IO place design

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| Tool Version : Vivado v.2021.1 (win64) Build 3247384 Thu Jun 10 19:36:33 MDT 2021

| Date : Wed Apr 10 16:10:52 2024

| Host : DESKTOP-4LK3EFH running 64-bit major release (build 9200)

| Command : report\_io -file UART\_io\_placed.rpt

| Design : UART

| Device : xc7z020

| Speed File : -1

| Package : clg400

| Package Version : FINAL 2012-06-26

| Package Pin Delay Version : VERS. 2.0 2012-06-26

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IO Information

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2. IO Assignments by Package Pin

1. Summary

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| Total User IO |

+---------------+

| 20 |

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2. IO Assignments by Package Pin

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| Pin Number | Signal Name | Bank Type | Pin Name | Use | IO Standard | IO Bank | Drive (mA) | Slew | On-Chip Termination | Off-Chip Termination | Voltage | Constraint | Pull Type | DQS Bias | Vref | Signal Integrity | Pre Emphasis | Lvds Pre Emphasis | Equalization |

+------------+-------------+------------+-------------------------+-------------+-------------+---------+------------+------+---------------------+----------------------+---------+------------+-----------+----------+------+------------------+--------------+-------------------+--------------+

| A1 | | | PS\_DDR\_DM0\_502 | PSS IO | | | | | | | | | | | | | | | |

| A2 | | | PS\_DDR\_DQ2\_502 | PSS IO | | | | | | | | | | | | | | | |

| A3 | | | VCCO\_DDR\_502 | VCCO | | | | | | | any\*\* | | | | | | | | |

| A4 | | | PS\_DDR\_DQ3\_502 | PSS IO | | | | | | | | | | | | | | | |

| A5 | | | PS\_MIO6\_500 | PSS IO | | | | | | | | | | | | | | | |

| A6 | | | PS\_MIO5\_500 | PSS IO | | | | | | | | | | | | | | | |

| A7 | | | PS\_MIO1\_500 | PSS IO | | | | | | | | | | | | | | | |

| A8 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| A9 | | | PS\_MIO43\_501 | PSS IO | | | | | | | | | | | | | | | |

| A10 | | | PS\_MIO37\_501 | PSS IO | | | | | | | | | | | | | | | |

| A11 | | | PS\_MIO36\_501 | PSS IO | | | | | | | | | | | | | | | |

| A12 | | | PS\_MIO34\_501 | PSS IO | | | | | | | | | | | | | | | |

| A13 | | | VCCO\_MIO1\_501 | VCCO | | | | | | | any\*\* | | | | | | | | |

| A14 | | | PS\_MIO32\_501 | PSS IO | | | | | | | | | | | | | | | |

| A15 | | | PS\_MIO26\_501 | PSS IO | | | | | | | | | | | | | | | |

| A16 | | | PS\_MIO24\_501 | PSS IO | | | | | | | | | | | | | | | |

| A17 | | | PS\_MIO20\_501 | PSS IO | | | | | | | | | | | | | | | |

| A18 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| A19 | | | PS\_MIO16\_501 | PSS IO | | | | | | | | | | | | | | | |

| A20 | | High Range | IO\_L2N\_T0\_AD8N\_35 | User IO | | 35 | | | | | | | | | | | | | |

| B1 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| B2 | | | PS\_DDR\_DQS\_N0\_502 | PSS IO | | | | | | | | | | | | | | | |

| B3 | | | PS\_DDR\_DQ1\_502 | PSS IO | | | | | | | | | | | | | | | |

| B4 | | | PS\_DDR\_DRST\_B\_502 | PSS IO | | | | | | | | | | | | | | | |

| B5 | | | PS\_MIO9\_500 | PSS IO | | | | | | | | | | | | | | | |

| B6 | | | VCCO\_MIO0\_500 | VCCO | | | | | | | any\*\* | | | | | | | | |

| B7 | | | PS\_MIO4\_500 | PSS IO | | | | | | | | | | | | | | | |

| B8 | | | PS\_MIO2\_500 | PSS IO | | | | | | | | | | | | | | | |

| B9 | | | PS\_MIO51\_501 | PSS IO | | | | | | | | | | | | | | | |

| B10 | | | PS\_SRST\_B\_501 | PSS IO | | | | | | | | | | | | | | | |

| B11 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| B12 | | | PS\_MIO48\_501 | PSS IO | | | | | | | | | | | | | | | |

| B13 | | | PS\_MIO50\_501 | PSS IO | | | | | | | | | | | | | | | |

| B14 | | | PS\_MIO47\_501 | PSS IO | | | | | | | | | | | | | | | |

| B15 | | | PS\_MIO45\_501 | PSS IO | | | | | | | | | | | | | | | |

| B16 | | | VCCO\_MIO1\_501 | VCCO | | | | | | | any\*\* | | | | | | | | |

| B17 | | | PS\_MIO22\_501 | PSS IO | | | | | | | | | | | | | | | |

| B18 | | | PS\_MIO18\_501 | PSS IO | | | | | | | | | | | | | | | |

| B19 | | High Range | IO\_L2P\_T0\_AD8P\_35 | User IO | | 35 | | | | | | | | | | | | | |

| B20 | | High Range | IO\_L1N\_T0\_AD0N\_35 | User IO | | 35 | | | | | | | | | | | | | |

| C1 | | | PS\_DDR\_DQ6\_502 | PSS IO | | | | | | | | | | | | | | | |

| C2 | | | PS\_DDR\_DQS\_P0\_502 | PSS IO | | | | | | | | | | | | | | | |

| C3 | | | PS\_DDR\_DQ0\_502 | PSS IO | | | | | | | | | | | | | | | |

| C4 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| C5 | | | PS\_MIO14\_500 | PSS IO | | | | | | | | | | | | | | | |

| C6 | | | PS\_MIO11\_500 | PSS IO | | | | | | | | | | | | | | | |

| C7 | | | PS\_POR\_B\_500 | PSS IO | | | | | | | | | | | | | | | |

| C8 | | | PS\_MIO15\_500 | PSS IO | | | | | | | | | | | | | | | |

| C9 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| C10 | | | PS\_MIO52\_501 | PSS IO | | | | | | | | | | | | | | | |

| C11 | | | PS\_MIO53\_501 | PSS IO | | | | | | | | | | | | | | | |

| C12 | | | PS\_MIO49\_501 | PSS IO | | | | | | | | | | | | | | | |

| C13 | | | PS\_MIO29\_501 | PSS IO | | | | | | | | | | | | | | | |

| C14 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| C15 | | | PS\_MIO30\_501 | PSS IO | | | | | | | | | | | | | | | |

| C16 | | | PS\_MIO28\_501 | PSS IO | | | | | | | | | | | | | | | |

| C17 | | | PS\_MIO41\_501 | PSS IO | | | | | | | | | | | | | | | |

| C18 | | | PS\_MIO39\_501 | PSS IO | | | | | | | | | | | | | | | |

| C19 | | High Range | VCCO\_35 | VCCO | | 35 | | | | | 3.30 | | | | | | | | |

| C20 | | High Range | IO\_L1P\_T0\_AD0P\_35 | User IO | | 35 | | | | | | | | | | | | | |

| D1 | | | PS\_DDR\_DQ5\_502 | PSS IO | | | | | | | | | | | | | | | |

| D2 | | | VCCO\_DDR\_502 | VCCO | | | | | | | any\*\* | | | | | | | | |

| D3 | | | PS\_DDR\_DQ4\_502 | PSS IO | | | | | | | | | | | | | | | |

| D4 | | | PS\_DDR\_A13\_502 | PSS IO | | | | | | | | | | | | | | | |

| D5 | | | PS\_MIO8\_500 | PSS IO | | | | | | | | | | | | | | | |

| D6 | | | PS\_MIO3\_500 | PSS IO | | | | | | | | | | | | | | | |

| D7 | | | VCCO\_MIO0\_500 | VCCO | | | | | | | any\*\* | | | | | | | | |

| D8 | | | PS\_MIO7\_500 | PSS IO | | | | | | | | | | | | | | | |

| D9 | | | PS\_MIO12\_500 | PSS IO | | | | | | | | | | | | | | | |

| D10 | | | PS\_MIO19\_501 | PSS IO | | | | | | | | | | | | | | | |

| D11 | | | PS\_MIO23\_501 | PSS IO | | | | | | | | | | | | | | | |

| D12 | | | VCCO\_MIO1\_501 | VCCO | | | | | | | any\*\* | | | | | | | | |

| D13 | | | PS\_MIO27\_501 | PSS IO | | | | | | | | | | | | | | | |

| D14 | | | PS\_MIO40\_501 | PSS IO | | | | | | | | | | | | | | | |

| D15 | | | PS\_MIO33\_501 | PSS IO | | | | | | | | | | | | | | | |

| D16 | | | PS\_MIO46\_501 | PSS IO | | | | | | | | | | | | | | | |

| D17 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| D18 | r\_data[3] | High Range | IO\_L3N\_T0\_DQS\_AD1N\_35 | OUTPUT | LVCMOS33 | 35 | 12 | SLOW | | FP\_VTT\_50 | | FIXED | | | | NONE | | | |

| D19 | | High Range | IO\_L4P\_T0\_35 | User IO | | 35 | | | | | | | | | | | | | |

| D20 | | High Range | IO\_L4N\_T0\_35 | User IO | | 35 | | | | | | | | | | | | | |

| E1 | | | PS\_DDR\_DQ7\_502 | PSS IO | | | | | | | | | | | | | | | |

| E2 | | | PS\_DDR\_DQ8\_502 | PSS IO | | | | | | | | | | | | | | | |

| E3 | | | PS\_DDR\_DQ9\_502 | PSS IO | | | | | | | | | | | | | | | |

| E4 | | | PS\_DDR\_A12\_502 | PSS IO | | | | | | | | | | | | | | | |

| E5 | | | VCCO\_DDR\_502 | VCCO | | | | | | | any\*\* | | | | | | | | |

| E6 | | | PS\_MIO0\_500 | PSS IO | | | | | | | | | | | | | | | |

| E7 | | | PS\_CLK\_500 | PSS Clock | | | | | | | | | | | | | | | |

| E8 | | | PS\_MIO13\_500 | PSS IO | | | | | | | | | | | | | | | |

| E9 | | | PS\_MIO10\_500 | PSS IO | | | | | | | | | | | | | | | |

| E10 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| E11 | | | PS\_MIO\_VREF\_501 | PSS IO | | | | | | | | | | | | | | | |

| E12 | | | PS\_MIO42\_501 | PSS IO | | | | | | | | | | | | | | | |

| E13 | | | PS\_MIO38\_501 | PSS IO | | | | | | | | | | | | | | | |

| E14 | | | PS\_MIO17\_501 | PSS IO | | | | | | | | | | | | | | | |

| E15 | | | VCCO\_MIO1\_501 | VCCO | | | | | | | any\*\* | | | | | | | | |

| E16 | | | PS\_MIO31\_501 | PSS IO | | | | | | | | | | | | | | | |

| E17 | | High Range | IO\_L3P\_T0\_DQS\_AD1P\_35 | User IO | | 35 | | | | | | | | | | | | | |

| E18 | | High Range | IO\_L5P\_T0\_AD9P\_35 | User IO | | 35 | | | | | | | | | | | | | |

| E19 | | High Range | IO\_L5N\_T0\_AD9N\_35 | User IO | | 35 | | | | | | | | | | | | | |

| E20 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| F1 | | | PS\_DDR\_DM1\_502 | PSS IO | | | | | | | | | | | | | | | |

| F2 | | | PS\_DDR\_DQS\_N1\_502 | PSS IO | | | | | | | | | | | | | | | |

| F3 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| F4 | | | PS\_DDR\_A14\_502 | PSS IO | | | | | | | | | | | | | | | |

| F5 | | | PS\_DDR\_A10\_502 | PSS IO | | | | | | | | | | | | | | | |

| F6 | | Dedicated | TDO\_0 | Config | | 0 | | | | | | | | | | | | | |

| F7 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| F8 | | | VCCPAUX | PSS VCCAUX | | | | | | | | | | | | | | | |

| F9 | | Dedicated | TCK\_0 | Config | | 0 | | | | | | | | | | | | | |

| F10 | | | RSVDGND | GND | | | | | | | | | | | | | | | |

| F11 | | Dedicated | VCCBATT\_0 | Config | | 0 | | | | | | | | | | | | | |

| F12 | | | PS\_MIO35\_501 | PSS IO | | | | | | | | | | | | | | | |

| F13 | | | PS\_MIO44\_501 | PSS IO | | | | | | | | | | | | | | | |

| F14 | | | PS\_MIO21\_501 | PSS IO | | | | | | | | | | | | | | | |

| F15 | | | PS\_MIO25\_501 | PSS IO | | | | | | | | | | | | | | | |

| F16 | | High Range | IO\_L6P\_T0\_35 | User IO | | 35 | | | | | | | | | | | | | |

| F17 | | High Range | IO\_L6N\_T0\_VREF\_35 | User IO | | 35 | | | | | | | | | | | | | |

| F18 | | High Range | VCCO\_35 | VCCO | | 35 | | | | | 3.30 | | | | | | | | |

| F19 | | High Range | IO\_L15P\_T2\_DQS\_AD12P\_35 | User IO | | 35 | | | | | | | | | | | | | |

| F20 | | High Range | IO\_L15N\_T2\_DQS\_AD12N\_35 | User IO | | 35 | | | | | | | | | | | | | |

| G1 | | | VCCO\_DDR\_502 | VCCO | | | | | | | any\*\* | | | | | | | | |

| G2 | | | PS\_DDR\_DQS\_P1\_502 | PSS IO | | | | | | | | | | | | | | | |

| G3 | | | PS\_DDR\_DQ10\_502 | PSS IO | | | | | | | | | | | | | | | |

| G4 | | | PS\_DDR\_A11\_502 | PSS IO | | | | | | | | | | | | | | | |

| G5 | | | PS\_DDR\_VRN\_502 | PSS IO | | | | | | | | | | | | | | | |

| G6 | | Dedicated | TDI\_0 | Config | | 0 | | | | | | | | | | | | | |

| G7 | | | VCCPINT | PSS VCCINT | | | | | | | | | | | | | | | |

| G8 | | | VCCPLL | PSS VCCPLL | | | | | | | | | | | | | | | |

| G9 | | | VCCPAUX | PSS VCCAUX | | | | | | | | | | | | | | | |

| G10 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| G11 | | | VCCBRAM | VCCBRAM | | | | | | | | | | | | | | | |

| G12 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| G13 | | | VCCINT | VCCINT | | | | | | | | | | | | | | | |

| G14 | r\_data[2] | High Range | IO\_0\_35 | OUTPUT | LVCMOS33 | 35 | 12 | SLOW | | FP\_VTT\_50 | | FIXED | | | | NONE | | | |

| G15 | w\_data[0] | High Range | IO\_L19N\_T3\_VREF\_35 | INPUT | LVCMOS33 | 35 | | | | NONE | | FIXED | | | | NONE | | | |

| G16 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| G17 | | High Range | IO\_L16P\_T2\_35 | User IO | | 35 | | | | | | | | | | | | | |

| G18 | | High Range | IO\_L16N\_T2\_35 | User IO | | 35 | | | | | | | | | | | | | |

| G19 | | High Range | IO\_L18P\_T2\_AD13P\_35 | User IO | | 35 | | | | | | | | | | | | | |

| G20 | | High Range | IO\_L18N\_T2\_AD13N\_35 | User IO | | 35 | | | | | | | | | | | | | |

| H1 | | | PS\_DDR\_DQ14\_502 | PSS IO | | | | | | | | | | | | | | | |

| H2 | | | PS\_DDR\_DQ13\_502 | PSS IO | | | | | | | | | | | | | | | |

| H3 | | | PS\_DDR\_DQ11\_502 | PSS IO | | | | | | | | | | | | | | | |

| H4 | | | VCCO\_DDR\_502 | VCCO | | | | | | | any\*\* | | | | | | | | |

| H5 | | | PS\_DDR\_VRP\_502 | PSS IO | | | | | | | | | | | | | | | |

| H6 | | | PS\_DDR\_VREF0\_502 | PSS IO | | | | | | | | | | | | | | | |

| H7 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| H8 | | | VCCPAUX | PSS VCCAUX | | | | | | | | | | | | | | | |

| H9 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| H10 | | | VCCBRAM | VCCBRAM | | | | | | | | | | | | | | | |

| H11 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| H12 | | | VCCINT | VCCINT | | | | | | | | | | | | | | | |

| H13 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| H14 | | High Range | VCCO\_35 | VCCO | | 35 | | | | | 3.30 | | | | | | | | |

| H15 | | High Range | IO\_L19P\_T3\_35 | User IO | | 35 | | | | | | | | | | | | | |

| H16 | | High Range | IO\_L13P\_T2\_MRCC\_35 | User IO | | 35 | | | | | | | | | | | | | |

| H17 | | High Range | IO\_L13N\_T2\_MRCC\_35 | User IO | | 35 | | | | | | | | | | | | | |

| H18 | | High Range | IO\_L14N\_T2\_AD4N\_SRCC\_35 | User IO | | 35 | | | | | | | | | | | | | |

| H19 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| H20 | | High Range | IO\_L17N\_T2\_AD5N\_35 | User IO | | 35 | | | | | | | | | | | | | |

| J1 | | | PS\_DDR\_DQ15\_502 | PSS IO | | | | | | | | | | | | | | | |

| J2 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| J3 | | | PS\_DDR\_DQ12\_502 | PSS IO | | | | | | | | | | | | | | | |

| J4 | | | PS\_DDR\_A9\_502 | PSS IO | | | | | | | | | | | | | | | |

| J5 | | | PS\_DDR\_BA2\_502 | PSS IO | | | | | | | | | | | | | | | |

| J6 | | Dedicated | TMS\_0 | Config | | 0 | | | | | | | | | | | | | |

| J7 | | | VCCPINT | PSS VCCINT | | | | | | | | | | | | | | | |

| J8 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| J9 | | Dedicated | VCCADC\_0 | XADC | | 0 | | | | | | | | | | | | | |

| J10 | | Dedicated | GNDADC\_0 | XADC | | 0 | | | | | | | | | | | | | |

| J11 | | | VCCAUX | VCCAUX | | | | | | | 1.80 | | | | | | | | |

| J12 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| J13 | | | VCCINT | VCCINT | | | | | | | | | | | | | | | |

| J14 | | High Range | IO\_L20N\_T3\_AD6N\_35 | User IO | | 35 | | | | | | | | | | | | | |

| J15 | | High Range | IO\_25\_35 | User IO | | 35 | | | | | | | | | | | | | |

| J16 | | High Range | IO\_L24N\_T3\_AD15N\_35 | User IO | | 35 | | | | | | | | | | | | | |

| J17 | | High Range | VCCO\_35 | VCCO | | 35 | | | | | 3.30 | | | | | | | | |

| J18 | | High Range | IO\_L14P\_T2\_AD4P\_SRCC\_35 | User IO | | 35 | | | | | | | | | | | | | |

| J19 | | High Range | IO\_L10N\_T1\_AD11N\_35 | User IO | | 35 | | | | | | | | | | | | | |

| J20 | | High Range | IO\_L17P\_T2\_AD5P\_35 | User IO | | 35 | | | | | | | | | | | | | |

| K1 | | | PS\_DDR\_A8\_502 | PSS IO | | | | | | | | | | | | | | | |

| K2 | | | PS\_DDR\_A1\_502 | PSS IO | | | | | | | | | | | | | | | |

| K3 | | | PS\_DDR\_A3\_502 | PSS IO | | | | | | | | | | | | | | | |

| K4 | | | PS\_DDR\_A7\_502 | PSS IO | | | | | | | | | | | | | | | |

| K5 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| K6 | | Dedicated | VCCO\_0 | VCCO | | 0 | | | | | any\*\* | | | | | | | | |

| K7 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| K8 | | | VCCPAUX | PSS VCCAUX | | | | | | | | | | | | | | | |

| K9 | | Dedicated | VP\_0 | XADC | | 0 | | | | | | | | | | | | | |

| K10 | | Dedicated | VREFN\_0 | XADC | | 0 | | | | | | | | | | | | | |

| K11 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| K12 | | | VCCINT | VCCINT | | | | | | | | | | | | | | | |

| K13 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| K14 | | High Range | IO\_L20P\_T3\_AD6P\_35 | User IO | | 35 | | | | | | | | | | | | | |

| K15 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| K16 | | High Range | IO\_L24P\_T3\_AD15P\_35 | User IO | | 35 | | | | | | | | | | | | | |

| K17 | clk | High Range | IO\_L12P\_T1\_MRCC\_35 | INPUT | LVCMOS33 | 35 | | | | NONE | | FIXED | | | | NONE | | | |

| K18 | rst | High Range | IO\_L12N\_T1\_MRCC\_35 | INPUT | LVCMOS33 | 35 | | | | NONE | | FIXED | | | | NONE | | | |

| K19 | rd\_uart | High Range | IO\_L10P\_T1\_AD11P\_35 | INPUT | LVCMOS33 | 35 | | | | NONE | | FIXED | | | | NONE | | | |

| K20 | | High Range | VCCO\_35 | VCCO | | 35 | | | | | 3.30 | | | | | | | | |

| L1 | | | PS\_DDR\_A5\_502 | PSS IO | | | | | | | | | | | | | | | |

| L2 | | | PS\_DDR\_CKP\_502 | PSS IO | | | | | | | | | | | | | | | |

| L3 | | | VCCO\_DDR\_502 | VCCO | | | | | | | any\*\* | | | | | | | | |

| L4 | | | PS\_DDR\_A6\_502 | PSS IO | | | | | | | | | | | | | | | |

| L5 | | | PS\_DDR\_BA0\_502 | PSS IO | | | | | | | | | | | | | | | |

| L6 | | Dedicated | PROGRAM\_B\_0 | Config | | 0 | | | | | | | | | | | | | |

| L7 | | | VCCPINT | PSS VCCINT | | | | | | | | | | | | | | | |

| L8 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| L9 | | Dedicated | VREFP\_0 | XADC | | 0 | | | | | | | | | | | | | |

| L10 | | Dedicated | VN\_0 | XADC | | 0 | | | | | | | | | | | | | |

| L11 | | | VCCAUX | VCCAUX | | | | | | | 1.80 | | | | | | | | |

| L12 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| L13 | | | VCCINT | VCCINT | | | | | | | | | | | | | | | |

| L14 | | High Range | IO\_L22P\_T3\_AD7P\_35 | User IO | | 35 | | | | | | | | | | | | | |

| L15 | | High Range | IO\_L22N\_T3\_AD7N\_35 | User IO | | 35 | | | | | | | | | | | | | |

| L16 | | High Range | IO\_L11P\_T1\_SRCC\_35 | User IO | | 35 | | | | | | | | | | | | | |

| L17 | | High Range | IO\_L11N\_T1\_SRCC\_35 | User IO | | 35 | | | | | | | | | | | | | |

| L18 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| L19 | | High Range | IO\_L9P\_T1\_DQS\_AD3P\_35 | User IO | | 35 | | | | | | | | | | | | | |

| L20 | | High Range | IO\_L9N\_T1\_DQS\_AD3N\_35 | User IO | | 35 | | | | | | | | | | | | | |

| M1 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| M2 | | | PS\_DDR\_CKN\_502 | PSS IO | | | | | | | | | | | | | | | |

| M3 | | | PS\_DDR\_A2\_502 | PSS IO | | | | | | | | | | | | | | | |

| M4 | | | PS\_DDR\_A4\_502 | PSS IO | | | | | | | | | | | | | | | |

| M5 | | | PS\_DDR\_WE\_B\_502 | PSS IO | | | | | | | | | | | | | | | |

| M6 | | Dedicated | CFGBVS\_0 | Config | | 0 | | | | | | | | | | | | | |

| M7 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| M8 | | | VCCPAUX | PSS VCCAUX | | | | | | | | | | | | | | | |

| M9 | | Dedicated | DXP\_0 | Temp Sensor | | 0 | | | | | | | | | | | | | |

| M10 | | Dedicated | DXN\_0 | Temp Sensor | | 0 | | | | | | | | | | | | | |

| M11 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| M12 | | | VCCINT | VCCINT | | | | | | | | | | | | | | | |

| M13 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| M14 | r\_data[0] | High Range | IO\_L23P\_T3\_35 | OUTPUT | LVCMOS33 | 35 | 12 | SLOW | | FP\_VTT\_50 | | FIXED | | | | NONE | | | |

| M15 | r\_data[1] | High Range | IO\_L23N\_T3\_35 | OUTPUT | LVCMOS33 | 35 | 12 | SLOW | | FP\_VTT\_50 | | FIXED | | | | NONE | | | |

| M16 | | High Range | VCCO\_35 | VCCO | | 35 | | | | | 3.30 | | | | | | | | |

| M17 | | High Range | IO\_L8P\_T1\_AD10P\_35 | User IO | | 35 | | | | | | | | | | | | | |

| M18 | | High Range | IO\_L8N\_T1\_AD10N\_35 | User IO | | 35 | | | | | | | | | | | | | |

| M19 | | High Range | IO\_L7P\_T1\_AD2P\_35 | User IO | | 35 | | | | | | | | | | | | | |

| M20 | | High Range | IO\_L7N\_T1\_AD2N\_35 | User IO | | 35 | | | | | | | | | | | | | |

| N1 | | | PS\_DDR\_CS\_B\_502 | PSS IO | | | | | | | | | | | | | | | |

| N2 | | | PS\_DDR\_A0\_502 | PSS IO | | | | | | | | | | | | | | | |

| N3 | | | PS\_DDR\_CKE\_502 | PSS IO | | | | | | | | | | | | | | | |

| N4 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| N5 | | | PS\_DDR\_ODT\_502 | PSS IO | | | | | | | | | | | | | | | |

| N6 | | | RSVDVCC3 | Reserved | | | | | | | | | | | | | | | |

| N7 | | | VCCPINT | PSS VCCINT | | | | | | | | | | | | | | | |

| N8 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| N9 | | | VCCAUX | VCCAUX | | | | | | | 1.80 | | | | | | | | |

| N10 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| N11 | | | VCCAUX | VCCAUX | | | | | | | 1.80 | | | | | | | | |

| N12 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| N13 | | | VCCINT | VCCINT | | | | | | | | | | | | | | | |

| N14 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| N15 | | High Range | IO\_L21P\_T3\_DQS\_AD14P\_35 | User IO | | 35 | | | | | | | | | | | | | |

| N16 | | High Range | IO\_L21N\_T3\_DQS\_AD14N\_35 | User IO | | 35 | | | | | | | | | | | | | |

| N17 | | High Range | IO\_L23P\_T3\_34 | User IO | | 34 | | | | | | | | | | | | | |

| N18 | | High Range | IO\_L13P\_T2\_MRCC\_34 | User IO | | 34 | | | | | | | | | | | | | |

| N19 | | High Range | VCCO\_34 | VCCO | | 34 | | | | | 3.30 | | | | | | | | |

| N20 | | High Range | IO\_L14P\_T2\_SRCC\_34 | User IO | | 34 | | | | | | | | | | | | | |

| P1 | | | PS\_DDR\_DQ16\_502 | PSS IO | | | | | | | | | | | | | | | |

| P2 | | | VCCO\_DDR\_502 | VCCO | | | | | | | any\*\* | | | | | | | | |

| P3 | | | PS\_DDR\_DQ17\_502 | PSS IO | | | | | | | | | | | | | | | |

| P4 | | | PS\_DDR\_RAS\_B\_502 | PSS IO | | | | | | | | | | | | | | | |

| P5 | | | PS\_DDR\_CAS\_B\_502 | PSS IO | | | | | | | | | | | | | | | |

| P6 | | | PS\_DDR\_VREF1\_502 | PSS IO | | | | | | | | | | | | | | | |

| P7 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| P8 | | | VCCPINT | PSS VCCINT | | | | | | | | | | | | | | | |

| P9 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| P10 | | | VCCAUX | VCCAUX | | | | | | | 1.80 | | | | | | | | |

| P11 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| P12 | | | VCCINT | VCCINT | | | | | | | | | | | | | | | |

| P13 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| P14 | | High Range | IO\_L6P\_T0\_34 | User IO | | 34 | | | | | | | | | | | | | |

| P15 | w\_data[1] | High Range | IO\_L24P\_T3\_34 | INPUT | LVCMOS33 | 34 | | | | NONE | | FIXED | | | | NONE | | | |

| P16 | wr\_uart | High Range | IO\_L24N\_T3\_34 | INPUT | LVCMOS33 | 34 | | | | NONE | | FIXED | | | | NONE | | | |

| P17 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| P18 | | High Range | IO\_L23N\_T3\_34 | User IO | | 34 | | | | | | | | | | | | | |

| P19 | | High Range | IO\_L13N\_T2\_MRCC\_34 | User IO | | 34 | | | | | | | | | | | | | |

| P20 | | High Range | IO\_L14N\_T2\_SRCC\_34 | User IO | | 34 | | | | | | | | | | | | | |

| R1 | | | PS\_DDR\_DQ19\_502 | PSS IO | | | | | | | | | | | | | | | |

| R2 | | | PS\_DDR\_DQS\_P2\_502 | PSS IO | | | | | | | | | | | | | | | |

| R3 | | | PS\_DDR\_DQ18\_502 | PSS IO | | | | | | | | | | | | | | | |

| R4 | | | PS\_DDR\_BA1\_502 | PSS IO | | | | | | | | | | | | | | | |

| R5 | | | VCCO\_DDR\_502 | VCCO | | | | | | | any\*\* | | | | | | | | |

| R6 | | | RSVDVCC2 | Reserved | | | | | | | | | | | | | | | |

| R7 | | | VCCPINT | PSS VCCINT | | | | | | | | | | | | | | | |

| R8 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| R9 | | | VCCAUX | VCCAUX | | | | | | | 1.80 | | | | | | | | |

| R10 | | Dedicated | INIT\_B\_0 | Config | | 0 | | | | | | | | | | | | | |

| R11 | | Dedicated | DONE\_0 | Config | | 0 | | | | | | | | | | | | | |

| R12 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| R13 | | | VCCINT | VCCINT | | | | | | | | | | | | | | | |

| R14 | | High Range | IO\_L6N\_T0\_VREF\_34 | User IO | | 34 | | | | | | | | | | | | | |

| R15 | | High Range | VCCO\_34 | VCCO | | 34 | | | | | 3.30 | | | | | | | | |

| R16 | | High Range | IO\_L19P\_T3\_34 | User IO | | 34 | | | | | | | | | | | | | |

| R17 | | High Range | IO\_L19N\_T3\_VREF\_34 | User IO | | 34 | | | | | | | | | | | | | |

| R18 | | High Range | IO\_L20N\_T3\_34 | User IO | | 34 | | | | | | | | | | | | | |

| R19 | | High Range | IO\_0\_34 | User IO | | 34 | | | | | | | | | | | | | |

| R20 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| T1 | | | PS\_DDR\_DM2\_502 | PSS IO | | | | | | | | | | | | | | | |

| T2 | | | PS\_DDR\_DQS\_N2\_502 | PSS IO | | | | | | | | | | | | | | | |

| T3 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| T4 | | | PS\_DDR\_DQ20\_502 | PSS IO | | | | | | | | | | | | | | | |

| T5 | | High Range | IO\_L19P\_T3\_13 | User IO | | 13 | | | | | | | | | | | | | |

| T6 | | | RSVDVCC1 | Reserved | | | | | | | | | | | | | | | |

| T7 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| T8 | | High Range | VCCO\_13 | VCCO | | 13 | | | | | any\*\* | | | | | | | | |

| T9 | | High Range | IO\_L12P\_T1\_MRCC\_13 | User IO | | 13 | | | | | | | | | | | | | |

| T10 | w\_data[7] | High Range | IO\_L1N\_T0\_34 | INPUT | LVCMOS33 | 34 | | | | NONE | | FIXED | | | | NONE | | | |

| T11 | w\_data[6] | High Range | IO\_L1P\_T0\_34 | INPUT | LVCMOS33 | 34 | | | | NONE | | FIXED | | | | NONE | | | |

| T12 | r\_data[6] | High Range | IO\_L2P\_T0\_34 | OUTPUT | LVCMOS33 | 34 | 12 | SLOW | | FP\_VTT\_50 | | FIXED | | | | NONE | | | |

| T13 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| T14 | | High Range | IO\_L5P\_T0\_34 | User IO | | 34 | | | | | | | | | | | | | |

| T15 | | High Range | IO\_L5N\_T0\_34 | User IO | | 34 | | | | | | | | | | | | | |

| T16 | w\_data[3] | High Range | IO\_L9P\_T1\_DQS\_34 | INPUT | LVCMOS33 | 34 | | | | NONE | | FIXED | | | | NONE | | | |

| T17 | | High Range | IO\_L20P\_T3\_34 | User IO | | 34 | | | | | | | | | | | | | |

| T18 | | High Range | VCCO\_34 | VCCO | | 34 | | | | | 3.30 | | | | | | | | |

| T19 | | High Range | IO\_25\_34 | User IO | | 34 | | | | | | | | | | | | | |

| T20 | | High Range | IO\_L15P\_T2\_DQS\_34 | User IO | | 34 | | | | | | | | | | | | | |

| U1 | | | VCCO\_DDR\_502 | VCCO | | | | | | | any\*\* | | | | | | | | |

| U2 | | | PS\_DDR\_DQ22\_502 | PSS IO | | | | | | | | | | | | | | | |

| U3 | | | PS\_DDR\_DQ23\_502 | PSS IO | | | | | | | | | | | | | | | |

| U4 | | | PS\_DDR\_DQ21\_502 | PSS IO | | | | | | | | | | | | | | | |

| U5 | | High Range | IO\_L19N\_T3\_VREF\_13 | User IO | | 13 | | | | | | | | | | | | | |

| U6 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| U7 | | High Range | IO\_L11P\_T1\_SRCC\_13 | User IO | | 13 | | | | | | | | | | | | | |

| U8 | | High Range | IO\_L17N\_T2\_13 | User IO | | 13 | | | | | | | | | | | | | |

| U9 | | High Range | IO\_L17P\_T2\_13 | User IO | | 13 | | | | | | | | | | | | | |

| U10 | | High Range | IO\_L12N\_T1\_MRCC\_13 | User IO | | 13 | | | | | | | | | | | | | |

| U11 | | High Range | VCCO\_13 | VCCO | | 13 | | | | | any\*\* | | | | | | | | |

| U12 | r\_data[7] | High Range | IO\_L2N\_T0\_34 | OUTPUT | LVCMOS33 | 34 | 12 | SLOW | | FP\_VTT\_50 | | FIXED | | | | NONE | | | |

| U13 | | High Range | IO\_L3P\_T0\_DQS\_PUDC\_B\_34 | User IO | | 34 | | | | | | | | | | | | | |

| U14 | | High Range | IO\_L11P\_T1\_SRCC\_34 | User IO | | 34 | | | | | | | | | | | | | |

| U15 | | High Range | IO\_L11N\_T1\_SRCC\_34 | User IO | | 34 | | | | | | | | | | | | | |

| U16 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| U17 | | High Range | IO\_L9N\_T1\_DQS\_34 | User IO | | 34 | | | | | | | | | | | | | |

| U18 | | High Range | IO\_L12P\_T1\_MRCC\_34 | User IO | | 34 | | | | | | | | | | | | | |

| U19 | | High Range | IO\_L12N\_T1\_MRCC\_34 | User IO | | 34 | | | | | | | | | | | | | |

| U20 | | High Range | IO\_L15N\_T2\_DQS\_34 | User IO | | 34 | | | | | | | | | | | | | |

| V1 | | | PS\_DDR\_DQ24\_502 | PSS IO | | | | | | | | | | | | | | | |

| V2 | | | PS\_DDR\_DQ30\_502 | PSS IO | | | | | | | | | | | | | | | |

| V3 | | | PS\_DDR\_DQ31\_502 | PSS IO | | | | | | | | | | | | | | | |

| V4 | | | VCCO\_DDR\_502 | VCCO | | | | | | | any\*\* | | | | | | | | |

| V5 | | High Range | IO\_L6N\_T0\_VREF\_13 | User IO | | 13 | | | | | | | | | | | | | |

| V6 | | High Range | IO\_L22P\_T3\_13 | User IO | | 13 | | | | | | | | | | | | | |

| V7 | | High Range | IO\_L11N\_T1\_SRCC\_13 | User IO | | 13 | | | | | | | | | | | | | |

| V8 | | High Range | IO\_L15P\_T2\_DQS\_13 | User IO | | 13 | | | | | | | | | | | | | |

| V9 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| V10 | | High Range | IO\_L21N\_T3\_DQS\_13 | User IO | | 13 | | | | | | | | | | | | | |

| V11 | | High Range | IO\_L21P\_T3\_DQS\_13 | User IO | | 13 | | | | | | | | | | | | | |

| V12 | | High Range | IO\_L4P\_T0\_34 | User IO | | 34 | | | | | | | | | | | | | |

| V13 | | High Range | IO\_L3N\_T0\_DQS\_34 | User IO | | 34 | | | | | | | | | | | | | |

| V14 | | High Range | VCCO\_34 | VCCO | | 34 | | | | | 3.30 | | | | | | | | |

| V15 | w\_data[4] | High Range | IO\_L10P\_T1\_34 | INPUT | LVCMOS33 | 34 | | | | NONE | | FIXED | | | | NONE | | | |

| V16 | | High Range | IO\_L18P\_T2\_34 | User IO | | 34 | | | | | | | | | | | | | |

| V17 | | High Range | IO\_L21P\_T3\_DQS\_34 | User IO | | 34 | | | | | | | | | | | | | |

| V18 | | High Range | IO\_L21N\_T3\_DQS\_34 | User IO | | 34 | | | | | | | | | | | | | |

| V19 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| V20 | | High Range | IO\_L16P\_T2\_34 | User IO | | 34 | | | | | | | | | | | | | |

| W1 | | | PS\_DDR\_DQ26\_502 | PSS IO | | | | | | | | | | | | | | | |

| W2 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| W3 | | | PS\_DDR\_DQ29\_502 | PSS IO | | | | | | | | | | | | | | | |

| W4 | | | PS\_DDR\_DQS\_N3\_502 | PSS IO | | | | | | | | | | | | | | | |

| W5 | | | PS\_DDR\_DQS\_P3\_502 | PSS IO | | | | | | | | | | | | | | | |

| W6 | | High Range | IO\_L22N\_T3\_13 | User IO | | 13 | | | | | | | | | | | | | |

| W7 | | High Range | VCCO\_13 | VCCO | | 13 | | | | | any\*\* | | | | | | | | |

| W8 | | High Range | IO\_L15N\_T2\_DQS\_13 | User IO | | 13 | | | | | | | | | | | | | |

| W9 | | High Range | IO\_L16N\_T2\_13 | User IO | | 13 | | | | | | | | | | | | | |

| W10 | | High Range | IO\_L16P\_T2\_13 | User IO | | 13 | | | | | | | | | | | | | |

| W11 | | High Range | IO\_L18P\_T2\_13 | User IO | | 13 | | | | | | | | | | | | | |

| W12 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| W13 | w\_data[2] | High Range | IO\_L4N\_T0\_34 | INPUT | LVCMOS33 | 34 | | | | NONE | | FIXED | | | | NONE | | | |

| W14 | r\_data[4] | High Range | IO\_L8P\_T1\_34 | OUTPUT | LVCMOS33 | 34 | 12 | SLOW | | FP\_VTT\_50 | | FIXED | | | | NONE | | | |

| W15 | w\_data[5] | High Range | IO\_L10N\_T1\_34 | INPUT | LVCMOS33 | 34 | | | | NONE | | FIXED | | | | NONE | | | |

| W16 | | High Range | IO\_L18N\_T2\_34 | User IO | | 34 | | | | | | | | | | | | | |

| W17 | | High Range | VCCO\_34 | VCCO | | 34 | | | | | 3.30 | | | | | | | | |

| W18 | | High Range | IO\_L22P\_T3\_34 | User IO | | 34 | | | | | | | | | | | | | |

| W19 | | High Range | IO\_L22N\_T3\_34 | User IO | | 34 | | | | | | | | | | | | | |

| W20 | | High Range | IO\_L16N\_T2\_34 | User IO | | 34 | | | | | | | | | | | | | |

| Y1 | | | PS\_DDR\_DM3\_502 | PSS IO | | | | | | | | | | | | | | | |

| Y2 | | | PS\_DDR\_DQ28\_502 | PSS IO | | | | | | | | | | | | | | | |

| Y3 | | | PS\_DDR\_DQ25\_502 | PSS IO | | | | | | | | | | | | | | | |

| Y4 | | | PS\_DDR\_DQ27\_502 | PSS IO | | | | | | | | | | | | | | | |

| Y5 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| Y6 | | High Range | IO\_L13N\_T2\_MRCC\_13 | User IO | | 13 | | | | | | | | | | | | | |

| Y7 | | High Range | IO\_L13P\_T2\_MRCC\_13 | User IO | | 13 | | | | | | | | | | | | | |

| Y8 | | High Range | IO\_L14N\_T2\_SRCC\_13 | User IO | | 13 | | | | | | | | | | | | | |

| Y9 | | High Range | IO\_L14P\_T2\_SRCC\_13 | User IO | | 13 | | | | | | | | | | | | | |

| Y10 | | High Range | VCCO\_13 | VCCO | | 13 | | | | | any\*\* | | | | | | | | |

| Y11 | | High Range | IO\_L18N\_T2\_13 | User IO | | 13 | | | | | | | | | | | | | |

| Y12 | | High Range | IO\_L20P\_T3\_13 | User IO | | 13 | | | | | | | | | | | | | |

| Y13 | | High Range | IO\_L20N\_T3\_13 | User IO | | 13 | | | | | | | | | | | | | |

| Y14 | r\_data[5] | High Range | IO\_L8N\_T1\_34 | OUTPUT | LVCMOS33 | 34 | 12 | SLOW | | FP\_VTT\_50 | | FIXED | | | | NONE | | | |

| Y15 | | | GND | GND | | | | | | | 0.0 | | | | | | | | |

| Y16 | | High Range | IO\_L7P\_T1\_34 | User IO | | 34 | | | | | | | | | | | | | |

| Y17 | | High Range | IO\_L7N\_T1\_34 | User IO | | 34 | | | | | | | | | | | | | |

| Y18 | | High Range | IO\_L17P\_T2\_34 | User IO | | 34 | | | | | | | | | | | | | |

| Y19 | | High Range | IO\_L17N\_T2\_34 | User IO | | 34 | | | | | | | | | | | | | |

| Y20 | | High Range | VCCO\_34 | VCCO | | 34 | | | | | 3.30 | | | | | | | | |

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\* Default value

\*\* Special VCCO requirements may apply. Please consult the device family datasheet for specific guideline on VCCO requirements.