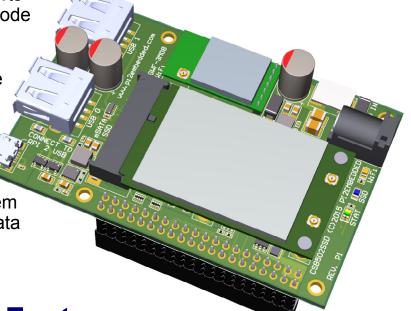
CSB502SSD Raspberry Pi 2 Shield

Introduction and Overview

The CSB502SSD, designed and manufactured by Pi 2 Design, is a professional I/O Shield designed for the low cost Raspberry PI 2 (RPi 2) computer. This shield converts one RPi 2 USB Host Port to a high capacity mSATA SSD Drive

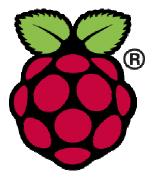
(up to 1TB), Dual USB 2.0 Host Ports and 802.11b/g/n WiFi w/Soft-AP Mode Support, and Battery Backed RTC.

Coupled with the high performance
Raspberry Pi 2 with Quad Core
Cortex-A7 CPU, the CSB502SSD
creates a low cost, embedded
network storage device. This
powerful combination enables
you to leverage the RPi 2 ecosystem
for a wide variety of Embedded, Data
Storage, Medical and Industrial
applications.

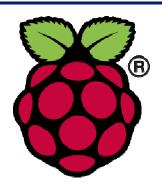


Specifications and Features

- FORM FACTOR Full Size Raspberry Pi 2 I/O Shield with 40-Pin mating connector. Stacking and Non-Stacking versions are available.
- **USB PORTS –** Two USB2.0 Type A for additional USB expansion.
- SSD PL2571 Controller and mSATA Socket for up to 1TeraByte on-board Storage.
- **WiFi –** GWF-3M08 Module (Based on Ralink RT537) provides 802.11b/g/n for up to 150Mbps. On-Module IPEX connector allows for optimal antenna placement.
- RTC WITH BATTERY DS1339 Real Time Clock with 16mm Coin Cell Backup and Programmable Alarm.
- **TEMP SENSOR** 1-Wire DS18B20 Temperature Sensor mounted below SSD to monitor health of drive. Additionally the DS18B20 has a unique 64-Bit ID that can be used to identify the shield.
- ON-BOARD POWER SUPPLY Wide-Input 5V @ 4A supply powers all peripherals as well as the RPi 2.



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12V @ 5A **Power Brick** 2.5MM DC Jack Backpower +8V to +24V Input 3V @ 3A Switching Protection 5V @ 4A Switching Supply USB-A to Supply Circuit Micro USB-B **Patch Cable** USB MICRO-B USB Type-A USB2514 HUB UPSTREAM PORT USB-A USB-A HOST PORT 1 HOST HOST HOST PORT 2 USB Type-A USB-A USB-A HOST PORT 3 HOST HOST **HOST PORT 4 mSATA** 10/100 RJ45 5mm Socket 32GB to 1TB w/Transformer IPEX (U.FL) USB Port SATA Port **OGEMRAY** PL2571 SATA GWF-3M08 1-Wire DS18B20 Height 40-Pin Socket 802.11b/g/n Controller Temp. Sensor +5V w/64-Bit ID GPIO I2C DS1339 24AA32T ID I2C Extended **EEPROM Real Time Clock** \$ **GPIO** Bi-Color Status I FD Raspberry Pi 2 CSB502SSD BLOCK DIAGRAM **HDMI**