

STM32H7xxXx-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.

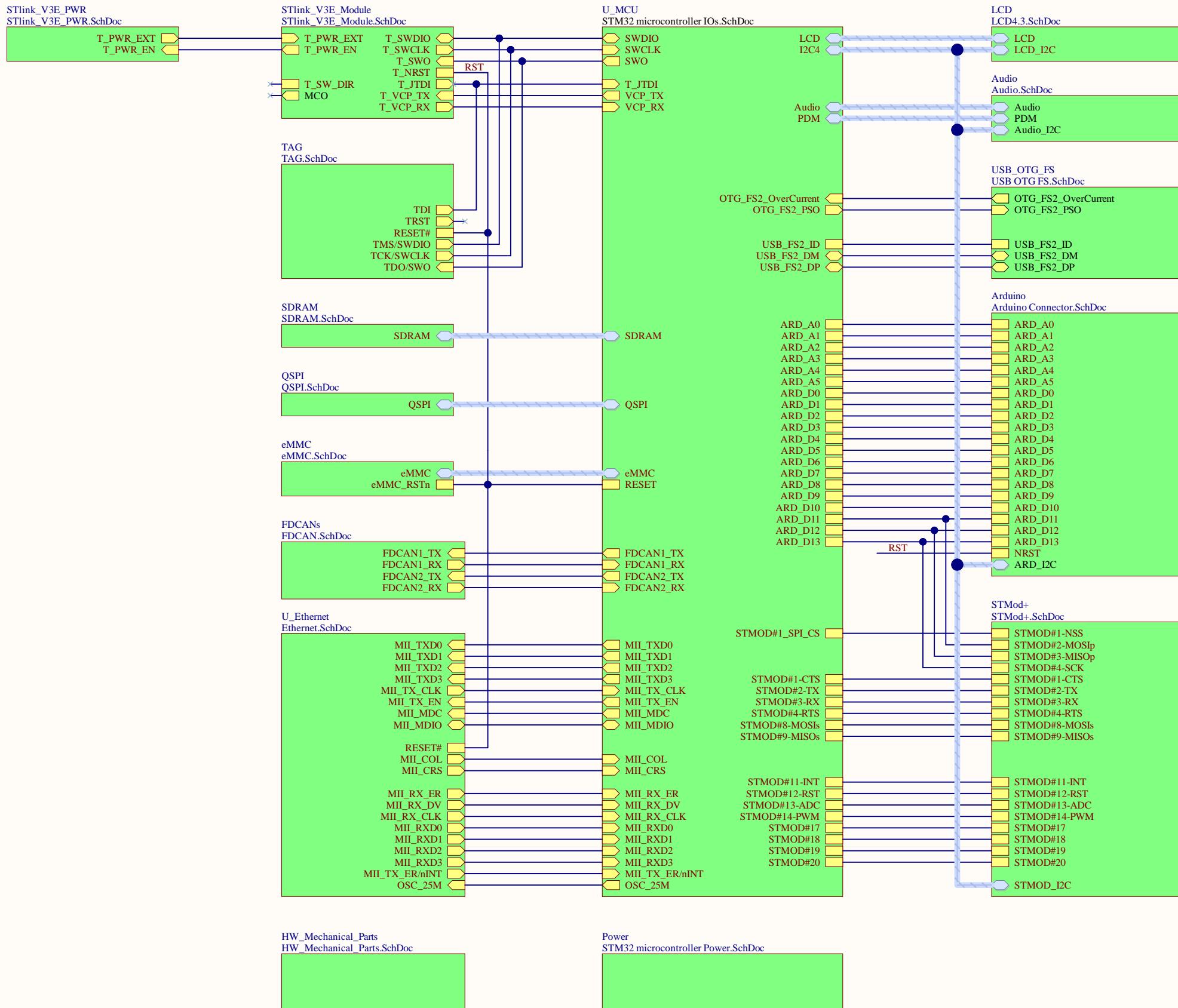
▲ Notes to generate the board layout.

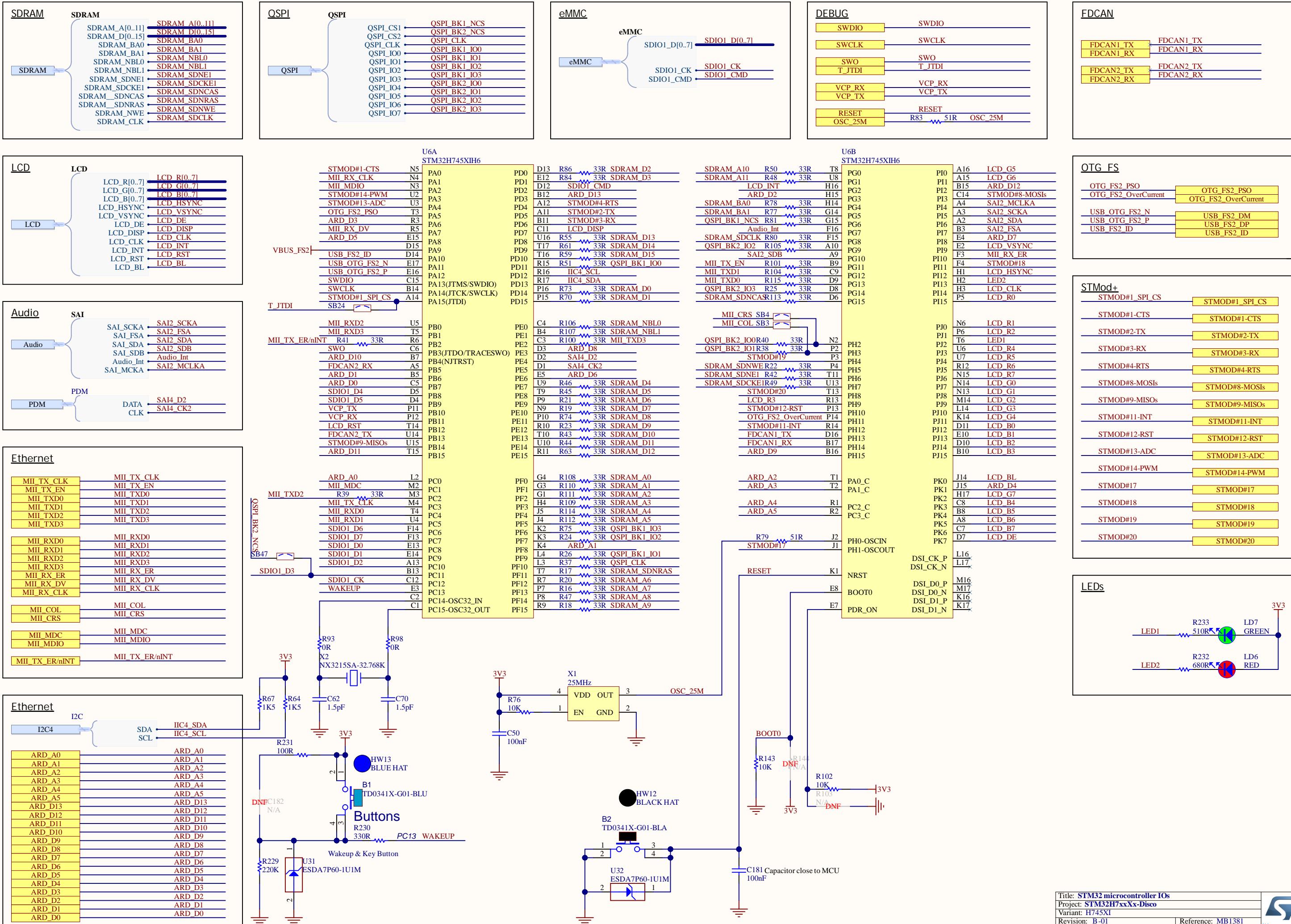
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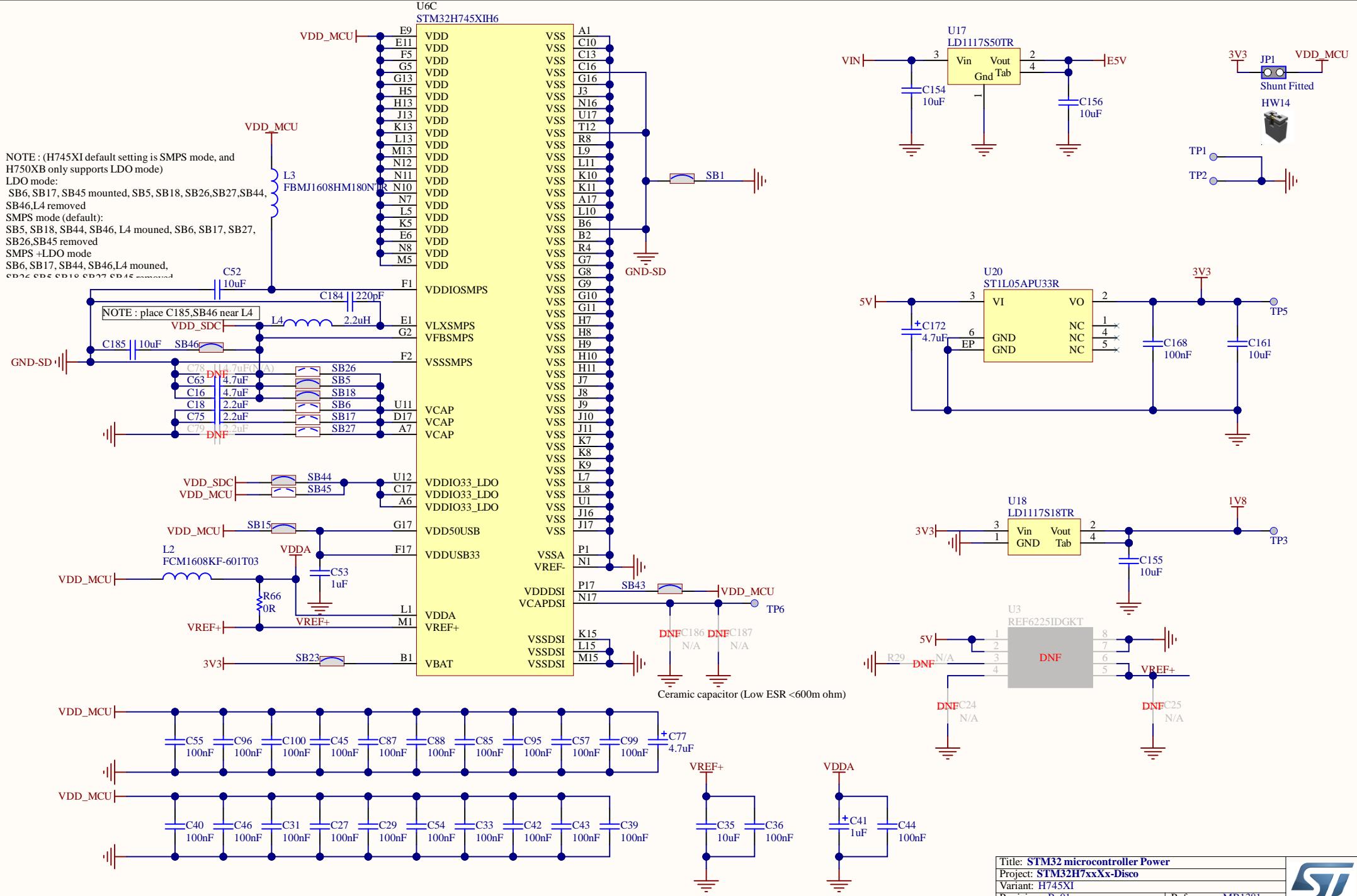
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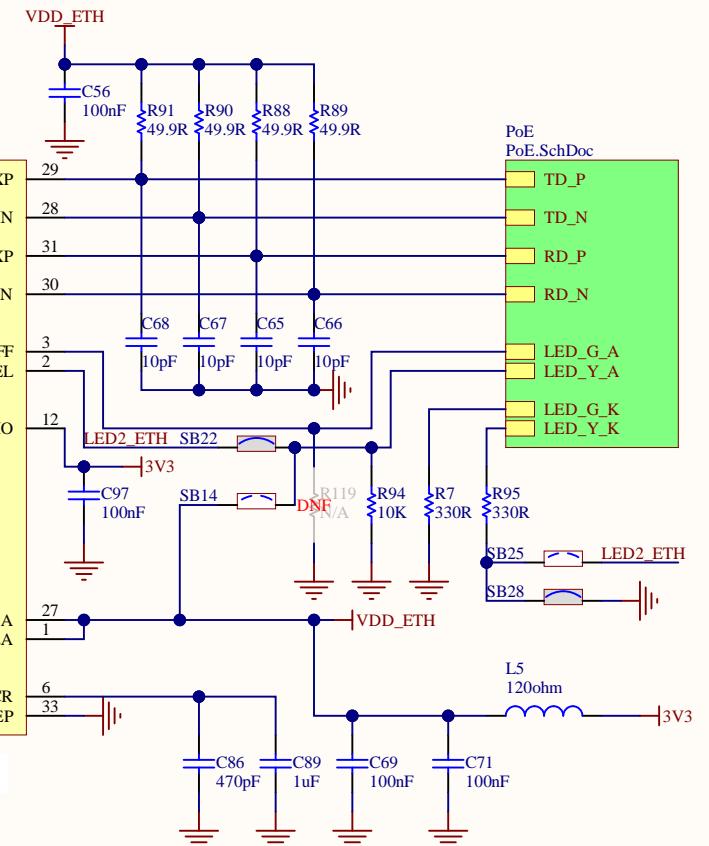
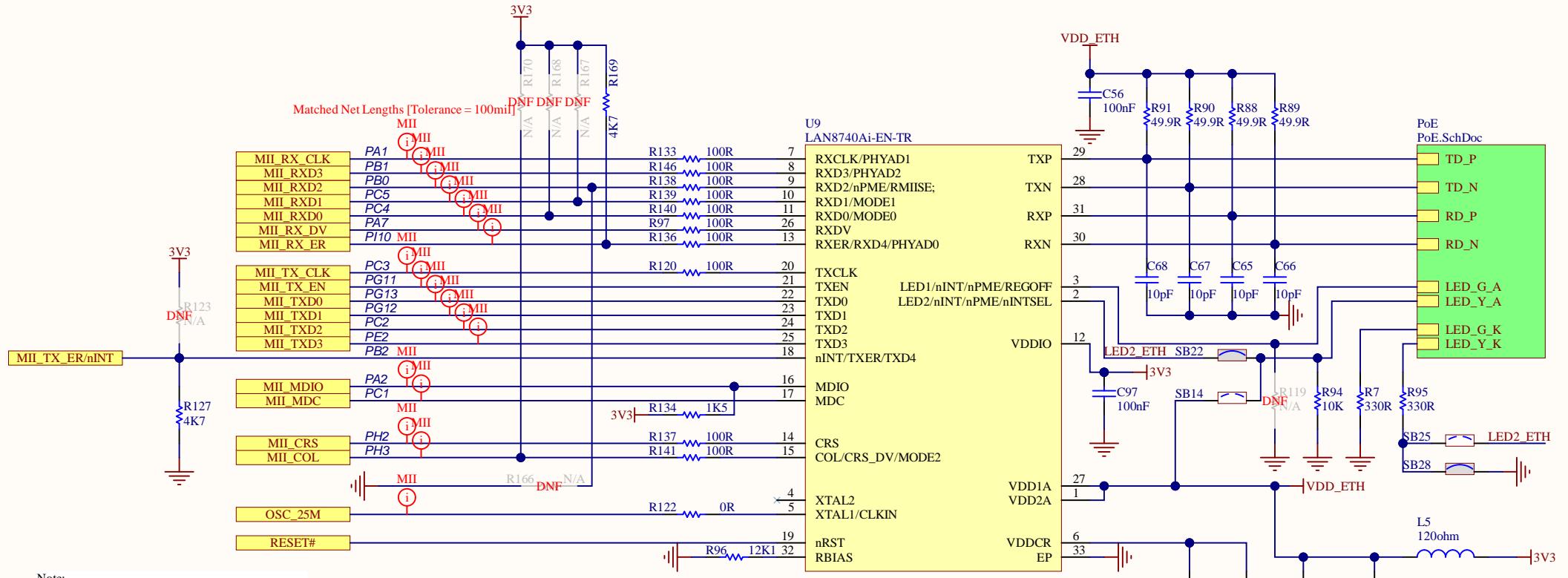
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INPUT

CN1	KRJ-CB4.2GYZNL
TX+	1
TX-	2
RX+	3
NC	4
NC	5
RX-	6
NC	7
NC	8
SH1	SH2
LED(Yellow)_A	Chassis
LED(Yellow)_K	
LED(Green)_A	
LED(Green)_K	
LED_G_A	LED_G_A
LED_G_K	LED_Y_A
LED_Y_A	LED_Y_K
LED_Y_K	

Power Over Ethernet

Matched Net Lengths [Tolerance = 100mil]

Diff Pair 100ohm

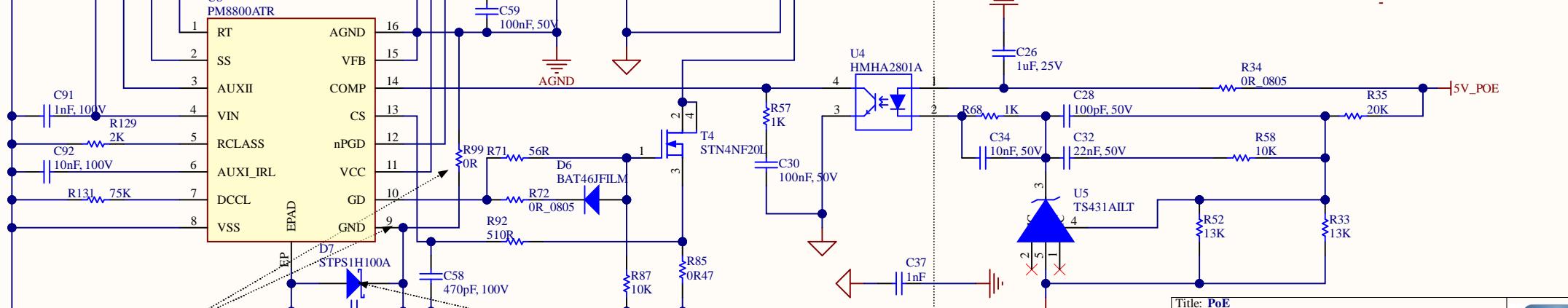
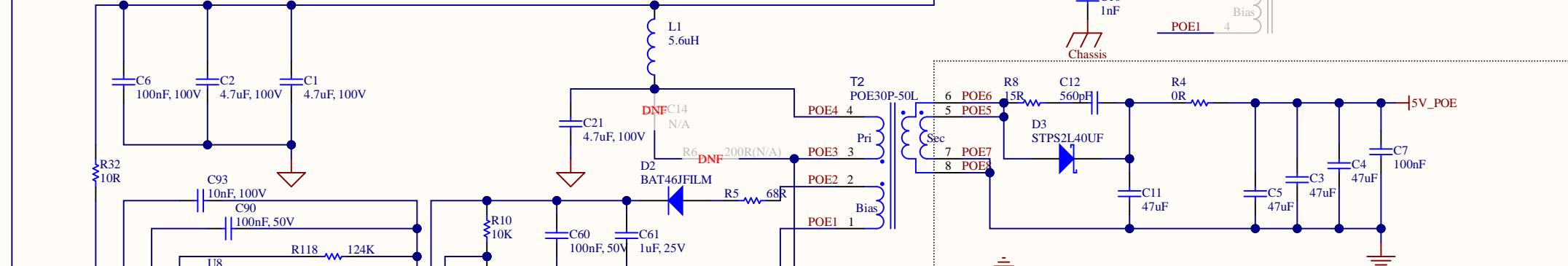
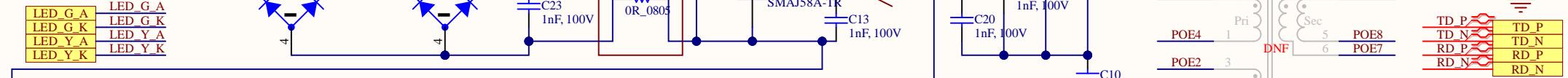
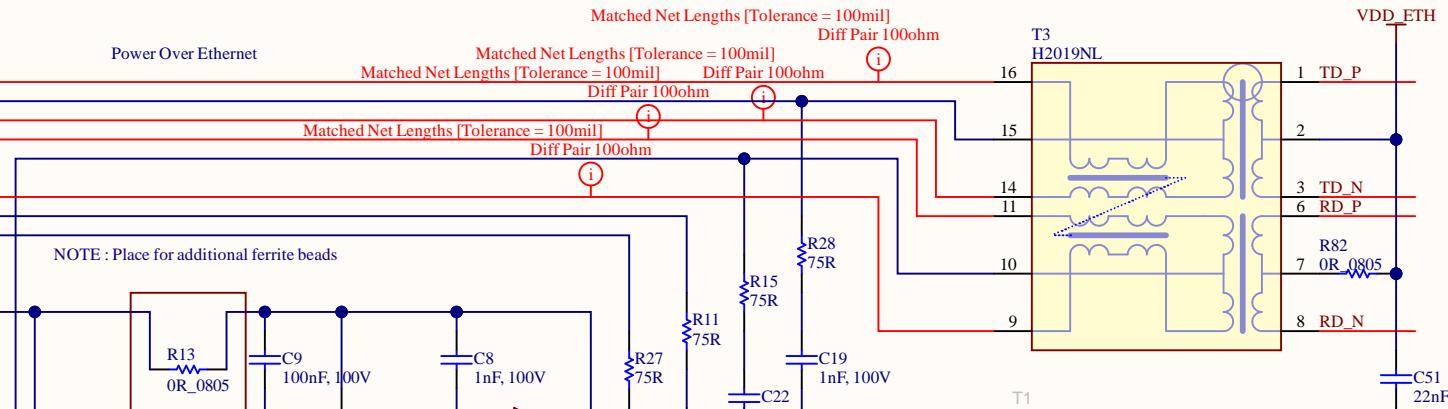
Matched Net Lengths [Tolerance = 100mil]

Diff Pair 100ohm

Matched Net Lengths [Tolerance = 100mil]

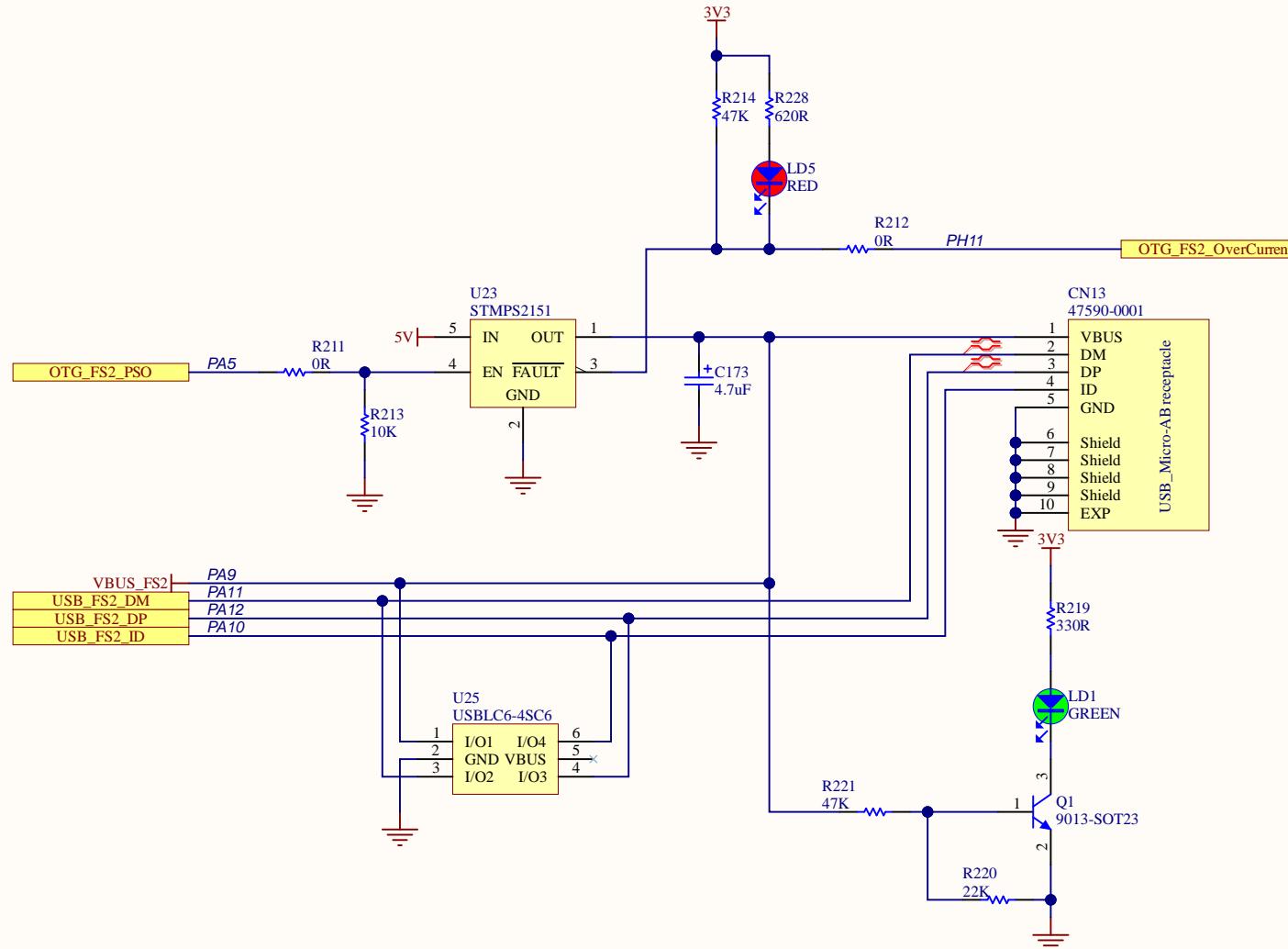
Diff Pair 100ohm

NOTE : Place for additional ferrite beads



NOTE : The AGND is a dedicated plane.
The resistor 0 ohm must be very close to pin 9.

NOTE : this diode must be placed close to
pin 8 and 9



Title: **USB OTG FS**

Project: **STM32H7xx-Disco**

Variant: **H745XI**

Revision: **B-01**

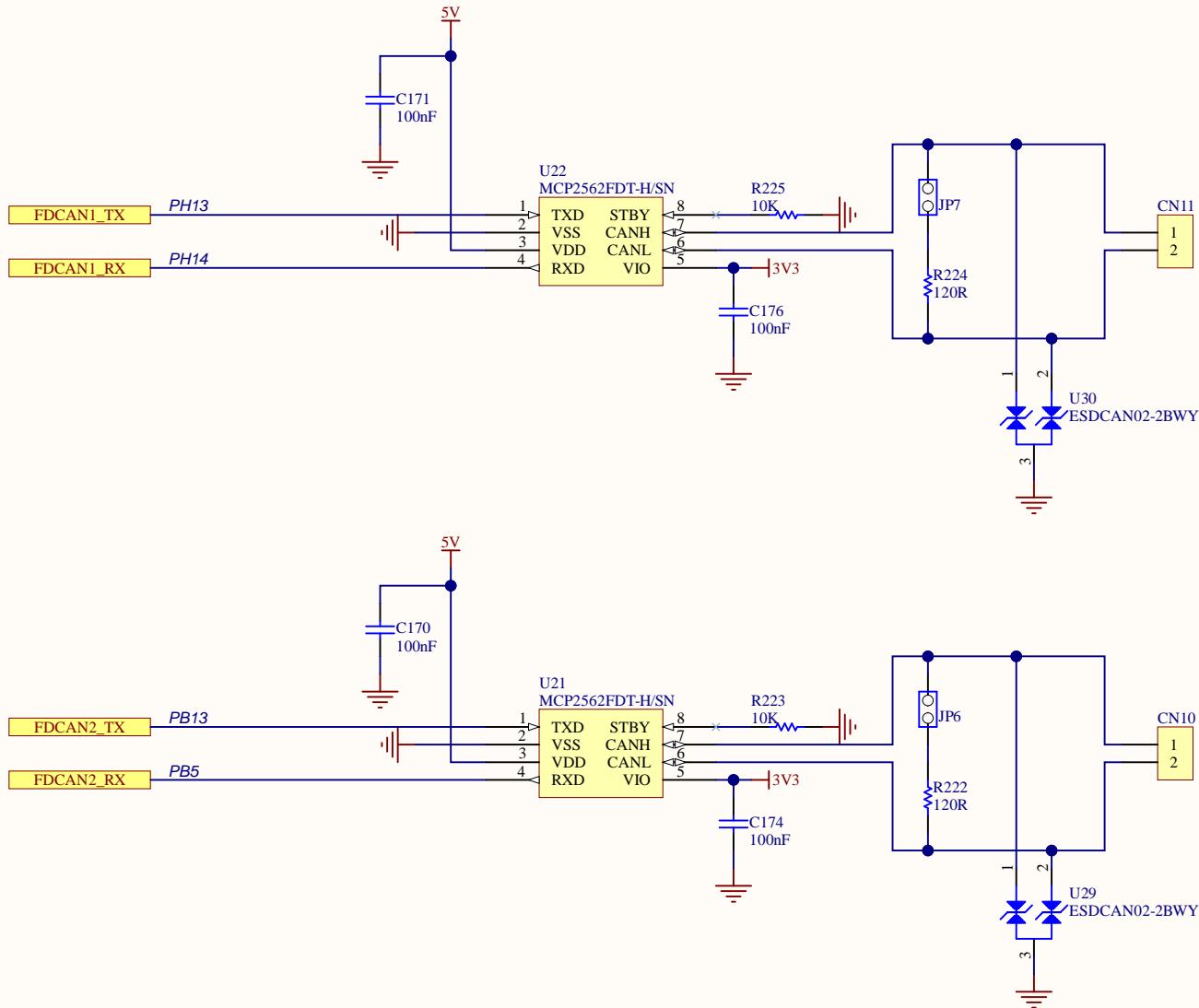
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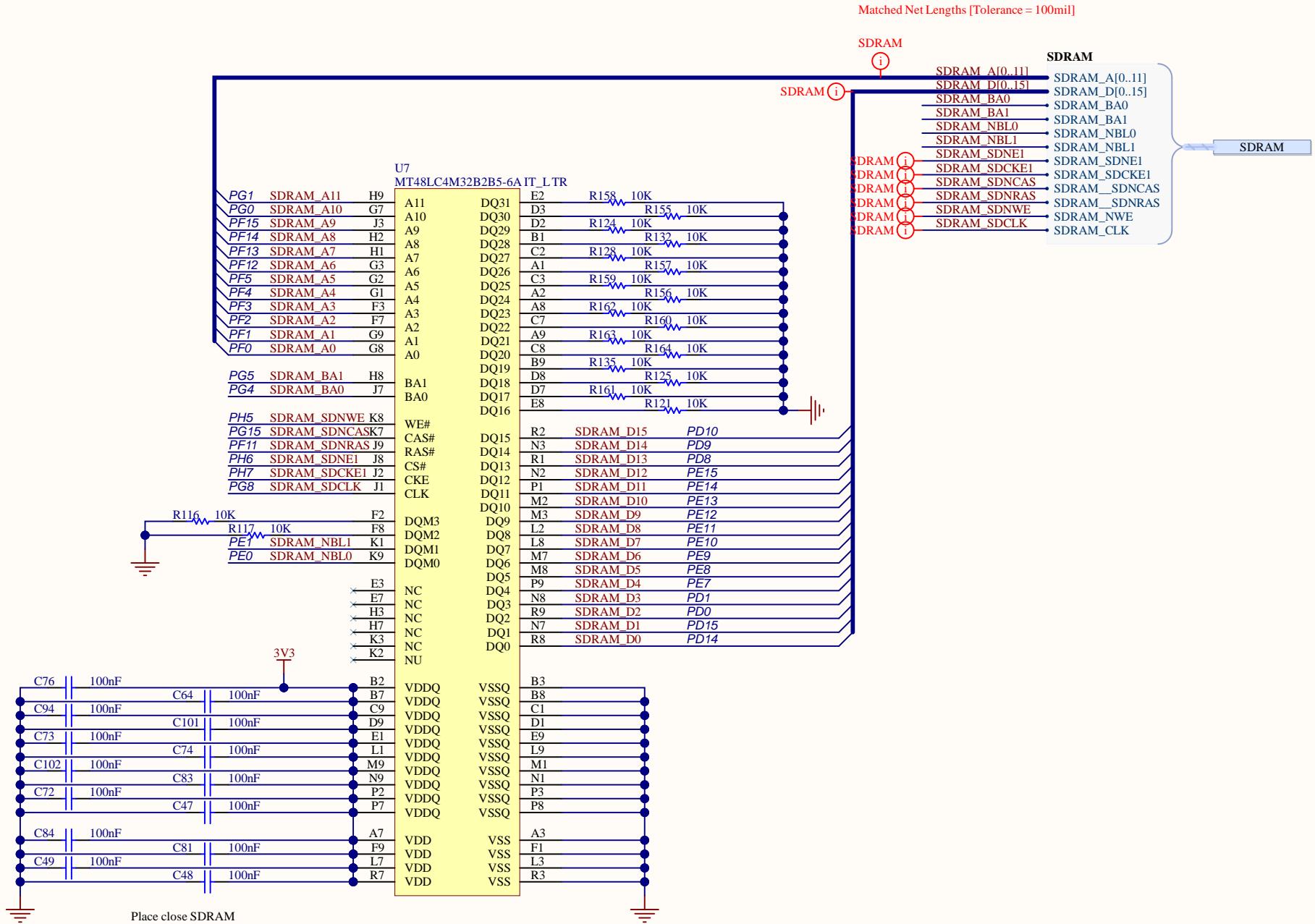
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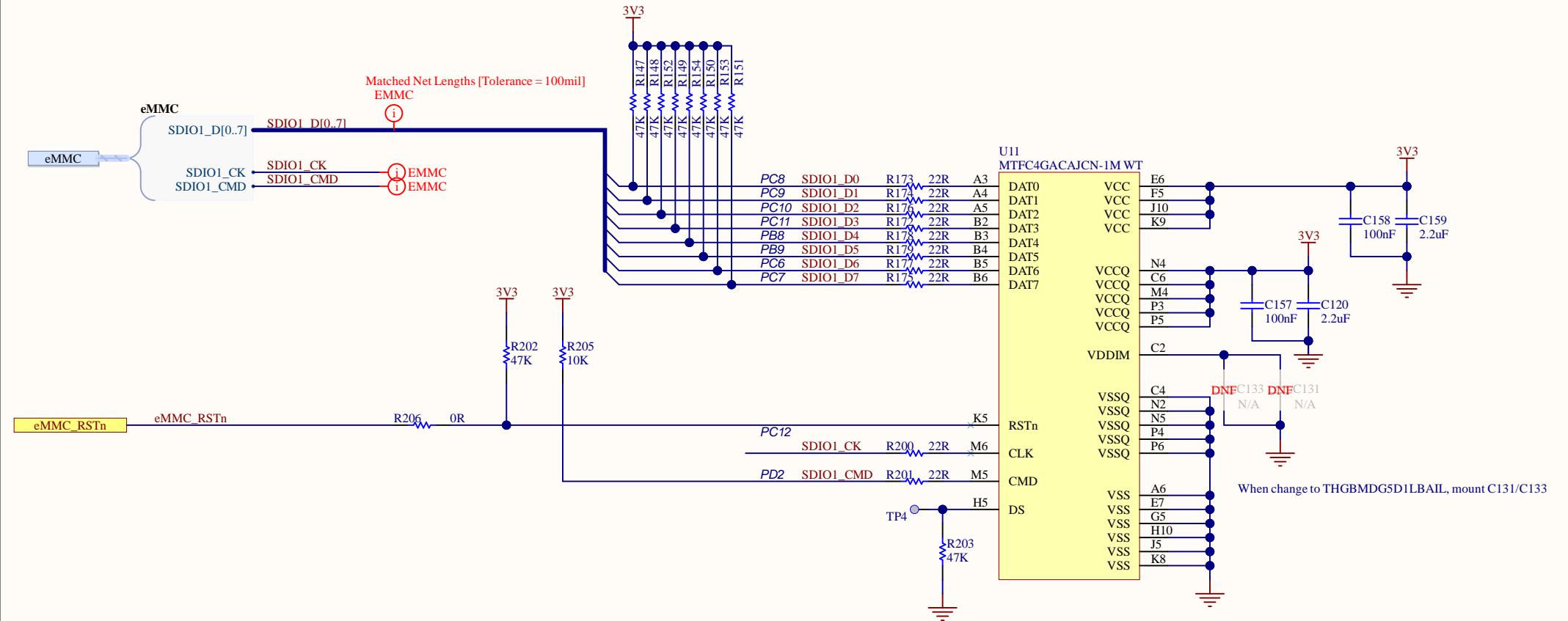
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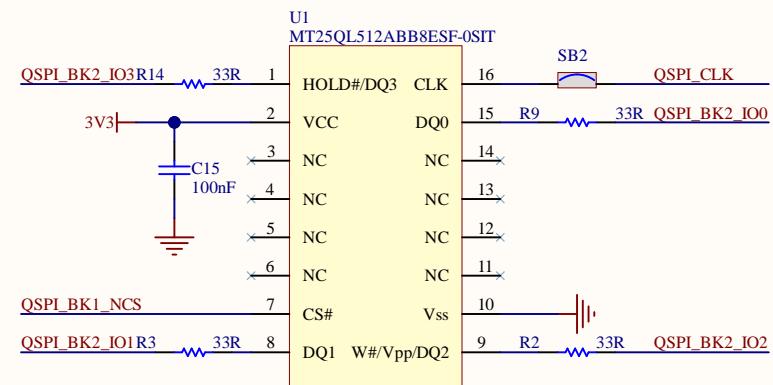
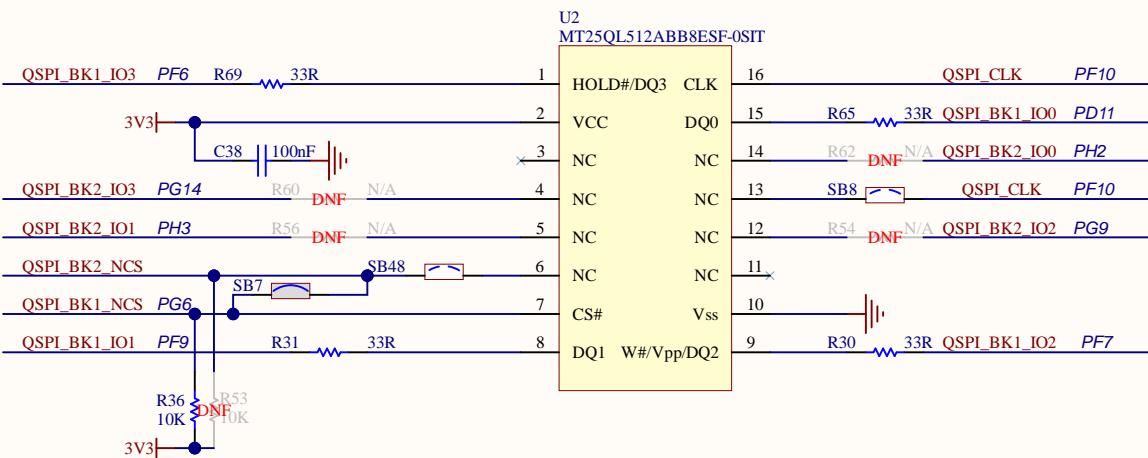
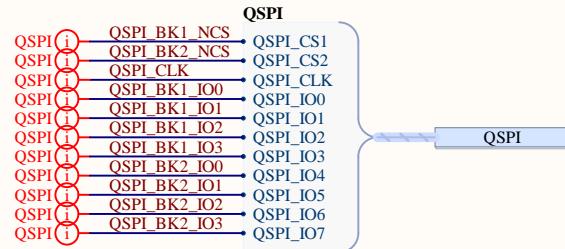
life.augmented







Matched Net Lengths [Tolerance = 100mil]

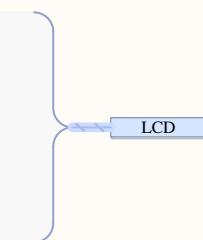


Twin Quad SPI Flash solutions:

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

LCD i	LCD_R[0..7]	LCD_R[0..7]
LCD i	LCD_G[0..7]	LCD_G[0..7]
LCD i	LCD_B[0..7]	LCD_B[0..7]
LCD i	LCD_HSYNC	LCD_HSYNC
LCD i	LCD_VSYNC	LCD_VSYNC
LCD i	LCD_DE	LCD_DE
LCD i	LCD_DISP	LCD_DISP
LCD i	LCD_CLK	LCD_CLK
LCD i	LCD_INT	LCD_INT
LCD i	LCD_RST	LCD_RST
LCD i	LCD_BL	LCD_BL



I2C

LCD_SCL	PD12	SCL
LCD_SDA	PD13	SDA

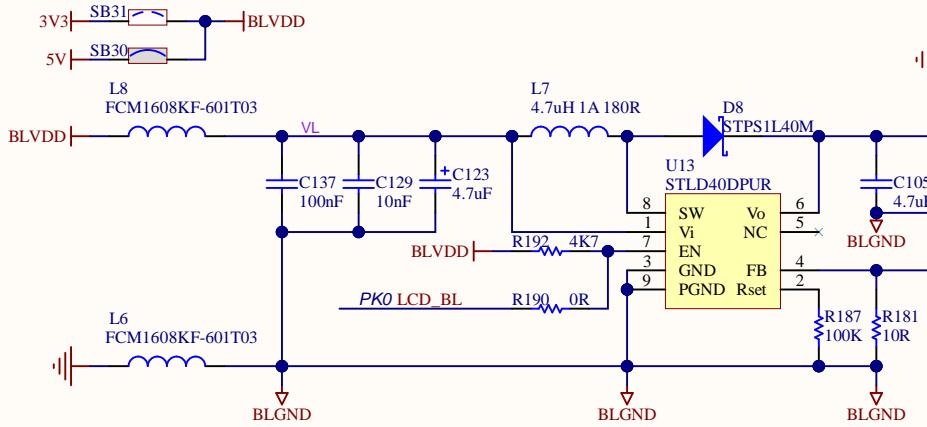
LCD_I2C

U33
RK043FN48H-CT672B

PI14	LCD_CLK	30	5	LCD_R0	PI15
PI12	LCD_HSYNC32		6	LCD_R1	PI0
PI9	LCD_VSYNC33		7	LCD_R2	PI1
DE			8	LCD_R3	PH9
DISP			9	LCD_R4	PJ3
			10	LCD_R5	PJ4
			11	LCD_R6	PJ5
			12	LCD_R7	PJ6
			13	LCD_G0	PJ7
			14	LCD_G1	PJ8
			15	LCD_G2	PJ9
			16	LCD_G3	PJ10
			17	LCD_G4	PJ11
			18	LCD_G5	PJ10
			19	LCD_G6	PJ1
			20	LCD_G7	PK2
			21	LCD_B0	PJ12
			22	LCD_B1	PJ13
			23	LCD_B2	PJ14
			24	LCD_B3	PJ15
			25	LCD_B4	PK3
			26	LCD_B5	PK4
			27	LCD_B6	PK5
			28	LCD_B7	PK6

Default I2C Address : 01110000

Backlight driver & PFC of LCD panel



Title: LCD4.3

Project: STM32H7xxXx-Disco

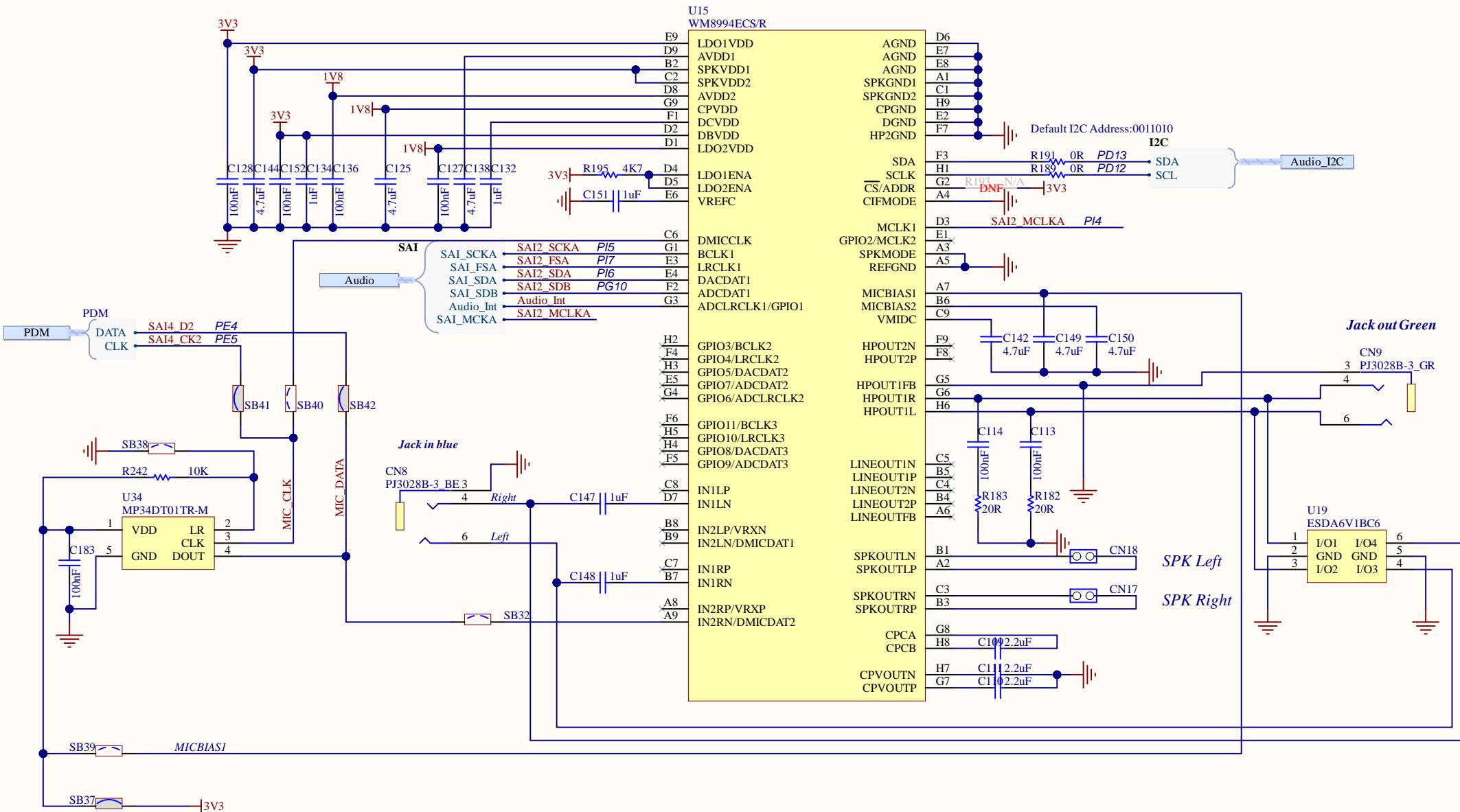
Variant: H745XI

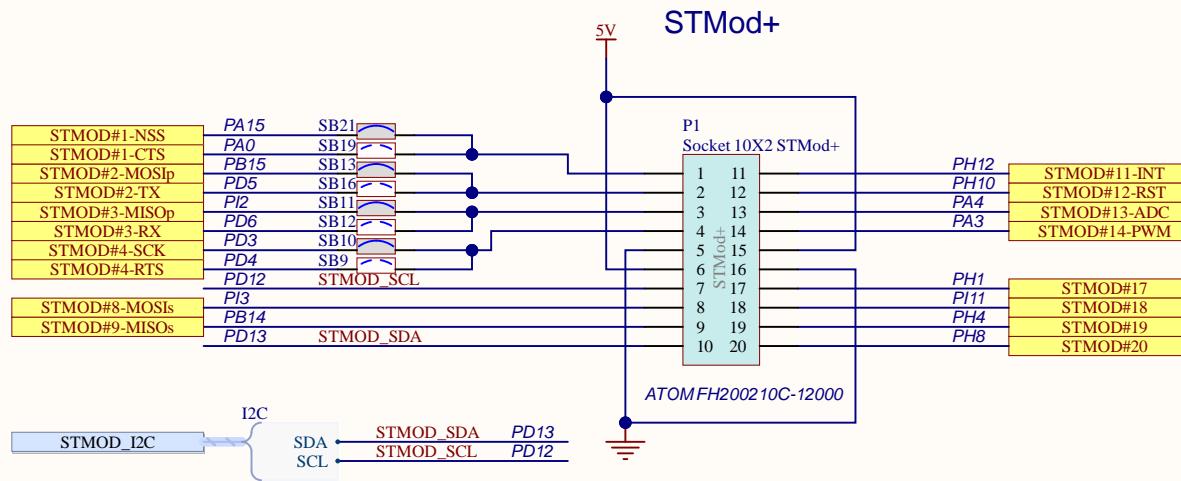
Revision: B-01

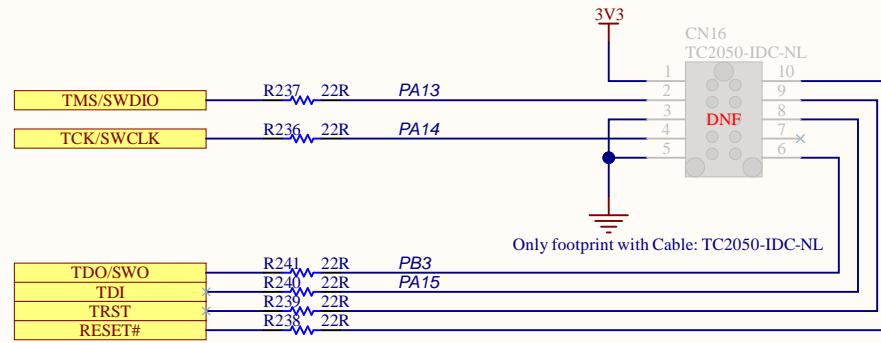
Size: A4 Date: 11-JUNE-18 Reference: MB138I

life.augmented

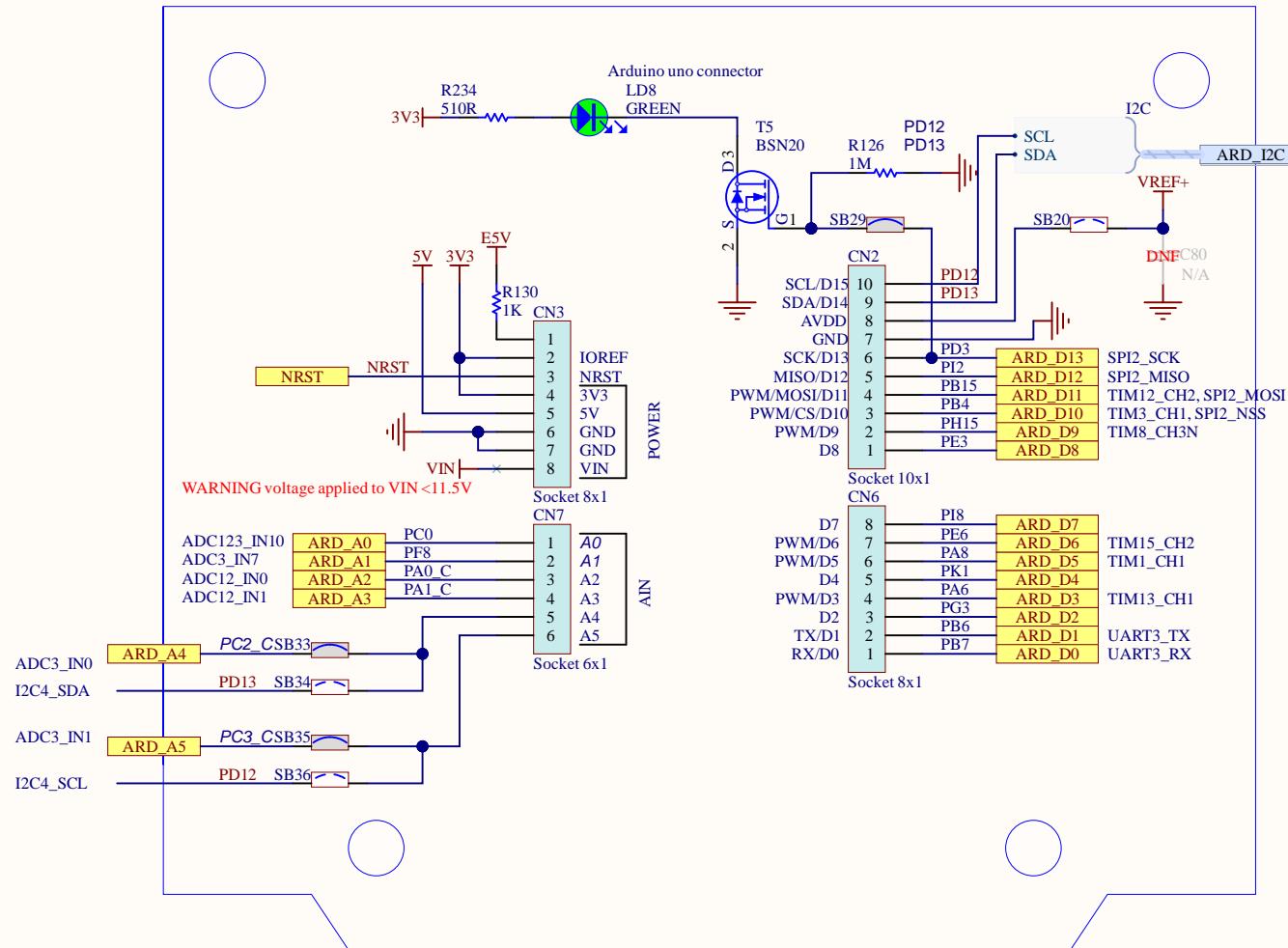
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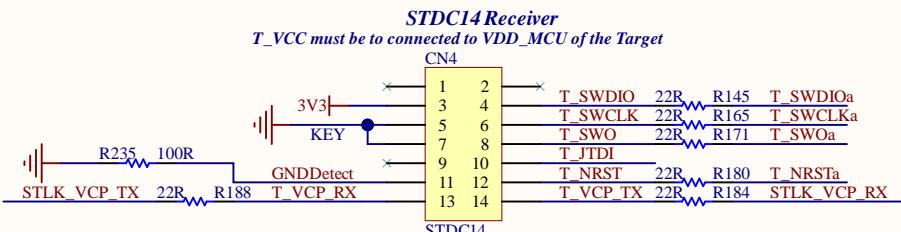
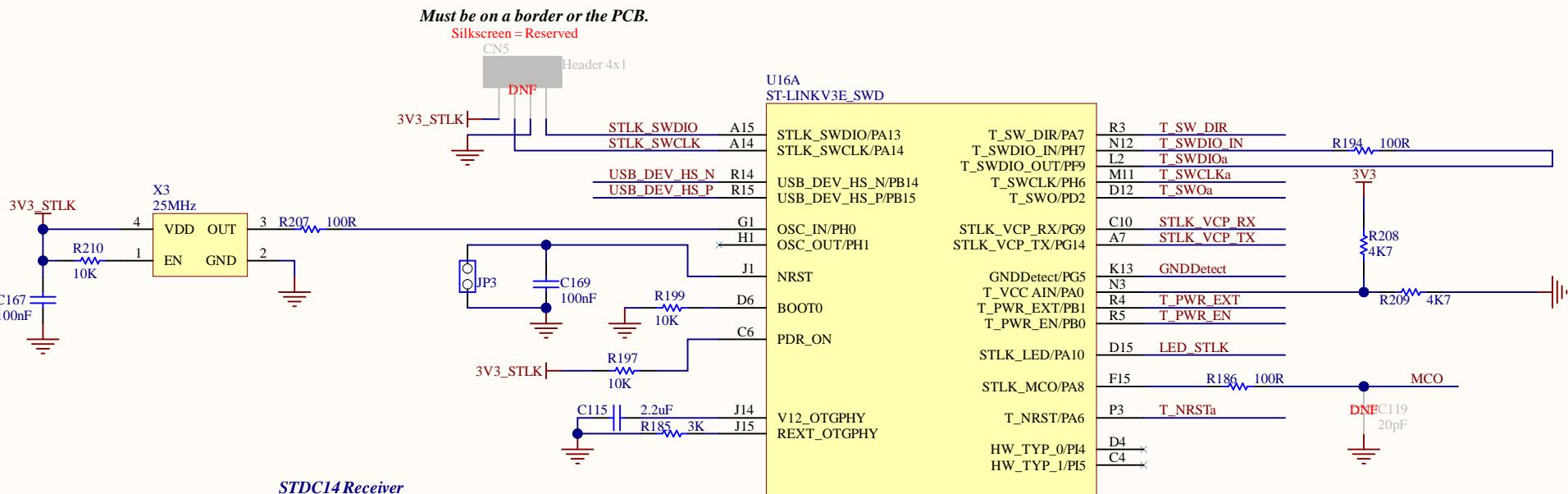
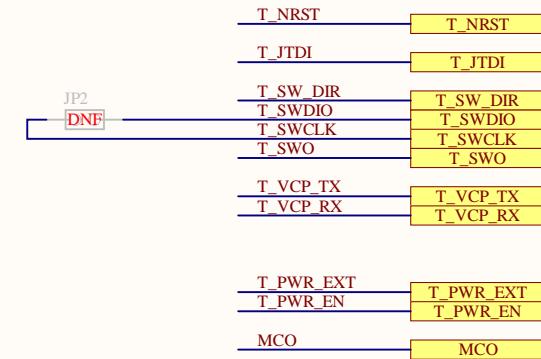
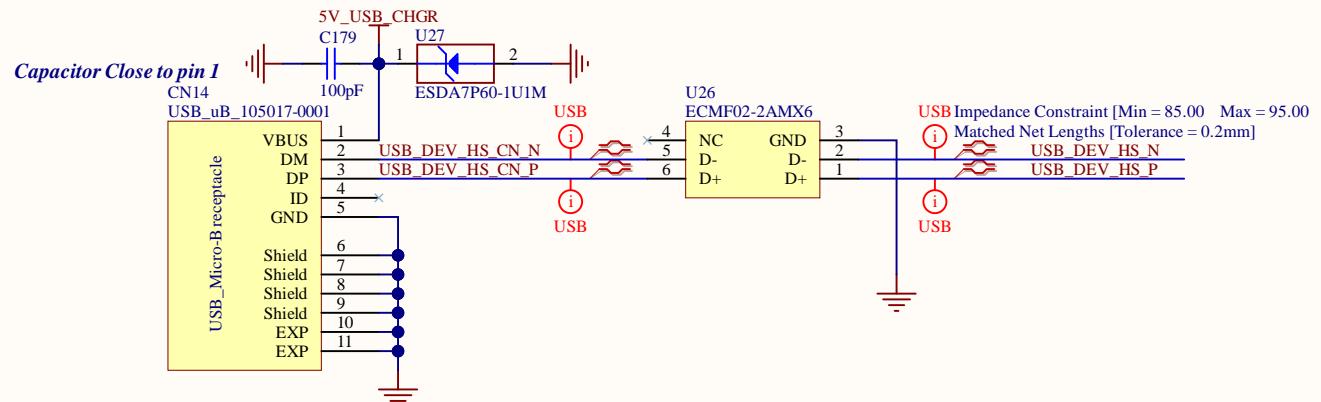






Place this connector close to STDC, they will share the same ESD components





Title: ST-LINK/V3E-SWD Module

Project: STM32H7xxX-Disco

Variant: H745XI

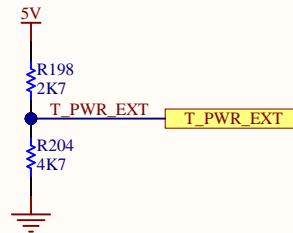
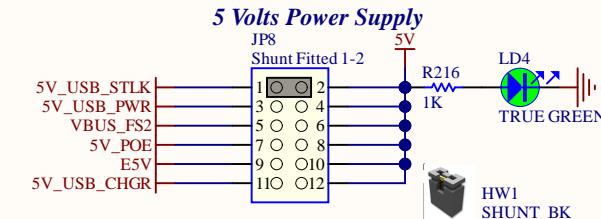
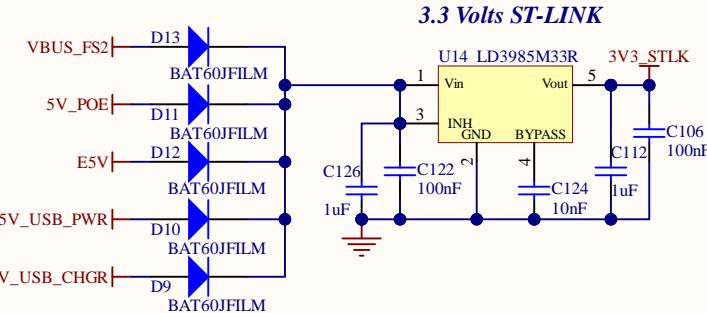
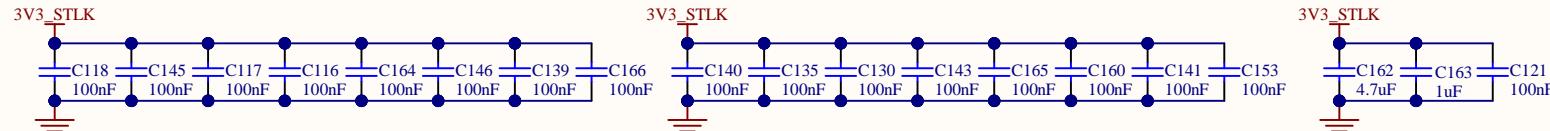
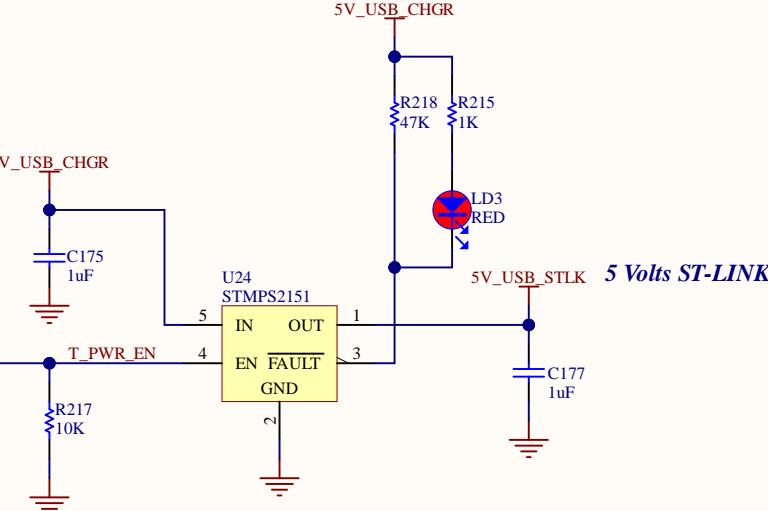
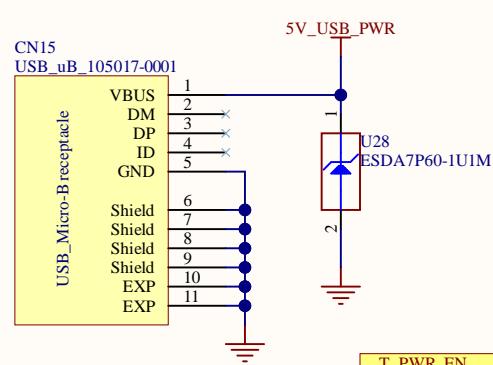
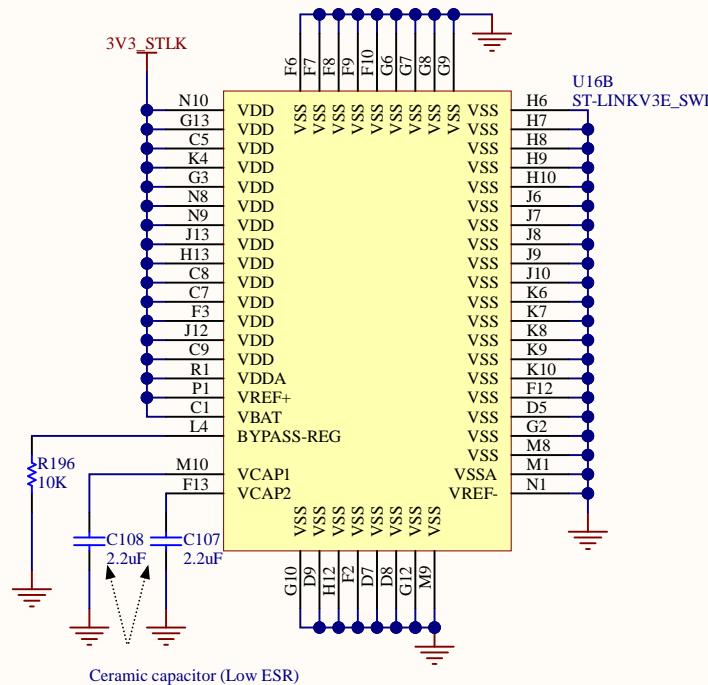
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Reference: MB138I

Size: A4

Date: 11-JUNE-18

Sheet: 17 of 19



Title: ST-LINK/V3E-SWD Power Module

Project: STM32H7xxXx-Disco

Variant: H745XI

Revision: B-01

Reference: MB138I

Size: A4

Date: 11-JUNE-18

Sheet: 18 of 18



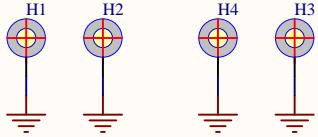
HW Mechanical parts

HW6
MB1381A
PCB

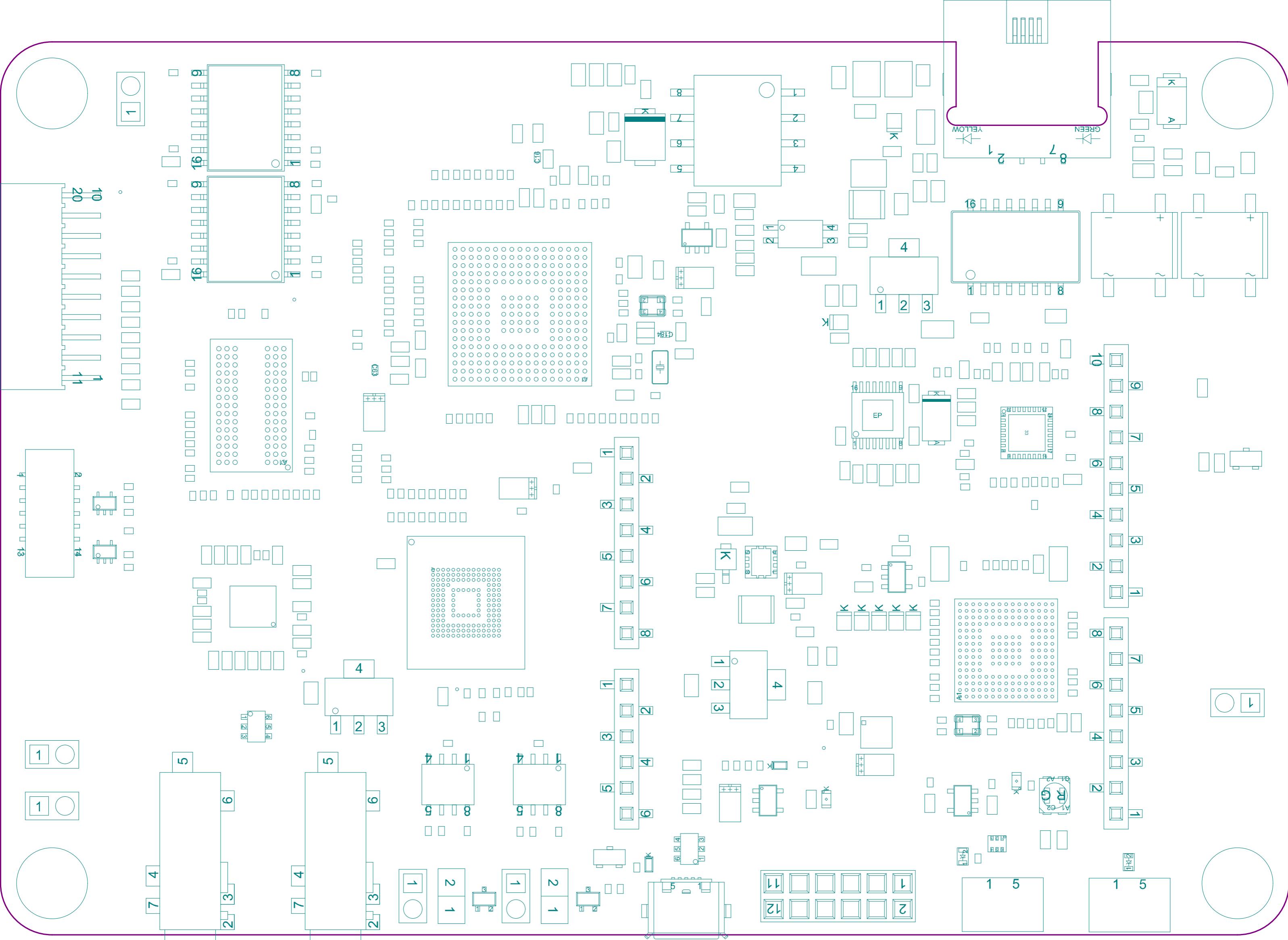
HW7
MB1381A-01 XXXX
BOARD REF

HW8
STM32H745I-Disco
BOARD CPN

HW4 LOGO ST HW5 LOGO CE HW3 LOGO ESD HW9 LOGO ROHS HW10 LOGO STM32



Title: HW Mechanical parts	
Project: STM32H7xxXx-Disco	
Variant: H745XI	
Revision: B-01	Reference: MB1381
Size: A4	Date: 11-JUNE-18



2

LAYER 2 (GND PLANE)

FAB DRAWING & DRILL LEGEND

