STM32L0538-DISCO

MB1143

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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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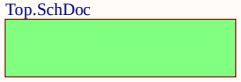
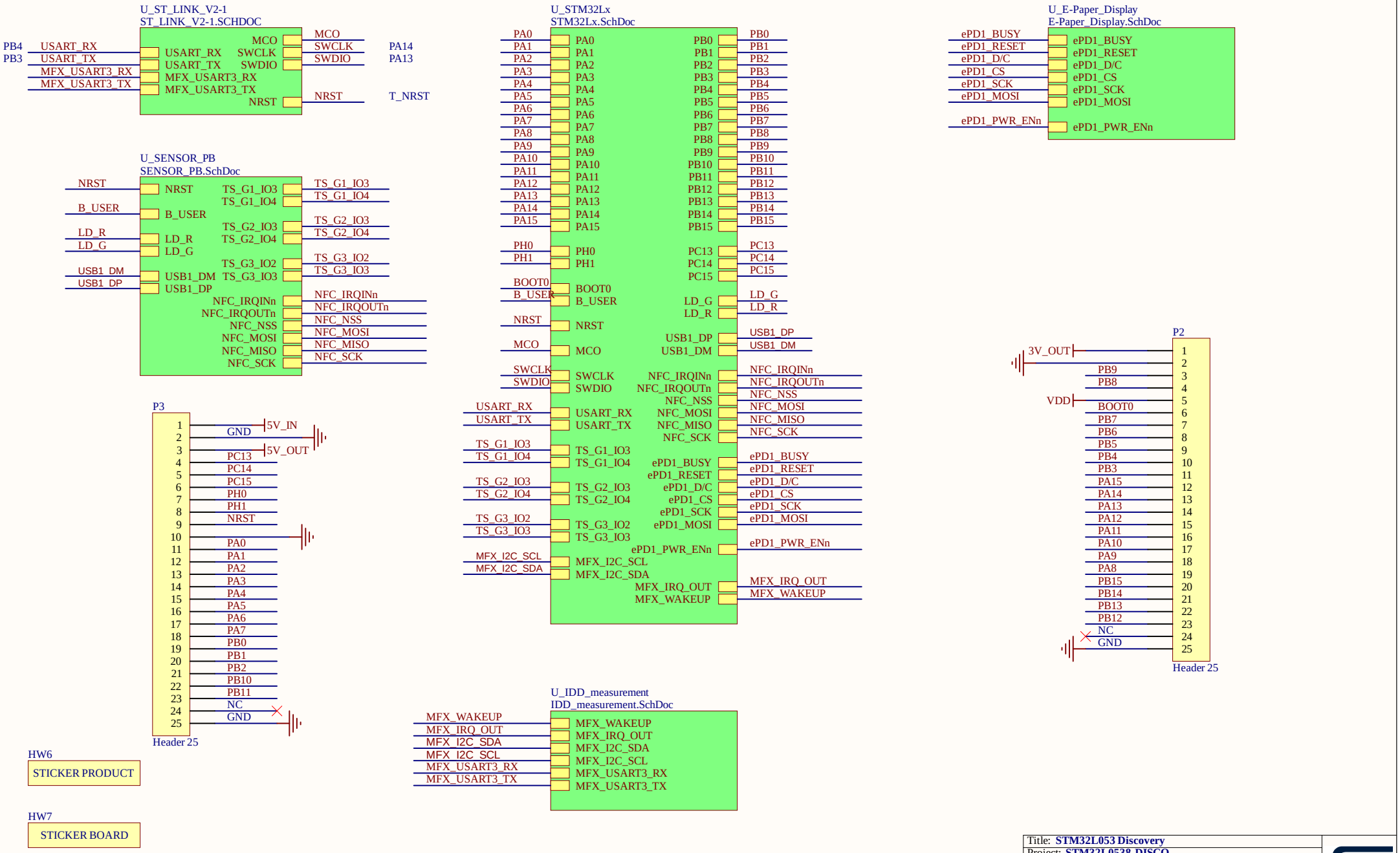
U_Top
Top.SchDoc



Title: **Project overview**		
Project: **STM32L0538-DISCO**		
Variant: L053C8T6		
Revision: B-03		Reference: MB1143
Size: A4	Date: 19/01/2022	Sheet: 1 of 7


U_ST_LINK_V2-1
ST_LINK_V2-1.SCHDOC
PB4 USART_RX
PB3 USART_TX
MFX_USART3_RX
MFX_USART3_TX
USART_RX
USART_TX
MFX_USART3_RX
MFX_USART3_TX
MCO
SWCLK
SWDIO
NRST
MCO
SWCLK
SWDIO
NRST
PA14
PA13
T_NRST
U_SENSOR_PB
SENSOR_PB.SchDoc
NRST
B_USER
LD_R
LD_G
USB1_DM
USB1_DP
TS_G1_IO3
TS_G1_IO4
TS_G2_IO3
TS_G2_IO4
TS_G3_IO2
TS_G3_IO3
NFC_IRQINn
NFC_IRQOUTn
NFC_NSS
NFC_MOSI
NFC_MISO
NFC_SCK
U_STM32Lx
STM32Lx.SchDoc
U_E-Paper_Display
E-Paper_Display.SchDoc
ePD1_BUSY
ePD1_RESET
ePD1_D/C
ePD1_CS
ePD1_SCK
ePD1_MOSI
ePD1_PWR_ENn
P3
Header 25
5V_IN
5V_OUT
GND
P2
Header 25
3V_OUT
VDD
U_IDD_measurement
IDD_measurement.SchDoc
MFX_WAKEUP
MFX_IRQ_OUT
MFX_I2C_SDA
MFX_I2C_SCL
MFX_USART3_RX
MFX_USART3_TX
HW6
STICKER PRODUCT
HW7
STICKER BOARD
Title: STM32L053 Discovery
Project: STM32L0538-DISCO
Variant: L053C8T6
Revision: B-03
Reference: MB1143
Size: A4
Date: 19/01/2022
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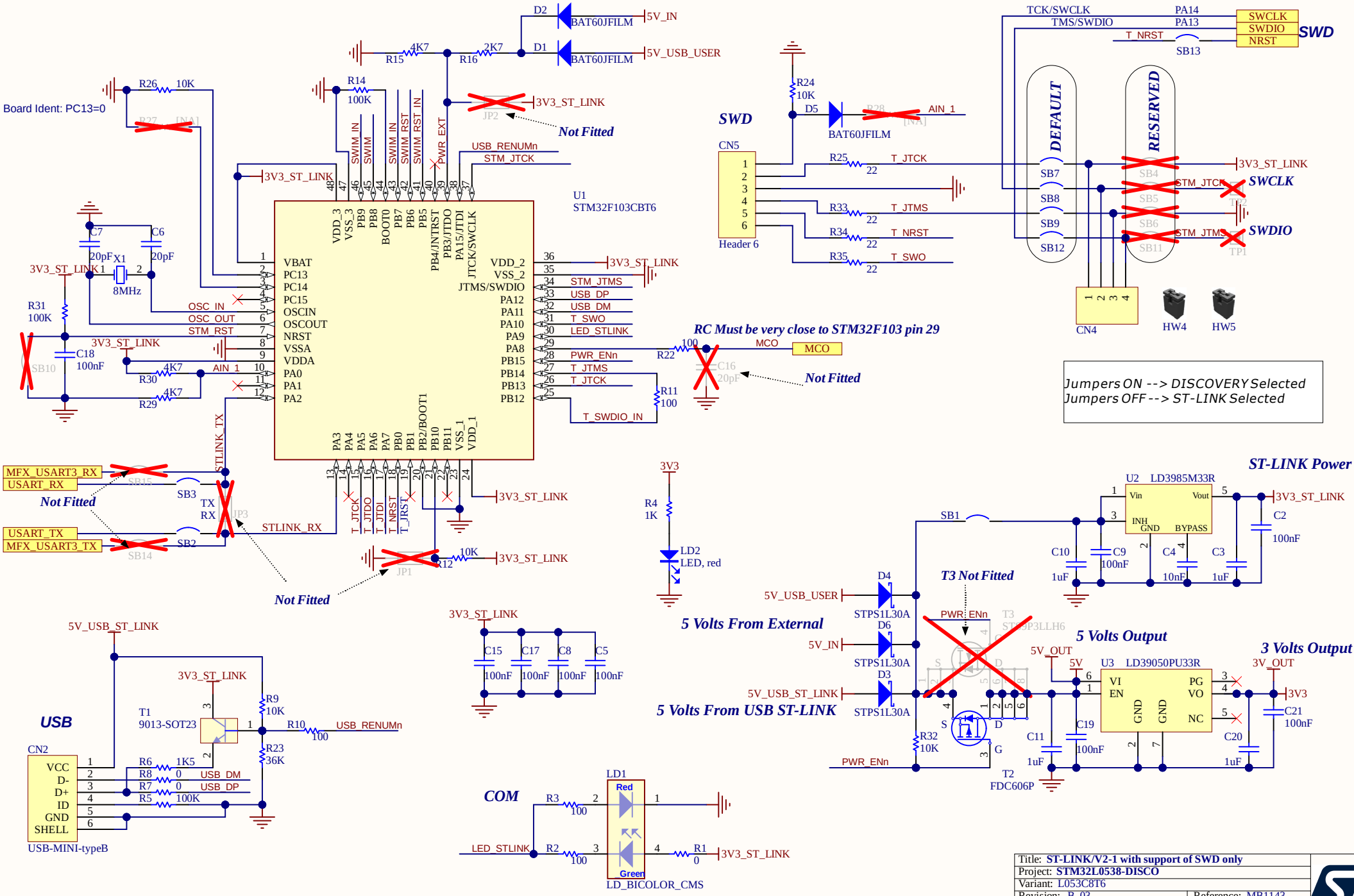
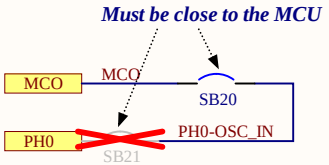
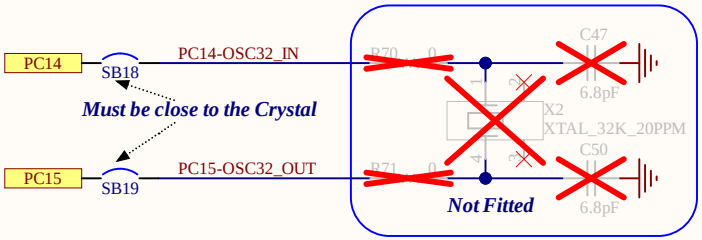
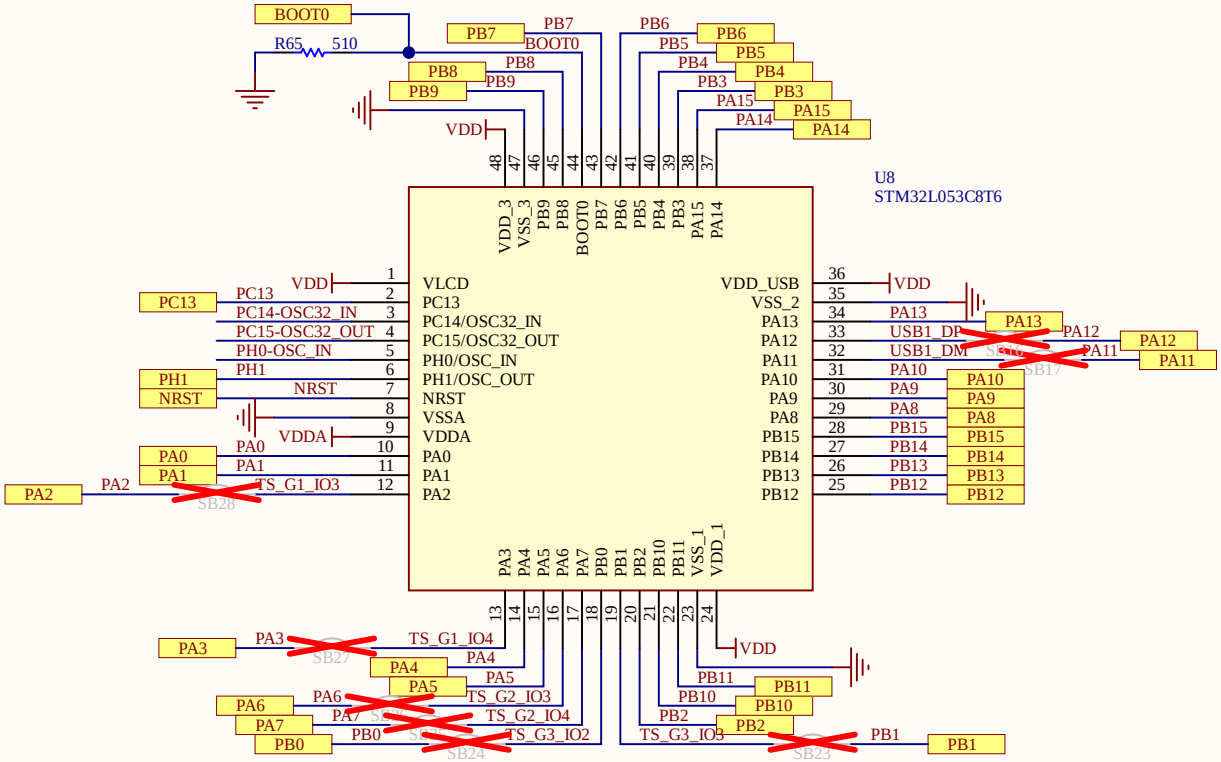
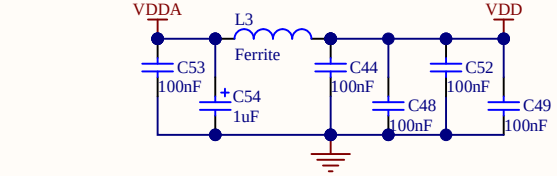
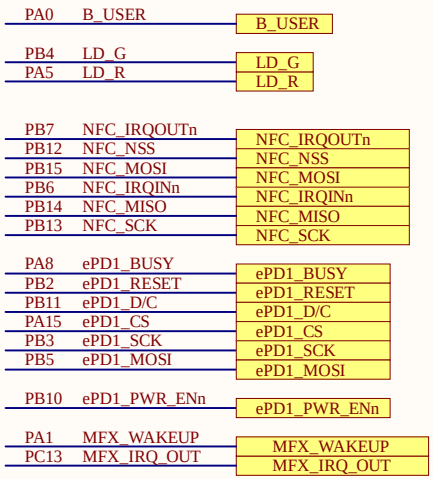

Board Ident: PC13=0
R26 10K
R27 [NA]
R14 100K
R15 4K7
R16 2K7
D2 BAT60JFILM
D1 BAT60JFILM
5V_IN
5V_USB_USER
JP2
3V3_ST_LINK
Not Fitted
SWIM_IN
SWIM
SWIM_RST
SWIM_RST_IN
PWR_EXT
USB_RENUMn
STM_JTCK
U1
STM32F103CBT6
VBAT
PC13
PC14
PC15
OSCIN
OSCOUT
NRST
VSSA
VDDA
PA0
PA1
PA2
VDD_2
VSS_2
JTMS/SWDIO
PA12
PA11
PA10
PA9
PA8
PB15
PB14
PB13
PB12
C7 20pF
C6 20pF
X1 8MHz
OSC_IN
OSC_OUT
STM_RST
R31 100K
C18 100nF
SB10
R30 4K7
R29 4K7
AIN_1
STLINK_TX
STLINK_RX
MFX_USART3_RX
USART_RX
USART_TX
MFX_USART3_TX
SB15
SB3
SB2
SB14
JP3
TX
RX
Not Fitted
JP1
R12 10K
T_JTCK
T_JTDO
T_JTDI
T_NRST
T_JRST
STM_JTMS
USB_DP
USB_DM
T_SWO
LED_STLINK
PWR_ENn
T_JTMS
T_JTCK
T_SWDIO_IN
R22 100
R11 100
C16 20pF
MCO
RC Must be very close to STM32F103 pin 29
SWD
CN5
Header 6
R24 10K
D5 BAT60JFILM
R28 [NA]
AIN_1
R25 22
R33 22
R34 22
R35 22
T_JTCK
T_JTMS
T_NRST
T_SWO
TCK/SWCLK
TMS/SWDIO
T_NRST
SB13
PA14
PA13
SWCLK
SWDIO
NRST
SWD
DEFAULT
RESERVED
SB7
SB8
SB9
SB12
SB4
SB5
SB6
SB11
SWCLK
SWDIO
TP2
TP1
CN4
HW4
HW5
Jumpers ON --> DISCOVERY Selected
Jumpers OFF --> ST-LINK Selected
ST-LINK Power
U2 LD3985M33R
Vin
Vout
INH
GND
BYPASS
C10 1uF
C9 100nF
C4 10nF
C3 1uF
C2 100nF
SB1
3V3
R4 1K
LD2 LED, red
5 Volts From External
5 Volts From USB ST-LINK
D4 STPS1L30A
D6 STPS1L30A
D3 STPS1L30A
5V_USB_USER
5V_IN
5V_USB_ST_LINK
T3 Not Fitted
PWR_ENn
T3 STS3P3LLH6
R32 10K
T2 FDC606P
5 Volts Output
3 Volts Output
5V_OUT
5V
U3 LD39050PU33R
VI
EN
GND
GND
PG
VO
NC
3V3
C11 1uF
C19 100nF
C20 1uF
C21 100nF
C15 100nF
C17 100nF
C8 100nF
C5 100nF
USB
CN2
VCC
D-
D+
ID
GND
SHELL
USB-MINI-typeB
T1 9013-SOT23
R9 10K
R10 100
R23 36K
R6 1K5
R8 0
R7 0
R5 100K
USB_DM
USB_DP
COM
LD1
Red
Green
LD_BICOLOR_CMS
R3 100
R2 100
R1 0
LED_STLINK
Title: ST-LINK/V2-1 with support of SWD only
Project: STM32L0538-DISCO
Variant: L053C8T6
Revision: B-03
Reference: MB1143
Size: A4
Date: 19/01/2022
Sheet: 3 of 7

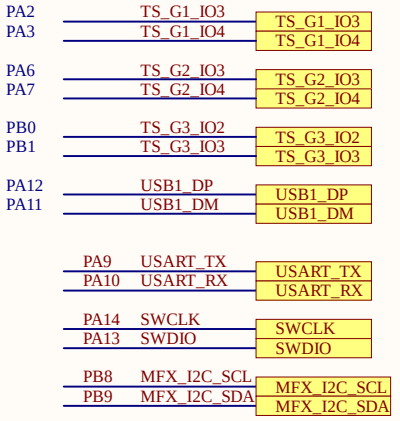












Title: **STM32L053C8T6 MCU**		
Project: **STM32L0538-DISCO**		
Variant: L053C8T6		
Revision: B-03		Reference: MB1143
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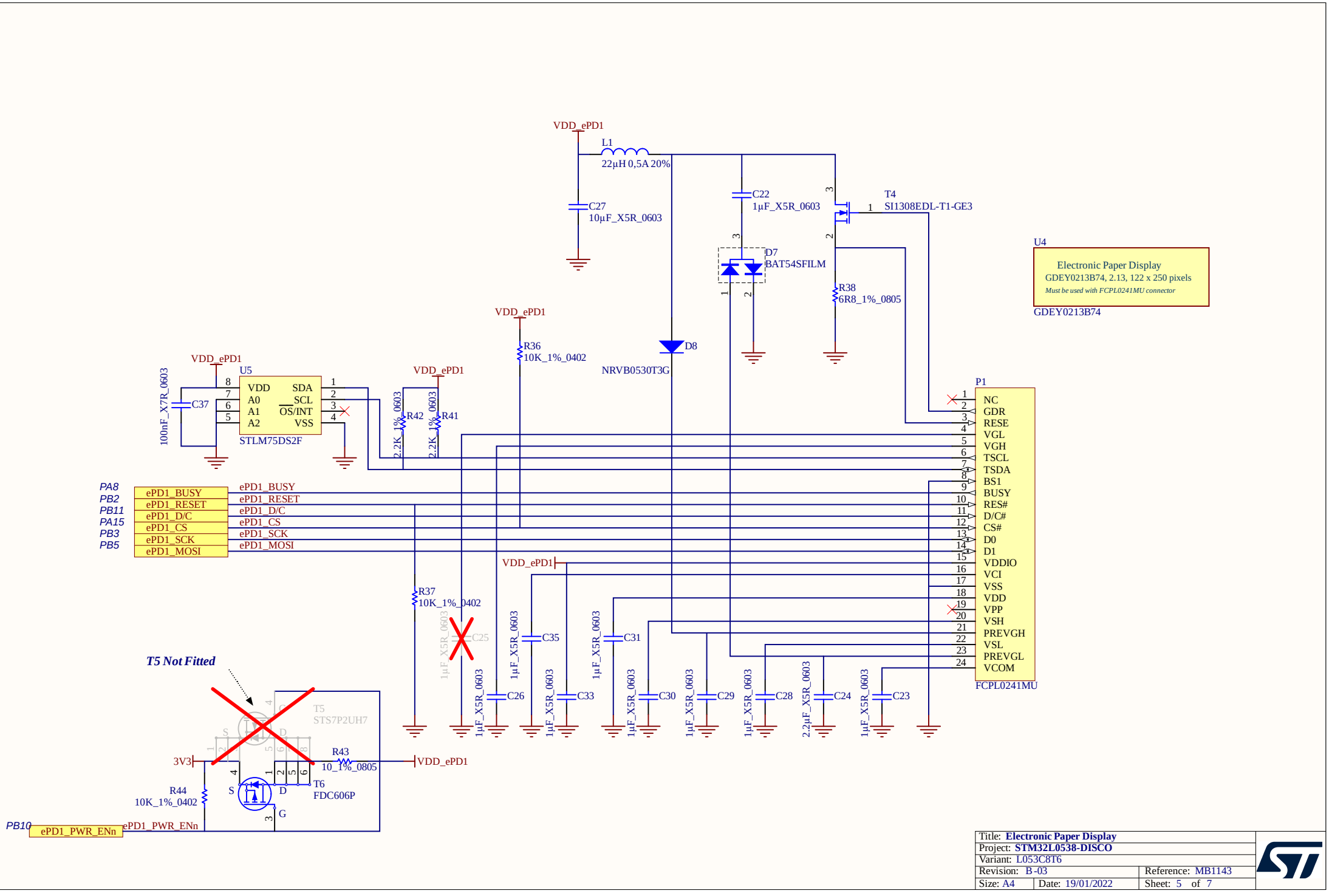

Title: **Electronic Paper Display**		
Project: **STM32L0538-DISCO**		
Variant: L053C8T6		
Revision: B-03		Reference: MB1143
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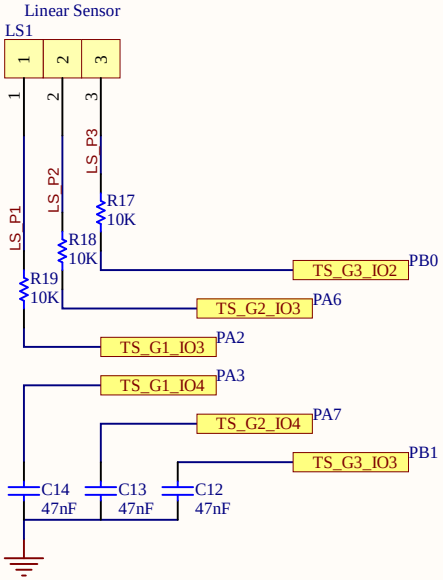
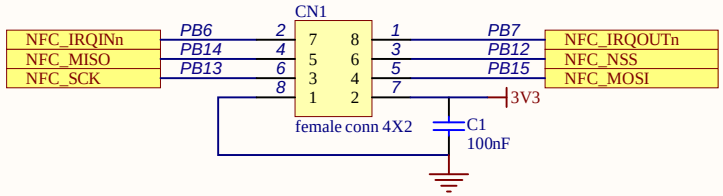


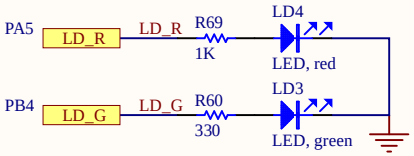
Linear Touch Sensor made of 3 electrodes



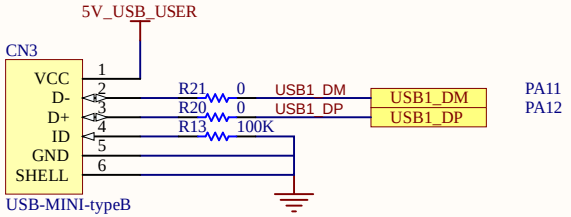
Operating Voltage: +3.3V

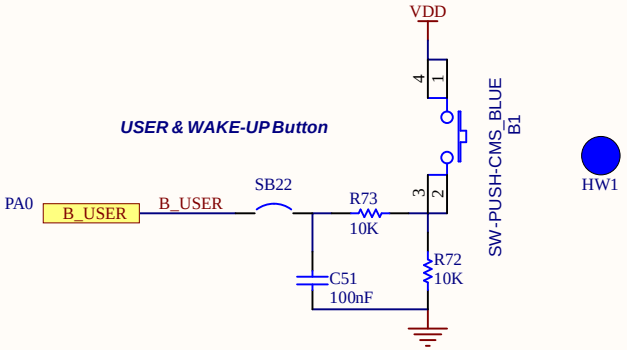
NFC kit reference: CR95HF-B

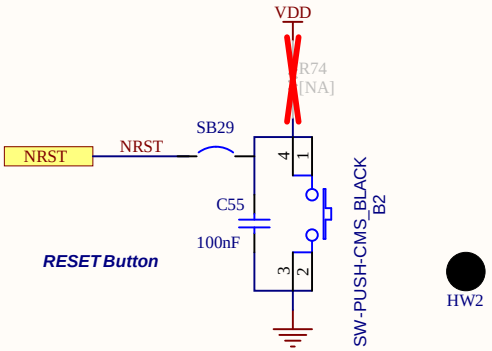
NFC



USB User







Title: **Linear Touch Sensor, NFC, USB and Push Button**		
Project: **STM32L0538-DISCO**		
Variant: L053C8T6		
Revision: B-03		Reference: MB1143
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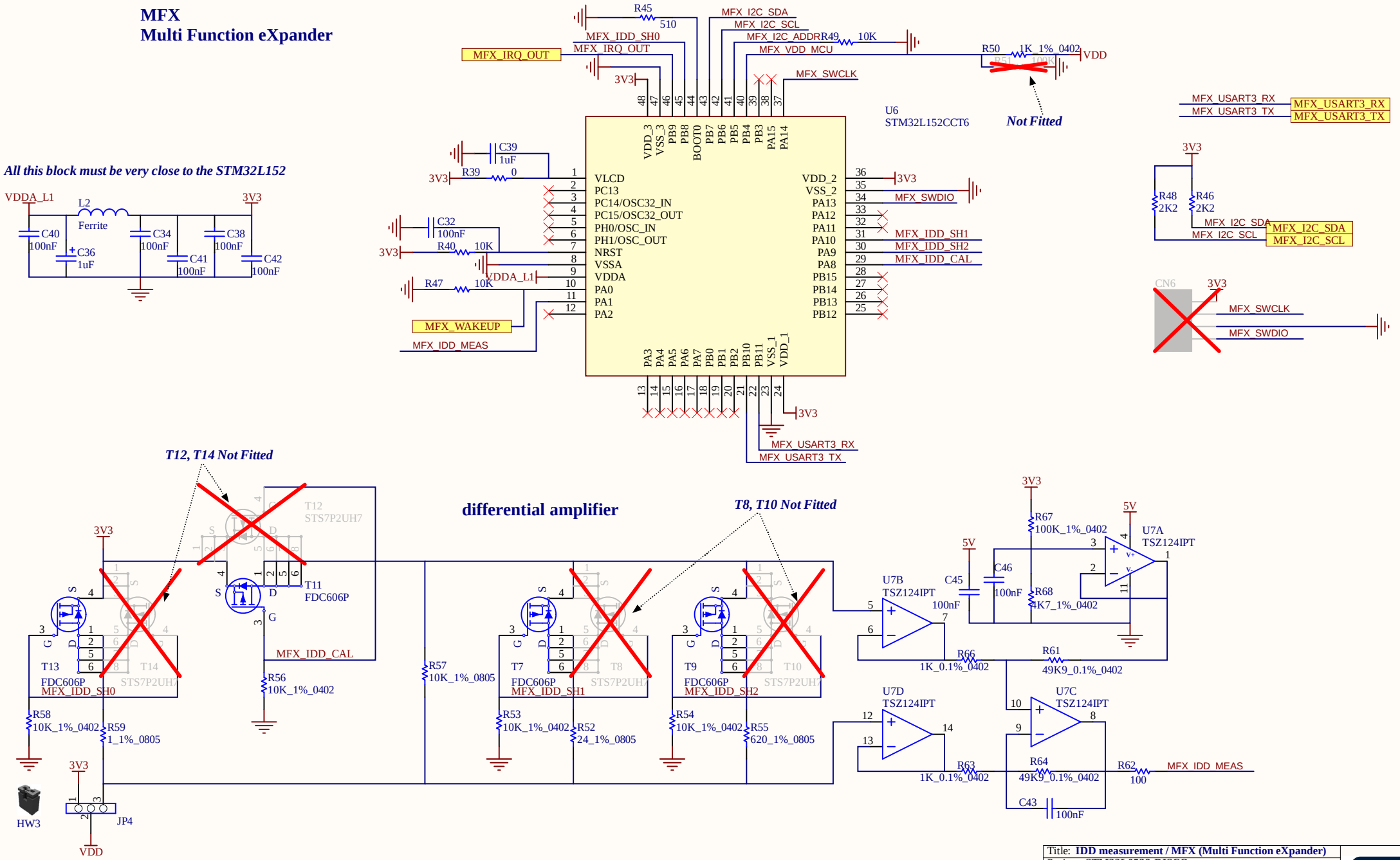
MFX
Multi Function eXpander



Title: **IDD measurement / MFX (Multi Function eXpander)**		
Project: **STM32L0538-DISCO**		
Variant: L053C8T6		
Revision: B-03		Reference: MB1143
Size: A4	Date: 19/01/2022	Sheet: 7 of 7