



FEATURES HIGHLIGHT

- Processor – Microchip PIC18F4XK20 64MHz core speed maximum.
- Internal High-speed Flash: Up to 64 Kbytes, and up to 4K internal SRAM.
- On board three status LEDs
- General purpose 2.54mm pitch, pin-headers for easy user access.
- Plug-in style enables modular product design.
- SPI, I2C, UART, and GPIO lines available on pin-headers.
- Built in reset switch
- Onboard ICSP programming connector
- 1.8 to 3.6V power supply range
- Inbuilt up to 1K EEPROM with 1 million erase cycles

APPLICATIONS

- Wireless Interface, Smartcard Readers, etc
- Medical Electronics and Instrumentation
- Embedded Applications: Access Control, Home Security etc

- Industrial Automation: Safety control systems, remote monitoring of actuator control, temperature, etc

OVERVIEW

Prodigy's CPU Module is based on Microchip's PIC18F4XK20 series, 8-bit microcontrollers. The board supports features to meet a complete set of system functions, minimizing the number of external components for building a product. General purpose pin headers provide easy access and usage of the on-chip peripherals. It is an ideal modular board solution to build a product faster for the proof of concept and also the volume production.

The embedded Flash memory can be programmed in-system via the ICSP interface or a serial interface on a production line.

SPECIFICATIONS

Physical Characteristics

Dimensions: 55(L) X 35(B) mm
2.165(L) X 1.377(B) inches

Boot loader: Optional

Programming: UART, ICSP

Performance Characteristics

CPU: Microchip PIC18F46K20 8 bit core.

Memory:

- SRAM 4Kbytes
- FLASH 64Kbytes
- EEPROM 1Kbytes (inbuilt to processor)

Peripherals:

- UART, I2C, SSP, SPI interfaces
- PWM channels
- 25 mA source/sink GPIO
- Parallel Slave Port
- High/Low voltage detection unit
- Programmable Brown out detection
- LIN 2.0 and RS485
- Programmable on chip voltage reference
- Two Speed Oscillator startup
- Very Low power sleep mode operation
- Dual Analog Comparators
- Watch Dog Timer,
- 10-bit 14 channel ADC,
- 16-bit General Purpose timers
- PWM control
- Optional CAN Interface

Security: Built-in code protection mechanism for the program code.

Fully Static Operation: Up to 64 MHz operation

User Environment

Operating Temperature -40°C to +85°C

Storage Temperature -50°C to +105°C

Humidity: 15% to 95% relative humidity, non-condensing

Important: Specifications provided in this datasheet are only preliminary. Final specifications and the availability to be checked with Prodigy while placing the order.