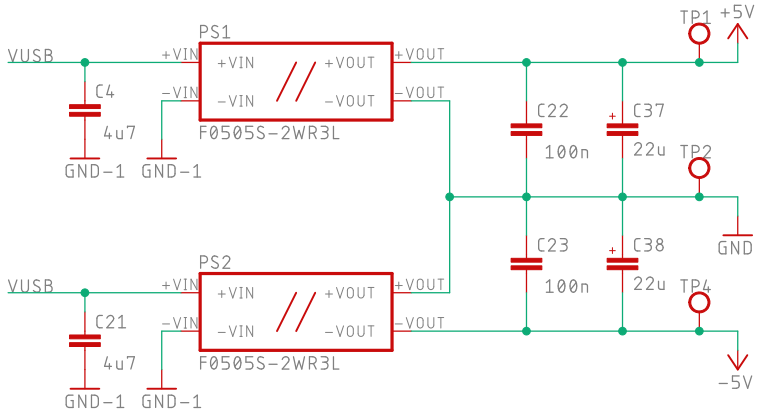
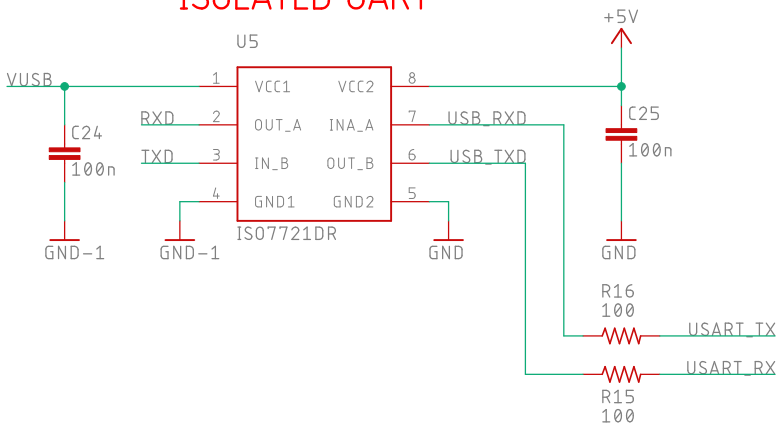
ISOLATED POWER SUPPLY

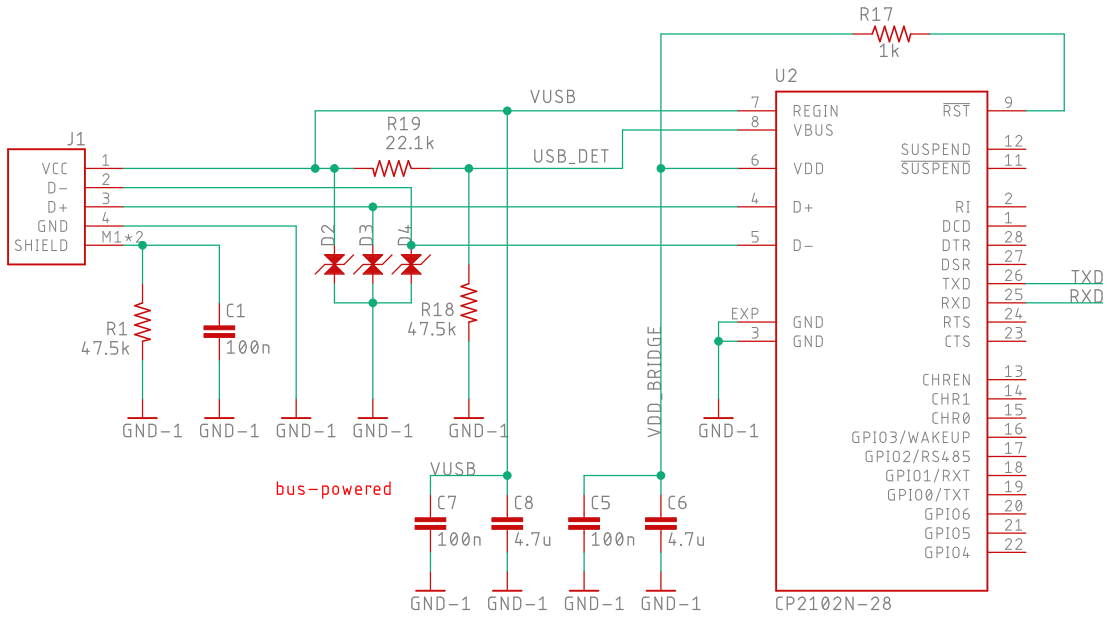


ISOLATED UART

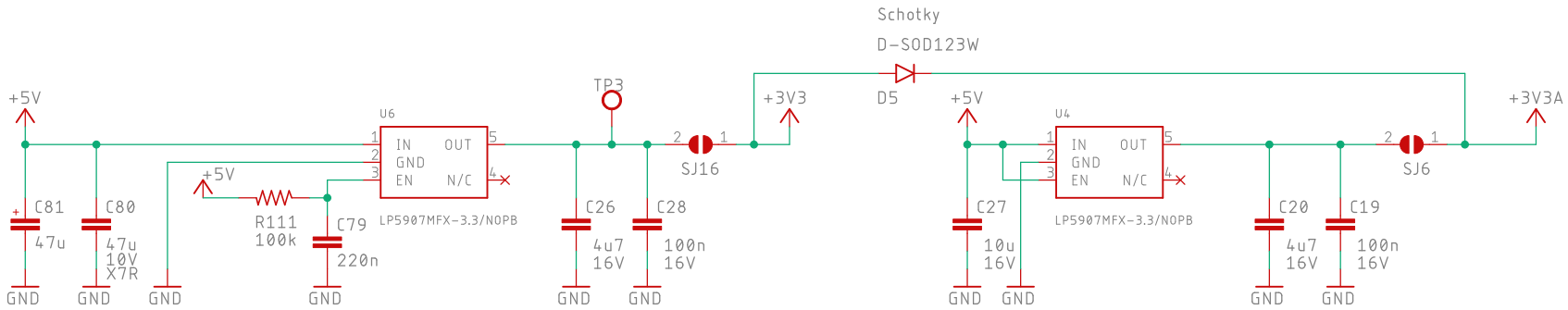


VERIFICAR
QUE TX-RX ESTEN CORRECTOS
VERIFICAR
CORRECTA ORIENTACION
DE IN-OUT AISLADOR

USB-TTL MCU

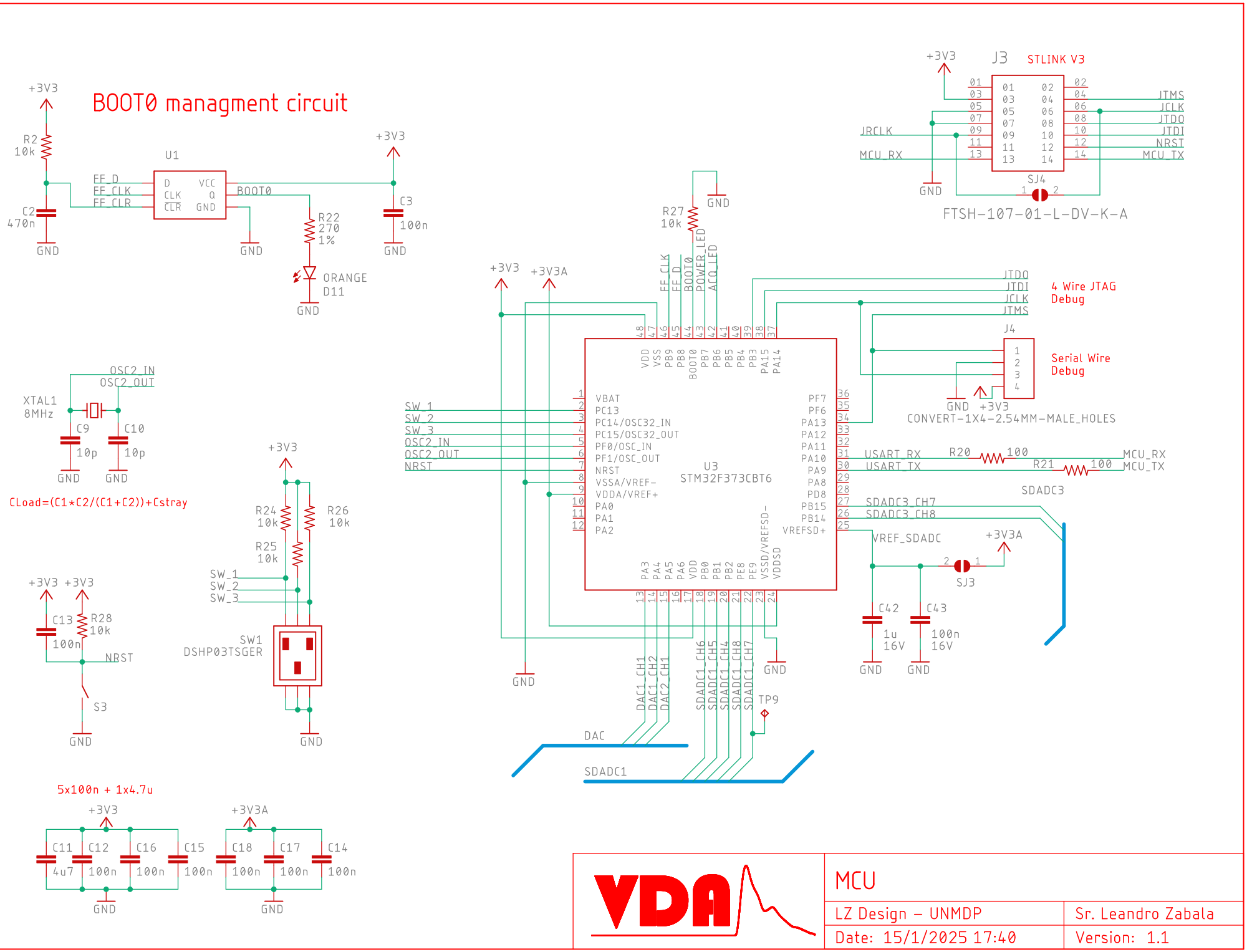


Isolated USB-UART Bridge	
LZ Design – UNMDP	Sr. Leandro Zabala
Date: 15/1/2025 17:40	Version: 1.1

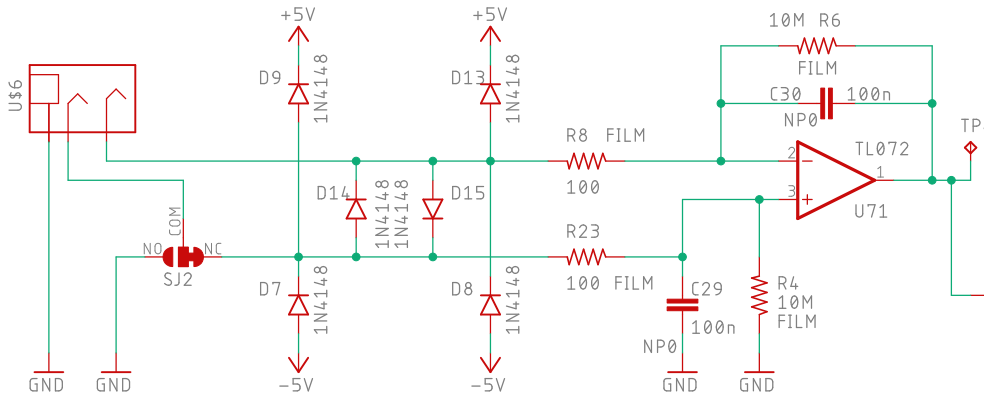


LDO and Voltage Reference

LZ Design – UNMDP	Sr. Leandro Zabala
Date: 15/1/2025 17:40	Version: 1.1


BOOT0 managment circuit
+3V3
R2
10k
U1
FF_D
FF_CLK
FF_CLR
D
CLK
CLR
VCC
Q
GND
BOOT0
C2
470n
R22
270
1%
ORANGE
D11
C3
100n
XTAL1
8MHz
OSC2_IN
OSC2_OUT
C9
C10
10p
CLoad=(C1*C2/(C1+C2))+Cstray
R24
10k
R25
10k
R26
10k
SW_1
SW_2
SW_3
SW1
DSHP03TSGER
C13
100n
R28
10k
NRST
S3
5x100n + 1x4.7u
C11
4u7
C12
C16
C15
C18
C17
C14
+3V3A
R27
POWER_LED
ACQ_LED
U3
STM32F373CBT6
VBAT
PC13
PC14/OSC32_IN
PC15/OSC32_OUT
PF0/OSC_IN
PF1/OSC_OUT
NRST
VSSA/VREF-
VDDA/VREF+
PA0
PA1
PA2
PF7
PF6
PA13
PA12
PA11
PA10
PA9
PA8
PD8
PB15
PB14
VREFSD+
VSSD/VREFSD-
VDDSD
DAC1_CH1
DAC1_CH2
DAC2_CH1
SDADC1_CH6
SDADC1_CH5
SDADC1_CH4
SDADC1_CH8
SDADC1_CH7
TP9
DAC
SDADC1
J3
STLINK V3
JRCLK
MCU_RX
JTMS
JCLK
JTDO
JTDI
NRST
MCU_TX
SJ4
FTSH-107-01-L-DV-K-A
4 Wire JTAG Debug
J4
Serial Wire Debug
CONVERT-1X4-2.54MM-MALE_HOLES
USART_RX
USART_TX
R20
100
R21
100
MCU_RX
MCU_TX
SDADC3
SDADC3_CH7
SDADC3_CH8
VREF_SDADC
SJ3
C42
1u
16V
C43
100n
16V
MCU
LZ Design – UNMDP
Sr. Leandro Zabala
Date: 15/1/2025 17:40
Version: 1.1

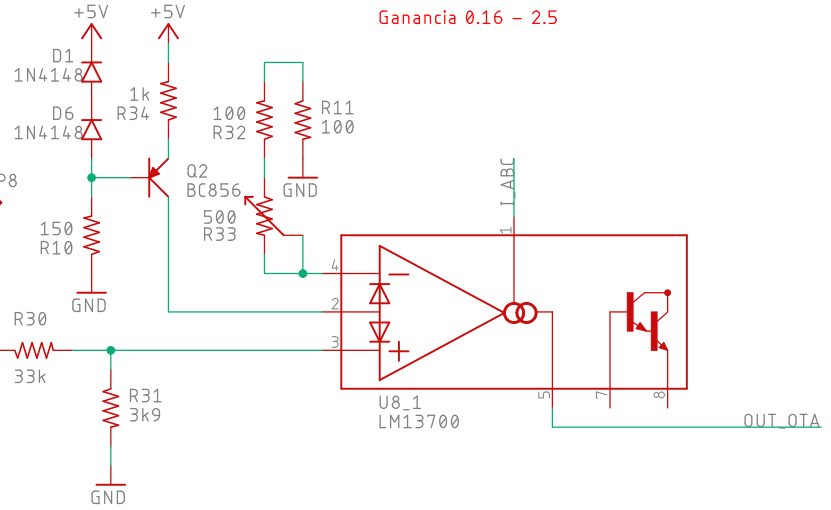
Differential Charge–Amp



https://www.ti.com/litv/pdf/slyt369

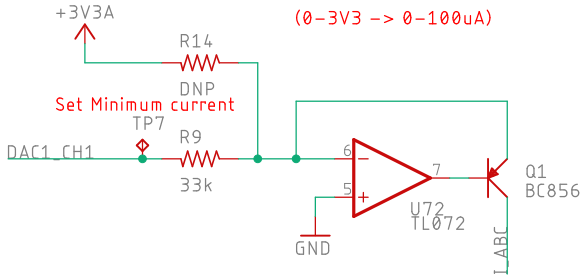
Voltage Controlled Amplifier

Ganancia 0.16 – 2.5

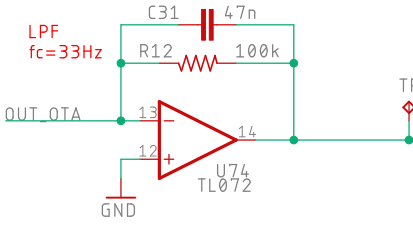


Voltage – Current Converter

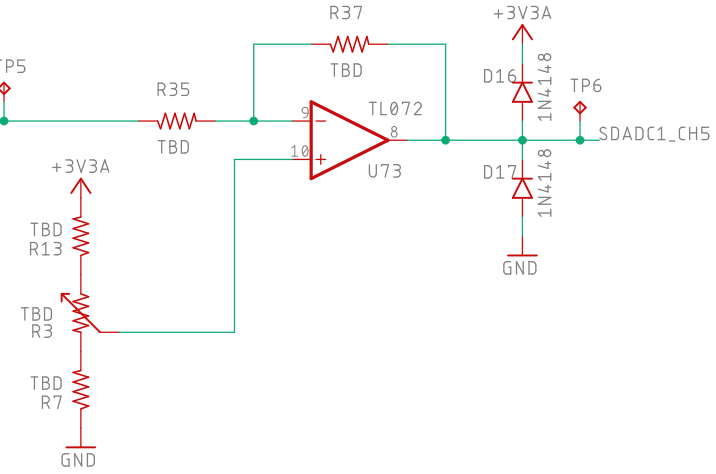
(0–3V3 -> 0–100uA)



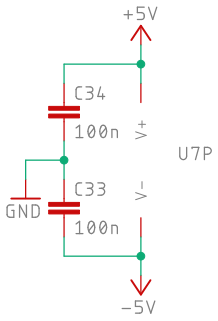
Current to Voltage



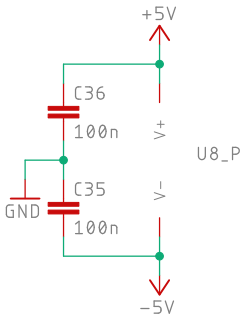
Amplifier and Offset



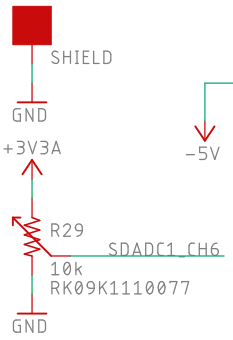
TL072
Power



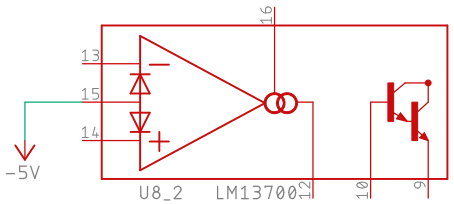
LM13700
Power



MS384-10F
MS384-10C

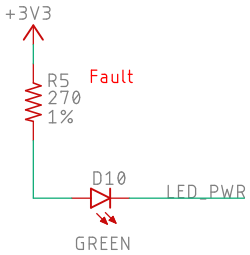


Unused LM13700 1/2

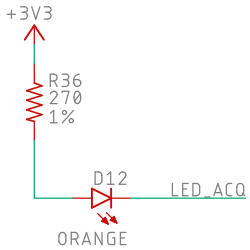


Front End	
LZ Design – UNMDP	Sr. Leandro Zabala
Date: 15/1/2025 17:40	Version: 1.1

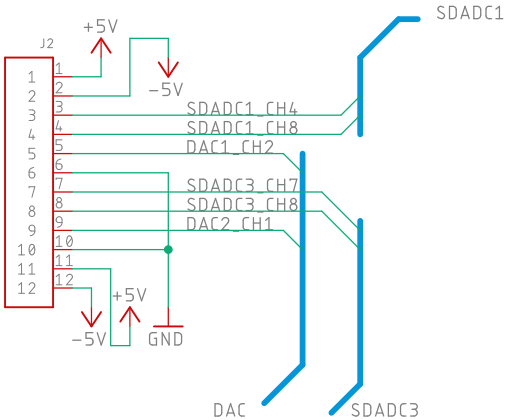
Power LED



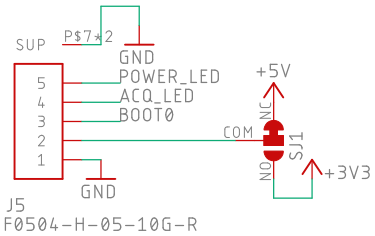
ACQ LED



Expansion Connector



Front Panel Connector



VDA	Status LEDs & Expansion Connectors	
	LZ Design – UNMDP	Sr. Leandro Zabala
	Date: 15/1/2025 17:40	Version: 1.1