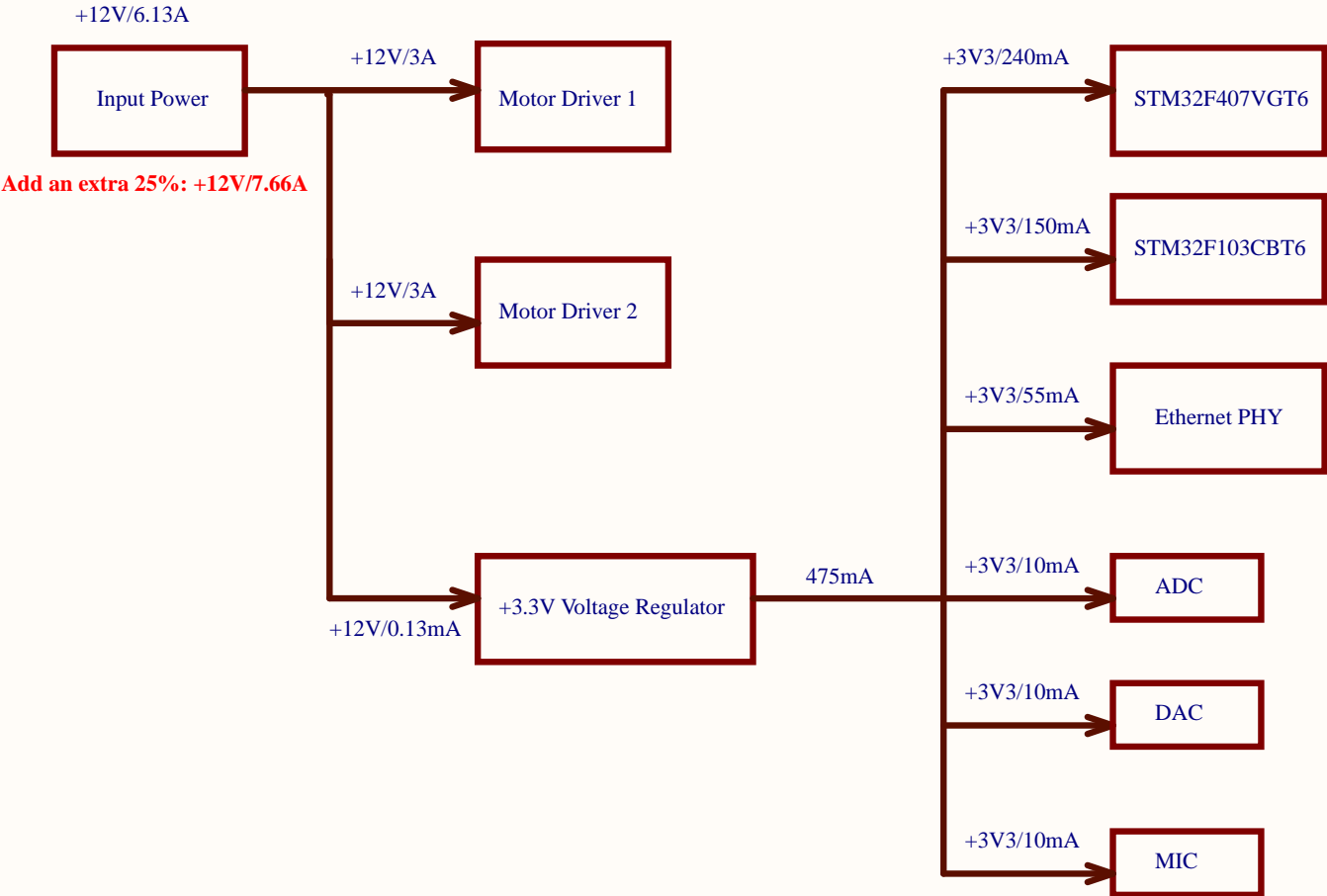
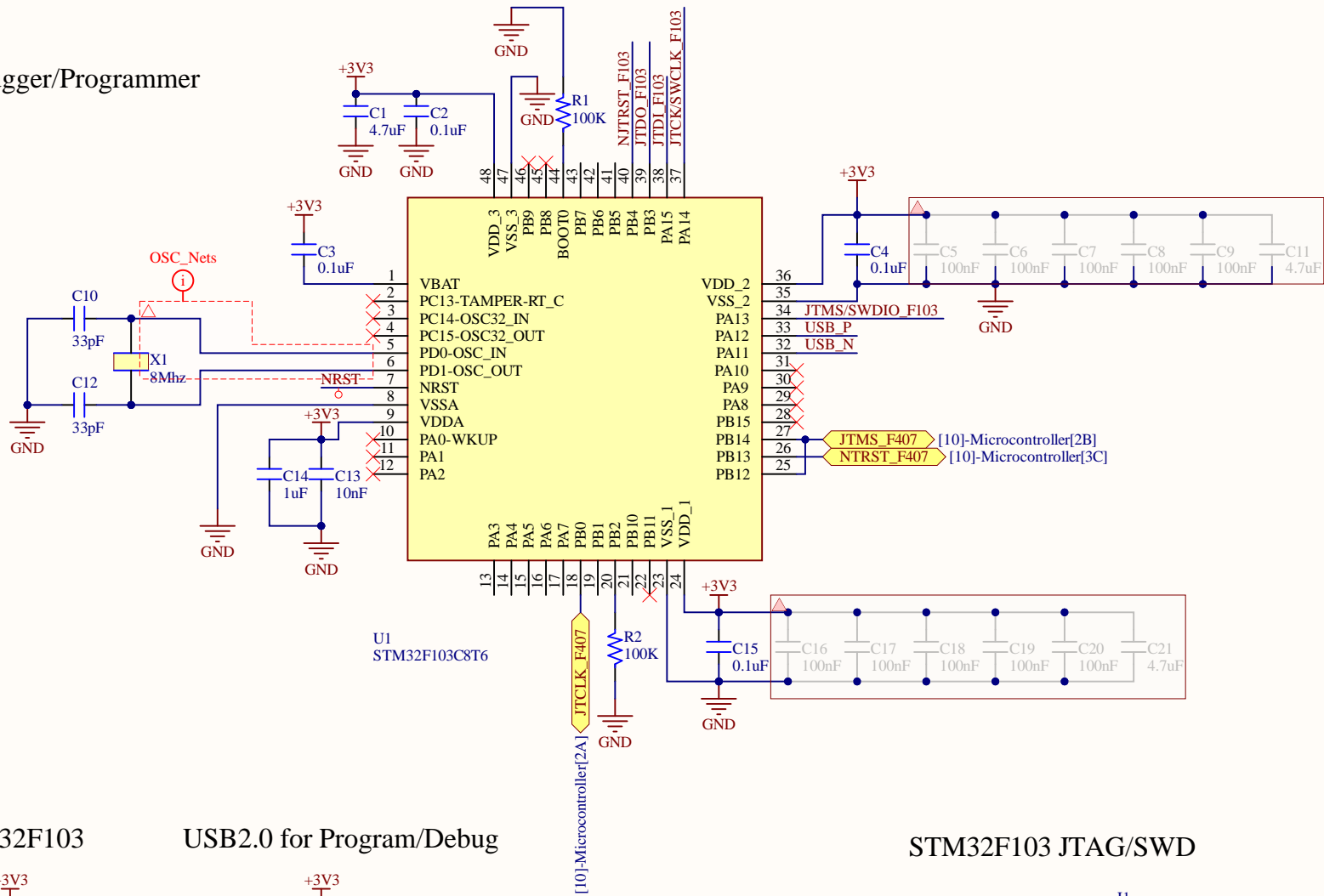


Power Budget

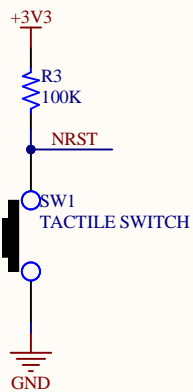


Title		
Size A	Number	Revision
Date:	8/25/2025	Sheet of
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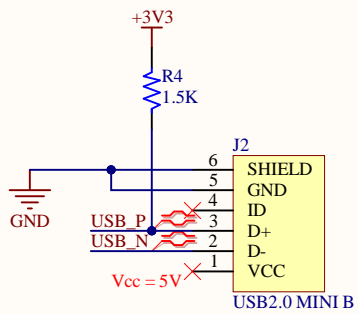
# Debugger/Programmer



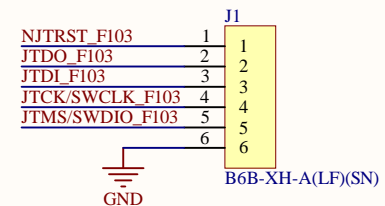
## Reset STM32F103



## USB2.0 for Program/Debug



## STM32F103 JTAG/SWD



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Date:	8/25/2025		Sheet of
File:	C:\Users\...\[3]-Debugger.SchDoc		Drawn By:

### ETH Reset and Fault LEDs

The diagram shows the circuit for the ETH Reset and Fault LEDs. A PHY RESET signal is connected to a tactile switch (SW2) and a microcontroller ([10]-Microcontroller[2B]). Two LEDs, DS1 (RED LED) and DS2 (RED LED), are connected to the microcontroller via resistors R6 and R7 (3K3). The LEDs are connected to GND through the microcontroller pins K and A.

### RJ45 Connector

The diagram shows the circuit for the RJ45 Connector. A RJ45 LAN connector (J3) is connected to a network switch. The connector has pins D4+, D4-, D3+, D3-, D2+, D2-, D1-, and D1+. The circuit includes resistors R11 (1K) and capacitors C34 (10nF) connected to GND. Four LEDs, D1, D2, D3, and D4 (ESD3V3D9-TP), are connected to the connector pins via resistors R6 and R7 (3K3). The LEDs are connected to GND through the microcontroller pins K and A.

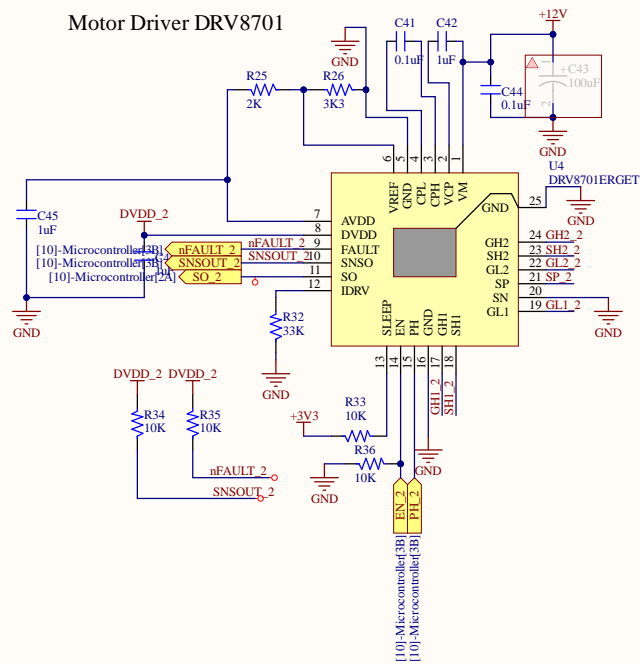
### Ethernet PHY

Title		
Size B	Number	Revision
Date:	8/25/2025	Sheet of
File:	C:\Users\...[4]-Ethernet PHY.SchDoc	Drawn By:

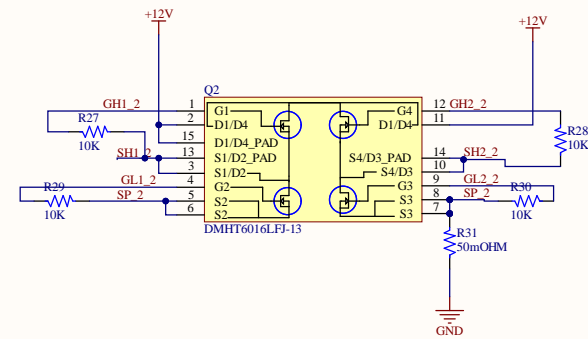


## DRV8701 Motor Driver-2

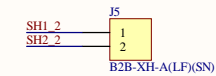
Motor Driver DRV8701



N-MOSFET



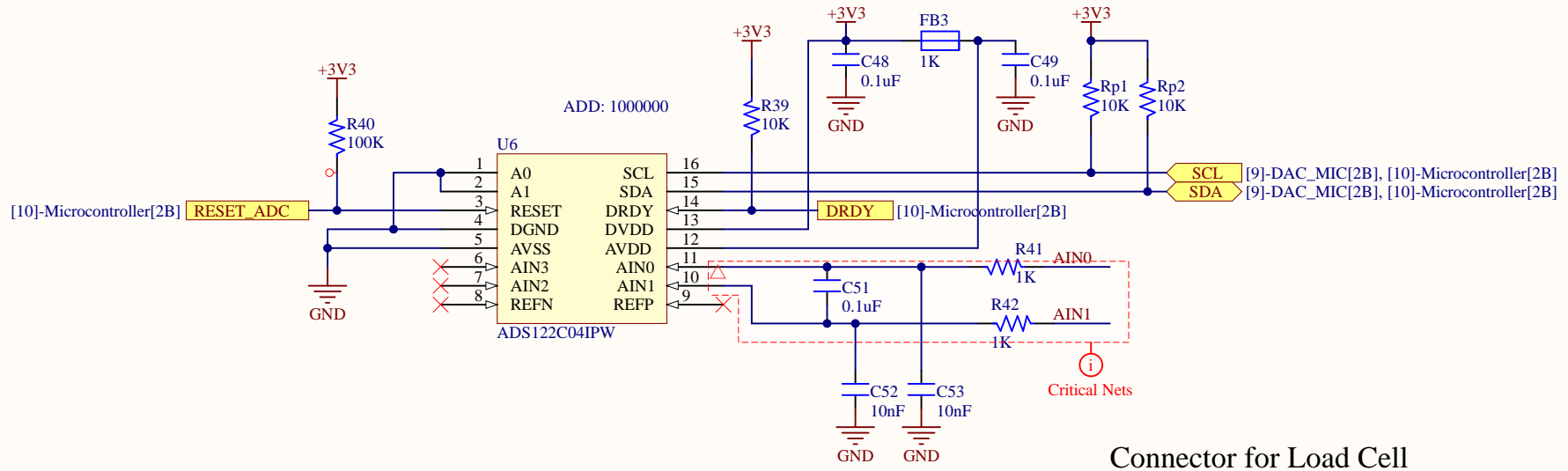
Connector for Motor -2



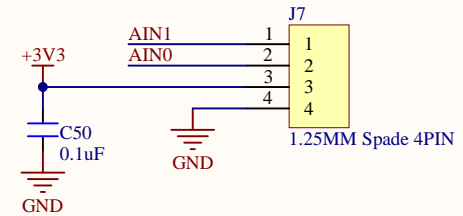
Title		
Size	Number	Revision
B		
Date:	8/25/2025	Sheet of
File:	C:\Users\j[6]-Motor Driver-2\SchDoc	Drawn By:



## 24-bit ADC Load Cell



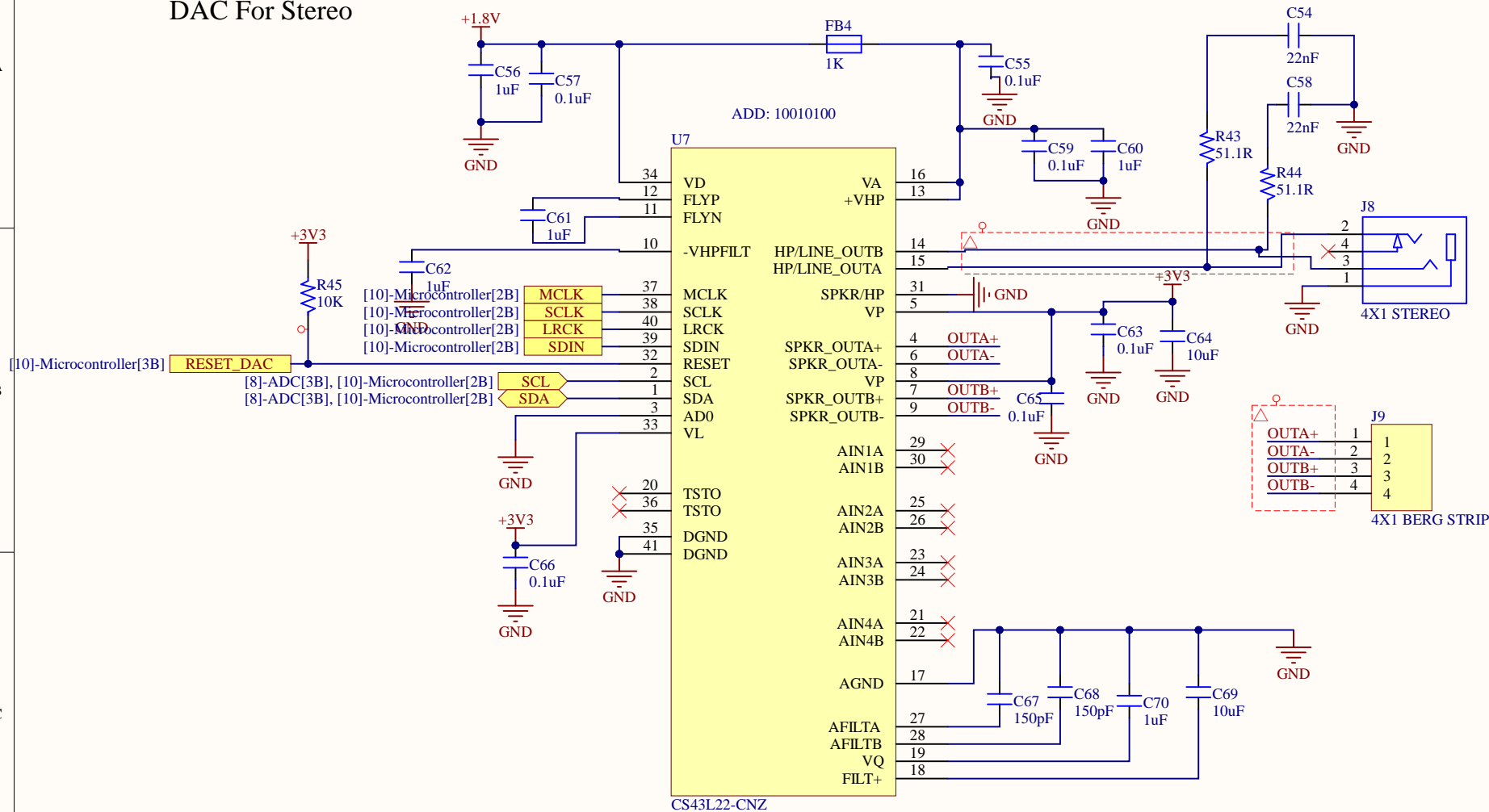
## Connector for Load Cell



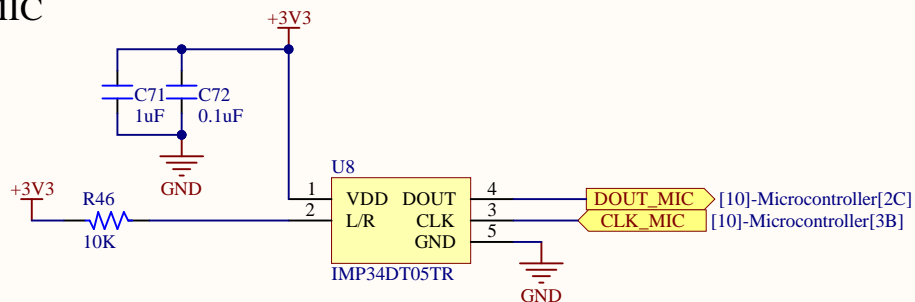
Title		
Size A	Number	Revision
Date:	8/25/2025	Sheet of
File:	C:\Users\...\[81-ADC.SchDoc	Drawn By:



## DAC For Stereo

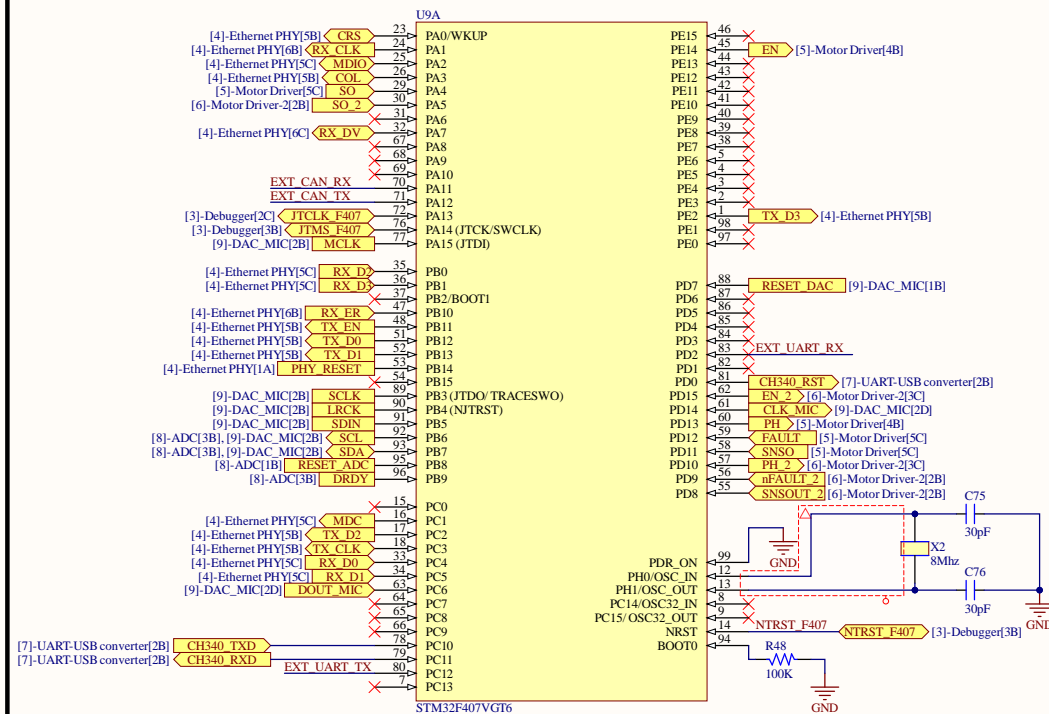


## MIC

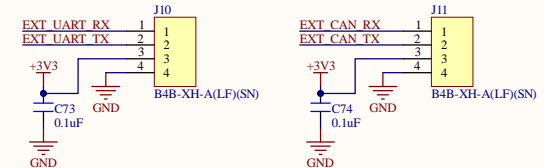


Title		
Size	Number	Revision
A		
Date:	8/25/2025	Sheet of
File:	C:\Users\...\[9]-DAC_MIC.SchDoc	Drawn By:

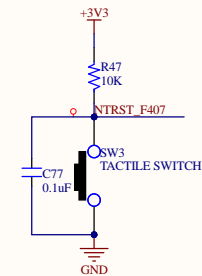
## STM32F407 Main Controller



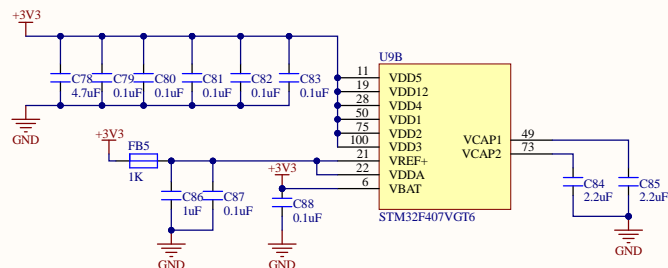
## UART and CAN Connector



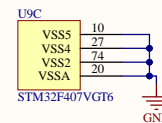
## Reset for Main Controller



## Main Controller VDD



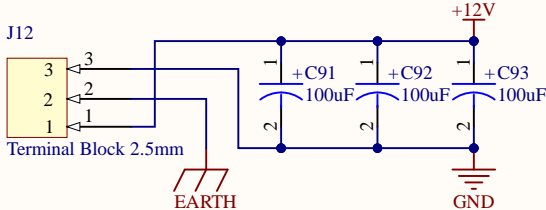
## Main Controller GND



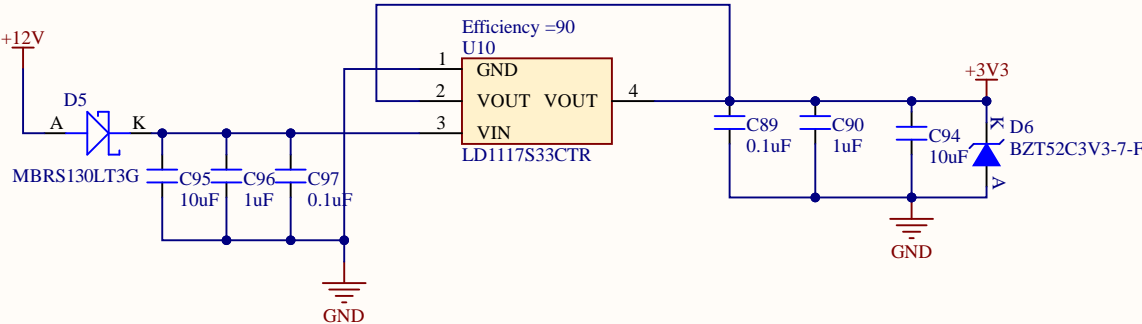
Title			
Size B	Number		Revision
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File:	C:\Users\...[10]-Microcontroller.SchDoc	Drawn By:	

# Power Supply

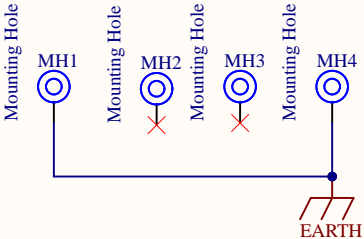
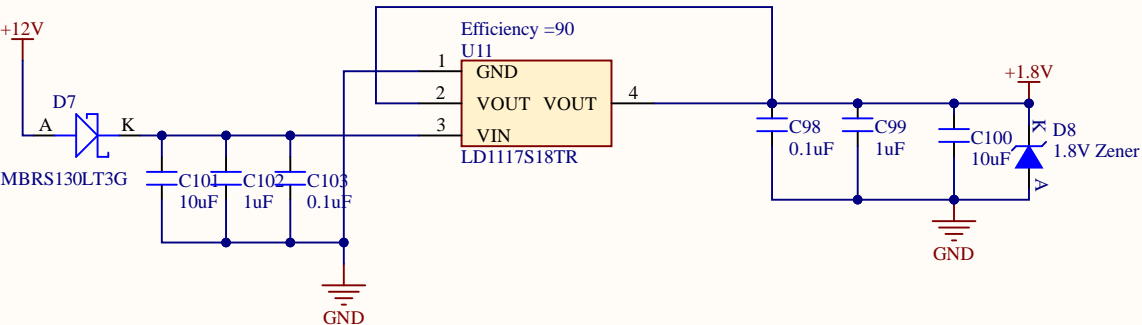
I/P Power Connector



+3V3 Regulator



+1V8 Regulator



Title		
Size	Number	Revision
A		
Date:	8/25/2025	Sheet of
File:	C:\Users\...\[11]-Power Input & Regulators.Dwg	
Drawn By:		