Flash Memory TinyShield- ASD2202-R-F
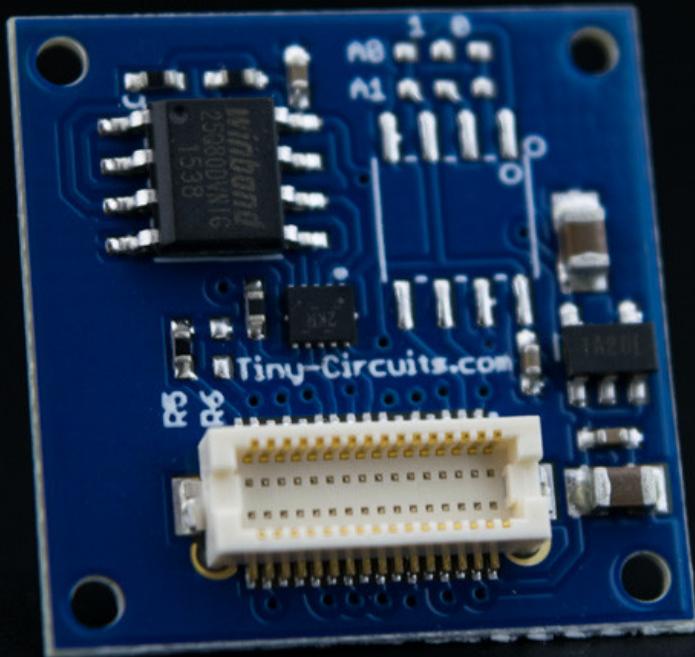
DESCRIPTION

Add robust, lightning-fast storage memory to your TinyDuino with this Flash Memory TinyShield. Built around the Winbond W25Q80DV, this board is a simple way to store settings, logs, or any other data your project needs to keep through power cycles.

The Flash Memory TinyShield is low power and works through the SPI interface. It has 1 MB of storage and is byte addressable. Example code is provided to make it simple to add flash memory support to your projects.

*To learn more about the **TinyDuino Platform,** click* here

TECHNICAL DETAILS

Winbond W25Q80DV Flash Specs

- 1024K x 8 (8 Mbit)
- 256-Byte Page Write Buffer
- Page Write Time 0.8 ms typical
- Write Endurance: 100,000
- Data Retention: 20+ Years

TinyDuino Power Requirements

- Voltage: 2.7V - 5.5V
- Current:
  - Standby: 10uA
  - Read: 7mA
  - Write: 20mA
  - Due to the low current, this board can be run using the TinyDuino coin cell option.

Pins Used

- **05 - SPI_CS:** This signal is the SPI chip select for the flash memory.
- **11 - MOSI:** This signal is the serial SPI data out of the TinyDuino and into the flash memory.
- **12 - MISO:** This signal is the serial SPI data out of the flash memory and into the TinyDuino.
- **13 - SCLK:** This signal is the serial SPI clock out of the TinyDuino and into the flash memory.

Dimensions

- 20mm x 20mm (.787 inches x .787 inches)
- Max Height (from lower bottom TinyShield Connector to upper top TinyShield Connector): 5.11mm (0.201 inches)
- Weight: 1.11 grams (.039 ounces)

Notes

- The "Write-Protect" feature has been permanently disabled for this chip.