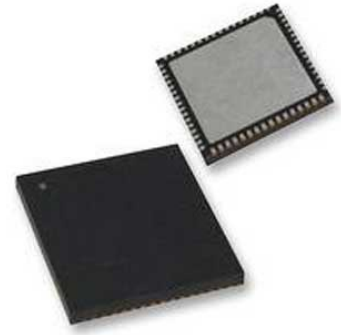


PIC/DSPIC Microcontroller, PIC32 Family PIC32MX Series Microcontrollers, PIC32, 32bit, 100 MHz

Manufacturers	Microchip Technology, Inc
Package/Case	QFN-64
Product Type	Embedded Processors & Controllers
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for PIC32MX470F512H-I/MR or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

Features

120 MHz/150 DMIPS, MIPS32® M4K® core

USB 2.0-compliant Full-speed OTG controller

Two I2S/SPI modules for Codec and serial communications

Peripheral Pin Select (PPS) functionality

Parallel Master Port (PMP) for graphics interfaces

Charge Time Measurement Unit (CTMU)

Temperature Range - 40°C to 105°C

Microcontroller Features

Operating voltage range of 2.3V to 3.6V

512KB Flash memory (plus an additional 12 KB of Boot Flash)

128KB SRAM memory

MIPS16e® mode for up to 40% smaller code size

Pin-compatible with most Microchip 16-bit devices

Low-power management modes (Idle and Sleep)

Peripheral Features

Peripheral Pin Select (PPS) functionality

Up to 4 channels of hardware DMA with automatic data size detection

Four UARTs and two I2C™ modules

Hardware Real-Time Clock and Calendar (RTCC)

Five 16-bit Timers/Counters (two 16-bit pairs combine to create two 32-bit timers)

Five Capture inputs and Five Compare/PWM outputs

Audio/Graphics/Touch HMI Features

External graphics interface with up to 34 PMP pins

Audio data communication: I2S, LJ, RJ, USB

Audio data control interface: SPI and I2C™

Audio data master clock:

Generation of fractional clock frequencies

Can be synchronized with USB clock

Can be tuned in run-time

Charge Time Measurement Unit (CTMU):

Supports miTouch™ capacitive touch sensing

Provides high-resolution time measurement (1 ns)

On-chip temperature measurement capability

Advanced Analog Features

ADC Module:

10-bit 1Msps rate with one Sample and Hold (S&H)

Up to 28 analog inputs

Can operate during sleep mode

Comparators:

Two dual-input Comparator modules

Programmable references with 32 voltage points

Debugger Development Support

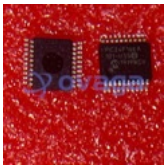
In-circuit and in-application programming

4-wire MIPS® Enhanced JTAG interface

Unlimited program and six complex data breakpoints

IEEE 1149.2-compatible (JTAG) boundary scan

Related Products



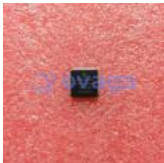
[PIC24F16KA101-I/SS](#)

Microchip Technology, Inc
SSOP-20



[PIC16F1938-I/SP](#)

Microchip Technology, Inc
PDIP-28



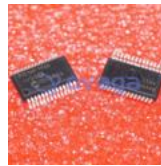
[PIC18F6520-I/PT](#)

Microchip Technology, Inc
TQFP-64



[PIC18F2620-I/SO](#)

Microchip Technology, Inc
SOIC-28



[PIC16F1936-I/SS](#)

Microchip Technology, Inc
SSOP-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