

1

2

3

4

Cannot open file D:\Work\Ambimat\2023\023_Power Board\Process\BD_PDU_01.02.jpg

A

A

B

B


C

C

D

D

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Design By:		
TITLE: BLOCK DIAGRAM		
Document Number: SCH_AE170		
26-03-2024	Rev: 02.04	Sheet: 1 of 6

1

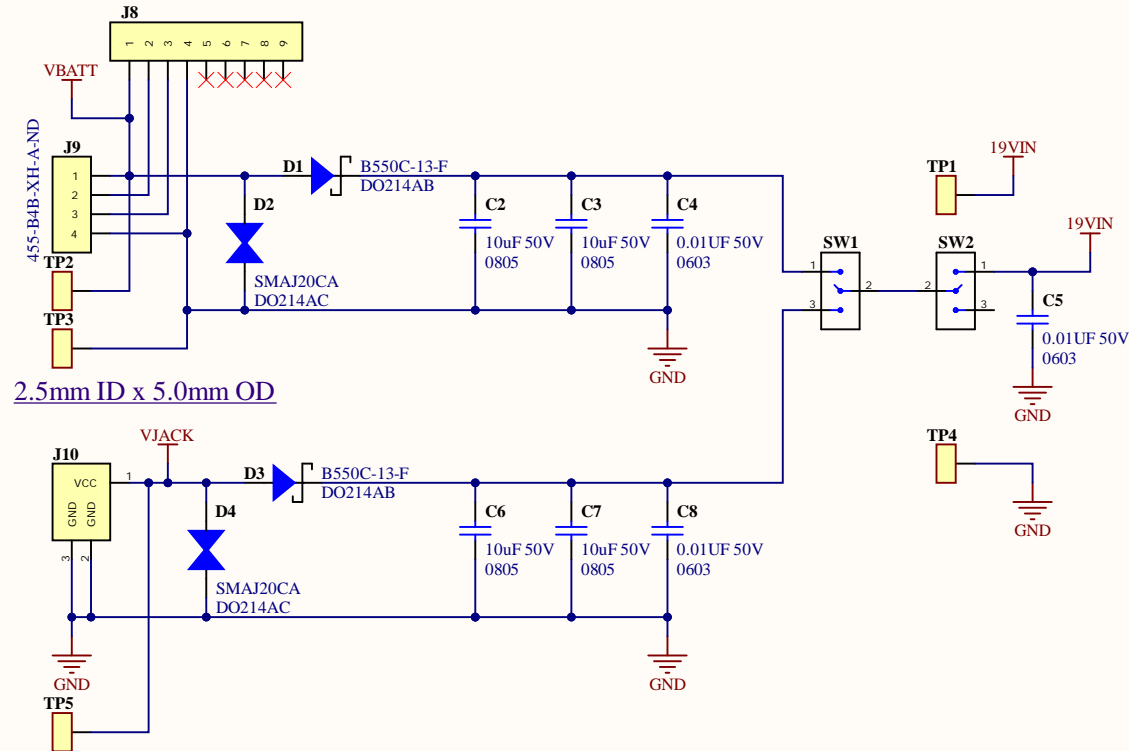
2

3

4

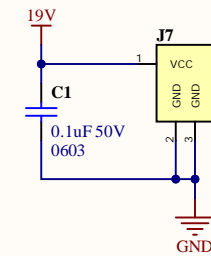
Power Supply input and selection switch

Balancing Leads

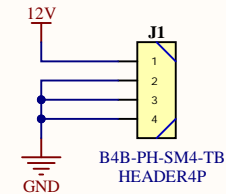


Jetson Orin Nano Devkit

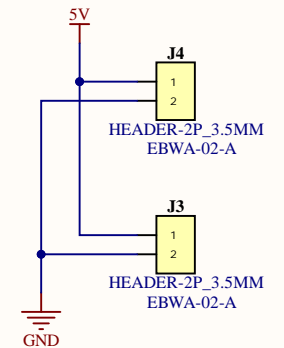
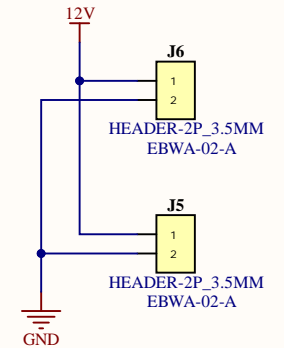
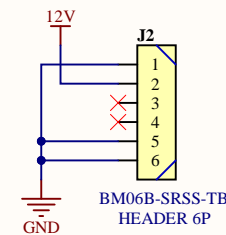
2.5mm ID x 5.0mm OD



Hokuyo 30LX LiDAR



Hokuyo 10XL LiDAR



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Design By:



TITLE: Input Section and Output Connectors

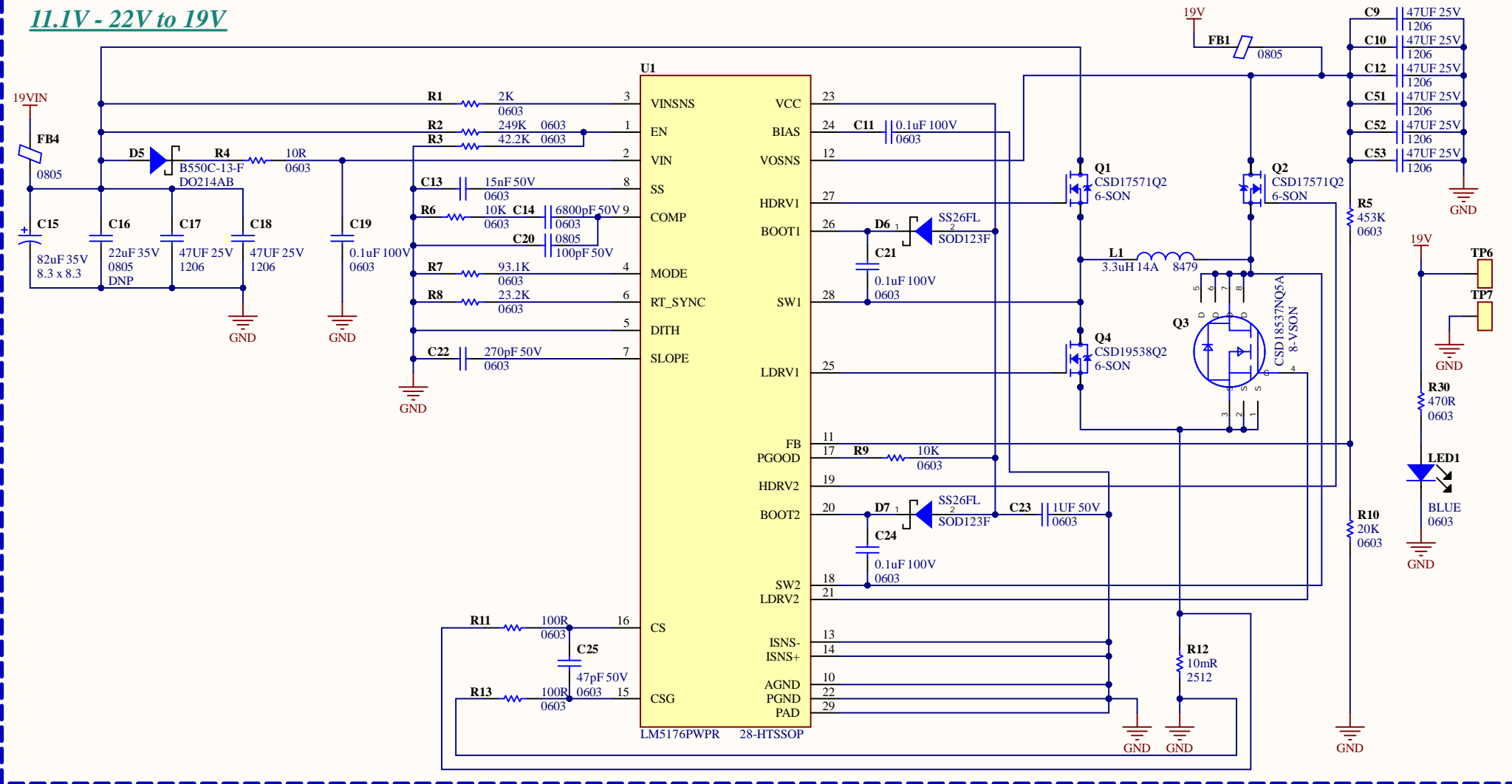
Document Number: SCH_AE170

26-03-2024

Rev: 02.04

Sheet: 2 of 6

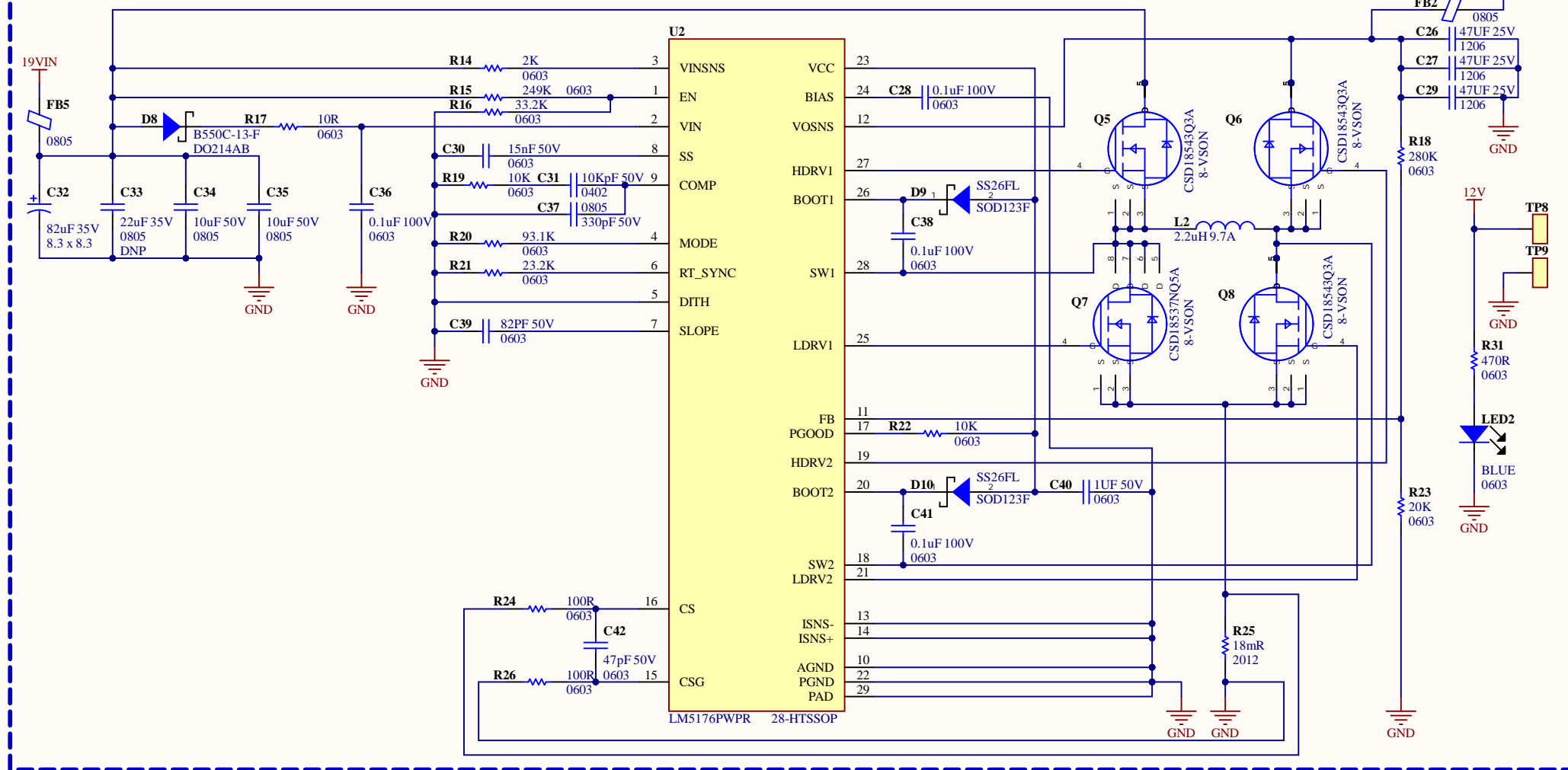
11.1V - 22V to 19V



Design By:		
TITLE:	Power Supply - 2: 11V-22 to 19V	
Document Number:	SCH_AE170	
26-03-2024	Rev: 02.04	Sheet: 3 of 6

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11.1V - 22V to 12V



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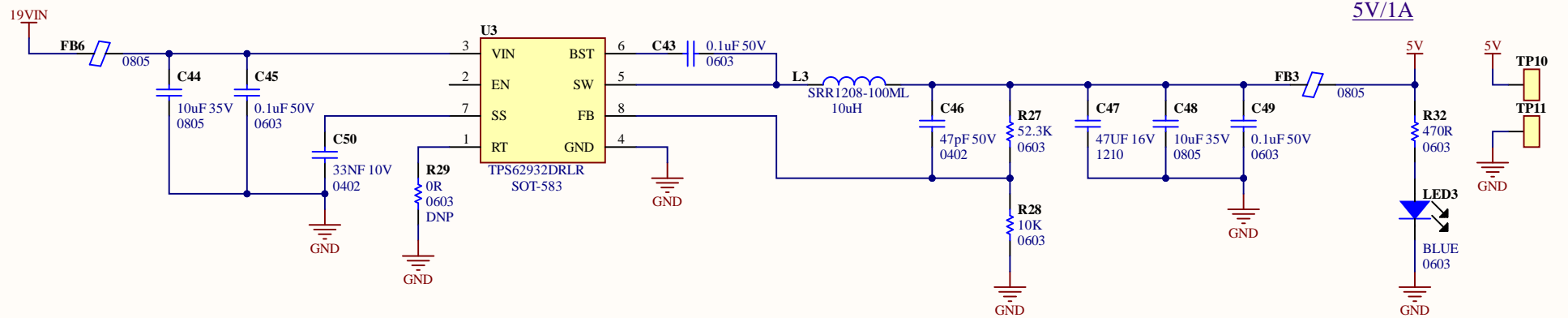
Design By:




TITLE: Power Supply - 2: 11V-22 to 12V

Document Number: SCH_AE170

26-03-2024 Rev: 02.04 Sheet: 4 of 6



Design By: 		
TITLE: 12V and 5V Section		
Document Number: SCH_AE170		
26-03-2024	Rev: 02.04	Sheet: 5 of 6

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Revision: 01.01

Initial draft is released.

Revision: 02.01

1. Ferrite bead - FB1, FB2, FB3, FB4, FB5, FB6 part numbers are updated.
2. Diode D5 part number is updated as per D8.
3. 47uF/25V - 3 capacitors are added at 19V output.
4. Q5, Q6, Q7, and Q8 part number is updated as per PCB footprint.
5. Battery connector J5 is updated to 455-B4B-XH-A-ND.
6. J10 Lidar connector, Pin#1 and 2 connections are swapped.
7. LED's are added for 19V, 12V and 5V.

Revision: 02.02

1. All connectors designators are updated as per PCB location, Left to right.
2. Battery connector connectios are updated as per Customer input.

Revision: 02.03

1. C17 and C18 is updated to 47uF/25V.

Revision: 02.04

1. No change at schematic level, Sr No block and AE symbol is added on PCB.

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Design By:



TITLE: Revision History

Document Number: **SCH_AE169**

26-03-2024

Rev: 02.04

Sheet: 6 of 6