PIC32MX150F128D-I/PT

Microcontroller PIC/DSPIC, PIC32 Family PIC32MX Series, 32bit, 40MHz, 128KB, 32KB RAM, TQFP-44

Manufacturers	Microchip Technology, Inc
Package/Case	TQFP-44
Product Type	Embedded Processors & Controllers
RoHS	Rohs
Lifecycle	

Images are for reference only

Please submit RFQ for PIC32MX150F128D-I/PT or Email to us: sales@ovaga.com We will contact you in 12 hours.   RFQ

General Description

DEVICE OVERVIEW
This document contains device-s PIC32MX1XX/2XX devices.

Operating Conditions
• 2.3V to 3.6V, -40ºC to +105ºC, DC to 40 MHz

Core: 40 MHz MIPS32® M4K®
• MIPS16e® mode for up to 40% smaller code size
• 1.56 DMIPS/MHz (Dhrystone 2.1) performance
• Code-efficient (C and Assembly) architecture
• Single-cycle (MAC) 32x16 and two-cycle 32x32 multiply

Clock Management
• 0.9% internal oscillator
• Programmable PLLs and oscillator clock sources
• Fail-Safe Clock Monitor (FSCM)
• Independent Watchdog Timer
• Fast wake-up and start-up

Power Management
• Low-power management modes (Sleep, Idle)
• Integrated Power-on Reset and Brown-out Reset
• 0.5 mA/MHz dynamic current (typical)
• 20 µA IPD current (typical)

Timers/Output Compare/Input Capture
• Five General Purpose Timers:
   - Five 16-bit and up to two 32-bit Timers/Counters
• Five Output Compare (OC) modules
• Five Input Capture (IC) modules

- Peripheral Pin Select (PPS) to allow function remap
- Real-Time Clock and Calendar (RTCC) module

Communication Interfaces
- USB 2.0-compliant Full-speed OTG controller
- Two UART modules (10 Mbps)
  - Supports LIN 2.0 protocols and IrDA® support
- Two 4-wire SPI modules (20 Mbps)
- Two I2C modules (up to 1 Mbaud) with SMBus support
- Peripheral Pin Select (PPS) to allow function remap
- Parallel Master Port (PMP)

Direct Memory Access (DMA)
- Four channels of hardware DMA with automatic data size detection
- Two additional channels dedicated for USB
- Programmable Cyclic Redundancy Check (CRC)

Input/Output
- 15 mA source/sink on all I/O pins
- 5V-tolerant pins
- Selectable open drain, pull-ups, and pull-downs
- External interrupts on all I/O pins

Qualification and Class B Support
- AEC-Q100 REVG (Grade 2 -40ºC to +105ºC) planned
- Class B Safety Library, IEC 60730

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

Features

Microcontroller Features

Peripheral Features

Audio Interface Features

Analog Features
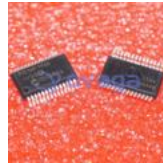
Debug Features

Related Products

[PIC24F16KA101-I/SS](#)

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SSOP-20

[PIC16F1936-I/SS](#)

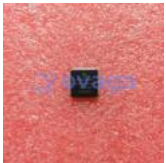Microchip Technology, Inc

SSOP-28

[PIC16F1938-I/SP](#)

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[PIC18F23K22-I/SP](#)

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SPDIP-28

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TQFP-100

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