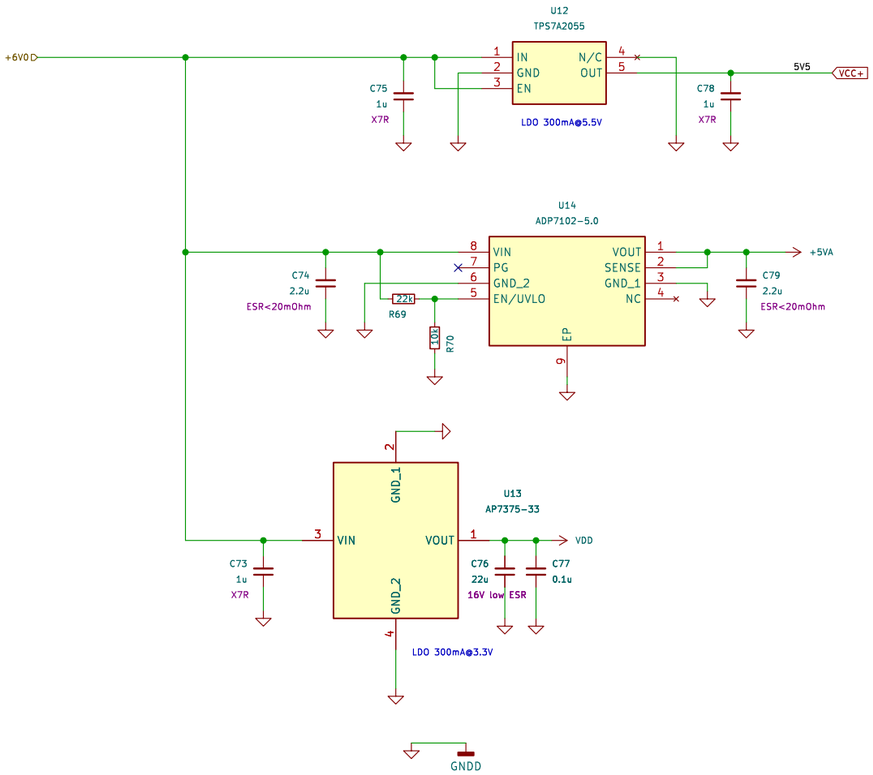
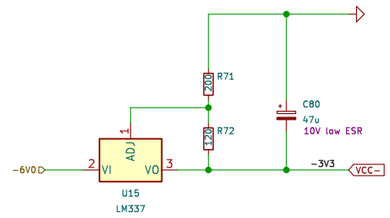
PCM3168 DAC Output is 1.6xVA (p11 of d/s)
= 4Vpp each side of diff signal centred on 2.5V
OPA1679 goes to 0.8V of rail, so need VCC- < -0.3V, VCC+ > 5.3V

Current (mA)	+5VA	VDD	VCC+/VCC-	
PCM3168A	210	150	0	
ISO7760	0	10	0	
SI8640	0	23	0	
ISO1641	0	6	0	
INPUT x18	0	0	180*2	
OUTPUT x8	0	0	80*2	
TOTAL	210	189	520	= 919 ... Make it 1A

Generate +/-6V using buck converters
6.0V > LDO > VDD (189mA ... design for 225)
6.0V > LDO > +5VA (210mA ... design for 250)
6.0V > LDO > VCC+ (260mA ... design for 300)
-6.0V > LM337 > -3V3 (260mA ... design for 300)



Thermal calculations
U14 = 300mA @ 1V drop = 300mW
U13 = 225mA @ 2.7V drop = 608mW
U12 = 300mA @ 0.5V drop = 150mW
U15 = 300mA @ 2.7V drop = 810mW



Sheet: /power/		
File: power.kicad_sch		
Title: RPi5 soundcard IO daughter board		
Size: A3	Date: 2023-11-30	**Rev:**
KiCad E.D.A. kicad 7.0.10		Id: 17/32