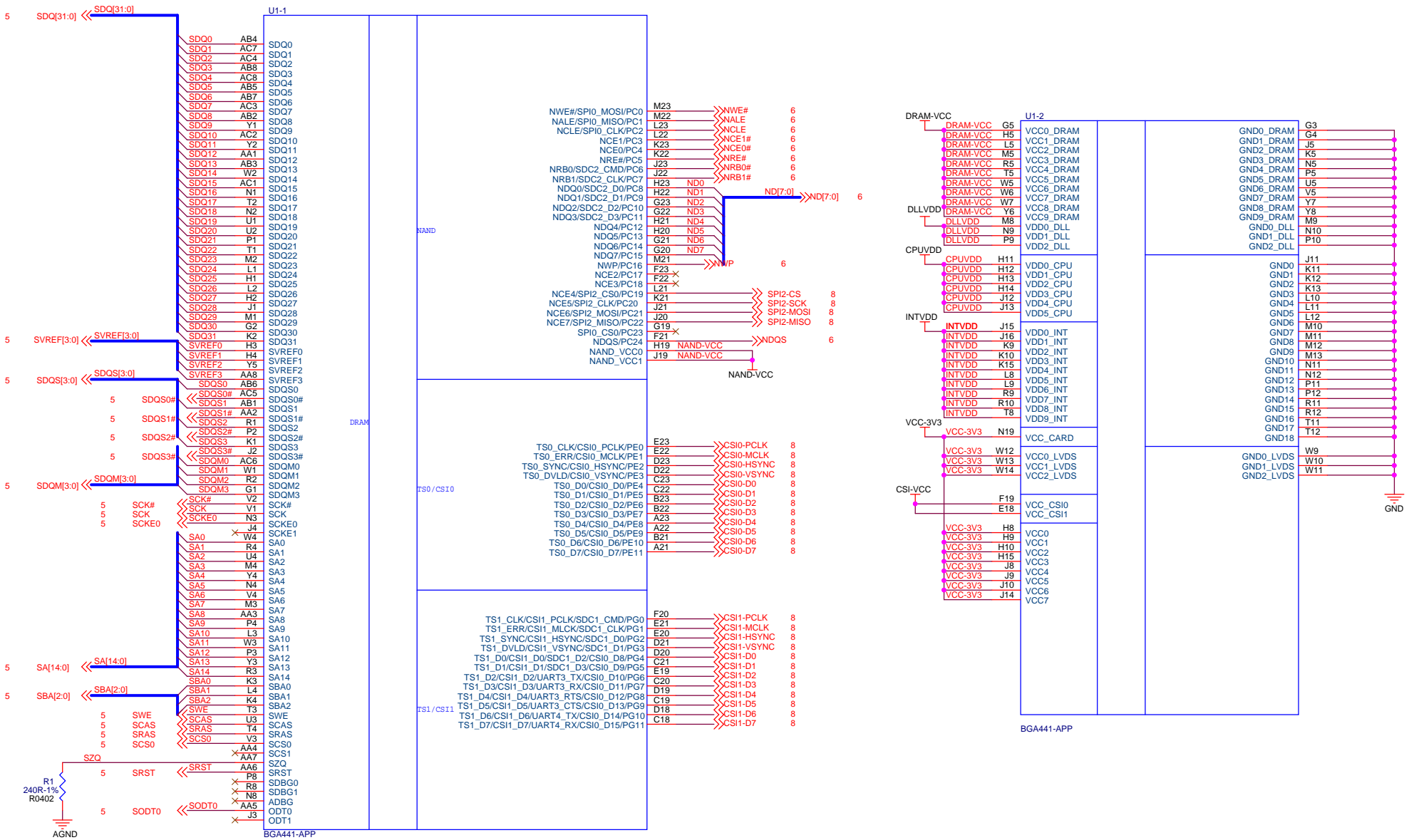
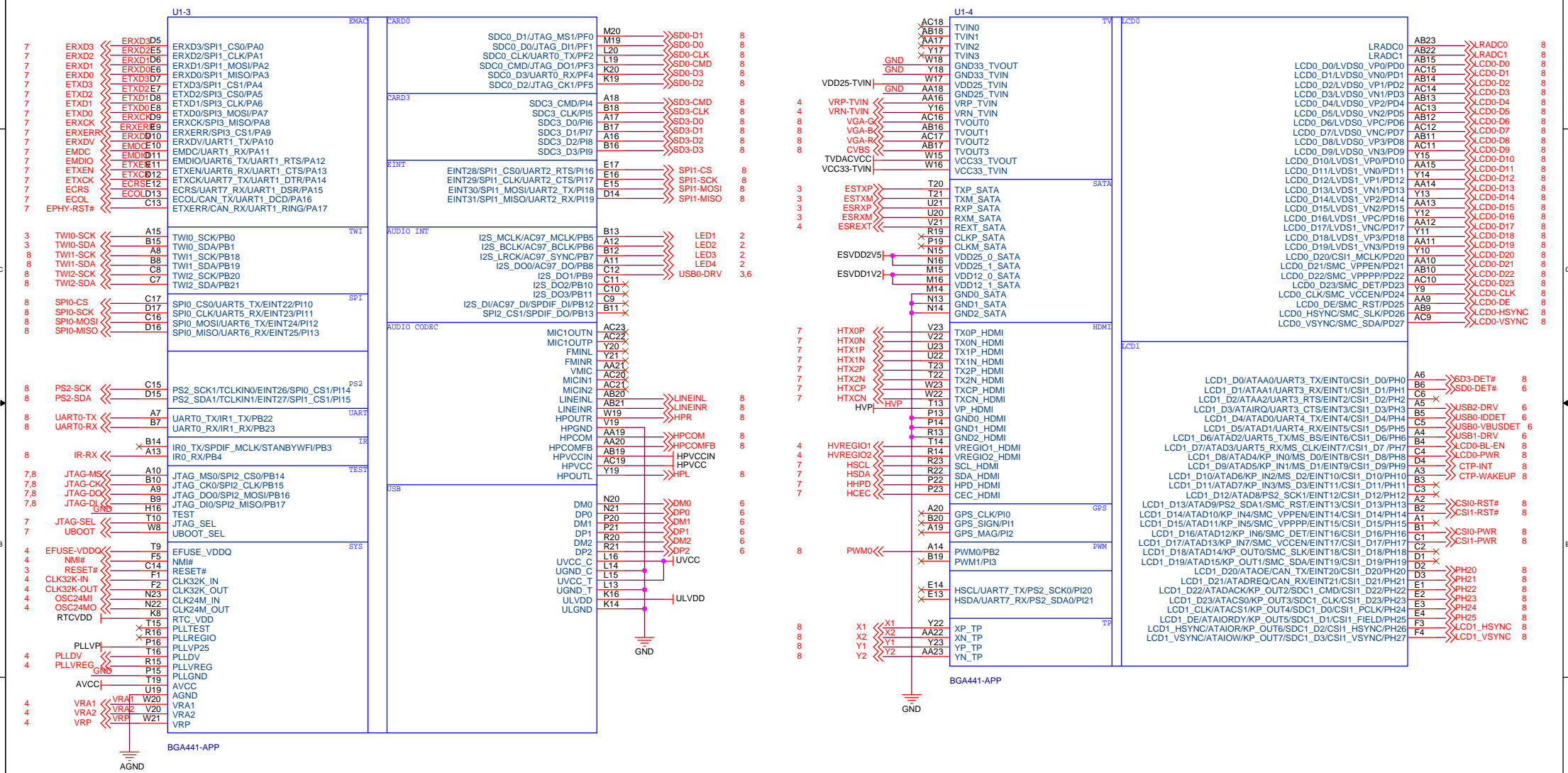


CPU1



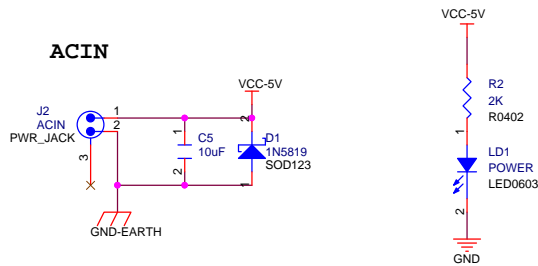
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CPU2

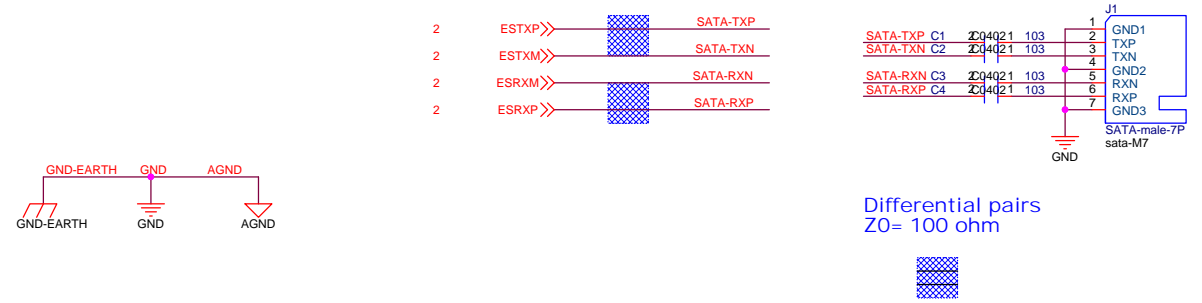


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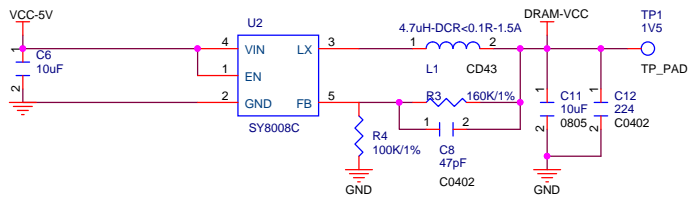
POWER



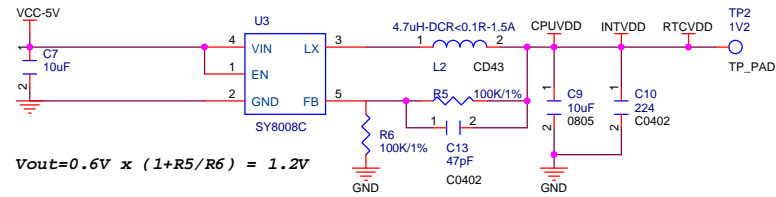
SATA



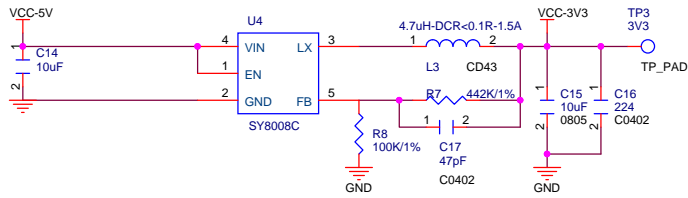
1V5 for DDR3



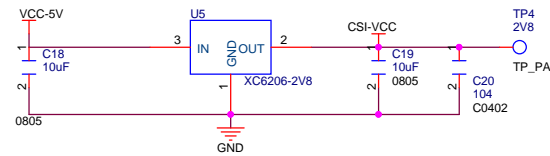
1V2 for CPUVDD/INTVDD/RTCVDD



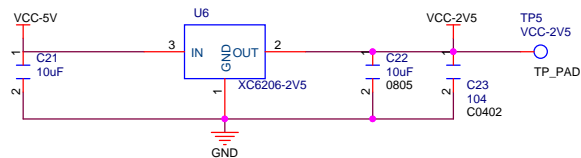
3V3 for IO



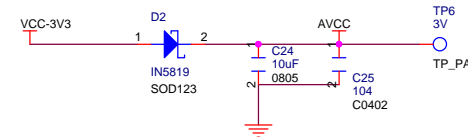
2V8 for CSI0/CSI1



2V5 for SATA/TVIN

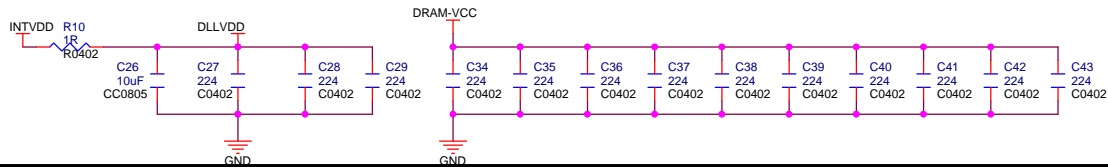


3V for AVCC

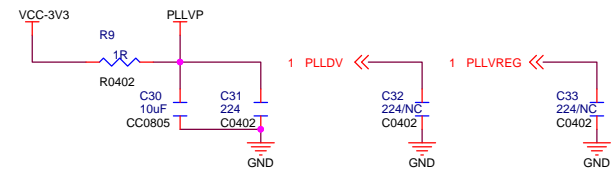


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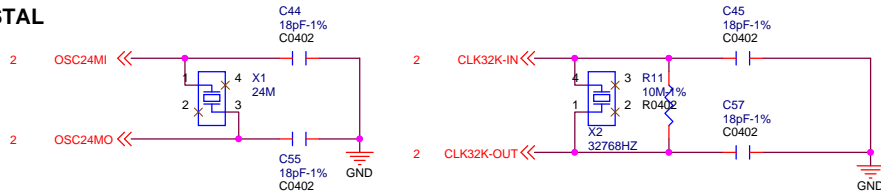
DRAM-DLL



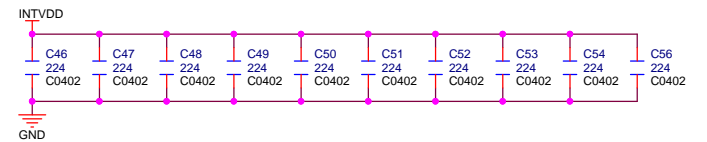
PLL-NAND



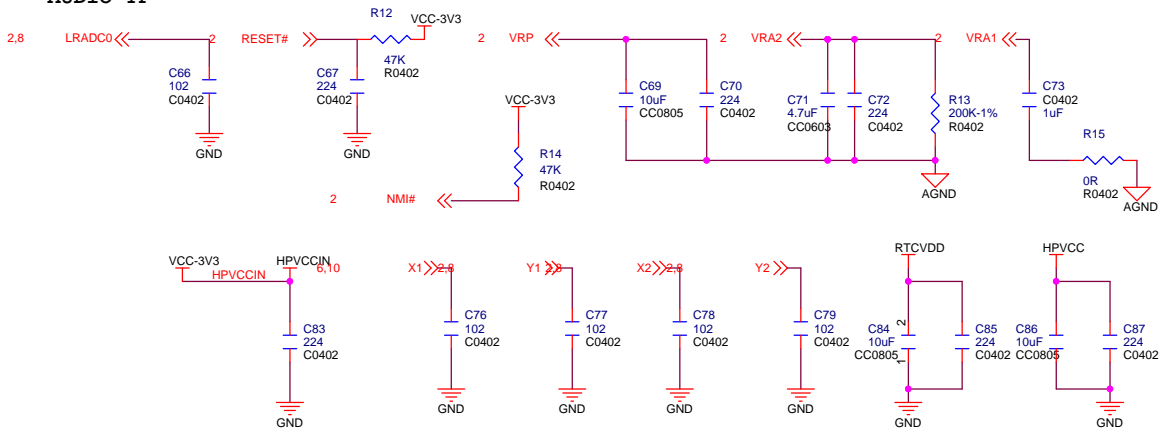
CRYSTAL



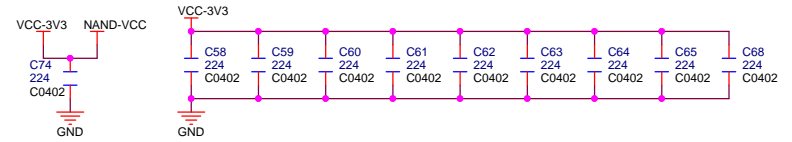
INTERLOGIC



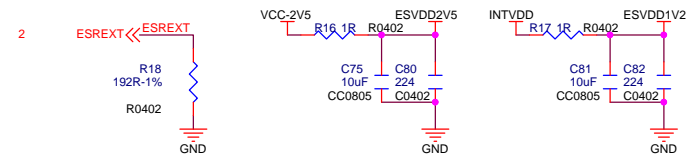
AUDIO-TP



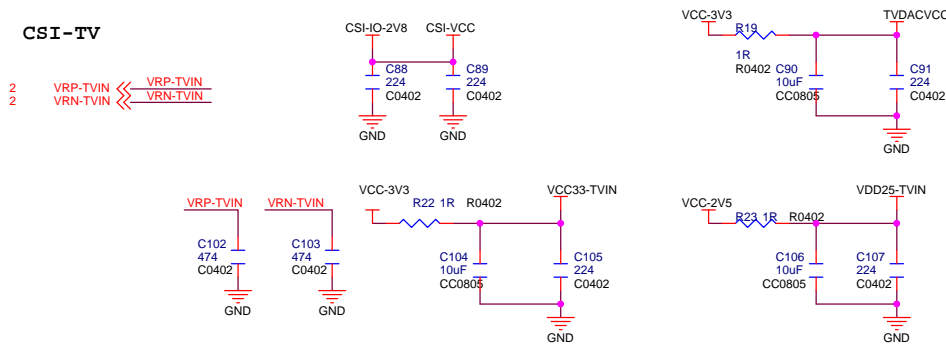
PIO-INTERFACE



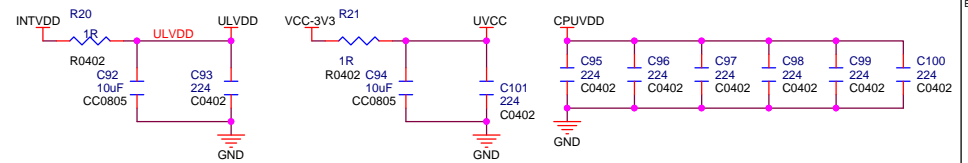
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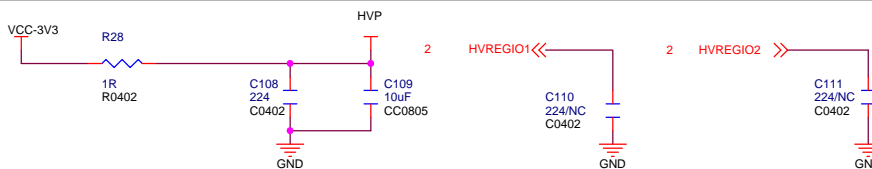
CSI-TV



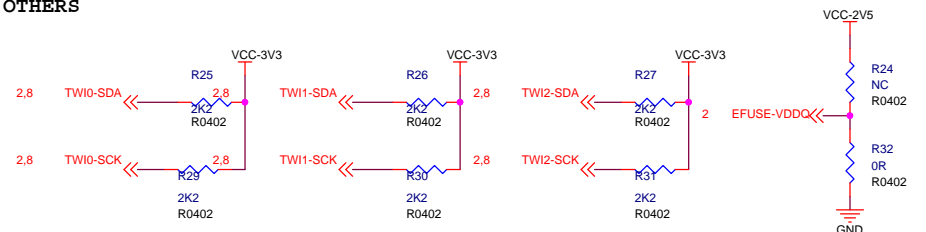
USB-CPU



HDMI

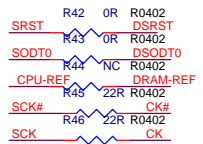
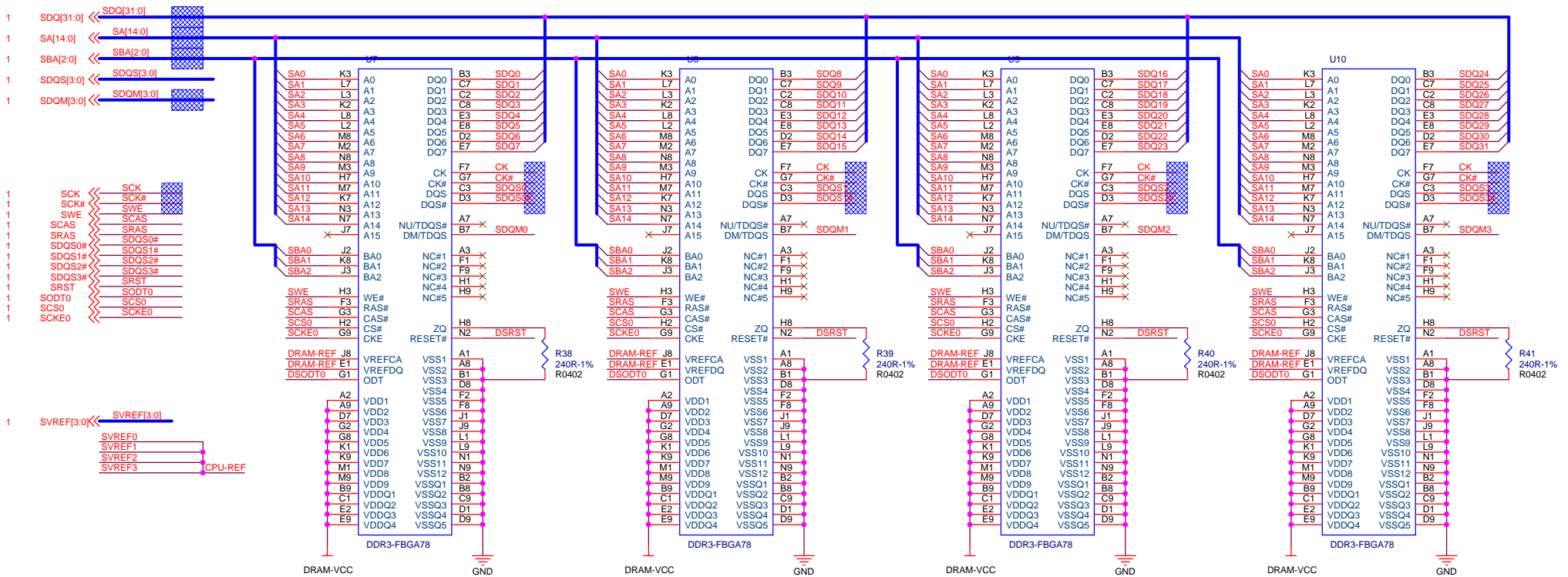
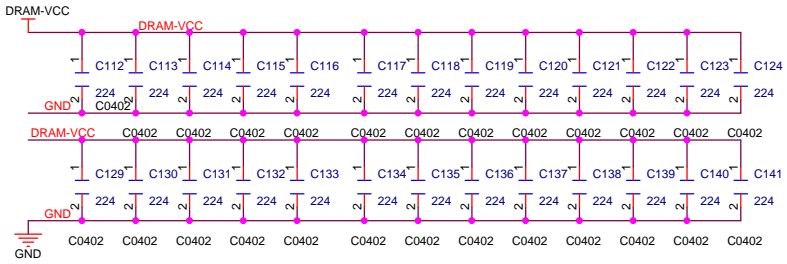
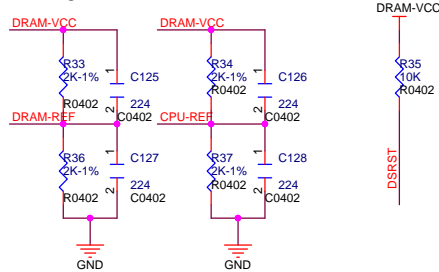


OTHERS



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DDR3



Equilong BUS
Z0 = 50 ohm

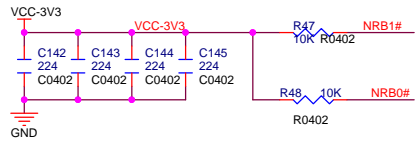
Differential pairs
Z0 = 100 ohm

DQ0-7, DQM0, DQS0 Length matching 100mil
 DQ8-15, DQM1, DQS1 Length matching 100mil
 DQ16-23, DQM2, DQS2 Length matching 100mil
 DQ24-31, DQM3, DQS3 Length matching 100mil
 DA, CONTROL, CK Length matching 300mil
 DQSn, DQSn# Differential pairs Z0= 100 ohm, Length matching 10mil
 CK, CK# Differential pairs Z0= 100 ohm, Length matching 10mil

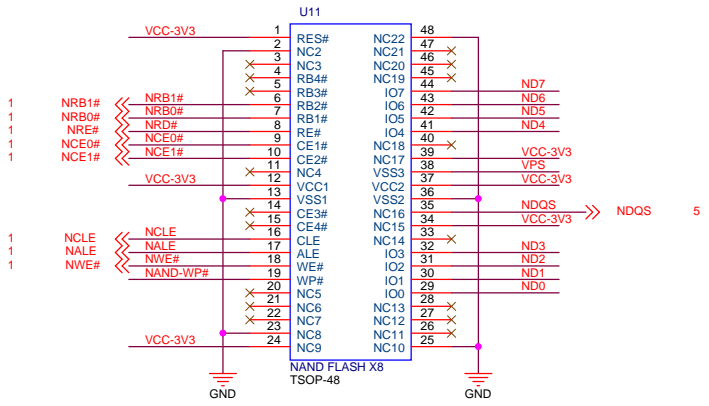


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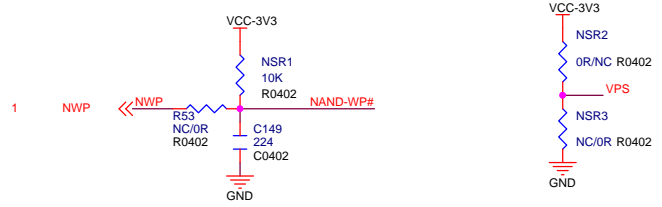
NAND Flash



1 ND[7:0] << ND[7:0]



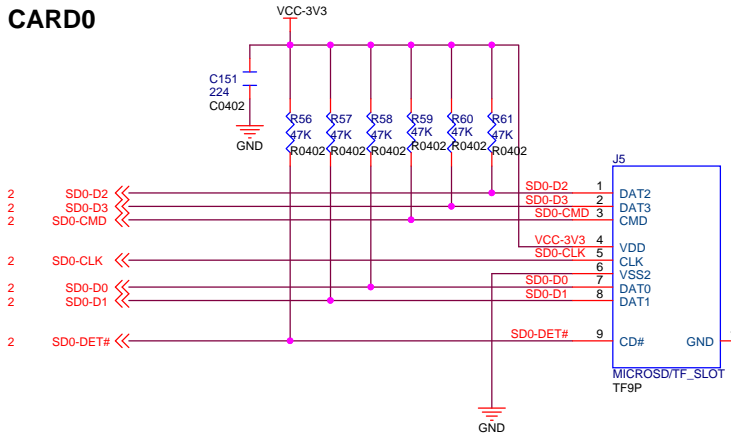
1 NRB1#
1 NRB0#
1 NRE#
1 NCE0#
1 NCE1#
1 NCLE
1 NALE
1 NWE#
1 NAND-WP#



1 NWP << NWP

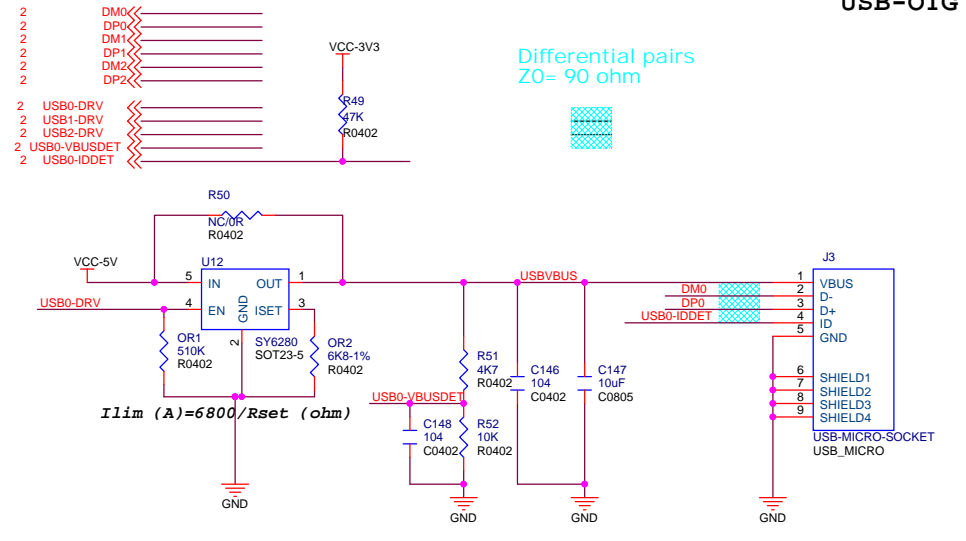
Note: Intel, Toshiba, Samsung 2xnm TSOP Nand to The VPS pull-up; then other Nand pull-down.

CARD0



2 SD0-D2
2 SD0-D3
2 SD0-CMD
2 SD0-CLK
2 SD0-D0
2 SD0-D1
2 SD0-DET#

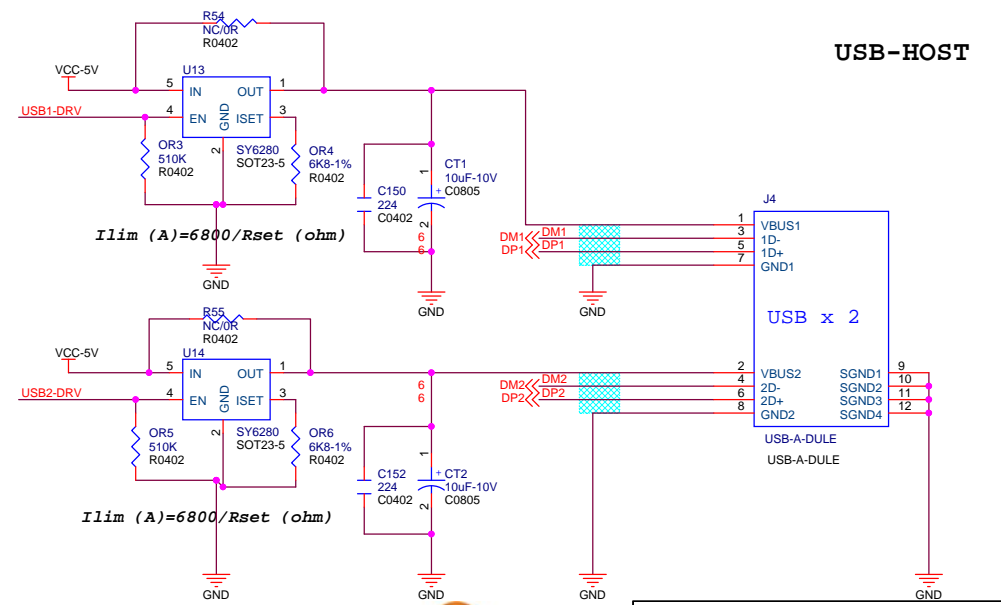
USB-OTG



Differential pairs
Z0= 90 ohm

$$I_{lim} (A) = 6800 / R_{set} (ohm)$$

USB-HOST



$$I_{lim} (A) = 6800 / R_{set} (ohm)$$

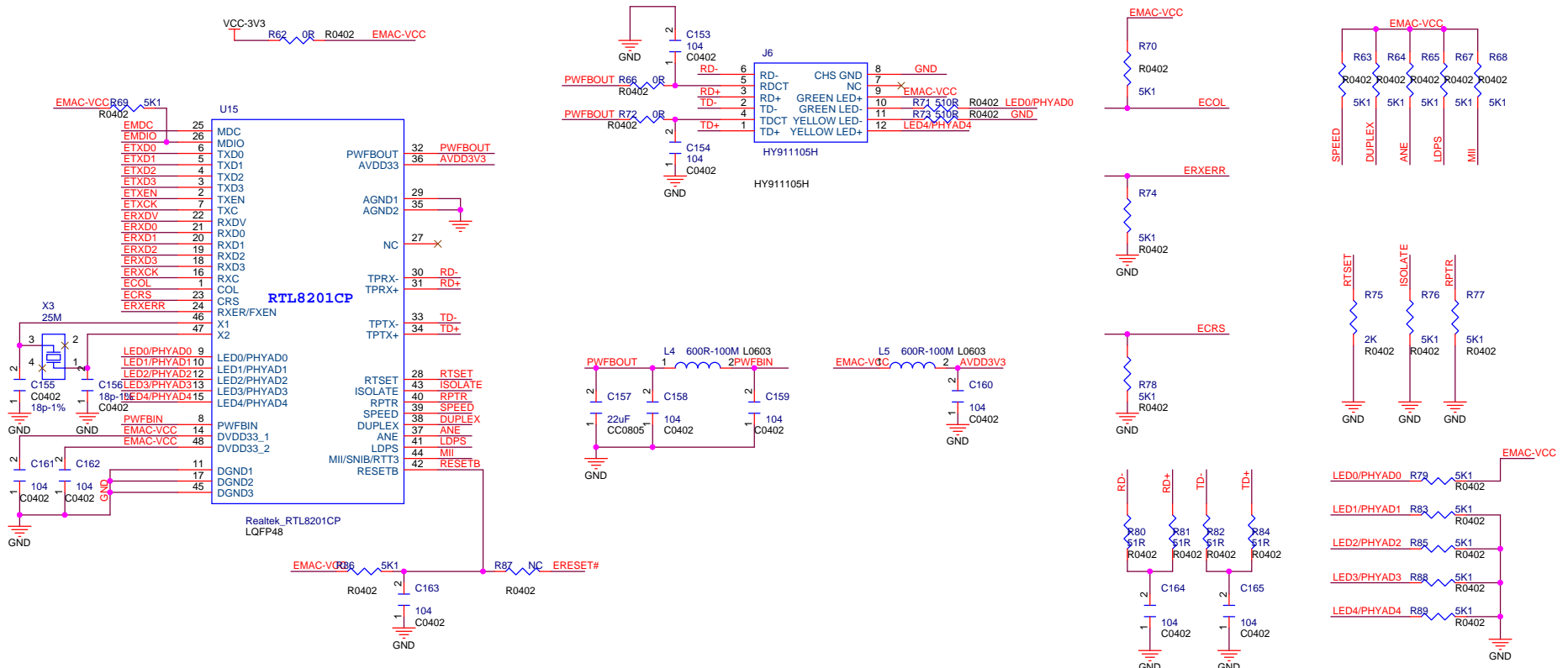
$$I_{lim} (A) = 6800 / R_{set} (ohm)$$



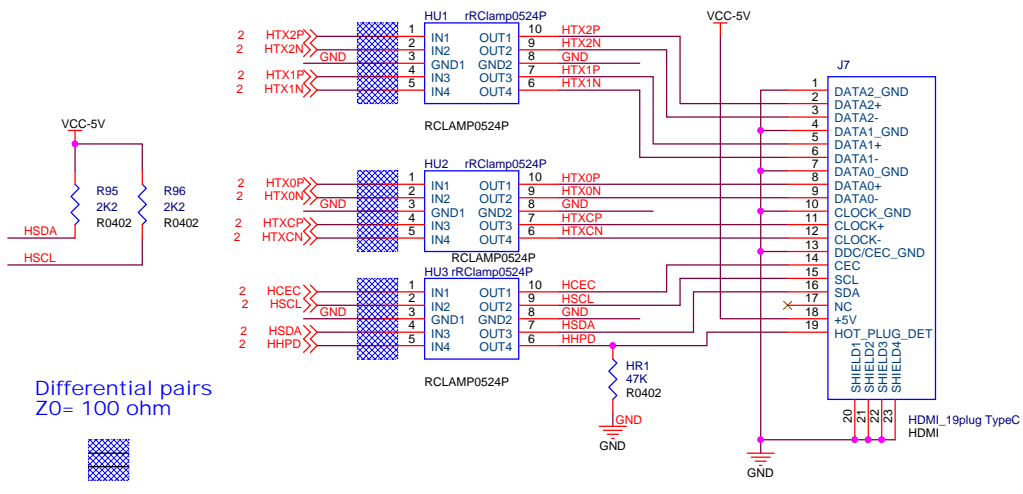
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EMAC

- 2 ERXD3 << ERXD3
- 2 ERXD2 << ERXD2
- 2 ERXD1 << ERXD1
- 2 ERXD0 << ERXD0
- 2 ETXD3 << ETXD3
- 2 ETXD2 << ETXD2
- 2 ETXD1 << ETXD1
- 2 ETXD0 << ETXD0
- 2 ERXCK << ERXCK
- 2 ERXERR << ERXERR
- 2 ERXDV << ERXDV
- 2 EMDC << EMDC
- 2 EMDIO << EMDIO
- 2 ETXEN << ETXEN
- 2 ETXCK << ETXCK
- 2 ECRS << ECRS
- 2 ECOL << ECOL
- 2 EPHY-RST# << ERESET#

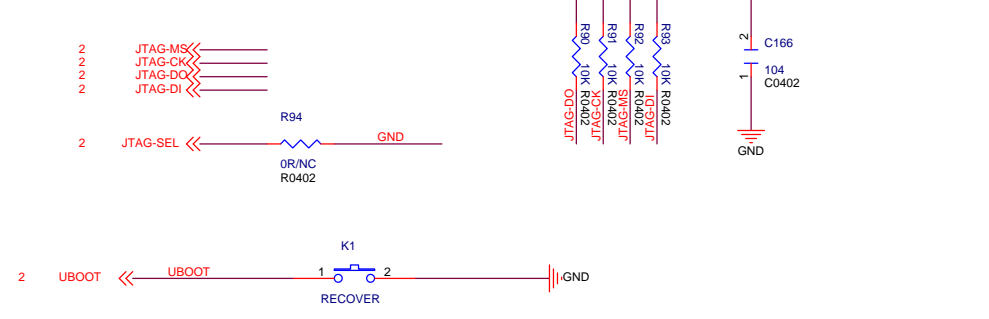


HDMI



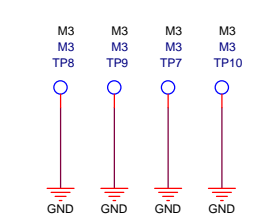
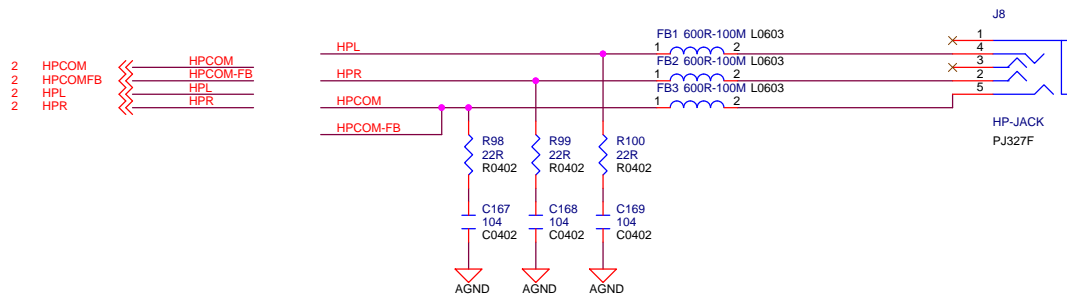
Differential pairs
ZO = 100 ohm

JTAG



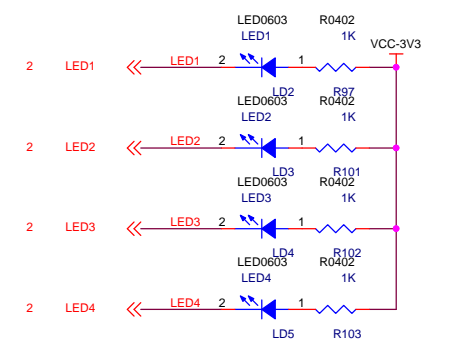
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Head Phone & Speaker

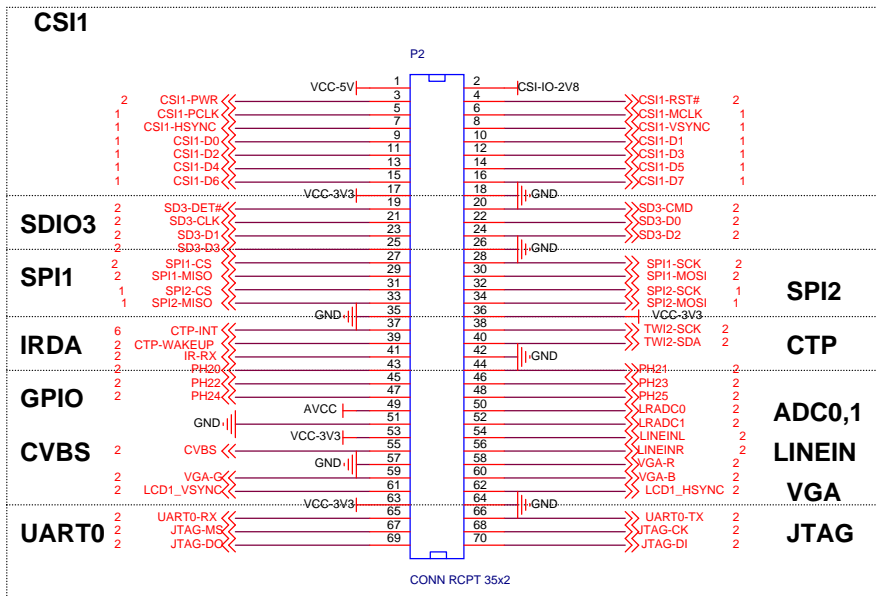
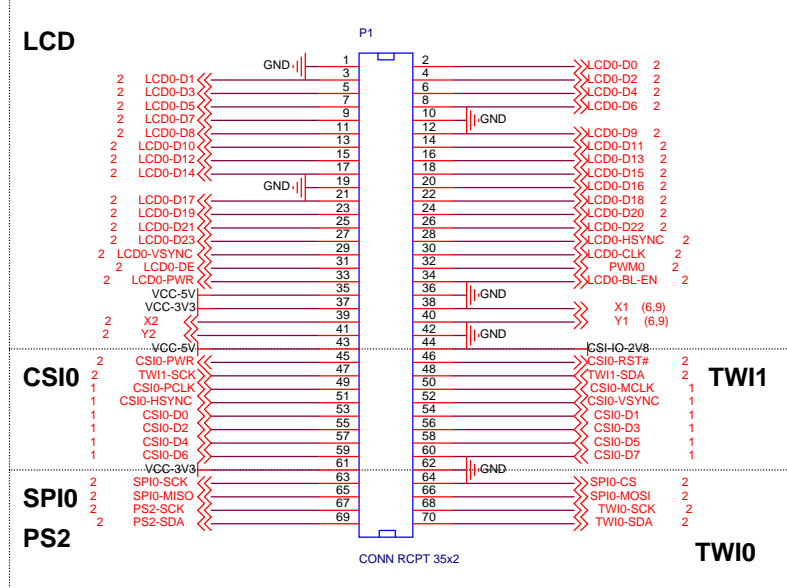


4xM3 fixing hole

LEDs



Extention Interface



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P07: EMAC-HDMI-JTAG
P08: HP-LINEIN-EXTIF-LED
P09: INDEX-HISTORY

HISTORY

Version	Date	Modified
V1.0	2012-11-18	The initial version
V1.1	2012-12-15	1, 1V5 for DDR3 input, add the ground symbol 2, 3V3 for IO input, add the ground symbol 3, Remove the PMU circuits, modified to DC-DC and LDO powered 4, USB HOST, USB OTG add direct power supply short-circuit resistor.
V1.2	2012-12-17	1, Add the SATA socket
V1.3	2013-02-21	1, Modify the HDMI interface to Type C



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