dsPIC30F2010

dsPIC30F2010 Data Sheet Errata

Clarifications/Corrections to the Data Sheet:

In the Device Data Sheet (DS70118**G**), the following clarifications and corrections should be noted. Any silicon issues related to the dsPIC30F2010 family will be reported in a separate silicon errata. Please check the Microchip website (www.microchip.com) for any existing issues.

1. Module: DC Temperature and Voltage Specifications

RAM Data Retention Voltage (Parameter DC12) in the DC Temperature and Voltage Specifications (Table 22-4 on page 148) has changed from 1.5V Typical to 1.75V Minimum. The following table shows this change in **Bold** text.

TABLE 22-4: DC TEMPERATURE AND VOLTAGE SPECIFICATIONS

DC CHARACTERISTICS			Standard Operating Conditions: 2.5V to 5.5V (unless otherwise stated) Operating temperature -40°C ≤ TA ≤ +85°C for Industrial -40°C ≤ TA ≤ +125°C for Extended				
Param No.	**Symbol**	**Characteristic**	**Min**	**Typ(1)**	**Max**	**Units**	**Conditions**
Operating Voltage(2)							
DC10	VDD	Supply Voltage	2.5	—	5.5	V	Industrial temperature
DC11	VDD	Supply Voltage	3.0	—	5.5	V	Extended temperature
DC12	VDR	RAM Data Retention Voltage(3)	**1.75**	**—**	—	V	
DC16	VPOR	VDD Start Voltage to ensure internal Power-on Reset signal	—	VSS	—	V	
DC17	SVDD	VDD Rise Rate to ensure internal Power-on Reset signal	0.05			V/ms	0-5V in 0.1 sec 0-3V in 60 ms

Note 1: Data in "Typ" column is at 5V, 25°C unless otherwise stated. Parameters are for design guidance only and are not tested.

2: These parameters are characterized but not tested in manufacturing.

3: This is the limit to which VDD can be lowered without losing RAM data.

2. Module: AC Characteristics: RC Accuracy

Internal RC Accuracy Parameters OS62 and OS64 are removed from the AC Characteristics (Table 22-17 on page 158). Parameter OS63 has been expanded to reflect multiple Max values for different temperatures, as shown by the **Bold** text below.

TABLE 22-17: AC CHARACTERISTICS: INTERNAL RC ACCURACY

AC CHARACTERISTICS		**Standard Operating Conditions: 2.5V to 5.5V (unless otherwise stated)** Operating temperature -40°C ≤ TA ≤ +85°C for Industrial -40°C ≤ TA ≤ +125°C for Extended					
Param No.	**Characteristic**	**Min**	**Typ**	**Max**	**Units**	**Conditions**	
	Internal FRC Accuracy @ FRC Freq. = 7.37 MHz(1)						
OS63	**FRC**	**—**	**—**	**±2.00**	**%**	**-40°C ≤ TA ≤ +85°C**	**VDD = 3.0-5.5V**
		—	**—**	**±5.00**	**%**	**-40°C ≤ TA ≤ +125°C**	**VDD = 3.0-5.5V**

Note 1: Frequency calibrated at 7.372 MHz ±2%, 25°C and 5V. TUN <3:0> bits can be used to compensate for temperature drift.

3. Module: AC Characteristics: Internal RC Accuracy

Internal RC Accuracy Parameter OS65 has been expanded in the AC Characteristics (Table 22-18 on page 158) to reflect multiple Min and Max values for different temperatures, as shown by the **Bold** text below.

TABLE 22-18: INTERNAL RC ACCURACY

AC CHARACTERISTICS		Standard Operating Conditions: 2.5V to 5.5V (unless otherwise stated) Operating temperature -40°C ≤ TA ≤ +85°C for Industrial -40°C ≤ TA ≤ +125°C for Extended				
Param No.	**Characteristic**	**Min**	**Typ**	**Max**	**Units**	**Conditions**
	LPRC @ Freq. = 512 kHz(1)					
OS65A		**-50**	**—**	**+50**	**%**	**VDD = 5.0V**
OS65B		**-60**	**—**	**+60**	**%**	**VDD = 3.3V**
OS65C		**-70**	**—**	**+70**	**%**	**VDD = 2.5V**

Note 1: Change of LPRC frequency as VDD changes.

REVISION HISTORY

Rev A Document (1/2008)

Initial release of this document.

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