SRAM TINYSHIELD

ASD2202-R-S

This **SRAM Tinyshield** allows you to add memory to your TinyDuino projects that can read and write at a virtually instant rate. Built around the Microchip 23LC1024, this board allows for some extra processing memory when your Arduino device is powered on. Since it doesn't hold information through power cycles, you don't have to worry about erasing anything.

The SRAM TinyShield is low power and works through the SPI interface. It has 1Mbit of storage. Example code is provided to make it simple to add SRAM support to your projects.

TECHNICAL DETAILS

*To see what other TinyShields this will work with or conflict with, check out the **TinyShield Compatibility Matrix***

Microchip 23LC1024 SRAM Specs
o   128K x 8 (1 Mbit)

o   Zero Write Time

o   Unlimited read and write cycles

TinyDuino Power Requirements
o   Voltage: 2.5V - 5.5V
o   Current:
    o   Standby: 4uA
    o   Read: 3mA
    o   Write: 3mA
    o   Due to the low current, this board can be run using the TinyDuino coin cell option.

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

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

NOTES

o   Resistor R5 can be swapped to R6 to change the Chip Select Pin to pin 6.

TINYCIRCUITS

TinyCircuits.com

ASD2202 - Rev3

Memory TinyShield

☐ SRAM ☐ EEPROM
☐ FRAM ☐ Flash