

| REV | Description   | DATE       | BY |
|-----|---|------------|----|
| A3  | Production release.   | 10/21/2011 | GC |
| A3A | Updated in conjunction with the release of the SRM. Typos and naming changes. No change in design.  | 11/5/2011  | GC |
| A4  | 1. Changed supplier for the SD card connector due to availability issue. Created a dual footprint for two different parts. SD connector is now reversed, so label down is the new orientation.<br>2. Changed R76 from a 50 ohm to 49.9 ohm. Smaller package and lower cost. Changed footprint to 0402.<br>3. Changed C99 termination to DGND.<br>4. Added 10K pulldown to fix link speed LED.<br>5. Changed C7 to a 0805 package in PCB layout.   | 12/1/2011  | GC |
| A5  | 1. Changed R219 to DNI. It was causing issues with Ethernet DHCP IP address acquisition. Will be added back in on revision A6.<br>2. Removed the connection of the VPP to VDD_CORE as suggested by TI.  | 2/3/2012   | GC |
| A6  | 1. Changed R219 to installed.<br>2. Added R220 , a 10K pulldown to pin 18 of the SMSC PHY to allow R219 addition to work as expected..<br>3. Removed the connection to the VPP pin on the processor.<br>4. Added R221, R218, R217, R202 to facilitate the addition of two signals, GPIO3_18 and GPIO3_19 to the expansion bus header to provide two more signals for the PRU access..<br>5. Changed R210 to installed and added test point to allow the EEPROM to be programmed but with added protection to prevent corruption. Added Test Point to enable programming.<br>6. Moved Resistors R189 and R150 to provide more clearance around mounting hole.<br>7. PCB revision was changed to C2.<br>8. Change pullups on the boot pins to 42.2K per AM335x design team.<br>9. Rewired the JTAG reset signal from the optional JTAG connector.<br>10. R122 was removed because it was connectd to the wrong pin on the SMSC LAN8710.<br>11. R172 was removed due to a spurious reset generated by the FT2232 when under CCS, the target was connected. | 5/10/2012  | GC |
| A6A | 1. Corrected typo on page 8 for correct pin on LAN8710A for MODE2 function.   | 6/28/2012  | GC |

| PAGE NO. | SCHEMATIC PAGE                |
|----------|-------------------------------|
| 1        | COVER PAGE                    |
| 2        | POWER MANAGEMENT              |
| 3        | PROCESSOR 1 OF 3              |
| 4        | PROCESSOR 2 OF 3              |
| 5        | PROCESSOR 3 OF 3              |
| 6        | LED, CONFIGURATION AND BUTTON |
| 7        | MEMORY                        |
| 8        | ETHERNET AND USB HOST         |
| 9        | USB CONCENTRATOR              |
| 10       | SERIAL AND JTAG               |
| 11       | EXP CONN, uSD, AND LDO        |

NOTE: PCB Revision for this board is Rev C2.

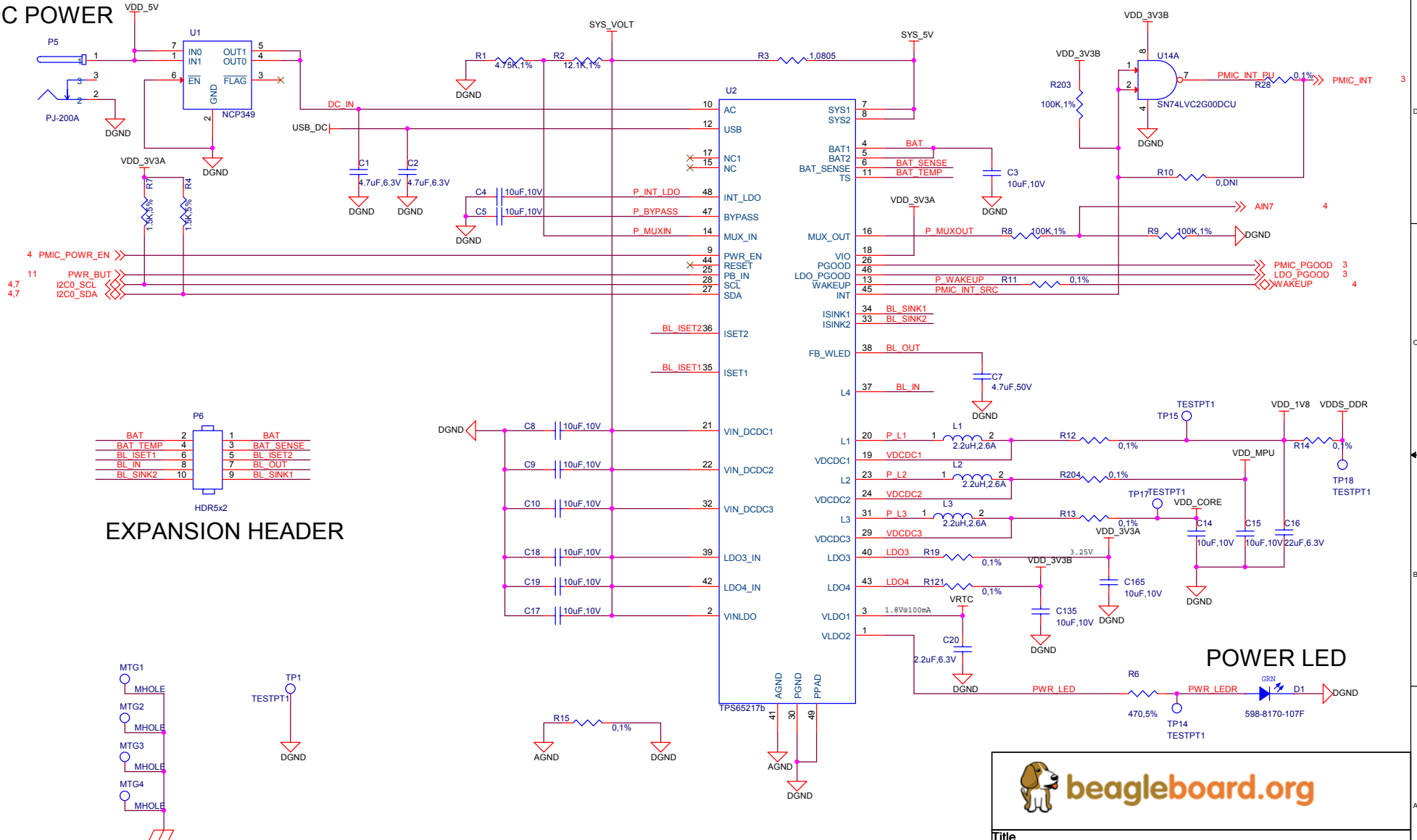
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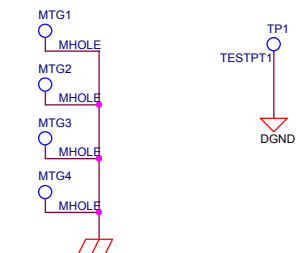
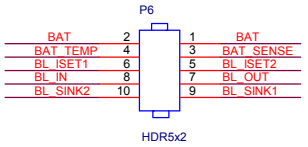

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|-------|-------------------------|-----------------------|---------|
| Title |                         | BeagleBone Cover Page |         |
| Size  | Document Number         | Rev                   |         |
| B     | 450-5500-001            | A6A                   |         |
| Date: | Thursday, June 28, 2012 | Sheet                 | 1 of 11 |

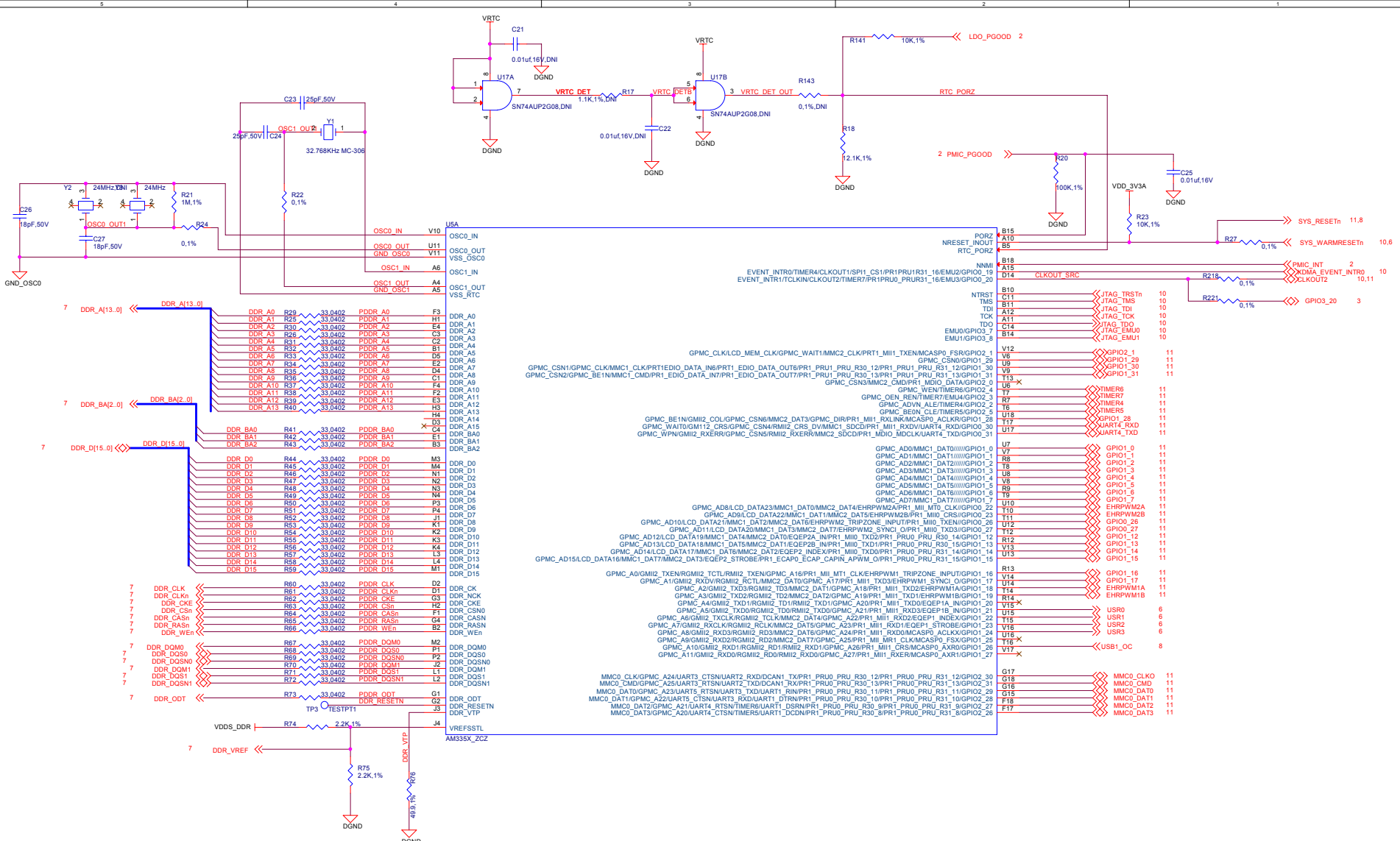

# 5V DC POWER



## EXPANSION HEADER

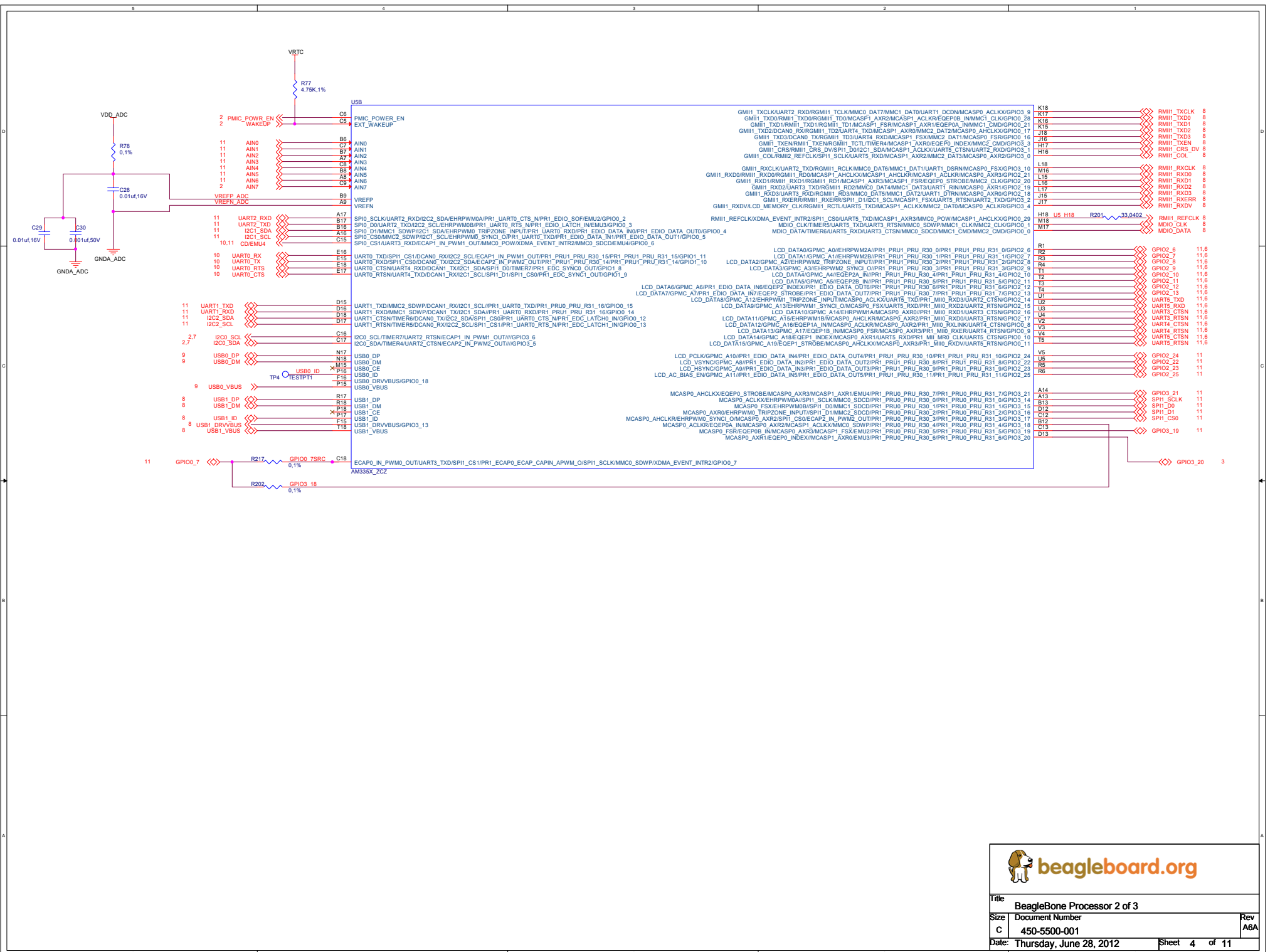


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| Title                       |                         |               |
| BeagleBone Power Management |                         |               |
| Size                        | Document Number         | Rev           |
| B                           | 450-5500-001            | A6A           |
| Date:                       | Thursday, June 28, 2012 | Sheet 2 of 11 |

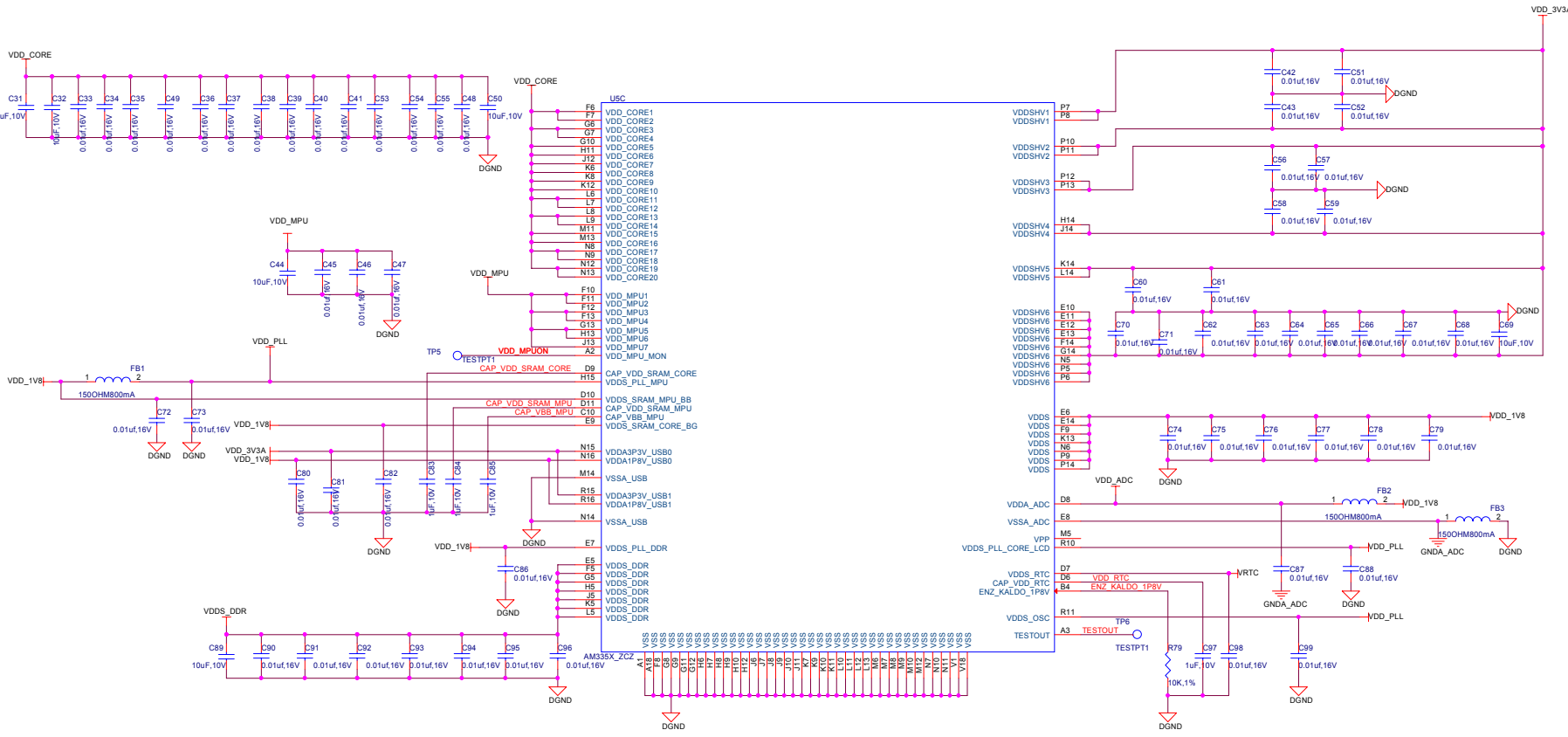



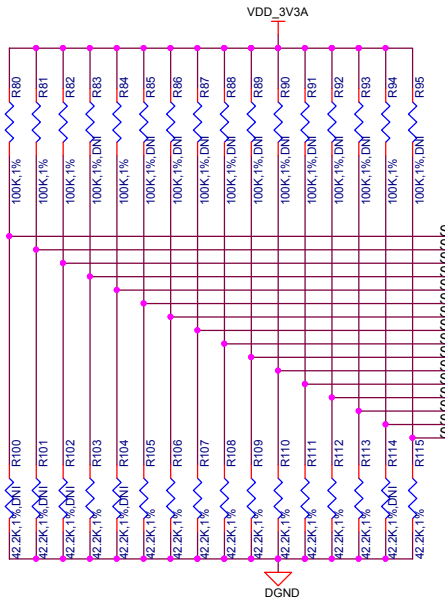
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| Title |                         | BeagleBone Processor 1 of 3 |
| Size  |                         | Document Number             |
| C     | 450-5500-001            | Rev AGA                     |
| Date: | Thursday, June 28, 2012 | Sheet 3 of 11               |



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|-------|-------------------------|-------|-----------------------------|
| Title |                         |       | BeagleBone Processor 2 of 3 |
| Size  |                         |       | Document Number             |
| C     | 450-5500-001            | Rev   | AGA                         |
| Date: | Thursday, June 28, 2012 | Sheet | 4 of 11                     |

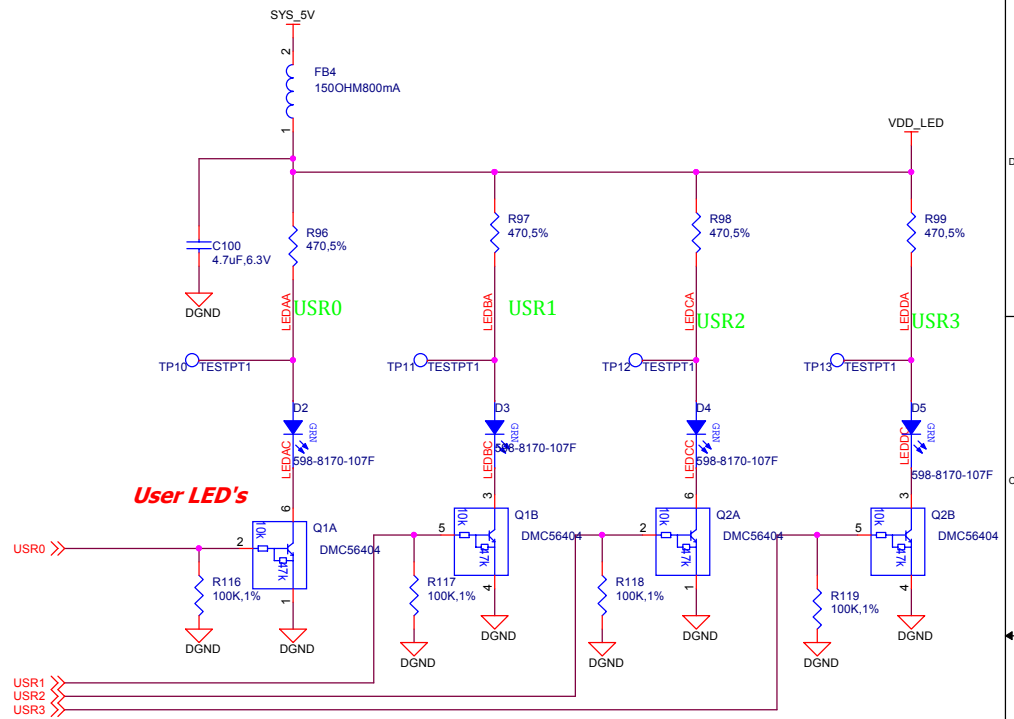




|            |            |      |
|------------|------------|------|
| SYS_BOOT0  | GPIO2_6    | 11,4 |
| SYS_BOOT1  | GPIO2_7    | 11,4 |
| SYS_BOOT2  | GPIO2_8    | 11,4 |
| SYS_BOOT3  | GPIO2_9    | 11,4 |
| SYS_BOOT4  | GPIO2_10   | 11,4 |
| SYS_BOOT5  | GPIO2_11   | 11,4 |
| SYS_BOOT6  | GPIO2_12   | 11,4 |
| SYS_BOOT7  | GPIO2_13   | 11,4 |
| SYS_BOOT8  | UART5_TXD  | 11,4 |
| SYS_BOOT9  | UART5_RXD  | 11,4 |
| SYS_BOOT10 | UART3_CTSN | 11,4 |
| SYS_BOOT11 | UART3_RTSN | 11,4 |
| SYS_BOOT12 | UART4_CTSN | 11,4 |
| SYS_BOOT13 | UART4_RTSN | 11,4 |
| SYS_BOOT14 | UART5_CTSN | 11,4 |
| SYS_BOOT15 | UART5_RTSN | 11,4 |

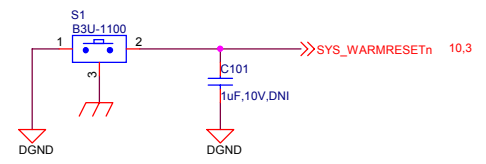
**Boot Configuration**

BOOT ORDER....MMC....SPI....UART ....USB.....24MHZ

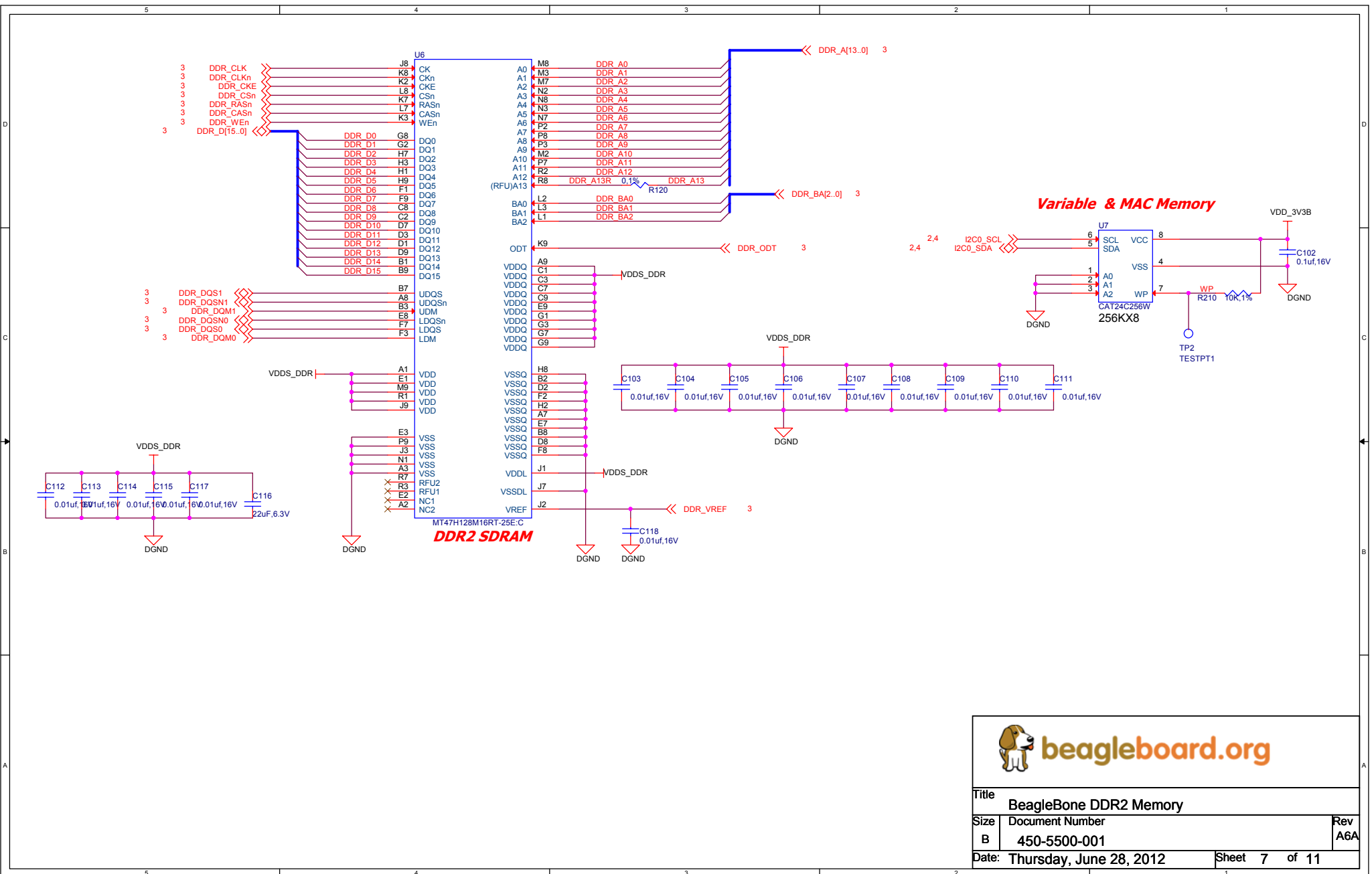



**User LED's**

**RESET BUTTON**

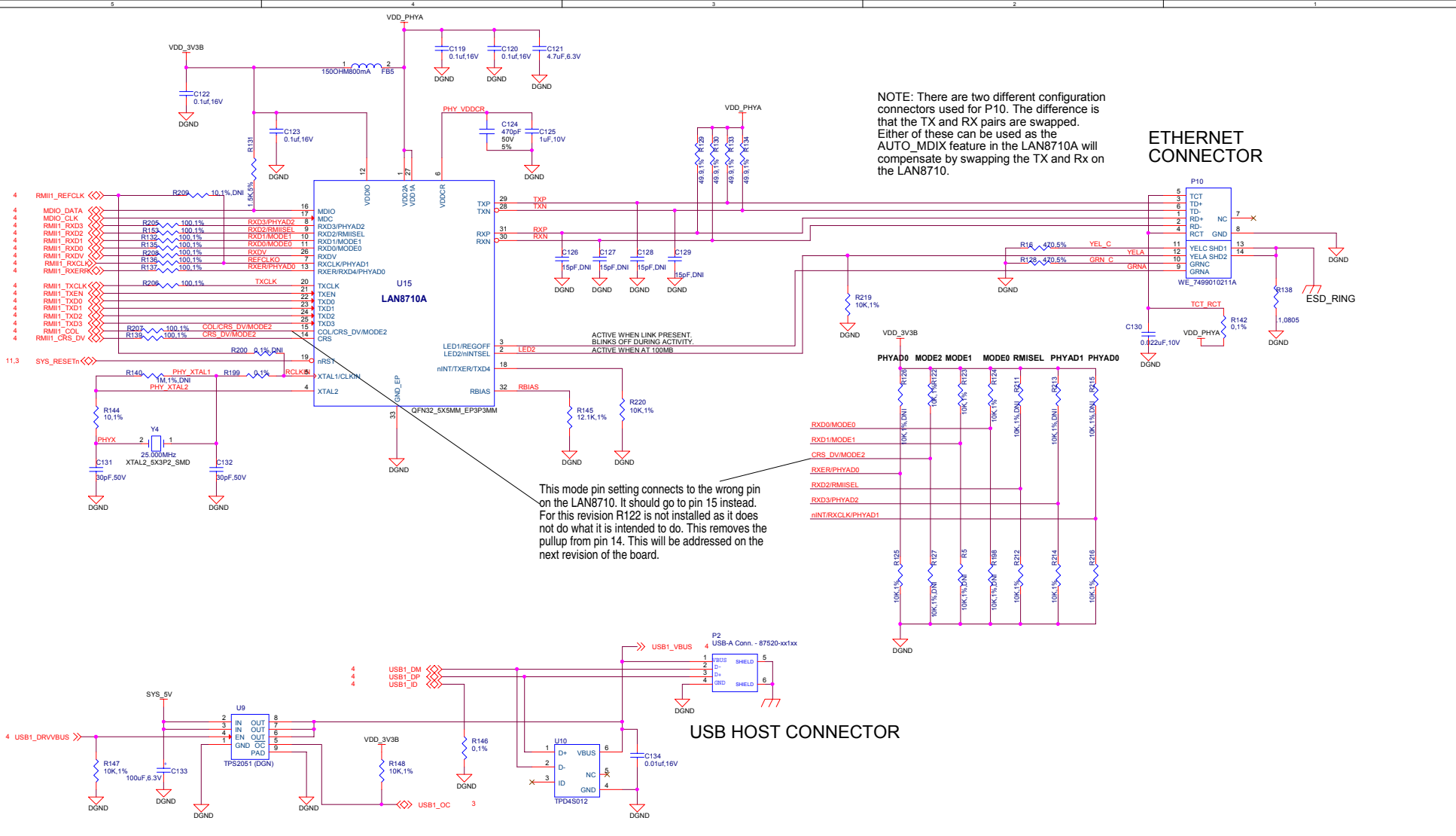


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| Title                                   |                         |               |
| BeagleBone LED, Configuration and Reset |                         |               |
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| B                                       | 450-5500-001            | A6A           |
| Date:                                   | Thursday, June 28, 2012 | Sheet 6 of 11 |

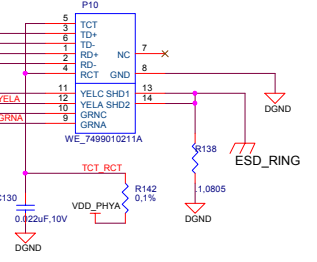
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|-------|-------------------------|------------------------|
| Title |                         | BeagleBone DDR2 Memory |
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| B     | 450-5500-001            | A6A                    |
| Date: | Thursday, June 28, 2012 | Sheet 7 of 11          |



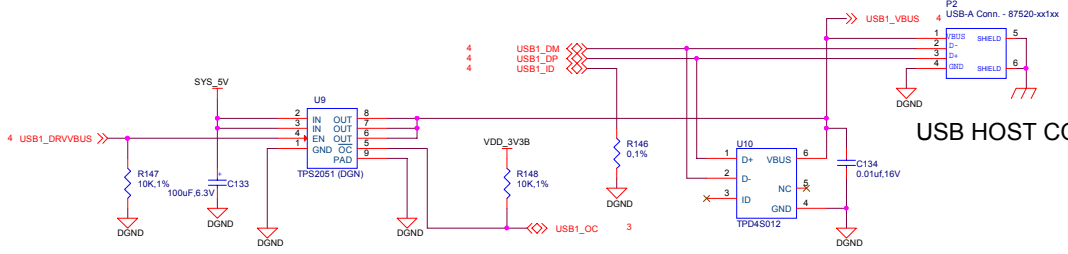
NOTE: There are two different configuration connectors used for P10. The difference is that the TX and RX pairs are swapped. Either of these can be used as the AUTO\_MDIX feature in the LAN8710A will compensate by swapping the TX and Rx on the LAN8710.

### ETHERNET CONNECTOR

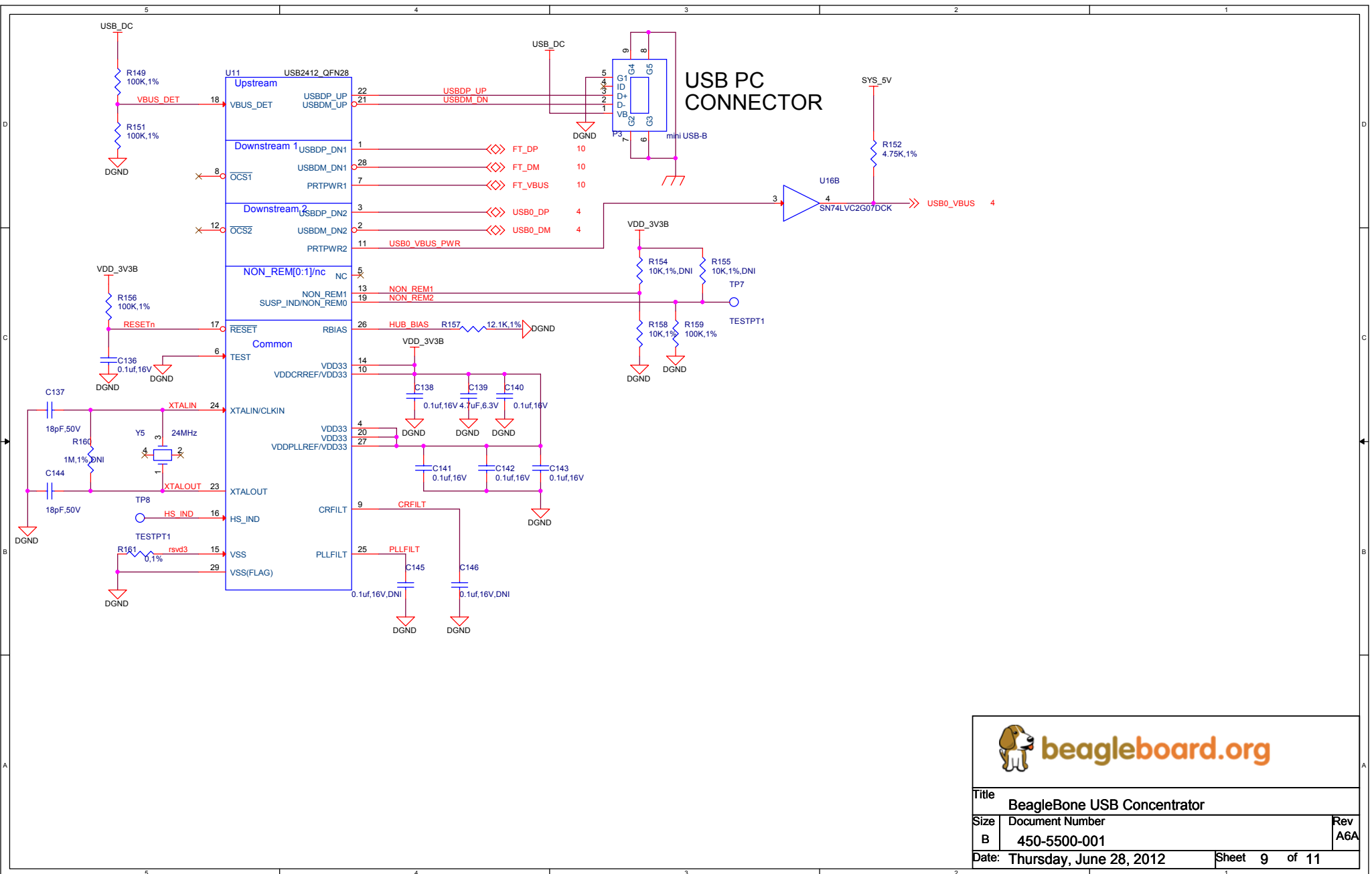


This mode pin setting connects to the wrong pin on the LAN8710. It should go to pin 15 instead. For this revision R122 is not installed as it does not do what it is intended to do. This removes the pullup from pin 14. This will be addressed on the next revision of the board.

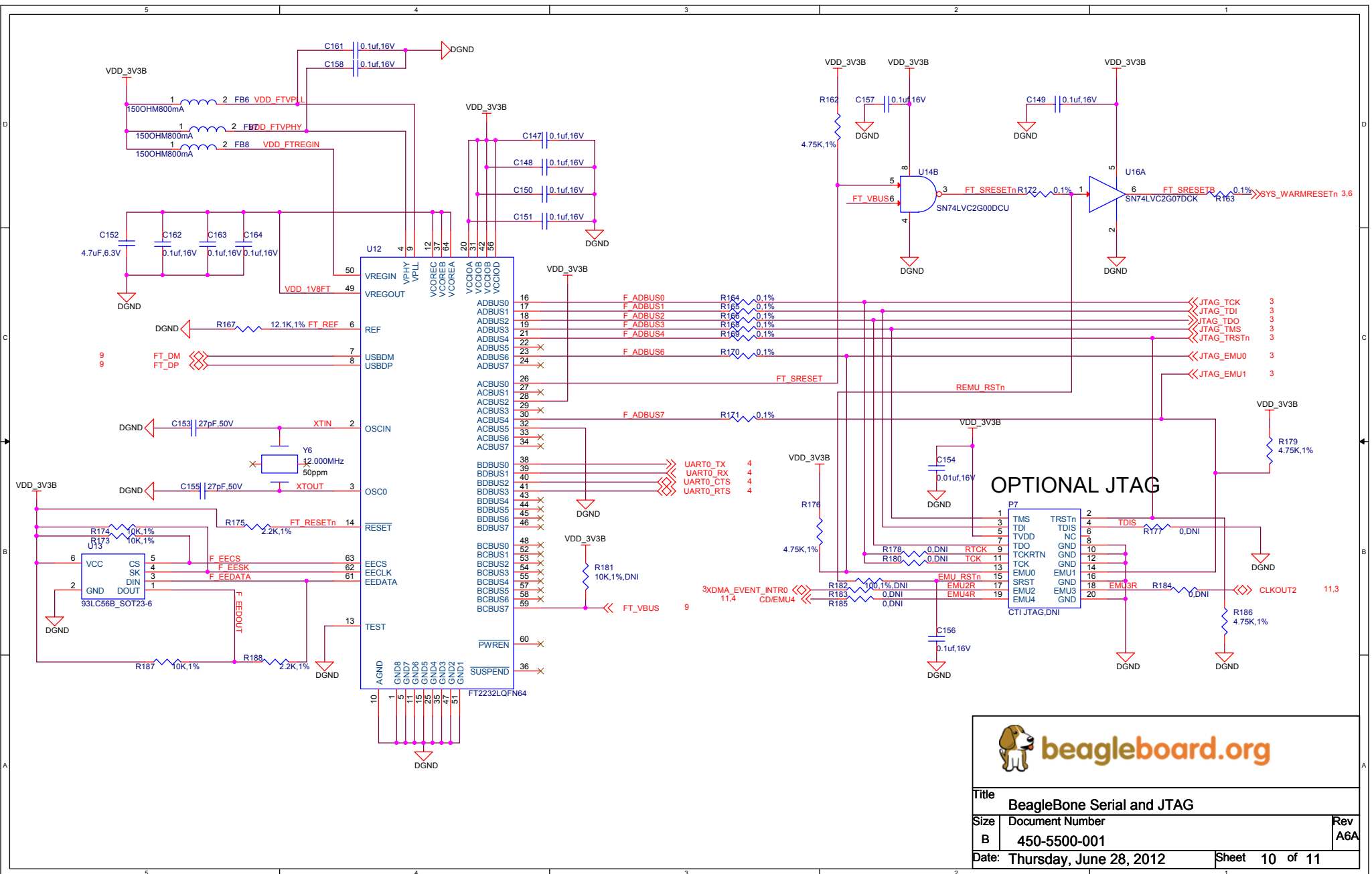
### USB HOST CONNECTOR



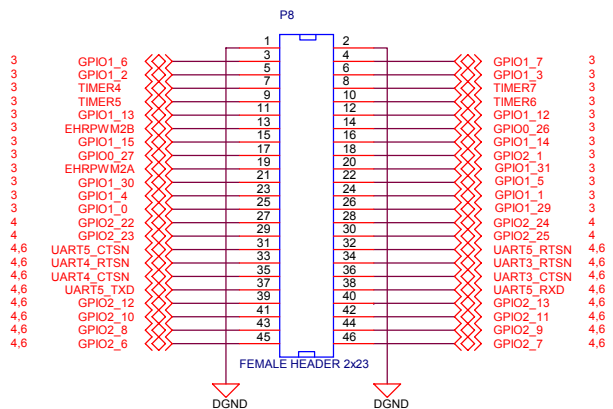




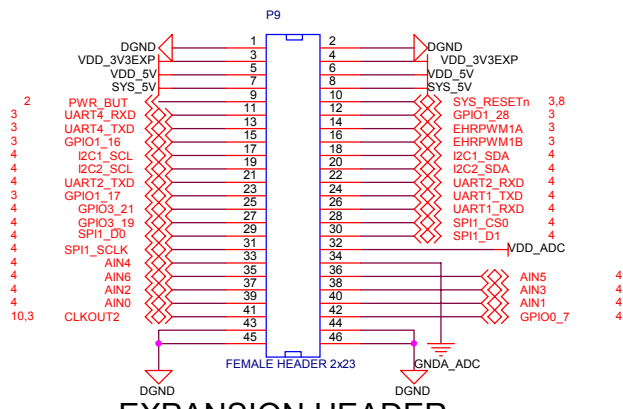
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| Title |                         | BeagleBone USB Concentrator |         |
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| B     | 450-5500-001            | A6A                         |         |
| Date: | Thursday, June 28, 2012 | Sheet                       | 9 of 11 |



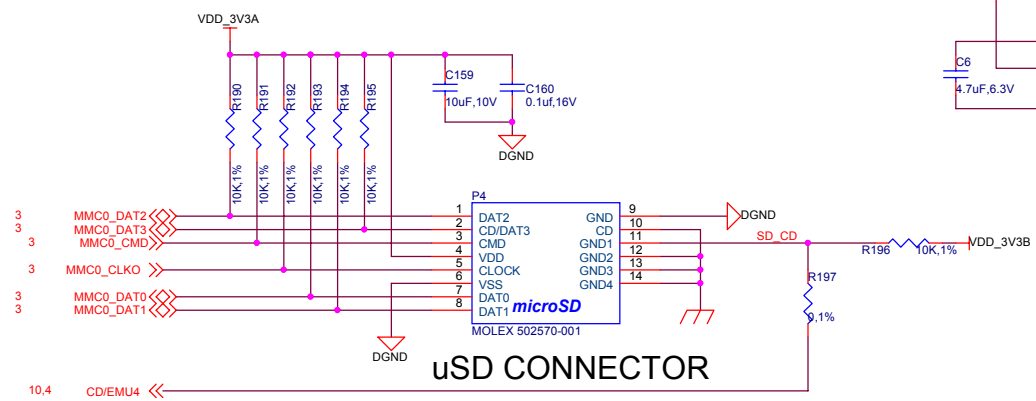
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| Title |                         | BeagleBone Serial and JTAG |          |
| Size  | Document Number         | Rev                        |          |
| B     | 450-5500-001            | A6A                        |          |
| Date: | Thursday, June 28, 2012 | Sheet                      | 10 of 11 |



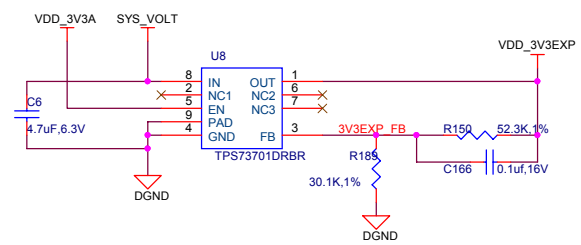
### EXPANSION HEADER



### EXPANSION HEADER



### uSD CONNECTOR



|  |                         |                |
|--|-------------------------|----------------|
| Title  |                         |                |
| BeagleBone Expansion Headers, SD/MMC and LDO |                         |                |
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| B  | 450-5500-001            | A6A            |
| Date:  | Thursday, June 28, 2012 | Sheet 11 of 11 |