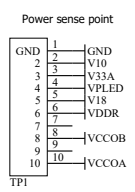
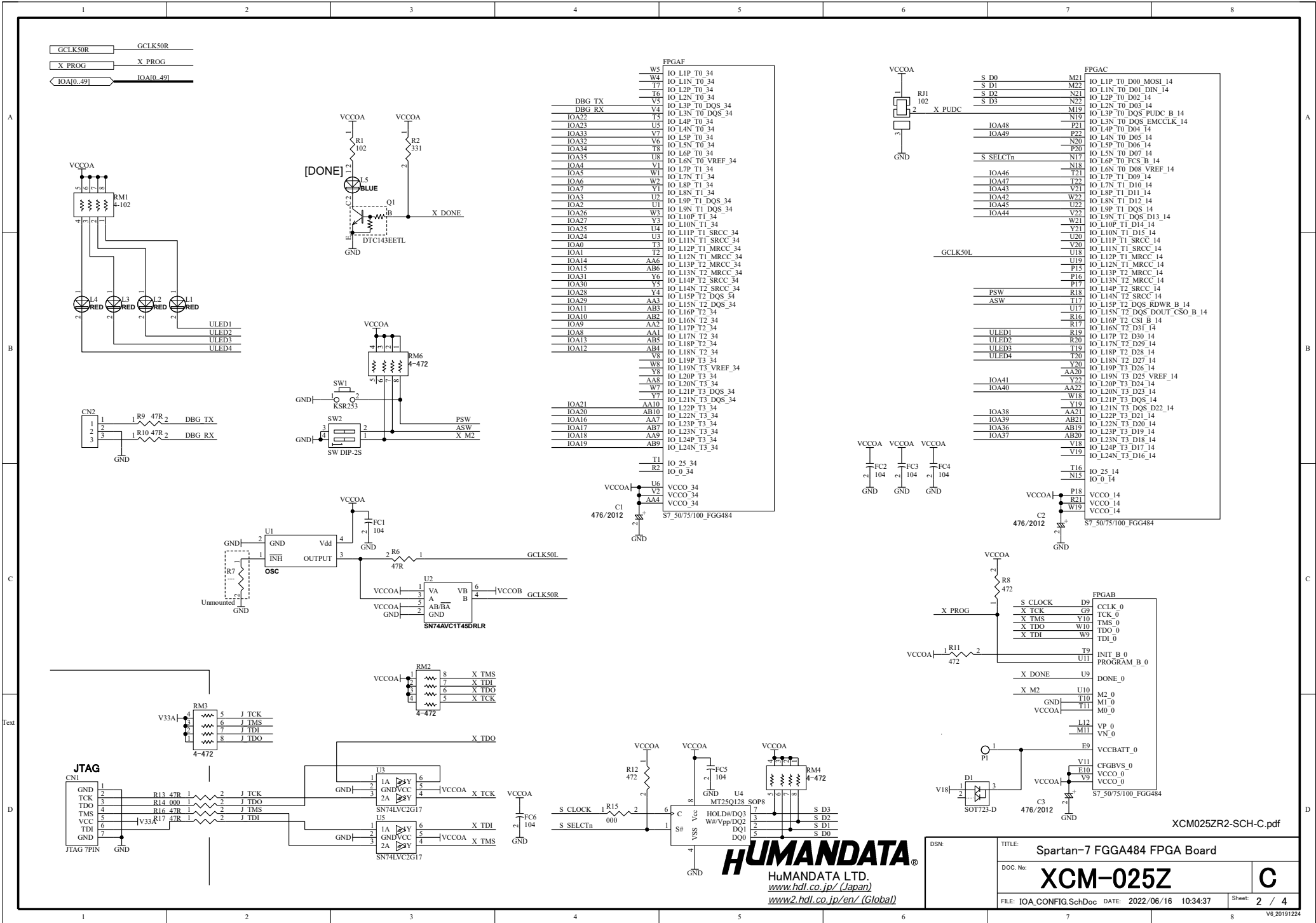


| CNA | | CNB | |
|--------|----|--------|----|
| V33A | 1 | VIO(A) | 1 |
| VIO(A) | 2 | VIO(B) | 1 |
| VIO(A) | 3 | | |
| 5V | 4 | | |
| 5V | 5 | GND | 5 |
| GND | 6 | GND | 6 |
| GND | 7 | GND | 7 |
| IOA0 | 8 | IOB0 | 8 |
| IOA1 | 9 | IOB1 | 9 |
| IOA2 | 10 | IOB2 | 10 |
| IOA3 | 11 | IOB3 | 11 |
| IOA4 | 12 | IOB4 | 12 |
| IOA5 | 13 | IOB5 | 13 |
| IOA6 | 14 | IOB6 | 14 |
| IOA7 | 15 | IOB7 | 15 |
| GND | 16 | GND | 16 |
| GND | 17 | GND | 17 |
| IOA8 | 18 | IOB8 | 18 |
| IOA9 | 19 | IOB9 | 19 |
| IOA10 | 20 | IOB10 | 20 |
| IOA11 | 21 | IOB11 | 21 |
| IOA12 | 22 | IOB12 | 22 |
| IOA13 | 23 | IOB13 | 23 |
| IOA14 | 24 | IOB14 | 24 |
| IOA15 | 25 | IOB15 | 25 |
| GND | 26 | GND | 26 |
| GND | 27 | GND | 27 |
| IOA16 | 28 | IOB16 | 28 |
| IOA17 | 29 | IOB17 | 29 |
| IOA18 | 30 | IOB18 | 30 |
| IOA19 | 31 | IOB19 | 31 |
| IOA20 | 32 | IOB20 | 32 |
| IOA21 | 33 | IOB21 | 33 |
| IOA22 | 34 | IOB22 | 34 |
| IOA23 | 35 | IOB23 | 35 |
| GND | 36 | GND | 36 |
| GND | 37 | GND | 37 |
| IOA24 | 38 | IOB24 | 38 |
| IOA25 | 39 | IOB25 | 39 |
| IOA26 | 40 | IOB26 | 40 |
| IOA27 | 41 | IOB27 | 41 |
| IOA28 | 42 | IOB28 | 42 |
| IOA29 | 43 | IOB29 | 43 |
| IOA30 | 44 | IOB30 | 44 |
| IOA31 | 45 | IOB31 | 45 |
| GND | 46 | GND | 46 |
| GND | 47 | GND | 47 |
| IOA32 | 48 | IOB32 | 48 |
| IOA33 | 49 | IOB33 | 49 |
| IOA34 | 50 | IOB34 | 50 |
| IOA35 | 51 | IOB35 | 51 |
| IOA36 | 52 | IOB36 | 52 |
| IOA37 | 53 | IOB37 | 53 |
| IOA38 | 54 | IOB38 | 54 |
| IOA39 | 55 | IOB39 | 55 |
| GND | 56 | GND | 56 |
| GND | 57 | GND | 57 |
| IOA40 | 58 | IOB40 | 58 |
| IOA41 | 59 | IOB41 | 59 |
| IOA42 | 60 | IOB42 | 60 |
| IOA43 | 61 | IOB43 | 61 |
| IOA44 | 62 | IOB44 | 62 |
| IOA45 | 63 | IOB45 | 63 |
| IOA46 | 64 | IOB46 | 64 |
| IOA47 | 65 | IOB47 | 65 |
| IOA48 | 66 | IOB48 | 66 |
| IOA49 | 66 | IOB49 | 66 |



| | |
|----------------------|------------------------------------|
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| DOC. No: | XCM-025Z |
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| Sheet: 1 / 4 | C |

XCM025ZR2-SCH-C.pdf

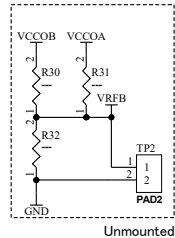
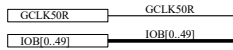


| FPGA | |
|------|--------------------|
| W5 | IO L1P T0 34 |
| W4 | IO L1N T0 34 |
| T7 | IO L2P T0 34 |
| T6 | IO L2N T0 34 |
| V5 | IO L3P T0 DQS 34 |
| V4 | IO L3N T0 DQS 34 |
| U5 | IO L4P T0 34 |
| U4 | IO L4N T0 34 |
| V7 | IO L5P T0 34 |
| V6 | IO L5N T0 34 |
| T8 | IO L6P T0 34 |
| U8 | IO L6N T0 VREF_34 |
| V1 | IO L7P T1 34 |
| W1 | IO L7N T1 34 |
| W2 | IO L8P T1 34 |
| Y1 | IO L8N T1 34 |
| U2 | IO L9P T1 DQS 34 |
| U1 | IO L9N T1 DQS 34 |
| W3 | IO L10P T1 34 |
| Y3 | IO L10N T1 34 |
| U4 | IO L11P T1 SRCC 34 |
| U3 | IO L11N T1 SRCC 34 |
| T3 | IO L12P T1 MRCC 34 |
| T2 | IO L12N T1 MRCC 34 |
| AA6 | IO L13P T2 MRCC 34 |
| AB6 | IO L13N T2 MRCC 34 |
| Y6 | IO L14P T2 SRCC 34 |
| Y5 | IO L14N T2 SRCC 34 |
| Y4 | IO L15P T2 DQS 34 |
| AA3 | IO L15N T2 DQS 34 |
| AB3 | IO L16P T2 34 |
| AB2 | IO L16N T2 34 |
| AA2 | IO L17P T2 34 |
| AA1 | IO L17N T2 34 |
| AB5 | IO L18P T2 34 |
| AB4 | IO L18N T2 34 |
| V8 | IO L19P T3 34 |
| W8 | IO L19N T3 VREF_34 |
| Y8 | IO L20P T3 34 |
| AA8 | IO L20N T3 34 |
| W7 | IO L21P T3 DQS 34 |
| Y7 | IO L21N T3 DQS 34 |
| AA10 | IO L22P T3 34 |
| AB10 | IO L22N T3 34 |
| AA7 | IO L23P T3 34 |
| AB7 | IO L23N T3 34 |
| AA9 | IO L24P T3 34 |
| AB9 | IO L24N T3 34 |

| FPGA | |
|------|------------------------------|
| M21 | IO L1P T0 D00 MOSI 14 |
| M22 | IO L1N T0 D01 DIN 14 |
| N21 | IO L2P T0 D02 14 |
| N22 | IO L2N T0 D03 14 |
| M19 | IO L3P T0 DQS_PUDC B 14 |
| N19 | IO L3N T0 DQS_EMCCLK 14 |
| P21 | IO L4P T0 D04 14 |
| P22 | IO L4N T0 D05 14 |
| N20 | IO L5P T0 D06 14 |
| P20 | IO L5N T0 D07 14 |
| N17 | IO L6P T0 FCS B 14 |
| N18 | IO L6N T0 D08 VREF 14 |
| T21 | IO L7P T1 D09 14 |
| T22 | IO L7N T1 D10 14 |
| V21 | IO L8P T1 D11 14 |
| W22 | IO L8N T1 D12 14 |
| U22 | IO L9P T1 DQS 14 |
| W21 | IO L9N T1 DQS D13_14 |
| Y21 | IO L10P T1 D14 14 |
| U20 | IO L10N T1 D15 14 |
| U20 | IO L11P T1 SRCC 14 |
| V20 | IO L11N T1 SRCC 14 |
| U19 | IO L12P T1 MRCC 14 |
| P15 | IO L12N T1 MRCC 14 |
| P16 | IO L13P T2 MRCC 14 |
| P17 | IO L14P T2 SRCC 14 |
| R18 | IO L14N T2 DQS DOUT_CSO_B 14 |
| U17 | IO L15P T2 DQS RDWR B 14 |
| R16 | IO L15N T2 DQS DOUT_CSO_B 14 |
| R17 | IO L16P T2 CSI B 14 |
| R19 | IO L16N T2 D31 14 |
| R20 | IO L17P T2 D30 14 |
| U19 | IO L17N T2 D29 14 |
| T20 | IO L18P T2 D28 14 |
| T20 | IO L18N T2 D27 14 |
| Y20 | IO L19P T3 D26 14 |
| AA20 | IO L19N T3 D25 VREF 14 |
| Y22 | IO L20P T3 D24 14 |
| AA22 | IO L20N T3 D23 14 |
| W18 | IO L21P T3 DQS 14 |
| Y19 | IO L21N T3 DQS D22 14 |
| AA21 | IO L22P T3 D21 14 |
| AB21 | IO L22N T3 D20 14 |
| AB19 | IO L23P T3 D19 14 |
| AB20 | IO L23N T3 D18 14 |
| V18 | IO L24P T3 D17 14 |
| V19 | IO L24N T3 D16 14 |

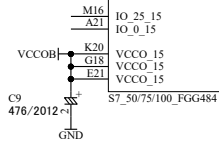


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| FILE: IOA_CONFIG.SchDoc | DATE: 2022/06/16 10:34:37 |
| Sheet: | 2 / 4 |

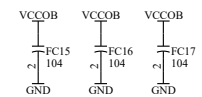
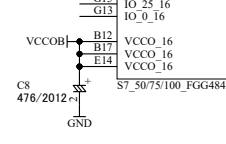


Unmounted

| IOB | Signal | IOB | Signal |
|-------|-----------|-------|--------|
| IOB31 | F17 | IOB34 | M16 |
| IOB30 | F18 | IOB35 | A21 |
| | H17 | | K20 |
| | G17 | | G18 |
| | J17 | | E21 |
| | H18 | | |
| | H16 | | |
| | G16 | | |
| | K16 | | |
| | I16 | | |
| | K15 | | |
| | J15 | | |
| IOB12 | VRFB B21 | | |
| IOB13 | B22 | | |
| IOB24 | D20 | | |
| IOB25 | C20 | | |
| IOB38 | D21 | | |
| IOB39 | C22 | | |
| IOB40 | F22 | | |
| IOB41 | D22 | | |
| IOB43 | F21 | | |
| IOB42 | F22 | | |
| | F19 | | |
| | F20 | | |
| | M15 | | |
| | L15 | | |
| | M17 | | |
| | M18 | | |
| | L16 | | |
| | K17 | | |
| | K18 | | |
| | K19 | | |
| | J19 | | |
| | L18 | | |
| | L19 | | |
| | H19 | | |
| | G20 | | |
| IOB45 | VRFB G21 | | |
| IOB44 | G22 | | |
| IOB32 | H20 | | |
| IOB33 | H21 | | |
| IOB48 | L22 | | |
| IOB49 | K22 | | |
| IOB46 | J21 | | |
| IOB47 | J22 | | |
| IOB36 | L20 | | |
| IOB37 | L21 | | |



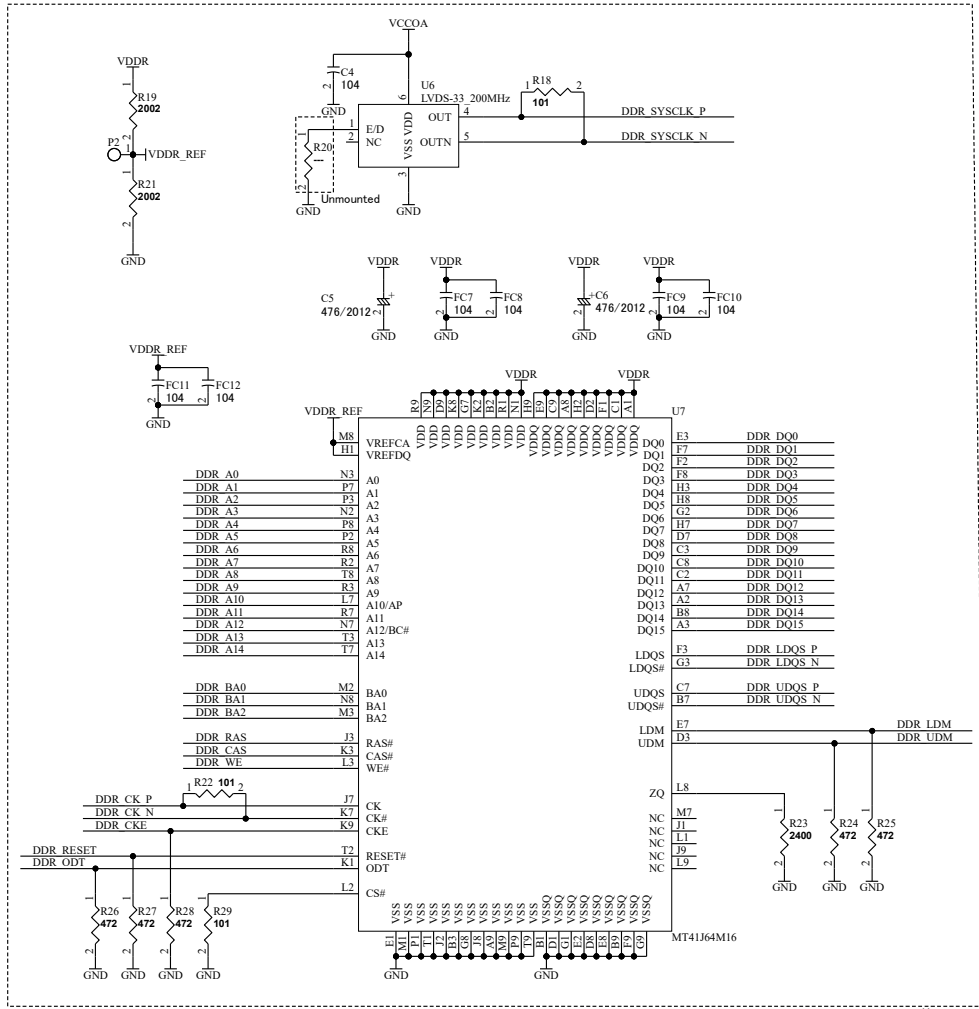
| IOB | Signal | IOB | Signal |
|---------|-----------|-----|--------|
| | G11 | | |
| | F11 | | |
| | G10 | | |
| | F10 | | |
| | E11 | | |
| | D11 | | |
| | F13 | | |
| | F14 | | |
| | F12 | | |
| | E12 | | |
| | G14 | | |
| | F15 | | |
| IOB14 | VRFB D13 | | |
| IOB15 | C13 | | |
| IOB0 | A11 | | |
| IOB1 | A12 | | |
| IOB2 | B13 | | |
| IOB3 | A13 | | |
| | C10 | | |
| | C11 | | |
| | D14 | | |
| IOB16 | D15 | | |
| IOB17 | D12 | | |
| GCLK50R | C12 | | |
| | C15 | | |
| IOB18 | C16 | | |
| IOB19 | B15 | | |
| IOB20 | B16 | | |
| IOB21 | B16 | | |
| | D16 | | |
| | C17 | | |
| | E15 | | |
| | E16 | | |
| IOB4 | B14 | | |
| IOB5 | A14 | | |
| IOB6 | A16 | | |
| IOB7 | A17 | | |
| | D18 | | |
| | C18 | | |
| IOB22 | VRFB C19 | | |
| IOB23 | B19 | | |
| IOB8 | A18 | | |
| IOB9 | A19 | | |
| IOB29 | E17 | | |
| IOB38 | F18 | | |
| IOB11 | B20 | | |
| IOB10 | A20 | | |
| IOB27 | E19 | | |
| IOB26 | D19 | | |



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 www2.hdl.co.jp/en/ (Global)

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| DSN: | TITLE: Spartan-7 FGA484 FPGA Board |
| DOC. No: | XCM-025Z |
| FILE: IOB.SchDoc | DATE: 2022/06/16 10:34:38 |
| Sheet: 3 / 4 | C |

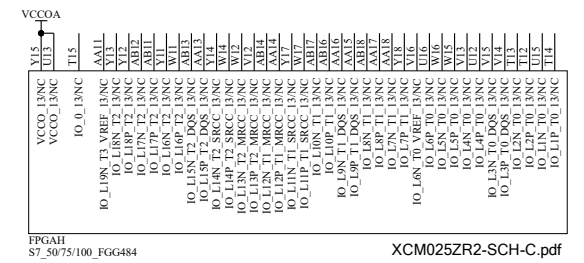


FPGA

| | |
|--------------|------|
| DDR_A12 | J3 |
| DDR_A2 | H2 |
| DDR_A8 | H4 |
| DDR_A3 | H3 |
| DDR_CK_P | J2 |
| DDR_CK_N | J1 |
| DDR_A9 | K3 |
| DDR_A5 | K2 |
| DDR_BA1 | H6 |
| DDR_A6 | H5 |
| DDR_ODT | K6 |
| DDR_A10 | J6 |
| DDR_CKE | J8 |
| DDR_A4 | J7 |
| DDR_WE | L7 |
| DDR_CAS | L6 |
| DDR_A14 | L5 |
| DDR_A1 | K5 |
| DDR_RAS | L4 |
| DDR_A11 | K4 |
| DDR_BA2 | L8 |
| DDR_A0 | K8 |
| DDR_BA0 | M8 |
| DDR_SYSCLK_P | M7 |
| DDR_SYSCLK_N | M4 |
| DDR_A13 | K1 |
| DDR_A7 | M1 |
| DDR_DQ0 | E3 |
| DDR_DQ1 | F7 |
| DDR_DQ2 | F2 |
| DDR_DQ3 | F8 |
| DDR_DQ4 | H3 |
| DDR_DQ5 | H8 |
| DDR_DQ6 | G2 |
| DDR_DQ7 | H7 |
| DDR_DQ8 | D7 |
| DDR_DQ9 | C3 |
| DDR_DQ10 | C8 |
| DDR_DQ11 | C2 |
| DDR_DQ12 | A7 |
| DDR_DQ13 | A2 |
| DDR_DQ14 | B8 |
| DDR_DQ15 | A3 |
| DDR_LDOS_P | F3 |
| DDR_LDOS_N | G3 |
| DDR_UDQS_P | C7 |
| DDR_UDQS_N | B7 |
| DDR_LDM | E7 |
| DDR_UDM | D3 |
| DDR_CK | J7 |
| DDR_CK_N | K7 |
| DDR_CKE | K9 |
| DDR_RESET | T2 |
| DDR_ODT | K1 |
| VSS | E1 |
| VSS | E2 |
| VSS | E3 |
| VSS | E4 |
| VSS | E5 |
| VSS | E6 |
| VSS | E7 |
| VSS | E8 |
| VSS | E9 |
| VSS | E10 |
| VSS | E11 |
| VSS | E12 |
| VSS | E13 |
| VSS | E14 |
| VSS | E15 |
| VSS | E16 |
| VSS | E17 |
| VSS | E18 |
| VSS | E19 |
| VSS | E20 |
| VSS | E21 |
| VSS | E22 |
| VSS | E23 |
| VSS | E24 |
| VSS | E25 |
| VSS | E26 |
| VSS | E27 |
| VSS | E28 |
| VSS | E29 |
| VSS | E30 |
| VSS | E31 |
| VSS | E32 |
| VSS | E33 |
| VSS | E34 |
| VSS | E35 |
| VSS | E36 |
| VSS | E37 |
| VSS | E38 |
| VSS | E39 |
| VSS | E40 |
| VSS | E41 |
| VSS | E42 |
| VSS | E43 |
| VSS | E44 |
| VSS | E45 |
| VSS | E46 |
| VSS | E47 |
| VSS | E48 |
| VSS | E49 |
| VSS | E50 |
| VSS | E51 |
| VSS | E52 |
| VSS | E53 |
| VSS | E54 |
| VSS | E55 |
| VSS | E56 |
| VSS | E57 |
| VSS | E58 |
| VSS | E59 |
| VSS | E60 |
| VSS | E61 |
| VSS | E62 |
| VSS | E63 |
| VSS | E64 |
| VSS | E65 |
| VSS | E66 |
| VSS | E67 |
| VSS | E68 |
| VSS | E69 |
| VSS | E70 |
| VSS | E71 |
| VSS | E72 |
| VSS | E73 |
| VSS | E74 |
| VSS | E75 |
| VSS | E76 |
| VSS | E77 |
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| VSS | E87 |
| VSS | E88 |
| VSS | E89 |
| VSS | E90 |
| VSS | E91 |
| VSS | E92 |
| VSS | E93 |
| VSS | E94 |
| VSS | E95 |
| VSS | E96 |
| VSS | E97 |
| VSS | E98 |
| VSS | E99 |
| VSS | E100 |

FPGA

| | |
|-----------------------|-----|
| DDR_DQ15 | B9 |
| DDR_DQ9 | A9 |
| DDR_DQ13 | B10 |
| DDR_DQ11 | A10 |
| DDR_LDOS_P | C9 |
| DDR_LDOS_N | C8 |
| DDR_UDM | A7 |
| DDR_DQ10 | A6 |
| DDR_DQ12 | B8 |
| DDR_DQ14 | B7 |
| DDR_DQ8 | D8 |
| DDR_DQ1 | C6 |
| DDR_DQ3 | C5 |
| DDR_LDM | D6 |
| DDR_DQ5 | D5 |
| DDR_LDOS_P | G8 |
| DDR_LDOS_N | F8 |
| DDR_DQ6 | F5 |
| DDR_DQ7 | E5 |
| DDR_DQ2 | G7 |
| DDR_DQ4 | G6 |
| DDR_DQ0 | F7 |
| IO_L1P_T0_AD4P_35 | F6 |
| IO_L1N_T0_AD4N_35 | B6 |
| IO_L2P_T0_AD12P_35 | A5 |
| IO_L2N_T0_AD12N_35 | A4 |
| IO_L3P_T0_DQ5_36NC | A3 |
| IO_L3N_T0_DQ5_36NC | B3 |
| IO_L4P_T0_35 | B2 |
| IO_L4N_T0_35 | B1 |
| IO_L5P_T0_35 | C1 |
| IO_L5N_T0_35 | G4 |
| IO_L6P_T0_35 | G3 |
| IO_L6N_T0_VREF_35 | E4 |
| IO_L7P_T1_AD6P_35 | F4 |
| IO_L7N_T1_AD6N_35 | D1 |
| IO_L8P_T1_AD14P_35 | N6 |
| IO_L8N_T1_AD14N_35 | N5 |
| IO_L9P_T1_DQ5_AD7P_35 | E1 |
| IO_L9N_T1_DQ5_AD7N_35 | E2 |
| IO_L10P_T1_AD15P_35 | G1 |
| IO_L10N_T1_AD15N_35 | G2 |
| IO_L11P_T1_SRCC_35 | E3 |
| IO_L11N_T1_SRCC_35 | D2 |
| IO_L12P_T1_MRCC_35 | D1 |
| IO_L12N_T1_MRCC_35 | E1 |
| IO_L13P_T2_MRCC_35 | F4 |
| IO_L13N_T2_MRCC_35 | F3 |
| IO_L14P_T2_SRCC_35 | G1 |
| IO_L14N_T2_SRCC_35 | G2 |
| IO_L15P_T2_DQ5_35 | E3 |
| IO_L15N_T2_DQ5_35 | D2 |
| IO_L16P_T2_35 | E2 |
| IO_L16N_T2_35 | D1 |
| IO_L17P_T2_35 | F1 |
| IO_L17N_T2_35 | F2 |
| IO_L18P_T2_35 | G1 |
| IO_L18N_T2_35 | G2 |
| IO_L19P_T3_VREF_35 | E3 |
| IO_L19N_T3_VREF_35 | D2 |
| IO_L20P_T3_35 | E1 |
| IO_L20N_T3_35 | D1 |
| IO_L21P_T3_DQ5_35 | F4 |
| IO_L21N_T3_DQ5_35 | F3 |
| IO_L22P_T3_35 | G1 |
| IO_L22N_T3_35 | G2 |
| IO_L23P_T3_35 | E3 |
| IO_L23N_T3_35 | D2 |
| IO_L24P_T3_35 | E1 |
| IO_L24N_T3_35 | D1 |
| IO_25_35 | F4 |
| IO_0_35 | E8 |
| VDDREF | B5 |
| VDDREF | E7 |
| VDDREF | F3 |
| VDDREF | F4 |
| VDDREF | E8 |



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| DSN: | TITLE: | Spartan-7 FGA484 FPGA Board | |
| DOC. No: | XCM-025Z | | C |
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