

UART Audio Sequencer Pin Setup

KEY: A & B represent the ends of a jumper wire (regardless of male or female)

Reference

Male to Male

A-----B

Male to Female

A-----[]B

or

B-----[]A

Female to Female

A[]-----[]B

A	B
Microcontroller Pins	
3.3V	Breadboard Positive (+) Strip
Ground (GND)	Breadboard Negative (-) Strip
ADC (P5.5)	Middle Pin of Potentiometer 1
ADC (P5.4)	Middle Pin of Potentiometer 2
SCLK (P1.5)	DAC SCLK (Pin 4)
SDI (P1.6)	DAC SDI (Pin 5)
~CS (P3.0)	DAC ~CS (Pin 3)
DAC Pins	
Vdd (Pin 1)	Breadboard Positive (+) Strip
~LDAC (Pin 8)	Breadboard Negative (-) Strip
Vss (Pin 12)	Breadboard Negative (-) Strip
VrefA (Pin 13)	Breadboard Positive (+) Strip
VoutA (Pin 14)	Audio Jack Far Right Pin (GND)
Potentiometer Pins (for Both) (Note: Direction is Facing Towards Pot)	
Left Pin	Breadboard Positive (+) Strip
Right Pin	Breadboard Negative (-) Strip
Audio Jack Pins (Note: Direction is Facing Towards 3.5mm Hole)	
Middle Pin (GND)	Breadboard Negative (-) Strip
Audio Cable (3.5mm Cable)	External Speaker

Datasheet Links

Microcontroller (MSP432P401R):

https://www.ti.com/lit/ds/symlink/msp432p401r.pdf?ts=1609585390065&ref_url=https%253A%252F%252Fwww.ti.com%252Fproduct%252FMSP432P401R

DAC (MCP4912): <https://ww1.microchip.com/downloads/en/DeviceDoc/22250A.pdf>

Potentiometers: <https://www.sparkfun.com/datasheets/Components/General/Linear-Trimpot.pdf>

Audio Jack: <https://www.sparkfun.com/datasheets/Prototyping/Audio-3.5mm.pdf>