

## PIC24FJ128GA308-I/PT

Data Sheet

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

Manufacturers <u>Microchip Technology, Inc</u>	
Package/Case TQFP-80	und
Product Type Embedded Processors & Controllers	
RoHS Rohs	
Lifecycle	У
Please submit RFQ for PIC24FJ128GA308-I/PT or Email to us: sales@ovaga.com We will contact you in 12 hours.	<u>RFO</u>

### **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 to the RTCC to a battery supply when Vdd is removed. The family is also 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, INTO and RTCC

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, INTO and RTCC
JTAG Boundary Scan

#### **Related Products**



PIC24F16KA101-I/SS

SSOP-20

PIC16F1938-I/SP



# Microchip Technology, Inc

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