

STM32H7xxx-Disco

MB1381

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Top
TOP.SchDoc



Legend

General comment such as function title, configuration, ...

Text to be added to silkscreen.

Warning text.

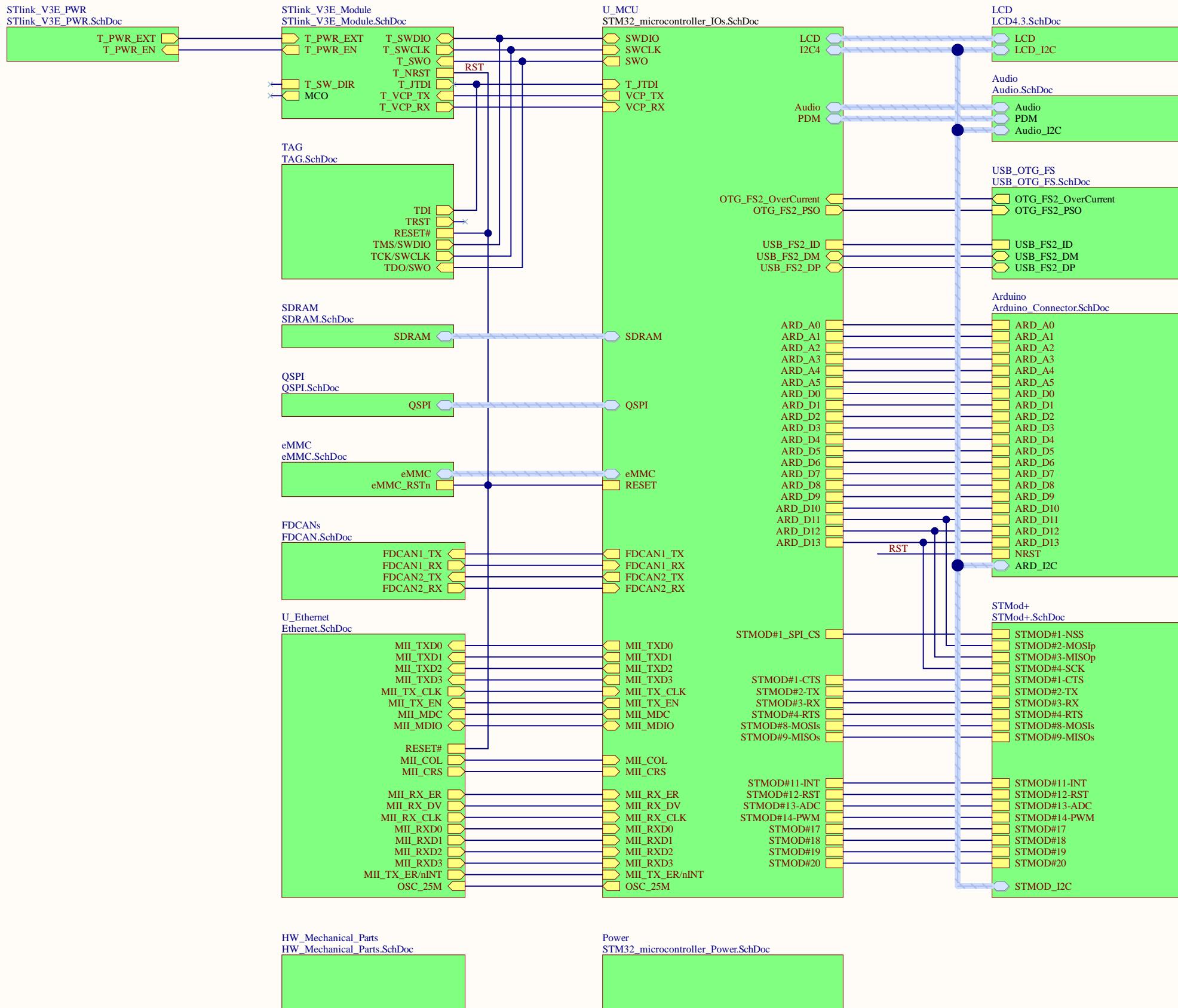
▲ Notes to generate the board layout.

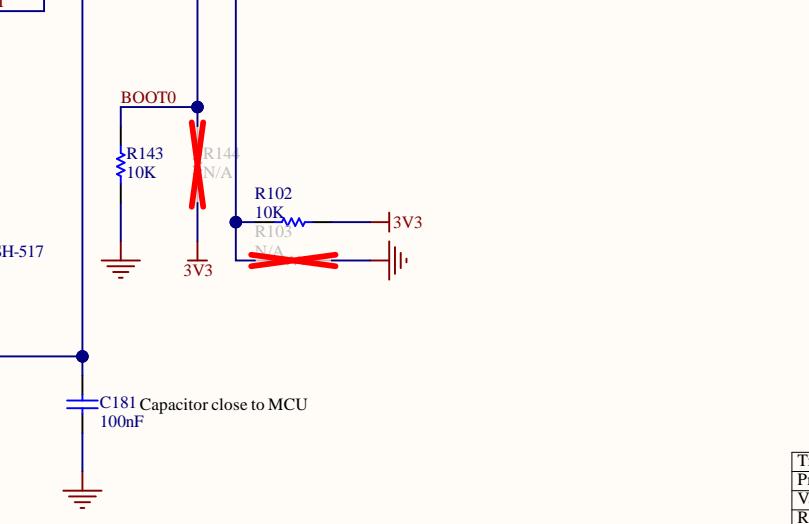
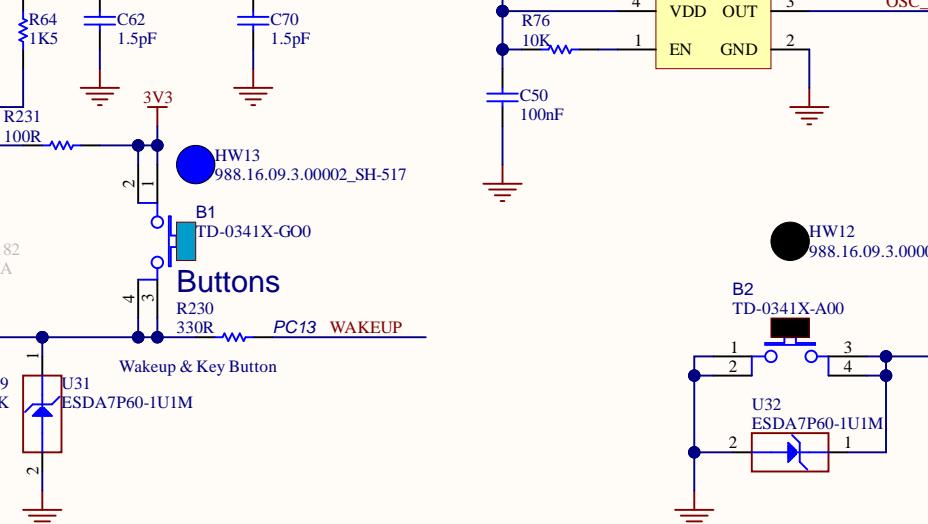
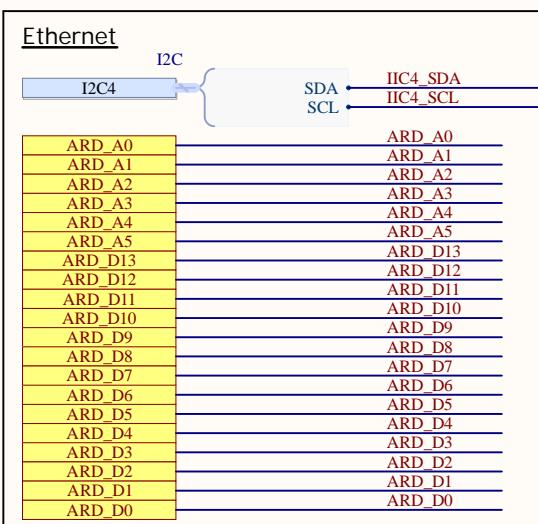
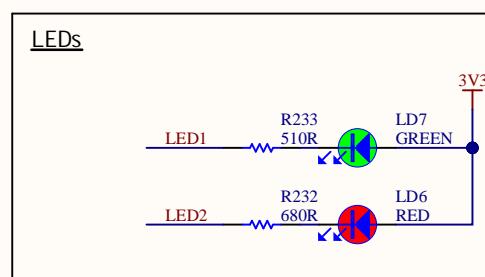
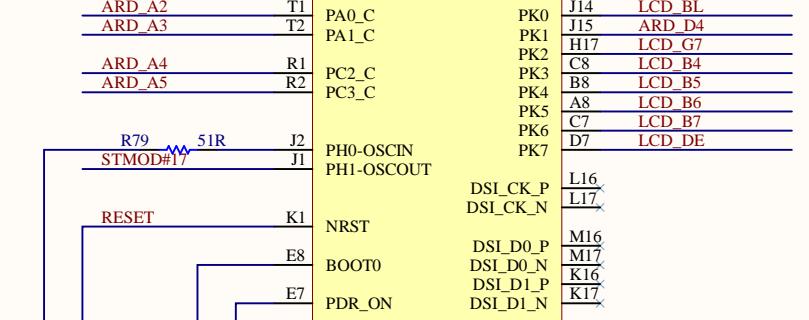
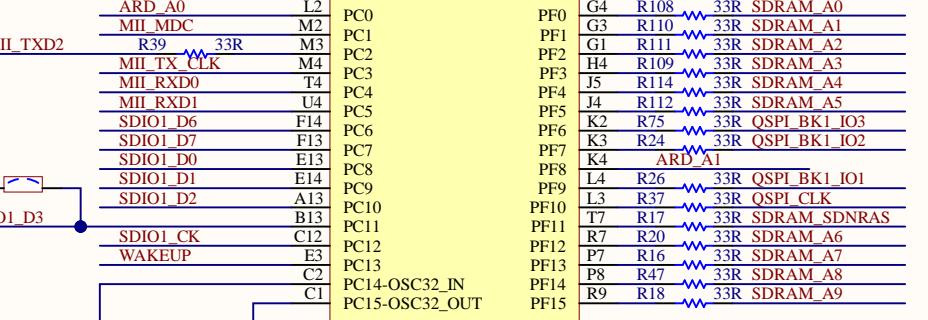
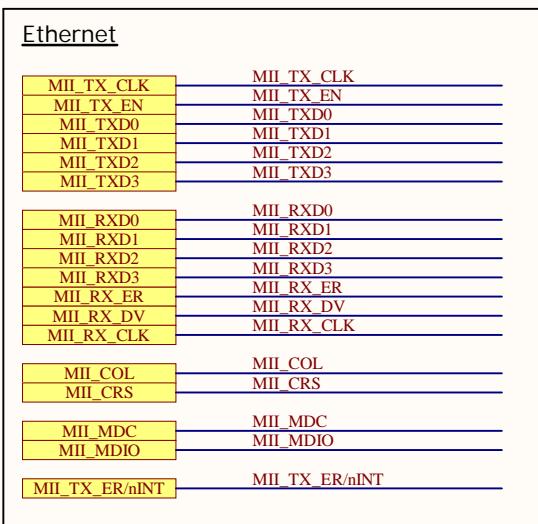
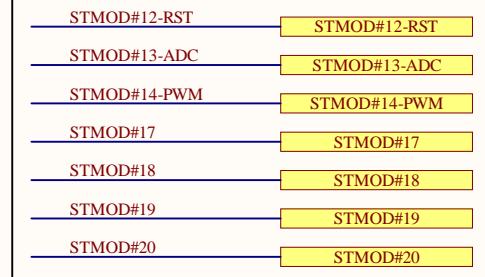
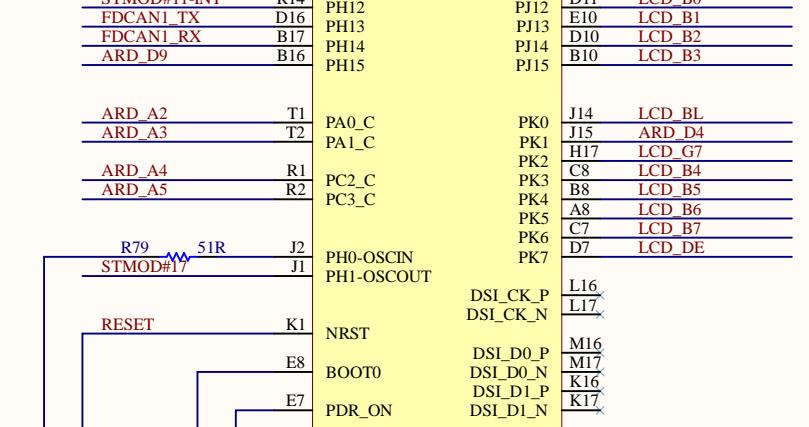
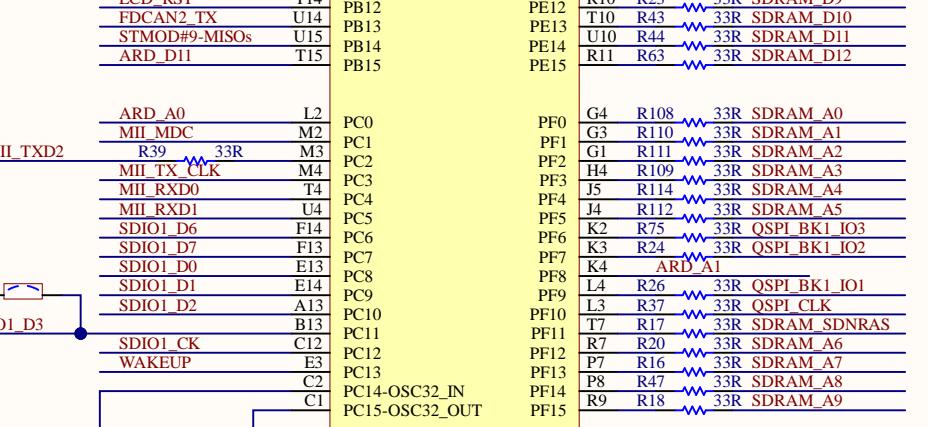
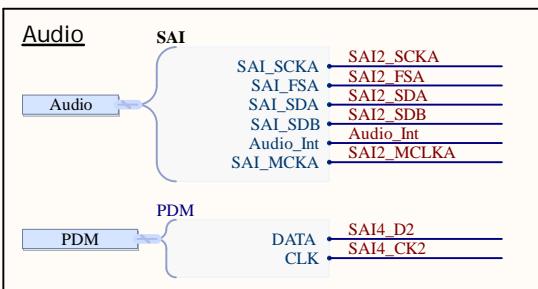
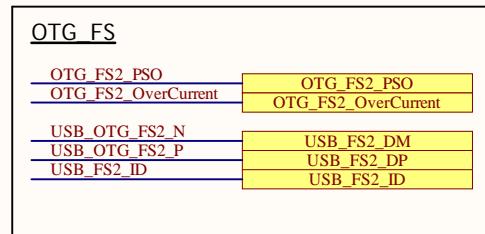
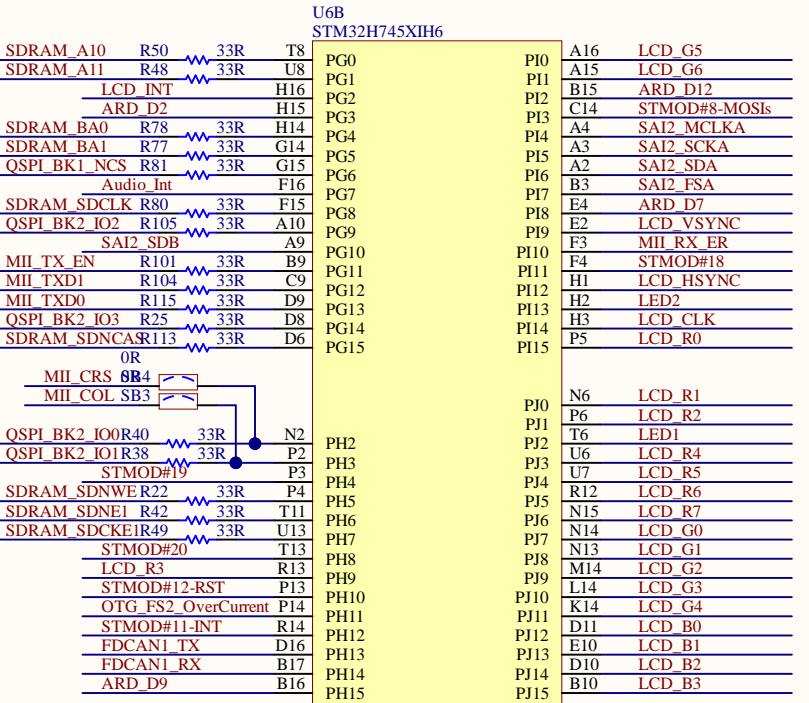
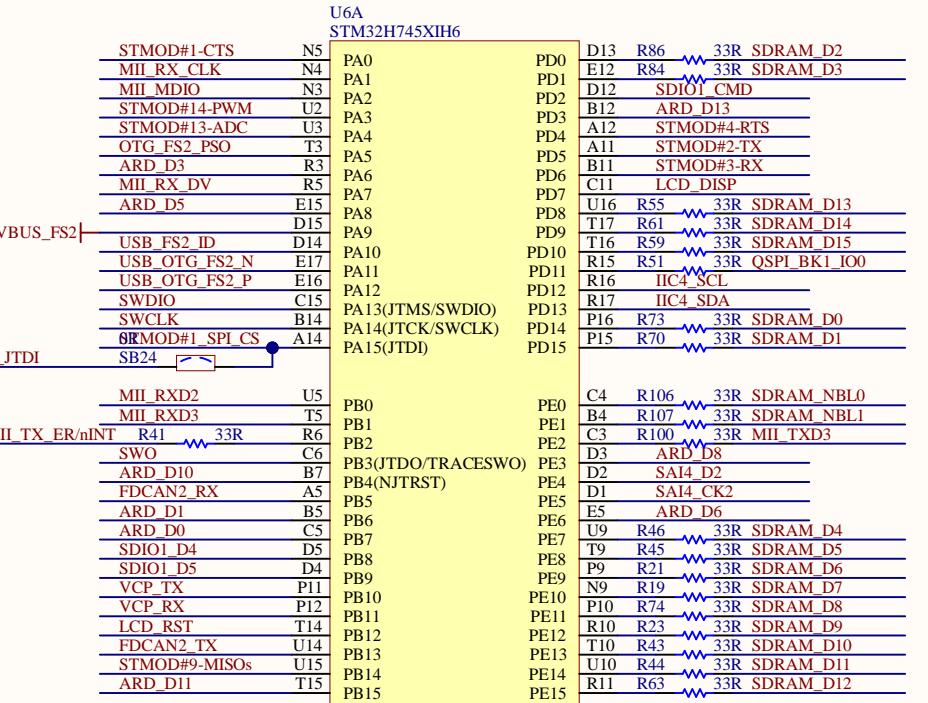
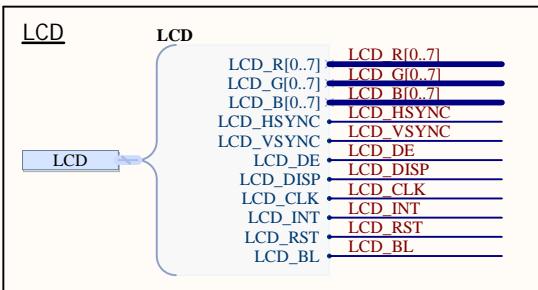
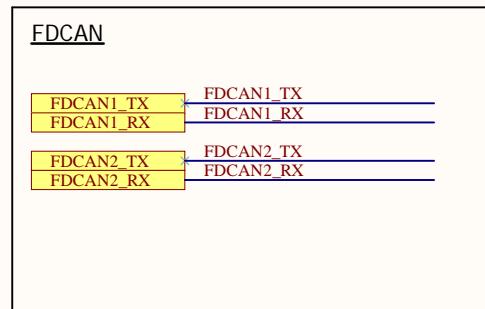
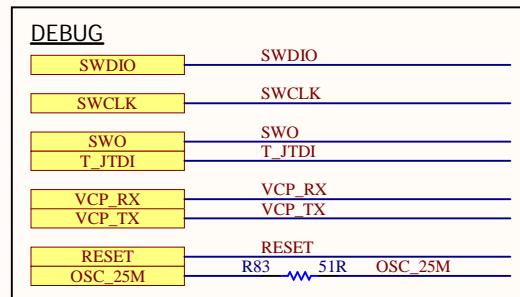
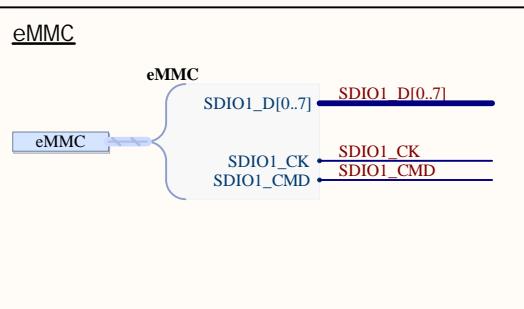
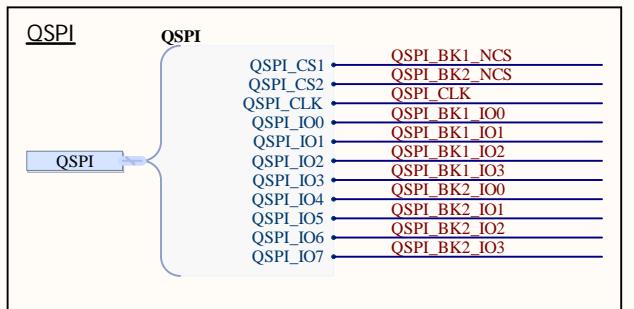
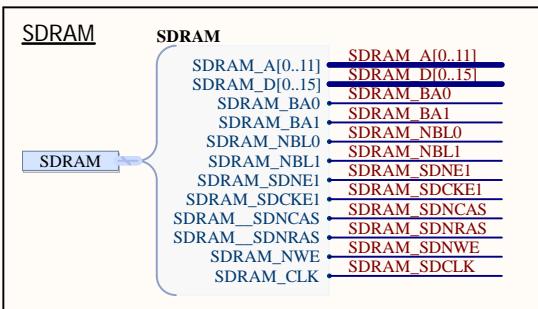
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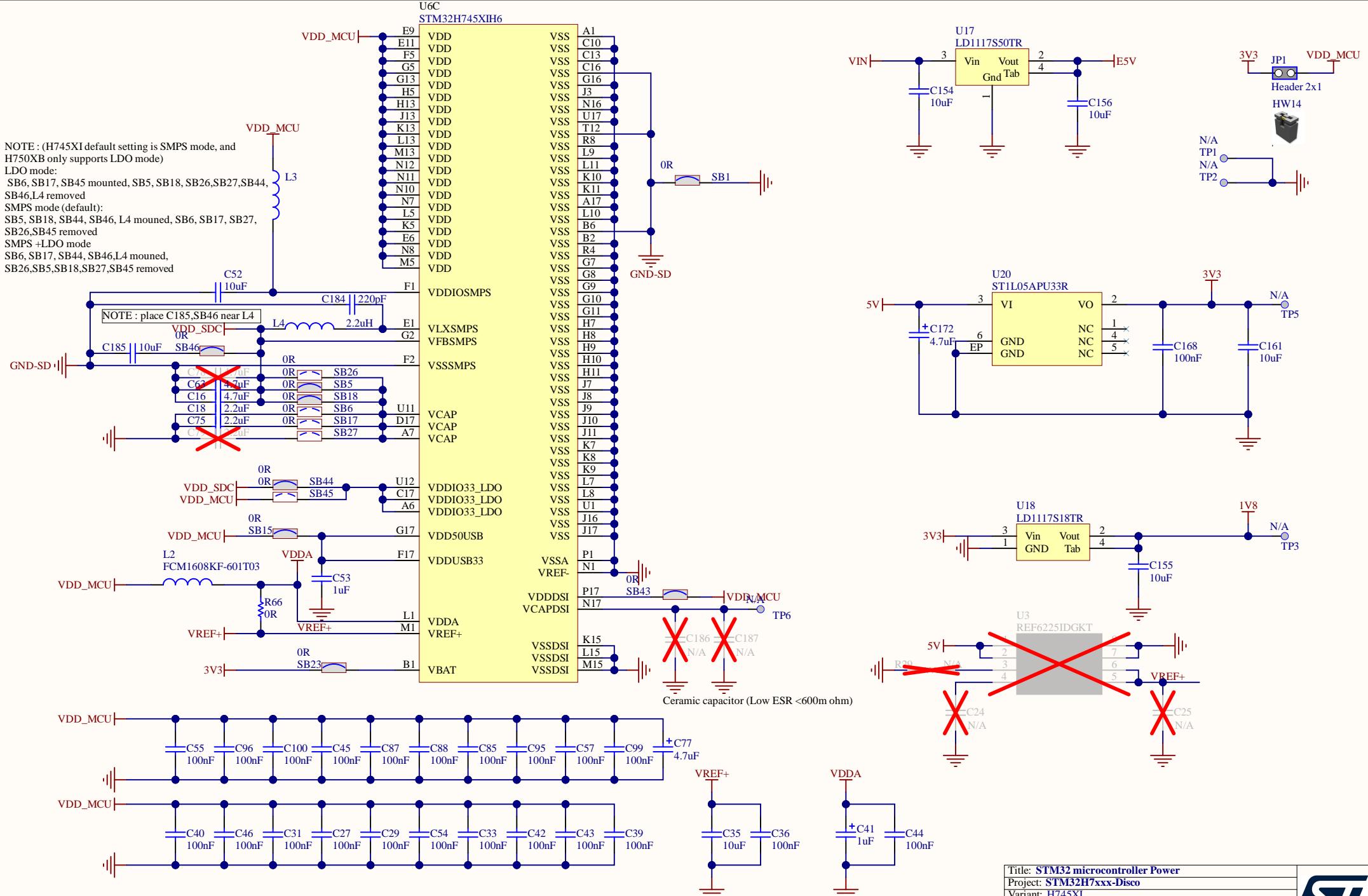
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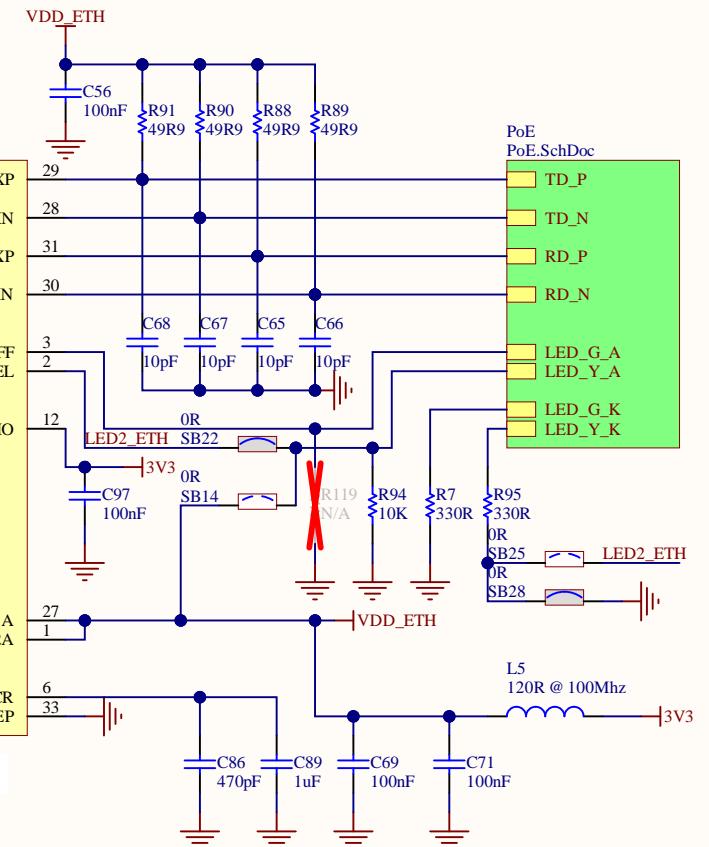
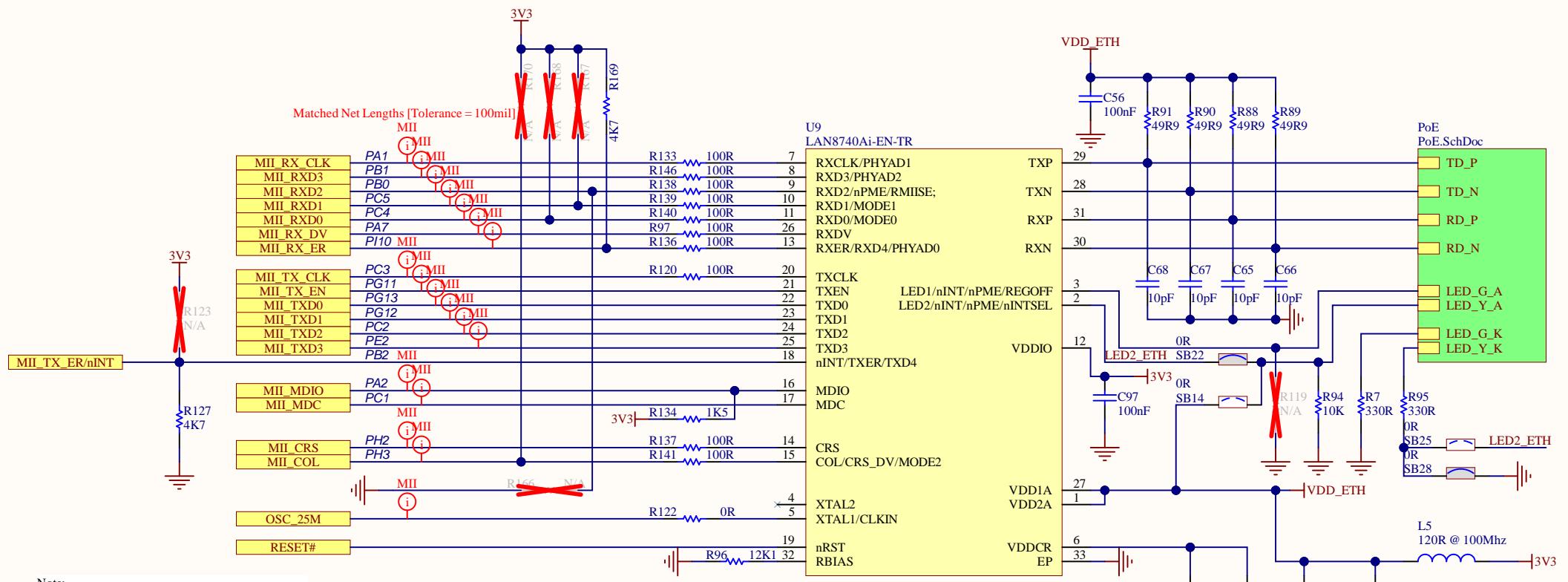
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Note:
 keep R94 to enable the TXER function, and close SB22,SB28,open SB14,SB25 for LED2
 Remove R94 and SB14 to enable nINT founction, and close SB14,SB25, open SB22,SB28 for LED2

INPUT

CN1	RJ45_KRJ-CB4.2GYZNL
TX+	1
TX-	2
RX+	3
NC	4
NC	5
RX-	6
NC	7
NC	8
SH1	9
SH2	10
LED(Yellow)_A	LED(Yellow)_A
LED(Yellow)_K	LED(Yellow)_K
LED(Green)_A	LED(Green)_A
LED(Green)_K	LED(Green)_K

Power Over Ethernet

Matched Net Lengths [Tolerance = 100mil]

Diff Pair 100ohm

Matched Net Lengths [Tolerance = 100mil]

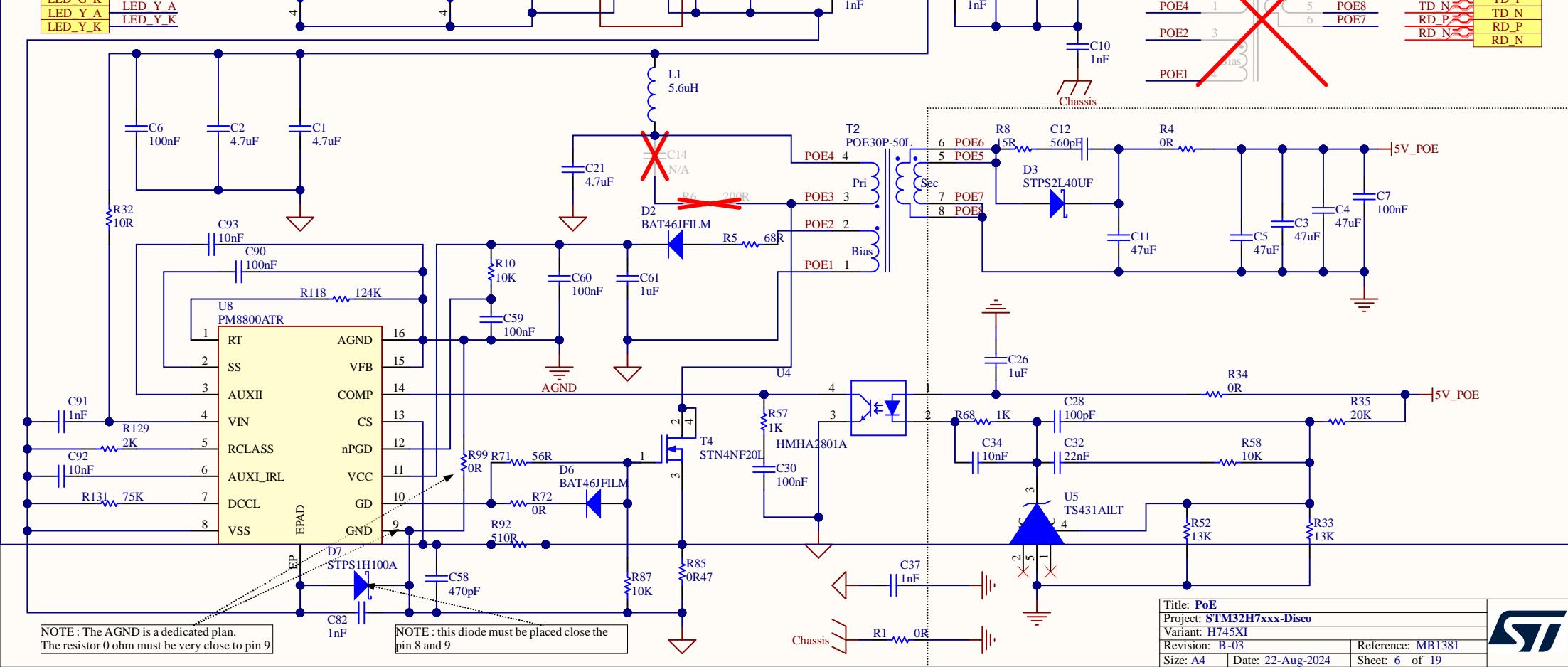
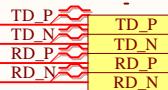
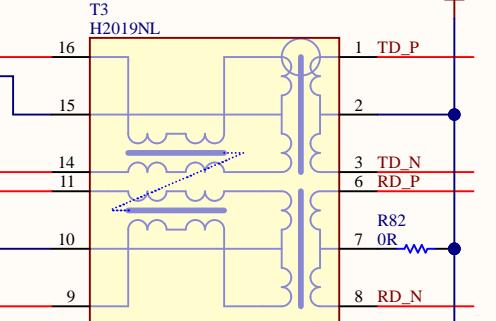
Diff Pair 100ohm

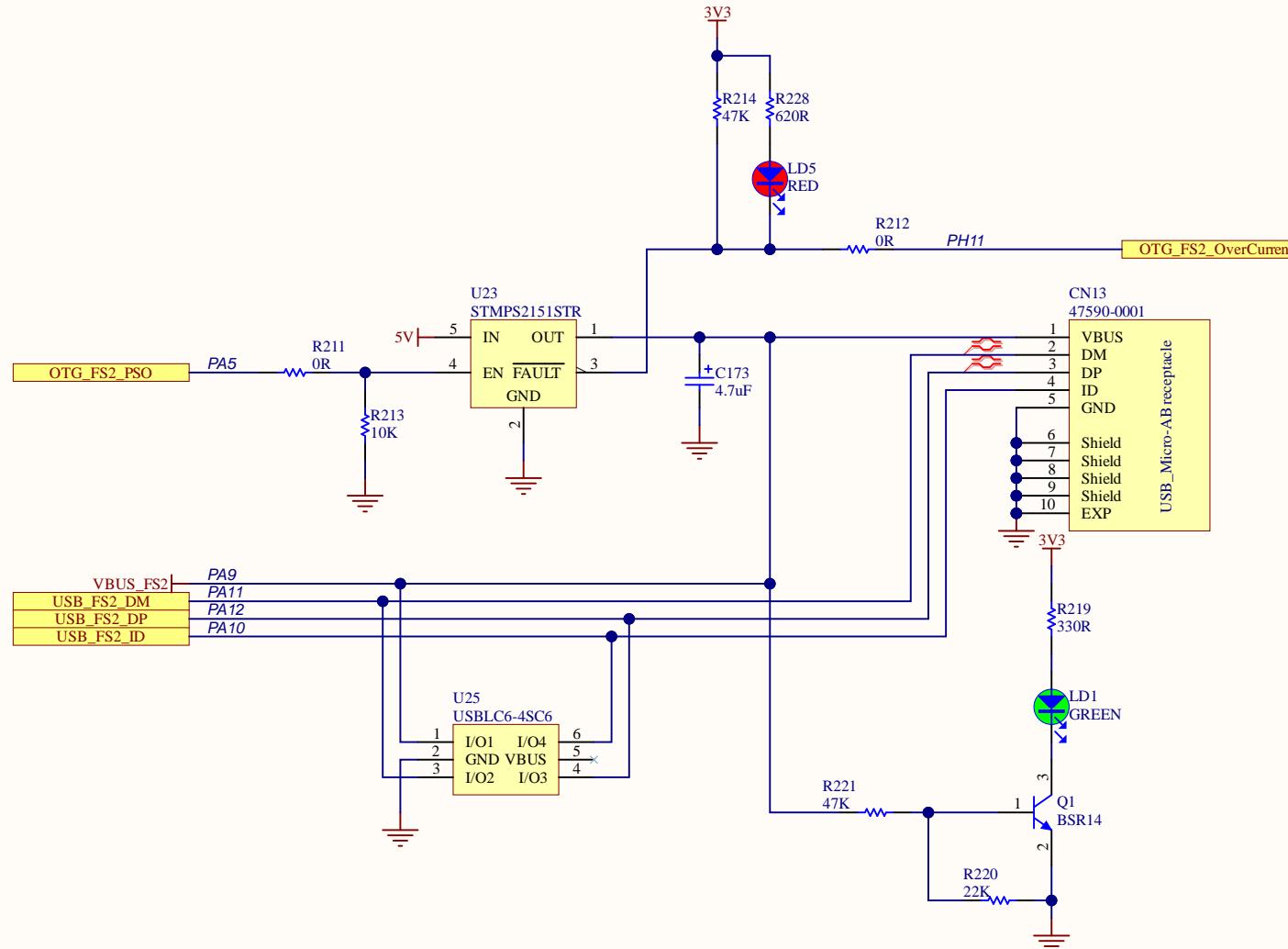
Matched Net Lengths [Tolerance = 100mil]

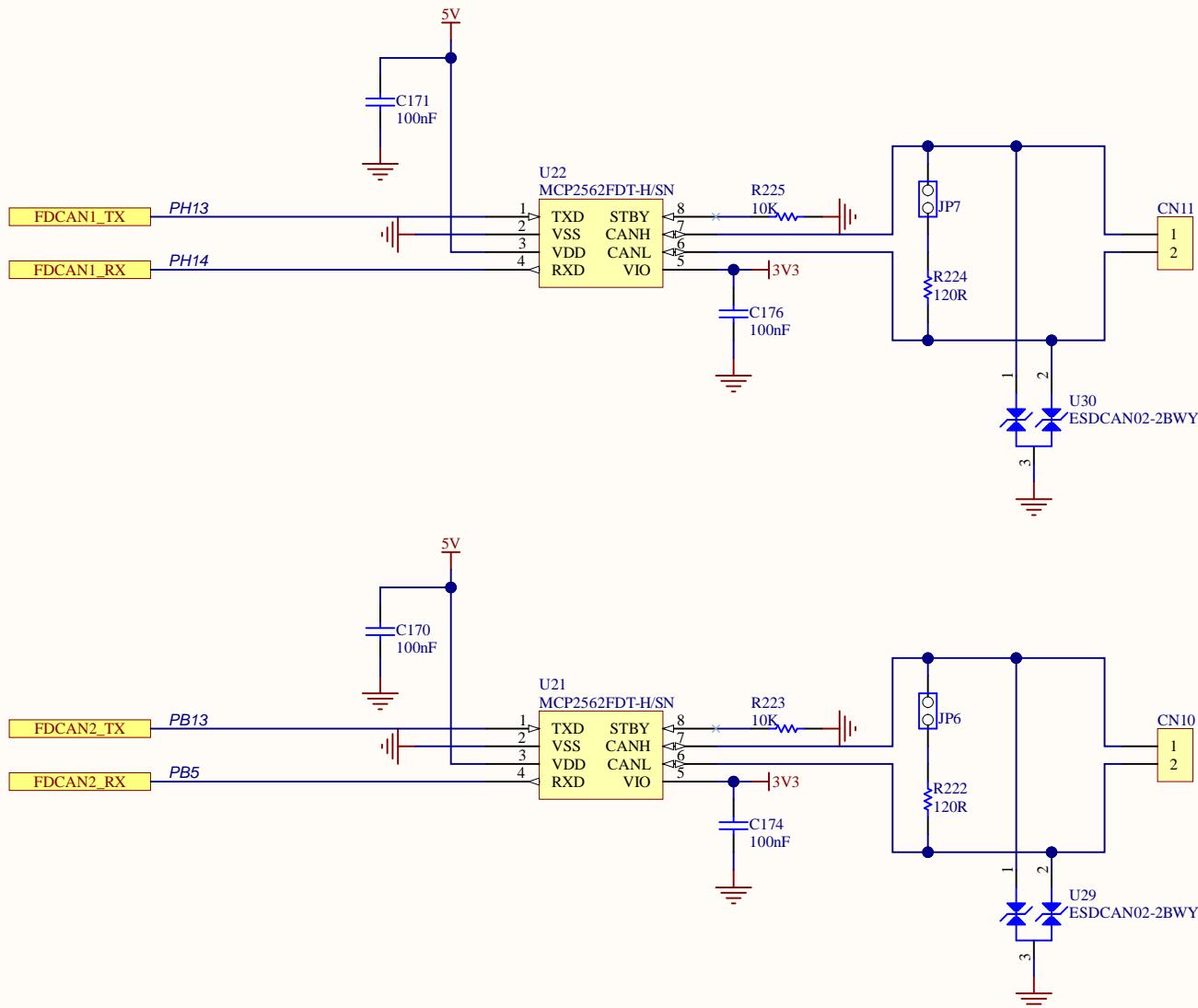
Diff Pair 100ohm

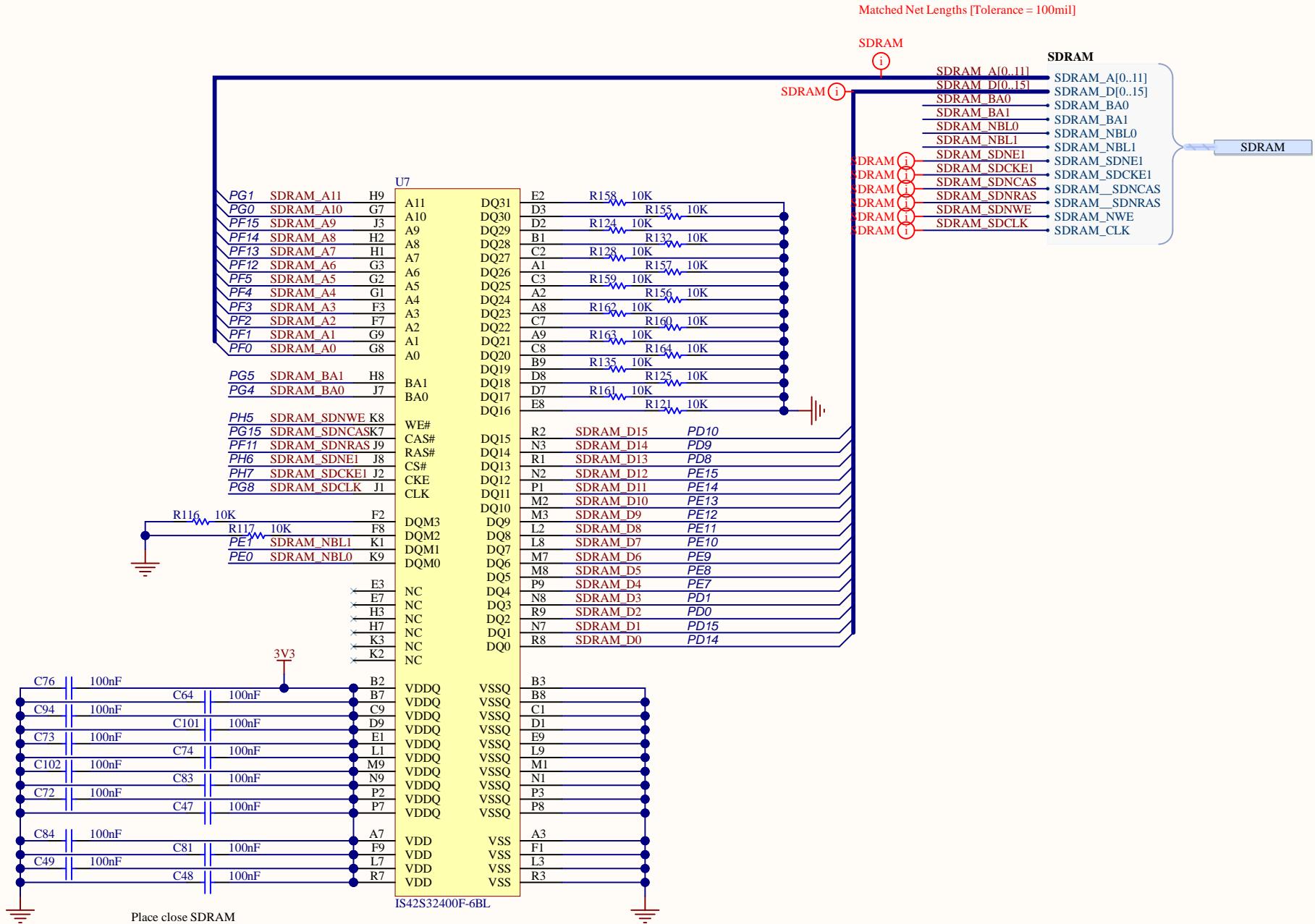
NOTE : Place for additional ferrite beads

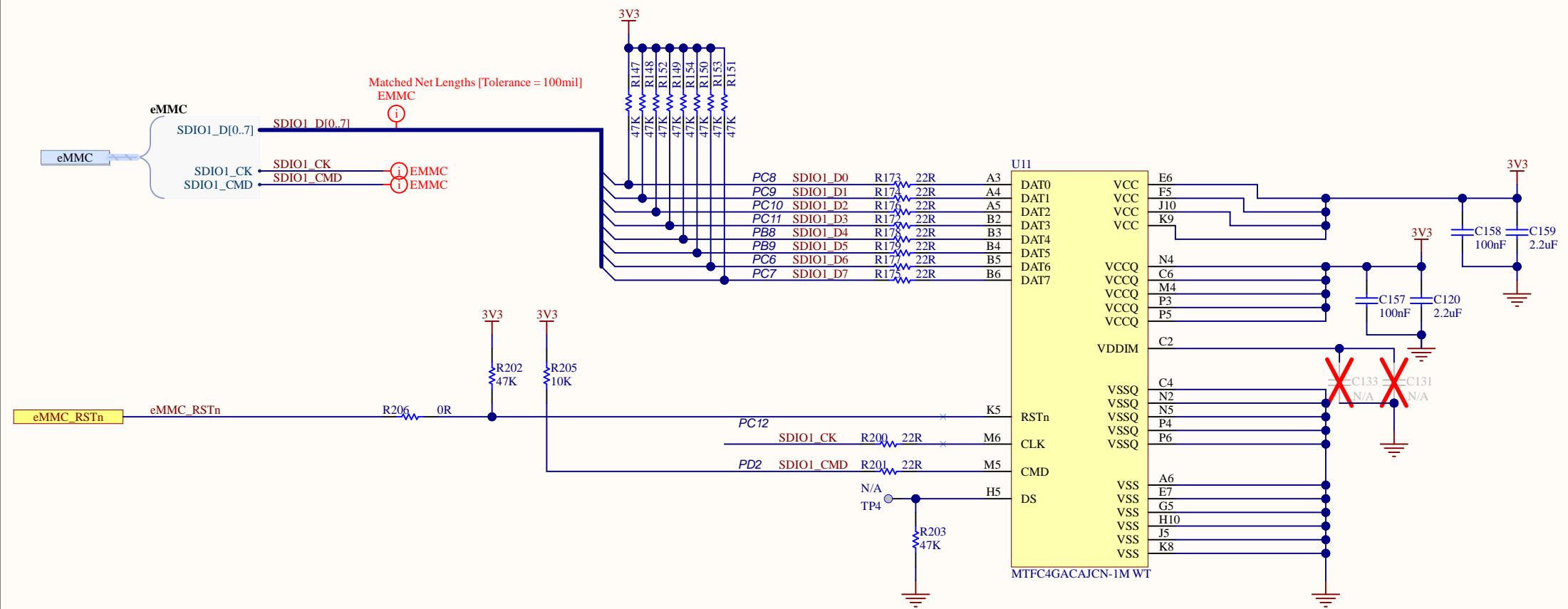
VDD ETH







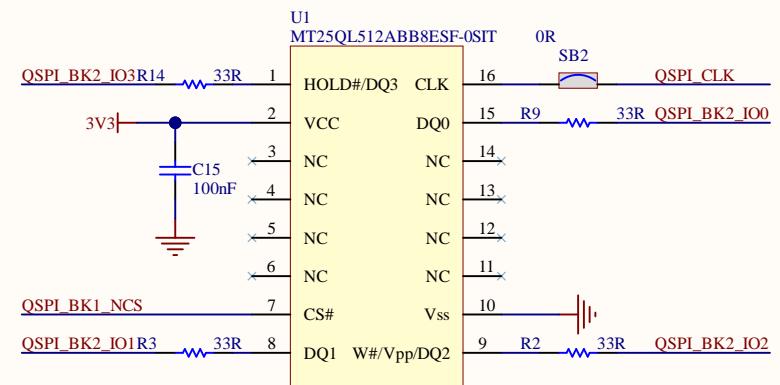
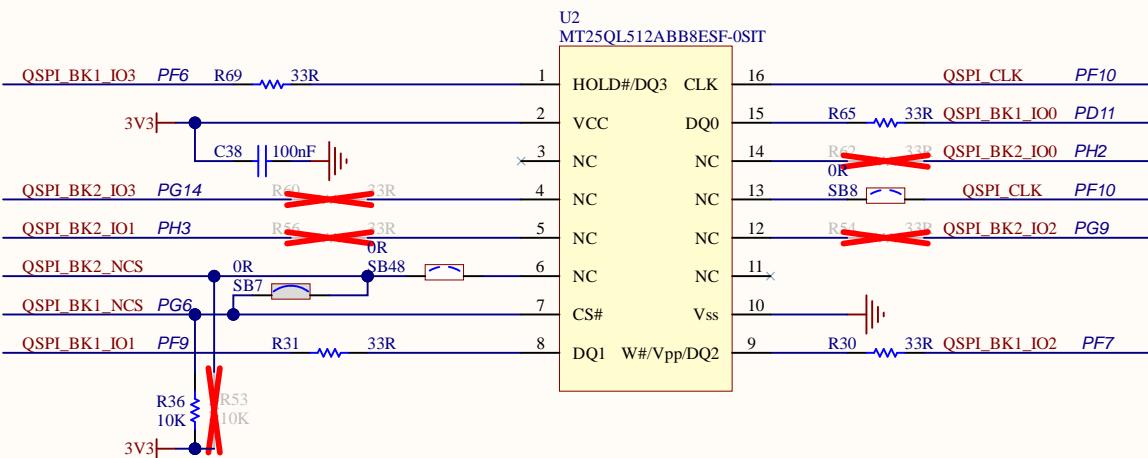
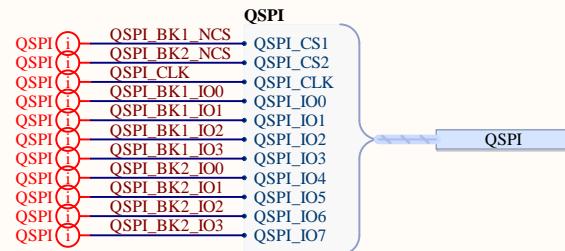




When change to THGBMDG5D1LBAIL, mount C131/C133

Title: eMMC		
Project: STM32H7xxx-Disco		
Variant: H745XI		
Revision: B-03	Reference: MB1381	
Size: A4	Date: 22-Aug-2024	Sheet: 10 of 19

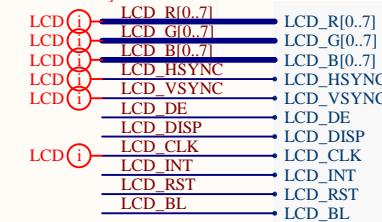
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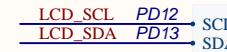
Twin Quad SPI Flash solutions:

One Twin Quad SPI Fllash	U2:MT25TL01GHBB8ESF-0SIT	U1:NA	R53/R62/R54/R56/R60/SB8/SB48 ON	R14/R3/R2/R9./SB2./C15 OFF
Two Quad SPI Fllash	U1:MT25QL512ABB8ESF-0SIT	U2:MT25QL512ABB8ESF-0SIT	R14/R3/R2/R9./SB2./C15 ON	R53/R62/R54/R56/R60/SB8/SB48 OFF

Matched Net Lengths [Tolerance = 100mil]

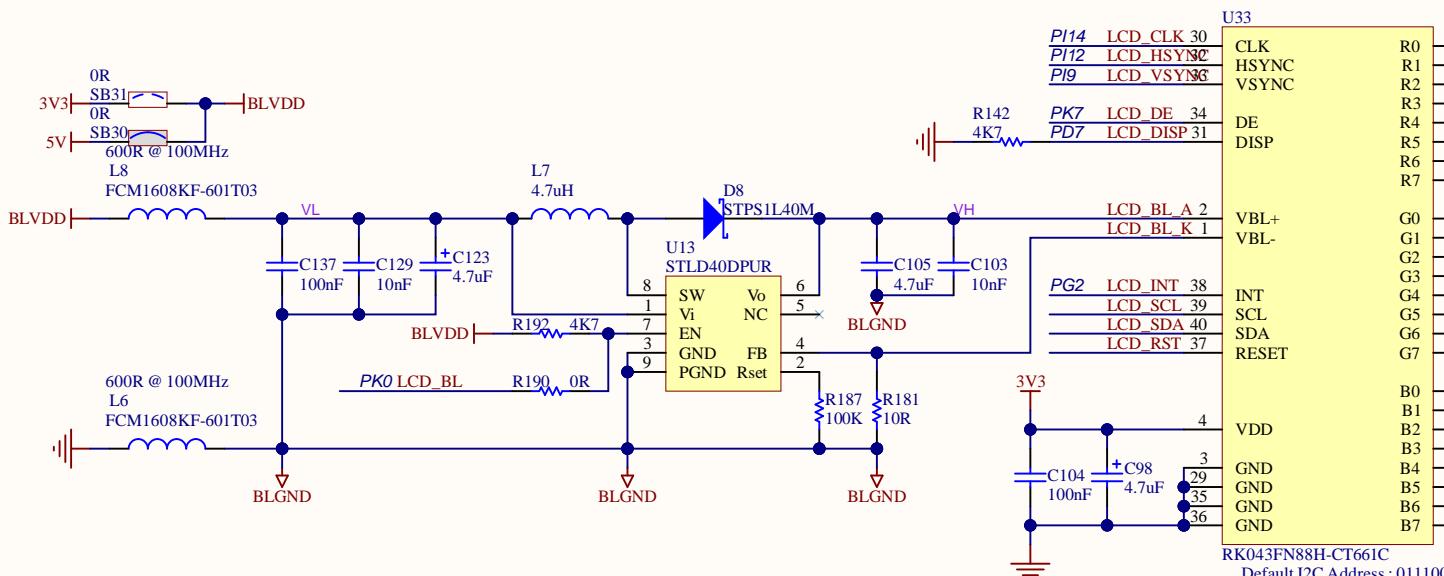


I2C



RK043FN88H-CT661C
Default I2C Address : 01110000

Backlight driver & PFC of LCD panel



Title: LCD43

Project: STM32H7xxx-Disco

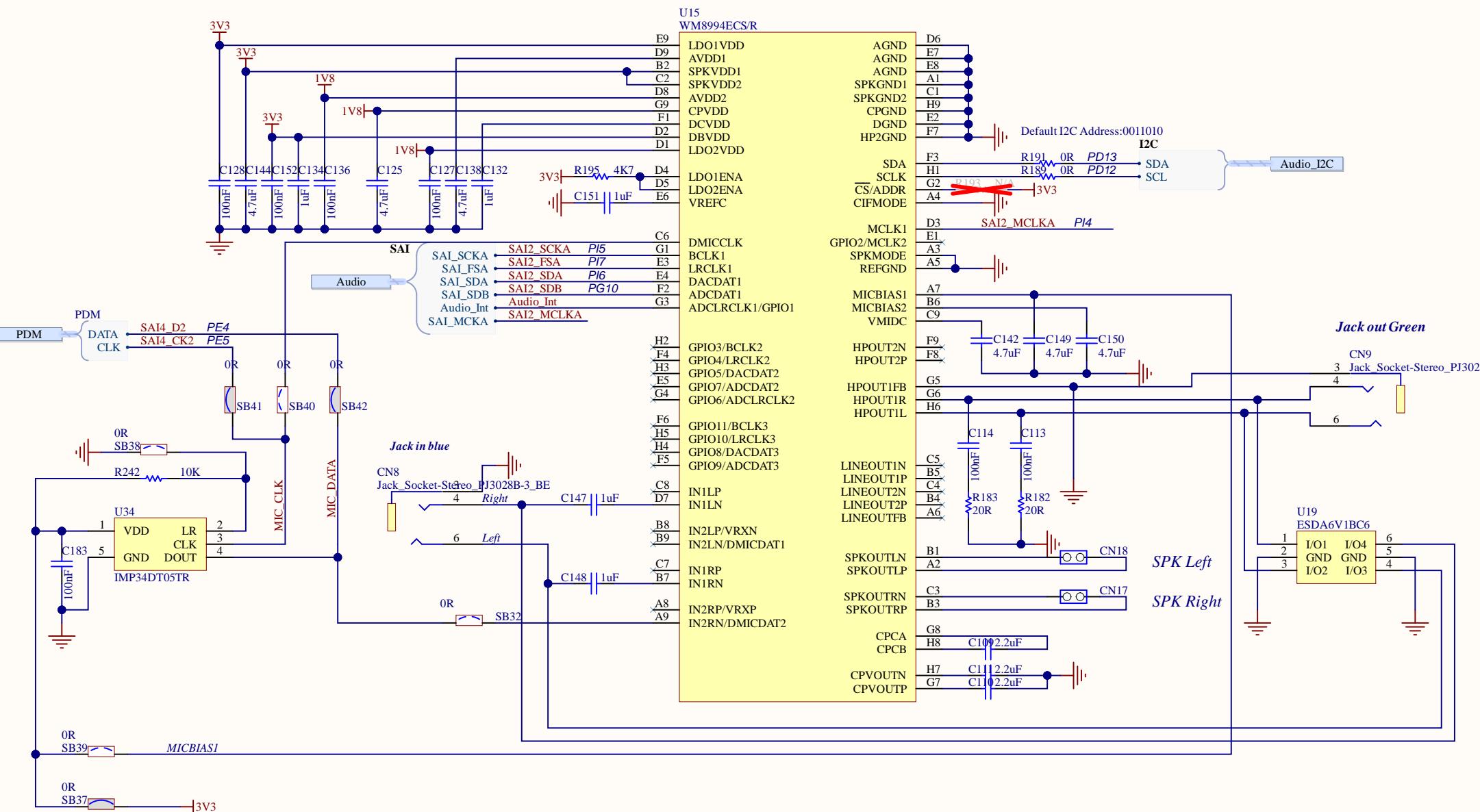
Variant: H745XI

Revision: B-03

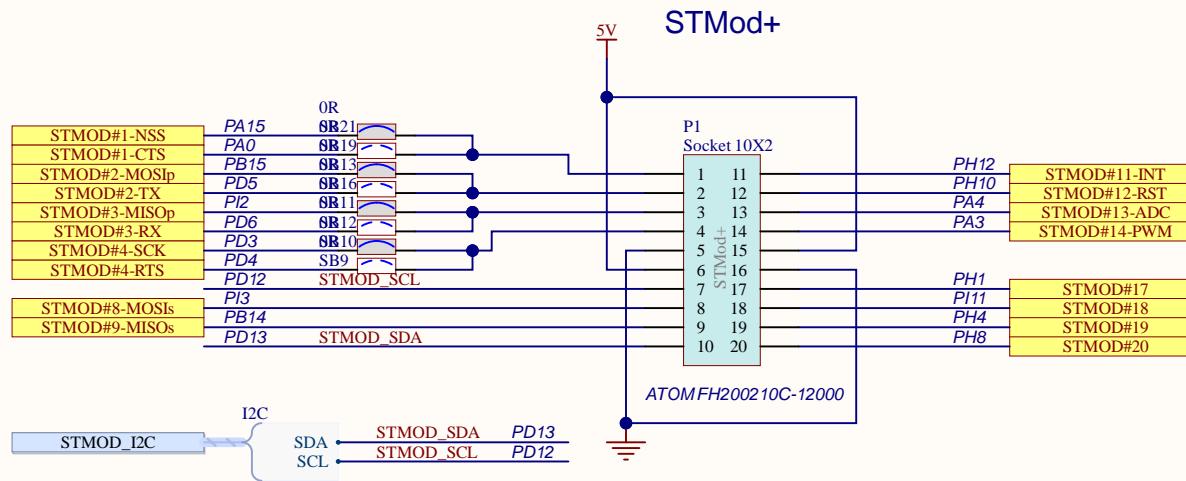
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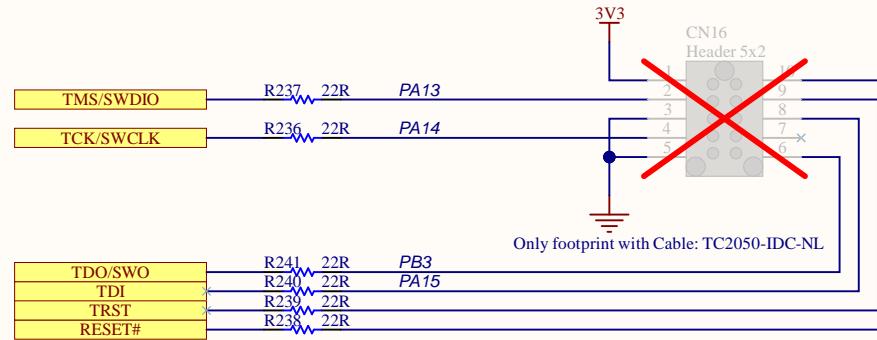
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Sheet: 12 of 19

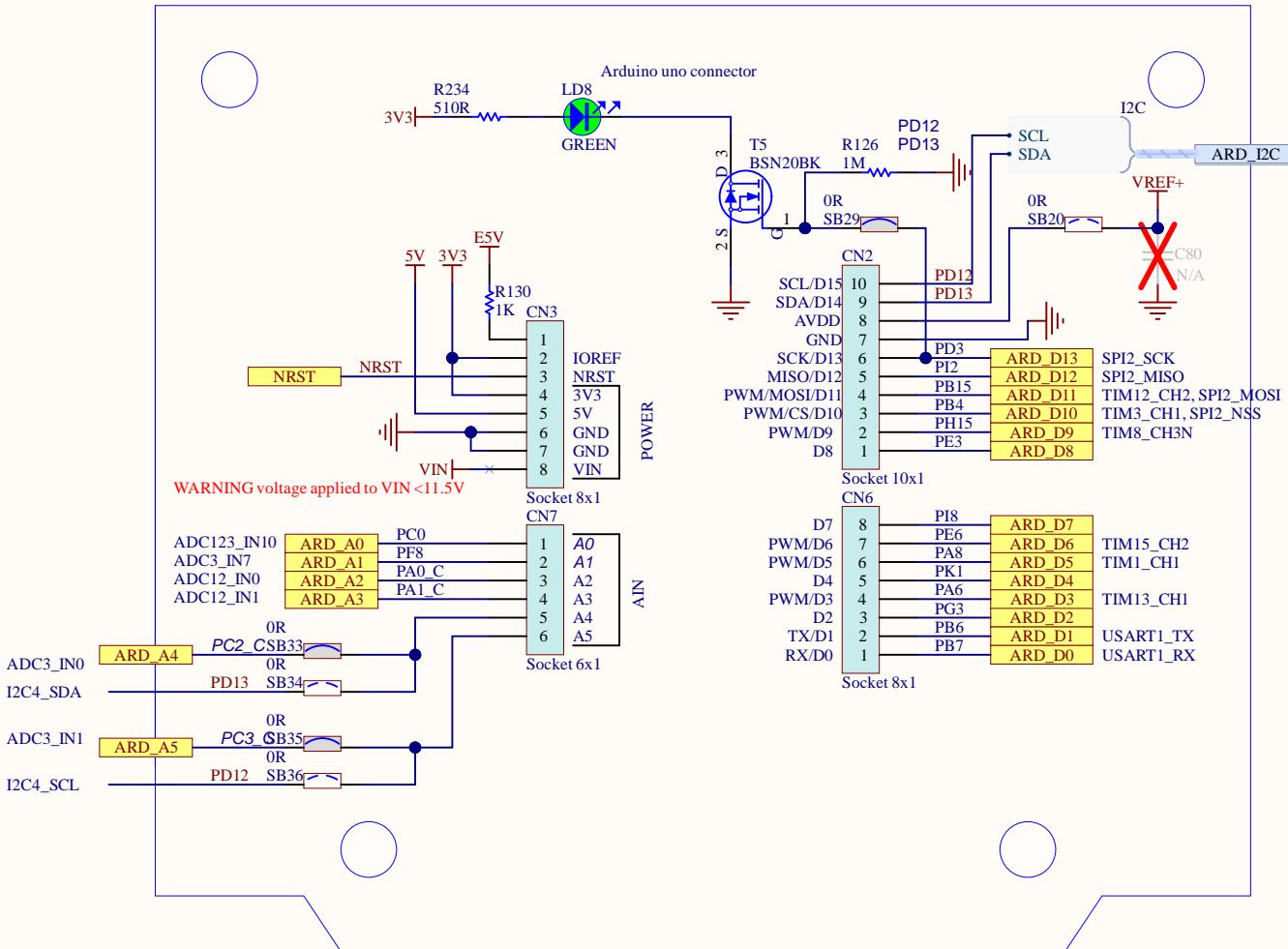


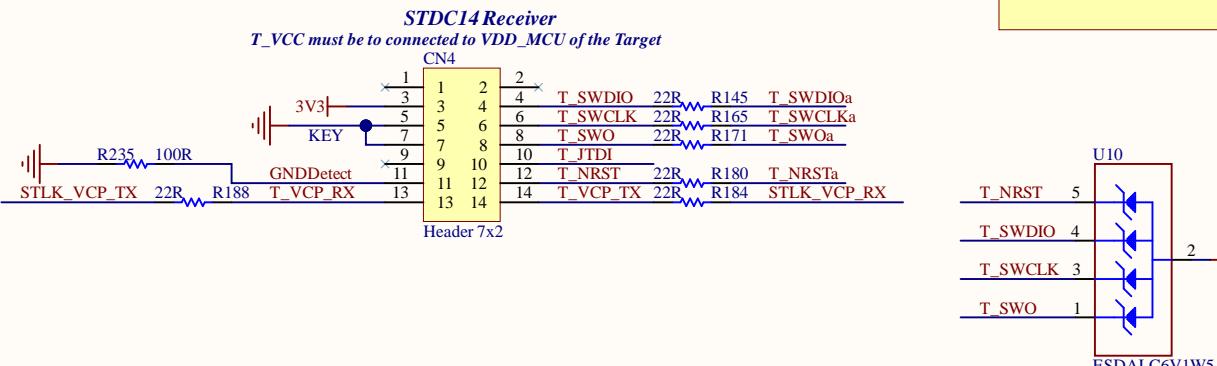
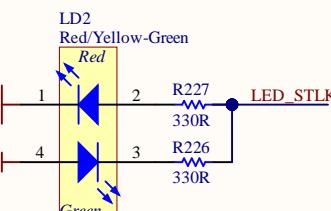
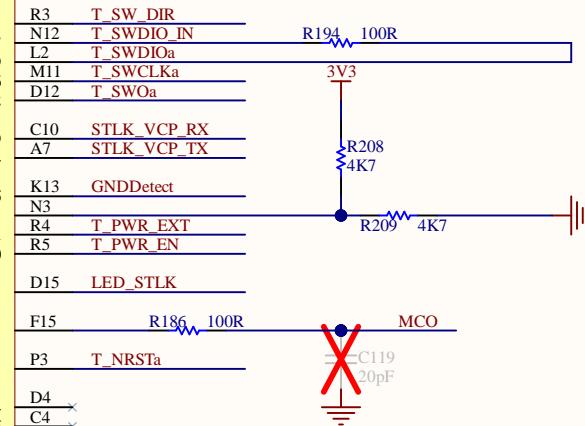
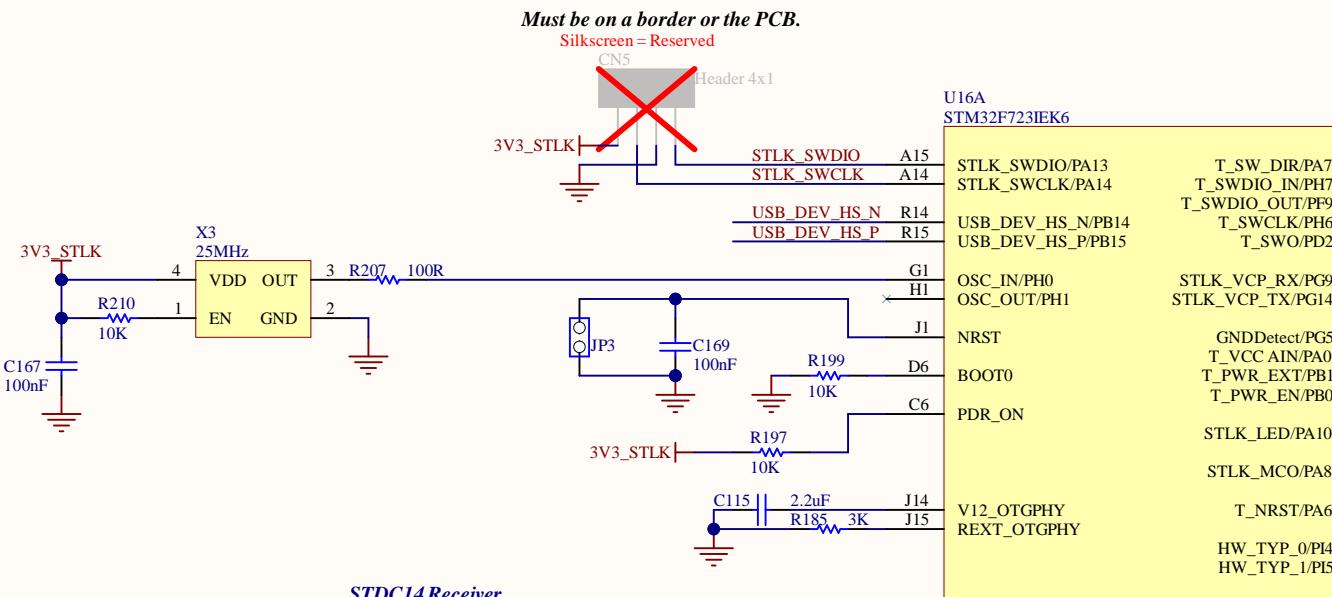
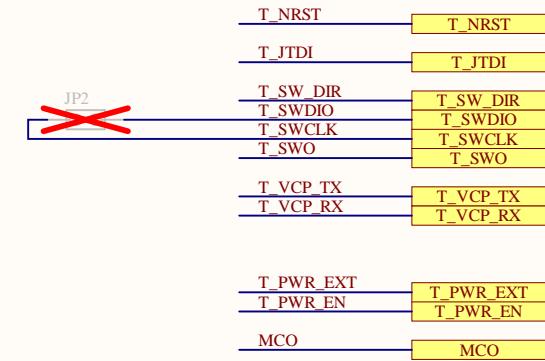
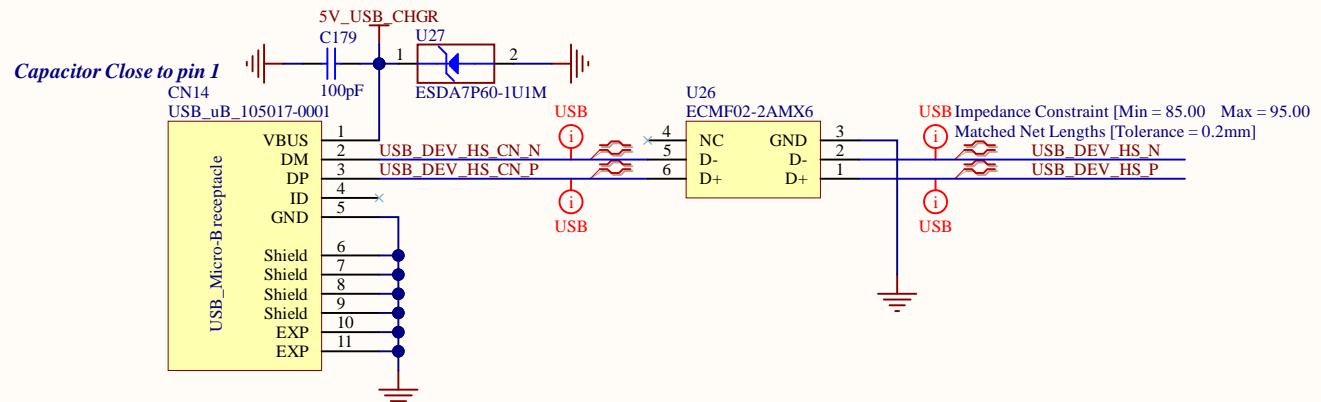
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Project: STM32H7xxx-Disco	
Variant: H745XI	
Revision: B-03	Reference: MB1381
Size: A4	Date: 22-Aug-2024
Sheet: 13 of 19	

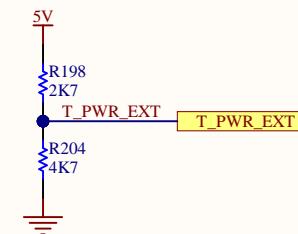
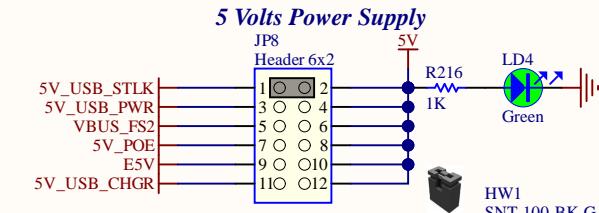
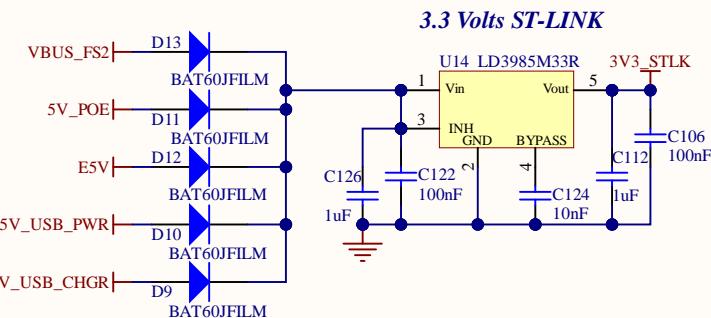
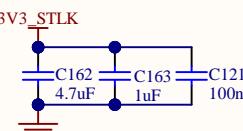
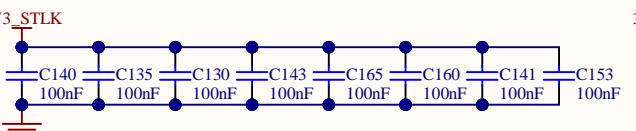
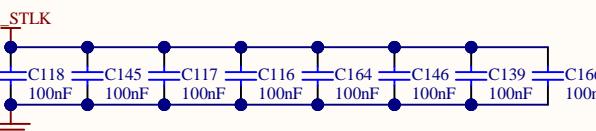
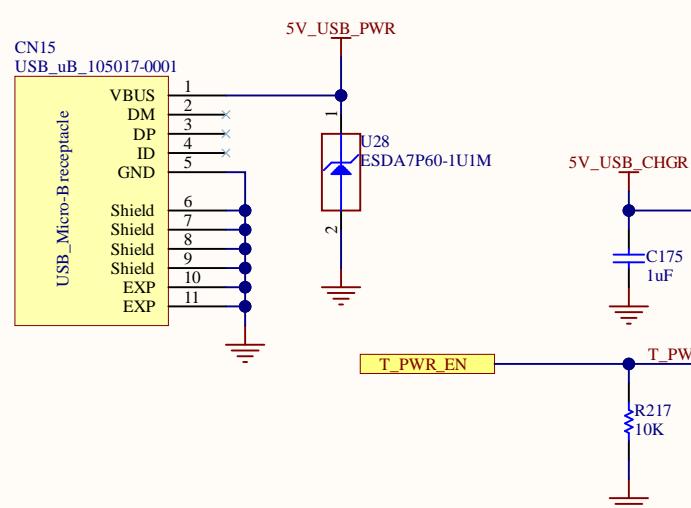
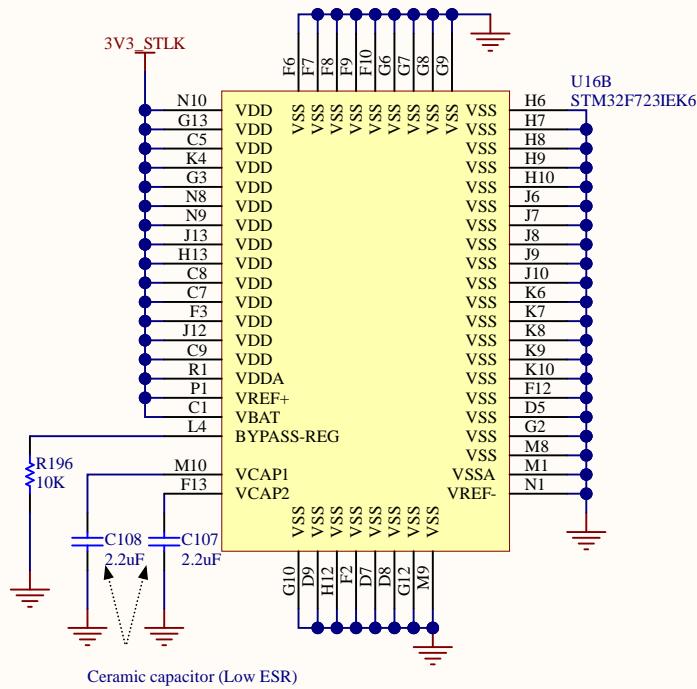




Place this connector close to STDC, they will share the same ESD components







Title: ST-LINK/V3E-SWD Power Module	
Project: STM32H7xxx-Disco	
Variant: H745XI	
Revision: B-03	Reference: MB1381
Size: A4	Date: 22-Aug-2024
	Sheet: 18 of 19



HW Mechanical parts

HW6
mbxxxxY

PCB

HW7
Sticker board

BOARD REF

HW8
STM32H745I-Disco

BOARD CPN

HW4

LOGO ST

HW5

LOGO CE

HW3

LOGO ESD

HW9

LOGO ROHS

HW10

LOGO STM32

N/A

H1



N/A

H2



N/A

H4



N/A

H3



Title: HW Mechanical parts

Project: STM32H7xxx-Disco

Variant: H745XI

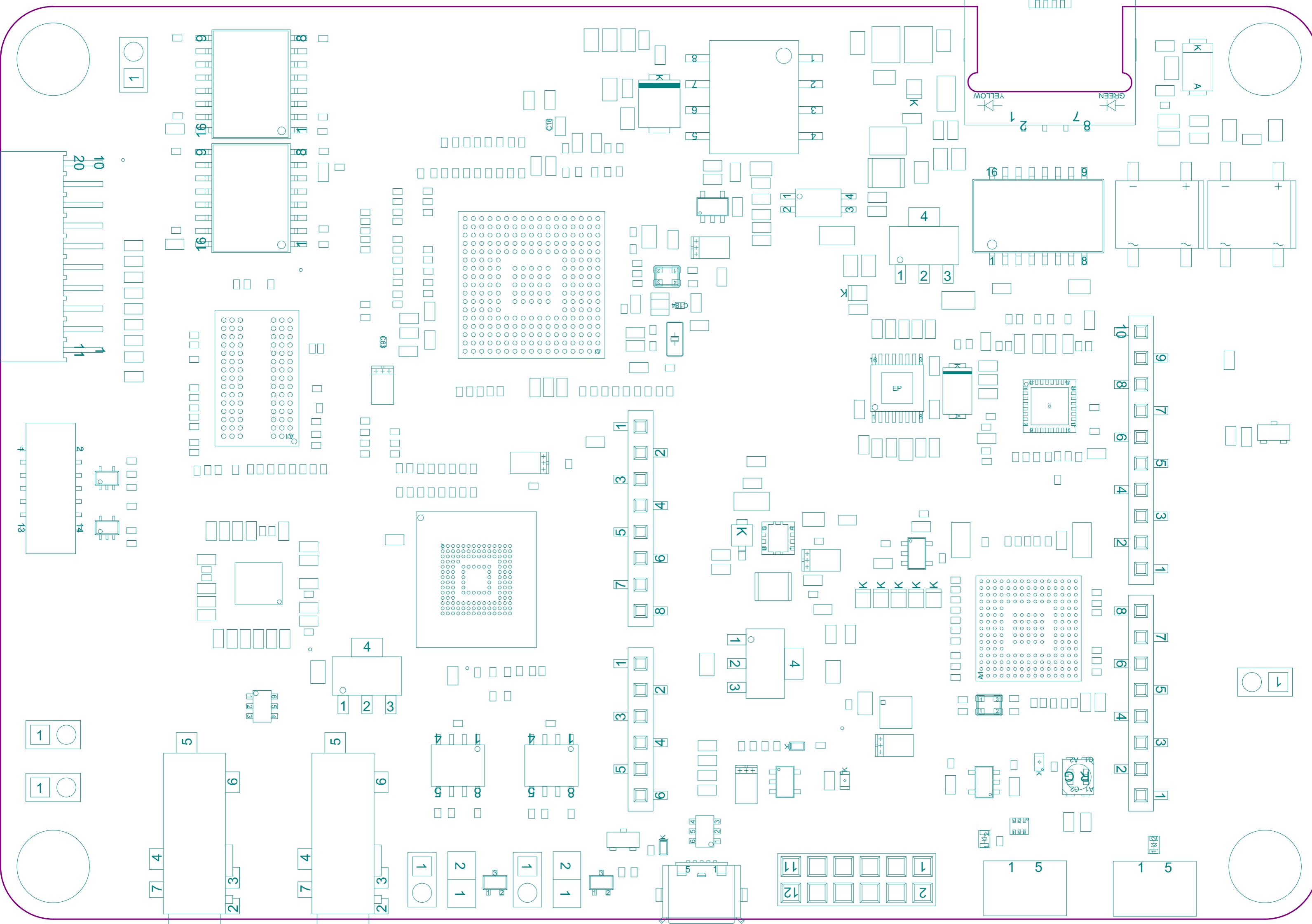
Revision: B-03

Size: A4 | Date: 22-Aug-2024



Reference: MB1381

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2

LAYER 2 (GND PLANE)

FAB DRAWING & DRILL LEGEND

