

NUCLEO-64 - Mezzanine Board

MB1801

Table of contents

- Sheet 1: Project overview (this page)
- Sheet 2: Top
- Sheet 3: Extension Connectors
- Sheet 4: Accessories (Push Buttons, LEDs, USB,...)
- Sheet 5: Power Management
- Sheet 6: STLINK-V3EC & Level Shifters
- Sheet 7: External_Debug_Interface

Legend

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

Text to be added to silkscreen.

Warning text.

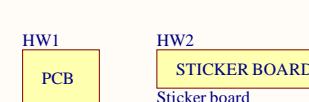
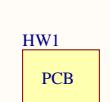
Notes to generate the board layout.

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.

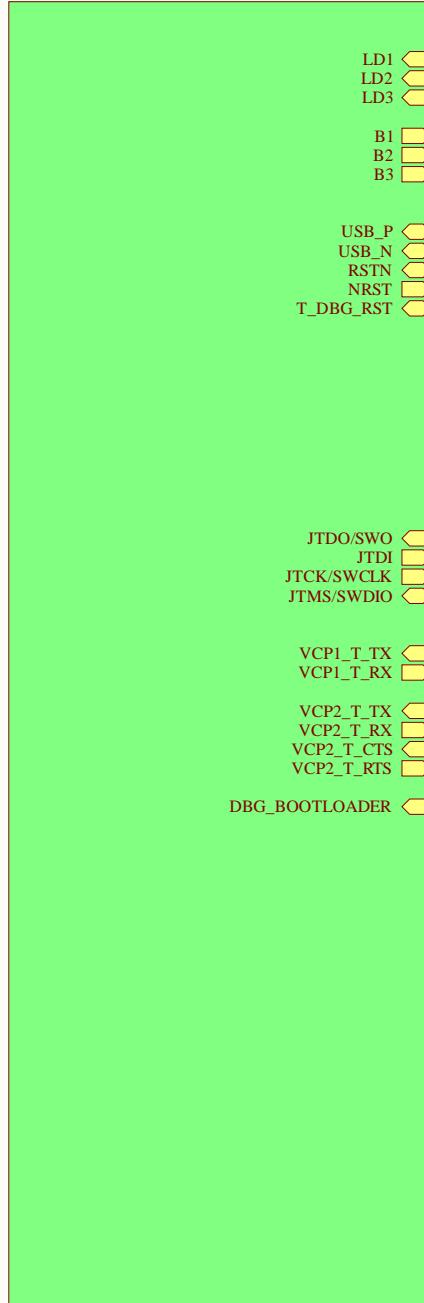
The complete Open Platform License Agreement can be found on www.st.com/opla.



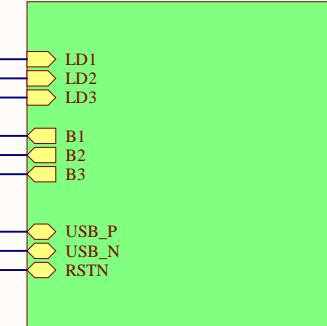
Title:	Project overview
Project:	NUCLEO-64 - Mezzanine Board
Variant:	USB
Revision:	D-01
Size:	A4
Date:	11-JAN-2024
Reference:	MB1801
Sheet:	1 of 7



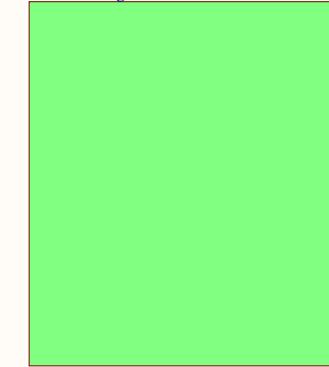
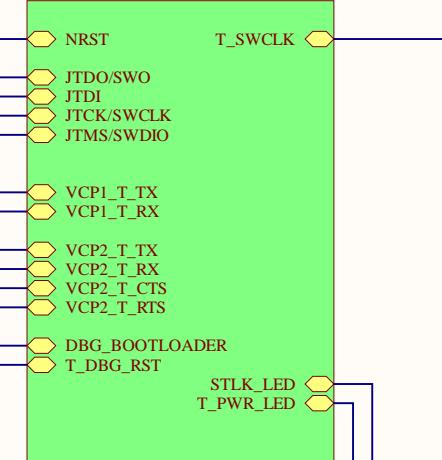
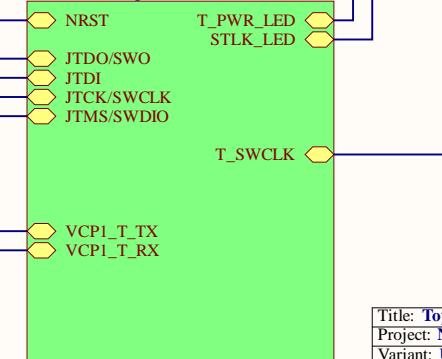
Extension Connectors



LEDs & Push Buttons & USB-C Connector

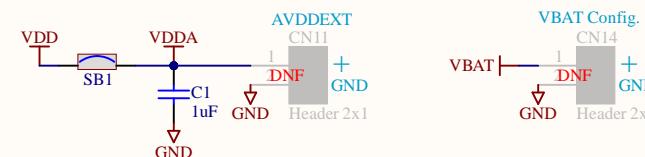
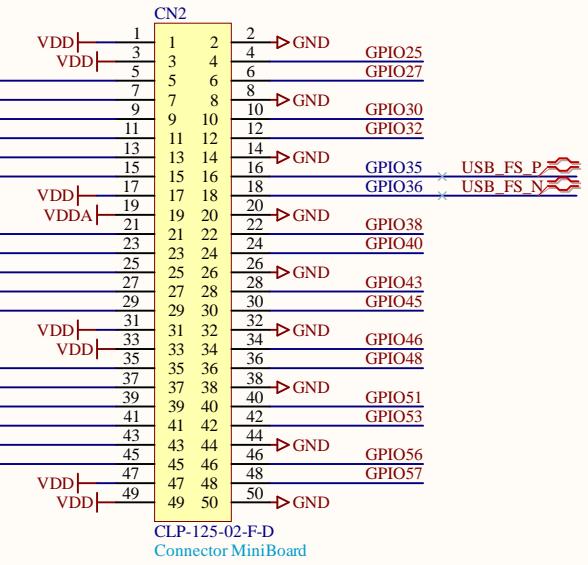
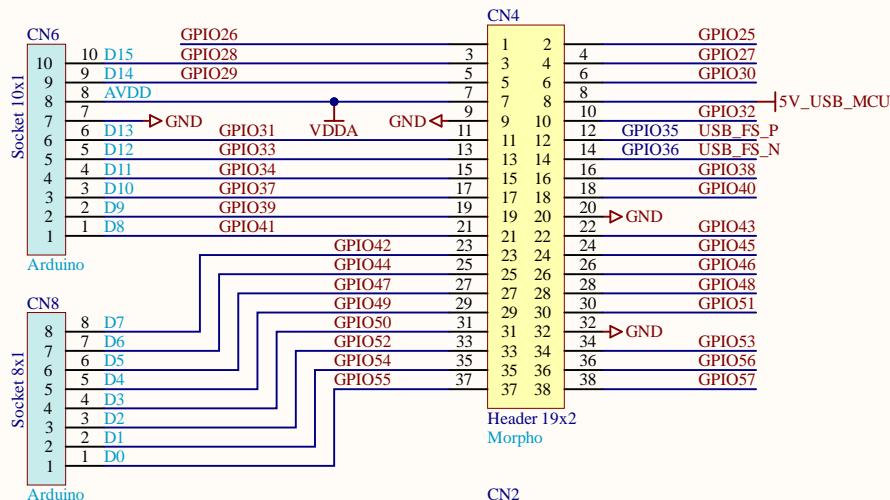
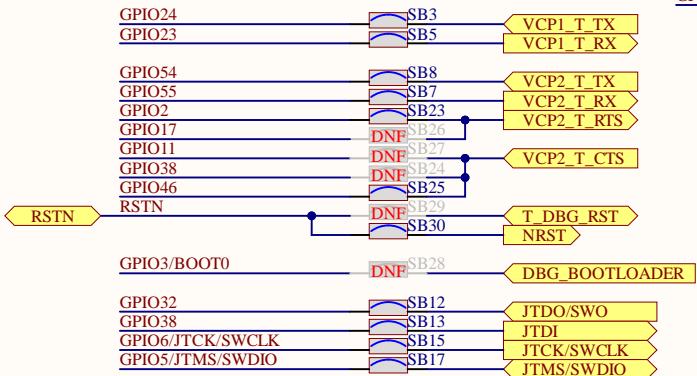
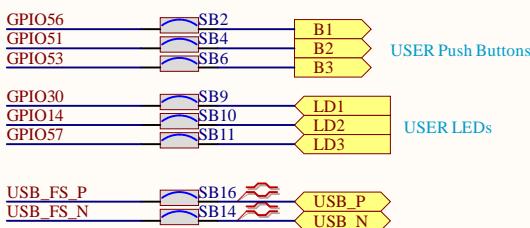
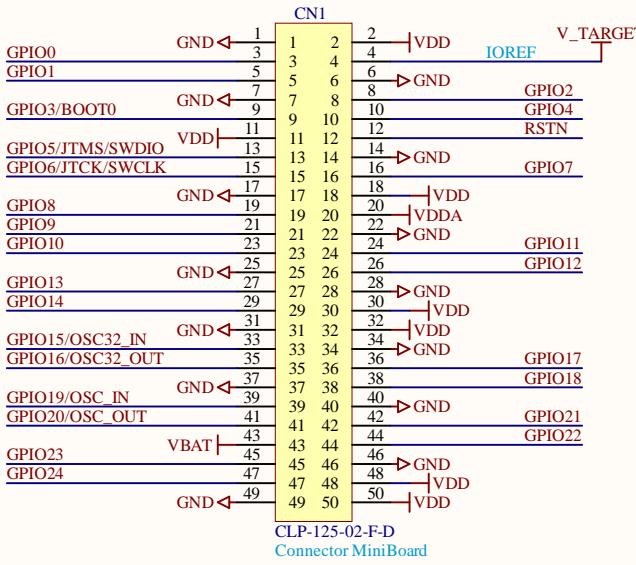
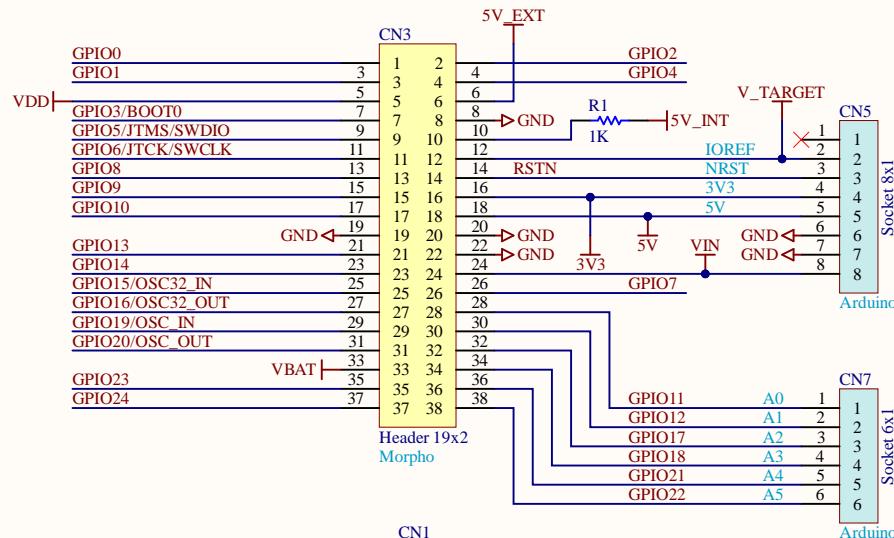


Power Management

U_STlink-V3EC
STLink-V3EC.SchDocU_External_Debug_Interface
External_Debug_Interface.SchDoc

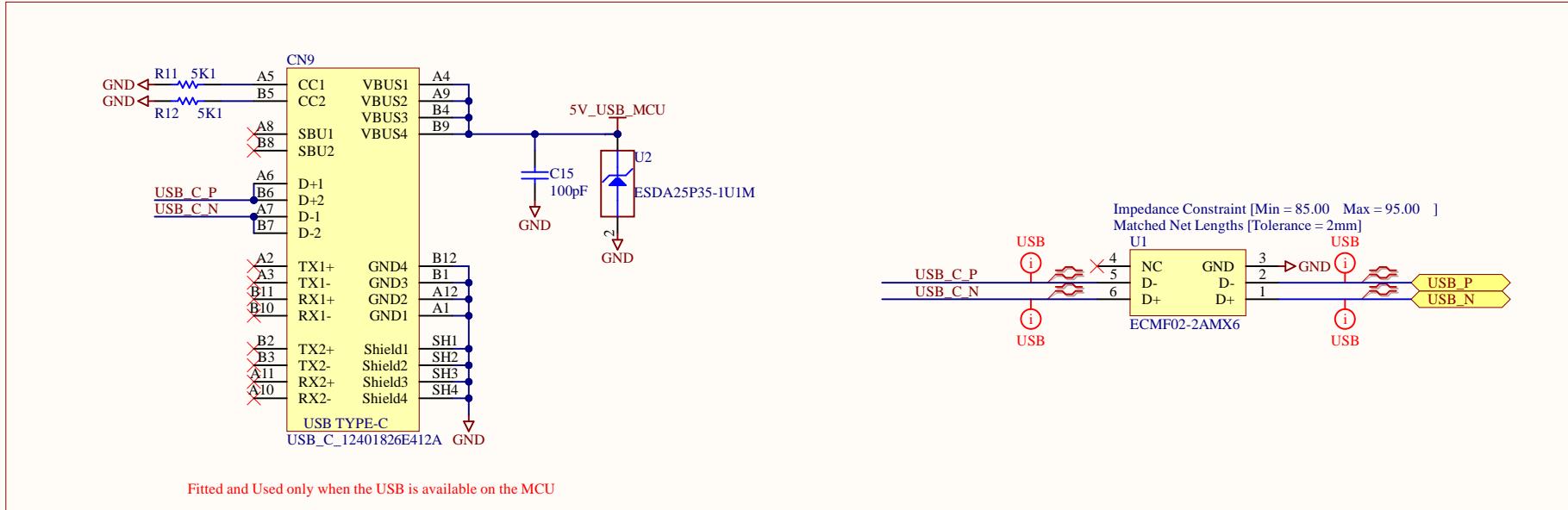
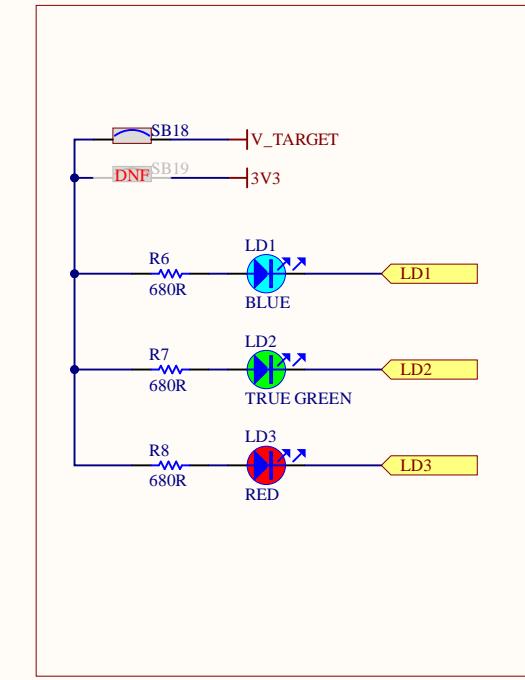
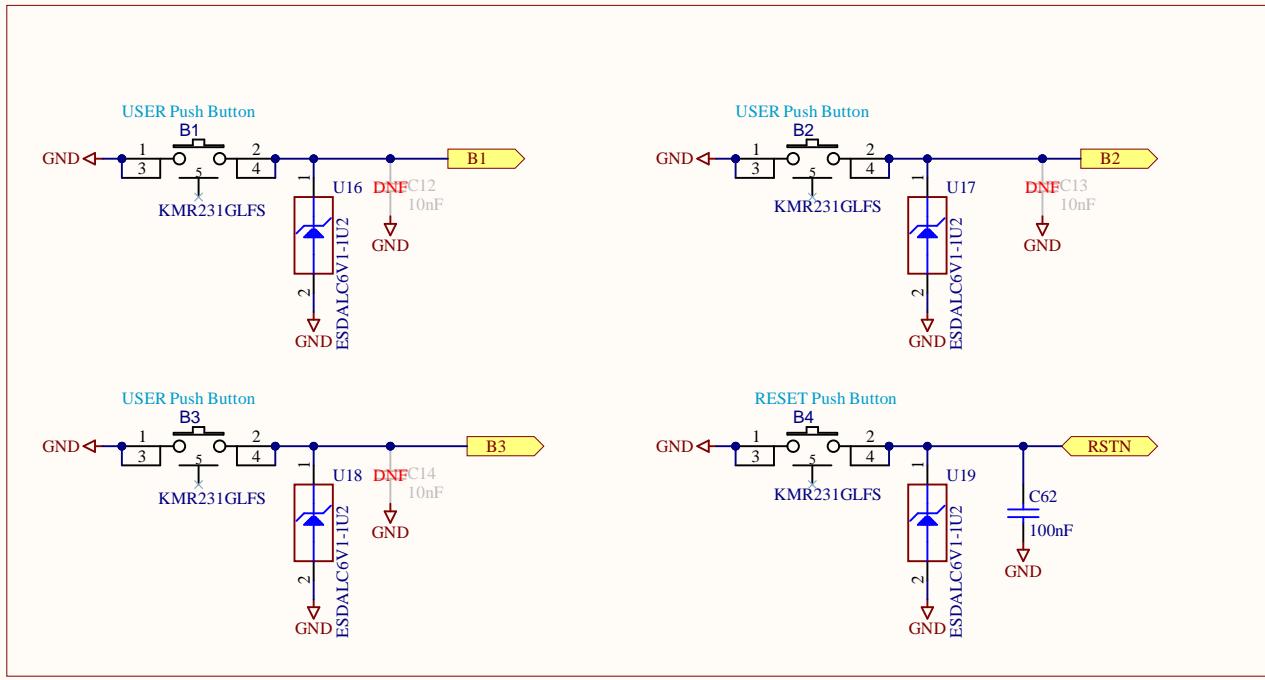
Title: Top Schematic	
Project: NUCLEO-64 - Mezzanine Board	
Variant: USB	
Revision: D-01	
Size: A4 Date: 11-JAN-2024	
Reference: MB1801	
Sheet: 2 of 7	





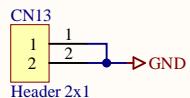
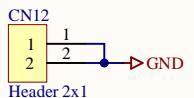
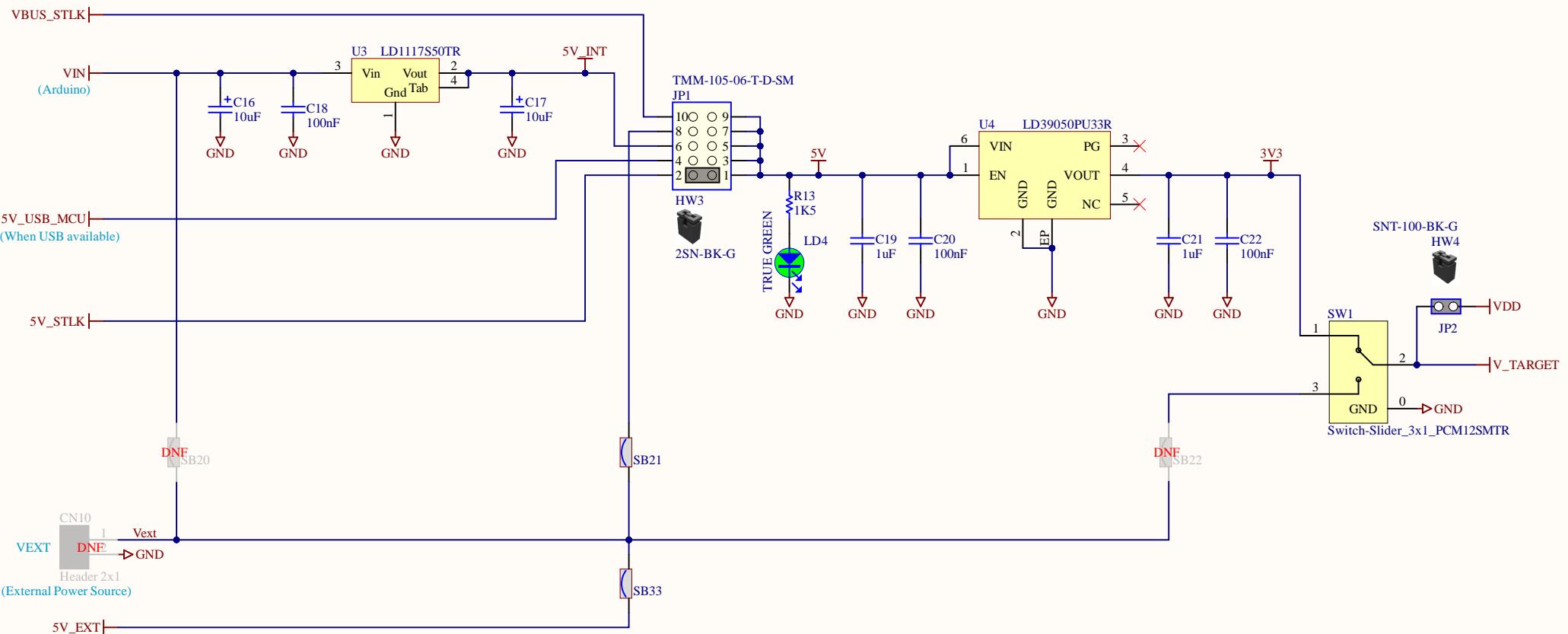
Title: Extension Connectors		
Project: NUCLEO-64 - Mezzanine Board		
Variant: USB		
Revision: D-01	Reference: MB1801	
Size: A4	Date: 11-JAN-2024	Sheet: 3 of 7





Title:	LEDs & Push Buttons & USB-C Connector	
Project:	NUCLEO-64 - Mezzanine Board	
Variant:	USB	
Revision:	D-01	Reference: ME
Size:	A4	Date: 11-JAN-2024
		Sheet: 4 of 7

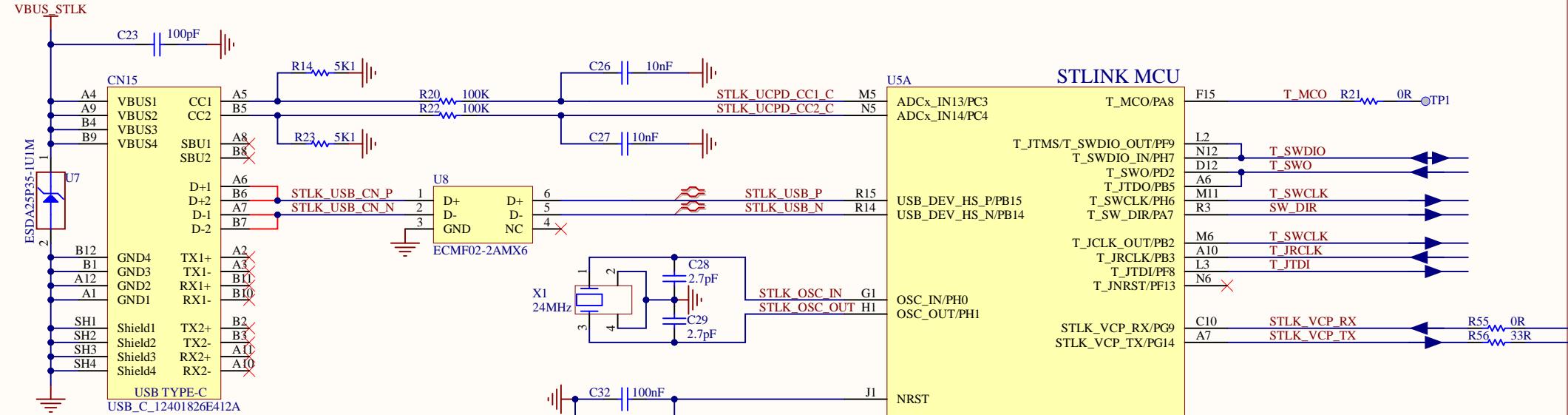




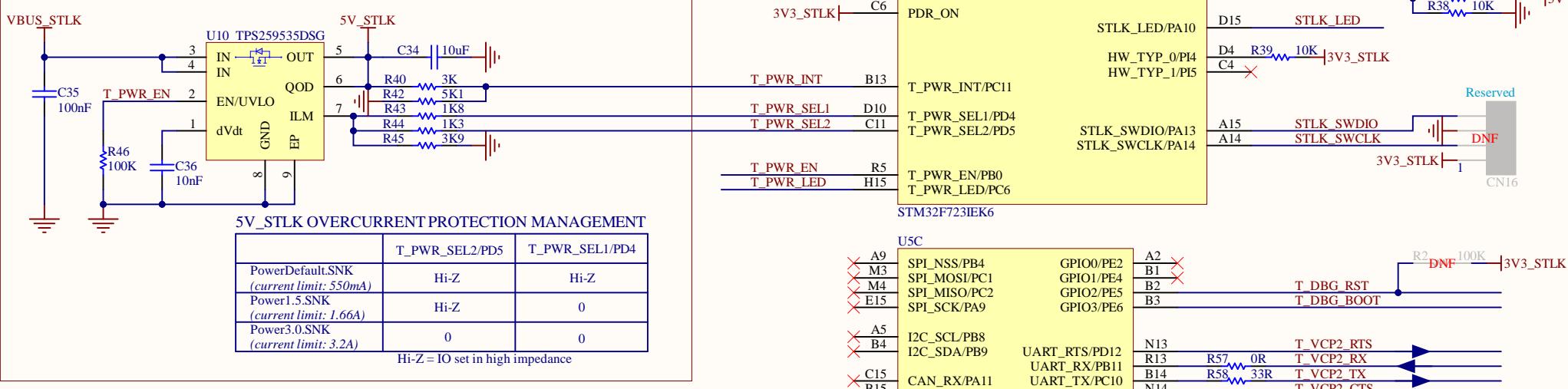
Title: Power Management	
Project: NUCLEO-64 - Mezzanine Board	
Variant: USB	
Revision: D-01	
Size: A4 Date: 11-JAN-2024	
Reference: MB1801	
Sheet: 5 of 7	



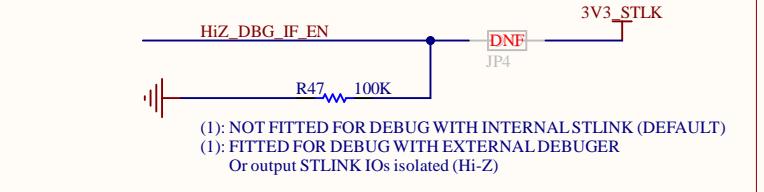
ST-LINK USB CONNECTOR



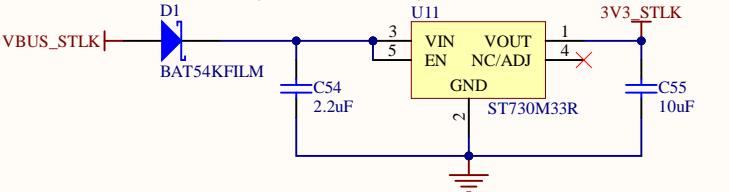
5V_STLK OVERVOLTAGE AND OVERCURRENT PROTECTION



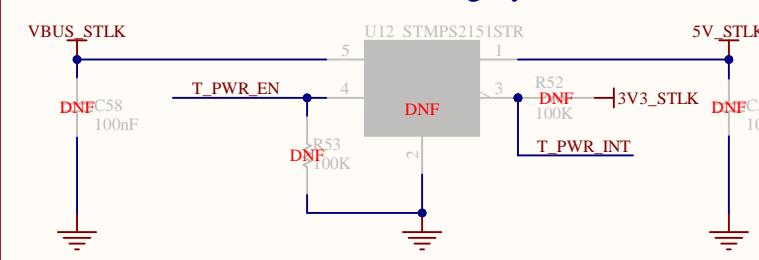
EXTERNAL DEBUGGER SELECTION



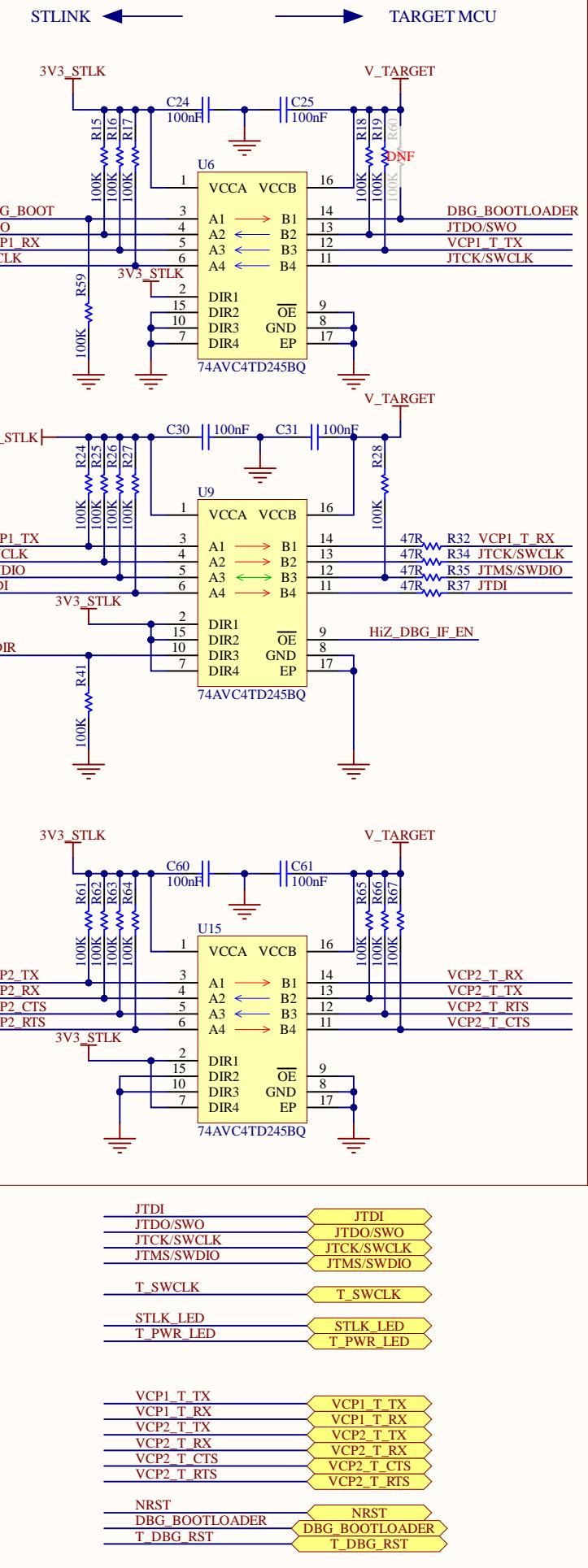
ST-LINK POWER (3V3/300mA)

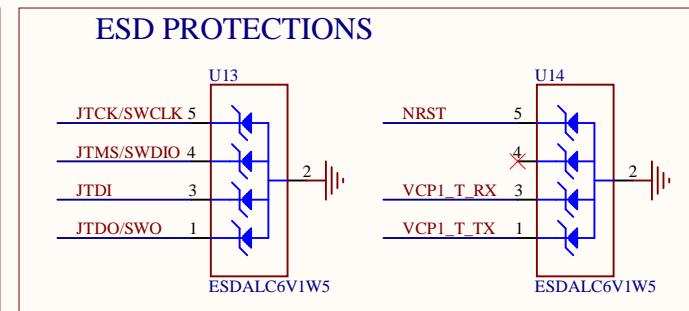
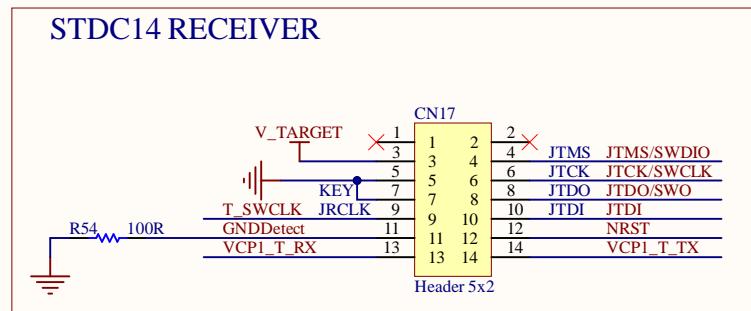
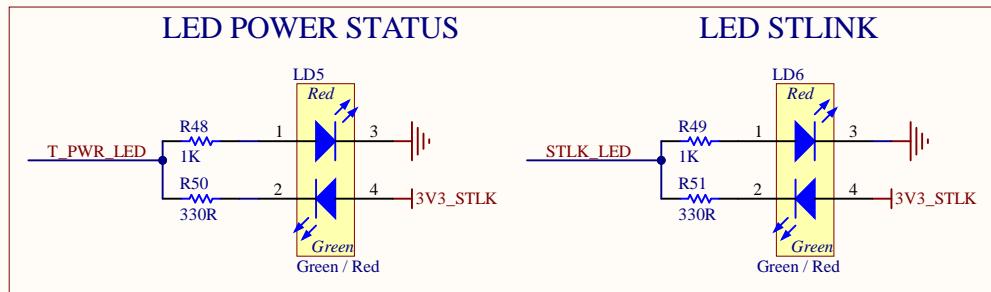


5V ST-LINK PROTECTION for Legacy



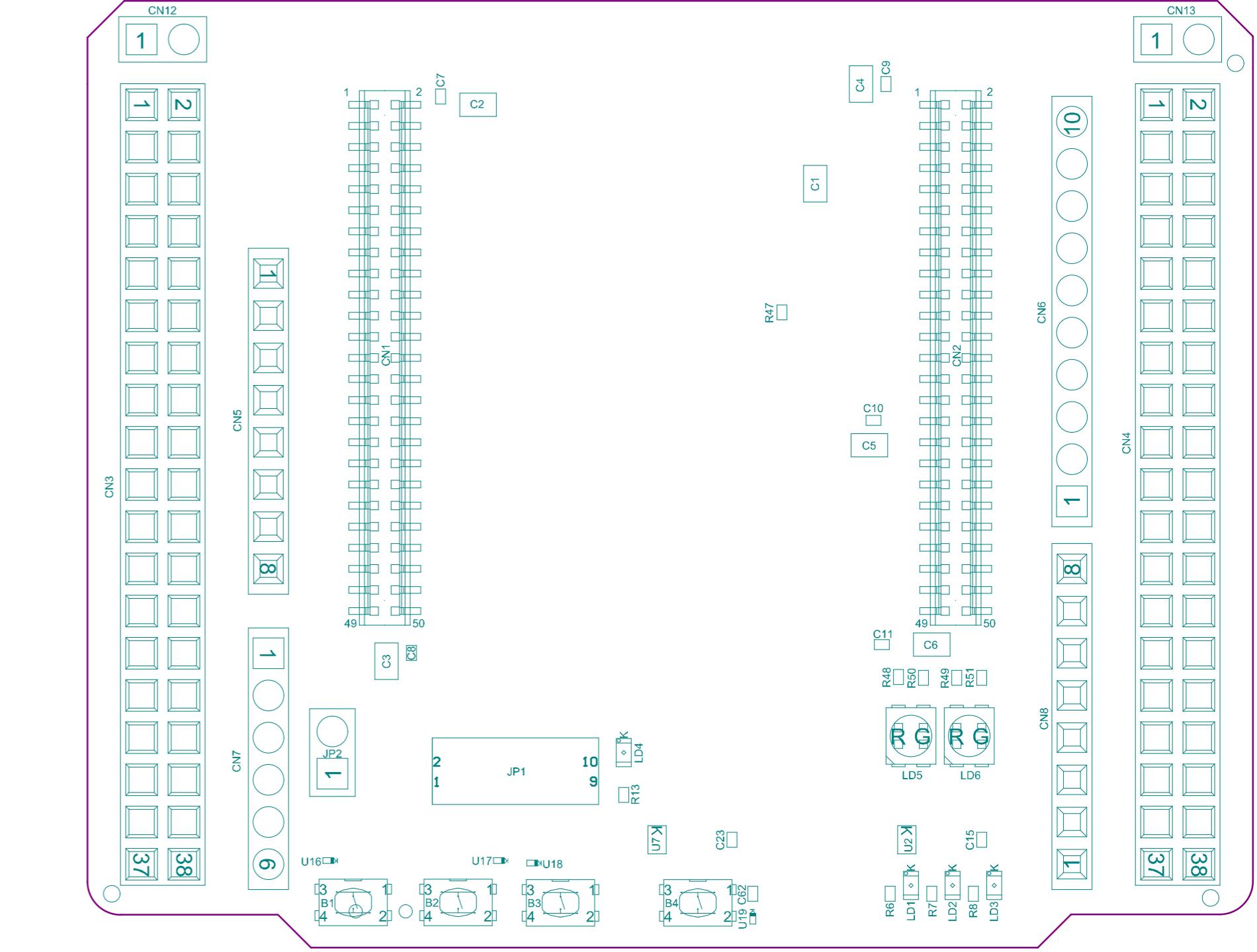
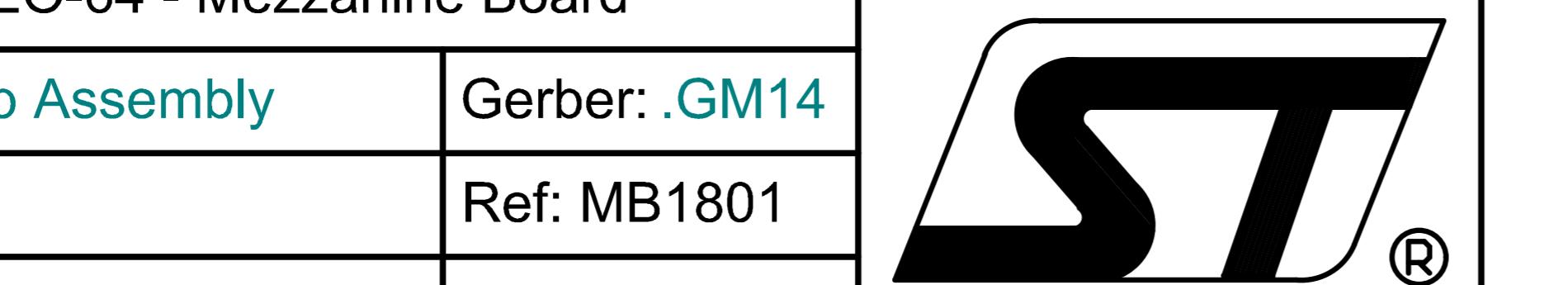
VOLTAGE LEVEL SHIFTER

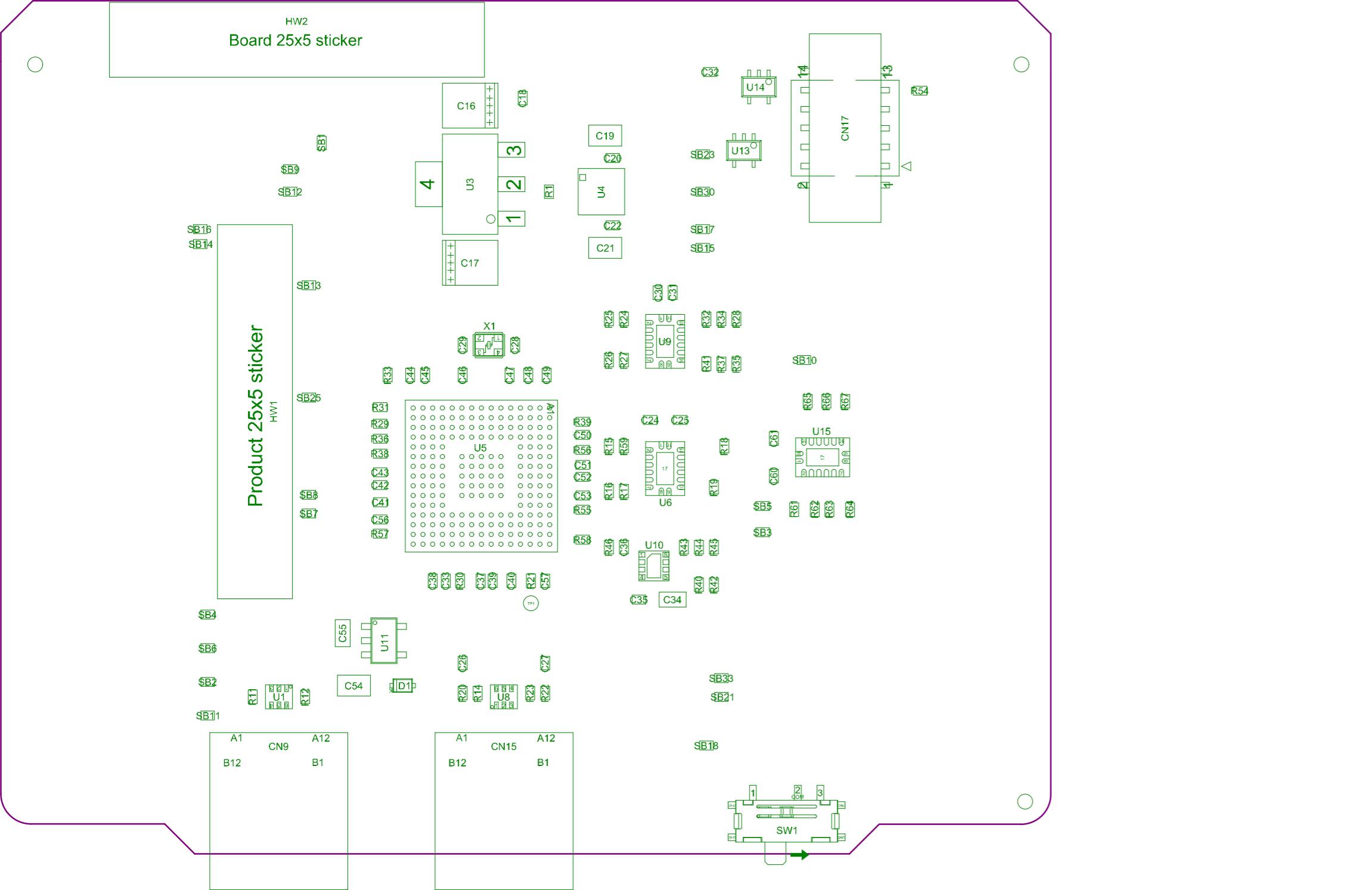




JTMS/SWDIO	JTMS/SWDIO
JTCK/SWCLK	JTCK/SWCLK
JTDO/SWO	JTDO/SWO
JTDI	JTDI
T_SWCLK	T_SWCLK
VCPI_T_RX	VCPI_T_RX
VCPI_T_RX	VCPI_T_RX
NRST	NRST
STLK_LED	STLK_LED
T_PWR_LED	T_PWR_LED

Project: NUCLEO-64 - Mezzanine Board	
Layer: M14-Top Assembly	Gerber: .GM14
Variant: USB	Ref: MB1801
Date: 11-JAN-2024	Rev: D





: NUCLEO-64 - Mezzanine

M15-Bottom Assembly | Gerber

: USB

1-JAN-202

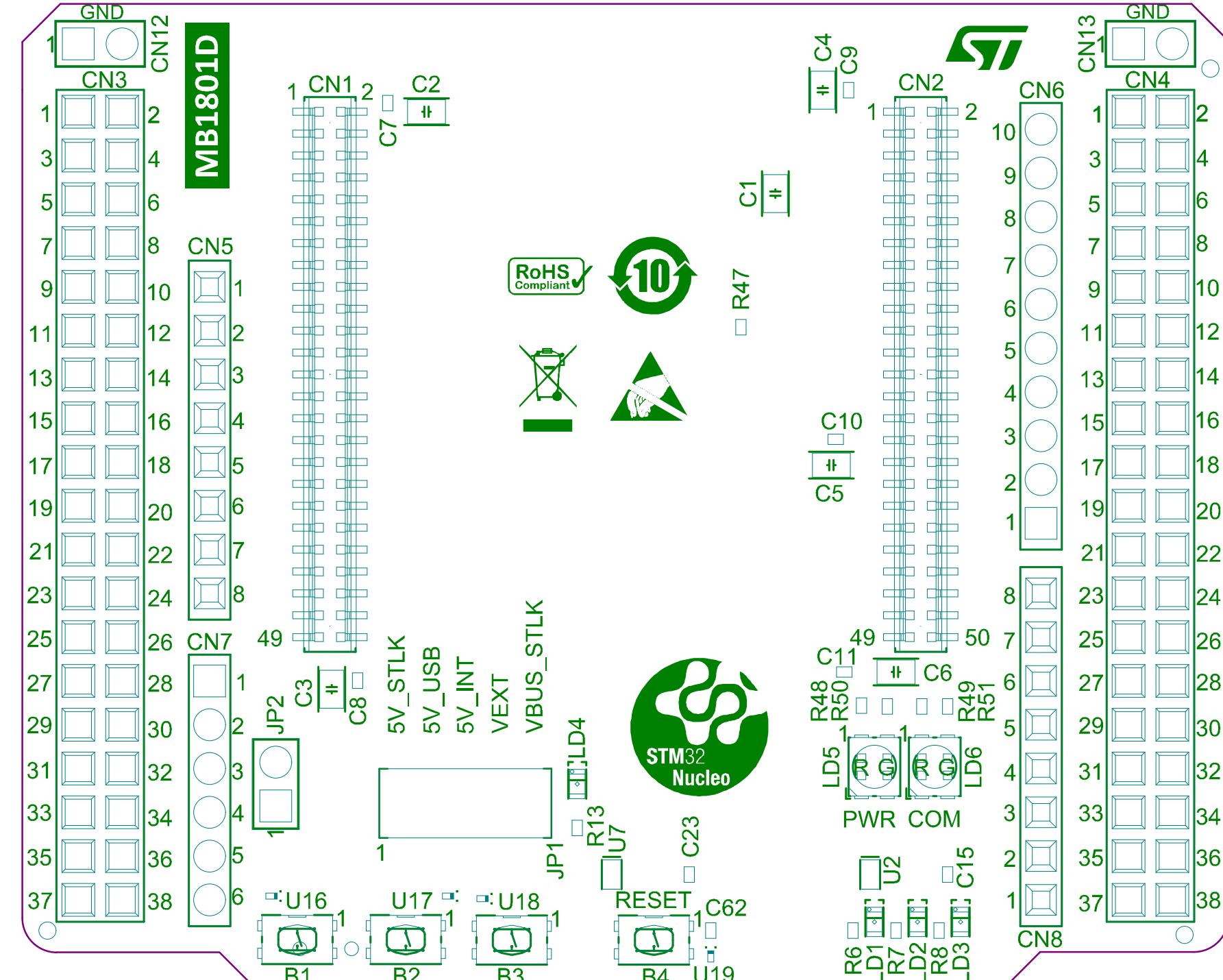
Gerber

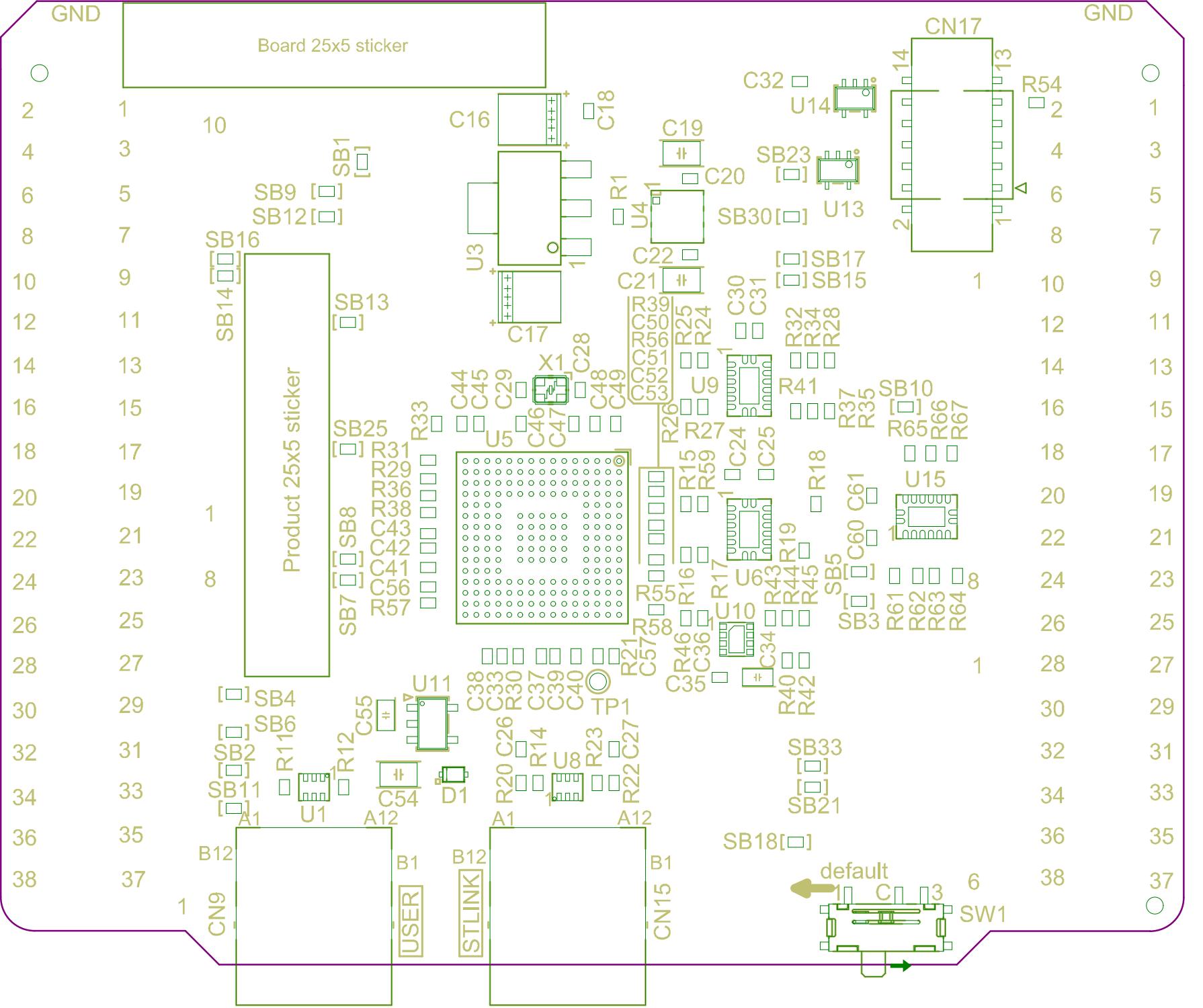
1



Top Overlay

.GTO





Bottom Overlay

.GBO