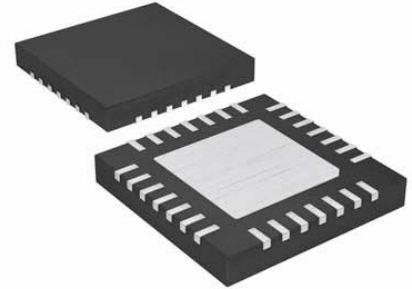


16-bit Microcontrollers - MCU 16B MCU 512KB Flsh 48KB RAM OpAmp Cmptr

Manufacturers	Microchip Technology, Inc
Package/Case	QFN-28
Product Type	Embedded Processors & Controllers
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for PIC24EP512GP202-I/MM or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The PIC24E general purpose MCUs feature the high speed 70 MIPS core with excellent performance and code density. It offers superior ADC performance, CTMU, Op Amps and Peripheral Trigger Generator (PTG) for high-end general purpose applications. These devices are available in various packages and with extended (125°C) temp option.

Features

Operating Conditions

3.0V to 3.6V, -40°C to +85°C, DC to 70 MIPS

3.0V to 3.6V, -40°C to +125°C, DC to 60 MIPS

PIC24E MCU Core

Modified Harvard Architecture

C Compiler Optimized Instruction Set

16-bit Wide Data Path

24-bit Wide Instructions

16x16 Integer Multiply Operations

32/16 and 16/16 Integer Divide Operations

Advanced Analog Features

ADC module Configurable as 10-bit, 1.1 Msps with four S&H or 12-bit, 500 ksps with one S&H

Up to three Op amp/Comparators

Op Amp direct connection to the ADC module

Additional dedicated comparator

Programmable references with 32 voltage points for comparators

Charge Time Measurement Unit (CTMU) supports mTouch™ capacitive touch sensing

Timers/Output Compare/Input Capture

12 general purpose timers

Five 16-bit and up to two 32-bit timers/counters

Four OC modules configurable as timers/counters

Four IC modules

Peripheral Trigger Generator (PTG) for scheduling complex sequences

PTG module with two configurable timers/counters

Communication Interfaces

Two UART modules (15 Mbps)

Two 4-wire SPI modules (15 Mbps)

Two I2C™ modules (up to 1 Mbaud) with SMBus support

PPS to allow function remap

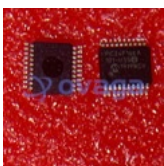
Programmable Cyclic Redundancy Check (CRC)

Direct Memory Access (DMA)

4-channel DMA with user selectable priority arbitration

UART, SPI, ADC, IC, OC, and Timers

Related Products



[PIC24F16KA101-I/SS](#)

Microchip Technology, Inc
SSOP-20



[PIC16F1936-I/SS](#)

Microchip Technology, Inc
SSOP-28



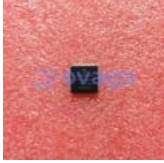
[PIC16F1938-I/SP](#)

Microchip Technology, Inc
PDIP-28



[PIC18F23K22-I/SP](#)

Microchip Technology, Inc
SPDIP-28



[PIC18F6520-I/PT](#)

Microchip Technology, Inc
TQFP-64



[PIC18F2620-I/SP](#)

Microchip Technology, Inc
SPDIP-28



[PIC18F2620-I/SO](#)

Microchip Technology, Inc
SOIC-28



[PIC18F97J60T-I/PT](#)

Microchip Technology, Inc
TQFP-100