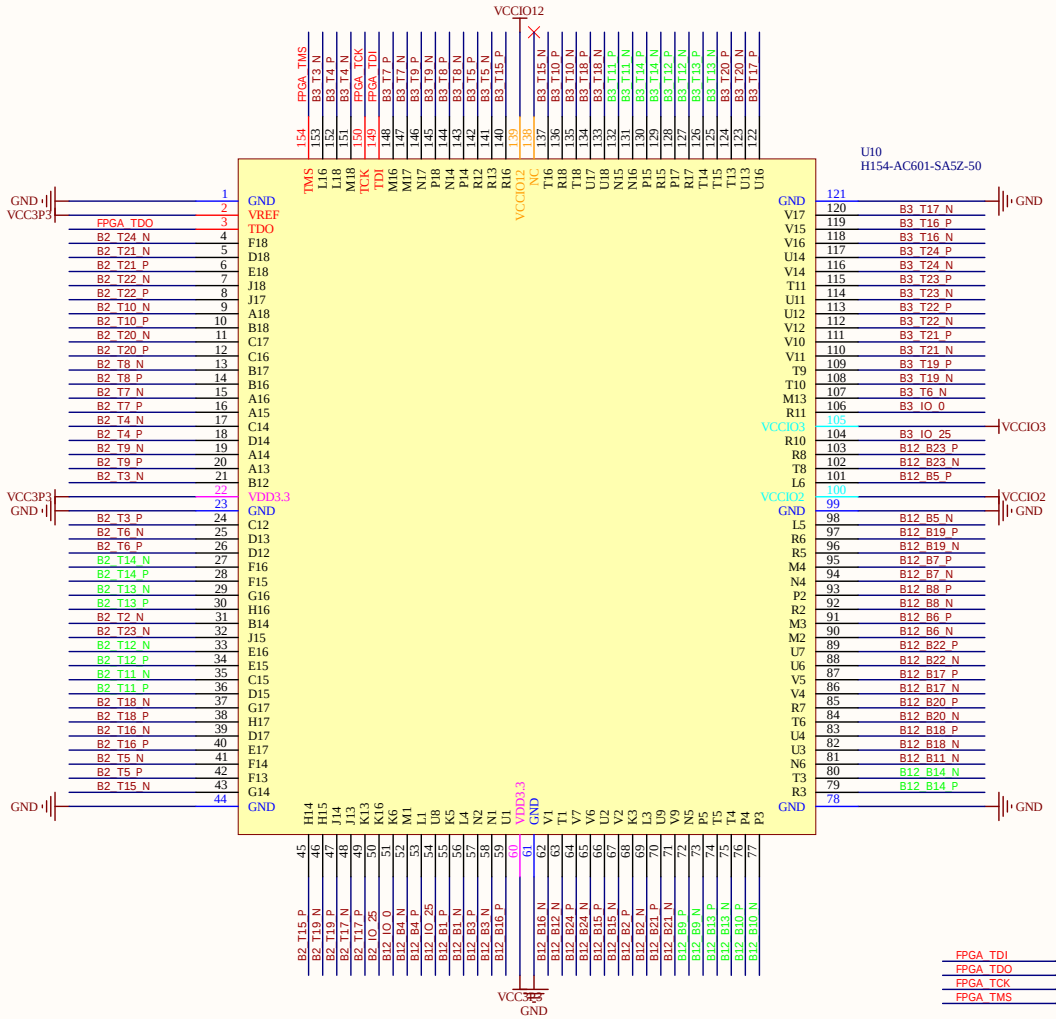

核心板JTAG触点，方便用夹具测试

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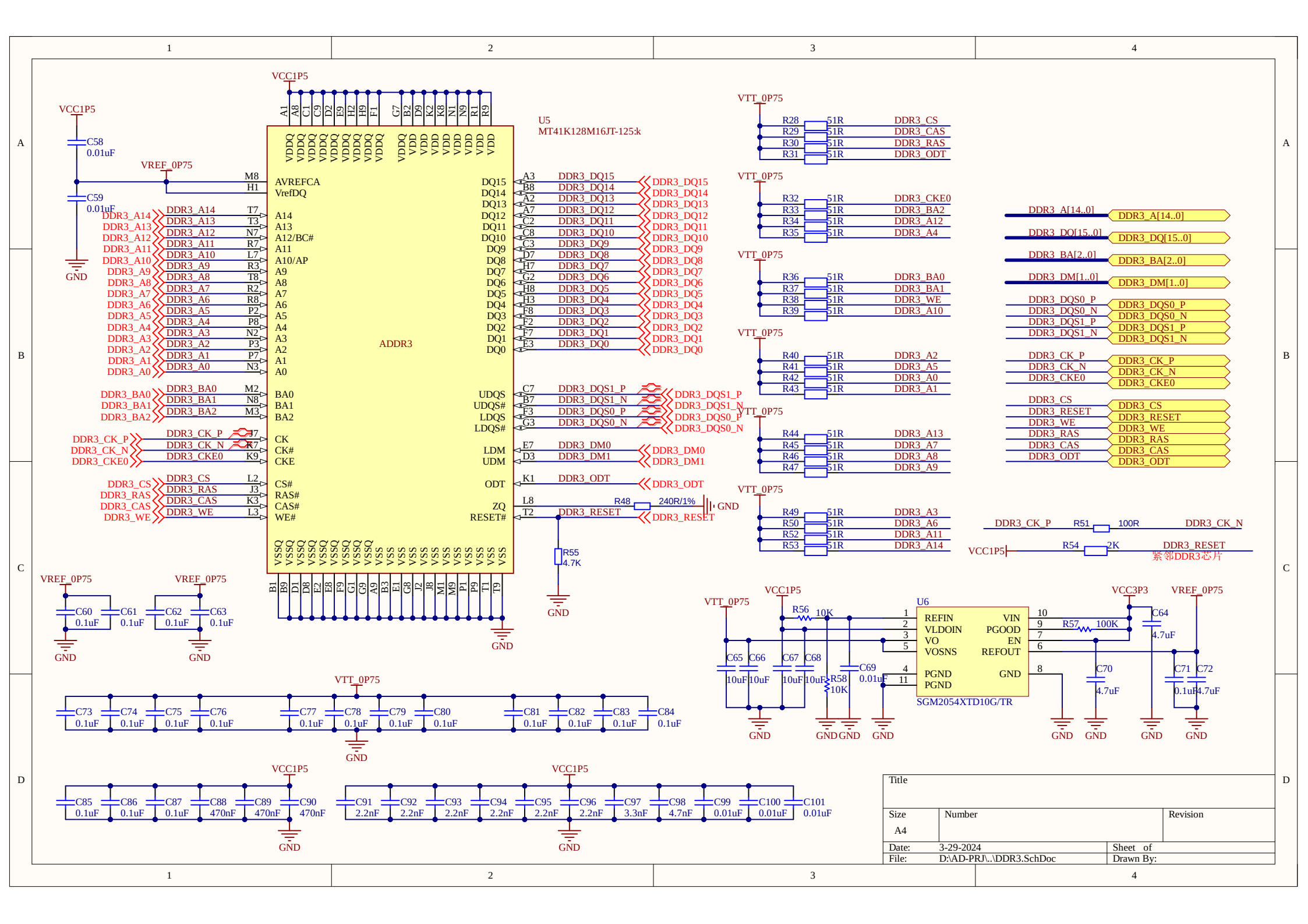
U5
MT41K128M16JT-125:k
ADDR3
VCC1P5
VREF_0P75
VTT_0P75
GND
U6
SGM2054XTD10G/TR
REFIN
VLDOIN
VO
VOSNS
PGND
VIN
PGOOD
EN
REFOUT
GND
VCC3P3
DDR3_A[14..0]
DDR3_DQ[15..0]
DDR3_BA[2..0]
DDR3_DM[1..0]
DDR3_DQS0_P
DDR3_DQS0_N
DDR3_DQS1_P
DDR3_DQS1_N
DDR3_CK_P
DDR3_CK_N
DDR3_CKE0
DDR3_CS
DDR3_RESET
DDR3_WE
DDR3_RAS
DDR3_CAS
DDR3_ODT
紧邻DDR3芯片
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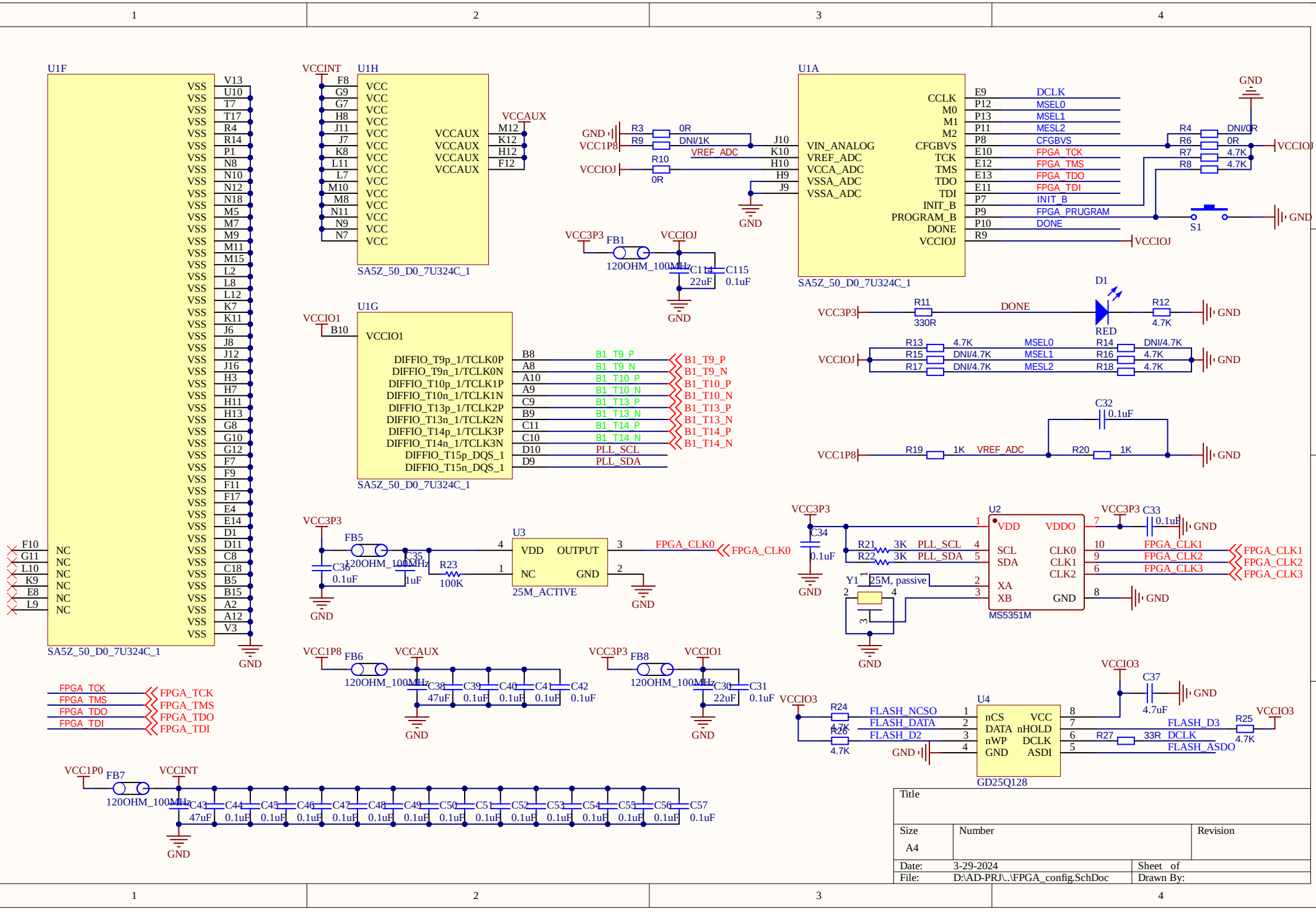
U1F
SA5Z_50_D0_7U324C_1
VCCINT
U1H
SA5Z_50_D0_7U324C_1
VCCAUX
U1A
SA5Z_50_D0_7U324C_1
U1G
SA5Z_50_D0_7U324C_1
VCCIO1
VCC3P3
FB1
120OHM_100MHz
C114 22uF
C115 0.1uF
GND
VCCIOJ
R3 0R
R9 DNI/1K
R10 0R
VREF_ADC
VCC1P8
DCLK
MSEL0
MSEL1
MESL2
CFGBVS
FPGA_TCK
FPGA_TMS
FPGA_TDO
FPGA_TDI
INIT_B
FPGA_PRUGRAM
DONE
S1
R4 DNI/0R
R6 0R
R7 4.7K
R8 4.7K
D1
RED
R11 330R
R12 4.7K
R13 4.7K
R14 DNI/4.7K
R15 DNI/4.7K
R16 4.7K
R17 DNI/4.7K
R18 4.7K
C32 0.1uF
R19 1K
R20 1K
B1_T9_P
B1_T9_N
B1_T10_P
B1_T10_N
B1_T13_P
B1_T13_N
B1_T14_P
B1_T14_N
PLL_SCL
PLL_SDA
U3
25M_ACTIVE
FB5
C35 1uF
C36 0.1uF
R23 100K
FPGA_CLK0
U2
MS5351M
C33 0.1uF
C34 0.1uF
R21 3K
R22 3K
Y1 25M, passive
FPGA_CLK1
FPGA_CLK2
FPGA_CLK3
FB6
C38 47uF
C39 0.1uF
C40 0.1uF
C41 0.1uF
C42 0.1uF
FB8
C30 22uF
C31 0.1uF
U4
GD25Q128
C37 4.7uF
R24 4.7K
R26 4.7K
R27 33R
R25 4.7K
FLASH_NCSO
FLASH_DATA
FLASH_D2
FLASH_D3
DCLK
FLASH_ASDO
FB7
C43 47uF
C44 0.1uF
C45 0.1uF
C46 0.1uF
C47 0.1uF
C48 0.1uF
C49 0.1uF
C50 0.1uF
C51 0.1uF
C52 0.1uF
C53 0.1uF
C54 0.1uF
C55 0.1uF
C56 0.1uF
C57 0.1uF
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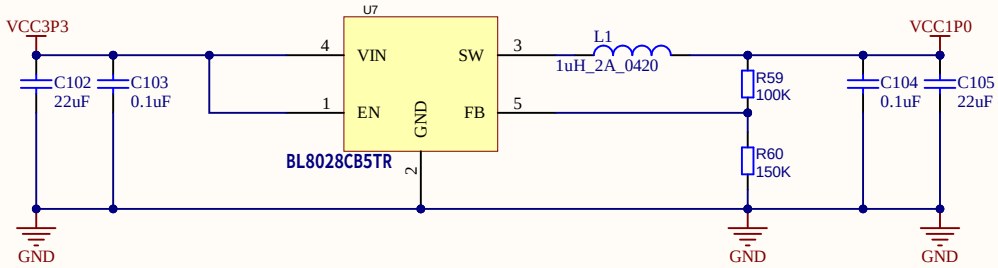

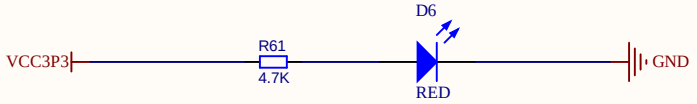

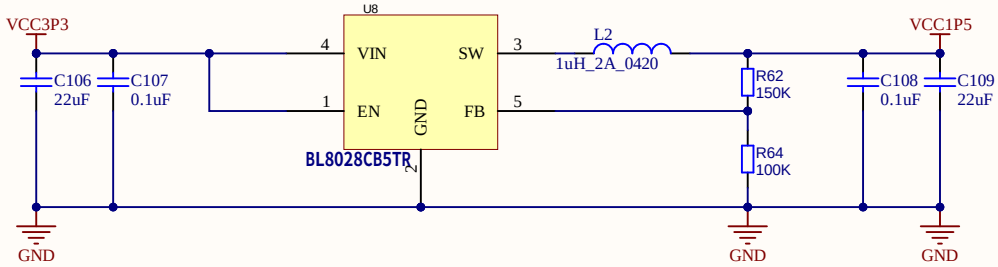

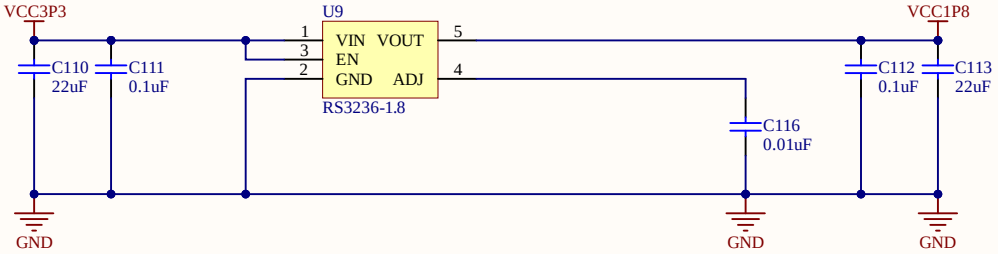

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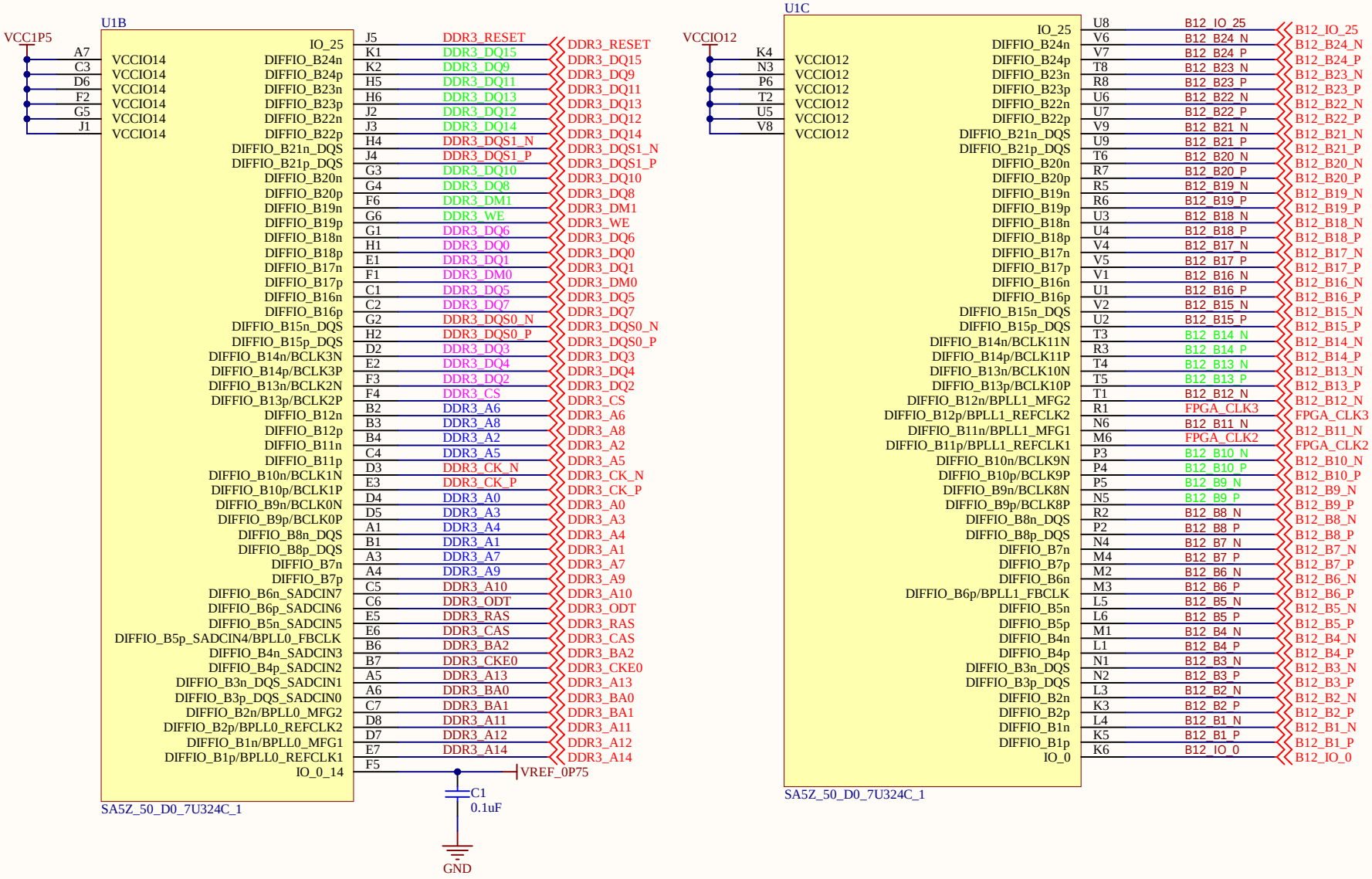
U1B
VCC1P5
A7
C3
D6
F2
G5
J1
VCCIO14
VCCIO14
VCCIO14
VCCIO14
VCCIO14
VCCIO14
IO_25
DIFFIO_B24n
DIFFIO_B24p
DIFFIO_B23n
DIFFIO_B23p
DIFFIO_B22n
DIFFIO_B22p
DIFFIO_B21n_DQS
DIFFIO_B21p_DQS
DIFFIO_B20n
DIFFIO_B20p
DIFFIO_B19n
DIFFIO_B19p
DIFFIO_B18n
DIFFIO_B18p
DIFFIO_B17n
DIFFIO_B17p
DIFFIO_B16n
DIFFIO_B16p
DIFFIO_B15n_DQS
DIFFIO_B15p_DQS
DIFFIO_B14n/BCLK3N
DIFFIO_B14p/BCLK3P
DIFFIO_B13n/BCLK2N
DIFFIO_B13p/BCLK2P
DIFFIO_B12n
DIFFIO_B12p
DIFFIO_B11n
DIFFIO_B11p
DIFFIO_B10n/BCLK1N
DIFFIO_B10p/BCLK1P
DIFFIO_B9n/BCLK0N
DIFFIO_B9p/BCLK0P
DIFFIO_B8n_DQS
DIFFIO_B8p_DQS
DIFFIO_B7n
DIFFIO_B7p
DIFFIO_B6n_SADCIN7
DIFFIO_B6p_SADCIN6
DIFFIO_B5n_SADCIN5
DIFFIO_B5p_SADCIN4/BPLL0_FBCLK
DIFFIO_B4n_SADCIN3
DIFFIO_B4p_SADCIN2
DIFFIO_B3n_DQS_SADCIN1
DIFFIO_B3p_DQS_SADCIN0
DIFFIO_B2n/BPLL0_MFG2
DIFFIO_B2p/BPLL0_REFCLK2
DIFFIO_B1n/BPLL0_MFG1
DIFFIO_B1p/BPLL0_REFCLK1
IO_0_14
J5 DDR3_RESET
K1 DDR3_DQ15
K2 DDR3_DQ9
H5 DDR3_DQ11
H6 DDR3_DQ13
J2 DDR3_DQ12
J3 DDR3_DQ14
H4 DDR3_DQS1_N
J4 DDR3_DQS1_P
G3 DDR3_DQ10
G4 DDR3_DQ8
F6 DDR3_DM1
G6 DDR3_WE
G1 DDR3_DQ6
H1 DDR3_DQ0
E1 DDR3_DQ1
F1 DDR3_DM0
C1 DDR3_DQ5
C2 DDR3_DQ7
G2 DDR3_DQS0_N
H2 DDR3_DQS0_P
D2 DDR3_DQ3
E2 DDR3_DQ4
F3 DDR3_DQ2
F4 DDR3_CS
B2 DDR3_A6
B3 DDR3_A8
B4 DDR3_A2
C4 DDR3_A5
D3 DDR3_CK_N
E3 DDR3_CK_P
D4 DDR3_A0
D5 DDR3_A3
A1 DDR3_A4
B1 DDR3_A1
A3 DDR3_A7
A4 DDR3_A9
C5 DDR3_A10
C6 DDR3_ODT
E5 DDR3_RAS
E6 DDR3_CAS
B6 DDR3_BA2
B7 DDR3_CKE0
A5 DDR3_A13
A6 DDR3_BA0
C7 DDR3_BA1
D8 DDR3_A11
D7 DDR3_A12
E7 DDR3_A14
F5
DDR3_RESET
DDR3_DQ15
DDR3_DQ9
DDR3_DQ11
DDR3_DQ13
DDR3_DQ12
DDR3_DQ14
DDR3_DQS1_N
DDR3_DQS1_P
DDR3_DQ10
DDR3_DQ8
DDR3_DM1
DDR3_WE
DDR3_DQ6
DDR3_DQ0
DDR3_DQ1
DDR3_DM0
DDR3_DQ5
DDR3_DQ7
DDR3_DQS0_N
DDR3_DQS0_P
DDR3_DQ3
DDR3_DQ4
DDR3_DQ2
DDR3_CS
DDR3_A6
DDR3_A8
DDR3_A2
DDR3_A5
DDR3_CK_N
DDR3_CK_P
DDR3_A0
DDR3_A3
DDR3_A4
DDR3_A1
DDR3_A7
DDR3_A9
DDR3_A10
DDR3_ODT
DDR3_RAS
DDR3_CAS
DDR3_BA2
DDR3_CKE0
DDR3_A13
DDR3_BA0
DDR3_BA1
DDR3_A11
DDR3_A12
DDR3_A14
VREF_0P75
SA5Z_50_D0_7U324C_1
C1
0.1uF
GND
U1C
VCCIO12
K4
N3
P6
T2
U5
V8
VCCIO12
VCCIO12
VCCIO12
VCCIO12
VCCIO12
VCCIO12
IO_25
DIFFIO_B24n
DIFFIO_B24p
DIFFIO_B23n
DIFFIO_B23p
DIFFIO_B22n
DIFFIO_B22p
DIFFIO_B21n_DQS
DIFFIO_B21p_DQS
DIFFIO_B20n
DIFFIO_B20p
DIFFIO_B19n
DIFFIO_B19p
DIFFIO_B18n
DIFFIO_B18p
DIFFIO_B17n
DIFFIO_B17p
DIFFIO_B16n
DIFFIO_B16p
DIFFIO_B15n_DQS
DIFFIO_B15p_DQS
DIFFIO_B14n/BCLK11N
DIFFIO_B14p/BCLK11P
DIFFIO_B13n/BCLK10N
DIFFIO_B13p/BCLK10P
DIFFIO_B12n/BPLL1_MFG2
DIFFIO_B12p/BPLL1_REFCLK2
DIFFIO_B11n/BPLL1_MFG1
DIFFIO_B11p/BPLL1_REFCLK1
DIFFIO_B10n/BCLK9N
DIFFIO_B10p/BCLK9P
DIFFIO_B9n/BCLK8N
DIFFIO_B9p/BCLK8P
DIFFIO_B8n_DQS
DIFFIO_B8p_DQS
DIFFIO_B7n
DIFFIO_B7p
DIFFIO_B6n
DIFFIO_B6p/BPLL1_FBCLK
DIFFIO_B5n
DIFFIO_B5p
DIFFIO_B4n
DIFFIO_B4p
DIFFIO_B3n_DQS
DIFFIO_B3p_DQS
DIFFIO_B2n
DIFFIO_B2p
DIFFIO_B1n
DIFFIO_B1p
IO_0
U8 B12_IO_25
V6 B12_B24_N
V7 B12_B24_P
T8 B12_B23_N
R8 B12_B23_P
U6 B12_B22_N
U7 B12_B22_P
V9 B12_B21_N
U9 B12_B21_P
T6 B12_B20_N
R7 B12_B20_P
R5 B12_B19_N
R6 B12_B19_P
U3 B12_B18_N
U4 B12_B18_P
V4 B12_B17_N
V5 B12_B17_P
V1 B12_B16_N
U1 B12_B16_P
V2 B12_B15_N
U2 B12_B15_P
T3 B12_B14_N
R3 B12_B14_P
T4 B12_B13_N
T5 B12_B13_P
T1 B12_B12_N
R1 FPGA_CLK3
N6 B12_B11_N
M6 FPGA_CLK2
P3 B12_B10_N
P4 B12_B10_P
P5 B12_B9_N
N5 B12_B9_P
R2 B12_B8_N
P2 B12_B8_P
N4 B12_B7_N
M4 B12_B7_P
M2 B12_B6_N
M3 B12_B6_P
L5 B12_B5_N
L6 B12_B5_P
M1 B12_B4_N
L1 B12_B4_P
N1 B12_B3_N
N2 B12_B3_P
L3 B12_B2_N
K3 B12_B2_P
L4 B12_B1_N
K5 B12_B1_P
K6 B12_IO_0
B12_IO_25
B12_B24_N
B12_B24_P
B12_B23_N
B12_B23_P
B12_B22_N
B12_B22_P
B12_B21_N
B12_B21_P
B12_B20_N
B12_B20_P
B12_B19_N
B12_B19_P
B12_B18_N
B12_B18_P
B12_B17_N
B12_B17_P
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B12_B15_N
B12_B15_P
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B12_B13_N
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B12_B12_N
FPGA_CLK3
B12_B11_N
FPGA_CLK2
B12_B10_N
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B12_B9_N
B12_B9_P
B12_B8_N
B12_B8_P
B12_B7_N
B12_B7_P
B12_B6_N
B12_B6_P
B12_B5_N
B12_B5_P
B12_B4_N
B12_B4_P
B12_B3_N
B12_B3_P
B12_B2_N
B12_B2_P
B12_B1_N
B12_B1_P
B12_IO_0
SA5Z_50_D0_7U324C_1
VCC1P5
C2 47uF
C3 0.1uF
C4 0.1uF
C5 0.1uF
C6 0.1uF
C7 0.1uF
C8 0.1uF
GND
VCC3P3
FB2
120OHM_100MHz
VCCIO12
C9 47uF
C10 0.1uF
C11 0.1uF
C12 0.1uF
C13 0.1uF
C14 0.1uF
C15 0.1uF
GND
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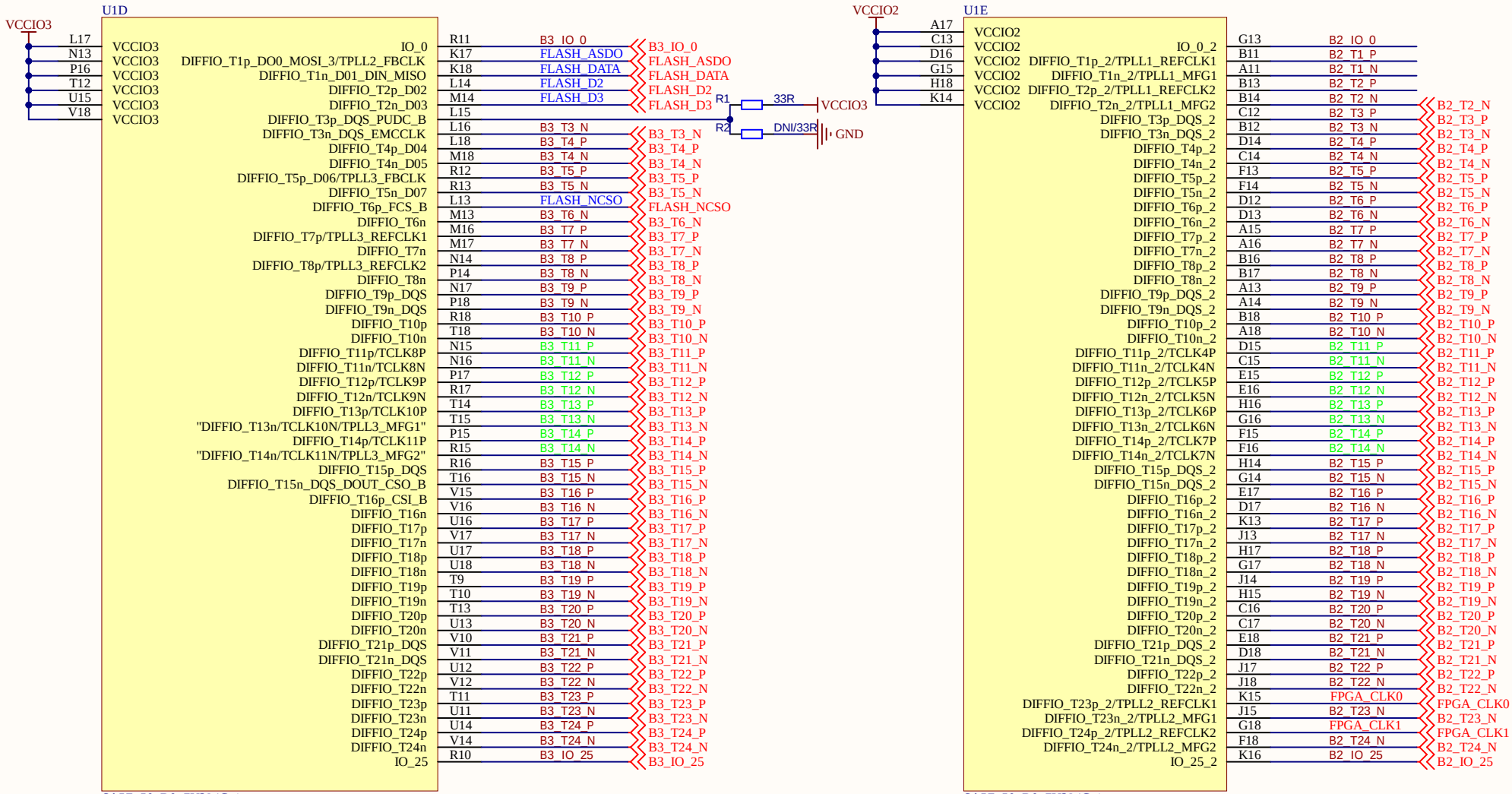
U1D
VCCIO3
L17 VCCIO3
N13 VCCIO3
P16 VCCIO3
T12 VCCIO3
U15 VCCIO3
V18 VCCIO3
IO_0
DIFFIO_T1p_DO0_MOSI_3/TPLL2_FBCLK
DIFFIO_T1n_D01_DIN_MISO
DIFFIO_T2p_D02
DIFFIO_T2n_D03
DIFFIO_T3p_DQS_PUDC_B
DIFFIO_T3n_DQS_EMCCLK
DIFFIO_T4p_D04
DIFFIO_T4n_D05
DIFFIO_T5p_D06/TPLL3_FBCLK
DIFFIO_T5n_D07
DIFFIO_T6p_FCS_B
DIFFIO_T6n
DIFFIO_T7p/TPLL3_REFCLK1
DIFFIO_T7n
DIFFIO_T8p/TPLL3_REFCLK2
DIFFIO_T8n
DIFFIO_T9p_DQS
DIFFIO_T9n_DQS
DIFFIO_T10p
DIFFIO_T10n
DIFFIO_T11p/TCLK8P
DIFFIO_T11n/TCLK8N
DIFFIO_T12p/TCLK9P
DIFFIO_T12n/TCLK9N
DIFFIO_T13p/TCLK10P
"DIFFIO_T13n/TCLK10N/TPLL3_MFG1"
DIFFIO_T14p/TCLK11P
"DIFFIO_T14n/TCLK11N/TPLL3_MFG2"
DIFFIO_T15p_DQS
DIFFIO_T15n_DQS_DOUT_CSO_B
DIFFIO_T16p_CSI_B
DIFFIO_T16n
DIFFIO_T17p
DIFFIO_T17n
DIFFIO_T18p
DIFFIO_T18n
DIFFIO_T19p
DIFFIO_T19n
DIFFIO_T20p
DIFFIO_T20n
DIFFIO_T21p_DQS
DIFFIO_T21n_DQS
DIFFIO_T22p
DIFFIO_T22n
DIFFIO_T23p
DIFFIO_T23n
DIFFIO_T24p
DIFFIO_T24n
IO_25
R11 B3_IO_0 B3_IO_0
K17 FLASH_ASDO FLASH_ASDO
K18 FLASH_DATA FLASH_DATA
L14 FLASH_D2 FLASH_D2
M14 FLASH_D3 FLASH_D3
L15
L16 B3_T3_N B3_T3_N
L18 B3_T4_P B3_T4_P
M18 B3_T4_N B3_T4_N
R12 B3_T5_P B3_T5_P
R13 B3_T5_N B3_T5_N
L13 FLASH_NCSO FLASH_NCSO
M13 B3_T6_N B3_T6_N
M16 B3_T7_P B3_T7_P
M17 B3_T7_N B3_T7_N
N14 B3_T8_P B3_T8_P
P14 B3_T8_N B3_T8_N
N17 B3_T9_P B3_T9_P
P18 B3_T9_N B3_T9_N
R18 B3_T10_P B3_T10_P
T18 B3_T10_N B3_T10_N
N15 B3_T11_P B3_T11_P
N16 B3_T11_N B3_T11_N
P17 B3_T12_P B3_T12_P
R17 B3_T12_N B3_T12_N
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T15 B3_T13_N B3_T13_N
P15 B3_T14_P B3_T14_P
R15 B3_T14_N B3_T14_N
R16 B3_T15_P B3_T15_P
T16 B3_T15_N B3_T15_N
V15 B3_T16_P B3_T16_P
V16 B3_T16_N B3_T16_N
U16 B3_T17_P B3_T17_P
V17 B3_T17_N B3_T17_N
U17 B3_T18_P B3_T18_P
U18 B3_T18_N B3_T18_N
T9 B3_T19_P B3_T19_P
T10 B3_T19_N B3_T19_N
T13 B3_T20_P B3_T20_P
U13 B3_T20_N B3_T20_N
V10 B3_T21_P B3_T21_P
V11 B3_T21_N B3_T21_N
U12 B3_T22_P B3_T22_P
V12 B3_T22_N B3_T22_N
T11 B3_T23_P B3_T23_P
U11 B3_T23_N B3_T23_N
U14 B3_T24_P B3_T24_P
V14 B3_T24_N B3_T24_N
R10 B3_IO_25 B3_IO_25
SA5Z_50_D0_7U324C_1
R1 33R VCCIO3
R2 DNI/33R GND
VCCIO2
U1E
A17 VCCIO2
C13 VCCIO2
D16 VCCIO2
G15 VCCIO2
H18 VCCIO2
K14 VCCIO2
IO_0_2
DIFFIO_T1p_2/TPLL1_REFCLK1
DIFFIO_T1n_2/TPLL1_MFG1
DIFFIO_T2p_2/TPLL1_REFCLK2
DIFFIO_T2n_2/TPLL1_MFG2
DIFFIO_T3p_DQS_2
DIFFIO_T3n_DQS_2
DIFFIO_T4p_2
DIFFIO_T4n_2
DIFFIO_T5p_2
DIFFIO_T5n_2
DIFFIO_T6p_2
DIFFIO_T6n_2
DIFFIO_T7p_2
DIFFIO_T7n_2
DIFFIO_T8p_2
DIFFIO_T8n_2
DIFFIO_T9p_DQS_2
DIFFIO_T9n_DQS_2
DIFFIO_T10p_2
DIFFIO_T10n_2
DIFFIO_T11p_2/TCLK4P
DIFFIO_T11n_2/TCLK4N
DIFFIO_T12p_2/TCLK5P
DIFFIO_T12n_2/TCLK5N
DIFFIO_T13p_2/TCLK6P
DIFFIO_T13n_2/TCLK6N
DIFFIO_T14p_2/TCLK7P
DIFFIO_T14n_2/TCLK7N
DIFFIO_T15p_DQS_2
DIFFIO_T15n_DQS_2
DIFFIO_T16p_2
DIFFIO_T16n_2
DIFFIO_T17p_2
DIFFIO_T17n_2
DIFFIO_T18p_2
DIFFIO_T18n_2
DIFFIO_T19p_2
DIFFIO_T19n_2
DIFFIO_T20p_2
DIFFIO_T20n_2
DIFFIO_T21p_DQS_2
DIFFIO_T21n_DQS_2
DIFFIO_T22p_2
DIFFIO_T22n_2
DIFFIO_T23p_2/TPLL2_REFCLK1
DIFFIO_T23n_2/TPLL2_MFG1
DIFFIO_T24p_2/TPLL2_REFCLK2
DIFFIO_T24n_2/TPLL2_MFG2
IO_25_2
G13 B2_IO_0
B11 B2_T1_P
A11 B2_T1_N
B13 B2_T2_P
B14 B2_T2_N B2_T2_N
C12 B2_T3_P B2_T3_P
B12 B2_T3_N B2_T3_N
D14 B2_T4_P B2_T4_P
C14 B2_T4_N B2_T4_N
F13 B2_T5_P B2_T5_P
F14 B2_T5_N B2_T5_N
D12 B2_T6_P B2_T6_P
D13 B2_T6_N B2_T6_N
A15 B2_T7_P B2_T7_P
A16 B2_T7_N B2_T7_N
B16 B2_T8_P B2_T8_P
B17 B2_T8_N B2_T8_N
A13 B2_T9_P B2_T9_P
A14 B2_T9_N B2_T9_N
B18 B2_T10_P B2_T10_P
A18 B2_T10_N B2_T10_N
D15 B2_T11_P B2_T11_P
C15 B2_T11_N B2_T11_N
E15 B2_T12_P B2_T12_P
E16 B2_T12_N B2_T12_N
H16 B2_T13_P B2_T13_P
G16 B2_T13_N B2_T13_N
F15 B2_T14_P B2_T14_P
F16 B2_T14_N B2_T14_N
H14 B2_T15_P B2_T15_P
G14 B2_T15_N B2_T15_N
E17 B2_T16_P B2_T16_P
D17 B2_T16_N B2_T16_N
K13 B2_T17_P B2_T17_P
J13 B2_T17_N B2_T17_N
H17 B2_T18_P B2_T18_P
G17 B2_T18_N B2_T18_N
J14 B2_T19_P B2_T19_P
H15 B2_T19_N B2_T19_N
C16 B2_T20_P B2_T20_P
C17 B2_T20_N B2_T20_N
E18 B2_T21_P B2_T21_P
D18 B2_T21_N B2_T21_N
J17 B2_T22_P B2_T22_P
J18 B2_T22_N B2_T22_N
K15 FPGA_CLK0 FPGA_CLK0
J15 B2_T23_N B2_T23_N
G18 FPGA_CLK1 FPGA_CLK1
F18 B2_T24_N B2_T24_N
K16 B2_IO_25 B2_IO_25
SA5Z_50_D0_7U324C_1
VCC3P3 FB3 VCCIO3
120OHM_100MHz
C16 47uF C17 0.1uF C18 0.1uF C19 0.1uF C20 0.1uF C21 0.1uF C22 0.1uF
GND
VCC3P3 FB4 VCCIO2
120OHM_100MHz
C23 47uF C24 0.1uF C25 0.1uF C26 0.1uF C27 0.1uF C28 0.1uF C29 0.1uF
GND
Title
Size A4
Number
Revision
Date: 3-29-2024
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