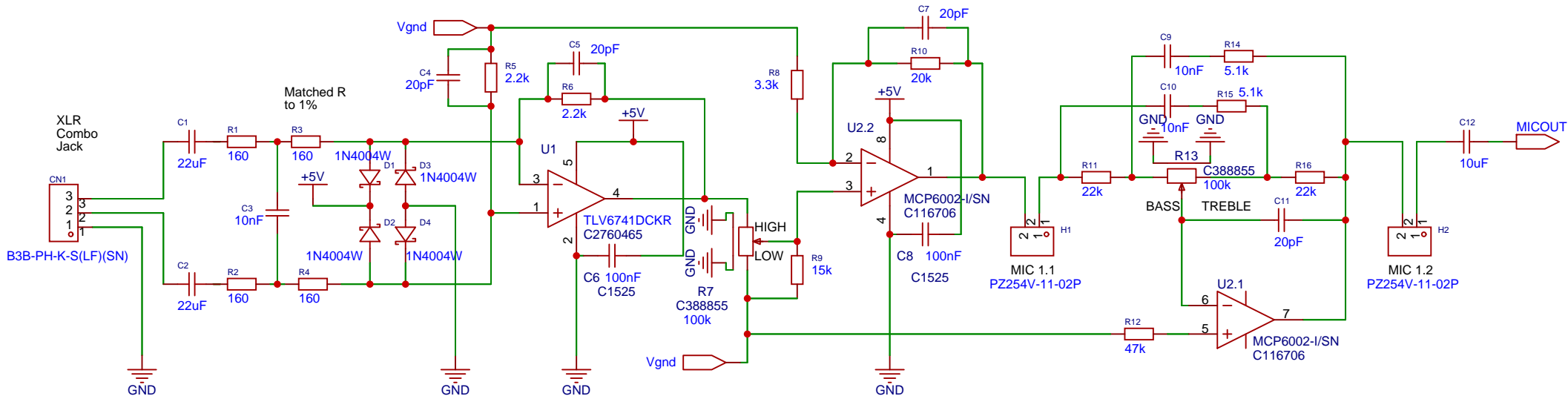


Microphone preamp, Mic #1

Balanced
Input Buffer (+17dB)

MIC VOLUME Ctrl
Secondary buffer (+17dB)

Single "Tilt" (+/-16dB)
TONE Control (+0dB)

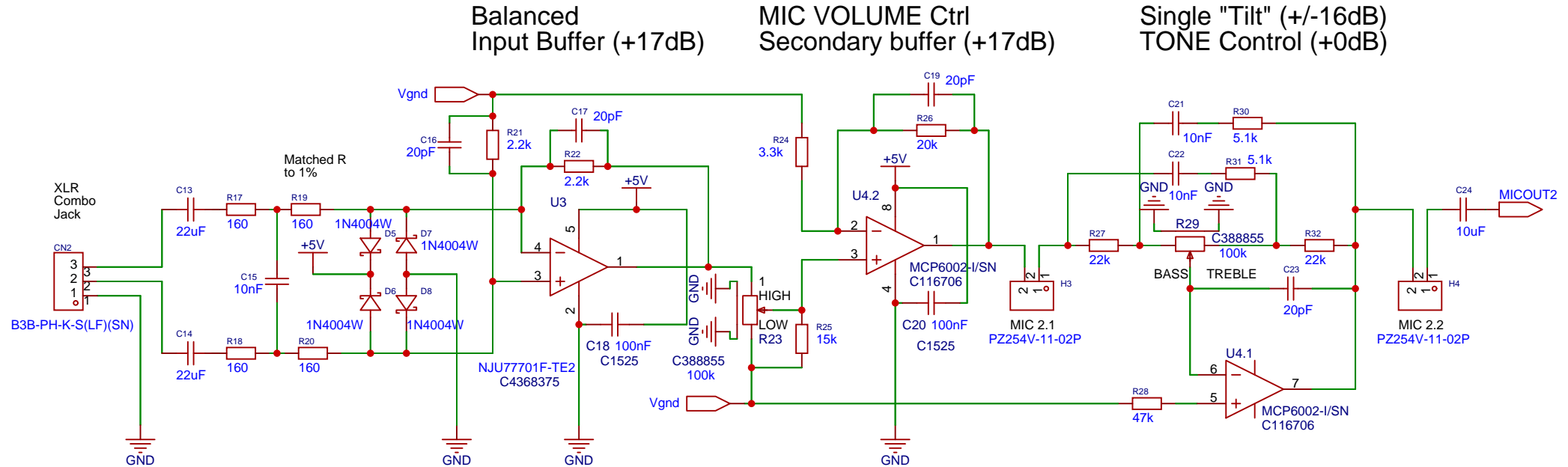


NOTE:
U2 shall be populated with C7377 (MCP6002T-ISN) by manually editing the BOM.
C7377 has exactly the same footprint as C116706.

NOTE:
MIC1 channel is testing TLV6741 (3.5nV/sqrt(Hz))
MIC2 channel is testing LMV721 (8.5nV/sqrt(Hz))
For comparison, MCP6001 is 28nV/sqrt(Hz).

Schematic	mixer project v2.0		Update Date	2024-02-03
			Create Date	2024-01-09
Page	MIC1.Preamp		Part Number	JLPCB-002
Drawn	M.Pogue	Mixer V2		
Reviewed	EasyEDA Pro			
		VER	SIZE	PAGE 1 OF 6
EasyEDA		V0.1	A4	EasyEDA.com

Microphone preamp, Mic #2



NOTE:
U3 shall be populated with C725344 (LMV721AM5/TR) by manually editing the BOM.
C725344 has exactly the same footprint as C4368375.

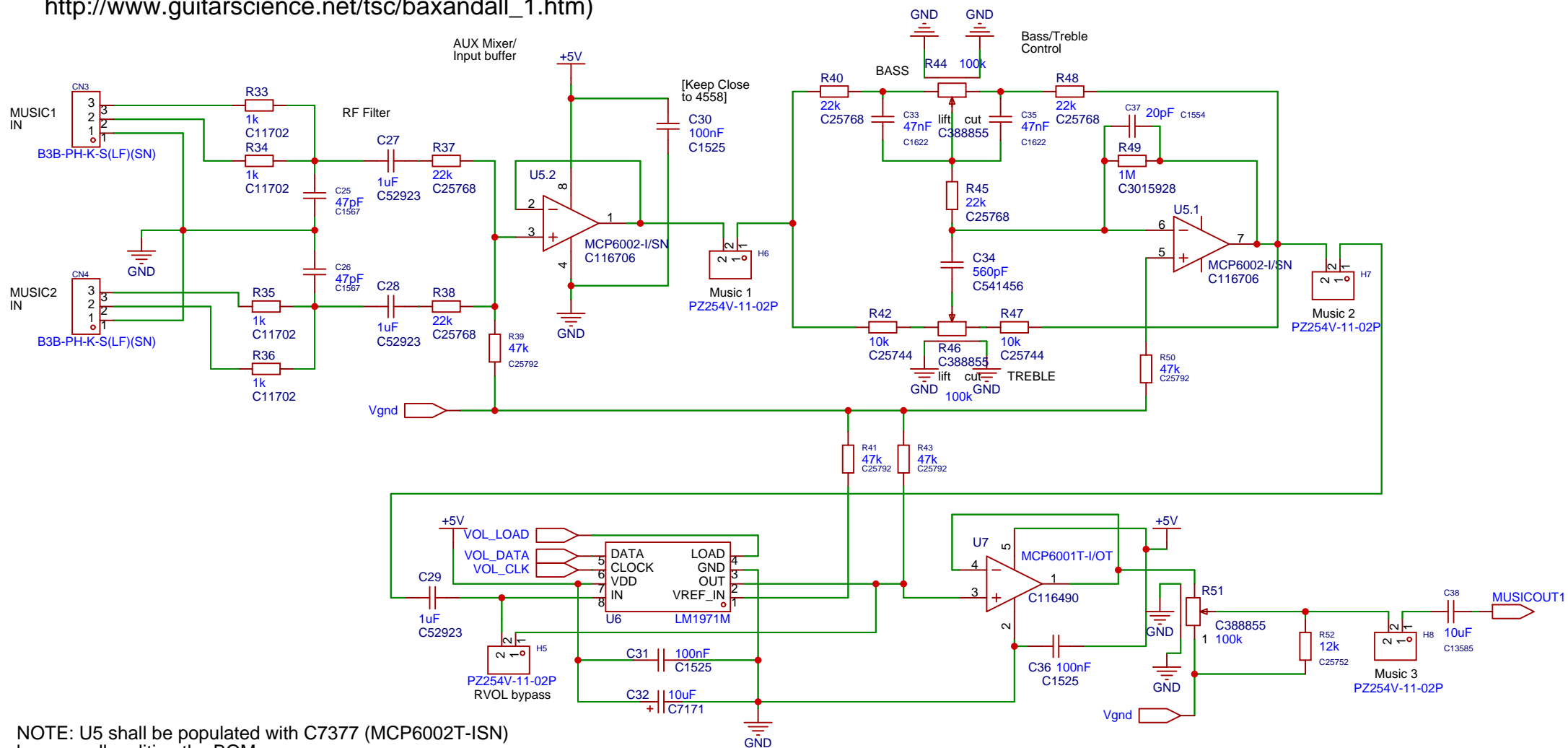
U4 shall be populated with C7377 (MCP6002T-ISN) by manually editing the BOM.
C7377 has exactly the same footprint as C116706.

NOTE:
MIC1 channel is testing TLV6741 (3.5nV/sqrt(Hz))
MIC2 channel is testing LMV721 (8.5nV/sqrt(Hz))

Schematic	mixer project v2.0		Update Date	2024-02-03
			Create Date	2024-01-09
Page	MIC2.Preamp.mixer project v2.0		Part Number	JLPCB-002
Drawn	M.Pogue	Mixer V2		
Reviewed	EasyEDA Pro			
		VER	SIZE	PAGE 2 OF 6
		V0.1	A4	EasyEDA.com

Music Mixer/Preamplifier/Remote Vol/Main Vol Control

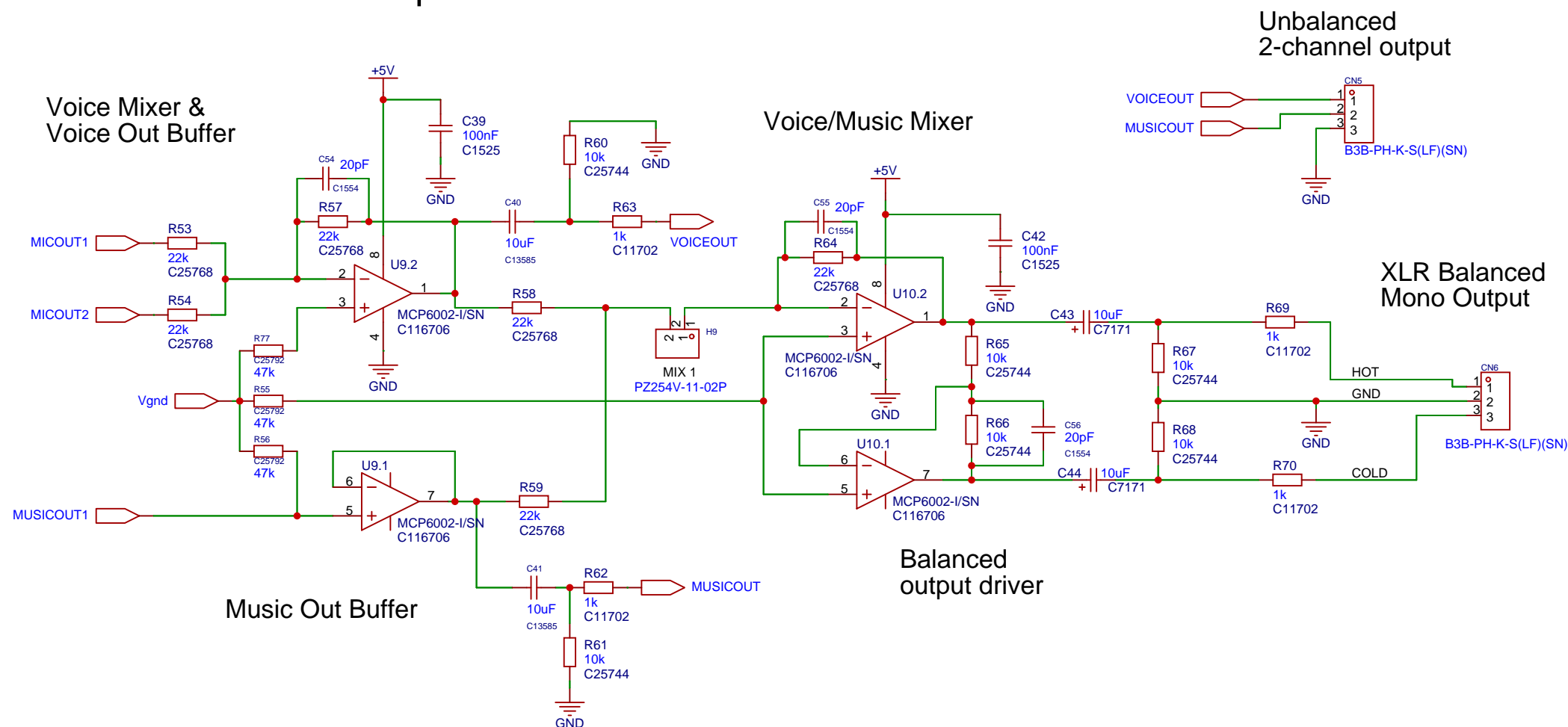
(source: <https://www.ti.com/lit/ug/tidu034/tidu034.pdf>, <https://sound-au.com/project01.htm>, http://www.guitarscience.net/tsc/baxandall_1.htm)



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 v2.0		Update Date	2024-02-03
			Create Date	2024-01-09
Page	MUSIC.Preamp		Part Number	JLPCB-002
Drawn	M.Pogue	Mixer V2		
Reviewed	EasyEDA Pro			
		VER	SIZE	PAGE 3 OF 6
EasyEDA		V0.1	A4	EasyEDA.com

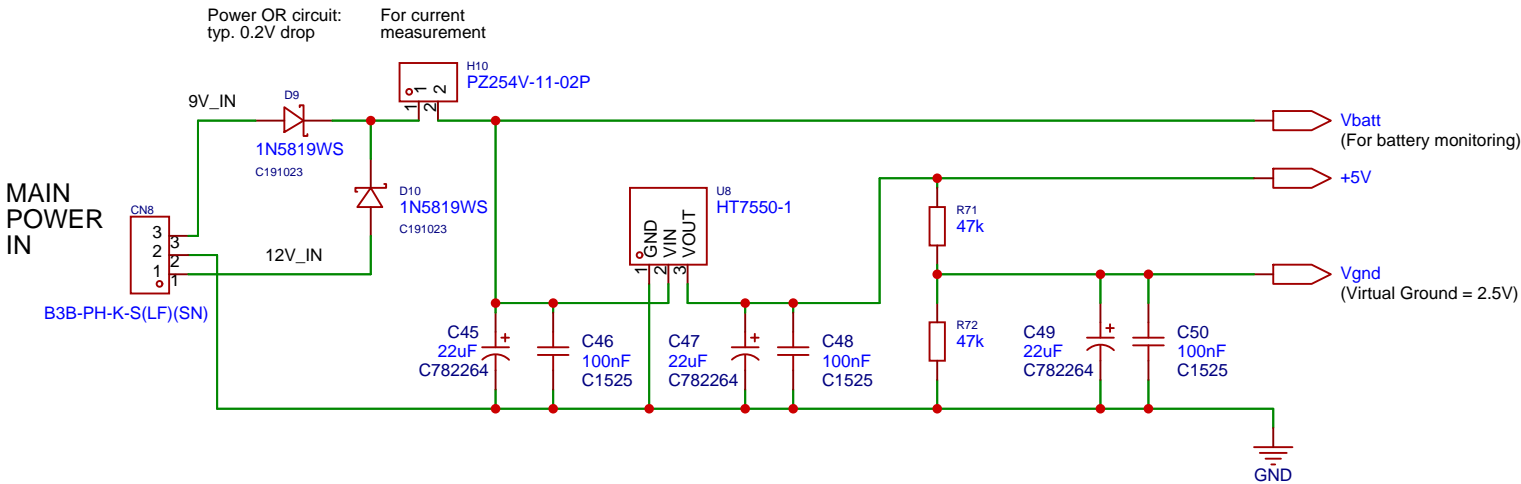
Final Mixer/Balanced output driver



NOTE: U9 and U10 shall be populated with C7377 (MCP6002T-ISN) by manually editing the BOM. C7377 has exactly the same footprint as C116706.

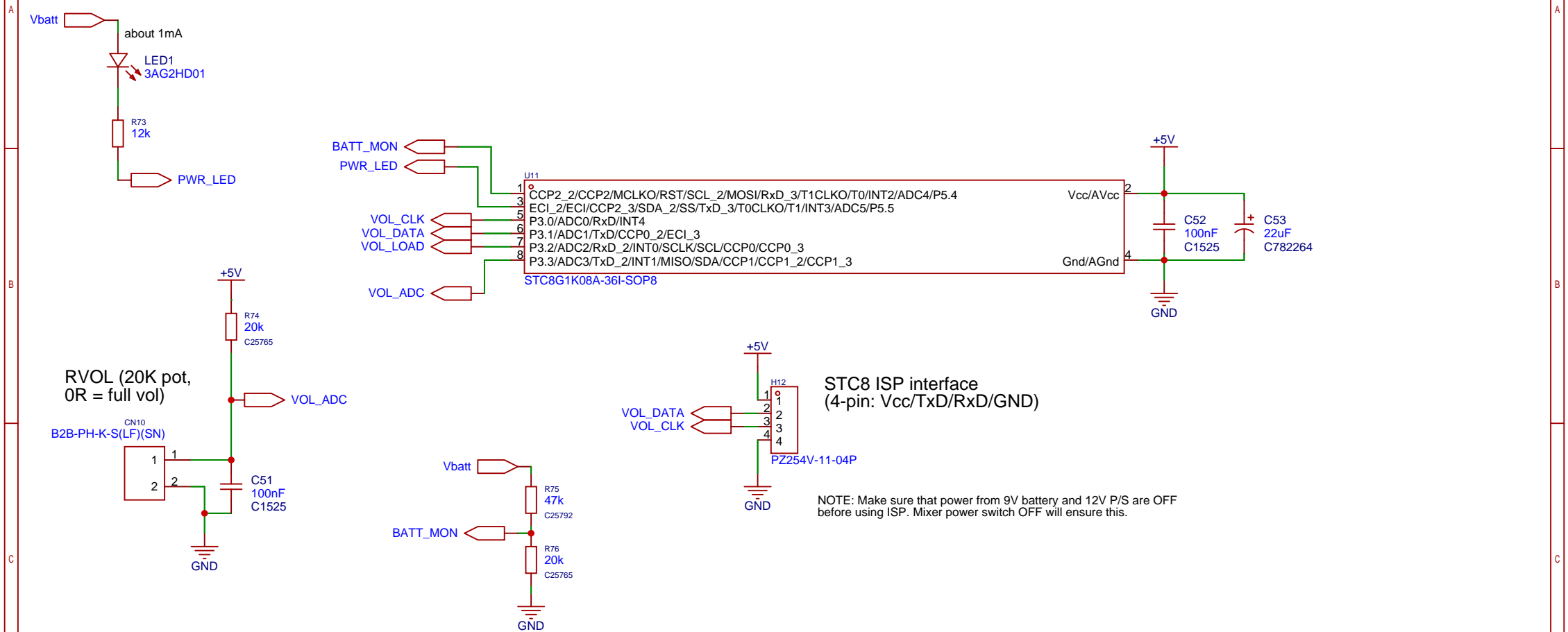
Schematic	mixer project v2.0		Update Date	2024-01-30
			Create Date	2024-01-09
Page	OutputStage.mixer project v2.0		Part Number	JLPCB-002
Drawn	M.Pogue	Mixer V2		
Reviewed	EasyEDA Pro			
		VER	SIZE	PAGE 4 OF 6
		V0.1	A4	EasyEDA.com

Input Power Management



Schematic	mixer project v2.0		Update Date	2024-01-22
			Create Date	2024-01-09
Page			Part Number	JLCPCB-002
Drawn	M.Pogue	Mixer V2		
Reviewed	EasyEDA Pro			
		VER	SIZE	PAGE 5 OF 6
EasyEDA		V0.1	A4	EasyEDA.com

MCU (Battery Monitor, Remote Vol Ctrl)



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

Schematic	mixer project v2.0			Update Date	2024-01-23
				Create Date	2024-01-09
Page				Part Number	JLCPCB-002
Drawn	EasyEDA Pro	Mixer V2			
Reviewed	EasyEDA Pro				
		VER	SIZE	PAGE	6 OF 6
EasyEDA		V0.1	A4	EasyEDA.com	