

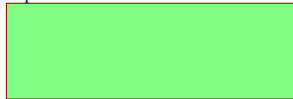
STM32WB1M STMod+ expansion board

MB1868

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[Top.SchDoc](#)

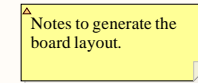


Legend

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

Text to be added to silkscreen.

Warning text.



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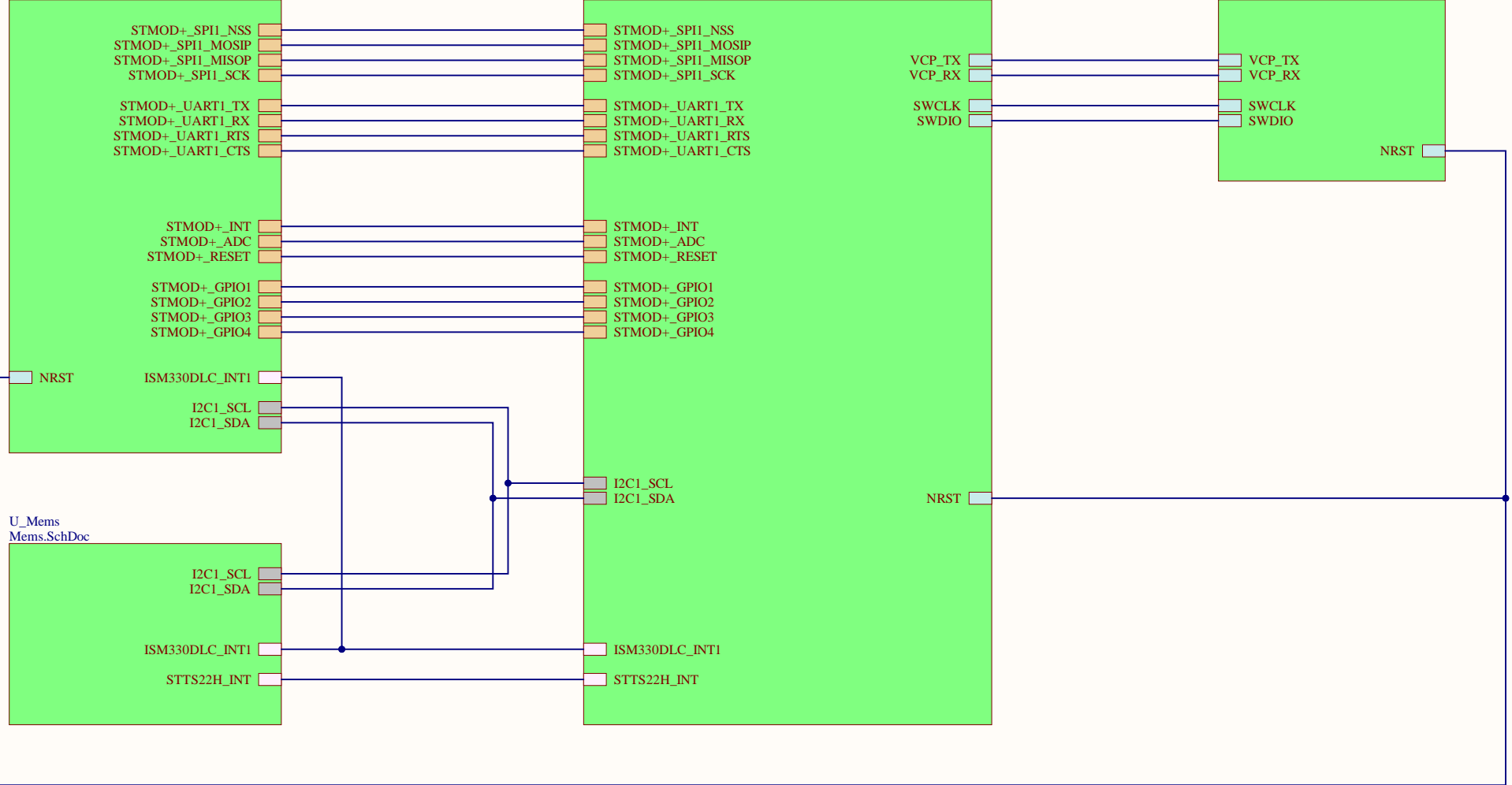
Title: Project overview		
Project: STM32WB1M STMod+ expansion board		
Variant: WB1M		
Revision: E-01		Reference: MB1868
Size: A4	Date: 29-JUN-2023	Sheet: 1 of 6

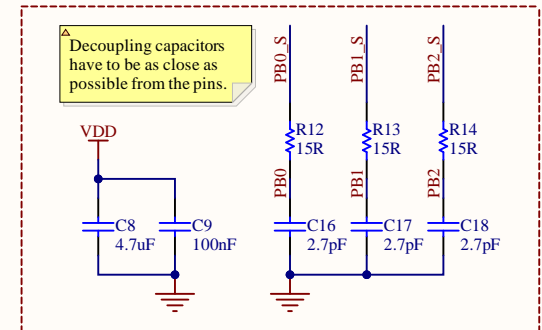
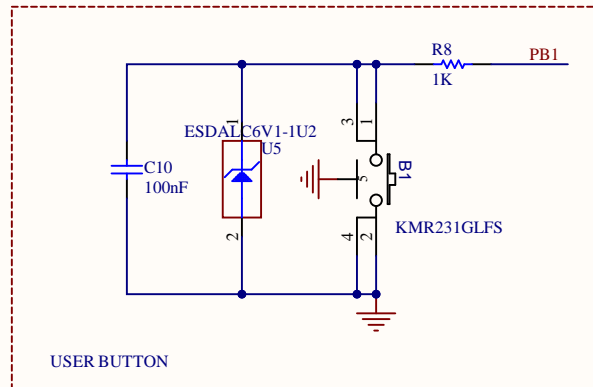
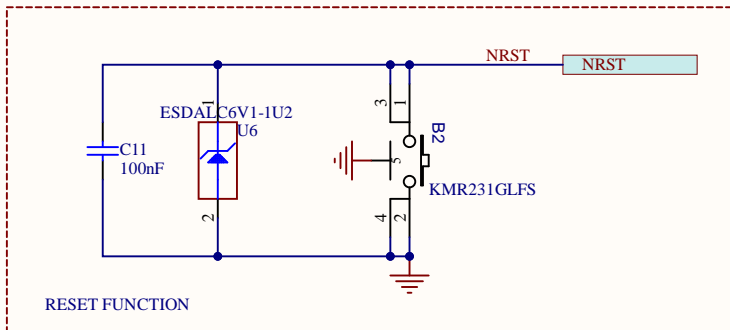
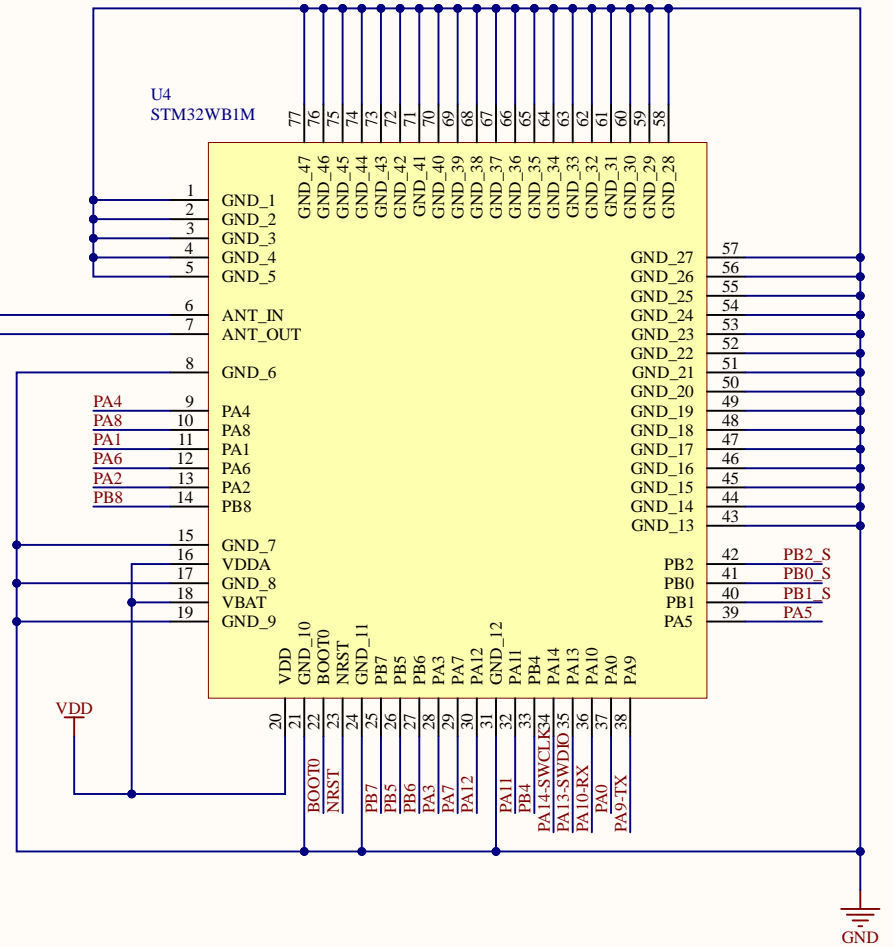
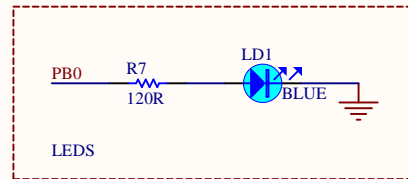
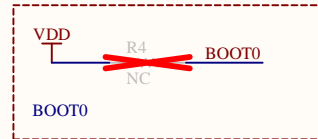
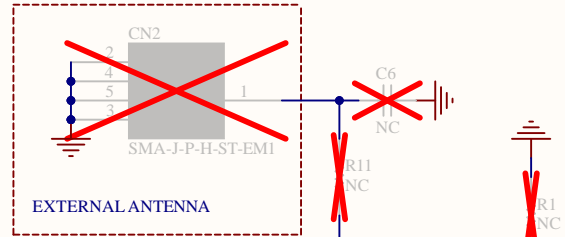
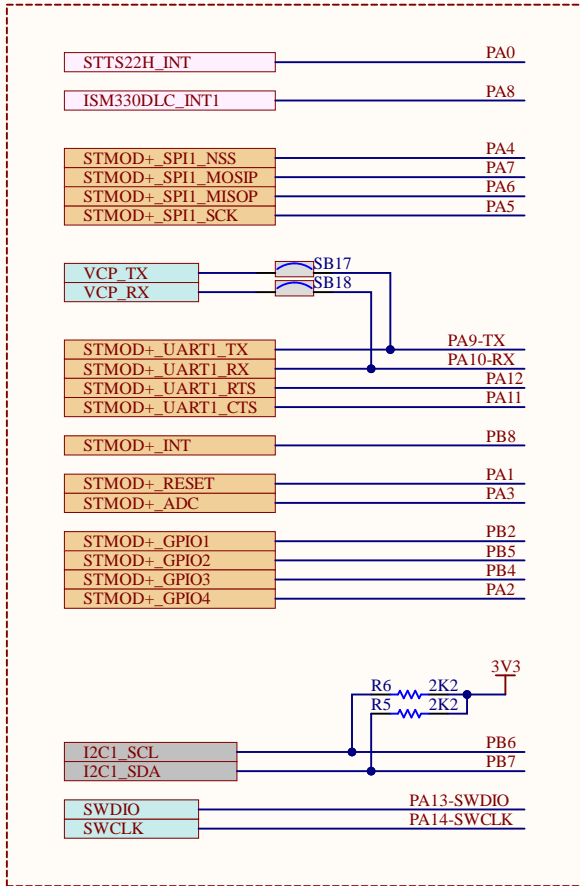


U_STMOD+_interface
STMOD+_interface.SchDoc

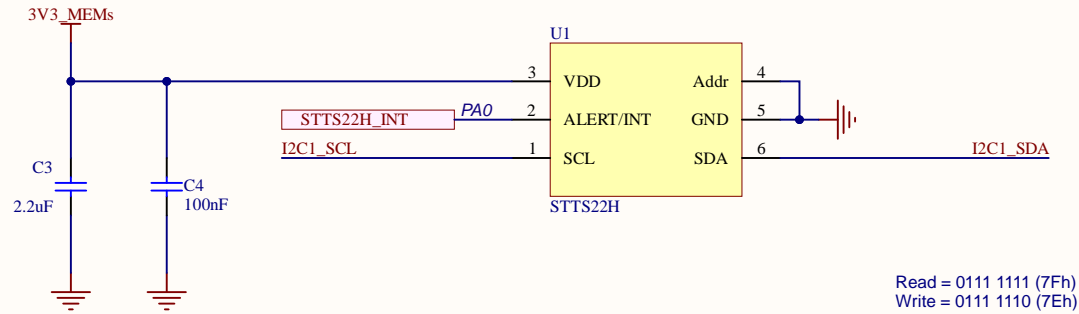
U_STM32WB1M
STM32WB1M.SchDoc

U_Board_supply
Board_supply.SchDoc



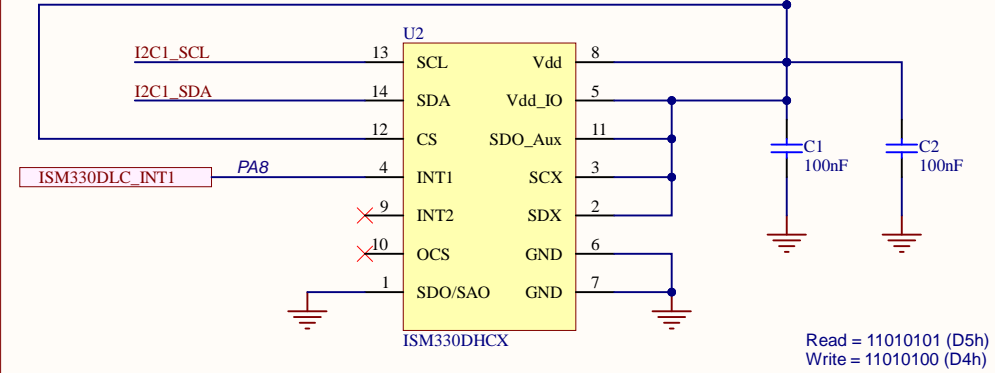


Capacitive digital sensor for temperature

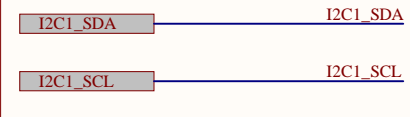


Read = 0111 1111 (7Fh)
Write = 0111 1110 (7Eh)

3D accelerometer and 3D gyroscope

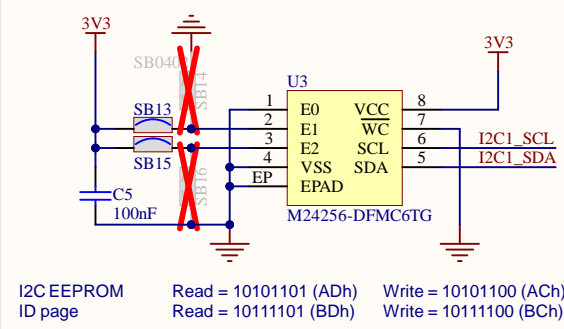


Read = 11010101 (D5h)
Write = 11010100 (D4h)

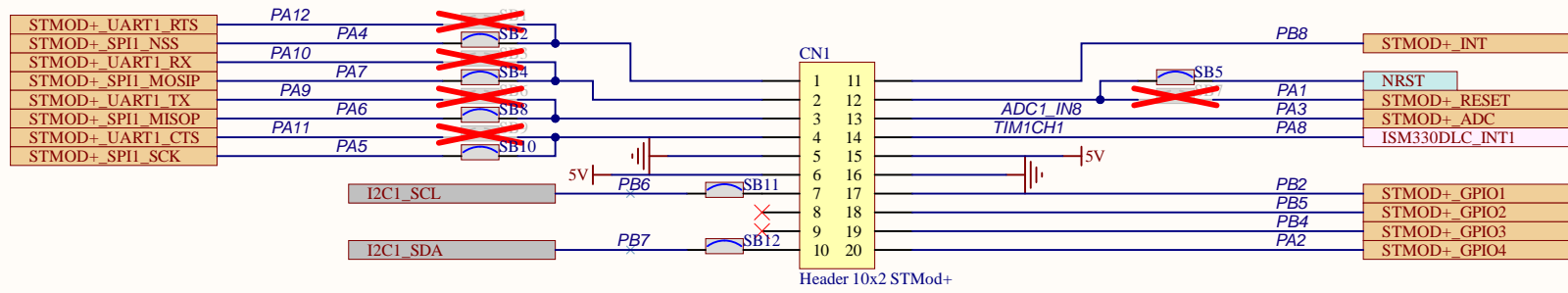


▲ 100nF Capacitors on external supplies should be placed as close as possible to the supply pads of the MEMs.

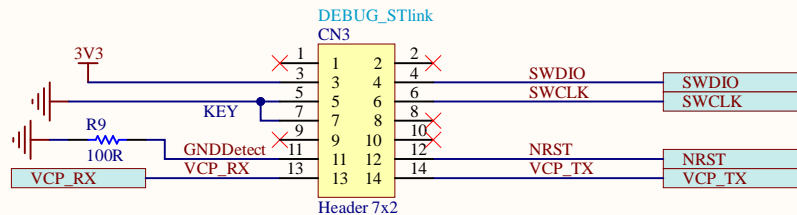
I2C Bus EEPROM



I2C EEPROM ID page
Read = 10101101 (ADh)
Write = 10101100 (ACh)
Read = 10111101 (BDh)
Write = 10111100 (BCh)

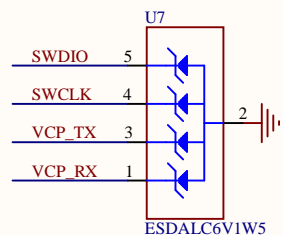


STDC14 receiver connector



Specific constraints for SWDIO and SWCLK (must have same length and must be Shielded),

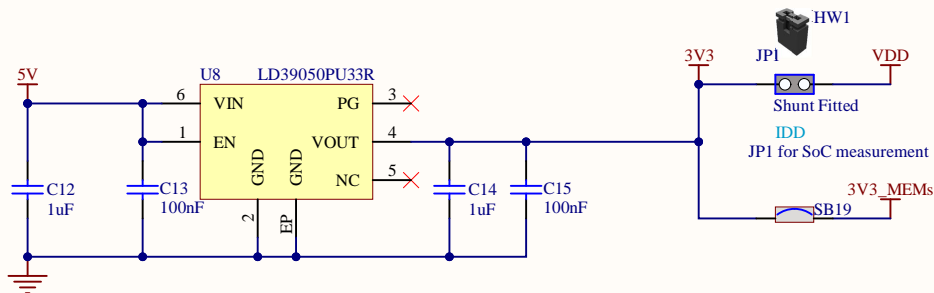
ESD protections for connectors



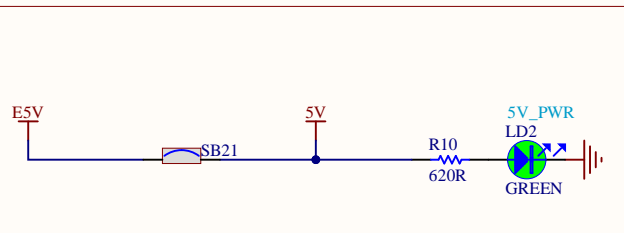
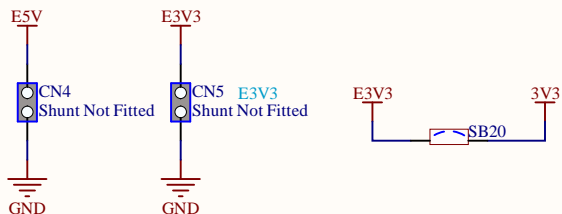
Pin attributions on ESD can be swapped for layout optimisation

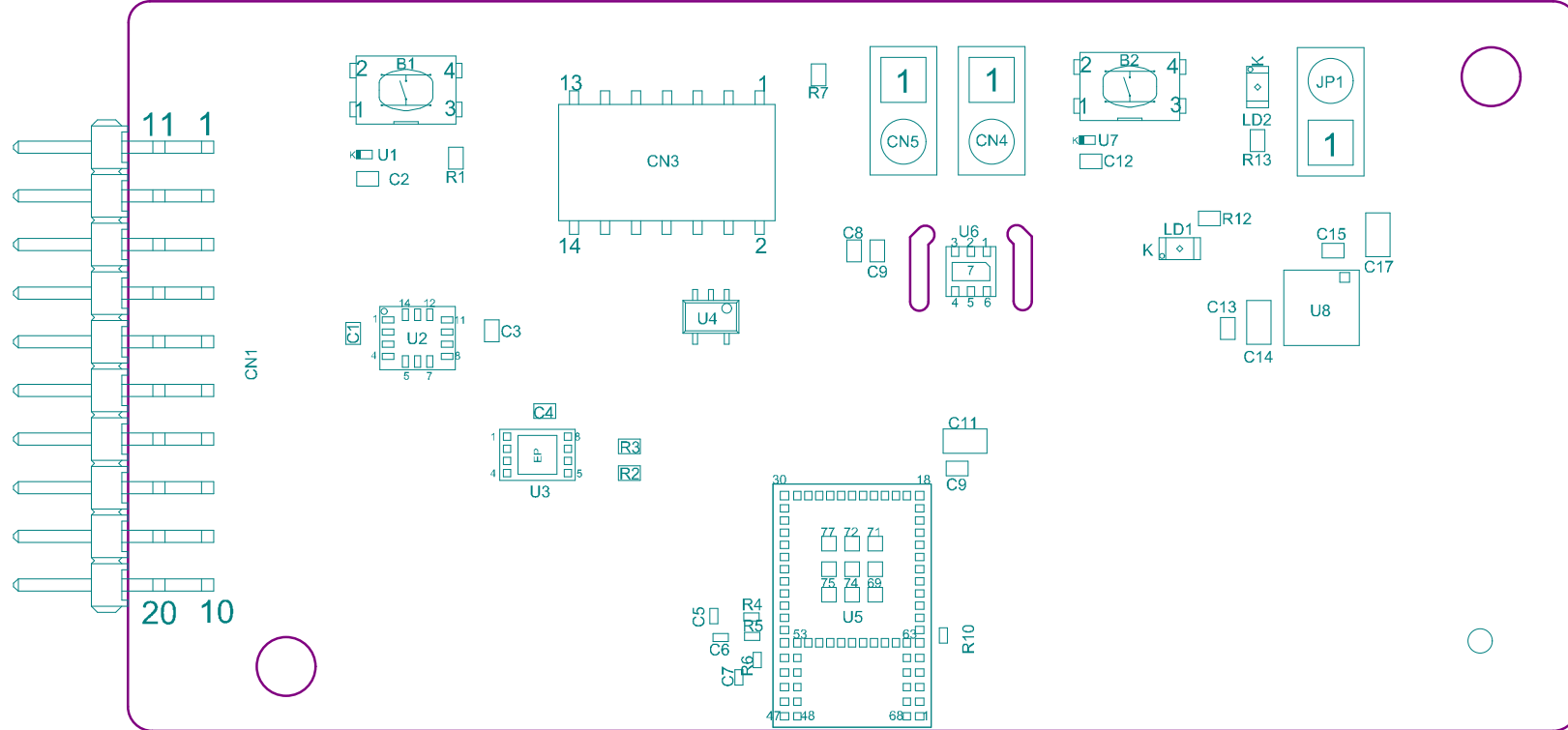
There are 3 ways to provide the 5V voltage supply to the board:
 - With an external 5V (CN4),
 - With STMOD+ (CN1),
 If the board is connected to the STMOD+ connector, then 5V must not supply the board (so remove SB38 also), as the board is already supplied via the STMOD+.

VDD PWR for MCU



Connectors for external supplies





Project: STM32WB1M STMod+ expansion board

Layer: M14-Top Assembly

Gerber: .GM14

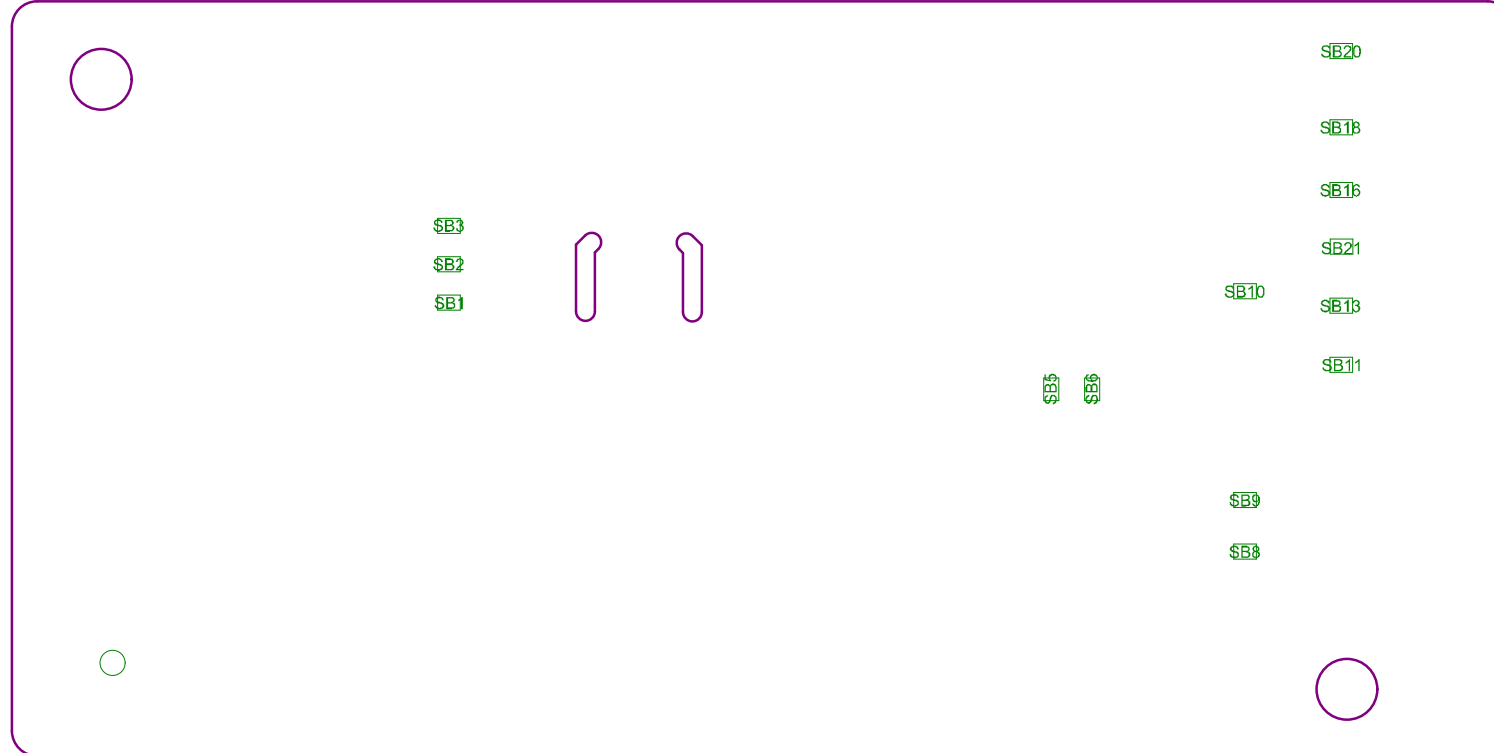
Variant: WB1M

Ref: MB1868

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Rev: E





Project: STM32WB1M STMod+ expansion board

Layer: M15-Bottom Assembly

Gerber: .GM15

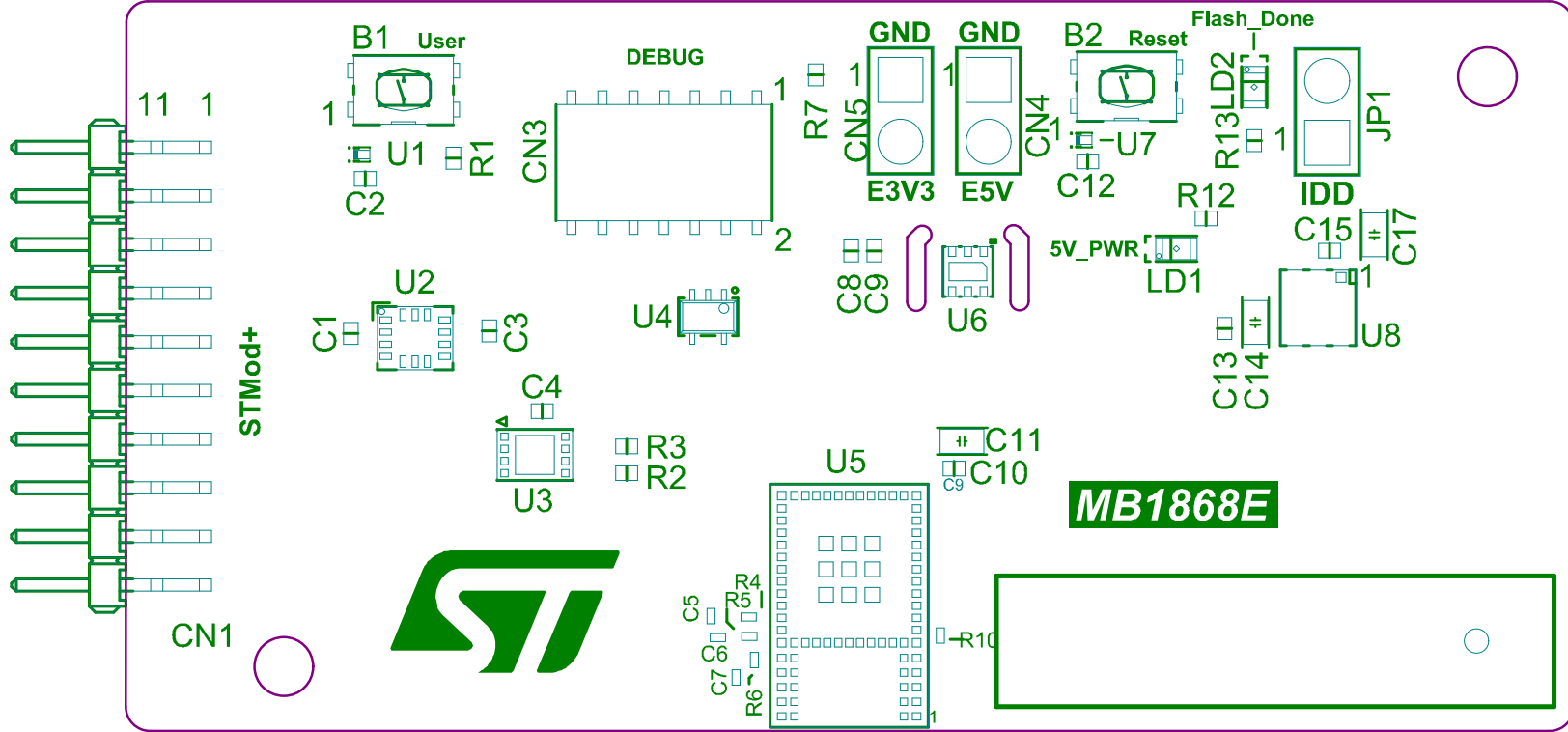
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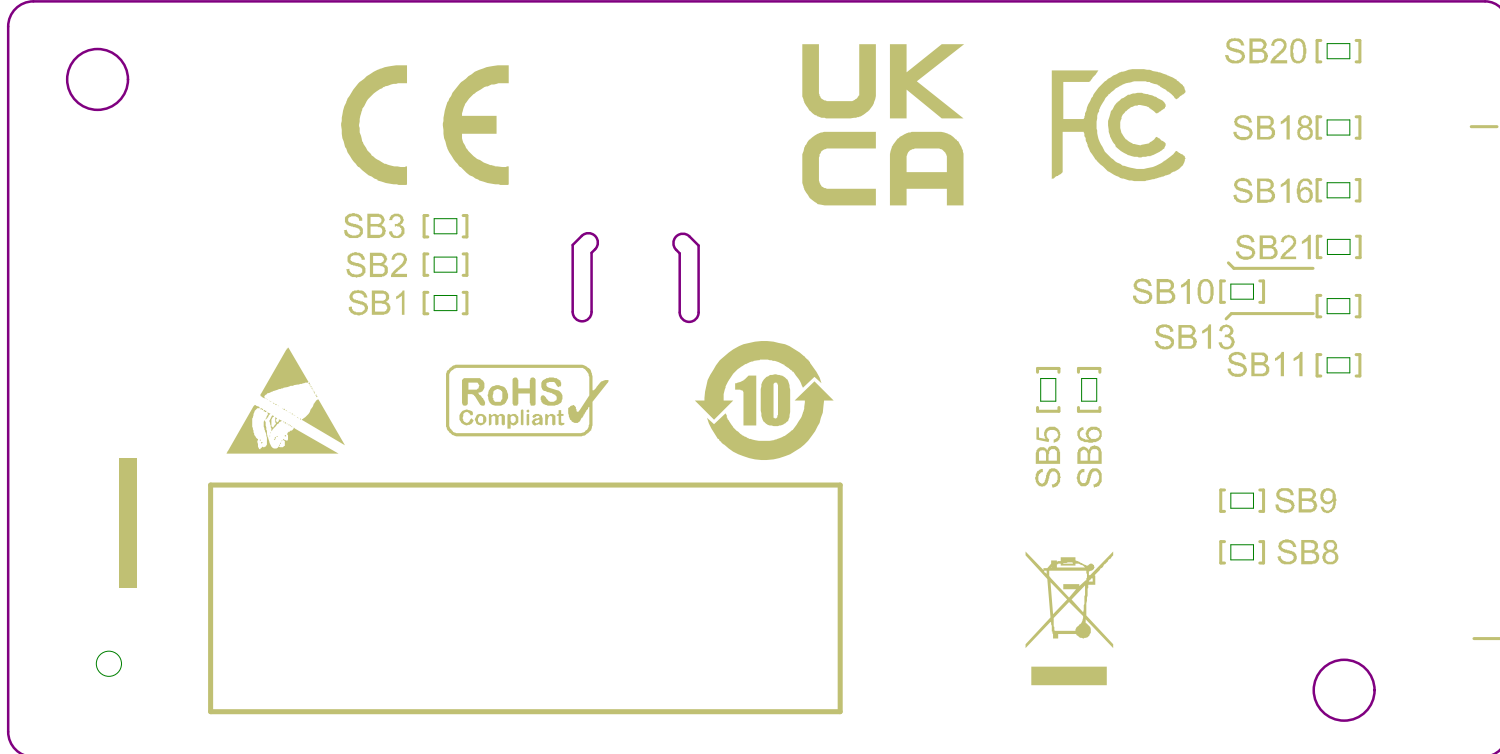
Rev: E





Top Overlay

.GTO



Bottom Overlay

.GBO