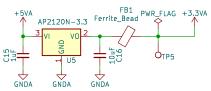
power	audio-codec	usb
File: power.kicad_sch	File: audio-codec.kicad_sch	File: usb.kicad_sch
coreboard	audio-inputs	midi
File: coreboard.kicad_sch	File: audio-inputs.kicad_sch	File: midi.kicad_sch
mechanics	audio-outputs	control-chain
File: mechanics.kicad_sch	File: audio—outputs.kicad_sch audio—headphones	File: control-chain.kicad_sch
	File: audio-headphones.kicad_sch control-voltage	
	File: control—voltage.kicad_sch spdif	

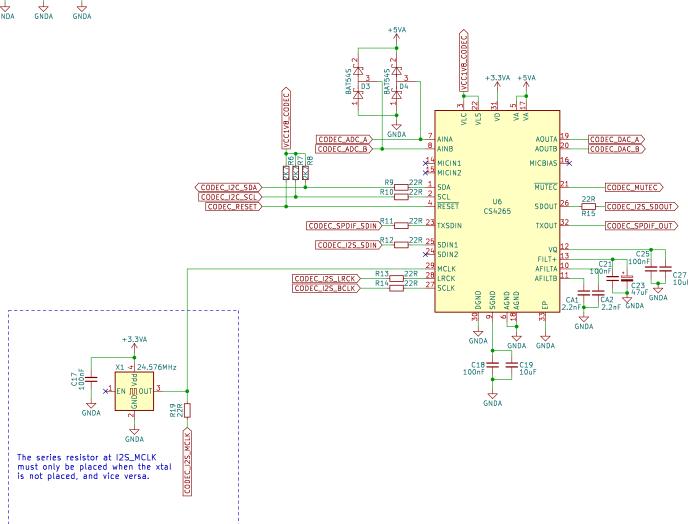
## Notes

- All resistors named as RA\* must have at least 1% tolerance
  All non-polarized capacitors named as CA\* must use NPO Temp. Coef.
  All other non-polarized capacitors should use X7R Temp. Coef.
  Decoupling caps must be placed as close as possible of the IC power pins
  IC's such as the codec, ADC, DAC, headphone amplifier, EEPROM should not be changed to maintain software compatibility

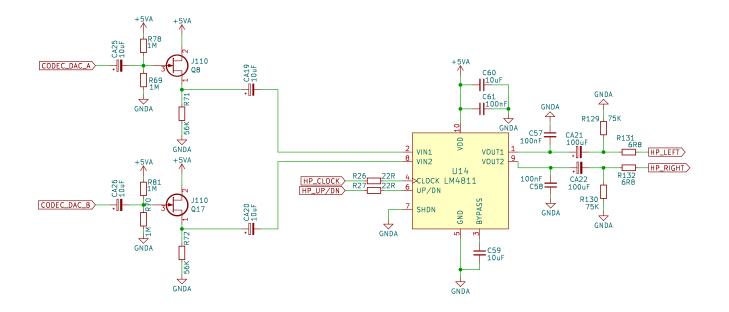
File: spdif.kicad\_sch

## 3V3 for codec

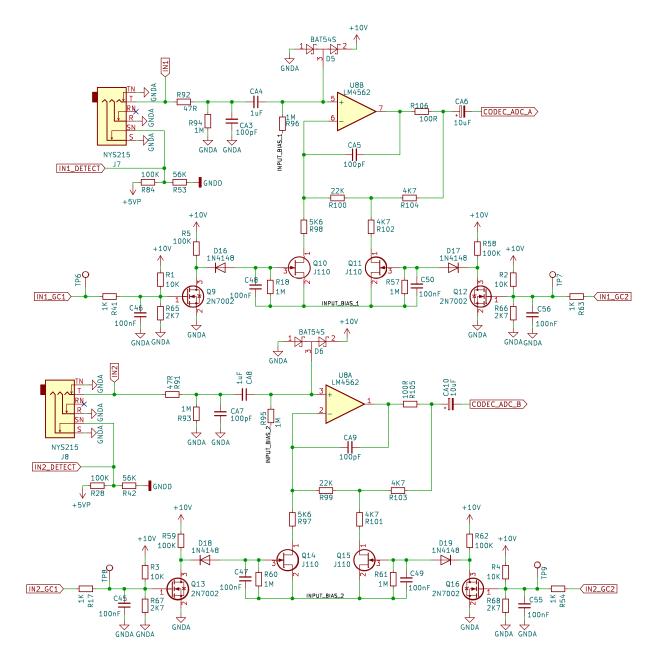




# Placed close to their respective pin +3.3VA +5VA GNDA VD GNDA VD GNDA VLS VLC



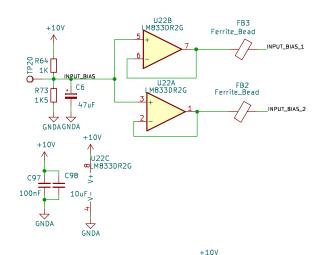
HP circuit values designed for Dual 70mW @ RL=32ohm

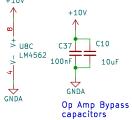


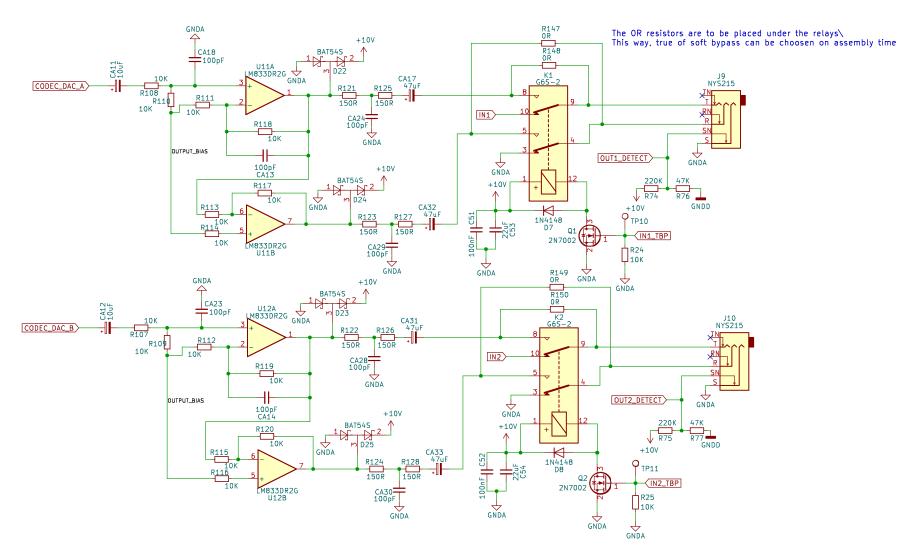
## GPIO controllable gain spec:

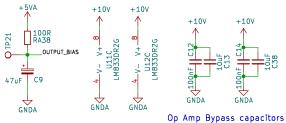
GC2, GC1	GAIN (dB)	The gain calculation includes
1, 1 1, 0 0, 1	0.0	the RDSon value
1, 0	6.0	
0, 1	15.0	J110: RDSon = 18R
0, 0	20.4	

The CODEC only presents optimal dynamic range and THD+N for PGA setting:  $-12 \mathrm{dB}$  to +6dB.

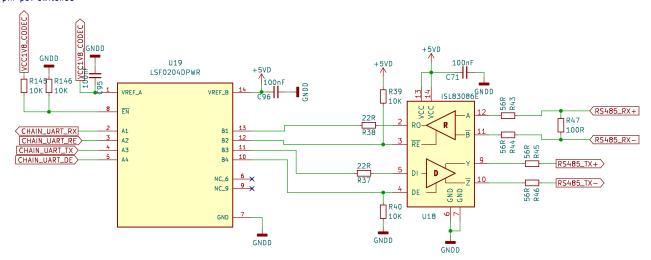


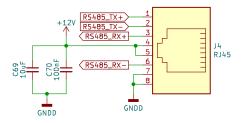


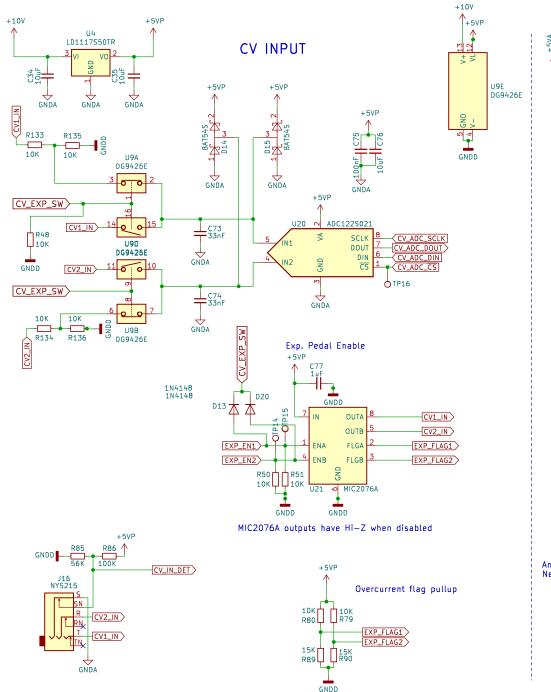


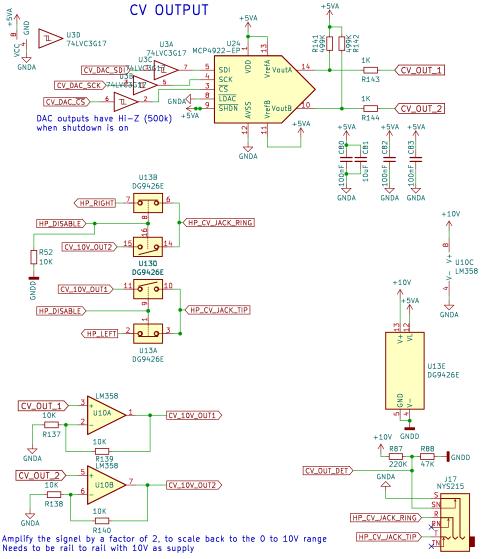


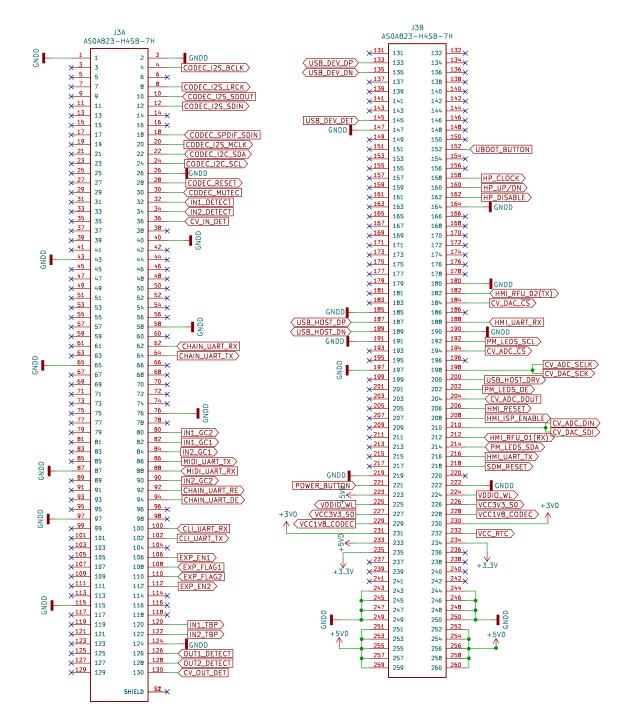
These R can not both be placed! Different models have EN pin pol switched

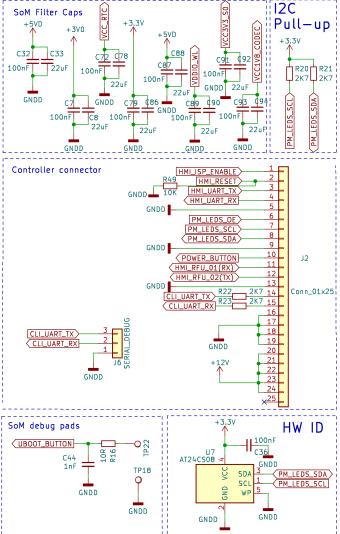




















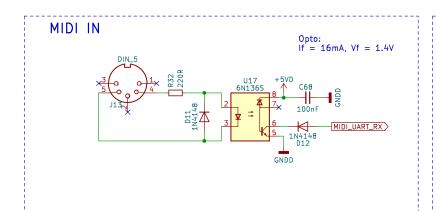


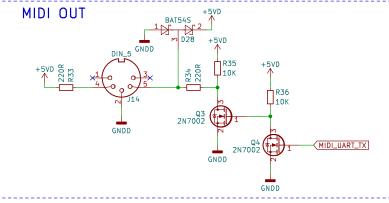






IMG1 Logo





# Analog



