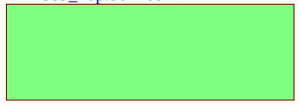
NUCLEO-WL5JC

MB1389

Table of contents

U_MB1389_Top
MB1389_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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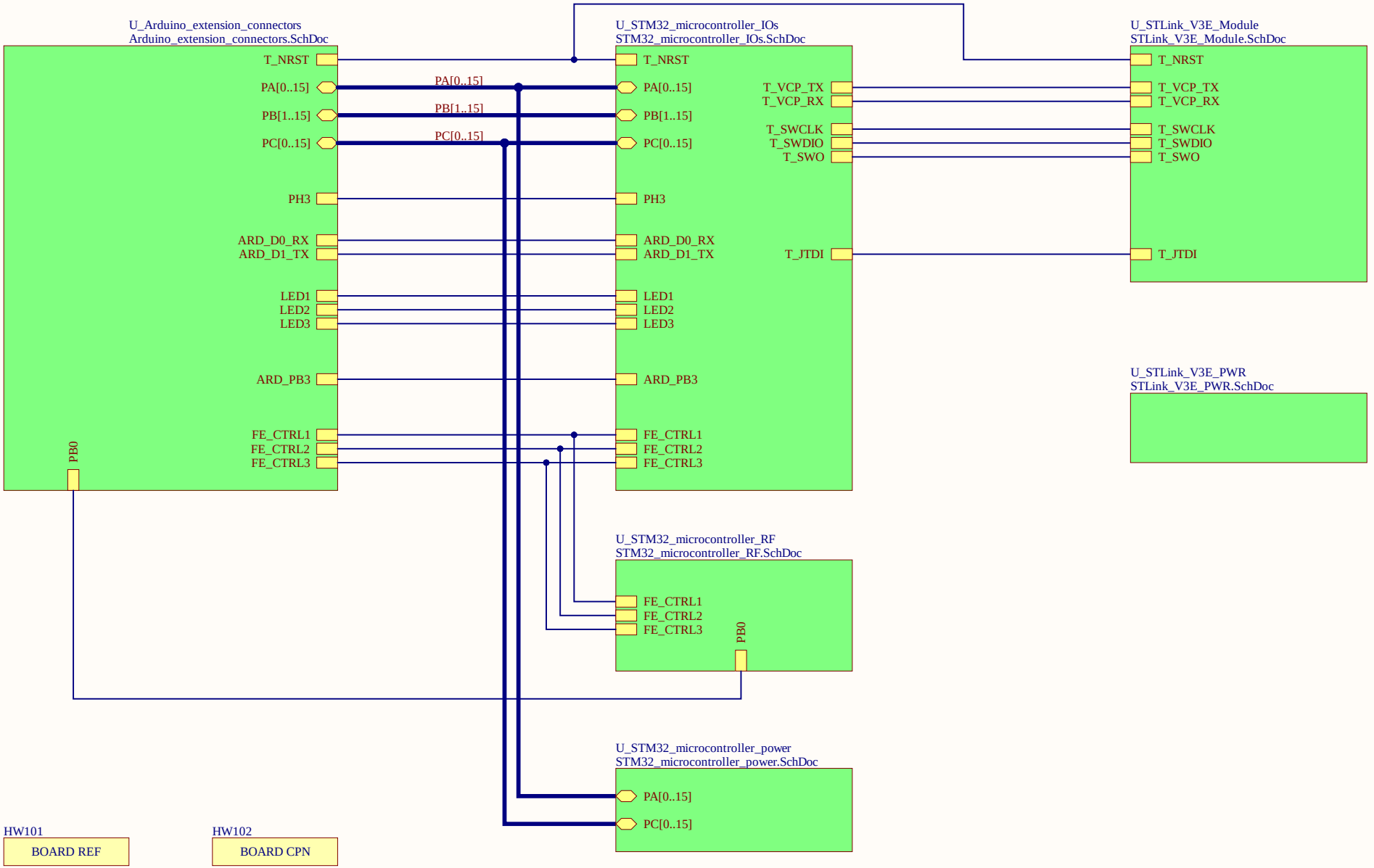
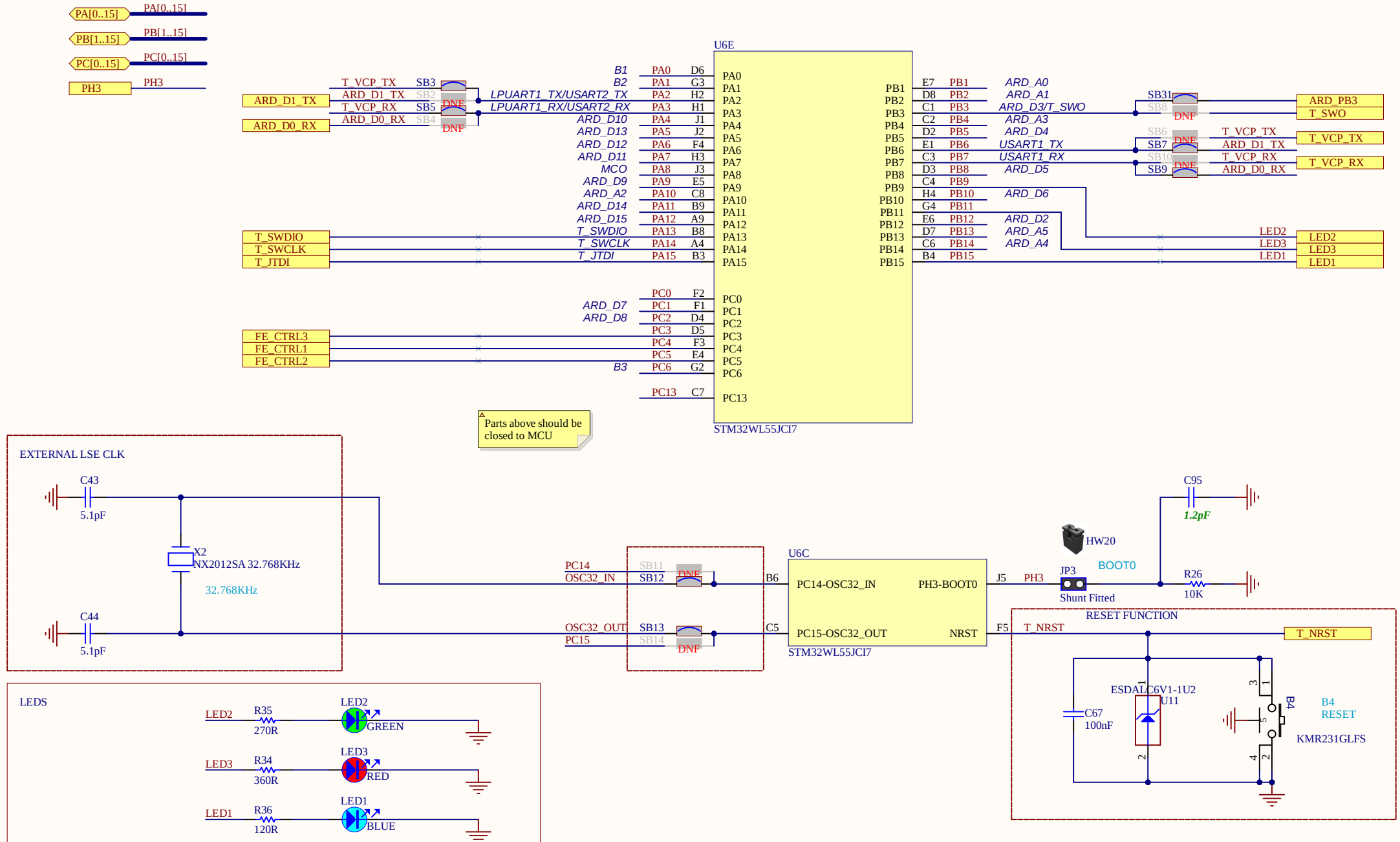
Title: **Project overview**		
Project: **NUCLEO-WL5JC**		
Variant: High-band		
Revision: E -02		Reference: MB1389
Size: A4	Date: 2020-April-28	Sheet: 1 of 8

life.augmented



Title: **Top hierarchical view**			
Project: **NUCLEO-WL5JC**			
Variant: High-band			
Revision: E -02		Reference: MB1389	
Size: A4	Date: 2020-April-28	Sheet: 2 of 8	

life.augmented


PA[0..15]
PB[1..15]
PC[0..15]
PH3
U6E
STM32WL55JCI7
Parts above should be closed to MCU
EXTERNAL LSE CLK
C43
5.1pF
X2
NX2012SA 32.768KHz
32.768KHz
C44
5.1pF
U6C
STM32WL55JCI7
HW20
BOOT0
JP3
Shunt Fitted
C95
1.2pF
R26
10K
RESET FUNCTION
T_NRST
ESDALC6V1-1U2
U11
C67
100nF
B4
RESET
KMR231GLFS
LEDS
LED2
R35
270R
GREEN
LED3
R34
360R
RED
LED1
R36
120R
BLUE
Title: STM32 microcontroller I/Os
Project: NUCLEO-WL5JC
Variant: High-band
Revision: E-02
Reference: MB1389
Size: A4
Date: 2020-April-28
Sheet: 3 of 8
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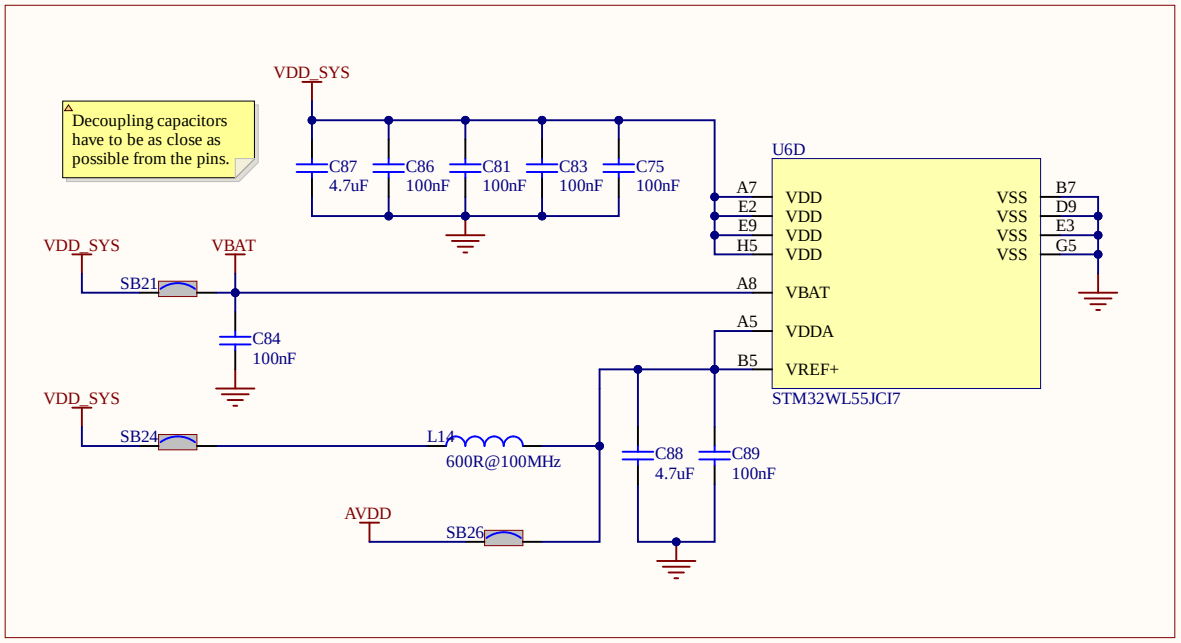
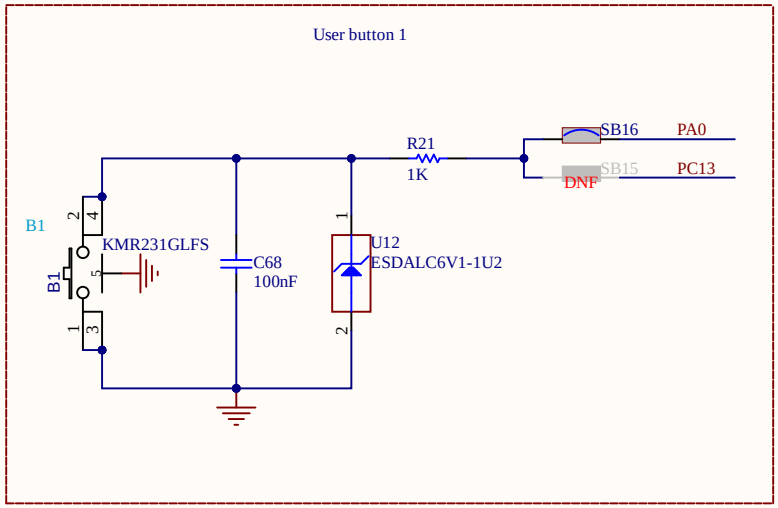
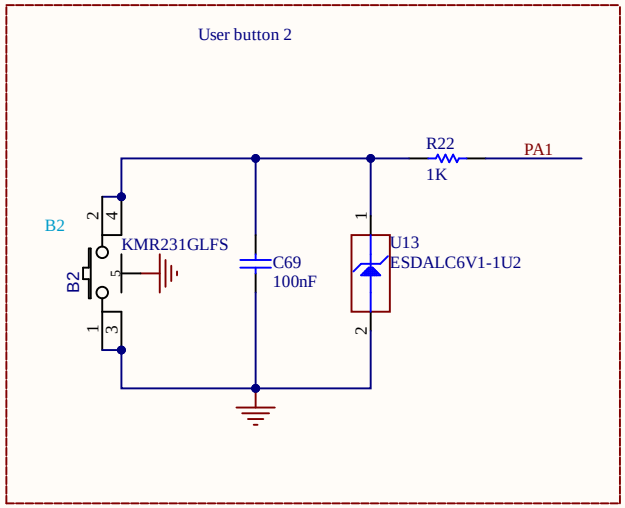
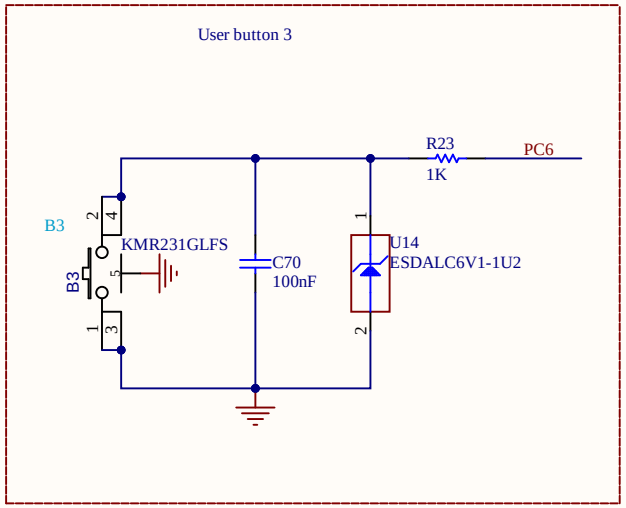


User buttons







PA[0..15] PA[0..15]

PC[0..15] PC[0..15]

Title: **STM32 microcontroller power**		
Project: **NUCLEO-WL5JC**		
Variant: High-band		
Revision: E -02		Reference: MB1389
Size: A4	Date: 2020-April-28	Sheet: 4 of 8

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R33 close to L13 to avoid stub on VLXSMPS track

Capacitors close to MCU

RF front-end configuration	FE_CTRL1	FE_CTRL2	FE_CTRL3
Transmit high output power	Low	High	High
Transmit low output power	High	High	High
Receive	High	Low	High

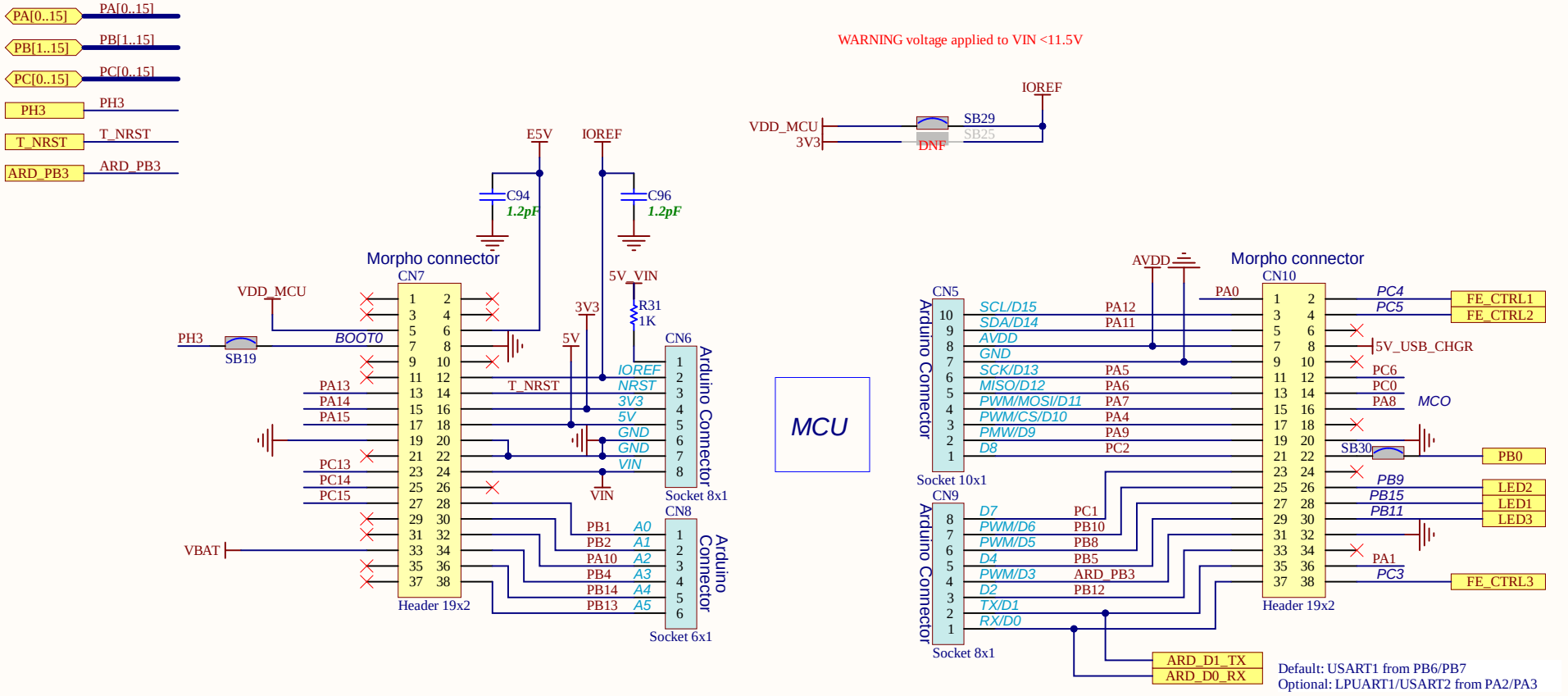
EXTERNAL HSE CLK
TCXO Configuration

C31 must be placed in order to avoid stubs on XTA path when C31 not fitted.

EXTERNAL HSE CLK (XO back-up)

Shield clips for metal RF cavity

Title:	STM32 microcontroller RF		
Project:	NUCLEO-WL5JC		
Variant:	High-band		
Revision:	E -02	Reference:	MB1389
Size: A3	Date: 2020-April-28	Sheet: 5 of 8	



Title: **Arduino & Morpho extension connectors**		
Project: **NUCLEO-WL5JC**		
Variant: High-band		
Revision: E -02		Reference: MB1389
Size: A4	Date: 2020-April-28	Sheet: 6 of 8

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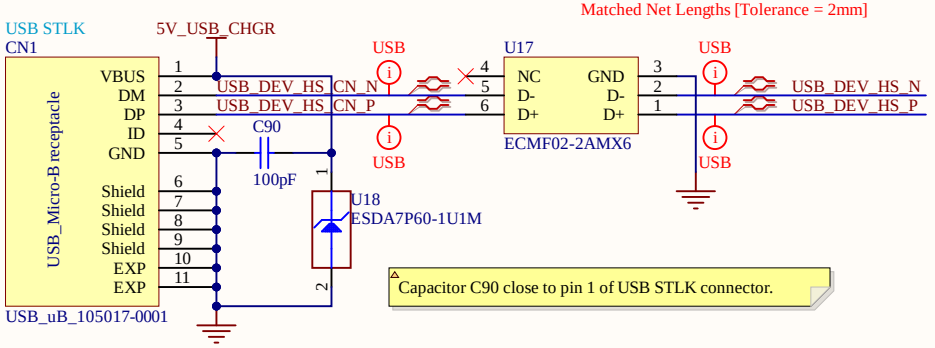
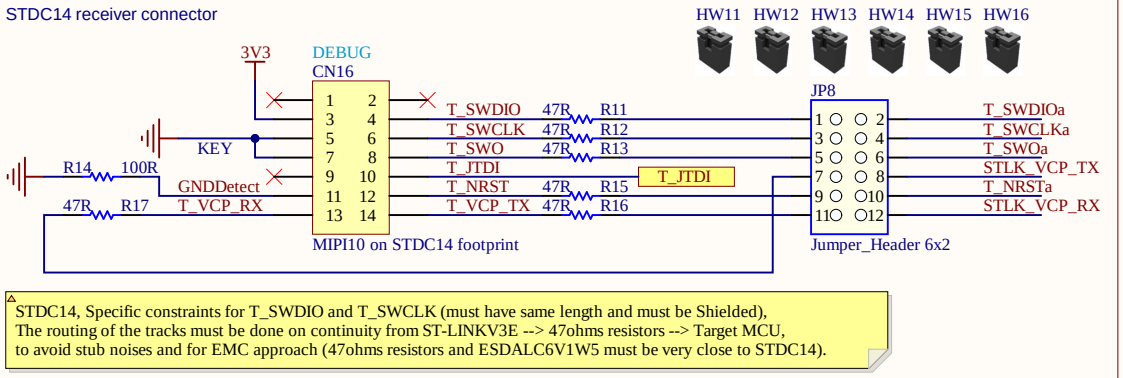
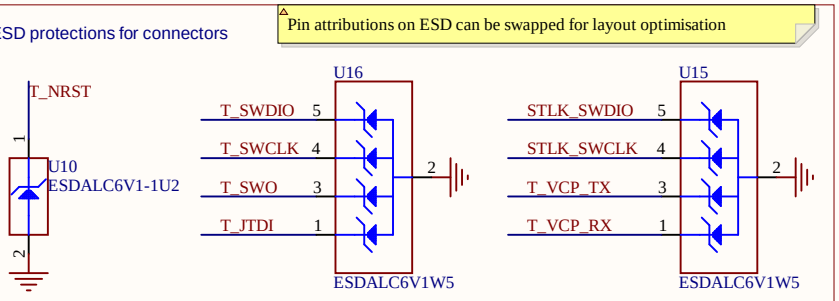
STLK USB HS & 5V USB charger



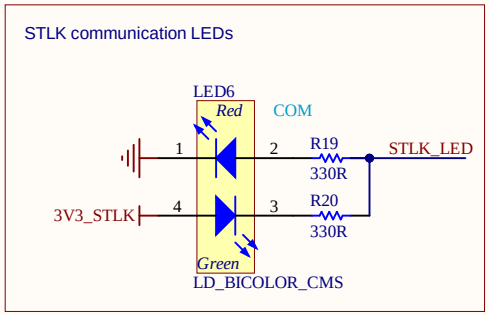
STDC14 receiver connector



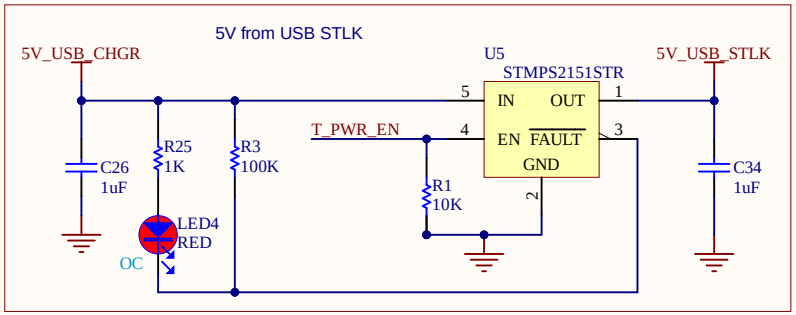
ESD protections for connectors



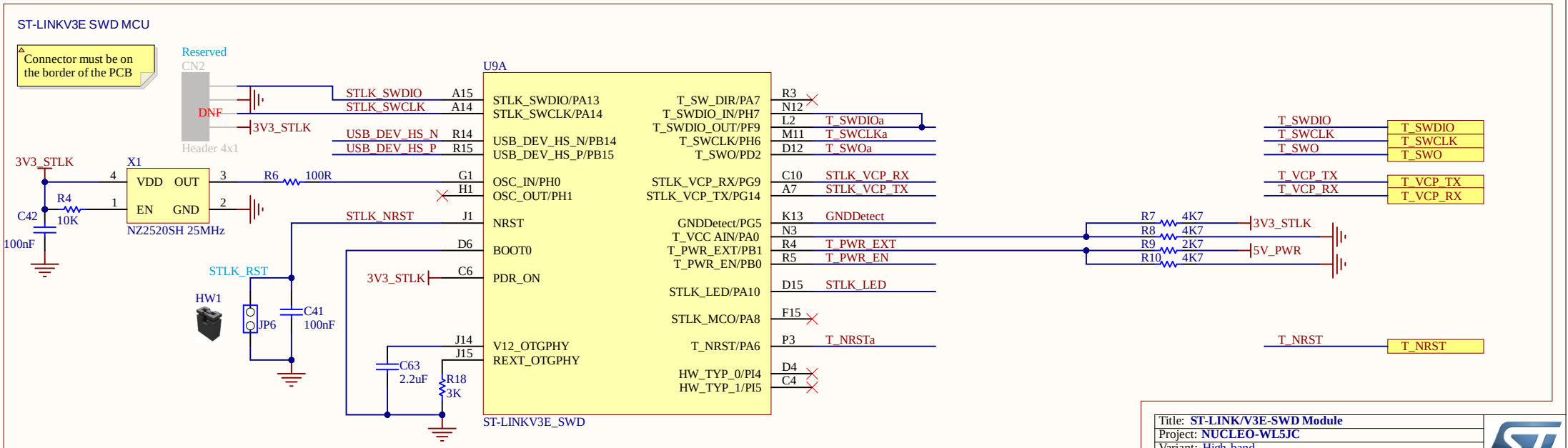
STLK communication LEDs



5V from USB STLK



ST-LINKV3E SWD MCU



Title: **ST-LINK/V3E-SWD Module**		
Project: **NUCLEO-WL5JC**		
Variant: High-band		
Revision: E-02		Reference: MB1389
Size: A4	Date: 2020-April-28	Sheet: 7 of 8

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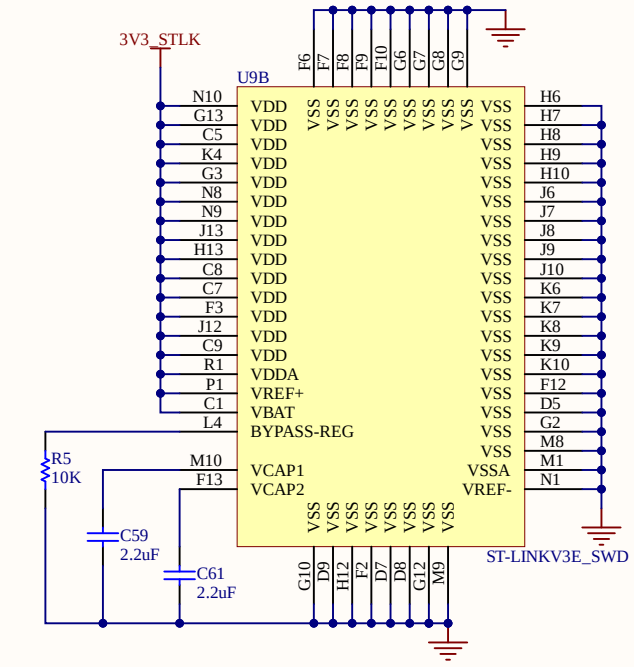
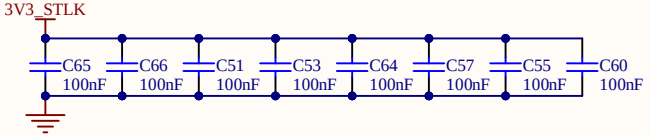
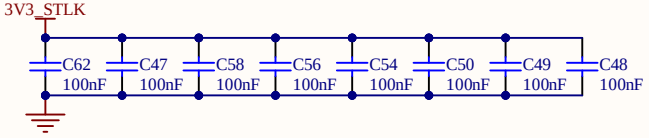
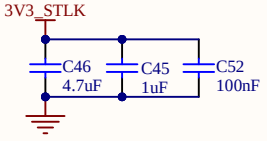
ST-LINKV3E SWD MCU POWER

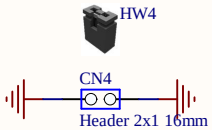




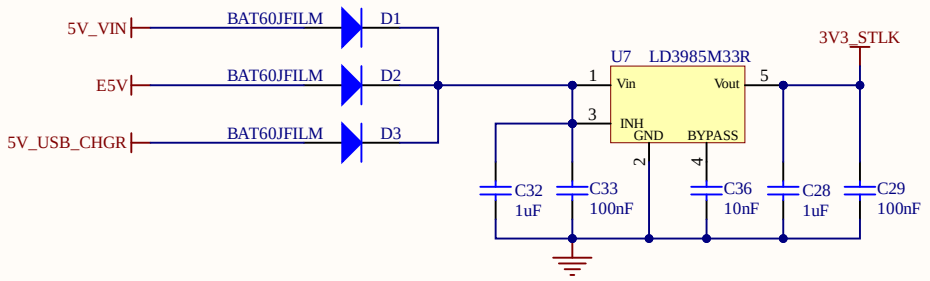




GND

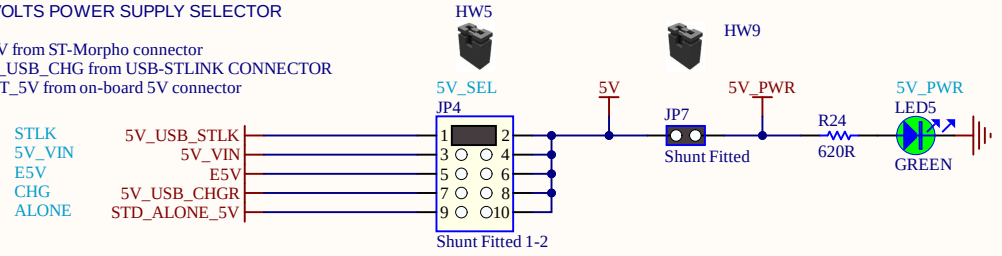


3.3 VOLTS POWER SUPPLY FOR ST-LINK



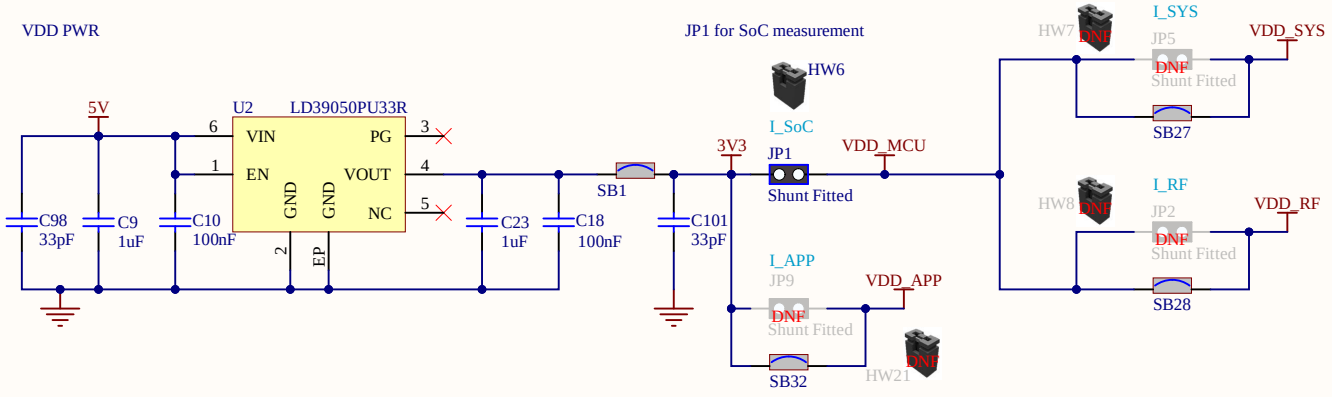
5 VOLTS POWER SUPPLY SELECTOR

E5V from ST-Morpho connector
5V_USB_CHG from USB-STLINK CONNECTOR
EXT_5V from on-board 5V connector

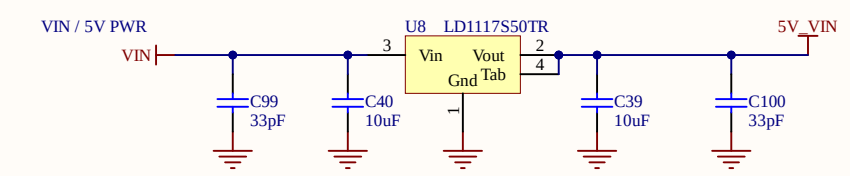


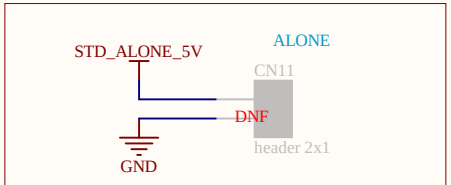
VDD PWR

JP1 for SoC measurement



VIN / 5V PWR





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