

Linear Products

Cross Reference Guide

Summer 2004

Power

Data Conversion

Audio

Cross Reference

Interface

Amplifiers

 **National
Semiconductor**
The Sight & Sound of Information

Linear Products Cross Reference

National Semiconductor's Linear Cross Reference Guide was created to provide customers with a single resource to select National products that are identical or functional replacements to products from other semiconductor companies.

For over 40 years, National Semiconductor has been the standard of excellence for the manufacture of analog integrated circuits.

To complement National's vast portfolio of analog products, the company offers a number of resources to enable customers to identify and design with the best analog products for their application. National's web site provides the following industry-leading online resources:

- **Analog UniversitySM**
Expand your knowledge and understanding of analog with our FREE online educational training tool
- **Online Seminars**
FREE analog online seminars by industry experts with archives available 24/7
- **solutions.national.com**
Access the best solutions for end-user applications in: automotive, DSL communications, displays, industrial, medical systems, video, personal/consumer electronics, power and wireless communications, and more
- **WEBENCH[®]**
Design, build, and test amplifiers and power supplies in this FREE online design and prototyping environment
- **Knowledge Base**
Easy natural-language online search engine provides quick access to parts and technical information
- **National Edge**
National's monthly online technical journal

For more information on National's online tools, please visit www.national.com

Table of Contents

Cross reference by supplier

Advanced Monolithic Systems	6
Allegro	7
Analog Devices.....	8
Analogic Tech	21
Analog Integrations.....	24
Analog Microelectronics.....	25
Andigilog	26
Anpec	26
Bay Linear.....	28
Catalyst.....	30
Champion Microelectronics Co.....	31
Dallas Semiconductor	31
EM Microelectronic - Marin SA.....	31
Exar Semiconductor	32
Fairchild Semiconductor.....	32
FCI Semiconductor	45
Fujitsu Semiconductor.....	47
Gamma Microelectronics.....	47
Hitachi Semiconductor	48
Holtek Semiconductor.....	48
IMP	48
Infineon	48
Intersil Corporation	49
Linear Technology.....	50
Matsushita Panasonic Corporation	61
Maxim.....	62
Micrel	77
Micro Analog Systems.....	84
Microchip.....	84
MicroLinear.....	84

Micro Networks	84
Microsemi Corporation	84
Mitsubishi	90
Mitsumi	90
Motorola	90
MPS	90
New Japan Radio Co, Ltd.	90
NEC Corporation.....	91
NTE Electronics Inc	91
ON Semiconductor	91
Pericom	106
Philips	107
Ricoh	109
Richtech	109
Rhom	110
Seiko	110
Seme Lab.	110
Semtech	113
Shenzhen ASIC Microelectronics Ltd.....	117
Signal Processing Technologies	117
Sipex Corporation	117
Sony Semiconductors	127
ST Microelectronics	127
Telcom	146
Toko.....	174
Torex	174
Toshiba	174
Unisonic Technologies	175
Vishay	175
Zetex Semiconductors.....	177

Table of Contents

Supplier package cross reference

Advanced Monolithic Systems	182
Allegro	182
Alpha Semiconductor.....	182
Analog Devices.....	182
Analog Integrations.....	182
Analog Microelectronics.....	182
Analogic Tech	182
Anpec	182
Bay Linear	183
Catalyst	183
Champion Microelectronics Co.....	183
Dallas Semiconductor	183
EM Microelectronic - Marin SA.....	183
Exar Semiconductor	183
Fairchild Semiconductor.....	183
FCI Semiconductor	183
IMP	183
Intersil Corporation	183
Linear Technology.....	184
Maxim	184
Micrel	184
Microchip.....	185
MicroLinear.....	185
Microsemi Corporation.....	185
Mitsumi	185
ON Semiconductor.....	185
Pericom	186
Philips.....	186
Semtech.....	186
Signal Processing Technologies.....	186

Sipex Corporation	187
Sony Semiconductors	187
ST Microelectronics.....	187
Telcom Semiconductor	187
Texas Instruments	187
Toshiba	188
Vishay	188
Zetex Semiconductors	188

National Semiconductor packaging guide

Packages, dimensions and photos	189
---------------------------------------	-----

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Advanced Monolithic Systems										
AMS1117-1.8	LM1117MP-1.8	800 mA low-dropout regulator	SOT223-4	SOT223-4	-40°C to 125°C	0°C to 125°C	1.8	1.8	S	
AMS1117-2.5	LM1117MP-2.5	800 mA low-dropout regulator	SOT223-4	SOT223-4	-40°C to 125°C	0°C to 125°C	2.5	2.5	S	
AMS1117-2.85	LM1117MP-2.85	800 mA low-dropout regulator	SOT223-4	SOT223-4	-40°C to 125°C	0°C to 125°C	2.85	2.85	S	
AMS1117-3.3	LM1117MP-3.3	800 mA low-dropout regulator	SOT223-4	SOT223-4	-40°C to 125°C	0°C to 125°C	3.3	3.3	S	
AMS1117-5.0	LM1117MP-5.0	800 mA low-dropout regulator	SOT223-4	SOT223-4	-40°C to 125°C	0°C to 125°C	5	5	S	
AMS1117CD-1.8	LM1117DT-1.8	800 mA low-dropout regulator	T0252-3	T0252-3	-40°C to 125°C	0°C to 125°C	1.8	1.8	D	
AMS1117CD-2.5	LM1117DT-2.5	800 mA low-dropout regulator	T0252-3	T0252-3	-40°C to 125°C	0°C to 125°C	2.5	2.5	D	
AMS1117CD-3.3	LM1117DT-3.3	800 mA low-dropout regulator	T0252-3	T0252-3	-40°C to 125°C	0°C to 125°C	3.3	3.3	D	
AMS1117CD-5.0	LM1117DT-5.0	800 mA low-dropout regulator	T0252-3	T0252-3	-40°C to 125°C	0°C to 125°C	5	5	D	
AMS431BM-Adj	LM431CIM3-Adj	Shunt regulator	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	Adj.	Adj.	F	0.5% accuracy
AMS431CM-Adj	LM431BIM3-Adj	Shunt regulator	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	Adj.	Adj.	F	1% accuracy
AMS431BN-Adj	LM431CIZ-Adj	Shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	Adj.	Adj.	F	0.5% accuracy
AMS431CN-Adj	LM431BIZ-Adj	Shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	Adj.	Adj.	F	1% accuracy
AMS431BS-Adj	LM431CIM-Adj	Shunt regulator	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	Adj.	Adj.	F	0.5% accuracy
AMS431CS-Adj	LM431BIM-Adj	Shunt regulator	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	Adj.	Adj.	F	1% accuracy
AMS285AN	LM285BXZ	Voltage reference	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	–	–	D	1% accuracy
AMS285BN	LM285Z	Voltage reference	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	–	–	D	1% accuracy
AMS285BS	LM285M	Voltage reference	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	1% accuracy
AMS285CN	LM385Z	Voltage reference	T0-92	T0-92	-40°C to 85°C	0°C to 70°C	–	–	S	2% accuracy
AMS285CS	LM385M	Voltage reference	SOIC-8	SOIC-8	-40°C to 85°C	0°C to 70°C	–	–	S	2% accuracy
AMS385BN	LM385BZ	Voltage reference	T0-92	T0-92	0°C to 70°C	0°C to 70°C	–	–	D	1% accuracy
AMS385BS	LM385BM	Voltage reference	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	1% accuracy
AMS385CN	LM385Z	Voltage reference	T0-92	T0-92	0°C to 70°C	0°C to 70°C	–	–	D	2% accuracy
AMS385CS	LM385M	Voltage reference	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	2% accuracy
AMS285-1.2BN	LM285Z-1.2	Voltage reference	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	1.2	1.2	D	1% accuracy

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Advanced Monolithic Systems										
AMS285-1.2BS	LM285M-1.2	Voltage reference	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	1.2	1.2	D	1% accuracy
AMS285-1.2CN	LM385Z-1.2	Voltage reference	TO-92	TO-92	-40°C to 85°C	0°C to 70°C	1.2	1.2	S	2% accuracy
AMS285-1.2CS	LM385M-1.2	Voltage reference	SOIC-8	SOIC-8	-40°C to 85°C	0°C to 70°C	1.2	1.2	S	2% accuracy
AMS385-1.2BN	LM385BZ-1.2	Voltage reference	TO-92	TO-92	0°C to 70°C	0°C to 70°C	1.2	1.2	D	1% accuracy
AMS385-1.2BS	LM385BM-1.2	Voltage reference	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	1.2	1.2	D	1% accuracy
AMS385-1.2CN	LM385Z-1.2	Voltage reference	TO-92	TO-92	0°C to 70°C	0°C to 70°C	1.2	1.2	D	2% accuracy
AMS385-1.2CS	LM385M-1.2	Voltage reference	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	1.2	1.2	D	2% accuracy
AMS285-2.5BN	LM285Z-2.5	Voltage reference	TO-92	TO-92	-40°C to 85°C	-40°C to 85°C	2.5	2.5	D	1.5% accuracy
AMS285-2.5BS	LM285M-2.5	Voltage reference	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2.5	2.5	D	1.5% accuracy
AMS285-2.5CN	LM385Z-2.5	Voltage reference	TO-92	TO-92	-40°C to 85°C	0°C to 70°C	2.5	2.5	S	3% accuracy
AMS285-2.5CS	LM385M-2.5	Voltage reference	SOIC-8	SOIC-8	-40°C to 85°C	0°C to 70°C	2.5	2.5	S	3% accuracy
AMS385-2.5BN	LM385BZ-2.5	Voltage reference	TO-92	TO-92	0°C to 70°C	0°C to 70°C	2.5	2.5	D	1.5% accuracy
AMS385-2.5BS	LM385BM-2.5	Voltage reference	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2.5	2.5	D	1.5% accuracy
AMS385-2.5CN	LM385Z-2.5	Voltage reference	TO-92	TO-92	0°C to 70°C	0°C to 70°C	2.5	2.5	D	3% accuracy
AMS385-2.5CS	LM385M-2.5	Voltage reference	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2.5	2.5	D	3% accuracy
AMS336AN	LM336BZ-2.5	Reference diode	TO-92	TO-92	0°C to 70°C	0°C to 70°C	2.5	2.5	S	Different reverse breakdown voltage
AMS336AS	LM336BM-2.5	Reference diode	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2.5	2.5	S	Different reverse breakdown voltage
AMS336BN	LM336Z-2.5	Reference diode	TO-92	TO-92	0°C to 70°C	0°C to 70°C	2.5	2.5	S	Different reverse breakdown voltage
AMS336BS	LM336M-2.5	Reference diode	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2.5	2.5	S	Different reverse breakdown voltage
Allegro										
ULN2003A	DS2003CN	High-voltage, high-current Darlington transistor array	MDIP-16	MDIP-16	-20°C to 85°C	-40°C to 85°C	5	5	S	
ULN2003L	DS2003TN	High-voltage, high-current Darlington transistor array	SOIC-16	SOIC-16	-20°C to 85°C	-40°C to 85°C	5	5	S	

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement
(May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package
(See datasheets for differences.)

N = Similar function, different package and/or pinout
(See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Allegro										
ULQ2003A	DS2003CN	High-voltage, high-current Darlington transistor array	MDIP-16	MDIP-16	-40°C to 85°C	-40°C to 85°C	5	5	S	
ULQ2003L	DS2003TN	High-voltage, high-current Darlington transistor array	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	5	5	S	
ULN2004A	DS2003CN	High-voltage, high-current Darlington transistor array	MDIP-16	MDIP-16	-20°C to 85°C	-40°C to 85°C	5	5	S	
ULN2004L	DS2003TN	High-voltage, high-current Darlington transistor array	SOIC-16	SOIC-16	-20°C to 85°C	-40°C to 85°C	5	5	S	
ULQ2004A	DS2003CN	High-voltage, high-current Darlington transistor array	MDIP-16	MDIP-16	-40°C to 85°C	-40°C to 85°C	5	5	S	
ULQ2004L	DS2003TN	High-voltage, high-current Darlington transistor array	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	5	5	S	
ULN2023A	DS2003CN	High-voltage, high-current Darlington transistor array	MDIP-16	MDIP-16	-20°C to 85°C	-40°C to 85°C	5	5	S	
ULN2023L	DS2003TN	High-voltage, high-current Darlington transistor array	SOIC-16	SOIC-16	-20°C to 85°C	-40°C to 85°C	5	5	S	
ULQ2023A	DS2003CN	High-voltage, high-current Darlington transistor array	MDIP-16	MDIP-16	-40°C to 85°C	-40°C to 85°C	5	5	S	
ULN2024A	DS2003CN	High-voltage, high-current Darlington transistor array	MDIP-16	MDIP-16	-20°C to 85°C	-40°C to 85°C	5	5	S	
ULN2024L	DS2003TN	High-voltage, high-current Darlington transistor array	SOIC-16	SOIC-16	-20°C to 85°C	-40°C to 85°C	5	5	S	
Analog Devices										
AD711AH	LF256H	JFET input operational amplifier	TO-5	TO-5	-40°C to 85°C	-25°C to 85°C	–	–	S	
AD711AQ	LF356N	JFET input operational amplifier	CERDIP-8	MDIP-8	-40°C to 85°C	0°C to 70°C	–	–	S	
AD711BQ	LF356N	JFET input operational amplifier	CERDIP-8	MDIP-8	-40°C to 85°C	0°C to 70°C	–	–	S	
AD711CH	LF256H	JFET input operational amplifier	TO-5	TO-5	-40°C to 85°C	-25°C to 85°C	–	–	S	
AD711JN	LF356N	JFET input operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
AD711JN	LF411CN	Precision JFET operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	±15	±15	D	
AD711JR	LF356M	JFET input operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Analog Devices										
AD711KN	LF356N	JFET input operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
AD711KN	LF411ACN	Precision JFET operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	±15	±20	D	
AD711KR	LF356M	JFET input operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
AD711SQ/883B	LF356N	JFET input operational amplifier	CERDIP-8	MDIP-8	-55°C to 125°C	0°C to 70°C	–	–	S	
AD711TQ/883B	LF356N	JFET input operational amplifier	CERDIP-8	MDIP-8	-55°C to 125°C	0°C to 70°C	–	–	S	
AD712JN	LF412CN	Dual precision JFET operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	±15	±15	D	
AD712KN	LF412ACN	Dual precision JFET operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	±15	±20	D	
AD7416AR	LM75BIM-3	Two-wire digital temperature sensor with alarms	SOIC-8	SOIC-8	-40°C to 125°C	-55°C to 150°C	2.7 to 5.5	3 to 5.5	D	
AD7416AR	LM75BIM-5	Two-wire digital temperature sensor with alarms	SOIC-8	SOIC-8	-40°C to 125°C	-55°C to 150°C	2.7 to 5.5	3 to 5.5	D	
AD7416AR	LM75CIM-3	Two-wire digital temperature sensor with alarms	SOIC-8	SOIC-8	-40°C to 125°C	-55°C to 150°C	2.7 to 5.5	3 to 5.5	D	
AD7416AR	LM75CIM-5	Two-wire digital temperature sensor with alarms	SOIC-8	SOIC-8	-40°C to 125°C	-55°C to 150°C	2.7 to 5.5	3 to 5.5	D	
AD7416ARM	LM75BIMM-3	Two-wire digital temperature sensor with alarms	MSOP-8	MSOP-8	-40°C to 125°C	-55°C to 150°C	2.7 to 5.5	3 to 5.5	D	
AD7416ARM	LM75BIMM-5	Two-wire digital temperature sensor with alarms	MSOP-8	MSOP-8	-40°C to 125°C	-55°C to 150°C	2.7 to 5.5	3 to 5.5	D	
AD7416ARM	LM75CIMM-3	Two-wire digital temperature sensor with alarms	MSOP-8	MSOP-8	-40°C to 125°C	-55°C to 150°C	2.7 to 5.5	3 to 5.5	D	
AD7416ARM	LM75CIMM-5	Two-wire digital temperature sensor with alarms	MSOP-8	MSOP-8	-40°C to 125°C	-55°C to 150°C	2.7 to 5.5	3 to 5.5	D	
AD7476ART	ADCS7476AIMF	1 MSPS, 12-/10-/8-bit A/D converter	SOT23-6	SOT23-6	-40°C to 85°C	-40°C to 85°C	2.7 to 5.25	2.7 to 5.25	D	
AD7476BRT	ADCS7476AIMF	1 MSPS, 12-/10-/8-bit A/D converter	SOT23-6	SOT23-6	-40°C to 85°C	-40°C to 85°C	2.7 to 5.25	2.7 to 5.25	D	
AD7476SRT	ADCS7476AIMF	1 MSPS, 12-/10-/8-bit A/D converter	SOT23-6	SOT23-6	-55°C to 125°C	-40°C to 85°C	2.7 to 5.25	2.7 to 5.25	S	

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Analog Devices										
AD7477ART	ADCS7477AIMF	1 MSPS, 12-/10-/8-bit A/D converter	SOT23-6	SOT23-6	-40°C to 85°C	-40°C to 85°C	2.7 to 5.25	2.7 to 5.25	D	
AD7477SRT	ADCS7477AIMF	1 MSPS, 12-/10-/8-bit A/D converter	SOT23-6	SOT23-6	-55°C to 125°C	-40°C to 85°C	2.7 to 5.25	2.7 to 5.25	S	
AD7478ART	ADCS7478AIMF	1 MSPS, 12-/10-/8-bit A/D converter	SOT23-6	SOT23-6	-40°C to 85°C	-40°C to 85°C	2.7 to 5.25	2.7 to 5.25	D	
AD7478SRT	ADCS7478AIMF	1 MSPS, 12-/10-/8-bit A/D converter	SOT23-6	SOT23-6	-55°C to 125°C	-40°C to 85°C	2.7 to 5.25	2.7 to 5.25	S	
AD7741BN	LM231AN	Precision voltage-to-frequency converter	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	N	
AD775JR	ADC1175CIJM	8-bit, 20 MSPS video A/D converter	SOIC-24	SOIC-24	-20°C to 75°C	-20°C to 75°C	–	–	D	
AD7814ARM	LM70CILD-3	10-bit plus sign digital temperature sensor	MSOP-8	LLP®-8	-55°C to 150°C	-55°C to 150°C	2.7 to 5.5	2.7 to 5.5	F	
AD7814ARM	LM70CILD-5	10-bit plus sign digital temperature sensor	MSOP-8	LLP-8	-55°C to 150°C	-55°C to 150°C	2.7 to 5.5	2.7 to 5.5	F	
AD7814ARM	LM70CIMM-3	10-bit plus sign digital temperature sensor	MSOP-8	MSOP-8	-55°C to 150°C	-55°C to 150°C	2.7 to 5.5	2.7 to 5.5	F	
AD7814ARM	LM70CIMM-5	10-bit plus sign digital temperature sensor	MSOP-8	MSOP-8	-55°C to 150°C	-55°C to 150°C	2.7 to 5.5	2.7 to 5.5	F	
AD7814ARM	LM71CIMF	13-bit plus sign digital temperature sensor	MSOP-8	SOT23-5	-55°C to 150°C	-40°C to 150°C	2.7 to 5.5	1.5 to 2.65	F	
AD7814ARM	LM71CSID	13-bit plus sign digital temperature sensor	MSOP-8	LLP-6	-55°C to 150°C	-40°C to 150°C	2.7 to 5.5	1.5 to 2.65	F	
AD7814ARM	LM74CIBP-3	12-bit plus sign digital temperature sensor	MSOP-8	micro SMD-5	-40°C to 125°C	-55°C to 150°C	2.7 to 5.5	1.25 to 5.5	F	
AD7814ARM	LM74CIBP-5	12-bit plus sign digital temperature sensor	MSOP-8	micro SMD-5	-40°C to 125°C	-55°C to 150°C	2.7 to 5.5	1.25 to 5.5	F	
AD7814ARM	LM74CIM-3	12-bit plus sign digital temperature sensor	MSOP-8	SOIC-8	-40°C to 125°C	-55°C to 150°C	2.7 to 5.5	2.7 to 5.5	F	
AD7814ARM	LM74CIM-5	12-bit plus sign digital temperature sensor	MSOP-8	SOIC-8	-40°C to 125°C	-55°C to 150°C	2.7 to 5.5	2.7 to 5.5	F	
AD7814ART	LM70CILD-3	10-bit plus sign digital temperature sensor	SOT23-6	LLP-8	-55°C to 150°C	-55°C to 150°C	2.7 to 5.5	2.7 to 5.5	F	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Analog Devices										
AD7814ART	LM70CILD-5	10-bit plus sign digital temperature sensor	SOT23-6	LLP-8	-55°C to 150°C	-55°C to 150°C	2.7 to 5.5	2.7 to 5.5	F	
AD7814ART	LM70CIMM-3	10-bit plus sign digital temperature sensor	SOT23-6	MSOP-8	-55°C to 150°C	-55°C to 150°C	2.7 to 5.5	2.7 to 5.5	F	
AD7814ART	LM70CIMM-5	10-bit plus sign digital temperature sensor	SOT23-6	MSOP-8	-55°C to 150°C	-55°C to 150°C	2.7 to 5.5	2.7 to 5.5	F	
AD7814ART	LM71CIMF	13-bit plus sign digital temperature sensor	SOT23-6	SOT23-5	-55°C to 150°C	-40°C to 150°C	2.7 to 5.5	1.5 to 2.65	F	
AD7814ART	LM71CSID	13-bit plus sign digital temperature sensor	SOT23-6	LLP-6	-55°C to 150°C	-40°C to 150°C	2.7 to 5.5	1.5 to 2.65	F	
AD7814ART	LM74CIBP-3	12-bit plus sign digital temperature sensor	SOT23-6	micro SMD-5	-40°C to 125°C	-55°C to 150°C	2.7 to 5.5	1.25 to 5.5	F	
AD7814ART	LM74CIBP-5	12-bit plus sign digital temperature sensor	SOT23-6	micro SMD-5	-40°C to 125°C	-55°C to 150°C	2.7 to 5.5	1.25 to 5.5	F	
AD7814ART	LM74CIM-3	12-bit plus sign digital temperature sensor	SOT23-6	SOIC-8	-40°C to 125°C	-55°C to 150°C	2.7 to 5.5	2.7 to 5.5	F	
AD7814ART	LM74CIM-5	12-bit plus sign digital temperature sensor	SOT23-6	SOIC-8	-40°C to 125°C	-55°C to 150°C	2.7 to 5.5	2.7 to 5.5	F	
AD7816AR	LM70CILD-3	10-bit plus sign digital temperature sensor	SOIC-8	LLP-8	-55°C to 150°C	-55°C to 150°C	2.7 to 5.5	2.7 to 5.5	F	
AD7816AR	LM70CILD-5	10-bit plus sign digital temperature sensor	SOIC-8	LLP-8	-55°C to 150°C	-55°C to 150°C	2.7 to 5.5	2.7 to 5.5	F	
AD7816AR	LM70CIMM-3	10-bit plus sign digital temperature sensor	SOIC-8	MSOP-8	-55°C to 150°C	-55°C to 150°C	2.7 to 5.5	2.7 to 5.5	F	
AD7816AR	LM70CIMM-5	10-bit plus sign digital temperature sensor	SOIC-8	MSOP-8	-55°C to 150°C	-55°C to 150°C	2.7 to 5.5	2.7 to 5.5	F	
AD7816AR	LM71CIMF	13-bit plus sign digital temperature sensor	SOIC-8	SOT23-5	-55°C to 150°C	-40°C to 150°C	2.7 to 5.5	1.5 to 2.65	F	
AD7816AR	LM71CSID	13-bit plus sign digital temperature sensor	SOIC-8	LLP-6	-55°C to 150°C	-40°C to 150°C	2.7 to 5.5	1.5 to 2.65	F	
AD7816AR	LM74CIBP-3	12-bit plus sign digital temperature sensor	SOIC-8	micro SMD-5	-40°C to 125°C	-55°C to 150°C	2.7 to 5.5	1.25 to 5.5	F	
AD7816AR	LM74CIBP-5	12-bit plus sign digital temperature sensor	SOIC-8	micro SMD-5	-40°C to 125°C	-55°C to 150°C	2.7 to 5.5	1.25 to 5.5	F	

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Analog Devices										
AD7816AR	LM74CIM-3	12-bit plus sign digital temperature sensor	SOIC-8	SOIC-8	-40°C to 125°C	-55°C to 150°C	2.7 to 5.5	2.7 to 5.5	F	
AD7816AR	LM74CIM-5	12-bit plus sign digital temperature sensor	SOIC-8	SOIC-8	-40°C to 125°C	-55°C to 150°C	2.7 to 5.5	2.7 to 5.5	F	
AD7816ARM	LM70CILD-3	10-bit plus sign digital temperature sensor	MSOP-8	LLP-8	-55°C to 150°C	-55°C to 150°C	2.7 to 5.5	2.7 to 5.5	F	
AD7816ARM	LM70CILD-5	10-bit plus sign digital temperature sensor	MSOP-8	LLP-8	-55°C to 150°C	-55°C to 150°C	2.7 to 5.5	2.7 to 5.5	F	
AD7816ARM	LM70CIMM-3	10-bit plus sign digital temperature sensor	MSOP-8	MSOP-8	-55°C to 150°C	-55°C to 150°C	2.7 to 5.5	2.7 to 5.5	F	
AD7816ARM	LM70CIMM-5	10-bit plus sign digital temperature sensor	MSOP-8	MSOP-8	-55°C to 150°C	-55°C to 150°C	2.7 to 5.5	2.7 to 5.5	F	
AD7816ARM	LM71CIMF	13-bit plus sign digital temperature sensor	MSOP-8	SOT23-5	-55°C to 150°C	-40°C to 150°C	2.7 to 5.5	1.5 to 2.65	F	
AD7816ARM	LM71CSID	13-bit plus sign digital temperature sensor	MSOP-8	LLP-6	-55°C to 150°C	-40°C to 150°C	2.7 to 5.5	1.5 to 2.65	F	
AD7816ARM	LM74CIBP-3	12-bit plus sign digital temperature sensor	MSOP-8	micro SMD-5	-40°C to 125°C	-55°C to 150°C	2.7 to 5.5	1.25 to 5.5	F	
AD7816ARM	LM74CIBP-5	12-bit plus sign digital temperature sensor	MSOP-8	micro SMD-5	-40°C to 125°C	-55°C to 150°C	2.7 to 5.5	1.25 to 5.5	F	
AD7816ARM	LM74CIM-3	12-bit plus sign digital temperature sensor	MSOP-8	SOIC-8	-40°C to 125°C	-55°C to 150°C	2.7 to 5.5	2.7 to 5.5	F	
AD7816ARM	LM74CIM-5	12-bit plus sign digital temperature sensor	MSOP-8	SOIC-8	-40°C to 125°C	-55°C to 150°C	2.7 to 5.5	2.7 to 5.5	F	
AD7820KR	ADC08061CIWM	500 ns A/D converter	WSOIC-20	WSOIC-20	-40°C to 85°C	-40°C to 85°C	5	5	D	
AD7820KR	ADC08161CIWM	500 ns A/D converter	WSOIC-20	WSOIC-20	-40°C to 85°C	-40°C to 85°C	5	5	D	
AD8017AR	LMH6672MA	XDSL line driver/operational amplifier	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	Bipolar 2.5/6	Bipolar 2.5/6	D	
AD8022AR	LMH6622MA	XDSL line driver/operational amplifier	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	Bipolar 2.5/6	Bipolar 2.5/6	D	
AD8022ARM	LMH6622MM	XDSL line driver/operational amplifier	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	Bipolar 2.5/6	Bipolar 2.5/6	D	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Analog Devices										
AD8031AR	LMH6645MA	Single high-speed amplifier/low-power	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2.7 to 12	2.7 to 12	D	
AD8032AR	LMH6646MA	Dual high-speed amplifier/low-power	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2.5 to 12	2.7 to 12	D	
AD8051AR	LMH6642MA	Single high-speed amplifier	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	3 to 12	2.7 to 12	D	
AD8052AR	LMH6643MA	Dual high-speed amplifier	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	3 to 12	2.7 to 12	D	
AD8052ARM	LMH6643MM	Dual high-speed amplifier	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	3 to 12	2.7 to 12	D	
AD8054AR	LMH6644MA	Quad high-speed amplifier	SOIC-14	SOIC-14	-40°C to 85°C	-40°C to 85°C	3 to 12	2.7 to 12	D	
AD8591ART	LMV921M5	Low-power operational amplifier	SOT23-6	SOT23-5	-40°C to 85°C	-40°C to 85°C	2.5 to 6	1.5 to 5	F	
AD8592ARM	LMV932MM	Low-power operational amplifier	SOIC-10	MSOP-8	-40°C to 85°C	-40°C to 85°C	2.5 to 6	1.8 to 5	F	
AD8594AR	LMV924M	Low-power operational amplifier	SOIC-16	SOIC-14	-40°C to 85°C	-40°C to 85°C	2.5 to 6	1.8 to 5	F	
AD8594ARU	LMV924MT	Low-power operational amplifier	TSSOP-16	TSSOP-14	-40°C to 85°C	-40°C to 85°C	2.5 to 6	1.8 to 5	F	
ADM1021AARQ	LM82CIMQA	Remote diode and local temperature sensor with two-wire interface	SSOP-16	SSOP-16	0°C to 100°C	-40°C to 150°C	2.8 to 5.5	3 to 3.6	S	
ADM1021AARQ	LM84CIMQA	Remote diode and local temperature sensor with two-wire interface	SSOP-16	SSOP-16	0°C to 100°C	0°C to 125°C	2.8 to 5.5	3 to 3.6	S	
ADM1021AARQZ	LM82CIMQA	Remote diode and local temperature sensor with two-wire interface	SSOP-16	SSOP-16	0°C to 100°C	-40°C to 150°C	2.8 to 5.5	3 to 3.6	S	
ADM1021AARQZ	LM84CIMQA	Remote diode and local temperature sensor with two-wire interface	SSOP-16	SSOP-16	0°C to 100°C	0°C to 125°C	2.8 to 5.5	3 to 3.6	S	
ADM1024ARU	LM87CIMT	Serial interface system monitor with remote diode temperature sensing	TSSOP-24	TSSOP-24	-40°C to 125°C	-40°C to 150°C	3 to 5.5	3 to 3.8	D	
ADM1024ARU	LM87CIMT	ACPI-compatible microprocessor system hardware monitor	TSSOP-24	TSSOP-24	0°C to 100°C	-40°C to 150°C	–	–	S	
ADM1024ARUZ	LM87CIMT	Serial interface system monitor with remote diode temperature sensing	TSSOP-24	TSSOP-24	-40°C to 125°C	-40°C to 150°C	3 to 5.5	3 to 3.8	D	

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement (May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package (See datasheets for differences.)

N = Similar function, different package and/or pinout (See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Analog Devices										
ADM1027	LM85BIMQ	Automatic fan control, remote diode sensing, SMBUS	TSSOP-24	TSSOP-24	0° to 105°C	0°C to 125°C	3 to 5.5	3 to 3.8	S	
ADM1032AR	LM86CIM	0.75°C accurate, remote diode and local temperature sensor with two-wire interface	SOIC-8	SOIC-8	0°C to 120°C	0°C to 125°C	3 to 5.5	3 to 3.6	D	
ADM1032AR-1	LM89CIM	0.75°C accurate remote diode and local temperature sensor with two-wire interface and alarms	SOIC-8	SOIC-8	0°C to 120°C	0°C to 125°C	3 to 5.5	3 to 3.6	D	
ADM1032AR-1	LM89-1CIM	0.75°C accurate remote diode and local temperature sensor with two-wire interface and alarms	SOIC-8	SOIC-8	0°C to 120°C	0°C to 125°C	3 to 5.5	3 to 3.6	D	
ADM1032ARM	LM86CIMM	0.75°C accurate, remote diode and local temperature sensor with two-wire interface	MSOP-8	MSOP-8	0°C to 120°C	0°C to 125°C	3 to 5.5	3 to 3.6	D	
ADM1032ARM-1	LM89CIMM	0.75°C accurate remote diode and local temperature sensor with two-wire interface and alarms	MSOP-8	MSOP-8	0°C to 120°C	0°C to 125°C	3 to 5.5	3 to 3.6	D	
ADM1032ARM-1	LM89-1CIMM	0.75°C accurate remote diode and local temperature sensor with two-wire interface and alarms	MSOP-8	MSOP-8	0°C to 120°C	0°C to 125°C	3 to 5.5	3 to 3.6	D	
ADM1181AAN	DS14C232CN	5V dual RS- 232 driver/receiver	MDIP-16	MDIP-16	-40°C to 85°C	-40°C to 85°C	–	–	S	
ADM1181AARW	DS14C232CM	5V dual RS- 232 driver/receiver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	–	–	S	
ADM1485AR	DS36C279TM	Low-power RS-485 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
ADM1485AR	LMS1485IM	5V low-power RS-485 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
ADM1485JR	DS36C279M	Low-power RS-485 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
ADM1485JR	LMS1485M	5V low-power RS-485 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
ADM1487AR	DS36C279TM	Low-power RS-485 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
ADM1487JR	DS36C279M	Low-power RS-485 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
ADM202EAN	DS14C232CN	5V dual RS- 232 driver/receiver	MDIP-16	MDIP-16	-40°C to 85°C	-40°C to 85°C	–	–	F	
ADM202EARN	LMS202EIM	15 kV 5 TIA/EIA-232 dual XCVR	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	–	–	F	
ADM202EARW	DS14C232CM	5V dual RS- 232 driver/receiver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	–	–	F	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Analog Devices										
ADM202JN	DS14C232CN	5V dual RS- 232 driver/receiver	MDIP-16	MDIP-16	-40°C to 85°C	-40°C to 85°C	–	–	F	
ADM202JRN	LMS202CM	5V RS-232 transceiver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	D	
ADM202JRW	LMS202CMW	5V RS-232 transceiver	WSOIC-16	WSOIC-16	0°C to 70°C	0°C to 70°C	–	–	D	
ADM232AAN	DS14C232CN	Low-power 5V powered TIA/EIA-232 dual driver/receiver	MDIP-16	MDIP-16	-40°C to 85°C	0°C to 70°C	–	–	S	
ADM232AARN	DS14C232CM	Low-power 5V powered TIA/EIA-232 dual driver/receiver	SOIC-16	SOIC-16	-40°C to 85°C	0°C to 70°C	–	–	S	
ADM241LAR	DS14C241WM	RS-232 4 driver 5 receiver	SOIC-28	SOIC-28	-40°C to 85°C	0°C to 70°C	–	–	S	
ADM241LARS	DS14C241WMX	RS-232 4 driver 5 receiver	SOIC-28	SOIC-28	-40°C to 85°C	0°C to 70°C	–	–	S	
ADM241LJR	DS14C241WM	RS-232 4 driver 5 receiver	SOIC-28	SOIC-28	0°C to 70°C	0°C to 70°C	–	–	D	
ADM241LJRS	DS14C241WMX	RS-232 4 driver 5 receiver	SOIC-28	SOIC-28	0°C to 70°C	0°C to 70°C	–	–	D	
ADM3082AN	DS36C278TN	Low-power multipoint EIA-RS-485 transceiver	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
ADM3082AR	DS36C278TM	Low-power multipoint EIA-RS-485 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
ADM3082JN	DS36C278N	Low-power multipoint EIA-RS-485 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
ADM3082JR	DS36C278M	Low-power multipoint EIA-RS-485 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
ADM3085AN	DS36C278TN	Low-power multipoint EIA-RS-485 transceiver	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
ADM3085AR	DS36C278TM	Low-power multipoint EIA-RS-485 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
ADM3085JN	DS36C278N	Low-power multipoint EIA-RS-485 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
ADM3085JR	DS36C278M	Low-power multipoint EIA-RS-485 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
ADM3088AN	DS36C278TN	Low-power multipoint EIA-RS-485 transceiver	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
ADM3088AR	DS36C278TM	Low-power multipoint EIA-RS-485 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement
(May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package
(See datasheets for differences.)

N = Similar function, different package and/or pinout
(See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Analog Devices										
ADM3088JN	DS36C278N	Low-power multipoint EIA-RS-485 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
ADM3088JR	DS36C278M	Low-power multipoint EIA-RS-485 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
ADM485AN	DS75176BTN	Multipoint RS-485/RS-422 transceiver	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
ADM485AN	DS36277TN	Dominant mode multipoint transceiver	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
ADM485AN	DS3695TN	Multipoint RS-485/RS-422 transceiver	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
ADM485AN	DS485TN	Low-power RS-485/RS-422 transceiver	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
ADM485AN	LMS485INA	5V low-power RS-485 transceiver	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
ADM485AR	DS36C279TM	Low-power RS-485 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
ADM485AR	DS75176BTM	Multipoint RS-485/RS-422 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
ADM485AR	DS36277TM	Dominant mode multipoint transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
ADM485AR	DS3695ATM	Multipoint RS-485/RS-422 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
ADM485AR	DS485TM	Low-power RS-485/RS-422 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
ADM485AR	LMS485IM	5V low-power RS-485 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
ADM485ARZ	DS485TM NOPB	Low-power RS-485/RS-422 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	Lead free
ADM485JN	DS75176BN	Multipoint RS-485/RS-422 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
ADM485JN	DS3695N	Multipoint RS-485/RS-422 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
ADM485JN	DS3696N	Multipoint RS-485/RS-422 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	F	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Analog Devices										
ADM485JN	DS485N	Low-power RS-485/RS-422 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
ADM485JN	LMS485CNA	5V low-power RS-485 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
ADM485JR	DS36C279M	Low-power RS-485 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
ADM485JR	DS75176BM	Multipoint RS-485/RS-422 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
ADM485JR	DS36276M	FAILSAFE multipoint transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
ADM485JR	DS3695AM	Multipoint RS-485/RS-422 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
ADM485JR	DS3696AM	Multipoint RS-485/RS-422 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	F	
ADM485JR	DS485M	Low-power RS-485/RS-422 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
ADM485JR	LMS485CM	5V low-power RS-485 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
ADM485JRZ	DS485M NOPB	Low-power RS-485/RS-422 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	Lead free
ADM488AN	DS8921TN	Differential line driver and receiver pair	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	National also offers 0°C to 70°C temperature range
ADM488AN	DS8921ATN	Differential line driver and receiver pair	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
ADM488AR	DS8921TM	Differential line driver and receiver pair	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	National also offers 0°C to 70°C temperature range
ADM488AR	DS8921ATM	Differential line driver and receiver pair	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
ADM489AN	DS8921TN	Differential line driver and receiver pair	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	N	National also offers 0°C to 70°C temperature range
ADM489AN	DS8921ATN	Differential line driver and receiver pair	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	N	
ADM489AR	DS8921TM	Differential line driver and receiver pair	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	N	National also offers 0°C to 70°C temperature range
ADM489AR	DS8921ATM	Differential line driver and receiver pair	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	N	

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement
(May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package
(See datasheets for differences.)

N = Similar function, different package and/or pinout
(See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Analog Devices										
ADM809JART	LM809M3-4.00	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 105°C	4	4	D	
ADM809LART	LM809M3-4.63	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 105°C	4.63	4.63	D	
ADM809MART	LM809M3-3.38	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 105°C	4.38	4.38	D	
ADM809RART	LM809M3-2.63	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 105°C	2.63	2.63	D	
ADM809SART	LM809M3-2.93	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 105°C	2.93	2.93	D	
ADM809TART	LM809M3-3.08	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 105°C	3.08	3.08	D	
ADM810JART	LM810M3-4.00	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 105°C	4	4	D	
ADM810LART	LM810M3-4.63	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 105°C	4.63	4.63	D	
ADM810MART	LM810M3-3.38	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 105°C	4.38	4.38	D	
ADM810RART	LM810M3-2.63	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 105°C	2.63	2.63	D	
ADM810SART	LM810M3-2.93	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 105°C	2.93	2.93	D	
ADM810TART	LM810M3-3.08	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 105°C	3.08	3.08	D	
ADM9240ARU	LM81BIMT-3	Serial interface ACPI compatible system monitor	TSSOP-24	TSSOP-24	-40°C to 125°C	-40°C to 105°C	2.8 to 3.8	2.8 to 3.8	D	
ADM9240ARU	LM81CIMT-3	Serial interface ACPI compatible system monitor	TSSOP-24	TSSOP-24	-40°C to 125°C	-40°C to 105°C	2.8 to 3.8	2.8 to 3.8	D	
ADM9240ARU	LM81BIMT-3	Serial interface ACPI compatible system monitor	TSSOP-24	TSSOP-24	-40°C to 125°C	-40°C to 105°C	–	–	D	
ADP3333-3-RL7	LP3982IMM-3.0	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	3	3	S	National has LLP package. National V_{IN} range = 2.5-6V; accuracy = $\pm 2\%$
ADP3333-5-RL7	LP3982IMM-Adj	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	5	Adj.	S	National has LLP package. National V_{IN} range = 2.5-6V; accuracy = $\pm 2\%$
ADP3333ARM-1.5-RL	LP2982IMM-Adj	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	1.5	Adj.	S	National has LLP package. National V_{IN} range = 2.5-6V; accuracy = $\pm 2\%$
ADP3333ARM-1.5-RL7	LP2982IMM-Adj	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	1.5	Adj.	S	National has LLP package. National V_{IN} range = 2.5-6V; accuracy = $\pm 2\%$

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Analog Devices										
ADP3333ARM-1.8-RL	LP3982IMM-1.8	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	1.8	1.8	S	National has LLP package. National V _{IN} range = 2.5-6V; accuracy = ±2%
ADP3333ARM-1.8-RL7	LP3982IMM-1.8	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	1.8	1.8	S	National has LLP package. National V _{IN} range = 2.5-6V; accuracy = ±2%
ADP3333ARM-2.5-RL	LP3982IMM-2.5	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	2.5	2.5	S	National has LLP package. National V _{IN} range = 2.5-6V; accuracy = ±2%
ADP3333ARM-2.5-RL7	LP3982IMM-2.5	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	2.5	2.5	S	National has LLP package. National V _{IN} range = 2.5-6V; accuracy = ±2%
ADP3333ARM-2.77-RL	LP3982IMM-2.77	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	2.77	2.77	S	National has LLP package. National V _{IN} range = 2.5-6V; accuracy = ±2%
ADP3333ARM-2.77-RL7	LP3982IMM-2.77	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	2.77	2.77	S	National has LLP package. National V _{IN} range = 2.5-6V; accuracy = ±2%
ADP3333ARM-3.15-R7	LP3982IMM-Adj	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	3.15	Adj.	S	National has LLP package. National V _{IN} range = 2.5-6V; accuracy = ±2%
ADP3333ARM-3.15-RL	LP3982IMM-Adj	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	3.15	Adj.	S	National has LLP package. National V _{IN} range = 2.5-6V; accuracy = ±2%
ADP3333ARM-3.3-RL	LP3982IMM-3.3	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	3.3	3.3	S	National has LLP package. National V _{IN} range = 2.5-6V; accuracy = ±2%
ADP3333ARM-3-REEL	LP3982IMM-3.0	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	3	3	S	National has LLP package. National V _{IN} range = 2.5-6V; accuracy = ±2%
ADP3333ARM-5-REEL	LP3982IMM-Adj	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	5	Adj.	S	National has LLP package. National V _{IN} range = 2.5-6V; accuracy = ±2%
ADT7461AR	LM89CIM	0.75°C accurate remote diode and local temperature sensor with two wire interface and alarms	SOIC-8	SOIC-8	0°C to 120°C	0°C to 125°C	3 to 5.5	3 to 3.6	S	

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement
(May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package
(See datasheets for differences.)

N = Similar function, different package and/or pinout
(See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Analog Devices										
ADT7461ARM	LM89C1MM	0.75°C accurate remote diode and local temperature sensor with two wire interface and alarms	MSOP-8	MSOP-8	0°C to 120°C	0°C to 125°C	3 to 5.5	3 to 3.6	S	
DAC08CP	DAC0800LCN	8-bit high-speed D/A converter	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	D	
DAC08CP	DAC0802LCN	8-bit high-speed D/A converter	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	D	
DAC08CQ	DAC0800LCJ	8-bit high-speed D/A converter	CERDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	D	
DAC08CQ	DAC0802LCJ	8-bit high-speed D/A converter	CERDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	D	
DAC08CS	DAC0800LCM	8-bit high-speed D/A converter	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	D	
DAC08CS	DAC0802LCM	8-bit high-speed D/A converter	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	D	
DAC08EP	DAC0800LCN	8-bit digital-to-analog converter	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	S	
DAC08ES	DAC0800LCM	8-bit digital-to-analog converter	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	S	
DAC08HP	DAC0800LCN	8-bit digital-to-analog converter	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	S	
OP482GP	LF444ACN	BI-FET quad operational amplifier	MDIP-14	MDIP-14	-40°C to 85°C	-55°C to 125°C	±3 to ±15	±5 to ±20	S	
SSM2211CP	LM4871LD	Low-distortion audio power amplifier	LFCSP 8	LLP-8	-20°C to 85°C	-40°C to 85°C	2.5 to 6	2 to 5.5	S	
SSM2211S	LM4861M	Low-distortion audio power amplifier	SOIC-8	SOIC-8	-20°C to 85°C	-40°C to 85°C	–	–	S	
SSM2211S	LM4871M	Low-distortion audio power amplifier	SOIC-8	SOIC-8	-20°C to 85°C	-40°C to 85°C	–	–	S	
SSM2211SZ	LM4871M	Low-distortion audio power amplifier	SOIC-8	SOIC-8	-20°C to 85°C	-40°C to 85°C	2.5 to 6	2 to 5.5	D	
SSM2250RM	LM4850MM	1.5W mono audio amplifier, 250 mW stereo amplifier	MSOP-10	MSOP-10	-20°C to 85°C	-40°C to 85°C	2.7 to 6	2.4 to 5.5	D	
SSM2250RU	LM4850MT	1.5W mono audio amplifier, 250 mW stereo amplifier	TSSOP-14	TSSOP-14	-20°C to 85°C	-40°C to 85°C	2.7 to 6	2.4 to 5.5	S	
TMP35FT9	LM35CZ	Precision centigrade temperature sensor	TO-92	TO-92	10°C to 125°C	-40°C to 110°C	2.7 to 5.25	4 to 30	S	
TMP36FT9	LM35CAZ	Precision centigrade temperature sensor	TO-92	TO-92	-40°C to 125°C	-40°C to 100°C	2.7 to 5.25	4 to 30	S	
TMP37FS	LM35DM	Precision centigrade temperature sensor	SOIC-8	SOIC-8	5°C to 100°C	0°C to 100°C	2.7 to 5.25	4 to 30	D	
TMP37FS-REEL	LM35DMX	Precision centigrade temperature sensor	SOIC-8	SOIC-8	5°C to 100°C	0°C to 100°C	2.7 to 5.25	4 to 30	D	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Analogic Tech										
AAT3237IGU-1.2-T1	LP3982ILD-Adj	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	SOT23-6	LLP-8	-40°C to 85°C	-40°C to 85°C	1.2	1.2	F	National V _{OUT} accuracy = ±2%
AAT3237IGU-1.5-T1	LP3982ILD-Adj	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	SOT23-6	LLP-8	-40°C to 85°C	-40°C to 85°C	1.5	1.5	F	National V _{OUT} accuracy = ±2%
AAT3237IGU-1.8-T1	LP3982ILD-1.8	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	SOT23-6	LLP-8	-40°C to 85°C	-40°C to 85°C	1.8	1.8	F	National V _{OUT} accuracy = ±2%
AAT3237IGU-2.0-T1	LP3982ILD-Adj	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	SOT23-6	LLP-8	-40°C to 85°C	-40°C to 85°C	2	2	F	National V _{OUT} accuracy = ±2%
AAT3237IGU-2.3-T1	LP3982ILD-Adj	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	SOT23-6	LLP-8	-40°C to 85°C	-40°C to 85°C	2.3	2.3	F	National V _{OUT} accuracy = ±2%
AAT3237IGU-2.5-T1	LP3982ILD-2.5	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	SOT23-6	LLP-8	-40°C to 85°C	-40°C to 85°C	2.5	2.5	F	National V _{OUT} accuracy = ±2%
AAT3237IGU-2.7-T1	LP3982ILD-2.77	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	SOT23-6	LLP-8	-40°C to 85°C	-40°C to 85°C	2.7	2.7	F	National V _{OUT} accuracy = ±2%
AAT3237IGU-2.8-T1	LP3982ILD-2.82	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	SOT23-6	LLP-8	-40°C to 85°C	-40°C to 85°C	2.8	2.8	F	National V _{OUT} accuracy = ±2%
AAT3237IGU-2.85-T1	LP3982ILD-2.82	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	SOT23-6	LLP-8	-40°C to 85°C	-40°C to 85°C	2.85	2.85	F	National V _{OUT} accuracy = ±2%
AAT3237IGU-2.9-T1	LP3982ILD-Adj	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	SOT23-6	LLP-8	-40°C to 85°C	-40°C to 85°C	2.9	2.9	F	National V _{OUT} accuracy = ±2%
AAT3237IGU-3.0-T1	LP3982ILD-3.0	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	SOT23-6	LLP-8	-40°C to 85°C	-40°C to 85°C	3	3	F	National V _{OUT} accuracy = ±2%
AAT3237IGU-3.3-T1	LP3982ILD-3.3	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	SOT23-6	LLP-8	-40°C to 85°C	-40°C to 85°C	3.3	3.3	F	National V _{OUT} accuracy = ±2%

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement
(May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package
(See datasheets for differences.)

N = Similar function, different package and/or pinout
(See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Analogic Tech										
AAT3237IGU-3.5-T1	LP3982ILD-Adj	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	SOT23-6	LLP-8	-40°C to 85°C	-40°C to 85°C	3.5	3.5	F	National V _{OUT} accuracy = ±2%
AAT3237IJS-1.2-T1	LP3982IMM-Adj	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	SC70-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	1.2	1.2	F	National V _{OUT} accuracy = ±2%
AAT3237IJS-1.5-T1	LP3982IMM-Adj	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	SC70-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	1.5	1.5	F	National V _{OUT} accuracy = ±2%
AAT3237IJS-1.8-T1	LP3982IMM-1.8	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	SC70-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	1.8	1.8	F	National V _{OUT} accuracy = ±2%
AAT3237IJS-2.0-T1	LP3982IMM-Adj	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	SC70-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	2	2	F	National V _{OUT} accuracy = ±2%
AAT3237IJS-2.3-T1	LP3982IMM-Adj	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	SC70-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	2.3	2.3	F	National V _{OUT} accuracy = ±2%
AAT3237IJS-2.5-T1	LP3982IMM-2.5	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	SC70-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	2.5	2.5	F	National V _{OUT} accuracy = ±2%
AAT3237IJS-2.7-T1	LP3982IMM-2.77	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	SC70-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	2.7	2.7	F	National V _{OUT} accuracy = ±2%
AAT3237IJS-2.8-T1	LP3982IMM-2.82	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	SC70-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	2.8	2.8	F	National V _{OUT} accuracy = ±2%
AAT3237IJS-2.85-T1	LP3982IMM-2.82	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	SC70-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	2.85	2.85	F	National V _{OUT} accuracy = ±2%
AAT3237IJS-2.9-T1	LP3982IMM-Adj	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	SC70-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	2.9	2.9	F	National V _{OUT} accuracy = ±2%
AAT3237IJS-3.0-T1	LP3982IMM-3.0	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	SC70-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	3	3	F	National V _{OUT} accuracy = ±2%

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Analogic Tech										
AAT3237IJS-3.3-T1	LP3982IMM-3.3	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	SC70-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	3.3	3.3	F	National V _{OUT} accuracy = ±2%
AAT3237IJS-3.5-T1	LP3982IMM-Adj	Micropower, ultra-low-dropout, low noise, 300 mA CMOS regulator	SC70-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	3.5	3.5	F	National V _{OUT} accuracy = ±2%
AHK432IGY-.5-T1	LMV431BIMF	Low-voltage adjustable precision shunt regulator	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
AHK432IGV-.5-T1	LMV431BCM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	-40°C to 105°C	0°C to 70°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
AHK432ILY-.5-A1	LMV431BCZ	Low-voltage adjustable precision shunt regulator	T0-92	T0-92	-40°C to 105°C	0°C to 70°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
AHK432ILY-1-B1	LMV431AIZ	Low-voltage adjustable precision shunt regulator	T0-92	T0-92	-40°C to 105°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
AHK432IGY-1-T1	LMV431AIMF	Low-voltage adjustable precision shunt regulator	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
AHK432IGV-1-T1	LMV431AIM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	-40°C to 105°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
AHK432ILY-1-A1	LMV431AIZ	Low-voltage adjustable precision shunt regulator	T0-92	T0-92	-40°C to 105°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
AHK432IGY-2-T1	LMV431AIMF	Low-voltage adjustable precision shunt regulator	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage and better accuracy
AHK432IGV-2-T1	LMV431IM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	-40°C to 105°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
AHK432ILY-2-A1	LMV431IZ	Low-voltage adjustable precision shunt regulator	T0-92	T0-92	-40°C to 105°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
ATT3113ISN-20-T1	LM2794BLX	White LED driver	QFN-16	micro SMD-14	-40°C to 85°C	-40°C to 85°C	2.7 to 5.5 V _{IN}	2.7 to 5.5 V _{IN}	F	
ATT3113ISN-20-T1	LM2795BLX	White LED driver	QFN-16	micro SMD-14	-40°C to 85°C	-30°C to 85°C	2.7 to 5.5 V _{IN}	2.7 to 5.5 V _{IN}	F	
ATT3123ISN-20-T1	LM2794BLX	White LED driver	QFN-16	micro SMD-14	-40°C to 85°C	-30°C to 85°C	2.7 to 5.5 V _{IN}	2.7 to 5.5 V _{IN}	F	

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Analogic Tech										
ATT3123ISN-20-T1	LM2795BLX	White LED driver	QFN-16	micro SMD-14	-40°C to 85°C	-30°C to 85°C	2.7 to 5.5 V _{IN}	2.7 to 5.5 V _{IN}	F	
ATT3114ISN-20-T1	LM2796TLX	White LED driver	QFN-16	micro SMD-18	-40°C to 85°C	-30°C to 85°C	2.7 to 5.5 V _{IN}	2.7 to 5.5 V _{IN}	F	
ATT3124ISN-20-T1	LM2796TLX	White LED driver	QFN-16	micro SMD-18	-40°C to 85°C	-30°C to 85°C	2.7 to 5.5 V _{IN}	2.7 to 5.5 V _{IN}	F	
ATT3110IGU-5-T1	LM2750LDX-Adj	Switched capacitor boost regulator	SOT23-5	LLP-10	-40°C to 85°C	-40°C to 85°C	2.7 V _{IN} to V _{OUT} , 4.5, 5.0 V _{OUT}	2.7 to 5.6 V _{IN}	F	
AAT3215IGU-5-T1	LP3985IM5-3.0	150 mA CMOS low-dropout regulator	SOT23-5	SOT23-5	-40°C to 85°C	-40°C to 125°C	5.5 V _{IN} , 2.5 to 3.5 V _{OUT}	2.5 to 6.0 V _{IN}	F	Also available in micro SMD-4 package
Analog Integrations										
AIC1525-0CS	LM3525M-L	Single port USB power switch	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
AIC1525-1CS	LM3525M-H	Single port USB power switch	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
AIC1526-0CS	LM3526M-L	Dual port USB power switch	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
AIC1526-1CS	LM3526M-H	Dual port USB power switch	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
LM385B-CS-Adj	LM385BM	Micropower voltage reference	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	Adj.	Adj.	D	1% accuracy
LM385B-1.2CS	LM385BM-1.2	Micropower voltage reference	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	1.2	1.2	D	1% accuracy
LM385B-2.5CS	LM385BM-2.5	Micropower voltage reference	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2.5	2.5	S	Supplier has 1% accuracy, National has 1.5% accuracy
LM385B-CZ	LM385BZ-Adj	Micropower voltage reference	TO-92	TO-92	0°C to 70°C	0°C to 70°C	Adj.	Adj.	D	1% accuracy
LM385B-1.2CZ	LM385BZ-1.2	Micropower voltage reference	TO-92	TO-92	0°C to 70°C	0°C to 70°C	1.2	1.2	D	1% accuracy
LM385B-2.5CZ	LM385BZ-2.5	Micropower voltage reference	TO-92	TO-92	0°C to 70°C	0°C to 70°C	2.5	2.5	S	Supplier has 1% accuracy, National has 1.5% accuracy
LM385-CS	LM385M-Adj	Micropower voltage reference	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	Adj.	Adj.	D	2% accuracy
LM385-1.2CS	LM385M-1.2	Micropower voltage reference	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	1.2	1.2	D	2% accuracy
LM385-2.5CS	LM385M-2.5	Micropower voltage reference	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2.5	2.5	S	Supplier has 2% accuracy, National has 3% accuracy
LM385-2.5CU	LM385M3-2.5	Micropower voltage reference	SOT23-3	SOT23-3	0°C to 70°C	0°C to 70°C	2.5	2.5	F	Supplier has 2% accuracy, National has 3% accuracy

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Analog Integrations										
LM385-CZ	LM385Z-Adj	Micropower voltage reference	T0-92	T0-92	0°C to 70°C	0°C to 70°C	Adj.	Adj.	D	2% accuracy
LM385-1.2CZ	LM385Z-1.2	Micropower voltage reference	T0-92	T0-92	0°C to 70°C	0°C to 70°C	1.2	1.2	D	2% accuracy
LM385-2.5CZ	LM385Z-2.5	Micropower voltage reference	T0-92	T0-92	0°C to 70°C	0°C to 70°C	2.5	2.5	S	Supplier has 2% accuracy, National has 3% accuracy
Analog Microelectronics										
AME1084ACBT	LM1084IT-Adj	5A low-dropout regulator	T0220-3	T0220-3	0°C to 70°C	-40°C to 125°C	Adj.	Adj.	S	
AME1084DCBT	LM1084IT-3.3	5A low-dropout regulator	T0220-3	T0220-3	0°C to 70°C	-40°C to 125°C	3.3	3.3	S	
AME1084ACDT-3	LM1084IS-Adj	5A low-dropout regulator	T0263-3	T0263-3	0°C to 70°C	-40°C to 125°C	Adj.	Adj.	S	
AME1084DCDT-3	LM1084IS-3.3	5A low-dropout regulator	T0263-3	T0263-3	0°C to 70°C	-40°C to 125°C	3.3	3.3	S	
AME1085ACBT	LM1085IT-Adj	3A low-dropout regulator	T0220-3	T0220-3	0°C to 70°C	-40°C to 125°C	Adj.	Adj.	S	
AME1085CDBT	LM1085IT-3.3	3A low-dropout regulator	T0220-3	T0220-3	0°C to 70°C	-40°C to 125°C	3.3	3.3	S	
AME1085ACDT-3	LM1085IS-Adj	3A low-dropout regulator	T0263-3	T0263-3	0°C to 70°C	-40°C to 125°C	Adj.	Adj.	S	
AME1085CDDT-3	LM1085IS-3.3	3A low-dropout regulator	T0263-3	T0263-3	0°C to 70°C	-40°C to 125°C	3.3	3.3	S	
AME1117ACBT-Adj	LM1117T-Adj	800 mA low-dropout regulator	T0220-3	T0220-3	0°C to 70°C	0°C to 125°C	Adj.	Adj.	S	
AME1117BCBT-2.5	LM1117T-2.5	800 mA low-dropout regulator	T0220-3	T0220-3	0°C to 70°C	0°C to 125°C	2.5	2.5	S	
AME1117CCBT-3.3	LM1117T-3.3	800 mA low-dropout regulator	T0220-3	T0220-3	0°C to 70°C	0°C to 125°C	3.3	3.3	S	
AME1117DCBT-5.0	LM1117T-5.0	800 mA low-dropout regulator	T0220-3	T0220-3	0°C to 70°C	0°C to 125°C	5	5	S	
AME1117ACCT-Adj	LM1117DTX-Adj	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 70°C	0°C to 125°C	Adj.	Adj.	S	
AME1117BCCT-2.5	LM1117DTX-2.5	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 70°C	0°C to 125°C	2.5	2.5	S	
AME1117CCCT-3.3	LM1117DTX-3.3	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 70°C	0°C to 125°C	3.3	3.3	S	
AME1117DCCT-5.0	LM1117DTX-5.0	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 70°C	0°C to 125°C	5	5	S	
AME1117ACGT-Adj	LM1117MPX-Adj	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 70°C	0°C to 125°C	Adj.	Adj.	S	
AME1117BCGT-2.5	LM1117MPX-2.5	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 70°C	0°C to 125°C	2.5	2.5	S	
AME1117CCGT-3.3	LM1117MPX-3.3	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 70°C	0°C to 125°C	3.3	3.3	S	

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement
(May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package
(See datasheets for differences.)

N = Similar function, different package and/or pinout
(See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Analog Microelectronics										
AME1117DCGT-5.0	LM1117MPX-5.0	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 70°C	0°C to 125°C	5	5	S	
AME1117ECGT-1.8	LM1117MPX-1.8	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 70°C	0°C to 125°C	1.8	1.8	S	
AME385AEAT	LM285Z-1.2	Voltage reference	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	1.2	1.2	S	Supplier has 0.5% accuracy, National has 1% accuracy
AME385AEHA	LM285M-1.2	Voltage reference	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	1.2	1.2	S	Supplier has 0.5% accuracy, National has 1% accuracy
AME385BEAT	LM285Z-2.5	Voltage reference	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	2.5	2.5	S	Supplier has 0.5% accuracy, National has 1.5% accuracy
AME385BEHA	LM285M-2.5	Voltage reference	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2.5	2.5	S	Supplier has 0.5% accuracy, National has 1.5% accuracy
AME41BEAT	LM285Z	Voltage reference	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	–	–	S	Supplier has 0.5% accuracy, National has 1.5% accuracy
AME41BEHA	LM285M	Voltage reference	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	Supplier has 0.5% accuracy, National has 1.5% accuracy
Andigilog										
ASM120Q2	LM20BIM7	Temperature sensor	QFN-2	SC70-5	-40°C to 125°C	-55°C to 130°C	2.7 to 6	2.4 to 5.5	F	
ASM120Q2	LM20SIBP	Temperature sensor	QFN-2	micro SMD-4	-40°C to 125°C	-40°C to 125°C	2.7 to 6	2.4 to 5.5	F	National offers a micro SMD package
ASM121Q3	LM20BIM7	Temperature sensor	QFN-3	SC70-5	-40°C to 125°C	-55°C to 130°C	2.7 to 6	2.4 to 5.5	F	
ASM122Q3	LM20CIM7	Temperature sensor	QFN-3	SC70-5	-40°C to 125°C	-55°C to 130°C	2.7 to 6	2.4 to 5.5	F	
Anpec										
APL1431LABCPB	LMV431BCM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	0°C to 70°C	0°C to 70°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
APL1431LABCTB	LMV431BCM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	0°C to 70°C	0°C to 70°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
APL1431LABCTR	LMV431BCM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	0°C to 70°C	0°C to 70°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
APL1117U	LMS8117ADT-Adj	1A low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	S	National's part is an upgrade
APL1117-3.3U	LMS8117ADT-3.3	1A low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	3.3	3.3	S	National's part is an upgrade

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Anpec										
APL1117V	LMS8117AMP-Adj	1A low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	Adj.	Adj.	S	National's part is an upgrade
APL1117-3.3U	LMS8117AMP-3.3	1A low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	3.3	3.3	S	National's part is an upgrade
APL1431LABIPB	LMV431BCM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	-40°C to 85°C	0°C to 70°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
APL1431LABITB	LMV431BCM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	-40°C to 85°C	0°C to 70°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
APL1431LABITR	LMV431BCM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	-40°C to 85°C	0°C to 70°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
APL1431LBBCPB	LMV431ACM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	0°C to 70°C	0°C to 70°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
APL1431LBBCTB	LMV431ACM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	0°C to 70°C	0°C to 70°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
APL1431LBBCTR	LMV431ACM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	0°C to 70°C	0°C to 70°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
APL1431LBBIPB	LMV431AIM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	-40°C to 85°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
APL1431LBBITB	LMV431AIM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	-40°C to 85°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
APL1431LBBITR	LMV431AIM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	-40°C to 85°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
APL1431AAC	LM431CCM3	Adjustable shunt regulator	SOT23-3	SOT23-3	0°C to 70°C	0°C to 70°C	2.5	2.5	D	0.5% accuracy
APL1431AAI	LM431CIM	Adjustable shunt regulator	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	2.5	2.5	D	0.5% accuracy
APL1431BAC	LM431BCM3	Adjustable shunt regulator	SOT23-3	SOT23-3	0°C to 70°C	0°C to 70°C	2.5	2.5	D	1% accuracy
APL1431BAI	LM431BIM3	Adjustable shunt regulator	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	2.5	2.5	D	1% accuracy
APL1431BBCj	LMV431ACM	Adjustable shunt regulator	SOT23-5	SOT23-5	0°C to 70°C	0°C to 70°C	1.24	1.24	S	1% accuracy
APL1431LABC	LMV431BCM5	Adjustable shunt regulator	SOT23-5	SOT23-5	0°C to 70°C	0°C to 70°C	1.24	1.24	S	0.5% accuracy
APL1431LBBI	LMV431AIM5	Adjustable shunt regulator	SOT23-5	SOT23-5	-40°C to 85°C	-40°C to 85°C	1.24	1.24	S	1% accuracy
APL431AEC	LM431CCZ	Adjustable shunt regulator	T0-92	T0-92	0°C to 70°C	0°C to 70°C	2.5	2.5	D	0.5% accuracy
APL431AEI	LM431CIZ	Adjustable shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	2.5	2.5	D	0.5% accuracy

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Anpec										
APL431BEC	LM431BCZ	Adjustable shunt regulator	T0-92	T0-92	0°C to 70°C	0°C to 70°C	2.5	2.5	D	1% accuracy
APL431BEC	LMV431ACZ	Adjustable shunt regulator	T0-92	T0-92	0°C to 70°C	0°C to 70°C	1.24	1.24	S	1% accuracy
APL431BEI	LM431BIZ	Adjustable shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	2.5	2.5	D	1% accuracy
APL431CEC	LM431ACZ	Adjustable shunt regulator	T0-92	T0-92	0°C to 70°C	0°C to 70°C	2.5	2.5	D	2% accuracy
APL431CEI	LM431AIZ	Adjustable shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	2.5	2.5	D	2% accuracy
APL431LAEC	LMV431BCZ	Adjustable shunt regulator	T0-92	T0-92	0°C to 70°C	0°C to 70°C	1.24	1.24	S	0.5% accuracy
APL431LBEI	LMV431AIZ	Adjustable shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	1.24	1.24	S	1% accuracy
APA4880K	LM4880M	2 x 250 mW audio amplifier/ Boomer®	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
APA4881K	LM4880M	2 x 250 mW audio amplifier/ Boomer	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
APA48810	LM4881MM	2 x 200 mW stereo audio amplifier	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
APA48350	LM4835MT	Stereo 1.1W audio amplifier for laptop	TSSOP-28	TSSOP-28	-40°C to 85°C	-40°C to 85°C	–	–	D	
APA48350	LM4835MTE	Stereo 2W audio power amplifier	TSSOP-28	TSSOP-28	-40°C to 85°C	-40°C to 85°C	–	–	D	
APA48380	LM4838MT	Stereo 2.0W audio amplifier with DC volume	TSSOP-28	TSSOP-28	0°C to 70°C	0°C to 70°C	–	–	D	
APA48380	LM4835MTE	Stereo 2.2W Boomer with high-speed mode	TSSOP-28	TSSOP-28	-40°C to 85°C	-40°C to 85°C	–	–	D	
APA4835R	LM4835MTE	2.5W stereo audio amplifier	TSSOP-28	TSSOP-28	-40°C to 85°C	-40°C to 85°C	4.5 to 5	2.7 to 5.5	D	LM4835 has a wider operating voltage
APA4838R	LM4838MTE	2.5W stereo audio amplifier	TSSOP-28	TSSOP-28	-40°C to 85°C	-40°C to 85°C	4.5 to 5	2.7 to 5.5	D	LM4835 has a wider operating voltage
APA4863R	LM4863MTE	2.2W stereo audio amplifier	TSSOP-28	TSSOP-20	-40°C to 85°C	-40°C to 85°C	4.5 to 5	2 to 5.5	D	
Bay Linear										
B431LAZ	LMV431BCZ	Low-voltage adjustable precision shunt regulator	T0-92	T0-92	-40°C to 85°C	0°C to 70°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
B431LAM	LMV431BCM5	Low-voltage adjustable precision shunt regulator	SOIC-8	SOT23-5	-40°C to 85°C	0°C to 70°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Bay Linear										
B431LAK3	LMV431BIMF	Low-voltage adjustable precision shunt regulator	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
B431LBZ	LMV431AIZ	Low-voltage adjustable precision shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
B431LBM	LMV431AIM5	Low-voltage adjustable precision shunt regulator	SOIC-8	SOT23-5	-40°C to 85°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
B431LBK3	LMV431AIMF	Low-voltage adjustable precision shunt regulator	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
B431LCZ	LMV431IZ	Low-voltage adjustable precision shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
B431LCM	LMV431IM5	Low-voltage adjustable precision shunt regulator	SOIC-8	SOT23-5	-40°C to 85°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
B431LCK3	LMV431AIMF	Low-voltage adjustable precision shunt regulator	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
B432AZ	LMV431BCZ	Low-voltage adjustable precision shunt regulator	T0-92	T0-92	-40°C to 85°C	0°C to 70°C	1.25	1.25	S	National has higher absolute maximum rating of cathode voltage
B432AM	LMV431BCM5	Low-voltage adjustable precision shunt regulator	SOIC-8	SOT23-5	-40°C to 85°C	0°C to 70°C	1.25	1.25	S	National has higher absolute maximum rating of cathode voltage
B432AK3	LMV431BIMF	Low-voltage adjustable precision shunt regulator	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	1.25	1.25	S	National has higher absolute maximum rating of cathode voltage
B432BZ	LMV431AIZ	Low-voltage adjustable precision shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	1.25	1.25	S	National has higher absolute maximum rating of cathode voltage
B432BM	LMV431AIM5	Low-voltage adjustable precision shunt regulator	SOIC-8	SOT23-5	-40°C to 85°C	-40°C to 85°C	1.25	1.25	S	National has higher absolute maximum rating of cathode voltage
B432BK3	LMV431AIMF	Low-voltage adjustable precision shunt regulator	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	1.25	1.25	S	National has higher absolute maximum rating of cathode voltage
B432CZ	LMV431IZ	Low-voltage adjustable precision shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	1.25	1.25	S	National has higher absolute maximum rating of cathode voltage
B432CM	LMV431IM5	Low-voltage adjustable precision shunt regulator	SOIC-8	SOT23-5	-40°C to 85°C	-40°C to 85°C	1.25	1.25	S	National has higher absolute maximum rating of cathode voltage
B432CK3	LMV431AIMF	Low-voltage adjustable precision shunt regulator	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	1.25	1.25	S	National has higher absolute maximum rating of cathode voltage
B5213-28	LMS5213IMG-2.8	µCap, low-dropout voltage regulator	SC70-5	SC70-5	-40°C to 125°C	-40°C to 125°C	2.8	2.8	D	National has lower enable input current and tighter limit

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Bay Linear										
B5213-30	LMS5213IMG-3.0	µCap, low-dropout voltage regulator	SC70-5	SC70-5	-40°C to 125°C	-40°C to 125°C	3	3	D	National has lower enable input current and tighter limit
B5213-33	LMS5213IMG-3.3	µCap, low-dropout voltage regulator	SC70-5	SC70-5	-40°C to 125°C	-40°C to 125°C	3.3	3.3	D	National has lower enable input current and tighter limit
B5213-25	LMS5214IMG-2.5	80 mA low-dropout voltage regulator	SC70-5	SC70-5	-40°C to 125°C	-40°C to 125°C	2.5	2.5	S	National has lower enable input current and tighter limit
B5213-28	LMS5214IMG-2.9	80 mA low-dropout voltage regulator	SC70-5	SC70-5	-40°C to 125°C	-40°C to 125°C	2.8	2.9	S	National has lower enable input current and tighter limit
B5213-30	LMS5214IMG-3.0	80 mA low-dropout voltage regulator	SC70-5	SC70-5	-40°C to 125°C	-40°C to 125°C	3	3	S	National has lower enable input current and tighter limit
B5213-33	LMS5214IMG-3.3	80 mA low-dropout voltage regulator	SC70-5	SC70-5	-40°C to 125°C	-40°C to 125°C	3.3	3.3	S	National has lower enable input current and tighter limit
LP2951AM-3	LP2951ACM-3.0	Low-dropout voltage regulator	SOIC-8	SOIC-8	-55°C to 150°C	-40°C to 125°C	30	30	S	
LP2951AM-3.3	LP2951ACM-3.3	Low-dropout voltage regulator	SOIC-8	SOIC-8	-55°C to 150°C	-40°C to 125°C	30	30	S	
LP2951AM-5	LP2951ACM	Low-dropout voltage regulator	SOIC-8	SOIC-8	-55°C to 150°C	-40°C to 125°C	30	30	S	
LP2951BM-3	LP2951CM-3.0	Low-dropout voltage regulator	SOIC-8	SOIC-8	-55°C to 150°C	-40°C to 125°C	30	30	S	
LP2951BM-3.3	LP2951CM-3.3	Low-dropout voltage regulator	SOIC-8	SOIC-8	-55°C to 150°C	-40°C to 125°C	30	30	S	
LP2951BM-5	LP2951CM	Low-dropout voltage regulator	SOIC-8	SOIC-8	-55°C to 150°C	-40°C to 125°C	30	30	S	
Catalyst										
CAT37EKT-TE7	LM2704MFX-Adj	White LED driver	SOT23-5	SOT23-5	-40°C to 80°C	-45°C to 80°C	3 to 5 V _{IN}	2.2 to 7 V _{IN} , 20 V _{OUT}	D	
CAT32EKT-TE7	LM2703MFX-Adj	White LED driver	SOT23-5	SOT23-5	-40°C to 80°C	-45°C to 80°C	2.7 to 4.2 V _{IN}	2.2 to 7 V _{IN} , 20 V _{OUT}	D	
CAT431LEUR-TE7	LMV431BIMF	Low-voltage adjustable precision shunt regulator	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
CAT431LEUK-TE7	LMV431BCM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	-40°C to 85°C	0°C to 70°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
CAT431LEZR-TEAP	LMV431BCZ	Low-voltage adjustable precision shunt regulator	TO-92	TO-92	-40°C to 85°C	0°C to 70°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Champion Microelectronics Co.										
CM2851ACIM25	LMS5258MF-1.2	150 mA CMOS low-dropout regulator with power good	SOT23-5	SOT23-5	-40°C to 85°C	-40°C to 85°C	1.2	1.2	D	
Dallas Semiconductor										
DS1780E	LM81BIMT-3	Serial interface ACPI compatible system monitor	TSSOP-24	TSSOP-24	-40°C to 125°C	-40°C to 125°C	2.8 to 5.75	2.8 to 3.8	D	
DS1780E	LM81CIMT-3	Serial interface ACPI compatible system monitor	TSSOP-24	TSSOP-24	-40°C to 125°C	-40°C to 125°C	2.8 to 5.75	2.8 to 3.8	D	
DS232A-N	DS14C232CN	5V dual RS-232 driver/receiver	MDIP-16	MDIP-16	-40°C to 85°C	-40°C to 85°C	–	–	S	
DS60R	LM60BIM3	Temperature sensor	SOT23-3	SOT23-3	-25°C to 125°C, -40°C to 125°C	-25°C to 125°C, -40°C to 125°C	2.7 to 10	2.7 to 10	S	
DS60R	LM60CIM3	Temperature sensor	SOT23-3	SOT23-3	-25°C to 125°C, -40°C to 125°C	-25°C to 125°C, -40°C to 125°C	2.7 to 10	2.7 to 10	S	
DS60X	LM60BIM3	Temperature sensor	Flip chip	SOT23-3	-25°C to 125°C, -40°C to 125°C	-25°C to 125°C, -40°C to 125°C	2.7 to 10	2.7 to 10	F	
DS60X	LM60CIM3	Temperature sensor	Flip chip	SOT23-3	-25°C to 125°C, -40°C to 125°C	-25°C to 125°C, -40°C to 125°C	2.7 to 10	2.7 to 10	F	
DS75	LM75BIMM-3	Two-wire digital temperature sensor with alarms	MSOP-8	MSOP-8	-55°C to 125°C	-55°C to 150°C	2 to 5.5	2 to 5.5	D	
DS75S	LM75BIM-3	Two-wire digital temperature sensor with alarms	SOIC-8	SOIC-8	-55°C to 125°C	-55°C to 150°C	2 to 5.5	2 to 5.5	D	
EM Microelectronic - Marin SA										
V6309LSP3B	LM809M3-4.63	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 125°C	-40°C to 105°C	4.63	4.63	S	
V6309MSP3B	LM809M3-4.38	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 125°C	-40°C to 105°C	4.38	4.38	S	
V6309TSP3B	LM809M3-3.08	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 125°C	-40°C to 105°C	3.08	3.08	S	
V6309SSP3B	LM809M3-2.93	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 125°C	-40°C to 105°C	2.93	2.93	S	
V6309RSP3B	LM809M3-2.63	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 125°C	-40°C to 105°C	2.63	2.63	S	
V6319LSP3B	LM810M3-4.63	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 125°C	-40°C to 105°C	4.63	4.63	S	
V6319MSP3B	LM810M3-4.38	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 125°C	-40°C to 105°C	4.38	4.38	S	
V6319TSP3B	LM810M3-3.38	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 125°C	-40°C to 105°C	3.08	3.08	S	
V6319SSP3B	LM810M3-2.93	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 125°C	-40°C to 105°C	2.93	2.93	S	

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
EM Microelectronic - Marin SA										
V6319RSP3B	LM810M3-2.63	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 125°C	-40°C to 105°C	2.63	2.63	S	
Exar Semiconductor										
ST16C550CP40	PC16550DN	Single-channel UART	MDIP-40	MDIP-40	0°C to 70°C	0°C to 70°C	3.3 or 5	5	D	
ST16C550IP40	PC16550DN	Single-channel UART	MDIP-40	MDIP-40	-40°C to 85°C	0°C to 70°C	3.3 or 5	5	S	
ST16C550CJ44	PC16550DV	Single-channel UART	PLCC-44	PLCC-44	0°C to 70°C	0°C to 70°C	3.3 or 5	5	D	
ST16C550IJ44	PC16550DV	Single-channel UART	PLCC-44	PLCC-44	-40°C to 85°C	0°C to 70°C	3.3 or 5	5	S	
ST16C2552CJ44	PC16552DV	Dual-channel UART	PLCC-44	PLCC-44	0°C to 70°C	0°C to 70°C	3.3 or 5	5	D	
ST16C2552IJ44	PC16552DV	Dual-channel UART	PLCC-44	PLCC-44	-40°C to 85°C	0°C to 70°C	3.3 or 5	5	S	
ST16C552CJ68	PC16552DV	Dual-channel UART	PLCC-68	PLCC-44	0°C to 70°C	0°C to 70°C	3.3 or 5	5	N	
ST16C552IJ68	PC16552DV	Dual-channel UART	PLCC-68	PLCC-44	-40°C to 85°C	0°C to 70°C	3.3 or 5	5	N	
ST16C552ACJ68	PC16552DV	Dual-channel UART	PLCC-68	PLCC-44	0°C to 70°C	0°C to 70°C	3.3 or 5	5	N	
ST16C552ICJ68	PC16552DV	Dual-channel UART	PLCC-68	PLCC-44	-40°C to 85°C	0°C to 70°C	3.3 or 5	5	N	
ST26C31CF16	DS26LS31CM	Quad differential line driver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	S	
ST26C31CP16	DS26LS31CN	Quad differential line driver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	S	
ST26C31LF16	DS26LS31CM	Quad differential line driver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	S	
ST26C31LP16	DS26LS31CN	Quad differential line driver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	S	
XR-1010CP	LMF100CCN	Dual switched capacitor filter	MDIP-20	MDIP-20	0°C to 70°C	0°C to 70°C	14	15	D	
XR-1010CD	LMF100CIWM	Dual switched capacitor filter	WSOIC-20	WSOIC-20	0°C to 70°C	-40°C to 85°C	14	15	D	National has better temp. range
XR-1010CD	LMF10CWM	Dual switched capacitor filter	WSOIC-20	WSOIC-20	0°C to 70°C	0°C to 70°C	14	15	D	
Fairchild Semiconductor										
FAN1117AAS33X	LM1117MPX-3.3	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
FAN1117AD18X	LMS8117ADT-1.8	1A low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	1.8	1.8	D	
FAN1117AD18X	LM1117DTX-1.8	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	1.8	1.8	D	
FAN1117AD25X	LM1117DTX-2.5	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	2.5	2.5	D	
FAN1117AD285	LM1117DTX-2.85	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	2.85	2.85	D	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Fairchild Semiconductor										
FAN1117AD33X	LM1117DTX-3.3	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
FAN1117AD5X	LM1117DTX-5.0	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	5	5	D	
FAN1117ADX	LMS8117ADT-Adj	1A low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
FAN1117ADX	LM1117DTX-Adj	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	National offers the LMS8117A in 1A for the 1.8V, 3.3V and adj. versions in the SOT-223 and TO-252
FAN1117AS18X	LMS8117AMP-1.8	1A low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	1.8	1.8	D	
FAN1117AS18X	LM1117MPX-1.8	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	1.8	1.8	D	
FAN1117AS25X	LM1117MPX-2.5	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	2.5	2.5	D	
FAN1117AS285	LM1117MPX-2.85	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	2.85	2.85	D	
FAN1117AS33X	LMS8117AMP-3.3	1A low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
FAN1117AS5X	LM1117MPX-5.0	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	5	5	D	
FAN1117ASX	LMS8117AMP-Adj	1A low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
FAN1117ASX	LM1117MPX-Adj	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	Fairchild's parts are specified at 1A
FAN1117AT	LM1117T-Adj	800 mA low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
FAN1117AT18	LM1117T-1.8	800 mA low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	1.8	1.8	D	
FAN1117AT25	LM1117T-2.5	800 mA low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	2.5	2.5	D	
FAN1117AT33	LM1117T-3.3	800 mA low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
FAN2558S12	LMS5258MF-1.2	180 mA low-dropout regulator with power good	SOT23-5	SOT23-5	-40°C to 125°C	-40°C to 125°C	1.2	1.2	S	National's load current capability is 150 mA
FAN5609MPX	LM2794BLX	White LED driver	MLP-14	micro SMD-14	-40°C to 85°C	-30°C to 85°C	2.7 to 5.5 V _{IN}	2.7 to 5.5 V _{IN}	F	
FAN5609MPX	LM2795BLX	White LED driver	MLP-14	micro SMD-14	-40°C to 85°C	-30°C to 85°C	2.7 to 5.5 V _{IN}	2.7 to 5.5 V _{IN}	F	
FAN5610MPX	LM3595LDX	White LED driver	MLP-8	LLP-10	-40°C to 85°C	-40°C to 85°C	2.7 to 5.5 V _{IN}	3 to 5.5 V _{IN}	F	
FAN5660IMX	LM2665M6X	Unregulated switched capacitor	SOIC-8	SOT23-6	-40°C to 85°C	-40°C to 85°C	1.5 to 5 V _{IN}	1.8 to 5.8 V _{IN}	F	

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement (May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package (See datasheets for differences.)

N = Similar function, different package and/or pinout (See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Fairchild Semiconductor										
FAN7005M	LM4900M	265 mW at 3.3V cellular audio amplifier	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
FAN7005MU	LM4900MM	265 mW at 3.3V cellular audio amplifier	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
FAN7021M	LM4871M	1.5W audio amplifier with shutdown	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
FAN7023M	LM4889MA	1W audio power amplifier	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
FAN7023M	LM4871MM	1W audio amplifier	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2.2 to 5.5	2 to 5.5	D	
FAN7023MU	LM4889MM	1W audio power amplifier	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
FAN7023MU	LM4871MM	1W audio amplifier	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	2.2 to 5.5	2 to 5.5	D	
FAN7031MTF	LM4874MH	2W stereo audio amplifier	TSSOP-20	TSSOP-20	-40°C to 85°C	-40°C to 85°C	2.7 to 5.5	2.7 to 5.5	D	
FIN1001M5	DS90LV011ATMF	Single differential line driver	SOT23-5	SOT23-5	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
FIN1002M5	DS90LT012ATMF	Single differential line receiver	SOT23-5	SOT23-5	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
FIN1017K8	DS90LV017M	Single differential line driver	US8-8	SOIC-8	-40°C to 85°C	0°C to 70°C	3.3	3.3	F	
FIN1017K8	DS90LV017ATM	Single differential line driver	US8-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	3.3	3.3	F	
FIN1017M	DS90LV017M	Single differential line driver	SOIC-8	SOIC-8	-40°C to 85°C	0°C to 70°C	3.3	3.3	S	
FIN1017M	DS90LV017ATM	Single differential line driver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
FIN1018K8	DS90LV018ATM	Single differential line receiver	US8-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	3.3	3.3	F	
FIN1018M	DS90LV018ATM	Single LVDS receiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
FIN1019M	DS90LV019TM	Single transceiver	SOIC-14	SOIC-14	-40°C to 85°C	-40°C to 85°C	3.3 or 5	3.3 or 5	D	
FIN1019MTC	DS90LV019TMT	Single transceiver	TSSOP-14	TSSOP-14	-40°C to 85°C	-40°C to 85°C	3.3 or 5	3.3 or 5	D	
FIN1022M	DS90CP22M-8	2 x 2 LVDS crosspoint switch	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
FIN1022MTC	DS90CP22MT	2 x 2 LVDS crosspoint switch	TSSOP-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
FIN1027AM	DS90LV027ATM	Dual LVDS differential driver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
FIN1027K8	DS90LV027M	Dual LVDS differential driver	US8-8	SOIC-8	-40°C to 85°C	0°C to 70°C	3.3	3.3	F	
FIN1027M	DS90LV027M	Dual LVDS differential driver	SOIC-8	SOIC-8	-40°C to 85°C	0°C to 70°C	3.3	3.3	S	
FIN1028M	DS90LV028ATM	Dual LVDS receiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Fairchild Semiconductor										
FIN1028M	DS90LV028ATMF	Dual LVDS differential receiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
FIN1031M	DS90LV031ATM	Quad LVDS differential line driver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
FIN1031MTC	DS90LV031ATMC	Quad LVDS differential line driver	TSSOP-16	TSSOP-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
FIN1032M	DS90LV032ATM	Quad LVDS receiver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
FIN1032MTC	DS90LV032ATMTC	Quad LVDS differential line receiver	TSSOP-16	TSSOP-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
FIN1047M	DS90LV047ATM	Quad LVDS differential line driver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
FIN1047MTC	DS90LV047ATMTC	Quad LVDS differential line driver	TSSOP-16	TSSOP-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
FIN1048M	DS90LV048ATM	Quad LVDS differential line receiver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
FIN1048MTC	DS90LV048ATMTC	Quad LVDS differential line receiver	TSSOP-16	TSSOP-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
FIN1049MTC	DS90LV049TMT	LVDS dual line driver/receiver	TSSOP-16	TSSOP-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
FIN1531M	DS90C031TM	Quad LVDS differential line driver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	5	5	D	
FIN1531M	DS90C031BTM	Quad LVDS differential line driver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	5	5	D	
FIN1531MTC	DS90C031TM	Quad LVDS differential line driver	TSSOP-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	5	5	F	
FIN1531MTC	DS90C031BTM	Quad LVDS differential line driver	TSSOP-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	5	5	F	
FIN1532M	DS26C32ATM	Quad RS-422 receiver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	5	5	D	
FIN1532M	DS90C032BTM	Quad LVDS receiver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	5	5	D	
FIN1532M	DS90C032TM	Quad LVDS differential line receiver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	5	5	D	
FIN1532M	DS90C032BTM	Quad LVDS differential line receiver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	5	5	D	
FIN1532MTC	DS90C032TM	Quad LVDS differential line receiver	TSSOP-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	5	5	F	
FIN1532MTC	DS90C032BTM	Quad LVDS differential line receiver	TSSOP-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	5	5	F	
FM20PX5	LM20BIM7	Temperature sensor	SC70-5	SC70-5	-55°C to 130°C	-55°C to 130°C	2.4 to 5.5	2.4 to 5.5	S	

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Fairchild Semiconductor										
FM20PX5	LM20CIM7	Temperature sensor	SC70-5	SC70-5	-55°C to 130°C	-55°C to 130°C	2.4 to 5.5	2.4 to 5.5	D	
FM20S35	LM20BIM7	Temperature sensor	SOT23-3	SC70-5	-55°C to 130°C	-55°C to 130°C	2.4 to 5.5	2.4 to 5.5	F	
FM20S35	LM20CIM7	Temperature sensor	SOT23-3	SC70-5	-55°C to 130°C	-55°C to 130°C	2.4 to 5.5	2.4 to 5.5	F	
KA1458	LM1458N	Dual operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
KA1458D	LM1458M	Dual operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
KA301A	LM301AN	Operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	National's LM301AN is an upgrade
KA311	LM311N	Voltage comparator	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
KA311D	LM311M	Voltage comparator	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
KA317LZ	LM317LZ	3-terminal 100 mA positive adjustable regulator	TO-92	TO-92	0°C to 125°C	-40°C to 125°C	–	–	D	National's part has a wider temperature range and is offered in a micro SMD and SOIC-8 packages
KA317M	LM317T	3-terminal 1.5A positive adjustable regulator	TO220-3	TO220-3	0°C to 125°C	0°C to 125°C	–	–	D	National offers additional packages: TO-3, TO-39, TO-220, LCC, TO-263, TO-252, SOT-223
KA317MR	LM317MDT	3-terminal 1.5A positive adjustable regulator	TO252-3	TO252-3	0°C to 125°C	0°C to 125°C	–	–	D	National offers additional packages: TO-3, TO-39, TO-220, LCC, TO-263, TO-252, SOT-223
KA317T	LM317T	3-terminal 1.5A positive adjustable regulator	TO220-3	TO220-3	0°C to 125°C	0°C to 125°C	–	–	D	National offers additional packages: TO-3, TO-39, TO-220, LCC, TO-263, TO-252, SOT-223
KA348	LM348N	Quad operational amplifier	MDIP-14	MDIP-14	0°C to 70°C	0°C to 70°C	–	–	D	
KA348D	LM348M	Quad operational amplifier	SOIC-14	SOIC-14	0°C to 70°C	0°C to 70°C	–	–	D	
KA3524	LM3524D	Regulating pulse width modulator	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	D	National's LM3524D is an upgrade to the KA3524
KA3524N	LM3524DN	Regulating pulse width modulator	MDIP-16	MDIP-16	0°C to 70°C	0°C to 125°C	8 to 40	8 to 40	F	Pin 4 and 5 are reversed, otherwise the same
KA431SAMF	LM431BIM3	Precision Zener shunt regulator	SOT23-3	SOT23-3	-25°C to 85°	-40°C to 85°C	2.5	2.5	S	1% accuracy
KA431SLMF	LM431CIM3	Precision Zener shunt regulator	SOT23-3	SOT23-3	-25°C to 85°	-40°C to 85°C	2.5	2.5	S	0.5% accuracy
KA431SMF	LM431AIM3	Precision Zener shunt regulator	SOT23-3	SOT23-3	-25°C to 85°C	-40°C to 85°C	2.5	2.5	S	2% accuracy
KA4558	LM1458N	Dual operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Fairchild Semiconductor										
KA4558D	LM1458M	Dual operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
KA7805	LM340T-5.0	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	5	5	D	
KA7808	LM7808CT	3-terminal 1A positive voltage regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	8	8	D	Slightly different package
KA7808A	LM7808CT	3-terminal 1A positive voltage regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	8	8	S	Slightly different package
KA78L05AD	LM78L05ACM	Low-current voltage regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 125°C	5	5	D	
KA78L05AZ	LM78L05ACZ	Low-current voltage regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	5	5	D	
KA78L06AZ	LM78L62ACZ	Low-current voltage regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	6	6.2	S	
KA78L08AD	LM78L82ACM	Low-current voltage regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 125°C	8	8.2	S	
KA78L08AZ	LM78L82ACZ	Low-current voltage regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	8	8.2	S	
KA78L09AZ	LM78L09ACZ	Low-current voltage regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	9	9	D	
KA78L12AD	LM78L12ACM	Low-current voltage regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 125°C	12	12	D	
KA78L12AZ	LM78L12ACZ	Low-current voltage regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	12	12	D	
KA78L12AZBU	LM78L12ACZ	3-terminal positive regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	12	12	D	
KA78L15AZ	LM78L15ACZ	Low-current voltage regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	15	15	D	
KA78M05	LM2930T-5.0	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 85°C	5	5	S	Different temperature range
KA78M05	LM340T-5.0	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	5	5	D	National has higher current range
KA78M05	LM78M05CT	0.5A voltage regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	5	5	S	
KA78M05R	LM340MP-5.0	3-terminal positive regulator	T0252-3	SOT223-4	0°C to 125°C	0°C to 125°C	5	5	F	Different package, National has higher current range
KA78M05R	LM78M05CDT	0.5A voltage regulator	T0252-3	T0252-3	0°C to 125°C	-40°C to 125°C	5	5	S	
KA78M08	LM7808CT	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	8	8	D	National has higher current range
KA78M08	LM2930T-8.0	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 85°C	8	8	S	Different temperature range
KA78M12	LM340T-12	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	12	12	D	National has higher current range
KA78M12	LM78M12CT	0.5A voltage regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	12	12	S	

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Fairchild Semiconductor										
KA78M12R	LM78M12CDT	0.5A voltage regulator	T0252-3	T0252-3	0°C to 125°C	-40°C to 125°C	12	12	S	
KA78M15	LM340T-15	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	15	15	D	National has higher current range
KA78M15	LM78M15CT	0.5A voltage regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	15	15	S	
KA78M15R	LM78M15CDT	0.5A voltage regulator	T0252-3	T0252-3	0°C to 125°C	-40°C to 125°C	15	15	S	
KA7905	LM320T-5.0	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	-5	-5	D	National has lower Iq current
KA7905	LM7905CT	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	-5	-5	D	National has lower Iq current
KA7905A	LM320T-5.0	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	-5	-5	F	Supplier has 2% accuracy, National has 4% accuracy
KA7905A	LM7905CT	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	-5	-5	F	Supplier has 2% accuracy, National has 4% accuracy
KA7912	LM320T-12	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	-12	-12	D	National has lower Iq current
KA7912	LM7912CT	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	-12	-12	D	National has lower Iq current
KA7912A	LM320T-12	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	-12	-12	F	Supplier has 2% accuracy, National has 4% accuracy
KA7912A	LM7912CT	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	-12	-12	F	Supplier has 2% accuracy, National has 4% accuracy
KA7915	LM320T-15	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	-15	-15	D	National has lower Iq current
KA7915	LM7915CT	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	-15	-15	D	National has lower Iq current
KA7915A	LM320T-15	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	-15	-15	F	Supplier has 2% accuracy, National has 4% accuracy
KA7915A	LM7915CT	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	-15	-15	F	Supplier has 2% accuracy, National has 4% accuracy
KA79M05	LM79M05CT	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	-5	-5	D	
KA79M05	LM79M05CT	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	-5, -12, -15	-5, -12, -15	D	
KA79M12	LM79M12CT	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	-12	-12	D	
KA79M15	LM79M15CT	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	-15	-15	D	
KF353N	LF353N	Dual precision JFET operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	±15	±15	D	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Fairchild Semiconductor										
LF347M	LF347M	Wide bandwidth quad JFET input operational amplifier	SOIC-14	SOIC-14	0°C to 70°C	0°C to 70°C	–	–	D	
LF347N	LF347N	Wide bandwidth quad JFET input operational amplifier	MDIP-14	MDIP-14	0°C to 70°C	0°C to 70°C	–	–	D	
LF351M	LF351M	Precision JFET operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	±15	±15	D	
LF351N	LF351N	Precision JFET operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	±15	±15	D	
LF353M	LF353M	Dual precision JFET operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	±15	±15	D	
LF353N	LF353N	Dual precision JFET operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	±15	±15	D	
LM1458CM	LM1458M	Dual operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
LM1458CN	LM1458N	Dual operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
LM1458M	LM1458M	Dual operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	6 to 36	6 to 36	D	
LM1458N	LM1458N	Dual operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	6 to 36	6 to 36	D	
LM2901M	LM2901M	Dual operational amplifier	SOIC-14	SOIC-14	-40°C to 85°C	-40°C to 85°C	2 to 36	2 to 36	D	
LM2901N	LM2901N	Dual operational amplifier	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	2 to 36	2 to 36	D	
LM2902M	LM2902M	Dual operational amplifier	SOIC-14	SOIC-14	-40°C to 85°C	-40°C to 85°C	3 to 26	3 to 32	D	
LM2902N	LM2902N	Dual operational amplifier	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	3 to 26	3 to 32	D	
LM2903M	LM2903M	Dual operational amplifier	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2 to 36	2 to 36	D	
LM2903N	LM2903N	Dual operational amplifier	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	2 to 36	2 to 36	D	
LM2904M	LM2904M	Low-power, low-offset voltage dual comparator	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	3 to 26	3 to 32	D	
LM2904N	LM2904N	Low-power, low-offset voltage dual comparator	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	3 to 26	3 to 32	D	
LM2931AZ5	LM2931AZ-5.0	Low-dropout regulator	T0-92	T0-92	-40°C to 125°C	-40°C to 125°C	5	5	D	
LM301AN	LM301AN	Operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	National's LM301AN is an upgrade
LM311M	LM311M	Voltage comparator	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	5 to 15	5	D	
LM311N	LM311N	Voltage comparator	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	5 to 15	5	D	

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Fairchild Semiconductor										
LM317AHVT	LM317AT	3-terminal 1.5A positive adjustable regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	–	–	S	National offers additional packages: TO-3, TO-39, TO-220, LCC, TO-263, TO-252, SOT-223
LM317HVT	LM317T	1.5A positive adjustable voltage regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	1.2 to 37	1.2 to 37	D	
LM317LM	LM317LM	3-terminal 100 mA positive adjustable regulator	SOIC-8	SOIC-8	0°C to 125°C	-40°C to 125°C	–	–	D	National part has wider temperature range and is offered in micro SMD and SOIC-8 packages
LM317LZ	LM317LZ	3-terminal 100 mA positive adjustable regulator	TO-92	TO-92	0°C to 125°C	-40°C to 125°C	–	–	D	National part has wider temperature range and is offered in micro SMD and SOIC-8 packages
LM317MDT	LM317MDT	3-terminal adjustable regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	1.2 to 37	1.2 to 37	D	
LM317T	LM317T	3-terminal 1.5A positive adjustable regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	–	–	D	National offers additional packages: TO-3, TO-39, TO-220, LCC, TO-263, TO-252, SOT-223
LM319M	LM319M	High-speed dual comparator	SOIC-14	SOIC-14	0°C to 70°C	0°C to 70°C	–	–	D	
LM319N	LM319N	High-speed dual comparator	MDIP-14	MDIP-14	0°C to 70°C	0°C to 70°C	–	–	D	
LM324AM	LM324AM	Low-power quad operational amplifier	SOIC-14	SOIC-14	0°C to 70°C	0°C to 70°C	3 to 32	3 to 32	D	
LM324AN	LM324AN	Low-power quad operational amplifier	MDIP-14	MDIP-14	0°C to 70°C	0°C to 70°C	3 to 32	3 to 32	D	
LM324M	LM324M	Low-power quad operational amplifier	SOIC-14	SOIC-14	0°C to 70°C	0°C to 70°C	3 to 32	3 to 32	D	
LM331N	LM331N	Precision voltage to frequency converter	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	National offers better DC specs and industrial temperature range
LM336BZ25	LM336BZ-2.5	Shunt regulator	TO-92	TO-92	0°C to 70°C	0°C to 70°C	2.5	2.5	D	1% accuracy
LM336BZ25	LM336BZ-2.5	Reference diode	TO-92	TO-92	0°C to 70°C	0°C to 70°C	2.5	2.5	S	
LM336BZ50	LM336BZ-5.0	Shunt regulator	TO-92	TO-92	0°C to 70°C	0°C to 70°C	5	5	D	1% accuracy
LM336BZ50	LM336BZ-5.0	Reference diode	TO-92	TO-92	0°C to 70°C	0°C to 70°C	5	5	D	
LM336Z2.5	LM336Z-2.5	Shunt regulator	TO-92	TO-92	0°C to 70°C	0°C to 70°C	2.5	2.5	D	1% accuracy
LM336Z25	LM336Z-2.5	Reference diode	TO-92	TO-92	0°C to 70°C	0°C to 70°C	2.5	2.5	S	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Fairchild Semiconductor										
LM336Z5	LM336Z-5.0	Shunt regulator	TO-92	TO-92	0°C to 70°C	0°C to 70°C	5	5	D	1% accuracy
LM336Z50	LM336Z-5.0	Reference diode	TO-92	TO-92	0°C to 70°C	0°C to 70°C	5	5	D	
LM337T	LM337T	1.5A negative adjustable regulator	TO220-3	TO220-3	0°C to 125°C	0°C to 125°C	1.2 to 37	1.2 to 37	D	
LM339M	LM339M	Low-power quad operational amplifier	SOIC-14	SOIC-14	0°C to 70°C	0°C to 70°C	2 to 36	3 to 32	D	
LM339N	LM339N	Low-power quad operational amplifier	MDIP-14	MDIP-14	0°C to 70°C	0°C to 70°C	2 to 36	3 to 32	D	
LM348M	LM348M	Quad operational amplifier	SOIC-14	SOIC-14	0°C to 70°C	0°C to 70°C	–	–	D	
LM348N	LM348N	Low-power quad operational amplifier	MDIP-14	MDIP-14	0°C to 70°C	0°C to 70°C	±18	±18	D	
LM350	LM350AT,	3-terminal 3A positive adjustable voltage regulator	TO220-3	TO220-3	0°C to 125°C	-40°C to 125°C	–	–	S	
LM358AM	LM358M	Low-power quad operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	3 to 32	3 to 32	D	
LM358AN	LM358N	Low-power quad operational amplifier	MDIP-14	MDIP-14	0°C to 70°C	0°C to 70°C	3 to 32	3 to 32	D	
LM393M	LM393M	Low-power, low-offset voltage dual comparator	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2 to 36	2 to 36	D	
LM393N	LM393N	Low-power, low-offset voltage dual comparator	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	2 to 36	2 to 36	D	
LM431ACM	LM431ACM	Programmable shunt regulator	SOIC-8	SOIC-8	-25°C to 85°C	0°C to 70°C	2.5 to 36	2.5 to 36	S	Different temperature range
LM431ACZ	LM431ACZ	Programmable shunt regulator	TO-92	TO-92	-25°C to 85°C	0°C to 70°C	2.5 to 36	2.5 to 36	S	
LM431AIM	LM431AIM	Programmable shunt regulator	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2.5 to 36	2.5 to 36	D	
LM431AIZ	LM431AIZ	Programmable shunt regulator	TO-92	TO-92	-40°C to 85°C	-40°C to 85°C	2.5 to 36	2.5 to 36	D	
LM431BCM	LM431BCM	Programmable shunt regulator	SOIC-8	SOIC-8	-25°C to 85°C	0°C to 70°C	2.5 to 36	2.5 to 36	S	Different temperature range
LM431BCZ	LM431BCZ	Programmable shunt regulator	TO-92	TO-92	-25°C to 85°C	0°C to 70°C	2.5 to 36	2.5 to 36	S	
LM431BIM	LM431BIM	Programmable shunt regulator	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2.5 to 36	2.5 to 36	D	
LM431BIZ	LM431BIZ	Programmable shunt regulator	TO-92	TO-92	-40°C to 85°C	-40°C to 85°C	2.5 to 36	2.5 to 36	D	
LM431CCM	LM431CCM	Programmable shunt regulator	SOIC-8	SOIC-8	-25°C to 85°C	0°C to 70°C	2.5 to 36	2.5 to 36	S	Different temperature range

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement
(May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package
(See datasheets for differences.)

N = Similar function, different package and/or pinout
(See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Fairchild Semiconductor										
LM431CCZ	LM431CCZ	Programmable shunt regulator	TO-92	TO-92	-25°C to 85°C	0°C to 70°C	2.5 to 36	2.5 to 36	S	
LM431CIM	LM431CIM	Programmable shunt regulator	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2.5 to 36	2.5 to 36	D	
LM431CIZ	LM431CIZ	Programmable shunt regulator	TO-92	TO-92	-40°C to 85°C	-40°C to 85°C	2.5 to 36	2.5 to 36	D	
LM555CM	LM555CM	Single precision timing circuit	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	4.5 to 16	4.5 to 16	D	
LM555CM	LM555CN	Single precision timing circuit	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
LM555CN	LM555CN	Single precision timing circuit	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	4.5 to 16	4.5 to 16	D	
LM555CN	LM555CM	Single precision timing circuit	MSOP-8	MSOP-8	0°C to 70°C	0°C to 70°C	–	–	D	
LM78L05ACZ	LM78L05ACZ	3-terminal positive regulator	TO-92	TO-92	0°C to 125°C	0°C to 125°C	5	5	D	
LM78L12ACZ	LM78L12ACZ	3-terminal positive regulator	TO-92	TO-92	0°C to 125°C	0°C to 125°C	12	12	D	
LM78M05CT	LM78M05CT	0.5A voltage regulator	TO220-3	TO220-3	0°C to 125°C	-40°C to 125°C	5	5	S	
LM78M12CT	LM78M12CT	0.5A voltage regulator	TO220-3	TO220-3	0°C to 125°C	-40°C to 125°C	12	12	S	
LM78M15CT	LM78M15CT	0.5A voltage regulator	TO220-3	TO220-3	0°C to 125°C	-40°C to 125°C	15	15	S	
LM79L05ACZ	LM79L05ACZ	3-terminal negative regulator	TO-92	TO-92	0°C to 125°C	0°C to 125°C	5	5	D	
LM79L12ACZ	LM79L12ACZ	3-terminal negative regulator	TO-92	TO-92	0°C to 125°C	0°C to 125°C	12	12	D	
LM79L15ACZ	LM79L15ACZ	3-terminal negative regulator	TO-92	TO-92	0°C to 125°C	0°C to 125°C	15	15	D	
LMV321AP5X	LMV321M7	Single amplifier	SC70-5	SC70-5	-40°C to 125°C	-40°C to 85°C	2.7 to 5	2.7 to 5	S	
LMV321AS5X	LMV321M5	Single amplifier	SOT23-5	SOT23-5	-40°C to 125°C	-40°C to 85°C	2.7 to 5	2.7 to 5	S	
LMV324AM14X	LMV324M	Quad amplifier	SOIC-14	SOIC-14	-40°C to 125°C	-40°C to 85°C	2.7 to 5	2.7 to 5	S	
LMV324AMTC14X	LMV324MT	Quad amplifier	TSSOP-14	TSSOP-14	-40°C to 125°C	-40°C to 85°C	2.7 to 5	2.7 to 5	S	
LMV358AM8X	LMV358M	Dual amplifier	SOIC-8	SOIC-8	-40°C to 125°C	-40°C to 85°C	2.7 to 5	2.7 to 5	S	
LMV358AMU8X	LMV358AMM	Dual amplifier	MSOP-8	MSOP-8	-40°C to 125°C	-40°C to 85°C	2.7 to 5	2.7 to 5	S	
LP2951CM / RC2951M	LP2951CM	Adjustable micropower voltage regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 125°C	3 or 5	3 or 5	D	
MC78L05ACD	LM78L05ACM	Low-current voltage regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 125°C	5	5	D	
MC78L05ACP	LM78L05ACZ	Low-current voltage regulator	TO-92	TO-92	0°C to 125°C	0°C to 125°C	5	5	D	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Fairchild Semiconductor										
MC78L06ACD	LM78L62ACM	Low-current voltage regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 125°C	6	6.2	S	
MC78L06ACP	LM78L62ACZ	Low-current voltage regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	6	6.2	S	
MC78L08ACD	LM78L82ACM	Low-current voltage regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 125°C	8	8.2	S	
MC78L08ACP	LM78L82ACZ	Low-current voltage regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	8	8.2	S	
MC78L09ACD	LM78L09ACM	Low-current voltage regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 125°C	9	9	D	
MC78L09ACP	LM78L09ACZ	Low-current voltage regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	9	9	D	
MC78L12ACD	LM78L12ACM	Low-current voltage regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 125°C	12	12	D	
MC78L12ACP	LM78L12ACZ	Low-current voltage regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	12	12	D	
MC78L15ACD	LM78L15ACM	Low-current voltage regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 125°C	15	15	D	
MC78L15ACP	LM78L15ACZ	Low-current voltage regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	15	15	D	
MC78M05	LM340T-5.0	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	5	5	D	National has higher current range
MC78M05CDT	LM340MP-5.0	3-terminal positive regulator	T0252-3	SOT223-4	0°C to 125°C	0°C to 125°C	5	5	F	Different package, National has higher current range
MC78M05CDT	LM78M05CDT	0.5A voltage regulator	T0252-3	T0252-3	0°C to 125°C	-40°C to 125°C	5	5	S	
MC78M05CT	LM340T-5.0	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	5	5	D	National has higher current range
MC78M05CT	LM78M05CT	0.5A voltage regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	5	5	S	
MC78M05R	LM340MP-5.0	3-terminal positive regulator	T0252-3	SOT223-4	0°C to 125°C	0°C to 125°C	5	5	F	Different package, National higher current range
MC78M08	LM7808CT	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	8	8	D	National has higher current range
MC78M08CT	LM7808CT	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	8	8	D	National has higher current range
MC78M12	LM340T-12	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	12	12	D	National has higher current range
MC78M12CDT	LM78M12CDT	0.5A voltage regulator	T0252-3	T0252-3	0°C to 125°C	-40°C to 125°C	12	12	S	
MC78M12CT	LM340T-12	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	12	12	D	National has higher current range
MC78M12CT	LM78M12CT	0.5A voltage regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	12	12	S	
MC78M15	LM340T-15	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	15	15	D	National has higher current range
MC78M15CDT	LM78M15CDT	0.5A voltage regulator	T0252-3	T0252-3	0°C to 125°C	-40°C to 125°C	15	15	S	

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement
(May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package
(See datasheets for differences.)

N = Similar function, different package and/or pinout
(See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Fairchild Semiconductor										
MC78M15CT	LM340T-15	3-terminal positive regulator	TO220-3	TO220-3	0°C to 125°C	0°C to 125°C	15	15	D	National has higher current range
MC78M15CT	LM78M15CT	0.5A voltage regulator	TO220-3	TO220-3	0°C to 125°C	-40°C to 125°C	15	15	S	
MC7905ACT	LM320T-5.0	3-terminal negative regulator	TO220-3	TO220-3	0°C to 125°C	0°C to 125°C	-5	-5	F	Supplier has 2% accuracy, National has 4% accuracy
MC7905CT	LM320T-5.0	3-terminal negative regulator	TO220-3	TO220-3	0°C to 125°C	0°C to 125°C	-5	-5	D	National has lower Iq current
MC7912ACT	LM320T-12	3-terminal negative regulator	TO220-3	TO220-3	0°C to 125°C	0°C to 125°C	-12	-12	F	Supplier has 2% accuracy, National has 4% accuracy
MC7912CT	LM320T-12	3-terminal negative regulator	TO220-3	TO220-3	0°C to 125°C	0°C to 125°C	-12	-12	D	National has lower Iq current
MC7915ACT	LM320T-15	3-terminal negative regulator	TO220-3	TO220-3	0°C to 125°C	0°C to 125°C	-15	-15	F	Supplier has 2% accuracy, National has 4% accuracy
MC7915CT	LM320T-15	3-terminal negative regulator	TO220-3	TO220-3	0°C to 125°C	0°C to 125°C	-15	-15	D	National has lower Iq current
MC79L05ACD	LM79L05ACM	Negative regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 70°C	-5	-5	S	
MC79L05ACP	LM79L05ACZ	Negative regulator	TO-92	TO-92	0°C to 125°C	0°C to 70°C	-5	-5	S	
MC79L12ACP	LM79L12ACZ	Negative regulator	TO-92	TO-92	0°C to 125°C	0°C to 70°C	-12	-12	S	
MC79L15ACD	LM79L15ACM	Negative regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 70°C	-15	-15	S	
MC79L15ACP	LM79L15ACZ	Negative regulator	TO-92	TO-92	0°C to 125°C	0°C to 70°C	-15	-15	S	
NE555D	LM555CN	Single precision timing circuit	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
NE555N	LM555CM	Single precision timing circuit	MSOP-8	MSOP-8	0°C to 70°C	0°C to 70°C	–	–	D	
RC0431AM	LMV431ACM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	0°C to 70°C	0°C to 70°C	–	1.24	D	National offers better accuracy, higher absolute maximum rating of cathode voltage and cathode current
RC0431AS	LMV431ACMF	Low-voltage adjustable precision shunt regulator	SOT23-3	SOT23-3	0°C to 70°C	0°C to 70°C	–	1.24	D	National offers better accuracy, higher absolute maximum rating of cathode voltage and cathode current
RC0431AT	LMV431ACZ	Low-voltage adjustable precision shunt regulator	TO-92	TO-92	0°C to 70°C	0°C to 70°C	–	1.24	D	National offers better accuracy, higher absolute maximum rating of cathode voltage and cathode current

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Fairchild Semiconductor										
RC1117D25T	LM1117DTX-2.5	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	2.5	2.5	D	
RC1117D33T	LM1117DTX-3.3	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
RC1117D5T	LM1117DTX-5.0	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	5	5	D	
RC1117DT	LM1117DTX-Adj	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	National offers the LMS8117A in 1A for the 1.8V, 3.3V and adjustable versions in the SOT-223 and TO-252
RC1117M	LM1117SX-Adj	800 mA low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	Fairchild has a 2.5 V _{IN} TO-263
RC1117M285	LM1117SX-2.85	800 mA low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	2.85	2.85	D	
RC1117M33	LM1117SX-3.3	800 mA low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
RC1117M5	LM1117SX-5.0	800 mA low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	5	5	D	
RC1117S25T	LM1117MPX-2.5	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	2.5	2.5	D	
RC1117S285T	LM1117MPX-2.85	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	2.85	2.85	D	
RC1117S33T	LM1117MPX-3.3	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
RC1117S5T	LM1117MPX-5.0	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	5	5	D	
RC1117ST	LM1117MPX-Adj	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	Fairchild's parts are specified at 1A
RC1587M	LMS1587CS-Adj	3A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
RC1587M-1.5	LMS1587CS-1.5	3A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	1.5	1.5	D	
RC1587M-3.3	LMS1587CS-3.3	3A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
RC1587T	LMS1587CT-Adj	3A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
RC1587T-1.5	LMS1587CT-1.5	3A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	1.3	1.3	D	
RC1587T-3.3	LMS1587CT-3.3	3A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
TMC1175AM7C20	ADC1175CIJM	8-bit, 20 MSPS video A/D converter	SOIC-24	SOIC-24	-20°C to 75°C	-20°C to 75°C	–	–	D	
μA760	LM360M	High-speed differential comparator	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	μA760 discontinued
FCI Semiconductor										
LM386D	LM386N-1	Low-voltage power amplifier	MDIP-8	MDIP-8	-20°C to 70°C	0°C to 70°C	4 to 15	4 to 15	D	
LM386D	LM386M-1	Low-voltage power amplifier	SOIC-8	SOIC-8	-20°C to 70°C	0°C to 70°C	4 to 15	4 to 15	D	

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement
(May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package
(See datasheets for differences.)

N = Similar function, different package and/or pinout
(See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
FCI Semiconductor										
LM7805	LM340AT-5.0	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	5	5	D	
LM7808	LM7808CT	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	8	8	S	
LM7812	LM340T-12	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	12	12	S	
LM7815	LM340T-15	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	15	15	S	
LM7905	LM320T-5.0	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	-5	-5	S	
LM7912	LM320T-12	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	-12	-12	S	
LM7915	LM320T-15	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	-15	-15	S	
LM7905	LM7905CT	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	-5	-5	S	
LM7912	LM7912CT	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	-12	-12	S	
LM7915	LM7915CT	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	-15	-15	S	
LM79L05	LM79L05ACM	Negative regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 70°C	-5	-5	S	
LM79L05	LM79L05ACZ	Negative regulator	T0-92	T0-92	0°C to 125°C	0°C to 70°C	-5	-5	S	
LM79L12	LM79L12ACM	Negative regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 70°C	-12	-12	S	
LM79L12	LM79L12ACZ	Negative regulator	T0-92	T0-92	0°C to 125°C	0°C to 70°C	-12	-12	S	
LM79L15	LM79L15ACM	Negative regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 70°C	-15	-15	S	
LM79L15	LM79L15ACZ	Negative regulator	T0-92	T0-92	0°C to 125°C	0°C to 70°C	-15	-15	S	
TL431BID	LM431CIM	Programmable shunt regulator	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2.5 to 36	2.5 to 36	N	Different pinout
TL431AID	LM431BIM	Programmable shunt regulator	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2.5 to 36	2.5 to 36	N	Different pinout
TL431ID	LM431AIM	Programmable shunt regulator	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2.5 to 36	2.5 to 36	N	Different pinout
TL431BCD	LM431CCM	Programmable shunt regulator	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2.5 to 36	2.5 to 36	N	Different pinout
TL431ACD	LM431BCM	Programmable shunt regulator	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2.5 to 36	2.5 to 36	N	Different pinout
TL431CD	LM431ACM	Programmable shunt regulator	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2.5 to 36	2.5 to 36	N	Different pinout
TL431BIT	LM431CIZ	Programmable shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	2.5 to 36	2.5 to 36	D	
TL431AIT	LM431BIZ	Programmable shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	2.5 to 36	2.5 to 36	D	
TL431IT	LM431AIZ	Programmable shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	2.5 to 36	2.5 to 36	D	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
FCI Semiconductor										
TL431BCT	LM431CCZ	Programmable shunt regulator	T0-92	T0-92	0°C to 70°C	0°C to 70°C	2.5 to 36	2.5 to 36	D	
TL431ACT	LM431BCZ	Programmable shunt regulator	T0-92	T0-92	0°C to 70°C	0°C to 70°C	2.5 to 36	2.5 to 36	D	
TL431CT	LM431ACZ	Programmable shunt regulator	T0-92	T0-92	0°C to 70°C	0°C to 70°C	2.5 to 36	2.5 to 36	D	
Fujitsu Semiconductor										
MB4072P	DAC0802LCN	8-bit, high-speed D/A converter	MDIP-16	MDIP-16	-40°C to 85°C	0°C to 70°C	–	–	S	
Gamma Microelectronics										
GM432A-ST23	LMV431BIMF	Low-voltage adjustable precision shunt regulator	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
GM432A-ST25	LMV431BCM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	-40°C to 85°C	0°C to 70°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
GM432A-S8	LMV431BCM5	Low-voltage adjustable precision shunt regulator	SOIC-8	SOT23-5	-40°C to 85°C	0°C to 70°C	1.24	1.24	F	National has higher absolute maximum rating of cathode voltage
GM432A-T0-92	LMV431BCZ	Low-voltage adjustable precision shunt regulator	T0-92	T0-92	-40°C to 85°C	0°C to 70°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
GM432A-ST89	LMV431BCM5	Low-voltage adjustable precision shunt regulator	SOT-89	SOT23-5	-40°C to 85°C	0°C to 70°C	1.24	1.24	F	National has higher absolute maximum rating of cathode voltage
GM432B-ST23	LMV431AIMF	Low-voltage adjustable precision shunt regulator	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
GM432B-ST25	LMV431AIM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	-40°C to 85°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
GM432B-S8	LMV431AIM5	Low-voltage adjustable precision shunt regulator	SOIC-8	SOT23-5	-40°C to 85°C	-40°C to 85°C	1.24	1.24	F	National has higher absolute maximum rating of cathode voltage
GM432B-T0-92	LMV431AIZ	Low-voltage adjustable precision shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
GM432B-ST89	LMV431AIM5	Low-voltage adjustable precision shunt regulator	SOT-89	SOT23-5	-40°C to 85°C	-40°C to 85°C	1.24	1.24	F	National has higher absolute maximum rating of cathode voltage
GM432C-ST23	LMV431AIMF	Low-voltage adjustable precision shunt regulator	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
GM432C-ST25	LMV431IM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	-40°C to 85°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
GM432C-S8	LMV431IM5	Low-voltage adjustable precision shunt regulator	SOIC-8	SOT23-5	-40°C to 85°C	-40°C to 85°C	1.24	1.24	F	National has higher absolute maximum rating of cathode voltage

Compatibility codes: D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement (May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package (See datasheets for differences.)

N = Similar function, different package and/or pinout (See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Gamma Microelectronics										
GM432C-T0-92	LMV431IZ	Low-voltage adjustable precision shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
GM432C-ST89	LMV431IM5	Low-voltage adjustable precision shunt regulator	SOT-89	SOT23-5	-40°C to 85°C	-40°C to 85°C	1.24	1.24	F	National has higher absolute maximum rating of cathode voltage
Hitachi Semiconductor										
HA17524P	LM3524DN	Regulating pulse width modulator	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	D	National also offers a SOIC-16
HA178M05P	LM78M05CT	0.5A voltage regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	5	5	S	
HA178M12P	LM78M12CT	0.5A voltage regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	12	12	S	
HA178M15P	LM78M15CT	0.5A voltage regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	15	15	S	
Holtek Semiconductor										
HT6571	DS14185WM	RS-232 transceiver, 3 driver, 5 receiver	MSOP-20	MSOP-20	0°C to 70°C	0°C to 70°C	–	–	S	
IMP										
IMP809LEUR -T	LM809M3-4.63	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 105°C	4.63	4.63	D	
IMP809MEUR -T	LM809M3-4.38	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 105°C	4.38	4.38	D	
IMP809JEUR -T	LM809M3-4.00	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 105°C	4	4	D	
IMP809TEUR -T	LM809M3-3.08	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 105°C	3.08	38	D	
IMP809SEUR -T	LM809M3-2.93	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 105°C	2.93	2.93	D	
IMP809REUR -T	LM809M3-2.63	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 105°C	2.63	2.63	D	
IMP810LEUR -T	LM810M3-4.63	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 105°C	4.63	4.63	D	
IMP810MEUR -T	LM810M3-4.38	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 105°C	4.38	4.38	D	
IMP810JEUR -T	LM810M3-4.00	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 105°C	4	4	D	
IMP810TEUR -T	LM810M3-3.08	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 105°C	3.08	38	D	
IMP810SEUR -T	LM810M3-2.93	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 105°C	2.93	2.93	D	
IMP810REUR -T	LM810M3-2.63	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 105°C	2.63	2.63	D	
Infineon										
TLE 4274 V50	LM330T-5.0	Low-dropout regulator	T0220-3	T0220-3	-40°C to 150°C	0°C to 70°C	5	5	S	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Intersil Corporation (Intersil divested from Harris Corporation)										
ADC0804LCN	ADC0804LCN	8-bit microprocessor-compatible A/D converter	MDIP-20	MDIP-20	0°C to 70°C	0°C to 70°C	–	–	D	
HA3-4741-5	LM348M	Quad operational amplifier	MDIP-14	SOIC-24	0°C to 75°C	0°C to 70°C	–	–	D	
HI1175JCB	ADC1175CIJM	8-bit, 20 MSPS video A/D converter	SOIC-24	SOIC-24	-40°C to 85°C	-20°C to 75°C	–	–	S	
HIN202ACBN	LMS202ECM	5V high-speed RS-232 transceiver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	D	
HIN202CB	LMS202CMW	5V RS-232 transceiver	WSOIC-16	WSOIC-16	0°C to 70°C	0°C to 70°C	–	–	D	
HIN202CBN	LMS202CM	5V RS-232 transceiver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	D	
HIN202ECB	LMS202ECMW	15 kV ESD protected RS-232 transceiver	WSOIC-16	WSOIC-16	0°C to 70°C	0°C to 70°C	–	–	D	
HIN202ECBN	LMS202ECM	15 kV ESD protected RS-232 transceiver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	D	
HIN202ECBN	DS14C232CM	5V dual RS-232 driver/receiver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	S	
HIN202ECP	DS14C232N	5V dual RS-232 driver/receiver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	S	
HIN202EIB	LMS202EIMW	15 kV ESD protected RS-232 transceiver	WSOIC-16	WSOIC-16	-40°C to 85°C	-40°C to 85°C	–	–	D	
HIN202EIBN	LMS202EIM	15 kV ESD protected RS-232 transceiver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	–	–	D	
HIN202EIBN	DS14C232TM	5V dual RS-232 driver/receiver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	–	–	S	
HIN202IB	LMS202IMW	5V RS-232 transceiver	WSOIC-16	WSOIC-16	-40°C to 85°C	-40°C to 85°C	–	–	D	
HIN202IBN	LMS202IM	5V RS-232 transceiver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	–	–	D	
HIN211CB	DS14C241WM	RS-232 4 driver 5 receiver	SOIC-28	SOIC-28	0°C to 70°C	0°C to 70°C	–	–	S	
HIN232ECBN	DS14C232CM	5V dual RS-232 driver/receiver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	S	
HIN232ECP	DS14C232N	5V dual RS-232 driver/receiver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	S	
HIN241CB	DS14C241WM	RS-232 4 driver 5 receiver	SOIC-28	SOIC-28	0°C to 70°C	0°C to 70°C	–	–	S	
HIN241IB	DS14C241WM	RS-232 4 driver 5 receiver	SOIC-28	SOIC-28	-40°C to 85°C	0°C to 70°C	–	–	S	

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement
(May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package
(See datasheets for differences.)

N = Similar function, different package and/or pinout
(See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Intersil Corporation (Intersil divested from Harris Corporation)										
ICL8069CCZR	LM385BYZ-1.2	Voltage reference	TO-92	TO-92	0°C to 70°C	0°C to 70°C	1.2	1.2	S	50 PPM/C, National range is 10 µA to 20 mA, Intersil is 50 µA to 5 mA Supplier has 2% accuracy, National has 1% accuracy
ICL8069DCZR	LM385Z-1.2	Voltage reference	TO-92	TO-92	0°C to 70°C	0°C to 70°C	1.2	1.2	D	100 PPM/C, National range is 10 µA to 20 mA, Intersil is 50 µA to 5 mA 2% accuracy
ICL8069CCBA	LM385BYM-1.2	Voltage reference	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	1.2	1.2	D	50 PPM/C, National range is 10 µA to 20 mA, Intersil is 50 µA to 5 mA Supplier has 2% accuracy, National has 1% accuracy
ICM7555IBA	LMC555CM	Single general purpose CMOS timer	MSOP-8	MSOP-8	-25°C to 85°C	-40°C to 85°C	–	–	S	
ICM7555IBA	LMC555MX	Single general purpose CMOS timer	MSOP-8	MSOP-8	-25°C to 85°C	-40°C to 85°C	–	–	S	
ICM7555IPA	LMC555CN	Single general purpose CMOS timer	MSOP-8	MSOP-8	-25°C to 85°C	-40°C to 85°C	–	–	S	
ISL8485CB	DS36C279M	Low-power RS-485 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
ISL8485IB	DS36C279TM	Low-power RS-485 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
Linear Technology										
LF156AH	LF156H	JFET input operational amplifier	TO-5	TO-5	-55°C to 125°C	-55°C to 125°C	–	–	S	
LF156H	LF156H	JFET input operational amplifier	TO-5	TO-5	-55°C to 125°C	-55°C to 125°C	–	–	S	
LF356AH	LF356H	JFET input operational amplifier	TO-5	TO-5	0°C to 70°C	0°C to 70°C	–	–	S	
LF356AN8	LF356N	JFET input operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
LF356H	LF356H	JFET input operational amplifier	TO-5	TO-5	0°C to 70°C	0°C to 70°C	–	–	S	
LF356N8	LF356N	JFET input operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
LF398	LF398	Sample-and-hold amplifier	SOIC-8	SOIC-14	0°C to 70°C	0°C to 70°C	–	–	F	Same package type but different pin count and pinout
LF398S8	LF398M	Sample-and-hold amplifier	SOIC-8	SOIC-14	0°C to 70°C	0°C to 70°C	–	–	F	Meets key specs but different package
LF398S8	LF398N	Sample-and-hold amplifier	SOIC-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	F	
LF412ACN8	LF412ACN	Dual precision JFET operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	±20	±20	D	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Linear Technology										
LF412CN8	LF412CN	Dual precision JFET operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	±15	±15	D	
LM10BH	LM10BH	Low-power operational amplifier and reference	TO-5	TO-5	-25°C to 85°C	-25°C to 85°C	–	–	D	
LM10BJ8	LM10CN	Low-power operational amplifier and reference	CERDIP-8	MDIP-8	-25°C to 85°C	0°C to 70°C	–	–	S	LT part is obsolete
LM10BLH	LM10CLH	Low-power operational amplifier and reference	TO-5	TO-5	-25°C to 85°C	0°C to 70°C	–	–	S	
LM10BLJ8	LM10CLN	Low-power operational amplifier and reference	CERDIP-8	MDIP-8	-25°C to 85°C	0°C to 70°C	–	–	S	LT part is obsolete
LM10CH	LM10CH	Low-power operational amplifier and reference	TO-5	TO-5	0°C to 70°C	0°C to 70°C	–	–	D	
LM10CJ8	LM10CN	Low-power operational amplifier and reference	CERDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	LT part is obsolete
LM10CLH	LM10CLH	Low-power operational amplifier and reference	TO-5	TO-5	0°C to 70°C	0°C to 70°C	–	–	D	
LM10CLJ8	LM10CLN	Low-power operational amplifier and reference	CERDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	LT part is obsolete
LM10CLN8	LM10CLN	Low-power operational amplifier and reference	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
LM10CN8	LM10CN	Low-power operational amplifier and reference	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
LM10H	LM10H/883	Low-power operational amplifier and reference	TO-5	TO-5	-55°C to 125°C	-55°C to 125°C	–	–	D	
LM10J8	LM10CN	Low-power operational amplifier and reference	CERDIP-8	MDIP-8	-55°C to 125°C	0°C to 70°C	–	–	S	LT part is obsolete
LM111J8	LM111J	Voltage comparator	TO-5	CERDIP-8	-55°C to 125°C	-55°C to 125°C	–	–	D	
LM119J	LM119J	High-speed dual comparator	CERDIP-14	CERDIP-14	-55°C to 125°C	-55°C to 125°C	–	–	D	LT part is obsolete
LM234Z-3	LM234Z-3	3-terminal adjustable current source	TO-92	TO-92	-25°C to 100°C	-25°C to 100°C	–	–	D	National also offers the TO-46
LM234Z-6	LM234Z-6	3-terminal adjustable current source	TO-92	TO-92	-25°C to 100°C	-25°C to 100°C	–	–	D	National also offers the TO-46
LM285S8-2.5	LM285M-2.5	Voltage reference	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2.5	2.5	F	1.5% accuracy
LM285Z-1.2	LM285Z-1.2	Voltage reference	TO-92	TO-92	-40°C to 85°C	-40°C to 85°C	1.2	1.2	D	1% accuracy

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement
(May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package
(See datasheets for differences.)

N = Similar function, different package and/or pinout
(See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Linear Technology										
LM285Z-2.5	LM285Z-2.5	Voltage reference	TO-92	TO-92	-40°C to 85°C	-40°C to 85°C	2.5	2.5	D	1.5% accuracy
LM311H	LM311H	Voltage comparator	TO-5	TO-5	0°C to 70°C	0°C to 70°C	–	–	D	
LM311N8	LM311N	Voltage comparator	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
LM318S8	LM318M	High-speed operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
LM319J	LM319J	High-speed dual comparator	CERDIP-14	CERDIP-14	-55°C to 125°C	-55°C to 125°C	–	–	D	LT part is obsolete
LM319N	LM319N	High-speed dual comparator	MDIP-14	MDIP-14	0°C to 70°C	0°C to 70°C	–	–	D	
LM329DZ	LM329DZ	Precision voltage reference	TO-92	TO-92	0°C to 70°C	0°C to 70°C	6.9	6.9	D	
LM334S8	LM334M	3-terminal adjustable current source	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	National offers two different SOIC-8 pinouts and the TO-46
LM334Z	LM334Z	3-terminal adjustable current source	TO-92	TO-92	-25°C to 100°C	-25°C to 100°C	–	–	D	National also offers the TO-46
LM336	LM336	Reference diode	TO-92	TO-92	0°C to 70°C	0°C to 70°C	2.5	2.5	D	
LM336B	LM336B	Reference diode	TO-92	TO-92	0°C to 70°C	0°C to 70°C	2.5	2.5	D	
LM336BZ-2.5	LM336BZ-2.5	Reference diode	TO-92	TO-92	0°C to 70°C	0°C to 70°C	2.5	2.5	D	
LM336Z-2.5	LM336Z-2.5	Reference diode	TO-92	TO-92	0°C to 70°C	0°C to 70°C	2.5	2.5	D	
LM337H	LM337H	3-terminal adjustable negative regulator	TO-39	TO-39	0°C to 125°C	0°C to 125°C	–	–	D	
LM337K	LM337K	3-terminal adjustable negative regulator	TO-3	TO-3	0°C to 125°C	0°C to 125°C	–	–	D	
LM337T	LM337T	3-terminal adjustable negative regulator	TO220-3	TO220-3	0°C to 125°C	0°C to 125°C	–	–	D	
LM385BS8-1.2	LM385BM-1.2	Voltage reference	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	1.2	1.2	F	SOIC-8 pinout is slightly different, LTC has redundant pin 1% accuracy
LM385BS8-2.5	LM385BM-2.5	Voltage reference	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2.5	2.5	F	3% accuracy SOIC-8 pinout is slightly different, LTC has redundant pin
LM385BZ-1.2	LM385BZ-1.2	Voltage reference	TO-92	TO-92	0°C to 70°C	0°C to 70°C	1.2	1.2	D	1% accuracy
LM385BZ-2.5	LM385BZ-2.5	Voltage reference	TO-92	TO-92	0°C to 70°C	0°C to 70°C	2.5	2.5	D	1.5% accuracy

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Linear Technology										
LM385S8-1.2	LM385M-1.2	Voltage reference	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	1.2	1.2	F	2% accuracy SOIC-8 pinout is slightly different, LTC has redundant pin
LM385S8-2.5	LM385M-2.5	Voltage reference	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2.5	2.5	F	1.5% accuracy SOIC-8 pinout is slightly different, LTC has redundant pin
LM385Z-1.2	LM385Z-1.2	Voltage reference	T0-92	T0-92	0°C to 70°C	0°C to 70°C	1.2	1.2	D	2% accuracy
LM385Z-2.5	LM385Z-2.5	Voltage reference	T0-92	T0-92	0°C to 70°C	0°C to 70°C	2.5	2.5	D	3% accuracy
LT1016CN8	LM360N	High-speed differential comparator	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	N	
LT1016CS8	LM360M	High-speed differential comparator	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	N	
LT1081CN	DS14C232CN	Low-power 5V powered TIA/EIA-232 dual driver/receiver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	S	
LT1081CSW	DS14C232CM	Low-power 5V powered TIA/EIA-232 dual driver/receiver	WSOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	F	
LT1085CM	LM1085IS-Adj	3A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	-40°C to 125°C	Adj.	Adj.	S	
LT1085CM-3.3	LM1085IS-3.3	3A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	-40°C to 125°C	3.3	3.3	S	
LT1085CT	LM1085IT-Adj	3A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	Adj.	Adj.	S	
LT1085CT-12	LM1085IT-12	3A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	12	12	S	
LT1085CT-3.3	LM1085IT-3.3	3A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	3.3	3.3	S	
LT1085CT-5.0	LM1085IT-5.0	3A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	5	5	S	
LT1085IT	LM1085IT-Adj	3A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	Adj.	Adj.	S	
LT1086CM	LM1086CS-Adj	1.5A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
LT1086CM-3.3	LM1086CS-3.3	1.5A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
LT1086CT	LM1086CT-Adj	1.5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
LT1086CT-2.85	LM1086CT-2.85	1.5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	2.85	2.85	D	
LT1086CT-3.3	LM1086CT-3.3	1.5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
LT1086CT-5	LM1086CT-5.0	1.5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	5	5	D	
LT1086IM	LM1086IS-Adj	1.5A low-dropout regulator	T0263-3	T0263-3	-40°C to 125°C	-40°C to 125°C	Adj.	Adj.	D	

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Linear Technology										
LT1086IM-3.3	LM1086IS-3.3	1.5A low-dropout regulator	T0263-3	T0263-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	D	
LT1086IT-5	LM1086IT-5.0	1.5A low-dropout regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	5	5	D	
LT1086IT-Adj	LM1086IT	1.5A low-dropout regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	Adj.	Adj.	D	
LT1096CS8	ADC08031CIWM	8-bit high-speed serial I/O A/D converter	SOIC-8	WSOIC-8	0°C to 70°C	-40°C to 85°C	3 or 5	5	F	
LT1096IS8	ADC08031CIWM	8-bit high-speed serial I/O A/D converter	SOIC-8	WSOIC-8	-40°C to 85°C	-40°C to 85°C	3 or 5	5	F	
LT1098CS8	ADC08032CIWM	8-bit high-speed serial I/O A/D converter	SOIC-8	WSOIC-14	-40°C to 85°C	-40°C to 85°C	5	5	F	
LT1098IS8	ADC08032CIWM	8-bit high-speed serial I/O A/D converter	SOIC-8	WSOIC-14	-40°C to 85°C	-40°C to 85°C	5	5	F	
LT1117CM	LM1117S-Adj	800 mA low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
LT1117CM	LM1117SX-Adj	800 mA low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
LT1117CM-2.85	LM1117S-2.85	800 mA low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	2.85	2.85	D	
LT1117CM-2.85	LM1117SX-2.85	800 mA low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	2.85	2.85	D	
LT1117CM-3.3	LM1117S-3.3	800 mA low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
LT1117CM-3.3	LM1117SX-3.3	800 mA low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
LT1117CM-5	LM1117S-5.0	800 mA low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	5	5	D	
LT1117CM-5	LM1117SX-5.0	800 mA low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	5	5	D	
LT1117CST	LM1117MP-Adj	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
LT1117CST	LM1117MPX-Adj	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	National has a higher max. input voltage
LT1117CST-2.85	LM1117MP-2.85	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	2.85	2.85	D	
LT1117CST-2.85	LM1117MPX-2.85	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	2.85	2.85	D	
LT1117CST-3.3	LM1117MP-3.3	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
LT1117CST-3.3	LM1117MPX-3.3	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
LT1117CST-5	LM1117MP-5.0	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	5	5	D	
LT1117CST-5	LM1117MPX-5.0	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	5	5	D	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Linear Technology										
LT111AH	LM111H	Voltage comparator	TO-5	TO-5	-55°C to 125°C	-55°C to 125°C	–	–	D	
LT1383CN	DS14C232CN	Low-power 5V powered TIA/EIA-232 dual driver/receiver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	S	
LT1383CS	DS14C232CM	Low-power 5V powered TIA/EIA-232 dual driver/receiver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	S	
LT1585ACT	LMS1585ACT-Adj	5A low-dropout regulator	TO220-3	TO220-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
LT1585ACT-1.5	LMS1585ACT-1.5	5A low-dropout regulator	TO220-3	TO220-3	0°C to 125°C	0°C to 125°C	1.5	1.5	D	
LT1585ACT-3.3	LMS1585ACT-3.3	5A low-dropout regulator	TO220-3	TO220-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
LT1585CM	LMS1585ACS-Adj	5A low-dropout regulator	TO263-3	TO263-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
LT1585CM-1.5	LMS1585ACS-1.5	5A low-dropout regulator	TO263-3	TO263-3	0°C to 125°C	0°C to 125°C	1.5	1.5	D	
LT1585CM-3.3	LMS1585ACS-3.3	5A low-dropout regulator	TO263-3	TO263-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
LT1585CT	LMS1585ACT-Adj	5A low-dropout regulator	TO220-3	TO220-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
LT1585CT	LMS1585ACT-1.5	5A low-dropout regulator	TO220-3	TO220-3	0°C to 125°C	0°C to 125°C	1.5	1.5	D	
LT1585CT	LMS1585ACT-3.3	5A low-dropout regulator	TO220-3	TO220-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
LT1587CM	LMS1587CS-Adj	3A low-dropout regulator	TO263-3	TO263-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
LT1587CM-1.5	LMS1587CS-1.5	3A low-dropout regulator	TO263-3	TO263-3	0°C to 125°C	0°C to 125°C	1.5	1.5	D	
LT1587CM-3.3	LMS1587CS-3.3	3A low-dropout regulator	TO263-3	TO263-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
LT1587CT	LMS1587CT-Adj	3A low-dropout regulator	TO220-3	TO220-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
LT1587CT-1.5	LMS1587CT-1.5	3A low-dropout regulator	TO220-3	TO220-3	0°C to 125°C	0°C to 125°C	1.3	1.3	D	
LT1587CT-3.3	LMS1587CT-3.3	3A low-dropout regulator	TO220-3	TO220-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
LT1719CS8	LM360M	High-speed differential comparator	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	N	
LT1937ES5	LM2704MFX-Adj	White LED driver	TSOT-5	SOT23-5	-40°C to 85°C	-45°C to 80°C	3 to 5 V _{IN}	2.2 to 7 V _{IN} , 20 V _{OUT}	F	
LT1937ES5	LM2703MFX-Adj	White LED driver	TSOT-5	SOT23-5	-40°C to 85°C	-45°C to 80°C	3 to 5 V _{IN}	2.2 to 7 V _{IN} , 20 V _{OUT}	F	
LT311AH	LM311H	Voltage comparator	TO-5	TO-5	0°C to 70°C	0°C to 70°C	–	–	D	
LT311AN8	LM311N	Voltage comparator	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	

Compatibility codes: D = Drop-in replacement S = Same function, package, and pinout but not drop-in replacement F = Same function, different pinout and/or package N = Similar function, different package and/or pinout 55
(May not meet all key specs. See datasheets for differences.) (See datasheets for differences.) (See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Linear Technology										
LTC1060CN	LMF100CCN	Dual switched capacitor filter	MDIP-20	MDIP-20	-40°C to 85°C	0°C to 70°C	18	15	S	
LTC1089AIN8	ADC08832IN	8-bit serial I/O A/D converter	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	6	6	S	ADC08832 clock frequency = 2 MHz vs. LTC's 500 kHz
LTC10968AIN8	ADC08832IN	8-bit serial I/O A/D converter	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	3 to 9	4.5 to 6	S	ADC08832 clock frequency = 2 MHz vs. LTC's 500 kHz
LTC1096ACN8	ADC08831IN	8-bit serial I/O A/D converter	MDIP-8	MDIP-8	0°C to 70°C	-40°C to 85°C	3 to 9	4.5 to 6	S	ADC08831 clock frequency = 2 MHz vs. LTC's 500 kHz
LTC1096ACS8	ADC08831IM	8-bit serial I/O A/D converter	SOIC-8	SOIC-8	0°C to 70°C	-40°C to 85°C	3 to 9	4.5 to 6	S	ADC08831 clock frequency = 2 MHz vs. LTC's 500 kHz
LTC1096AIN8	ADC08831IN	8-bit serial I/O A/D converter	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	3 to 9	4.5 to 6	S	ADC08831 clock frequency = 2 MHz vs. LTC's 500 kHz
LTC1096AIS8	ADC08831IM	8-bit serial I/O A/D converter	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	3 to 9	4.5 to 6	S	ADC08831 clock frequency = 2 MHz vs. LTC's 500 kHz
LTC1096CN8	ADC08831IN	8-bit serial I/O A/D converter	MDIP-8	MDIP-8	0°C to 70°C	-40°C to 85°C	3 to 9	4.5 to 6	S	ADC08831 clock frequency = 2 MHz vs. LTC's 500 kHz
LTC1096CS8	ADC08831IM	8-bit serial I/O A/D converter	SOIC-8	SOIC-8	0°C to 70°C	-40°C to 85°C	3 to 9	4.5 to 6	S	ADC08831 clock frequency = 2 MHz vs. LTC's 500 kHz
LTC1096IN8	ADC08831IN	8-bit serial I/O A/D converter	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	3 to 9	4.5 to 6	S	ADC08831 clock frequency = 2 MHz vs. LTC's 500 kHz
LTC1096IS8	ADC08831IM	8-bit serial I/O A/D converter	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	3 to 9	4.5 to 6	S	ADC08831 clock frequency = 2 MHz vs. LTC's 500 kHz
LTC1096LCS8	ADC08831IM	8-bit serial I/O A/D converter	SOIC-8	SOIC-8	0°C to 70°C	-40°C to 85°C	3 to 9	4.5 to 6	S	ADC08831 clock frequency = 2 MHz vs. LTC's 500 kHz
LTC1096LIS8	ADC08831IM	8-bit serial I/O A/D converter	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	3 to 9	4.5 to 6	S	ADC08831 clock frequency = 2 MHz vs. LTC's 500 kHz
LTC1098ACN8	ADC08832IN	8-bit serial I/O A/D converter	MDIP-8	MDIP-8	0°C to 70°C	-40°C to 85°C	3 to 9	4.5 to 6	S	ADC08832 clock frequency = 2 MHz vs. LTC's 500 kHz
LTC1098ACS8	ADC08832IM	8-bit serial I/O A/D converter	SOIC-8	SOIC-8	0°C to 70°C	-40°C to 85°C	3 to 9	4.5 to 6	S	ADC08832 clock frequency = 2 MHz vs. LTC's 500 kHz
LTC1098AIS8	ADC08832IM	8-bit serial I/O A/D converter	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	3 to 9	4.5 to 6	S	ADC08832 clock frequency = 2 MHz vs. LTC's 500 kHz
LTC1098CN8	ADC08832IN	8-bit serial I/O A/D converter	MDIP-8	MDIP-8	0°C to 70°C	-40°C to 85°C	3 to 9	4.5 to 6	S	ADC08832 clock frequency = 2 MHz vs. LTC's 500 kHz

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Linear Technology										
LTC1098CS8	ADC08832IM	8-bit serial I/O A/D converter	SOIC-8	SOIC-8	0°C to 70°C	-40°C to 85°C	3 to 9	4.5 to 6	S	ADC08832 clock frequency = 2 MHz vs. LTC's 500 kHz
LTC1098CS8	ADC08131CIWM	8-bit high-speed serial I/O A/D converter	SOIC-8	WSOIC-14	0°C to 70°C	-40°C to 85°C	5	5	F	
LTC1098IN8	ADC08832IN	8-bit serial I/O A/D converter	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	3 to 9	4.5 to 6	S	ADC08832 clock frequency = 2 MHz vs. LTC's 500 kHz
LTC1098IS8	ADC08832IM	8-bit serial I/O A/D converter	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	3 to 9	4.5 to 6	S	ADC08832 clock frequency = 2 MHz vs. LTC's 500 kHz
LTC1098IS8	ADC08131CIWM	8-bit high-speed serial I/O A/D converter	SOIC-8	WSOIC-14	-40°C to 85°C	-40°C to 85°C	5	5	F	
LTC1098LCS8	ADC08832IM	8-bit serial I/O A/D converter	SOIC-8	SOIC-8	0°C to 70°C	-40°C to 85°C	3 to 9	4.5 to 6	S	ADC08832 clock frequency = 2 MHz vs. LTC's 500 kHz
LTC1098LIS8	ADC08832IM	8-bit serial I/O A/D converter	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	3 to 9	4.5 to 6	S	ADC08832 clock frequency = 2 MHz vs. LTC's 500 kHz
LTC1099CSW	ADC08161CIWM	500 ns A/D converter	WSOIC-20	WSOIC-20	0°C to 70°C	-40°C to 85°C	5	5	D	
LTC1481CS8	DS36C279M	Low-power RS-485 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
LTC1481IS8	DS36C279TM	Low-power RS-485 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
LTC1485CN8	DS36C278N	Low-power multipoint EIA-RS-485 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
LTC1485CS8	LMS1485M	5V low-power RS-485 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
LTC1485CS8	DS36C278M	Low-power multipoint EIA-RS-485 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
LTC1485IN8	DS36C278TN	Low-power multipoint EIA-RS-485 transceiver	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
LTC1485IS8	LMS1485IM	5V low-power RS-485 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
LTC1485IS8	DS36C278TM	Low-power multipoint EIA-RS-485 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
LTC1487CN8	LMS1487CNA	5V low-power RS-485 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
LTC1487CS8	LMS1487CM	5V low-power RS-485 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
LTC1503CMS8-1.8	LM2788MMX-1.8	Switched capacitor buck regulator	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	2.4 to 6 V _{IN}	2.6 to 5.5 V _{IN}	D	

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Linear Technology										
LTC1503CMS8-2.0	LM2788MMX-2.0	Switched capacitor buck regulator	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	2.4 to 6 V _{IN}	2.6 to 5.5 V _{IN}	D	
LTC1751EMS8	LM2750LDX-Adj	Switched capacitor buck regulator	MSOP-8	LLP-10	-40°C to 85°C	-40°C to 85°C	2 to 5.5 V _{IN}	2.7 to 5.6 V _{IN}	F	
LTC1779ES6	LM2612BL	Programmable stepdown DC/DC converter	Thin SOT	micro SMD-10	-40°C to 85°C	-30°C to 80°C	2.5 to 9.8 V _{IN} , 0.8 V _{OUT} to V _{IN}	2.8 to 5.5 V _{IN} 1.05 to 1.8 V _{OUT}	F	
LTC1779ES6	LM2616BL	Programmable stepdown DC/DC converter	Thin SOT	micro SMD-10	-40°C to 85°C	-30°C to 80°C	2.5 to 9.8 V _{IN} , 0.8 V _{OUT} to V _{IN}	2.8 to 5.5 V _{IN} 1.05 to 1.8 V _{OUT}	F	
LTC1877MS8	LM2619MTCX	Miniature stepdown DC/DC converter	MSOP-8	micro SMD-10	-40°C to 85°C	-25°C to 125°C	2.7 to 10 V _{IN} , 0.8 V _{OUT} to V _{IN}	2.8 to 5.5 V _{IN} 1.5 to 3.6 V _{OUT} (adj.)	F	National part is also available in the TSSOP package
LTC1911EMS8-1.8	LM2788MMX-1.8	Switched capacitor buck regulator	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	2.7 to 4.5 V _{IN}	2.6 to 5.5 V _{IN}	D	
LTC1911EMS8-1.8	LM3354MM-3.3	Switched capacitor boost regulator	MSOP-8	MSOP-10	-40°C to 85°C	-45°C to 80°C	2.7 to 5.5 V _{IN}	2.5 to 5.5 V _{IN} , 4.1 and 5 V _{OUT}	F	
LTC3200ES6-5	LM2750LDX-Adj	Switched capacitor boost regulator	Thin SOT-6	LLP-10	-40°C to 85°C	-40°C to 85°C	2.7 to 4.5 V _{IN}	2.7 to 5.6 V _{IN}	F	
LTC3201EMS	LM2750LDX-Adj	Switched capacitor boost regulator	MSOP-10	LLP-10	-40°C to 85°C	-40°C to 85°C	2.7 to 4.5 V _{IN}	2.7 to 5.6 V _{IN}	F	
LTC3202EMS	LM2750LDX-Adj	Switched capacitor boost regulator	MSOP-10	LLP-10	-40°C to 85°C	-40°C to 85°C	2.7 to 4.5 V _{IN}	2.7 to 5.6 V _{IN}	F	
LTC3205EUF	LM3595LDX	White LED driver	QFN-24	LLP-10	-40°C to 85°C	-40°C to 85°C	2.8 to 4.5 V _{IN}	3 to 5.5 V _{IN}	F	
LTC3250ES6-1.5	LM2788MMX-1.5	Switched capacitor buck regulator	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	2.7 to 5.5 V _{IN}	2.6 to 5.5 V _{IN}	D	
LTC3403EDD	LM2706TL NOPB	Variable stepdown DC/DC converter for RF PAs	DFN	micro SMD-10	-40°C to 85°C	-25°C to 85°C	2.5 to 5 V _{IN} , 0.3 V _{OUT} to V _{IN}	2.7 to 5.5 V _{IN} , 1.5 to 3.25 V _{OUT} (variable)	F	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Linear Technology										
LTC3408EDD	LM2706TL NOPB	Variable stepdown DC/DC converter for RF PAs	DFN	micro SMD-10	-40°C to 85°C	-25°C to 85°C	2.5 to 5 V _{IN} , 0.3 V _{OUT} to V _{IN}	2.7 to 5.5 V _{IN} , 1.5 to 3.25 V _{OUT} (variable)	F	
LTC485	DS36C278	Low-power multipoint EIA-RS-485 transceiver	SOIC-8, MDIP-8	SOIC-8, MDIP-8	0°C to 70°C, -40°C to 85°C	0°C to 70°C, -40°C to 85°C	–	–	D	
LTC1485	DS36C278	Low-power multipoint EIA-RS-485 transceiver	SOIC-8, MDIP-8	SOIC-8, MDIP-8	0°C to 70°C, -40°C to 85°C	0°C to 70°C, -40°C to 85°C	–	–	D	
LTC485CN8	LMS485CNA	5V low-power RS-485 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
LTC485CN8	DS36C278N	Low-power multipoint EIA-RS-485 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
LTC485CN8	DS75176BN	Multipoint RS-485/RS-422 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
LTC485CN8	DS3695N	Multipoint RS-485/RS-422 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
LTC485CN8	DS3696N	Multipoint RS-485/RS-422 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	F	
LTC485CN8	DS485N	Low-power RS-485/RS-422 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
LTC485CS8	LMS485CM	5V low-power RS-485 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
LTC485CS8	DS36C278M	Low-power multipoint EIA-RS-485 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
LTC485CS8	DS75176BM	Low-power RS-485/RS-422 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
LTC485CS8	DS36276M	FAILSAFE multipoint transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
LTC485CS8	DS3695AM	Multipoint RS-485/RS-422 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
LTC485CS8	DS3696AM	Multipoint RS-485/RS-422 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	F	
LTC485CS8	DS485M	Low-power RS-485/RS-422 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
LTC485CS8	DS36C279M	Low-power RS-485 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Linear Technology										
LTC485IN8	LMS485INA	5V low-power RS-485 transceiver	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
LTC485IN8	DS36C278TN	Low-power multipoint EIA-RS-485 transceiver	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
LTC485IN8	DS75176BTN	Multipoint RS-485/RS-422 transceiver	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
LTC485IN8	DS36277TN	Dominant mode multipoint transceiver	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
LTC485IN8	DS3695TN	Multipoint RS-485/RS-422 transceiver	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
LTC485IN8	DS485TN	Low-power RS-485/RS-422 transceiver	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
LTC485IS8	LMS485IM	5V low-power RS-485 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
LTC485IS8	DS36C278TM	Low-power multipoint EIA-RS-485 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
LTC485IS8	DS75176BTM	Multipoint RS-485/RS-422 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
LTC485IS8	DS36277TM	Dominant mode multipoint transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
LTC485IS8	DS3695ATM	Multipoint RS-485/RS-422 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
LTC485IS8	DS485TM	Low-power RS-485/RS-422 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
LTC485IS8	DS36C279TM	Low-power RS-485 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
LTC486CN	DS26LS31CN	Quad differential line driver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	S	
LTC486CS	DS26LS31CM	Quad differential line driver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	S	
LTC488CN	DS26LS32CN	Quad differential line receiver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	S	
LTC488CS	DS26LS32CM	Quad differential line receiver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	S	
LTC489CN	DS3486N	Quad differential line receiver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	S	
LTC489CS	DS3486M	Quad differential line receiver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	S	
LTC490	DS8921	Differential line driver and receiver pair	SOIC-8, MDIP-8	SOIC-8, MDIP-8	0°C to 70°C, -40°C to 85°C	0°C to 70°C, -40°C to 85°C	–	–	S	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Linear Technology										
LTC490CN8	DS8921N	Differential line driver and receiver pair	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
LTC490CS8	DS8921M	Differential line driver and receiver pair	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
LTC490IN8	DS8921ATN	Differential line driver and receiver pair	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
LTC490IS8	DS8921ATM	Differential line driver and receiver pair	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
OP-215EN8	LF412ACN	Dual precision JFET operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	±20	±20	D	
OP-215GN8	LF412CN	Dual precision JFET operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	±15	±15	D	
RH1011W	LM111W	Voltage comparator	CERPAK-10	CERPAK-10	-55°C to 125°C	-55°C to 125°C	–	–	S	
RH111H	LM111H	Voltage comparator	TO-5	TO-5	-55°C to 125°C	-55°C to 125°C	–	–	D	
RH111W	LM111W	Voltage comparator	CERPAK-10	CERPAK-10	-55°C to 125°C	-55°C to 125°C	–	–	D	
Matsushita Panasonic Corporation										
AN178M05R	LM78M05CT	0.5A voltage regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	5	5	S	
AN178M12R	LM78M12CT	0.5A voltage regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	12	12	S	
AN178M15R	LM78M15CT	0.5A voltage regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	15	15	S	
AN78L05	LM78L05ACZ	3-terminal positive regulator	TO-92	TO-92	0°C to 125°C	0°C to 125°C	5	5	D	
AN78L06	LM78L62ACZ	3-terminal positive regulator	TO-92	TO-92	0°C to 125°C	0°C to 125°C	6	6.2	S	
AN78L08	LM78L82ACZ	3-terminal positive regulator	TO-92	TO-92	0°C to 125°C	0°C to 125°C	8	8.2	S	
AN78L09	LM78L09ACZ	3-terminal positive regulator	TO-92	TO-92	0°C to 125°C	0°C to 125°C	9	9	D	
AN78L12	LM78L12ACZ	3-terminal positive regulator	TO-92	TO-92	0°C to 125°C	0°C to 125°C	12	12	D	
AN78L15	LM78L15ACZ	3-terminal positive regulator	TO-92	TO-92	0°C to 125°C	0°C to 125°C	15	15	D	
AN78L05M	LM78L05ACZ	3-terminal positive regulator	TO-92	TO-92	0°C to 125°C	0°C to 100°C	5	5	S	
AN78L06M	LM78L62ACZ	3-terminal positive regulator	TO-92	TO-92	0°C to 125°C	0°C to 100°C	6	6.2	S	
AN78L08M	LM78L82ACZ	3-terminal positive regulator	TO-92	TO-92	0°C to 125°C	0°C to 100°C	8	8.2	S	

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement
(May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package
(See datasheets for differences.)

N = Similar function, different package and/or pinout
(See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Matsushita Panasonic Corporation										
AN78L09M	LM78L09ACZ	3-terminal positive regulator	T0-92	T0-92	0°C to 125°C	0°C to 100°C	9	9	S	
AN78L12M	LM78L12ACZ	3-terminal positive regulator	T0-92	T0-92	0°C to 125°C	0°C to 100°C	12	12	S	
AN78L15M	LM78L15ACZ	3-terminal positive regulator	T0-92	T0-92	0°C to 125°C	0°C to 100°C	15	15	S	
Maxim										
ADC0820BCM	ADC0820BCWM	High-speed 8-bit A/D converter with track-and-hold	WSOIC-20	WSOIC-20	0°C to 70°C	0°C to 70°C	–	–	D	
ADC0820BCN	ADC0820BCN	High-speed 8-bit A/D converter with track-and-hold	MDIP-20	MDIP-20	0°C to 70°C	0°C to 70°C	–	–	D	
ADC0820CCM	ADC0820CCWM	High-speed 8-bit A/D converter with track-and-hold	WSOIC-20	WSOIC-20	0°C to 70°C	0°C to 70°C	–	–	D	
ADC0820CCN	ADC0820CCN	High-speed 8-bit A/D converter with track-and-hold	MDIP-20	MDIP-20	0°C to 70°C	0°C to 70°C	–	–	D	
ICL7660CPA	LMC7660IN	Switched capacitor voltage converter	MDIP-8	MDIP-8	0°C to 70°C	-40°C to 85°C	1.5 to 5.5 V _{IN}	1.5 to 10 V _{IN}	D	
ICL7660CSA	LMC7660IM	Switched capacitor voltage converter	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	1.5 to 5.5 V _{IN}	1.5 to 10 V _{IN}	D	
ICL7660ESA	LMC7660IM	Switched capacitor voltage converter	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	1.5 to 5.5 V _{IN}	1.5 to 10 V _{IN}	D	
ICL7662CBA	LMC7660IM	Switched capacitor voltage converter	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	4.5 to 20 V _{IN}	1.5 to 10 V _{IN}	S	LMC7660 functions at lower V _{IN}
ICL7662CPA	LMC7660IN	Switched capacitor voltage converter	MDIP-8	MDIP-8	0°C to 70°C	-40°C to 85°C	4.5 to 20 V _{IN}	1.5 to 10 V _{IN}	S	LMC7660 functions at lower V _{IN}
ICL7662EBA	LMC7660IM	Switched capacitor voltage converter	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	4.5 to 20 V _{IN}	1.5 to 10 V _{IN}	S	LMC7660 functions at lower V _{IN}
ICL7662EPA	LMC7660IN	Switched capacitor voltage converter	MDIP-8	MDIP-8	0°C to 70°C	-40°C to 85°C	4.5 to 20 V _{IN}	1.5 to 10 V _{IN}	S	LMC7660 functions at lower V _{IN}
ICL7760EPA	LMC7660IN	Switched capacitor voltage converter	MDIP-8	MDIP-8	0°C to 70°C	-40°C to 85°C	1.5 to 5.5 V _{IN}	1.5 to 10 V _{IN}	D	
ICM7555IPA	LMC555CN	Single general purpose CMOS timer	MDIP-8	MDIP-8	-20°C to 125°C	-40°C to 85°C	–	–	S	
ICM7555ISA	LMC555CM	Single general purpose CMOS timer	MSOP-8	MSOP-8	-20°C to 125°C	-40°C to 85°C	–	–	S	
ICM7555ISA	LMC555MX	Single general purpose CMOS timer	MSOP-8	MSOP-8	-20°C to 125°C	-40°C to 85°C	–	–	S	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Maxim										
MAX1044CPA	LMC7660IN	Switched capacitor voltage converter	MDIP-8	MDIP-8	0°C to 70°C	-40°C to 85°C	1.5 to 10 V _{IN}	1.5 to 10 V _{IN}	S	LMC7660 has lower R _{OUT} resistance
MAX1044CSA	LMC7660IM	Switched capacitor voltage converter	SOIC-8	SOIC-8	0°C to 70°C	-40°C to 85°C	1.5 to 10 V _{IN}	1.5 to 10 V _{IN}	S	LMC7660 has lower R _{OUT} resistance
MAX1044EPA	LMC7660IN	Switched capacitor voltage converter	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	1.5 to 10 V _{IN}	1.5 to 10 V _{IN}	S	LMC7660 has lower R _{OUT} resistance
MAX1107CUB	ADC08031CIWM	8-bit high-speed serial I/O A/D converter	MSOP-10	WSOIC-8	0°C to 70°C	-40°C to 85°C	5	5	S	
MAX1107UEB	ADC08031CIWM	8-bit high-speed serial I/O A/D converter	MSOP-10	WSOIC-8	-40°C to 85°C	-40°C to 85°C	3 or 5	5	S	
MAX1109CUB	ADC08032CIWM	8-bit high-speed serial I/O A/D converter	MSOP-10	WSOIC-14	0°C to 70°C	-40°C to 85°C	5	5	S	
MAX1109CUB	ADC08062CIWM	500 ns A/D converter	MSOP-10	WSOIC-20	0°C to 70°C	-40°C to 85°C	5	5	F	
MAX1109CUB	ADC08131CIWM	8-bit high-speed serial I/O A/D converter	MSOP-10	WSOIC-14	0°C to 70°C	-40°C to 85°C	5	5	F	
MAX1109EUB	ADC08032CIWM	8-bit high-speed serial I/O A/D converter	MSOP-10	WSOIC-14	-40°C to 85°C	-40°C to 85°C	5	5	S	
MAX1109EUB	ADC08131CIWM	8-bit high-speed serial I/O A/D converter	MSOP-10	WSOIC-14	-40°C to 85°C	-40°C to 85°C	5	5	F	
MAX1110CAP	ADC08038CIWM	8-bit high-speed serial I/O A/D converter	SSOP-20	SOIC-20	0°C to 70°C	-40°C to 85°C	2.7 or 5.5	5	N	
MAX1111CAP	ADC08034CIWM	8-bit high-speed serial I/O A/D converter	WSOIC-14	SSOP-20	0°C to 70°C	-40°C to 85°C	3 to 5	5	N	
MAX1111CPE	ADC08134CIWM	8-bit high-speed serial I/O A/D converter	WSOIC-20	WSOIC-14	0°C to 70°C	-40°C to 85°C	3 or 5	5	F	
MAX1111EPE	ADC08134CIWM	8-bit high-speed serial I/O A/D converter	WSOIC-20	WSOIC-14	-40°C to 85°C	-40°C to 85°C	3 or 5	5	F	
MAX1112CAP	ADC08038CIWM	8-bit high-speed serial I/O A/D converter	SSOP-20	SOIC-20	0°C to 70°C	-40°C to 85°C	5	5	N	
MAX1113CAP	ADC08034CIWM	8-bit high-speed serial I/O A/D converter	WSOIC-14	SSOP-20	0°C to 70°C	-40°C to 85°C	5	5	N	
MAX1113EPE	ADC08134CIWM	8-bit high-speed serial I/O A/D converter	WSOIC-20	WSOIC-14	-40°C to 85°C	-40°C to 85°C	5	5	F	

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement (May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package (See datasheets for differences.)

N = Similar function, different package and/or pinout (See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Maxim										
MAX118CAI	ADC08138CIWM	8-bit high-speed serial I/O A/D converter	SSOP-28	WSOIC-20	0°C to 70°C	-40°C to 85°C	5	5	F	
MAX118EAI	ADC08138CIWM	8-bit high-speed serial I/O A/D converter	SSOP-28	WSOIC-20	-40°C to 85°C	-40°C to 85°C	5	5	F	
MAX1487CPA	LMS1487CNA	Low-power RS-485 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
MAX1487CSA	LMS1487CM	Low-power RS-485 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
MAX1487CSA	DS36C279M	Low-power RS-485 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
MAX1487EPA	LMS1487INA	Low-power RS-485 transceiver	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
MAX1487ESA	LMS1487IM	Low-power RS-485 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
MAX1487ESA	DS36C279TM	Low-power RS-485 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
MAX1488ECPD	DS1488N	RS-232 quad line driver	MDIP-14	MDIP-14	0°C to 70°C	0°C to 75°C	–	–	S	
MAX1488ECSD	DS1488M	RS-232 quad line driver	SOIC-14	SOIC-14	0°C to 70°C	0°C to 75°C	–	–	S	
MAX1489ECPD	DS1489N	RS-232 quad line receiver	MDIP-14	MDIP-14	0°C to 70°C	0°C to 75°C	–	–	S	
MAX1489ECSD	DS1489M	RS-232 quad line receiver	SOIC-14	SOIC-14	0°C to 70°C	0°C to 75°C	–	–	S	
MAX153CWP	ADC08061CIWM	500 ns A/D converter	WSOIC-20	WSOIC-20	0°C to 70°C	-40°C to 85°C	5	5	F	Single input vs. National's double input
MAX153CWP	ADC08161CIWM	500 ns A/D converter	WSOIC-20	WSOIC-20	0°C to 70°C	-40°C to 85°C	5	5	F	Single input vs. National's double input
MAX153EWP	ADC08061CIWM	500 ns A/D converter	WSOIC-20	WSOIC-20	-40°C to 85°C	-40°C to 85°C	5	5	F	Single input vs. National's double input
MAX153EWP	ADC08161CIWM	500 ns A/D converter	WSOIC-20	WSOIC-20	-40°C to 85°C	-40°C to 85°C	5	5	F	Single input vs. National's double input
MAX1570ETE	LM2794BLX	White LED driver	QFN-16	micro SMD-14	-40°C to 85°C	-30°C to 85°C	2.7 to 5.5 V _{IN}	2.7 to 5.5 V _{IN}	F	
MAX1570ETE	LM2795BLX	White LED driver	QFN-16	micro SMD-14	-40°C to 85°C	-30°C to 85°C	2.7 to 5.5 V _{IN}	2.7 to 5.5 V _{IN}	F	
MAX1573ETE	LM3595LDX	White LED driver	Thin QFN	LLP-10	-40°C to 85°C	-40°C to 85°C	2.7 to 5.5 V _{IN}	3 to 5.5 V _{IN}	F	
MAX1595ETC50	LM2750LDX-Adj	Switched capacitor boost regulator	QFN-12	LLP-10	-40°C to 85°C	-40°C to 85°C	1.8 to 5.5 V _{IN}	2.7 to 5.6 V _{IN}	F	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Maxim										
MAX1595EUB-3.3V	LM3354MM-1.8	Switched capacitor boost regulator	MSOP-8	MSOP-10	-40°C to 85°C	-40°C to 85°C	1.8 to 5.5 V _{IN}	2.5 to 5.5 V _{IN} , 4.1 and 5 V _{OUT}	F	
MAX1682EUK-T	LM2665M6X	Unregulated switched capacitor	SOT23-5	SOT23-6	-40°C to 85°C	-40°C to 85°C	2 to 5.5 V _{IN}	1.8 to 5.8 V _{IN}	F	
MAX1683EUK-T	LM2665M6X	Unregulated switched capacitor	SOT23-5	SOT23-6	-40°C to 85°C	-40°C to 85°C	2 to 5.5 V _{IN}	1.8 to 5.8 V _{IN}	F	
MAX1759EUB	LM2750LDX-Adj	Switched capacitor boost regulator	MSOP-10	LLP-10	-40°C to 85°C	-40°C to 85°C	1.6 to 5.5 V _{IN}	2.7 to 5.6 V _{IN}	F	
MAX1820EUB	LM2706TL NOPB	Variable stepdown DC/DC converter for RF PAs	MSOP-10	micro SMD-10	-40°C to 85°C	-25°C to 85°C	2.6 to 5.5 V _{IN} , 1.25 to 5.5 V _{OUT} (adj.)	2.7 to 5.5 V _{IN} , 1.5 to 3.25 V _{OUT} (variable)	F	
MAX1821EUB	LM2706TL NOPB	Variable stepdown DC/DC converter for RF PAs	MSOP-10	micro SMD-10	-40°C to 85°C	-25°C to 85°C	2.6 to 5.5 V _{IN} , 1.25 to 5.5 V _{OUT} (adj.)	2.7 to 5.5 V _{IN} , 1.5 to 3.25 V _{OUT} (variable)	F	
MAX1821EUB	LM2706TL NOPB	Variable stepdown DC/DC converter for RF PAs	MSOP-10	micro SMD-10	-40°C to 85°C	-25°C to 85°C	2.6 to 5.5 V _{IN} , 1.25 to 5.5 V _{OUT} (adj.)	2.7 to 5.5 V _{IN} , 1.5 to 3.25 V _{OUT} (variable)	F	
MAX1910EUB	LM2750LDX-Adj	Switched capacitor boost regulator	MSOP-10	LLP-10	-40°C to 85°C	-40°C to 85°C	2.7 to 5.3 V _{IN}	2.7 to 5.6 V _{IN}	F	
MAX1912EUB-5	LM2750LDX-Adj	Switched capacitor boost regulator	MSOP-10	LLP-10	-40°C to 85°C	-40°C to 85°C	2.7 to 5.3 V _{IN}	2.7 to 5.6 V _{IN}	F	
MAX1920EUT-T	LM2612ATLX	Programmable stepdown DC/DC converter	SOT23-6	micro SMD-10	-40°C to 85°C	-30°C to 80°C	2 to 5.5 V _{IN} , 1.25 to 4 V _{OUT} (adj.)	2.8 to 5.5 V _{IN} , 1.05 to 1.8 V _{OUT}	F	
MAX1921EUT-T	LM2614ATLX	Miniature stepdown DC/DC converter	SOT23-6	micro SMD-10	-40°C to 85°C	-25°C to 125°C	2 to 5.5 V _{IN} , 1.5 to 3.3 V _{OUT}	2.8 to 5.5 V _{IN} , 1.5 to 3.6 V _{OUT} (adj.)	F	
MAX1927EUB25	LM2619ATL	Miniature stepdown DC/DC converter	MSOP-10	micro SMD-10	-40°C to 85°C	-25°C to 125°C	2.6 to 5.5 V _{IN} , 0.75 to 5 V _{OUT} (adj.)	2.8 to 5.5 V _{IN} , 1.5 to 3.6 V _{OUT} (adj.)	F	

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement (May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package (See datasheets for differences.)

N = Similar function, different package and/or pinout (See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Maxim										
MAX1928EUB25	LM2619ATL	Miniature stepdown DC/DC converter	MSOP-10	micro SMD-10	-40°C to 85°C	-25°C to 125°C	2.6 to 5.5 V _{IN} , 0.75 to 5 V _{OUT} (adj.)	2.8 to 5.5 V _{IN} , 1.5 to 3.6 V _{OUT} (adj.)	F	
MAX232CPE	DS14C232CN	Low-power 5V powered TIA/EIA-232 dual driver/receiver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	S	
MAX232CSE	DS14C232CM	Low-power 5V powered TIA/EIA-232 dual driver/receiver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	S	
MAX3030ECSE	DS26LS31CM	Quad differential line driver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	S	
MAX3032ECSE	DS3487M	Quad TRI-STATE® line driver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	N	Different specs, Maxim has 15 kV ESD rating
MAX3033ECSE	DS3487M	Quad TRI-STATE line driver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	N	Different specs, Maxim has 15 kV ESD rating
MAX3071EAPA	DS8921ATN	Differential line driver and receiver pair	MDIP-8	MDIP-8	-40°C to 125°C	-40°C to 85°C	–	–	S	
MAX3071EASA	DS8921ATM	Differential line driver and receiver pair	SOIC-8	SOIC-8	-40°C to 125°C	-40°C to 85°C	–	–	S	
MAX3071EEPA	DS8921ATN	Differential line driver and receiver pair	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
MAX3071EESA	DS8921ATM	Differential line driver and receiver pair	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
MAX3074EAPA	DS8921ATN	Differential line driver and receiver pair	MDIP-8	MDIP-8	-40°C to 125°C	-40°C to 85°C	–	–	S	
MAX3074EASA	DS8921ATM	Differential line driver and receiver pair	SOIC-8	SOIC-8	-40°C to 125°C	-40°C to 85°C	–	–	S	
MAX3074EEPA	DS8921ATN	Differential line driver and receiver pair	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
MAX3074EESA	DS8921ATM	Differential line driver and receiver pair	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
MAX3077EAPA	DS8921ATN	Differential line driver and receiver pair	MDIP-8	MDIP-8	-40°C to 125°C	-40°C to 85°C	–	–	S	
MAX3077EASA	DS8921ATM	Differential line driver and receiver pair	SOIC-8	SOIC-8	-40°C to 125°C	-40°C to 85°C	–	–	S	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Maxim										
MAX3077EEPA	DS8921ATN	Differential line driver and receiver pair	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
MAX3077EESA	DS8921ATM	Differential line driver and receiver pair	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
MAX3081CPA	DS8921N	Differential line driver and receiver pair	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
MAX3081CSA	DS8921M	Differential line driver and receiver pair	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
MAX3081EPA	DS8921ATN	Differential line driver and receiver pair	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
MAX3081ESA	DS8921ATM	Differential line driver and receiver pair	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
MAX3084CPA	DS8921N	Differential line driver and receiver pair	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
MAX3084CSA	DS8921M	Differential line driver and receiver pair	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
MAX3084EPA	DS8921ATN	Differential line driver and receiver pair	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
MAX3084ESA	DS8921ATM	Differential line driver and receiver pair	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
MAX3087CPA	DS8921N	Differential line driver and receiver pair	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
MAX3087CSA	DS8921M	Differential line driver and receiver pair	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
MAX3087EPA	DS8921ATN	Differential line driver and receiver pair	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
MAX3087ESA	DS8921ATM	Differential line driver and receiver pair	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
MAX3088CSA	DS36C279M	Low-power RS-485 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
MAX3088ESA	DS36C279TM	Low-power RS-485 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
MAX3093ECSE	DS3486M	Quad differential line receiver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	S	
MAX3095CPE	DS26LS32CN	Quad differential line receiver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	S	

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement
(May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package
(See datasheets for differences.)

N = Similar function, different package and/or pinout
(See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Maxim										
MAX3095CPE	DS26C32ATN	Quad differential line receiver	MDIP-16	MDIP-16	0°C to 70°C	-40°C to 85°C	5	5	D	
MAX3095CSE	DS26LS32CM	Quad differential line receiver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	S	
MAX3095CSE	DS26C32ATM	Quad differential line receiver	SOIC-16	SOIC-16	0°C to 70°C	-40°C to 85°C	5	5	D	
MAX3095EPE	DS26C32ATN	Quad differential line receiver	MDIP-16	MDIP-16	-40°C to 85°C	-40°C to 85°C	5	5	D	
MAX3095ESE	DS26C32ATM	Quad differential line receiver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	5	5	D	
MAX3462CPA	DS8921N	Differential line driver and receiver pair	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
MAX3462CSA	DS8921M	Differential line driver and receiver pair	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
MAX3462EPA	DS8921ATN	Differential line driver and receiver pair	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
MAX3462ESA	DS8921ATM	Differential line driver and receiver pair	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
MAX3488CPA	DS8921N	Differential line driver and receiver pair	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
MAX3488CSA	DS8921M	Differential line driver and receiver pair	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
MAX3488EPA	DS8921ATN	Differential line driver and receiver pair	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
MAX3488ESA	DS8921ATM	Differential line driver and receiver pair	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
MAX3490CPA	DS8921N	Differential line driver and receiver pair	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
MAX3490CSA	DS8921M	Differential line driver and receiver pair	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
MAX3490EPA	DS8921ATN	Differential line driver and receiver pair	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
MAX3490ESA	DS8921ATM	Differential line driver and receiver pair	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
MAX481CPA	DS36C278N	Low-power multipoint EIA-RS-485 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Maxim										
MAX481CSA	DS36C278M	Low-power multipoint EIA-RS-485 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
MAX481CSA	DS36C279M	Low-power RS-485 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
MAX481EPA	DS36C278ATN	Low-power multipoint EIA-RS-485 transceiver	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
MAX481ESA	DS36C278ATM	Low-power multipoint EIA-RS-485 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
MAX481ESA	DS36C279TM	Low-power RS-485 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
MAX483CPA	DS36C278N	Low-power multipoint EIA-RS-485 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
MAX483CSA	DS36C278M	Low-power multipoint EIA-RS-485 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
MAX483EPA	DS36C278ATN	Low-power multipoint EIA-RS-485 transceiver	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
MAX483ESA	DS36C278ATM	Low-power multipoint EIA-RS-485 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
MAX485CPA	DS36C278N	Low-power multipoint EIA-RS-485 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
MAX485CPA	DS75176BN	Multipoint RS-485/RS-422 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
MAX485CPA	DS3695N	Multipoint RS-485/RS-422 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
MAX485CPA	DS3696N	Multipoint RS-485/RS-422 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	F	
MAX485CPA	DS485N	Low-power RS-485/RS-422 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
MAX485CSA	DS36C278M	Low-power multipoint EIA-RS-485 Transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
MAX485CSA	DS75176BM	Multipoint RS-485/RS-422 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
MAX485CSA	DS36276M	FAILSAFE multipoint transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
MAX485CSA	DS3695AM	Multipoint RS-485/RS-422 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement
(May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package
(See datasheets for differences.)

N = Similar function, different package and/or pinout
(See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Maxim										
MAX485CSA	DS3696AM	Multipoint RS-485/RS-422 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	F	
MAX485CSA	DS485M	Low-power RS-485/RS-422 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
MAX485CSA	DS36C279M	Low-power RS-485 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
MAX485EPA	DS36C278ATN	Low-power multipoint EIA-RS-485 transceiver	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
MAX485EPA	DS75176BTN	Multipoint RS-485/RS-422 transceiver	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
MAX485EPA	DS36277TN	Dominant mode multipoint transceiver	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
MAX485EPA	DS3695TN	Multipoint RS-485/RS-422 transceiver	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
MAX485EPA	DS485TN	Low-power RS-485/RS-422 transceiver	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
MAX485ESA	DS36C278ATM	Low-power multipoint EIA-RS-485 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
MAX485ESA	DS75176BTM	Multipoint RS-485/RS-422 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
MAX485ESA	DS36277TM	Dominant mode multipoint transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
MAX485ESA	DS3695ATM	Multipoint RS-485/RS-422 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
MAX485ESA	DS485TM	Low-power RS-485/RS-422 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
MAX485ESA	DS36C279TM	Low-power RS-485 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
MAX487CPA	DS36C278N	Low-power multipoint EIA-RS-485 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
MAX487CSA	DS36C278M	Low-power multipoint EIA-RS-485 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
MAX487EPA	DS36C278ATN	Low-power multipoint EIA-RS-485 transceiver	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	D	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Maxim										
MAX487ESA	DS36C278ATM	Low-power multipoint EIA-RS-485 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
MAX488CPA	DS8921N	Differential line driver and receiver pair	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
MAX488CSA	DS8921M	Differential line driver and receiver pair	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
MAX488EPA	DS8921ATN	Differential line driver and receiver pair	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
MAX488ESA	DS8921ATM	Differential line driver and receiver pair	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
MAX490CPA	DS8921N	Differential line driver and receiver pair	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
MAX490CSA	DS8921M	Differential line driver and receiver pair	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
MAX490EPA	DS8921ATN	Differential line driver and receiver pair	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
MAX490ESA	DS8921ATM	Differential line driver and receiver pair	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
MAX6501UKP045	LM26CIM5-NPA	Factory preset thermostat	SOT23-5	SOT23-5	-45°C to 125°C	-55°C to 130°C	2.4 to 5.5	2.4 to 5.5	D	
MAX6501UKP065	LM26CIM5-RPA	Factory preset thermostat	SOT23-5	SOT23-5	-45°C to 125°C	-55°C to 130°C	2.4 to 5.5	2.4 to 5.5	D	
MAX6501UKP075	LM26CIM5-SPA	Factory preset thermostat	SOT23-5	SOT23-5	-45°C to 125°C	-55°C to 130°C	2.4 to 5.5	2.4 to 5.5	D	
MAX6501UKP085	LM26CIM5-TPA	Factory preset thermostat	SOT23-5	SOT23-5	-45°C to 125°C	-55°C to 130°C	2.4 to 5.5	2.4 to 5.5	D	
MAX6501UKP095	LM26CIM5-VPA	Factory preset thermostat	SOT23-5	SOT23-5	-45°C to 125°C	-55°C to 130°C	2.4 to 5.5	2.4 to 5.5	D	
MAX6501UKP105	LM26CIM5-XPA	Factory preset thermostat	SOT23-5	SOT23-5	-45°C to 125°C	-55°C to 130°C	2.4 to 5.5	2.4 to 5.5	D	
MAX6501UKP115	LM26CIM5-YPA	Factory preset thermostat	SOT23-5	SOT23-5	-45°C to 125°C	-55°C to 130°C	2.4 to 5.5	2.4 to 5.5	D	
MAX6501UKP125	LM26CIM5-ZPA	Factory preset thermostat	SOT23-5	SOT23-5	-45°C to 125°C	-55°C to 130°C	2.4 to 5.5	2.4 to 5.5	S	
MAX6502UK P045	LM26CIM5-NPC	Factory preset thermostat	SOT23-5	SOT23-5	-45°C to 125°C	-55°C to 130°C	2.4 to 5.5	2.4 to 5.5	D	
MAX6502UK P065	LM26CIM5-RPC	Factory preset thermostat	SOT23-5	SOT23-5	-45°C to 125°C	-55°C to 130°C	2.4 to 5.5	2.4 to 5.5	D	

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Maxim										
MAX6502UK P075	LM26CIM5-SPC	Factory preset thermostat	SOT23-5	SOT23-5	-45°C to 125°C	-55°C to 130°C	2.4 to 5.5	2.4 to 5.5	D	
MAX6502UK P085	LM26CIM5-TPC	Factory preset thermostat	SOT23-5	SOT23-5	-45°C to 125°C	-55°C to 130°C	2.4 to 5.5	2.4 to 5.5	D	
MAX6502UK P095	LM26CIM5-VPC	Factory preset thermostat	SOT23-5	SOT23-5	-45°C to 125°C	-55°C to 130°C	2.4 to 5.5	2.4 to 5.5	D	
MAX6502UK P105	LM26CIM5-XPC	Factory preset thermostat	SOT23-5	SOT23-5	-45°C to 125°C	-55°C to 130°C	2.4 to 5.5	2.4 to 5.5	D	
MAX6502UK P115	LM26CIM5-YPC	Factory preset thermostat	SOT23-5	SOT23-5	-45°C to 125°C	-55°C to 130°C	2.4 to 5.5	2.4 to 5.5	D	
MAX6502UK P125	LM26CIM5-ZPC	Factory preset thermostat	SOT23-5	SOT23-5	-45°C to 125°C	-55°C to 130°C	2.4 to 5.5	2.4 to 5.5	S	
MAX6503UK N005	LM26CIM5-FPB	Factory preset thermostat	SOT23-5	SOT23-5	-45°C to 125°C	-55°C to 130°C	2.4 to 5.5	2.4 to 5.5	D	
MAX6503UK N015	LM26CIM5-EPB	Factory preset thermostat	SOT23-5	SOT23-5	-45°C to 125°C	-55°C to 130°C	2.4 to 5.5	2.4 to 5.5	D	
MAX6503UK N025	LM26CIM5-DPB	Factory preset thermostat	SOT23-5	SOT23-5	-45°C to 125°C	-55°C to 130°C	2.4 to 5.5	2.4 to 5.5	D	
MAX6503UK N035	LM26CIM5-CPB	Factory preset thermostat	SOT23-5	SOT23-5	-45°C to 125°C	-55°C to 130°C	2.4 to 5.5	2.4 to 5.5	D	
MAX6503UK N045	LM26CIM5-BPB	Factory preset thermostat	SOT23-5	SOT23-5	-45°C to 125°C	-55°C to 130°C	2.4 to 5.5	2.4 to 5.5	D	
MAX6503UK NP005	LM26CIM5-HPB	Factory preset thermostat	SOT23-5	SOT23-5	-45°C to 125°C	-55°C to 130°C	2.4 to 5.5	2.4 to 5.5	D	
MAX6503UK NP015	LM26CIM5-JPB	Factory preset thermostat	SOT23-5	SOT23-5	-45°C to 125°C	-55°C to 130°C	2.4 to 5.5	2.4 to 5.5	D	
MAX6504UK N005	LM26CIM5-FPD	Factory preset thermostat	SOT23-5	SOT23-5	-45°C to 125°C	-55°C to 130°C	2.4 to 5.5	2.4 to 5.5	D	
MAX6504UK N015	LM26CIM5-EPD	Factory preset thermostat	SOT23-5	SOT23-5	-45°C to 125°C	-55°C to 130°C	2.4 to 5.5	2.4 to 5.5	D	
MAX6504UK N025	LM26CIM5-DPD	Factory preset thermostat	SOT23-5	SOT23-5	-45°C to 125°C	-55°C to 130°C	2.4 to 5.5	2.4 to 5.5	D	
MAX6504UK N035	LM26CIM5-CPD	Factory preset thermostat	SOT23-5	SOT23-5	-45°C to 125°C	-55°C to 130°C	2.4 to 5.5	2.4 to 5.5	D	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Maxim										
MAX6504UK N045	LM26CIM5-BPD	Factory preset thermostat	SOT23-5	SOT23-5	-45°C to 125°C	-55°C to 130°C	2.4 to 5.5	2.4 to 5.5	D	
MAX6504UKN P005	LM26CIM5-HPD	Factory preset thermostat	SOT23-5	SOT23-5	-45°C to 125°C	-55°C to 130°C	2.4 to 5.5	2.4 to 5.5	D	
MAX6504UKN P015	LM26CIM5-JPD	Factory preset thermostat	SOT23-5	SOT23-5	-45°C to 125°C	-55°C to 130°C	2.4 to 5.5	2.4 to 5.5	D	
MAX660CPA	LMC7660IN	Switched capacitor voltage converter	MDIP-8	MDIP-8	0°C to 70°C	-40°C to 85°C	1.5 to 5.5 V _{IN}	1.5 to 10 V _{IN}	S	LMC7660 has a higher input voltage range
MAX660CSA	LM2665M6X	Unregulated switched capacitor	SOIC-8	SOT23-6	-40°C to 85°C	-40°C to 85°C	1.2 to 5.5 V _{IN}	1.8 to 5.8 V _{IN}	F	
MAX660CSA	LMC7660IM	Switched capacitor voltage converter	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	1.5 to 5.5 V _{IN}	1.5 to 10 V _{IN}	S	LMC7660 has a higher input voltage range
MAX660EPA	LMC7660IN	Switched capacitor voltage converter	MDIP-8	MDIP-8	0°C to 70°C	-40°C to 85°C	1.5 to 5.5 V _{IN}	1.5 to 10 V _{IN}	S	LMC7660 has a higher input voltage range
MAX660ESA	LMC7660IM	Switched capacitor voltage converter	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	1.5 to 5.5 V _{IN}	1.5 to 10 V _{IN}	S	LMC7660 has a higher input voltage range
MAX6613MXK	LM20BIM7	Temperature sensor	SC70-5	SC70-5	-55°C to 130°C	-55°C to 130°C	2.4 to 5.5	2.4 to 5.5	D	Maxim does not have micro SMD
MAX6613MXK	LM20CIM7	Temperature sensor	SC70-5	SC70-5	-55°C to 130°C	-55°C to 130°C	2.4 to 5.5	2.4 to 5.5	S	Maxim does not have micro SMD
MAX6617CWE	LM82CIMQA	Remote diode and local temperature sensor with two-wire interface	SSOP-16	SSOP-16	-45°C to 125°C	-45°C to 125°C	3 to 3.6	3 to 3.6	D	
MAX6617CWE	LM84CIMQA	Remote diode and local temperature sensor with two-wire interface	SSOP-16	SSOP-16	-45°C to 125°C	0°C to 125°C	3 to 3.6	3 to 3.6	S	
MAX6627MKA	LM74CIM-5	12-bit plus sign digital temperature sensor	SOT23-5	SOIC-8	-55°C to 150°C	-55°C to 150°C	3 to 5.5	3 to 5.5	N	National parts also available in micro SMD
MAX6628MKA	LM74CIM-5	12-bit plus sign digital temperature sensor	SOT23-5	SOIC-8	-55°C to 150°C	-55°C to 150°C	3 to 5.5	3 to 5.5	N	National parts also available in micro SMD
MAX6646MUA	LM99-CIMM/ LM99-1CIMM	1°C accurate remote diode and local temperature sensor with two-wire interface and alarms	MSOP-8	MSOP-8	Remote diode: 0°C to 145°C	Remote diode: 0°C to 140°C	3 to 5	3 to 3.6	D	Different model numbers each have a unique address
MAX6647MUA	LM99-CIMM/ LM99-1CIMM	1°C accurate remote diode and local temperature sensor with two-wire interface and alarms	MSOP-8	MSOP-8	Remote diode: 0°C to 145°C	Remote diode: 0°C to 140°C	3 to 5	3 to 3.6	D	Different model numbers each have a unique address

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Maxim										
MAX6649MUA	LM99-CIMM/ LM99-1CIMM	1°C accurate remote diode and local temperature sensor with two-wire interface and alarms	MSOP-8	MSOP-8	Remote diode: 0°C to 145°C	Remote diode: 0°C to 140°C	3 to 5	3 to 3.6	D	Different model numbers each have a unique address
MAX6654MME	LM82CIMQA	Remote diode and local temperature sensor with two-wire interface	SSOP-16	SSOP-16	-45°C to 125°C	-45°C to 125°C	3 to 3.6	3 to 3.6	D	
MAX6654MME	LM84CIMQA	Remote diode and local temperature sensor with two-wire interface	QSOP-16	SSOP-16	-45°C to 125°C	0°C to 125°C	3 to 3.6	3 to 3.6	S	
MAX665CPA	LMC7660IN	Switched capacitor voltage converter	MDIP-8	MDIP-8	0°C to 70°C	-40°C to 85°C	1.5 to 8 V _{IN}	1.5 to 10 V _{IN}	S	LMC7660 has a higher input voltage range
MAX665EPA	LMC7660IN	Switched capacitor voltage converter	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	1.5 to 8 V _{IN}	1.5 to 10 V _{IN}	S	LMC7660 has a higher input voltage range
MAX682EUA	LM2750LDX-Adj	Switched capacitor boost regulator	MSOP-8	LLP-10	-40°C to 85°C	-40°C to 85°C	2.7 to 5.5 V _{IN}	2.7 to 5.6 V _{IN}	F	
MAX683EUA	LM2750LDX-Adj	Switched capacitor boost regulator	MSOP-8	LLP-10	-40°C to 85°C	-40°C to 85°C	2.7 to 5.5 V _{IN}	2.7 to 5.6 V _{IN}	F	
MAX8506ETE	LM2706TL NOPB	Variable stepdown DC/DC converter for RF PAs	QFN-16	micro SMD-10	-40°C to 85°C	-25°C to 85°C	2.6 to 5.5 V _{IN} , 0.4 to 3.5 V _{OUT} (adj.)	2.7 to 5.5 V _{IN} , 1.5 to 3.25 V _{OUT} (variable)	F	Lead free
MAX8507ETE	LM2706TL NOPB	Variable stepdown DC/DC converter for RF PAs	QFN-16	micro SMD-10	-40°C to 85°C	-25°C to 85°C	2.6 to 5.5 V _{IN} , 0.4 to 3.5 V _{OUT} (adj.)	2.7 to 5.5 V _{IN} , 1.5 to 3.25 V _{OUT} (variable)	F	Lead free
MAX8508ETE	LM2706TL NOPB	Variable stepdown DC/DC converter for RF PAs	QFN-16	micro SMD-10	-40°C to 85°C	-25°C to 85°C	2.6 to 5.5 V _{IN} , 0.75 to 3.5 V _{OUT} (adj.)	2.7 to 5.5 V _{IN} , 1.5 to 3.25 V _{OUT} (variable)	F	Lead free
MAX8510EXK25T	LMS5214IMG-2.5	80 mA low-dropout voltage regulator	SC70-5	SC70-5	-40°C to 85°C	-40°C to 125°C	2.5	2.5	F	National has a wider temperature range
MAX8510EXK27T	LMS5214IMG-2.6	80 mA low-dropout voltage regulator	SC70-5	SC70-5	-40°C to 85°C	-40°C to 125°C	2.7	2.6	F	National has a wider temperature range
MAX8510EXK29T	LMS5214IMG-2.9	80 mA low-dropout voltage regulator	SC70-5	SC70-5	-40°C to 85°C	-40°C to 125°C	2.85	2.9	F	National has a wider temperature range

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Maxim										
MAX8510EXK30T	LMS5214IMG-3.0	80 mA low-dropout voltage regulator	SC70-5	SC70-5	-40°C to 85°C	-40°C to 125°C	3	3	F	National has a wider temperature range
MAX8510EXK33T	LMS5214IMG-3.3	80 mA low-dropout voltage regulator	SC70-5	SC70-5	-40°C to 85°C	-40°C to 125°C	3.3	3.3	F	National has a wider temperature range
MAX8511EXK25T	LMS5214IMG-2.5	80 mA low-dropout voltage regulator	SC70-5	SC70-5	-40°C to 85°C	-40°C to 125°C	2.5	2.5	F	National has a wider temperature range
MAX8511EXK27T	LMS5214IMG-2.6	80 mA low-dropout voltage regulator	SC70-5	SC70-5	-40°C to 85°C	-40°C to 125°C	2.7	2.6	F	National has a wider temperature range
MAX8511EXK29T	LMS5214IMG-2.9	80 mA low-dropout voltage regulator	SC70-5	SC70-5	-40°C to 85°C	-40°C to 125°C	2.85	2.9	F	National has a wider temperature range
MAX8511EXK33T	LMS5214IMG-3.3	80 mA low-dropout voltage regulator	SC70-5	SC70-5	-40°C to 85°C	-40°C to 125°C	3.3	3.3	F	National has a wider temperature range
MAX860ESA	LMC7660IM	Switched capacitor voltage converter	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	1.5 to 5.5 V _{IN}	1.5 to 10 V _{IN}	N	LMC7660 has a higher input voltage range
MAX860ISA	LMC7660IM	Switched capacitor voltage converter	SOIC-8	SOIC-8	-25°C to 85°C	-40°C to 85°C	1.5 to 5.5 V _{IN}	1.5 to 10 V _{IN}	N	LMC7660 has a higher input voltage range
MAX861ESA	LMC7660IM	Switched capacitor voltage converter	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	1.5 to 5.5 V _{IN}	1.5 to 10 V _{IN}	N	LMC7660 has a higher input voltage range
MAX861ISA	LMC7660IM	Switched capacitor voltage converter	SOIC-8	SOIC-8	-25°C to 85°C	-40°C to 85°C	1.5 to 5.5 V _{IN}	1.5 to 10 V _{IN}	N	LMC7660 has a higher input voltage range
MAX8860EUA18	LP3982IMM-1.8	Micropower, ultra-low-dropout, low-noise, 300 mA CMOS regulator	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	1.8	1.8	S	National IN, SHDN to GND is -0.3 to 6.5; V _{CC} = 6.5 max.
MAX8860EUA25	LP3982IMM-2.5	Micropower, ultra-low-dropout, low-noise, 300 mA CMOS regulator	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	2.5	2.5	S	National IN, SHDN to GND is -0.3 to 6.5; V _{CC} = 6.5 max.
MAX8860EUA27	LP3982IMM-2.77	Micropower, ultra-low-dropout, low-noise, 300 mA CMOS regulator	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	2.77	2.77	S	National IN, SHDN to GND is -0.3 to 6.5; V _{CC} = 6.5 max.
MAX8860EUA28	LP3982IMM-2.82	Micropower, ultra-low-dropout, low-noise, 300 mA CMOS regulator	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	2.82	2.82	S	National IN, SHDN to GND is -0.3 to 6.5; V _{CC} = 6.5 max.
MAX8860EUA30	LP3982IMM-3.0	Micropower, ultra-low-dropout, low-noise, 300 mA CMOS regulator	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	3	3	S	National IN, SHDN to GND is -0.3 to 6.5; V _{CC} = 6.5 max.

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Maxim										
MAX8860EUA33	LP3982IMM-3.3	Micropower, ultra-low-dropout, low-noise, 300 mA CMOS regulator	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	3.3	3.3	S	National IN, SHDN to GND is -0.3 to 6.5; V _{CC} = 6.5 max.
MAX8878EUK	LP3985IM5-3.0	150 mA CMOS low-dropout regulator	SOT23-5	SOT23-5	-40°C to 85°C	-40°C to 125°C	2.2 to 5.5 V _{IN}	2.5 to 6 V _{IN}	F	Also available in micro SMD-4 package
MAX9110ESA	DS90LV017M	Single differential line driver	SOIC-8	SOIC-8	-40°C to 85°C	0°C to 70°C	3.3	3.3	S	
MAX9110ESA	DS90LV017ATM	Single differential line driver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
MAX9111ESA	DS90LV018ATM	Single differential line driver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
MAX9112ESA	DS90LV027M	Dual LVDS differential driver	SOIC-8	SOIC-8	-40°C to 85°C	0°C to 70°C	3.3	3.3	S	
MAX9112ESA	DS90LV027ATM	Dual LVDS differential driver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
MAX9113ESA	DS90LV028ATMF	Dual LVDS differential driver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
MAX9121ESE	DS90LV048ATM	Quad LVDS differential line receiver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
MAX9121EUE	DS90LV048 ATMTC	Quad LVDS differential line receiver	TSSOP-16	TSSOP-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
MAX9123ESE	DS90LV047ATM	Quad LVDS differential line receiver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
MAX9123EUE	DS90LV047 ATMTC	Quad LVDS differential line driver	TSSOP-16	TSSOP-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
MAX9124ESE	DS90LV031ATM	Quad LVDS differential line driver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
MAX9124ESE	DS90LV031BTM	Quad LVDS differential line driver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
MAX9124EUE	DS90LV031 ATMTC	Quad LVDS differential line driver	TSSOP-16	TSSOP-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
MAX9125ESE	DS90LV032ATM	Quad LVDS differential line receiver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
MAX9125EUE	DS90LV032 ATMTC	Quad LVDS differential line receiver	TSSOP-16	TSSOP-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
MAX9686CPA	LM360N	High-speed differential comparator	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	N	
MAX9686CSA	LM360M	High-speed differential comparator	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	N	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Maxim										
MF10BN	LMF10ACN	Dual switched capacitor filter	MDIP-20	MDIP-20	0°C to 70°C	0°C to 70°C	14	14	D	
MF10CN	LMF10CCN	Dual switched capacitor filter	MDIP-20	MDIP-20	0°C to 70°C	0°C to 70°C	14	14	D	
SI7661CJ	LMC7660IN	Switched capacitor voltage converter	MDIP-8	MDIP-8	0°C to 70°C	-40°C to 85°C	4.5 to 20 V _{IN}	1.5 to 10 V _{IN}	S	LMC7660 functions at lower V _{IN}
SI7661CSA	LMC7660IM	Switched capacitor voltage converter	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	4.5 to 20 V _{IN}	1.5 to 10 V _{IN}	S	LMC7660 functions at lower V _{IN}
SI7661DJ	LMC7660IN	Switched capacitor voltage converter	MDIP-8	MDIP-8	0°C to 70°C	-40°C to 85°C	4.5 to 20 V _{IN}	1.5 to 10 V _{IN}	S	LMC7660 functions at lower V _{IN}
SI7661ESA	LMC7660IM	Switched capacitor voltage converter	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	4.5 to 20 V _{IN}	1.5 to 10 V _{IN}	S	LMC7660 functions at lower V _{IN}
Micrel										
LM2574BWM	LM2574M-Adj	500 mA stepdown SIMPLE SWITCHER®	WSOIC-14	WSOIC-14	-40°C to 85°C	-40°C to 125°C	Adj.	Adj.	S	
LM2574-3.3BWM	LM2574M-3.3	500 mA stepdown SIMPLE SWITCHER	WSOIC-14	WSOIC-14	-40°C to 85°C	-40°C to 125°C	3.3	3.3	S	
LM2574-5.0BWM	LM2574M-5.0	500 mA stepdown SIMPLE SWITCHER	WSOIC-14	WSOIC-14	-40°C to 85°C	-40°C to 125°C	5	5	S	
LM2574-12BWM	LM2574M-12	500 mA stepdown SIMPLE SWITCHER	WSOIC-14	WSOIC-14	-40°C to 85°C	-40°C to 125°C	12	12	S	
LM2574BN	LM2574N-Adj	500 mA stepdown SIMPLE SWITCHER	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 125°C	Adj.	Adj.	S	
LM2574-3.3BN	LM2574N-3.3	500 mA stepdown SIMPLE SWITCHER	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 125°C	3.3	3.3	S	
LM2574-5.0BN	LM2574N-5.0	500 mA stepdown SIMPLE SWITCHER	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 125°C	5	5	S	
LM2574-12BN	LM2574N-12	500 mA stepdown SIMPLE SWITCHER	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 125°C	12	12	S	
LM2575BWM	LM2575M-Adj	500 mA stepdown SIMPLE SWITCHER	WSOIC-14	WSOIC-14	-40°C to 85°C	-40°C to 125°C	Adj.	Adj.	S	
LM2575-3.3BWM	LM2575M-3.3	500 mA stepdown SIMPLE SWITCHER	WSOIC-14	WSOIC-14	-40°C to 85°C	-40°C to 125°C	3.3	3.3	S	

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Micrel										
LM2575-5.0BWM	LM2575M-5.0	500 mA stepdown SIMPLE SWITCHER	WSOIC-14	WSOIC-14	-40°C to 85°C	-40°C to 125°C	5	5	S	
LM2575-12BWM	LM2575M-12	500 mA stepdown SIMPLE SWITCHER	WSOIC-14	WSOIC-14	-40°C to 85°C	-40°C to 125°C	12	12	S	
LM2575BN	LM2575N-Adj	500 mA stepdown SIMPLE SWITCHER	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 125°C	Adj.	Adj.	S	
LM2575-3.3BN	LM2575N-3.3	500 mA stepdown SIMPLE SWITCHER	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 125°C	3.3	3.3	S	
LM2575-5.0BN	LM2575N-5.0	500 mA stepdown SIMPLE SWITCHER	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 125°C	5	5	S	
LM2575-12BN	LM2575N-12	500 mA stepdown SIMPLE SWITCHER	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 125°C	12	12	S	
LM2575BU	LM2575S-Adj	1A stepdown SIMPLE SWITCHER	T0263-5	T0263-5	-40°C to 85°C	-40°C to 125°C	Adj.	Adj.	S	
LM2575-3.3BU	LM2575S-3.3	1A stepdown SIMPLE SWITCHER	T0263-5	T0263-5	-40°C to 85°C	-40°C to 125°C	3.3	3.3	S	
LM2575-5.0BU	LM2575S-5.0	1A stepdown SIMPLE SWITCHER	T0263-5	T0263-5	-40°C to 85°C	-40°C to 125°C	5	5	S	
LM2575-12BU	LM2575S-12	1A stepdown SIMPLE SWITCHER	T0263-5	T0263-5	-40°C to 85°C	-40°C to 125°C	12	12	S	
LM2575BT	LM2575T-Adj	1A stepdown SIMPLE SWITCHER	T0220-5	T0220-5	-40°C to 85°C	-40°C to 125°C	Adj.	Adj.	S	
LM2575-3.3BT	LM2575T-3.3	1A stepdown SIMPLE SWITCHER	T0220-5	T0220-5	-40°C to 85°C	-40°C to 125°C	3.3	3.3	S	
LM2575-5.0BT	LM2575T-5.0	1A stepdown SIMPLE SWITCHER	T0220-5	T0220-5	-40°C to 85°C	-40°C to 125°C	5	5	S	
LM2575-12BT	LM2575T-Adj	1A stepdown SIMPLE SWITCHER	T0220-5	T0220-5	-40°C to 85°C	-40°C to 125°C	12	12	S	
LM2576BU	LM2576S-Adj	1A stepdown SIMPLE SWITCHER	T0263-5	T0263-5	-40°C to 85°C	-40°C to 125°C	Adj.	Adj.	S	
LM2576-3.3BU	LM2576S-3.3	1A stepdown SIMPLE SWITCHER	T0263-5	T0263-5	-40°C to 85°C	-40°C to 125°C	3.3	3.3	S	
LM2576-5.0BU	LM2576S-5.0	1A stepdown SIMPLE SWITCHER	T0263-5	T0263-5	-40°C to 85°C	-40°C to 125°C	5	5	S	
LM2576-12BU	LM2576S-12	1A stepdown SIMPLE SWITCHER	T0263-5	T0263-5	-40°C to 85°C	-40°C to 125°C	12	12	S	
LM2576BT	LM2576T-Adj	1A stepdown SIMPLE SWITCHER	T0220-5	T0220-5	-40°C to 85°C	-40°C to 125°C	Adj.	Adj.	S	
LM2576-3.3BT	LM2576T-3.3	1A stepdown SIMPLE SWITCHER	T0220-5	T0220-5	-40°C to 85°C	-40°C to 125°C	3.3	3.3	S	
LM2576-5.0BT	LM2576T-5.0	1A stepdown SIMPLE SWITCHER	T0220-5	T0220-5	-40°C to 85°C	-40°C to 125°C	5	5	S	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Micrel										
LM2576-12BT	LM2576T-Adj	1A stepdown SIMPLE SWITCHER	TO220-5	TO220-5	-40°C to 85°C	-40°C to 125°C	12	12	S	
LM4040/1AIM3-2.5	LM4040/1AIM3-2.5	Micropower shunt voltage reference	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	2.5	2.5	D	0.1% accuracy
LM4040/1AIM3-4.1	LM4040/1AIM3-4.1	Micropower shunt voltage reference	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	4.1	4.1	D	0.1% accuracy
LM4040/1AIM3-5.0	LM4040/1AIM3-5.0	Micropower shunt voltage reference	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	5	5	D	0.1% accuracy
LM4040/1BIM3-2.5	LM4040/1BIM3-2.5	Micropower shunt voltage reference	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	2.5	2.5	D	0.2% accuracy
LM4040/1BIM3-4.1	LM4040/1BIM3-4.1	Micropower shunt voltage reference	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	4.1	4.1	D	0.2% accuracy
LM4040/1BIM3-5.0	LM4040/1BIM3-5.0	Micropower shunt voltage reference	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	5	5	D	0.2% accuracy
LM4040/1CIM3-2.5	LM4040/1CIM3-2.5	Micropower shunt voltage reference	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	2.5	2.5	D	0.5% accuracy
LM4040/1CIM3-4.1	LM4040/1CIM3-4.1	Micropower shunt voltage reference	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	4.1	4.1	D	0.5% accuracy
LM4040/1CIM3-5.0	LM4040/1CIM3-5.0	Micropower shunt voltage reference	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	5	5	D	0.5% accuracy
LM4040/1DIM3-2.5	LM4040/1DIM3-2.5	Micropower shunt voltage reference	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	2.5	2.5	D	1% accuracy
LM4040/1DIM3-4.1	LM4040/1DIM3-4.1	Micropower shunt voltage reference	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	4.1	4.1	D	1% accuracy
LM4040/1DIM3-5.0	LM4040/1DIM3-5.0	Micropower shunt voltage reference	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	5	5	D	1% accuracy
LMC7101AIM5	LMC7101AIM5	RRIO low-power operational amplifier	SOT23-5	SOT23-5	-40°C to 85°C	-40°C to 85°C	–	–	D	
LMC7101BIM5	LMC7101BIM5	RRIO low-power operational amplifier	SOT23-5	SOT23-5	-40°C to 85°C	-40°C to 85°C	–	–	D	
LP2950-05BZ	LP2950ACZ-5.0	Micropower fixed voltage regulator	TO-92	TO-92	-40°C to 125°C	-40°C to 125°C	5	5	S	150 mA version of the LP2950
LP2950-02BZ	LP2950ACZ-5.0	Micropower fixed voltage regulator	TO-92	TO-92	-40°C to 125°C	-40°C to 125°C	5	5	D	

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement
(May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package
(See datasheets for differences.)

N = Similar function, different package and/or pinout
(See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Micrel										
LP2950-06BZ	LP2950CZ-5.0	Micropower fixed voltage regulator	TO-92	TO-92	-40°C to 125°C	-40°C to 125°C	5	5	S	150 mA version of the LP2950
LP2950-03BZ	LP2950CZ-5.0	Micropower fixed voltage regulator	TO-92	TO-92	-40°C to 125°C	-40°C to 125°C	5	5	D	
MIC2525-1BM	LM3525M-H	Single port USB power switch	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
MIC2525-2BM	LM3525M-L	Single port USB power switch	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
MIC2526-1BM	LM3526M-H	Dual port USB power switch	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
MIC2526-2BM	LM3526M-L	Dual port USB power switch	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
MIC2937A-3.3BU	LM2937ES-3.3	500 mA low-dropout regulator	TO263-3	TO263-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	D	
MIC2937A-3.3BT	LM2937ET-3.3	500 mA low-dropout regulator	TO220-3	TO220-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	D	
MIC2940A-5.0BT	LM2940T-5.0	1.25A low-dropout regulator	TO220-3	TO220-3	-40°C to 125°C	-40°C to 125°C	5	5, 8, 9, 10, 12	S	National offers additional packages: LLP, SOT-223, TO-220, TO-263, and voltage options
MIC2940A-12.0BT	LM2940T-12.0	1.25A low-dropout regulator	TO220-3	TO220-3	-40°C to 125°C	-40°C to 125°C	12	5, 8, 9, 10, 12	S	National offers additional packages: LLP, SOT-223, TO-220, TO-263, and voltage options
MIC2940A-5.0BU	LM2940S-5.0	1.25A low-dropout regulator	TO263-3	TO263-3	-40°C to 125°C	-40°C to 125°C	5	5, 8, 9, 10, 12	S	National offers additional packages: LLP, SOT-223, TO-220, TO-263, and voltage options
MIC2940A-12.0BU	LM2940S-12.0	1.25A low-dropout regulator	TO263-3	TO263-3	-40°C to 125°C	-40°C to 125°C	12	5, 8, 9, 10, 12	S	National offers additional packages: LLP, SOT-223, TO-220, TO-263, and voltage options
MIC2941ABT	LM2941T	1.25A adjustable low-dropout regulator	TO220-3	TO220-3	-40°C to 125°C	-40°C to 125°C	Adj.	Adj.	S	National offers an LLP package
MIC2941ABU	LM2941S	1.25A adjustable low-dropout regulator	TO263-3	TO263-3	-40°C to 125°C	-40°C to 125°C	Adj.	Adj.	S	National offers an LLP package
MIC2950-06BZ	LP2950CZ-5.0	150 mA low-dropout regulator	TO-92	TO-92	-40°C to 125°C	-40°C to 125°C	5	5	D	
MIC2951-3.3BM	LP2951CM-3.3	150 mA low-dropout regulator	SOIC-8	SOIC-8	-40°C to 125°C	-40°C to 125°C	3.3	3.3	D	
MIC29510-3.3BT	LMS1585ACT-3.3	5A low-dropout regulator	TO220-3	TO220-3	0°C to 125°C	0°C to 125°C	3.3	3.3	F	Different specs, pinout
MIC29510-5.0BT	LMS1585ACT-5.0	5A low-dropout regulator	TO220-3	TO220-3	0°C to 125°C	0°C to 125°C	5	5	F	Different specs, pinout
MIC29510-3.3BT	LM1084IT-3.3	5A low-dropout regulator	TO220-3	TO220-3	0°C to 125°C	-40°C to 125°C	3.3	3.3	F	Different specs, pinout

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Micrel										
MIC29510-5.0BT	LM1084IT-5.0	5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	5	5	F	Different specs, pinout
MIC29310-3.3BT	LMS1587CT-3.3	3A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	3.3	3.3	F	Different specs, pinout
MIC29310-3.3BU	LMS1587CS-3.3	3A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	3.3	3.3	F	Different specs, pinout
MIC29310-3.3BT	LM1085IT-3.3	3A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	3.3	3.3	F	Different specs, pinout
MIC29310-3.3BU	LM1085IS-3.3	3A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	-40°C to 125°C	3.3	3.3	F	Different specs, pinout
MIC29310-5.0BT	LM1085IT-5.0	3A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	5	5	F	Different specs, pinout
MIC29310-5.0BU	LM1085IS-5.0	3A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	-40°C to 125°C	5	5	F	Different specs, pinout
MIC29150-3.3BT	LM1086IT-3.3	1.5A low-dropout regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	F	Different specs, pinout
MIC29150-3.3BU	LM1086IS-3.3	1.5A low-dropout regulator	T0263-3	T0263-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	F	Different specs, pinout
MIC29150-5.0BT	LM1086IT-5.0	1.5A low-dropout regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	5	5	F	Different specs, pinout
MIC29150-5.0BU	LM1086IS-5.0	1.5A low-dropout regulator	T0263-3	T0263-3	-40°C to 125°C	-40°C to 125°C	5	5	F	Different specs, pinout
MIC29300-3.3BT	LMS1587CT-3.3	3A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	3.3	3.3	F	Different specs, pinout
MIC29300-3.3BU	LMS1587CS-3.3	3A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	3.3	3.3	F	Different specs, pinout
MIC29300-3.3BT	LM1085IT-3.3	3A low-dropout regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	F	Different specs, pinout
MIC29300-3.3BU	LM1085IS-3.3	3A low-dropout regulator	T0263-3	T0263-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	F	Different specs, pinout
MIC29300-5.0BT	LM1085IT-5.0	3A low-dropout regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	5	5	F	Different specs, pinout
MIC29300-5.0BU	LM1085IS-5.0	3A low-dropout regulator	T0263-3	T0263-3	-40°C to 125°C	-40°C to 125°C	5	5	F	Different specs, pinout
MIC2954-02BT	LM2930T-5.0	3-terminal positive regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	5	5	S	
MIC2954-03BT	LM2930T-5.0	3-terminal positive regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	5	5	S	
MIC2981BN	DS2003TN	High-voltage high-current Darlington transistor array	MDIP-18	MDIP-16	-40°C to 85°C	-40°C to 125°C	5	5	S	TTL/CMOS compatible
MIC2981BWM	DS2003TMT	High-voltage high-current Darlington transistor array	WSOIC-18	TSSOP-16	-40°C to 85°C	-40°C to 125°C	5	5	S	TTL/CMOS compatible
MIC2982BN	DS2003TN	High-voltage high-current Darlington transistor array	MDIP-18	MDIP-16	-40°C to 85°C	-40°C to 125°C	5	5	S	TTL/CMOS compatible
MIC2982BWM	DS2003TMT	High-voltage high-current Darlington transistor array	WSOIC-18	TSSOP-16	-40°C to 85°C	-40°C to 125°C	5	5	S	TTL/CMOS compatible

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Micrel										
MIC5213-2.5BC5	LMS5214IMG-2.5	80 mA low-dropout voltage regulator	SC70-5	SC70-5	-40°C to 125°C	-40°C to 125°C	2.5	2.5	S	National has a lower enable input current and tighter limit
MIC5213-2.6BC5	LMS5214IMG-2.6	80 mA low-dropout voltage regulator	SC70-5	SC70-5	-40°C to 125°C	-40°C to 125°C	2.6	2.6	S	National has a lower enable input current and tighter limit
MIC5213-2.8BC5	LMS5214IMG-2.9	80 mA low-dropout voltage regulator	SC70-5	SC70-5	-40°C to 125°C	-40°C to 125°C	2.8	2.9	S	National has a lower enable input current and tighter limit
MIC5213-3.0BC5	LMS5214IMG-3.0	80 mA low-dropout voltage regulator	SC70-5	SC70-5	-40°C to 125°C	-40°C to 125°C	3	3	S	National has a lower enable input current and tighter limit
MIC5213-3.3BC5	LMS5214IMG-3.3	80 mA low-dropout voltage regulator	SC70-5	SC70-5	-40°C to 125°C	-40°C to 125°C	3.3	3.3	S	National has a lower enable input current and tighter limit
MIC5213-2.8BC5	LMS5213IM7-2.8	Fixed 2.8V, 80 mA μ Cap low-dropout regulator	SC70-5	SC70-5	-40°C to 125°C	-40°C to 125°C	2.8	2.8	D	
MIC5213-3.0BC5	LMS5213IM7-3.0	Fixed 3.0V, 80 mA μ Cap low-dropout regulator	SC70-5	SC70-5	-40°C to 125°C	-40°C to 125°C	3	3	D	
MIC5213-3.3BC5	LMS5213IM7-3.3	Fixed 3.3V, 80 mA μ Cap low-dropout regulator	SC70-5	SC70-5	-40°C to 125°C	-40°C to 125°C	3.3	3.3	D	
MIC5237-5.0BT	LM2937ET-5.0	500 mA low-dropout regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	5	5, 8, 10, 12, 15	S	Maximum V_{IN} for Micrel is 16V, National is 26V
MIC5237-5.0BU	LM2937ES-5.0	500 mA low-dropout regulator	T0263-3	T0263-3	-40°C to 125°C	-40°C to 125°C	5	5, 8, 10, 12, 15	S	Maximum V_{IN} for Micrel is 16V, National is 26V
MIC5245-2.5BM5	LP3985IM5-2.5	Low-noise, low-power low-dropout regulator	SOT23-5	SOT23-5	-40°C to 125°C	-40°C to 125°C	2.5	2.5	D	
MIC5245-27BM5	LP3985IM5-2.7	Low-noise, low-power low-dropout regulator	SOT23-5	SOT23-5	-40°C to 125°C	-40°C to 125°C	2.7	2.7	D	
MIC5245-2.8BM5	LP3985IM5-2.8	Low-noise, low-power low-dropout regulator	SOT23-5	SOT23-5	-40°C to 125°C	-40°C to 125°C	2.8	2.8	D	
MIC5245-2.85BM5	LP3985IM5-2.85	Low-noise, low-power low-dropout regulator	SOT23-5	SOT23-5	-40°C to 125°C	-40°C to 125°C	2.85	2.85	D	
MIC5245-3.0BM5	LP3985IM5-3.0	Low-noise, low-power low-dropout regulator	SOT23-5	SOT23-5	-40°C to 125°C	-40°C to 125°C	3	3	D	
MIC5245-3.2BM5	LP3985IM5-3.2	Low-noise, low-power low-dropout regulator	SOT23-5	SOT23-5	-40°C to 125°C	-40°C to 125°C	3.2	3.2	D	
MIC5245-3.3BM5	LP3985IM5-3.3	Low-noise, low-power low-dropout regulator	SOT23-5	SOT23-5	-40°C to 125°C	-40°C to 125°C	3.3	3.3	D	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Micrel										
MIC5249-2.85BMM	LP3982IMM-2.82	Micropower, ultra-low-dropout, low-noise, 300 mA CMOS regulator	MSOP-8	MSOP-8	-40°C to 125°C	-40°C to 85°C	2.85	2.82	F	National has LLP package and shutdown pin. Also other voltage options available.
MIC5250-2.8BMM	LP3986BL-2.8	Dual, low-power low-dropout regulator	MSOP-10	micro SMD-8	-40°C to 125°C	-40°C to 125°C	2.8	2.8	F	
MIC5250-3.0BMM	LP3986BL-3.0	Dual, low-power low-dropout regulator	MSOP-10	micro SMD-8	-40°C to 125°C	-40°C to 125°C	3	3	F	
MIC5250-3.3BMM	LP3986BL-3.3	Dual, low-power low-dropout regulator	MSOP-10	micro SMD-8	-40°C to 125°C	-40°C to 125°C	3.3	3.3	F	
MIC5256-2.85BM5	LP3985IM5-3.0	150 mA CMOS low-dropout regulator	SOT23-5	SOT23-5	-40°C to 125°C	-40°C to 125°C	2.7 to 6 V _{IN}	2.5 to 6 V _{IN}	F	Also available in micro SMD-4 package
MIC5258-1.2BM5	LMS5258MF-1.2	150 mA low-dropout regulator with power good	SOT23-5	SOT23-5	-40°C to 125°C	-40°C to 125°C	1.2	1.2	D	
MIC5268-1.2BM5	LP8358MF-1.2	150 mA low-dropout regulator with power good	SOT23-5	SOT23-5	-40°C to 125°C	-40°C to 125°C	1.2	1.2	D	
MIC6270BM5	LM397MF	Comparator	SOT23-5	SOT23-5	-40°C to 85°C	-40°C to 85°C	–	–	F	Different pinout
MIC809LU	LM809M3-4.63	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 105°C	4.63	4.63	S	
MIC809MU	LM809M3-4.38	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 105°C	4.38	4.38	S	
MIC809JU	LM809M3-4.00	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 105°C	4	4	S	
MIC809TU	LM809M3-3.08	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 105°C	3.08	3.08	S	
MIC809SU	LM809M3-2.93	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 105°C	2.93	2.93	S	
MIC809RU	LM809M3-2.63	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 105°C	2.63	2.63	S	
MIC810LU	LM810M3-4.63	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 105°C	4.63	4.63	S	
MIC810MU	LM810M3-4.38	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 105°C	4.38	4.38	S	
MIC810JU	LM810M3-4.00	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 105°C	4	4	S	
MIC810TU	LM810M3-3.38	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 105°C	3.08	3.08	S	
MIC810SU	LM810M3-2.93	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 105°C	2.93	2.93	S	
MIC810RU	LM810M3-2.63	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 105°C	2.63	2.63	S	

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Micro Analog Systems										
MAS9160ASMHT	LP3986BL	150 mA dual CMOS low-dropout regulator	MSOP-8	micro SMD-8	-40°C to 125°C	-40°C to 125°C	2.5 to 5.3 V _{IN}	2.5 to 6 V _{IN}	F	
Microchip										
MCP120-300I/TT	LM8364 BALMF30	Micropower undervoltage sensor	SOT23-3	SOT23-5	-40°C to 85°C	-40°C to 85°C	7	6.5	F	
MCP120-450I/TT	LM8364 BALMF45	Micropower undervoltage sensor	SOT23-3	SOT23-5	-40°C to 85°C	-40°C to 85°C	7	6.5	F	
MCP6022-I/SN	LMC6022IM	Dual operational amplifier	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	7	16	S	Microchip parts are standard power/high-speed, National part is low-power/low-speed
MCP6024-I/SL	LMC6024IM	Quad operational amplifier	SOIC-14	SOIC-14	-40°C to 85°C	-40°C to 85°C	7	16	S	Microchip parts are standard power/high-speed, National part is low-power/low-speed
MCP809-300ITT	LM809M3-3.0	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 105°C	3	3	S	
MCP810-300ITT	LM810M3-3.0	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 105°C	3	3	S	
MicroLinear - power & video lines acquired by Fairchild Semiconductor										
ML6401CS-1	ADC1175CIJM	8-bit, 20 MSPS video A/D converter	SOIC-24	SOIC-24	0°C to 70°C	-20°C to 75°C	–	–	D	
Micro Networks										
MN3014	DAC0800LCN	8-bit D/A converter	CERDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	S	
Microsemi Corporation										
LM385DM-1.2	LM385M-1.2	Voltage reference	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	1.2	1.2	D	Supplier has 2.5% accuracy, National has 2% accuracy SOIC-8 pinout is slightly different, Linfinity has redundant pin
LM385LP-1.2	LM385Z-1.2	Voltage reference	TO-92	TO-92	0°C to 70°C	0°C to 70°C	1.2	1.2	D	Supplier has 2.5% accuracy, National has 2% accuracy
LM385BDM-1.2	LM385BM-1.2	Voltage reference	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	1.2	1.2	D	1% accuracy SOIC-8 pinout is slightly different, Linfinity has redundant pin
LM385BLP-1.2	LM385BZ-1.2	Voltage reference	TO-92	TO-92	0°C to 70°C	0°C to 70°C	1.2	1.2	D	1% accuracy

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Microsemi Corporation										
LM385DM-2.5	LM385M-2.5	Voltage reference	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2.5	2.5	D	3% accuracy SOIC-8 pinout is slightly different, Linfinity has redundant pin
LM385LP-2.5	LM385Z-2.5	Voltage reference	T0-92	T0-92	0°C to 70°C	0°C to 70°C	2.5	2.5	D	3% accuracy
LM385BDM-2.5	LM385BM-2.5	Voltage reference	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2.5	2.5	D	1.5% accuracy SOIC-8 pinout is slightly different, Linfinity has redundant pin
LM385BLP-2.5	LM385BZ-2.5	Voltage reference	T0-92	T0-92	0°C to 70°C	0°C to 70°C	2.5	2.5	D	1.5% accuracy
LX432CLP	LMV431ACZ	Precision shunt regulator	T0-92	T0-92	0°C to 70°C	0°C to 70°C	1.24	1.24	D	1% accuracy
LX432CSE	LMV431ACM5	Precision shunt regulator	SOT23-5	SOT23-5	0°C to 70°C	0°C to 70°C	1.24	1.24	D	1% accuracy
LX432ILP	LMV431AICZ	Precision shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	1.24	1.24	D	1% accuracy
LX432ISE	LMV431AIM5	Precision shunt regulator	SOT23-5	SOT23-5	-40°C to 85°C	-40°C to 85°C	1.24	1.24	D	1% accuracy
LX432ISC	LMV431AIMF	Precision shunt regulator	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	1.24	1.24	D	1% accuracy
LX432CSC	LMV431AIMF	Low-voltage adjustable precision shunt regulator	SOT23-3	SOT23-3	0°C to 70°C	-40°C to 85°C	1.24	1.24	D	National offers higher maximum rating of cathode voltage and higher continuous cathode current
LX432ISC	LMV431AIMF	Low-voltage adjustable precision shunt regulator	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	1.24	1.24	D	National offers higher maximum rating of cathode voltage and higher continuous cathode current
LX432CSE	LMV431ACM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	0°C to 70°C	0°C to 70°C	1.24	1.24	D	National offers higher maximum rating of cathode voltage and higher continuous cathode current
LX432ISE	LMV431AIM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	-40°C to 85°C	-40°C to 85°C	1.24	1.24	D	National offers higher maximum rating of cathode voltage and higher continuous cathode current
LX432CLP	LMV431ACZ	Low-voltage adjustable precision shunt regulator	T0-92	T0-92	0°C to 70°C	0°C to 70°C	1.24	1.24	D	National offers higher maximum rating of cathode voltage and higher continuous cathode current
LX432ILP	LMV431ACIZ	Low-voltage adjustable precision shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	1.24	1.24	D	National offers higher maximum rating of cathode voltage and higher continuous cathode current
LX8117A-00CDD	LM1117S-Adj	800 mA low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Microsemi Corporation										
LX8117A-25CDD	LM1117S-2.5	800 mA low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	2.5	2.5	D	
LX8117A-28CDD	LM1117S-2.85	800 mA low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	2.85	28.5	D	
LX8117A-33CDD	LM1117S-3.3	800 mA low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
LX8117A-05CDD	LM1117S-5.0	800 mA low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	5	5	D	
LX8117A-00CDD	LM1117S-Adj	800 mA low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
LX8117A-25CDD	LM1117S-2.5	800 mA low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	2.5	2.5	D	
LX8117A-28CDD	LM1117S-2.85	800 mA low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	2.85	28.5	D	
LX8117A-33CDD	LM1117S-3.3	800 mA low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
LX8117A-05CDD	LM1117S-5.0	800 mA low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	5	5	D	
LX8117A-00CDT	LM1117DT-Adj	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
LX8117A-25CDT	LM1117DT-2.5	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	2.5	2.5	D	
LX811A7-28CDT	LM1117DT-2.85	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	2.85	2.85	D	
LX811A7-33CDT	LM1117DT-3.3	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
LX8117A-05CDT	LM1117DT-5.0	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	5	5	D	
LX8117A-00CST	LM1117MP-Adj	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
LX8117A-25CST	LM1117MP-2.5	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	2.5	2.5	D	
LX8117A-28CST	LM1117MP-2.85	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	2.85	2.85	D	
LX8117A-33CST	LM1117MP-3.3	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
LX8117A-05CST	LM1117MP-5.0	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	5	5	D	
LX8117-00CST	LM1117MPX-Adj	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	National offers a 1.8V version
LX8117-2.5CST	LM1117MPX-2.5	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	2.5	2.5	D	National offers other package options
LX8117-28CST	LM1117MPX-2.85	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	2.85	2.85	D	National offers TO-220 and LLP packages
LX8117-33CST	LM1117MPX-3.3	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
LX8117-05CST	LM1117MPX-5.0	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	5	5	D	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Microsemi Corporation										
LX8117-00CDD	LM1117SX-Adj	800 mA low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
LX8117-28CDD	LM1117SX-2.85	800 mA low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	2.85	2.85	D	
LX8117-33CDD	LM1117SX-3.3	800 mA low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
LX8117-05CDD	LM1117SX-5.0	800 mA low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	5	5	D	
LX8117-00CDT	LM1117DTX-Adj	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
LX8117-2.5CDT	LM1117DTX-2.5	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	2.5	2.5	D	
LX8117-28CDT	LM1117DTX-2.85	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	2.85	2.85	D	National offers the LMS8117A in 1A for the 1.8V, 3.3V and adjustable versions in SOT-223 and TO-252
LX8117-33CDT	LM1117DTX-3.3	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
LX8117-05CDT	LM1117DTX-5.0	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	5	5	D	
LX8117A-00CST	LMS8117AMP-Adj	1A low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	National offers a 1.8V version
LX8117A-33CST	LMS8117AMP-3.3	1A low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
LX8117A-00CST	LMS8117ADT-Adj	1A low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
LX8117A-33CST	LMS8117ADT-3.3	1A low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
LX8384B-00CDD	LM1084IS-Adj	5A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	-40°C to 125°C	Adj.	Adj.	S	
LX8384B-33CDD	LM1084IS-3.3	5A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	-40°C to 125°C	3.3	3.3	S	
LX8384B-00CP	LM1084IT-Adj	5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	Adj.	Adj.	S	
LX8384B-33CP	LM1084IT-3.3	5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	3.3	3.3	S	
LX8384-33IDD	LM1084IS-3.3	5A low-dropout regulator	T0263-3	T0263-3	-25°C to 125°C	-40°C to 125°C	3.3	3.3	S	
LX8384-33IP	LM1084IT-3.3	5A low-dropout regulator	T0220-3	T0220-3	-25°C to 125°C	-40°C to 125°C	3.3	3.3	S	
LX8385B-00CDD	LM1085IS-Adj	3A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	-40°C to 125°C	Adj.	Adj.	S	
LX8385B-33CDD	LM1085IS-3.3	3A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	-40°C to 125°C	3.3	3.3	S	
LX8385B-05CDD	LM1085IS-5.0	3A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	-40°C to 125°C	5	5	S	
LX8385B-00CP	LM1085IT-Adj	3A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	Adj.	Adj.	S	
LX8385B-33CP	LM1085IT-3.3	3A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	3.3	3.3	S	

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement
(May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package
(See datasheets for differences.)

N = Similar function, different package and/or pinout
(See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Microsemi Corporation										
LX8385B-05CP	LM1085IT-5.0	3A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	5	5	S	
LX8385B-00IDD	LM1085IS-Adj	3A low-dropout regulator	T0263-3	T0263-3	-25°C to 125°C	-40°C to 125°C	Adj.	Adj.	S	
LX8385B-33IDD	LM1085IS-3.3	3A low-dropout regulator	T0263-3	T0263-3	-25°C to 125°C	-40°C to 125°C	3.3	3.3	S	
LX8385B-05IDD	LM1085IS-5.0	3A low-dropout regulator	T0263-3	T0263-3	-25°C to 125°C	-40°C to 125°C	5	5	S	
LX8385B-00IP	LM1085IT-Adj	3A low-dropout regulator	T0220-3	T0220-3	-25°C to 125°C	-40°C to 125°C	Adj.	Adj.	S	
LX8385B-33IP	LM1085IT-3.3	3A low-dropout regulator	T0220-3	T0220-3	-25°C to 125°C	-40°C to 125°C	3.3	3.3	S	
LX8385B-05IP	LM1085IT-5.0	3A low-dropout regulator	T0220-3	T0220-3	-25°C to 125°C	-40°C to 125°C	5	5	S	
LX8386B-00CP	LM1086CT-Adj	1.5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	Adj.	Adj.	S	
LX8386B-33CP	LM1086CT-3.3	1.5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	3.3	3.3	S	
LX8386B-00IDD	LM1086IS-Adj	1.5A low-dropout regulator	T0263-3	T0263-3	-25°C to 125°C	-40°C to 125°C	Adj.	Adj.	S	
LX8386B-33IDD	LM1086IS-3.3	1.5A low-dropout regulator	T0263-3	T0263-3	-25°C to 125°C	-40°C to 125°C	3.3	3.3	S	
LX8386B-00IP	LM1086IT-Adj	1.5A low-dropout regulator	T0220-3	T0220-3	-25°C to 125°C	-40°C to 125°C	Adj.	Adj.	S	
LX8386B-33IP	LM1086IT-3.3	1.5A low-dropout regulator	T0220-3	T0220-3	-25°C to 125°C	-40°C to 125°C	3.3	3.3	S	
LX8585A-00CDD	LMS1585ACS-Adj	5A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	S	
LX8585A-15CDD	LMS1585ACS-1.5	5A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	1.5	1.5	S	
LX8585A-33CDD	LMS1585ACS-3.3	5A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	3.3	3.3	S	
LX8585A-00CP	LMS1585ACT-Adj	5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	S	
LX8585A-15CP	LMS1585ACT-1.5	5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	1.5	1.5	S	
LX8585A-33CP	LMS1585ACT-3.3	5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	3.3	3.3	S	
LX8585-00CDD	LMS1585ACS-Adj	5A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	S	
LX8585-15CDD	LMS1585ACS-1.5	5A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	1.5	1.5	S	
LX8585-33CDD	LMS1585ACS-3.3	5A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	3.3	3.3	S	
LX8585-00CP	LMS1585ACT-Adj	5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	S	
LX8585-15CP	LMS1585ACT-1.5	5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	1.5	1.5	S	
LX8585-33CP	LMS1585ACT-3.3	5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	3.3	3.3	S	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Microsemi Corporation										
LX8587A-00CDD	LMS1587CS-Adj	3A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	S	
LX8587A-15CDD	LMS1587CS-1.5	3A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	1.5	1.5	S	
LX8587A-33CDD	LMS1587CS-3.3	3A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	3.3	3.3	S	
LX8587A-00CP	LMS1587CT-Adj	3A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	S	
LX8587A-15CP	LMS1587CT-1.5	3A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	1.5	1.5	S	
LX8587A-33CP	LMS1587CT-3.3	3A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	3.3	3.3	S	
LX8587-00CDD	LMS1587CS-Adj	3A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	S	
LX8587-15CDD	LMS1587CS-1.5	3A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	1.5	1.5	S	
LX8587-33CDD	LMS1587CS-3.3	3A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	3.3	3.3	S	
LX8587-00CP	LMS1587CT-Adj	3A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	S	
LX8587-15CP	LMS1587CT-1.5	3A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	1.5	1.5	S	
LX8587-33CP	LMS1587CT-3.3	3A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	3.3	3.3	S	
LX8940CP	LM2940CT-5.0	1A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	5	5, 9, 12, 15	D	National offers the following packages: LLP, SOT-223, TO-220, TO-263
LX8940IP	LM2940T-5.0	1A low-dropout regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	5	5, 8, 9, 10, 12	D	National offers the following packages: LLP, SOT-223, TO-220, TO-263
LX8941CP	LM2941CT	1.25A adjustable low-dropout regulator	T0220-3	T0220-3	0°C to 70°C	0°C to 125°C	Adj.	Adj.	D	National offers the following packages: LLP, TO-220, TO-263
LX8941CDD	LM2941CS	1.25A adjustable low-dropout regulator	T0263-3	T0263-3	0°C to 70°C	0°C to 125°C	Adj.	Adj.	D	National offers the following packages: LLP, TO-220, TO-263
SG117AT	LM117H	3-terminal 1.5A positive adjustable regulator	T039-3	T039-3	-55°C to 125°C	-55°C to 150°C	Adj.	Adj.	D	National has a wider operating temperature range
SG117AK	LM117K	3-terminal 1.5A positive adjustable regulator	T03-2	T03-2	-55°C to 125°C	-55°C to 150°C	Adj.	Adj.	D	National has a wider operating temperature range
SG2524N	LM2524DN	Regulating pulse width modulator	MDIP-16	MDIP-16	-25°C to 85°C	-40°C to 125°C	8 to 40	8 to 40	D	
SG3524N	LM3524DN	Regulating pulse width modulator	MDIP-16	MDIP-16	0°C to 70°C	0°C to 125°C	8 to 40	8 to 40	D	
SG3524D	LM3524DM	Regulating pulse width modulator	SOIC-16	SOIC-16	0°C to 70°C	0°C to 125°C	8 to 40	8 to 40	D	
SG2524BN	LM2524DN	Regulating pulse width modulator	MDIP-16	MDIP-16	-25°C to 85°C	-40°C to 125°C	8 to 40	8 to 40	S	

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Microsemi Corporation										
SG3524BN	LM3524DN	Regulating pulse width modulator	MDIP-16	MDIP-16	0°C to 70°C	0°C to 125°C	8 to 40	8 to 40	S	
Mitsubishi										
M54523FP	DS2003CM	High-voltage high-current Darlington transistor array	SOIC-16	SOIC-16	-20°C to 75°C	-40°C to 85°C	5	5	S	Operates directly with TTL/CMOS
M54523P	DS2003CN	High-voltage high-current Darlington transistor array	MDIP-16	MDIP-16	-20°C to 75°C	-40°C to 85°C	5	5	S	Operates directly with TTL/CMOS
M54526FP	DS2003CM	High-voltage high-current Darlington transistor array	SOIC-16	SOIC-16	-20°C to 75°C	-40°C to 85°C	5	5	S	Operates directly with TTL/CMOS
M54526P	DS2003CN	High-voltage high-current Darlington transistor array	MDIP-16	MDIP-16	-20°C to 75°C	-40°C to 85°C	5	5	S	Operates directly with TTL/CMOS
MM1377XF	LM432A	Dual operational amplifier with on-chip fixed 2.5 reference	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	5	5	D	
Mitsumi										
MM1377XF	LM432MA	Dual operational amplifier with on-chip fixed 2.5 reference	SOIC-8	SOIC-8	-20°C to 85°C	-40°C to 85°C	–	–	S	
Motorola										
LM337MT	LM337T	3-terminal adjustable negative regulator	TO220-3	TO220-3	0°C to 125°C	0°C to 125°C	–	–	D	
MPS										
MP1521	LM2703MFX-Adj	White LED driver	MSOP-10	SOT23-5	-20°C to 85°C	-45°C to 80°C	2.7 to 25 V _{IN}	2.2 to 7 V _{IN} , 20 V _{OUT}	F	
MP1523	LM2703MFX-Adj	White LED driver	MSOP-10	SOT23-5	-20°C to 85°C	-45°C to 80°C	2.7 to 25 V _{IN}	2.2 to 7 V _{IN} , 20 V _{OUT}	F	
New Japan Radio Co, Ltd.										
NJM13600D	LM13700N	Dual operational transconductance amplifier	MDIP-16	MDIP-16	-40°C to 85°C	-40°C to 85°C	–	–	S	
NJM13600M	LM13700M	Dual operational transconductance amplifier	SOIC-16	MSOP-16	-40°C to 85°C	0°C to 70°C	–	–	S	
NJM13700D	LM13700N	Dual operational transconductance amplifier	MDIP-16	MDIP-16	-40°C to 85°C	0°C to 70°C	–	–	S	
NJM13700M	LM13700M	Dual operational transconductance amplifier	SOIC-16	MSOP-16	-40°C to 85°C	0°C to 70°C	–	–	S	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
New Japan Radio Co, Ltd.										
NJR386D	LM386N-1	Low-voltage power amplifier	MDIP-8	MDIP-8	-40°C to 85°C	0°C to 70°C	4 to 15	4 to 15	S	
NJR386M	LM386M-1	Low-voltage power amplifier	SOIC-8	SOIC-8	-40°C to 85°C	0°C to 70°C	4 to 15	4 to 15	D	
NJU7019R	LPC662AIM	Low-power CMOS dual operational amplifier	VSP-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	F	
NJU7019R	LPC662IM	Low-power CMOS dual operational amplifier	VSP-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	F	
NEC Corporation										
UPC178M05AHF	LM78M05CT	0.5A voltage regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	5	5	S	
UPC178M12AHF	LM78M12CT	0.5A voltage regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	12	12	S	
UPC178M15AHF	LM78M15CT	0.5A voltage regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	15	15	S	
UPC813C	LF156N	JFET input operational amplifier	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
UPC813G2	LF156M	JFET input operational amplifier	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	F	
NTE Electronics Inc.										
NTE7143	LM1875T	20W audio power amplifier	T0220-5	T0220-5	0°C to 70°C	0°C to 70°C	16 to 60	16 to 60	D	LM1875 has 4 different lead bend options
NTE823	LM386M-1	Low-voltage audio amplifier	MDIP-8	SOIC-8	0°C to 70°C	0°C to 70°C	4 to 12	4 to 12	D	
NTE823	LM386N-1	Low-voltage audio amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	4 to 12	4 to 12	S	
NTE823	LM386MM-1	Low-voltage audio amplifier	MDIP-8	MSOP-8	0°C to 70°C	0°C to 70°C	4 to 12	4 to 12	S	
NTE990	LM1877N-9	2W dual audio power amplifier	MDIP-14	MDIP-14	0°C to 70°C	0°C to 70°C	6 to 24	6 to 24	D	
NTE990	LM1877M-9	2W dual audio power amplifier	MDIP-14	SOIC-14	0°C to 70°C	0°C to 70°C	6 to 24	6 to 24	S	
ON Semiconductor										
MC1413BD	DS2003CM	High-voltage, high-current Darlington transistor arrays	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	5	5	S	
MC1413BDR2	DS2003CM	High-voltage, high-current Darlington transistor arrays	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	5	5	S	
MC1413BDR2G	DS2003CM	High-voltage, high-current Darlington transistor arrays	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	5	5	S	
MC1413BP	DS2003CN	High-voltage, high-current Darlington transistor arrays	MDIP-16	MDIP-16	-40°C to 85°C	-40°C to 85°C	5	5	S	

Compatibility codes: D = Drop-in replacement S = Same function, package, and pinout but not drop-in replacement F = Same function, different pinout and/or package N = Similar function, different package and/or pinout 91
(May not meet all key specs. See datasheets for differences.) (See datasheets for differences.) (See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
ON Semiconductor										
MC1413D	DS2003CM	High-voltage, high-current Darlington transistor arrays	SOIC-16	SOIC-16	-20°C to 85°C	-40°C to 85°C	5	5	S	
MC1413DG	DS2003CM	High-voltage, high-current Darlington transistor arrays	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	5	5	S	
MC1413P	DS2003CN	High-voltage, high-current Darlington transistor arrays	MDIP-16	MDIP-16	-20°C to 85°C	-40°C to 85°C	5	5	S	
MC1413PG	DS2003CN	High-voltage, high-current Darlington transistor arrays	MDIP-16	MDIP-16	-20°C to 85°C	-40°C to 85°C	5	5	S	
NCV1413BDR2	DS2003TM	High-voltage, high-current Darlington transistor arrays	SOIC-16	SOIC-16	-40°C to 125°C	-40°C to 125°C	5	5	S	
CS1124YD8	LM1815M	Dual variable, reluctance sensor interface IC	SOIC-14	SOIC-14	-40°C to 125°C	-40°C to 85°C	5.5	12	N	
CS1124YDR8	LM1815N	Dual variable, reluctance sensor interface IC	SOIC-14	SOIC-14	-40°C to 125°C	-40°C to 85°C	5.5	12	N	
CS5203A-1GDP3	LM1085IS-Adj	3A low-dropout regulator	D2PAK-3	T0263-3	-40°C to 70°C	-40°C to 125°C	Adj.	Adj.	S	Different input voltage range, National is higher
CS5203A-1GDP3	LMS1587IS-Adj	3A low-dropout regulator	D2PAK-3	T0263-3	-40°C to 70°C	-40°C to 125°C	Adj.	Adj.	S	Different input voltage range, National is higher
CS5203A-1GT3	LM1085IT-Adj	3A low-dropout regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	Adj.	Adj.	D	Different input voltage range, National is higher
CS5203A-1GT3	LMS1587IT-Adj	3A low-dropout regulator	T0220-3	T0220-3	-40°C to 70°C	-40°C to 125°C	Adj.	Adj.	S	Different input voltage range, National is higher
CS5203A-3GDP3	LM1085IS-3.3	3A low-dropout regulator	D2PAK-3	T0220-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	F	
CS5203A-3GT3	LM1085IT-3.3	3A low-dropout regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	D	
CS5203A-5GT3	LM1085IT-5.0	3A low-dropout regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	5	5	D	
LF347BN	LF347BN	Wide bandwidth quad JFET input operational amplifier	MDIP-14	MDIP-14	0°C to 70°C	0°C to 70°C	–	–	D	Supplier part on archive, device not recommended for new design
LF347N	LF347N	Wide bandwidth quad JFET input operational amplifier	MDIP-14	MDIP-14	0°C to 70°C	0°C to 70°C	–	–	D	Supplier part on archive, device not recommended for new design
LF353D	LF353M	Wide bandwidth dual JFET operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
ON Semiconductor										
LF353N	LF353N	Wide bandwidth dual JFET operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
LM211D	LM211M	Voltage comparator	SOIC-8	SOIC-8	-25°C to 85°C	-25°C to 85°C	–	–	D	
LM211DR	LM211M	Voltage comparator	SOIC-8	SOIC-8	-25°C to 85°C	-25°C to 85°C	–	–	D	
LM2574N-12	LM2574N-12	500 mA stepdown SIMPLE SWITCHER®	MDIP-8	MDIP-8	-40°C to 125°C	-40°C to 125°C	12	12	D	
LM2574N-12	LM2575N-12	500 mA stepdown SIMPLE SWITCHER	MDIP-8	MDIP-8	-40°C to 125°C	-40°C to 125°C	12	12	F	
LM2574N-15	LM2574N-15	500 mA stepdown SIMPLE SWITCHER	MDIP-8	MDIP-8	-40°C to 125°C	-40°C to 125°C	15	15	D	
LM2574N-15	LM2575N-15	500 mA stepdown SIMPLE SWITCHER	MDIP-8	MDIP-8	-40°C to 125°C	-40°C to 125°C	15	15	F	
LM2574N-3.3	LM2574N-3.3	500 mA stepdown SIMPLE SWITCHER	MDIP-8	MDIP-8	-40°C to 125°C	-40°C to 125°C	3.3	3.3	D	
LM2574N-5	LM2574N-5.0	500 mA stepdown SIMPLE SWITCHER	MDIP-8	MDIP-8	-40°C to 125°C	-40°C to 125°C	5	5	D	
LM2574N-5	LM2575N-5.0	500 mA stepdown SIMPLE SWITCHER	MDIP-8	MDIP-8	-40°C to 125°C	-40°C to 125°C	5	5	F	
LM2574N-Adj	LM2574N-Adj	500 mA stepdown SIMPLE SWITCHER	MDIP-8	MDIP-8	-40°C to 125°C	-40°C to 125°C	Adj.	Adj.	D	
LM2574N-Adj	LM2575N-Adj	500 mA stepdown SIMPLE SWITCHER	MDIP-8	MDIP-8	-40°C to 125°C	-40°C to 125°C	Adj.	Adj.	F	
LM2575/6T-12	LM2575/6T-12	1A stepdown SIMPLE SWITCHER	TO220-5	TO220-5	-40°C to 125°C	-40°C to 125°C	12	12	D	
LM2575/6T-15	LM2575/6T-15	1A stepdown SIMPLE SWITCHER	TO220-5	TO220-5	-40°C to 125°C	-40°C to 125°C	15	15	D	
LM2575/6T-3.3	LM2575/6T-3.3	1A stepdown SIMPLE SWITCHER	TO220-5	TO220-5	-40°C to 125°C	-40°C to 125°C	3.3	3.3	D	
LM2575/6T-5	LM2575/6T-5.0	1A stepdown SIMPLE SWITCHER	TO220-5	TO220-5	-40°C to 125°C	-40°C to 125°C	5	5	D	
LM2575/6T-Adj	LM2575/6T-Adj	1A stepdown SIMPLE SWITCHER	TO220-5	TO220-5	-40°C to 125°C	-40°C to 125°C	Adj.	Adj.	D	
LM285D-1.2	LM285M-1.2	Voltage reference	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	1.2	1.2	D	1% accuracy
LM285D-2.5	LM285M-2.5	Voltage reference	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2.5	2.5	D	1.5% accuracy
LM285Z-1.2	LM285Z-1.2	Voltage reference	TO-92	TO-92	-40°C to 85°C	-40°C to 85°C	1.2	1.2	D	1% accuracy

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
ON Semiconductor										
LM285Z-2.5	LM285Z-2.5	Voltage reference	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	2.5	2.5	D	1.5% accuracy
LM2901D	LM2901M	Low-power quad operational amplifier	SOIC-14	SOIC-14	-40°C to 105°C	-40°C to 85°C	2 to 36	2 to 36	D	
LM2901N	LM2901N	Low-power quad operational amplifier	MDIP-14	MDIP-14	-40°C to 105°C	-40°C to 85°C	2 to 36	2 to 36	D	
LM2902D	LM2902M	Low-power quad operational amplifier	SOIC-14	SOIC-14	-40°C to 105°C	-40°C to 85°C	3 to 32	3 to 36	D	
LM2902N	LM2902N	Low-power quad operational amplifier	MDIP-14	MDIP-14	-40°C to 105°C	-40°C to 85°C	3 to 32	3 to 32	D	
LM2903D	LM2903M	Low-power voltage dual comparator	SOIC-8	SOIC-8	-40°C to 105°C	-40°C to 85°C	2 to 36	2 to 36	D	
LM2903N	LM2903N	Low-power voltage dual comparator	MDIP-14	MDIP-14	-40°C to 105°C	-40°C to 85°C	2 to 36	2 to 36	D	
LM2904D	LM2904M	Low-power voltage dual comparator	SOIC-8	SOIC-8	-40°C to 105°C	-40°C to 85°C	3 to 26	3 to 26	D	
LM2904N	LM2904N	Low-power voltage dual comparator	MDIP-8	MDIP-8	-40°C to 105°C	-40°C to 85°C	3 to 26	3 to 26	D	
LM2931AD2T-5.0	LM2931ASX-5.0	100 mA low-dropout regulator	D2PAK-3	T0263-3	-40°C to 125°C	-40°C to 85°C	5	5	F	
LM2931AD-5.0	LM2931AM-5.0	Low-dropout voltage regulator	SOIC-8	SOIC-8	-40°C to 125°C	-40°C to 85°C	5	5	S	
LM2931ADT-5.0	LM2931AS-5.0	Low-dropout voltage regulator	T0252-3	T0263-3	-40°C to 125°C	-40°C to 85°C	5	5	F	
LM2931AT-5.0	LM2931AT-5.0	Low-dropout voltage regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 85°C	5	5	S	
LM2931AZ-5.0	LM2931AZ-5.0	Low-dropout voltage regulator	T0-92	T0-92	-40°C to 125°C	-40°C to 85°C	5	5	S	
LM2931CD	LM2931CM	Low-dropout voltage regulator	SOIC-8	SOIC-8	-40°C to 125°C	-40°C to 85°C	–	–	S	
LM2931CD2T	LM2931CS	Low-dropout voltage regulator	D2PAK-3	T0263-3	-40°C to 125°C	-40°C to 85°C	–	–	F	
LM2931CT	LM2931CT	Low-dropout voltage regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 85°C	–	–	S	
LM2931D2T-5.0	LM2931SX-5.0	100 mA low-dropout regulator	D2PAK-3	T0263-3	-40°C to 125°C	-40°C to 85°C	5	5	F	
LM2931D-5.0	LM2931M-5.0	100 mA low-dropout regulator	SOIC-8	SOIC-8	-40°C to 125°C	-40°C to 85°C	5	5	F	
LM2931DT-5.0	LM2931S-5.0	Low-dropout voltage regulator	T0252-3	T0263-3	-40°C to 125°C	-40°C to 85°C	5	5	F	
LM2931T-5.0	LM2931T-5.0	Low-dropout voltage regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 85°C	5	5	S	
LM2931Z-5.0	LM2931Z-5.0	Low-dropout voltage regulator	T0-92	T0-92	-40°C to 125°C	-40°C to 85°C	5	5	S	
LM2951ACD	LP2951ACM	Low-dropout voltage regulator	SOIC-8	SOIC-8	-40°C to 125°C	-40°C to 125°C	5	5	D	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
ON Semiconductor										
LM2951ACD-3.0	LP2951ACM-3.0	Low-dropout voltage regulator	SOIC-8	SOIC-8	-40°C to 125°C	-40°C to 125°C	3.0	3.0	D	
LM2951ACD-3.3	LP2951ACM-3.3	Low-dropout voltage regulator	SOIC-8	SOIC-8	-40°C to 125°C	-40°C to 125°C	3.3	3.3	D	
LM2951ACDM	LP2951ACMM	Low-dropout voltage regulator	MSOP-8	MSOP-8	-40°C to 125°C	-40°C to 125°C	5	5	D	
LM2951ACDM-3.0	LP2951ACMM-3.0	Low-dropout voltage regulator	MSOP-8	MSOP-8	-40°C to 125°C	-40°C to 125°C	3.0	3.0	D	
LM2951ACDM-3.3	LP2951ACMM-3.3	Low-dropout voltage regulator	MSOP-8	MSOP-8	-40°C to 125°C	-40°C to 125°C	3.3	3.3	D	
LM2951ACN	LP2951ACN	Low-dropout voltage regulator	MDIP-8	MDIP-8	-40°C to 125°C	-40°C to 125°C	5	5	D	
LM2951ACN-3.0	LP2951ACN-3.0	Low-dropout voltage regulator	MDIP-8	MDIP-8	-40°C to 125°C	-40°C to 125°C	3.0	3.0	D	
LM2951ACN-3.3	LP2951ACN-3.3	Low-dropout voltage regulator	MDIP-8	MDIP-8	-40°C to 125°C	-40°C to 125°C	3.3	3.3	D	
LM2951CD	LM2951CM	Low-dropout voltage regulator	SOIC-8	SOIC-8	-40°C to 125°C	-40°C to 125°C	5	5	D	
LM2951CD-3.0	LM2951CM-3.0	Low-dropout voltage regulator	SOIC-8	SOIC-8	-40°C to 125°C	-40°C to 125°C	3.0	3.0	D	
LM2951CD-3.3	LM2951CM-3.3	Low-dropout voltage regulator	SOIC-8	SOIC-8	-40°C to 125°C	-40°C to 125°C	3.3	3.3	D	
LM2951CDM	LP2951CCM	Low-dropout voltage regulator	MSOP-8	MSOP-8	-40°C to 125°C	-40°C to 125°C	5	5	D	
LM2951CDM-3.0	LP2951CCM-3.0	Low-dropout voltage regulator	MSOP-8	MSOP-8	-40°C to 125°C	-40°C to 125°C	3.0	3.0	D	
LM2951CDM-3.3	LP2951CCM-3.3	Low-dropout voltage regulator	MSOP-8	MSOP-8	-40°C to 125°C	-40°C to 125°C	3.3	3.3	D	
LM2951CN	LM2951CN	Low-dropout voltage regulator	MDIP-8	MDIP-8	-40°C to 125°C	-40°C to 125°C	5	5	D	
LM2951CN-3.0	LM2951CN-3.0	Low-dropout voltage regulator	MDIP-8	MDIP-8	-40°C to 125°C	-40°C to 125°C	3.0	3.0	D	
LM2951CN-3.3	LM2951CN-3.3	Low-dropout voltage regulator	MDIP-8	MDIP-8	-40°C to 125°C	-40°C to 125°C	3.3	3.3	D	
LM301AN	LM301AN	Operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	National's LM301AN is an upgrade
LM311D	LM311M	Voltage comparator	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
LM311DR	LM311M	Voltage comparator	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
LM311N	LM311N	Voltage comparator	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
LM317MDT	LM317MDT	0.5A positive adjustable regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
LM324AD	LM324AM	Low-power quad operational amplifier	SOIC-14	SOIC-14	0° to 70° C	0°C to 70°C	3 to 32	3 to 32	D	
LM324D	LM324M	Low-power quad operational amplifier	SOIC-14	SOIC-14	0° to 70° C	0°C to 70°C	3 to 32	3 to 32	D	

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement
(May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package
(See datasheets for differences.)

N = Similar function, different package and/or pinout
(See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
ON Semiconductor										
LM337T	LM337T	3-terminal adjustable negative regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	–	–	D	
LM339D	LM339M	Low-power quad operational amplifier	SOIC-14	SOIC-14	0° to 70° C	0°C to 70°C	2 to 36	2 to 36	D	
LM350BT	LM350AT	3-terminal 3A positive adjustable voltage regulator	T0221A-3	T0220-3	-40°C to 125°C	-40°C to 125°C	–	–	D	
LM350T	LM350T	3-terminal 3A positive adjustable voltage regulator	T0221A-3	T0220-3	0°C to 125°C	0°C to 125°C	–	–	D	
LM358D	LM358M	Low-power quad operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	3 to 32	3 to 32	D	
LM385BD-1.2	LM385BM-1.2	Voltage reference	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	1.2	1.2	D	1% accuracy
LM385BD-2.5	LM385BM-2.5	Voltage reference	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2.5	2.5	D	1.5% accuracy
LM385BZ-1.2	LM385BZ-1.2	Voltage reference	T0-92	T0-92	0°C to 70°C	0°C to 70°C	1.2	1.2	D	1% accuracy
LM385BZ-2.5	LM385BZ-2.5	Voltage reference	T0-92	T0-92	0°C to 70°C	0°C to 70°C	2.5	2.5	D	1.5% accuracy
LM385D-1.2	LM385M-1.2	Voltage reference	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	1.2	1.2	D	2% accuracy
LM385D-2.5	LM385M-2.5	Voltage reference	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2.5	2.5	D	3% accuracy
LM385Z-1.2	LM385Z-1.2	Voltage reference	T0-92	T0-92	0°C to 70°C	0°C to 70°C	1.2	1.2	D	2% accuracy
LM385Z-2.5	LM385Z-2.5	Voltage reference	T0-92	T0-92	0°C to 70°C	0°C to 70°C	2.5	2.5	D	3% accuracy
LM393D	LM393M	Low-power, low-offset voltage dual comparator	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	3 to 32	2 to 36	D	
LP2950ACZ-3.0	LP2950ACZ-3.0	Adjustable micropower voltage regulator	T0-92	T0-92	-40°C to 125°C	-40°C to 125°C	3	3	D	
LP2950ACZ-3.3	LP2950ACZ-3.3	Adjustable micropower voltage regulator	T0-92	T0-92	-40°C to 125°C	-40°C to 125°C	3.3	3.3	D	
LP2950ACZ-5.0	LP2950ACZ-5.0	Micropower fixed voltage regulator	T0-92	T0-92	-40°C to 125°C	-40°C to 125°C	5	5	D	
LP2950CDT-3.0	LP2950CDT-3.0	Micropower fixed voltage regulator	T0252-3	T0252-3	-40°C to 125°C	-40°C to 125°C	3	3	D	
LP2950CDT-3.0RK	LP2950CDTX-3.0	Micropower fixed voltage regulator	T0252-3	T0252-3	-40°C to 125°C	-40°C to 125°C	3	3	D	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
ON Semiconductor										
LP2950CDT-3.3	LP2950CDT-3.3	Micropower fixed voltage regulator	T0252-3	T0252-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	D	
LP2950CDT-3.3RK	LP2950CDTX-3.3	Micropower fixed voltage regulator	T0252-3	T0252-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	D	
LP2950CDT-5.0	LP2950CDT-5.0	Micropower fixed voltage regulator	T0252-3	T0252-3	-40°C to 125°C	-40°C to 125°C	5	5	D	
LP2950CDT-5.0RK	LP2950CDTX-5.0	Micropower fixed voltage regulator	T0252-3	T0252-3	-40°C to 125°C	-40°C to 125°C	5	5	D	
LP2950CZ-3.0	LP2950CZ-3.0	Micropower fixed voltage regulator	T0-92	T0-92	-40°C to 125°C	-40°C to 125°C	3	3	D	
LP2950CZ-3.3	LP2950CZ-3.3	Micropower fixed voltage regulator	T0-92	T0-92	-40°C to 125°C	-40°C to 125°C	3.3	3.3	D	
LP2950CZ-5.0	LP2950CZ-5.0	Micropower fixed voltage regulator	T0-92	T0-92	-40°C to 125°C	-40°C to 125°C	5	5	D	
LP2951ACD	LP2951ACM	Adjustable micropower voltage regulator	SOIC-8	SOIC-8	-40°C to 125°C	-40°C to 125°C	5	5	D	
LP2951ACD-3.0	LP2951ACM-3.0	Adjustable micropower voltage regulator	SOIC-8	SOIC-8	-40°C to 125°C	-40°C to 125°C	3	3	D	
LP2951ACD-3.3	LP2951ACM-3.3	Adjustable micropower voltage regulator	SOIC-8	SOIC-8	-40°C to 125°C	-40°C to 125°C	3.3	3.3	D	
LP2951ACN	LP2951ACN	Adjustable micropower voltage regulator	MDIP-8	MDIP-8	-40°C to 125°C	-40°C to 125°C	5	5	D	
LP2951ACN-3.0	LP2951ACN-3.0	Adjustable micropower voltage regulator	MDIP-8	MDIP-8	-40°C to 125°C	-40°C to 125°C	3	3	D	
LP2951ACN-3.3	LP2951ACN-3.3	Adjustable micropower voltage regulator	MDIP-8	MDIP-8	-40°C to 125°C	-40°C to 125°C	3.3	3.3	D	
LP2951CN	LP2951CN	Adjustable micropower voltage regulator	MDIP-8	MDIP-8	-40°C to 125°C	-40°C to 125°C	5	5	D	
LP2951CN-3.0	LP2951CN-3.0	Adjustable micropower voltage regulator	MDIP-8	MDIP-8	-40°C to 125°C	-40°C to 125°C	3	3	D	
LP2951CN-3.3	LP2951CN-3.3	Adjustable micropower voltage regulator	MDIP-8	MDIP-8	-40°C to 125°C	-40°C to 125°C	3.3	3.3	D	
MAX809JTR	LM809M3-4.00	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 105°C	4	4	D	

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
ON Semiconductor										
MAX809LTR	LM809M3-4.63	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 105°C	4.63	4.63	D	
MAX809RTR	LM809M3-2.63	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 105°C	2.63	2.63	D	
MAX809STR	LM809M3-2.93	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 105°C	2.93	2.93	D	
MAX809TTR	LM809M3-3.08	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 105°C	3.08	3.08	D	
MAX80MTR	LM809M3-4.38	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 105°C	4.38	4.38	D	
MAX810LTR	LM810M3-4.63	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 105°C	4.63	4.63	D	
MAX810MTR	LM810M3-4.38	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 105°C	4.38	4.38	D	
MAX810RTR	LM810M3-2.63	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 105°C	2.63	2.63	D	
MAX810STR	LM810M3-2.93	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 105°C	2.93	2.93	D	
MAX810TTR	LM810M3-3.08	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 105°C	3.08	3.08	D	
MC1413BD	DS2003CM	High-voltage, high-current Darlington transistor arrays	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	5	5	D	Operates directly with TTL/CMOS/PMOS
MC1413BP	DS2003CN	High-voltage, high-current Darlington transistor arrays	MDIP-16	MDIP-16	-40°C to 85°C	-40°C to 85°C	5	5	D	Operates directly with TTL/CMOS/PMOS
MC1413DR2	DS2003CM	High-voltage, high-current Darlington transistor arrays	SOIC-16	SOIC-16	-20°C to 85°C	-40°C to 85°C	5	5	S	Operates directly with TTL/CMOS/PMOS
MC1455D	LM555CM	Single precision timing circuit	MSOP-8	MSOP-8	0°C to 70°C	0°C to 70°C	–	–	D	
MC1455P1	LM555CN	Single precision timing circuit	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
MC1488D	DS1488M	RS-232 quad line driver	SOIC-14	SOIC-14	0°C to 75°C	0°C to 75°C	–	–	D	
MC1488P	DS1488N	RS-232 quad line driver	MDIP-14	MDIP-14	0°C to 75°C	0°C to 75°C	–	–	D	
MC1489AD	DS1489AM	RS-232 quad line driver	SOIC-14	SOIC-14	0°C to 75°C	0°C to 75°C	–	–	D	
MC1489AP	DS1489AN	RS-232 quad line receiver	MDIP-14	MDIP-14	0°C to 75°C	0°C to 75°C	–	–	D	
MC1489D	DS1489M	RS-232 quad line receiver	SOIC-14	SOIC-14	0°C to 75°C	0°C to 75°C	–	–	D	
MC1489P	DS1489N	RS-232 quad line receiver	MDIP-14	MDIP-14	0°C to 75°C	0°C to 75°C	–	–	D	
MC1741CP1	LM741CN	General purpose operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
MC33269DT	LM1117DT-Adj	800 mA low-dropout regulator	T0252-3	T0252-3	-40°C to 125°C	0°C to 125°C	Adj.	Adj.	S	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
ON Semiconductor										
MC33269DT-3.3	LM1117DT-3.3	800 mA low-dropout regulator	T0252-3	T0252-3	-40°C to 125°C	0°C to 125°C	3.3	3.3	S	
MC33269DT-5.0	LM1117DT-5.0	800 mA low-dropout regulator	T0252-3	T0252-3	-40°C to 125°C	0°C to 125°C	5	5	S	
MC33269ST-3.3	LM1117MP-3.3	800 mA low-dropout regulator	SOT223-4	SOT223-4	-40°C to 125°C	0°C to 125°C	3.3	3.3	S	
MC33269T	LM1117T-Adj	800 mA low-dropout regulator	T0220-3	T0220-3	-40°C to 125°C	0°C to 125°C	Adj.	Adj.	S	
MC33269T-3.3	LM1117T-3.3	800 mA low-dropout regulator	T0220-3	T0220-3	-40°C to 125°C	0°C to 125°C	3.3	3.3	S	
MC33269T-5.0	LM1117T-5.0	800 mA low-dropout regulator	T0220-3	T0220-3	-40°C to 125°C	0°C to 125°C	5	5	S	
MC33460SQ-30ATR	LMS33460MG	3V under voltage detector	SC-82AB	SC70-5	-40°C to 85°C	-40°C to 85°C	3	3	F	
MC7805ABD2T	LM340AS-5.0	3-terminal positive regulator	D2PAK-3	T0263-3	0°C to 125°C	0°C to 125°C	5	5	F	
MC7805ABT	LM340AT-5.0	3-terminal positive regulator	T0220-3	T0220-3	-40°C to 125°C	0°C to 125°C	5	5	S	
MC7805ACD2T	LM340AS-5.0	3-terminal positive regulator	D2PAK-3	T0263-3	0°C to 125°C	0°C to 125°C	5	5	F	
MC7805ACT	LM340AT-5.0	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	5	5	D	
MC7805BD2T	LM340S-5.0	3-terminal positive regulator	D2PAK-3	T0263-3	-40°C to 125°C	0°C to 125°C	5	5	F	
MC7805BDT	LM340MP-5.0	3-terminal positive regulator	D2PAK-3	SOT223-4	-40°C to 125°C	0°C to 125°C	5	5	F	
MC7805BT	LM340MP-5.0	3-terminal positive regulator	T0220-3	T0220-3	-40°C to 125°C	0°C to 125°C	5	5	S	
MC7805CD2T	LM340S-5.0	3-terminal positive regulator	D2PAK-3	T0263-3	0°C to 125°C	0°C to 125°C	5	5	F	
MC7805CDT	LM340MP-5.0	3-terminal positive regulator	D2PAK-3	SOT223-4	0°C to 125°C	0°C to 125°C	5	5	F	
MC7805CT	LM340T-5.0	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	5	5	D	
MC7808ABT	LM7808CT	3-terminal positive regulator	T0220-3	T0220-3	-40°C to 125°C	0°C to 125°C	8	8	S	
MC7808ACT	LM7808CT	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	8	8	S	
MC7808BT	LM7808CT	3-terminal positive regulator	T0220-3	T0220-3	-40°C to 125°C	0°C to 125°C	8	8	S	
MC7808CT	LM7808CT	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	8	8	S	
MC7812BD2T	LM340S-12	3-terminal positive regulator	D2PAK-3	T0263-3	-40°C to 125°C	0°C to 125°C	12	12	F	
MC7812BT	LM340T-12	3-terminal positive regulator	T0220-3	T0220-3	-40°C to 125°C	0°C to 125°C	12	12	S	
MC7812CD2T	LM340S-12	3-terminal positive regulator	D2PAK-3	T0263-3	0°C to 125°C	0°C to 125°C	12	12	F	
MC7812CT	LM340T-12	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	12	12	D	

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
ON Semiconductor										
MC7815BT	LM340T-15	3-terminal positive regulator	T0220-3	T0220-3	-40°C to 125°C	0°C to 125°C	15	15	S	
MC7815CT	LM340T-15	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	15	15	D	
MC78L05ABD	LM78L05ACM	Low-current voltage regulator	SOIC-8	SOIC-8	-40°C to 125°C	0°C to 125°C	5	5	S	
MC78L05ABP	LM78L05ACZ	Low-current voltage regulator	T0-92	T0-92	-40°C to 125°C	0°C to 125°C	5	5	S	
MC78L05ACD	LM78L05ACM	Low-current voltage regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 125°C	5	5	D	
MC78L05ACP	LM78L05ACZ	Low-current voltage regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	5	5	D	
MC78L08ABD	LM78L82ACM	Low-current voltage regulator	SOIC-8	SOIC-8	-40°C to 125°C	0°C to 125°C	8	8.2	S	
MC78L08ABP	LM78L82ACZ	Low-current voltage regulator	T0-92	T0-92	-40°C to 125°C	0°C to 125°C	8	8.2	S	
MC78L08ACD	LM78L82ACM	Low-current voltage regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 125°C	8	8.2	S	
MC78L08ACP	LM78L82ACZ	Low-current voltage regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	8	8.2	S	
MC78L09ABD	LM78L09ACM	Low-current voltage regulator	SOIC-8	SOIC-8	-40°C to 125°C	0°C to 125°C	9	9	S	
MC78L09ABP	LM78L09ACZ	Low-current voltage regulator	T0-92	T0-92	-40°C to 125°C	0°C to 125°C	9	9	S	
MC78L09ACD	LM78L09ACM	Low-current voltage regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 125°C	9	9	D	
MC78L09ACP	LM78L09ACZ	Low-current voltage regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	9	9	D	
MC78L12ABD	LM78L12ACM	Low-current voltage regulator	SOIC-8	SOIC-8	-40°C to 125°C	0°C to 125°C	12	12	S	
MC78L12ABP	LM78L12ACZ	Low-current voltage regulator	T0-92	T0-92	-40°C to 125°C	0°C to 125°C	12	12	S	
MC78L12ACD	LM78L12ACM	Low-current voltage regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 125°C	12	12	D	
MC78L12ACP	LM78L12ACZ	Low-current voltage regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	12	12	D	
MC78L15ABD	LM78L15ACM	Low-current voltage regulator	SOIC-8	SOIC-8	-40°C to 125°C	0°C to 125°C	15	15	S	
MC78L15ABP	LM78L15ACZ	Low-current voltage regulator	T0-92	T0-92	-40°C to 125°C	0°C to 125°C	15	15	S	
MC78L15ACD	LM78L15ACM	Low-current voltage regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 125°C	15	15	D	
MC78L15ACP	LM78L15ACZ	Low-current voltage regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	15	15	D	
MC78M05ABDT	LM78M05CDT	0.5A voltage regulator	T0252-3	T0252-3	-40°C to 125°C	-40°C to 125°C	5	5	D	
MC78M05ABT	LM78M05CT	0.5A voltage regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	5	5	D	
MC78M05ACDT	LM78M05CDT	0.5A voltage regulator	T0252-3	T0252-3	0°C to 125°C	-40°C to 125°C	5	5	S	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
ON Semiconductor										
MC78M05ACT	LM78M05CT	0.5A voltage regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	5	5	S	
MC78M05BDT	LM78M05CDT	0.5A voltage regulator	T0252-3	T0252-3	-40°C to 125°C	-40°C to 125°C	5	5	D	
MC78M05BT	LM2930T-5.0	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 85°C	5	5	S	National has different temperature range
MC78M05BT	LM78M05CT	0.5A voltage regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	5	5	D	
MC78M05CDT	LM78M05CDT	0.5A voltage regulator	T0252-3	T0252-3	0°C to 125°C	-40°C to 125°C	5	5	S	
MC78M05CT	LM2930T-5.0	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 85°C	5	5	S	National has different temperature range
MC78M05CT	LM78M05CT	0.5A voltage regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	5	5	S	
MC78M12ABDT	LM78M12CDT	0.5A voltage regulator	T0252-3	T0252-3	-40°C to 125°C	-40°C to 125°C	12	12	D	
MC78M12ABT	LM78M12CT	0.5A voltage regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	12	12	D	
MC78M12ACDT	LM78M12CDT	0.5A voltage regulator	T0252-3	T0252-3	0°C to 125°C	-40°C to 125°C	12	12	S	
MC78M12ACT	LM78M12CT	0.5A voltage regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	12	12	S	
MC78M12BDT	LM78M12CDT	0.5A voltage regulator	T0252-3	T0252-3	-40°C to 125°C	-40°C to 125°C	12	12	D	
MC78M12BT	LM78M12CT	0.5A voltage regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	12	12	D	
MC78M12CDT	LM78M12CDT	0.5A voltage regulator	T0252-3	T0252-3	0°C to 125°C	-40°C to 125°C	12	12	S	
MC78M12CT	LM78M12CT	0.5A voltage regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	12	12	S	
MC78M15ABDT	LM78M15CDT	0.5A voltage regulator	T0252-3	T0252-3	-40°C to 125°C	-40°C to 125°C	15	15	D	
MC78M15ABT	LM78M15CT	0.5A voltage regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	15	15	D	
MC78M15ACDT	LM78M15CDT	0.5A voltage regulator	T0252-3	T0252-3	0°C to 125°C	-40°C to 125°C	15	15	S	
MC78M15ACT	LM78M15CT	0.5A voltage regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	15	15	S	
MC78M15BDT	LM78M15CDT	0.5A voltage regulator	T0252-3	T0252-3	-40°C to 125°C	-40°C to 125°C	15	15	D	
MC78M15BT	LM78M15CT	0.5A voltage regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	15	15	D	
MC78M15CDT	LM78M15CDT	0.5A voltage regulator	T0252-3	T0252-3	0°C to 125°C	-40°C to 125°C	15	15	S	
MC78M15CT	LM78M15CT	0.5A voltage regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	15	15	S	
MC7905ACT	LM320T-5.0	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	-5	-5	F	Supplier has 2% accuracy, National has 4% accuracy

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement
(May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package
(See datasheets for differences.)

N = Similar function, different package and/or pinout
(See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
ON Semiconductor										
MC7905BT	LM320T-5.0	3-terminal negative regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	-5	-5	F	Different temperature range
MC7905CT	LM320T-5.0	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	-5	-5	D	
MC7905CT	LM7905CT	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	-5	-5	D	
MC7912ACT	LM320T-12	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	-12	-12	F	Supplier has 2% accuracy, National has 4% accuracy
MC7912BT	LM320T-12	3-terminal negative regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	-12	-12	F	Different temperature range
MC7912CT	LM320T-12	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	-12	-12	D	
MC7912CT	LM7912CT	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	-12	-12	D	
MC7915ACT	LM320T-15	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	-15	-15	F	Supplier has 2% accuracy, National has 4% accuracy
MC7915BT	LM320T-15	3-terminal negative regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	-15	-15	F	Different temperature range
MC7915CT	LM320T-15	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	-15	-15	D	
MC7915CT	LM7915CT	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	-15	-15	D	
MC79L05ABD	LM79L05ACM	Negative regulator	SOIC-8	SOIC-8	0°C to 125°C	-40°C to 125°C	-5	-5	S	
MC79L05ABP	LM79L05ACZ	Negative regulator	TO-92	TO-92	0°C to 125°C	-40°C to 125°C	-5	-5	S	
MC79L05ACD	LM79L05ACM	Negative regulator	SOIC-8	SOIC-8	0°C to 125°C	-40°C to 125°C	-5	-5	S	
MC79L05ACP	LM79L05ACZ	Negative regulator	TO-92	TO-92	0°C to 125°C	-40°C to 125°C	-5	-5	S	
MC79L12ABD	LM79L12ACM	Negative regulator	SOIC-8	SOIC-8	0°C to 125°C	-40°C to 125°C	-12	-12	S	
MC79L12ABP	LM79L12ACZ	Negative regulator	TO-92	TO-92	0°C to 125°C	-40°C to 125°C	-12	-12	S	
MC79L12ACD	LM79L12ACM	Negative regulator	SOIC-8	SOIC-8	0°C to 125°C	-40°C to 125°C	-12	-12	S	
MC79L12ACP	LM79L12ACZ	Negative regulator	TO-92	TO-92	0°C to 125°C	-40°C to 125°C	-12	-12	S	
MC79L15ABD	LM79L15ACM	Negative regulator	SOIC-8	SOIC-8	0°C to 125°C	-40°C to 125°C	-15	-15	S	
MC79L15ABP	LM79L15ACZ	Negative regulator	TO-92	TO-92	0°C to 125°C	-40°C to 125°C	-15	-15	S	
MC79L15ACD	LM79L15ACM	Negative regulator	SOIC-8	SOIC-8	0°C to 125°C	-40°C to 125°C	-15	-15	S	
MC79L15ACP	LM79L15ACZ	Negative regulator	TO-92	TO-92	0°C to 125°C	-40°C to 125°C	-15	-15	S	
MC79M05CT	LM79M05CT	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	-5	-5	D	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
ON Semiconductor										
MC79M12CT	LM79M12CT	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	-12	-12	D	
MC79M15CT	LM79M15CT	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	-15	-15	D	
NCP1086D2T-Adj	LM1086IS-Adj	1.5A low-dropout regulator	D2PAK-3	T0263-3	-40°C to 70°C	-40°C to 125°C	Adj.	Adj.	S	Different input voltage range, National has better specs
NCP1086T-3.3	LM1086CT-3.3	1.5A low-dropout regulator	T0220-3	T0220-3	-40°C to 70°C	-40°C to 125°C	3.3	3.3	S	
NCP1086T-Adj	LM1086CT-Adj	1.5A low-dropout regulator	T0220-3	T0220-3	-40°C to 70°C	-40°C to 125°C	Adj.	Adj.	S	
NCP1086T-Adj	LM1086IT-Adj	1.5A low-dropout regulator	T0220-3	T0220-3	-40°C to 70°C	-40°C to 125°C	Adj.	Adj.	S	Different input voltage range, National has better specs
NCP1117DT18	LM1117DT-1.8	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	1.8	1.8	D	National has 1.8V, 3.3V and adjustable versions in SOT-223 and TO-252
NCP1117DT25	LM1117DT-2.5	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	2.5	2.5	D	1.8V, 3.3V and adjustable versions in SOT-223 and TO-252
NCP1117DT285	LM1117DT-2.85	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	2.85	2.85	D	1.8V, 3.3V and adjustable versions in SOT-223 and TO-252
NCP1117DT33	LM1117DT-3.3	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
NCP1117DT50	LM1117DT-5.0	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	5	5	D	
NCP1117DTA	LM1117DTX-Adj	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	National offers the LMS8117A in 1A version
NCP1117ST18T3	LM1117MP-1.8	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	1.8	1.8	D	
NCP1117ST25T3	LM1117MP-2.5	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	2.5	2.5	D	
NCP1117ST285T3	LM1117MP-2.85	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	2.85	2.85	D	
NCP1117ST33T3	LM1117MP-3.3	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	3.3	3.3	D	Slightly different limits
NCP1117ST50T3	LM1117MP-5.0	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	5	5	D	
NCP1117STAT3	LM1117MP-Adj	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
NCP2890AFCT2	LM4889ITL	1W mono audio amplifier	Flip chip-9	micro SMD-9	-40°C to 85°C	-40°C to 85°C	2.2 to 6	2.2 to 5.5	D	
NCP2890DMR2	LM4879MM	1W cellular specific audio amplifier	MSOP-8	MSOP-10	-40°C to 85°C	-40°C to 85°C	–	–	F	
NCP2890DMR2	LM4889MM	1W mono audio amplifier	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	2.2 to 6	2.2 to 5.5	D	

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement
(May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package
(See datasheets for differences.)

N = Similar function, different package and/or pinout
(See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
ON Semiconductor										
NCP2890FCT1	LM4879ITL	1W cellular specific audio amplifier	Flip chip	micro SMD	-40°C to 85°C	-40°C to 85°C	–	–	D	
NCP301LSN20T1	LM8364 BALMF20	Micropower undervoltage sensor	TSOP-5	SOT23-5	-40°C to 125°C	-40°C to 85°C	12	6.5	S	Supplier has 2% accuracy, National has 2.5% accuracy
NCP301LSN30T1	LM8364 BALMF30	Micropower undervoltage sensor	TSOP-5	SOT23-5	-40°C to 125°C	-40°C to 85°C	12	6.5	S	Supplier has 2% accuracy, National has 2.5% accuracy
NCP301LSN45T1	LM8364 BALMF45	Micropower undervoltage sensor	TSOP-5	SOT23-5	-40°C to 125°C	-40°C to 85°C	12	6.5	S	Supplier has 2% accuracy, National has 2.5% accuracy
NCP302LSN30T1	LM8365BCLMF30	Micropower undervoltage sensor	TSOP-5	SOT23-5	-40°C to 125°C	-40°C to 85°C	12	6.5	S	Supplier has 2% accuracy, National has 2.5% accuracy
NCP303LSN22T1	LM8365 BALMF22	Micropower undervoltage sensor	TSOP-5	SOT23-5	-40°C to 125°C	-40°C to 85°C	12	6.5	S	Supplier has 2% accuracy, National has 2.5% accuracy
NCP303LSN27T1	LM8365 BALMF27	Micropower undervoltage sensor	TSOP-5	SOT23-5	-40°C to 125°C	-40°C to 85°C	12	6.5	S	Supplier has 2% accuracy, National has 2.5% accuracy
NCP303LSN45T1	LM8365 BALMF45	Micropower undervoltage sensor	TSOP-5	SOT23-5	-40°C to 125°C	-40°C to 85°C	12	6.5	S	Supplier has 2% accuracy, National has 2.5% accuracy
NCP5007SNT1G	LM2703MFX-Adj	White LED driver	SOT23-5	SOT23-5	-25°C to 85°C	-45°C to 80°C	2.7 to 5.5	2.2 to 7 V _{IN} , 20 V _{OUT}	F	
TL431ACD	LM431BCM	Programmable shunt regulator	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2.5 to 36	2.5 to 36	D	
TL431ACLP	LM431BCZ	Programmable shunt regulator	TO-92	TO-92	0°C to 70°C	0°C to 70°C	2.5 to 36	2.5 to 36	D	
TL431AID	LM431BIM	Programmable shunt regulator	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2.5 to 36	2.5 to 36	D	
TL431AILP	LM431BIZ	Programmable shunt regulator	TO-92	TO-92	-40°C to 85°C	-40°C to 85°C	2.5 to 36	2.5 to 36	D	
TL431BCD	LM431CCM	Programmable shunt regulator	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2.5 to 36	2.5 to 36	D	National has better accuracy
TL431BCLP	LM431CCZ	Programmable shunt regulator	TO-92	TO-92	0°C to 70°C	0°C to 70°C	2.5 to 20	2.5 to 36	D	National has better accuracy
TL431BID	LM431CIM	Programmable shunt regulator	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2.5 to 36	2.5 to 36	D	National has better accuracy
TL431BILP	LM431CIZ	Programmable shunt regulator	TO-92	TO-92	-40°C to 85°C	-40°C to 85°C	2.5 to 36	2.5 to 36	D	National has better accuracy
TL431CD	LM431ACM	Programmable shunt regulator	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2.5 to 36	2.5 to 36	D	
TL431CLP	LM431ACZ	Programmable shunt regulator	TO-92	TO-92	0°C to 70°C	0°C to 70°C	2.5 to 36	2.5 to 36	D	
TL431ID	LM431AIM	Programmable shunt regulator	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2.5 to 36	2.5 to 36	D	
TL431ILP	LM431AIZ	Programmable shunt regulator	TO-92	TO-92	-40°C to 85°C	-40°C to 85°C	2.5 to 36	2.5 to 36	D	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
ON Semiconductor										
TLV431ALP	LMV431AIZ	Low-voltage adjustable precision shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	1.24	1.24	D	National offers higher maximum rating of cathode voltage and higher continuous cathode current
TLV431ALPRA	LMV431AIZ	Low-voltage adjustable precision shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	1.24	1.24	D	National offers higher maximum rating of cathode voltage and higher continuous cathode current
TLV431ALPRE	LMV431AIZ	Low-voltage adjustable precision shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	1.24	1.24	D	National offers higher maximum rating of cathode voltage and higher continuous cathode current
TLV431ALPRM	LMV431AIZ	Low-voltage adjustable precision shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	1.24	1.24	D	National offers higher maximum rating of cathode voltage and higher continuous cathode current
TLV431ALPRP	LMV431AIZ	Low-voltage adjustable precision shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	1.24	1.24	D	National offers higher maximum rating of cathode voltage and higher continuous cathode current
TLV431ASN1T1	LMV431AIMF	Low-voltage adjustable precision shunt regulator	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	1.24	1.24	D	National offers higher maximum rating of cathode voltage and higher continuous cathode current
TLV431ASNT1	LMV431AIM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	-40°C to 85°C	-40°C to 85°C	1.24	1.24	D	National offers higher maximum rating of cathode voltage and higher continuous cathode current
TLV431BLP	LMV431BIZ	Low-voltage adjustable precision shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	1.24	1.24	D	National offers higher maximum rating of cathode voltage and higher continuous cathode current
TLV431BLPRA	LMV431BIZ	Low-voltage adjustable precision shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	1.24	1.24	D	National offers higher maximum rating of cathode voltage and higher continuous cathode current
TLV431BLPRE	LMV431BIZ	Low-voltage adjustable precision shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	1.24	1.24	D	National offers higher maximum rating of cathode voltage and higher continuous cathode current
TLV431BLPRM	LMV431BIZ	Low-voltage adjustable precision shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	1.24	1.24	D	National offers higher maximum rating of cathode voltage and higher continuous cathode current

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement (May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package (See datasheets for differences.)

N = Similar function, different package and/or pinout (See datasheets for differences.) 105

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
ON Semiconductor										
TLV431BLPRP	LMV431BIZ	Low-voltage adjustable precision shunt regulator	TO-92	TO-92	-40°C to 85°C	-40°C to 85°C	1.24	1.24	D	National offers higher maximum rating of cathode voltage and higher continuous cathode current
TLV431BSN1T1	LMV431BIMF	Low-voltage adjustable precision shunt regulator	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	1.24	1.24	D	National offers higher maximum rating of cathode voltage and higher continuous cathode current
TLV431BSNT1	LMV431BCM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	-40°C to 85°C	0°C to 70°C	1.24	1.24	S	National offers higher maximum rating of cathode voltage and higher continuous cathode current
Pericom										
PI90LV02T	DS90LT012ATMF	Single differential line receiver	SOT23-5	SOT23-5	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
PI90LV01T	DS90LV011ATMF	Single differential line driver	SOT23-5	SOT23-5	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
PI90LV02T	DS90LV012ATMF	Single differential line receiver	SOT23-5	SOT23-5	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
PI90LV017AW	DS90LV017M	Single differential line driver	SOIC-8	SOIC-8	-40°C to 85°C	0°C to 70°C	3.3	3.3	S	
PI90LV017AW	DS90LV017ATM	Single differential line driver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
PI90LV018AW	DS90LV018ATM	Single differential line receiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
PI90LV019W	DS90LV019TM	3.3V/5V LVDS driver/receiver	SOIC-14	SOIC-14	-40°C to 85°C	-40°C to 85°C	3.3	3.3 or 5	S	
PI90LV019L	DS90LV019TMTc	3.3V/5V LVDS driver/receiver	TSSOP-14	TSSOP-14	-40°C to 85°C	-40°C to 85°C	3.3	3.3 or 5	S	
PI90LV027AW	DS90LV027M	Dual LVDS differential driver	SOIC-8	SOIC-8	-40°C to 85°C	0°C to 70°C	3.3	3.3	S	
PI90LV027AU	DS90LV027M	Dual LVDS differential driver	MSOP-8	SOIC-8	-40°C to 85°C	0°C to 70°C	3.3	3.3	F	
PI90LV027AW	DS90LV027ATM	Dual LVDS differential driver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
PI90LV027AU	DS90LV027ATM	Dual LVDS differential driver	MSOP-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	3.3	3.3	F	
PI90LV028AW	DS90LV028ATMF	Dual LVDS differential receiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
PI90LV028AU	DS90LV028ATMF	Dual LVDS differential receiver	MSOP-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	3.3	3.3	F	
PI90LV031AW	DS90LV031ATM	Quad LVDS differential line driver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
PI90LV031AL	DS90LV031ATMTC	Quad LVDS differential line driver	TSSOP-16	TSSOP-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Pericom										
PI90LV031AW	DS90LV031BTM	Quad LVDS differential line driver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
PI90LV032AW	DS90LV032ATM	Quad LVDS differential line receiver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
PI90LV032AL	DS90LV032ATMTC	Quad LVDS differential line receiver	TSSOP-16	TSSOP-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
PI90LV047AW	DS90LV047ATM	Quad LVDS differential line driver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
PI90LV047AL	DS90LV047ATMTC	Quad LVDS differential line driver	TSSOP-16	TSSOP-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
PI90LV048AW	DS90LV048ATM	Quad LVDS differential line receiver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
PI90LV048AL	DS90LV048ATMTC	Quad LVDS differential line receiver	TSSOP-16	TSSOP-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
Philips										
ADC0820NEN	ADC0820CCN	High-speed 8-bit A/D converter with track-and-hold	MDIP-20	MDIP-20	0°C to 70°C	0°C to 70°C	–	–	D	Philips part is discontinued
ADC0820NED	ADC0820CCWM	High-speed 8-bit A/D converter with track-and-hold	WSOIC-20	WSOIC-20	0°C to 70°C	0°C to 70°C	–	–	D	Philips part is discontinued
DAC08CN	DAC0800LCN	8-bit high-speed D/A converter	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	D	
DAC08EN	DAC0800LCN	8-bit high-speed D/A converter	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	D	
DAC08HN	DAC0800LCN	8-bit high-speed D/A converter	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	D	
DAC08ED	DAC0800LCM	8-bit high-speed D/A converter	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	D	
DAC08CN	DAC0802LCN	8-bit high-speed D/A converter	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	D	
DAC08EN	DAC0802LCN	8-bit high-speed D/A converter	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	D	
DAC08HN	DAC0802LCN	8-bit high-speed D/A converter	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	D	
DAC08ED	DAC0802LCM	8-bit high-speed D/A converter	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	D	
LF198FE	LF398N	Sample-and-hold amplifier	CERDIP-8	MDIP-8	-55°C to 125°C	0°C to 70°C	–	–	S	
LF398D	LF398M	Sample-and-hold amplifier	SOIC-14	SOIC-14	0°C to 70°C	0°C to 70°C	–	–	D	
LF398FE	LF398N	Sample-and-hold amplifier	CERDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement
(May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package
(See datasheets for differences.)

N = Similar function, different package and/or pinout
(See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Philips										
LF398N	LF398N	Sample-and-hold amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
LF298FE	LF398N	Sample-and-hold amplifier	CERDIP-8	MDIP-8	-25°C to 85°C	0°C to 70°C	–	–	S	
LF298N	LF398N	Sample-and-hold amplifier	MDIP-8	MDIP-8	-25°C to 85°C	0°C to 70°C	–	–	S	
LM319N	LM319N	High-speed dual comparator	MDIP-14	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	D	
LM319D	LM319M	High-speed dual comparator	SOIC-14	SOIC-14	0°C to 70°C	0°C to 70°C	–	–	D	
LM431ACMD	LM431ACM	Shunt regulator	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
TL431ACD /CD	LM431BCM	Shunt regulator	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
TL431CD	LM431 ACM	Shunt regulator	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
TL431ID	LM431 AIM	Shunt regulator	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
TL431AID	LM431CIM	Programmable shunt regulator	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2.5 to 36	2.5 to 36	D	National has better accuracy
TL431AID	LM431BIM	Programmable shunt regulator	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2.5 to 36	2.5 to 36	D	
TL431ID	LM431AIM	Programmable shunt regulator	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2.5 to 36	2.5 to 36	D	
TL431ACD	LM431CCM	Programmable shunt regulator	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2.5 to 36	2.5 to 36	D	National has better accuracy
TL431ACD	LM431BCM	Programmable shunt regulator	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2.5 to 36	2.5 to 36	D	
TL431CD	LM431ACM	Programmable shunt regulator	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2.5 to 36	2.5 to 36	D	
LM431ACMD	LM431ACM	Programmable shunt regulator	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2.5 to 36	2.5 to 36	D	
AU211D	LM211M	Voltage comparator	SOIC-8	SOIC-8	-25°C to 85°C	-25°C to 85°C	–	–	D	
LM211D	LM211M	Voltage comparator	SOIC-8	SOIC-8	-25°C to 85°C	-25°C to 85°C	–	–	D	
LM311D	LM311M	Voltage comparator	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
LM311N	LM311N	Voltage comparator	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
NE5532N	LM1458N	Dual operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	Philips drives 600Ω load
NE5532D8	LM1458M	Dual operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	Philips drives 600Ω load
NE4558N	LM1458N	Dual operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
NE4558D	LM1458M	Dual operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
MC1458N	LM1458N	Dual operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Philips										
MC1458D	LM1458M	Dual operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
NE527D	LM361M	High-speed differential comparator	SOIC-14	SOIC-14	0°C to 70°C	0°C to 70°C	–	–	S	
NE527N	LM361N	High-speed differential comparator	MDIP-14	MDIP-14	0°C to 70°C	0°C to 70°C	–	–	S	
NE529D	LM361M	High-speed differential comparator	SOIC-14	SOIC-14	0°C to 70°C	0°C to 70°C	–	–	D	
NE529N	LM361N	High-speed differential comparator	MDIP-14	MDIP-14	0°C to 70°C	0°C to 70°C	–	–	D	
NE5517N	LM13700N	Dual operational transconductance amplifier	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	S	Supplier has higher supply voltage
NE5517AN	LM13700N	Dual operational transconductance amplifier	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	S	Supplier has higher supply voltage, National's is an upgrade
NE5517D	LM13700M	Dual operational transconductance amplifier	SOIC-16	MSOP-16	0°C to 70°C	0°C to 70°C	–	–	S	Supplier has higher supply voltage
AU5517D	LM13700M	Dual operational transconductance amplifier	SOIC-16	MSOP-16	-40°C to 125°C	0°C to 70°C	–	–	S	Supplier has higher supply voltage
UA741CN	LM741CN	General purpose operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	Philips part is discontinued
SC16C550IN40	PC16550DN	Single channel UART	MDIP-40	MDIP-40	-40°C to 85°C	0°C to 70°C	5	5	S	
SC16C550IA44	PC16550DV	Single channel UART	PLCC-44	PLCC-44	-40°C to 85°C	0°C to 70°C	5	5	S	
SC16C2552IA44	PC16552DV	Dual channel UART	PLCC-44	PLCC-44	-40°C to 85°C	0°C to 70°C	5	5	S	
TDA1308	LM4808MM	Stereo headphone amplifier	MDIP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	2 to 5.5	2.4 to 7	S	LM4808 lower operating voltage is an advantage
TDA1308T	LM4808M	Stereo headphone amplifier	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2 to 5.5	2.4 to 7	D	LM4808 lower operating voltage is an advantage
TDA1308TT	LM4808LD	Stereo headphone amplifier	TSSOP-8	LLP-8	-40°C to 85°C	-40°C to 85°C	2 to 5.5	2.4 to 7	S	LM4808 lower operating voltage is an advantage
Ricoh										
R1113Z	LP3985IM5-3.0	150 mA CMOS low-dropout regulator	WL-CSP	SOT23-5	-40°C to 85°C	-40°C to 125°C	2 to 6 V _{IN}	2.5 to 6 V _{IN}	F	National part also available in micro SMD-4
Richtech										
RT9172	LP3985IM5-3.0	150 mA CMOS low-dropout regulator	SOIC-8	SOT23-5	-40°C to 125°C	-40°C to 125°C	2.25 to 6 V _{IN}	2.5 to 6 V _{IN}	F	National part also available in micro SMD-4

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Rhom										
BA178M05T	LM78M05CT	0.5A voltage regulator	T0220-3	T0220-3	-40°C to 85°C	-40°C to 125°C	5	5	S	
BA178M05FP	LM78M05CDT	0.5A voltage regulator	T0252-3	T0252-3	-40°C to 85°C	-40°C to 125°C	5	5	S	
BA178M12T	LM78M12CT	0.5A voltage regulator	T0220-3	T0220-3	-40°C to 85°C	-40°C to 125°C	12	12	S	
BA178M12FP	LM78M12CDT	0.5A voltage regulator	T0252-3	T0252-3	-40°C to 85°C	-40°C to 125°C	12	12	S	
BA178M15T	LM78M15CT	0.5A voltage regulator	T0220-3	T0220-3	-40°C to 85°C	-40°C to 125°C	15	15	S	
BA178M15FP	LM78M15CDT	0.5A voltage regulator	T0252-3	T0252-3	-40°C to 85°C	-40°C to 125°C	15	15	S	
BH6040FVM	LM3354MM-1.8	Switched capacitor boost regulator	MSOP-8	MSOP-10	-30°C to 75°C	-40°C to 85°C	3 to 4.5 V _{IN}	2.5 to 5.5 V _{IN} , 4.1 and 5 V _{OUT}	F	
Seiko										
S-8120CNB-DRB-TF	LM20BIM7	Temperature sensor	Custom 2X2.1	SC70-5	-30°C to 100°C	-55°C to 130°C	2.4 to 10	2.4 to 5.5	S	National part also available in micro SMD
S-8120CPF-DRB-TF-G	LM20BIM7	Temperature sensor	Custom 1.2x1.57	SC70-5	-30°C to 100°C	-55°C to 130°C	2.4 to 10	2.4 to 5.5	F	National part also available in micro SMD
S-8110CNB-DRA-TF	LM20CIM7	Temperature sensor	Custom 2x2.1	SC70-5	-30°C to 100°C	-55°C to 130°C	2.4 to 10	2.4 to 5.5	S	National part also available in micro SMD
S-8110CPF-DRA-TF-G	LM20CIM7	Temperature sensor	Custom 1.2x1.57	SC70-5	-30°C to 100°C	-55°C to 130°C	2.4 to 10	2.4 to 5.5	F	National part also available in micro SMD
Seme Lab.										
IP5560J	LM3524DN	Regulating pulse width modulator	CERDIP-16	MDIP-16	-55°C to 125°C	0°C to 70°C	–	–	N	National offers SOIC-16 package
IP5560CN	LM3524DN	Regulating pulse width modulator	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	N	
IP5560CD	LM3524DM	Regulating pulse width modulator	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	N	
IP1060BJ	LM3524DN	Regulating pulse width modulator	CERDIP-16	MDIP-16	-55°C to 125°C	0°C to 70°C	–	–	N	National offers SOIC-16 package
IP1060J	LM3524DN	Regulating pulse width modulator	CERDIP-16	MDIP-16	-25°C to 85°C	0°C to 70°C	–	–	N	
IP1060N	LM3524DN	Regulating pulse width modulator	MDIP-16	MDIP-16	-25°C to 85°C	0°C to 70°C	–	–	N	
IP1060D	LM3524DM	Regulating pulse width modulator	SOIC-16	SOIC-16	-25°C to 85°C	0°C to 70°C	–	–	N	
IP1060AJ	LM3524DN	Regulating pulse width modulator	CERDIP-16	MDIP-16	-25°C to 85°C	0°C to 70°C	–	–	N	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Seme Lab.										
IP1060AN	LM3524DN	Regulating pulse width modulator	MDIP-16	MDIP-16	-25°C to 85°C	0°C to 70°C	–	–	N	
IP1060AD	LM3524DM	Regulating pulse width modulator	SOIC-16	SOIC-16	-25°C to 85°C	0°C to 70°C	–	–	N	
IP117MAHVVH	LM117HVKSTL/883	3-terminal 1.5A positive adjustable regulator	TO-39	TO-39	-55°C to 150°C	-55°C to 150°C	Adj.	Adj.	D	National offers TO-252, SOT-223, TO-263 and LCC packages
IP117MHVH	LM117HVKSTL/883	3-terminal 1.5A positive adjustable regulator	TO-39	TO-39	-55°C to 150°C	-55°C to 150°C	Adj.	Adj.	D	National offers TO-252, SOT-223, TO-263 and LCC packages
IP117MAH	LM117HVKSTL/883	3-terminal 1.5A positive adjustable regulator	TO-39	TO-39	-55°C to 150°C	-55°C to 150°C	Adj.	Adj.	D	National offers TO-252, SOT-223, TO-263 and LCC packages
IP117MH	LM117HVKSTL/883	3-terminal 1.5A positive adjustable regulator	TO-39	TO-39	-55°C to 150°C	-55°C to 150°C	Adj.	Adj.	D	National offers TO-252, SOT-223, TO-263 and LCC packages
IP117H	LM117HVH	3-terminal 1.5A positive adjustable regulator	TO-39	TO-39	-55°C to 150°C	-55°C to 150°C	Adj.	Adj.	D	National offers TO-252, SOT-223, TO-263 and LCC packages
LM117H	LM117HVH	3-terminal 1.5A positive adjustable regulator	TO-39	TO-39	-55°C to 150°C	-55°C to 150°C	Adj.	Adj.	D	National offers TO-252, SOT-223, TO-263 and LCC packages
IP117K	LM117K Steel	3-terminal 1.5A positive adjustable regulator	TO-3	TO-3	-55°C to 150°C	-55°C to 150°C	Adj.	Adj.	D	National offers TO-252, SOT-223, TO-263 and LCC packages
LM117K	LM117K Steel	3-terminal 1.5A positive adjustable regulator	TO-3	TO-3	-55°C to 150°C	-55°C to 150°C	Adj.	Adj.	D	National offers TO-252, SOT-223, TO-263 and LCC packages
LM117HVK	LM117HVKSTL/883	3-terminal 1.5A positive adjustable regulator	TO-3	TO-3	-55°C to 150°C	-55°C to 150°C	Adj.	Adj.	D	National offers TO-252, SOT-223, TO-263 and LCC packages
IP117HVK	LM117HVKSTL/883	3-terminal 1.5A positive adjustable regulator	TO-3	TO-3	-55°C to 150°C	-55°C to 150°C	Adj.	Adj.	D	National offers TO-252, SOT-223, TO-263 and LCC packages
LM317K	LM317K STEEL	3-terminal 1.5A positive adjustable regulator	TO-3	TO-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	National offers TO-252, SOT-223, TO-263 and LCC packages
LM317T	LM317T	3-terminal 1.5A positive adjustable regulator	TO220-3	TO220-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	National offers TO-252, SOT-223, TO-263 and LCC packages
LM317HVK	LM317HVK STEEL	3-terminal 1.5A positive adjustable regulator	TO-3	TO-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	National offers TO-252, SOT-223, TO-263 and LCC packages
LM317HVT	LM317HVT	3-terminal 1.5A positive adjustable regulator	TO220-3	TO220-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	National offers TO-252, SOT-223, TO-263 and LCC packages
IP317K	LM317K STEEL	3-terminal 1.5A positive adjustable regulator	TO-3	TO-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	S	National offers TO-252, SOT-223, TO-263 and LCC packages

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement
(May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package
(See datasheets for differences.)

N = Similar function, different package and/or pinout
(See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Seme Lab.										
IP317T	LM317T	3-terminal 1.5A positive adjustable regulator	TO220-3	TO220-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	S	National offers TO-252, SOT-223, TO-263 and LCC packages
IP317HVK	LM317HVK STEEL	3-terminal 1.5A positive adjustable regulator	TO-3	TO-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	S	National offers TO-252, SOT-223, TO-263 and LCC packages
IP317HVT	LM317HVT	3-terminal 1.5A positive adjustable regulator	TO220-3	TO220-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	S	National offers TO-252, SOT-223, TO-263 and LCC packages
IP317AK	LM317K STEEL	3-terminal 1.5A positive adjustable regulator	TO-3	TO-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	S	National offers TO-252, SOT-223, TO-263 and LCC packages
IP317AT	LM317AT	3-terminal 1.5A positive adjustable regulator	TO220-3	TO220-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	S	National offers TO-252, SOT-223, TO-263 and LCC packages
IP317AHVK	LM317HVK STEEL	3-terminal 1.5A positive adjustable regulator	TO-3	TO-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	S	National offers TO-252, SOT-223, TO-263 and LCC packages
IP317AHVT	LM317HVT	3-terminal 1.5A positive adjustable regulator	TO220-3	TO220-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	S	National offers TO-252, SOT-223, TO-263 and LCC packages
LM120-05K	LM120K-5.0	3-terminal negative regulator	TO-3	TO-3	-55°C to 150°C	-55°C to 150°C	-5	-5	D	
LM7905K	LM120K-5.0	3-terminal negative regulator	TO-3	TO-3	-55°C to 150°C	-55°C to 150°C	-5	-5	D	
IP120-12K	LM120K-15	3-terminal negative regulator	TO-3	TO-3	-55°C to 150°C	-55°C to 150°C	-12	-12	S	
LM120-12K	LM120K-15	3-terminal negative regulator	TO-3	TO-3	-55°C to 150°C	-55°C to 150°C	-12	-12	S	
LM120-15K	LM120K-15	3-terminal negative regulator	TO-3	TO-3	-55°C to 150°C	-55°C to 150°C	-15	-15	S	
IP120-15K	LM120K-15	3-terminal negative regulator	TO-3	TO-3	-55°C to 150°C	-55°C to 150°C	-15	-15	S	
IP7912K	LM120K-15	3-terminal negative regulator	TO-3	TO-3	-55°C to 150°C	-55°C to 150°C	-12	-12	S	
IP7915K	LM120K-15	3-terminal negative regulator	TO-3	TO-3	-55°C to 150°C	-55°C to 150°C	-15	-15	S	
IP5560CN	LM78S40CN	Universal switching regulator subsystem	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	N	
IP78M05AH	LM78M05CT	0.5A voltage regulator	TO-39	TO220-3	-55°C to 150°C	-40°C to 125°C	5	5	F	
IP78M12AH	LM78M12CT	0.5A voltage regulator	TO-39	TO220-3	-55°C to 150°C	-40°C to 125°C	12	12	F	
IP78M15AH	LM78M15CT	0.5A voltage regulator	TO-39	TO220-3	-55°C to 150°C	-40°C to 125°C	15	15	F	
IP78M05H	LM78M05CT	0.5A voltage regulator	TO-39	TO220-3	-55°C to 150°C	-40°C to 125°C	5	5	F	
IP78M12H	LM78M12CT	0.5A voltage regulator	TO-39	TO220-3	-55°C to 150°C	-40°C to 125°C	12	12	F	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Seme Lab.										
IP178M15H	LM78M15CT	0.5A voltage regulator	T0-39	T0220-3	-55°C to 150°C	-40°C to 125°C	15	15	F	
IP140M05AH	LM78M05CT	0.5A voltage regulator	T0-39	T0220-3	-55°C to 150°C	-40°C to 125°C	5	5	F	
IP140M12AH	LM78M12CT	0.5A voltage regulator	T0-39	T0220-3	-55°C to 150°C	-40°C to 125°C	12	12	F	
IP140M15AH	LM78M15CT	0.5A voltage regulator	T0-39	T0220-3	-55°C to 150°C	-40°C to 125°C	15	15	F	
IP140M05H	LM78M05CT	0.5A voltage regulator	T0-39	T0220-3	-55°C to 150°C	-40°C to 125°C	5	5	F	
IP140M12H	LM78M12CT	0.5A voltage regulator	T0-39	T0220-3	-55°C to 150°C	-40°C to 125°C	12	12	F	
IP140M15H	LM78M15CT	0.5A voltage regulator	T0-39	T0220-3	-55°C to 150°C	-40°C to 125°C	15	15	F	
Semtech										
EZ1084ACM	LM1084IS-Adj	5A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	-40°C to 125°C	Adj.	Adj.	S	
EZ1084ACM-3.3	LM1084IS-3.3	5A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	-40°C to 125°C	3.3	3.3	S	
EZ1084ACT	LM1084IT-Adj	5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	Adj.	Adj.	S	
EZ1084ACT-3.3	LM1084IT-3.3	5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	3.3	3.3	S	
EZ1084CM	LM1084IS-Adj	5A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	-40°C to 125°C	Adj.	Adj.	S	
EZ1084CM-3.3	LM1084IS-3.3	5A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	-40°C to 125°C	3.3	3.3	S	
EZ1084CT	LM1084IT-Adj	5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	Adj.	Adj.	S	
EZ1084CT-3.3	LM1084IT-3.3	5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	3.3	3.3	S	
EZ1085ACM	LM1085IS-Adj	3A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	-40°C to 125°C	Adj.	Adj.	S	
EZ1085ACM-3.3	LM1085IS-3.3	3A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	-40°C to 125°C	3.3	3.3	S	
EZ1085ACT	LM1085IT-Adj	3A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	Adj.	Adj.	S	
EZ1085ACT-3.3	LM1085IT-3.3	3A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	3.3	3.3	S	
EZ1085CM	LM1085IS-Adj	3A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	-40°C to 125°C	Adj.	Adj.	S	
EZ1085CM-3.3	LM1085IS-3.3	3A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	-40°C to 125°C	3.3	3.3	S	
EZ1085CT	LM1085IT-Adj	3A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	Adj.	Adj.	S	
EZ1085CT-3.3	LM1085IT-3.3	3A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	3.3	3.3	S	
EZ1086ACM	LM1086CS-Adj	1.5A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement
(May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package
(See datasheets for differences.)

N = Similar function, different package and/or pinout
(See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Semtech										
EZ1086ACM-3.3	LM1086CS-3.3	1.5A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
EZ1086ACT	LM1086CT-Adj	1.5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
EZ1086ACT-3.3	LM1086CT-3.3	1.5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
EZ1086CM	LM1086CS-Adj	1.5A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
EZ1086CM-3.3	LM1086CS-3.3	1.5A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
EZ1086CT	LM1086CT-Adj	1.5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
EZ1086CT-3.3	LM1086CT-3.3	1.5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
EZ1117CST	LM1117MP-Adj	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
EZ1117CST-2.5	LM1117MP-2.5	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	2.5	2.5	D	
EZ1117CST-2.85	LM1117MP-2.85	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	2.85	2.85	D	
EZ1117CST-3.3	LM1117MP-3.3	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
EZ1585ACM	LMS1585ACS-Adj	5A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
EZ1585ACM-1.5	LMS1585ACS-1.5	5A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	1.5	1.5	D	
EZ1585ACM-3.3	LMS1585ACS-3.3	5A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
EZ1585ACT	LMS1585ACT-Adj	5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
EZ1585ACT-1.5	LMS1585ACT-1.5	5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	1.5	1.5	D	
EZ1585ACT-3.3	LMS1585ACT-3.3	5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
EZ1585BCT	LMS1585ACT-Adj	5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
EZ1585CM	LMS1585ACS-Adj	5A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
EZ1585CM-1.5	LMS1585ACS-1.5	5A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	1.5	1.5	D	
EZ1585CM-3.3	LMS1585ACS-3.3	5A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
EZ1585CT	LMS1585ACT-Adj	5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
EZ1585CT-1.5	LMS1585ACT-1.5	5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	1.5	1.5	D	
EZ1585CT-3.3	LMS1585ACT-3.3	5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
EZ1587ACM	LMS1587CS-Adj	3A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Semtech										
EZ1587ACM-1.5	LMS1587CS-1.5	3A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	1.5	1.5	D	
EZ1587ACM-3.3	LMS1587CS-3.3	3A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
EZ1587ACT	LMS1587CT-Adj	3A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
EZ1587ACT-1.5	LMS1587CT-1.5	3A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	1.5	1.5	D	
EZ1587ACT-3.3	LMS1587CT-3.3	3A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
EZ1587CM	LMS1587CS-Adj	3A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
EZ1587CM-1.5	LMS1587CS-1.5	3A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	1.5	1.5	D	
EZ1587CM-3.3	LMS1587CS-3.3	3A low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
EZ1587CT	LMS1587CT-Adj	3A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
EZ1587CT-1.5	LMS1587CT-1.5	3A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	1.5	1.5	D	
EZ1587CT-3.3	LMS1587CT-3.3	3A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
SC431LCSK-.25TR	LMV431BIMF	Low-voltage adjustable precision shunt regulator	SOT23-3	SOT23-3	0°C to 70°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute rating of cathode voltage
SC431LISK-.25TR	LMV431BIMF	Low-voltage adjustable precision shunt regulator	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute rating of cathode voltage
SC431LCSK-.25TR	LMV431BCM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	0°C to 70°C	0°C to 70°C	1.24	1.24	S	National has higher absolute rating of cathode voltage
SC431LI5SK-.25TR	LMV431BCM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	-40°C to 85°C	0°C to 70°C	1.24	1.24	S	National has higher absolute rating of cathode voltage
SC431LCSK-.5TR	LMV431BIMF	Low-voltage adjustable precision shunt regulator	SOT23-3	SOT23-3	0°C to 70°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
SC431LISK-.5TR	LMV431BIMF	Low-voltage adjustable precision shunt regulator	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
SC431LCSK-.5TR	LMV431BCM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	0°C to 70°C	0°C to 70°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
SC431LI5SK-.5TR	LMV431BCM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	-40°C to 85°C	0°C to 70°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
SC431LCSK-1TR	LMV431AIMF	Low-voltage adjustable precision shunt regulator	SOT23-3	SOT23-3	0°C to 70°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement (May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package (See datasheets for differences.)

N = Similar function, different package and/or pinout (See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Semtech										
SC431LISK-1TR	LMV431AIMF	Low-voltage adjustable precision shunt regulator	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
SC431LC5SK-1TR	LMV431ACM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	0°C to 70°C	0°C to 70°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
SC431LI5SK-1TR	LMV431AIM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	-40°C to 85°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
SC431LCSK-2TR	LMV431AIMF	Low-voltage adjustable precision shunt regulator	SOT23-3	SOT23-3	0°C to 70°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
SC431LISK-2TR	LMV431AIMF	Low-voltage adjustable precision shunt regulator	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	1.24	1.24	S	National has better voltage tolerance and higher absolute maximum rating of cathode voltage
SC431LC5SK-2TR	LMV431CM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	0°C to 70°C	0°C to 70°C	1.24	1.24	S	National has better voltage tolerance and higher absolute maximum rating of cathode voltage
SC431LI5SK-2TR	LMV431IM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	-40°C to 85°C	-40°C to 85°C	1.24	1.24	S	National has better voltage tolerance and higher absolute maximum rating of cathode voltage
SC431CSK-.5TR	LM431CIM3	Programmable shunt regulator	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	2.5 to 30	2.5 to 36	F	Different pinout
SC431CSKQTR	LM431CIM3	Programmable shunt regulator	SOT23-3	SOT23-3	-40°C to 125°C	-40°C to 85°C	2.5 to 30	2.5 to 36	F	Different pinout, different temperature range
SC431CSK-1TR	LM431BIM3	Programmable shunt regulator	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	2.5 to 30	2.5 to 36	F	Different pinout
SC431CSK-2TR	LM431AIM3	Programmable shunt regulator	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	2.5 to 30	2.5 to 36	F	Different pinout
SC431CS-.5TR	LM431CIM	Programmable shunt regulator	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2.5 to 30	2.5 to 36	D	
SC431CSQTR	LM431CIM	Programmable shunt regulator	SOIC-8	SOIC-8	-40°C to 125°C	-40°C to 85°C	2.5 to 30	2.5 to 36	S	Different temperature range
SC431CS-1TR	LM431BIM	Programmable shunt regulator	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2.5 to 30	2.5 to 36	D	
SC431CS-2TR	LM431AIM	Programmable shunt regulator	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2.5 to 30	2.5 to 36	D	
SC431CZ-.5TA	LM431CIZ	Programmable shunt regulator	TO-92	TO-92	-40°C to 85°C	-40°C to 85°C	2.5 to 30	2.5 to 36	D	
SC431CZQTA	LM431CIZ	Programmable shunt regulator	TO-92	TO-92	-40°C to 125°C	-40°C to 85°C	2.5 to 30	2.5 to 36	S	Different temperature range
SC431CZ-1TA	LM431BIZ	Programmable shunt regulator	TO-92	TO-92	-40°C to 85°C	-40°C to 85°C	2.5 to 30	2.5 to 36	D	
SC431CZ-2TA	LM431AIZ	Programmable shunt regulator	TO-92	TO-92	-40°C to 85°C	-40°C to 85°C	2.5 to 30	2.5 to 36	D	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Semtech										
SC6041MLTR	LM2794BLX	White LED driver	MPL-10	micro SMD-14	-40°C to 85°C	-40°C to 85°C	2.5 to 6.5 V _{IN}	2.7 to 5.5 V _{IN}	F	
SC6041MLTR	LM2795BLX	White LED driver	MPL-10	micro SMD-14	-40°C to 85°C	-40°C to 85°C	2.5 to 6.5 V _{IN}	2.7 to 5.5 V _{IN}	F	
SC6031MLTR	LM2750LDX-Adj	Switched capacitor boost regulator	MPL-10	LLP-10	-40°C to 85°C	-40°C to 85°C	2.7 to 6.5 V _{IN}	2.7 to 5.6 V _{IN}	F	
SC6001MLTTR	LM2750LDX-Adj	Switched capacitor boost regulator	MPL-10	LLP-10	-40°C to 85°C	-40°C to 85°C	2.7 to 6.5 V _{IN}	2.7 to 5.6 V _{IN}	F	
SC1462ISKTR	LM2665M6X	Unregulated switched capacitor	SOT23-6	SOT23-6	-40°C to 85°C	-40°C to 85°C	1.65 to 5.5 V _{IN}	1.8 to 5.8 V _{IN}	F	
LP2951CM.TR	LP2951CM	Low-dropout voltage regulator	SOIC-8	SOIC-8	-40°C to 125°C	-40°C to 125°C	30	30	D	
Shenzhen ASIC Microelectronics Ltd.										
AS432AL	LMV431ACZ	Low-voltage adjustable precision shunt regulator	TO-92	TO-92	0°C to 70°C	0°C to 70°C	1.24	1.24	S	National has lower continuous cathode current
AS432AN	LMV431ACM5	Low-voltage adjustable precision shunt regulator	MDIP-8	SOT23-5	0°C to 70°C	0°C to 70°C	1.24	1.24	F	National has lower continuous cathode current
AS432AJ	LMV431ACMF	Low-voltage adjustable precision shunt regulator	SOIC-8	SOT23-5	0°C to 70°C	0°C to 70°C	1.24	1.24	F	National has lower continuous cathode current
AS432AT	LMV431ACMF	Low-voltage adjustable precision shunt regulator	SOT23-3	SOT23-3	0°C to 70°C	0°C to 70°C	1.24	1.24	S	National has lower continuous cathode current
Signal Processing Technologies										
SPT1175ACS	ADC1175CIJM	8-bit, 20 MSPS video A/D converter	SOIC-24	SOIC-24	0°C to 70°C	-20°C to 75°C	–	–	S	
Sipex Corporation										
AS433AM	LM431CIM3	Shunt regulator	SOT23-3	SOT23-3	-25°C to 105°C	-40°C to 85°C	–	–	S	
AS433CM	LM431CIM3	Shunt regulator	SOT23-3	SOT23-3	-25°C to 105°C	-40°C to 85°C	–	–	S	
AS433M	LM431CIM3	Shunt regulator	SOT23-3	SOT23-3	-25°C to 105°C	-40°C to 85°C	–	–	S	
LP2950ACN-3.3	LP2950ACZ-3.3	Micropower fixed voltage regulator	TO-92	TO-92	-40°C to 125°C	-40°C to 125°C	3.3	3.3	S	
LP2950ACN-5.0	LP2950ACZ-5.0	Micropower fixed voltage regulator	TO-92	TO-92	-40°C to 125°C	-40°C to 125°C	5	5	S	
LP2950CN-3.3	LP2950CZ-3.3	Micropower fixed voltage regulator	TO-92	TO-92	-40°C to 125°C	-40°C to 125°C	3.3	3.3	S	
LP2950CN-5.0	LP2950CZ-5.0	Micropower fixed voltage regulator	TO-92	TO-92	-40°C to 125°C	-40°C to 125°C	5	5	S	

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement (May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package (See datasheets for differences.)

N = Similar function, different package and/or pinout (See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Sipex Corporation										
LP4950CN-5.0	LP4950CZ-5.0	100 mA low-dropout regulator	TO-92	TO-92	-40°C to 125°C	-40°C to 125°C	5	5	D	National has higher output voltage accuracy
LP4951CS	LP4951CM	100 mA low-dropout regulator	SOIC-8	SOIC-8	-40°C to 125°C	-40°C to 125°C	Adj.	Adj.	D	National has higher output voltage accuracy
LP4951CS-5.0	LP4951CM	100 mA low-dropout regulator	SOIC-8	SOIC-8	-40°C to 125°C	-40°C to 125°C	5	5	D	National has higher output voltage accuracy
SP202ECN	LMS202ECM	15 kV ESD protected RS-232 transceiver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	D	
SP202ECP	DS14C232CN	5V dual RS-232 driver/receiver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	D	
SP202ECT	LMS202ECMW	15 kV ESD protected RS-232 transceiver	WSOIC-16	WSOIC-16	0°C to 70°C	0°C to 70°C	–	–	D	
SP202ECT	DS14C232CM	5V dual RS-232 driver/receiver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	D	
SP202EEN	LMS202EIM	15 kV ESD protected RS-232 transceiver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	–	–	D	
SP202EEN	DS14C232TM	5V dual RS-232 driver/receiver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	–	–	S	
SP202EET	LMS202EIMW	15 kV ESD protected RS-232 transceiver	WSOIC-16	WSOIC-16	-40°C to 85°C	-40°C to 85°C	–	–	D	
SP208ECT	DS14C238WM	5V RS-232 4x4 driver/receiver	SOIC-24	SOIC-24	0°C to 70°C	0°C to 70°C	–	–	S	
SP211ECT	DS14C241WM	RS-232 4 driver 5 receiver	SOIC-28	SOIC-28	0°C to 70°C	0°C to 70°C	–	–	S	
SP213CT	DS14C241WM	RS-232 4 driver 5 receiver	SOIC-28	SOIC-28	0°C to 70°C	0°C to 70°C	–	–	S	
SP232ECN	DS14C232CM	Low-power 5V powered TIA/EIA-232 dual driver/receiver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	S	
SP232ECP	DS14C232N	5V dual RS-232 driver/receiver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	S	
SP232ECP	DS14C232CN	Low-power 5V powered TIA/EIA-232 dual driver/receiver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	S	
SP232ECT	DS14C232CM	5V dual RS-232 driver/receiver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	S	
SP232EEN	DS14C232TM	5V dual RS-232 driver/receiver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	–	–	S	
SP238ACT	DS14C238WM	RS-232 multi-channel 4x5 driver receiver	WSOIC-24	WSOIC-24	0°C to 70°C	0°C to 70°C	–	–	D	
SP238ACT	DS14C238WMX	RS-232 multi-channel 4x5 driver receiver	WSOIC-24	WSOIC-24	0°C to 70°C	0°C to 70°C	–	–	D	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Sipex Corporation										
SP241ACT	DS14C241WM	RS-232 multi-channel 4x5 driver receiver	WSOIC-28	WSOIC-28	0°C to 70°C	0°C to 70°C	–	–	D	
SP241BCT	DS14C241WM	RS-232 multi-channel 4x5 driver receiver	WSOIC-28	WSOIC-28	0°C to 70°C	0°C to 70°C	–	–	D	
SP3490CN	DS8921N	Differential line driver and receiver pair	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	F	
SP3490CP	DS8921M	Differential line driver and receiver pair	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	F	
SP3490EN	DS8921ATN	Differential line driver and receiver pair	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	F	
SP3490EP	DS8921ATM	Differential line driver and receiver pair	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	F	
SP3491CN	DS8921N	Differential line driver and receiver pair	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	N	
SP3491CP	DS8921M	Differential line driver and receiver pair	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	N	
SP3491EN	DS8921ATN	Differential line driver and receiver pair	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	N	
SP3491EP	DS8921ATM	Differential line driver and receiver pair	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	N	
SP431CN	DS26LS31CM	Quad differential line driver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	D	
SP431CP	DS26LS31CN	Quad differential line driver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	D	
SP432CN	DS26LS32CM	Quad differential line receiver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	D	
SP432CP	DS26LS32CN	Quad differential line receiver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	D	
SP481CN	DS36C278N	Low-power multipoint EIA-RS-485 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
SP481CN	DS36C279M	Low-power RS-485 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
SP481CP	DS36C278M	Low-power multipoint EIA-RS-485 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
SP481EN	DS36C278ATN	Low-power multipoint EIA-RS-485 transceiver	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
SP481EN	DS36C279TM	Low-power RS-485 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Sipex Corporation										
SP481EP	DS36C278ATM	Low-power multipoint EIA-RS-485 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
SP483CN	DS36C278N	Low-power multipoint EIA-RS-485 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
SP483CP	DS36C278M	Low-power multipoint EIA-RS-485 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
SP483EN	DS36C278ATN	Low-power multipoint EIA-RS-485 transceiver	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
SP483EP	DS36C278ATM	Low-power multipoint EIA-RS-485 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
SP485CN	LMS485CM	5V low-power RS-485 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
SP485CN	DS36C278N	Low-power multipoint EIA-RS-485 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
SP485CN	DS75176BM	Multipoint RS-485/RS-422 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
SP485CN	DS36276M	FAILSAFE multipoint transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
SP485CN	DS3695AM	Multipoint RS-485/RS-422 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
SP485CN	DS3696AM	Multipoint RS-485/RS-422 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	F	
SP485CN	DS485N	Low-power RS-485/RS-422 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
SP485CN	DS36C279M	Low-power RS-485 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	National has power save mode
SP485CP	DS36C278M	Low-power multipoint EIA-RS-485 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
SP485CS	LMS485CNA	5V low-power RS-485 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
SP485CS	DS75176BN	Multipoint RS-485/RS-422 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
SP485CS	DS3695N	Multipoint RS-485/RS-422 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Sipex Corporation										
SP485CS	DS3696N	Multipoint RS-485/RS-422 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	F	
SP485CS	DS485M	Low-power RS-485/RS-422 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
SP485EN	LMS485IM	5V low-power RS-485 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
SP485EN	DS36C278ATN	Low-power multipoint EIA-RS-485 transceiver	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
SP485EN	DS75176BTM	Multipoint RS-485/RS-422 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
SP485EN	DS36277TM	Dominant mode multipoint transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
SP485EN	DS3695ATM	Multipoint RS-485/RS-422 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
SP485EN	DS485TN	Low-power RS-485/RS-422 transceiver	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
SP485EN	DS36C279TM	Low-power RS-485 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	National has power save mode
SP485EP	DS36C278ATM	Low-power multipoint EIA-RS-485 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
SP485ES	LMS485INA	5V low-power RS-485 transceiver	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
SP485ES	DS75176BTN	Multipoint RS-485/RS-422 transceiver	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
SP485ES	DS36277TN	Dominant mode multipoint transceiver	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
SP485ES	DS3695TN	Multipoint RS-485/RS-422 transceiver	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
SP485ES	DS485TM	Low-power RS-485/RS-422 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
SP487CS	DS3487N	Quad TRI-STATE® line driver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	S	National is faster
SP487CS	DS96174CN	Quad RS-485 driver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	S	
SP487CT	DS3487M	Quad TRI-STATE line driver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	S	National is faster

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Sipex Corporation										
SP487ES	DS3487N	Quad TRI-STATE line driver	MDIP-16	MDIP-16	-40°C to 85°C	0°C to 70°C	–	–	S	Different temperature range, National is faster
SP487ET	DS3487M	Quad TRI-STATE line driver	SOIC-16	SOIC-16	-40°C to 85°C	0°C to 70°C	–	–	S	Different temperature range, National is faster
SP488CS	DS96173CN	Quad RS-485 receiver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	S	
SP489CS	DS3486N	Quad differential line receiver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	S	
SP489CS	DS96175CN	Quad RS-485 receiver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	S	
SP489CT	DS3486M	Quad differential line receiver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	S	
SP490CN	DS8921N	Differential line driver and receiver pair	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
SP490CP	DS8921M	Differential line driver and receiver pair	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
SP490EN	DS8921ATN	Differential line driver and receiver pair	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
SP490EP	DS8921ATM	Differential line driver and receiver pair	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
SP491CN	DS8921N	Differential line driver and receiver pair	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	F	
SP491CP	DS8921M	Differential line driver and receiver pair	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	F	
SP491EN	DS8921ATN	Differential line driver and receiver pair	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	F	
SP491EP	DS8921ATM	Differential line driver and receiver pair	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	F	
SP6682ER	LM2750LDX-Adj	Switched capacitor boost regulator	DFN-10	LLP-10	-40°C to 85°C	-40°C to 85°C	2.7 to 5 V _{IN}	2.7 to 5.6 V _{IN}	F	
SPX1117M3	LM1117MPX-Adj	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	Adj.	Adj.	S	
SPX1117M3-2.5	LM1117MPX-2.5	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	2.5	2.5	S	
SPX1117M3-2.85	LM1117MPX-2.85	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	2.85	2.85	S	
SPX1117M3-3.3	LM1117MPX-3.3	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	3.3	3.3	S	
SPX1117R	LM1117DTX-Adj	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	S	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Sipex Corporation										
SPX1117R-1.8	LM1117DTX-1.8	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	1.8	1.8	S	Slightly different limits on all voltage options
SPX1117R-2.5	LM1117DTX-2.5	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	2.5	2.5	S	
SPX1117R-2.85	LM1117DTX-2.85	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	2.85	2.85	S	
SPX1117R-3.3	LM1117DTX-3.3	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	3.3	3.3	S	
SPX1117T	LM1117SX-Adj	800 mA low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	S	
SPX1117T-2.85	LM1117SX-2.85	800 mA low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	2.85	2.85	S	
SPX1117T-3.3	LM1117SX-3.3	800 mA low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	3.3	3.3	S	
SPX1117U	LM1117T-Adj	800 mA low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	S	
SPX1117U-1.8	LM1117T-1.8	800 mA low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	1.8	1.8	S	
SPX1117U-2.5	LM1117T-2.5	800 mA low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	2.5	2.5	S	
SPX1117U-2.85	LM1117T-2.85	800 mA low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	2.85	2.85	S	
SPX1117U-3.3	LM1117T-3.3	800 mA low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	3.3	3.3	S	
SPX1585AT	LM1084IS-Adj	5A low-dropout regulator	T0263-3	T0263-3	-40°C to 125°C	-40°C to 125°C	Adj.	Adj.	S	Different input voltage range, National is higher
SPX1585AT	LMS1585AIS-Adj	5A low-dropout regulator	T0263-3	T0263-3	-40°C to 125°C	-40°C to 125°C	Adj.	Adj.	S	Different input voltage range, National is higher
SPX1585AT-1.5	LMS1585AIS-1.5	5A low-dropout regulator	T0263-3	T0263-3	-40°C to 125°C	-40°C to 125°C	1.5	1.5	S	Different input voltage range, National is higher
SPX1585AT-3.3	LM1084IS-3.3	5A low-dropout regulator	T0263-3	T0263-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	S	Different input voltage range, National is higher
SPX1585AT-3.3	LMS1585AIS-3.3	5A low-dropout regulator	T0263-3	T0263-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	S	Different input voltage range, National is higher
SPX1585AT-5.0	LM1084IS-5.0	5A low-dropout regulator	T0263-3	T0263-3	-40°C to 125°C	-40°C to 125°C	5	5	S	Different input voltage range, National is higher
SPX1585AU	LM1084IT-Adj	5A low-dropout regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	Adj.	Adj.	S	Different input voltage range, National is higher
SPX1585AU	LMS1585AIT-Adj	5A low-dropout regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	Adj.	Adj.	S	Different input voltage range, National is higher

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement
(May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package
(See datasheets for differences.)

N = Similar function, different package and/or pinout
(See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Sipex Corporation										
SPX1585AU-1.5	LMS1585AIT-1.5	5A low-dropout regulator	TO220-3	TO220-3	-40°C to 125°C	-40°C to 125°C	1.5	1.5	S	Different input voltage range, National is higher
SPX1585AU-3.3	LM1084IT-3.3	5A low-dropout regulator	TO220-3	TO220-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	S	Different input voltage range, National is higher
SPX1585AU-3.3	LMS1585AIT-3.3	5A low-dropout regulator	TO220-3	TO220-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	S	Different input voltage range, National is higher
SPX1585AU-5.0	LM1084IT-5.0	5A low-dropout regulator	TO220-3	TO220-3	-40°C to 125°C	-40°C to 125°C	5	5	S	Different input voltage range, National is higher
SPX1587AT	LMS1587IS-Adj	3A low-dropout regulator	TO263-3	TO263-3	-40°C to 125°C	-40°C to 125°C	Adj.	Adj.	S	Different input voltage range, National is higher
SPX1587AT-1.5	LMS1587IS-1.5	3A low-dropout regulator	TO263-3	TO263-3	-40°C to 125°C	-40°C to 125°C	1.5	1.5	S	Different input voltage range, National is higher
SPX1587AT-3.3	LMS1587IS-3.3	3A low-dropout regulator	TO263-3	TO263-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	S	Different input voltage range, National is higher
SPX1587AU	LMS1587IT-Adj	3A low-dropout regulator	TO220-3	TO220-3	-40°C to 125°C	-40°C to 125°C	Adj.	Adj.	S	Different input voltage range, National is higher
SPX1587AU-1.5	LMS1587IT-1.5	3A low-dropout regulator	TO220-3	TO220-3	-40°C to 125°C	-40°C to 125°C	1.5	1.5	S	Different input voltage range, National is higher
SPX1587AU-3.3	LMS1587IT-3.3	3A low-dropout regulator	TO220-3	TO220-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	S	Different input voltage range, National is higher
SPX2815AT	LM1086IS-Adj	1.5A low-dropout regulator	TO263-3	TO263-3	-40°C to 125°C	-40°C to 125°C	Adj.	Adj.	F	
SPX2815AT-3.3	LM1086IS-3.3	1.5A low-dropout regulator	TO263-3	TO263-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	F	
SPX2815AT-5.0	LM1086IS-5.0	1.5A low-dropout regulator	TO263-3	TO263-3	-40°C to 125°C	-40°C to 125°C	5	5	F	
SPX2815AU	LM1086IT-Adj	1.5A low-dropout regulator	TO220-3	TO220-3	-40°C to 125°C	-40°C to 125°C	Adj.	Adj.	F	
SPX2815AU-3.3	LM1086IT-3.3	1.5A low-dropout regulator	TO220-3	TO220-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	F	
SPX2815AU-5.0	LM1086IT-5.0	1.5A low-dropout regulator	TO220-3	TO220-3	-40°C to 125°C	-40°C to 125°C	5	5	F	
SPX2940T	LM2940S	1A low-dropout regulator	TO263-3	TO263-3	-40°C to 125°C	-40°C to 125°C	1.8, 2.5, 3.3, 5	5, 8, 9, 10, 12	D	National offers other package options: LLP, SOT-223, TO-220, TO-263
SPX2940U	LM2940T	1A low-dropout regulator	TO220-3	TO220-3	-40°C to 125°C	-40°C to 125°C	1.8, 2.5, 3.3, 5	5, 8, 9, 10, 12	D	National offers other package options: LLP, SOT-223, TO-220, TO-263
SPX2941T5	LM2941S	1.25A adjustable low-dropout regulator	TO263-3	TO263-3	-40°C to 125°C	-40°C to 125°C	Adj.	Adj.	D	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Sipex Corporation										
SPX2941U5	LM2941T	1.25A adjustable low-dropout regulator	TO220-3	TO220-3	-40°C to 125°C	-40°C to 125°C	Adj.	Adj.	D	
SPX385AN-1.2	LM285Z-1.2	Voltage reference	TO-92	TO-92	-40°C to 85°C	-40°C to 85°C	1.2	1.2	D	1% accuracy
SPX385AN-2.5	LM285Z-2.5	Voltage reference	TO-92	TO-92	-40°C to 85°C	-40°C to 85°C	2.5	2.5	S	Supplier has 1% accuracy, National has 1.5% accuracy
SPX385AS-1.2	LM285M-1.2	Voltage reference	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	1.2	1.2	D	1% accuracy
SPX385AS-2.5	LM285M-2.5	Voltage reference	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2.5	2.5	D	Supplier has 1% accuracy, National has 1.5% accuracy
SPX385M1-1.2	LM385M3-1.2	Voltage reference	SOT-89	SOT23-3	-40°C to 85°C	0°C to 70°C	1.2	1.2	S	2% accuracy
SPX385M1-2.5	LM385M3-2.5	Voltage reference	SOT-89	SOT23-3	-40°C to 85°C	0°C to 70°C	2.5	2.5	S	Supplier has 2% accuracy, National has 3 accuracy%
SPX385N-1.2	LM385Z-1.2	Voltage reference	TO-92	TO-92	-40°C to 85°C	0°C to 70°C	1.2	1.2	S	2% accuracy
SPX385N-2.5	LM385Z-2.5	Voltage reference	TO-92	TO-92	-40°C to 85°C	-40°C to 85°C	2.5	2.5	D	Supplier has 2% accuracy, National has 1.5 accuracy%
SPX385S-1.2	LM385M-1.2	Voltage reference	SOIC-8	SOIC-8	-40°C to 85°C	0°C to 70°C	1.2	1.2	S	2% accuracy
SPX385S-2.5	LM385M-2.5	Voltage reference	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2.5	2.5	D	Supplier has 2% accuracy, National has 1.5 accuracy%
SPX3940M3-3.3	LM3940IMP-3.3	1A low-dropout regulator	SOT223-4	SOT223-4	-40°C to 125°C	-40°C to 125°C	3.3	3.3	S	
SPX3940T-3.3	LM3940IS-3.3	1A low-dropout regulator	TO263-3	TO263-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	S	
SPX3940U-3.3	LM3940IT-3.3	1A low-dropout regulator	TO220-3	TO220-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	S	
SPX4040AM-2.5	LM4040CIM3-2.5	Micropower shunt voltage reference	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	2.5	2.5	D	0.5% accuracy
SPX4040AN-2.5	LM4040CIZ-2.5	Micropower shunt voltage reference	TO-92	TO-92	-40°C to 85°C	-40°C to 85°C	2.5	2.5	D	0.5% accuracy
SPX4040M-2.5	LM4040AIM3-2.5	Micropower shunt voltage reference	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	2.5	2.5	D	1% accuracy
SPX4040N-2.5	LM4040AIZ-2.5	Micropower shunt voltage reference	TO-92	TO-92	-40°C to 85°C	-40°C to 85°C	2.5	2.5	D	1% accuracy
SPX4041AM	LM4041DIM3-1.2	Micropower shunt voltage reference	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	1.24	1.2	D	1% accuracy

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Sipex Corporation										
SPX4041AN	LM4041DIZ-1.2	Micropower shunt voltage reference	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	1.24	1.2	D	1% accuracy
SPX4041M	LM4041EIM3-1.2	Micropower shunt voltage reference	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	1.24	1.2	D	2% accuracy
SPX4041N	LM4041EIZ-1.2	Micropower shunt voltage reference	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	1.24	1.2	D	2% accuracy
SPX431LAM	LM431CIM3	Programmable shunt regulator	SOT23-3	SOT23-3	0°C to 105°C	-40°C to 85°C	2.5 to 20	2.5 to 36	N	Different pinout, different temperature range
SPX431LAN	LM431CIZ	Programmable shunt regulator	T0-92	T0-92	0°C to 105°C	-40°C to 85°C	2.5 to 20	2.5 to 36	S	Different temperature range
SPX431LAS	LM431CIM	Programmable shunt regulator	SOIC-8	SOIC-8	0°C to 105°C	-40°C to 85°C	2.5 to 20	2.5 to 36	S	Different temperature range
SPX431LCM	LM431AIM3	Programmable shunt regulator	SOT23-3	SOT23-3	0°C to 105°C	-40°C to 85°C	2.5 to 20	2.5 to 36	N	Different pinout, different temperature range
SPX431LCN	LM431AIZ	Programmable shunt regulator	T0-92	T0-92	0°C to 105°C	-40°C to 85°C	2.5 to 20	2.5 to 36	S	Different temperature range
SPX431LCS	LM431AIM	Programmable shunt regulator	SOIC-8	SOIC-8	0°C to 105°C	-40°C to 85°C	2.5 to 20	2.5 to 36	S	Different temperature range
SPX431LM	LM431BIM3	Programmable shunt regulator	SOT23-3	SOT23-3	0°C to 105°C	-40°C to 85°C	2.5 to 20	2.5 to 36	N	Different pinout, different temperature range
SPX431LN	LM431BIZ	Programmable shunt regulator	T0-92	T0-92	0°C to 105°C	-40°C to 85°C	2.5 to 20	2.5 to 36	S	Different temperature range
SPX431LS	LM431BIM	Programmable shunt regulator	SOIC-8	SOIC-8	0°C to 105°C	-40°C to 85°C	2.5 to 20	2.5 to 36	S	Different temperature range
SPX432AM	LMV431BIMF	Low-voltage adjustable precision shunt regulator	SOT23-3	SOT23-3	0°C to 105°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
SPX432AN	LMV431BCZ	Low-voltage adjustable precision shunt regulator	T0-92	T0-92	0°C to 105°C	0°C to 70°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
SPX432AS	LMV431BCM5	Low-voltage adjustable precision shunt regulator	SOIC-8	SOT23-5	0°C to 105°C	0°C to 70°C	1.24	1.24	F	National has higher absolute maximum rating of cathode voltage
SPX432M	LMV431AIMF	Low-voltage adjustable precision shunt regulator	SOT23-3	SOT23-3	0°C to 105°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
SPX432N	LMV431AIZ	Low-voltage adjustable precision shunt regulator	T0-92	T0-92	0°C to 105°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
SPX432S	LMV431AIM5	Low-voltage adjustable precision shunt regulator	SOIC-8	SOT23-5	0°C to 105°C	-40°C to 85°C	1.24	1.24	F	National has higher absolute maximum rating of cathode voltage

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Sony Semiconductors										
CXD1175AM	ADC1175CIJM	8-bit, 20 MSPS video A/D converter	SOIC-24	SOIC-24	-40°C to 85°C	-20°C to 75°C	–	–	S	
ST Microelectronics										
ST75C185CD	DS14185WM	RS-232 transceiver, 3 driver 5 receiver	MSOP-20	MSOP-20	0°C to 70°C	0°C to 70°C	–	–	S	
LM135AZ	LM135AH	Precision temperature sensor	TO-92	TO-46	-55°C to 150°C	-55°C to 150°C	3	3	F	
LM235AZ	LM235AH	Precision temperature sensor	TO-92	TO-46	-40°C to 125°C	-40°C to 125°C	3	3	F	
LM335AZ	LM335AZ	Precision temperature sensor	TO-92	TO-92	-40°C to 100°C	-40°C to 100°C	3	3	D	
DAC0808D	DAC0808LCM	8-bit D/A converter	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	D	
DAC0808LCN	DAC0808LCN	8-bit D/A converter	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	D	
ETC5054D	TP3054WM	Serial I/F codec filter (COMBO®)	SOIC-16	WSOIC-16	0°C to 70°C	0°C to 70°C	5	5	D	±5% accuracy
ETC5054N	TP3054N	Serial I/F codec filter (COMBO)	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	5	5	D	±5% accuracy
ETC5057D	TP3057WM	Serial I/F codec filter (COMBO)	SOIC-16	WSOIC-16	0°C to 70°C	0°C to 70°C	5	5	D	±5% accuracy
ETC5057FN	TP3057V	Serial I/F codec filter (COMBO)	PLCC-20	PLCC-20	0°C to 70°C	0°C to 70°C	5	5	D	±5% accuracy
ETC5057N	TP3057N	Serial I/F codec filter (COMBO)	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	5	5	D	±5% accuracy
ETC5064D	TP3064WM	Serial I/F CMOS codec filter (COMBO) with receive power amplifier	SOIC-20	WSOIC-20	-25°C to 125°C	-25°C to 125°C	5	5	D	±5% accuracy
ETC5064N	TP3064N	Serial I/F CMOS codec filter (COMBO) with receive power amplifier	MDIP-20	MDIP-20	-25°C to 125°C	-25°C to 125°C	5	5	D	±5% accuracy
ETC5067D	TP3067WM	Serial I/F CMOS codec filter (COMBO) with receive power amplifier	SOIC-20	WSOIC-20	-25°C to 125°C	-25°C to 125°C	5	5	D	±5% accuracy
ETC5067FN	TP3067V	Serial I/F CMOS codec filter (COMBO) with receive power amplifier	PLCC-20	PLCC-20	-25°C to 125°C	-25°C to 125°C	5	5	D	±5% accuracy
ETC5067N	TP3067N	Serial I/F CMOS codec filter (COMBO) with receive power amplifier	MDIP-20	MDIP-20	-25°C to 125°C	-25°C to 125°C	5	5	D	±5% accuracy
L4940P10	LM2940T-10	1.5A low-dropout regulator	TO220-3	TO220-3	-40°C to 150°C	-40°C to 125°C	10	10	S	National offers the following packages: LLP, SOT-223, TO-220, TO-263

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement (May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package (See datasheets for differences.)

N = Similar function, different package and/or pinout (See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
ST Microelectronics										
L4940P12	LM2940T-12	1.5A low-dropout regulator	TO220-3	TO220-3	-40°C to 150°C	-40°C to 125°C	12	12	S	National offers the following packages: LLP, SOT-223, TO-220, TO-263
L4940P5.0	LM2940T-5.0	1.5A low-dropout regulator	TO220-3	TO220-3	-40°C to 150°C	-40°C to 125°C	5	5	S	National offers the following packages: LLP, SOT-223, TO-220, TO-263
L4940P8.5	LM2940T-8.0	1.5A low-dropout regulator	TO220-3	TO220-3	-40°C to 150°C	-40°C to 125°C	8.5	8	S	National offers the following packages: LLP, SOT-223, TO-220, TO-263
L7805CD2T	LM340S-5.0	3-terminal positive regulator	D2PAK-3	TO263-3	-55°C to 150°C	0°C to 125°C	5	5	F	
L7805CF	LM340T-5.0	3-terminal positive regulator	TO220FM-3	TO220-3	-55°C to 150°C	0°C to 125°C	5	5	S	National has better specs
L7805CP	LM340T-5.0	3-terminal positive regulator	TO220FM-3	TO220-3	-55°C to 150°C	0°C to 125°C	5	5	S	National has better specs
L7805CT	LM340K-5.0	3-terminal positive regulator	TO-3	TO-3	-55°C to 150°C	0°C to 125°C	5	5	S	National has better specs
L7805CV	LM340T-5.0	3-terminal positive regulator	TO220-3	TO220-3	-55°C to 150°C	0°C to 125°C	5	5	S	National has better specs
L7805T	LM140K-5.0	3-terminal positive regulator	TO-3	TO-3	-55°C to 150°C	-55°C to 150°C	5	5	D	National has better specs overall
L7808CF	LM7808CT	3-terminal positive regulator	TO220-3	TO220-3	-55°C to 150°C	0°C to 125°C	8	8	S	National has better specs
L7808CP	LM7808CT	3-terminal positive regulator	TO220-3	TO220-3	-55°C to 150°C	0°C to 125°C	8	8	S	National has better specs
L7808CV	LM7808CT	3-terminal positive regulator	TO220-3	TO220-3	-55°C to 150°C	0°C to 125°C	8	8	S	National has better specs
L7808CV	LM7808CT	3-terminal positive regulator	TO220-3	TO220-3	-55°C to 150°C	0°C to 125°C	8	8	S	National has better specs
L7812CF	LM340T-12	3-terminal positive regulator	TO220-3	TO220-3	-55°C to 150°C	0°C to 125°C	12	12	S	National has better specs
L7812CP	LM340T-12	3-terminal positive regulator	TO220-3	TO220-3	-55°C to 150°C	0°C to 125°C	12	12	S	National has better specs
L7812CT	LM340K-12	3-terminal positive regulator	TO-3	TO-3	-55°C to 150°C	0°C to 125°C	12	12	S	National has better specs
L7812CV	LM340K-12	3-terminal positive regulator	TO220-3	TO220-3	-55°C to 150°C	0°C to 125°C	12	12	S	National has better specs
L7812T	LM140K-12	3-terminal positive regulator	TO-3	TO-3	-55°C to 150°C	-55°C to 150°C	12	12	D	National has better specs overall
L7815CF	LM340T-15	3-terminal positive regulator	TO220-3	TO220-3	-55°C to 150°C	0°C to 125°C	15	15	S	National has better specs
L7815CP	LM340T-15	3-terminal positive regulator	TO220-3	TO220-3	-55°C to 150°C	0°C to 125°C	15	15	S	National has better specs
L7815CT	LM340K-15	3-terminal positive regulator	TO-3	TO-3	-55°C to 150°C	0°C to 125°C	15	15	S	National has better specs
L7815CV	LM340K-15	3-terminal positive regulator	TO220-3	TO220-3	-55°C to 150°C	0°C to 125°C	15	15	S	National has better specs
L7815T	LM140K-15	3-terminal positive regulator	TO-3	TO-3	-55°C to 150°C	-55°C to 150°C	15	15	D	National has better specs overall

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
ST Microelectronics										
L78L05ACD	LM78L05ACM	3-terminal positive regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 125°C	5	5	D	
L78L05ACZ	LM78L05ACZ	3-terminal positive regulator	T0-92	T0-92	-40°C to 125°C	0°C to 125°C	5	5	S	
L78L05CD	LM78L05ACM	3-terminal positive regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 125°C	5	5	D	
L78L05CZ	LM78L05ACZ	3-terminal positive regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	5	5	D	
L78L06ACD	LM78L62ACM	3-terminal positive regulator	SOIC-8	SOIC-8	-40°C to 125°C	0°C to 125°C	6	6.2	S	
L78L06ACZ	LM78L62ACZ	3-terminal positive regulator	T0-92	T0-92	-40°C to 125°C	0°C to 125°C	6	6.2	S	
L78L06CD	LM78L62ACM	3-terminal positive regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 125°C	6	6.2	S	
L78L06CZ	LM78L62ACZ	3-terminal positive regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	6	6.2	S	
L78L08ACD	LM78L82ACM	3-terminal positive regulator	SOIC-8	SOIC-8	-40°C to 125°C	0°C to 125°C	8	8.2	S	
L78L08ACZ	LM78L82ACZ	3-terminal positive regulator	T0-92	T0-92	-40°C to 125°C	0°C to 125°C	8	8.2	S	
L78L08CD	LM78L82ACM	3-terminal positive regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 125°C	8	8.2	S	
L78L08CZ	LM78L82ACZ	3-terminal positive regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	8	8.2	S	
L78L09ACD	LM78L09ACM	3-terminal positive regulator	SOIC-8	SOIC-8	-40°C to 125°C	0°C to 125°C	9	9	S	
L78L09ACZ	LM78L09ACZ	3-terminal positive regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	9	9	D	
L78L09CD	LM78L09ACM	3-terminal positive regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 125°C	9	9	D	
L78L09CZ	LM78L09ACZ	3-terminal positive regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	9	9	D	
L78L12ACD	LM78L12ACM	3-terminal positive regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 125°C	12	12	D	
L78L12ACZ	LM78L12ACZ	3-terminal positive regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	12	12	D	
L78L12CD	LM78L12ACM	3-terminal positive regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 125°C	12	12	D	
L78L12CZ	LM78L12ACZ	3-terminal positive regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	12	12	D	
L78L15ACD	LM78L15ACM	3-terminal positive regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 125°C	15	15	D	
L78L15ACZ	LM78L15ACZ	3-terminal positive regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	15	15	D	
L78L15CD	LM78L15ACM	3-terminal positive regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 125°C	15	15	D	
L78L15CZ	LM78L15ACZ	3-terminal positive regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	15	15	D	
L78M05ABDT	LM78M05CDT	0.5A voltage regulator	T0252-3	T0252-3	-40°C to 125°C	-40°C to 125°C	5	5	D	

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement
(May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package
(See datasheets for differences.)

N = Similar function, different package and/or pinout
(See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
ST Microelectronics										
L78M05ABV	LM341T-5.0	Positive voltage regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	5	5	S	2% accuracy
L78M05ACDT	LM78M05CDT	0.5A voltage regulator	T0252-3	T0252-3	0°C to 125°C	-40°C to 125°C	5	5	S	
L78M05ACV	LM78M05CT	0.5A voltage regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	5	5	S	
L78M05CV	LM78M05CT	0.5A voltage regulator	T0220-3	T0220-3	0°C to 150°C	-40°C to 125°C	5	5	S	
L78M05CV	LM341T-5.0	0.5A voltage regulator	T0220-3	T0220-3	0°C to 150°C	-40°C to 125°C	5	5	S	
L78M12ABDT	LM78M12CDT	0.5A voltage regulator	T0252-3	T0252-3	-40°C to 125°C	-40°C to 125°C	12	12	D	
L78M12ABV	LM341T-12	0.5A voltage regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	12	12	S	±2% accuracy
L78M12ABV	LM78M12CT	0.5A voltage regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	12	12	D	
L78M12ACDT	LM78M12CDT	0.5A voltage regulator	T0252-3	T0252-3	0°C to 125°C	-40°C to 125°C	12	12	S	
L78M12ACV	LM78M12CT	0.5A voltage regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	12	12	S	
L78M12CV	LM78M12CT	0.5A voltage regulator	T0220-3	T0220-3	0°C to 150°C	-40°C to 125°C	12	12	S	
L78M12CV	LM341T-12	0.5A voltage regulator	T0220-3	T0220-3	0°C to 150°C	-40°C to 125°C	12	12	S	
L78M15ABDT	LM78M15CDT	0.5A voltage regulator	T0252-3	T0252-3	-40°C to 125°C	-40°C to 125°C	15	15	D	
L78M15ABV	LM78M15CT	0.5A voltage regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	15	15	D	
L78M15ACDT	LM78M15CDT	0.5A voltage regulator	T0252-3	T0252-3	0°C to 125°C	-40°C to 125°C	15	15	S	
L78M15ACV	LM78M15CT	0.5A voltage regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	15	15	S	
L78M15CV	LM78M15CT	3-terminal positive regulator	T0220-3	T0220-3	0°C to 150°C	-40°C to 125°C	15	15	S	
L78M15CV	LM341T-15	3-terminal positive regulator	T0220-3	T0220-3	0°C to 150°C	-40°C to 125°C	15	15	S	
L79015CT	LM320K-15	3-terminal negative regulator	T0-3	T0-3	0°C to 125°C	0°C to 125°C	-15	-15	D	
L7905CP	LM320T-5.0	3-terminal negative regulator	T0220FP-3	T0220-3	0°C to 125°C	0°C to 125°C	-5	-5	F	
L7905CP	LM7905CT	3-terminal negative regulator	T0220FP-3	T0220-3	0°C to 125°C	0°C to 125°C	-5	-5	F	
L7905CT	LM320K-5.0	3-terminal negative regulator	T0-3	T0-3	0°C to 125°C	0°C to 125°C	-5	-5	D	
L7905CV	LM320T-5.0	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	-5	-5	D	
L7905CV	LM7905CT	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	-5	-5	D	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
ST Microelectronics										
L7912CP	LM320T-12	3-terminal negative regulator	T0220FP-3	T0220-3	0°C to 125°C	0°C to 125°C	-12	-12	F	
L7912CP	LM7912CT	3-terminal negative regulator	T0220FP-3	T0220-3	0°C to 125°C	0°C to 125°C	-12	-12	F	
L7912CT	LM320K-12	3-terminal negative regulator	T0-3	T0-3	0°C to 125°C	0°C to 125°C	-12	-12	D	
L7912CV	LM320T-12	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	-12	-12	D	
L7912CV	LM7912CT	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	-12	-12	D	
L7915CP	LM320T-15	3-terminal negative regulator	T0220FP-3	T0220-3	0°C to 125°C	0°C to 125°C	-15	-15	F	
L7915CP	LM7915CT	3-terminal negative regulator	T0220FP-3	T0220-3	0°C to 125°C	0°C to 125°C	-15	-15	F	
L7915CV	LM320T-15	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	-15	-15	D	
L7915CV	LM7915CT	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	-15	-15	D	
L79L05ABD	LM79L05ACM	3-terminal negative regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 70°C	-5	-5	S	
L79L05ABZ	LM79L05ACZ	3-terminal negative regulator	T0-92	T0-92	0°C to 125°C	0°C to 70°C	-5	-5	S	
L79L05ACD	LM79L05ACM	3-terminal negative regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 125°C	-5	-5	D	
L79L05ACZ	LM79L05ACZ	3-terminal negative regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	-5	-5	D	
L79L05CD	LM79L05ACM	3-terminal negative regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 70°C	-5	-5	S	
L79L05CZ	LM79L05ACZ	3-terminal negative regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	-5	-5	D	
L79L12ABD	LM79L12ACM	3-terminal negative regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 70°C	-12	-12	S	
L79L12ABZ	LM79L12ACZ	3-terminal negative regulator	T0-92	T0-92	0°C to 125°C	0°C to 70°C	-12	-12	S	
L79L12ACD	LM79L12ACM	3-terminal negative regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 70°C	-12	-12	S	
L79L12ACZ	LM79L12ACZ	3-terminal negative regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	-12	-12	D	
L79L12CD	LM79L12ACM	3-terminal negative regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 70°C	-12	-12	S	
L79L12CZ	LM79L12ACZ	3-terminal negative regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	-12	-12	D	
L79L15ABD	LM79L15ACM	3-terminal negative regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 70°C	-15	-15	S	
L79L15ABZ	LM79L15ACZ	3-terminal negative regulator	T0-92	T0-92	0°C to 125°C	0°C to 70°C	-15	-15	S	
L79L15ACD	LM79L15ACM	3-terminal negative regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 125°C	-15	-15	D	
L79L15ACZ	LM79L15ACZ	3-terminal negative regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	-15	-15	D	

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement
(May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package
(See datasheets for differences.)

N = Similar function, different package and/or pinout
(See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
ST Microelectronics										
L79L15CD	LM79L15ACM	3-terminal negative regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 70°C	-15	-15	S	
L79L15CZ	LM79L15ACZ	3-terminal negative regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	-15	-15	D	
LD1084D2M	LM1084IS-Adj	5A low-dropout regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	Adj.	Adj.	F	
LD1084D2M120	LM1084IS-12	5A low-dropout regulator	D2PAK/A-3	T0263-3	-40°C to 125°C	-40°C to 125°C	12	12	F	
LD1084D2M15	LMS1585AIS-1.5	5A low-dropout regulator	D2PAK/A-3	T0263-3	-40°C to 125°C	-40°C to 125°C	1.5	1.5	F	
LD1084D2M33	LM1084IS-3.3	5A low-dropout regulator	D2PAK/A-3	T0263-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	F	
LD1084D2M33	LMS1585AIS-3.3	5A low-dropout regulator	D2PAK/A-3	T0263-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	F	
LD1084D2M50	LM1084IS-5.0	5A low-dropout regulator	D2PAK/A-3	T0263-3	-40°C to 125°C	-40°C to 125°C	5	5	F	
LD1084P	LM1084IT-Adj	5A low-dropout regulator	T0220FP-3	T0220-3	-40°C to 125°C	-40°C to 125°C	Adj.	Adj.	F	
LD1084P120	LM1084IT-12	5A low-dropout regulator	T0220FP-3	T0220-3	-40°C to 125°C	-40°C to 125°C	12	12	F	
LD1084P15	LMS1585AIT-1.5	5A low-dropout regulator	T0220FP-3	T0220-3	-40°C to 125°C	-40°C to 125°C	1.5	1.5	F	
LD1084P33	LM1084IT-3.3	5A low-dropout regulator	T0220FP-3	T0220-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	F	
LD1084P33	LMS1585AIT-3.3	5A low-dropout regulator	T0220FP-3	T0220-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	F	
LD1084P50	LM1084IT-5.0	5A low-dropout regulator	T0220FP-3	T0220-3	-40°C to 125°C	-40°C to 125°C	5	5	F	
LD1084V	LM1084IT-Adj	5A low-dropout regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	Adj.	Adj.	D	
LD1084V120	LM1084IT-12	5A low-dropout regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	12	12	D	
LD1084V15	LMS1585AIT-1.5	5A low-dropout regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	1.5	1.5	D	
LD1084V33	LM1084IT-3.3	5A low-dropout regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	D	
LD1084V33	LM1084IT-3.3	5A low-dropout regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	D	
LD1084V50	LM1084IT-5.0	5A low-dropout regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	5	5	D	
LD1085D2M	LM1085IS-Adj	3A low-dropout regulator	T0263-3	T0263-3	-40°C to 125°C	-40°C to 125°C	Adj.	Adj.	D	
LD1085D2M120	LM1085IS-12	3A low-dropout regulator	D2PAK/A-3	T0263-3	-40°C to 125°C	-40°C to 125°C	12	12	F	
LD1085D2M15	LMS1587IS-1.5	3A low-dropout regulator	D2PAK/A-3	T0263-3	-40°C to 125°C	-40°C to 125°C	1.5	1.5	F	
LD1085D2M33	LM1085IS-3.3	3A low-dropout regulator	T0263-3	T0263-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	F	
LD1085D2M33	LMS1587IS-3.3	3A low-dropout regulator	D2PAK/A-3	T0263-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	F	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
ST Microelectronics										
LD1085D2M50	LM1085IS-5.0	3A low-dropout regulator	D2PAK/A-3	T0263-3	-40°C to 125°C	-40°C to 125°C	5	5	F	
LD1085D2T	LM1085IS-Adj	3A low-dropout regulator	T0263-3	T0263-3	-40°C to 125°C	-40°C to 125°C	Adj.	Adj.	D	
LD1085D2T120	LM1085IS-12	3A low-dropout regulator	T0263-3	T0263-3	-40°C to 125°C	-40°C to 125°C	12	12	D	
LD1085D2T33	LM1085IS-3.3	3A low-dropout regulator	T0263-3	T0263-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	D	
LD1085D2T50	LM1085IS-5.0	3A low-dropout regulator	T0263-3	T0263-3	-40°C to 125°C	-40°C to 125°C	5	5	D	
LD1085P	LM1085IT-Adj	3A low-dropout regulator	TO-220FP-3	T0220-3	-40°C to 125°C	-40°C to 125°C	Adj.	Adj.	F	
LD1085P120	LM1085IT-12	3A low-dropout regulator	TO-220FP-3	T0220-3	-40°C to 125°C	-40°C to 125°C	12	12	F	
LD1085P15	LMS1587IT-1.5	3A low-dropout regulator	TO-220FP-3	T0220-3	-40°C to 125°C	-40°C to 125°C	1.5	1.5	F	
LD1085P33	LM1085IT-3.3	3A low-dropout regulator	TO-220FP-3	T0220-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	F	
LD1085P33	LMS1587IT-3.3	3A low-dropout regulator	TO-220FP-3	T0220-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	F	
LD1085P50	LM1085IT-5.0	3A low-dropout regulator	TO-220FP-3	T0220-3	-40°C to 125°C	-40°C to 125°C	5	5	F	
LD1085	LM1085IT-Adj	3A low-dropout regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	Adj.	Adj.	D	
LD1085120	LM1085IT-12	3A low-dropout regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	12	12	D	
LD108515	LMS1587IT-1.5	3A low-dropout regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	1.5	1.5	D	
LD108533	LM1085IT-3.3	3A low-dropout regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	D	
LD108533	LMS1587IT-3.3	3A low-dropout regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	D	
LD108550	LM1085IT-5.0	3A low-dropout regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	5	5	D	
LD1086D2M	LM1086IS-Adj	1.5A low-dropout regulator	D2PAK/A-3	T0263-3	-40°C to 125°C	-40°C to 125°C	Adj.	Adj.	F	
LD1086D2M18	LM1086IS-1.8	1.5A low-dropout regulator	D2PAK/A-3	T0263-3	-40°C to 125°C	-40°C to 125°C	1.8	1.8	F	
LD1086D2M25	LM1086IS-2.5	1.5A low-dropout regulator	D2PAK/A-3	T0263-3	-40°C to 125°C	-40°C to 125°C	2.5	2.5	F	
LD1086D2M33	LM1086IS-3.3	1.5A low-dropout regulator	D2PAK/A-3	T0263-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	F	
LD1086D2M50	LM1086IS-5.0	1.5A low-dropout regulator	D2PAK/A-3	T0263-3	-40°C to 125°C	-40°C to 125°C	5	5	F	
LD1086D2T	LM1086IS-Adj	1.5A low-dropout regulator	T0263-3	T0263-3	-40°C to 125°C	-40°C to 125°C	Adj.	Adj.	D	
LD1086D2T28	LM1086IS-2.85	1.5A low-dropout regulator	T0263-3	T0263-3	-40°C to 125°C	-40°C to 125°C	2.85	2.85	D	
LD1086D2T33	LM1086IS-3.3	1.5A low-dropout regulator	T0263-3	T0263-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	D	

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement
(May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package
(See datasheets for differences.)

N = Similar function, different package and/or pinout
(See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
ST Microelectronics										
LD1086D2T50	LM1086IS-5.0	1.5A low-dropout regulator	T0263-3	T0263-3	-40°C to 125°C	-40°C to 125°C	5	5	D	
LD1086P	LM1086IT-Adj	1.5A low-dropout regulator	T0220FP-3	T0220-3	-40°C to 125°C	-40°C to 125°C	Adj.	Adj.	F	
LD1086P18	LM1086IT-1.8	1.5A low-dropout regulator	T0220FP-3	T0220-3	-40°C to 125°C	-40°C to 125°C	1.8	1.8	F	
LD1086P25	LM1086IT-2.5	1.5A low-dropout regulator	T0220FP-3	T0220-3	-40°C to 125°C	-40°C to 125°C	2.5	2.5	F	
LD1086P33	LM1086IT-3.3	1.5A low-dropout regulator	T0220FP-3	T0220-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	F	
LD1086P50	LM1086IT-5.0	1.5A low-dropout regulator	T0220FP-3	T0220-3	-40°C to 125°C	-40°C to 125°C	5	5	F	
LD1086V	LM1086IT-Adj	1.5A low-dropout regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	Adj.	Adj.	D	
LD1086V18	LM1086IT-1.8	1.5A low-dropout regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	1.8	1.8	D	
LD1086V25	LM1086IT-2.5	1.5A low-dropout regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	2.5	2.5	D	
LD1086V28	LM1086IT-2.85	1.5A low-dropout regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	2.85	2.85	D	
LD1086V33	LM1086IT-3.3	1.5A low-dropout regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	3.3	3.3	D	
LD1086V50	LM1086IT-5.0	1.5A low-dropout regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 125°C	5	5	D	
LD1117DT	LM1117DT-Adj	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
LD1117DT18	LM1117DT-1.8	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	1.8	1.8	D	
LD1117DT25	LM1117DT-2.5	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	2.5	2.5	D	
LD1117DT28	LM1117DTX-2.85	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	2.85	2.85	S	National has a higher max. V_{IN}
LD1117DT33	LM1117DTX-3.3	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	3.3	3.3	S	National offers an LLP and TO-263
LD1117DT50	LM1117DTX-5.0	800 mA low-dropout regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	5	5	S	
LD1117S	LM1117MP-Adj	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
LD1117S18	LM1117MP-1.8	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	1.8	1.8	D	
LD1117S25	LM1117MP-2.5	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	2.5	2.5	D	
LD1117S28	LM1117MP-2.85	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	2.85	2.85	D	
LD1117S33	LM1117MP-3.3	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
LD1117S-5.0	LM1117MP-5.0	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	5	5	D	
LD1117V	LM1117T-Adj	800 mA low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
ST Microelectronics										
LD1117V18	LM1117T-1.8	800 mA low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	1.8	1.8	D	
LD1117V25	LM1117T-2.5	800 mA low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	2.5	2.5	D	
LD1117V28	LM1117T-2.85	800 mA low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	2.85	2.85	D	
LD1117V33	LM1117T-3.3	800 mA low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
LD1117V50	LM1117T-5.0	800 mA low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	5	5	D	
LE30ABZ	LP2950CZ-3.0	Micropower voltage regulator	T0-92	T0-92	-40°C to 125°C	-40°C to 125°C	3	3	D	
LE30CZ	LP2950CZ-3.0	Micropower voltage regulator	T0-92	T0-92	-40°C to 125°C	-40°C to 125°C	3	3	D	
LE33ABZ	LP2950CZ-3.3	Micropower voltage regulator	T0-92	T0-92	-40°C to 125°C	-40°C to 125°C	3.3	3.3	D	
LE33CZ	LP2950CZ-3.3	Micropower voltage regulator	T0-92	T0-92	-40°C to 125°C	-40°C to 125°C	3.3	3.3	D	
LE50ABZ	LP2950CZ-5.0	Micropower voltage regulator	T0-92	T0-92	-40°C to 125°C	-40°C to 125°C	5	5	D	
LE50CZ	LP2950CZ-5.0	Micropower voltage regulator	T0-92	T0-92	-40°C to 125°C	-40°C to 125°C	5	5	D	
LF347BN	LF347BN	Wide bandwidth quad JFET input operational amplifier	MDIP-14	MDIP-14	0°C to 70°C	0°C to 70°C	–	–	D	
LF347D	LF347M	Wide bandwidth quad JFET input operational amplifier	SOIC-14	SOIC-14	0°C to 70°C	0°C to 70°C	–	–	D	
LF347N	LF347N	Wide bandwidth quad JFET input operational amplifier	MDIP-14	MDIP-14	0°C to 70°C	0°C to 70°C	–	–	D	
LF351D	LF356M	JFET input operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
LF351D	LF351M	Precision JFET operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	±15	±15	D	
LF351N	LF356N	JFET input operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
LF351N	LF351N	Precision JFET operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	±15	±15	D	
LF353D	LF353M	Wide bandwidth dual JFET operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
LF353D	LF353M	Dual precision JFET operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	±15	±15	D	
LF353N	LF353N	Wide bandwidth dual JFET operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
LF353N	LF353N	Dual precision JFET operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	±15	±15	D	

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement
(May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package
(See datasheets for differences.)

N = Similar function, different package and/or pinout
(See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
ST Microelectronics										
LM135Z	LM135H	Precision temperature sensor	T0-92	T0-46	-55°C to 150°C	-55°C to 150°C	3	3	F	
LM211D	LM211M	Voltage comparator	SOIC-8	SOIC-8	-25°C to 85°C	-40°C to 105°C	–	–	S	
LM234D	LM234M	3-terminal adjustable current source	SOIC-8	SOIC-8	-25°C to 100°C	-25°C to 100°C	–	–	F	National's SOIC-8 has a slightly different pinout, functionally the same
LM234Z	LM234Z	3-terminal adjustable current source	T0-92	T0-92	-25°C to 100°C	-25°C to 100°C	–	–	D	
LM235Z	LM235H	Precision temperature sensor	T0-92	T0-46	-40°C to 125°C	-40°C to 125°C	3	3	F	
LM2931BD33	LM2931BP-3.3	Low-dropout voltage regulator	SOIC-8	micro SMD-3	-40°C to 125°C	-40°C to 85°C	40	26	N	
LM2931BD50	LM2931M	Low-dropout voltage regulator	SOIC-8	SOIC-8	-40°C to 125°C	-40°C to 85°C	40	26	S	
LM2931BDT50	LM2931S-5.0	Low-dropout voltage regulator	T0252-3	T0263-3	-40°C to 125°C	-40°C to 85°C	40	26	F	
LM2931BV50	LM2931T-5.0	Low-dropout voltage regulator	T0220-3	T0220-3	-40°C to 125°C	-40°C to 85°C	40	26	S	
LM2931BZ50	LM2931Z-5.0	Low-dropout voltage regulator	T0-92	T0-92	-40°C to 125°C	-40°C to 85°C	40	26	S	
LM2931D	LM2931CM	Low-dropout voltage regulator	SOIC-8	SOIC-8	-40°C to 125°C	-40°C to 85°C	40	26	S	
LM301AN	LM301AN	Operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
LM311D	LM311M	Voltage comparator	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
LM311N	LM311N	Voltage comparator	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
LM317MDT	LM317MDT	0.5A, 3-terminal adjustable regulator	T0252-3	T0252-3	0°C to 125°C	0°C to 125°C	1.2 to 37	1.2 to 37	D	
LM317T	LM317T	0.5A, 3-terminal adjustable regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	1.2 to 37	1.2 to 37	D	
LM319D	LM319M	High-speed dual comparator	SOIC-14	SOIC-14	0°C to 70°C	0°C to 70°C	–	–	D	
LM319N	LM319N	High-speed dual comparator	MDIP-14	MDIP-14	0°C to 70°C	0°C to 70°C	–	–	D	
LM334D	LM334M	3-terminal adjustable current source	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	F	National's SOIC-8 has a slightly different pinout, functionally the same
LM334Z	LM334Z	3-terminal adjustable current source	T0-92	T0-92	0°C to 70°C	0°C to 70°C	–	–	D	
LM335AD	LM335AM	Precision temperature sensor	SOIC-8	SOIC-8	-40°C to 100°C	-40°C to 100°C	3	3	D	
LM335AZ	LM335AZ	Temperature sensor	T0-92	T0-92	-40°C to 100°C	-40°C to 100°C	–	–	F	National has a better operating current range (400 µA vs. 450 µA), different pinout

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
ST Microelectronics										
LM335D	LM335M	Precision temperature sensor	SOIC-8	SOIC-8	-40°C to 100°C	-40°C to 100°C	3	3	D	
LM335Z	LM335Z	Precision temperature sensor	TO-92	TO-92	-40°C to 100°C	-40°C to 100°C	3	3	D	
LM336BD	LM336BM	Reference diode	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2.5	2.5	D	
LM336BZ	LM336BZ	Reference diode	TO-92	TO-92	0°C to 70°C	0°C to 70°C	2.5	2.5	D	
LM336D	LM336M	Reference diode	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2.5	2.5	D	
LM336Z	LM336Z	Reference diode	TO-92	TO-92	0°C to 70°C	0°C to 70°C	2.5	2.5	D	
LM337H	LM337H	3-terminal adjustable negative regulator	TO-39	TO-39	0°C to 125°C	0°C to 125°C	–	–	D	
LM337K	LM337K	3-terminal adjustable negative regulator	TO-3	TO-3	0°C to 125°C	0°C to 125°C	–	–	D	
LM337SP	LM337T	3-terminal adjustable negative regulator	TO220-3	TO220-3	0°C to 125°C	0°C to 125°C	–	–	D	
LM346N	LM346N	Programmable quad operational amplifier	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	D	National also offers the device in the SOIC package
LM348D	LM348M	Quad operational amplifier	SOIC-14	SOIC-14	0°C to 70°C	0°C to 70°C	–	–	D	
LM348N	LM348N	Quad operational amplifier	MDIP-14	MDIP-14	0°C to 70°C	0°C to 70°C	–	–	D	
MC1458D	LM1458M	Dual operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
MC1458N	LM1458N	Dual operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
MC4558CD	LM1458M	Dual operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
MC4558CN	LM1458N	Dual operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
SG3524N	LM3524DN	Regulating pulse width modulator	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	D	National's LM3524 is an upgrade
SG3524P	LM3524DM	Regulating pulse width modulator	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	D	National's LM3524 is an upgrade
SP485BD	LMS485IM	5V low-power RS-485 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
SP485BN	LMS485INA	5V low-power RS-485 transceiver	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
SP485CN	LMS485CNA	5V low-power RS-485 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
ST202BD	LMS202IM	5V RS-232 transceiver	SOIC-16	SOIC-16	-40°C to 125°C	-40°C to 125°C	–	–	D	
ST202BW	LMS202IMW	5V RS-232 transceiver	WSOIC-16	WSOIC-16	-40°C to 125°C	-40°C to 125°C	–	–	D	

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement
(May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package
(See datasheets for differences.)

N = Similar function, different package and/or pinout
(See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
ST Microelectronics										
ST202CD	LMS202CM	5V RS-232 transceiver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	D	
ST202CW	LMS202CMW	5V RS-232 transceiver	WSOIC-16	WSOIC-16	0°C to 70°C	0°C to 70°C	–	–	D	
ST202EAD	LMS202EIM	15 kV ESD protected RS-232 transceiver	SOIC-16	SOIC-16	-40°C to 125°C	-40°C to 85°C	–	–	S	
ST202EBW	LMS202EIMW	15 kV ESD protected RS-232 transceiver	WSOIC-16	WSOIC-16	-40°C to 85°C	-40°C to 85°C	–	–	D	
ST202ECD	LMS202ECM	15 kV ESD protected RS-232 transceiver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	D	
ST202ECW	LMS202ECMW	15 kV ESD protected RS-232 transceiver	WSOIC-16	WSOIC-16	0°C to 70°C	0°C to 70°C	–	–	D	
ST232BD	DS14C232TM	5V dual RS-232 driver/receiver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	–	–	S	
ST232CD	DS14C232CM	5V dual RS-232 driver/receiver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	S	
ST232CN	DS14C232N	5V dual RS-232 driver/receiver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	S	
ST26C31BD	DS26C31TM	Quad differential line driver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	5	5	D	
ST26C31BN	DS26C31TN	Quad differential line driver	MDIP-16	MDIP-16	-40°C to 85°C	-40°C to 85°C	5	5	D	
ST26C31BT	DS26C31TM	Quad differential line driver	TSSOP-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	5	5	F	
ST26C32ABD	DS26C32ATM	Quad differential line receiver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	5	5	D	
ST26C32ABN	DS26C32ATN	Quad differential line receiver	MDIP-16	MDIP-16	-40°C to 85°C	-40°C to 85°C	5	5	D	
ST26C32ABT	DS26C32ATM	Quad differential line receiver	TSSOP-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	5	5	F	
ST34C86BD	DS34C86TM	Quad differential line receiver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	5	5	D	
ST34C86BN	DS34C86TN	Quad differential line receiver	MDIP-16	MDIP-16	-40°C to 85°C	-40°C to 85°C	5	5	D	
ST34C86BT	DS34C86TM	Quad differential line receiver	TSSOP-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	5	5	F	
ST485BD	LMS485IM	5V low-power RS-485 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
ST485BD	DS485TM	Low-power RS-485/RS-422 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
ST485BD	DS36C279TM	Low-power RS-485 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
ST485BN	LMS485INA	5V low-power RS-485 transceiver	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	D	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
ST Microelectronics										
ST485BN	DS485TN	Low-power RS-485/RS-422 transceiver	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
ST485CD	LMS485CM	5V low-power RS-485 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
ST485CD	DS485M	Low-power RS-485/RS-422 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
ST485CD	DS36C279M	Low-power RS-485 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
ST485CN	LMS485CNA	5V low-power RS-485 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
ST485CN	DS485N	Low-power RS-485/RS-422 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
ST75C176BD	DS36277TM	Dominant mode multipoint transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
ST75C176BD	DS3695ATM	Multipoint RS-485/RS-422 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
ST75C176BN	DS36277TN	Dominant mode multipoint transceiver	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
ST75C176BN	DS3695TN	Multipoint RS-485/RS-422 transceiver	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
ST75C176CD	DS36276M	FAILSAFE multipoint transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
ST75C176CD	DS3695AM	Multipoint RS-485/RS-422 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
ST75C176CD	DS3696AM	Multipoint RS-485/RS-422 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	F	
ST75C176CN	DS3695N	Multipoint RS-485/RS-422 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
ST75C176CN	DS3696N	Multipoint RS-485/RS-422 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	F	
STLVDS31BD	DS90LV031ATM	Quad LVDS differential line driver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
STLVDS31BD	DS90LV031BTM	Quad LVDS differential line driver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
STLVDS31BT	DS90LV031ATMTC	Quad LVDS differential line driver	TSSOP-16	TSSOP-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
STLVDS31BT	DS90LV031BTM	Quad LVDS differential line driver	TSSOP-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	F	

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
ST Microelectronics										
STLVDS32BD	DS90LV032 ATM	Quad LVDS differential line receiver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
STLVDS32BT	DS90LV032 ATMTC	Quad LVDS differential line receiver	TSSOP-16	TSSOP-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
STLVDS3487AD	DS3487M	Quad TRI-STATE® line driver	SOIC-16	SOIC-16	-55°C to 125°C	0°C to 70°C	–	–	N	Different temperature range, different specs
STLVDS3487BD	DS3487M	Quad TRI-STATE line driver	SOIC-16	SOIC-16	-40°C to 85°C	0°C to 70°C	–	–	N	Different temperature range, different specs
STLVDS47BD	DS90LV047ATM	Quad LVDS differential line driver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
STLVDS47BT	DS90LV047 ATMTC	Quad LVDS differential line driver	TSSOP-16	TSSOP-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
STLVDS9637BD	DS9637ACM	Dual differential line receiver	SOIC-8	SOIC-8	-40°C to 85°C	0°C to 70°C	–	–	S	
TDA7262	LM1876T	Stereo audio power amplifier	TO220-11	TO220-15	-40°C to 150°C	-20°C to 85°C	–	–	S	
TDA7265	LM4731TA	2x25W audio amplifier	Multiwatt package	TO220-15	-20°C to 85°C	-20°C to 85°C	–	–	D	
TDA7269A	LM4730TA	2x14W audio amplifier	Multiwatt package	TO220-15	0°C to 70°C	-20°C to 85°C	–	–	S	
TDA7294	LM3886T	Stereo audio power amplifier	TO220-15	TO220-11	0°C to 70°C	-20°C to 85°C	–	–	S	
TL082ACD	TL082CM	Wide bandwidth dual JFET operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
TL082ACN	TL082CP	Wide bandwidth dual JFET operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
TL082ACP	TL082CM	Wide bandwidth dual JFET operational amplifier	TSSOP-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	F	
TL082BCD	TL082CM	Wide bandwidth dual JFET operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
TL082BCN	TL082CP	Wide bandwidth dual JFET operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
TL082BCP	TL082CM	Wide bandwidth dual JFET operational amplifier	TSSOP-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	F	
TL082CD	TL082CM	Wide bandwidth dual JFET operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
ST Microelectronics										
TL082CD	LF353M	Dual precision JFET operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	±15	±15	D	
TL082CN	TL082CP	Wide bandwidth dual JFET operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
TL082CN	LF353N	Dual precision JFET operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	±15	±15	D	
TL082CP	TL082CM	Wide bandwidth dual JFET operational amplifier	TSSOP-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	F	
TL431ACD	LM431CCM	Programmable shunt regulator	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2.5 to 36	2.5 to 36	D	National has better accuracy
TL431ACD	LM431BCM	Programmable shunt regulator	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2.5 to 36	2.5 to 36	D	
TL431ACZ	LM431CCZ	Programmable shunt regulator	T0-92	T0-92	0°C to 70°C	0°C to 70°C	2.5 to 36	2.5 to 36	D	National has better accuracy
TL431ACZ	LM431BCZ	Programmable shunt regulator	T0-92	T0-92	0°C to 70°C	0°C to 70°C	2.5 to 36	2.5 to 36	D	
TL431AID	LM431BIM	Programmable shunt regulator	SOIC-8	SOIC-8	-40°C to 105°C	-40°C to 85°C	2.5 to 36	2.5 to 36	S	
TL431AID	LM431CIM	Programmable shunt regulator	SOIC-8	SOIC-8	-40°C to 105°C	-40°C to 85°C	2.5 to 36	2.5 to 36	S	Different temperature range, National has better accuracy
TL431AID	LM431BIM	Programmable shunt regulator	SOIC-8	SOIC-8	-40°C to 105°C	-40°C to 85°C	2.5 to 36	2.5 to 36	S	Different temperature range
TL431AIZ	LM431BIZ	Programmable shunt regulator	T0-92	T0-92	-40°C to 105°C	-40°C to 85°C	2.5 to 36	2.5 to 36	S	
TL431AIZ	LM431CIZ	Programmable shunt regulator	T0-92	T0-92	-40°C to 105°C	-40°C to 85°C	2.5 to 36	2.5 to 36	S	Different temperature range, National has better accuracy
TL431AIZ	LM431BIZ	Programmable shunt regulator	T0-92	T0-92	-40°C to 105°C	-40°C to 85°C	2.5 to 36	2.5 to 36	S	Different temperature range
TL431CD	LM431ACM	Programmable shunt regulator	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2.5 to 36	2.5 to 36	D	
TL431CZ	LM431ACZ	Programmable shunt regulator	T0-92	T0-92	0°C to 70°C	0°C to 70°C	2.5 to 36	2.5 to 36	D	
TL431CZ	LM431ACZ	Programmable shunt regulator	T0-92	T0-92	0°C to 70°C	0°C to 70°C	2.5 to 36	2.5 to 36	D	
TL431ID	LM431AIM	Programmable shunt regulator	SOIC-8	SOIC-8	-40°C to 105°C	-40°C to 85°C	2.5 to 36	2.5 to 36	S	
TL431ID	LM431AIM	Programmable shunt regulator	SOIC-8	SOIC-8	-40°C to 105°C	-40°C to 85°C	2.5 to 36	2.5 to 36	S	Different temperature range
TL431IZ	LM431AIZ	Programmable shunt regulator	T0-92	T0-92	-40°C to 105°C	-40°C to 85°C	2.5 to 36	2.5 to 36	S	Different temperature range
TS2431AILT	LM431BIM3	Programmable shunt regulator	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 85°C	2.5 to 24	2.5 to 36	S	Different temperature range
TS2431AILT	LM431BCM3	Programmable shunt regulator	SOT23-3	SOT23-3	-40°C to 105°C	0°C to 70°C	2.5 to 24	2.5 to 36	F	National commercial grade

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement
(May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package
(See datasheets for differences.)

N = Similar function, different package and/or pinout
(See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
ST Microelectronics										
TS2431BILT	LM431CIM3	Programmable shunt regulator	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 85°C	2.5 to 24	2.5 to 36	S	Different temperature range
TS2431BILT	LM431CCM3	Programmable shunt regulator	SOT23-3	SOT23-3	-40°C to 105°C	0°C to 70°C	2.5 to 24	2.5 to 36	F	National commercial grade
TS2431ILT	LM431AIM3	Programmable shunt regulator	SOT23-3	SOT23-3	-40°C to 105°C	-40°C to 85°C	2.5 to 24	2.5 to 36	S	Different temperature range
TS2431ILT	LM431ACM3	Programmable shunt regulator	SOT23-3	SOT23-3	-40°C to 105°C	0°C to 70°C	2.5 to 24	2.5 to 36	F	National commercial grade
TS272ACD	LMC6035IM	CMOS dual operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	-40°C to 85°C	–	–	S	
TS272ACN	LMC6035IM	CMOS dual operational amplifier	MDIP-8	SOIC-8	0°C to 70°C	-40°C to 85°C	–	–	F	
TS272ACP	LMC6035IMM	CMOS dual operational amplifier	TSSOP-8	MSOP-8	0°C to 70°C	-40°C to 85°C	–	–	F	
TS272AID	LMC6035IM	CMOS dual operational amplifier	SOIC-8	SOIC-8	-40°C to 125°C	-40°C to 85°C	–	–	S	
TS272AIN	LMC6035IM	CMOS dual operational amplifier	MDIP-8	SOIC-8	-40°C to 125°C	-40°C to 85°C	–	–	F	
TS272AIP	LMC6035IMM	CMOS dual operational amplifier	TSSOP-8	MSOP-8	-40°C to 125°C	-40°C to 85°C	–	–	F	
TS272CD	LMC6035IM	CMOS dual operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	-40°C to 85°C	–	–	S	
TS272CN	LMC6035IM	CMOS dual operational amplifier	MDIP-8	SOIC-8	0°C to 70°C	-40°C to 85°C	–	–	F	
TS272CP	LMC6035IMM	CMOS dual operational amplifier	TSSOP-8	MSOP-8	0°C to 70°C	-40°C to 85°C	–	–	F	
TS272ID	LMC6035IM	CMOS dual operational amplifier	SOIC-8	SOIC-8	-40°C to 125°C	-40°C to 85°C	–	–	S	
TS272IN	LMC6035IM	CMOS dual operational amplifier	MDIP-8	SOIC-8	-40°C to 125°C	-40°C to 85°C	–	–	F	
TS272IP	LMC6035IMM	CMOS dual operational amplifier	TSSOP-8	MSOP-8	-40°C to 125°C	-40°C to 85°C	–	–	F	
TS27M2ACD	LPC662IM	Low-power CMOS dual operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	-40°C to 85°C	–	–	S	
TS27M2ACD	LPC662AIM	Low-power CMOS dual operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	-40°C to 85°C	–	–	S	
TS27M2AID	LPC662IM	Low-power CMOS dual operational amplifier	SOIC-8	SOIC-8	-40°C to 125°C	-40°C to 85°C	–	–	S	
TS27M2AID	LPC662AIM	Low-power CMOS dual operational amplifier	SOIC-8	SOIC-8	-40°C to 125°C	-40°C to 85°C	–	–	S	
TS27M2BCD	LPC662AIM	Low-power CMOS dual operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	-40°C to 85°C	–	–	S	
TS27M2BID	LPC662AIM	Low-power CMOS dual operational amplifier	SOIC-8	SOIC-8	-40°C to 125°C	-40°C to 85°C	–	–	S	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
ST Microelectronics										
TS27M2CD	LPC662IM	Low-power CMOS dual operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	-40°C to 85°C	–	–	S	
TS27M2CD	LPC662AIM	Low-power CMOS dual operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	-40°C to 85°C	–	–	S	
TS27M2ID	LPC662IM	Low-power CMOS dual operational amplifier	SOIC-8	SOIC-8	-40°C to 125°C	-40°C to 85°C	–	–	S	
TS27M2ID	LPC662AIM	Low-power CMOS dual operational amplifier	SOIC-8	SOIC-8	-40°C to 125°C	-40°C to 85°C	–	–	S	
TS391IL	LM397MF	Comparator	SOT23-5	SOT23-5	-40°C to 125°C	-40°C to 85°C	–	–	F	Different pinout
TS3V555ID	LMC555CM	Single general purpose CMOS timer	MSOP-8	MSOP-8	-40°C to 125°C	-40°C to 85°C	–	–	S	
TS3V555IDT	LMC555MX	Single general purpose CMOS timer	MSOP-8	MSOP-8	-40°C to 125°C	-40°C to 85°C	–	–	S	
TS3V555IN	LMC555CN	Single general purpose CMOS timer	MDIP-8	MDIP-8	-40°C to 125°C	-40°C to 85°C	–	–	S	
TS431AILT	LMV431AIM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	-40°C to 125°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
TS431AIZ	LMV431AIZ	Low-voltage adjustable precision shunt regulator	TO-92	TO-92	-40°C to 125°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
TS431AIZAP	LMV431AIZ	Low-voltage adjustable precision shunt regulator	TO-92	TO-92	-40°C to 125°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
TS431AIZT	LMV431AIZ	Low-voltage adjustable precision shunt regulator	TO-92	TO-92	-40°C to 125°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
TS431AL	LMV431ACM5	Precision shunt regulator	SOT23-5	SOT23-5	-40°C to 125°C	0°C to 70°C	1.24	1.24	S	
TS431AZ	LMV431ACZ	Precision shunt regulator	TO-92	TO-92	-40°C to 125°C	0°C to 70°C	1.24	1.24	S	
TS431BILT	LMV431BCM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	-40°C to 125°C	0°C to 70°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
TS431BIZ	LMV431BCZ	Low-voltage adjustable precision shunt regulator	TO-92	TO-92	-40°C to 125°C	0°C to 70°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
TS431BIZAP	LMV431BCZ	Low-voltage adjustable precision shunt regulator	TO-92	TO-92	-40°C to 125°C	0°C to 70°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
TS431BIZT	LMV431BCZ	Low-voltage adjustable precision shunt regulator	TO-92	TO-92	-40°C to 125°C	0°C to 70°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
TS431BL	LMV431BCM5	Precision shunt regulator	SOT23-5	SOT23-5	-40°C to 125°C	0°C to 70°C	1.24	1.24	S	

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement
(May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package
(See datasheets for differences.)

N = Similar function, different package and/or pinout
(See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
ST Microelectronics										
TS431BZ	LMV431BCZ	Precision shunt regulator	T0-92	T0-92	-40°C to 125°C	0°C to 70°C	1.24	1.24	S	
TS431ILT	LMV431IM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	-40°C to 125°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
TS431IZ	LMV431IZ	Low-voltage adjustable precision shunt regulator	T0-92	T0-92	-40°C to 125°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
TS431IZAP	LMV431IZ	Low-voltage adjustable precision shunt regulator	T0-92	T0-92	-40°C to 125°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
TS431IZT	LMV431IZ	Low-voltage adjustable precision shunt regulator	T0-92	T0-92	-40°C to 125°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
TS432AILT	LMV431VBIMF	Low-voltage adjustable precision shunt regulator	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
TS432ILT	LMV431AIM5	Low-voltage adjustable precision shunt regulator	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	1.24	1.24	S	National has higher absolute maximum rating of cathode voltage
TS4851J	LM4851ITL	1W mono 100 mW stereo audio subsystem	micro SMD-18	micro SMD-18	-40°C to 85°C	-40°C to 85°C	–	–	D	
TS4855J	LM4855ITL	1W mono 100 mW stereo audio subsystem	micro SMD-18	micro SMD-18	-40°C to 85°C	-40°C to 85°C	–	–	D	
TS4871DT	LM4871MA	1W mono audio amplifier	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2.5 to 5.5	2.5 to 5.5	D	LM4871 rated at 1.2W
TS4871ID	LM4871M	1.5W audio amplifier with shutdown	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
TS4871IQ	LM4871LD	1.5W audio amplifier with shutdown	MDIP-8	LLP-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
TS4871IQT	LM4871LD	1W mono audio amplifier	DFN8	LLP-8	-40°C to 85°C	-40°C to 85°C	2.5 to 5.5	2.5 to 5.5	D	LM4871 rated at 1.2W
TS4871IS	LM4871MM	1.5W audio amplifier with shutdown	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
TS4871ST	LM4871MM	1W mono audio amplifier	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	2.5 to 5.5	2.5 to 5.5	D	LM4871 rated at 1.2W
TS4872IJ	LM4872IBP	1W Boomer® audio amplifier	micro SMD-8	micro SMD-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
TS4872IJT	LM4872IBP	1.2W mono audio amplifier	Flip chip-8	micro SMD-8	-40°C to 85°C	-40°C to 85°C	2.5 to 5.5	2.5 to 5.5	D	
TS4890DT	LM4889MA	1W mono audio amplifier	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2.2 to 5.5	2.2 to 5.5	D	
TS4890ID	LM4889MA	1W audio power amplifier	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
TS4890IQ	LM4889LD	1W audio power amplifier	MDIP-8	LLP-8	-40°C to 85°C	-40°C to 85°C	–	–	D	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
ST Microelectronics										
TS4890IQT	LM4889LD	1W mono audio amplifier	DFN-8	LLP-8	-40°C to 85°C	-40°C to 85°C	2.2 to 5.5	2.2 to 5.5	D	
TS4890IS	LM4889MM	1W audio power amplifier	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
TS4890IST	LM4889MM	1W mono audio amplifier	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	2.2 to 5.5	2.2 to 5.5	D	
TS4900ID	LM4900M	265 mW at 3.3V cellular audio amplifier	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
TS4900IS	LM4900MM	265 mW at 3.3V cellular audio amplifier	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
TS4902IS	LM4902MM	265 mW at 3.3V cellular audio amplifier	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
TS4990IJT	LM4890IBP	1W cellular specific audio amplifier	micro SMD-8	micro SMD-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
TS4990IQT	LM4890LD	1W cellular specific audio amplifier	MSOP-8	LLP-10	-40°C to 85°C	-40°C to 85°C	–	–	S	
TS4990IST	LM4890MM	1W cellular specific audio amplifier	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
TS5070FN	TP3070V-G	Programmable PCM/codec filter COMBO II	PLCC-28	PLCC-28	-50°C to 150°C	-40°C to 85°C	5	5	S	5% accuracy, 6 latches
TS555ID	LMC555CM	Single general purpose CMOS timer	MSOP-8	MSOP-8	-40°C to 125°C	-40°C to 85°C	–	–	S	
TS555IDT	LMC555MX	Single general purpose CMOS timer	MSOP-8	MSOP-8	-40°C to 125°C	-40°C to 85°C	–	–	S	
TS555IN	LMC555CN	Single general purpose CMOS timer	MDIP-8	MDIP-8	-40°C to 125°C	-40°C to 85°C	–	–	S	
TS555IPT	LMC555MMX	Single general purpose CMOS timer	TSSOP-8	TSSOP-8	-40°C to 125°C	-40°C to 85°C	–	–	F	Similar but not exact package to National
UA79M05CKCS	LM79M05CT	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	-5	-5	D	National has -12V and -15 options
ULN2003A	DS2003CN	High-voltage high-current Darlington transistor array	MDIP-16	MDIP-16	-20°C to 85°C	-40°C to 85°C	5	5	S	Operates directly with TTL/CMOS/PMOS
ULN2003AD	DS2003CM	High-voltage high-current Darlington transistor array	SOIC-16	SOIC-16	-20°C to 70°C	-40°C to 85°C	5	5	S	Operates directly with TTL/CMOS/PMOS
ULN2003AN	DS2003CN	High-voltage high-current Darlington transistor array	MDIP-16	MDIP-16	-20°C to 70°C	-40°C to 85°C	5	5	S	Operates directly with TTL/CMOS/PMOS
ULN2003D	DS2003CM	High-voltage high-current Darlington transistor array	SOIC-16	SOIC-16	-20°C to 85°C	-40°C to 85°C	5	5	S	Operates directly with TTL/CMOS/PMOS

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement (May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package (See datasheets for differences.)

N = Similar function, different package and/or pinout (See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Telcom Semiconductor (acquired by Microchip)										
TC1047VNB	LM61CIM3	Analog temperature sensor	SOT23-3	SOT23-3	-40°C to 125°C	-30°C to 100°C	2.7 to 4.4	2.7 to 10	S	
TC1047VNB	LM61BIM3	Analog temperature sensor	SOT23-3	SOT23-3	-40°C to 125°C	-30°C to 100°C	2.7 to 4.4	2.7 to 10	S	
TC1047AVNB	LM61CIM3	Analog temperature sensor	SOT23-3	SOT23-3	-40°C to 125°C	-30°C to 100°C	2.7 to 4.4	2.7 to 10	S	
TC1047AVNB	LM61BIM3	Analog temperature sensor	SOT23-3	SOT23-3	-40°C to 125°C	-30°C to 100°C	2.7 to 4.4	2.7 to 10	S	
TC1046VNB	LM60BIM3	Temperature sensor	SOT23-3	SOT23-3	-40°C to 125°C	-25°C to 125°C, -40°C to 125°C	2.7 to 4.4	2.7 to 10	S	
TC1046VNB	LM60CIM3	Temperature sensor	SOT23-3	SOT23-3	-40°C to 125°C	-25°C to 125°C, -40°C to 125°C	2.7 to 4.4	2.7 to 10	S	
TC6501P045CT	LM26CIM5-NPA	Factory preset thermostat	SOT23-3	SOT23-3	-55°C to 125°C	-55°C to 125°C	2.7 to 5.5	2.7 to 5.5	D	
TC6501P065CT	LM26CIM5-RPA	Factory preset thermostat	SOT23-3	SOT23-3	-55°C to 125°C	-55°C to 125°C	2.7 to 5.5	2.7 to 5.5	D	
TC6501P075CT	LM26CIM5-SPA	Factory preset thermostat	SOT23-3	SOT23-3	-55°C to 125°C	-55°C to 125°C	2.7 to 5.5	2.7 to 5.5	D	
TC6501P095CT	LM26CIM5-VPA	Factory preset thermostat	SOT23-3	SOT23-3	-55°C to 125°C	-55°C to 125°C	2.7 to 5.5	2.7 to 5.5	D	
TC6501P105CT	LM26CIM5-XPA	Factory preset thermostat	SOT23-3	SOT23-3	-55°C to 125°C	-55°C to 125°C	2.7 to 5.5	2.7 to 5.5	D	
TC6501P115CT	LM26CIM5-YPA	Factory preset thermostat	SOT23-3	SOT23-3	-55°C to 125°C	-55°C to 125°C	2.7 to 5.5	2.7 to 5.5	D	
TC6501P120VCT	LM26CIM5-ZPA	Factory preset thermostat	SOT23-3	SOT23-3	-55°C to 125°C	-55°C to 125°C	2.7 to 5.5	2.7 to 5.5	S	
TC6501P125CT	LM26CIM5-ZPA	Factory preset thermostat	SOT23-3	SOT23-3	-55°C to 125°C	-55°C to 125°C	2.7 to 5.5	2.7 to 5.5	D	
TC6502P045CT	LM26CIM5-NPC	Factory preset thermostat	SOT23-3	SOT23-3	-55°C to 125°C	-55°C to 125°C	2.7 to 5.5	2.7 to 5.5	D	
TC6502P065CT	LM26CIM5-RPC	Factory preset thermostat	SOT23-3	SOT23-3	-55°C to 125°C	-55°C to 125°C	2.7 to 5.5	2.7 to 5.5	D	
TC6502P075CT	LM26CIM5-SPC	Factory preset thermostat	SOT23-3	SOT23-3	-55°C to 125°C	-55°C to 125°C	2.7 to 5.5	2.7 to 5.5	D	
TC6502P095CT	LM26CIM5-VPC	Factory preset thermostat	SOT23-3	SOT23-3	-55°C to 125°C	-55°C to 125°C	2.7 to 5.5	2.7 to 5.5	D	
TC6502P115CT	LM26CIM5-YPC	Factory preset thermostat	SOT23-3	SOT23-3	-55°C to 125°C	-55°C to 125°C	2.7 to 5.5	2.7 to 5.5	D	
TC6502P125CT	LM26CIM5-ZPC	Factory preset thermostat	SOT23-3	SOT23-3	-55°C to 125°C	-55°C to 125°C	2.7 to 5.5	2.7 to 5.5	D	
TC6503N015CT	LM26CIM5-EPB	Factory preset thermostat	SOT23-3	SOT23-3	-55°C to 125°C	-55°C to 125°C	2.7 to 5.5	2.7 to 5.5	D	
TC6503P005CT	LM26CIM5-FPB	Factory preset thermostat	SOT23-3	SOT23-3	-55°C to 125°C	-55°C to 125°C	2.7 to 5.5	2.7 to 5.5	D	
TC6504N015CT	LM26CIM5-EPD	Factory preset thermostat	SOT23-3	SOT23-3	-55°C to 125°C	-55°C to 125°C	2.7 to 5.5	2.7 to 5.5	D	
TC6504P005CT	LM26CIM5-FPD	Factory preset thermostat	SOT23-3	SOT23-3	-55°C to 125°C	-55°C to 125°C	2.7 to 5.5	2.7 to 5.5	D	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Telcom Semiconductor										
TC77-3.3MOA	LM70CILD-3	10-bit plus sign digital temperature sensor	SOIC-8	LLP-8	-55°C to 125°C	-55°C to 150°C	2.7 to 5.5	2.7 to 5.5	F	
TC77-5.0MOA	LM70CILD-5	10-bit plus sign digital temperature sensor	SOIC-8	LLP-8	-55°C to 125°C	-55°C to 150°C	2.7 to 5.5	2.7 to 5.5	F	
TC77-3.3MOA	LM70CIMM-3	10-bit plus sign digital temperature sensor	SOIC-8	MSOP-8	-55°C to 125°C	-55°C to 150°C	2.7 to 5.5	2.7 to 5.5	F	
TC77-5.0MOA	LM70CIMM-5	10-bit plus sign digital temperature sensor	SOIC-8	MSOP-8	-55°C to 125°C	-55°C to 150°C	2.7 to 5.5	2.7 to 5.5	F	
TC77-3.3MCTTR	LM71CIMF	13-bit plus sign digital temperature sensor	SOT23-3	SOT23-3	-55°C to 125°C	-55°C to 150°C	2.7 to 5.5	2.65 to 5.5	F	
TC77-5.0MCTTR	LM71CIMF	13-bit plus sign digital temperature sensor	SOT23-3	SOT23-3	-55°C to 125°C	-55°C to 150°C	2.7 to 5.5	2.65 to 5.5	F	
TC77-3.3MCTTR	LM71CSID	13-bit plus sign digital temperature sensor	SOT23-3	LLP-6	-55°C to 125°C	-55°C to 150°C	2.7 to 5.5	2.65 to 5.5	F	
TC77-5.0MCTTR	LM71CSID	13-bit plus sign digital temperature sensor	SOT23-3	LLP-6	-55°C to 125°C	-55°C to 150°C	2.7 to 5.5	2.65 to 5.5	F	
TC77-3.3MOA	LM74CIBP-3	12-bit plus sign digital temperature sensor	SOIC-8	micro SMD-5	-55°C to 125°C	-55°C to 150°C	2.7 to 5.5	2.65 to 5.5	F	
TC77-5.0MOA	LM74CIBP-5	12-bit plus sign digital temperature sensor	SOIC-8	micro SMD-5	-55°C to 125°C	-55°C to 150°C	2.7 to 5.5	3 to 5.5	F	
TC77-3.3MOA	LM74CIM-3	12-bit plus sign digital temperature sensor	SOIC-8	SOIC-8	-55°C to 125°C	-55°C to 150°C	2.7 to 5.5	2.65 to 5.5	S	
TC77-5.0MOA	LM74CIM-5	12-bit plus sign digital temperature sensor	SOIC-8	SOIC-8	-55°C to 125°C	-55°C to 150°C	2.7 to 5.5	3 to 5.5	S	
TCN75-3.3MOA	LM75BIM-3	Two-wire digital temperature sensor with alarms	SOIC-8	SOIC-8	-55°C to 125°C	-55°C to 150°C	2 to 5.5	3 to 5.5	D	
TCN75-5.0MOA	LM75BIM-5	Two-wire digital temperature sensor with alarms	SOIC-8	SOIC-8	-55°C to 125°C	-55°C to 150°C	2 to 5.5	3 to 5.5	D	
TCN75-3.3MOA	LM75CIM-3	Two-wire digital temperature sensor with alarms	SOIC-8	SOIC-8	-55°C to 125°C	-55°C to 150°C	2 to 5.5	3 to 5.5	D	
TCN75-5.0MOA	LM75CIM-5	Two-wire digital temperature sensor with alarms	SOIC-8	SOIC-8	-55°C to 125°C	-55°C to 150°C	2 to 5.5	3 to 5.5	D	
TCN75-3.3MUA	LM75BIMM-3	Two-wire digital temperature sensor with alarms	MSOP-8	MSOP-8	-55°C to 125°C	-55°C to 150°C	2 to 5.5	3 to 5.5	D	

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement
(May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package
(See datasheets for differences.)

N = Similar function, different package and/or pinout
(See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Telcom Semiconductor										
TCN75-5.0MUA	LM75BIMM-5	Two-wire digital temperature sensor with alarms	MSOP-8	MSOP-8	-55°C to 125°C	-55°C to 150°C	2 to 5.5	3 to 5.5	D	
TCN75-3.3MUA	LM75CIMM-3	Two-wire digital temperature sensor with alarms	MSOP-8	MSOP-8	-55°C to 125°C	-55°C to 150°C	2 to 5.5	3 to 5.5	D	
TCN75-5.0MUA	LM75CIMM-5	Two-wire digital temperature sensor with alarms	MSOP-8	MSOP-8	-55°C to 125°C	-55°C to 150°C	2 to 5.5	3 to 5.5	D	
TCM809 LENB713	LM809M3-4.63	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 105°C	4.63	4.63	S	
TCM809 MENB713	LM809M3-4.38	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 105°C	4.38	4.38	S	
TCM809JENB713	LM809M3-4.00	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 105°C	4	4	S	
TCM809TENB713	LM809M3-3.08	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 105°C	3.08	3.08	S	
TCM809SENB713	LM809M3-2.93	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 105°C	2.93	2.93	S	
TCM809RENB713	LM809M3-2.63	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 105°C	2.63	2.63	S	
TCM810 LENB713	LM810M3-4.63	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 105°C	4.63	4.63	S	
TCM810 MENB713	LM810M3-4.38	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 105°C	4.38	4.38	S	
TCM810JENB713	LM810M3-4.00	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 105°C	4	4	S	
TCM810TENB713	LM810M3-3.08	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 105°C	3.08	3.08	S	
TCM810SENB713	LM810M3-2.93	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 105°C	2.93	2.93	S	
TCM810RENB713	LM810M3-2.63	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 105°C	2.63	2.63	S	
Texas Instruments										
AM26C31CD	DS3487M	Quad TRI-STATE® line driver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	N	
AM26C31CD	DS26C31TM	Quad differential line driver	SOIC-16	SOIC-16	0°C to 70°C	-40°C to 85°C	5	5	D	
AM26C31CDB	DS26C31TM	Quad differential line driver	SSOP-16	SOIC-16	0°C to 70°C	-40°C to 85°C	5	5	F	
AM26C31CN	DS3487N	Quad TRI-STATE line driver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	N	
AM26C31CN	DS26C31TN	Quad differential line driver	MDIP-16	MDIP-16	0°C to 70°C	-40°C to 85°C	5	5	D	
AM26C31CNS	DS26C31TM	Quad differential line driver	SOIC-16	SOIC-16	0°C to 70°C	-40°C to 85°C	5	5	F	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Texas Instruments										
AM26C31ID	DS26C31TM	Quad differential line driver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	5	5	D	
AM26C31IDB	DS26C31TM	Quad differential line driver	SSOP-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	5	5	F	
AM26C31IN	DS26C31TN	Quad differential line driver	MDIP-16	MDIP-16	-40°C to 85°C	-40°C to 85°C	5	5	D	
AM26C31INS	DS26C31TM	Quad differential line driver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	5	5	F	
AM26C31QD	DS26C31TM	Quad differential line driver	SOIC-16	SOIC-16	-55°C to 125°C	-40°C to 85°C	5	5	S	
AM26C32CD	DS26C32ATM	Quad differential line receiver	SOIC-16	SOIC-16	0°C to 70°C	-40°C to 85°C	5	5	D	
AM26C32CN	DS26C32ATN	Quad differential line receiver	MDIP-16	MDIP-16	0°C to 70°C	-40°C to 85°C	5	5	D	
AM26C32CNS	DS26C32ATM	Quad differential line receiver	SOIC-16	SOIC-16	0°C to 70°C	-40°C to 85°C	5	5	F	
AM26C32ID	DS26C32ATM	Quad differential line receiver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	5	5	D	
AM26C32IN	DS26C32ATN	Quad differential line receiver	MDIP-16	MDIP-16	-40°C to 85°C	-40°C to 85°C	5	5	D	
AM26C32INS	DS26C32ATM	Quad differential line receiver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	5	5	F	
AM26C32QD	DS26C32ATM	Quad differential line receiver	SOIC-16	SOIC-16	-55°C to 125°C	-40°C to 85°C	5	5	S	
AM26C32QN	DS26C32ATN	Quad differential line receiver	MDIP-16	MDIP-16	-55°C to 125°C	-40°C to 85°C	5	5	S	
AM26LS31CD	DS26LS31CMX	Quad differential line driver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	S	
AM26LS31CD	DS26LS31CM	Quad differential line driver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	D	
AM26LS31CN	DS26LS31N	Quad differential line driver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	S	
AM26LS31CN	DS26LS31CN	Quad differential line driver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	D	
AM26LS32ACD	DS26LS32ACM	Quad differential line receiver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	D	
AM26LS32ACN	DS26LS32ACN	Quad differential line receiver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	D	
AM26LS32CD	DS26LS32CM	Quad differential line receiver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	D	
AM26LS32CN	DS26LS32CN	Quad differential line receiver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	D	
AM26LV31CD	DS26LV31TM	3V quad differential line driver	SOIC-16	SOIC-16	0°C to 70°C	-40°C to 85°C	3.3	3.3	D	
AM26LV31CD	DS34LV87TM	Quad differential line driver	SOIC-16	SOIC-16	0°C to 70°C	-40°C to 85°C	3.3	3.3	S	
AM26LV31CNS	DS26LV31TM	3V quad differential line driver	SOIC-16	SOIC-16	0°C to 70°C	-40°C to 85°C	3.3	3.3	F	
AM26LV31CNS	DS34LV87TM	Quad differential line driver	SOIC-16	SOIC-16	0°C to 70°C	-40°C to 85°C	3.3	3.3	N	

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement
(May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package
(See datasheets for differences.)

N = Similar function, different package and/or pinout
(See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Texas Instruments										
AM26LV31INS	DS26LV31TM	3V quad differential line driver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	F	
AM26LV31INS	DS34LV87TM	Quad differential line driver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	N	
AM26LV32CD	DS26LV32ATM	3V quad differential line receiver	SOIC-16	SOIC-16	0°C to 70°C	-40°C to 85°C	3.3	3.3	D	
AM26LV32CD	DS34LV86TM	3V quad differential line receiver	SOIC-16	SOIC-16	0°C to 70°C	-40°C to 85°C	3.3	3.3	S	
AM26LV32CNS	DS26LV32ATM	3V quad differential line receiver	SOIC-16	SOIC-16	0°C to 70°C	-40°C to 85°C	3.3	3.3	F	
AM26LV32CNS	DS34LV86TM	3V quad differential line receiver	SOIC-16	SOIC-16	0°C to 70°C	-40°C to 85°C	3.3	3.3	N	
DAC1408AP	DAC0800LCN	8-bit high-speed D/A converter	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	D	
DAC1408AP	DAC0802LCN	8-bit high-speed D/A converter	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	D	
DAC1408AQ	DAC0800LCJ	8-bit high-speed D/A converter	CERDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	D	
DAC1408AQ	DAC0802LCJ	8-bit high-speed D/A converter	CERDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	D	
DS3680D	DS3680M	Quad telephone relay driver	SOIC-14	SOIC-14	0°C to 70°C	0°C to 85°C	-70	-60	S	
DS3680DR	DS3680M	Quad telephone relay driver	SOIC-14	SOIC-14	0°C to 70°C	0°C to 85°C	-70	-60	S	
DS3680N	DS3680N	Quad telephone relay driver	MDIP-14	MDIP-14	0°C to 70°C	0°C to 85°C	-70	-60	S	
GD75323DW	DS14196WWM	RS-232 transceiver, 5 driver 3 receiver	SOIC-20	SOIC-20	0°C to 70°C	0°C to 70°C	–	–	S	
LF353D	LF353M	Dual precision JFET operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	±15	±15	D	
LF353N	LF353N	Dual precision JFET operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	±15	±15	D	
LF353P	LF353N	Wide bandwidth dual JFET operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
LF411CP	LF411CN	Precision JFET operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	±15	±15	D	
LF412CD	LF353M	Dual precision JFET operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	±15	±15	S	
LF412CP	LF412CN	Dual precision JFET operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	±15	±15	D	
LM111U	LM111W	Voltage comparator	W10A	W10A	-55°C to 125°C	-55°C to 125°C	–	–	D	
LM211D	LM211M	Voltage comparator	SOIC-8	SOIC-8	-40°C to 85°C	-25°C to 85°C	–		S	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Texas Instruments										
LM211P	LM311N	Voltage comparator	MDIP-8	MDIP-8	-40°C to 85°C	0°C to 70°C	–	–	S	
LM248D	LM837M	Low noise quad operational amplifier	SOIC-14	SOIC-14	0°C to 70°C	0°C to 70°C	36	36	D	
LM248N	LM837N	Low noise quad operational amplifier	MDIP-14	MDIP-14	0°C to 70°C	0°C to 70°C	36	36	D	
LM285D-1.2	LM285M-1.2	Micropower voltage reference	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	1.2	1.2	D	1% accuracy
LM285D-2.5	LM285M-2.5	Micropower voltage reference	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2.5	2.5	D	1% accuracy
LM285LP-1.2	LM285Z-1.2	Micropower voltage reference	TO-92	TO-92	-40°C to 85°C	-40°C to 85°C	1.2	1.2	D	1% accuracy
LM285LP-2.5	LM285Z-2.5	Micropower voltage reference	TO-92	TO-92	-40°C to 85°C	-40°C to 85°C	2.5	2.5	D	1% accuracy
LM311D	LM311M	Voltage comparator	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
LM311P	LM311N	Voltage comparator	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
LM318D	LM318M	High-speed operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
LM318P	LM318N	High-speed operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
LM324DR	LM324MX	Low-power quad operational amplifier	SOIC-14	SOIC-14	0°C to 70°C	0°C to 70°C	3 to 30	3 to 32	S	
LM336BD	LM336BM	Reference diode	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2.5	2.5	D	
LM336BLP	LM336BZ	Reference diode	TO-92	TO-92	0°C to 70°C	0°C to 70°C	2.5	2.5	D	
LM336D	LM336M	Reference diode	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2.5	2.5	D	
LM336LP	LM336Z	Reference diode	TO-92	TO-92	0°C to 70°C	0°C to 70°C	2.5	2.5	D	
LM337KC	LM337T	3-terminal adjustable negative regulator	TO220-3	TO220-3	0°C to 125°C	0°C to 125°C	–	–	D	
LM339D	LM339M	Low-power quad operational amplifier	SOIC-14	SOIC-14	0°C to 70°C	0°C to 70°C	2 to 36	2 to 36	S	
LM348D	LM348M	Quad operational amplifier	SOIC-14	SOIC-14	0°C to 70°C	0°C to 70°C	–	–	D	
LM348N	LM348N	Quad operational amplifier	MDIP-14	MDIP-14	0°C to 70°C	0°C to 70°C	–	–	D	
LM358D	LM358M	Low-power quad operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	3 to 32	3 to 32	S	
LM385BD-1.2	LM385BM-1.2	Micropower voltage reference	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	1.2	1.2	D	1% accuracy
LM385BD-2.5	LM385BM-2.5	Micropower voltage reference	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2.5	2.5	D	1.5% accuracy

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement
(May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package
(See datasheets for differences.)

N = Similar function, different package and/or pinout
(See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Texas Instruments										
LM385BLP-1.2	LM385BZ-1.2	Micropower voltage reference	TO-92	TO-92	0°C to 70°C	0°C to 70°C	1.2	1.2	D	1% accuracy
LM385BLP-2.5	LM385BZ-2.5	Micropower voltage reference	TO-92	TO-92	0°C to 70°C	0°C to 70°C	2.5	2.5	D	1.5% accuracy
LM385D-1.2	LM385M-1.2	Micropower voltage reference	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	1.2	1.2	D	2% accuracy
LM385D-2.5	LM385M-2.5	Micropower voltage reference	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2.5	2.5	D	3% accuracy
LM385LP-1.2	LM385Z-1.2	Micropower voltage reference	TO-92	TO-92	0°C to 70°C	0°C to 70°C	1.2	1.2	D	2% accuracy
LM385LP-2.5	LM385Z-2.5	Micropower voltage reference	TO-92	TO-92	0°C to 70°C	0°C to 70°C	2.5	2.5	D	3% accuracy
LM385PS-1.2	LM385M-1.2	Micropower voltage reference	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	1.2	1.2	F	2% accuracy, same pinout, different footprint
LM393D	LM393M	Dual voltage comparator	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2 to 36	2 to 36	S	
LMV321IDBV	LMV321M5	Low-voltage rail-to-rail output amplifier	SOT23-5	SOT23-5	-40°C to 85°C	-40°C to 85°C	–	–	D	
LMV321IDBVR	LMV321M5X	Low-voltage rail-to-rail output amplifier	SOT23-5	SOT23-5	-40°C to 85°C	-40°C to 105°C	2.7 to 5	2.7 to 5	D	
LMV321IDCK	LMV321M7	Low-voltage rail-to-rail output amplifier	SC70-5	SC70-5	-40°C to 85°C	-40°C to 85°C	–	–	D	
LMV321IDCKR	LMV321M7X	Single amplifier	SC70-5	SC70-5	-40°C to 85°C	-40°C to 105°C	2.7 to 5	2.7 to 5	D	
LMV324I	LMV324M	Low-voltage quad amplifier	SOIC-14	SOIC-14	-40°C to 85°C	-40°C to 85°C	–	–	D	
LMV324IDR	LMV324MX	Low-voltage quad amplifier	SOIC-14	SOIC-14	-40°C to 85°C	-40°C to 105°C	2.7 to 5	2.7 to 5	D	
LMV324IPW	LMV324MT	Low-voltage quad amplifier	TSSOP-14	TSSOP-14	-40°C to 85°C	-40°C to 85°C	–	–	D	
LMV324IPWR	LMV324MTX	Quad amplifier	TSSOP-14	TSSOP-14	-40°C to 85°C	-40°C to 105°C	2.7 to 5	2.7 to 5	D	
LMV331IDBVR	LMV331M5X	Low voltage single comparator	SOT23-5	SOT23-5	-40°C to 85°C	-40°C to 105°C	2.7 to 5	2.7 to 5	D	
LMV331IDCKR	LMV331M7X	Low voltage single comparator	SC70-5	SC70-5	-40°C to 85°C	-40°C to 105°C	2.7 to 5	2.7 to 5	D	
LMV339IDR	LMV339MX	Low voltage quad comparator	SOIC-14	SOIC-14	-40°C to 85°C	-40°C to 105°C	2.7 to 5	2.7 to 5	D	
LMV339IPWR	LMV339MTX	Low voltage quad comparator	TSSOP-14	TSSOP-14	-40°C to 85°C	-40°C to 105°C	2.7 to 5	2.7 to 5	D	
LMV358I	LMV358M	Low-voltage dual amplifier	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
LMV358IDGK	LMV358	Low-voltage dual amplifier	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
LMV358IDGKR	LMV358MMX	Low-voltage dual amplifier	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 105°C	2.7 to 5	2.7 to 5	D	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Texas Instruments										
LMV358IDR	LMV358MX	Low-voltage dual amplifier	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 105°C	2.7 to 5	2.7 to 5	D	
LMV393IDGKR	LMV393MMX	Low-voltage dual comparator	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 105°C	2.7 to 5	2.7 to 5	D	
LMV393IDR	LMV393MX	Low-voltage dual comparator	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 105°C	2.7 to 5	2.7 to 5	D	
LP339D	LP339M	Low-power quad comparator	SOIC-14	SOIC-14	0°C to 70°C	0°C to 70°C	–	–	D	
LP339N	LP339N	Low-power quad comparator	MDIP-14	MDIP-14	0°C to 70°C	0°C to 70°C	–	–	D	
MAX232N	DS14C232CN	Low-power 5V powered TIA/EIA-232 dual driver/receiver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	S	
MAX232N	DS14C232CM	Low-power 5V powered TIA/EIA-232 dual driver/receiver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	S	
MC1458D	LM1458M	Dual operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
MC1458D	LM833M	Dual operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	36	36	D	
MC1458P	LM1458N	Dual operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
MC1458P	LM833N	Dual operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	36	36	D	
MC1458PS	LM833MM	Dual operational amplifier	MSOP-8	MSOP-8	0°C to 70°C	0°C to 70°C	36	36	S	
MC3403D	LM348M	Quad operational amplifier	SOIC-14	SOIC-14	0°C to 70°C	0°C to 70°C	–	–	D	
MC3403N	LM348N	Quad operational amplifier	MDIP-14	MDIP-14	0°C to 70°C	0°C to 70°C	–	–	D	
MC3486D	DS3486M	Quad differential line receiver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	D	
MC3486D	DS34C86TM	Quad differential line receiver	SOIC-16	SOIC-16	0°C to 70°C	-40°C to 85°C	5	5	D	
MC3486N	DS3486N	Quad differential line receiver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	D	
MC3486N	DS34C86TN	Quad differential line receiver	MDIP-16	MDIP-16	0°C to 70°C	-40°C to 85°C	5	5	D	
MC3486NS	DS34C86TM	Quad differential line receiver	SOIC-16	SOIC-16	0°C to 70°C	-40°C to 85°C	5	5	F	
MC3487D	DS3487M	Quad TRI-STATE line driver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	S	National is faster
MC3487D	DS34C87TM	Quad differential line driver	SOIC-16	SOIC-16	0°C to 70°C	-40°C to 85°C	5	5	D	
MC3487N	DS3487N	Quad TRI-STATE line driver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	S	National is faster
MC3487NS	DS34C87TM	Quad differential line driver	SOIC-16	SOIC-16	0°C to 70°C	-40°C to 85°C	5	5	F	
MC3487NS	DS34C87TN	Quad differential line driver	MDIP-16	MDIP-16	0°C to 70°C	-40°C to 85°C	5	5	D	

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement
(May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package
(See datasheets for differences.)

N = Similar function, different package and/or pinout
(See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Texas Instruments										
MC79L05ACD	LM79L05ACM	Negative regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 70°C	-5	-5	S	
MC79L05ACLP	LM79L05ACZ	Negative regulator	TO-92	TO-92	0°C to 125°C	0°C to 70°C	-5	-5	S	
MC79L12ACD	LM79L12ACM	Negative regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 70°C	-12	-12	S	
MC79L12ACLP	LM79L12ACZ	Negative regulator	TO-92	TO-92	0°C to 125°C	0°C to 70°C	-12	-12	S	
MC79L12CLP	LM79L12ACZ	Negative regulator	TO-92	TO-92	0°C to 125°C	0°C to 70°C	-12	-12	S	National has better accuracy
MC79L15ACD	LM79L15ACM	Negative regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 70°C	-15	-15	S	
MC79L15CD	LM79L15ACZ	Negative regulator	TO-92	TO-92	0°C to 125°C	0°C to 70°C	-15	-15	S	National has better accuracy
NE555D	LM555CM	Single precision timing circuit	MSOP-8	MSOP-8	0°C to 70°C	0°C to 70°C	–	–	D	
NE555P	LM555CN	Single precision timing circuit	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
OPA2137P	LF442CN	BI-FET dual operational amplifier	MDIP-8	MDIP-8	-40°C to 125°C	0°C to 70°C	±3 to ±18	±5 to ±15	S	
OPA2137PA	LF442ACN	BI-FET dual operational amplifier	MDIP-8	MDIP-8	-40°C to 125°C	-55°C to 125°C	±3 to ±18	±5 to ±20	S	
OPA4137P	LF444CN	BI-FET quad operational amplifier	MDIP-14	MDIP-14	-40°C to 125°C	0°C to 70°C	±3 to ±18	±5 to ±15	S	
OPA4137PA	LF444ACN	BI-FET quad operational amplifier	MDIP-14	MDIP-14	-40°C to 125°C	-55°C to 125°C	±3 to ±18	±5 to ±20	S	
OPA602AP	LF411CN	Precision JFET operational amplifier	MDIP-8	MDIP-8	-25°C to 85°C	0°C to 70°C	±15	±15	S	Different temperature range
OPA602BP	LF411ACN	Precision JFET operational amplifier	MDIP-8	MDIP-8	-25°C to 85°C	0°C to 70°C	±15	±20	S	Different temperature range
RC4558D	LM1458M	Dual operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
RC4558P	LM1458N	Dual operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
REG1117	LM1117MPX-Adj	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	Adj.	Adj.	S	
REG1117-2.85	LM1117MPX-2.85	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	2.85	2.85	S	
REG1117-2.85	LM1117MPX-Adj	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	
REG1117-2.85	LM1117MPX-2.85	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	2.85	2.85	D	
REG1117-2.85	LM1117MPX-3.3	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
REG1117-2.85	LM1117MPX-5.0	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	5	5	D	
REG1117-3.3	LM1117MPX-3.3	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	3.3	3.3	S	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Texas Instruments										
REG1117-5	LM1117MPX-5.0	800 mA low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	5	5	S	
REG1117A	LMS8117AMPX-Adj	1A low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	Adj.	Adj.	S	
REG1117A-1.8	LMS8117AMPX-1.8	1A low-dropout regulator	SOT223-4	SOT223-4	0°C to 125°C	0°C to 125°C	1.8	1.8	S	
REG1117F-3.3	LM1117SX-3.3	800 mA low-dropout regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	
REG710EA-3.3V	LM3354MM-1.8	Switched capacitor boost regulator	MSOP-8	MSOP-10	-40°C to 85°C	-40°C to 85°C	1.8 to 5.5 V _{IN}	2.5 to 5.5 V _{IN} , 4.1 and 5 V _{OUT}	F	
REG711EA-3.3V	LM3354MM-1.8	Switched capacitor boost regulator	MSOP-8	MSOP-10	-40°C to 85°C	-40°C to 85°C	1.8 to 5.5 V _{IN}	2.5 to 5.5 V _{IN} , 4.1 and 5 V _{OUT}	F	
REG711EA-5	LM2750LD-Adj	Switched capacitor boost regulator	MSOP-8	LLP-10	-40°C to 85°C	-40°C to 85°C	1.8 to 5.5 V _{IN}	2.7 to 5.6 V _{IN}	F	
SG3524D	LM3524DM	Regulating pulse width modulator	SOIC-16	SOIC-16	0°C to 70°C	0°C to 125°C	8 to 40	8 to 40	D	
SG3524N	LM3524DN	Regulating pulse width modulator	MDIP-16	MDIP-16	0°C to 70°C	0°C to 125°C	8 to 40	8 to 40	D	
SN105125DBV	LMS5258MF-1.2	150 mA low-dropout regulator with power good	SOT23-5	SOT23-5	0°C to 70°C	-40°C to 125°C	1.2	1.2	D	National offers wider operating temperature range
SN65176BD	DS75176BTM	Multipoint RS-485/RS-422 transceiver	SOIC-8	SOIC-8	-40°C to 105°C	-40°C to 85°C	–	–	S	
SN65176BD	DS36277TM	Dominant mode multipoint transceiver	SOIC-8	SOIC-8	-40°C to 105°C	-40°C to 85°C	–	–	S	
SN65176BD	DS3695ATM	Multipoint RS-485/RS-422 transceiver	SOIC-8	SOIC-8	-40°C to 105°C	-40°C to 85°C	–	–	S	
SN65176BD	DS89C21TM	Differential line driver/receiver	SOIC-16	SOIC-16	-40°C to 105°C	-40°C to 85°C	5	5	S	
SN65176BP	DS75176BTN	Dominant mode multipoint transceiver	MDIP-8	MDIP-8	-40°C to 105°C	-40°C to 85°C	–	–	S	
SN65176BP	DS36277TN	Dominant mode multipoint transceiver	MDIP-8	MDIP-8	-40°C to 105°C	-40°C to 85°C	–	–	S	
SN65176BP	DS3695TN	Multipoint RS-485/RS-422 transceiver	MDIP-8	MDIP-8	-40°C to 105°C	-40°C to 85°C	–	–	S	
SN65ALS180D	DS36C200IMA	Differential driver and receiver pairs	SOIC-14	SOIC-14	-40°C to 85°C	-40°C to 85°C	7	5.5	S	

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement (May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package (See datasheets for differences.)

N = Similar function, different package and/or pinout (See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Texas Instruments										
SN65ALS180DR	DS36C200IMA	Differential driver and receiver pairs	SOIC-14	SOIC-14	-40°C to 85°C	-40°C to 85°C	7	5.5	S	
SN65C1167N	DS8922N	Differential driver and receiver pairs	MDIP-16	MDIP-16	-40°C to 85°C	0°C to 70°C	–	–	N	
SN65C1167N	DS8922AN	Dual differential driver and receiver	MDIP-16	MDIP-16	-40°C to 85°C	0°C to 70°C	–	–	N	
SN65C1167NS	DS8922M	Dual differential driver and receiver	SOIC-16	SOIC-16	-40°C to 85°C	0°C to 70°C	–	–	N	
SN65C1167NS	DS8922AM	Dual differential driver and receiver	SOIC-16	SOIC-16	-40°C to 85°C	0°C to 70°C	–	–	N	
SN65LBC176D	DS36C279TM	Low-power RS-485 transceiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
SN65LV1021DB	DS92LV1021 TMSA	10:1 LVDS serializer	SSOP-28	SSOP-28	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
SN65LV1023DB	DS92LV1023 TMSA	10:1 LVDS serializer	SSOP-28	SSOP-28	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
SN65LV1024DB	DS92LV1224 TMSA	1:10 LVDS deserializer	SSOP-28	SSOP-28	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
SN65LV1212DB	DS92LV1212 AMSA	1:10 LVDS deserializer	SSOP-28	SSOP-28	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
SN65LVDM31D	DS90LV031ATM	Quad LVDS differential line driver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
SN65LVDM31D	DS90LV031BTM	Quad LVDS differential line driver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
SN65LVDS047D	DS90LV047ATM	Quad LVDS differential line driver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
SN65LVDS047 PW	DS90LV047 ATMTC	Quad LVDS differential line driver	TSSOP-16	TSSOP-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
SN65LVDS048 AD	DS90LV048ATM	Quad LVDS differential line receiver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
SN65LVDS048 APW	DS90LV048 ATMTC	Quad LVDS differential line receiver	TSSOP-16	TSSOP-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
SN65LVDS049 PW	DS90LV049TMT	LVDS dual line driver/receiver	TSSOP-16	TSSOP-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
SN65LVDS180D	DS90LV019TM	3.3V/5V LVDS driver/receiver	SOIC-14	SOIC-14	-40°C to 85°C	-40°C to 85°C	3.3	3.3 or 5	S	
SN65LVDS180 PW	DS90LV019TMT	3.3V/5V LVDS driver/receiver	TSSOP-14	TSSOP-14	-40°C to 85°C	-40°C to 85°C	3.3	3.3 or 5	S	
SN65LVDS1D	DS90LV017M	Single differential line driver	SOIC-8	SOIC-8	-40°C to 85°C	0°C to 70°C	3.3	3.3	S	
SN65LVDS1D	DS90LV017ATM	Single differential line driver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Texas Instruments										
SN65LVDS1DBV	DS90LV011ATMF	Single LVDS differential line driver	SOT23-5	SOT23-5	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
SN65LVDS2D	DS90LV018ATM	Single differential line receiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
SN65LVDS2DBV	DS90LV012ATMF	Single LVDS differential line driver	SOT23-5	SOT23-5	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
SN65LVDS31D	DS90LV031ATM	Quad LVDS differential line driver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
SN65LVDS31D	DS90LV031BTM	Quad LVDS differential line driver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
SN65LVDS31NS	DS90LV031ATM	Quad LVDS differential line driver	MSOP-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	F	
SN65LVDS31NS	DS90LV031BTM	Quad LVDS differential line driver	MSOP-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	F	
SN65LVDS31PW	DS90LV031ATMTC	Quad LVDS differential line driver	TSSOP-16	TSSOP-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
SN65LVDS32D	DS90LV032ATM	Quad LVDS differential line receiver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
SN65LVDS32NS	DS90LV032ATM	Quad LVDS differential line receiver	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	F	
SN65LVDS32PW	DS90LV032ATMTC	Quad LVDS differential line receiver	TSSOP-16	TSSOP-16	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
SN65LVDS93DGG	DS90CR285MTD	28:4 LVDS serializer	TSSOP-56	TSSOP-56	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
SN65LVDS94DGG	DS90CR286MTD	4:28 LVDS deserializer	TSSOP-56	TSSOP-56	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
SN65LVDS95DGG	DS90CR215MTD	21:3 LVDS serializer	TSSOP-48	TSSOP-48	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
SN65LVDS9637BD	DS90LV028ATMF	Dual LVDS differential receiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
SN65LVDS9638D	DS90LV027M	Dual LVDS differential driver	SOIC-8	SOIC-8	-40°C to 85°C	0°C to 70°C	3.3	3.3	S	
SN65LVDS9638D	DS90LV027ATM	Dual LVDS differential driver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
SN65LVDS9638DGG	DS90LV027M	Dual LVDS differential driver	VSSOP-8	SOIC-8	-40°C to 85°C	0°C to 70°C	3.3	3.3	F	
SN65LVDS9638DGG	DS90LV027ATM	Dual LVDS differential driver	VSSOP-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	3.3	3.3	F	
SN65LVDS9638DGN	DS90LV027M	Dual LVDS differential driver	HTSSOP-8	SOIC-8	-40°C to 85°C	0°C to 70°C	3.3	3.3	F	

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement
(May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package
(See datasheets for differences.)

N = Similar function, different package and/or pinout
(See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Texas Instruments										
SN65LVDS9638DGN	DS90LV027ATM	Dual LVDS differential driver	HTSSOP-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	3.3	3.3	F	
SN65LVDS96DGG	DS90CR216MTD	3:21 LVDS deserializer	TSSOP-48	TSSOP-48	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
SN65LVDT2D	DS90LV018ATM	Single differential line receiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
SN65LVDT2DBV	DS90LT012ATMF	Single LVDS receiver	SOT23-5	SOT23-5	-40°C to 85°C	-40°C to 85°C	3.3	3.3	D	
SN65LVDT9637BD	DS90LV028ATMF	Dual LVDS differential receiver	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	3.3	3.3	S	
SN75157D	DS9637ACM	Dual differential line receiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	F	
SN75157P	DS9637ACN	Dual differential line receiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	F	
SN75173N	DS96173CN	Quad RS-485 receiver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	S	
SN75174N	DS96174CN	Quad RS-485 driver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	S	
SN75175N	DS96175CN	Quad RS-485 receiver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	S	
SN75176BD	DS36C278N	Low-power multipoint EIA-RS-485 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	National offers an industrial temperature range -40°C to 85°C
SN75176BD	DS75176BM	Multipoint RS-485/RS-422 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
SN75176BD	DS36276M	FAILSAFE multipoint transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
SN75176BD	DS3695AM	Multipoint RS-485/RS-422 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
SN75176BD	DS3696AM	Multipoint RS-485/RS-422 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	F	
SN75176BP	DS36C278M	Low-power multipoint EIA-RS-485 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	National offers an industrial temperature range -40°C to 85°C
SN75176BP	DS75176BN	Multipoint RS-485/RS-422 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
SN75176BP	DS3695N	Multipoint RS-485/RS-422 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
SN75176BP	DS3696N	Multipoint RS-485/RS-422 transceiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	F	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Texas Instruments										
SN75177BD	DS8921N	Differential line driver and receiver pair	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	N	National offers an industrial temperature range -40°C to 85°C
SN75177BP	DS8921M	Differential line driver and receiver pair	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	N	National offers an industrial temperature range -40°C to 85°C
SN75178BD	DS8921N	Differential line driver and receiver pair	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	N	National offers an industrial temperature range -40°C to 85°C
SN75178BP	DS8921M	Differential line driver and receiver pair	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	N	National offers an industrial temperature range -40°C to 85°C
SN75179BD	DS8921N	Differential line driver and receiver pair	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	National offers an industrial temperature range -40°C to 85°C
SN75179BP	DS8921M	Differential line driver and receiver pair	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	National offers an industrial temperature range -40°C to 85°C
SN75185DW	DS14185WM	EIA/TIA-232, 3 driver x 5 receiver	SOIC-20	SOIC-20	0°C to 70°C	0°C to 70°C	–	–	D	
SN75188D	DS1488M	RS-232 quad line driver	SOIC-14	SOIC-14	0°C to 70°C	0°C to 75°C	–	–	D	
SN75188N	DS1488N	RS-232 quad line driver	MDIP-14	MDIP-14	0°C to 70°C	0°C to 75°C	–	–	D	
SN75189AD	DS1489AM	RS-232 quad line receiver	SOIC-14	SOIC-14	0°C to 70°C	0°C to 75°C	–	–	D	
SN75189AN	DS1489AN	RS-232 quad line receiver	MDIP-14	MDIP-14	0°C to 70°C	0°C to 75°C	–	–	D	
SN75189D	DS1489M	RS-232 quad line receiver	SOIC-14	SOIC-14	0°C to 70°C	0°C to 75°C	–	–	D	
SN75189N	DS1489N	RS-232 quad line receiver	MDIP-14	MDIP-14	0°C to 70°C	0°C to 75°C	–	–	D	
SN75196DW	DS14196WM	RS-232 transceiver, 5 driver 3 receiver	SOIC-20	SOIC-20	0°C to 70°C	0°C to 70°C	–	–	D	
SN75437	DS3658N	Quad peripheral driver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	5.25	5.25	D	
SN75437	DS3668N	Quad peripheral driver	MDIP-16	MDIP-16	0°C to 70°C	-40°C to 125°C	5.25	5.25	S	
SN75ALS1177N	DS8922N	Dual differential driver and receiver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	N	
SN75ALS1177N	DS8922AN	Dual differential driver and receiver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	N	
SN75ALS1177NS	DS8922M	Dual differential driver and receiver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	N	
SN75ALS1177NS	DS8922AM	Dual differential driver and receiver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	N	
SN75ALS176AD	LMS75ALS176 AM	5V RS-485/RS-422 differential bus transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Texas Instruments										
SN75ALS176D	LMS75ALS176 AM	5V RS-485/RS-422 differential bus transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
SN75ALS194D	DS3487M	Quad TRI-STATE line driver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	S	National is faster
SN75ALS194N	DS3487N	Quad TRI-STATE line driver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	S	National is faster
SN75C1167N	DS8922N	Dual differential driver and receiver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	N	
SN75C1167N	DS8922AN	Dual differential driver and receiver	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	N	
SN75C1167NS	DS8922M	Dual differential driver and receiver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	N	
SN75C1167NS	DS8922AM	Dual differential driver and receiver	SOIC-16	SOIC-16	0°C to 70°C	0°C to 70°C	–	–	N	
SN75C188D	DS14C88M	Quad CMOS line driver	SOIC-14	SOIC-14	0°C to 70°C	0°C to 75°C	–	–	S	
SN75C188N	DS14C88N	Quad CMOS line driver	MDIP-14	MDIP-14	0°C to 70°C	0°C to 75°C	–	–	S	
SN75C189D	DS14C89AM	Quad CMOS receiver	SOIC-14	SOIC-14	0°C to 70°C	0°C to 75°C	–	–	S	
SN75C189N	DS14C89AN	Quad CMOS receiver	MDIP-14	MDIP-14	0°C to 70°C	0°C to 75°C	–	–	S	
SN75LBC176D	LMS75LBC176M	5V RS-485 differential bus transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
SN75LBC176D	DS36C279M	Low-power RS-485 transceiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
SN75LP1185DW	DS14185WM	RS-232 transceiver, 3 driver 5 receiver	SOIC-20	SOIC-20	0°C to 70°C	0°C to 70°C	–	–	S	
SN75LP196DW	DS14196WM	RS-232 transceiver, 3 driver 5 receiver	SOIC-20	SOIC-20	0°C to 70°C	0°C to 70°C	–	–	S	
SN75LVDS82 DGG	DS90CF364MTD	3:21 LVDS deserializer	TSSOP-48	TSSOP-48	0°C to 70°C	-40°C to 85°C	3.3	3.3	S	
SN75LVDS83 DGG	DS90C383MTD	28:4 LVDS serializer	TSSOP-56	TSSOP-56	0°C to 70°C	-40°C to 85°C	3.3	3.3	S	
SN75LVDS84 DGG	DS90CF363MTD	21:3 LVDS serializer	TSSOP-48	TSSOP-48	0°C to 70°C	-40°C to 85°C	3.3	3.3	S	
SN75LVDS86A DGG	DS90CF364MTD	3:21 LVDS deserializer	TSSOP-48	TSSOP-48	0°C to 70°C	-40°C to 85°C	3.3	3.3	S	
THS3110ID	LM6181AIM	100 MHz current feedback operational amplifier	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Texas Instruments										
THS3110IDGN	LM6181AIN	100 MHz current feedback operational amplifier	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
TL062ACP	LF442ACN	BI-FET dual operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	±3 to ±18	±5 to ±20	S	
TL062AIP	LF442ACN	BI-FET dual operational amplifier	MDIP-8	MDIP-8	-40°C to 85°C	-55°C to 125°C	±3 to ±18	±5 to ±20	S	
TL062CP	LF442CN	BI-FET dual operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	±3 to ±18	±5 to ±15	S	
TL064ACP	LF444ACN	BI-FET quad operational amplifier	MDIP-14	MDIP-14	0°C to 70°C	0°C to 70°C	±3 to ±18	±5 to ±20	S	
TL064AIP	LF444ACN	BI-FET quad operational amplifier	MDIP-14	MDIP-14	-40°C to 85°C	-55°C to 125°C	±3 to ±18	±5 to ±20	S	
TL064CP	LF444CN	BI-FET quad operational amplifier	MDIP-14	MDIP-14	0°C to 70°C	0°C to 70°C	±3 to ±18	±5 to ±15	S	
TL071ACD	LF356M	JFET input operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
TL071ACDR	LF356MX	JFET input operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
TL071ACP	LF356N	JFET input operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
TL071BCD	LF356M	JFET input operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
TL071BCDR	LF356MX	JFET input operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
TL071BCP	LF356N	JFET input operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
TL071CD	LF356M	JFET input operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
TL071CDR	LF356MX	JFET input operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
TL071CP	LF356N	JFET input operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
TL071CPSR	LF356MX	JFET input operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
TL071ID	LF356M	JFET input operational amplifier	SOIC-8	SOIC-8	-40°C to 85°C	0°C to 70°C	–	–	S	
TL071IDR	LF356MX	JFET input operational amplifier	SOIC-8	SOIC-8	-40°C to 85°C	0°C to 70°C	–	–	S	
TL071IP	LF356N	JFET input operational amplifier	MDIP-8	MDIP-8	-40°C to 85°C	0°C to 70°C	–	–	S	
TL082ACD	TL082CM	Wide bandwidth dual JFET operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
TL082ACP	TL082CP	Wide bandwidth dual JFET operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
TL082BCD	TL082CM	Wide bandwidth dual JFET operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Texas Instruments										
TL082BCP	TL082CP	Wide bandwidth dual JFET operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
TL082CD	TL082CM	Wide bandwidth dual JFET operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	S	
TL082CP	TL082CP	Wide bandwidth dual JFET operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	S	
TL082CPW	TL082CM	Wide bandwidth dual JFET operational amplifier	TSSOP-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	F	
TL16C550CFN	PC16550DV	Single channel UART	PLCC-44	PLCC-44	0°C to 70°C	0°C to 70°C	5	5	D	
TL16C550CN	PC16550DN	Single channel UART	MDIP-40	MDIP-40	0°C to 70°C	0°C to 70°C	5	5	D	
TL16C550IFN	PC16550DV	Single channel UART	PLCC-44	PLCC-44	-40°C to 85°C	0°C to 70°C	5	5	S	
TL16C552AFN	PC16552DV	Dual channel UART	PLCC-68	PLCC-44	0°C to 70°C	0°C to 70°C	5	5	N	
TL16C552AIFN	PC16552DV	Dual channel UART	PLCC-68	PLCC-44	-40°C to 85°C	0°C to 70°C	5	5	N	
TL16C552FN	PC16552DV	Dual channel UART	PLCC-68	PLCC-44	0°C to 70°C	0°C to 70°C	5	5	N	
TL331DBV	LM397MF	Single comparator	SOT23-5	SOT23-5	-40°C to 85°C	-40°C to 85°C	–	–	D	
TL331IDBVR	LM397MF	Single comparator	SOT23-5	SOT23-5	-40°C to 125°C	-40°C to 85°C	–	–	S	
TL431ACD	LM431ACM	Programmable shunt regulator	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
TL431ACD	LM431BCM	Programmable shunt regulator	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2.5	2.5	D	
TL431ACDR	LM431CCM	Programmable shunt regulator	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2.5 to 36	2.5 to 36	D	National has better accuracy
TL431ACDR	LM431BCM	Programmable shunt regulator	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2.5 to 36	2.5 to 36	D	
TL431ACLPR	LM431BCZ	Programmable shunt regulator	TO-92	TO-92	0°C to 70°C	0°C to 70°C	2.5	2.5	D	
TL431ACLPR	LM431CCZ	Programmable shunt regulator	TO-92	TO-92	0°C to 70°C	0°C to 70°C	2.5 to 36	2.5 to 36	D	National has better accuracy
TL431ACLPR	LM431BCZ	Programmable shunt regulator	TO-92	TO-92	0°C to 70°C	0°C to 70°C	2.5 to 36	2.5 to 36	D	
TL431AID	LM431AIM	Programmable shunt regulator	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	D	
TL431AIDR	LM431CIM	Programmable shunt regulator	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2.5 to 36	2.5 to 36	D	National has better accuracy
TL431AIDR	LM431BIM	Programmable shunt regulator	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2.5 to 36	2.5 to 36	D	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Texas Instruments										
TL431AILP	LM431BIZ	Programmable shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	2.5 to 36	2.5 to 36	D	
TL431AILPR	LM431CIZ	Programmable shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	2.5 to 36	2.5 to 36	D	National has better accuracy
TL431AILPR	LM431BIZ	Programmable shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	2.5 to 36	2.5 to 36	D	
TL431CD	LM431ACM	Programmable shunt regulator	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2.5	2.5	D	
TL431CDBVR	LM431CM3	Programmable shunt regulator	SOT23-5	SOT23-5	0°C to 70°C	0°C to 70°C	–	–	D	
TL431CDR	LM431ACM	Programmable shunt regulator	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2.5 to 36	2.5 to 36	D	
TL431CLP	LM431ACZ	Programmable shunt regulator	T0-92	T0-92	0°C to 70°C	0°C to 70°C	2.5	2.5	D	
TL431CLPR	LM431ACZ	Programmable shunt regulator	T0-92	T0-92	0°C to 70°C	0°C to 70°C	2.5 to 36	2.5 to 36	D	
TL431ID	LM431AIM	Programmable shunt regulator	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2.5	2.5	D	
TL431IDR	LM431AIM	Programmable shunt regulator	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2.5 to 36	2.5 to 36	D	
TL431ILP	LM431ACZ	Programmable shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	2.5	2.5	D	
TL431ILP	LM431AIZ	Programmable shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	2.5	2.5	D	
TL431ILPR	LM431AIZ	Programmable shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	2.5 to 36	2.5 to 36	D	
TL494CH	LM78S40CN	Universal switching regulator subsystem	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	N	
TL494IN	LM78S40N	Universal switching regulator subsystem	MDIP-16	MDIP-16	-40°C to 85°C	-40°C to 125°C	–	–	N	
TL750L05CKC	LM2930T-5.0	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	5	5	D	National wider temperature range
TL750L05CKTER	LM2930S-5.0	3-terminal positive regulator	T0263-3	T0263-3	0°C to 125°C	-40°C to 125°C	5	5	D	National wider temperature range
TL750L05CLP	LP2950CZ-5.0	Micropower fixed voltage regulator	T0-92	T0-92	0°C to 125°C	-40°C to 125°C	5	5	S	
TL750L05KTER	LP2950CDTX-5.0	Micropower fixed voltage regulator	Power FLEX	T0252-3	0°C to 125°C	-40°C to 125°C	5	5	F	
TL780-05CKC	LM340AT-5.0	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	5	5	D	
TL780-05CKTER	LM340AS-5.0	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	5	5	D	
TL780-05KCS	LM340AT-5.0	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	5	5	S	Slightly different package
TL780-12CKC	LM340T-12	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	12	12	D	

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Texas Instruments										
TL780-15CKC	LM340T-15	3-terminal positive regulator	T0263-3	T0220-3	0°C to 125°C	0°C to 125°C	15	15	F	
TL7812CKCS	LM340T-12	3-terminal positive regulator	T0263-3	T0220-3	0°C to 125°C	0°C to 125°C	5	5	S	Slightly different package, National has better line regulator and load regulator
TL7815CKC	LM340T-15	3-terminal positive regulator	T0263-3	T0220-3	0°C to 125°C	0°C to 125°C	15	15	F	National has better line regulator and load regulator
TL7815CKCS	LM340T-15	3-terminal positive regulator	T0263-3	T0220-3	0°C to 125°C	0°C to 125°C	15	15	S	Slightly different package, National has better line regulator and load regulator
TLC0820ACDW	ADC0820CCWM	High-speed 8-bit A/D converter with track-and-hold	WSOIC-20	WSOIC-20	0°C to 70°C	0°C to 70°C	–	–	D	
TLC0820ACFN	ADC0820BCV	High-speed 8-bit A/D converter with track-and-hold	PLCC-20	PLCC-20	0°C to 70°C	0°C to 70°C	–	–	D	Lower total unadjusted error
TLC0820ACN	ADC0820CCN	High-speed 8-bit A/D converter with track-and-hold	MDIP-20	MDIP-20	0°C to 70°C	0°C to 70°C	–	–	D	
TLC0820AIDW	ADC0820CIWM	High-speed 8-bit A/D converter with track-and-hold	WSOIC-20	WSOIC-20	-40°C to 85°C	-40°C to 85°C	–	–	D	
TLC0820AIDW	ADC08061CIWM	500 ns A/D converter	WSOIC-20	WSOIC-20	-40°C to 85°C	-40°C to 85°C	5	5	D	
TLC0831CD	ADC0831CCWM	8-bit serial I/O A/D converter with multiplexer option	SOIC-8	WSOIC-14	0°C to 70°C	0°C to 70°C	–	–	F	
TLC0831CP	ADC0831CCN	8-bit serial I/O A/D converter with multiplexer option	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
TLC0831ID	ADC0831CCWM	8-bit serial I/O A/D converter with multiplexer option	SOIC-8	WSOIC-14	-40°C to 85°C	0°C to 70°C	–	–	F	
TLC0831IP	ADC0831CCN	8-bit serial I/O A/D converter with multiplexer option	MDIP-8	MDIP-8	-40°C to 85°C	0°C to 70°C	–	–	S	
TLC0832CD	ADC0832CCWM	8-bit serial I/O A/D converter with multiplexer option	SOIC-8	WSOIC-14	0°C to 70°C	0°C to 70°C	–	–	F	
TLC0832CP	ADC08832CCN	8-bit serial I/O A/D converter with multiplexer option	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
TLC0832ID	ADC08832CIWM	8-bit serial I/O A/D converter with multiplexer option	SOIC-8	WSOIC-14	-40°C to 85°C	-40°C to 85°C	–	–	F	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Texas Instruments										
TLC0832IP	ADC08832CCN	8-bit serial I/O A/D converter with multiplexer option	MDIP-8	MDIP-8	-40°C to 85°C	0°C to 70°C	–	–	S	
TLC0834CD	ADC0834CCWM	8-bit serial I/O A/D converter with multiplexer option	SOIC-14	WSOIC-14	0°C to 70°C	0°C to 70°C	–	–	F	
TLC0834CN	ADC0834CCN	8-bit serial I/O A/D converter with multiplexer option	MDIP-14	MDIP-14	0°C to 70°C	0°C to 70°C	–	–	D	
TLC0834CPW	ADC0834CCMW	8-bit serial I/O A/D converter with multiplexer option	SOIC-16	WSOIC-14	0°C to 70°C	0°C to 70°C	–	–	F	
TLC0834ID	ADC0834CIWM	8-bit serial I/O A/D converter with multiplexer option	SOIC-14	WSOIC-14	-40°C to 85°C	0°C to 70°C	–	–	F	
TLC0834IN	ADC0834CCN	8-bit serial I/O A/D converter with multiplexer option	MDIP-14	MDIP-14	-40°C to 85°C	0°C to 70°C	–	–	S	
TLC0834IPW	ADC0834CCMW	8-bit serial I/O A/D converter with multiplexer option	SOIC-16	WSOIC-14	-40°C to 85°C	0°C to 70°C	–	–	F	
TLC0834QN	ADC0834CCN	8-bit serial I/O A/D converter with multiplexer option	MDIP-14	MDIP-14	-40°C to 125°C	0°C to 70°C	–	–	S	Supplier part is obsolete
TLC0838CDW	ADC0838CCWM	8-bit serial I/O A/D converter with multiplexer option	WSOIC-20	WSOIC-20	0°C to 70°C	0°C to 70°C	–	–	D	
TLC0838CN	ADC0838CCN	8-bit serial I/O A/D converter with multiplexer option	MDIP-20	MDIP-20	0°C to 70°C	0°C to 70°C	–	–	D	
TLC0838CPW	ADC0838CCWM	8-bit serial I/O A/D converter with multiplexer option	SOIC-20	WSOIC-20	0°C to 70°C	0°C to 70°C	–	–	F	
TLC0838IDW	ADC0838CIWM	8-bit serial I/O A/D converter with multiplexer option	WSOIC-20	WSOIC-20	-40°C to 85°C	-40°C to 85°C	–	–	D	
TLC0838IN	ADC0838CCN	8-bit serial I/O A/D converter with multiplexer option	MDIP-20	MDIP-20	-40°C to 85°C	0°C to 70°C	–	–	S	
TLC0838IPW	ADC0838CIWM	8-bit serial I/O A/D converter with multiplexer option	SOIC-20	WSOIC-20	-40°C to 85°C	-40°C to 85°C	–	–	F	
TLC1518IDW	ADC10061CIWM	10-bit 600 ns A/D converter	WSOIC-20	WSOIC-20	-40°C to 85°C	-40°C to 85°C	5	5	N	
TLC2252ID	LMC6042AIM	Low-power CMOS RRO operational amplifier (dual)	SOIC-8	SOIC-8	-40°C to 125°C	-40°C to 85°C	–	–	S	
TLC2252ID	LMC6572AIM	Low-power CMOS RRO operational amplifier (dual)	SOIC-8	SOIC-8	-40°C to 125°C	-40°C to 85°C	–	–	S	

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Texas Instruments										
TLC2252IN	LMC6042AIN	Low-power CMOS RRO operational amplifier (dual)	MDIP-8	MDIP-8	-40°C to 125°C	-40°C to 85°C	–	–	S	
TLC2252IN	LMC6572AIN	Low-power CMOS RRO operational amplifier (dual)	MDIP-8	MDIP-8	-40°C to 125°C	-40°C to 85°C	–	–	S	
TLC2254ID	LMC6044AIM	Low-power CMOS RRO operational amplifier (quad)	SOIC-14	SOIC-14	-40°C to 125°C	-40°C to 85°C	–	–	S	
TLC2254ID	LMC6574AIM	Low-power CMOS RRO operational amplifier (quad)	SOIC-14	SOIC-14	-40°C to 125°C	-40°C to 85°C	–	–	S	
TLC2254IN	LMC6574AIN	Low-power CMOS RRO operational amplifier (quad)	MDIP-14	MDIP-14	-40°C to 125°C	-40°C to 85°C	–	–	S	
TLC252ACD	LPC662IM	Low-power CMOS dual operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	-40°C to 85°C	–	–	S	
TLC252ACD	LPC662AIM	Low-power CMOS dual operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	-40°C to 85°C	–	–	S	
TLC252BCD	LPC662AIM	Low-power CMOS dual operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	-40°C to 85°C	–	–	S	
TLC252CD	LPC662IM	Low-power CMOS dual operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	-40°C to 85°C	–	–	S	
TLC252CD	LPC662AIM	Low-power CMOS dual operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	-40°C to 85°C	–	–	S	
TLC25M2ACD	LMC6035IM	CMOS dual operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	-40°C to 85°C	–	–	S	
TLC25M2ACP	LMC6035IM	CMOS dual operational amplifier	MDIP-8	SOIC-8	0°C to 70°C	-40°C to 85°C	–	–	F	
TLC25M2CD	LMC6035IM	CMOS dual operational amplifier	SOIC-8	SOIC-8	0°C to 70°C	-40°C to 85°C	–	–	S	
TLC25M2CP	LMC6035IM	CMOS dual operational amplifier	MDIP-8	SOIC-8	0°C to 70°C	-40°C to 85°C	–	–	F	
TLC272AID	LMC6482M	Low-power CMOS RRIO operational amplifier (dual)	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
TLC272AIP	LMC6482N	Low-power CMOS RRIO operational amplifier (dual)	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
TLC274AID	LMC6484M	Low-power CMOS RRIO operational amplifier (quad)	SOIC-14	SOIC-14	-40°C to 85°C	-40°C to 85°C	–	–	S	
TLC274AIN	LMC6484N	Low-power CMOS RRIO operational amplifier (quad)	MDIP-14	MDIP-14	-40°C to 85°C	-40°C to 85°C	–	–	S	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Texas Instruments										
TLC548CD	ADC08831IM	8-bit serial I/O A/D converter	SOIC-8	SOIC-8	0°C to 70°C	-40°C to 85°C	3 to 6	4.5 to 6	N	National also offers a WSOIC-14 and MSOP-8 package
TLC548CP	ADC08831IN	8-bit serial I/O A/D converter	MDIP-8	MDIP-8	0°C to 70°C	-40°C to 85°C	3 to 6	4.5 to 6	N	National also offers a WSOIC-14 and MSOP-8 package
TLC548ICD	ADC08831IM	8-bit serial I/O A/D converter	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	3 to 6	4.5 to 6	N	National also offers a WSOIC-14 and MSOP-8 package
TLC548ICP	ADC08831IN	8-bit serial I/O A/D converter	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	3 to 6	4.5 to 6	N	National also offers a WSOIC-14 and MSOP-8 package
TLC549CD	ADC08832IM	8-bit serial I/O A/D converter	SOIC-8	SOIC-8	0°C to 70°C	-40°C to 85°C	3 to 6	4.5 to 6	N	National also offers a WSOIC-14 and MSOP-8 package
TLC549CP	ADC08832IN	8-bit serial I/O A/D converter	MDIP-8	MDIP-8	0°C to 70°C	-40°C to 85°C	3 to 6	4.5 to 6	N	National also offers a WSOIC-14 and MSOP-8 package
TLC549ICD	ADC08832IM	8-bit serial I/O A/D converter	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	3 to 6	4.5 to 6	N	National also offers a WSOIC-14 and MSOP-8 package
TLC549ICP	ADC08832IN	8-bit serial I/O A/D converter	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	3 to 6	4.5 to 6	N	National also offers a WSOIC-14 and MSOP-8 package
TLC5510INSLE	ADC1175CIJM	8-bit, 20 MSPS video A/D converter	SOIC-24	SOIC-24	-20°C to 75°C	-20°C to 75°C	–	–	D	
TLC5510IPW	ADC1175CIMTC	8-bit, 20 MHz, 60 mW A/D converter	TSSOP-24	TSSOP-24	-20°C to 75°C	-20°C to 75°C	5	5	D	
TLC555ID	LMC555CM	Single general purpose CMOS timer	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
TLC555IDR	LMC555MX	Single general purpose CMOS timer	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
TLC555IP	LMC555CN	Single general purpose CMOS timer	MDIP-8	MDIP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
TLC7524CD	DAC0830CN	8-bit microprocessor compatible D/A converter	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	N	
TLV2217-33KC	LP2950CDT-3.3	Micropower fixed voltage regulator	TO220-3	TO252-3	0°C to 125°C	-40°C to 125°C	3.3	3.3	F	
TLV2217-33KTPR	LP2950CDTX-3.3	Micropower fixed voltage regulator	Power FLEX	TO252-3	0°C to 125°C	-40°C to 125°C	3.3	3.3	F	
TLV431ACDBV	LMV431ACM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	0°C to 70°C	0°C to 70°C	1.24	1.24	D	1% accuracy National has higher absolute maximum rating of cathode voltage and continuous cathode current

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Texas Instruments										
TLV431ACDBVT	LMV431ACM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	0°C to 70°C	0°C to 70°C	1.24	1.24	D	1% accuracy National has higher absolute maximum rating of cathode voltage and continuous cathode current
TLV431ACLP	LMV431ACZ	Low-voltage adjustable precision shunt regulator	T0-92	T0-92	0°C to 70°C	0°C to 70°C	1.24	1.24	D	1% accuracy National has higher absolute maximum rating of cathode voltage and continuous cathode current
TLV431AID	LMV431AIM5	Low-voltage adjustable precision shunt regulator	SOIC-8	SOT23-5	-40°C to 85°C	-40°C to 85°C	1.24	1.24	F	1% accuracy National has higher absolute maximum rating of cathode voltage and continuous cathode current
TLV431AIDBV	LMV431AIM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	-40°C to 85°C	-40°C to 85°C	1.24	1.24	D	1% accuracy National has higher absolute maximum rating of cathode voltage and continuous cathode current
TLV431AIDBVR	LMV431AIM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	-40°C to 85°C	-40°C to 85°C	1.24	1.24	D	1% accuracy National has higher absolute maximum rating of cathode voltage and continuous cathode current
TLV431AIDBVT	LMV431IM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	-40°C to 85°C	-40°C to 85°C	1.24	1.24	D	1% accuracy National has higher absolute maximum rating of cathode voltage and continuous cathode current
TLV431AIDR	LMV431AIM5	Low-voltage adjustable precision shunt regulator	SOIC-8	SOT23-5	-40°C to 85°C	-40°C to 85°C	1.24	1.24	F	1% accuracy National has higher absolute maximum rating of cathode voltage and continuous cathode current
TLV431AILP	LMV431AIZ	Low-voltage adjustable precision shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	1.24	1.24	D	1% accuracy National has higher absolute maximum rating of cathode voltage and continuous cathode current
TLV431CDBV	LMV431CM5	Precision shunt regulator	SOT23-5	SOT23-5	0°C to 70°C	0°C to 70°C	1.24	1.24	D	Supplier part is obsolete
TLV431CLP	LMV431CZ	Precision shunt regulator	T0-92	T0-92	0°C to 70°C	0°C to 70°C	1.24	1.24	D	1.5% accuracy National has higher absolute maximum rating of cathode voltage and continuous cathode current

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Texas Instruments										
TLV431IDBV	LMV431IM5	Precision shunt regulator	SOT23-5	SOT23-5	-40°C to 85°C	-40°C to 85°C	1.24	1.24	D	Supplier part is obsolete
TLV431IDBVR	LMV431IM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	-40°C to 85°C	-40°C to 85°C	1.24	1.24	D	1.5% accuracy National has higher absolute maximum rating of cathode voltage and continuous cathode current
TLV431IDBVT	LMV431IM5	Low-voltage adjustable precision shunt regulator	SOT23-5	SOT23-5	-40°C to 85°C	-40°C to 85°C	1.24	1.24	D	1.5% accuracy National has higher absolute maximum rating of cathode voltage and continuous cathode current
TLV431ILP	LMV431IZ	Low-voltage adjustable precision shunt regulator	TO-92	TO-92	-40°C to 85°C	-40°C to 85°C	1.24	1.24	D	1.5% accuracy National has higher absolute maximum rating of cathode voltage and continuous cathode current
TP13054BDW	TP3054WM-X	Serial I/F codec filter (COMBO®)	SOIC-16	WSOIC-16	-40°C to 85°C	-25°C to 125°C	5	5	S	±5% accuracy
TP13054BN	TP3054N	Serial I/F codec filter (COMBO)	MDIP-16	MDIP-16	-40°C to 85°C	-25°C to 125°C	5	5	S	±5% accuracy
TP13057BDW	TP3057WM-X	Serial I/F codec filter (COMBO)	SOIC-16	WSOIC-16	-40°C to 85°C	-25°C to 125°C	5	5	S	±5% accuracy
TP3054BDW	TP3054WM	Serial I/F codec filter (COMBO)	SOIC-16	WSOIC-16	-40°C to 85°C	-25°C to 125°C	5	5	S	±5% accuracy
TP3054BN	TP3054N	Serial I/F codec filter (COMBO)	MDIP-16	MDIP-16	-40°C to 85°C	-25°C to 125°C	5	5	S	±5% accuracy
TP3057BDW	TP3057WM	Serial I/F codec filter (COMBO)	SOIC-16	WSOIC-16	-40°C to 85°C	-25°C to 125°C	5	5	S	±5% accuracy
TP3057BN	TP3057N	Serial I/F codec filter (COMBO)	MDIP-16	MDIP-16	-40°C to 85°C	-25°C to 125°C	5	5	S	±5% accuracy
TP3064BDW	TP3064WM	Serial I/F CMOS codec filter (COMBO) with receive power amplifier	SOIC-20	WSOIC-20	-40°C to 85°C	-25°C to 125°C	5	5	S	±5% accuracy
TP3064BN	TP3064N	Serial I/F CMOS codec filter (COMBO) with receive power amplifier	MDIP-20	MDIP-20	-40°C to 85°C	-25°C to 125°C	5	5	S	±5% accuracy
TP3067BDW	TP3067WM	Serial I/F CMOS codec filter (COMBO) with receive power amplifier	SOIC-20	WSOIC-20	-40°C to 85°C	-25°C to 125°C	5	5	S	±5% accuracy
TP3067BN	TP3067N	Serial I/F CMOS codec filter (COMBO) with receive power amplifier	MDIP-20	MDIP-20	-40°C to 85°C	-25°C to 125°C	5	5	S	±5% accuracy

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement
(May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package
(See datasheets for differences.)

N = Similar function, different package and/or pinout
(See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Texas Instruments										
TPA0202PWP	LM4873MT	2W stereo audio amplifier with input mux	TSSOP-24	TSSOP-20	-40°C to 85°C	-40°C to 85°C	–	–	S	
TPA0202PWP	LM4873MTE	2W stereo audio amplifier with input mux	TSSOP-24	TSSOP - 20	-40°C to 85°C	-40°C to 85°C	3 to 5.5	2 to 5.5	S	LM4873 has lower operating voltage
TPA0212PWP	LM4873MT	2W stereo audio amplifier with input mux	TSSOP-24	TSSOP-20	-40°C to 85°C	-40°C to 85°C	–	–	S	
TPA122D	LM4880M	Stereo audio power amplifier	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
TPA122D	LM4881M	Dual audio headphone amplifier	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
TPA2000D2PWP	LM4663MT	Dual audio headphone amplifier	TSSOP-24	TSSOP-24	-40°C to 85°C	-40°C to 85°C	–	–	S	
TPA301D	LM386M-1	Low-voltage audio amplifier	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	2.5 to 5.5	4 to 12	D	LM386 has wider operating voltage
TPA301D	LM386N-1	Low-voltage audio amplifier	SOIC-8	MDIP-8	0°C to 70°C	0°C to 70°C	2.5 to 5.5	4 to 12	S	LM386 has wider operating voltage
TPA301GN	LM386MM-1	Low-voltage audio amplifier	HTSSOP -8	MSOP - 8	0°C to 70°C	0°C to 70°C	2.5 to 5.5	4 to 12	D	LM386 has wider operating voltage
TPA302D	LM4880M	Stereo audio power amplifier	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
TPA4861D	LM4861M	Low-distortion audio power amplifier	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
TPA4861D	LM4871M	Low-distortion audio power amplifier	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
TPA6017A2PWP	LM4874MH	2W stereo audio amplifier	TSSOP-20	TSSOP-20	-40°C to 85°C	-40°C to 85°C	4.5 to 5.5	2.7 to 5.5	D	LM4874 has wider operating voltage
TPA6110A2DGN	LM4881MM	Dual audio headphone amplifier	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
TPA6111A2D	LM4880M	Stereo audio power amplifier	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
TPA6111A2D	LM4881M	Dual audio headphone amplifier	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	S	
TPA701D	LM4900M	700 mW audio amplifier	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2.7 to 5.5	2 to 5.5	D	LM4900 has lower operating voltage
TPA701DGN	LM4900MM	700 mW audio amplifier	MSOP-8	MSOP-8	-40°C to 85°C	-40°C to 85°C	2.7 to 5.5	2 to 5.5	D	
TPM0125DBV	LMS5258MF-1.2	150 mA low-dropout regulator with power good	SOT23-5	SOT23-5	0°C to 70°C	-40°C to 125°C	1.2	1.2	D	National offers wider operating temperature range
TPS3809K33DBV	LM809M3-2.93	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	2.93	2.93	D	National has 2.63, 2.93, 3.8, 4, 4.38, 4.63, and custom voltage options
TPS3809L30DBV	LM809M3-2.64	Power supply supervisory circuit	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	2.64	2.64	D	National has 2.63, 2.93, 3.8, 4, 4.38, 4.63, and custom voltage options

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Texas Instruments										
TPS60110PWPR	LM2750LDX-Adj	Switched capacitor boost regulator	TSSOP-20	LLP-10	-40°C to 85°C	-40°C to 85°C	2.7 to 5.4 V _{IN}	2.7 to 5.6 V _{IN}	F	
TPS60111PWPR	LM2750LDX-Adj	Switched capacitor boost regulator	TSSOP-20	LLP-10	-40°C to 85°C	-40°C to 85°C	2.7 to 5.4 V _{IN}	2.7 to 5.6 V _{IN}	F	
TPS60130PWPR	LM2750LDX-Adj	Switched capacitor boost regulator	Power-PAD-20	LLP-10	-40°C to 85°C	-40°C to 85°C	2.7 to 5.4 V _{IN}	2.7 to 5.6 V _{IN}	F	
TPS60131PWPR	LM2750LDX-Adj	Switched capacitor boost regulator	Power-PAD-20	LLP-10	-40°C to 85°C	-40°C to 85°C	2.7 to 5.4 V _{IN}	2.7 to 5.6 V _{IN}	F	
TPS60132PWPR	LM2750LDX-Adj	Switched capacitor boost regulator	Power-PAD-20	LLP-10	-40°C to 85°C	-40°C to 85°C	2.7 to 5.4 V _{IN}	2.7 to 5.6 V _{IN}	F	
TPS60133PWPR	LM2750LDX-Adj	Switched capacitor boost regulator	Power-PAD-20	LLP-10	-40°C to 85°C	-40°C to 85°C	2.7 to 5.4 V _{IN}	2.7 to 5.6 V _{IN}	F	
TPS60500DGSR	LM2797MM	Switched capacitor boost regulator	MSOP-10	MSOP-10	-40°C to 125°C	-40°C to 85°C	1.8 to 6.5 V _{IN}	2.6 to 5.5 V _{IN}	F	
TPS60502DGSR	LM2797MM	Switched capacitor regulator	MSOP-10	MSOP-10	-40°C to 125°C	-40°C to 85°C	1.8 to 6.5 V _{IN}	2.6 to 5.5 V _{IN}	F	
TPS60502DGSR	LM3354MM-1.8	Switched capacitor regulator	MSOP-10	MSOP-10	-40°C to 85°C	-40°C to 85°C	1.8 to 6.5 V _{IN}	2.5 to 5.5 V _{IN} , 4.1 and 5 V _{OUT}	F	
TPS60503DGSR	LM2797MM	Switched capacitor regulator	MSOP-10	MSOP-10	-40°C to 125°C	-40°C to 85°C	1.8 to 6.5 V _{IN}	2.6 to 5.5 V _{IN}	F	
UA741CP	LM741CN	General purpose operational amplifier	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
UA7805CKC	LM340T-5.0	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	5	5	D	National has better line regulator and load regulator
UA7805CKCS	LM340T-5.0	3-terminal positive regulator	T0263-3	T0220-3	0°C to 125°C	0°C to 125°C	5	5	S	Slightly different package, National has better line reg. and load reg.
UA7805CKTER	LM340S-5.0	3-terminal positive regulator	T0263-3	T0263-3	0°C to 125°C	0°C to 125°C	5	5	D	National has better line regulator and load regulator
UA7808CKC	LM7808CT	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	5	5	D	
UA7808CKCS	LM7808CT	3-terminal positive regulator	T0263-3	T0220-3	0°C to 125°C	0°C to 125°C	5	5	S	
UA7812CKC	LM340T-12	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	12	12	D	National has better line regulator and load regulator
UA78L05ACIP	LM78L05ACZ	100 mA voltage regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	5	5	D	
UA78L05AD	LM78L05ACM	100 mA voltage regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 125°C	5	5	D	

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Texas Instruments										
UA78L08ACIP	LM78L82ACZ	100 mA voltage regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	8	8.2	S	
UA78L08AD	LM78L82ACM	100 mA voltage regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 125°C	8	8.2	S	
UA78L09ACIP	LM78L09ACZ	100 mA voltage regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	9	9	D	
UA78L09AD	LM78L09ACM	100 mA voltage regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 125°C	9	9	D	
UA78L12ACIP	LM78L12ACZ	100 mA voltage regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	12	12	D	
UA78L12AD	LM78L12ACM	100 mA voltage regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 125°C	12	12	D	
UA78L15ACIP	LM78L15ACZ	100 mA voltage regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	15	15	D	
UA78L15AD	LM78L15ACM	100 mA voltage regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 125°C	15	15	D	
UA78L62ACIP	LM78L62ACZ	100 mA voltage regulator	T0-92	T0-92	0°C to 125°C	0°C to 125°C	6.2	6.2	D	
UA78L62AD	LM78L62ACM	100 mA voltage regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 125°C	6.2	6.2	D	
UA78M05CDCY	LM78M05CDT	0.5A voltage regulator	T0223-3	T0252-3	0°C to 125°C	-40°C to 125°C	5	5	F	
UA78M05CKC	LM78M05CT	0.5A voltage regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	5	5	S	
UA78M05CKTP	LM78M05CDT	0.5A voltage regulator	T0252-3	T0252-3	0°C to 125°C	-40°C to 125°C	5	5	S	
UA78M12CKC	LM78M12CT	0.5A voltage regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	12	12	S	
UA78M12CKTP	LM78M12CDT	0.5A voltage regulator	T0252-3	T0252-3	0°C to 125°C	-40°C to 125°C	12	12	S	
UA78M15CKC	LM78M15CT	0.5A voltage regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	15	15	S	
UA78M15CKTP	LM78M15CDT	0.5A voltage regulator	T0252-3	T0252-3	0°C to 125°C	-40°C to 125°C	15	15	S	
UA7905CKCS	LM320T-5.0	3-terminal negative regulator	T0263-3	T0220-3	0°C to 125°C	0°C to 125°C	-5	-5	F	
UA7905CKCS	LM7905CT	3-terminal negative regulator	T0263-3	T0220-3	0°C to 125°C	0°C to 125°C	-5	-5	F	
UA7912CKCS	LM320T-12	3-terminal negative regulator	T0263-3	T0220-3	0°C to 125°C	0°C to 125°C	-12	-12	F	
UA7912CKCS	LM7912CT	3-terminal negative regulator	T0263-3	T0220-3	0°C to 125°C	0°C to 125°C	-12	-12	F	
UA7915CKCS	LM320T-15	3-terminal negative regulator	T0263-3	T0220-3	0°C to 125°C	0°C to 125°C	-15	-15	F	
UA7915CKCS	LM7915CT	3-terminal negative regulator	T0263-3	T0220-3	0°C to 125°C	0°C to 125°C	-15	-15	F	
UA79M05CKC	LM79M05CT	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	-5	-5	F	
UA79M12CKCS	LM79M12CT	3-terminal negative regulator	T0263-3	T0220-3	0°C to 125°C	0°C to 125°C	-12	-12	F	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Texas Instruments										
UA79M15CKC	LM79M15CT	3-terminal negative regulator	TO263-3	TO220-3	0°C to 125°C	0°C to 125°C	-15	-15	F	
UA9638CD	DS9638CM	Dual differential line driver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	
UA9638CP	DS9638CN	Dual differential line driver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	
UA9639ACD	DS9637ACM	Dual differential line receiver	SOIC-8	SOIC-8	0°C to 70°C	0°C to 70°C	–	–	D	National is faster
UA9639ACP	DS9637ACN	Dual differential line receiver	MDIP-8	MDIP-8	0°C to 70°C	0°C to 70°C	–	–	D	National is faster
UC2524	LM78S40N	Universal switching regulator subsystem	MDIP-16	MDIP-16	-25°C to 85°C	-40°C to 125°C	–	–	N	
UC2525	LM78S40N	Universal switching regulator subsystem	MDIP-16	MDIP-16	-40°C to 85°C	-40°C to 125°C	–	–	N	
UC3524	LM78S40CN	Universal switching regulator subsystem	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	N	
UC3525	LM78S40CN	Universal switching regulator subsystem	MDIP-16	MDIP-16	0°C to 70°C	0°C to 70°C	–	–	N	
UCC283T-3	LM1085IT-3.3	3A low-dropout regulator	TO220-3	TO220-3	-40°C to 85°C	-40°C to 125°C	3.3	3.3	F	
UCC283T-3	LMS1587IT-3.3	3A low-dropout regulator	TO220-3	TO220-3	-40°C to 85°C	-40°C to 125°C	3.3	3.3	F	
UCC283T-5	LM1085IT-5.0	3A low-dropout regulator	TO220-3	TO220-3	-40°C to 85°C	-40°C to 125°C	5	5	F	
UCC283TD-3	LM1085IS-3.3	3A low-dropout regulator	TO263-3	TO263-3	-40°C to 85°C	-40°C to 125°C	3.3	3.3	F	
UCC283TD-3	LMS1587IS-3.3	3A low-dropout regulator	TO263-3	TO263-3	-40°C to 85°C	-40°C to 125°C	3.3	3.3	F	
UCC283TD-5	LM1085IS-5.0	3A low-dropout regulator	TO263-3	TO263-3	-40°C to 85°C	-40°C to 125°C	5	5	F	
UCC383T-3	LM1085IT-3.3	3A low-dropout regulator	TO220-3	TO220-3	0°C to 70°C	-40°C to 125°C	3.3	3.3	F	
UCC383T-3	LMS1587CT-3.3	3A low-dropout regulator	TO220-3	TO220-3	0°C to 70°C	0°C to 125°C	3.3	3.3	F	
UCC383T-5	LM1085IT-5.0	3A low-dropout regulator	TO220-3	TO220-3	0°C to 70°C	-40°C to 125°C	5	5	F	
UCC383TD-3	LM1085IS-3.3	3A low-dropout regulator	TO263-3	TO263-3	0°C to 70°C	-40°C to 125°C	3.3	3.3	F	
UCC383TD-3	LMS1587CS-3.3	3A low-dropout regulator	TO263-3	TO263-3	0°C to 70°C	0°C to 125°C	3.3	3.3	F	
UCC383TD-5	LM1085IS-5.0	3A low-dropout regulator	TO263-3	TO263-3	0°C to 70°C	-40°C to 125°C	5	5	F	
ULN2003AD	DS2003CM	High-voltage high-current Darlington transistor array	SOIC-16	SOIC-16	-20°C to 70°C	-40°C to 85°C	5	5	S	TTL/CMOS compatible

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement
(May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package
(See datasheets for differences.)

N = Similar function, different package and/or pinout
(See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Texas Instruments										
ULN2003AN	DS2003CN	High-voltage high-current Darlington transistor array	MDIP-16	MDIP-16	-20°C to 70°C	-40°C to 85°C	5	5	S	TTL/CMOS compatible
ULN2003ANSR	DS2003TMT	High-voltage high-current Darlington transistor array	SOIC-16	TSSOP-16	-20°C to 70°C	-40°C to 125°C	5	5	S	TTL/CMOS compatible
Toko										
TK65700F	LM2750LDX-Adj	Switched capacitor boost regulator	SON3024-8	LLP-10	-30°C to 80°C	-40°C to 85°C	2.7 to 5 V _{IN}	2.7 to 5.6 V _{IN}	F	
TK65600B	LM3500TLX-16	White LED driver	Flip chip-8	micro SMD-8	-30°C to 80°C	-40°C to 125°C	2.7 to 5.5 V _{IN}	2.7 to 7 V _{IN}	D	
Torex										
XC6204	LP3985IM5-3.0	150 mA CMOS low-dropout regulator	SOT-25	SOT23-5	-40°C to 85°C	-40°C to 125°C	2 to 10 V _{IN}	2.5 to 6 V _{IN}	F	National has a micro SMD-4 package
Toshiba										
TA78L05S	LM78L05ACZ	100 mA voltage regulator	TO-92	TO-92	0°C to 125°C	0°C to 125°C	5	5	D	
TA78L06S	LM78L06ACZ	100 mA voltage regulator	TO-92	TO-92	0°C to 125°C	0°C to 125°C	6	6.2	S	
TA78L08S	LM78L08ACZ	100 mA voltage regulator	TO-92	TO-92	0°C to 125°C	0°C to 125°C	8	8.2	S	
TA78L09S	LM78L09ACZ	100 mA voltage regulator	TO-92	TO-92	0°C to 125°C	0°C to 125°C	9	9	D	
TA78L12S	LM78L12ACZ	100 mA voltage regulator	TO-92	TO-92	0°C to 125°C	0°C to 125°C	12	12	D	
TA78L15S	LM78L15ACZ	100 mA voltage regulator	TO-92	TO-92	0°C to 125°C	0°C to 125°C	15	15	D	
TC75W51FU	LPC662IM	Low-power CMOS dual operational amplifier	SSOP-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	F	
TC75W51FU	LPC662AIM	Low-power CMOS dual operational amplifier	SSOP-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	F	
TC75W51FK	LPC662IM	Low-power CMOS dual operational amplifier	SSOP-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	F	
TC75W51FK	LPC662AIM	Low-power CMOS dual operational amplifier	SSOP-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	–	–	F	
TD62001APG	DS2003CN	High-voltage high-current Darlington transistor array	MDIP-16	MDIP-16	-40°C to 85°C	-40°C to 85°C	5	5	S	TTL/CMOS compatible
TD62001AFG	DS2003CM	High-voltage high-current Darlington transistor array	SOIC-16	SOIC-16	-40°C to 85°C	-40°C to 85°C	5	5	S	TTL/CMOS compatible

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Unisonic Technologies										
UTC LP2951	LP2951ACM	Low-dropout voltage regulator	SOIC-8	SOIC-8	-40°C to 125°C	-40°C to 125°C	18	30	D	
UTC LP2951	LP2951ACN	Low-dropout voltage regulator	MDIP-8	MDIP-8	-40°C to 125°C	-40°C to 125°C	18	30	D	
Vishay										
GS1084CT3.3	LM1084CT-3.3	5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	3.3	3.3	D	National has higher input voltage range and temperature range
GS1084CT	LM1084CT-Adj	5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	Adj.	Adj.	D	National has higher input voltage range and temperature range
GS1084CT3.3	LMS1585ACT-3.3	5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	National has higher input voltage range and temperature range
GS1084CT	LMS1585ACT-Adj	5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	National has higher input voltage range and temperature range
GS1085CT3.3	LMS1587CT-3.3	3A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	National has higher input voltage range
GS1085CT	LMS1587CT-Adj	3A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	National has higher input voltage range
GS1085CM3.3	LM1085IS-3.3	3A low-dropout regulator	T0-263AB	T0263-3	0°C to 125°C	-40°C to 125°C	3.3	3.3	F	National has higher input voltage range, temperature range, and different package
GS1085CM3.3	LMS1587CS-3.3	3A low-dropout regulator	T0-263AB	T0263-3	0°C to 125°C	0°C to 125°C	3.3	3.3	F	National has higher input voltage range, temperature range, and different package
GS1085CM5.0	LM1085IS-5.0	3A low-dropout regulator	T0-263AB	T0263-3	0°C to 125°C	-40°C to 125°C	5	5	F	National has higher input voltage range, temperature range, and different package
GS1085CM	LM1085IS-Adj	3A low-dropout regulator	T0-263AB	T0263-3	0°C to 125°C	-40°C to 125°C	Adj.	Adj.	F	National has higher input voltage range, temperature range, and different package
GS1085CM	LMS1587CS-Adj	3A low-dropout regulator	T0-263AB	T0263-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	F	National has higher input voltage range, temperature range, and different package
GS1085CT3.3	LM1085IT-3.3	3A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	3.3	3.3	D	National has higher input voltage range and temperature range
GS1085CT5.0	LM1085IT-5.0	3A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	5	5	D	National has higher input voltage range and temperature range

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Vishay										
GS1085CT	LM1085IT-Adj	3A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	-40°C to 125°C	Adj.	Adj.	D	National has higher input voltage range and temperature range
GS1086CM2.5	LM1086CS-2.5	1.5A low-dropout regulator	T0-263AB	T0263-3	0°C to 125°C	0°C to 125°C	2.5	2.5	F	National has higher input voltage range, different package
GS1086CM2.85	LM1086CS-2.85	1.5A low-dropout regulator	T0-263AB	T0263-3	0°C to 125°C	0°C to 125°C	2.85	2.85	F	National has higher input voltage range, different package
GS1086CM3.3	LM1086CS-3.3	1.5A low-dropout regulator	T0-263AB	T0263-3	0°C to 125°C	0°C to 125°C	3.3	3.3	F	National has higher input voltage range, different package
GS1086CM5.0	LM1086CS-5.0	1.5A low-dropout regulator	T0-263AB	T0263-3	0°C to 125°C	0°C to 125°C	5	5	F	National has higher input voltage range, different package
GS1086CM	LM1086CS-Adj	1.5A low-dropout regulator	T0-263AB	T0263-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	F	National has higher input voltage range, different package
GS1086CT2.85	LM1086CT-2.85	1.5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	2.85	2.85	D	National has higher input voltage range
GS1086CT3.3	LM1086CT-3.3	1.5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	3.3	3.3	D	National has higher input voltage range
GS1086CT5.0	LM1086CT-5.0	1.5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	5	5	D	National has higher input voltage range
GS1086CT	LM1086CT-Adj	1.5A low-dropout regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	Adj.	Adj.	D	National has higher input voltage range
GS431BILP	LM431CIZ	Programmable shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	2.5 to 30	2.5 to 36	D	
GS431BIS	LM431CIM3	Programmable shunt regulator	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2.5 to 30	2.5 to 36	D	
GS431BIU-1	LM431CIM3	Programmable shunt regulator	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	2.5 to 30	2.5 to 36	D	
TL431AIU-1	LM431BIM3	Programmable shunt regulator	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	2.5 to 30	2.5 to 36	D	
TL431IU-1	LM431AIM3	Programmable shunt regulator	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	2.5 to 30	2.5 to 36	D	
TL431AILP	LM431BIZ	Programmable shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	2.5 to 30	2.5 to 36	D	
TL431ILP	LM431AIZ	Programmable shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	2.5 to 30	2.5 to 36	D	
TL431AIS	LM431BIM3	Programmable shunt regulator	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2.5 to 30	2.5 to 36	D	
TL431IS	LM431AIM3	Programmable shunt regulator	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2.5 to 30	2.5 to 36	D	
MC7805CT	LM340AT-5.0	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	5	5	S	
MC7808CT	LM7808CT	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	8	8	S	
MC7812CT	LM340T-12	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	12	12	S	

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Vishay										
MC7815CT	LM340T-15	3-terminal positive regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	15	15	S	
MC7905CT	LM7905CT	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	-5	-5	S	
MC7912CT	LM7912CT	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	-12	-12	S	
MC7915CT	LM7915CT	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	-15	-15	S	
MC7905CT	LM320T-5.0	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	-5	-5	S	
MC7912CT	LM320T-12	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	-12	-12	S	
MC7915CT	LM320T-15	3-terminal negative regulator	T0220-3	T0220-3	0°C to 125°C	0°C to 125°C	-15	-15	S	
MC79L05ACS	LM79L05ACM	100 mA negative regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 70°C	-5	-5	S	
MC79L05ACLP	LM79L05ACZ	100 mA negative regulator	T0-92	T0-92	0°C to 125°C	0°C to 70°C	-5	-5	S	
MC79L12ACS	LM79L12ACM	100 mA negative regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 70°C	-12	-12	S	
MC79L12ACLP	LM79L12ACZ	100 mA negative regulator	T0-92	T0-92	0°C to 125°C	0°C to 70°C	-12	-12	S	
MC79L15ACS	LM79L15ACM	100 mA negative regulator	SOIC-8	SOIC-8	0°C to 125°C	0°C to 70°C	-15	-15	S	
MC79L15ACLP	LM79L15ACZ	100 mA negative regulator	T0-92	T0-92	0°C to 125°C	0°C to 70°C	-15	-15	S	
Zetex Semiconductors										
ZR431C	LM431AIZ	Precision shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	2.5	2.5	S	2% accuracy
ZR431C01	LM431BIZ	Precision shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	2.5	2.5	S	1% accuracy
ZR431LC01L	LMV431AIZ	Low-voltage adjustable precision shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	1.24	1.24	D	National has more accurate parts and also offers the device in the SOT23-5 package
ZR431LC01STOB	LMV431AIZ	Low-voltage adjustable precision shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	1.24	1.24	D	National has more accurate parts and also offers the device in the SOT23-5 package
ZR431LC02L	LMV431IZ	Low-voltage adjustable precision shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	1.24	1.24	D	National has more accurate parts and also offers the device in the SOT23-5 package
ZR431LC02STOB	LMV431IZ	Low-voltage adjustable precision shunt regulator	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	1.24	1.24	D	National has more accurate parts and also offers the device in the SOT23-5 package

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Zetex Semiconductors										
ZR431LF01TA	LMV431AIMF	Low-voltage adjustable precision shunt regulator	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	1.24	1.24	D	National has more accurate parts and also offers the device in the SOT23-5 package
ZR431LF02TA	LMV431AIMF	Low-voltage adjustable precision shunt regulator	SOT23-3	SOT23-3	-40°C to 85°C	-40°C to 85°C	1.24	1.24	D	National has more accurate parts and also offers the device in the SOT23-5 package
ZR431N8	LM431AIM	Precision shunt regulator	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2.5	2.5	S	2% accuracy
ZR431N801	LM431BIM	Precision shunt regulator	SOIC-8	SOIC-8	-40°C to 85°C	-40°C to 85°C	2.5	2.5	S	1% accuracy
ZR78L05C	LM78L05ACZ	100 mA voltage regulator	TO-92	TO-92	-55°C to 125°C	0°C to 125°C	5	5	S	
ZR78L05N8	LM78L05ACM	100 mA voltage regulator	SOIC-8	SOIC-8	-55°C to 125°C	0°C to 125°C	5	5	S	
ZR78L06C	LM78L62ACZ	100 mA voltage regulator	TO-92	TO-92	-55°C to 125°C	0°C to 125°C	6	6.2	S	
ZR78L06N8	LM78L62ACM	100 mA voltage regulator	SOIC-8	SOIC-8	-55°C to 125°C	0°C to 125°C	6	6.2	S	
ZR78L08C	LM78L82ACZ	100 mA voltage regulator	TO-92	TO-92	-55°C to 125°C	0°C to 125°C	8	8.2	S	
ZR78L08N8	LM78L82ACM	100 mA voltage regulator	SOIC-8	SOIC-8	-55°C to 125°C	0°C to 125°C	8	8.2	S	
ZR78L09C	LM78L09ACZ	100 mA voltage regulator	TO-92	TO-92	-55°C to 125°C	0°C to 125°C	9	9	S	
ZR78L09N8	LM78L09ACM	100 mA voltage regulator	SOIC-8	SOIC-8	-55°C to 125°C	0°C to 125°C	9	9	S	
ZR78L12C	LM78L12ACZ	100 mA voltage regulator	TO-92	TO-92	-55°C to 125°C	0°C to 125°C	12	12	S	
ZR78L12N8	LM78L12ACM	100 mA voltage regulator	SOIC-8	SOIC-8	-55°C to 125°C	0°C to 125°C	12	12	S	
ZXCL250H5	LMS5214IMG-2.5	80 mA low-dropout voltage regulator	SC70-5	SC70-5	-40°C to 85°C	-40°C to 125°C	2.5	2.5	S	National has wider temperature range
ZXCL260H5	LMS5214IMG-2.6	80 mA low-dropout voltage regulator	SC70-5	SC70-5	-40°C to 85°C	-40°C to 125°C	2.6	2.6	S	National has wider temperature range
ZXCL280H5	LMS5214IMG-2.9	80 mA low-dropout voltage regulator	SC70-5	SC70-5	-40°C to 85°C	-40°C to 125°C	2.8	2.9	S	National has wider temperature range
ZXCL300H5	LMS5214IMG-3.0	80 mA low-dropout voltage regulator	SC70-5	SC70-5	-40°C to 85°C	-40°C to 125°C	3	3	S	National has wider temperature range
ZXCL330H5	LMS5214IMG-3.3	80 mA low-dropout voltage regulator	SC70-5	SC70-5	-40°C to 85°C	-40°C to 125°C	3.3	3.3	S	National has wider temperature range
ZXCL5213V25H5	LMS5214IMG-2.5	80 mA low-dropout voltage regulator	SC70-5	SC70-5	-40°C to 85°C	-40°C to 125°C	2.5	2.5	S	National has wider temperature range
ZXCL5213V26H5	LMS5214IMG-2.6	80 mA low-dropout voltage regulator	SC70-5	SC70-5	-40°C to 85°C	-40°C to 125°C	2.6	2.6	S	National has wider temperature range
ZXCL5213V28H5	LMS5214IMG-2.9	80 mA low-dropout voltage regulator	SC70-5	SC70-5	-40°C to 85°C	-40°C to 125°C	2.8	2.9	S	National has wider temperature range
ZXCL5213V30H5	LMS5214IMG-3.0	80 mA low-dropout voltage regulator	SC70-5	SC70-5	-40°C to 85°C	-40°C to 125°C	3	3	S	National has wider temperature range

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Zetex Semiconductors										
ZXCL5213V33H5	LMS5214IMG-3.3	80 mA low-dropout voltage regulator	SC70-5	SC70-5	-40°C to 85°C	-40°C to 125°C	3.3	3.3	S	National has wider temperature range
ZXCL5214V25H5	LMS5214IMG-2.5	80 mA low-dropout voltage regulator	SC70-5	SC70-5	-40°C to 85°C	-40°C to 125°C	2.5	2.5	D	National has wider temperature range
ZXCL5214V26H5	LMS5214IMG-2.6	80 mA low-dropout voltage regulator	SC70-5	SC70-5	-40°C to 85°C	-40°C to 125°C	2.6	2.6	D	National has wider temperature range
ZXCL5214V28H5	LMS5214IMG-2.9	80 mA low-dropout voltage regulator	SC70-5	SC70-5	-40°C to 85°C	-40°C to 125°C	2.8	2.9	D	National has wider temperature range
ZXCL5214V30H5	LMS5214IMG-3.0	80 mA low-dropout voltage regulator	SC70-5	SC70-5	-40°C to 85°C	-40°C to 125°C	3	3	D	National has wider temperature range
ZXCL5214V33H5	LMS5214IMG-3.3	80 mA low-dropout voltage regulator	SC70-5	SC70-5	-40°C to 85°C	-40°C to 125°C	3.3	3.3	D	National has wider temperature range
ZXCP330E6	LM3354MM-1.8	Switched capacitor boost regulator	SOT23-6	MSOP-10	-40°C to 85°C	-40°C to 85°C	2 to 4.4 V _{IN}	2.5 to 5.5 V _{IN} , 4.1 and 5 V _{OUT}	F	
ZXRE1004DF	LM285M-1.2	Micropower voltage reference	SOT23-3	SOIC-8	-40°C to 85°C	-40°C to 85°C	1.2	1.2	F	1% accuracy
ZXRE1004DF	LM385BM-1.2	Micropower voltage reference	SOT23-3	SOIC-8	-40°C to 85°C	0°C to 70°C	1.2	1.2	F	1% accuracy
ZXRE1004DR	LM285Z-1.2	Micropower voltage reference	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	1.2	1.2	S	1% accuracy
ZXRE1004DR	LM385BZ-1.2	Micropower voltage reference	T0-92	T0-92	-40°C to 85°C	0°C to 70°C	1.2	1.2	S	1% accuracy
ZXRE1004EF	LM285M-1.2	Micropower voltage reference	SOT23-3	SOIC-8	-40°C to 85°C	-40°C to 85°C	1.2	1.2	F	Supplier has 2% accuracy, National has 1% accuracy
ZXRE1004EF	LM385BM-1.2	Micropower voltage reference	SOT23-3	SOIC-8	-40°C to 85°C	0°C to 70°C	1.2	1.2	F	Supplier has 2% accuracy, National has 1% accuracy
ZXRE1004EF	LM385M-1.2	Micropower voltage reference	SOT23-3	SOIC-8	-40°C to 85°C	0°C to 70°C	1.2	1.2	F	2% accuracy
ZXRE1004EF	LM385M3-1.2	Micropower voltage reference	SOT23-3	SOT23-3	-40°C to 85°C	0°C to 70°C	1.2	1.2	S	2% accuracy
ZXRE1004ER	LM285Z-1.2	Micropower voltage reference	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	1.2	1.2	S	Supplier has 2% accuracy, National has 1% accuracy
ZXRE1004ER	LM385BZ-1.2	Micropower voltage reference	T0-92	T0-92	-40°C to 85°C	0°C to 70°C	1.2	1.2	S	Supplier has 2% accuracy, National has 1% accuracy
ZXRE1004ER	LM385Z-1.2	Micropower voltage reference	T0-92	T0-92	-40°C to 85°C	0°C to 70°C	1.2	1.2	S	2% accuracy
ZXRE1004FF	LM285M-1.2	Micropower voltage reference	SOT23-3	SOIC-8	-40°C to 85°C	-40°C to 85°C	1.2	1.2	F	Supplier has 3% accuracy National has 1% accuracy
ZXRE1004FF	LM385BM-1.2	Micropower voltage reference	SOT23-3	SOIC-8	-40°C to 85°C	0°C to 70°C	1.2	1.2	F	Supplier has 3% accuracy National has 1% accuracy

Compatibility codes:

D = Drop-in replacement

S = Same function, package, and pinout but not drop-in replacement (May not meet all key specs. See datasheets for differences.)

F = Same function, different pinout and/or package (See datasheets for differences.)

N = Similar function, different package and/or pinout (See datasheets for differences.)

Linear Products Cross Reference

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Zetex Semiconductors										
ZXRE1004FF	LM385M-1.2	Micropower voltage reference	SOT23-3	SOIC-8	-40°C to 85°C	0°C to 70°C	1.2	1.2	F	Supplier has 3% accuracy National has 2% accuracy
ZXRE1004FF	LM385M3-1.2	Micropower voltage reference	SOT23-3	SOT23-3	-40°C to 85°C	0°C to 70°C	1.2	1.2	S	Supplier has 3% accuracy National has 2% accuracy
ZXRE1004FR	LM285Z-1.2	Micropower voltage reference	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	1.2	1.2	S	Supplier has 3% accuracy National has 1% accuracy
ZXRE1004FR	LM385BZ-1.2	Micropower voltage reference	T0-92	T0-92	-40°C to 85°C	0°C to 70°C	1.2	1.2	S	Supplier has 3% accuracy National has 1% accuracy
ZXRE1004FR	LM385Z-1.2	Micropower voltage reference	T0-92	T0-92	-40°C to 85°C	0°C to 70°C	1.2	1.2	S	Supplier has 3% accuracy National has 2% accuracy
ZXRE125DF	LM285M-1.2	Micropower voltage reference	SOT23-3	SOIC-8	-40°C to 85°C	-40°C to 85°C	1.2	1.2	F	1% accuracy
ZXRE125DF	LM385BM-1.2	Micropower voltage reference	SOT23-3	SOIC-8	-40°C to 85°C	0°C to 70°C	1.2	1.2	F	1% accuracy
ZXRE125DR	LM285Z-1.2	Micropower voltage reference	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	1.2	1.2	S	1% accuracy
ZXRE125DR	LM385BZ-1.2	Micropower voltage reference	T0-92	T0-92	-40°C to 85°C	0°C to 70°C	1.2	1.2	S	1% accuracy
ZXRE125EF	LM285M-1.2	Micropower voltage reference	SOT23-3	SOIC-8	-40°C to 85°C	-40°C to 85°C	1.2	1.2	F	Supplier has 2% accuracy National has 1% accuracy
ZXRE125EF	LM385BM-1.2	Micropower voltage reference	SOT23-3	SOIC-8	-40°C to 85°C	0°C to 70°C	1.2	1.2	F	Supplier has 2% accuracy National has 1% accuracy
ZXRE125EF	LM385M-1.2	Micropower voltage reference	SOT23-3	SOIC-8	-40°C to 85°C	0°C to 70°C	1.2	1.2	F	2% accuracy
ZXRE125EF	LM385M3-1.2	Micropower voltage reference	SOT23-3	SOT23-3	-40°C to 85°C	0°C to 70°C	1.2	1.2	S	2% accuracy
ZXRE125ER	LM285Z-1.2	Micropower voltage reference	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	1.2	1.2	D	Supplier has 2% accuracy National has 1% accuracy
ZXRE125ER	LM385BZ-1.2	Micropower voltage reference	T0-92	T0-92	-40°C to 85°C	0°C to 70°C	1.2	1.2	S	Supplier has 2% accuracy National has 1% accuracy
ZXRE125ER	LM385Z-1.2	Micropower voltage reference	T0-92	T0-92	-40°C to 85°C	0°C to 70°C	1.2	1.2	S	2% accuracy
ZXRE125FF	LM285M-1.2	Micropower voltage reference	SOT23-3	SOIC-8	-40°C to 85°C	-40°C to 85°C	1.2	1.2	F	Supplier has 3% accuracy National has 1% accuracy
ZXRE125FF	LM385BM-1.2	Micropower voltage reference	SOT23-3	SOIC-8	-40°C to 85°C	0°C to 70°C	1.2	1.2	F	Supplier has 3% accuracy National has 1% accuracy
ZXRE125FF	LM385M-1.2	Micropower voltage reference	SOT23-3	SOIC-8	-40°C to 85°C	0°C to 70°C	1.2	1.2	F	Supplier has 3% accuracy National has 2% accuracy

Supplier part number	National Semiconductor part number	Product description	Supplier package	National package	Supplier temperature range	National temperature range	Supplier voltage options (V)	National voltage options (V)	Compatibility code	Comments
Zetex Semiconductors										
ZXRE125FF	LM385M3-1.2	Micropower voltage reference	SOT23-3	SOT23-3	-40°C to 85°C	0°C to 70°C	1.2	1.2	S	Supplier has 3% accuracy National has 2% accuracy
ZXRE125FR	LM285Z-1.2	Micropower voltage reference	T0-92	T0-92	-40°C to 85°C	-40°C to 85°C	1.2	1.2	D	Supplier has 3% accuracy National has 1% accuracy
ZXRE125FR	LM385BZ-1.2	Micropower voltage reference	T0-92	T0-92	-40°C to 85°C	0°C to 70°C	1.2	1.2	S	Supplier has 3% accuracy National has 1% accuracy
ZXRE125FR	LM385Z-1.2	Micropower voltage reference	T0-92	T0-92	-40°C to 85°C	0°C to 70°C	1.2	1.2	S	Supplier has 3% accuracy National has 2% accuracy

Package Comparison

Supplier package code	National equivalent package code	Package type	Pin count
Advanced Monolithic Systems			
	MP	SOT-223	4
M	M3	SOT-23	3
CD	DT	TO-252	3
N	Z	TO-92	3
S	M	SOIC	8
Allegro			
A	N	SOIC	16
L	M	SOIC	16
Alpha Semiconductor			
M	M3	SOT-23	3
N	Z	TO-92	3
AM	DIM3	SOT-23	3
S	M	SOIC	8
Analog Devices			
R	M	SOIC	8, 14, 16, 24
RN	M	SOIC	8, 14, 16, 24
RM	MM	MSOP	8, 10
RT	MF	SOT-23	5, 6
KS	M7	SC-70	5
RU	MT	TSSOP	14, 16, 24
U	MT	TSSOP	14, 16, 24
N	N	MDIP	8, 14, 16
P	N	MDIP	8, 14, 16
R	MW	WSOIC	16, 20, 24, 28
RW	MW	WSOIC	16, 20, 24, 28

Supplier package code	National equivalent package code	Package type	Pin count
Analog Devices			
ARU	MT	TSSOP	24
S	M	SOIC	8, 16, 16
RS	MQ	SSOP	14, 16, 20, 24, 28, 30, 38
T9	Z	TO-92	3
Analog Integrations			
S	M	SOIC	8
Z	Z	TO-92	3
U	MF	SOT-23	5, 6
Analog Microelectronics			
CBT	T	TO-220	3
DT	S	TO-263	3
CT	DT	TO-252	3
GT	MP	SOT-223	4
AT	Z	TO-92	3
HA	M	SOIC	8
Analogic Tech			
GU	MF	SOT-23	5, 6
JS	M7	SC-70	5, 8
GY	MF	SOT-23	5, 6
LY	Z	TO-92	3
Anpec			
K	M	SOIC	8
O	MM	MSOP	8
O	MT	TSSOP	28
U	DT	TO-252	3

Supplier package code	National equivalent package code	Package type	Pin count
Anpec			
V	DT	TO-252	3
U	MP	SOT-223	3
V	MP	SOT-223	3
B	MF	SOT-23	3, 5
E	Z	TO-92	3
Bay Linear			
Z	Z	TO-92	3
M	M	SOIC	8, 16, 16
K3	MF	SOT-23	3, 5
Catalyst			
KT	MF	SOT-23	3, 5
Z	Z	TO-92	3
Champion Microelectronics Co.			
IM	MF	SOT-23	5
Dallas Semiconductor			
N	CN	MDIP	16
R	MF	SOT-23	3, 5
S	M	SOIC	8
E	MT	TSSOP	24
EM Microelectronic - Marin SA			
SP	MF	SOT-23	3
Exar Semiconductor			
F	M	SOIC	16
P	N	MDIP	16
D	WM	WSOIC	20

Supplier package code	National equivalent package code	Package type	Pin count
Exar Semiconductor			
J	V	PLCC	44
Fairchild Semiconductor			
M	M	SOIC	8, 14, 16, 24
MU	MM	MSOP	8
D	DT	TO-252	3
S	MP	SOT-223	4
MTC	MT	TSSOP	14
MF	MF	SOT-23	3, 5
T	T	TO-220	3
Z	Z	TO-92	3
N	N	MDIP	8, 14
X5	M7	SC-70	5
M	TS	TO-263	3
SC	WM	WSOIC	16, 20, 24, 28
WM	WM	WSOIC	16, 20, 24, 28
FCI Semiconductor			
D	N	MDIP	8
ID	M	SOIC	8
T	Z	TO-92	3
S	M	SOIC	8
IMP			
UR	M3	SOT-23	3
Intersil Corporation			
B	M	SOIC	8, 14, 16
BA	M	SOIC	8, 14, 16

Package Comparison

Supplier package code	National equivalent package code	Package type	Pin count
Intersil Corporation			
E	N	MDIP	8, 14, 16, 20, 24, 28
H	MF	SOT-23	3, 5
V	MT	TSSOP	24
B	WM	WSOIC	16
Z	Z	TO-92	3
A	MM	MSOP	8
Linear Technology			
Q	S	TO-263	3
T	T	TO-220	3
ST	MP	SOT-223	4
S	M	SOIC	8
SW	WM	WSOIC	16, 20, 24, 28
Z	Z	TO-92	3
N	N	MDIP	8, 14, 16, 20, 24, 28
MS8	MM	MSOP	8
MS10	MM	MSOP	10
F	MT	TSSOP	8, 14, 16, 20, 24, 28
FW	MT	TSSOP	8, 14, 16, 20, 24, 28
J	J	CERDIP	8
Maxim			
A + pin code	MS	SSOP	Pin code# R = 3, K = 5, T = 6, A = 8, D = 14, E = 16, N = 18, P = 20, I = 28
C + pin code	T	TO-220	Pin code# R = 3, K = 5, T = 6, A = 8, D = 14, E = 16, N = 18, P = 20, I = 28
N + pin code	N	MDIP	Pin code# R = 3, K = 5, T = 6, A = 8, D = 14, E = 16, N = 18, P = 20, I = 28

Supplier package code	National equivalent package code	Package type	Pin count
Maxim			
P + pin code	N	MDIP	Pin code# R = 3, K = 5, T = 6, A = 8, D = 14, E = 16, N = 18, P = 20, I = 28
S + pin code	M	SOIC	Pin code# R = 3, K = 5, T = 6, A = 8, D = 14, E = 16, N = 18, P = 20, I = 28
U + pin code	MF	SOT-23	Pin code# R = 3, K = 5, T = 6, A = 8, D = 14, E = 16, N = 18, P = 20, I = 28
U + pin code	MT	TSSOP	Pin code# R = 3, K = 5, T = 6, A = 8, D = 14, E = 16, N = 18, P = 20, I = 28
U + pin code	MP	SOT-223	Pin code# R = 3, K = 5, T = 6, A = 8, D = 14, E = 16, N = 18, P = 20, I = 28
W + pin code	WM	WSOIC	Pin code# R = 3, K = 5, T = 6, A = 8, D = 14, E = 16, N = 18, P = 20, I = 28
X + pin code	M7	SC-70	Pin code# R = 3, K = 5, T = 6, A = 8, D = 14, E = 16, N = 18, P = 20, I = 28
Z + pin code	Z	TO-92	Pin code# R = 3, K = 5, T = 6, A = 8, D = 14, E = 16, N = 18, P = 20, I = 28
Micrel			
C5	M7	SC-70	5
M5	MF	SOT-23	5
N	N	MDIP	8, 14, 16, 20, 24, 28
S	MP	SOT-223	4
SM	MS	SSOP	20, 24, 28
T	T	TO-220	3
TS	MT	TSSOP	8, 14, 16, 20, 24, 28
U	S	TO-263	3, 5
WM	WM	WSOIC	16, 20, 24, 28

Supplier package code	National equivalent package code	Package type	Pin count
Microchip			
TT	MF	SOT-23	3
S	M	SOIC	8, 14
CLP	Z	TO-92	3
CSE	MF	SOT-23	5
CDD	S	TO-263	3
CDT	DT	TO-252	3
CST	MP	SOT-223	3
CP	T	TO-220	3
MicroLinear			
CS-1	M	SOIC	16, 24
P	N	MDIP	16
FP	CM	SOIC	16
Microsemi Corporation			
M	M	SOIC	8, 14
LP	Z	TO-92	3
S	MF	SOT-23	3, 5
DD	S	TO-263	3
ST	MP	SOT-223	4
C	T	SOT-220	3
N	N	MDIP	8, 16
K	K	TO-3	3
Mitsumi			
XF	M	SOIC	8

Supplier package code	National equivalent package code	Package type	Pin count
ON Semiconductor			
CP	N	MDIP	8, 14, 16, 20, 24, 28
H	N	MDIP	8, 14, 16, 20, 24, 28
P	N	MDIP	8, 14, 16, 20, 24, 28
P1	N	MDIP	8, 14, 16, 20, 24, 28
P2	N	MDIP	8, 14, 16, 20, 24, 28
D	M	SOIC	8, 14, 16
D1	M	SOIC	8, 14, 16
D2	M	SOIC	8, 14, 16
D2T	S	TO-263	3
D2T	S	TO-263	5
DP	S	TO-263	3
DP3	S	TO-263	3
DF	M7	SC-70	5
DT	M7	SC-70	5
DT	MT	TSSOP	48, 56, 64
DT	MT	TSSOP	8, 14, 16, 20, 24, 28
DTB	MT	TSSOP	8, 14, 16, 20, 24, 28
DW	WM	WSOIC	16, 20, 24, 28
KC	T	TO-220	3
LP	Z	TO-92	3
P	Z	TO-92	3
M	MS	SSOP	14, 16, 20, 24, 28, 30, 38
SD	MS	SSOP	14, 16, 20, 24, 28, 30, 38
M	ME	SSOP	8, 14, 16, 20, 24

Package Comparison

Supplier package code	National equivalent package code	Package type	Pin count
ON Semiconductor			
SN	MF	SOT-23	5
SQ	MG, M7	SC-70	5
T	T	TO-220	3
T3	T	TO-220	3
TD	DT	TO-252	3
Pericom			
T	MF	SOT-23	5
W	M	SOIC	16
L	MT	TSSOP	14
U	MM	MSOP	8, 10
Philips			
D	M	SOIC	8, 16, 16
D8	M	SOIC	8, 16, 16
T	M	SOIC	8, 16, 16
TD	M	SOIC	8, 16, 16
W	M	SOIC	8, 16, 16
DCK	M7, MG	SC-70	5
GW	M7, MG	SC-70	5
SDK	MT	TSSOP	8, 14, 16, 20, 24, 28
PW	MT	TSSOP	48, 56, 64
DDG	MT	TSSOP	48, 56, 64
DH	MT	TSSOP	8, 14, 16, 20, 24, 28
DL	MS	SSOP	28, 48, 56
DT	MT	TSSOP	8, 14, 16, 20, 24, 28

Supplier package code	National equivalent package code	Package type	Pin count
Philips			
GW	MF, M5	SOT-23	5
GW	M7, MG	SC-70	5
H	MS	SSOP	14, 16, 20, 24, 28, 30, 38
N	N	MDIP	8, 14, 16, 20, 24, 28
NB	N	MDIP	8, 14, 16, 20, 24, 28
PN	N	MDIP	8, 14, 16, 20, 24, 28
N	N	MDIP	24, 28
N2	N	MDIP	24, 28
S	WM	WSOIC	16, 20, 24, 28
A	V	PLCC	44
Semtech			
5M	S	TO-263	5
M	S	TO-263	3, 5
M	M	SOIC	8, 14, 16
MS	MM	MSOP	8, 10
S	M	SOIC	8, 14, 16
S	MP	SOT-223	4
S	S	TO-263	5
SK	MF, M5	SOT-23	5
ST	MP	SOT-223	4
T	T	TO-220	3
Z	Z	TO-92	3
Signal Processing Technologies			
ACS	M	SOIC	24

Supplier package code	National equivalent package code	Package type	Pin count
Sipex Corporation			
A	MS	SSOP	14, 16 20, 24, 28, 30, 38
M	M3, MF	SOT-23	3
M3	MP	SOT-223	4
N	M	SOIC	8, 14, 16
P	N	MDIP	8, 14, 16, 20, 24, 28
R	DT	TO-252	3
T	M	SOIC	8, 14, 16
S	N	MDIP	8, 14, 16, 20, 24, 28
S	M	SOIC	8, 14, 16
S1	M	SOIC	8, 14, 16
S2	M	SOIC	8, 14, 16
T	WM	WSOIC	16, 20, 24, 28
T	S	TO-263	3
U	T	TO-220	3
Y	MT	TSSOP	8, 14, 16, 20, 24, 28
Sony Semiconductors			
AM	CIJM	SOIC	24
ST Microelectronics			
CD	WM	MSOP	20
FN	V	PLCC	20
Z	Z	TO-92	3
ABDT	DT	TP-252	3
V	T	TO-220	3
D	M	SOIC	8, 14, 16
DT	DT	TO-252	3












Supplier package code	National equivalent package code	Package type	Pin count
ST Microelectronics			
M	M5, MF	SOT-23	5
L	M5, MF	SOT-23	5
L	M3, MF	SOT-23	3
M	M3, MF	SOT-23	3
N	N	MDIP	8, 14, 16, 20, 24, 28
P	MT	TSSOP	8, 14, 16, 20, 24, 28
S	MM	MSOP	8, 10
T	MT	TSSOP	8, 14, 16, 20, 24, 28
V	T	TO-220	3
W	WM	WSOIC	16, 20, 24, 28
D2M	S	TO-263	3
D2T	S	TO-263	3
S	MP	TO-223	3
Telcom Semiconductor			
NB	M3	SOT-23	3
MU	MT	MSOP	8
MOA	M	SOIC	8
Texas Instruments			
KTP	DT	TO-252	3
NS	M	SOP	8, 14, 16
PS	M	SOP	8, 14, 16
D	M	SOIC	8, 14, 16
DBV	M5, MF	SOT-23	5
DCK	M7, MG	SC-70	5
DL	ME	SSOP	28, 48, 56



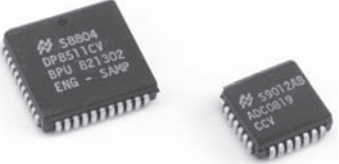



Package Comparison

Supplier package code	National equivalent package code	Package type	Pin count
Texas Instruments			
DB	MEB, MEC, MED, MQ, MQA, MS, MSA, MSC	SSOP	14, 16, 20, 24, 28, 30, 38
DGK	MM	MSOP	8
DGS	MM	MSOP	10
DCY	MP	SOT-223	4
PW	MT	TSSOP	8, 14, 16, 20, 24, 28
DW	MW	WSOIC	16, 20, 24, 28
P	N	MDIP	8, 14, 16, 20, 24, 28
N	N	MDIP	8, 14, 16, 20, 24, 28
KTE	S	TO-263	3
KTG	S	TO-263	5
KC	T	TO-220	3
KTP	TD	TO-252	3
LP	Z	TO-92	3
LPM	Z	TO-92	3
Toshiba			
PG	N	MDIP	8, 14, 16, 20, 24, 28
FG	M	SOIC	8, 14, 16
S	Z	TO-92	3
FU	MS	SSOP	8
FK	MS	SSOP	8

Supplier package code	National equivalent package code	Package type	Pin count
Vishay			
T	T	TO-220	3
M	S	TO-263	3
U	M3, MF	SOT-23	3
LP	Z	TO-92	3
S	M	SOIC	8
Zetex Semiconductors			
C	Z	TO-92	3
TA	MF	SOT-23	3
N8	M	SOIC	8
H5	MG	SC-70	5
R	Z	TO-92	3
F	MF	SOT-23	3
N8	AIM	SOIC	8
N801	BIM	SOIC	8

Packaging Guide

Package	Dimensions	Photo
micro SMD	0.85 x 0.85 x 0.9 mm	
SC-70	1.25 x 2 x 0.9 mm	
3-Lead Metal Can Package (TO-46)	2.36 mm	
Molded Small Outline Package (SOT-23)	2.9 x 3 x 0.8 mm	
Leadless Leadframe Package (LLP)	3 x 3 x 0.8 mm	
Miniature Molded Small Outline Package (MSOP)	3 x 3 x 0.86 mm	
Molded Small Outline Package (SOT-223)	3.56 x 6.5 x 1.6 mm	
Shrink Small Outline Package (SSOP)	3.89 x 4.90 x 1.44 mm	
Molded Small Outline Package (SOIC)	3.9 x 4.9 x 1.44 mm	
Molded Thin Shrink Small Outline Package (TSSOP)	4.4 x 5 x .9 mm	
Molded TO-92	4.95 x 5.05 x 3.92 mm	

Package	Dimensions	Photo
Molded Dual-in-Line (MDIP)	6.34 x 9.81 x 3.3 mm	
Molded DPAK (TO-252)	6.58 x 7.30 x 2.3 mm	
Molded Plastic Leaded Chip Carrier (PLCC)	8.8 x 8.8 x 3.68 mm	
Ceramic Dual-in-Line Package (CERDIP)	10.15 x 6.5 x 4 mm	
Molded Power Surface Mount (TO-263)	10.15 x 9.9 x 4.54 mm	
Molded TO-220	10.15 x 14.98 x 4.57 mm	

Disclaimer

Information contained in this Cross Reference is based on data collected from outside sources and should be used as a reference source only. THE INFORMATION PROVIDED HEREIN IS PROVIDED "AS IS" WITHOUT WARRANTY BY NATIONAL SEMICONDUCTOR OF ANY KIND, AND TO THE MAXIMUM EXTENT ALLOWED BY APPLICABLE LAW, NATIONAL SEMICONDUCTOR EXPRESSLY DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, ACCURACY, OR ANY WARRANTY OF NONINFRINGEMENT. NATIONAL SEMICONDUCTOR DOES NOT WARRANT, GUARANTEE, OR MAKE ANY REPRESENTATIONS REGARDING THE USE OR THE RESULTS OF THE USE OF THE INFORMATION WITH RESPECT TO PERFORMANCE, ACCURACY, RELIABILITY, SECURITY, CAPABILITY, CURRENTNESS OR OTHERWISE. NO ORAL OR WRITTEN INFORMATION OR ADVICE GIVEN BY ANY PERSON SHALL CREATE A WARRANTY IN ANY WAY WHATSOEVER RELATING TO NATIONAL SEMICONDUCTOR. National Semiconductor recommends reviewing its datasheets to confirm functionality and package compliance in the customers' application.

For more details, please visit www.national.com

National Semiconductor provides a comprehensive set of support services. Product information, including sales literature and technical assistance is available through National's Customer Support Centers.

Americas

Email: new.feedback@nsc.com

Phone: 1-800-272-9959

Europe

Fax: +49 (0) 180-530 85 86

Email: europe.support@nsc.com

Phone:

Deutsch +49 (0) 69 9508 6208

English +44 (0) 870 24 0 2171

Français +33 (0) 1 41 91 87 90

Asia Pacific

Email: ap.support@nsc.com

Japan

Fax: 81-3-5639-7507

Email: jpn.feedback@nsc.com

Phone: 81-3-5639-7560

See us on the World Wide Web at: www.national.com