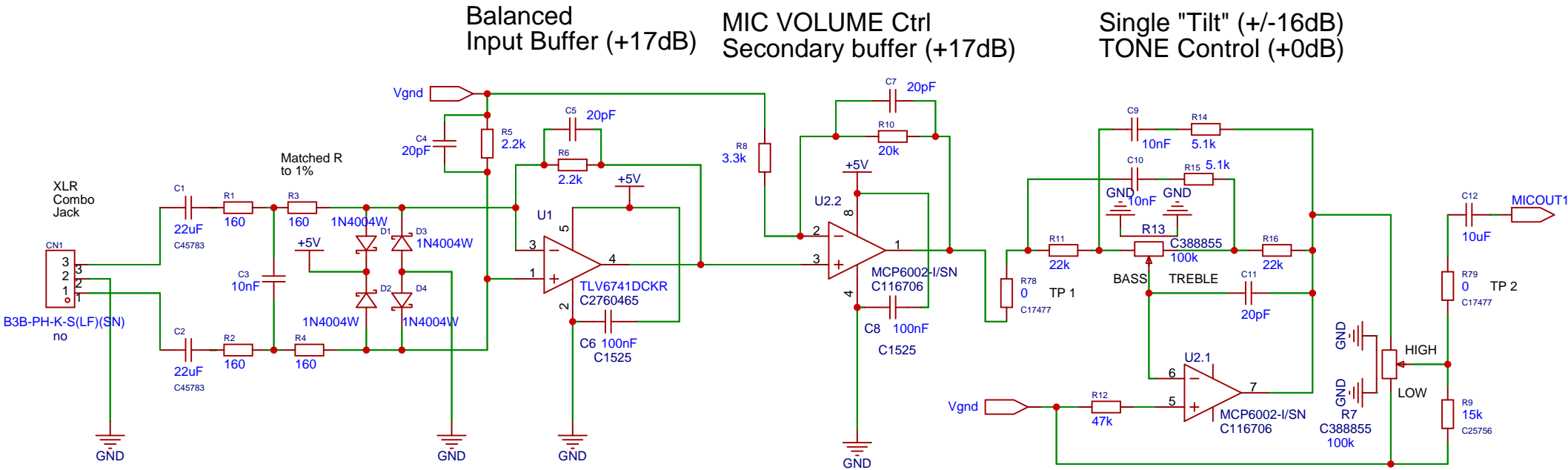


Microphone preamp, Mic #1

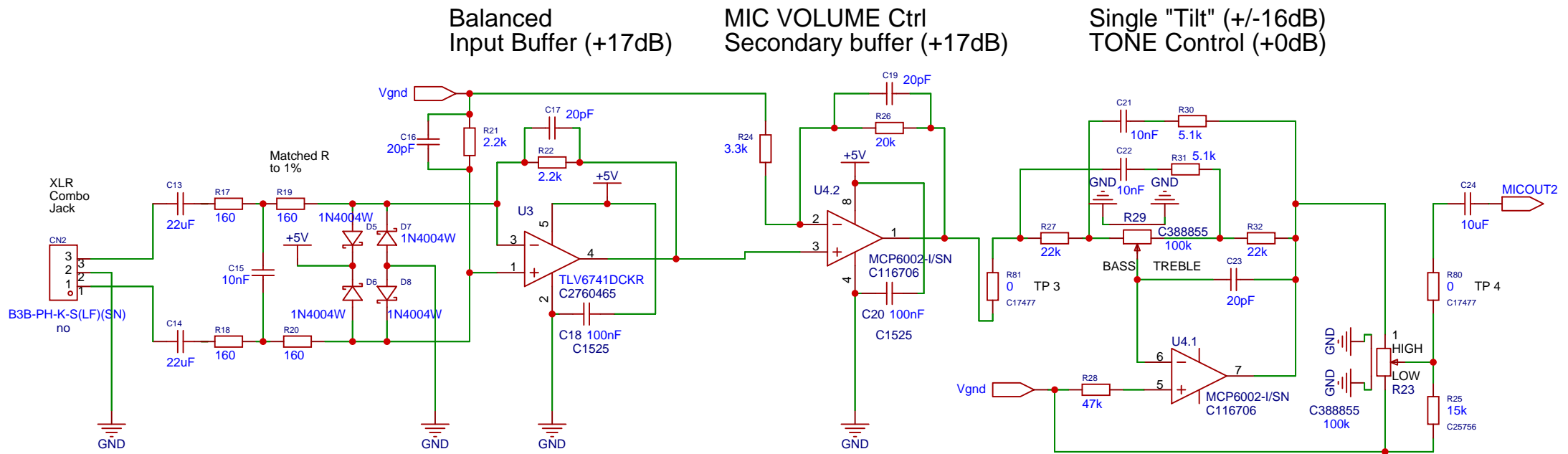


NOTE:
MIC1 channel is using TLV6741 (3.5nV/sqrt(Hz))

For comparison:
LMV721 is 8.5nV/sqrt(Hz)
MCP6001 is 28nV/sqrt(Hz)

Schematic	mixer project v2.4		Update Date	2024-08-01
			Create Date	2024-08-02
Page	MIC1.Preamp		Part Number	JLPCB-002
Drawn	M.Pogue	Mixer V2.4		
Reviewed	EasyEDA Pro			
		VER	SIZE	PAGE 1 OF 6
EasyEDA		V2.4	A4	EasyEDA.com

Microphone preamp, Mic #2



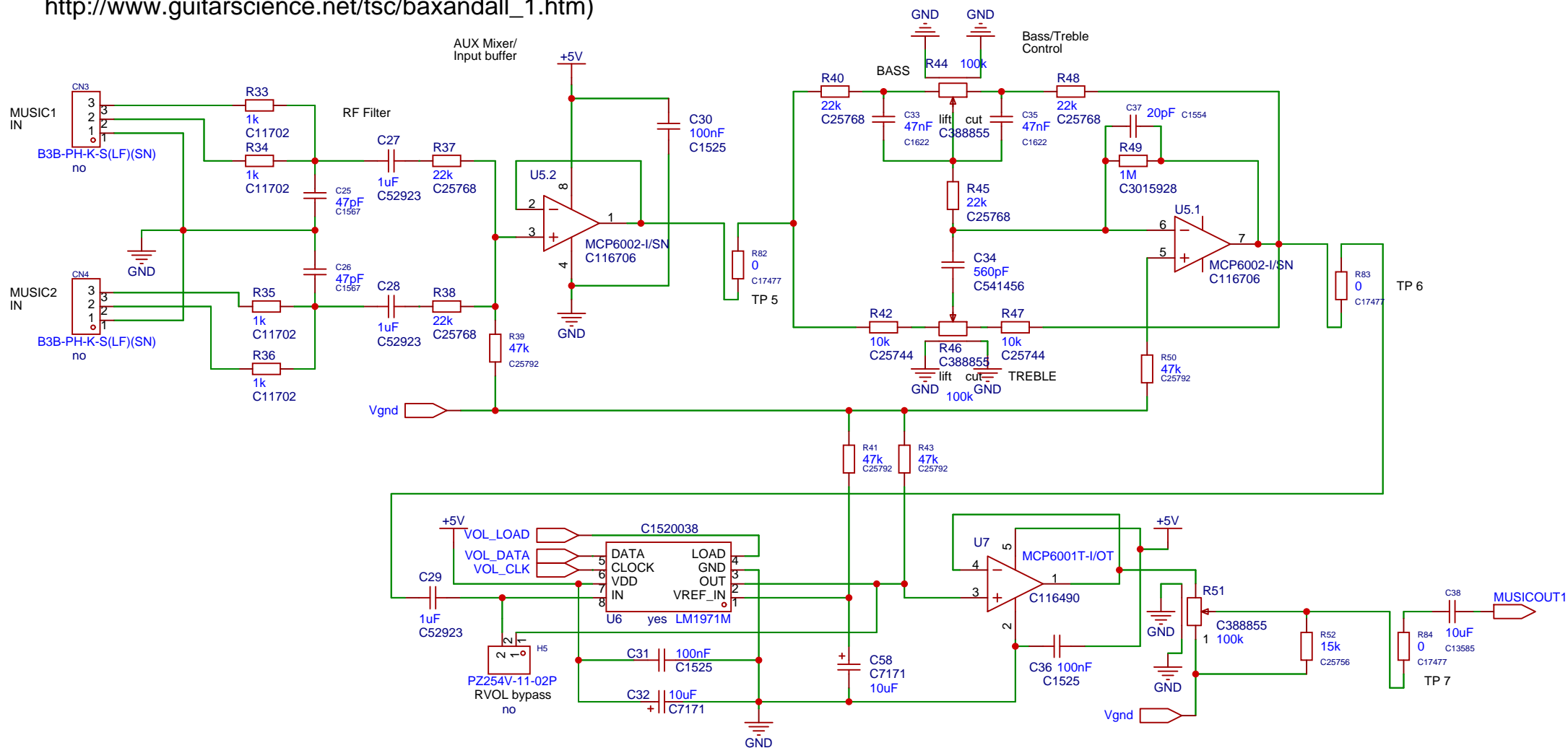
NOTE:
MIC2 channel is using TLV6741 (3.5nV/sqrt(Hz))

For comparison:
LMV721 is 8.5nV/sqrt(Hz)
MCP6001 is 28nV/sqrt(Hz)

Schematic	mixer project v2.4		Update Date	2024-08-01
			Create Date	2024-08-02
Page	MIC2.Preamp.mixer project v2.4		Part Number	JLPCB-002
Drawn	M.Pogue	Mixer V2.4		
Reviewed	EasyEDA Pro			
		VER	SIZE	PAGE 2 OF 6
EasyEDA		V2.4	A4	EasyEDA.com

Music Mixer/Preamplifier/Remote Vol/Main Vol Control

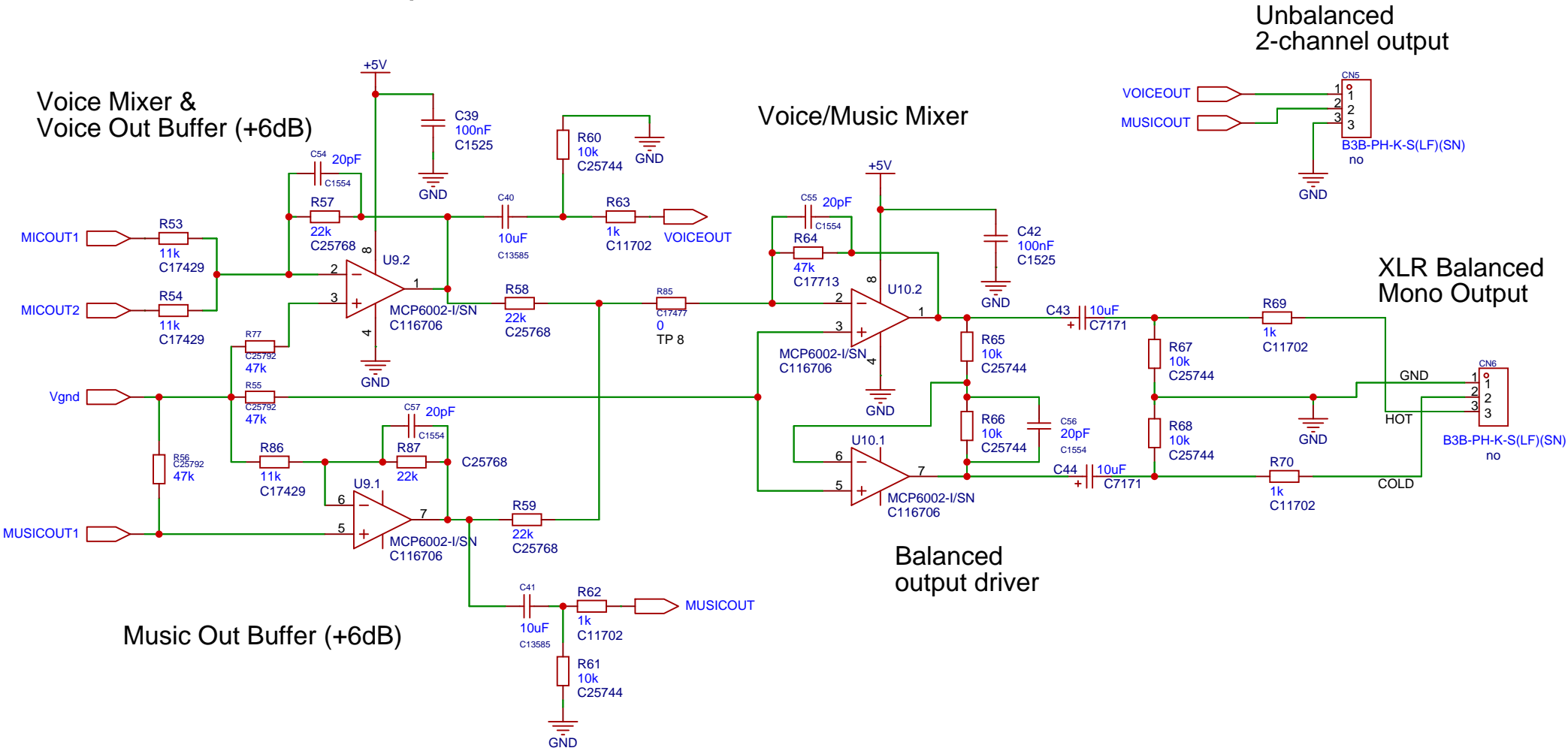
(source: <https://www.ti.com/lit/ug/tidu034/tidu034.pdf>, <https://sound-au.com/project01.htm>, http://www.guitarscience.net/tsc/baxandall_1.htm)




NOTE: U5 shall be populated with C7377 (MCP6002T-ISN) by manually editing the BOM. C7377 has exactly the same footprint as C116706.

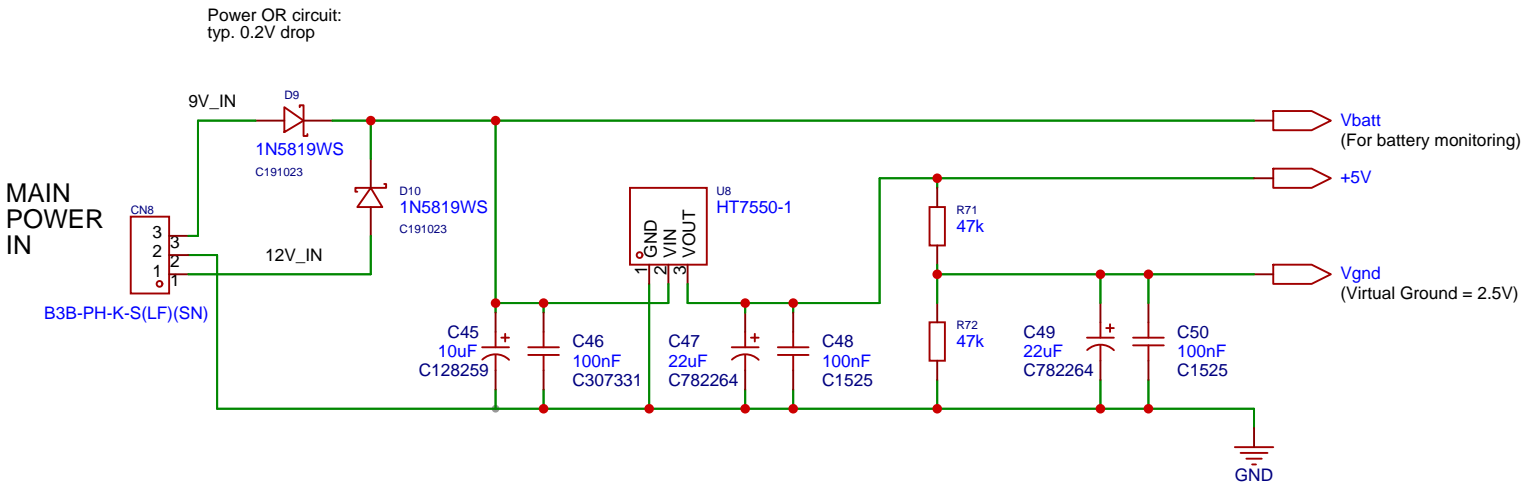
Schematic	mixer project v2.4		Update Date	2024-08-26
			Create Date	2024-08-02
Page	MUSIC.Preamplifier.mixer project v2.4		Part Number	JLPCB-002
Drawn	M.Pogue	Mixer V2.4		
Reviewed	EasyEDA Pro			
		VER	SIZE	PAGE 3 OF 6
		V2.4	A4	EasyEDA.com

Final Mixer/Balanced output driver



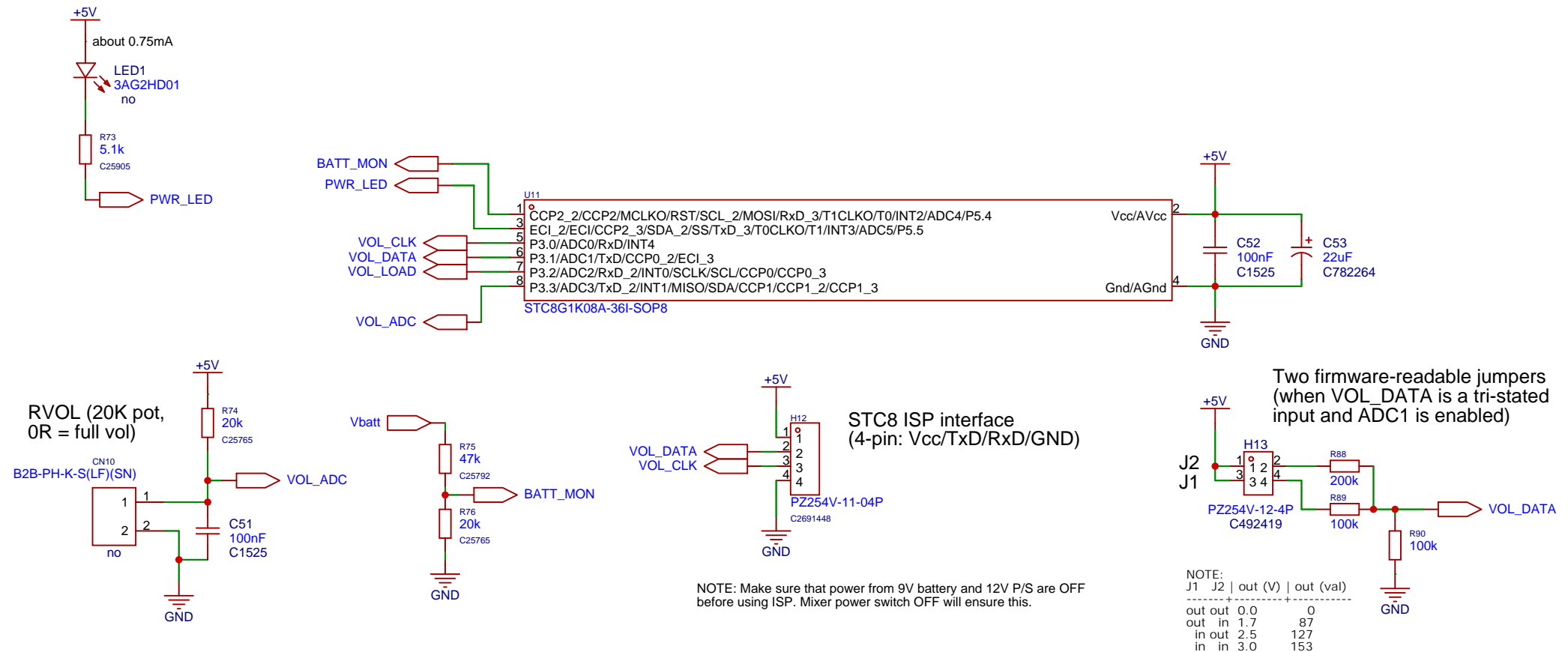
Schematic	mixer project v2.4			Update Date	2024-08-01
				Create Date	2024-08-02
Page	OutputStage			Part Number	JLCPCB-002
Drawed	M.Pogue	Mixer V2.4			
Reviewed	EasyEDA Pro				
		VER	SIZE	PAGE	4 OF 6
		V2.4	A4	EasyEDA.com	

Input Power Management



Schematic	mixer project v2.4			Update Date	2024-08-02
				Create Date	2024-08-02
Page				Part Number	JLPCB-002
Drawn	M.Pogue	Mixer V2.4			
Reviewed	EasyEDA Pro				
		VER	SIZE	PAGE	5 OF 6
EasyEDA		V2.4	A4	EasyEDA.com	


MCU (Battery Monitor, Remote Vol Ctrl)



NOTE: Digital section must be carefully isolated from Analog section.

NOTE: VOL_ADC is +5 when there is no Remote Vol Ctrl plugged in. It is 0 - 2.5V when the RVC is plugged in.

NOTE: BATT_MON is 0 - 3.6V for +12V input, 0 - 2.7V for +9V input.

Schematic	mixer project v2.4			Update Date	2024-08-02
				Create Date	2024-08-02
Page				Part Number	JLCPCB-002
Drawed	EasyEDA Pro	Mixer V2.4			
Reviewed	EasyEDA Pro				
		VER	SIZE	PAGE	6 OF 6
		V2.4	A4	EasyEDA.com	