

PIC16C62B/72A

28-Pin 8-Bit CMOS Microcontrollers

Microcontroller Core Features:

- High-performance RISC CPU
- Only 35 single word instructions to learn
- All single cycle instructions except for program branches, which are two cycle
- Operating speed: DC 20 MHz clock input DC - 200 ns instruction cycle
- 2K x 14 words of Program Memory, 128 x 8 bytes of Data Memory (RAM)
- · Interrupt capability
- Eight level deep hardware stack
- Direct, indirect, and relative addressing modes
- Power-on Reset (POR)
- Power-up Timer (PWRT) and Oscillator Start-up Timer (OST)
- Watchdog Timer (WDT) with its own on-chip RC oscillator for reliable operation
- Brown-out detection circuitry for Brown-out Reset (BOR)
- Programmable code-protection
- · Power saving SLEEP mode
- · Selectable oscillator options
- Low-power, high-speed CMOS EPROM technology
- Fully static design
- In-Circuit Serial Programming[™] (ICSP)
- Wide operating voltage range: 2.5V to 5.5V
- High Sink/Source Current 25/25 mA
- Commercial, Industrial and Extended temperature ranges
- Low-power consumption:
 - < 2 mA @ 5V, 4 MHz
 - 22.5 μA typical @ 3V, 32 kHz
 - < 1 µA typical standby current





Peripheral Features:

- Timer0: 8-bit timer/counter with 8-bit prescaler
- Timer1: 16-bit timer/counter with prescaler, can be incremented during sleep via external crystal/clock
- Timer2: 8-bit timer/counter with 8-bit period register, prescaler and postscaler
- Capture, Compare, PWM module
- Capture is 16-bit, max. resolution is 12.5 ns, Compare is 16-bit, max. resolution is 200 ns, PWM maximum resolution is 10-bit
- 8-bit multi-channel Analog-to-Digital converter
- • Synchronous Serial Port (SSP) with Enhanced SPI[™] and $I^2C^{^{™}}$

Pin Diagrams



Key Features PICmicro™ Mid-Range Reference Manual (DS33023)	PIC16C62B	PIC16C72A
Operating Frequency	DC - 20 MHz	DC - 20 MHz
Resets (and Delays)	POR, BOR (PWRT, OST)	POR, BOR (PWRT, OST)
Program Memory (14-bit words)	2K	2K
Data Memory (bytes)	128	128
Interrupts	7	8
I/O Ports	Ports A,B,C	Ports A,B,C
Timers	3	3
Capture/Compare/PWM modules	1	1
Serial Communications	SSP	SSP
8-bit Analog-to-Digital Module	—	5 input channels

PIC16C62B/72A PRODUCT IDENTIFICATION SYSTEM

To order or obtain information, e.g., on pricing or delivery refer to the factory or the listed sales office.



* JW Devices are UV erasable and can be programmed to any device configuration. JW Devices meet the electrical requirement of each oscillator type (including LC devices).

Sales and Support

Data Sheets

Products supported by a preliminary Data Sheet may have an errata sheet describing minor operational differences and recommended workarounds. To determine if an errata sheet exists for a particular device, please contact one of the following:

- 1. Your local Microchip sales office
- 2. The Microchip Corporate Literature Center U.S. FAX: (480) 786-7277
- 3. The Microchip Worldwide Site (www.microchip.com)

Please specify which device, revision of silicon and Data Sheet (include Literature #) you are using.

New Customer Notification System

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