

IMPORTANT NOTICE

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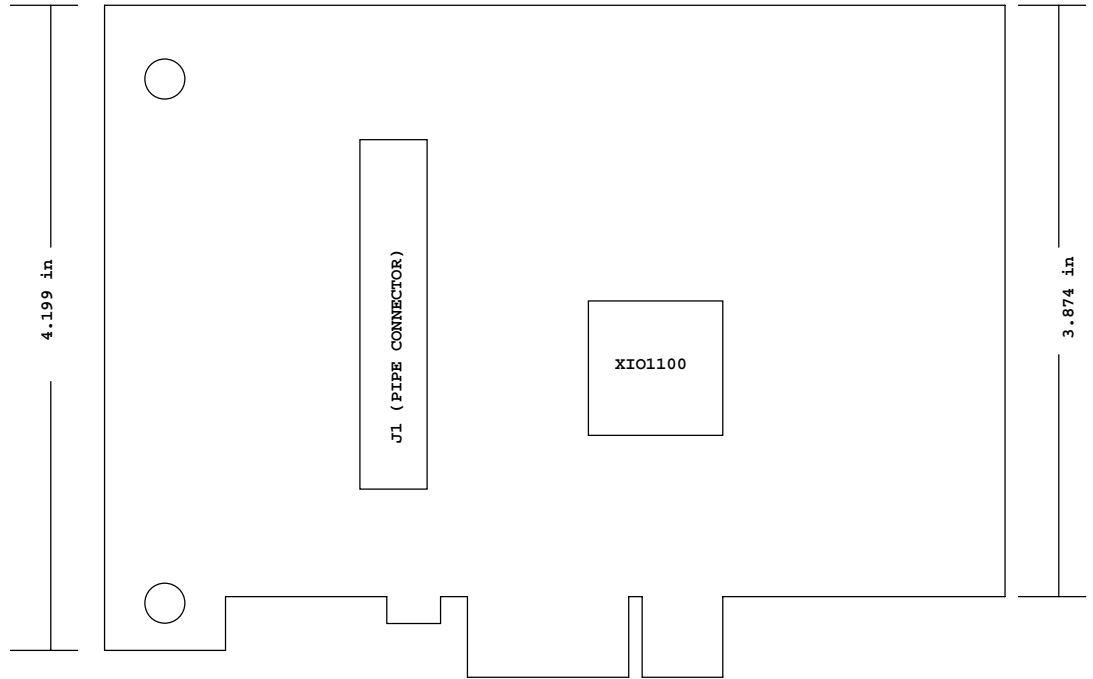
POWER PLANES: 1.5VD, 1.5VA, VDDIO, 3.3VA, and PCIE_3.3V


POWER TRACES (15mil width minimum):
PCIE_3.3VAUX, ICS_VDDA, VDD_33_COMB, VDD_33_COMB_IO, VDD_15_COMB, TPSFB, TPS1.8, TPS1.5.

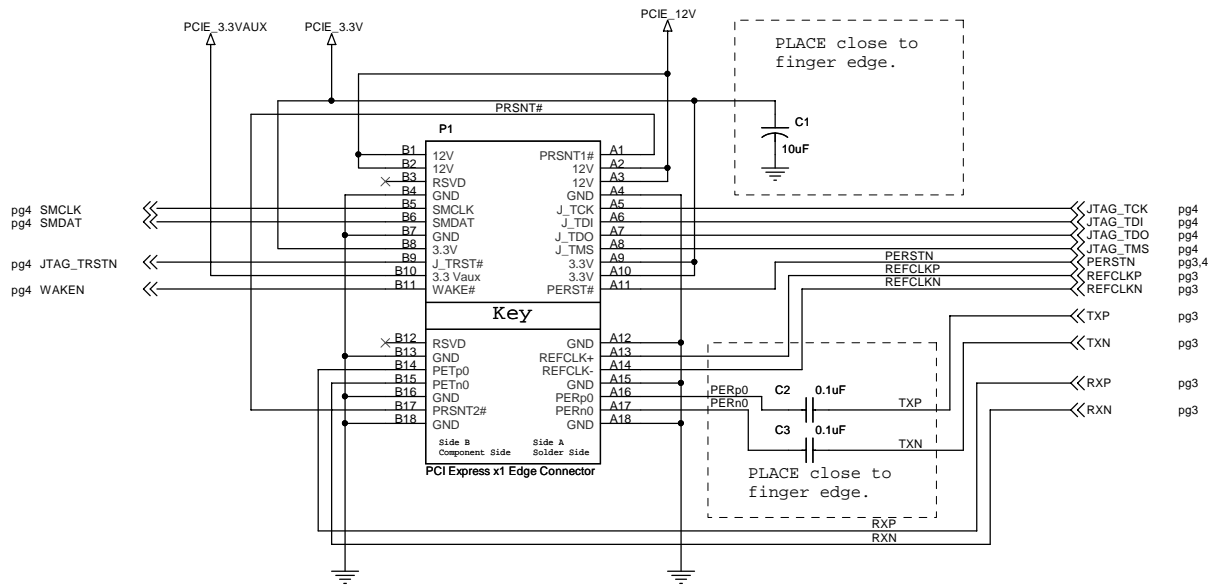
POWER TRACES (50mil width minimum):
PCIE_12V

CRITICAL ROUTING:

1. TXP/TXN must be matched to within 5mils.
2. TXP/TXN must have a 100-ohms differential impedance
3. RXP/RXN must be matched to within 5mils.
4. RXP/RXN must have a 100-ohms differential impedance
5. REFCLKP/REFCLKN must be matched to within 5mils
6. REFCLKP/REFCLKN must have a 100-ohms differential impedance
7. P0_S_REFCLKP/P0_S_REFCLKN must be matched to within 5mils
8. P0_S_REFCLKP/P0_S_REFCLKN must have a 100-ohms differential impedance.
9. REFCLK+/REFCLK- must be matched to within 5mils.
10. REFCLK+/REFCLK- must have a 100-ohms differential impedance.
11. The following signals need to be matched to within 50mils. These signals also need to have a single-ended impedance of 50-ohms +/- 10%: TX_DATA[15:0], TX_DATAK[1:0], TX_CLK, TXCOMPLIANCE, and TXELECIDLLE.
12. The following signals needs to be matched to within 50mils. These signals also need to have a single-ended impedance of 50-ohms +/- 10%: RX_CLK, RX_DATA[15:0], RX_DATAK[1:0], RX_STATUS[2:0], RX_VALID, and RX_ELECIDLLE.




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XIO1100 PIPE EVM (TITLE PAGE)	
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NOTES:

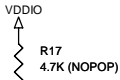
- 1.) WAKE# (B11) is not connected. System Vendor provides pullup.
- 2.) 3.3VAUX (B10) is not connected.
- 3.) Required that all PCI Express add-in cards implement variable length edge finger pads and tie the PRSNT1# and PRSNT2# signals together on the add-in card. Refer to the PCI Express Card Electromechanical Spec section 3.2.
- 4.) Each differential signal pair must be 100-ohm differential impedance with each single-ended lane measuring in the range of 50-ohm to 55-ohm impedance to ground.
- 5.) The differential pair should be routed such that the skew within differential pairs is less than 5 mils.

MATCH to within 5mils

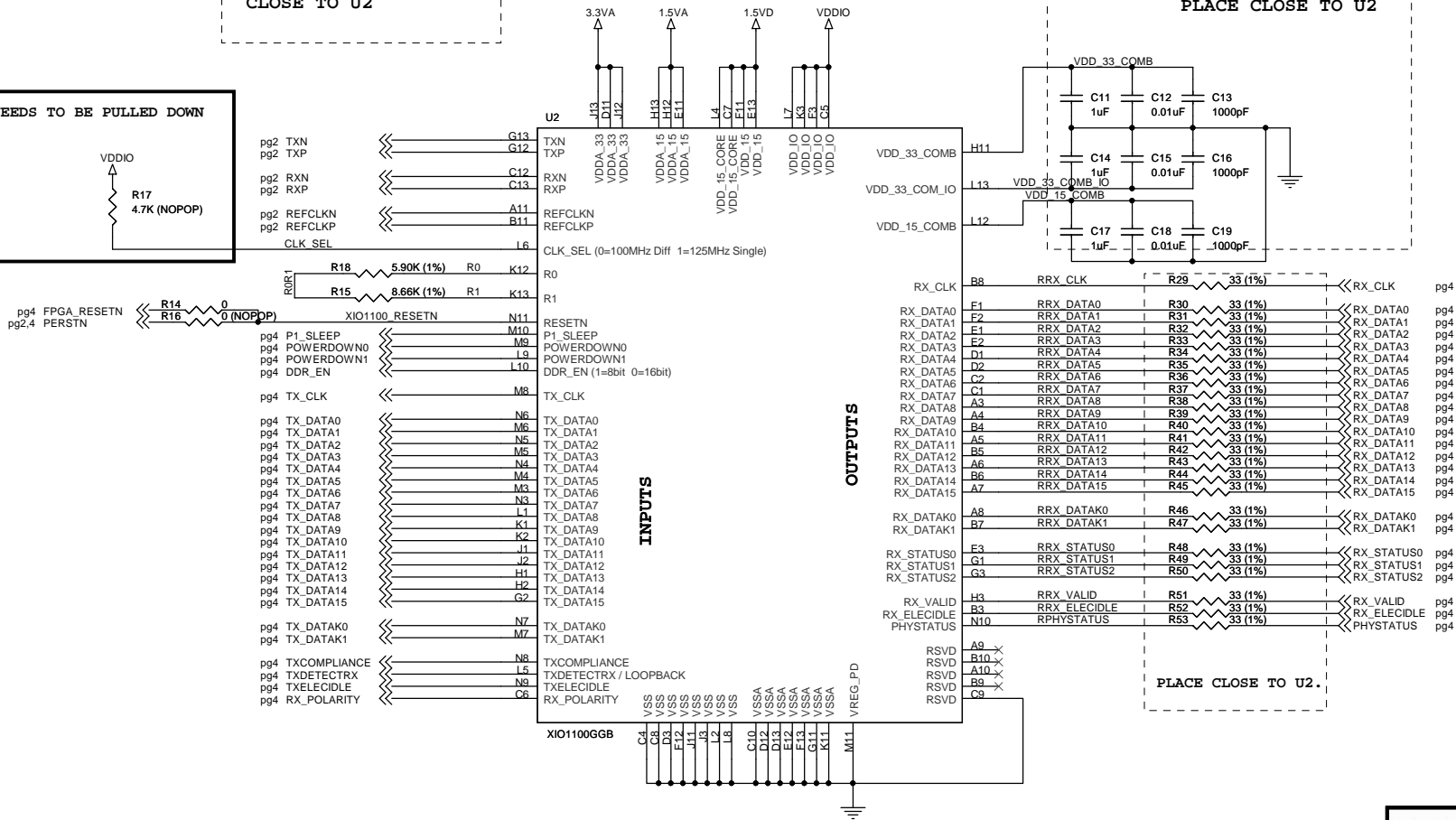
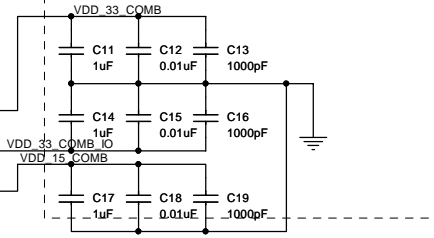
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PCI EXPRESS X1 CONNECTOR	
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PLACE R15 AND R18
CLOSE TO U2

NEEDS TO BE PULLED DOWN



PLACE CLOSE TO U2



INPUTS

OUTPUTS

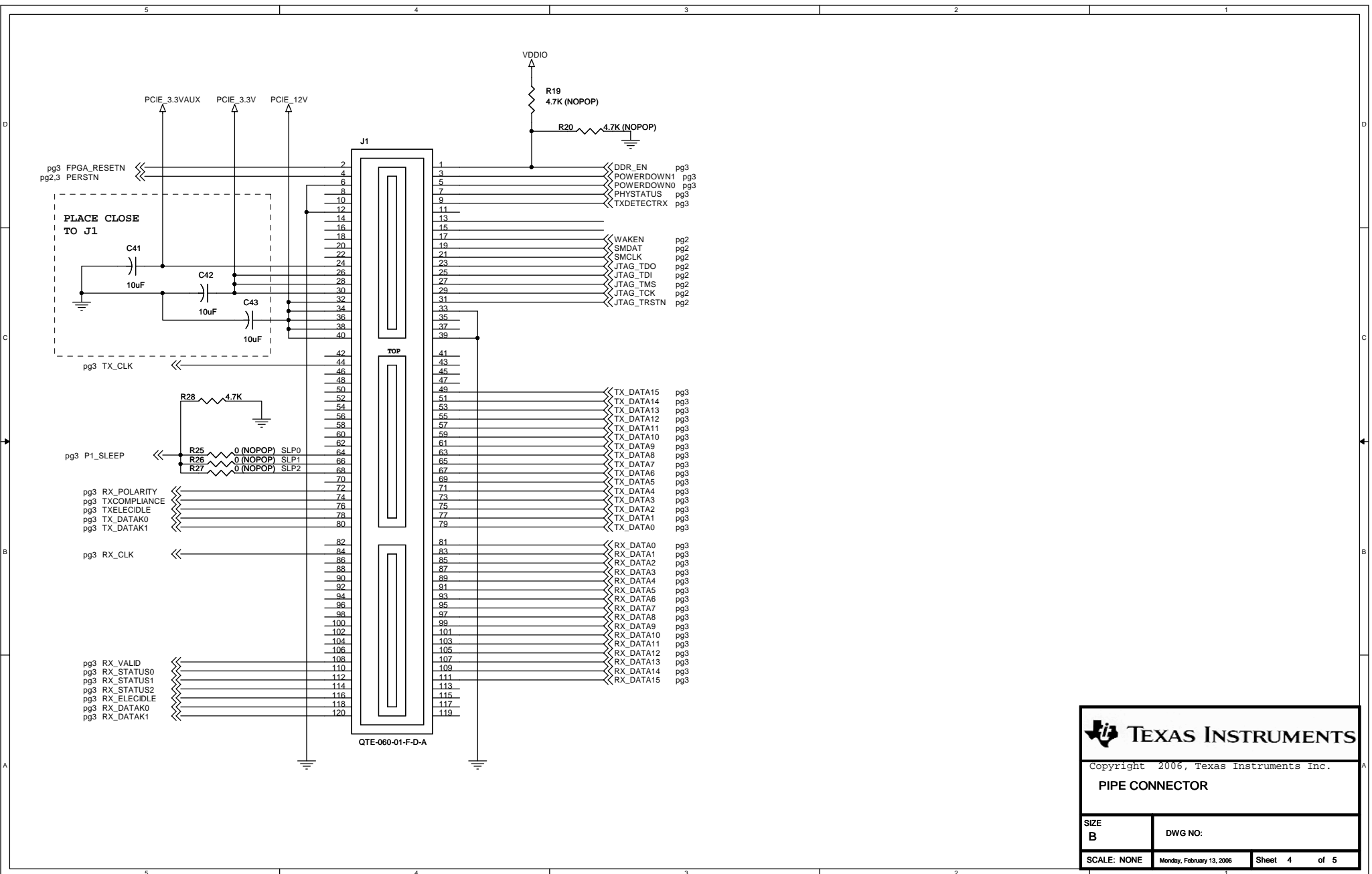
PLACE CLOSE TO U2.


TEXAS INSTRUMENTS

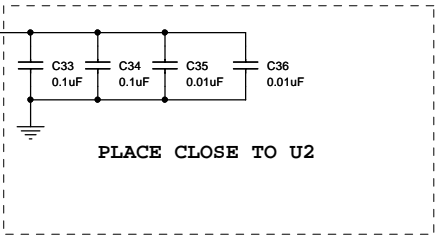
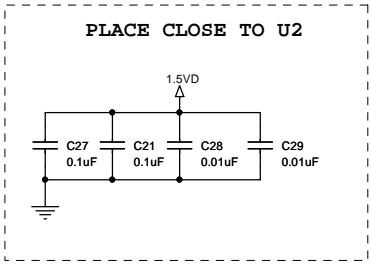
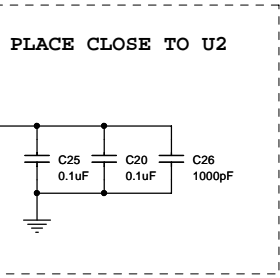
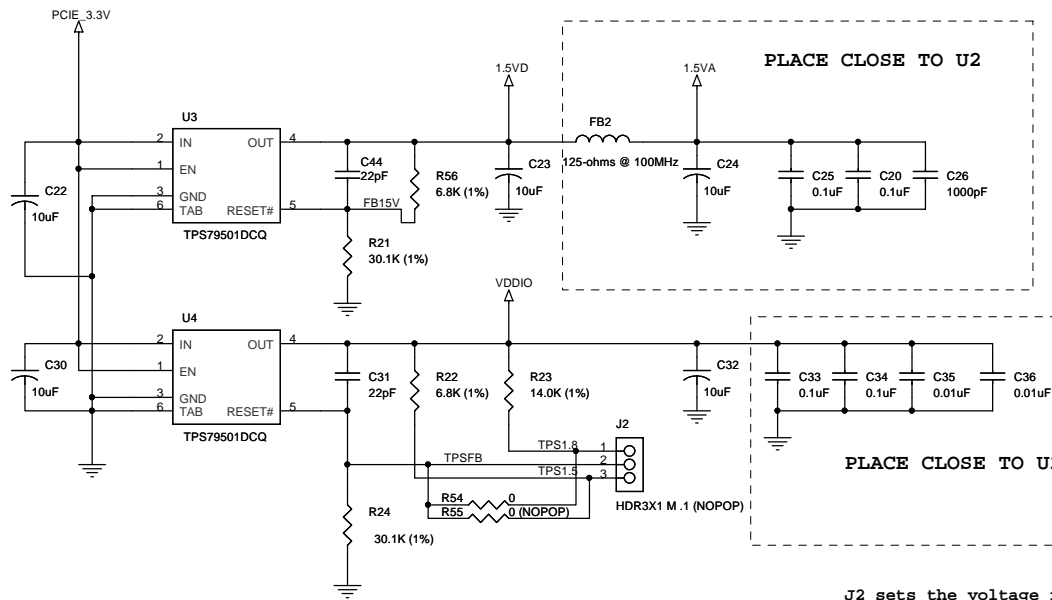
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XIO1100 (100-GGB)

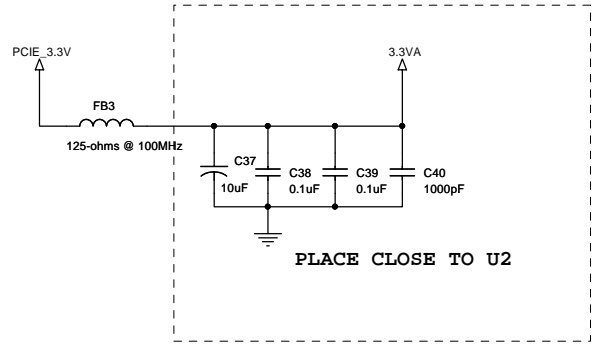
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PIPE CONNECTOR	
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J2 sets the voltage for VDDIO:
 1-2 = 1.8V
 2-3 = 1.5V



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POWER	
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