



Microcontroller Side-By-Side Comparison

	PIC16F1847 Microchip delete	PIC16F1827 Microchip delete	PIC16F88 Microchip delete
P.Memory (Kbytes)	14 Flash	7 Flash	7 Flash
P.Memory (Kwords)	8	4	4
Self-Write Flash	Yes	Yes	Yes
RAM (Bytes)	1024	384	368
EEPROM (Bytes)	256	256	256
I/O Pins	16	16	16
Max CPU Speed	32 MHz (8 MIPS)	32 MHz (8 MIPS)	20 MHz (5 MIPS)
Internal OSC	32 MHz, 32 kHz	32 MHz, 32 kHz	8MHz
CodeGuard Security	None	None	None
System Mgmt Features	BOR, LVD, POR, WDT, nanoWatt-[Low Speed, Fast Wake, XLP, Pwr Modes]	BOR, LVD, POR, WDT, nanoWatt-[Low Speed, Fast Wake, XLP, Pwr Modes]	None, POR, WDT, nanoWatt-[Low Speed, Fast Wake, Pwr Modes]
Analog Peripherals	2-Comparatorsw/SRLatch, Bandgap - Yes, OpAmp; 1A/D, 12x10-bit @ 100ksps; 1D/A, 1x5-bit @ ksps	2-Comparatorsw/SRLatch, Bandgap - Yes, OpAmp; 1A/D, 12x10-bit @ 100ksps; 1D/A, 1x5-bit @ ksps	2-Comparators, Bandgap - No, OpAmp; 1A/D, 7x10-bit @ 30ksps
Digital Comm. Peripherals	1-UART, 1-A/E/USART, 1-SPI, 1-I2C, 2-MSSP(SPI/I2C)	1-UART, 1-A/E/USART, 1-SPI, 1-I2C, 2-MSSP(SPI/I2C)	1-UART, 1-A/E/USART, 1-SPI, 1-I2C, 1-SSP(SPI/I2C)
Connectivity	None, LIN	None, LIN	None
Capture/Compare PWM Peripherals	2-CCP, 2-ECCP, 10-bitPWM	2-CCP, 2-ECCP, 10-bitPWM	1-CCP, 10-bitPWM
Digital Timers	4x8-bit, 1x16-bit	4x8-bit, 1x16-bit	2x8-bit, 1x16-bit
Application Peripherals	4-MtrCtrl. PWM, No, EBI-No	4-MtrCtrl. PWM, No, EBI-No	No, EBI-No
Debug/Develop. Features	ICSP, ICDDebug - Integrated	ICSP, ICDDebug - Integrated	ICSP, ICDDebug - No
Package (Pins)	PDIP, QFN, SOIC, SPDIP, SSOP, UQFN (18)	PDIP, QFN, SOIC, SSOP, UQFN (18)	PDIP, QFN, SOIC, SSOP (18)
Operating Voltage	(1.8V-5.5V)	(1.8V-5.5V)	(2V-5.5V)
Temperature Ranges	(-40 to 125)	(-40 to 125)	(-40 to 125)
Min PCB Area (mm2)			
Other Features	Debug Support • Integrated debug support on Device. No debug header is required	Enhanced Mid-range Core with 49 Instruction, 16 Stack Levels Flash Program Memory with self read/write	This powerful (200 nanosecond instruction execution) yet easy-to-program (only 35 single word instructions) CMOS Flash-based 8-bit