

STM32H7B3I-DK

MB1332

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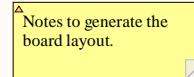
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Legend

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

Text to be added to silkscreen.

Warning text.



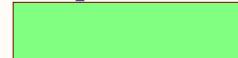
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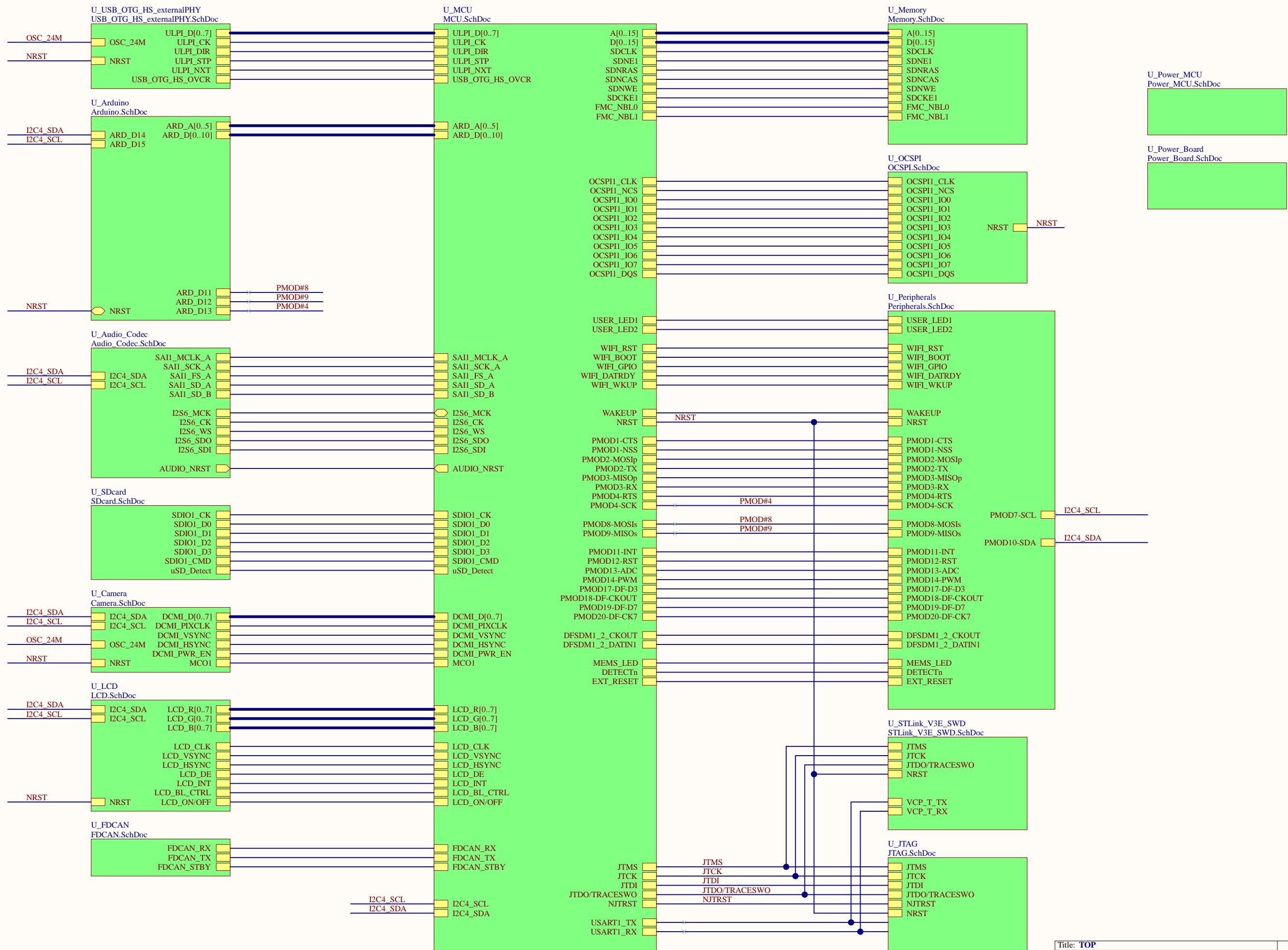
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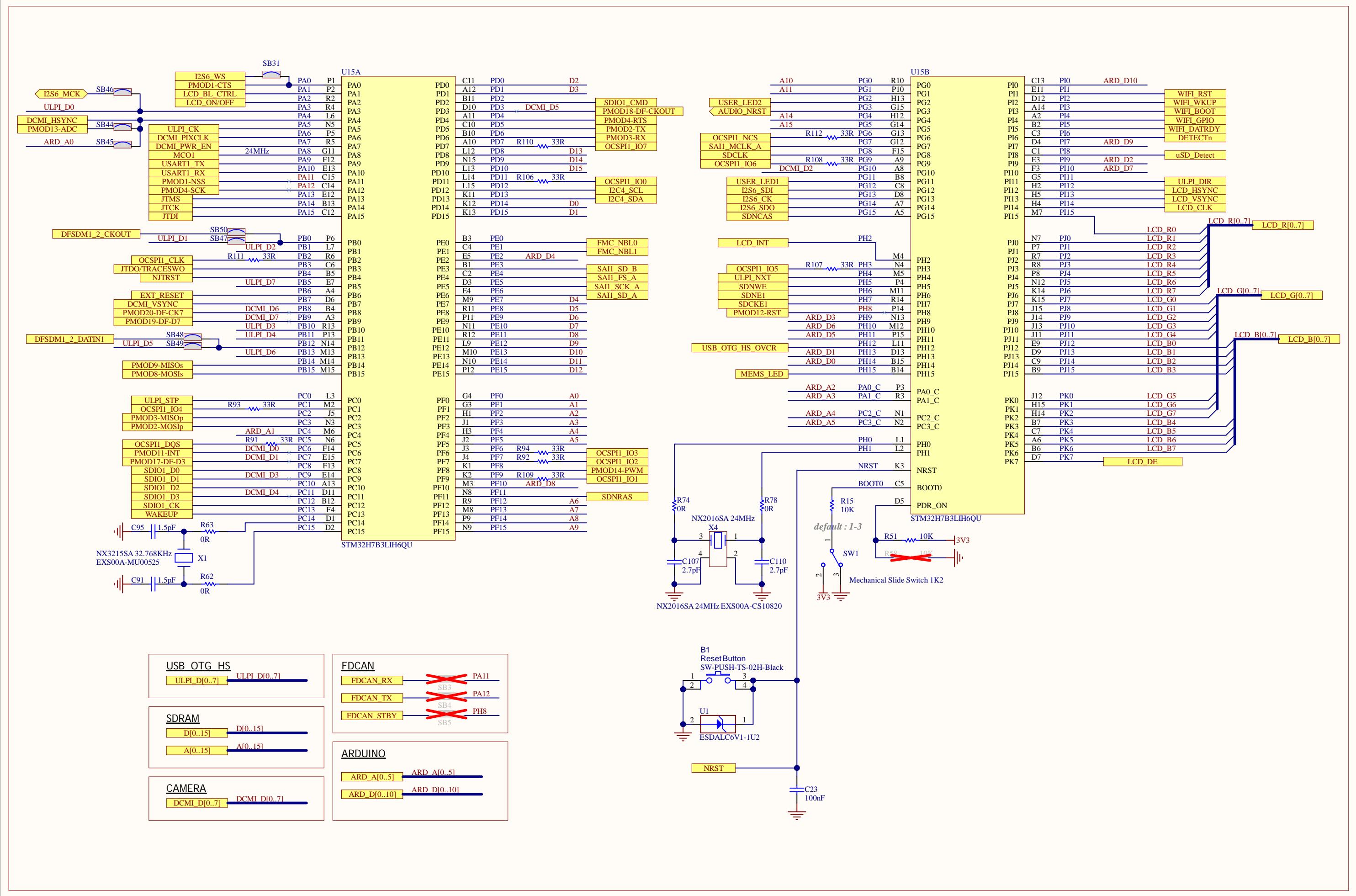
U_Top
MB1332_TOP.SchDoc



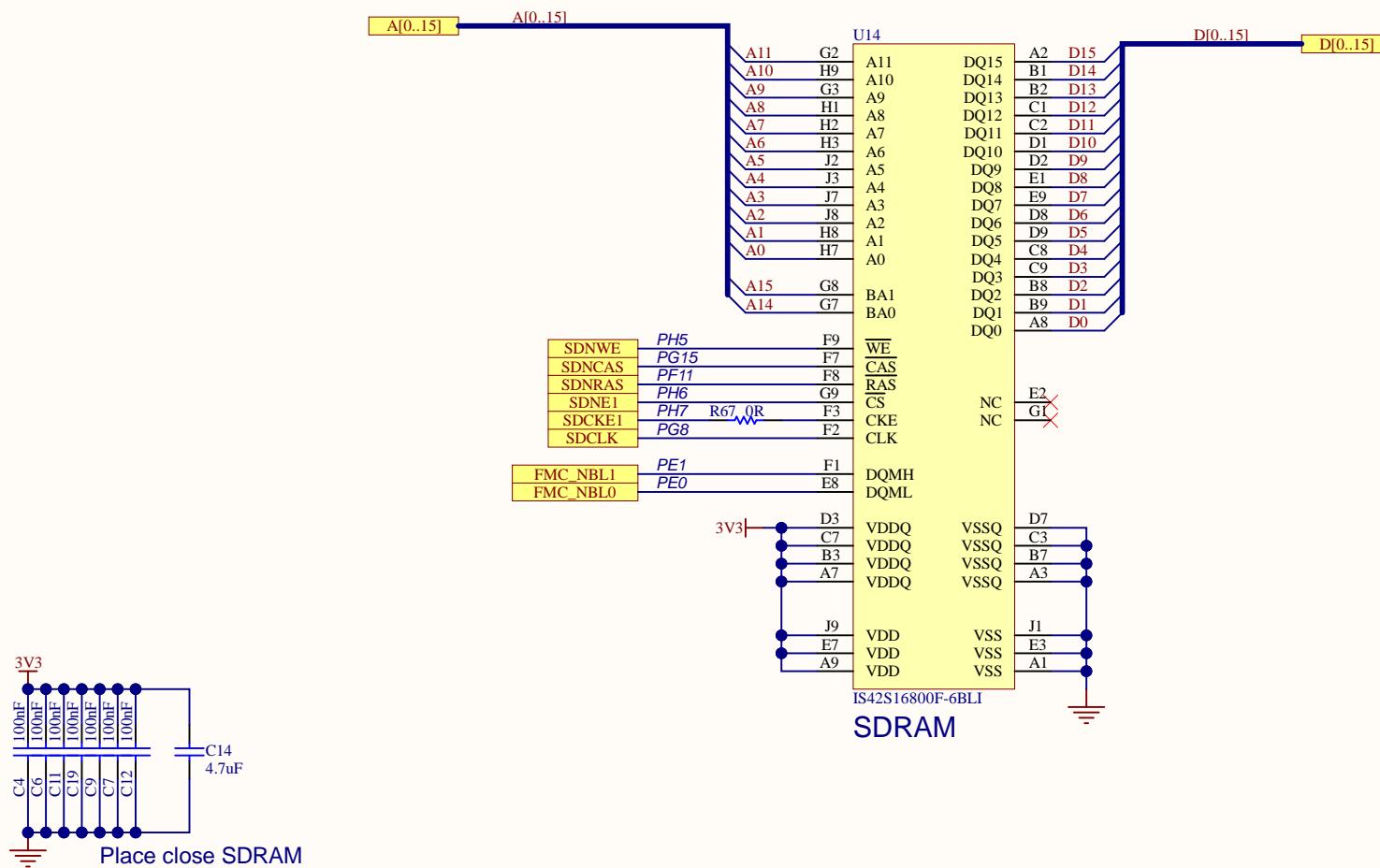
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Project: STM32H7B3I-DK	
Variant: H7B3I	
Revision: B-02	Reference: MB1332
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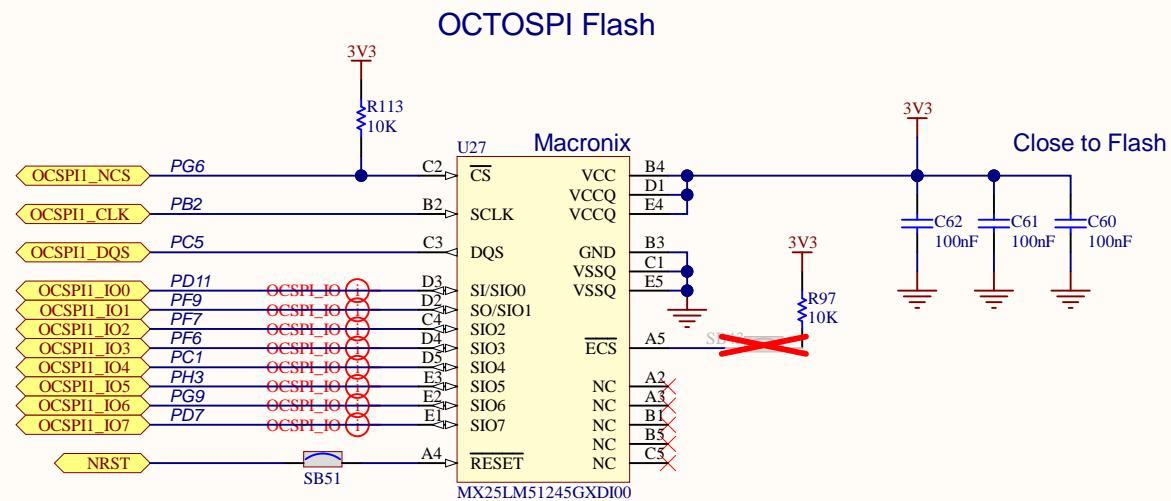


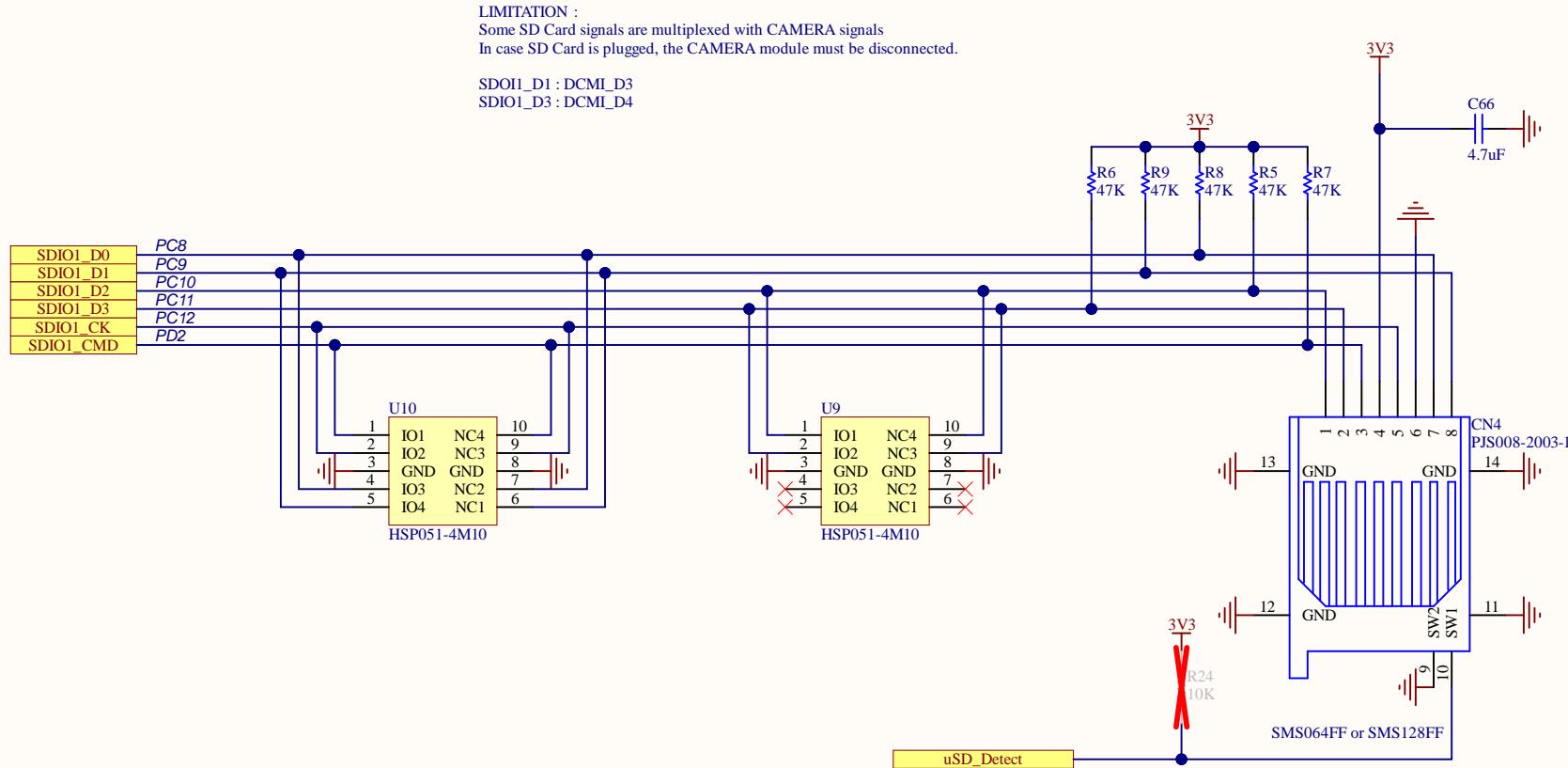


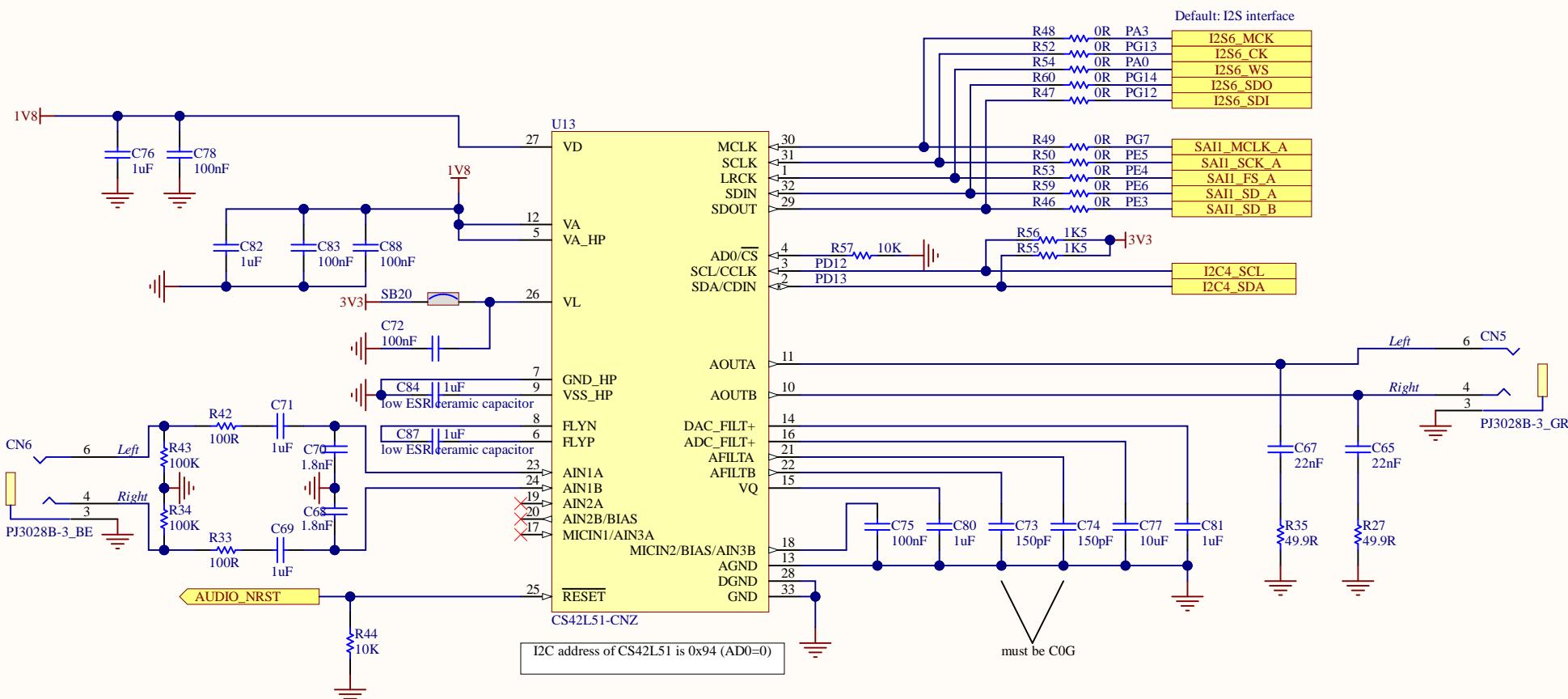


Memory







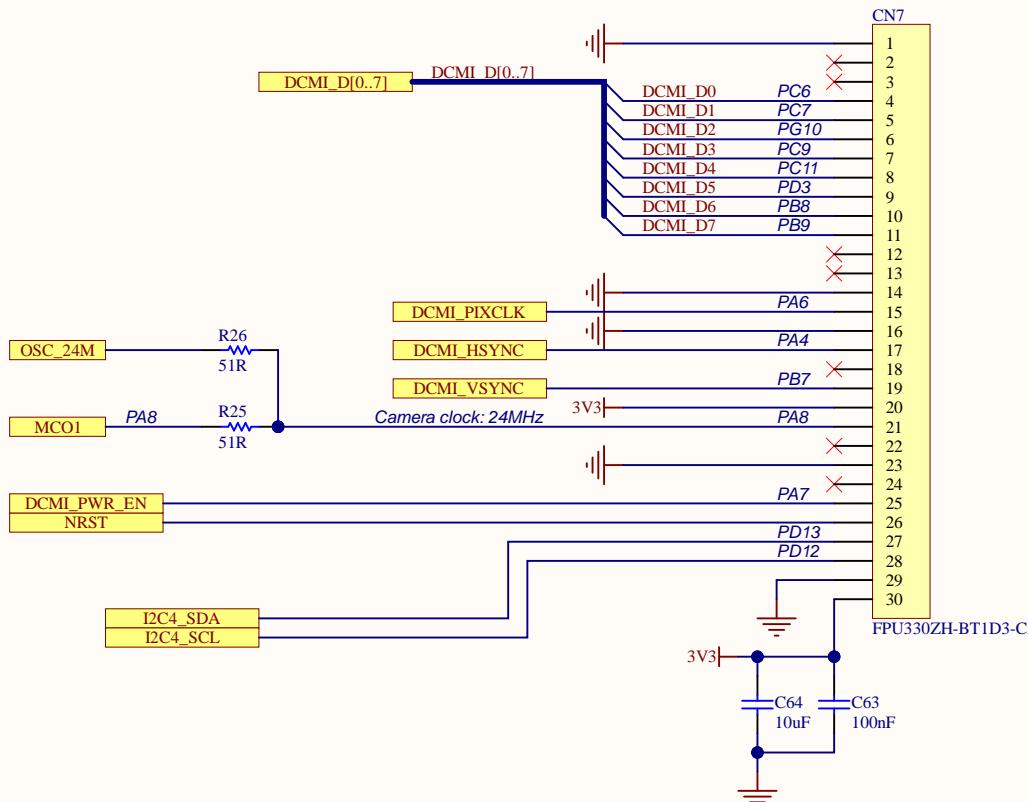


LIMITATION :

DCMI signals are multiplexed with several functions (SD Card, STMOD+ and Arduino)
 In case CAMERA module is plugged, videos are stored in USB. SD Card, STMOD+ and Arduino must be disconnected.

DCML_D0 : PMOD#11-INT
 DCML_D1 : PMOD#17-DF-D3
 DCML_D3: SDOII_D1
 DCML_D4 : SDIO1_D4
 DCML_D5 PMOD#18-DF-CKOUT
 DCML_D6 : PMOD#20-DF-CK7
 DCML_D7 : PMOD#19-DF-D7
 DCML_HSYNC : PMOD#13-ADC and ARD_A0

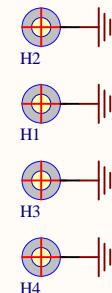
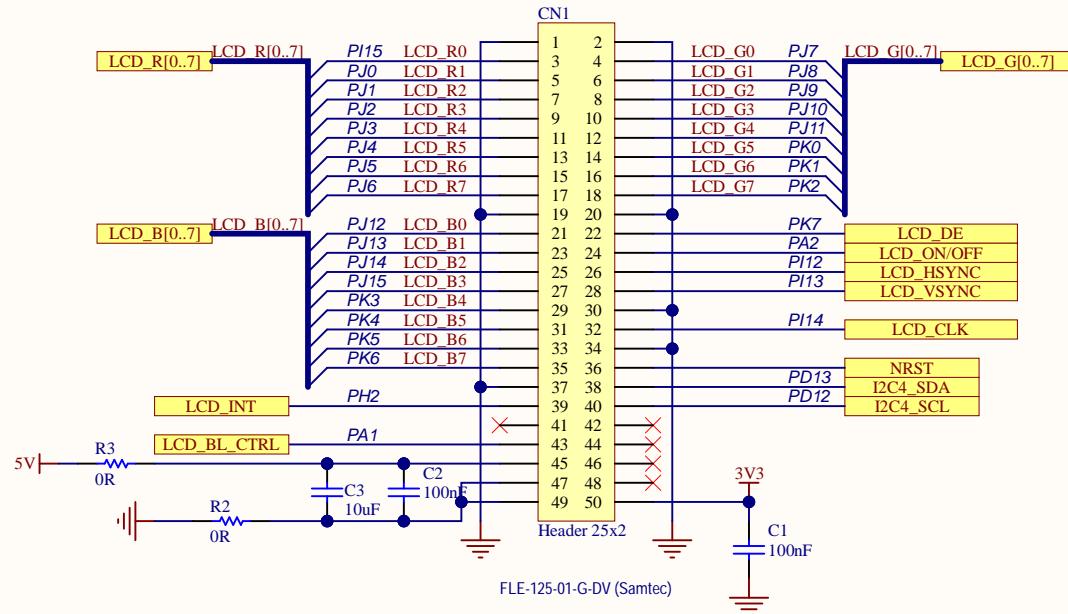
Camera connector for STM32F4DIS-CAM



Title: Camera	Project: STM32H7B3I-DK	Variant: H7B3I
Revision: B-02	Reference: MB1332	
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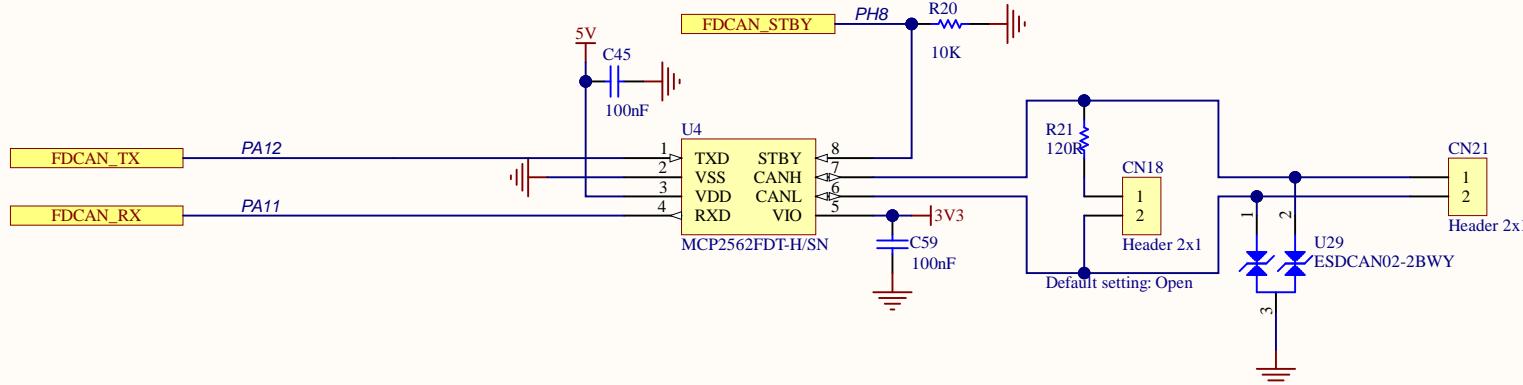


Compatible with MB1315 (4.3 inch LCD board)



LIMITATION :
 FD-CAN signals are multiplexed with STMOD+ function
 In case FD-CAN module is connected, STMOD+ must be disconnected.

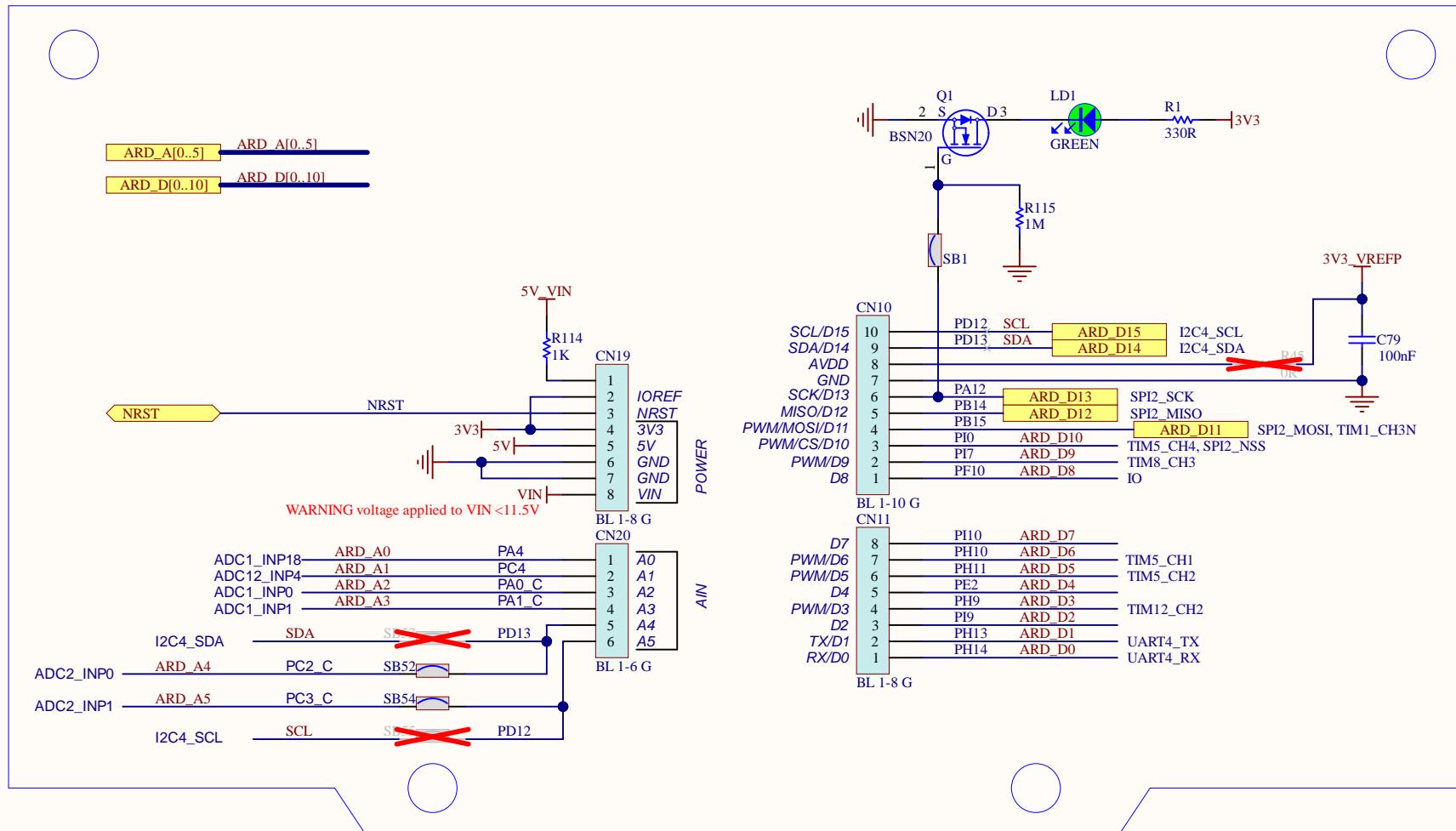
FDCAN_RX : PMOD1-NSS
 FDCAN_TX : PMOD4-SCK
 FDCAN_STBY : PMOD12-RST



Title: FD-CAN		
Project: STM32H7B3I-DK		
Variant: H7B3I		
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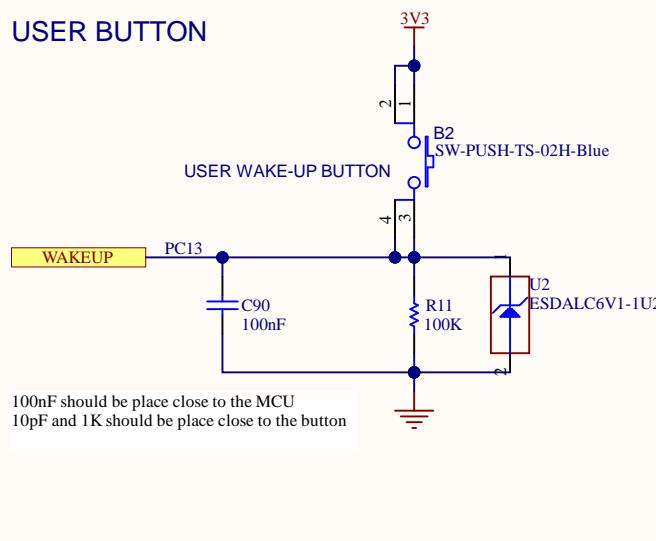
LIMITATION :
 ARDUINO signals are multiplexed with STMOD+ signals
 In case ARDUINO SHIELD is plugged, STMOD+ and Camera must be disconnected.



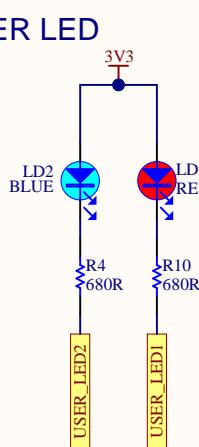
Title: Arduino
Project: STM32H7B3I-DK
Variant: H7B3I
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USER BUTTON

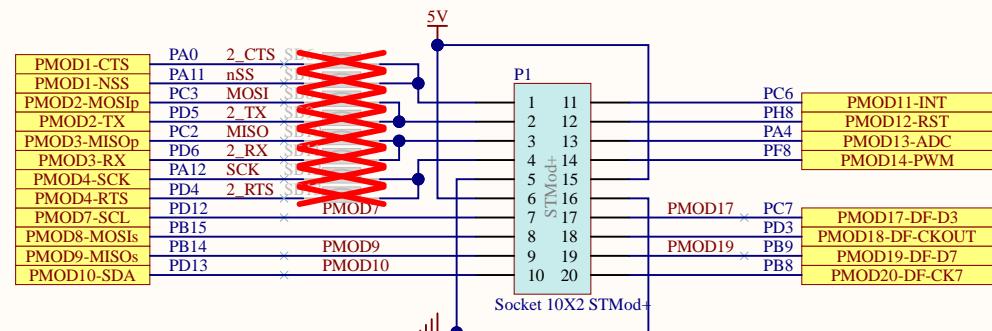


USER LED



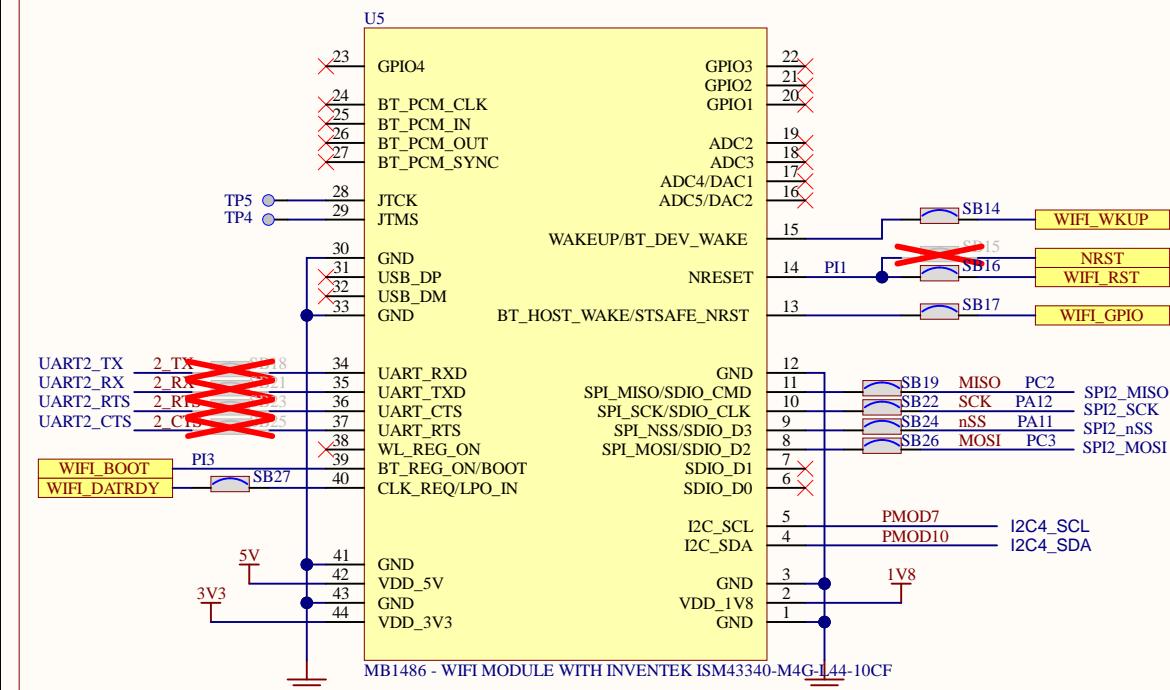
STMOD+

LIMITATION :
STMOD+ signals are multiplexed with AUDIO, CAMERA and Arduino signals
In case STMOD+ is used, Digital Microphones, Camera and Arduino must be disconnected.



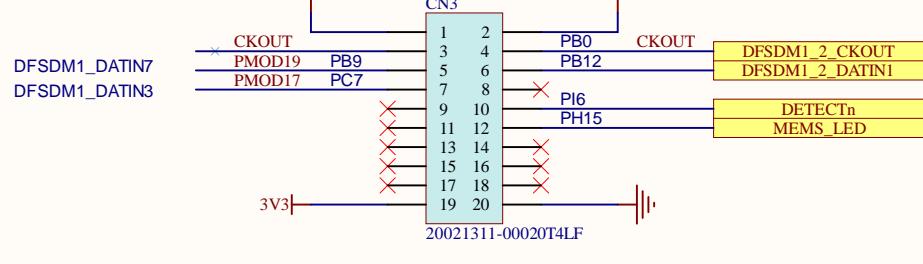
WIFI MODULE (ISM43340-M4G-L44-10CF)

LIMITATION :
WiFi signals are multiplexed with STMOD+
In case WiFi-BT is activated, STMOD+ must be disconnected.

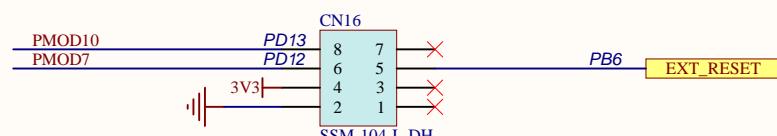


AUDIO DFSDM

LIMITATION :
DFSDM signals are multiplexed with STMOD+ signals
In case microphones are activated, noting must be connected on STMOD+.



I2C Connector



Title: Peripherals

Project: STM32H7B3I-DK

Variant: H7B3I

Revision: B-02

Reference: MB1332

Size: A4

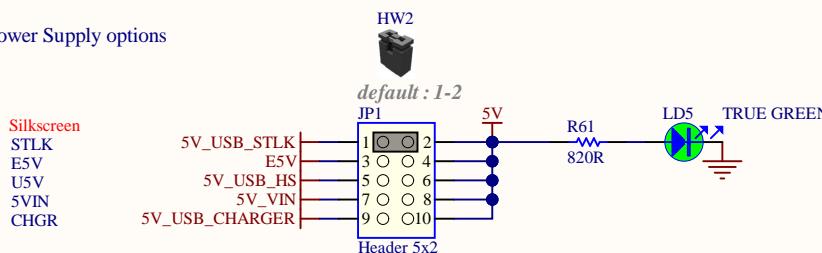
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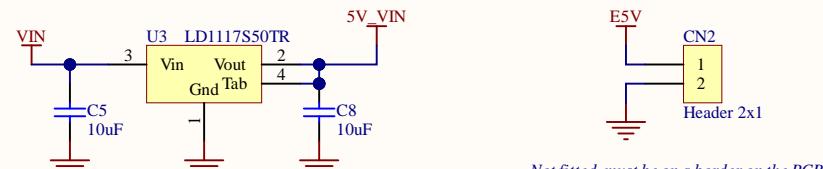


Board power

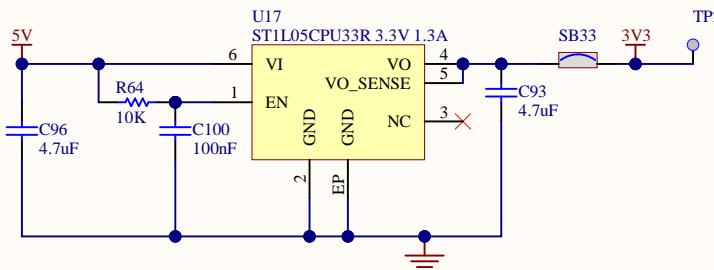
5V Power Supply options



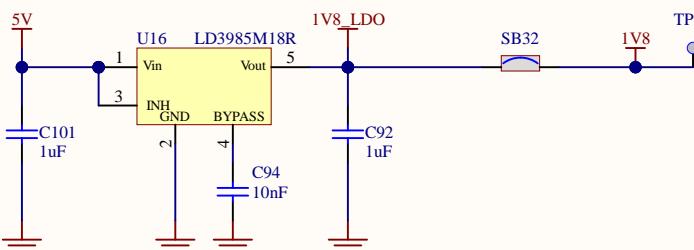
5V External Supply



3V3 and VDD MCU Supplies



1V8 / 150mA (Audio codec and USB HS)



Title: Board Power

Project: STM32H7B3I-DK

Variant: H7B3I

Revision: B-02

Size: A4

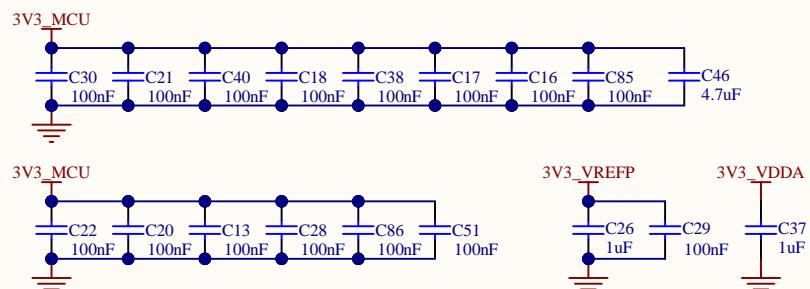
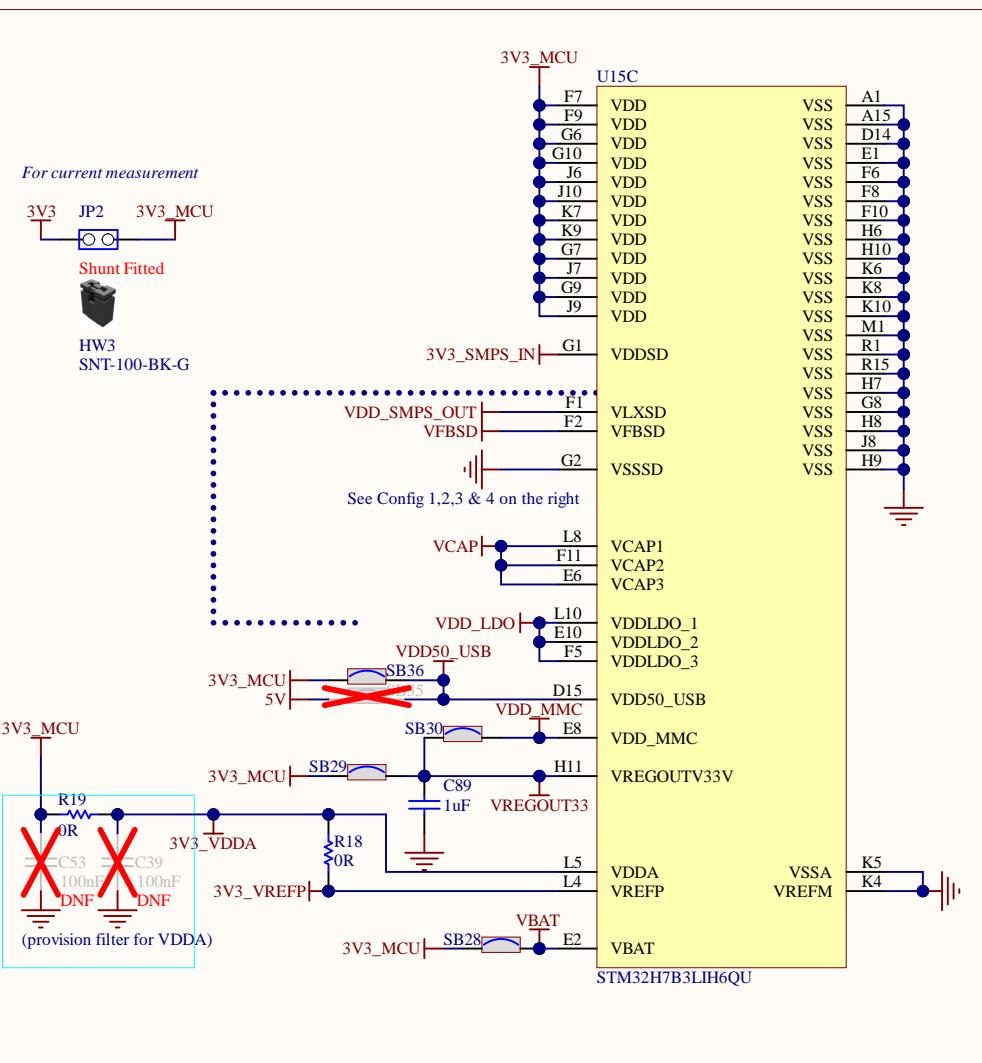
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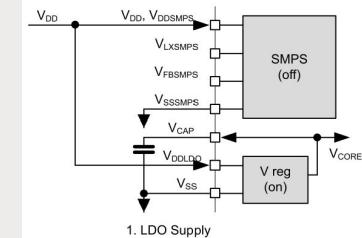
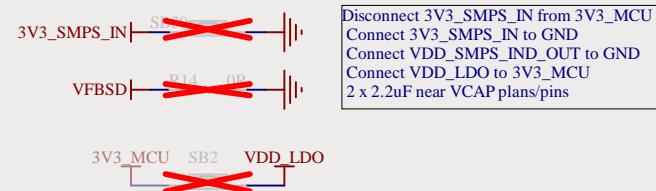
MCU power



Internal SMPS Supply Config

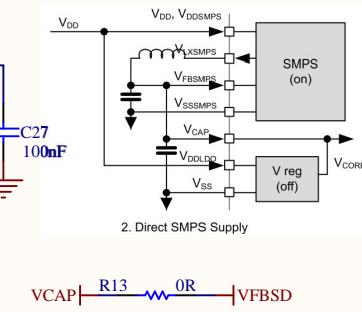
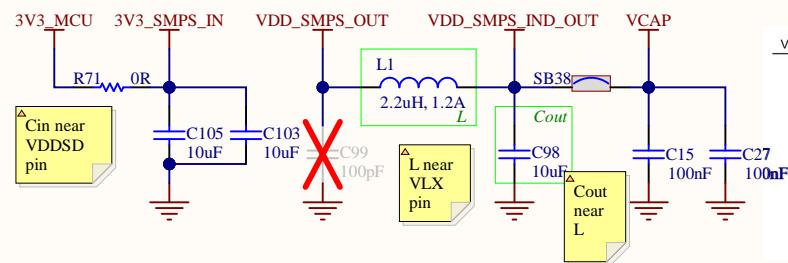
For further details, please see TINY_SHARK_PWR.pdf

Supply Config 1 : LDO only (SMPS OFF, LDO ON)

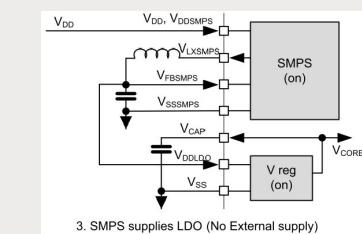
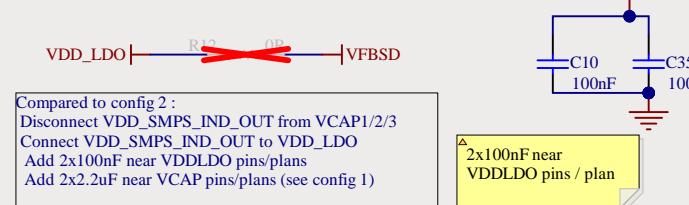


Supply Config 2 : SMPS only (SMPS ON, LDO OFF)

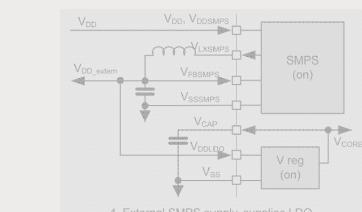
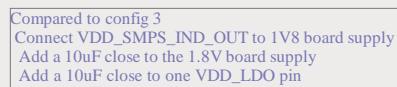
Default config



Supply Config 3 : SMPS & LDO cascaded (SMPS & LDO ON)



Supply Config 4 : same as config 3, but SMPS supplies also 1V8 to board



Title: MCU Power

Project: STM32H7B3I-DK

Variant: H7B3I

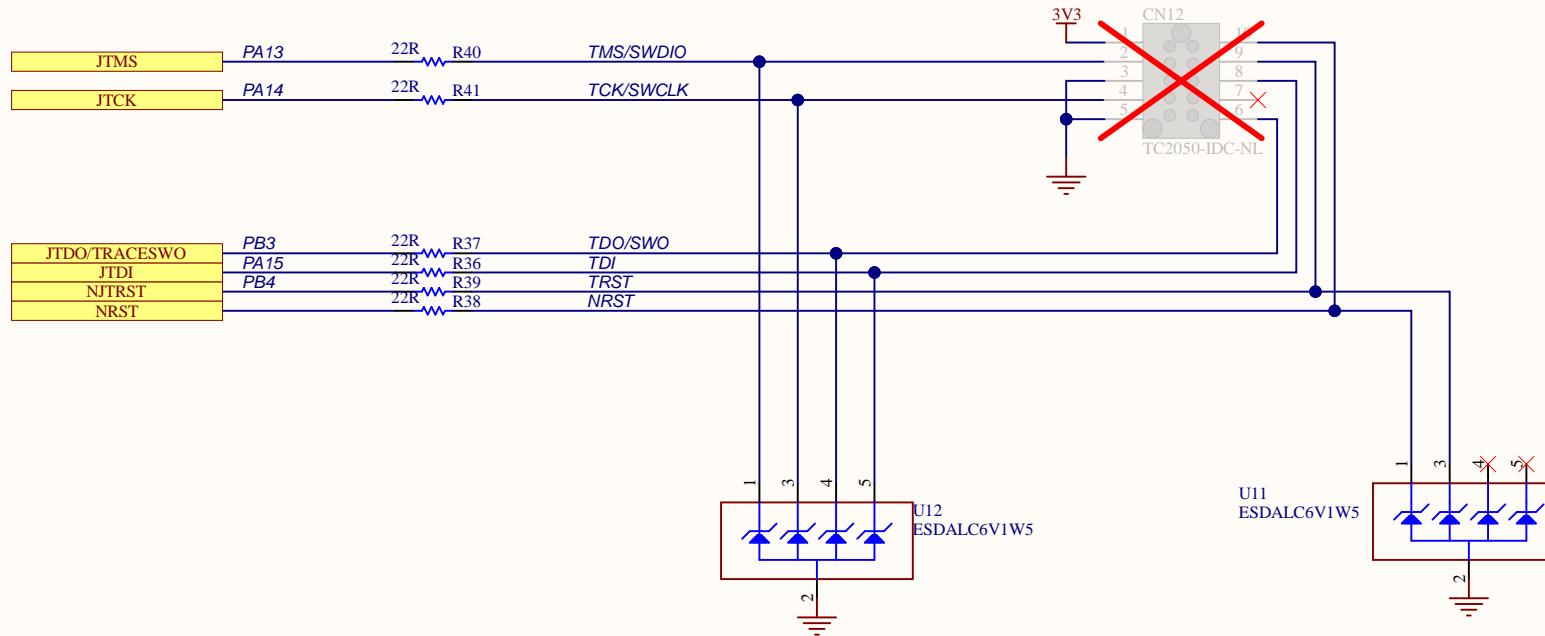
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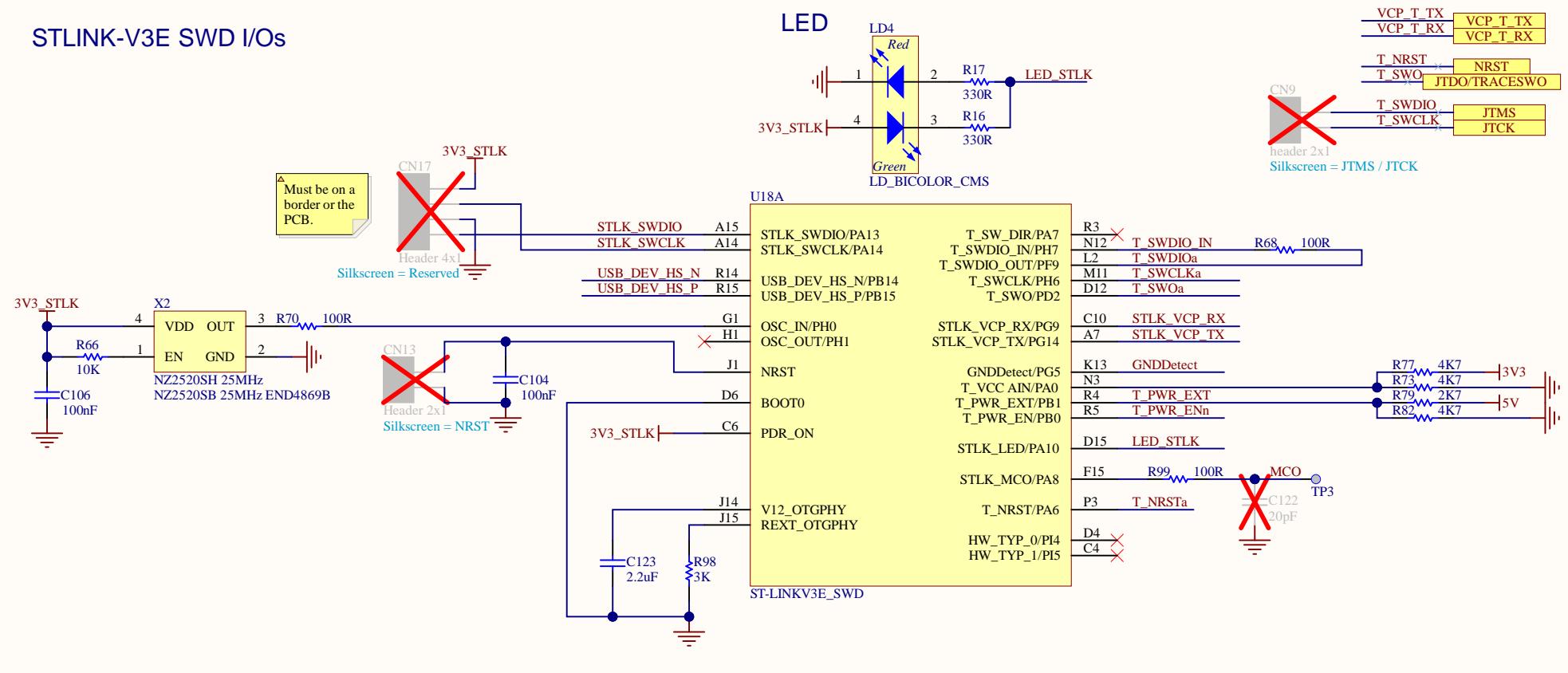
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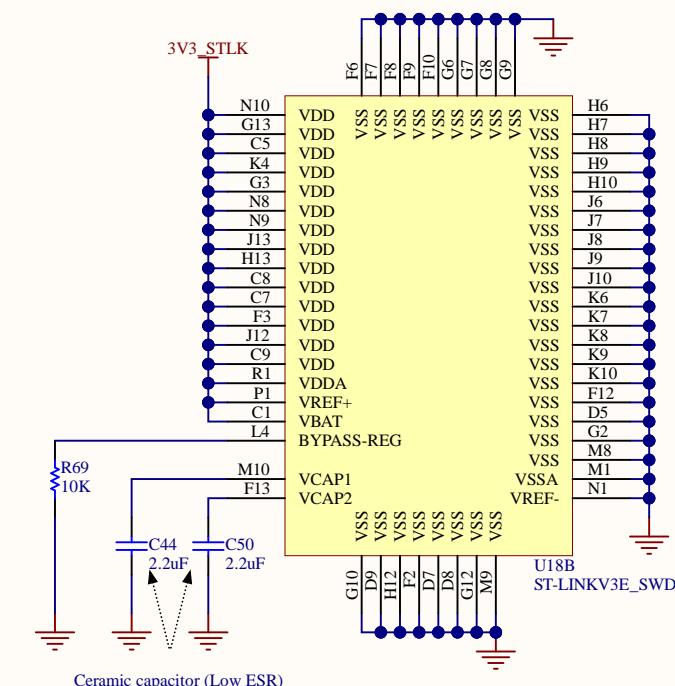


STLINK-V3E SWD

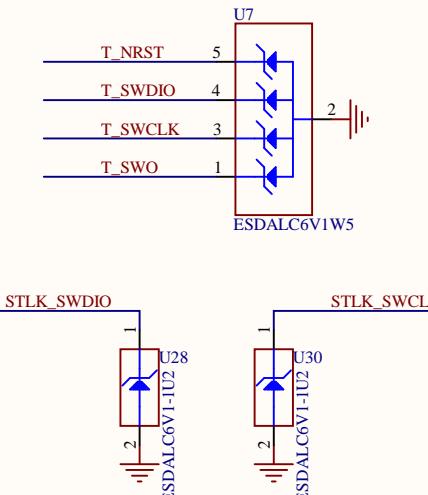
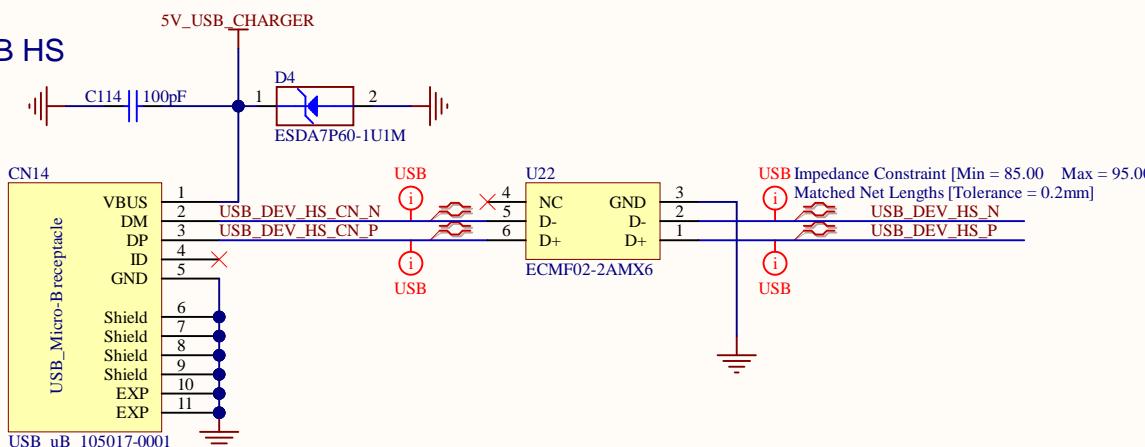
STLINK-V3E SWD I/Os



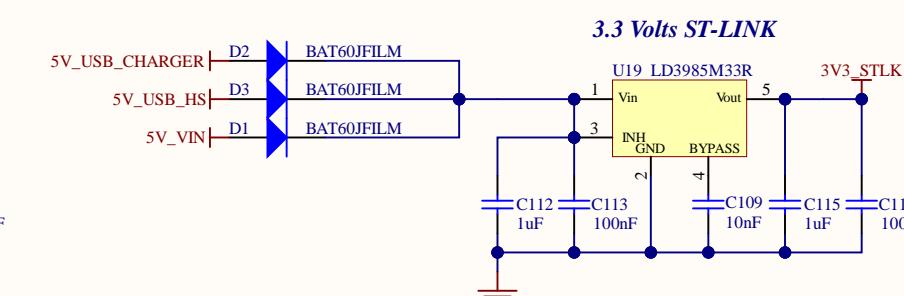
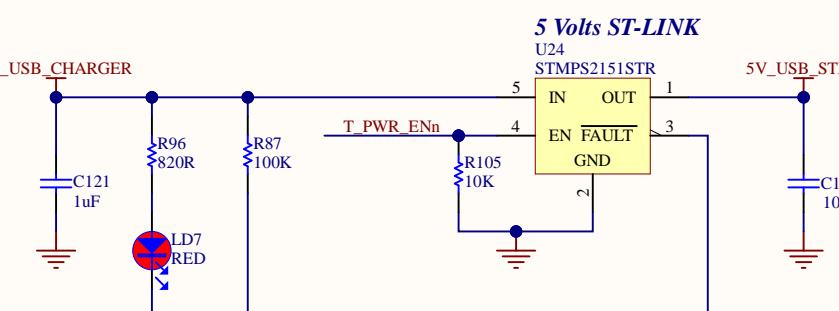
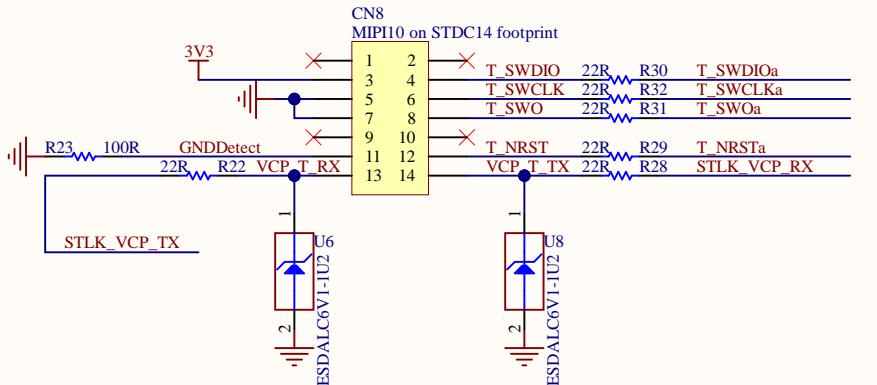
STLINK-V3E SWD POWER

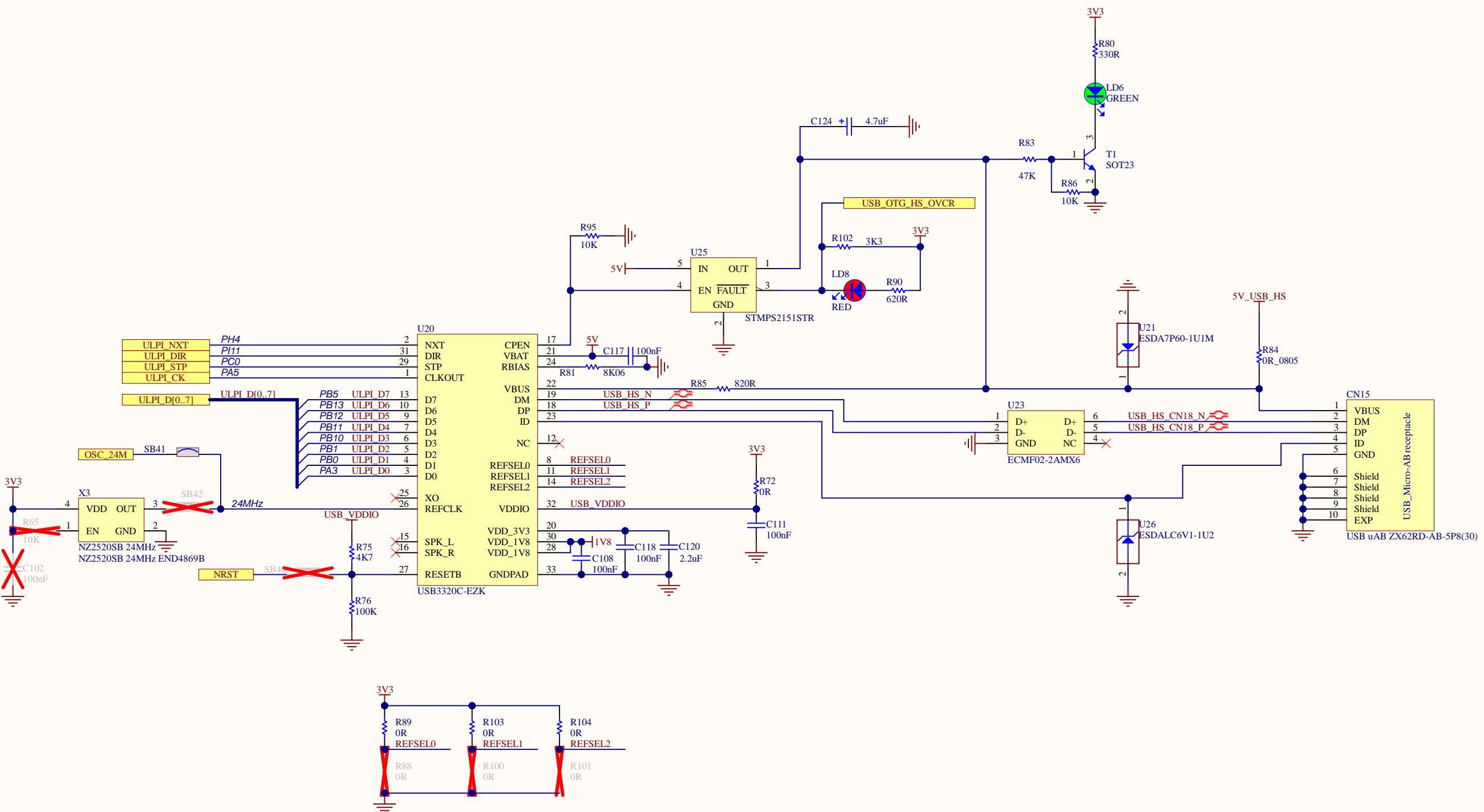


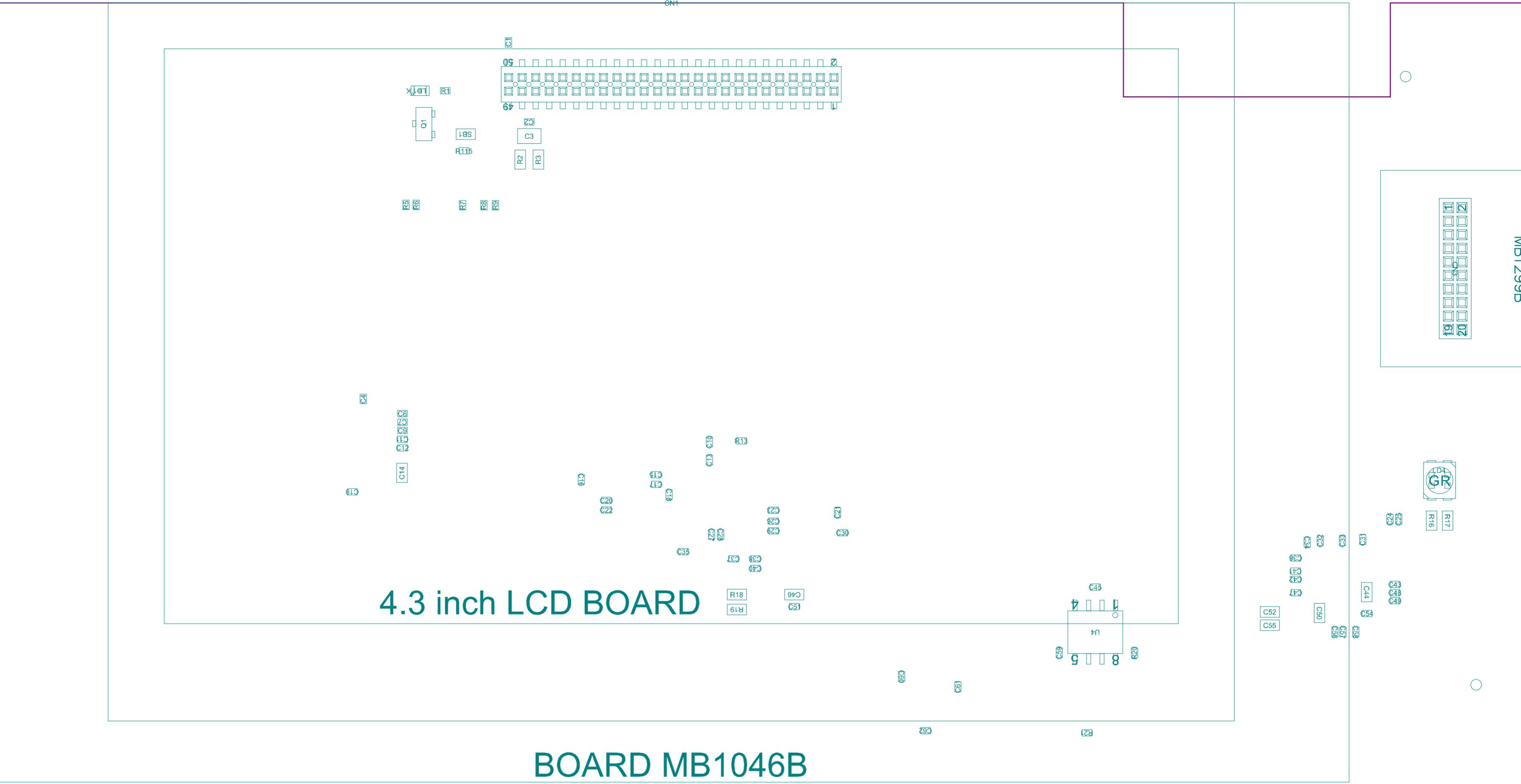
USB HS



STLINK-V3E SWD POWER







Project: STM32H7B3I-DK

Layer: M14-Top Assembly

Gerber: .GM14

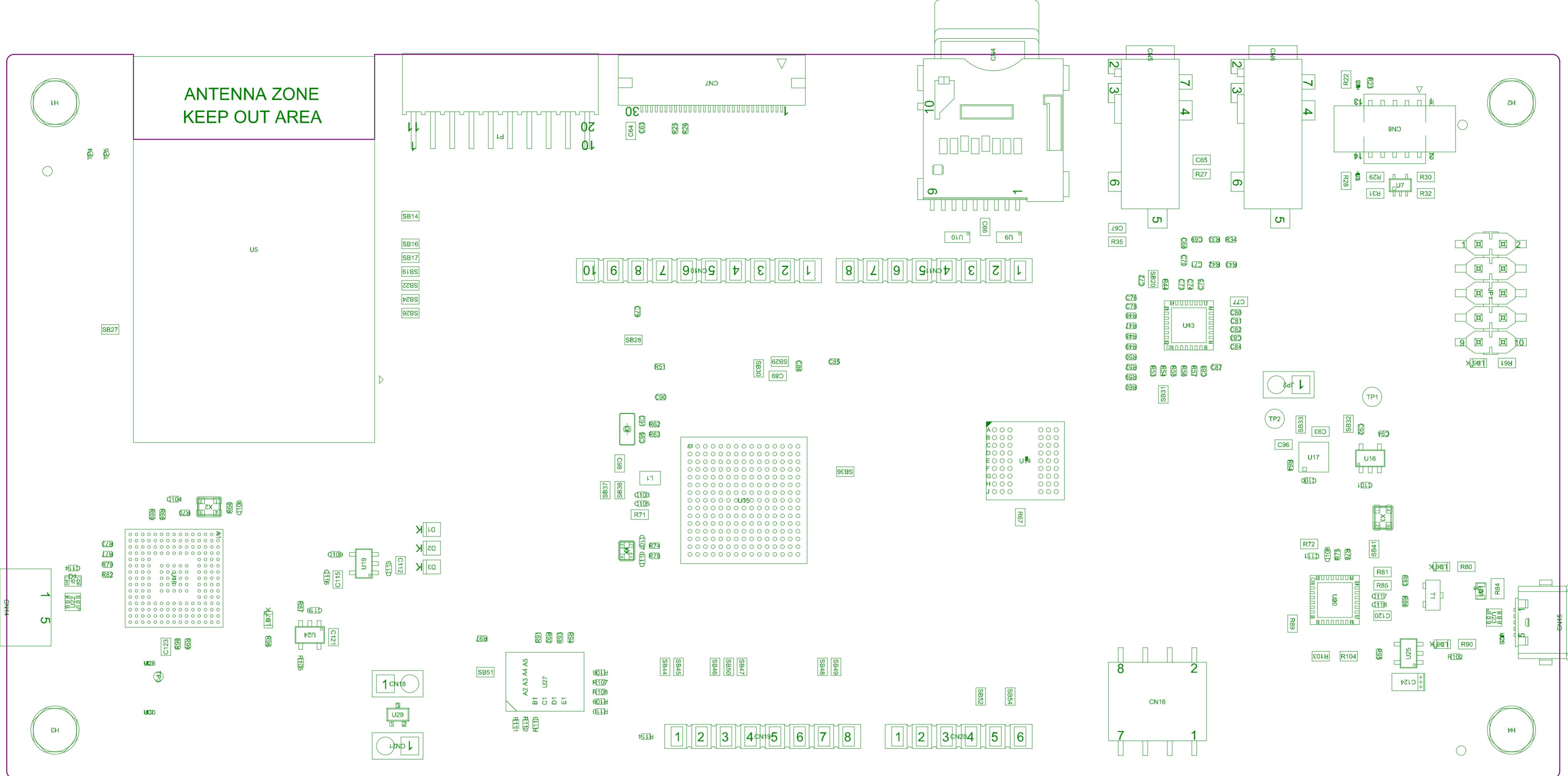
Variant: H7B3I

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Date: 23-SEP-19

Rev: B





Project: STM32H7B3I-DK

Layer: M15-Bottom Assembly

Gerber:.GM15

Variant: H7B3I

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