



MICROSD / AUDIO TINYSHIELD

ASD2205-R

### DESCRIPTION

This TinyShield is designed specifically for the <u>TinyScreen+</u> to allow for video playback in a very compact package. This TinyShield adds a microSD Adapter to store video and image files, an audio amplifier for driving a speaker, and an IR receiver. The <u>16x9 speaker</u> is also included with this board and can be connected to the speaker port.

**Note:** This does not include the microSD card (sold separately), you can get a compatible microSD card here.

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

## TECHNICAL DETAILS

#### microSD Specs

- o Uses standard Arduino SD Card Library
- Supports most standard microSD cards and SDHC cards- cards larger than 8GB may not work!

### **Power Requirements**

- o Voltage: 3.0V 5.5V
- o Current: up to approximately 100mA while reading from microSD card

#### Pins Used

SPI Interface for microSD card:

- o 10 CS: This signal SPI chip select for the microSD card
- **11 SCLK:** This signal is the serial SPI clock out of the TinyDuino and into the microSD card.
- 12 MISO: This signal is the serial SPI data out of the microSD card and into the TinvDuino.
- o **13 MOSI:** This signal is the serial SPI data out of the TinyDuino and into the microSD card.

#### Additional:

- o **A0 DAC Output:** Analog output for audio amplifier
- o **3 IR Input:** Output signal from infrared receiver 6.8 3.6

#### **Dimensions**

- $_{\odot}~25.8 mm~x~25.0 mm~(1.02"~x~0.98")$  Note: microSD car overhanges the edge by approx 3mm for easy removal
- o Maximum height of board: 3.6mm (0.14")

- o Thickness with TinyScreen+ attached: 6.8mm (0.27")
- o Weight (TinyShield only): 1.62 grams (0.06 ounces)

# **NOTES**

- o This TinyShield is designed specifically for the <u>TinyScreen+</u> and may not properly mate with other TinyShields or processor boards.
- This does not include the microSD card (sold separately), you can get a compatible microSD card here.

## **DOWNLOADS**