

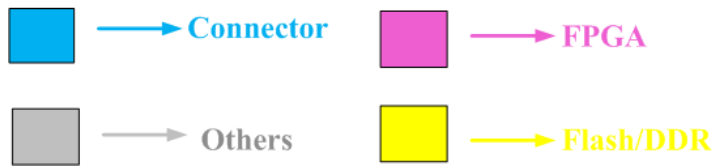
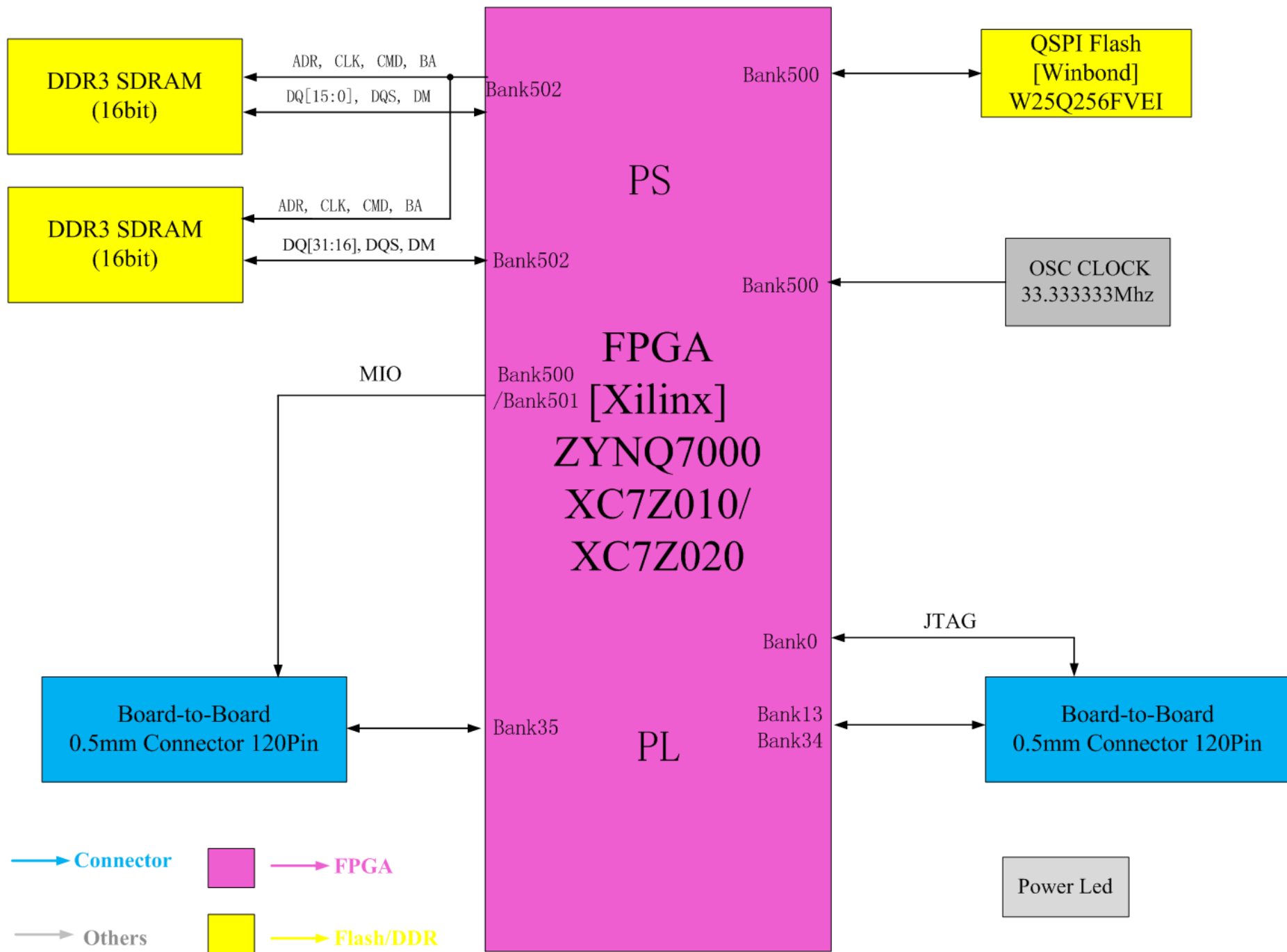
| REV  | Description   | Date      |
|------|---------------|-----------|
| V1.0 | First Release | 2019-6-21 |
|      |               |           |
|      |               |           |

# AC7Z010/AC7Z020 Schematics

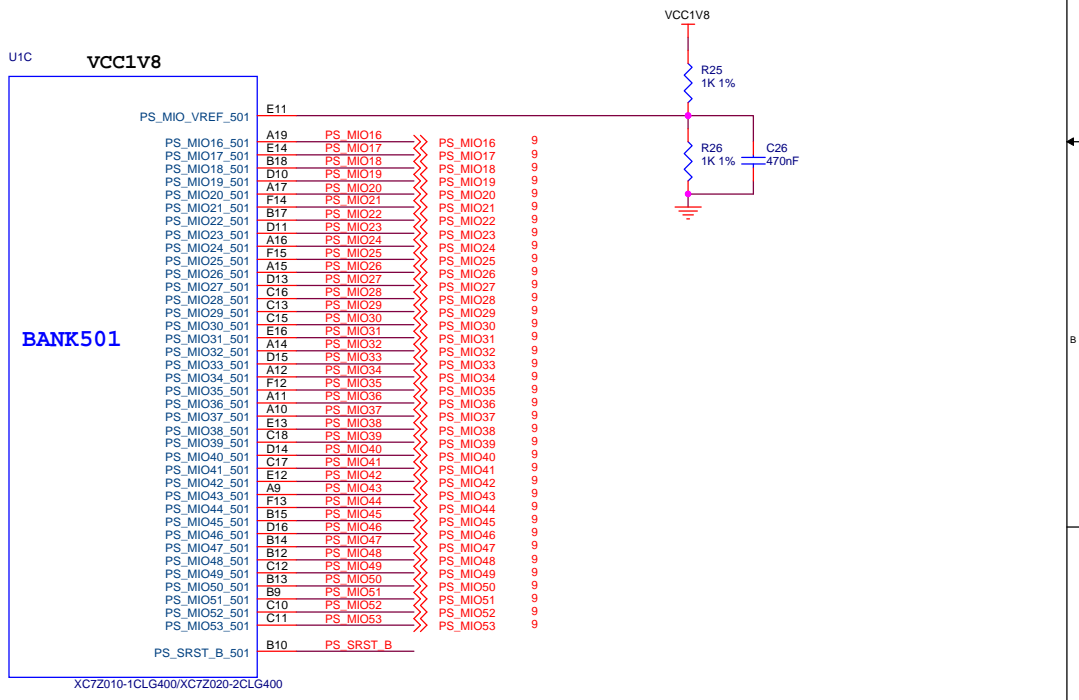
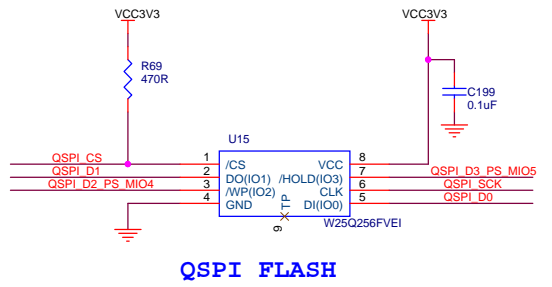
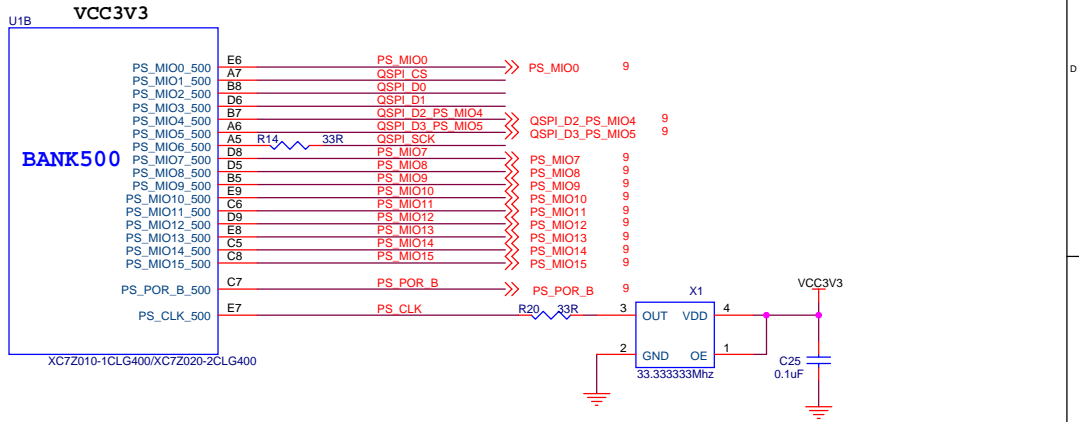
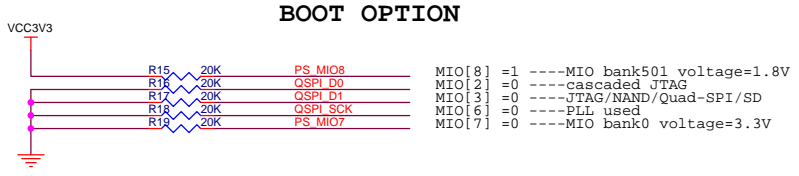
## ZYNQ硬件平台

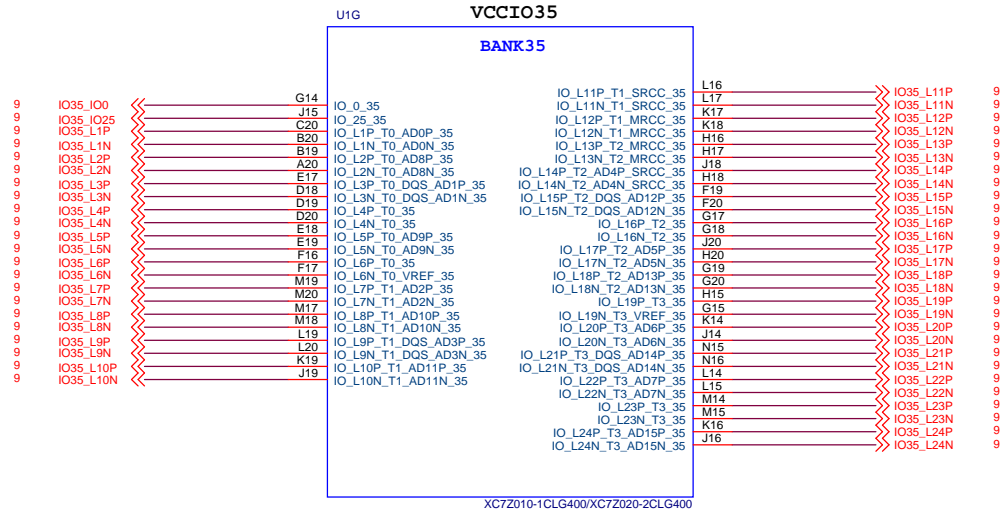
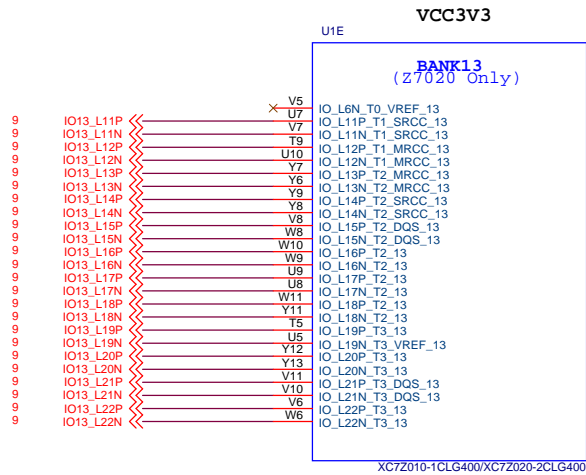
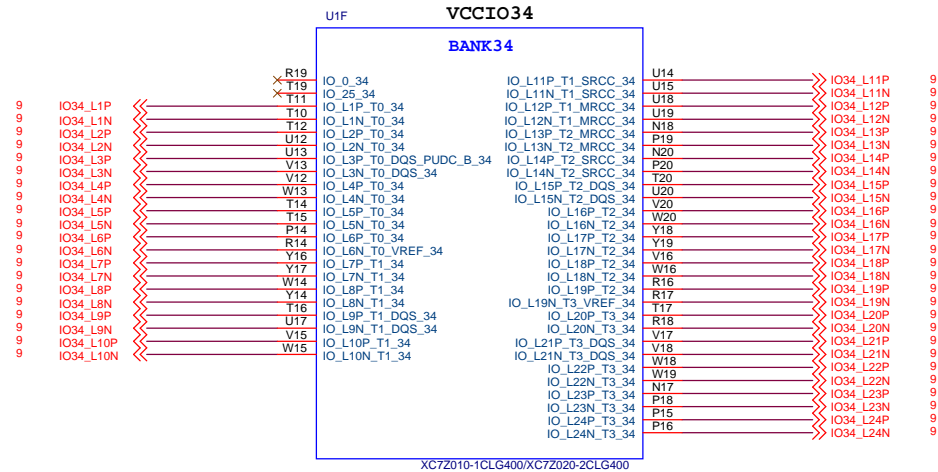
| Page Number | Description            |
|-------------|------------------------|
| Page01      | Cover Page             |
| Page02      | Block Diagram          |
| Page03      | Zynq-7000 JTAG & Bank0 |
| Page04      | Zynq-7000 MIO Config   |
| Page05      | Zynq-7000 Bank13-34-35 |
| Page06      | Zynq-7000 Bank502      |
| Page07      | Zynq-7000 Power        |
| Page08      | DDR3                   |
| Page09      | GPHY                   |
| Page10      | USB OTG                |
| Page11      | UART, SD               |
| Page12      | EXTEND IO              |
| Page13      | POWER                  |

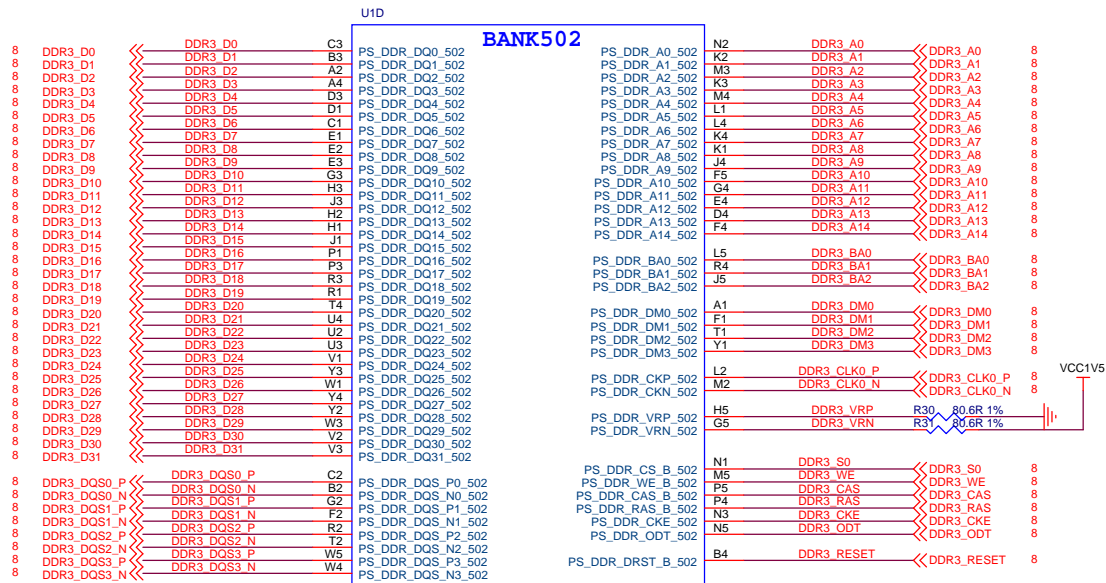
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| <b>ALINX</b>               |  |               |
| Title Zynq-7000 Cover Page |  |               |
| Size                       | Document Number<br>AC7Z010/AC7Z020 核心板Schematics | Rev<br>1.0    |
| Date:                      | Wednesday, August 21, 2019                       | Sheet 1 of 13 |

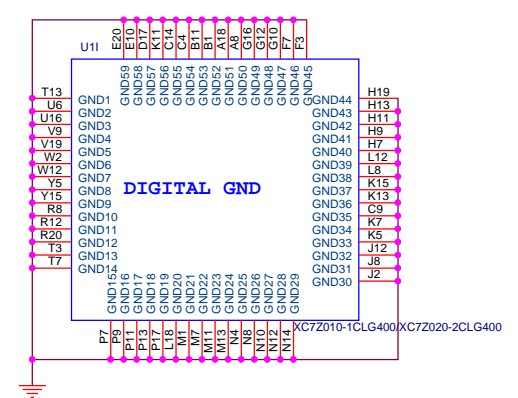
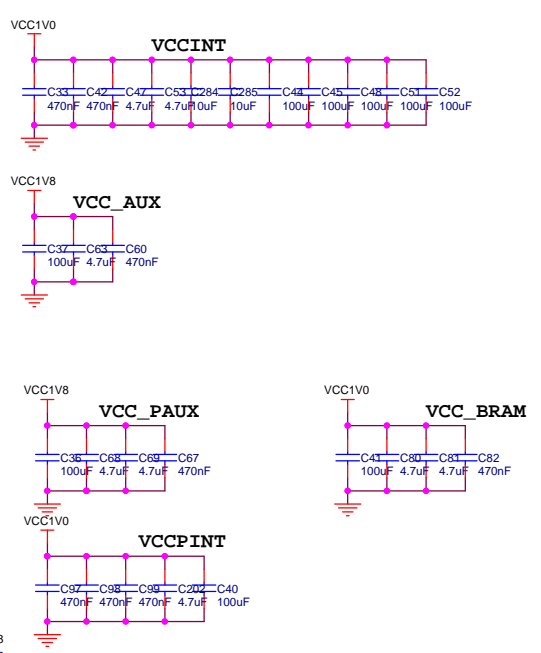
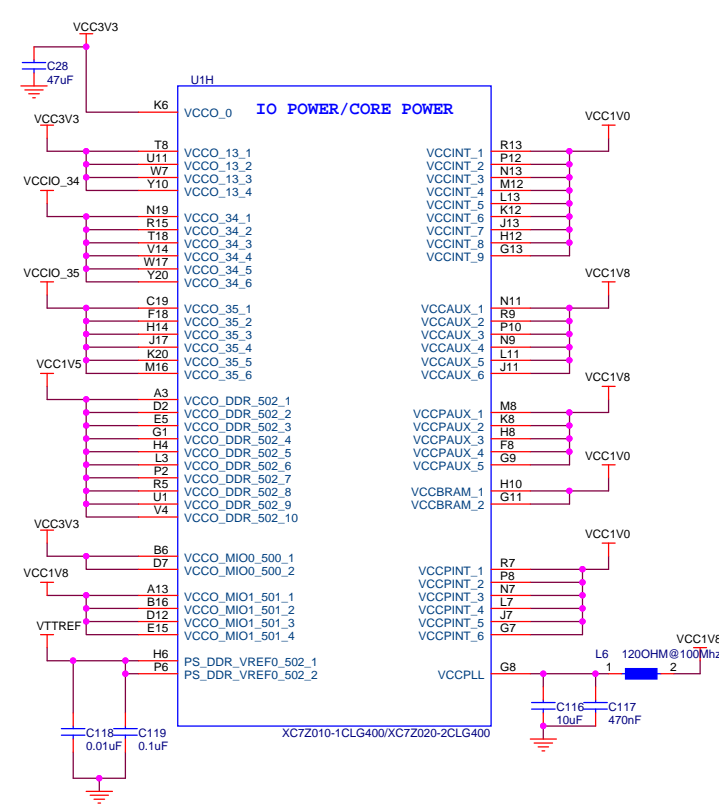
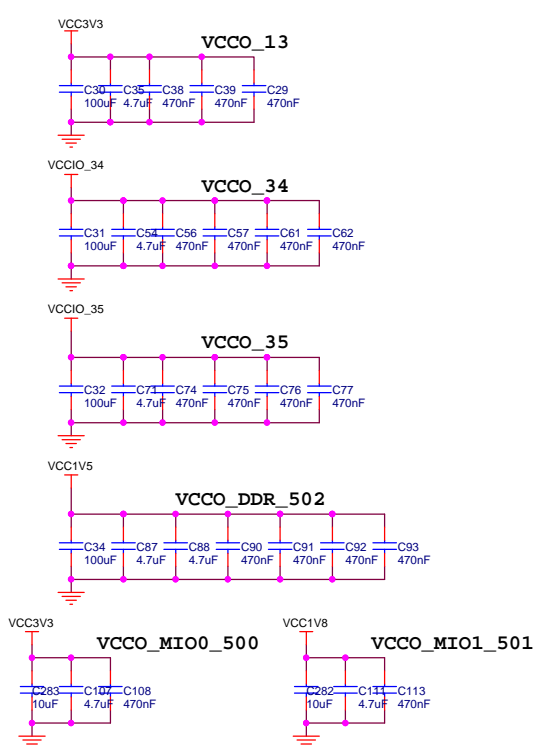


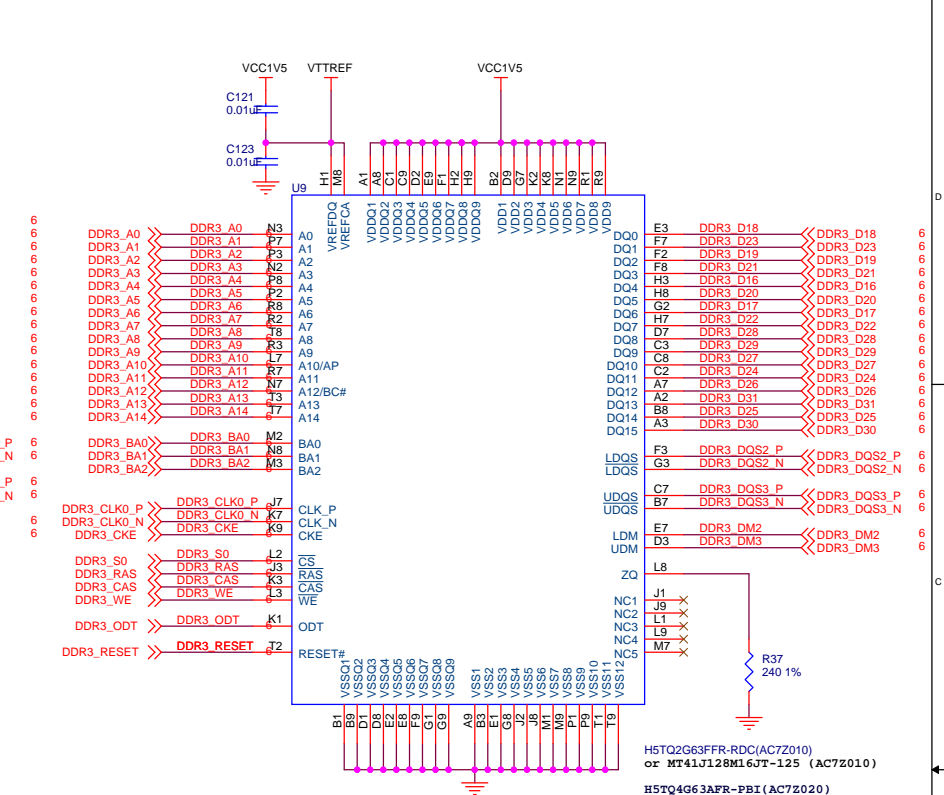
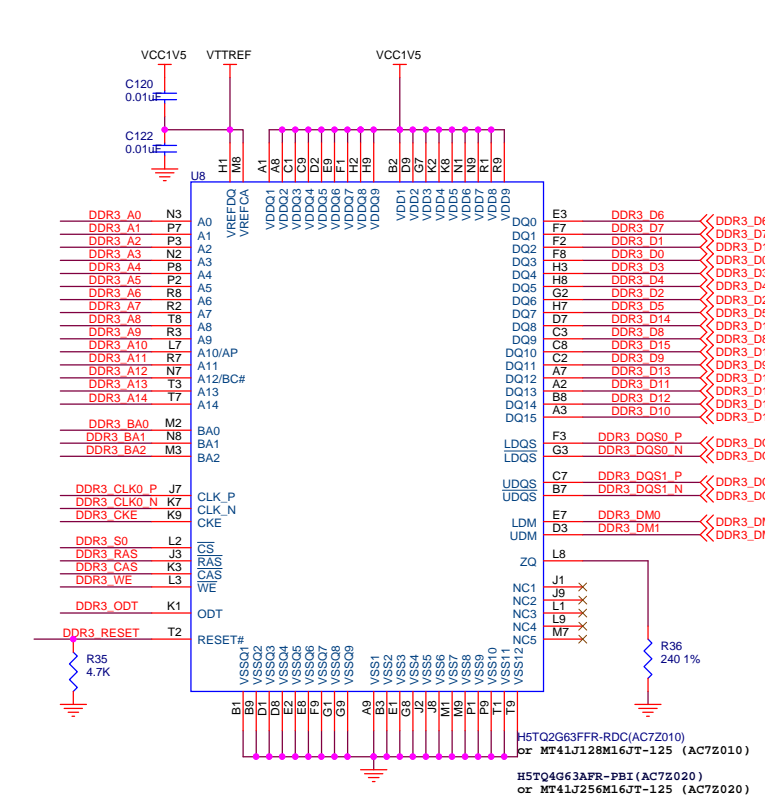
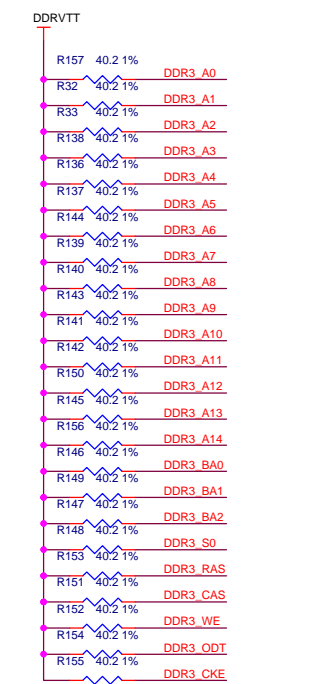
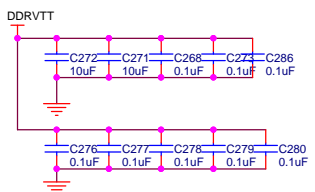










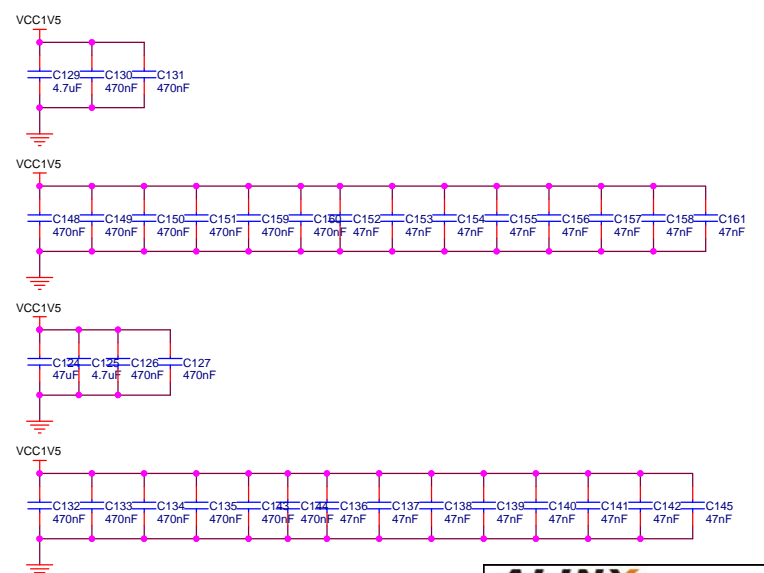
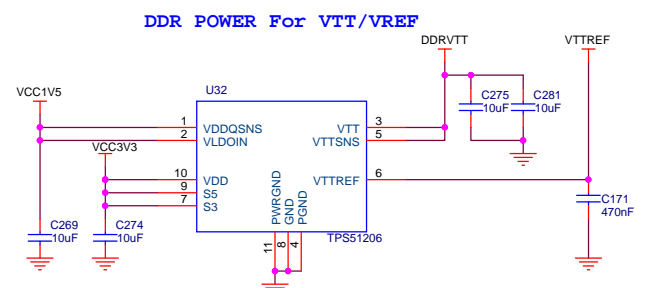


为了PCB走线方便, DDR3数据线组内 (DQS除外) 可以任意交换。  
XILINX 的UG933文档的PAGE66有以下说明:



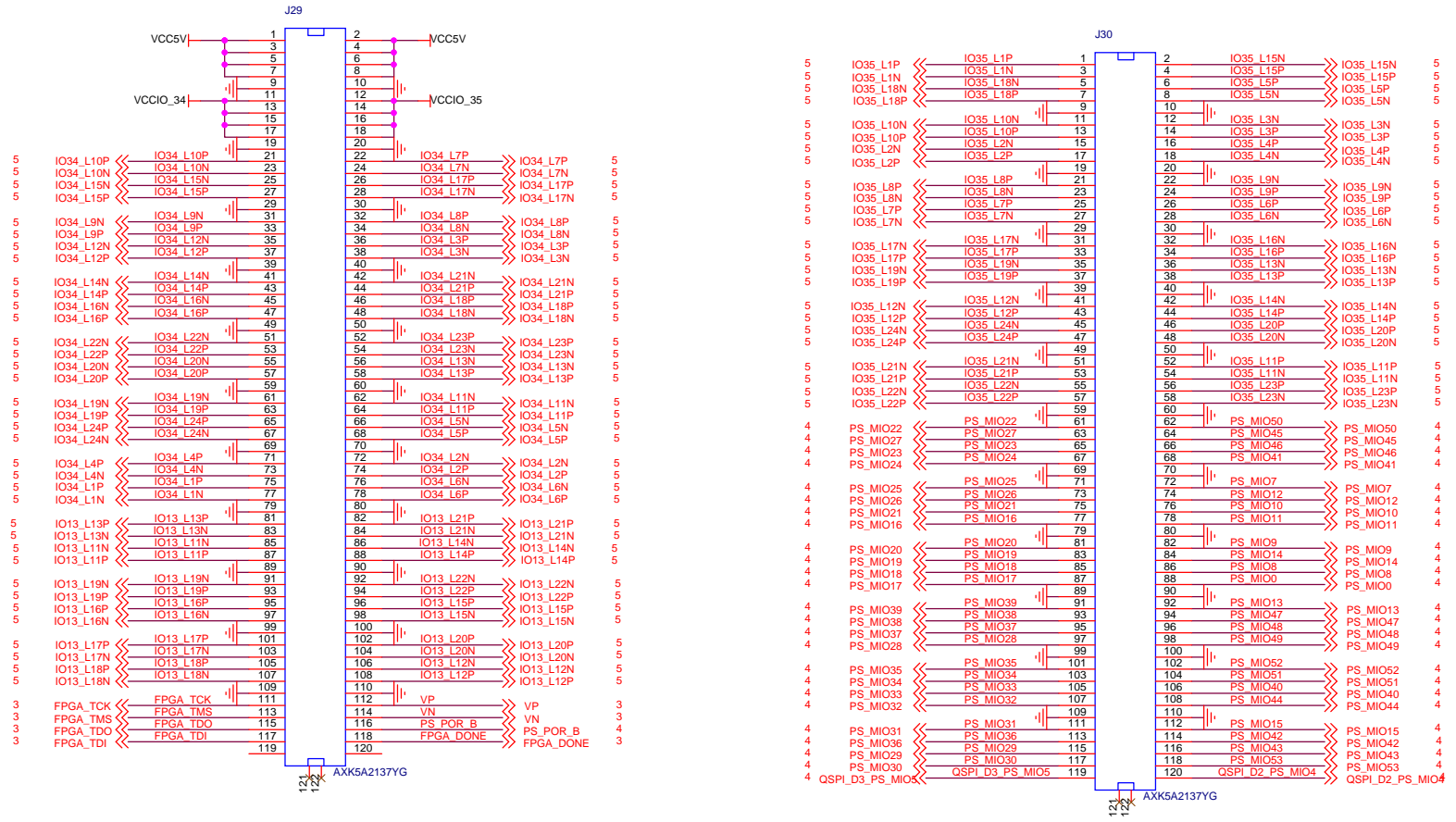
Table 5-12 shows the recommended routing topologies. **Byte and bit swapping is allowed** to facilitate PCB routing, except for LPDDR2, which specifically forbids swapping. When swapping bits, keep all bits within the same byte group.

Table 5-12: DDR Routing Topology

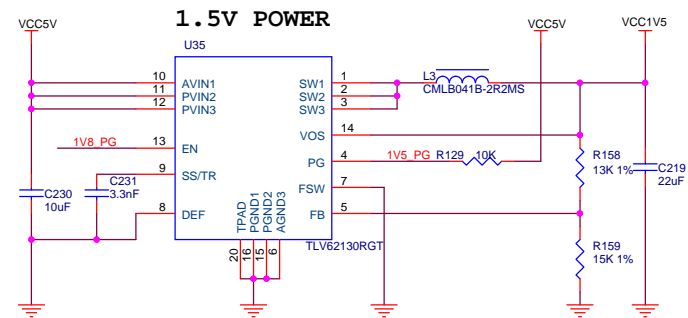
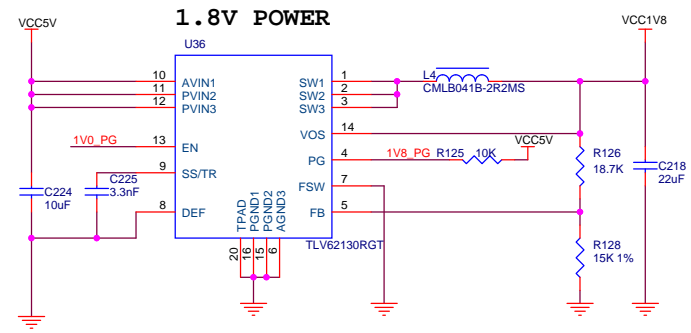
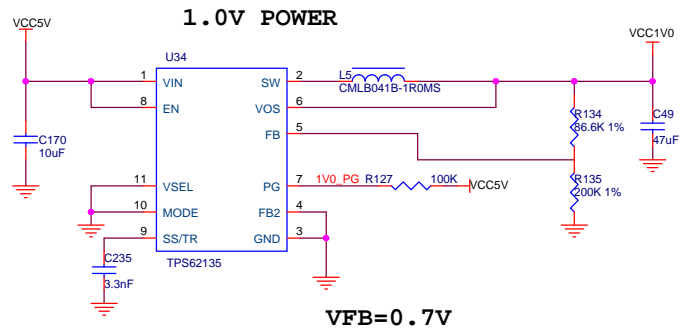




VCCIO34, VCCIO35的电源由底板提供, 不能超过3.3v, 上电顺序要求5v先供电, 然后再供VCCIO34和VCCIO35

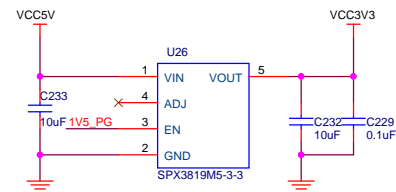


BANK13的IO管脚只有AC7Z020的板子才有, AC7Z010的核心板无法使用这些IO



**Power On Sequence:**

1.0V -> 1.8V -> 1.5 V -> 3.3V -> VCCIO



|              |                               |                |
|--------------|-------------------------------|----------------|
| <b>ALINX</b> |                               |                |
| Title Power  |                               |                |
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| Date:        | Wednesday, August 21, 2019    | Sheet 10 of 10 |