PIC24FJ128GA310-I/PT

PIC/DSPIC Microcontroller, General Purpose, PIC24 Family PIC24FJ GA Series Microcontrollers, PIC24

Manufacturers	Microchip Technology, Inc
Package/Case	TQFP-100
Product Type	Embedded Processors & Controllers
RoHS	Rohs
Lifecycle	

Images are for reference only

Please submit RFQ for PIC24FJ128GA310-I/PT or Email to us: sales@ovaga.com We will contact you in 12 hours.   RFQ

General Description

PIC24F 16-bit Microcontroller featuring nanoWatt XLP for eXtreme Low Power consumption. The device includes advanced low power features including a Low Voltage Sleep mode that maintains the device state and RAM with a typical current of 340 nA, and a Vbat pin that automatically transitions the RTCC to a battery supply when Vdd is removed. The family includes a 480 segment LCD Driver with 60 segment x 8 common drive capability.The combination of feature make the part ideally suited to a number of battery powered and general purpose applications.

Features

Low Power nanoWatt XLP

10 nA Deep Sleep mode

400 nA RTCC in Vbat mode

330 nA Low Voltage Sleep mode (RAM retention)

400 nA Real Time Clock & Calendar operation in Sleep modes

270 nA Watch Dog Timer operation in Deep Sleep modes

150 uA/MHz Run mode

Power Modes: Run, Doze, Idle, Sleep, Low Voltage Sleep, Deep Sleep, Vbat

Multiple, Switchable Clock Modes for Optimum Performance and Power Management

System Supervisors: Low Power BOR, WDT, INT0 and RTCC

CPU

Up to 16 MIPS performance

Single Cycle Instruction Execution

16 x 16 Hardware Multiply, & 32-bit x 16-bit Hardware Divider

C Compiler Optimized Instruction Set System

Peripherals

Upto 480 segment LCD Driver with 60 segment x 8 common drive

10/12-bit Differential ADC, 24 channels, 200/500 Ksps with Threshold Detect

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

Charge Time Measurement Unit (CTMU) enabling 24 channels of Capacitive Touch

Three Analog rail-to-rail comparators Peripherals

Hardware RTCC, Real-Time Clock Calendar with Alarms

System

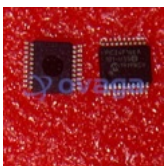Internal oscillators support - 31 kHz to 8 MHz, up to 32 MHz with 4X PLL

Fail-Safe Clock Monitor - allows safe shutdown if clock fails

Watchdog Timer with separate RC oscillator

System Supervisors: Low Power BOR, WDT, INT0 and RTCC

JTAG Boundary Scan

Related Products

PIC24F16KA101-I/SS

Microchip Technology, Inc

SSOP-20

PIC16F1936-I/SS

Microchip Technology, Inc
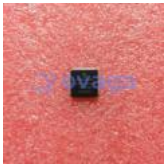
SSOP-28

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

Microchip Technology, Inc

SOIC-28

PIC18F97J60T-I/PT

Microchip Technology, Inc

TQFP-100