

## PIC32MK1024GPE100-E/PT

Data Sheet

MCU 32-bit PIC RISC 1MB Flash 3.3V Automotive 100-Pin TQFP Tray

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

Package/Case TQFP-100

Product Type Embedded Processors & Controllers

**RoHS** 

Lifecycle

Please submit RFQ for PIC32MK1024GPE100-E/PT or Email to us: sales@ovaga.com We will contact you in 12 hours.

Distribution of the second

Images are for reference only

**RFO** 

## **General Description**

PIC32MK family devices combine 32-Bit, 120Mhz performance with up to 1MB of Flash memory, and a rich peripheral set targeting applications such as motor control, industrial control and Industrial Internet of Things (IIoT) and multi-channel CAN applications.

These devices feature 7x 12-Bit ADC's each operating at up to 3.75MSPS, which can be combined and sequenced to provide up to 18MSPS sampling rates!

## **Features**

120Mhz MIPS32 microAptiv MCU Core

Floating Point Unit for single and double precision math

MicroMIPS Mode for 40% smaller code size

Four 64-bit Accumulators

Single Cycle MAC supporting saturating and fractional math

1MB Dual Panel Flash with Live Update support

4KB EEPROM

7x 12-bit 3.75MSPS ADC Cores up to 42 analog inputs

Four Op amps

Five analog comparators

Up to three 12-bit DACs 16 Output Compare 16 Input Capture **RTCC** Dual FS USB2.0 4 CAN 2.0B Modules Up to six UART Modules (up to 25Mbps) with LIN and IrDA support Up to six SPI/I2S modules Peripheral Pin Select (PPS) to enable remapable pin functions AEC-Q100 REVG (Grade 1 -40°C to +125°C) (planned) Class B Safety Library, IEC 60730 (planned) Back-up internal oscillator Programmable High/Low-Voltage Detect module Clock monitor with Back-up Internal Oscillator Global register locking In-circuit and in-application programming 2-wire or 4-wire MIPS® Enhanced JTAG interface Unlimited software and 12 complex breakpoints IEEE 1149.2-compatible (JTAG) boundary scan Non-intrusive hardware-based instruction trace MPLAB X Integrated Development Environment (IDE) MPLAB® Harmony Integrated Software Framework USB, Graphics, and mTouch<sup>TM</sup> middleware MFi, Android<sup>TM</sup>, and Bluetooth® audio frameworks RTOS Kernels: Express Logic ThreadX, FreeRTOS<sup>TM</sup>, OPENRTOS®, Micriµm®  $\mu$ C/OS<sup>TM</sup>, and SEGGER

## **Related Products**



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

Microchip Technology, Inc SSOP-20



PIC16F1936-I/SS

Microchip Technology, Inc SSOP-28



PIC16F1938-I/SP

Microchip Technology, Inc PDIP-28



PIC18F6520-I/PT

Microchip Technology, Inc TQFP-64



PIC18F2620-I/SO

Microchip Technology, Inc SOIC-28



PIC18F23K22-I/SP

Microchip Technology, Inc SPDIP-28



PIC18F2620-I/SP

Microchip Technology, Inc SPDIP-28



PIC18F97J60T-I/PT

Microchip Technology, Inc TQFP-100