

Multi-dimensional Matrix

Processor	MB91FV362GB	LCP2361 FBD	PIC18F45K80	LM3S2276	AT90CAN128	ATmega16M1	ATmega64M1
Manufacturer	Fujitsu	NXP Semiconductors	MICROCHIP	TI	ATMEL	ATMEL	ATMEL
Architecture	RISC	RISC		RISC	RISC	RISC	RISC
Performance	?	?	Up to 16MIPS	1.25 DMIPS/MHz	1 MIPS / MHz	1 MIPS / MHz	1 MIPS / MHz
Core size	32 bit	16 / 32 bit	8 bit	32 bit	8 bit	8 bit	8 bit
Clock	64MHz	72MHz	64MHz	50MHz	16MHz	16MHz	16MHz
RAM	16KB	8KB	3.5KB	32KB	4KB	1KB	4KB
FLASH	512KB	128KB	32KB	64KB	128KB	16KB	64KB
EPROM	No	No	1KB	No	4K	0.5KB	2KB
I/O	92	70	35	33	58	28	28
CAN 2.0	3 channels	2 channel	1 channel	1 channel	1 channel	1 channel	1 channel
ADC	16 x 10 bit	6 x 10 bit	11 x 12 bit	6 x 10 bit	8 x 10 bit	11 x 10 bit	11 x 10 bit
DAC	2 x 10 bit	1 x 10 bit	No	No	No	1 x 10 bit	1 x 10 bit
SPI	No	1	1	1	1	1	1
Timers	2 x 16 bit	4 x 32 bit	2 x 8bit, 3 x 16 bit	3 x 32 bit	2 x 8bit, 2 x 16 bit	1 x 8bit, 1 x 16 bit	1 x 8bit, 1 x 16 bit
Analog comparators	1	No	2	No	1	4	4
Temperature sensor	No	No	No	1	No	1	1
Hardware multiplier	Yes	No	Yes	Yes	Yes	Yes	Yes
Operating voltage	4.25V to 5.25V	3.0V to 3.6V	1.8V to 5.5V	2.7V to 5.5V	2.7V to 5.5V	2.7V to 5.5V	2.7V to 5.5V
Operating temperature	-40C to +85C	-40C to +85C	-40C to +125C	-40C to +80C	-40C to +125C	-40C to +125C	-40C to +125C
Grade	Industrial	Industrial	Automotive	Industrial	Automotive	Automotive	Automotive
Package	FPT 120	LQFP100	44 TQFP	64TQFP	64TQFP	TQFP32	TQFP32
Size (space)	32 x 32 mm	16 x 16 mm	9 x 9 mm	12 x 12 mm	16 x 16 mm	7 x 7 mm	7 x 7 mm
Price / 100 pcs (DK)	?	7.02CND	2.76CND	6.81CND	17.43CND	2.41CND	8.18CND
Documentation	Yes	Yes	Yes	Yes	Yes	Yes	Yes
IDE	?	?	MPLab	Code composer ?	AVR Studio 4	AVR Studio 4	AVR Studio 4
FW library	Cannot find	Cannot find	Yes	Yes	Yes	Yes	Yes
Dev. Board	Cannot find	Cannot find	Yes	Yes	Yes	Yes	Yes
Support	?	?	Microchip	TI AVNET	ATMEL AVNET	ATMEL AVNET	ATMEL AVNET
Availability	Fujitsu	NXP Digikey	Microchip DigiKey	TI AVNET DigiKey	ATMEL AVNET DigiKey	ATMEL AVNET DigiKey	ATMEL AVNET DigiKey