

STM32H745I-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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Title: Project overview

Project: STM32H745I-Disco

Variant: H750XB

Revision: B-01

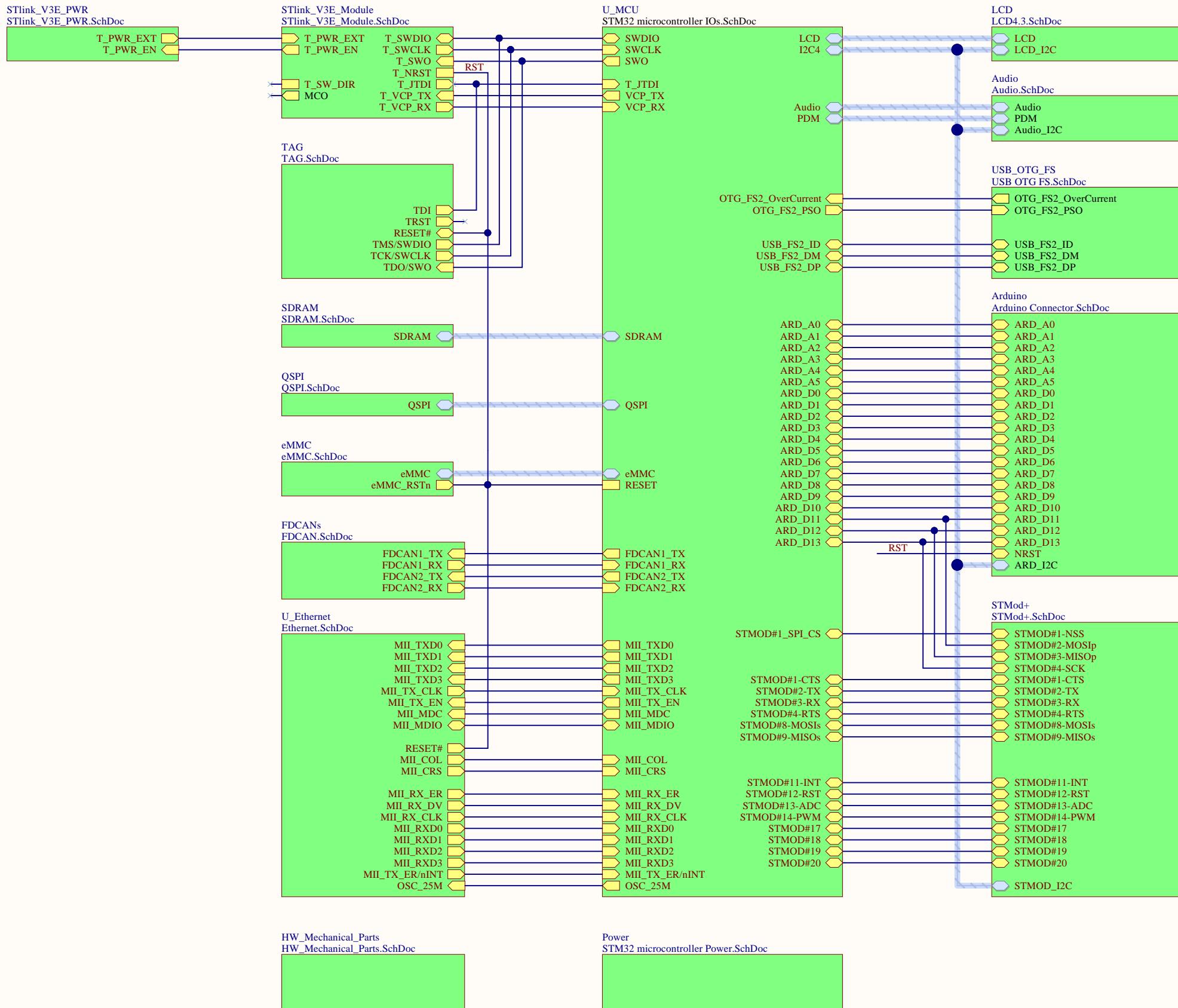
Reference: MB1381

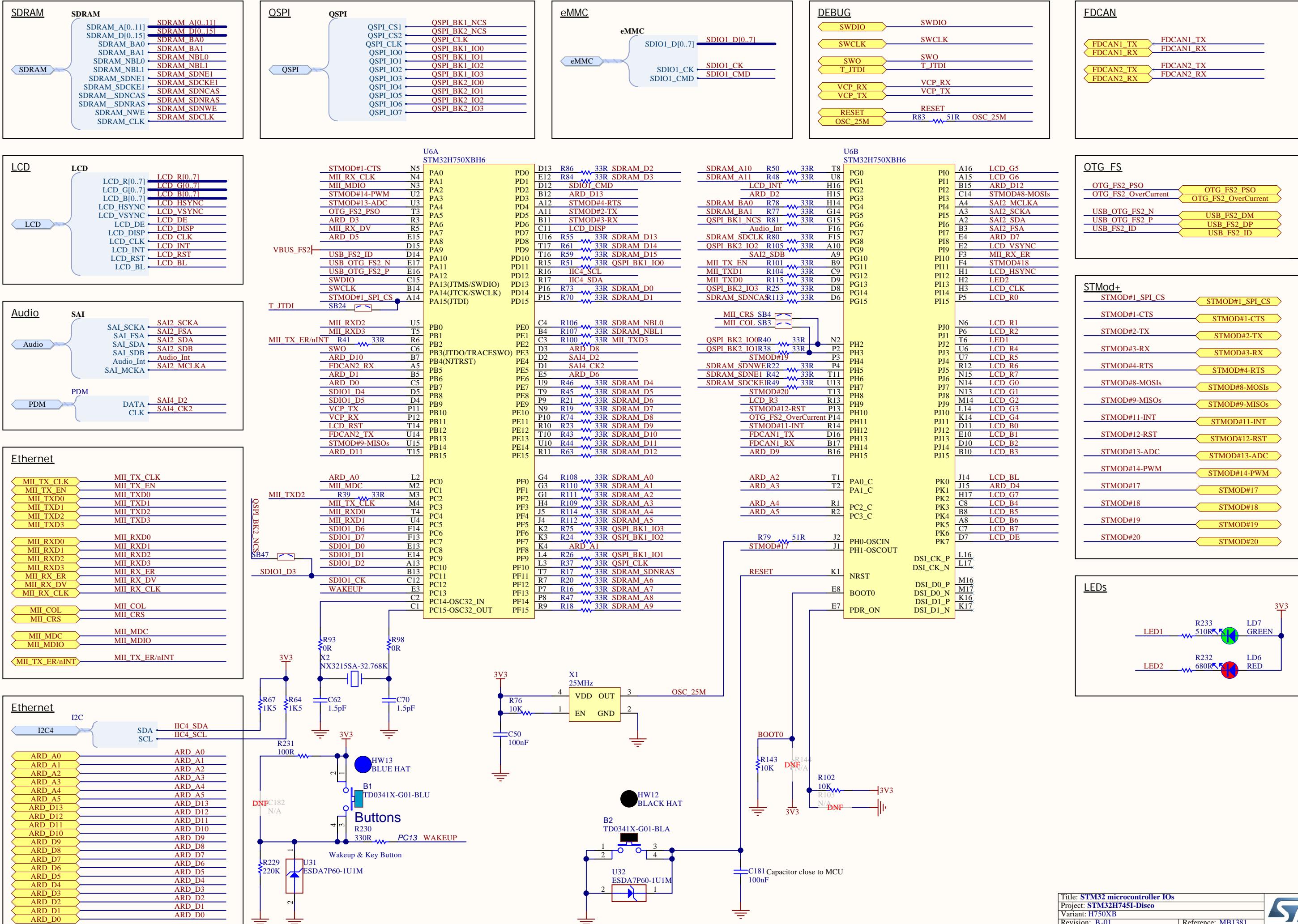
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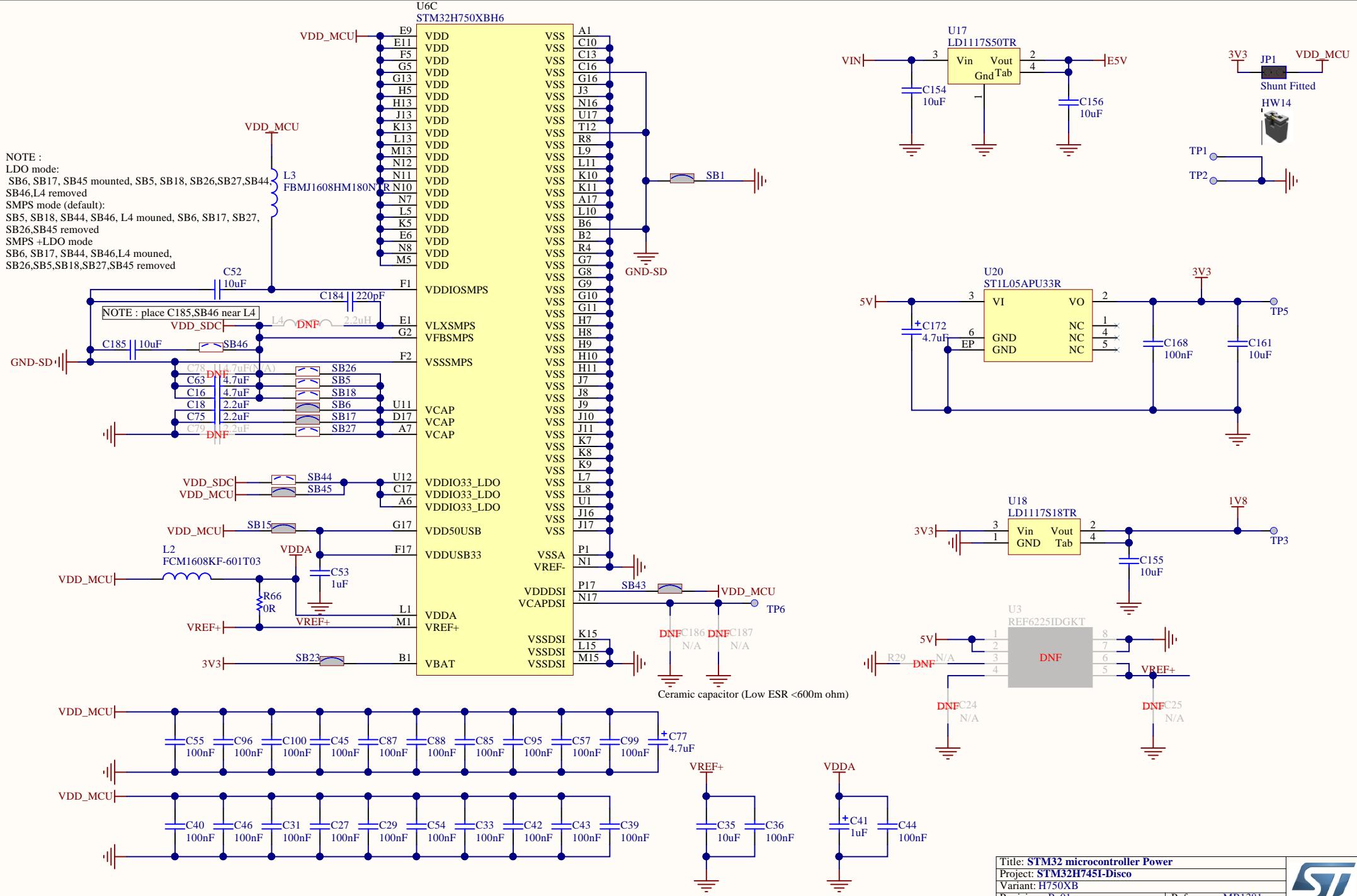
Date: 11-JUNE-18

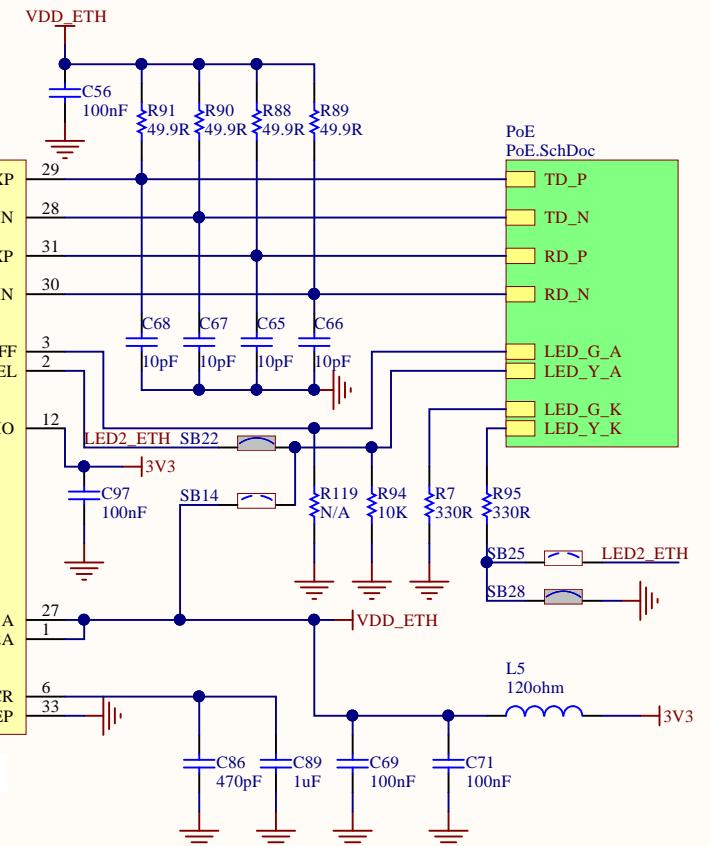
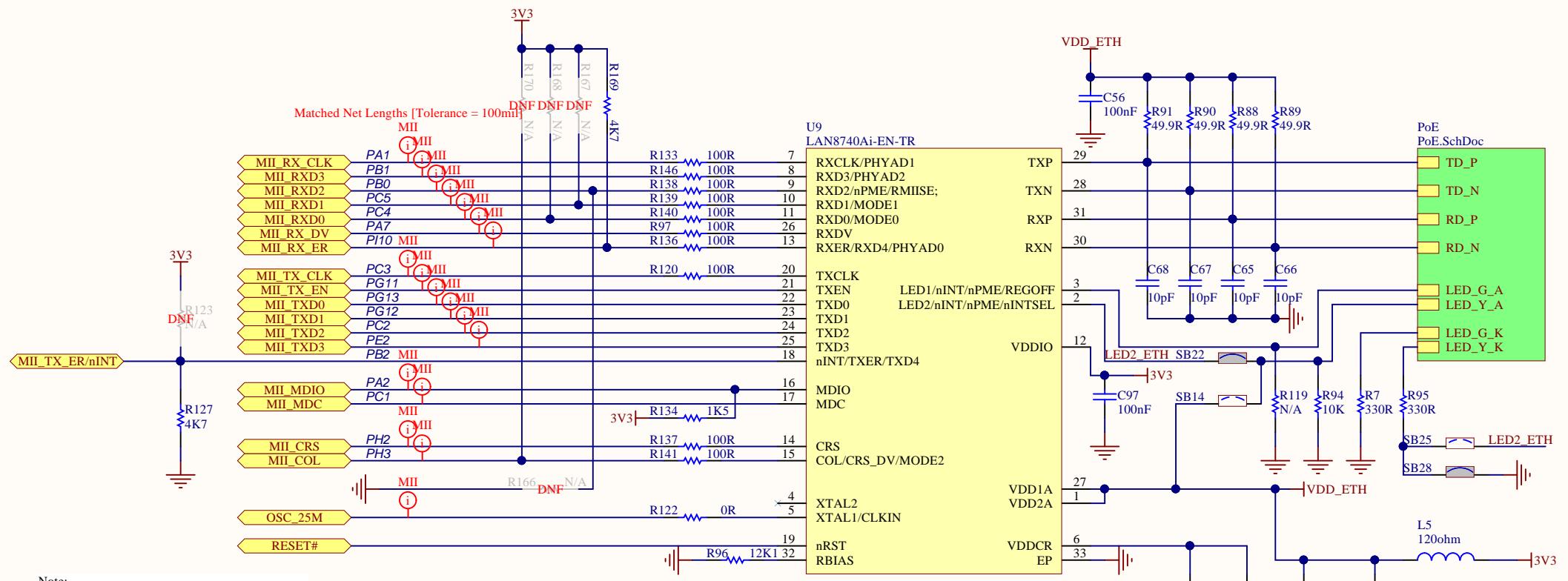
Sheet: 1 of 19











INPUT

CN1
KRU-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_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]

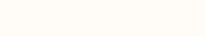
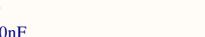
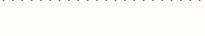
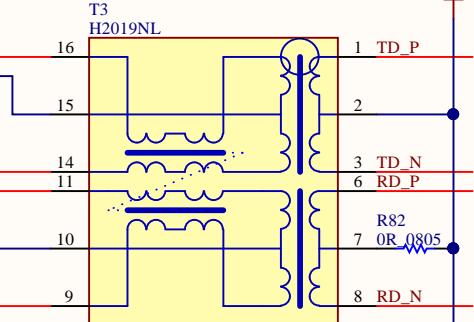
Diff Pair 100ohm

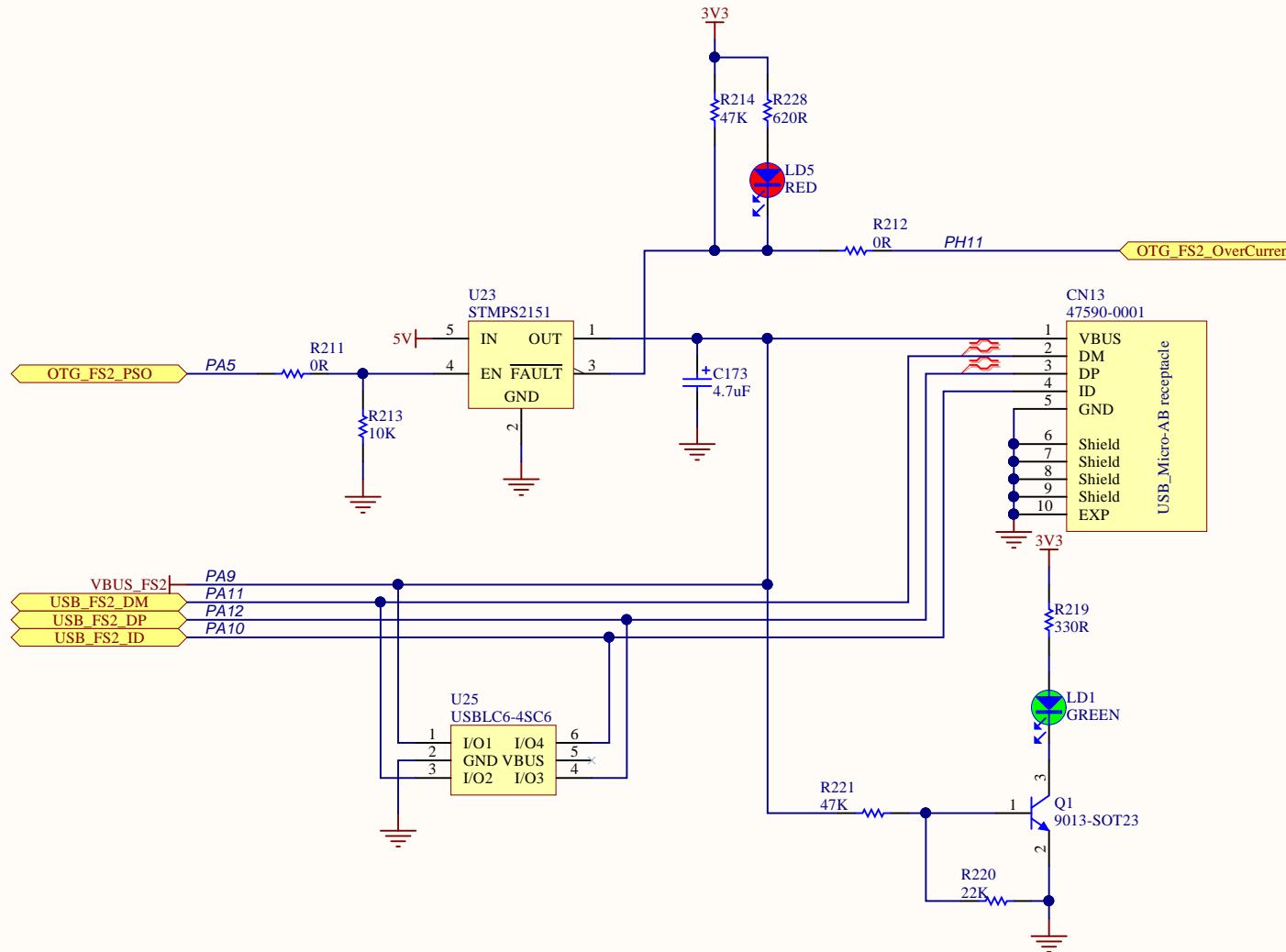
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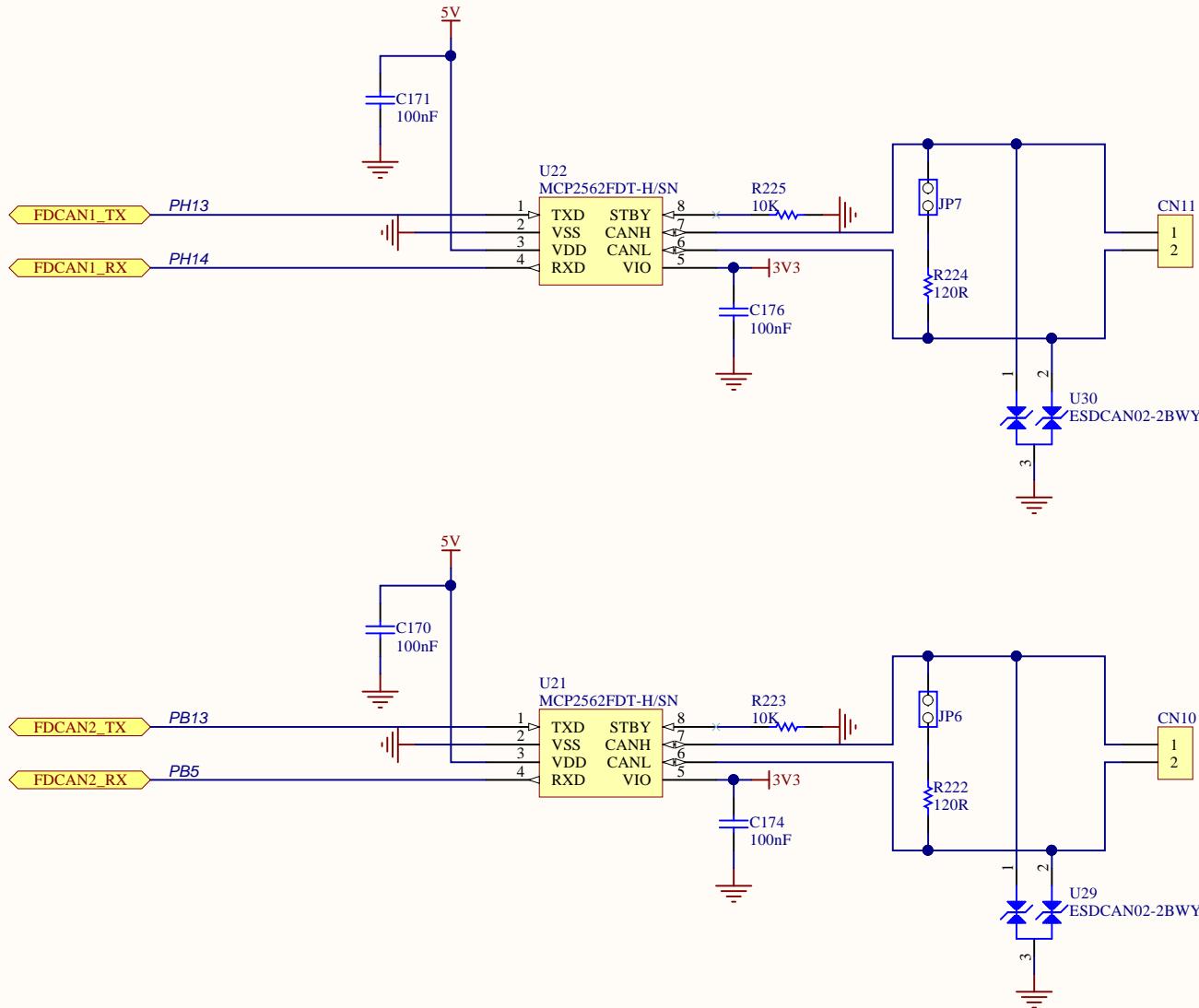
Diff Pair 100ohm

NOTE : Place for additional ferrite beads

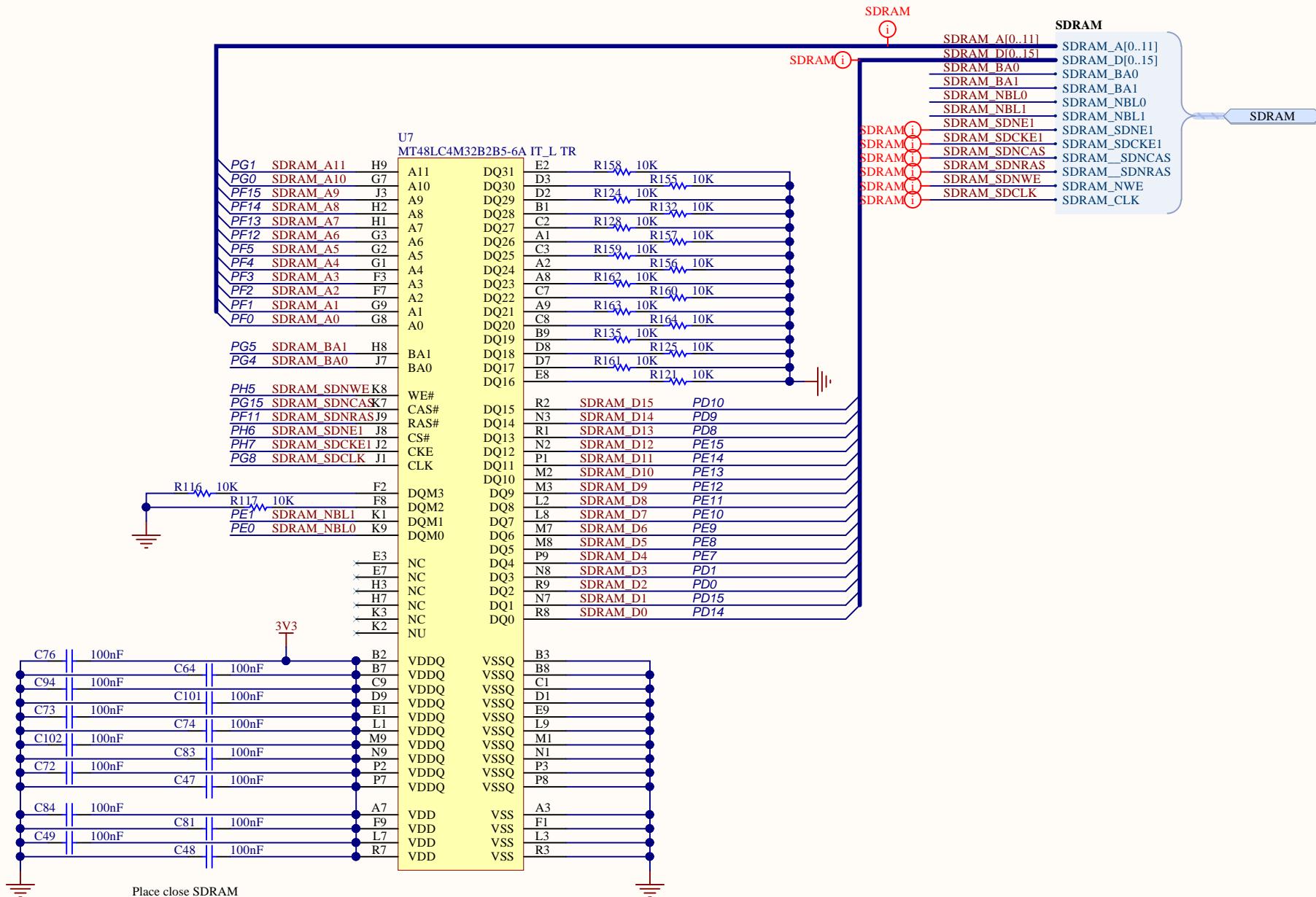
VDD_ETH





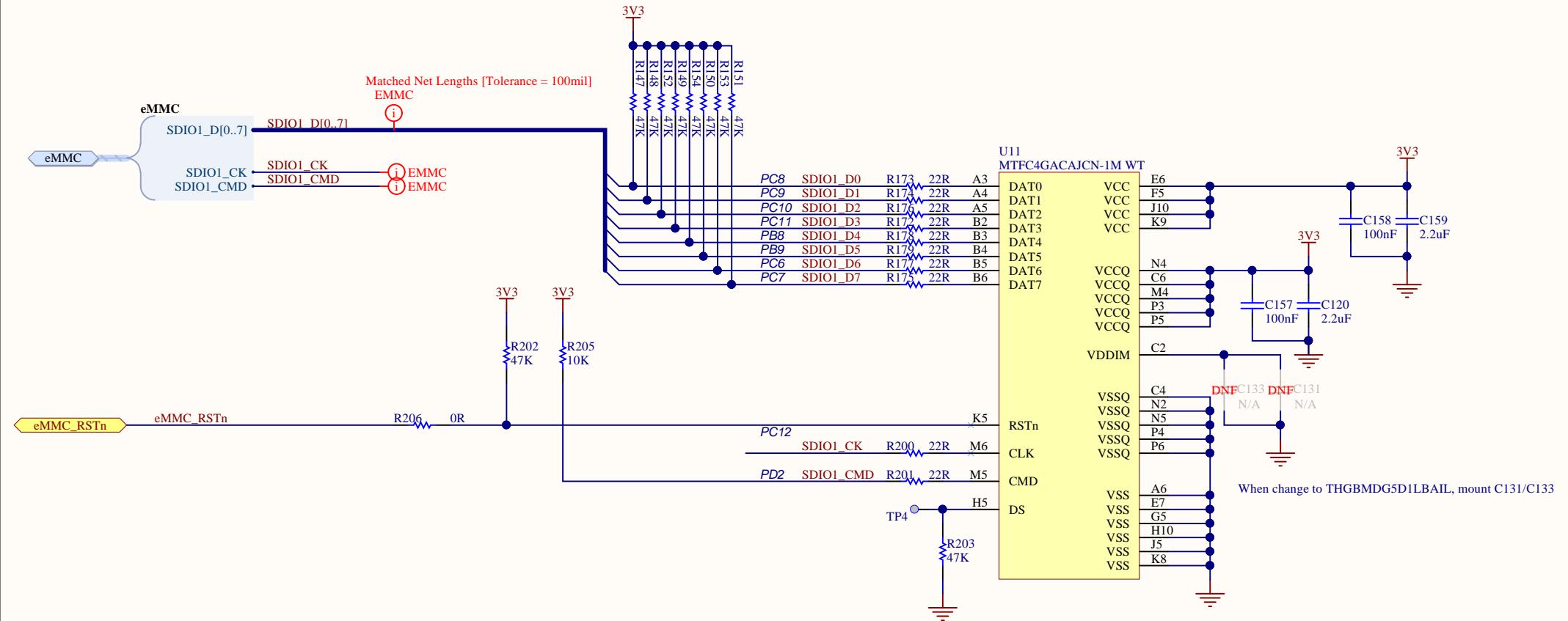


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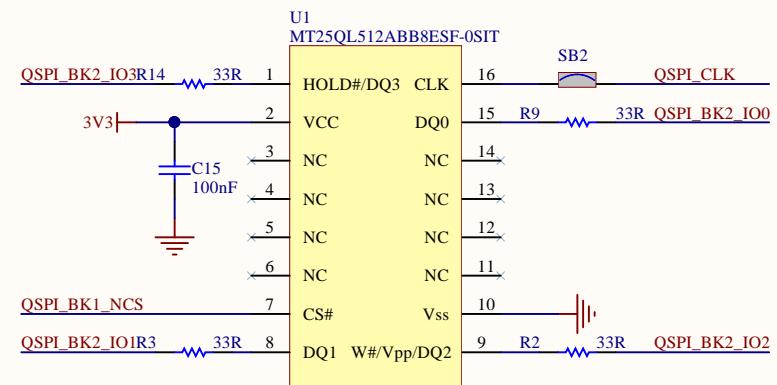
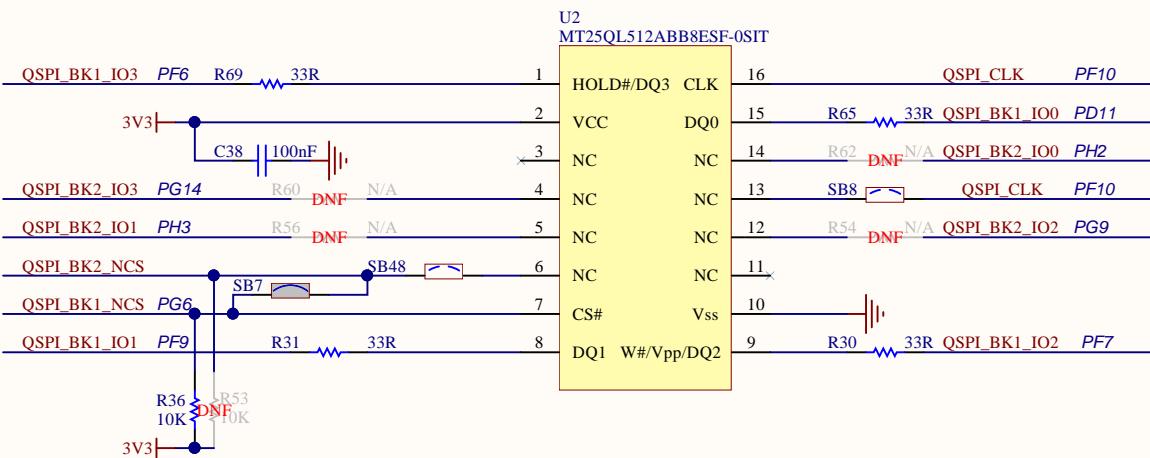
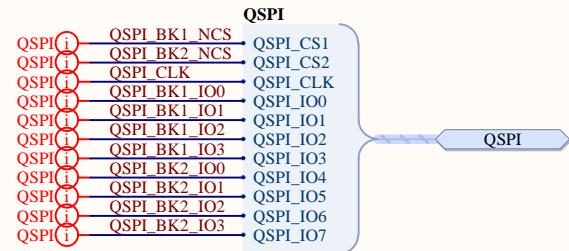


Place close SDRAM

Title: SDRAM	 life.aumented
Project: STM32H745I-Disco	
Variant: H750XB	
Revision: B-01	
Size: A4	Reference: MB1381
Date: 11-JUNE-18	Sheet: 9 of 19



Matched Net Lengths [Tolerance = 100mil]

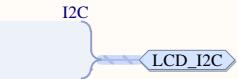


Twin Quad SPI Flash solutions:

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	
LCD _i 1	LCD_R[0..7]
LCD _i 1	LCD_G[0..7]
LCD _i 1	LCD_B[0..7]
LCD _i 1	LCD_HSYNC
LCD _i 1	LCD_VSYNC
LCD _i 1	LCD_DE
LCD _i 1	LCD_DISP
LCD _i 1	LCD_CLK
LCD _i 1	LCD_INT
LCD _i 1	LCD_RST
LCD _i 1	LCD_BL

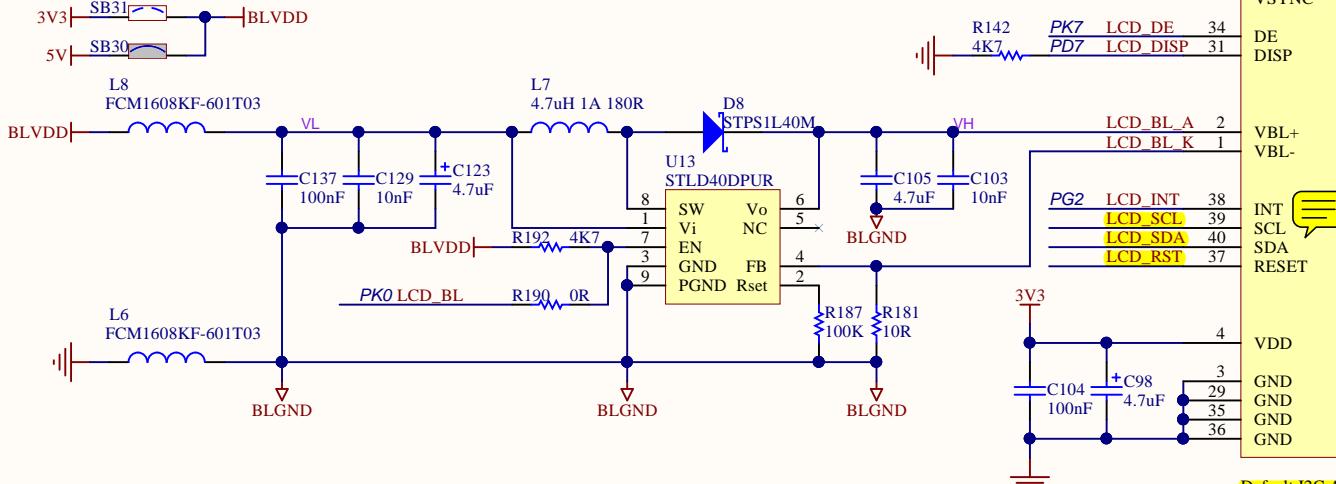


U33
RK043FN48H-CT672B

P14	LCD_CLK	30	5	LCD_R0	P15
P12	LCD_HSYNC	32	6	LCD_R1	P10
P9	LCD_VSYNC	33	7	LCD_R2	P11
			8	LCD_R3	P9
			9	LCD_R4	P13
			10	LCD_R5	P14
			11	LCD_R6	P15
			12	LCD_R7	P16
			13	LCD_G0	P7
			14	LCD_G1	P8
			15	LCD_G2	P9
			16	LCD_G3	P10
			17	LCD_G4	P11
			18	LCD_G5	P10
			19	LCD_G6	P11
			20	LCD_G7	PK2
			21	LCD_B0	P12
			22	LCD_B1	P13
			23	LCD_B2	P14
			24	LCD_B3	P15
			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: STM32H745I-Disco

Variant: H750XB

Revision: B-01

Reference: MB1381

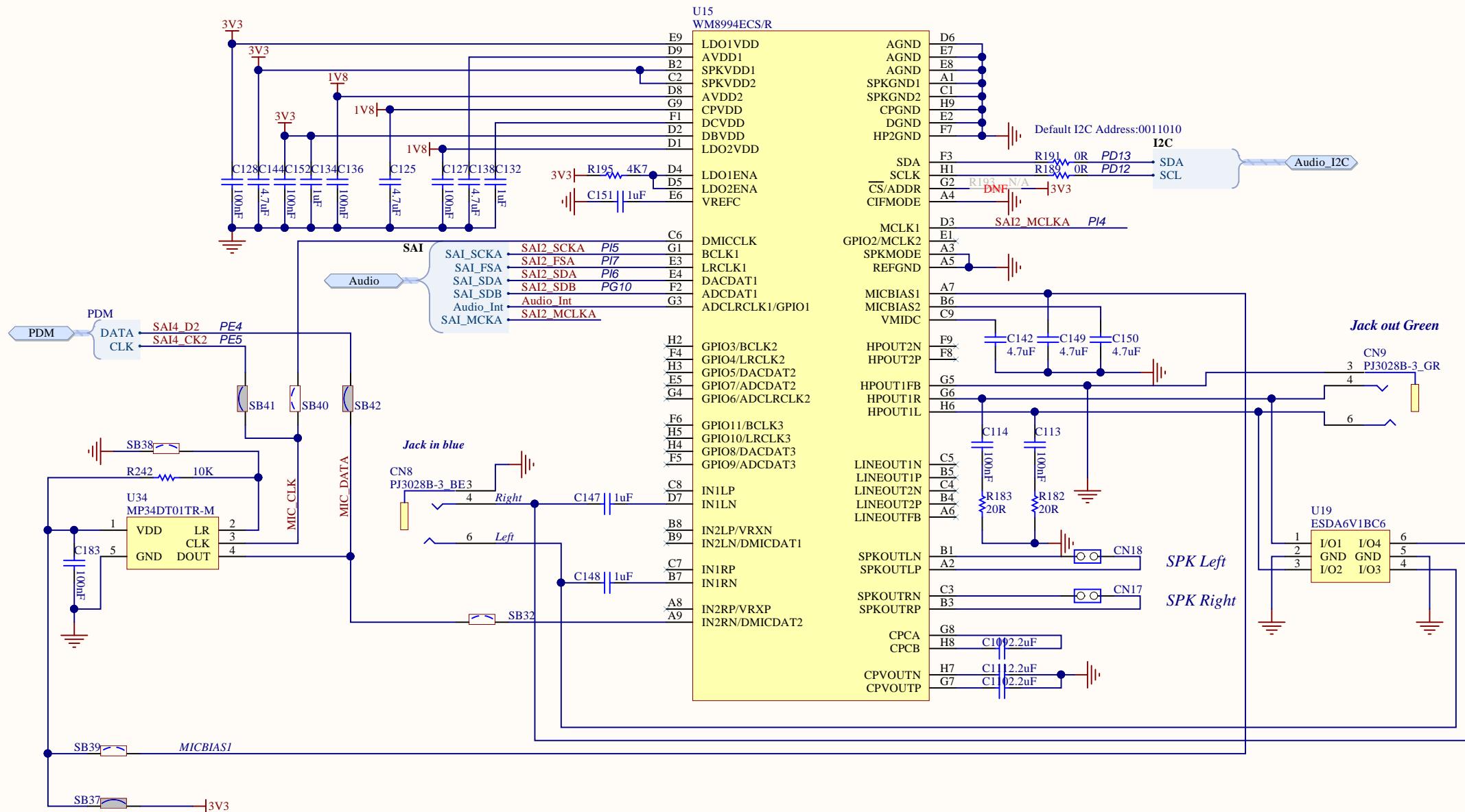
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Date: 11-JUNE-18

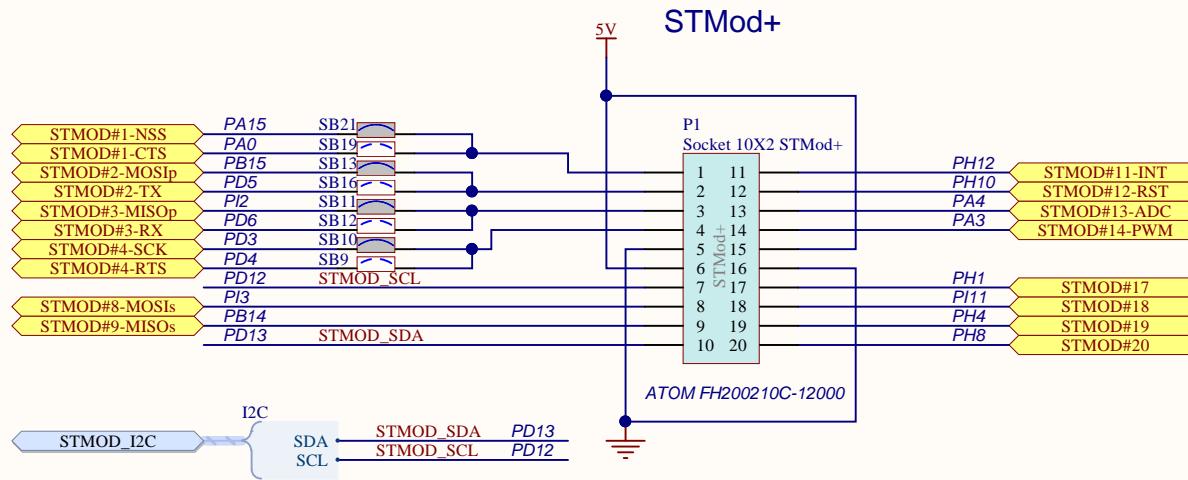


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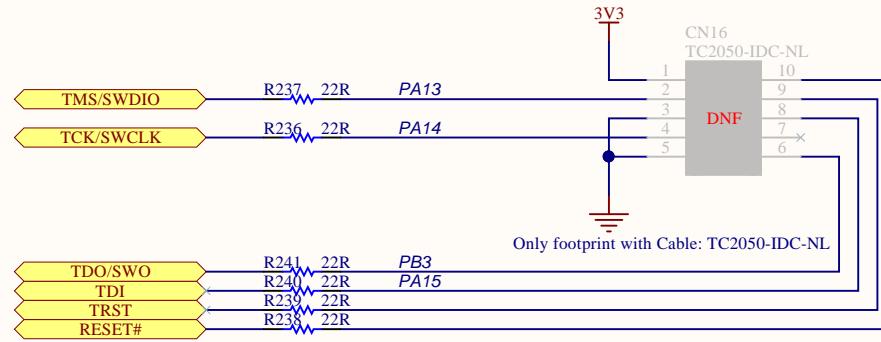
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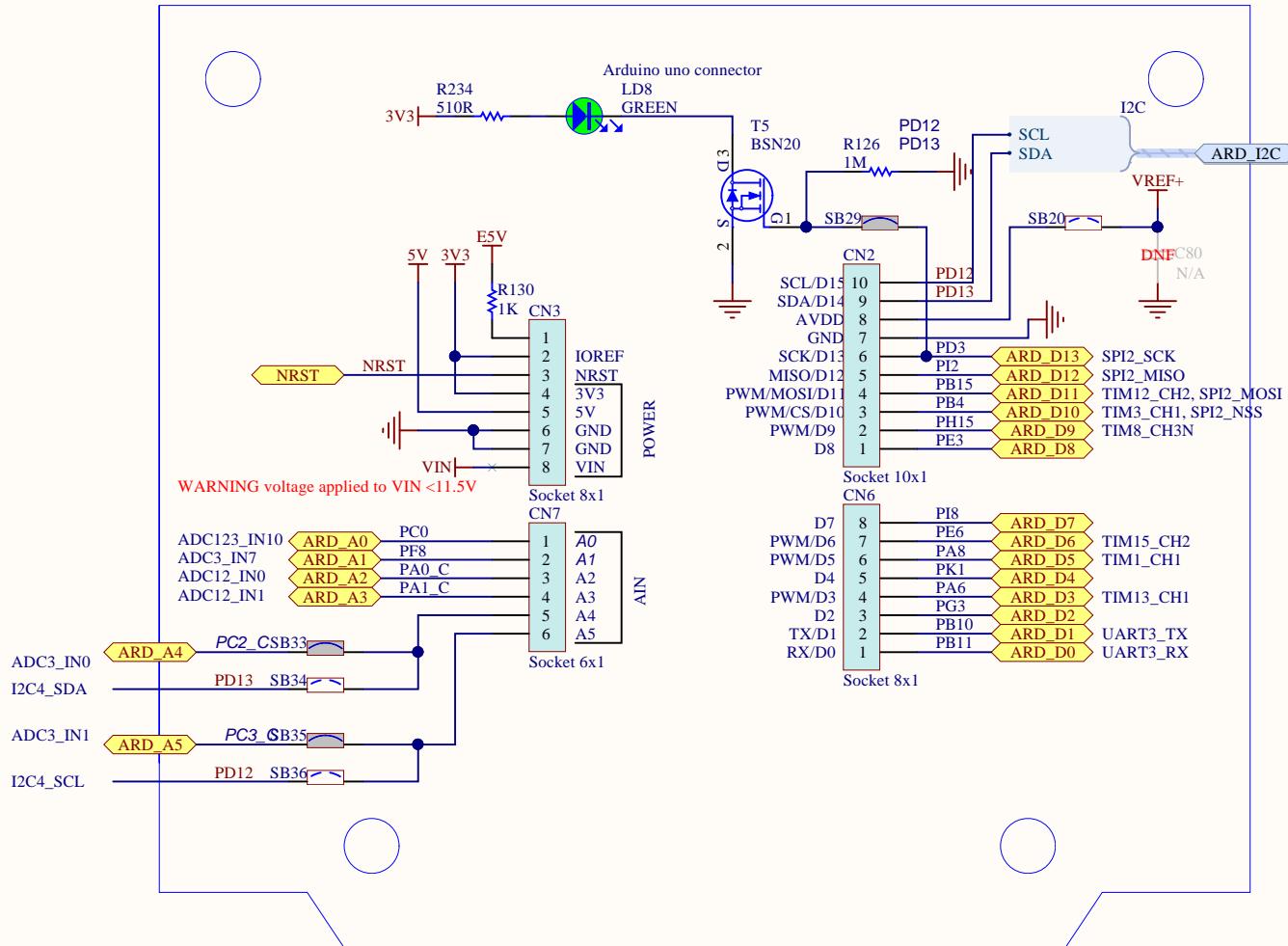
Title: Audio		
Project: STM32H745I-Disco		
Variant: H750XB		
Revision: B-01		
Size: A4	Date: 11-JUNE-18	Reference: MBI381
Sheet: 13 of 19		1

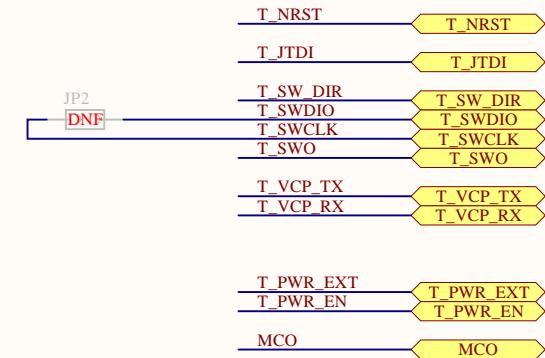
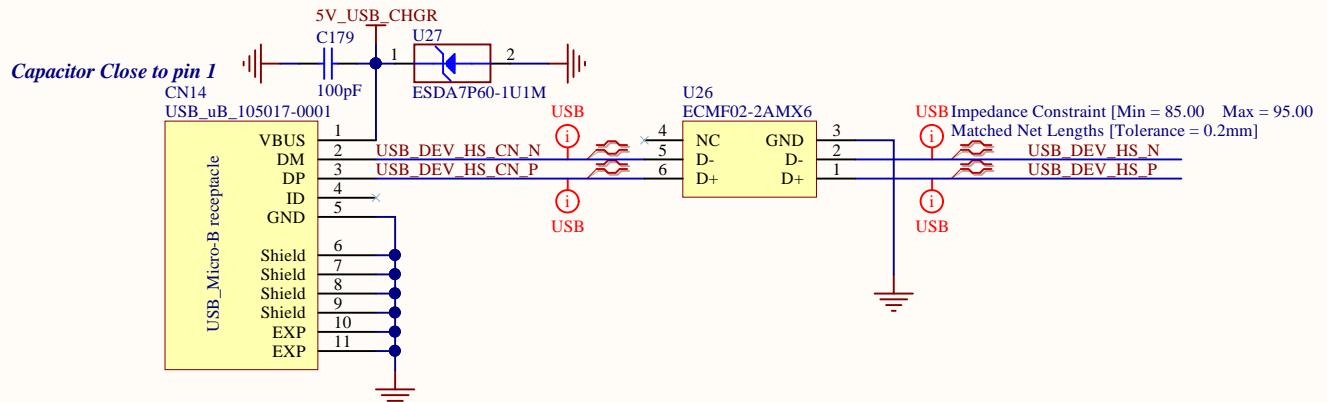


Title: STMod+	
Project: STM32H745I-Disco	
Variant: H750XB	
Revision: B-01	
Size: A4	Date: 11-JUNE-18
Reference: MB1381	Sheet: 14 of 19



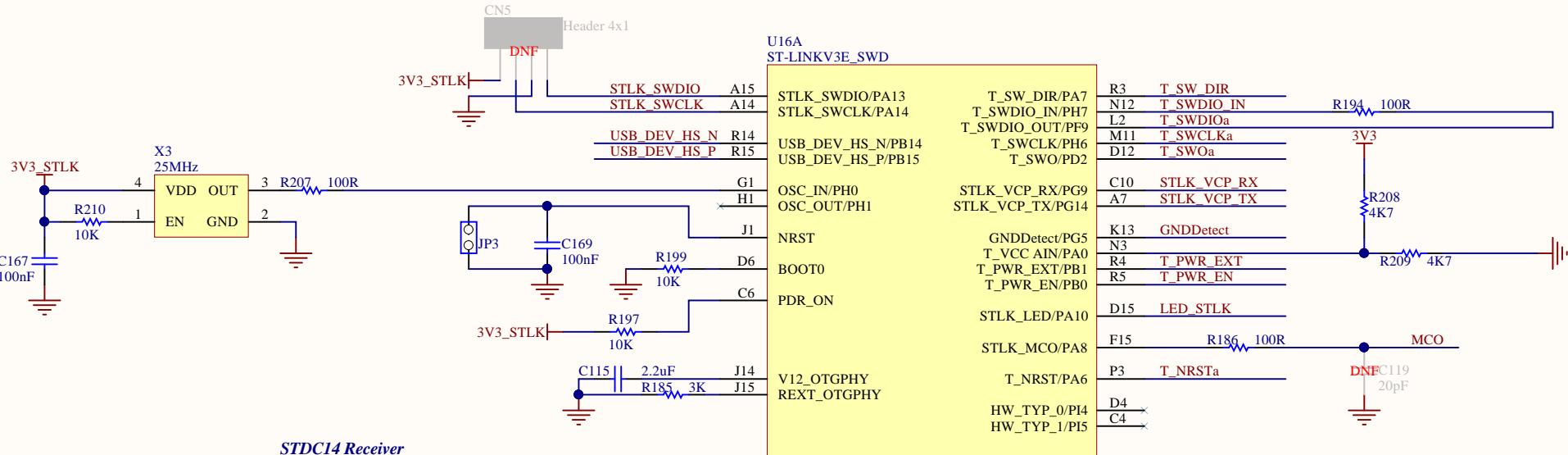
Place this connector close to STDC, they will share the same ESD components





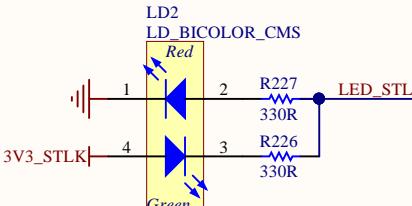
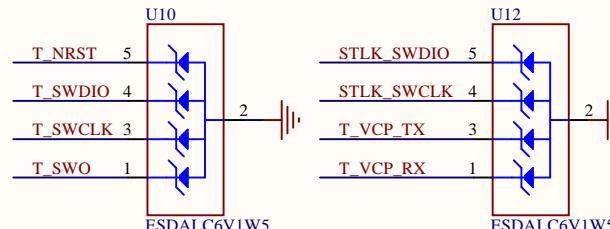
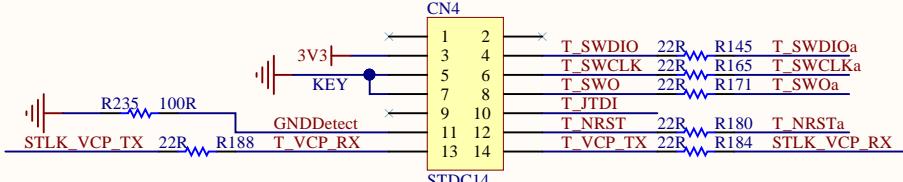
Must be on a border or the PCB.

Silkscreen = Reserved



STDCI4 Receiver

T_VCC must be connected to VDD MCU of the Target



Title: ST-LINK/V3E-SWD Modu

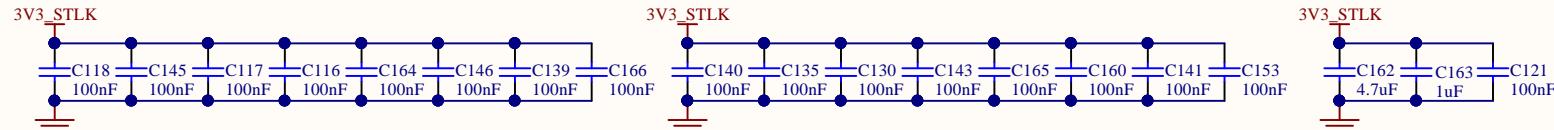
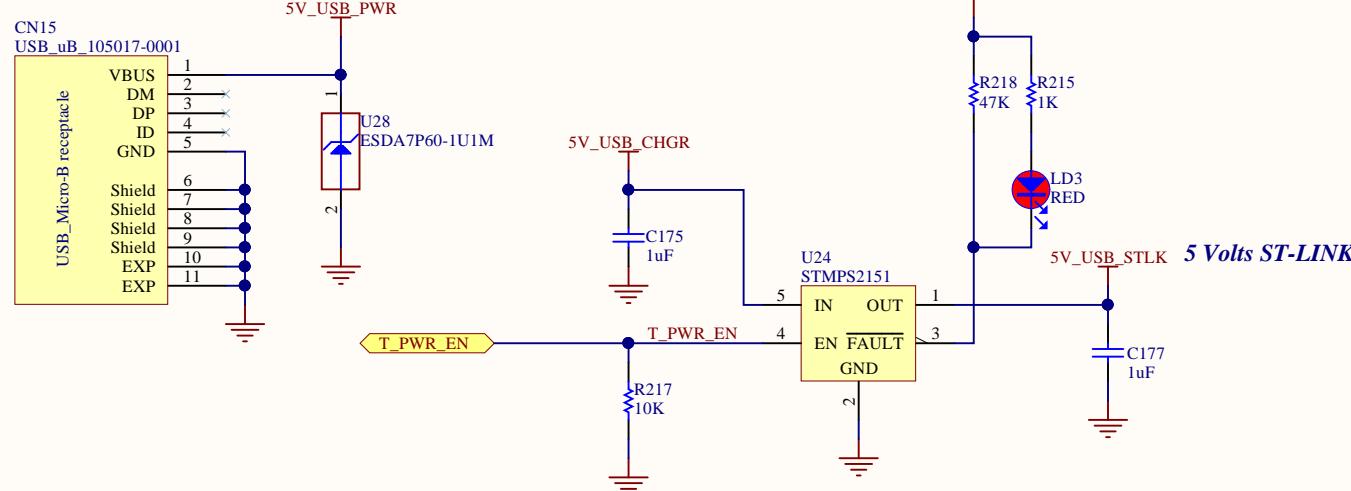
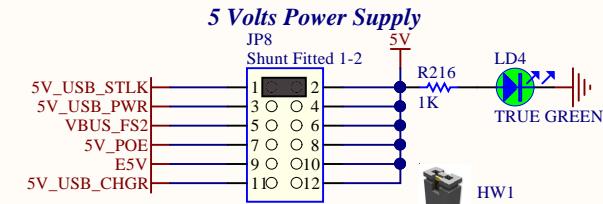
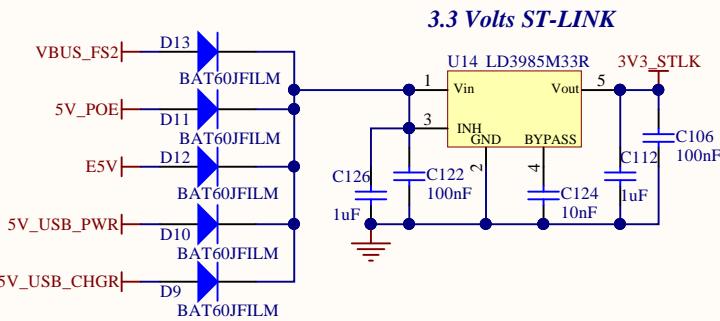
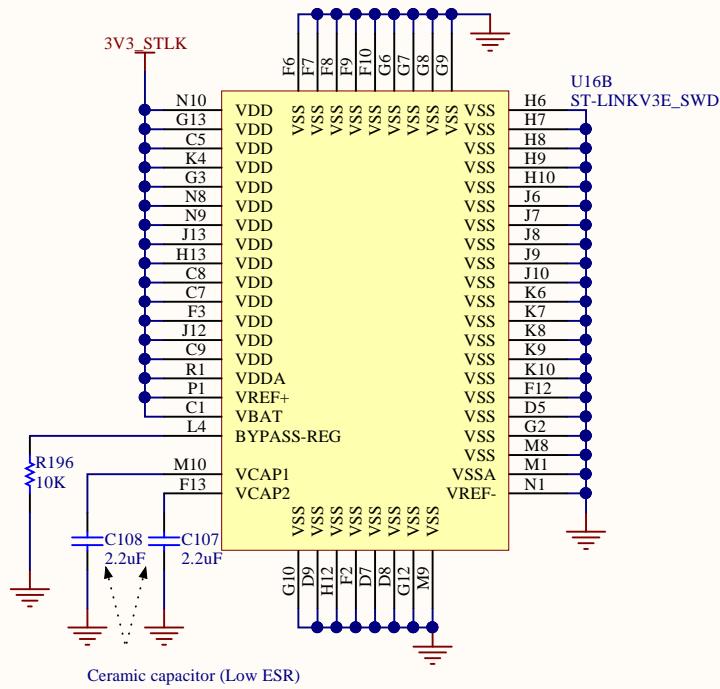
Project: STM32H745I-Dis

Variant: B

Variant: H750AB
Revision: B-01

Size: A

Size: A4 Date: 11-JUNE-18 Sheet: 17



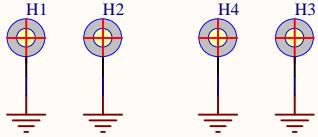
HW Mechanical parts

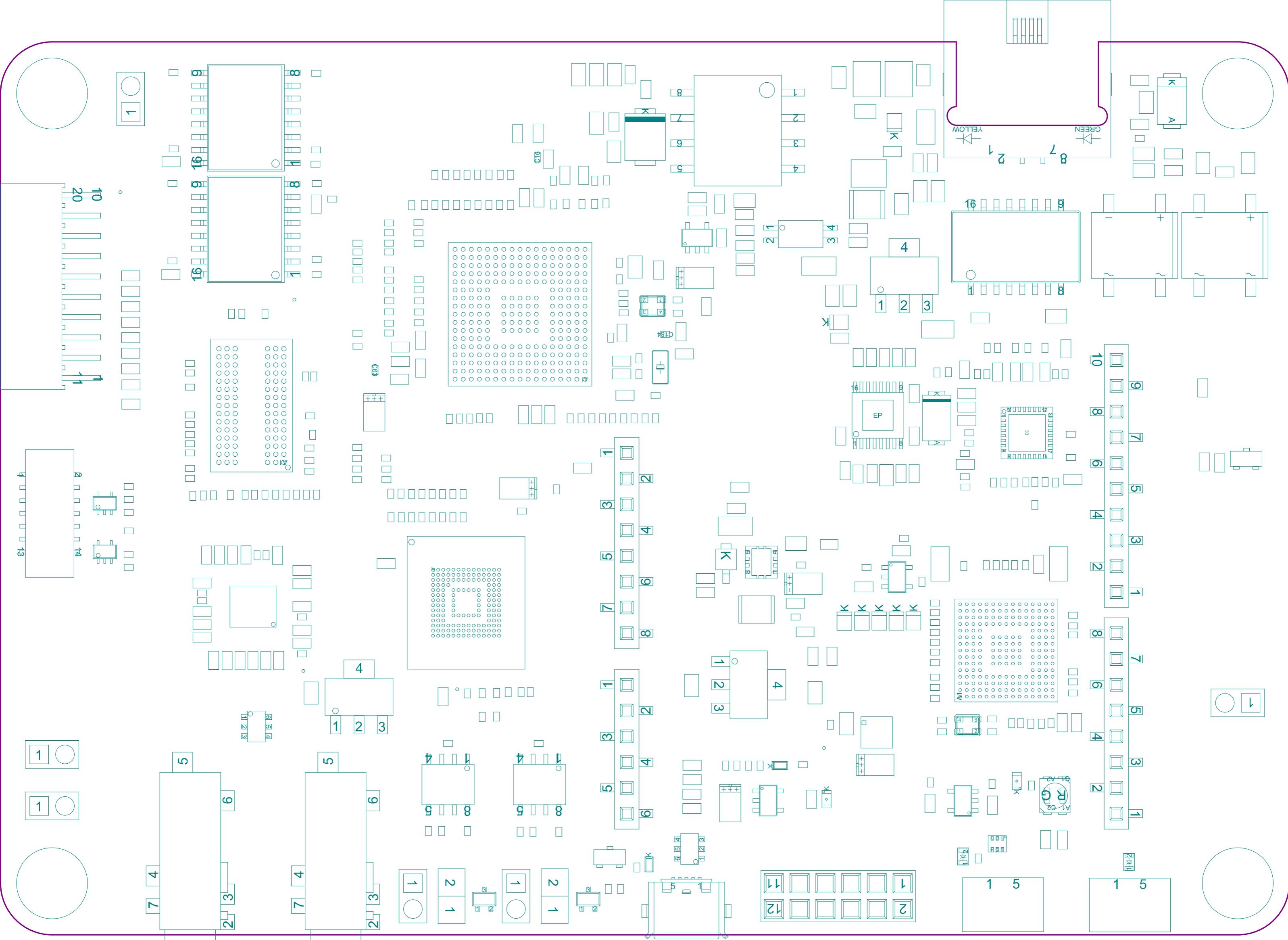
HW6
MB1381A
PCB

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





2

LAYER 2 (GND PLANE)

FAB DRAWING & DRILL LEGEND

