MicroMod RP2040 Processor Board

DEV-17720

Product Overview

10/11/2022

For the most up-to-date information, visit www.mouser.com or the supplier's website.

Description

SparkFun MicroMod RP2040 Processor Board (DEV-17720) is a low-cost, high-performance board with flexible digital interfaces and an RP2040 processor. This board features M.2 connector that increases parts availability and reduces connector cost. The RP2040 utilizes dual Arm® Cortex-M0+ processors and offers 264kB of embedded SRAM in six banks and six dedicated IO for SPI flash (supporting Execute In Place (XIP)). The RP2040 processor board is supported with C/C++ and Micro Python cross-platform development environments, including easy runtime debugging access. This board includes a built-in USB that acts as both device and host. The RP2040 processor board includes an external flash chip in addition to a large amount of internal RAM on the chip. This board comes with two symmetric cores and high internal bandwidth, making it useful for signal processing and video.

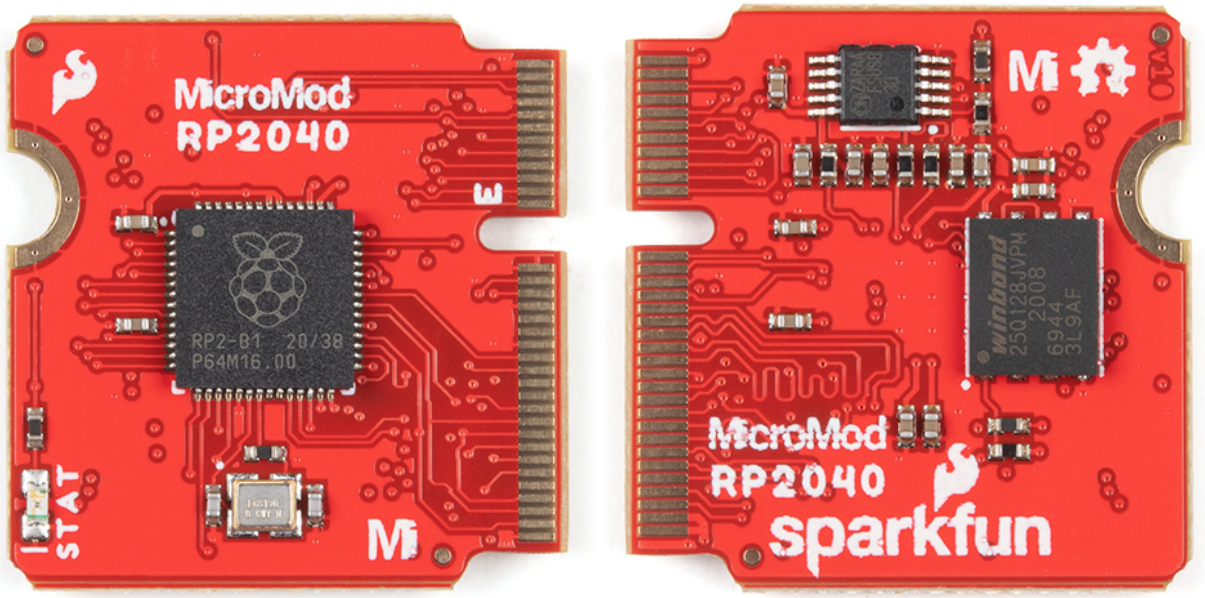
Features

- Dual Cortex M0+ processors up to 133MHz
- 264kB of embedded SRAM in 6 banks
- 6 dedicated IO for QSPI flash and supporting Execute In place (XIP)
- 30 programmable IO for extended peripheral support
- SWD interface
- Timer with 4 alarms
- Real-time counter (RTC)
- USB 1.1 host/device functionality
- Supported programming languages:
  - MicroPython
  - C/C++
- 22mm x 22mm dimension

Peripherals

- 1x USB dedicated for programming and debugging (Host capable)
- 2x UARTs
- 2x I²C
- 2x SPI
- 29x GPIO
- 2x digital pins
- 3x analog pins
- 16x PWM
- 128Mbit/16MB (external) flash memory
- Status LED

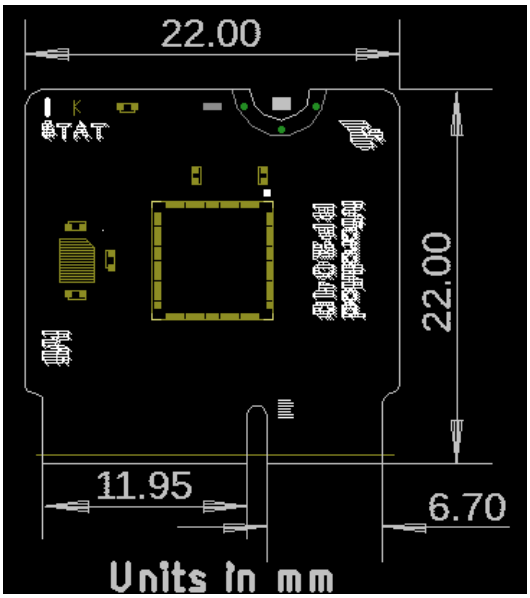
Board Overview



Schematic

- DEV-17720

Board Dimensions



Mouser Part Number

View Part

To learn more, visit https://www.mouser.com/new/sparkfun/sparkfun-dev-17720-micromod-development-board/