

# PIC24FV16KA301-I/SO

Data Sheet

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

Manufacturers	Microchip Technology, Inc	
Package/Case	SOIC-20	
Product Type	Embedded Processors & Controllers	22222222222
RoHS	Rohs	
Lifecycle		Images are for reference only
Please submit REO	for PIC24FV16KA301-I/SO or <u>Email to us: sales@ovaga.com</u> `	We will contact you in 12 hours. RFQ

# **General Description**

16-bit Microcontroller featuring eXtreme LowPower consumption. Designed for power constrained and battery powered applications. 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:

#### **Ovaga Technologies Limited**

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

PIC16F1938-I/SP 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/SO

Microchip Technology, Inc SOIC-28





## PIC18F2620-I/SP

Microchip Technology, Inc SPDIP-28

## PIC18F97J60T-I/PT

Microchip Technology, Inc TQFP-100