8 Bit MCU, Flash, PIC18 Family PIC18F K2x Series Microcontrollers, 64 MHz, 8 KB, 512 Byte, 28 Pins

Manufacturers	Microchip Technology, Inc
Package/Case	SOIC-28
Product Type	Embedded Processors & Controllers
RoHS	Rohs
Lifecycle	

Images are for reference only

Please submit RFQ for PIC18F23K20-I/SO or Email to us: sales@ovaga.com We will contact you in 12 hours.   RFQ

General Description

Features

Optional extended instruction set designed to optimize re-entrant code

Up to 1024 bytes Data EEPROM

Up to 64 Kbytes Linear program memory addressing

Up to 3936 bytes Linear data memory addressing

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

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

Operating Voltage Range: 1.8V to 3.6V

Self-Programmable under Software Control

Interrupt on High/Low-Voltage Detection

With software enable option

Programmable period from 4 ms to 131s

Single-Supply 3V In-Circuit Serial Programming™ (ICSP™) via two pins

In-Circuit Debug (ICD) via Two Pins

Sleep mode: 100 nA

Watchdog Timer: 500 nA

Timer1 Oscillator: 500 nA @ 32 kHz

10-bit resolution, 13 External Channels

Auto-acquisition capability

Conversion available during Sleep

1.2V Fixed Voltage Reference (FVR) channel

Independent input multiplexing

Two rail-to-rail analog comparators

Independent input multiplexing

Programmable (% VDD), 16 steps

Two 16-level voltage ranges using VREF pins

High-Current Sink/Source 25 mA/25 mA

Three programmable external interrupts

Four programmable interrupt-on-change

Eight programmable weak pull-ups

Programmable slew rate

Capture/Compare/PWM (CCP) module

One, two or four PWM outputs

Selectable polarity

Programmable dead time

Auto-Shutdown and Auto-Restart

3-wire SPI (supports all 4 modes)

I2C™ Master and Slave modes with address mask

Supports RS-485, RS-232 and LIN

RS-232 operation using internal oscillator

Auto-Wake-up on Break

Auto-Baud Detect

Related Products

PIC24F16KA101-I/SS

Microchip Technology, Inc

SSOP-20

PIC16F1936-I/SS
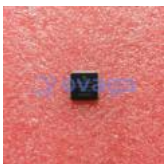
Microchip Technology, Inc

SSOP-28

PIC16F1938-I/SP

Microchip Technology, Inc

PDIP-28

PIC18F23K22-I/SP

Microchip Technology, Inc

SPDIP-28

PIC18F6520-I/PT

Microchip Technology, Inc

TQFP-64

PIC18F2620-I/SP

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SPDIP-28

PIC18F2620-I/SO

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SOIC-28

PIC18F97J60T-I/PT

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TQFP-100