

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

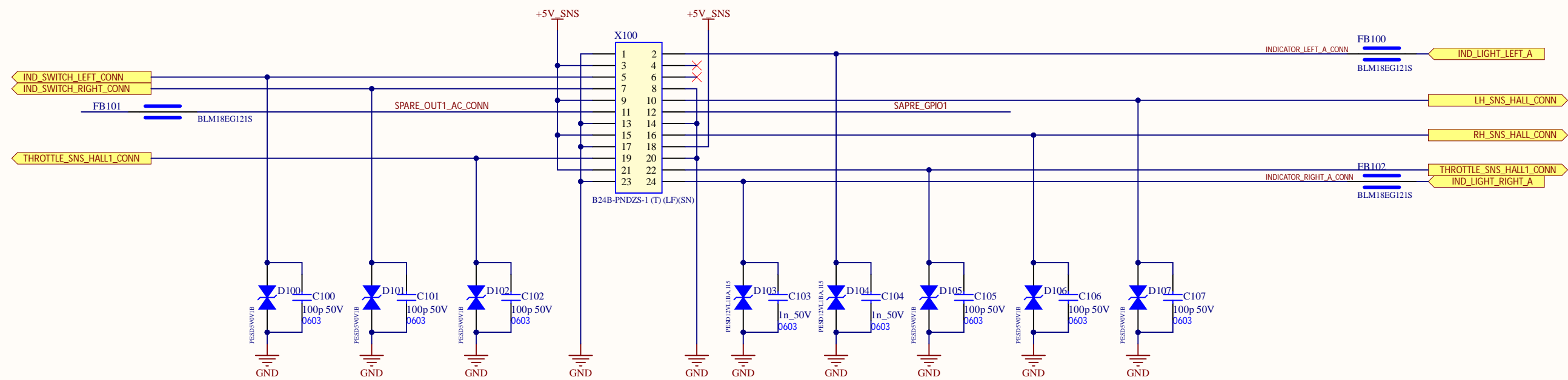
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<div>ID002 - Block Diagram</div>																															
Cannot open file C:\Users\Juan\Downloads\LIDO Block Diagram (1).png. File does not exist.				Cannot open file C:\Users\Juan\Downloads\LIDO Pwr Block.png. File does not exist.																											
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B							B																								
C							C																								
D							D																								
						<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 17 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 colspan="2">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 17 Version: 1			Revision: .0	Project: LIDO			Rev. date: *Param				File: LIDO-HW.002.BlockDiagram.SchDoc		8
Title: *			Dott (emTransit B.V.)																												
Date: 11/04/2022 Engineer: FG			Part Number: *xxxxx																												
Size: A3 Sheet 2 of 17 Version: 1			Revision: .0																												
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A	<div><div>ID003 - Revision History</div><div><div><div>Index</div><div>Date</div><div>HISTORY</div></div><div><div>1</div><div>29/04/2022</div><div><div><div>Draft schematic wiht symbo only ready for first reviews within team and Vladimir (external)</div></div></div></div></div></div>							A
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 17 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>

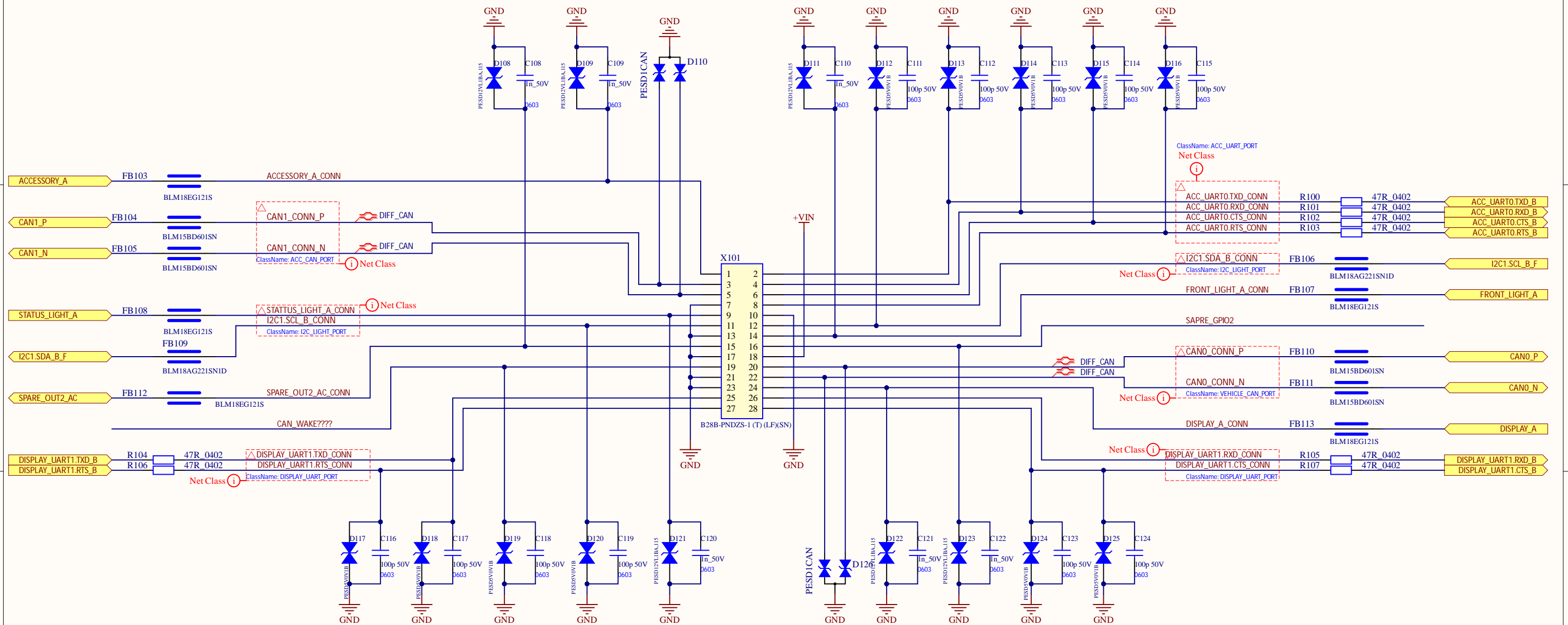
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ID004 - Revision History								
A								A
B								B
C								C
D								D
1	2	3	4	5	6	7	8	


Title: *						Dott (emTransit B.V.)	
Date: 11/04/2022			Engineer: FG			Part Number: *xxxxx	<div>Westerdok Van Diemenstraat 292 1013 CR, Amsterdam The Netherlands</div> <div></div>
Size: A3	Sheet	4 of 17	Version: 1			Revision: .0	
Project: LIDO			File: LIDO-HW.004.RevisionHistory.SchDoc			Rev. date: *Param	

ID100 - FRONT CONNECTOR



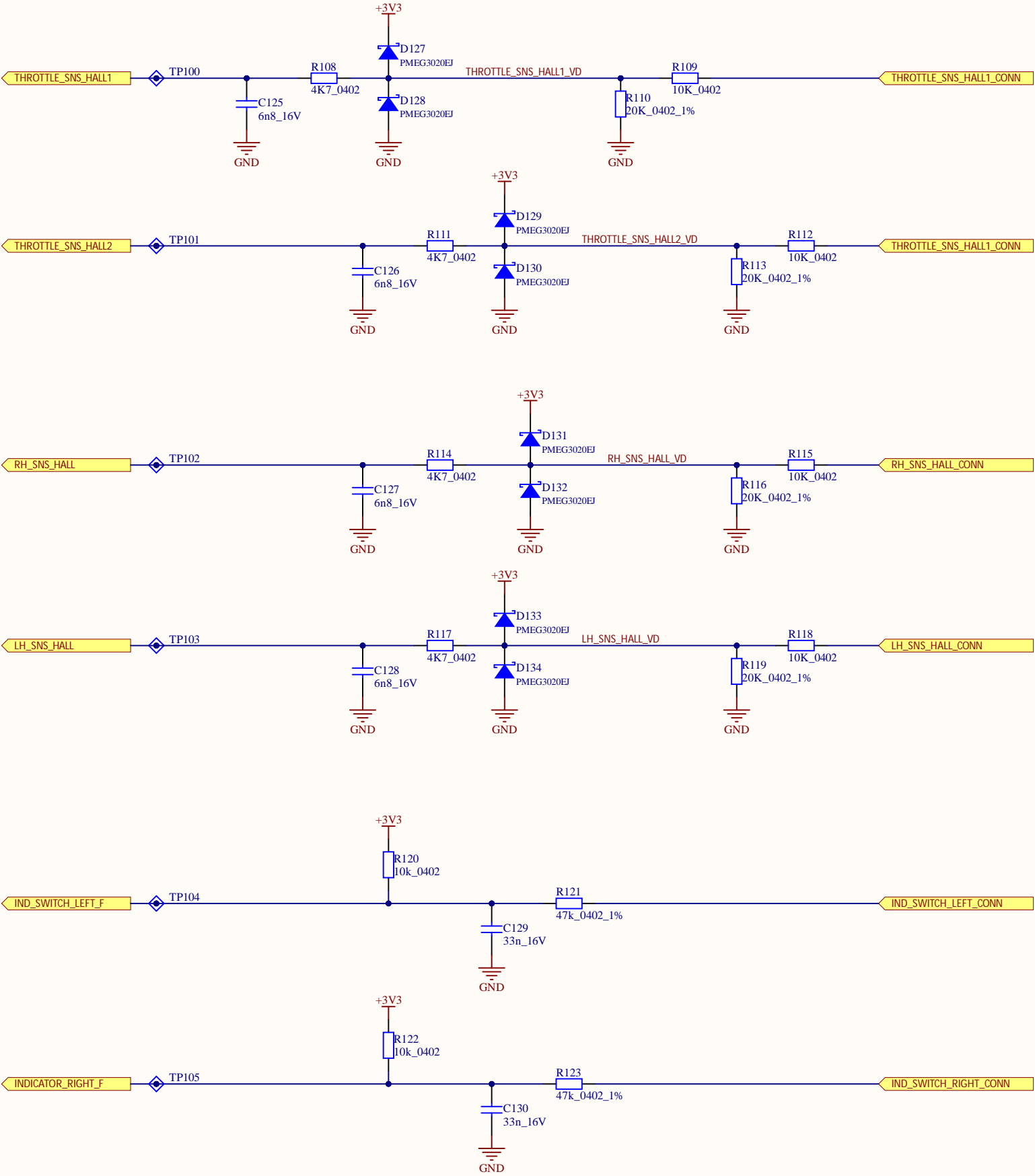
ID100 - REAR CONENCTOR



Title: *			Dott (emTransit B.V.)		
Date: 11/04/2022	Engineer: FG	Part Number: *xxxxx	Westerdok		
		Revision: 0	Van Diemenstraat 292		
Size: A3 Sheet 6 of 17 Version: 1		Rev. date: *Param	1013 CR, Amsterdam		
Project: LIDO		File: LIDO-HW.100.RearConnector.SchDoc	The Netherlands		

ID100 - INPUT STAGE

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

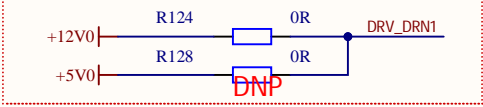


DESIGN NOTE:
Low-pass Filter (R= 47k & C= 33n) Fc: 102 Hz

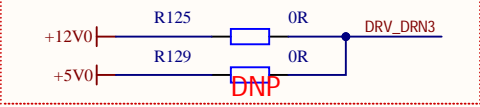
ID100 - OUTPUT STAGE

DRIVER VOLTAGE SELECTOR

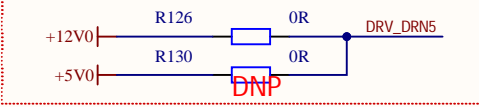
JUMPER - DRV1 SOURCE (FRONT LIGHT)



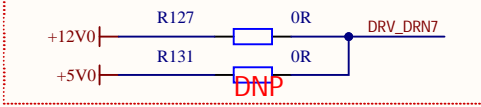
JUMPER - DRV3 SOURCE (RIGHT LIGHT INDICATOR)



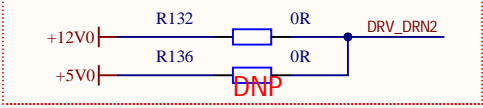
JUMPER - DRV5 SOURCE (ACCESSORY)



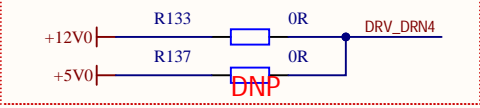
JUMPER - DRIVER 7 SOURCE (SPARE 1)



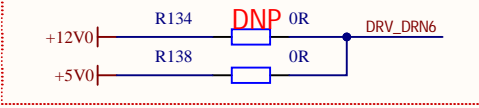
JUMPER - DRV2 SOURCE (LEFT LIGHT INDICATOR)



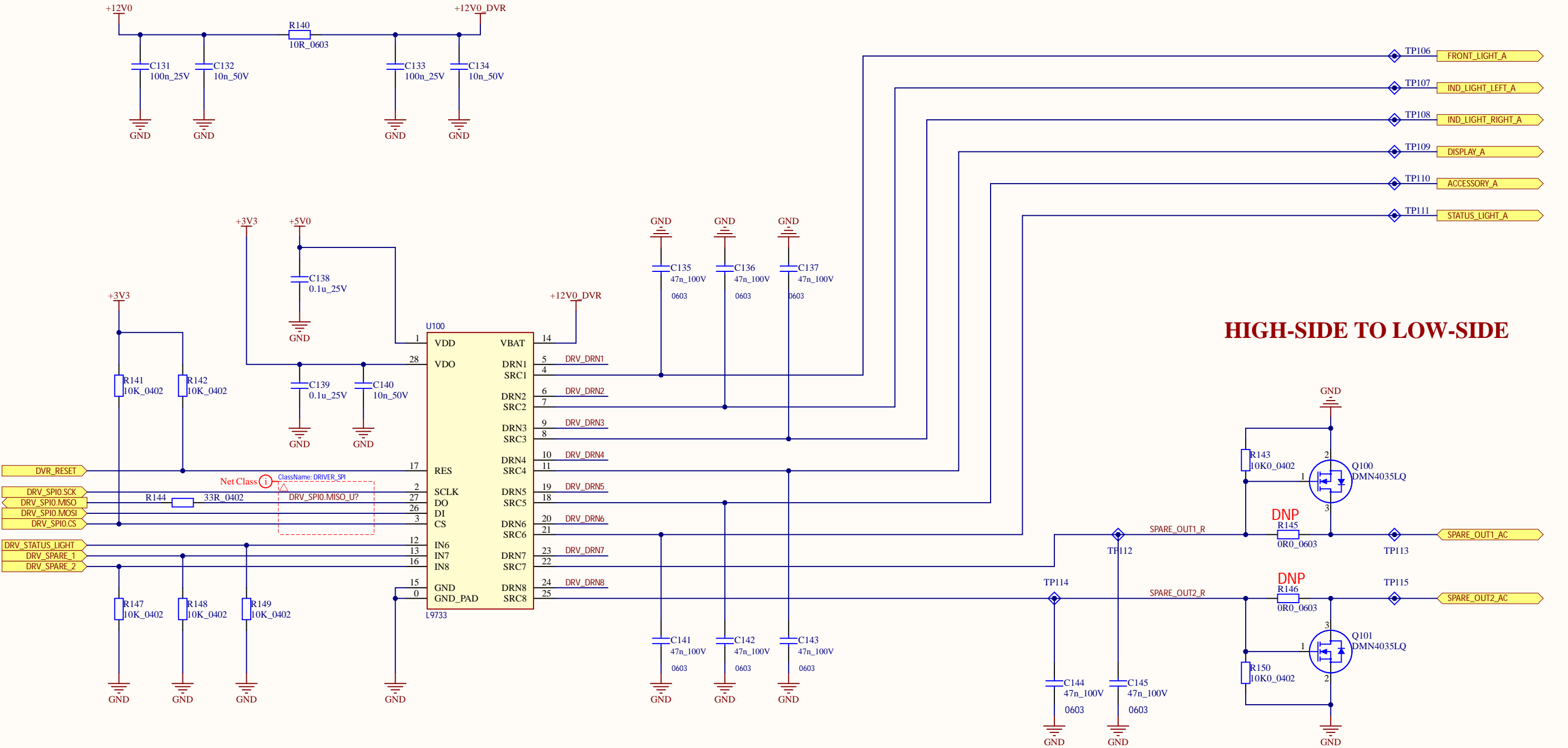
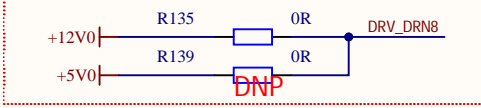
JUMPER - DRV4 SOURCE (DISPLAY)



JUMPER - DRV6 SOURCE (STATUS LIGHT)

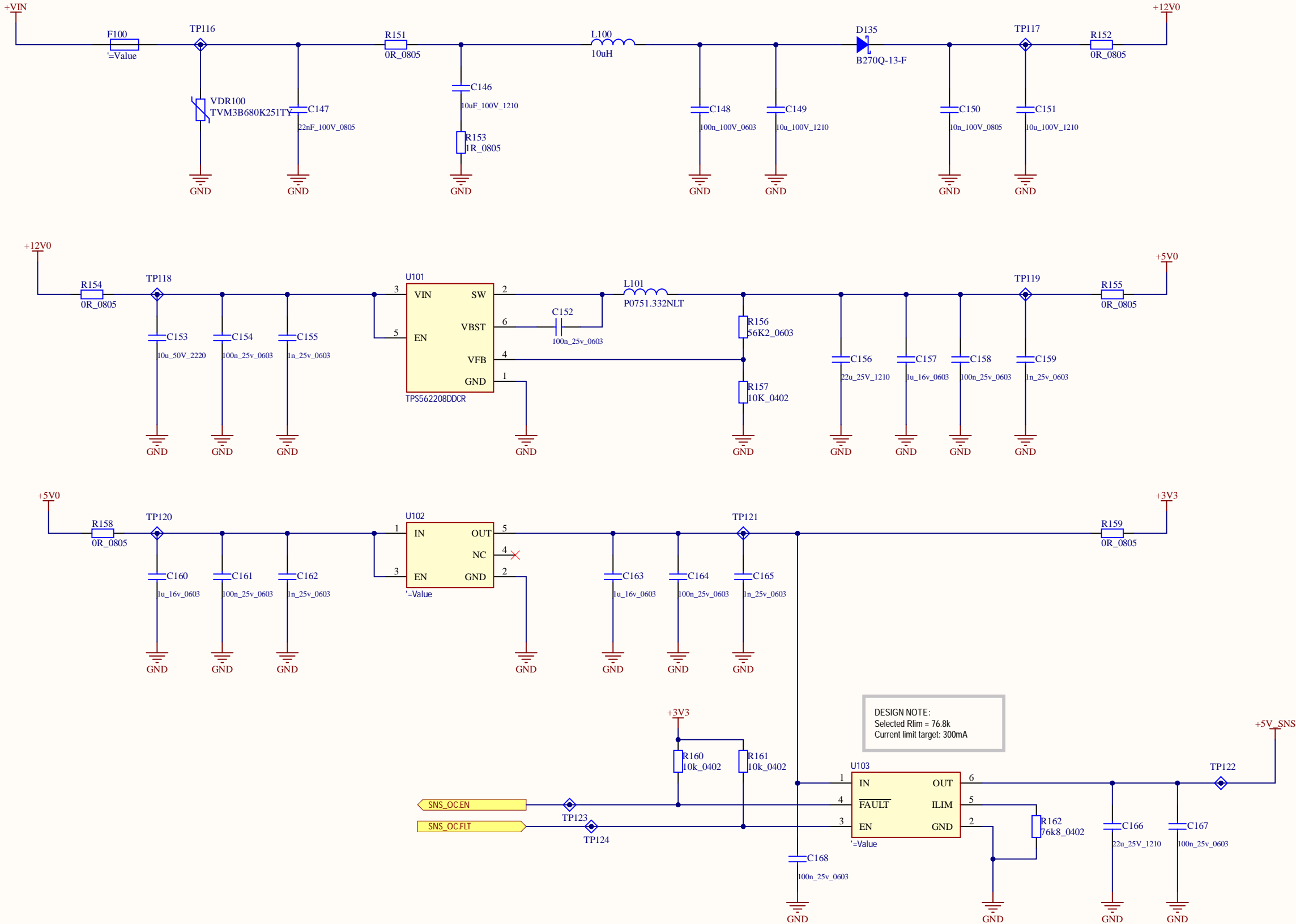


JUMPER - DRIVER 8 SOURCE (SPARE 2)

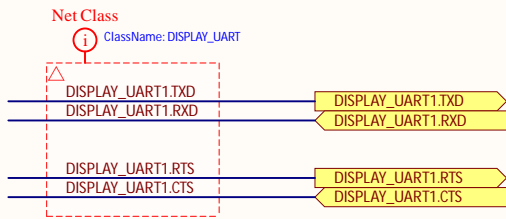
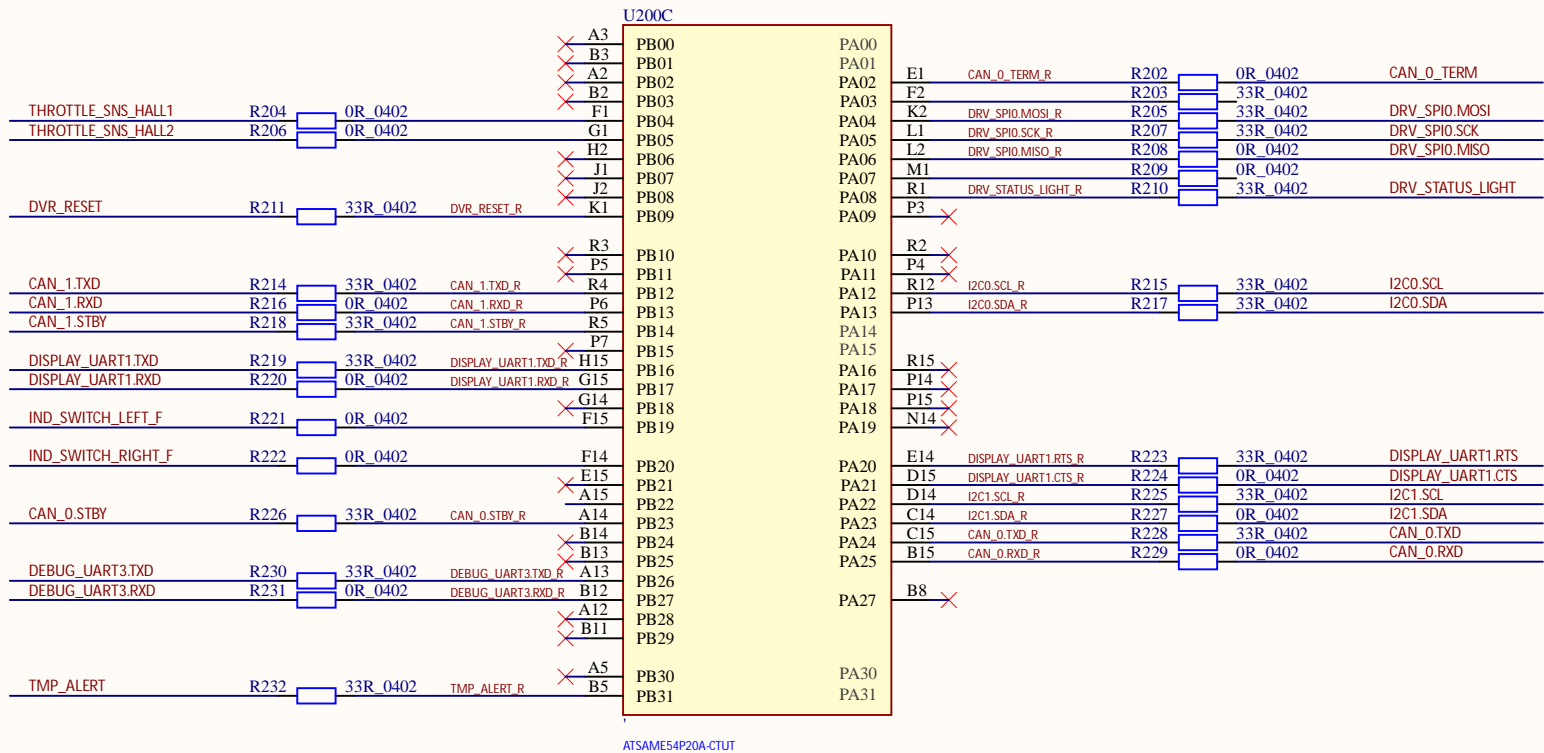


HIGH-SIDE TO LOW-SIDE

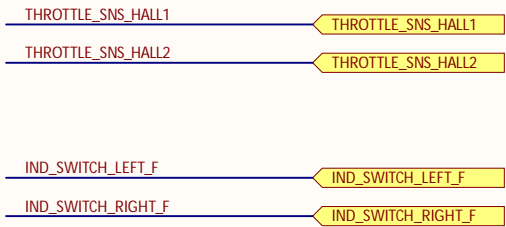
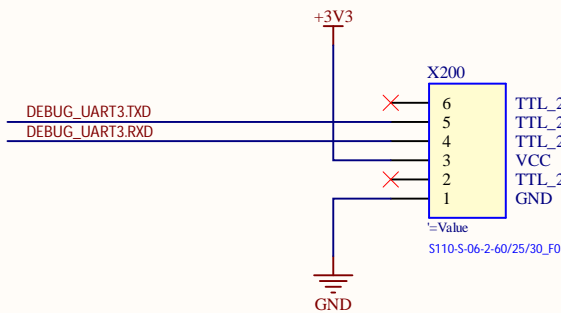
ID100 - INPUT VOLTAGE AND POWER SUPPLIES



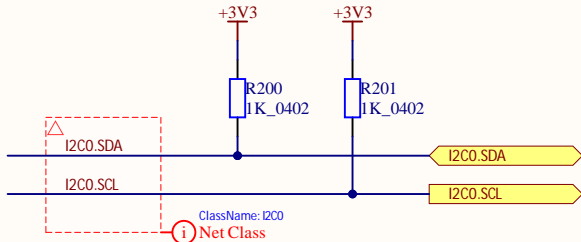
ID200 - MCU PERIPHERALS



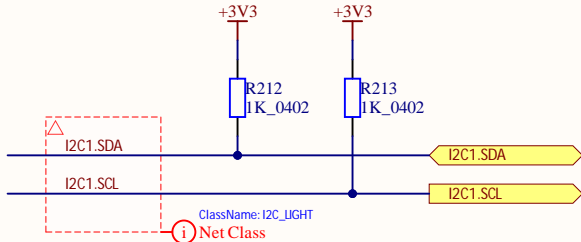
UART DEBUG CONNECTOR



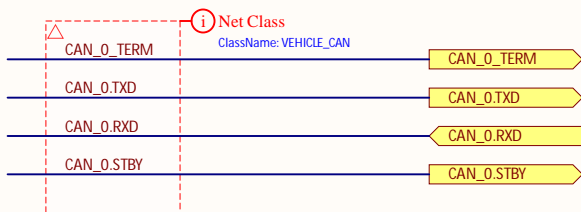
MAIN I2C



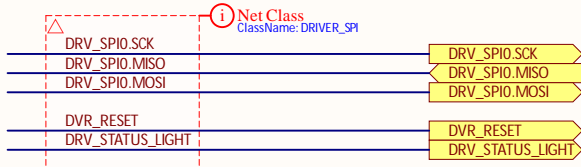
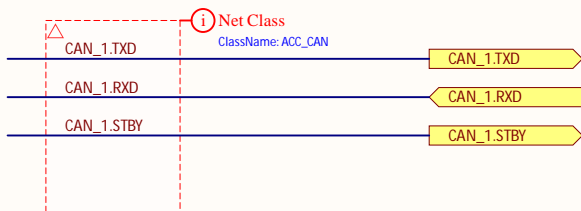
STATUS LIGHT I2C



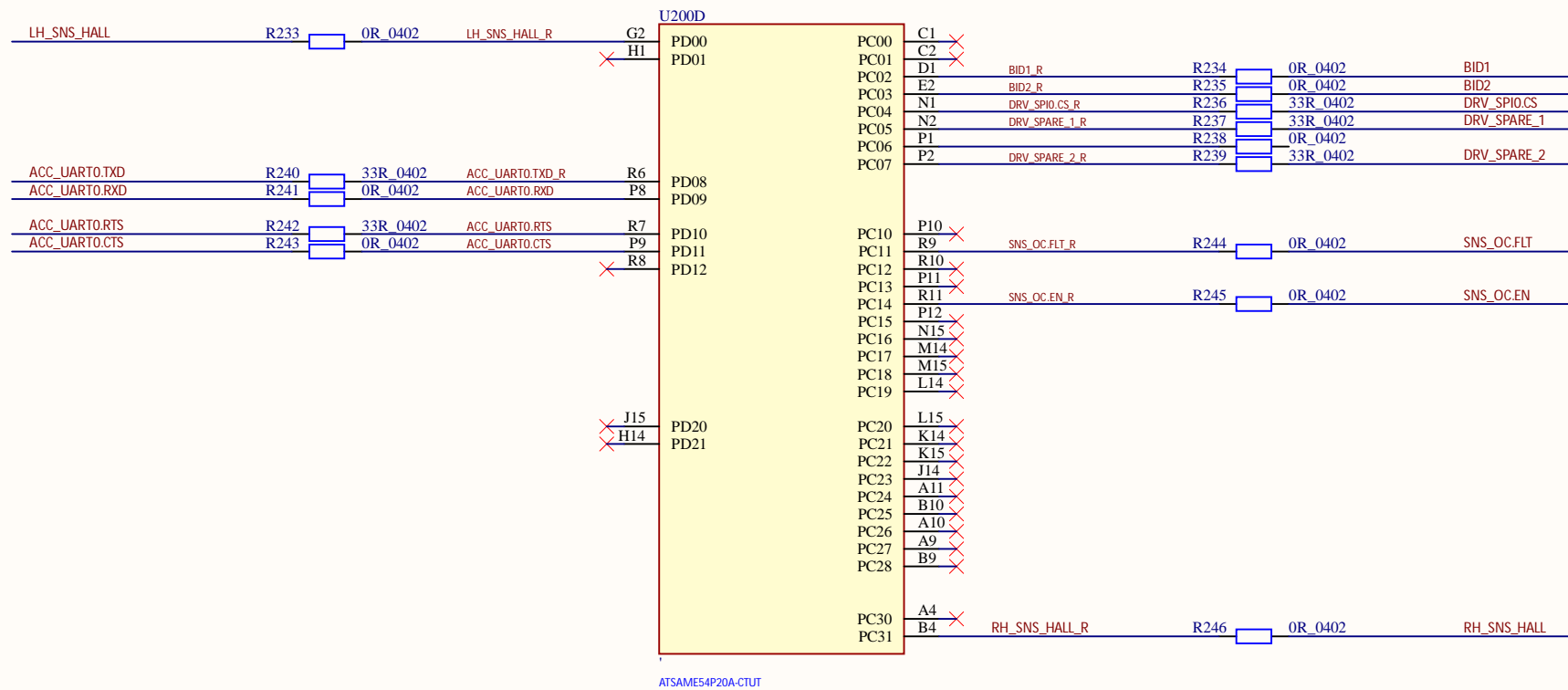
VEHICLE CAN BUS



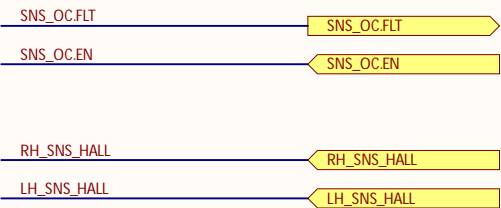
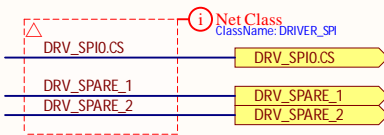
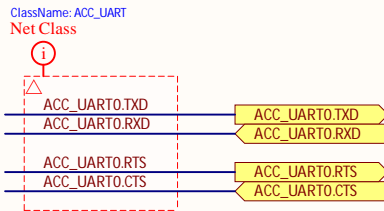
ACCESSORY CAN BUS



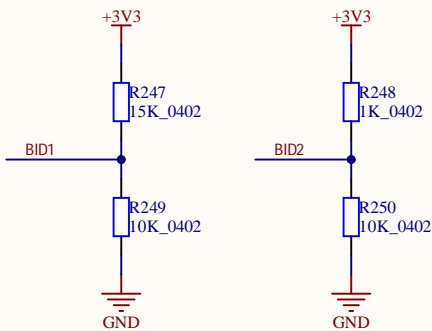
ID200 - MCU PERIPHERALS



ACCESSORY UART



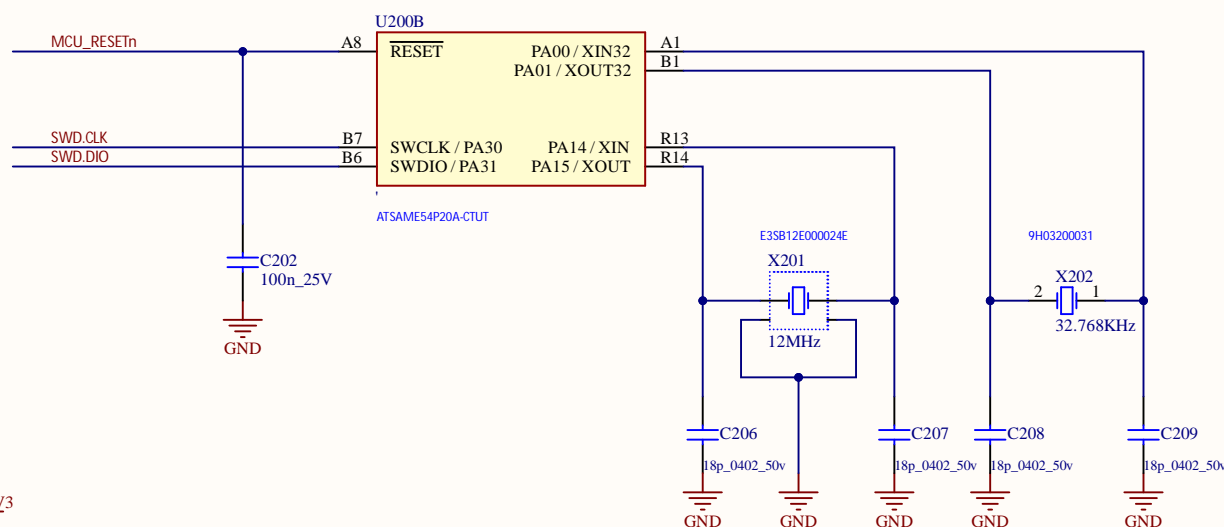
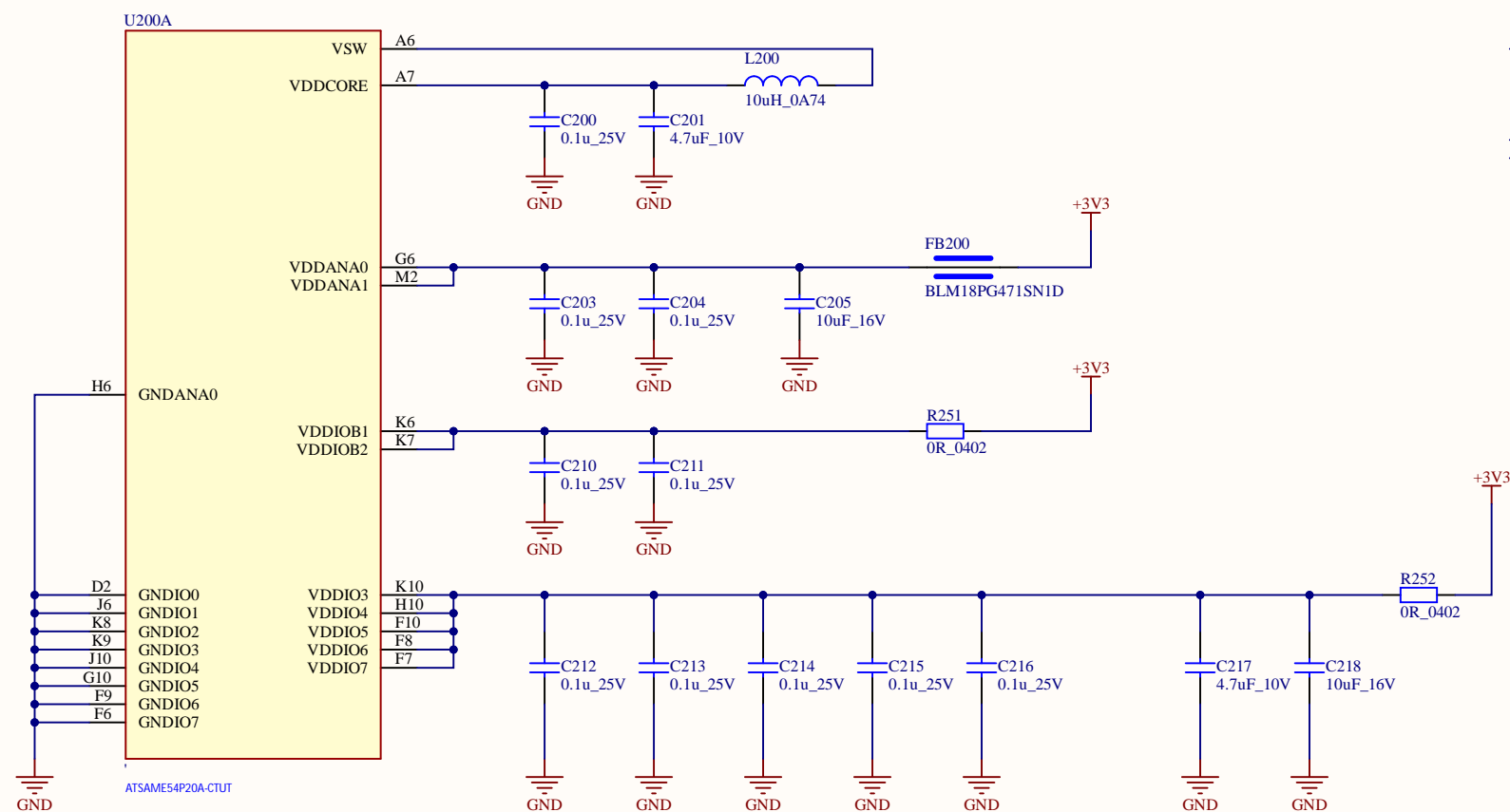
BOARD ID



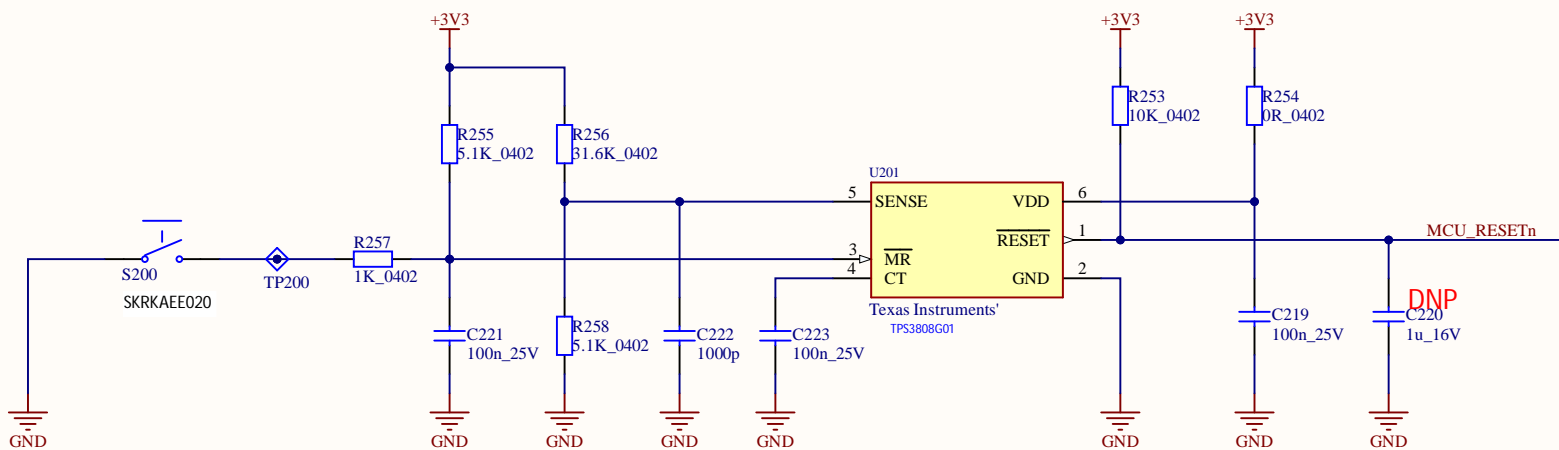
DESIGN NOTE:

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

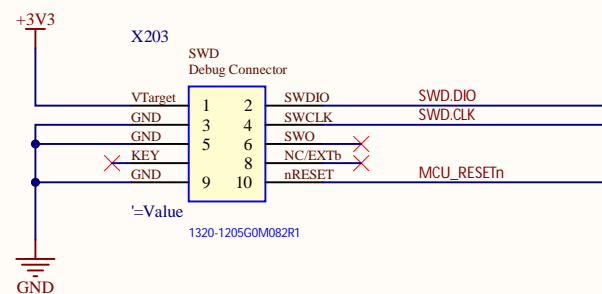
ID200 - MCU POWER, SWD AND RESET



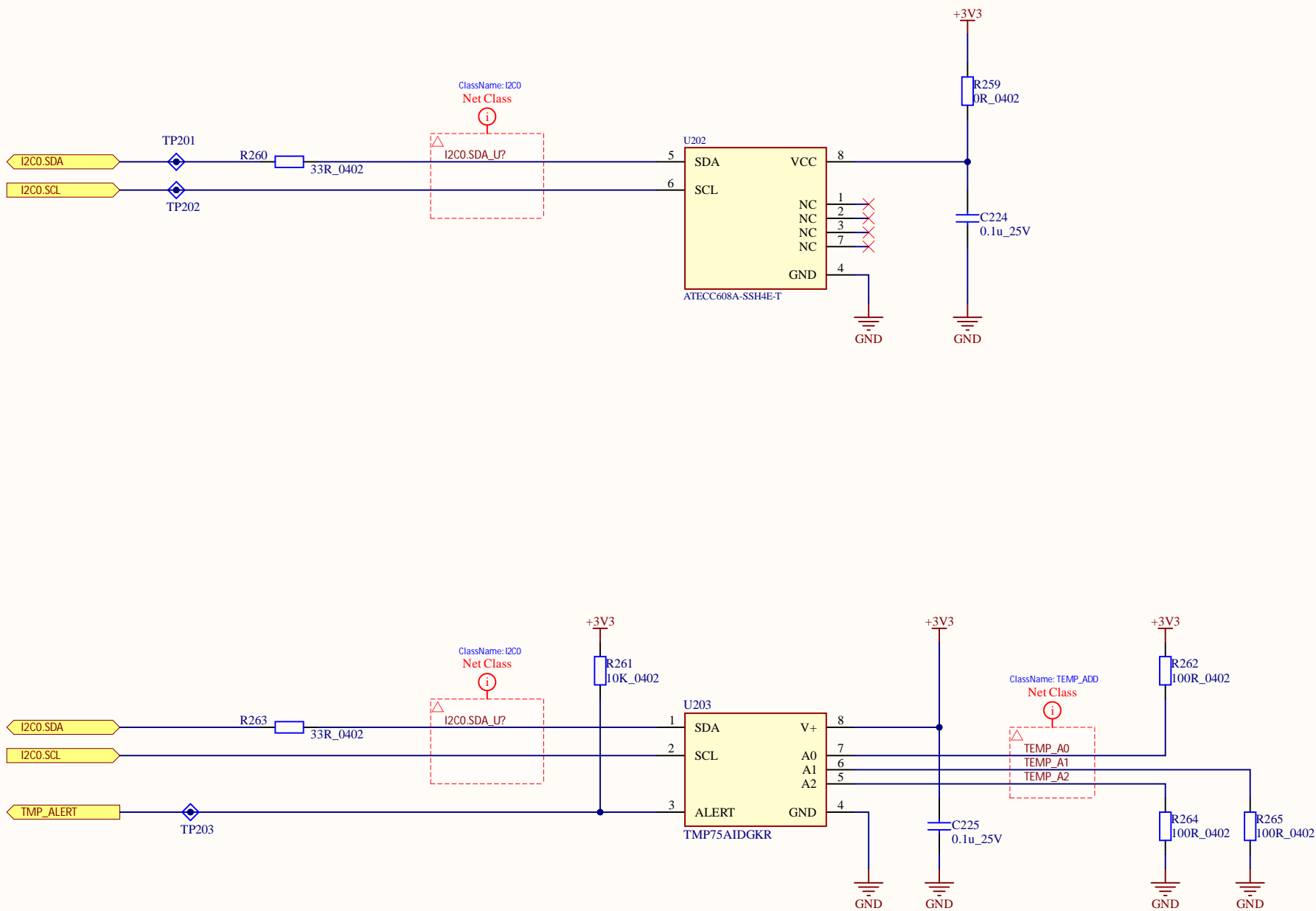
RESET SUPERVISOR



SWD DEBUG CONNECTOR

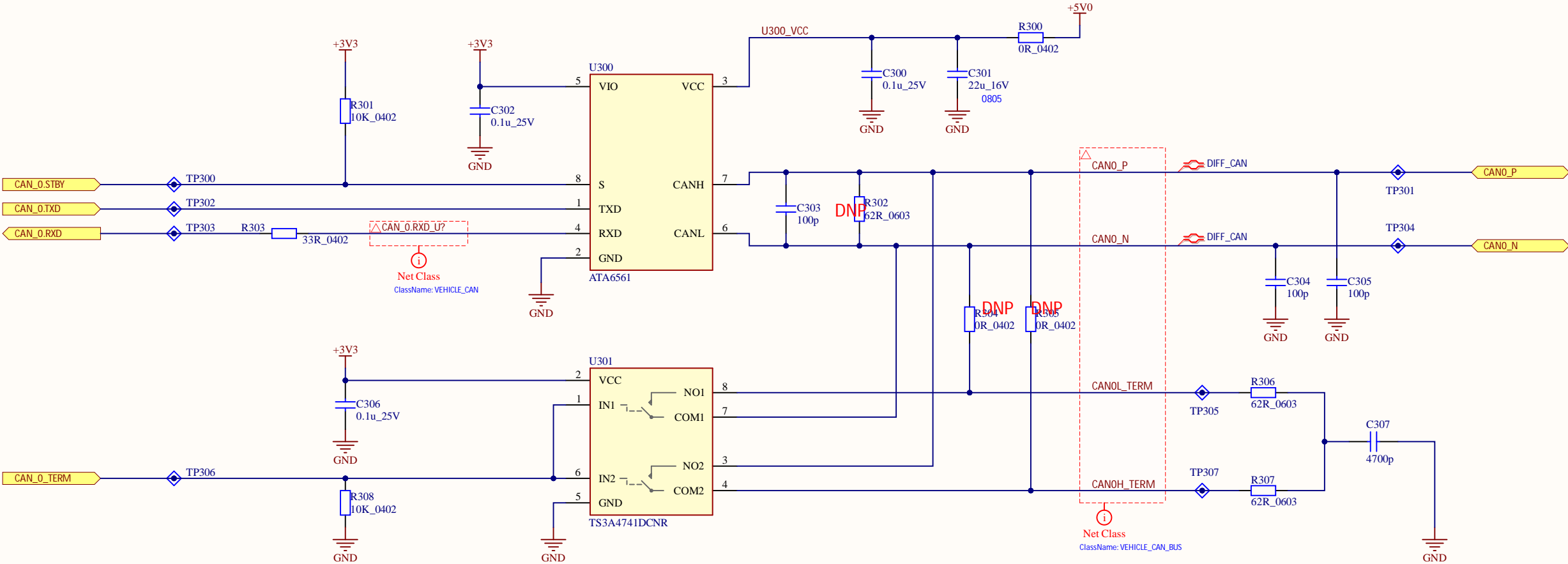


ID200 - SECURITY CHIP AND TEMPERATURE SENSOR



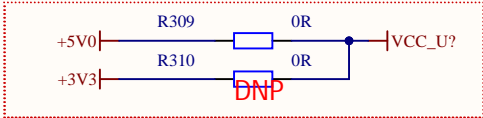
ID300 - VEHICLE INTERFACE

CAN 0 BUS

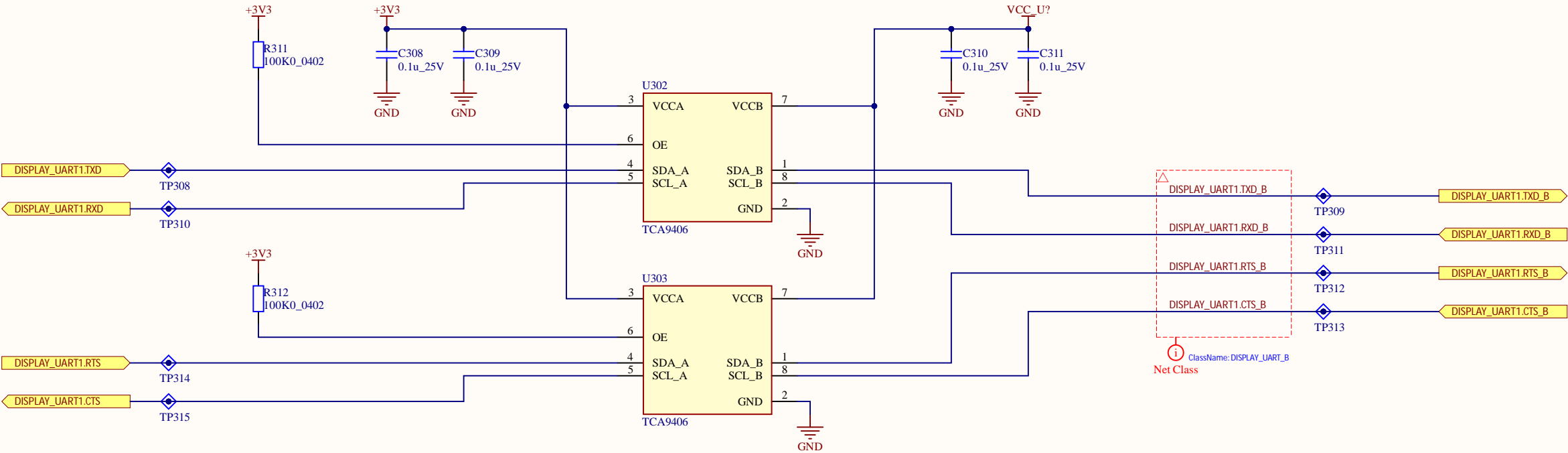


ID300 - DISPLAY INTERFACE

JUMPER - VCCB VOTLAGE SELECTOR

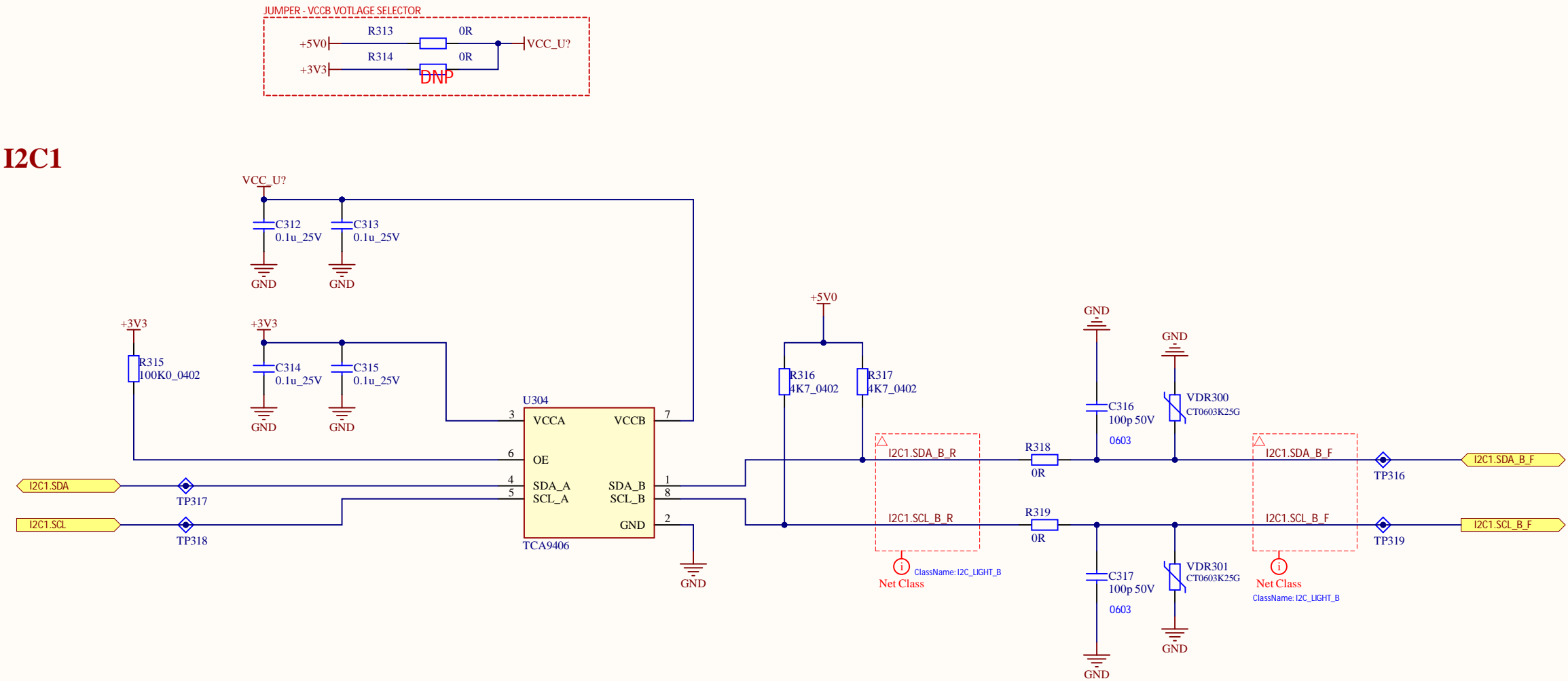


UART1



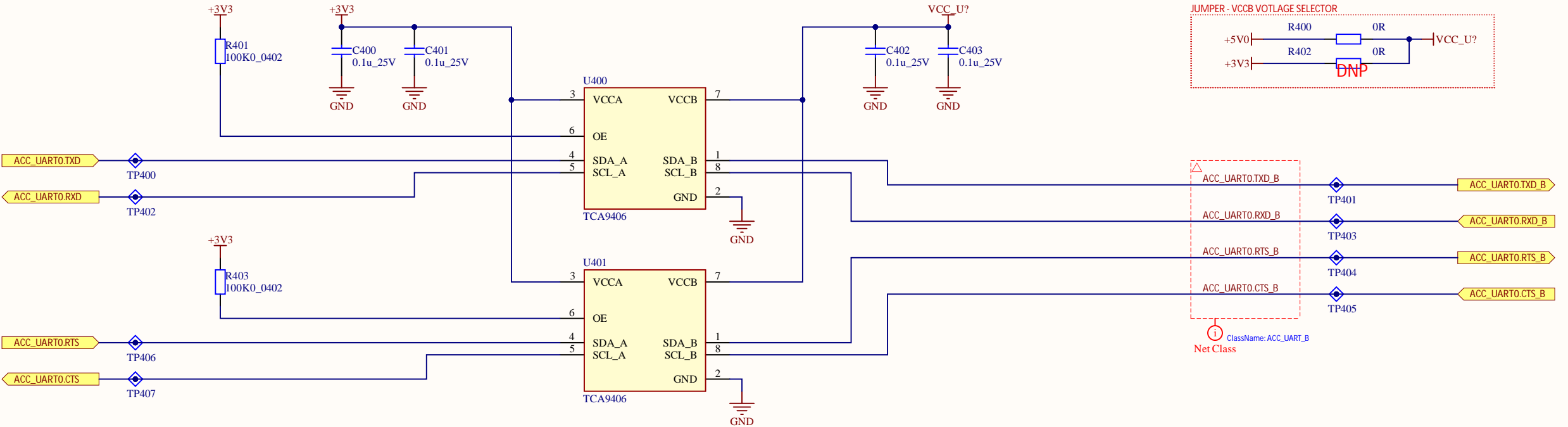
ID300 - STATUS LIGHT INTERFACE

I2C1



ID400 - ACCESSORY INTERFACES

UART0



CAN 1 BUS

