

NUCLEO-64

MB1814

Table of contents

Sheet 1: Project overview (this page)

Sheet 2: mb1814_Top

Sheet 3: STM32_microcontroller_IOs

Sheet 4: STM32_microcontroller_power

Sheet 5: Arduino & Morpho extension connectors

Sheet 6: Power

Sheet 7: USB User

Sheet 8: STLINK-V3EC

U_mb1814.Top
mb1814.Top.SchDoc

Legend

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

Text to be added to silkscreen.

Warning text.

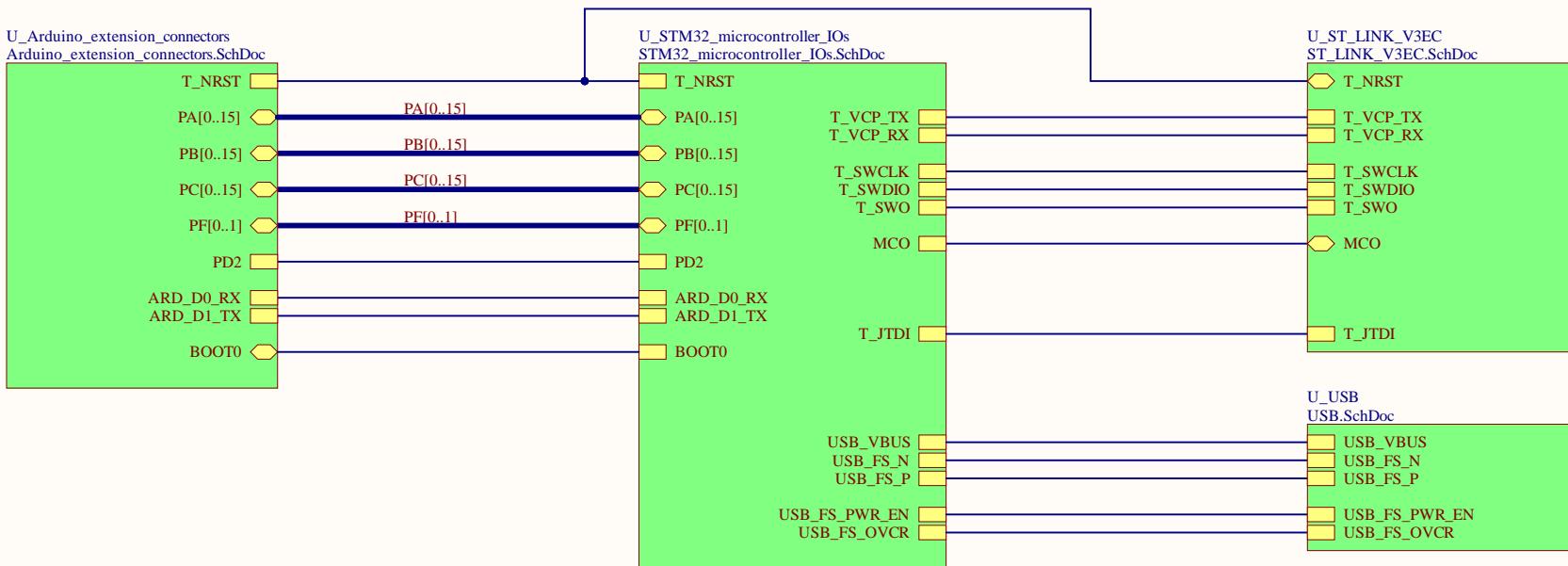
▲ Notes to generate the board layout.

OPEN PLATFORM LICENSE AGREEMENT

The Open Platform License Agreement ("Agreement") is a binding legal contract between you ("You") and STMicroelectronics International N.V. ("ST"), a company incorporated under the laws of the Netherlands acting for the purpose of this Agreement through its Swiss branch 39, Chemin du Champ des Filles, 1228 Plan-les-Ouates, Geneva, Switzerland.

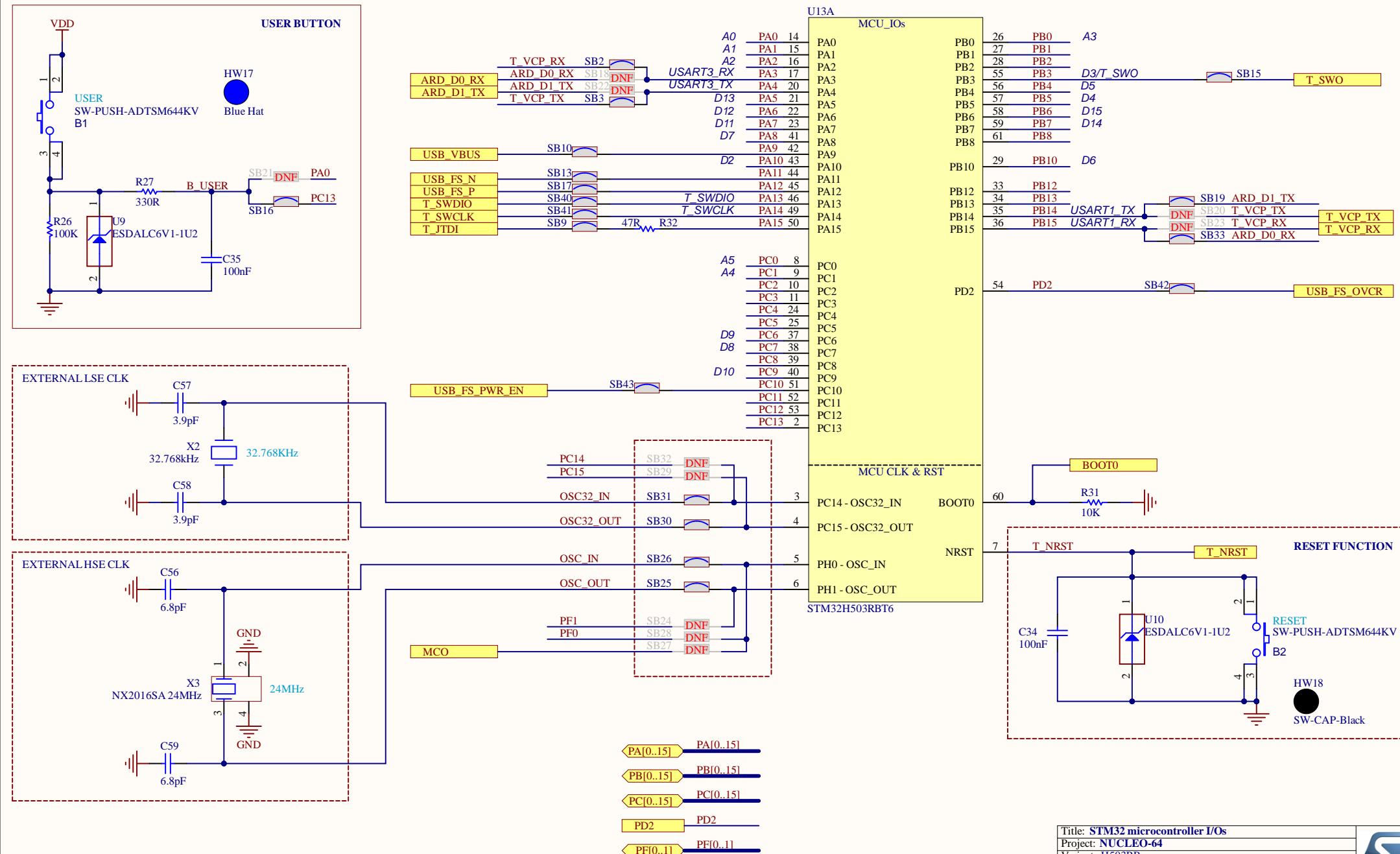
By using the enclosed reference designs, schematics, PC board layouts, and documentation, in hardcopy or CAD tool file format (collectively, the "Reference Material"), You are agreeing to be bound by the terms and conditions of this Agreement. Do not use the Reference Material until You have read and agreed to this Agreement terms and conditions. The use of the Reference Material automatically implies the acceptance of the Agreement terms and conditions.

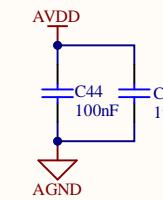
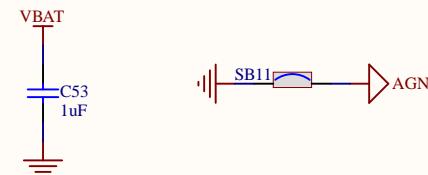
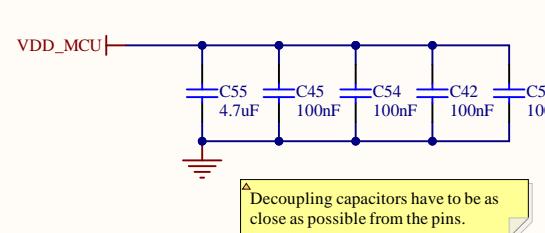
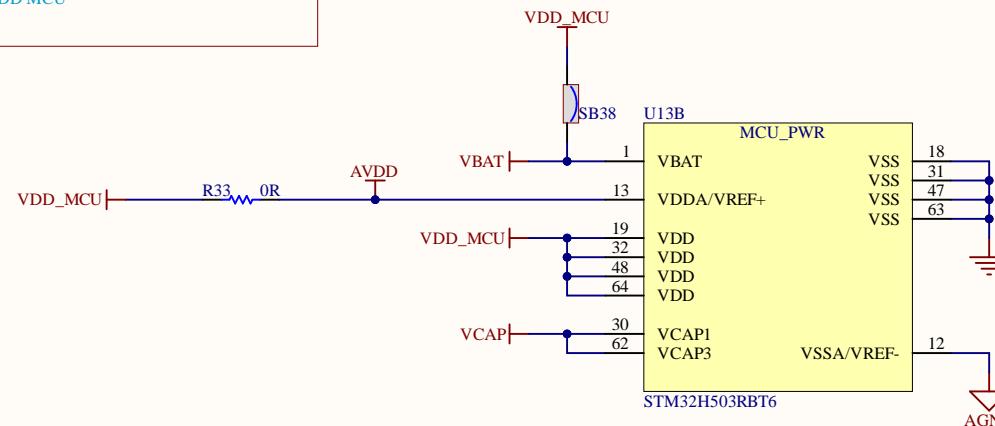
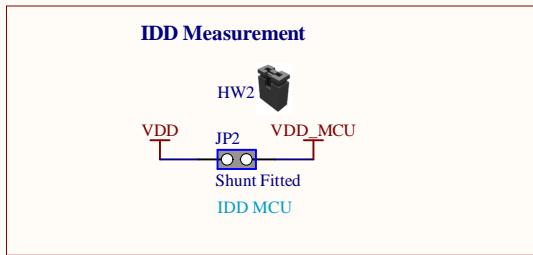
The complete Open Platform License Agreement can be found on www.st.com/opla.



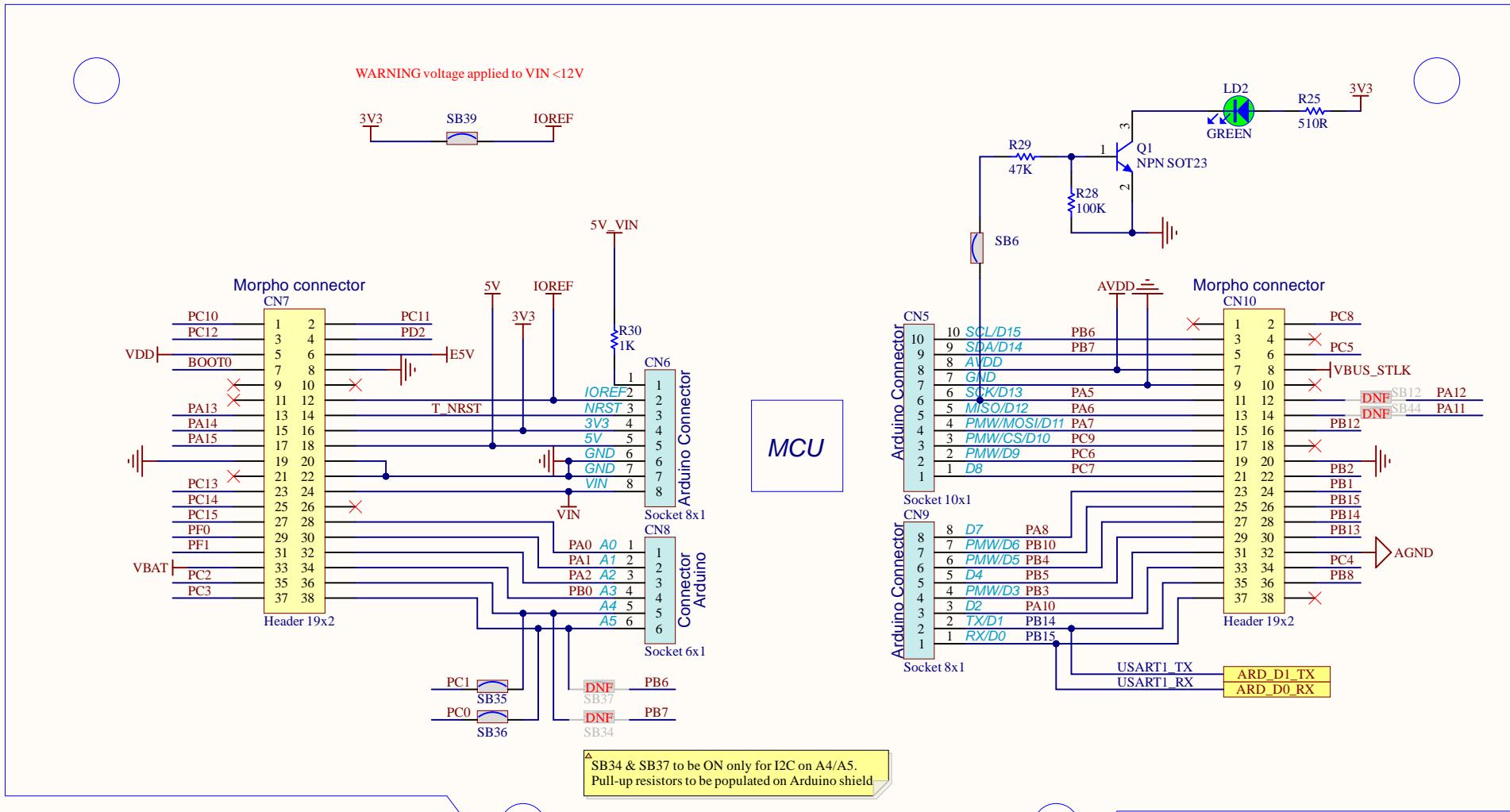
U_Power
Power.SchDoc

U_STM32_microcontroller_power
STM32_microcontroller_power.SchDoc



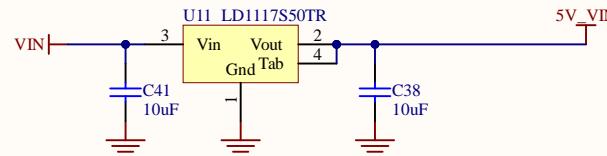


Ceramic capacitor (Low ESR, ESR<1ohm)

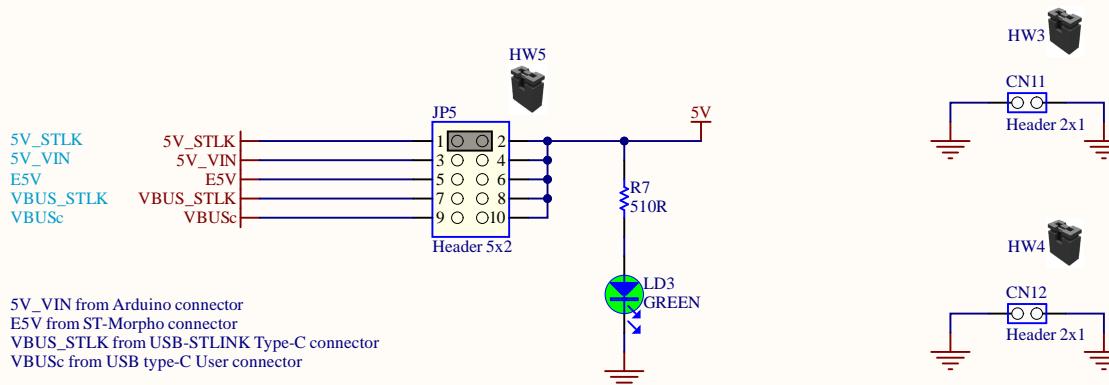


- PA[0..15] → PA[0..15]
- PB[0..15] → PB[0..15]
- PC[0..15] → PC[0..15]
- PD2 → PD2
- T_NRST → T_NRST
- PF[0..1] → PF[0..1]
- BOOT0 → BOOT0

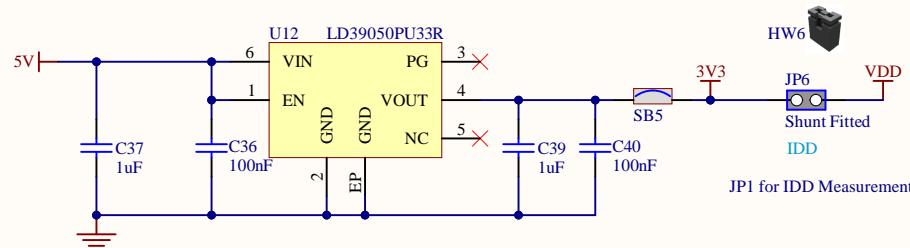
VIN / 5V POWER



5V POWER SOURCE SELECTION



VDD POWER



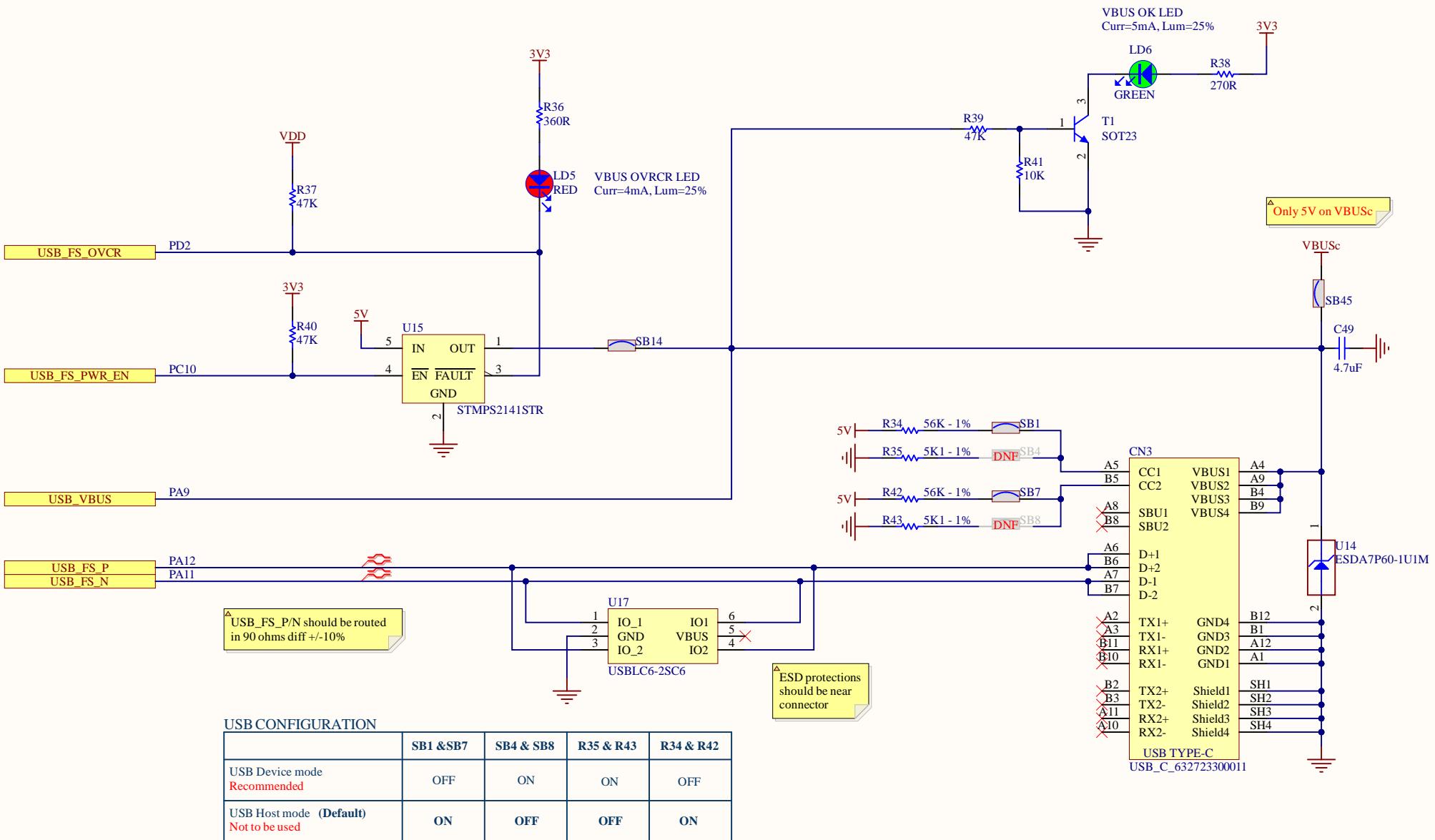
Title: Main power 5V / 3V3

Project: NUCLEO-64

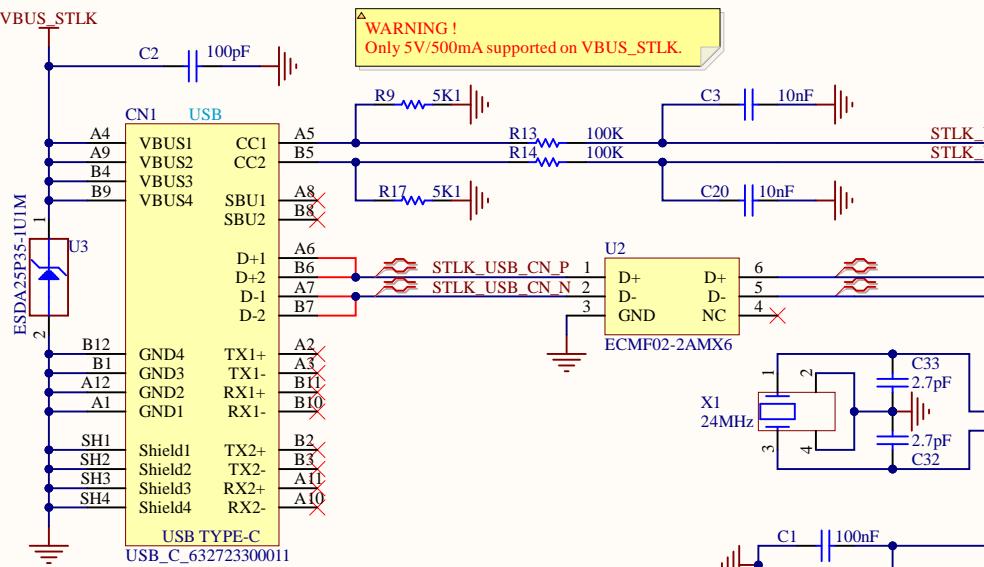
Variant: H503RB

Revision: B-01

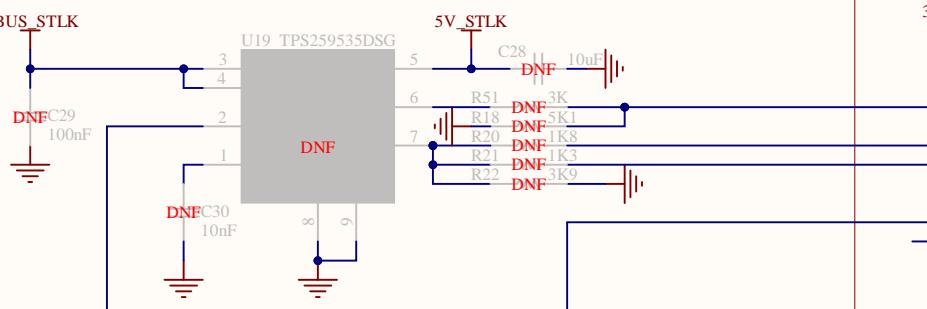
Size: A4 | Date: 25-JAN-15



ST-LINK USB CONNECTOR



5V_STLK OVERVOLTAGE AND OVERCURRENT PROTECTION

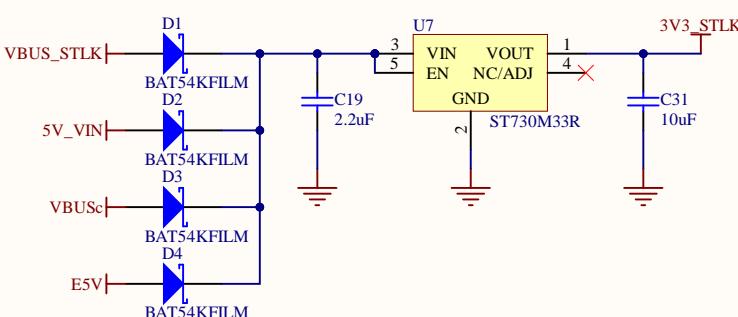


5V_STLK OVERCURRENT PROTECTION MANAGEMENT

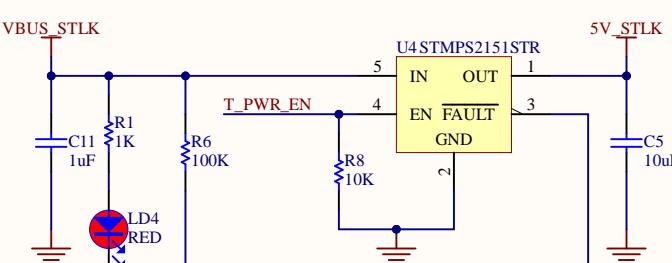
	T_PWR_SEL2/PD5	T_PWR_SEL1/PD4
PowerDefault SNK (Current limit: 550mA)	Hi-Z	Hi-Z
Power1.5.SNK (Current limit: 1.66A)	Hi-Z	0
Power3.0.SNK (Current limit: 3.2A)	0	0

IO set in high impedance

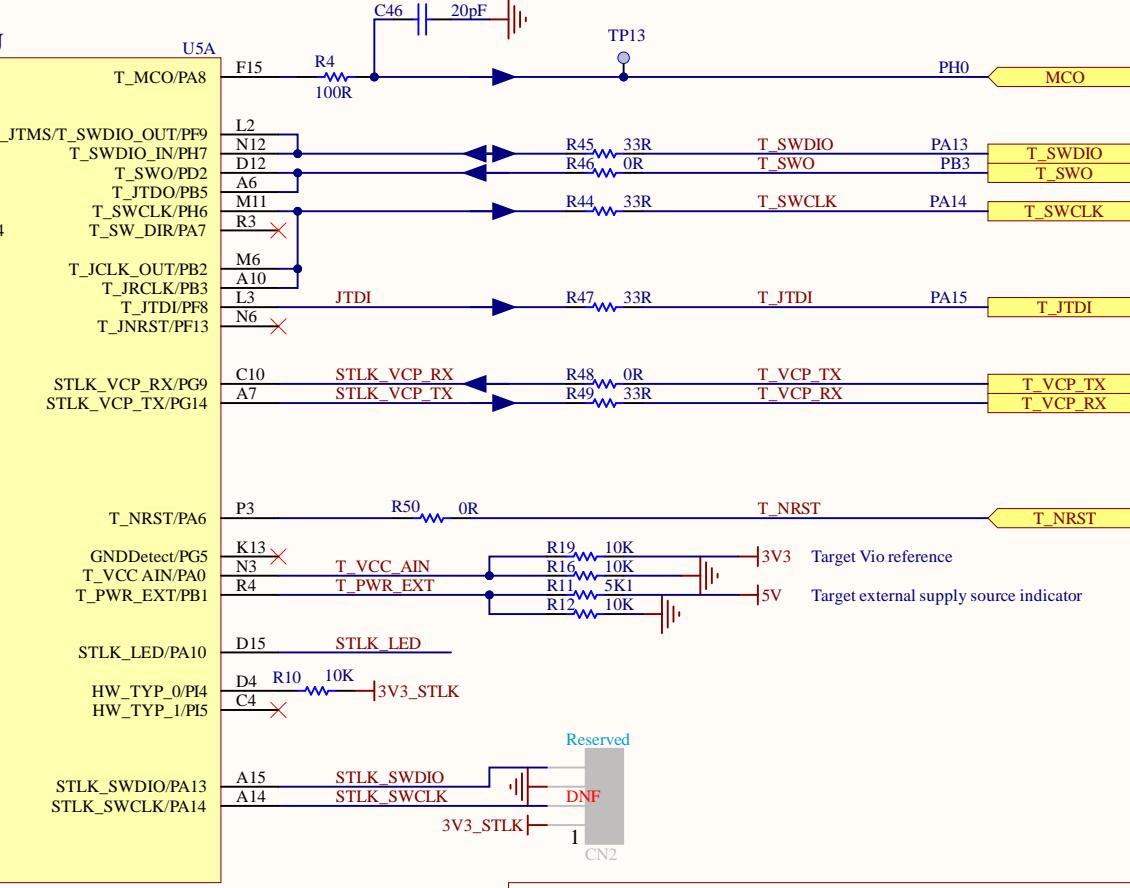
ST-LINK POWER (3V3/300mA)



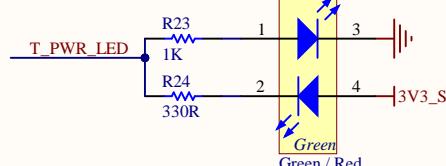
5V ST-LINK PROTECTION for legacy STMPS2151STR is backup of the TPS259535DS



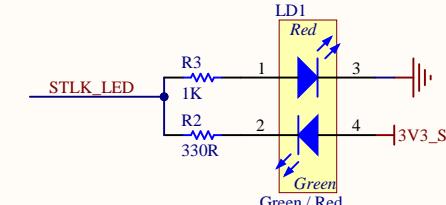
STLINK MCU



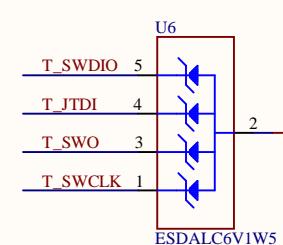
LED POWER STATUS



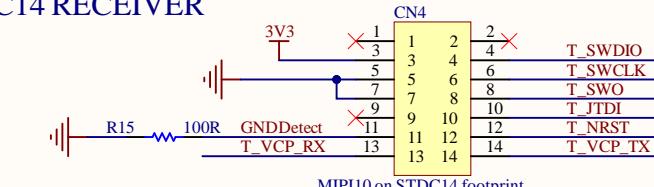
LED STLINK



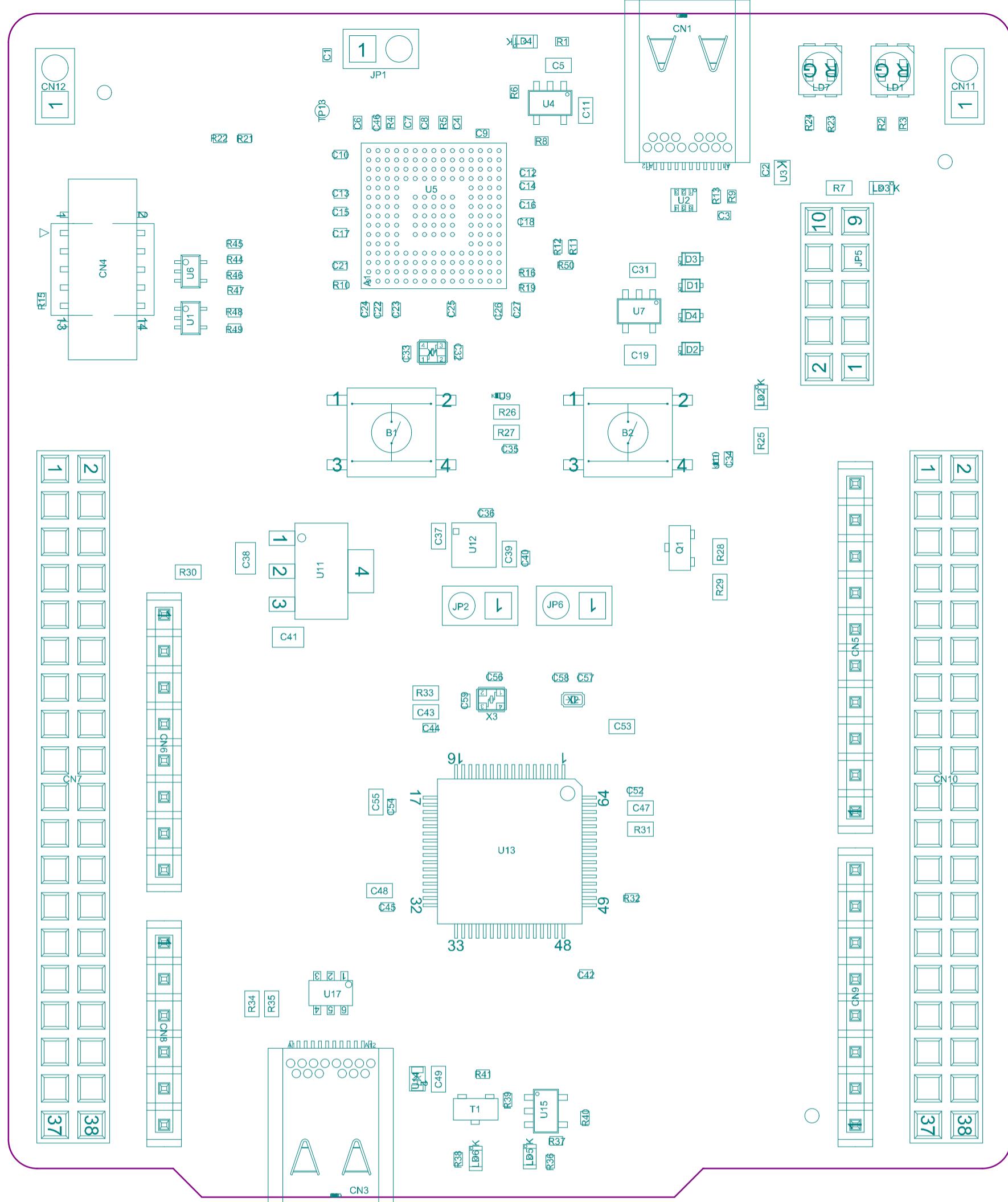
ESD PROTECTION



STDC14 RECEIVER



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



Project: NUCLEO-64

Layer: M14-Top Assembly

Gerber: .GM14

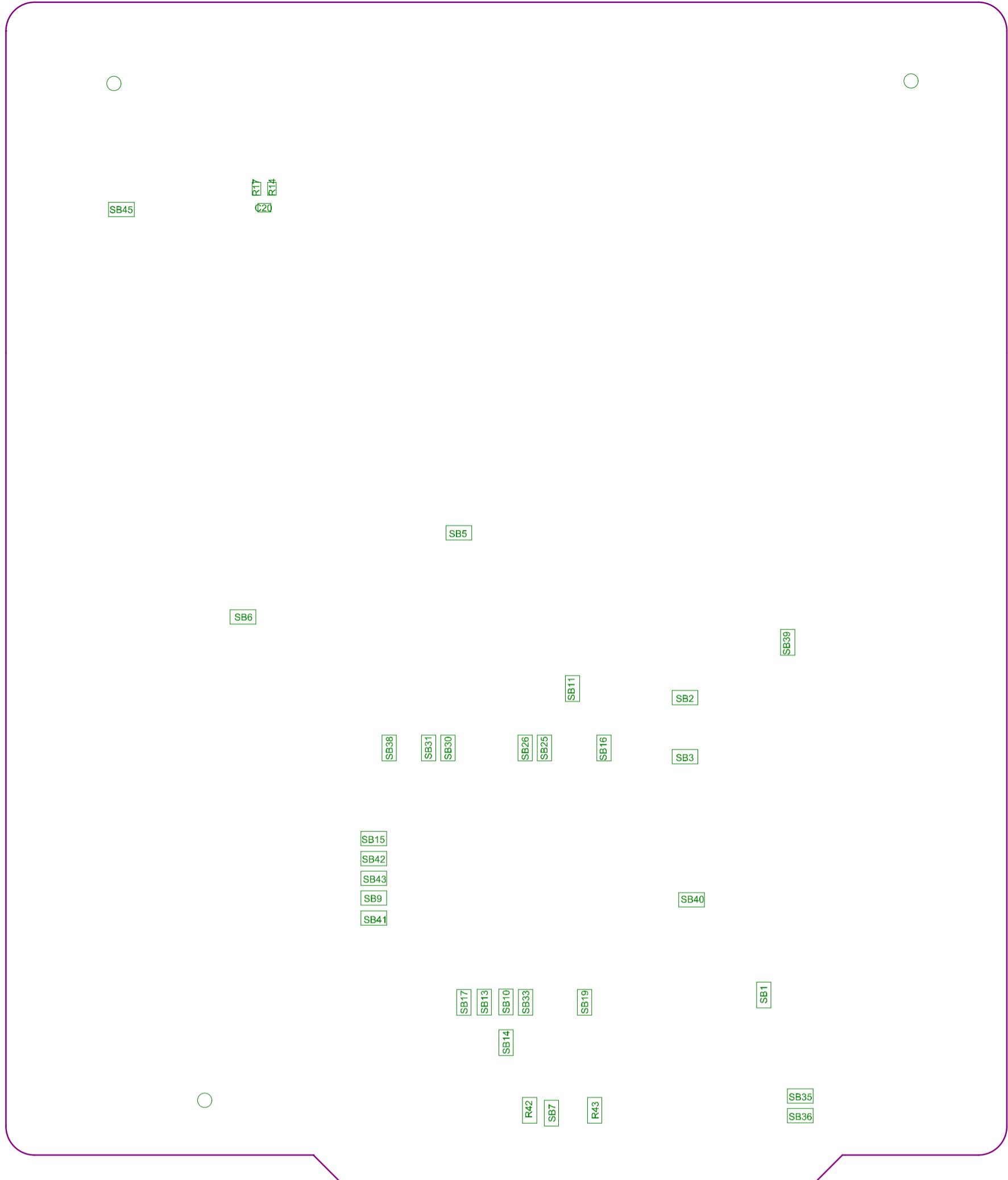
Variant: H503RB

MB1814

Date: 25-JAN-15

Rev: B





Project: NUCLEO-64

Layer: M15-Bottom Assembly

Gerber: .GM15

Variant: H503RB

MB1814

Date: 25-JAN-15

Rev: B



