

PIC18F24K40-I/SO

Data Sheet

8bit PIC Microcontroller, 64MHz, 16 kB Flash, 28-Pin SOIC

Manufacturers <u>Microchip Technology</u>, Inc

Package/Case SOIC-28

Product Type Embedded Processors & Controllers

RoHS

Lifecycle



Images are for reference only

Please submit RFQ for PIC18F24K40-I/SO or <a href="mailto:Emai

RFO

General Description

PIC18(L)F24K40 microcontrollers combine large Flash/EE/RAM memory, rich peripheral integration, XLP and 5V support to suit a variety of general purpose applications. These 28-pin devices deliver Core Independent Peripherals such as CWG, WWDT, CRC/Memory Scan, Hardware CVD, Zero-Cross Detect and Peripheral Pin Select, providing for increased design flexibility and lower system cost.

Features

PIC18 Core with 83 Instructions, 31 Stack Levels

Internal 64MHz oscillator

Operating Voltage Range: 'F' Version (2.3V – 5.5V)- Low Power 'LF' variant (1.8V – 3.6V)

Temperature Range: Industrial Version (-40C to 85C)- Extended Version (-40C to 125C)

16 KB Flash Program Memory with self read/write capability

1024 Bytes Data SRAM Memory

256 Bytes of EEPROM

24 x 10-bit ADC channels

1 x 5-bit DAC

2 x Comparators

Fixed Voltage Reference (FVR) module - 1.024V, 2.048V and 4.096V output levels

Hardware Capacitive Voltage Divider (CVD) for mTouch buttons/sliders
1 x Zero-Cross Detect
1 x I2C/SPI
1 x EUSART with LIN support
CRC with Memory Scan
Windowed Watchdog Timer (WWDT)
1 x Hardware Limit Timer (HLT)
1 x Complementary Waveform Generator
2 x standalone 10-bit PWM modules
2 x Capture/Compare/PWM modules
Three 8-bit Timers/Counters
Four 16-bit Timers/Counters
1 x Hardware Limit Timer (HLT)
Extended Watchdog Timer (WDT)
eXtreme Low Power (XLP) technology
Doze, Idle, and Sleep Power Saving Operating Modes
Sleep mode: 50nA @ 1.8V, typical
Active mode: 32uA/MHz @ 1.8V, typical
Low Current Power-on Reset (POR)
Brown-out Reset (BOR)
Low-Power BOR (LPBOR)
Peripheral Pin Select
In-Circuit Debug Integrated On-Chip
In-Circuit Serial Programing (ICSP) via Two Pins
Related Products



PIC24F16KA101-I/SS

Microchip Technology, Inc SSOP-20



PIC16F1936-I/SS

Microchip Technology, Inc SSOP-28



PIC16F1938-I/SP

Microchip Technology, Inc PDIP-28



PIC18F6520-I/PT

Microchip Technology, Inc TQFP-64



PIC18F2620-I/SO

Microchip Technology, Inc SOIC-28



PIC18F23K22-I/SP

Microchip Technology, Inc SPDIP-28



PIC18F2620-I/SP

Microchip Technology, Inc SPDIP-28



PIC18F97J60T-I/PT

Microchip Technology, Inc TQFP-100