

# NUCLEO-64

MB1814

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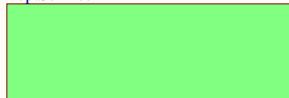
Sheet 5: Board Power

Sheet 6: Connectors

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U\_Top  
Top.SchDoc



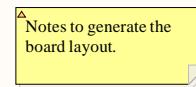
## Legend

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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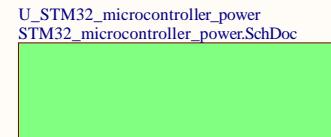
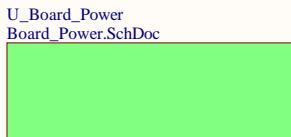
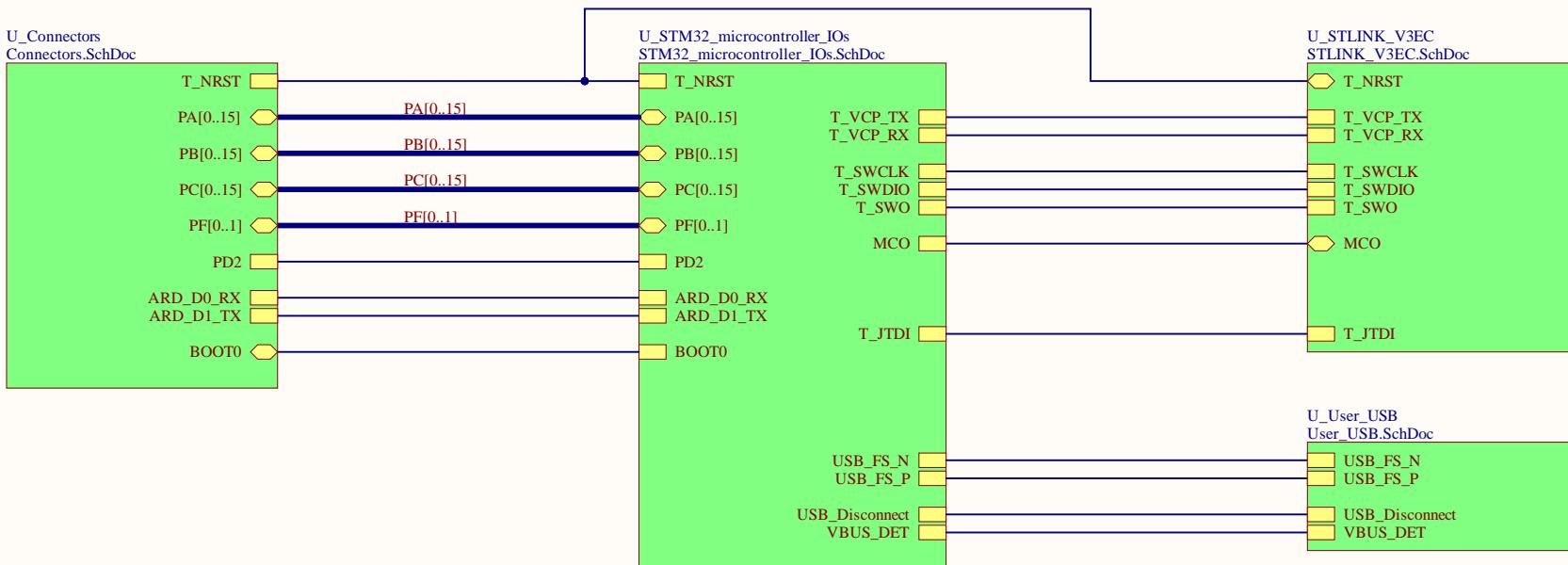
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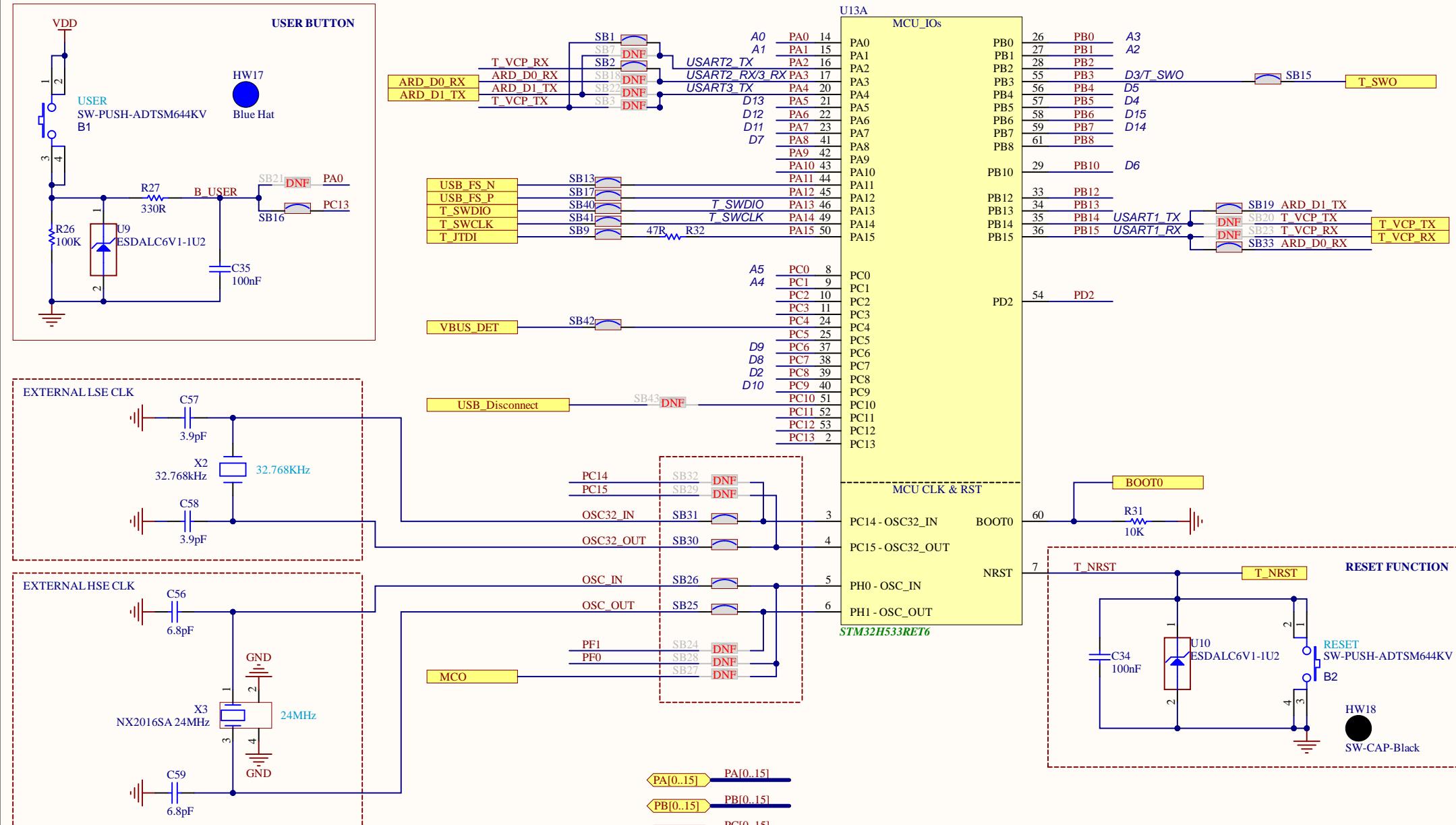
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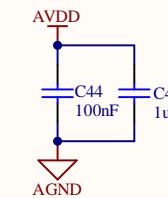
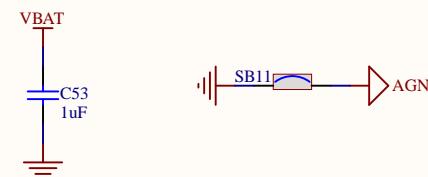
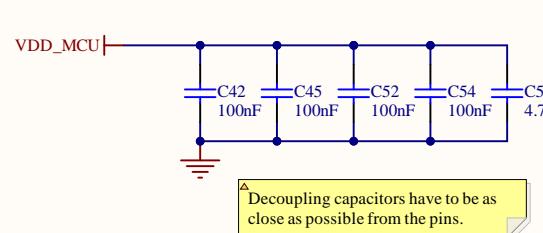
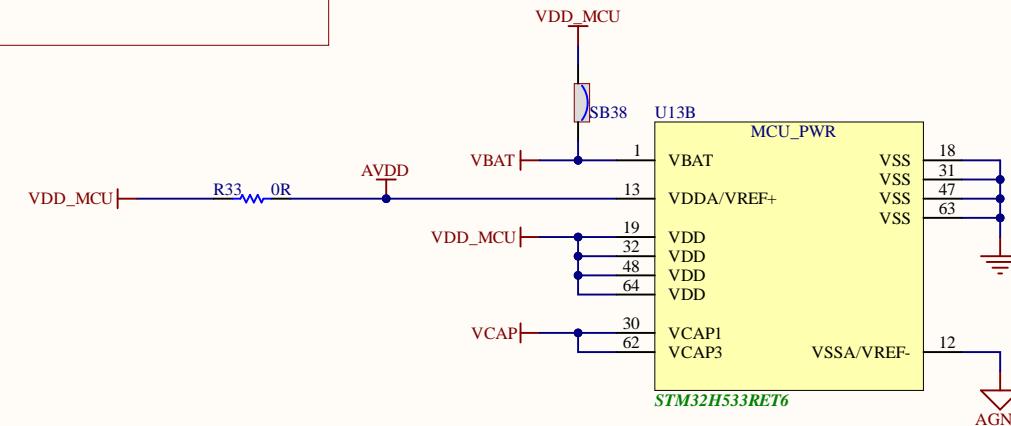
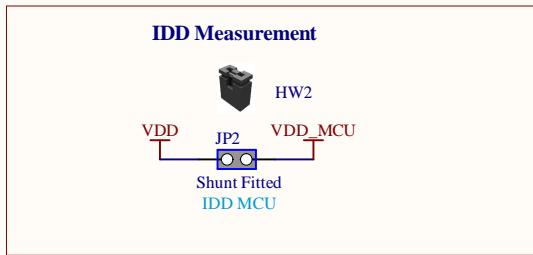
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|            |                  |
|------------|------------------|
| Title:     | Project overview |
| Project:   | NUCLEO-64        |
| Variant:   | H533RE           |
| Revision:  | C-02             |
| Size:      | A4               |
| Date:      | 06-FEB-2024      |
| Reference: | MB1814           |
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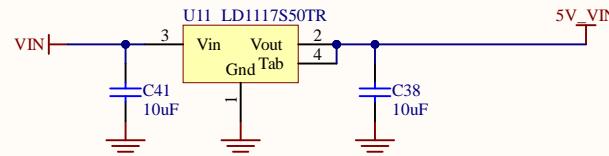




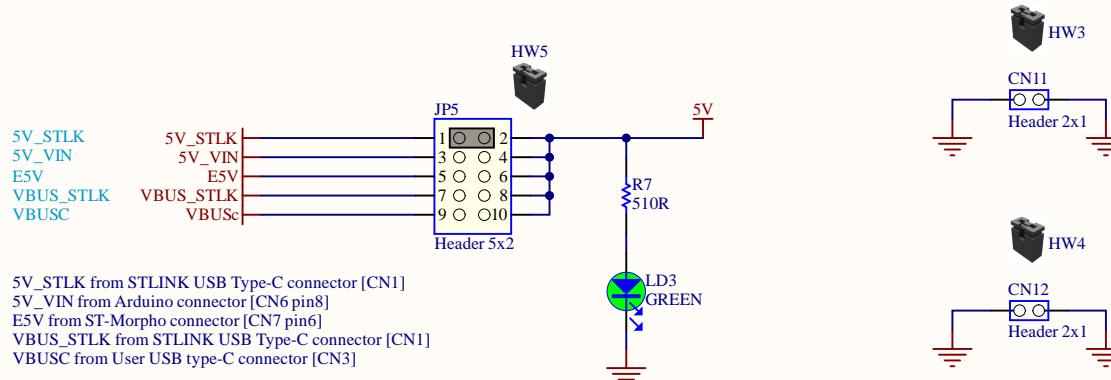


Ceramic capacitor (Low ESR, ESR<1ohm)

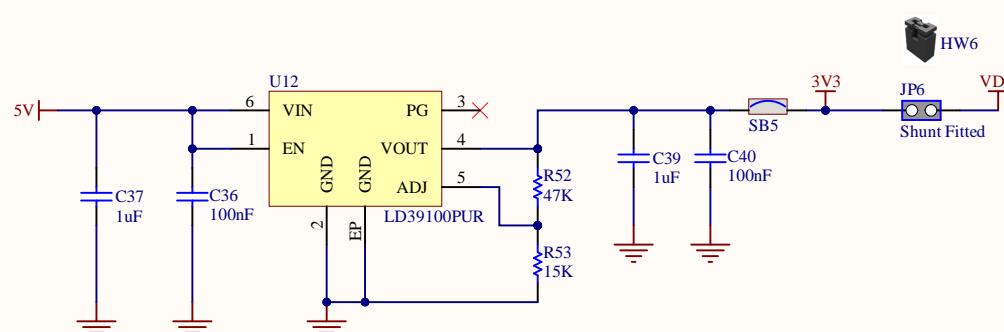
## VIN / 5V POWER



## 5V POWER SOURCE SELECTION

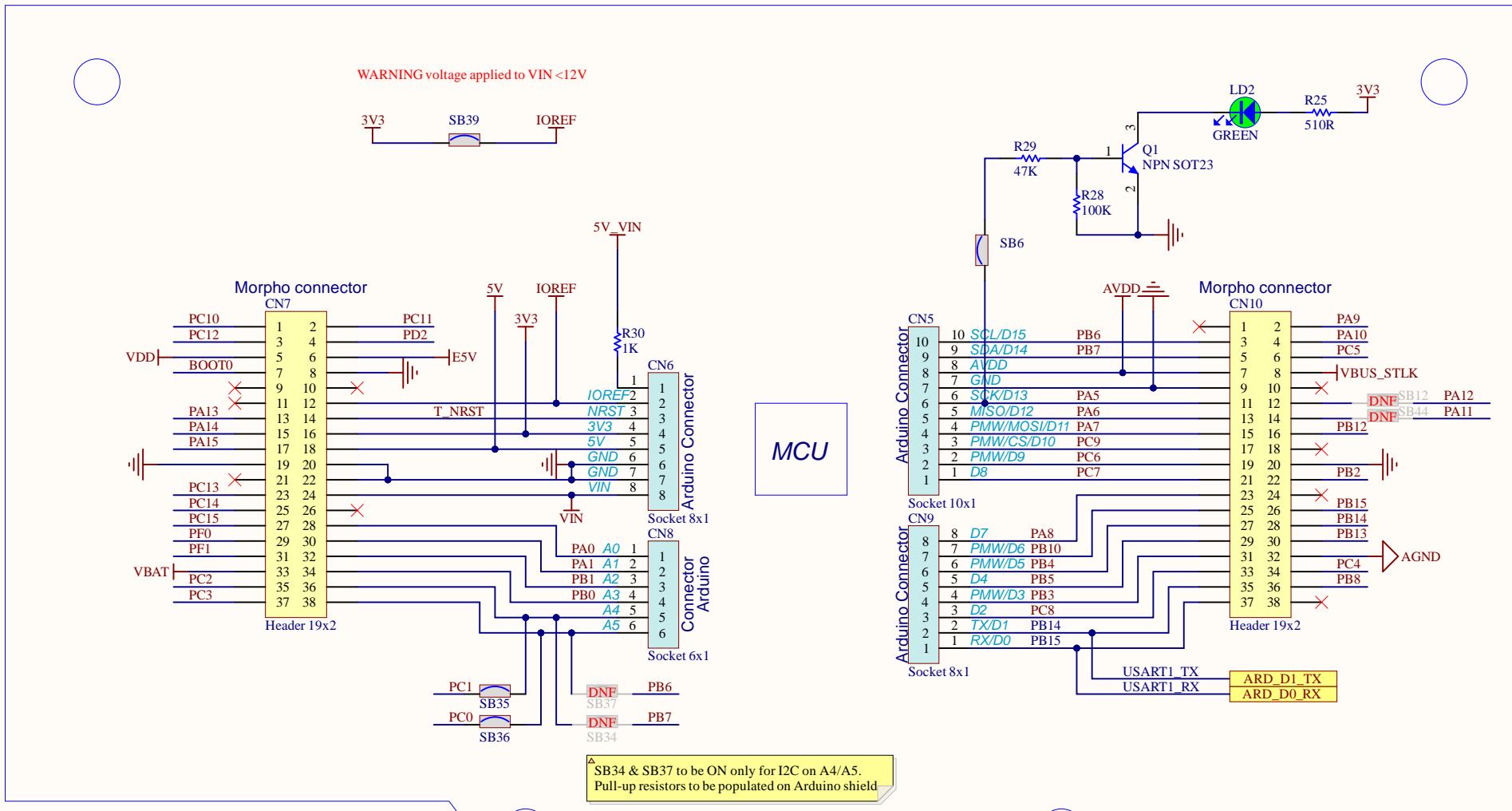


## VDD POWER 3V3 - 1A max

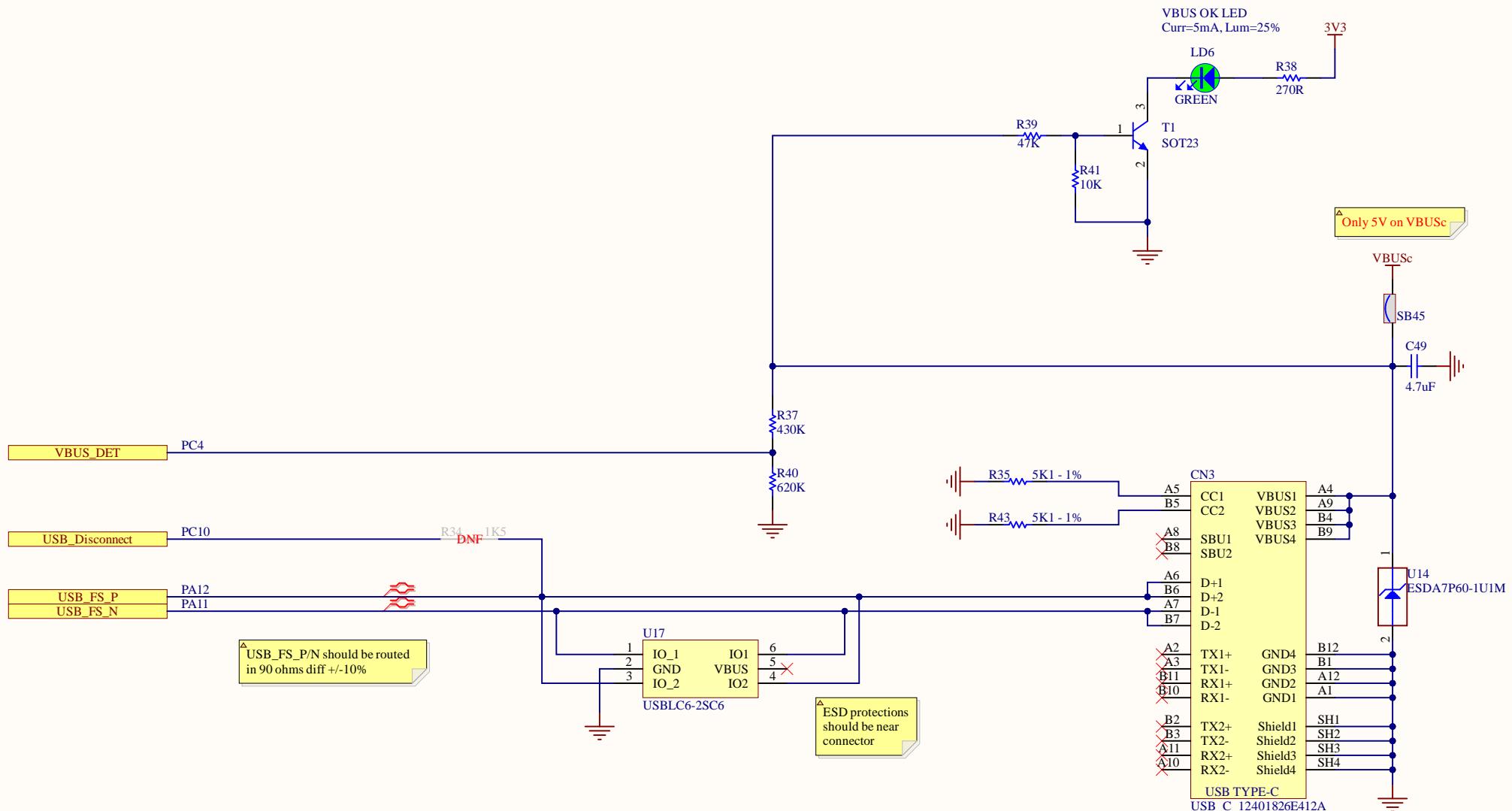


|                    |                   |
|--------------------|-------------------|
| Title: Board power |                   |
| Project: NUCLEO-64 |                   |
| Variant: H533RE    |                   |
| Revision: C-02     | Reference: MB1814 |
| Size: A4           | Date: 06-FEB-2024 |
| Sheet: 5           | of 8              |

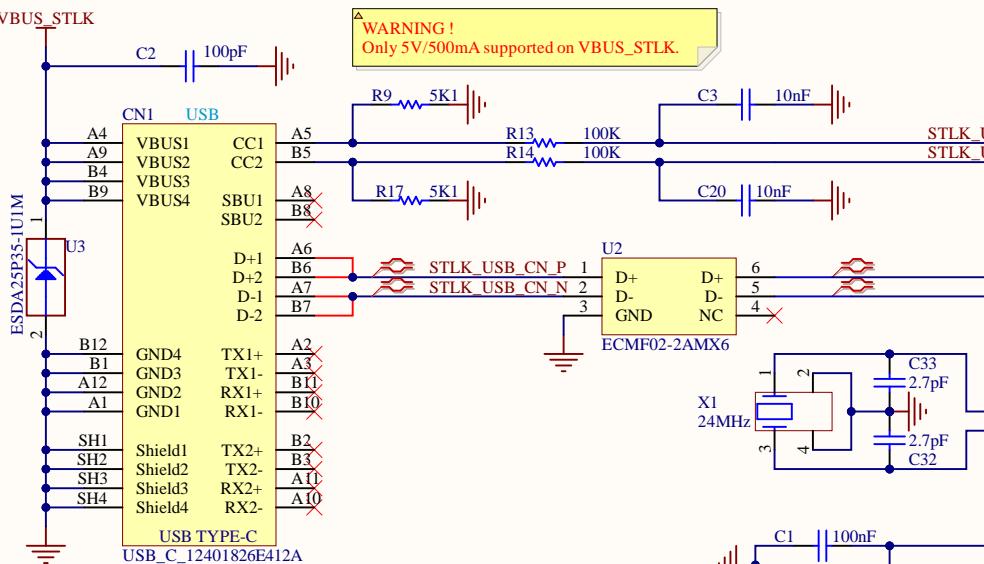




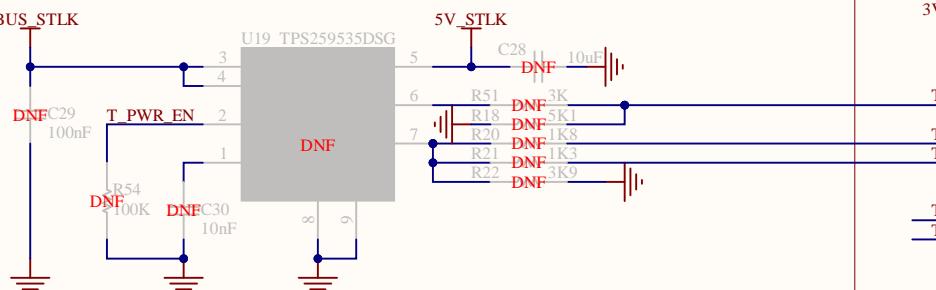
- PA[0..15] PA[0..15]
- PB[0..15] PB[0..15]
- PC[0..15] PC[0..15]
- PD2 PD2
- T\_NRST T\_NRST
- PF[0..1] PF[0..1]
- BOOT0 BOOT0



## ST-LINK USB CONNECTOR



## 5V\_STLK OVERVOLTAGE AND OVERCURRENT PROTECTION

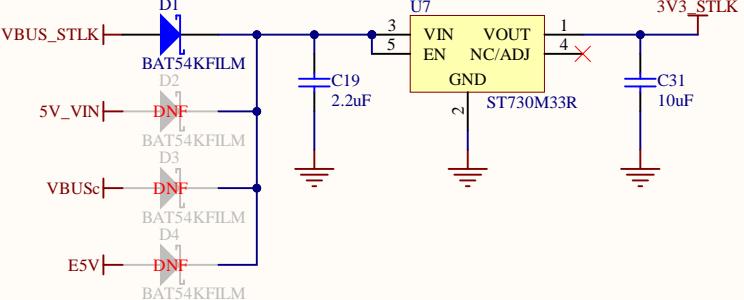


### 5V\_STLK OVERCURRENT PROTECTION MANAGEMENT

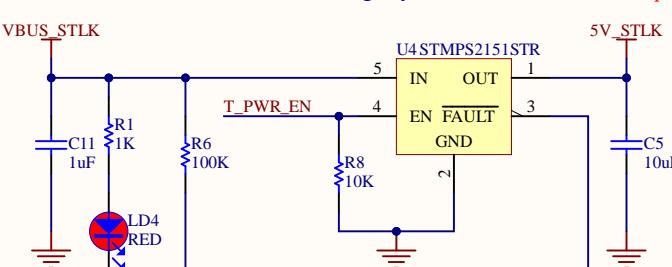
|  | T_PWR_SEL2/PD5 | T_PWR_SEL1/PD4 |
|--|----------------|----------------|
| PowerDefault SNK<br>(Current limit: 550mA) | Hi-Z           | Hi-Z           |
| Power1.5.SNK<br>(Current limit: 1.66A)     | Hi-Z           | 0              |
| Power3.0.SNK<br>(Current limit: 3.2A)      | 0            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

HZ= IO set in high impedance

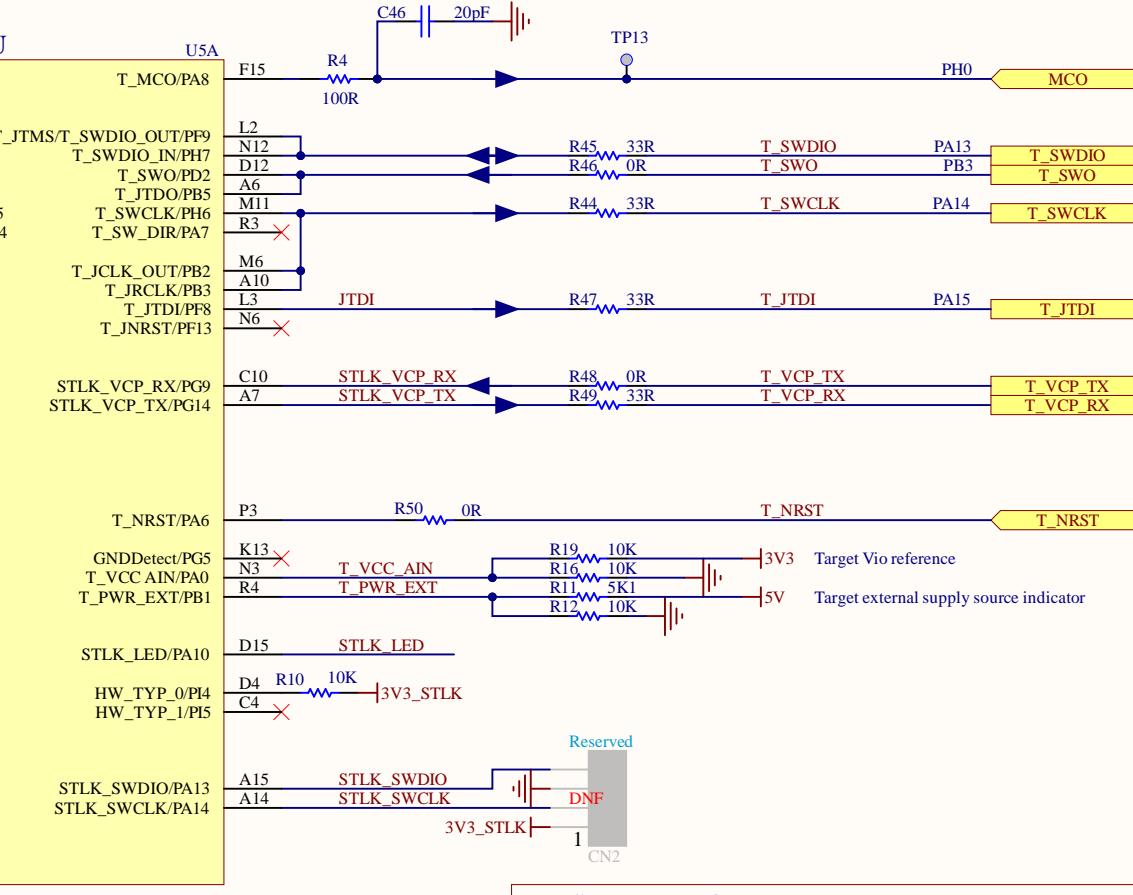
## ST-LINK POWER (3V3/300mA)



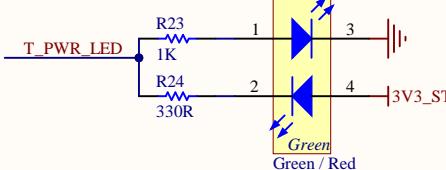
## 5V ST-LINK PROTECTION for legacy STMP2151STR is backup of the TPS259535DSG



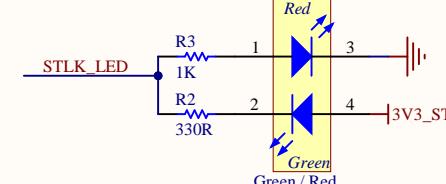
## STLINK MCU



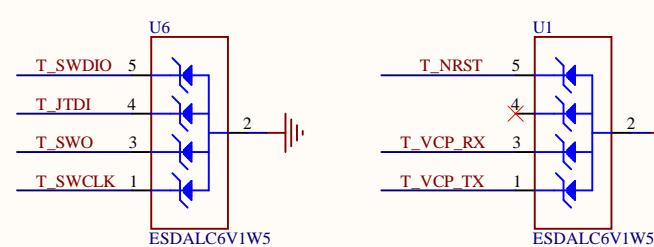
## LED POWER STATUS



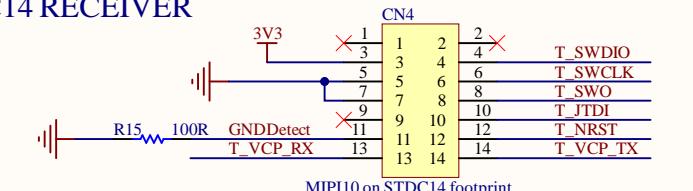
## LED STLINK



## ESD PROTECTIONS

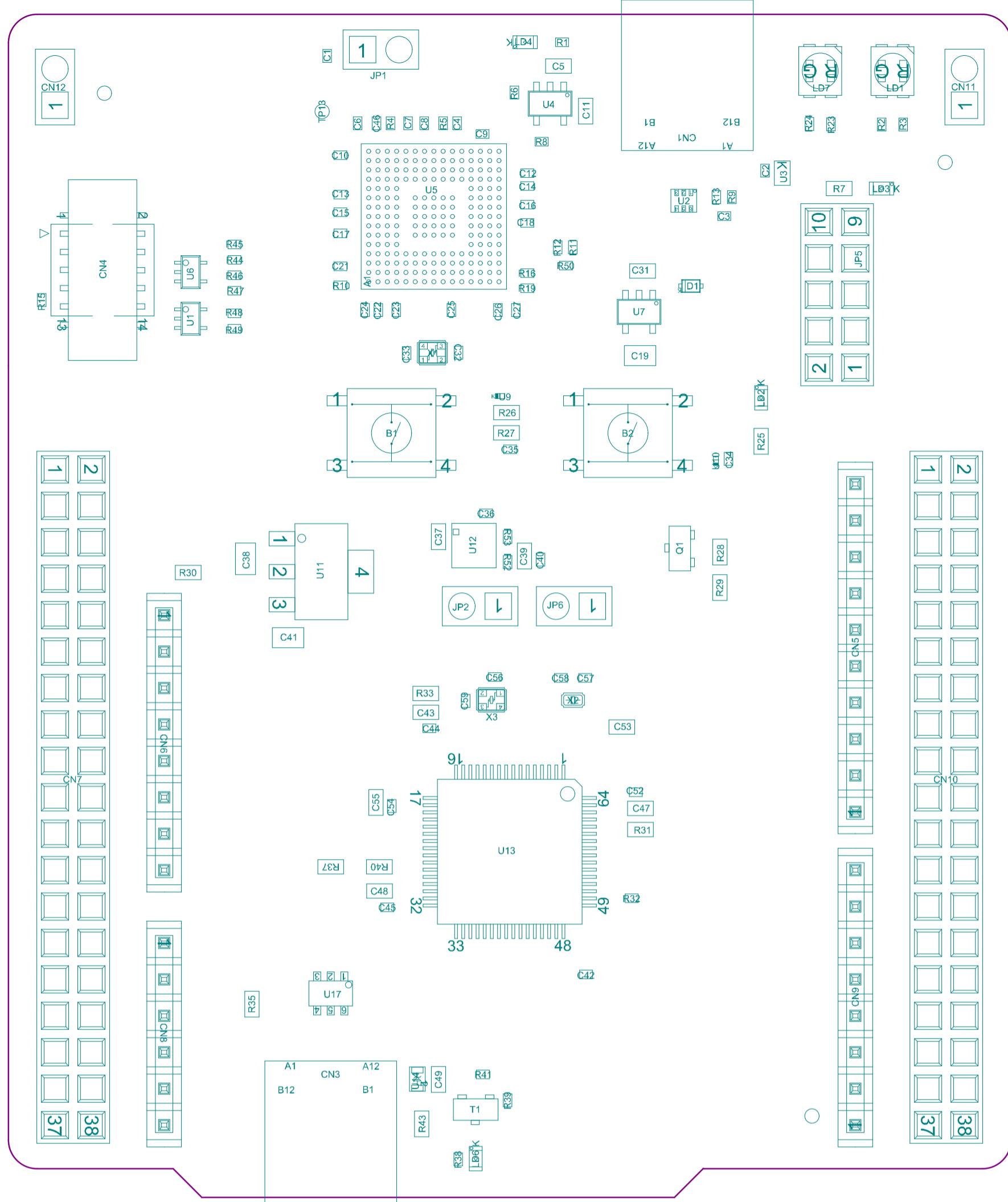


## STDC14 RECEIVER



JP1 to be ON when an external probe is connected to the STDC14





**Project: NUCLEO-64**

**Layer: M14-Top Assembly**

**Gerber: .GM14**

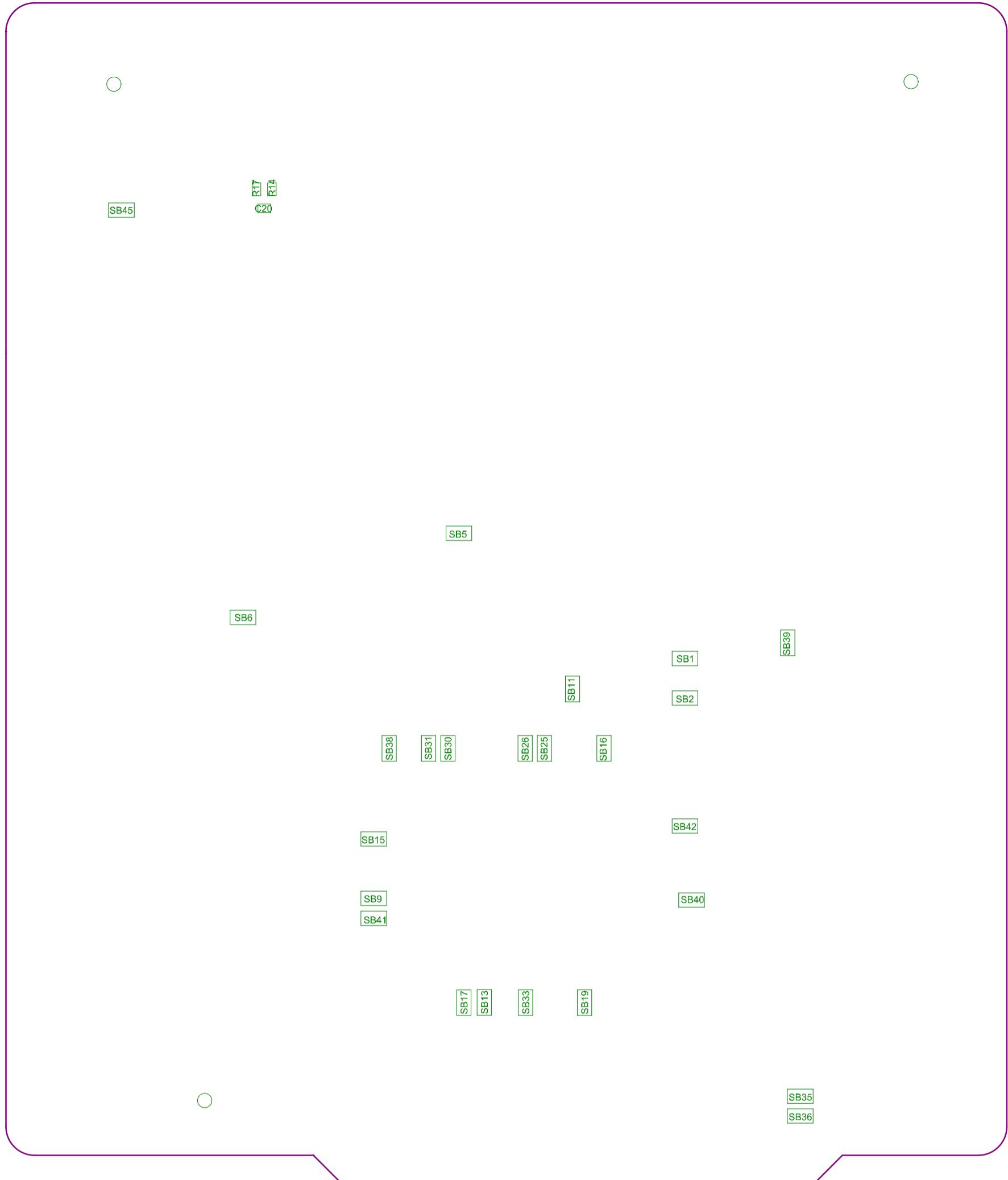
**Variant: H533RE**

**MB1814**

**Date: 06-FEB-2024**

**Rev: C**





Project: NUCLEO-64

Layer: M15-Bottom Assembly

Gerber: .GM15

Variant: H533RE

MB1814

Date: 06-FEB-2024

Rev: C





