

# Compal confidential

## Schematics Document Mobile Dothan uFCPGA with Intel Alviso\_GM+ICH6-M core logic

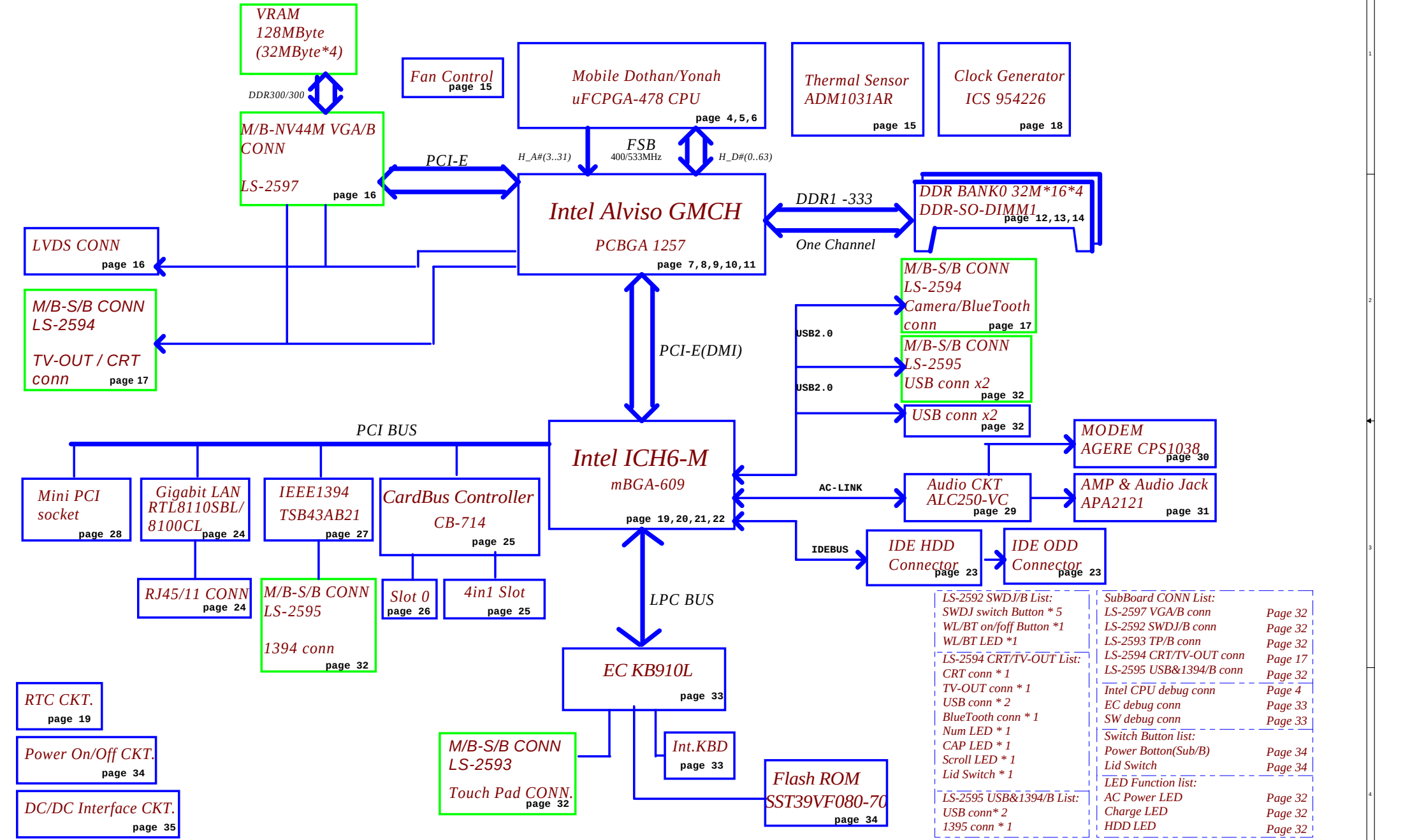
2005-02-15

LA-2592

REV:0.3

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| Custor                   | LA-2592                   |       | 0.3     |
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|                          |         |
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| AC Power LED             | Page 32 |
| Charge LED               | Page 32 |
| HDD LED                  | Page 32 |

I2C / SMBUS ADDRESSING

External PCI Devices

| DEVICE                 | IDSEL # | REQ / GNT # | PIRQ |
|------------------------|---------|-------------|------|
| LAN                    | AD17    | 0           | F    |
| CARD BUS               | AD20    | 1           | A    |
| Cardreader             |         |             | B    |
| 1394                   | AD16    | 2           | E    |
| Wireless LAN(MINI PCI) | AD18    | 3           | G,H  |

Power Managment table

| Signal<br>State      | +12VALW<br>+3VALW<br>+5VALW | +3V<br>+2.5V | +CPU CORE<br>+VCCP(1.05v)<br>+5VS<br>+3VS<br>+2.5VS<br>+1.5VS<br>+1.25VS<br>+1.1VS(VGA/B)<br>+1.2VS(VGA/B)<br>+1.8VS(VGA/B) |
|----------------------|-----------------------------|--------------|-----------------------------------------------------------------------------------------------------------------------------|
| S0                   | ON                          | ON           | ON                                                                                                                          |
| S1                   | ON                          | ON           | ON                                                                                                                          |
| S3                   | ON                          | ON           | OFF                                                                                                                         |
| S5 S4/AC             | ON                          | OFF          | OFF                                                                                                                         |
| S5 S4/AC don't exist | OFF                         | OFF          | OFF                                                                                                                         |

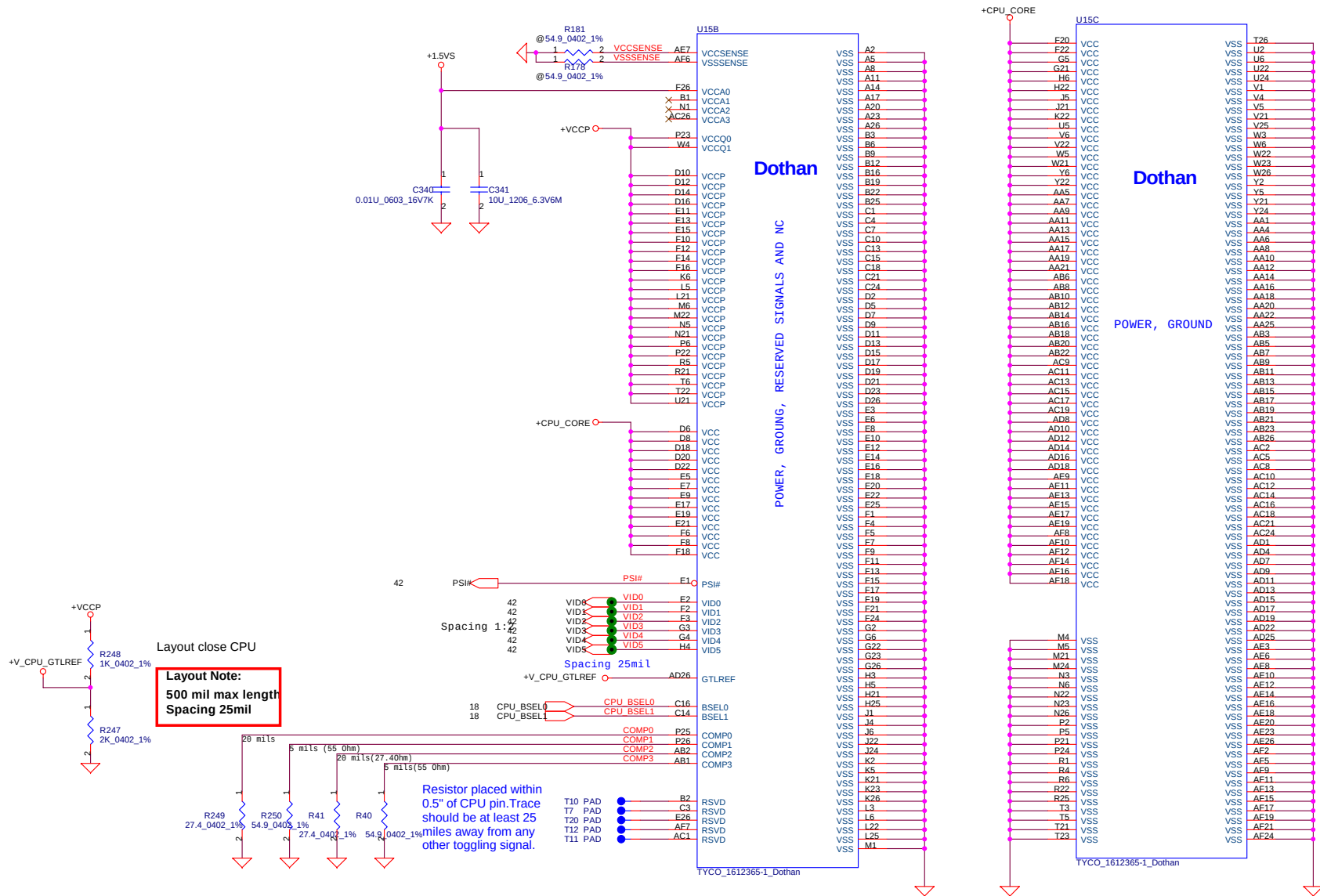
SMBUS Control Table

|                           | SOURCE          | INVERTER | BATT | SERIAL<br>EEPROM | THERMAL<br>SENSOR<br>(CPU)<br>ADM1032 | SODIMM | CLK CHIP | MINI PCI | LCD |
|---------------------------|-----------------|----------|------|------------------|---------------------------------------|--------|----------|----------|-----|
| SMB_EC_CK1<br>SMB_EC_DA1  | KB910L          | ×        | ✓    | ×                | ×                                     | ×      | ×        | ×        | ×   |
| SMB_EC_CK2<br>SMB_EC_DA2  | KB910L          | ×        | ×    | ×                | ✓                                     | ×      | ×        | ×        | ×   |
| ICH_SMBCLK<br>ICH_SMBDATA | ICH6-M          | ×        | ×    | ×                | ×                                     | ✓      | ✓        | ×        | ×   |
| LCD_DDCCLK<br>LCD_DDCDATA | Alviso<br>GM-GP | ×        | ×    | ×                | ×                                     | ×      | ×        | ×        | ✓   |
| I2CC_SCL<br>I2CC_SDA      | NV44M           | ×        | ×    | ×                | ×                                     | ×      | ×        | ×        | ✓   |

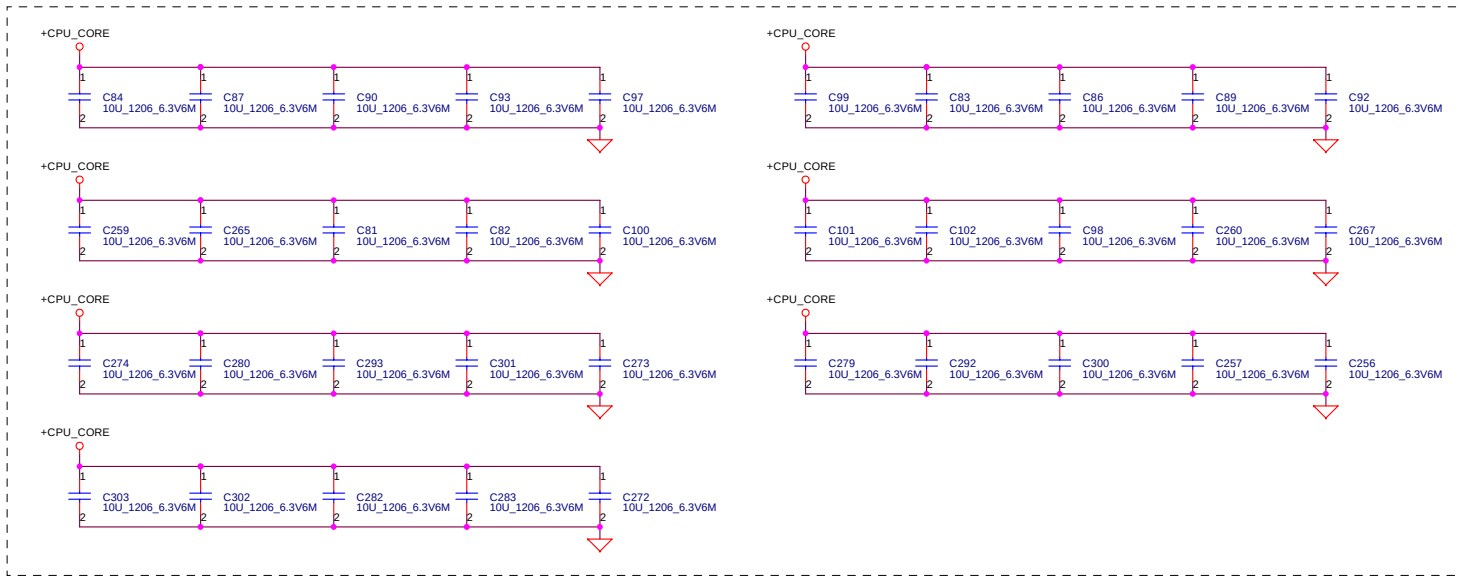
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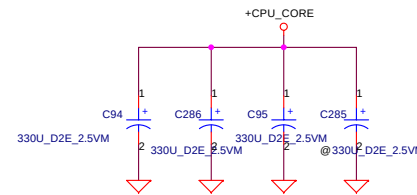




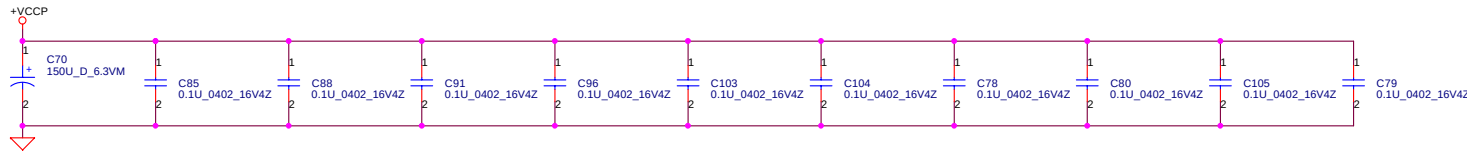
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Near VCORE regulator.

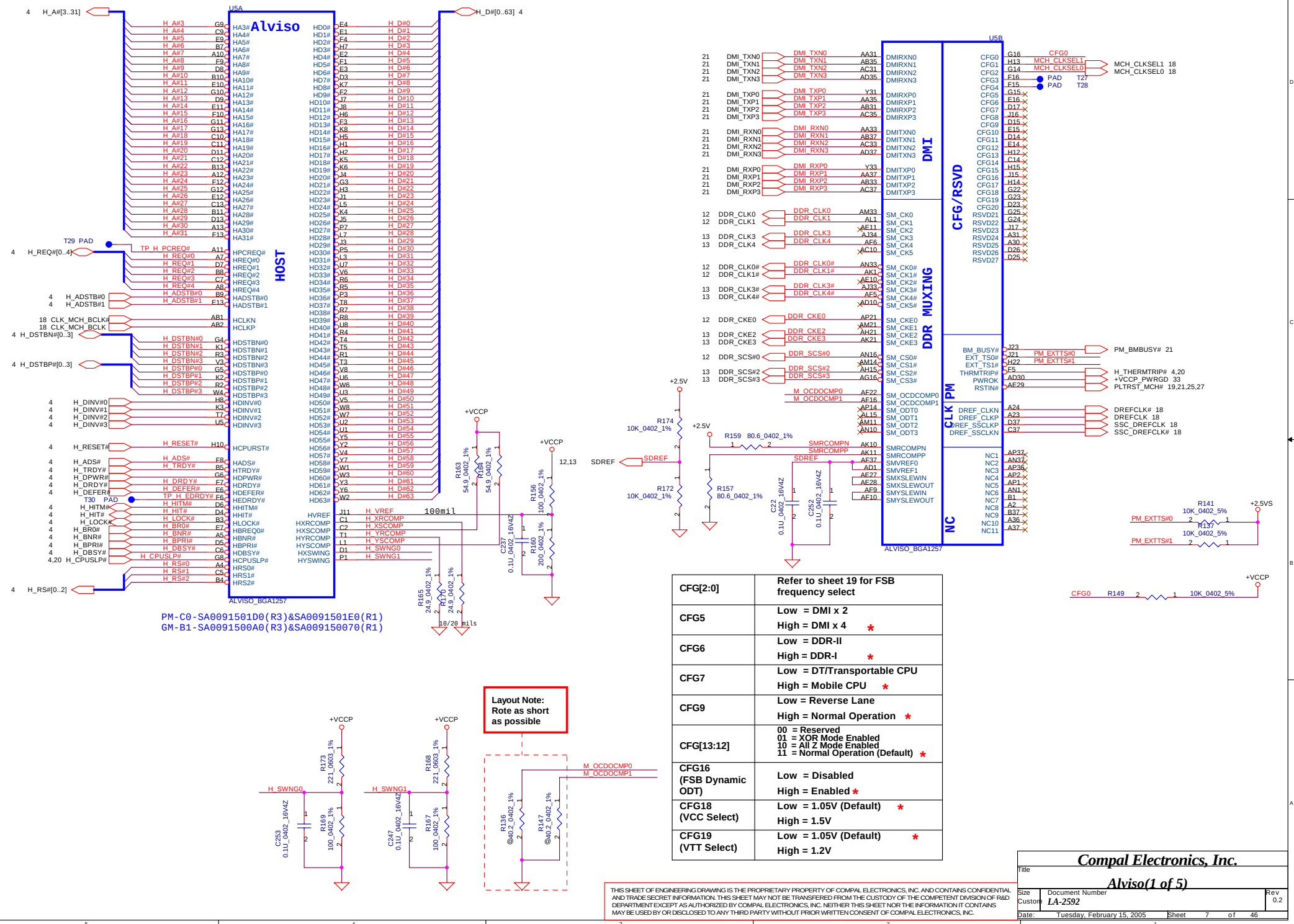


ESR <= 3m ohm  
Capacitor > 880 uF

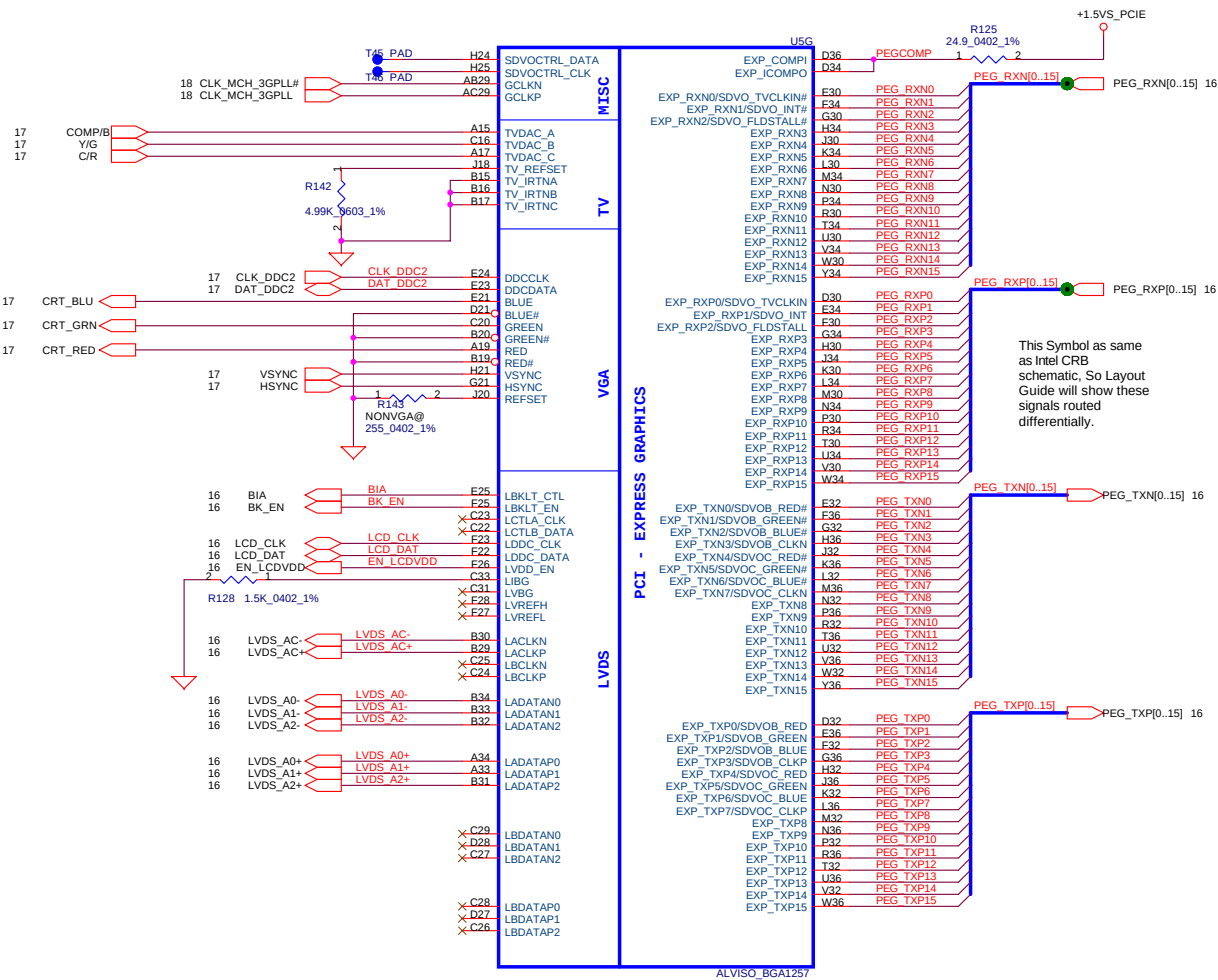


|                                                         |                            |       |         |
|---------------------------------------------------------|----------------------------|-------|---------|
| <b>Compal Electronics, Inc.</b><br><b>Dothan Bypass</b> |                            |       |         |
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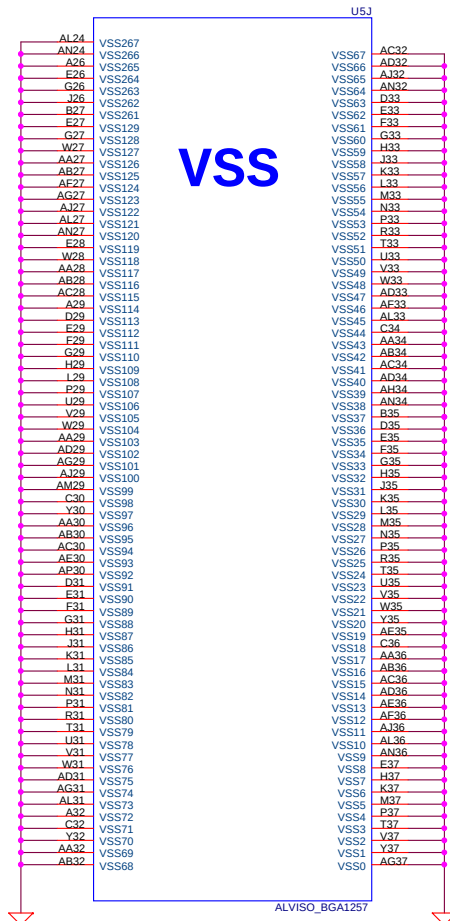
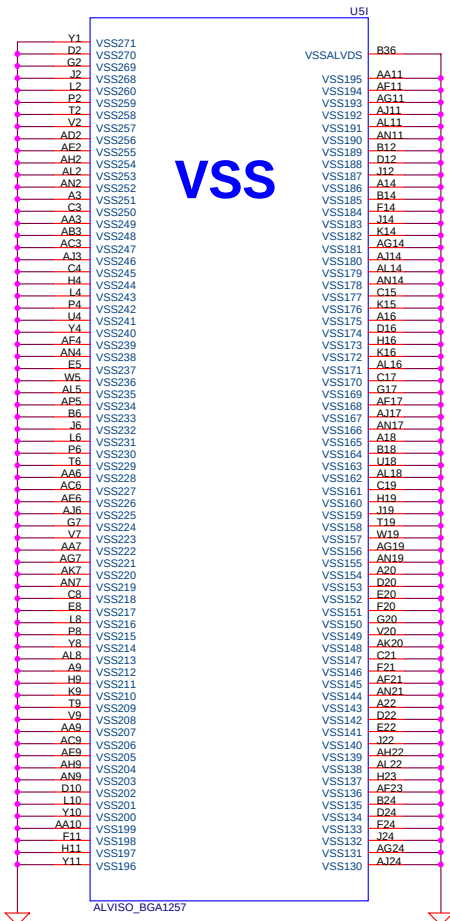
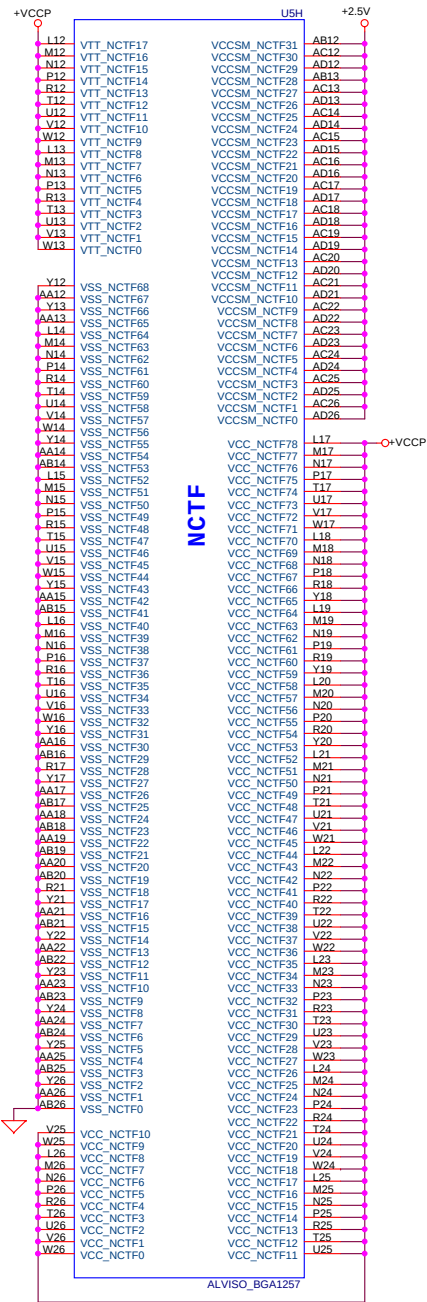






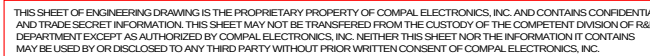
This Symbol as same as Intel CRB schematic, So Layout Guide will show these signals routed differentially.

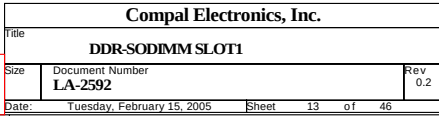




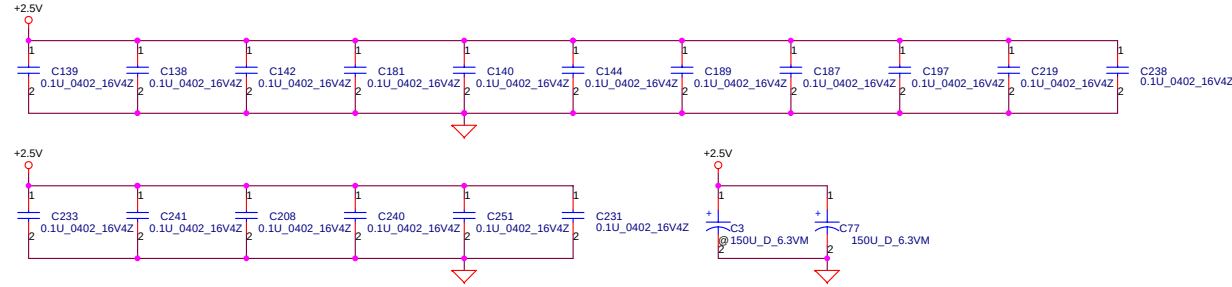
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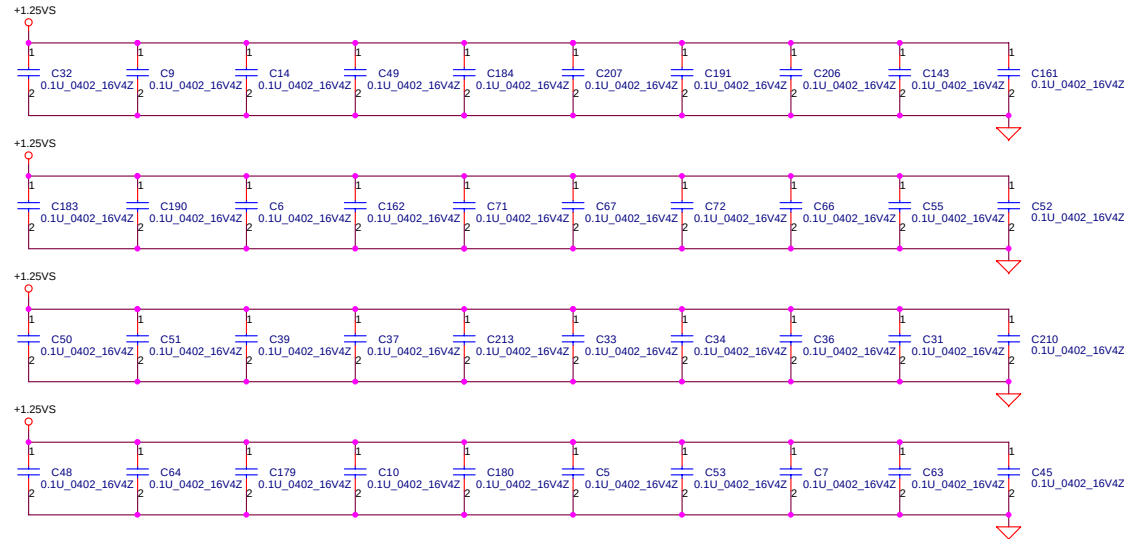




Layout note :  
Distribute as close as possible  
to DDR-SODIMM.

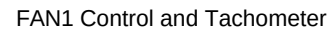
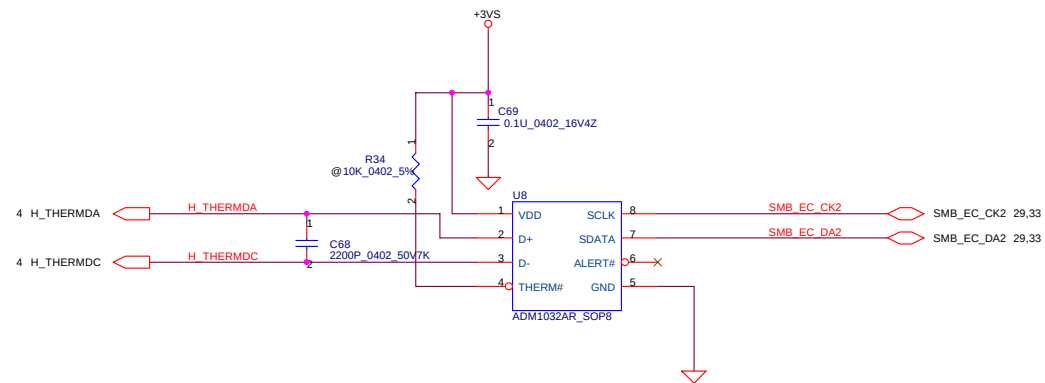


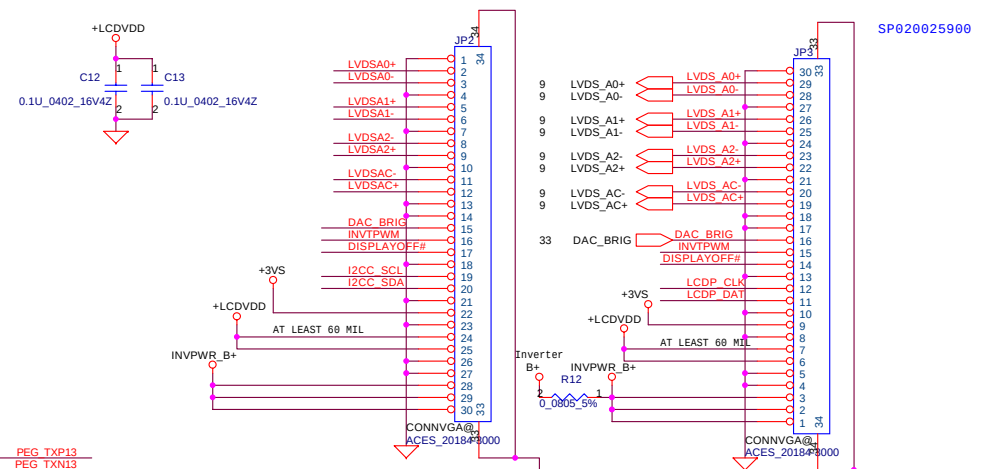
Layout note :  
Place one cap close to every 2 pull up resistors termination to  
+1.25V



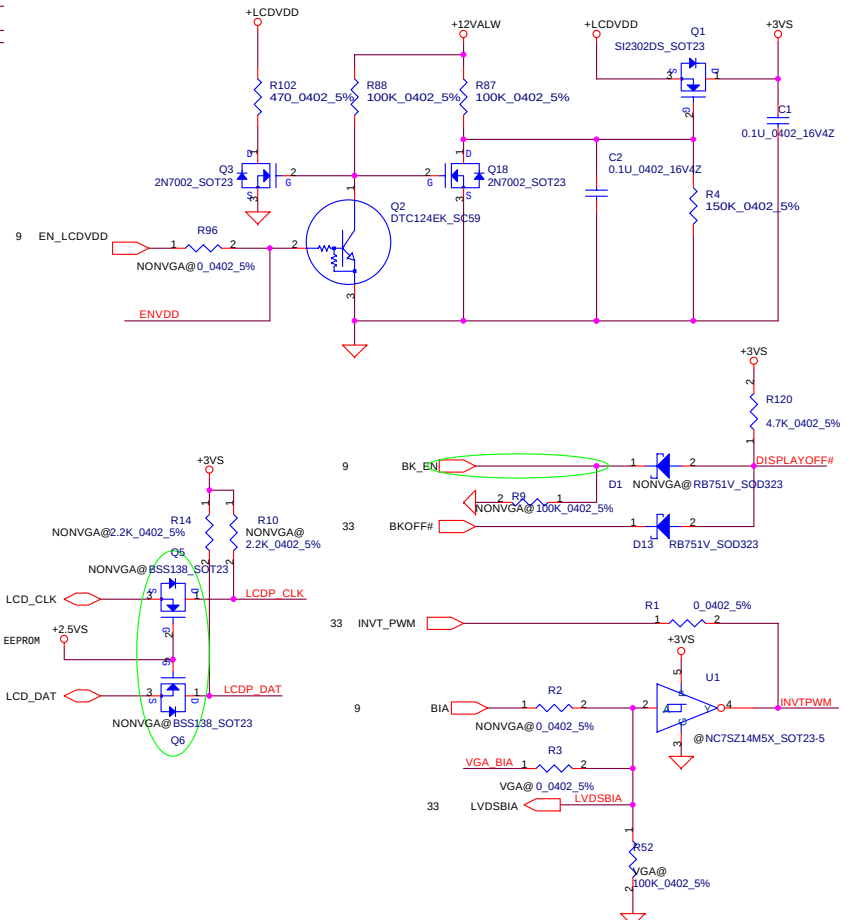
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| Title                    |                            |       |          |
| DDR SODIMM Decoupling    |                            |       |          |
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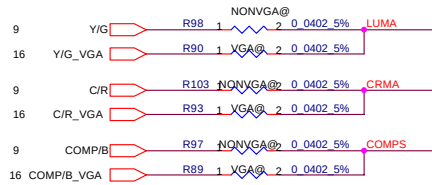
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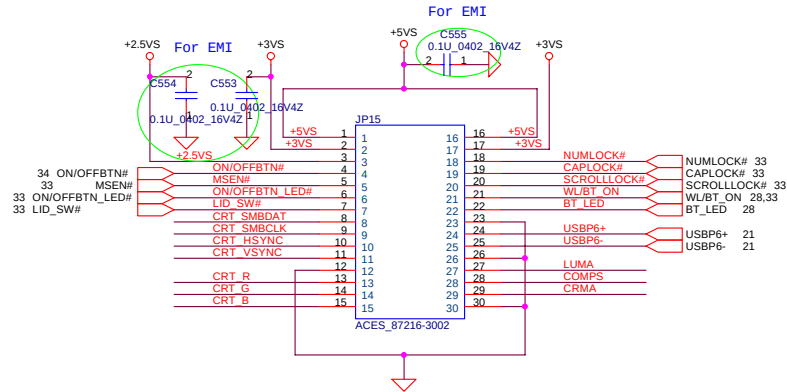
VGA/B connector

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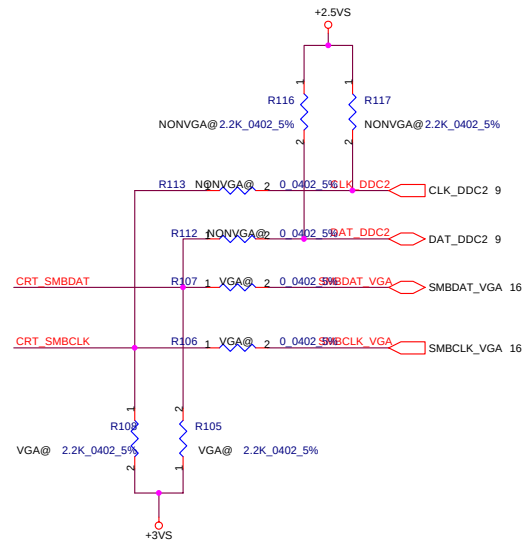
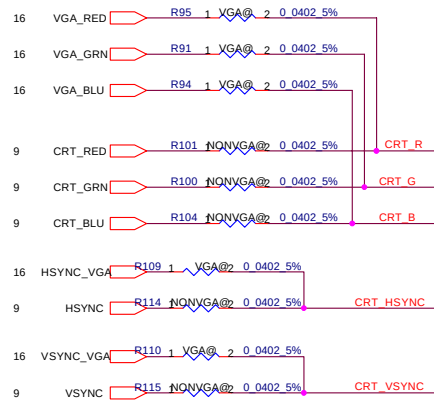
## TV-Out Connector



## VGA I/O PORT Connector

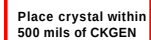


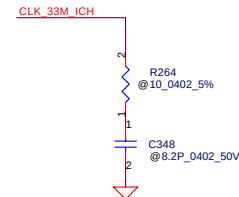
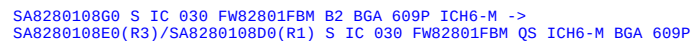
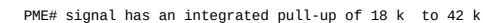
## CRT CONNECTOR

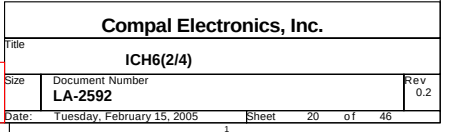


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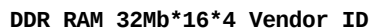
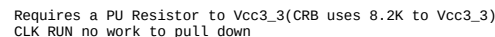
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| Title                    | TV_OUT and DVI connector   |       |          |
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Table : ICS 954226

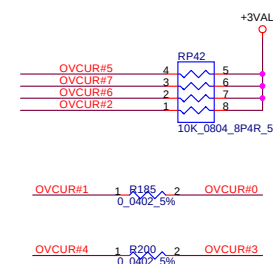
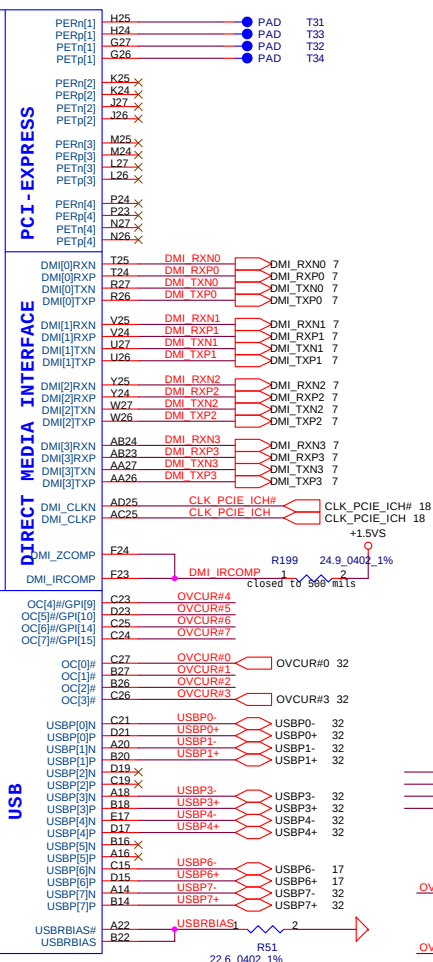
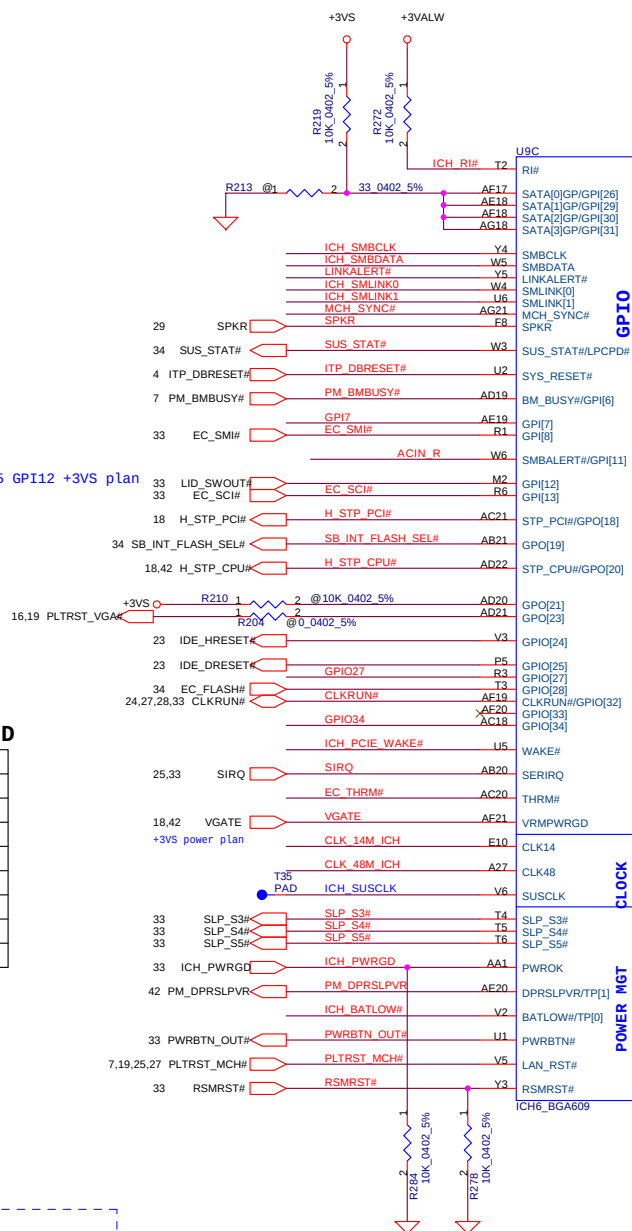
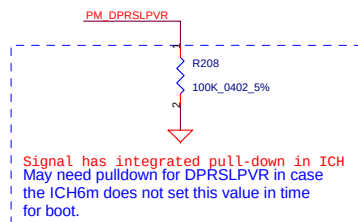




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| GPi7/GPi027/GPi034 |   |   | Vendor   |
|--------------------|---|---|----------|
| 0                  | 0 | 0 | Reserved |
| 0                  | 0 | 1 | Reserved |
| 0                  | 1 | 0 | Reserved |
| 0                  | 1 | 1 | Reserved |
| 1                  | 0 | 0 | Reserved |
| 1                  | 0 | 1 | Infineon |
| 1                  | 1 | 0 | Samsung  |
| 1                  | 1 | 1 | Hynix    |

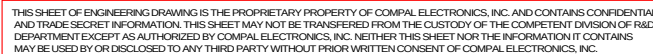
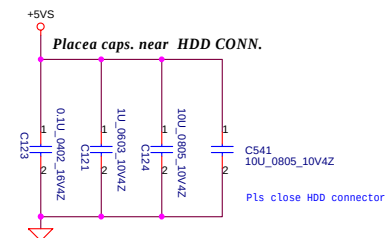
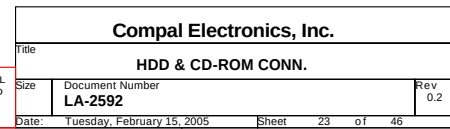


USBPN/USBPP impedance 45 Ohm

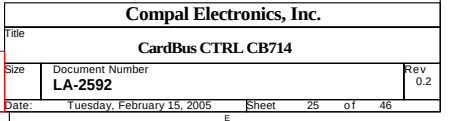


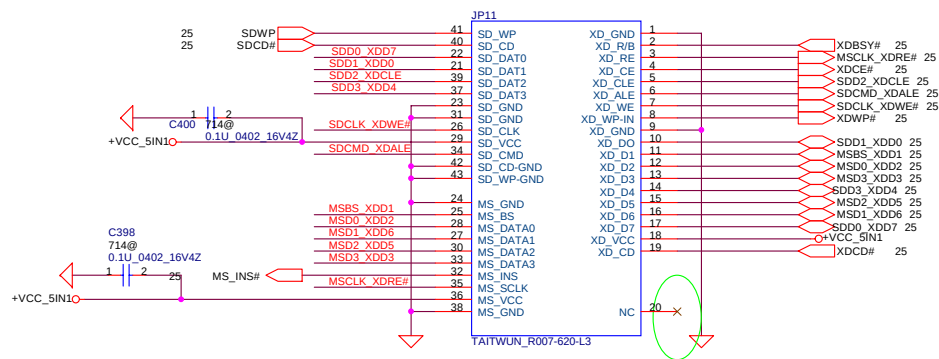
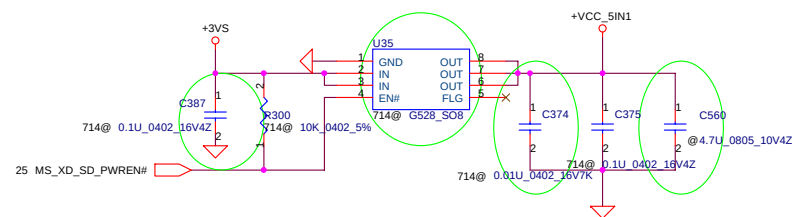


IDE\_HDD[0..15] 20

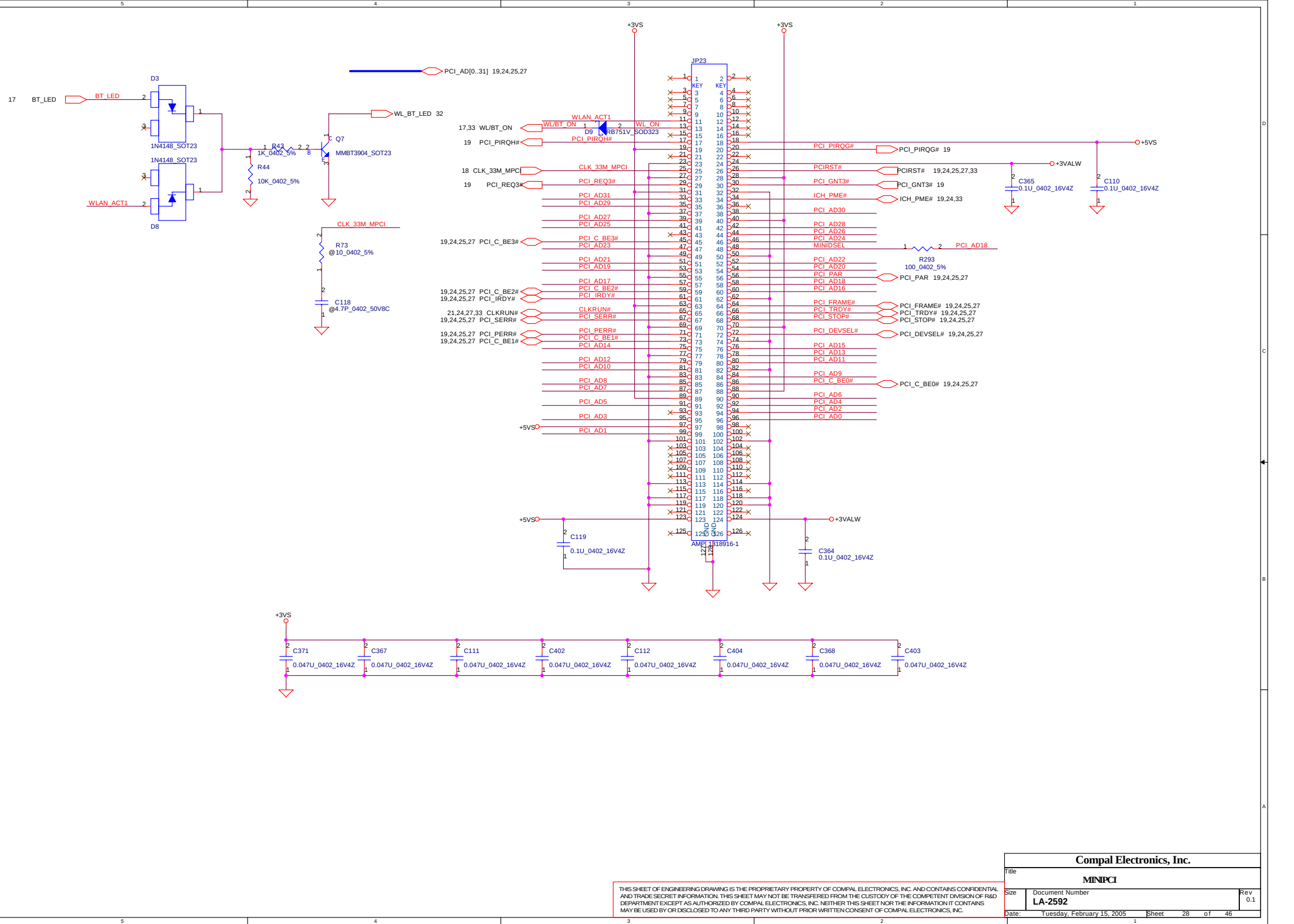
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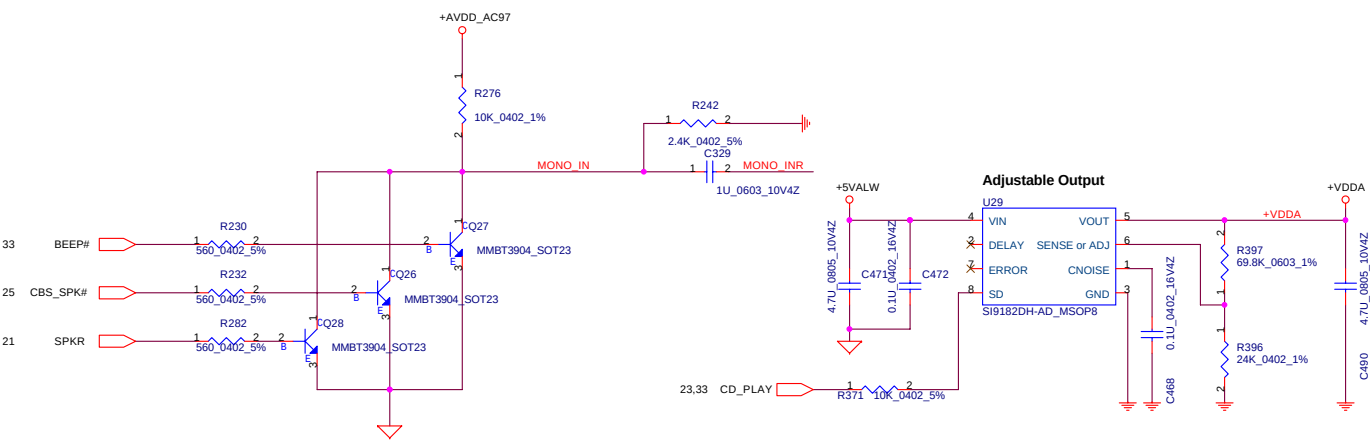




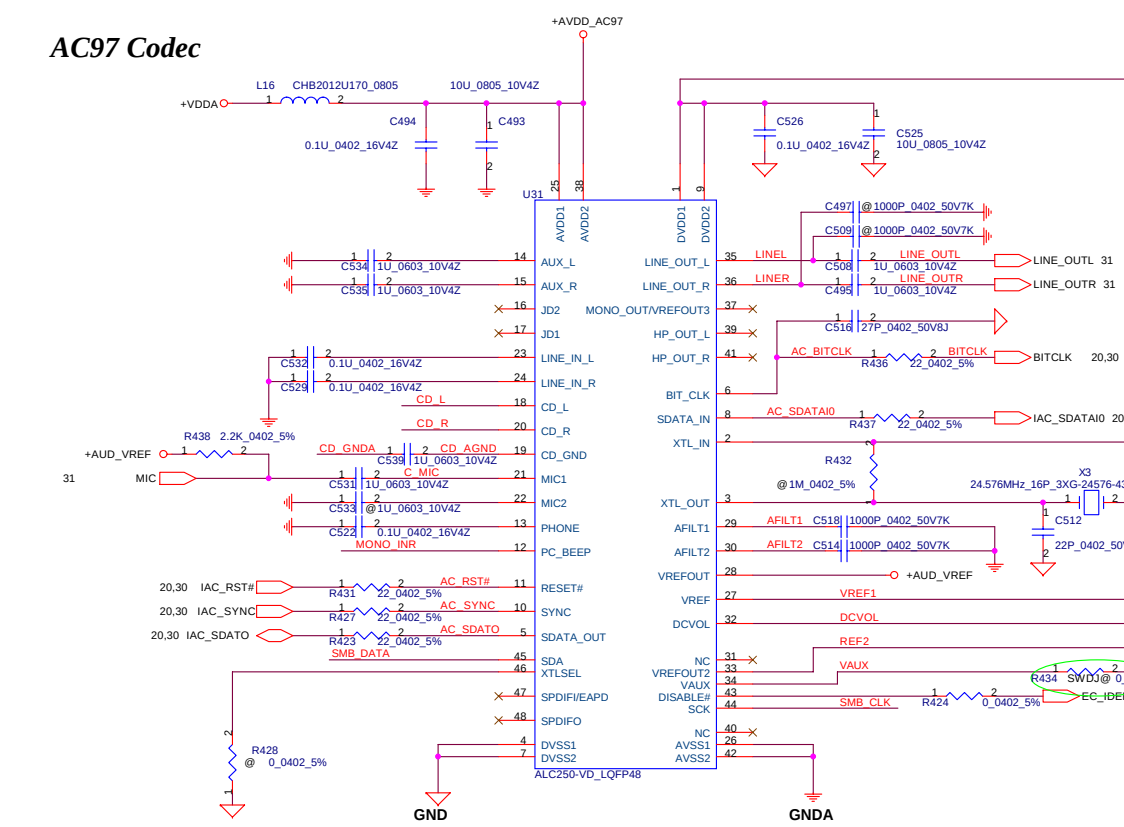




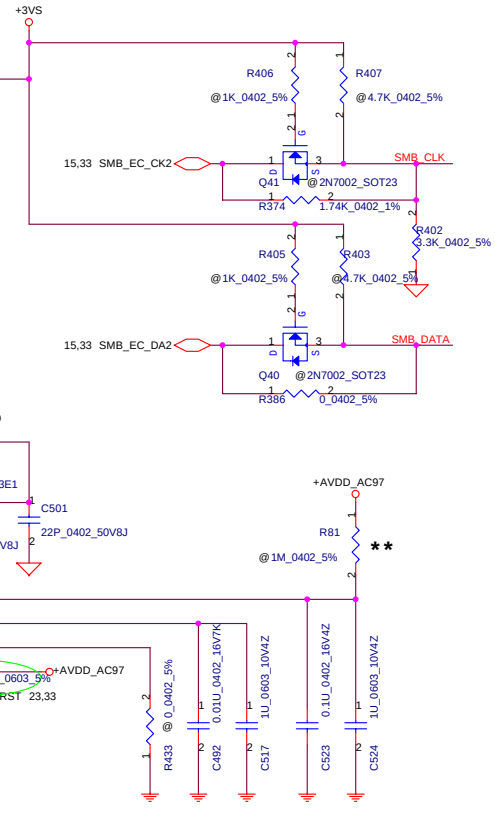
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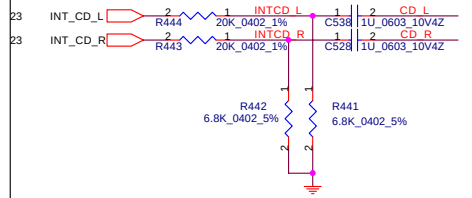
## AC97 Codec



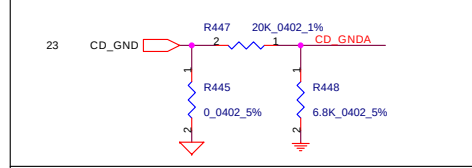
WITH 14.318MHz : Rxxx POP  
WITH 24.576MHz : Rxxx DEPOP



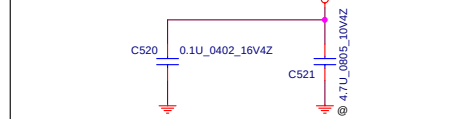
## Audio Signal Bias Circuit



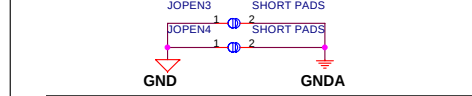
## CD\_GND To CD\_GNDA Bypass



## Analog Reference V

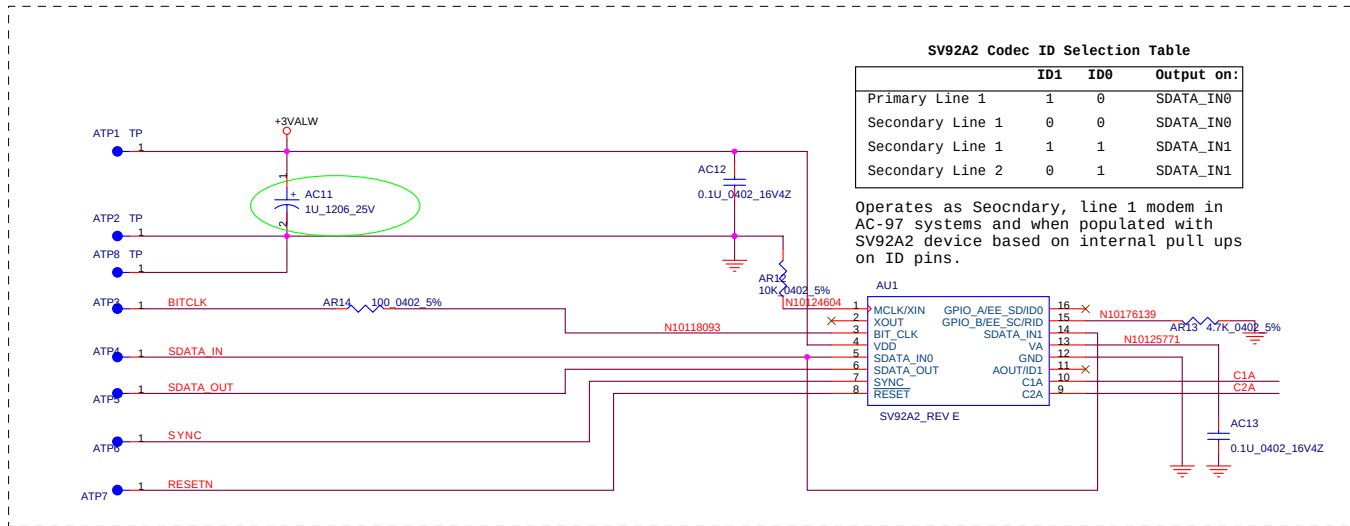
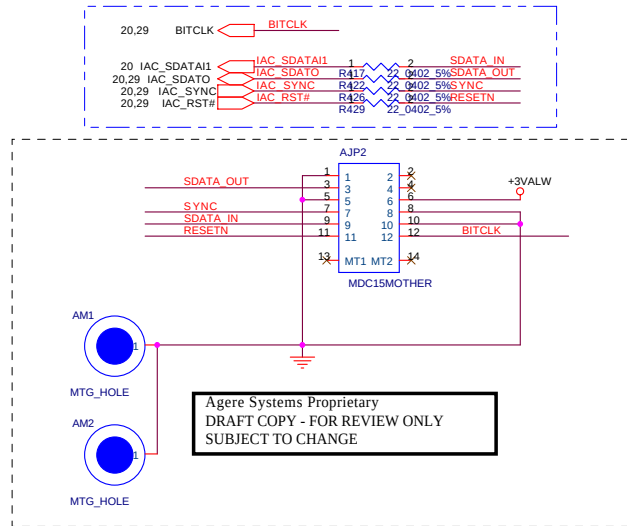


## GND To GNDA Bypass

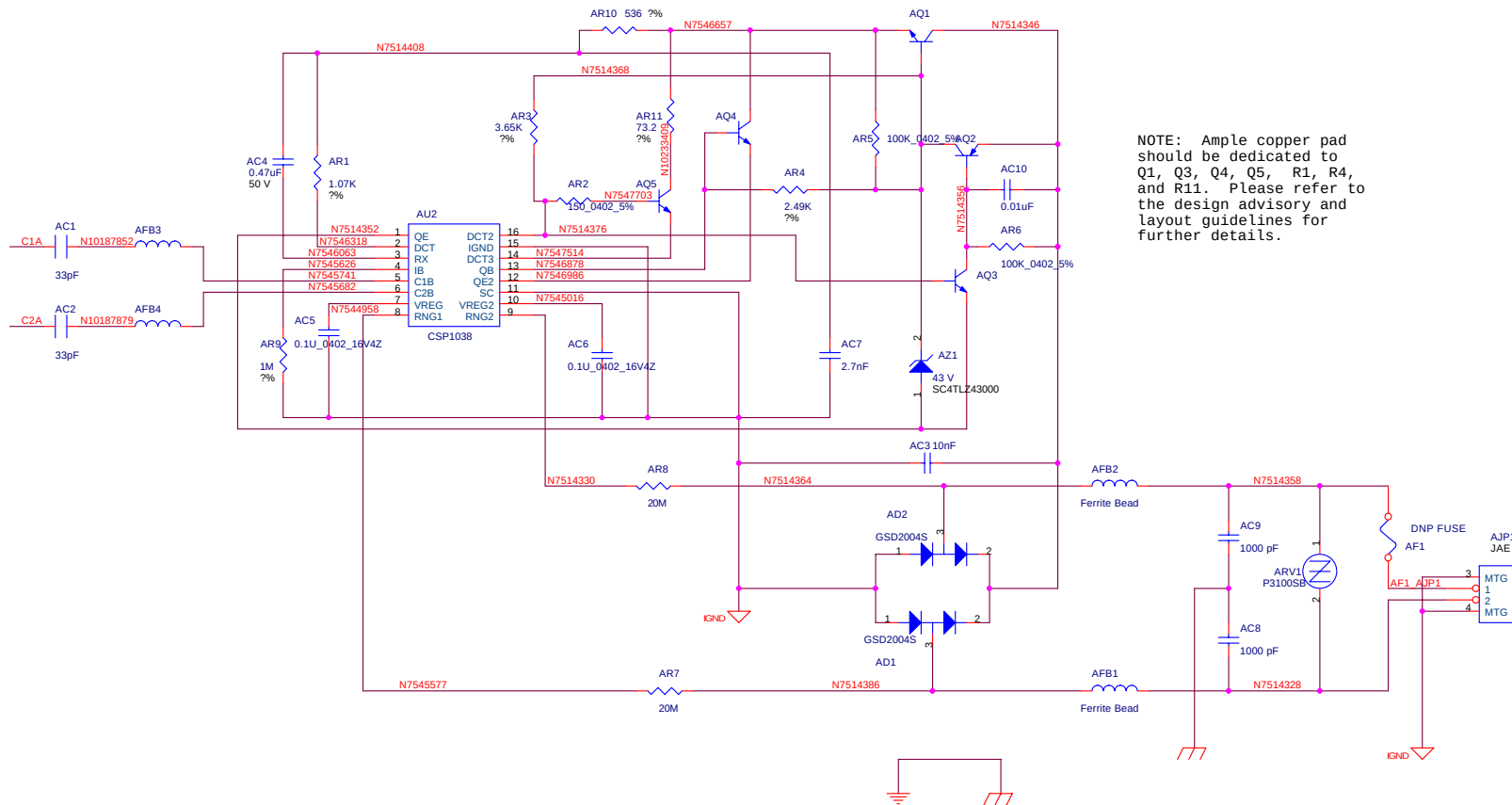


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| Codec ALC250             |                            |       |          |
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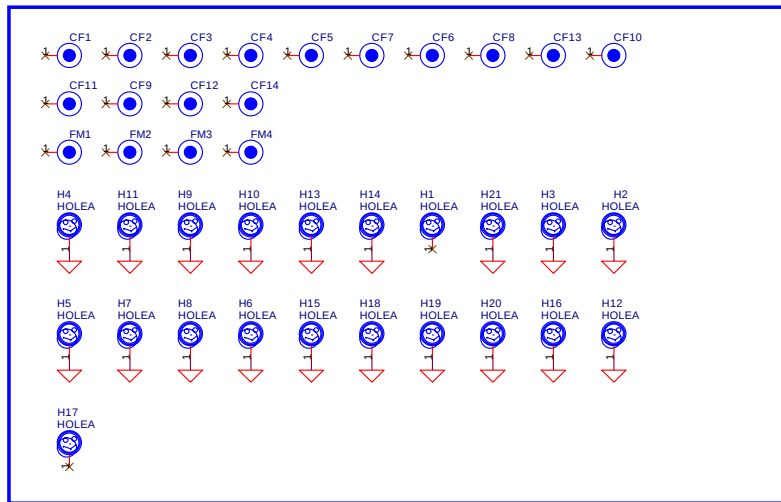
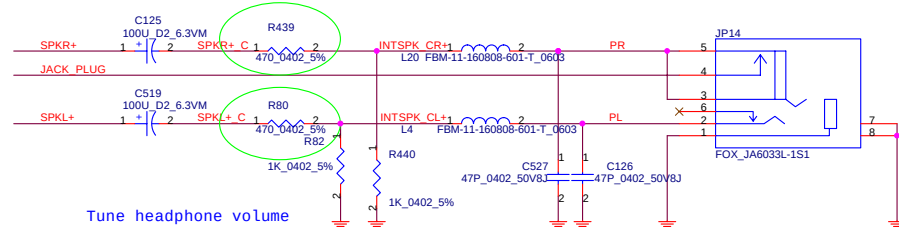
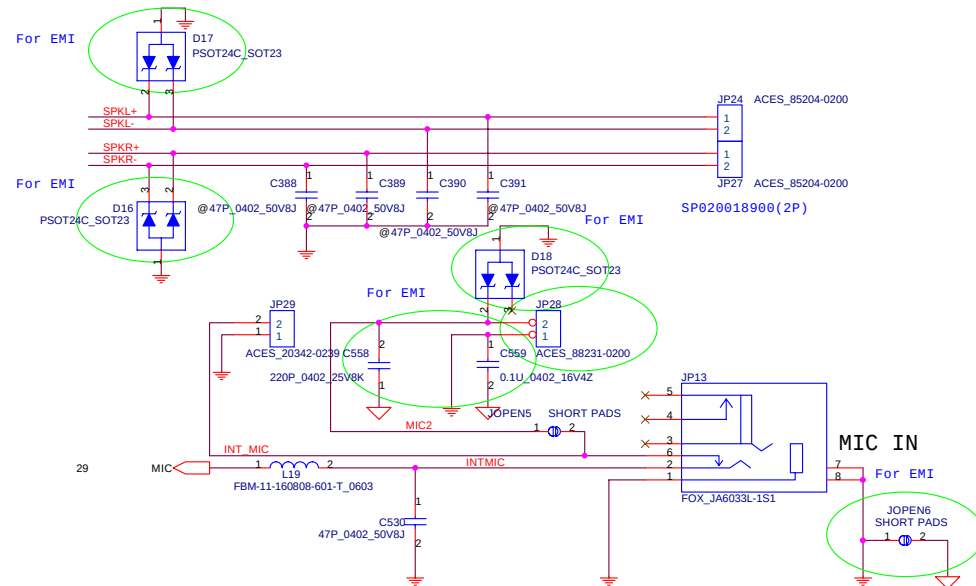
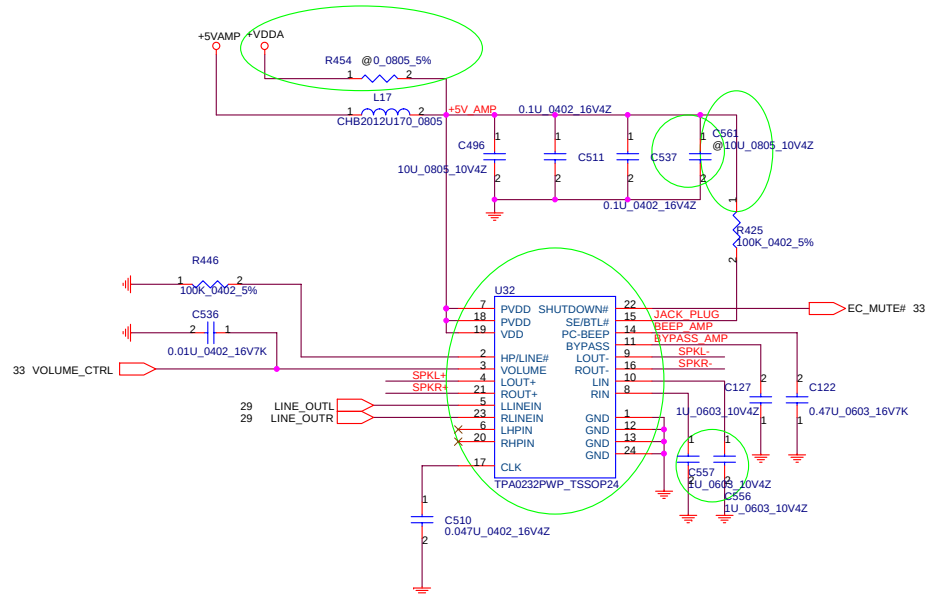


No Ground Plane In DAA Section



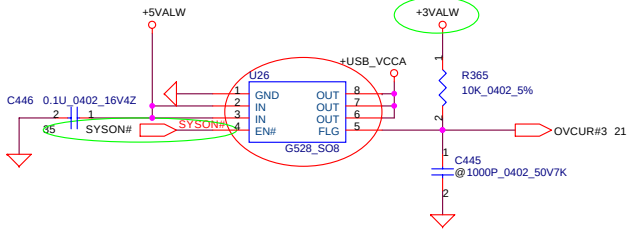
CSP1038A Line Side DAA

Agere Systems Proprietary  
DRAFT COPY - FOR REVIEW ONLY  
SUBJECT TO CHANGE

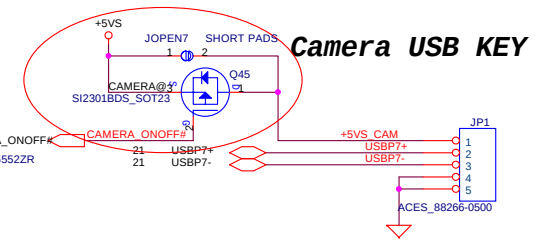
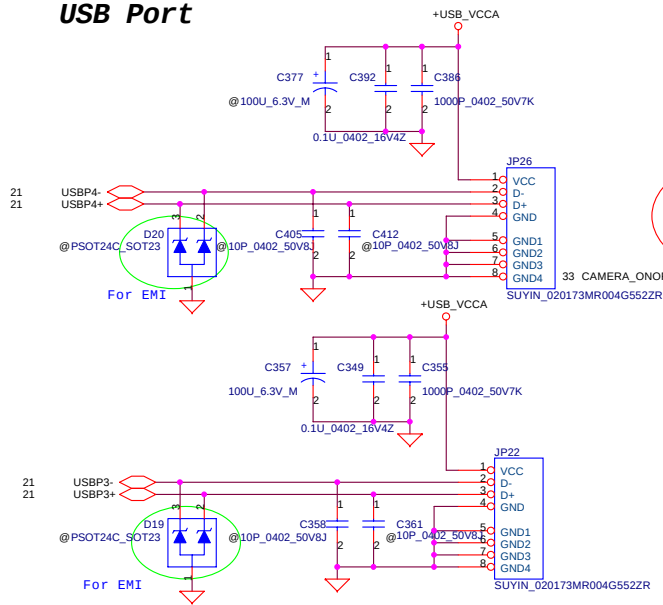


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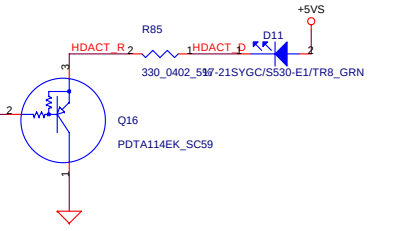
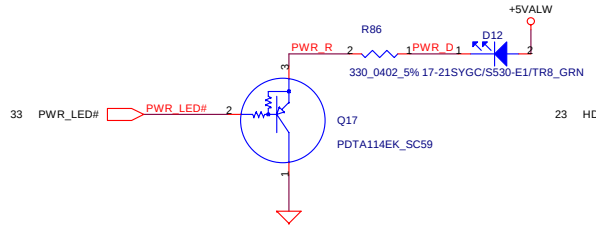
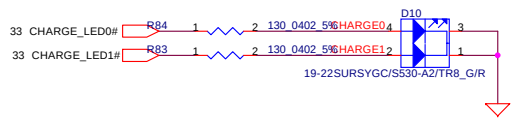
| Compal Electronics, Inc.   |                 |       |    |
|----------------------------|-----------------|-------|----|
| AMP & Audio Jack           |                 |       |    |
| Size                       | Document Number | Rev   |    |
| LA-2592                    |                 | 0.2   |    |
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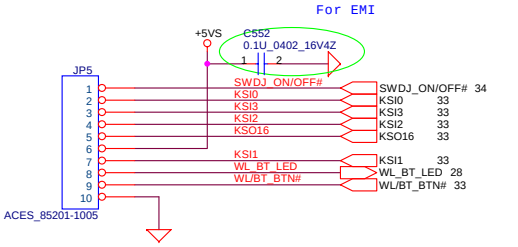
## USB Port



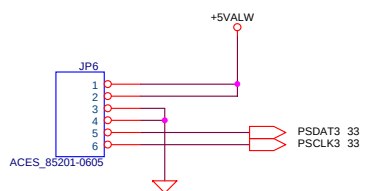
## LED Function



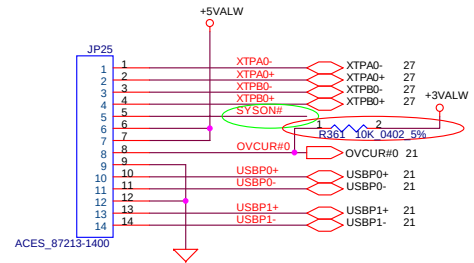
## SWDJ Board



## T/P Board

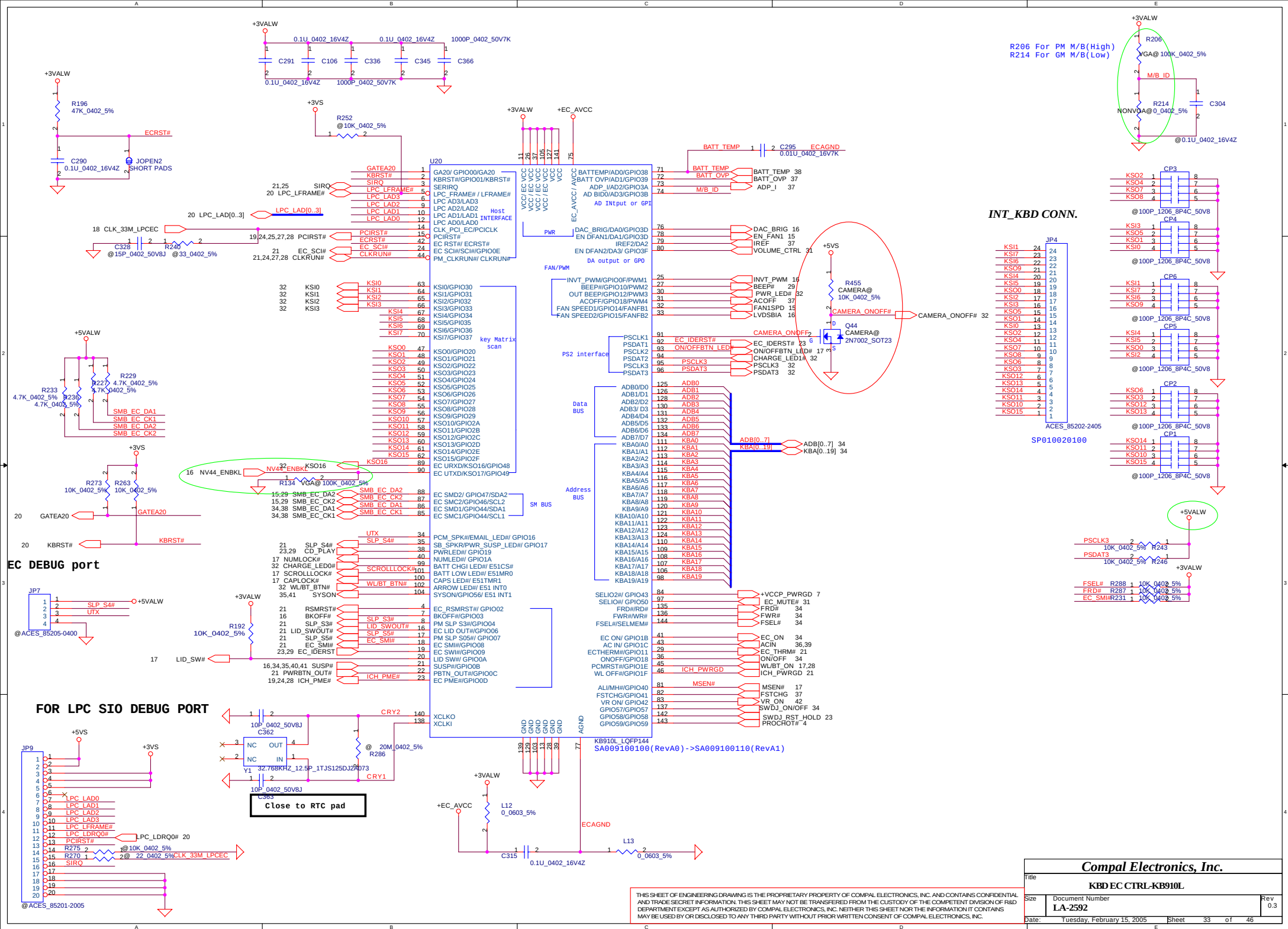


## 1394/USB Board

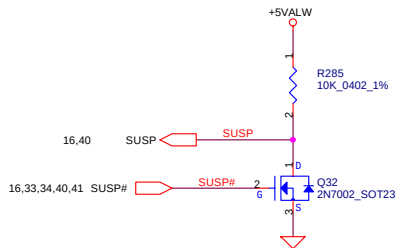
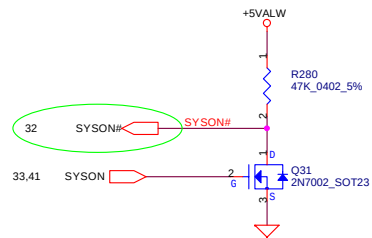
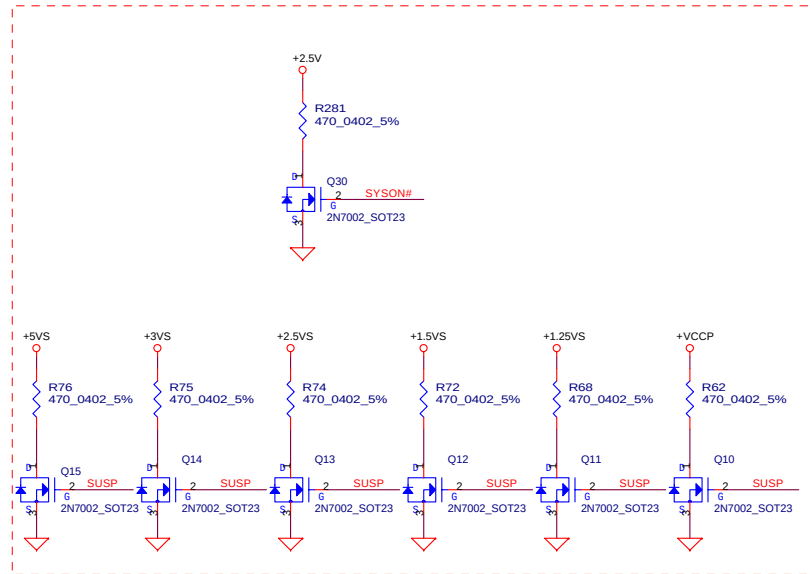
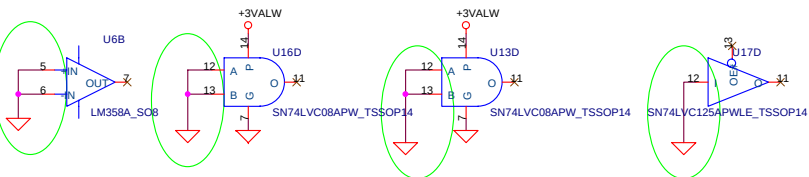
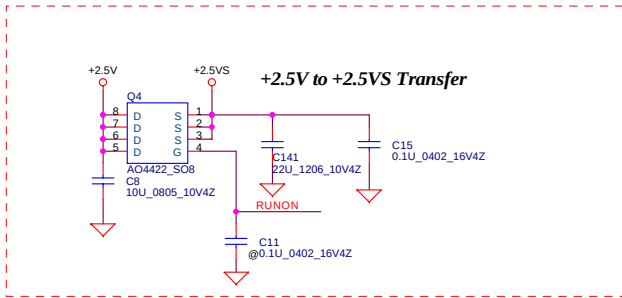
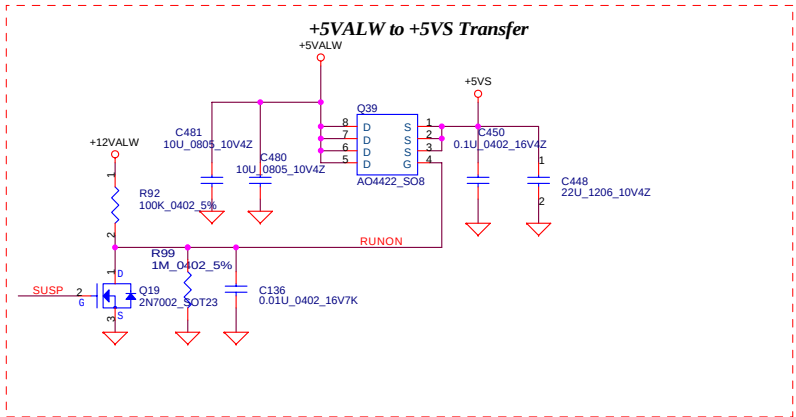
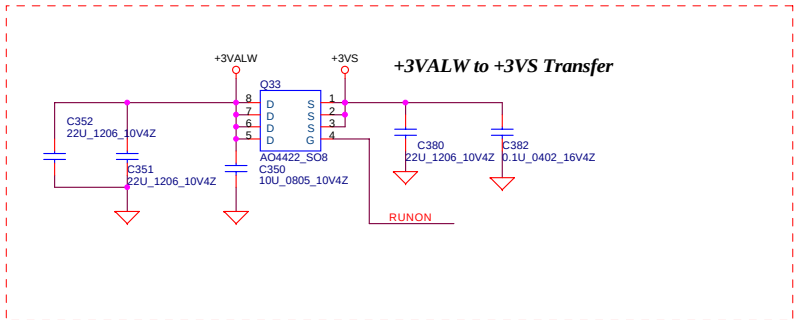


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|--------------------------|----------------------------|-------|----------|
| Title                    |                            |       |          |
| USB Port                 |                            |       |          |
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| Custom                   | LA-2592                    | 0.2   |          |
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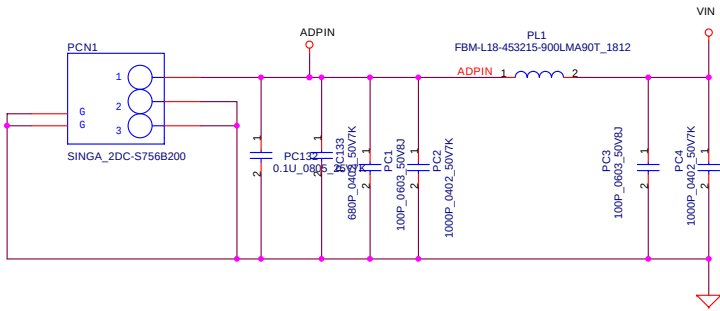




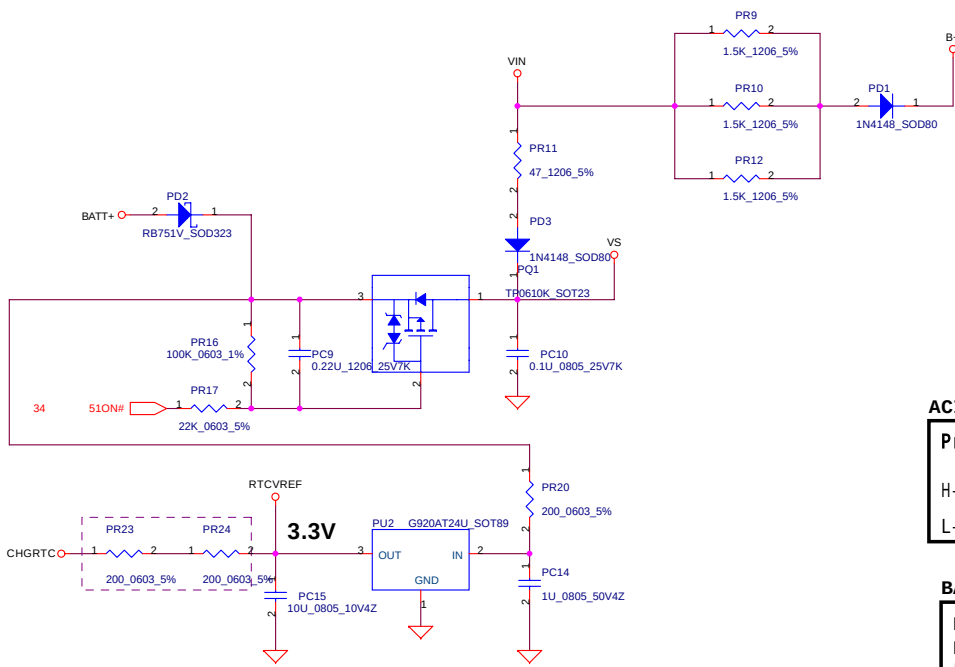
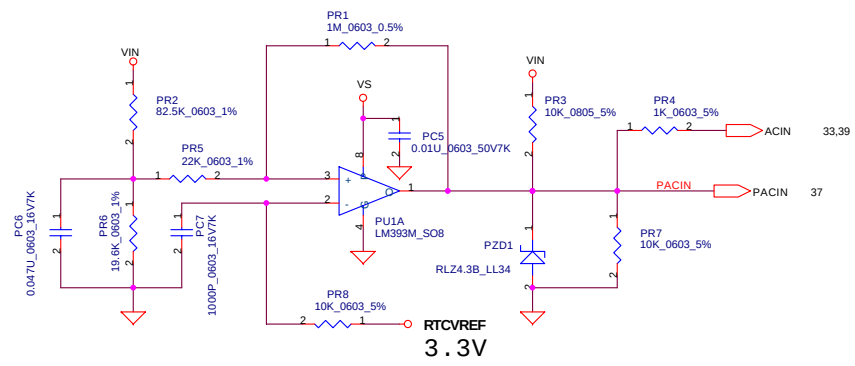


|                          |                            |       |          |
|--------------------------|----------------------------|-------|----------|
| Compal Electronics, Inc. |                            |       |          |
| Title                    |                            |       |          |
| POWER CONTROL            |                            |       |          |
| Size                     | Document Number            |       | Rev      |
|                          | LA-2592                    |       | 0.1      |
| Customer                 |                            |       |          |
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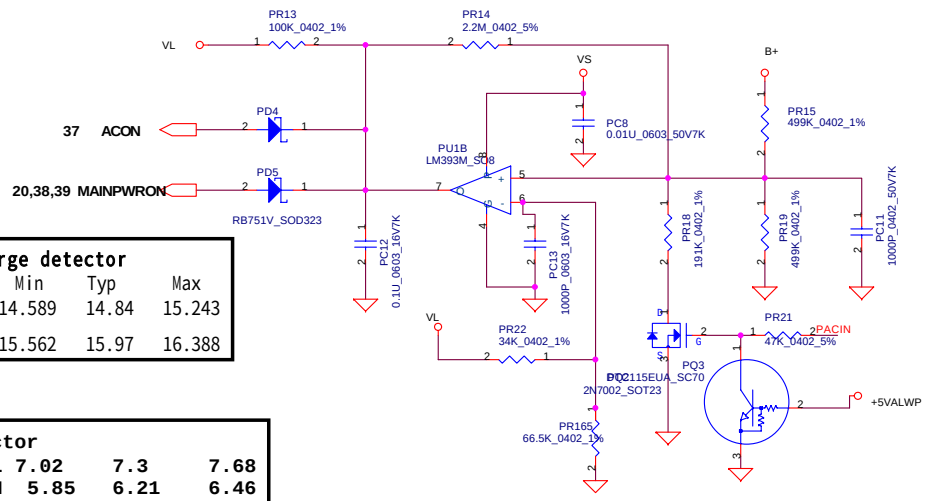


|              |        |        |
|--------------|--------|--------|
| Vin Detector |        |        |
| 18.234       | 17.841 | 17.449 |
| 17.597       | 17.210 | 16.813 |



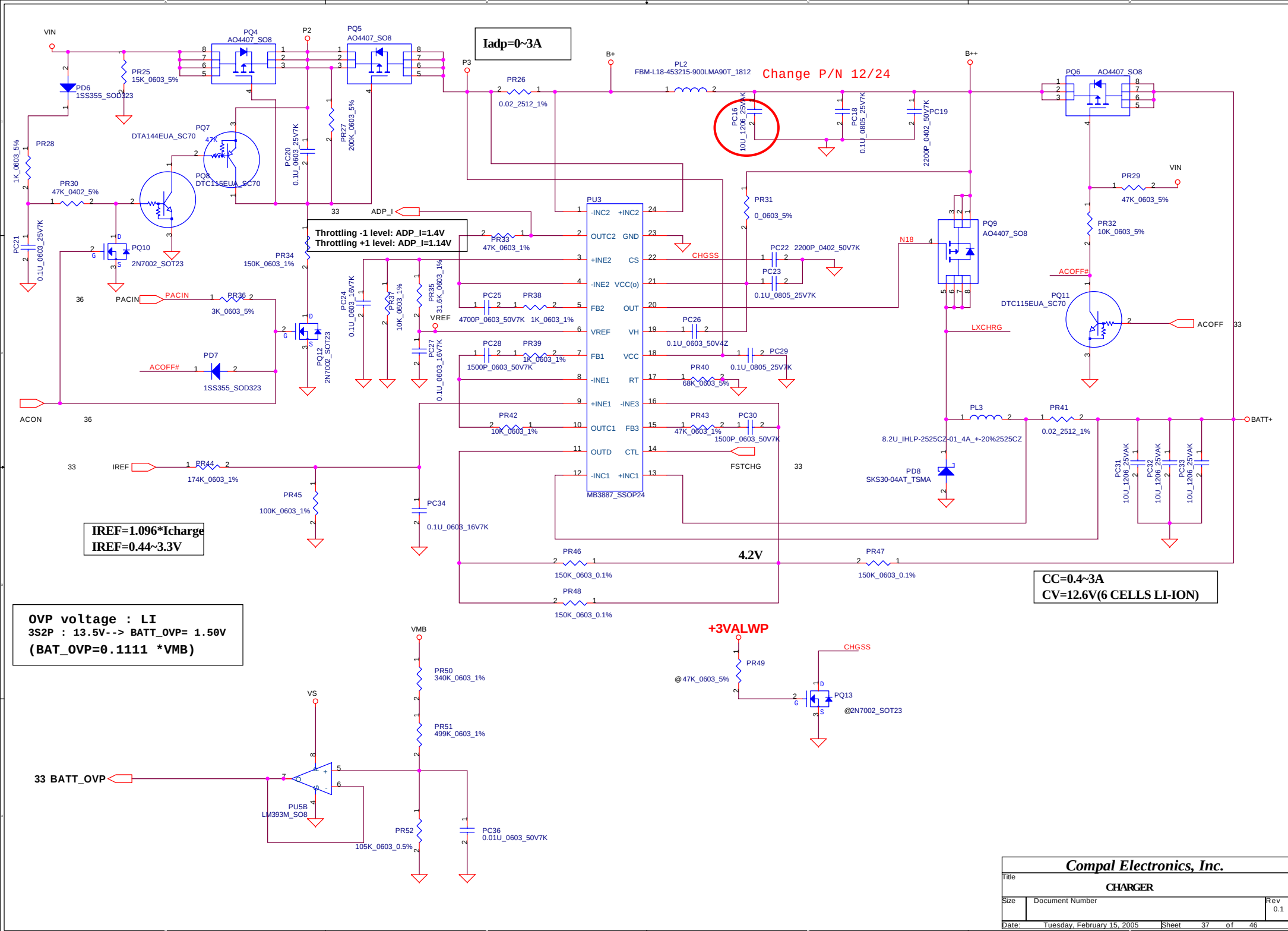
|                    |        |       |        |
|--------------------|--------|-------|--------|
| ACIN               |        |       |        |
| Precharge detector |        |       |        |
|                    | Min    | Typ   | Max    |
| H->L               | 14.589 | 14.84 | 15.243 |
| L->H               | 15.562 | 15.97 | 16.388 |

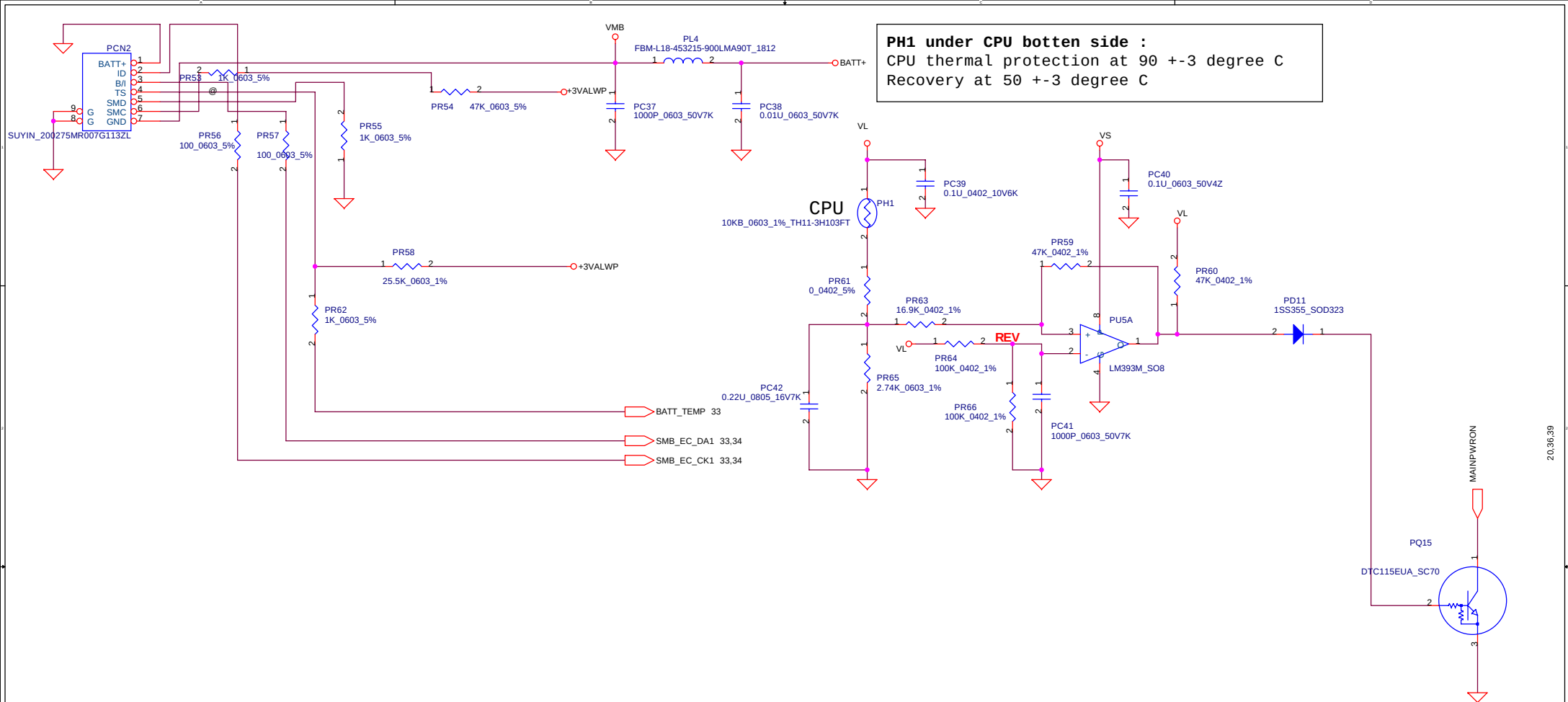
|          |      |      |      |
|----------|------|------|------|
| BATT     |      |      |      |
| Detector |      |      |      |
| H-->L    | 7.02 | 7.3  | 7.68 |
| L---H    | 5.85 | 6.21 | 6.46 |



|                          |                            |       |          |
|--------------------------|----------------------------|-------|----------|
| Compal Electronics, Inc. |                            |       |          |
| Detector                 |                            |       |          |
| Size                     | Document Number            | Rev   |          |
|                          |                            | 0.1   |          |
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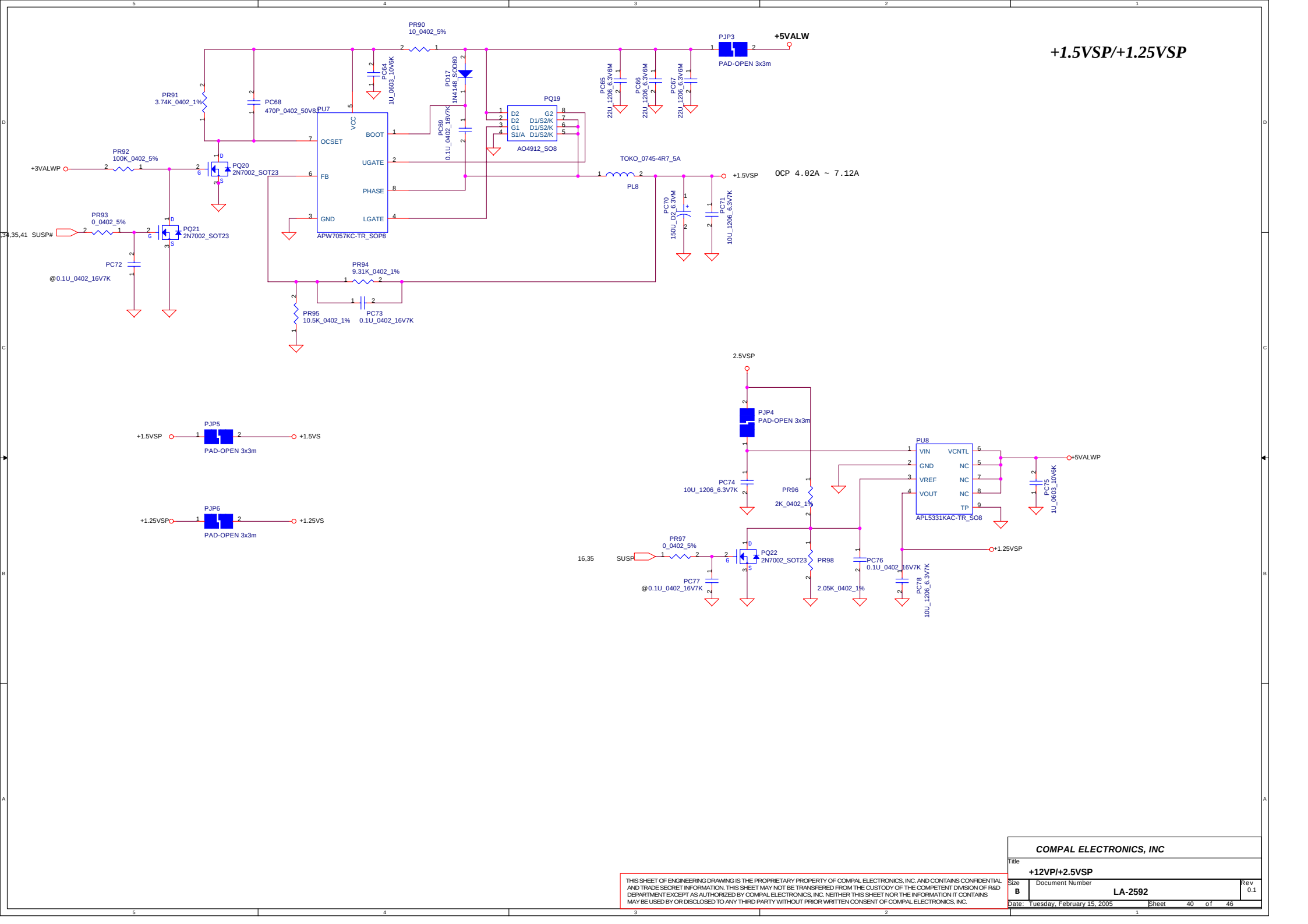




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|                                  |                 |     |
|----------------------------------|-----------------|-----|
| Title                            |                 |     |
| BATTERY CONN                     |                 |     |
| Size                             | Document Number | Rev |
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| Date: Tuesday, February 15, 2005 |                 |     |
| Sheet 38 of 46                   |                 |     |





+1.5VSP/+1.25VSP

+5VALW

OCP 4.02A ~ 7.12A

2.5VSP

+1.5VSP

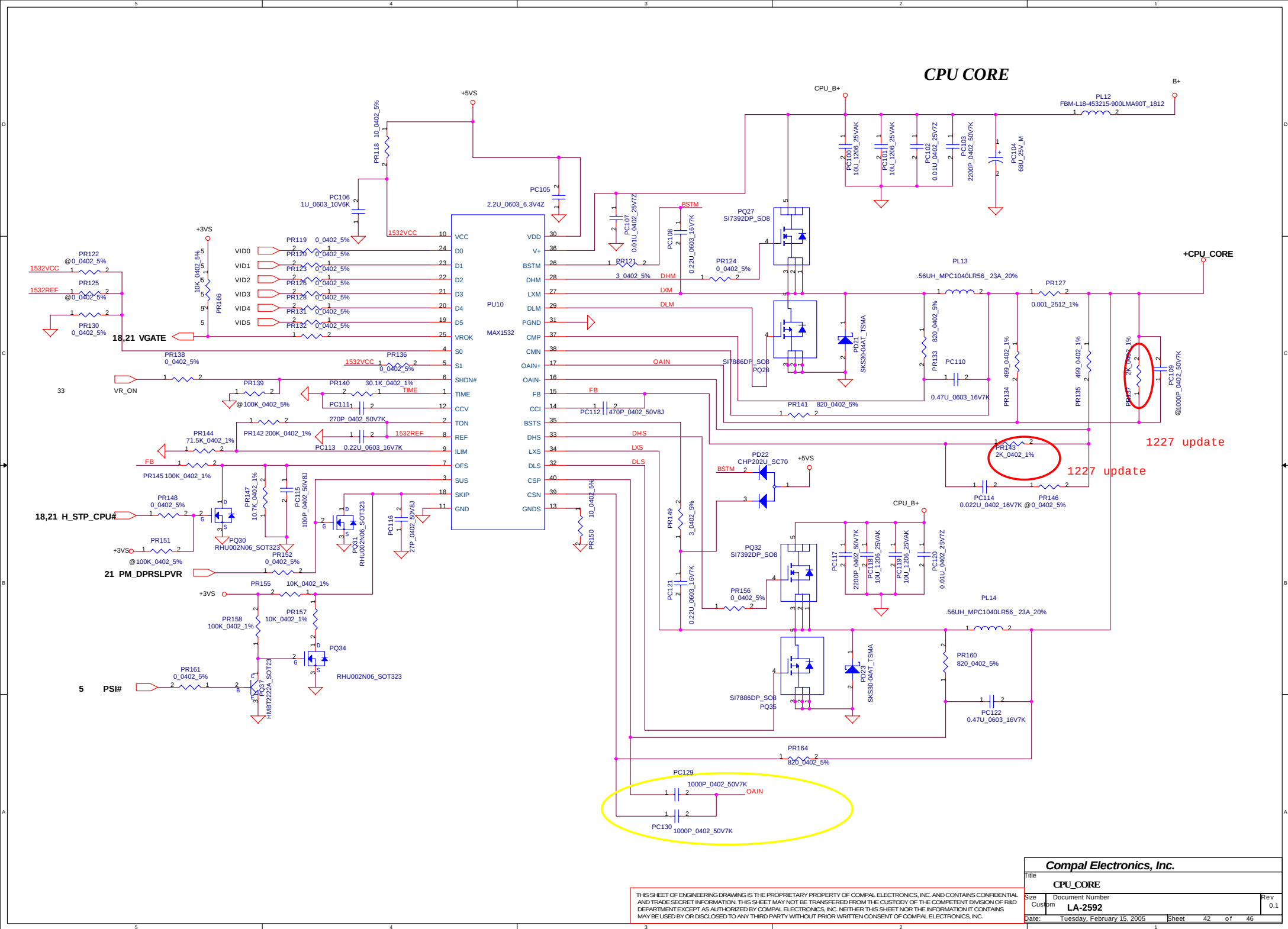
+1.25VSP

+5VALWP

|                         |                            |       |          |
|-------------------------|----------------------------|-------|----------|
| COMPAL ELECTRONICS, INC |                            |       |          |
| Title                   |                            |       |          |
| +12VP/+2.5VSP           |                            |       |          |
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| Date:                   | Tuesday, February 15, 2005 | Sheet | 40 of 46 |

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Version change list (P.I.R. List)

| Item | Fixed Issue                                                                                                                                     | Reason for change                                    | Rev.   | PG#      | Modify List | B.Ver # | Phase |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|--------|----------|-------------|---------|-------|
| 1    | Change USB Power MOS form AATI4610AIGV-T1_SOT23-5 to RT9702ACB_SOT23-5 SA097020100                                                              | Cost down                                            | Rev0.2 | P31      |             |         |       |
| 2    | Add new part U33 74LVC1G125GW_SOT3535 SA411250200 & C540 0.1U_0402_16V4Z SE070104Z00 & R366 10K_0402_5% SD028100200                             | HDD IOR# issue                                       | Rev0.2 | P31      |             |         |       |
| 3    | Add new part C541 10U_0805_10V4Z SE053106Z00                                                                                                    | HDD Power ripple                                     | Rev0.2 | P31      |             |         |       |
| 4    | Del R412 0_0402_5% SD028000000                                                                                                                  | BITCLK 0 ohm passthought                             | Rev0.2 | P31      |             |         |       |
| 5    | Del R192(DPRSLP#)/R195(FERR#) 0_0402_5% SD028000000                                                                                             | Passthought Dothan B signal                          | Rev0.2 | P31      |             |         |       |
| 6    | BOM Del R136/R147 40.2_0402_1% SD034402A00                                                                                                      | Intel recommand                                      | Rev0.2 | P31      |             |         |       |
| 7    | Add new part C542/C543 10U_0805_6.3V6M SE093106K00                                                                                              | NB +VCCP Power ripple                                | Rev0.2 | P31      |             |         |       |
| 8    | <del>Add new part R192 0_0402_5% SD028000000</del>                                                                                              | Passthought FWR# to FWE#                             | Rev0.2 | P31      |             |         |       |
| 9    | BOM del C377 100U_6.3V_M SF10001M100                                                                                                            | USB Power 100UF * 2 -> 100UF *1                      | Rev0.2 | P32      |             |         |       |
| 10   | Del R412 0_0402_5% SD028000000                                                                                                                  | Del MODEM AC97 BITCLK 0 Ohm                          | Rev0.2 | P30      |             |         |       |
| 11   | <del>BOM add C35 330U_D2F 2.5VM SGA19331D00</del>                                                                                               | NB +2.5V Power ripple                                | Rev0.2 | P10      |             |         |       |
| 12   | <del>BOM add C77 150U_D 6.3VM SG020151330</del>                                                                                                 | +2.5V Power ripple                                   | Rev0.2 | P14      |             |         |       |
| 13   | <del>BOM add C285 330U_D2F 2.5VM SGA19331D00</del>                                                                                              | +CPU_CORE Power ripple                               | Rev0.2 | P6       |             |         |       |
| 14   | CRT LUMA/COMPS/CRMA & USBP6-/USBP6+ swap                                                                                                        | layout swap avoid power noise cover                  | Rev0.2 | P17      |             |         |       |
| 15   | 1394 PCI BUS swap PCI_AD[0..31]                                                                                                                 | 1394 PCI BUS Layout update                           | Rev0.2 | P27      |             |         |       |
| 16   | Add new part R192 10K_0402_5% SD028100200                                                                                                       | Lid SW# M/B pull high.                               | Rev0.2 | P33      |             |         |       |
| 17   | RTC BATT1 pin swap                                                                                                                              | RTC Battary pin define error                         | Rev0.2 | P20      |             |         |       |
| 18   | Del part R19<br>BOM part change R19 0_0603_5% to L21 BLM18PG600SN1_0603 SM010022000                                                             | CRT power filter noise<br>NB power plan R19 -> L21   | Rev0.2 | P10      |             |         |       |
| 19   | BOM change part 10 to 56: RP1, RP2, RP3, RP4, RP5, RP6, RP7, RP8, RP14, RP15, RP16, RP17, RP18, RP19, RP20, RP21 -> 56_1206_8P4R_5% SD302560A00 | Rev0.1 BOM error                                     | Rev0.2 | P13      |             |         |       |
| 20   | BOM change part 10 to 56: R5, R6, R7, R8, R15, R16, R17, R18, 23, R26, R28, R29, R30, R31, R36, R39 -> 56_0402_5% SD028560A00                   | Rev0.1 BOM error                                     | Rev0.2 | P13      |             |         |       |
| 21   | Add new part C544, C545, C546, C548, C550 0.1U_0402_16V4Z SE070104Z00                                                                           | NB Power plan filter                                 | Rev0.2 | P10      |             |         |       |
| 22   | Add new part C549, C551, C547 0.22U_0603_16V4Z SE027224NT5                                                                                      | NB Power plan filter                                 | Rev0.2 | P10      |             |         |       |
| 23   | Add new part L21, L22, L23, L24, L25 CHB1608U301_0603 SM010012500                                                                               | NB Power plan filter                                 | Rev0.2 | P10      |             |         |       |
| 24   | U20Pin93 - Del ON/OFFBTN_LED# JP15.Pin6 - chagne ON/OFFBTN_LED# to GND                                                                          | ON/OFFBTN_LED# need EC control, LED direct pull +3VS | Rev0.2 | P17,P33  |             |         |       |
| 25   | BOM D6 change 1N4148_SOT23 to DAN202U_SC70 SC2N202U0T4                                                                                          | SWDF ON/OFF# no function                             | Rev0.2 | P34      |             |         |       |
| 26   | JOPEN1, JOPEN3, JOPEN4 follow JOPEN2 footprint                                                                                                  | DFX review recommand                                 | Rev0.2 | P20, P29 |             |         |       |
| 27   | JOPEN5, JOPEN6, JOPEN7 reserve MIC second rounting                                                                                              | For ME recommand                                     | Rev0.2 | P31      |             |         |       |
| 28   | Pin73 - EC_IDERST Move to Pin19<br>Pin19 - ADP_I Move to Pin73                                                                                  | For EC Swap signal                                   | Rev0.2 | P33      |             |         |       |

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| Item | Fixed Issue                                                                                   | Reason for change                                    | Rev.   | PG # | Modify List |  | B.Ver # | Phase |
|------|-----------------------------------------------------------------------------------------------|------------------------------------------------------|--------|------|-------------|--|---------|-------|
| 29   | Del C443 0.47U_0603_16V7K SE026474KT6<br>Del BOM C445 1000P_0402_50V7K SE074102K00            | Del +USB_VCCA CAF                                    | Rev0.2 | P32  |             |  |         |       |
| 30   | Add BOM R208 100K_0402_5% SD028100300                                                         | PM_DPRSPLVR stuff on resistor                        | Rev0.2 | P21  |             |  |         |       |
| 31   | Add new part R19 43K_0402_5% SD028430200                                                      | Option ENE1410 & TI1410 resistor                     | Rev0.2 | P25  |             |  |         |       |
| 32   | Add new part C443 150U_D_6.3VM SG020151330                                                    | NB power +2.5VS BOM non-stuff                        | Rev0.2 | P10  |             |  |         |       |
| 33   | Change BOM part U11 74AHCT1G125GW to 74LVC1G125GW_S0T3535 SA411250200                         | BIOS block schematic part change                     | Rev0.2 | P34  |             |  |         |       |
| 34   | Change BOM part L1 BLM18PG600SN1_0603 to 74BLM18PG330SN1_2P SM010019400                       | NB power +1.5VS ripple                               | Rev0.2 | P10  |             |  |         |       |
| 35   | Add net U20.pin93 EC_IDERST# for gating HD_IOR#                                               | Gating HD_IOR#                                       | Rev0.2 | P33  |             |  |         |       |
| 36   | Add BOM part R27 10K_0402_5% SD028100200 & C54 1000P_0402_50V7K SE074102K00                   | FAN schematic FAN1SPD stuff on pull high & CAF       | Rev0.2 | P15  |             |  |         |       |
| 37   | Add new part R195,R412,R452 0_0402_5% SD028000000                                             | Option SWDJ@ & NONSWDJ@                              | Rev0.2 | P23  |             |  |         |       |
| 38   | Del part R151,R152,R153,R154,R146,R158,R148,R138,R134                                         | NB pin name CFG part change to test point.           | Rev0.2 | P07  |             |  |         |       |
| 39   | Del part R131,R132                                                                            | NB pin name SDVOCTRL change to test point.           | Rev0.2 | P09  |             |  |         |       |
| 40   | ME change connector for LVDS/HDD/Keyboard/VGA B-B/Speaker/USB/RJ45/INT MIC                    |                                                      | Rev0.2 |      |             |  |         |       |
| 41   | Del RJ45 LED function part R188, R224(10/100), R225(GLAN)                                     | RJ45 connector no LED function                       | Rev0.2 | P24  | A2 MEMO     |  |         |       |
| 42   | BOM AC10 0.01UF NPO SE069103K00 change to 0.01UF X7R SE000000H00                              | Short part                                           | Rev0.2 | P30  | A2 MEMO     |  |         |       |
| 43   | BOM AC11 SE168103M00 01U 250V M X7R 0805 change to SE093106K00 10U 6.3V M X5R 0805            | BOM error                                            | Rev0.2 | P30  | A2 MEMO     |  |         |       |
| 44   | BOM U23 CB714 A revision change to B0 SA007140B10                                             | Change revision and all BOM's CB712 change to CB714. | Rev0.2 | P25  | A2 MEMO     |  |         |       |
| 45   | BOM U20 KB910L A0 revision change to A1 revision SA009100110                                  | Change revision                                      | Rev0.2 | P33  | A2 MEMO     |  |         |       |
| 46   | Add new part U34 74LVC1G125GW SA411250200                                                     | IDE_HDIOIR# gating.                                  | Rev0.2 | P23  | A2 MEMO     |  |         |       |
| 47   | Add new part R131,R132 200 ohm 0402 SD028200000                                               | For PCI-1410 BOM                                     | Rev0.2 | P27  | A2 MEMO     |  |         |       |
| 48   | Del part U11,R57,R59,R60,C108,C109<br>Add part R58 0 0402 +-5% SD028000000                    | FSEL# pass-through INT_FSEL#                         | Rev0.2 | P34  | A2 MEMO     |  |         |       |
| 49   | Del part R206,C304                                                                            | Signal M/B_ID                                        | Rev0.2 | P33  | A2 MEMO     |  |         |       |
| 50   | SMT JP29 un-marked                                                                            |                                                      | Rev0.2 | P31  | A2 MEMO     |  |         |       |
| 51   | Del part C3, Add part C77                                                                     | DDR +2.5V Cap change                                 | Rev0.2 | P14  | A2 MEMO     |  |         |       |
| 52   | BOM AR7,AR8 SD010200500 20M Ohm +-1% change to SD015200500 20M Ohm +-5%                       | Short part                                           | Rev0.2 | P21  | A2 MEMO     |  |         |       |
| 53   | BOM AC5,AC6,AC12,AC13 SE072104K00 0.1U 25V +-10% Y5V change to SE070104Z00 0.1U 16V +-10% Y5V | Short part                                           | Rev0.2 | P30  | A2 MEMO     |  |         |       |
| 54   | Del part R237                                                                                 | Del SB's AC_IN                                       | Rev0.3 | P30  | B MEMO      |  |         |       |
| 55   | Change part DDR Hynix A die SA216220000 -> B die SA000023200                                  | Chagne Hynix DDR version                             | Rev0.3 | P12  | B MEMO      |  |         |       |
| 56   | NB's signal COMP/B & Y/G swap                                                                 | Schematic pindefine error.                           | Rev0.3 | P09  |             |  |         |       |

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| Item | Fixed Issue                                                                                                                         | Reason for change                                   | Rev.   | PG #        | Modify List      | B.Ver # | Phase |
|------|-------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|--------|-------------|------------------|---------|-------|
| 57   | Change BOM part Q5,Q6 2N7002 to BSS138                                                                                              | LVDS EDID Vih, Vil no match spec                    | Rev0.3 | P16         |                  |         |       |
| 58   | Net GNDH_ENBRK connect to EC_U20.p90<br>Add new part R134 100K pull down.<br>Del part R11 0 ohm                                     | PM panel white back light issue.                    | Rev0.3 | P21         |                  |         |       |
| 59   | Add new part<br>C552,C553,C554,C555,C558,C559,D16,D17,D18,D19,D20.                                                                  | EMI issue.                                          | Rev0.3 | P17,P31,P32 |                  |         |       |
| 60   | Add new part R453,Q43.                                                                                                              | For SWDJ geting RIQ.                                | Rev0.3 | P23         |                  |         |       |
| 61   | Pop part R434.                                                                                                                      | For SWDJ A-A issue.                                 | Rev0.3 | P29         |                  |         |       |
| 62   | Change BOM part AC11 10U_0805 to 1U_1206                                                                                            | ME issue.                                           | Rev0.3 | P30         |                  |         |       |
| 63   | Add part C557,C558.                                                                                                                 | Boost audio "B0" sound issue.                       | Rev0.3 | P31         |                  |         |       |
| 64   | Change BOM part R439,R80 0_0402 to 470_0402.                                                                                        | Ear phone sound too big issue.                      | Rev0.3 | P31         |                  |         |       |
| 65   | Change BOM part JP28 footprint no match spec.                                                                                       | layout spec issue.                                  | Rev0.3 | P31         |                  |         |       |
| 66   | U6, U13, U16, U17 nc pin connect to GND.                                                                                            |                                                     | Rev0.3 | P35         |                  |         |       |
| 67   | Add jumper JOPEN5                                                                                                                   | EMI issue.                                          | Rev0.3 | P31         |                  |         |       |
| 68   | Add part C560 SE053475Z05 4.7U 10V Z Y5V 0805                                                                                       | Change Card Reader power MOS for MS card conn issue | Rev0.3 | P26         |                  |         |       |
| 69   | Del BOM part Q34 SB923010010 SI2301BDS                                                                                              | Change Card Reader power MOS for MS card conn issue | Rev0.3 | P26         |                  |         |       |
| 70   | Add part U34 SA005280100 G528                                                                                                       | Change Card Reader power MOS for MS card conn issue | Rev0.3 | P26         |                  |         |       |
| 71   | Change BOM part C374 SE076103K00 .01U 16V K X7R 0402 to SE076104Z00 .1U 16V Z Y5V 0402                                              | Change Card Reader power MOS for MS card conn issue | Rev0.3 | P26         |                  |         |       |
| 72   | Add part R454, C357.<br>net EC_MUTE# pull high chanGe to +5V_AMP                                                                    | For audio CD-L/R noise option +VDPA & +5VAMP.       | Rev0.3 | P31         |                  |         |       |
| 73   | Change BOM part R361 20K 0hm to 10K 0hm                                                                                             | For camera power switch.                            | Rev0.3 | P32         | C TEST BOM MEMO. |         |       |
| 74   | Add part R455, Q45, Q44, JOPEN7.<br>Add net CAMERA_ONOFF&+5VS_CAM                                                                   | For camera power switch.                            | Rev0.3 | P33,32      | C TEST BOM MEMO. |         |       |
| 75   | Change BOM part U26 to G528 for USB power MOS.<br>Change Net U26.4 to SYSON# & OVCUR#3 pull high +3VALW                             | For camera power switch.                            | Rev0.3 | P32         | C TEST BOM MEMO. |         |       |
| 76   | Change BOM part U32 Change SA021210000 S IC<br>APA2121RI_TR TSSOP-24 AUDIO AMP to SA002320300 S IC<br>TPA0232PWP TSSOP-24 AUDIO AMP | For APA AMP audio power up "bo" sound               | Rev0.3 | P31         | C TEST BOM MEMO. |         |       |
| 77   |                                                                                                                                     |                                                     |        |             |                  |         |       |
| 78   |                                                                                                                                     |                                                     |        |             |                  |         |       |
| 79   |                                                                                                                                     |                                                     |        |             |                  |         |       |
| 80   |                                                                                                                                     |                                                     |        |             |                  |         |       |
| 81   |                                                                                                                                     |                                                     |        |             |                  |         |       |
| 82   |                                                                                                                                     |                                                     |        |             |                  |         |       |
| 83   |                                                                                                                                     |                                                     |        |             |                  |         |       |
| 84   |                                                                                                                                     |                                                     |        |             |                  |         |       |

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## Version change list (P.I.R. List)

## Power section

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| Item | Reason for change                                                    | PG #  | Modify List                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Date   | B.Ver # |
|------|----------------------------------------------------------------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------|
| 1    | Update 1.05V, 2.5V, 1.5V, 3.3V and 5V CHOKE for cost down            | 38    | PL7, PL6, PL10, PL11, PL8 update to TOKIN 4.5mm(High) from VISHAY(3mm High)                                                                                                                                                                                                                                                                                                                                                                                                  | Nov/12 | A.Ver # |
| 2    | Add Capacity 4.7UF 2 pcs for reduce ribble voltage                   | 38    | Add 4.7U in pC?                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Nov/12 | A.Ver # |
| 3    | Update BST Resistor to 4.7 ohm 2 pcs for reduce switching node noise | 38    | PR72, PR76 update to 4.7 ohm from 0 ohm                                                                                                                                                                                                                                                                                                                                                                                                                                      | Nov/12 | A.Ver # |
| 4    | Update 12VALWP 16V Zener to 12V Zener                                | 38    | Update PD26 to 12V Zener from 16V Zener                                                                                                                                                                                                                                                                                                                                                                                                                                      | Nov/12 | A.Ver # |
| 5    | Add CPU Thermal protect circuit                                      | 37    | Add PR61, PR65, PC42, PR63, PR64, PR66, PC41, PR59, PU5, PC40, PR60 PD11, PQ15                                                                                                                                                                                                                                                                                                                                                                                               | Nov/12 | A.Ver # |
| 6    | Delete Battery Thermal Protect circuit                               | 37    | Delete PH2, PC43, PR68, PC45, PR70, PR71, PR67, PR69, PR14                                                                                                                                                                                                                                                                                                                                                                                                                   | Nov/12 | A.Ver # |
| 7    | Update Output Voltage to 1.26V from 1.25V                            | 39    | Update PR96 to 2K from 1K<br>Update PR98 to 2.05K from 1K                                                                                                                                                                                                                                                                                                                                                                                                                    | Nov/12 | A.Ver # |
| 8    | Reduce Ripple Voltage for 1.05V and 2.5V                             | 40    | Add 4.7U Capacity in pC128, PC127                                                                                                                                                                                                                                                                                                                                                                                                                                            | Nov/12 | A.Ver # |
| 9    | Update Out put Voltage to 1.054V from 1.05V                          | 40    | Update PR111 to 23.2K from 25.5K                                                                                                                                                                                                                                                                                                                                                                                                                                             | Nov/12 | A.Ver # |
| 10   | Reduce switching node noise                                          | 40    | Update PR102, PR103 to 4.7 ohm from 0 ohm                                                                                                                                                                                                                                                                                                                                                                                                                                    | Nov/12 | A.Ver # |
| 11   | Reduce noise for SUSP#                                               | 40    | Update PR1092, PR103 to 4. to 27 ohm from 0 ohm                                                                                                                                                                                                                                                                                                                                                                                                                              | Nov/12 | A.Ver # |
| 12   | Reduce CPU noise for Vgate                                           | 41    | Update PR166 to 10K from 100K                                                                                                                                                                                                                                                                                                                                                                                                                                                | Nov/12 | A.Ver # |
| 13   | Reduce CPU noise                                                     | 41    | Update PL12 to 13A from 8A                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Nov/12 | A.Ver # |
| 14   | Reduce CPU switching node noise                                      | 41    | Update PR121, PR149 to 3 ohm from 0 ohm                                                                                                                                                                                                                                                                                                                                                                                                                                      | Nov/12 | A.Ver # |
| 15   | Reduce CPU noise for input side                                      | 41    | Add 68UF Capacity in PC 129, PC104                                                                                                                                                                                                                                                                                                                                                                                                                                           | Nov/12 | A.Ver # |
| 16   | Adjust load line                                                     | 41    | Update PR137, PR143 to 2K from 3K                                                                                                                                                                                                                                                                                                                                                                                                                                            | Nov/12 | A.Ver # |
|      | Delete shocket Diode for Maxium 8743 and Maxium 1999 solution        | 40 38 | Delete PD24, PD25, PD19, PD20                                                                                                                                                                                                                                                                                                                                                                                                                                                | Nov/12 | A.Ver # |
|      |                                                                      |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |        |         |
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