

# PIC32MX250F128B-I/ML

Data Sheet

32 Bit MCU, 128KB Flash, 32KB RAM, 40 MHz, 28 Pin, 3 Comp, CTMU, RTCC 28 QFN 6x6x0.9mm TUBE 73T1451

Manufacturers	Microchip Technology, Inc	
Package/Case	QFN-28	E
Product Type	Embedded Processors & Controllers	FEEL INNI
RoHS	Rohs	
Lifecycle		Images are for reference only

Please submit RFQ for PIC32MX250F128B-I/ML or Email to us: sales@ovaga.com We will contact you in 12 hours. RFQ

# **General Description**

# Features

50 MHz/83DMIPS, 32-bit RISC CPU with 0.5 mA/MHz current consumption

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):

Supports mTouchTM Capacitive touch buttons and sliders

Provides high-resolution time measurement (1 ns)

On-chip temperature measurement capability

Temperature Range - 40°C to 105°C

Microcontroller Features

Operating voltage range of 2.3V to 3.6V

Up to 128KB Flash memory (plus an additional 3 KB of Boot Flash)		
Up to 32K SRAM memory		
1.65 DMIPS/MHz (Dhrystone 2.1) performance		
MIPS32® M4K® core with MIPS16e® mode for up to 40% smaller code size		
Pin-compatible with most Microchip 16-bit devices		
Multiple power management modes		
Configurable WDT with on-chip Low-Power RC oscillator for reliable operation		
Peripheral Features		
Peripheral Pin Select (PPS) functionality		
Up to 4 channels of hardware DMA with automatic data size detection		
Two UART and $I2C^{TM}$ modules		
Separate PLLs for CPU and USB clocks		
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 Interface Features		
Data communication: I2S, LJ, RJ, DSP modes		
Control interface: SPI and I2C <sup>TM</sup>		
Master clock:		
Generation of fractional clock frequencies		
Can be synchronized with USB clock		
Can be tuned in run-time		
Analog Features		
Up to 13-channel, 10-bit ADC		
Three Analog Comparators		
Charge Time Measurement Unit (CTMU)		
Debug Features		
Four programming and debugging Interfaces		

### **Related Products**



# PIC24F16KA101-I/SS

Microchip Technology, Inc SSOP-20



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