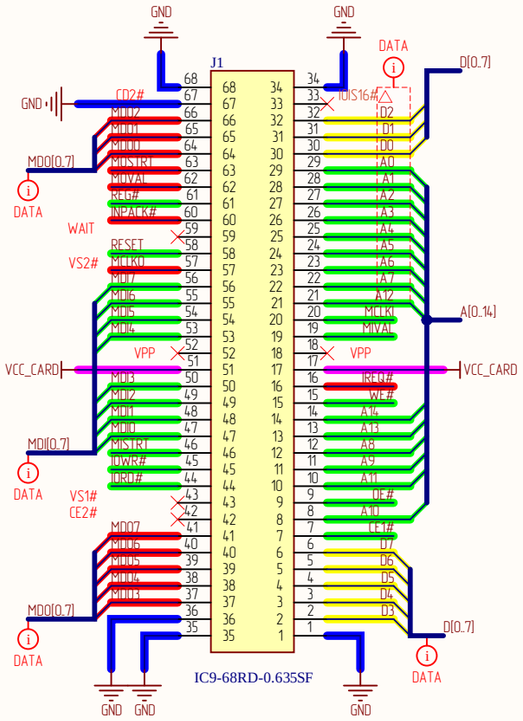

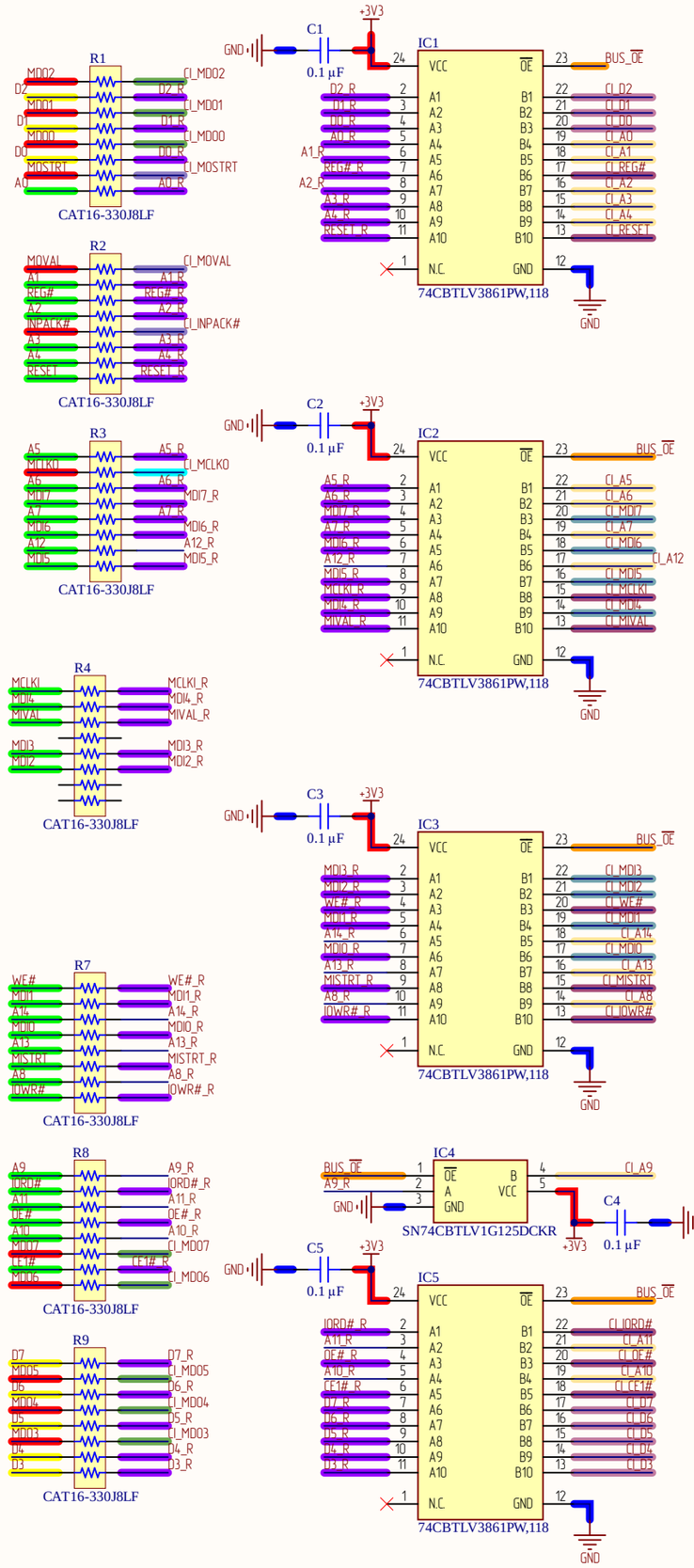

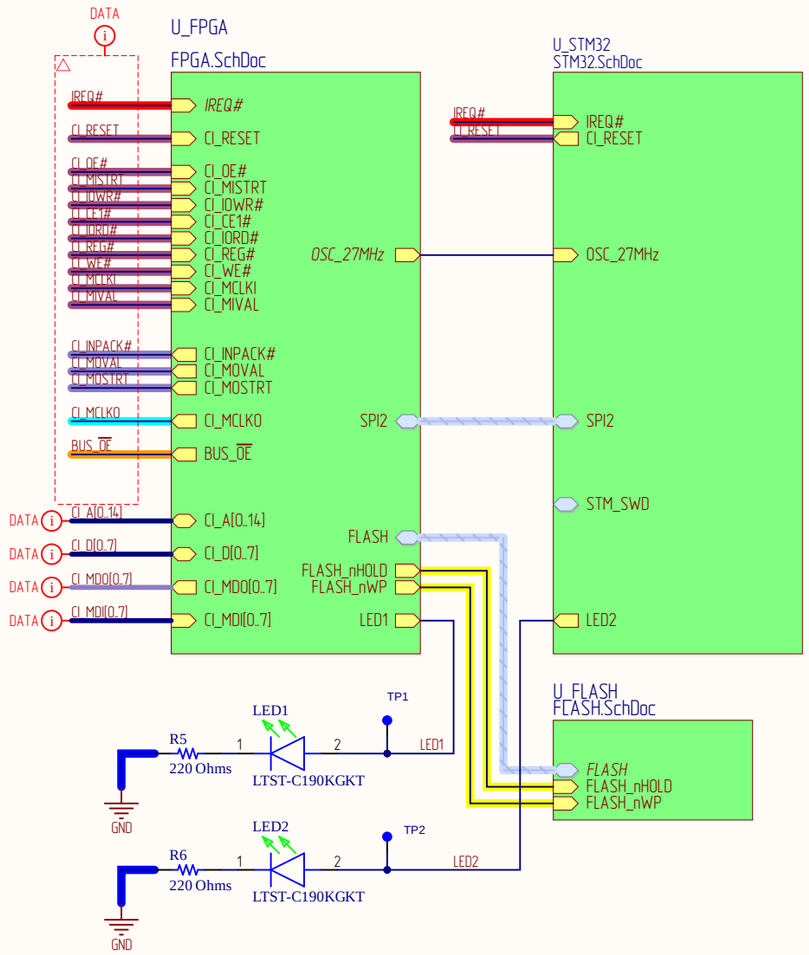

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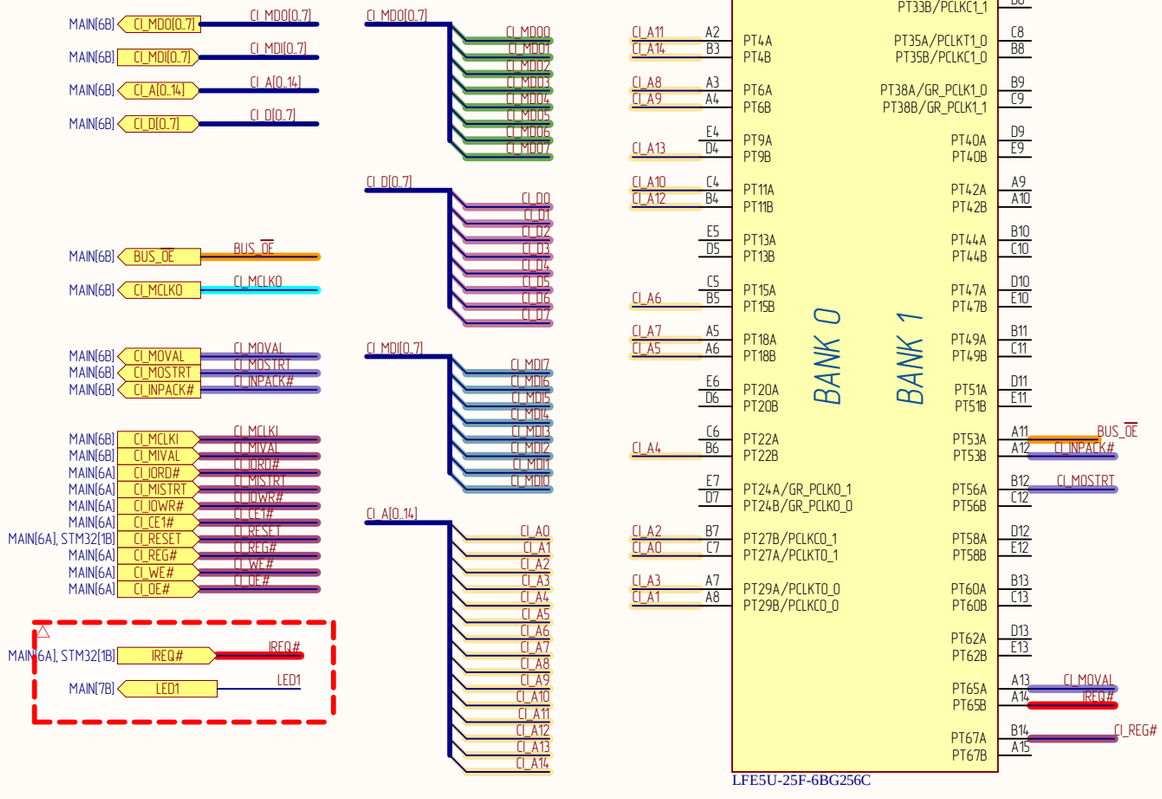
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MAIN[6B] CI_MDI[0..7] CI_MDI[0..7]
MAIN[6B] CI_A[0..14] CI_A[0..14]
MAIN[6B] CI_D[0..7] CI_D[0..7]
CI_MDO0 CI_MDO1 CI_MDO2 CI_MDO3 CI_MDO4 CI_MDO5 CI_MDO6 CI_MDO7
CI_D0 CI_D1 CI_D2 CI_D3 CI_D4 CI_D5 CI_D6 CI_D7
CI_MDI7 CI_MDI6 CI_MDI5 CI_MDI4 CI_MDI3 CI_MDI2 CI_MDI1 CI_MDI0
CI_A0 CI_A1 CI_A2 CI_A3 CI_A4 CI_A5 CI_A6 CI_A7 CI_A8 CI_A9 CI_A10 CI_A11 CI_A12 CI_A13 CI_A14
MAIN[6B] BUS_OE BUS_OE
MAIN[6B] CI_MCLKO CI_MCLKO
MAIN[6B] CI_MOVAL CI_MOVAL
MAIN[6B] CI_MOSTRT CI_MOSTRT
MAIN[6B] CI_INPACK# CI_INPACK#
MAIN[6B] CI_MCLKI CI_MCLKI
MAIN[6B] CI_MIVAL CI_MIVAL
MAIN[6A] CI_IORD# CI_IORD#
MAIN[6A] CI_MISTRT CI_MISTRT
MAIN[6A] CI_IOWR# CI_IOWR#
MAIN[6A] CI_CE1# CI_CE1#
MAIN[6A], STM32[1B] CI_RESET CI_RESET
MAIN[6A] CI_REG# CI_REG#
MAIN[6A] CI_WE# CI_WE#
MAIN[6A] CI_OE# CI_OE#
MAIN[6A], STM32[1B] IREQ# IREQ#
MAIN[7B] LED1 LED1
IC6A
CI_A11 A2
CI_A14 B3
CI_A8 A3
CI_A9 A4
E4
CI_A13 D4
CI_A10 C4
CI_A12 B4
E5
D5
C5
CI_A6 B5
CI_A7 A5
CI_A5 A6
E6
D6
C6
CI_A4 B6
E7
D7
CI_A2 B7
CI_A0 C7
CI_A3 A7
CI_A1 A8
PT4A PT4B PT6A PT6B PT9A PT9B PT11A PT11B PT13A PT13B PT15A PT15B PT18A PT18B PT20A PT20B PT22A PT22B PT24A/GR_PCLK0_1 PT24B/GR_PCLK0_0 PT27B/PCLKC0_1 PT27A/PCLKT0_1 PT29A/PCLKT0_0 PT29B/PCLKC0_0
BANK 0
BANK 1
PT33A/PCLKT1_1 PT33B/PCLKC1_1 PT35A/PCLKT1_0 PT35B/PCLKC1_0 PT38A/GR_PCLK1_0 PT38B/GR_PCLK1_1 PT40A PT40B PT42A PT42B PT44A PT44B PT47A PT47B PT49A PT49B PT51A PT51B PT53A PT53B PT56A PT56B PT58A PT58B PT60A PT60B PT62A PT62B PT65A PT65B PT67A PT67B
E8 D8 C8 B8 B9 C9 D9 E9 A9 A10 B10 C10 D10 E10 B11 C11 D11 E11
A11 BUS_OE
A12 CI_INPACK#
B12 CI_MOSTRT
D12 E12 B13 C13 D13 E13
A13 CI_MOVAL
A14 IREQ#
B14 CI_REG#
A15
LFE5U-25F-6BG256C
SPI
FLASH_RSV.CS R16 0 Ohms FLASH.CS
FLASH_RSV.SCK R17 0 Ohms FLASH.SCK
FLASH_RSV.MISO R18 0 Ohms FLASH.MISO
FLASH_RSV.MOSI R19 0 Ohms FLASH.MOSI
CS SCK MISO MOSI
FLASH FLASH MAIN[7B], FLASH[2B]
JTAG MODE
J2
TCK TDO TMS PROGRAMN TDI
+3V3 +5V
PBD2-10
GND
+3V
R26 4.7 kOhms
R27 1.1 kOhms
R28 10 kOhms
R29 10 kOhms
R30 10 kOhms
R31 10 kOhms
FLASH.CS FLASH.SCK FLASH.MISO FLASH.MOSI FLASH_nHOLD FLASH_nWP
+3V3 +3V3 +3V3
R20 DNC
R21 4.7 kOhms
R22 DNC
CFG0 CFG1 CFG2
R23 0 Ohms
R24 DNC
R25 0 Ohms
GND GND GND
Y1
VDD OUT GND TRI
27 MHz
C52 0.1 µ
R32 33 Ohms PLL_27MHz
R33 33 Ohms STM_27MHz
R34 33 Ohms 27MHz
OSC_27MHz
MAIN[7A], STM
+3V3 +3V3
GND GND
SPI
MAIN[7B], STM32[1B] SPI2
SPI2 CS SCK MISO MOSI
SPI2.CS SPI2.SCK SPI2.MISO SPI2.MOSI
SPI
MAIN[7B], FLASH[2B] FLASH
FLASH CS SCK MISO MOSI
FLASH.CS FLASH.SCK FLASH.MISO FLASH.MOSI
MAIN[7B], FLASH[2B] FLASH_nHOLD
MAIN[7B], FLASH[2B] FLASH_nWP
IC6C
B16 B15 C14 D14 C16 C15 E14 F14 D16 E15 F13 F12 G12 G13 F15 E16 F16 G15 G14 H14 H12 H13 J13 J12 G16 H15 J14 K14 J16 J15 K16 K15
PR2A PR2B PR2C PR2D PR5A PR5B PR5C PR5D PR8A PR8B PR8C PR8D PR11A PR11B PR11C PR11D PR14A PR14B PR14C PR14D PR17A PR17B PR17C PR17D PR20A/GR_PCLK2_1 PR20B PR20C/GR_PCLK2_1 PR20D PR23A/PCLKT2_1 PR23B/PCLKC2_1 PR23C/PCLKT2_0 PR23D/PCLKC2_0
BANK 2
BANK 3
PR26A/PCLKT3_1 PR26B/PCLKC3_1 PR26C/PCLKT3_0 PR26D/PCLKC3_0 PR29A/GR_PCLK3_0 PR29B PR29C/GR_PCLK3_1 PR29D PR32A PR32B PR32C PR32D PR35A PR35B PR35D PR35C PR38A PR38B PR38C PR38D PR41A PR41B PR41C PR41D PR44A PR44B PR44C PR44D PR47A PR47B PR47C/LRC_GPLLOT_IN PR47D/LRC_GPLLOC_IN
L16 L15 M16 M15 K13 K12 L13 L12 N16 P15 L14 M14 P16 R16 N14 M13 N13 P14 R15 T15 P13 R14 R13 T14 R12 T13 M12 N12 M11 N11 P11 P12
27MHz
LED1
SPI2.SCK
SPI2.CS
SPI2.MISO
SPI2.MOSI
FLASH_RSV.MOSI
PROGRAMN
FLASH_RSV.CS
FLASH_RSV.SCK
FLASH_RSV.MISO
PLL_27MHz
LFE5U-25F-6BG256C
IC6B
CI_RESET B1 B2 C3 D3
CI_MDI7 C1
CI_MDI6 C2 E3 F3
CI_MDI5 D1 E2 F4 F5
G5 G4
CI_MIVAL F2
CI_MDI4 E1
CI_MDI3 F1
CI_MDI2 G2 G3 H3
H5 H4 J4 J5
CI_WE# G1
CI_MDI1 H2 J3 K3
CI_IORD# J1
CI_MDI0 J2
CI_CE1# K1
CI_OE# K2
PL2A PL2B PL2C PL2D PL5A PL5B PL5C PL5D PL8A PL8B PL8C PL8D PL11A PL11B PL11C PL11D PL14A PL14B PL14C PL14D PL17A PL17B PL17C PL17D PL20A/GR_PCLK_7_1 PL20B PL20C/GR_PCLK7_0 PL20D PL23A/PCLKT7_1 PL23B/PCLKC7_1 PL23C/PCLKT7_0 PL23D/PCLKC7_0
BANK 7
BANK 6
PL26A/PCLKT6_1 PL26B/PCLKC6_1 PL26C/PCLKT6_0 PL26D/PCLKC6_0 PL29A/GR_PCLK6_0 PL29B PL29C/GR_PCLK6_1 PL29D PL32A PL32B PL32C PL32D PL35A PL35B PL35C PL35D PL38A PL38B PL38C PL38D PL41A PL41B PL41C PL41D PL44A PL44B PL44C PL44D PL47A PL47B PL47C/LLC_GPLLOT_IN PL47D/LLC_GPLLOC_IN
L1 L2 M1 M2 K4 K5 L4 L5 N1 P2 L3 M3 P1 R1 M4 N3 N4 P3 R2 T2 P4 R3 R4 T3 R5 T4 M5 N5 M6 N6 P6 P5
CI_MCLKO CI_MISTRT CI_MCLKI CI_IOWR#
CI_MDO2 CI_MDO0
CI_MDO1 CI_MDO7
CI_D2 CI_D1
CI_MDO4 CI_MDO6 CI_MDO5
CI_D3 CI_D7 CI_D5 CI_MDO3
CI_D4 CI_D6
CI_D0
LFE5U-25F-6BG256C
IC6D
T6 R6 R7 P7 T7 T8 R8 P8 N8 M8 M9
PB4A PB4B PB6A PB6B PB9A/D3/IO3 PB9B/D2/IO2 PB11A/D1/MISO/IO1 PB11B/D0/MOSI/IO0 PB13A PB13B PB15A PB15B PB18A
FLASH_nHOLD FLASH_nWP FLASH.MISO FLASH.MOSI +3V3 FLASH.CS
R9 T9 P9 N9 N10 P10 R10 R11 M10 T10 T11
PROGRAMN INITN DONE CCLK CFG_0 CFG_1 CFG_2 TDI TDO TCK TMS
CFG0 CFG1 CFG2
FLASH.SCK
+3V3
R35 4.7 kOhms
TP7
R36 4.7 kOhms
R37 4.7 kOhms
+3V3 +3V3
R38 4.7 kOhms
R39 4.7 kOhms
R40 4.7 kOhms
R41 4.7 kOhms
TP8 TP9 TP10 TP11
GND
LFE5U-25F-6BG256C
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Date 9.01.2025
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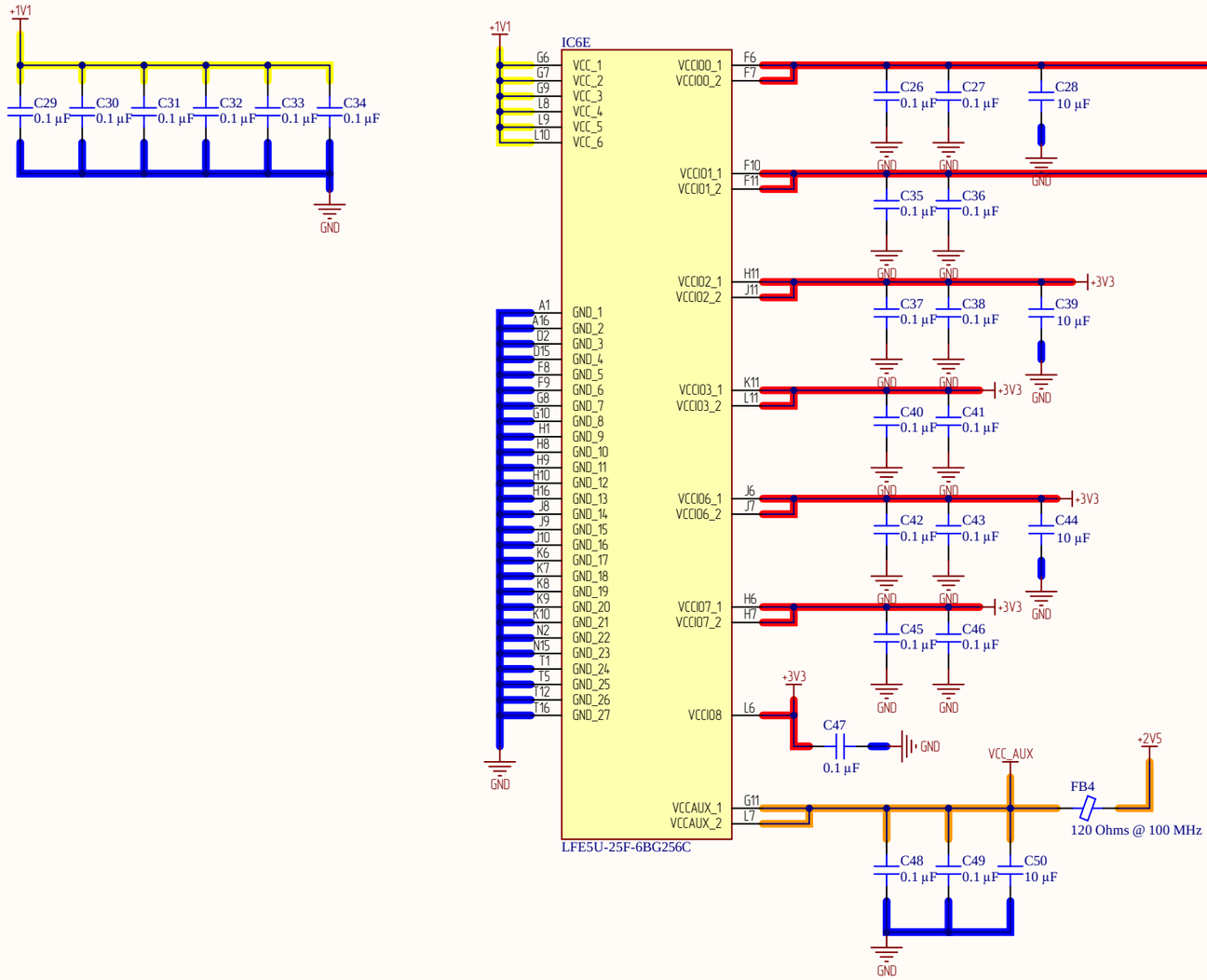

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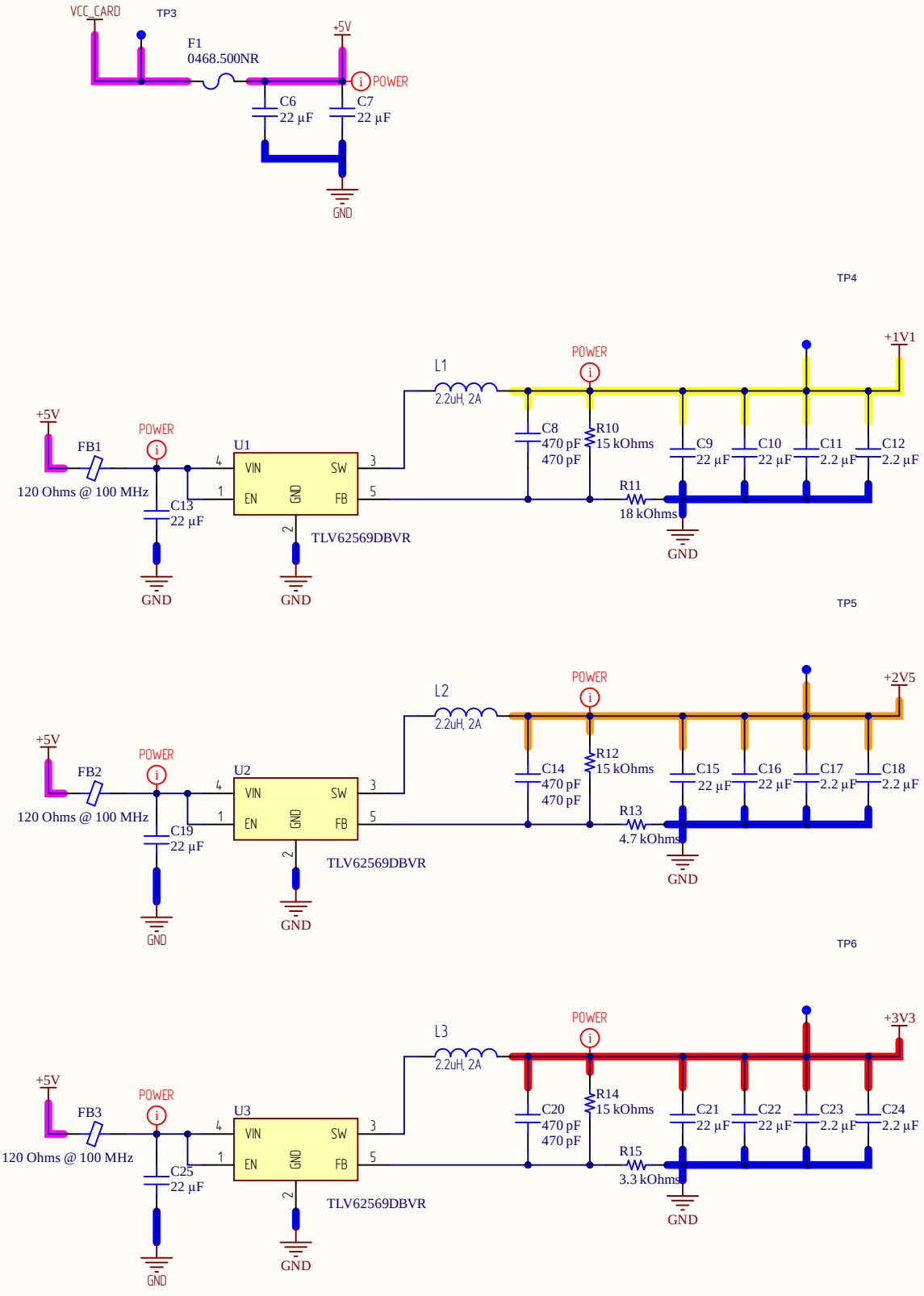

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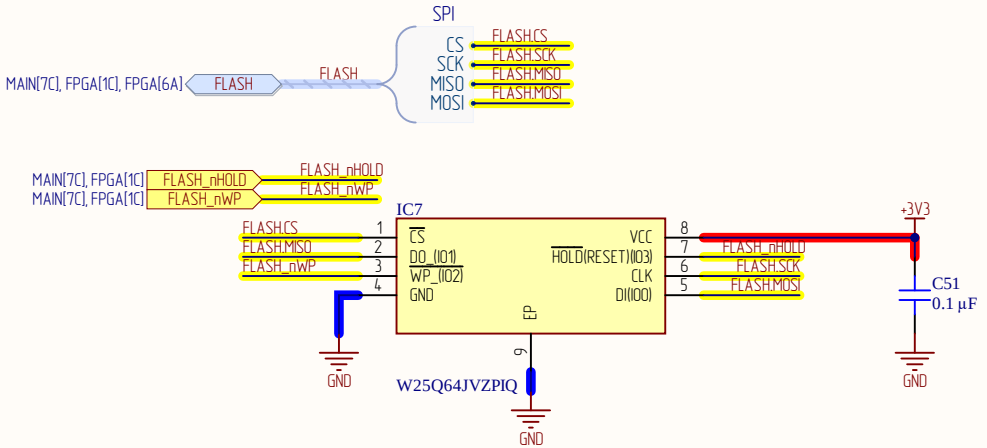

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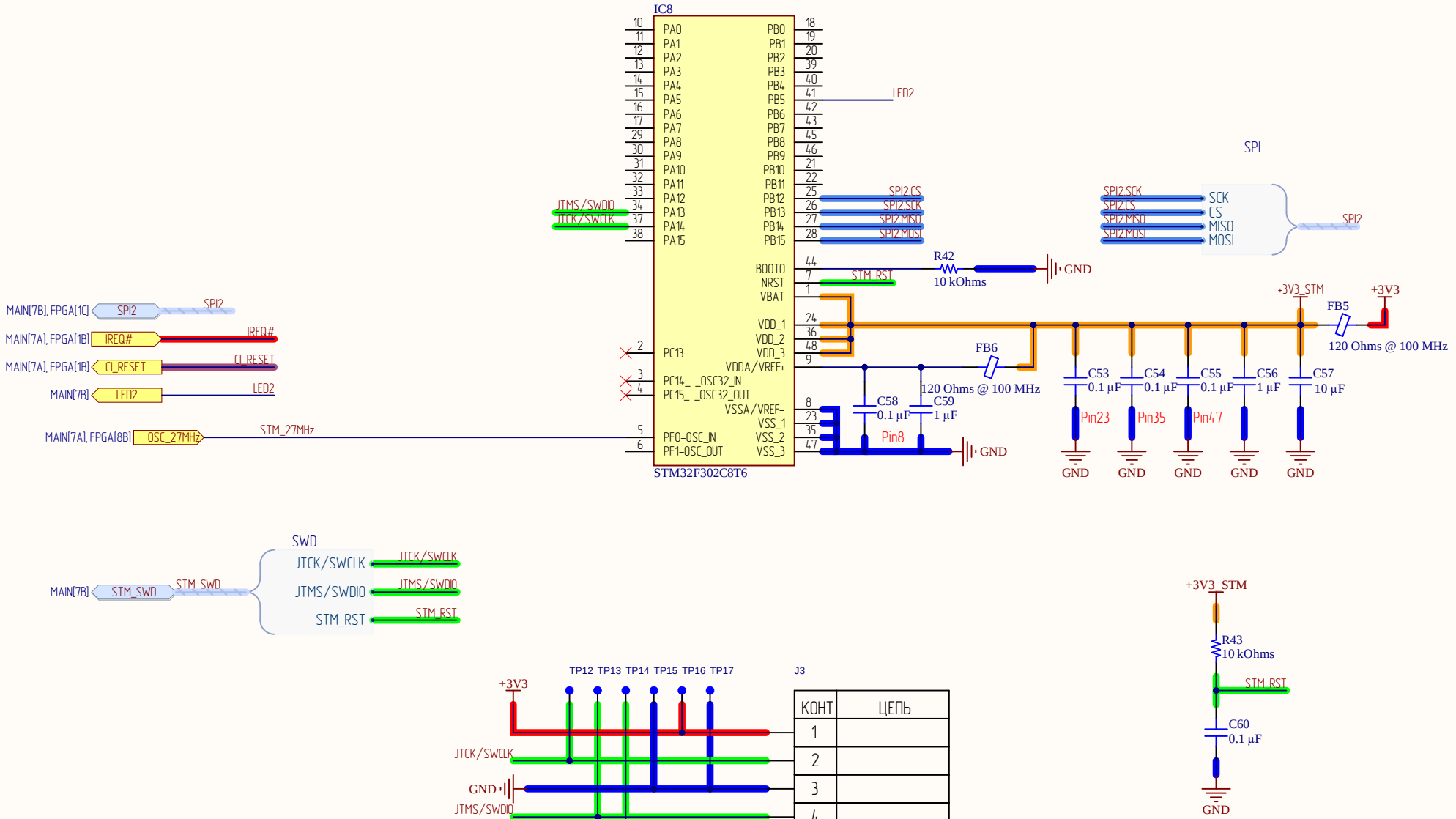
IC8
PA0
PA1
PA2
PA3
PA4
PA5
PA6
PA7
PA8
PA9
PA10
PA11
PA12
PA13
PA14
PA15
PB0
PB1
PB2
PB3
PB4
PB5
PB6
PB7
PB8
PB9
PB10
PB11
PB12
PB13
PB14
PB15
BOOT0
NRST
VBAT
PC13
PC14_-_OSC32_IN
PC15_-_OSC32_OUT
VDD_1
VDD_2
VDD_3
VDDA/VREF+
VSSA/VREF-
VSS_1
VSS_2
VSS_3
PF0-OSC_IN
PF1-OSC_OUT
STM32F302C8T6
LED2
SPI2_CS
SPI2_SCK
SPI2_MISO
SPI2_MOSI
JTMS/SWDIO
JTCK/SWCLK
STM_RST
R42
10 kOhms
GND
SPI
SCK
CS
MISO
MOSI
SPI2
+3V3_STM
+3V3
FB5
120 Ohms @ 100 MHz
FB6
120 Ohms @ 100 MHz
C53
0.1 µF
C54
0.1 µF
C55
0.1 µF
C56
1 µF
C57
10 µF
C58
0.1 µF
C59
1 µF
Pin23
Pin35
Pin47
Pin8
MAIN[7B], FPGA[1C]
MAIN[7A], FPGA[1B]
MAIN[7A], FPGA[1B]
MAIN[7B]
MAIN[7A], FPGA[8B]
IREQ#
CI_RESET
OSC_27MHz
STM_27MHz
SWD
MAIN[7B]
STM_SWD
JTCK/SWCLK
JTMS/SWDIO
STM_RST
TP12 TP13 TP14 TP15 TP16 TP17
J3
КОНТ
ЦЕПЬ
1
2
3
4
5
6
7
+3V3_STM
R43
10 kOhms
C60
0.1 µF
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Size
A4
Number
Revision
Date:
9.01.2025
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