

SDRR

07/04/2022

LIDO  
Variant: Draft

Version and Revision  
1.0

Sch. under Review

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DESIGN CONSIDERATIONS

DESIGN NOTE:  
Example text for informational  
design notes .

DESIGN NOTE:  
Example text for cautionary  
design notes.




DESIGN NOTE:  
Example text for debug notes.


DESIGN NOTE:  
Example text for critical  
design notes.

LAYOUT NOTE:  
Example text for critical  
layout guidelines.


TOP VIEW

BOTTOM VIEW

1	2	3	4	5	6	7	8																							
<div>ID002 - Block Diagram</div>																														
Cannot open file C:\Users\Juan\Downloads\LIDO Block Diagram (1).png. File does not exist.				Cannot open file C:\Users\Juan\Downloads\LIDO Pwr Block.png. File does not exist.																										
A							A																							
B							B																							
C							C																							
D							D																							
1	2	3	4	5	6	7	8																							
						<table><tr><td colspan="3">Title: *</td><td colspan="2">Dott (emTransit B.V.)</td></tr><tr><td colspan="3">Date: 11/04/2022 Engineer: FG</td><td>Part Number: *xxxxx</td><td rowspan="4"></td></tr><tr><td colspan="3">Size: A3 Sheet 2 of 16 Version: 1</td><td>Revision: .0</td></tr><tr><td colspan="3">Project: LIDO</td><td>Rev. date: *Param</td></tr><tr><td colspan="3"></td><td>File: LIDO-HW.002.BlockDiagram.SchDoc</td></tr></table>		Title: *			Dott (emTransit B.V.)		Date: 11/04/2022 Engineer: FG			Part Number: *xxxxx		Size: A3 Sheet 2 of 16 Version: 1			Revision: .0	Project: LIDO			Rev. date: *Param				File: LIDO-HW.002.BlockDiagram.SchDoc	
Title: *			Dott (emTransit B.V.)																											
Date: 11/04/2022 Engineer: FG			Part Number: *xxxxx																											
Size: A3 Sheet 2 of 16 Version: 1			Revision: .0																											
Project: LIDO			Rev. date: *Param																											
			File: LIDO-HW.002.BlockDiagram.SchDoc																											

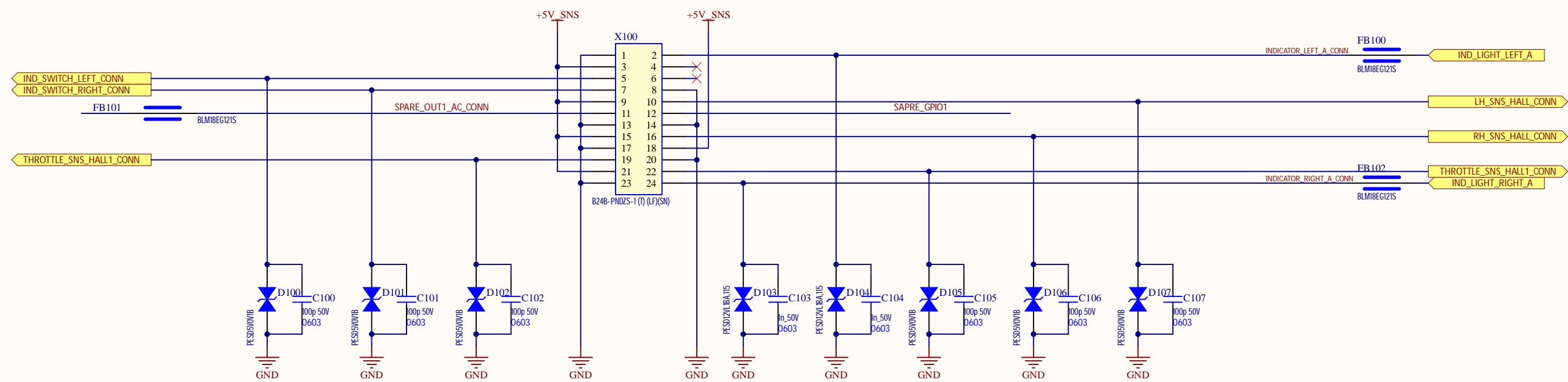
1	2	3	4	5	6	7	8	
<div>ID003 - Revision History</div>								
A	Index	Date	HISTORY					A
	1	29/04/2022	<div>Draft schematic wiht symbo only ready for first reviews within team and Vladimir (external)</div>					
B								B
C								C
D								D
1	2	3	4	5	6	7	8	
						<div><div>Title: *</div><div>Date: 11/04/2022   Engineer: FG</div><div>Size: A3   Sheet 3 of 16   Version: 1</div><div>Project: LIDO</div></div> <div><div>Part Number: *xxxxx</div><div>Revision: .0</div><div>Rev. date: *Param</div><div>File: LIDO-HW.003.RevisionHistory.SchDoc</div></div> <div><div>Dott (emTransit B.V.)</div><div>Westerdok Van Diemenstraat 292 1013 CR, Amsterdam The Netherlands</div><div></div></div>		

1	2	3	4	5	6	7	8	
<div>ID004 - Revision History</div>								
A								A
B								B
C								C
D								D
1	2	3	4	5	6	7	8	

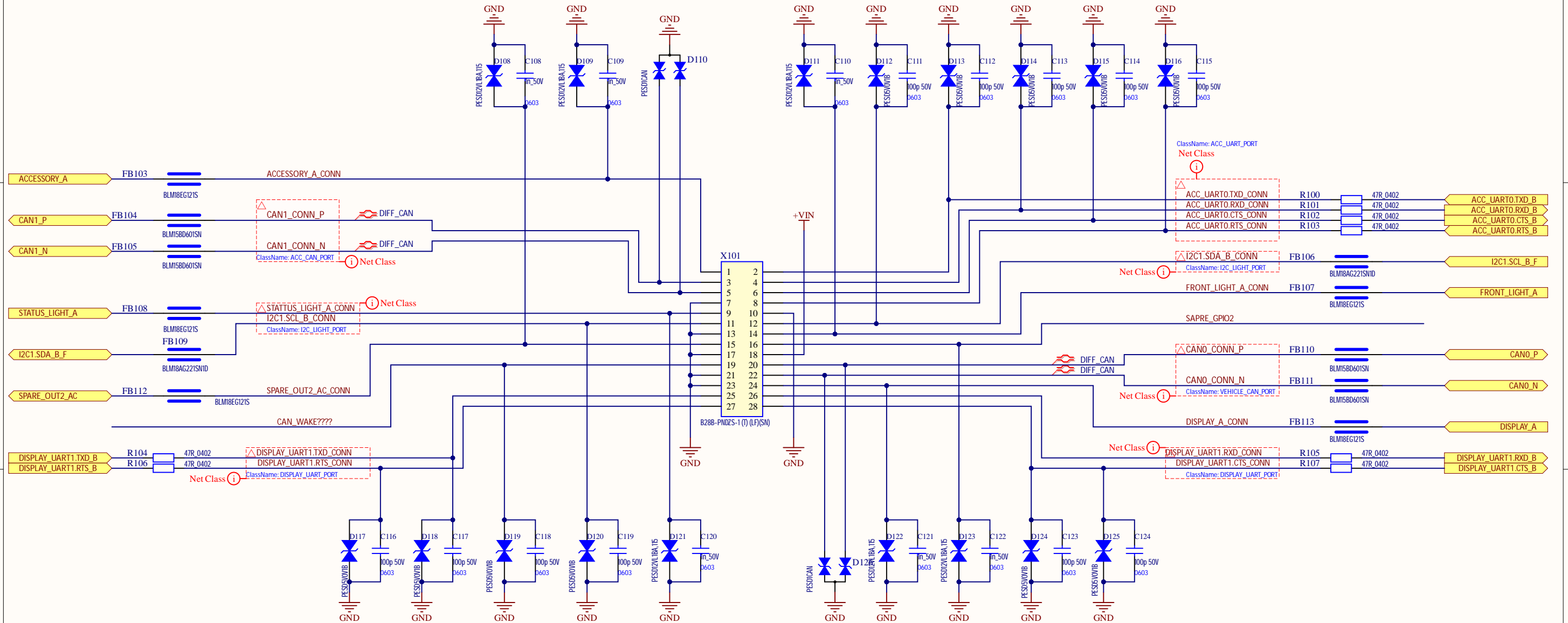
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Date: 11/04/2022		Engineer: FG		Part Number: *xxxxx			Westerdok Van Diemenstraat 292 1013 CR, Amsterdam The Netherlands
Size: A3		Sheet 4 of 16		Revision: .0			
Version: 1		Rev. date: *Param					
Project: LIDO		File: LIDO-HW.004.RevisionHistory.SchDoc					



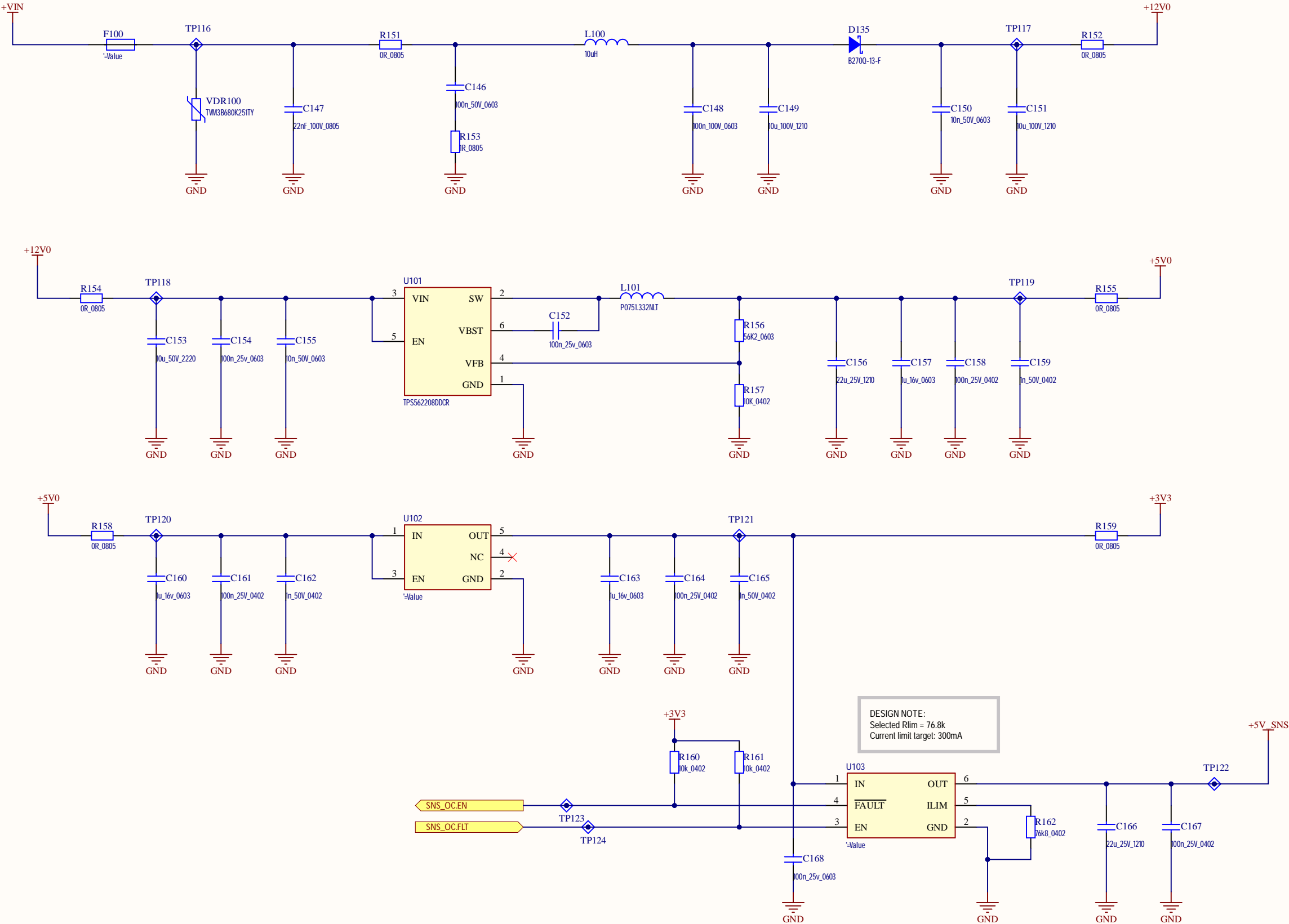
# ID100 - FRONT CONNECTOR



# ID100 - REAR CONENCTOR

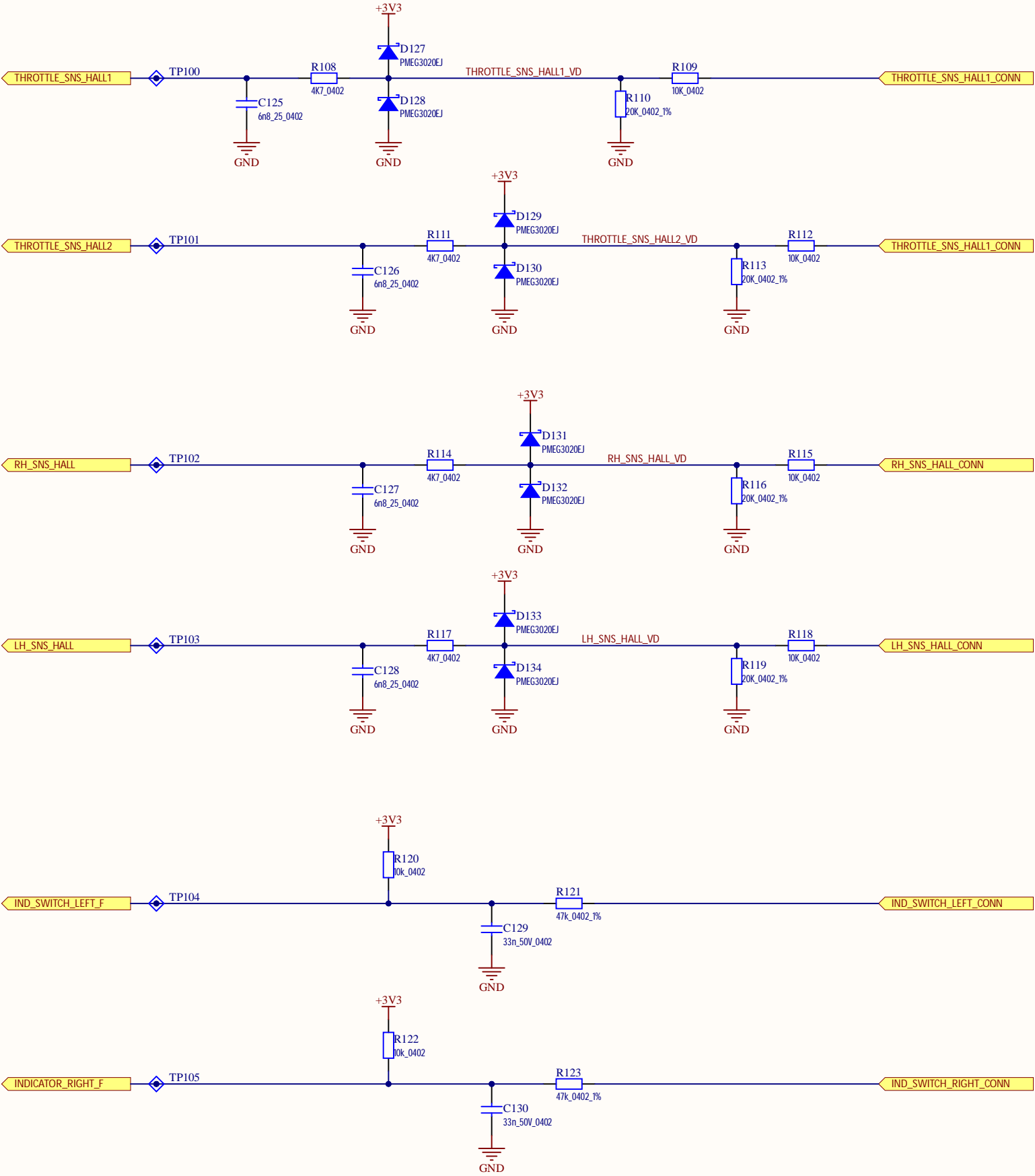


# ID100 - INPUT VOLTAGE AND POWER SUPPLIES



# ID100 - INPUT STAGE

DESIGN NOTE:  
Low-pass Filter (R= 4k7 & C= 6n8) Fc: 4k98 Hz



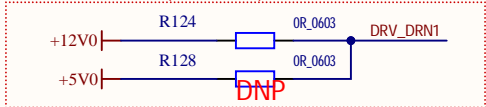
DESIGN NOTE:  
Low-pass Filter (R= 47k & C= 33n) Fc: 102 Hz



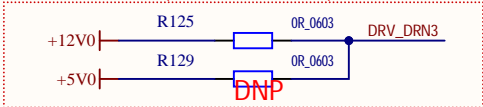
# ID100 - OUTPUT STAGE

## DRIVER VOLTAGE SELECTOR

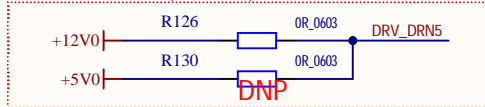
JUMPER - DRV1 SOURCE (FRONT LIGHT)



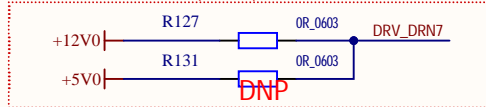
JUMPER - DRV3 SOURCE (RIGHT LIGHT INDICATOR)



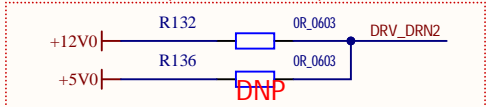
JUMPER - DRV5 SOURCE (ACCESSORY)



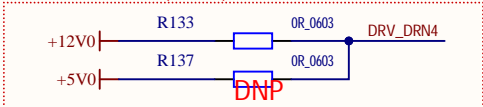
JUMPER - DRIVER 7 SOURCE (SPARE 1)



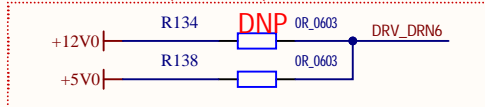
JUMPER - DRV2 SOURCE (LEFT LIGHT INDICATOR)



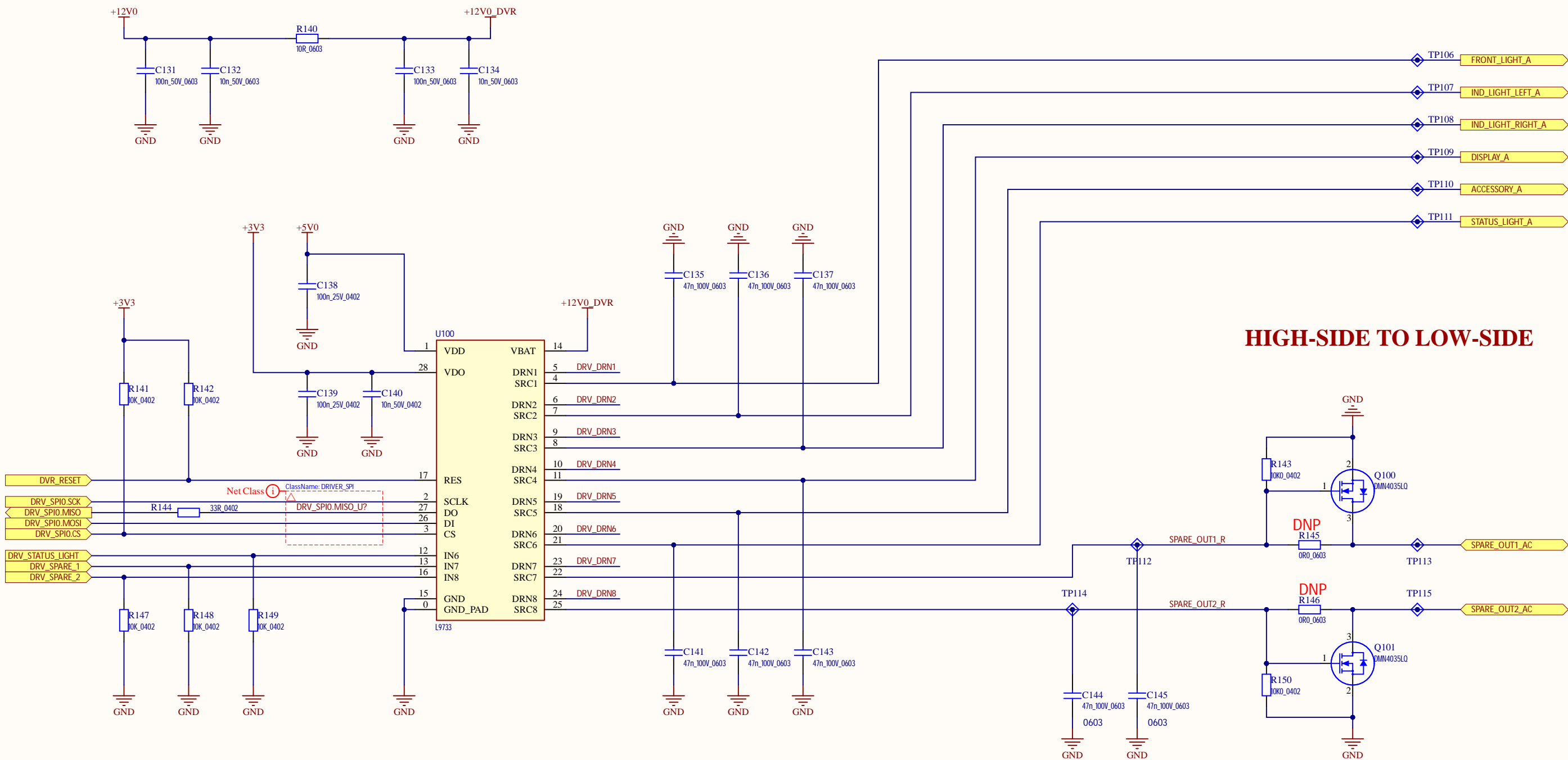
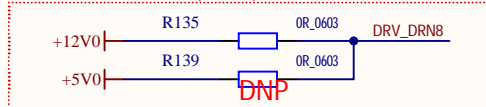
JUMPER - DRV4 SOURCE (DISPLAY)



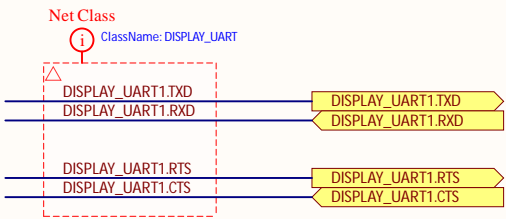
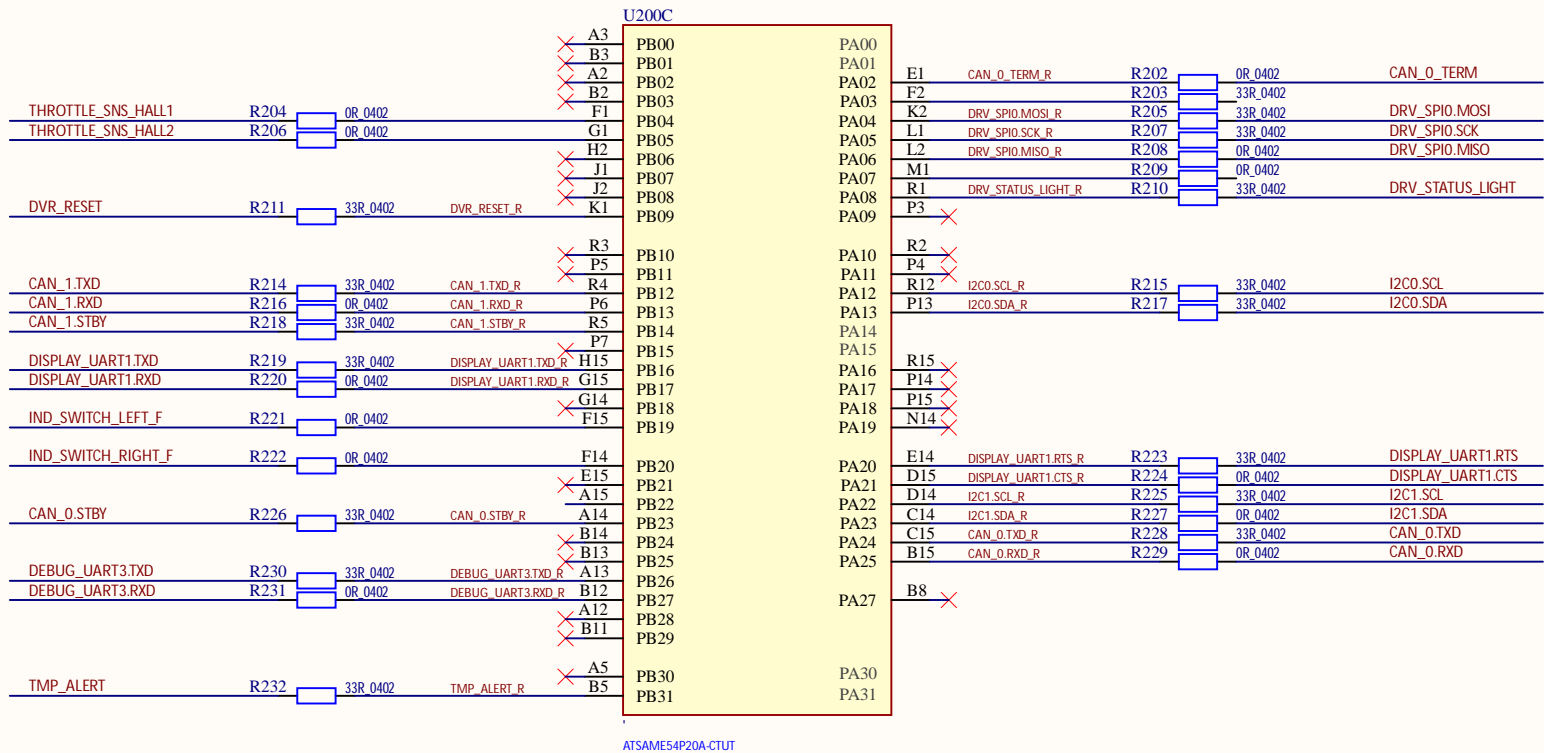
JUMPER - DRV6 SOURCE (STATUS LIGHT)



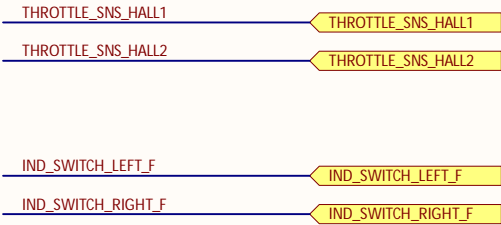
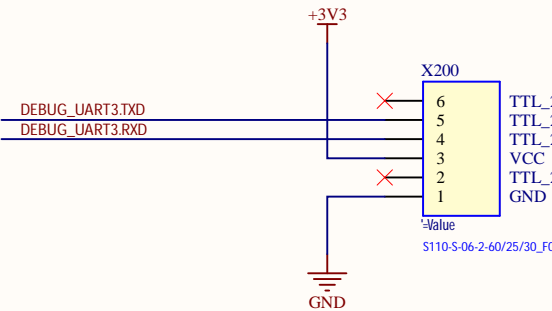
JUMPER - DRIVER 8 SOURCE (SPARE 2)



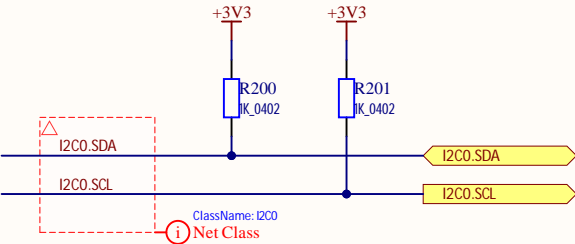
# ID200 - MCU PERIPHERALS



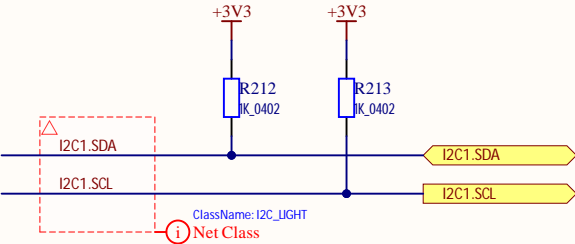
## UART DEBUG CONNECTOR



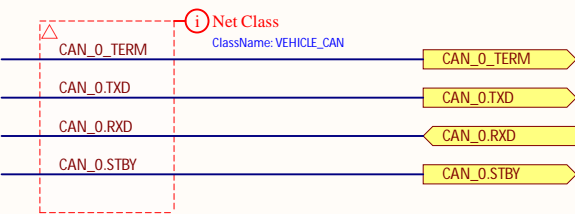
## MAIN I2C



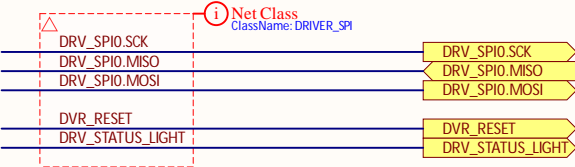
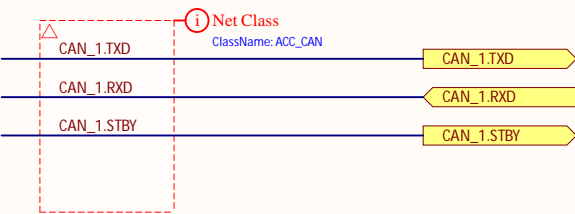
## STATUS LIGHT I2C



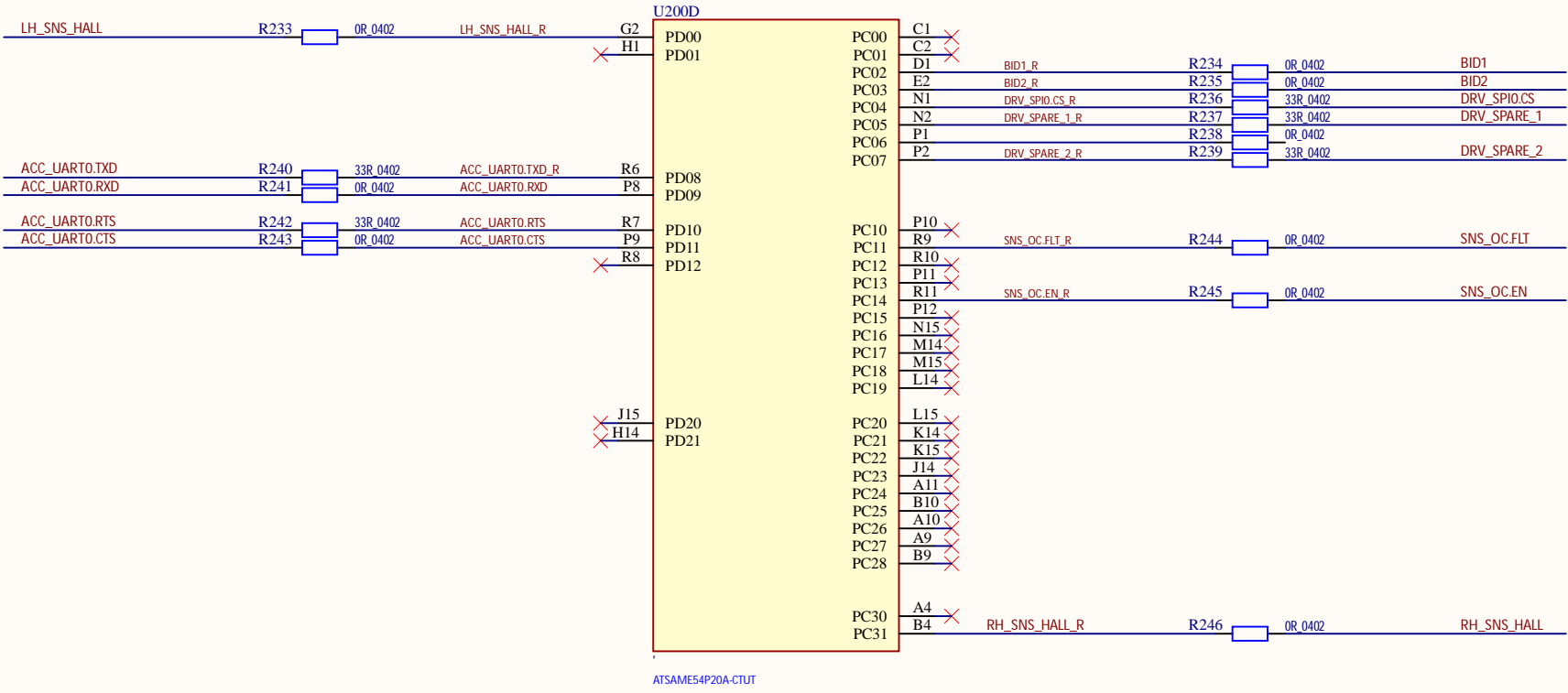
## VEHICLE CAN BUS



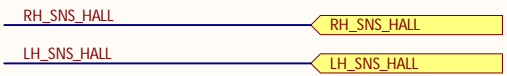
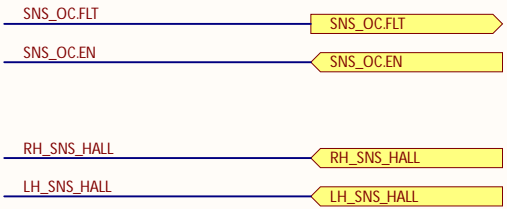
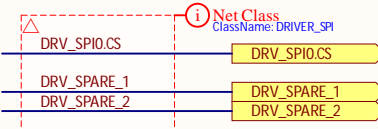
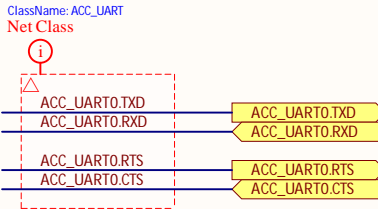
## ACCESSORY CAN BUS



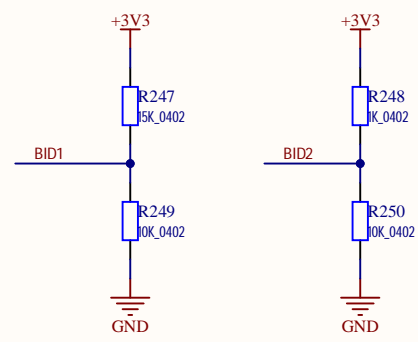
# ID200 - MCU PERIPHERALS



## ACCESSORY UART

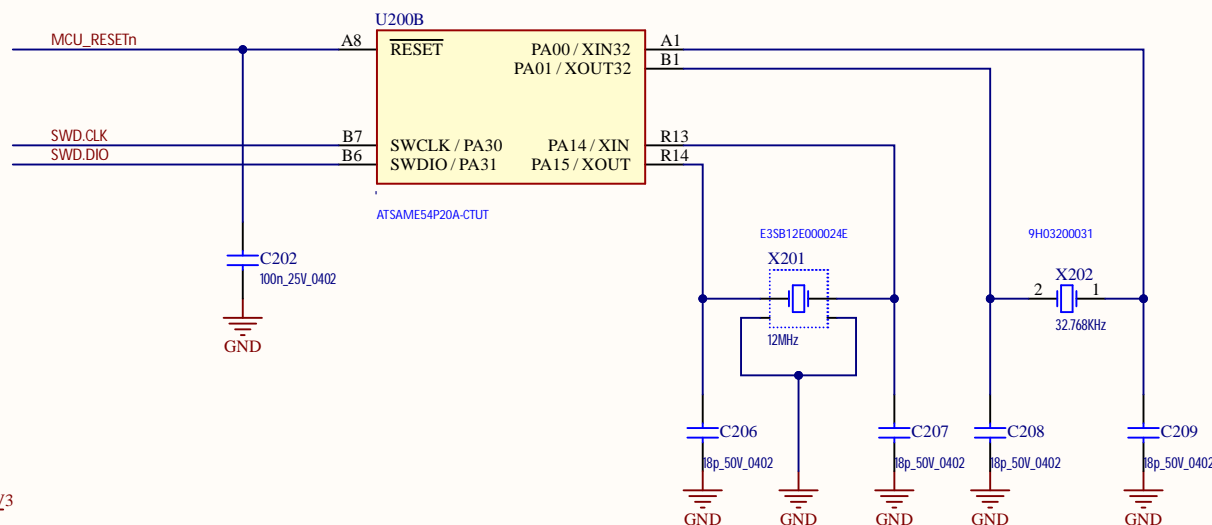
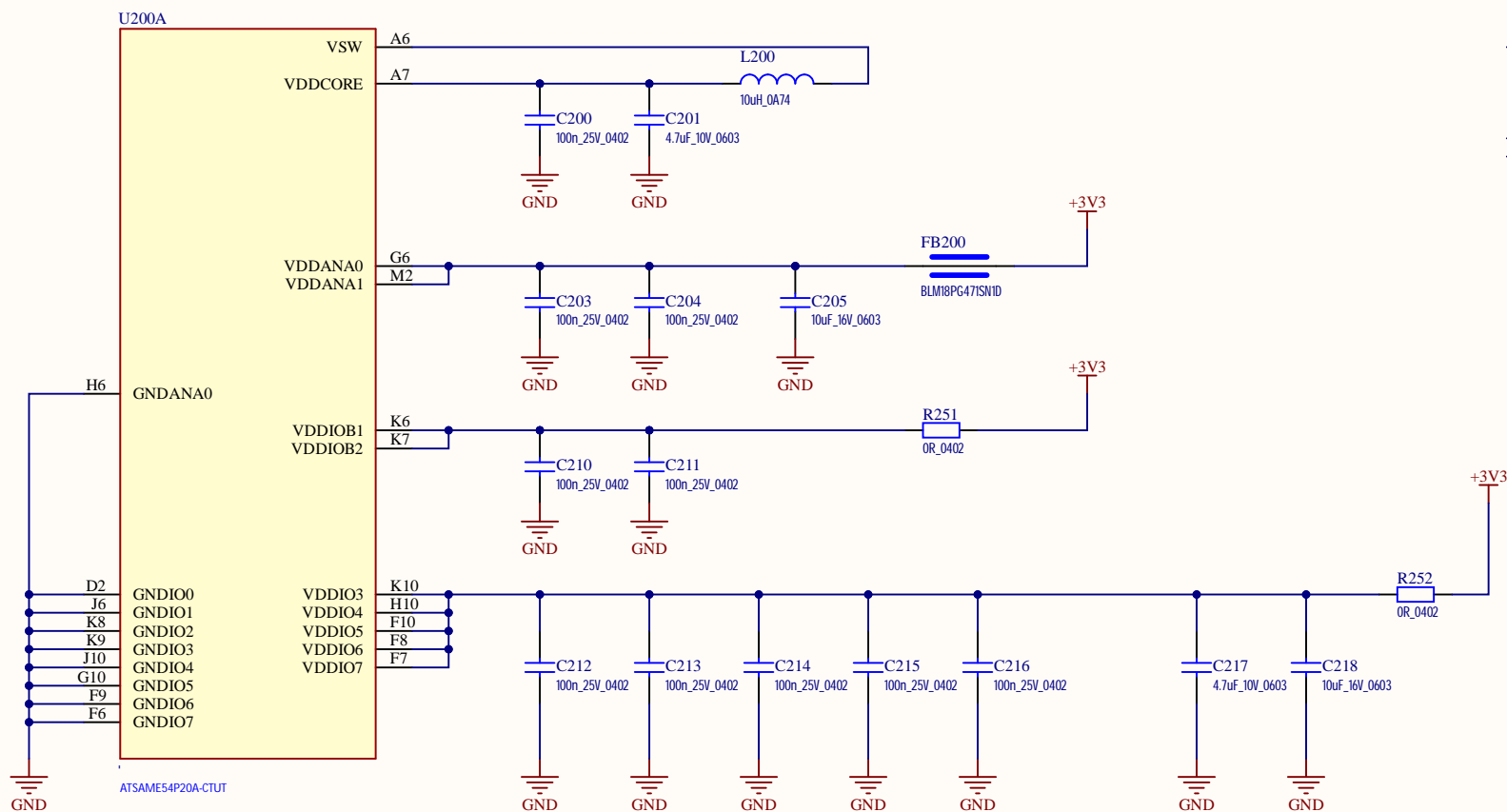


## BOARD ID

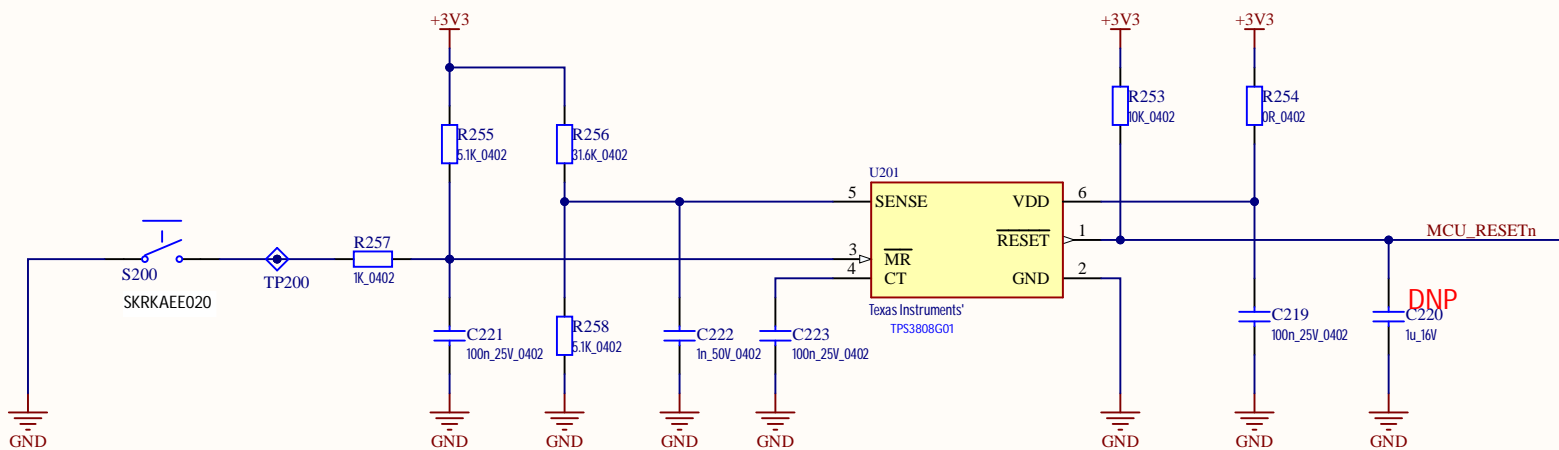


DESIGN NOTE:			
Board ID:			
ID#	Res	Voltage	
0	1K	3V	
1	5.1K	2.18V	
2	15K	1.32V	
3	76.8K	0.38V	

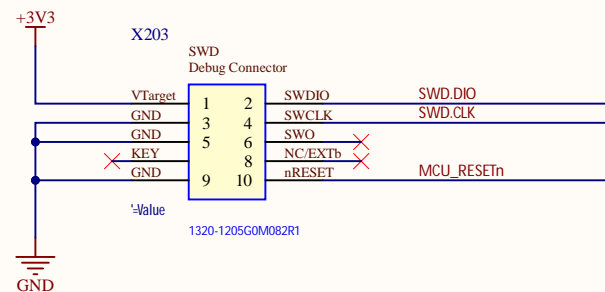
# ID200 - MCU POWER, SWD AND RESET



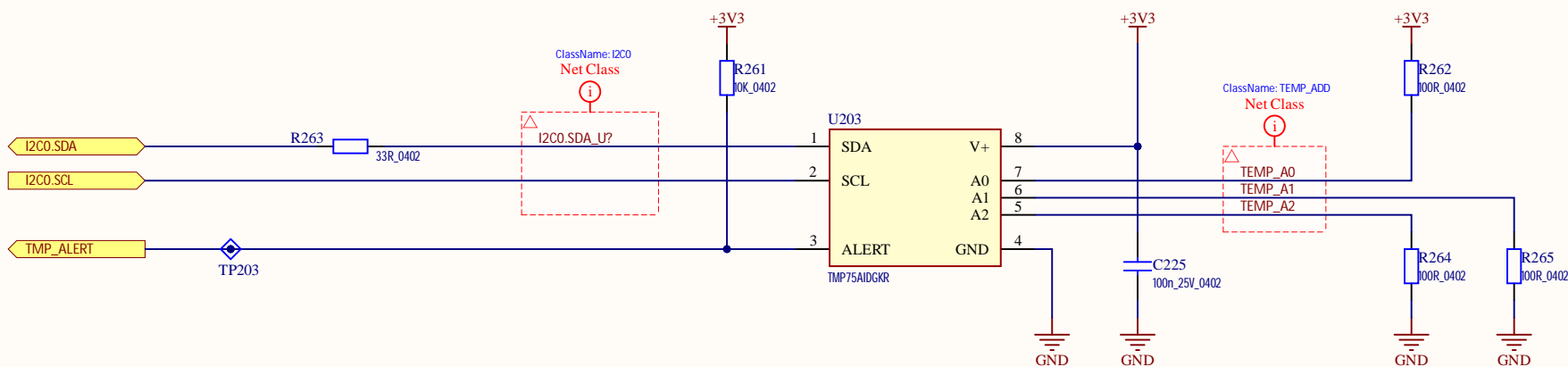
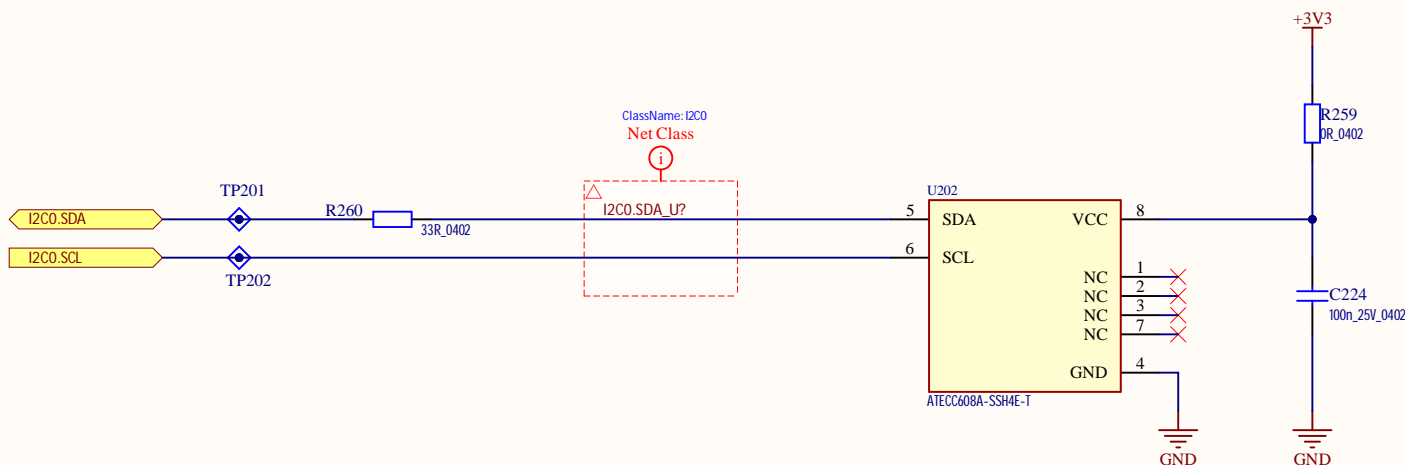
## RESET SUPERVISOR



## SWD DEBUG CONNECTOR

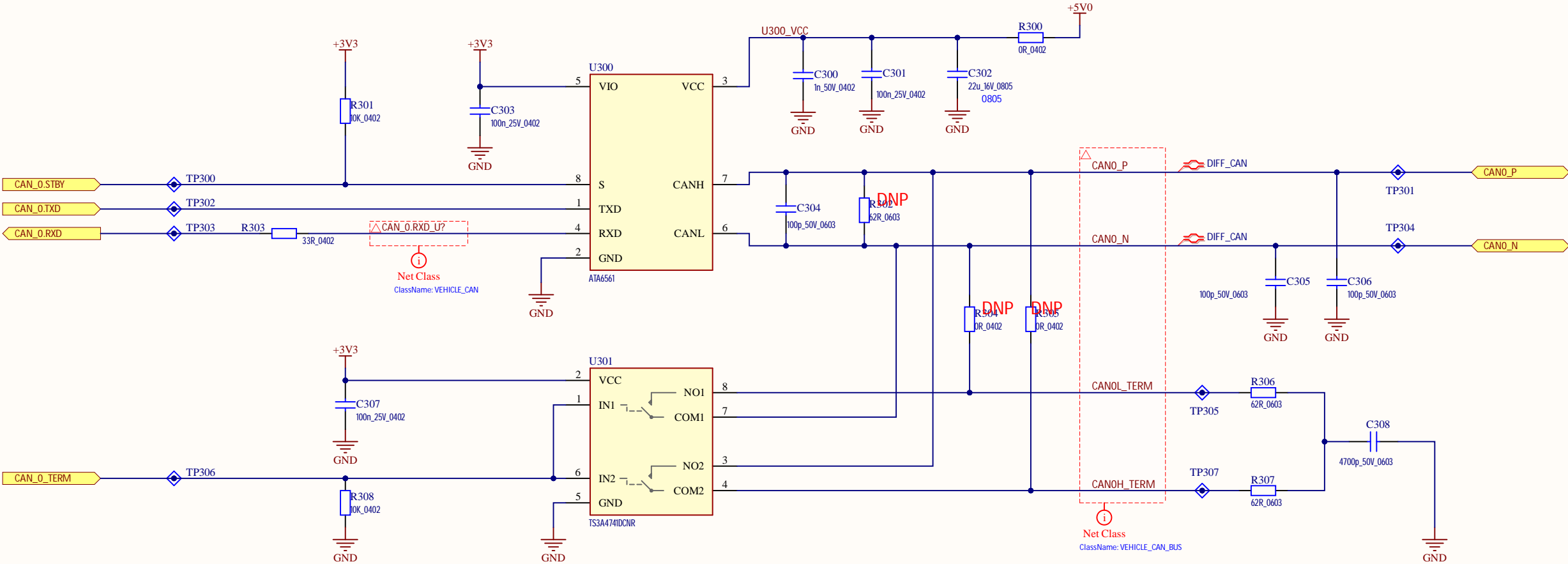


# ID200 - SECURITY CHIP AND TEMPERATURE SENSOR

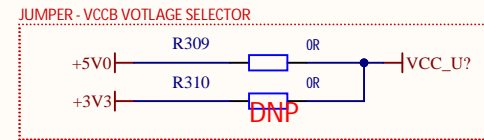


# ID300 - VEHICLE INTERFACE

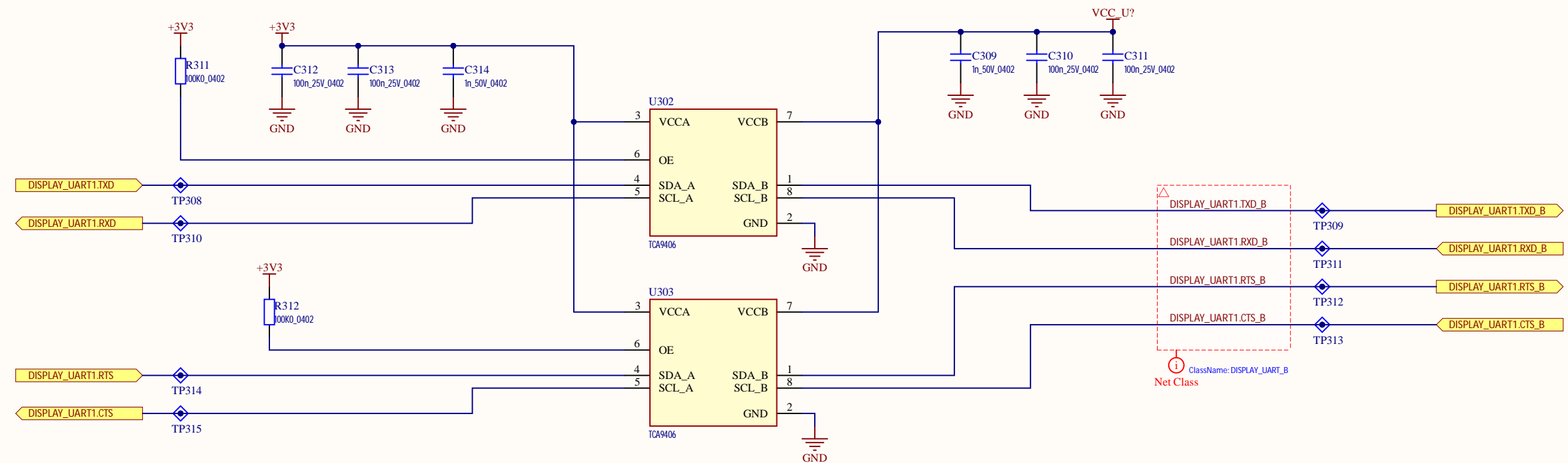
## CAN 0 BUS




# ID300 - DISPLAY INTERFACE



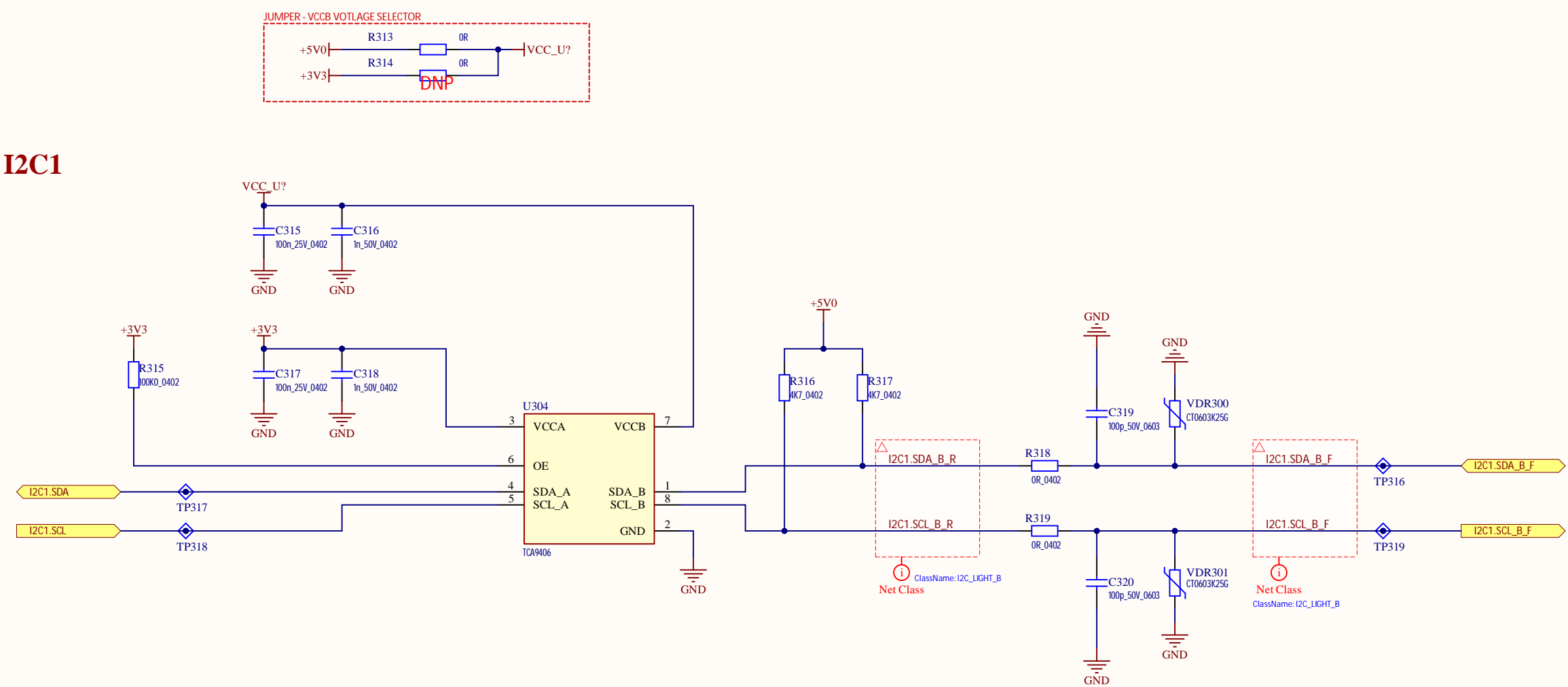
## UART1



Title: *			Dott (emTransit B.V.)		
Date: 11/04/2022	Engineer: FG	Part Number: *xxxxx		Westerdok	
		Revision: 0		Van Diemenstraat 292	
Size: A3 Sheet 14 of 16 Version: 1		Rev. date: *Param		1013 CR, Amsterdam	
Project: LIDO		File: LIDO-HW.300.DisplayInterface.SchDoc		The Netherlands	

# ID300 - STATUS LIGHT INTERFACE

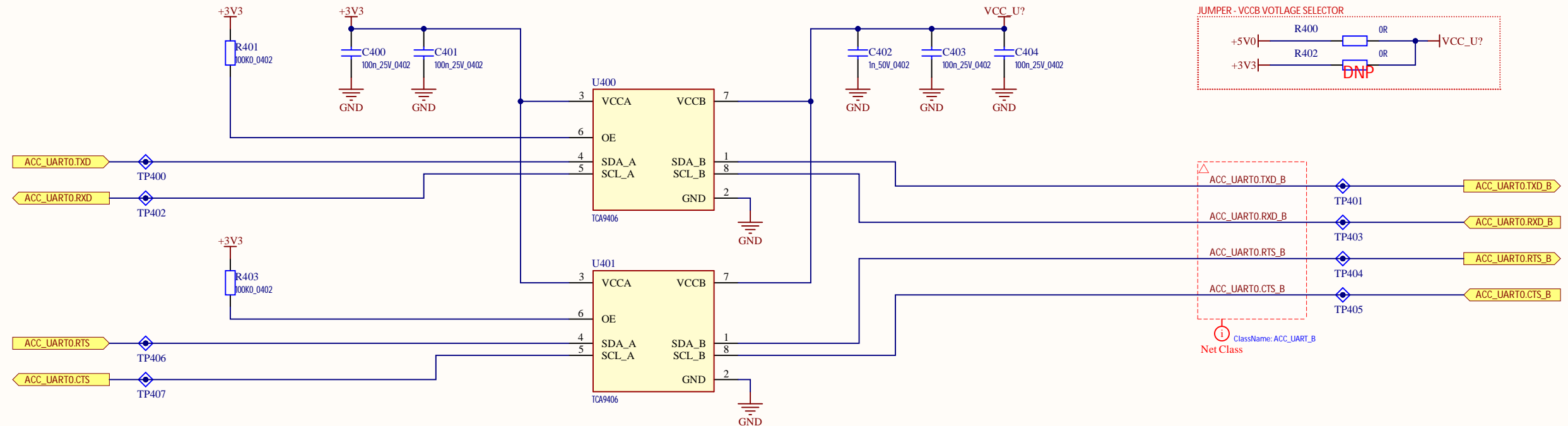
I2C1



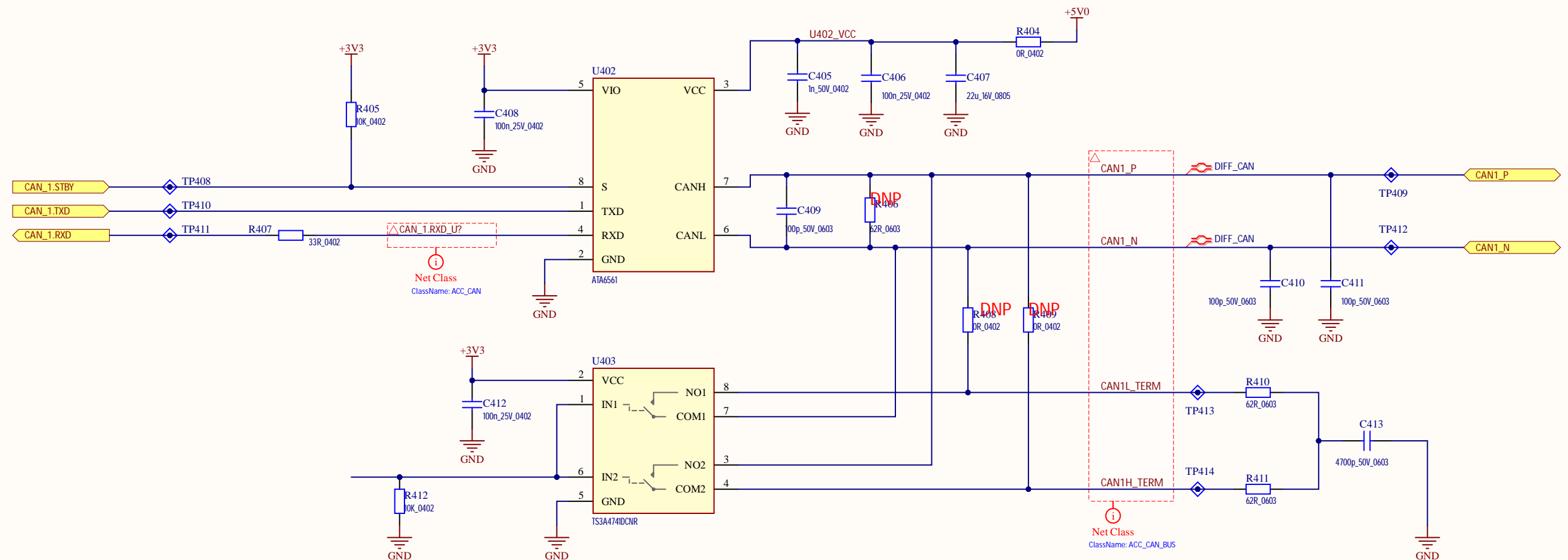



# ID400 - ACCESSORY INTERFACES

## UART0



## CAN 1 BUS



Title: *			Dott (emTransit B.V.) Westerdok Van Diemenstraat 292 1013 CR, Amsterdam The Netherlands	
Date: 11/04/2022	Engineer: FG	Part Number: *xxxxx		
		Revision: 0		
		Rev. date: *Param		
Size: A3	Sheet 16of 16	Version: 1		
Project: LIDO		File: LIDO-HW-400.AccessoriesInterfaces.SchDoc		