

PIC32MX470F512L-I/PT

Data Sheet

PIC/DSPIC Microcontroller, PIC32 Microcontrollers, PIC32, 32bit, 120 MHz, 512 KB, 128 KB

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

Package/Case TQFP-100

Product Type Embedded Processors & Controllers

RoHS Rohs

Please submit RFQ for PIC32MX470F512L-I/PT or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

Images are for reference only



Features

Lifecycle

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
Five UARTs and two I2C TM 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 TM
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 mTouch TM 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