Audio TinyShield - ASD2841-R
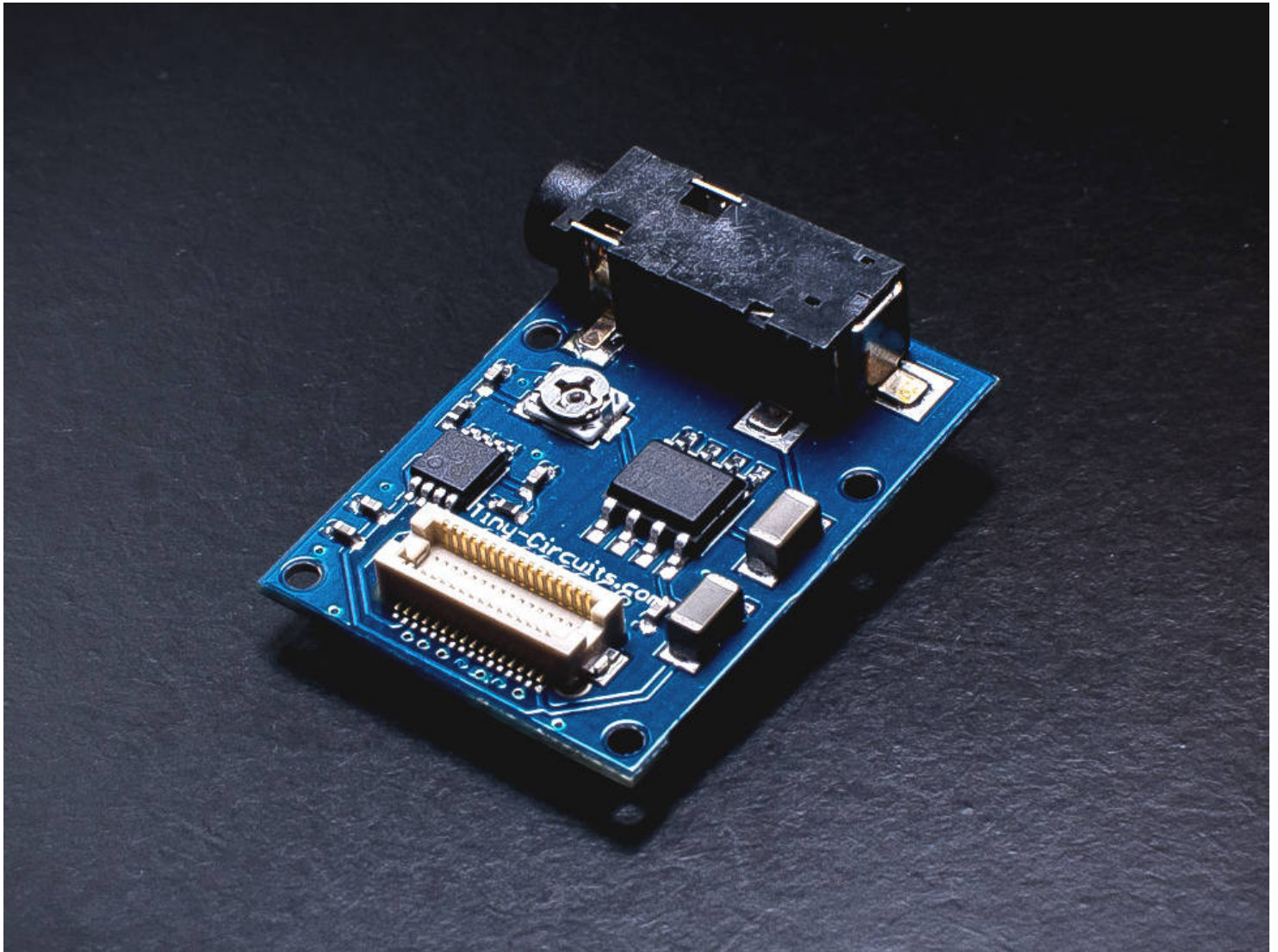
DESCRIPTION

This TinyShield makes it incredibly easy to add audio support to your TinyDuino projects. It has an onboard DAC, filter and amplifier for great sound quality. It can play any size uncompressed 22kHz, 16bit mono Wave files (.wav) directly off a microSD card (a **microSD TinyShield** is also required for this).

The audio output is mono on both the L and R channels, and uses a standard 3.5mm headphone jack connector. An onboard potentiometer can be used to control the volume. This TinyShield is completely compatible with the **Arduino waveHC Library** from Adafruit for playing wave files from a microSD card.

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

TECHNICAL DETAILS

Audio Specs

- Microchip MCP4921 12-bit Digital-to-Analog Converter (DAC)
- Audio Output: mono on both the L and R channels on standard 3.5mm headphone jack
- Volume Control: Manual onboard potentiometer
- Wave file streaming: Can play any size uncompressed 22kHz, 16bit mono Wave files from a microSD card

TinyDuino Power Requirements

- Voltage: 3.0V - 5.5V
- Current: 5 - 20mA. Due to the current, this board should not be run using the TinyDuino coin cell option

Pins Used

- **2 - DAC_CS:** This signal is the chip select for the audio DAC
- **3 - DAC_SCK:** This signal is the serial clock for the audio DAC
- **4 - DAC_SDI:** This signal is the serial data in for the audio DAC

Dimensions

- 24.14mm x 20mm (1.07 inches x .787 inches)
- Max Height (from lower bottom TinyShield Connector to upper top TinyShield Connector): 7.81mm (0.307 inches)
- Weight: 2.1 grams (.07 ounces)

Notes

- The 3.5mm jack extends past the end of the board and is fairly tall. Normal size TinyShields (20mm x 20mm) can stack on top of this TinyShield; however, boards that are longer (like the WiFi TinyShield) cannot be stacked directly on top.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Audio IC Development Tools *category:*

Click to view products by TINY CIRCUITS *manufacturer:*

Other Similar products are found below :

LM4906MMBD LM4935RLEVAL LME49710NABD LME49740MABD LME49740NABD LME49860MABD LME49870MABD EVAL-AD1940AZ EVAL-ADAU1401AEBZ SRC4382EVM-PDK TLV320AIC36EVM-K TPA5052EVM TPA6136A2YFFEVM LM4562HABD LM4906LDBD LM4923LQBD LM4992SDBD LME49710MABD LME49713MABD LME49860NABD MAX98300EVKIT+WLP MAX9738EVKIT+ MAX98358EVSYS#WLP MAX9723DEVKIT+ EVAL-ADAV803EBZ MAX9709EVKIT LM4809MBD LM4674TLBD CDBWM8725-M-1 CDBWM8533-M-1 EV_ICS-40740-FX SDCK3 PIM524 MAX9723DEVCMODU+ DEV-17737 MAX9850EVCMOD2# EVALAHNBIM69D130V01TOBO1 1063 TAS5756MDCAEVM TLV320ADC3101EVM-K TLV320AIC3007EVM-K TLV320AIC3105EVM-K TLV320AIC3253EVM-K TPA2016D2EVM TPA2035D1EVM TPA2051D3YFFEVM TPA3107D2EVM TPA6120A2EVM TPA6132A2EVM2 MIKROE-2454