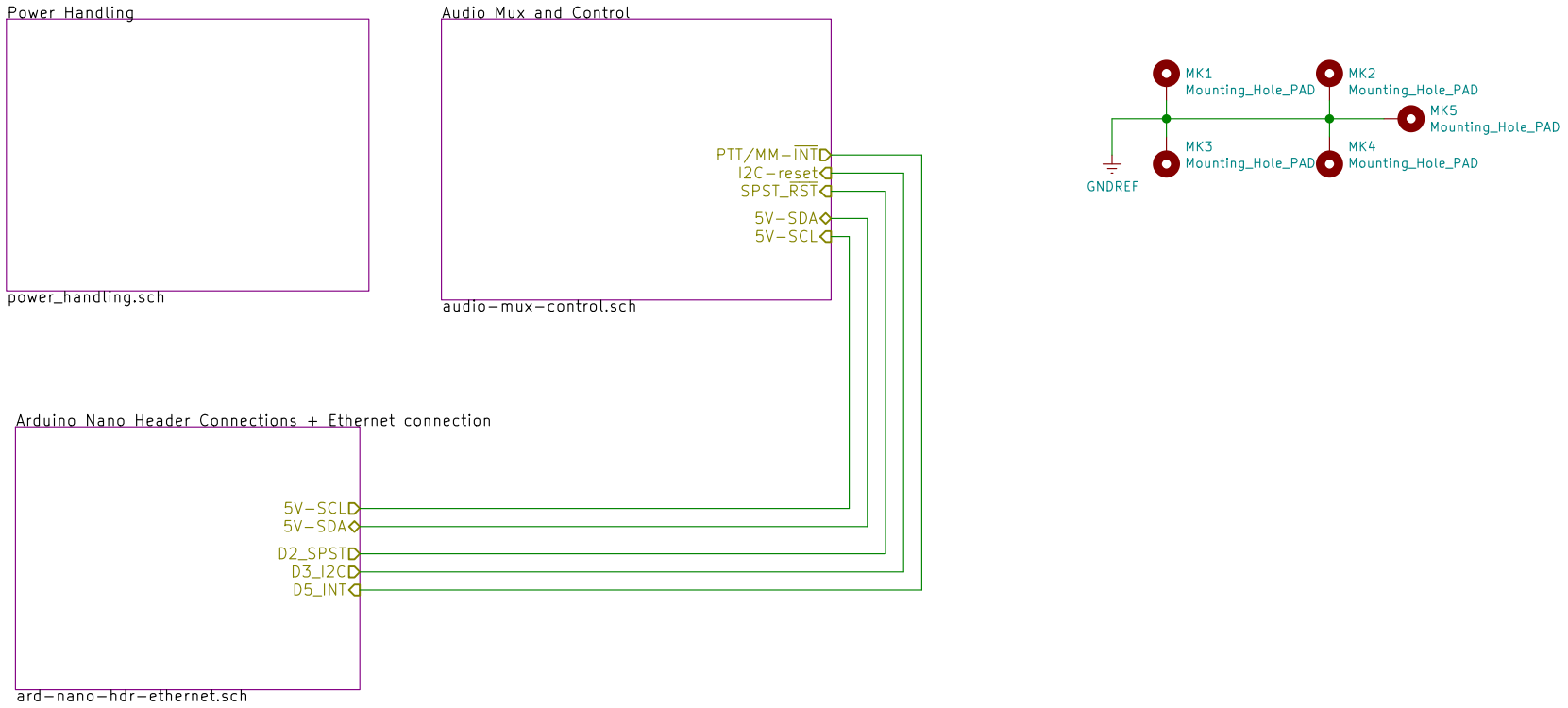


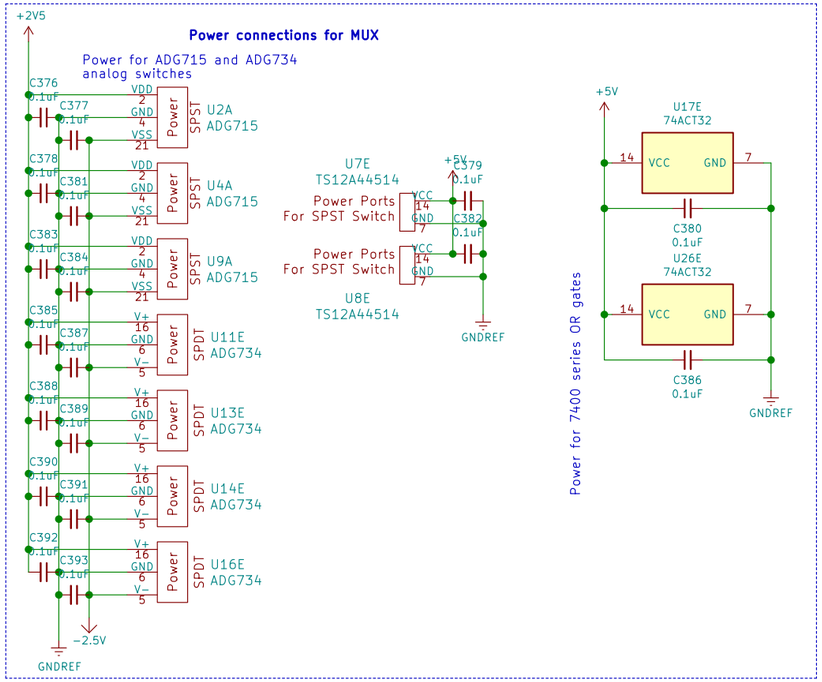
All signal directions are indicated from the perspective of the MUX box

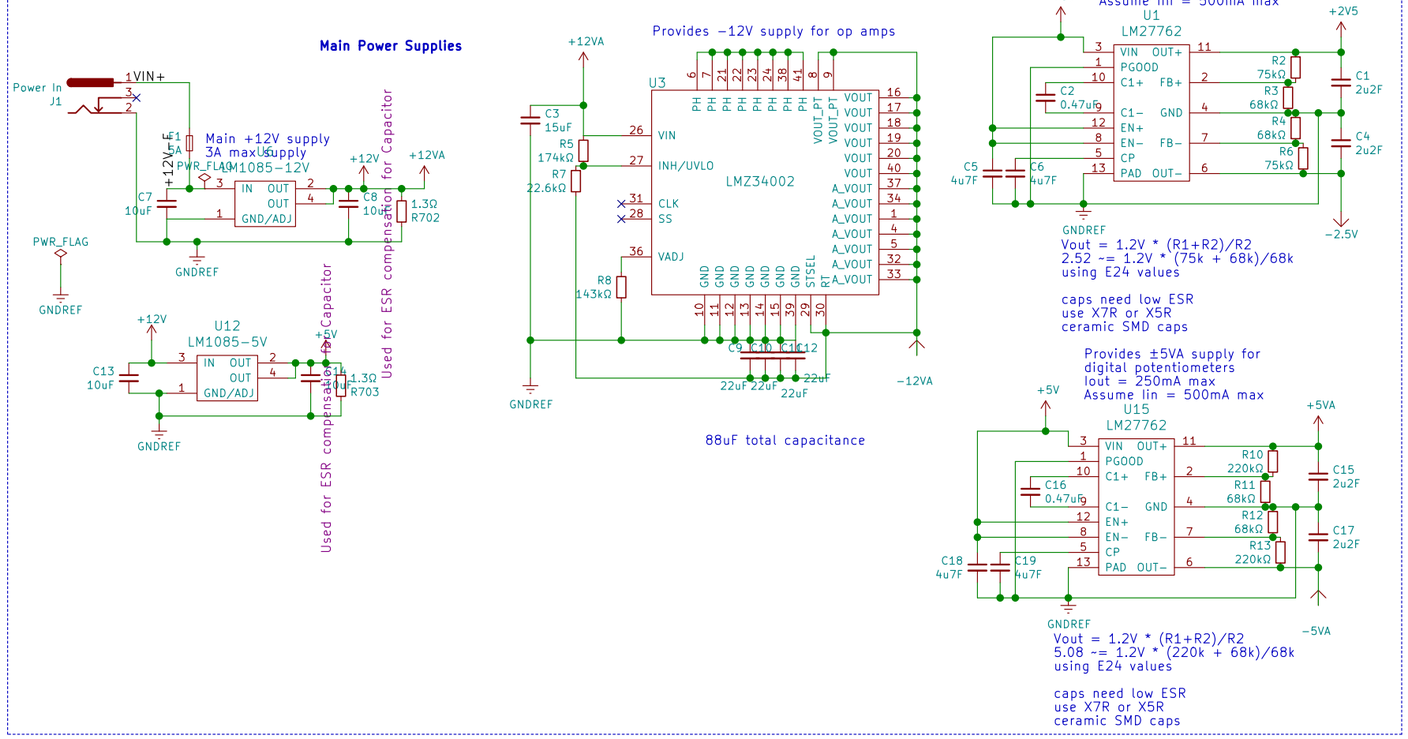
8x connectors with stereo audio out, mono mic in, PTT in, Mic Mute in, +5V bias out
Each connector can be used for one or more functions.
These connectors are for speakermics, headsets and ptt switches.
Connector model is Amphenol LTW circular connector 8 pin

8x connectors with stereo audio in, mono mic out, PTT out
Each connector can be used for one or more functions.
These connectors are for smartphones and radios.
Connector model is Amphenol LTW circular connector 8pin

1x DB25 connector to connect to mixer
1x TRS connector for output from mixer to MUX

Sheet: / File: motherboard.sch		
Title:		
Size: USLetter	Date:	**Rev:**
KiCad E.D.A. kicad (2018-01-31 revision e69ddf0)-master		Id: 1/38





0−5V control signal switch/mux chips will use 5V as power

audio signal switch chips will use
+2.5VA as positive rail
−2.5VA as negative rail

Potentiometers use
5V as digital power
5VA as analog positive rail
−5VA as negative analog rail

op amps use
+12VA as analog positive rail
−12VA as analog negative rail

for each chip voltage level, i2c lines are pulled to
the individual vdd of the chip.

+12V is regulated +12V@5A DC supply.
+5V is 5V@3A supply

+12VA is positive supply for op amps used as audio amplifiers
−12VA is negative supply for op amps used as audio amplifiers
+5VA is positive analog supply for potentiometer chips
−5VA is negative analog supply for potentiometer chips
+2.5V is positive supply for audio switch chips and io
expanders at that logic level
−2.5V is positive supply for audio switch chips and io
expanders at that logic level

Sheet: /Power Handling/
File: power_handling.sch

Title: Power Regulation

Size: B	Date:	Rev:
KiCad E.D.A. kicad (2018−01−31 revision e69ddf0)−master		Id: 2/38

For 2 wire mic connection (separate ground, baofeng)
Connect +,– mic to +,– mic in cable
For 1 wire mic connection (same ground, iphone)
connect +,– mic to +,ground in cable.

PTT for each device is an electronic switch closure.
This can be controlled via a digital signal from RPi
or from other ptt inputs

Device power provided by external connection

1–Ground
2–L audio to MUX
3–R audio to MUX
4–Mic +
5–Mic –
6–+5V for active cables
7– PTT +
8– PTT –

J2 Device 0 · J3 Device 1 · J4 Device 2 · J6 Device 3 · J9 Device 4 · J14 Device 5 · J17 Device 6 · J24 Device 7

cap to block dc bias from devices

D1 TPD1E10B06 · D4 TPD1E10B06 · D7 TPD1E10B06 · D10 TPD1E10B06 · D19 TPD1E10B06 · D34 TPD1E10B06 · D43 TPD1E10B06 · D46 TPD1E10B06

D3 0582BQ · D6 0582BQ · D9 0582BQ · D12 0582BQ · D21 0582BQ · D38 0582BQ · D45 0582BQ · D48 0582BQ

D2 0582BQ · D5 0582BQ · D8 0582BQ · D11 0582BQ · D20 0582BQ · D35 0582BQ · D44 0582BQ · D47 0582BQ

U7B TS12A44514 · U7A TS12A44514 · U7C TS12A44514 · U7D TS12A44514 (Swapped pins to make layout easier) · U8B TS12A44514 · U8A TS12A44514 · U8C TS12A44514 · U8D TS12A44514 (Swapped pins to make layout easier)

U2C ADG715 · U2D ADG715 · U2E ADG715 · U2F ADG715 · U2G ADG715 · U2H ADG715 · U2I ADG715 · U2J ADG715

U17B 74ACT32 · U17C 74ACT32 · U17D 74ACT32 · U17A 74ACT32 · U26B 74ACT32 · U26C 74ACT32 · U26D 74ACT32 · U26A 74ACT32

RPI-PTT-0 · RPI-PTT-1 · RPI-PTT-2 · RPI-PTT-3 · RPI-PTT-4 · RPI-PTT-5 · RPI-PTT-6 · RPI-PTT-7

Device_LR_Distro_Amplifier_0 … Device_LR_Distro_Amplifier_7 (stereo-1-2-distro-amp.sch)

L_OUT1 / R_OUT1: MIXER-OUT-L-0 / MIXER-OUT-R-0 … MIXER-OUT-L-7 / MIXER-OUT-R-7
out 1 goes to Mixer
out 2 goes to L_in/R_in bus

L_OUT2 / R_OUT2: HEADSET-AUDIO-SOURCE-L-0 / HEADSET-AUDIO-SOURCE-R-0 … HEADSET-AUDIO-SOURCE-L-7 / HEADSET-AUDIO-SOURCE-R-7

HEADSET-AUDIO-SOURCE-L-[0..7]
HEADSET-AUDIO-SOURCE-R-[0..7]

U18 ADG708 · U19 ADG708 · U20 ADG708 · U21 ADG708 · U22 ADG708 · U23 ADG708 · U24 ADG708 · U25 ADG708 · U27 ADG708 · U28 ADG708 · U29 ADG708 · U30 ADG708 · U33 ADG708 · U34 ADG708 · U37 ADG708 · U40 ADG708

DEV-MIC-IN-XBAR-CTL0 … DEV-MIC-IN-XBAR-CTL23
DEV-PTT-XBAR-CTL0 … DEV-PTT-XBAR-CTL23
DEV-MIC-IN-XBAR-CTL[0..23]
DEV-PTT-XBAR-CTL[0..23]

AMP-MIC-IN-0-0 … AMP-MIC-IN-7-7
PTT-0 … PTT-7

C20 1uF · C21 0.1uF · C22 0.1uF · C23 0.1uF · C24 1uF · C25 0.1uF · C26 0.1uF · C27 0.1uF · C28 1uF · C29 0.1uF · C30 0.1uF · C31 0.1uF · C32 1uF · C33 0.1uF · C34 0.1uF · C35 0.1uF · C36 0.1uF · C37 1uF · C38 0.1uF · C39 1uF · C40 1uF · C41 1uF · C42 1uF · C43 0.1uF · C44 0.1uF · C45 0.1uF · C46 0.1uF · C47 1uF · C48 1uF · C49 0.1uF · C50 0.1uF · C51 1uF · C52 1uF · C53 1uF · C54 0.1uF · C55 1uF · C56 1uF · C57 1uF · C58 1uF · C59 1uF · C60 1uF · C61 1uF · C62 1uF · C63 1uF · C64 1uF · C65 0.1uF · C66 0.1uF · C67 0.1uF · C68 0.1uF · C69 1uF · C70 0.1uF · C71 0.1uF · C72 0.1uF · C73 0.1uF · C74 0.1uF · C75 0.1uF · C76 1uF · C77 0.1uF · C78 0.1uF · C79 0.1uF · C80 0.1uF · C81 0.1uF

Dual Mic Distro Amp 0 … Dual Mic Distro Amp 3 (1-8-stereo-buffer-amp.sch)

AMP-MIC-IN-0-0 … AMP-MIC-IN-7-7
L_OUT0 … L_OUT7 / R_OUT0 … R_OUT7

Dual Mic Amplifier 0 … Dual Mic Amplifier 3 (stereo-amp.sch)

L_IN / R_IN · L_OUT / R_OUT · SDA / SCL · A0 / A1 / A2
MIC-IN-0 … MIC-IN-7
5V-SCL-1 · 5V-SDA-1

Headset LR audio out Mux and Source Selection (headset-audio-out-mux-switching.sch)

L_IN[0..7] · R_IN[0..7] · L_OUT[0..7] · R_OUT[0..7]
MIXER_L_IN · MIXER_R_IN
SDA · SCL · A2 · 2v5-SDA-0 · 2v5-SCL-0

J5 Mixer Audio In: 1=Left=Tip · 2=Right=Ring · 3=GND=Sleeve
D57 0582BQ

Stereo Amplifier 0 … Stereo Amplifier 7 (stereo-amp.sch)

U4E ADG715 · U9E ADG715 · U4F ADG715 · U9F ADG715 · U4D ADG715 · U9D ADG715 · U4C ADG715 · U9C ADG715 · U4H ADG715 · U9H ADG715 · U4G ADG715 · U9G ADG715 · U4I ADG715 · U9I ADG715 · U4J ADG715 · U9J ADG715

L_OUT0 / R_OUT0 … L_OUT7 / R_OUT7

Standard Android headset controls can be accomodated with an external converter that measures the resistances on the mic line and transforms those into a pulse code on the mic mute line that the raspberry pi is monitoring for.

J7 Headset 0 · J8 Headset 1 · J10 Headset 2 · J11 Headset 3 · J12 Headset 4 · J13 Headset 5 · J15 Headset 6 · J16 Headset 7

MIC-IN-0 … MIC-IN-7
PTT-0 … PTT-7
MIC-MUTE-0 … MIC-MUTE-7

D13 0582BQ · D14 TPD1E10B06 · D15 0582BQ · D16 0582BQ · D17 TPD1E10B06 · D18 0582BQ · D22 0582BQ · D23 TPD1E10B06 · D24 0582BQ · D25 0582BQ · D26 TPD1E10B06 · D27 0582BQ · D28 0582BQ · D29 TPD1E10B06 · D30 0582BQ · D31 0582BQ · D32 TPD1E10B06 · D33 0582BQ · D36 0582BQ · D37 TPD1E10B06 · D39 0582BQ · D40 0582BQ · D41 TPD1E10B06 · D42 0582BQ

U2B ADG715 · U4B ADG715 · U9B ADG715 (interface)

2v5-SCL-0 · 2v5-SDA-0 · SPST_RST

U31 TCA9555 · U32 TCA9548A · U35 TCA9555 · U36 TCA9555 · U38 TCA9555 · U39 TCA9555

4818P-T02-202LF · RN1

PTT/MM–INT · 5V-SCL-0 · 5V-SDA-0

+3V3 is from Arduino regulator

I2C-reset

5V-SDA/SCL-0:
ADDR: 0101000 – 0101111 digipots
ADDR: 0100000 – 0100010 5v IO expanders

5V-SDA/SCL-1:
ADDR: 0101000 – 0101011 digipots

2v5-SDA/SCL-0:
ADDR: 0100000 – 0100101 2.5 IO expanders
ADDR: 1001000 – 1001010 SPST switches

J18 5V-I2C-2 · J19 5V-I2C-3 · J20 5V-I2C-4 · J21 5V-I2C-5 · J22 5V-I2C-6

J23 Extra GPIO

ADDR: 0100001 · ADDR: 0100100 · ADDR: 0100010 · ADDR: 0100101

Swapped pins to make layout easier

RPI-PTT-[0..7]
DEV-PTT-XBAR-CTL[0..23]
DEV-MIC-IN-XBAR-CTL[0..23]

J25 Using TASCAM DB-25 pinout
+ = right, – = left
Outputs to Mixer

1–Audio Ground
2–L audio to Headphones
3–R audio to Headphones
4–Mic +
5–Mic –
6–+5V for PTT, MIC–MUTE, Mic Bias
7–PTT (On=+5V) (default pull=low)
8–Mic Mute (On=+5V) (default pull=low)

PTT logic, can either be controlled via headset PTT wire or through IO expander from PI

Mic Mute logic, IO expander accepts signal into nano. IO expander provides signal from nano. Switching is controlled via i2c SPST switch

IO expanders are 0 to 5V logic. VCC at +5V to support this.

SPST switches support rail to rail voltages at switch terminals. Control signals are a function of VCC. use +5V in order to support 0–5V logic on the control inputs.

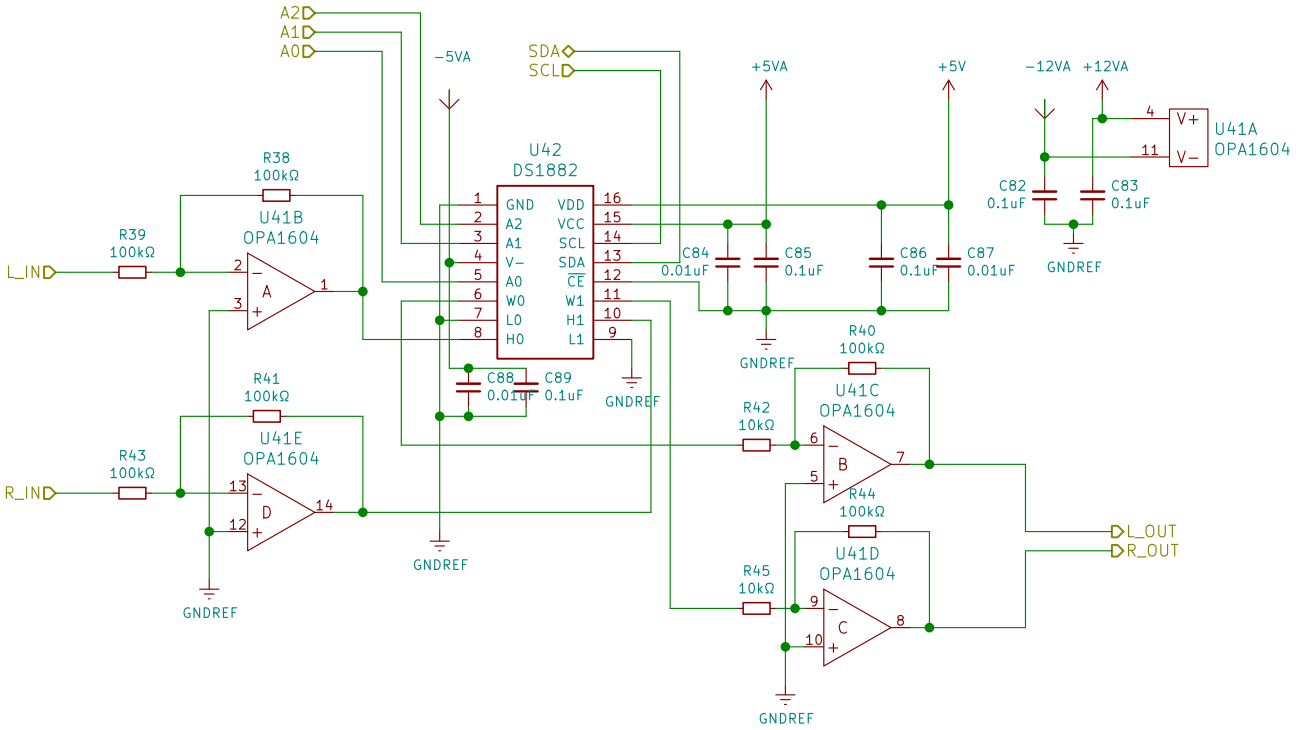
Mic Mute and PTT signals are 0–5V logic.

Consumer level audio: Mic in and headphone out are consumer line level devices with Vpp of 0.894 and Vpk of 0.447

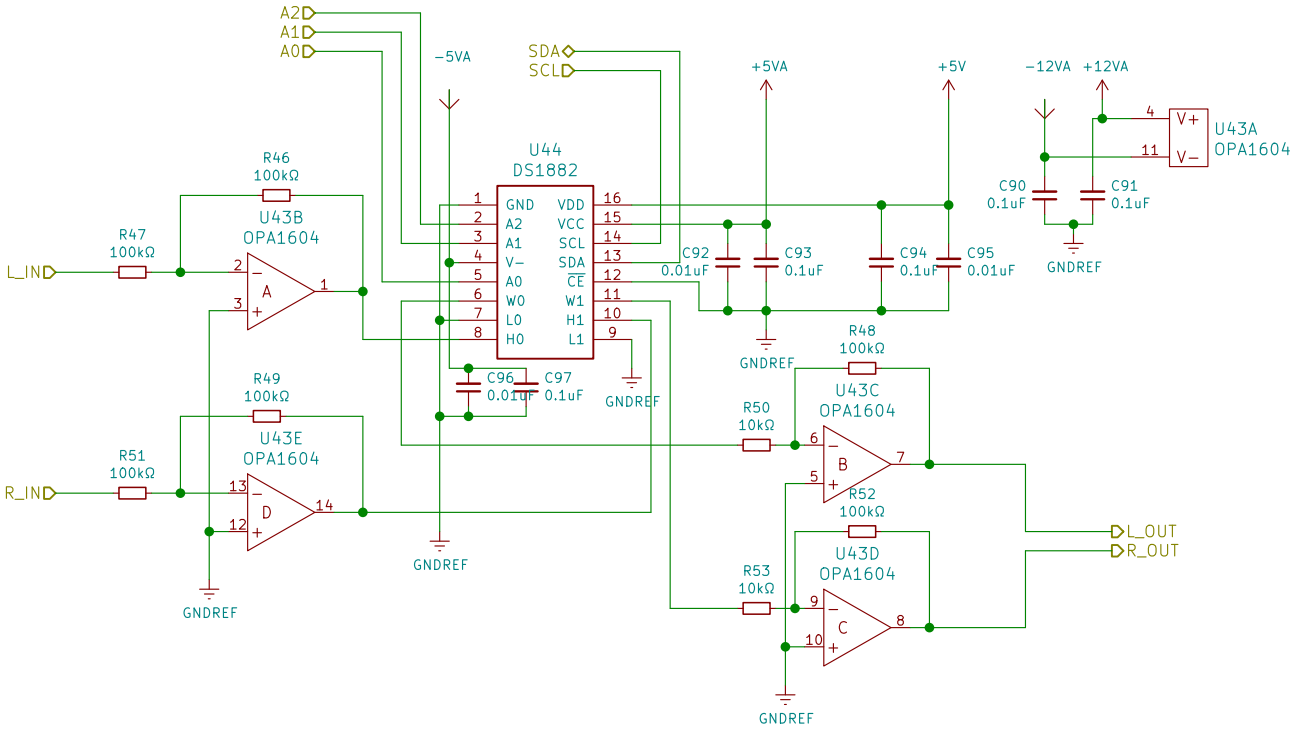
Sheet: /Audio Mux and Control/
File: audio-mux-control.sch

Title: Audio and Control Mux

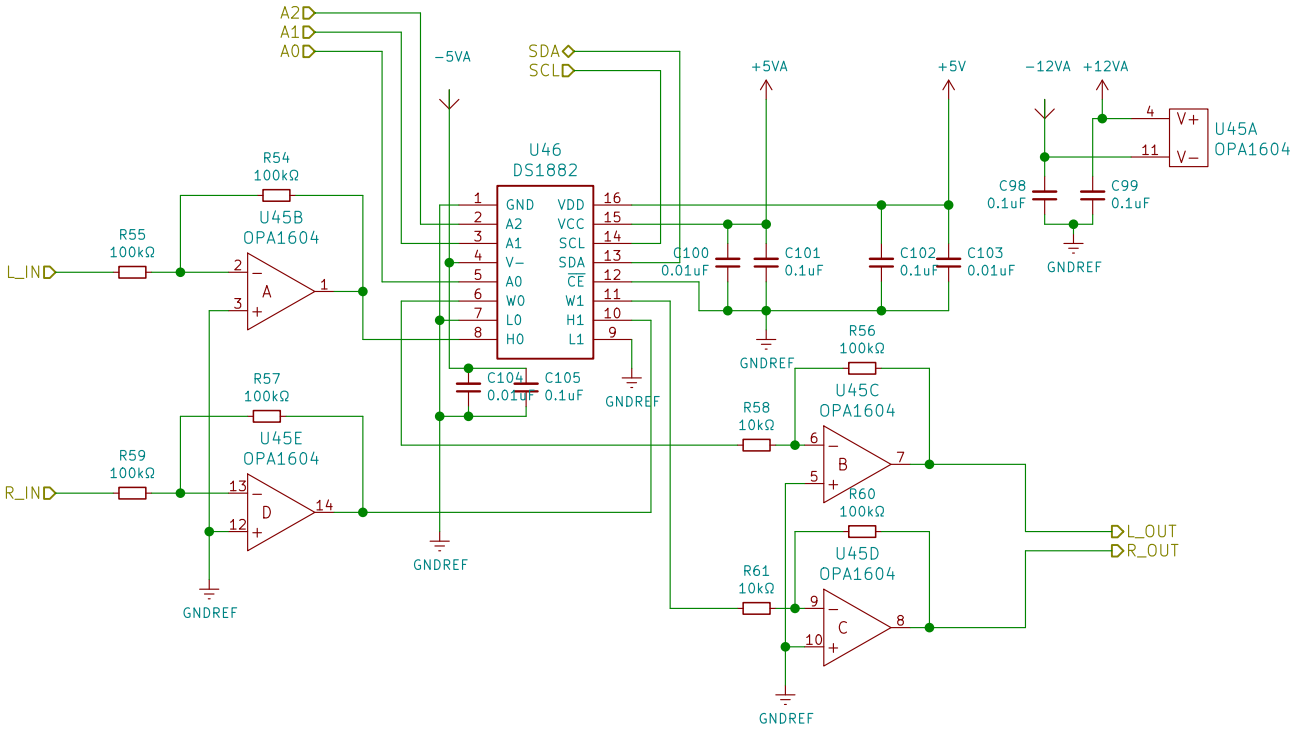
Size: User · Date: · Rev:
KiCad E.D.A. kicad (2018-01-31 revision e69ddf0)-master · Id: 3/38



Sheet: /Audio Mux and Control/Stereo Amplifier 1/		
File: stereo−amp.sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (2018−01−31 revision e69ddf0)−master		Id: 4/38



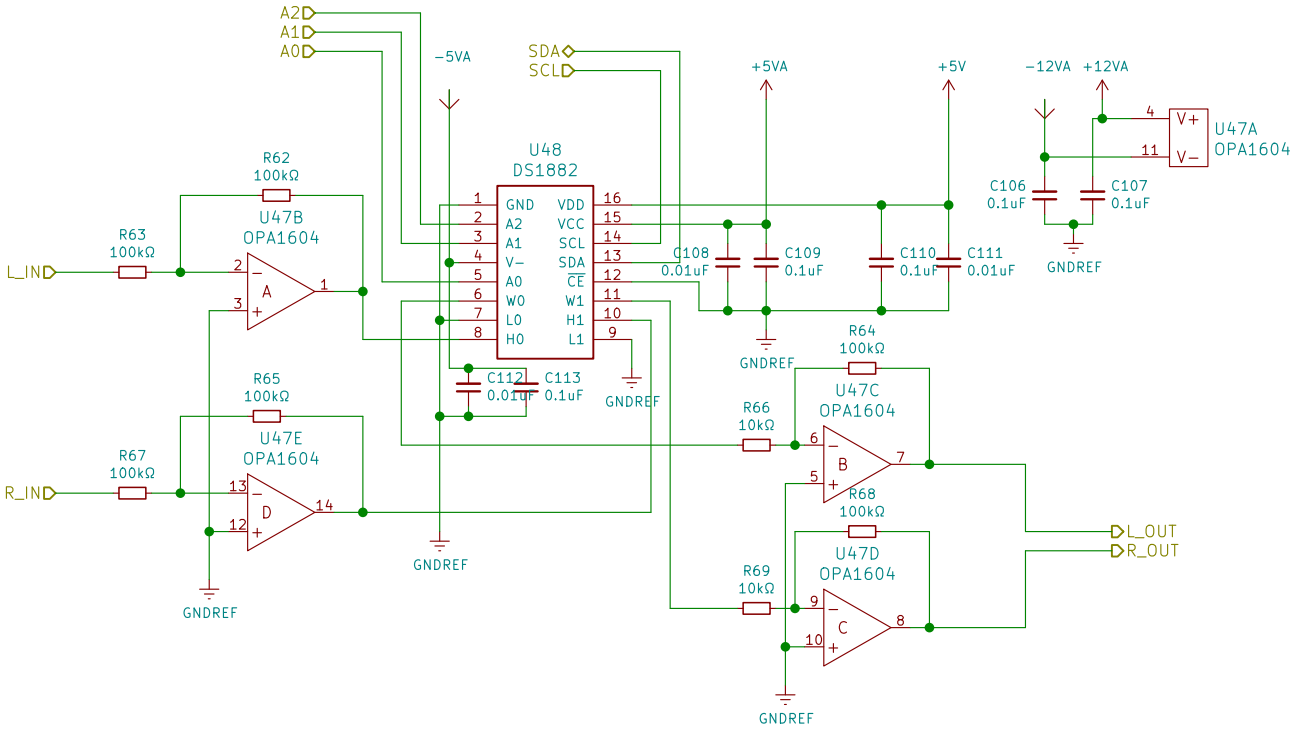
Sheet: /Audio Mux and Control/Stereo Amplifier 0/		
File: stereo−amp.sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (2018−01−31 revision e69ddf0)−master		Id: 5/38



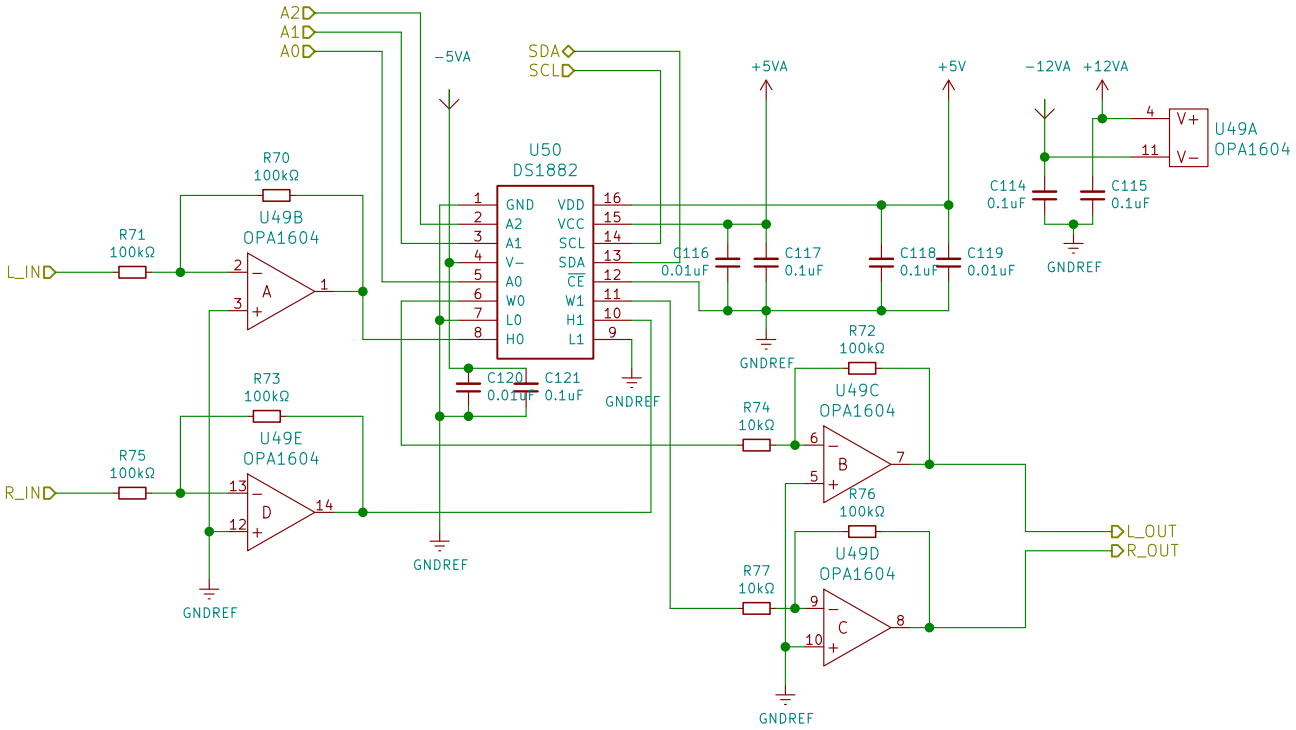
Sheet: /Audio Mux and Control/Stereo Amplifier 2/
File: stereo−amp.sch

Title:

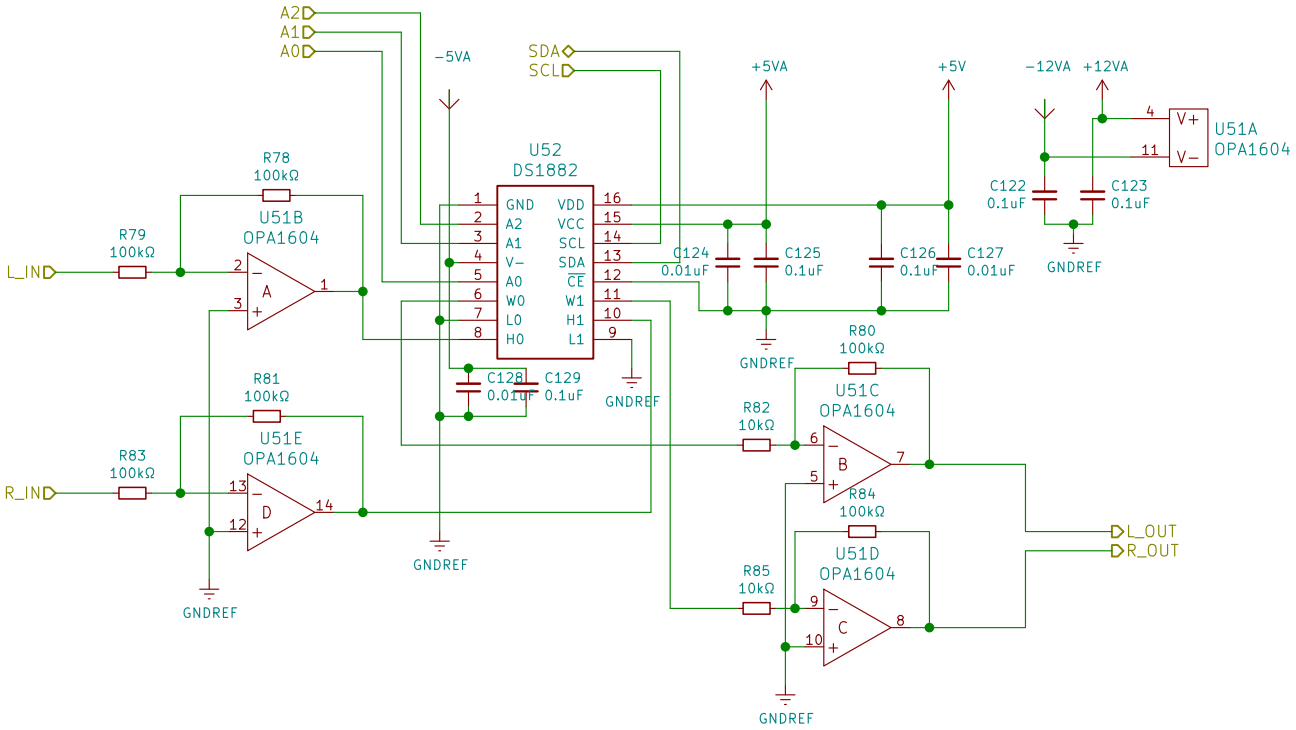
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (2018−01−31 revision e69ddf0)−master		Id: 6/38



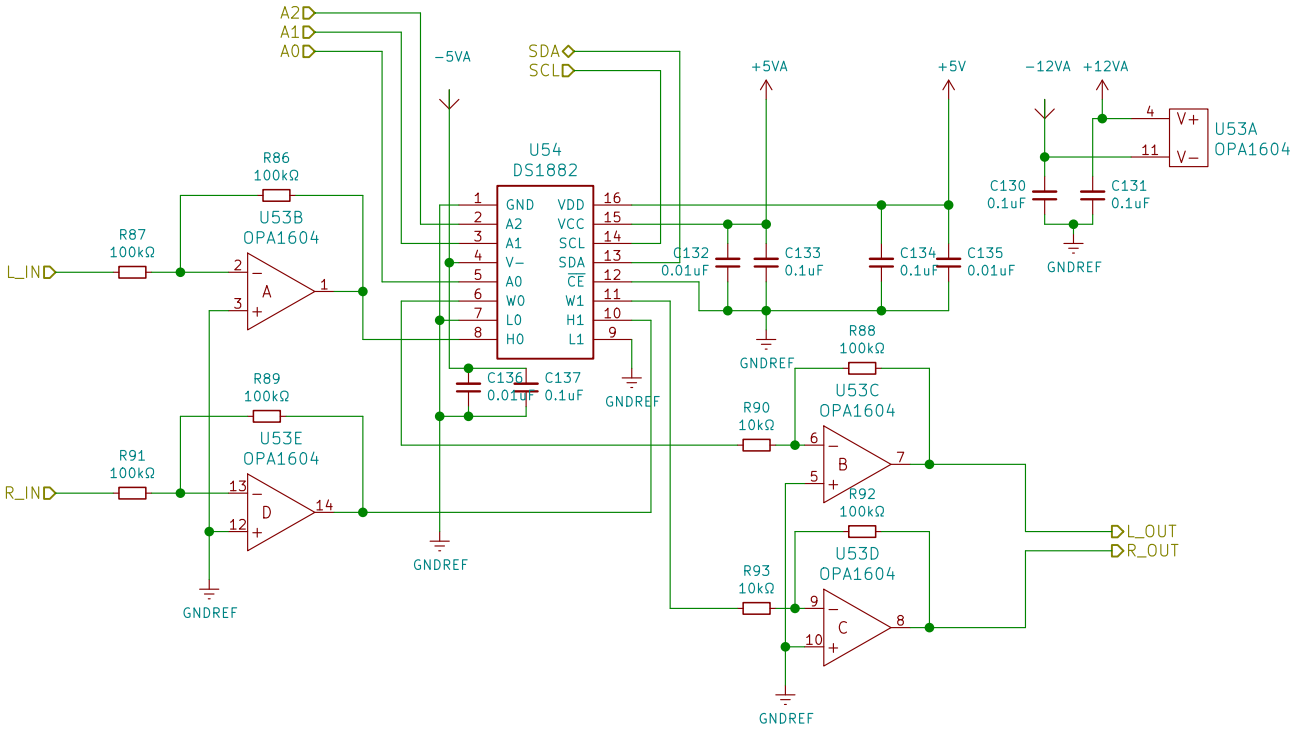
Sheet: /Audio Mux and Control/Stereo Amplifier 3/		
File: stereo−amp.sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (2018−01−31 revision e69ddf0)−master		Id: 7/38



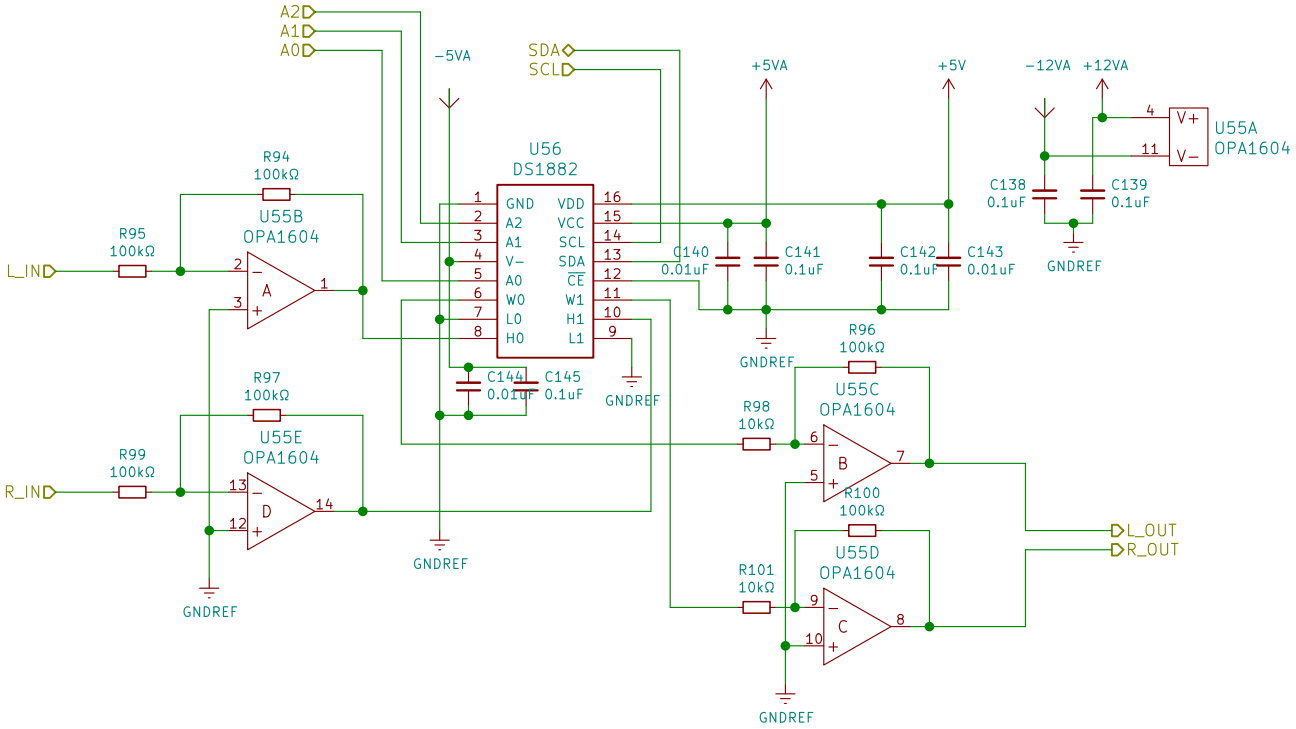
Sheet: /Audio Mux and Control/Stereo Amplifier 4/		
File: stereo−amp.sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (2018−01−31 revision e69ddf0)−master		Id: 8/38



Sheet: /Audio Mux and Control/Stereo Amplifier 5/		
File: stereo−amp.sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (2018−01−31 revision e69ddf0)−master		Id: 9/38



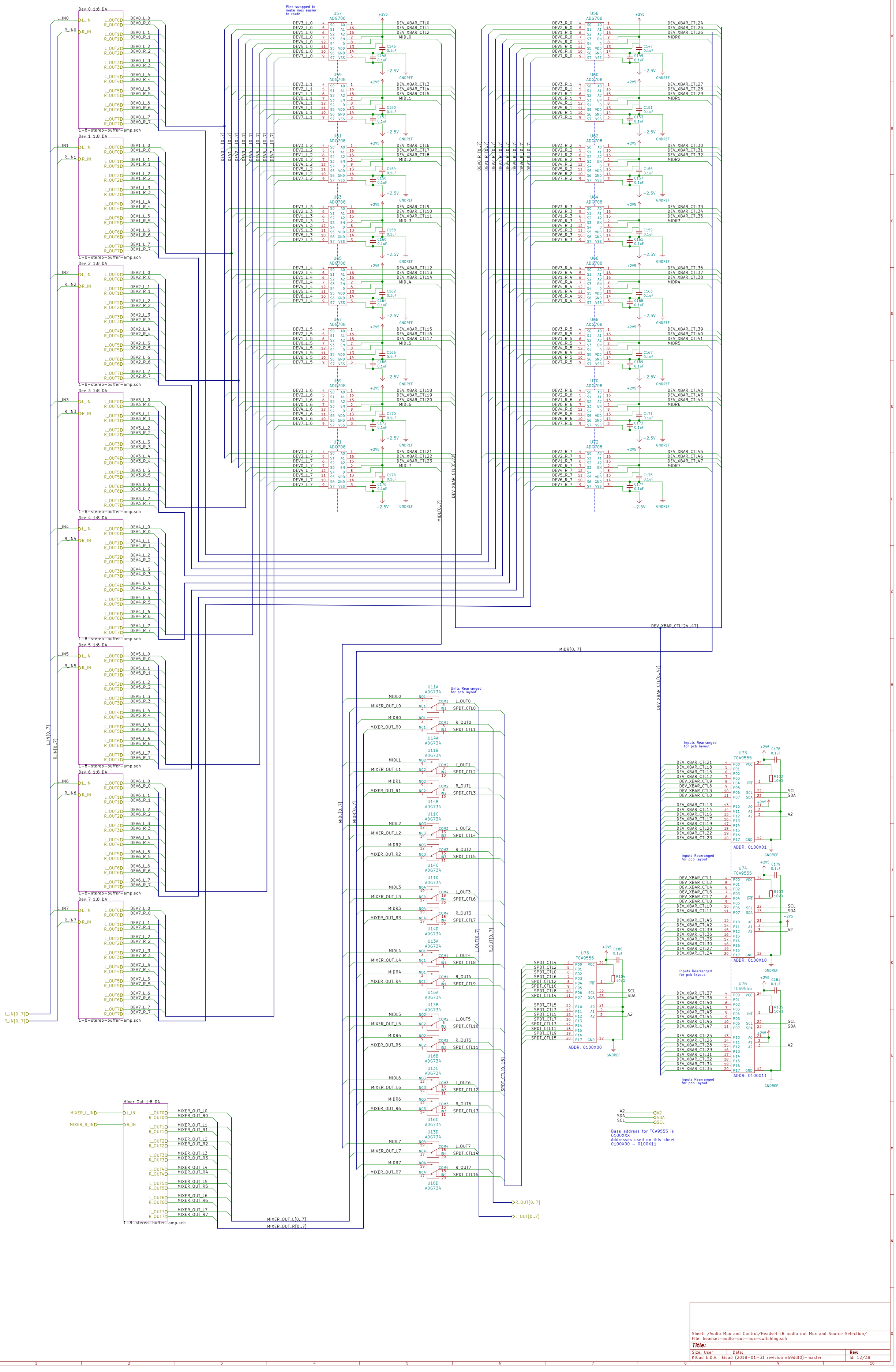
Sheet: /Audio Mux and Control/Stereo Amplifier 6/		
File: stereo−amp.sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (2018−01−31 revision e69ddf0)−master		Id: 10/38

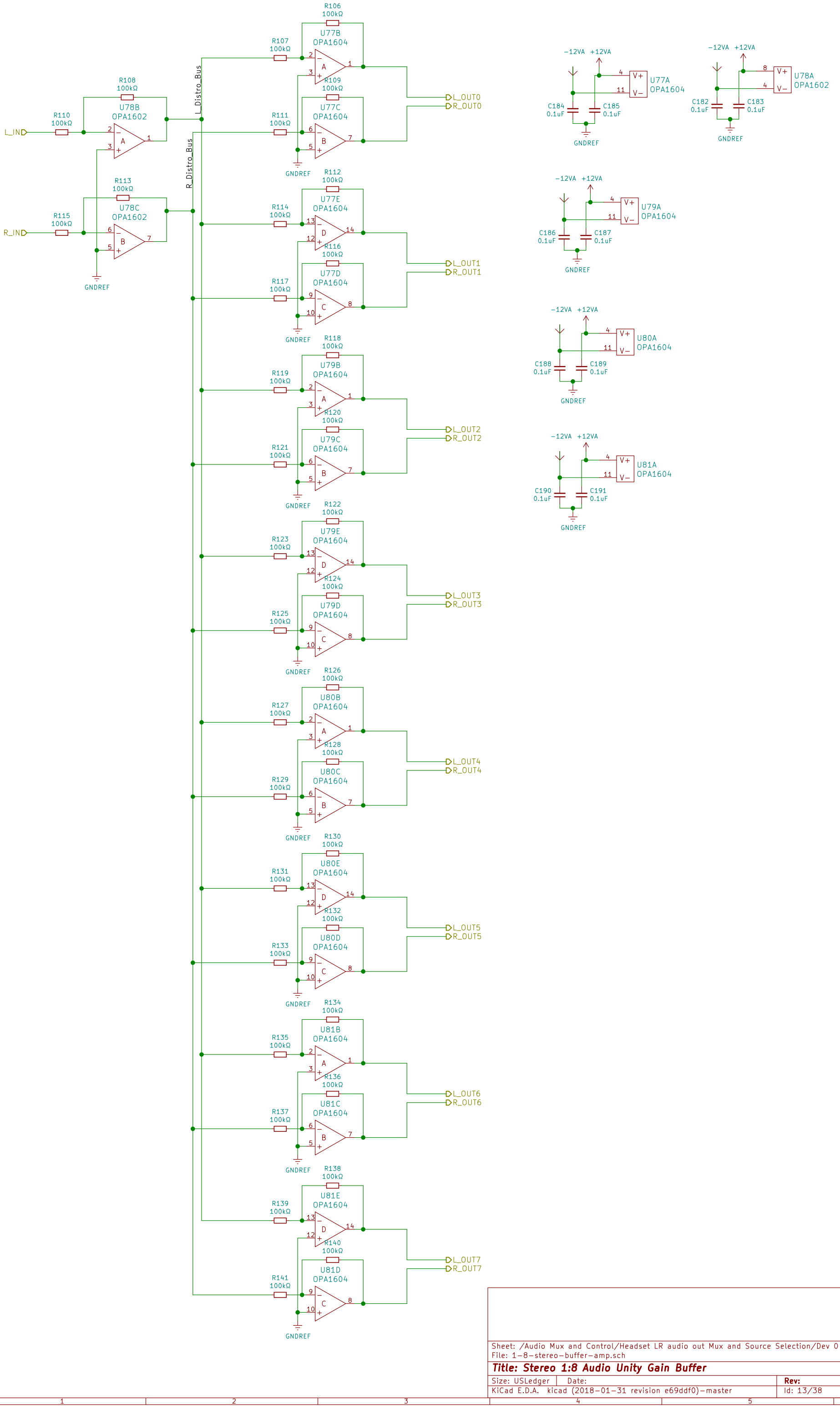


Sheet: /Audio Mux and Control/Stereo Amplifier 7/
File: stereo−amp.sch

Title:

Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (2018−01−31 revision e69ddf0)−master		Id: 11/38

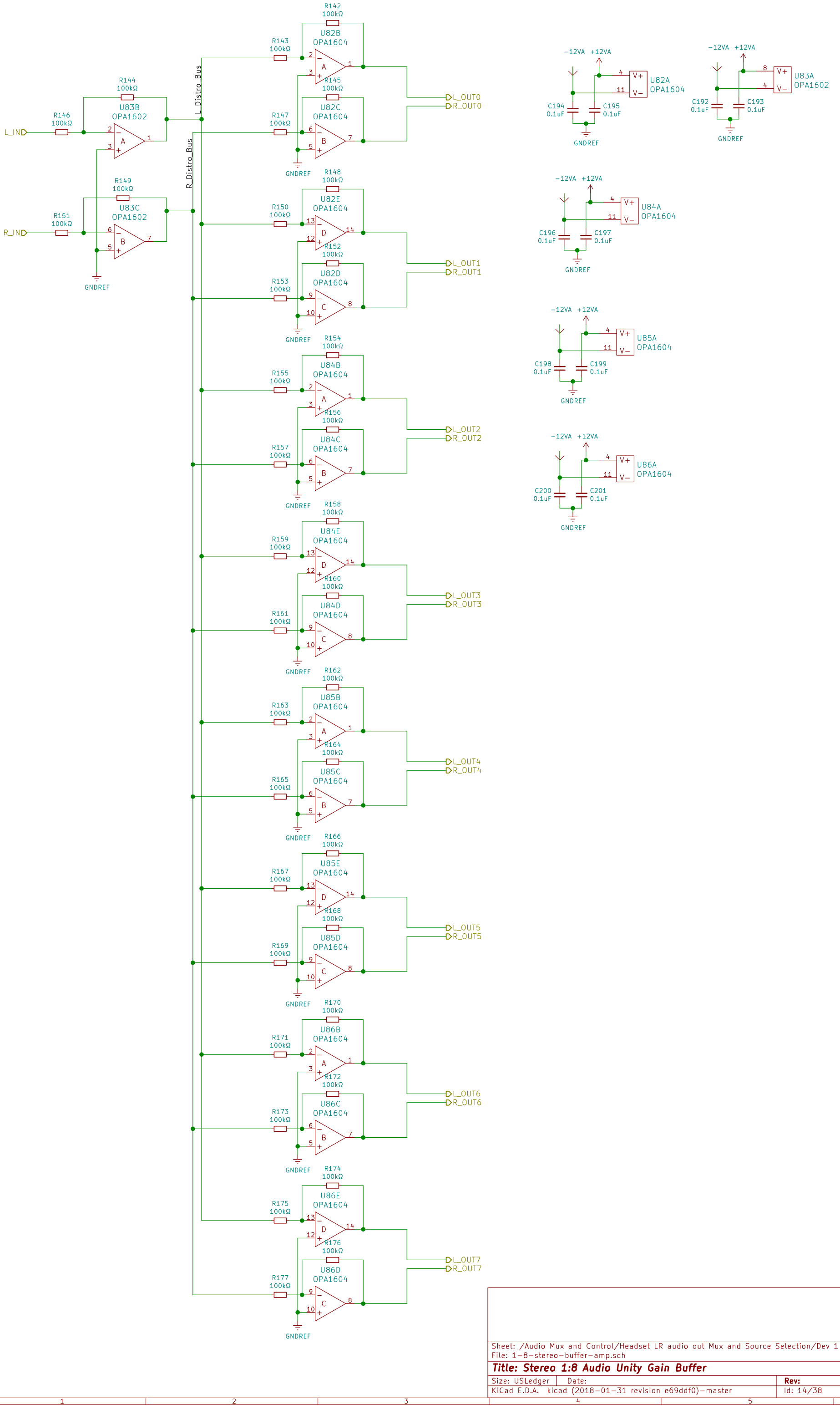

Dev 0 1:8 DA
L_IN0
R_IN0
L_IN
R_IN
L_OUT0
R_OUT0
DEV0_L_0
DEV0_R_0
1-8-stereo-buffer-amp.sch
Dev 1 1:8 DA
L_IN1
R_IN1
DEV1_L_0
DEV1_R_0
Dev 2 1:8 DA
L_IN2
R_IN2
DEV2_L_0
DEV2_R_0
Dev 3 1:8 DA
L_IN3
R_IN3
DEV3_L_0
DEV3_R_0
Dev 4 1:8 DA
L_IN4
R_IN4
DEV4_L_0
DEV4_R_0
Dev 5 1:8 DA
L_IN5
R_IN5
DEV5_L_0
DEV5_R_0
Dev 6 1:8 DA
L_IN6
R_IN6
DEV6_L_0
DEV6_R_0
Dev 7 1:8 DA
L_IN7
R_IN7
DEV7_L_0
DEV7_R_0
L_IN[0..7]
R_IN[0..7]
Pins swapped to make mux easier to route
U57
U58
U59
U60
U61
U62
U63
U64
U65
U66
U67
U68
U69
U70
U71
U72
ADG708
+2V5
-2.5V
GNDREF
C146
C147
C148
C149
C150
C151
C152
C153
C154
C155
C156
C157
C158
C159
C160
C161
C162
C163
C164
C165
C166
C167
C168
C169
C170
C171
C172
C173
C174
C175
C176
C177
0.1uF
DEV0_L_[0..7]
DEV1_L_[0..7]
DEV2_L_[0..7]
DEV3_L_[0..7]
DEV4_L_[0..7]
DEV5_L_[0..7]
DEV6_L_[0..7]
DEV7_L_[0..7]
DEV0_R_[0..7]
DEV1_R_[0..7]
DEV2_R_[0..7]
DEV3_R_[0..7]
DEV4_R_[0..7]
DEV5_R_[0..7]
DEV6_R_[0..7]
DEV7_R_[0..7]
DEV_XBAR_CTL[0..23]
DEV_XBAR_CTL[24..47]
MIDL[0..7]
MIDR[0..7]
U11A
U14A
U11B
U14B
U11C
U14C
U11D
U14D
U13A
U16A
U13B
U16B
U13C
U16C
U13D
U16D
Units Rearranged for pcb layout
MIDL0
MIDR0
MIDL1
MIDR1
MIDL2
MIDR2
MIDL3
MIDR3
MIDL4
MIDR4
MIDL5
MIDR5
MIDL6
MIDR6
MIDL7
MIDR7
MIXER_OUT_L0
MIXER_OUT_R0
MIXER_OUT_L1
MIXER_OUT_R1
MIXER_OUT_L2
MIXER_OUT_R2
MIXER_OUT_L3
MIXER_OUT_R3
MIXER_OUT_L4
MIXER_OUT_R4
MIXER_OUT_L5
MIXER_OUT_R5
MIXER_OUT_L6
MIXER_OUT_R6
MIXER_OUT_L7
MIXER_OUT_R7
L_OUT0
R_OUT0
L_OUT1
R_OUT1
L_OUT2
R_OUT2
L_OUT3
R_OUT3
L_OUT4
R_OUT4
L_OUT5
R_OUT5
L_OUT6
R_OUT6
L_OUT7
R_OUT7
SPDT_CTL0
SPDT_CTL1
SPDT_CTL2
SPDT_CTL3
SPDT_CTL4
SPDT_CTL5
SPDT_CTL6
SPDT_CTL7
SPDT_CTL8
SPDT_CTL9
SPDT_CTL10
SPDT_CTL11
SPDT_CTL12
SPDT_CTL13
SPDT_CTL14
SPDT_CTL15
L_OUT[0..7]
R_OUT[0..7]
SPDT_CTL[0..15]
Mixer Out 1:8 DA
MIXER_L_IN
MIXER_R_IN
MIXER_OUT_L[0..7]
MIXER_OUT_R[0..7]
Inputs Rearranged for pcb layout
U73
U74
U75
U76
TCA9555
R102
R103
R104
R105
10kΩ
C178
C179
C180
C181
SCL
SDA
A2
ADDR: 0100X01
ADDR: 0100X10
ADDR: 0100X00
ADDR: 0100X11
Base address for TCA9555 is 0100XXX
Addresses used on this sheet 0100X00 – 0100X11
Sheet: /Audio Mux and Control/Headset LR audio out Mux and Source Selection/
File: headset-audio-out-mux-switching.sch
Title:
Size: User
Date:
Rev:
KiCad E.D.A. kicad (2018-01-31 revision e69ddf0)-master
Id: 12/38



Sheet: /Audio Mux and Control/Headset LR audio out Mux and Source Selection/Dev 0 1:8 DA/
File: 1-8-stereo-buffer-amp.sch

Title: Stereo 1:8 Audio Unity Gain Buffer

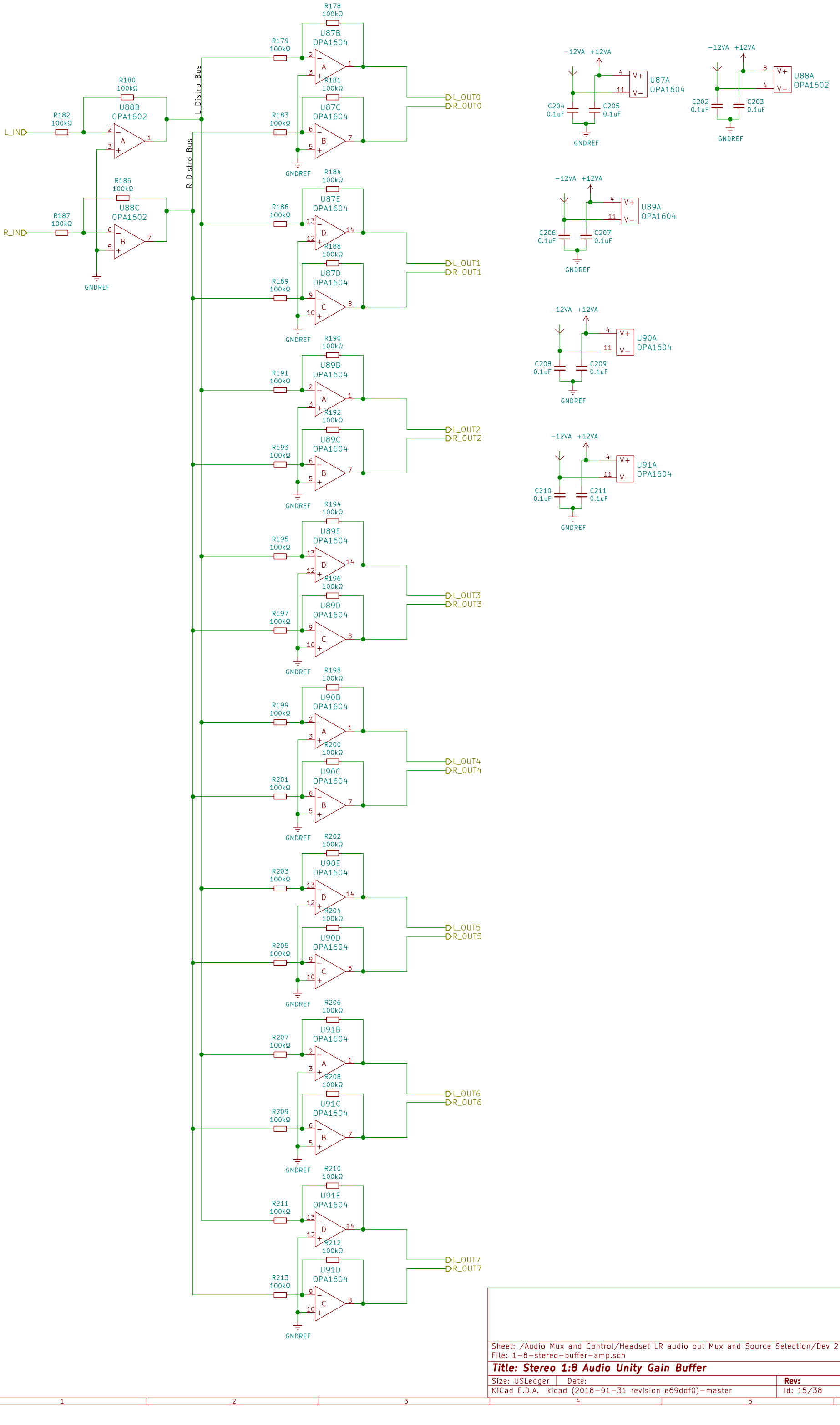
Size: USLedger	Date:	Rev:
KiCad E.D.A. kicad (2018-01-31 revision e69ddf0)-master		Id: 13/38



Sheet: /Audio Mux and Control/Headset LR audio out Mux and Source Selection/Dev 1 1:8 DA/
File: 1-8-stereo-buffer-amp.sch

Title: Stereo 1:8 Audio Unity Gain Buffer

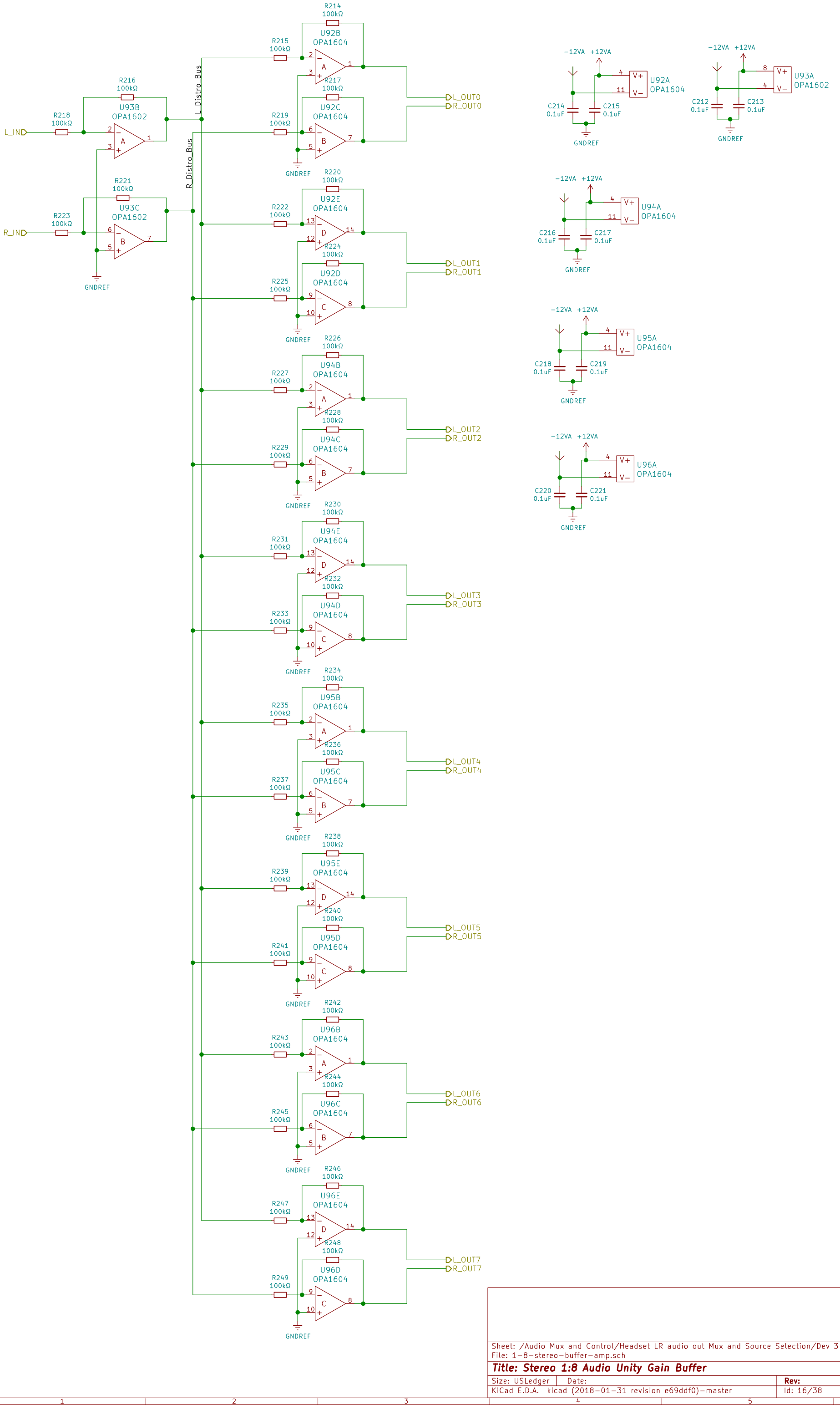
Size: USLedger	Date:	Rev:
KiCad E.D.A. kicad (2018-01-31 revision e69ddf0)-master		Id: 14/38



Sheet: /Audio Mux and Control/Headset LR audio out Mux and Source Selection/Dev 2 1:8 DA/
File: 1-8-stereo-buffer-amp.sch

Title: Stereo 1:8 Audio Unity Gain Buffer

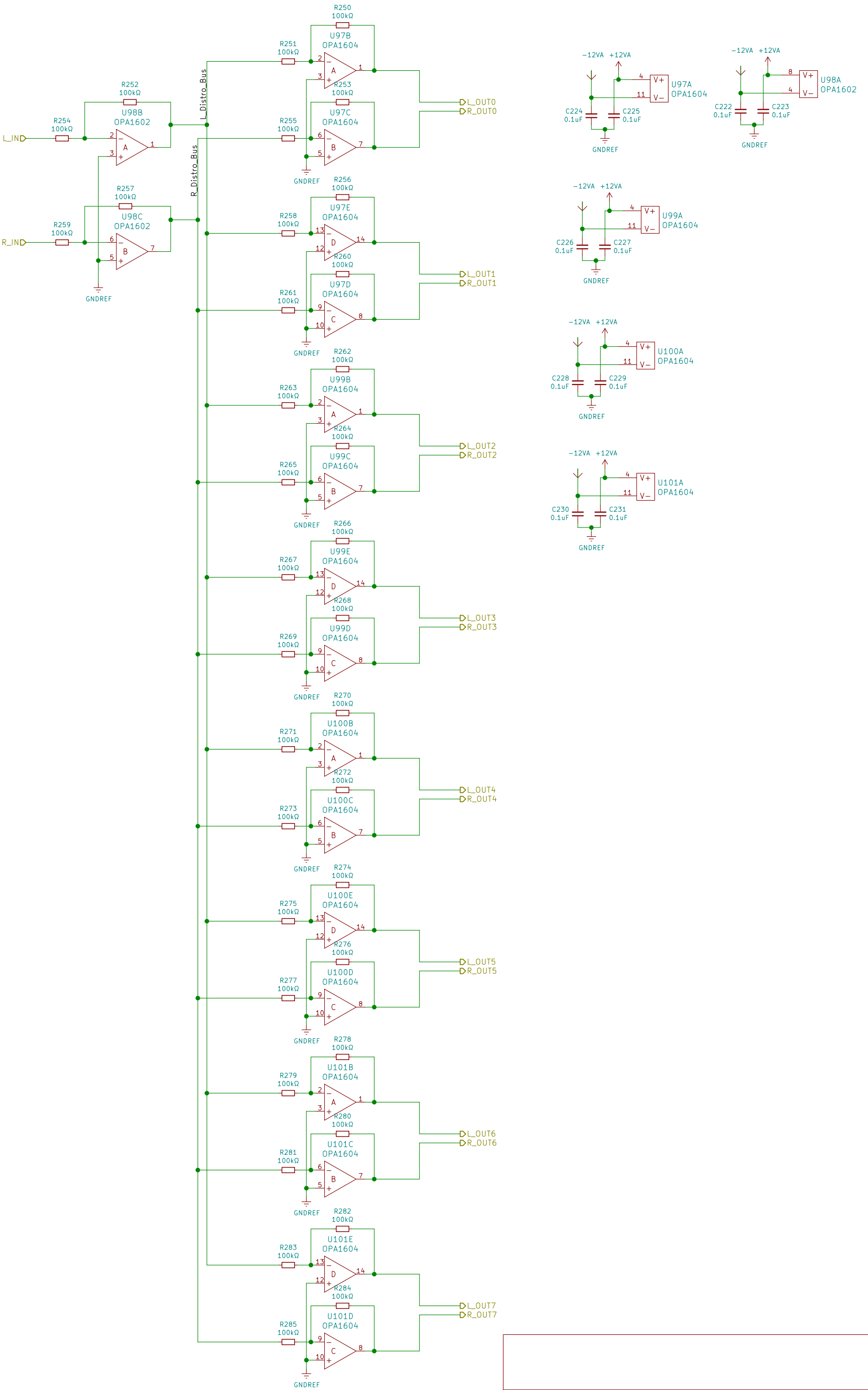
Size: USLedger	Date:	Rev:
KiCad E.D.A. kicad (2018-01-31 revision e69ddf0)-master		Id: 15/38



Sheet: /Audio Mux and Control/Headset LR audio out Mux and Source Selection/Dev 3 1:8 DA/
File: 1-8-stereo-buffer-amp.sch

Title: Stereo 1:8 Audio Unity Gain Buffer

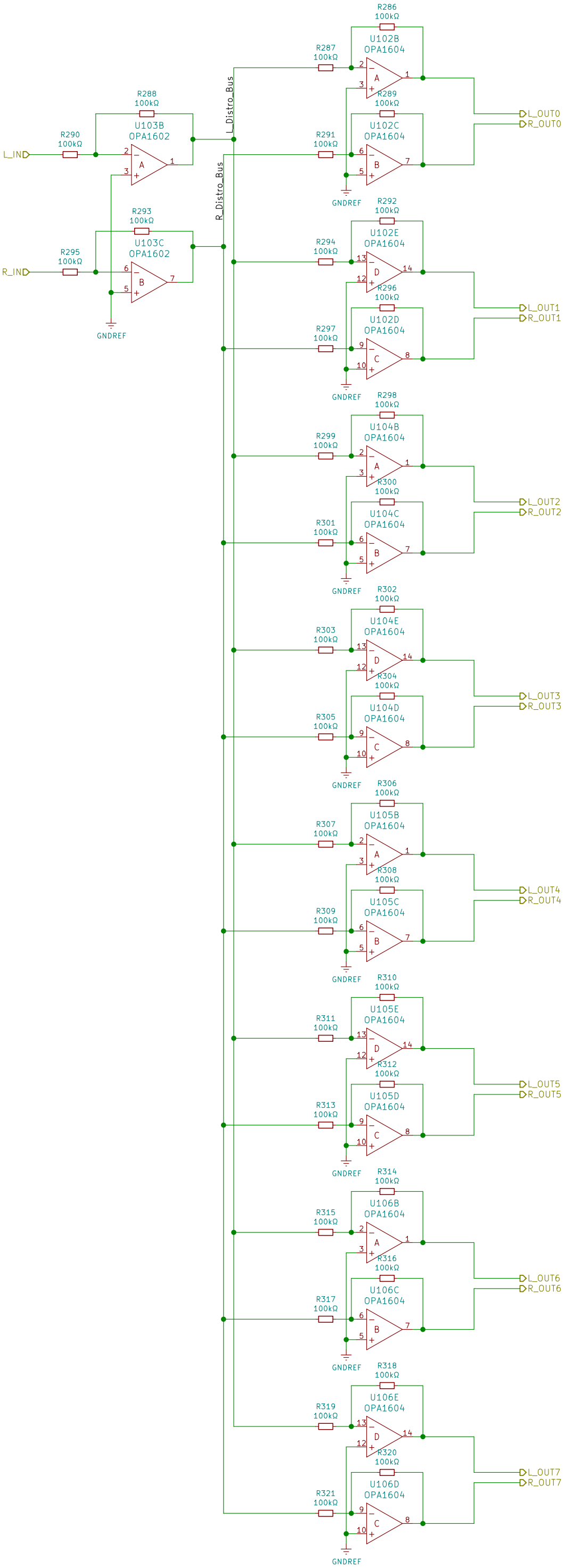
Size: USLedger	Date:	Rev:
KiCad E.D.A. kicad (2018-01-31 revision e69ddf0)-master		Id: 16/38

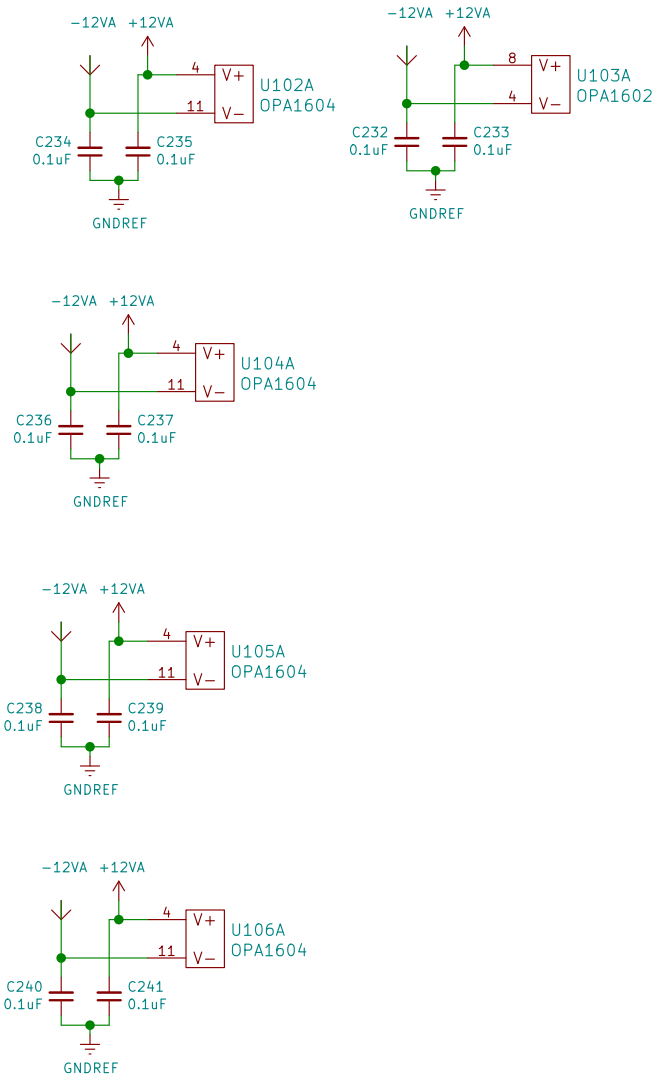


Sheet: /Audio Mux and Control/Headset LR audio out Mux and Source Selection/Dev 5 1:8 DA/
File: 1-8-stereo-buffer-amp.sch

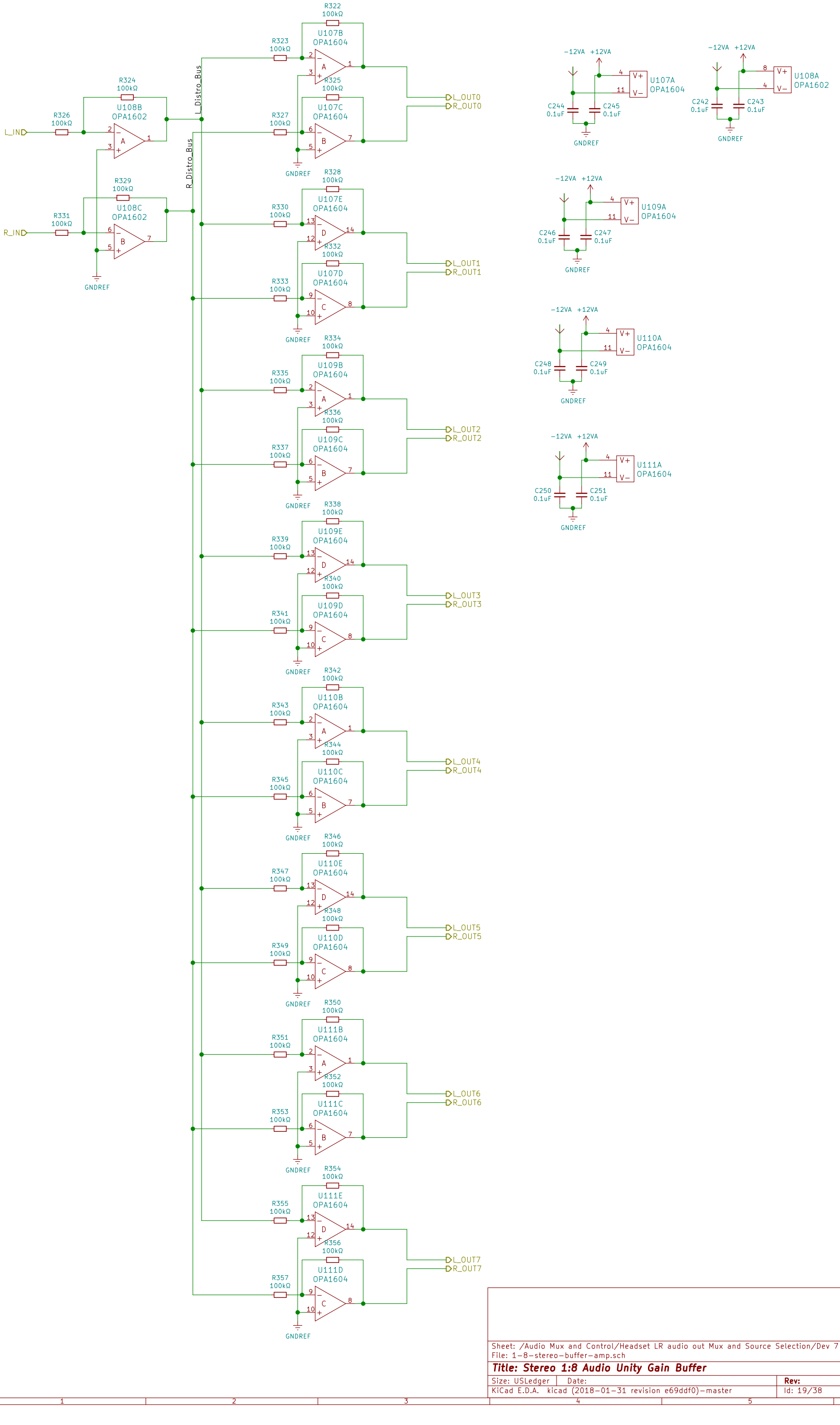
Title: Stereo 1:8 Audio Unity Gain Buffer

Size: USLedger	Date:	Rev:
KiCad E.D.A. kicad (2018-01-31 revision e69ddf0)-master		Id: 17/38





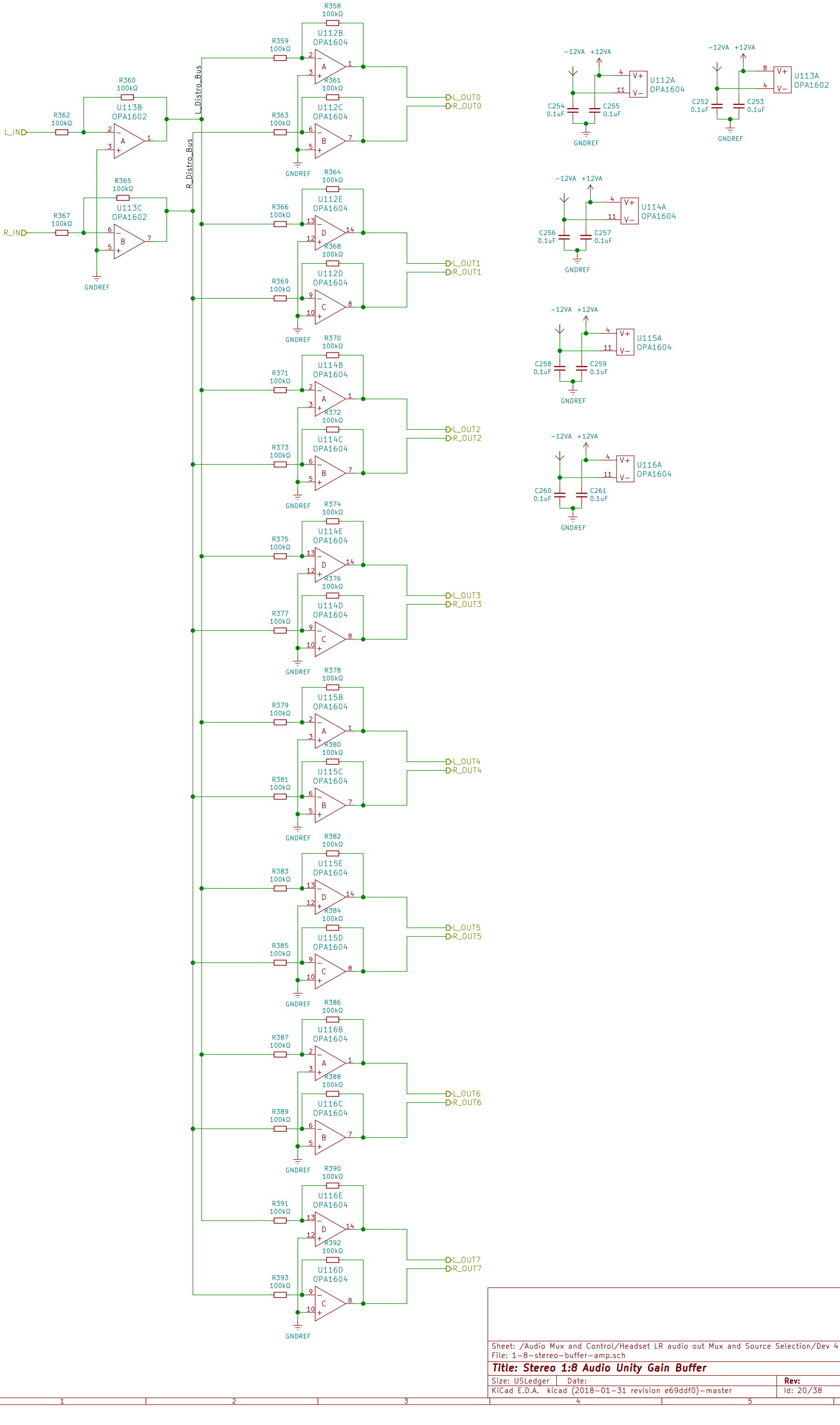
Sheet: /Audio Mux and Control/Headset LR audio out Mux and Source Selection/Dev 6 1:8 DA/		
File: 1-8-stereo-buffer-amp.sch		
Title: Stereo 1:8 Audio Unity Gain Buffer		
Size: USLedger	Date:	**Rev:**
KiCad E.D.A. kicad (2018-01-31 revision e69ddf0)-master		Id: 18/38



Sheet: /Audio Mux and Control/Headset LR audio out Mux and Source Selection/Dev 7 1:8 DA/
File: 1-8-stereo-buffer-amp.sch

Title: Stereo 1:8 Audio Unity Gain Buffer

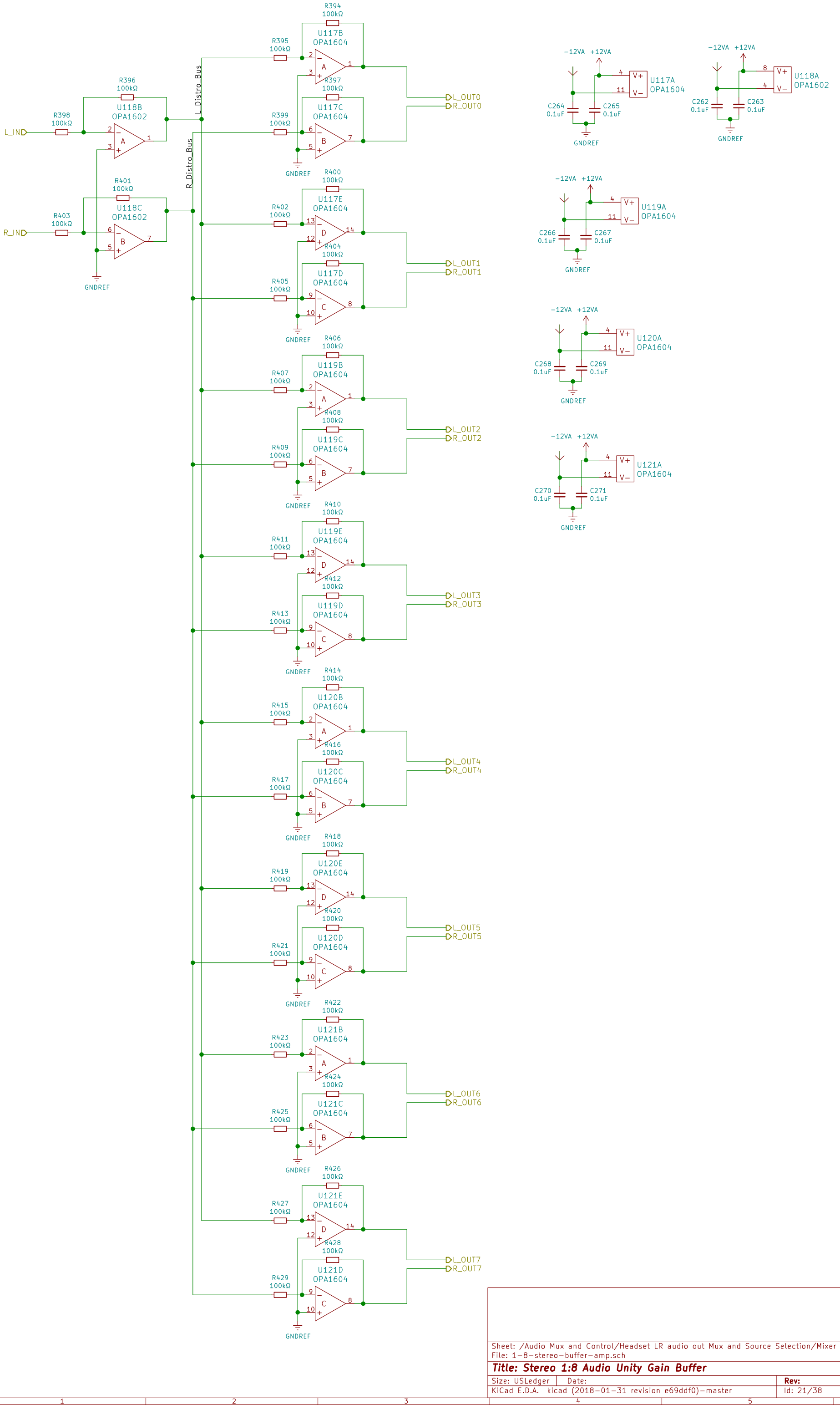
Size: USLedger	Date:	Rev:
KiCad E.D.A. kicad (2018-01-31 revision e69ddf0)-master		Id: 19/38



Sheet: /Audio Mux and Control/Headset LR audio out Mux and Source Selection/Dev 4 1:8 DA/
File: 1-8-stereo-buffer-amp.sch

Title: Stereo 1:8 Audio Unity Gain Buffer

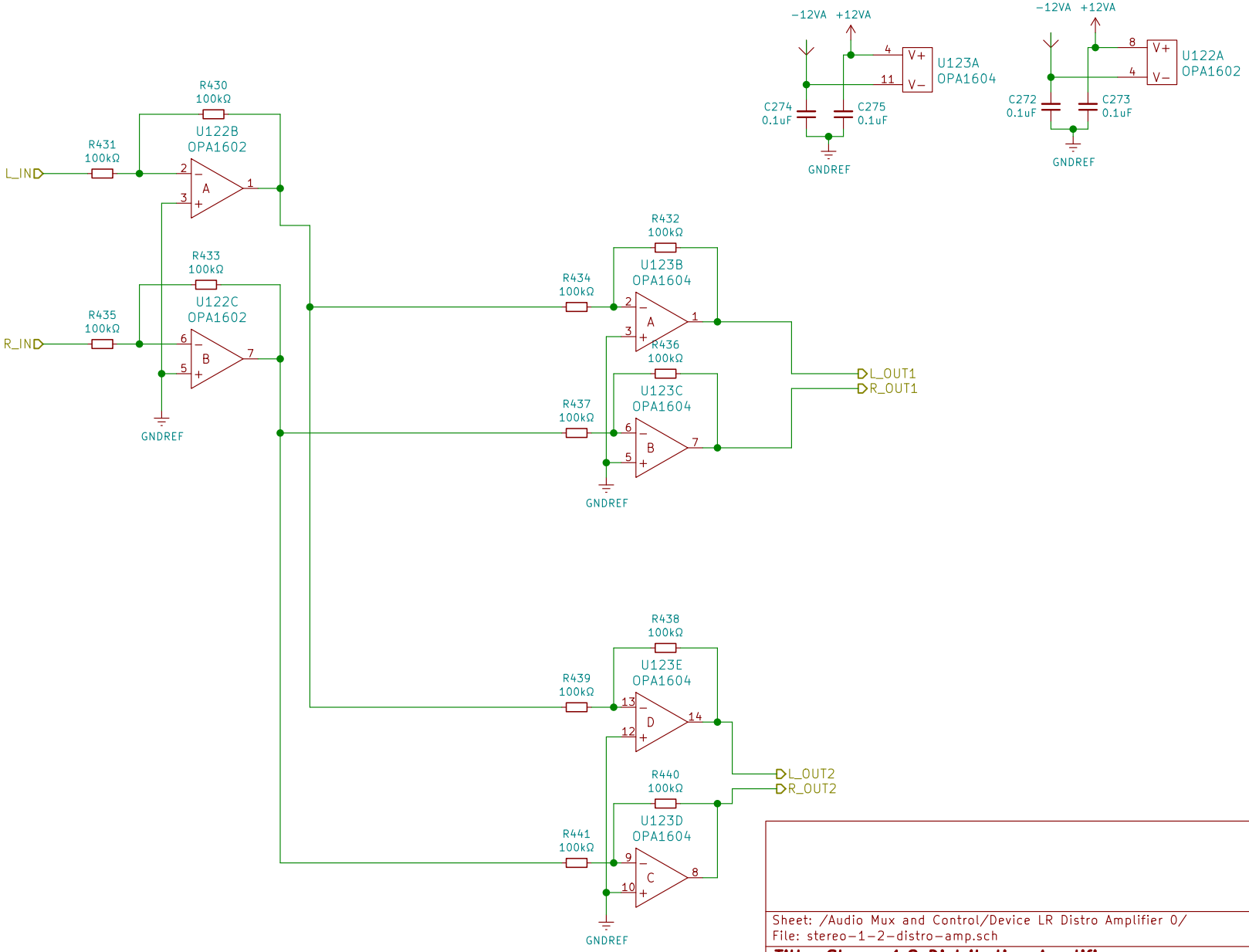
Size: USLedger	Date:	Rev:
KiCad E.D.A. kicad (2018-01-31 revision e69ddf0)-master		Id: 20/38



Sheet: /Audio Mux and Control/Headset LR audio out Mux and Source Selection/Mixer Out 1:8 DA/
File: 1-8-stereo-buffer-amp.sch

Title: Stereo 1:8 Audio Unity Gain Buffer

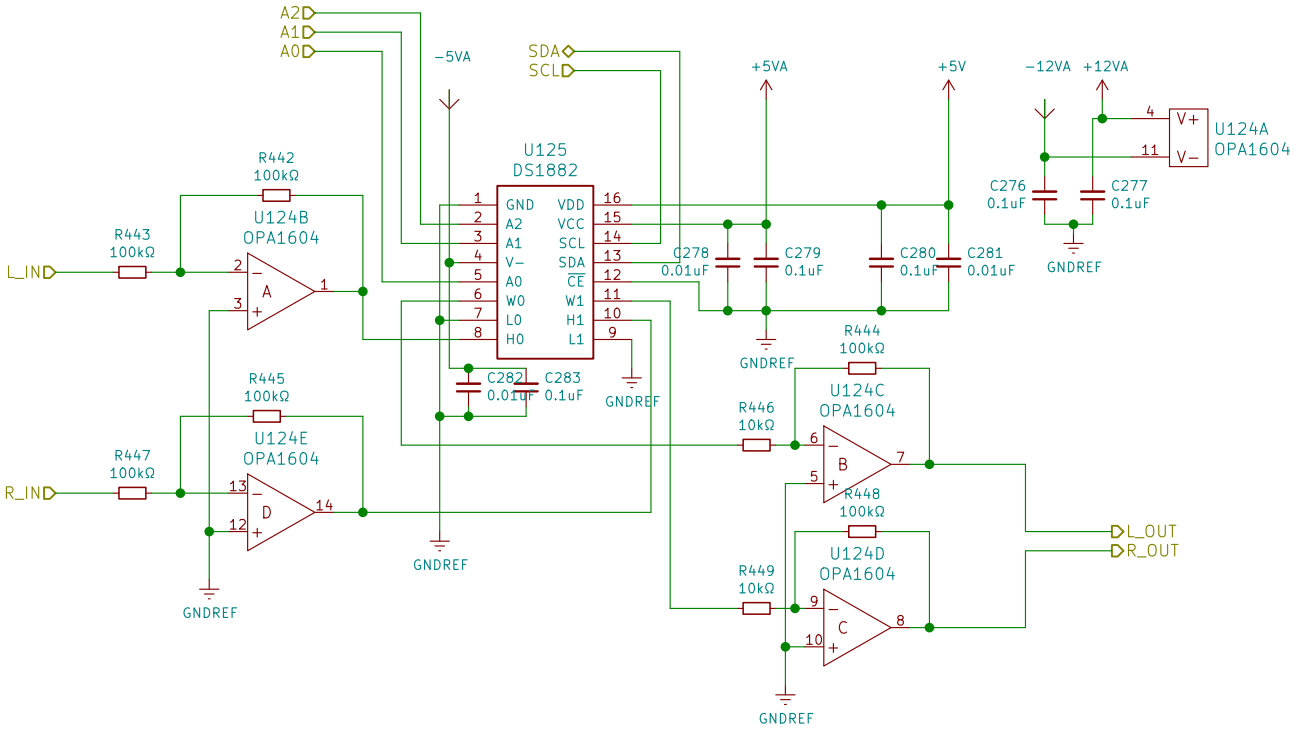
Size: USLedger	Date:	Rev:
KiCad E.D.A. kicad (2018-01-31 revision e69ddf0)-master		Id: 21/38



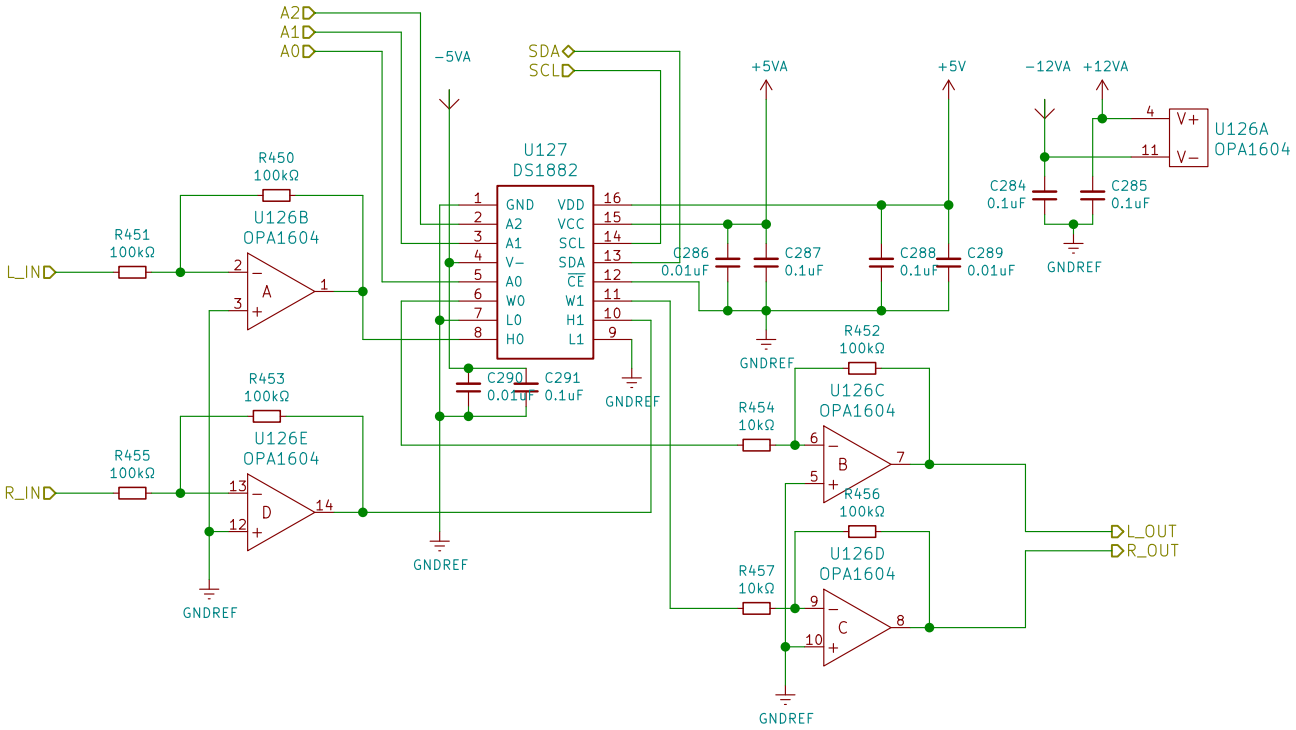
Sheet: /Audio Mux and Control/Device LR Distro Amplifier 0/
File: stereo-1-2-distro-amp.sch

Title: Stereo 1:2 Distribution Amplifier

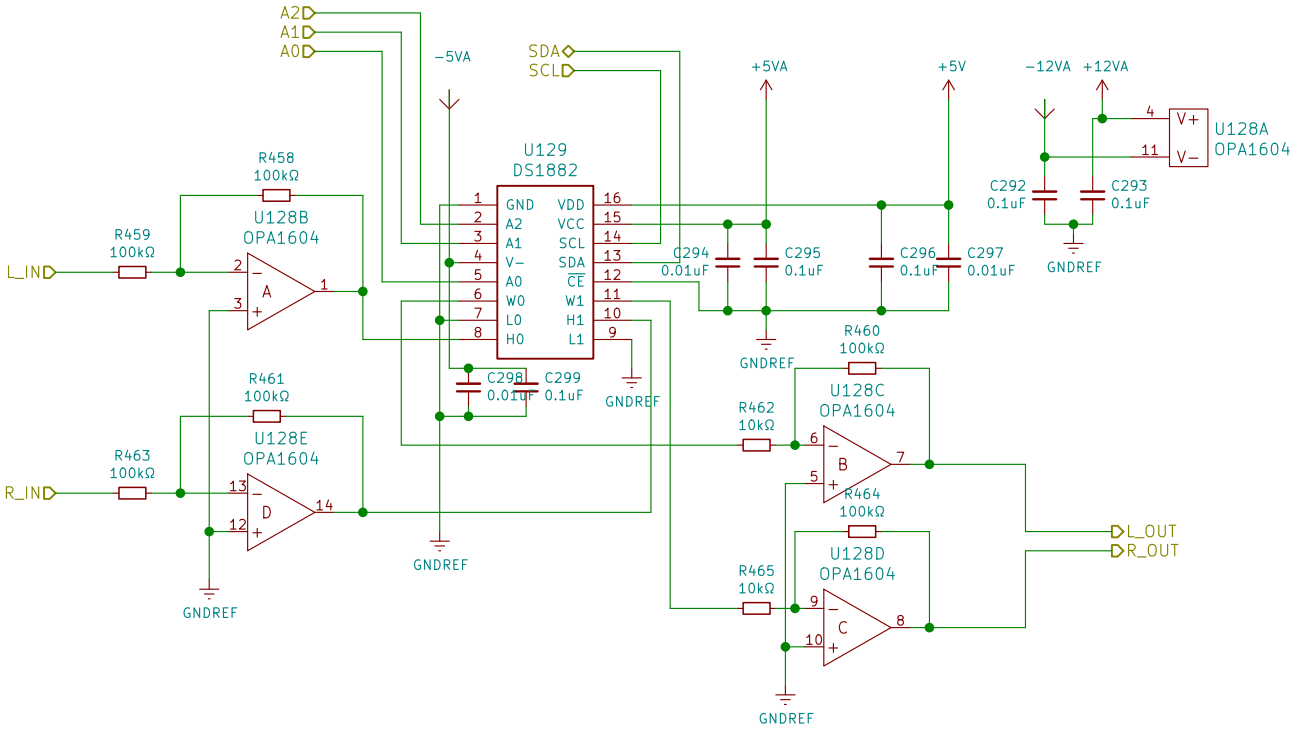
Size: USLetter	Date:	Rev:
KiCad E.D.A. kicad (2018-01-31 revision e69ddf0)-master		Id: 22/38



Sheet: /Audio Mux and Control/Dual Mic Amplifier 0/		
File: stereo−amp.sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (2018−01−31 revision e69ddf0)−master		Id: 23/38



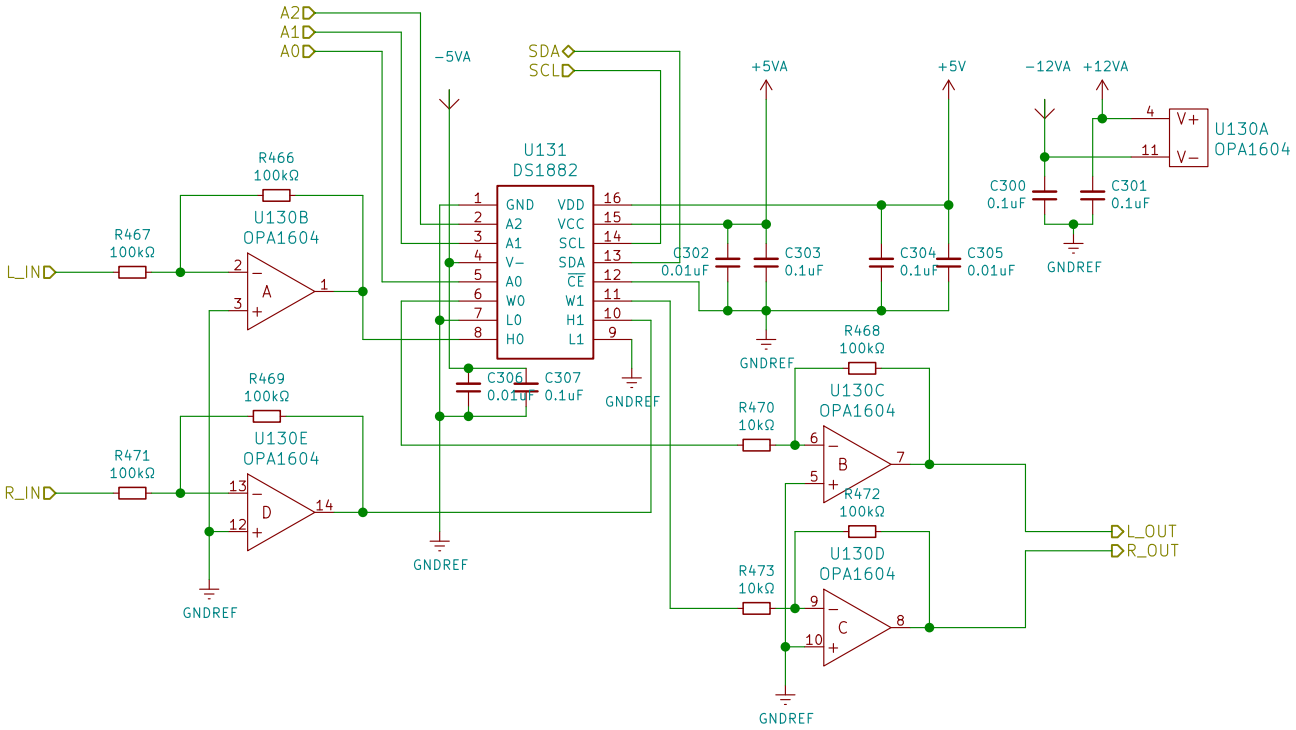
Sheet: /Audio Mux and Control/Dual Mic Amplifier 1/		
File: stereo−amp.sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (2018−01−31 revision e69ddf0)−master		Id: 24/38



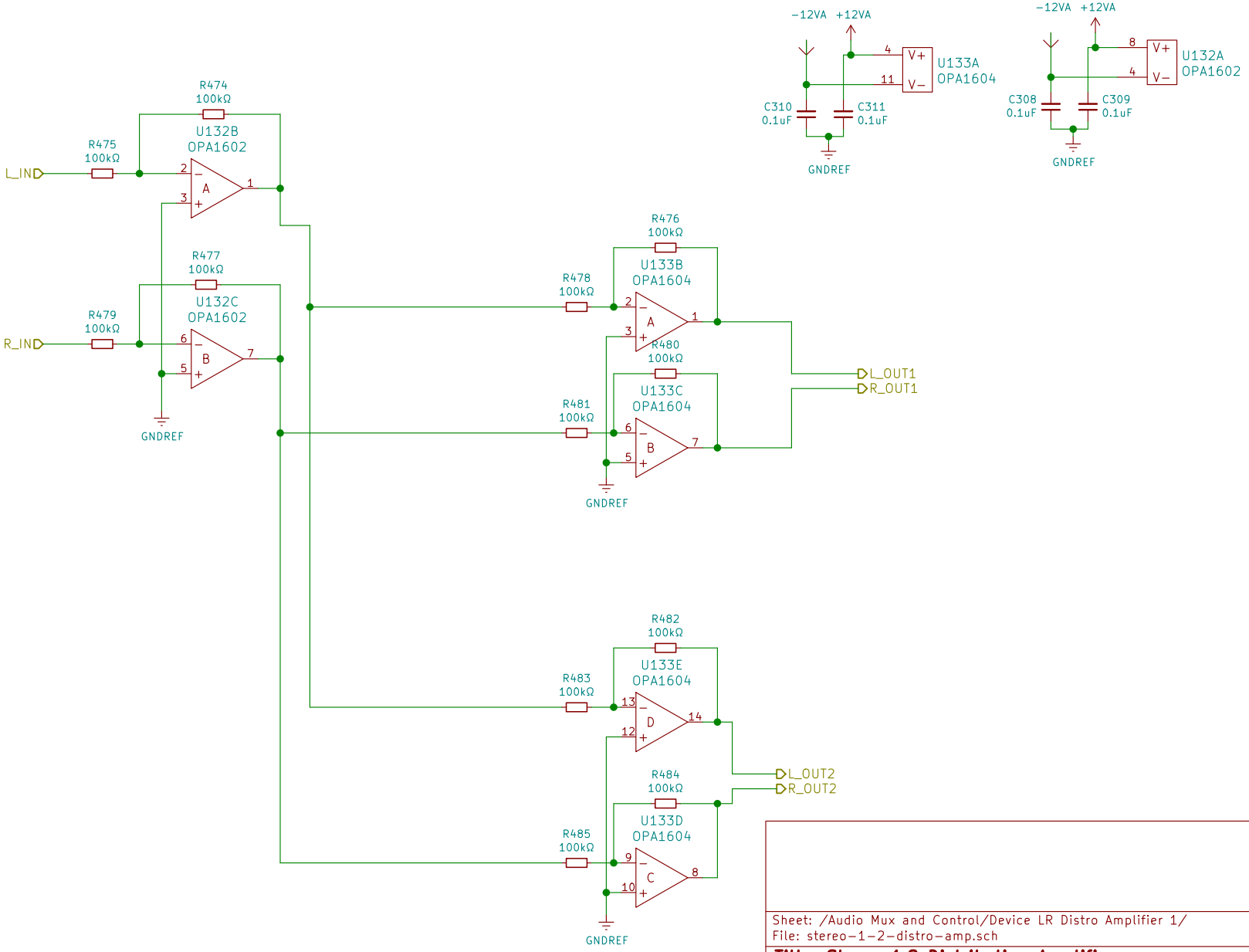
Sheet: /Audio Mux and Control/Dual Mic Amplifier 2/
File: stereo−amp.sch

Title:

Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (2018−01−31 revision e69ddf0)−master		Id: 25/38



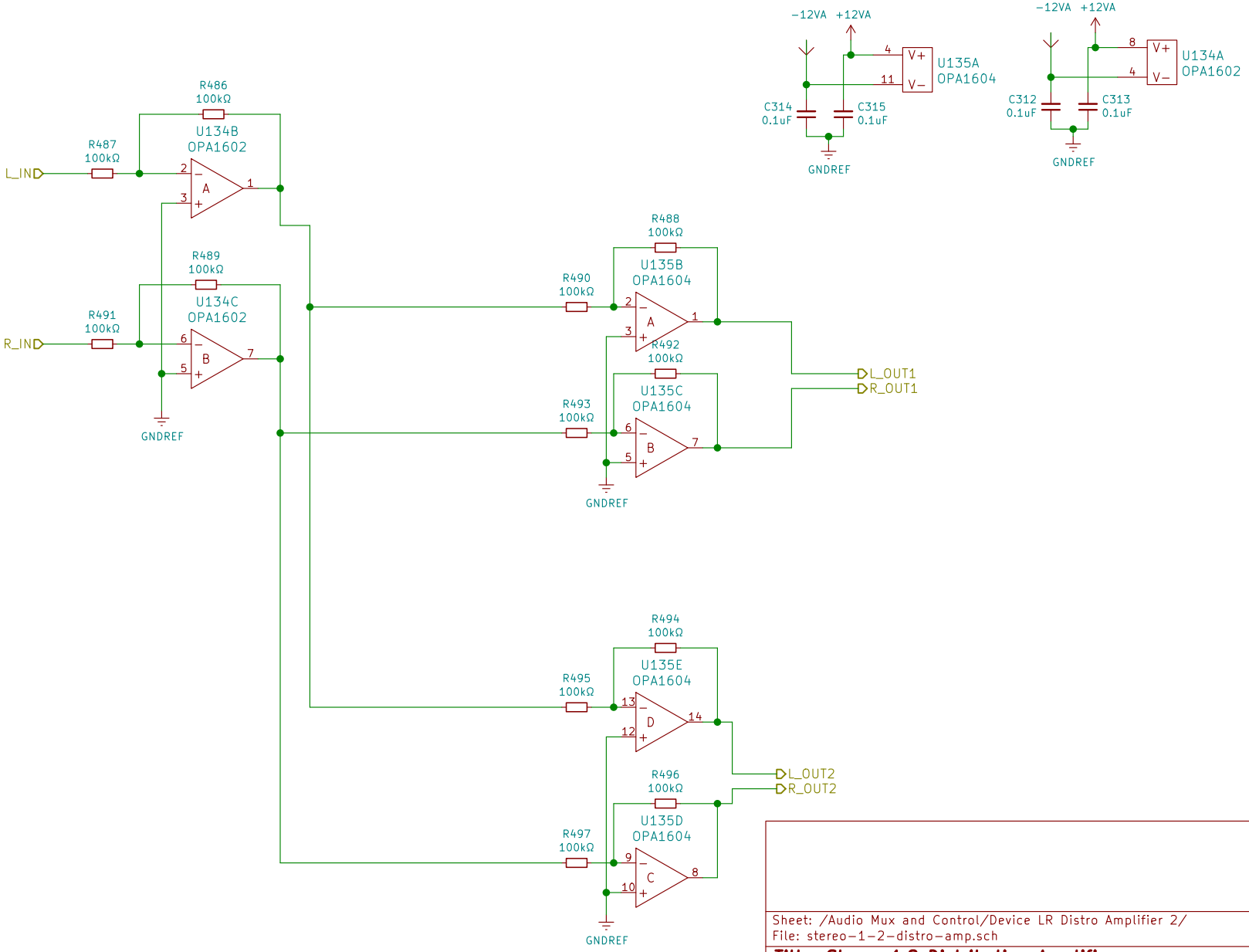
Sheet: /Audio Mux and Control/Dual Mic Amplifier 3/		
File: stereo−amp.sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (2018−01−31 revision e69ddf0)−master		Id: 26/38



Sheet: /Audio Mux and Control/Device LR Distro Amplifier 1/
File: stereo-1-2-distro-amp.sch

Title: Stereo 1:2 Distribution Amplifier

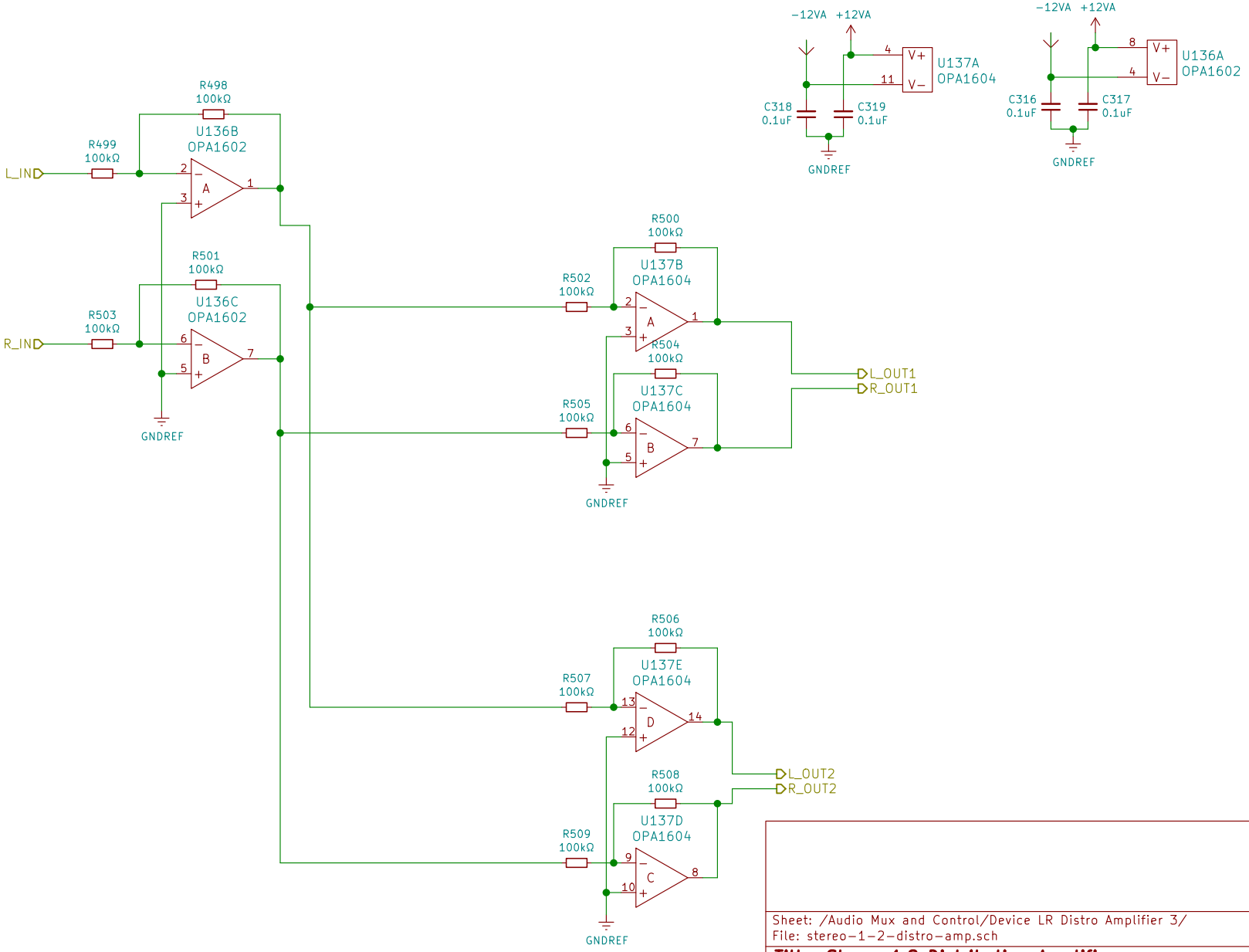
Size: USLetter	Date:	Rev:
KiCad E.D.A. kicad (2018-01-31 revision e69ddf0)-master		Id: 27/38



Sheet: /Audio Mux and Control/Device LR Distro Amplifier 2/
File: stereo-1-2-distro-amp.sch

Title: Stereo 1:2 Distribution Amplifier

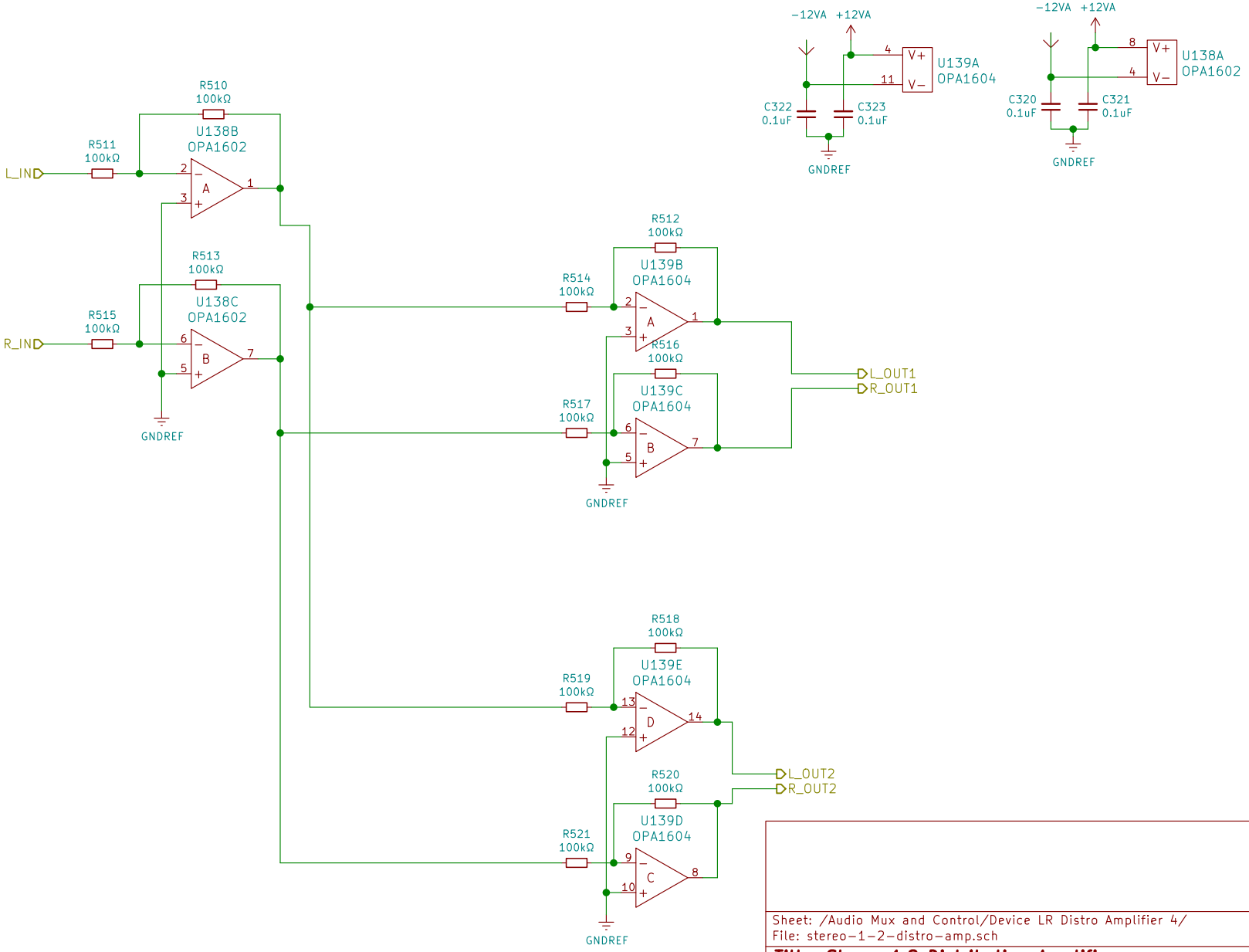
Size: USLetter	Date:	Rev:
KiCad E.D.A. kicad (2018-01-31 revision e69ddf0)-master		Id: 28/38



Sheet: /Audio Mux and Control/Device LR Distro Amplifier 3/
File: stereo-1-2-distro-amp.sch

Title: Stereo 1:2 Distribution Amplifier

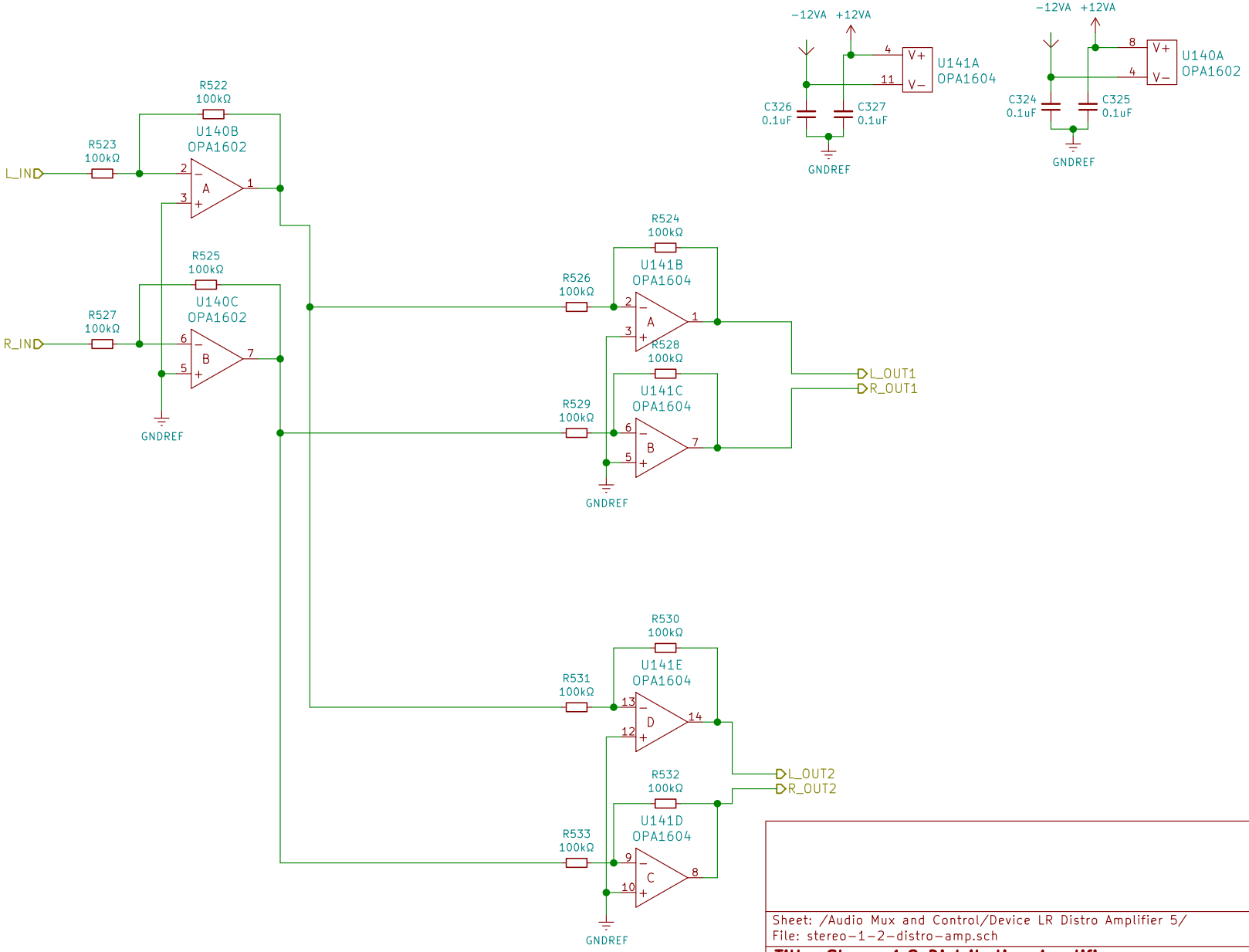
Size: USLetter	Date:	Rev:
KiCad E.D.A. kicad (2018-01-31 revision e69ddf0)-master		Id: 29/38



Sheet: /Audio Mux and Control/Device LR Distro Amplifier 4/
File: stereo-1-2-distro-amp.sch

Title: Stereo 1:2 Distribution Amplifier

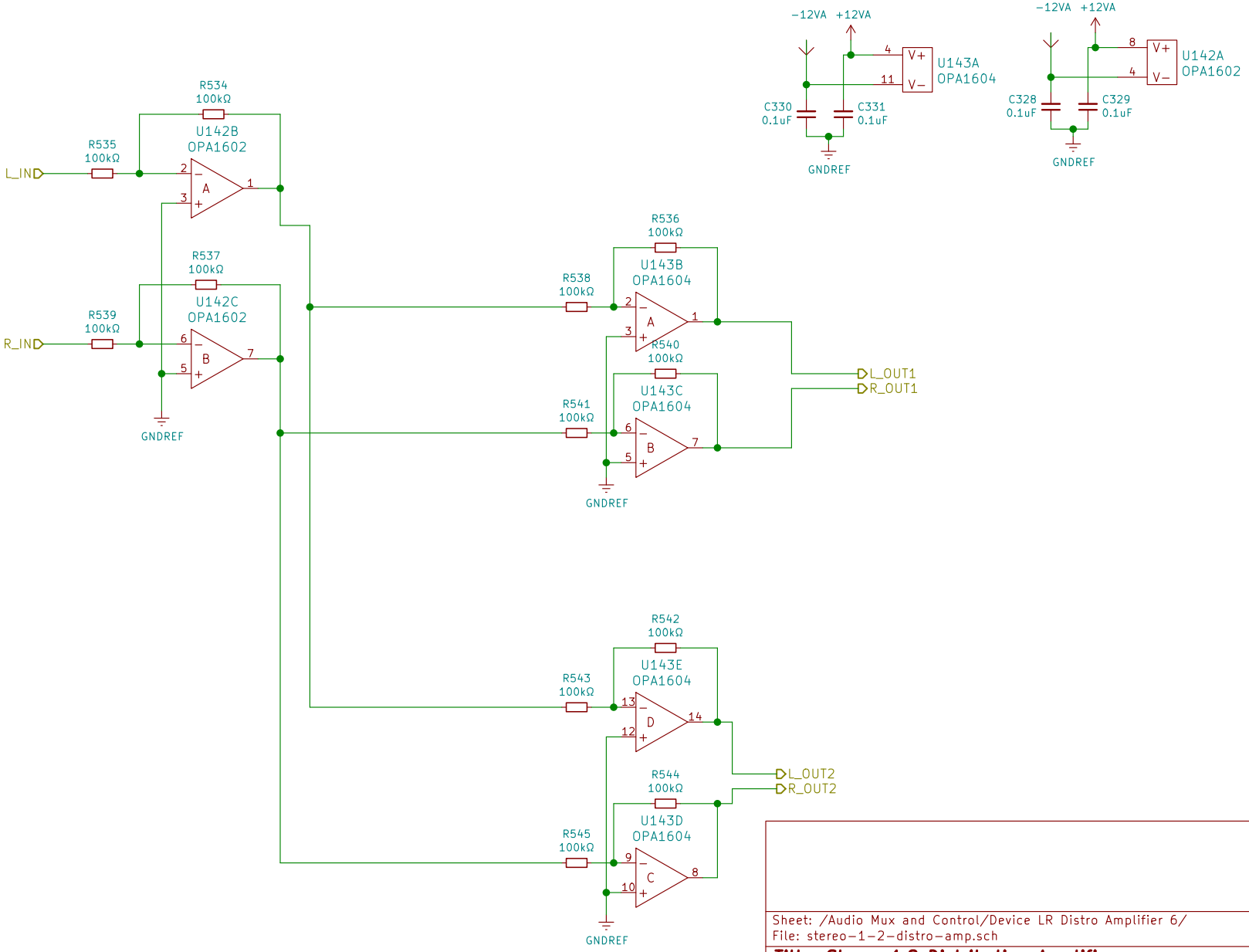
Size: USLetter	Date:	Rev:
KiCad E.D.A. kicad (2018-01-31 revision e69ddf0)-master		Id: 30/38



Sheet: /Audio Mux and Control/Device LR Distro Amplifier 5/
File: stereo-1-2-distro-amp.sch

Title: Stereo 1:2 Distribution Amplifier

Size: USLetter	Date:	Rev:
KiCad E.D.A. kicad (2018-01-31 revision e69ddf0)-master		Id: 31/38



Sheet: /Audio Mux and Control/Device LR Distro Amplifier 6/
File: stereo-1-2-distro-amp.sch

Title: Stereo 1:2 Distribution Amplifier

Size: USLetter	Date:	Rev:
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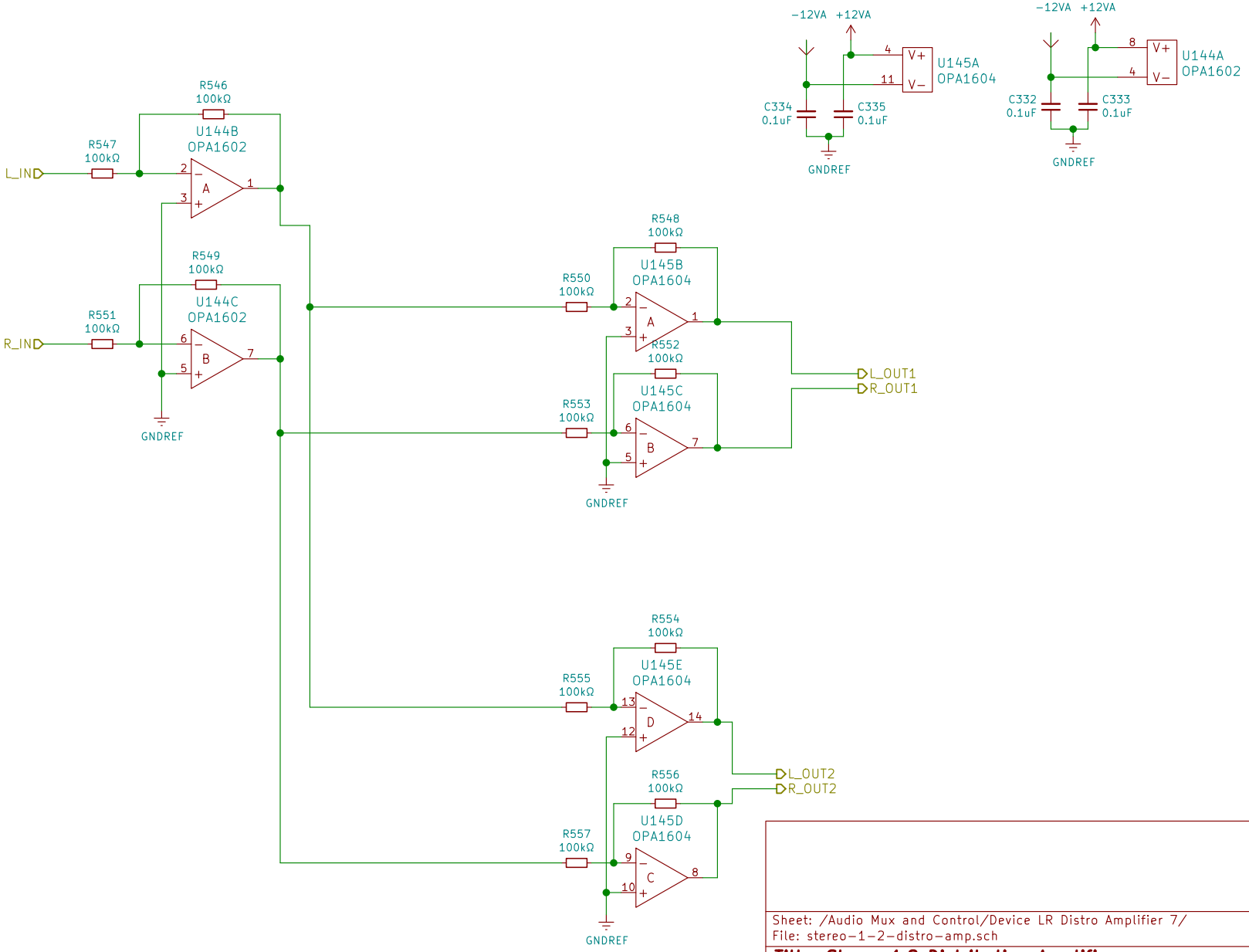
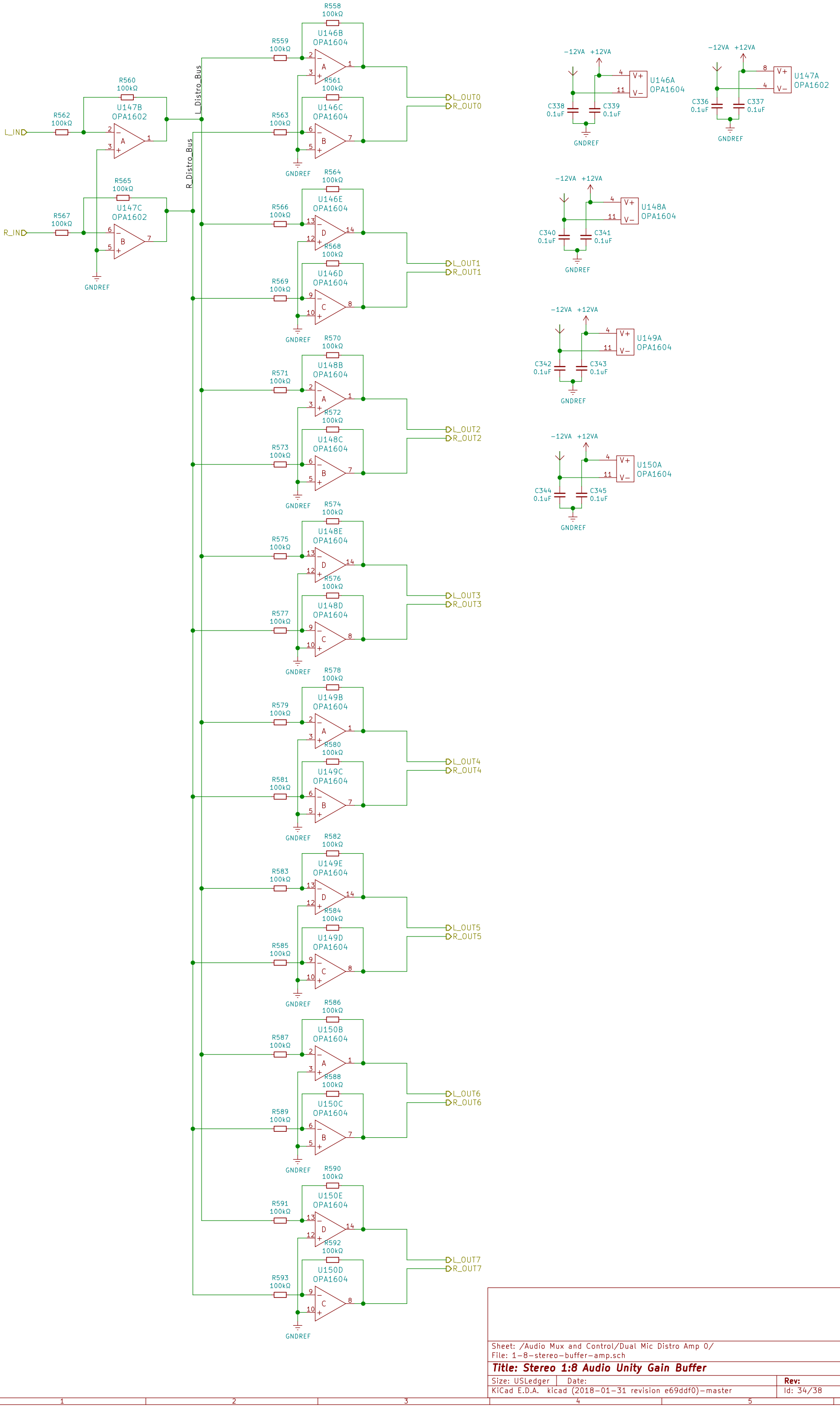


Sheet: /Audio Mux and Control/Device LR Distro Amplifier 7/
File: stereo-1-2-distro-amp.sch

Title: Stereo 1:2 Distribution Amplifier

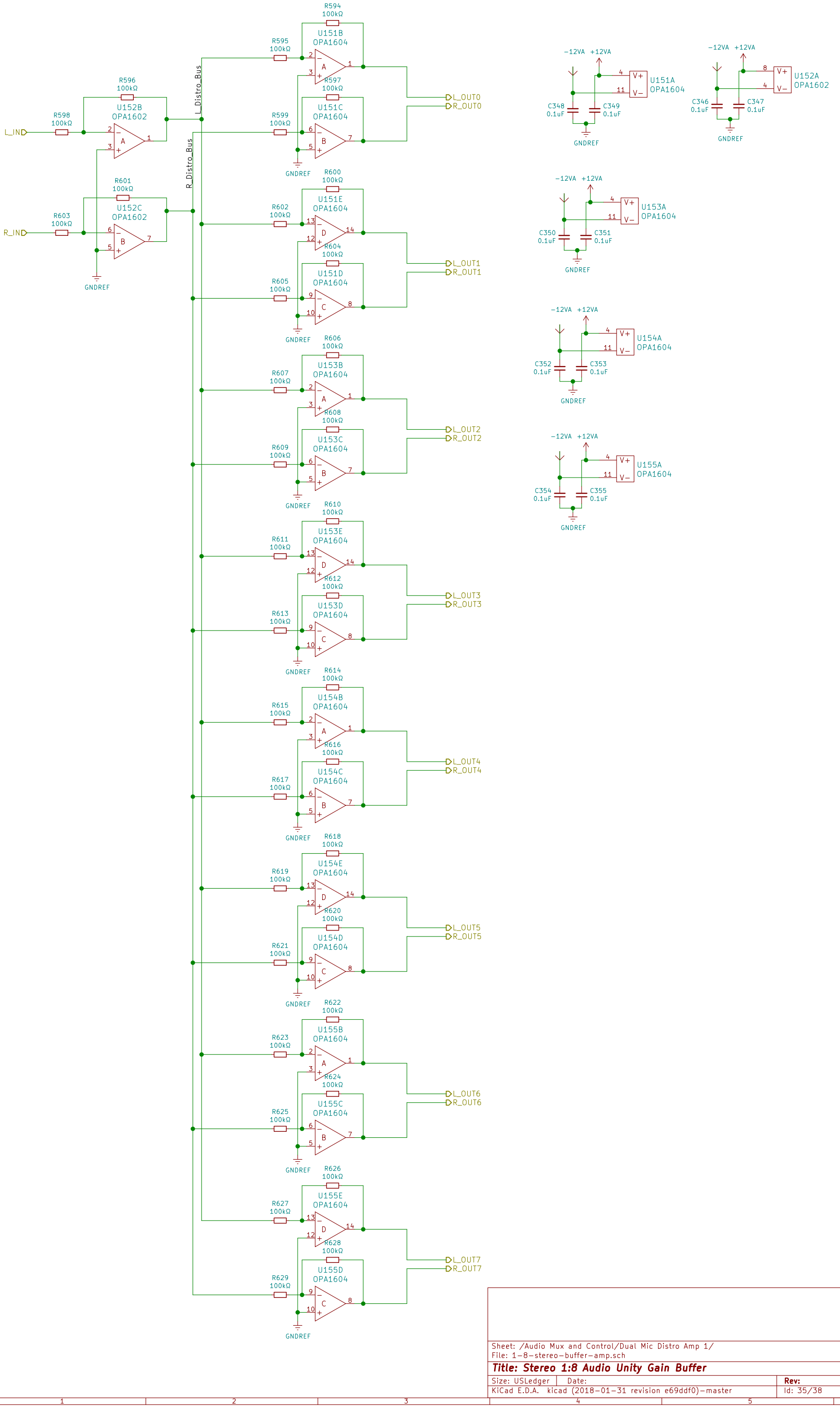
Size: USLetter	Date:	Rev:
KiCad E.D.A. kicad (2018-01-31 revision e69ddf0)-master		Id: 33/38



Sheet: /Audio Mux and Control/Dual Mic Distro Amp 0/
File: 1-8-stereo-buffer-amp.sch

Title: Stereo 1:8 Audio Unity Gain Buffer

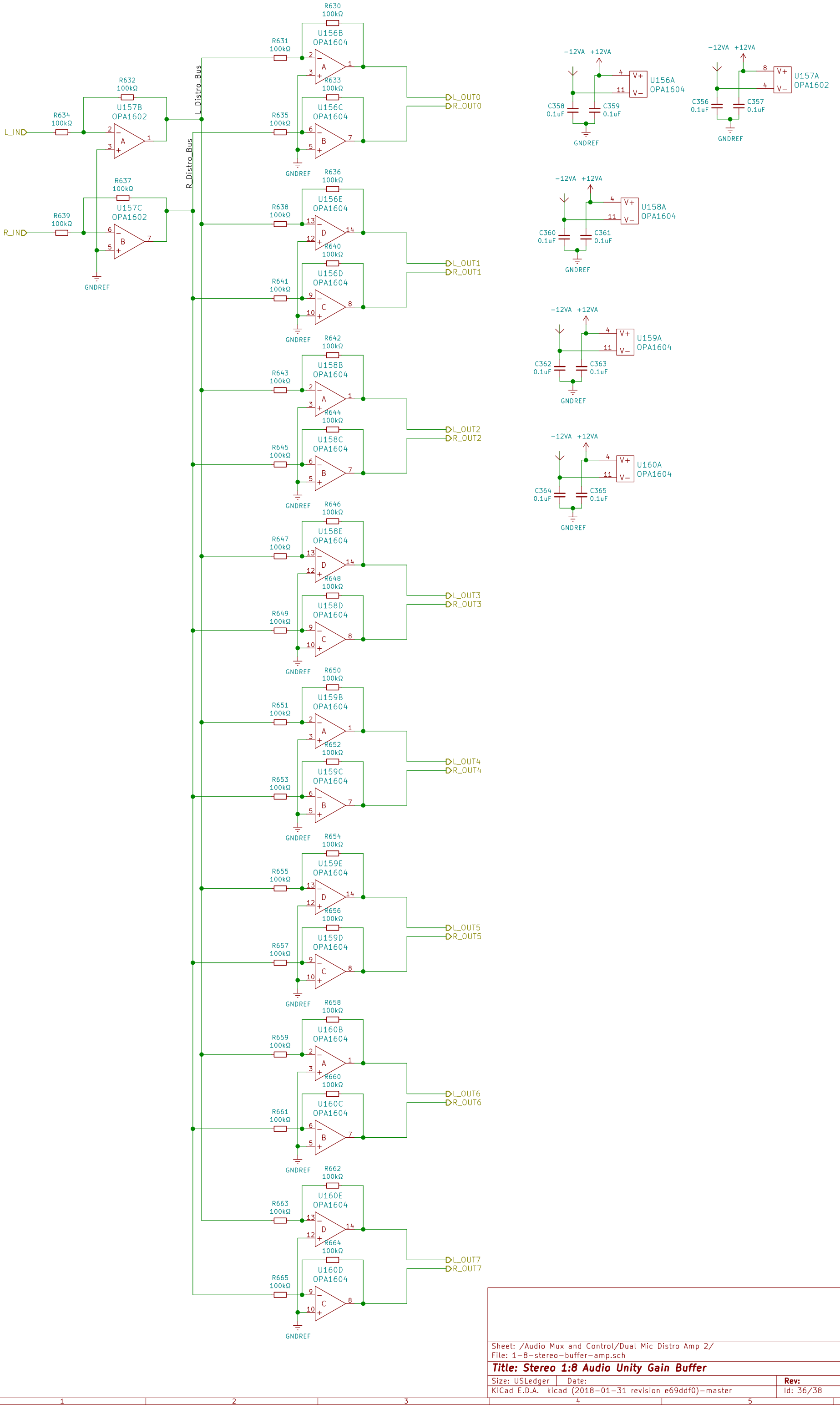
Size: USLedger	Date:	**Rev:**
KiCad E.D.A. kicad (2018-01-31 revision e69ddf0)-master		Id: 34/38



Sheet: /Audio Mux and Control/Dual Mic Distro Amp 1/
File: 1-8-stereo-buffer-amp.sch

Title: Stereo 1:8 Audio Unity Gain Buffer

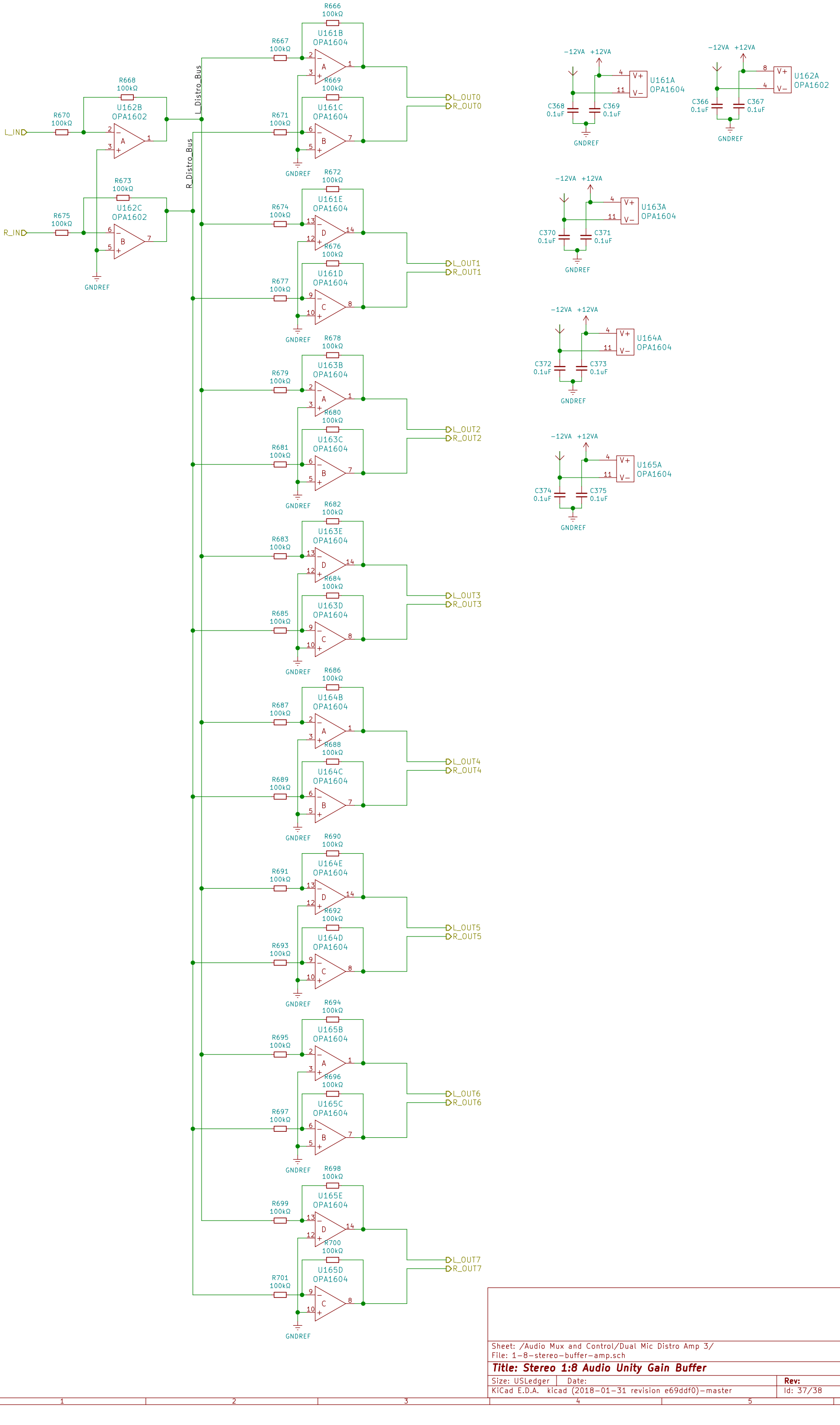
Size: USLedger	Date:	**Rev:**
KiCad E.D.A. kicad (2018-01-31 revision e69ddf0)-master		Id: 35/38



Sheet: /Audio Mux and Control/Dual Mic Distro Amp 2/
File: 1-8-stereo-buffer-amp.sch

Title: Stereo 1:8 Audio Unity Gain Buffer

Size: USLedger	Date:	**Rev:**
KiCad E.D.A. kicad (2018-01-31 revision e69ddf0)-master		Id: 36/38

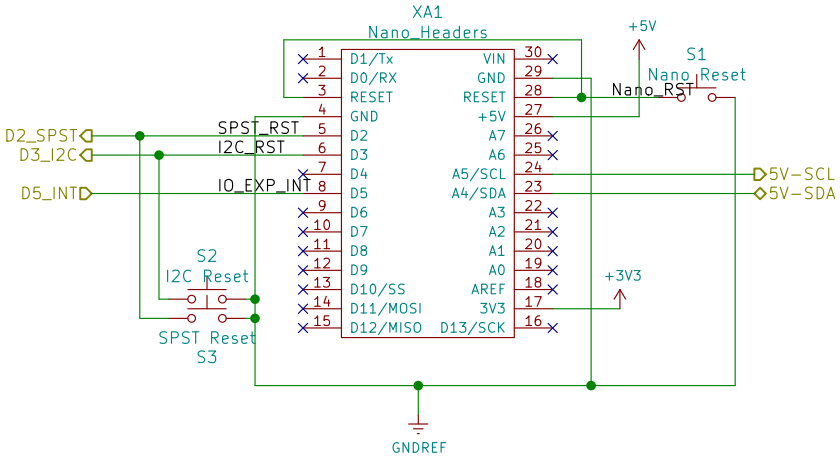


Sheet: /Audio Mux and Control/Dual Mic Distro Amp 3/
File: 1-8-stereo-buffer-amp.sch

Title: Stereo 1:8 Audio Unity Gain Buffer

Size: USLedger	Date:	Rev:
KiCad E.D.A. kicad (2018-01-31 revision e69ddf0)-master		Id: 37/38

Pins D4, D10, D11, D12, D13 are
used by gravitech.us ethernet card
Ethernet and USB connections are
provided by short cables to
external connectors



Sheet: /Arduino Nano Header Connections + Ethernet connection/
File: ard-nano-hdr-ethernet.sch

Title: Arduino Header Connections

Size: A4	Date:	Rev:
KiCad E.D.A. kicad (2018-01-31 revision e69ddf0)-master		Id: 38/38