Qwiic Tsunami Super WAV Trigger

WIG-18159

Product Overview
10/10/2022
For the most up-to-date information, visit www.mouser.com or the supplier's website.

Description

SparkFun Qwiic Tsunami Super WAV Trigger is based on ARM Cortex M7 and extends polyphony to 32 mono or 18 stereo simultaneous uncompressed 44.1kHz and 16-bit tracks. The tracks can start, pause, resume, loop, and stop independently and have a volume setting to create an interactive mix of music, dialog, and sound effects. This qwiic tsunami does not require soldering to connect it to the system but provides broken-out 0.1"-spaced pins for full access to each pin.
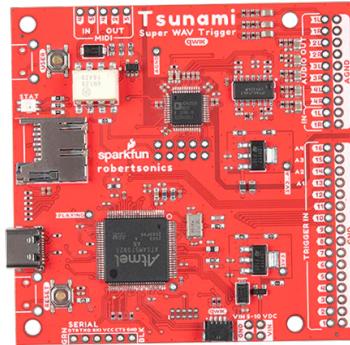
The qwiic tsunami WAV trigger supports true seamless looping over an arbitrary track length. This tsunami super WAV trigger features eight audio output channels, arranged as either eight mono or four stereo pairs.

This qwiic tsunami has a dedicated MIDI port with an integrated opto-isolator for quick connection to any MIDI controller. The tsunami's MIDI implementation includes control of volume, pitch bend, attack and release times, and the ability to route any MIDI key to any output channel. This qwiic tsunami is a 3.3V; its inputs include triggers, and serial RX is not 5V tolerant.

Specifications

- 5V to 10V Power range
- USB-C and PTH power inputs
- RGB Status LED
- I^2C Control
- Qwiic connector
- New audio codec
- Digital filters

Features

- Supports up to 4096 uncompressed 16-bit
- 44.1kHz mono or stereo WAV files – CD quality
- Polyphonic – play and mix 32 mono or 18 stereo tracks independently and simultaneously
- Eight audio output channels can be arranged as 4 stereo outputs.
- Route any track to any output
- Outputs provide independent real-time playback rate control and MIDI pitch bend
- Seamless looping over an arbitrary track length
- Trigger-to-sound delay:
  - 8 msecs typical and 12msecs maximum
- Pause and resume individual or groups of tracks
- Multiple random trigger ranges
- 16 trigger inputs are individually selectable for contact closure or 3.3V control
- Trigger inputs can be individually inverted (active low or high)
- Trigger inputs can be individually set to be edge, latched, or level sensitive
- Output volumes adjustable from 10dB to -70dB
- Firmware track fades (attacks & decays)
- Dedicated "Play" status digital output pin
- Extensive serial control.
- Pin compatible with FTDI basic 3.3V
- MIDI Velocity-sensitive triggering of up to 4096 tracks and adjustable attack and release times

Board Dimension

All dimensions in inches.
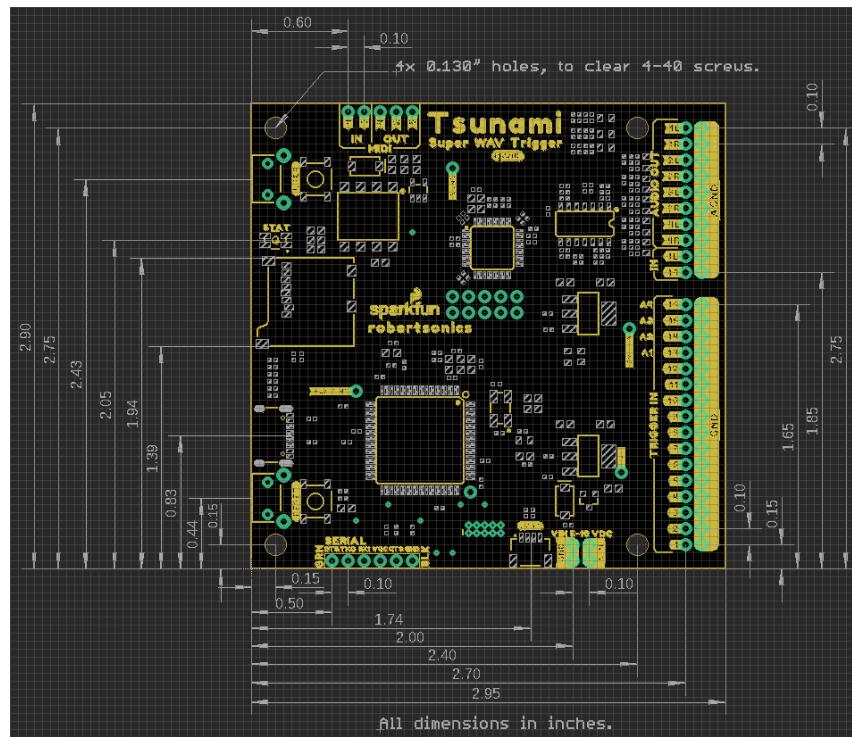
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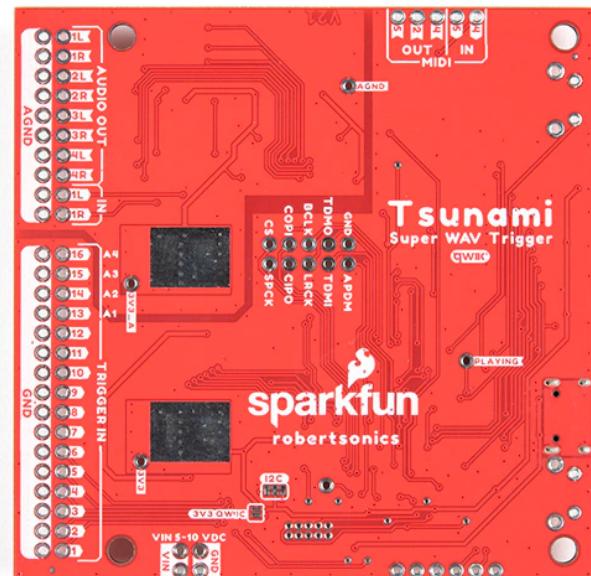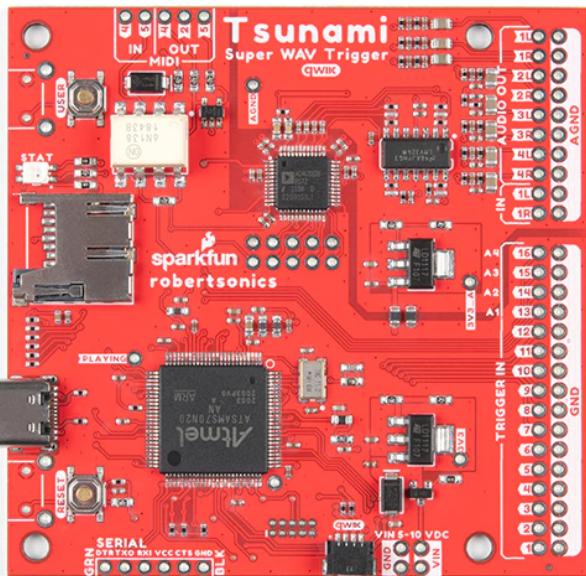
Mouser Part Number

View Part

To learn more, visit https://www.mouser.com/new/sparkfun/sparkfun-qwiic-tsunami-super-wav-trigger/