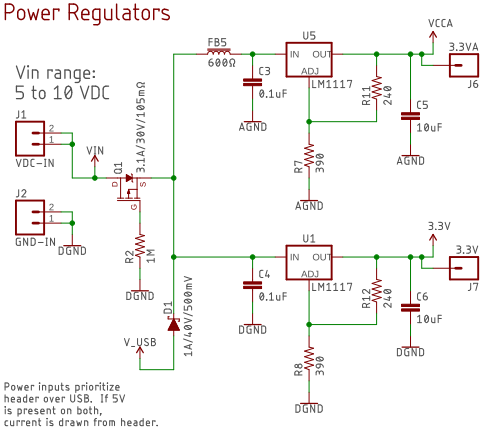
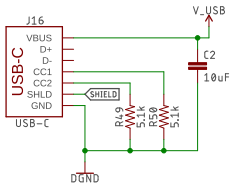
Power Regulators



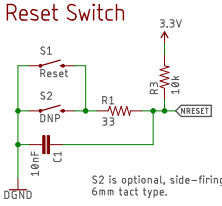
Power inputs prioritize header over USB. If 5V is present on both, current is drawn from header.

USB Device Port



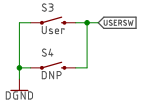
Scope Trigger

Reset Switch



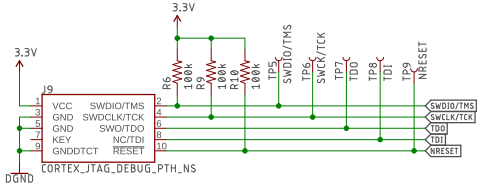
S2 is optional, side-firing 6mm tact type.

User Switch

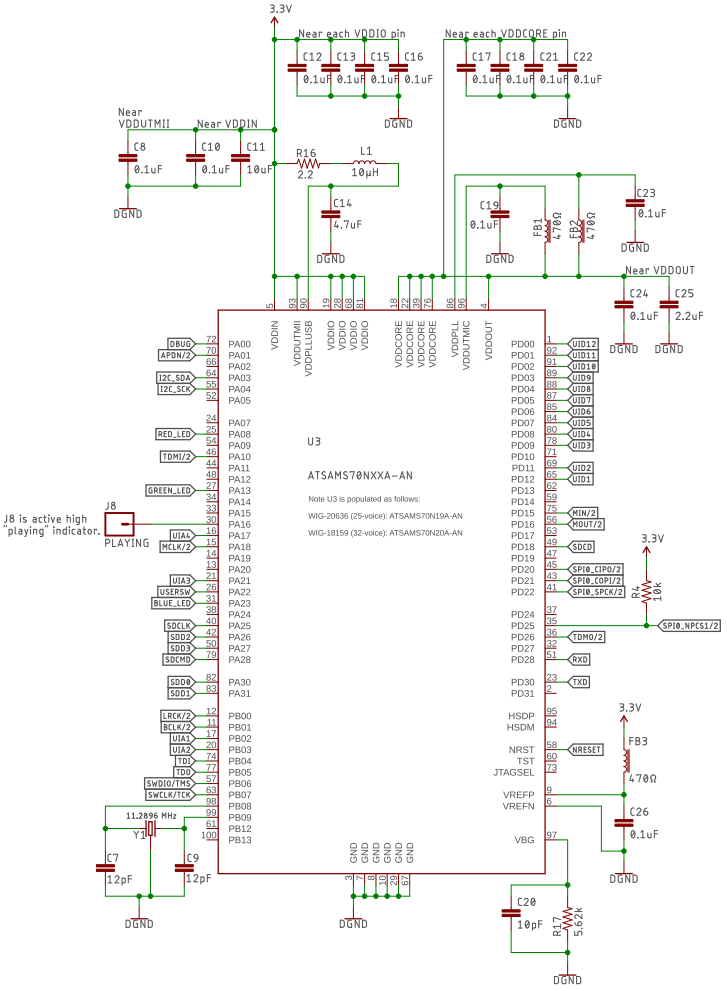


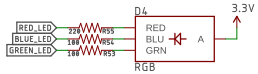
S4 is optional, side-firing 6mm tact type.

Cortex Debug Port



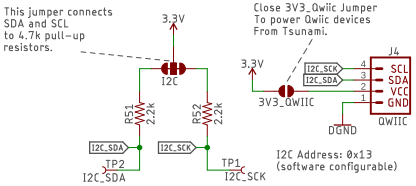
Cortex M7 Processor



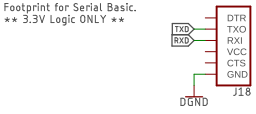


Status LED
Blue On while files are playing.

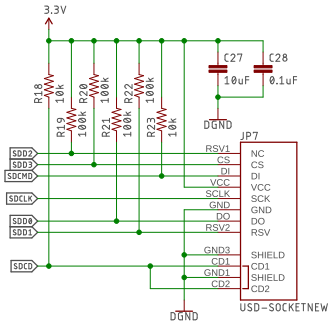
Qwiic Connector and Pullups



Host Serial Port Connection

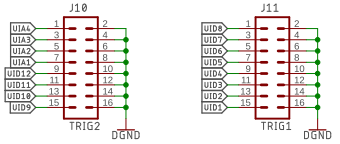


SDIO uSD Card Slot



User Trigger Inputs

UIA1 through UIA4 Serve double-pourpse as Triggers 13 to 16, or analog inputs 1 to 4.



TITLE: SparkFun_Tsunami_Qwiic	
Design by: Jamie Robertson, Byron Jacquot Revision by: Jamie Robertson, Pete Lewis	REV: V21
Date: 10/31/2022 11:39 AM	Sheet: 1/2

TDM Bus

Signals from processor

Audio Codec

Isolated analog ground plane with single connection to digital ground.

FB4 and FB5 are being used to formalize the plane crossing.

2nd order Lowpass filter
-3dB rolloff at 102KHz

ADC Input Filters

High Pass: 4.8Hz (33K/1.0uF)
Low Pass: 48.3KHz (33K/100pF)
Slew Rate: 1V/uS (1,000,000V/sec)
Max Freq (at 3.3V power):
slew rate (V/sec) = 2*pi*f*V
1,000,000 = 2(3.14)f(3.3V)
f(max) = 48KHz

MIDI IN

MIDI OUT

MIDI CONNECTOR

MIDI signals can be wired to standard 5-pin DIN connectors. Not all 5 pins are connected. Connect the pads below to the pins indicated.

MIDI inputs are not grounded. MIDI outputs are, with the shield of the cable tied to Pin 2 of the DIN.

DIN-5 connectors have an odd pin-ordering -- pin 2 is between 4 and 5, as reflected in the connector above.

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