

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. 2. Changed R76 from a 50 ohm to 49.9 ohm. Smaller package and lower cost. Changed footprint to 0402. 3. Changed C99 termination to DGND. 4. Added 10K pulldown to fix link speed LED. 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. 2. Removed the connection of the VPP to VDD_CORE as suggested by TI.	2/3/2012	GC
A6	1. Changed R219 to installed. 2. Added R220 , a 10K pulldown to pin 18 of the SMSC PHY to allow R219 addition to work as expected.. 3. Removed the connection to the VPP pin on the processor. 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. 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. 6. Moved Resistors R189 and R150 to provide more clearance around mounting hole. 7. PCB revision was changed to C2. 8. Change pullups on the boot pins to 42.2K per AM335x design team. 9. Rewired the JTAG reset signal from the optional JTAG connector. 10. R122 was removed because it was connected to the wrong pin on the SMSC LAN8710. 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.

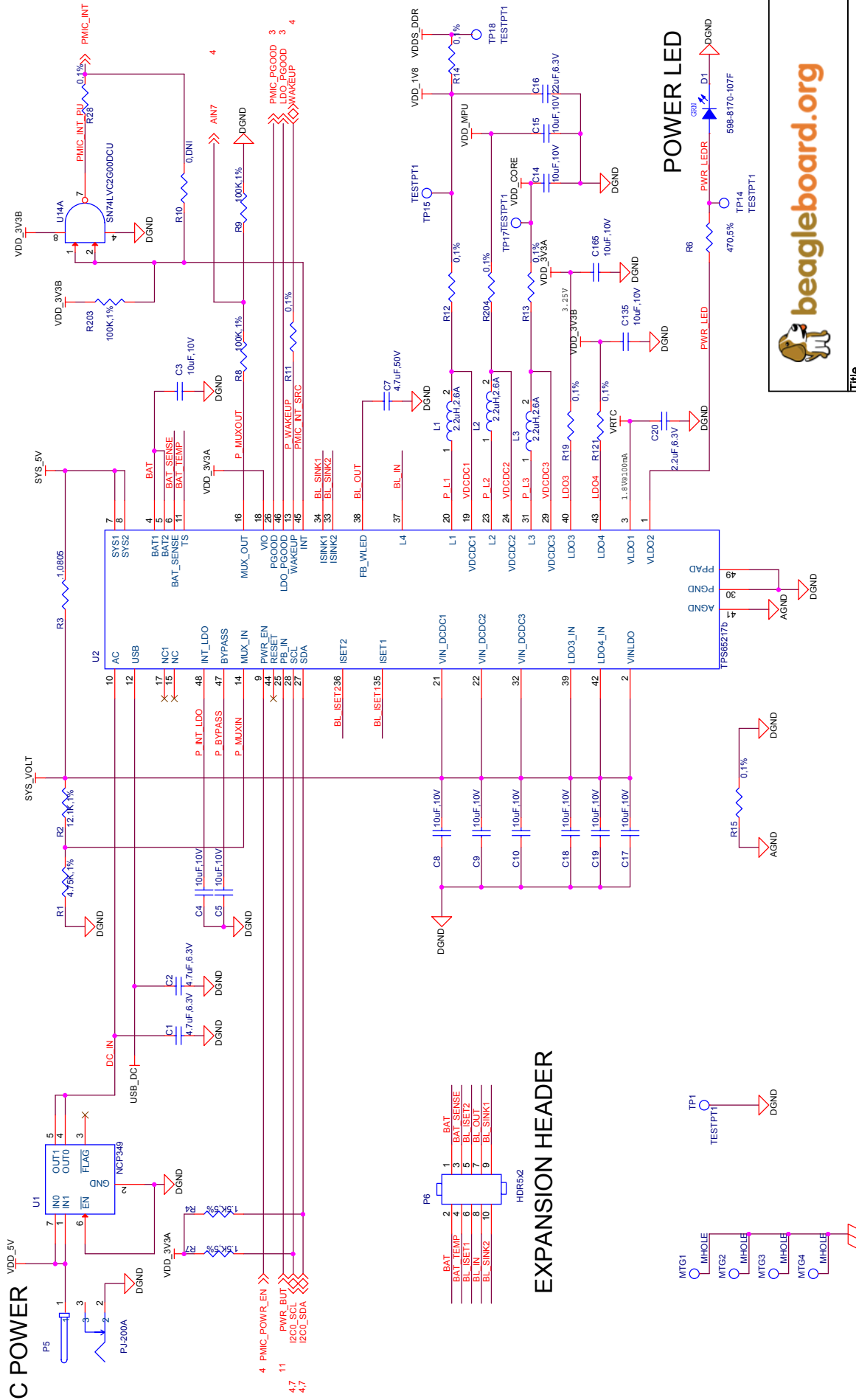


Title BeagleBone Cover Page		
Size B	Document Number 450-5500-001	Rev A6A
Date: Thursday, June 28, 2012	Sheet 1	of 11

This schematic is *NOT SUPPORTED* and DOES NOT constitute a reference design. Only "community" support is allowed via resources at BeagleBoard.org/discuss.

THERE IS NO WARRANTY FOR THIS DESIGN , TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE DESIGN "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE DESIGN IS WITH YOU. SHOULD THE DESIGN PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

5V DC POWER



Title		BeagleBone Power Management	
Size	B	Document Number	Rev AGA
Date:	Thursday, June 28, 2012		Sheet 2 of 11





beagleboard.org

Title BeagleBone Processor 2 of 3

Size Document Number

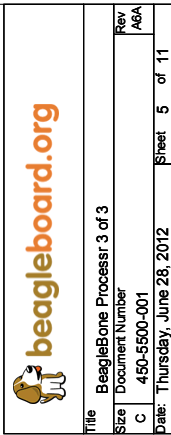
C 450-5500-001

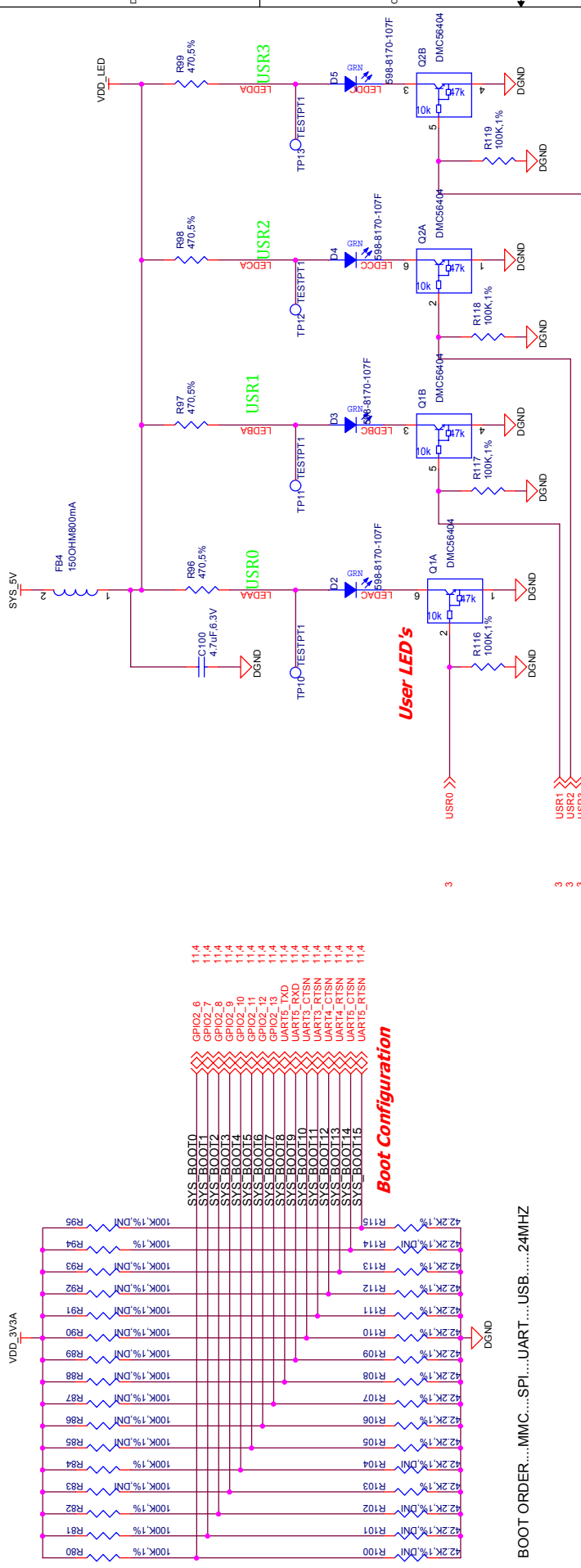
Date: Thursday, June 28, 2012

Sheet 4 of 11

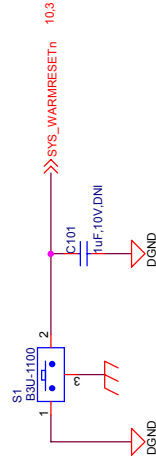
Rev

A6A





RESET BUTTON

 beagleboard.org

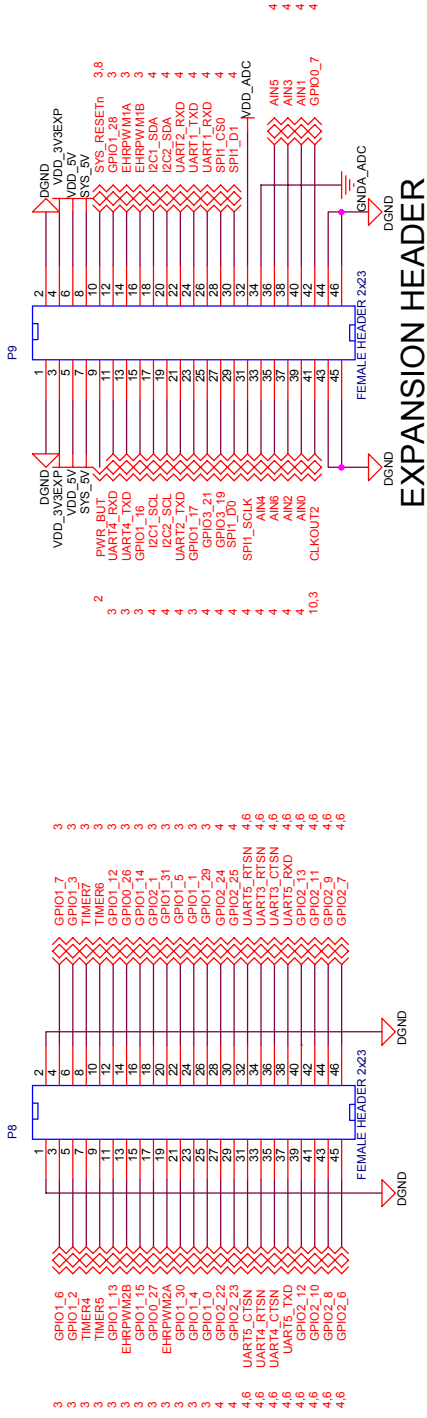
Title		BeagleBone LED, Configuration and Reset	
Size	B	Document Number	Rev
		450-5500-001	AGA
Date:	Thursday, June 28, 2012		Sheet 6 of 11



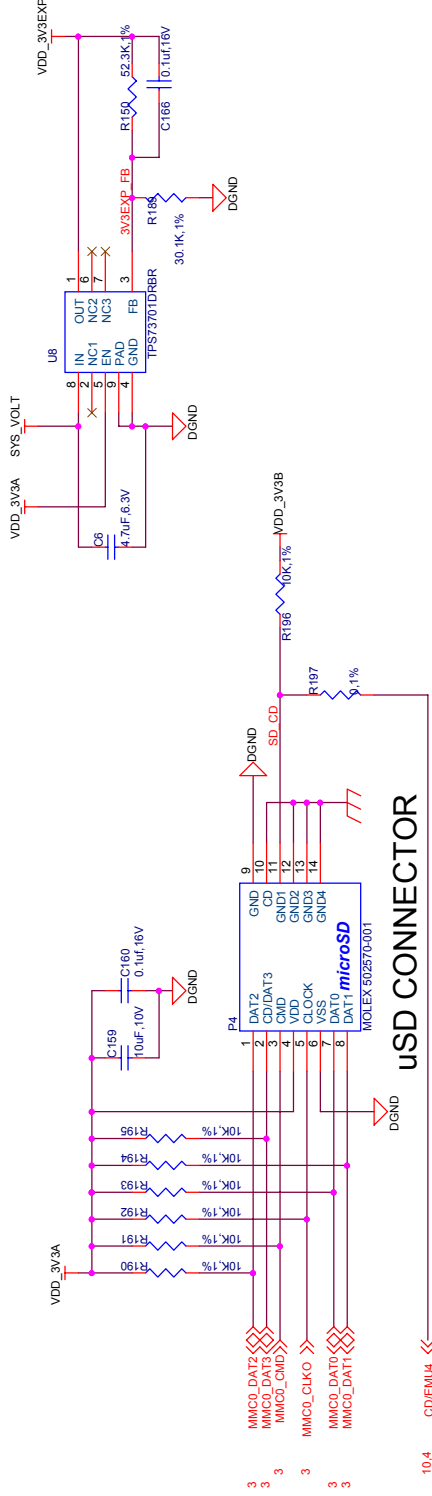
NOTE: There are two different configurations of connectors used for P10. The difference is that the TX and RX pairs are swapped. Either of these can be used as the LAN8710A MDIX feature in the LAN8710A will compensate by swapping the TX and RX on the LAN8710.

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



EXPANSION HEADER



uSD CONNECTOR



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