

Breadboard RP Pico2			Perfboard ESP32		
Connection	Voltage	Signal	Voltage	Signal	
LRC~GND	1.63	44.1kHz, 2.98V, Square Wave	1.63	44.1kHz, 3.5V, Square Wave	
BCLK~GND	1.65/1.66	1.4MHz, 2.98V, Rounded Square Wave	1.66	1.4MHz, 3V, Rounded Square Wave	
DIN~GND	0.67	200-300kHz, 3.04V, Combination of Square Waves	0.77	150-250kHz, 3.55V, Combination of Square Waves	
GAIN~GND	1.45/1.46	25kHz, 300mV, Nearly unnoticeable noise	1.46/1.47	~40mV nearly unnoticeable noise	
SD~GND	0.26	200-300kHz, 100mV, Nearly unnoticeable noise	0.26	~25mV, nearly unnoticeable noise	
VIN~GND	3.25/3.26		3.28		
OUT+~GND	1.63/1.64	300kHz, 3.24V, Square Wave	0.5	18kHz, 3.25V, spikes	Unstable Measurement
OUT-~GND	1.64	300kHz, 3.06V, Square Wave	0	3.2V spikes, frequency varies	Unstable Measurement
OUT+-OUT-		200-400Hz, 500mV, Lots of tiny spikes, maintains baseline	1.8V	Distinctive 100Hz spikes	Unstable Measurement
IN+-IN-		Similar to above	200-400Hz, 800mV, Lots of tiny spikes, Dips above and below		Unstable Measurement
Sound Description	Clear sound, comes out instantly, no loud pops when turning on/off			Loud, harsh static, silence before sound comes, no pop when turning on/off	