

Compal Confidential

LA-7461 Schematics Document

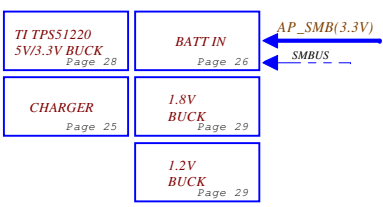
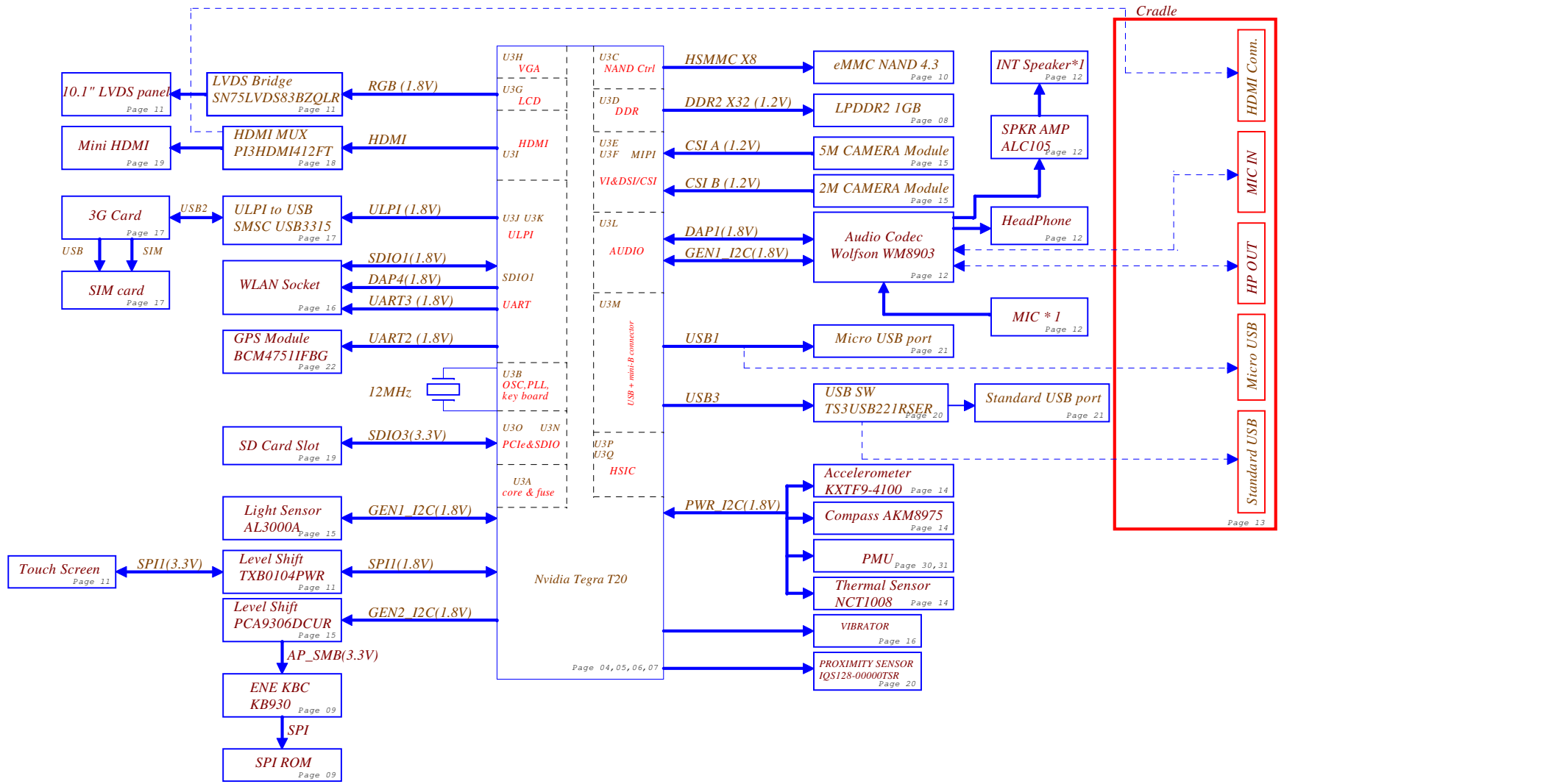
Nvidia(T20) + LPDDRII

2011-04-22

REV: 0.3

| | | | | | | |
|---|--------------------|-----------------|------------|--------------------------|------------------------|---------------|
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| | | | | Custom | LA-7461P | 0.3 |
| | | | | Date: | Monday, April 25, 2011 | Sheet 1 of 35 |

HDMI to Cradle



| | | | |
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Voltage Rails

| Power Plane | Description |
|--------------|---|
| VIN | Power supply (19V) |
| B+ | AC or battery power rail for power circuit. |
| +1.2VS_SM0 | Core voltage for CPU |
| +1.0VS_SM1 | CPU voltage for CPU |
| +1.1VS_LDO1 | AVDD_PLL power rail |
| +1.2VS_LDO2 | T20 RTC power rail |
| +1.8VS_LDO4 | T20 system power rail |
| +3.3VS_LDO3 | T20 USB power rail |
| +2.85VS_LDO5 | Core voltage for EMMC |
| +2.85VS_LDO6 | Core voltage for CAMERA |
| +3.3VS_LDO7 | T20 HDMI power rail |
| +1.8VS_LDO8 | T20 HDMI PLL power rail |
| +2.85VS_LDO9 | T20 DDR RX power rail |
| +3VALW | 3.3V always on power rail |
| +3VS | 3.3V switched power rail for standby mode |
| +5VALW | 5V always on power rail |
| +1.8VS | 1.8V always on power rail |
| +1.8VS_S3 | 1.8V switched power rail for standby mode |
| +3.3VS_RTC | RTC power |

LPDDR2

| NAND_D5 | NAND_D4 | SMT | | LPDDR2 | | Part Number |
|---------|---------|-----|-----|---------|----|-------------|
| L | L | R38 | R39 | ELPIDA | 1G | SA000048Q30 |
| L | H | R23 | R39 | Hynix | 1G | SA00004MJ10 |
| H | L | R38 | R24 | Samsung | 1G | NA |
| H | H | R23 | R24 | NA | | NA |

PWR_I2C address

| Device | Address |
|--|-------------|
| <input type="radio"/> FMU | 0110 100x b |
| <input type="radio"/> E-Compass | 0000 110x b |
| <input type="radio"/> Temperature sensor | 0100 110x b |

CAM_I2C address

| Device | Address |
|---------------------------------|---------|
| <input type="radio"/> CAMERA 5M | |
| <input type="radio"/> CAMERA 2M | |

GEN1_I2C

| Device | Address |
|------------------------------------|-------------|
| <input type="radio"/> Audio Codec | 0011 010x b |
| <input type="radio"/> Light sensor | 0001 110x b |

TS_I2C

| Device | Address |
|-----------------------|---------|
| <input type="radio"/> | |

GEN2_I2C

| Device | Address |
|-----------------------|---------|
| <input type="radio"/> | |

AP_SMB

| Device | Address |
|-------------------------------|---------|
| <input type="radio"/> LCD | |
| <input type="radio"/> 3G CARD | |

EC_SMB

| Device | Address |
|----------------------------|-------------|
| <input type="radio"/> BATT | 0001 001x b |

IME_I2C

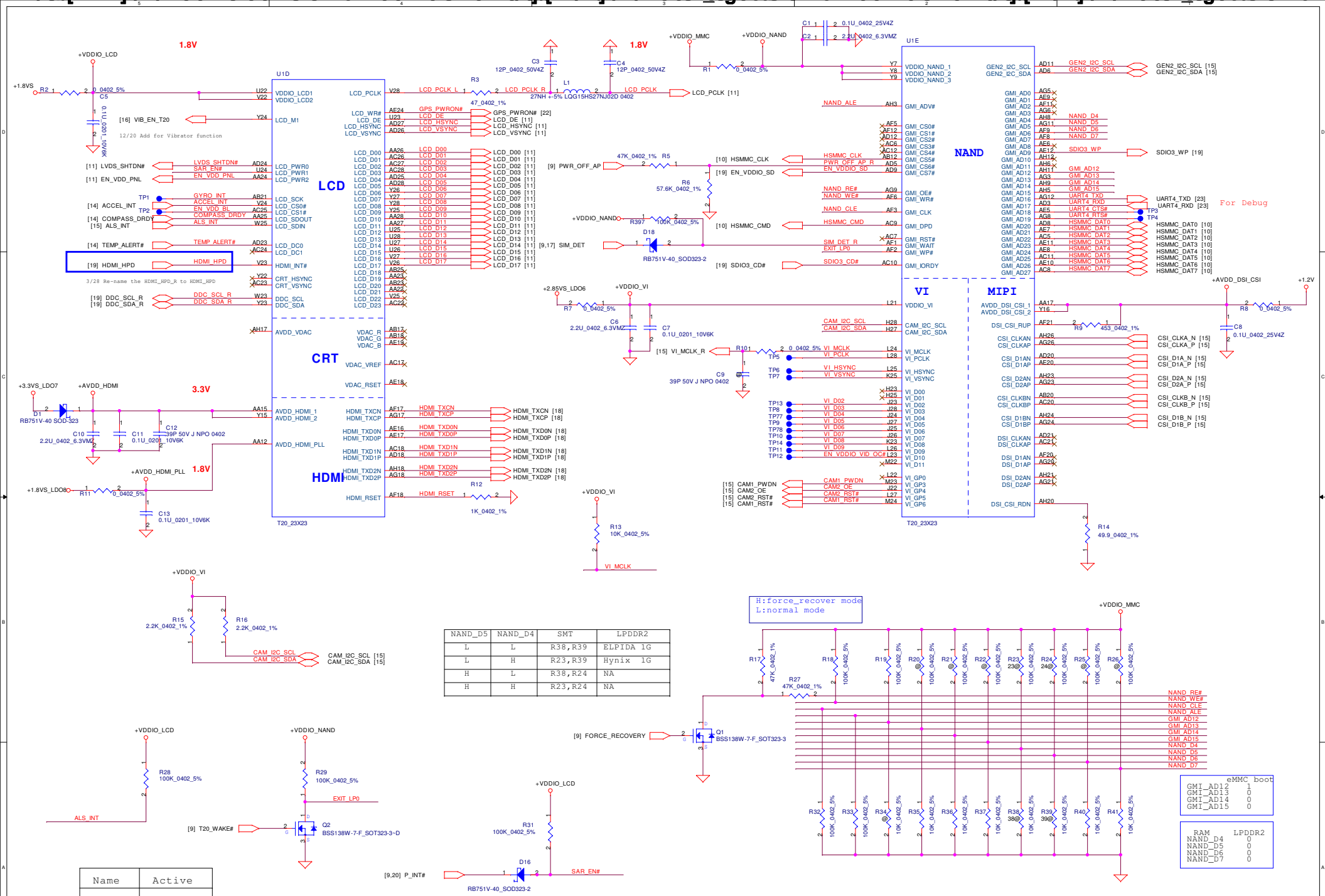
| Device | Address |
|--------------------------------|-------------|
| <input type="radio"/> G-sensor | 0001 1111 b |

DDC_I2C

| Device | Address |
|--------------------------------|---------|
| <input type="radio"/> HDM EDID | |

HDMI_DDC_I2C

| | | | | | |
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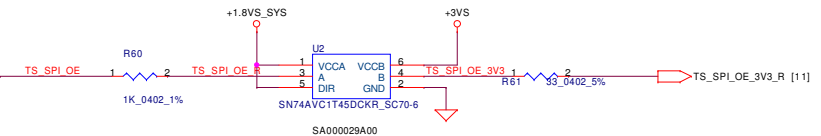
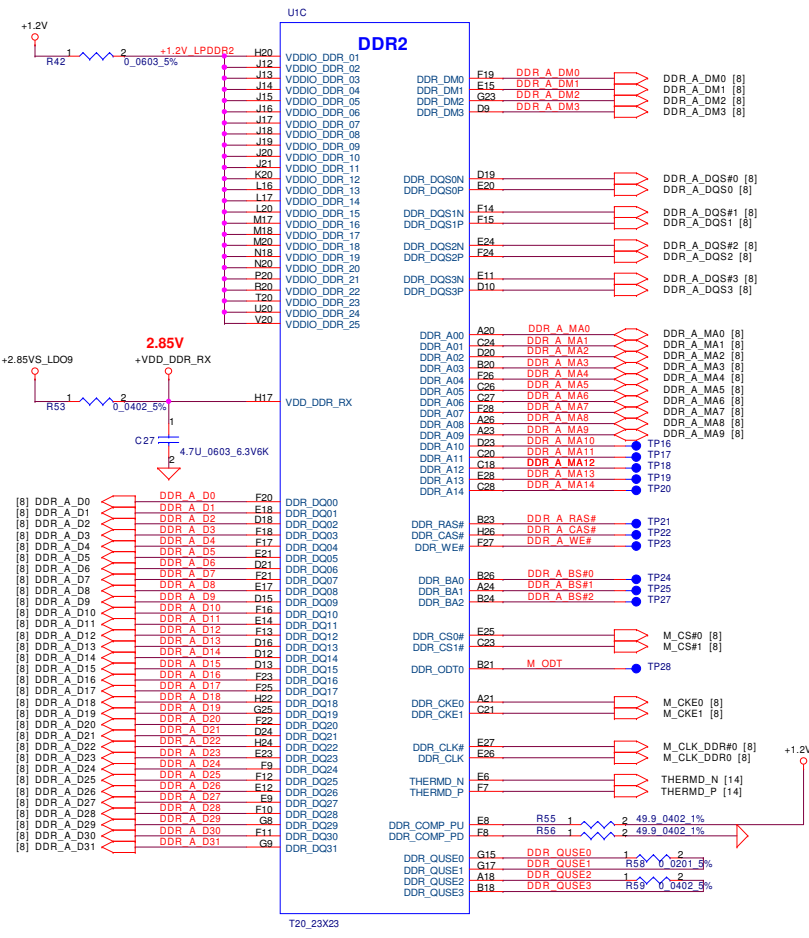
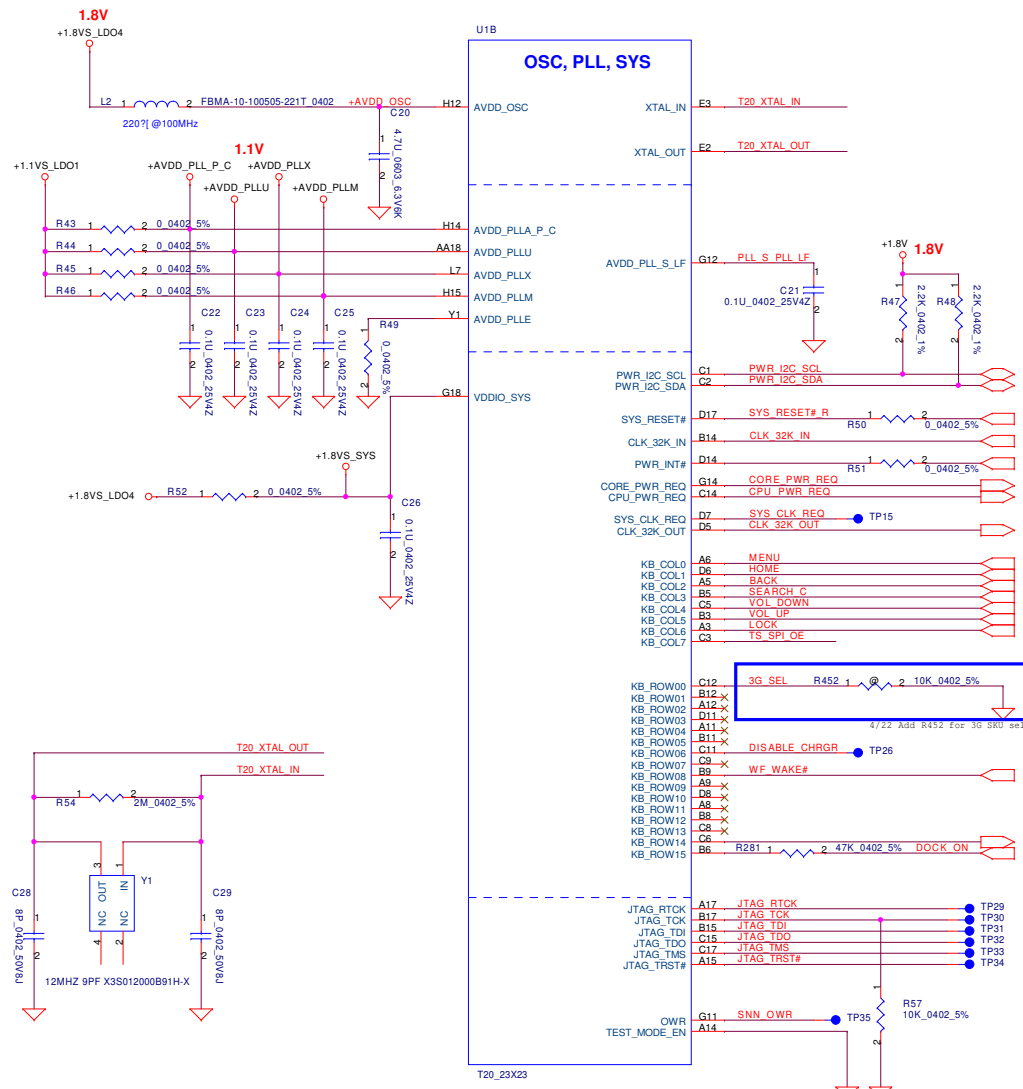


| Name | Active |
|----------|--------|
| EC_WAKE# | low |
| EXIT_LP0 | High |

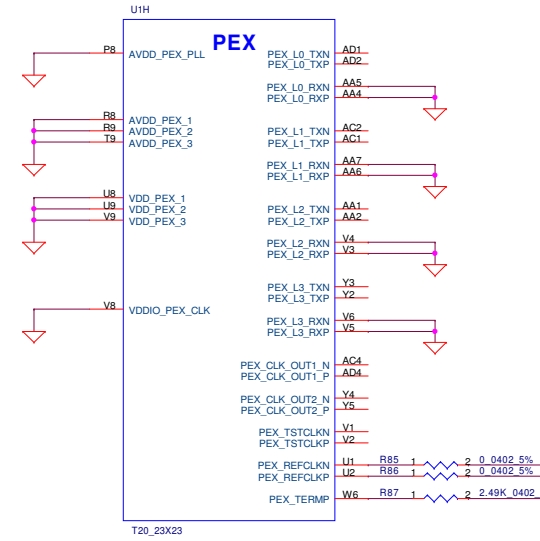
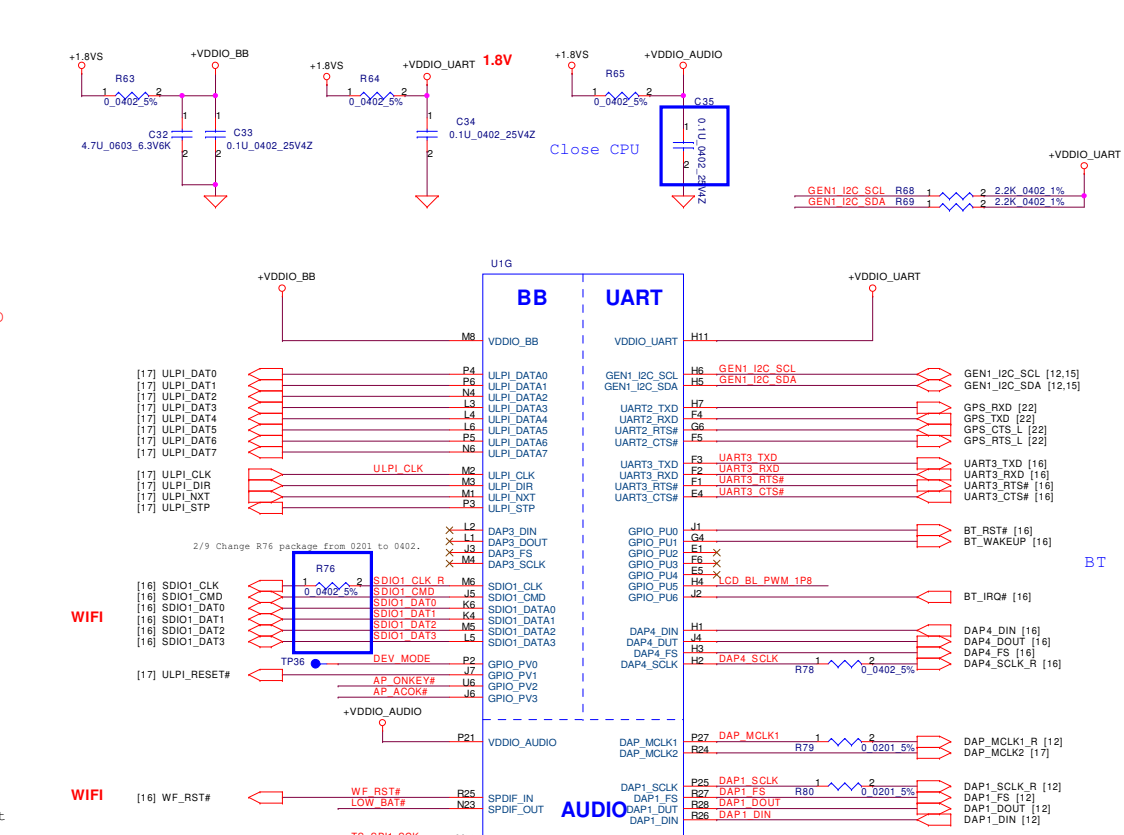
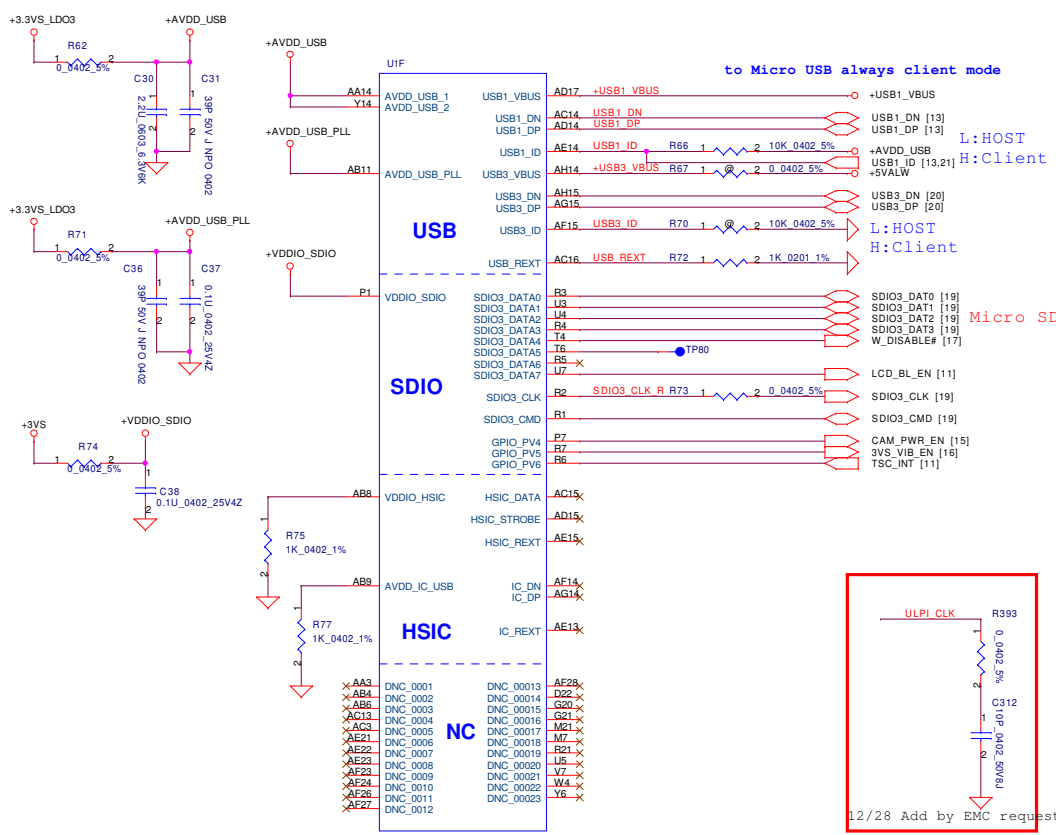
| NAND_D5 | NAND_D4 | SMT | LPDDR2 |
|---------|---------|----------|-----------|
| L | L | R38, R39 | ELPIDA 1G |
| L | H | R23, R39 | Hynix 1G |
| H | L | R38, R24 | NA |
| H | H | R23, R24 | NA |

| eMMC boot | |
|-----------|---|
| GMI_AD12 | 0 |
| GMI_AD13 | 0 |
| GMI_AD14 | 0 |
| GMI_AD15 | 0 |

| RAM LPDDR2 | |
|------------|---|
| NAND_D4 | 0 |
| NAND_D5 | 0 |
| NAND_D6 | 0 |
| NAND_D7 | 0 |

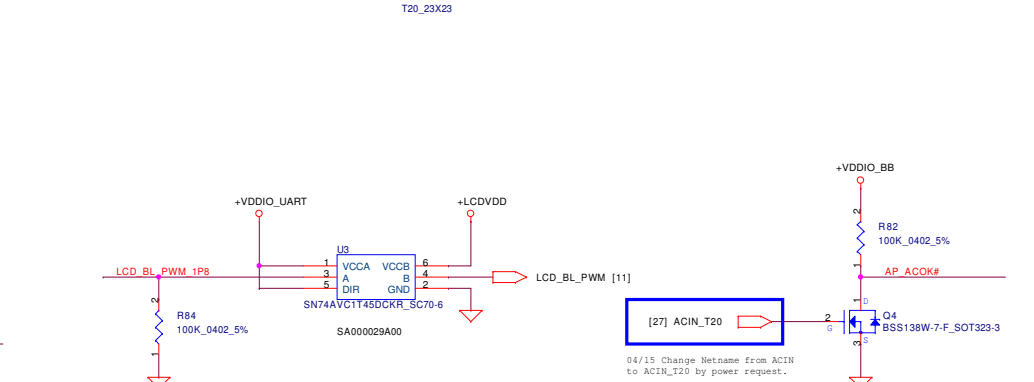
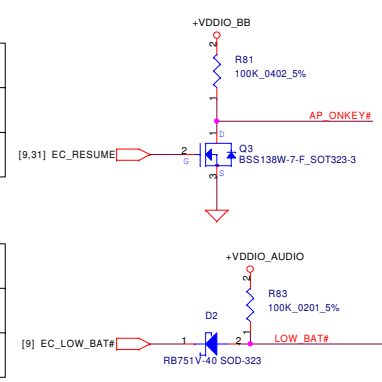


| | | | | | |
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| | | | | T20(2/4)OSC/PLL/SYS/DDR | |
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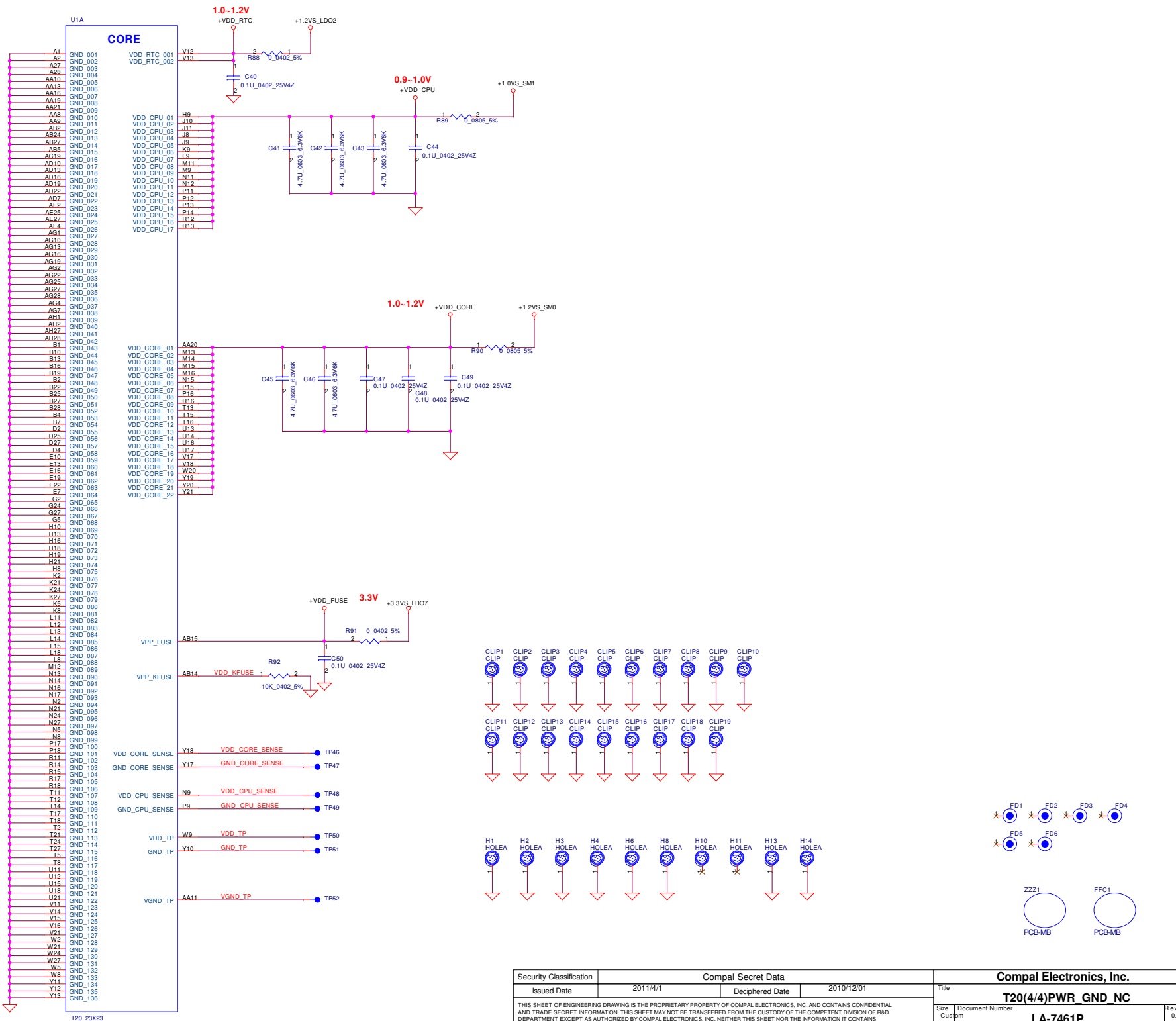
| Name | Active |
|------------|--------|
| EC_RESUMUE | High |
| AP_ONKEY# | Low |

| Name | Active |
|-------------|--------|
| EC_LOW_BAT# | Low |
| LOW_BAT# | Low |

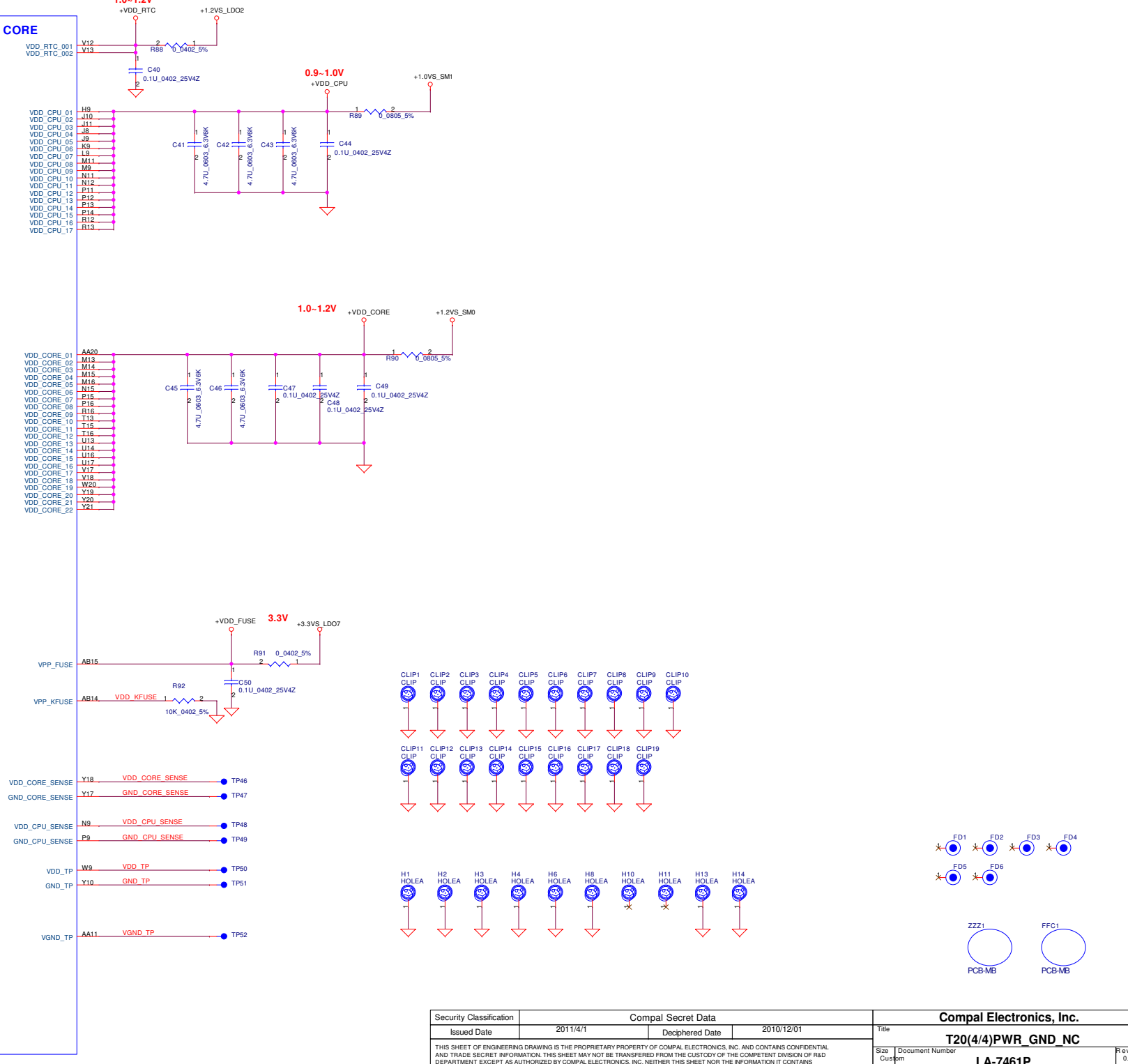


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|-------------------------|------------------------|--------------------|------------|------------------------------------|----|
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| | | | | T20(3/4)USB/SDIO/UART/AUDIO | |
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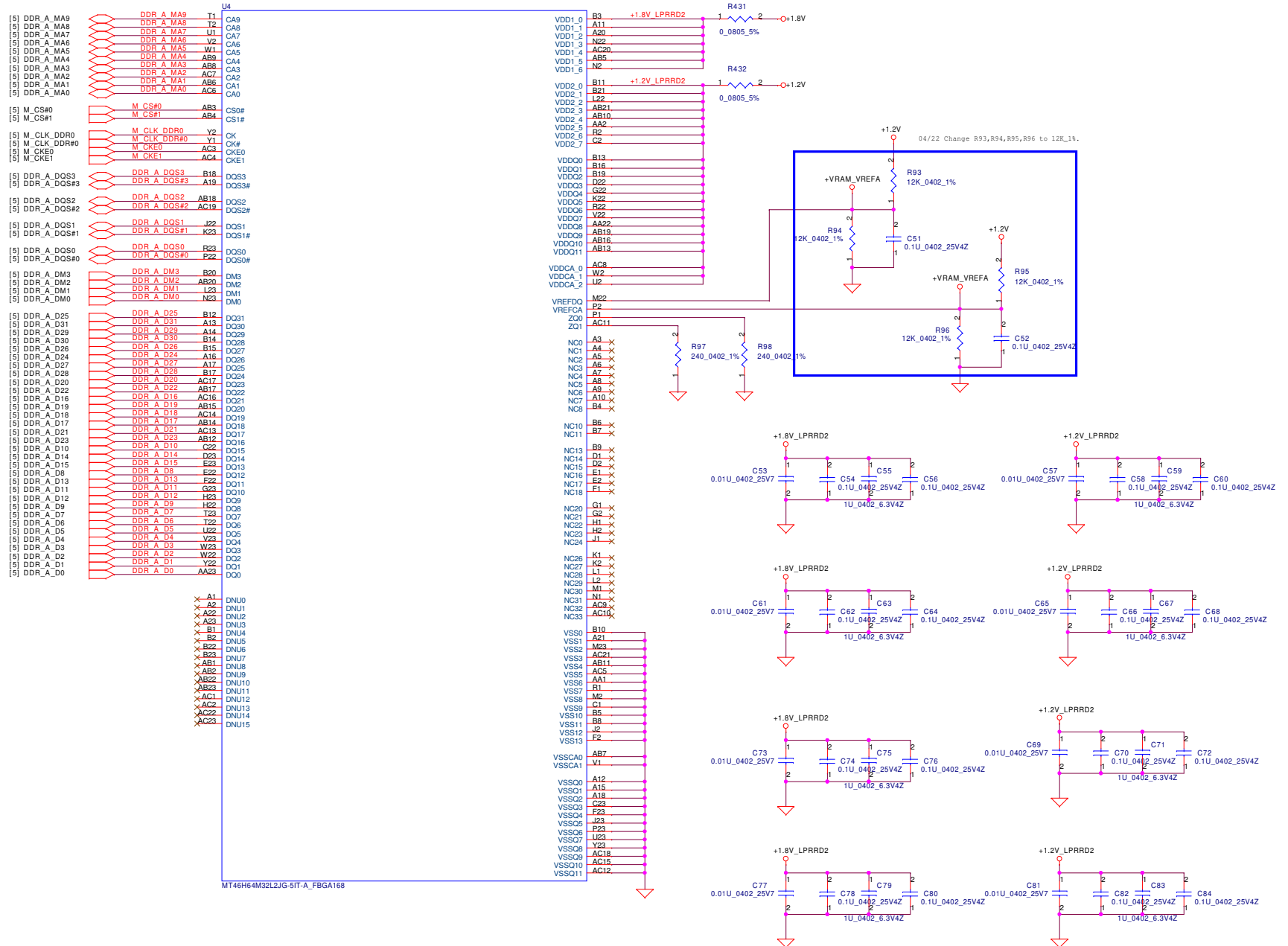
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- CORE**
- A1 GND 001
 - A2 GND 002
 - A26 GND 003
 - AA10 GND 004
 - AA13 GND 005
 - AA16 GND 006
 - AA19 GND 007
 - AA21 GND 008
 - AA8 GND 009
 - AA9 GND 010
 - AB2 GND 011
 - AB2 GND 012
 - AB24 GND 013
 - AB27 GND 014
 - AB5 GND 015
 - AC10 GND 016
 - AD10 GND 017
 - AD13 GND 018
 - AD16 GND 019
 - AD19 GND 020
 - AD22 GND 021
 - AD7 GND 022
 - AE2 GND 023
 - AE25 GND 024
 - AE27 GND 025
 - AE4 GND 026
 - AG1 GND 027
 - AG10 GND 028
 - AG13 GND 029
 - AG16 GND 030
 - AG19 GND 031
 - AG2 GND 032
 - AG22 GND 033
 - AG25 GND 034
 - AG27 GND 035
 - AG33 GND 036
 - AG4 GND 037
 - AG7 GND 038
 - AH1 GND 039
 - AH2 GND 040
 - AH27 GND 041
 - AH29 GND 042
 - B1 GND 043
 - B10 GND 044
 - B13 GND 045
 - B16 GND 046
 - B19 GND 047
 - B2 GND 048
 - B25 GND 049
 - B27 GND 050
 - B28 GND 051
 - B29 GND 052
 - B4 GND 053
 - D2 GND 054
 - D25 GND 055
 - D27 GND 056
 - D4 GND 057
 - E10 GND 058
 - E13 GND 059
 - E16 GND 060
 - E19 GND 061
 - E22 GND 062
 - E7 GND 063
 - G2 GND 064
 - G24 GND 065
 - G27 GND 066
 - G6 GND 067
 - H10 GND 068
 - H13 GND 069
 - H16 GND 070
 - H18 GND 071
 - H19 GND 072
 - H21 GND 073
 - H8 GND 074
 - K2 GND 075
 - K24 GND 076
 - K27 GND 077
 - K8 GND 078
 - L11 GND 079
 - L12 GND 080
 - L13 GND 081
 - L14 GND 082
 - L15 GND 083
 - L18 GND 084
 - L8 GND 085
 - M12 GND 086
 - N13 GND 087
 - N14 GND 088
 - N16 GND 089
 - N17 GND 090
 - N2 GND 091
 - N21 GND 092
 - N24 GND 093
 - N27 GND 094
 - N8 GND 095
 - N8 GND 096
 - N8 GND 097
 - N8 GND 098
 - P17 GND 099
 - P18 GND 100
 - R11 GND 101
 - R14 GND 102
 - R15 GND 103
 - R17 GND 104
 - R18 GND 105
 - T11 GND 106
 - T12 GND 107
 - T14 GND 108
 - T17 GND 109
 - T19 GND 110
 - T2 GND 111
 - T2 GND 112
 - T21 GND 113
 - T24 GND 114
 - T27 GND 115
 - T6 GND 116
 - T8 GND 117
 - U11 GND 118
 - U12 GND 119
 - U15 GND 120
 - U18 GND 121
 - U21 GND 122
 - V11 GND 123
 - V14 GND 124
 - V15 GND 125
 - V16 GND 126
 - V21 GND 127
 - W2 GND 128
 - W21 GND 129
 - W24 GND 130
 - W27 GND 131
 - W5 GND 132
 - W8 GND 133
 - Y11 GND 134
 - Y12 GND 135
 - Y13 GND 136

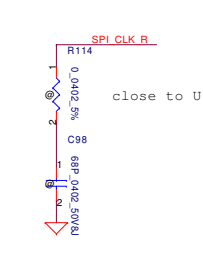
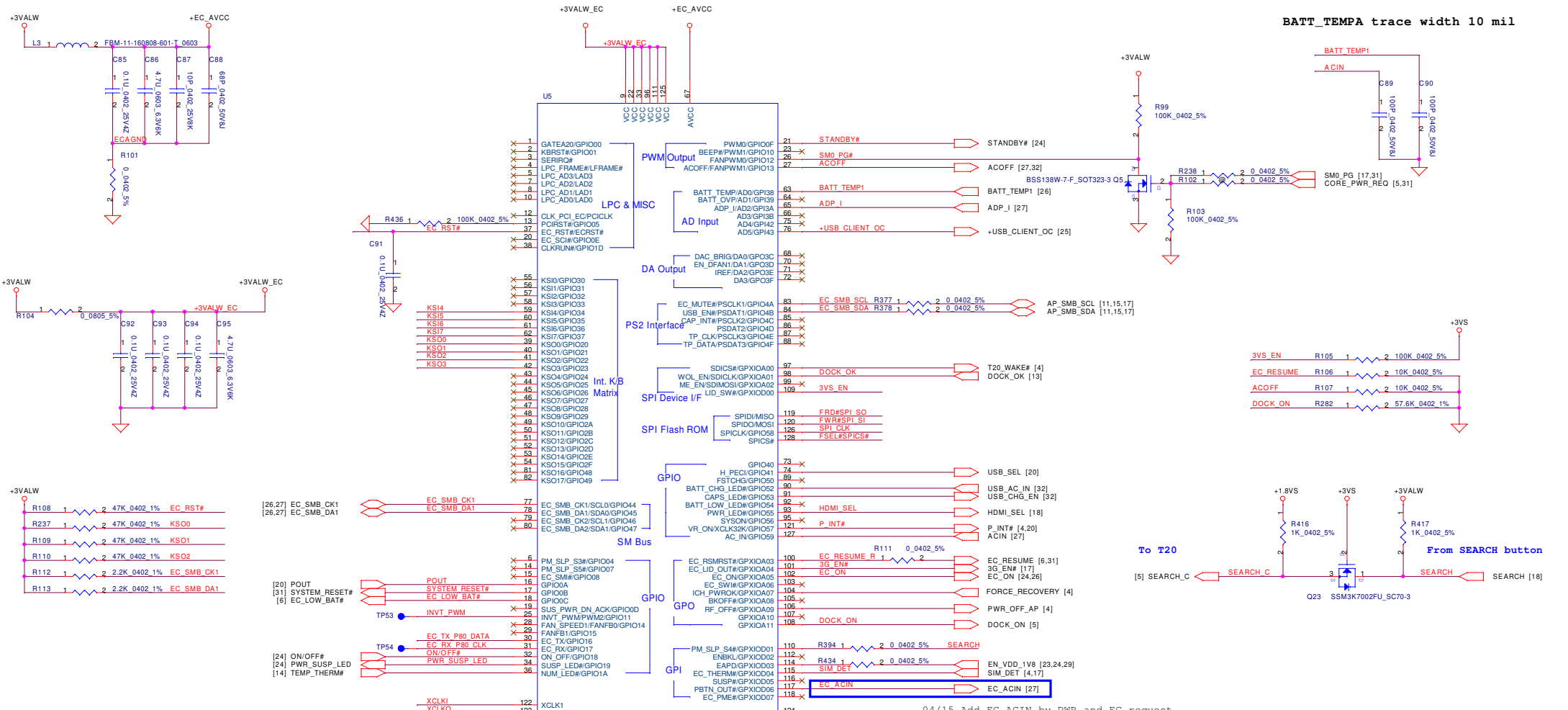


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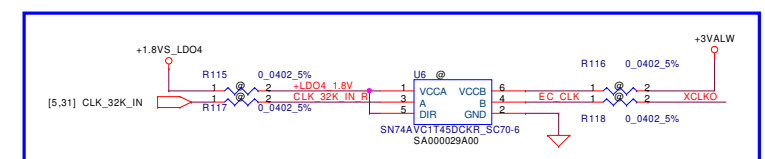
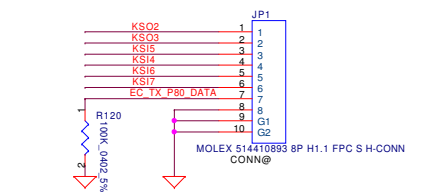
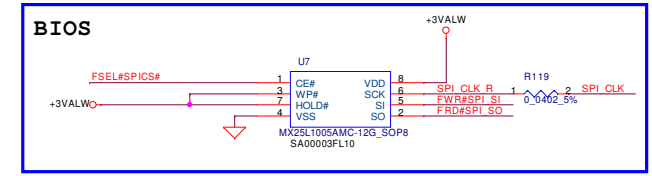


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| 8 | | | | 35 | |

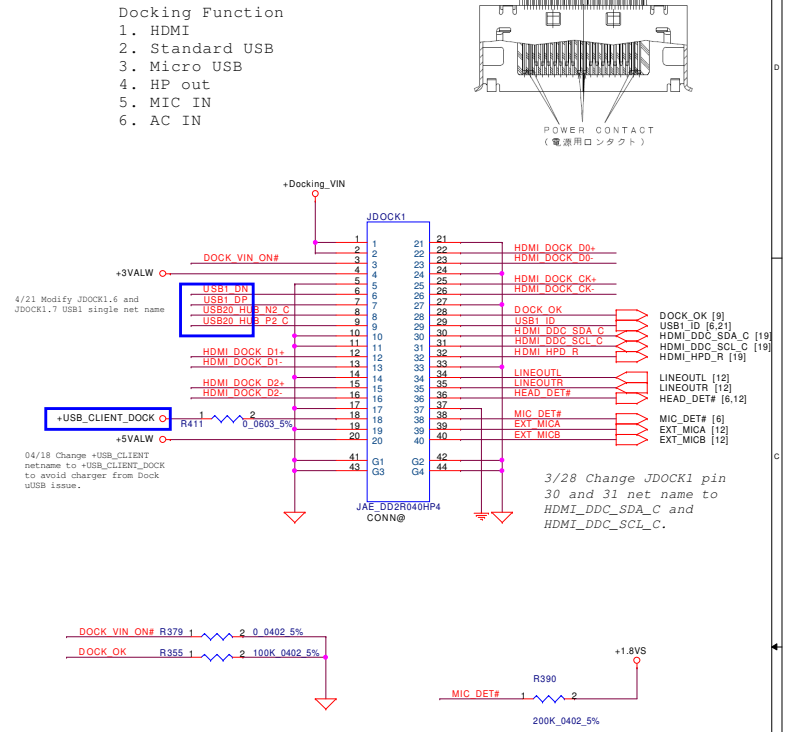
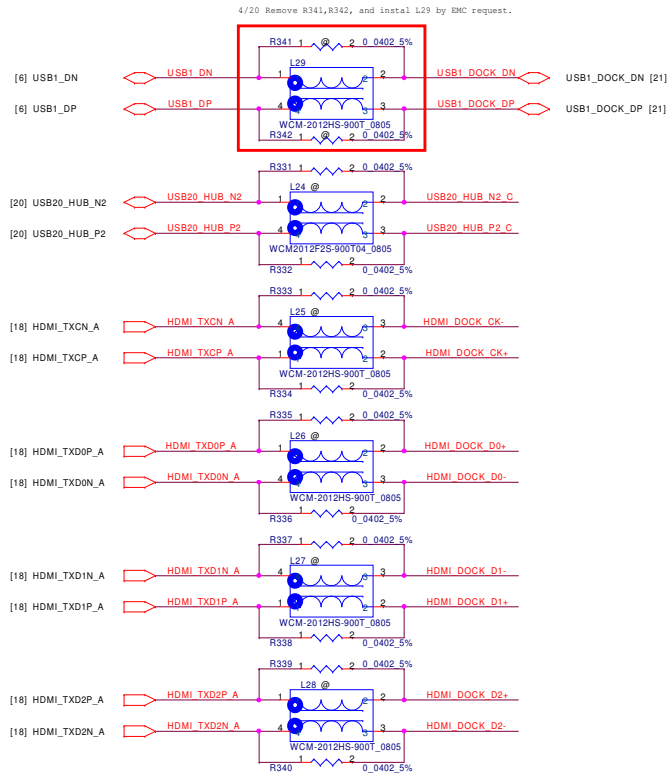
BATT_TEMP trace width 10 mil



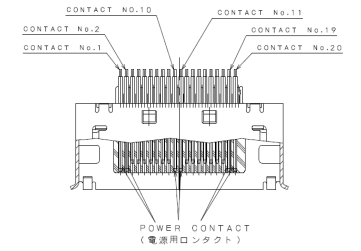
3/28 Change C99 and C100 to 33pF to reduce X1 output CLK deviation



| | | | | | |
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| | | | | ENE/BIOS/LIGHT SENSOR | |
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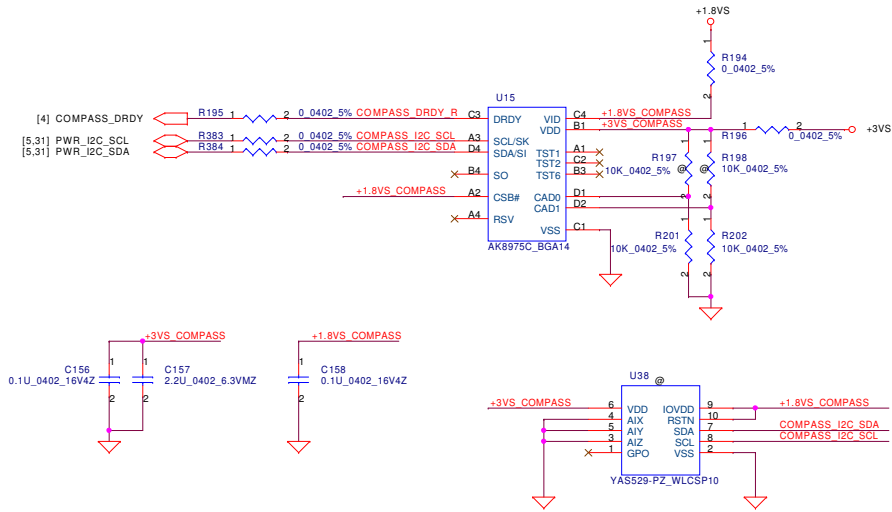


12/23 Add for EMC request
 12/29 Change ESD diode package
 04/21 Remove ESD diode D6,D19,D20,D21,D22,D25,D31 by EMC request.

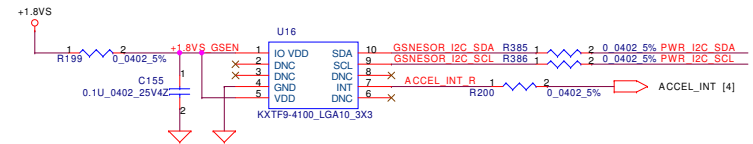


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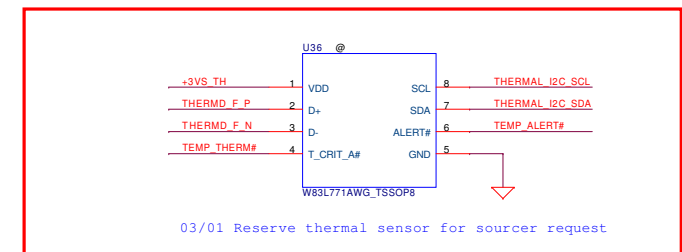
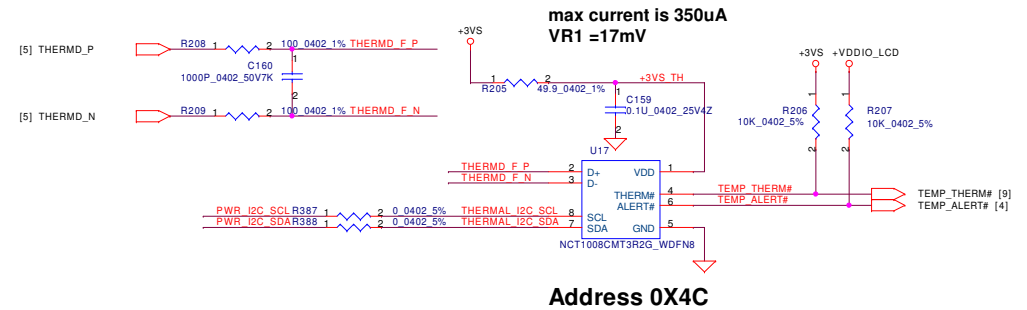
ECompass



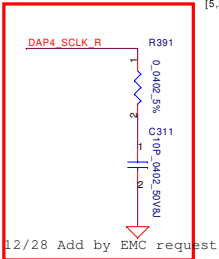
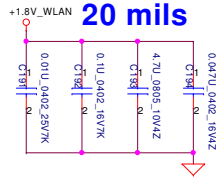
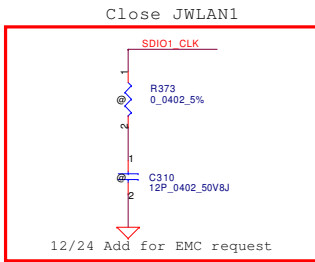
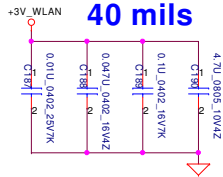
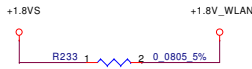
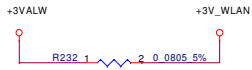
G-SENSOR



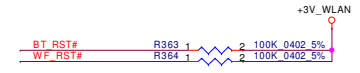
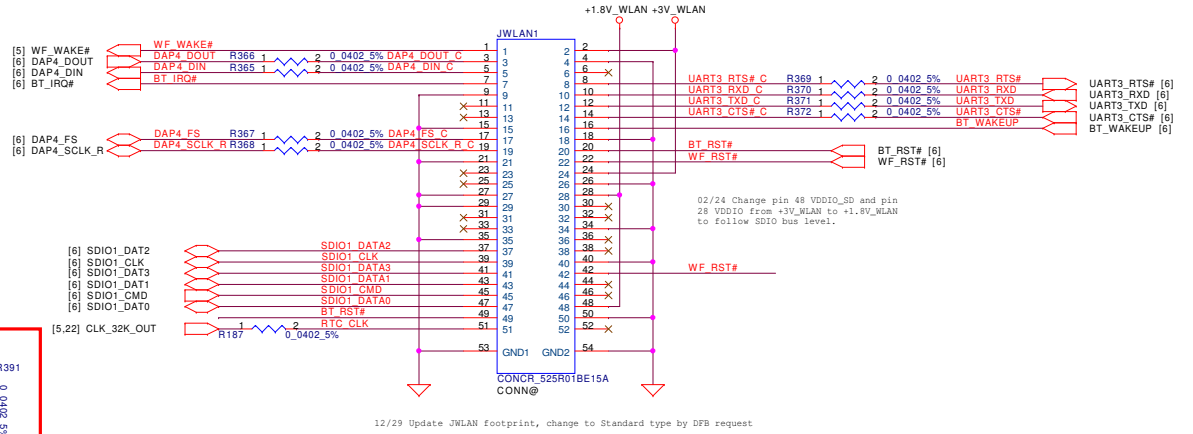
THERMAL



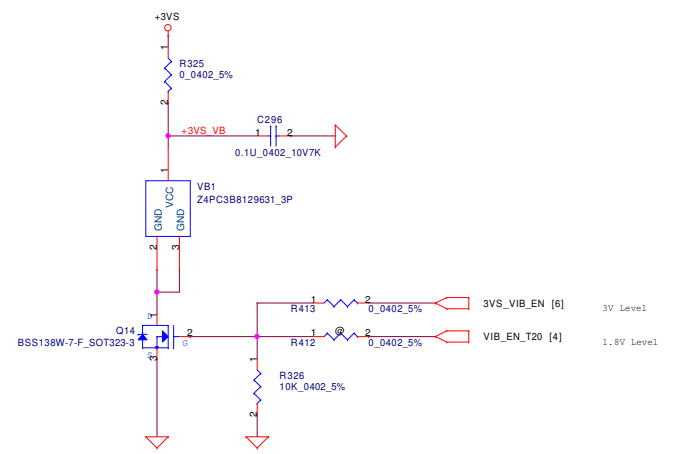
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WLAN/BT Mini Card

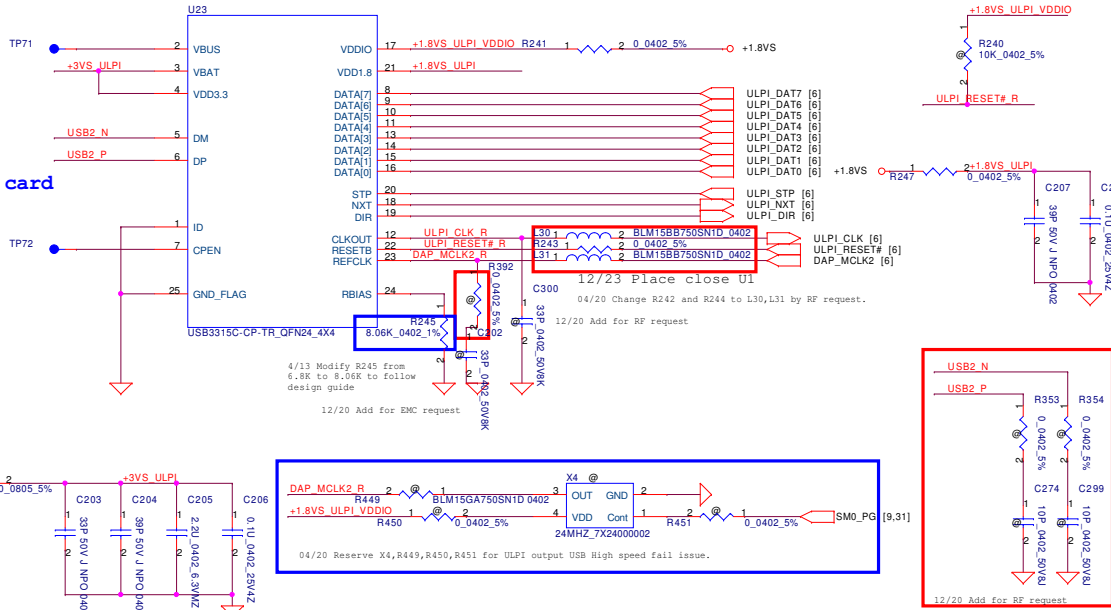


VIBRATOR

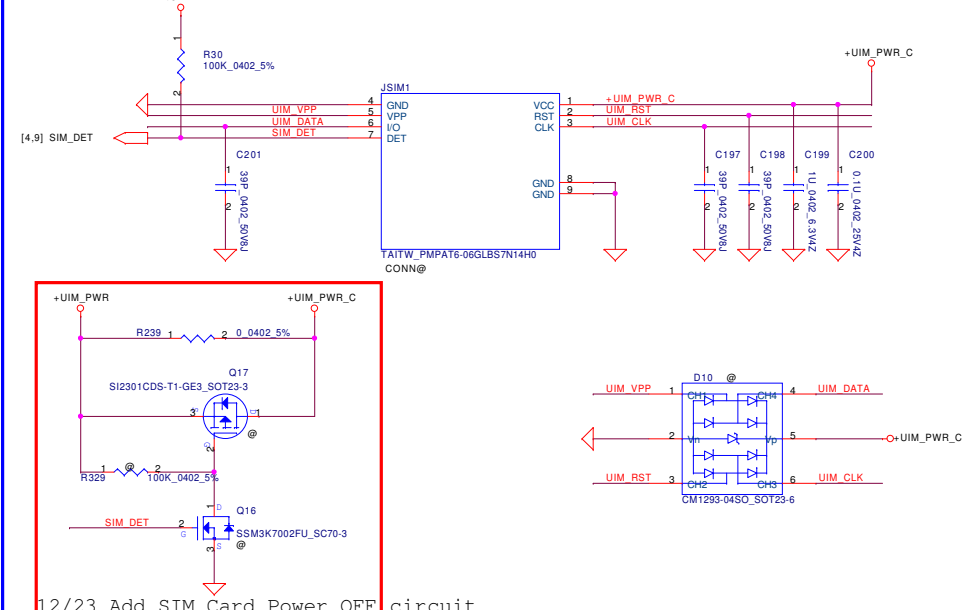


| | | | | | | | |
|---|-----------------|--------------------|------------|-------------------------------|--|--------------------------|--|
| Security Classification | | Compal Secret Data | | Title | | Compal Electronics, Inc. | |
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| Size | Document Number | Rev | | Date | | | |
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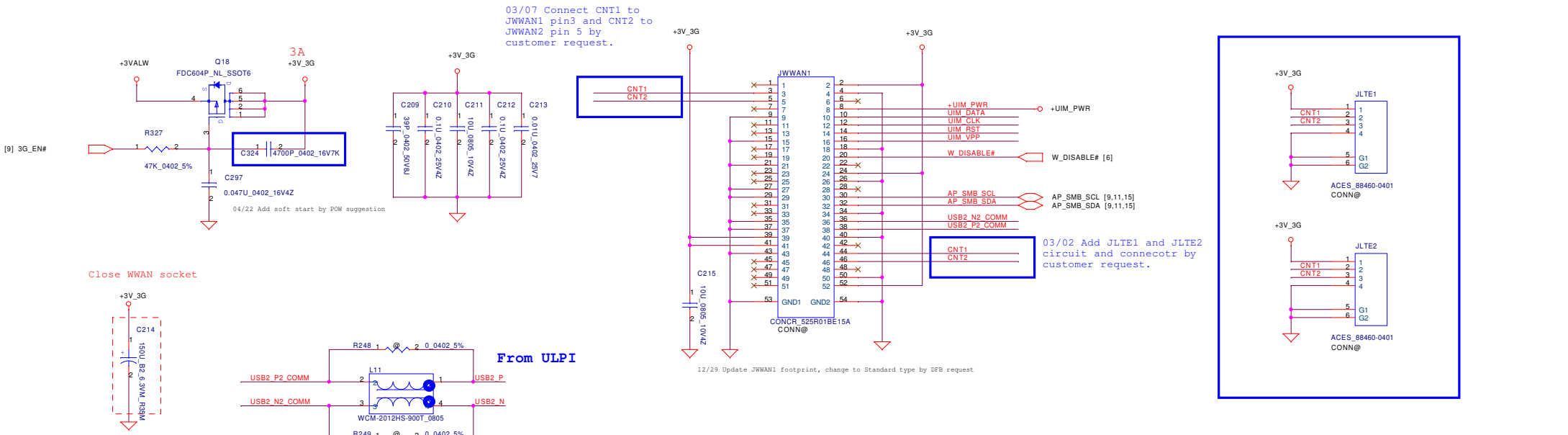
ULPI



SIM CARD SOCKET

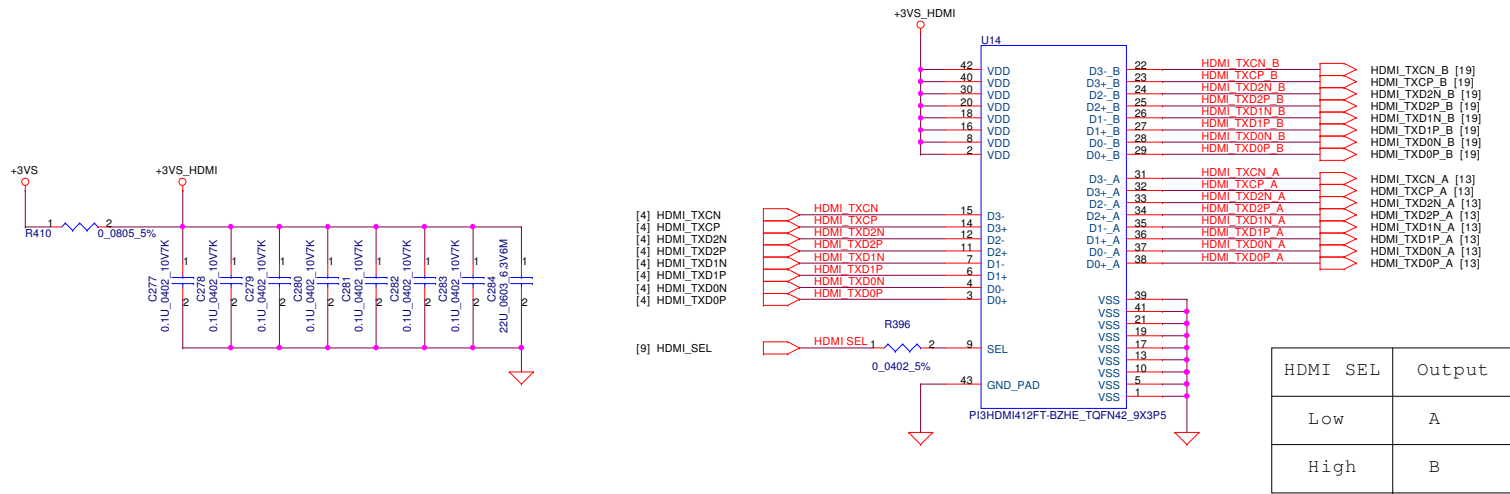


Mini-Express Card for WWAN

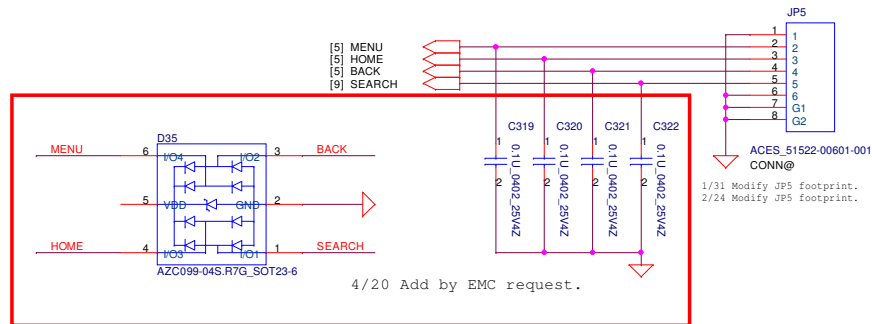


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| Title | ULPI/3G CARD/SIM CARD | | | Rev |
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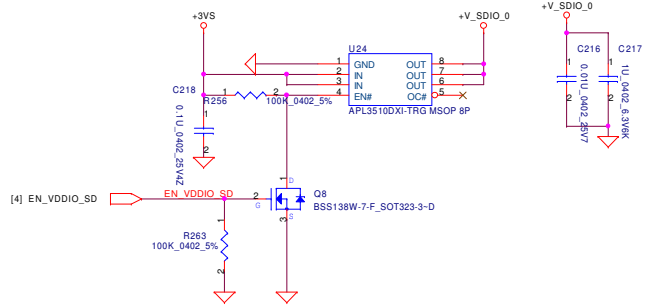
HDMI MUX



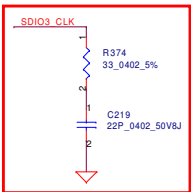
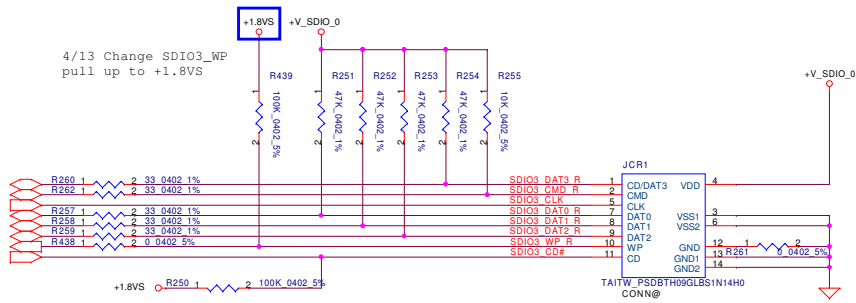
Button Board



SD CARD

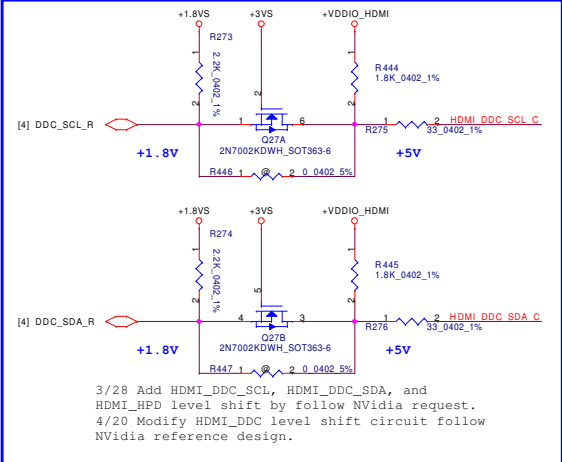
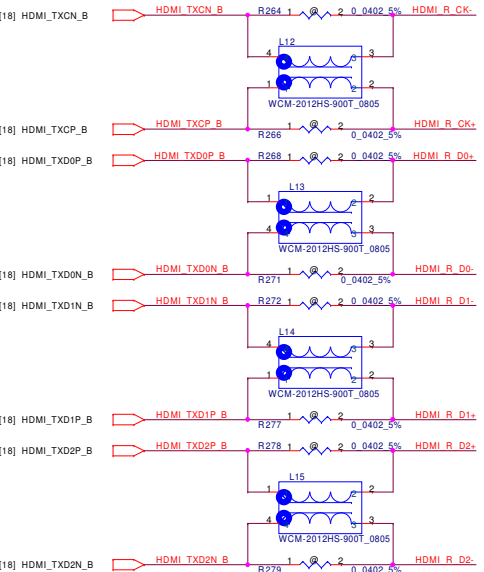


- [6] SDIO3_DAT3
- [6] SDIO3_CMD
- [6] SDIO3_CLK
- [6] SDIO3_DAT0
- [6] SDIO3_DAT1
- [6] SDIO3_DAT2
- [4] SDIO3_WP
- [4] SDIO3_CD#

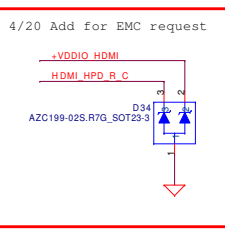
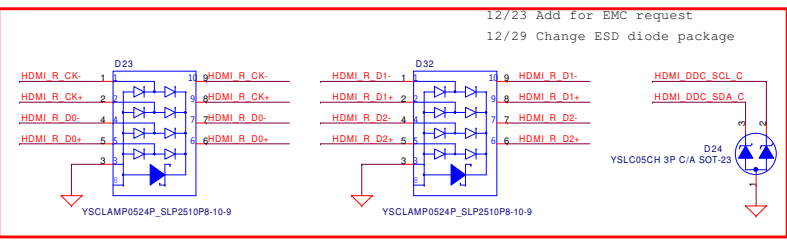


Close JCR1
 12/24 Add by EMC request
 3/28 Mount and change R374 to 33ohms,
 C219 to 22pF by EMI request

HDMI

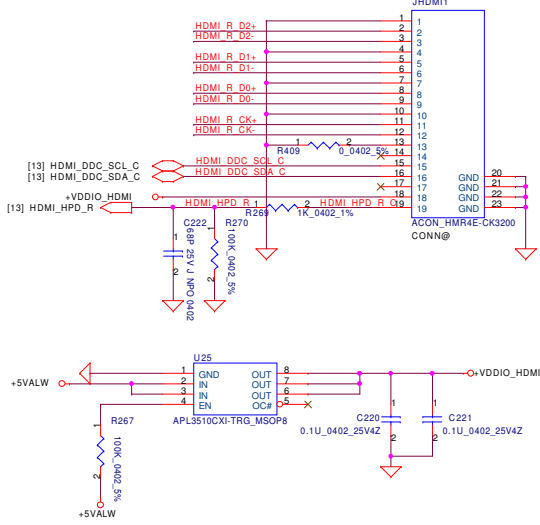


3/28 Add HDMI_DDC_SCL, HDMI_DDC_SDA, and
 HDMI_HPD level shift by follow Nvidia request.
 4/20 Modify HDMI_DDC level shift circuit follow
 Nvidia reference design.



4/20 Add for EMC request
 4/20 Modify HDMI_HPD level shift circuit follow
 Nvidia reference design.

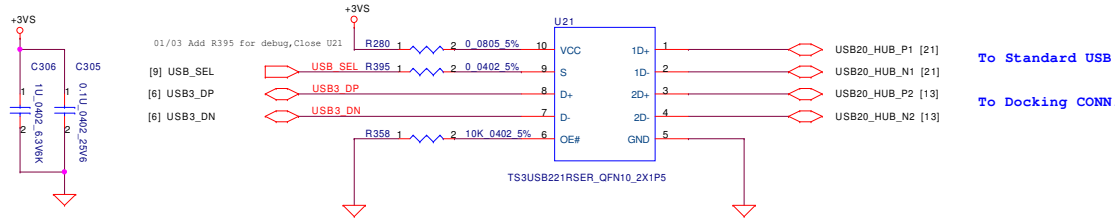
HDMI Type C Connector



• HDMI C Type

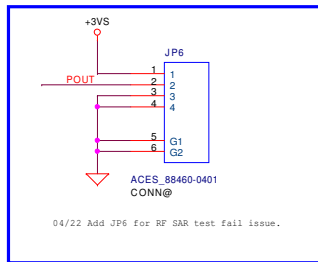
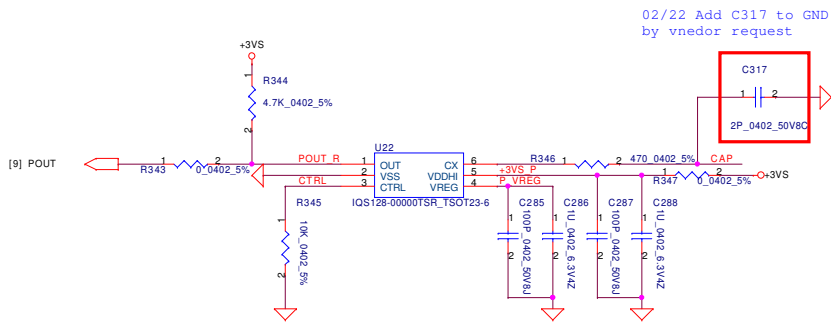
| Pin | Pin定義 |
|-----|---------------------------|
| 1 | TMDS Data2+ Shield |
| 2 | TMDS Data2+ |
| 3 | TMDS Data1+ Shield |
| 4 | TMDS Data1+ |
| 5 | TMDS Data0+ Shield |
| 6 | TMDS Data0+ |
| 7 | TMDS Data0- Shield |
| 8 | TMDS Data0- |
| 9 | TMDS Clock+ Shield |
| 10 | TMDS Clock+ |
| 11 | TMDS Clock- Shield |
| 12 | TMDS Clock- |
| 13 | DDC/CEC Ground |
| 14 | CEC |
| 15 | SC_L |
| 16 | SDA |
| 17 | Reserved (N.C. on device) |
| 18 | +5V Power |
| 19 | Hot Plug Detect |

USB SW

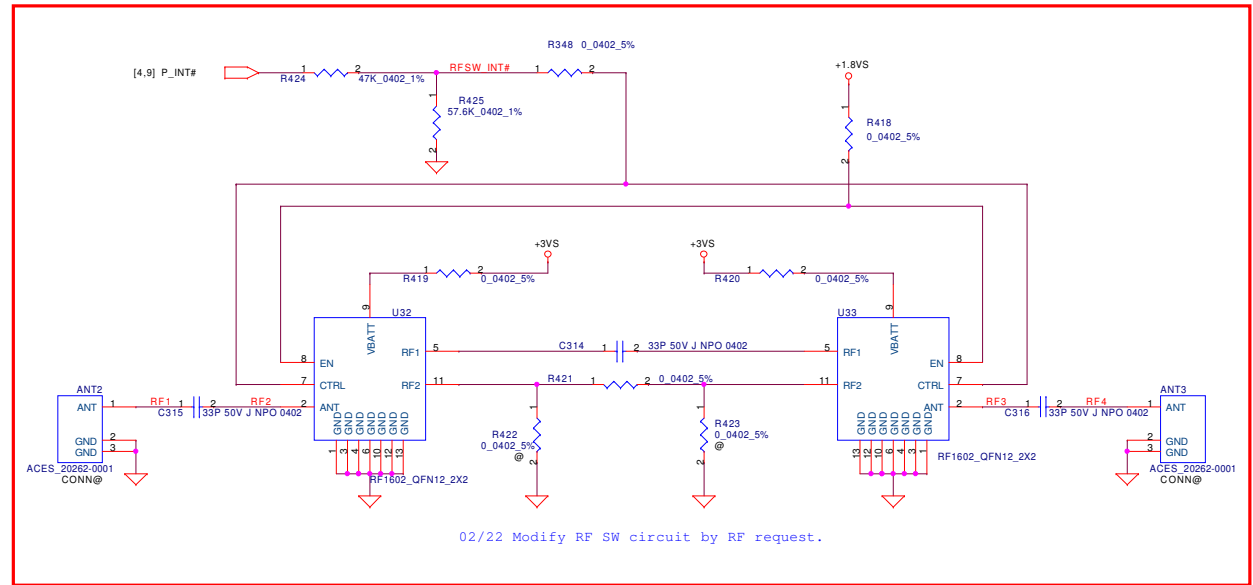


| | |
|---|--------|
| S | Output |
| L | D = 1D |
| H | D = 2D |

PROXIMITY SENSOR



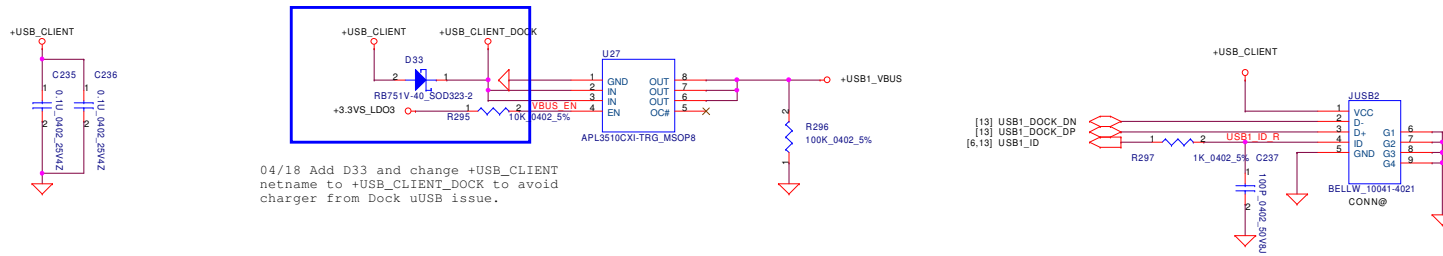
RF SW



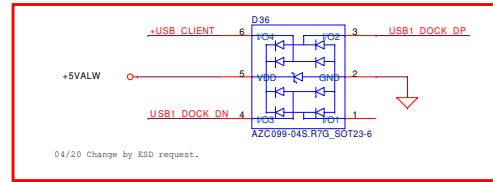
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|--|------------------------|-----------------|--------------------------|-------|
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| Issued Date | 2011/4/1 | Deciphered Date | 2010/12/01 | |
| Title USB SW/PROXIMITY/RF SW | | | | |
| Size | Document Number | LA-7461P | | Rev |
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MICRO USB

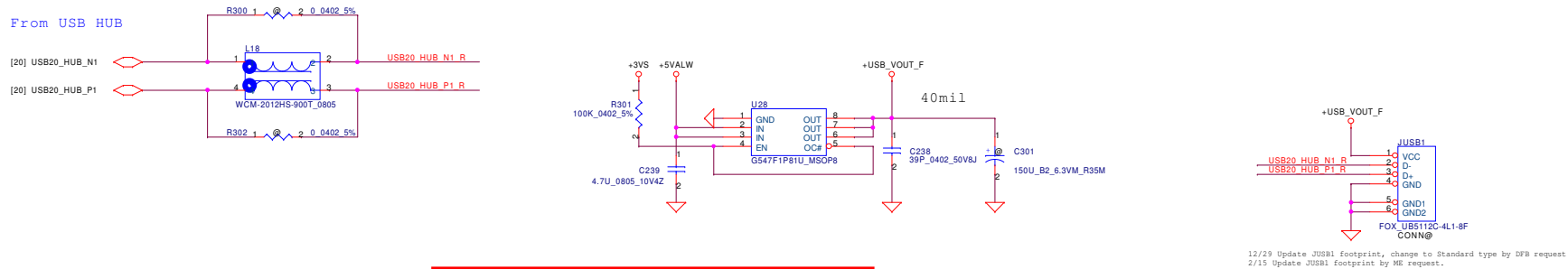


04/18 Add D33 and change +USB_CLIENT netname to +USB_CLIENT_DOCK to avoid charger from Dock uUSB issue.

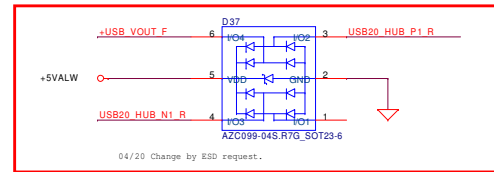


04/20 Change by ESD request.

STANDARD USB

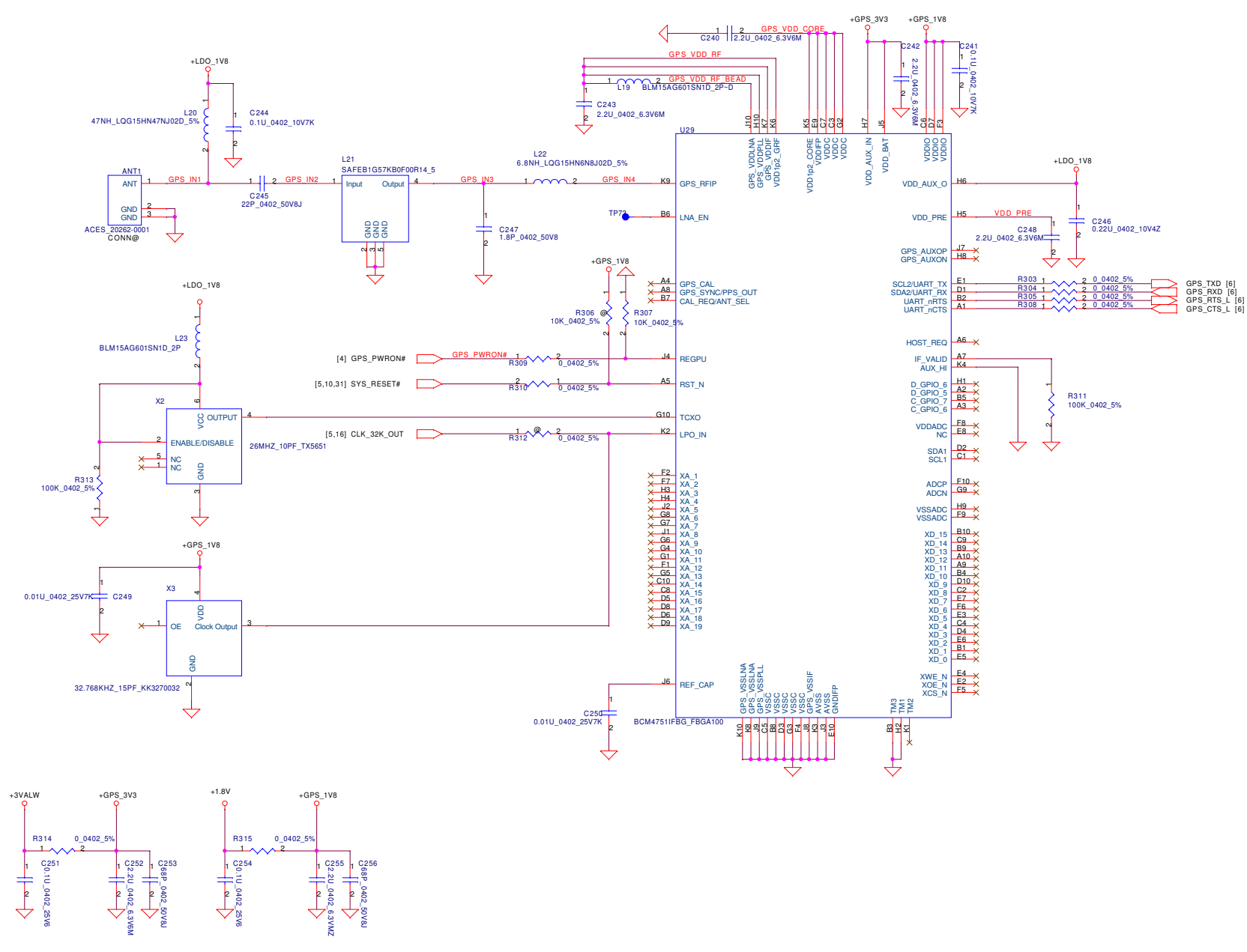


12/29 Update JUSB1 footprint, change to Standard type by DFB request
2/15 Update JUSB1 footprint by ME request.



04/20 Change by ESD request.

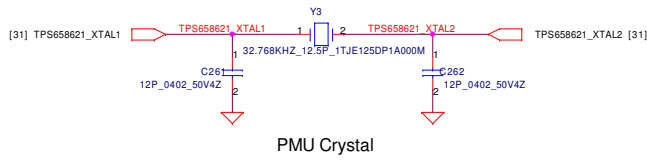
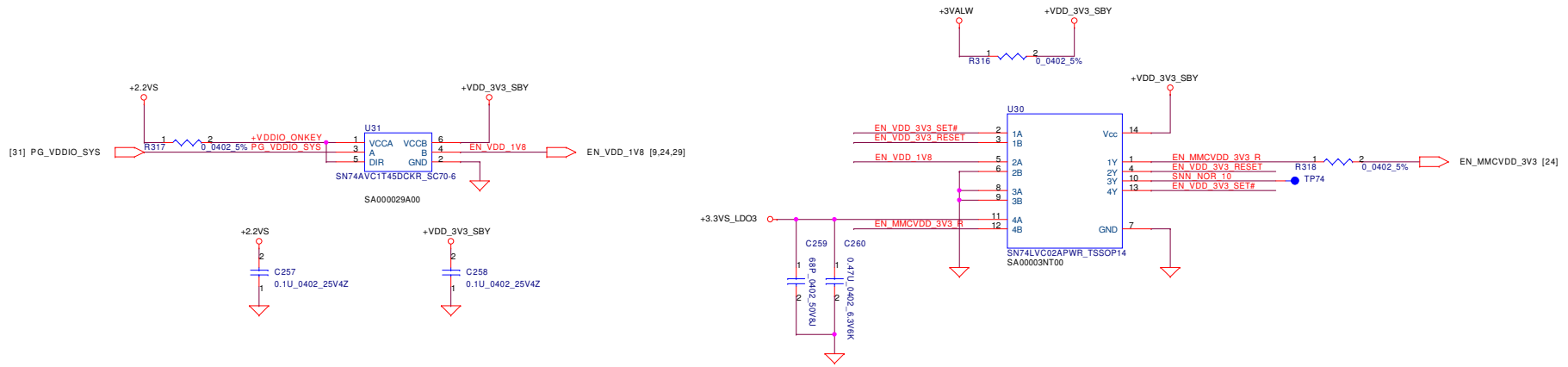
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| Date: | Monday, April 25, 2011 | Sheet | 21 of 35 | |



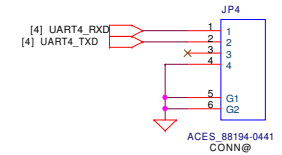
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| Security Classification | | Compal Secret Data | | Compal Electronics, Inc. | |
| Issued Date | 2011/4/1 | Deciphered Date | 2010/12/01 | Title | |
| | | | | GPS | |
| Size | | | Document Number | Rev | |
| | | | LA-7461P | 0.3 | |
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Power Sequence Logic



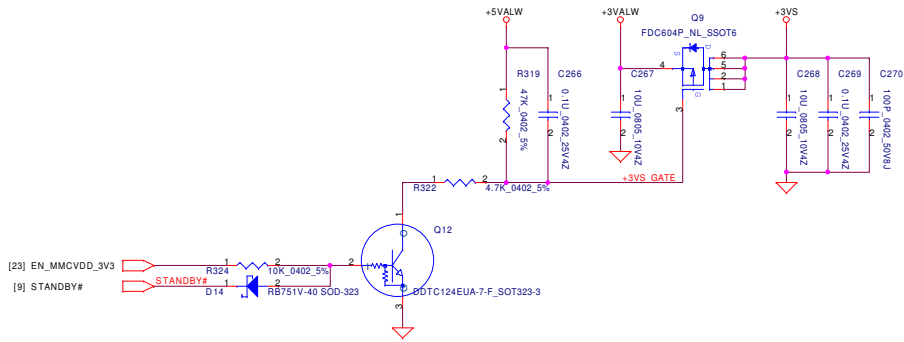
Debug connector



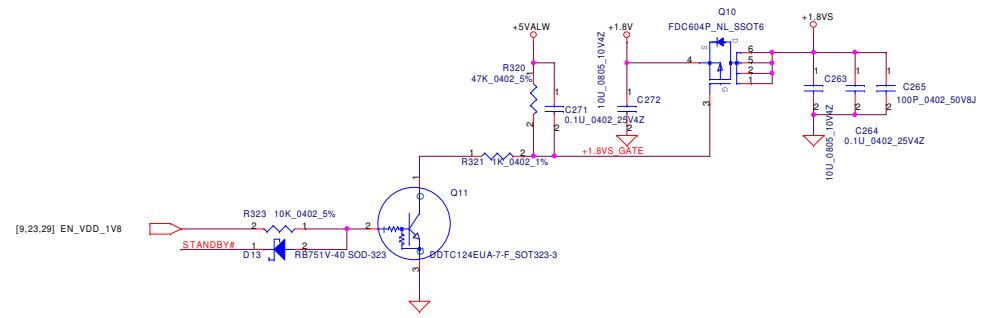
12/16 Add Debug Connector

| | | | | |
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| | | | | Document Number LA-7461P |
| | | | | Rev 0.3 |
| Date: Monday, April 25, 2011 | | | | Sheet 23 of 35 |

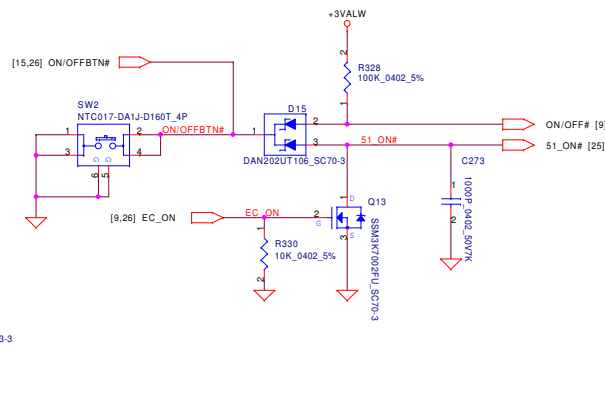
+3VALW to +3VS Transfer



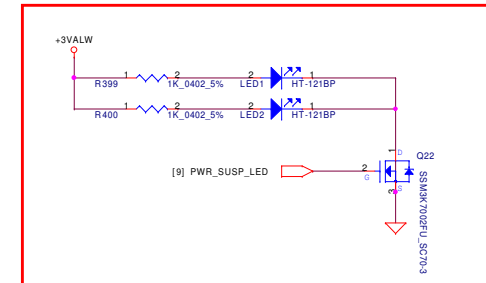
+1.8V to +1.8VS Transfer



Power Button

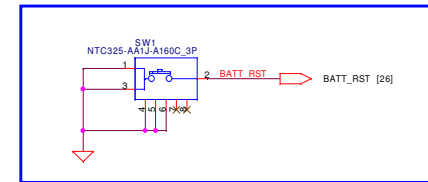


LED

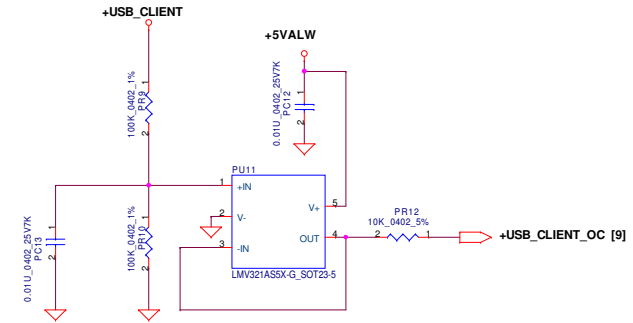
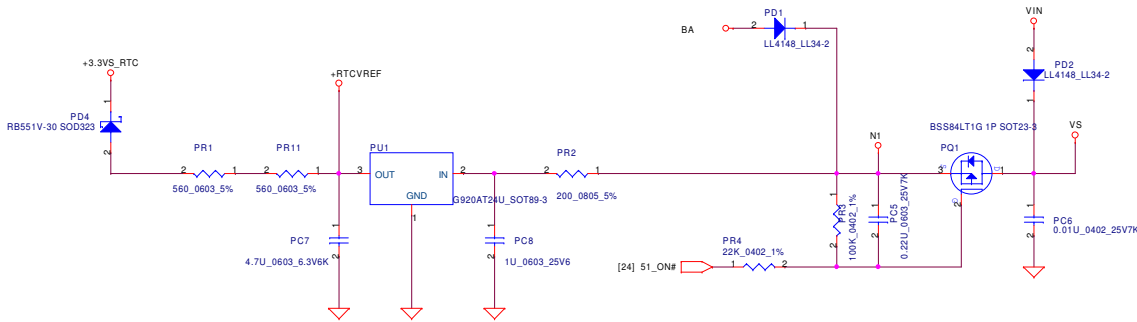
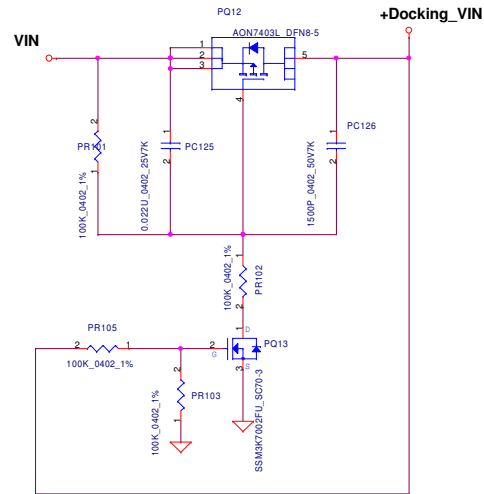
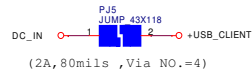
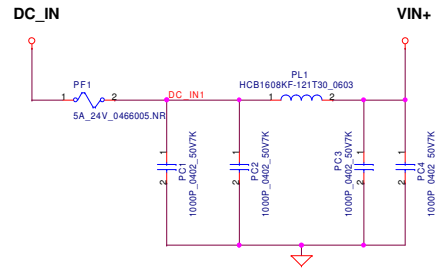


2/9 Add LED for customer request.
4/20 Change LED1 and LED2 from Red light to White light.

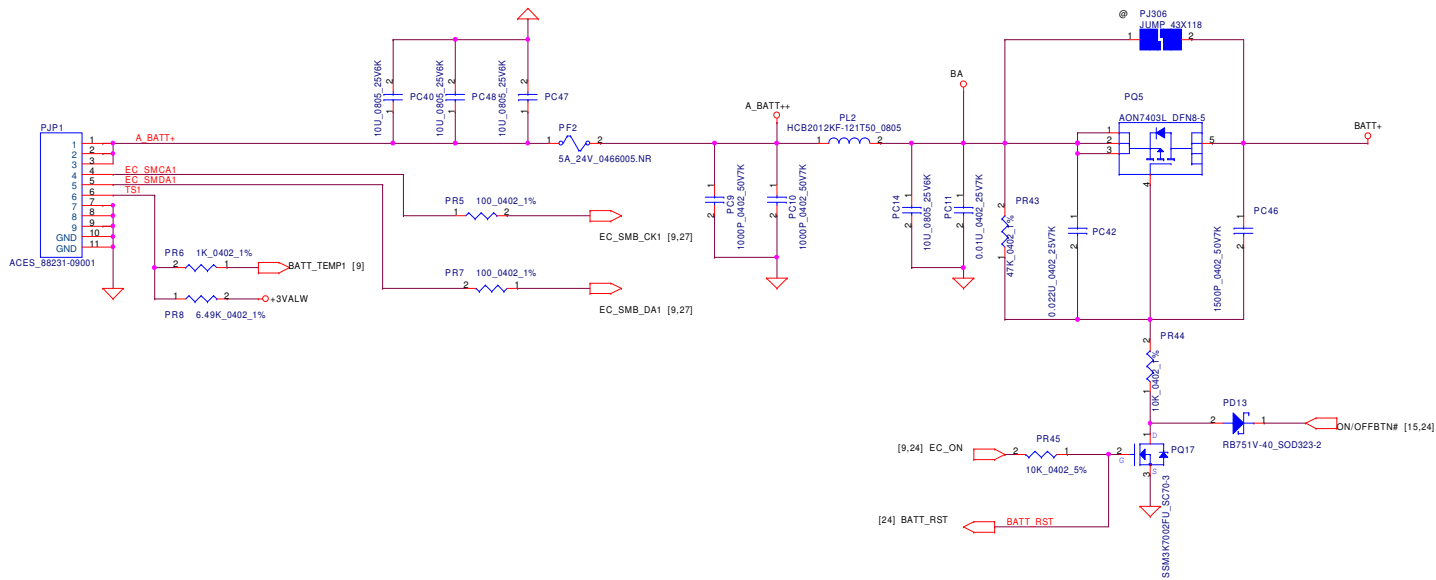
4/15 Move SW1 from PWR side to HW side, since it's HW parts.



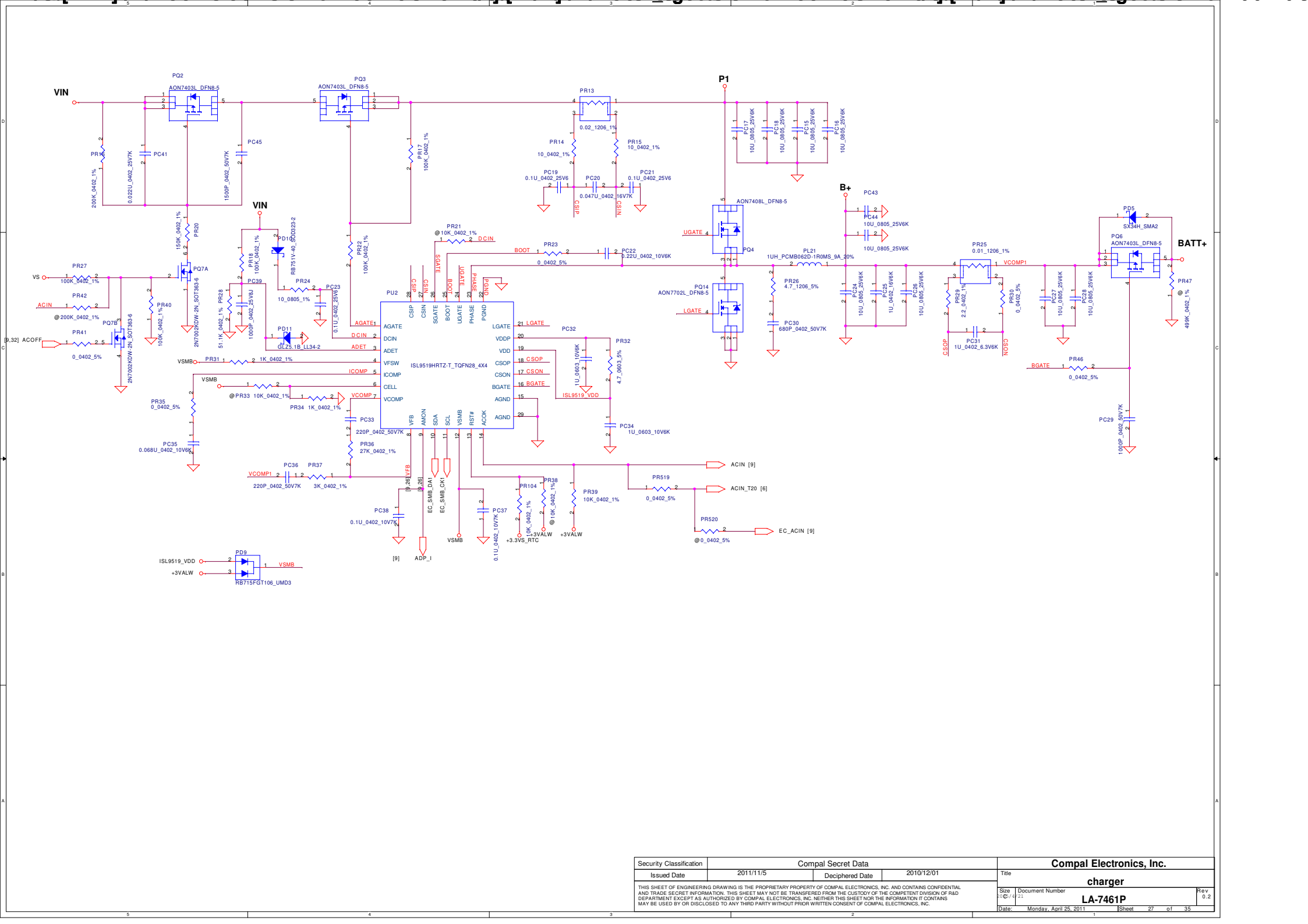
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| Size | C | Document Number | LA-7461P | Rev |
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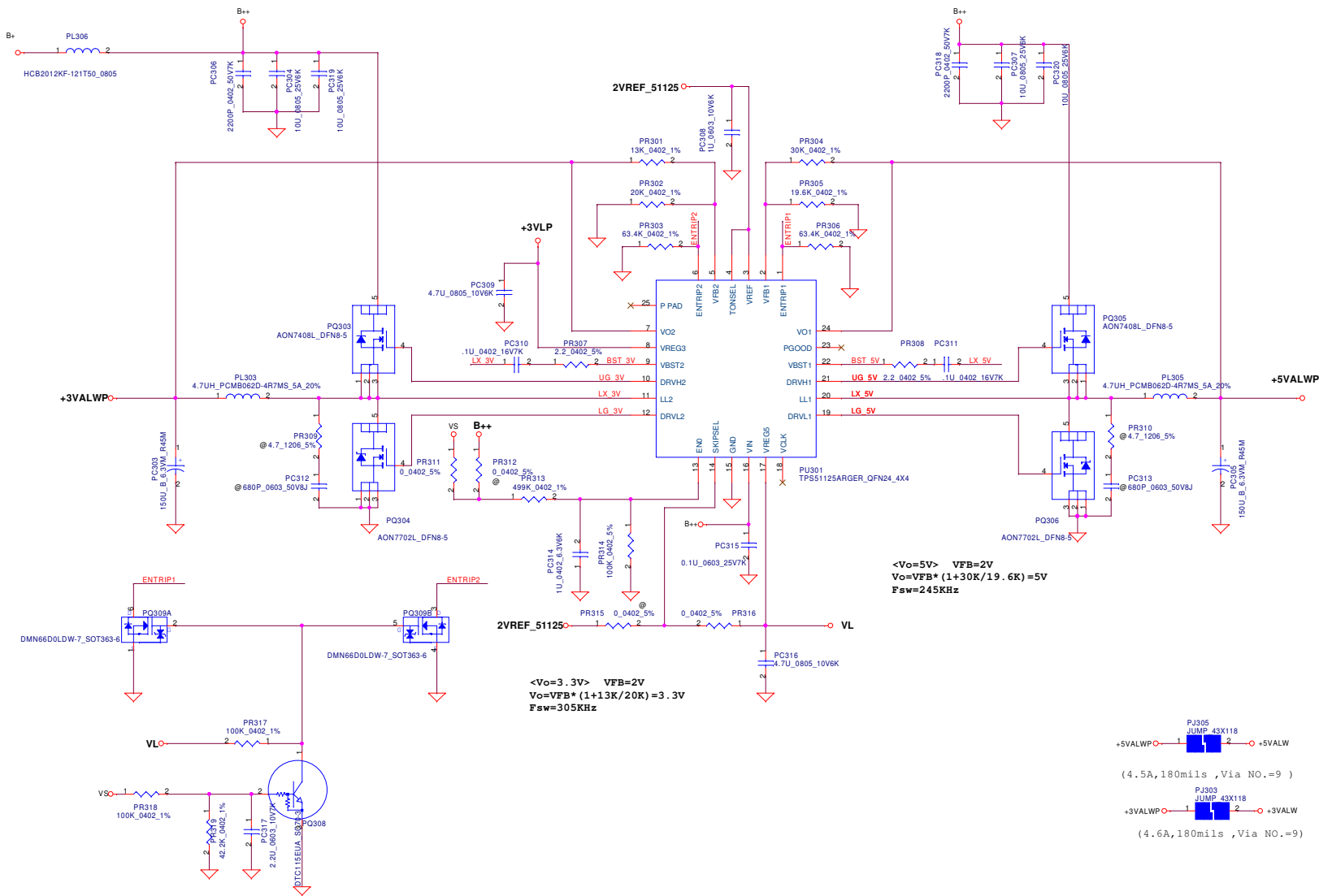
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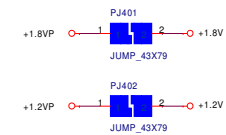
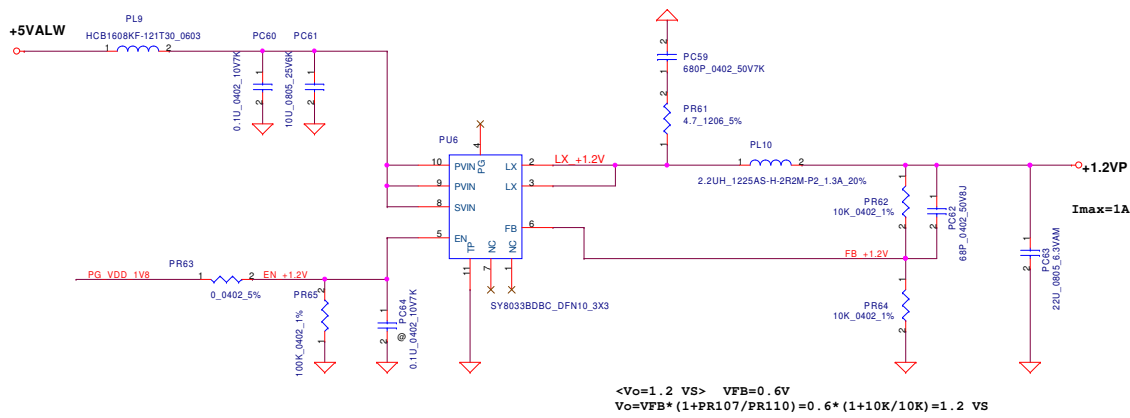
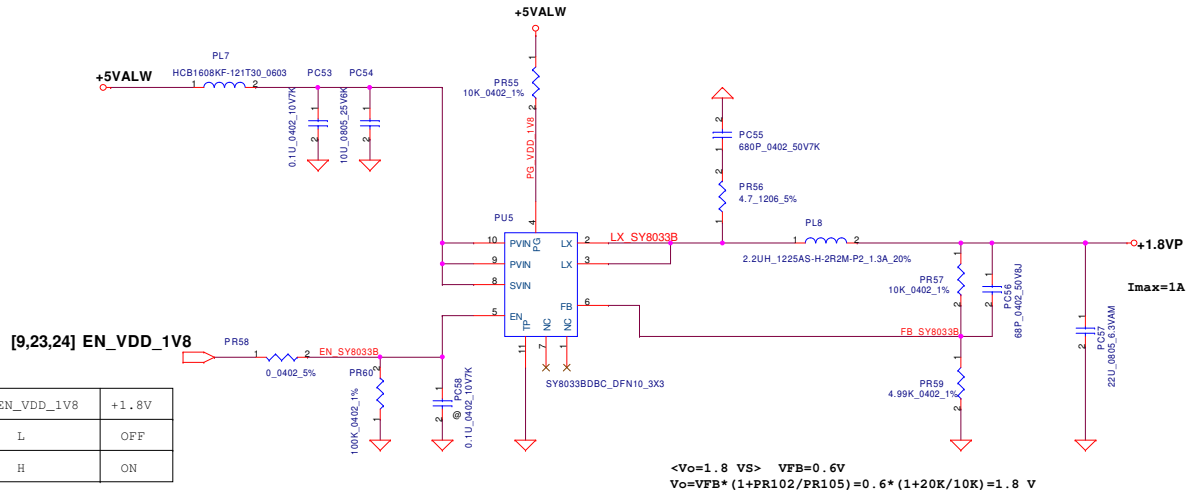
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| Size | C | Document Number | LA-7461P | Rev. | 0.2 |
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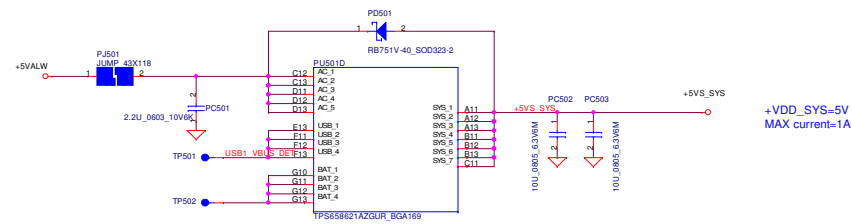


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| Size | Document Number | Rev | | |
| 10C/4 | 21 | 0.2 | | |
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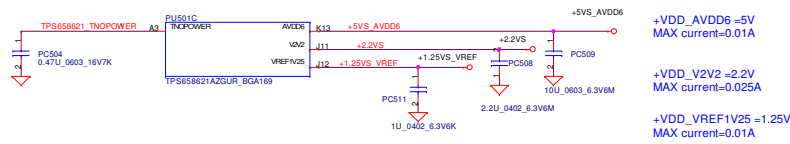
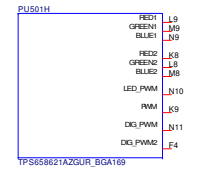


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|---|--------------------|-----------------|---|-------------------------------------|
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| C | | 0.2 | | |





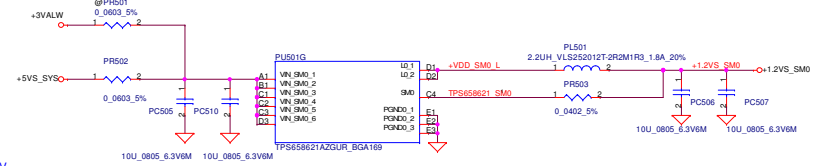
+VDD_SYS=5V
MAX current=1A



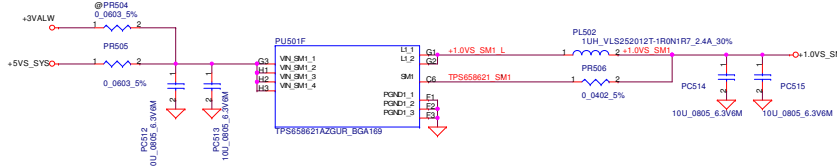
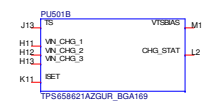
+VDD_AVDD6 = 5V
MAX current=0.01A

+VDD_V2V2 = 2.2V
MAX current=0.025A

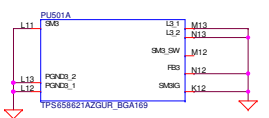
+VDD_VREF1V25 = 1.25V
MAX current=0.01A



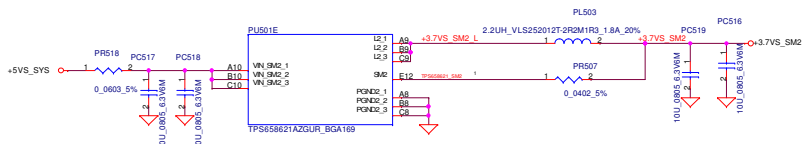
+VDD_SMD=1.2V
MAX current=0.6A



+VDD_SM1=1V
MAX current=1.5A



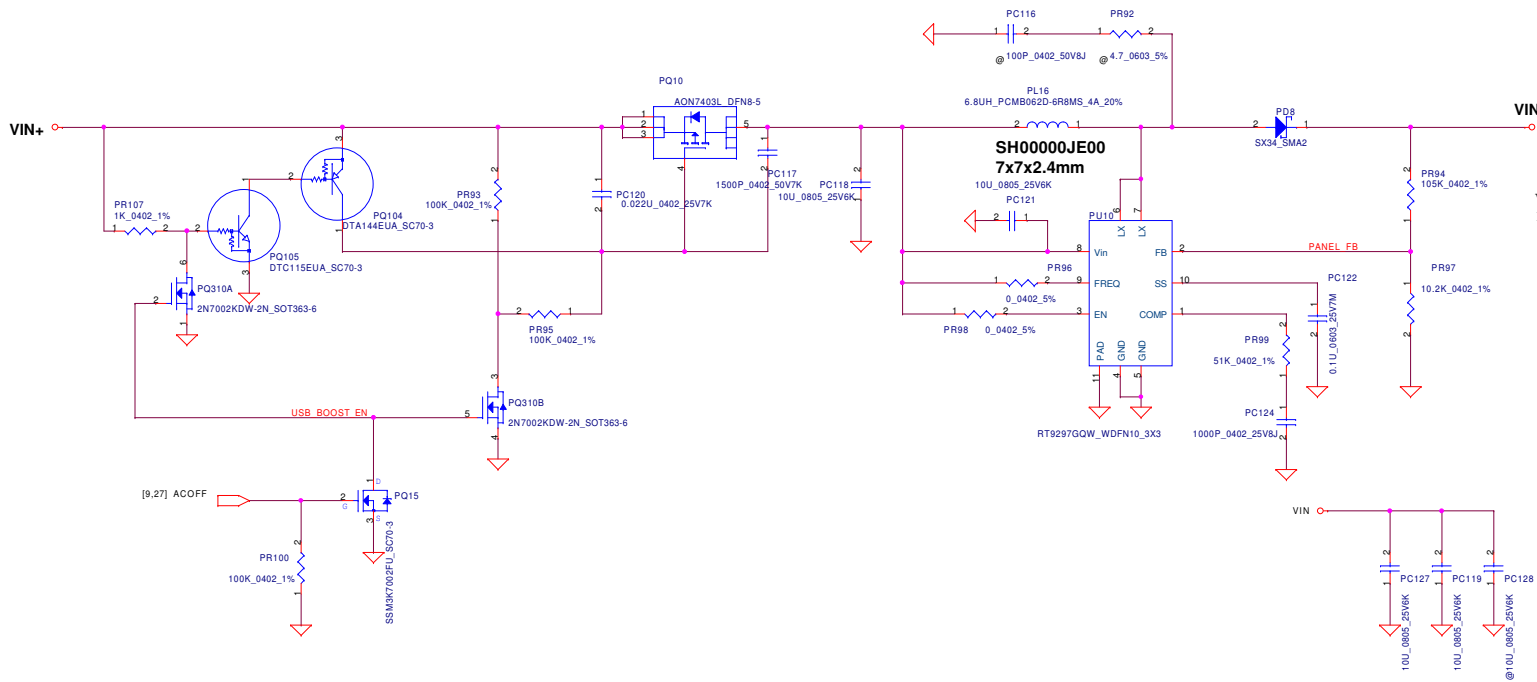
BOOST Converter



+VDD_SM2=3.7V
MAX current=0.75A

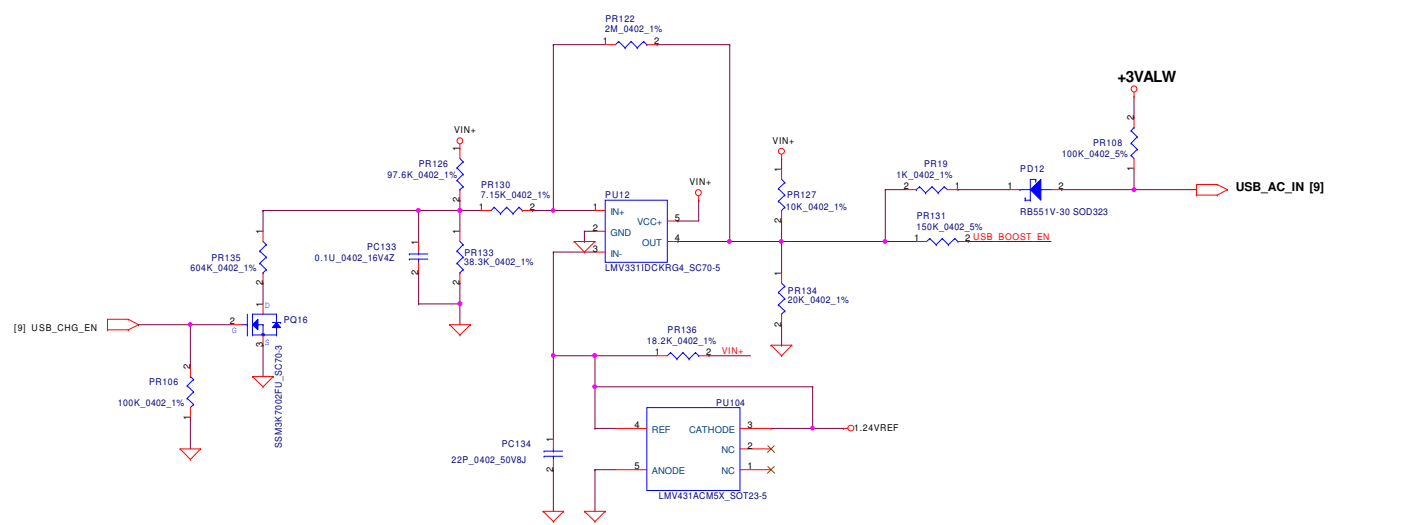
PMU #1

| | | | | |
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| Issued Date | 2006/08/18 | Deciphered Date | 2008/09/20 | Title |
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$$V_{out} = V_{FB} (1 + PR94/PR97) = 15.5V$$

$$1.24 * (1 + 115/10) = 15.5$$



| | | | | |
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| Size | Document Number | Rev | | |
| C | LA-7461P | 0.2 | | |
| Date: | Monday, April 25, 2011 | Sheet | 32 | of 35 |

Version Change List (P. I. R. List) for Power Circuit

| <i>Page#</i> | <i>Title</i> | <i>Date</i> | <i>Request Owner</i> | <i>Issue Description</i> | <i>Solution Description</i> |
|--------------|--------------|-------------|--------------------------|--------------------------|-----------------------------|
|--------------|--------------|-------------|--------------------------|--------------------------|-----------------------------|

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| | | | | Document Number | 0.2 |
| Date: | Monday, April 25, 2011 | Sheet | 33 | of | 35 |

PHJ00 from SDV to FVT LA-7461P REV:0.1 -> 0.2 Modify <2011.01.30.-2011.03.08. >

| Rev. | Item | Date | Impact | Page | Change Cause | Modify Description |
|------|------|------|------------|-------|--|--|
| 0.2 | 1 | 1/31 | CKT,Layout | 7 | -DFx suggest modify fiducial mark from two to three for M/B PCB bend test. | -Add FD5 and FD6 |
| 0.2 | 2 | 1/31 | CKT,Layout | 9 | -Force recovery function always high issue when boot. | -Move SEARCh pin from EC pin 64 to pin 110, and add external pull high R398 to +3VALV. |
| 0.2 | 3 | 1/31 | CKT,Layout | 11 | -To solve EN_VDD_PNL turn on issue. | -Add C313 at Q19 G/D side. |
| 0.2 | 4 | 1/31 | CKT,Layout | 12 | -Internal SPK noise issue. | -Disconnect CDC_LEFT and CDC_LEFT#, and CDC_LEFT# connect to TP82. |
| 0.2 | 5 | 1/31 | CKT,Layout | 18 | -C284 interfere with shielding can. | -Change C284 package from 1206 to 0603. |
| 0.2 | 6 | 1/31 | CKT,Layout | 11,18 | -Update connector list from ME request. | -Modify JTS1 and JP5 footprint |
| 0.2 | 7 | 1/31 | CKT,Layout | 7 | -ME release newest drawing | -Add H13 and H14 |
| 0.2 | 8 | 2/9 | CKT,Layout | 12 | -INT MIC can not record | -Delete C153 and C154, and change R191 and R192 to 0 ohms. MIC_LEFT_OUT pull high to +1.8VS, MIC_LEFT_OUT# pull down to AGND. |
| 0.2 | 9 | 2/9 | CKT,Layout | 19 | -Update connector list from ME request. | -Modify JCR1 footprint |
| 0.2 | 10 | 2/9 | CKT,Layout | 9,24 | -Add RED LED by customer request | -Add R399, R400, LED1, LED2, and Q22.Add SUSP_LED control signal from EC pin 34. |
| 0.2 | 11 | 2/10 | CKT,Layout | 12 | -Change HP and LINEOUT CR to GND by vendor request. | -Swap C275 and R193. Swap C276 and R203. Swap C131 and R168. Swap C132 and R169 by vendor request. |
| 0.2 | 12 | 2/11 | CKT,Layout | 16 | -BT can not work normally. | -Swap UART3_RXD and UART3_TXD, and swap UART3_RTS# and UART3_CTS# to solver BT cat not work normally. |
| 0.2 | 13 | 2/14 | CKT,Layout | 18 | -Power consumption measurement | -Add R410 for power consumption measurement. |
| 0.2 | 14 | 2/15 | CKT,Layout | 13 | -Cradle micro USB no function. | -Change JDock pin18 to +USB1_VBUS and serial R411 for solver Cradle micro USB no function issue. |
| 0.2 | 15 | 2/15 | CKT,Layout | 16 | -Vibrator can not work normally. | -Add 3V level GPIO 3VS_VIB_EN to control it, and reserve VIB_EN_T20. |
| 0.2 | 16 | 2/15 | CKT,Layout | 11 | -Follow sourcer's request to common design. | -Change U9 package from TSOP to BGA type. |
| 0.2 | 17 | 2/15 | CKT,Layout | 11 | -TSP pin define modify. | -Modify TSP JTS1 pin define by vendor request. |
| 0.2 | 18 | 2/15 | CKT,Layout | 20 | -Power consumption measurement | -Add R414 and R415 for power consumption measurement. |
| 0.2 | 19 | 2/22 | CKT,Layout | 5,9 | -Force recovery function abnormal issue | -Add level shift circuit (Q23, R416, and R417) between SEARCh pin and T20 |
| 0.2 | 20 | 2/22 | CKT,Layout | 20 | -Follow RF's request | -Modify RF SW circuit by RF team request. |
| 0.2 | 21 | 2/22 | CKT,Layout | 20 | -Follow vendor's request | -Add 2P capacitance from CAP signal to GND for vnedor request. |
| 0.2 | 22 | 2/23 | CKT,Layout | 11 | -TSP SPI bus is 3V level | -Add level shift circuit (U34,U35,R235,R189,R204,C318,R427) |
| 0.2 | 23 | 2/24 | CKT,Layout | 16 | -+1.8VS leakage issue when WIFI enable | -Change pin 48 (VDDIO_SD) and pin 28 (VDDIO) from +3V_WLAN to +1.8V_WLAN. |
| 0.2 | 24 | 2/24 | CKT,Layout | 16 | -Follow vendor's request | -Swap DAP4_DOUT and DAP4_DIN signal |
| 0.2 | 25 | 3/01 | CKT,Layout | 10 | -Follow DFx's request. | -Add U37 for eMMC 14*18mm footprint by DFx request. |
| 0.2 | 26 | 3/01 | CKT,Layout | 14 | -Follow sourcer's request. | -Reserve U36 Thermal sensor. |
| 0.2 | 27 | 3/01 | CKT,Layout | 24 | -SW2 interfere with ME. | -Change debug power button SW2 to Top view type. |
| 0.2 | 28 | 3/02 | CKT,Layout | 6,11 | -Follow TSP vendor request. | -Modify TSP level shift circuit and add power switch. |
| 0.2 | 29 | 3/02 | CKT,Layout | | -Power consumption measurement. | -Add R431,R432,R433. Change R104,R122,R121,R143,R144,R158,R159,R160,R161,R179,R220,R221,R223,R230,R231,R232,R233,R246,R410,R280 package to 0805. |
| 0.2 | 30 | 3/02 | CKT,Layout | 17 | -Follow customer request. | -Add JLTE1 and JLTE2 circuit by customer request. |
| 0.2 | 31 | 3/03 | CKT,Layout | 9 | -Double pull up. | -Delete R319 since SEARCh has double pull resistance. |
| 0.2 | 32 | 3/03 | CKT,Layout | 8 | -Modify Net name | -Modify LPDDR2 power net name. |
| 0.2 | 33 | 3/03 | CKT,Layout | 9 | -Prevent system hang up issue as PBJ30. | -KBC pin 13 add R436 100K ohms to GND. |
| 0.2 | 34 | 3/04 | CKT,Layout | 12 | -Follow vendor request. | -Change HP_AGND and LINE_AGND serial resistance to AGND. Connect HP_AGND to JHP1 pin5. |
| 0.2 | 35 | 3/04 | CKT,Layout | 4,19 | -SD Card no write protect function. | -Connect SDIO3_WP from U1 AE12 to JCR1 pin10. Delete R4. Add pull up resistance R439. |
| 0.2 | 36 | 3/04 | CKT,Layout | 11 | -Delete TSP debug connector JTS3. | -Delete JTS3 connector since the vendor can provide FFC cable. |
| 0.2 | 37 | 3/06 | CKT,Layout | 13 | -Cradle micro USB abnormally. | -Change JDock pin 18 net name from +USB1_VBUS to +USB_CLIENT to solve Cradle micro USB can not work issue. |
| 0.2 | 38 | 3/07 | CKT,Layout | 17 | -Follow customer request. | -Add CNT1 to JWWAN1.3 and CNT2 to JWWAN1.5 for LTE function. |
| 0.2 | 39 | 3/07 | CKT,Layout | 15 | -Camera I2C bus level is 3.3V. | -Add CAM_I2C bus level shift circuit (Q26 - R440 - R441) to 3V level. |
| 0.2 | 40 | 3/08 | CKT,Layout | 11 | -Follow RF request | -Change C147,C148,C150,C152,C195,C196,C302,C303 from 10pF to 18pF by RF request. |

PHJ00 from FVT to SIT LA-7461P REV:0.2 -> 0.3 Modify <2011.03.22.-2011.04.22. >

| Rev. | Item | Date | Impact | Page | Change Cause | Modify Description |
|------|------|------|------------|-------|---|--|
| 0.3 | 1 | 3/23 | CKT,Layout | 11 | -Modify JTS1 pin define by follow vendor request. | -Swap JTS1 pin2 and pin3 to follow module pin define. |
| 0.3 | 2 | 3/28 | CKT,Layout | 11 | -C298 Material shortage | -Change C298 package from 0603 to 0805 |
| 0.3 | 3 | 3/28 | CKT,Layout | 13,19 | -Follow NVidia request | -Add HDMI_DDC and HDMI_HPD level shift circuit (Q27 - Q28 - R444 - R445 - R446 - R447). Modify JDock1 pin 30 and 31 net name. |
| 0.3 | 4 | 3/28 | CKT | 19 | -Follow EMI request | -Change and instal R374 to 330ohms and C219 to 22pF by EMI request. |
| 0.3 | 5 | 3/28 | CKT | 9 | -X1 output CLK not accurate enough. | -Change C99 and C100 to 33pF by vendor suggestion. |
| 0.3 | 6 | 4/13 | CKT | 17 | -Follow SMSC USB3315 reference design | -Change R245 to 8.06K 1% |
| 0.3 | 7 | 4/15 | CKT | 12 | -SPK voice too small | -Change C149 to 3900pF by Audio team request. |
| 0.3 | 8 | 4/13 | CKT,Layout | 19 | -Avoid leakage issue. | -Change SDIO3_WP pull up level to +1.8VS |
| 0.3 | 9 | 4/15 | CKT | 24 | -BOM issue | -Move SW1 from PWR side to HW side. |
| 0.3 | 10 | 4/15 | CKT,Layout | 9 | -Power charger unstable issue. | -Add EC_ACIN by power and EC request. |
| 0.3 | 11 | 4/15 | CKT,Layout | 6 | -Power charger unstable issue. | -Change ACIN netname to ACIN_T20 by power request. |
| 0.3 | 12 | 4/18 | CKT,Layout | 13,21 | -Charger from Cradle micro USB issue. | -Add D33 and change +USB_CLIENT netname to +USB_CLIENT_DOCK to avoid charger from Cradle micro USB issue. |
| 0.3 | 13 | 4/20 | CKT,Layout | 19 | -Follow EMC request. | -Add ESD diode D34 for EMC request. |
| 0.3 | 14 | 4/20 | CKT,Layout | 18 | -Follow EMC request. | -Add C319,C320,C321,C322, and D35 by EMC request. |
| 0.3 | 15 | 4/20 | CKT,Layout | 21 | -Follow EMC request. | -Change D11,D12 to D36,D37 by EMC request. |
| 0.3 | 16 | 4/20 | CKT,Layout | 14 | -AKM eCompass shortage issue. | -Reserve Yamaha eCompass U38 by AKM eCompass shortage issue. |
| 0.3 | 17 | 4/20 | CKT,Layout | 13 | -Follow EMC request. | -Remove R341,R342, and install L29 by EMC request. |
| 0.3 | 18 | 4/20 | CKT | 17 | -Follow RF request. | -Change R242 and R244 to L30,L31 by RF request. |
| 0.3 | 19 | 4/20 | CKT | 24 | -Change LED1 and LED2 from Red light to White light | -Change LED1 and LED2 from Red light to White light |
| 0.3 | 20 | 4/21 | CKT,Layout | 12 | -Follow EMC request. | -Add C323 and connector HP_AGND to D4 |
| 0.3 | 21 | 4/21 | CKT,Layout | 13 | -Follow EMC request. | -Del ESD diode D6,D19,D20,D21,D22,D25,D31 |
| 0.3 | 22 | 4/20 | CKT,Layout | 17 | -For ULPI PHY high speed test fail issue. | -Reserver X4,R449,R450,R451 |
| 0.3 | 23 | 4/20 | CKT,Layout | 13 | -Follow EMC request. | -Modify JDock1.6 and JDock1.7 netname |
| 0.3 | 24 | 4/20 | CKT,Layout | 19 | -Follow NVidia reference design. | -Modify HDMI_DDC and HDMI_HPD level shift circuit. Change R444 and R445 to 1.8K. Change R273 and R274 to 2.2K. Add R448 HDMI_HPD pull down resistance. |
| 0.3 | 25 | 4/20 | CKT,Layout | 21 | -Follow EMC request. | -Change D36 and D37 to AZC099 by EMC request. |

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| | | | | LA-7461P | |
| | | | | Rev. | 0.3 |
| Date: Monday, April 25, 2011 | | Sheet | | 34 | of 35 |

PHJ00 from FVT to SIT LA-7461P REV:0.2 -> 0.3 Modify <2011.03.22.-2011.04.25. >

| Rev. | Item | Date | Impact | Page | Change Cause | Modify Description |
|------|------|------|------------|------|---------------------------------|--|
| 0.3 | 26 | 4/22 | CKT,Layout | 5 | -For without 3G SKU setting | -Add R452 pull down for SW 3G SKU detect. |
| 0.3 | 27 | 4/22 | CKT | 8 | -Customer request. | -Change R93,R94,R95,R96 to 12K_1% |
| 0.3 | 28 | 4/22 | CKT,Layout | 15 | -Vendor request. | -Reserver C325 for vendor request. |
| 0.3 | 29 | 4/22 | CKT,Layout | 17 | -Reduce power on irush current. | -Add soft start C324 to reduce irush current |
| 0.3 | 30 | 4/22 | CKT,Layout | 20 | -Follow FR request. | -Add JP6 by RF request for SAR test. |
| 0.3 | 31 | 4/22 | CKT,Layout | 12 | -INT MIC noise issue. | -Add R435,C326 to reduce Int. MIC noise issue. |