



MICROCHIP

PIC16C620 → PIC16C620A Migration

DEVICE MIGRATIONS

This document is intended to describe the functional differences and the electrical specification differences that are present when migrating from one device to the next.

Note: Even though compatible devices are specified to be tested to the same electrical specification, the characteristics of the devices may be different from each other (due to process difference). For systems that were designed to the device specifications, these process differences should not cause any issues in the application. For systems that did not tightly meet the electrical specifications, the process differences may cause the device to behave differently in the application.

Table 1 shows the considerations that must be taken into account when migrating from the PIC16C620 to the PIC16C620A.

TABLE 1: PIC16C620 → PIC16C620A DIFFERENCES

Functional Differences				
No.	Difference	H/W	S/W	Prog.
1	Master Clear Filter changed, PIC16C620A. See Electrical Specification #30	✓	—	—
2	3V 10MHz Operation supported on the PIC16C620A	✓	—	—

Electrical Specification Differences										
Parm. No.	Sym.	Characteristic	PIC16C620 Data Sheet			PIC16C620A Data Sheet			Units	Conditions
			Min	Typ	Max	Min	Typ	Max		
D001	VDD	Supply Voltage	3.0	—	6.00	3.0	—	5.5	V	
D010	IDD	Supply Current	—	1.8	3.3	—	1.2	2.0	mA	FOSC=4MHz, VDD=5.5V, WDT Disabled
			—	9.0	20	—	4.0	7.0	mA	FOSC=20MHz, VDD=5.5V, WDT Disabled
D020	IPD	Power Down Current	—	1.0	2.5	—	—	2.5	mA	VDD = 4.0V
D023	ΔI_{WDT}	WDT Current	—	6.0	20	—	6.0	10	mA	VDD=4.0V
			—	—	25	—	—	12	mA	(125°)
	ΔI_{BOR}	Brown-out Reset Current	—	350	425	—	75	125	mA	BOD enabled, VDD=5.0V
	ΔI_{COMP}	Comparator Current for each Comparator	—	—	100	—	30	60	mA	VDD=4.0V
	ΔI_{VREF}	VREF Current	—	—	300	—	80	135	mA	VDD=4.0V

NOTES:



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