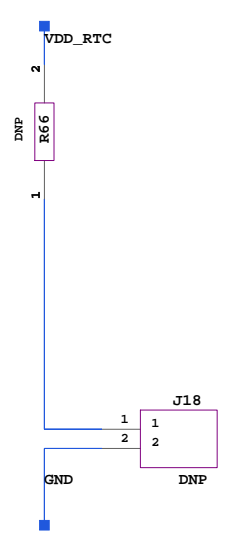
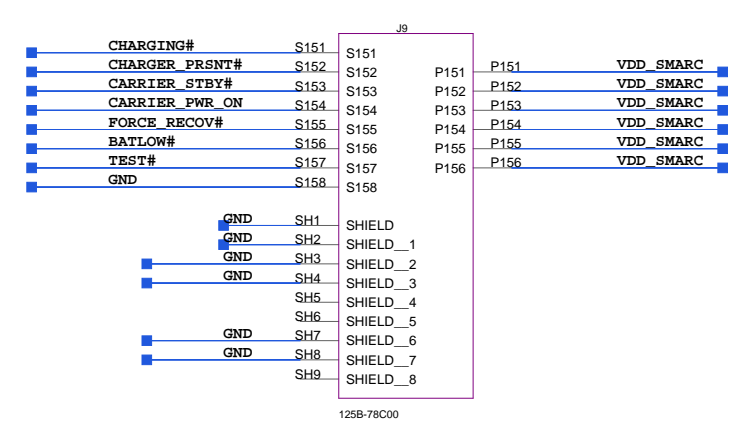
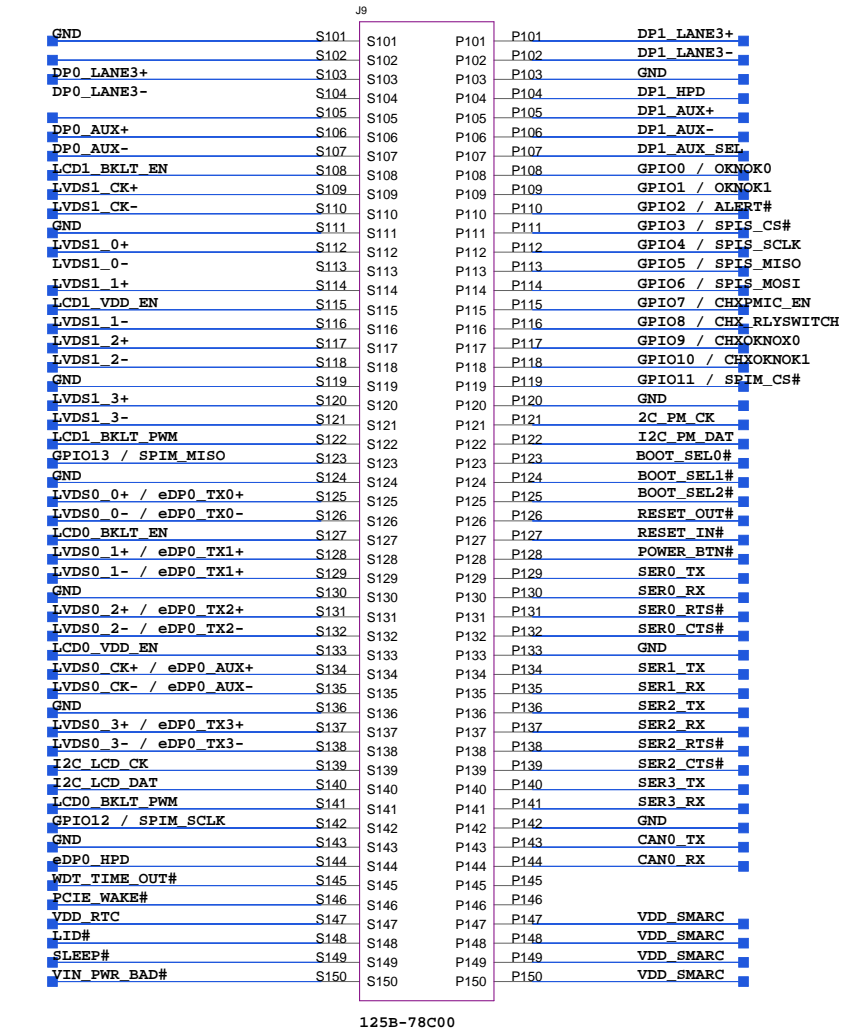
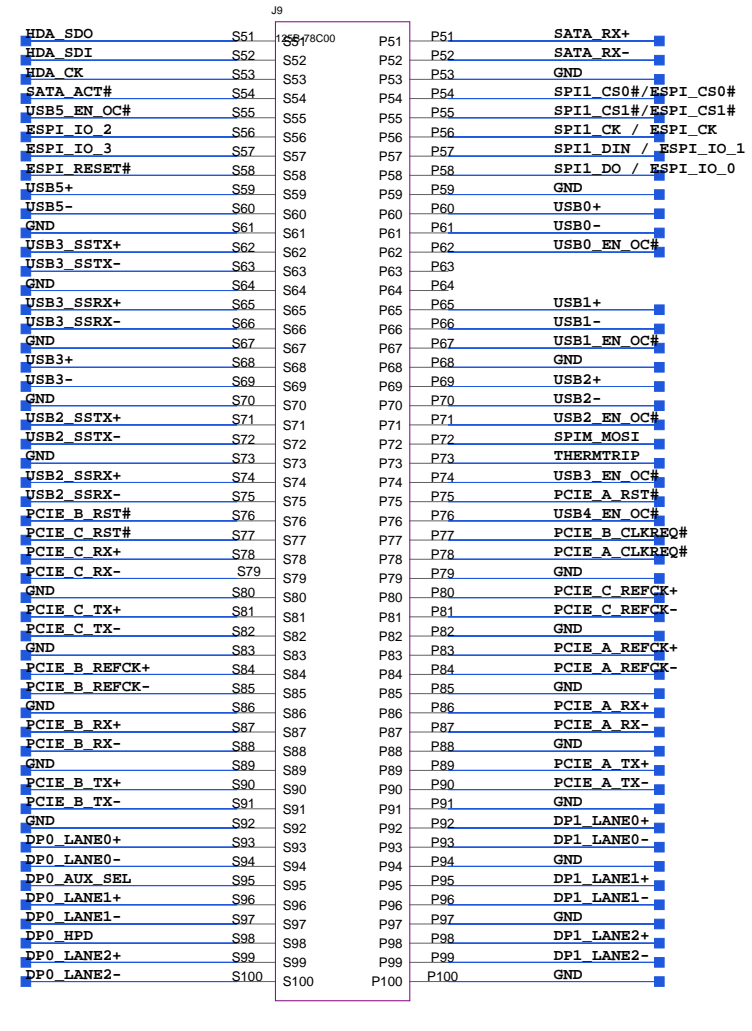
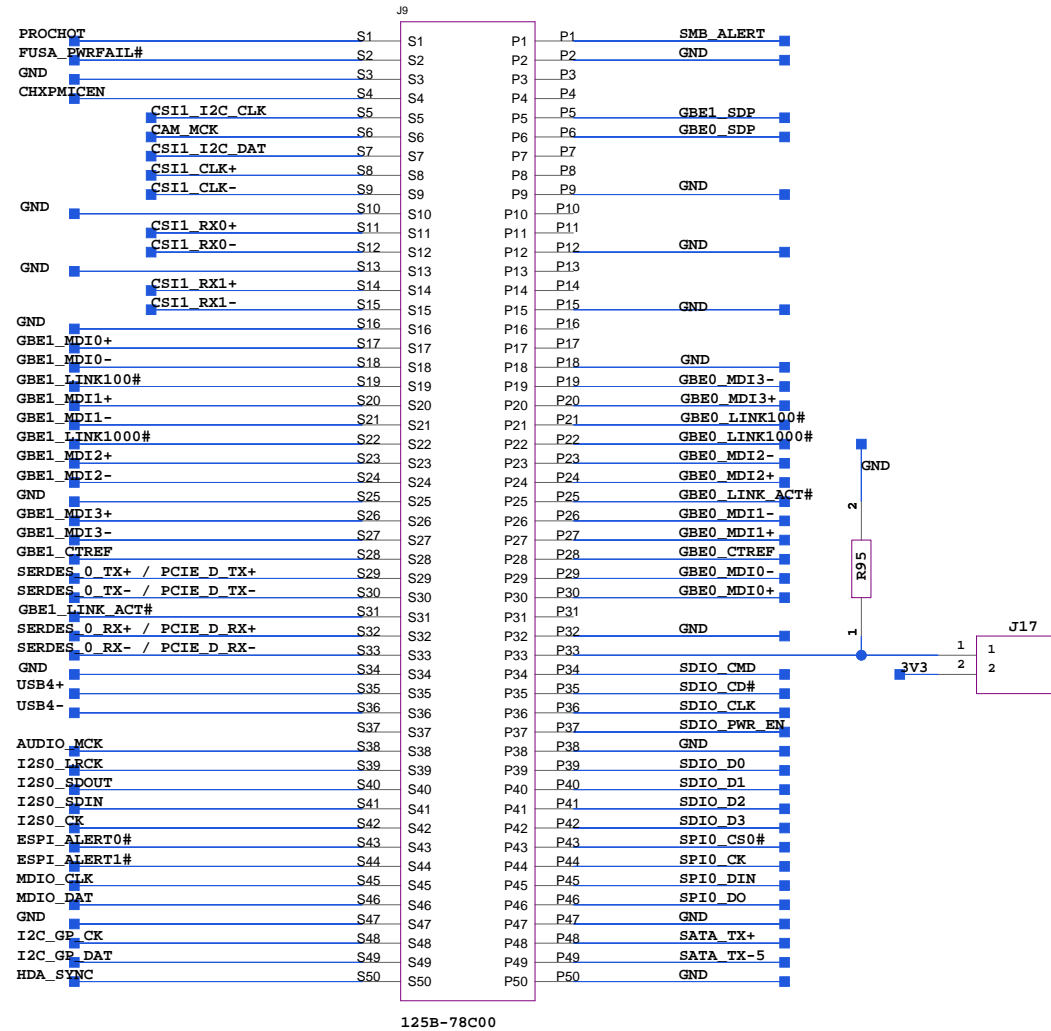



SMARC Connector

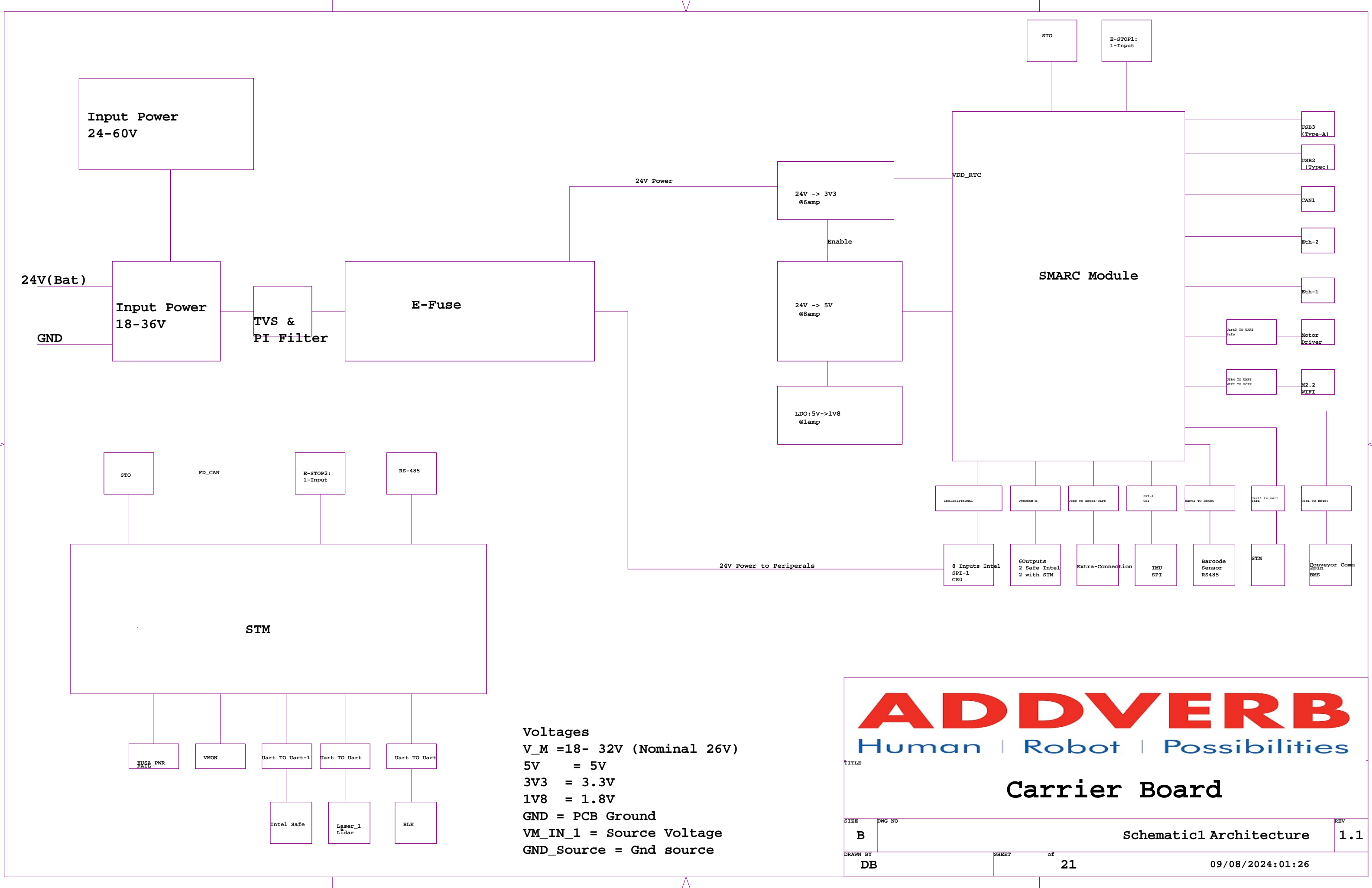


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Carrier Board

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1. Architecture (Block Diagram)
2. Power Tree
3. Schematic (Smarc Connector, Power, I/O Signals) 4-15
4. Revision History

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TITLE Carrier Board			
SIZE B	DWG NO	Schematic1 Index	REV 1.1
DRAWN BY Divyanshu Bawa	SHEET 21	09/08/2024:01:26	



Voltages
 V_M =18- 32V (Nominal 26V)
 5V = 5V
 3V3 = 3.3V
 1V8 = 1.8V
 GND = PCB Ground
 VM_IN_1 = Source Voltage
 GND_Source = Gnd source

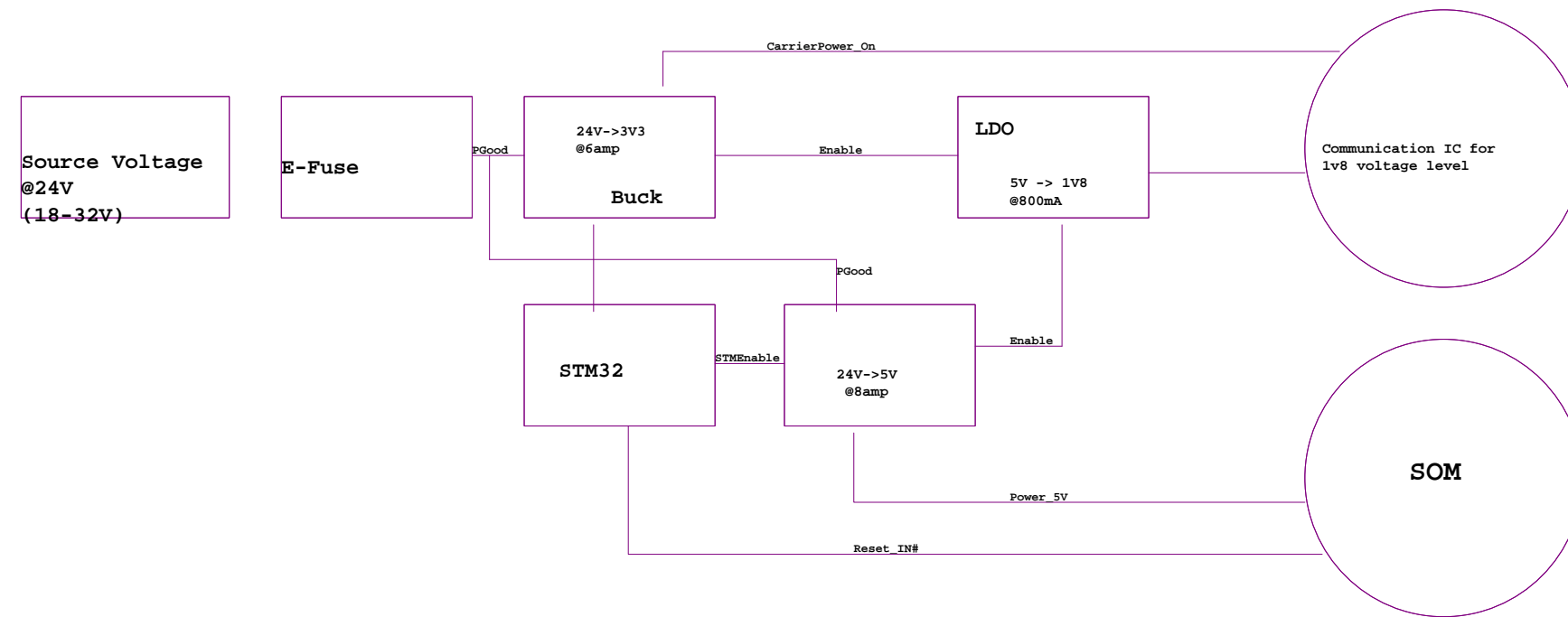
ADDVERB
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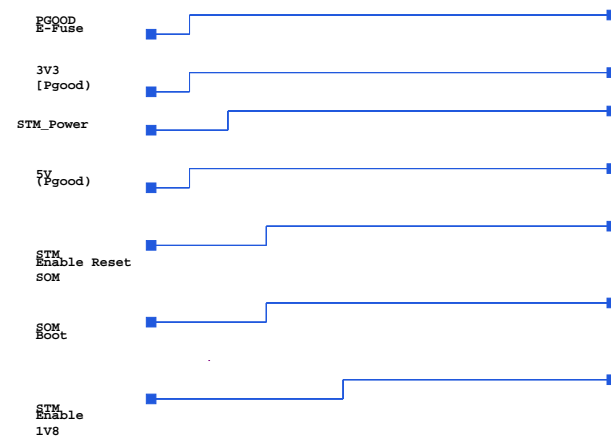
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DRAWN BY		SHEET		REV
DB		21		09/08/2024:01:26

Schematic Architecture

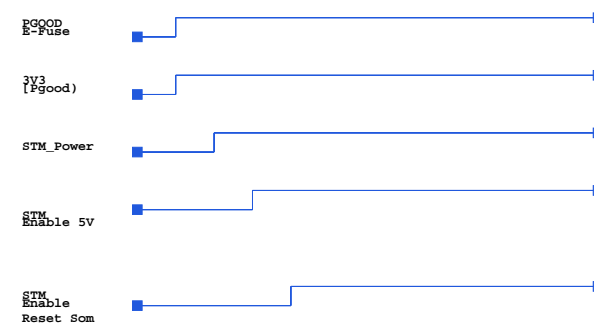
Power Tree sequencing



Option 1



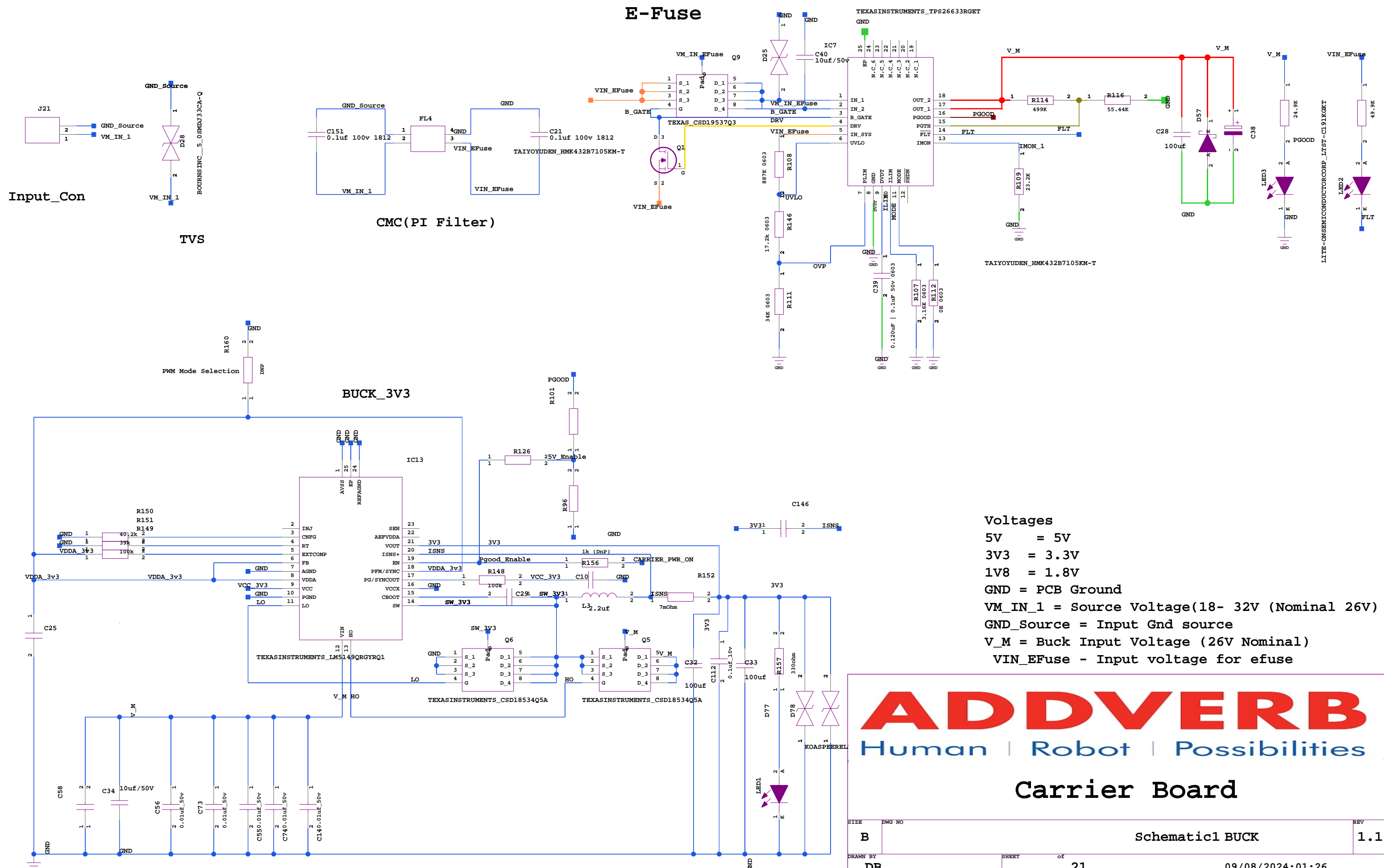
Option 2



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Carrier Board

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DRAWN BY	SHEET	of	
DB		21	09/08/2024:01:26



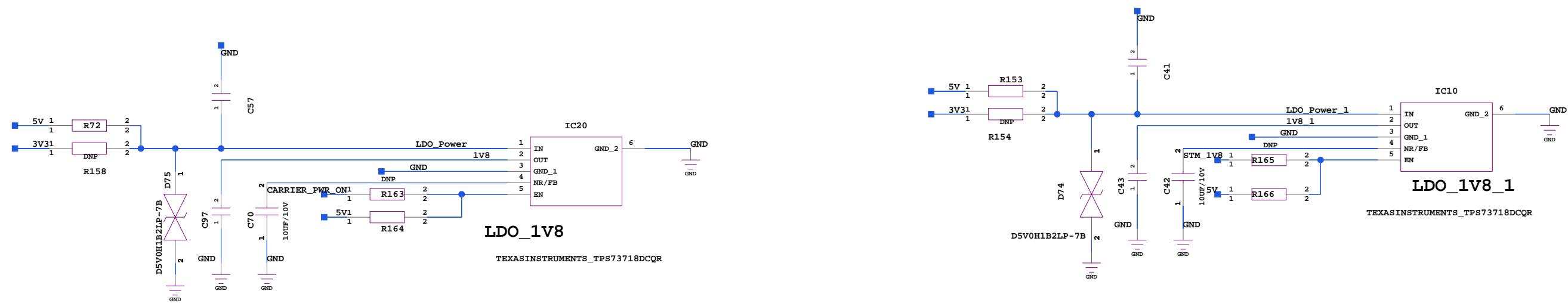
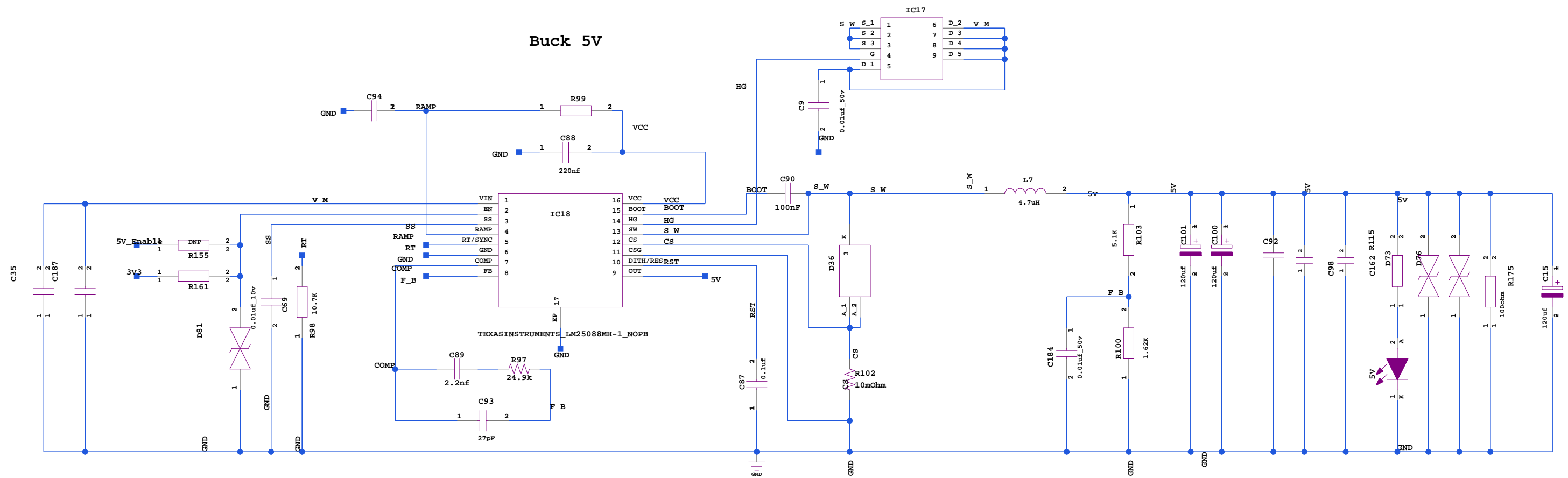
Voltages
 5V = 5V
 3V3 = 3.3V
 1V8 = 1.8V
 GND = PCB Ground
 VM_IN_1 = Source Voltage(18- 32V (Nominal 26V))
 GND_Source = Input Gnd source
 V_M = Buck Input Voltage (26V Nominal)
 VIN_EFuse - Input voltage for efuse

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Carrier Board

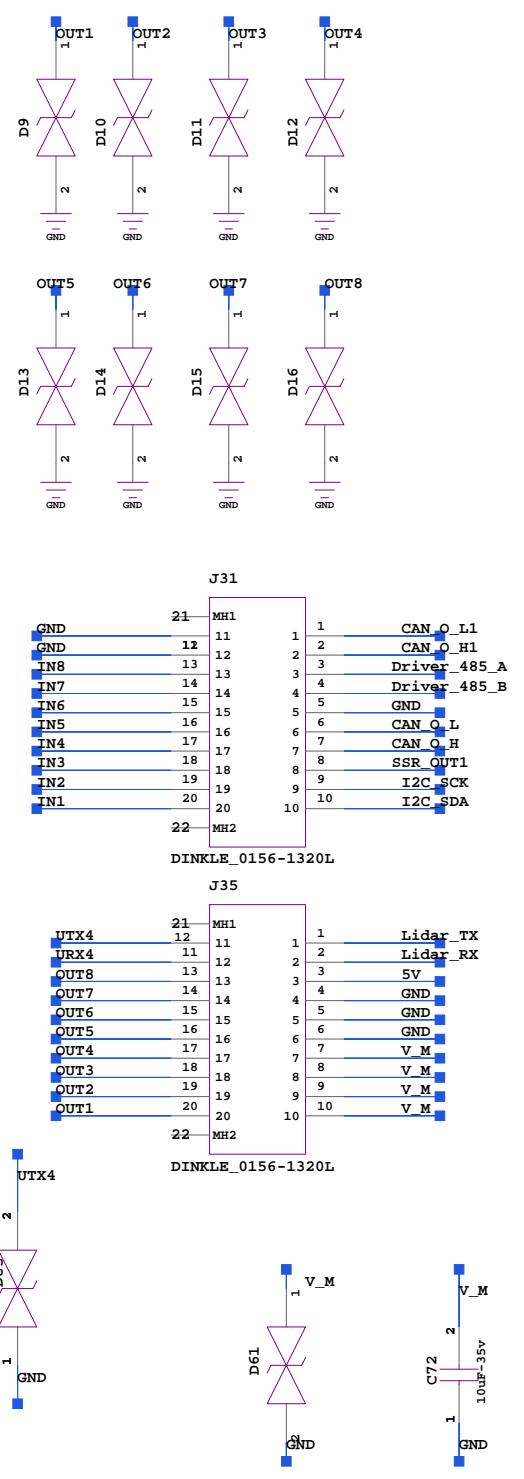
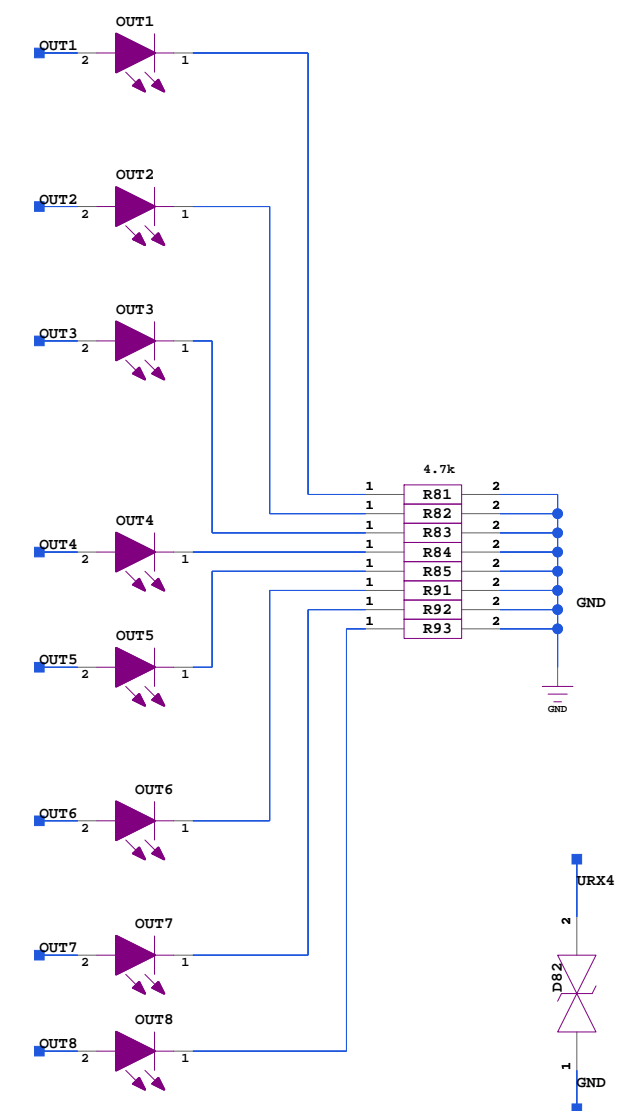
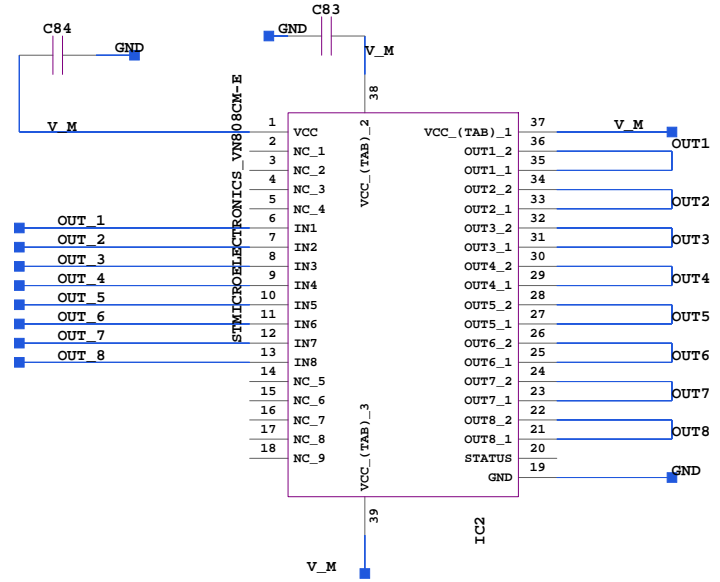
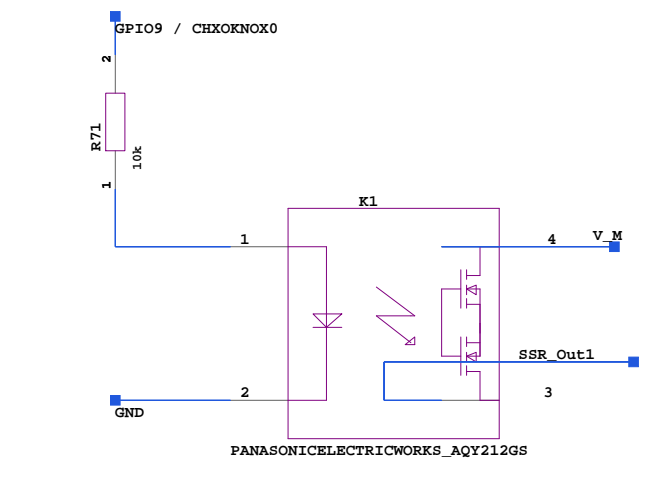
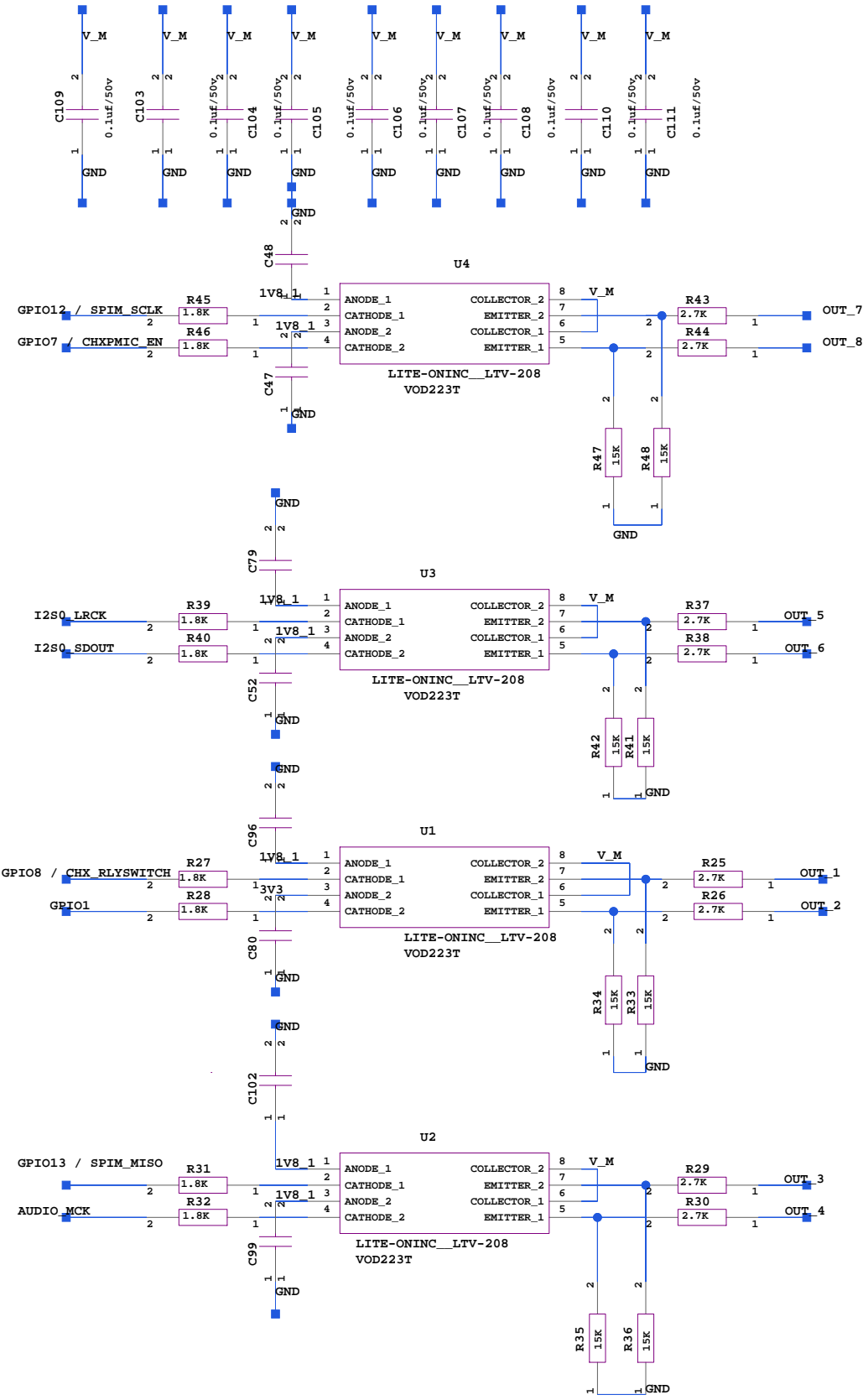
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B		1.1
DRAWN BY	SHEET	of
DB	21	09/08/2024:01:26

Schematic1 BUCK



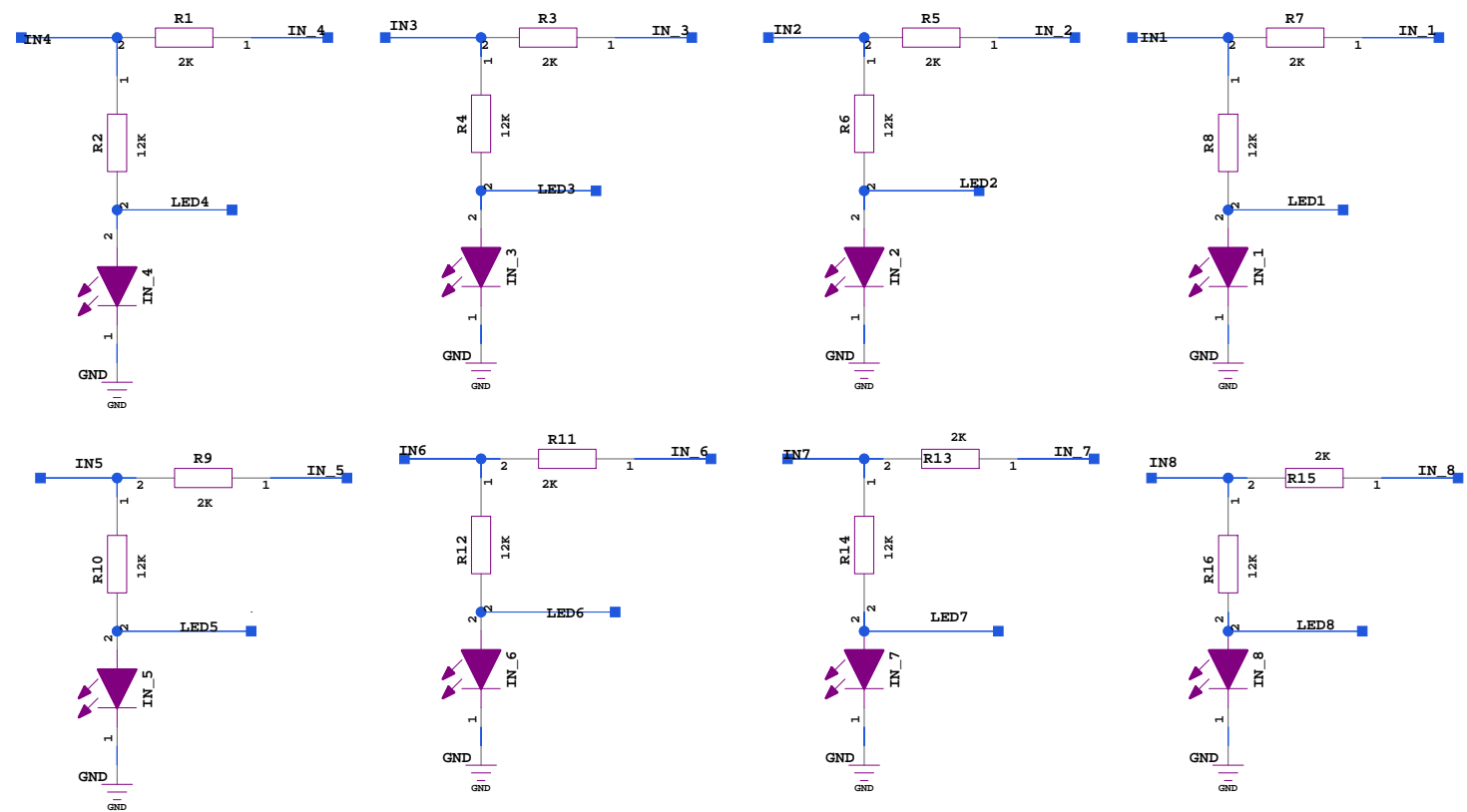
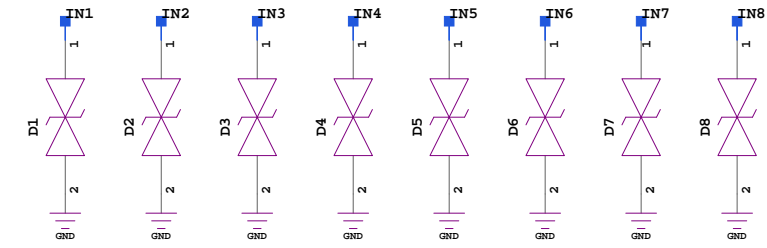
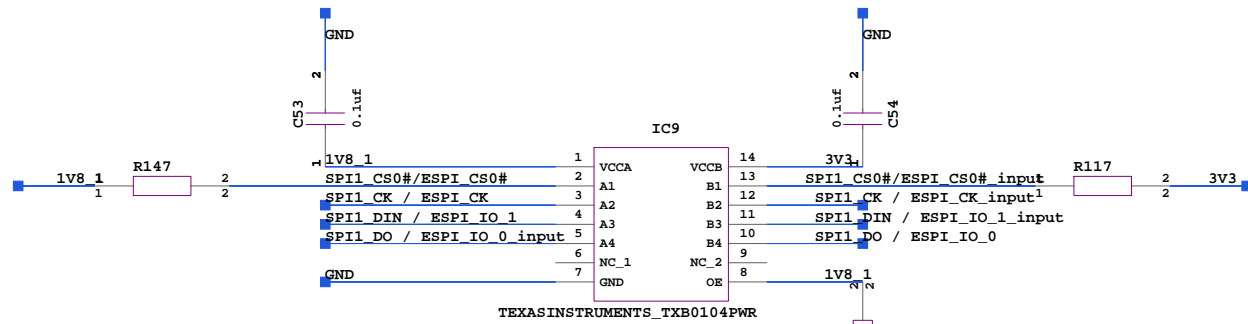
ADDVERB
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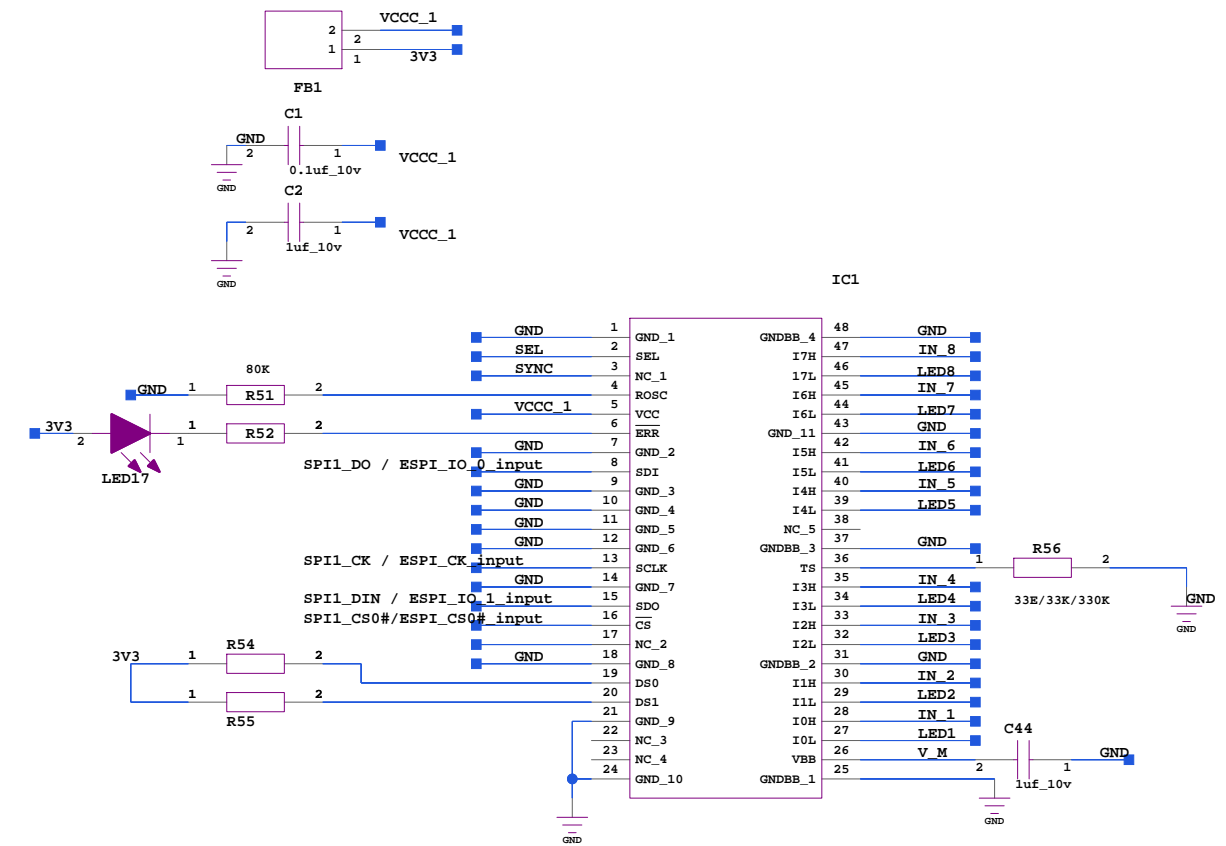


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 Carrier Board

INPUTS

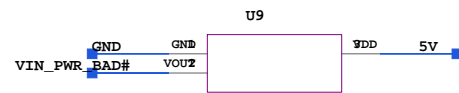
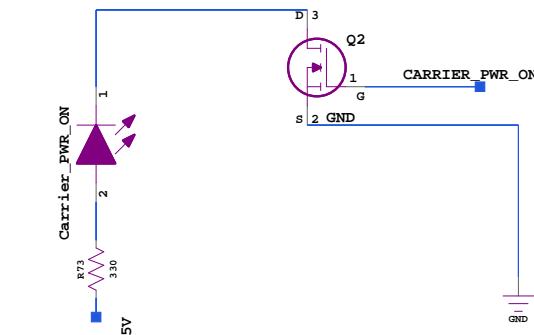
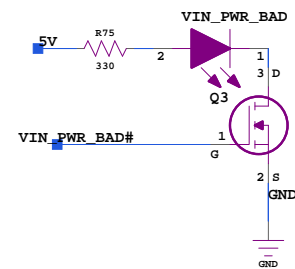
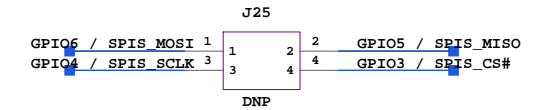
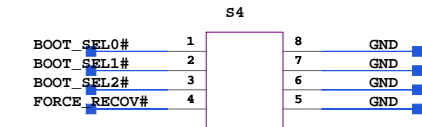
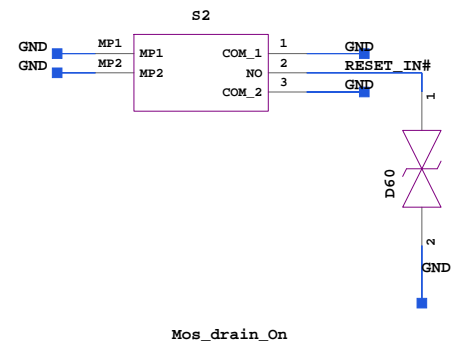


VCCC_1 = Voltage input to input IC (3V3)

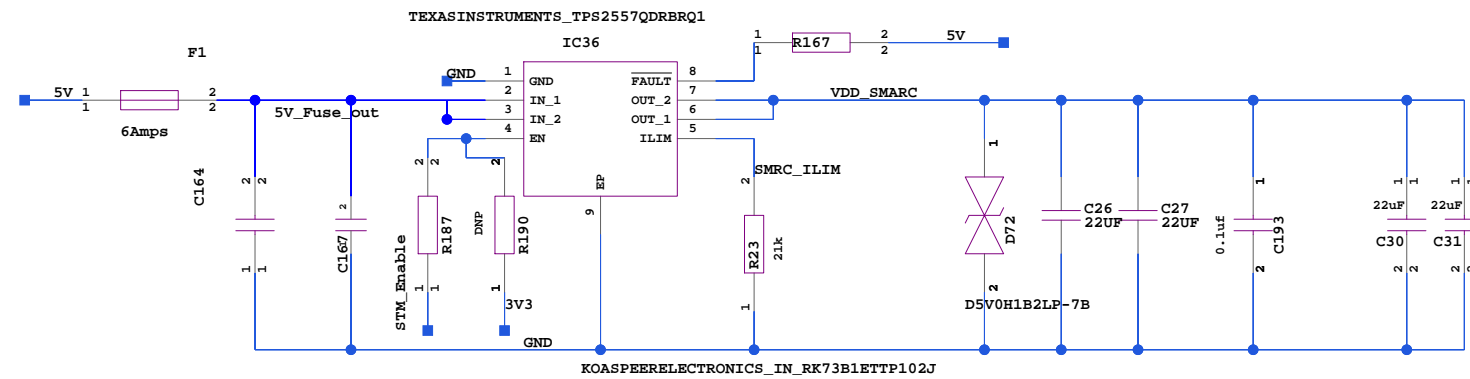
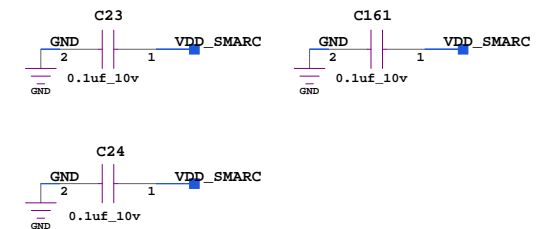


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Carrier Board



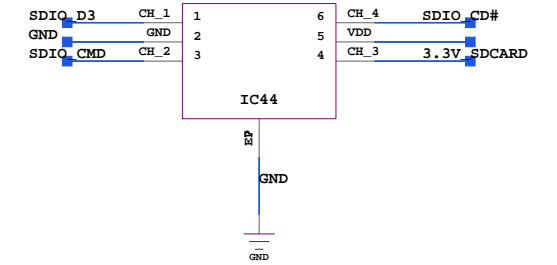
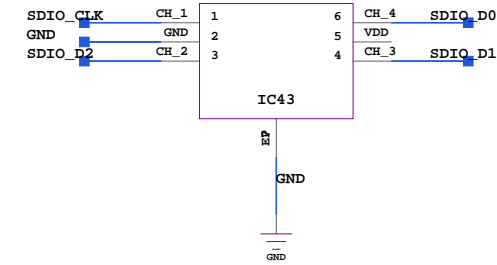
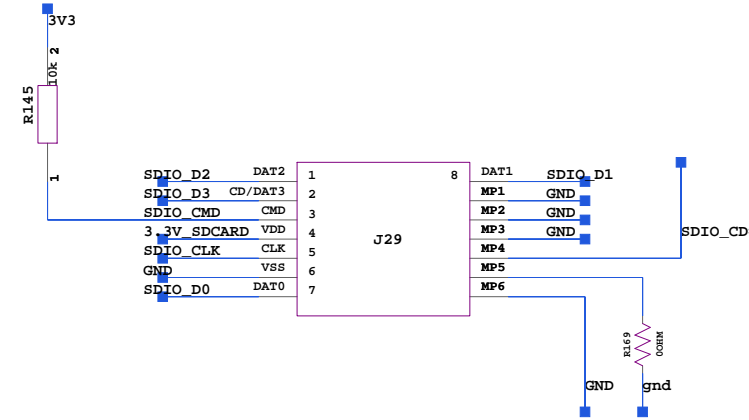
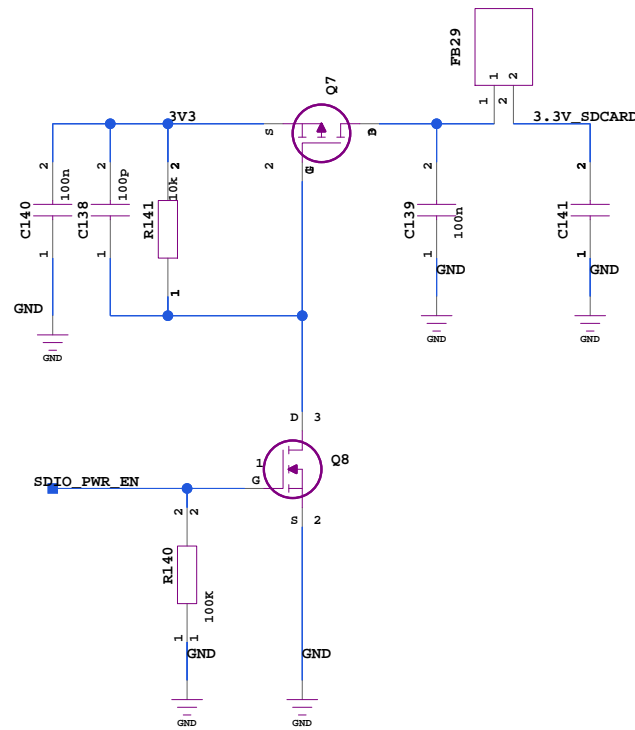
Decoupling cap



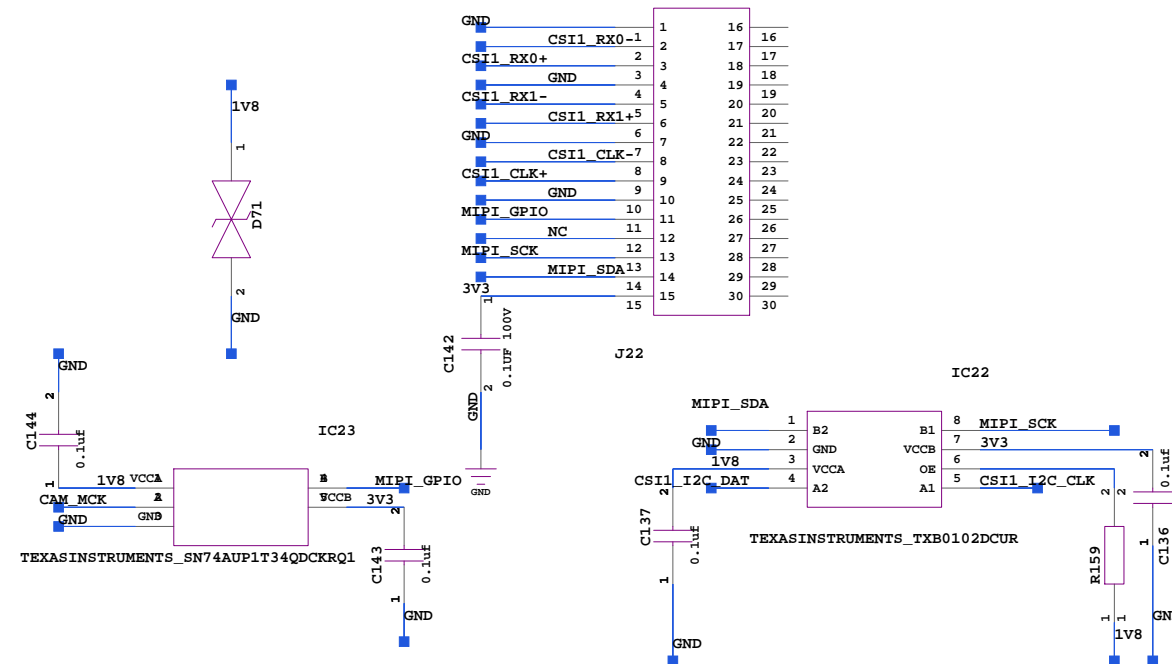
ADDVERB
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Carrier Board

SIZE	DWG NO	REV
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DRAWN BY	SHEET	of
DB	21	12/08/2024:22:42

SD CARD

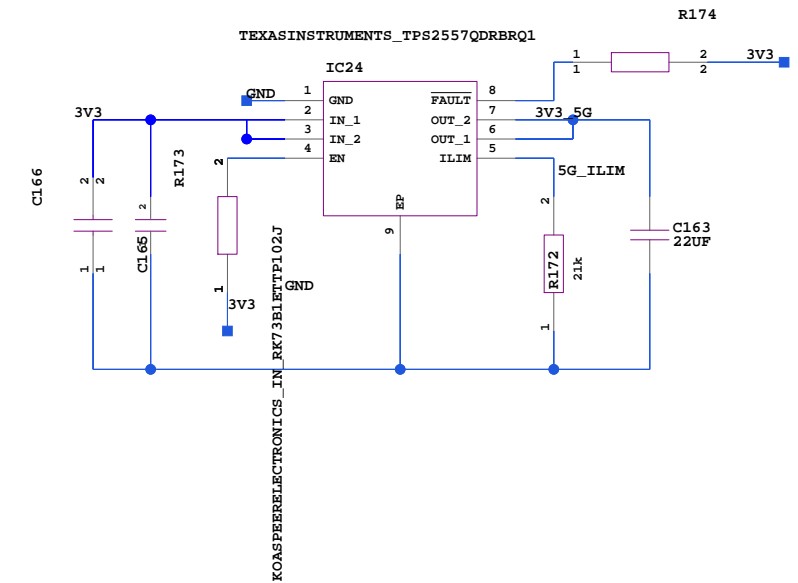
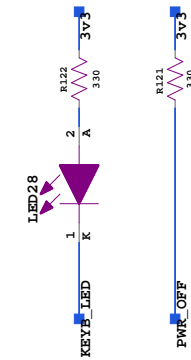
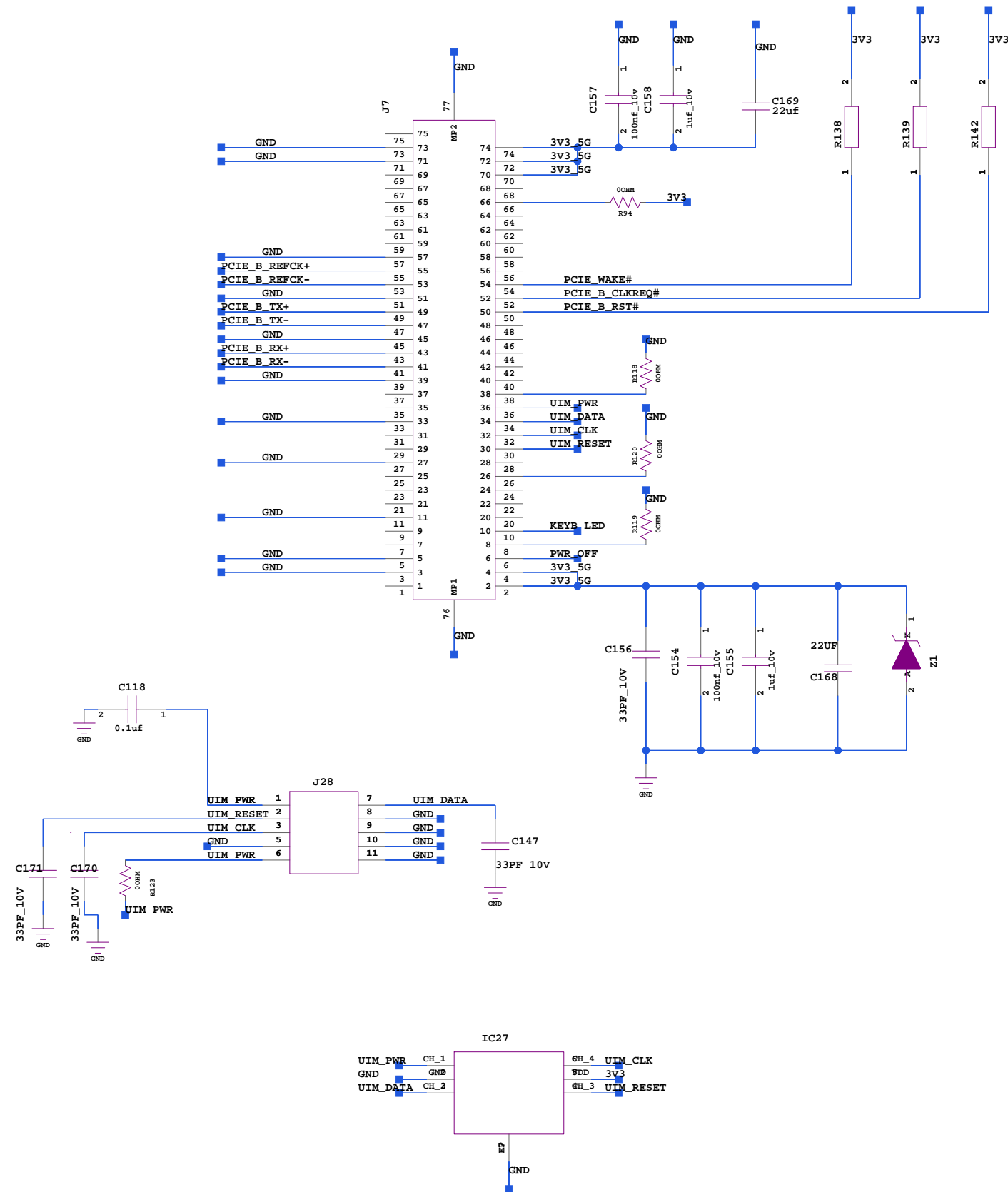


MIPI



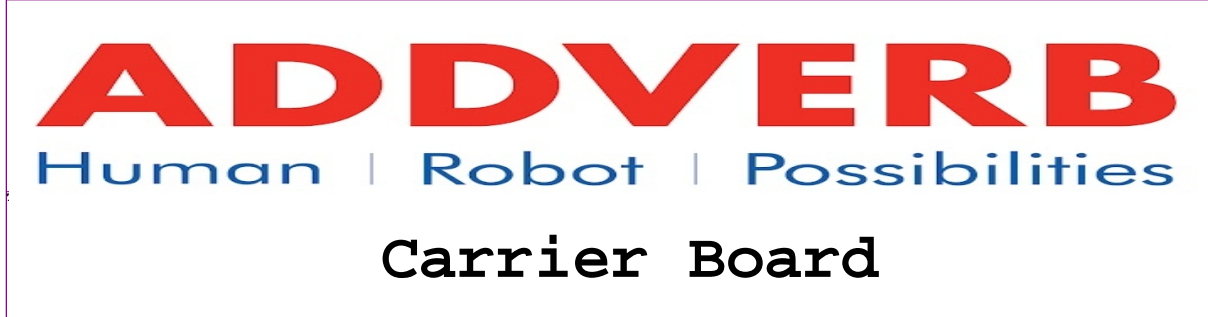
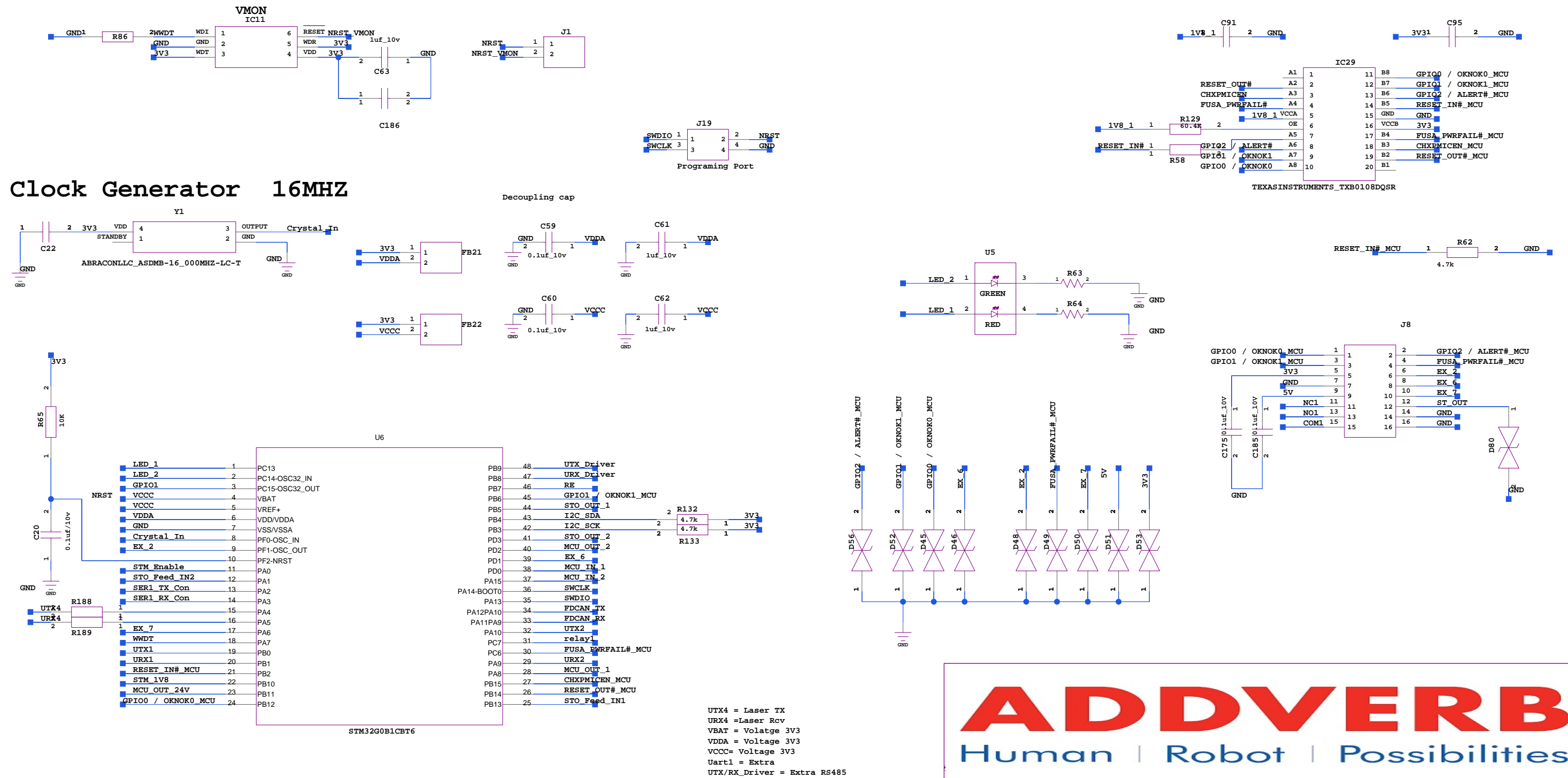
ADDVERB
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5G

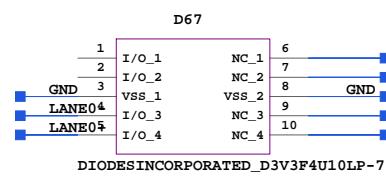
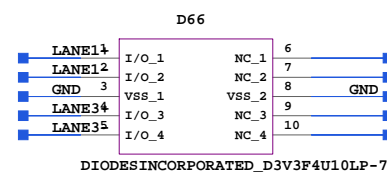
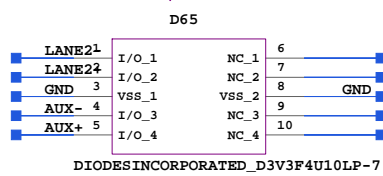
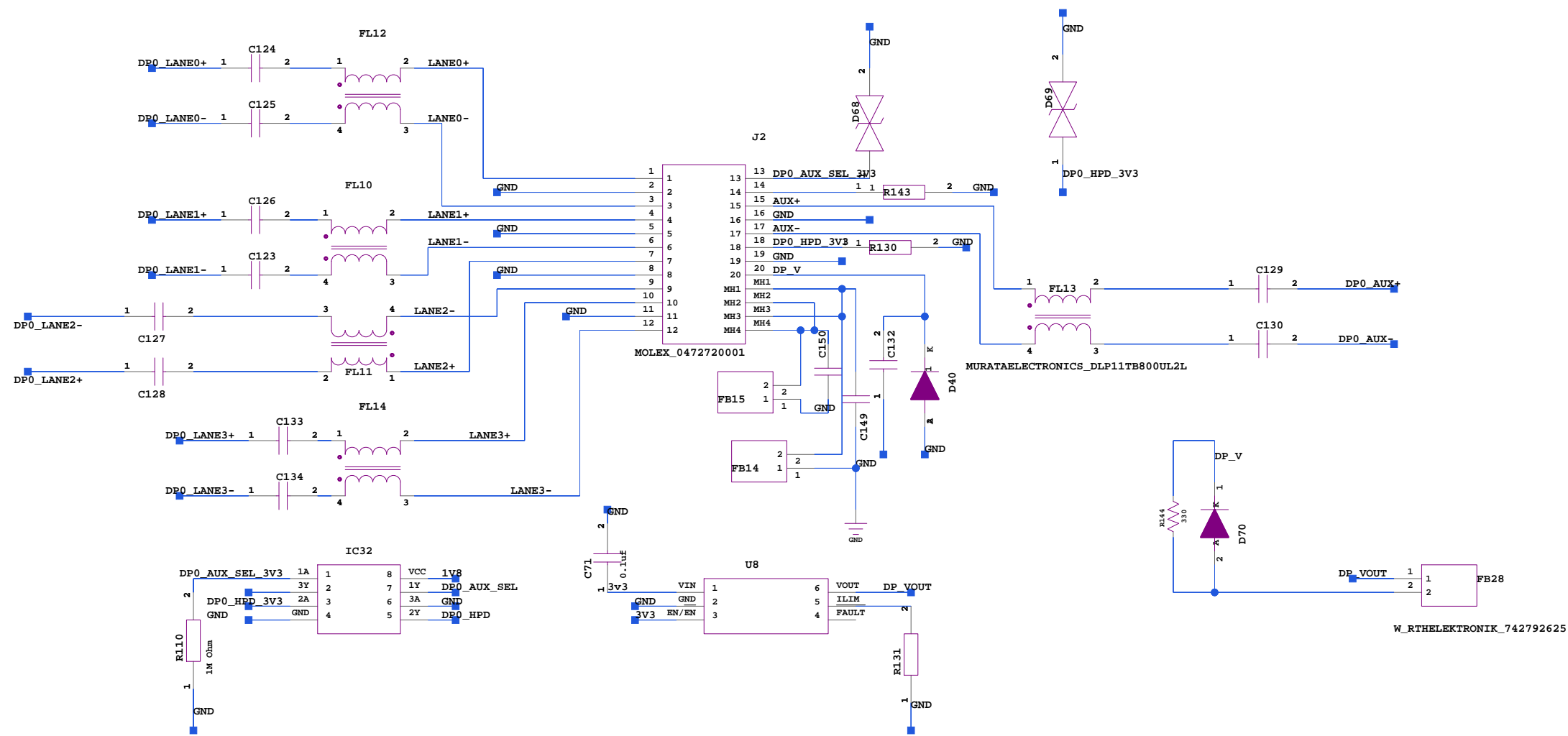


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Carrier Board

Safety MCU



Display Port



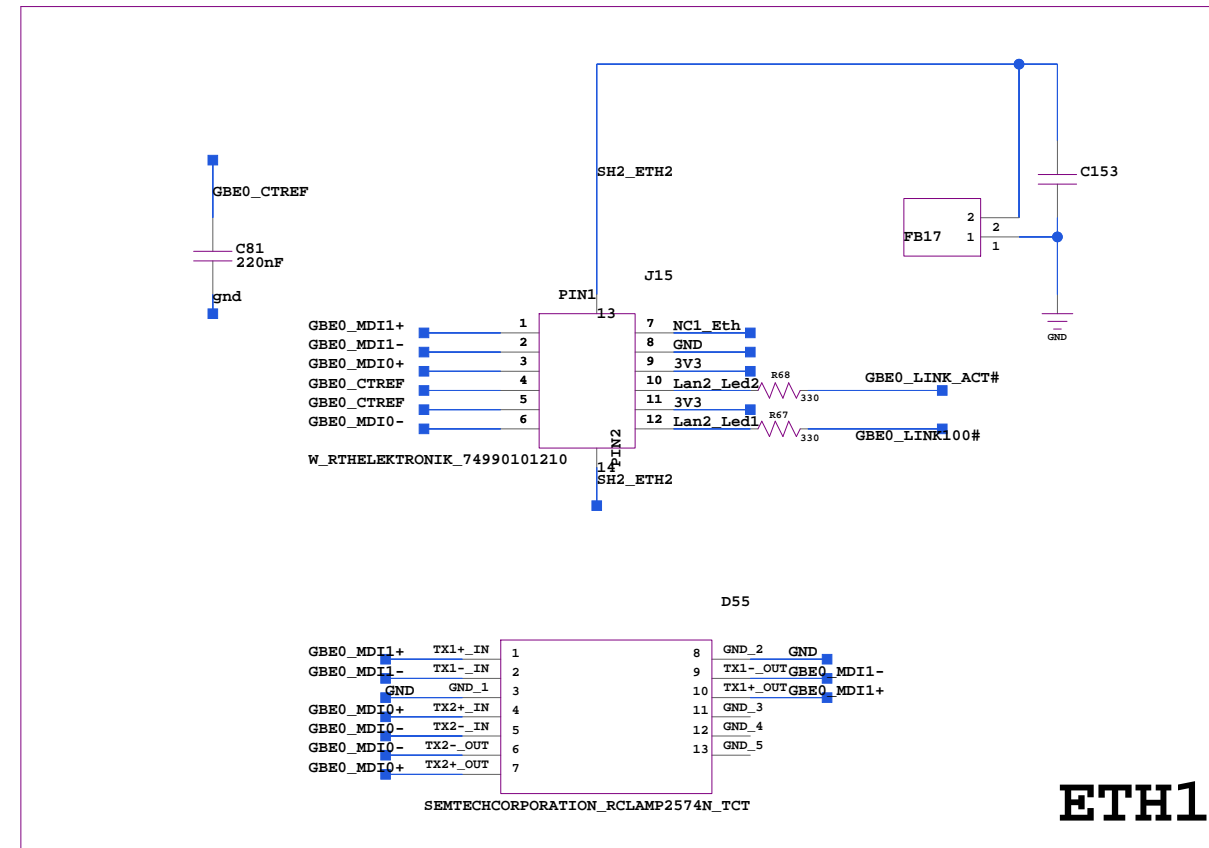
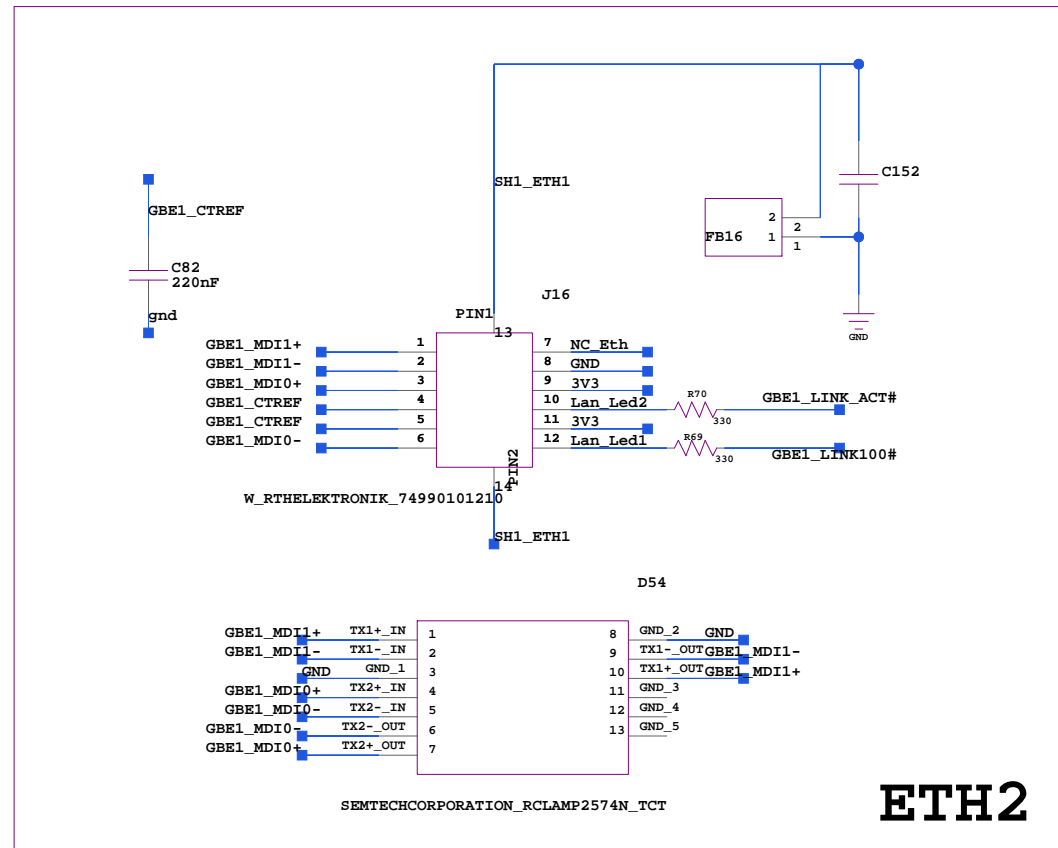
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Carrier Board

SIZE B	DWG NO	REV 1.1
DRAWN BY DB	SHEET 21	of 21
Schematic1 DP		09/08/2024:01:26

Ethernet

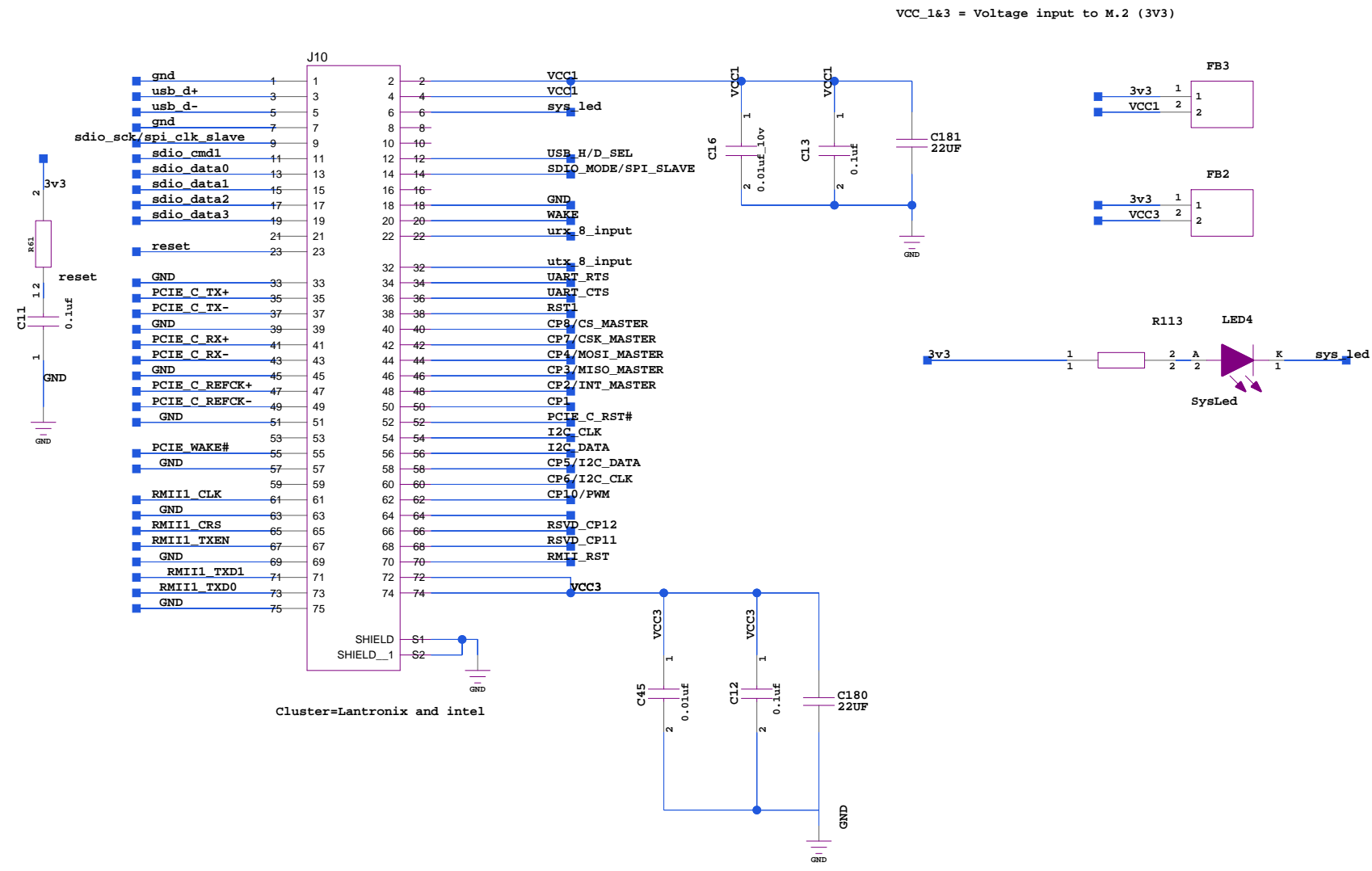


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Carrier Board

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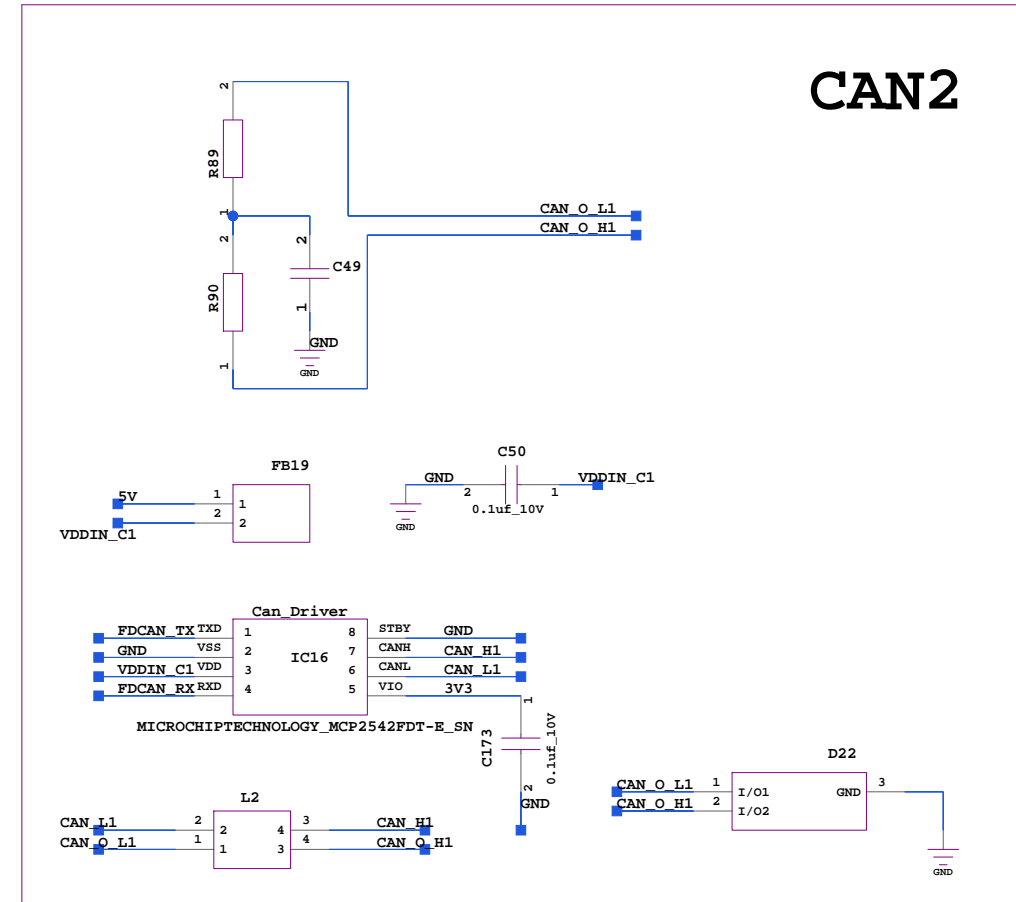
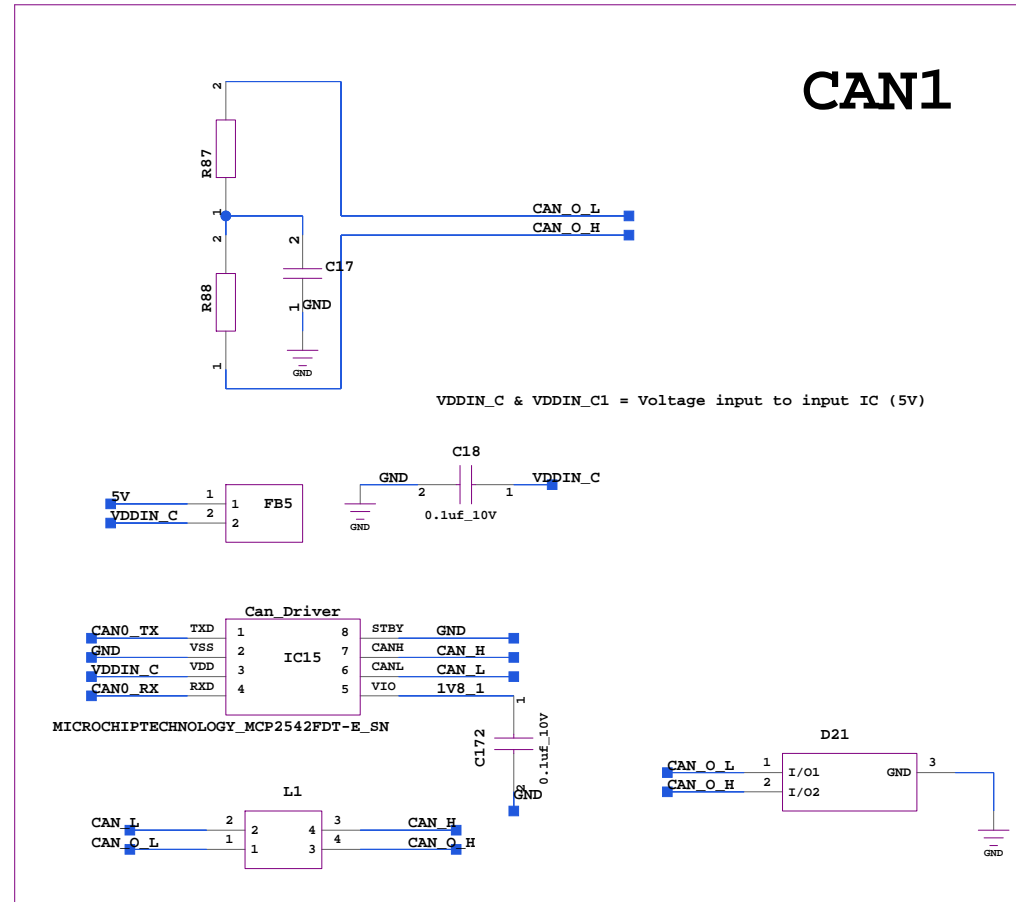
WIFI



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Carrier Board

SIZE	DWG NO	REV
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Schematic1 WIFI		
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DB	21	
09/08/2024:01:26		

CAN



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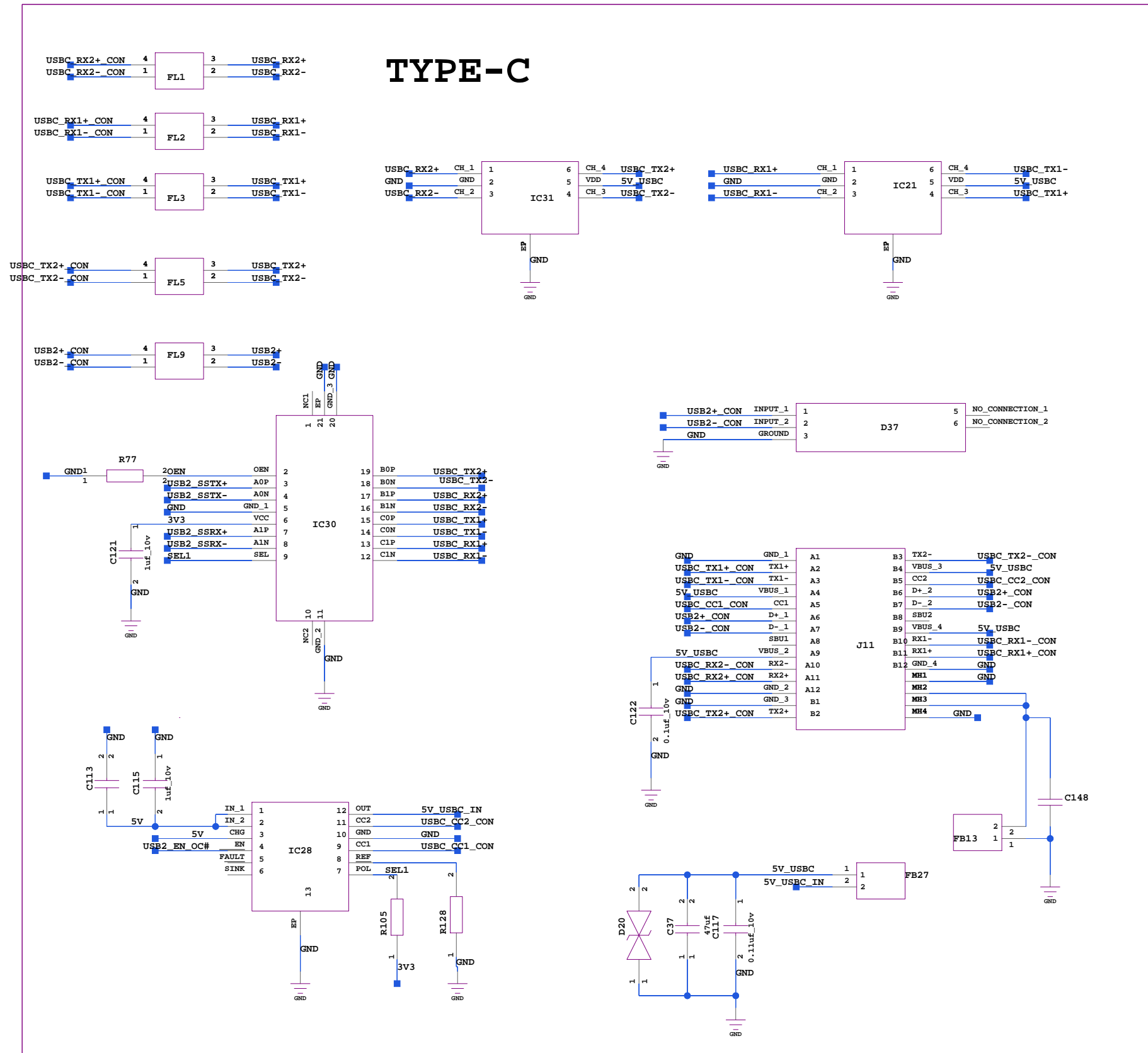
Carrier Board

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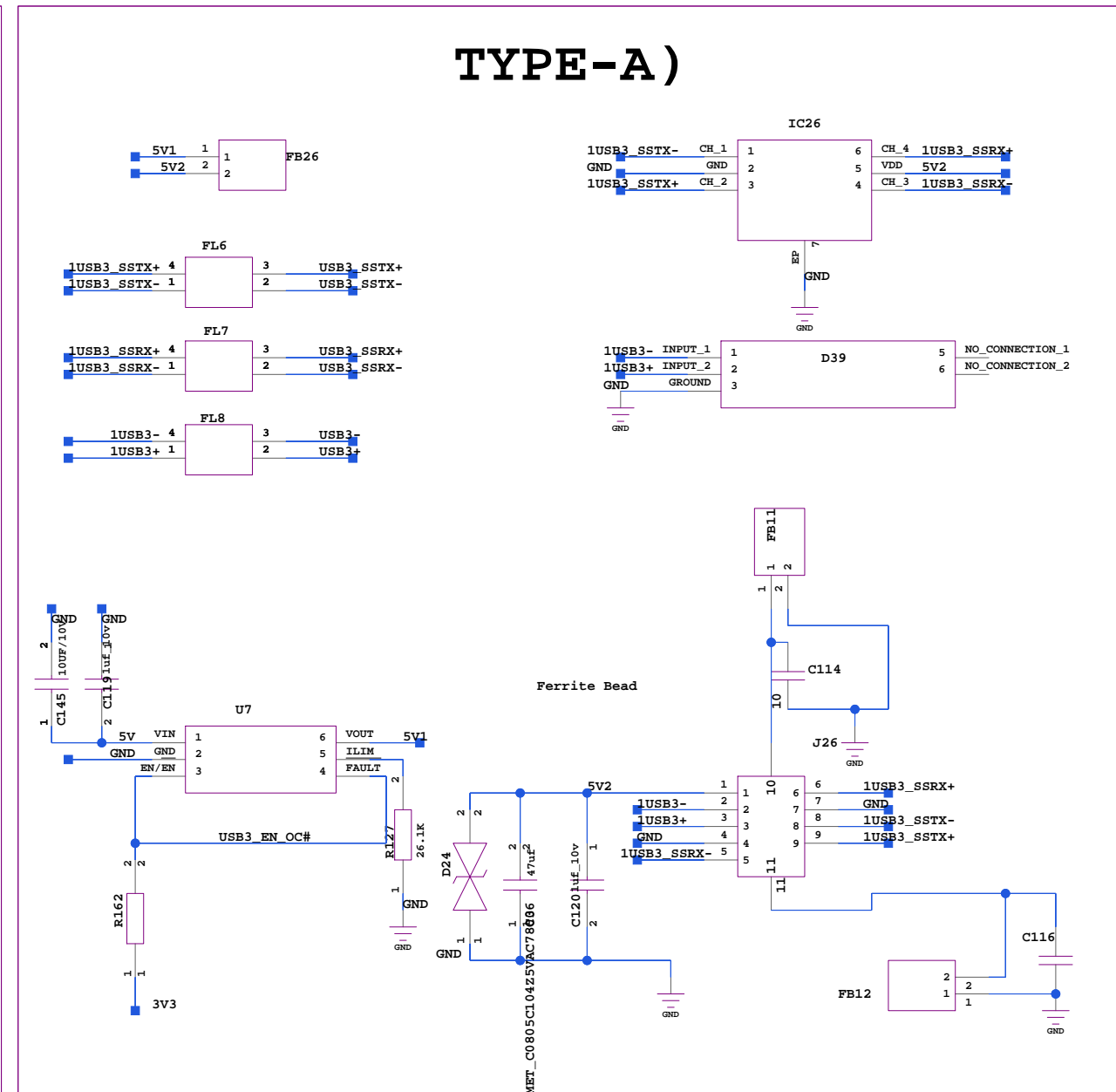
Schematic1 CAN

USB 3.0

TYPE-C



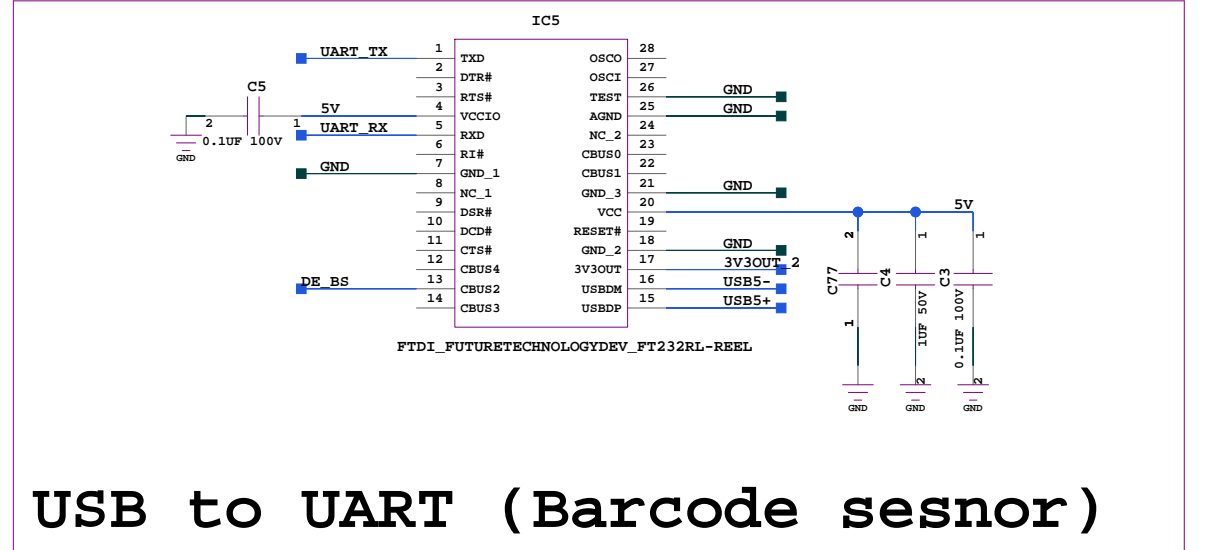
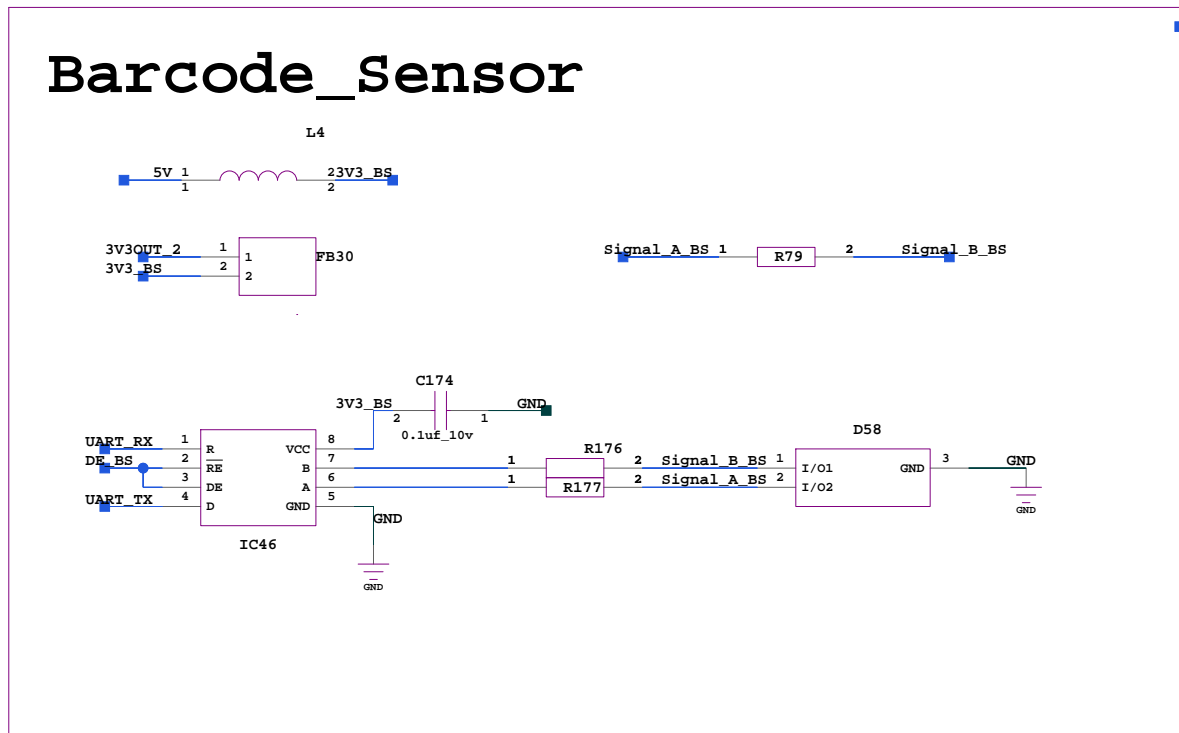
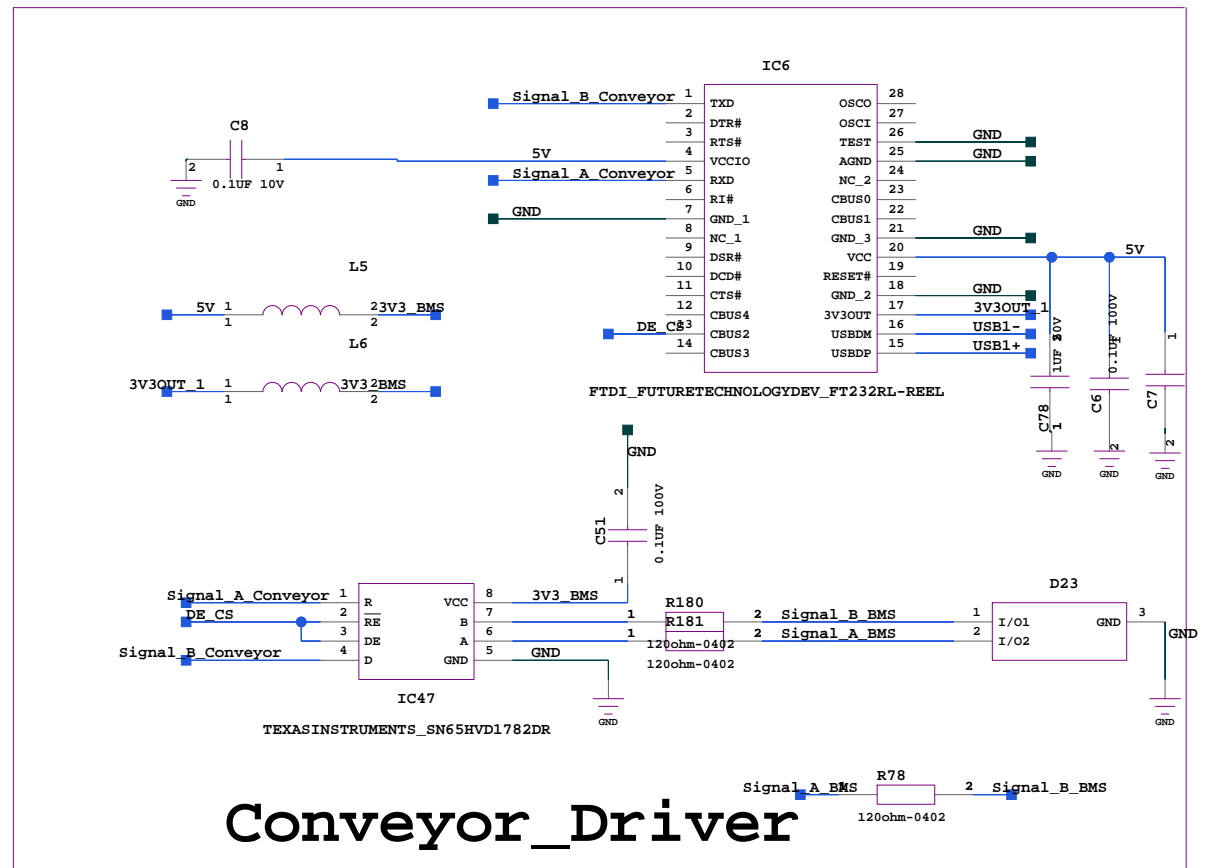
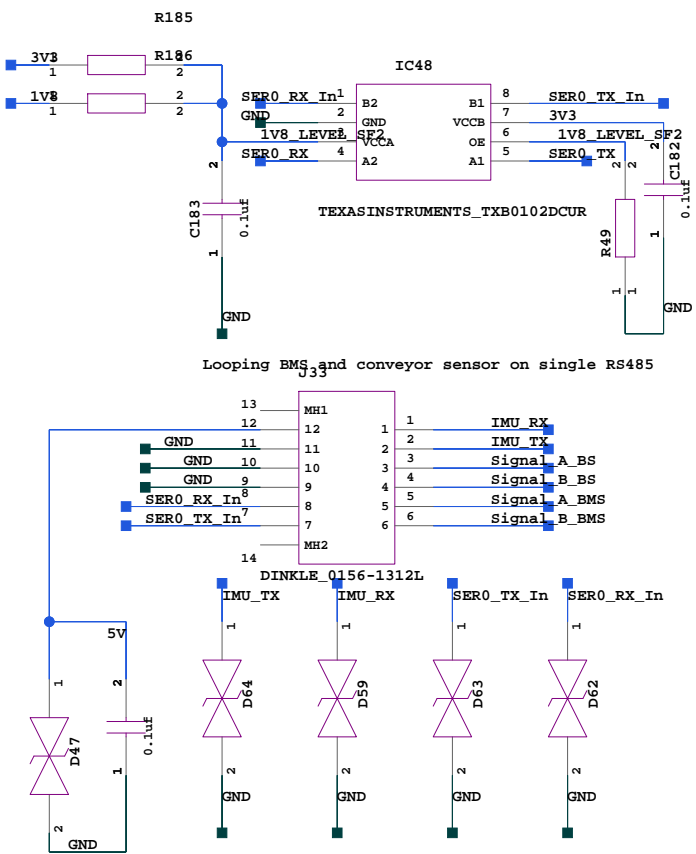
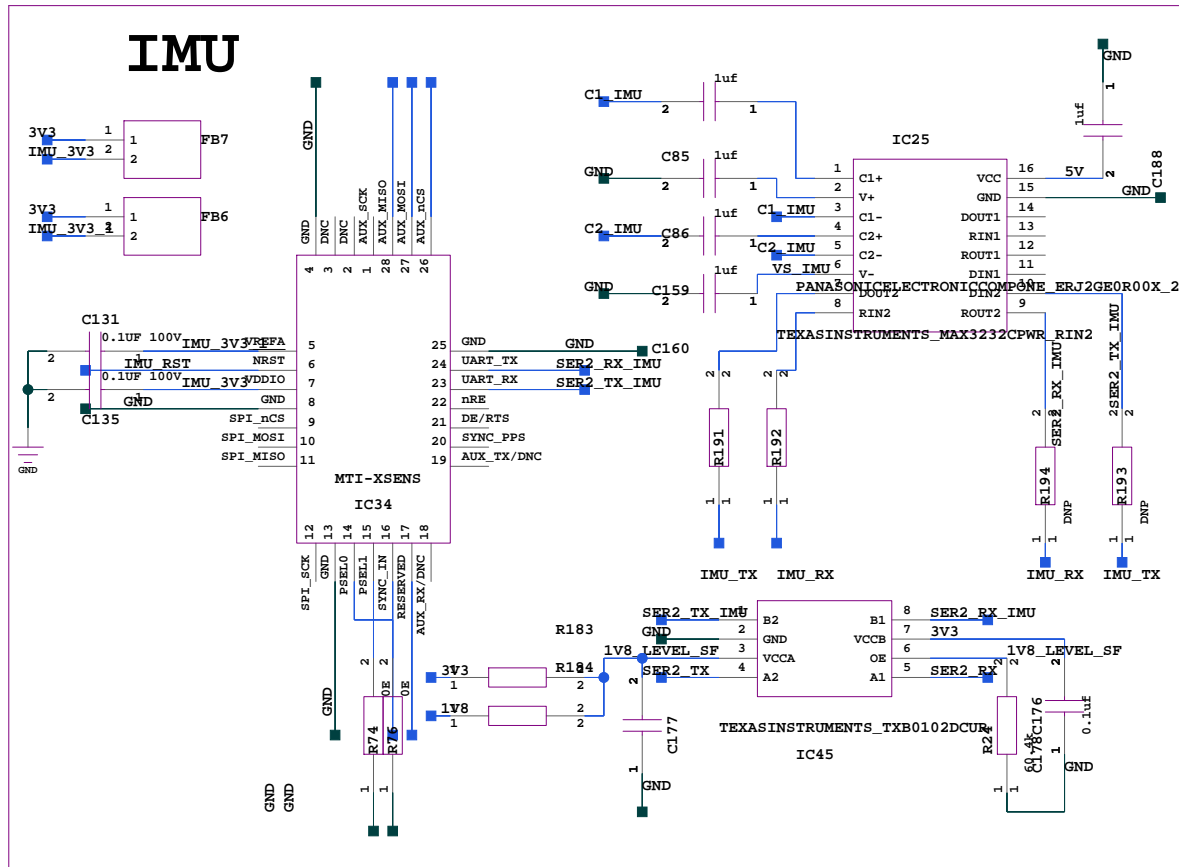
TYPE-A)



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Carrier Board

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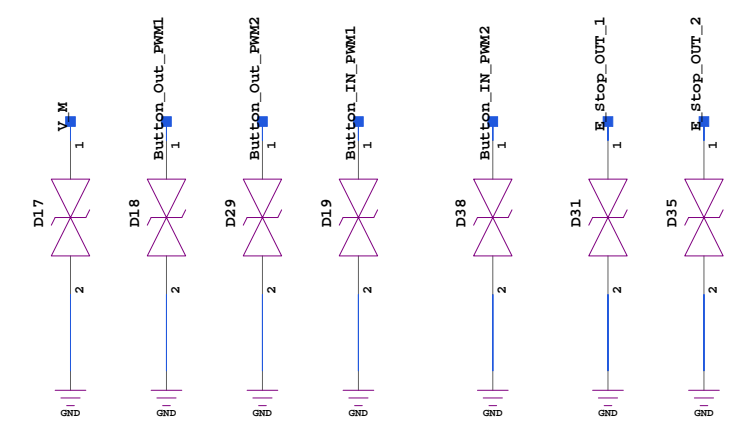
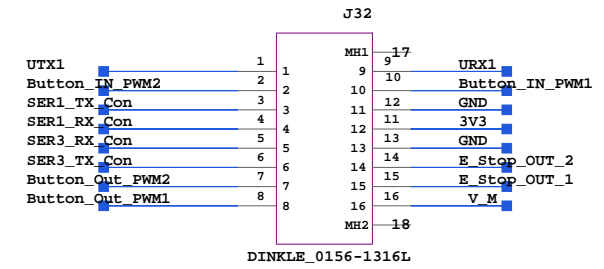
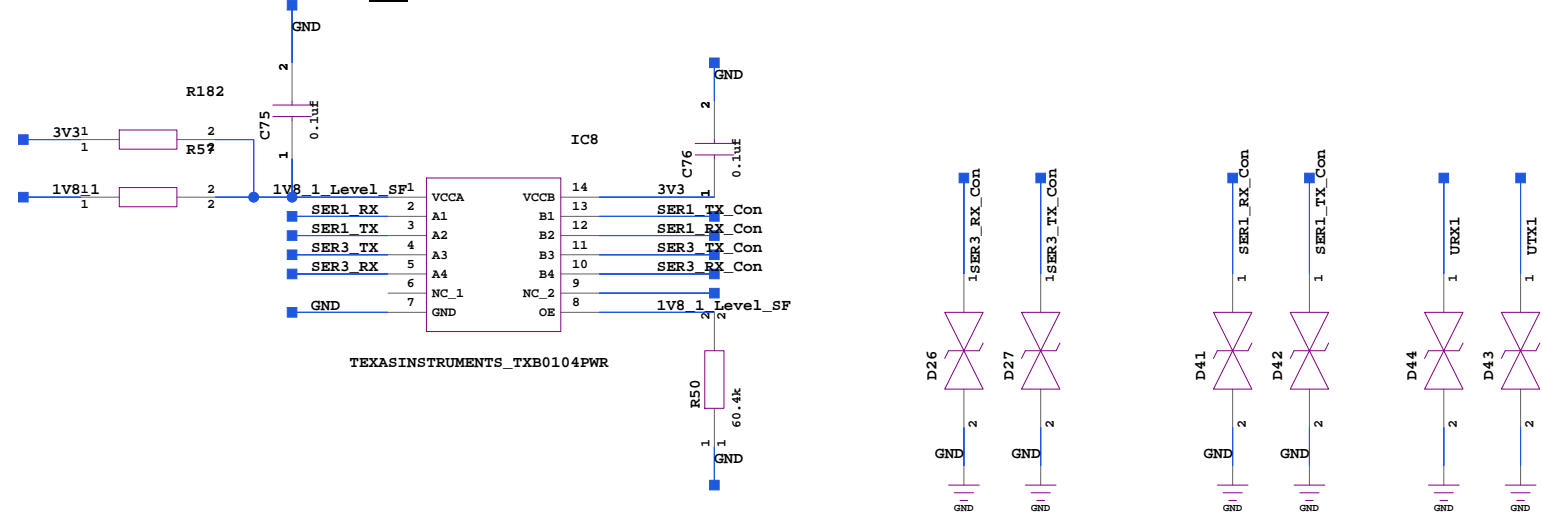
Carrier Board

TITLE

SIZE: B DWG NO: DB SHEET: 21 of 21 REV: 09/08/2024:01:26

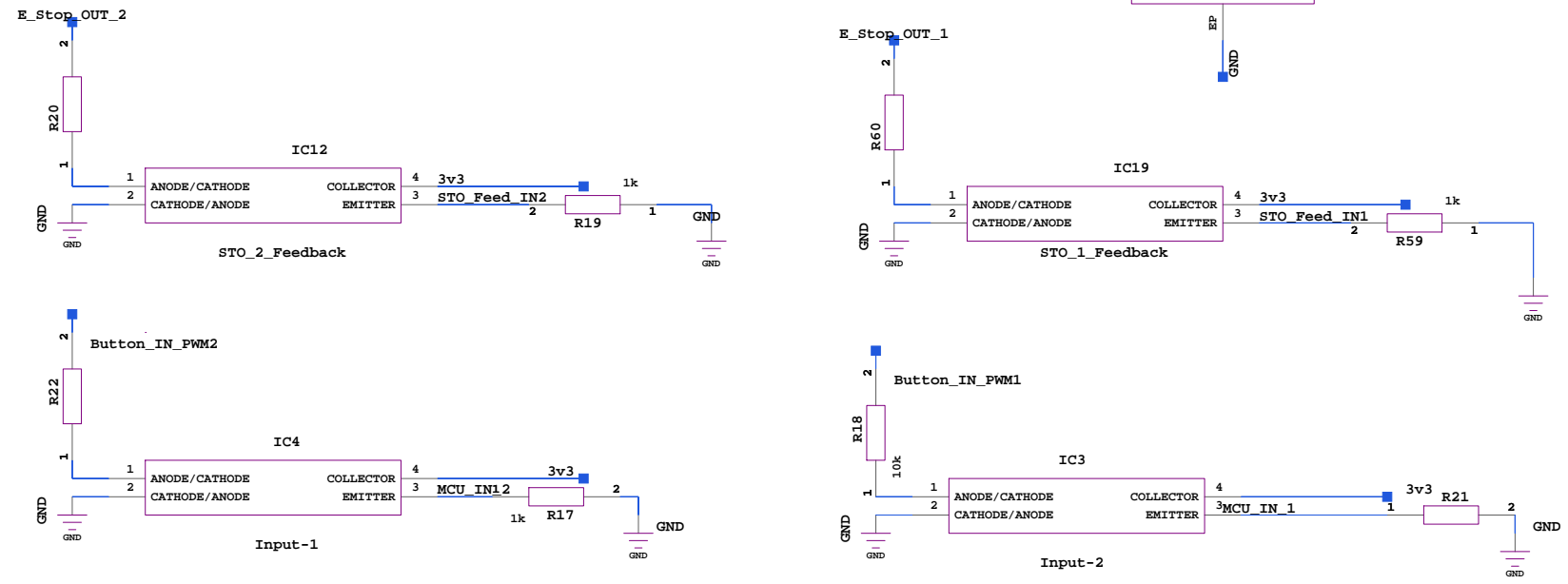
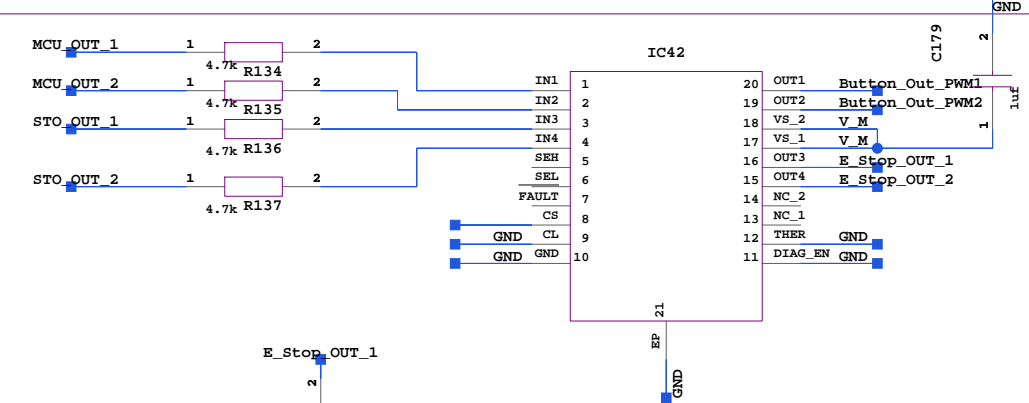
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Motor_Driver & Connector

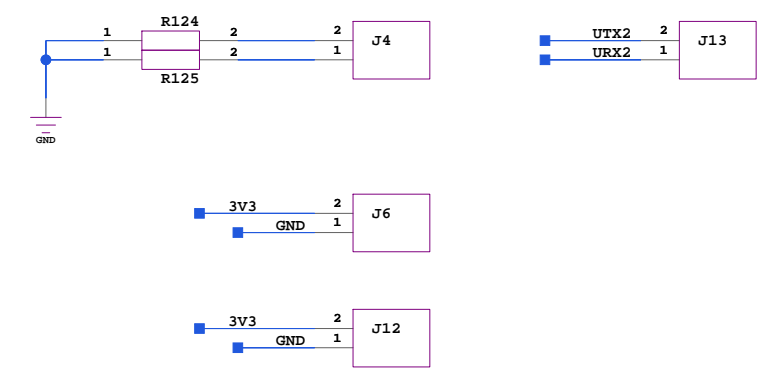


Input/Output_Connector

E-STOP_Inputs



Jumper_Ble



Carrier Board

Revision History

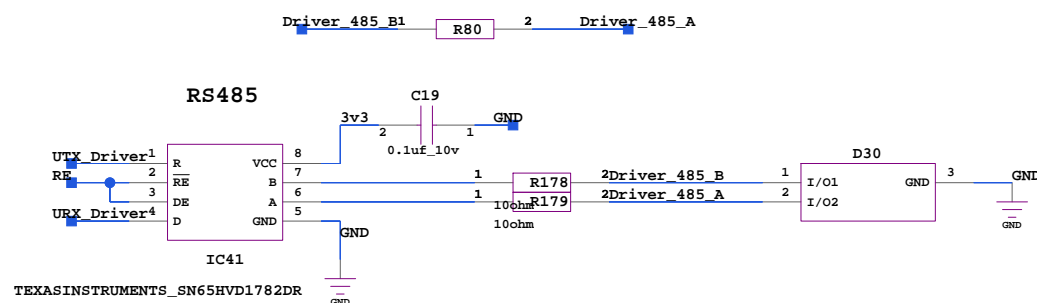
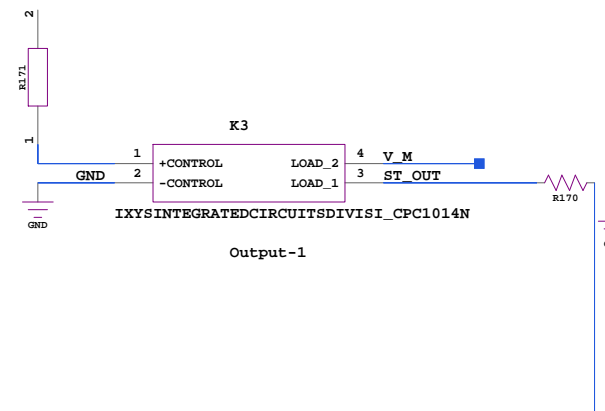
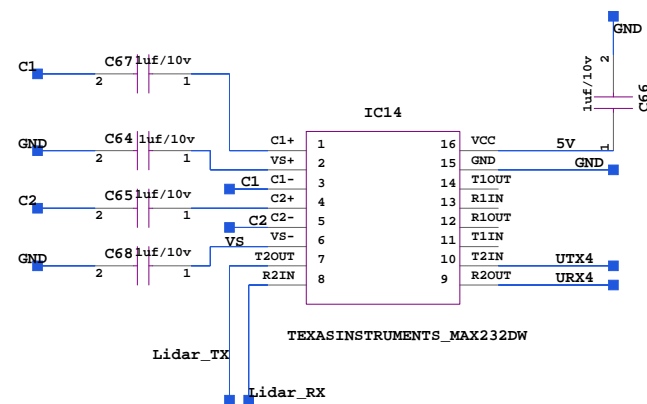
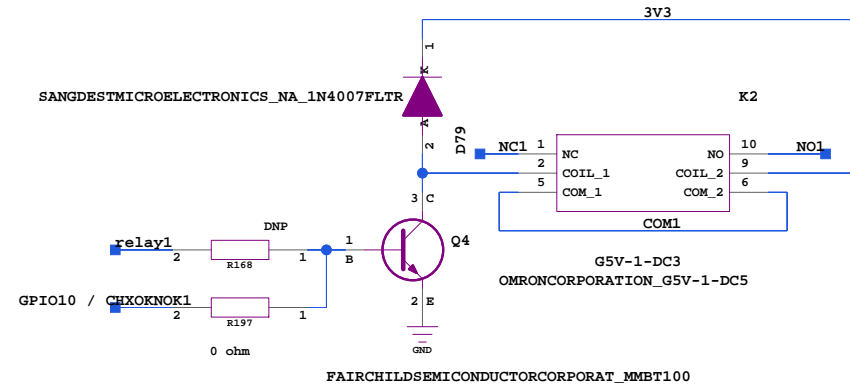
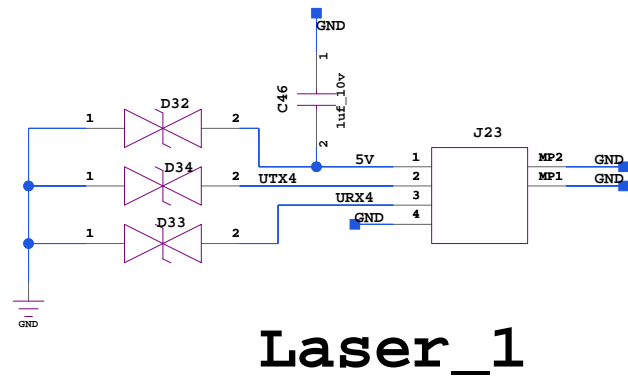
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Revision Date:24-03-2023
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Revision No
Revision date 16-10-2023
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SIZE	DWG NO	SHEET	of	REV
B		21		Schematic1 Revision_History1.1
DB				09/08/2024:01:26

Safety Peripherals



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