

A

B

C

D

A

B

C

D

1	2	3	4
A	<div>STM32H743XIH6 SOM B'd (Rev.A)</div> <div>[2] Overview</div>		
B			
C			
D			
1	2	3	4

Title		STM32H743XIH6 SOM Bd.PrjPcb		Rev	*
Doc		02_Overview.SchDoc			
Sheet # 2 of 7		Author *			
Date		2024-04-17			
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Diagram illustrating the pin connections for the CN400 module (TC2030-IDC) to the DP3.3VS and DGND pins:

- Pin 1: VCC (connected to DP3.3VS)
- Pin 4: SWCLK/TCK (connected to MCU_SWLCK)
- Pin 2: SWDIO/TMS (connected to MCU_SWLCK)
- Pin 6: SWO/TDO (connected to MCU_SWLCK)
- Pin 3: NRST (connected to MCU_NRST)
- Pin 5: GND (connected to DGND)

DP3_3VS

R401
10K/1005

MCU_BOOT0

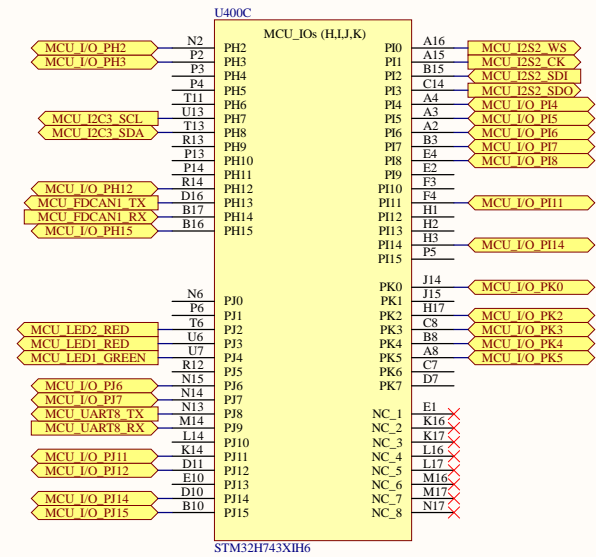
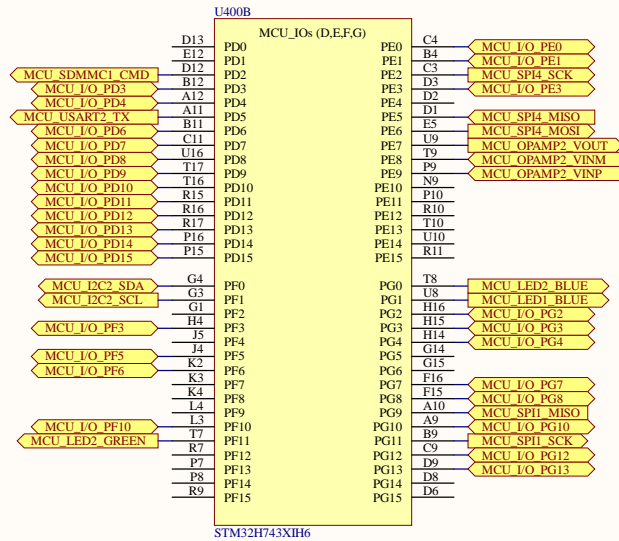
R403
0R/1005

DGND

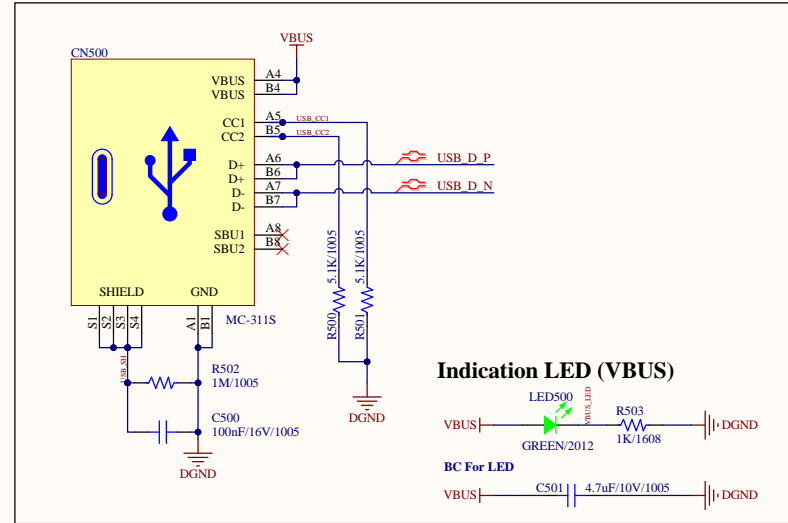
The diagram shows the I2C interface circuit. The AT24C16 EEPROM (U401) is connected to the MCU's I2C3 SCL, SDA, and WP pins. The I2C address is 1010_xxxx. Pull-up resistors (R411, R412, R413) are connected to the DP3.3VS supply. The I2C address is 1010_xxxx.

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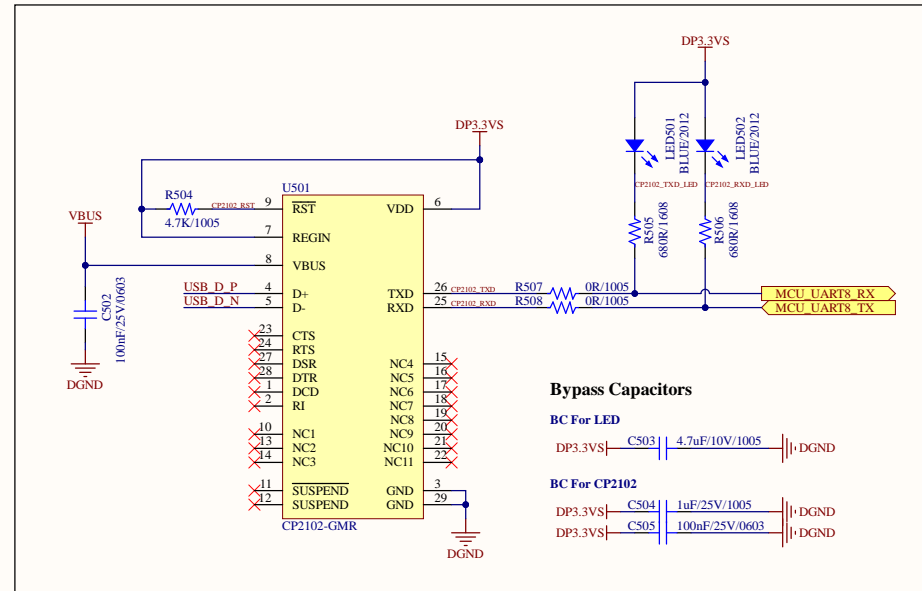
[5] MCU - Part2



USB Connector (Type-C)

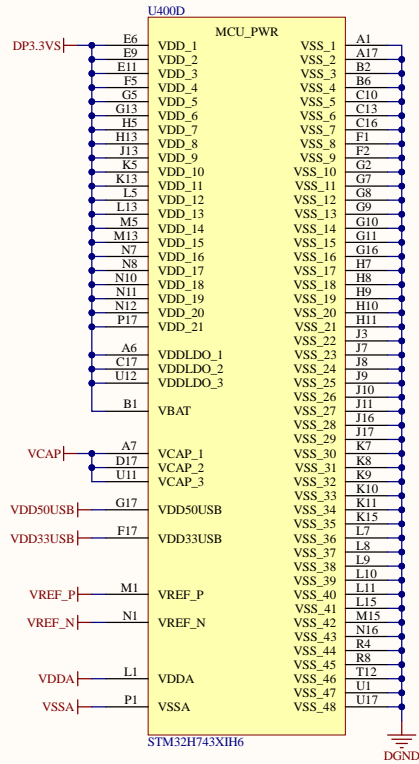


USB - UART Bridge

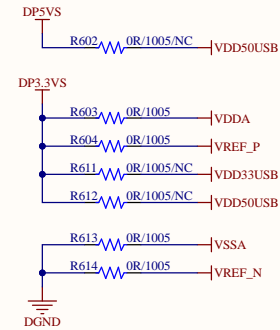


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05_MCU-Part2.SchDoc			
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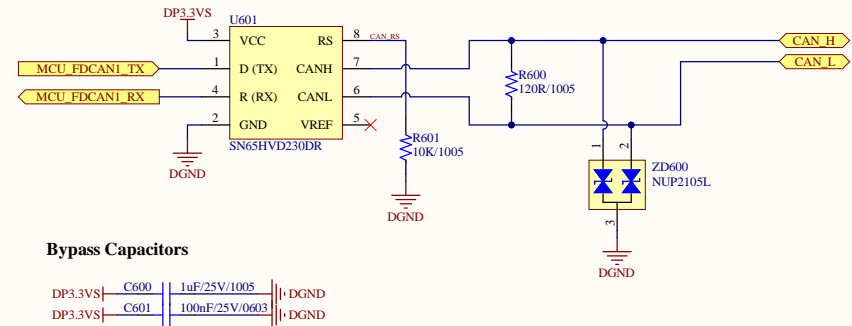
[6] MCU - Part3



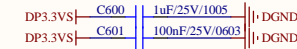
Pull-Up/Down Resistors



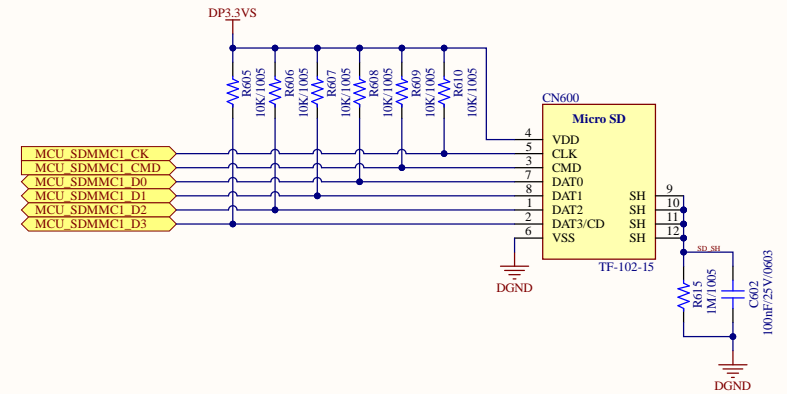
CAN Transceiver



Bypass Capacitors

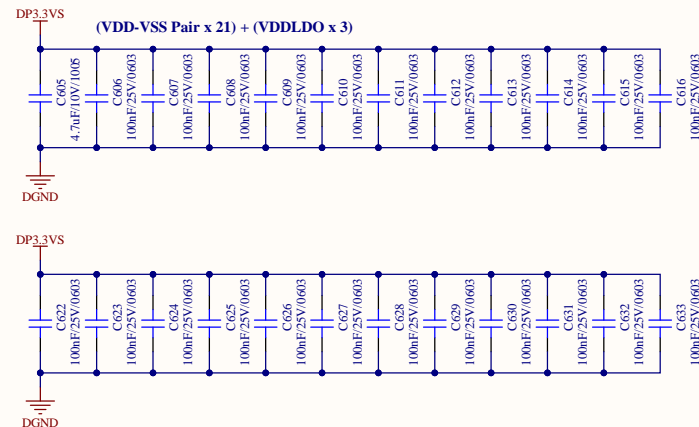


Micro-SD Card



Decoupling Capacitors

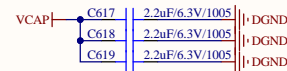
DeCap for "VDD - VSS Pair"



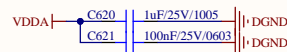
DeCap for VDD50USB & VDD33USB



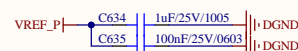
DeCap for VCAP



DeCap for VDDA

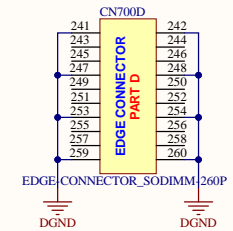
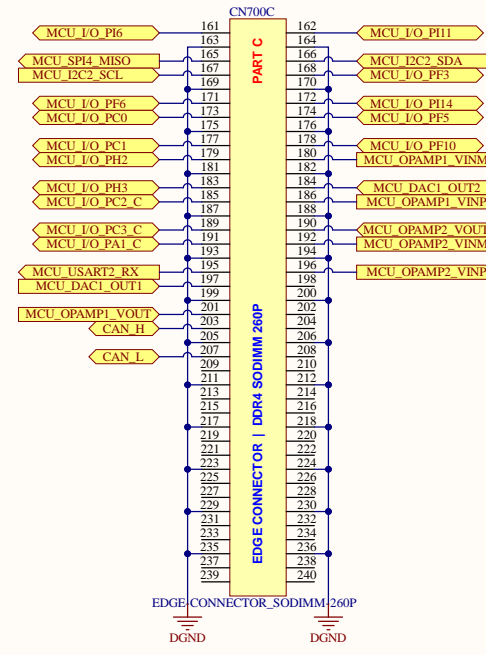
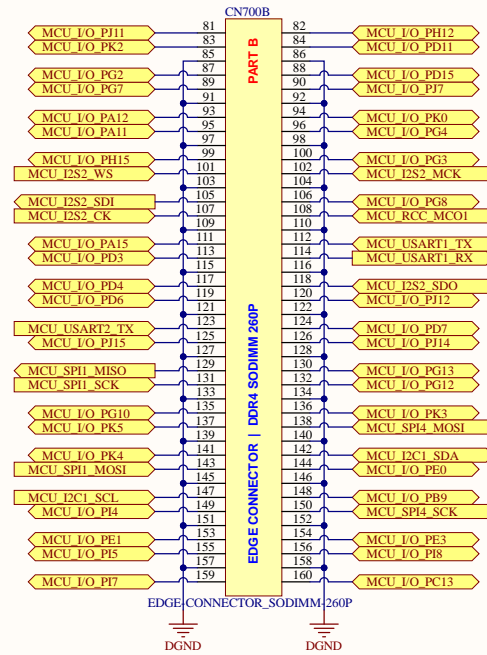
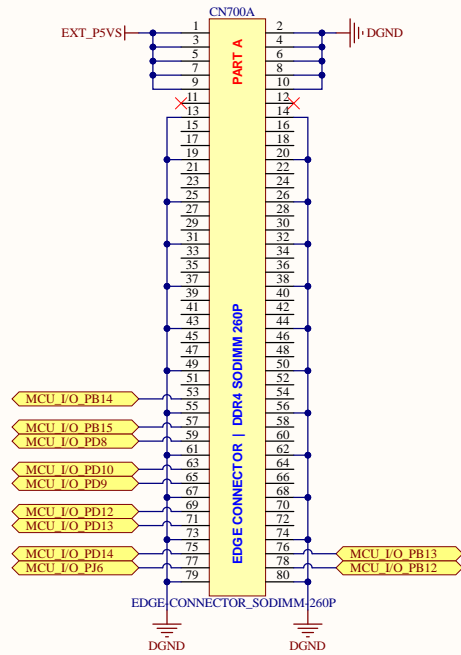


DeCap for VREF_P

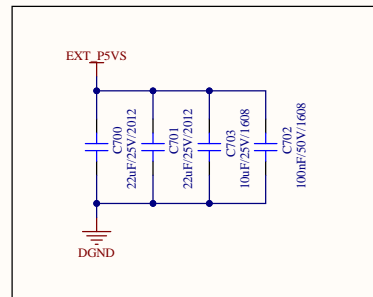


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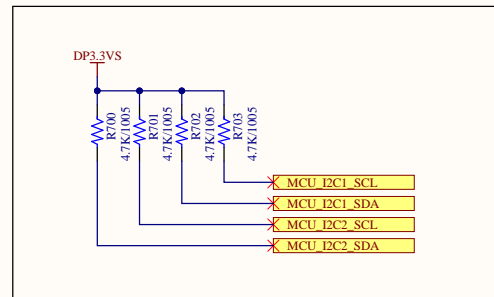
[7] Connector



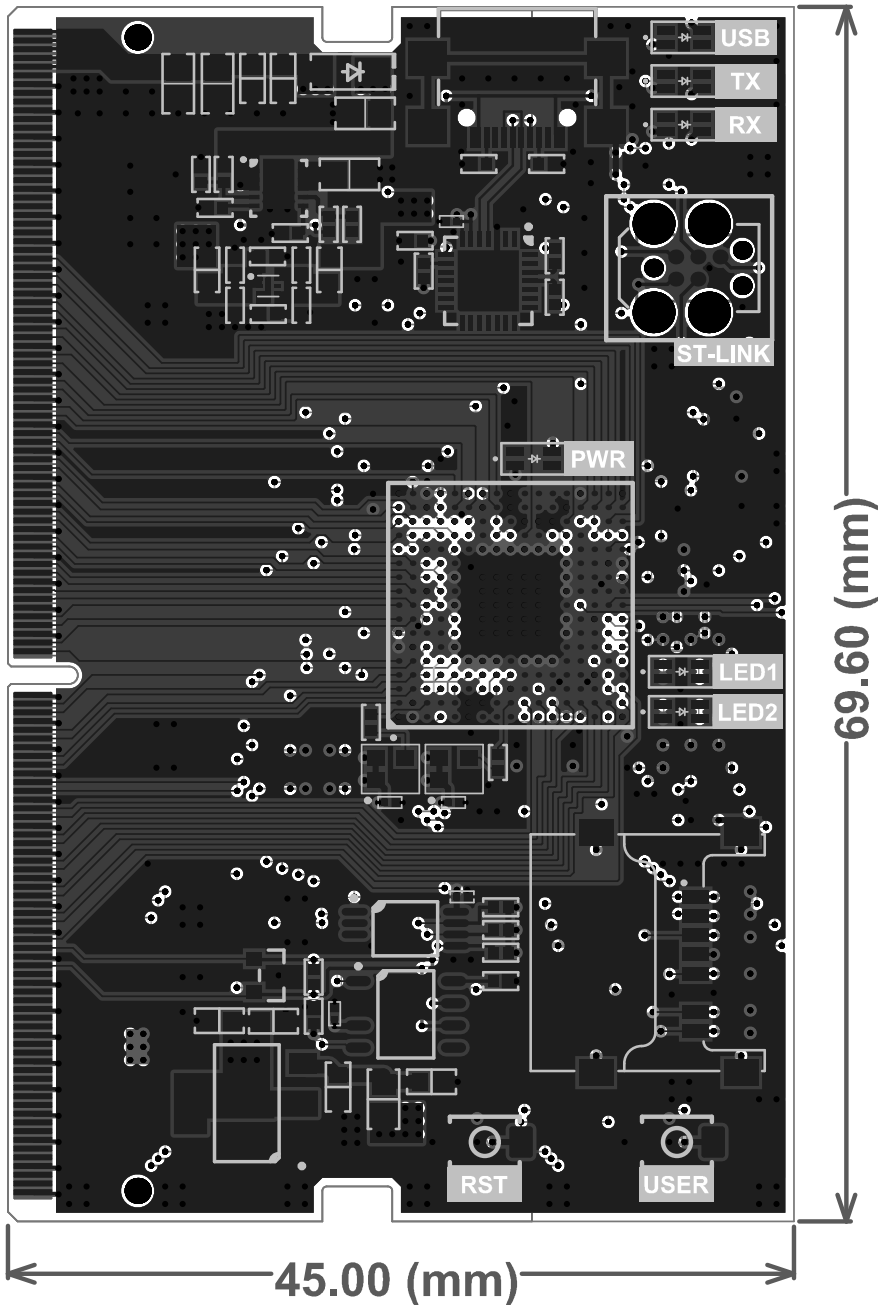
Decoupling Capacitors



Pull-up Resistors for Ext. I2C Peri



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07_Connector.SchDoc		
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# Layer Information	
L1	Top (Signal / GND)
L2	GND
L3	Power (5V / 3.3V)
L4	Signal / GND
L5	GND
L6	Signal / GND
L7	GND
L8	Bottom (Signal / GND)

# PCB Specification (JLCPCB)		
No	Category	Selection
1	Base Material	FR-4
2	Layer #	8 - Layer
3	Dimension	45.00(mm) * 69.60(mm)
4	Thickness	1.2T
5	Color	Green or Black
6	Material Type	FR-4 TG155
7	Surface Finish	ENIG
8	Gold Thickness	2 U"
9	Outer Copper Weight	1 oz
10	Inner Copper Weight	0.5 oz
11	Impedance Control	Yes
12	Layer Stack-up	JLC08121H-3313
13	Via Covering	Epoxy Filled & Capped
14	Min. Via Hole Size / Diameter	Hole : 0.2mm / Diameter : 0.35mm
15	Board Outline Tolerance	±0.1mm (Precision)
16	Confirm Production File	Yes
17	Remove Order Number	Yes
18	Flying Probe Test	Fully Test
19	Gold Fingers	Yes
20	30° Finger Chamfered	No
21	Castellated Holes	No
22	Edge Plating	No