

28-pin EPROM 8-Bit Microcontroller Product Brief

Device	Program Memory	Data Memory	Pins	Analog Comparators	Prog. Vref	PSP	In-circuit Programming
PIC16C642	4K x 14	192 x 8	28	2	Yes	No	Yes
PIC16C662*	4K x 14	192 x 8	40-44	2	Yes	Yes	Yes

High Performance RISC CPU:

- Simple instruction set - 35 total
- All single-cycle instructions (200 ns), except for program branches which are two-cycle
- Operating speed:
 - DC - 20 MHz clock input
 - DC - 200 ns instruction cycle
- 4K x 14 on-chip EPROM program memory
- 176 x 8 general purpose registers (SRAM)
- 8 levels of hardware stack
- Direct, Indirect and Relative addressing modes
- Interrupt capability

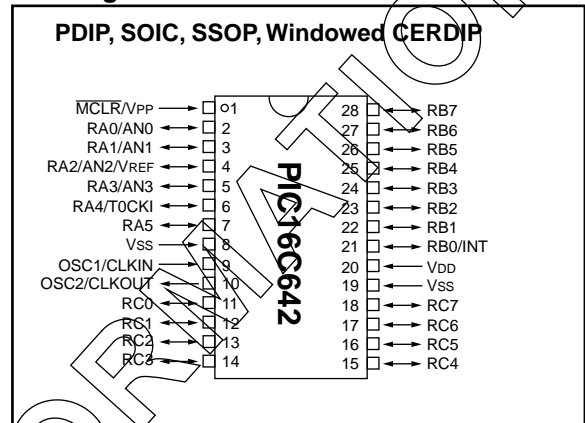
Peripheral Features:

- 22 I/O pins with individual direction control
- High current sink/source for direct LED drive
- Timer0: 8-bit timer/counter with 8-bit programmable prescaler
- ✓ 2 Analog Comparators with input multiplexing
- ✓ Programmable reference voltage for comparators

Special Microcontroller Features:

- Power-on Reset (POR)
- Power-up Timer (PWRT)
- Oscillator Start-up Timer (OST)
- Brown-out Protection
- ✓ Watchdog Timer (WDT) with dedicated on-chip RC oscillator for reliable operation
- Programmable code protection
- Power saving SLEEP mode
- Selectable oscillator options
- Serial in-system programming (via two pins)
- 4 user programmable ID locations

Pin Diagram



CMOS Technology:

- Low-power, high-speed CMOS EPROM technology
- Fully static design
- Wide operating voltage range
 - 3.0V to 6.0V
- Commercial, industrial and automotive temperature ranges
 - Low power consumption
 - < 2.0 mA @ 5.0V, 4.0 MHz
 - 15 µA typical @ 3.0V, 32 kHz
 - < 1.0 µA typical standby current @ 3.0V

* Contact Sales Office for Product Brief.

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