

# **PIC18F24K20-I/SS**

Data Sheet

**RFO** 

28 PIN, 16 KB ENH FLASH, 768 RAM, 25 I/O, -40C to +85C, 28-SSOP 208mil, TUBE, Microcontrollers (MCU) 16KB Flash 768B RAM 25 I/O 8B

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

Package/Case SSOP-28

Product Type Embedded Processors & Controllers

RoHS Rohs

Please submit RFQ for PIC18F24K20-I/SS or Email to us: sales@ovaga.com We will contact you in 12 hours.

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Images are for reference only

# **General Description**

## **Features**

Lifecycle

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  $\pm 1\%$ 

Software selectable frequencies range of 31 kHz to 16 MHz

64 MHz performance available using PLL

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 Fail-Safe Clock Monitor: 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<sup>TM</sup> (ICSP<sup>TM</sup>) 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<sup>TM</sup> 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



PIC16F1938-I/SP

Microchip Technology, Inc PDIP-28



PIC18F6520-I/PT

Microchip Technology, Inc TOFP-64



PIC18F2620-I/SO

Microchip Technology, Inc SOIC-28



PIC16F1936-I/SS

Microchip Technology, Inc SSOP-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