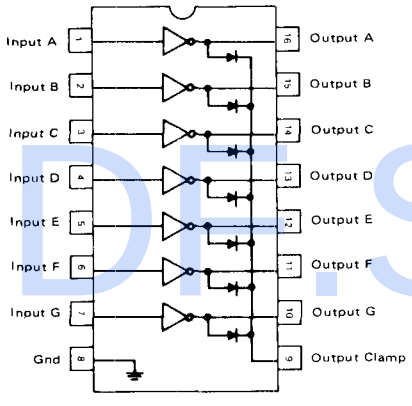
PERIPHERAL AND DISPLAY INTERFACE

MC1411, MC1412, MC1413–DRIVER ARRAYS

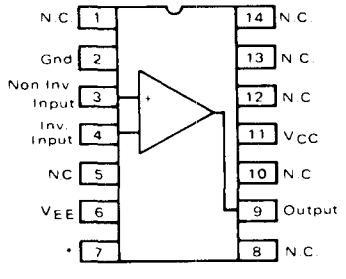
The seven NPN Darlington-connected transistors in these arrays are well suited for driving lamps, relays or printer hammers in a variety of industrial and consumer applications. Their high breakdown voltage and internal suppression diodes insures freedom from problems associated with inductive loads. Peak inrush currents to 600 mA permits them to drive incandescent lamps.

The MC1411 (ULN2001A) version is a general-purpose array for use with DTL, TTL, PMOS or CMOS logic. The MC1412 (ULN-2002A) contains a zener diode, and resistor in series with the input to limit input current for use with 14 to 25 Volt PMOS logic. The MC1413 (ULN2003A) with a series input resistor is well suited for systems utilizing 5 Volts TTL or CMOS logic.



Package: 16-Pin Dual-In-Line Plastic

COMPARATORS



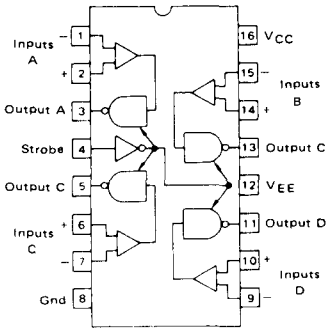
*Connected to pin 6 via the substrate on some plastic units.

MC1710C
0 to 70°C
G Suffix — Case 601
F Suffix — Case 606
L Suffix — Case 632
P Suffix — Case 646

MC1710
–55 to 125°C
G Suffix — Case 601
F Suffix — Case 606
L Suffix — Case 632

Single Comparators

Device Number	V_{IO} mV Max.	I_{IB} µA Max.	A_{VOL} V/V Min.
MC1710C	5.0	25	1000
MC1710	2.0	20	1250



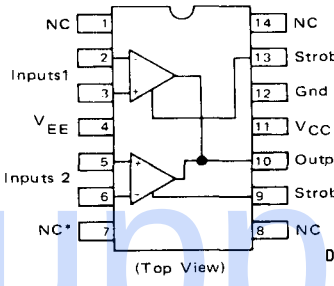
MC3430
MC3431
0 to 70°C
L Suffix — Case 620
P Suffix — Case 648

Quad High-Speed Comparators with Three-State Enable Common to all Four Devices

MC3432
MC3433
0 to 70°C
L Suffix — Case 620
P Suffix — Case 648

Quad Comparators with Open Collector Outputs, Common Strobe Input

Device Number	V_{IS} mV Max.	I_{IB} µA Max.	t_{PHL} ns Max.
MC3430	±6.0	20	45
MC3431	±10	20	45
MC3432	±6.0	20	50
MC3433	±10	20	50



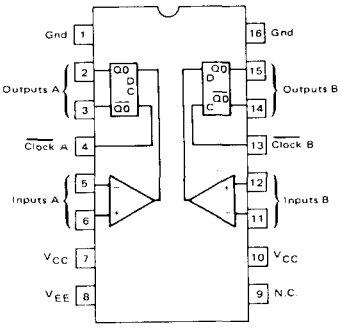
*Connected to pin 4 via the substrate on some plastic units.

MC1711C
0 to 70°C
G Suffix — Case 603
F Suffix — Case 606
L Suffix — Case 632
P Suffix — Case 646

MC1711
0 to 70°C
G Suffix — Case 603
F Suffix — Case 606
L Suffix — Case 632

Dual Comparators with Strobes, Wire-ORed Outputs

Device Number	V_{IO} mV Max.	I_{IB} µA Max.	A_{VOL} V/V Min.
MC1711C	5.0	100	700
MC1711	3.5	75	700



MC1650
MC1651
–30 to 85°C
L Suffix — Case 620

Ultra-High Speed Dual Comparators with Latches

Device Number	V_{TH} mV Min.	Common-Mode Range Volts Min.	t_{PD} (Differ. Inputs) ns Max.	t_{PD} (Clock) ns Max.
MC1650	±20	–2.5 to 3.0	5.0	4.7
MC1651	±20	–3.0 to 2.5	5.0	4.7