8 Bit MCU, Flash, PIC18 Family PIC18F K2x Series Microcontrollers, 64 MHz, 16 KB, 768 Byte, 44 Pins

Manufacturers	Microchip Technology, Inc
Package/Case	TQFP-44
Product Type	Embedded Processors & Controllers
RoHS	Rohs
Lifecycle	

Images are for reference only

Please submit RFQ for PIC18F44K22-I/PT or Email to us: sales@ovaga.com We will contact you in 12 hours.   RFQ

General Description

Features

C Compiler optimized architecture/instruction set

Data EEPROM to 1024 bytes

Linear program memory addressing to 64 Kbytes

Linear data memory addressing to 4 Kbytes

Up to 16 MIPS operation

16-bit wide instructions, 8-bit wide data path

Priority levels for interrupts

31-level, software accessible hardware stack

8 x 8 Single-Cycle Hardware Multiplier

Sleep mode: 100 nA, typical

Watchdog Timer: 500 nA, typical

Timer1 Oscillator: 500 nA @ typical 32 kHz

Factory calibrated to ± 1%

Software selectable frequencies range of 31 kHz to 16 MHz

64 MHz performance available using PLL

no external components required

Four Crystal modes up to 64 MHz

Two external Clock modes up to 64 MHz

4X Phase Lock Loop (PLL)

Secondary oscillator using Timer1 @ 32 kHz

Allows for safe shutdown if peripheral clock stops

Two-Speed Oscillator Start-up

Full 5.5V operation (PIC18F2XK22/4XK22)

Low voltage option available for 1.8V-3.6V operation (PIC18LF2XK22/4XK22)

Self-reprogrammable under software control

Power-on Reset (POR), Power-up Timer (PWRT) and Oscillator Start-up Timer (OST)

Programmable Brown-out Reset (BOR)

Extended Watchdog Timer (WDT) with on-chip oscillator and software enable

Programmable code protection

In-Circuit Serial Programming™ (ICSP™) via two pins

In-Circuit Debug via two pins

10-bit resolution

17 analog input channels (PIC18F/LF2XK22)

28 analog input channels (PIC18F/LF4XK22)

Auto acquisition capability

Conversion available during Sleep

Programmable High/Low Voltage Detection (PLVD) module

Up to 28 channels for button, sensor or slider input

Two rail-to-rail analog comparators

Comparator inputs and outputs externally accessible and configurable

Programmable On-chip Voltage Reference (CVREF) module (% of VDD)

Selectable on-chip fixed voltage reference

High current sink/source 25 mA/25 mA

Individually programmable weak pull-ups

Individually programmable interrupt-on-pin change

Three external interrupt pins

Up to four 16-bit timers/counters with prescaler

Up to three 8-bit timers/counters

Dedicated, low-power Timer1 oscillator

Up to two Capture/Compare/PWM (CCP) modules

Up to three Enhanced Capture/Compare/PWM

One, two or four PWM outputs

Selectable polarity

Programmable dead time

Auto-shutdown and Auto-restart

PWM output steering control

3-wire SPI (supports all 4 SPI modes)

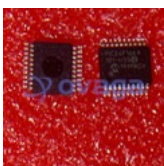I2C™ Master and Slave modes (Slave mode with address masking)

Two Enhanced Universal Synchronous Asynchronous

Supports RS-232, RS-485 and LIN 2.0

Auto-Baud Detect

Auto Wake-up on Start bit

Related Products

[PIC24F16KA101-I/SS](#)

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SSOP-20

[PIC16F1936-I/SS](#)
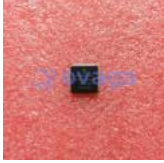
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SSOP-28
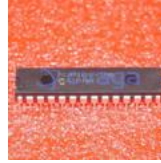
PIC16F1938-I/SP

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PDIP-28

PIC18F23K22-I/SP

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PIC18F2620-I/SO

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SOIC-28

PIC18F97J60T-I/PT

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TQFP-100