



DC6688F Selection Guide

	F2 Series (Single)	FS Series (Multi)			FL Series (Learning)			
	DC6688F2SCN	DC6688FSB	DC6688FSX	DC6688FSE	DC6688FLB	DC6688FLX	DC6688FLE	DC6688FLT
CPU	8-bit	8-bit	8-bit	8-bit	8-bit	8-bit	8-bit	8-bit
ARCHITECTURE	CISC-4T	CISC-4T	CISC-4T	CISC-4T	CISC-4T	CISC-4T	CISC-4T	CISC-1T
INSTRUCTION SET	MSC51	MSC51	MSC51	MSC51	MSC51	MSC51	MSC51	MSC51
MAX. CLOCK	12MHz	12MHz	12MHz	12MHz	16MHz	16MHz	16MHz	16MHz
UART	1	2	2	2	2	2	2	2
SPI (master)	N.A.	N.A.	N.A.	N.A.	N.A.	1	1	1
I2C (master)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	1	1
ROM (Program Flash)	2KB	2 / 4/ 8/ 16/ 24/ 30KB	62KB	16KB/30KB/62KB	16KB (12KB+4KB) / 32KB (24KB+8KB)	Total 48KB/ 64KB (configurable)	Total 64KB/ 96KB (configurable)	Total 96KB (configurable)
EEPROM/DATA Flash	N.A.	64B	64B	64B				
SRAM	64B	256B	256B	256B	256B+512B	256B+2KB	256B+2KB	256B+3KB
FLASH PROGRAMMING	SL	SL & SPI	SL & SPI	SL & SPI	SL & SPI	SL & SPI	SL & SPI	SL & SPI
SECURITY BIT	Single	Dual	Dual	Dual	Dual	Dual	Dual	Dual
I/O	16	19 (24pin) / 21(28pin)	19(24pin)/ 23(28pin)/ 26(32pin)	19(24pin)/ 23(28pin)/ 27(32pin)	19(24pin)/ 23(28pin)	23(28pin)/ 27(32pin)	23(28pin)/ 27(32pin)	23(28pin)/ 27(32pin)
External INTERRUPT	7 pins; 2 levels	8 pins; 2 levels	8 pins; 2 levels	8 pins; 2 levels	8 pins; 2 levels	8 pins; 2 levels	16 pins; 2 levels	16 pins; 2 levels
TIMERS/COUNTERS	16-bit x 3	16-bit x 3	16-bit x 3	16-bit x 3	16-bit x 3, 24-bitx1	16-bit x 3;24-bit x 1	16-bit x 3;24-bit x 1	16-bit x 3;24-bit x 1
PWM/REM	8-bit x 1	8-bit x 1	8-bit x 1	8-bit x 1	8-bit x 1	8-bit x 1	8-bit x 1	8-bit x 3
POWER Management	Backup/Idle/Stop	Backup/Idle/Stop	Backup/Idle/Stop	Backup/Idle/Stop	Backup/Idle/Stop	Backup/Idle/Stop	Backup/Idle/Stop	Backup/Idle/Stop
LVD/LVR Voltage	1.75V mean (1.5V to 2.0V)	1.75V mean (1.5V to 2.0V)	1.75V mean (1.5V to 2.0V)	1.75V mean (1.5V to 2.0V)	1.75V mean (1.5V to 2.0V)	1.75V mean (1.5V to 2.0V)	1.75V mean (1.5V to 2.0V)	1.75V mean (1.5V to 2.0V)
Operating Voltage (Max)	3.6V	3.6V	3.6V	3.6V	3.6V	3.6V	3.6V	3.6V
Operating Temperature	-25c to 85c	-25c to 85c	-25c to 85c	-25c to 85c	-25c to 85c	-25c to 85c	-25c to 85c	-25c to 85c
Package	20-SOP/SSOP	24/28-SOP/TSSOP	24/28-SOP/TSSOP 32-LQFP	24/28-SOP/TSSOP 32-LQFP	24/28-SOP/TSSOP	28-SOP/TSSOP 32-LQFP	28-SOP/TSSOP 32-LQFP	28-SOP/TSSOP 32-LQFP

Last Update: Feb 2013