

STM32H7xxx-Disco

MB1381

Revision B-02: correct pin name on CN6 on Arduino connector sheet.

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Sheet 15: TAG

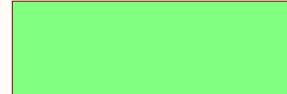
Sheet 16: Arduino Connector

Sheet 17: ST-LINK/V3E-SWD Module

Sheet 18: ST-LINK/V3E Power

Sheet 19: HW Mechanical parts

Top
TOP.SchDoc



Legend

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

Text to be added to silkscreen.

Warning text.

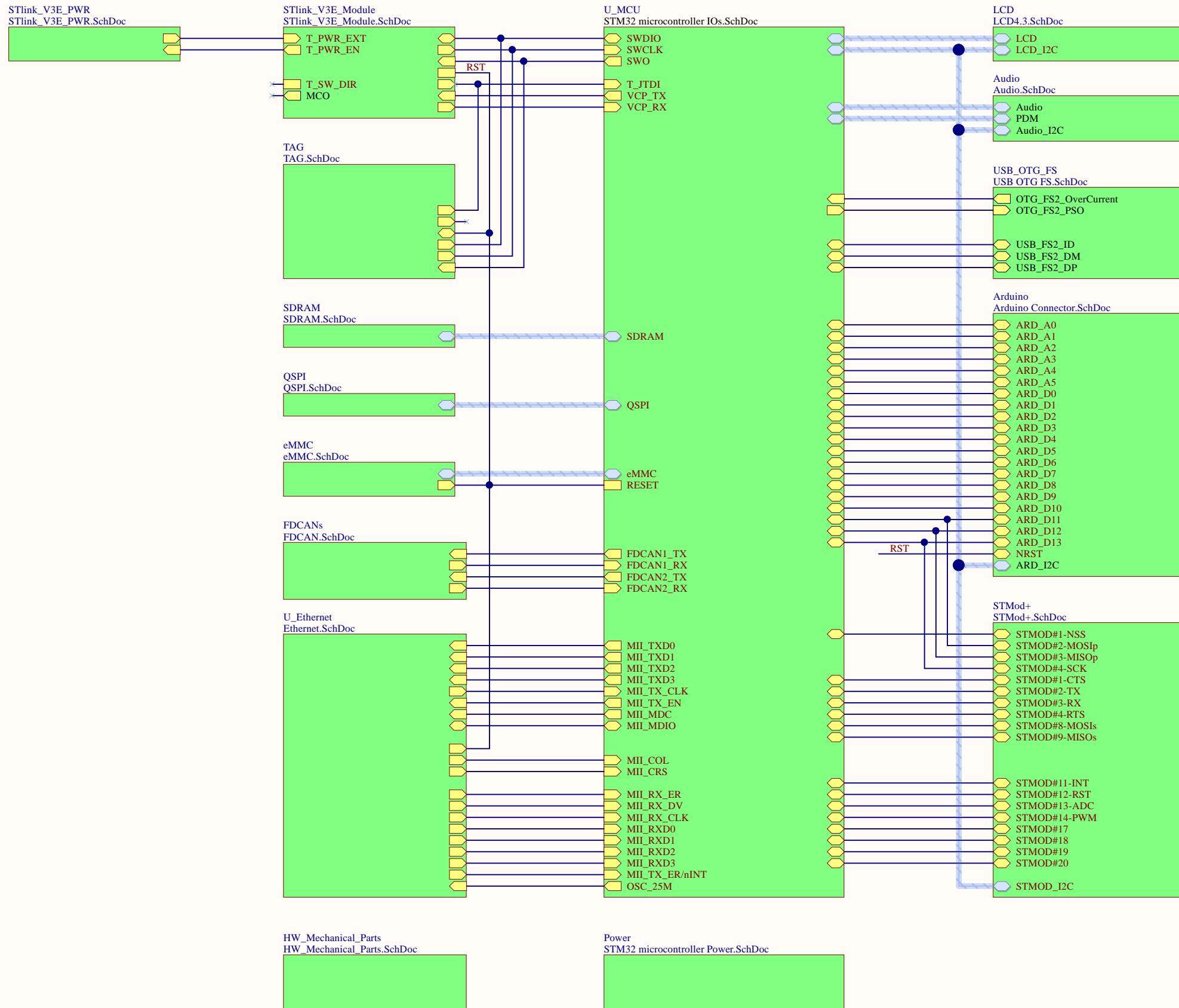
▲ Notes to generate the board layout.

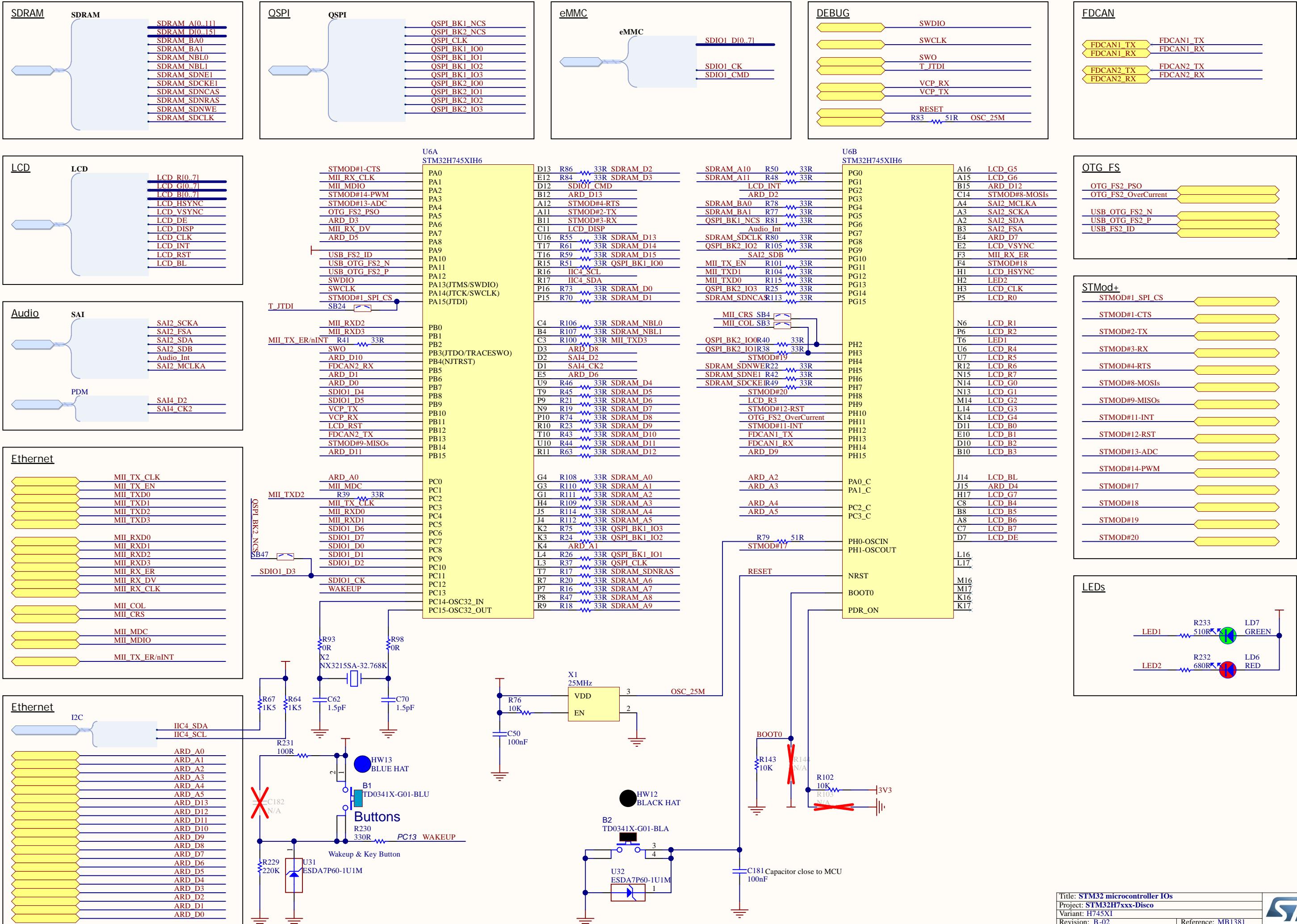
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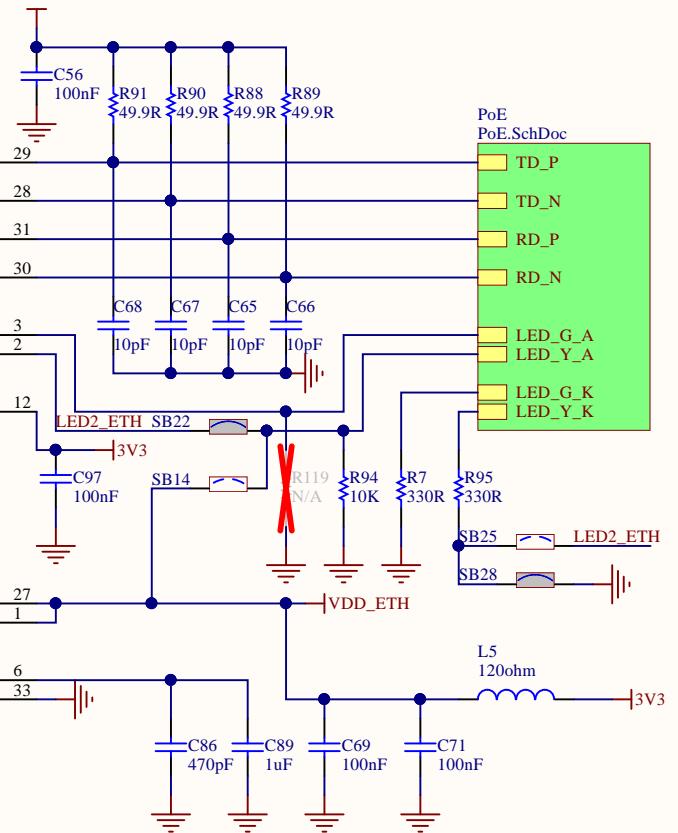
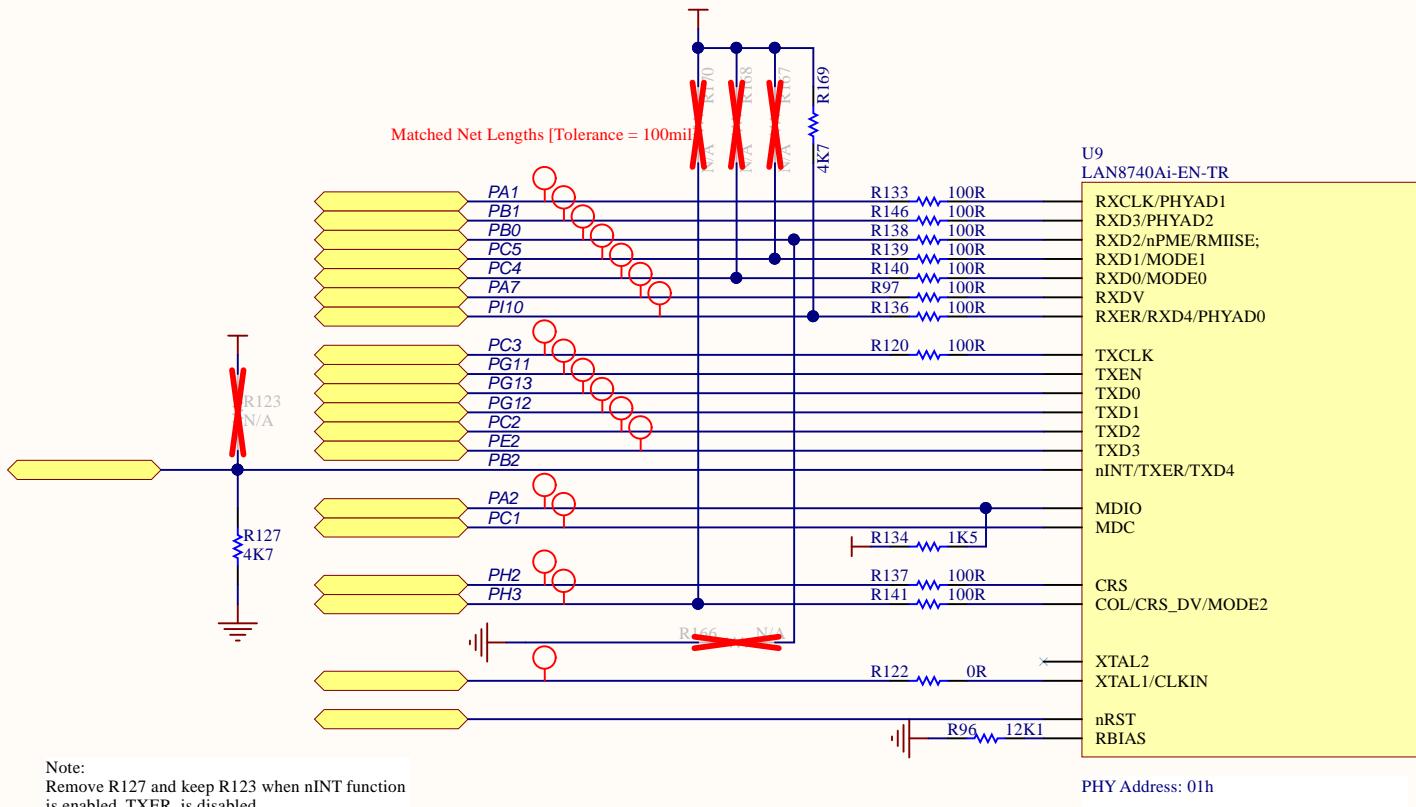
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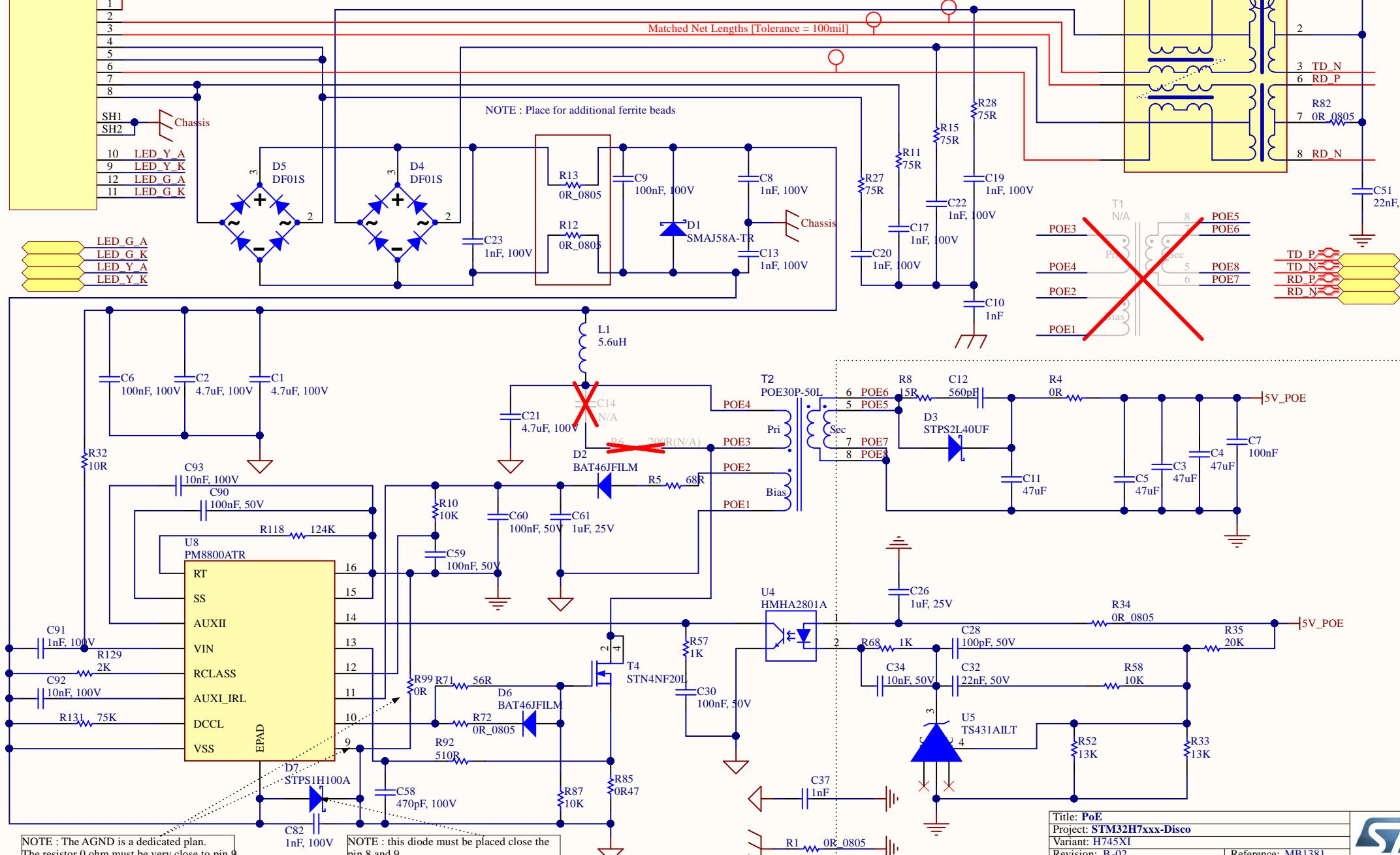
Note:
Remove R127 and keep R123 when nINT function is enabled. TXER is disabled
Remove R123 and keep R127 when nINT function is disabled. TXER is enabled

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
KBL-CB4-2GYZNII

KRJ-CB4.2GYZNL



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

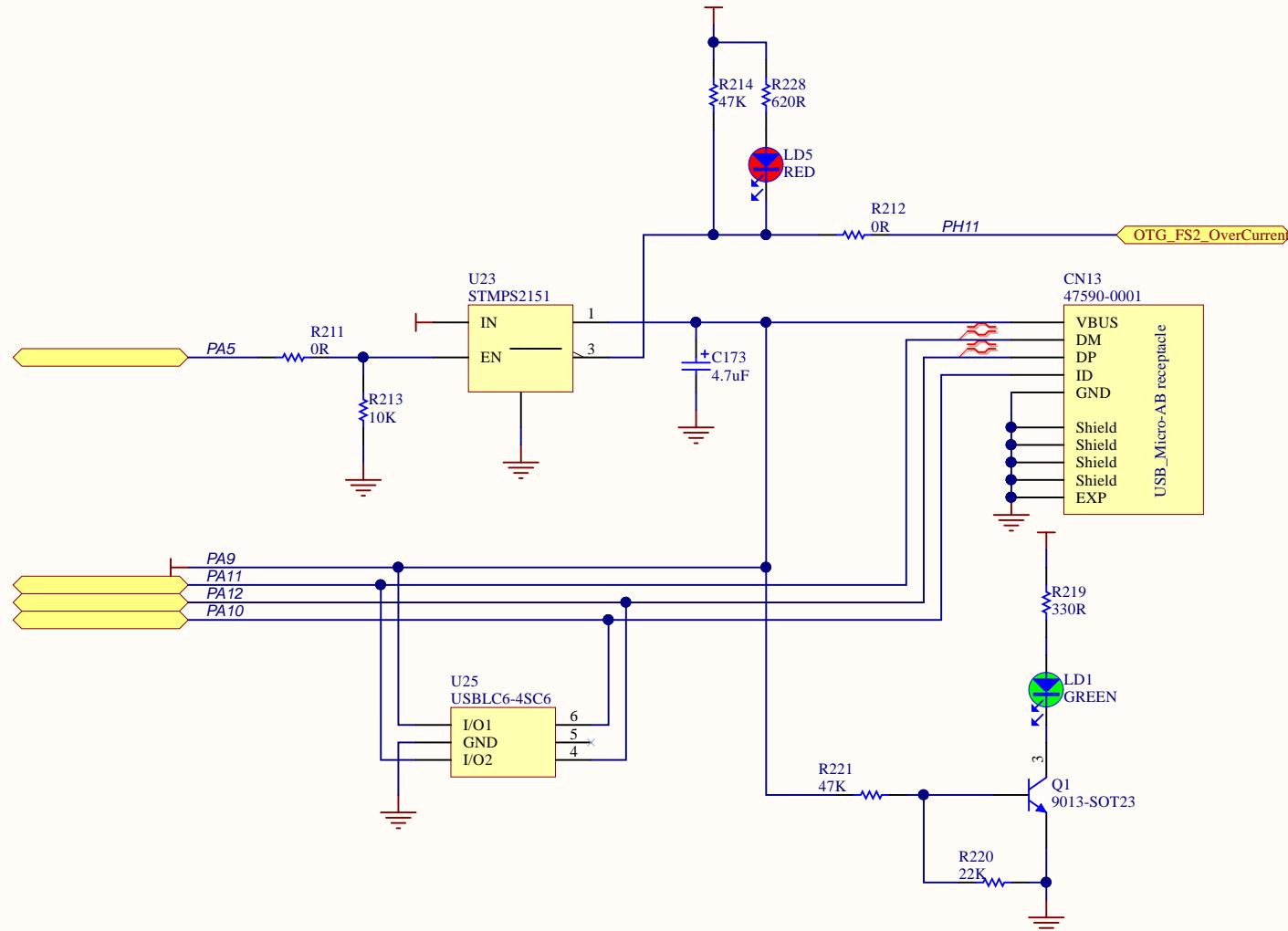
NOTE : The AGND is a dedicated plan.
The resistor 0 ohm must be very close to pin 9

1nF, 100V

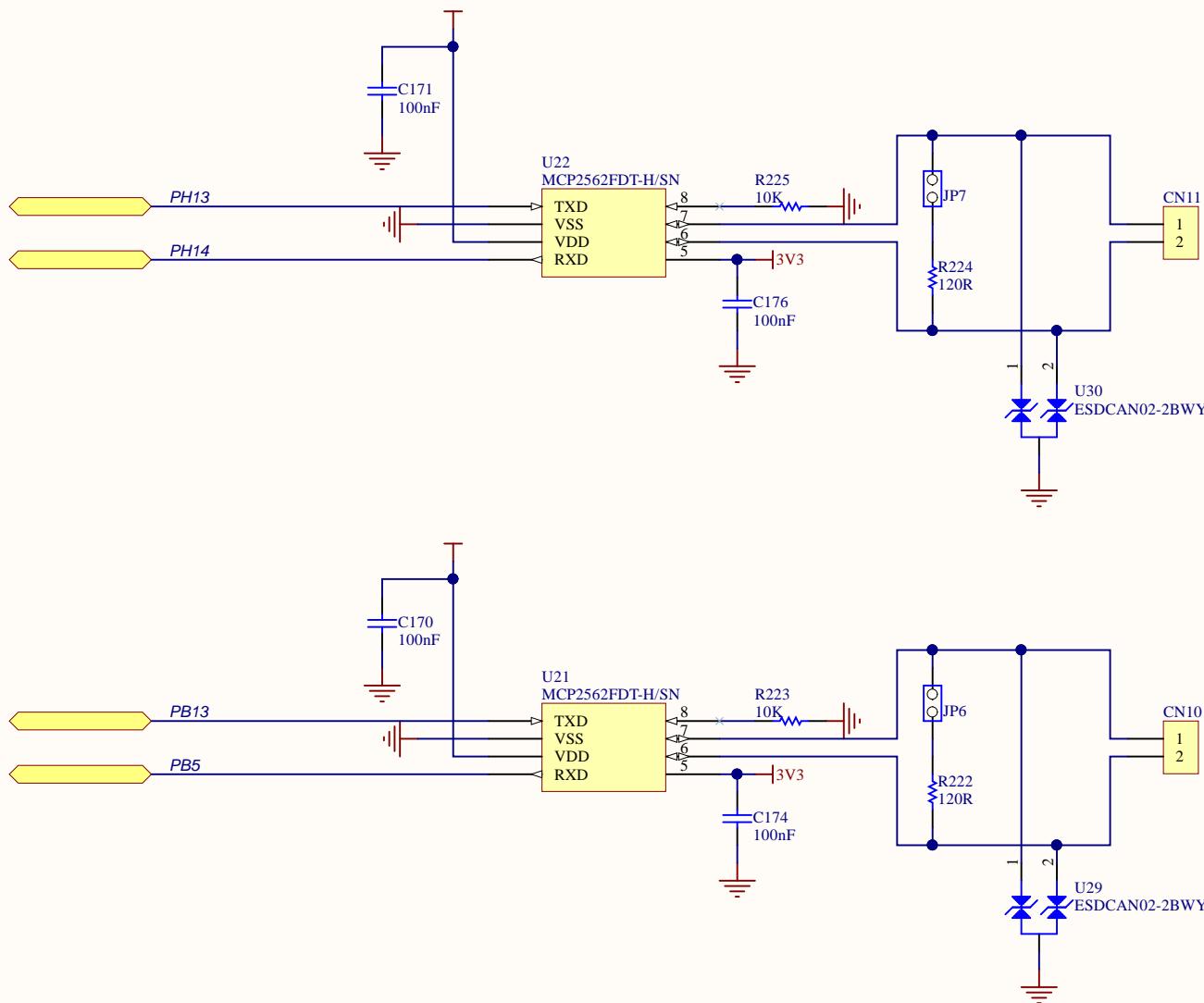
NOTE : this diode must be placed close the
pin 8 and 9

Title: PoE	
Project: STM32H7xxx-Disco	
Variant: H745XI	
Revision: B-02	
Size: A4	Date: 06-SEP-19
Reference: MB1381	
Sheet: 6 of 19	

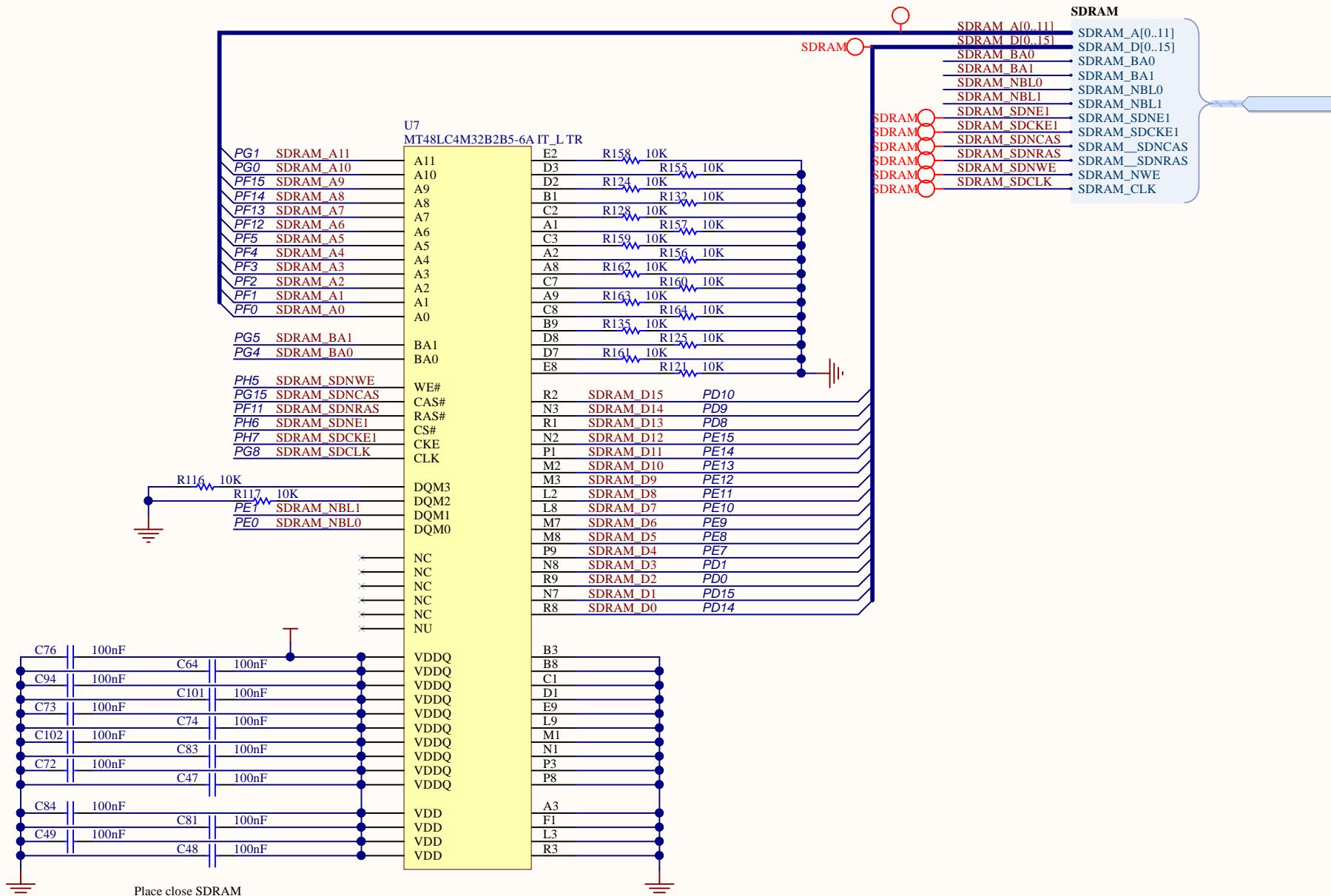


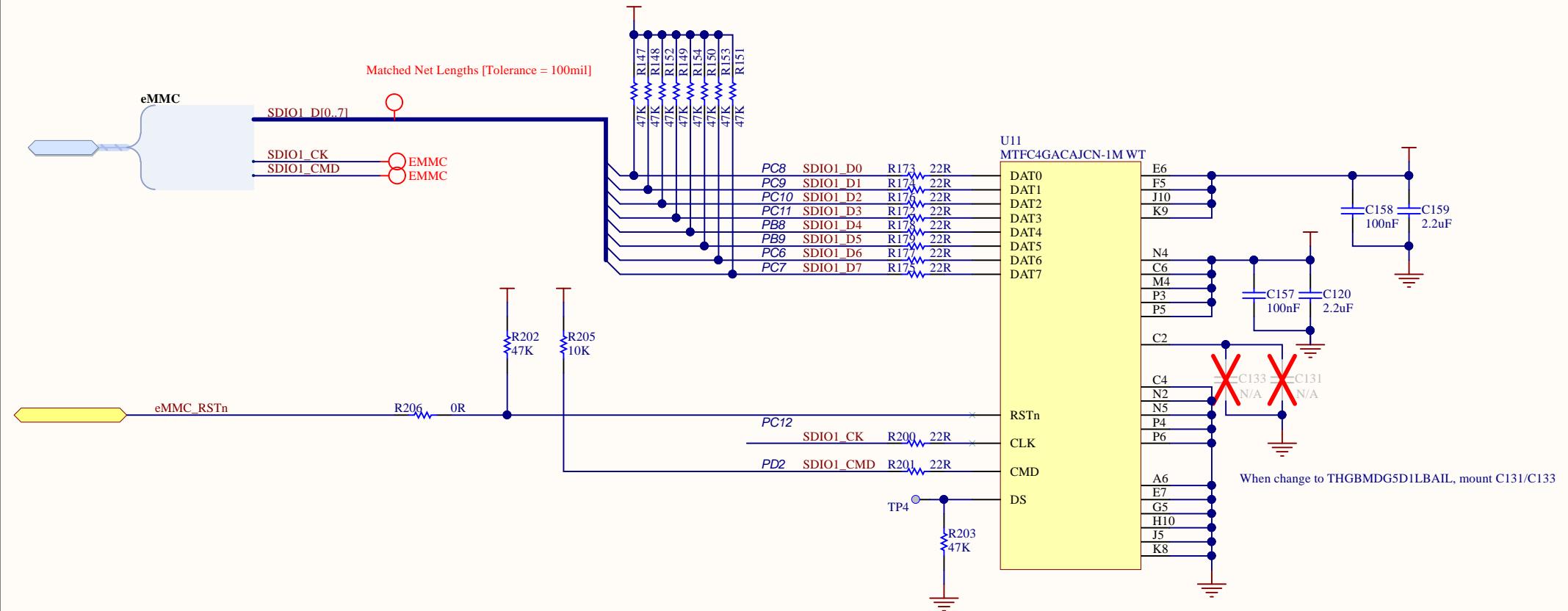


Title: USB OTG FS	
Project: STM32H7xxx-Disco	
Variant: H745XI	
Revision: B-02	
Size: A4	Date: 06-SEP-19
Reference: MB1381	Sheet: 7 of 19

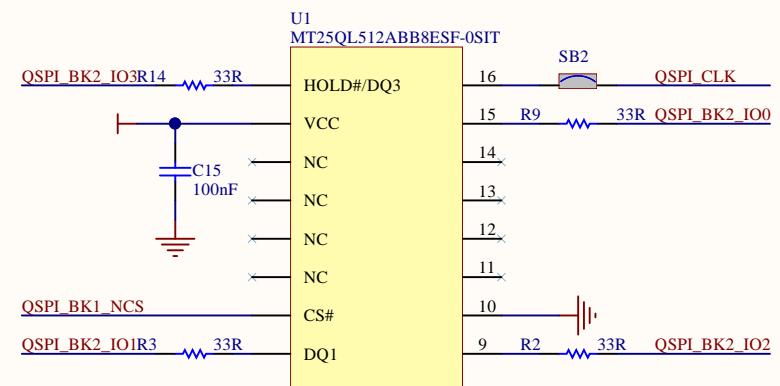
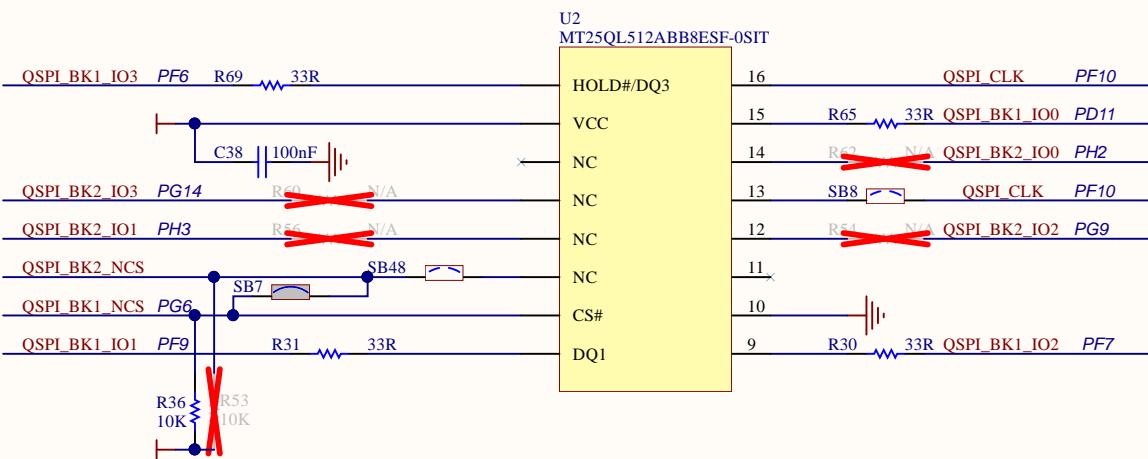
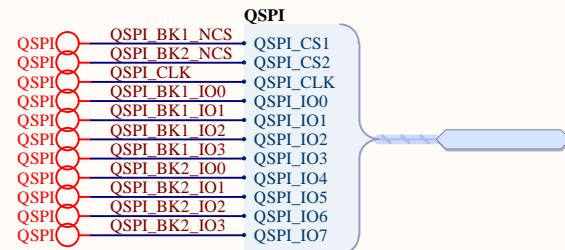


Title: FDCAN	
Project: STM32H7xxx-Disco	
Variant: H745XI	
Revision: B-02	
Reference: MB1381	
Size: A4	Date: 06-SEP-19
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Matched Net Lengths [Tolerance = 100mil]

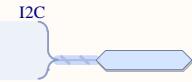


Twin Quad SPI Flash solutions:

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]

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

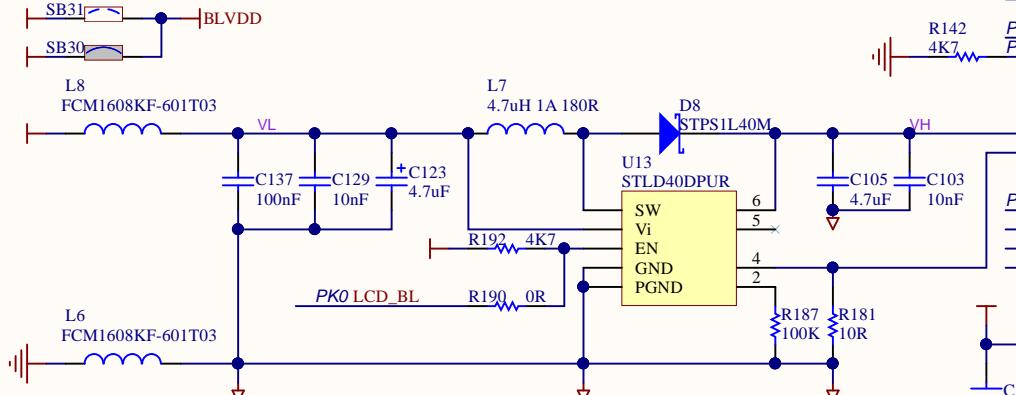


U33
RK043FN48H-CT672B

5	LCD_R0	PI15
6	LCD_R1	PJ0
7	LCD_R2	PJ1
8	LCD_R3	PH9
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

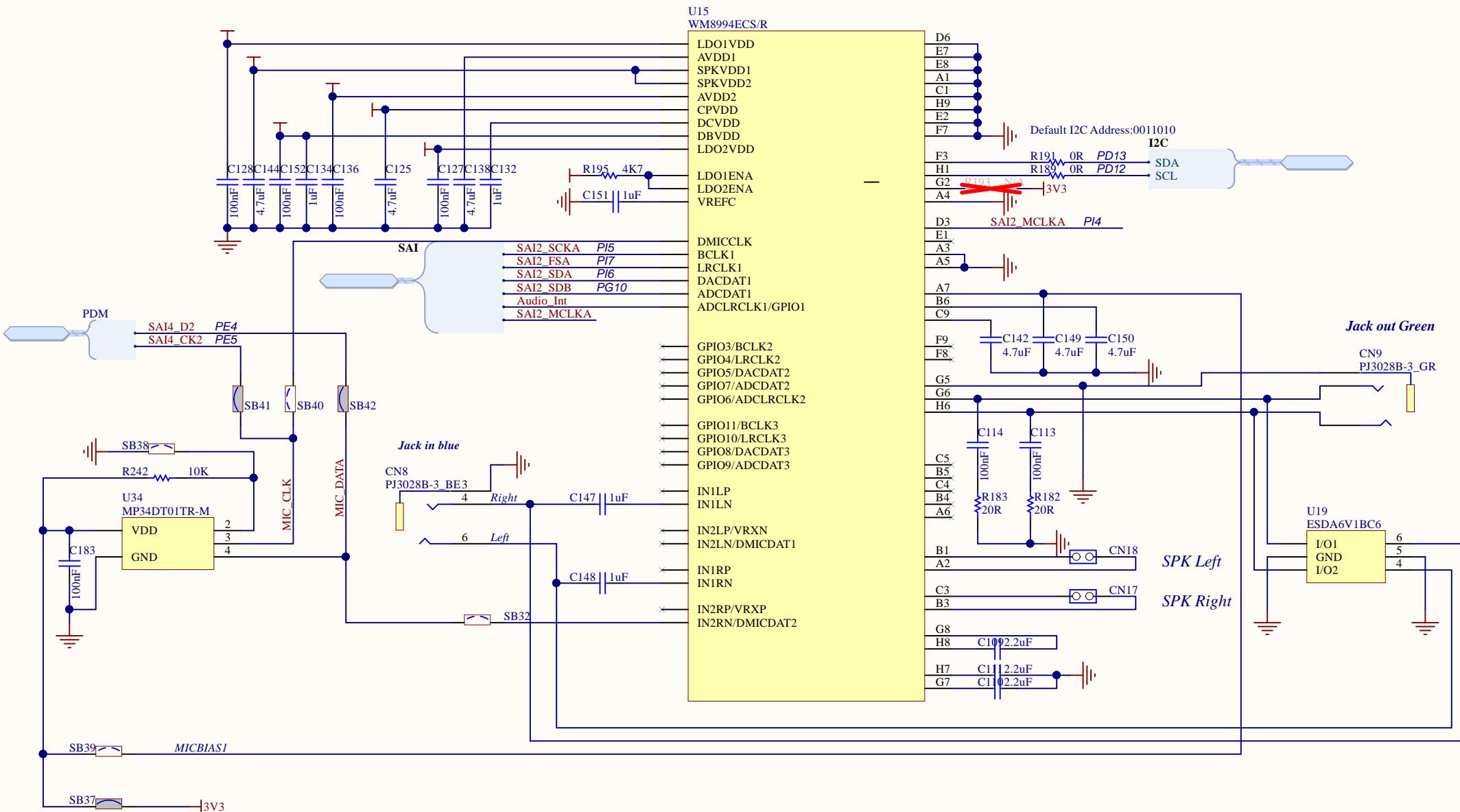
Default I2C Address : 01110000

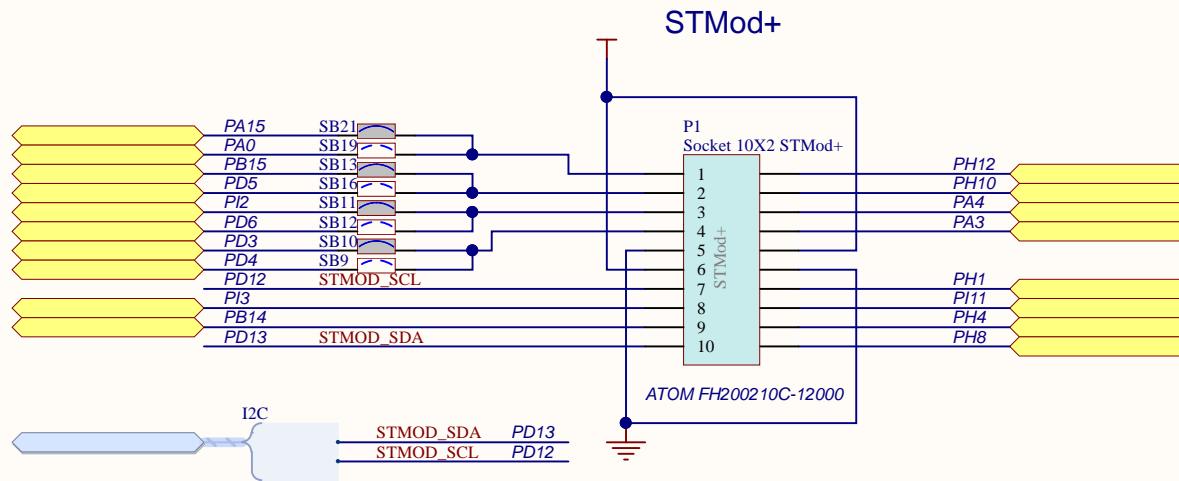
Backlight driver & PFC of LCD panel

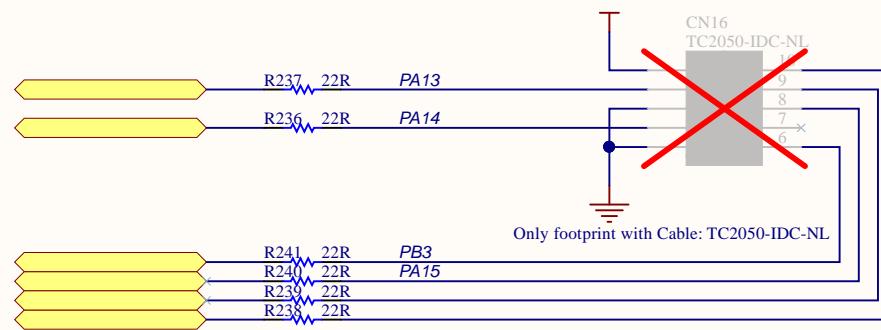


Title: LCD4.3
Project: STM32H7xxx-Disco
Variant: H745XI
Revision: B-02
Reference: MB1381
Size: A4
Date: 06-SEP-19
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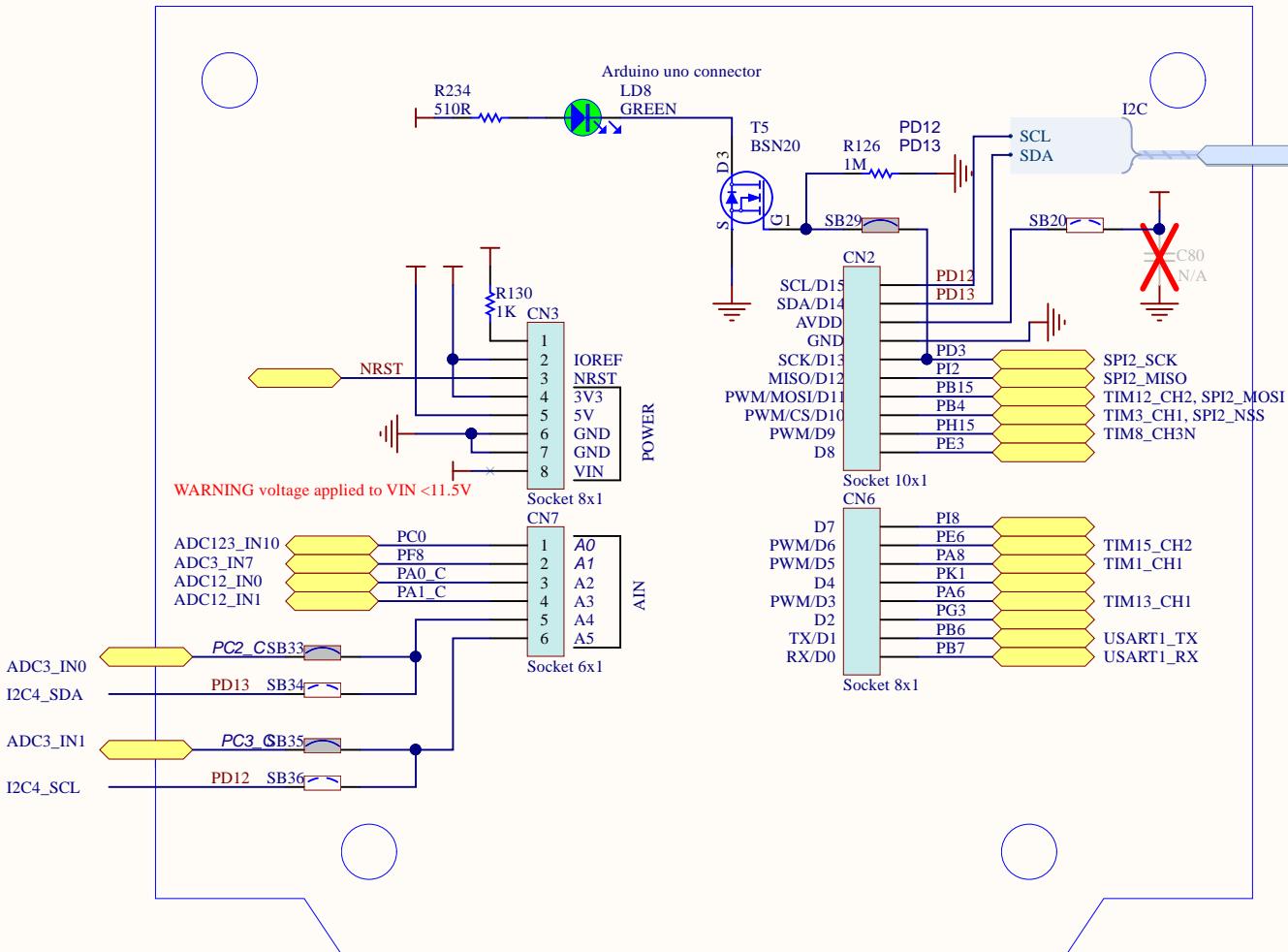




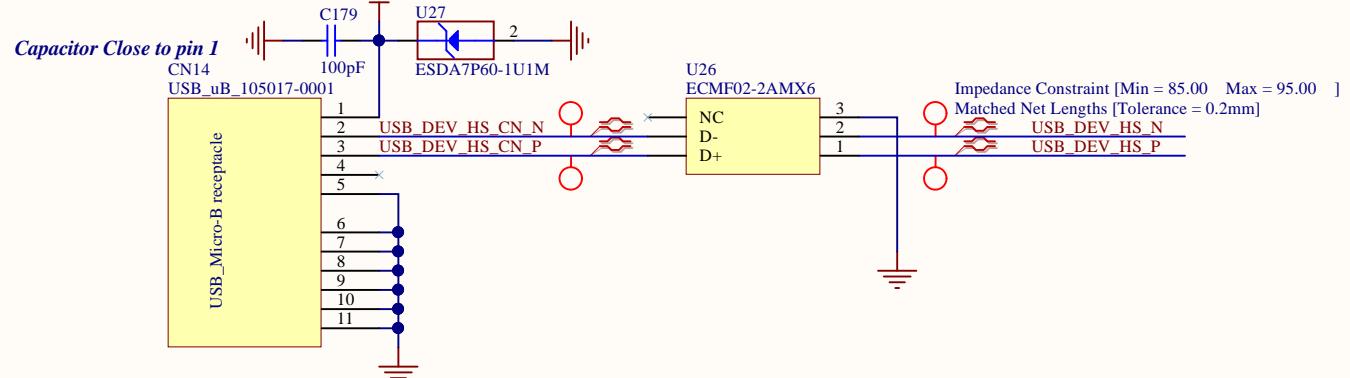




Place this connector close to STDC, they will share the same ESD components

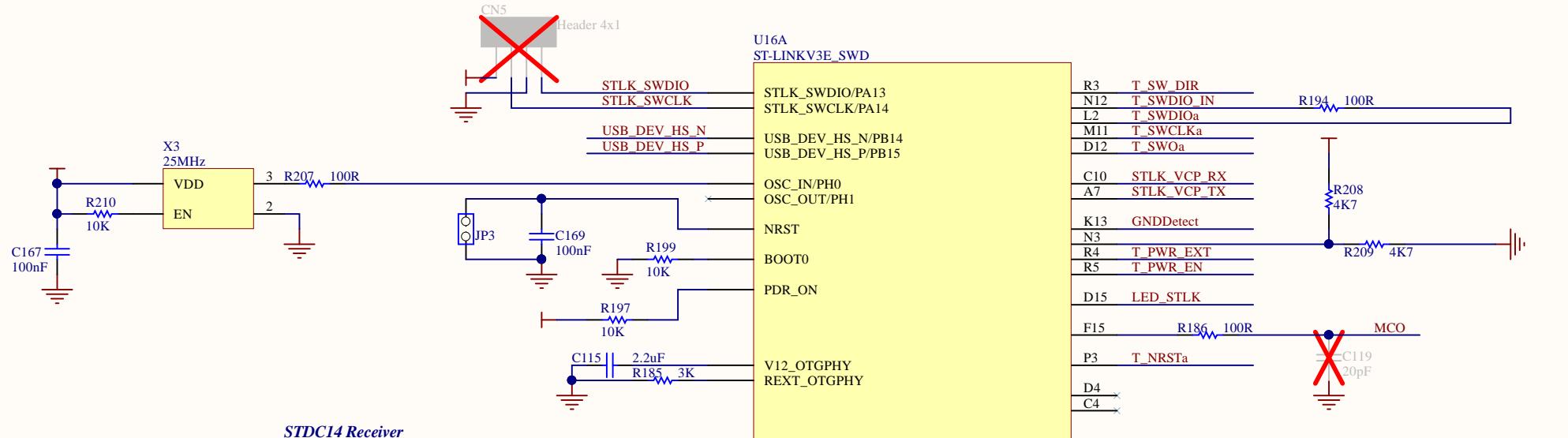


Title: Arduino Connector	
Project: STM32H7xxx-Disco	
Variant: H745XI	
Revision: B-02	
Size: A4 Date: 06-SEP-19	
Reference: MB1381	
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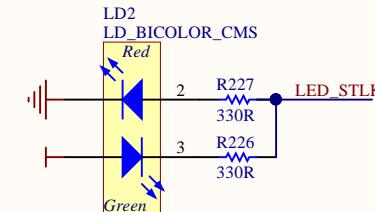
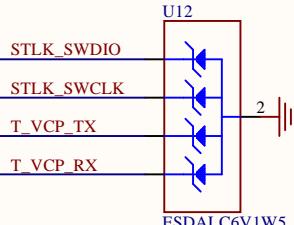
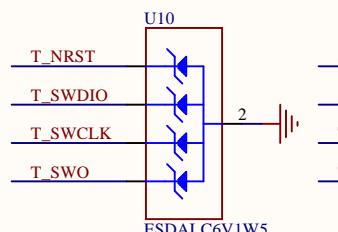
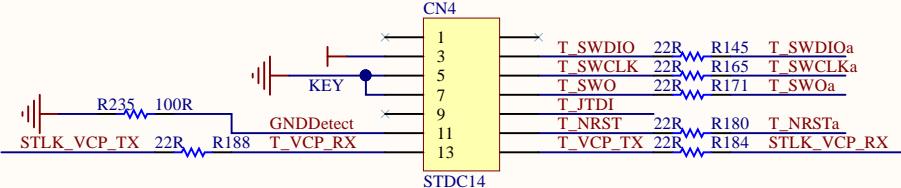
Must be on a border or the PCB.

Silkscreen = Reserved



STDC14 Receiver

T_VCC must be connected to VDD MCU of the Target



Title: ST-LINK/V3E-SWD Module

Project: STM32H7xxx-Disco

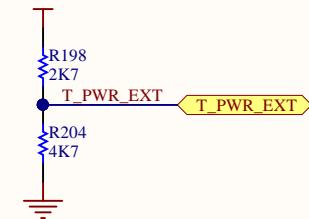
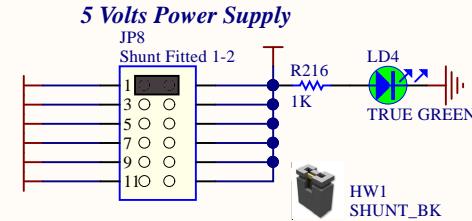
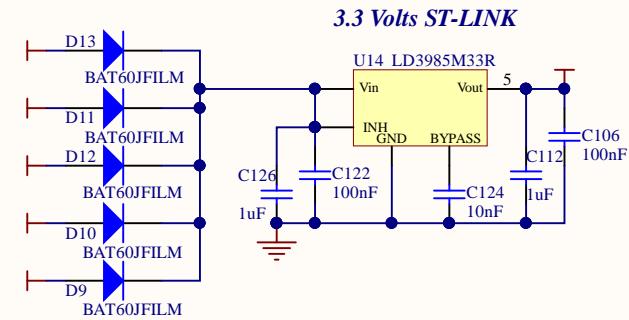
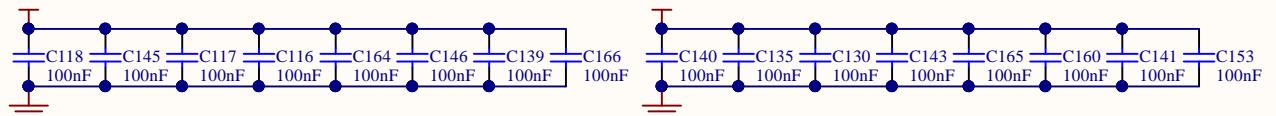
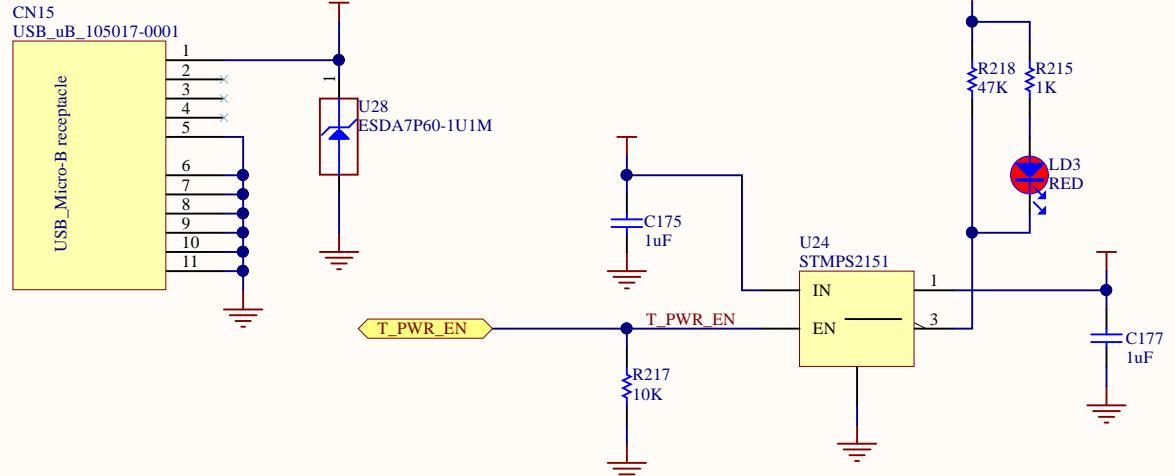
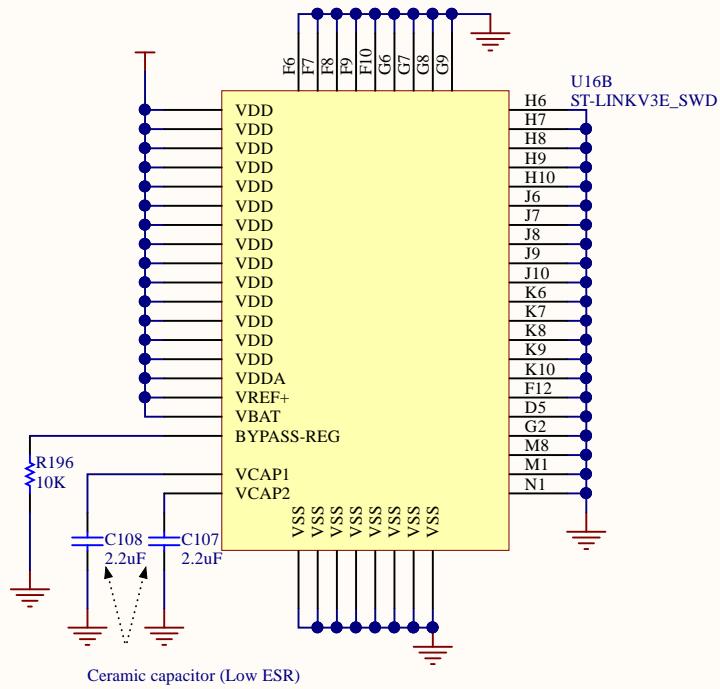
Variant: H745XI

Variant: 11745AI Revision: B-02 Reference

Size: A4 Date:

Sheet: 17





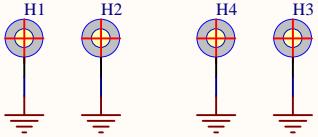
HW Mechanical parts

HW6
MB1381A
PCB

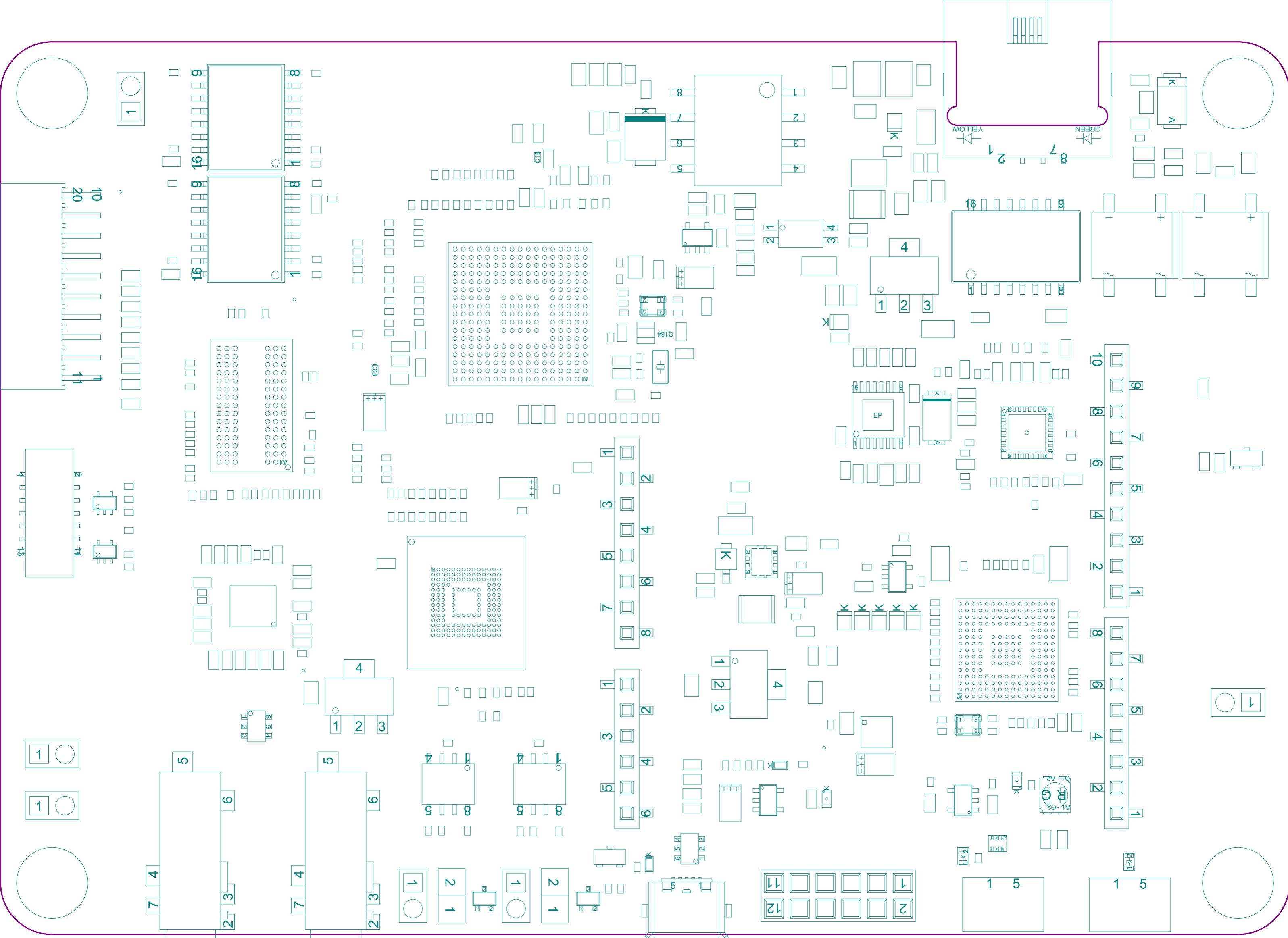
HW7
MB1381A-01 XXXX
BOARD REF

HW8
STM32H745I-Disco
BOARD CPN

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



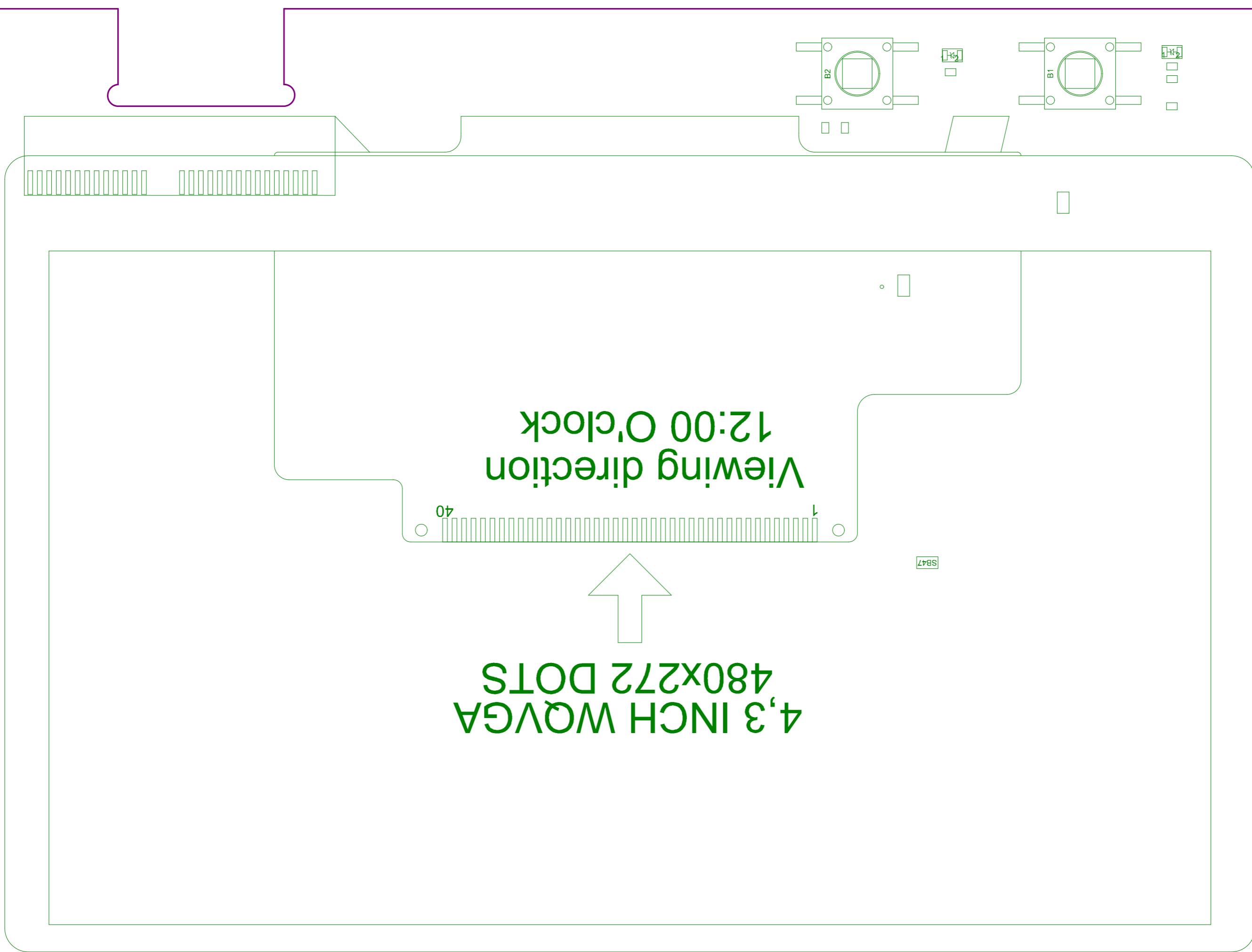
Title: HW Mechanical parts
Project: STM32H7xxx-Disco
Variant: H745XI
Revision: B-02
Reference: MB1381
Size: A4
Date: 06-SEP-19
Sheet: 19 of 19

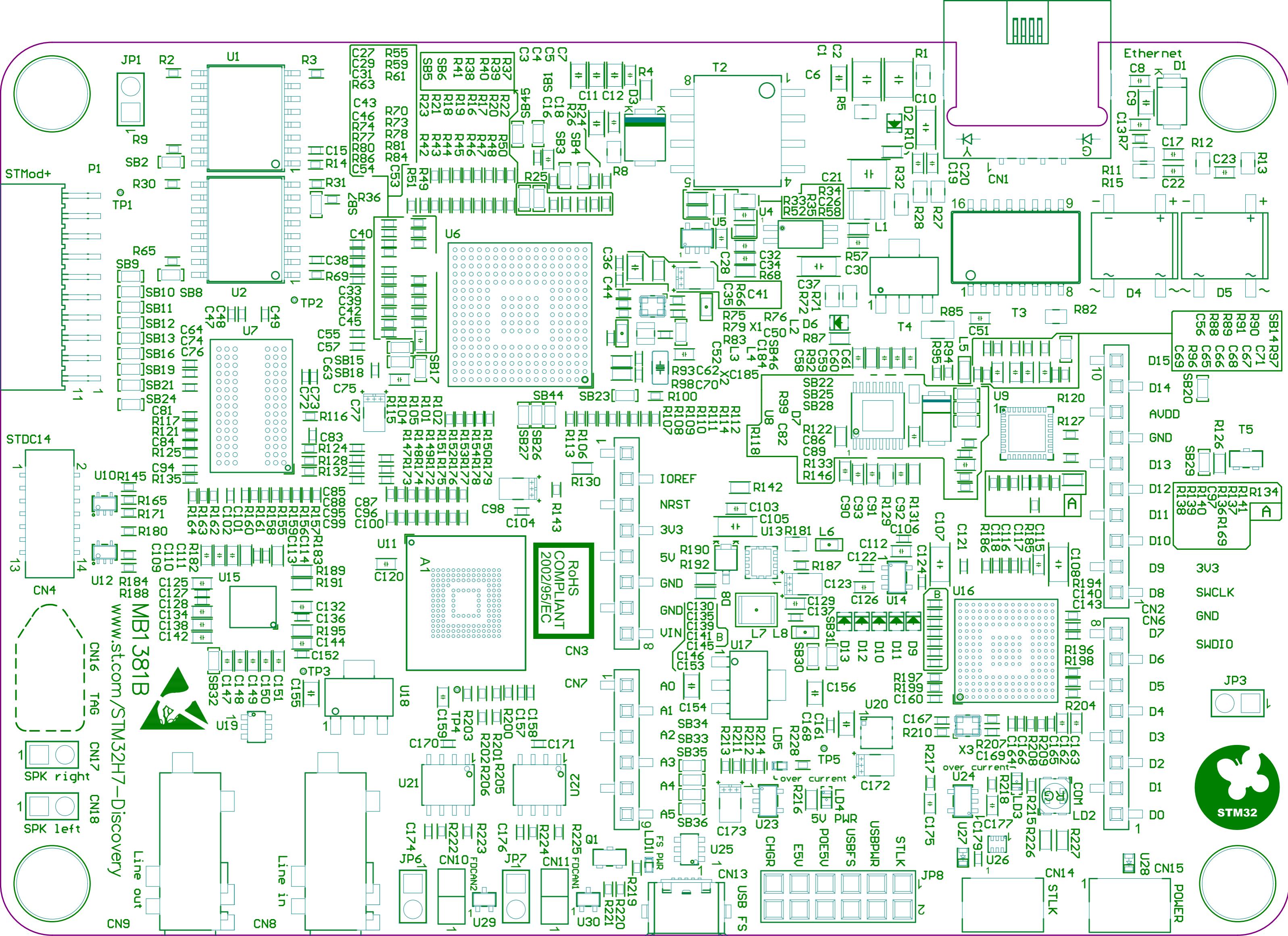


2

LAYER 2 (GND PLANE)

FAB DRAWING & DRILL LEGEND





SARS SCREENING (PRIMARY) LEGEND

