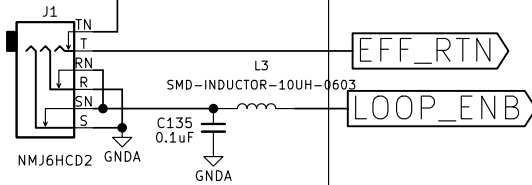
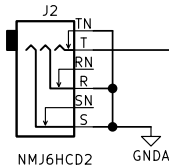


EFFECT
RETURN



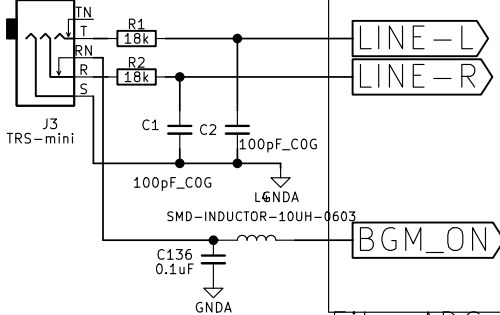
GUITAR
INPUT



Useable Phone Jacs:
NEUTRIK NMJ6HCD2
AMPHENOL ACJS-IH or
Yueqing Daier Electron PJ-644C

BGM
INPUT

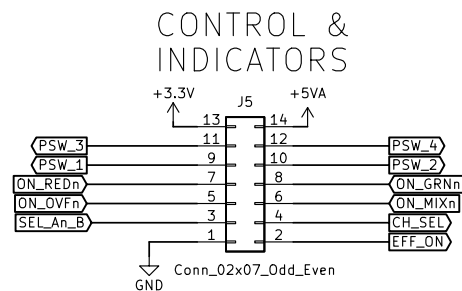
(Reference Level 0dB = 2Vr.m.s.)
2.09Vrms max.



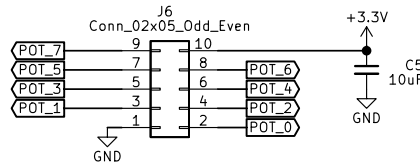
Sheet: ADC_DAC

File: ADC_DAC.sch

Interconnect to CONTROL-BOARD

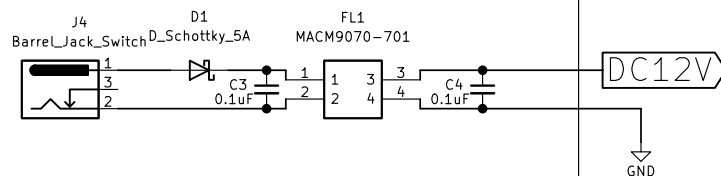


Multiplexed
POT-VOLTAGES



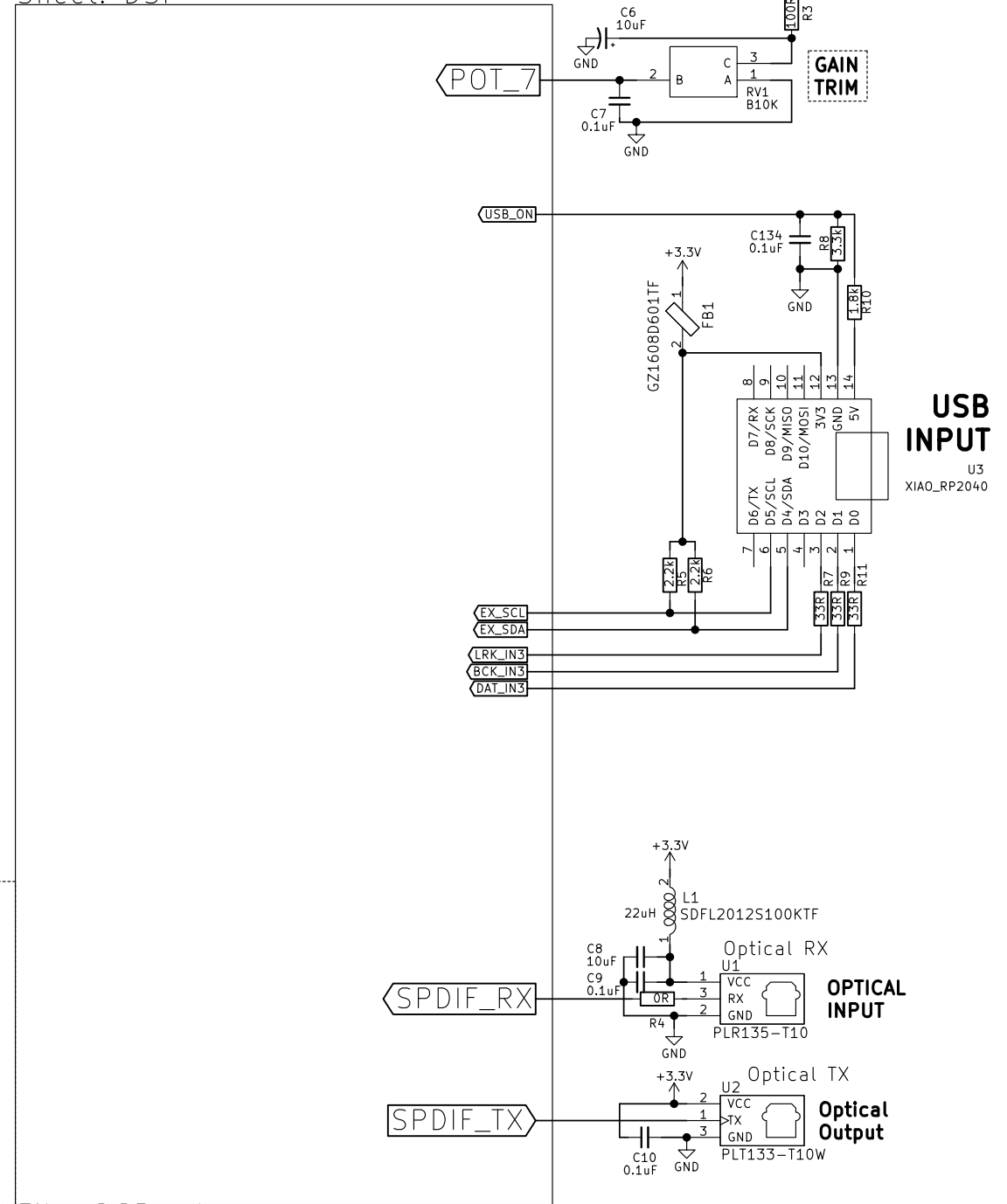
Sheet: PSU

DC12V INPUT
Center=
2.1mm Positive
Sleeve= 5.5mm



File: PSU.sch

Sheet: DSP



File: DSP.sch

Sheet: BM83_BT-RX

File: BM83_BT-RX.sch

MAIN BOARD
CONNECTORS

(Without BM83 version)

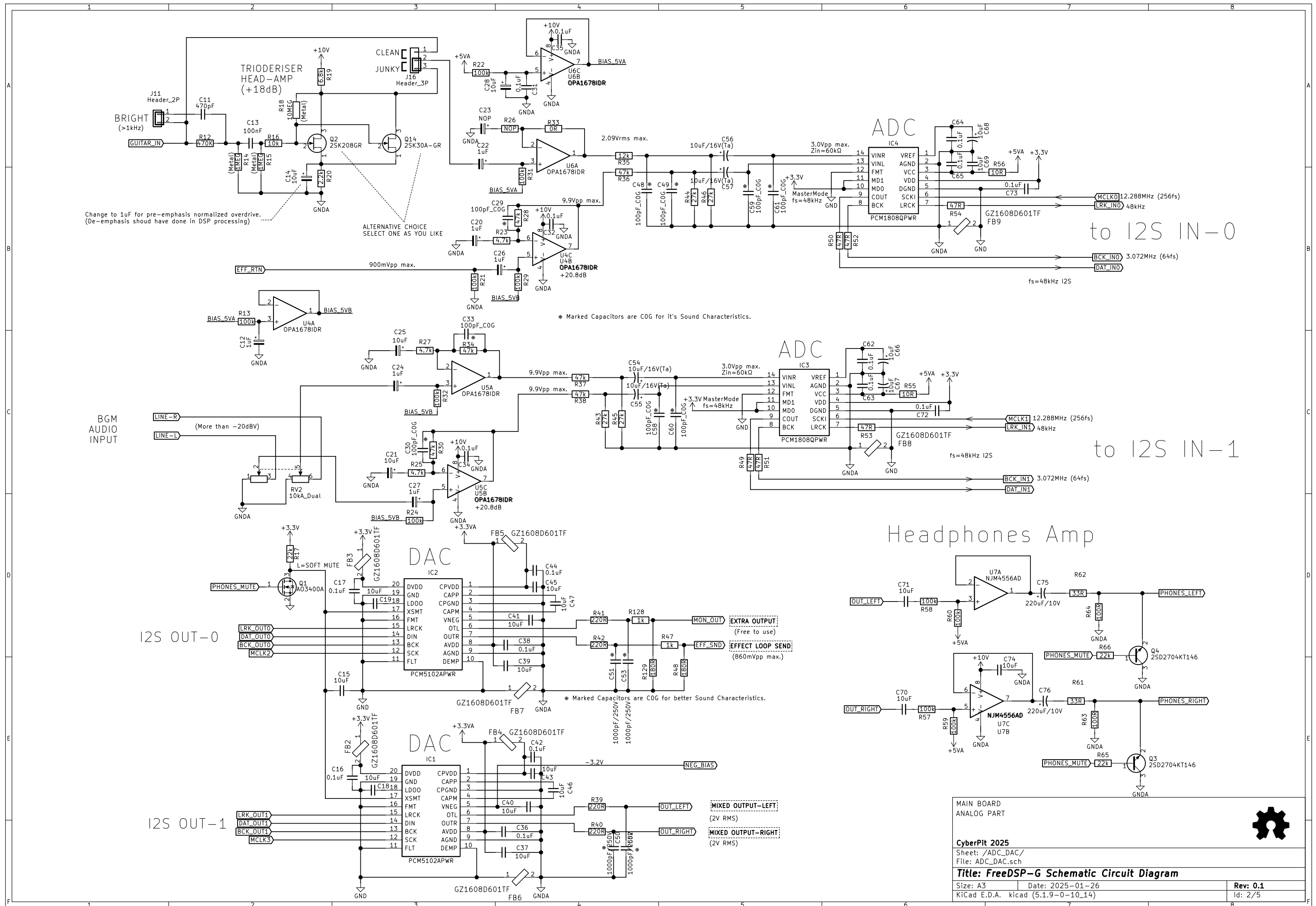
CyberPit 2025

Sheet: /
File: FreeDSP-G.sch

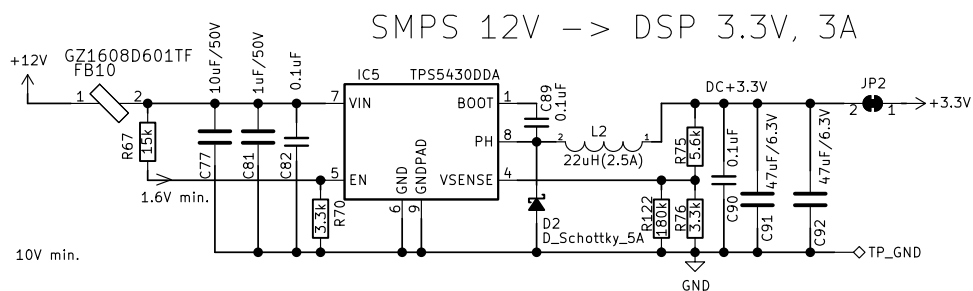
Title: FreeDSP-G Schematic Circuit Diagram

Size: A3 Date: 2025-01-26
KiCad E.D.A. kicad (5.1.9-0-10_14)

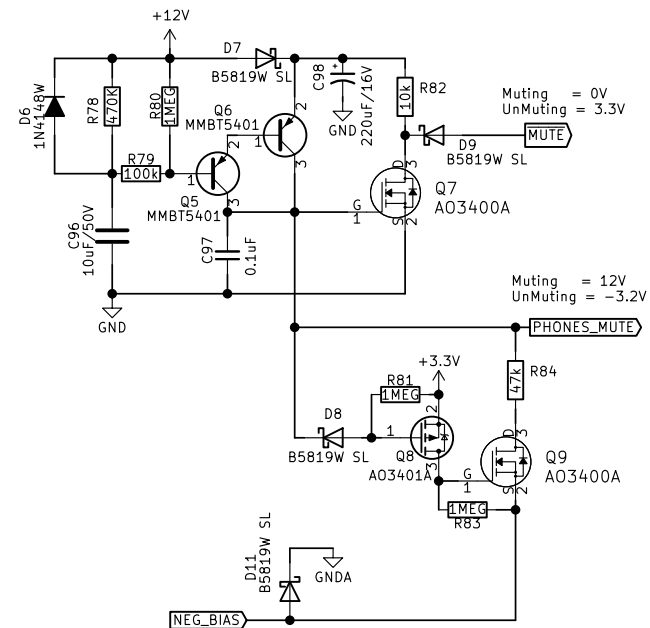
Rev: 0.1
Id: 1/5



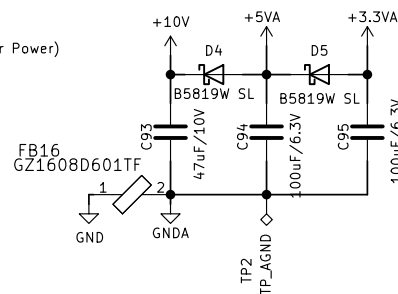
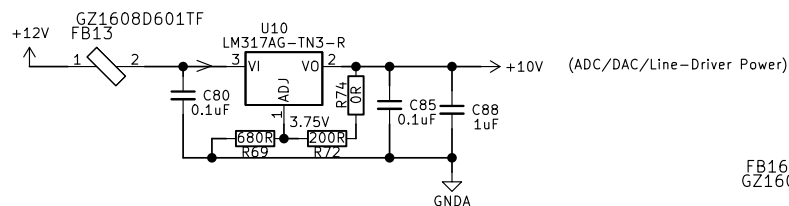
DC12V JP1 2 1 → +12V



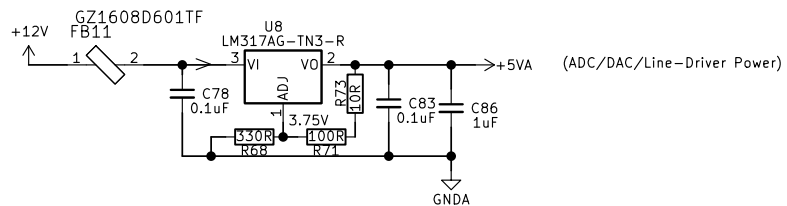
Power ON/OFF Mute Driver



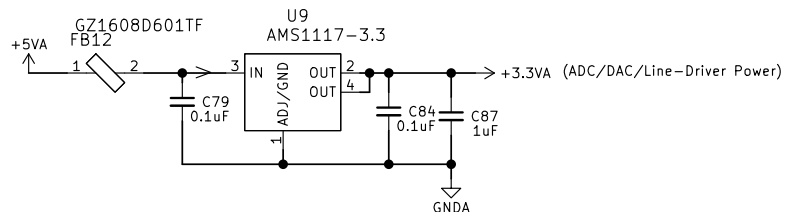
REG12V → ANALOG 10.0V



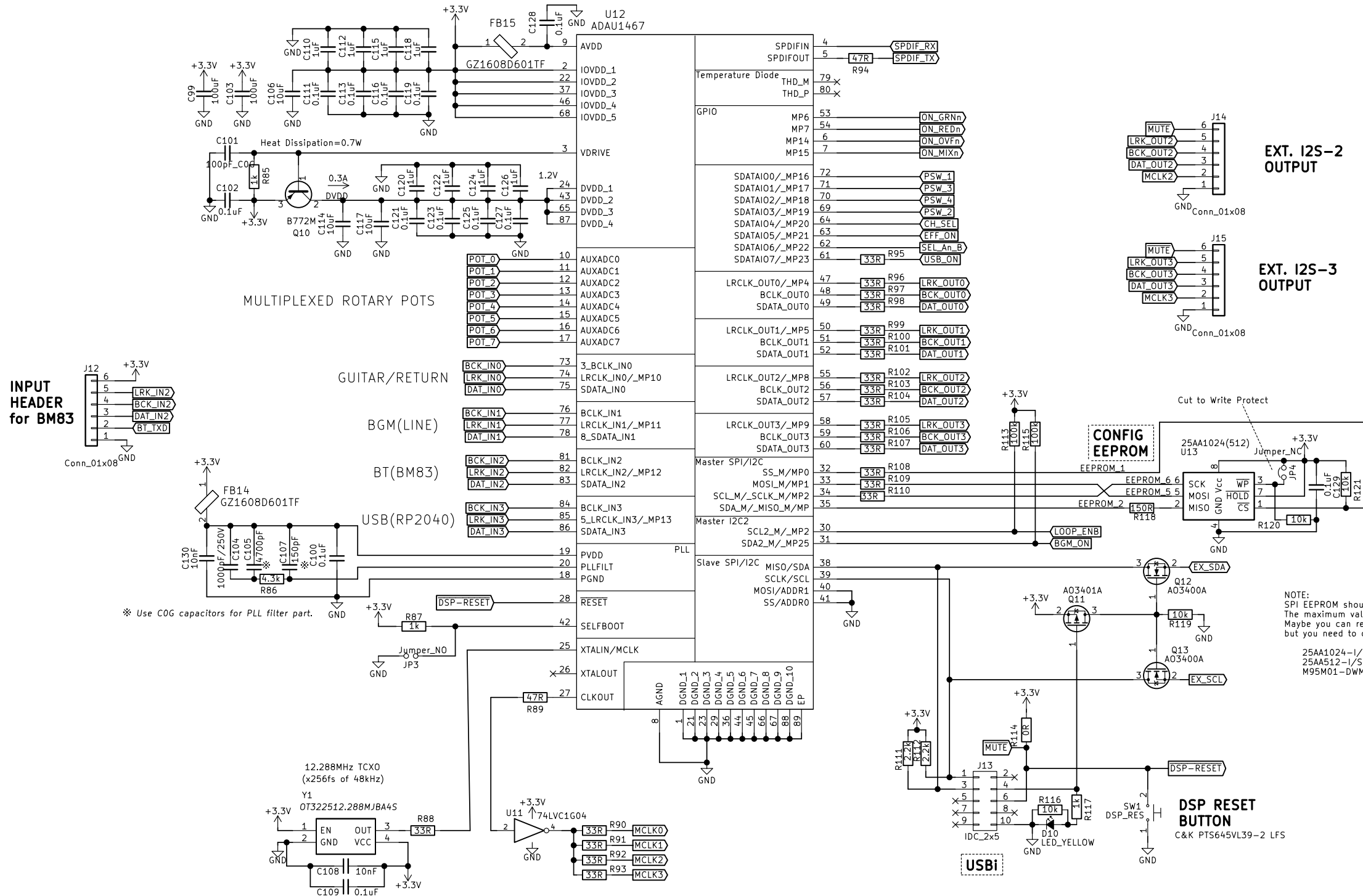
REG12V → ANALOG 5.0V



REG12V → ANALOG 3.3V



MAIN BOARD		
CyberPit 2025		
Sheet: /PSU/		
File: PSU.sch		
Title: FreeDSP-G Schematic Circuit Diagram		
Size: A4	Date: 2025-01-26	Rev: 0.1
KiCad E.D.A. kicad (5.1.9-0-10_14)		Id: 3/5



EXT. I2S-2
OUTPUT

EXT. I2S-3
OUTPUT

CONFIG
EEPROM

DSP RESET
BUTTON

C&K PTS645VL39-2 LFS

NOTE:
SPI EEPROM should be organized by 8 (128x8, 64x8, 32x8, etc..)
The maximum valid memory space is limited up to 512Mbits.
Maybe you can replace U13 EEPROM which contained in the following lists,
but you need to change the configuration EEPROM writing parameters...

25AA1024-1/SM (Microchip, Total=1048576, PageSize=256, N=3)
25AA512-1/SN (Microchip, Total=524288, PageSize=128, N=2)
M95M01-DWMN3TP/K (STM, Total=262144, PageSize=64, N=2)

Default: DSP's I2C slave port is connected to the XIAO RP2040.
If you Connect the USBI then the RP2040 will offline automatically.

MAIN BOARD DSP PART		
CyberPit 2025		
Sheet: /DSP/ File: DSP.sch		
Title: FreeDSP-G Schematic Circuit Diagram		
Size: A3	Date: 2025-01-26	Rev: 0.1
KiCad E.D.A. kicad (5.1.9-0-10_14)		Id: 4/5

