

B-U585AI-IOT02A

MB1551

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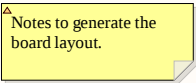
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Legend

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

Text to be added to silkscreen.

Warning text.



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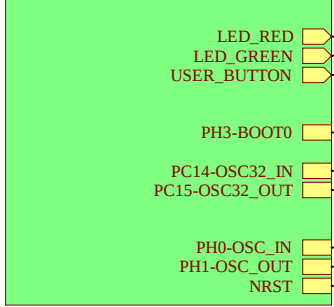
U_MB1551_TOP
MB1551_TOP.SchDoc



Title: Project overview		
Project: B-U585AI-IOT02A		
Variant: U585AI		
Revision: C-02		Reference: MB1551
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U_MCU_CLOCK_&_RESET
MCU_CLOCK_&_RESET.SchDoc



U_ST_LINK_V3E
ST_LINK_V3E.SchDoc



U_OCTOSPI
OCTOSPI.SchDoc



U_ARDUINO
ARDUINO.SchDoc



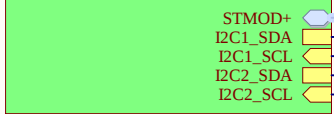
U_Camera
Camera.SchDoc



U_MEMs
MEMs.SchDoc



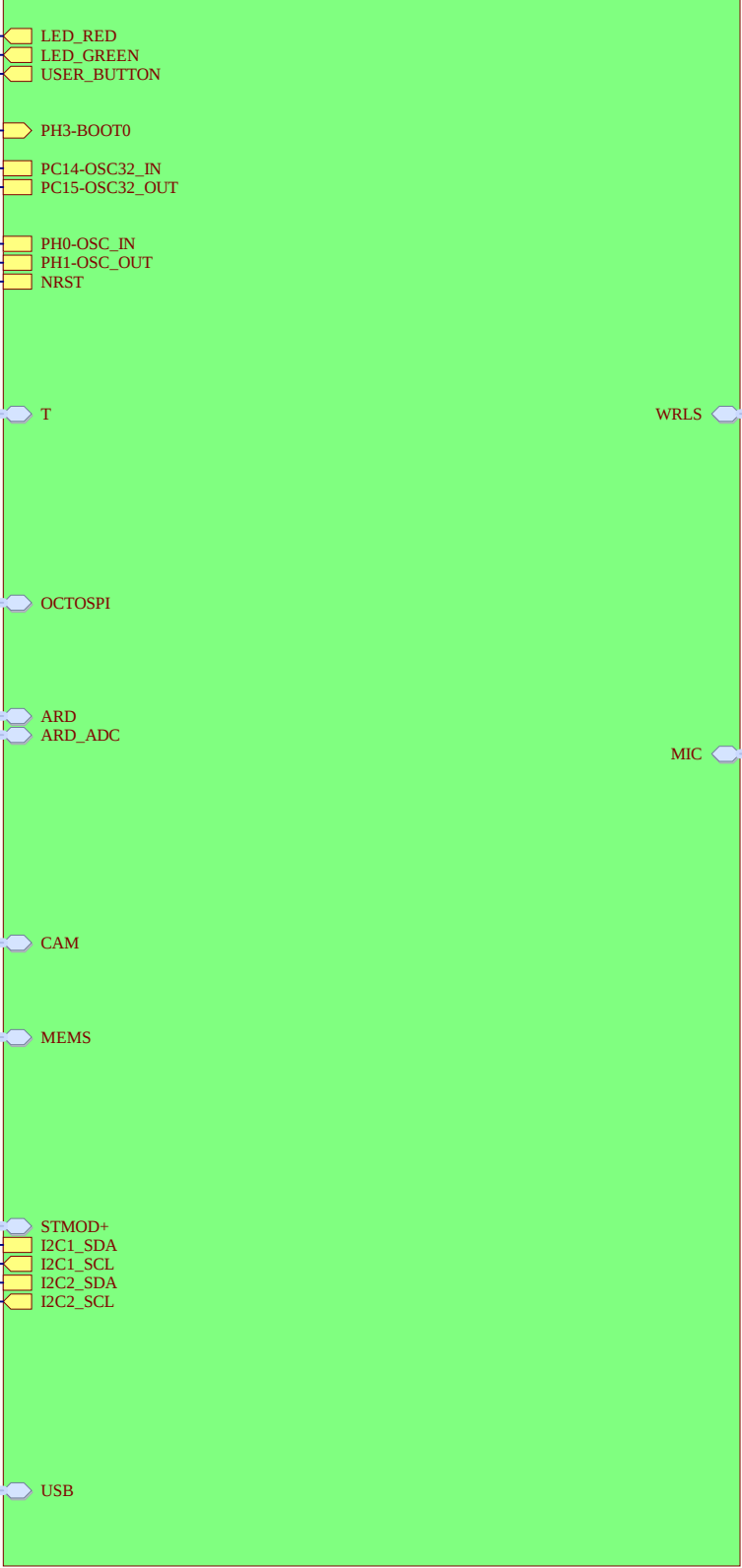
U_STMod+
STMod+.SchDoc



U_USB_TYPEC
USB_TYPEC.SchDoc



U_MCU_IO
MCU_IO.SchDoc



U_MCU_PWR
MCU_PWR.SchDoc



U_WIFI&BT
WIFI&BT.SchDoc



U_AUDIO
AUDIO.SchDoc

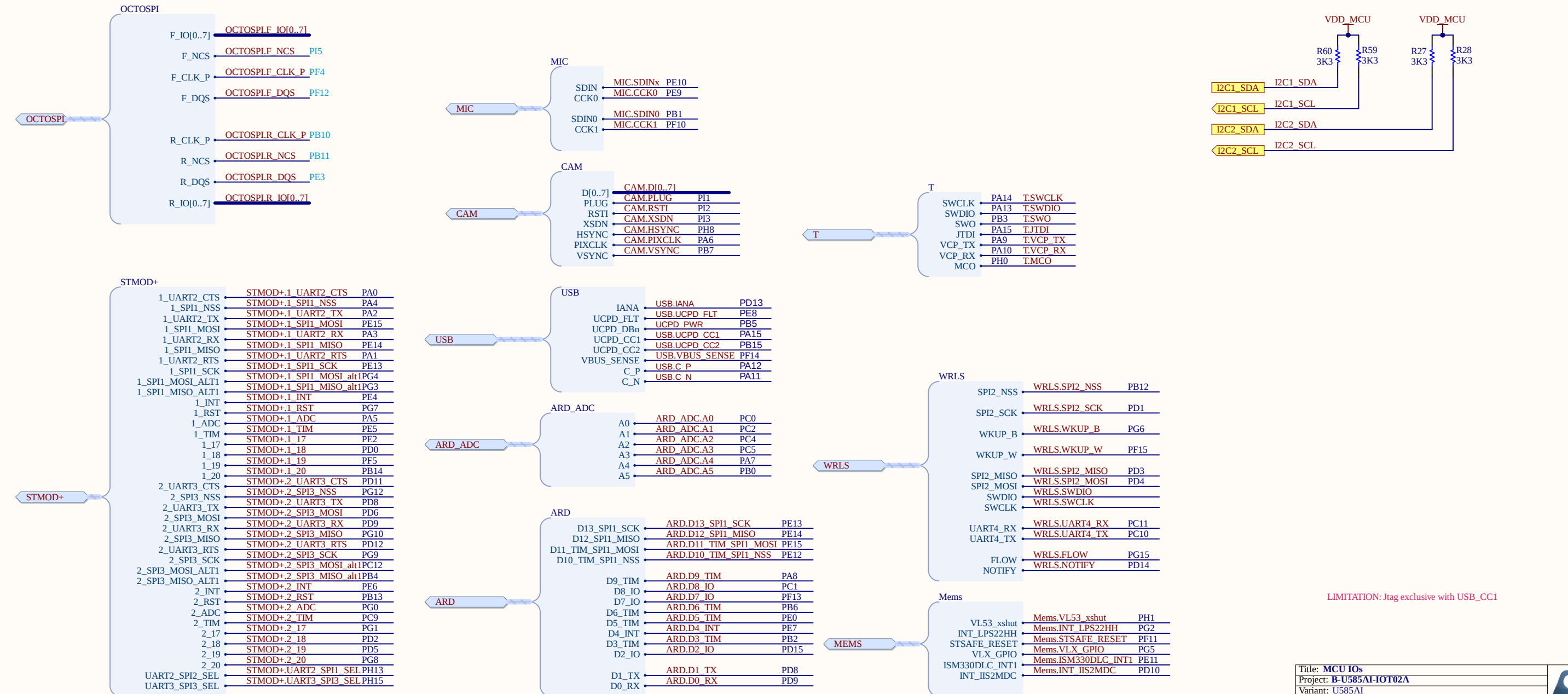
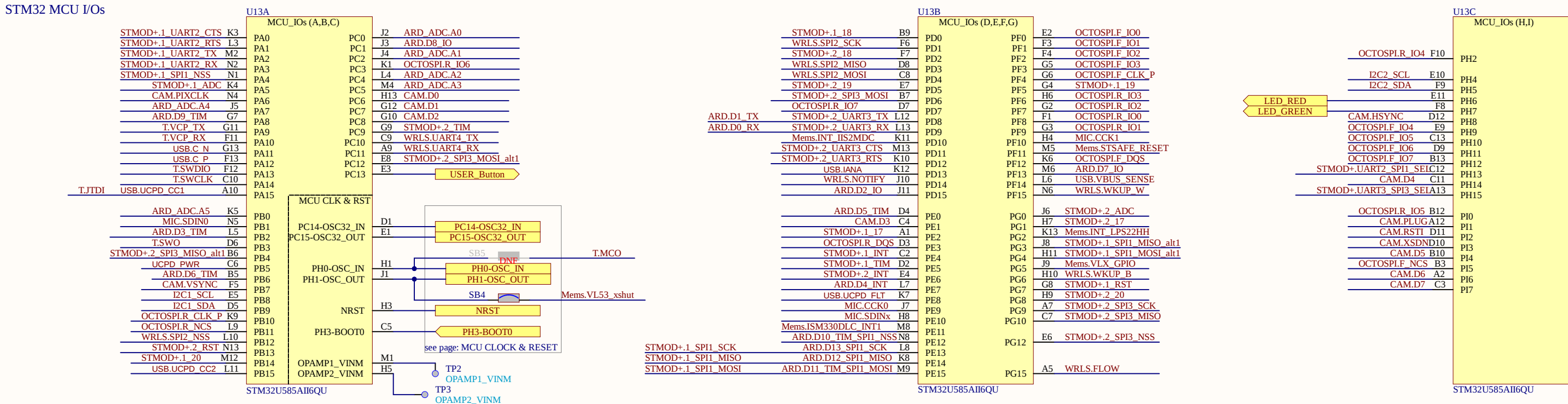


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Mechanical_Parts.SchDoc

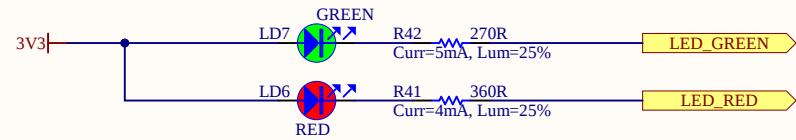


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BOARD_PWR.SchDoc

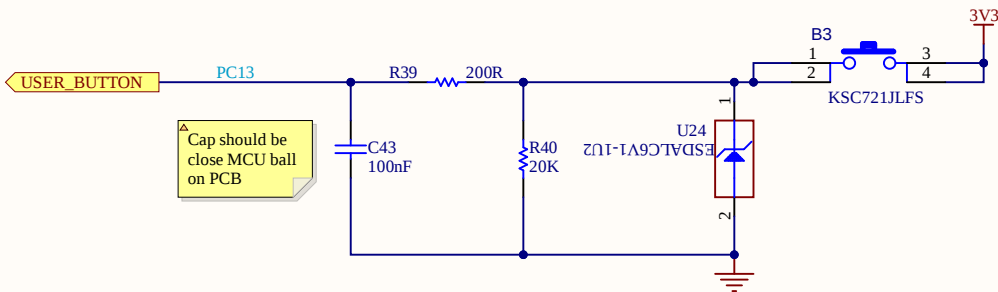
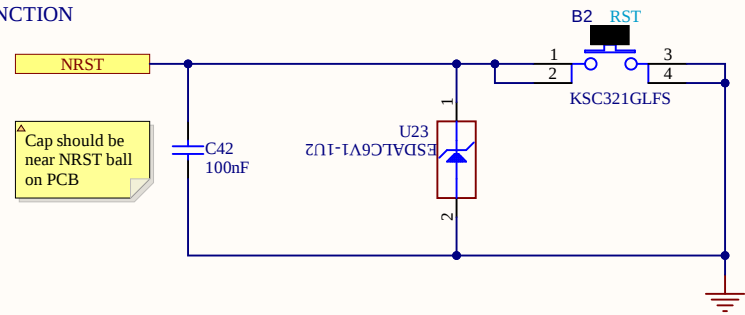




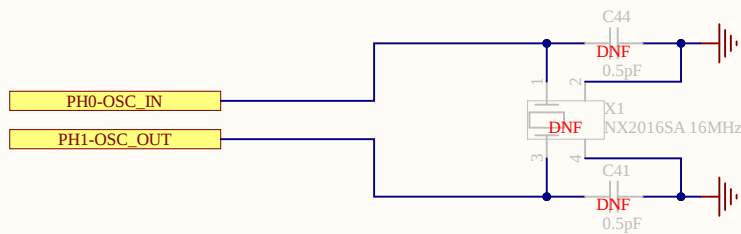
USER LEDs



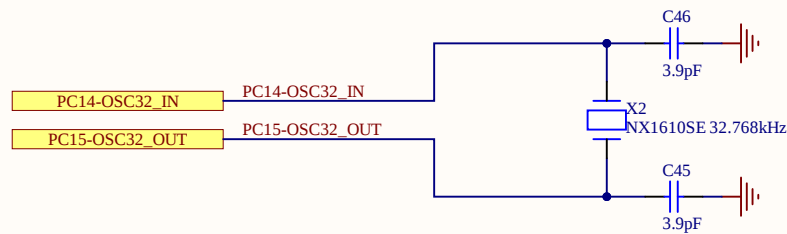
RESET FUNCTION



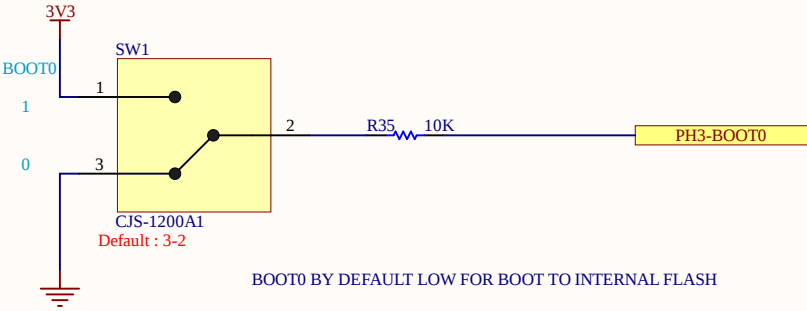
EXTERNAL HSE CLK



EXTERNAL LSE CLK

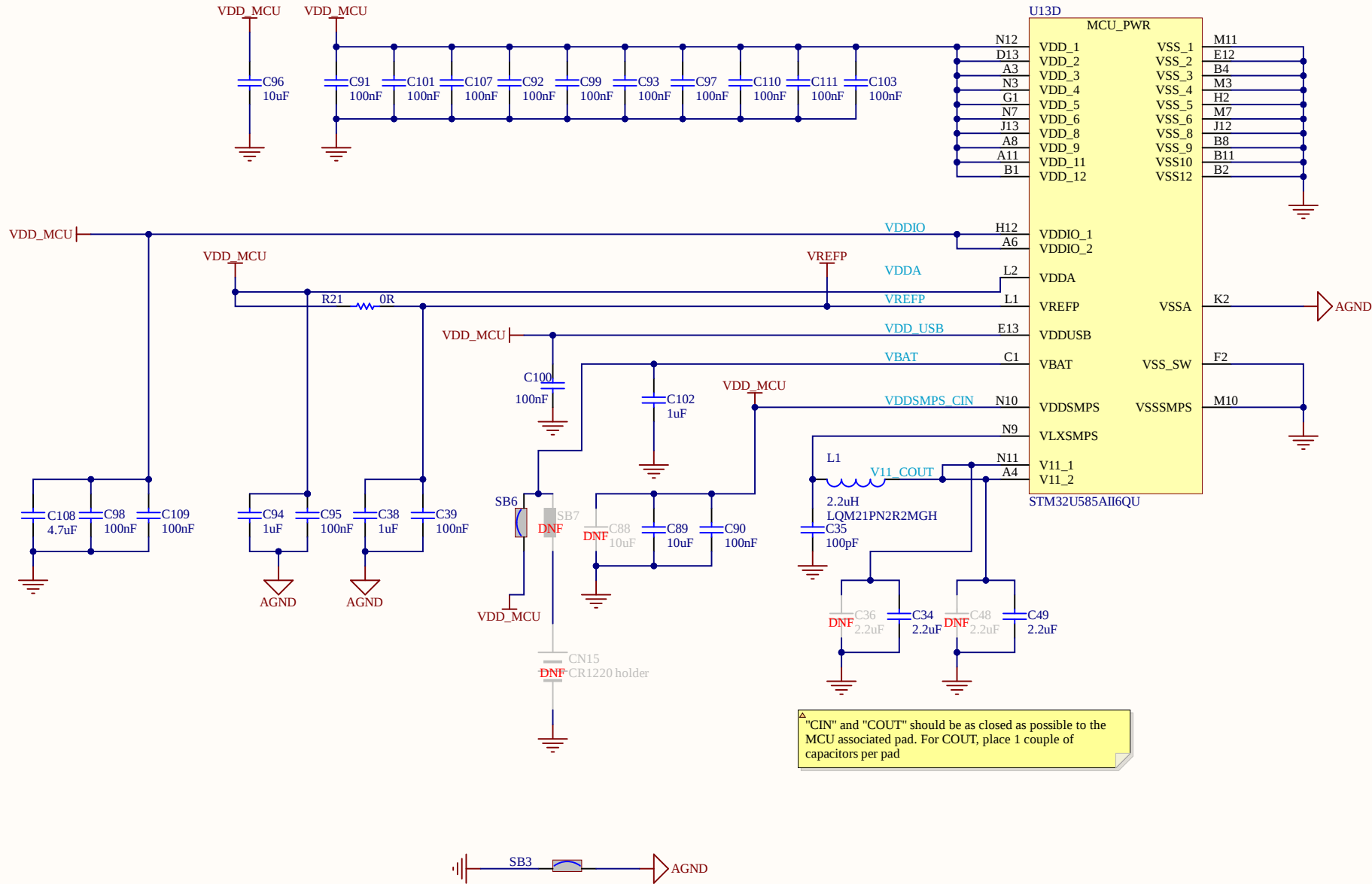


PH3_BOOT0

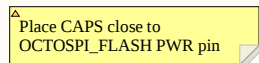


MCU PWR SUPPLIES

MCU DECAPS
Ceramic capacitor (Low ESR, ESR<1ohm)

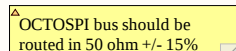


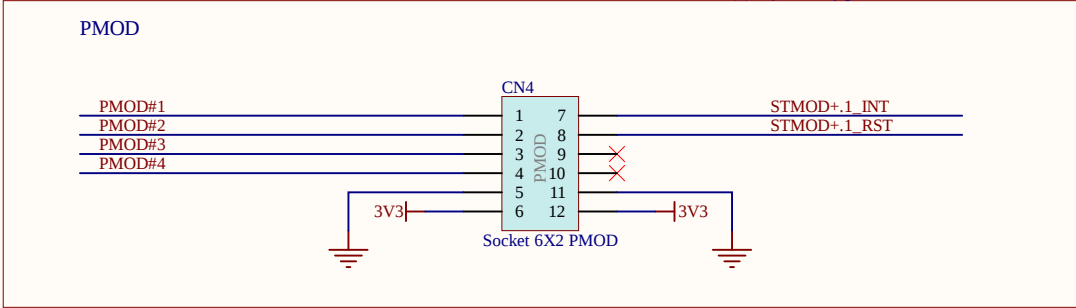
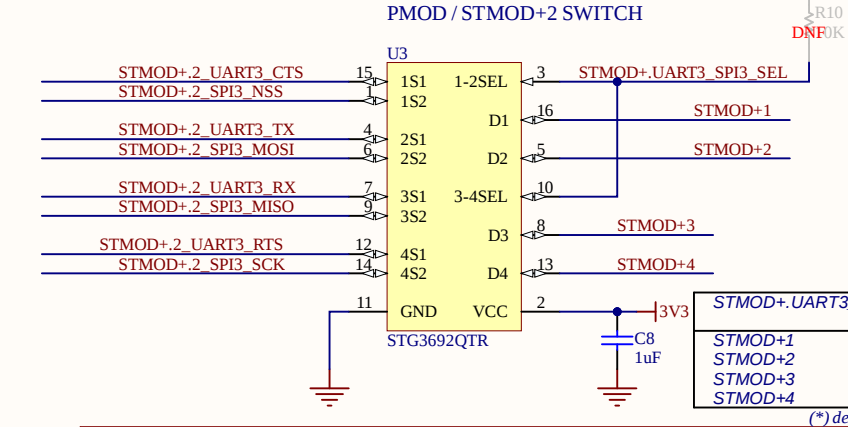
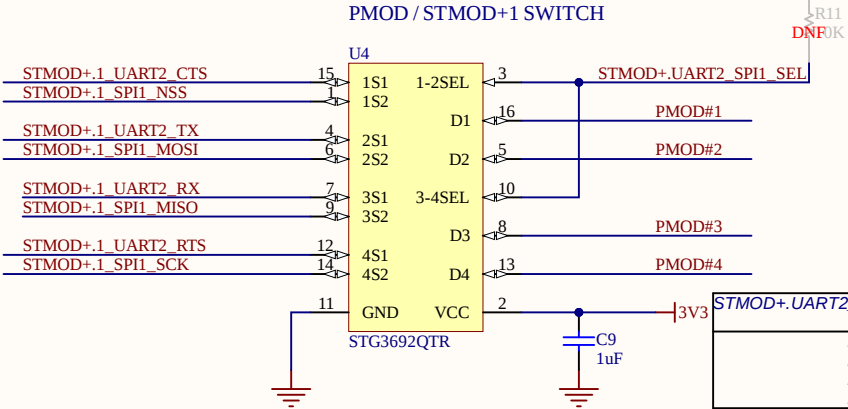
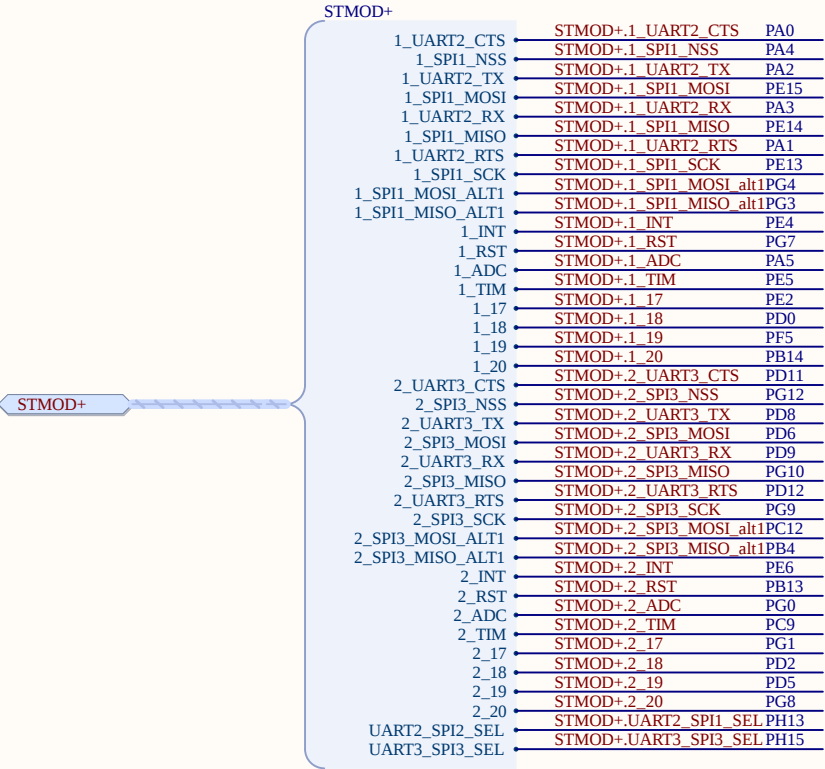
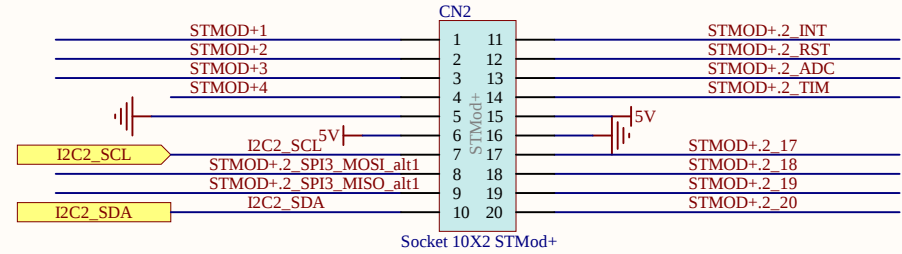
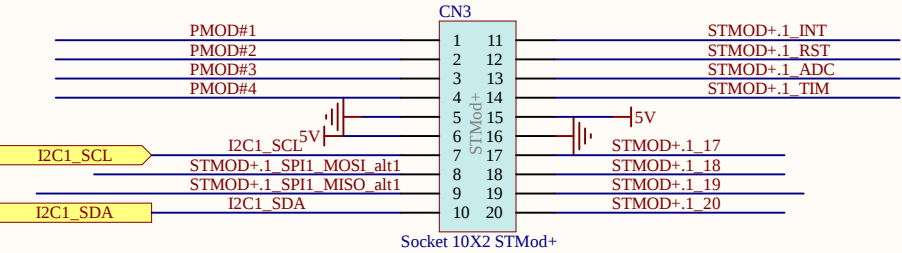
Operating range: $2.7 < V_{CC} < 3.6V$

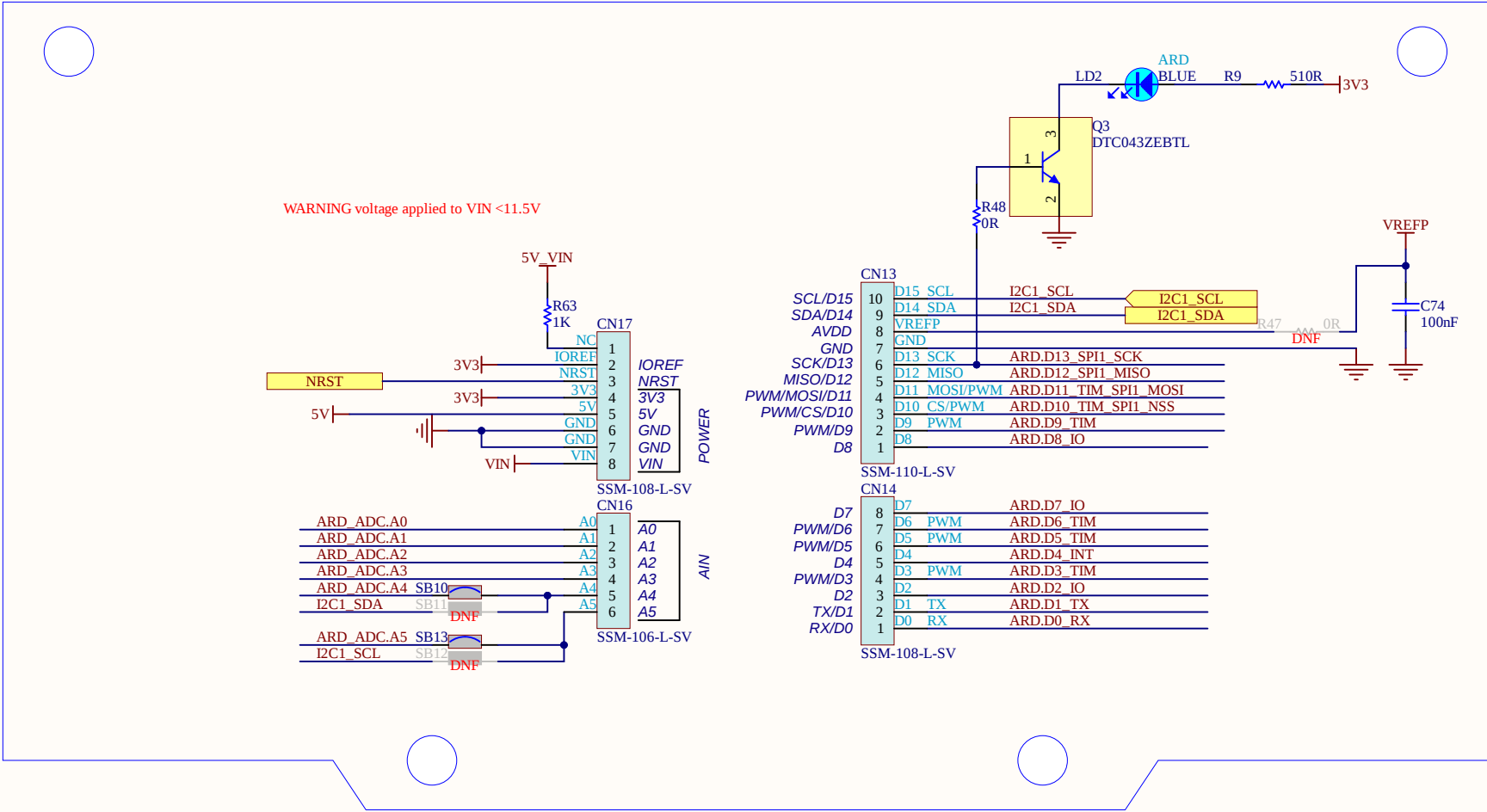
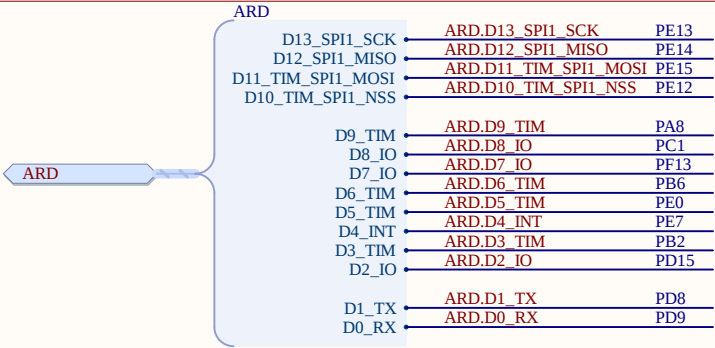
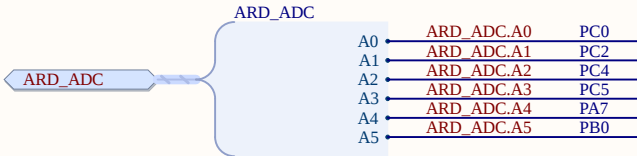


add the footprint to support APMemory QSPI in package SO8

**Operating range: $2.7 < V_{DD} < 3.6V$
 $2.7 < V_{DDQ} < 3.6V$**

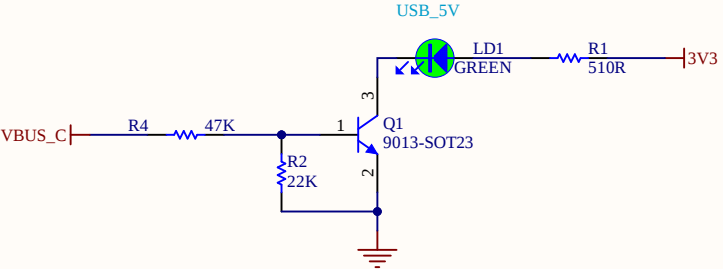
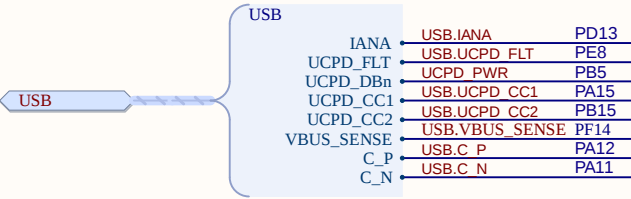
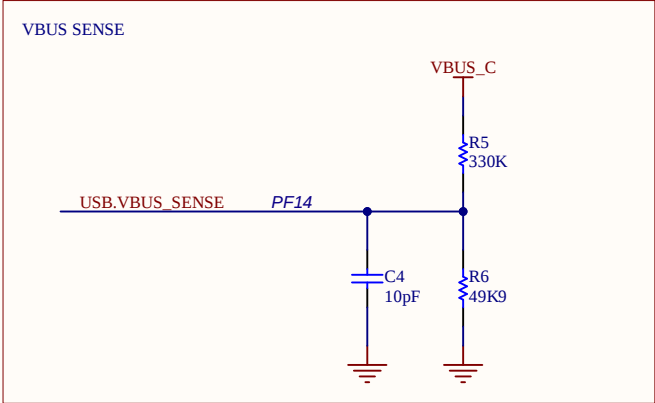
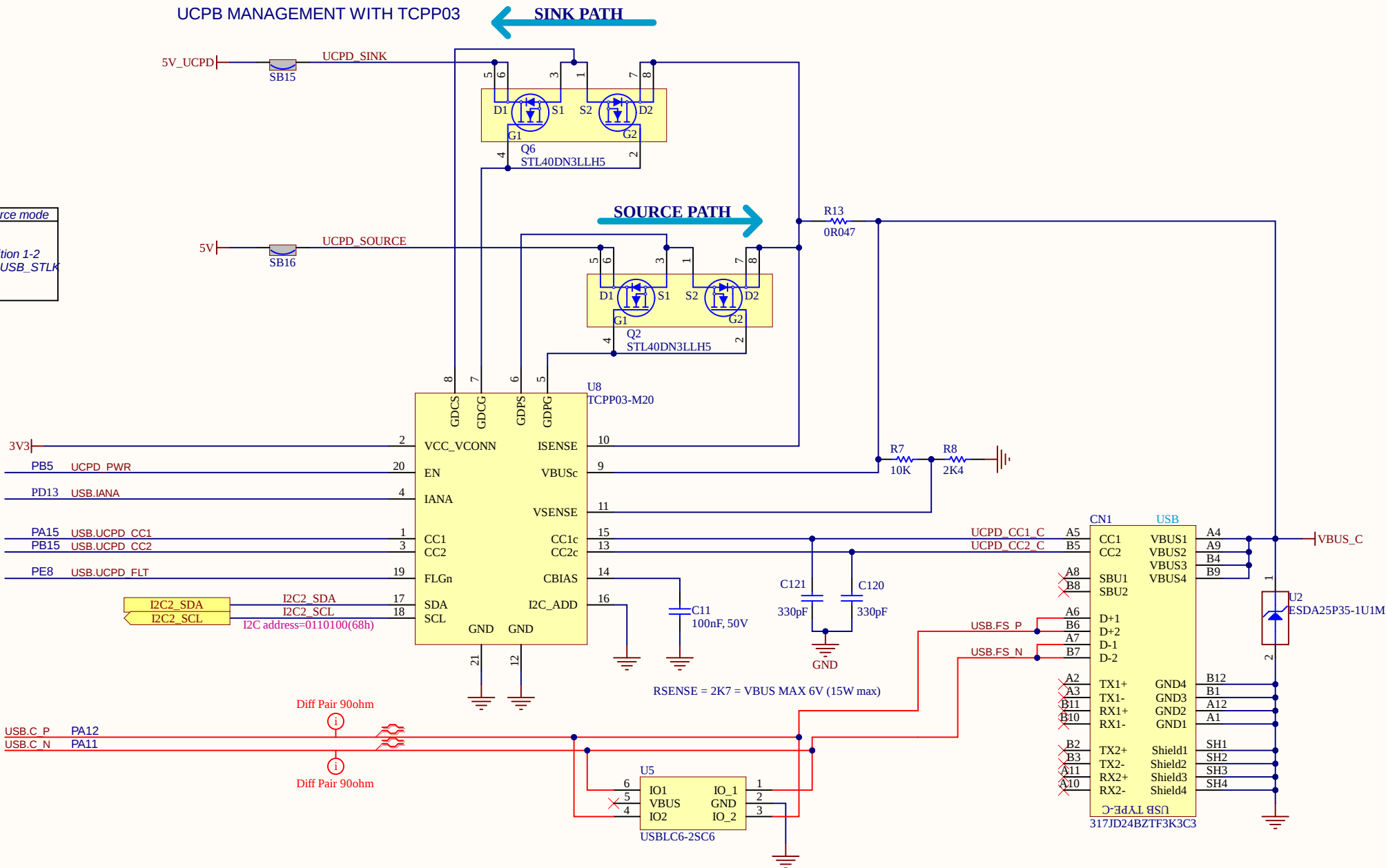






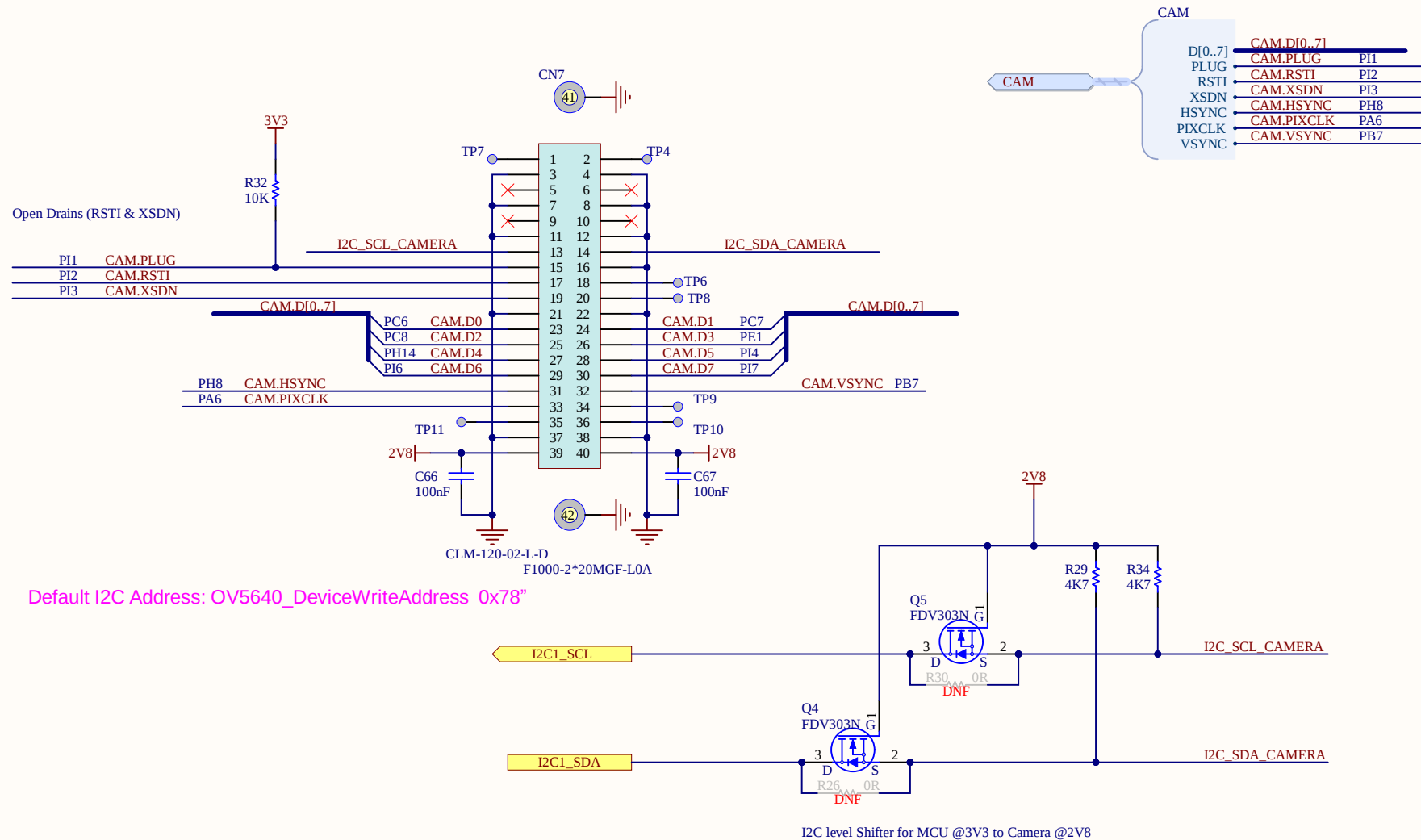
SINK and SOURCE

	SINK Mode	Source mode
jumper JP4 configuration see "Board Power " Page	position 5-6 5V_UCPD	position 1-2 5V_USB_STLK



CAMERA MODULE CONNECTOR

Operating range: 2.8<VDD<3.6V



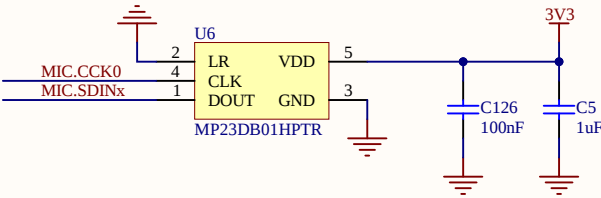
OCTOSPI bus should be routed in 50 ohm +/- 15%



AUDIO MEMS

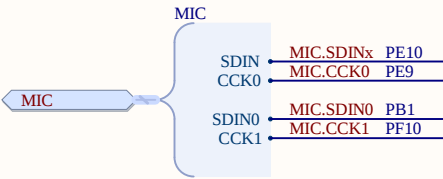
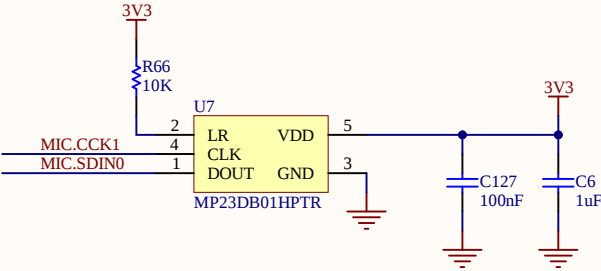
Operating range: $1.64 < VDD < 3.6V$

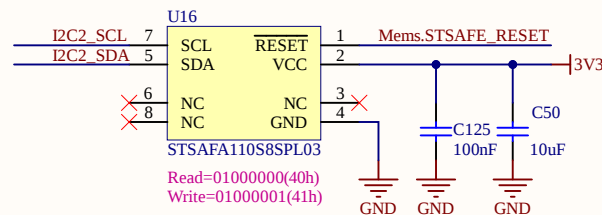
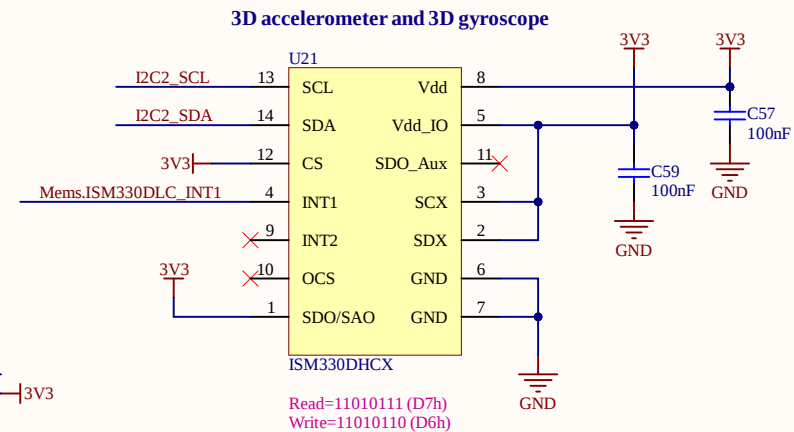
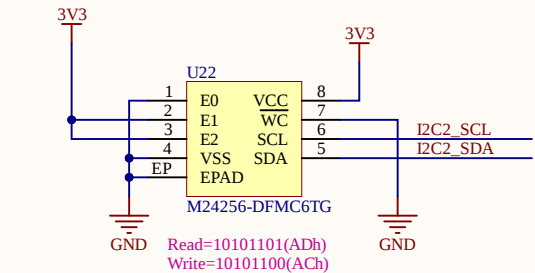
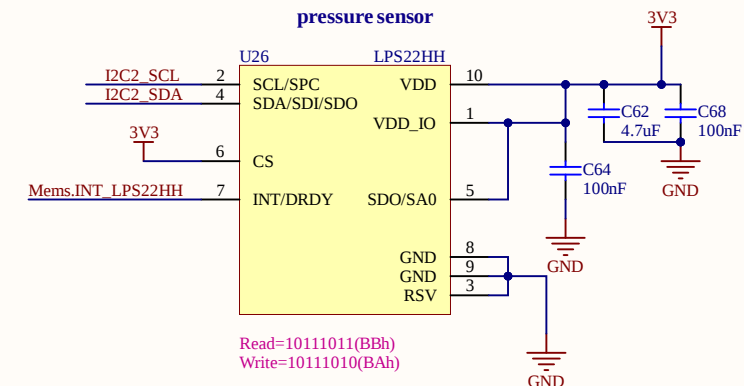
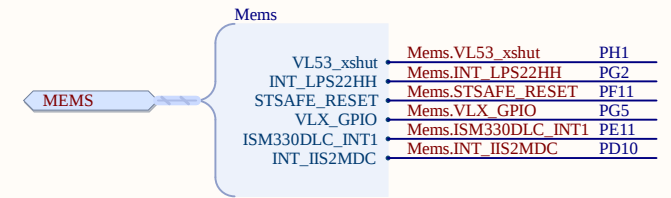
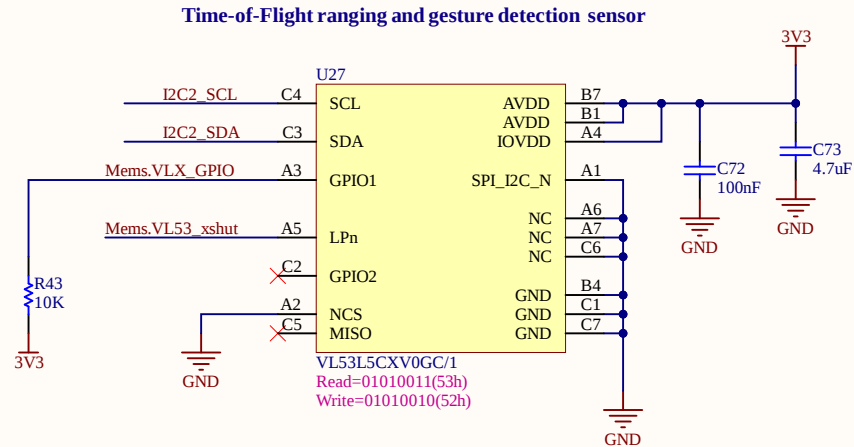
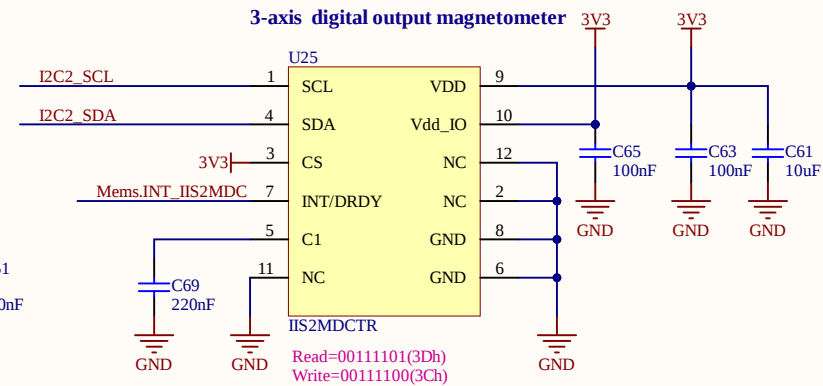
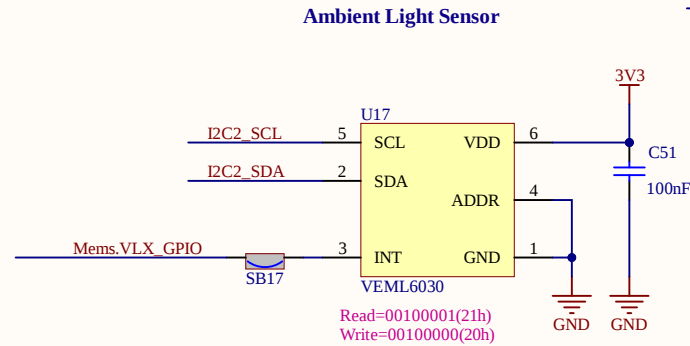
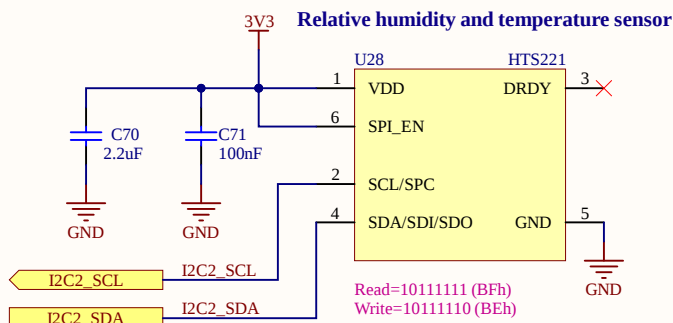
MDF&ADF INTERFACE

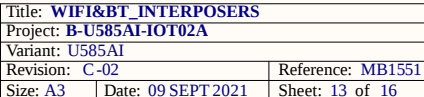


Operating range: $1.64 < VDD < 3.6V$

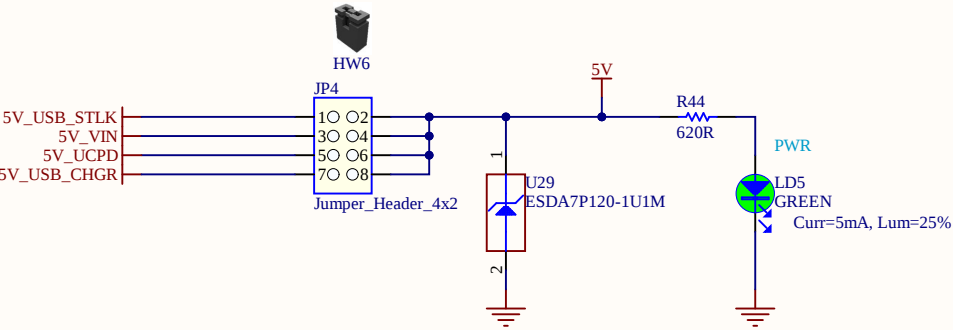
MDF INTERFACE





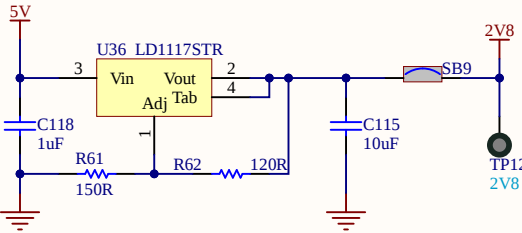


5V PWR SOURCE SELECTION



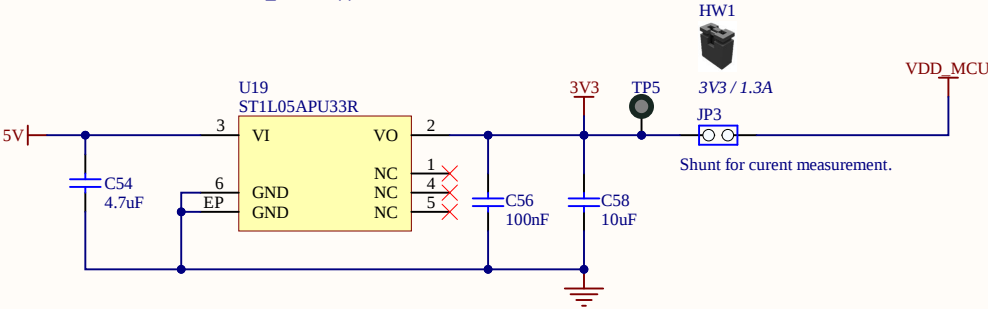
2V8_LDO: CAMERA

2V8 / 800mA

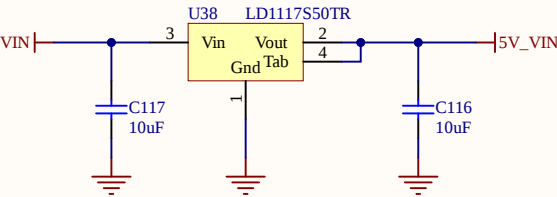


3V3 PWR SOURCE: 3V3 / 1300mA

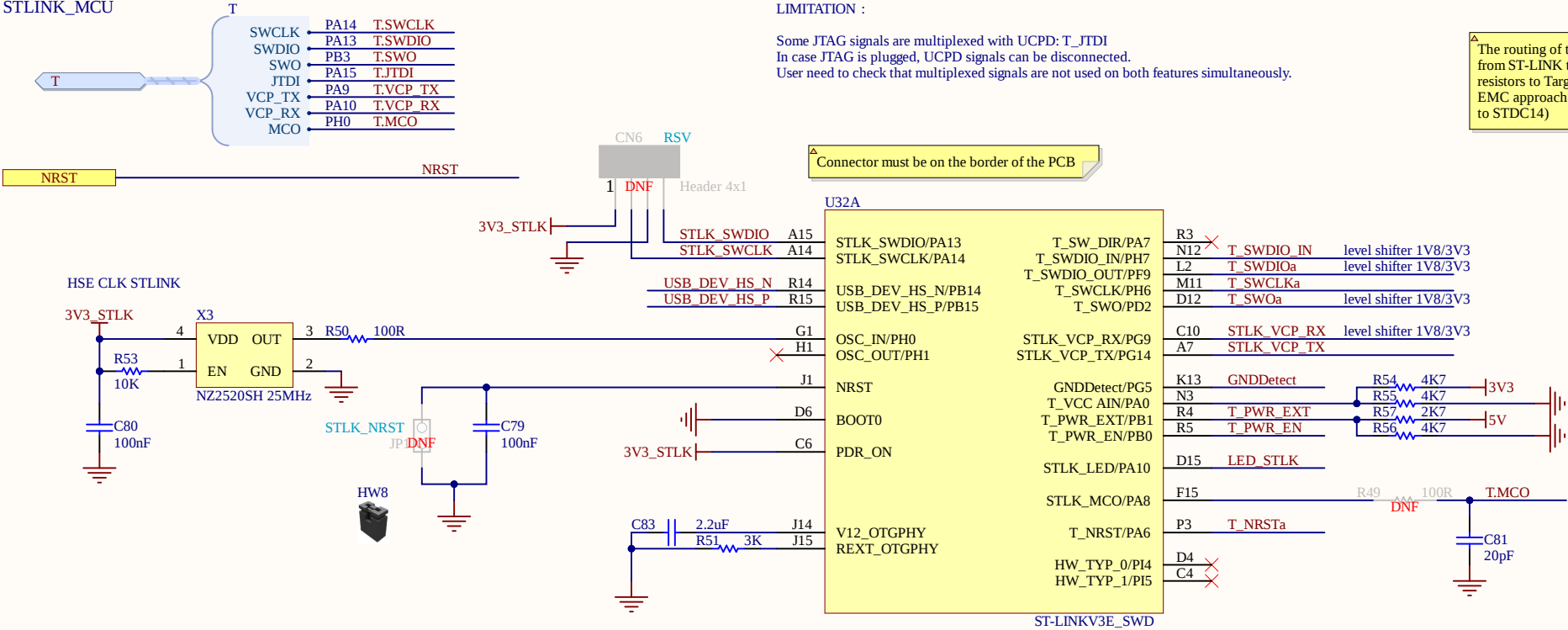
3V3 and VDD_MCU supplies



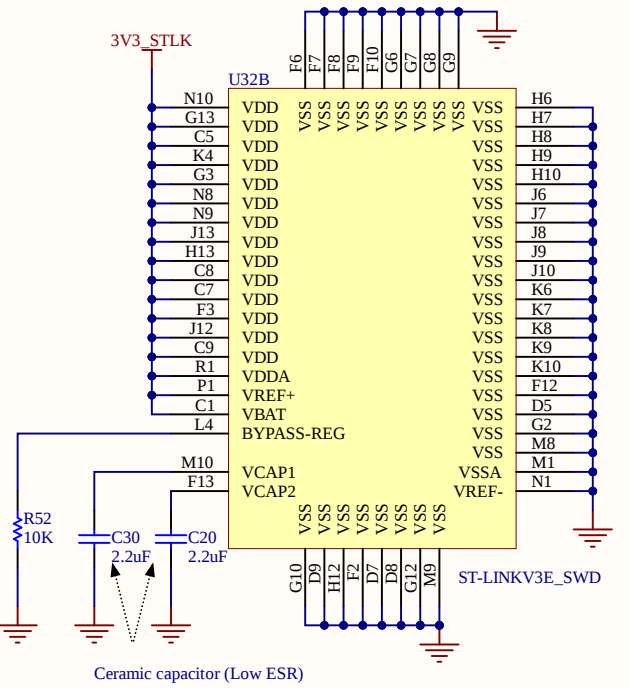
VIN FROM ARDUINO up to 12V: OUTPUT 5V / Up to 800mA (depend of VIN)



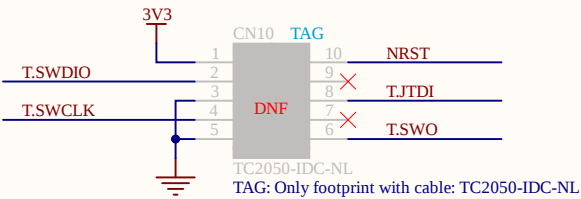
STLINK_MCU



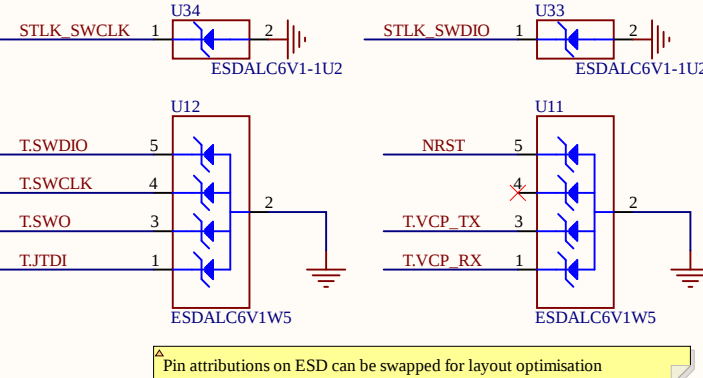
ST-LINK POWER



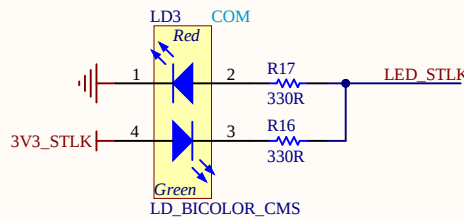
TAG CONNECTOR



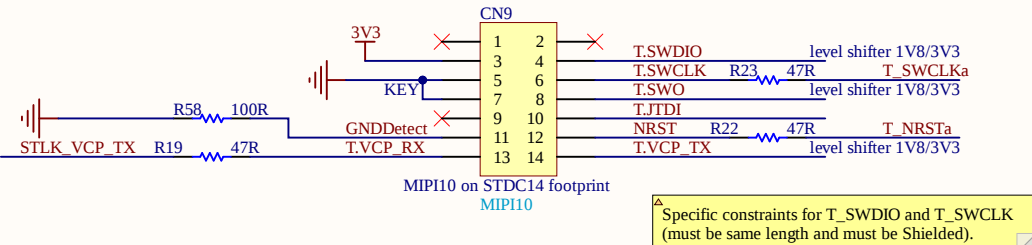
ESD PROTECTIONS



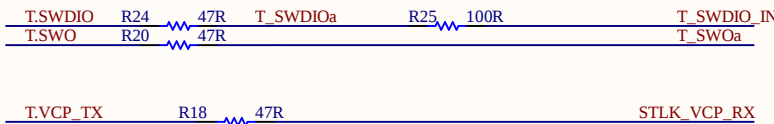
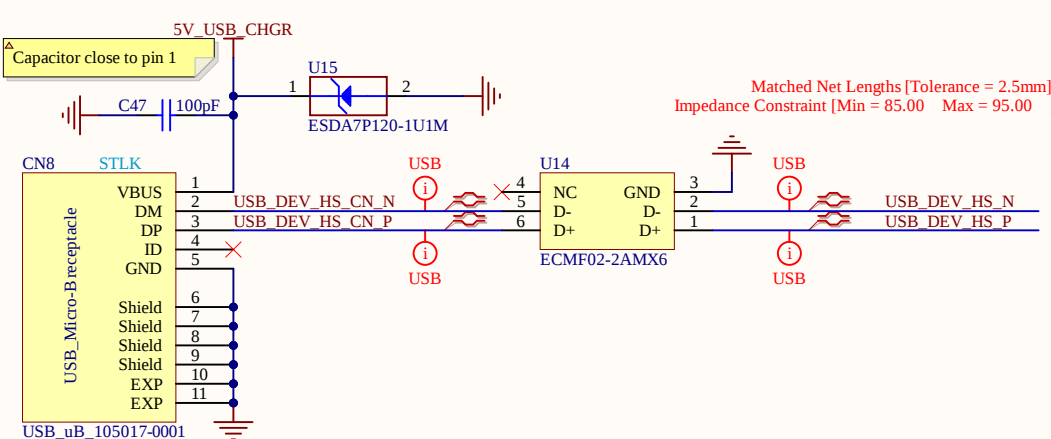
LED STLK



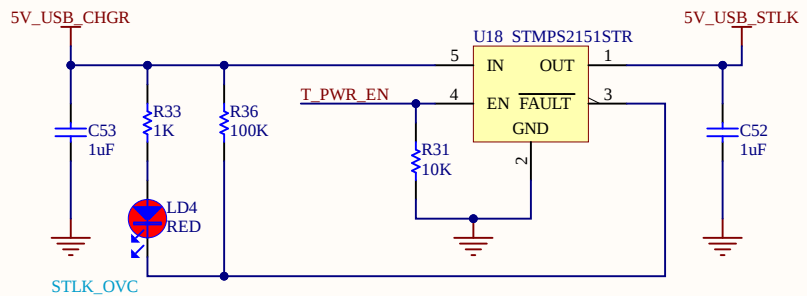
STDC14 RECEIVER



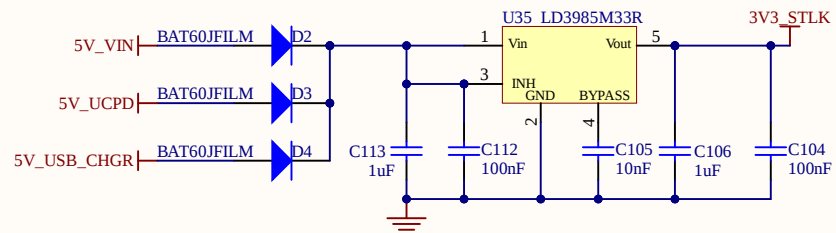
ST-LINK USB CONNECTOR



5V ST-LINK PROTECTION



ST-LINK POWER 3V3 / 150mA



PCB / STICKERS

HW3

DNF

HW4

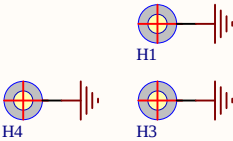
DNF

HW5

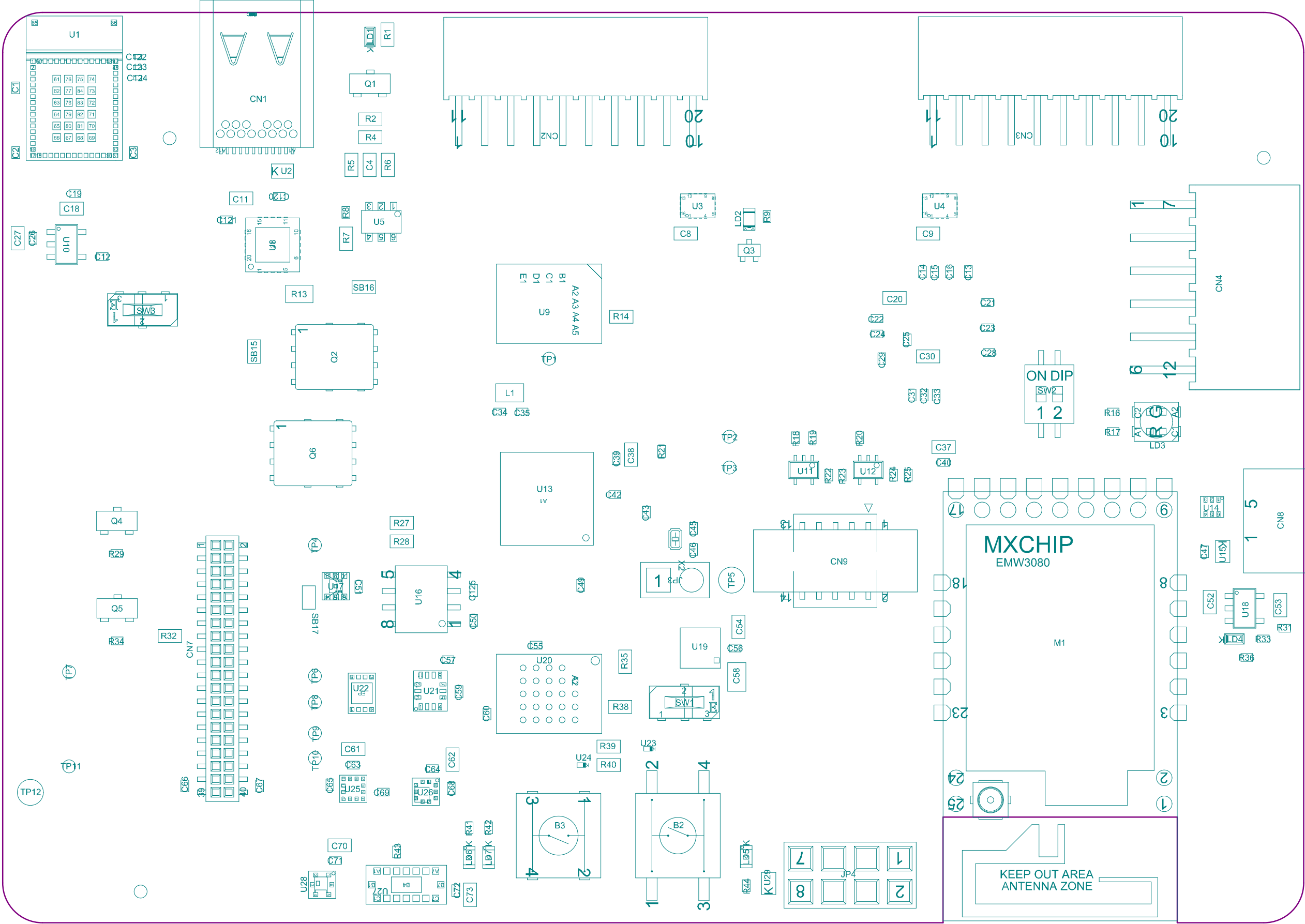
PCB

MB1551C

MECHANICAL PARTS



ADDED MODULES



Project: B-U585AI-IOT02A

Layer: M14-Top Assembly

Variant: U585AI

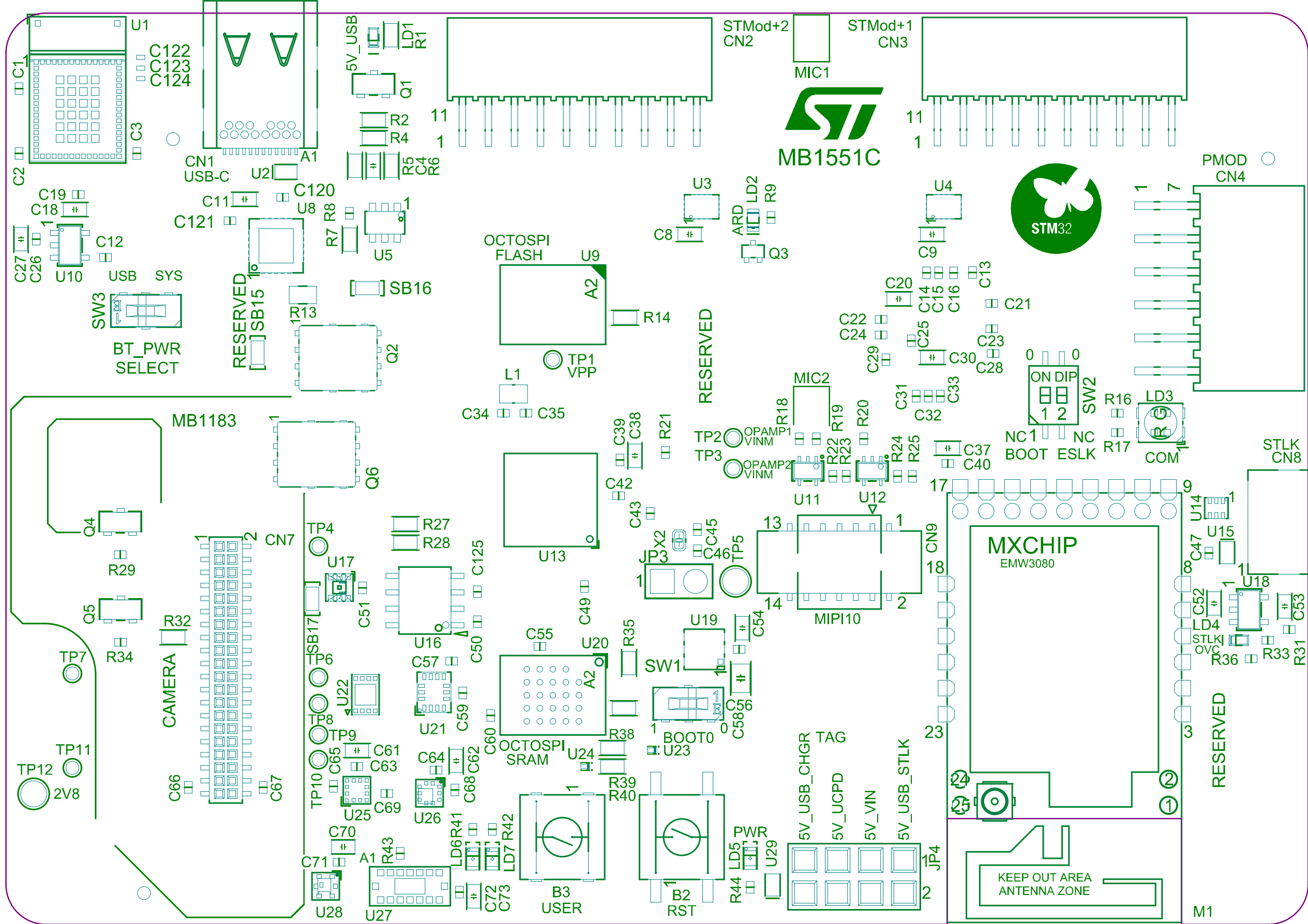
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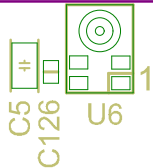
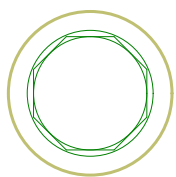
Gerber: .GM14

Ref: MB1551

Rev: C







UK
CA

