



## MICROSD / AUDIO TINYSHIELD

ASD2205-R

# DESCRIPTION

This TinyShield is designed specifically for the [TinyScreen+](#) 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 **16x9 speaker** 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

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

### Power Requirements

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

### Pins Used

SPI Interface for microSD card:

- **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 TinyDuino.
- **13 - MOSI:** This signal is the serial SPI data out of the TinyDuino and into the microSD card.

Additional:

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

### Dimensions

- 25.8mm x 25.0mm (1.02" x 0.98") Note: microSD car overhangs the edge by approx 3mm for easy removal
- Maximum height of board: 3.6mm (0.14")

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

## NOTES

- This TinyShield is designed specifically for the [TinyScreen+](#) 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