

Solar Tracker

Main_Powered Variant

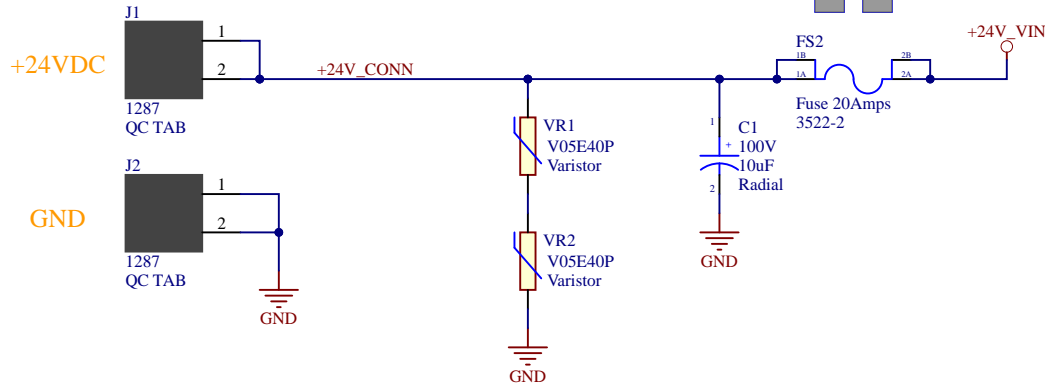
Revision History

Revision	Date	Changes
1.0	July 2023	Initial Draft Version.
1.1	November 2023	(1) Resistor R22 and R47 made as DNP. (2) Resistor R75 maked as Fitted.

Drawn By: VM		Cannot open file E:\Bhaghavan - Smart Trak\2. Design\Variant-1\V0.1\Schematic Template\smartrak-logo.png. File does not exist		
Engineer: VM				
PartNumber: -	Project Title Solar Tracker	Variant: Main_Powered		
Sheet Title 01_REVISION_HISTORY.SchDoc				
Size A3	Rev: 1.0			Date: 04-11-2023 Sheet 1 of 8
File: 01_REVISION_HISTORY.SchDoc				

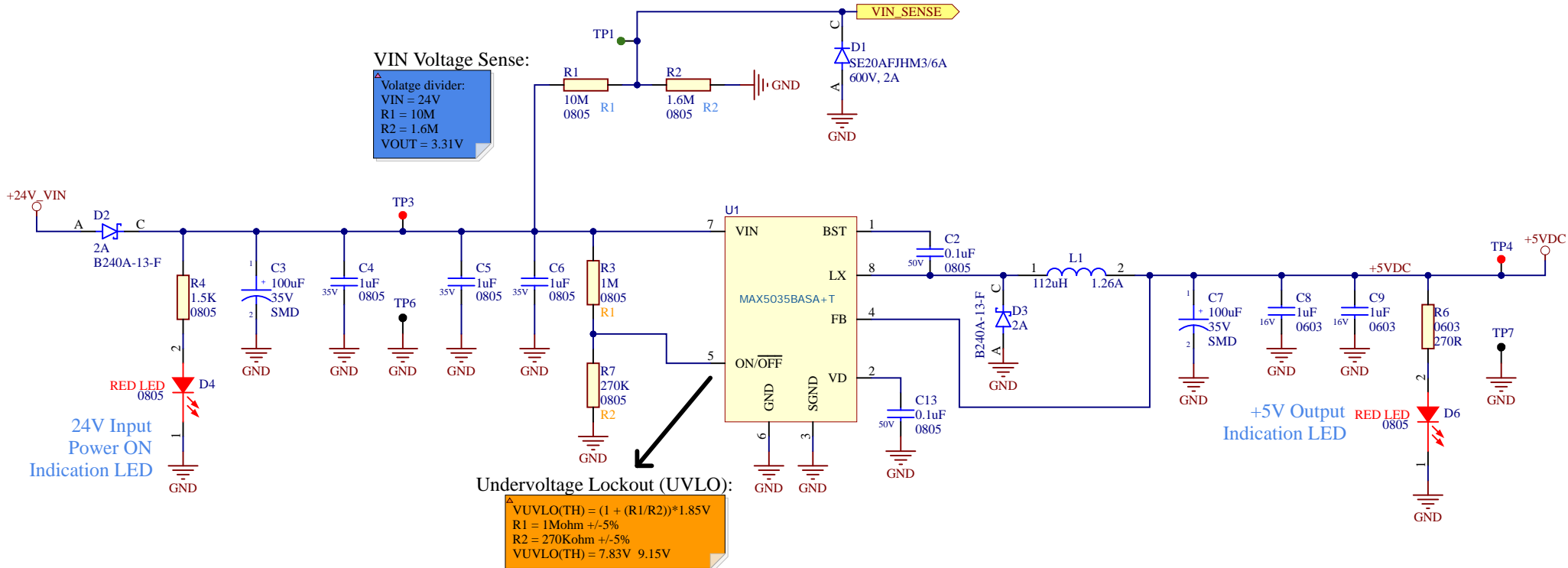
INPUT POWER SUPPLY

Power Connector

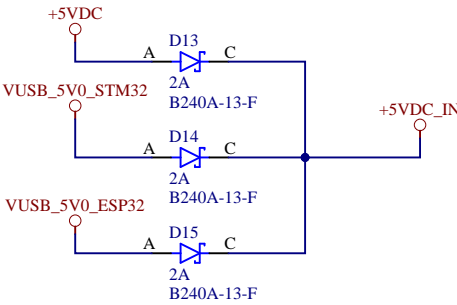


FID1 FID2 FID3
FID4 FID5 FID6

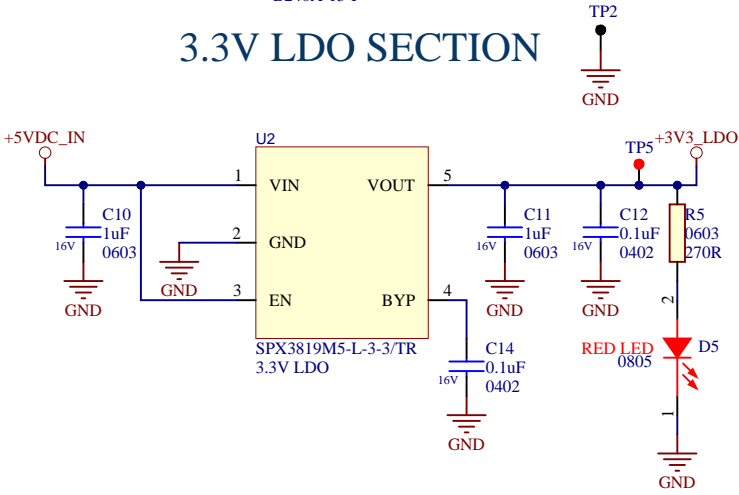
DC-DC CONVERTOR(+24V TO +5V)



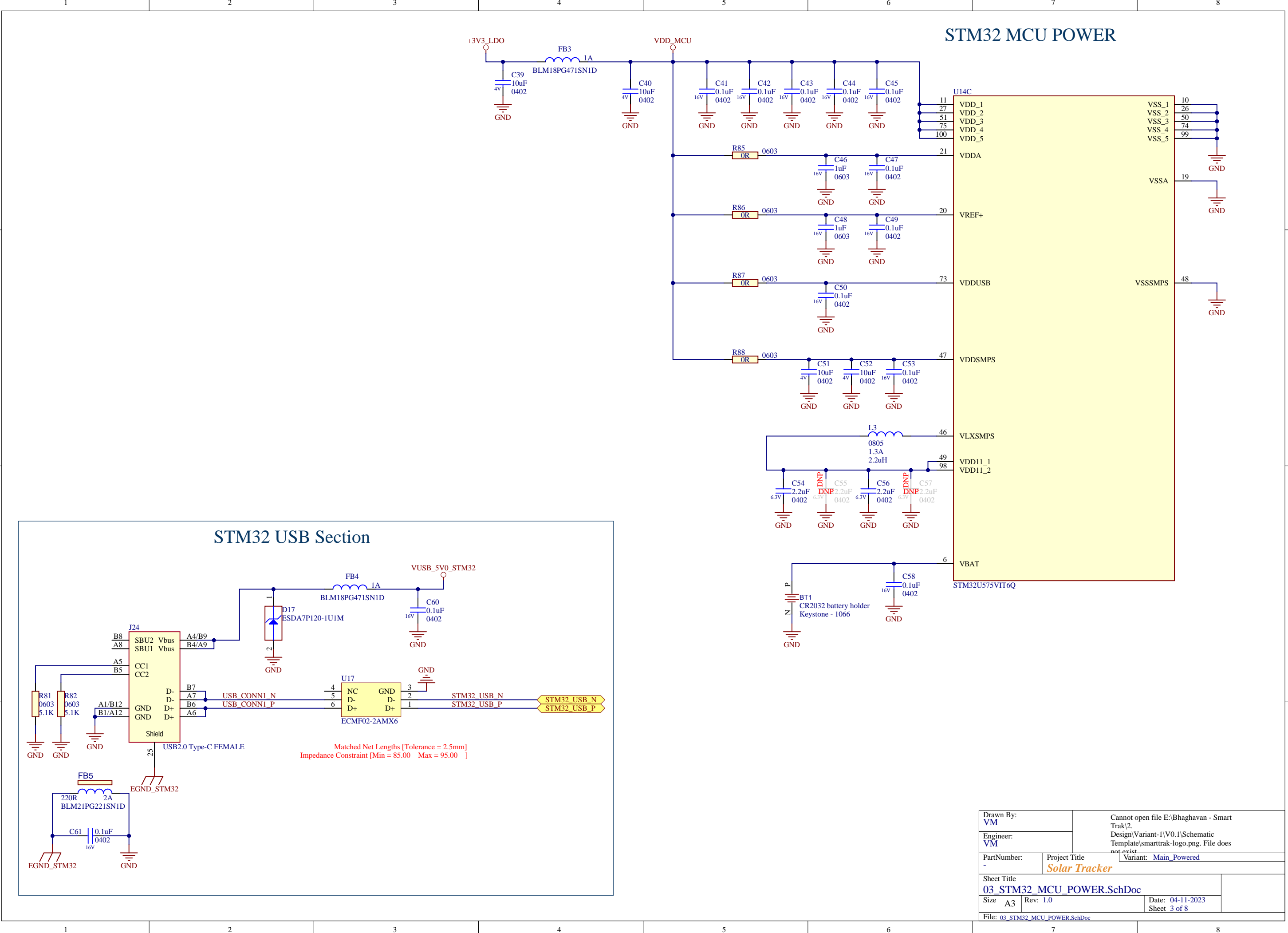
5V INPUT SELECTION



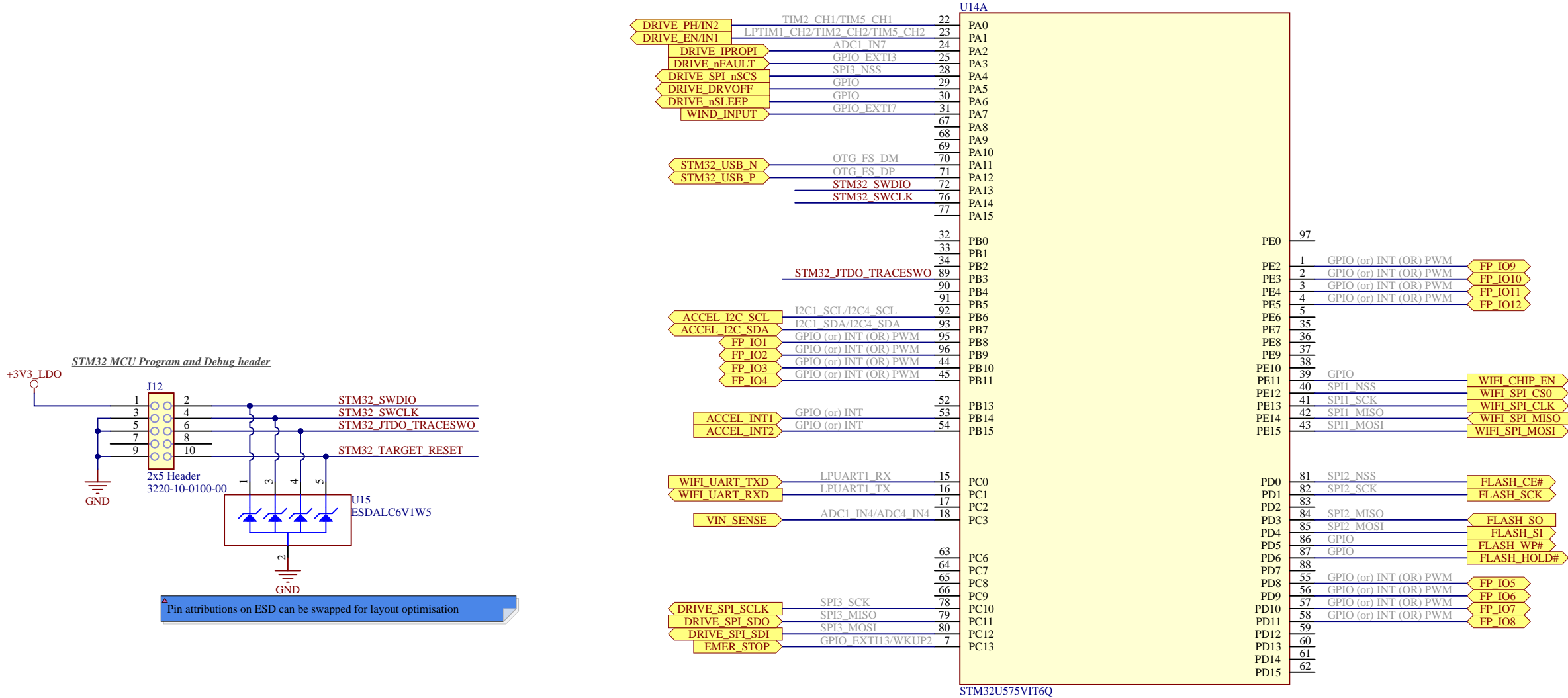
3.3V LDO SECTION



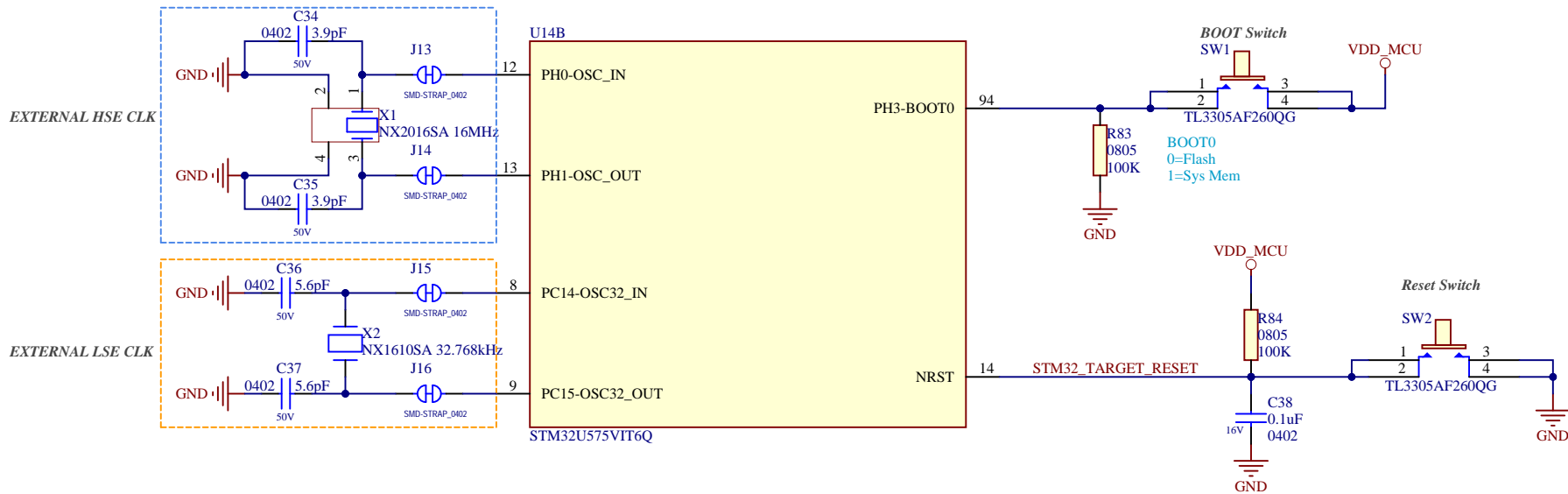
Drawn By: VM		Cannot open file E:\Bhaghavan - Smart Trak\2. Design\Variant-1\V0.1\Schematic Template\smartrak-logo.png. File does not exist.
Engineer: VM		
PartNumber: -	Project Title <i>Solar Tracker</i>	Variant: <u>Main_Powered</u>
Sheet Title <u>02_POWER_SUPPLY.SchDoc</u>		
Size <u>A3</u>	Rev: <u>1.0</u>	
Date: <u>04-11-2023</u> Sheet <u>2 of 8</u>		
File: <u>02_POWER_SUPPLY.SchDoc</u>		



STM32 MCU Section



Pin attributions on ESD can be swapped for layout optimisation



Drawn By: VM		Cannot open file E:\Bhaghavan - Smart Trak\2. Design\Variant-1\V0.1\Schematic Template\smatrtrak-logo.png. File does not exist
Engineer: VM		
PartNumber: -	Project Title Solar Tracker	Variant: Main_Powered
Sheet Title 04_STM32 MCU.SchDoc		
Size A3	Rev: 1.0	
Date: 04-11-2023 Sheet 4 of 8		
File: 04_STM32_MCU.SchDoc		

ESP32 C3 Wi-Fi Module

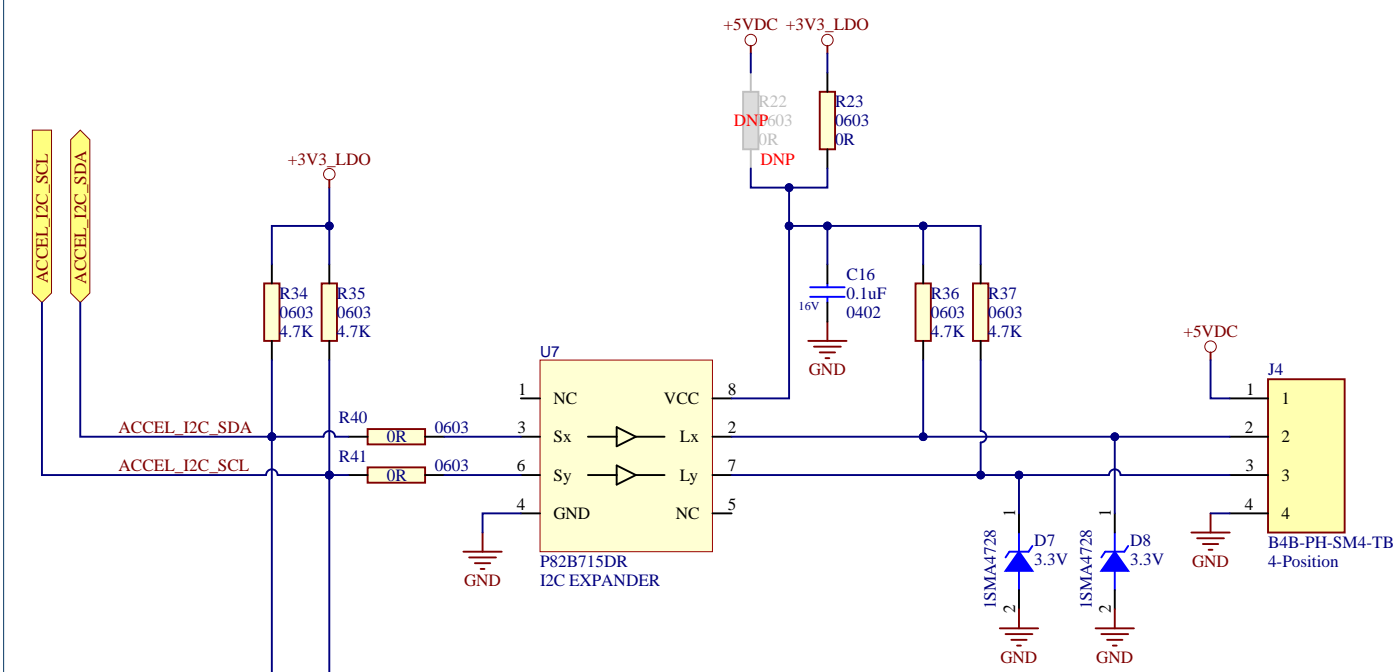


ESP32 USB Section

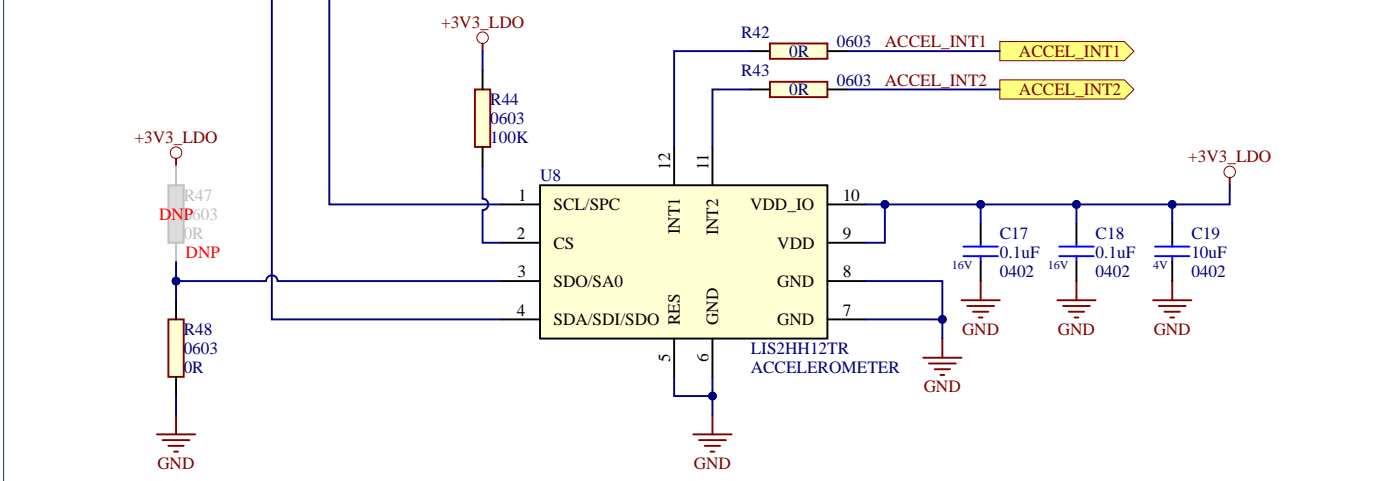


Drawn By: VM		Cannot open file E:\Bhaghavan - Smart Trak\2. Design\Variant-1\V0.1\Schematic Template\smartrak-logo.png. File does not exist	
Engineer: VM		Variant: <u>Main_Powered</u>	
PartNumber: -	Project Title <i>Solar Tracker</i>		
Sheet Title 05_WIFI_USB.SchDoc			
Size A3	Rev: 1.0	Date: 04-11-2023	Sheet 5 of 8
File: 05_WIFI_USB.SchDoc			

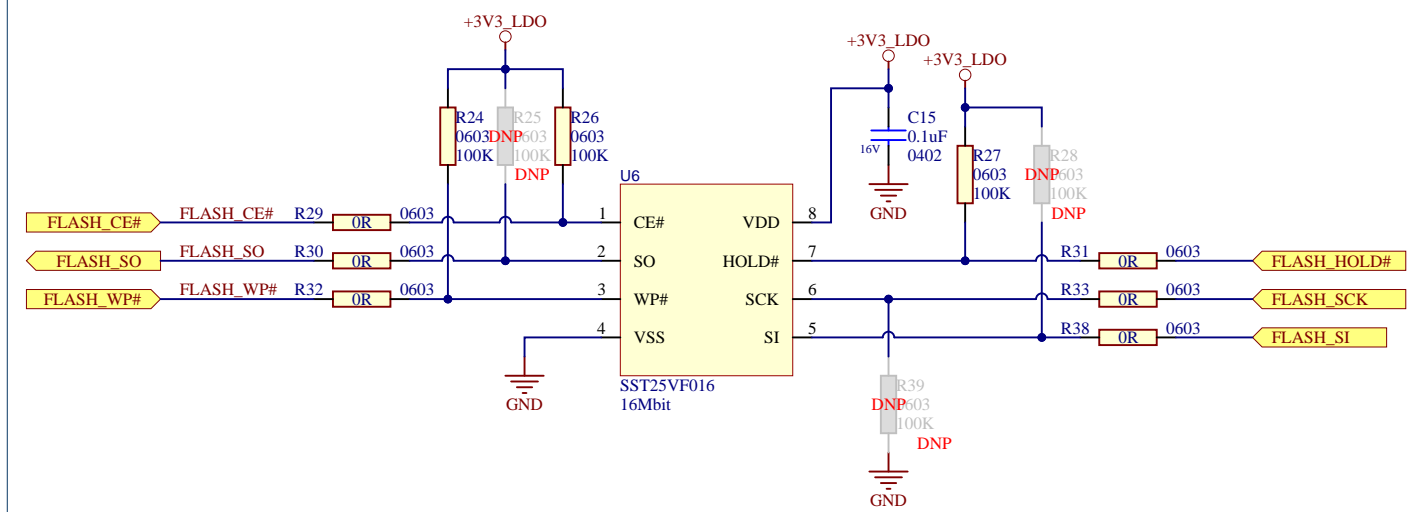
I2C BUS EXPENDER FOR EXTERNAL ACCELEROMETER CONNECTION



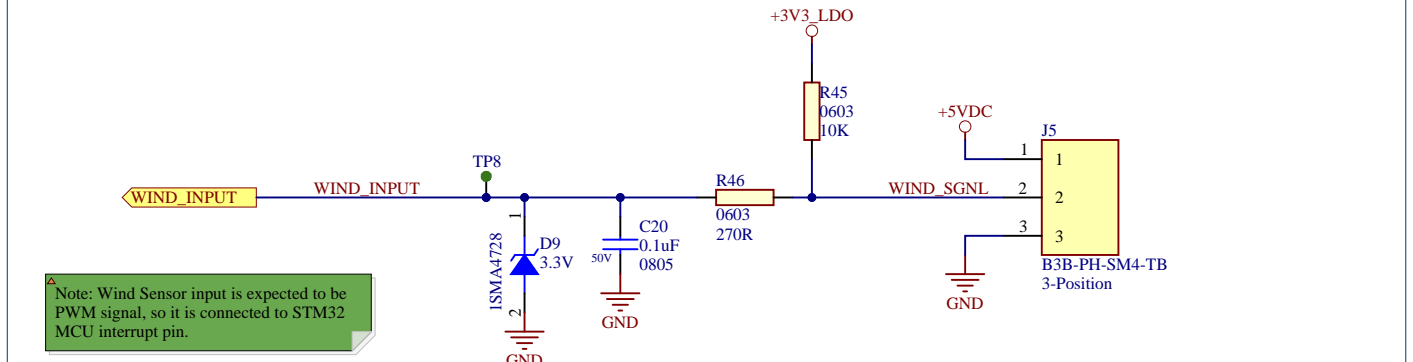
ON-BOARD ACCELEROMETER



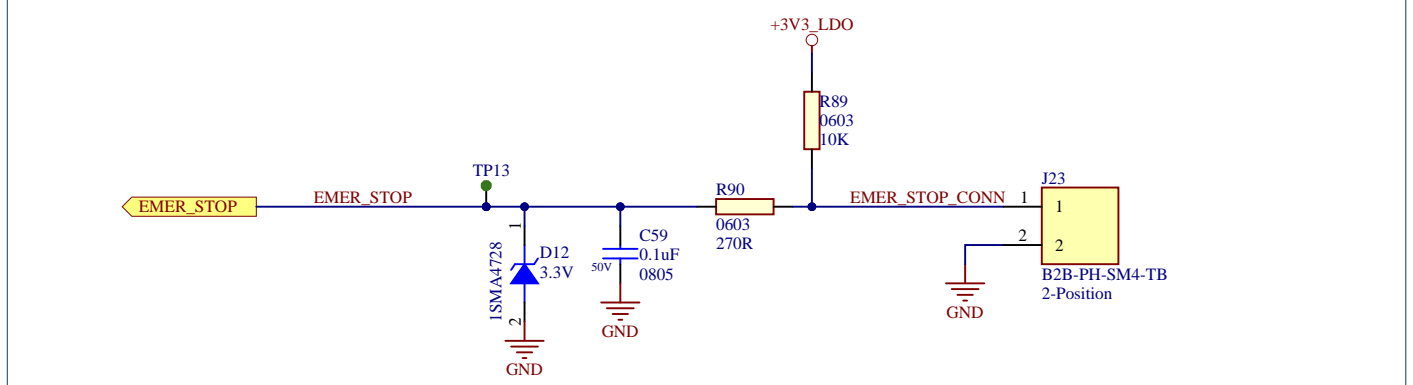
SPI Flash 16Mbit



Wind Sensor Input



Emergency Stop Button Connection



Drawn By: VM		Cannot open file E:\Bhaghavan - Smart Trak\2. Design\Variant-1\V0.1\Schematic Template\smartrak-logo.png. File does not exist.
Engineer: VM		
PartNumber: -	Project Title <i>Solar Tracker</i>	Variant: <u>Main_Powered</u>
Sheet Title <u>06_ACCELEROMETER_FLASH_WIND.SchDoc</u>		
Size A3	Rev: 1.0	Date: 04-11-2023 Sheet 6 of 8
File: 06_ACCELEROMETER_FLASH_WIND.SchDoc		

[illegible]

Drawn By: VM	Cannot open file E:\Bhagavan - Smart Trak\2_... Design\Variant-1\0.1\Schematic Template\smartrak-logo.png. File does not exist	
Engineer: VM		
PartNumber: -	Project Title <i>Solar Tracker</i>	Variant: <u>Main_Powered</u>
Sheet Title <u>07_FRONT_PANEL_CONTROL.SchDoc</u>		Date: <u>04-11-2023</u> Sheet <u>7 of 8</u>
Size <u>A3</u>	Rev: <u>1.0</u>	
File: <u>07_FRONT_PANEL_CONTROL.SchDoc</u>		

