PIC24FJ128GB106-I/MR

Data Sheet

PIC/DSPIC Microcontroller, USB On The Go, PIC24 Family PIC24FJ GB Series Microcontrollers, PIC24

Manufacturers	Microchip Technology, Inc
Package/Case	QFN-64
Product Type	Embedded Processors & Controllers
RoHS	Rohs
Lifecycle	

Images are for reference only

Please submit RFQ for PIC24FJ128GB106-I/MR or Email to us: sales@ovaga.com We will contact you in 12 hours. RFQ

General Description

Ideal for low power (<100nA standby current) and connectivity applications that benefit from the availability of multiple serial ports (3xI2C, 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 ofavailable I/O, and CTMU provides touch support for up to 64 individual buttons. Supports USB 2.0 for device, Host, and OTG with a complete and free software stack that includes a thumb drive application stack.Available in 64, 80, and 100 pin packages.USB Application Design Center

Features

Universal Serial Bus Features

USB v2.0 On-the-Go compliant

Dual role capable, can act as either Host or Device

Low speed(1.5Mb/s) and full speed(12 Mb/s) operation in host mode

Full speed USB operation in Device mode

Supports 32 endpoints

On-chip USB transceiver

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

Peripheral Pin Select allows I/O remapping of many peripherals in real time

4xUART Modules with LIN and IrDA support, 4 Deep FIFO

3xSPI ™ Modules with 8 Deep FIFO

3xI2C™ Modules with Master and Slave Modes

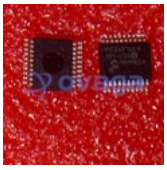
Five 16-bit Timer Modules

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



PIC24F16KA101-I/SS

Microchip Technology, Inc

SSOP-20

PIC16F1936-I/SS

Microchip Technology, Inc

SSOP-28

PIC16F1938-I/SP

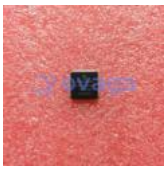
Microchip Technology, Inc

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

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SOIC-28

PIC18F97J60T-I/PT

Microchip Technology, Inc

TQFP-100