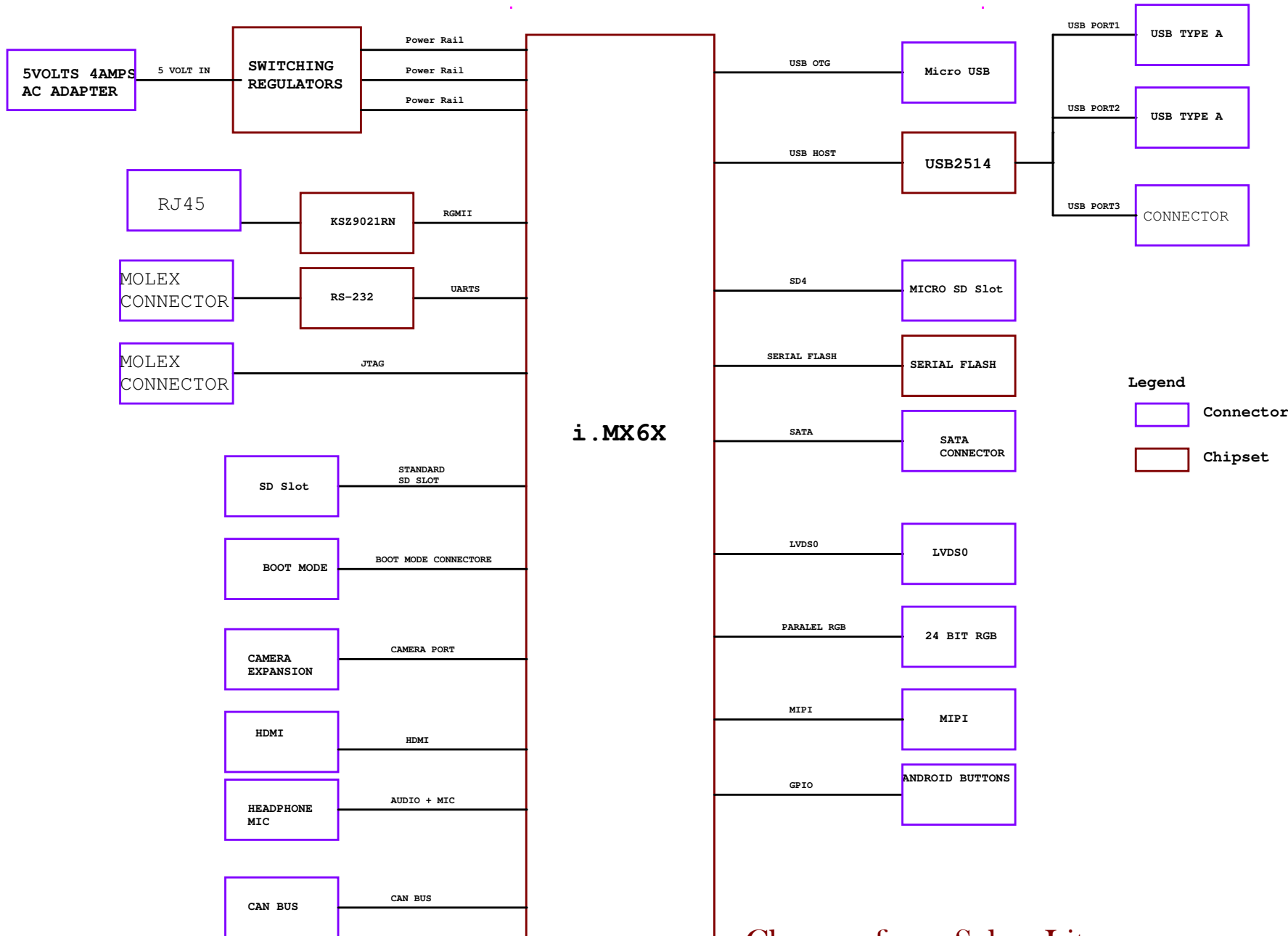


SABER LITE REV-D

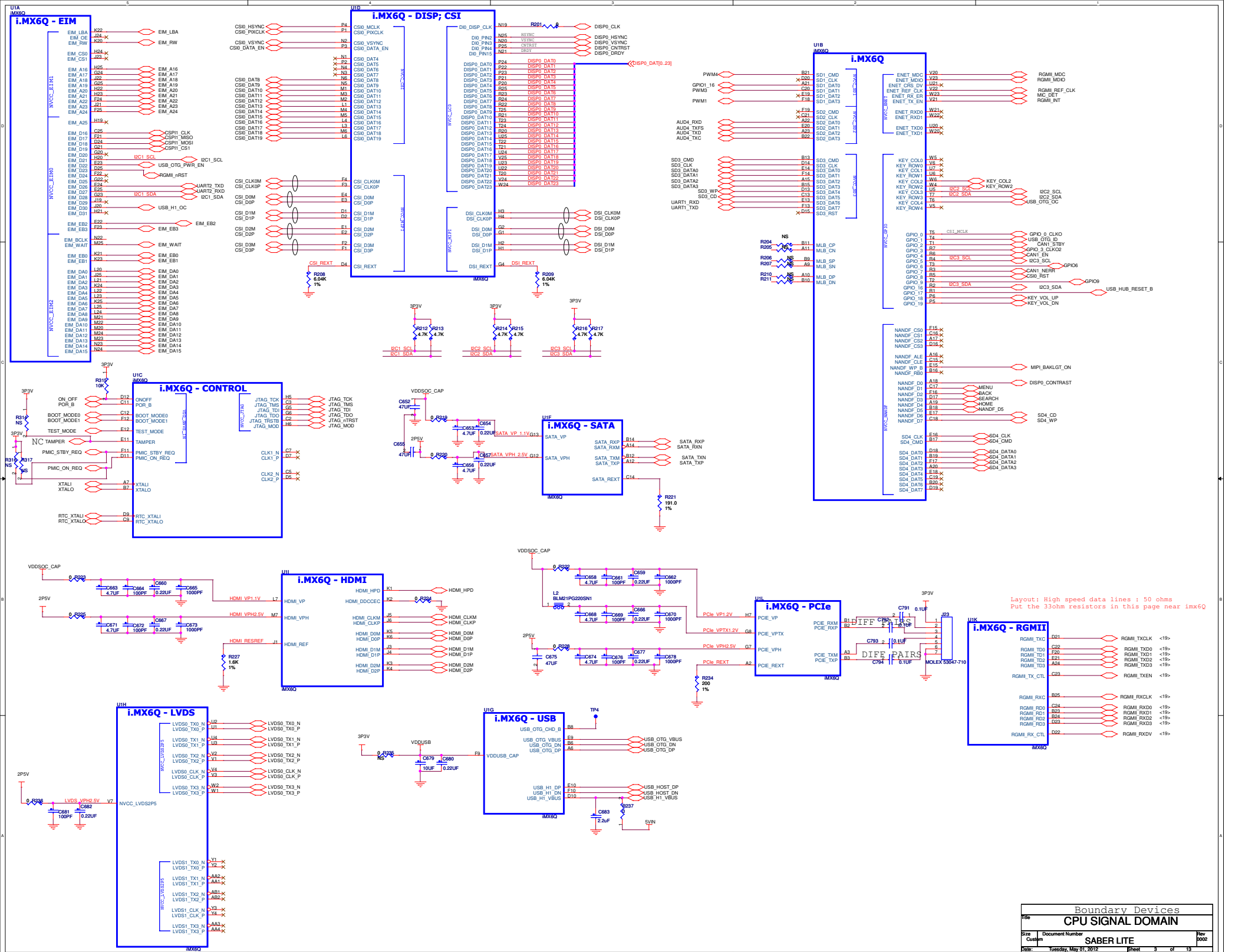


Legend
 Connector
 Chipset

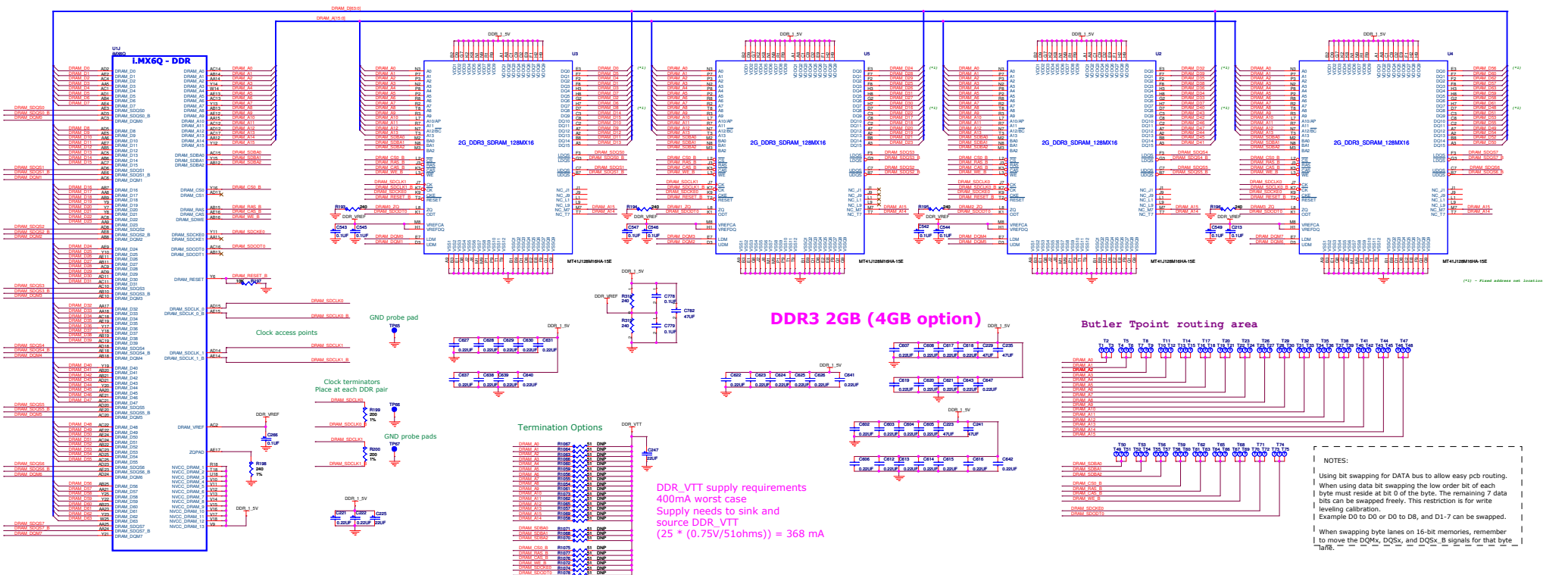
Changes from Sabre Lite

- 1)REPLACED THE 1.2 VOLT POWER FOR "NVCC_PLL_OUT" WITH LINEAR REGULATOR U23
- 2)REPLACED THE CAN CONTRROLER WITH NXP TJA1040T U18
- 3)MODIFIED J24A TO SUPPORT GIGA BIT ETHERNET

| | | |
|------------------|--------------------------|---------------|
| Boundary Devices | | |
| Title | EVK BLOCK DIAGRAM | |
| Size | Document Number | Rev |
| C | SABER LITE REV2 | 0001 |
| Date: | Wednesday, May 02, 2012 | Sheet 1 of 13 |

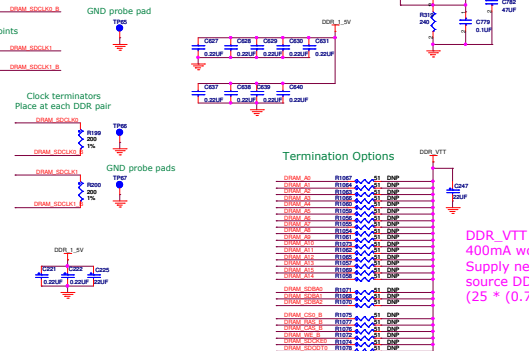


| Boundary Devices | | | |
|-------------------|-----------------------|------------|---------|
| CPU SIGNAL DOMAIN | | | |
| File | Document Number | Rev | 0002 |
| Size | Custom | SABER LITE | |
| Date: | Tuesday, May 01, 2012 | Sheet | 3 of 13 |

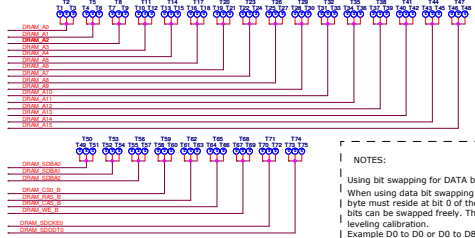


DDR3 2GB (4GB option)

Butler Tpoint routing area



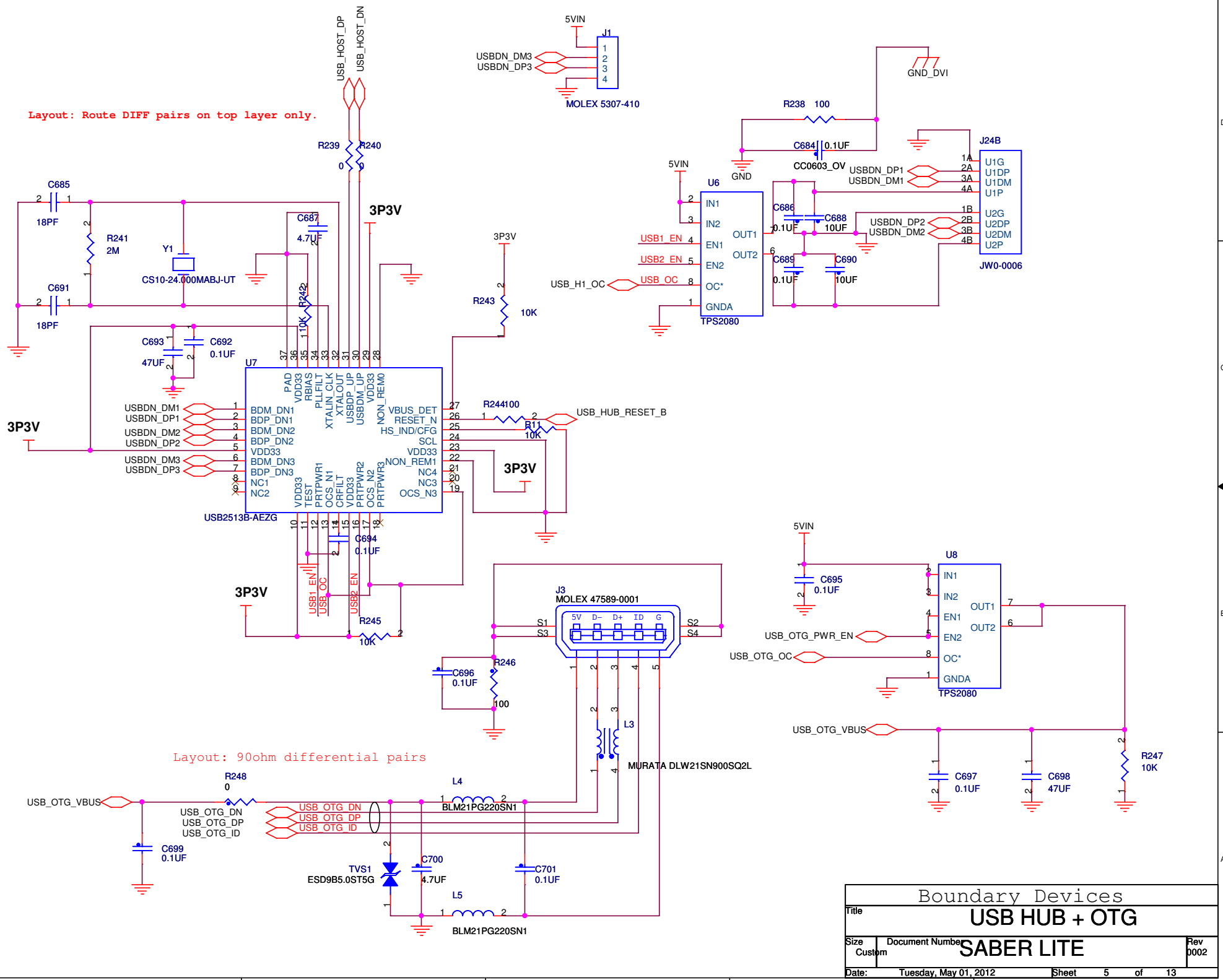
DDR_VTT supply requirements
 400mA worst case
 Supply needs to sink and source DDR_VTT
 (25 * (0.75V/51ohms)) = 368 mA



- NOTES:
- Using bit swapping for DATA bus to allow easy pcb routing.
 - When using data bit swapping the low order bit of each byte must reside at bit 0 of the byte. The remaining 7 data bits can be swapped freely. This restriction is for write leveling calibration.
 - Example D0 to D0 or D0 to D8, and D1-7 can be swapped.
 - When swapping byte lanes on 16-bit memories, remember to move the DQm, DQSx, and DQSx_B signals for that byte lane.

Layout: Route DIFF pairs on top layer only.

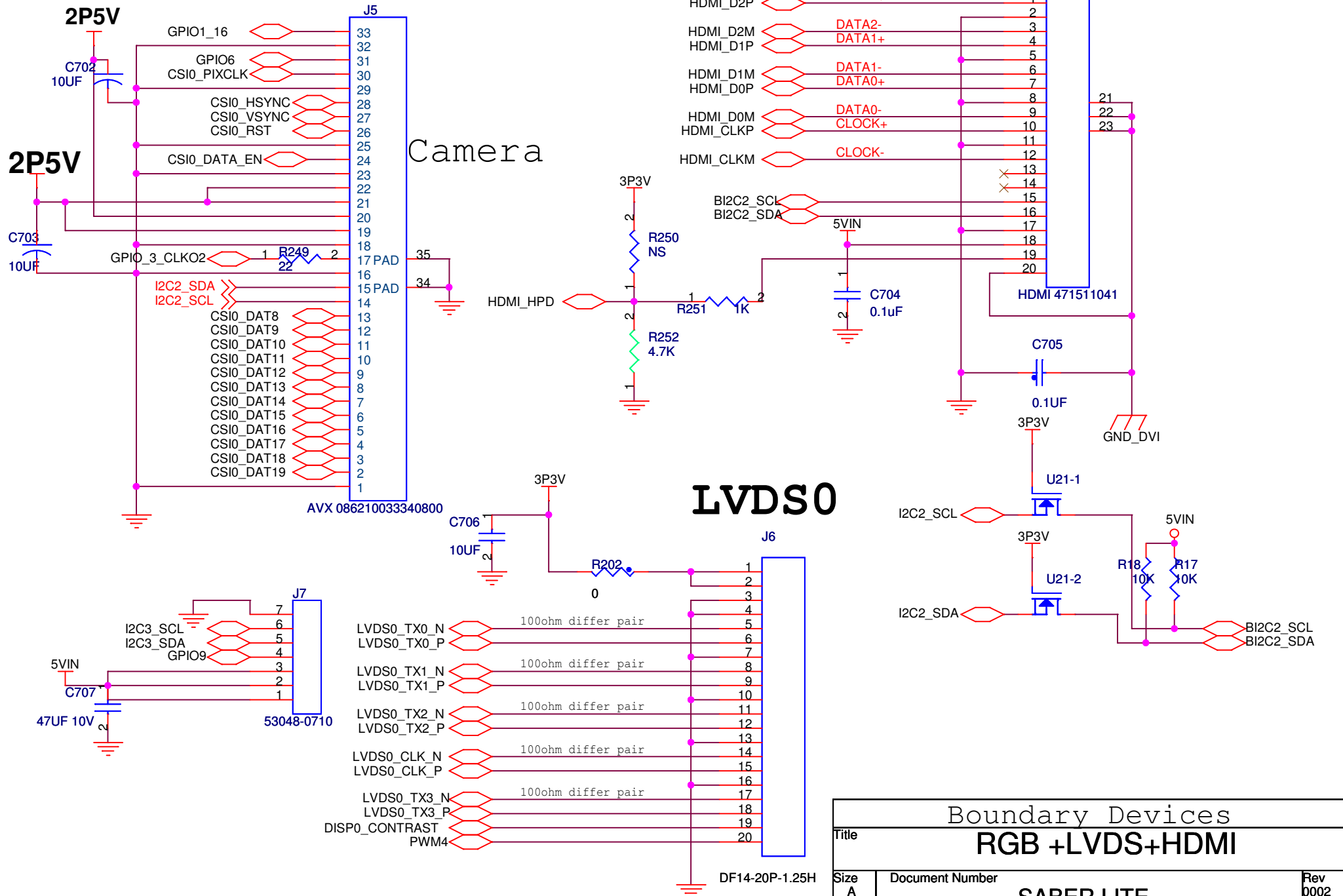
Layout: 90ohm differential pairs



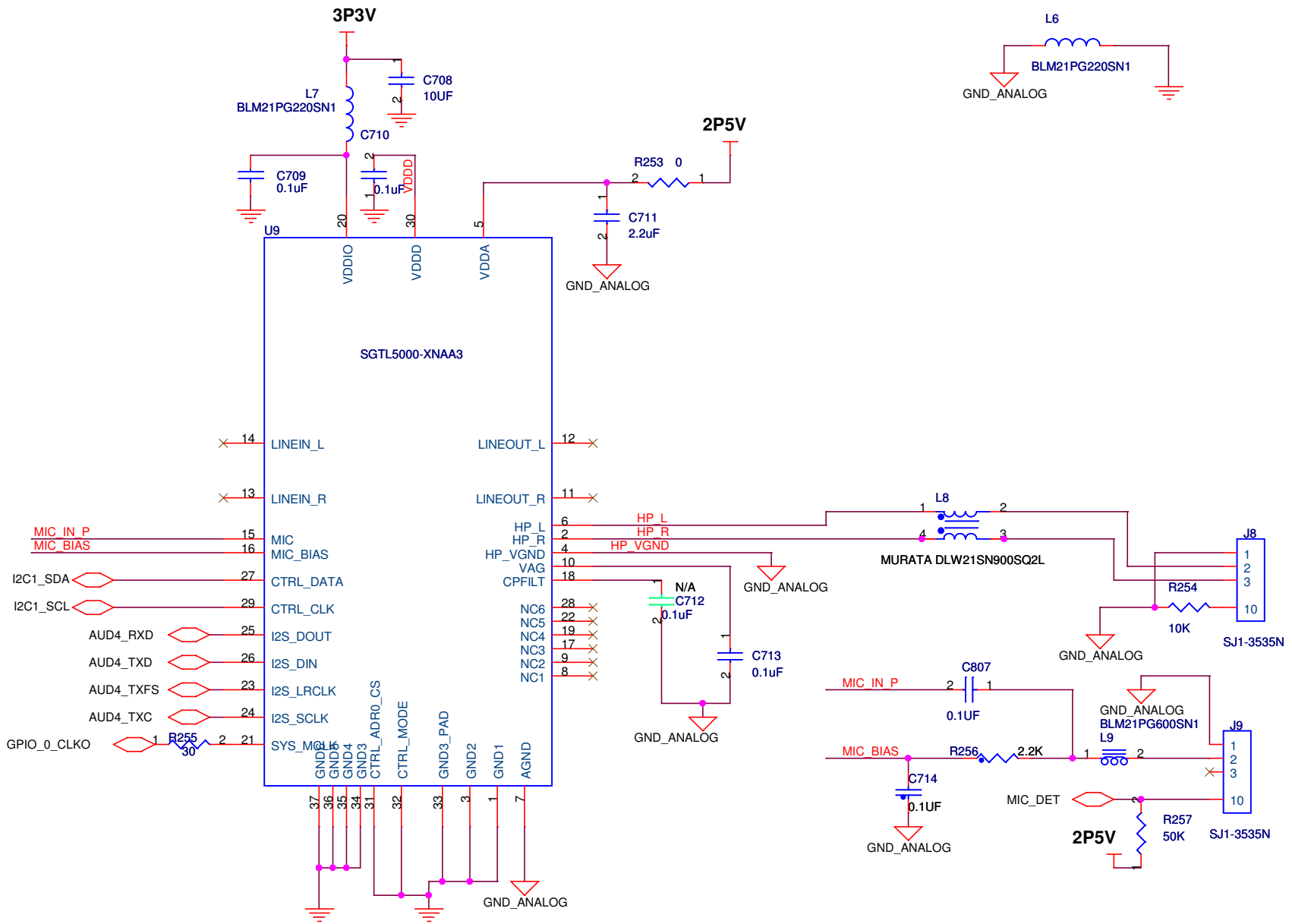
| | | |
|--------------------------------|--------------------------------------|-------------|
| Boundary Devices | | |
| Title USB HUB + OTG | | |
| Size Custom | Document Number SABER LITE | Rev 0002 |
| Date: Tuesday, May 01, 2012 | Sheet 5 | of 13 |

CMOS Sensor

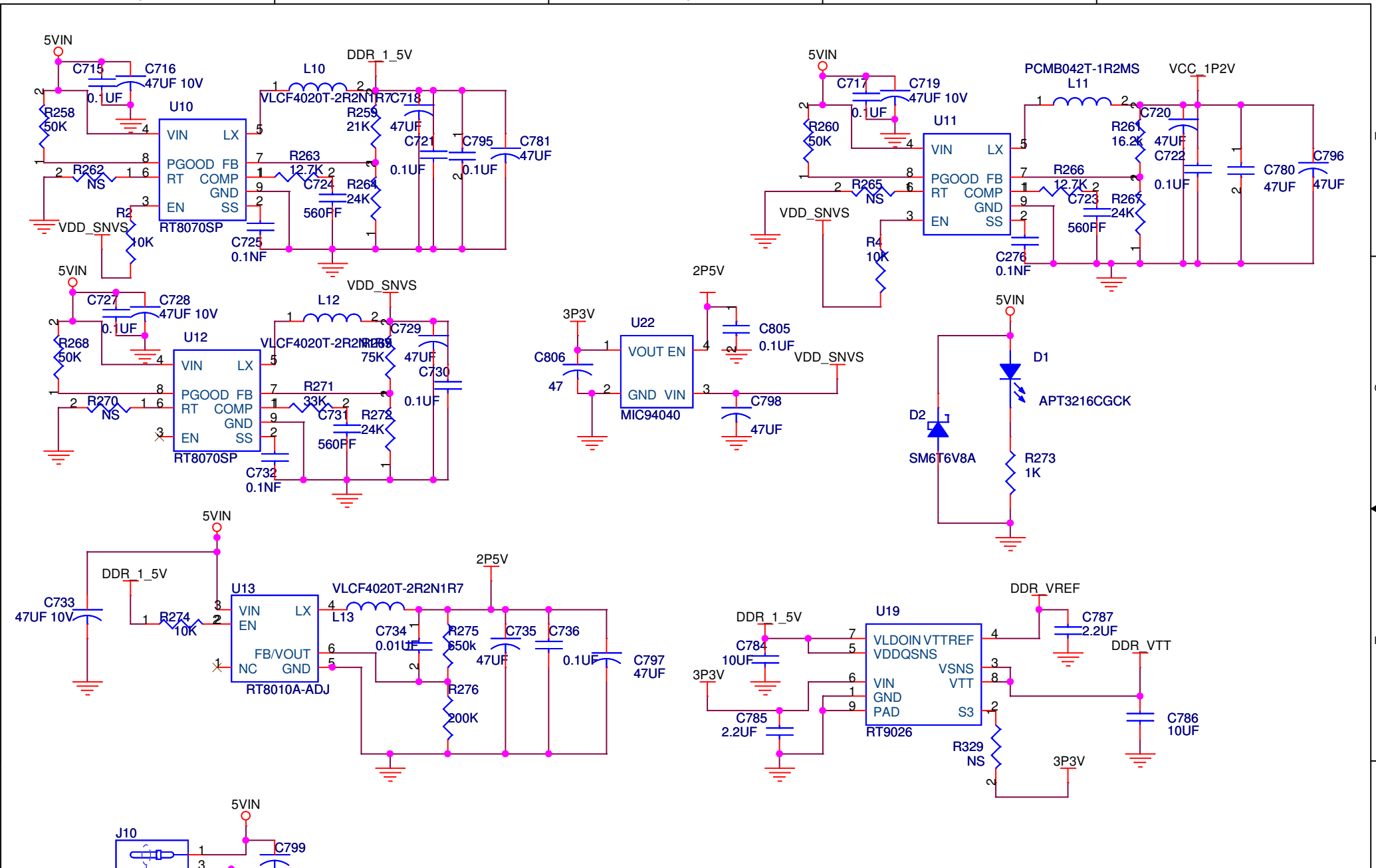
Layout: HDMI 100 ohm differential pairs



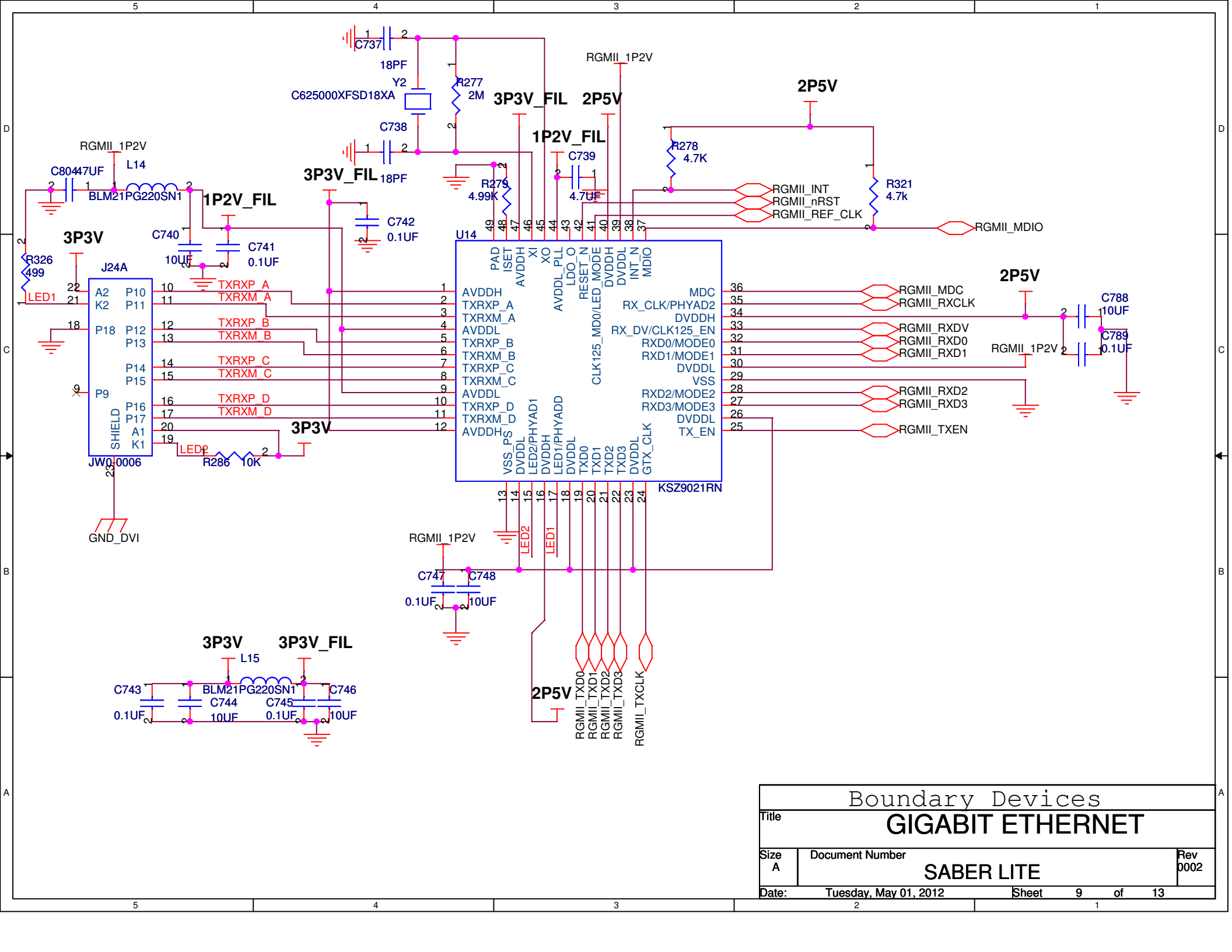
| | | |
|-----------------------|-----------------------|---------------|
| Boundary Devices | | |
| Title | | |
| RGB +LVDS+HDMI | | |
| Size | Document Number | Rev |
| A | SABER LITE | 0002 |
| Date: | Tuesday, May 01, 2012 | Sheet 6 of 13 |



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|------------------|-----------------------|-------|---------|
| Boundary Devices | | | |
| Title | | | |
| AUDIO | | | |
| Size | Document Number | | Rev |
| Custom | SABER LITE | | 0002 |
| Date: | Tuesday, May 01, 2012 | Sheet | 7 of 13 |
| | | | 1 |

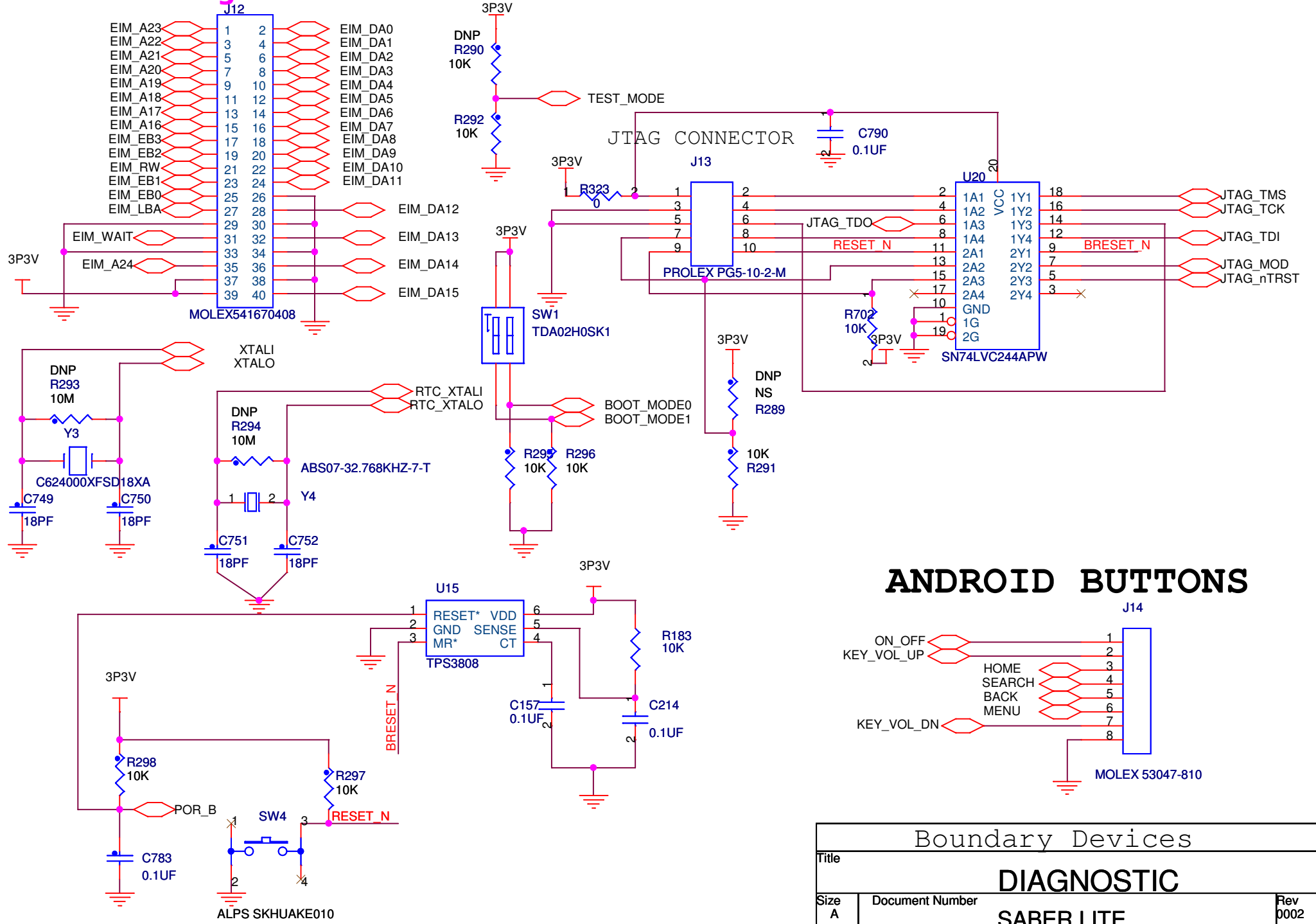


| | | |
|-----------------------------|-----------------|---------------|
| Boundary Devices | | |
| Title | | |
| SYSTEM POWER | | |
| Size A | Document Number | Rev 0002 |
| Date: Tuesday, May 01, 2012 | | Sheet 8 of 13 |

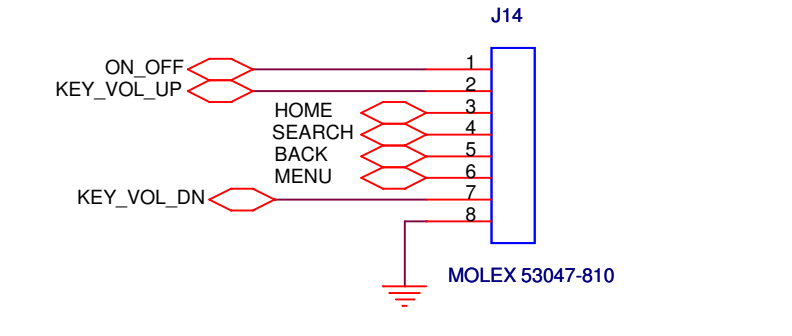


| | | |
|-------------------------|-----------------------|---------------|
| Boundary Devices | | |
| Title | | |
| GIGABIT ETHERNET | | |
| Size | Document Number | Rev |
| A | SABER LITE | 0002 |
| Date: | Tuesday, May 01, 2012 | Sheet 9 of 13 |

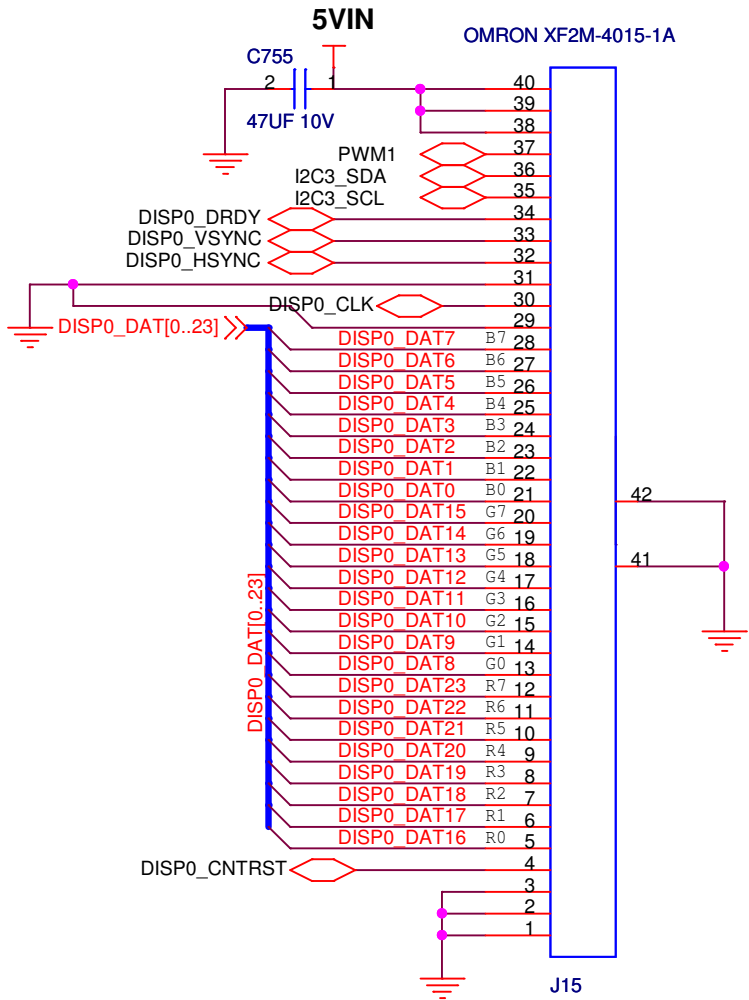
Boot Configuration Select



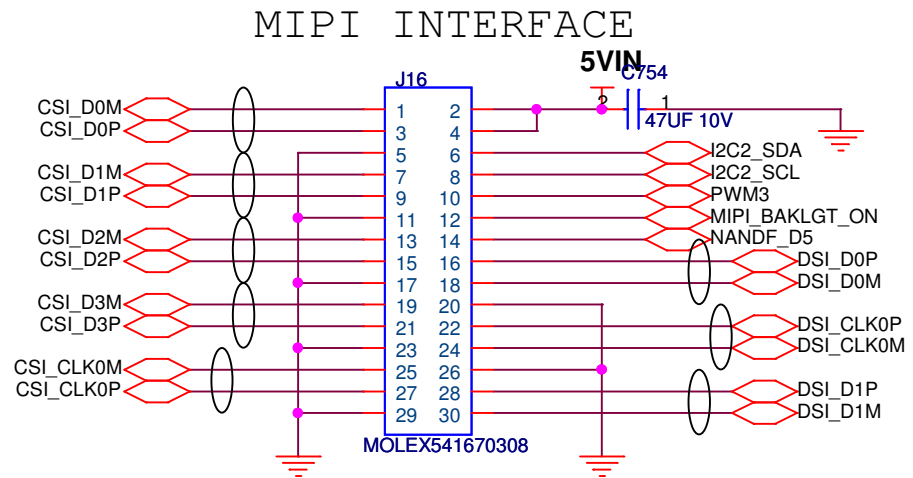
ANDROID BUTTONS



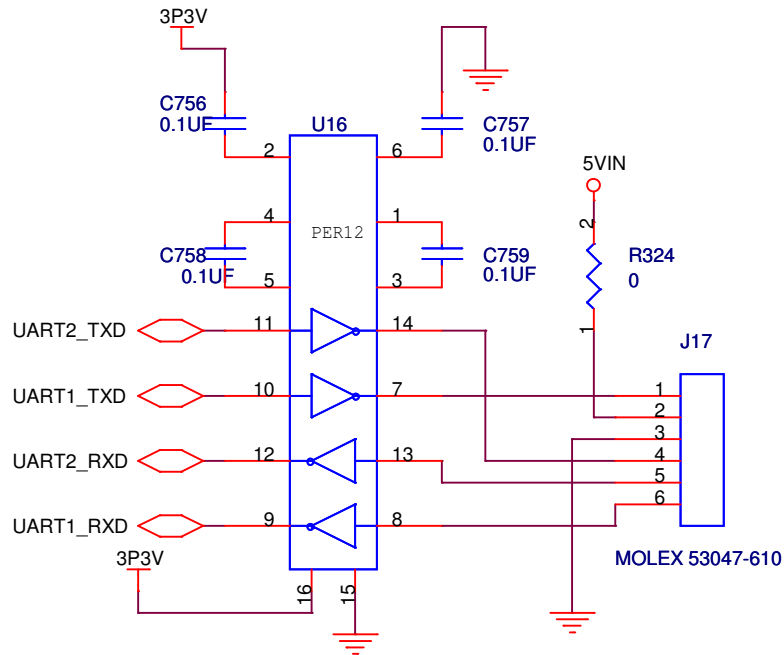
| | | |
|-----------------------------|-----------------|----------------|
| Boundary Devices | | |
| Title | | |
| DIAGNOSTIC | | |
| Size A | Document Number | Rev 0002 |
| Date: Tuesday, May 01, 2012 | | Sheet 10 of 13 |



PARALEL RGB INTERFACE



Layout: 100 ohm differential pairs

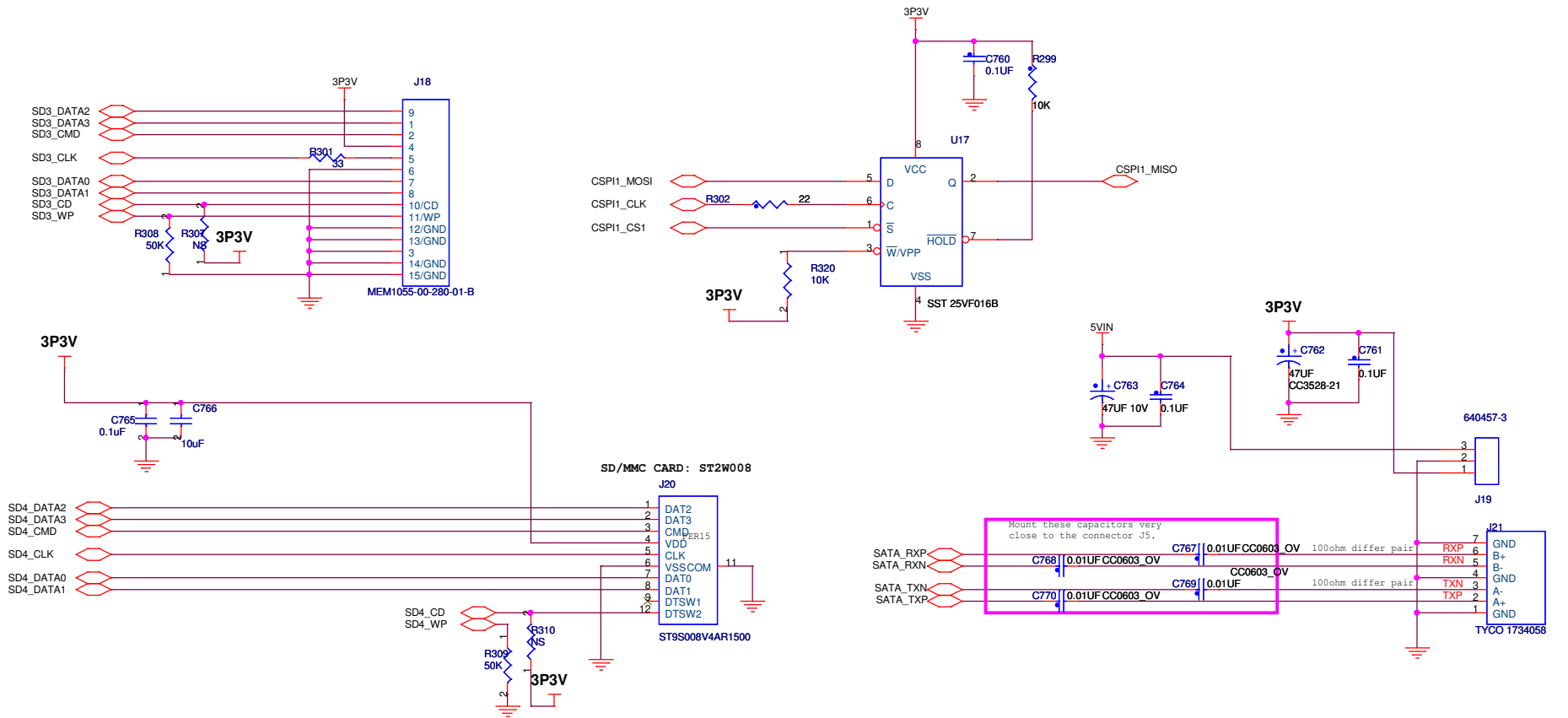


RS232 INTERFACE

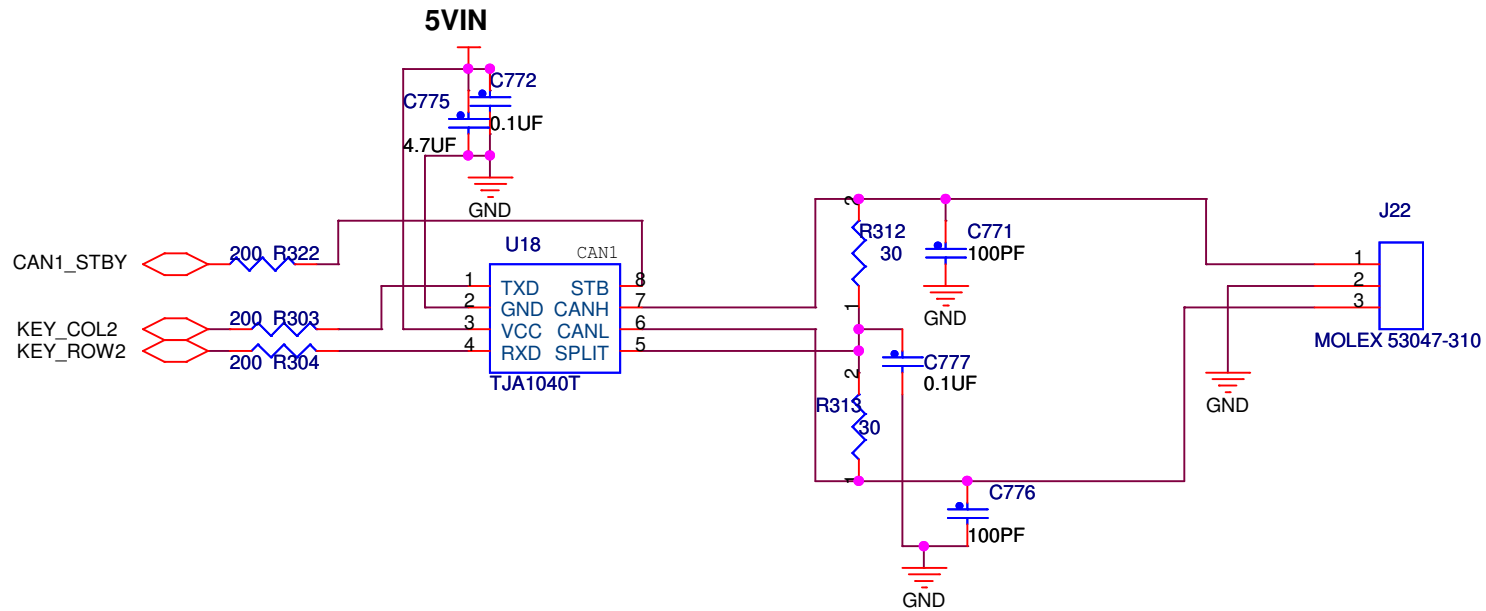
| | | |
|----------------------------------|--------------------------------------|----------------|
| Boundary Devices | | |
| Title RGB +MIPI + UART | | |
| Size A | Document Number SABER LITE | Rev 0002 |
| Date: | Tuesday, May 01, 2012 | Sheet 11 of 13 |

Layout:

1. 50ohm, SD singals(SD_DATAx, SD_CMD, SD_CLK) length equal
2. R274 be placed near MX6Q chip



| | | |
|------------------|-----------------------|----------------|
| Boundary Devices | | |
| Title | | |
| SD + SATA | | |
| Size | Document Number | Rev |
| B | SABER LITE | 0002 |
| Date: | Tuesday, May 01, 2012 | Sheet 12 of 13 |



| | | |
|-----------------------------|-----------------|----------------|
| Boundary Devices | | |
| Title | | |
| CAN BUS | | |
| Size A | Document Number | Rev 0002 |
| Date: Tuesday, May 01, 2012 | | Sheet 13 of 13 |