

# PIC24FV16KA304-I/PT

Data Sheet

PIC/DSPIC Microcontroller, General Purpose, PIC24 Family PIC24FV KA Series Microcontrollers, PIC24

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

Package/Case TQFP-44

Product Type Embedded Processors & Controllers

RoHS Rohs

Lifecycle



Images are for reference only

Please submit RFQ for PIC24FV16KA304-I/PT or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

## **General Description**

16-bit Microcontroller featuring eXtreme LowPower consumption. Designed for power constrained and battery poweredapplications. Features unique peripherals like DSBOR, DSWDT and RTCC which runin Deep Sleep mode for industry leading low power performance.

#### **Features**

Operating voltage:

PIC24FV products support 2.0V-5.5V operation

PIC24F products support 1.8V-3.6V operation

Typical nanoWatt XLP specifications include:

nanoWatt XLP Technology ideal for battery applications

20nA Deep Sleep mode

25nA Sleep mode with RAM retention

500nA Real Time Clock & Calendar operation in Sleep modes

400nA Watch Dog Timer operation in Sleep modes

512 Bytes of Data EEPROM

Other Low Power Specifications include:

1uS wake-up from Sleep

50nA I/O port leakage

200uA at 1MHz Run mode

Power Modes: Run, Doze, Idle, Sleep, Deep Sleep

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

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

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

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:

12-bit Differential ADC, 16 channels, 100k samples per second, 16-deep result buffer

Charge Time Measurement Unit (CTMU) enabling 16 channels of Capacitive Touch

Two Analog rail-to-rail comparators Peripherals

2 UART Modules with LIN and IrDA support, 4 Deep FIFO

2 SPI Modules with 8 Deep FIFO

2 I2C<sup>TM</sup> Modules with Master and Slave Modes

Hardware RTCC, Real-Time Clock Calendar with Alarms

#### **Related Products**



PIC24F16KA101-I/SS

Microchip Technology, Inc
SSOP-20



Microchip Technology, Inc PDIP-28

PIC16F1938-I/SP



PIC16F1936-I/SS

Microchip Technology, Inc
SSOP-28



Microchip Technology, Inc SPDIP-28

PIC18F23K22-I/SP



PIC18F6520-I/PT

Microchip Technology, Inc TQFP-64



PIC18F2620-I/SO

Microchip Technology, Inc SOIC-28



## PIC18F2620-I/SP

Microchip Technology, Inc SPDIP-28



### PIC18F97J60T-I/PT

Microchip Technology, Inc TQFP-100