

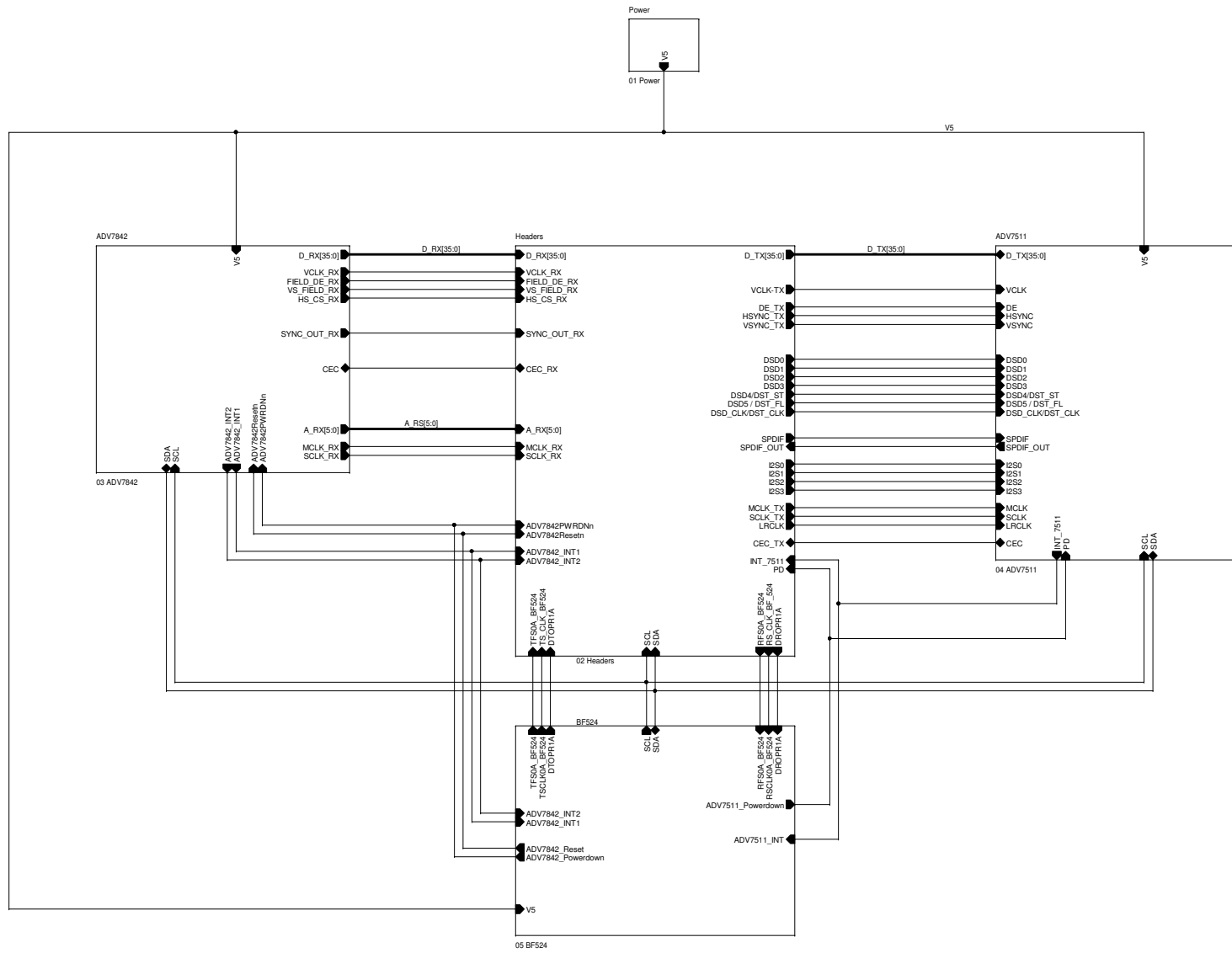
Advantiv (TM) EVAL-ADV7842-7511 Video Evaluation Board

Change Log

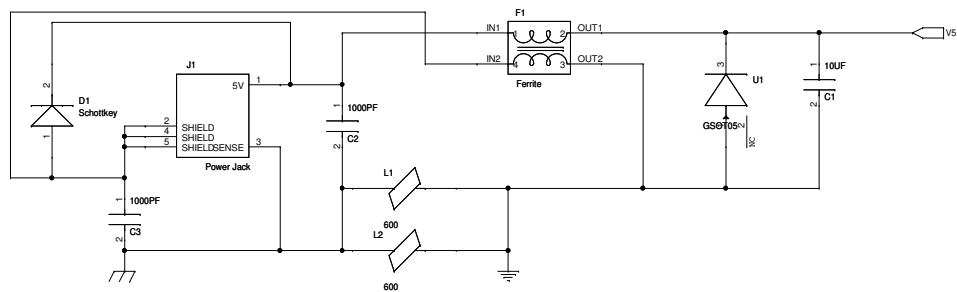
| Revision | Date | Description | Author |
|----------|-----------|---|--------|
| 0.1 | 3/26/2010 | Initial Drawings Completed | DD |
| | 4/2/2010 | BF524 Package changed to 208 pin, F5 connected to 3.3V, pushbutton1_hwait renamed to uart1cts, typo in part name ADM13305 fixed (was ADM13395), AND gate removed and reset switch directly connected to ADM13395, Jumper removed that allowed USB 5V connection to power the board since it doesn't seem possible due to the power needs of the 7842, fixed inverted boot mode, changed HEAC termination to pull up instead of down, Enables for regulators of power for 7842 setup to 3.3 enables 2.5 which enables 1.8, R104 made DNP, R106 changed to 2k | |
| | 4/6/2010 | BF524 Boot Mode pins fixed and reordered properly to get default 0011 boot mode for SPI Boot. Added recommended LC filter to all ADV7511 supplies and separated out PLVDD for it's own filter. Added layout notes for USB diff pair and for proximity of SDRAM and JTAG ports for BF524 | |
| | 4/28/2010 | Removed extra bypass caps on PVDD on ADV7511. PVdd and AVdd power nets for 7511 and 7842 renamed to specify which chip they are for. Bypassing added for Vddint on BF524. All 0.1UF caps changed from 0603 to 0402. | |
| | 5/3/2010 | Unused EBIU signals (non SDRAM ones) floated or tied off and RA23 removes as a result. EBIU address bus A17-A19 also no connected to remove RA22. | |
| | 5/4/2010 | Unused address signals A11, A14-A16 floated. SA10 moved to last net of rpack (swapped with SWE), RA21 changed to 4 resistor part | |
| | 5/7/2010 | Rewired rpack terminations for SDRAM interface on 7842 | |
| 1.0 | 8/12/2010 | Swapped labels for D2/D3, Connected DDC_5V on 7511 to V5, corrected footprint for Y2, R192 & R193 changed to 1k, C73 and C74 changed from 47pf to 27pf, Pr and Pb swapped on J9 to match with connector, R53 changed to 24 from 75, C9 pin 1 moved directly to J9 pin 4 | DD |
| 1.1 | 11/1/2010 | No schematic changes-- only silkscreen changes for layout | DD |
| 1.2 | 1/5/2011 | PR renamed to PR_IN, PB renamed to PB_IN. This is to fix error where Pr = PR and Pb = PB in the layout and they were shorted causing component video not to work properly | DD |

Open Issues

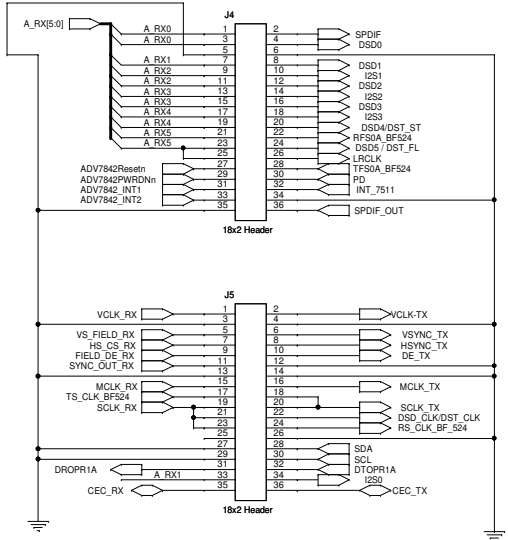
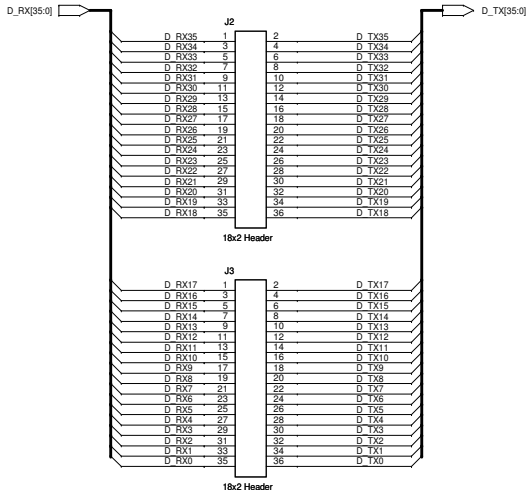
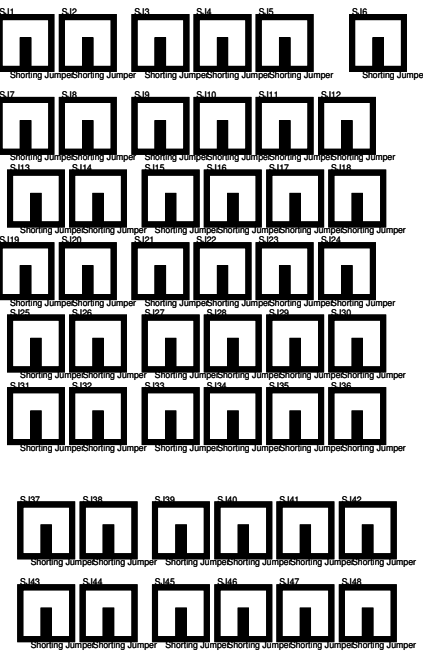
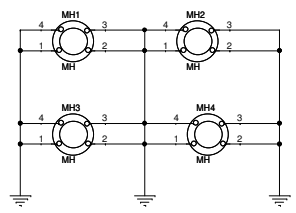
| |
|--|
| |
| |
| |

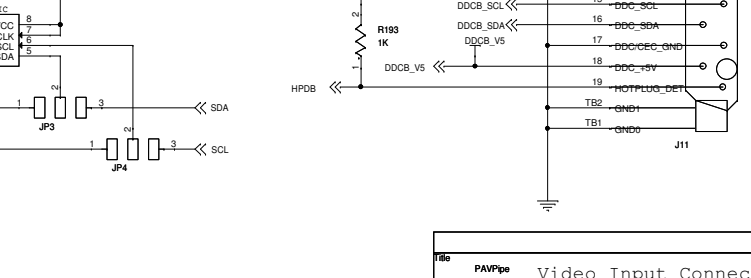
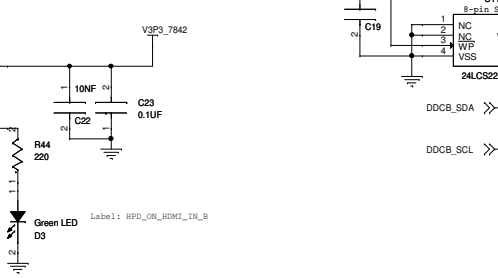
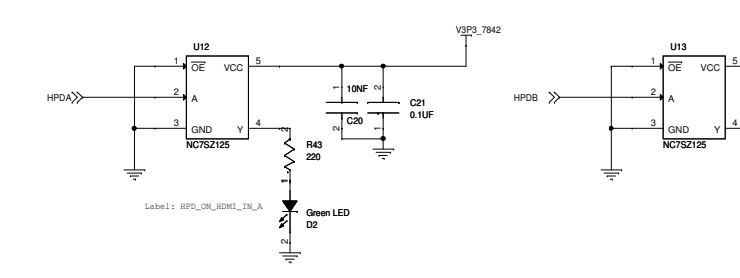
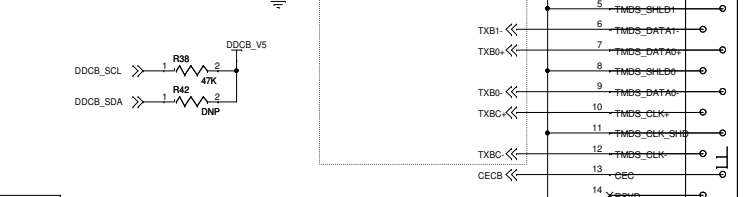
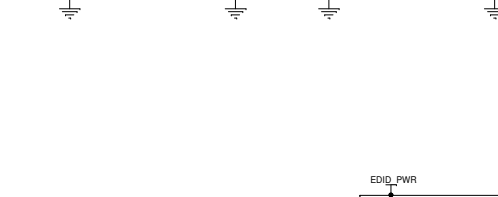
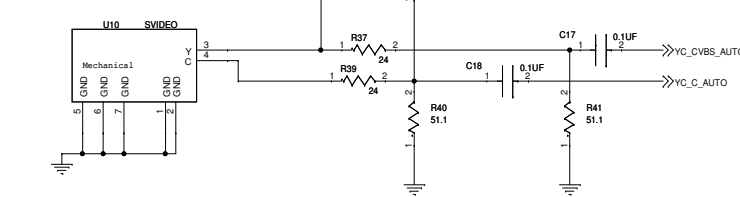
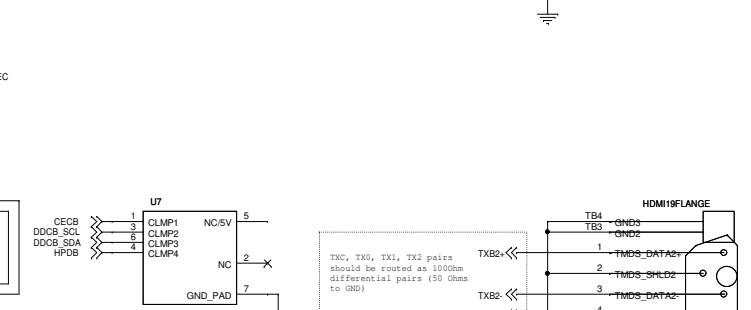
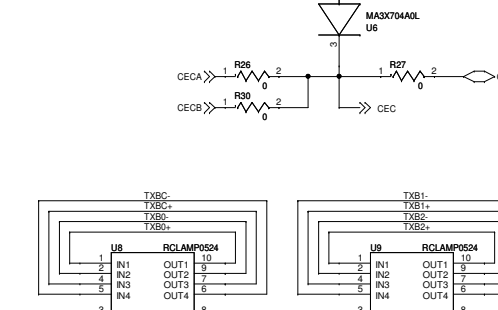
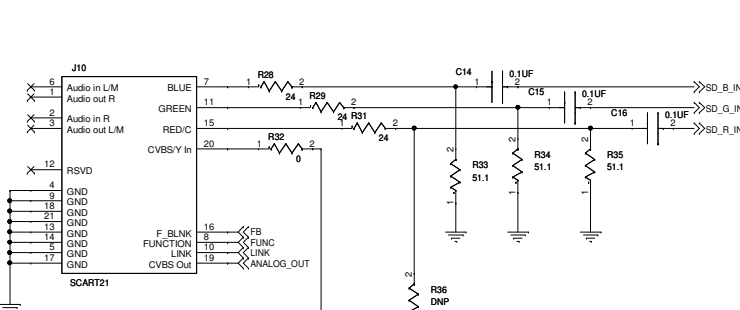
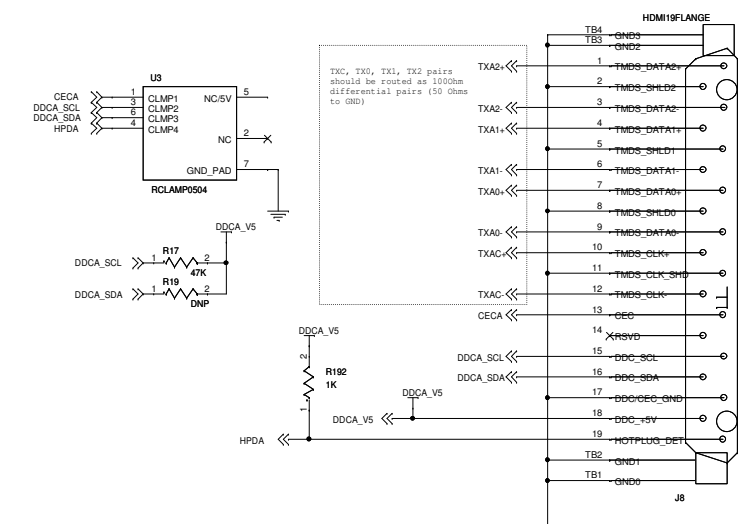
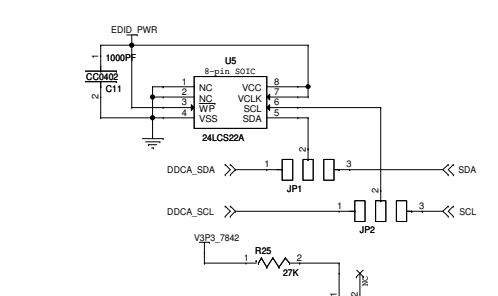
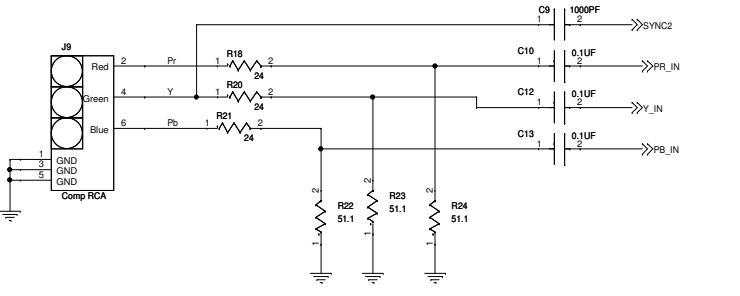
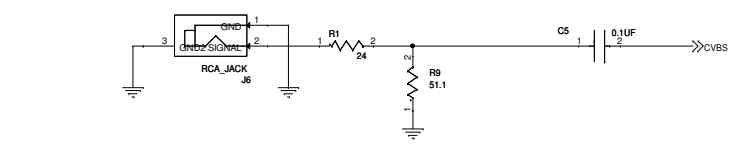
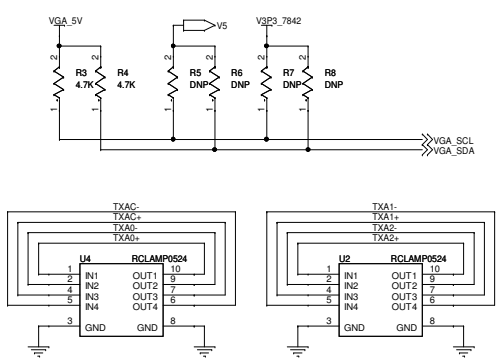
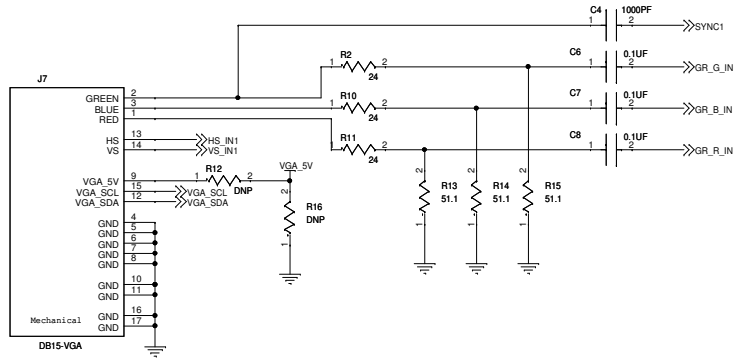


| | | | |
|-------|-------------------------|-----------------------|---------|
| Title | | PAVPipe Block Diagram | |
| Size | Document Number | Rev 1 | |
| C | <Doc> | | |
| Date: | Monday, August 16, 2010 | Sheet | 2 of 12 |

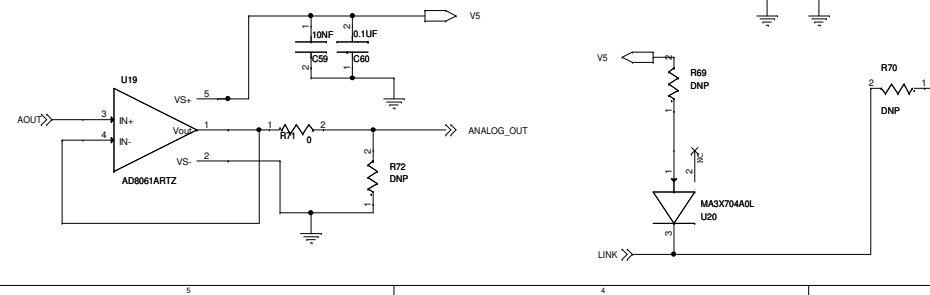
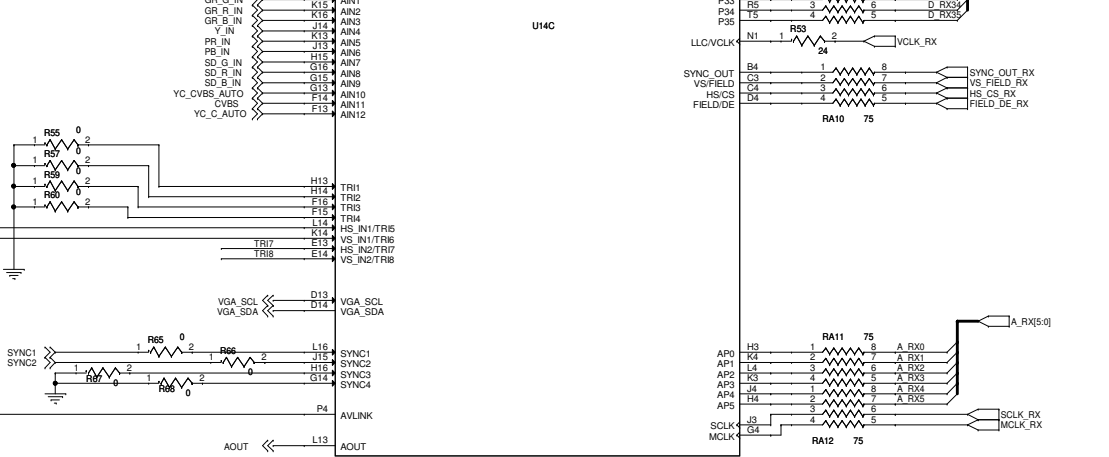
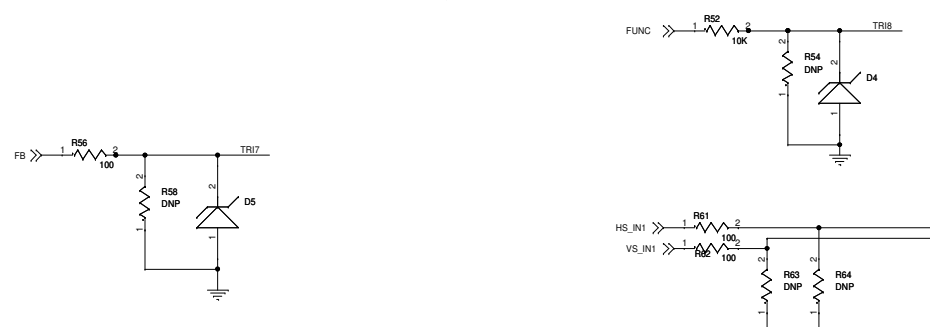
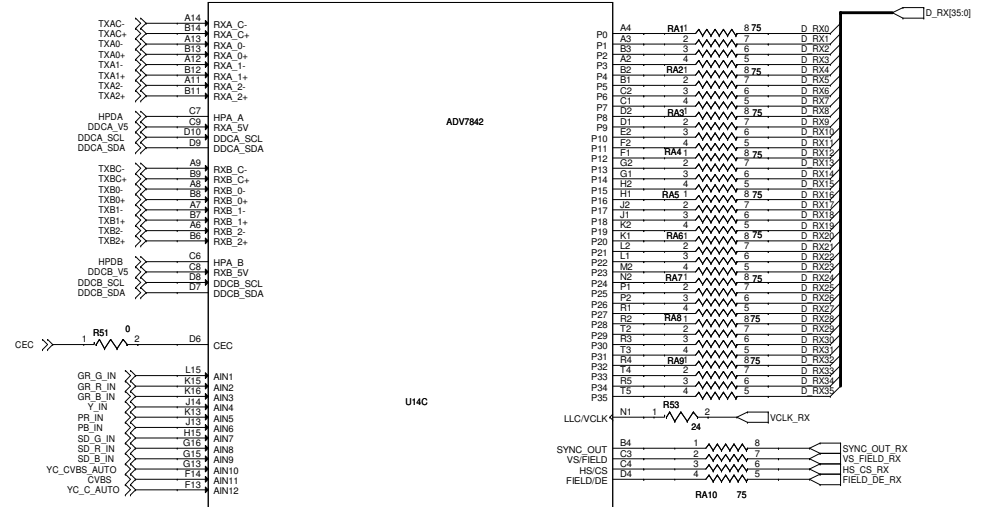
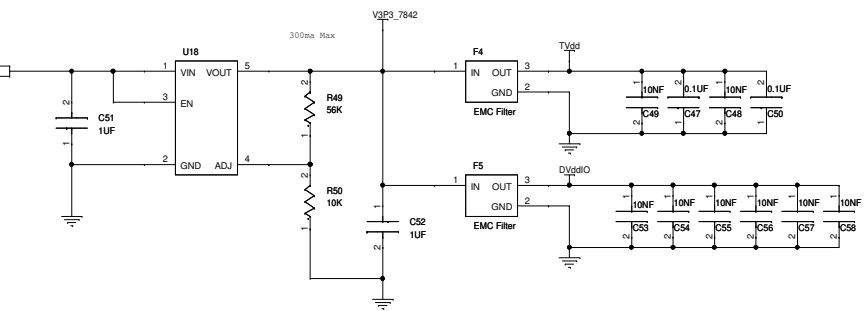
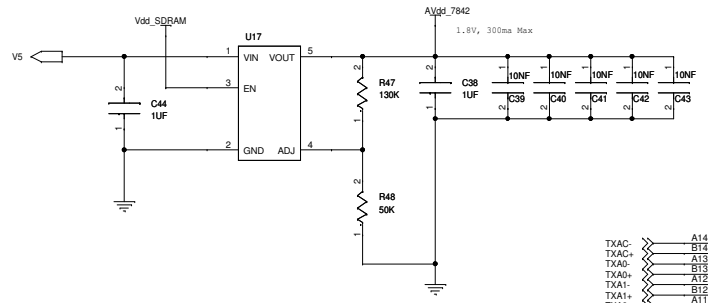
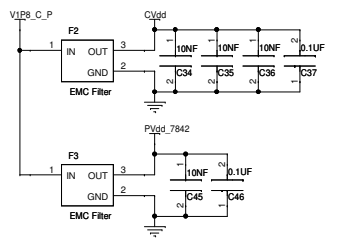
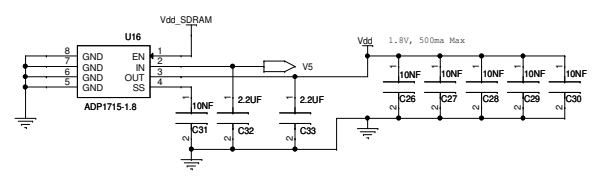
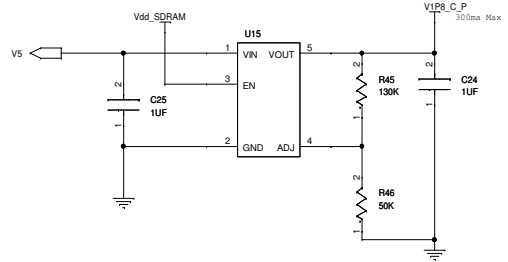
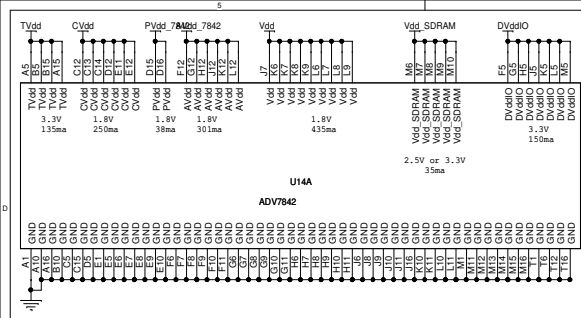


| | | | |
|-------|-------------------------|---------------|---------|
| Title | | PAVPipe Power | |
| Size | Document Number | Rev | |
| C | <Doc> | 1 | |
| Date: | Monday, August 16, 2010 | Sheet | 3 of 12 |

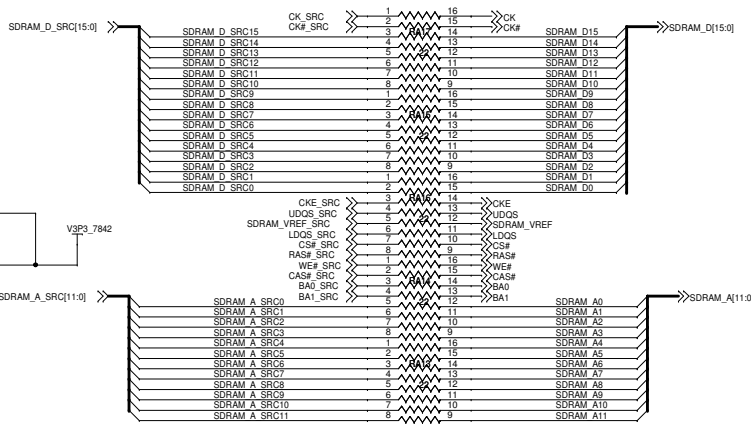
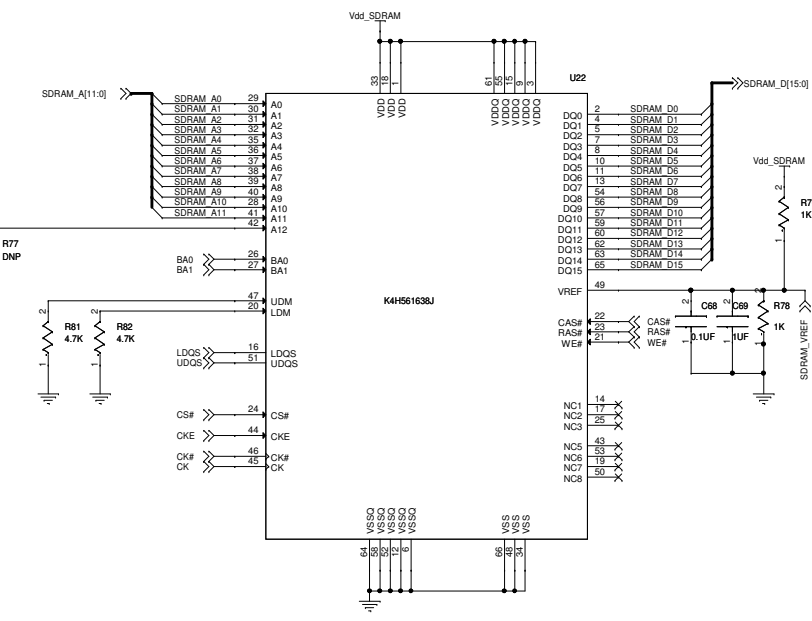
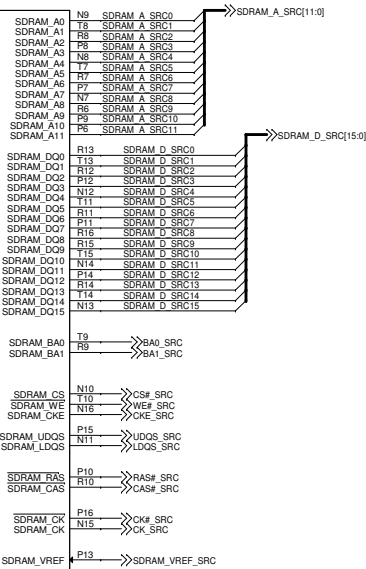
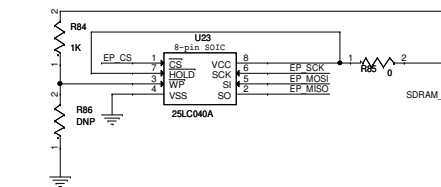
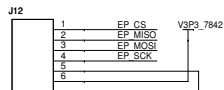
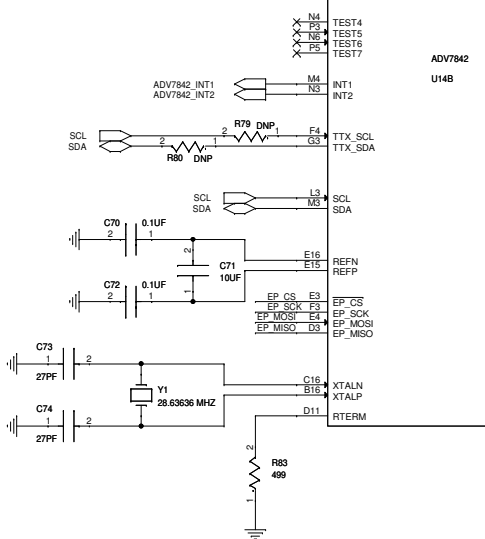
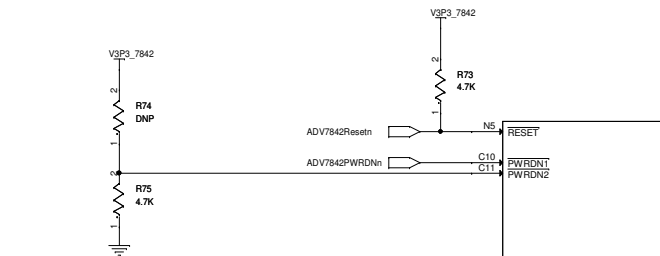
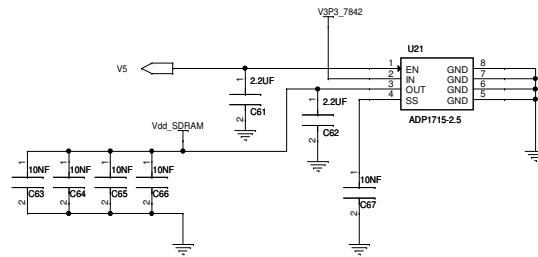
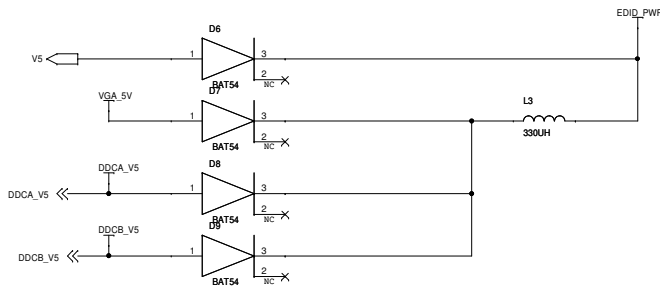




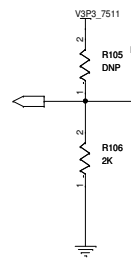
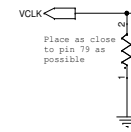
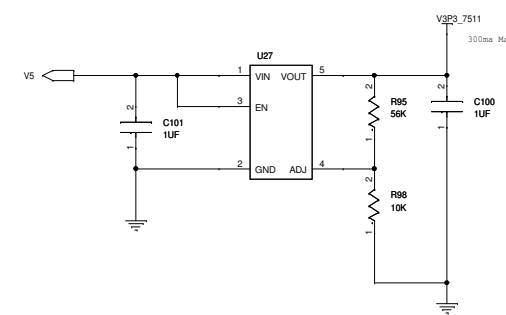
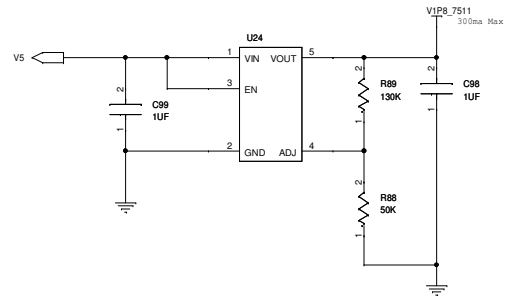
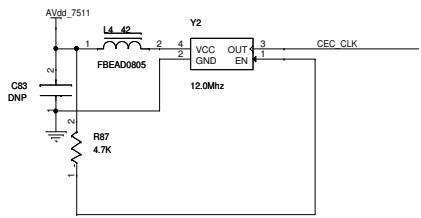
| | | |
|-------|-----------------------------|------------------------|
| Title | PAVPipe | Video Input Connectors |
| Size | C | Document Number <Doc> |
| Date | Wednesday, January 05, 2011 | Sheet 5 of 12 |



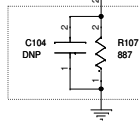
| | | | |
|-------|-----------------------------|-----------------|---------|
| Title | | PAVPipe ADV7842 | |
| Size | Document Number | | Rev |
| C | <Doc> | | 1 |
| Date: | Wednesday, January 05, 2011 | Sheet | 6 of 12 |



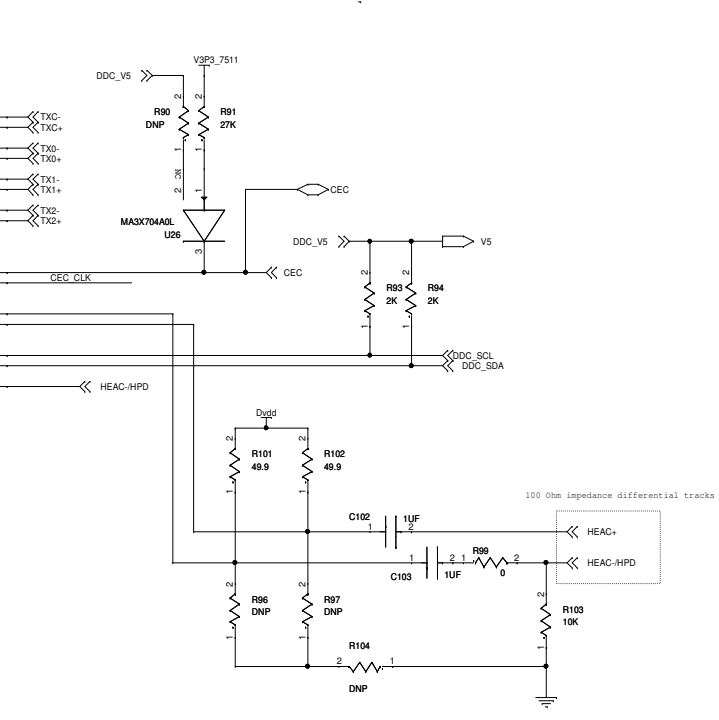
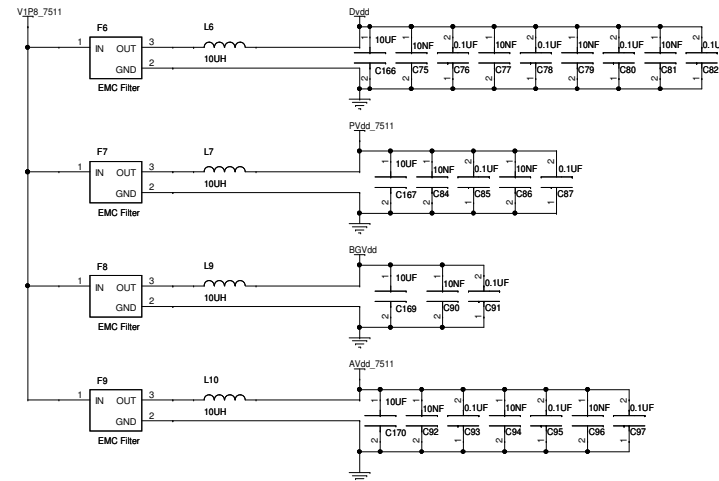
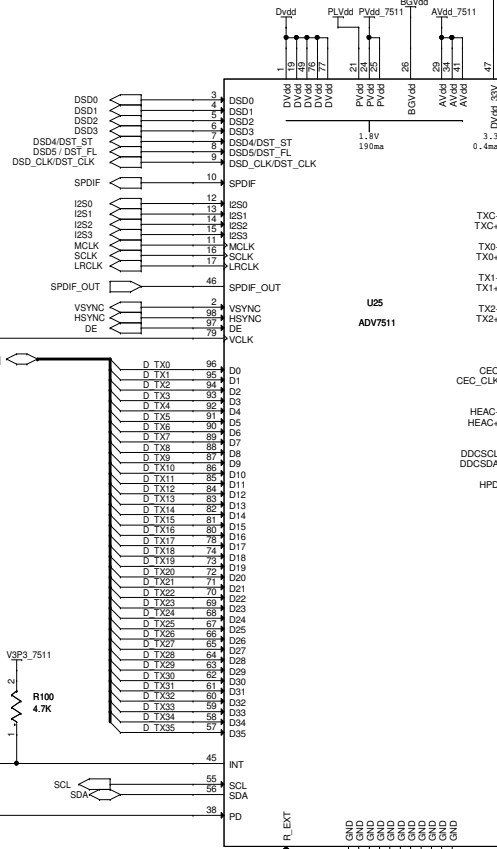
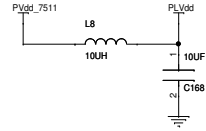
| | | |
|-------|-------------------------|---------------|
| Title | <Title> | ADV7842 SDRAM |
| Size | Document Number | <RevC> |
| C | <Doc> | <Doc> |
| Date | Monday, August 16, 2010 | Sheet 7 of 12 |



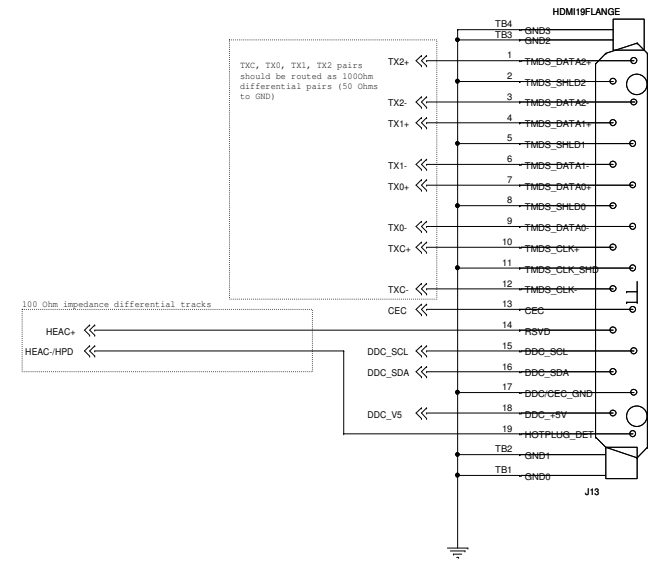
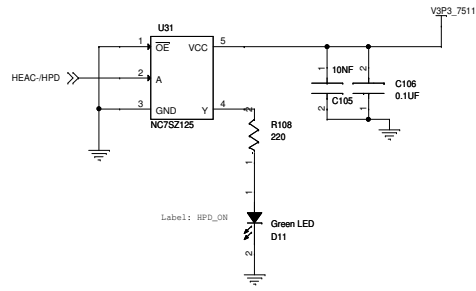
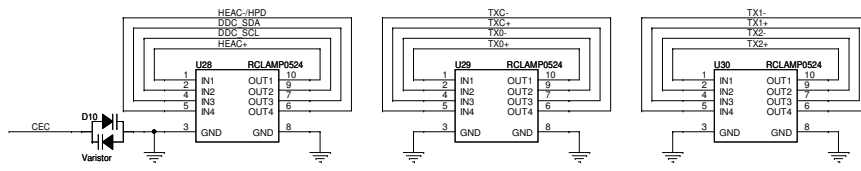
Place as close to pin on bottom of PCB and far from LRCLK, SCLK, or WCLK



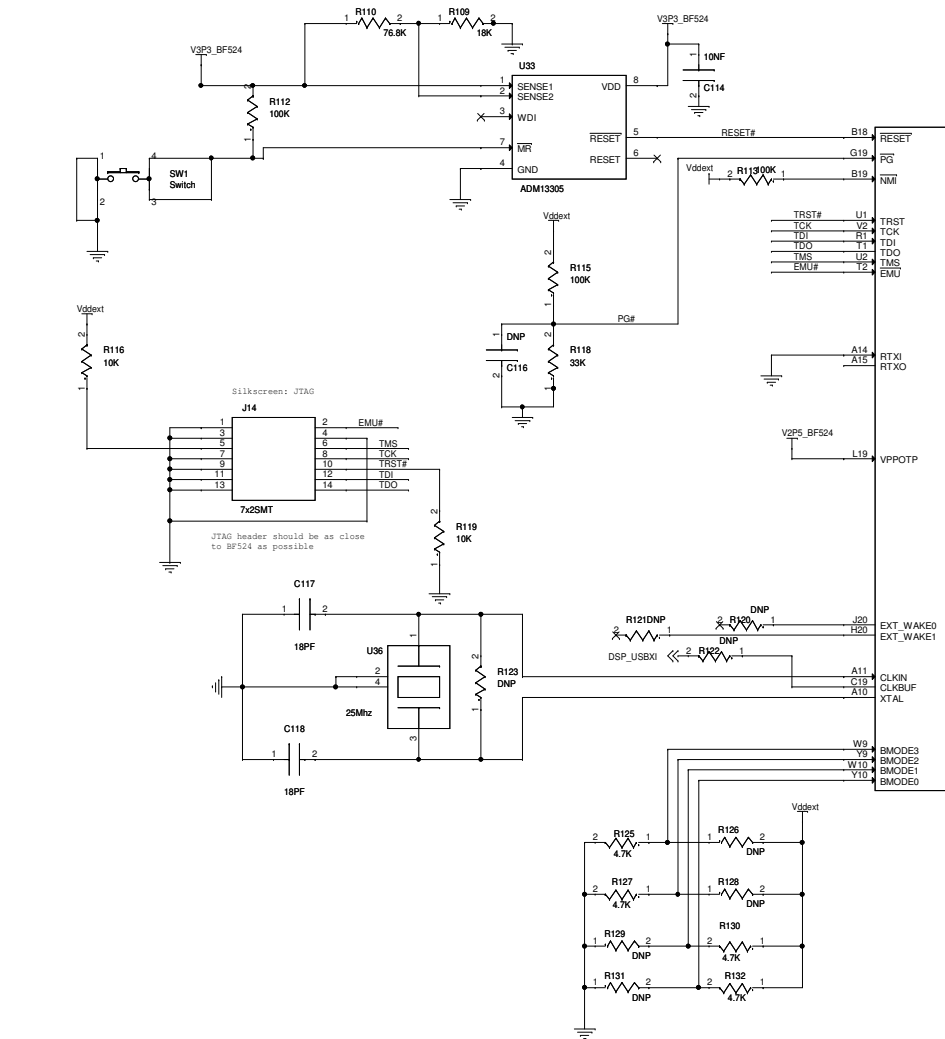
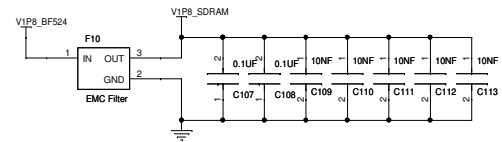
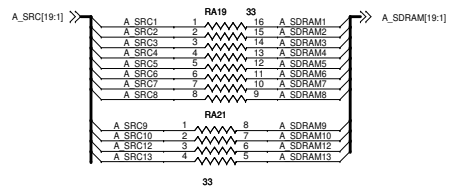
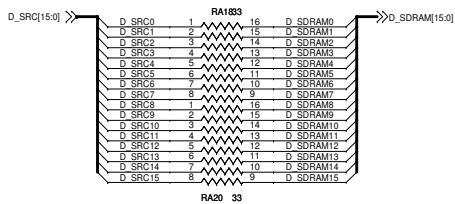
Bypass caps should be near their respective power pins



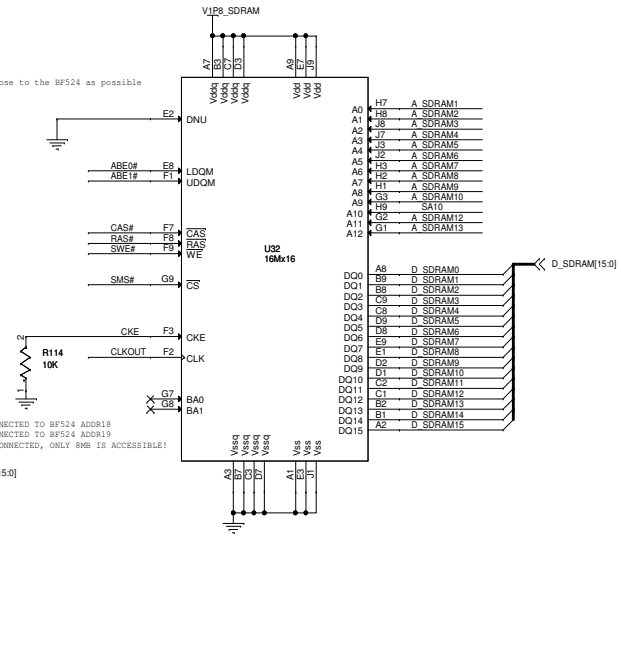
| | | |
|-------|-------------------------|-----------------------|
| Title | PAVPipe | ADV7511 |
| Size | C | Document Number <Doc> |
| Date: | Monday, August 16, 2010 | Sheet 8 of 12 |

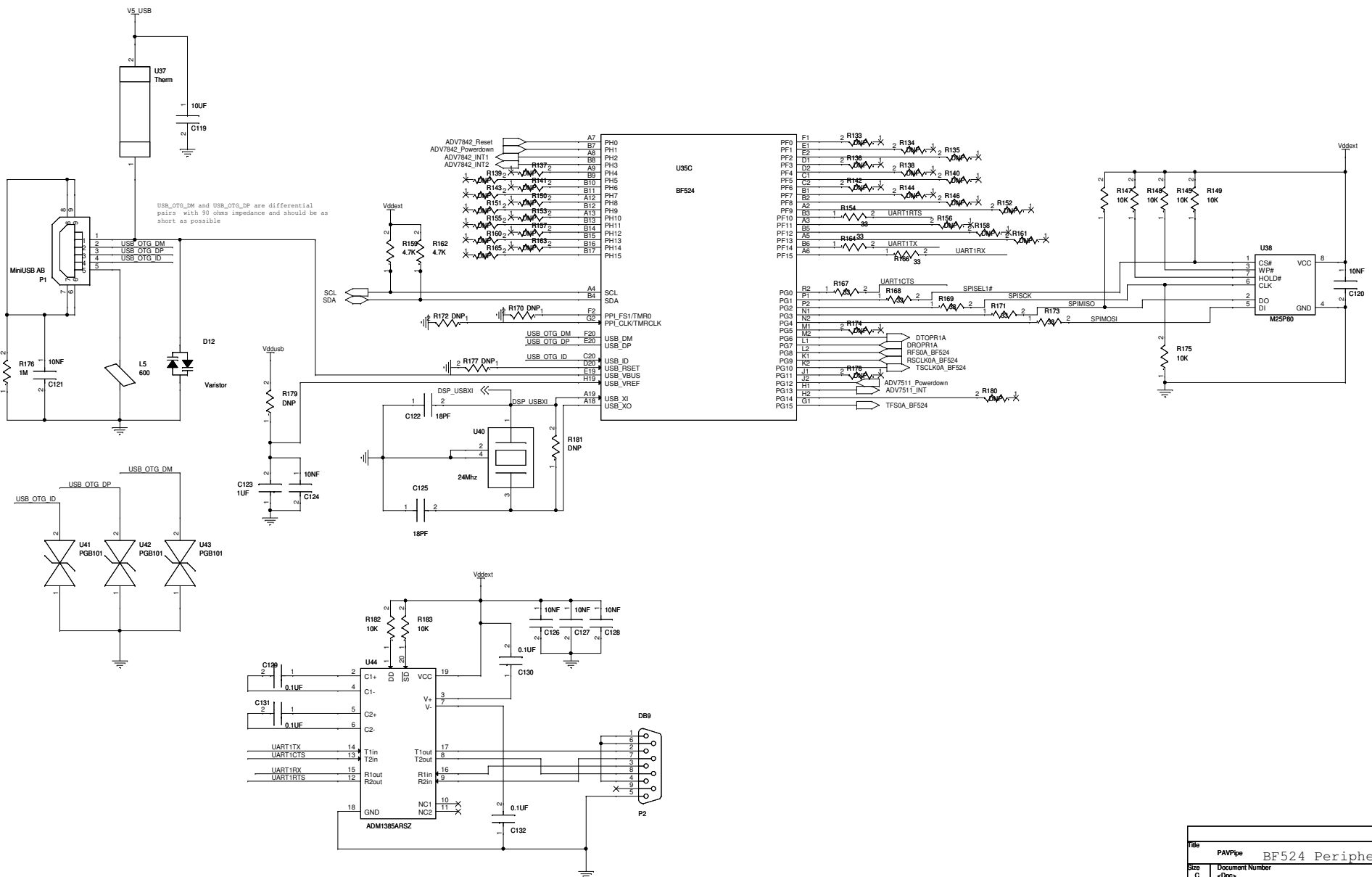


100 Ohm impedance differential tracks
 HEAC+ <<
 HEAC-HPD <<

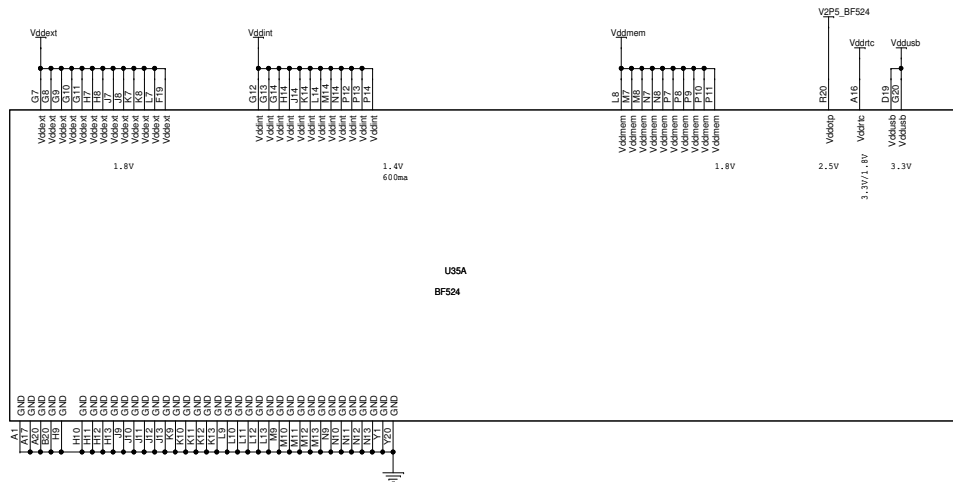
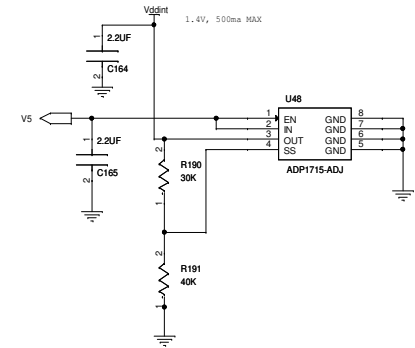
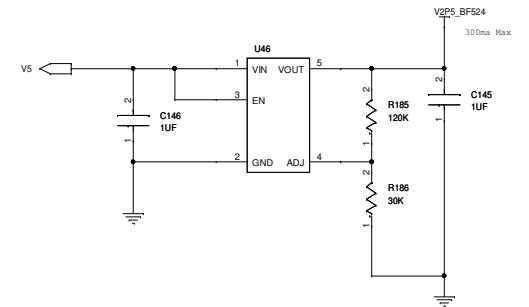
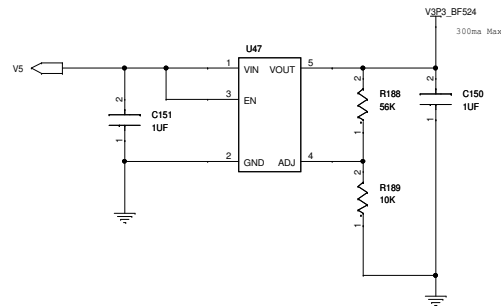
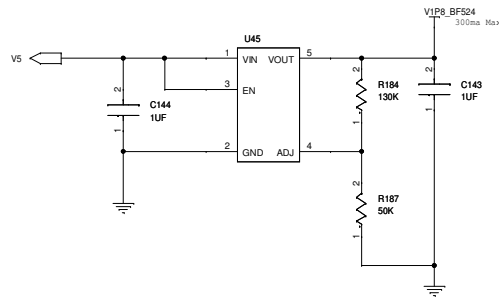
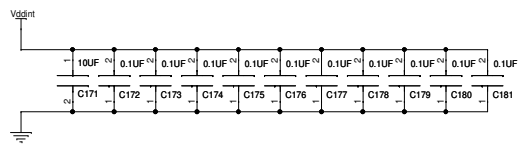
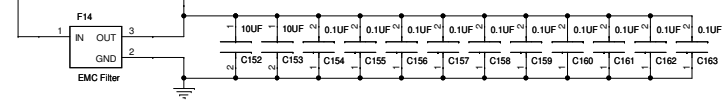
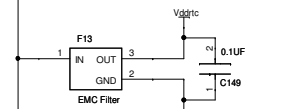
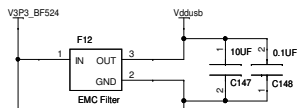
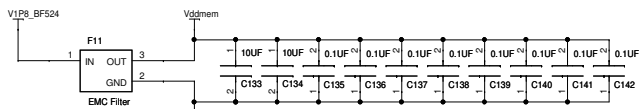


SDRAM should be as close to the BF524 as possible





| | | | |
|-------|-------------------------|---------------------------|----------|
| Title | | PAVPipe BF524 Peripherals | |
| Size | Document Number | Rev 1 | |
| C | <Doc> | | |
| Date: | Monday, August 16, 2010 | Sheet | 11 of 12 |



| | | |
|-------|-------------------------|----------------|
| Title | PAVPipe BF524 Power | |
| Size | Document Number | Rev 1 |
| C | <Doc> | |
| Date: | Monday, August 16, 2010 | Sheet 12 of 12 |