

PIC24FJ128GA106-I/PT

Data Sheet

64 PIN, 128KB Flash, 16KB RAM, 16-bit Core, General Purpose Device, -40C to +85C, 64-TQFP, TRAY, Microcontrollers (MCU) 16B 16MIPS 128KB RAM 53 I/O

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

Package/Case TQFP-64

Product Type Embedded Processors & Controllers

RoHS Rohs

Lifecycle



Images are for reference only

Please submit RFQ for PIC24FJ128GA106-I/PT or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

Ideal for low power (<100nA standby current) and connectivity applications that benefit from the availability of multiple serial ports (3x12C, 3xSPI), 4xUARTS, and 23 independent timers. Large amounts of RAM (16kB) memory for buffering and large (up to 256kB) Enhanced Flash program memory make it ideal for embedded control and monitoring applications. PPS (Peripheral Pin Select) aids in configuring the most efficient pin configuration of available I/O, and CTMU provides touch sensing support for up to 64 individual buttons. Available in 64, 80, and 100 pin packages.

Features

CPU

Up to 16 MIPS performance

16 x 16 Hardware Multiply, Single Cycle Execution

12-bit x 16-bit Hardware Divider

C Compiler Optimized Instruction Set

Low Power nanoWatt

Run, Idle and Sleep modes

Multiple, Switchable Clock Modes for Optimum Performance and Power Management

Run mode: 1 mA/MIPS, 2.0V Typical

Sleep mode Current Down to 100 nA Typical Standby Current with 32 kHz Oscillator: 2.5 uA, 2.0V typical Flash Program Memory Self-Reprogrammable under Software Control 10,000 erase/write cycles 20 year data retention EEprom emulation capable System Internal oscillator support - 31 kHz to 8 MHz, up to 32 MHz with 4X PLL On-chip LDO Voltage Regulator JTAG Boundary Scan and Flash Memory Program Support Fail-Safe Clock Monitor – allows safe shutdown if clock fails Watchdog Timer with separate RC oscillator Analog Features 10-bit ADC, 16 channels, 500k samples per second Three Analog comparators Peripherals CTMU supports Capacitive Touch applications Perpheral Pin Select allows I/O remapping of many peripherals in real time 4xUART Modules with LIN and IrDA support, 4 Deep FIFO 3xSPI TM Modules with 8 Deep FIFO 3xI2CTM Modules with Master and Slave Modes Five 16-bit Timer Modules Up to 9 Input Capture and 9 Output Compare/PWM with dedicated time base Hardware RTCC, Real-Time Clock Calendar with Alarms PMP, Parallel Master Port, with 16 Address Lines, and 8/16-bit Data





Related Products



<u>PIC24F16KA101-I/SS</u>

Microchip Technology, Inc SSOP-20



PIC16F1938-I/SP

Microchip Technology, Inc PDIP-28



PIC16F1936-I/SS

Microchip Technology, Inc SSOP-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