



PIC16C77X

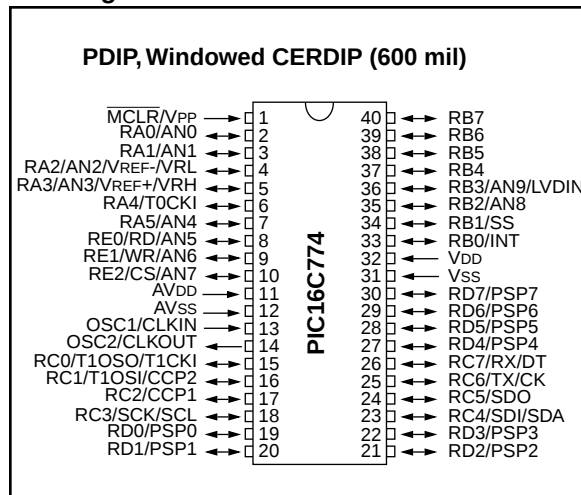
28/40-pin Microcontrollers with 12-bit A/D

Device	Memory		Pins	PSP	A/D Channels
	Program x14	Data x8			
PIC16C773	4K	256	28	No	6
PIC16C774	4K	256	40	Yes	10

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
- Up to 14 internal/external interrupt sources
- Up to 33 I/O pins with individual direction control
- 8 levels 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
- Programmable code-protection
- In-Circuit Serial Programming™ via two pins
- Power saving SLEEP mode
- Selectable oscillator options
- High sink/source current for direct LED drive
- Low-power, high-speed CMOS EPROM technology
- Fully static design
- Wide operating voltage range: 2.5V to 5.5V
- High sink/source current for direct LED drive
- Commercial and Industrial temperature ranges
- Low-power consumption:
 - < 2 mA @ 5V, 4 MHz
 - 22.5 µA typical @ 3V, 32 kHz
 - < 1 µA typical standby current

Pin Diagram



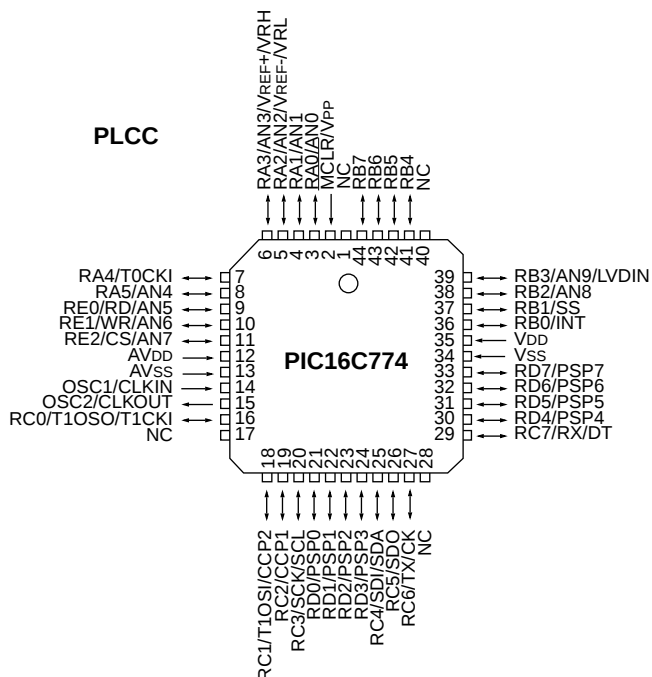
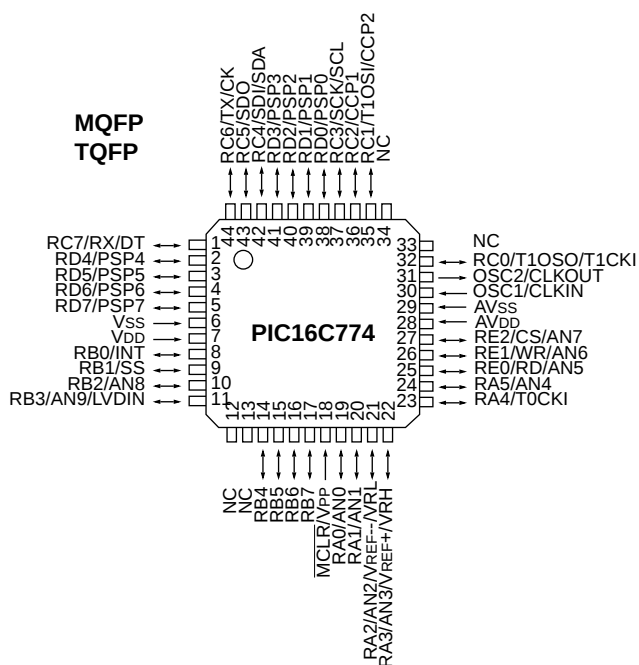
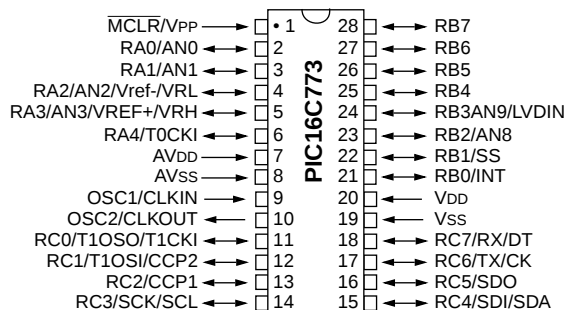
Peripheral Features:

- Timer0: 8-bit timer/counter with 8-bit programmable 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
- Two Capture, Compare, PWM (CCP) modules
- Capture is 16-bit, max. resolution is 12.5 ns, Compare is 16-bit, max. resolution is 200 ns, PWM max. resolution is 10-bit
- 12-bit multi-channel Analog-to-Digital converter
- On-chip absolute voltage reference generator
- Synchronous Serial Port (SSP) with SPI™ (Master Mode) and I²C™
- Universal Synchronous Asynchronous Receiver Transmitter (USART/SCI)
- Parallel Slave Port (PSP) 8-bits wide, with external RD, WR and CS controls (40/44-pin only)
- Programmable brown-out detection circuitry for Brown-out Reset (BOR)
- Programmable Low-voltage detection circuitry

PIC16C77X

Pin Diagrams (Cont'd)

SDIP, SOIC, Windowed Cerdip, SSOP (300 mil)





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Microchip received ISO 9001 Quality System certification for its worldwide headquarters, design, and wafer fabrication facilities in January, 1997. Our field-programmable PICmicro® 8-bit MCUs, KEELoc® code hopping devices, Serial EEPROMs, related specialty memory products and development systems conform to the stringent quality standards of the International Standard Organization (ISO).

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