

# STM32H735G-DK

MB1520

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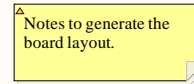
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## Legend

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

Text to be added to silkscreen.

Warning text.



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Top  
Top.SchDoc



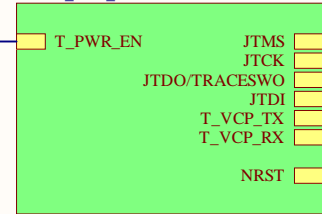
Title: <b>Project overview</b>	
Project: <b>STM32H735G-DK</b>	
Variant: H735I	
Revision: C-03	Reference: MB1520
Size: A4	Date: 2024-Dec-19
Sheet: 1 of 19	



STlink\_V3E\_PWR  
STlink\_V3E\_PWR.SchDoc



STlink\_V3E\_Module  
STlink\_V3E\_Module.SchDoc



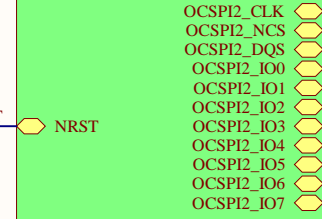
TAG

TAG.SchDoc



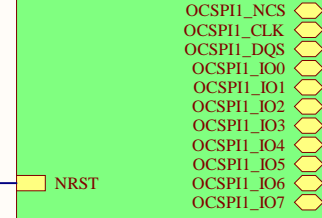
U\_HyperRAM

HyperRAM.SchDoc



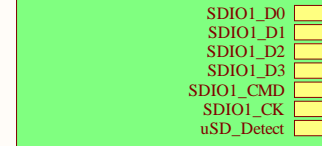
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OCSPI.SchDoc



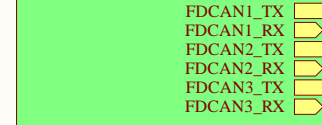
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SD\_CARD.SchDoc



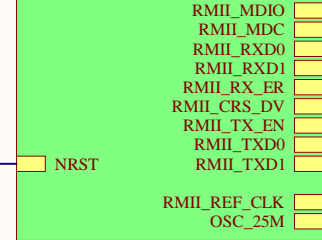
FDCANs

FDCAN.SchDoc

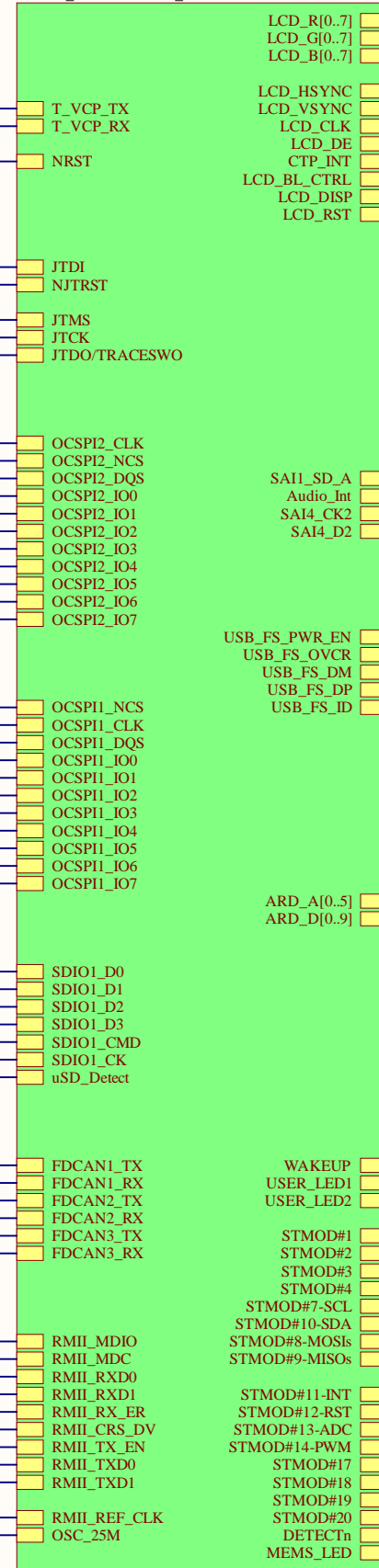


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Ethernet.SchDoc

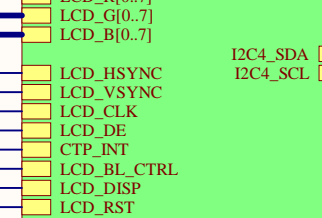


U\_MCU  
STM32\_microcontroller\_IOs.SchDoc



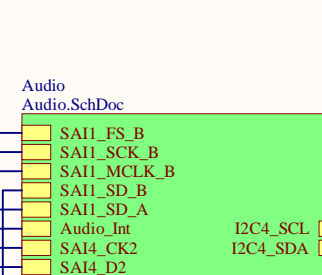
U\_LCD

LCD.SchDoc



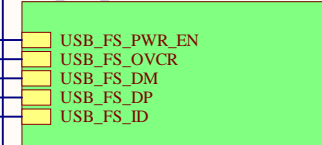
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Audio.SchDoc



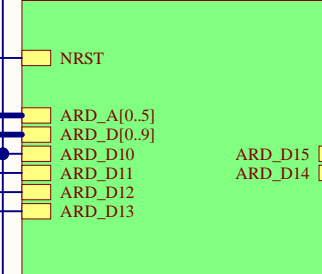
USB\_OTG\_FS

USB\_OTG\_FS.SchDoc



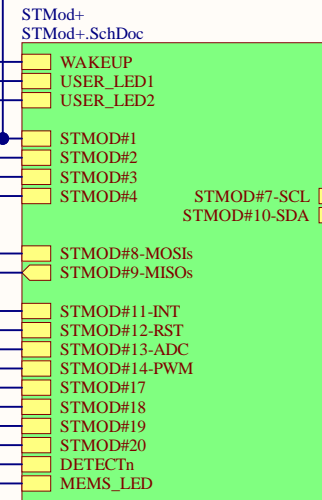
Arduino

Arduino\_Connector.SchDoc



STMod+

STMod+.SchDoc



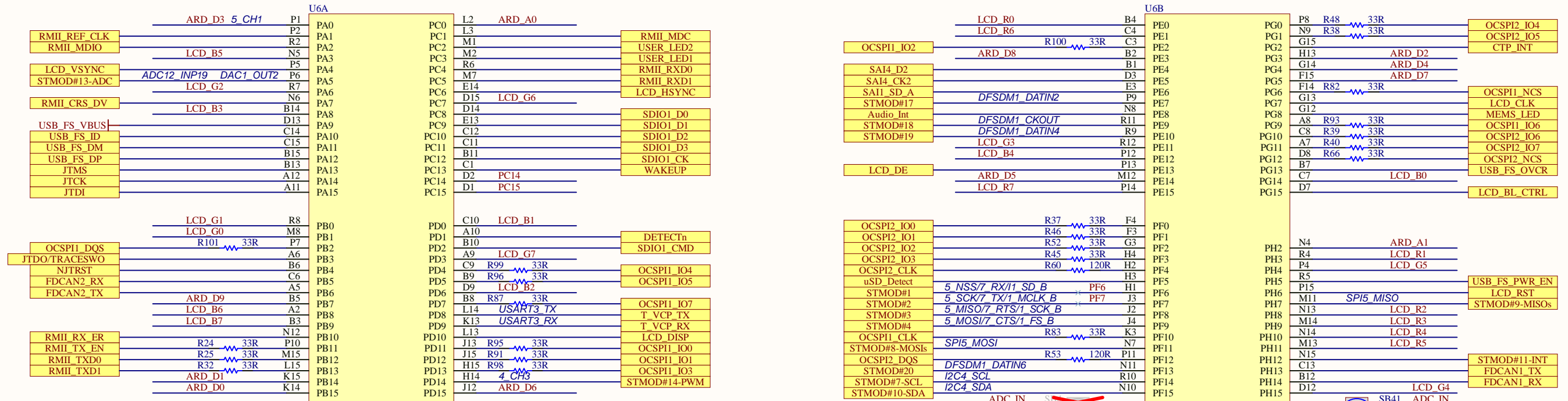
Power  
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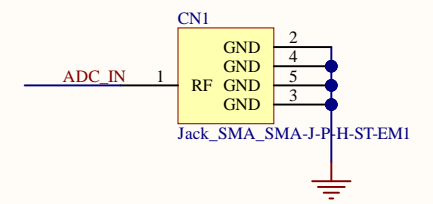
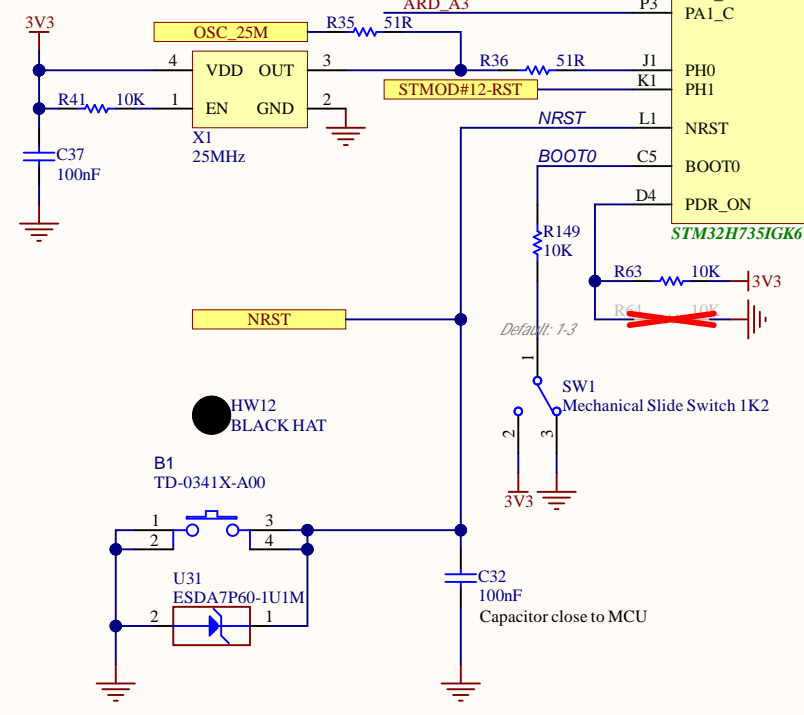
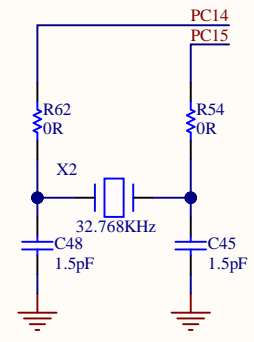
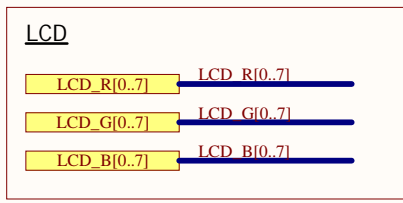
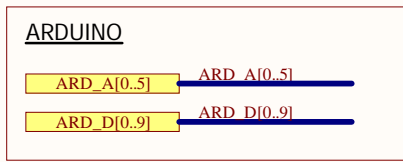
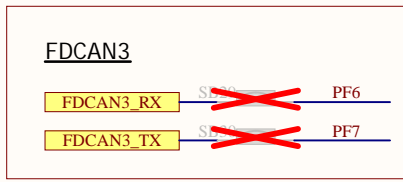
HW\_Mechanical\_Parts  
HW\_Mechanical\_Parts.SchDoc



# MCU IOs



STM32H735IGK6



# MCU POWER

## NOTE :

### LDO mode:

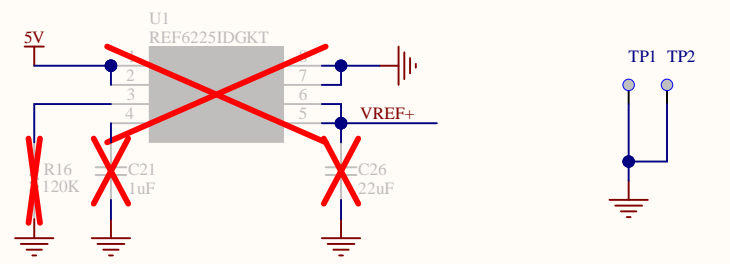
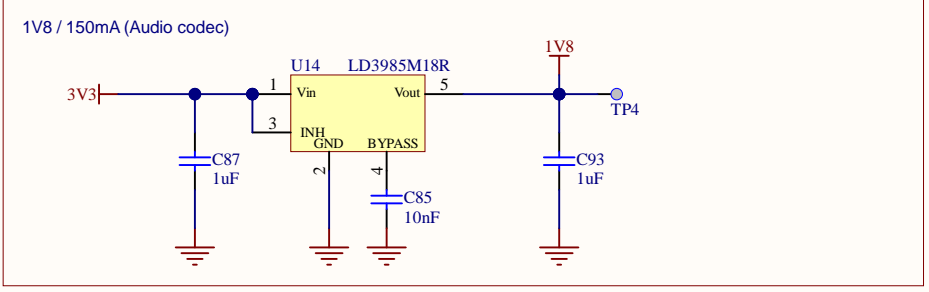
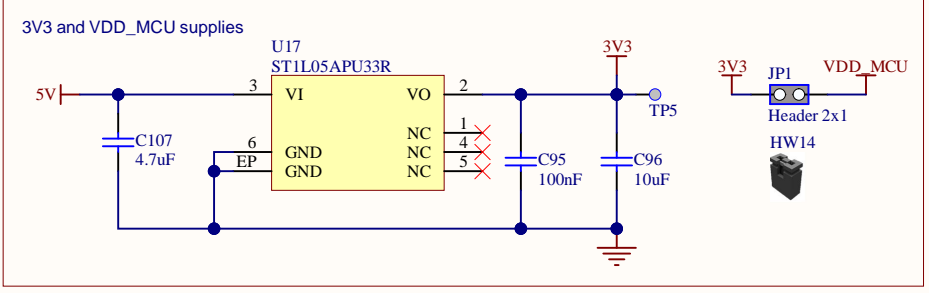
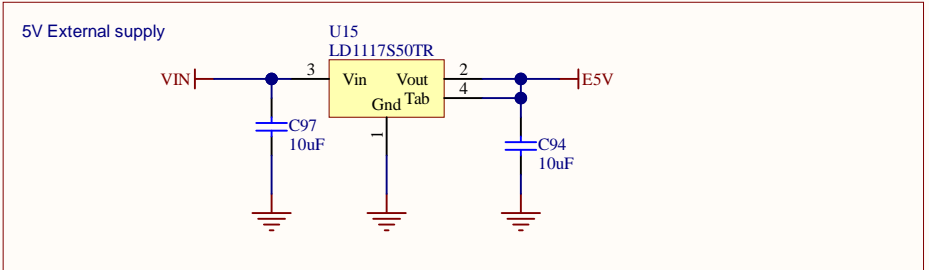
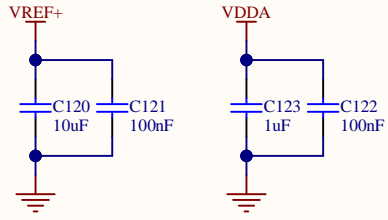
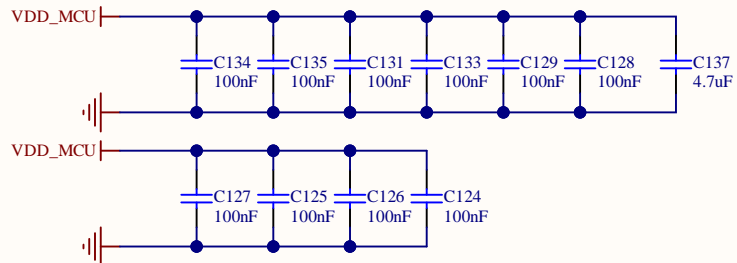
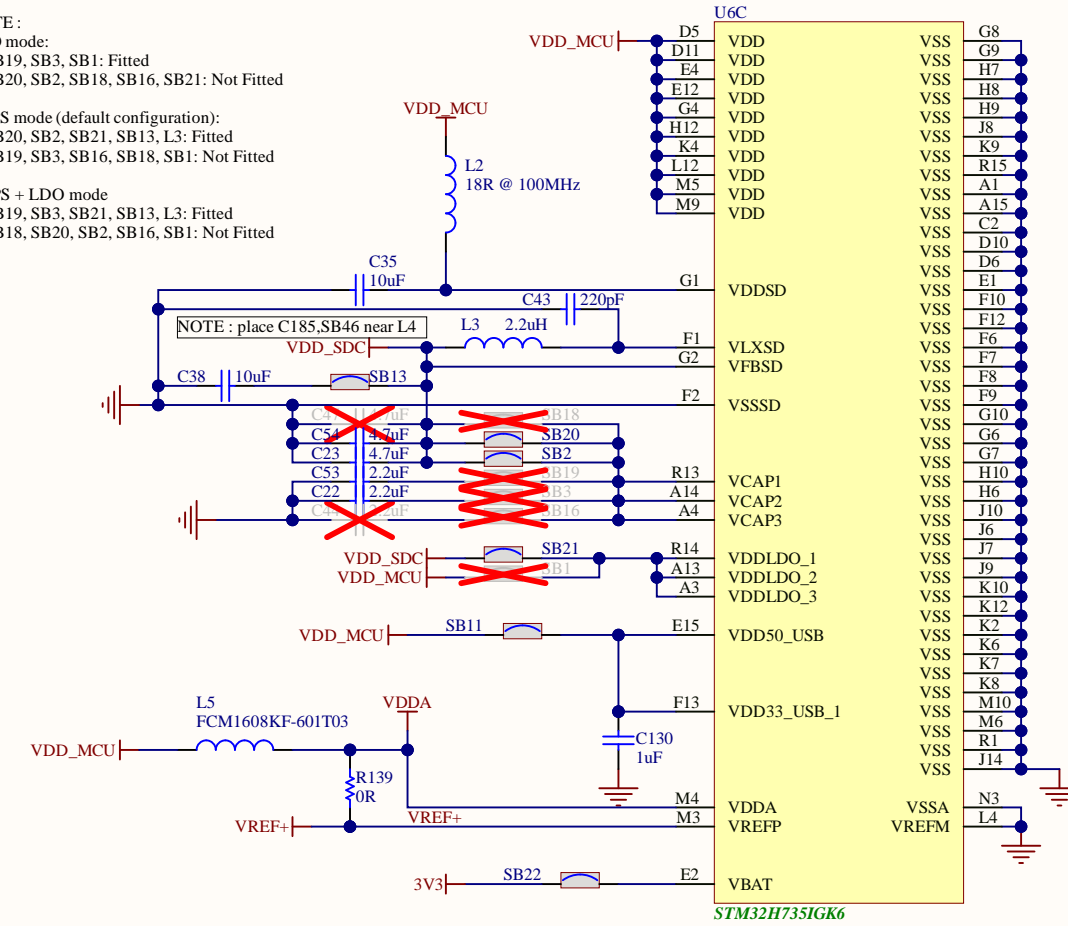
- .SB19, SB3, SB1: Fitted
- .SB20, SB2, SB18, SB16, SB21: Not Fitted

### SMPS mode (default configuration):

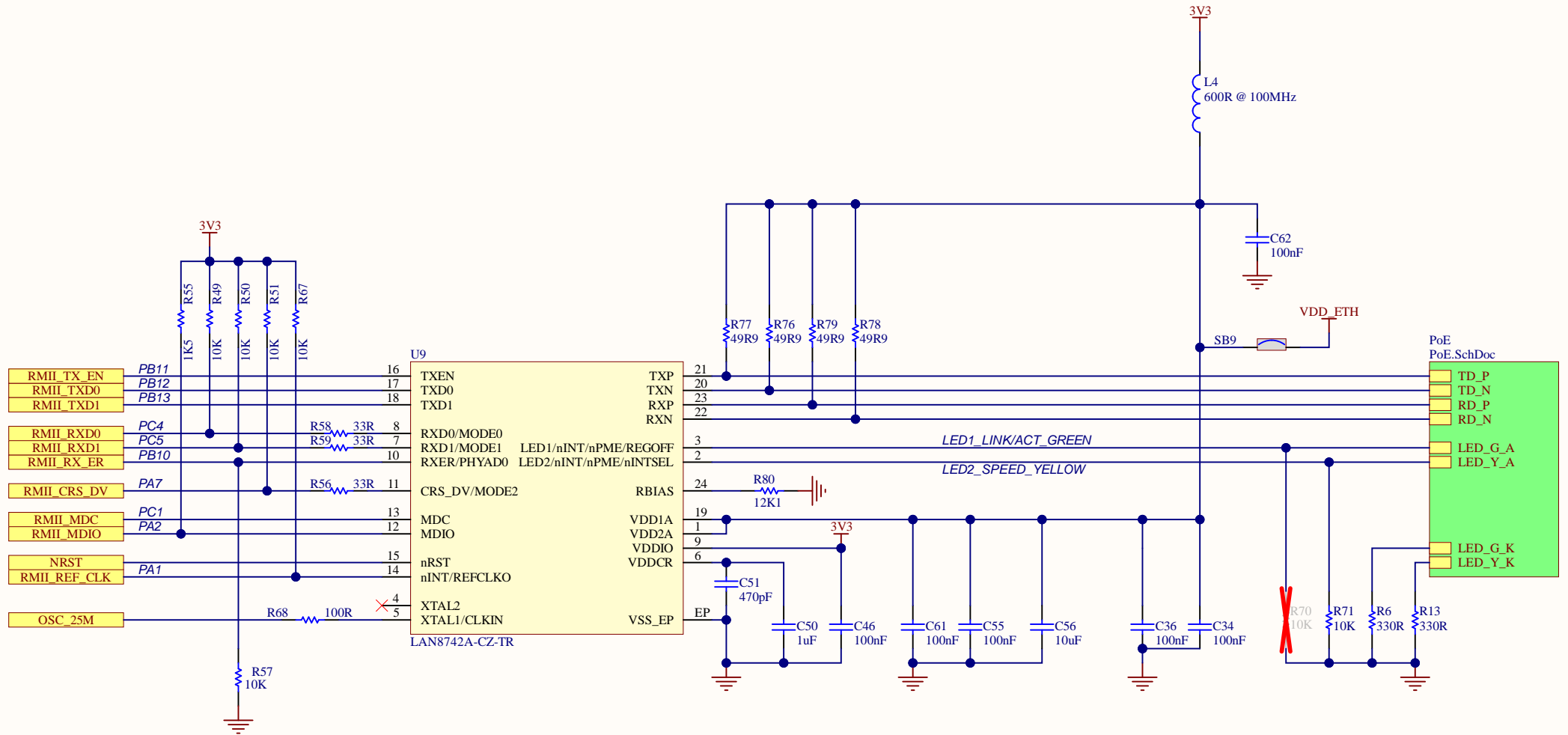
- .SB20, SB2, SB21, SB13, L3: Fitted
- .SB19, SB3, SB16, SB18, SB1: Not Fitted

### SMPS + LDO mode

- .SB19, SB3, SB21, SB13, L3: Fitted
- .SB18, SB20, SB2, SB16, SB1: Not Fitted



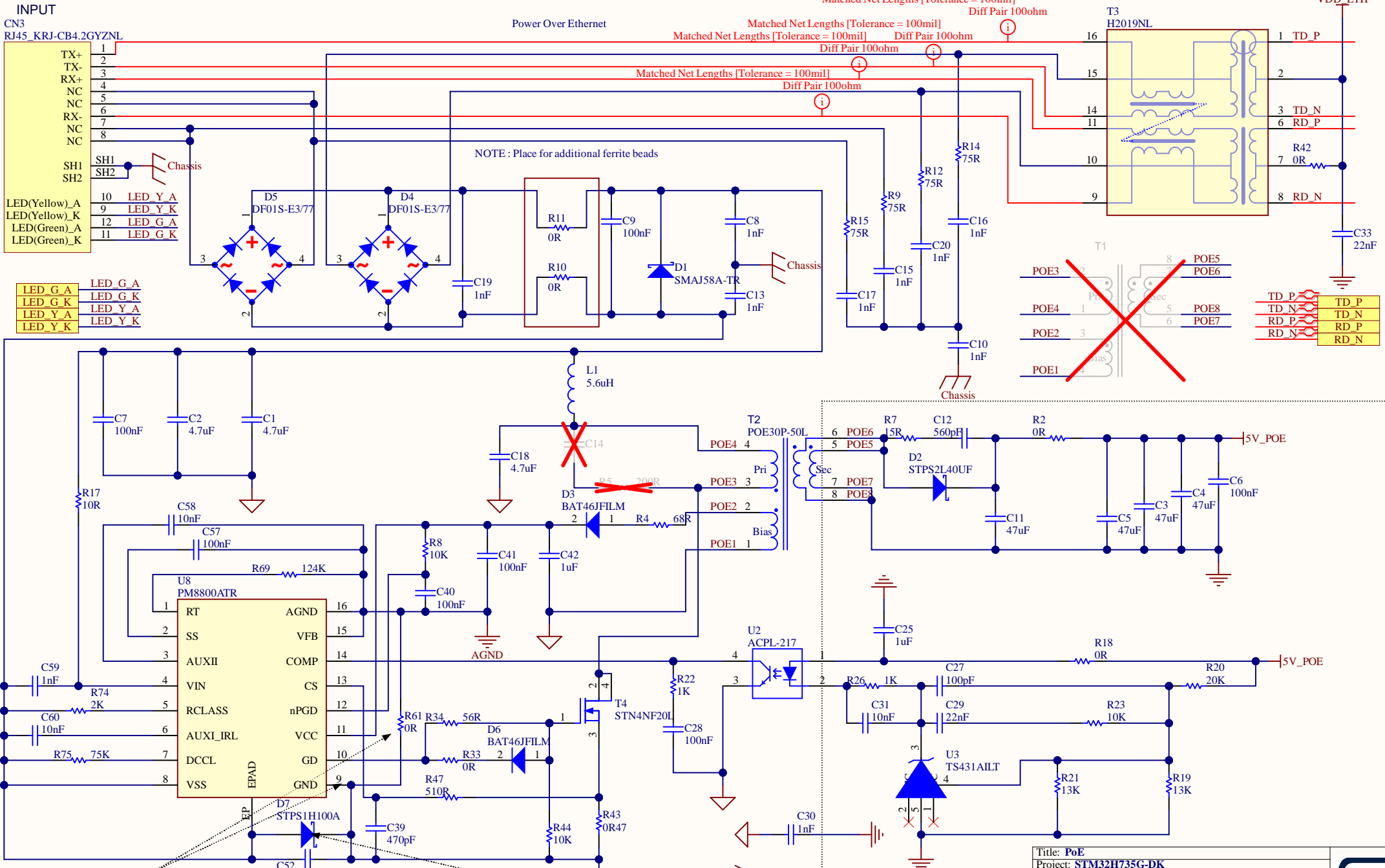
# ETHERNET



INPUT  
CN3  
RJ45\_KRJ-CB4.2GYZNL

TX+	1
TX-	2
RX+	3
NC	4
NC	5
RX-	6
NC	7
NC	8
SH1	SH1
SH2	SH2
LED(Yellow)_A	10 LED_Y_A
LED(Yellow)_K	9 LED_Y_K
LED(Green)_A	12 LED_G_A
LED(Green)_K	11 LED_G_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



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

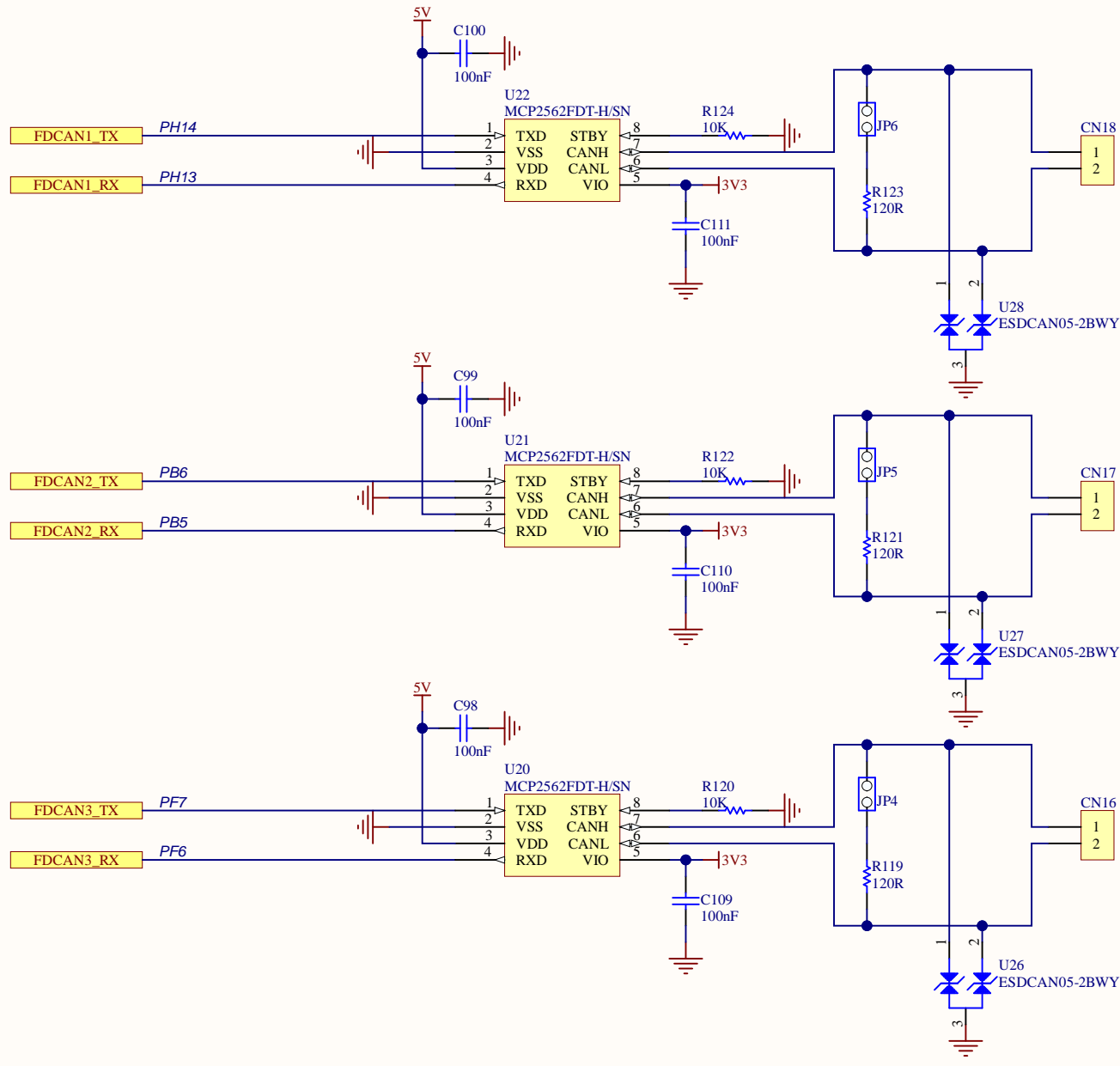
NOTE : this diode must be placed close the  
pin 8 and 9

Title: PoE		
Project: STM32H735G-DK		
Variant: H735I		
Revision: C-03		
Size: A4	Date: 2024-Dec-19	Reference: MB1520
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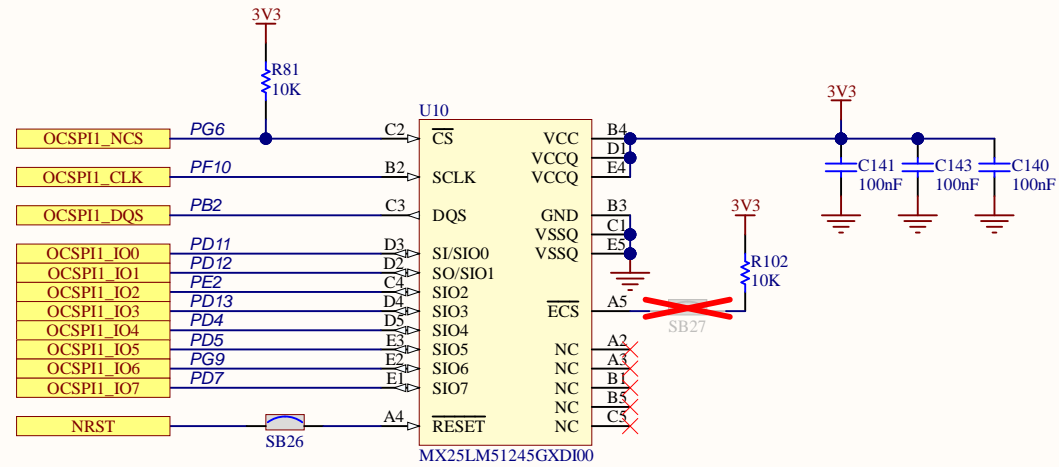


# FD-CAN

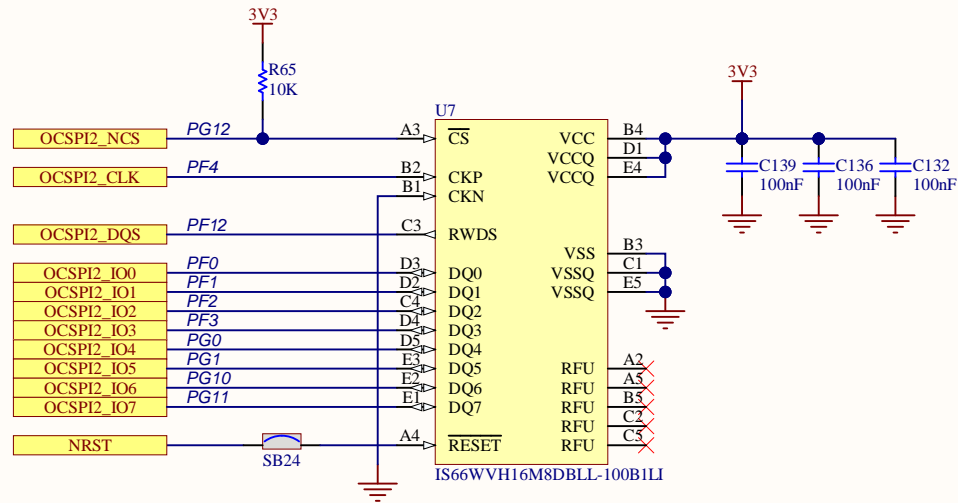




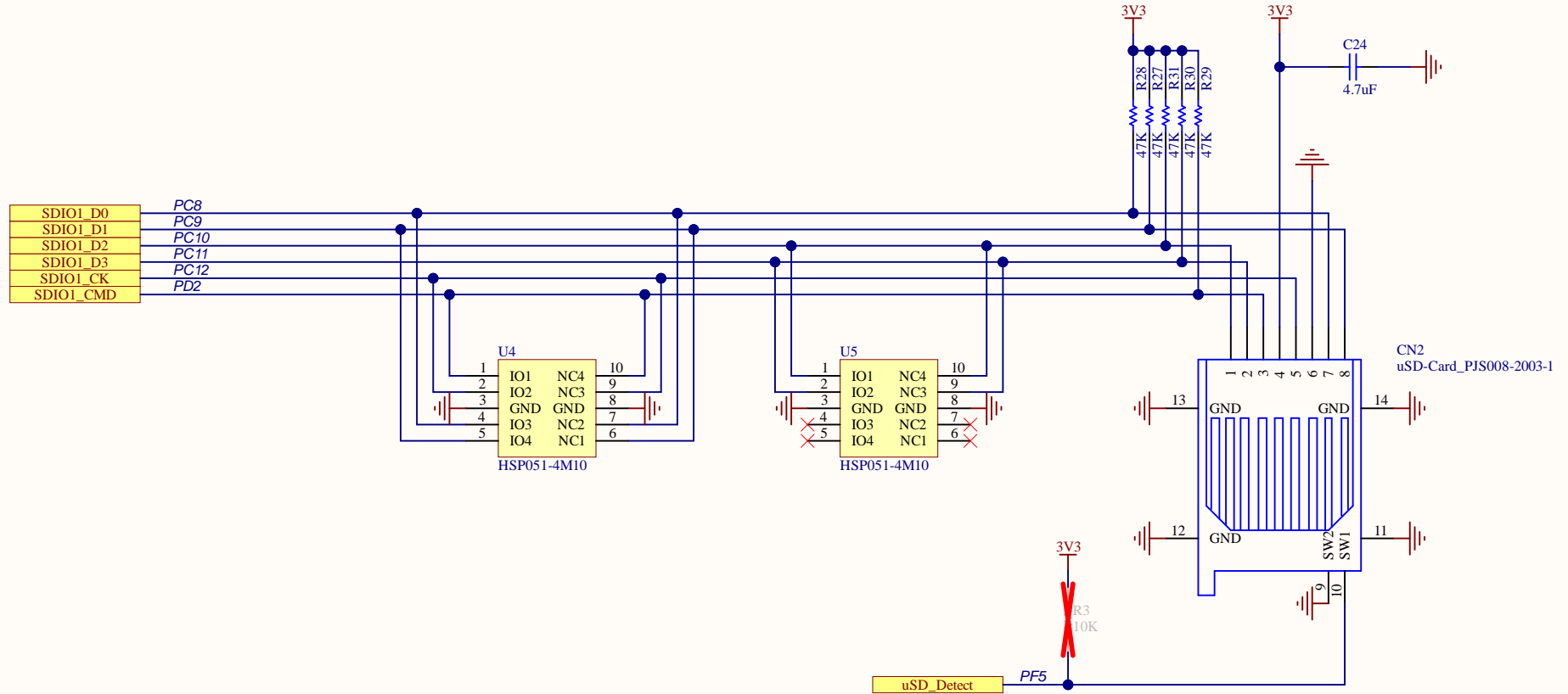
# OCTO-SPI Flash Memory



# HyperRAM Memory

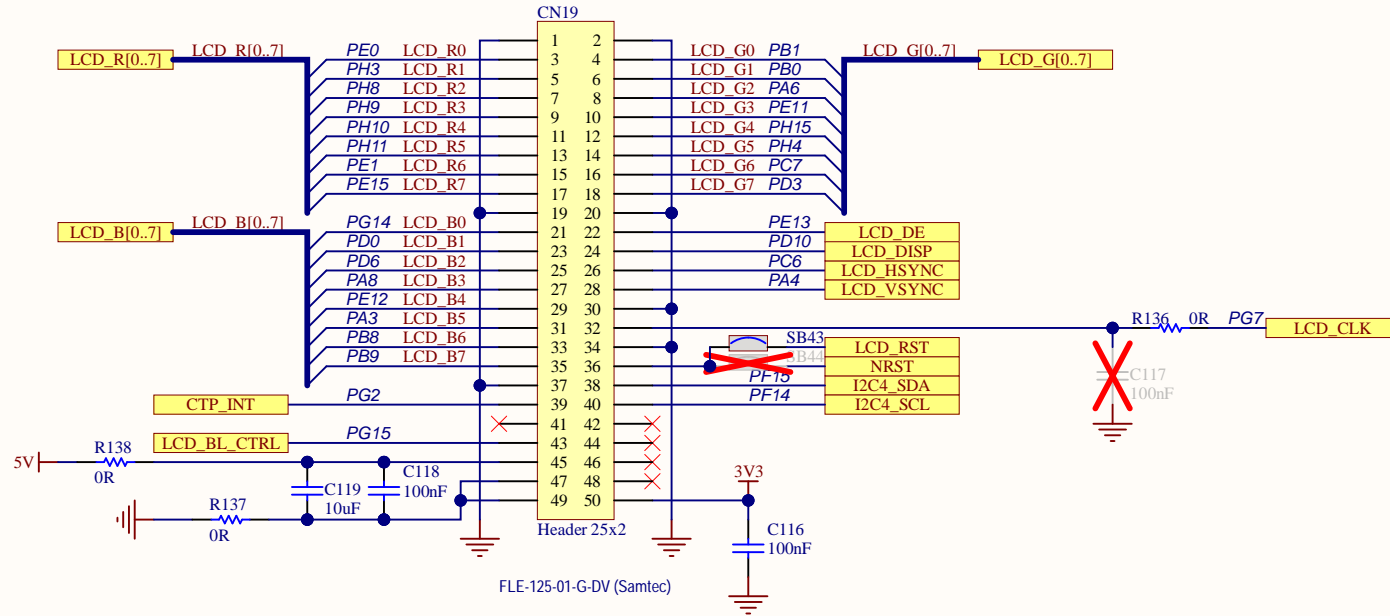


# uSD CARD

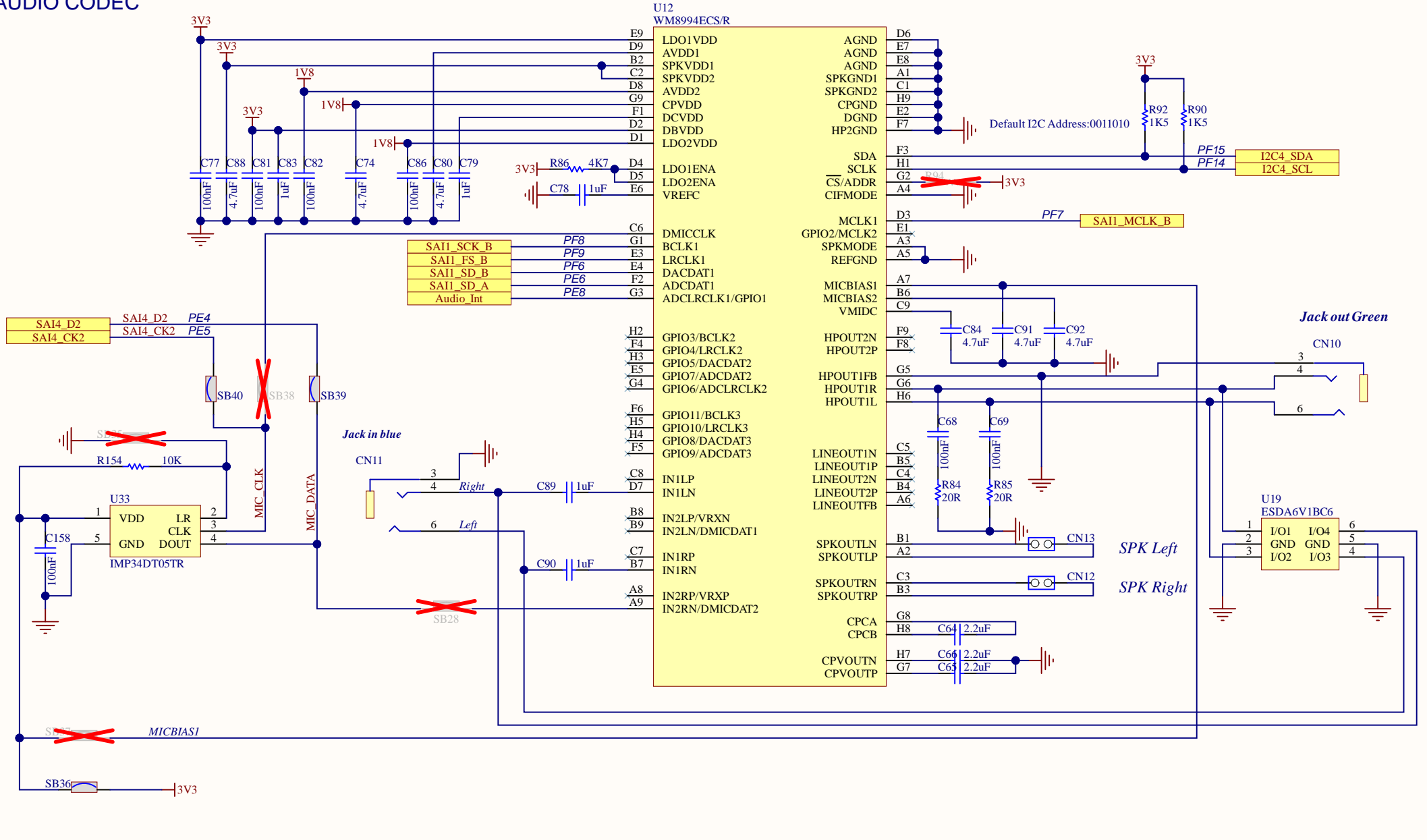


# LCD

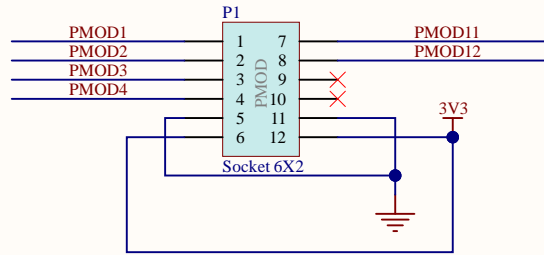
Compatible with MB1315 (4.3 inch LCD board)



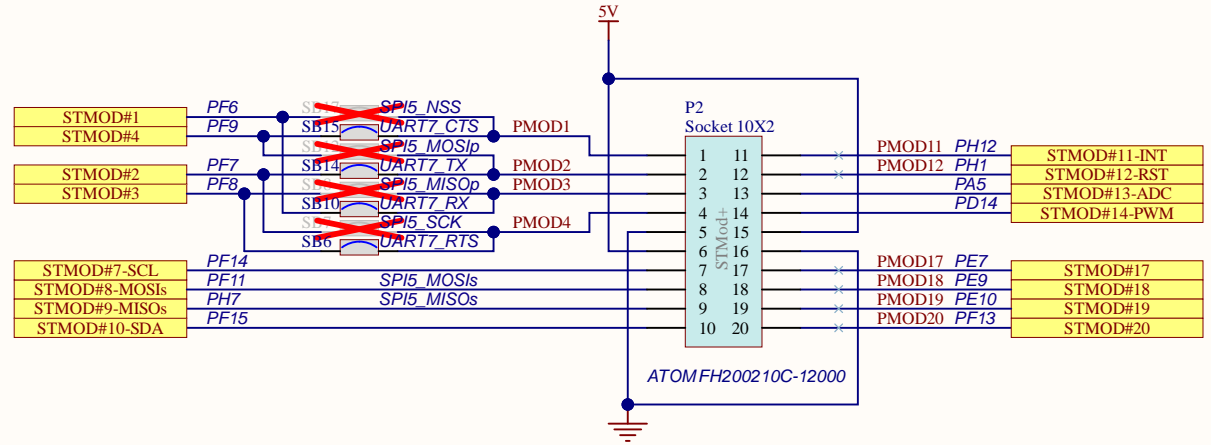
# AUDIO CODEC



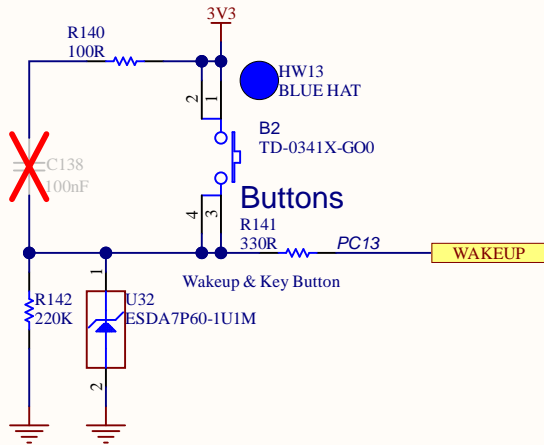
## PMOD



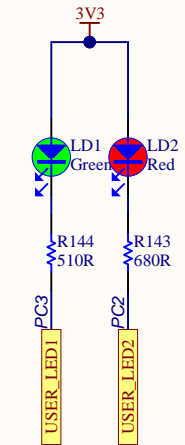
## STMOD+



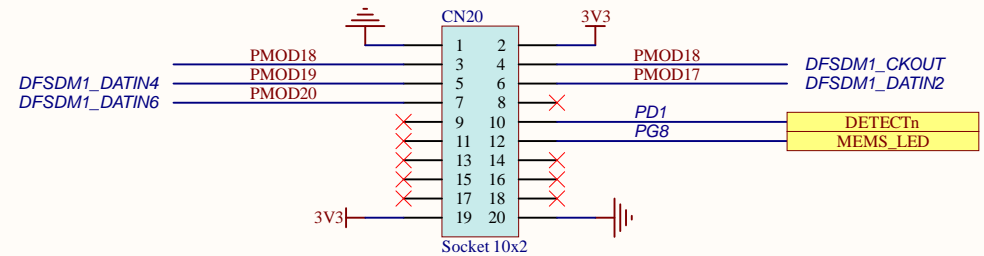
## USER BUTTON

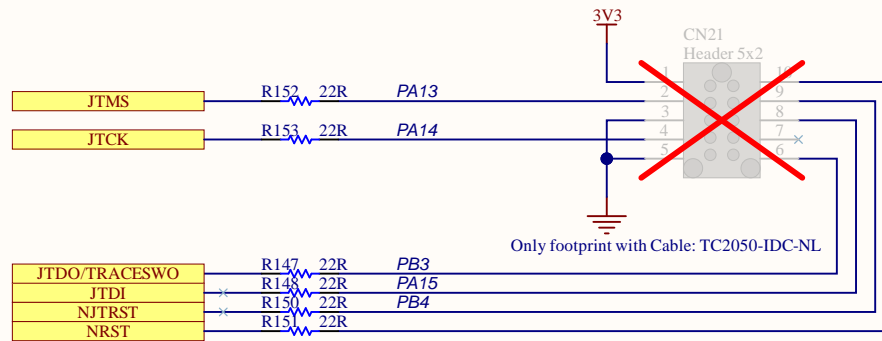


## USER LEDs



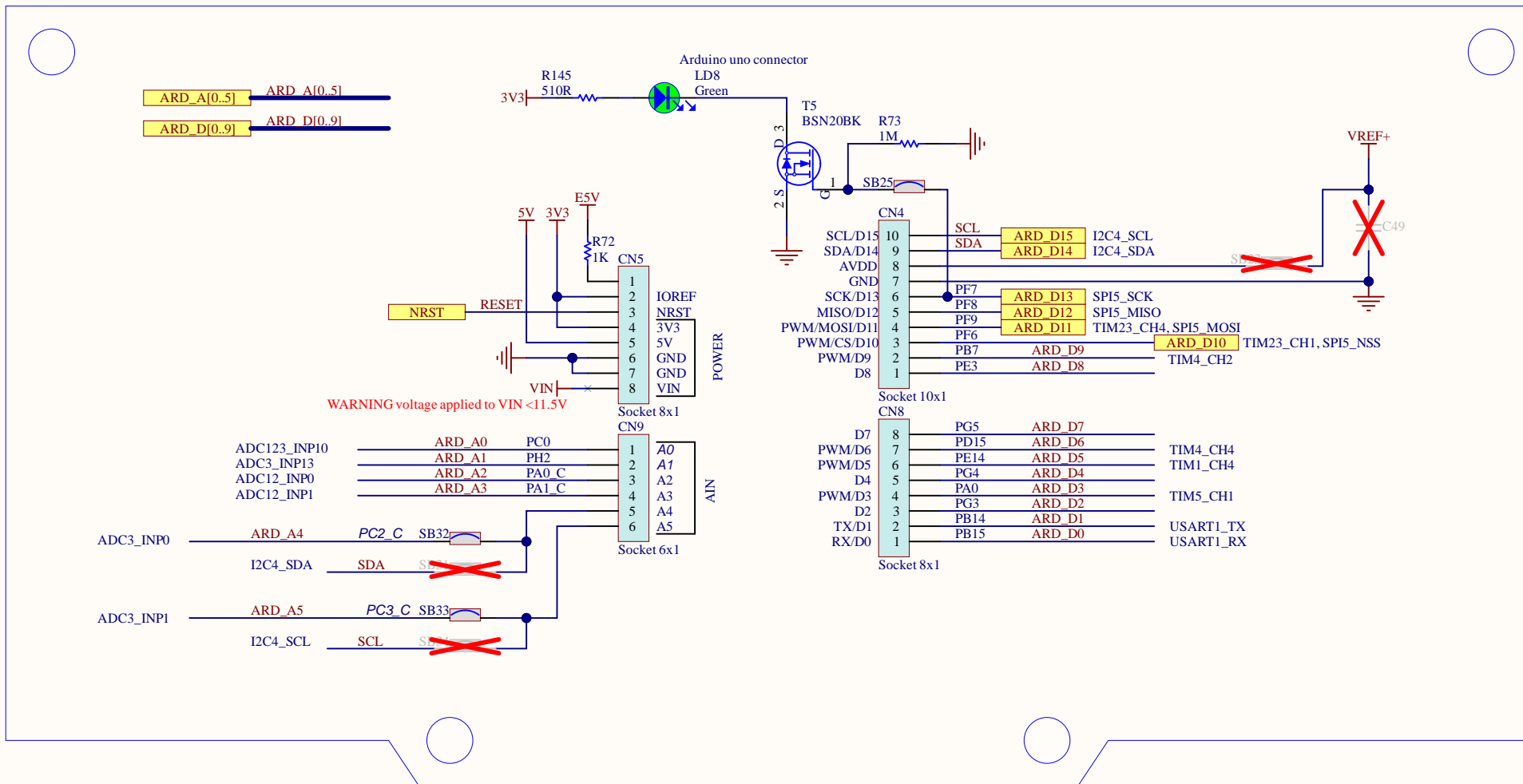
## EXTENSION MODULE MB1299



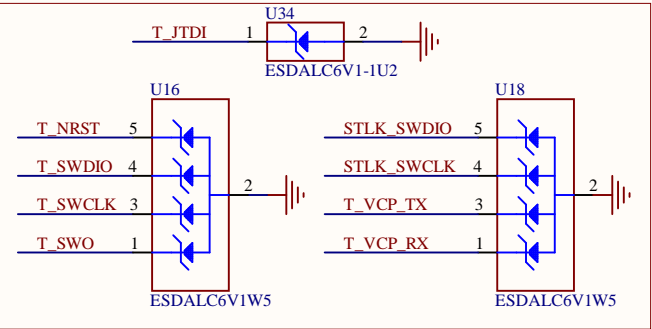
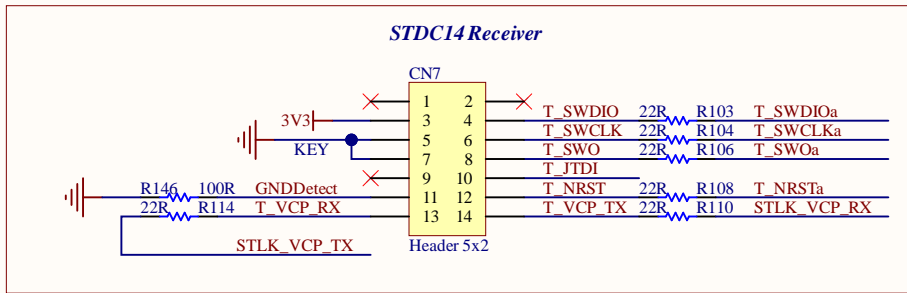
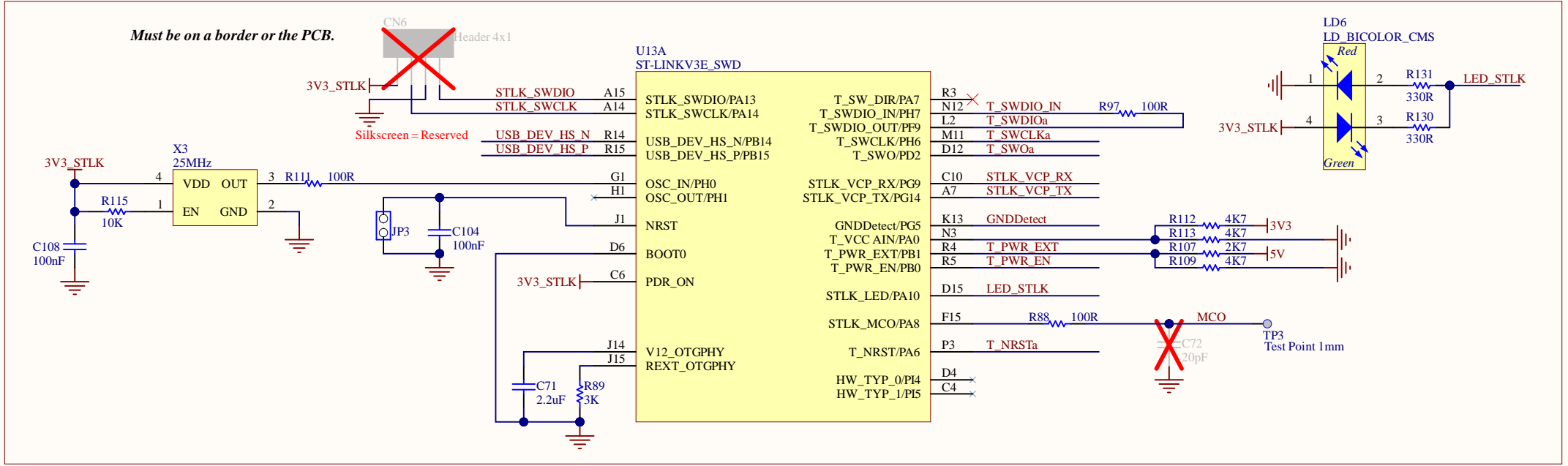
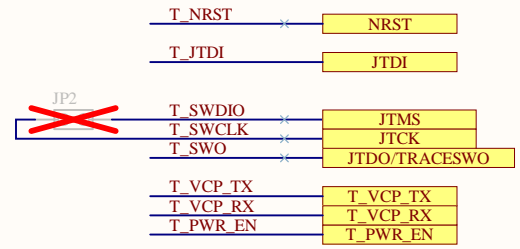
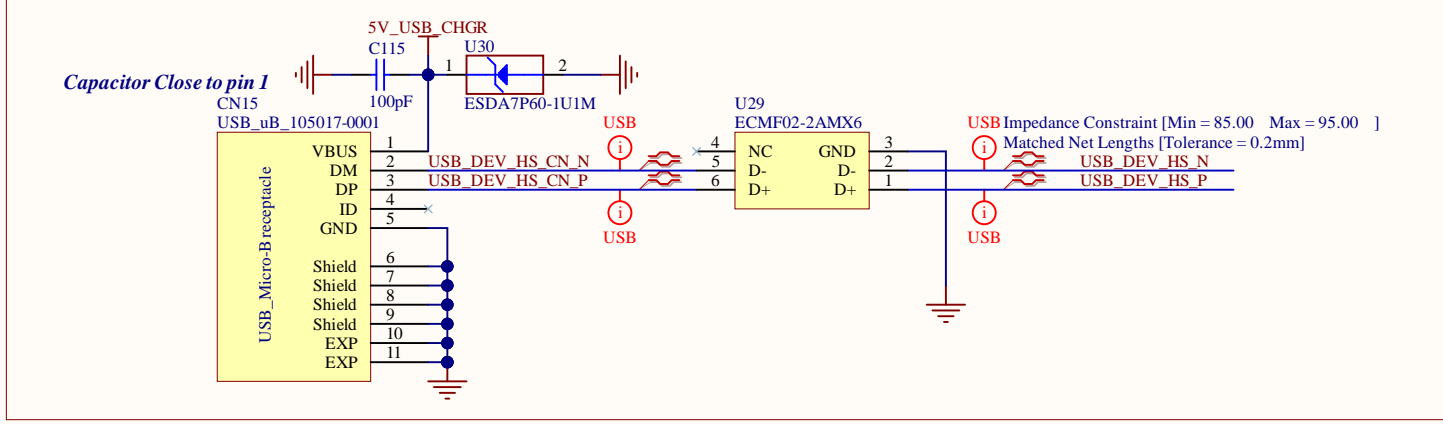


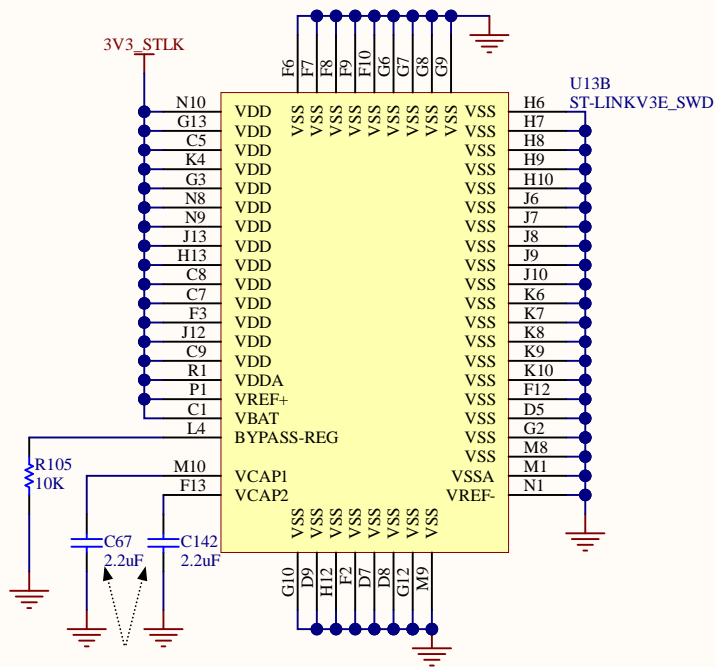
Place this connector close to STDC, they will share the same ESD components

# ARDUINO

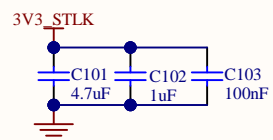
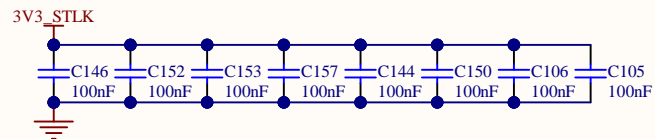
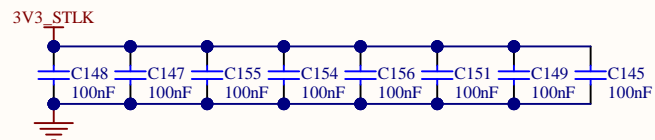




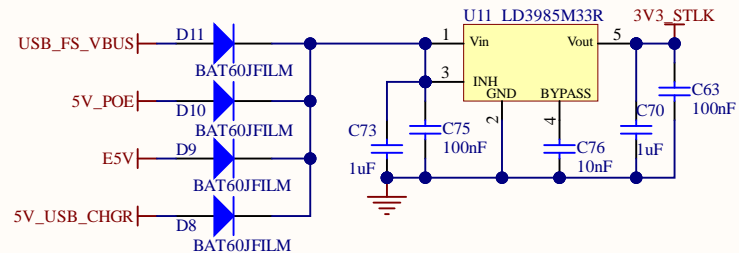




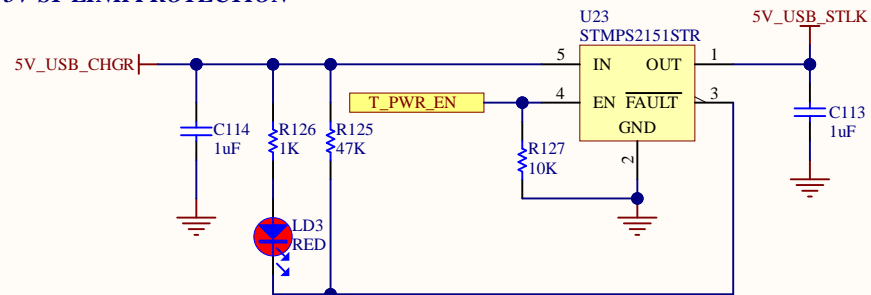
Ceramic capacitor (Low ESR)



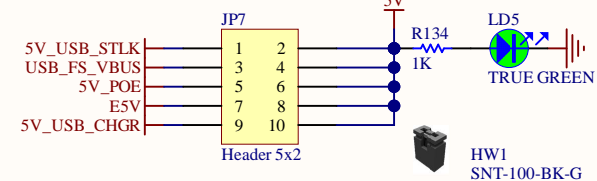
### 3.3 Volts ST-LINK



### 5V ST-LINK PROTECTION



### 5 Volts Power Supply



## 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

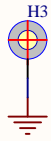
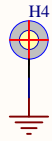
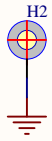
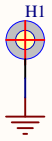


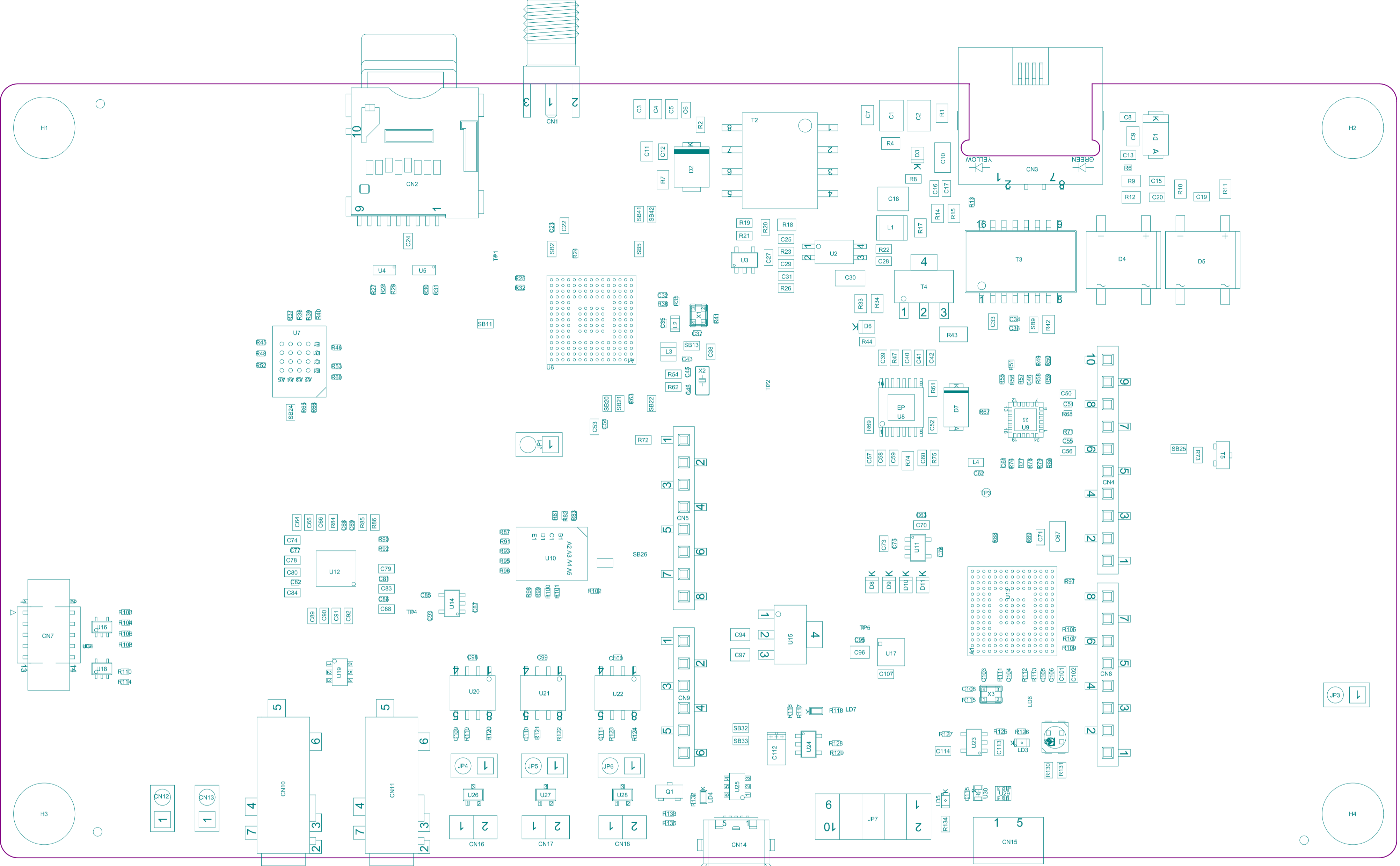
LOGO ROHS


HW10

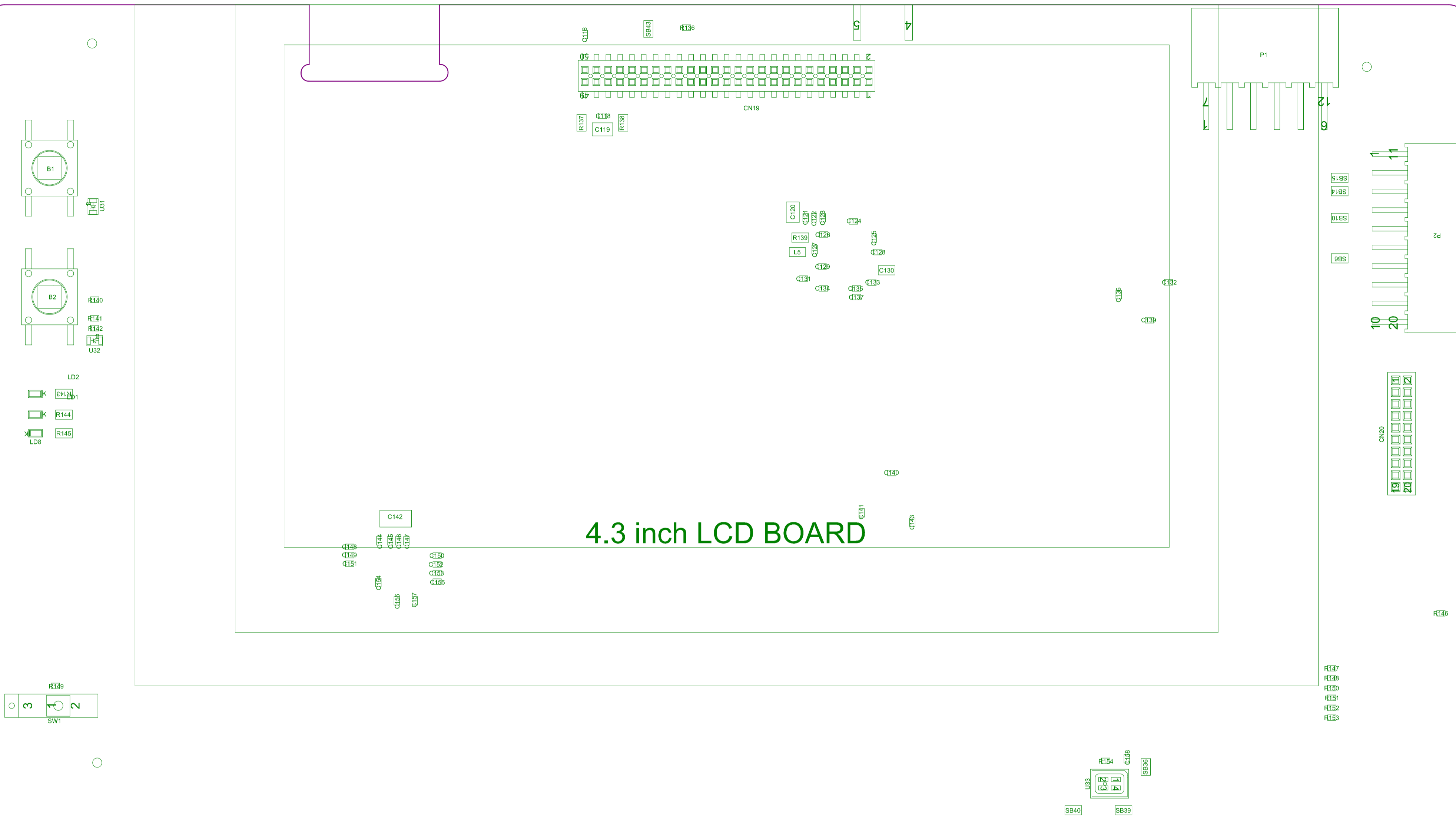


LOGO STM32





Project: STM32H735G-DK		
Layer: M14-Top Assembly	Gerber: .GM14	
Variant: H735I	MB1520	
Date: 2024-Dec-19	Rev: C	



Project: STM32H735G-DK	
Layer: M15-Bottom Assembly	Gerber: .GM15
Variant: H735I	MB1520
Date: 2024-Dec-19	Rev: C



