

PIC18F46K42-I/PT

Data Sheet

 $8\ Bit\ MCU,\ PIC18\ Family\ PIC18F\ K4x\ Series\ Microcontrollers,\ 64\ MHz,\ 64\ KB,\ 4\ KB,\ 44\ Pins,\ TQFP$

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

Package/Case TQFP-44

Product Type Embedded Processors & Controllers

RoHS

Lifecycle



Images are for reference only

Please submit RFQ for PIC18F46K42-I/PT or <u>Emailto:sales@ovaga.com</u> We will contact you in 12 hours.

RFO

General Description

PIC18(L)FxxK42 MCUs integrate a rich set of core independent peripherals, intelligent analog peripherals and large Flash/RAM/EEPROM memories. These 28-, 40- and 48-pin devices also offer a host of low power features, performance improvements and design flexibility options that easily and rapidly enable the complex set of functions required by many of today's embedded control applications.

PIC18F "K42" Product Family Overview

Check out the code examples in MPLAB Xpress

Watch livestream highlighting the K42

Features

Interrupt Vector Table

Programmable single or dual priority

Two level hardware context saving

Eliminates need for CPU involvement in data transfers

Access to all memory spaces and peripherals

Flexible source and destination message sizes

Programmable DMA priority

Memory Access Partition (MAP) - Customize flash partitioning with bootloader write protection

Device Information Area (DIA) - Dedicated memory area for data storage of temp sensor factory calibration value, factory ID and FVR values for ADC and COMP

WDT: 500nA @ 1.8V typical

SLEEP mode: 50nA @ 1.8V typical

DOZE mode allows CPU to run at a lower clock speed than peripherals

IDLE and SLEEP modes selectively shut down peripherals and/or core for power reduction

Averaging, filter calculations, oversampling and threshold comparison (ADCC)

Automates touch sampling and reduces software size and CPU usage when touch or proximity sensing is required (ADCC)

5-bit resolution, rail-to-rail (DAC)

Unbuffered I/O pin output

Comparator hysteresis enable

Invert output polarity

Fixed Voltage Reference (FVR) module - 1.024V, 2.048V and 4.096V output levels

Senses high voltage AC signal (ZCD)

Generates interrupts on zero cross (ZCD)

DMA compatible

Asynchronous UART, RS-232, RS-485 compatible

Programmable 1, 1.5, 2 stop bits

Configurable length bytes

Arbitrary length data packets

Separate transmit and receive buffers with 2-byte FIFO and DMA capabilities

SMBus, PMBUSTM compatible

In-Circuit Debug Integrated On-Chip

In-Circuit Serial Programing (ICSP) via Two Pins

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



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