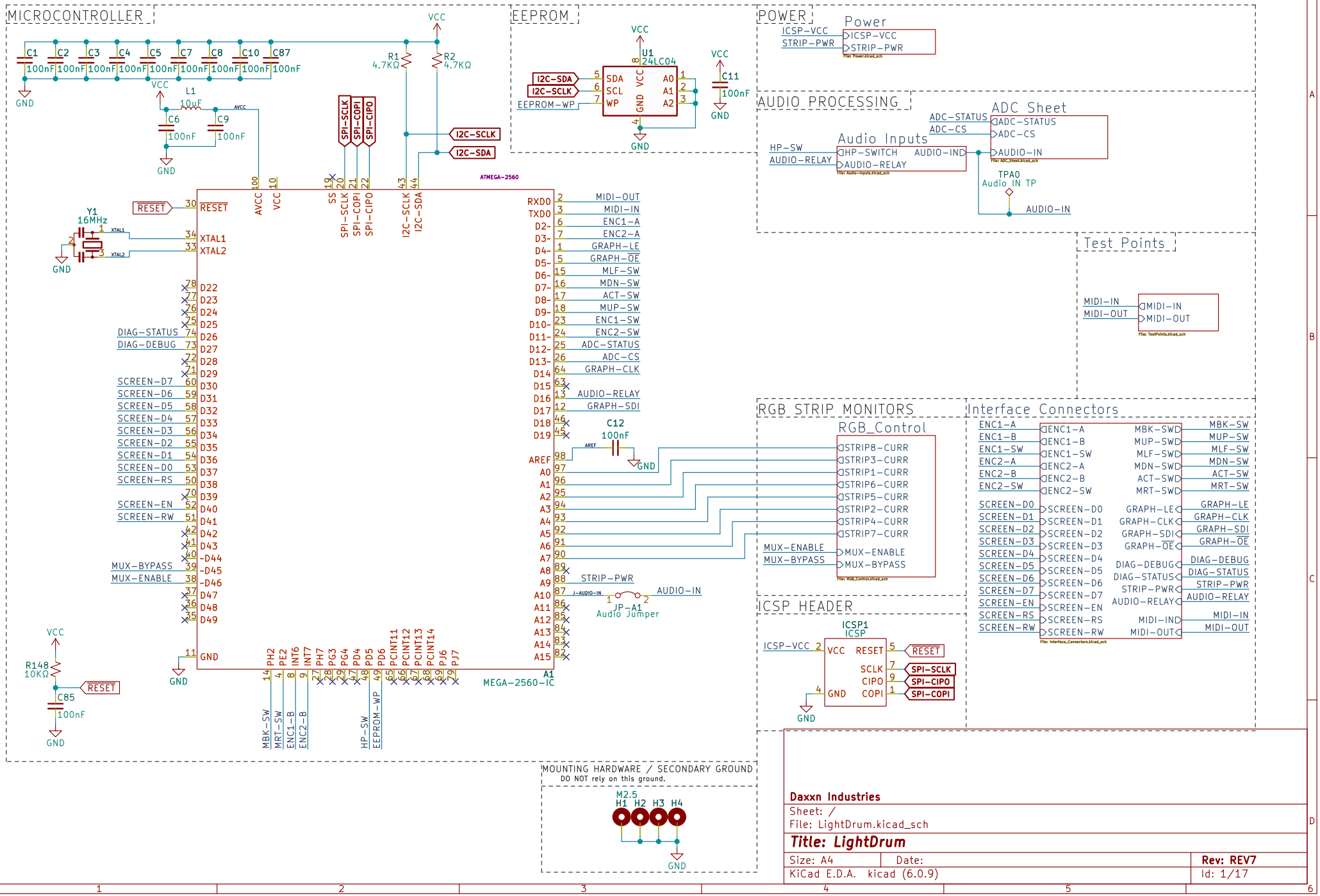
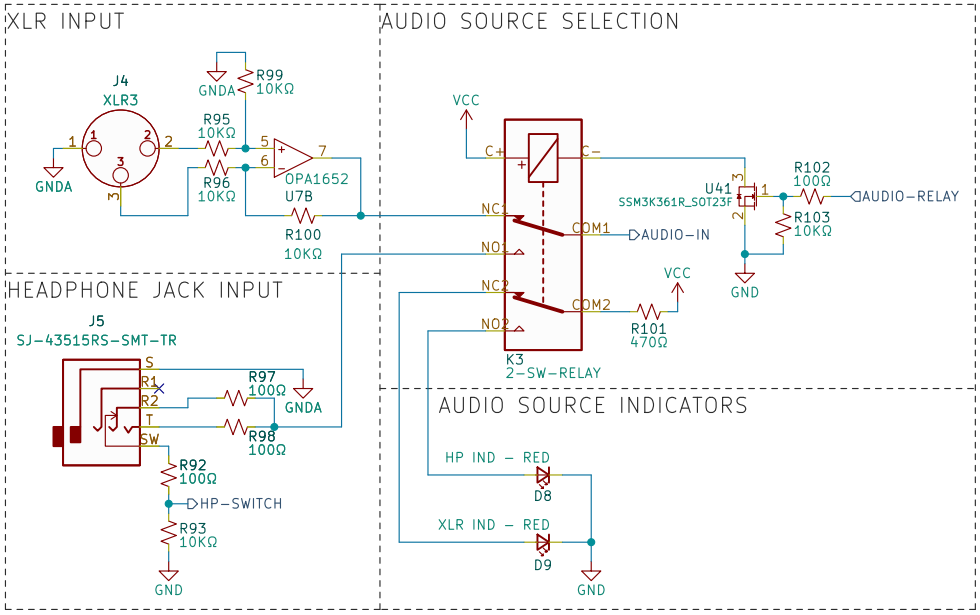
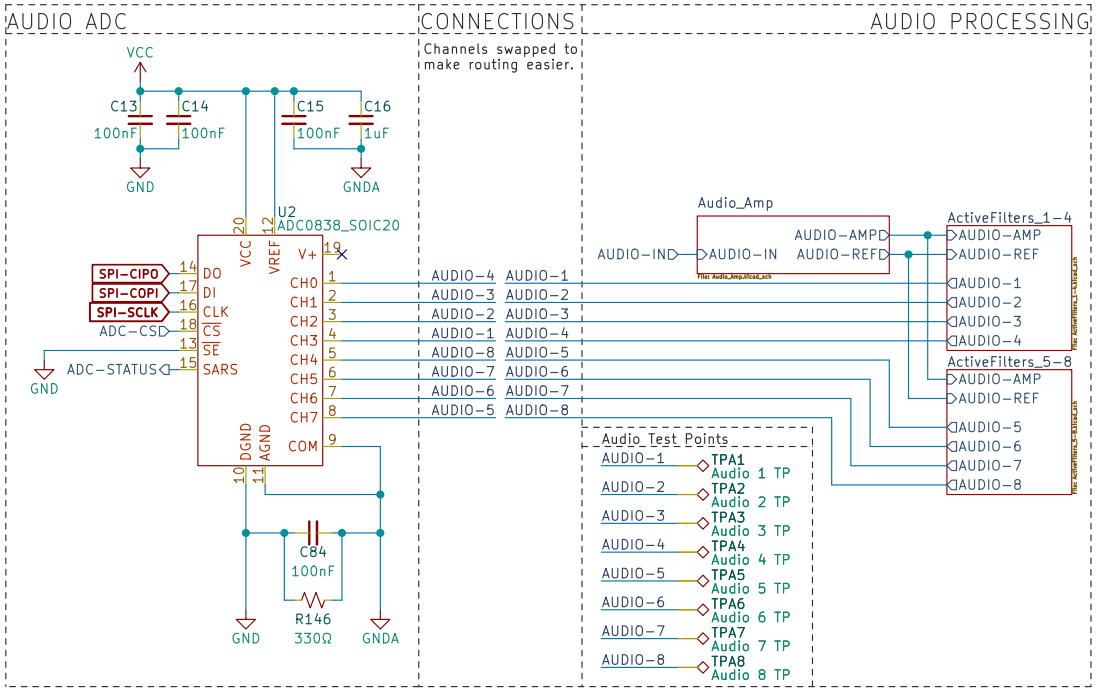
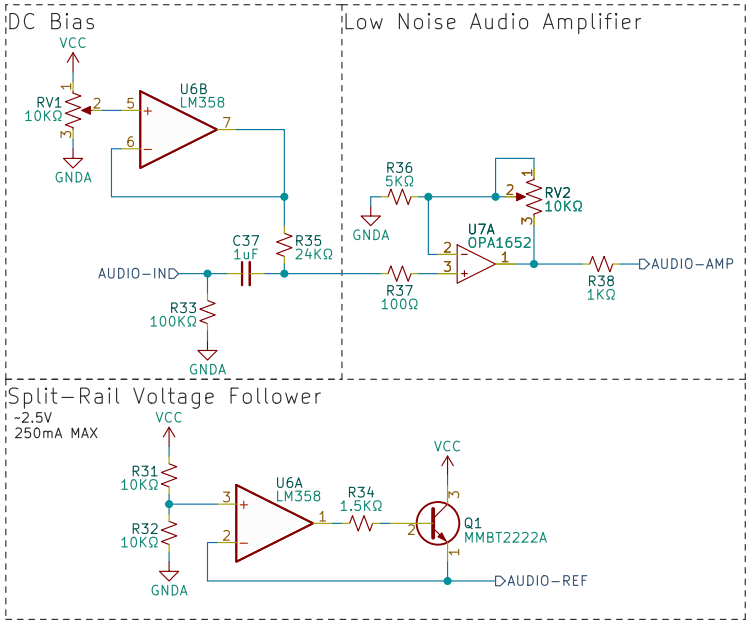

MICROCONTROLLER
EEPROM
POWER
AUDIO PROCESSING
Test Points
RGB STRIP MONITORS
Interface Connectors
ICSP HEADER
MOUNTING HARDWARE / SECONDARY GROUND
DO NOT rely on this ground.
ATMEGA-2560
MEGA-2560-IC
Power
ADC Sheet
Audio Inputs
TPA0
Audio IN TP
RGB_Control
Audio Jumper
Daxxn Industries
Sheet: /
File: LightDrum.kicad_sch
Title: LightDrum
Size: A4
Date:
Rev: REV7
KiCad E.D.A. kicad (6.0.9)
Id: 1/17



Daxxn Industries		
Sheet: /Audio Inputs/		
File: Audio−Inputs.kicad_sch		
Title: LightDrum		
Size: A4	Date:	**Rev: REV7**
KiCad E.D.A. kicad (6.0.9)		Id: 2/17



Daxxn Industries		
Sheet: /ADC Sheet/		
File: ADC_Sheet.kicad_sch		
Title: LightDrum		
Size: A4	Date:	**Rev: REV7**
KiCad E.D.A. kicad (6.0.9)		Id: 3/17

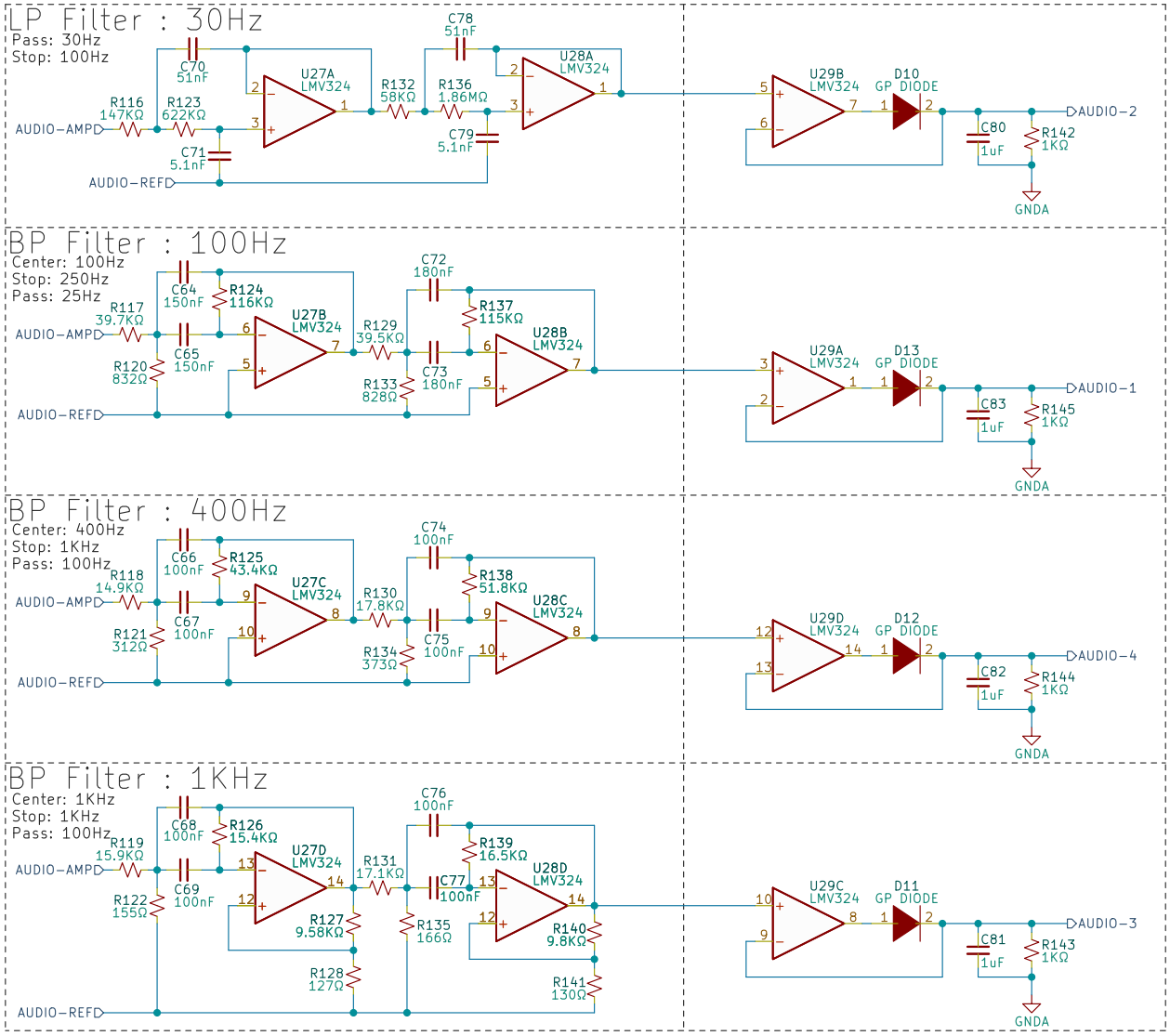


Daxxn Industries

Sheet: /ADC Sheet/Audio_Amp/
File: Audio_Amp.kicad_sch

Title: LightDrum

Size: A4	Date:	**Rev: REV7**
KiCad E.D.A. kicad (6.0.9)		Id: 4/17

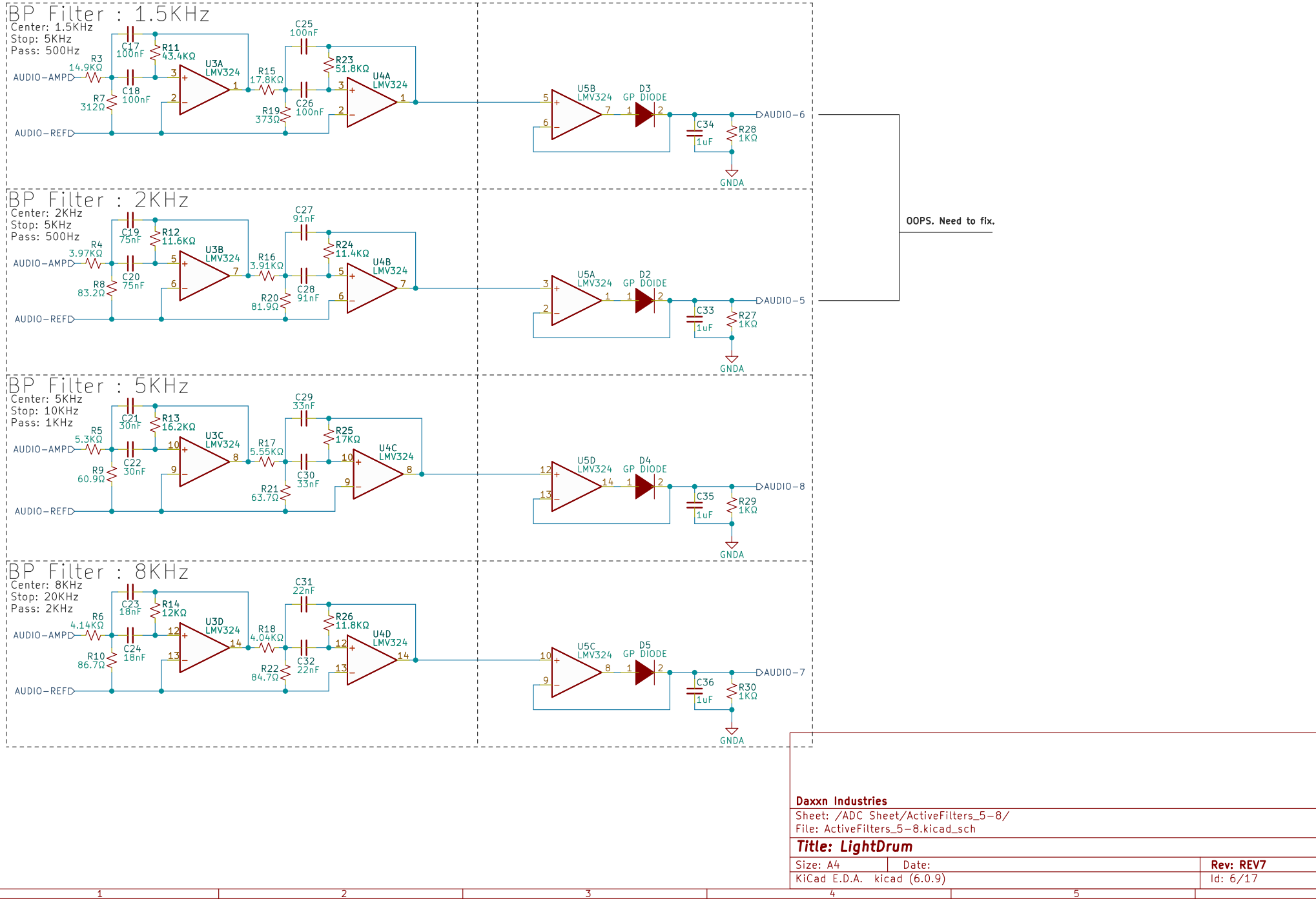


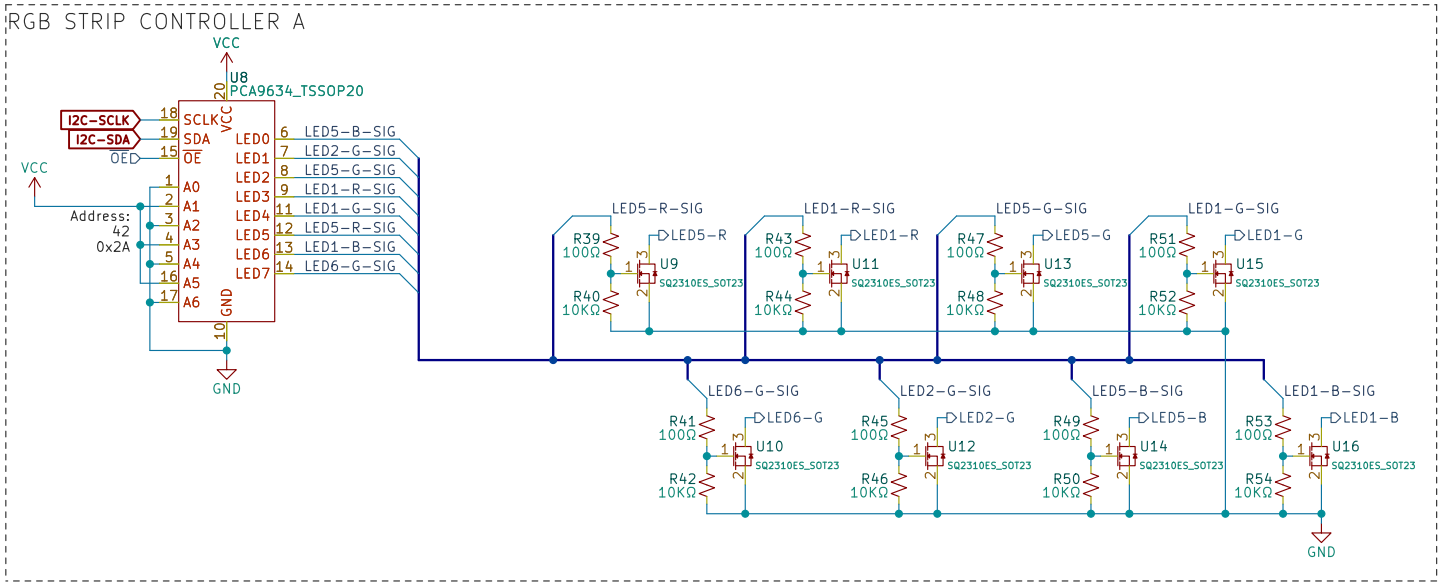
Daxxn Industries

Sheet: /ADC Sheet/ActiveFilters_1-4/
File: ActiveFilters_1-4.kicad_sch

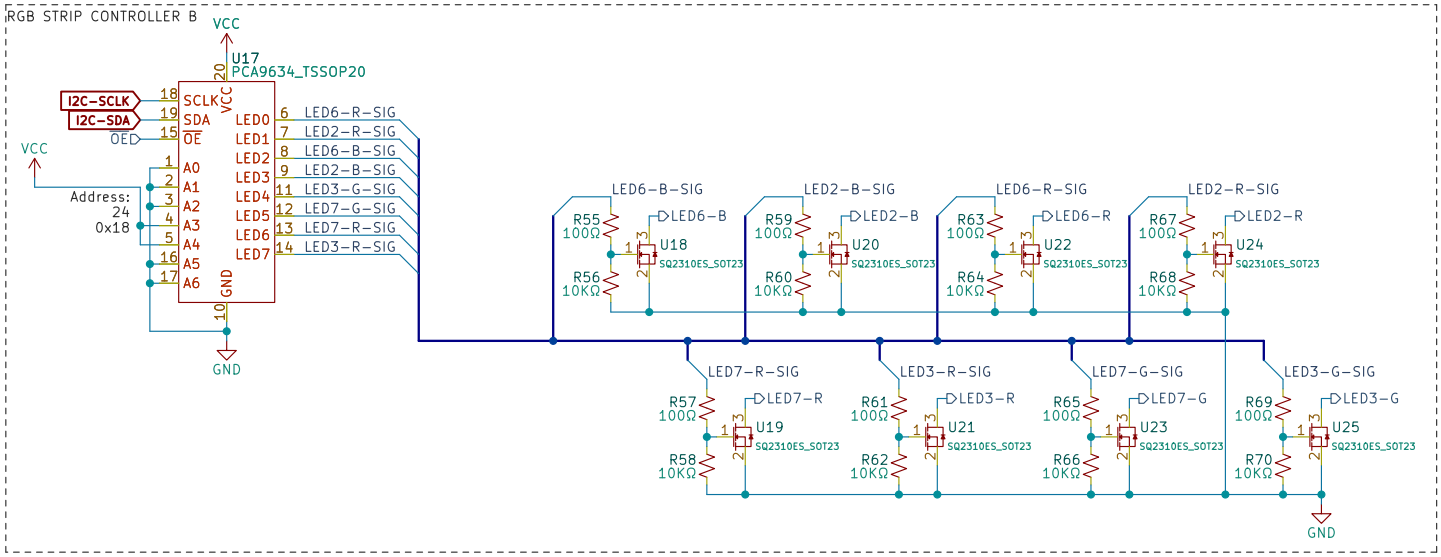
Title: LightDrum

Size: A4	Date:	**Rev: REV7**
KiCad E.D.A. kicad (6.0.9)		Id: 5/17

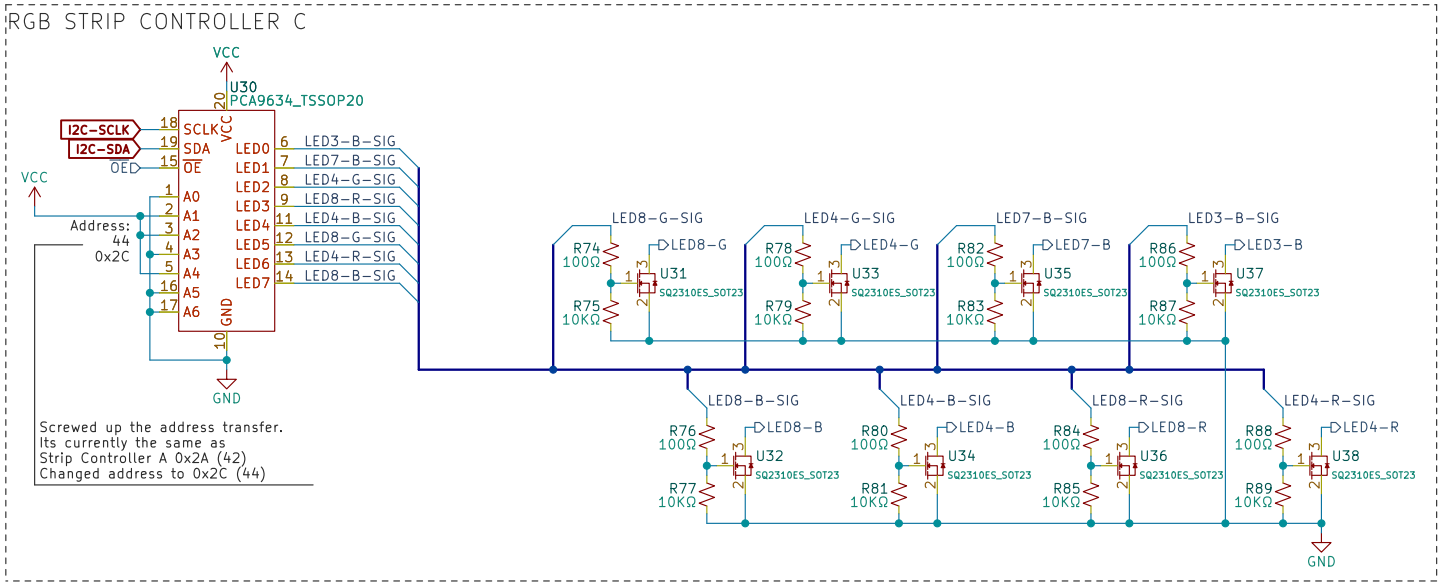

BP Filter : 1.5KHz
Center: 1.5KHz
Stop: 5KHz
Pass: 500Hz
AUDIO-AMP
AUDIO-REF
R3 14.9KΩ
R7 312Ω
C17 100nF
C18 100nF
R11 43.4KΩ
U3A LMV324
R15 17.8KΩ
R19 373Ω
C25 100nF
C26 100nF
R23 51.8KΩ
U4A LMV324
U5B LMV324
D3 GP DIODE
C34 1uF
R28 1KΩ
AUDIO-6
GNDA
BP Filter : 2KHz
Center: 2KHz
Stop: 5KHz
Pass: 500Hz
R4 3.97KΩ
R8 83.2Ω
C19 75nF
C20 75nF
R12 11.6KΩ
U3B LMV324
R16 3.91KΩ
R20 81.9Ω
C27 91nF
C28 91nF
R24 11.4KΩ
U4B LMV324
U5A LMV324
D2 GP DIODE
C33 1uF
R27 1KΩ
AUDIO-5
GNDA
BP Filter : 5KHz
Center: 5KHz
Stop: 10KHz
Pass: 1KHz
R5 5.3KΩ
R9 60.9Ω
C21 30nF
C22 30nF
R13 16.2KΩ
U3C LMV324
R17 5.55KΩ
R21 63.7Ω
C29 33nF
C30 33nF
R25 17KΩ
U4C LMV324
U5D LMV324
D4 GP DIODE
C35 1uF
R29 1KΩ
AUDIO-8
GNDA
BP Filter : 8KHz
Center: 8KHz
Stop: 20KHz
Pass: 2KHz
R6 4.14KΩ
R10 86.7Ω
C23 18nF
C24 18nF
R14 12KΩ
U3D LMV324
R18 4.04KΩ
R22 84.7Ω
C31 22nF
C32 22nF
R26 11.8KΩ
U4D LMV324
U5C LMV324
D5 GP DIODE
C36 1uF
R30 1KΩ
AUDIO-7
GNDA
OOPS. Need to fix.
Daxxn Industries
Sheet: /ADC Sheet/ActiveFilters_5-8/
File: ActiveFilters_5-8.kicad_sch
Title: LightDrum
Size: A4
Date:
Rev: REV7
KiCad E.D.A. kicad (6.0.9)
Id: 6/17



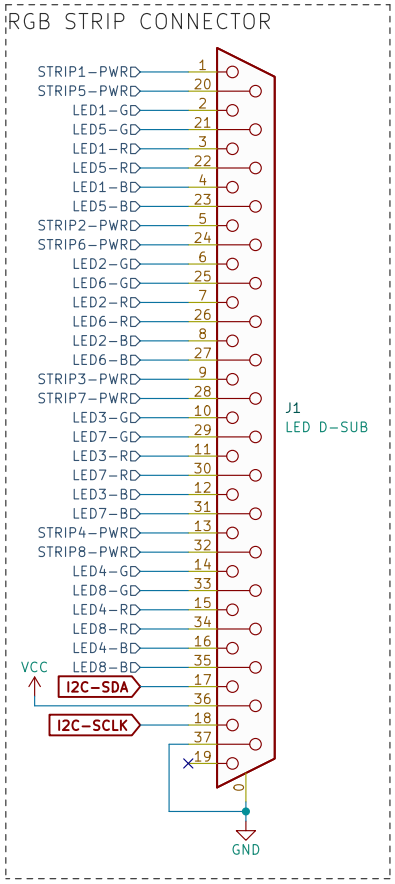
Daxxn Industries		
Sheet: /RGB_Control/RGB Control 1/		
File: RGB_Control-1.kicad_sch		
Title: LightDrum		
Size: A4	Date:	**Rev: REV7**
KiCad E.D.A. kicad (6.0.9)		Id: 7/17



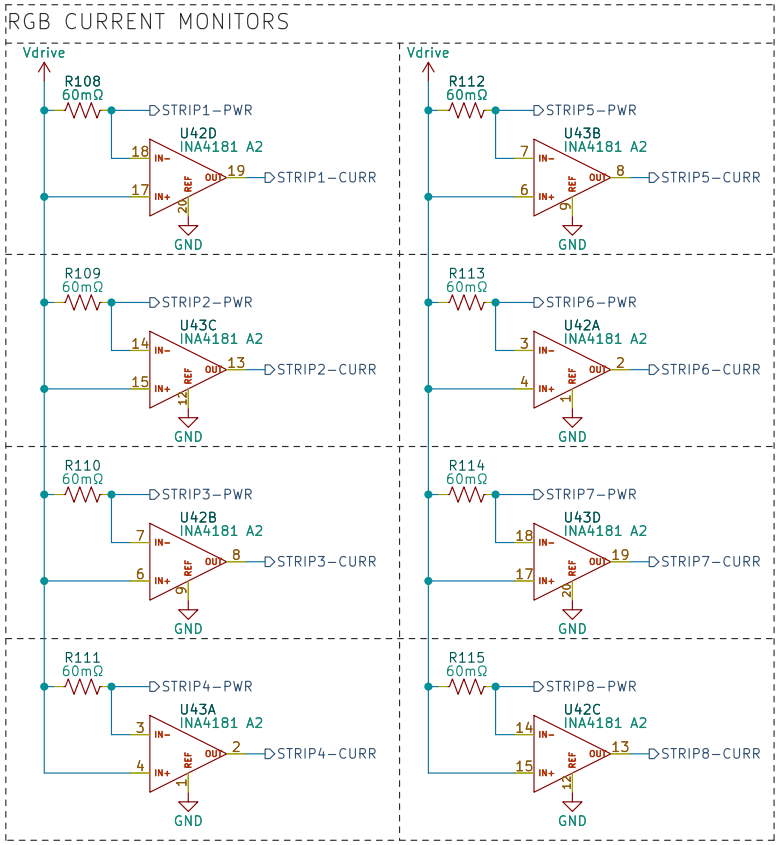
Daxxn Industries		
Sheet: /RGB_Control/RGB Control 2/		
File: RGB_Control-2.kicad_sch		
Title: LightDrum		
Size: A4	Date:	**Rev: REV7**
KiCad E.D.A. kicad (6.0.9)		Id: 8/17



Daxxn Industries		
Sheet: /RGB_Control/RGB Control 3/		
File: RGB_Control-3.kicad_sch		
Title: LightDrum		
Size: A4	Date:	**Rev: REV7**
KiCad E.D.A. kicad (6.0.9)		Id: 9/17



Daxxn Industries		
Sheet: /RGB_Control/Strip Connector/		
File: LED_Connector.kicad_sch		
Title: LightDrum		
Size: A4	Date:	**Rev: REV7**
KiCad E.D.A. kicad (6.0.9)		Id: 10/17

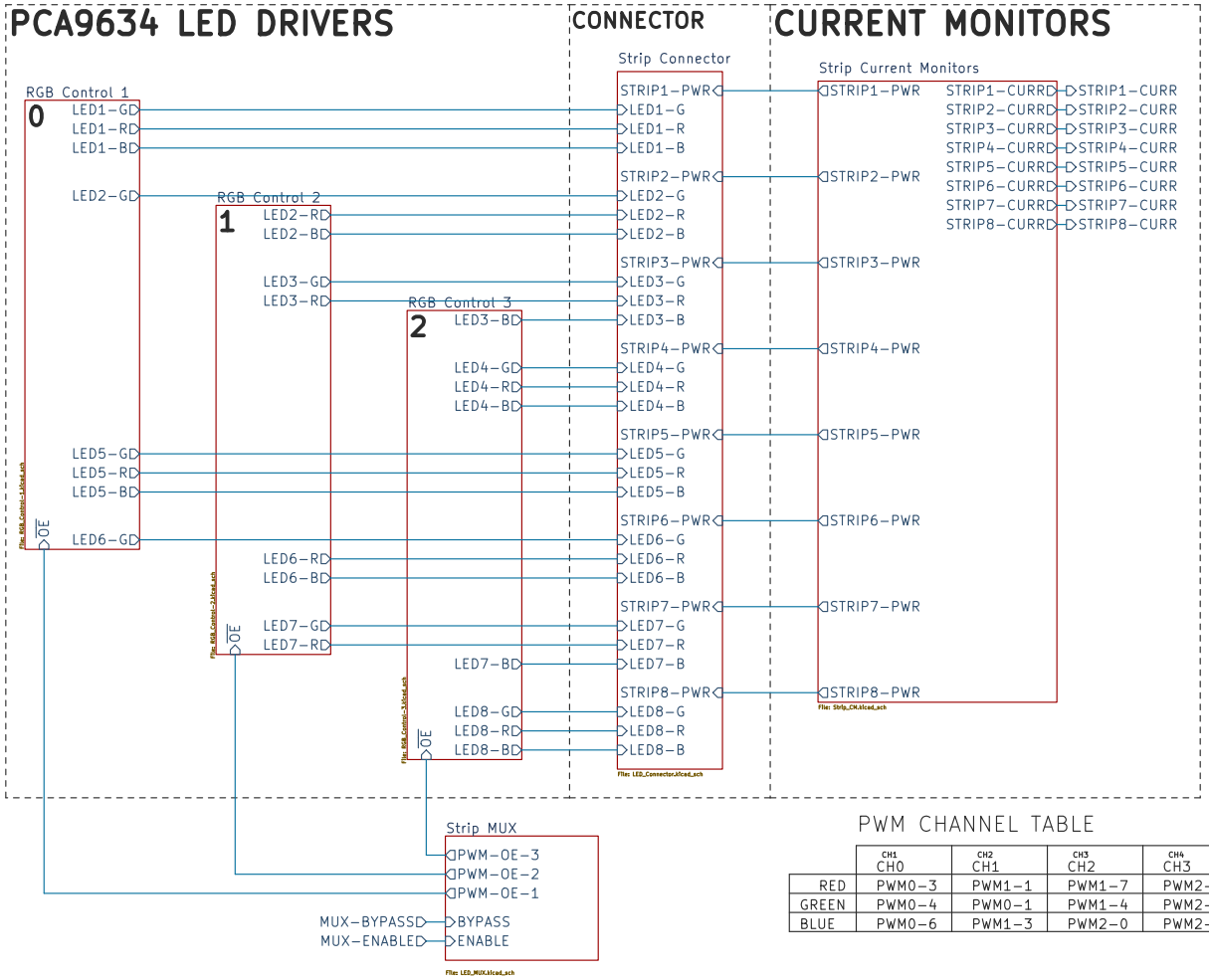


Daxxn Industries

Sheet: /RGB_Control/Strip Current Monitors/
File: Strip_CM.kicad_sch

Title: LightDrum

Size: A4	Date:	**Rev: REV7**
KiCad E.D.A. kicad (6.0.9)		Id: 11/17



PWM CHANNEL TABLE

	CH1 CH0	CH2 CH1	CH3 CH2	CH4 CH3	CH5 CH4	CH6 CH5	CH7 CH6	CH8 CH7
RED	PWM0-3	PWM1-1	PWM1-7	PWM2-6	PWM0-5	PWM1-0	PWM1-6	PWM2-3
GREEN	PWM0-4	PWM0-1	PWM1-4	PWM2-2	PWM0-2	PWM0-7	PWM1-5	PWM2-5
BLUE	PWM0-6	PWM1-3	PWM2-0	PWM2-4	PWM0-0	PWM1-2	PWM2-1	PWM2-7

Daxxn Industries

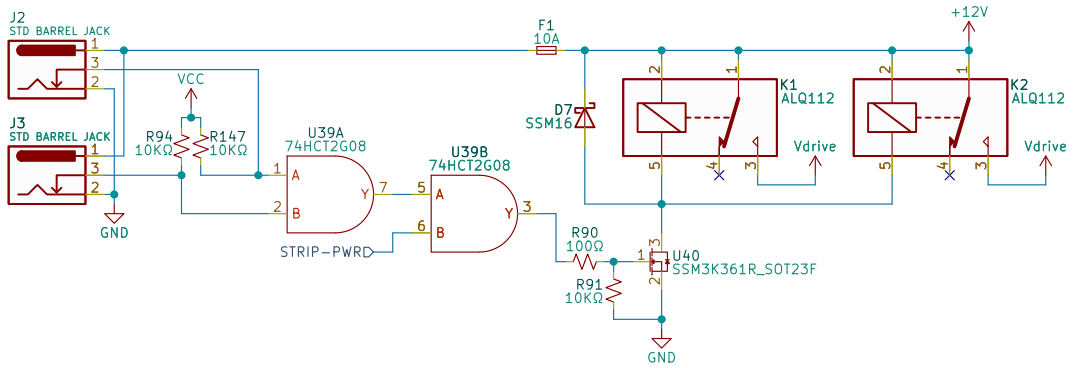
Sheet: /RGB_Control/
File: RGB_Control.kicad_sch

Title: LightDrum

Size: A4	Date:	**Rev: REV7**
KiCad E.D.A. kicad (6.0.9)		Id: 12/17

RGB STRIP POWER LOCKOUT

Due to the large current for the RGB strips, the load needs to be divided up between 2 barrel jacks. If only one is plugged in, it would probably melt. To prevent any melty firey and expensy issues, the RGB strips will not be powered unless both jacks are used AND the controller agrees.

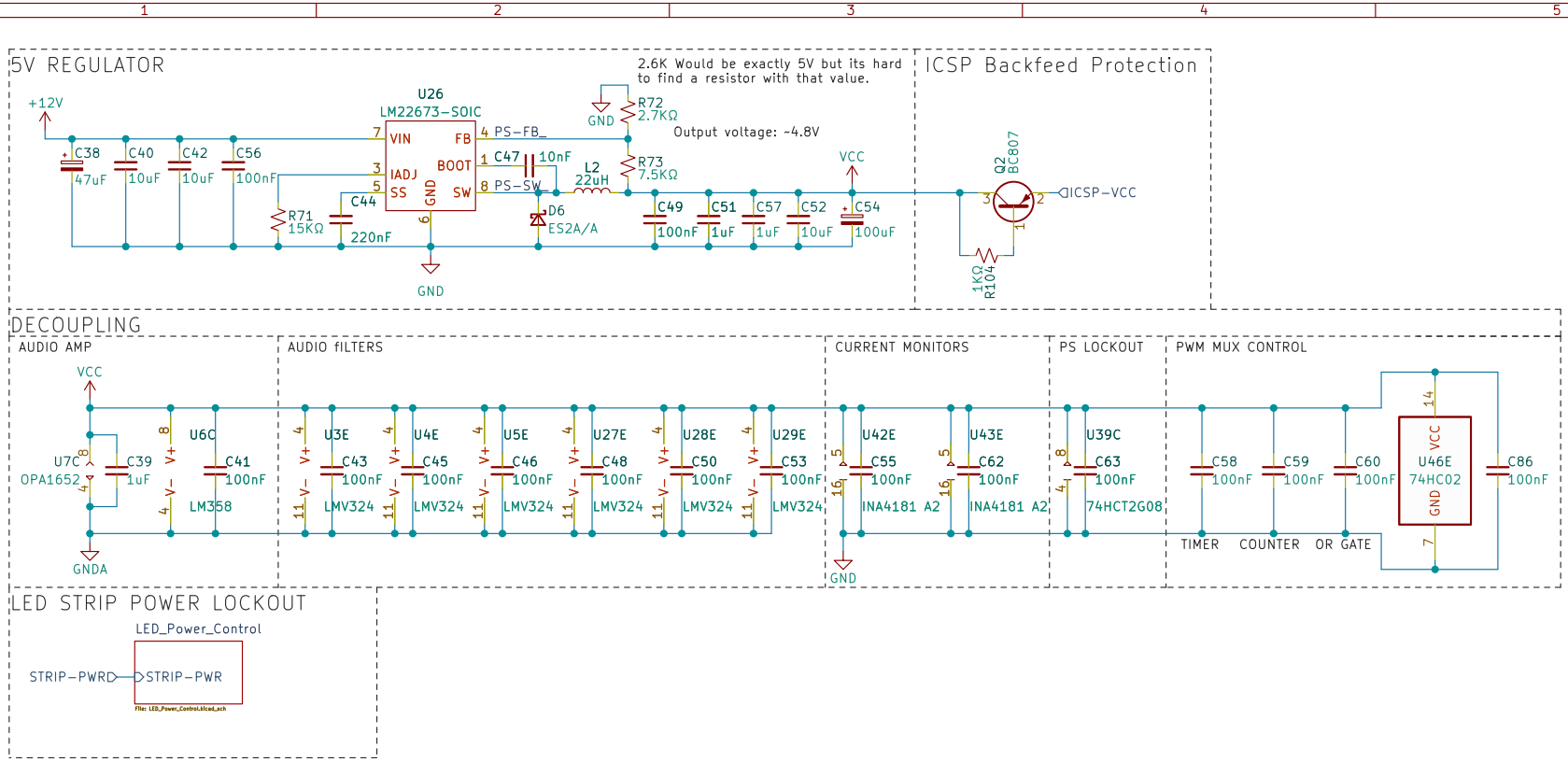


Daxxn Industries

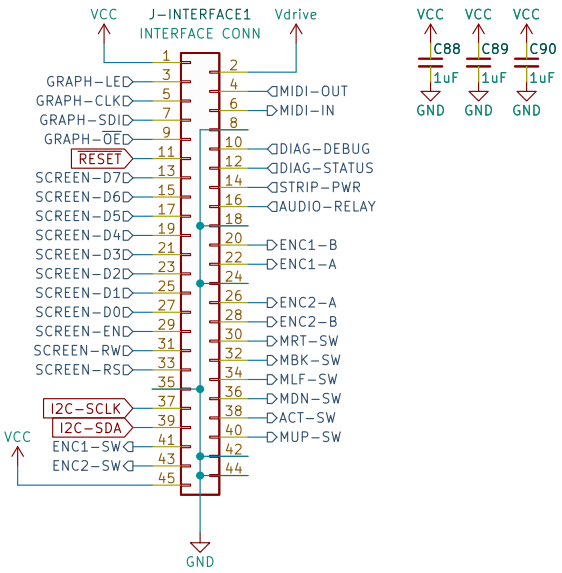
Sheet: /Power/LED_Power_Control/
File: LED_Power_Control.kicad_sch

Title: LightDrum

Size: A4	Date:	**Rev: REV7**
KiCad E.D.A. kicad (6.0.9)		Id: 14/17



Daxxn Industries		
Sheet: /Power/		
File: Power.kicad_sch		
Title: LightDrum		
Size: A4	Date:	**Rev: REV7**
KiCad E.D.A. kicad (6.0.9)		Id: 15/17

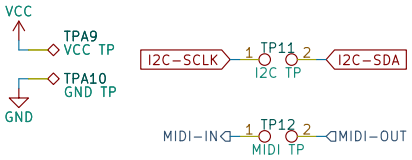


Daxxn Industries

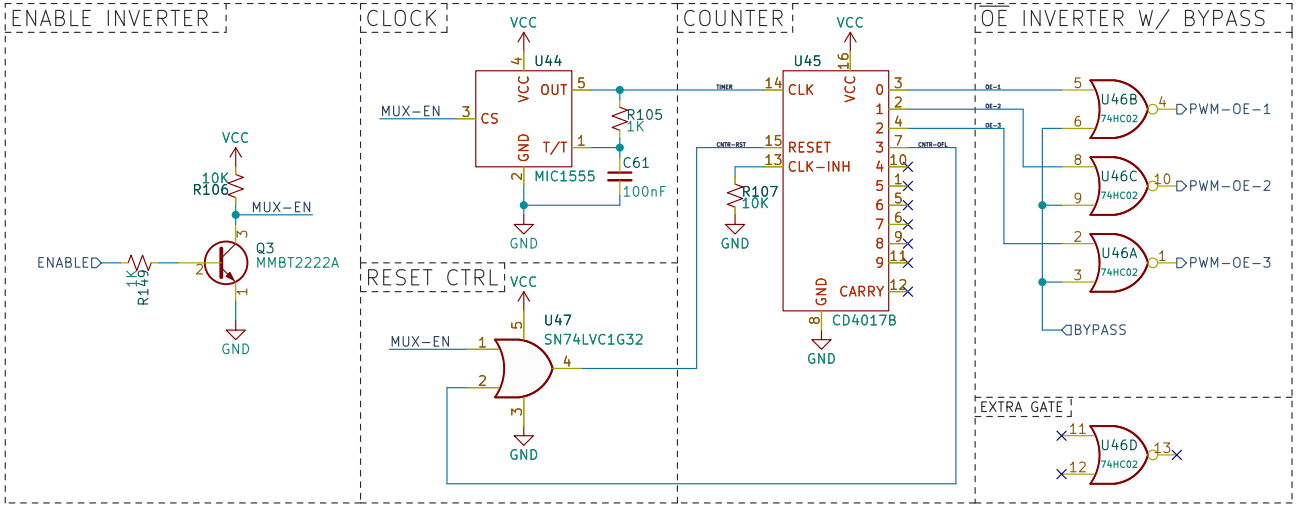
Sheet: /Interface Connectors/
File: Interface_Connectors.kicad_sch

Title: LightDrum

Size: A4	Date:	**Rev: REV7**
KiCad E.D.A. kicad (6.0.9)		Id: 16/17



Daxxn Industries		
Sheet: /Test Points/		
File: TestPoints.kicad_sch		
Title: LightDrum		
Size: A4	Date:	**Rev: REV7**
KiCad E.D.A. kicad (6.0.9)		Id: 16/17



INPUT TRUTH TABLE			
EN	BYP	RESULT	Description
LOW	LOW	ALL HIGH	Clock and counter disabled, bypass disabled. All Strips OFF.
HIGH	LOW	MUX EN	Multiplex enabled, cycles strips.
LOW	HIGH	ALL LOW	Clock and counter disabled, bypass enabled. All Strips ON.
HIGH	HIGH	ALL LOW	Clock and counter disabled, bypass enabled. All Strips ON.

Daxxn Industries

Sheet: /RGB_Control/Strip MUX/
File: LED_MUX.kicad_sch

Title: LightDrum

Size: A4	Date:	**Rev: REV7**
KiCad E.D.A. kicad (6.0.9)		Id: 17/17