

Compal Confidential

NEWX5 / PEW56 M/B Schematics Document

AMD Danube Only UMA

AMD Champlain Processor with RS880M/SB820M

WWW.MANUALS.CLAN.SU

2010-06-17

LA5912P REV: 1.0

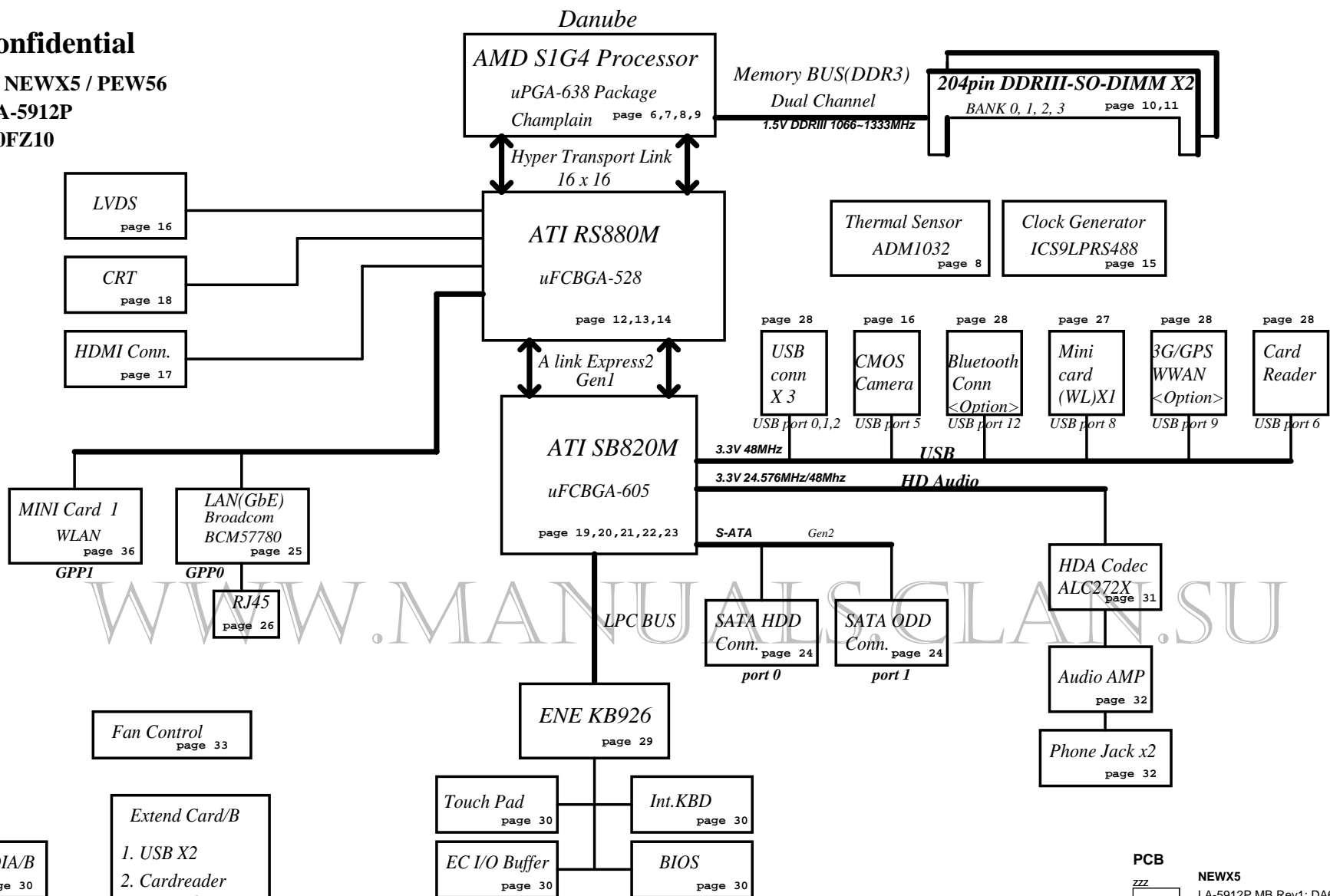
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| | | | | Rev C | 401829 |
| | | | | Date: | Wednesday, June 30, 2010 |
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Model Name : NEWX5 / PEW56

File Name : LA-5912P

P/N : DA60000FZ10



LED
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RTC CKT.
page 19

LID SW / MEDIA/B
page 30

Power On/Off CKT.
page 33

DC/DC Interface CKT.
page 34

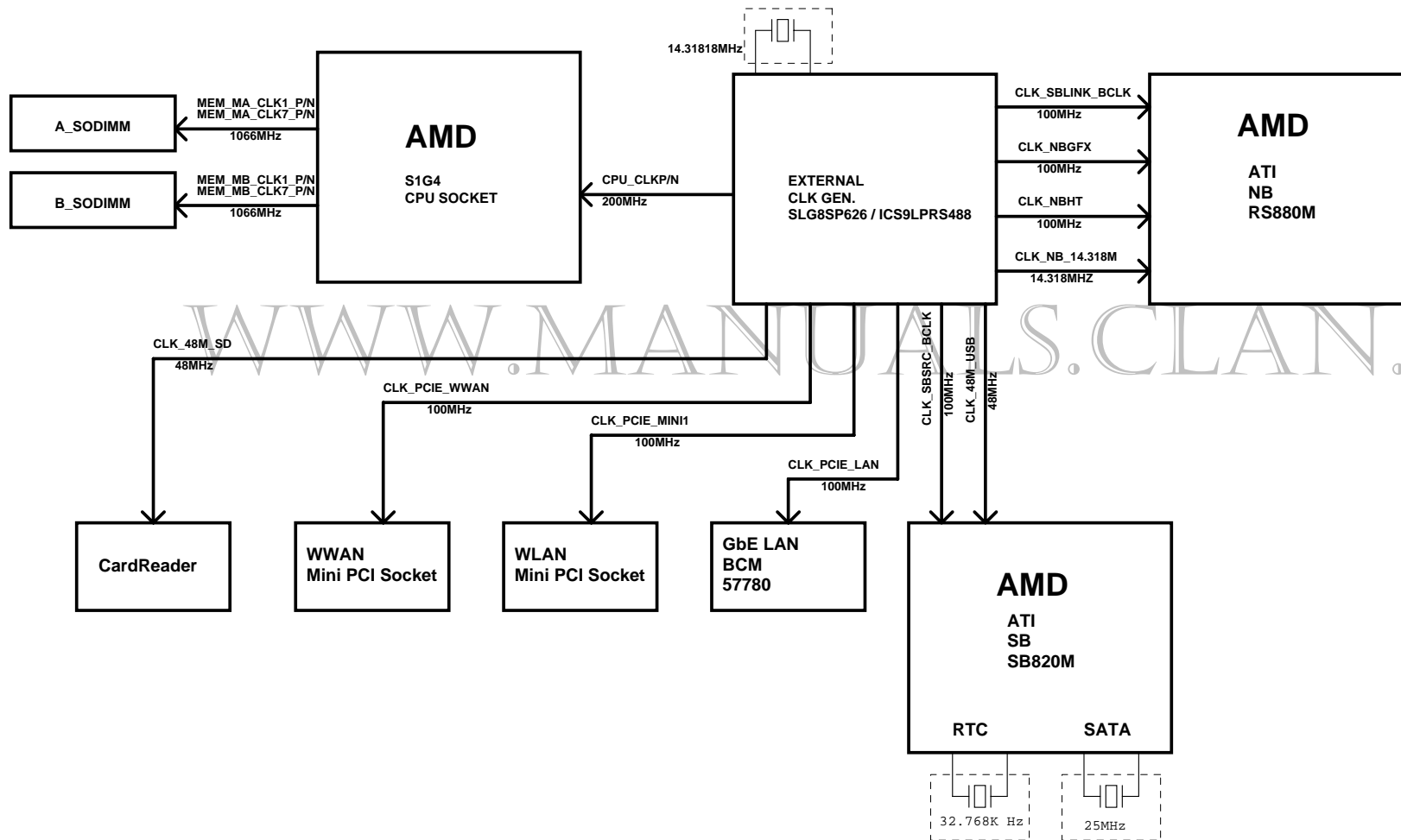
Power Circuit
page 35,36,37,38,39,40,
41,42,43

Fan Control
page 33

Extend Card/B
1. USB X2
2. Cardreader
RTS5160
w/ 5IN1 Conn.
w/ 2IN1 Conn.

PCB
ZZZ
NEWX5
LA-5912P MB Rev1: DA60000FZ10
LA-5912P MB DAZ0C600100
LA-5912P REV1 M/B
NEWX5®
ZZZ1
PEW56
LA-5912P MB Rev1: DA60000FZ10
LA-5912P MB DAZ0GJ00100
LA-5912P REV1 M/B
PEW56®

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| | | | | Date: | Wednesday, June 30, 2010 | Sheet | 3 of 45 |

Voltage Rails

| Power Plane | Description | S1 | S3 | S5 |
|--------------|---|-----|-----|-----|
| VIN | Adapter power supply (19V) | N/A | N/A | N/A |
| B+ | AC or battery power rail for power circuit. | N/A | N/A | N/A |
| +CPU_CORE | Core voltage for CPU (1.375-1.5V) | ON | OFF | OFF |
| +CPU_CORE_NB | Voltage for On-die Northbridge of CPU(0.8-1.1V) | ON | OFF | OFF |
| +CPU_VDDR | 1.05V switched power rail | ON | OFF | OFF |
| +0.75V | 0.75V switched power rail for DDR terminator | ON | ON | OFF |
| +1.1VS | 1.1V switched power rail for NB VDDC & VGA | ON | OFF | OFF |
| +1.5V | 1.5V power rail for CPU VDDIO and DDR | ON | ON | OFF |
| +1.5VS | 1.5V power rail for MINI Card | ON | OFF | OFF |
| +1.8VS | 1.8V switched power rail | ON | OFF | OFF |
| +2.5VS | 2.5V for CPU_VDDA | ON | OFF | OFF |
| +3VALW | 3.3V always on power rail | ON | ON | ON* |
| +3VS | 3.3V switched power rail | ON | OFF | OFF |
| +3V_LAN | 3.3V power rail for LAN | ON | ON | ON |
| +5VALW | 5V always on power rail | ON | ON | ON* |
| +5VS | 5V switched power rail | ON | OFF | OFF |
| +VSB | VSB always on power rail | ON | ON | ON* |
| +RTCVCC | RTC power | ON | ON | ON |
| | | | | |
| | | | | |

Note : ON* means that this power plane is ON only with AC power available, otherwise it is OFF.

External PCI Devices

| Device | IDSEL# | REQ#/GNT# | Interrupts |
|--------|--------|-----------|------------|
|--------|--------|-----------|------------|

EC SM Bus1 address

| Device | Address | HEX | Device | Address | HEX |
|---------------|-------------|-----|-------------------|-------------|-----|
| Smart Battery | 0001 011X b | 16H | ADI ADM1032 (CPU) | 1001 100X b | 98H |
| | | | SB-Temp Sensor | | 98H |

SB820

SM Bus 0 address

| Device | Address | HEX | Device | Address |
|------------------------------------|------------|-----|--------|---------|
| Clock Generator (SILEGO SLG8SP626) | 1101 001Xb | D2 | | |
| DDR DIMM1 | 1001 000Xb | 90 | | |
| DDR DIMM2 | 1001 010Xb | 94 | | |
| Mini card | | | | |

EC SM Bus2 address

SB820

SM Bus 1 address

| STATE | SIGNAL | SLP_S1# | SLP_S3# | SLP_S4# | SLP_S5# | +VALW | +V | +VS | Clock |
|----------------------|--------|---------|---------|---------|---------|-------|-----|-----|-------|
| Full ON | | HIGH | HIGH | HIGH | HIGH | ON | ON | ON | ON |
| S1(Power On Suspend) | | LOW | HIGH | HIGH | HIGH | ON | ON | ON | LOW |
| S3 (Suspend to RAM) | | LOW | LOW | HIGH | HIGH | ON | ON | OFF | OFF |
| S4 (Suspend to Disk) | | LOW | LOW | LOW | HIGH | ON | OFF | OFF | OFF |
| S5 (Soft OFF) | | LOW | LOW | LOW | LOW | ON | OFF | OFF | OFF |

Board ID / SKU ID Table for AD channel

| | | | | |
|----------|--------------|-------------|-------------|-------------|
| Vcc | 3.3V +/- 5% | | | |
| Ra/Rc/Re | 100K +/- 5% | | | |
| Board ID | Rb / Rd / Rf | VAD_BID min | VAD_BID typ | VAD_BID max |
| 0 | 0 | 0 V | 0 V | 0 V |
| 1 | 8.2K +/- 5% | 0.216 V | 0.250 V | 0.289 V |
| 2 | 18K +/- 5% | 0.436 V | 0.503 V | 0.538 V |
| 3 | 33K +/- 5% | 0.712 V | 0.819 V | 0.875 V |
| 4 | 56K +/- 5% | 1.036 V | 1.185 V | 1.264 V |
| 5 | 100K +/- 5% | 1.453 V | 1.650 V | 1.759 V |
| 6 | 200K +/- 5% | 1.935 V | 2.200 V | 2.341 V |
| 7 | NC | 2.500 V | 3.300 V | 3.300 V |

BOARD ID Table

| Board ID | PCB Revision |
|----------|--|
| 0 | |
| 1 | NEWX5 / PEW56 PVT stage (w/ pach code) |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |

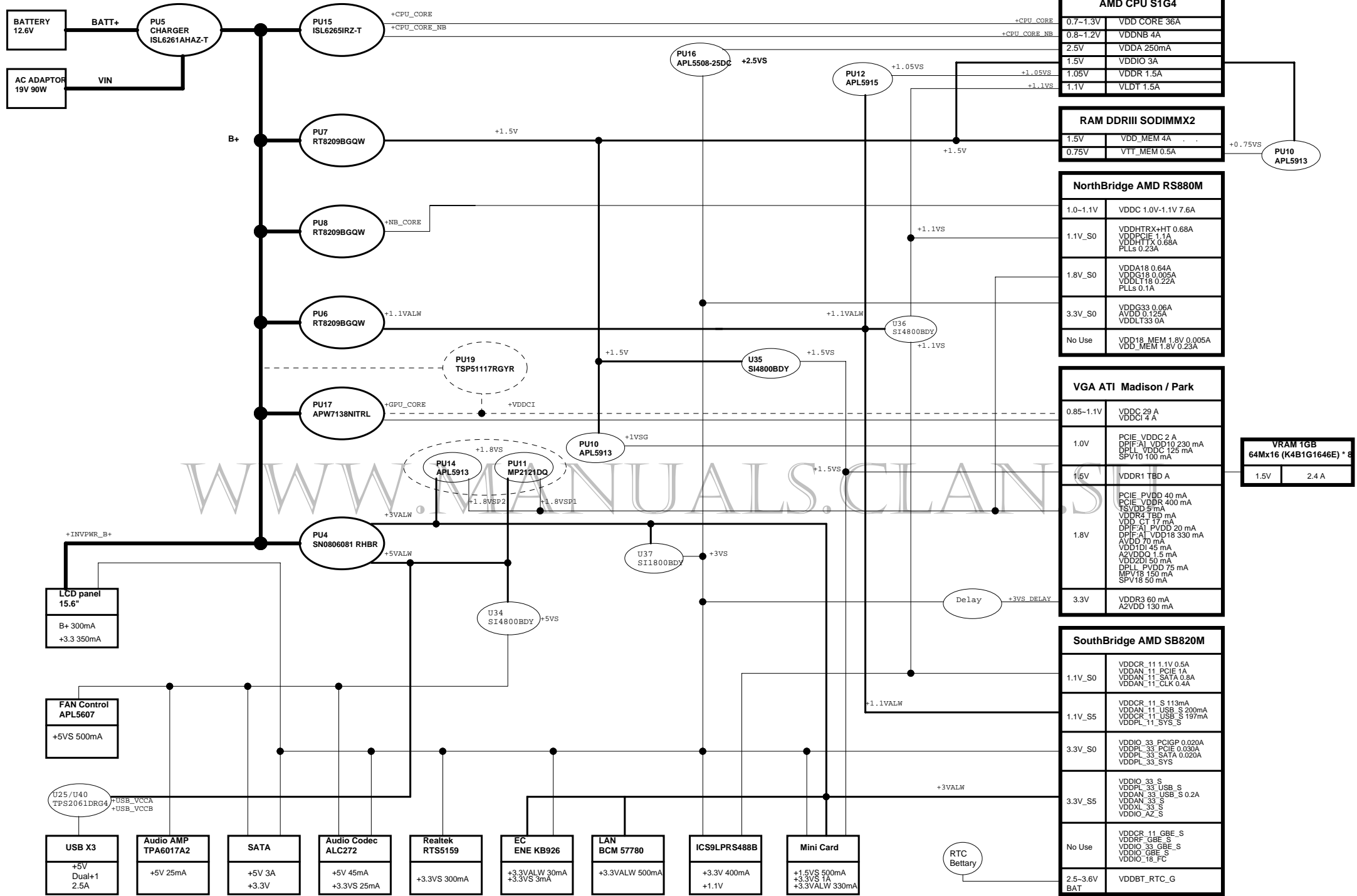
BTO Option Table

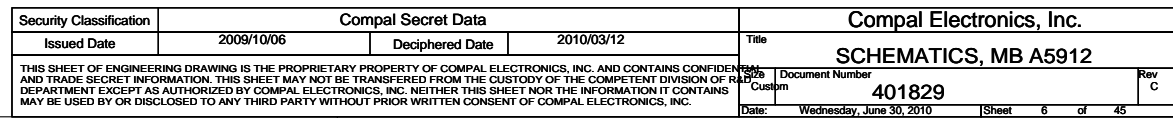
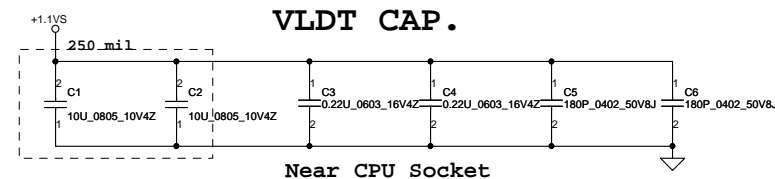
| BTO Item | BOM Structure |
|-----------------|---------------|
| Internal CLK | INT@ |
| External CLK | EXT@ |
| Vari-Bright | VB@ |
| No Vari-Bright | UNVB@ |
| HDMI | HDMI@ |
| NEWX5 | NEWX5@ |
| PEW56 | PEW56@ |
| NEW75/85 LED | 7585@ |
| NEW95/PEW56 LED | 9556@ |
| Bluetooth | BT@ |
| 3G | 3G@ |
| | |
| | |
| | |
| | |
| | |

Project ID Table

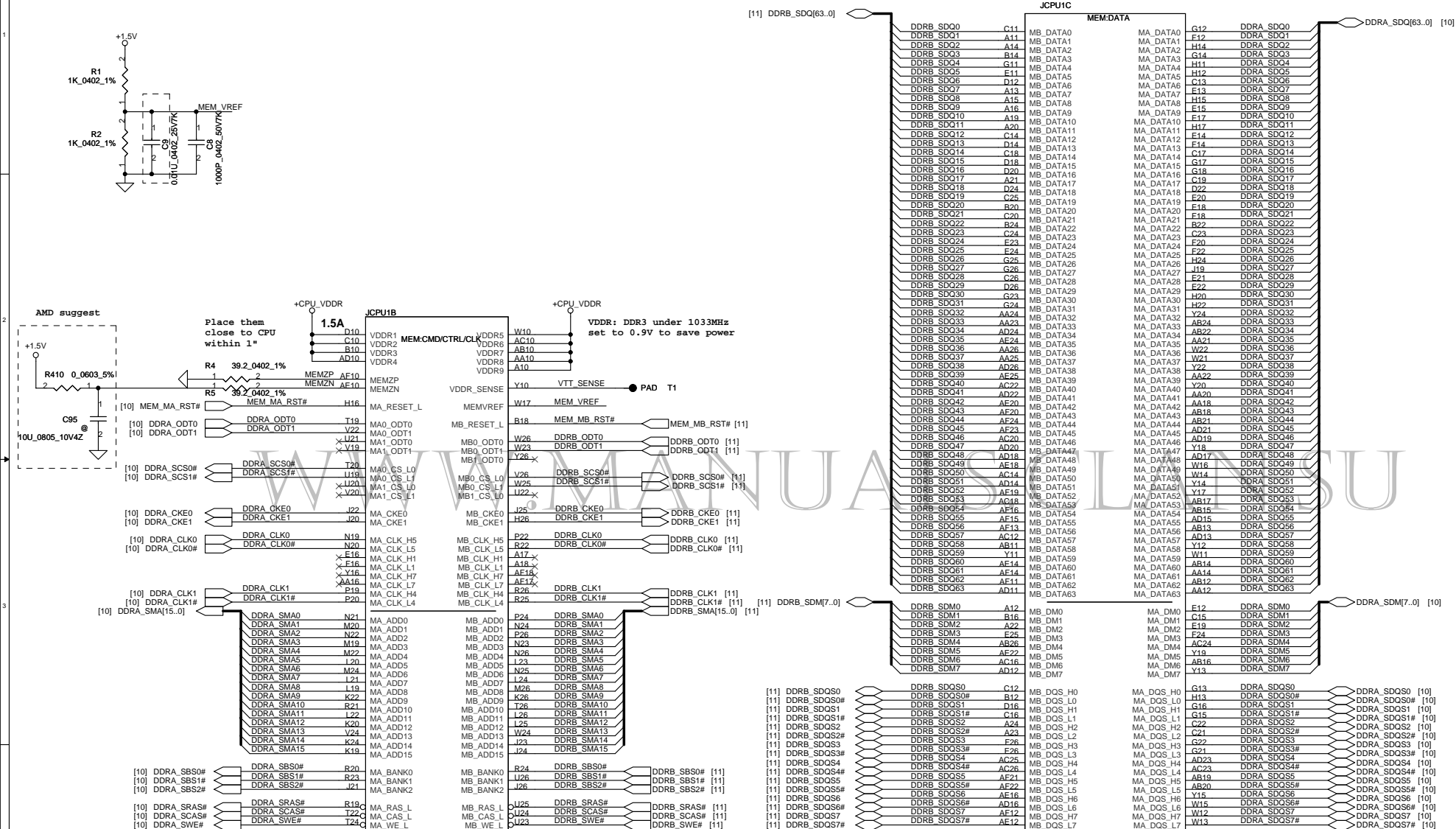
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|----------|--------------|
| 0 | NEWX5 |
| 1 | PEW56 |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |

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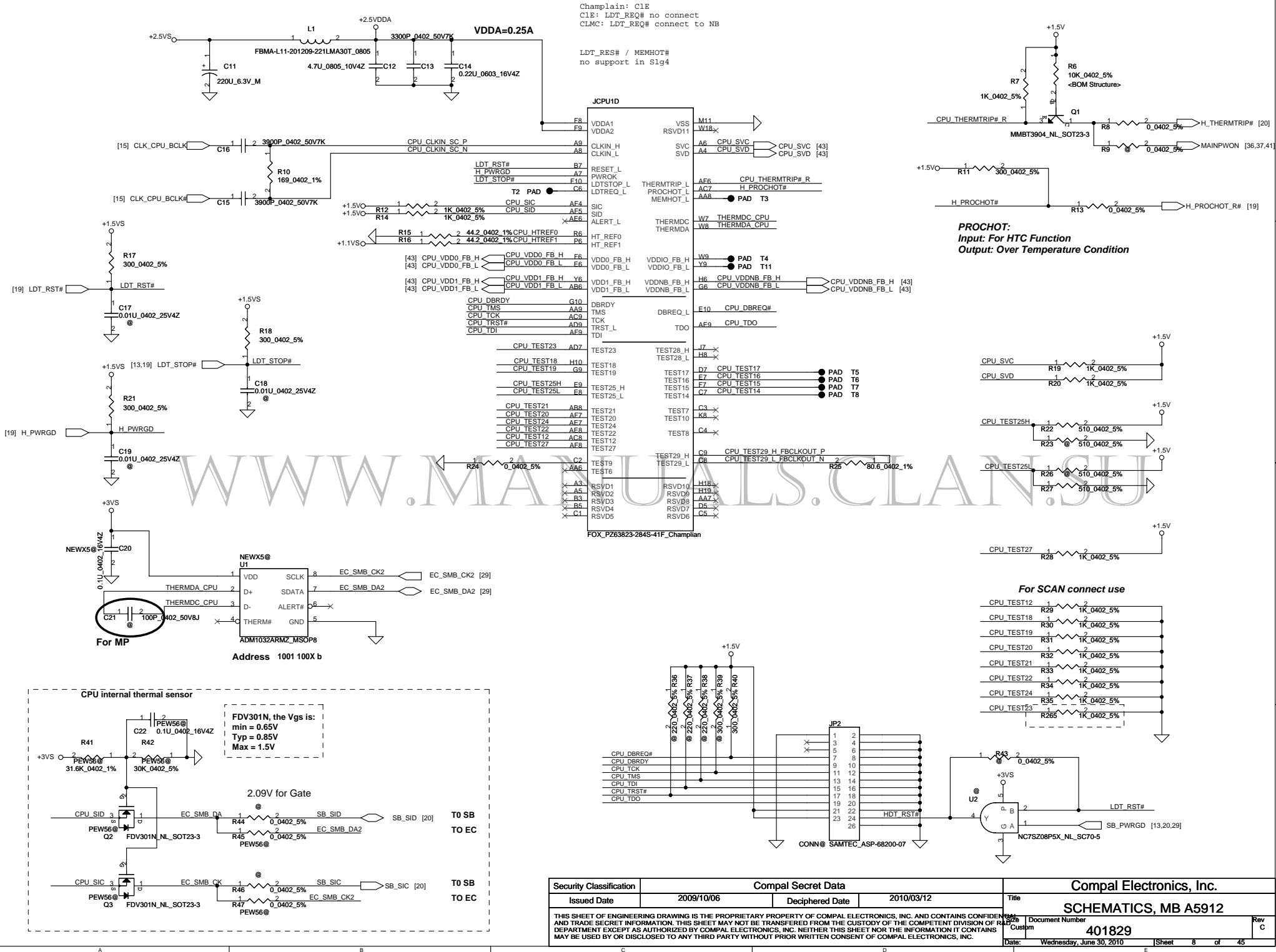
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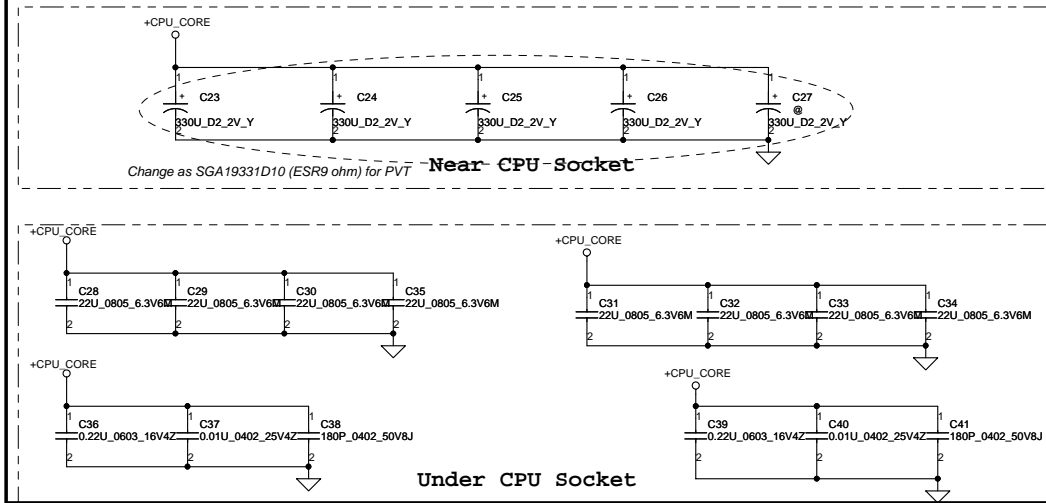
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FOX PZ63823-284S-41F Champlian

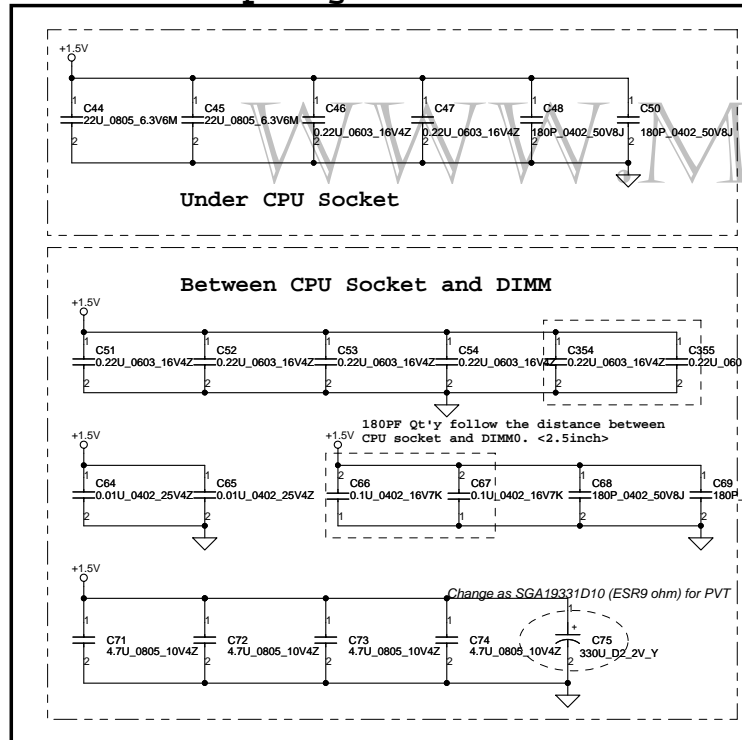
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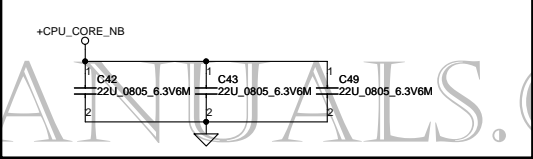
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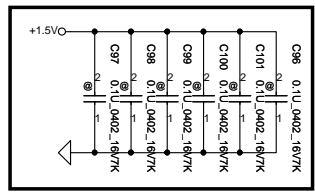
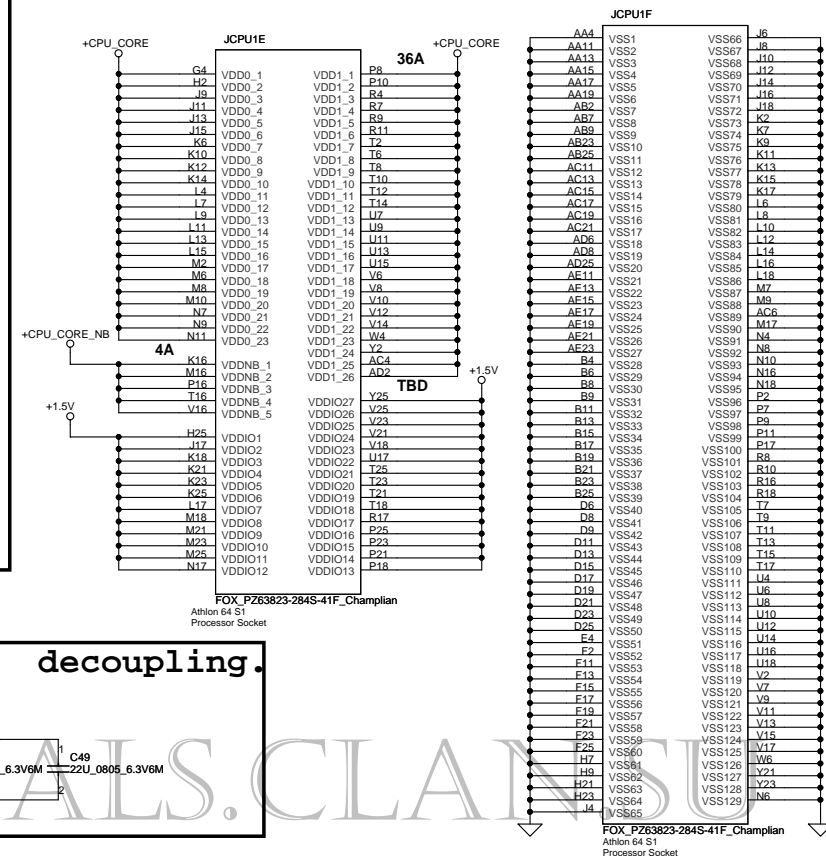
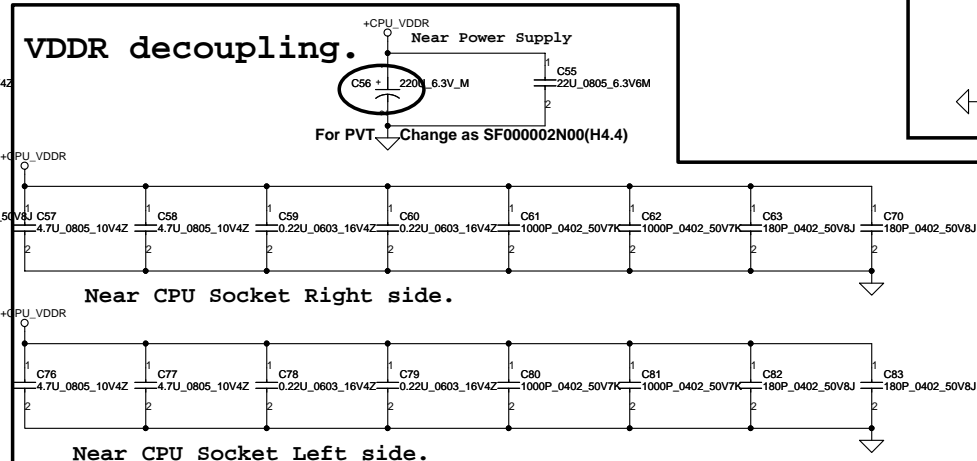
VDDIO decoupling.



+CPU_CORE_NB decoupling.



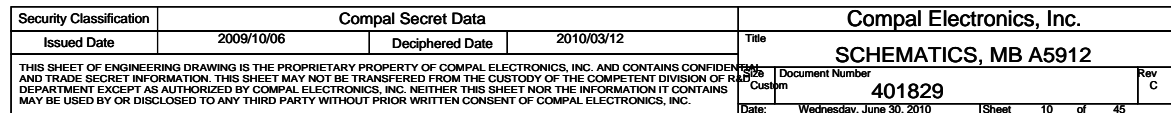
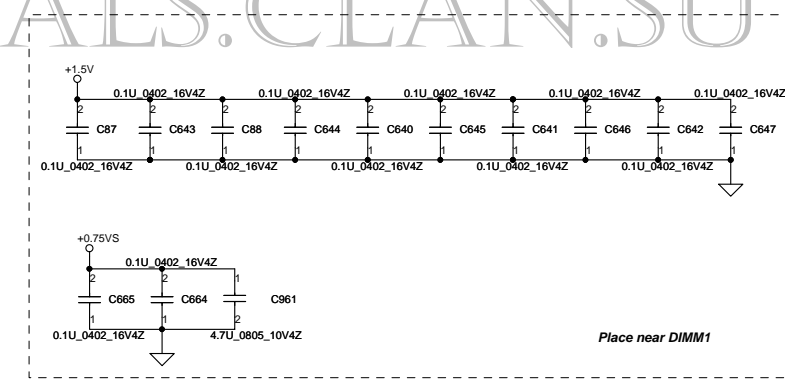
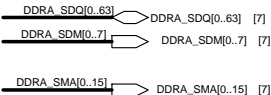
VDDR decoupling.

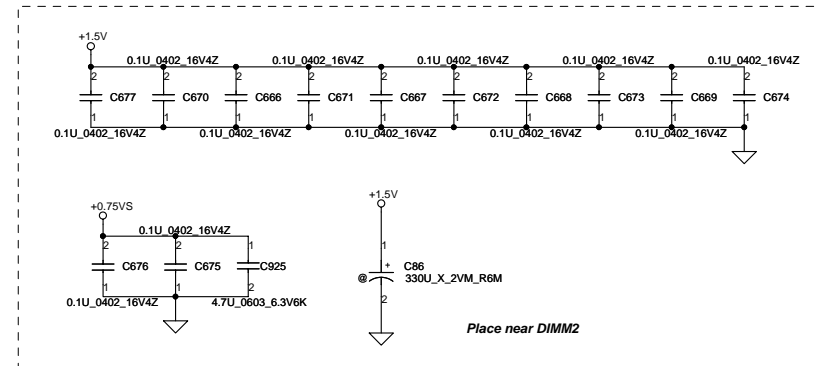
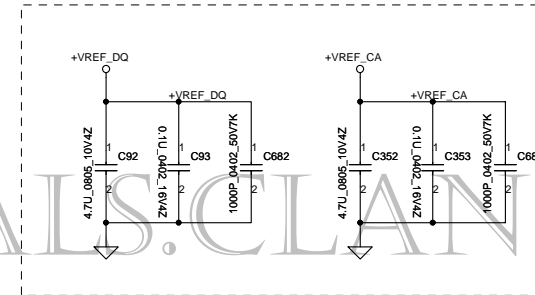
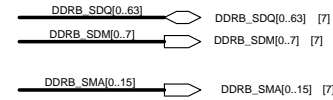
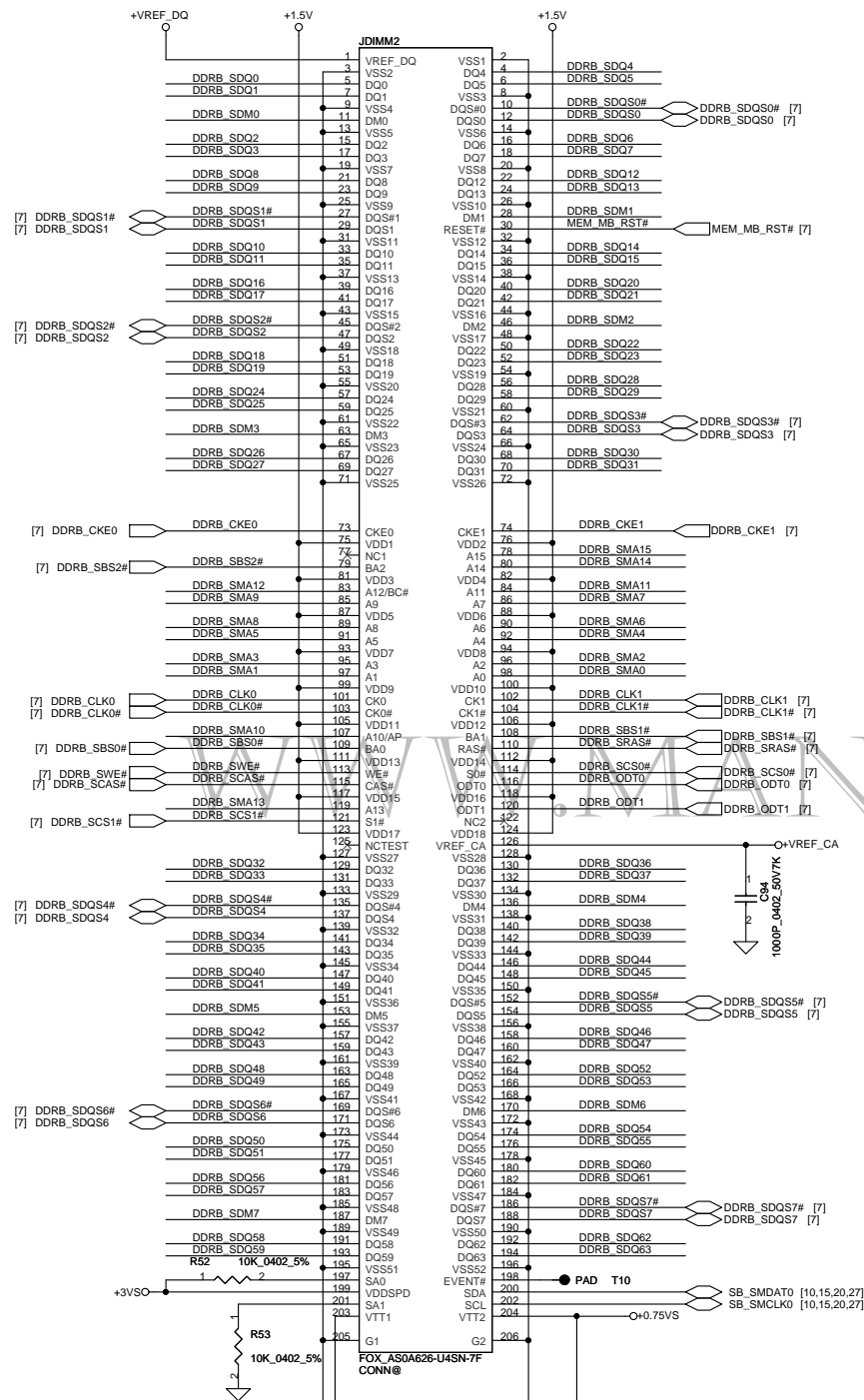


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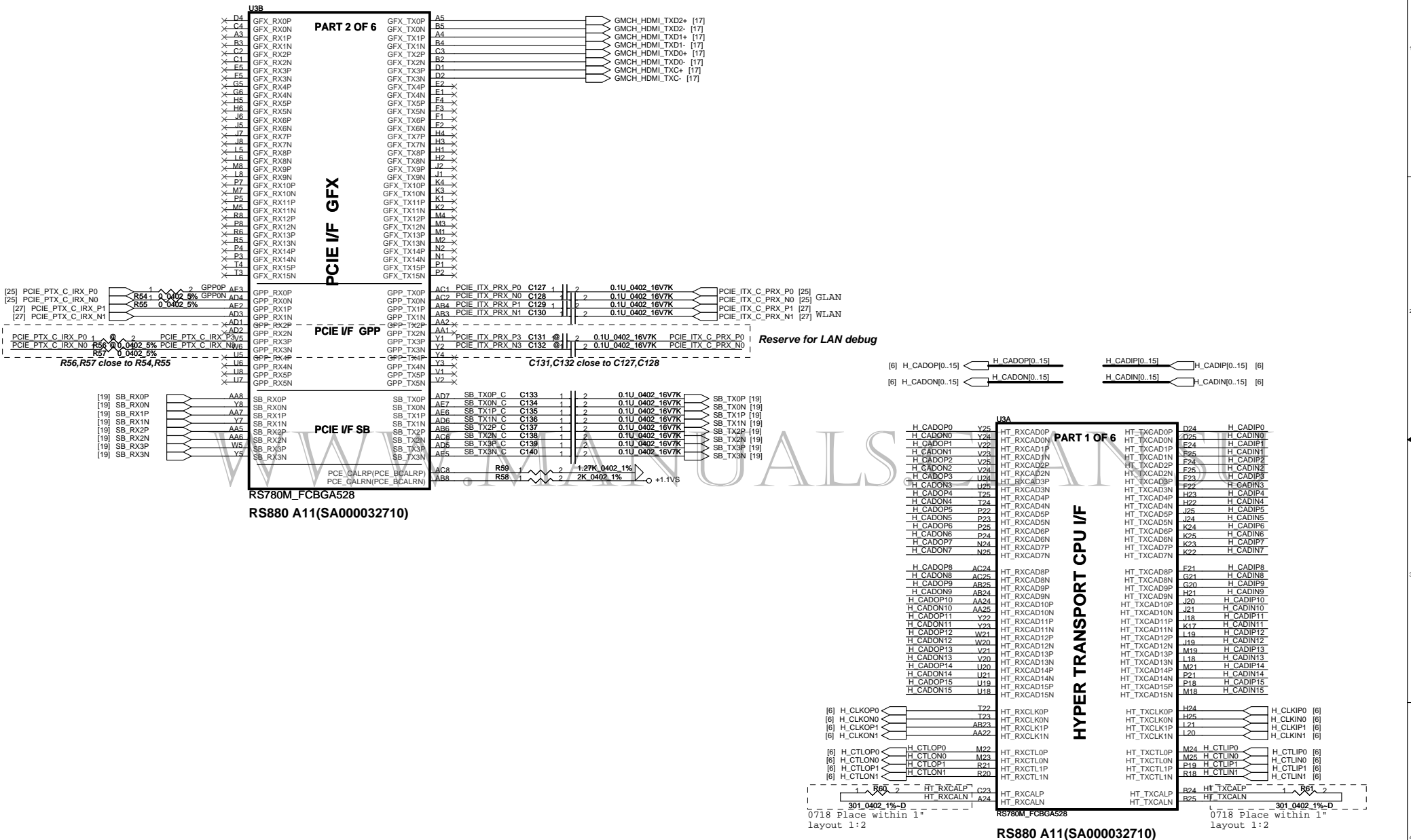
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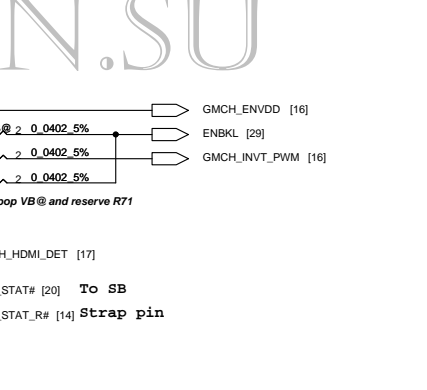
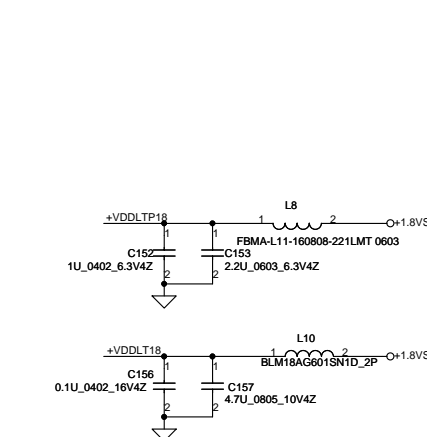
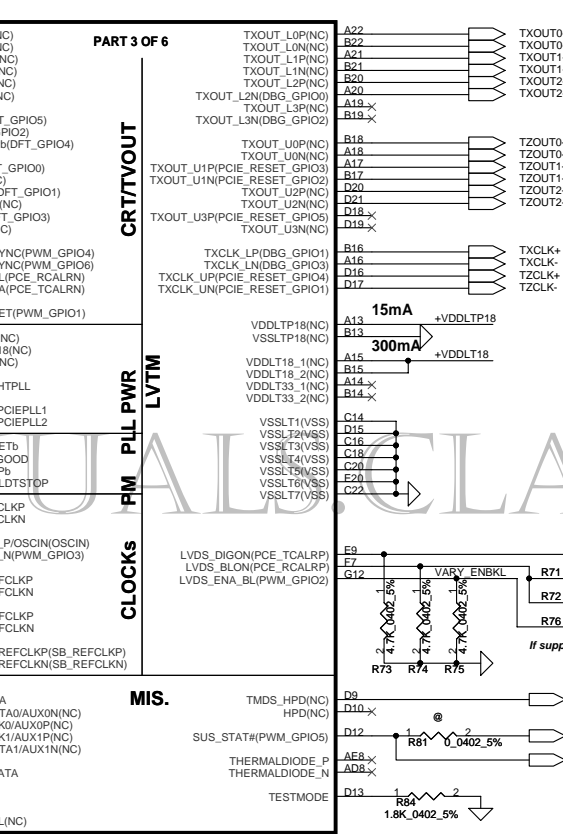
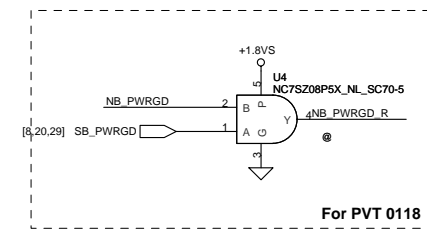
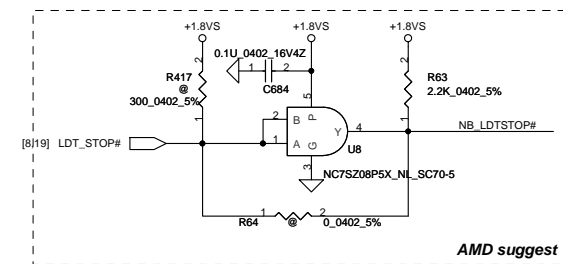
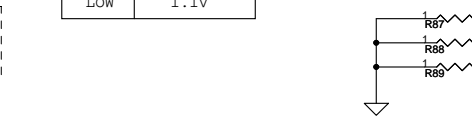
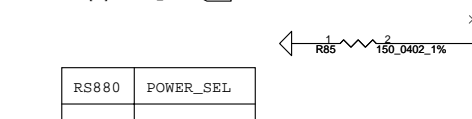
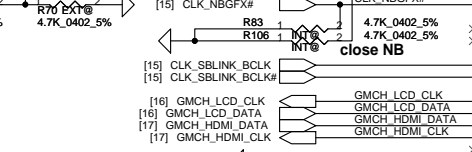
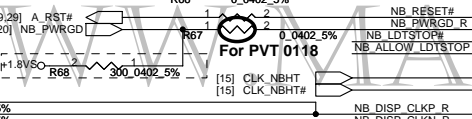
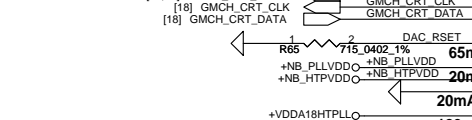
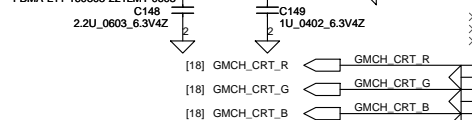
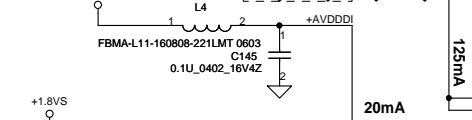
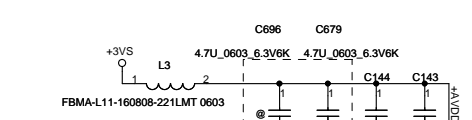
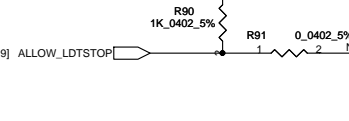
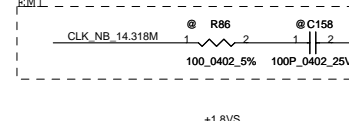
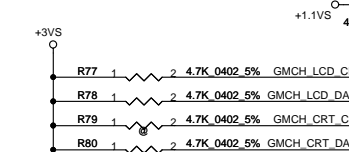
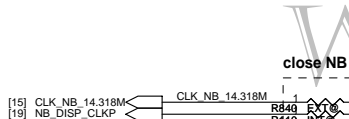
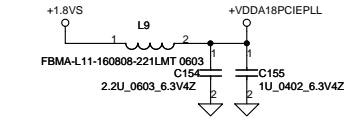
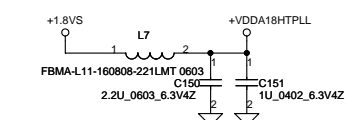
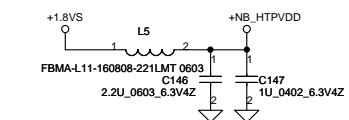
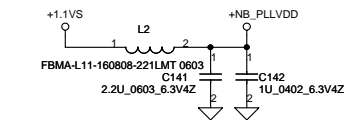




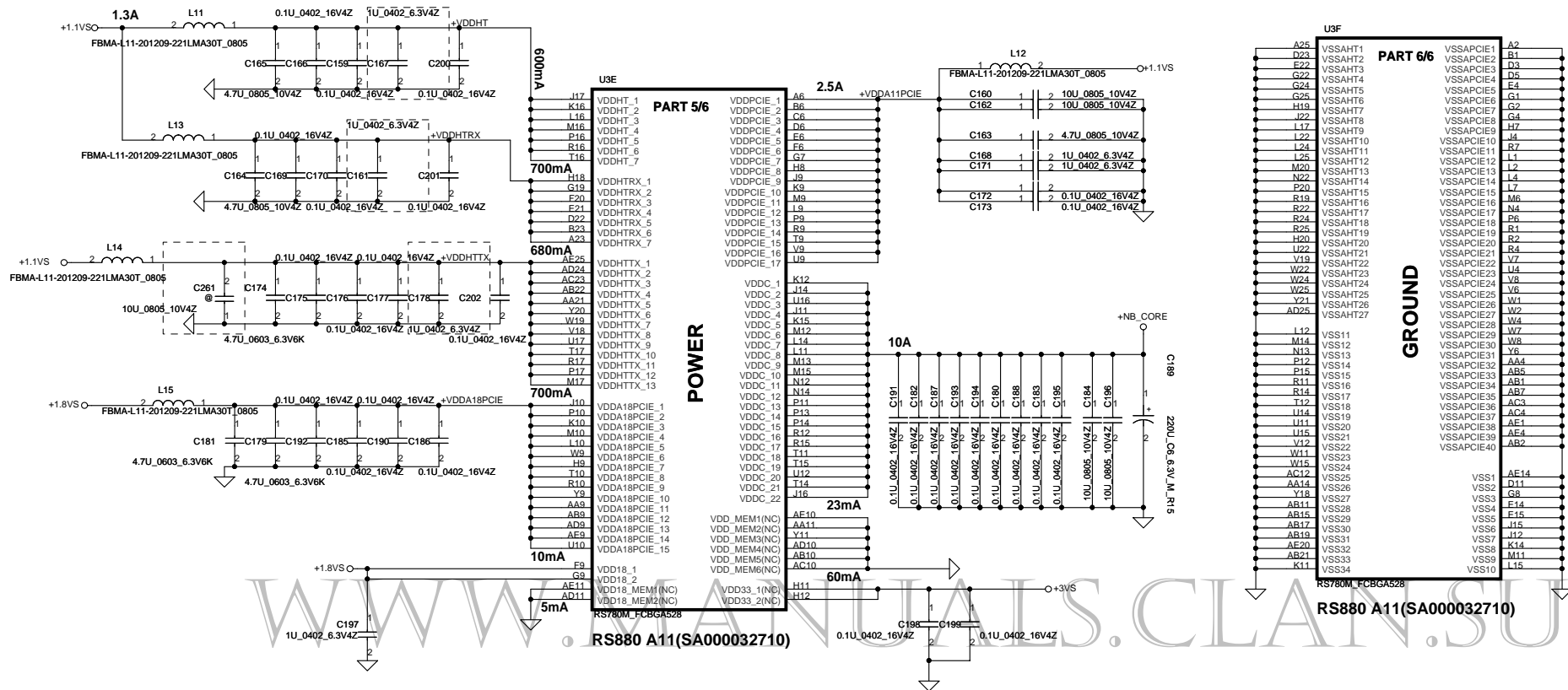
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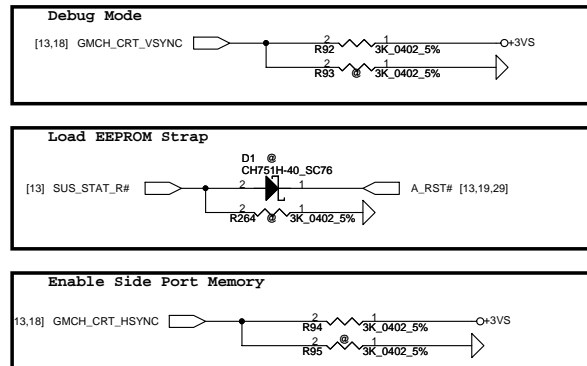
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Side port and Strap setting



DFT_GPIO5:STRAP_DEBUG_BUS_GPIO_ENABLEB

Enables the Test Debug Bus using GPIO. (VSYNC)

1 : Disable

0 : Enable

DFT_GPIO1: LOAD_EEPROM_STRAPS

Selects Loading of STRAPS from EPROM

1 : Bypass the loading of EEPROM straps and use Hardware Default Values

0 : I2C Master can load strap values from EEPROM if connected, or use default values if not connected

Enable Side Port Memory

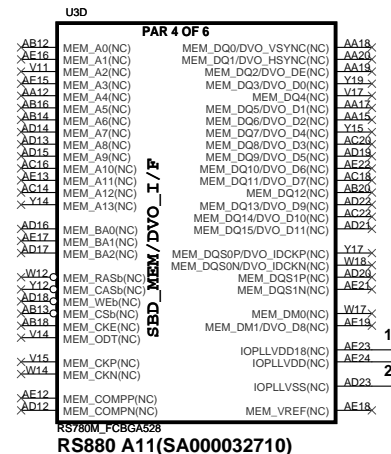
RS880: HSYNC#

0: Enable

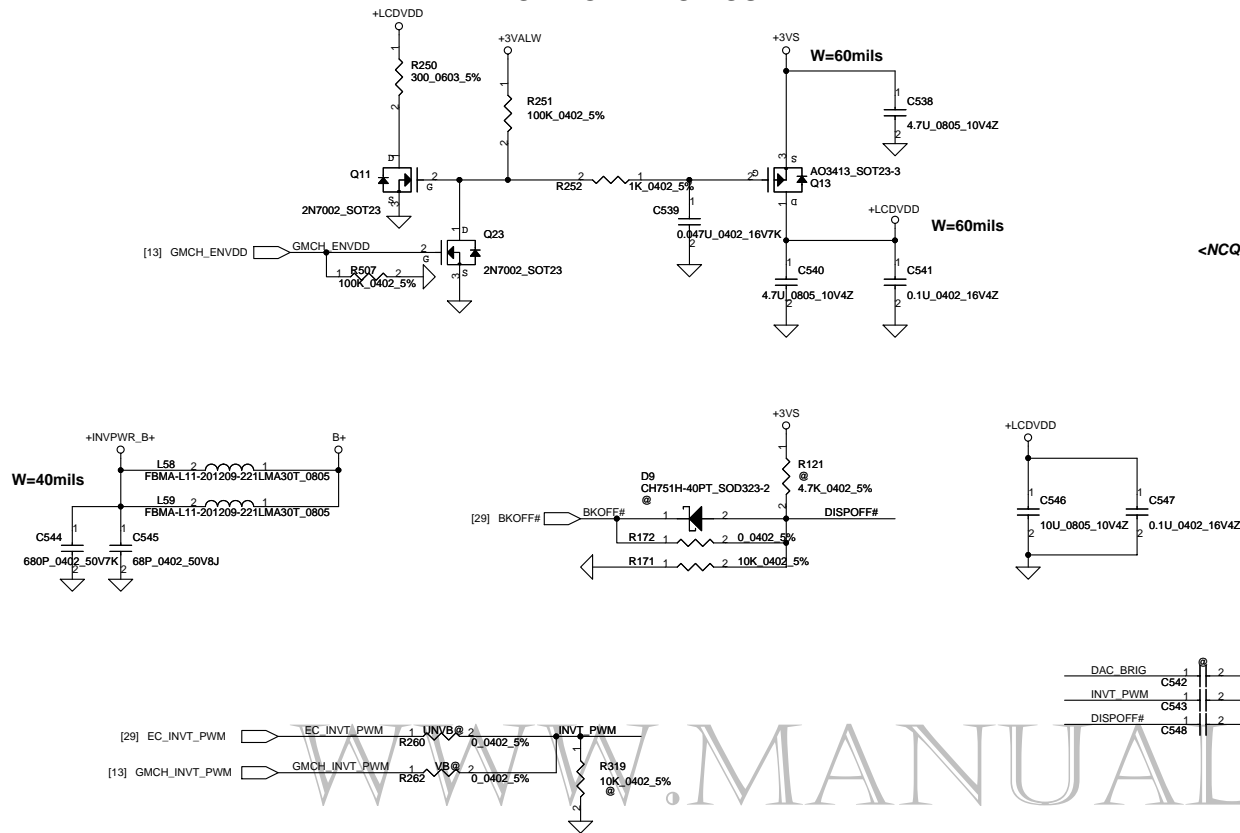
1: Disable

Register Readback of strap:

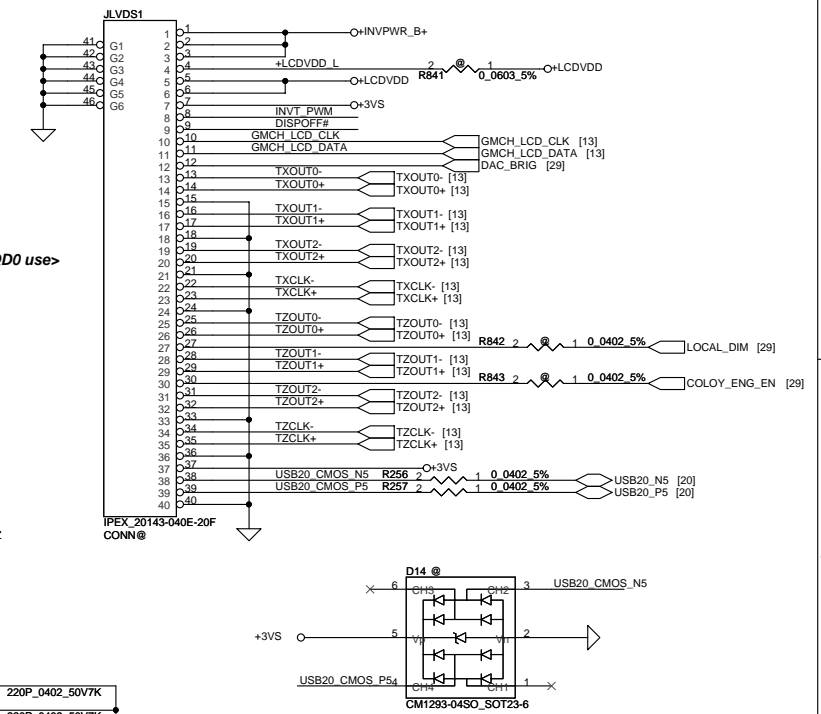
NB_CLKCFG:CLK_TOP_SPARE_D[1]



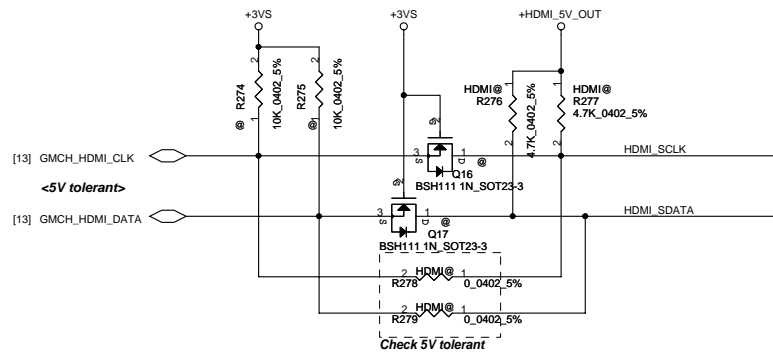
LCD POWER CIRCUIT



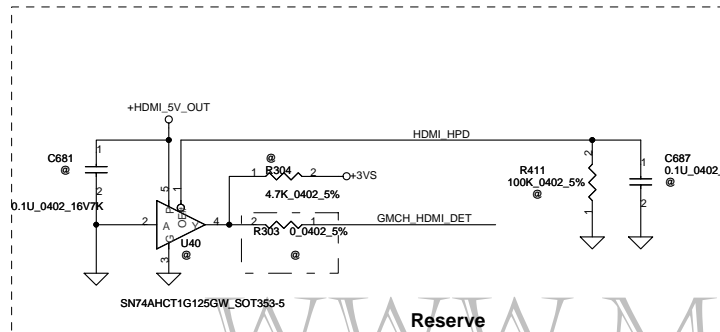
LCD/LED PANEL Conn.



| | | | | | |
|---|------------|--------------------|------------|--------------------------|--------------------------|
| Security Classification | | Compal Secret Data | | Compal Electronics, Inc. | |
| Issued Date | 2009/10/06 | Deciphered Date | 2010/03/12 | Title | SCHEMATICS, MB A5912 |
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| | | | | Date | Wednesday, June 30, 2010 |
| | | | | Sheet | 16 of 45 |

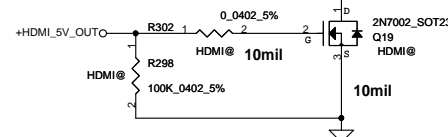


Place closed to JHDMI1

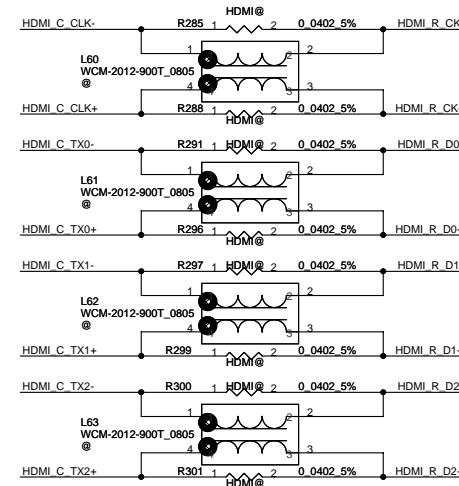
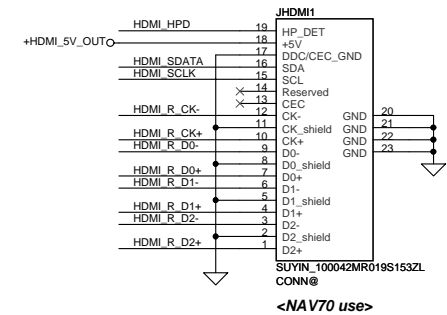


UMA 715 ohm

| | | | | | | | | | | |
|----------------------|------|-------|---|-----------------|-------------|------|---|-------|---|-------------|
| [12] GMCH_HDMI_TXD2- | C550 | HDMI@ | 1 | 0.1U_0402_16V7K | HDMI C TX2- | R286 | 1 | HDMI@ | 2 | 715_0402_1% |
| [12] GMCH_HDMI_TXD2+ | C551 | HDMI@ | 1 | 0.1U_0402_16V7K | HDMI C TX2+ | R287 | 1 | HDMI@ | 2 | 715_0402_1% |
| [12] GMCH_HDMI_TXD1- | C552 | HDMI@ | 1 | 0.1U_0402_16V7K | HDMI C TX1- | R289 | 1 | HDMI@ | 2 | 715_0402_1% |
| [12] GMCH_HDMI_TXD1+ | C553 | HDMI@ | 1 | 0.1U_0402_16V7K | HDMI C TX1+ | R290 | 1 | HDMI@ | 2 | 715_0402_1% |
| [12] GMCH_HDMI_TXD0- | C554 | HDMI@ | 1 | 0.1U_0402_16V7K | HDMI C TX0- | R292 | 1 | HDMI@ | 2 | 715_0402_1% |
| [12] GMCH_HDMI_TXD0+ | C555 | HDMI@ | 1 | 0.1U_0402_16V7K | HDMI C TX0+ | R293 | 1 | HDMI@ | 2 | 715_0402_1% |
| [12] GMCH_HDMI_TXC- | C556 | HDMI@ | 1 | 0.1U_0402_16V7K | HDMI C CLK- | R294 | 1 | HDMI@ | 2 | 715_0402_1% |
| [12] GMCH_HDMI_TXC+ | C557 | HDMI@ | 1 | 0.1U_0402_16V7K | HDMI C CLK+ | R295 | 1 | HDMI@ | 2 | 715_0402_1% |

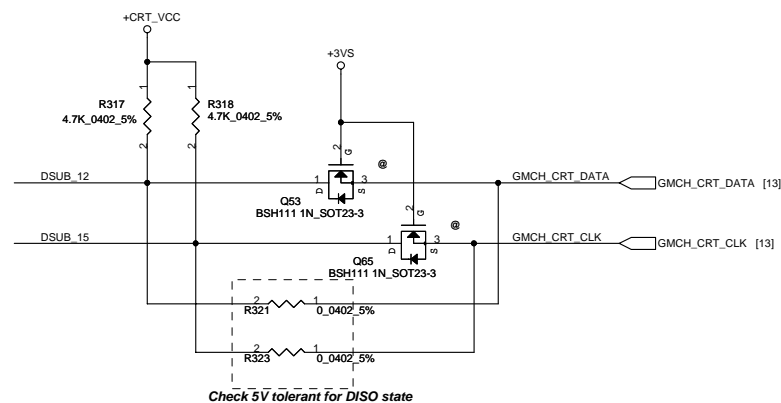
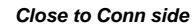


Place closed to JHDMI1

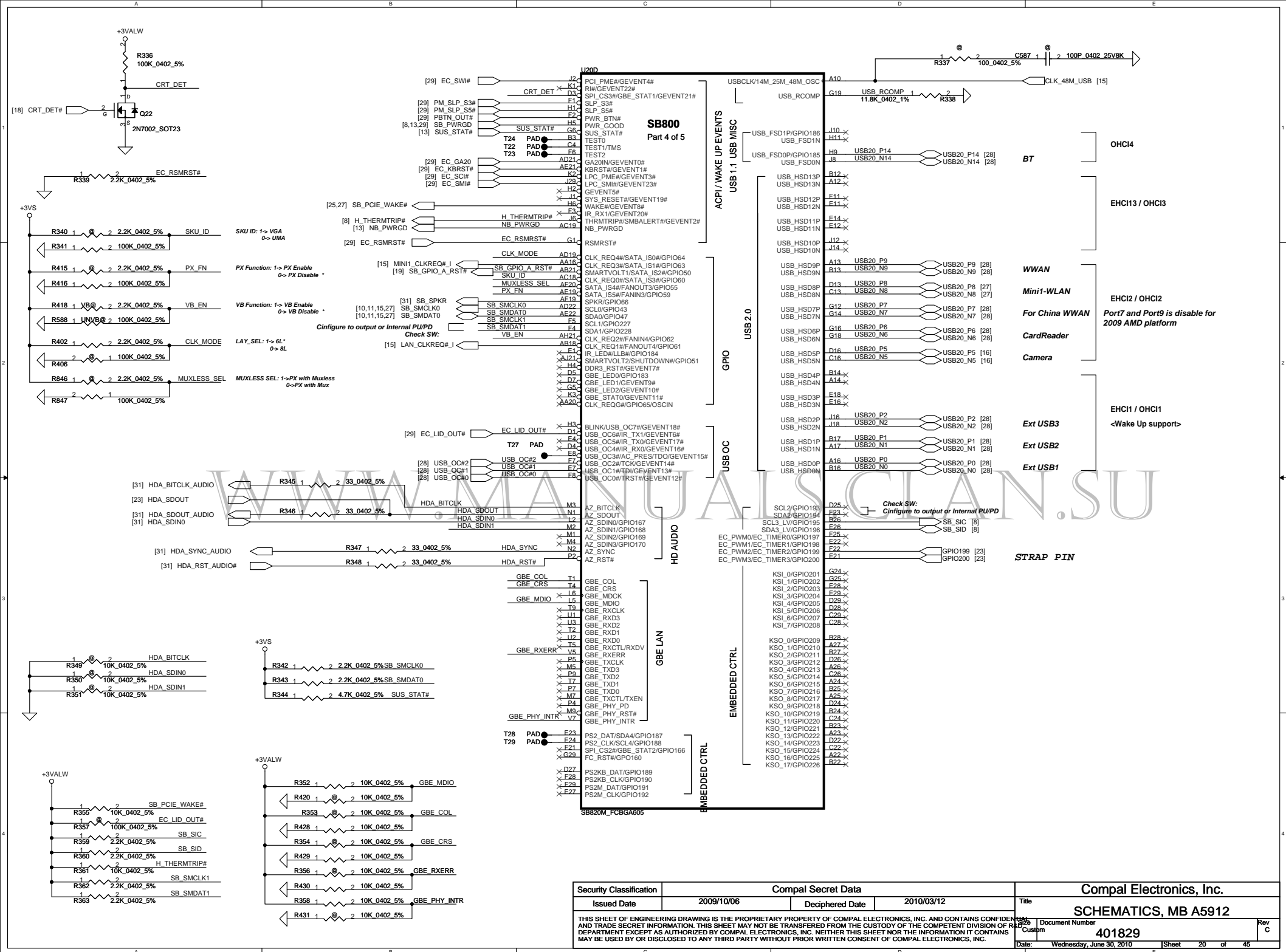


| | | | | | |
|---|--------------------|-----------------|------------|--------------------------------|----------------|
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| | | | | 401829 | C |
| | | | | Date: Wednesday, June 30, 2010 | Sheet 17 of 45 |

WWW.MANUALS.CLAN.SU

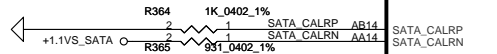
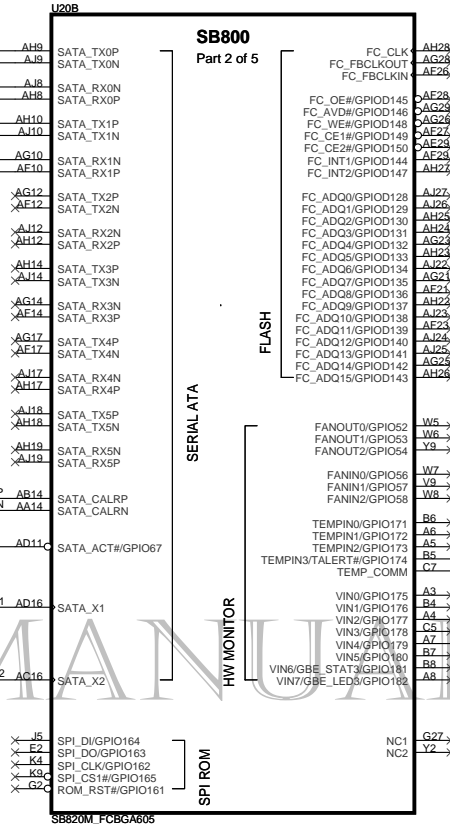
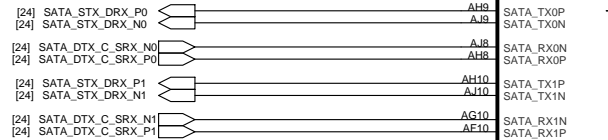


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| | | | | Date | Wednesday, June 30, 2010 | Sheet 18 of 45 |

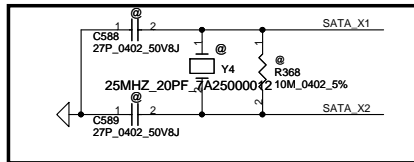


HDD

ODD

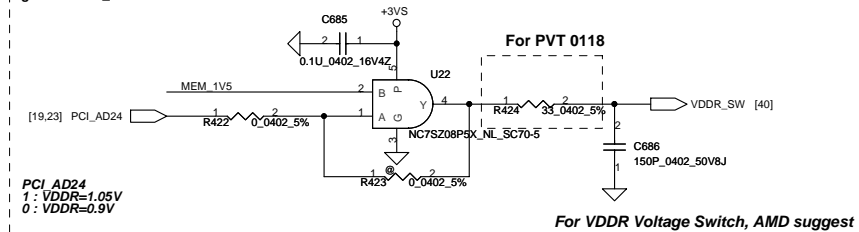
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SB820 A12(SA000031W10)

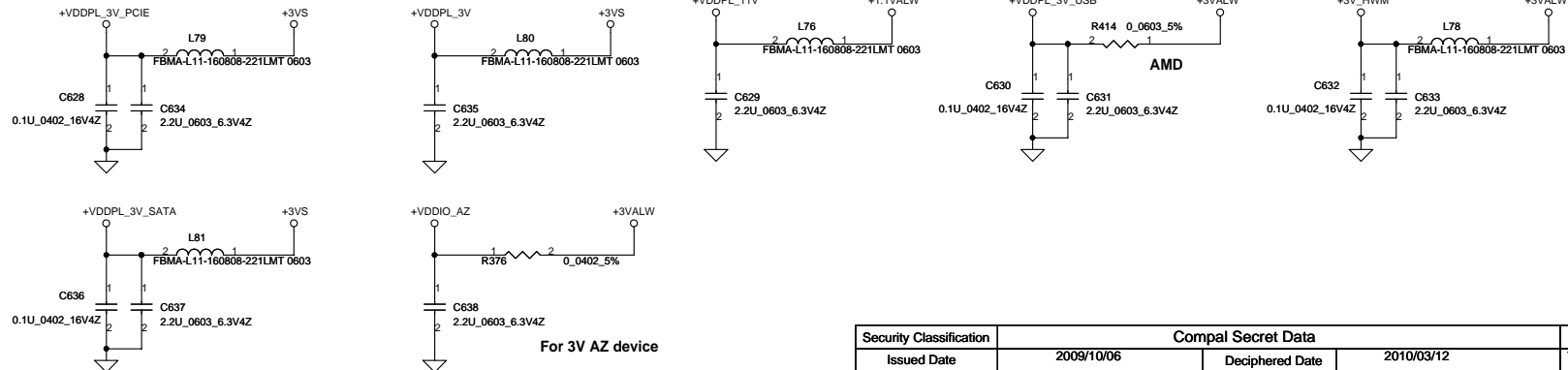
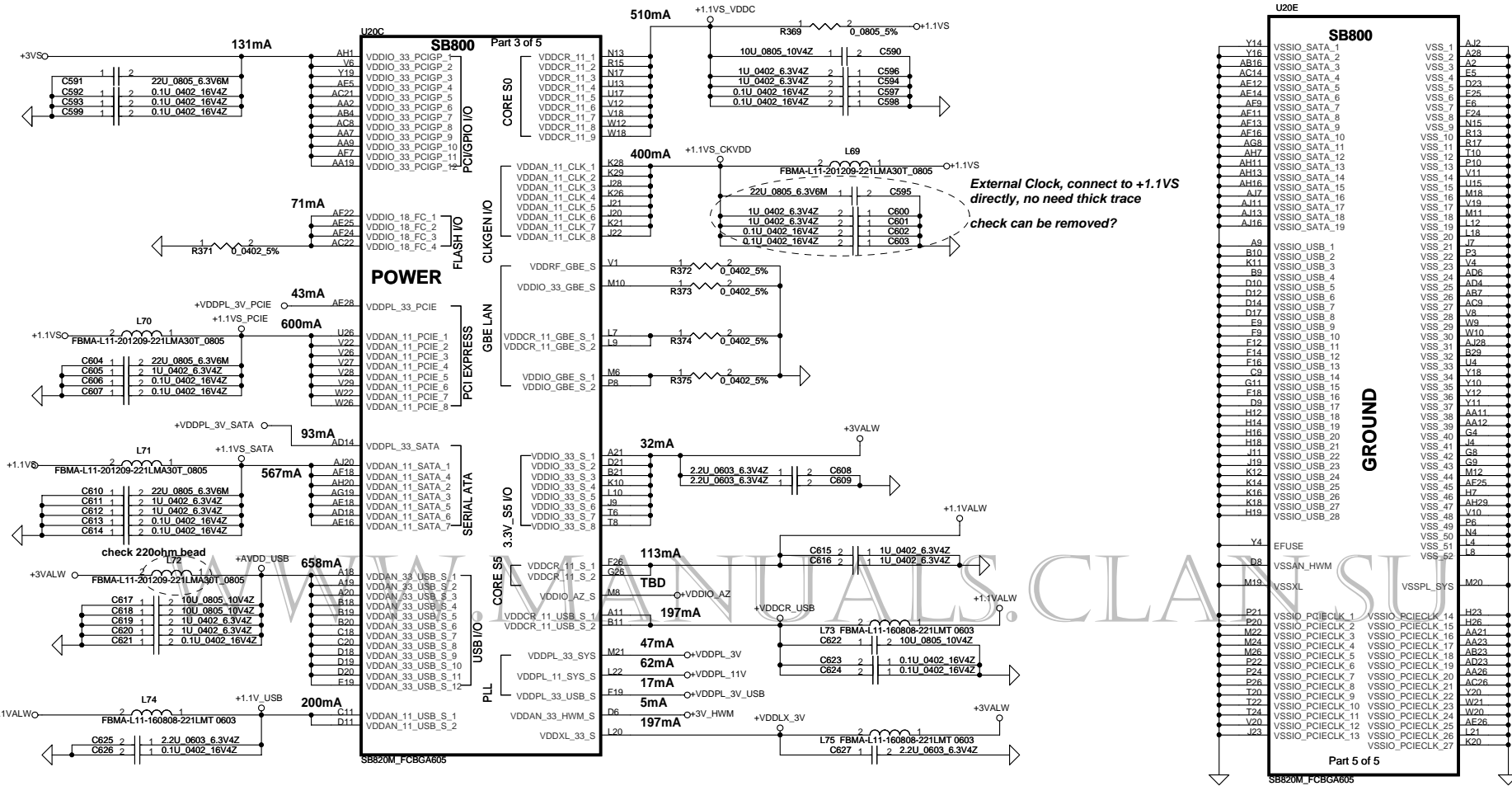


AMD Suggest Unpop Y4 For DVT 11/17

MEM_1V5 is for gating the glitch on PCI_AD24



| | | | | | | | | | | | | | |
|---|--|--------------------|--|-----------------|--|--------------------------|--|--------|--------------------------|----------------------|----|----|----|
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| Issued Date | | 2009/10/06 | | Deciphered Date | | 2010/03/12 | | Title | | SCHEMATICS, MB A5912 | | | |
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| | | | | | | | | Custom | 401829 | C | | | |
| | | | | | | | | Date: | Wednesday, June 30, 2010 | Sheet | 21 | of | 45 |
| | | | | | | | | | | | | | |



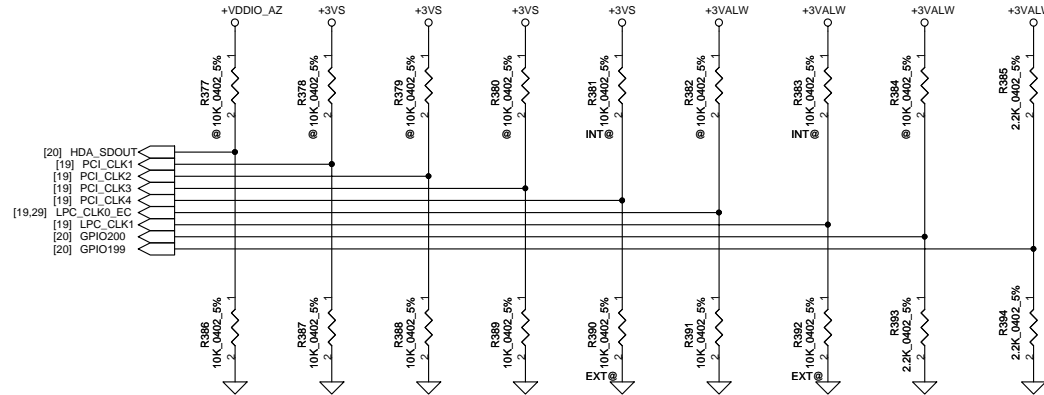
For 3V AZ device

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|---|------------|--------------------|------------|-----------------|----------|
| Issued Date | 2009/10/06 | Deciphered Date | 2010/03/12 | Document Number | 401829 |
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| Date: Wednesday, June 30, 2010 | | | | Sheet | 22 of 45 |

REQUIRED STRAPS

Check Internal PU/PD

| | AZ_SDOUT | PCI_CLK1 | PCI_CLK2 | PCI_CLK3 | PCI_CLK4 | LPC_CLK0 | LPC_CLK1 | | GPIO200 | GPIO199 |
|------------------|------------------|-----------------|------------------------|--------------------|----------------------------|------------|------------------|--|--|---------|
| PULL HIGH | LOW POWER MODE | ALLOW PCIE GEN2 | WATCHDOG TIMER ENABLE | USE DEBUG STRAP | Inter CLK Gen Mode Enable | EC ENABLE | CLOCKGEN ENABLE | | H,H = Reserved H,L = SPI ROM L,H = LPC ROM (Default L,NC) L,L = FWH ROM | |
| PULL LOW | Performance MODE | FORCE PCIE GEN1 | WATCHDOG TIMER DISABLE | IGNORE DEBUG STRAP | Inter CLK Gen Mode Disable | EC DISABLE | CLOCKGEN DISABLE | | | |
| | DEFAULT | DEFAULT | DEFAULT | DEFAULT | DEFAULT | DEFAULT | DEFAULT | | | |



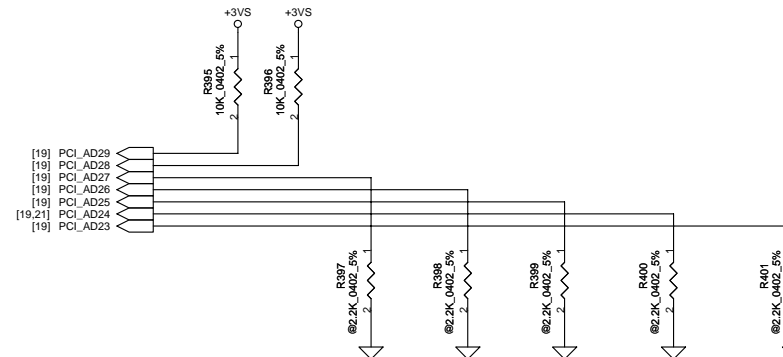
DEBUG STRAPS

SB800 HAS 15K INTERNAL PU FOR PCI_AD[27:23]

| | PCI_AD27 | PCI_AD26 | PCI_AD25 | PCI_AD24 | PCI_AD23 |
|------------------|----------------|---------------------|---------------|-------------------------|----------------------|
| PULL HIGH | USE PCI PLL | DISABLE ILA AUTORUN | USE FC PLL | USE DEFAULT PCIE STRAPS | DISABLE PCI MEM BOOT |
| | DEFAULT | DEFAULT | DEFAULT | DEFAULT | DEFAULT |
| PULL LOW | BYPASS PCI PLL | ENABLE ILA AUTORUN | BYPASS FC PLL | USE EEPROM PCIE STRAPS | ENABLE PCI MEM BOOT |

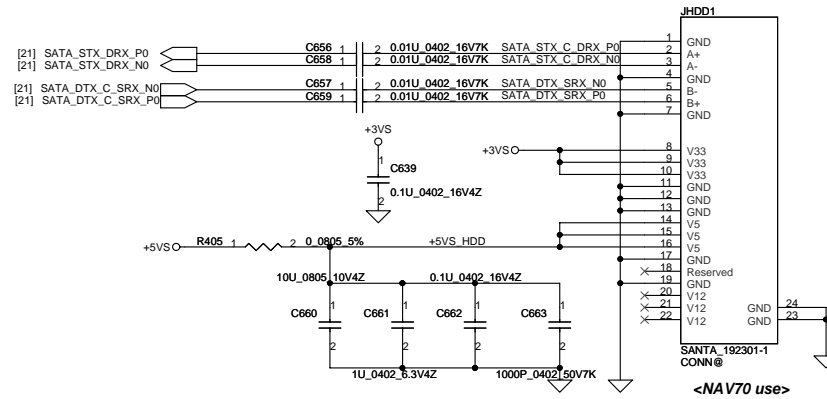
Check AD29,AD28 strap function

check default

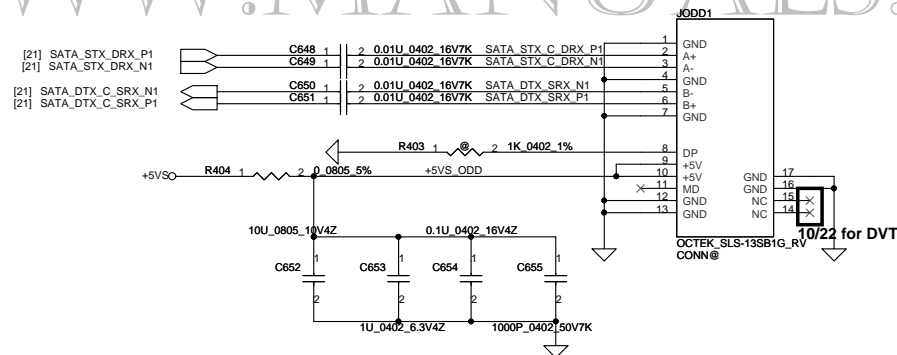


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| | | | | Date | Wednesday, June 30, 2010 |
| | | | | Sheet | 23 of 45 |

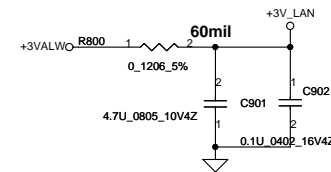
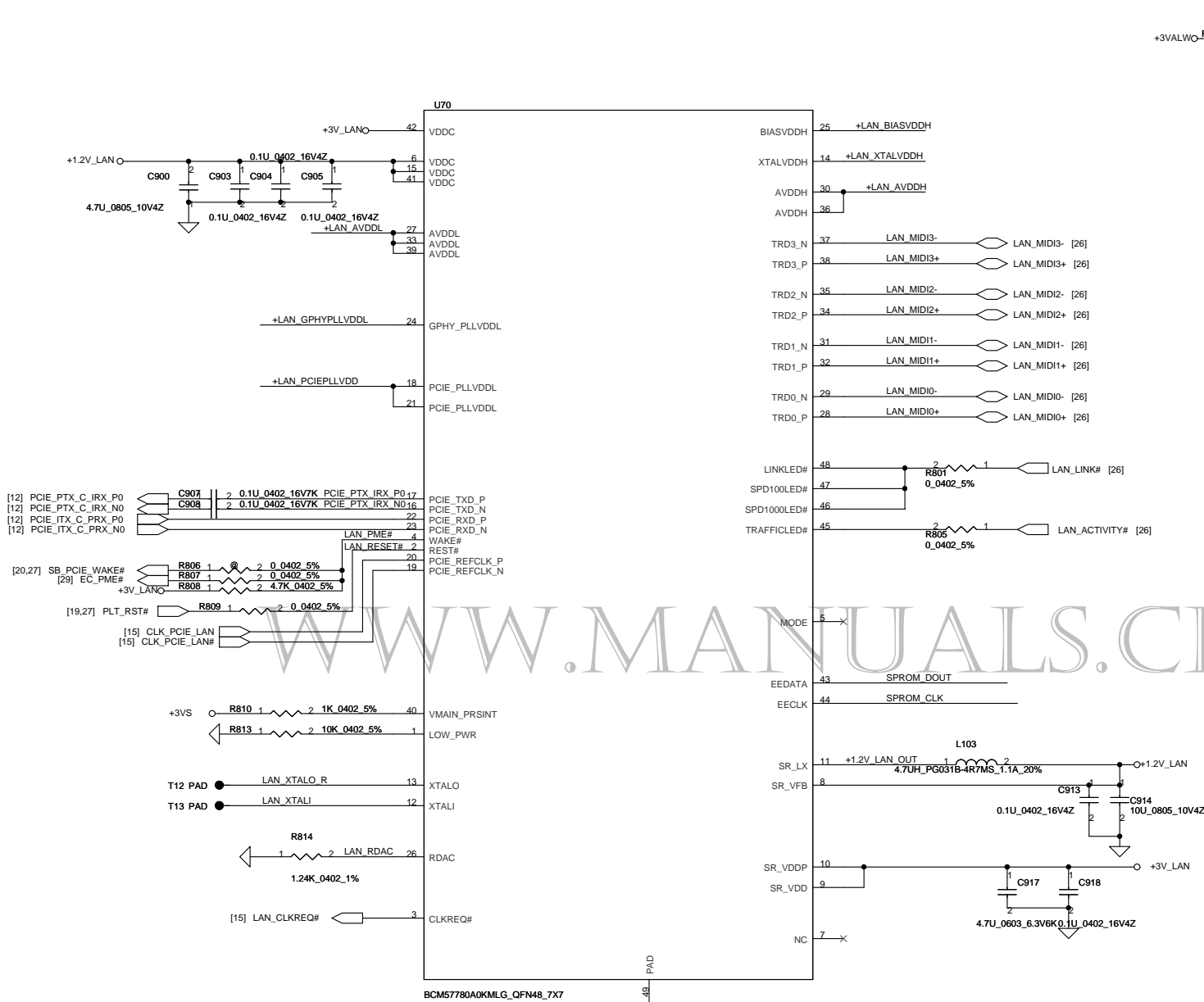
SATA HDD Conn.



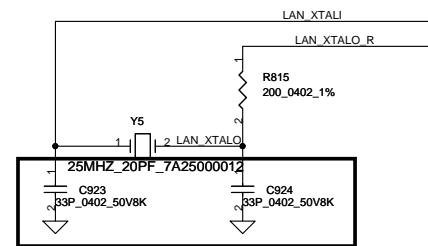
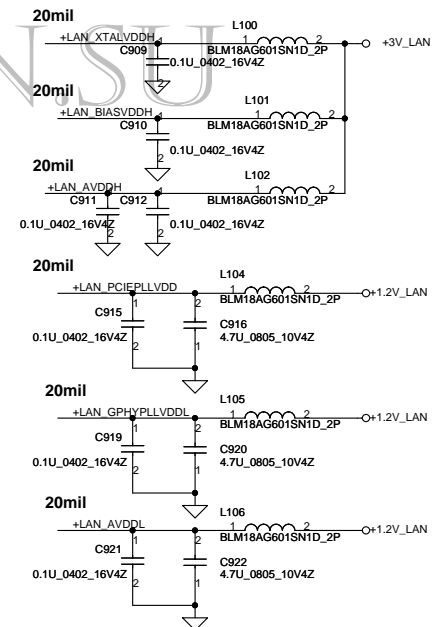
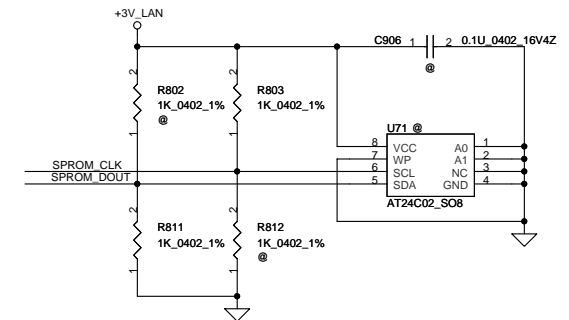
SATA ODD Conn.



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| Issued Date | | | | 2009/10/06 | | | | Deciphered Date | | | |
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| | | | | Rev | | | | Rev | | | |
| | | | | 401829 | | | | C | | | |
| Date: | | | | Wednesday, June 30, 2010 | | | | Sheet 24 of 45 | | | |



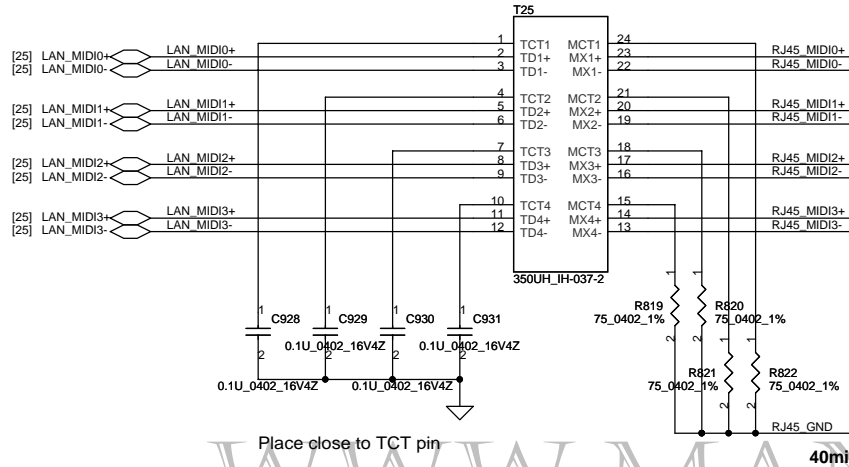
| | SPROM_CLK (ECLK) | SPROM_DOUT (EEDATA) |
|---------|---------------------|------------------------|
| On chip | 1 | 0 |
| AT24C02 | 1 | 1 |



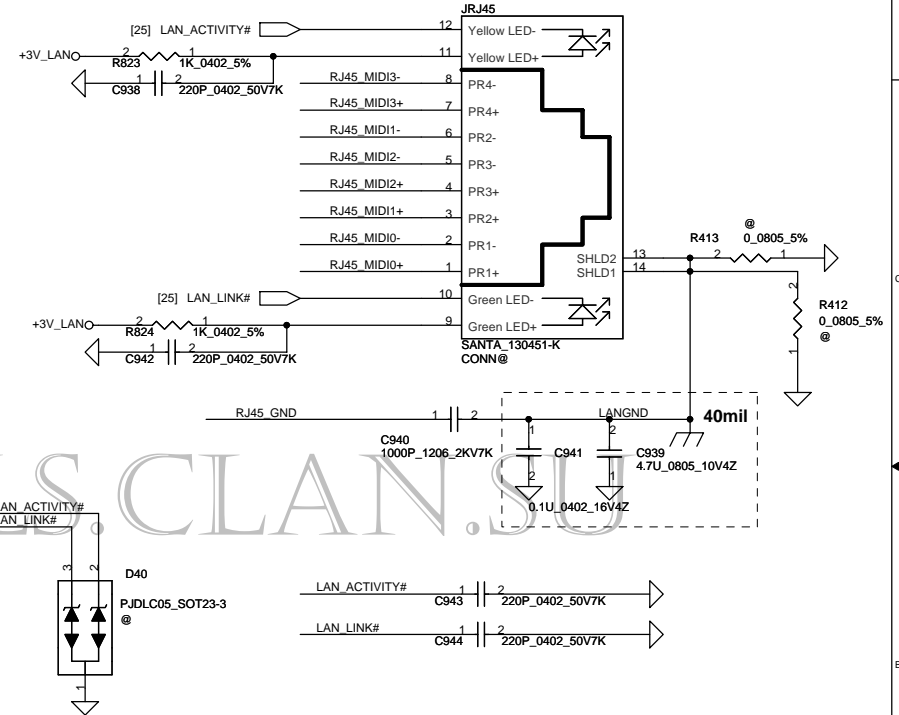
TXC suggest change SE071330J80 For DVT

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| Issued Date | 2009/10/06 | Deciphered Date | 2010/03/12 | Title | |
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| | | Custom | | 401829 | |
| | | Date: Wednesday, June 30, 2010 | | Sheet 25 of 45 | |

BH GS5009-D <SP050006B00>

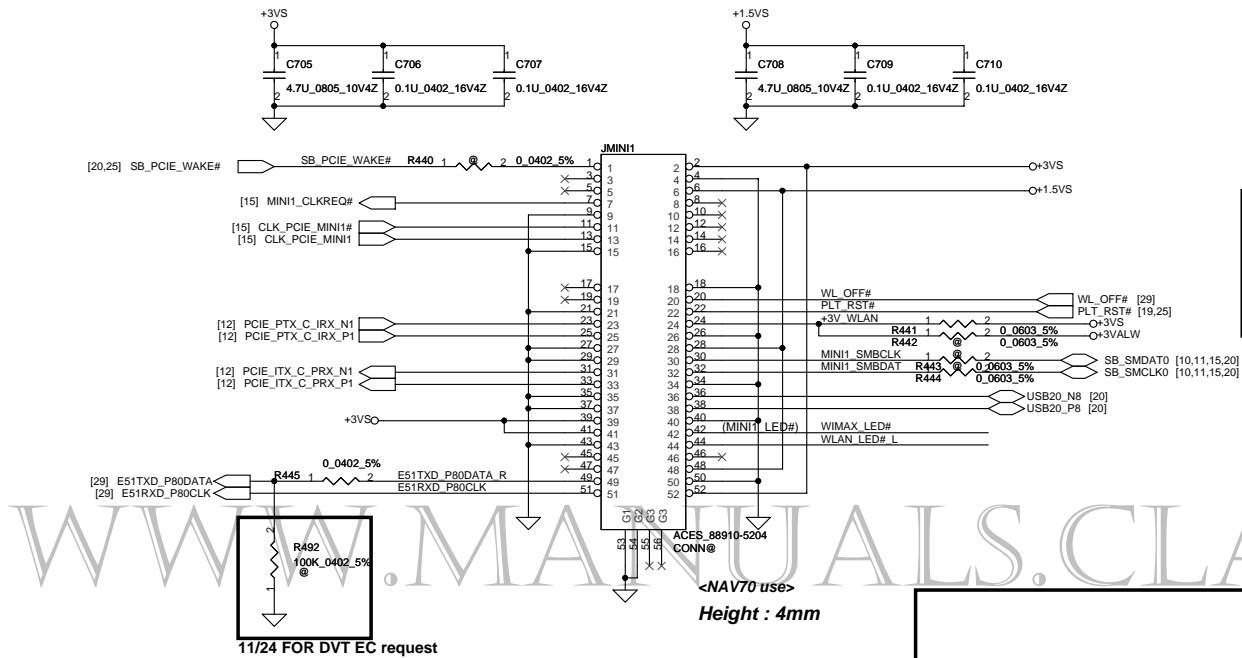


LAN Connector

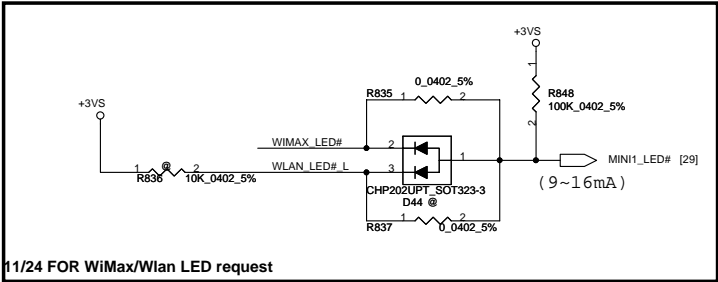


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| Security Classification | | Compal Secret Data | | Compal Electronics, Inc. | |
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| Date | | Wednesday, June 30, 2010 | | Sheet | 26 of 45 |

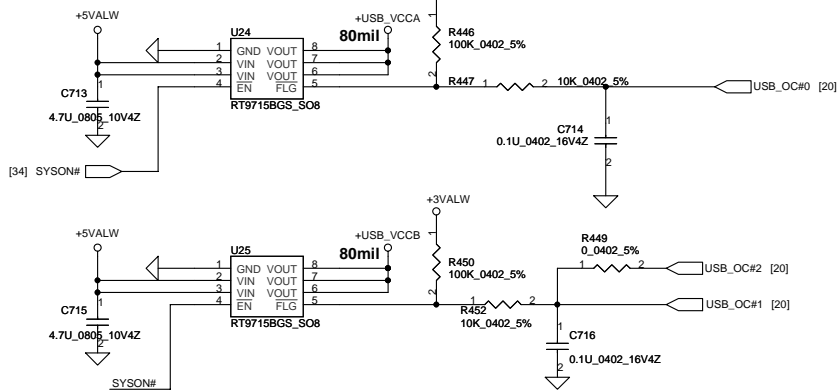
Mini-Express Card for WLAN



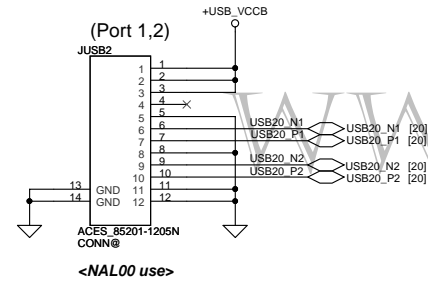
| Mini Card Power Rating | | | |
|------------------------|--------------------|--------|----------------------|
| Power | Primary Power (mA) | | Auxiliary Power (mA) |
| | Peak | Normal | Normal |
| +3VS | 1000 | 750 | |
| +3V | 330 | 250 | 250 (wake enable) |
| +1.5VS | 500 | 375 | 5 (Not wake enable) |



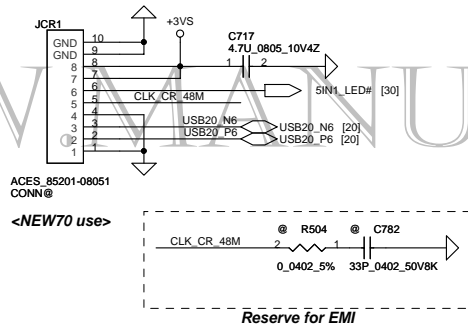
USB PW switch Change P/N SA00002XX00 For DVT



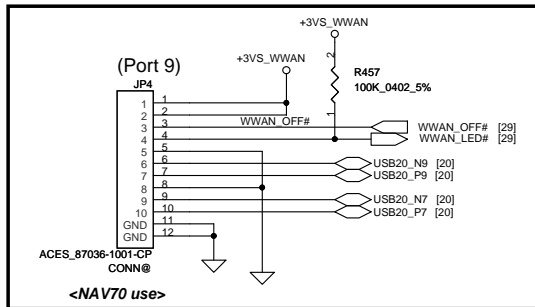
To USB/B Connector



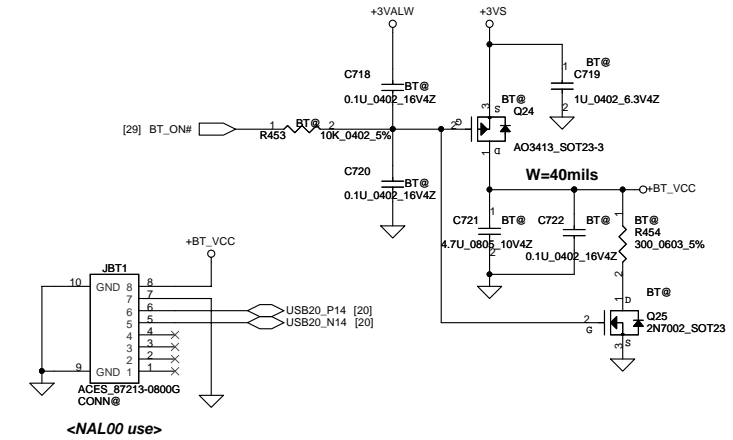
To CardReader/B Connector



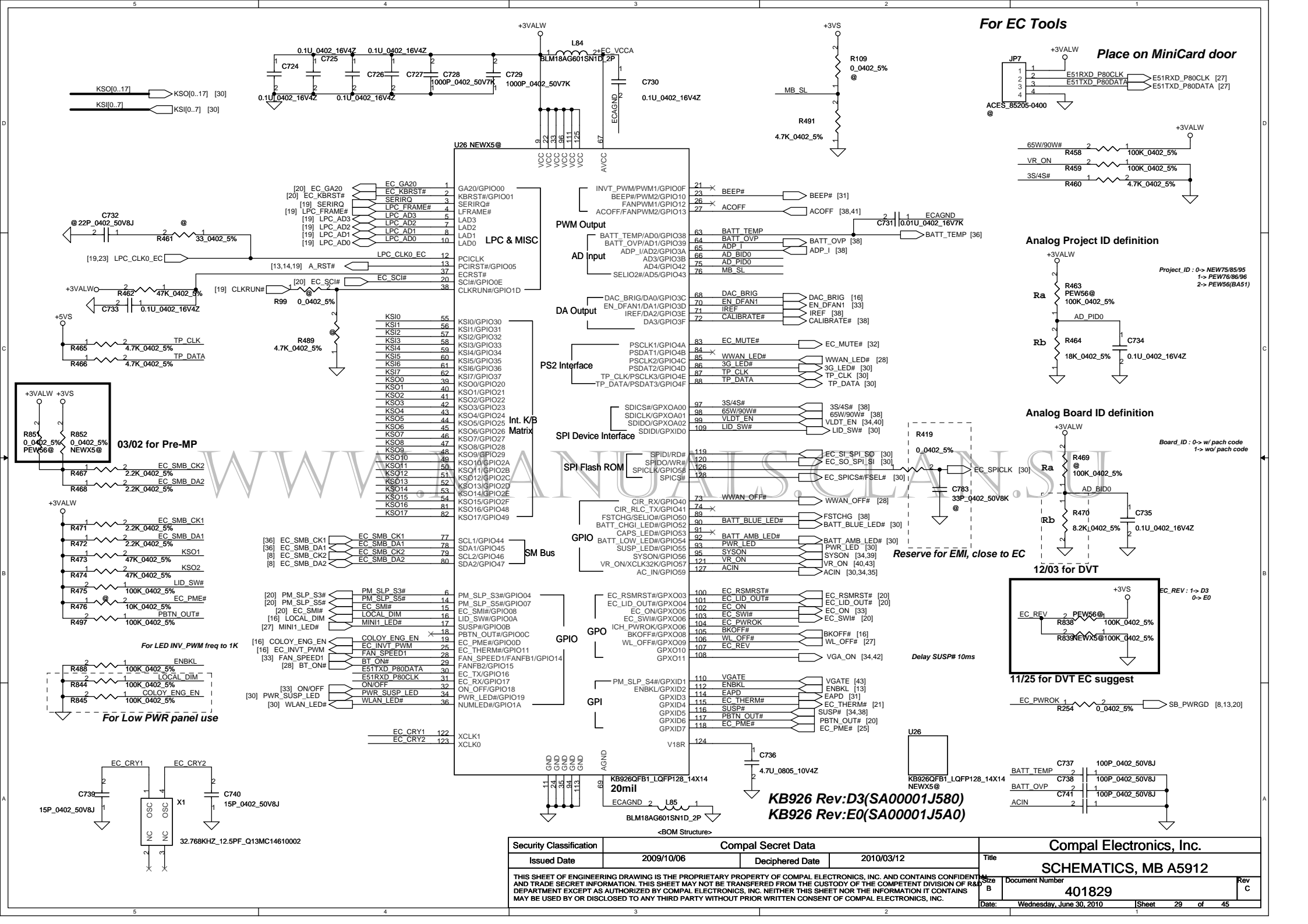
To 3G Module Connect

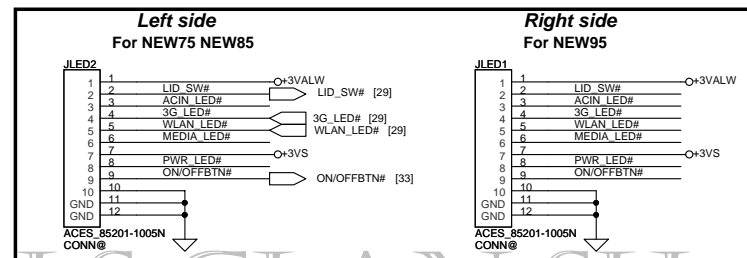
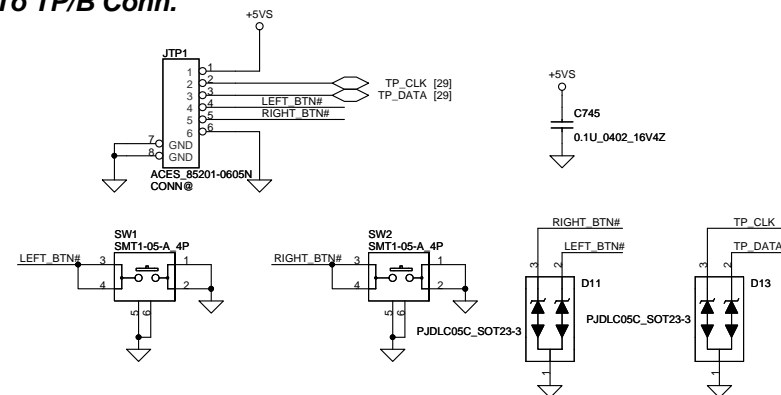
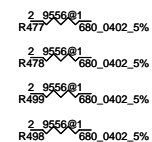


Bluetooth Conn.

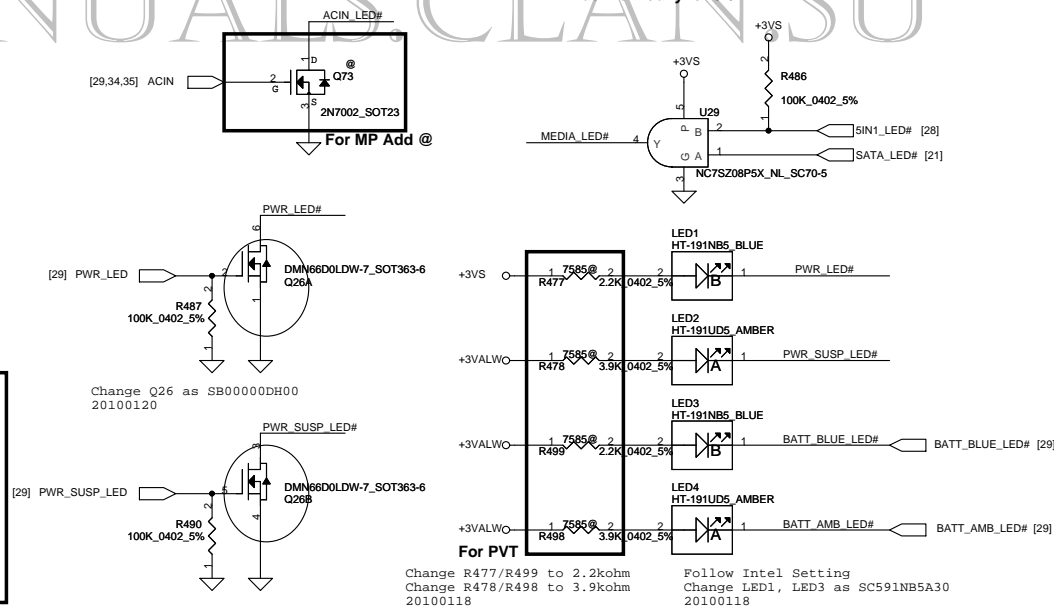


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| | | | | Date: | Wednesday, June 30, 2010 | Sheet 28 of 45 |

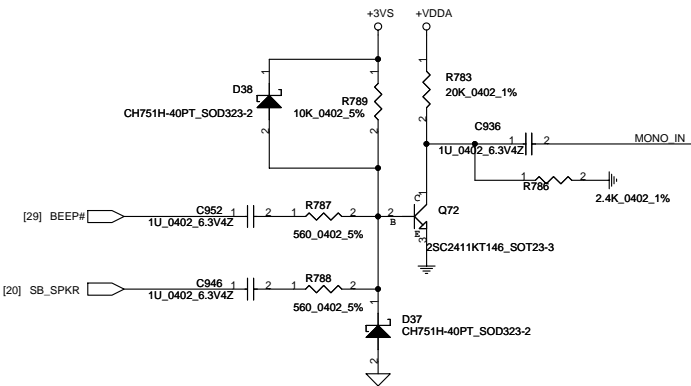




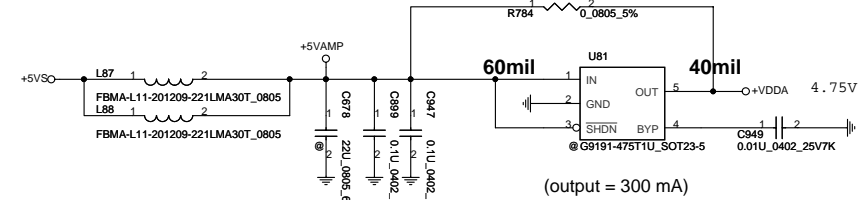
PIN define modify for 01/22



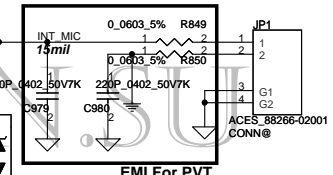
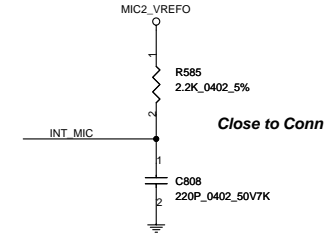
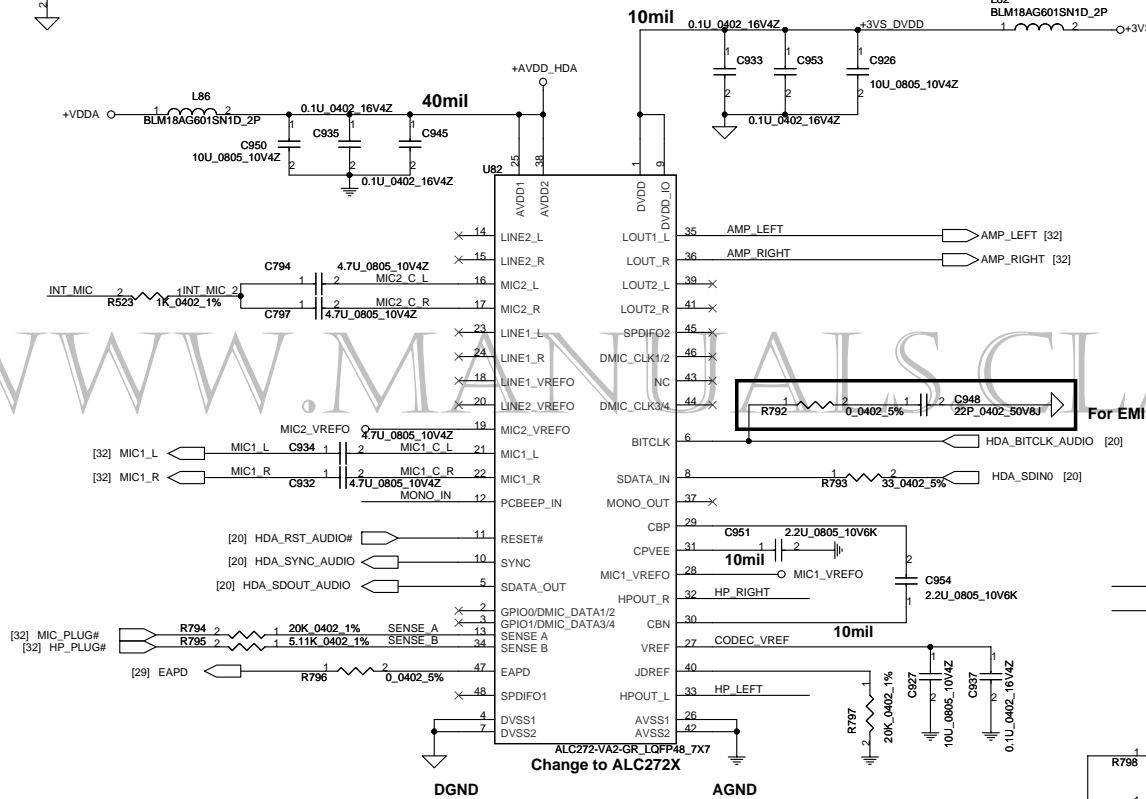
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| Security Classification | | Compal Secret Data | | Compal Electronics, Inc. | |
| Issued Date | | 2009/10/06 | Deciphered Date | 2010/03/12 | Title |
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| | | Page | Document Number | Revision | |
| | | 1 | 401829 | C | |
| | | Date | Wednesday, June 30, 2010 | Sheet | 30 of 45 |



HD Audio Codec



(output = 300 mA)



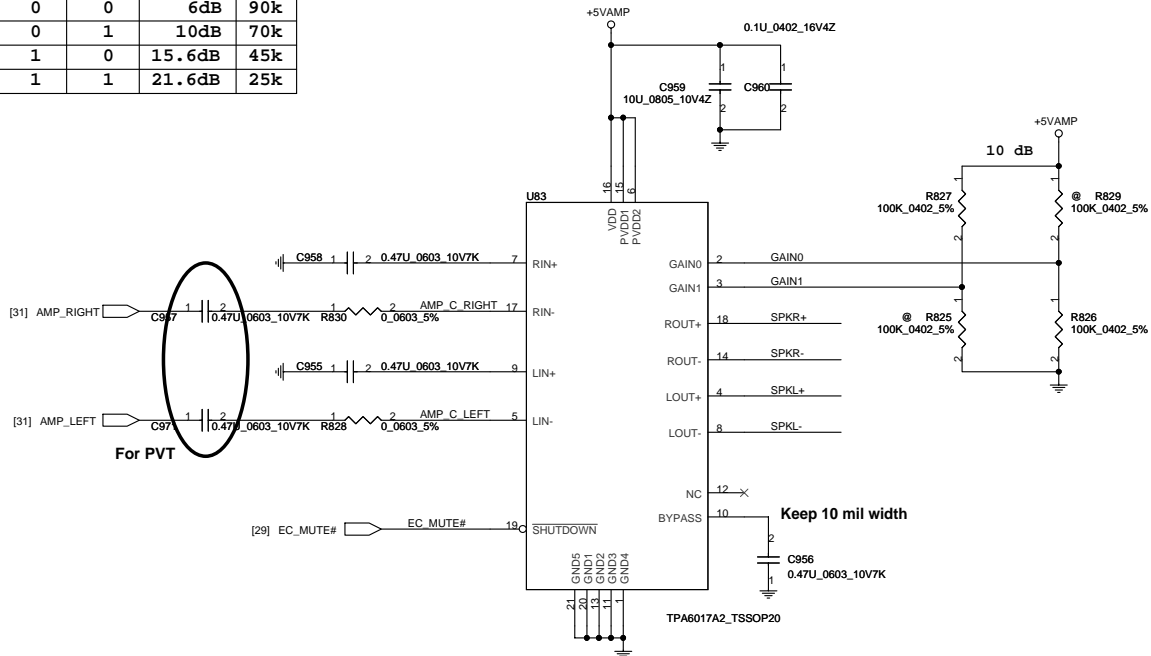
EMI For PVT

For EMI

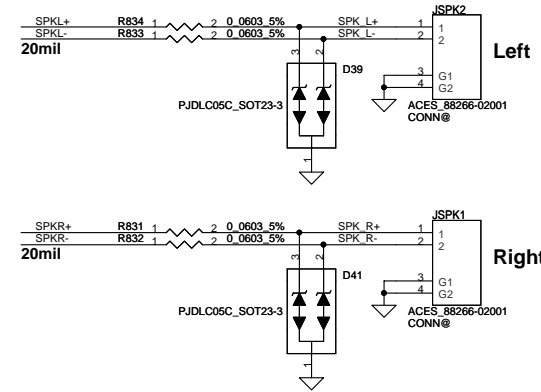
| ALC272X | | | |
|-----------|-----------|---------------------|----------|
| Sense Pin | Impedance | Codec Signals | Function |
| SENSE A | 39.2K | PORT-A (PIN 39, 41) | LOUT2 |
| | 20K | PORT-B (PIN 21, 22) | MIC1 |
| | 10K | PORT-C (PIN 23, 24) | LINE1 |
| | 5.1K | PORT-D (PIN 35, 36) | LOUT1 |
| SENSE B | 39.2K | PORT-E (PIN 14, 15) | LINE2 |
| | 20K | PORT-F (PIN 16, 17) | MIC2 |
| | 10K | PORT-I (PIN 32, 33) | HP |

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| Date: Wednesday, June 30, 2010 | | | | Sheet 31 of 45 | | | | Rev C | | | |

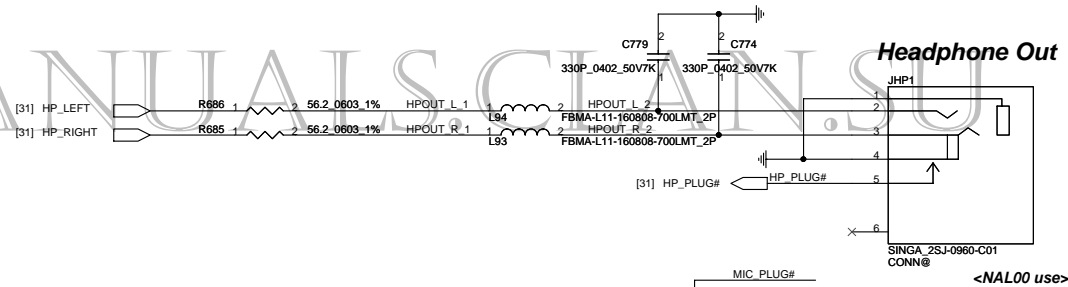
| GAIN0 | GAIN1 | AV(inv) | Ri |
|-------|-------|---------|-----|
| 0 | 0 | 6dB | 90k |
| 0 | 1 | 10dB | 70k |
| 1 | 0 | 15.6dB | 45k |
| 1 | 1 | 21.6dB | 25k |



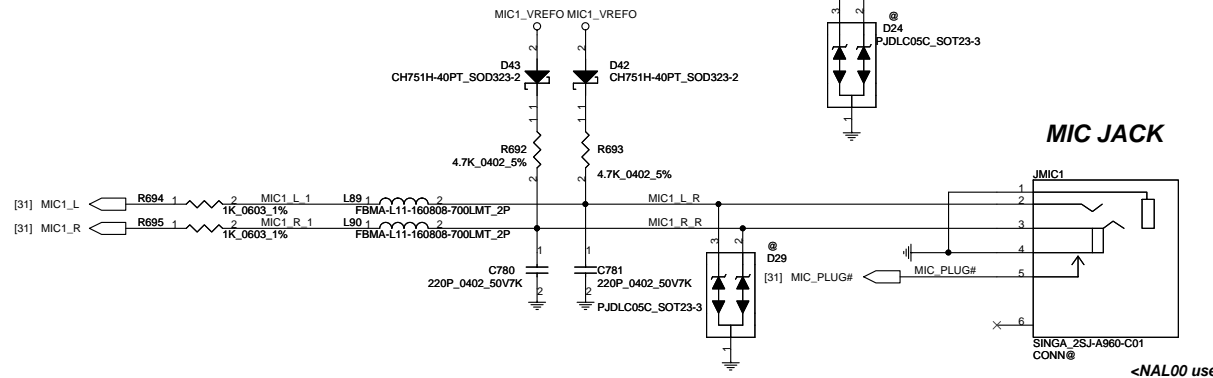
Int. Speaker Conn.



Headphone Out

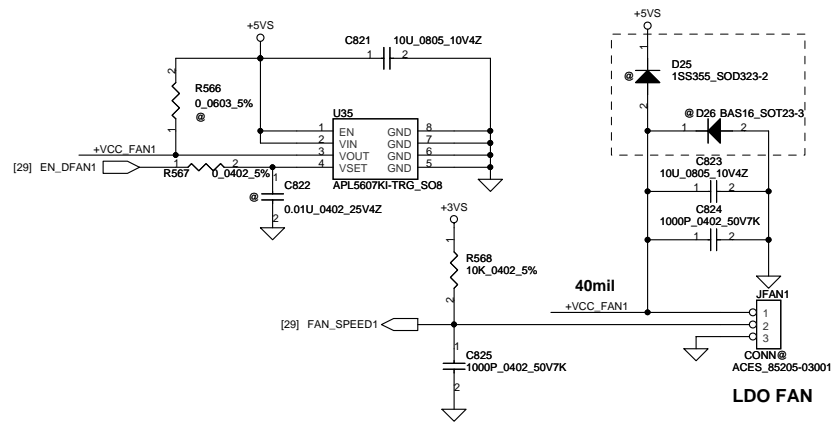


MIC JACK

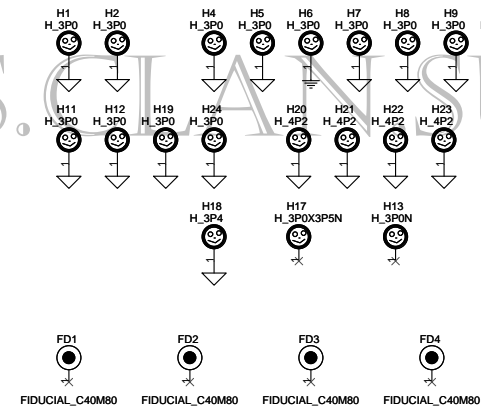
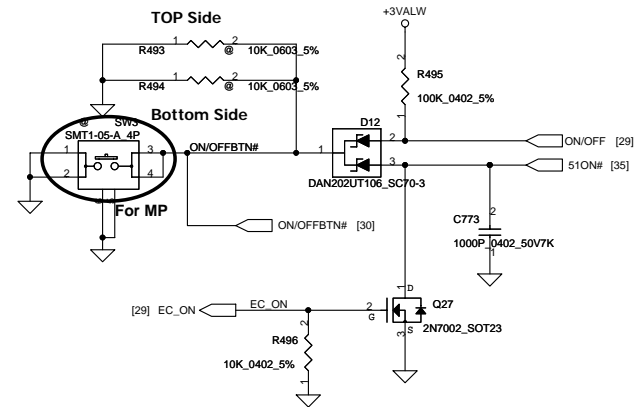


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FAN1 Conn



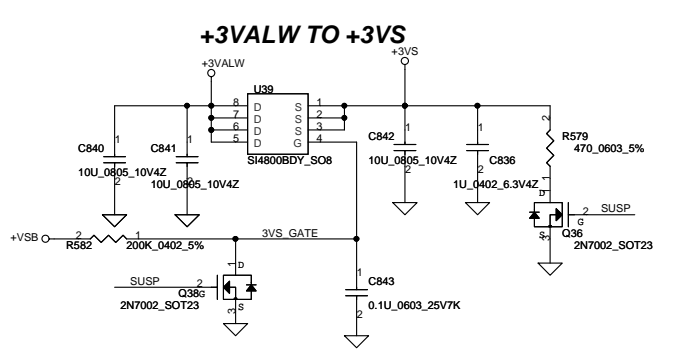
ON/OFF switch *Power Button*



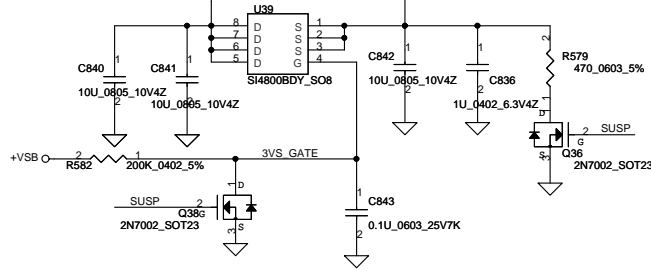
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+5VALW +5V_L

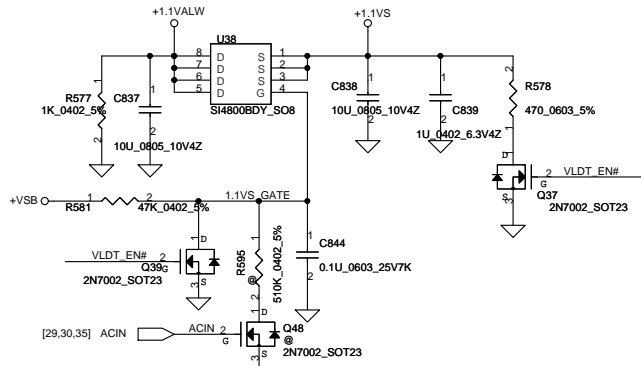
Q Q



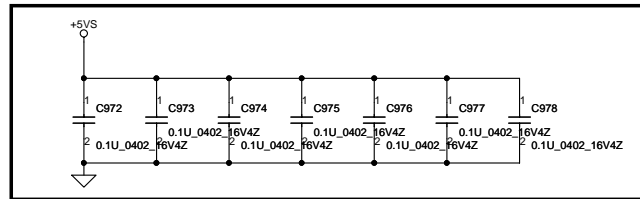
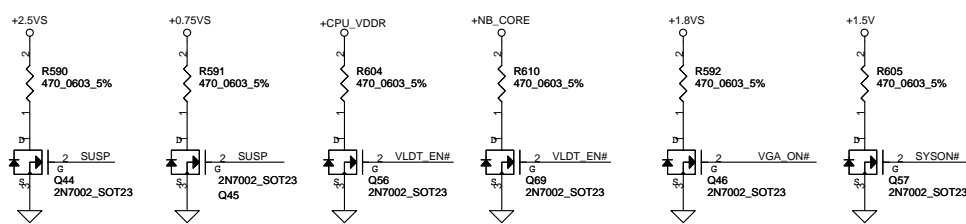
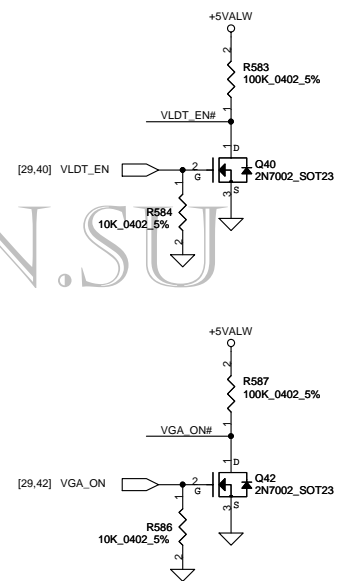
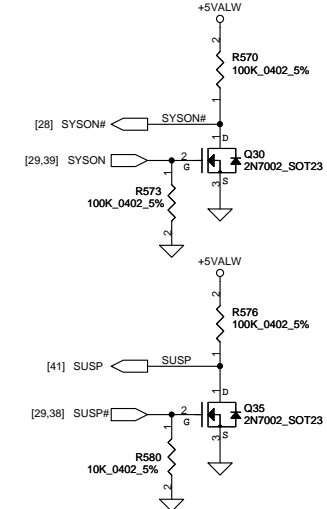
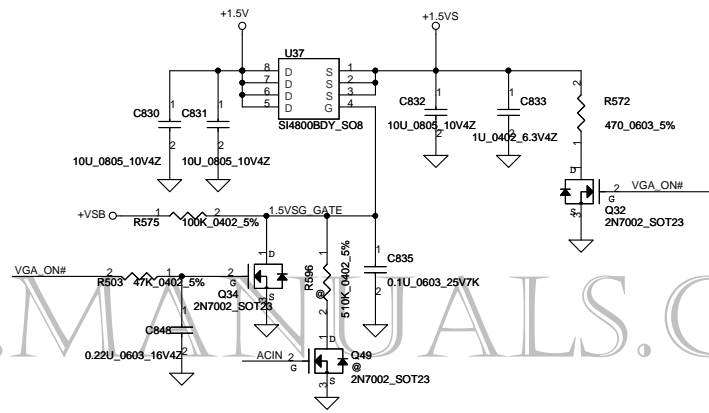
+3VALW



+1.1V_{ALW} +1.1V_S

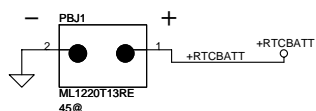
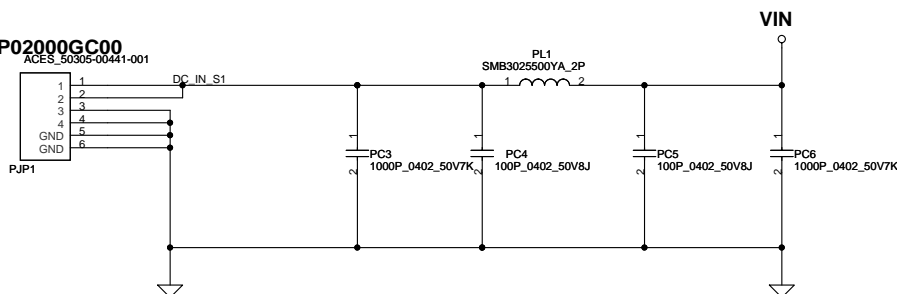


0 +1.

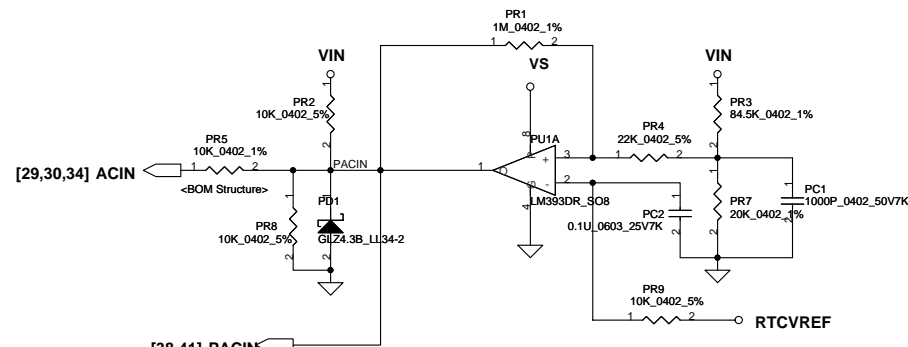
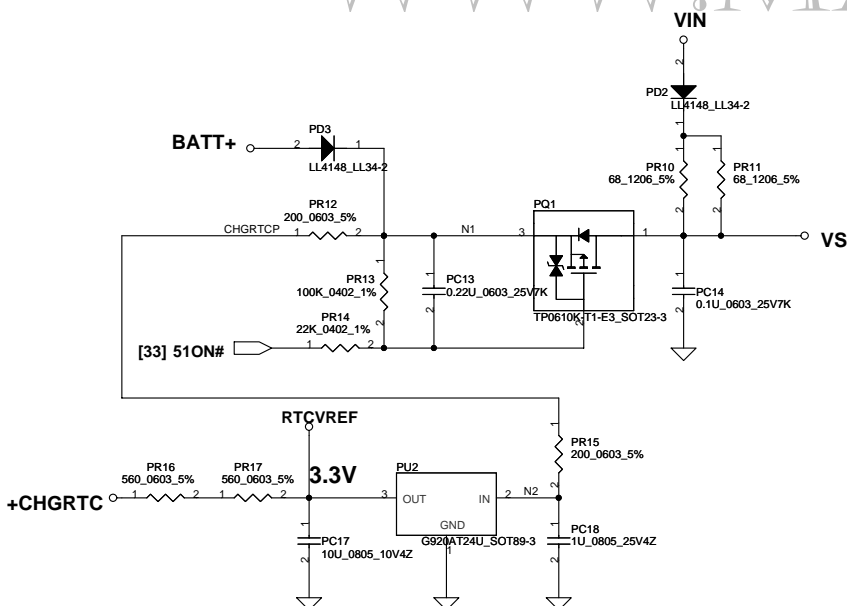


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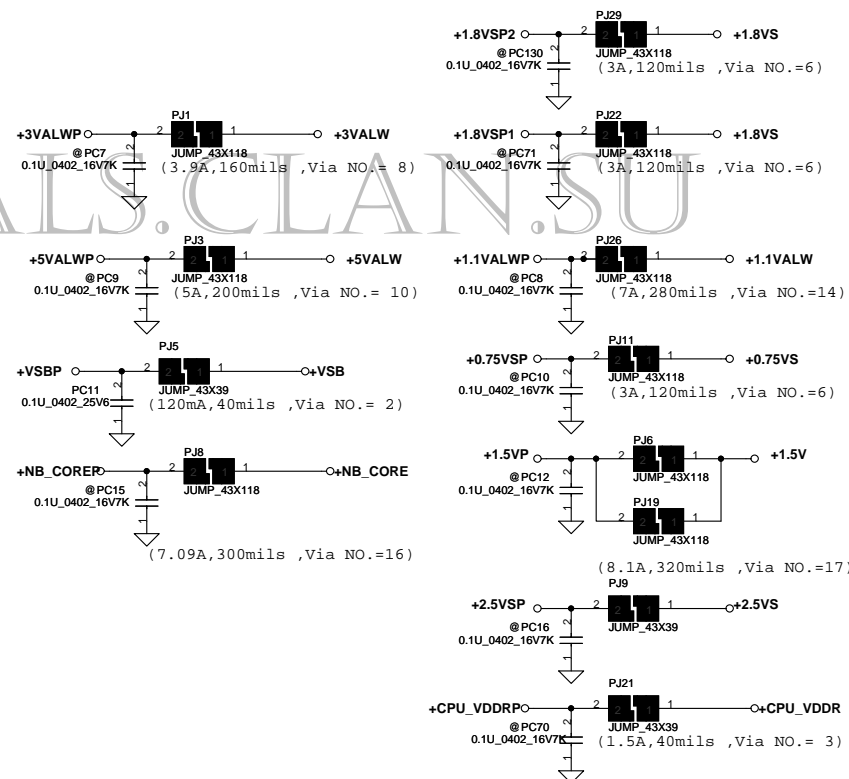
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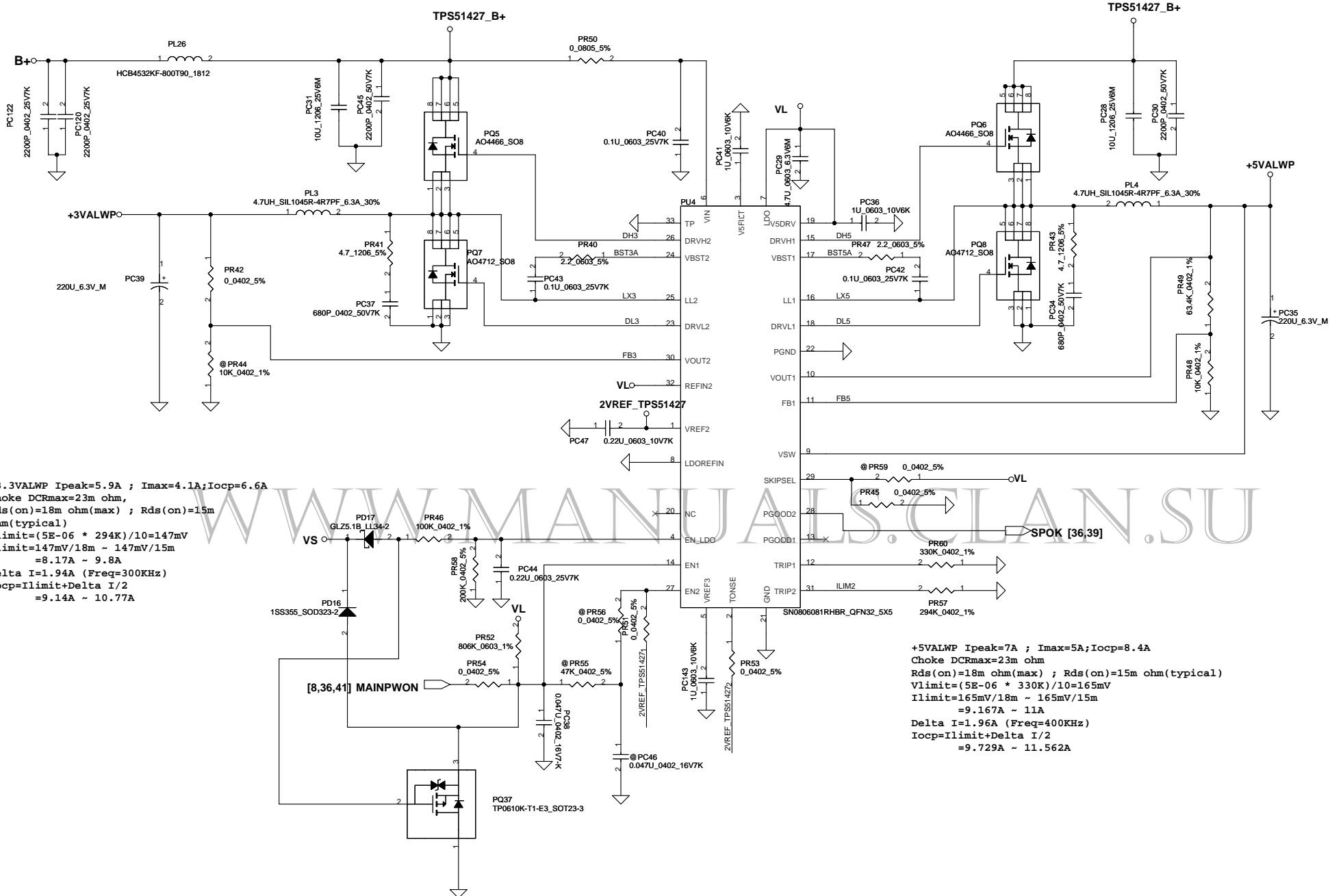
WWW.MANUALS.CLAN.SU



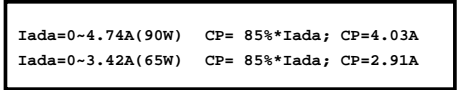
| | Min. | Typ | Max. |
|-------|---------|---------|---------|
| H-->L | 16.976V | 17.525V | 17.728V |
| L-->H | 17.430V | 17.901V | 18.384V |



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$$CP = 85\% \cdot I_{ada} ; CP = 4.03A$$


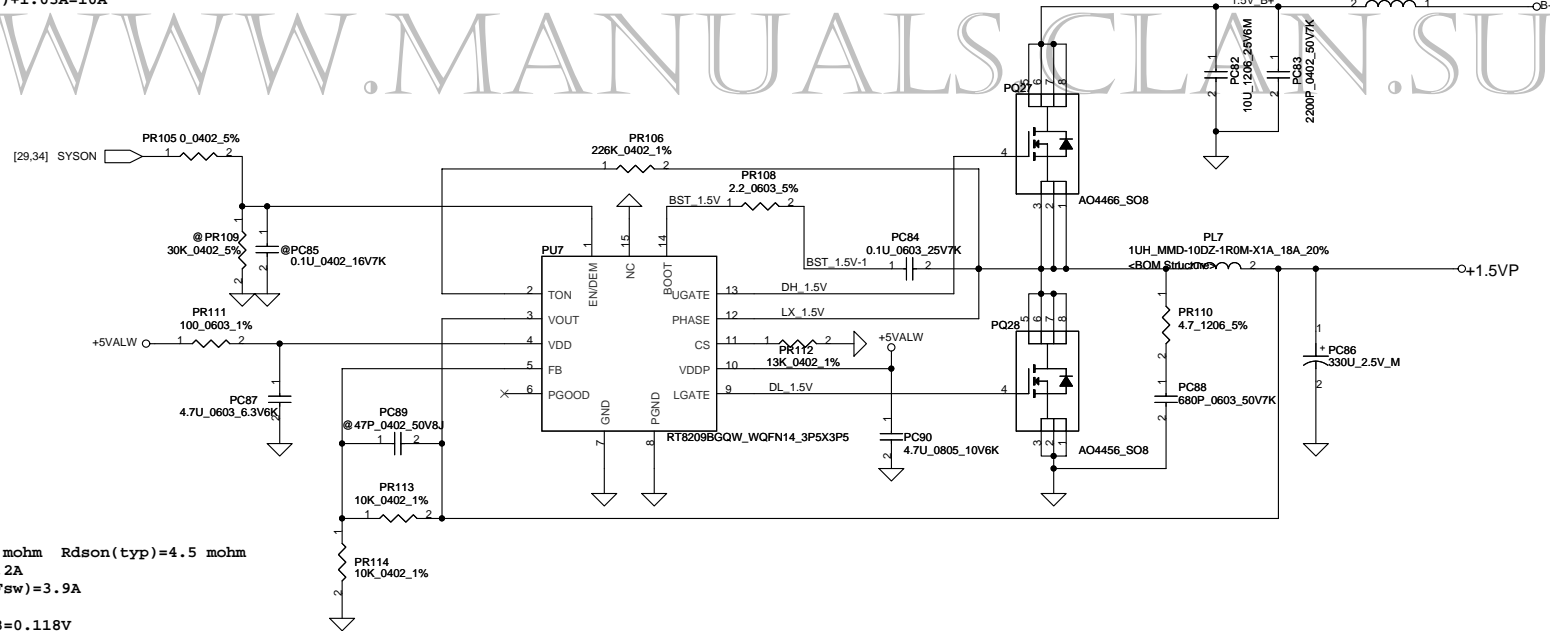
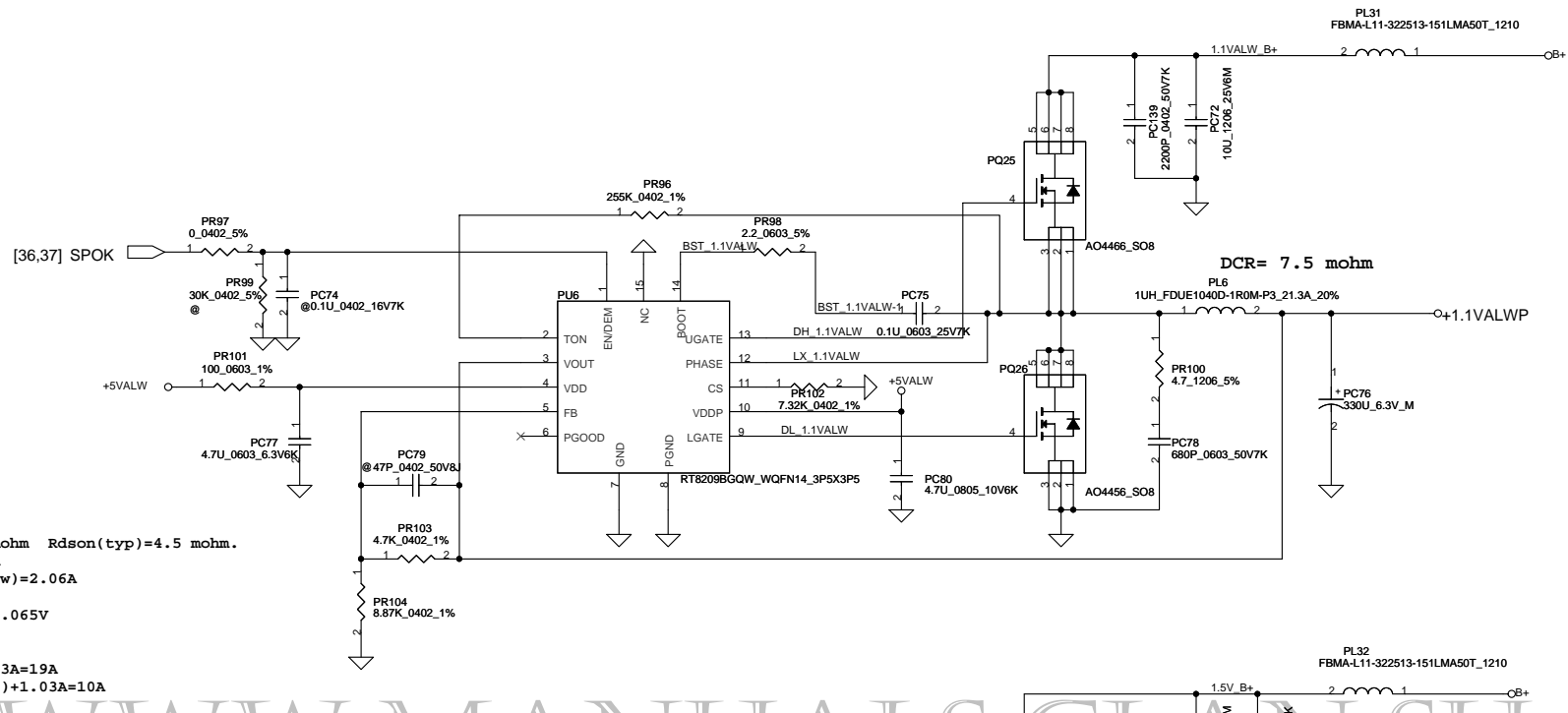
```
CP mode
Iinput=(1/0.02)*(0.05*Vaclm/2.39+0.05)
where Vaclm=1.464V (90W), Iinput=4.03A
PR84=12.1K;PR87=20K
where Vaclm=0.391(65W), Iinput=2.91A
PR84=12.1K;PR85=2.55K
```

$$ADP_I = 19.9 \times 3.42 \times 0.95 \times 0.02 = 1.29V$$

| BATT Type | Charging Voltage (0x15) | CV mode |
|-----------------------|----------------------------|---------|
| Normal 3S LI-ON Cells | 12600mV | 12.60V |

```
LI-3S :13.5V---BATT-OVP=1.5012V
BATT-OVP=0.1112*VMB
Per cell=3.5V
```

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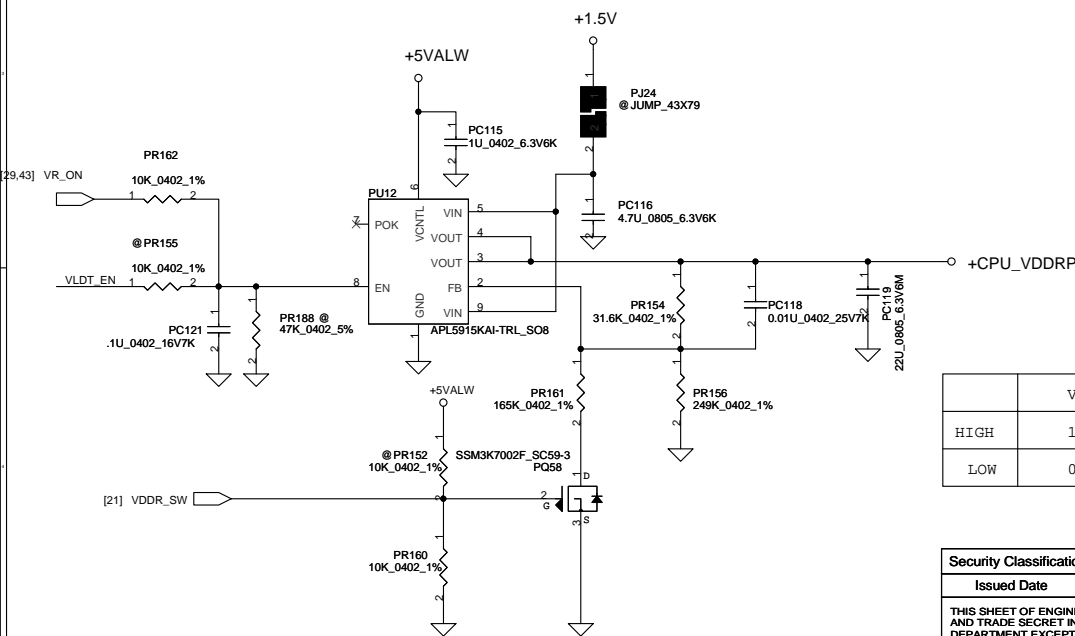
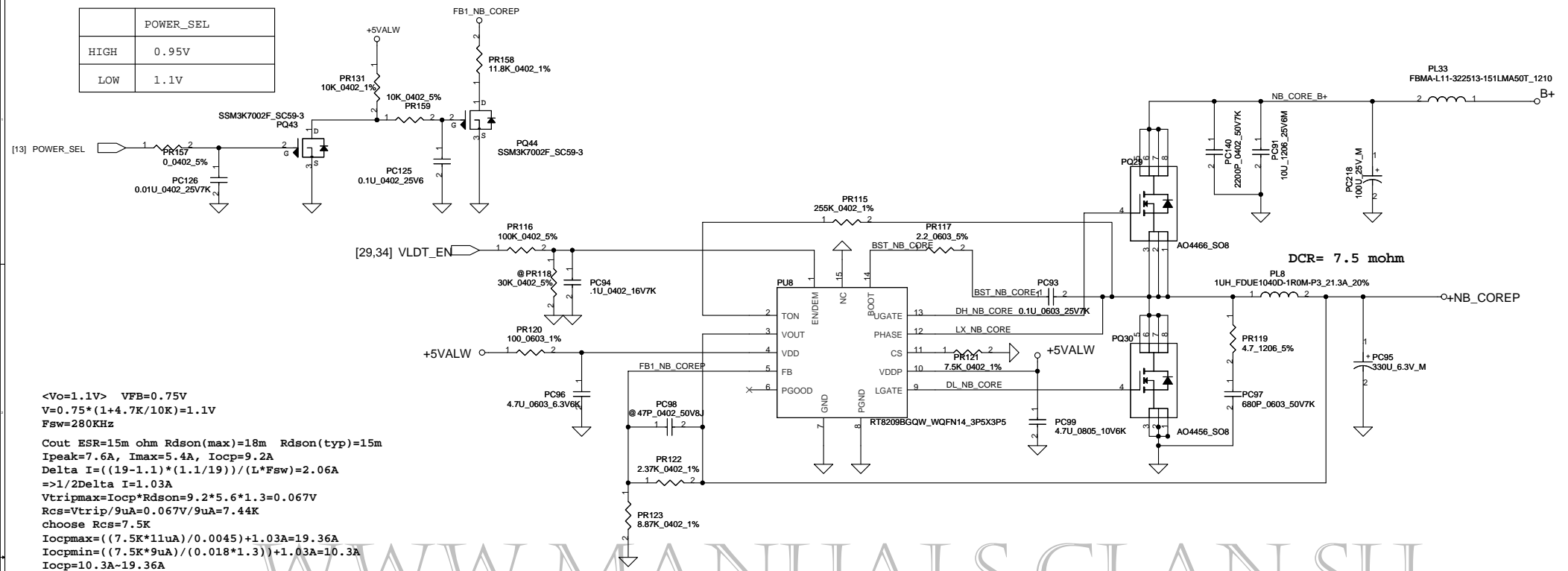


<Vo=1.1V> VFB=0.75V
V=0.75*(1+4.7K/10K)=1.1V
Fsw=280KHz
Cout ESR=15m ohm Rdson(max)=5.6 mohm Rdson(typ)=4.5 mohm.
Ipeak=7.42A, Imax=5.2A, Iocp=8.9A
Delta I=((19-1.1)*(1.1/19))/(L*Fsw)=2.06A
=>1/2Delta I=1.03A
Vtripmax=Iocp*Rdson=8.9*5.6*1.3=0.065V
Rcs=Vtrip/9uA=0.065V/9uA=7.2K
choose Rcs=7.32K
Iocpmax=((7.32K*11uA)/0.0045)+1.03A=19A
Iocpmin=((7.32K*9uA)/(0.0056*1.3))+1.03A=10A
Iocp=10A-19A

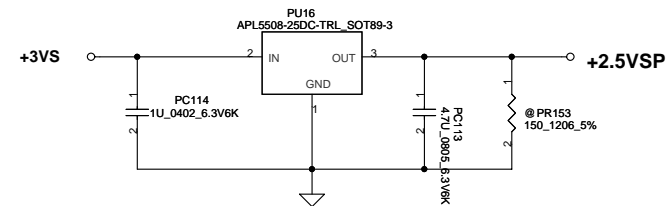
<Vo=1.5V> VFB=0.75V
Vo=0.75*(1+10K/10K)=1.5V
Fsw=335KHz
Cout ESR=17 mohm Rdson(max)=5.6 mohm Rdson(typ)=4.5 mohm
Ipeak=13.5A, Imax=9.5A, Iocp=16.2A
Delta I=((19-1.5)*(1.5/19))/(L*Fsw)=3.9A
=>1/2Delta I=1.95A
Vtripmax=Iocp*Rdson=16.2*5.6*1.3=0.118V
Rcs=Vtrip/9uA=0.118V/9uA=13.1K
choose Rcs=13K
Iocpmax=((13K*11uA)/0.0045)+1.95A=32A
Iocpmin=((13K*9uA)/(0.0056*1.3))+1.95A=18A
Iocp=18A-32A

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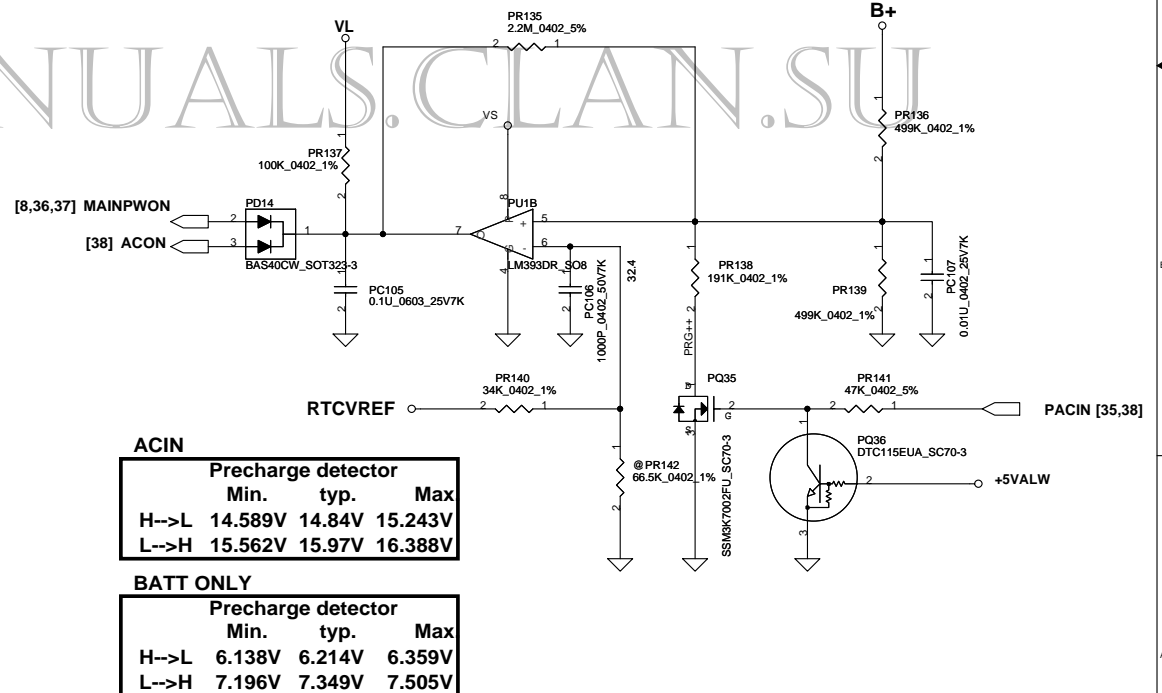
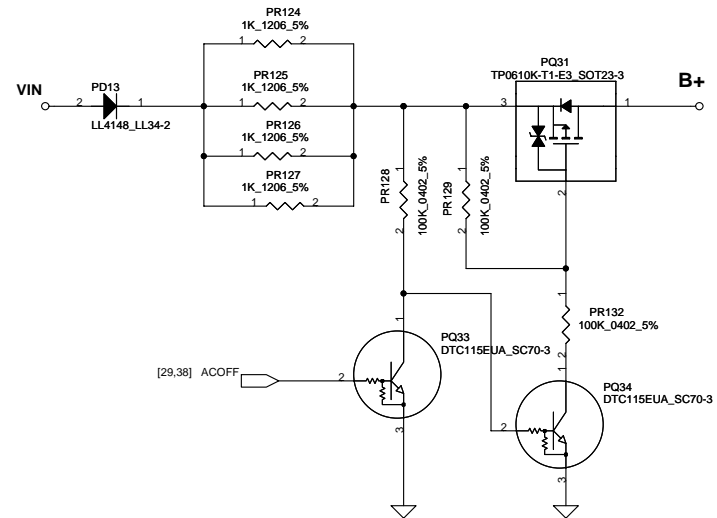
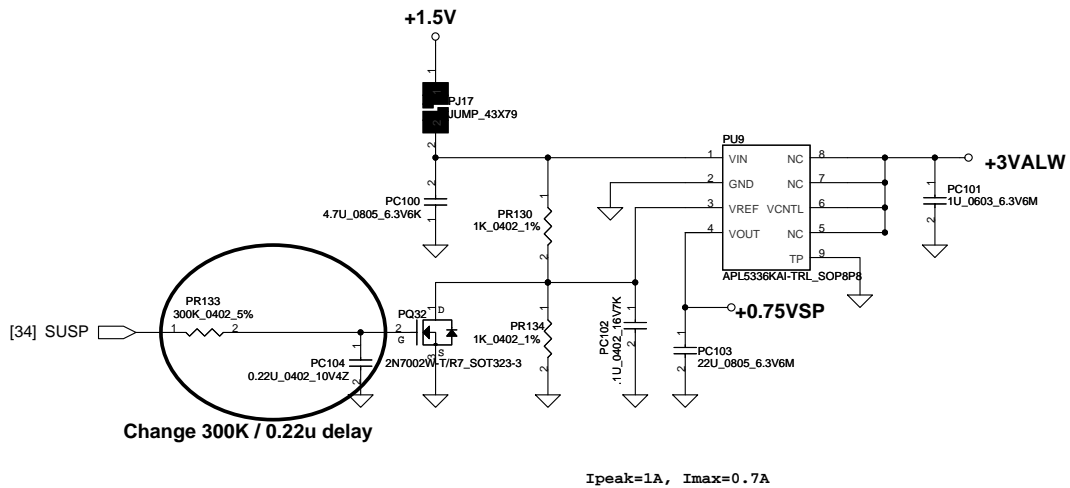
| | POWER_SEL |
|------|-----------|
| HIGH | 0.95V |
| LOW | 1.1V |



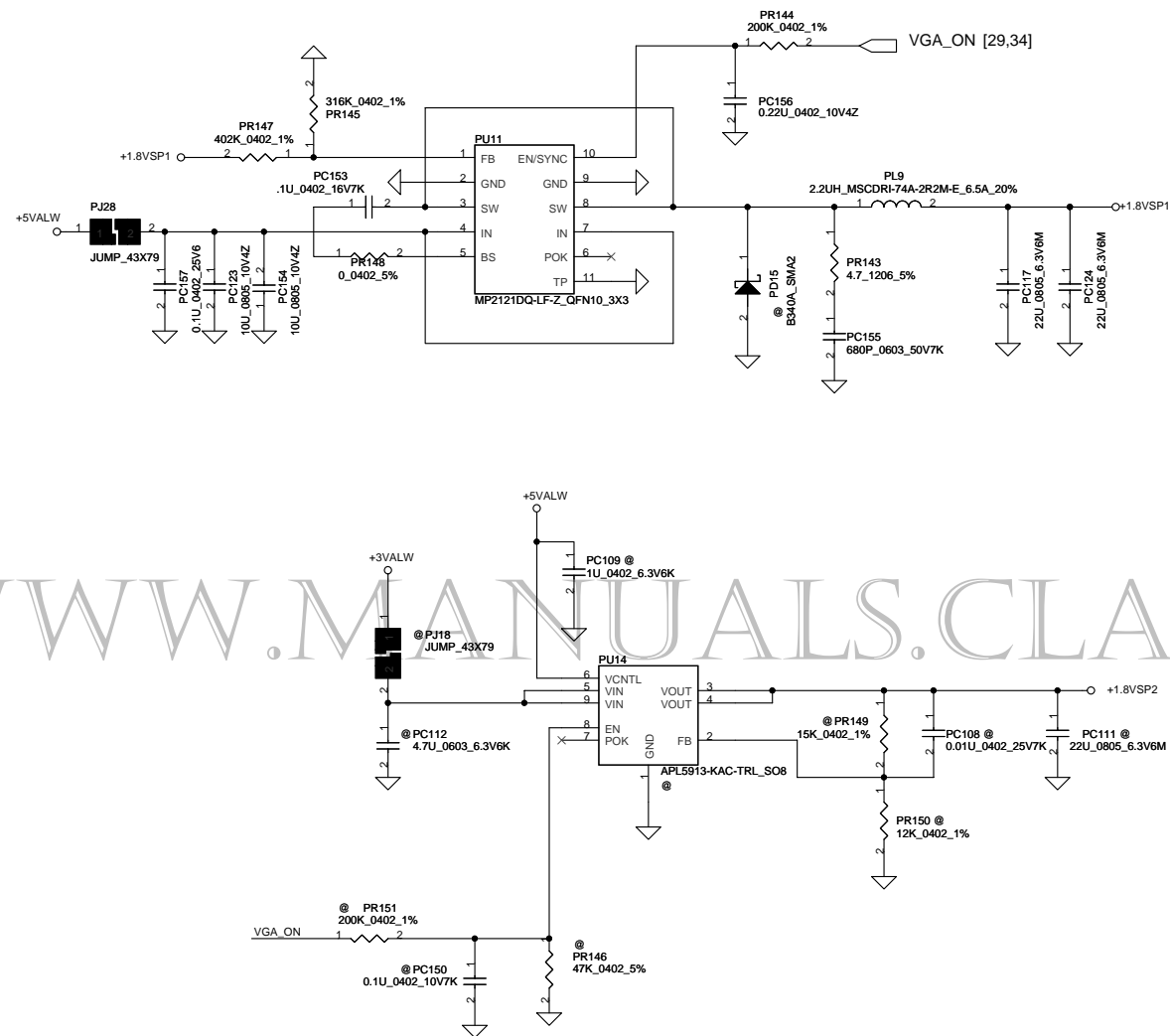
| | VDDR_SW |
|------|---------|
| HIGH | 1.05V |
| LOW | 0.9V |



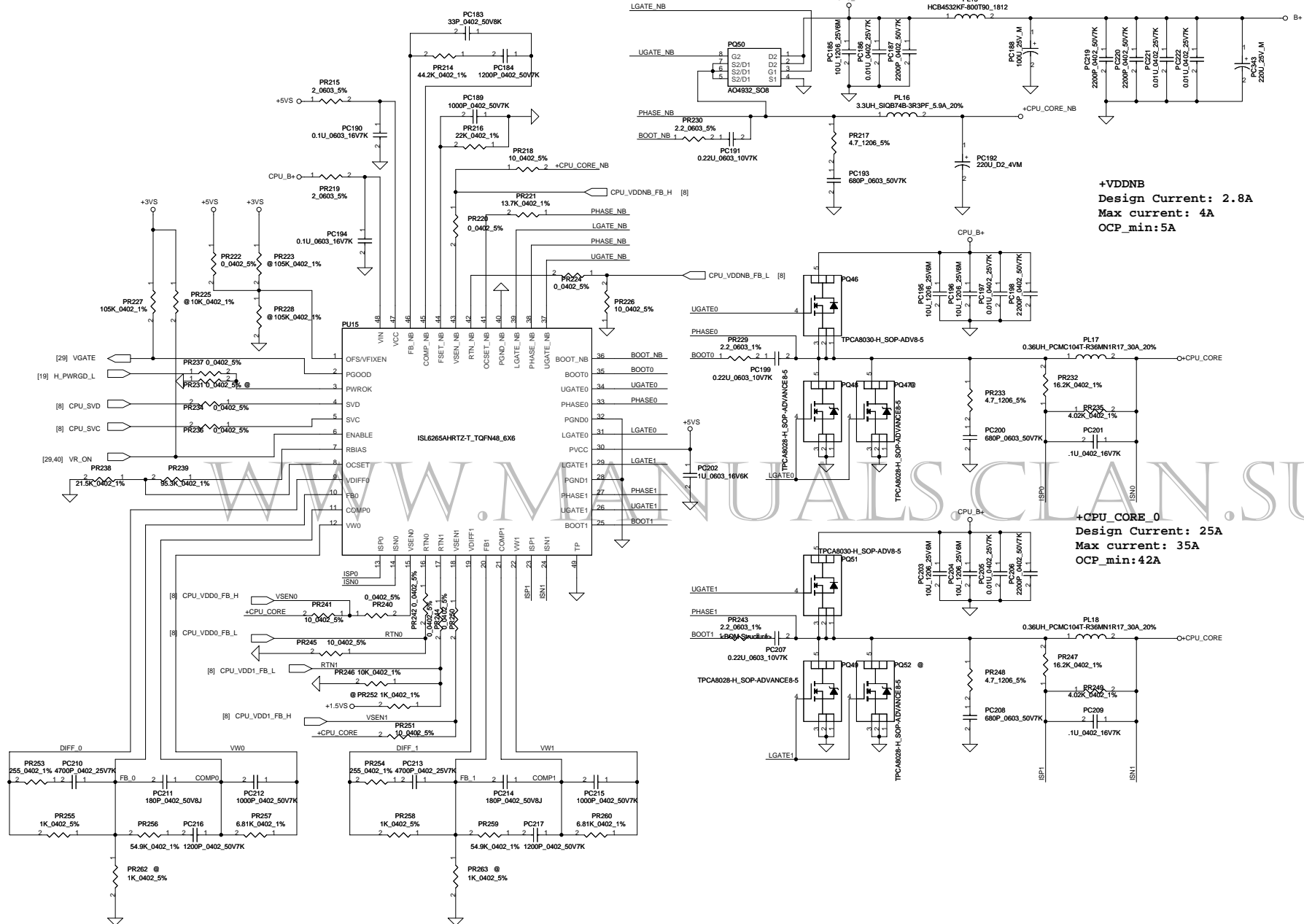
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Version change list (P.I.R. List)

Page 1 of 2
for PWR

| Item | Fixed Issue | Reason for change | Rev. | PG# | Modify List | Date | Phase |
|------|--|---|------|----------|---|------------|--------------|
| 1 | ADD 2 switch mos and remove 2 pull high resistance to modify VGA_CORE switch level | Before modify to fault, we recognize that VGAPWRSEL pin is open drain state. But after check with AMD AE regoer to clear the foul that VGAPWRSEL pin has driving ability,so i take away 2 pull high resistance and add 2 switch mos to modify the switch level. | 0.1 | 52 | ADD PQ60 and PQ61 remove PR212(10K,0402) and PR213(10K.0402) | 2009/08/21 | EVT_NAV71 |
| 2 | change thermister , tune PH1 protection and recovery set point | change thermister from 150K to 100K | 0.1 | 44 | thermister part number SL200000V00 and PR28 change to 21K, PR30 change to 9.53K | 2009/08/27 | EVT_NEW75 |
| 3 | Add GPU voltagr sence net | Cause GPU have GCORE_SEN and FB_GND pin so power add receive net. | 0.1 | 51 | ADD GCORE_SEN and FB_GND net, also add PR296(0_0402_1%), PR297(10_0402_5%) and PR298(0_0402_5%) | 2009/09/04 | EVT_NEW75 |
| 4 | change DC-IN connector part number | to meet pin definition | 0.1 | 43 | change part number is SP020908120 | 2009/09/10 | EVT_NEW75 |
| 5 | change reistance PR81 value | Cause meet battery Ki value setting from 1.106 to 0.7224. change PR81 from 154K(0402_1%) to 80.6K(0402_1%) | 0.1 | 46 | change resistance PR81 value from 154K to 80.6K | 2009/09/22 | EVT_NEW75 |
| 6 | ADD switch circuit for 1.05V | Cause follow AMD electrcial sheet, VDDIO/ VDDR voltage setting procedure. AMD processor will switch between 1.05V and 0.9V by VDDIO and VDDR | 0.1 | 48 | ADD PR161 (165K_0402_1%), PQ58,PR152(10K_0402_5%),PR160(10K_0402_5%), PC131(0.1U_25V6) , change PR161 value from 100K to 249K, and ADD enable net name -VDDR_SW | 2009/09/22 | EVT_NEW75 |
| 7 | Change enable signal of +CPU_VDDRP | Cause follow HW demand | 0.1 | 41 | change +CPU_VDDR enable signal from VLDT_EN to VR_ON | 2009/10/02 | EVT_NEW75_6L |
| 8 | change resistance size | cause for component de-rating Prevent the component break down when inrush current happen. | 0.1 | 39 | change PR61 from (0.02_1206_1%) to (0.02_2512_1%) | 2009/10/06 | EVT_NEW75 |
| 9 | change capacitor value for 0.75VSP request | Cause follow HW request | 0.1 | 41 | Change PC103 value from 10u to 22u | 2009/10/15 | EVT_NEW75_6L |
| 10 | Add snubber and boost resistance of 1.1Valw and 1.5V | Cause follow EMI request | 0.2 | 39 | Add 4.7 ohm to PR100, add cap. 680p to PC78 and add 2.2 ohm to PR98. Add 4.7 ohm to PR110, add cap. 680p to PC88 and add 2.2 ohm to PR108 | 2009/11/23 | EVT_NEW75_6L |
| 11 | Add bead | For reduce B+ noise | 0.2 | 37,39,40 | Add PL31,PL32,PL33(SM010020720) and PL26(SM010018210) | 2009/11/23 | EVT_NEW75_6L |
| 12 | Change chock | Cause A phase put wrong chock | 0.2 | 37,39,40 | Change PL9 from SH00000FK00 to SH000009Q00 | 2009/11/23 | EVT_NEW75_6L |
| 13 | Change resistance value | Cause Hw request 1.1Valw need to set to 1.15V, so change divider resistance PR104 | 0.2 | 39 | Change PR104 from SD000000680 (S RES 1/16W 8.45K +-1% 0402) to SD034887180 (S RES 1/16W 8.87K +-1% 0402) | 2009/12/01 | EVT_NEW75_6L |
| 14 | ADD capacitance | Cause EMI request | 0.2 | 43 | ADD PC219 PC220 SE074222K80 (S CER CAP 2200P 50V K X7R 0402) and PC221 PC222 SE000000MJ00 (S CER CAP 0.047U 25V K X7R 0402) | 2009/12/01 | EVT_NEW75_6L |
| 15 | change resistance value | Cause NB_CORE need to switch | 0.2 | 40 | change PR158 from SD034232280 (S RES 1/16W 23.2K +-1% 0402) to SD034118280 (S RES 1/16W 11.8K +-1% 0402) | 2009/12/01 | EVT_NEW75_6L |
| 16 | ADD Boost resistance | Cause EMI request | 0.2 | 37-43 | ADD PR40, PR47,PR117 and PR230 from SD013000080 (S RES 1/10W 0 +-5% 0603) to SD013220B80 (S RES 1/10W 2.2 +-5% 0603) | 2009/12/01 | EVT_NEW75_6L |

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11/20

- 1. P.21 unstuff Y4, C588, C589, R368 for AMD suggest
- 2. P.19 Modify Y3 net connect
- 3. P.25 Change C923, C924 as 33pF for Y5

11/24

- 1. P.13, P.15, P.20, P.23 Add Ext@ & Int@ option ; Modify CLK_SBLINK_BCLK net connect
- 2. P.13, P.16, P.20 Add VB@ & UNVB@ option
- 3. P.34 Change U38 as 4430(SB0000007010)
- 4. P.27 Add R835, R837 unstuff D44, R836 for WiMax/Wlan LED request ; change R492 as 100Komh for EC request
- 5. P.30 Change R477, R499 as 680ohm ; R478, R498 as 3.9kohm for LED brightness

11/25

- 1. P.19, P20 update SB GPIO PIN
- 2. P.29 Add R838, R839 for EC RevD3, E0
- 3. P.34 Add C972, C973, C974, C975, C976, C977, C978 for EMI Request
- 4. P.15 Remove R245, R247 for unSD CLK
- 5. P.13 Add R840 for CLK_NB_14.318

11/28

- 1. P.30 JLED1, JLED2 Pin define modify: Add Q73
- 2. P.23 Add R841, R842, R843 ; P.29 Add R844, R845 for Panel Low Power
- 3. P.28 Change D10 P/N as SC300000B00 ; Stuff D41, D27, D39, D11, D13, D29, D24 For ESD Request

PVT

01/18

- 1. P.17 Add HDMI@
- 2. P.19 Change C56 as SF000002N00(H4.4)
- 3. P.13 stuff R67, unstuff U4 for NB_PWRGD
- 4. P.21 stuff R424 for +CPU_VDDR
- 5. P.30 Change LED1, LED3 as SC591NB5A30 ; Change Resistance value for NEW75/85/95
- 6. P.32 Change C957, C971 as 0.47UF
- 7. P.20 Unstuff R359, R360 for SB_SIC, SB_SID

01/25

- 1. P.30 Change Q26 as SB00000DH00
- 2. P.29 Define U26 Pin 36, Pin 17, Pin 85, Pin86 for WWAN & WLAN
- 3. P.31 Reserve C979, C980, R849, R850 for EMI solution
- 4. P.9 Change C23, C24, C25, C26, C75 as SGA19331D10 (ESR 9 ohm)

03/02

- 1. P.29 Add R851, unstuff R852

03/30 For MP

- 1. P.8, P33 unstuff C21, SW3 for MP

05/18 For Cost down

- 1. P.8, P.29, P.31, P.32 unstuff Q73, D24, D27, D29, U2, U40, C681, R304 ,C687, R411 stuff R283

05/18 For PEW56

- 1. Modify SB GPI064, B_ID, P_ID, LED, TSI BOM option

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| Issued Date | 2009/10/06 | Deciphered Date | 2010/03/12 | Title | SCHEMATICS, MB A5912 |
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