STM32F769I-DISCO

MB1225

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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: **STM32F769I-DISCO**			
Variant: F769I			
Revision: C-01		Reference: MB1225	
Size: A4	Date: 01/06/2020	Sheet: 1 of 13	

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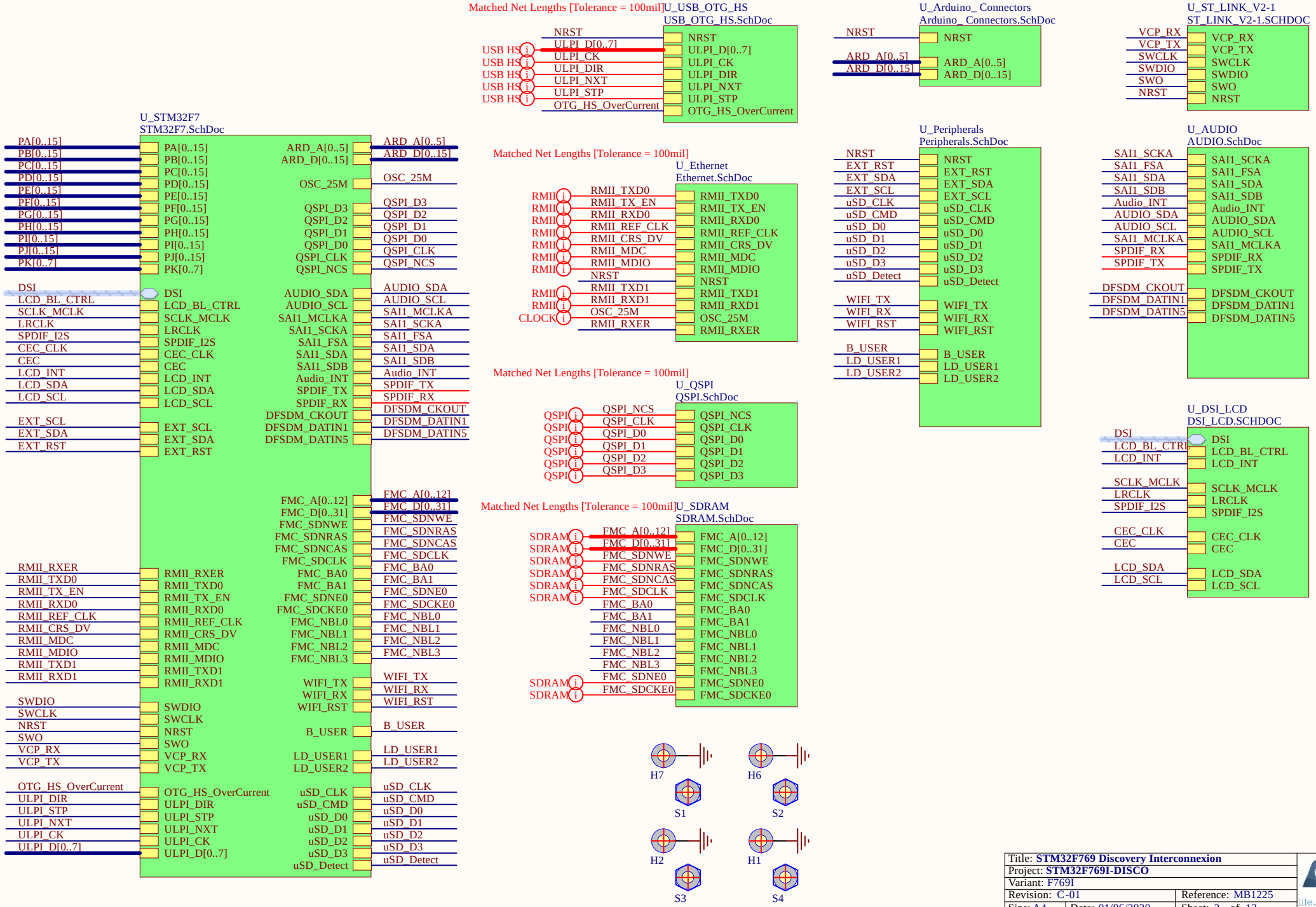
Matched Net Lengths [Tolerance = 100mil]
U_USB_OTG_HS
USB_OTG_HS.SchDoc
NRST
ULPI_D[0..7]
ULPI_CK
ULPI_DIR
ULPI_NXT
ULPI_STP
OTG_HS_OverCurrent
USB HS
U_Arduino_ Connectors
Arduino_ Connectors.SchDoc
ARD_A[0..5]
ARD_D[0..15]
U_ST_LINK_V2-1
ST_LINK_V2-1.SCHDOC
VCP_RX
VCP_TX
SWCLK
SWDIO
SWO
U_STM32F7
STM32F7.SchDoc
PA[0..15]
PB[0..15]
PC[0..15]
PD[0..15]
PE[0..15]
PF[0..15]
PG[0..15]
PH[0..15]
PI[0..15]
PJ[0..15]
PK[0..7]
OSC_25M
QSPI_D3
QSPI_D2
QSPI_D1
QSPI_D0
QSPI_CLK
QSPI_NCS
DSI
LCD_BL_CTRL
SCLK_MCLK
LRCLK
SPDIF_I2S
CEC_CLK
CEC
LCD_INT
LCD_SDA
LCD_SCL
AUDIO_SDA
AUDIO_SCL
SAI1_MCLKA
SAI1_SCKA
SAI1_FSA
SAI1_SDA
SAI1_SDB
Audio_INT
SPDIF_TX
SPDIF_RX
DFSDM_CKOUT
DFSDM_DATIN1
DFSDM_DATIN5
EXT_SCL
EXT_SDA
EXT_RST
Matched Net Lengths [Tolerance = 100mil]
U_Ethernet
Ethernet.SchDoc
RMII_TXD0
RMII_TX_EN
RMII_RXD0
RMII_REF_CLK
RMII_CRS_DV
RMII_MDC
RMII_MDIO
NRST
RMII_TXD1
RMII_RXD1
OSC_25M
RMII_RXER
CLOCK
U_Peripherals
Peripherals.SchDoc
NRST
EXT_RST
EXT_SDA
EXT_SCL
uSD_CLK
uSD_CMD
uSD_D0
uSD_D1
uSD_D2
uSD_D3
uSD_Detect
WIFI_TX
WIFI_RX
WIFI_RST
B_USER
LD_USER1
LD_USER2
U_AUDIO
AUDIO.SchDoc
SAI1_SCKA
SAI1_FSA
SAI1_SDA
SAI1_SDB
Audio_INT
AUDIO_SDA
AUDIO_SCL
SAI1_MCLKA
SPDIF_RX
SPDIF_TX
DFSDM_CKOUT
DFSDM_DATIN1
DFSDM_DATIN5
Matched Net Lengths [Tolerance = 100mil]
U_QSPI
QSPI.SchDoc
QSPI_NCS
QSPI_CLK
QSPI_D0
QSPI_D1
QSPI_D2
QSPI_D3
U_DSI_LCD
DSI_LCD.SCHDOC
DSI
LCD_BL_CTRL
LCD_INT
SCLK_MCLK
LRCLK
SPDIF_I2S
CEC_CLK
CEC
LCD_SDA
LCD_SCL
Matched Net Lengths [Tolerance = 100mil]
U_SDRAM
SDRAM.SchDoc
FMC_A[0..12]
FMC_D[0..31]
FMC_SDNWE
FMC_SDNRAS
FMC_SDNCAS
FMC_SDCLK
FMC_BA0
FMC_BA1
FMC_NBL0
FMC_NBL1
FMC_NBL2
FMC_NBL3
FMC_SDNE0
FMC_SDCKE0
SDRAM
RMII_RXER
RMII_TXD0
RMII_TX_EN
RMII_RXD0
RMII_REF_CLK
RMII_CRS_DV
RMII_MDC
RMII_MDIO
RMII_TXD1
RMII_RXD1
WIFI_TX
WIFI_RX
WIFI_RST
SWDIO
SWCLK
NRST
SWO
VCP_RX
VCP_TX
B_USER
LD_USER1
LD_USER2
OTG_HS_OverCurrent
ULPI_DIR
ULPI_STP
ULPI_NXT
ULPI_CK
ULPI_D[0..7]
uSD_CLK
uSD_CMD
uSD_D0
uSD_D1
uSD_D2
uSD_D3
uSD_Detect
H7
H6
S1
S2
H2
H1
S3
S4
Title: STM32F769 Discovery Interconnexion
Project: STM32F769I-DISCO
Variant: F769I
Revision: C-01
Reference: MB1225
Size: A4
Date: 01/06/2020
Sheet: 2 of 13
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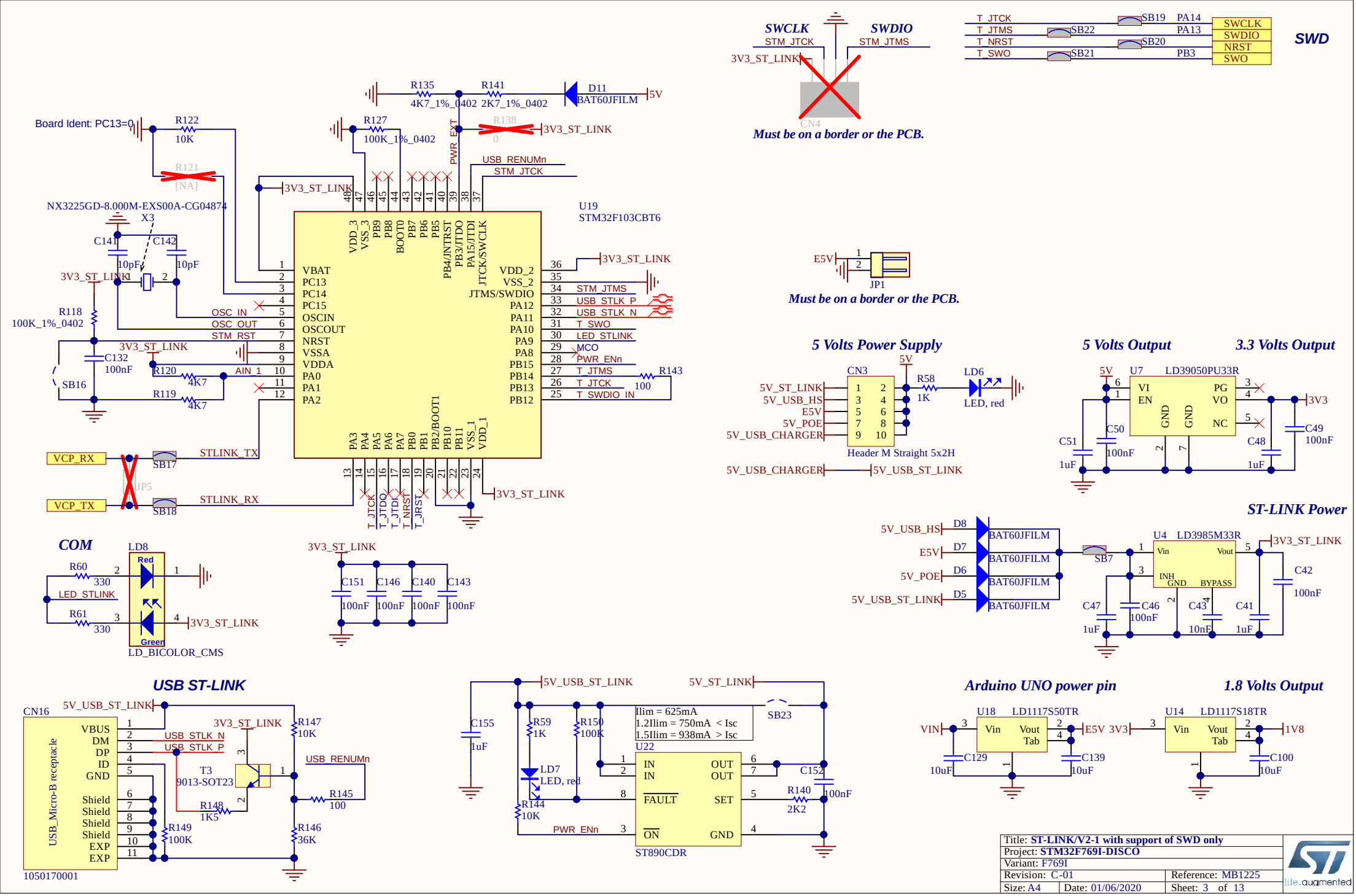

Title: **ST-LINK/V2-1 with support of SWD only**		
Project: **STM32F769I-DISCO**		
Variant: F769I		
Revision: C-01		Reference: MB1225
Size: A4	Date: 01/06/2020	Sheet: 3 of 13

life.augmented

ARD_A[0..5]
ARD_D[0..15]
ARD_A[0..5]
ARD_D[0..15]
OSC_25M
OSC_25M
QSPI_D3
QSPI_D2
QSPI_D1
QSPI_D0
QSPI_CLK
QSPI_NCS
QSPI_D3
QSPI_D2
QSPI_D1
QSPI_D0
QSPI_CLK
QSPI_NCS
uSD_CLK
uSD_CMD
uSD_D0
uSD_D1
uSD_D2
uSD_D3
uSD_Detect
uSD_CLK
uSD_CMD
uSD_D0
uSD_D1
uSD_D2
uSD_D3
uSD_Detect
FMC_A[0..12]
FMC_D[0..31]
FMC_SDNWE
FMC_SDNRAS
FMC_SDNCAS
FMC_SDCLK
FMC_BA0
FMC_BA1
FMC_SDNE0
FMC_SDCKE0
FMC_NBL0
FMC_NBL1
FMC_NBL2
FMC_NBL3
FMC_A[0..12]
FMC_D[0..31]
FMC_SDNWE
FMC_SDNRAS
FMC_SDNCAS
FMC_SDCLK
FMC_BA0
FMC_BA1
FMC_SDNE0
FMC_SDCKE0
FMC_NBL0
FMC_NBL1
FMC_NBL2
FMC_NBL3
B_USER
EXT_SCL
EXT_SDA
EXT_RST
B_USER
EXT_SCL
EXT_SDA
EXT_RST
WIFI_TX
WIFI_RX
WIFI_RST
WIFI_TX
WIFI_RX
WIFI_RST
LD_USER1
LD_USER2
LD_USER1
LD_USER2
OTG_HS_OverCurrent
ULPI_DIR
ULPI_STP
ULPI_NXT
ULPI_CK
ULPI_D[0..7]
OTG_HS_OverCurrent
ULPI_DIR
ULPI_STP
ULPI_NXT
ULPI_CK
ULPI_D[0..7]
SWDIO
SWCLK
SWO
VCP_RX
VCP_TX
SWDIO
SWCLK
SWO
VCP_RX
VCP_TX
RMII_RXER
RMII_TXD0
RMII_TX_EN
RMII_RXD0
RMII_REF_CLK
RMII_CRS_DV
RMII_MDC
RMII_MDIO
RMII_TXD1
RMII_RXD1
RMII_RXER
RMII_TXD0
RMII_TX_EN
RMII_RXD0
RMII_REF_CLK
RMII_CRS_DV
RMII_MDC
RMII_MDIO
RMII_TXD1
RMII_RXD1
LCD_BL_CTRL
LCD_INT
SCLK_MCLK
LRCLK
SPDIF_I2S
CEC_CLK
CEC
LCD_SDA
LCD_SCL
LCD_BL_CTRL
LCD_INT
SCLK_MCLK
LRCLK
SPDIF_I2S
CEC_CLK
CEC
LCD_SDA
LCD_SCL
DFSDM_CKOUT
DFSDM_DATIN1
DFSDM_DATIN5
DFSDM_CKOUT
DFSDM_DATIN1
DFSDM_DATIN5
TP8
TP6
TP7
TP11
SAI1_SCKA
SAI1_FSA
SAI1_SDA
SAI1_SDB
Audio_INT
AUDIO_SDA
AUDIO_SCL
SAI1_MCLKA
SPDIF_RX
SPDIF_TX
SAI1_SCKA
SAI1_FSA
SAI1_SDA
SAI1_SDB
Audio_INT
AUDIO_SDA
AUDIO_SCL
SAI1_MCLKA
SPDIF_RX
SPDIF_TX
TP22
TP1
TP3
U13A
B_USER
RMII_REF_CLK
RMII_MDIO
ULPI_D0
ARD_A1
ULPI_CK
ARD_A0
RMII_CRS_DV
CEC_CLK
VCP_TX
VCP_RX
ARD_D10
ARD_D13
SWDIO
SWCLK
CEC
ULPI_D1
ULPI_D2
QSPI_CLK
uSD_D3
ULPI_D7
QSPI_NCS
AUDIO_SDA
ARD_D15
ARD_D14
ULPI_D3
ULPI_D4
ULPI_D5
ULPI_D6
ARD_D12
ARD_D11
PA0 N3
PA1 N2
PA2 P2
PA3 R2
PA4 N4
PA5 P4
PA6 P3
PA7 R3
PA8 F15
PA9 E15
PA10 D15
PA11 C15
PA12 B15
PA13 A15
PA14 A14
PA15 A13
PB0 R5
PB1 R4
PB2 M5
PB3 A10
PB4 A9
PB5 A8
PB6 B6
PB7 B5
PB8 A7
PB9 B4
PB10 P12
PB11 R13
PB12 L13
PB13 K14
PB14 R14
PB15 R15
PC14 E1
PC15 F1
PH0 G1
PH1 H1
TP21 J1
BOOT0 E6
E5
PA0-WKUP
PA1
PA2
PA3
PA4
PA5
PA6
PA7
PA8
PA9
PA10
PA11
PA12
PA13 PC13-ANTI_TAMP
PA14
PA15
PB0
PB1
PB2
PB3
PB4
PB5
PB6
PB7
PB8
PB9
PB10
PB11
PB12
PB13
PB14
PB15
PC14-OSC32_IN
PC15-OSC32_OUT
PH0-OSC_IN
PH1-OSC_OUT
NRST
BOOT
PDR_ON
DSI_D0_P
DSI_D0_N
DSI_D1_P
DSI_D1_N
DSI_CK_P
DSI_CK_N
M2 PC0 ULPI_STP
M3 PC1 RMII_MDC
M4 PC2 ARD_A2
L4 PC3 DFSDM_DATIN1
N5 PC4 RMII_RXD0
P5 PC5 RMII_RXD1
H15 PC6 ARD_D1
G15 PC7 ARD_D0
G14 PC8 ARD_D5
F14 PC9 QSPI_D0
B14 PC10 QSPI_D1
B13 PC11 DFSDM_DATIN5
A12 PC12 WIFI_RX
D1 PC13 NC6
R6 PJ0 ARD_D4
R7 PJ1 ARD_D2
P7 PJ2 DSI_TE
N8 PJ3 ARD_D7
M9 PJ4 ARD_D8
M14 PJ5 LD_USER2
B10 PJ12 Audio_INT
B9 PJ13 LD_USER1
C9 PJ14 WIFI_RST
D10 PJ15 DSI_RESET
D8 PK3 NC7
D7 PK4 NC8
C6 PK5 NC1
C5 PK6 NC2
C4 PK7 NC3
J12 DSI_D0_P
J13 DSI_D0_N
F12 DSI_D1_P
F13 DSI_D1_N
H12 DSI_CK_P
H13 DSI_CK_N
DSI_TE
DSI_RESET
DSI_D0_P
DSI_D0_N
DSI_D1_P
DSI_D1_N
DSI_CK_P
DSI_CK_N
DSI
STM32F769NIH6
TP2
TP101
TP100
TP14
TP9
TP18
TP17
TP16
TP15
U13B
FMC_D2
FMC_D3
WIFI_TX
DFSDM_CKOUT
OTG_HS_OverCurrent
RMII_RXER
uSD_CLK
uSD_CMD
FMC_D13
FMC_D14
FMC_D15
SPDIF_TX
AUDIO_SCL
QSPI_D3
FMC_D0
FMC_D1
FMC_NBL0
FMC_NBL1
QSPI_D2
SAI1_SDB
SAI1_FSA
SAI1_SCKA
SAI1_SDA
FMC_D4
FMC_D5
FMC_D6
FMC_D7
FMC_D8
FMC_D9
FMC_D10
FMC_D11
FMC_D12
FMC_A0
FMC_A1
FMC_A2
FMC_A3
FMC_A4
FMC_A5
ARD_D3
ARD_D6
ARD_A4
ARD_A5
ARD_A3
FMC_SDNRAS
FMC_A6
FMC_A7
FMC_A8
FMC_A9
PD0 B12
PD1 C12
PD2 D12
PD3 C11
PD4 D11
PD5 C10
PD6 B11
PD7 A11
PD8 L15
PD9 L14
PD10 K15
PD11 N10
PD12 M10
PD13 M11
PD14 L12
PD15 K13
PE0 A6
PE1 A5
PE2 A3
PE3 A2
PE4 A1
PE5 B1
PE6 B2
PE7 R8
PE8 N9
PE9 P9
PE10 R9
PE11 P10
PE12 R10
PE13 R12
PE14 P11
PE15 R11
PF0 D2
PF1 E2
PF2 G2
PF3 H2
PF4 J2
PF5 K3
PF6 K2
PF7 K1
PF8 L3
PF9 L2
PF10 L1
PF11 P8
PF12 M6
PF13 N6
PF14 P6
PF15 M8
PD0
PD1
PD2
PD3
PD4
PD5
PD6
PD7
PD8
PD9
PD10
PD11
PD12
PD13
PD14
PD15
PE0
PE1
PE2
PE3
PE4
PE5
PE6
PE7
PE8
PE9
PE10
PE11
PE12
PE13
PE14
PE15
PF0
PF1
PF2
PF3
PF4
PF5
PF6
PF7
PF8 PI8-ANTI_TAMP2
PF9
PF10
PF11
PF12
PF13
PF14
PF15
PG0 N7 FMC_A10
PG1 M7 FMC_A11
PG2 M13 FMC_A12
PG3 M12 EXT_SCL
PG4 N12 FMC_BA0
PG5 N11 FMC_BA1
PG6 J15 EXT_SDA
PG7 J14 SAI1_MCLKA
PG8 H14 FMC_SDCLK
PG9 D9 uSD_D0
PG10 C8 uSD_D1
PG11 B8 RMII_TX_EN
PG12 C7 SPDIF_RX
PG13 B3 RMII_TXD0
PG14 A4 RMII_TXD1
PG15 B7 FMC_SDNCAS
PH2 K4 FMC_SDCKE0
PH3 J4 FMC_SDNE0
PH4 H4 ULPI_NXT
PH5 J3 FMC_SDNWE
PH6 P13 ARD_D9
PH7 N13 EXT_RST
PH8 P14 FMC_D16
PH9 N14 FMC_D17
PH10 P15 FMC_D18
PH11 N15 FMC_D19
PH12 M15 FMC_D20
PH13 E12 FMC_D21
PH14 E13 FMC_D22
PH15 D13 FMC_D23
PI0 E14 FMC_D24
PI1 D14 FMC_D25
PI2 C14 FMC_D26
PI3 C13 FMC_D27
PI4 C3 FMC_NBL2
PI5 D3 FMC_NBL3
PI6 D6 FMC_D28
PI7 D4 FMC_D29
PI8 C2 NC4
PI9 E4 FMC_D30
PI10 D5 FMC_D31
PI11 F3 ULPI_DIR
PI12 E3 NC5
PI13 G3 LCD_INT
PI14 H3 LCD_BL_CTRL
PI15 G4 uSD_Detect
STM32F769NIH6
TP102
TP12
TP13
3V3
R17
2K7
SPDIF_I2S
LCD_SCL
uSD_D2
R93
0
SWO
R92
[NA]
3V3
R90
2K7
LCD_SDA
R91
2K7
R89
2K7
C77
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X1
NX3215SA-32.768K
C84
3pF_NPO_-+0.25pF_0402
R97
0
R99
0
R104
100_1%_0402
TP21
BOOT0
R18
10K_1%_0402
R19
[NA]
R21
[NA]
R20
10K_1%_0402
3V3
3V3
3V3
X2
VDD
OUT
EN
GND
NZ2520SB-25.00M
OSC_25M
R107
10K_1%_0402
C98
100nF
R106
10K_1%_0402
NRST
NRST
DSI_VDD12
C23
2.2uF[N/A]
C25
2.2uF
C27
100nF
3V3
R109
0
JP4
VDD
L6
FCM1608KF-601T03
VDDA
R110
0
VREF+
C102
100nF
C101
1uF
R108
10K
VDD
C68
4.7uF
C69
4.7uF
VDDA
C116
1uF
C103
100nF
U13C
VDD1
VDD2
VDD3
VDD4
VDD5
VDD6
VDD7
VDD8
VDD_USB33
VDD_MMC33
VDD11
VDD12
VDD13
VDD14
VDD15
VDD17
VDD18
VDD19
VDD_VREGDSI
DSI_VDD12_0
DSI_VCAP
VDDA
VREF+
VBAT
BYPASS-REG
VSS1
VSS2
VSS3
VSS4
VSS5
VSS6
VSS7
VSS8
VSS9
VSS10
VSS11
VSS12
VSS13-VSS18
VSS14
VSS15
VSS17
VSS19
VSS20
DSI_VSS
VSSA
VREF-
VCAP1
VCAP2
L10 F11 E7 K5 H5 L8 L9 J11 G11 E9 E8 J5 F4 K11 E10 F5 G5 L7 H11 G13 K12 R1 P1 C1 L5
K9 F10 F6 K6 H6 K7 K8 J10 G10 F8 F7 J6 F2 K10 F9 G6 L6 H10 G12 M1 N1 L11 E11
C72
2.2uF
C31
2.2uF
Ceramic capacitor (Low ESR)
VDD
C88 C108 C83 C105 C114 C109 C112 C113 C106
C99 C86 C110 C115 C111 C104 C76 C97 C80 C107
100nF
PA[0..15]
PB[0..15]
PC[0..15]
PD[0..15]
PE[0..15]
PF[0..15]
PG[0..15]
PH[0..15]
PI[0..15]
PJ[0..15]
PK[0..7]
Title: STM32F769NIH6 Connexion
Project: STM32F769I-DISCO
Variant: F769I
Revision: C-01
Reference: MB1225
Size: A3
Date: 01/06/2020
Sheet: 4 of 13
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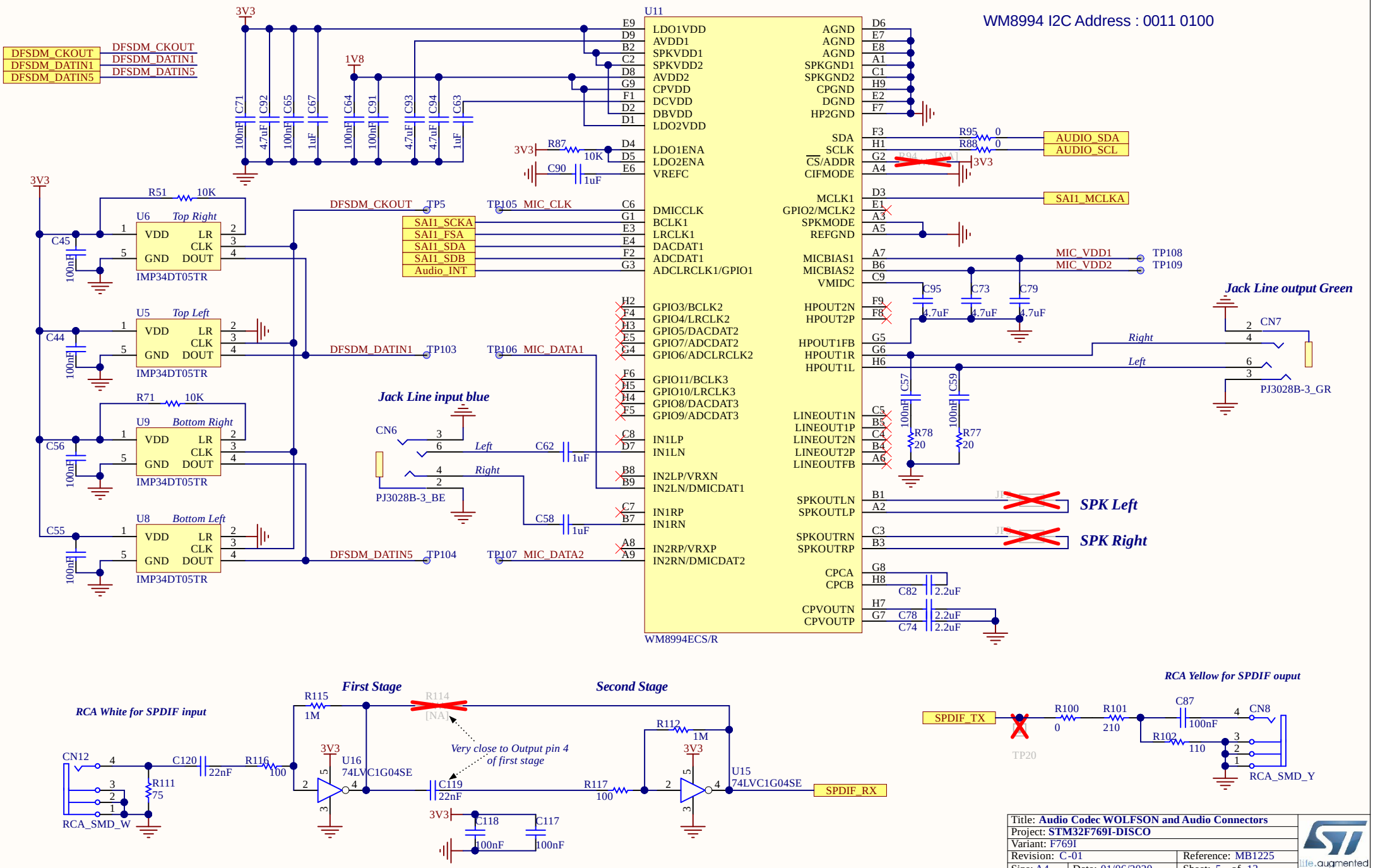
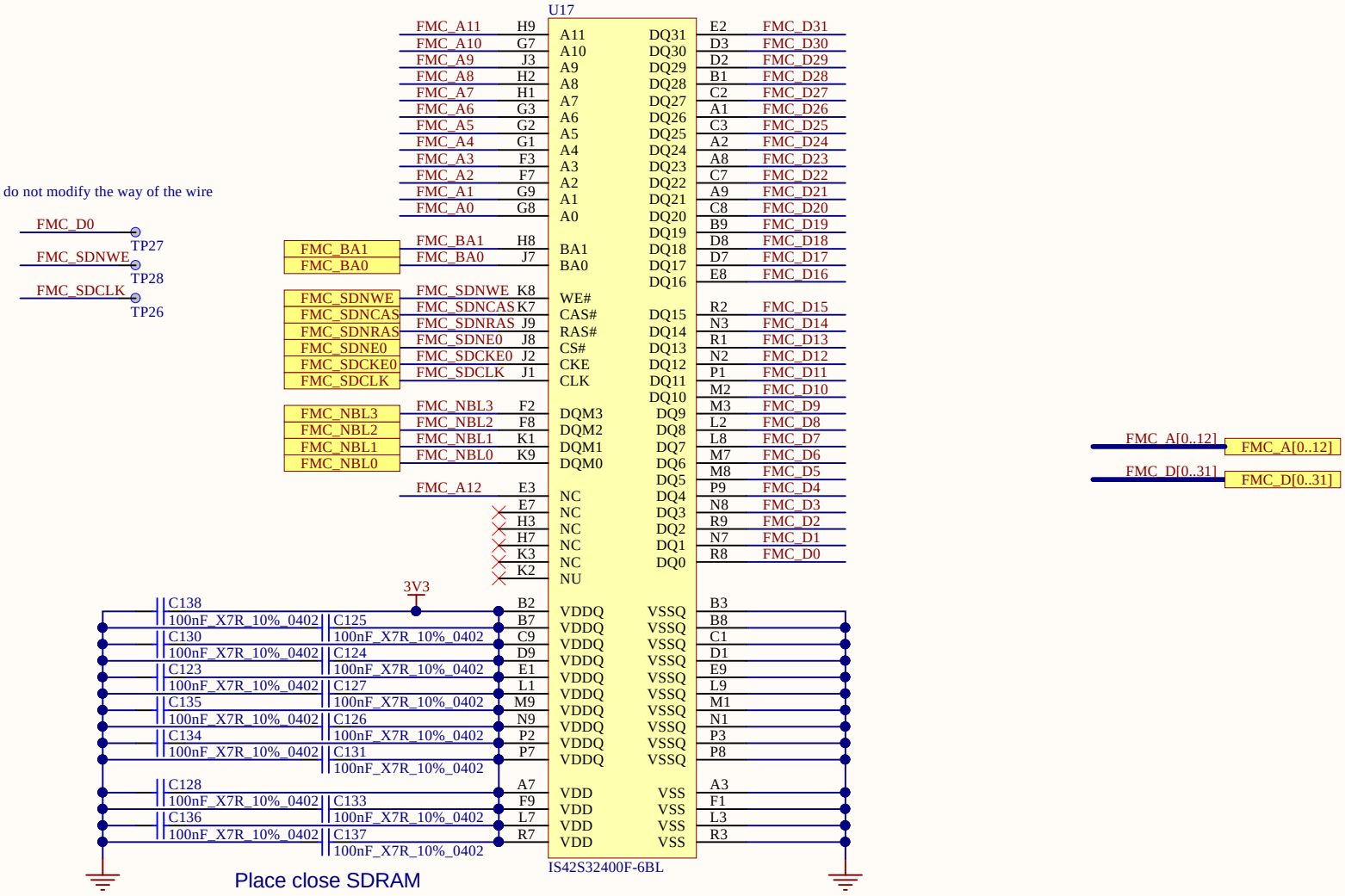


Title: **Audio Codec WOLFSON and Audio Connectors**		
Project: **STM32F769I-DISCO**		
Variant: F769I		
Revision: C-01		Reference: MB1225
Size: A4	Date: 01/06/2020	Sheet: 5 of 13



Title: **SDRAM (MICRON)**		
Project: **STM32F769I-DISCO**		
Variant: F769I		
Revision: C-01		Reference: MB1225
Size: A4	Date: 01/06/2020	Sheet: 6 of 13

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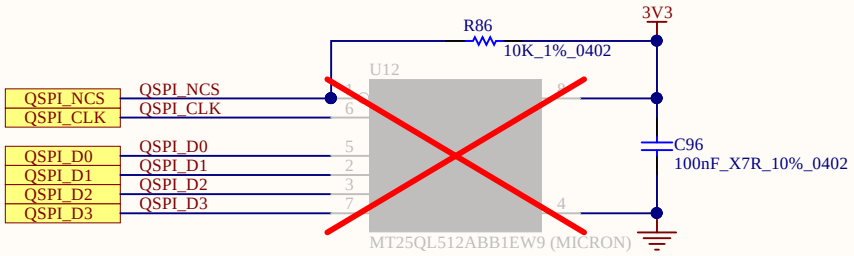
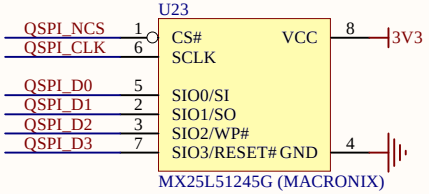
Quad SPI Flash Memory

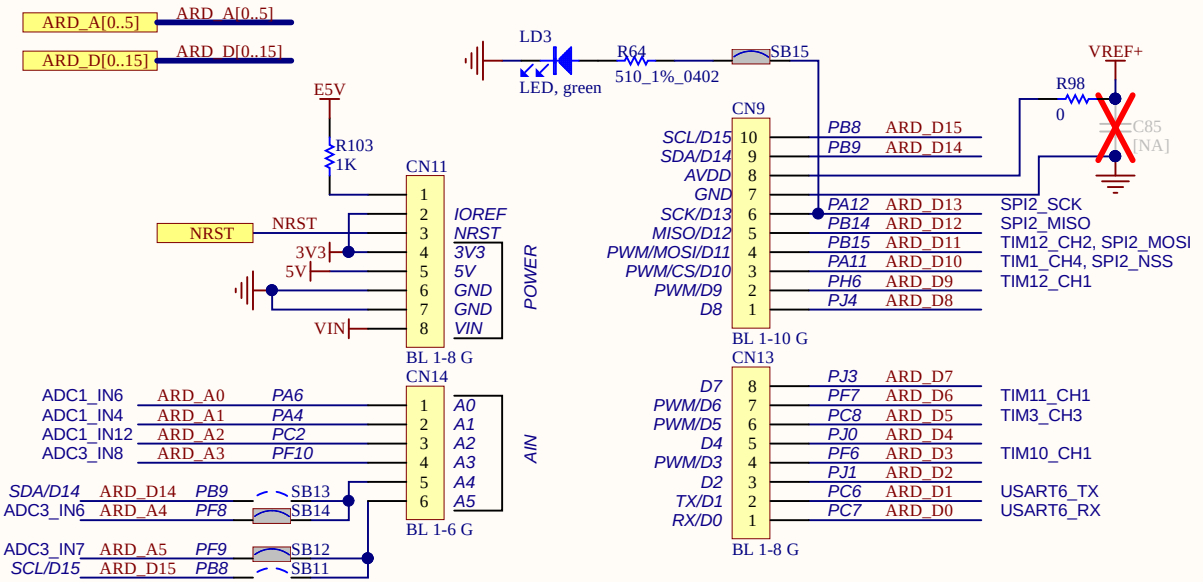




Title: **Quad SPI Flash Memory (MICRON)**		
Project: **STM32F769I-DISCO**		
Variant: F769I		
Revision: C-01		Reference: MB1225
Size: A4	Date: 01/06/2020	Sheet: 7 of 13

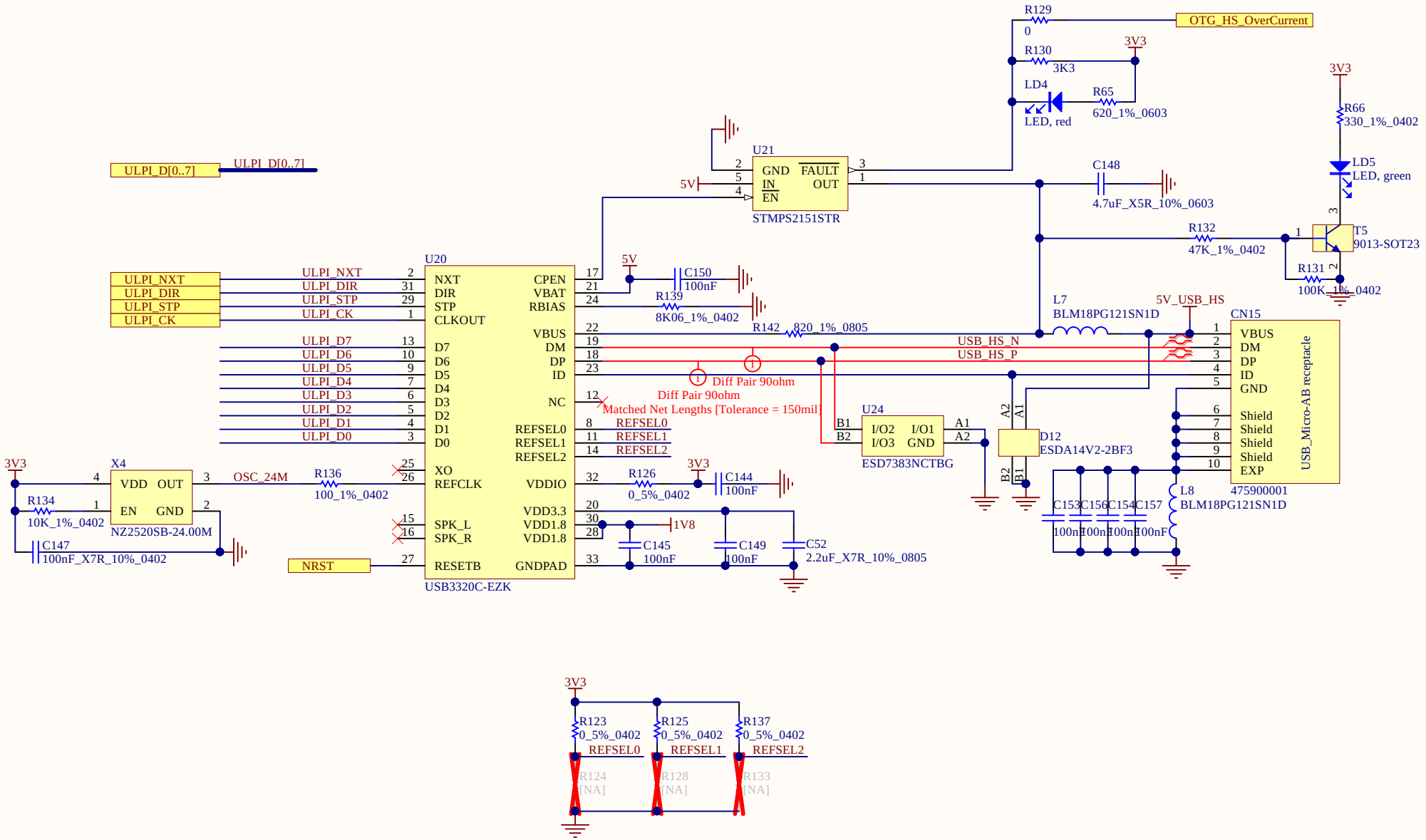
life.augmented

Arduino UNO connector



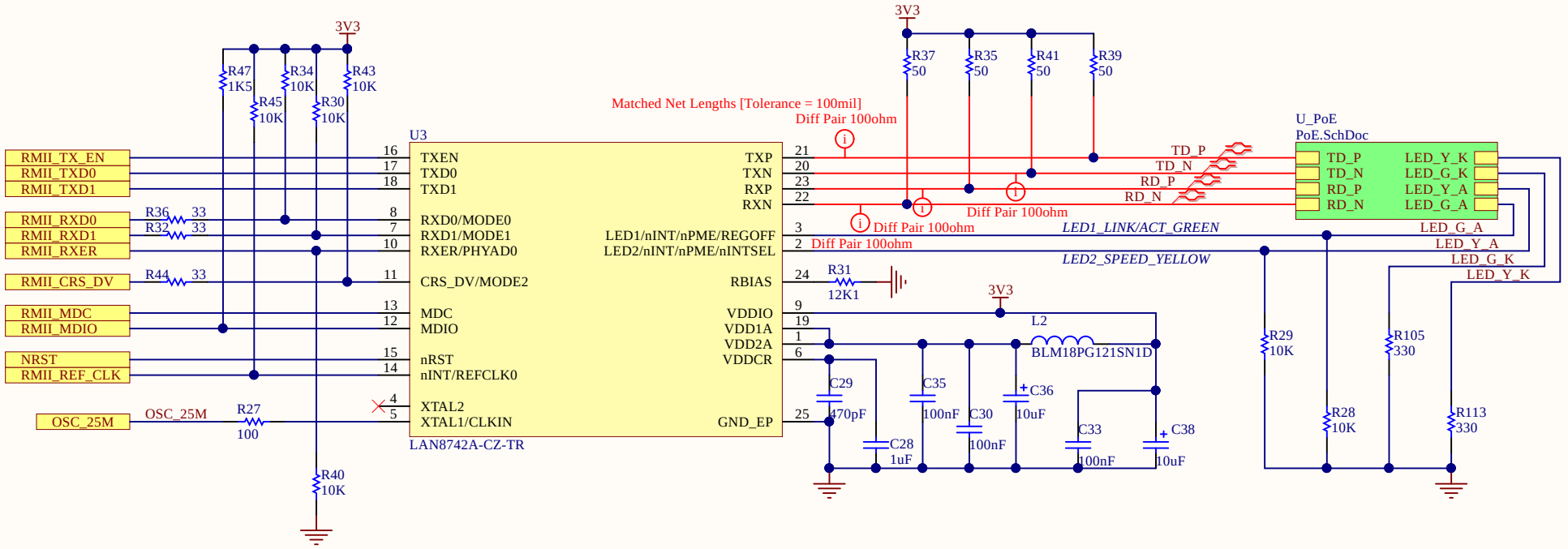
Title: **Arduino UNO connectors**		
Project: **STM32F769I-DISCO**		
Variant: F769I		
Revision: C-01		Reference: MB1225
Size: A4	Date: 01/06/2020	Sheet: 8 of 13

life.augmented



Title: **USB OTG HS PHY with micro A-B connector**		
Project: **STM32F769I-DISCO**		
Variant: F769I		
Revision: C-01		Reference: MB1225
Size: A4	Date: 01/06/2020	Sheet: 9 of 13

life.augmented



Title: **Ethernet PHY with RJ45 connector**		
Project: **STM32F769I-DISCO**		
Variant: F769I		
Revision: C-01		Reference: MB1225
Size: A4	Date: 01/06/2020	Sheet: 10 of 13

life.augmented

Power Over Ethernet

INPUT

Matched Net Lengths [Tolerance = 100mil]
Diff Pair 100ohm

CN10
KRJ-CB4
TX+
TX-
RX+
nc4
nc5
RX-
nc7
nc8
LED_Green_A
LED_Green_K
LED_Yellow_A
LED_Yellow_K
Shield_13
Shield_14
Chassis

NOTE : Place for additional ferrite beads

DF01S-E3/77
D4
D9
D10 SMAJ58A
R49 0
R48 0
C39 1nF_100V_X7R_10%_0603
C40 100nF_100V_X7R_10%_0805
C121 1nF_100V_X7R_10%_0603
C122 1nF_100V_X7R_10%_0603
R42 75
R26 75
R33 75
R46 75
C34 1nF_100V
C26 1nF_100V
C32 1nF_100V
C37 1nF_100V
C89 1nF_2KV

T4
H2019NL
TD_P
TD_N
RD_P
RD_N
R38 0_5%_0805

T100
Not Fitted
750315923
POE1
POE2
POE3
POE4
POE5
POE6
POE7
POE8

L5
ME3220-562MLB
C75 4.7uF
C70 4.7uF
C81 100nF_100V_X7R_10%_0805
C20 4.7uF
C22 27pF_100V_NPO_5%_0603
R75 10_1%_0805

T2
POE30P50L
Pri
Sec
Bias
C21 560pF_X7R_10%_0603
R22 15
R16 0_5%_0603
D2 STPS2L40UF
C18 47uF_X5R_20%_0805
C13 47uF_X5R_20%_0805
C14 47uF_X5R_20%_0805
C15 47uF_X5R_20%_0805
C16 100nF_X7R_10%_0603
5V_POE

U1
PM8800A
RT
SS
AUXII
VIN
RCLASS
AUXI_IRL
DCCL
VSS
AGND
VFB
COMP
CS
nPGD
VCC
GD
GND
Ex Pad
C10 10nF_100V_X7R_10%_0603
C11 100nF_50V_X7R_10%_0603
R6 124K_1%_0603
R25 10K_1%_0603
C24 1uF_25V_X5R_10%_0603
C6 100nF_50V_X7R_10%_0603
C7 100nF_50V_X7R_10%_0603
D3 BAT46JFILM
R24 68
C8 1nF_100V_X7R_10%_0603
R3 2K_1%_0805
C5 10nF_100V_X7R_10%_0603
R1 75K_1%_0603
R74 0
R10 56_1%_0805
R2 0_5%_0603
D1 BAT46JFILM
T1 STN4NF20L
R4 510_1%_0603
C9 470pF_100V_X7R_10%_0603
C4 1nF_100V_X7R_10%_0603
R9 0.47_1%_1206
R12 10K_1%_0603
C3 1nF_2KV_X7R_10%_1206
R96 0_5%_0805

U10
HMHA2801A
R5 1K_1%_0603
C12 100nF_50V_X7R_10%_0603
C66 1uF_25V_X5R_10%_0603
R84 0_5%_0805
R85 1K_1%_0603
C200 10nF_X7R_10%_0603
C17 100pF_50V_X7R_10%_0603
C19 22nF_50V_X7R_10%_0603
R11 20K_1%_0603
R13 10K_1%_0603
U2
TS431AILT
R15 13K_1%_0603
R14 13K_1%_0603

NOTE : The AGND is a dedicated plan.
The resistor 0 ohm must be very close to pin 9

Title: **Power Over Ethernet 3W**		
Project: **STM32F769I-DISCO**		
Variant: F769I		
Revision: C-01		Reference: MB1225
Size: A4	Date: 01/06/2020	Sheet: 11 of 13

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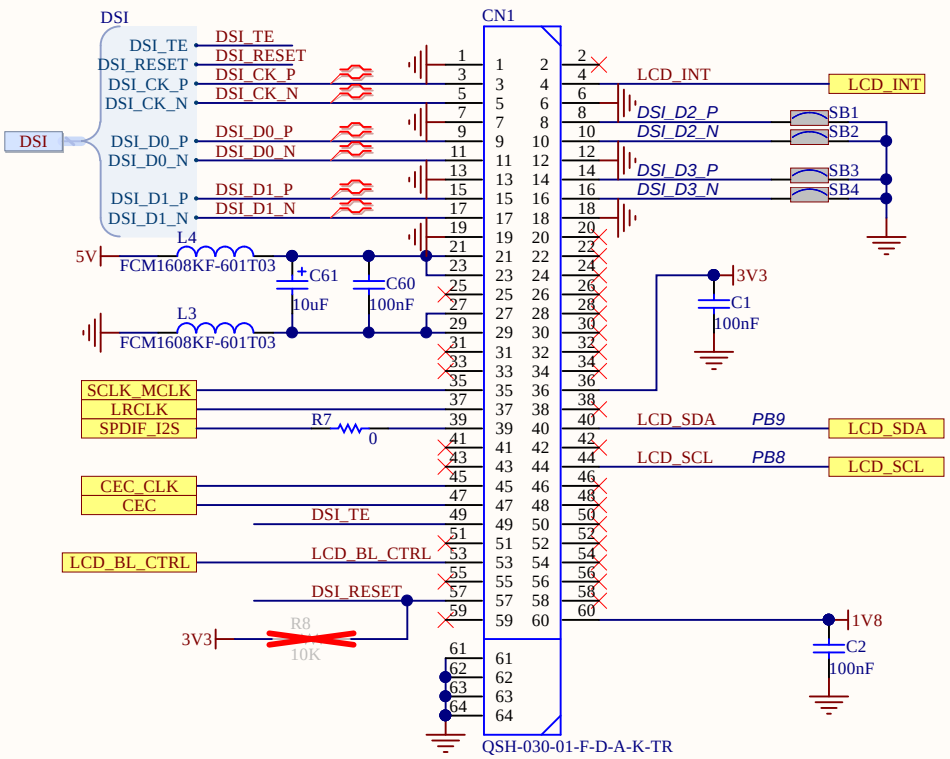
DSI LCD



MB1166 I2C Address : 0101 0100

Title: **MIPI connector for DSI LCD and HDMI boards.**		
Project: **STM32F769I-DISCO**		
Variant: F769I		
Revision: C-01		Reference: MB1225
Size: A4	Date: 01/06/2020	Sheet: 12 of 13

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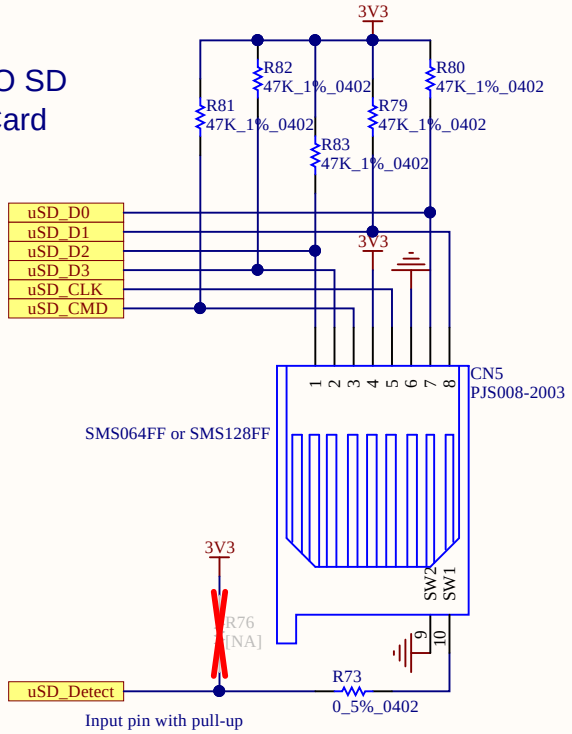
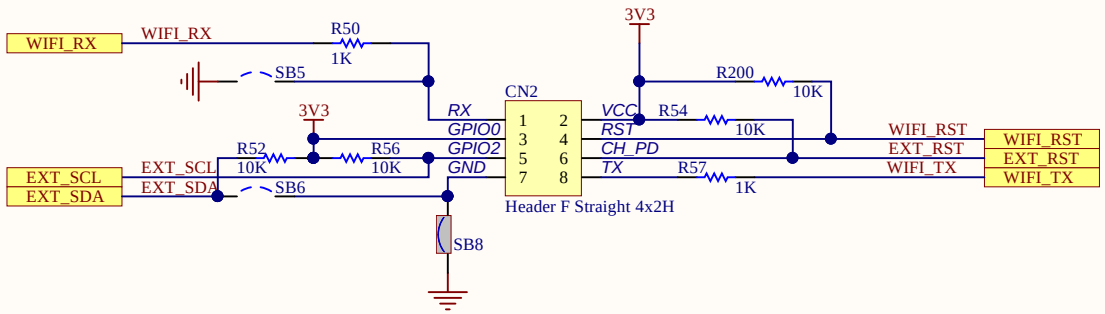
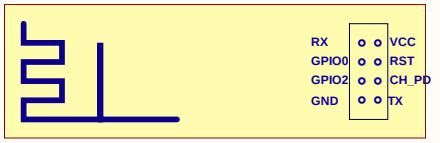
MICRO SD (TF) Card



WIFI with ESP8266 or I2C EXT Connector

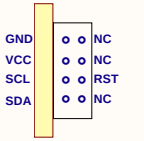




ESP8266-01

WIFI board

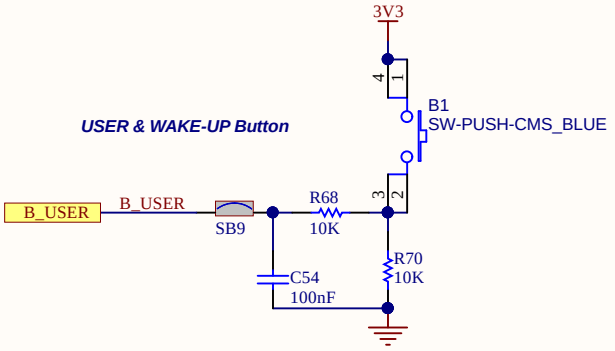
SB5, SB6, OFF
SB8, ON
EXT_RST, EXT_SCL, EXT_SDA = HIZ

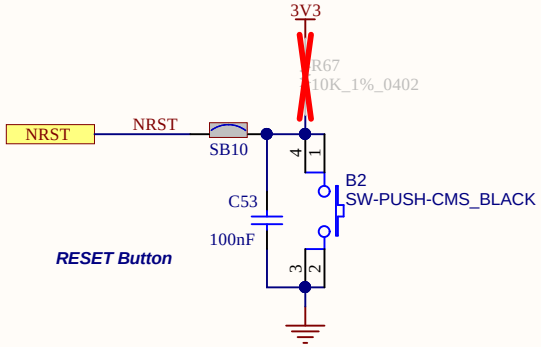


MB1064
MB1020

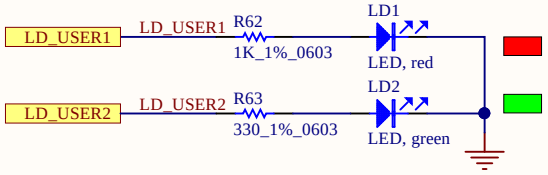
I2C board

SB8, OFF
SB5, SB6, ON
WIFI_RST, WIFI_RX, WIFI_TX = HIZ





LEDs



Title: **uSD, Wifi, LEDs and Push Button**		
Project: **STM32F769I-DISCO**		
Variant: F769I		
Revision: C-01		Reference: MB1225
Size: A4	Date: 01/06/2020	Sheet: 13 of 13

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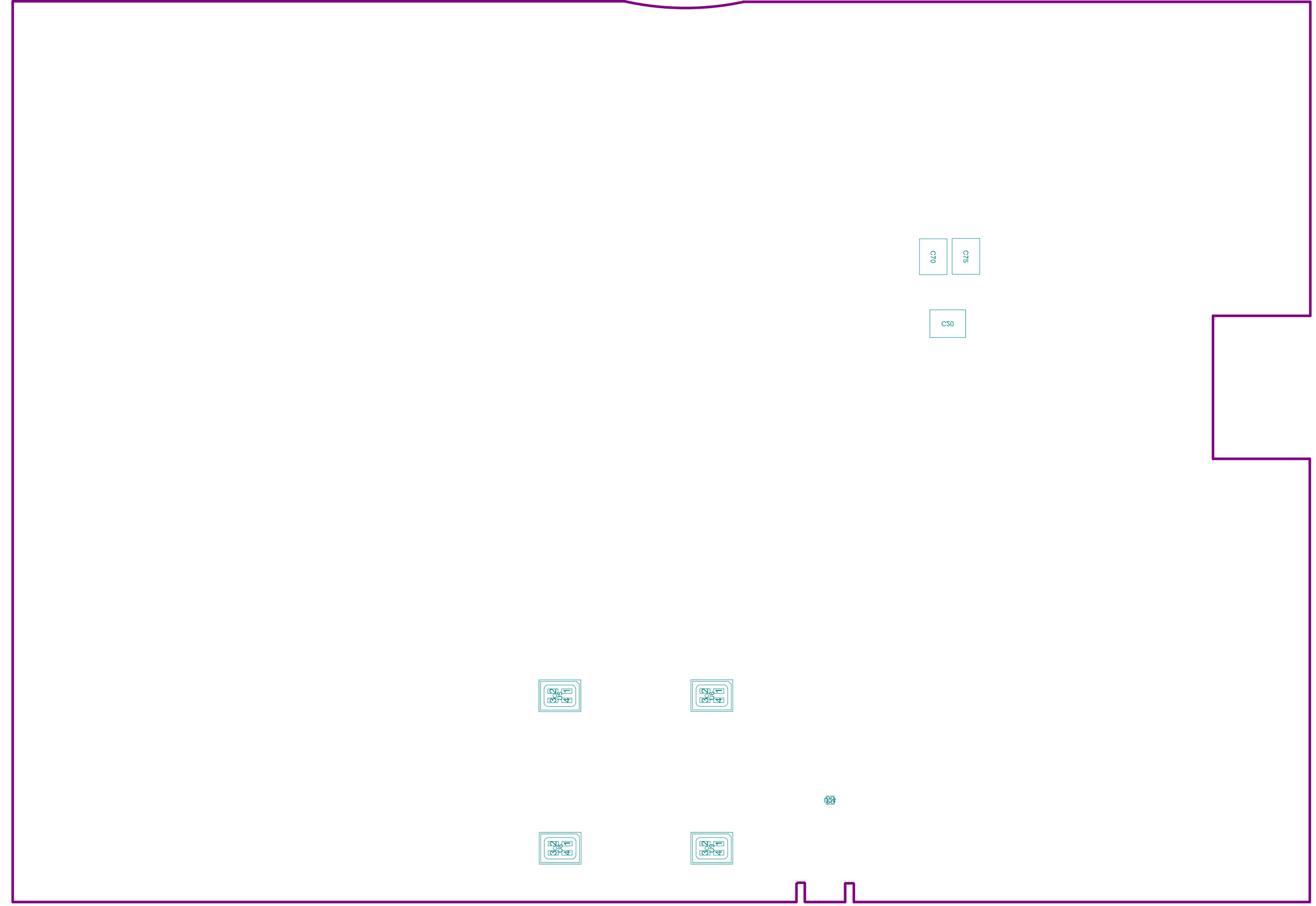
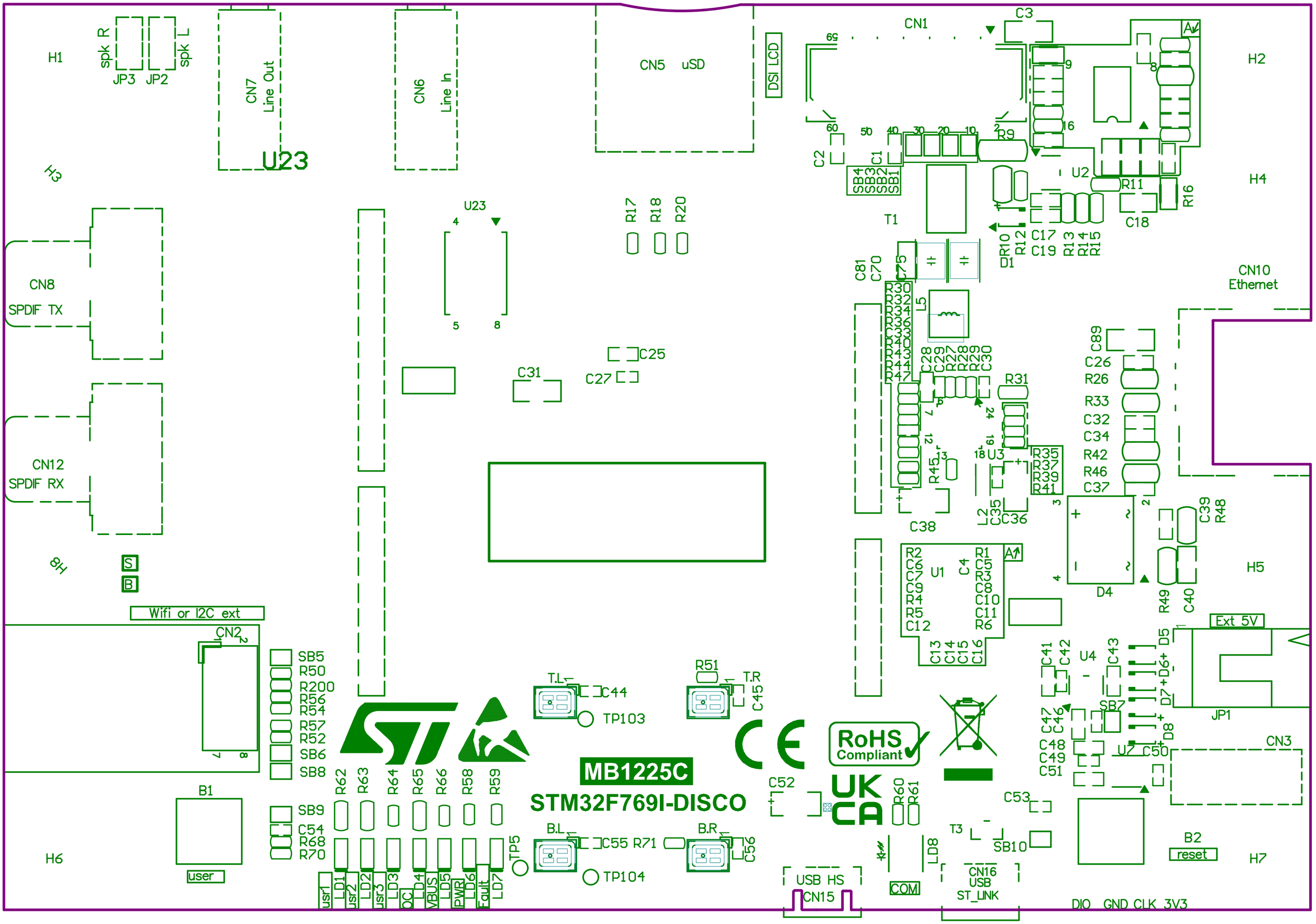


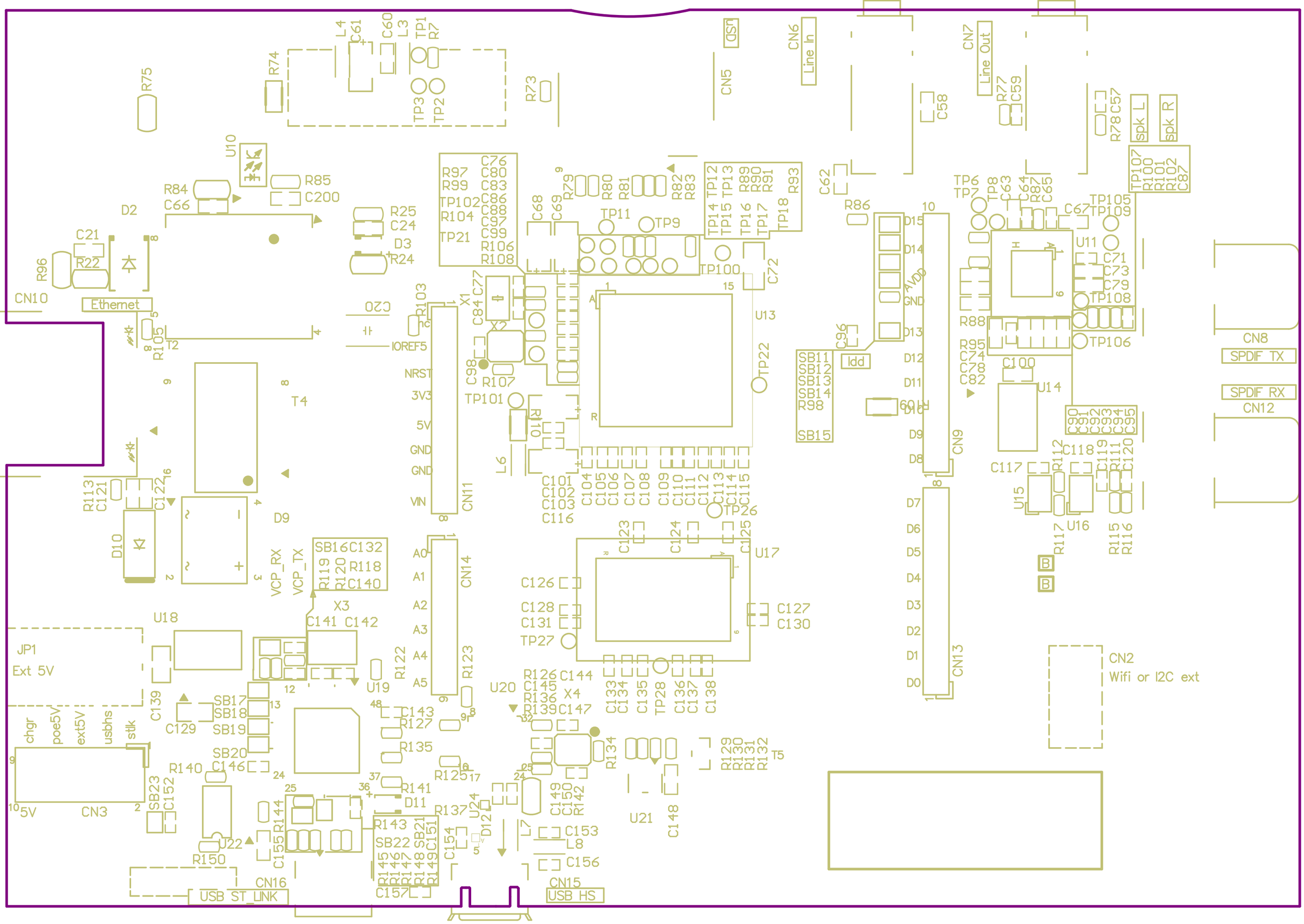
Project: STM32F769I-DISCO	
Layer: LAY3	Gerber: .GM14
Variant: F769I	Ref: MB1225
Date: 01/06/2020	Rev: C

Project: STM32F769I-DISCO	
Layer: LAY5	Gerber:.GM15
Variant: F769I	Ref: MB1225
Date: 01/06/2020	Rev: C



Designator1

Top Overlay .GTO



Bottom Overlay .GBO