

80MHz, 1.56 DMIPS/MHz, 32-bit MIPS M4K Core MCU; 64L TQFP  
10x10x1mm, Microcontrollers (MCU) 512KB Flash 32KBRAM 80MHz 10B ADC DMA

Manufacturers	<a href="#">Microchip Technology, Inc</a>
Package/Case	TQFP-64
Product Type	Embedded Processors & Controllers
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for PIC32MX440F512H-80I/PT or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

### Features

MCU Core

80MHz/105DMIPS, 32-bit MIPS M4K Core

USB 2.0 On-The-Go Peripheral with integrated PHY

Dedicated DMA Channel for USB OTG

5 Stage pipeline, Harvard architecture

MIPS16e mode for up to 40% smaller code size

Single cycle multiply and hardware divide unit

32 x 32-bit Core Registers

32 x 32-bit Shadow Registers

Fast context switch and interrupt response

MCU System Features

512K Flash (plus 12K boot Flash)

32K RAM (can execute from RAM)

4 Channel Hardware DMA Controller

Flash prefetch module with 256 Byte cache

Lock instructions or data in cache for fast access

Programmable vector interrupt controller

Analog Features

Fast and Accurate 16 channel 10-bit ADC,

Max 1 Mega samples per second at +/- 1LSB, conversion available during SLEEP & IDLE

Power Management Modes

RUN, IDLE, and SLEEP modes

Multiple switchable clock modes for each power mode, enables optimum power settings

Debug Features

8 hardware breakpoints (6 Instruction and 2 Data)

2 wire programming and debugging interface

JTAG interface supporting Programming, Debugging and Boundary scan

Other MCU Features

Fail-Safe Clock Monitor – allows safe shutdown if clock fails

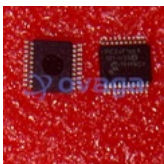
Hardware RTCC (Real-Time Clock and Calendar with Alarms)

2 Internal oscillators (8MHz & 31KHz)

Watchdog Timer with separate RC oscillator

Pin compatible with 16-bit PIC® MCUs

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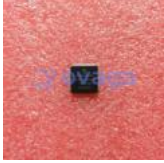
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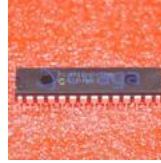
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