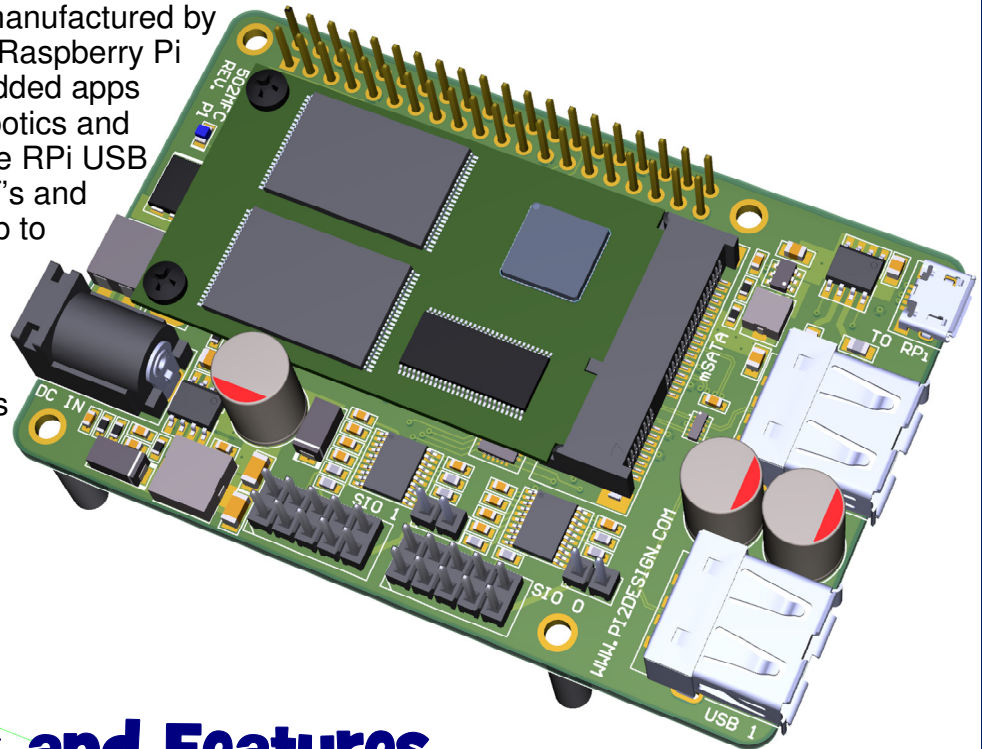


PI2EMBEDDED 502MFC Multi-Function Shield

Introduction and Overview

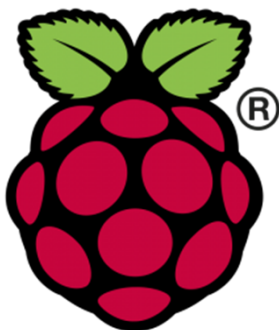
The 502MFC, designed and manufactured by PI 2 Design, is a professional Raspberry Pi I/O Shield designed for Embedded apps such as Machine Control, Robotics and more. The shield converts one RPi USB Host Port to two 1Mbps UART's and an mSATA Storage Socket (up to one Terrabyte).

Coupled with the Raspberry Pi 3 with built in Bluetooth and WiFi, the 502MFC creates a very low cost control system for a wide variety of industrial embedded applications.



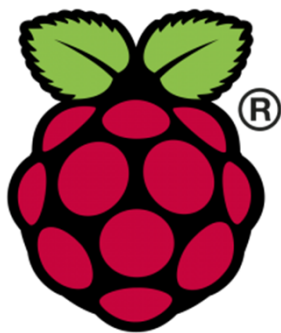
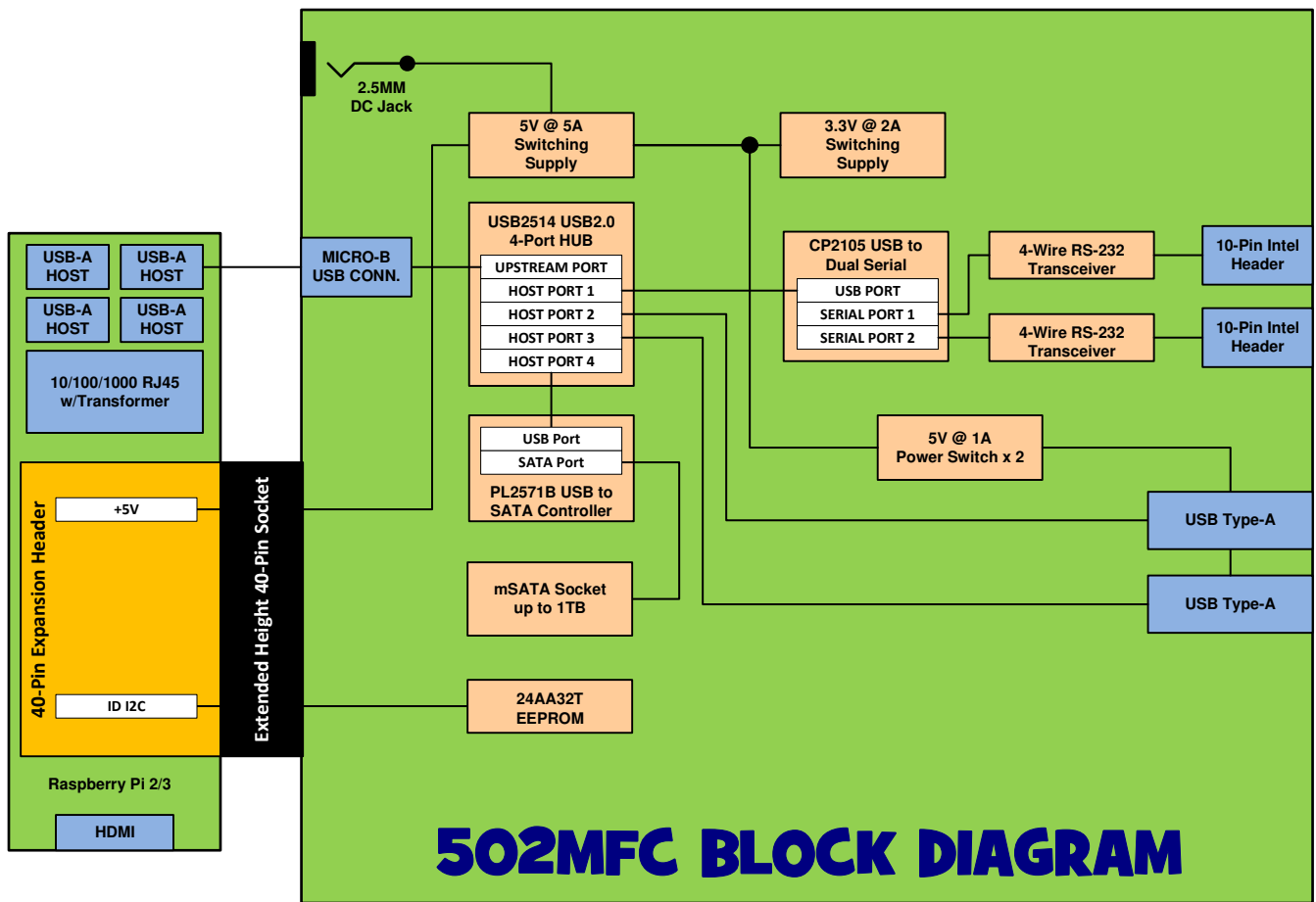
Specifications and Features

- **FORM FACTOR** – Standard Raspberry Pi Shield size with Stackable 40-Pin mating connector. Non-Stacking version is also available.
- **mSATA SOCKET** – Standard size for up to 1Tbyte of Solid State Storage. Compatible with all standard mSATA drives that accept SATA 2.5 or higher. The PL2571B provides the USB2.0 to SATA interface.
- **DUAL USB HOST** – A pair of USB-A Connectors provides for additional USB expansion. Unlike the Raspberry Pi ports, these offer up to 1A 5V power per socket.
- **RS232 SERIAL PORTS** – A dual USB to serial controller IC (CP2105) is used to enable two Serial Ports capable of up to 2Mbps data rates. An RS-232 4-wire Transceiver (TXD/RXD + CTS/RTS) is used on each port to drive a pair of Intel standard 10-pin serial headers. Additionally a pair of jumper plugs allows 5V to be applied to Pin 9 of each Header.
- **ON-BOARD POWER SUPPLY** – A highly efficient, wide input range (8V to 28V) power supply develops 5V @ 5A to power the 502MFC as well as the Raspberry Pi 3.



Pi 2 Design

www.Pi2Design.com



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