

STM32H573I-DK

MB1677

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U_Top
Top.SchDoc

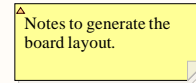


Legend

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

Text to be added to silkscreen.

Warning text.



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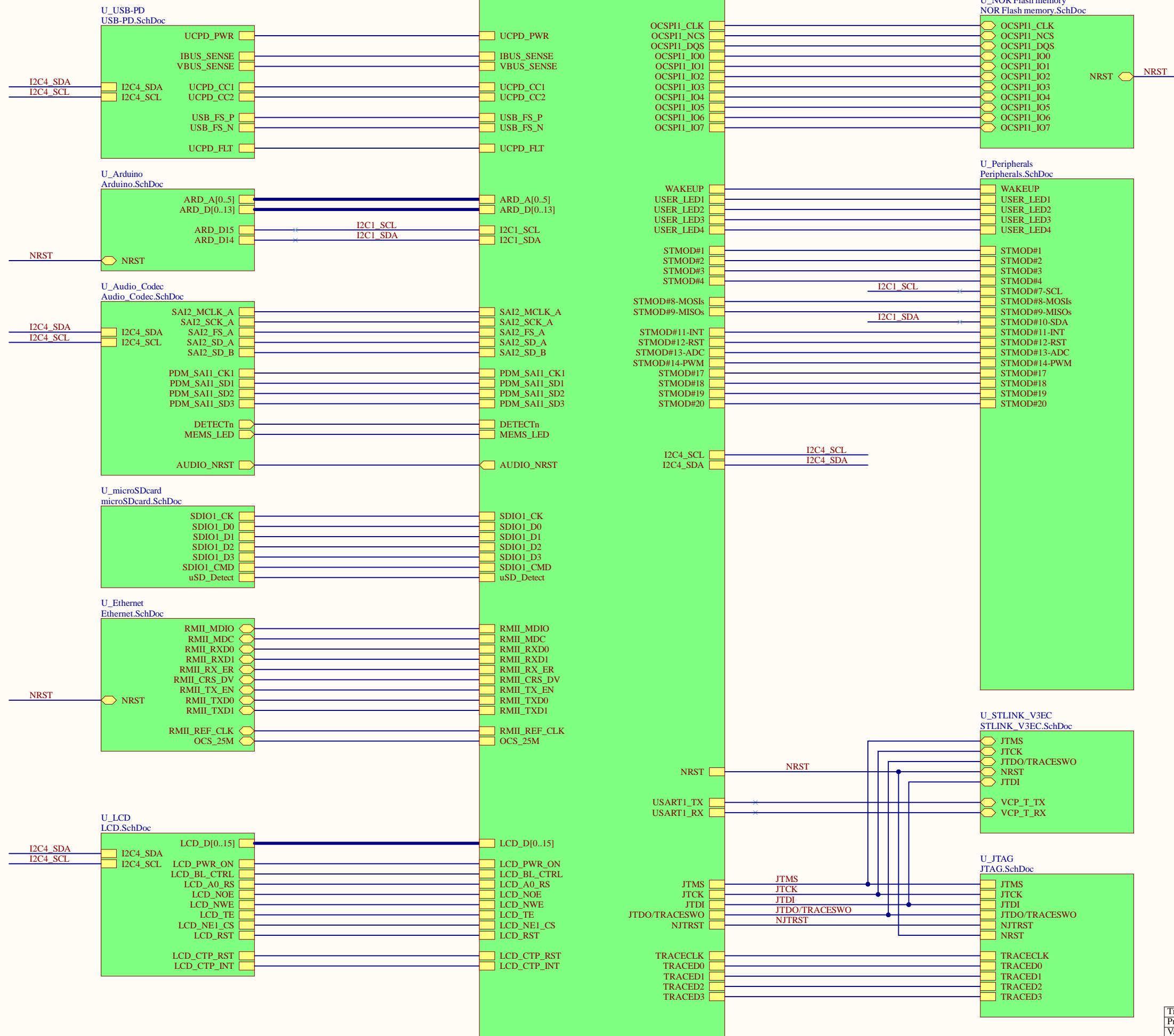
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Title: Project overview	
Project: STM32H573I-DK	
Variant: H573I	
Revision: C-02	Reference: MB1677
Size: A4	Date: 23-JUL-12
Sheet: 1 of 15	



U_STM32_microcontroller_IOs
STM32_microcontroller_IOs.SchDoc

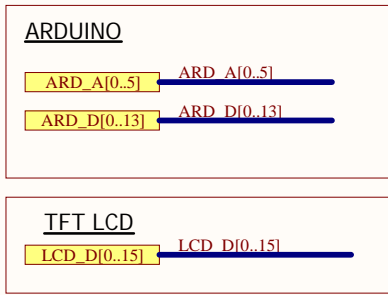
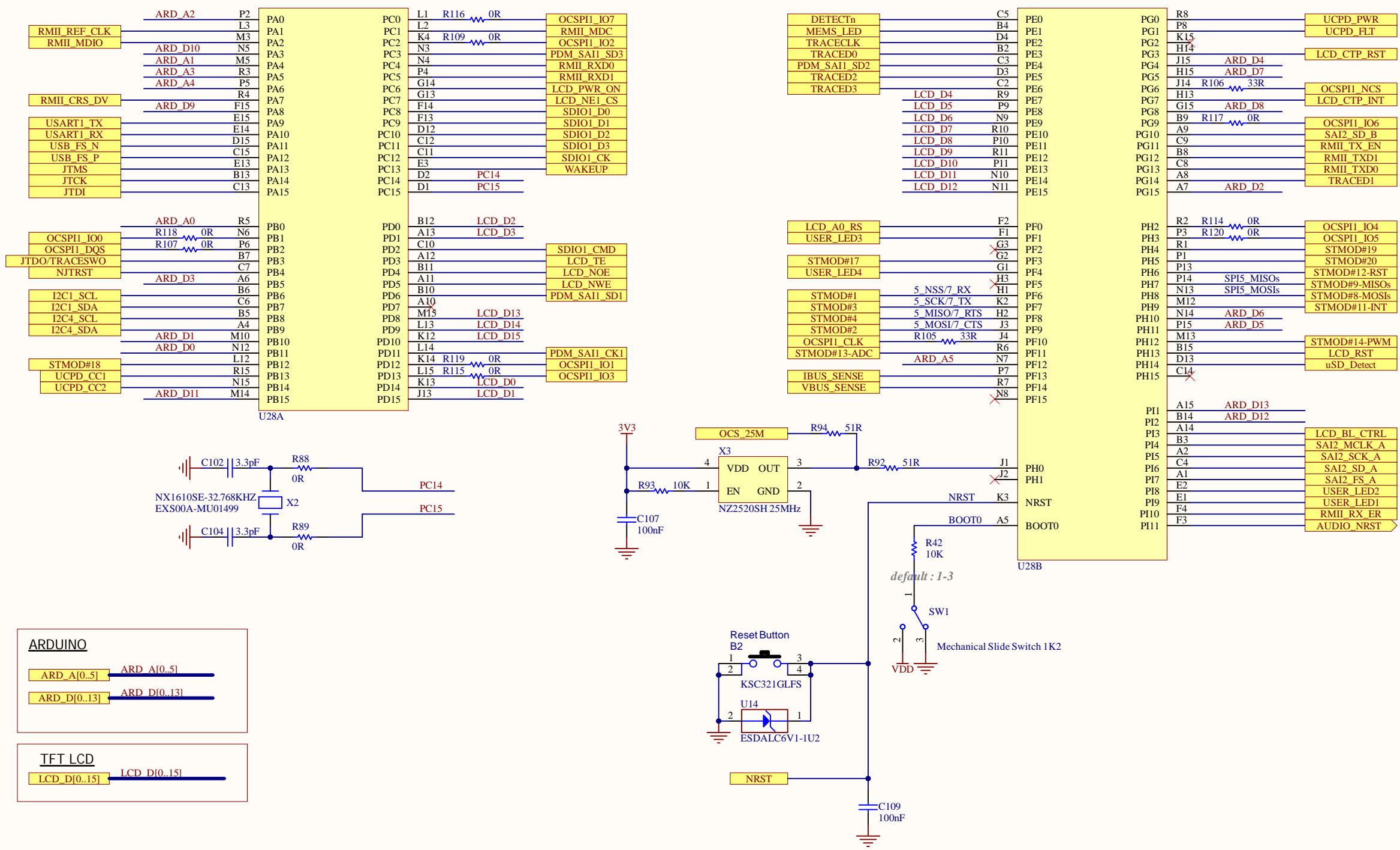


U_STM32_microcontroller_power
STM32_microcontroller_power.SchDoc



U_Board_power
Board_power.SchDoc





STM32 microcontroller power

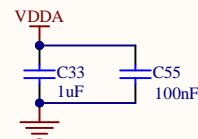
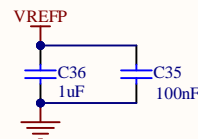
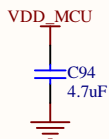
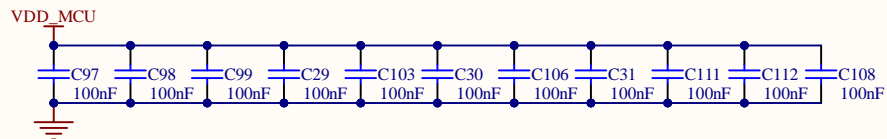
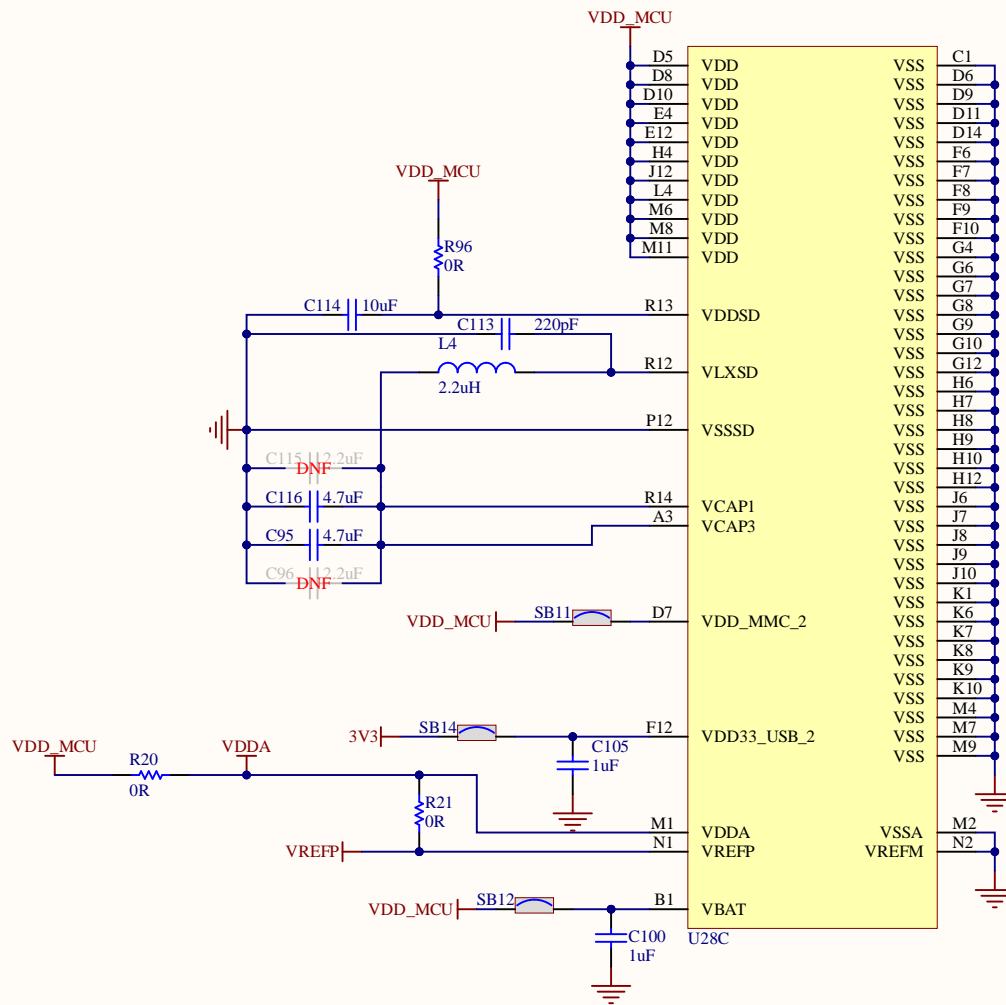


HW3
SNT-100-BK-G



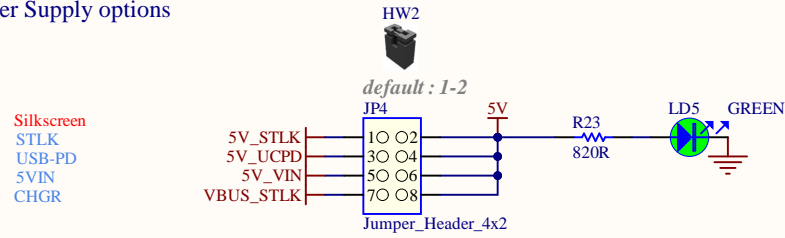
Shunt Fitted

For current measurement
Silkscreen: IDD

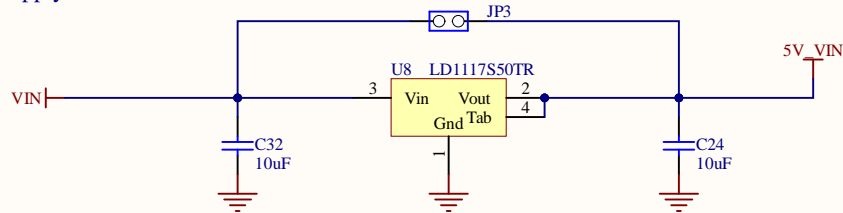


BOARD POWER

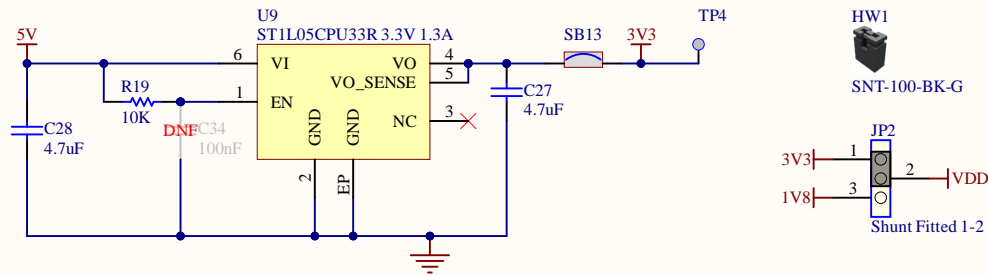
5V Power Supply options



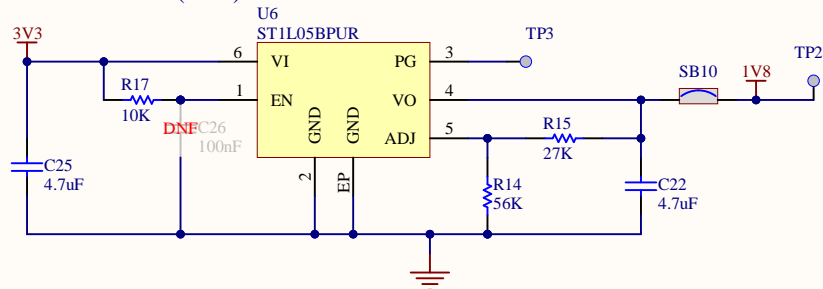
5V External Supply



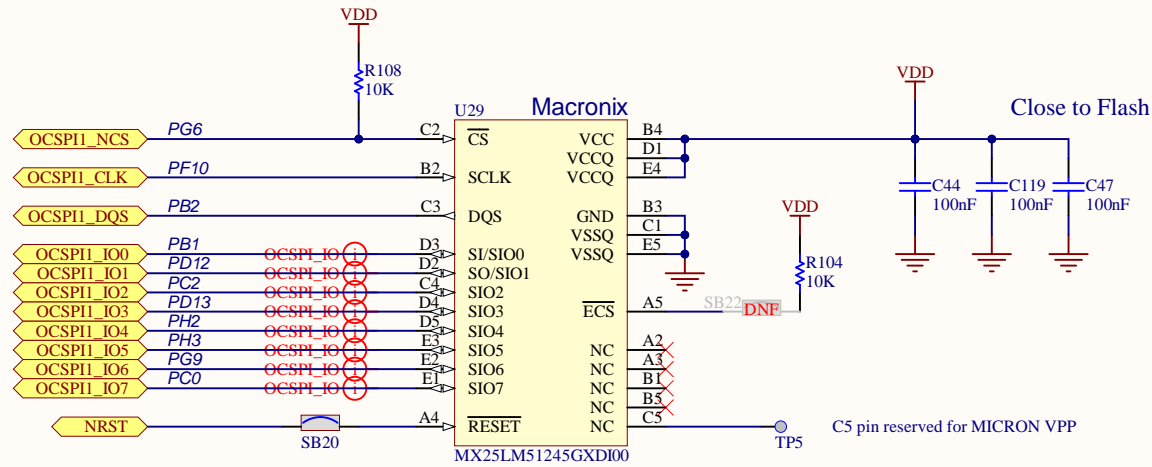
3V3 POWER SOURCE (1.3A)



1V8 POWER SOURCE (1.3A)



OctoSPI NOR Flash memory



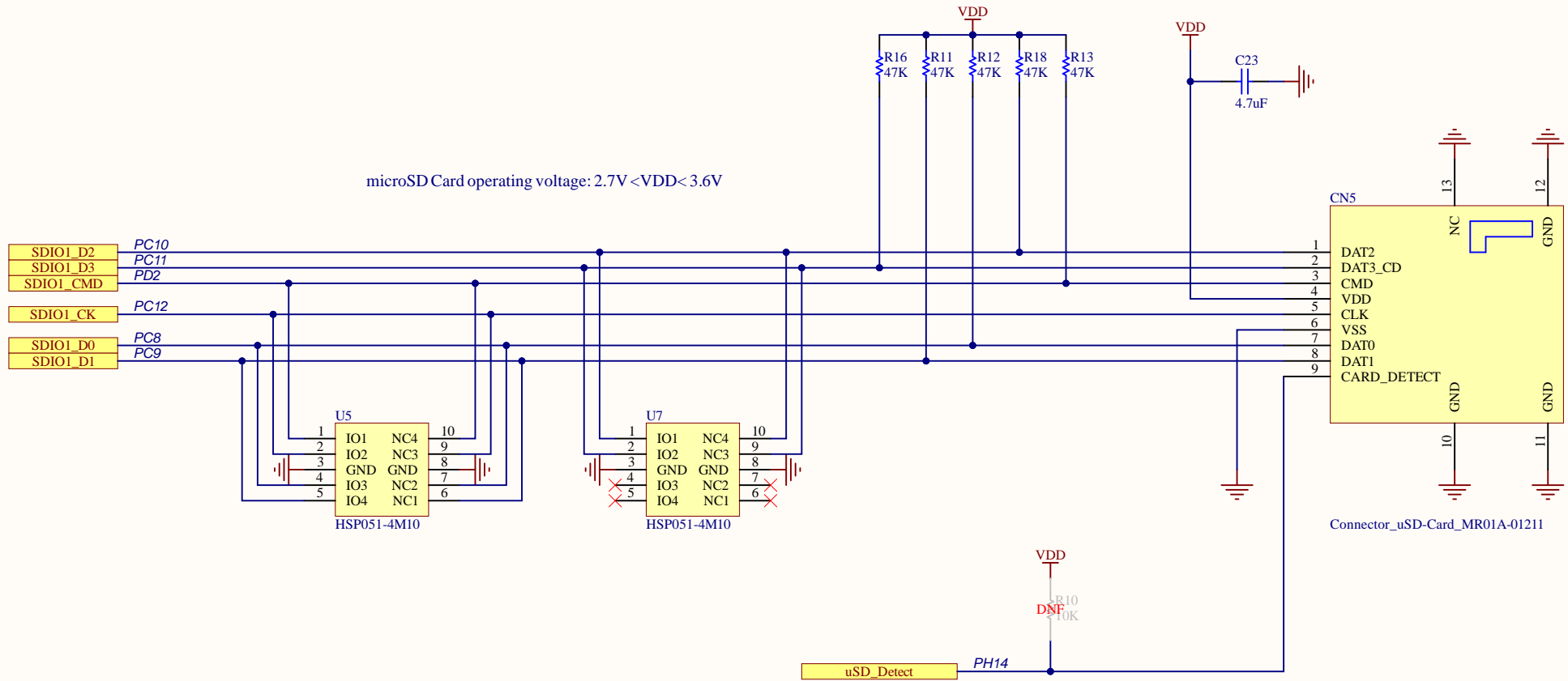
NOR Flash memory operating voltage : 2.7V<VDD<3.6V

^A OCSP11 signals should be routed in 50 ohms +/- 15% and trace length needs to be tightly controlled for the best performance. 33R resistors on OCSP11_CLK and OCSP11_NCS should be placed close to the MCU pins.

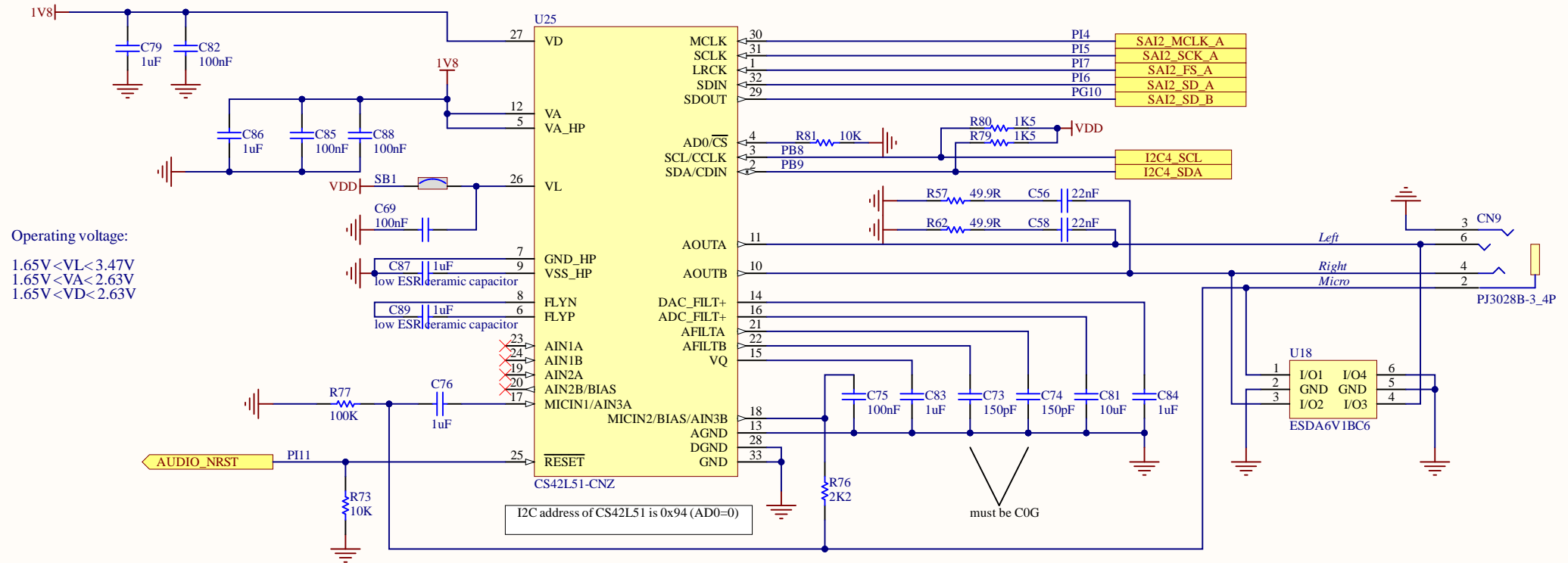


microSD CARD

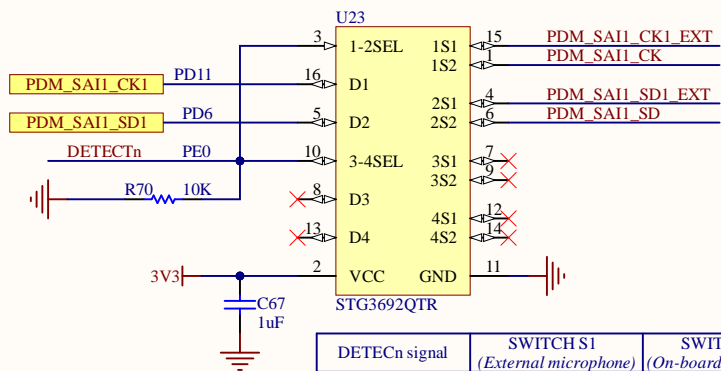
microSD Card operating voltage: $2.7V < VDD < 3.6V$



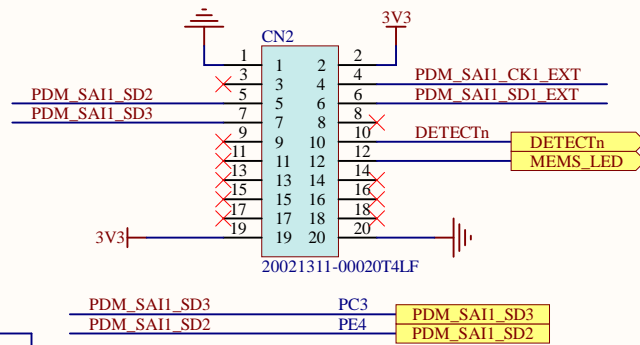
AUDIO CODEC



Extension microphone module

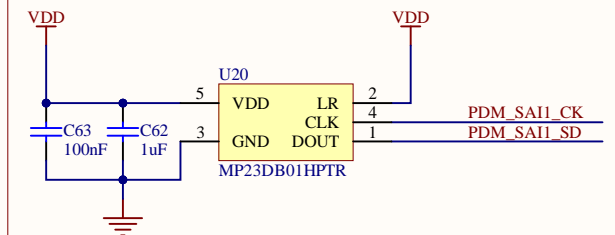


DETECn signal	SWITCH S1 (External microphone)	SWITCH S2 (On-board microphone)
HIGH	ON	OFF
LOW	OFF	ON

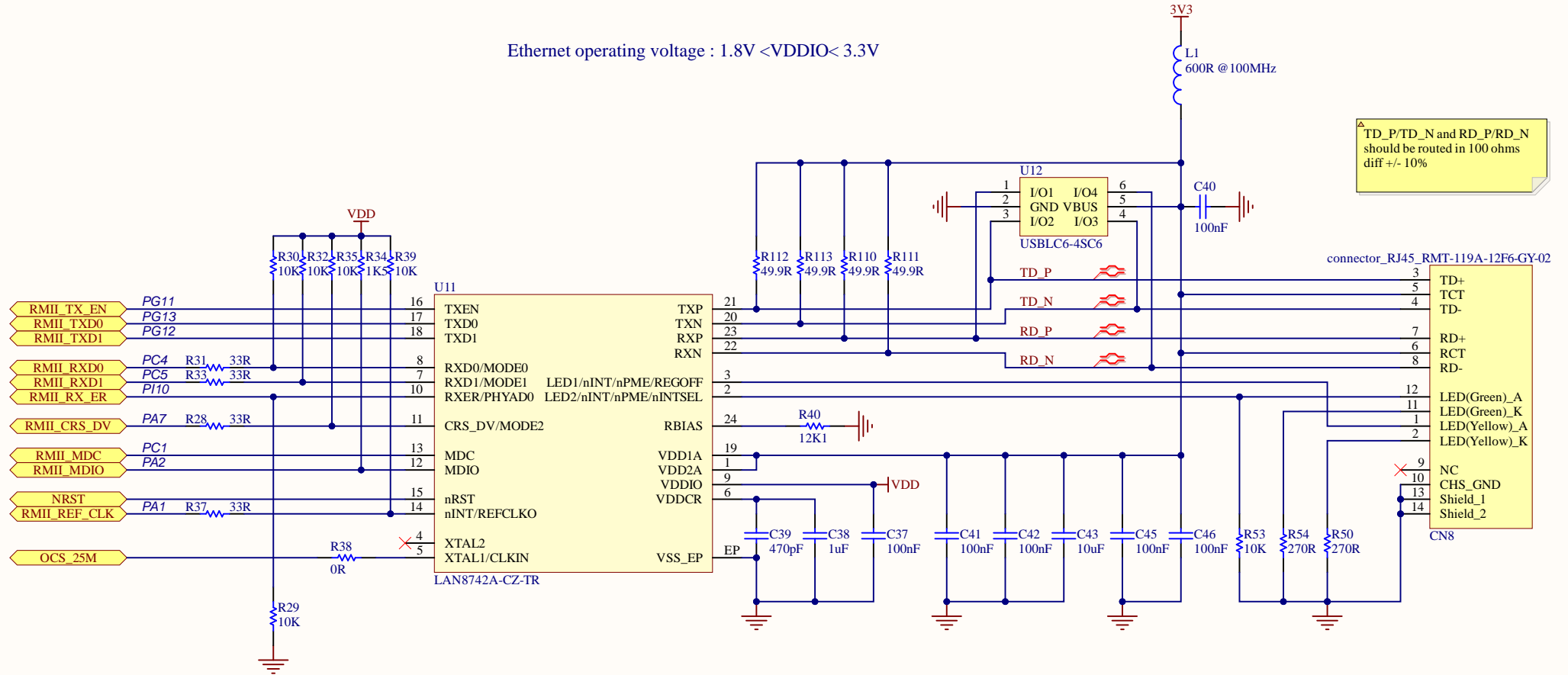


On-board MEMS microphone

Operating voltage: $1.6V < VDD < 3.6V$



Ethernet operating voltage : 1.8V <VDDIO< 3.3V

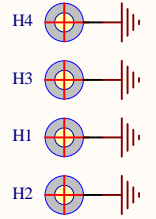
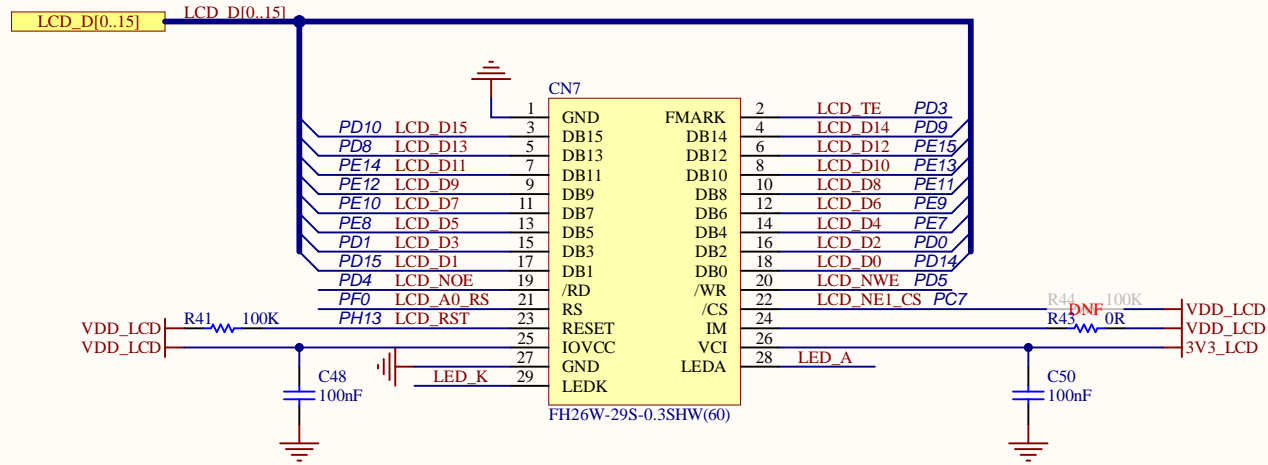
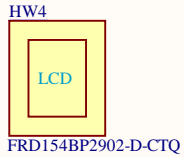


△ TD_P/TD_N and RD_P/RD_N should be routed in 100 ohms diff +/- 10%



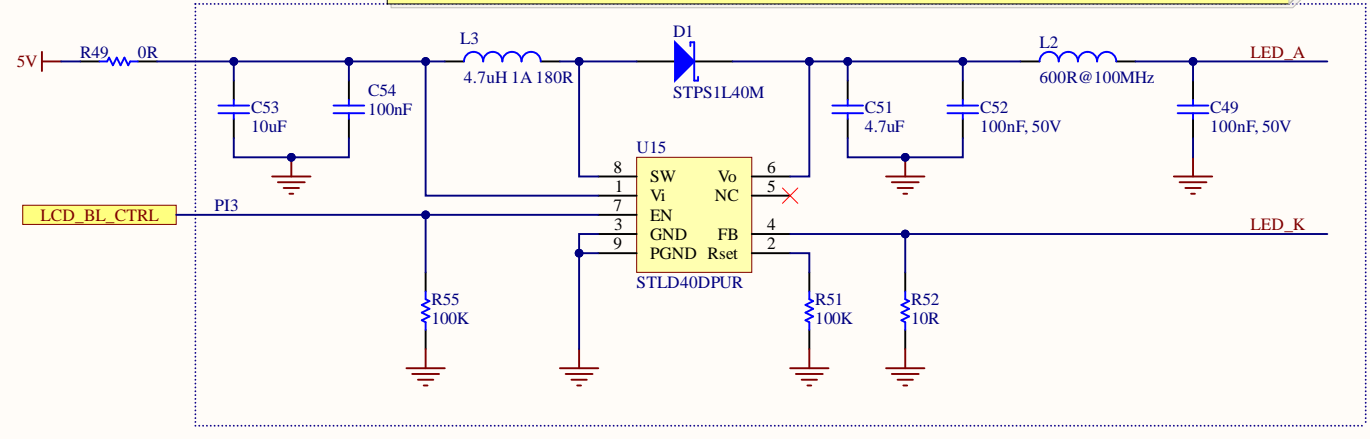
TFT LCD

LCD_TE	LCD_TE
LCD_NOE	LCD_NOE
LCD_A0_RS	LCD_A0_RS
LCD_RST	LCD_RST
LCD_NWE	LCD_NWE
LCD_NE1_CS	LCD_NE1_CS

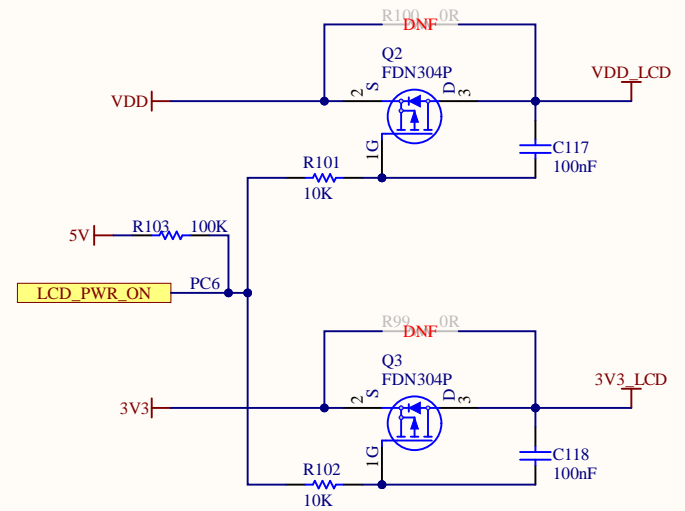


BACKLIGHT DRIVER

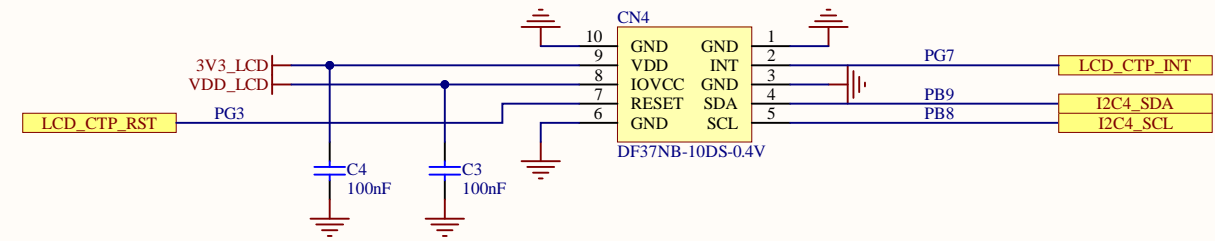
LAYOUT: parts close to STLD40D and grounded in same area with Backlight GND as local ground plane.

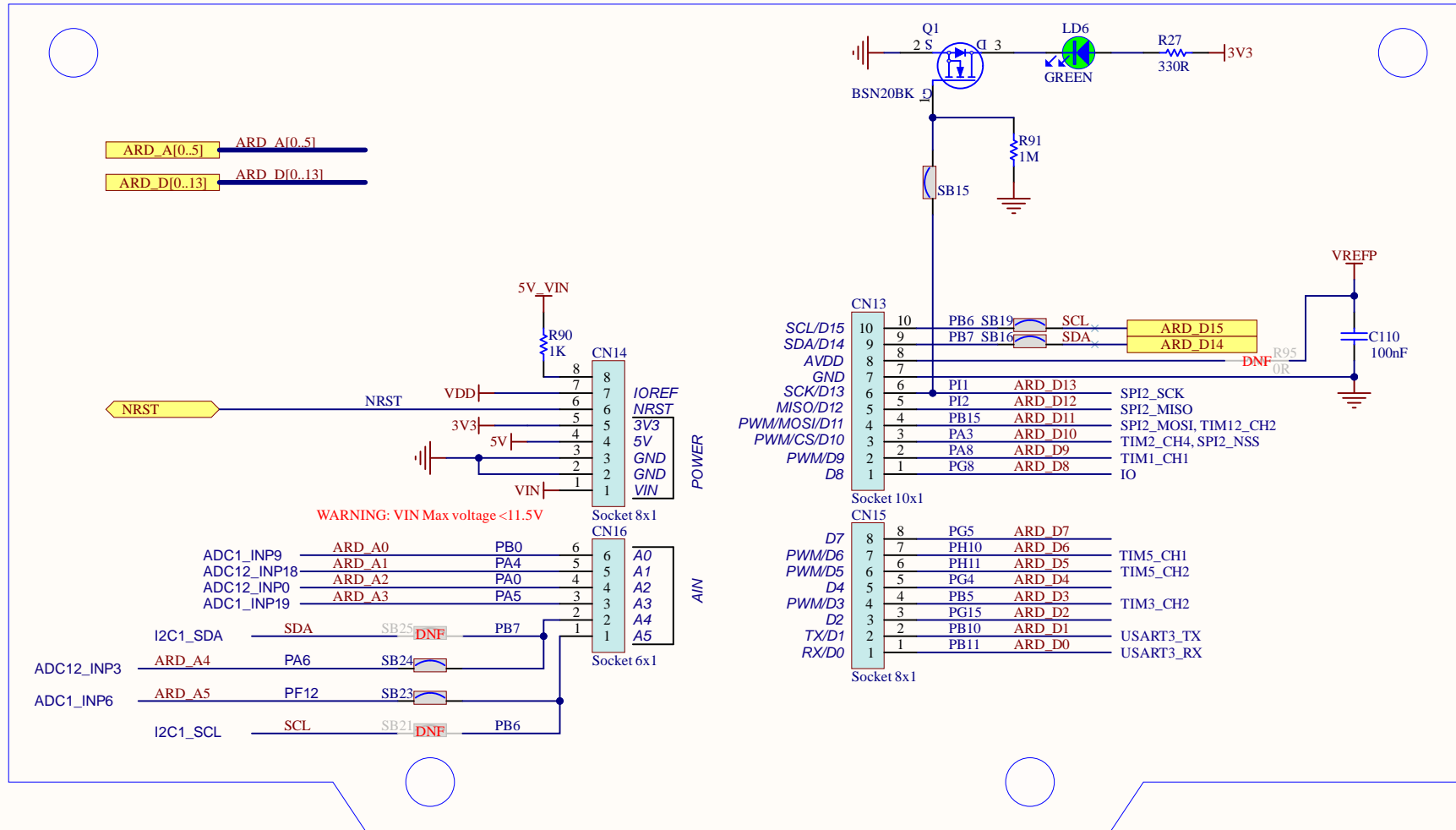


LCD PWR ENABLE



TOUCH PANEL CONNECTOR



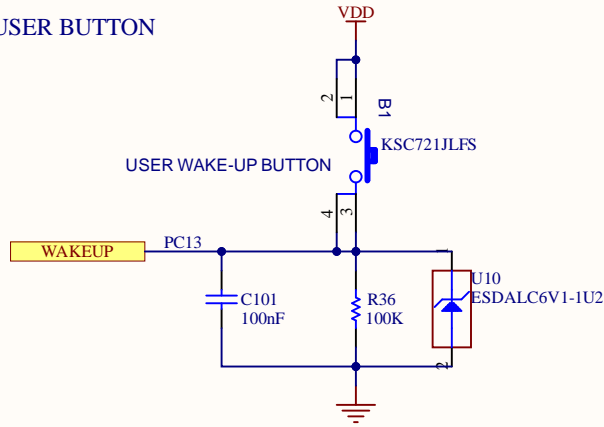


WARNING: VIN Max voltage < 11.5V



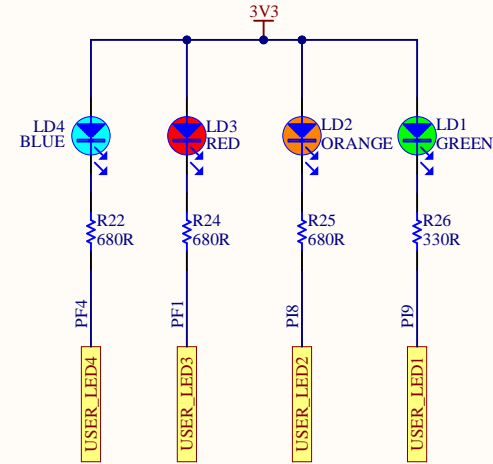
PERIPHERALS

USER BUTTON

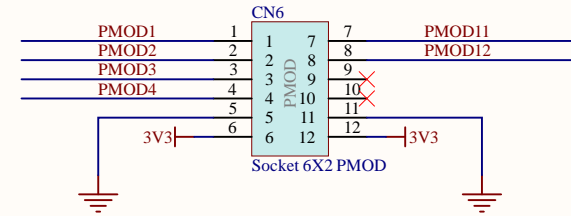


100nF should be placed close to the MCU.
10pf and 1K should be placed close to the button.

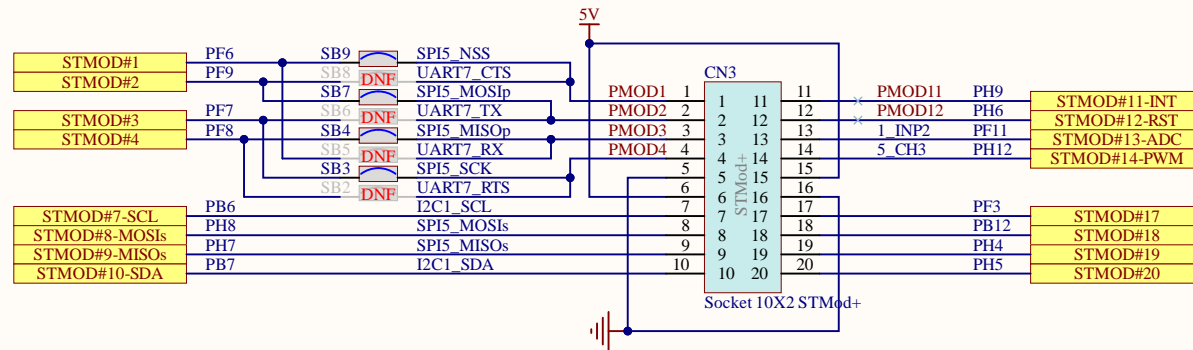
USER LED



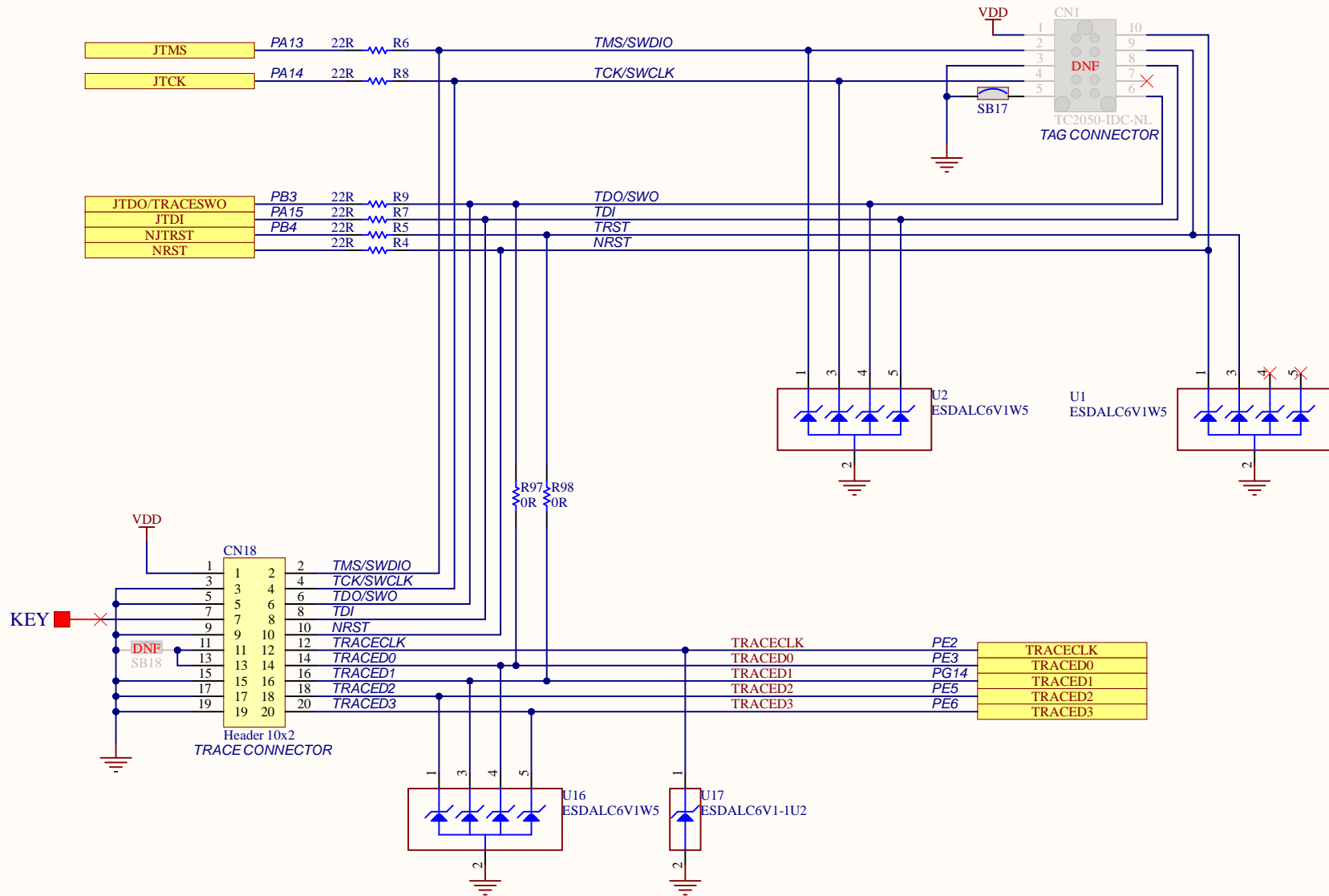
PMOD



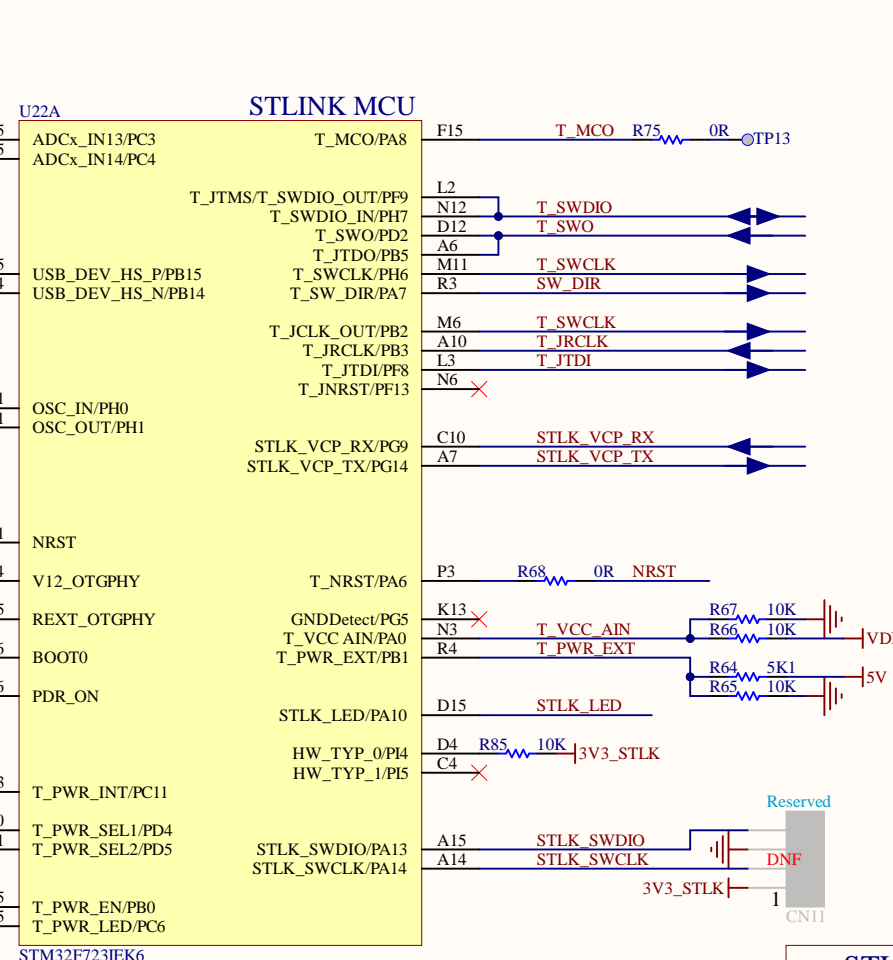
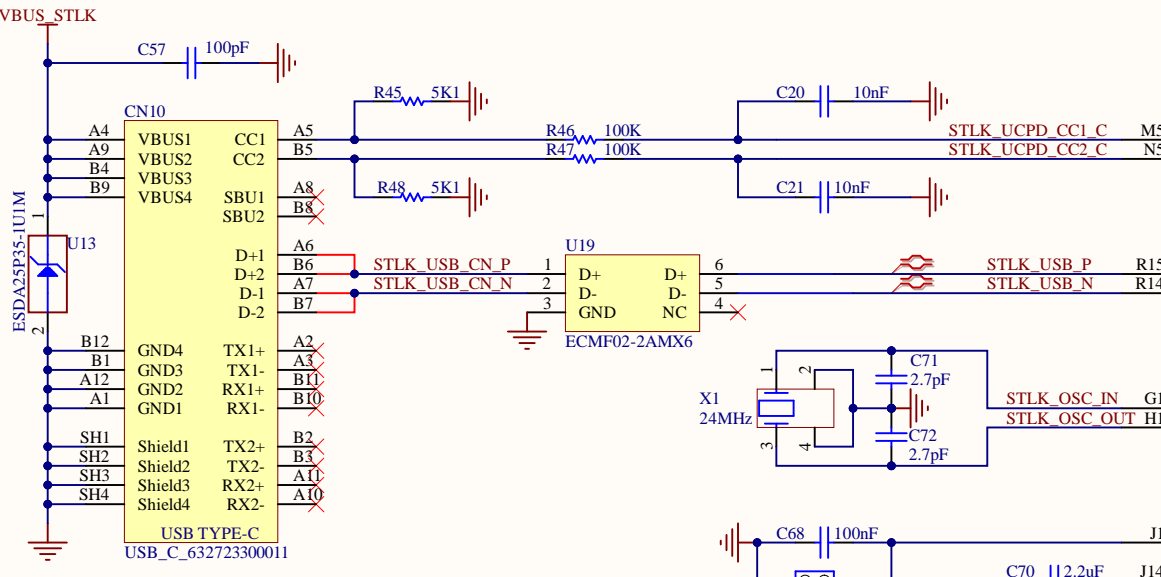
STMOD+



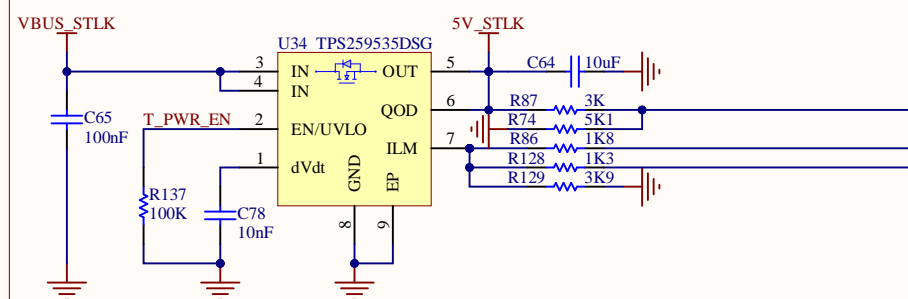
JTAG & TRACE



ST-LINK USB CONNECTOR



5V_STLK OVERVOLTAGE AND OVERCURRENT PROTECTION

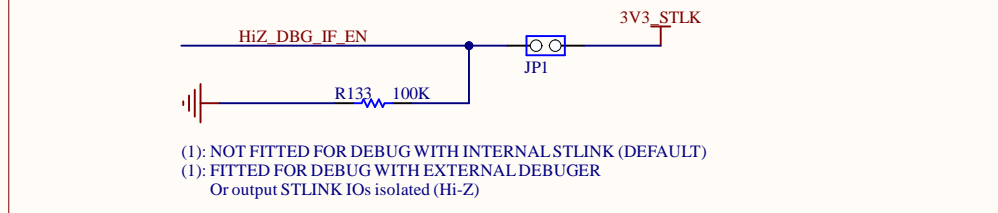


5V_STLK OVERCURRENT PROTECTION MANAGEMENT

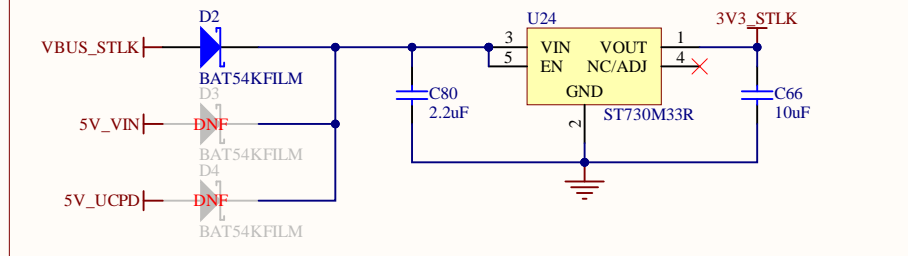
	T_PWR_SEL2/PD5	T_PWR_SEL1/PD4
PowerDefault.SNK (current limit: 550mA)	Hi-Z	Hi-Z
Power1.5.SNK (current limit: 1.66A)	Hi-Z	0
Power3.0.SNK (current limit: 3.2A)	0	0

Hi-Z = IO set in high impedance

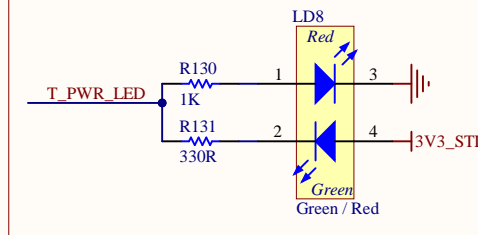
EXTERNAL DEBUGGER SELECTION



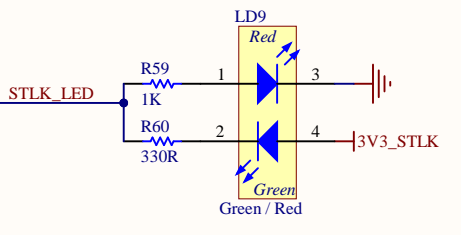
ST-LINK POWER (3V3/300mA)



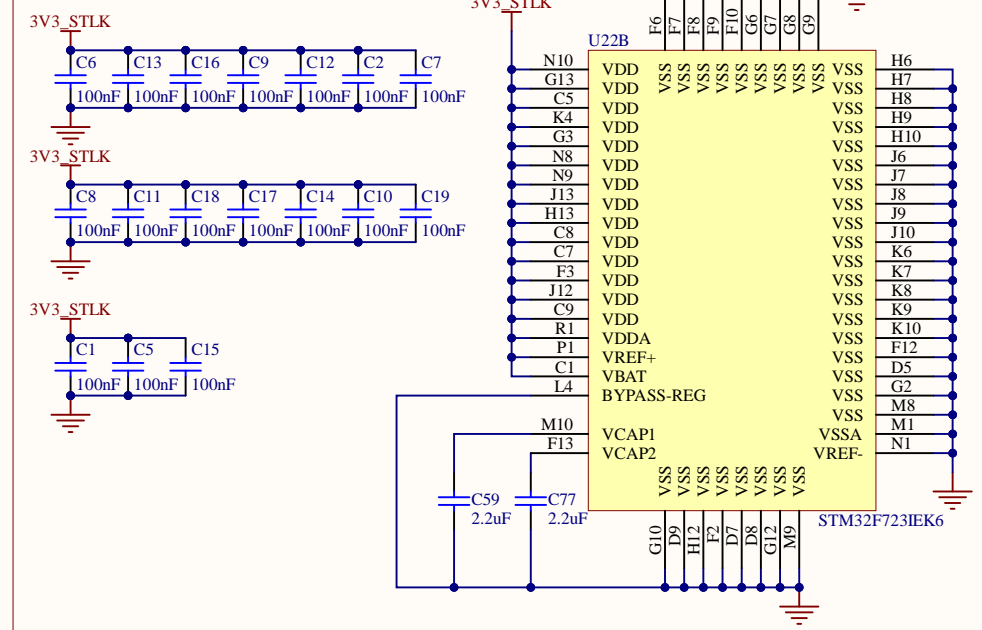
LED POWER STATUS



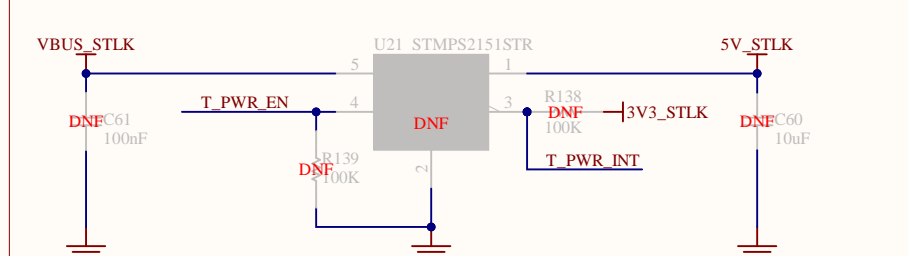
LED STLINK



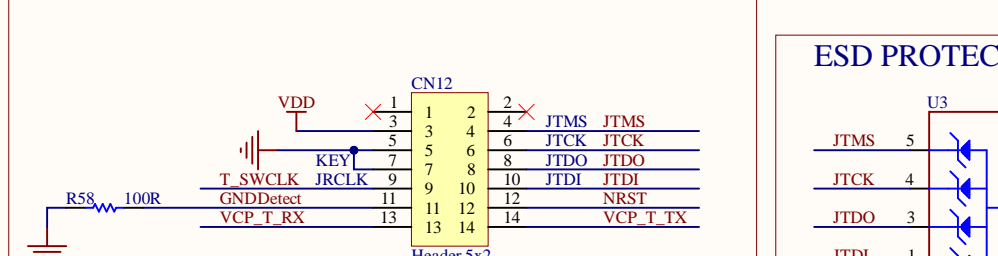
STLINK POWER



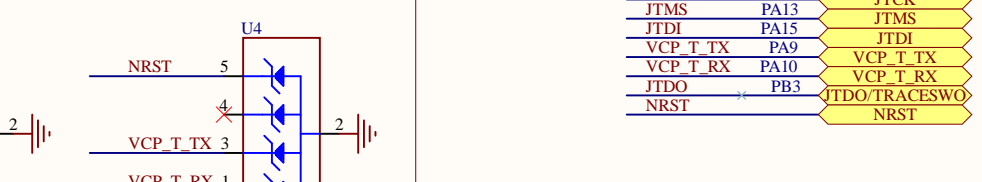
5V ST-LINK PROTECTION for Legacy



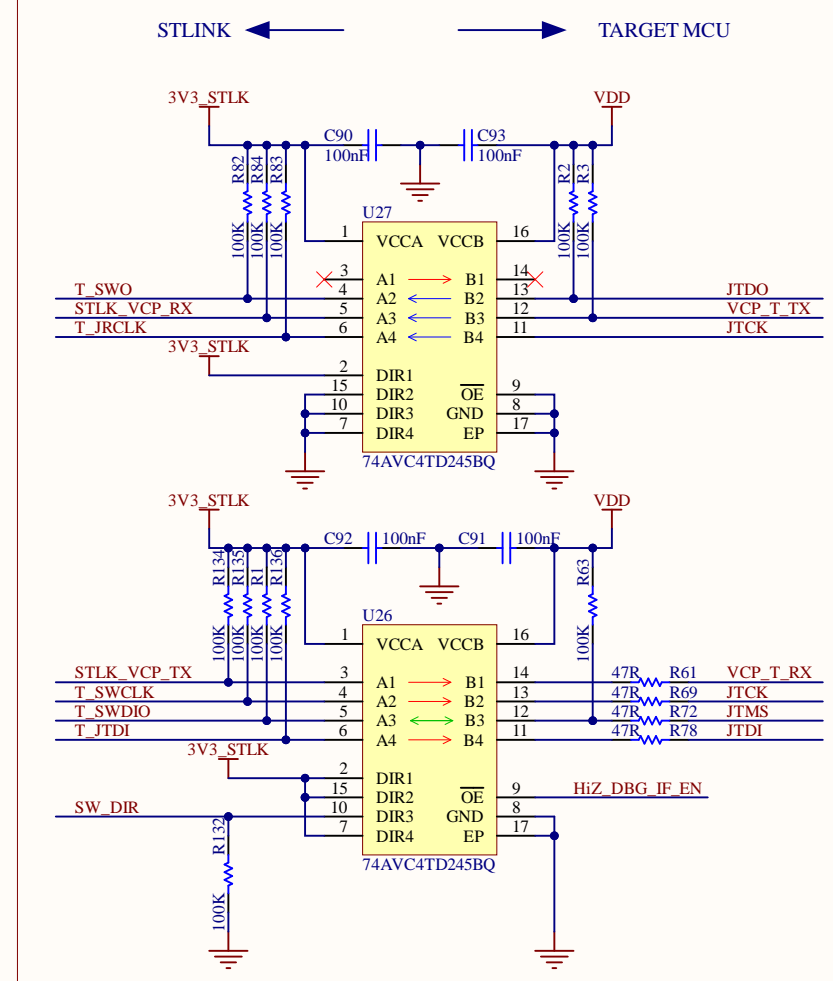
STDC14 RECEIVER

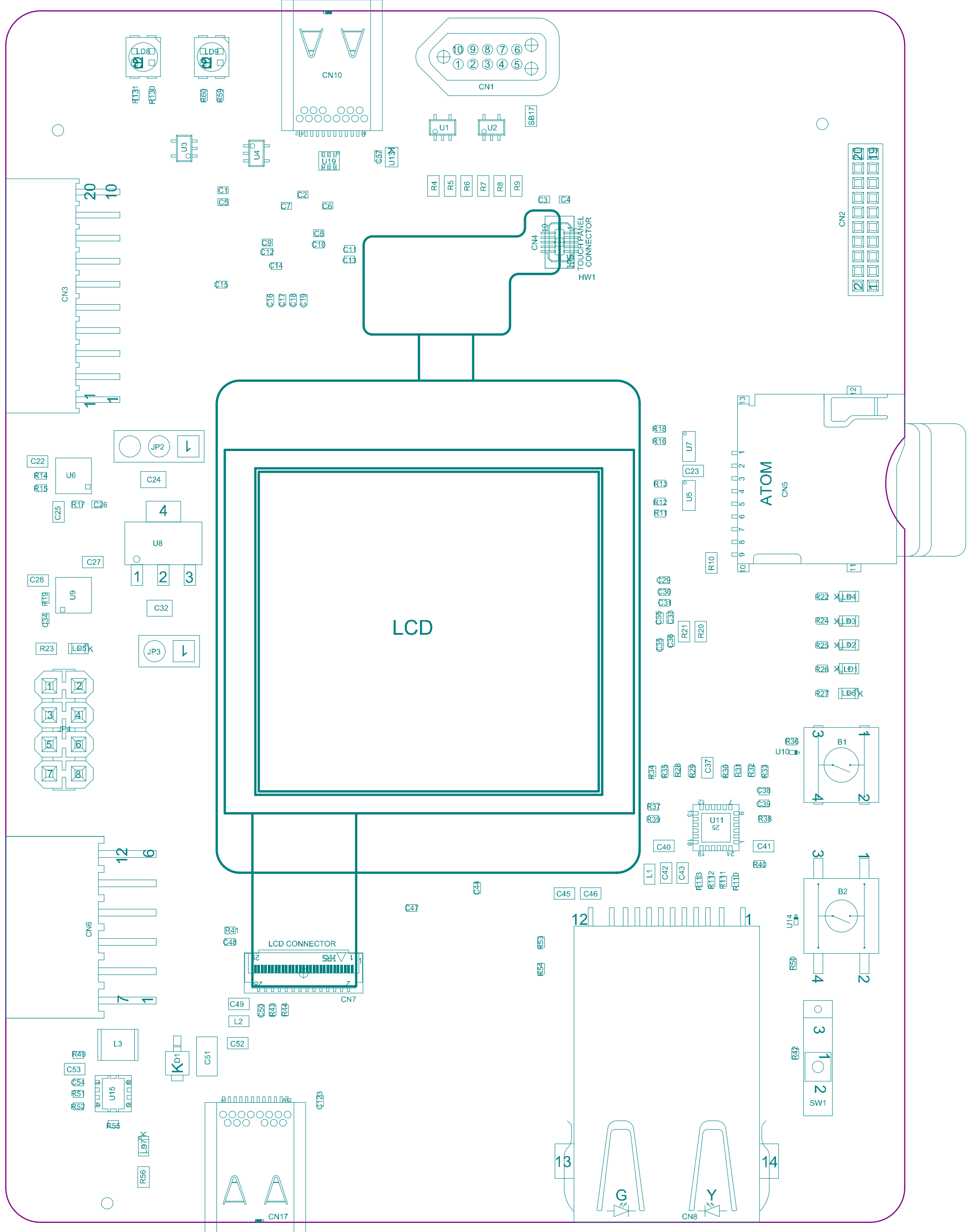


ESD PROTECTIONS



VOLTAGE LEVEL SHIFTER





Project: STM32H573I-DK

Layer: M14-Top Assembly

Variant: H573I

Date: 23-JUL-12

Gerber: .GM14

MB1677

Rev: C



