

COMPAL CONFIDENTIAL

MODEL NAME : **JBL01**

PCB NO : **LA-3803P (DAA0000001L)**

BOM P/N : **43152231L01**

M09 Roush DIS uFCPGA Mobile Penryn Intel Cantiga PM + ICH9M

2008-06-12

REV : 1.0(A00)

@ : Nopop Component
1@ : Use PCMCIA card only
2@ : Use Express card only
4@ : Use CHINA TPM only
5@ : Use Broadcom TPM only
6@ : All TPM Disabled for CCC - Depop D70, Pop R483

| Part Number | Description |
|-------------|-------------------------------|
| DAA0000000L | PCB 03J LA-3803P REV0 M/B DIS |

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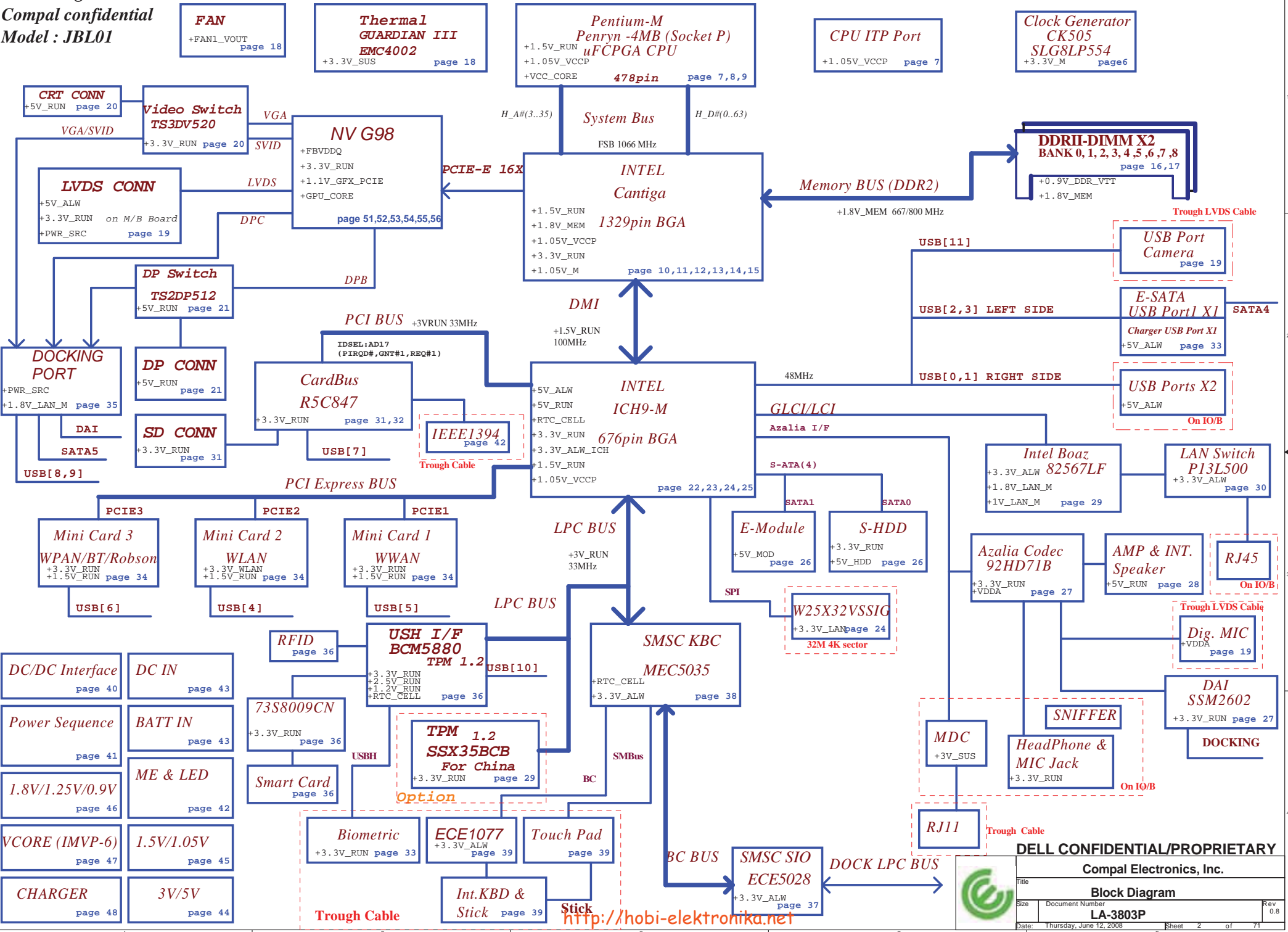


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Block Diagram
 Compal confidential
 Model : JBL01



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POWER STATES

| State \ Signal | SLP S3# | SLP S4# | SLP S5# | S4 STATE# | SLP M# | ALWAYS PLANE | M PLANE | SUS PLANE | RUN PLANE | CLOCKS |
|------------------------------|---------|---------|---------|-----------|--------|--------------|---------|-----------|-----------|--------|
| S0 (Full ON) / M0 | HIGH | HIGH | HIGH | HIGH | HIGH | ON | ON | ON | ON | ON |
| S3 (Suspend to RAM) / M1 | LOW | HIGH | HIGH | HIGH | HIGH | ON | ON | ON | OFF | ON |
| S4 (Suspend to DISK) / M1 | LOW | HIGH | HIGH | LOW | HIGH | ON | ON | ON | OFF | ON |
| S5 (SOFT OFF) / M1 | LOW | HIGH | LOW | LOW | HIGH | ON | ON | ON | OFF | ON |
| S3 (Suspend to RAM) / M-OFF | LOW | HIGH | HIGH | HIGH | LOW | ON | OFF | ON | OFF | OFF |
| S4 (Suspend to DISK) / M-OFF | LOW | LOW | HIGH | LOW | LOW | ON | OFF | OFF | OFF | OFF |
| S5 (SOFT OFF) / M-OFF | LOW | LOW | LOW | LOW | LOW | ON | OFF | OFF | OFF | OFF |

PM TABLE

| State \ power plane | +15V_ALW +5V_ALW +3.3V_ALW_ICH +3.3V_RTC_LDO | +3.3V_SUS +1.8V_MEM | +5V_RUN +3.3V_RUN +1.8V_RUN +1.5V_RUN +0.9V_DDR_VTT +GPU_CORE +VCC_CORE +1.05V_VCCP +FBVDDQ | +3.3V_M +1.05V_M | +3.3V_M +1.05V_M (M-OFF) |
|----------------------|---|------------------------|---|---------------------|--------------------------------|
| S0 | ON | ON | ON | ON | ON |
| S3 | ON | ON | OFF | ON | OFF |
| S5 S4/AC | ON | OFF | OFF | ON | OFF |
| S5 S4/AC don't exist | OFF | OFF | OFF | OFF | OFF |

PCI TABLE

| PCI DEVICE | IDSEL | REQ#/GNT# | PIRQ |
|------------|-------|---------------|------------|
| R5C847 | AD17 | REQ#1 / GNT#1 | PIRQ[B..D] |

| ICH9-M | USB PORT# | DESTINATION |
|--------|-----------|-------------------------------|
| | 0 | JUSB1 (Ext Right Side Top) |
| | 1 | JUSB1 (Ext Right Side Bottom) |
| | 2 | JESA1 (Ext Left Side Top) |
| | 3 | JESA1 (Ext Left Side Bottom) |
| | 4 | WLAN |
| | 5 | WWAN |
| | 6 | WPAN |
| | 7 | Card Bus/Express card |
| | 8 | DOCKING |
| | 9 | DOCKING |
| | 10 | USH->BIO |
| 11 | Camera | |

| PCI EXPRESS | DESTINATION |
|-------------|--------------------|
| Lane 1 | MINI CARD-1 WWAN |
| Lane 2 | MINI CARD-2 WLAN |
| Lane 3 | MINI CARD-3 BT/UWB |
| Lane 4 | EXPRESS CARD |
| Lane 5 | None |
| Lane 6 | 10/100/1G LAN |



Refer to add-on


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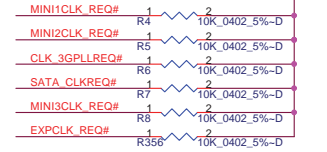
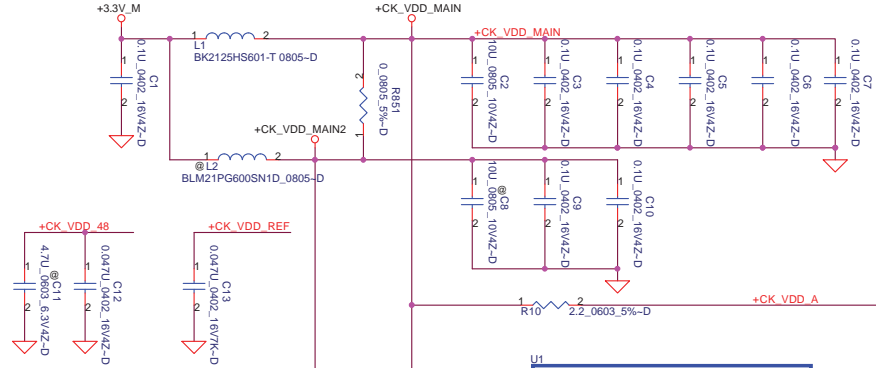
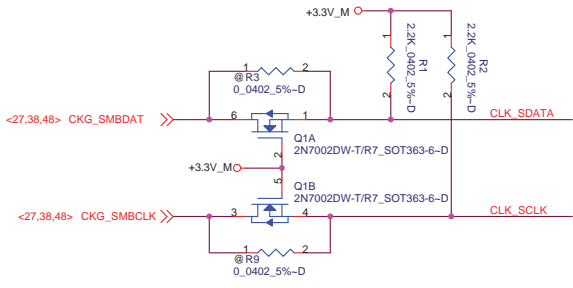
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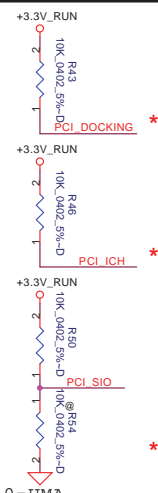
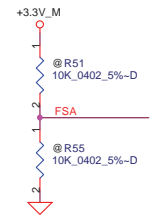
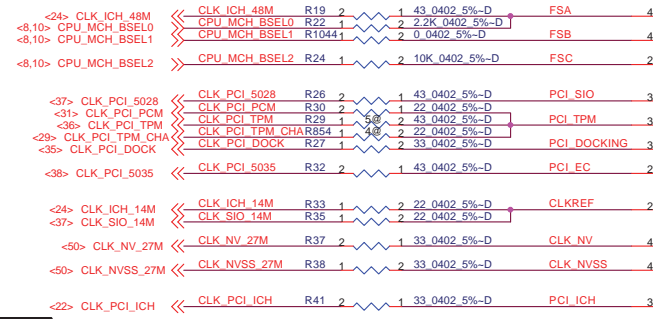
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| FSC | CLKSEL2 | FSB | CLKSEL1 | FSA | CLKSEL0 | CPU | MHz | SRC | MHz | PCI | MHz |
|-----|---------|-----|---------|-----|---------|------|-----|-----|-----|-----|-----|
| 0 | 0 | 0 | 0 | 266 | 100 | 33.3 | | | | | |
| 0 | 0 | 1 | 133 | 100 | 33.3 | | | | | | |
| 0 | 1 | 0 | 200 | 100 | 33.3 | | | | | | |
| 0 | 1 | 1 | 166 | 100 | 33.3 | | | | | | |
| 1 | 0 | 0 | 333 | 100 | 33.3 | | | | | | |
| 1 | 0 | 1 | 100 | 100 | 33.3 | | | | | | |
| 1 | 1 | 0 | 400 | 100 | 33.3 | | | | | | |

Place crystal within 500 mils of CK505

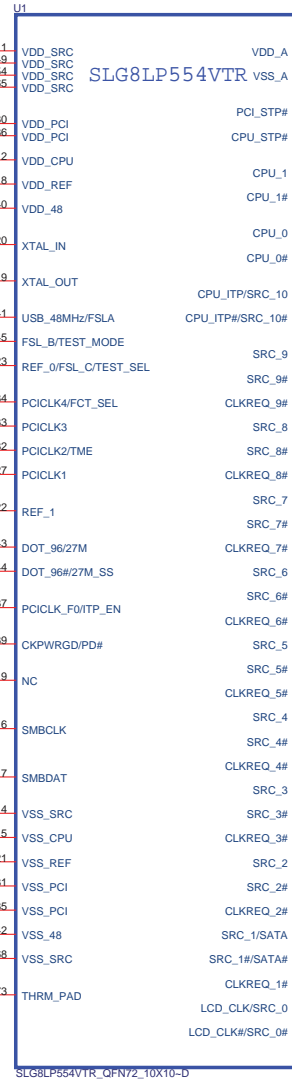


| TME | PIN 32 |
|-----|-----------------------|
| 0 | overclocking enabled |
| 1 | overclocking disabled |

| ITP_EN | PIN 37 |
|--------|--------------------|
| 0 | Pin 5/6 as SRC_10 |
| 1 | Pin 5/6 as CPU_ITP |

| FCTSEL1 | PIN43 | PIN44 | PIN47 | PIN48 |
|---------|---------|-----------|-----------|-----------|
| 0=UMA | DOT96T | DOT96C | 96/100M_T | 96/100M_C |
| 1=DIS | 27M_out | 27M SSout | SRCT0 | SRCC0 |

0=UMA
1=Disc. GRFX down



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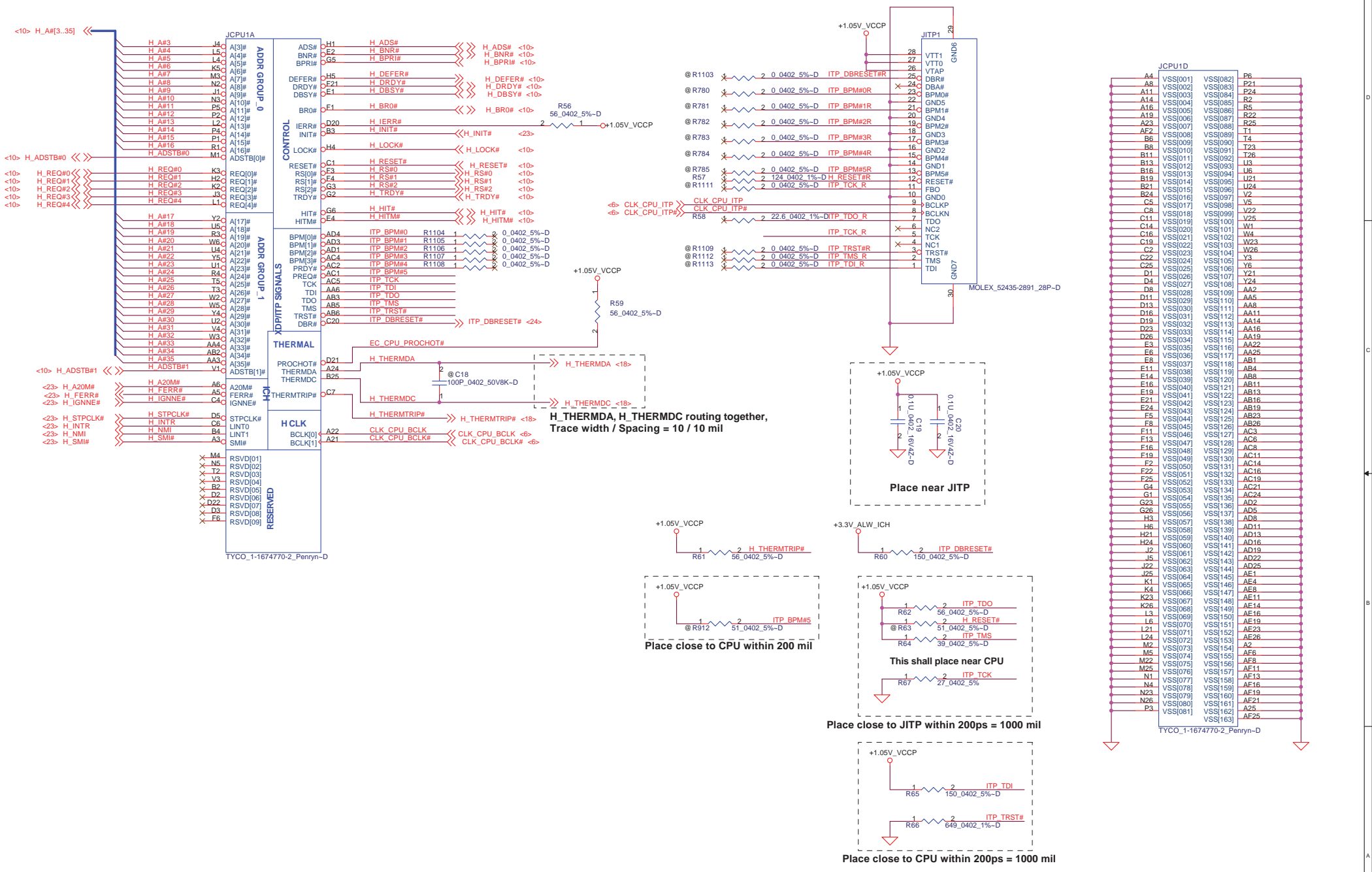
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Clock Generator

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H_THERMDA, H_THERMDC routing together, Trace width / Spacing = 10 / 10 mil

Place near J1TP

Place close to CPU within 200 mil

This shall place near CPU

Place close to J1TP within 200ps = 1000 mil

Place close to CPU within 200ps = 1000 mil

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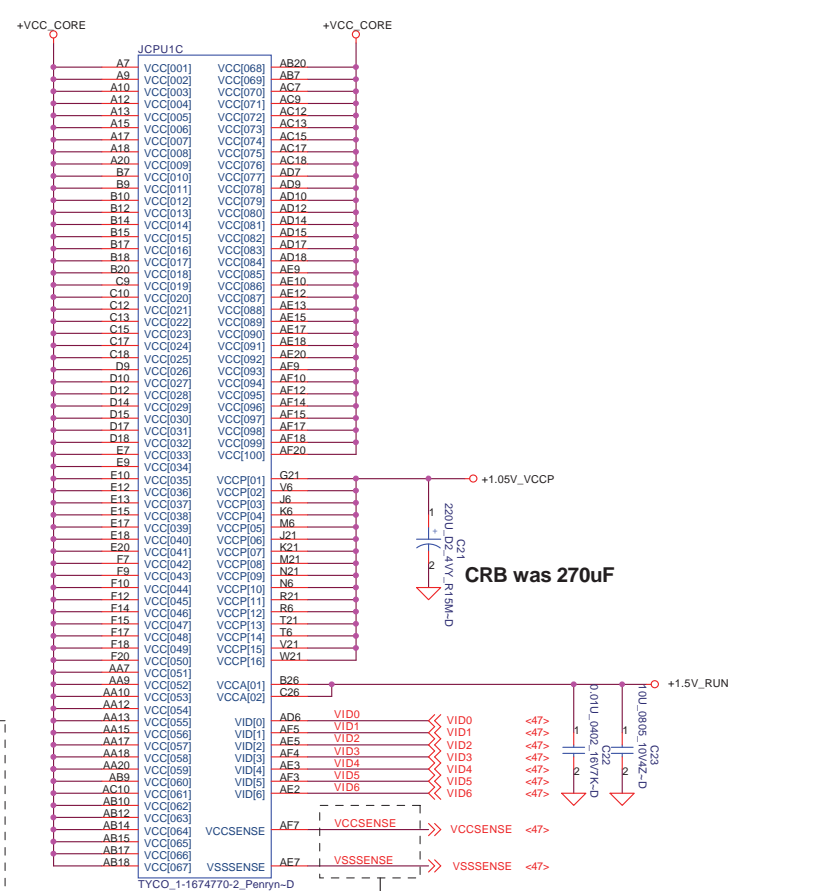
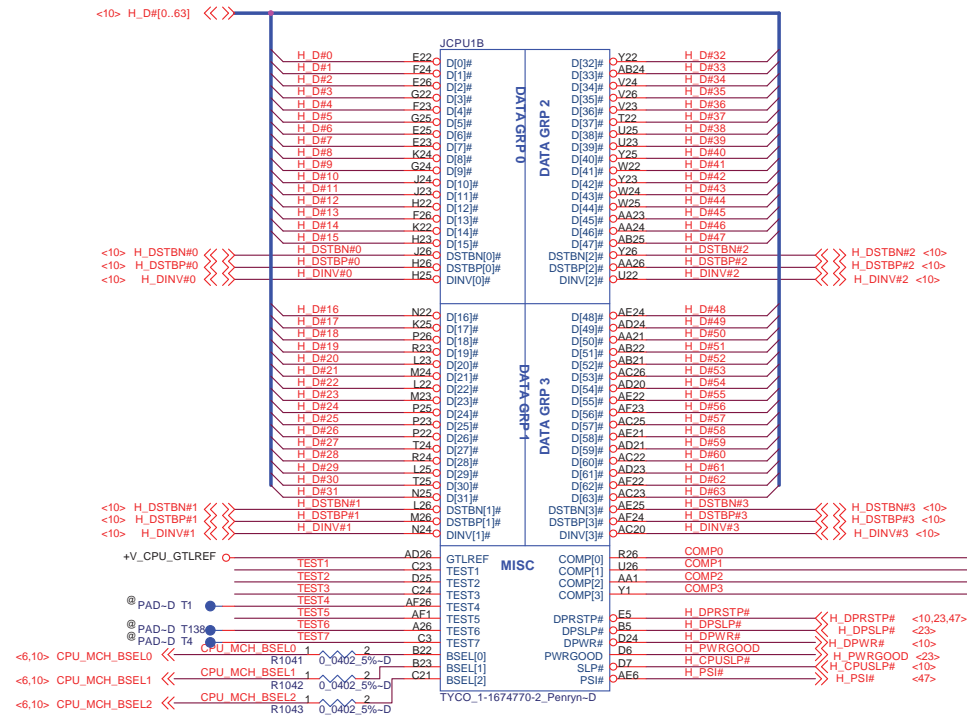
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| | | | | | |
|----------|-----------------|-----|-----------------------|-------------------------|---------------|
| Title | | | Penryn Processor(1/2) | | |
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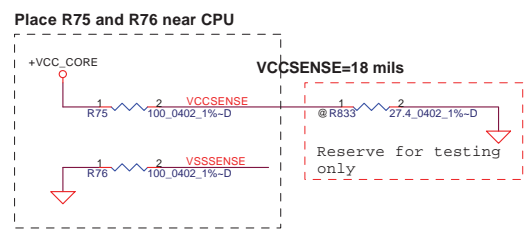
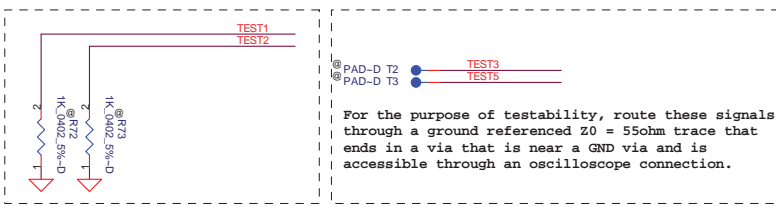




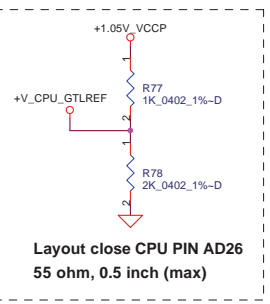
Resistor placed within 0.5" of CPU pin. Trace should be at least 25 mils away from any other toggling signal. COMP0, COMP2 trace should be 27.4 ohm. COMP1, COMP3 should be 55 ohm.

CRB was 270uF

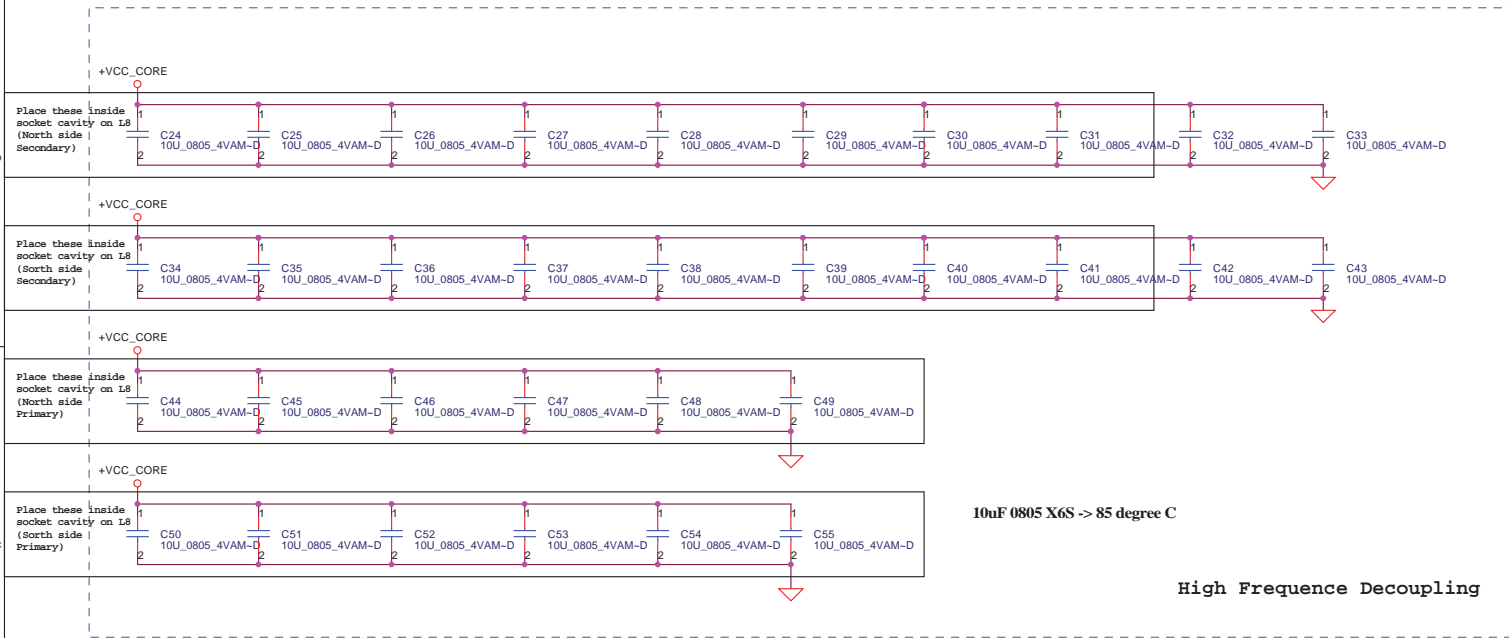
Length match within 25 mils, Z0=27.4 ohm



| FSB | BCLK | BSEL2 | BSEL1 | BSEL0 |
|------|------|-------|-------|-------|
| 533 | 133 | 0 | 0 | 1 |
| 667 | 166 | 0 | 1 | 1 |
| 800 | 200 | 0 | 1 | 0 |
| 1067 | 266 | 0 | 0 | 0 |



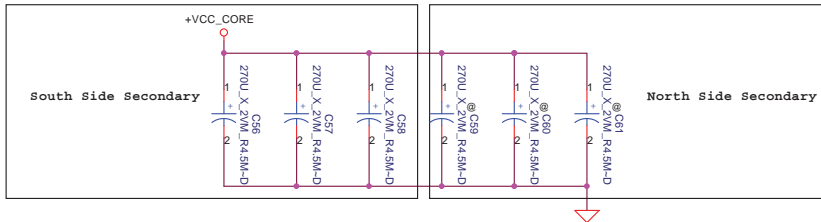
Route VCCSENSE and VSSSENSE trace at 27.4 ohms, 7 mils spacing and R75 & R76 keep to pad max 1 inch



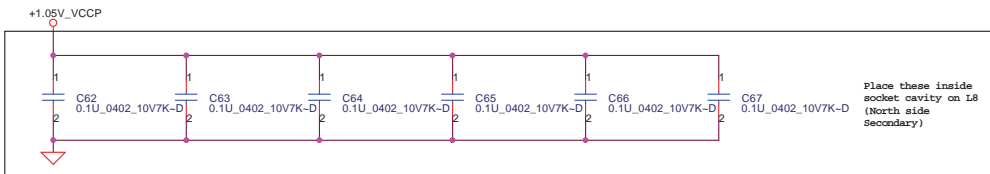
10uF 0805 X6S -> 85 degree C

High Frequency Decoupling

Near VCORE regulator.



ESR <= 1.5m ohm
Capacitor > 1320uF



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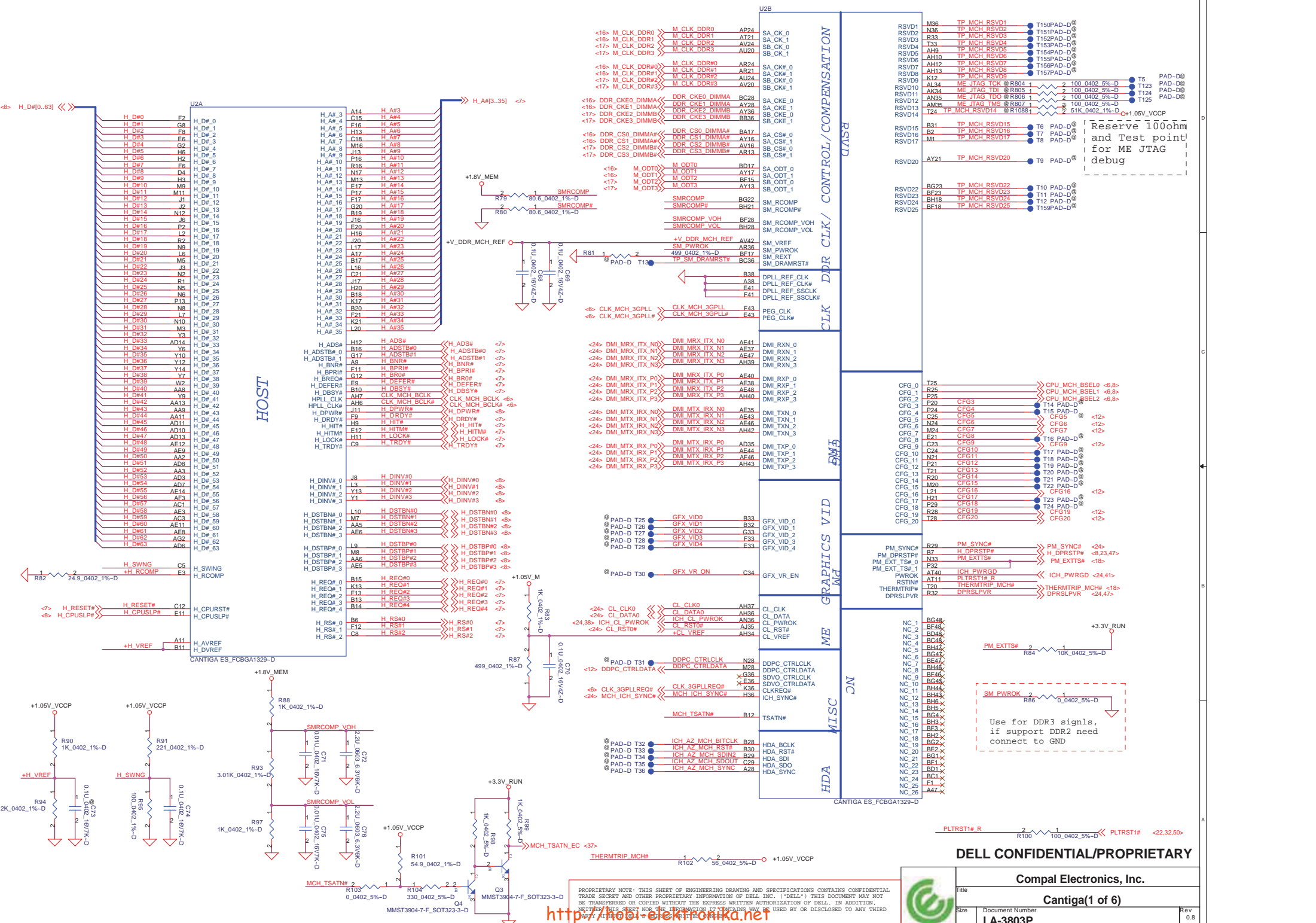
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| CPU Bypass | | |
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Reserve 100ohm
and Test point
for ME JTAG
debug

Use for DDR3 signals,
if support DDR2 need
connect to GND

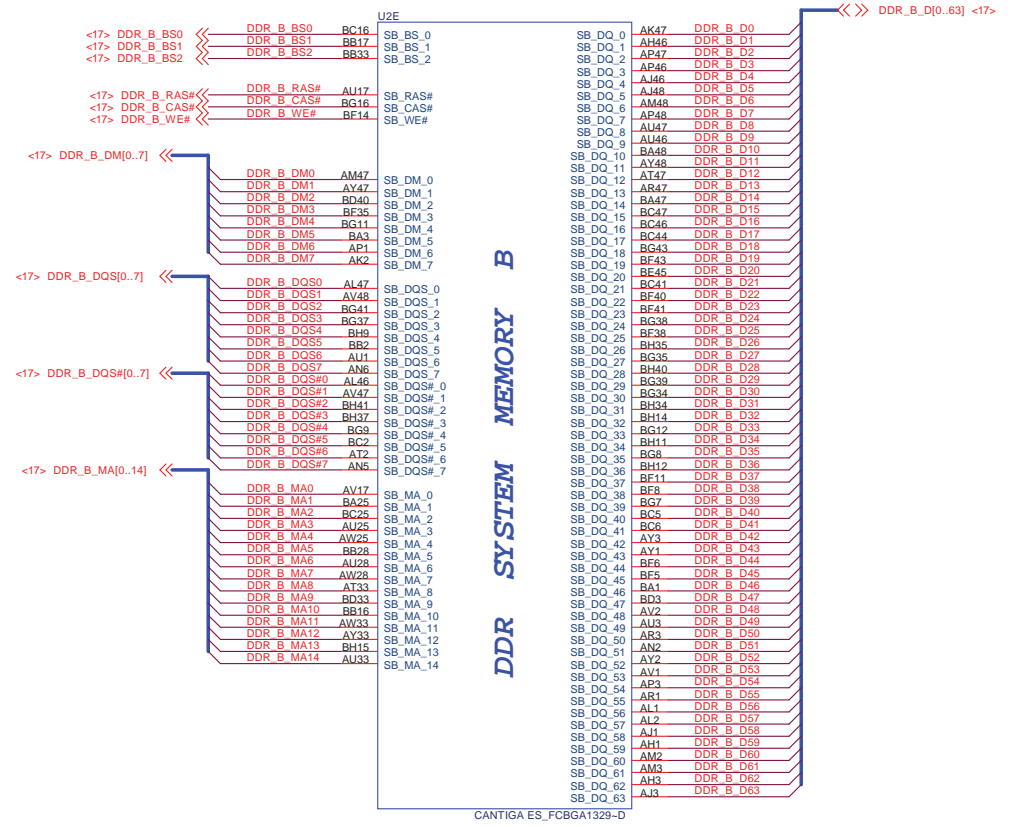
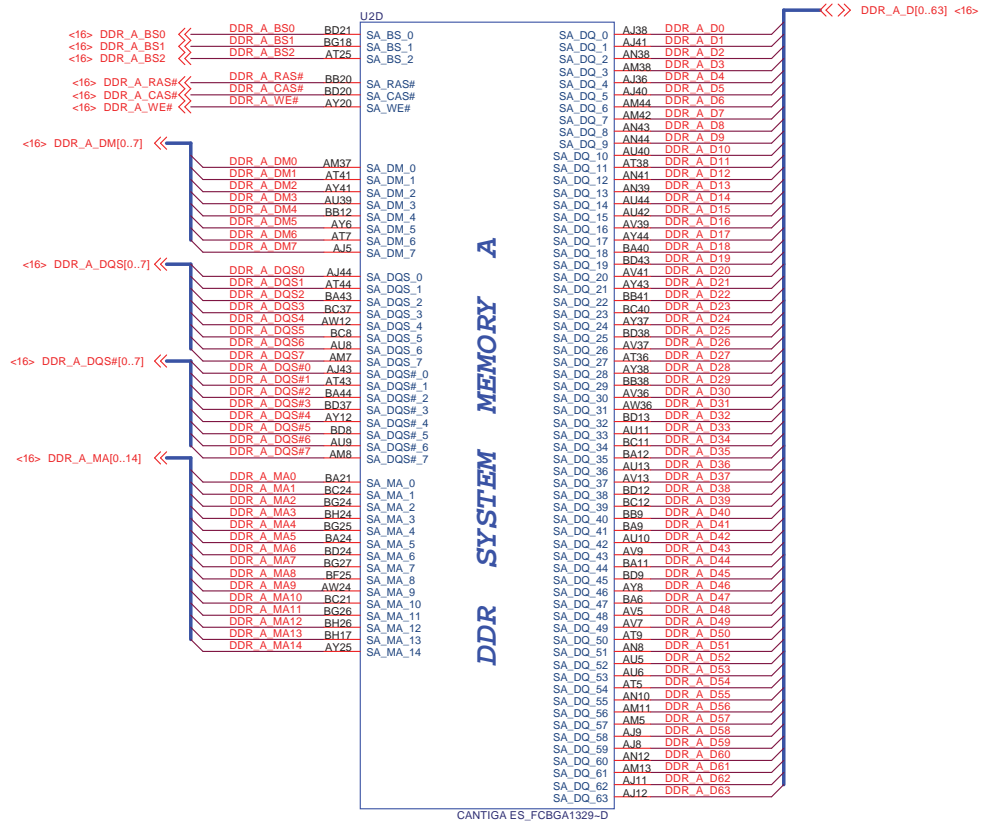
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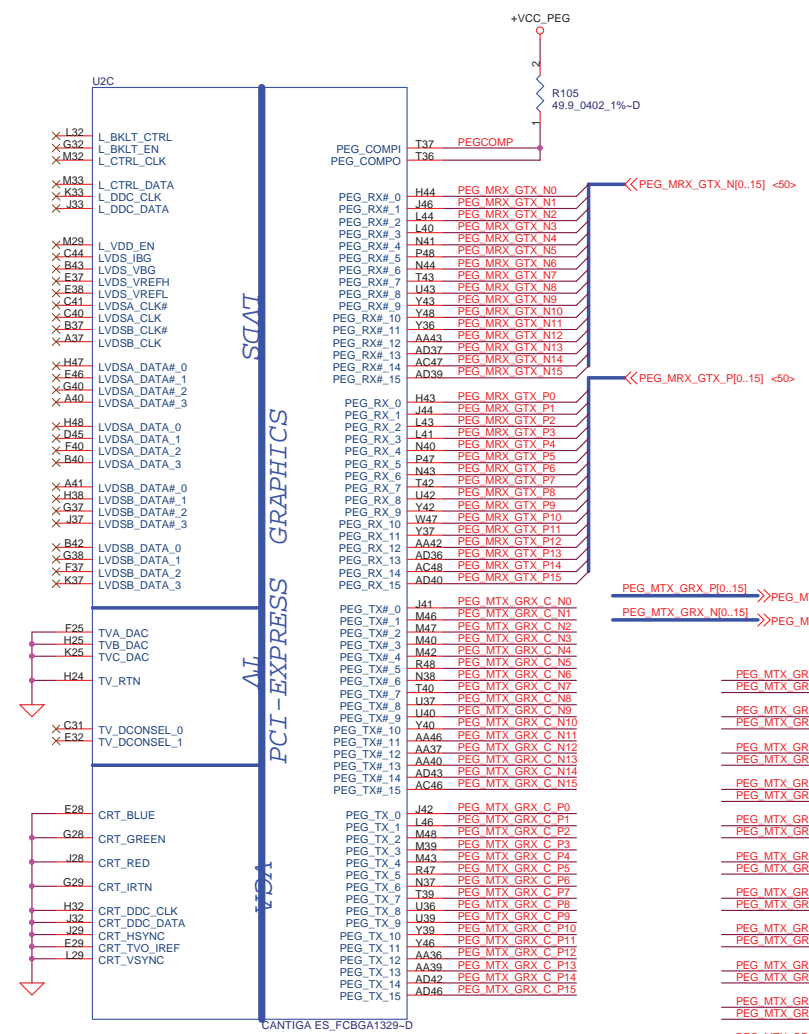
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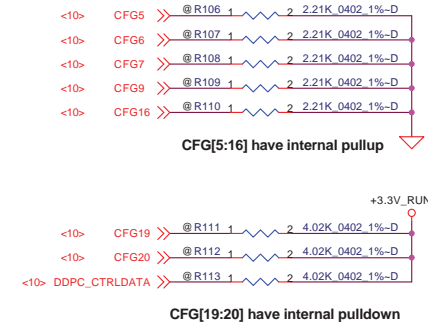
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Strap Pin Table

| | | |
|----------------|---|--|
| CFG5 | DMI X2 Select | Low = DMI x 2 High = DMI x 4 (Default) |
| CFG6 | iTPM Host Interface | Low = iTPM enable High = iTPM disable(Default) |
| CFG7 | Management Engine Crypto Strap | Low = TLS cipher suite with no confidentiality High = TLS cipher suite with confidentiality(Default) |
| CFG9 | PCI Express Graphic Lane | Low = Reverse Lane High = Normal Operation(Default) |
| CFG16 | FSB Dynamic ODT | Low=Dynamic ODT Disable High=Dynamic ODT Enable(default) |
| CFG19 | DMI Lane Reversal | Low=Normal (default) High=Lane Reversed |
| CFG20 | Digital Display Port Concurrent Operation | Low=Only digital display port (SDVO/DP/HDMI) or PCIe is operational (default) High = Digital display port (SDVO/DP/HDMI) and PCIe are operating simultaneously via the PEG port |
| SDVO_CTRL_DATA | | Low=No SDVO Device Present (default) High=SDVO Device Present |
| DDPC_CTRLDATA | | Low=DisplayPort disabled (default) High=DisplayPort device present |

| | | |
|---------------------|------------------------------|-----------------|
| PEG_MTX_GRX_P0_15] | >>PEG_MTX_GRX_P[0..15] <<50> | |
| PEG_MTX_GRX_N0..15] | >>PEG_MTX_GRX_N[0..15] <<50> | |
| PEG_MTX_GRX_C P0 | C77 2 1 0.1U 0402 10V7K-D | PEG_MTX_GRX_P0 |
| PEG_MTX_GRX_C N0 | C78 2 1 0.1U 0402 10V7K-D | PEG_MTX_GRX_N0 |
| PEG_MTX_GRX_C P1 | C79 2 1 0.1U 0402 10V7K-D | PEG_MTX_GRX_P1 |
| PEG_MTX_GRX_C N1 | C80 2 1 0.1U 0402 10V7K-D | PEG_MTX_GRX_N1 |
| PEG_MTX_GRX_C P2 | C81 2 1 0.1U 0402 10V7K-D | PEG_MTX_GRX_P2 |
| PEG_MTX_GRX_C N2 | C82 2 1 0.1U 0402 10V7K-D | PEG_MTX_GRX_N2 |
| PEG_MTX_GRX_C P3 | C83 2 1 0.1U 0402 10V7K-D | PEG_MTX_GRX_P3 |
| PEG_MTX_GRX_C N3 | C84 2 1 0.1U 0402 10V7K-D | PEG_MTX_GRX_N3 |
| PEG_MTX_GRX_C P4 | C85 2 1 0.1U 0402 10V7K-D | PEG_MTX_GRX_P4 |
| PEG_MTX_GRX_C N4 | C86 2 1 0.1U 0402 10V7K-D | PEG_MTX_GRX_N4 |
| PEG_MTX_GRX_C P5 | C87 2 1 0.1U 0402 10V7K-D | PEG_MTX_GRX_P5 |
| PEG_MTX_GRX_C N5 | C88 2 1 0.1U 0402 10V7K-D | PEG_MTX_GRX_N5 |
| PEG_MTX_GRX_C P6 | C89 2 1 0.1U 0402 10V7K-D | PEG_MTX_GRX_P6 |
| PEG_MTX_GRX_C N6 | C90 2 1 0.1U 0402 10V7K-D | PEG_MTX_GRX_N6 |
| PEG_MTX_GRX_C P7 | C91 2 1 0.1U 0402 10V7K-D | PEG_MTX_GRX_P7 |
| PEG_MTX_GRX_C N7 | C92 2 1 0.1U 0402 10V7K-D | PEG_MTX_GRX_N7 |
| PEG_MTX_GRX_C P8 | C93 1 2 0.1U 0402 10V7K-D | PEG_MTX_GRX_P8 |
| PEG_MTX_GRX_C N8 | C94 1 2 0.1U 0402 10V7K-D | PEG_MTX_GRX_N8 |
| PEG_MTX_GRX_C P9 | C95 1 2 0.1U 0402 10V7K-D | PEG_MTX_GRX_P9 |
| PEG_MTX_GRX_C N9 | C96 1 2 0.1U 0402 10V7K-D | PEG_MTX_GRX_N9 |
| PEG_MTX_GRX_C P10 | C97 1 2 0.1U 0402 10V7K-D | PEG_MTX_GRX_P10 |
| PEG_MTX_GRX_C N10 | C98 1 2 0.1U 0402 10V7K-D | PEG_MTX_GRX_N10 |
| PEG_MTX_GRX_C P11 | C99 1 2 0.1U 0402 10V7K-D | PEG_MTX_GRX_P11 |
| PEG_MTX_GRX_C N11 | C100 1 2 0.1U 0402 10V7K-D | PEG_MTX_GRX_N11 |
| PEG_MTX_GRX_C P12 | C101 1 2 0.1U 0402 10V7K-D | PEG_MTX_GRX_P12 |
| PEG_MTX_GRX_C N12 | C102 1 2 0.1U 0402 10V7K-D | PEG_MTX_GRX_N12 |
| PEG_MTX_GRX_C P13 | C103 1 2 0.1U 0402 10V7K-D | PEG_MTX_GRX_P13 |
| PEG_MTX_GRX_C N13 | C104 1 2 0.1U 0402 10V7K-D | PEG_MTX_GRX_N13 |
| PEG_MTX_GRX_C P14 | C105 1 2 0.1U 0402 10V7K-D | PEG_MTX_GRX_P14 |
| PEG_MTX_GRX_C N14 | C106 1 2 0.1U 0402 10V7K-D | PEG_MTX_GRX_N14 |
| PEG_MTX_GRX_C P15 | C107 1 2 0.1U 0402 10V7K-D | PEG_MTX_GRX_P15 |
| PEG_MTX_GRX_C N15 | C108 1 2 0.1U 0402 10V7K-D | PEG_MTX_GRX_N15 |



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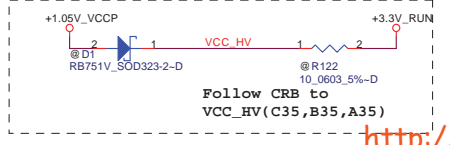
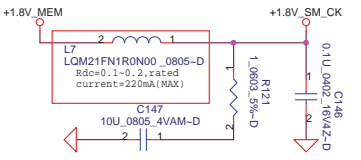
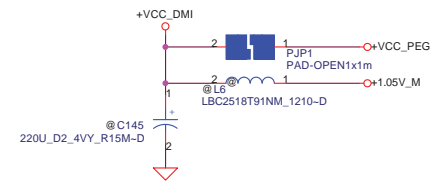
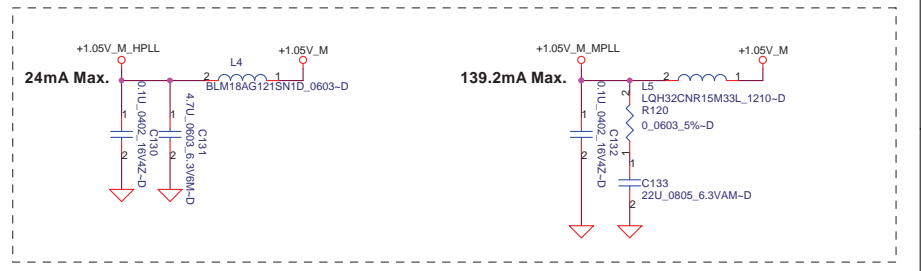
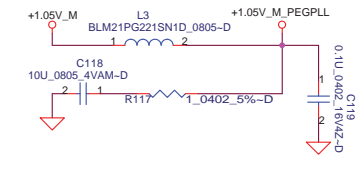
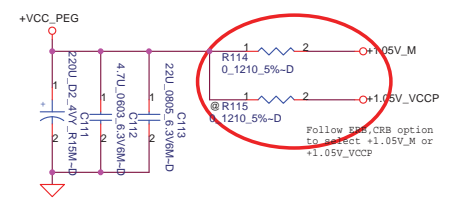
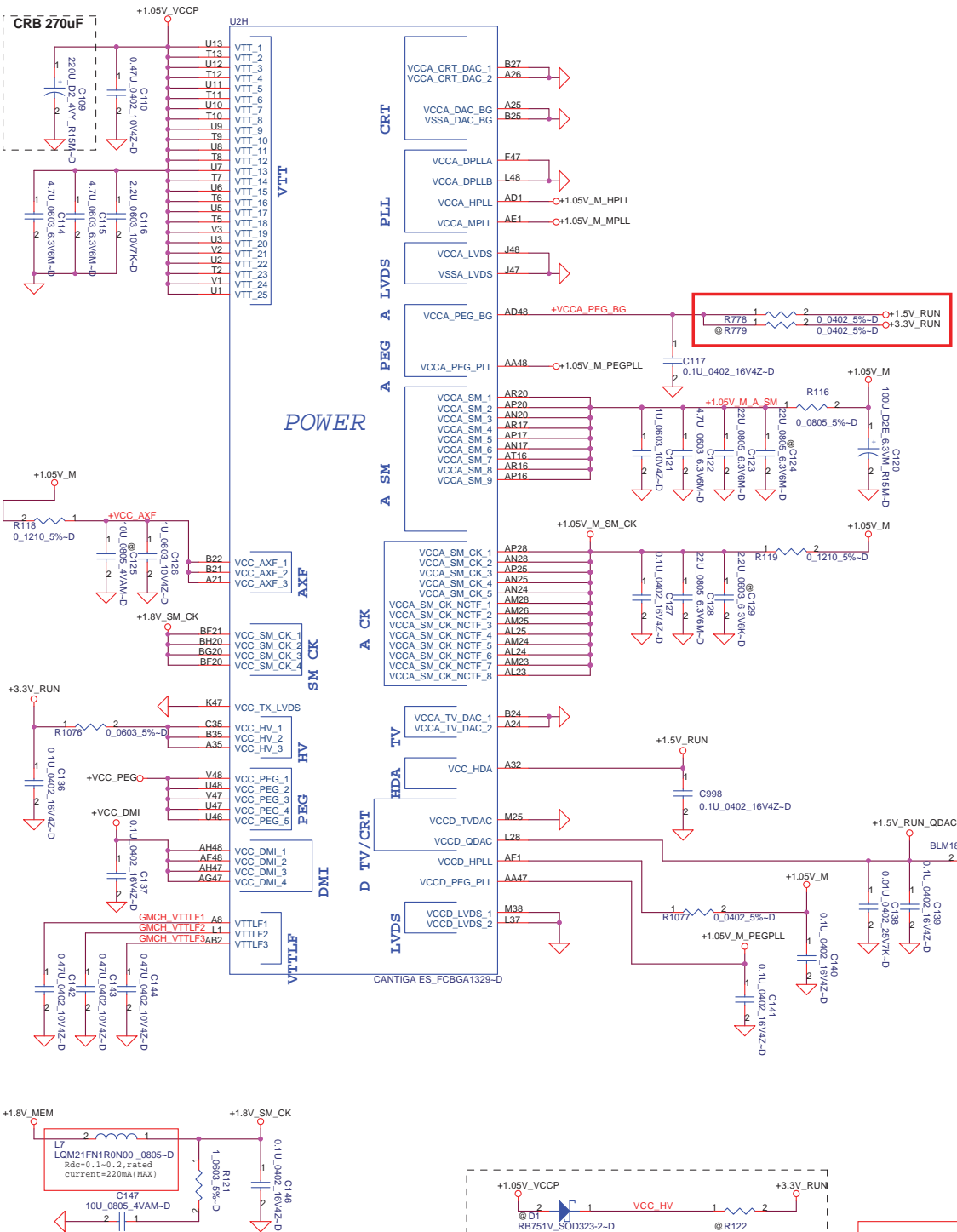


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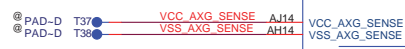
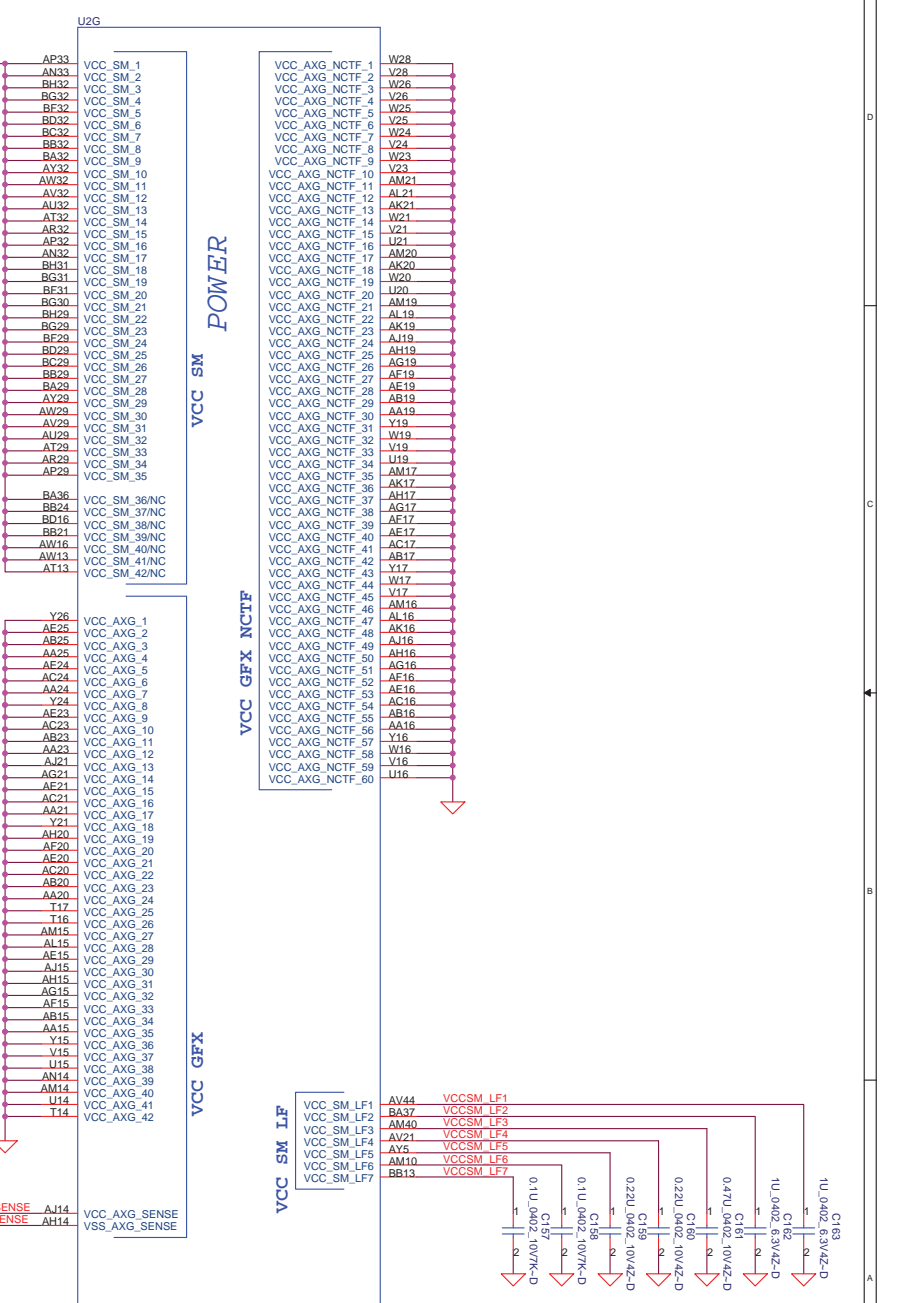
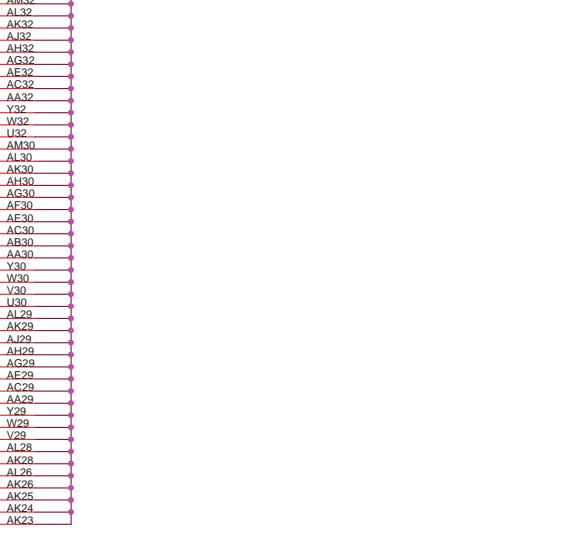
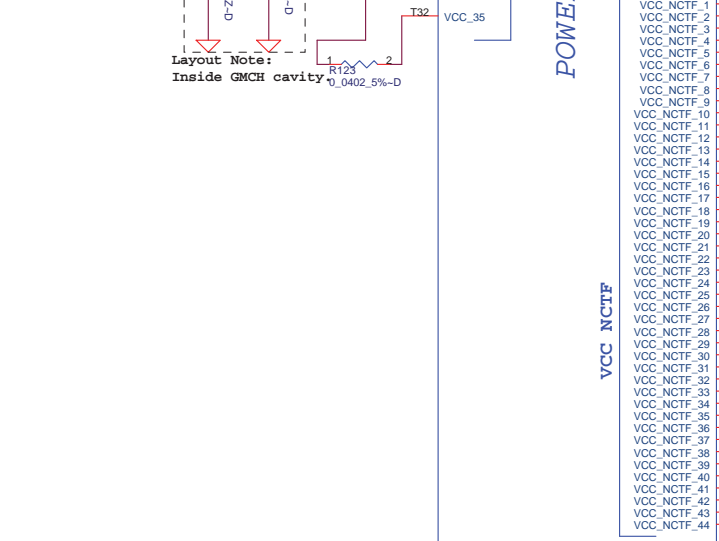
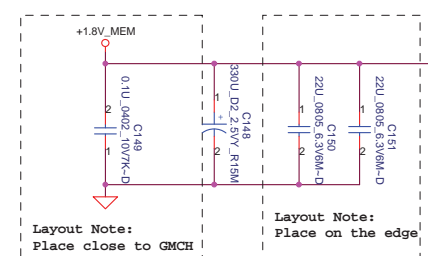
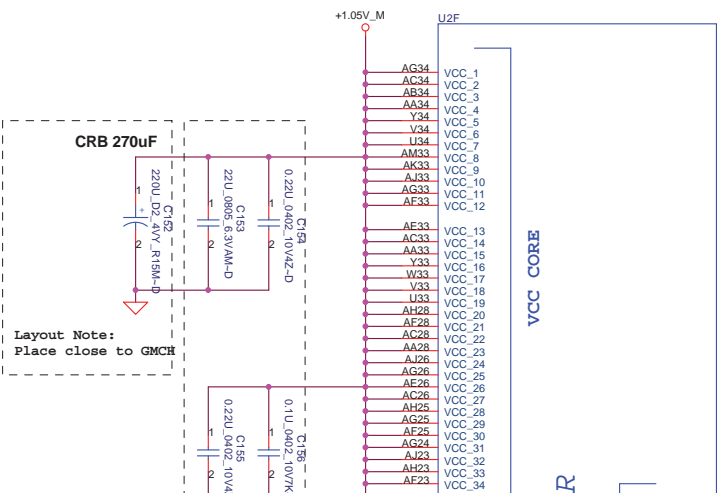
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| File | Cantiga(3 of 6) | | |
| Size | Document Number | Rev | 0.8 |
| | LA-3803P | | |
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| Cantiga(4 of 6) | | | |
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CANTIGA ES_FCBGA1329-D

CANTIGA ES_FCBGA1329-D

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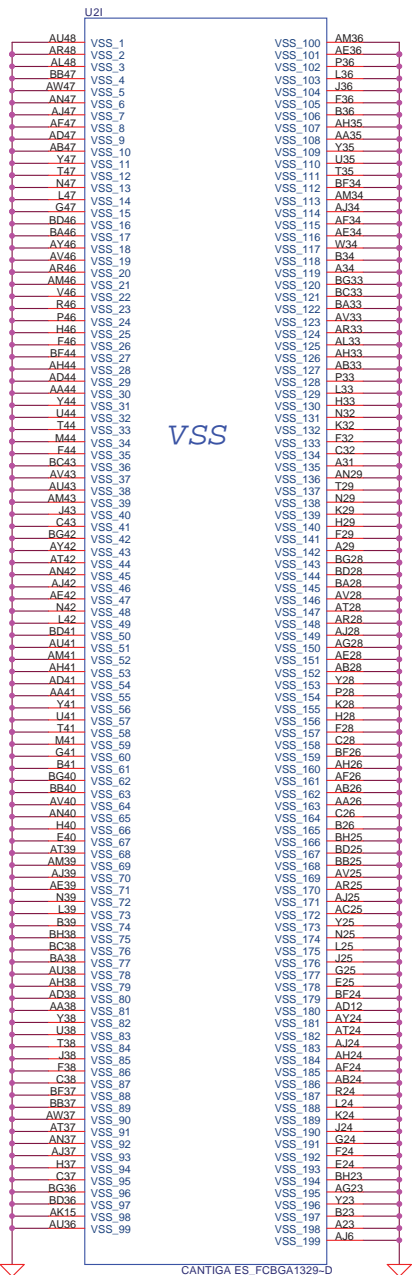
Compal Electronics, Inc.

Cantiga(5 of 6)

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| Size | Document Number | Rev |
| | LA-3803P | 0.8 |
| Date: | Thursday, June 12, 2008 | Sheet 14 of 71 |

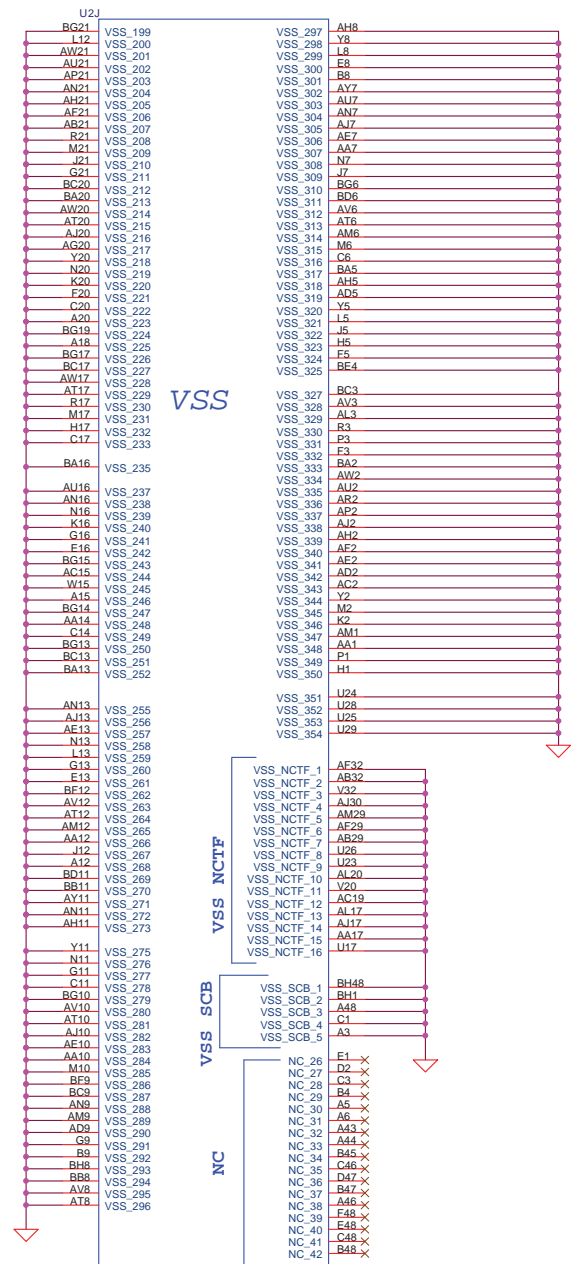
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VSS

CANTIGA ES_FCBGA1329-D



VSS

VSS NCTF

VSS SCB

NC

CANTIGA ES_FCBGA1329-D



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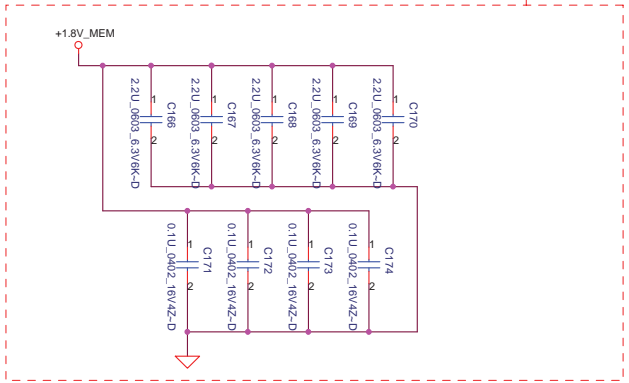
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| Size | Document Number | Rev | |
| | LA-3803P | 0.8 | |
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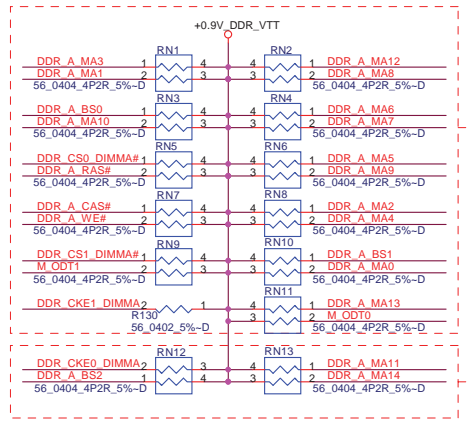
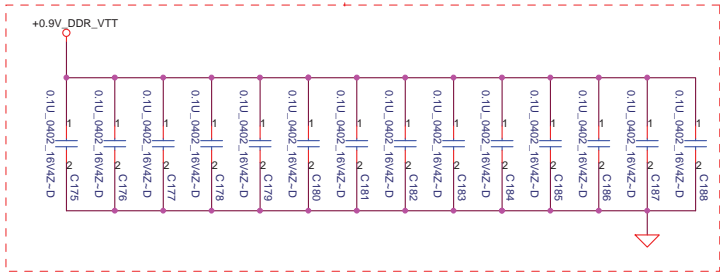
<http://hobi-elektronika.net>

<11> DDR_A_DQS#[0..7] <<>>
 <11> DDR_A_D[0..63] <<>>
 <11> DDR_A_DM[0..7] <<>>
 <11> DDR_A_DQS#[0..7K] <<>>
 <11> DDR_A_MA#[0..14] <<>>

Layout Note:
Place near JDIMMA

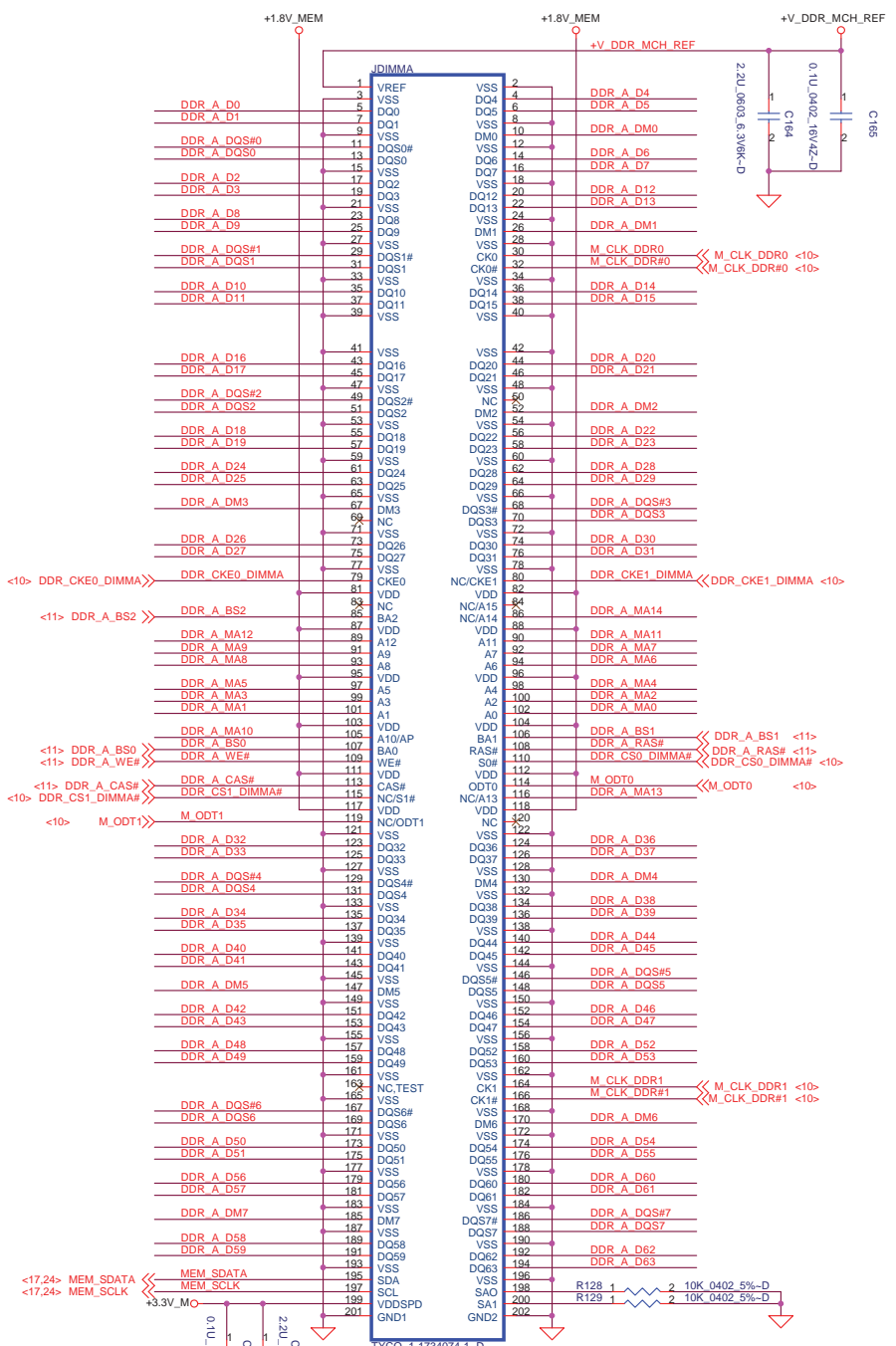


Layout Note:
Place one cap close to every 2 pullup resistors terminated to +0.9V_DDR_VTT



Layout Note:
Place these resistor closely DIMMA, all trace length < 750 mil

Layout Note:
Place these resistor closely DIMMA, all trace length Max=1.3"



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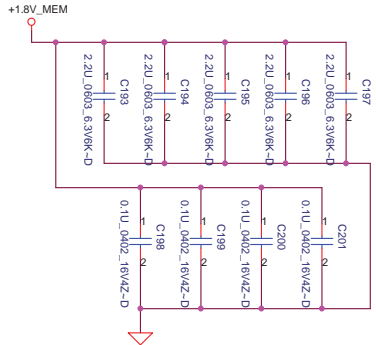
DDR11-SODIMM SLOT1

LA-3803P

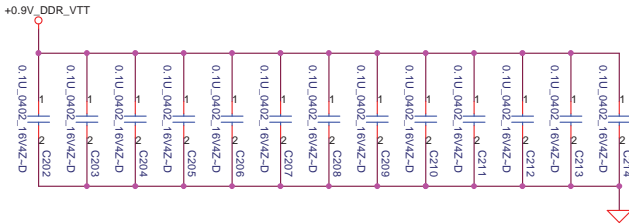
Date: Thursday, June 12, 2008 Sheet 16 of 71

- <11> DDR_B_DQS#[0..7] <<>>
- <11> DDR_B_DQ[0..63] <<>>
- <11> DDR_B_DM[0..7] <<>>
- <11> DDR_B_DQS[0..7K] <<>>
- <11> DDR_B_MA[0..14] <<>>

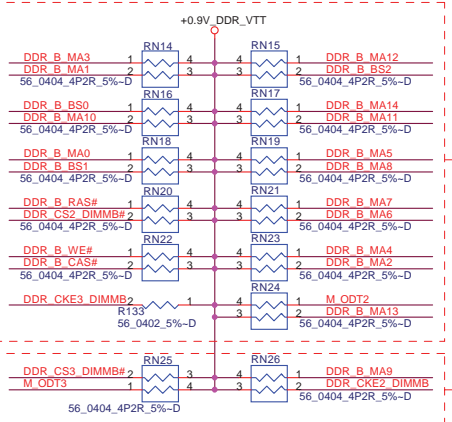
Layout Note:
Place near JDIMMB



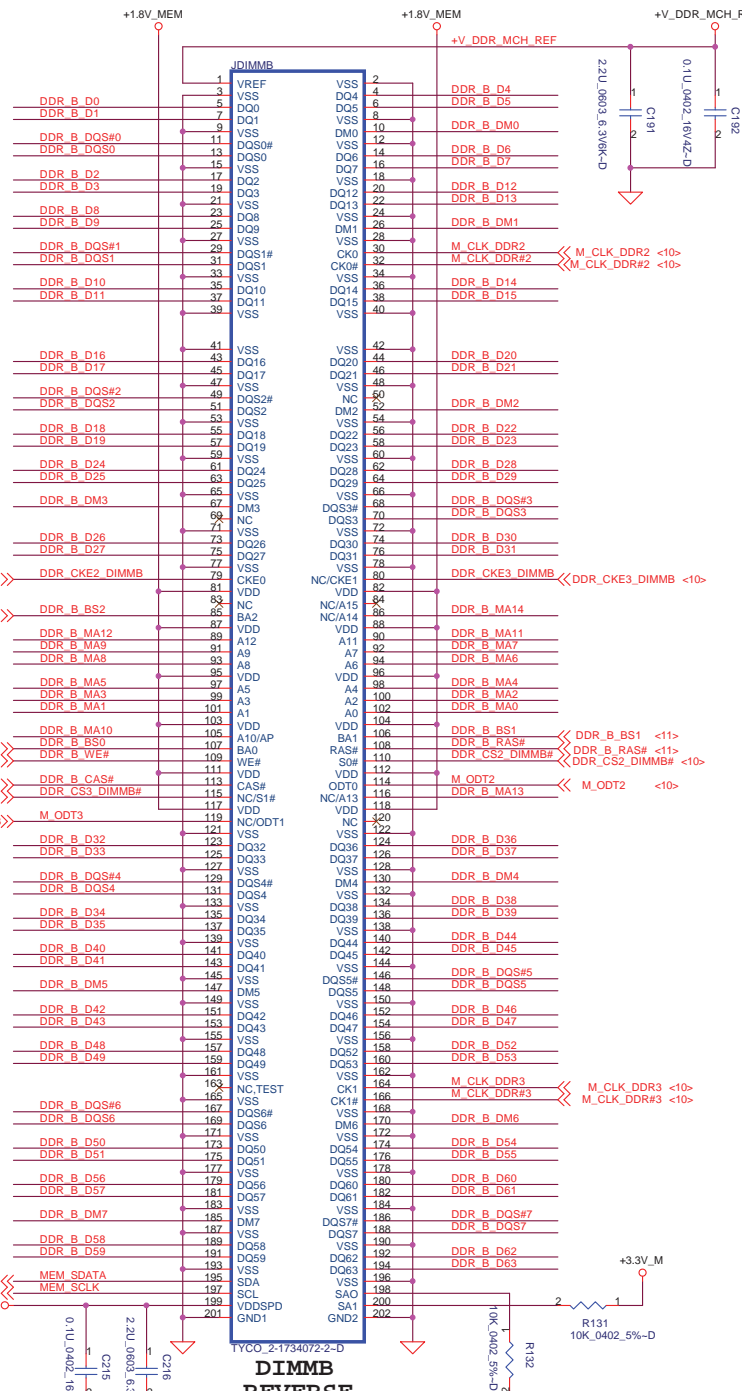
Layout Note:
Place one cap close to every 2 pullup resistors terminated to +0.9V_DDR_VTT



Layout Note:
Place these resistor closely DIMMB, all trace length <750 mil



Layout Note:
Place these resistor closely DIMMB, all trace length Max=1.3"



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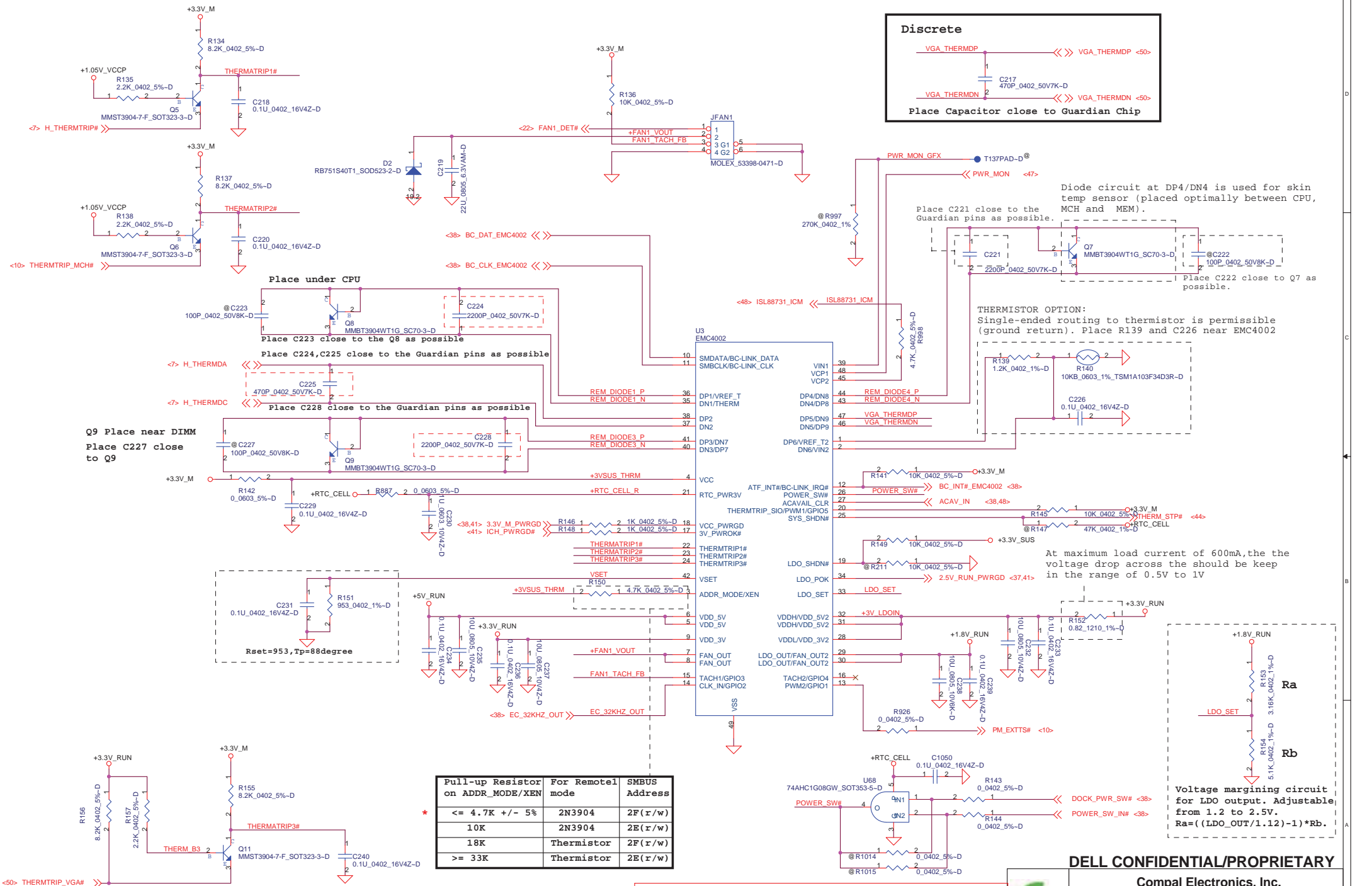
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| File | | | |
| DDRRI-SODIMM SLOT2 | | | |
| Size Document Number | | | |
| LA-3803P | | | |
| Date: Thursday, June 12, 2008 | | | |
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Rev 0.8



Discrete

VGA_THERMDP <<> VGA_THERMDP <50>

VGA_THERMDN <<> VGA_THERMDN <50>

Place Capacitor close to Guardian Chip

Diode circuit at DP4/DN4 is used for skin temp sensor (placed optimally between CPU, MCH and MEM).

Place C221 close to the Guardian pins as possible.

Place C222 close to Q7 as possible.

THERMISTOR OPTION:
Single-ended routing to thermistor is permissible (ground return). Place R139 and C226 near EMC4002

At maximum load current of 600mA, the voltage drop across the should be keep in the range of 0.5V to 1V

Voltage margining circuit for LDO output. Adjustable from 1.2 to 2.5V.
 $R_a = ((LDO_OUT/1.12)-1)*R_b.$

| Pull-up Resistor on ADDR_MODE/XEN | For Remotel mode | SMBUS Address |
|-----------------------------------|------------------|---------------|
| <= 4.7K +/- 5% | 2N3904 | 2F (r/w) |
| 10K | 2N3904 | 2E (r/w) |
| 18K | Thermistor | 2F (r/w) |
| >= 33K | Thermistor | 2E (r/w) |

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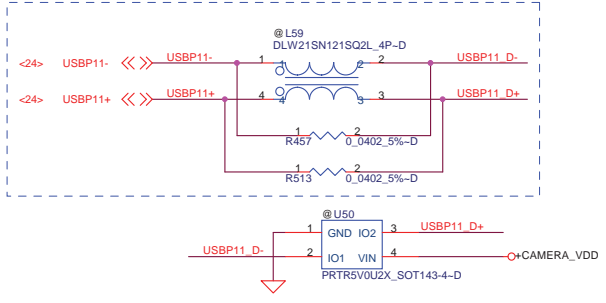
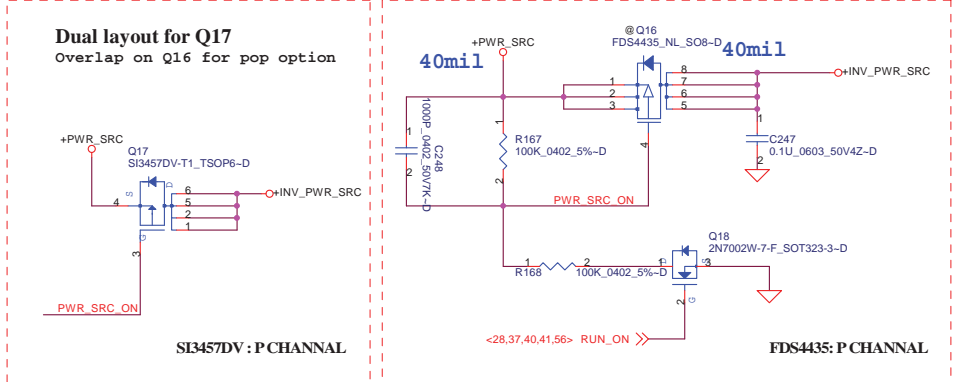
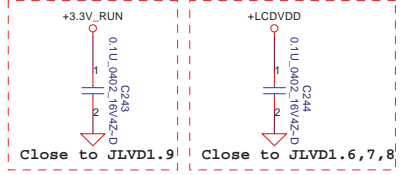
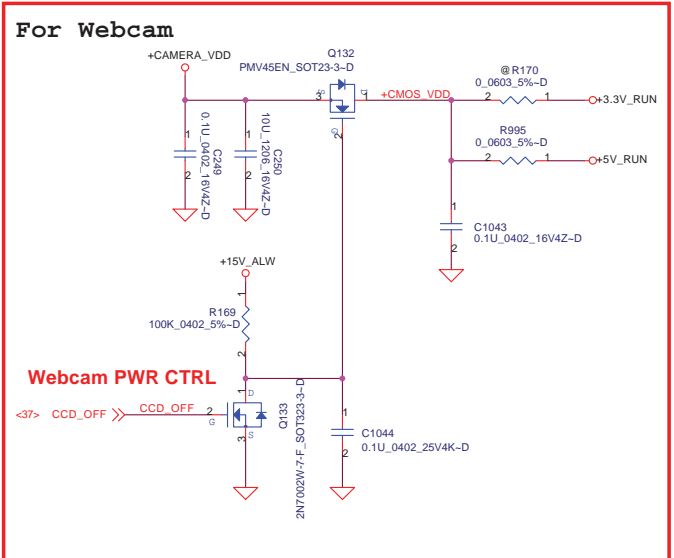
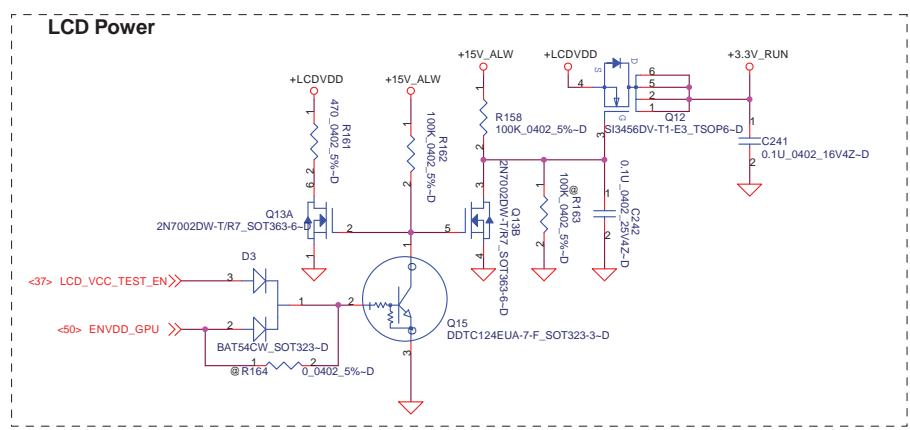
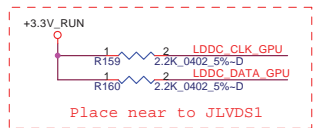
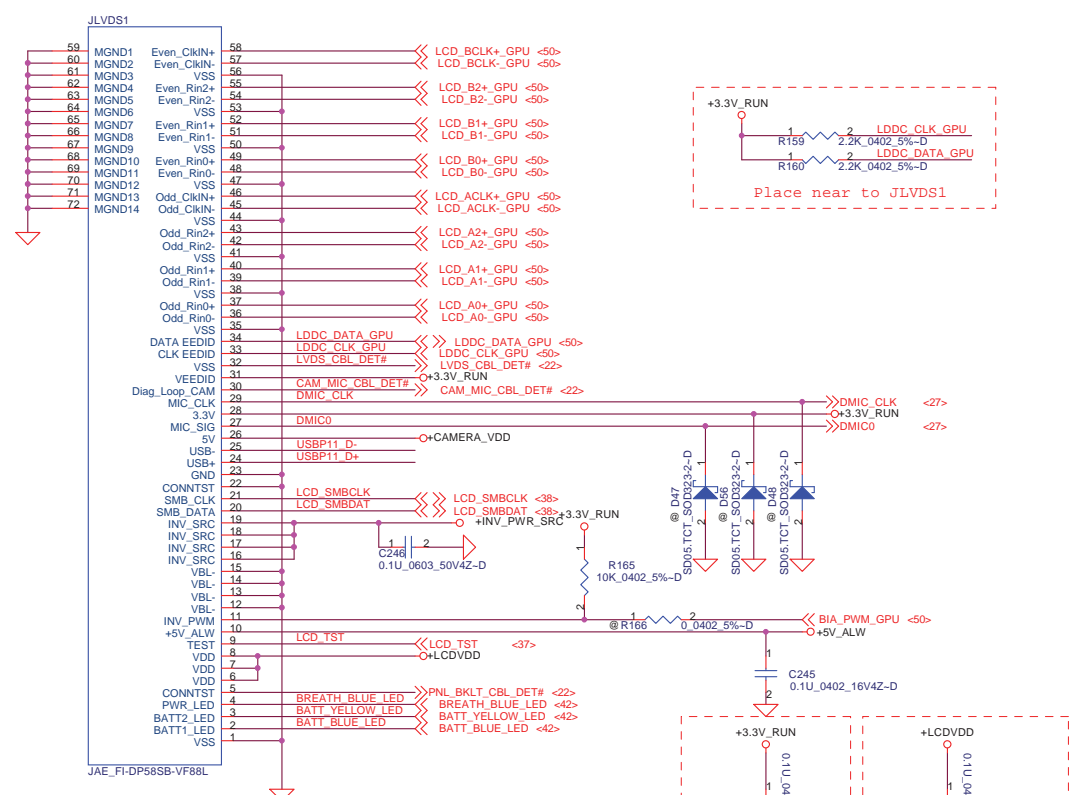
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| | | |
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| Title | | |
| FAN & Thermal Sensor | | |
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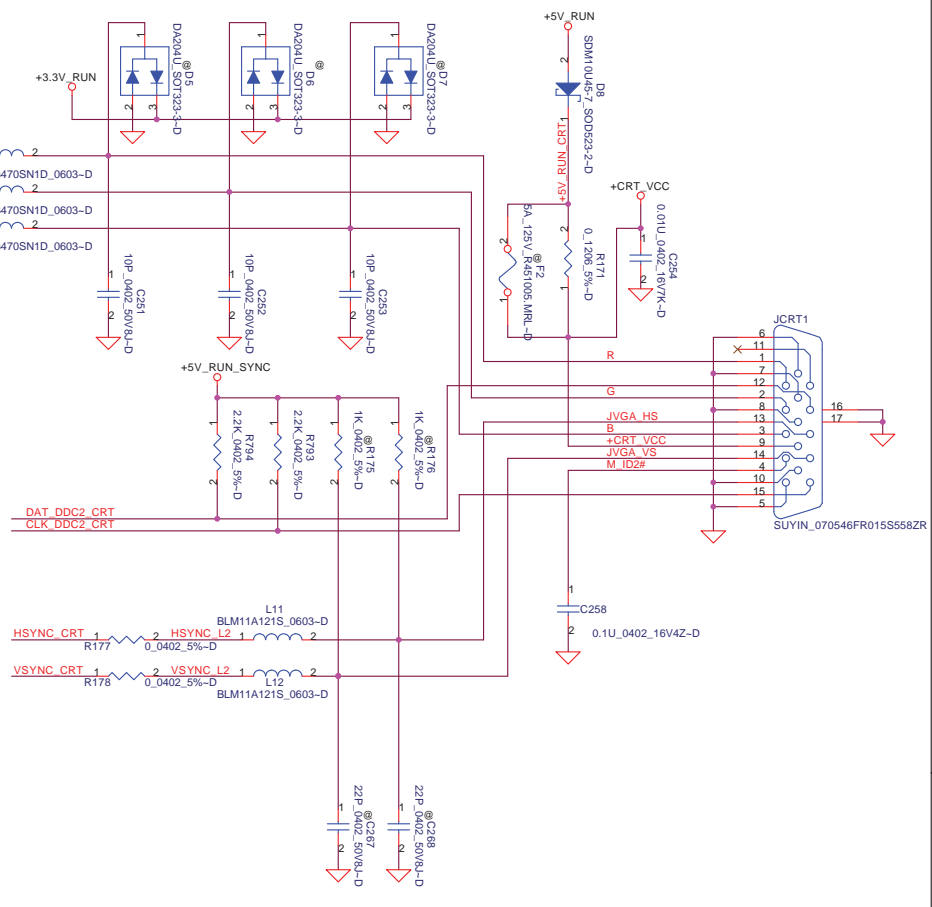
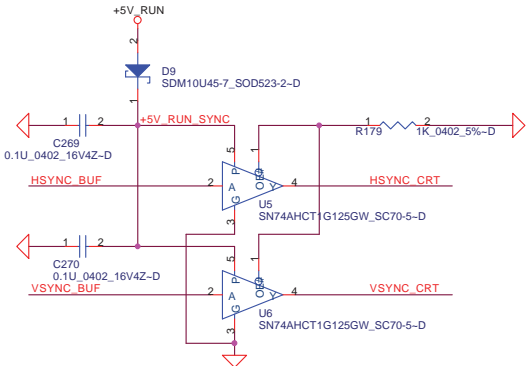
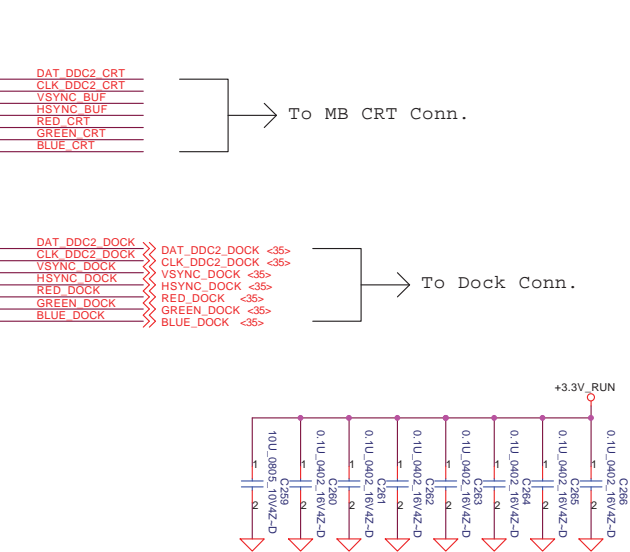
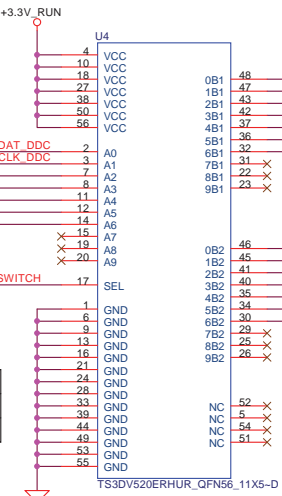
Compal Electronics, Inc.

LVDS Conn

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| SEL | CRT | TV |
|-----|---------|-----|
| 0 | MB | LIO |
| 1 | APR/SPR | NA |



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| | |
|--------------------------|-------------------------|
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| CRT/video switch | |
| Title | LA-3803P |
| Size | Document Number |
| Date | Thursday, June 12, 2008 |
| Sheet | 20 of 71 |
| Rev | 0.8 |

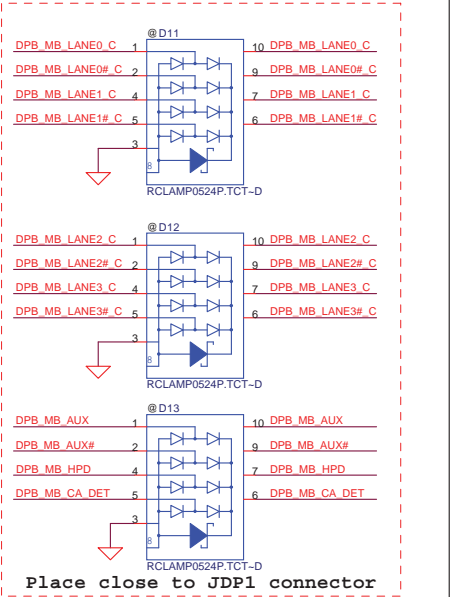
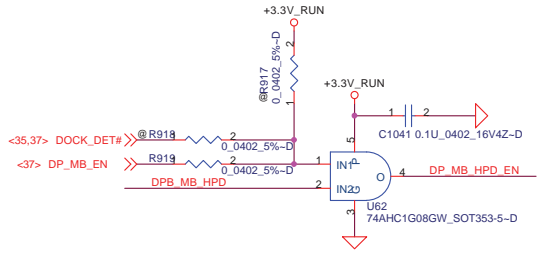
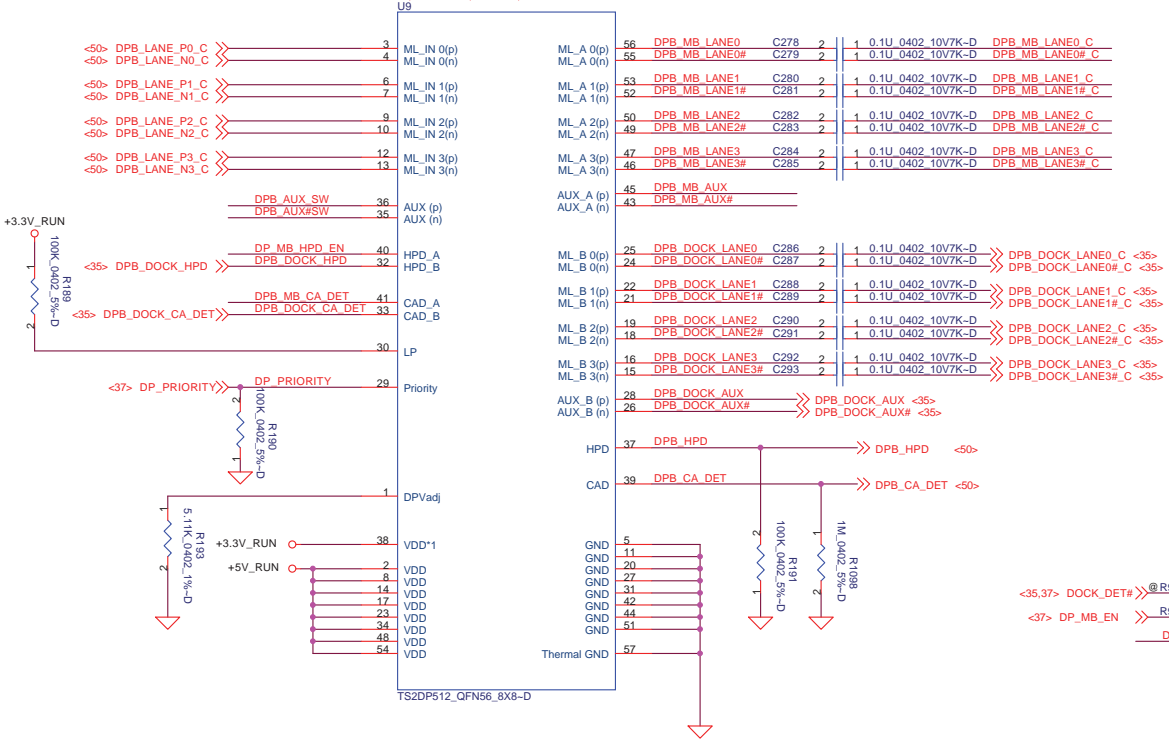
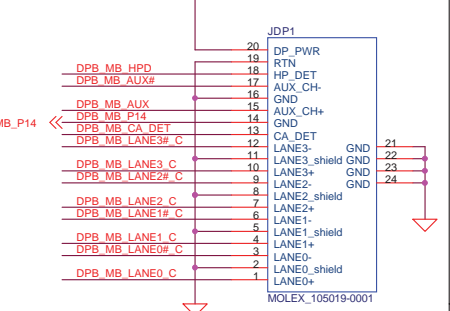
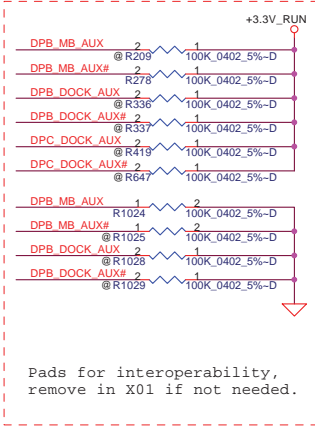
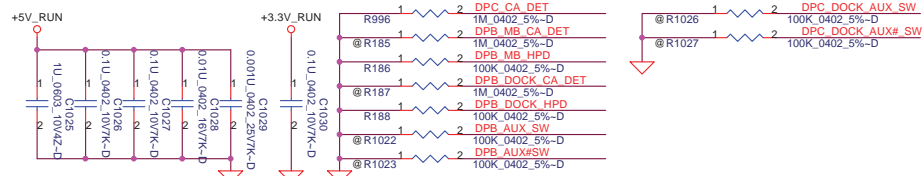
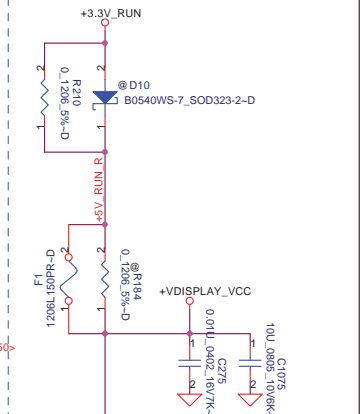
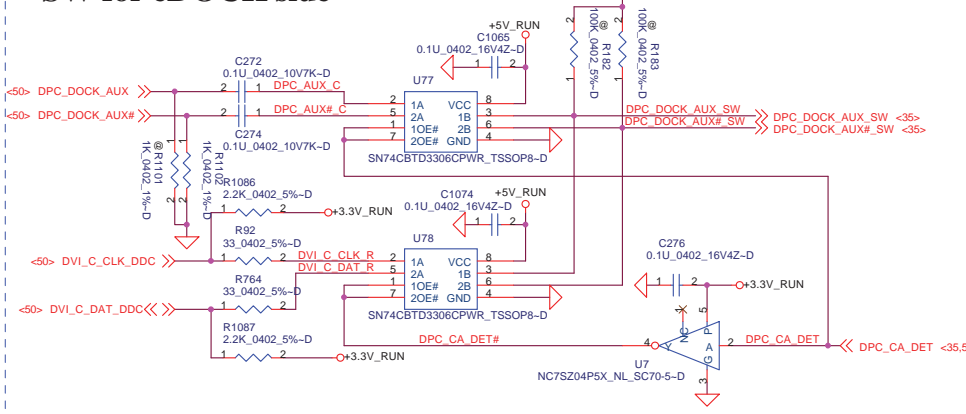
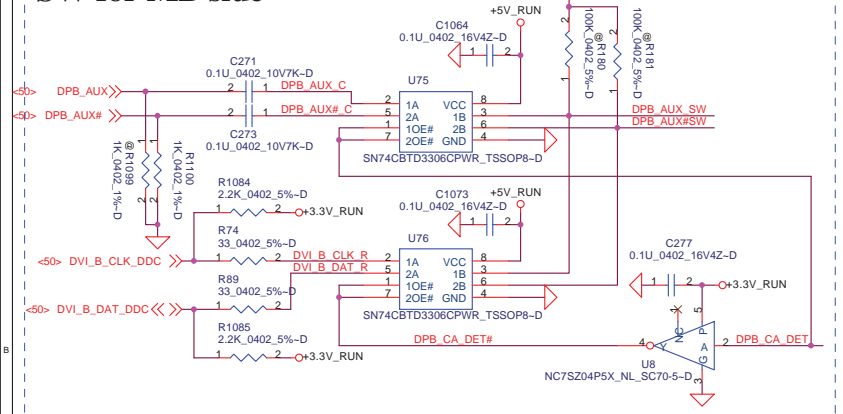
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SW for MB side

SW for eDOCK side

Display port Connector



| Pin | Level | State | Description |
|-----|-------|----------------|--|
| 30 | Hi | Normal Mode | Standard operational mode for device |
| LP | Low | Low power Mode | Device is forced into a low power mode causing the output s to go to a high-Z state, all other inputs are ignore |

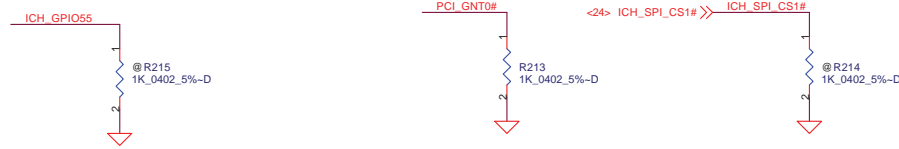
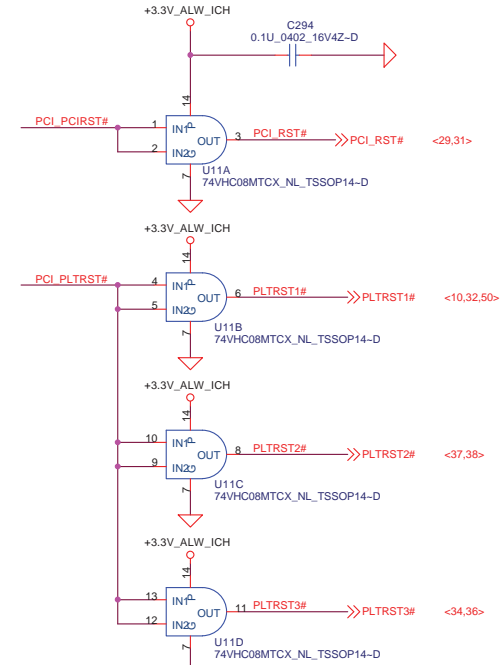
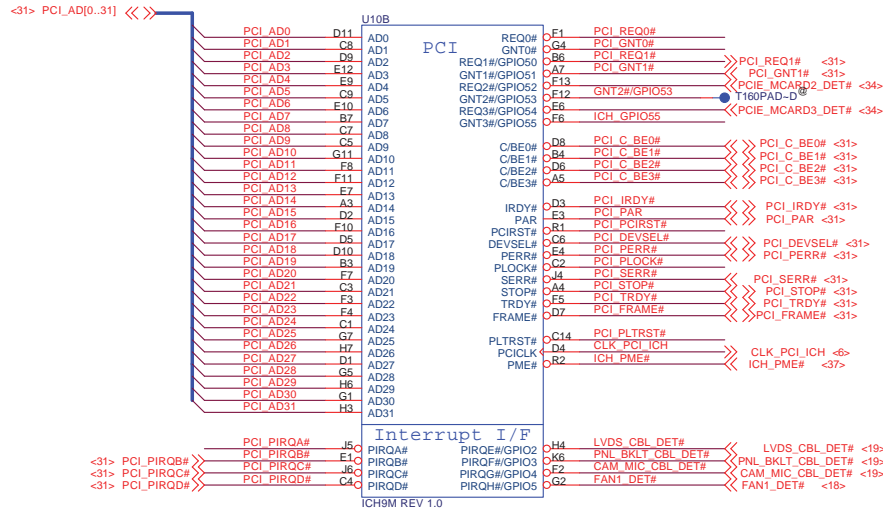
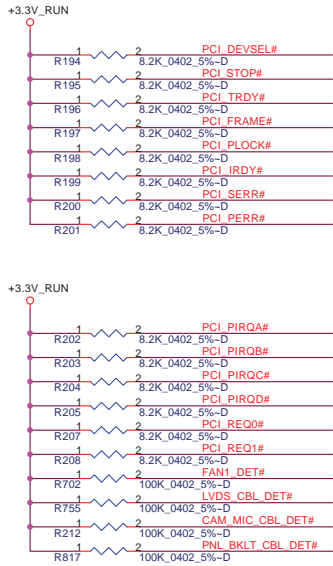
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Title: **Display port**
LA-3803P

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 Date: Thursday, June 12, 2008 Sheet 21 of 71 Rev 0.8

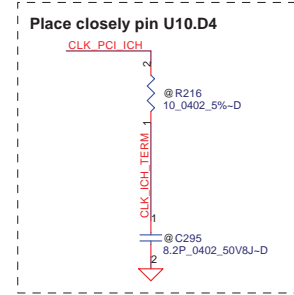


A16 away override strap.

| | |
|--------------------------|---|
| PCI_GNT3#/(MDC_RST_DIS#) | Low = A16 swap override enabled. High = Default. |
|--------------------------|---|

Boot BIOS Strap

| PCI_GNT0# | SPI_CS1# | Boot BIOS Location |
|-----------|----------|--------------------|
| 0 | 1 | SPI |
| 1 | 0 | PCI |
| 1 | 1 | LPC |



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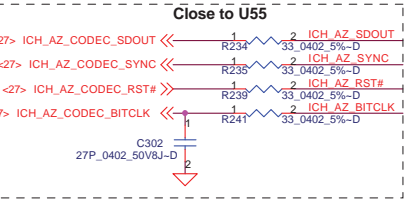
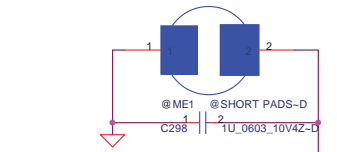
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|-----------------------------|------------------------------------|----------------|
| Title ICH9-M(1/4) | | |
| Size | Document Number LA-3803P | Rev 0.8 |
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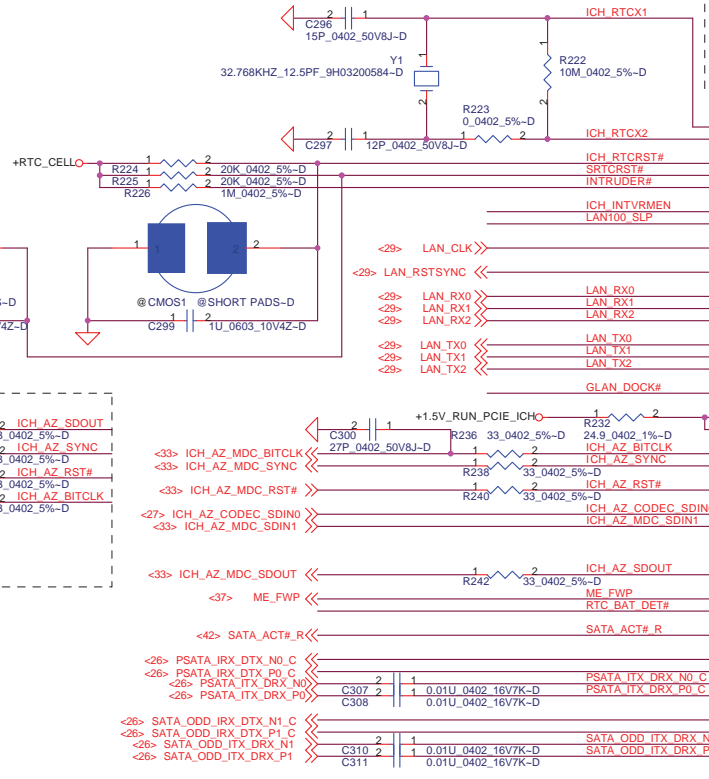
| CMOS_CLR1 | CMOS setting |
|-----------|--------------|
| Shunt | Clear CMOS |
| Open | Keep CMOS |

| ME_CLR1 | TPM setting |
|---------|------------------------|
| Shunt | Clear ME RTC Registers |
| Open | Keep ME RTC Registers |



| XOR Chain Entrance Strap | | |
|--------------------------|-----------|----------------------------|
| ICH_RSVD_TP3 | HDA_SDOUT | Description |
| 0 | 0 | RSVD |
| 0 | 1 | Enter XOR Chain |
| 1 | 0 | Normal Operation (Default) |
| 1 | 1 | Set PCIE port config bit 1 |

Package
9.6X4.06 mm



ICH9M Internal VR Enable Strap
(Internal VR for VccSus1.05, VccSus1.5, VccCL1.5)

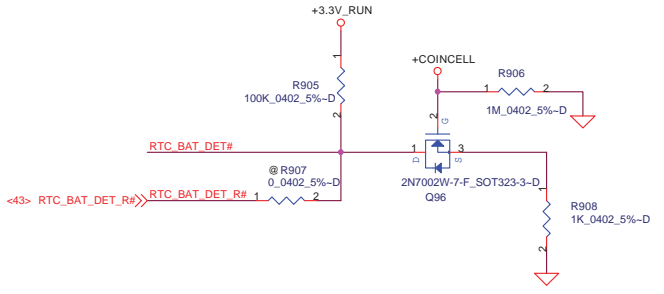
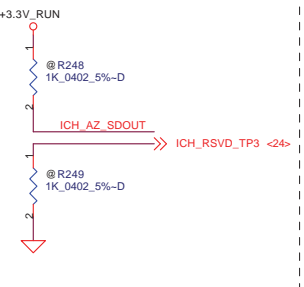
| | |
|---------------|-------------------------------------|
| ICH_INTRVSMEN | Low = Internal VR Disabled |
| | High = Internal VR Enabled(Default) |

ICH9M LAN100 SLP Strap
(Internal VR for VccLAN1.05 and VccCL1.05)

| | |
|----------------|-------------------------------------|
| ICH_LAN100_SLP | Low = Internal VR Disabled |
| | High = Internal VR Enabled(Default) |



Within 500 mils



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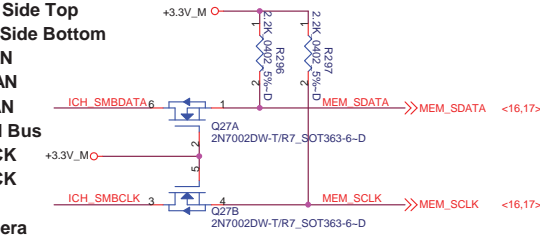
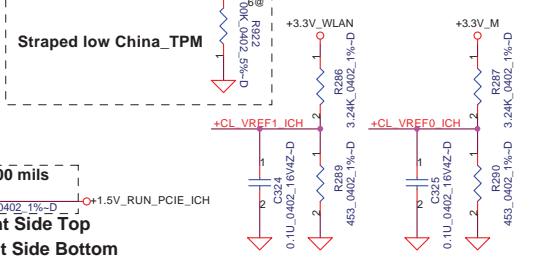
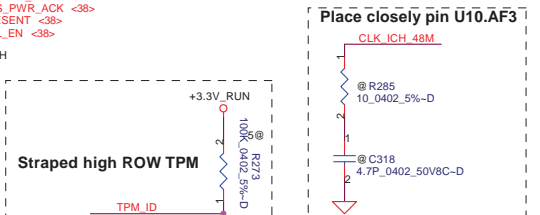
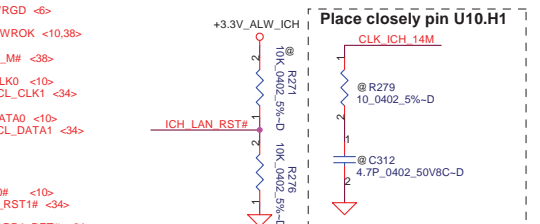
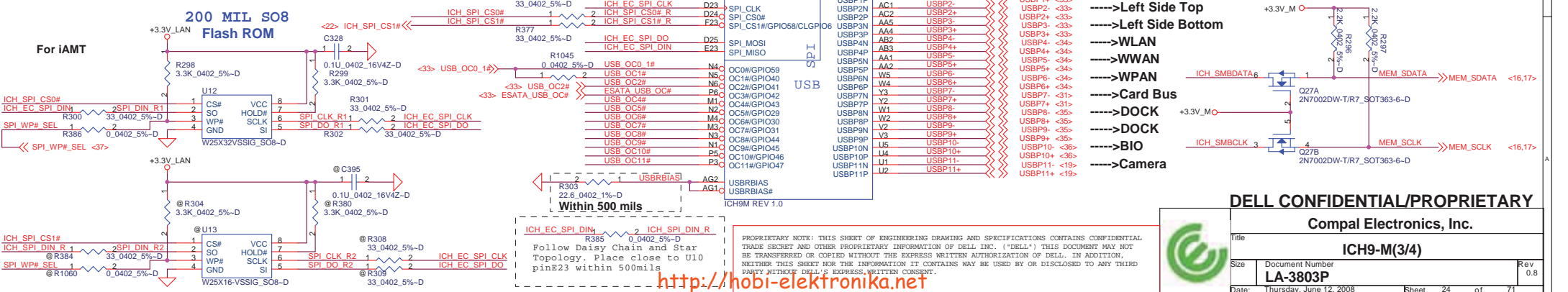
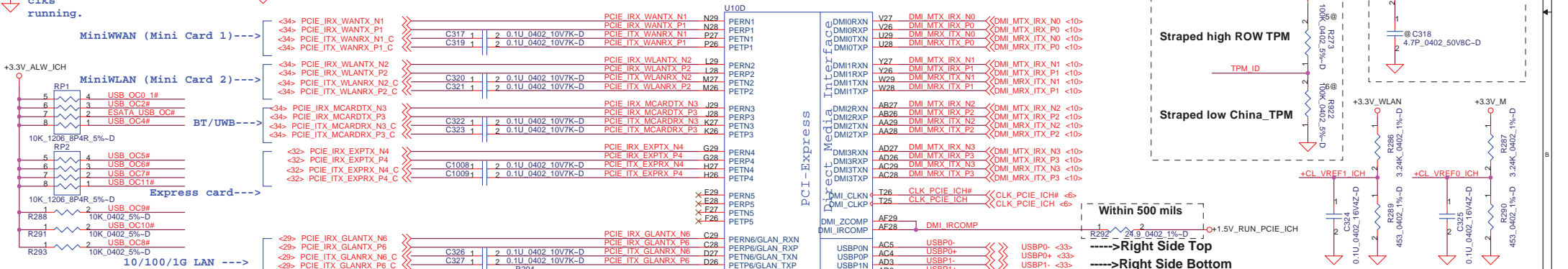
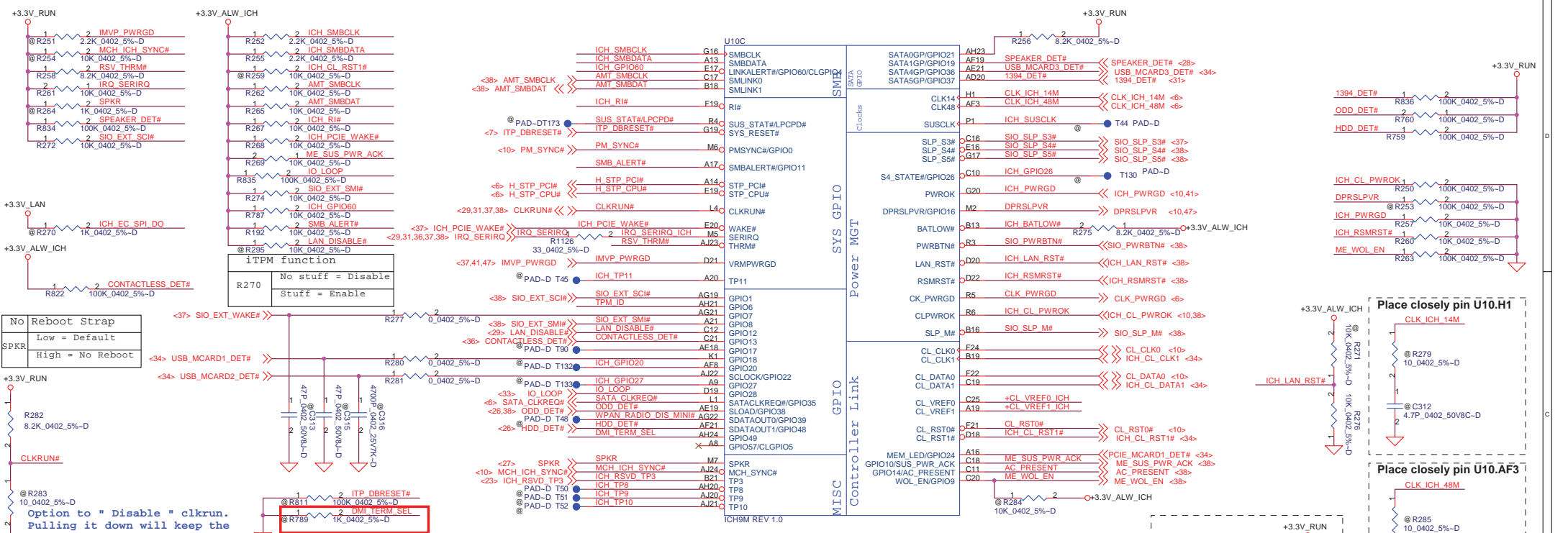
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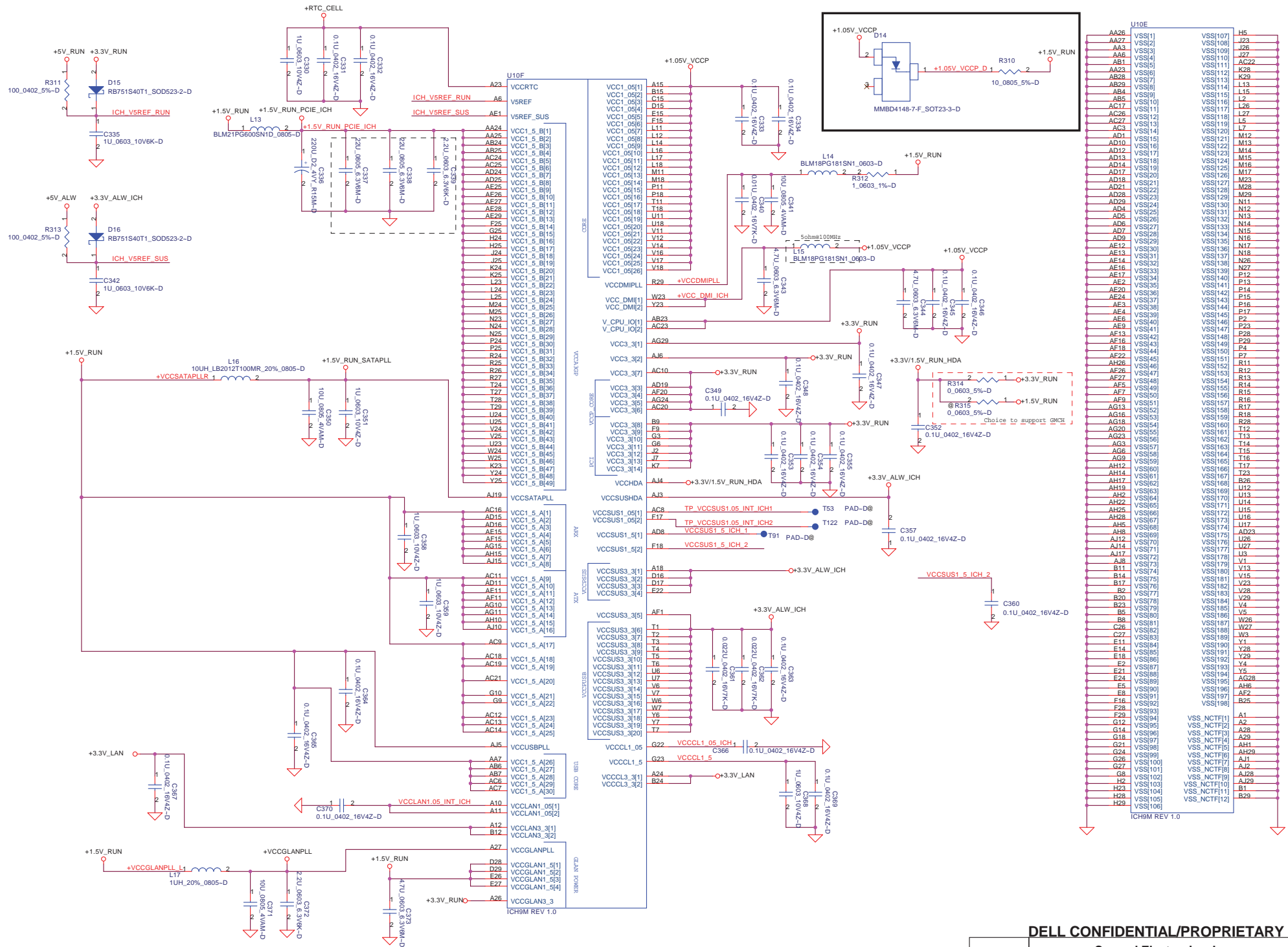
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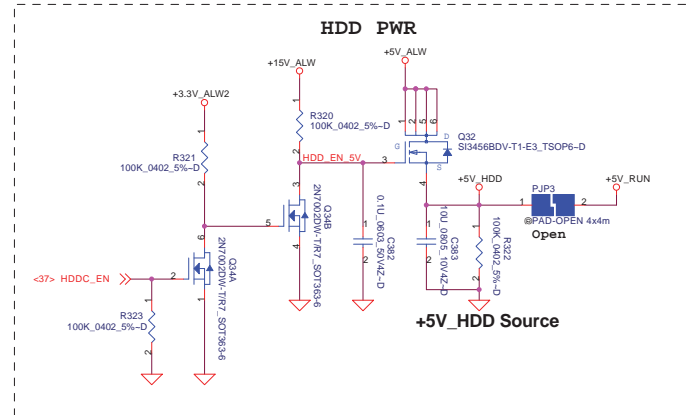
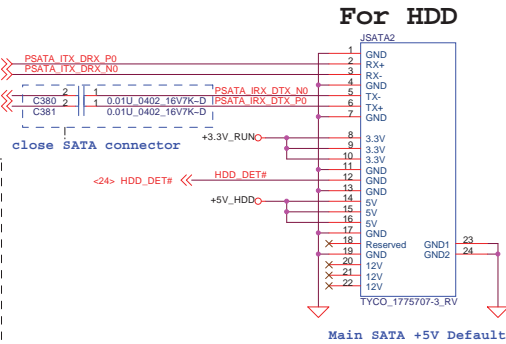
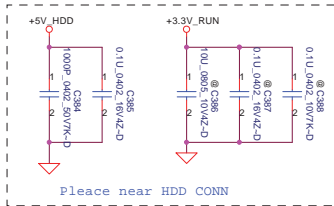
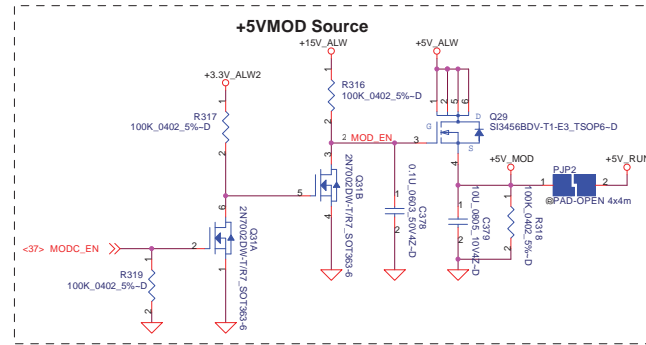
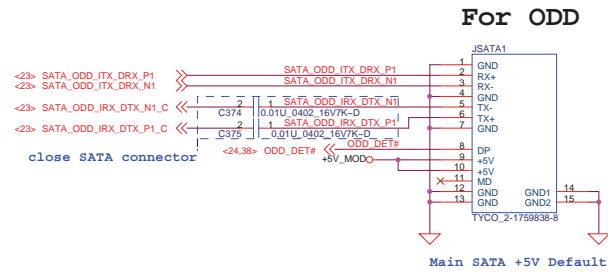
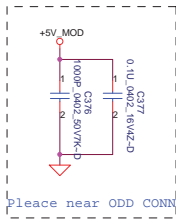
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|------|----------|------------|----------|
| AA26 | VSS[1] | VSS[107] | H5 |
| AA27 | VSS[108] | VSS[108] | J23 |
| AA3 | VSS[2] | VSS[109] | J26 |
| AA6 | VSS[4] | VSS[110] | VSS[110] |
| AB1 | VSS[5] | VSS[111] | AC222 |
| AB2 | VSS[6] | VSS[112] | K28 |
| AB3 | VSS[7] | VSS[113] | K29 |
| AB4 | VSS[8] | VSS[114] | L13 |
| AB5 | VSS[9] | VSS[115] | L16 |
| AB6 | VSS[10] | VSS[116] | L2 |
| AC17 | VSS[11] | VSS[117] | L26 |
| AC27 | VSS[12] | VSS[118] | L5 |
| AC3 | VSS[13] | VSS[119] | L7 |
| AD1 | VSS[14] | VSS[120] | M2 |
| AD10 | VSS[15] | VSS[121] | M13 |
| AD12 | VSS[16] | VSS[122] | M14 |
| AD13 | VSS[17] | VSS[123] | M15 |
| AD14 | VSS[18] | VSS[124] | M16 |
| AD17 | VSS[19] | VSS[125] | M17 |
| AD18 | VSS[20] | VSS[126] | M23 |
| AD21 | VSS[21] | VSS[127] | M28 |
| AD26 | VSS[22] | VSS[128] | M29 |
| AD29 | VSS[23] | VSS[129] | M29 |
| AD4 | VSS[24] | VSS[130] | N11 |
| AD5 | VSS[25] | VSS[131] | N12 |
| AD6 | VSS[26] | VSS[132] | N14 |
| AD7 | VSS[27] | VSS[133] | N15 |
| AD8 | VSS[28] | VSS[134] | N16 |
| AE12 | VSS[29] | VSS[135] | N17 |
| AE13 | VSS[30] | VSS[136] | N18 |
| AE14 | VSS[31] | VSS[137] | N18 |
| AE16 | VSS[32] | VSS[138] | N26 |
| AE17 | VSS[33] | VSS[139] | N27 |
| AE2 | VSS[34] | VSS[140] | P2 |
| AE24 | VSS[35] | VSS[141] | P13 |
| AE3 | VSS[36] | VSS[142] | P15 |
| AE4 | VSS[37] | VSS[143] | P16 |
| AE6 | VSS[38] | VSS[144] | P17 |
| AE9 | VSS[39] | VSS[145] | P2 |
| AE13 | VSS[40] | VSS[146] | P23 |
| AE16 | VSS[41] | VSS[147] | P28 |
| AE18 | VSS[42] | VSS[148] | P4 |
| AE22 | VSS[43] | VSS[149] | P7 |
| AH26 | VSS[44] | VSS[150] | P2 |
| AE27 | VSS[45] | VSS[151] | P27 |
| AE28 | VSS[46] | VSS[152] | R11 |
| AE29 | VSS[47] | VSS[153] | R12 |
| AE5 | VSS[48] | VSS[154] | R13 |
| AE7 | VSS[49] | VSS[155] | R14 |
| AE9 | VSS[50] | VSS[156] | R16 |
| AG13 | VSS[51] | VSS[157] | R16 |
| AG16 | VSS[52] | VSS[158] | R17 |
| AG18 | VSS[53] | VSS[159] | R18 |
| AG20 | VSS[54] | VSS[160] | R28 |
| AG23 | VSS[55] | VSS[161] | T12 |
| AG6 | VSS[56] | VSS[162] | T13 |
| AG7 | VSS[57] | VSS[163] | T15 |
| AG8 | VSS[58] | VSS[164] | T16 |
| AG9 | VSS[59] | VSS[165] | T16 |
| AH12 | VSS[60] | VSS[166] | T17 |
| AH14 | VSS[61] | VSS[167] | T23 |
| AH7 | VSS[62] | VSS[168] | U27 |
| AH19 | VSS[63] | VSS[169] | J12 |
| AH2 | VSS[64] | VSS[170] | J14 |
| AH22 | VSS[65] | VSS[171] | J14 |
| AH25 | VSS[66] | VSS[172] | J15 |
| AH28 | VSS[67] | VSS[173] | J16 |
| AH5 | VSS[68] | VSS[174] | J17 |
| AH8 | VSS[69] | VSS[175] | AD23 |
| AH12 | VSS[70] | VSS[176] | U27 |
| AH17 | VSS[71] | VSS[177] | J3 |
| AH8 | VSS[72] | VSS[178] | V1 |
| B11 | VSS[73] | VSS[179] | V1 |
| B14 | VSS[74] | VSS[180] | V13 |
| B17 | VSS[75] | VSS[181] | V15 |
| B18 | VSS[76] | VSS[182] | V23 |
| B2 | VSS[77] | VSS[183] | V28 |
| B20 | VSS[78] | VSS[184] | V29 |
| B23 | VSS[79] | VSS[185] | V4 |
| B5 | VSS[80] | VSS[186] | V5 |
| B8 | VSS[81] | VSS[187] | W26 |
| C26 | VSS[82] | VSS[188] | W27 |
| C27 | VSS[83] | VSS[189] | W3 |
| E11 | VSS[84] | VSS[190] | Y1 |
| E14 | VSS[85] | VSS[191] | Y28 |
| E18 | VSS[86] | VSS[192] | Y29 |
| E2 | VSS[87] | VSS[193] | Y4 |
| E21 | VSS[88] | VSS[194] | Y4 |
| E24 | VSS[89] | VSS[195] | AG28 |
| E5 | VSS[90] | VSS[196] | AH6 |
| E8 | VSS[91] | VSS[197] | AF2 |
| F16 | VSS[92] | VSS[198] | B25 |
| F28 | VSS[93] | VSS[93] | |
| F29 | VSS[94] | VSS_NCTF11 | A1 |
| G12 | VSS[95] | VSS_NCTF2 | A2 |
| G14 | VSS[96] | VSS_NCTF3 | A28 |
| G18 | VSS[97] | VSS_NCTF4 | A29 |
| G21 | VSS[98] | VSS_NCTF5 | AH1 |
| G24 | VSS[99] | VSS_NCTF6 | AH2 |
| G26 | VSS[100] | VSS_NCTF7 | A1 |
| G27 | VSS[101] | VSS_NCTF8 | A12 |
| G8 | VSS[102] | VSS_NCTF9 | A28 |
| H2 | VSS[103] | VSS_NCTF10 | A29 |
| H23 | VSS[104] | VSS_NCTF11 | B1 |
| H28 | VSS[105] | VSS_NCTF12 | B29 |
| H29 | VSS[106] | VSS[106] | |

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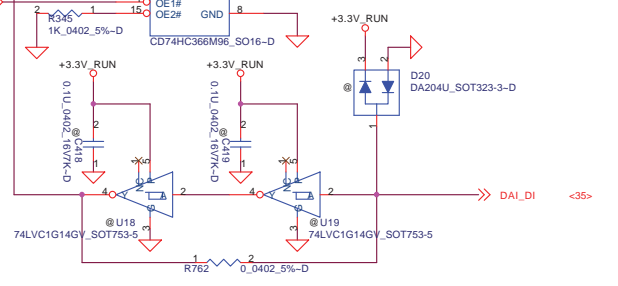
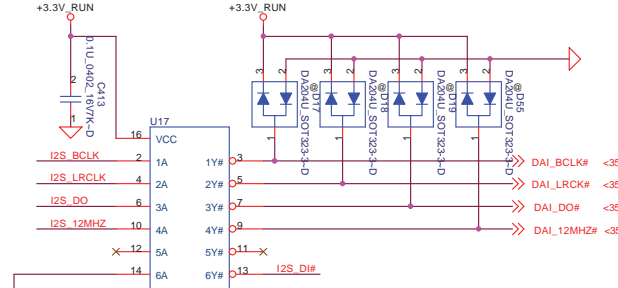
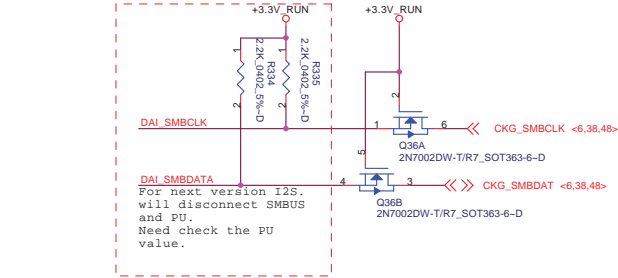
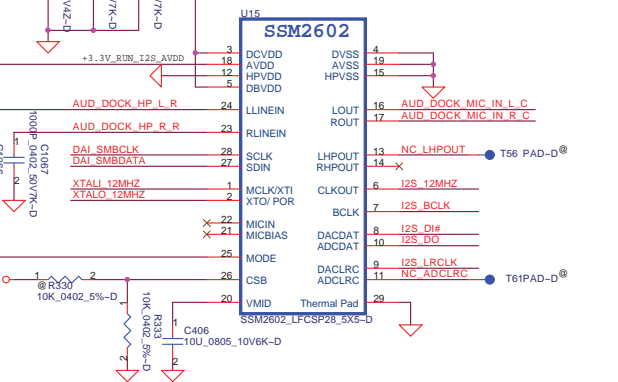
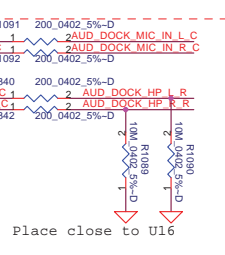
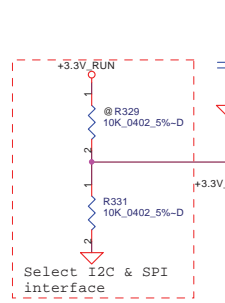
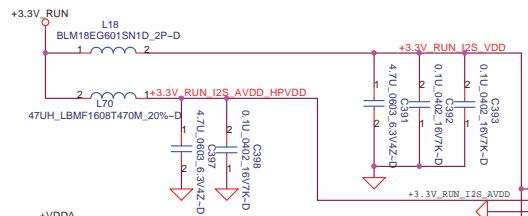
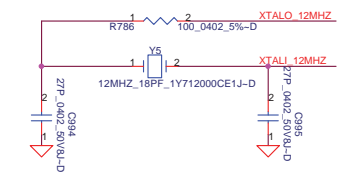
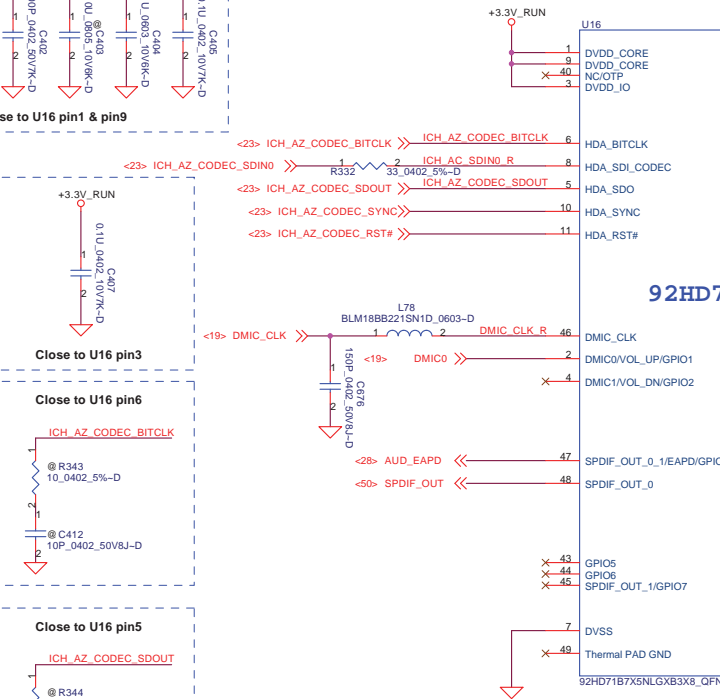
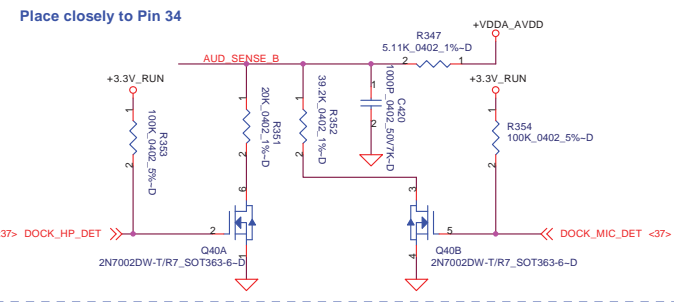
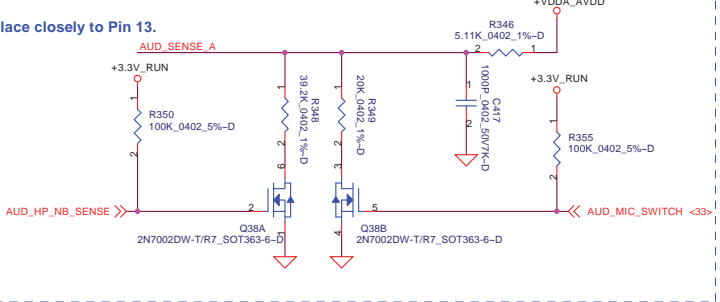
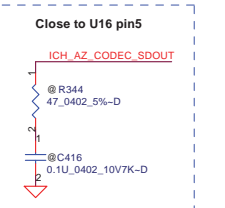
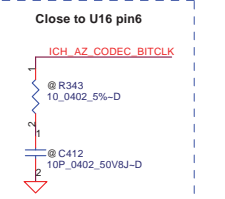
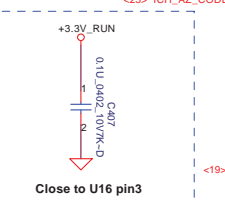
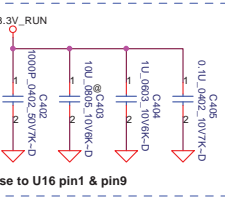
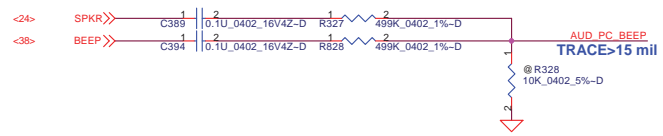
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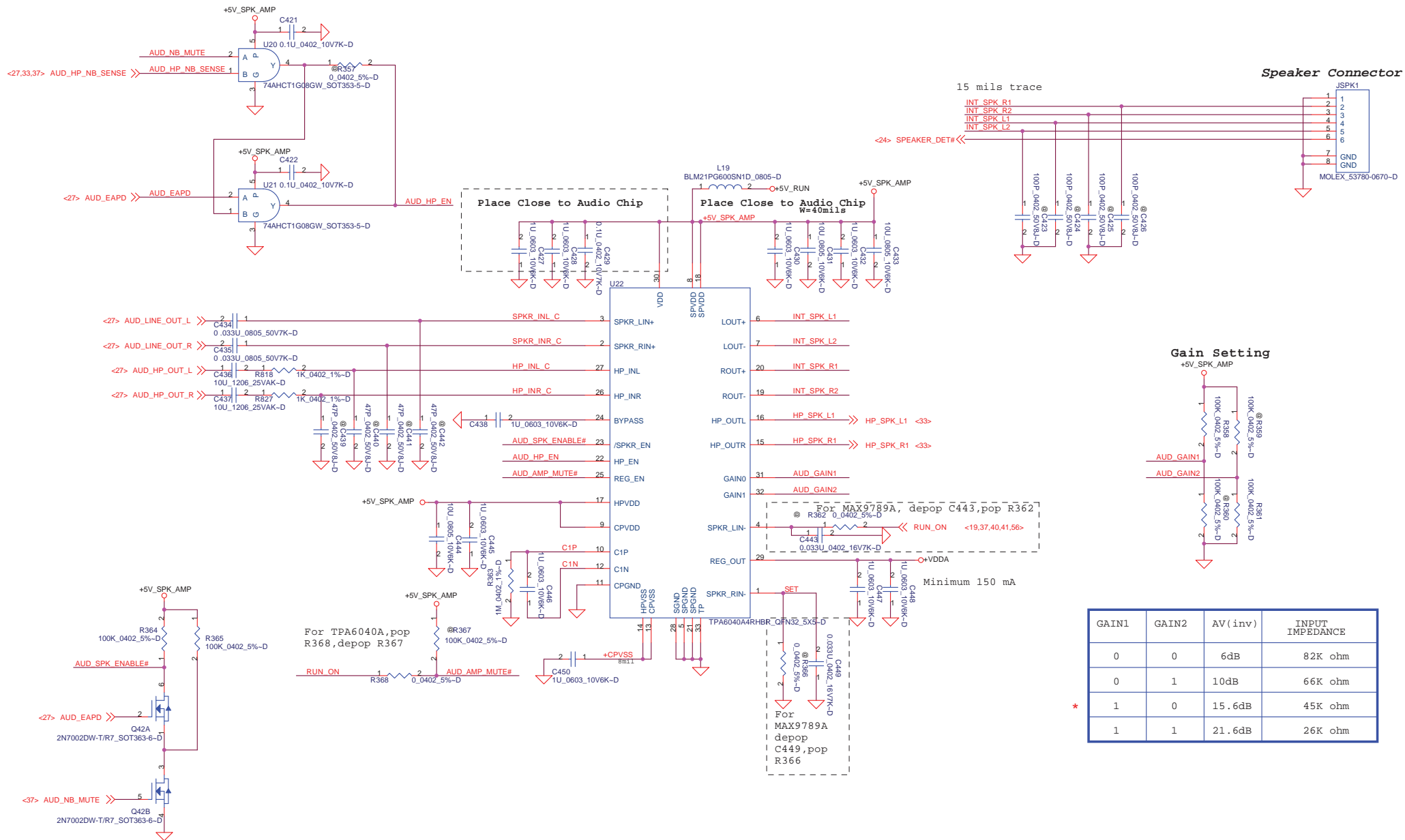


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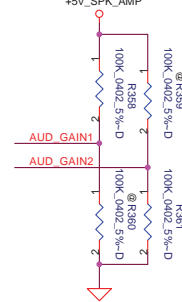
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Gain Setting



| GAIN1 | GAIN2 | AV(inv) | INPUT IMPEDANCE |
|-------|-------|---------|-----------------|
| 0 | 0 | 6dB | 82K ohm |
| 0 | 1 | 10dB | 66K ohm |
| 1 | 0 | 15.6dB | 45K ohm |
| 1 | 1 | 21.6dB | 26K ohm |

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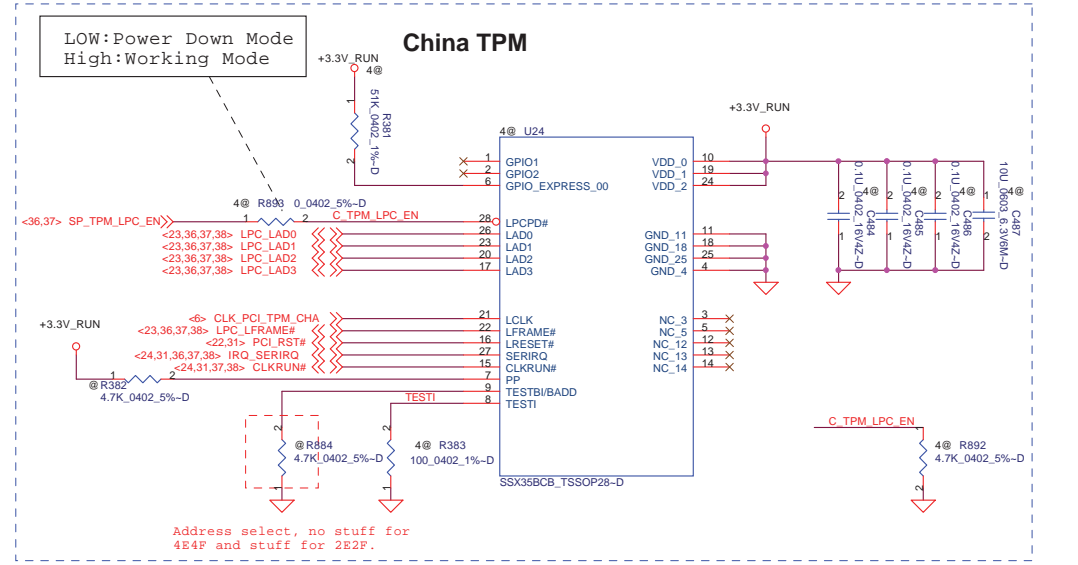
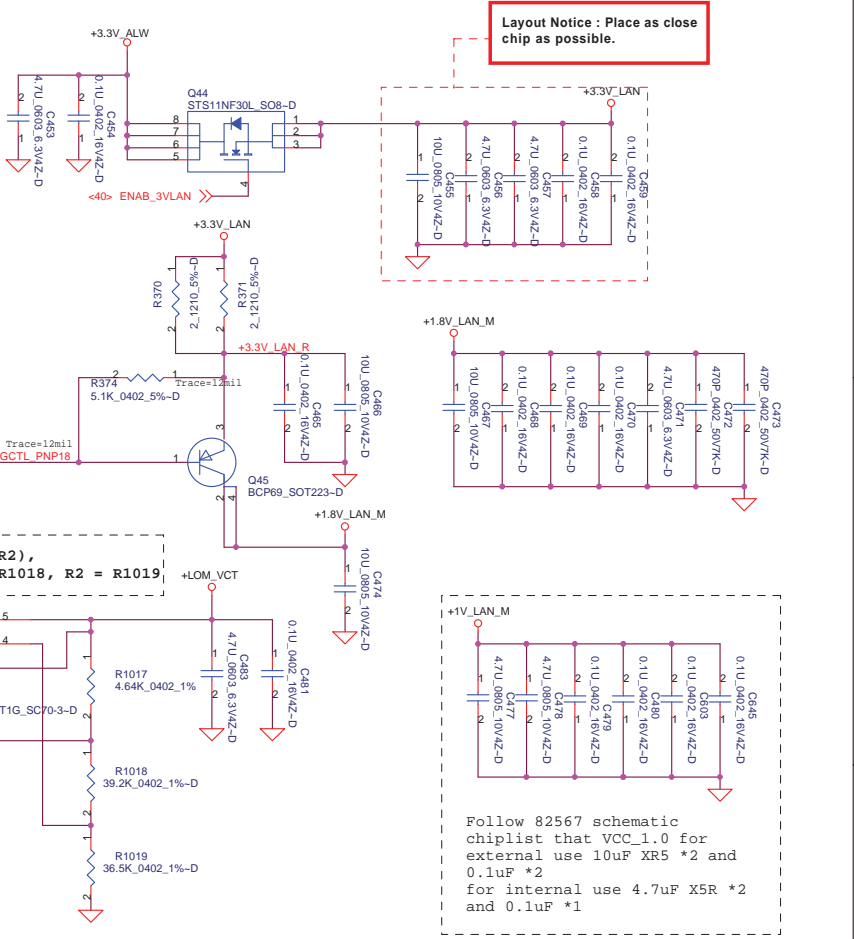
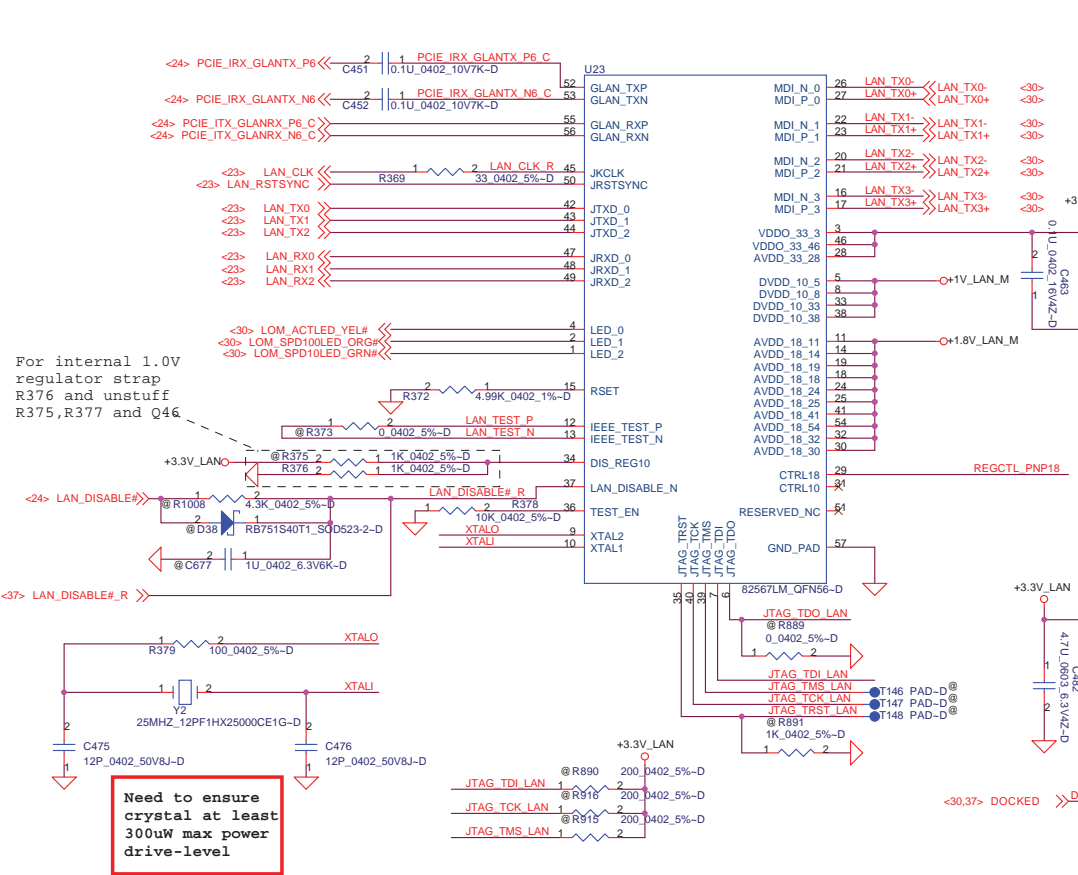
AMP and PHONE JACK

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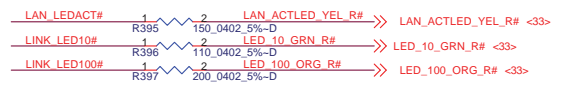
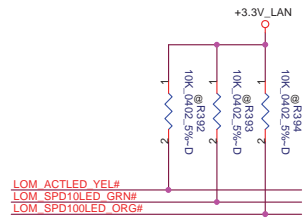
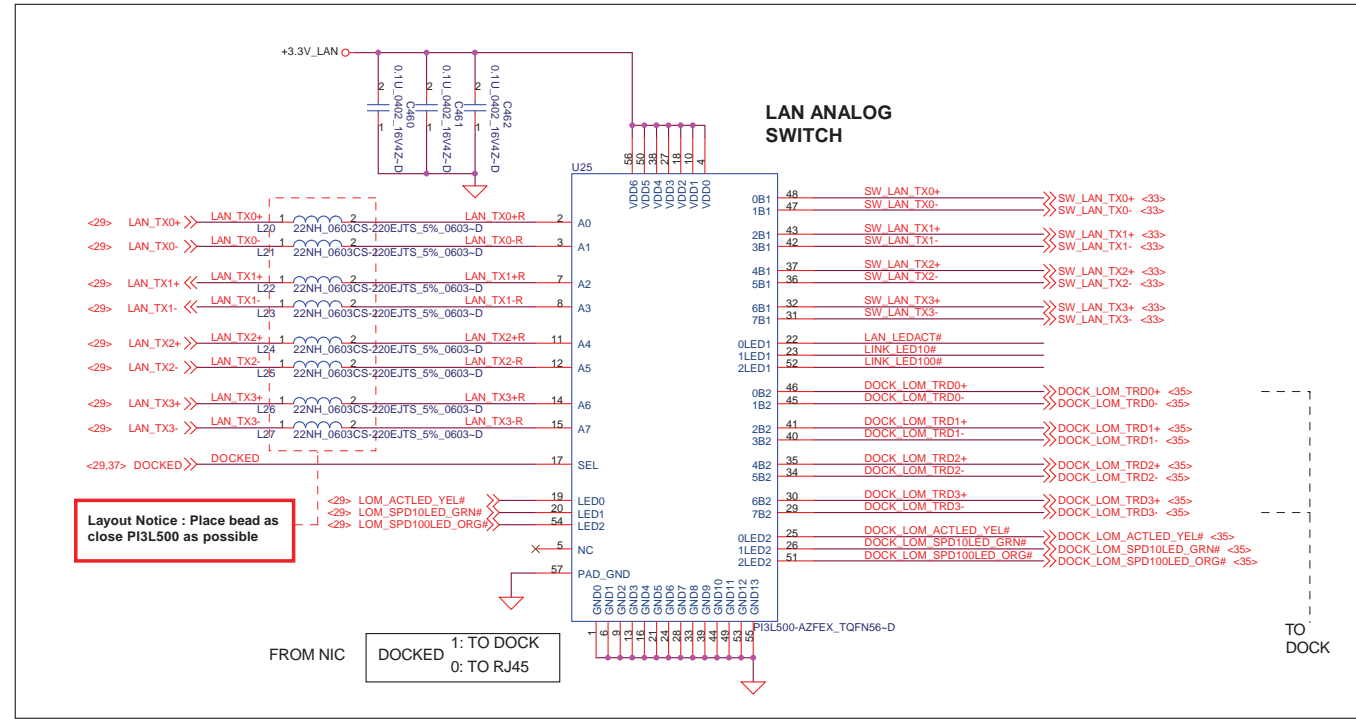
| ROUSH USH and China TPM BOM Option | | | | | | |
|------------------------------------|------------------------------|---------|--------|--------|------------|------------|
| DESCRIPTION | PART/PIN | Ref Des | A0 USH | B0 USH | A0 w/CHINA | B0 w/CHINA |
| Pull-up on LPC_EN_R | USH pin R6 LPCEN | R841 | POP | POP | POP | @ |
| Pull-down on LPC_EN_R | USH pin R6 LPCEN | R483 | @ | POP | @ | POP |
| Series from EC to LPC_EN_R | EC to USH Pin R6 LPCEN | 5@ R464 | @ | POP | @ | POP |
| Series from EC to LPD# | EC to USH Pin P7 LPCPD_N | R466 | @ | @ | @ | @ |
| Pull-up on LPD# | USH pin P7 LPCPD_N | R474 | POP | POP | POP | POP |
| Pull-up on EC | SIO pin 105 OUT65 | R788 | @ | @ | @ | @ |
| Pull-down on China TPM | To China TPM U24 pin 28 | 4@ R892 | @ | POP | POP | POP |
| Series from EC to China PD# | SIO to China Pin 28 LPCPD# | 4@ R893 | @ | @ | POP | POP |
| Broadcom USH | U32 USH | U32 | POP | POP | POP | POP |
| China TPM | U24 China TPM | 4@ U24 | @ | @ | POP | POP |
| LPCBus Series Resistors | R705, R723, R724, R732, R733 | 5@ | POP | POP | @ | @ |
| TPM_ID (Strap Low) | ICH9M GPIO6 Pin AH21 | 4@ R922 | @ | @ | POP | POP |
| TPM_ID (Strap High) | ICH9M GPIO6 Pin AH21 | 5@ R273 | POP | POP | @ | @ |

4@ is for China TPM only
5@ is for Broadcom TPM only

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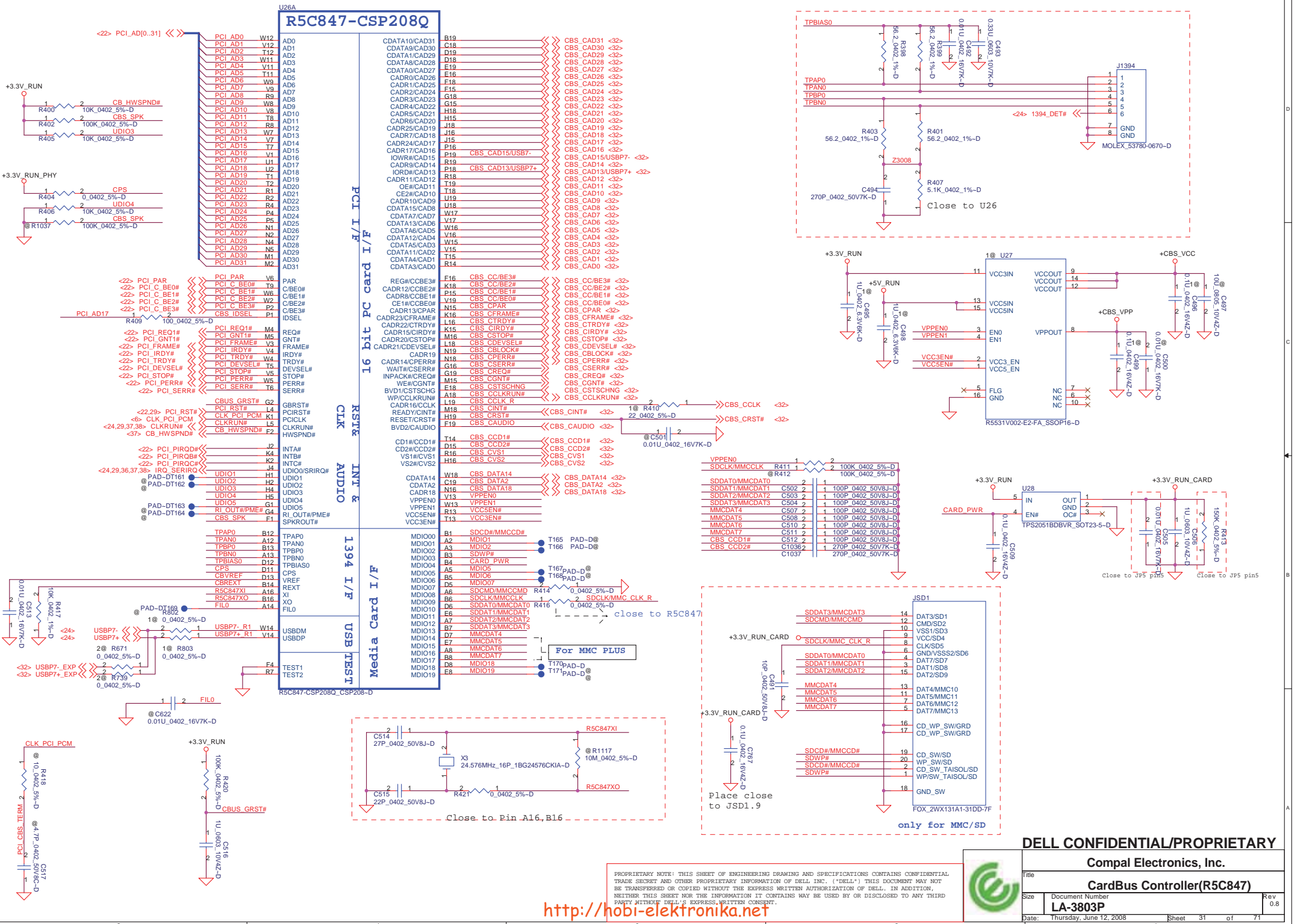
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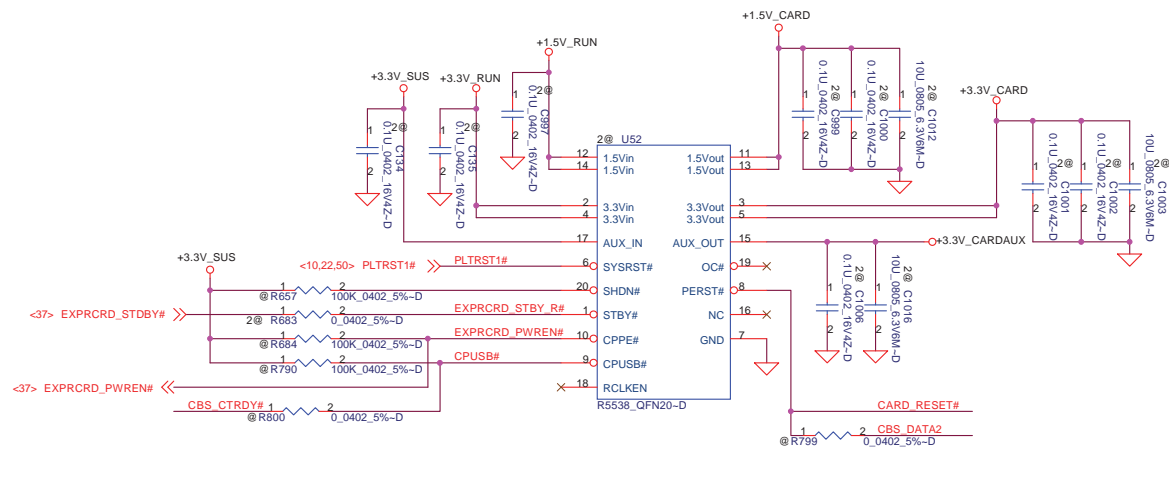
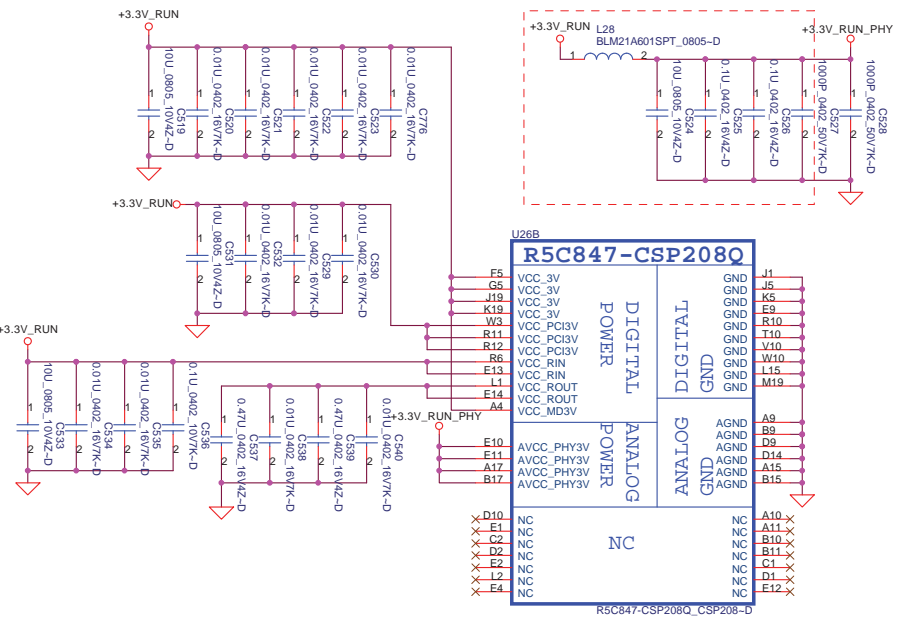
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CardBus Controller(R5C847)

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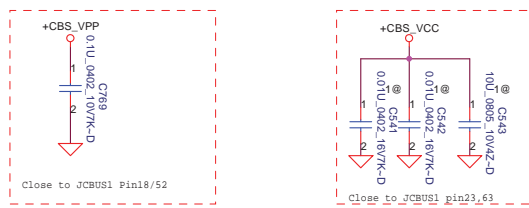
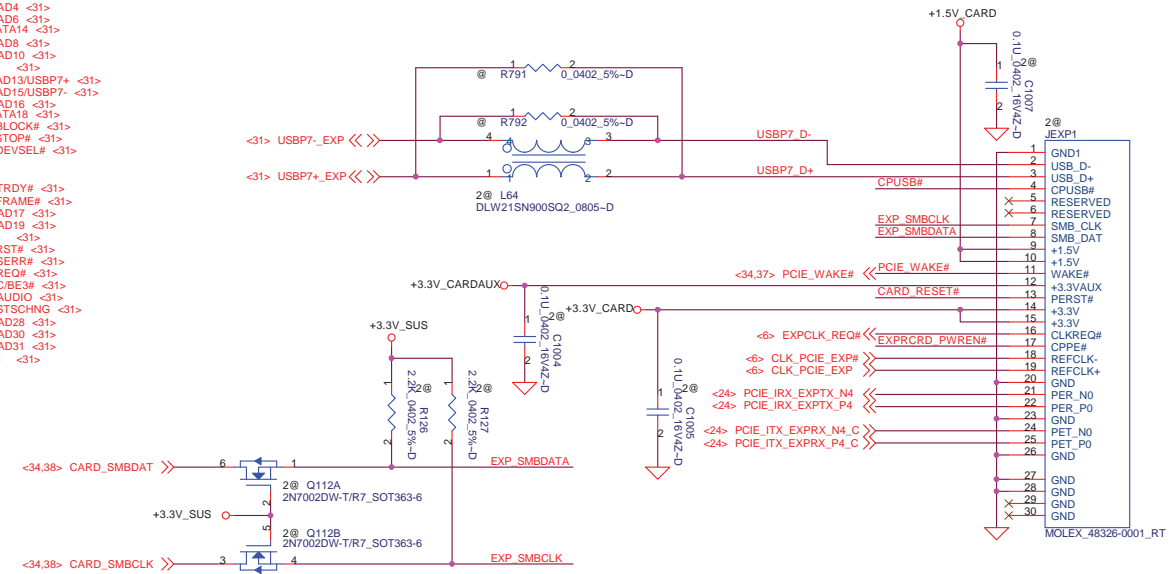
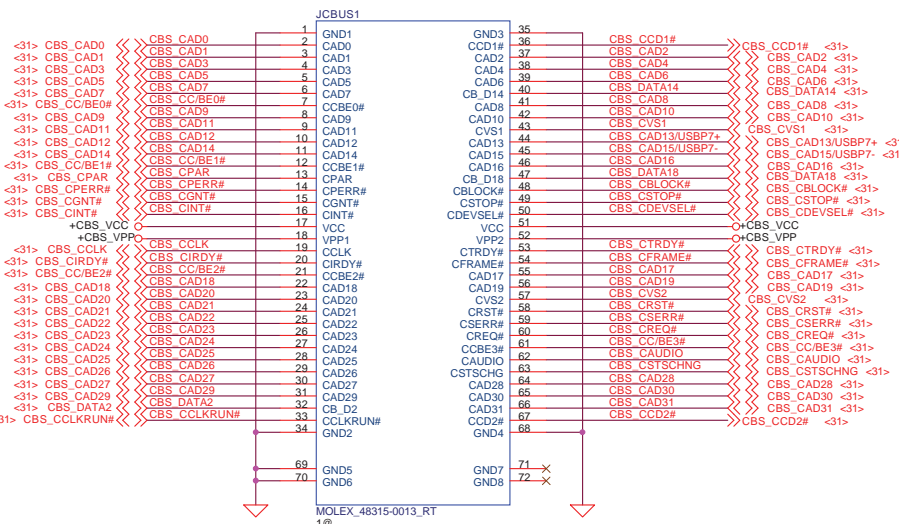
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Express Card

+1.5V_CARD: Max. 650mA, Average 500mA
+3.3V_CARD: Max. 1300mA, Average 1000mA



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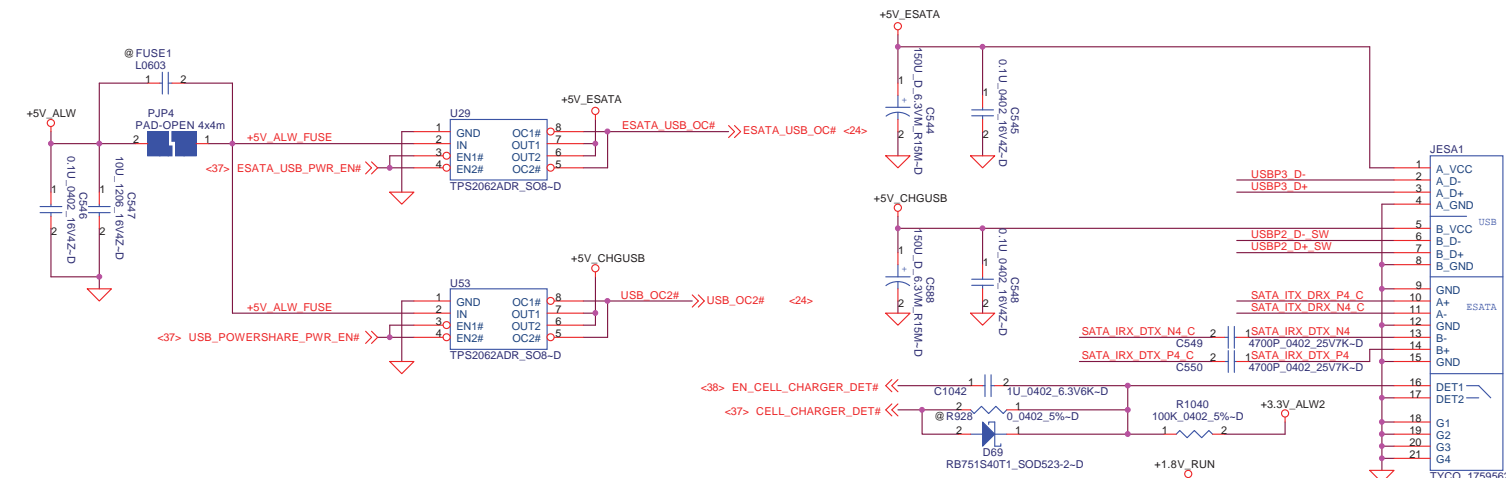


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CardBus/SD card Socket

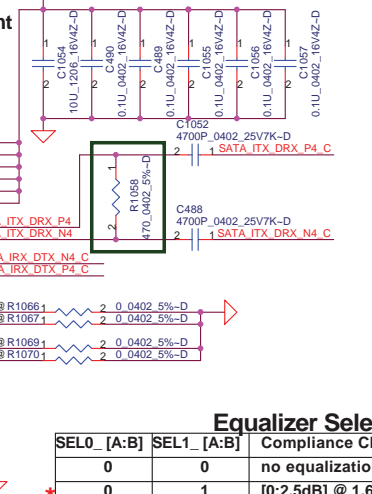
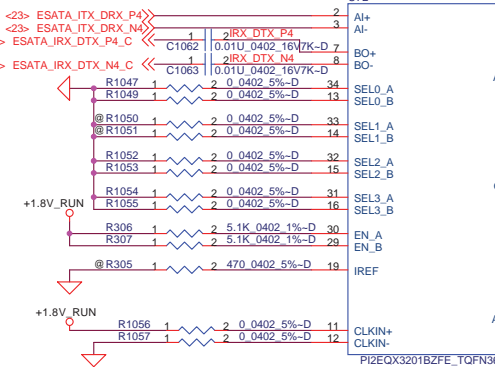
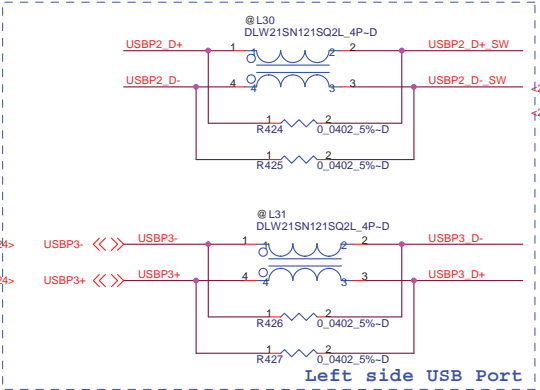
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| Size | Document Number | Rev | |
| | LA-3803P | 0.8 | |
| Date: | Thursday, June 12, 2008 | Sheet | 32 of 71 |



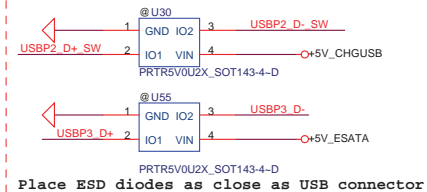
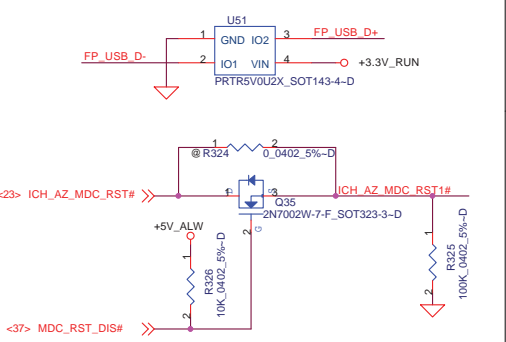
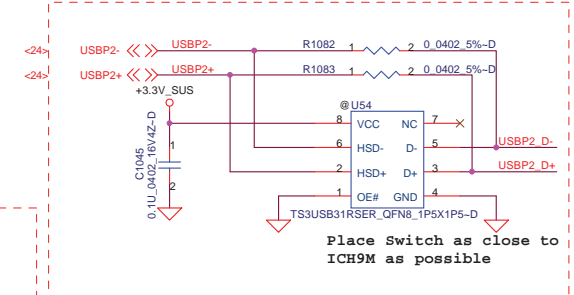
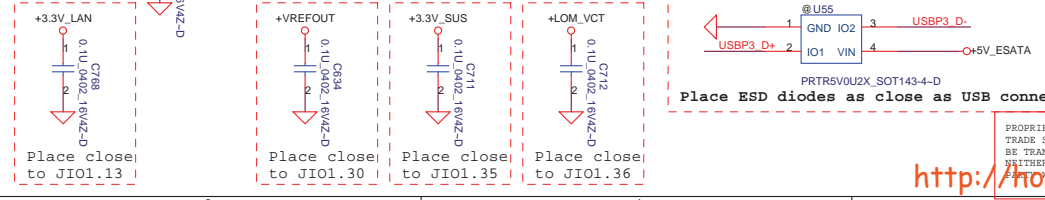
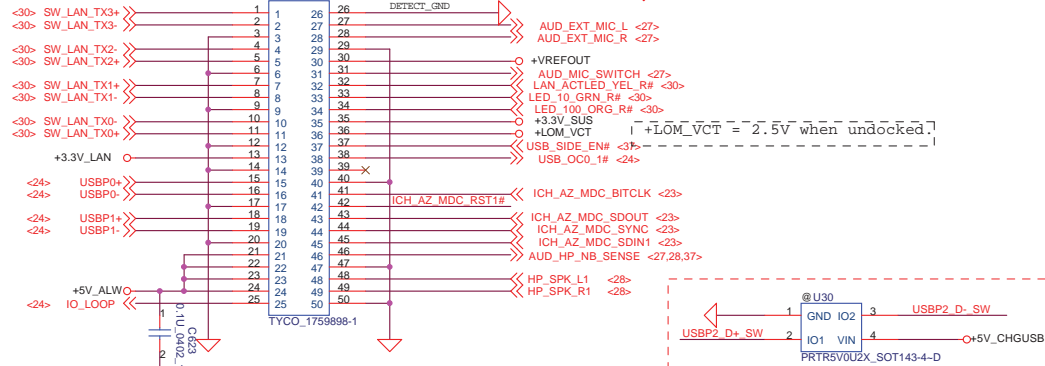
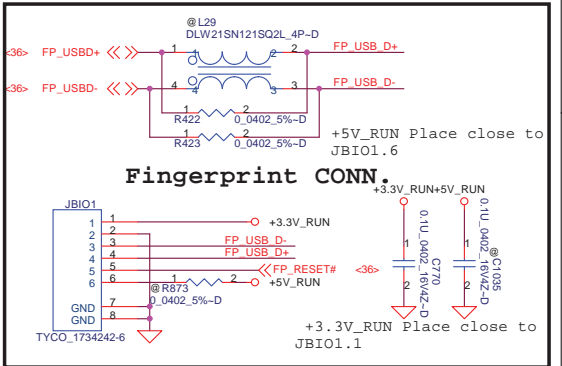
| USB PORT# | DESTINATION |
|-----------|-------------------------------|
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| 1 | JUSB1 (Ext Right Side Bottom) |
| 2 | JESA1 (Ext Left Side Top) |
| 3 | JESA1 (Ext Left Side Bottom) |
| 4 | WLAN |
| 5 | WWAN |
| 6 | WPAN |
| 7 | Card Bus/Express card |
| 8 | DOCKING |
| 9 | DOCKING |
| 10 | USH->BIO |
| 11 | Camera |

| SEL2_ [A:B] | Swing |
|-------------|-------|
| 0 | 1x |
| 1 | 1.2x |

| SEL3_ [A:B] | De-emphasis |
|-------------|-------------|
| 0 | 0dB |
| 1 | -3.5dB |



| SEL0_ [A:B] | SEL1_ [A:B] | Compliance Channel |
|-------------|-------------|-----------------------|
| 0 | 0 | no equalization |
| 0 | 1 | [0:2.5dB] @ 1.6 GHz |
| 1 | 0 | [2.5:4.5dB] @ 1.6 GHz |
| 1 | 1 | [4.5:6.5dB] @ 1.6 GHz |



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USB 2.0 PORT

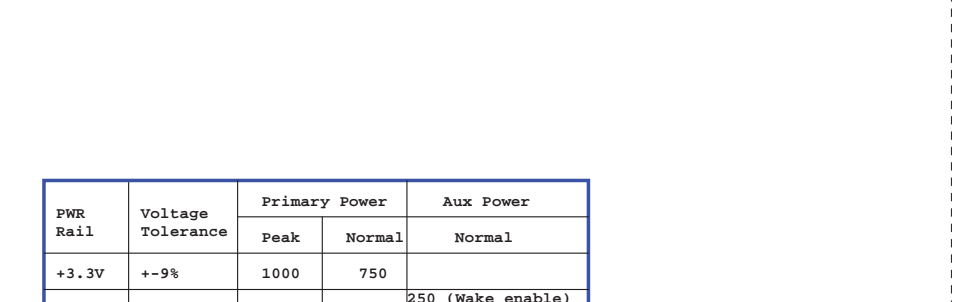
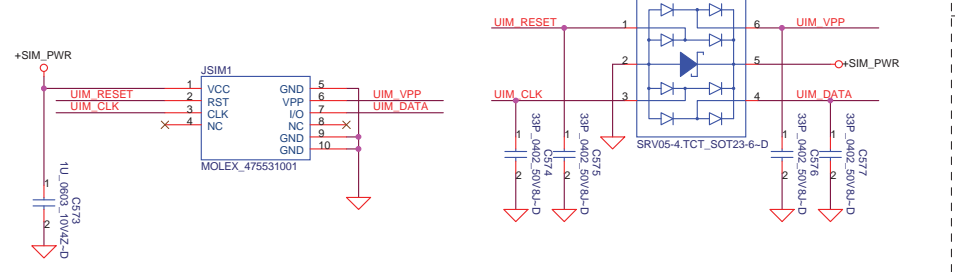
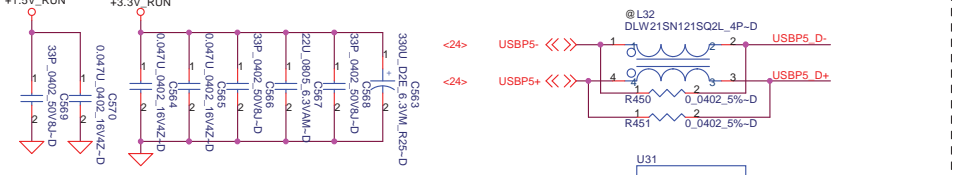
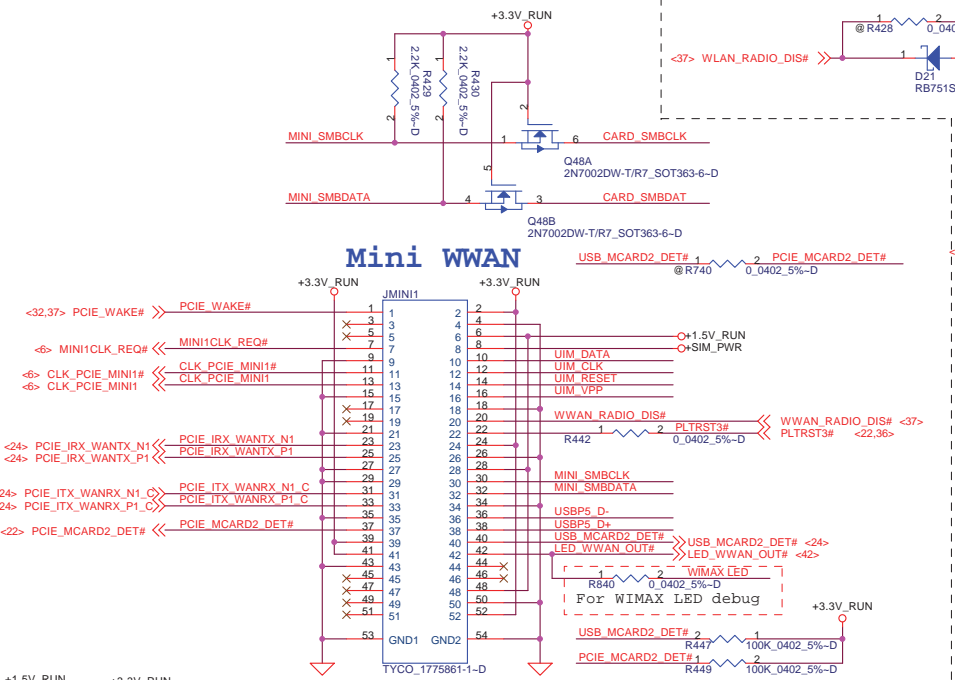
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Size: Document Number

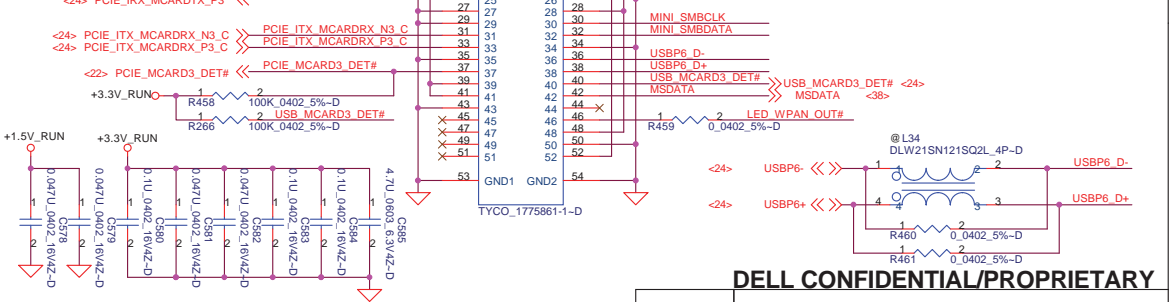
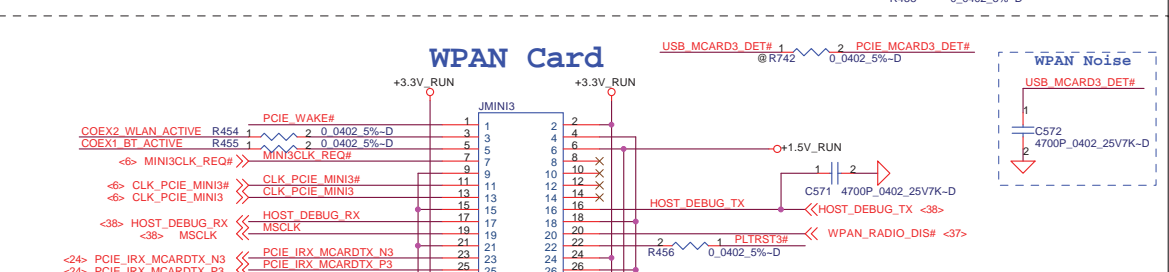
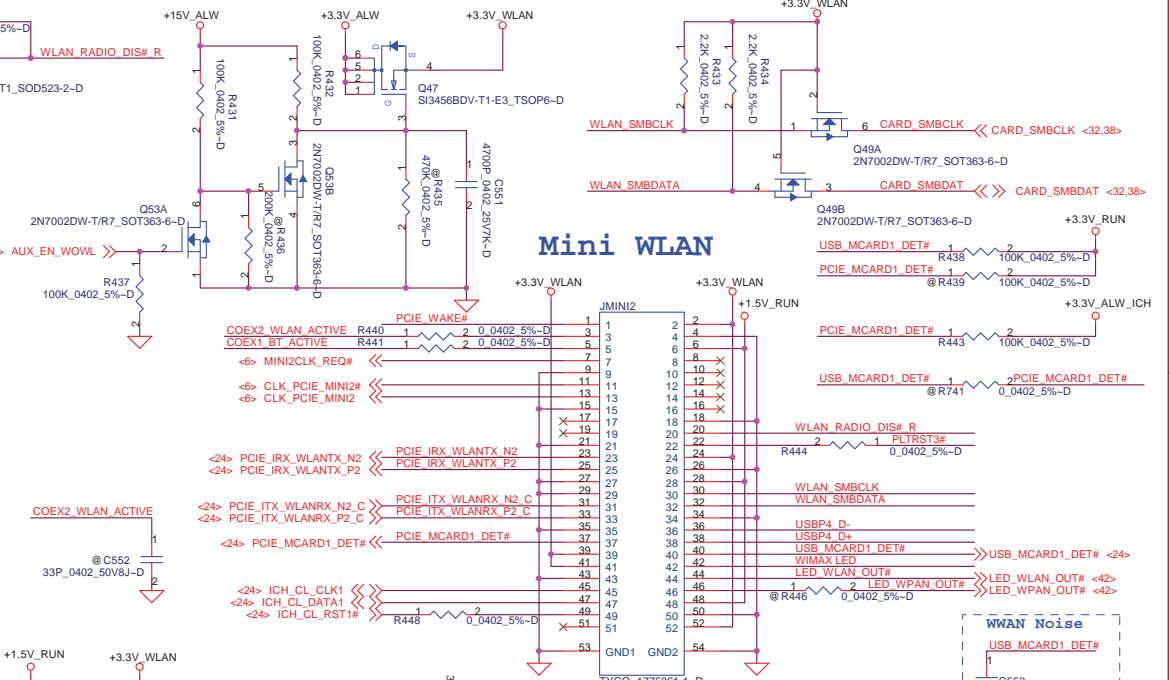
Date: Thursday, June 12, 2008

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Rev 0.8



| PWR Rail | Voltage Tolerance | Primary Power | | Aux Power |
|----------|-------------------|---------------|--------|--|
| | | Peak | Normal | Normal |
| +3.3V | +-9% | 1000 | 750 | |
| +3.3Vaux | +-9% | 330 | 250 | 250 (Wake enable) 5 (Not wake enable) |
| +1.5V | +-5% | 500 | 375 | NA |



| PWR Rail | Voltage Tolerance | Primary Power | | Aux Power |
|----------|-------------------|---------------|--------|--|
| | | Peak | Normal | Normal |
| +3.3V | +-9% | 1000 | 750 | |
| +3.3Vaux | +-9% | 330 | 250 | 250 (Wake enable) 5 (Not wake enable) |
| +1.5V | +-5% | 500 | 375 | NA |

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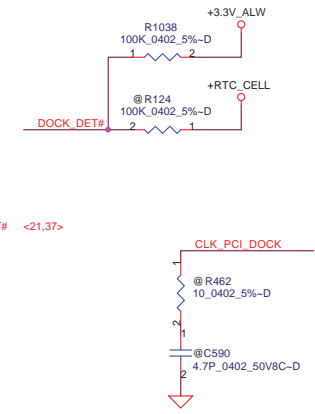
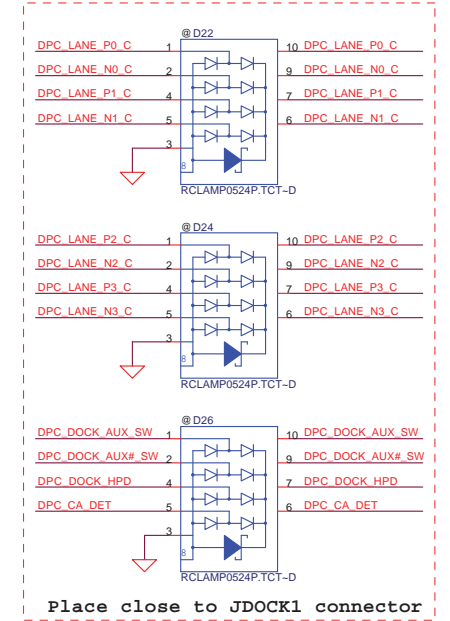
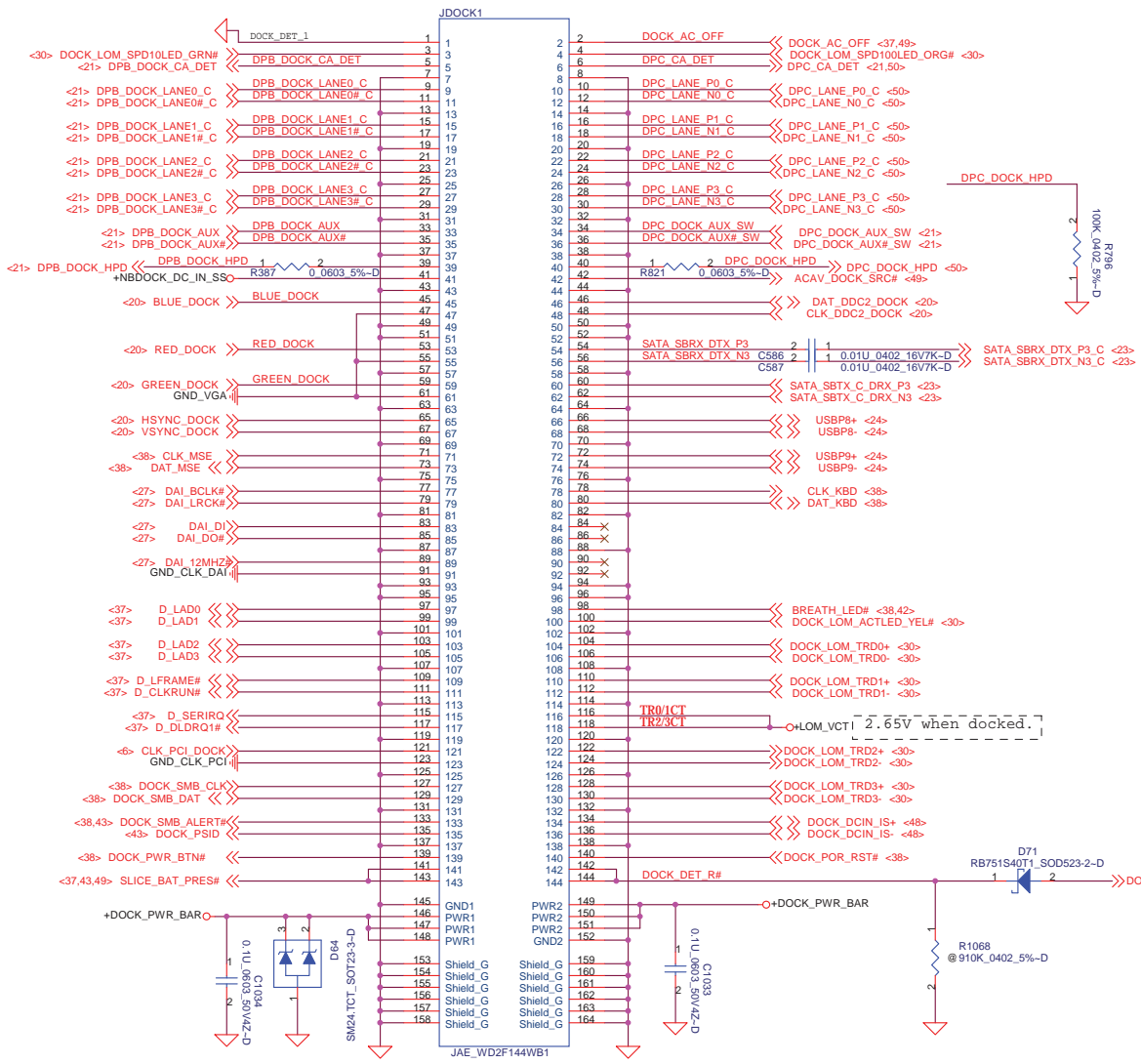
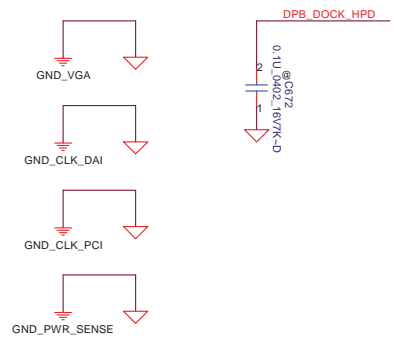
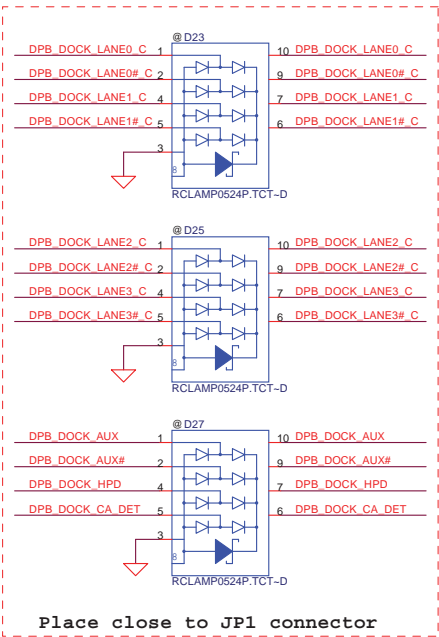
Compal Electronics, Inc.

Mini Card

LA-3803P

Thursday, June 12, 2008

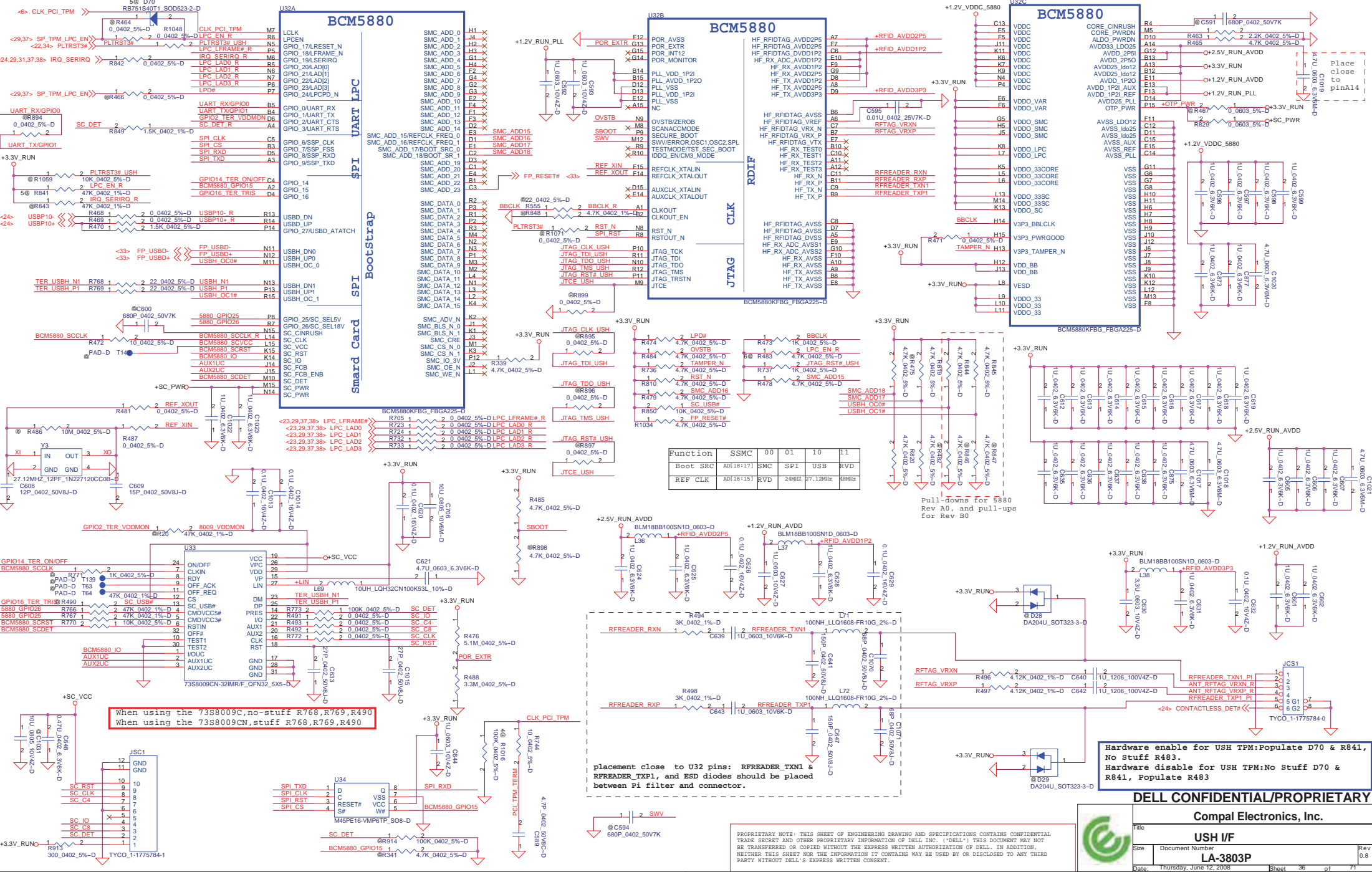
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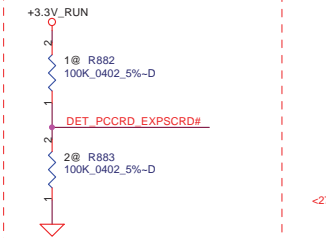
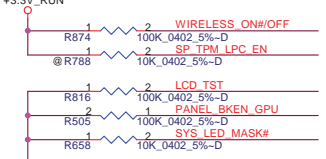
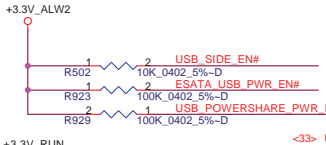
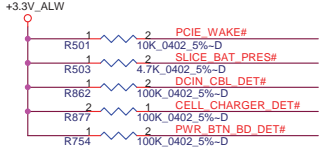
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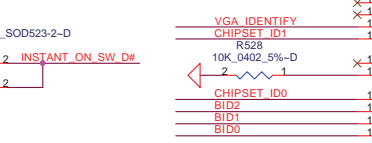
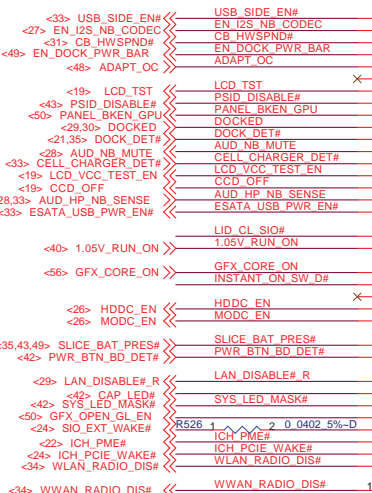
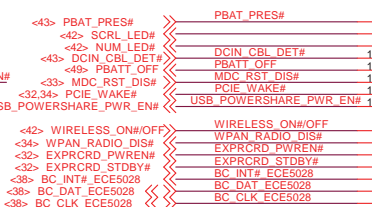
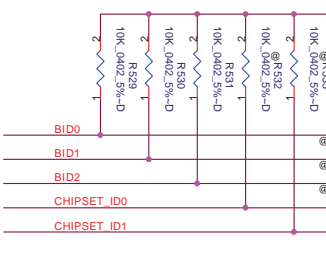
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| DOCKING CONN | | | |
| LA-3803P | | | |
| Size | Document Number | Rev 0.8 | |
| Date: | Thursday, June 12, 2008 | Sheet | 35 of 71 |



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Option for select PC Card & Express Card
For PC Card stuff R882
For Express card stuff R883



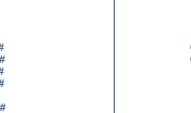
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| 0 | 1 | 0 | X02 |
| 0 | 1 | 1 | X03 |
| 1 | 0 | 0 | X04 |
| 1 | 0 | 1 | X05 |
| 1 | 1 | 0 | X06 |
| 1 | 1 | 1 | X07 |

| CHIPSET_ID0 | CHIPSET_ID1 | Note |
|-------------|-------------|------|
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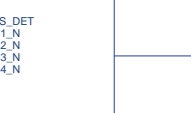
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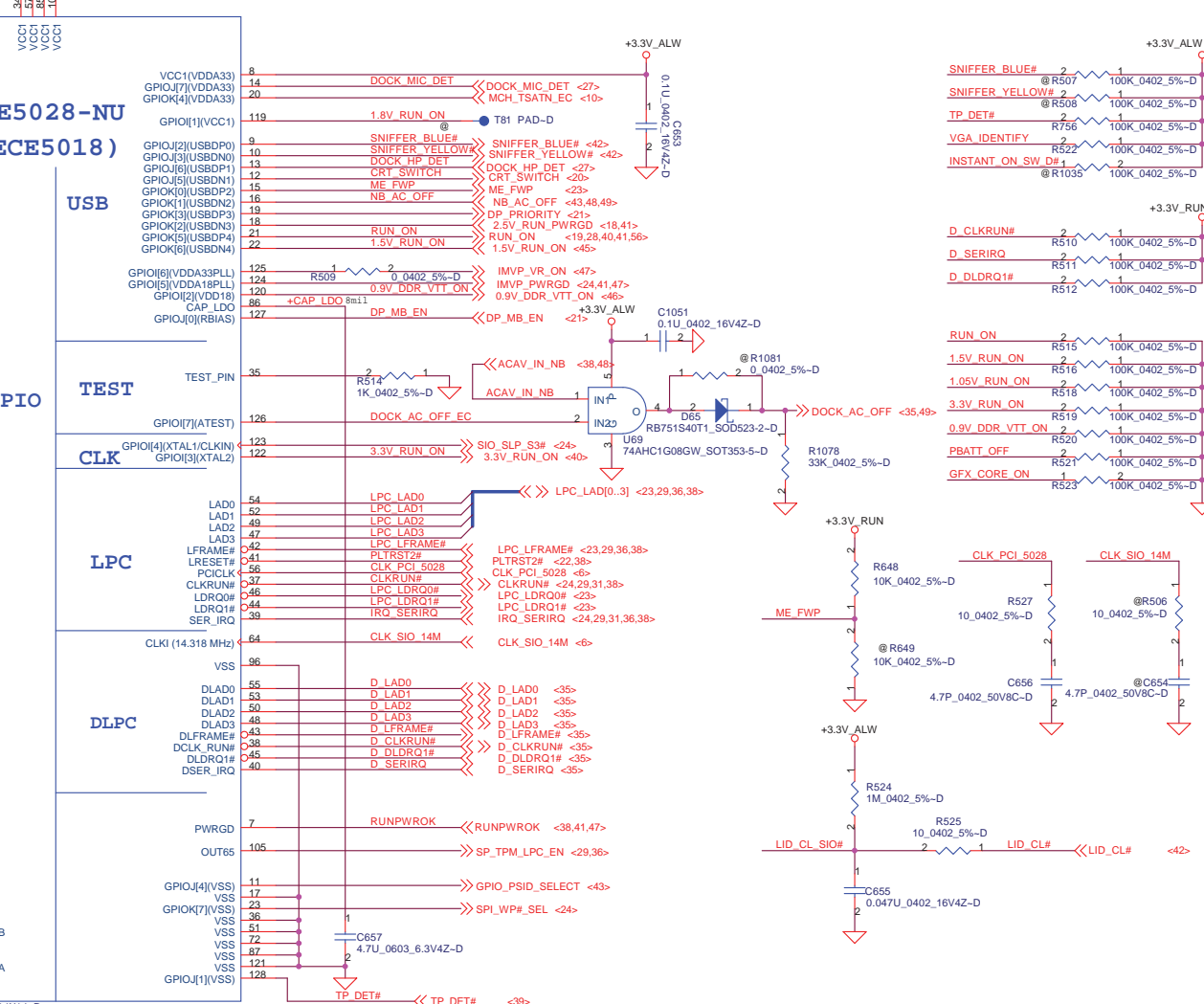
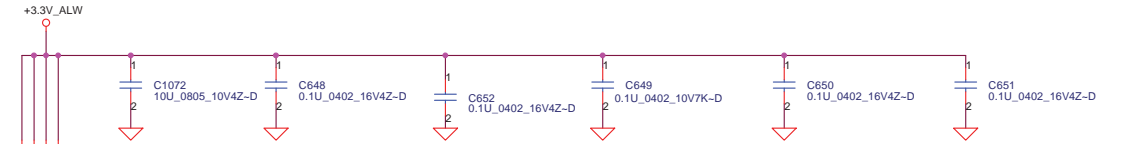
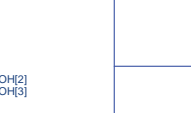
GPIO



LPC



DLPC



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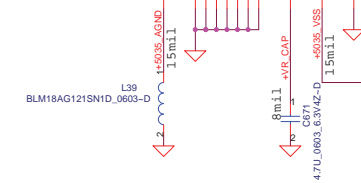
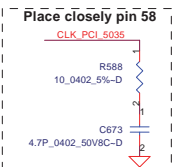
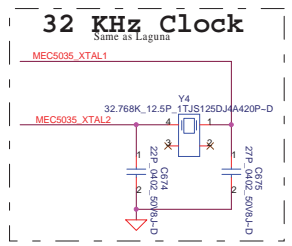
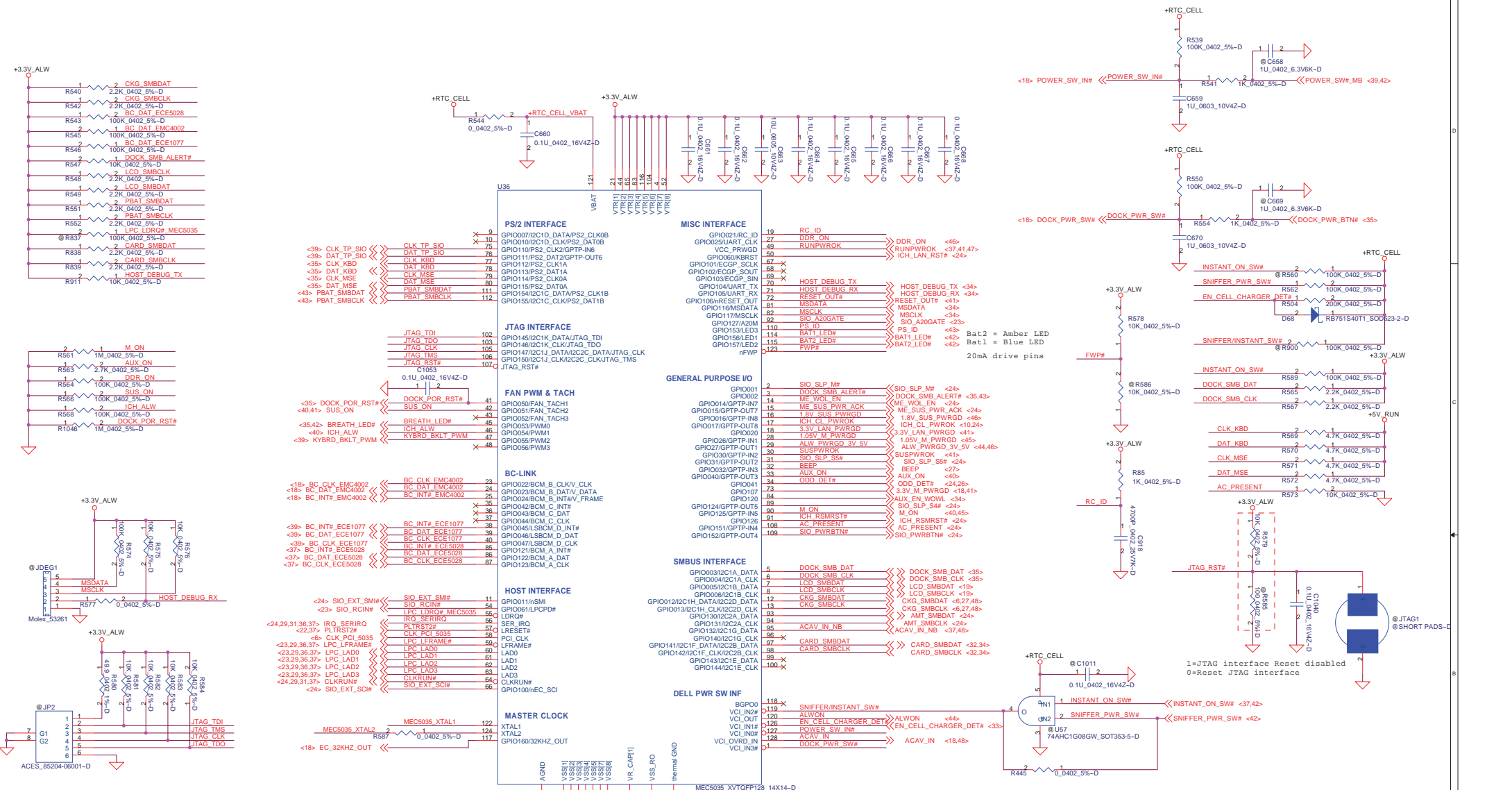
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Size: Document Number LA-3803P

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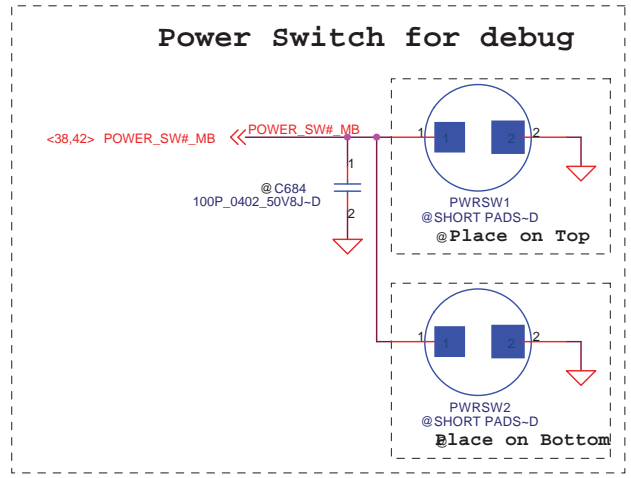
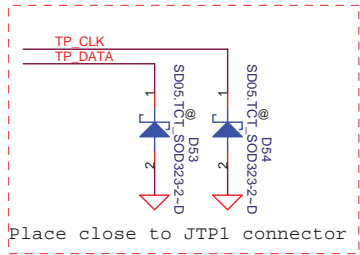
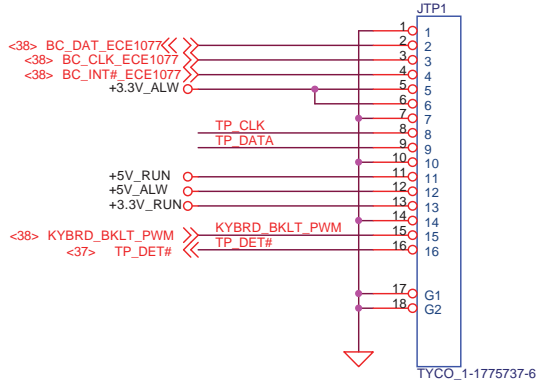
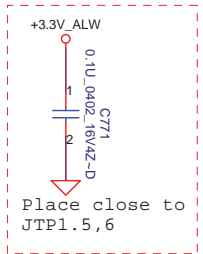
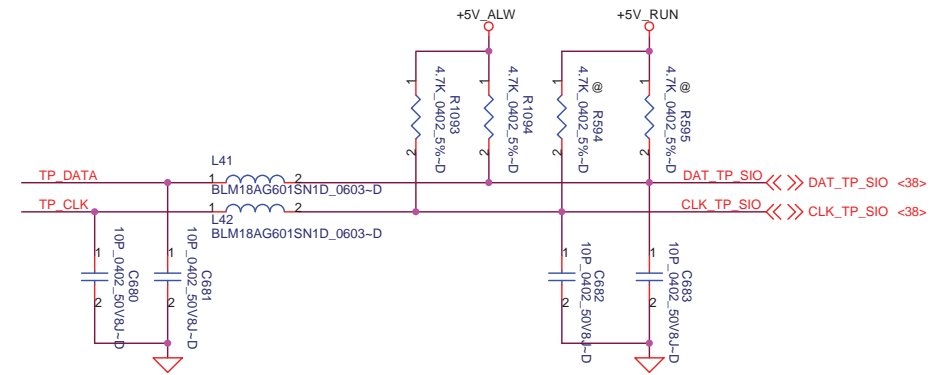
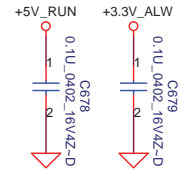
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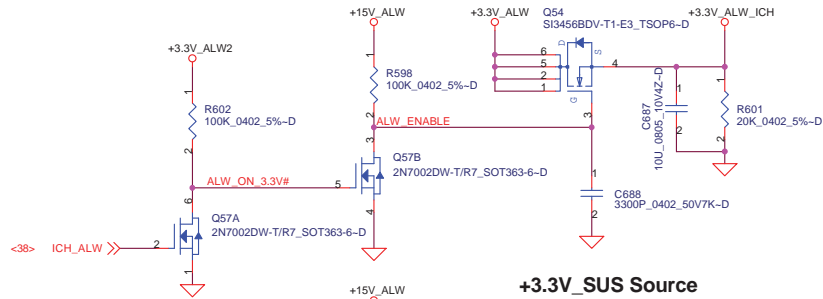
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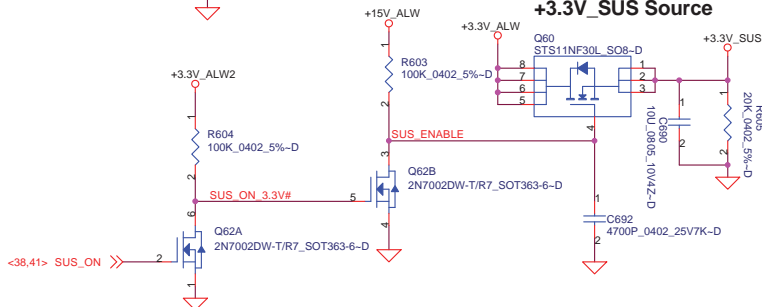
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| Title | | |
| Touch PAD/Int KB/LID | | |
| Size | Document Number | Rev |
| | LA-3803P | 0.8 |
| Date: | Thursday, June 12, 2008 | Sheet 39 of 71 |

DC/DC Interface

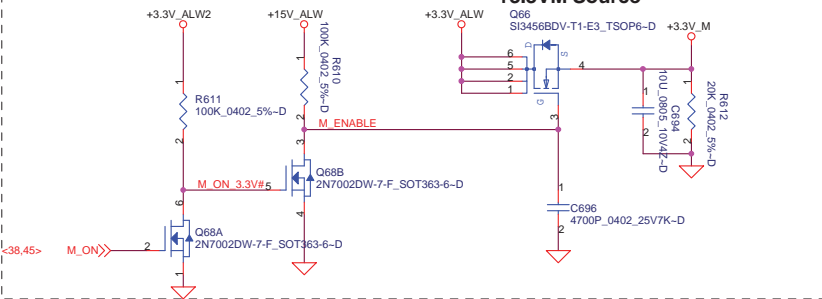
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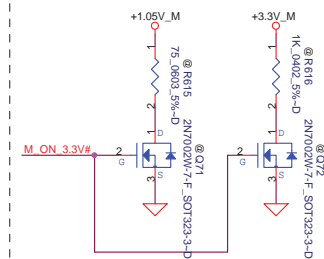
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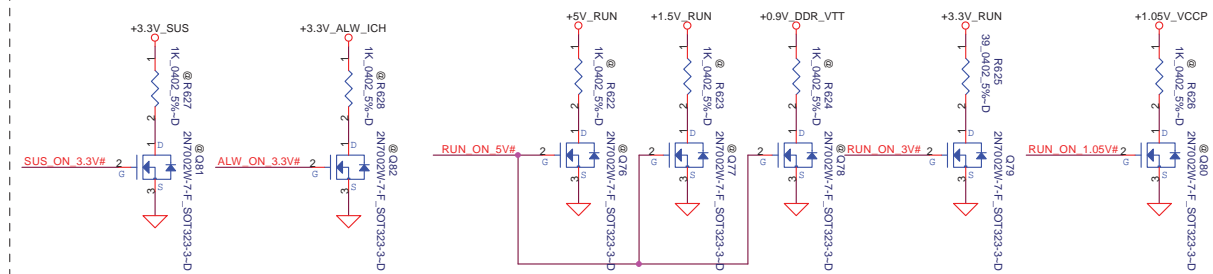
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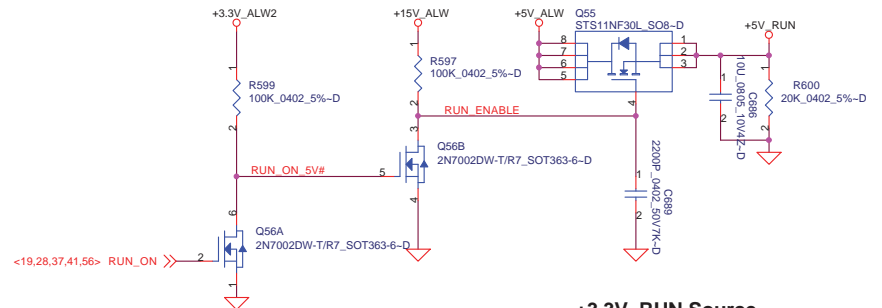
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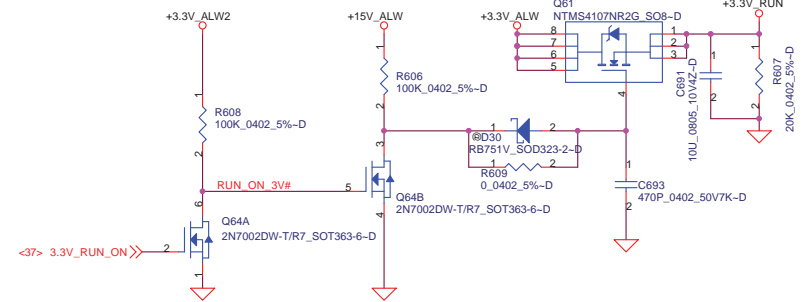
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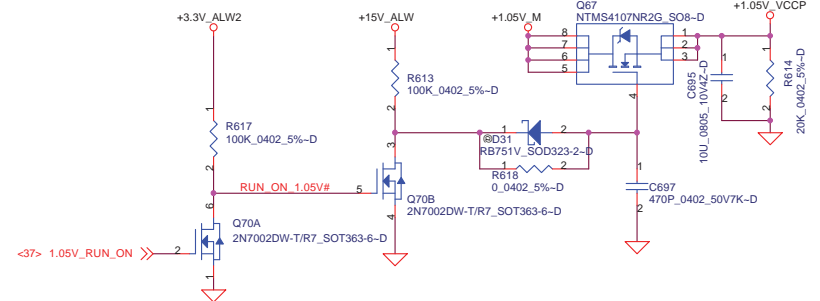
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+3.3V_RUN Source



+1.05V_VCCP Source



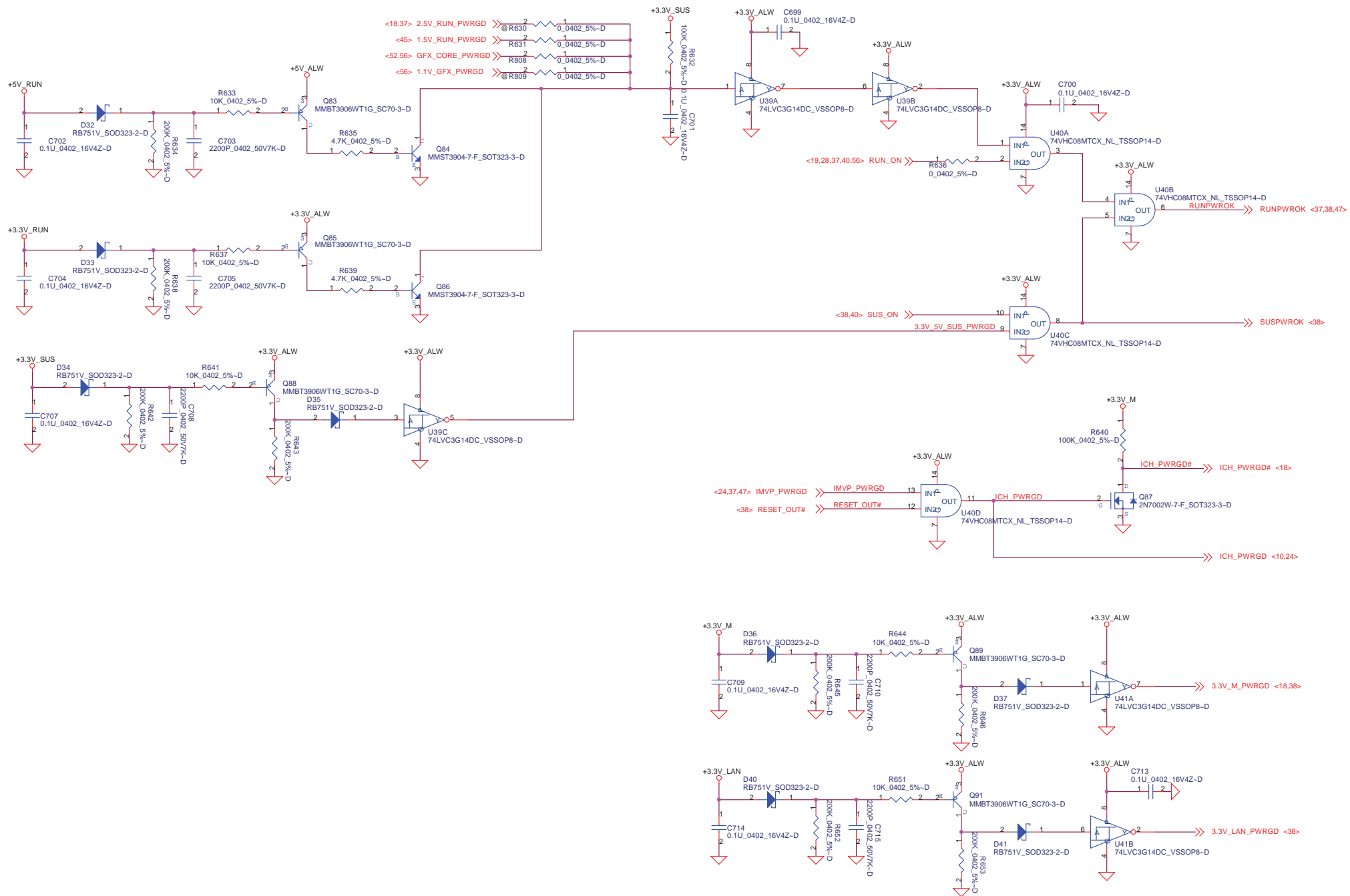
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| | | | |
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| Title | | POWER CONTROL | |
| Size | Document Number | LA-3803P | |
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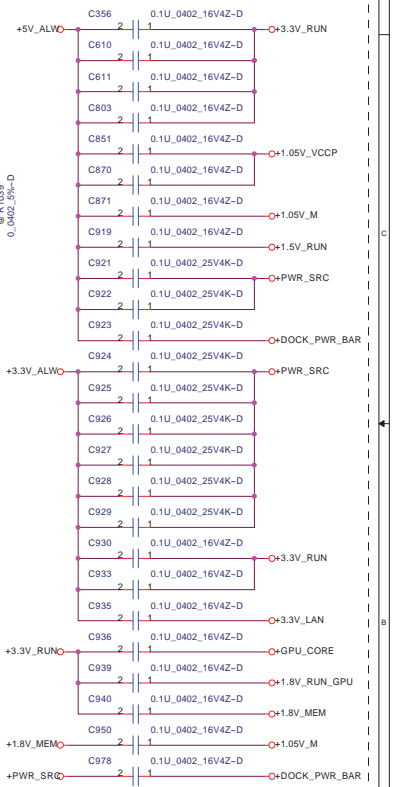
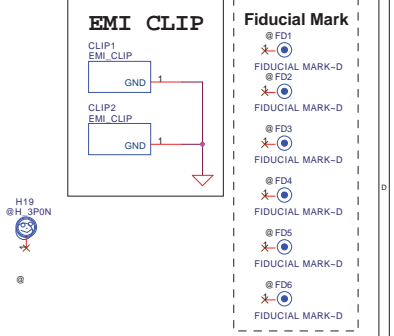
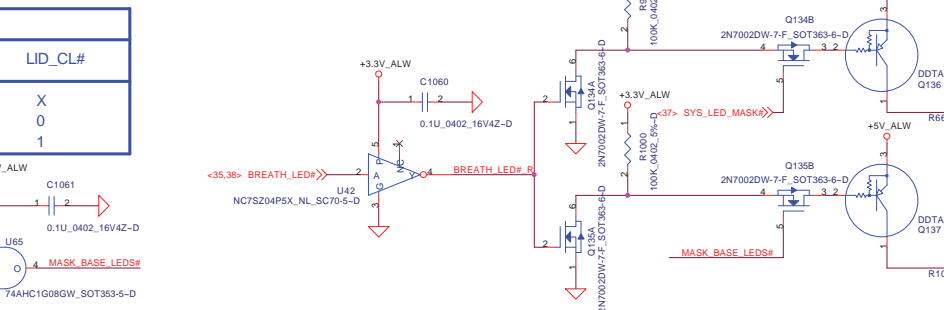
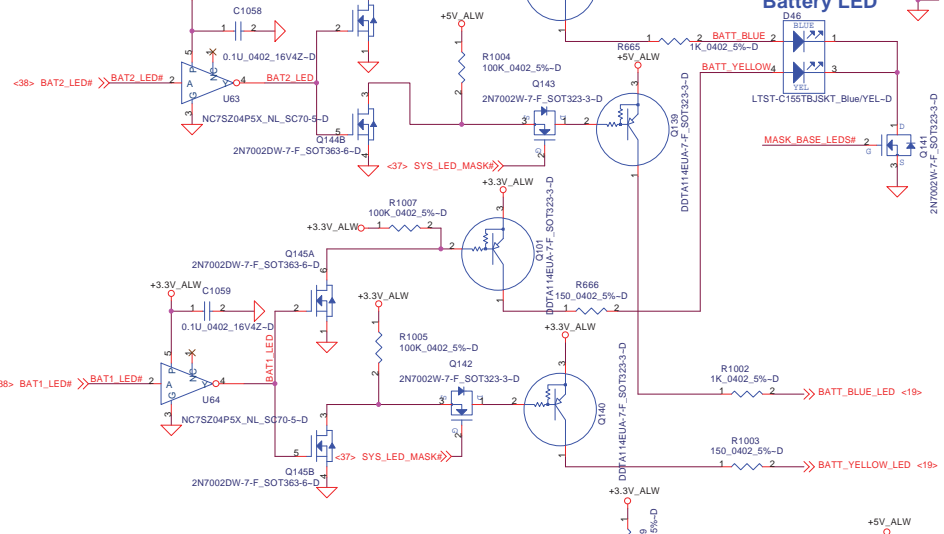
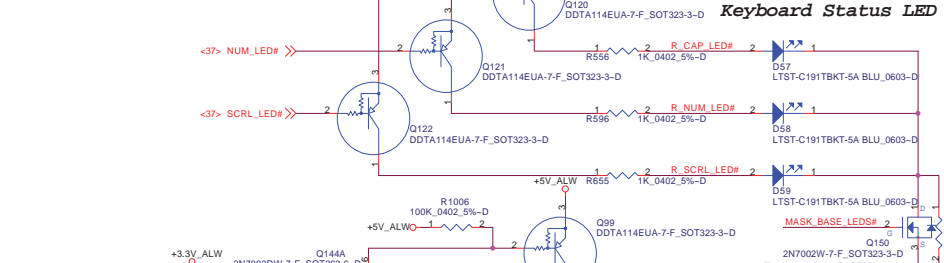
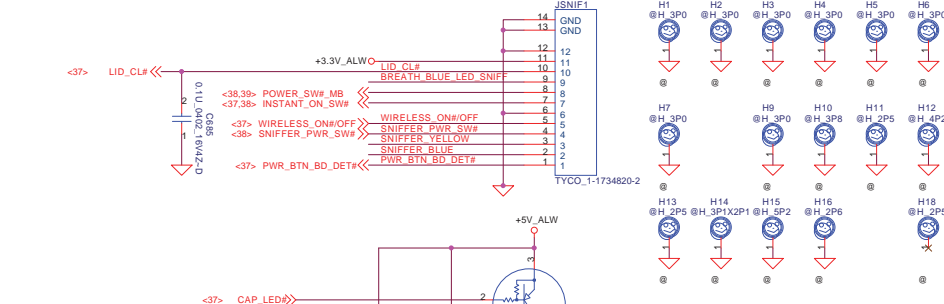
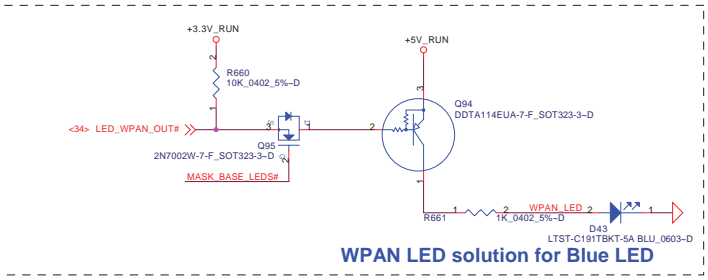
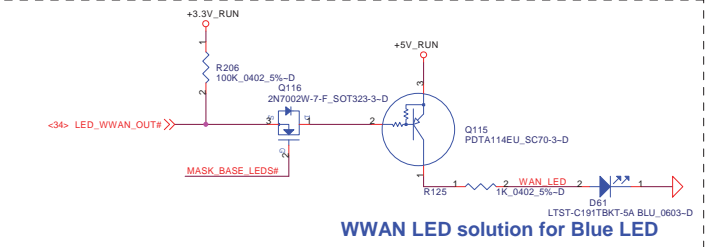
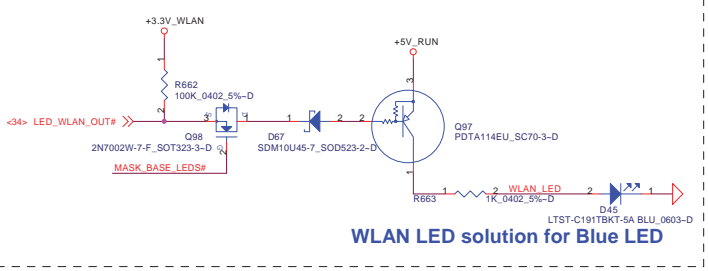
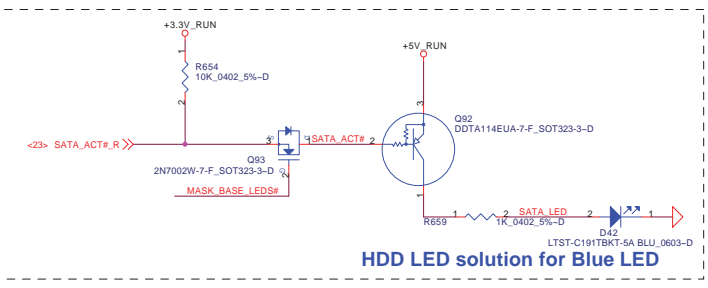
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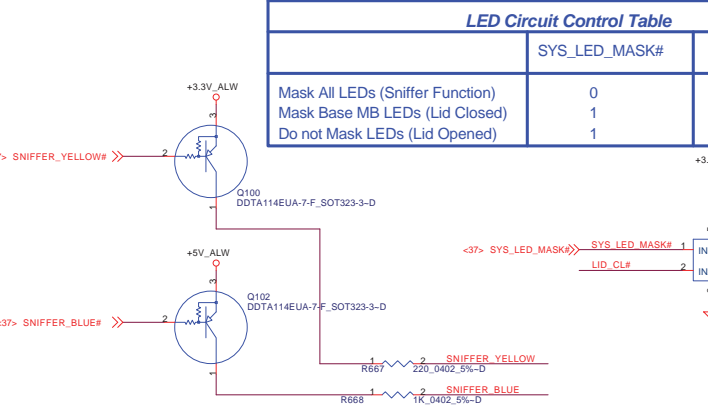
Power Good

LA-3803P

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| | SYS_LED_MASK# | LID_CL# |
|----------------------------------|---------------|---------|
| Mask All LEDs (Sniffer Function) | 0 | X |
| Mask Base MB LEDs (Lid Closed) | 1 | 0 |
| Do not Mask LEDs (Lid Opened) | 1 | 1 |



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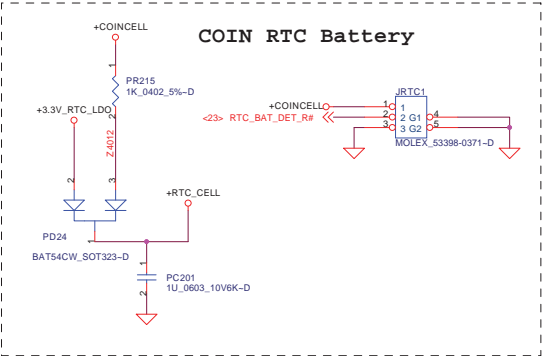
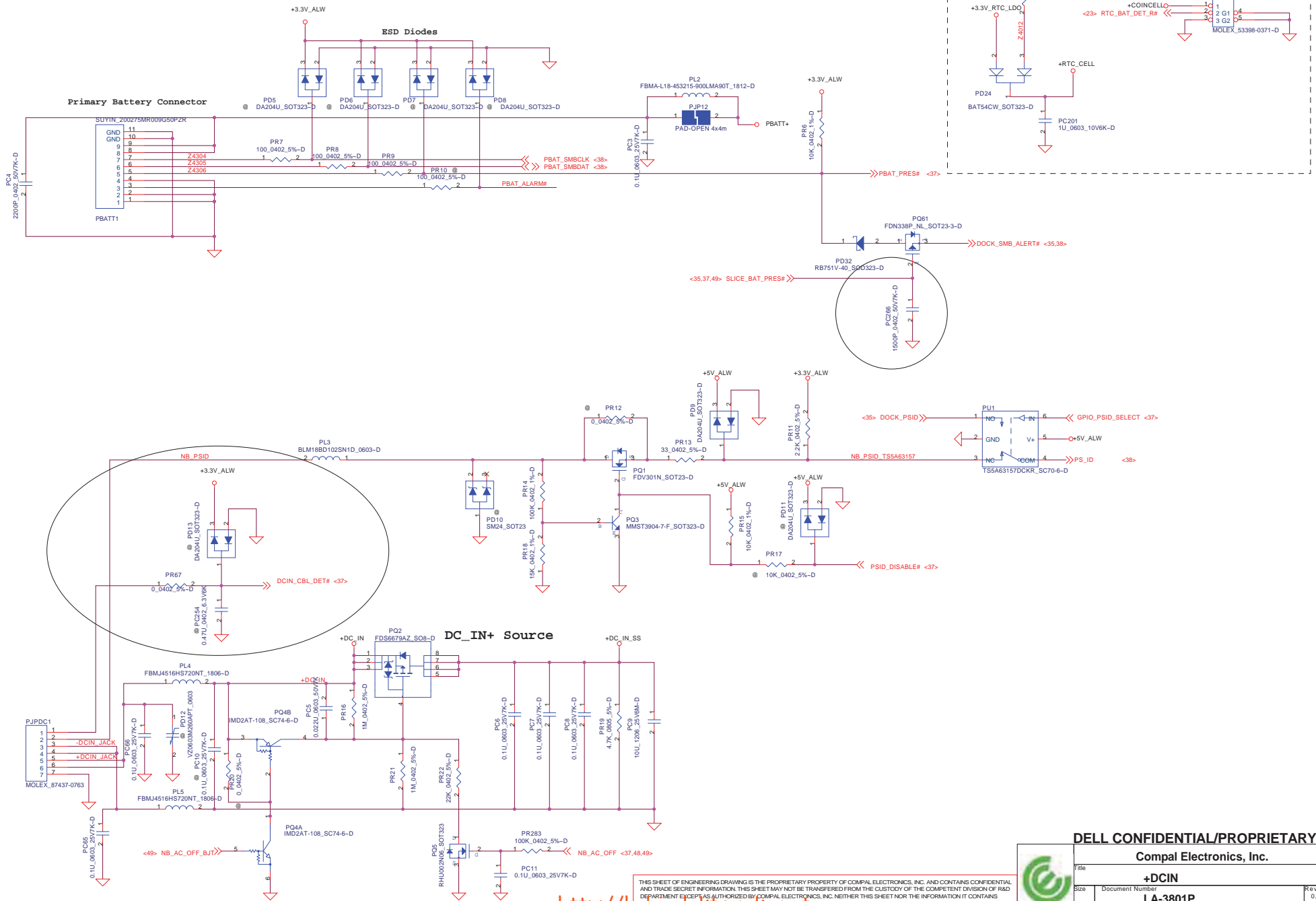
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File: **PAD and Standoff**

Size: **LA-3803P**

Date: Thursday, June 12, 2008 Sheet 42 of 71



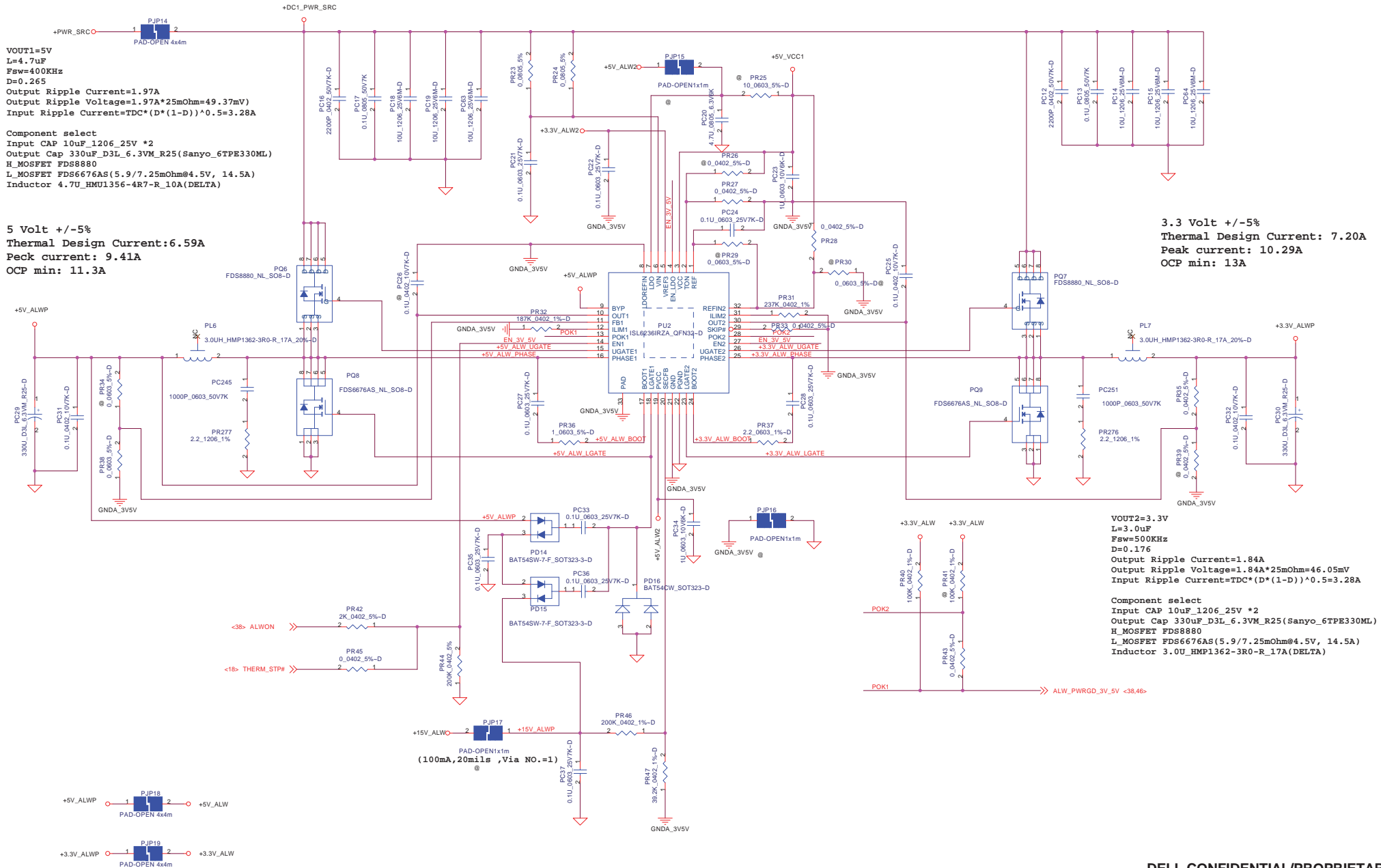
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| File | +DCIN | | Rev |
| Size | Document Number | LA-3801P | 0.8 |
| Date: | Thursday, June 12, 2008 | Sheet | 43 of 71 |

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+3.3V_ALWP/ +5V_ALWP/ +5V_ALW2 / +15V_ALWP



VOUT1=5V
 L=4.7uH
 Fsw=400KHz
 D=0.265
 Output Ripple Current=1.97A
 Output Ripple Voltage=1.97A*25mOhm=49.37mV
 Input Ripple Current=TDC*(D*(1-D))^0.5=3.28A

Component select
 Input CAP 10uF_1206_25V *2
 Output Cap 330uF_D3L_6.3VM_R25(Sanyo_6TPE330ML)
 H_MOSFET FDS8880
 L_MOSFET FDS6676AS(5.9/7.25mOhm@4.5V, 14.5A)
 Inductor 4.7U_HMU1356-4R7-R_10A(DELTA)

5 Volt +/-5%
 Thermal Design Current:6.59A
 Peck current: 9.41A
 OCP min: 11.3A

3.3 Volt +/-5%
 Thermal Design Current: 7.20A
 Peak current: 10.29A
 OCP min: 13A

VOUT2=3.3V
 L=3.0uF
 Fsw=500KHz
 D=0.176
 Output Ripple Current=1.84A
 Output Ripple Voltage=1.84A*25mOhm=46.05mV
 Input Ripple Current=TDC*(D*(1-D))^0.5=3.28A

Component select
 Input CAP 10uF_1206_25V *2
 Output Cap 330uF_D3L_6.3VM_R25(Sanyo_6TPE330ML)
 H_MOSFET FDS8880
 L_MOSFET FDS6676AS(5.9/7.25mOhm@4.5V, 14.5A)
 Inductor 3.0U_HMP1362-3R0-R_17A(DELTA)

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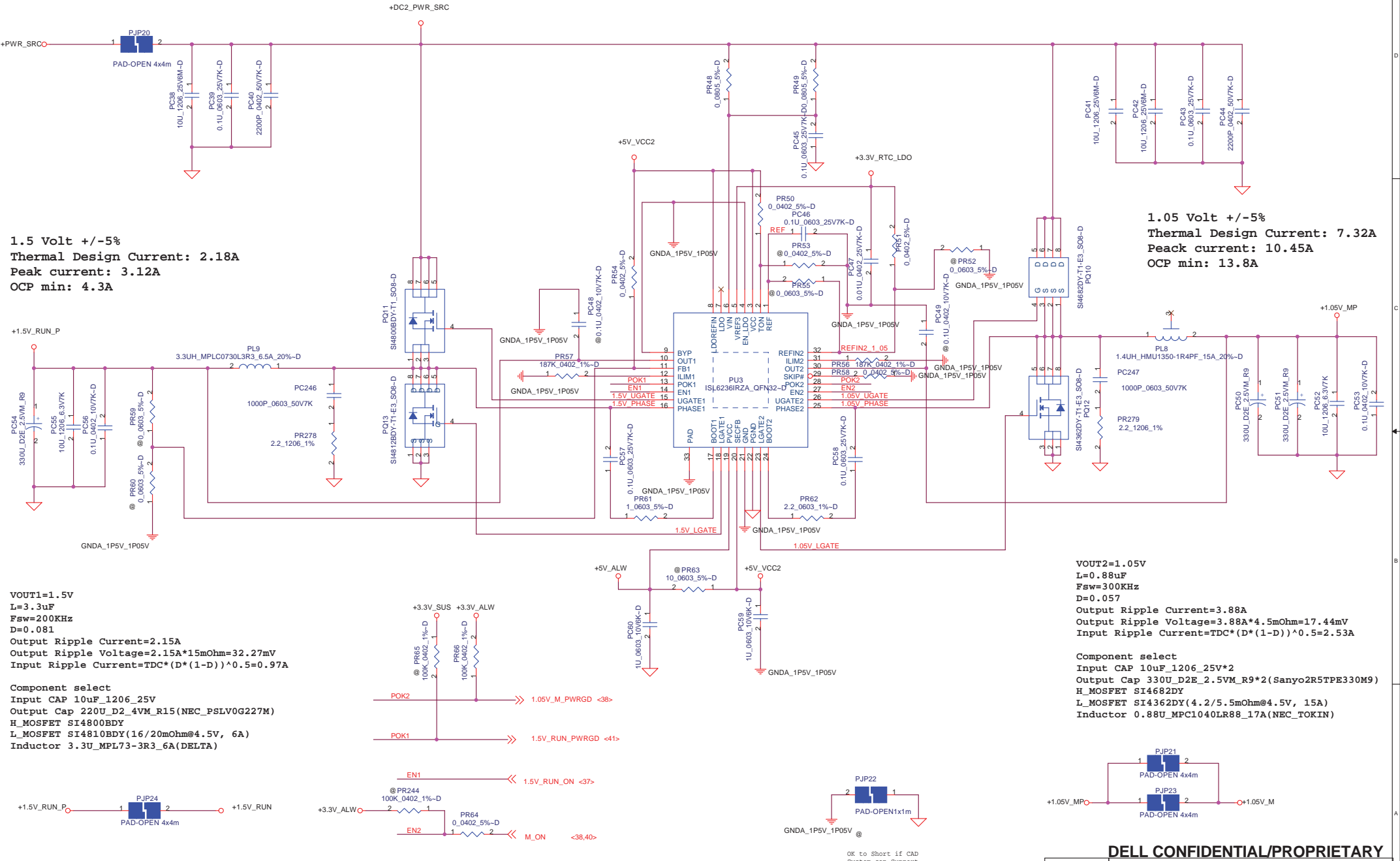
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Doc DC/DC +3V/+5V

Size Document Number LA-3803P Rev 0.8

Date: Thursday, June 12, 2008 Sheet 44 of 71

+1.5V_RUN / +1.05V_M / +3.3V_RTC_LDO



1.5 Volt +/-5%
Thermal Design Current: 2.18A
Peak current: 3.12A
OCP min: 4.3A

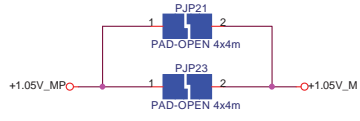
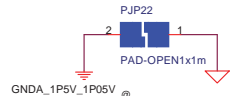
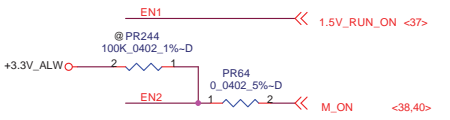
1.05 Volt +/-5%
Thermal Design Current: 7.32A
Peak current: 10.45A
OCP min: 13.8A

VOUT1=1.5V
L=3.3uF
Fsw=200KHz
D=0.081
Output Ripple Current=2.15A
Output Ripple Voltage=2.15A*15mOhm=32.27mV
Input Ripple Current=TDC*(D*(1-D))^0.5=0.97A

VOUT2=1.05V
L=0.88uF
Fsw=300KHz
D=0.057
Output Ripple Current=3.88A
Output Ripple Voltage=3.88A*4.5mOhm=17.44mV
Input Ripple Current=TDC*(D*(1-D))^0.5=2.53A

Component select
Input CAP 10uF_1206_25V
Output Cap 220U_D2_4VM_R15(NEC_PSLV0G227M)
H_MOSFET SI4800BDY
L_MOSFET SI4810BDY(16/20mOhm@4.5V, 6A)
Inductor 3.3U_MPL73-3R3_6A(DELTA)

Component select
Input CAP 10uF_1206_25V*2
Output Cap 330U_D2E_2.5VM_R9*2(Sanyo2R5TPE330M9)
H_MOSFET SI4362DY(4.2/5.5mOhm@4.5V, 15A)
L_MOSFET SI4362DY(4.2/5.5mOhm@4.5V, 15A)
Inductor 0.88U_MPC1040LR88_17A(NEC_TOKIN)



OK to Short if CAD System can Support

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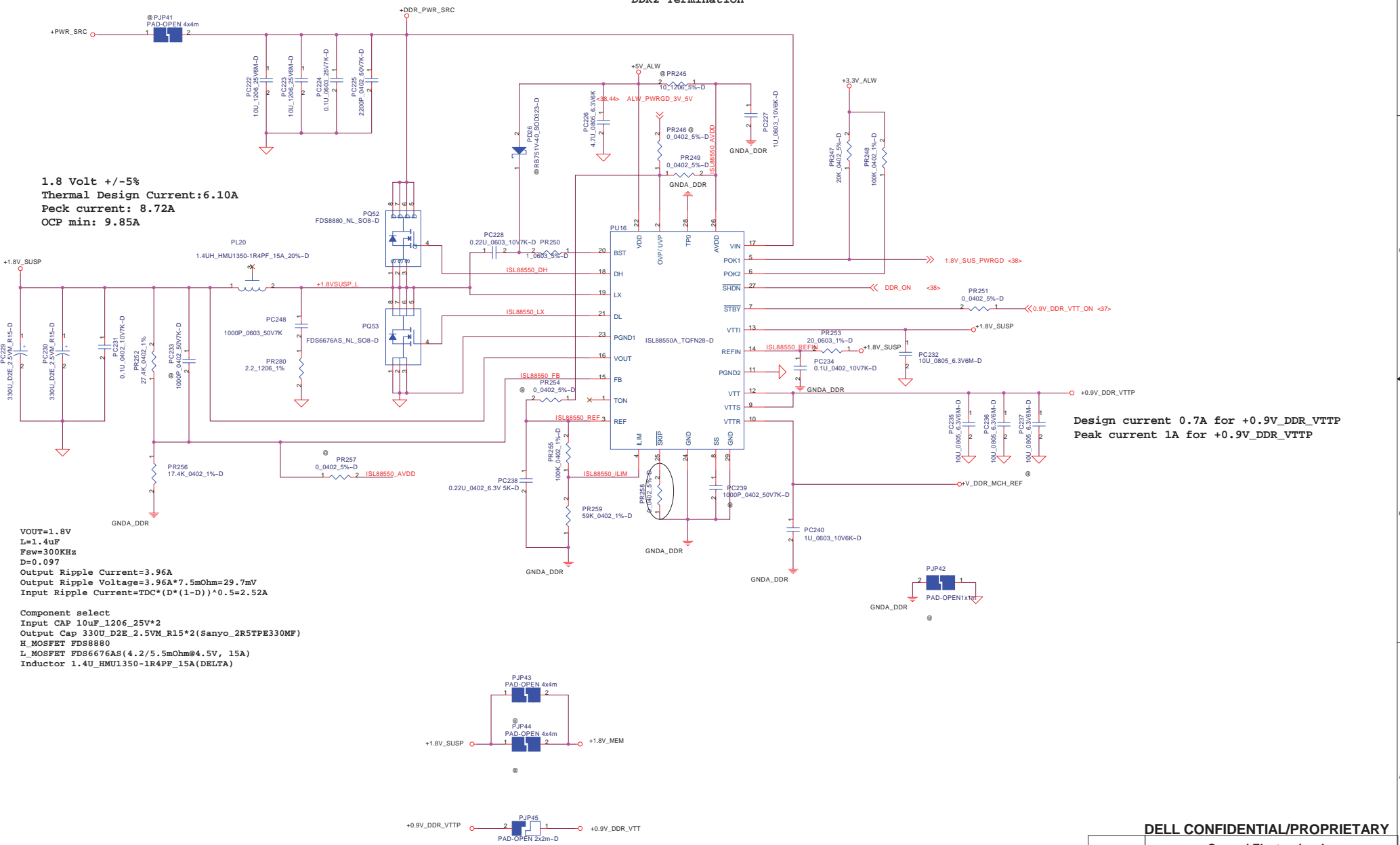
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Compal Electronics, Inc.

Title: **+1.5V_RUN / +1.05V_VCCP**

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Date: Thursday, June 12, 2008 Sheet 45 of 71

+1.8VSUSP/ +0.9V_DDR_VTT
DDR2 Termination



1.8 Volt +/-5%
Thermal Design Current: 6.10A
Peak current: 8.72A
OCP min: 9.85A

VOU1=1.8V
L=1.4uF
Fsw=300KHz
D=0.097
Output Ripple Current=3.96A
Output Ripple Voltage=3.96A*7.5mOhm=29.7mV
Input Ripple Current=TDC*(D*(1-D))^0.5=2.52A

Component select
Input CAP 10uF_1206_25V*2
Output Cap 330U_D2E_2.5VM_R15*2(Sanyo_2R2TPE330MF)
H_MOSFET FDS8880
L_MOSFET FDS6676AS(4.2/5.5mOhm@4.5V, 15A)
Inductor 1.4U_HMU1350-1R4PF_15A(DELTA)

Design current 0.7A for +0.9V_DDR_VTTP
Peak current 1A for +0.9V_DDR_VTTP

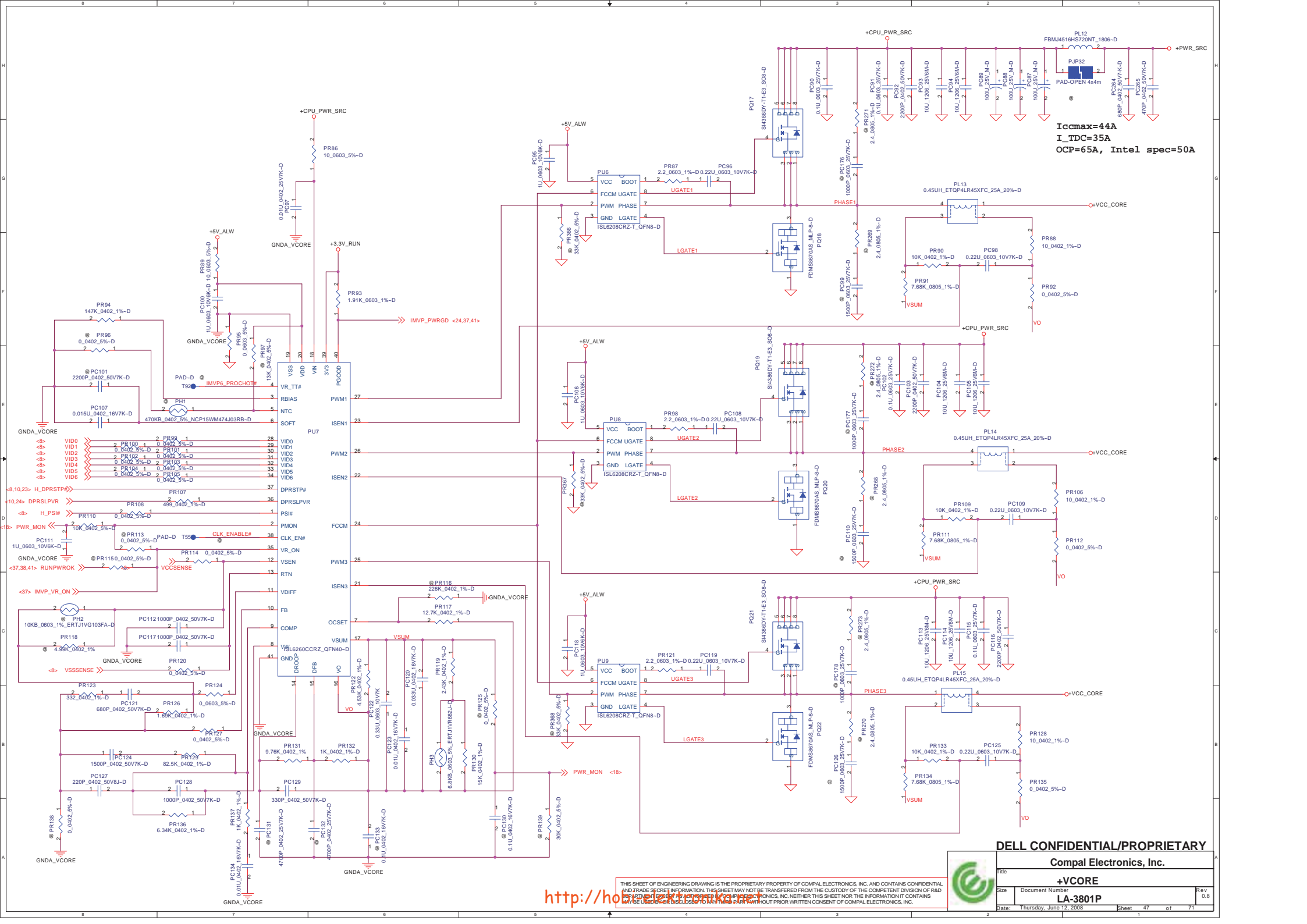
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| Title | | +1.8VSUSP/ +0.9V_DDR_VT |
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Iccmax=44A
 I_TDC=35A
 OCP=65A, Intel spec=50A

- <8> VID0 2 PR100 0.0402 5%-D 28
- <8> VID1 2 PR101 0.0402 5%-D 29
- <8> VID2 2 PR102 0.0402 5%-D 30
- <8> VID3 2 PR103 0.0402 5%-D 31
- <8> VID4 2 PR104 0.0402 5%-D 32
- <8> VID5 2 PR105 0.0402 5%-D 33
- <8> VID6 2 PR106 0.0402 5%-D 34
- <8,10,23> H_DPRSTP# 37
- <10,24> DPRSLPVR 36
- <8> H_PSI# 35
- <8> PWR_MON 38
- <37,38,41> RUNPWROK 12
- <8> VSSSENSE 13

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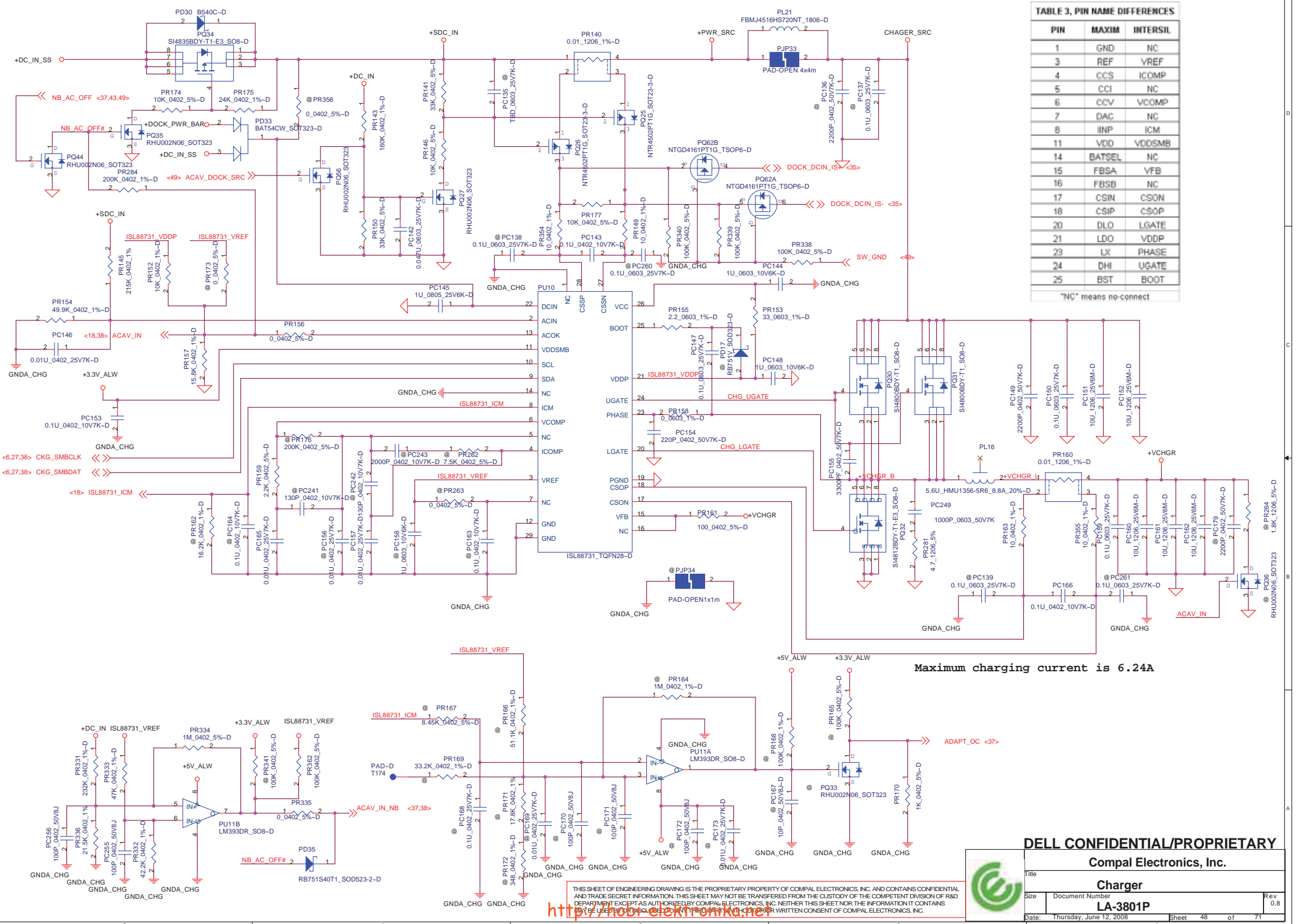
Rev 0.8

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<http://h...>

| TABLE 3. PIN NAME DIFFERENCES | | |
|-------------------------------|--------|----------|
| PIN | MAXIM | INTERSIL |
| 1 | GND | NC |
| 3 | REF | VREF |
| 4 | CCS | ICOMP |
| 5 | CCI | NC |
| 6 | CCV | VCOMP |
| 7 | DAC | NC |
| 8 | IINP | ICM |
| 11 | VDD | VDDSMB |
| 14 | BATSEL | NC |
| 15 | FBSA | VFB |
| 16 | FBSB | NC |
| 17 | CSIN | CSON |
| 18 | CSIP | CSOP |
| 20 | DLO | LGATE |
| 21 | LDO | VDDP |
| 23 | LX | PHASE |
| 24 | DHI | UGATE |
| 25 | BST | BOOT |

*"NC" means no-connect



Maximum charging current is 6.24A

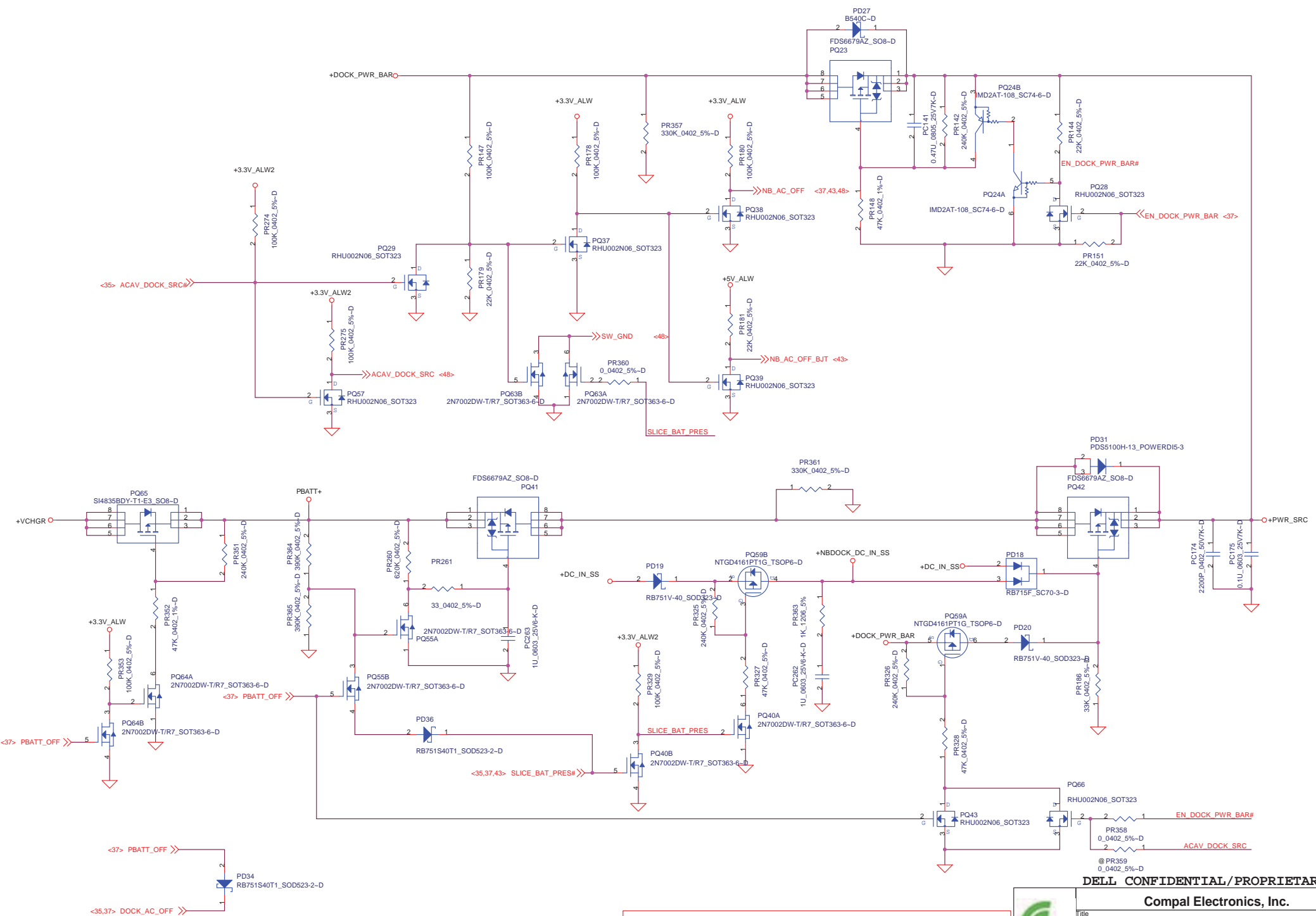
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| Title | | |
| Charger | | |
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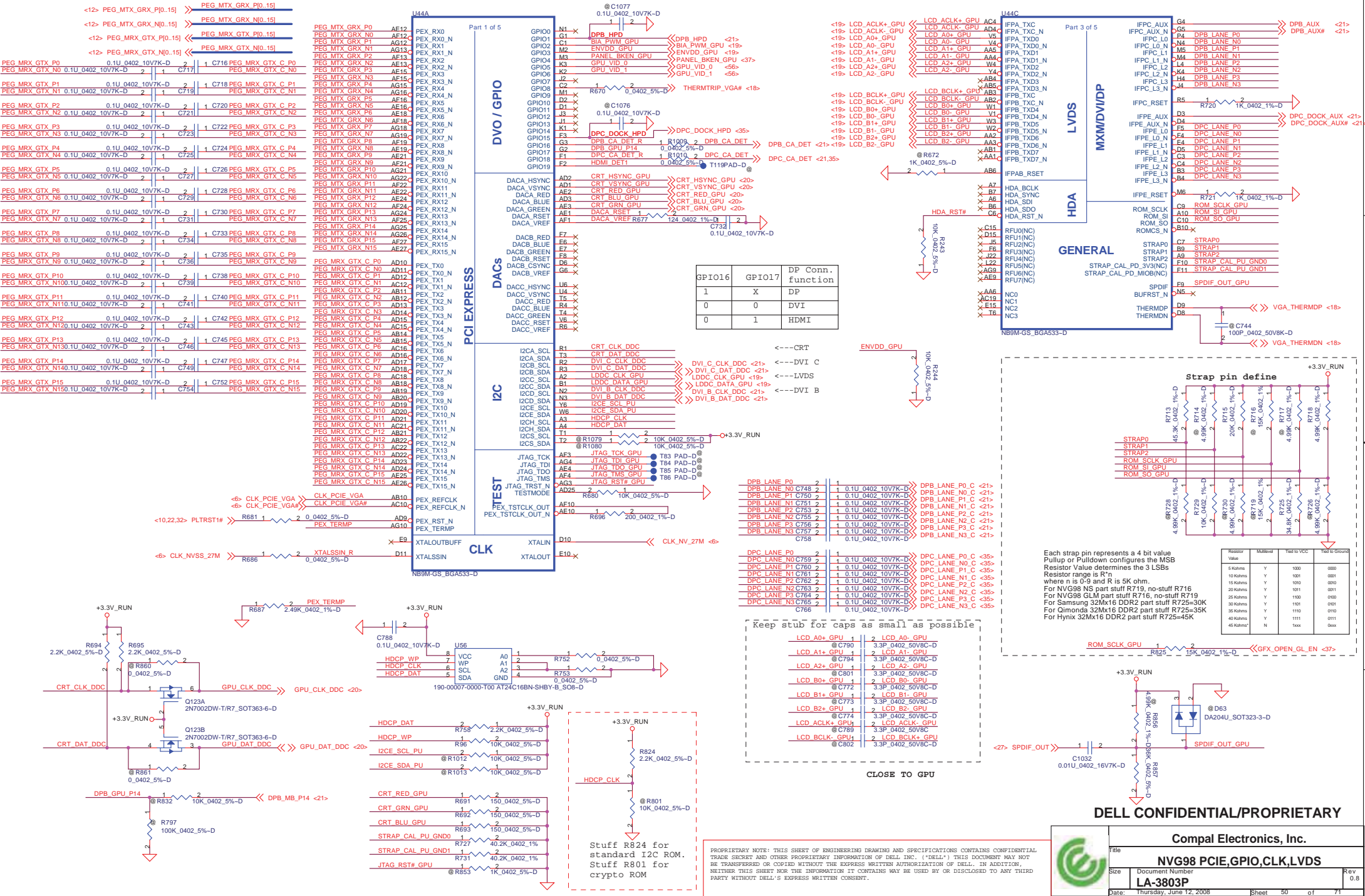
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LA-3803P

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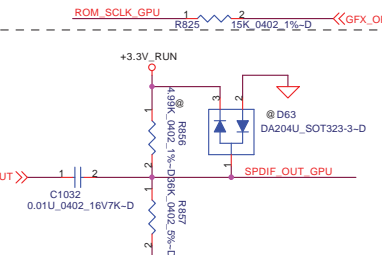


| GPIO16 | GPIO17 | DP Comm. function |
|--------|--------|-------------------|
| 1 | X | DP |
| 0 | 0 | DVI |
| 0 | 1 | HDMI |

| Resistor | Multivalue | Tied to VCC | Tied to Ground |
|----------|------------|-------------|----------------|
| 5 Kohms | Y | 1000 | 0000 |
| 10 Kohms | Y | 1001 | 0001 |
| 15 Kohms | Y | 1000 | 0000 |
| 20 Kohms | Y | 1001 | 0001 |
| 25 Kohms | Y | 1100 | 0000 |
| 30 Kohms | Y | 1101 | 0001 |
| 40 Kohms | Y | 1111 | 0111 |
| 45 Kohms | N | 1000 | 0000 |

Keep stub for caps as small as possible

| Component | Value | Location |
|---------------|-------|-------------------|
| LCD A0+ GPU | C790 | 3.3P 0402 50V8C-D |
| LCD A1+ GPU | C791 | 3.3P 0402 50V8C-D |
| LCD A2+ GPU | C792 | 3.3P 0402 50V8C-D |
| LCD B0+ GPU | C801 | 3.3P 0402 50V8C-D |
| LCD B1+ GPU | C802 | 3.3P 0402 50V8C-D |
| LCD B2+ GPU | C772 | 3.3P 0402 50V8C-D |
| LCD ACKL+ GPU | C773 | 3.3P 0402 50V8C-D |
| LCD BCLK+ GPU | C774 | 3.3P 0402 50V8C-D |
| LCD ACKL- GPU | C789 | 3.3P 0402 50V8C-D |
| LCD BCLK- GPU | C802 | 3.3P 0402 50V8C-D |



Stuff R824 for standard I2C ROM.
Stuff R801 for crypto ROM

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File: **NV98 GPU, GPIO, CLK, LVDS**

Size: **LA-3803P**

Date: Thursday, June 12, 2008

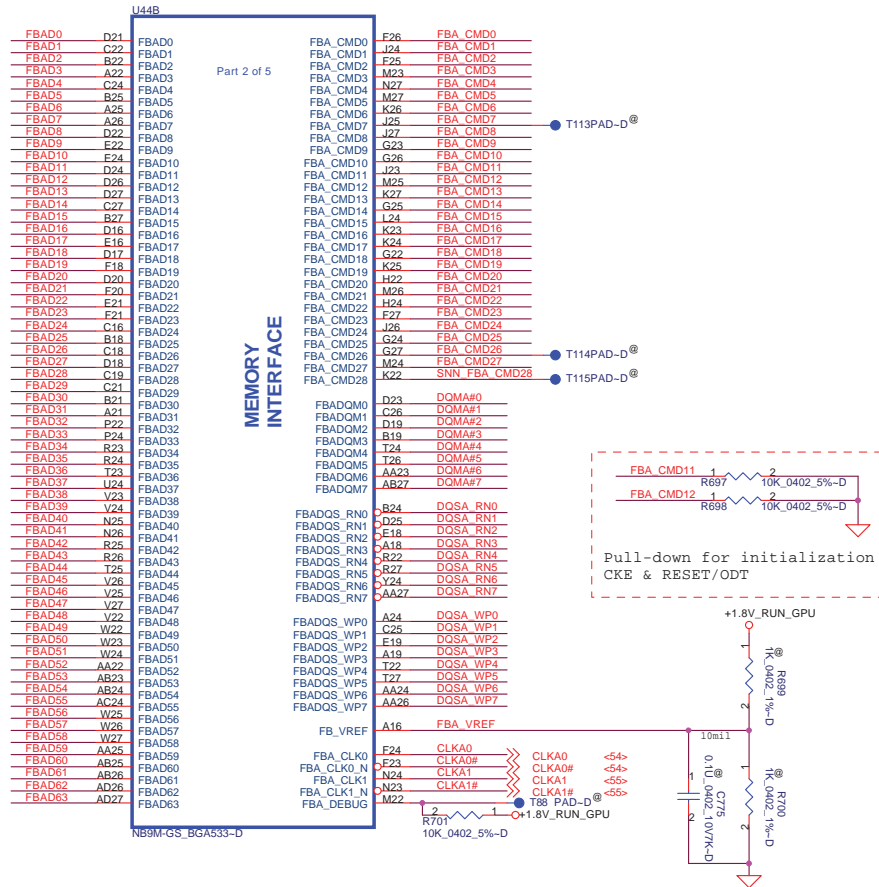
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FBAD[0:63] << FBAD[0:63] <54,55>
 DQMA#[0:7] >> DQMA#[0:7] <54,55>
 DQSA_WP[0:7] << DQSA_WP[0:7] <54,55>
 DQSA_RN[0:7] << DQSA_RN[0:7] <54,55>
 FBA_CMD[0..27] >> FBA_CMD[0..27] <54,55>

GPU CMD Mapping VRAM table

| CMD_Address | VRAM | Location |
|-------------|-------|----------|
| FBA_CMD0 | A3 | U46,U47 |
| FBA_CMD1 | A0 | U46..U49 |
| FBA_CMD2 | A2 | U46,U47 |
| FBA_CMD3 | A1 | U46..U49 |
| FBA_CMD4 | A3 | U48,U49 |
| FBA_CMD5 | A4 | U48,U49 |
| FBA_CMD6 | A5 | U48,U49 |
| FBA_CMD7 | | |
| FBA_CMD8 | CS# | U46..U49 |
| FBA_CMD9 | WE# | U46..U49 |
| FBA_CMD10 | BA0 | U46..U49 |
| FBA_CMD11 | CKE | U46..U49 |
| FBA_CMD12 | ODT | U46..U49 |
| FBA_CMD13 | A2 | U48,U49 |
| FBA_CMD14 | A12 | U46..U49 |
| FBA_CMD15 | RAS# | U46..U49 |
| FBA_CMD16 | A11 | U46..U49 |
| FBA_CMD17 | A10 | U46..U49 |
| FBA_CMD18 | BA1 | U46..U49 |
| FBA_CMD19 | A8 | U46..U49 |
| FBA_CMD20 | A9 | U46..U49 |
| FBA_CMD21 | A6 | U46..U49 |
| FBA_CMD22 | A5 | U46,U47 |
| FBA_CMD23 | A7 | U46..U49 |
| FBA_CMD24 | A4 | U46,U47 |
| FBA_CMD25 | CAS# | U46..U49 |
| FBA_CMD26 | | |
| FBA_CMD27 | NC#L1 | U46..U49 |
| FBA_CMD28 | | |

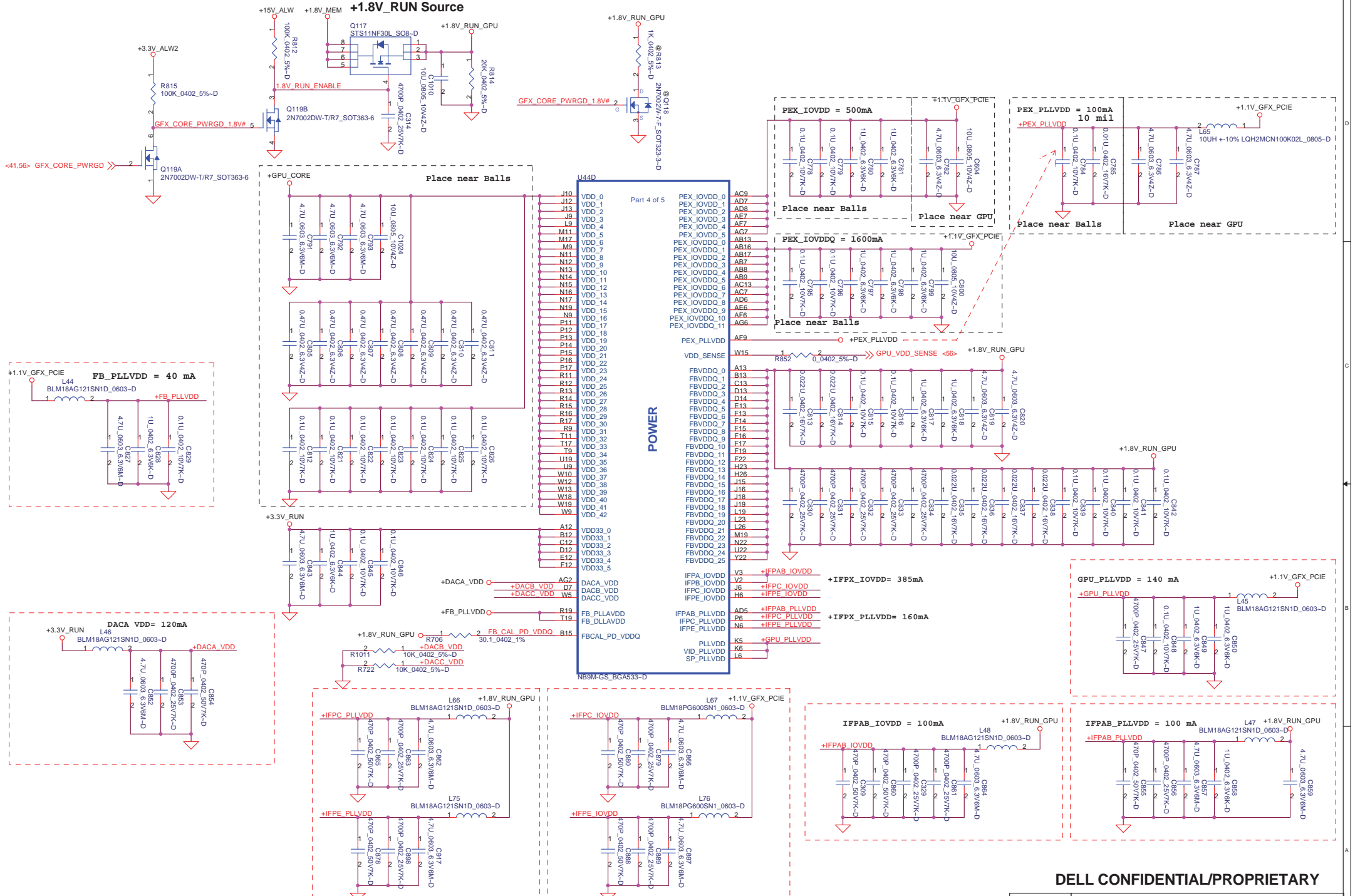


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| | | Title NVG98 Memory Interface | |
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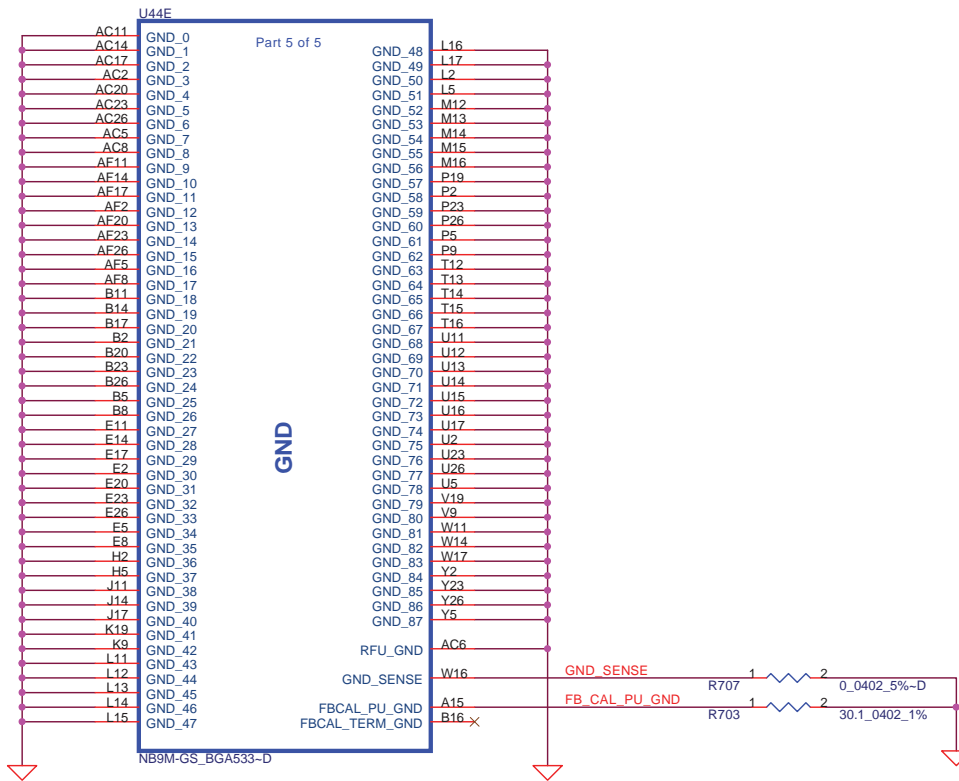


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| | | NVG98 POWER | |
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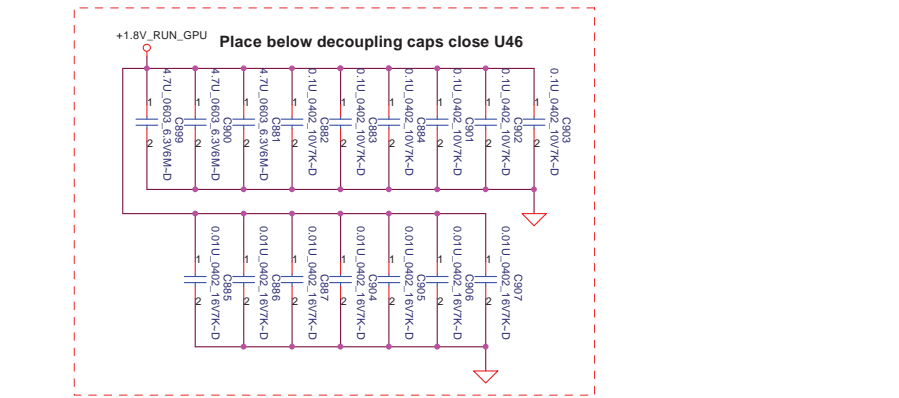
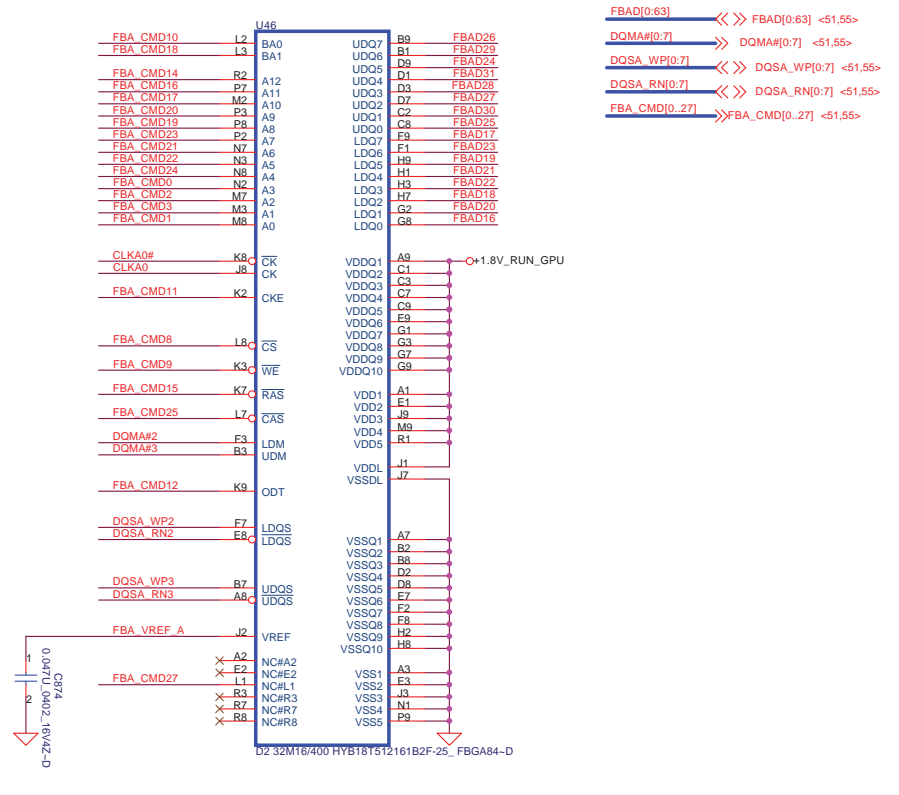
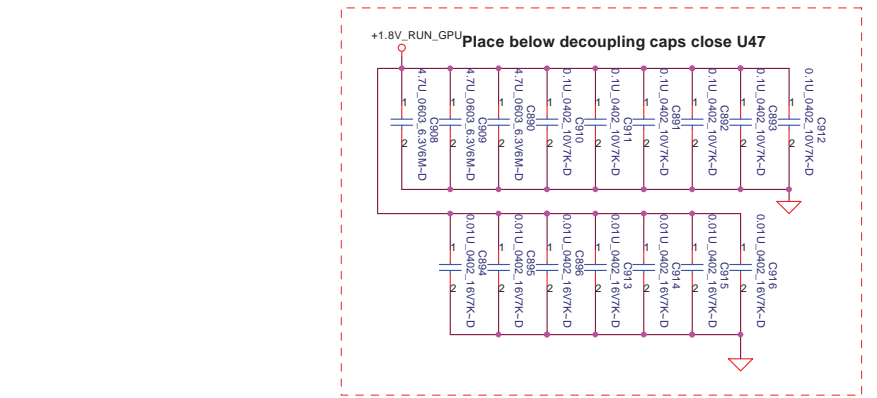
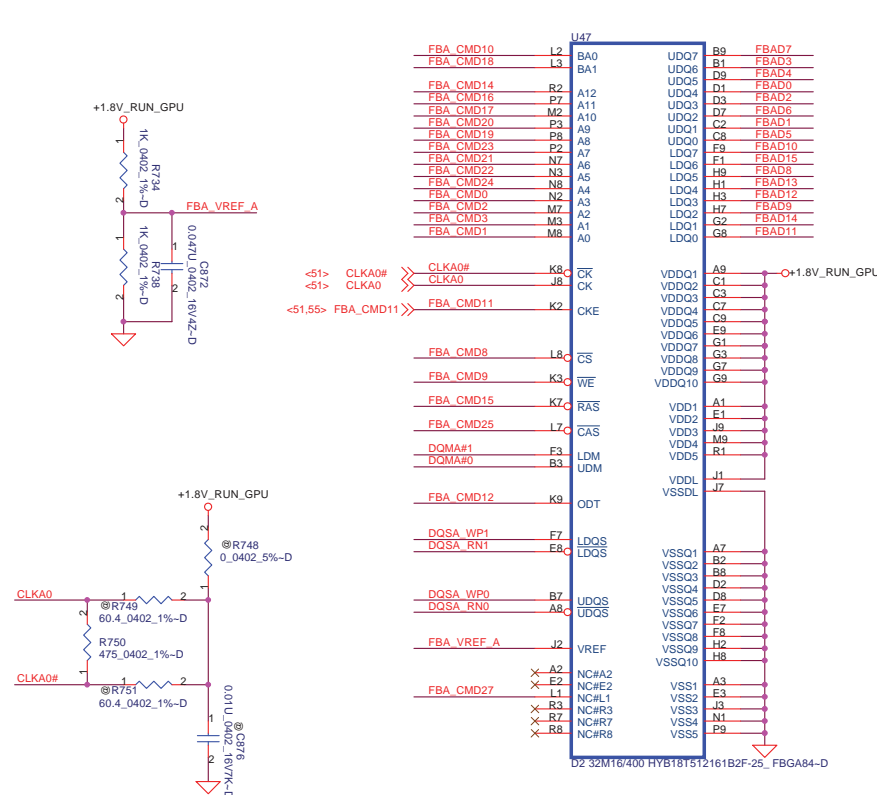
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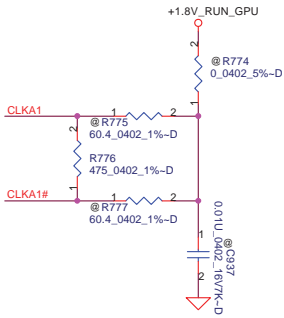
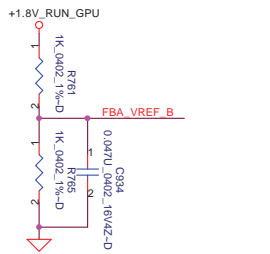


FBAD[0:63] <<>> FBAD[0:63] <51,55>
 DQMA#[0:7] <>> DQMA#[0:7] <51,55>
 DQSA_WP[0:7] <<>> DQSA_WP[0:7] <51,55>
 DQSA_RN[0:7] <<>> DQSA_RN[0:7] <51,55>
 FBA_CMD[0:27] >>> FBA_CMD[0:27] <51,55>

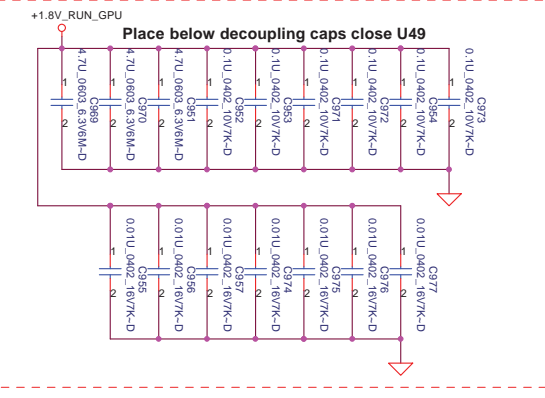
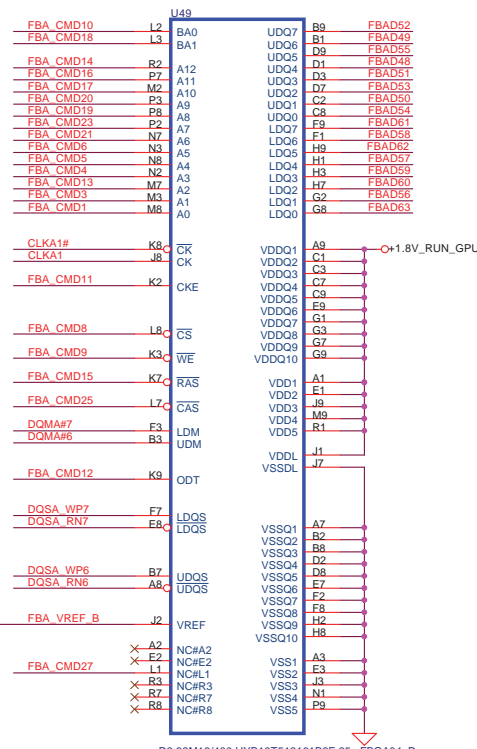
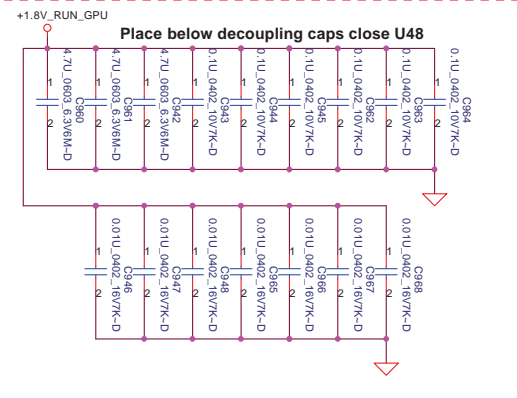
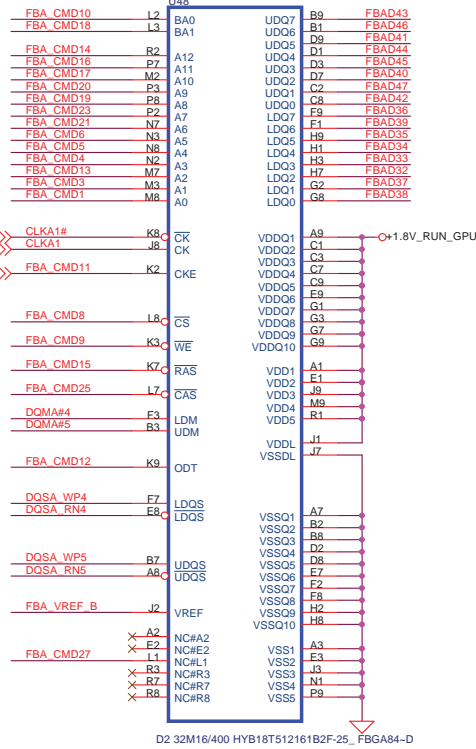
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<51> CLK_A1#
<51> CLK_A1
<51,54> FBA_CMD11



FBAD[0:63] <<< FBAD[0:63] <51,54>
DQMA# [0:7] >>> DQMA# [0:7] <51,54>
DQSA_WP [0:7] <<< DQSA_WP [0:7] <51,54>
DQSA_RN [0:7] >>> DQSA_RN [0:7] <51,54>
FBA_CMD [0:27] >>> FBA_CMD [0:27] <51,54>

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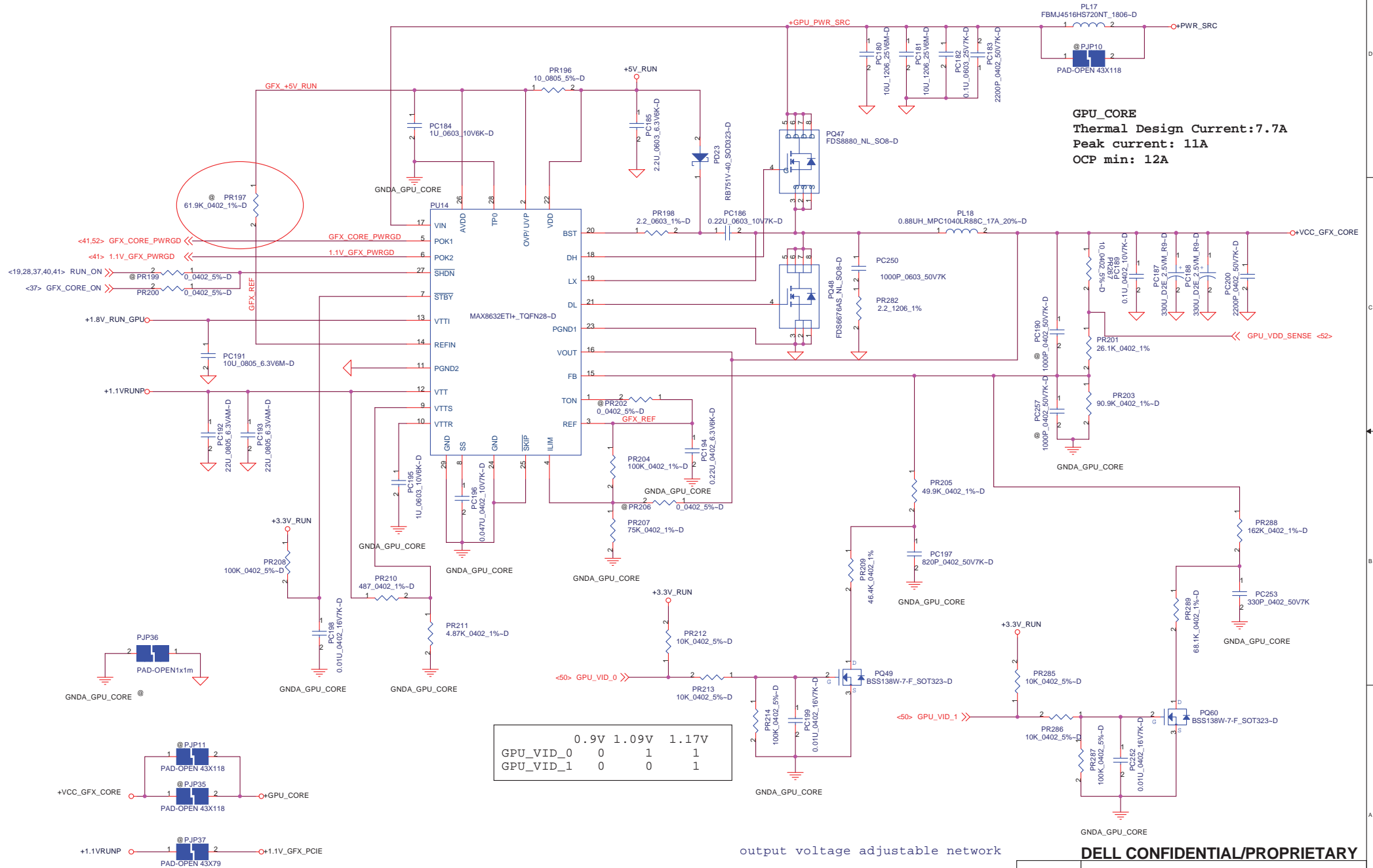
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GPU_CORE
 Thermal Design Current: 7.7A
 Peak current: 11A
 OCP min: 12A

| | | | |
|-----------|------|-------|-------|
| | 0.9V | 1.09V | 1.17V |
| GPU_VID_0 | 0 | 1 | 1 |
| GPU_VID_1 | 0 | 0 | 1 |

output voltage adjustable network

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| 1 | 36 | HW | 08/14/2007 | Compal | Change P/N to 8009CN | Change U33 | X01 |
| 2 | 36 | HW | 08/14/2007 | Compal | For vender request | Change R799 from 5 to 0ohm | X01 |
| 3 | 29,10~15 | HW | 08/14/2007 | Compal | Part Number issue | 1. Change U23 from 82567LF to 82567LM 2. Change U2 from Teenah to Cantiga | X01 |
| 4 | 36 | HW | 08/14/2007 | Compal | For vender request | 1. Change R476 from 2.2K to 510Kohm 2. Change R488 from 1K to 330Kohm | X01 |
| 5 | 36 | HW | 08/14/2007 | Compal | For vender request | Add L77 | X01 |
| 6 | 41 | HW | 08/16/2007 | Compal | Fix power sequence issue. | Depop R630, R809 | X01 |
| 7 | 21 | HW | 08/16/2007 | DELL | Follow DELL suggestion. | Add C1036, C1037, C1038, C1039. Change pop C271~274 from 0.1u cap to 0 ohm resistor. | X01 |
| 8 | 52,53, 54,55 | HW | 08/16/2007 | Compal | Follow Nvidia suggestion. | 1. Change R706, R703 from 40.2ohm to 30ohm. 2. Change R750, R776 from 121ohm to 240ohm. | X01 |
| 9 | 38 | HW | 08/16/2007 | DELL | Need to add a 100k pull up to RTC_CELL on CELL_CHARGER_DET# at the 5035. | Add a 100k pull up to +RTC_CELL | X01 |
| 10 | 37 | HW | 08/16/2007 | DELL | Follow New GPIO MAPand add DEF_PCCRD_EXPSCRD# for Expresscard/Cardbus detection | Add a pull-up and pull-down resistor option(R882, R883) to GPIOE[4] for Expresscard/Cardbus pop option. | X01 |
| 11 | 21 | HW | 08/16/2007 | DELL | Follow DELL request to remove common mode chokes and 0ohm resistor. | Remove L70~L74, R863~R872 | X01 |
| 12 | 38 | HW | 08/16/2007 | Compal | U57, U59 power and GND reverse | U57,U59 pin3 contact to GND and pin5 contact to +RTC_CELL | X01 |
| 13 | 6,50 | HW | 08/16/2007 | Compal | CLK_NVSS 27M not link to GPU | Stuff R38,R686 | X01 |
| 14 | 46 | HW | 08/16/2007 | Compal | DDR reference voltage no soure | Change V_DDR_MCH_REF to +V_DDR_MCH_REF | X01 |
| 15 | 28 | HW | 08/16/2007 | Compal | BOM option error for use TPA6040 audio amplifier | Stuff C443,C449 and no-stuff R362,R366 | X01 |
| 16 | 31 | HW | 08/20/2007 | Compal | For vender request | Change R802 & R803 to 1@,R671 & R739 to 2@ | X01 |
| 17 | 24 | HW | 08/20/2007 | Compal | For vender request | Change RP2 from 100K to 10K | X01 |
| 18 | 42 | HW | 08/20/2007 | Compal | For vender request | Change Q98 & Q116 from BSS138W to 2N7002, Q120-Q122 pin 3 pull up from +5V_ALW to +5V_RUN | X01 |
| 19 | 33 | HW | 08/28/2007 | Compal | Follow SMSC request to modify JTAG_RST# control schematic. | Add C1040 and change R579 from 100Kohm to 10Kohm, R585 from 1Kohm to 100ohm and no-stuff. | X02 |
| 20 | 38 | HW | 08/28/2007 | Compal | Follow USB Switch Specification and change the supply volatge from +5V to +3.3V. | Change U54 pin 8 from +5V_CHGUSB to +3.3V_SUS | X02 |
| 21 | 29 | HW | 08/28/2007 | Compal | LPC address conflict DOCK side SIO LPC47N237 | Reserve 4.7K pull-down of R884 on U24 pin9 for select LPC address of 4E/4F or 2E/2F. | X02 |
| 22 | 18 | HW | 08/30/2007 | Compal | Avoid +RTC_CELL drop to 2.5V and +3.3V_SUS have leakage issue | U3 pin 21 add R887 0 ohm, U3 pin 22-24 reserved pull up R885, R886 & R888 to +RTC_CELL | X02 |
| 23 | 29, 36 | HW | 08/30/2007 | Compal | Use JTAG to debug USH request | U32 pin B5, B4 add @R894, pin P10, R11, N10, R12, P11 & M9 add @R895-@R897, pin M9 add R899 0ohm pull down resistor | X02 |
| 24 | 31 | HW | 08/30/2007 | Compal | Schematic issue | VCC3EN# connect to U27 pin2, VCC5EN# connect to U27 pin 1 | X02 |
| 25 | 38 | HW | 08/30/2007 | Compal | Follow SMSC request | Add R900 100K ohm pull high to +RTC_CELL | X02 |
| 26 | 36 | HW | 08/30/2007 | Compal | For JTAG debug purpose | SBOOT reserved R898 pull down to GND | X02 |
| 27 | 29 | HW | 08/30/2007 | Compal | Add pop options for China TPM for request from DELL issue item SCH161931 | U24 pin 28 C_TPM_LPC_EN add R892 pull down 4.7K ohm to GND, and add @R893 to EC & USH | X02 |
| 28 | 29 | HW | 08/30/2007 | Compal | AUD_EAPD is high event not low event. | Change signal name from AUD_EAPD# to AUD_EAPD | X02 |
| 29 | 31 | HW | 08/30/2007 | Compal | REXT of R5C847 pinB14 pull-down not follow spec | Change R417 from 10K_5% to 10K_1% | X02 |
| 30 | 10 | HW | 08/30/2007 | Compal | Add test point for test | Add test point in U2 RSV1D1-RSV2D5. | X02 |
| 31 | 37 | HW | 08/30/2007 | Compal | Change Board ID to X02 | Pop R530, R534, de-pop R529, R535 | X02 |
| 32 | 35 | HW | 08/31/2007 | Compal | Change E-Dock connector location | Change from JP1 to JDOCK1 | X02 |
| 33 | 22,24 | HW | 09/01/2007 | Compal | Follow DELL issue item SCH162009 | Change R817, R212 from 8.2K ohm to 100K ohm, R823 from 10K ohm to 100K ohm | X02 |

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| 34 | 36 | HW | 09/01/2007 | Compal | Follow DELL issue item SCH162011 Remove Contactless Smart Cart resistors and traces to the Touch Pad Connector | Remove R858, R875, R876, R859 | X02 |
| 35 | 36 | HW | 09/01/2007 | Compal | For vender request | Remove R735 De-pop R555, R848, R20 and add @R831, R855 0 ohm | X02 |
| 36 | 36 | HW | 09/01/2007 | Compal | For vender request | Remove L77 | X02 |
| 37 | 27 | HW | 09/01/2007 | Compal | For vender request | De-pop R334, R335 | X02 |
| 38 | 24 | HW | 09/01/2007 | Compal | For vender request | R293 change to 10k ohm | X02 |
| 39 | 23 | HW | 09/01/2007 | DELL | Follow EE WORK ITEM SCH162092 correct RTC PAID | Add R905,906,907,908,Q96 and cheage the pull up power rail from +3.3V_RUN to +3.3V_ALW ICH for RTC_BAT_DET# | X02 |
| 40 | 36,39 | HW | 09/01/2007 | DELL | Follow DELL issue item TASK162008 | Remove "CONTACTLESS_DET" from JTP1 pin 20 and connect to JCS1 pin6 ,add pull-up resistor R910 100Kohm to +3.3V_ALW. | X02 |
| 41 | 21 | HW | 09/01/2007 | DELL | Follow DELL issue item SCH162035 | 1. Stuff C271,C272 C273,C274 with .1 uF. 2. Change C1036, C1037, C1038, and C1039 to 0 ohm of R901~904 | X02 |
| 42 | 38 | HW | 09/01/2007 | DELL | Follow DELL issue item SCH162105 Fix ACAV_IN DOCK# for battery discharge issue | 1.Change DOCK_DET# pull-up from +3.3V_ALW to +RTC_CELL 2.Change ACAV_IN DOCK# pull-up from +DC_IN to +3.3V_ALW2 | X02 |
| 43 | 7 | HW | 09/01/2007 | Intel | Follow Debug port design guide for Santa Rosa and Montevina Platforms_Rev0.95 for ITP700Flex debug port | Change ITP_TDO,ITP_TMS,ITP_TDI,ITP_TRST#,ITP_TCK of R62,R64,R65,R66,R67 pull-up from 56 to 51ohm and add ITP_BPM#5 of R912 pull-up 51ohm to +1.05V_VCCP. Change H_RESET# serial resistor to 1K ohm | X02 |
| 44 | 35 | HW | 09/01/2007 | DELL | Follow DELL issue item SCH161983 Fix Slice detect circuit | a). Short jdock1 pin 141 to pin 143. b). Keep the net name SLICE_BAT_PRES# c). Remove the connection to EC5028 pin 28. | X02 |
| 45 | 38 | HW | 09/01/2007 | DELL | For DELL request | HOST_DEBUG_TX Add R911 100K ohm pull up to +3.3V_ALW | X02 |
| 46 | 42 | HW | 09/01/2007 | Compal | Correct net name for sniffer blue led. | Correct net name from SNIFFER_GREEN# to SNIFFER_BLUE# | X02 |
| 47 | 37 | HW | 09/01/2007 | Compal | Correct VGA_IDENTIFY | Correct VGA_IDENTIFY from pull low for UMA to Pull high to +3.3V_ALW for DIS. | X02 |
| 48 | 42 | HW | 09/03/2007 | Compal | For vender request | Change D43 pin2 net name from R_WPAN_LED to WPAN_LED | X02 |
| 49 | 35 | HW | 09/03/2007 | Compal | For vender request | C1033 & C1034 change to 0603 25V | X02 |
| 50 | 36 | HW | 09/04/2007 | Compal | Change net name | Change net name from SC_DET# to SC_DET | X02 |
| 51 | 22,24 | HW | 09/04/2007 | Compal | Add test point | JSC1 pin1 add R913 4.7K ohm | X02 |
| 52 | 29 | HW | 09/04/2007 | Compal | BOM control add 4@ for China TPM | GNT2#/GPIO53, SUS_STAT#/LPCPD#, Change C484-C486, R381, R383, R893, U24, R892 to 4@ | X02 |
| 53 | 31,36 | HW | 09/04/2007 | Compal | Add test point | UDIO1, UDIO2, UDIO5, RI_OUT#/PME#, FIL0, MDIO1,MDIO2, MDIO5,MDIO6, MDIO18, MDIO19, SC_FCB_ENB | X02 |
| 54 | 18 | HW | 09/05/2007 | Compal | Solved +3.3V_SUS backdrive issue. | Reserved R914 0ohm 0603 resister and connect to +3.3V_ALW | X02 |
| 55 | 31 | HW | 09/05/2007 | Compal | Fix 1394 can't detec issue | Change J1394 from 5 pin to 6 pin and connect pin 1 to GND | X02 |
| 56 | 29 | HW | 09/05/2007 | Compal | Follow CRB to reserved pull up and pull down reisitor for JTAG | Reserved R890,R916,R915 200ohm to +3.3V_LAN, R891 1Kohm to GND and R889 0ohm to GND | X02 |
| 57 | 27 | HW | 09/05/2007 | Compal | Correct net name | Correct net name from DAI_BCLK, DAI_LRCK, DAI_DO, DAI_12MHZ, I2S_DI to DAI_BCLK#, DAI_LRCK#, DAI_DO#, DAI_12MHZ#, I2S_DI# and update U17 symbol. | X02 |
| 58 | 21 | HW | 09/06/2007 | Compal | Follow DELL issue item SCH161967 System DP off circuit. | Add U62, @R917, @R918,R919,C0141, and change R189 from pull down to pull up +3.3V_RUN, connect DP_MUX_PD# from U9 pin30 to U62 pin 1 and change DP_MUX_PD# net name to DP_MB_EN, connect DP_MB_HPD from U9 pin 40 to U62 pin2, connect U62 pin 4 to U9 pin 40 | X02 |
| 59 | 42 | HW | 09/06/2007 | Compal | For vender request | change R57 from 22.6ohm to 1Kohm. | X02 |
| 60 | 26 | HW | 09/06/2007 | Compal | Schematic issue. | change C380 and C381 from 3900pF to 0.01uF. | X02 |

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| 61 | 37 | HW | 09/06/2007 | DELL | For customer request | Change @R788 pull up from +3.3V_ALW to +3.3V_RUN | X02 |
| 62 | 18 | HW | 09/06/2007 | Compal | Add net name | Add net name for +RTC_CELL U3 pin21 | X02 |
| 63 | 28 | HW | 09/06/2007 | Compal | Schematic issue | Stuff R368 and no-stuff R367 | X02 |
| 64 | 29 | HW | 09/06/2007 | DELL | Disable USH TPM & enable China TPM | Stuff R841,R474,R892,R893 and no-stuff r483,R464,R466,R788,R750,R723,R724,R732,R733 | X02 |
| 65 | 36,37 | HW | 09/06/2007 | Compal | For vender request | Change @R464, @R466, R705, R723, R724, R732, R733 to 5@, SP_TPM_LPC_EN add pull down R920 10K ohm, pop R841 | X02 |
| 65 | 24,33 37,38 39,40 41 | HW | 09/08/2007 | DELL | Follow M09 GPIO Map_0907 | <ol style="list-style-type: none"> 1. Change MEC5035 pin43(GPIO52) from SIO_EC_SCI2# to SIO_EXT_SCI# and contact to ICH9M pinC12(GPIO12) and pinAG19(GPIO1) 2. Remove MEC5035 pin66(GPIO100/NEC_SCI) off-page 3. Change ICH9M pinAH21(GPIO6) form SIO_EC_SCI2# to TPM_ID and add pull-down of R922 for China TPM(4@), stuff R273 for USH TPM(5@) and change to 100K 4. Change ICH9M pinC21(GPIO13) from ENERGY_DET# to CONTACTLESS_DET# and change R822 from 20K to 100K.Remove ECE1088 pin10 and R910. 5. Change CELL_CHARGER_DET# from MEC5035 pin126(VCI_IN1#) to ECE5028 pin78(GPIOB6) 6. Rename MEC5035 pin126(VCI_IN1#) from CELL_CHARGER_DET# to EN_CELL_CHARGER_DET# and contact to U53 pin3,4 7. Rename USB_CHARGER_PWR_EN# to ESATA_USB_PWR_EN# and contact to U29 pin3,4 and add pull-up 100K of R923 to +3.3V_ALW 8. Remove ECE5028 pin82 off-page for DELL_ESATA_PWR_EN# 9. Change MEC5035 pin42(GPIO051) from 3.3V_SUS_ON to SUS_ON and remove pin34(GPIO041) from SUS_ON to NC 10. Remove MEC5035 pin118(BGPO0) to NC | X02 |
| 66 | 27,37 | HW | 09/08/2007 | Compal | Rename net name | <ol style="list-style-type: none"> 1. Rename DOCK_MIC_DET# to DOCK_MIC_DET 2. Rename DOCK_HP_DET# to DOCK_HP_DET | X02 |
| 67 | 50 | HW | 09/10/2007 | Compal | For DELL EE work item: SCH162359 | Change R825 from 45.3K 1% to 15K 1% | X02 |
| 68 | 24 | HW | 09/10/2007 | Compal | Change SPI ROM P/N | Change U12,U13 to SA000010Z0L | X02 |
| 69 | 33,37,38 | HW | 09/11/2007 | DELL | ESATA USB charger control signal issue | <ol style="list-style-type: none"> 1. Add serial resitor of R928 for CELL_CHARGER_DET# and R927,C1042 for EN_CELL_CHARGER_DET# and wire-and contact to JESAL pin16. 2. Change U29 pin3,4 from ESATA_USB_PWR_EN# to DELL_ESATA_PWR_EN# 3. Change U53 pin3,4 from N_CELL_CHARGER_DET# to ESATA_USB_PWR_EN# | X02 |
| 70 | 24 | HW | 09/11/2007 | DELL | Follow DELL request | Remove SIO_EXT_SCI# on ICH9M pinC12(GPIO12) and U36 pin43(GPIO052) and contact from ICH9M pinAG19(GPIO1) to U36 pin66(GPIO100) | X02 |
| 71 | 10,16 17,18 | HW | 09/11/2007 | DELL | Follow DELL request for PM_EXTT# | Add serial resistor of R926 from U3 pin13 contact to U2 pinN33,P32 and remove trace of PM_EXTT# [0,1] contact to DIMM | X02 |
| 72 | 23,24 | HW | 09/11/2007 | Compal | Aviod leakage issue | <ol style="list-style-type: none"> 1. Change SIO_EXT_SCI# pull-up from +3.3V_ALW_ICH to +3.3V_RUN 2. Change TPM_ID pull-up from +3.3V_ALW_ICH to +3.3V_RUN 3. Change SNIFFER_DET# pull-up from +3.3V_ALW_ICH to +3.3V_RUN 4. Change IO_LOOP from +3.3V_RUN to +3.3V_ALW_ICH 5. Change RTC_BAT_DET# from +3.3V_ALW_ICH to +3.3V_RUN | X02 |
| 73 | 37 | HW | 09/11/2007 | Compal | Add pull-up resistor for DELL_ESATA_PWR_EN# initial | Add pull-up resistor of R929 to pull-up +3.3V_ALW | X02 |
| 74 | 36 | HW | 09/11/2007 | Broadcom | Follow vendor request for use smard card controller of 73S8009CN | <ol style="list-style-type: none"> 1. Contact of GPIO14_TER_ON/OFF from U33 pin24 to U32 pinC4 2. Contact AUX1UC from U33 pin2 to U32 pinJ14 3. Contact AUX2UC from U33 pin3 to U32 pinJ15 4. Stuff R768,R769,R490 5. Change netname from GPIO1_TER_ON/OFF to UART_TX/GPIO1 | X02 |

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| 75 | 39 | HW | 09/11/2007 | Compal | ECE1088 & JCS1 de-pop option | De-pop U38, C676, C677, R650, R826, JCS1 | X02 |
| 76 | 18 | HW | 09/11/2007 | Compal | Change EMC4002 part number | From SA00001PYL for rev.B to SA00001PY1L for rev.C | X02 |
| 77 | 10,27 | HW | 09/11/2007 | Compal | For vender request | change @R685 from 33 ohm to 0 ohm, R85 de-pop, @R330 from 0 ohm to 10K ohm | X02 |
| 78 | 7 | HW | 09/13/2007 | Compal | For vender request | Un stuff R912. | X03 |
| 79 | 38 | HW | 09/13/2007 | Compal | For vender request | R574 change from 1Mohm to 100kohm. | X03 |
| 80 | 7 | HW | 09/13/2007 | Compal | For vender request | Change ITP_TDO,ITP_TMS,ITP_TDI,ITP_TRST#,ITP_TCK of R62,R64,R65,R66,R67 pull-up from 51 to 56ohm. | X03 |
| 81 | 19 | HW | 09/13/2007 | Compal | Fix schematic Issue. | Correct C242 power rating from 16V to 25V. | X03 |
| 82 | 24 | ICH9M | 09/14/2007 | Dell | SCH162577: Populate pull-down on ICH_LAN_RST# | Populate R276, No Pop R271 | X03 |
| 83 | 29 | ICH9M | 09/14/2007 | Dell | SCH161941: USH and China TPM Pop Options | Chane the text in the table to show that it R892 is connect to pin China TPM pin 28 | X03 |
| 84 | 29 | ICH9M | 09/14/2007 | Dell | SCH162277: GPIO for China TPM vs. USH TPM | Follow the new GPIO map to implement China TPM ID strap | X03 |
| 85 | 36 | USH | 09/14/2007 | Dell | Follow TPM Option Table on page 29. | Depop R466 | X03 |
| 86 | 38 | EC | 09/19/2007 | Dell | SCH162762: No Stuff U37 - Flash ROM on the EC | Depop U37, C672, R589, R590, R591, R592, R593 | X03 |
| 87 | 23 | ICH | 09/19/2007 | Dell | SCH162766: Need to change the value of R908 | Changed the value of R908 to 1 k ohm | X03 |
| 88 | 21, 38 | ICH | 09/19/2007 | Dell | SCH162800: Check U57 and U62 for packages | SOT353 and SC70 footprint are the same package | X03 |
| 89 | 24,29,37 | ICH/LOM | 10/09/2007 Updated | Dell | SCH162826: Connect the ICH9 GPIO12 to the Intel LOM LAN_DISABLE_N | Removed U58. Added R1008. | X03 |
| 90 | 34 | MiniCard | 09/19/2007 | Dell | SCH162827: No pop the 0 Ohm resistors that connect the USB and PCIE mini-card detects | No pop R740, R741, and R742 | X03 |
| 91 | 10 | MCH | 09/19/2007 | Dell | SCH162822: Remove one of the two pull-ups on PM_EXTTTS# | Removed R85 and changed netname from PM_EXTTTS#0/#1 to PM_EXTTTS# | X03 |
| 92 | 19,37 | LVDS/5028 | 09/27/2007 | Dell | SCH162824: Add load switch for the camera power | Removed D4 and Added C1043, C1044, Q132, Q133, R995. Use GPIOB4 on the 5028 for CCD_OFF . | X03 |
| 93 | 21 | DP | 09/27/2007 | Dell | SCH162926: Need to add 100k pull down to DPC_CA_DE | Added R996 | X03 |
| 94 | 35 | Docking | 09/29/2007 | Compal | SCH163185: Add ESD discharge parts for the Dock Power pins | Added D64, D65 (Nostuff) | X03 |
| 95 | 28 | Amplifier | 09/29/2007 | Dell | SCH162939: C434 and C435 can be reduced to 0805 | Changed C434, C435 size to 0805 | X03 |
| 96 | 18 | Guardian | 10/09/2007 Updated | Dell | SCH162823: Connect PWR_MON_GFX to VIN1 on the EMC4002 - Depop the UL circuit | Added R997(@), R998 on page 18. PR170 stuff. | X03 |
| 97 | 37 | SIO | 10/01/2007 | Dell | Change BID to X00 (011) | Changed R529 stuff. R534 nostuff. | X03 |
| 98 | 36 | USH | 10/02/2007 | Dell | SCH163294: USH strapping option resitor missing in Roush | Changed R479 pull-up and R478 pull-down. | X03 |
| 99 | 24,34 | Minicard | 10/03/2007 | Dell | SCH163380: Populate the PCIE MCARD Detect 100k pull-ups, and move R266 to page 34 | Populate:R439, R449 (Change from 8.2k to 100k), R458. Move R266 from page 24 to page 34 | X03 |
| 100 | 37,42 | LED | 10/09/2007 Updated | Dell | SCH161770: LED Circuit Changes | Added:R999-R1006. Q136, Q137. Q139-Q145, U65. Removed: D44, D60, D62. | X03 |
| 101 | 35 | Docking | 10/04/2007 | Compal | SCH163409: Populate D64 and D65 (ESD Diodes on +DOCK_PWR_BAR) | D64, D65 changed to stuff. | X03 |
| 102 | 6 | Clock | 10/04/2007 | Dell | SCH163426: Wrong series termination on CLK_NV_27M | R37 needs to change to 33 ohm | X03 |
| 103 | 5,38 | EC | 10/05/2007 | Dell | SCH163535: DOCK_SMB_CLK and DOCK_SMB_DAT pulled up resistor to +3.3V_ALW | Change R565 and R567 from +5V_ALW to +3.3V_ALW | X03 |
| 104 | 20 | Video | 10/05/2007 | Compal | SCH163503: Nostuff ESD Diodes | Nostuff ESD Diodes D5, D6, D7 | X03 |
| 105 | 33, 37 | EC | 10/05/2007 | Dell | SCH163465: Change Netname following 1003 GPIO Map | Rename GPIOB2 pin 82 from DELL_ESATA_PWR_EN# to USB_CHARGER_PWR_EN# for clarification | X03 |

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|------|----------------|------------------|--------------------|---------------|--|---|------|
| 106 | 52,53,54 | GFX | 10/05/2007 | Dell | SCH163430: Nvidia Feedback: Change FBCAL resistors and CLK Shunt Resistor | R703, R706 set to 30.1 Ohm 1% . R750 set to 475 Ohm 1% . | X03 |
| 107 | 24,37 | ICH,SIO | 10/09/2007 | Dell | SCH163524: Need to change SNIFFER_DET# connection | Disconnect SNIFFER_DET# from ICH pin AE18 and connect it to EC5028 pin 33. Rename, SNIFFER_DET# to PWR_BTN_BD_DET# | X03 |
| 108 | 36 | USH | 10/11/2007 | Compal | SCH163437: Teridian Feedback: Make sure Inductor has max rated current 400mA on pin 27 | L69 change to use 10uH with maximum 400mA rated current. | X03 |
| 109 | 33 | USB | 10/26/2007 Updated | Compal | SCH163706: Charge USB Circuit Update | 1. JESAI pin1 change to +5V_ESATA and pin5 change to +5V_CHGUSB 2. JESAI pin2,3 change to USBP3_D-,USBP3_D+ and pin6,7 change to USBP2_D-_SW, USBP2_D+_SW | X03 |
| 110 | 38 | EC | 10/17/2007 | Compal | SCH163795: Follow M09 GPIO_100307 MAP to modify schematic | 1.Add R85,C918 for RC_ID 2.Remove DEBUG_ENABLE# and connect HOST_DEBUG_RX from U36 pin71 to R577 pin2 3.Remove ADAPT_TRIP_SET on U35 pin70 and PR169 Pin1 | X03 |
| 111 | 50 | GFX | 10/25/2007 | Dell | SCH163765: Need to add two series zero ohm pop options for CA_DET | Added R1009, R1010 nostuff. | X03 |
| 112 | 23, 29, 36, 38 | ICH, LOM, USH,EC | 10/30/2007 | Compal | SCH164316: Crystal CL Capacitor Changes (Discrete Only) | 1. C297, C475, C476, C608 changed to 12pF 2. C609 changed to 15pF 3. C515 changed to 22pF 4. C514, C675 changed to 27pF | X03 |
| 113 | 38 | EC | 10/30/2007 | Dell | SCH163795: Follow M09 GPIO_100307 MAP to modify schematic | 1. Changed MEC5035 pin30 to SUSPWROK (Host RX is used) R553 del 2. Changed MEC5035 pin19 from SUSPWROK to RC_ID 3. RSVD Pin 70 GPIOC5 / ACK# ADAPT_TRIP_SEL 4. RSVD Pin 71 GPIOC6 / ERROR# ITP_DBRESET#(RSVD) / LCD_TST | X03 |
| 114 | 37 | SIO | 10/31/2007 | Dell | SCH164408: GPIO Map Update (1025) | 1. Added MDC_RST_DIS# to GPIOE5/DTR# (Del R489, R830) 2. Changed pin 82 from USB_CHARGER_PWR_EN# to ESATA_USB_PWR_EN# 3. Change pin 104 from ESATA_USB_PWR_EN# to USB_POWERSHARE_PWR_EN# | X03 |
| 115 | 28 | Amplifier | 11/01/2007 | Dell | SCH164416: Line out and Line In THD+N Failures require cap changes | Changes need to be made to the Line Out series Capacitors C436 & C437 from 1uF 1206 to 2.2uF 1206 | X03 |
| 116 | 20,50,52 | GFX | 11/01/2007 | Dell | SCH164532: Remove options for TV on Discrete | 1. Removed R669, R762, R763.Make pins 7B1, 8B1, 9B1, 7B2, 8B2, and 9B2 NC at U4 2. Disconnected DAC port B as NC at U44(Pin F7, E6, E7, F8, D6, G6) Removed C869, C868, C867, L49, R679, C737,R688,R689,R690. 3. Pull down DACB_VDD (pin D7) thru 10K ohm. Added R1011. | X03 |
| 117 | 18,41 | Thermal | 11/01/2007 | Dell | SCH162207: Issue to track the power rail for the EMC4002 | Follow Maybach circuit. | X03 |
| 118 | 50 | GFX | 11/05/2007 | NV | SCH163991: Reserve 10K pull-down on NV9M I2CE SMBus from Nvidia FAE request | Added R1012, R1013. | X03 |
| 119 | 33 | USB | 11/06/2007 | Compal | SCH164452: USB Switch Footprint Changed for Multiple Sources Support | Added C1045. Changed U54 footprint. | X03 |
| 120 | 23,50 | ICH9M,GFX | 11/06/2007 | Dell | TASK162887: Add level shifter from 3.3V to 1.5V for MCH HDA | Stuff R673, R674, R675, R6767, R678 and R243-R246. R673,R674,R676, R678 changed value from 33 ohm to 0 ohm because R243-R246 stuff . | X03 |
| 121 | 37 | SIO | 11/07/2007 | Dell | SCH164730: MDC_RST Connection Changed per GPIO Map (1105) | EC5028 Moved MDC_RST from pin 84 GPIOE5/DTR# to Pin 102 GPIOA5 | X03 |
| 122 | 50 | GFX | 11/07/2007 | Dell | SCH164740: Roush/Heelys: discrete graphics 3 voltages setting | GPIO6 is connected to GPU_VID_0, and GPIO5 is connected to GPU_VID_1. | X03 |
| 123 | 18 | Thermal | 11/07/2007 | Dell | TASK162399: Need to contact SMSC about Guardian errata | Changed R142 from 22 to 0 Ohm. | X03 |
| 124 | 35 | Docking | 11/08/2007 | Dell | SCH164795: Docking Pin Out Change to Support Battery Slice | Assign Pin 41 of the docking connector for NBDOCK_DC_IN_SS | X03 |
| 125 | 42 | LED | 11/08/2007 | Dell | SCH164770: Change CAP/NUM/SCRL LEDs to +5V_ALW | Change the 3x LED power rail to +5V_ALW instead of +5V_RUN | X03 |

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| 126 | 30 | LAN | 11/09/2007 | Compal | SCH164581: Remove termination resistor and capacitor for LAN_TX[0..3]+/- | Removed MDI termination R384-R391,C488-C491 | X03 |
| 127 | 12,13 | GMCH | 11/09/2007 | Dell | SCH164856: Remove options for TV form Cantiga | 1.VCCD_TV DAC --> connect to GND 2.VCCD_QDAC --> connect to 1.5V with filter 3.TV_DCONSEL_0, TV_DCONSEL_1 --> left as NC | X03 |
| 128 | 18 | 4002 | 11/12/2007 | Dell | SCH164877: EMC4002 POWER_SW# Input Add AND Gate | Added U68, R1014, R1015, C1050 | X03 |
| 129 | 38 | EC | 11/12/2007 | Dell | SCH164893: Remove U37 (SPI ROM on EC) | Removed U37, R558, R589-R593, C672 | X03 |
| 130 | 6,36 | CLOCK,USH | 11/12/2007 | Dell | SCH164896: PCI Clock BOM Options for ROW vs. China TPM | Change R29 from 22 Ohm to 33 Ohm 5@ (ROW TPM PCI Clock) Change R854 from 22 Ohm to 33 Ohm 4@ (China TPM PCI Clock) Add R1016 (100k) pull-down 4@ on U32 pin M7 | X03 |
| 131 | 50 | GFX | 11/12/2007 | Dell | SCH164899: Roush Discrete Pop Options | Populate R825. No Pop R719 | X03 |
| 132 | 29,33,35 | LOM, Docking | 11/12/2007 | Dell | SCH164888: Add Intel LOM LDO for 2.65V/2.5V | 1. Add Q50, Q146, R1017-R1020 2. Remove R377, R380, Q46 | X03 |
| 133 | 21 | DP | 11/12/2007 | Dell | SCH164892: Discrete Graphics changes for DP | 1. No pop 100kohm pull ups R180 2. Add 100kohm PD on DPB_AUX_SW and DPB_AUX#SW.R1022, R1023(@). 3. Add 100kohm PD on DPB_MB_AUX and DPB_MB_AUX#.R1024(@),R1025(@). 4. Remove Q10, R798. Connect U9 pin 37 directly to U44 pin G1 5. Change R720 and R721 (DPRSet) to 800ohms 6. No pop 100kohm pull ups R182 7. Add 100kohm PD on the DPC_AUX_SW and DPC_AUX#SW. R1026,R1027(@). 8. Remove Q114 ,R795. Connect JDock1 pin 40 directly to U44 pin F3. | X03 |
| 134 | 30 | LAN SW | 11/12/2007 | Dell | SCH164889: Change L20-L27 from 36nH to 22nH | Change MDI bus value at L20~ L27 from 36nH to 22nH. These changes will help improving the IEEE Return Loss margins | X03 |
| 135 | 33 | USB | 11/12/2007 | Compal | LAY164667: USB Switch Layout Changes following Vendor's recommendation | Change Common mode choke connection to between switch and connector. | X03 |
| 136 | 21 | DP | 11/13/2007 | Compal | TASK163764: Input derating data before PT gerber | 1. Applying voltage on ceramic capacitors: C921-C929, C1044 2. Applying current on inductor: L65, L67, L76 3. Applying current on diode: D10 | X03 |
| 137 | 38 | EC | 11/13/2007 | Dell | SCH164928: Change Netnames Following Power Circuit Changes | From "ACAV_IN_DOCK" to "ACAV_DOCK_SRC" From "ACAV_IN_DOCK#" to "ACAV_DOCK_SRC#" From "ACAV_IN_MB/DOCK" to "ACAV_IN" Remove U59, C1012. Add U69, C1051. | X03 |
| 138 | 21,50 | DP,GFX | 11/13/2007 | Dell | SCH164956: More DP clean up on discrete | 1. De-pop R181, De-pop R183 2. Populate R1024 (pull-down on DPB_MB_AUX) 3. Populate R278 (pull-up on DPB_MB_AUX#) 4. Add pull-down pads for DPB_DOCK_AUX and DPB_DOCK_AUX# 5. De-pop R1026 6. Change R193 to 3.48 kohm 7. Change DPB_HPD# to DPB_HPD and DPC_DOCK_HPD# to DPC_DOCK_HPD | X03 |
| 139 | 37 | SIO | 11/13/2007 | Dell | DF174483: [SSI2]The LCD/LED will keep had power with USB device when unplug AC & Battery. | 1) Add 100k no pop pull-ups to +3.3V_ALW2 on: - USB_SIDE_EN# - ESATA_USB_PWR_EN# - USB_POWERSHARE_PWR_EN# 2) No stuff R502, R923, R929. | X03 |
| 140 | 18 | 4002 | 11/14/2007 | Dell | SCH162823: Connect PWR_MON_GFX to VIN1 on the EMC4002 - Depop the UL circuit | - Connect PWR_MON_GFX to VIN1 on the EMC4002 - Add a pull-down resistor on the pin on the guardian - Remove PWR_MON_GFX from VCP2 | X03 |
| 141 | 37 | SIO | 11/14/2007 | Dell | SCH165017: Change PU to PD on SYS_LED_MASK# | change R658 from a no stuff pull-up to a populated pull-down | X03 |
| 142 | 39 | 1088 | 11/14/2007 | Dell | SCH165024: Remove nostuff parts from Roush schematic | Remove U38 (ECE1088), C677, C676, R747, R650, R826, R557 | X03 |
| 143 | 36 | USH | 11/15/2007 | Dell | SCH165076: Remove unnecessary Contactless SmartCard components | R495, R799, C777, R499, and C783 can be replaced with a short, and R800 can be replaced with an open | X03 |

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| 144 | 50 | GFX | 11/15/2007 | Dell | SCH165071: Need to depop R832 and R797 to pass HDMI spec | Depop R832, R797. | X03 |
| 145 | 21 | DP | 11/15/2007 | Dell | SCH165069: Depop R1022 for discrete | Depop R1022 | X03 |
| 146 | 24,33,36 | USH,BIO, ICH | 11/15/2007 | Dell | SCH165067: FP_RESET# signal from USH to Fingerprint reader | 1) Connect USH_SMC_ADD_23 (Pin C3) to Fingerprint reader connector JBI01 pin5 with a 4.7K pull-up to +3.3V_RUN. R1034 added. 2) Remove BIO_DET# connection to the ICH9M pin A8 | X03 |
| 147 | 37 | SIO | 11/15/2007 | Dell | SCH165068: Add FET buffer on signal INSTANT_ON_SW# to 5028 pin 28 | Add D66, R1035, R1036 | X03 |
| 148 | 27,38 | CODEC,EC | 11/15/2007 | Dell | DF179111: SMBus EA some item measure fail | 1.LCD_SMBCLK/LCD_SMBDAT change PU resistor of R548,R549 to 2.2K 2.DAI_SMBCLK/DAI_SMBDAT stuff R334,R335 to 2.2K 3.DOCK_SMB_CLK/DOCK_SMB_DAT change PU to +3.3V_ALW (R565, R567) | X03 |
| 149 | 27,36 | CODEC,USH | 11/19/2007 | Compal | Some Crystal is not PSL parts. | Y3, Y5 change to use KDS's crystal replace non-PSL part. | X03 |
| 150 | 10,22,27, 29,36,50 | NB,SB,USH, CODEC,LOM | 11/21/2007 | Compal | Change chips new revision P/N for PT1 Chnage VRAM Strapping setting for Qimonda | Change U2,U10,U16,U23,U32,U44 P/N Nostuff R717. Change R725 to 34.8K. | X03 |
| 151 | 37 | SIO | 11/20/2007 | Dell | Change BID to X04 (100) | Change R531, R534, R535 stuff. R529, R530, R536 nostuff. | X04 |
| 152 | 34 | Mini-Card | 11/20/2007 | Dell | SIM card Footprint change per ME request | JSIM1 footprint change | X04 |
| 153 | 24 | SPI | 11/22/2007 | Dell | Unstuff 2nd SPI ROM for ICH | Depop U13,R304,R305,R306,R308,R309,R295,C329 | X04 |
| 154 | 21,50 | DP | 11/22/2007 | Dell | SCH165325: For PT1 SMT: Build PT1 Discrete with R720 and R721 = 1k Ohm SCH165517: DP stuffing options for Roush PT1 | 1.Pop R336,R337,R1028,R1029,R182,R183,R1026,R1027 2.Change R720,R721 to 1K | X04 |
| 155 | 35 | Docking | 11/26/2007 | Compal | SCH165307: Docking Conn ESD Concern - Dock Power pins | Remove D65 & change D64 footprint from SOD323-2 to SOT23-3 | X04 |
| 156 | 24 | SPI | 11/28/2007 | Dell | SCH165504: Remove 2nd SPI ROM for ICH | Remove U13,R304,R305,R306,R307,R308,R309,R295,C329 | X04 |
| 157 | 34 | Mini-Card | 11/28/2007 | Compal | SCH165319: PCIE_MCARD1_DET# pull-up to wrong power rail | No-stuff R439 and add 100K of R443 to pull-up +3.3V_ALW_ICH | X04 |
| 158 | 38 | EC | 11/29/2007 | Compal | SCH165505: X04: Add pop options to change INSTANT_ON_SW# from RTC to +3.3V_ALW Rail | Add 0ohm of R445,100K of R589. No-stuff R560,C1011,U57,D66, Pop R1036 | X04 |
| 159 | 30 | LAN Switch | 11/29/2007 | DELL | LAY165172: LOM Feedback for X04 - Improve routing on the MDI signals | Swap LAN_TX[0..3]+/LAN_TX[0..3]-,SW_LAN_TX[0..3]+ /SW_LAN_TX[0..3]-,DOCK_LOM_TRD[0..3]+/DOCK_LOM_TRD[0..3]- | X04 |
| 160 | 13 | MCH | 11/29/2007 | Compal | SCH165564: Remove D1,R122 from Intel request | No-stuff D1,R122 from Intel request | X04 |
| 161 | 7 | CPU | 11/30/2007 | Compal | SCH165378: No-stuff H_RESET# pull-up resistor of R63 | No-stuff R63 | X04 |
| 162 | 21 | DP | 11/30/2007 | Compal | SCH165621: X04: Populate D10 with a 0 Ohm resistor | D10 PCB Footprint can't stuff 0805 or 1210 resistor directly, so add 1210 0ohm of R210 and no-stuff D10. | X04 |
| 163 | 36 | USH | 12/3/2007 | Broadcom | SCH165660: SC_DET issue from Broadcom highlight | Add R914 pull-down contact to SC_DET on JSC1 pin2 and no-stuff | X04 |
| 158 | 28 | Amplifier | 12/5/2007 | DELL | SCH165765: Audio Feedback: Change 2 resistor values, Add two resistors on IO board | Change R818,R827 to 1K_0402_1% | X04 |
| 159 | 37,42 | Wireless | 12/5/2007 | DELL | SCH165763: Change Wireless net name (on is toward the user) | Change net name from WIRELESS_ON/OFF# to WIRELESS_ON#/OFF | X04 |
| 160 | 36 | USH | 12/5/2007 | Broadcom | SCH165731: Follow Broadcom request to modify Maybach schematic for USH | 1.Depop R490,C591 2.Pop R829 and depop R467 3.Depop R849 4.Change R476 to 5.1M ohm and R488 to 3.3M ohm 5.No-stuff C594 6.Change R473,R771 to 1K 7.Change C621,C706,C646 to X5R | X04 |
| 161 | 18 | EMC4002 | 12/7/2007 | SMSC | SCH165882: Disable EMC4002 LDO | Add R211 and no-stuff R149 | X04 |
| 162 | 42 | LED | 12/7/2007 | Compal | SCH165913: +5V_RUN backdrive issue on s3 mode | Add D67 between Q97 and Q98 | X04 |
| 166 | 37 | EC5028 | 12/8/2007 | Compal | INSTANT_ON_SW double pull-up | No-stuff R1035 | X04 |
| 167 | 29 | LAN | 12/8/2007 | Intel | Intel request if didn't use ICH GPIO12 to control LAN_DISABLE need connected to 3.3V | Add pull-up resistor of R295 to +3.3V_ALW_ICH and no-stuff | X04 |
| 168 | 29 | LAN | 12/8/2007 | Compal | SCH165838: De-pop R1008 for control LAN PHY enable form BIOS setting | De-pop R1008 | X04 |

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| 169 | 27 | Auido Codec | 12/10/2007 | IDT | SCH165972: Follow IDT request to change C408~C411 to 2.2uF | Change C408-C411 to 2.2U_10V_0805 X5R | X04 |
| 170 | 31 | Cardbus | 12/10/2007 | Ricoh | SCH165973: Follow Ricoh request to modify schematic | Add C622,C1012,C1016,C1036,C1037,R1037,R799,R800 No-stuff R684,R790,R657 | X04 |
| 171 | 18,21,37,38,42 | TTL | 12/13/2007 | Compal | SCH166138: About 74AHCT1G08GW AND Gate issue | Change U68, U62, U69, U57, and U65 from 74AHCT1G08GW to 74AHC1G08GW | X04 |
| 172 | 38 | 5035 | 12/14/2007 | Dell | TASK166116: Updated GPIO Map | The signal ACAV_DOCK_SRC# can be removed from the 5035 | X04 |
| 173 | 35 | Docking | 12/14/2007 | Dell | SCH166112: Add a pull-up on DOCK_DET# to +3.3V_ALW | Add R1038. R124 nostuff. | X04 |
| 174 | 42 | LED | 12/17/2007 | Dell | SCH166225: Add mask signal on NUM/SCRL/CAPS LEDs | Add Q150. R1039 nostuff. | X04 |
| 175 | 33, 38 | USB,5035 | 12/18/2007 | Dell | SCH166229: Update Cell charger detect circuit | Add D68, D69, R1040. Del R927. C1042 change value to 1uF. | X04 |
| 176 | 29 | PHY | 12/17/2007 | Dell | SCH165838: De-pop R1008 for control LAN PHY enable form BIOS setting | Pop R1008 because new BIOS fixed this softstrap issue | X04 |
| 177 | 6,8,10,24 | CLOCK,CPU, MCH, ICH | 12/17/2007 | Dell | SCH166180: Intel NOA test point compliance | Add R1041~R1045. | X04 |
| 178 | 33 | USB | 12/17/2007 | Dell | SCH166140: Add SATA repeater for ICH to ESATA trace over 5inch issue | Add U72, C488~C490, C1052, R305~R307. | X04 |
| 179 | 23,50 | ICH,GPU | 12/18/2007 | Dell | SCH166293: Roush X04 Discrete: Remove HDA resistors | Del R673~R676, R678, R243~R246, C309. U10.AH3 as NC. | X04 |
| 180 | 31 | RICOH | 12/18/2007 | Dell | SCH165973: Follow Ricoh request to modify schematic | 1.Connect totally 10uF bulk capacitor(s) to 1.5VOUT pins. 2. Connect totally 10uF bulk capacitor(s) to AUXOUT pins. 3. Remove pull-up resistor from CPPE# signal. 4. Remove pull-up resistor from CPUSB# signal. 5. SHDN#, apply NC/open 6. Remove pull-up resistor from SHDN# 7. Apply pull-down resistor to SPKROUT pin. 8. Add capacitors for CCD[2:1]# 9. Connect CADR22 to CPUSB# pin of ExpressCard Connector 10. Connect CDATA2 to PERST# pin of ExpressCard Connector 11. Add capacitor for FIL0, 0.01uF | X04 |
| 181 | 35,38 | 5035, Docking | 12/18/2007 | Dell | SCH166292: Add Dock changes for GPIO50 pin 41 of the 5035 | Add R1046, C1053. 5035 GPIO50 connected to Docking pin 140. | X04 |
| 182 | 18,33 | 4002,eSATA | 12/19/2007 | Dell | TASK166288: ESATA Redriver Questions | 1. Using the Guardian LDO set to +1.8V for the VDD 2. Changed power rail to +1.8V_RUN 3. Connected the enable to a pull-up to the same rail as VDD 4. Use PI2EQX3201B. 5. No any 2nd source for this part | X04 |
| 183 | 50 | GPU | 12/19/2007 | Dell | SCH166329: NVidia feedback to pop R1009 and R1010 | Populate R1009 and R1011 | X04 |
| 184 | 36 | USH | 12/19/2007 | Dell | SCH166328: Add a series resistor on PLTRST3# for the USH RESET_N | Add R1048 | X04 |
| 185 | 36 | USH | 12/19/2007 | Dell | SCH166327:Add a no stuff diode in parallel w/ R464 | Add D70 | X04 |
| 186 | 42 | LED | 12/20/2007 | Compal | SCH166355: Add Bypass Capacitor for TTL gate | Add C1058~C1061 | X04 |
| 187 | 36 | USH | 12/20/2007 | Compal | SCH166388:Change USH Circuit per Broadcom Feedback | 1.Change R476 to 5.1M ohms and R488 to 3.3M ohms to lower 2.Pop D70, C641, C647,C1020,C1021,R474,R829. Depop R464,R466,R467 | X04 |
| 188 | 35 | Docking | 12/20/2007 | Dell | SCH166399:Roush + Docking AC protect issue(crowbar) | Add D71, R1068. | X04 |
| 189 | 13 | MCH | 12/21/2007 | Compal | Debug +3.3V_RUN backdrive issue on S3 mode | Add R1076 | X04 |
| 190 | 51 | GPU | 12/27/2007 | NVIDIA | SCH166484: Follow NV feedback to update DIS schmatic | No stuff R699,R700,C775/ Stuff R852. Change C855 to 470P.C857 to 4.7u. Add C309,C329,R1079,R1080 | X05 |
| 191 | 37 | SIO | 12/27/2007 | DELL | For Power change Media slice issue | Add D65,R1078 and reserve R1081 | X05 |
| 192 | 33 | ESATA | 12/27/2007 | DELL | SCH166445: ESATA feedback on 3201 pin 11 and pin 12 | Reserve R1056,R1057,R1066,R1067,R1069,R1070 | X05 |
| 193 | 36 | Broadcom | 12/27/2007 | DELL | SCH166428: Add a No Stuff series resistor between PLTRST3# and RST_N | Reserve R1071 | X05 |

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|------|----------|----------------|-------------------|---------------|---|--|------|
| 194 | All | All | 01/23/2008 | Compal | Update changes following PT2 MEMO | Update changes following PT2 latest MEMO Rev.0.6 | X05 |
| 195 | 37 | SIO | 01/23/2008 | Dell | SCH166607: UMA X04 - No Stuff R1081 | No Stuff R1081 | X05 |
| 196 | 7 | CPU | 01/23/2008 | Dell | SCH166740: X05 - Change ITP resistor values | R67->27 ohm,R64->39 ohm,R66->649 ohm,R65->150 ohm, R57->124 ohm | X05 |
| 197 | 36 | USH | 01/23/2008 | Dell | SCH166962: Roush X05 - EA issue with USB to 5880 | Change R468 and R469 to 0 Ohms | X05 |
| 198 | 33 | USB | 01/23/2008 | Dell | SCH167262: X05 - Add 0 Ohm bypass resistors on U54 for USB port 2 | Add R1082, R1083 | X05 |
| 199 | 42 | LED | 01/28/2008 | Compal | DF192207: Power LED current over spec | Change R1001 to 82 ohm | X05 |
| 200 | 36 | USH | 01/28/2008 | Dell | SCH167383: ROW TPM Disable Pop Options | Make D70, and R841 = 5@ (pop for USH TPM) Make R483 = 4@ (for China config) | X05 |
| 201 | 18 | EMC4002 | 01/29/2008 | Dell | SCH167478: Change R152 from 0 Ohm to 0.82 Ohm for EMC4002 LDO Input | Change R152 from 0 Ohm to 0.82 Ohm | X05 |
| 202 | 6 | Clock | 02/12/2008 Update | Dell | SCH167489: L1 Part Derating Problem | Change L1 to BK2125HS601-T | X05 |
| 203 | 36 | USH | 01/30/2008 | Compal | SCH167486: Smartcard Circuit Update | R849 must be pop-ed to support USH low power | X05 |
| 204 | 35 | Docking | 01/31/2008 | Compal | SCH167590: Docking Detection Circuit Update | No stuff R1068. | X05 |
| 205 | 21 | DP | 02/12/2008 | Dell | SCH167949: Add pass gate FETs to Roush Discrete | Add U73, U74, C1064, C1065, R1084-R1087, Q151, Q152 | X05 |
| 206 | 33 | eSATA | 02/12/2008 | Dell | SCH167851: X05 - Pop R1058 for ESATA EA | Stuff R1058 | X05 |
| 207 | 10 | MCH | 02/12/2008 | Dell | SCH167660: BOM option for Intel debug | Add R1088 (no stuff) | X05 |
| 208 | 27 | CODEC | 02/13/2008 | Compal | SCH168055: PC BEEP Circuit Update | Nostuff R328. Change R327 and R828 to 499K | X05 |
| 209 | 21 | DP | 02/19/2008 | Dell | SCH168269: Correction to meet DP spec | Change R996 to 1 M ohm | X05 |
| 210 | 21 | DP | 02/19/2008 | Dell | SCH168268: More DP changes for discrete | Change R1084, R1085, R1086, R1087 to 10k. Change R336, R337, R1028, R1029, R1026, R1027 to no pop. Change R193 to 5.11k | X05 |
| 211 | 27,28 | CODEC | 02/19/2008 | Dell | SCH168158: SSM2602 Circuit Update | Add R1089, R1090 resistors around C410 and C411. Change C406 to 10uF cap to pin 20 of U15 2602 Change C436 and C437 from 2.2uF 1206 to 10uF 1206 (DF194434) | X05 |
| 212 | 07 | ITP | 02/19/2008 | Dell | SCH168093: Populate JITP1 and Supporting Components | Populate JITP1 | X05 |
| 213 | 36 | USH | 02/21/2008 | Dell | Broadcom feedback: Pi filter | Add L71, L72, C1070, C1071 | X05 |
| 214 | 27 | CODEC | 02/26/2008 Update | Dell | SCH168407: SSM2602 Circuit Review Feedback | Remove:C395 Add:L70, L71, C1066, C1067, C1068, C1069, R1091, R1092. Value change:C391,C406,C397,C401,C408,C409,C410,C411,R340,R342. Connection change:R1089, R1090, C396, C397, C398, R346, R347. | X05 |
| 215 | 39 | TP | 02/27/2008 | Dell | SCH168492: Touchpad Changes to fix backdrive | Add R1093, R1094. No stuff R594, R595. | X05 |
| 216 | 27 | Audio | 02/27/2008 | ADI | SCH168407: SSM2602 Circuit Review Feedback | Add:L70, C1066, C1067, C1068, C1069 Value change:C391,C406,C397,C401,C408,C409,C410,C411,R340,R342. Connection change:R1089, R1090, C396, C397, C398 | X05 |
| 217 | 34 | SIM | 02/27/2008 | Compal | SCH168596: Change SIM Card Connector Back to Push-Push Button Type | Changed JSIM1 to push-push type | X05 |
| 218 | 18,37,38 | 4002,5028,5035 | 03/04/2008 | SMSC | SCH168546: SMSC ST Feedback for 4002/5028/5035 | R153 change to 3.16K. Add C1072. No stuff R900. Stuff R529. No stuff R534. | X05 |
| 219 | 37 | 5028 | 03/04/2008 | Compal | BID Chnagne | R1095-R1097(0 ohm) replace L8,L9,L10. | X05 |
| 220 | 20 | CRT | 03/04/2008 | Compal | SCH167856: X05 - RGB Filter Change | No stuff C255,C256 C257,C390,C518,C996. | X05 |
| 221 | 21 | DP | 03/04/2008 | Dell | SCH168809: Add pull down to prevent floating input | Add R1098. No stuff R185, R187 | X05 |
| 222 | 35 | Docking | 03/07/2008 | Dell | LAY169084: Fix D26 routing for discrete | D26 pin 4 and 7 should be connected to DPC_DOCK_HPDP | X05 |
| 223 | 34 | Mini-Card | 03/07/2008 | Dell | SCH169083: Pop R840 for WIMAX LED support post RTS | Populate R840. | X05 |
| 224 | 33 | USB | 03/07/2008 | Dell | SCH169019: Pop R1082 & R1083 to bypass USB buffer | Populate R1082 & R1083. No stuff U54. | X05 |
| 225 | 55 | GFX | 03/07/2008 | Dell | SCH169006: NVidia Feedback for X05 Discrete | Change R776 from 243 Ohm to 475 Ohm SPDIF: Make R856 and R857 no stuff | X05 |
| 226 | 21 | DP | 03/10/2008 | Dell | SCH168766: Add 1k ohm pop option for nVidia silicon concern | Add R1099, R1100, R1101, R1102 | X05 |

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| 227 | 36 | USH | 03/10/2008 | Dell | SCH169129: Smart Card Insertion | Change R849=1.5k, and R913=300 Ohm | X05 |
| 228 | 20 | CRT | 03/10/2008 | Compal | SCH167856: X05 - RGB Filter Change | 1. Removed C390, C518, C996, C255, C256, C257, C267 and C268. 2. Short L8, L9 and L10 (Replaced by R1095-R1097). | X05 |
| 229 | 21 | DP | 03/10/2008 | Dell | SCH168711: Modify circuit to comply to DP 1.1a spec | 1. Depop R336, R337, R1028, R1029, R182, R183, R1026, R1027. 2. Add SN74CBTD3306CPWR switches (U75-U78) to DDC lines. 3. Change R996 to 1 M ohm 4. Add a 1 M (R1098) pull down on U9 pin 39. Depop R185 and R187. 5. Change R193 to 5.11k. 6. Replace F1 with GEC 1206L150-C PTC. 7. Add a 10 uF cap (C1075) from +VDISPLAY_VCC to ground | X05 |
| 230 | 7 | ITP | 03/10/2008 | Dell | SCH168709: Issue to track ITP | Add R1103-R1113 | X05 |
| 231 | 50 | GPU | 03/11/2008 | Dell | SCH169189: Add pads for a .1uF cap on HPD signals | Add C1076, C1077 and no-stuff | X05 |
| 232 | 6,23,24,27,29,37,38 | RC Termination | 03/11/2008 | Compal | SCH169206: WWAN Noise Solution | - Add R527, R744, R588, R285, C656, C673, C318, C302, C300 - Value Change R786, R379, R26, R29, R32, R19 | X05 |
| 233 | 34,42 | MiniCard | 03/11/2008 | Compal | SCH169218: Remove Screw Hole and MiniCard Latches | Remove H8, JLAT2, JLAT3 | X05 |
| 234 | 23 | Crystal | 03/12/2008 | Compal | ME add new z-high limit cause 32.768Khz material interfere. | Change Y1 Footprint from Y_1TJS125DJ4A420P_4P to Y_1TJE125DP1_2P | X05 |
| 235 | 26,32 | ME | 03/12/2008 | Compal | ME update ODD,PCMCIA connector footprint Remove Hole & Mini card latch from ME request | Change JSATA1 Footprint to TYCO_2-1759838-8_13P_RV-T, JCBUS1 to MOLEX 48315-0012_68P_RT-T.Delete H8,JLAT2,JLAT3 | X05 |
| 236 | 31 | SD card | 03/12/2008 | Ricoh | SCH169273: Resolve SD_CLK under shoot issue below from Ricoh request | Add C491 close to JSD1 pin8 | X05 |
| 237 | 36 | RFID | 03/12/2008 | Broadcom | SCH169256: Need to make changes to RFID schematic connections | Follow Broadcom comment to modify circuit | X05 |
| 238 | 36 | DAI | 03/13/2008 | ADI | Follow DELL request to modify | 1. U15 pin12 to GND and remove C396 2. Change C1066, C1067, C1068 and C1069 to 1nF 3. Change C408 and C409 to 1uF. 4. Change C410 and C411 to 0.22uF 5. Change R340 and R342, R1091 and R1092 to 200 Ohm 6. Change R1089 and R1090 to 10M. | X05 |
| 239 | 35 | Docking | 03/13/2008 | Compal | DF193241: <ESD> Enhance ESD: Air discharge to jack screw cause system hang-up | Add C672 close to JDOCK1 pin39, stuff C1076 | X05 |
| 240 | 27 | Auido | 03/13/2008 | Compal | EMI team find had noise at 2MHz | Reserve C676 on DMIC_CLK signal | X05 |
| 241 | 24,37 | SPI ROM | 03/14/2008 | DELL | SCH169380: GPIO for Write Protect (WP#) for SPI Flash | 1.Add 2nd SPI ROM schematic 2.Add serial resistor and contact SPI_WP#_SEL signal from U35.23 to U12.3,U13.3 | X05 |
| 242 | 36 | SPI ROM | 03/14/2008 | Compal | U34 component z-high interfere ME define | Change package from S08 to VFQFPN8 | X05 |
| 243 | 31 | CARDBUS | 03/17/2008 | Compal | SCH169447: 24.576MHz (X3) Crystal Circuit Update | Add R1117 no stuff | X05 |
| 244 | 21 | DP | 03/17/2008 | Compal | SCH169464: DVI Pull Ups Changes per NV suggestion | R1084-R1087 change value from 10K to 2.2K | X05 |
| 245 | 6 | Clock | 03/18/2008 | Dell | CLK_PCI_DOCK is shared with CLK_PCI_PCM. It does not follow the Roush PIG, and causes risk for docking scenarios. (Roush gating list) | CLK_PCI_PCM change net from pin32 to pin33 of U1 | X05 |
| 246 | 27 | DAI | 04/01/2008 | Compal | SCH169971: Add 0ohm between double inverter for DAI function | Add R762 | X06 |
| 247 | 36 | RFID | 04/01/2008 | Compal | Change ESD Diode package | Change from BAS40-04_SOT23-3 to DA204U_SOT323-3 | X06 |
| 248 | 37 | SIO | 04/03/2008 | DELL | SCH170088: ICH LOM errata update | 1.PBAT_PRES# contact to U35 pin 97 2.LAN_DISABLE#_R contact to U35 pin88. 3.Add D38,C677 and no-stuff.R1008 change to 4.3K and no-stuff. | X06 |
| 249 | 35 | Docking | 04/03/2008 | DELL | SCH170091: Add series 0603 zero ohm on DPB_DOCK_HPD and DPC_DOCK_HPD_R. | Add R387 | X06 |
| 250 | 36 | USH | 04/23/2008 | Compal | Add 3.3V_RUN discharge circuit for backdrive | Stuff R625, Q79. | X07 |

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| 251 | 37 | SIO | 04/23/2008 | Compal | BID change to X07 | Depop R535, Populate R530 | X07 |
| 252 | 24 | ICH | 04/23/2008 | Dell | SCH170773: No Stuff 2nd SPI ROM (U13) | Depop U13, R304, R380, C395, R308, R309, R384, R1060, Populate R298 | X07 |
| 253 | 36 | USH | 05/02/2008 | Dell | SCH170926: Broadcom Feedback | Populate R298 | X07 |
| 254 | 40 | Power Control | 05/02/2008 | Dell | SCH170717: Power Sequence Check with Discharge Circuit | Populate R705, R723, R724, R732, R733 | X07 |
| 255 | 35 | Docking | 05/12/2008 | Compal | DOCK_DET# need not have pull down | Change R625 from 10 ohm to 39 ohm | X07 |
| 256 | 33 | TP | 05/15/2008 | Compal | DF216972: <ESD> Contact +/-6kv to FP cause system lock-up | Depop R1068 | X07 |
| 257 | 27 | AUDIO | 05/23/2008 | Compal | SCH171755/DF216224: DMIC EMI failed | Pop U51 | X07 |
| 258 | 32 | Express | 05/15/2008 | Compal | DF216223: EMI radiation failed for express card | Remove R338. Add L78. Pop C676. | X07 |
| 259 | 40 | Power | 05/23/2008 | Compal | SCH171795: Power Step on +3.3V_ALW_ICH rail | Depop R791, R792. Pop L64. | X07 |
| 260 | 6 | Clock | 05/29/2008 | Dell | SCH172103: No Stuff ITP clock resistors for X07 | C688 change value to 3300pF | X07 |
| 261 | 36 | USH | 06/04/2008 | Compal | SCH172075: RFID Implementation | No stuff R18, R21. | X07 |
| 262 | 24 | ICH | 06/02/2008 | Compal | SCH170341: Sawtooth waveform on SERIRQ Issue | C639 and C643 have to use X5R. L71, L72 change to 2%. | X07 |
| 263 | 42 | LED | 06/02/2008 | Compal | SCH172191: Breath Power LED Resistor Change | Add R1126 | X07 |
| 264 | 38 | EC | 06/03/2008 | Dell | SCH172185: Connect ODD_DET# to GPIO41 5035.34 | Change value from 82 to 100 ohm (R1001) | X07 |
| 265 | 37 | SIO | 06/03/2008 | Dell | SCH170391 (SLICE_BAT_PRES#) | Connect ODD_DET# to GPIO41 5035.34, ICH9.AE19, JSATA1.8 | X07 |
| 266 | 27 | AUDIO | 06/03/2008 | Compal | TASK169849: Regress Audio HP and Microphone test | R504 change to 4.7K. Add PC266 (1500pF) | X07 |
| 267 | 27 | Nvidia | 06/09/2008 | Nvidia | Add pull-down resistor on HDA_RST#(U44.C6) & GPIO3(U44.M2) | L70 change value to 47UH LBMF1608T470M 20% | X07 |

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|------|-------|------------------|-------|-------------------|--|--|------|
| 1 | 48 | Charger | 08/31 | Saha | ACAV_IN_NB will pull high when DOCK adapter insert. | Change PR145, PIN2 connection from +SDC_IN to +DC_IN | X02 |
| 2 | 48/49 | Charger Selector | 08/31 | Saha | ACAV_IN_DOCK# won't pull high when battery only mode. | Change ACAV_IN_DOCK# pull high to +3.3V_ALW2 Add inverter for ACAV_IN_DOCK PQ27 enable change to ACAV_IN_DOCK Confirm HW delete U58 and R124 pull up to +RTC_CELL | X02 |
| 3 | 48 | Charger | 09/28 | DELL Doug | EE work item SCH162823 | Connect ISL88731_ICM to VCP2 with a series resistor Depop the UL circuit (bottom of page 48) | X03 |
| 4 | 43 | Charger | 09/28 | Saha | DFX team suggest change GND to PIN1 and PIN2 | PJPDC1 PIN1/PIN2 is -DCIN_JACK, PIN3 is DCIN_CBL_DET# PIN4 NB_PSID, PIN5/PIN6 is +DCIN_JACK | X03 |
| 5 | PWR | Snubber | 10/22 | Guangyong DELL | DELL request add a snubber circuit on every regulator | Add below location of regulator switching node +3.3V_ALW: PR276, PR251 +5V_ALW: PR277, PC245 +1.5V_RUN:PR278, PC246 +1.05V_M:PR279, PC246 +1.8V_SUS:PR280, PC249 +VCHGR:PR281, PC249 VGA_CORE:PR282, PC250 | X03 |
| 6 | 43 | +DC_IN | 10/22 | Guangyong DELL | Add a resistor around AC power soft-start fet | Add PR251 0_0402_5% before NB_AC_OFF for delay switch | X03 |
| 7 | 43 | +DC_IN | 11/2 | Compal | DCIN_CBL_DET# damage ECE5028 | Add ESD diode PD13 DA204U_SOT323 at DCIN_CBL_DET# Series PR67 1K_0402_5% between PJPDC1, PIN1 and DCIN_CBL_DET# Parallel 0.47uF_0402_6.3V on DCIN_CBL_DET# | X03 |
| 8 | 48 | Charger | 11/2 | Compal | NB DC blocking MOSFET won't turn off when Dock AC insert. | Add PQ44 RHU002N06 control NB DC blocking MOSFET. Control singal is NB_AC_OFF Series PR284 200K_0402_1% between PQ44, PIN1 and NB_AC_OFF Add PD30 B540C parallel PQ34 | X03 |
| 9 | 49 | Selector | 11/2 | Compal | PBATT DC blocking MOSFET won't turn off when Docking AC insert. It will cause Battery or adapter protect. | Add PD18 RB715F_SOT323, PD20 and PD19 RB751V_SOD323, PR329 100K_0402_5% PR328 and PR327 47K_0402_5%, PR326 and PR325 240K_0402_5% PQ40 2N7002DW-7-F_SOT363-6, PQ59 NTG6161PT1G_TSOP6 Extra net name add +NBDOCK_DC_IN_SS from Docking connector | X03 |
| 10 | 43 | +DC_IN | 11/2 | Merle DELL | Roush component and rework changes for Dcoking test | PC5 change form 0.47uF_0805_25V to 0.1uF_0805_25V PR16 change form 240K_0402_5% to 1M_0402_5% PR21 change form 47K_0402_1% to 220K_0402_5% PR22 change form 47K_0402_1% to 22K_0402_5% PR283 change form 0_0402_1% to 100K_0402_5% | X03 |
| 11 | 62 | MAX8632_VGA | 11/7 | nVidia | NB9x's GPU CORE Voltage | Change PR203 to 90.9K_0402_1%, PR205 to 93.1K_0402_1%, PR209 to 68.1K Add PR288 221k_0402_1% , PC253 100P_0402_50V, PR289 63.4K_0402_1% PQ60 BSS138W, PC252 0.01u_0402_16V PR287 100K_0402_5%, PR286 and PR285 10K | X03 |
| 12 | 43 | +DC_IN | 11/8 | Compal | Battery slice need detect NB battery is insert or not. | Add PQ61 NTR4502PT1G, and PD32 RB751V_SOD323 Connect to DOCK_SMB_ALERT# and SLICE_BAT_PRES# | X03 |

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|------|----------|---------------------|-------|----------------|--|---|------|
| 13 | 49 | Selector | 11/8 | Compal | NB_AC_OFF_BJT can't turn off when Dock adapter exist | Change PQ39 to PQ61A/B (2N7002DW-7-F), NB_AC_OFF_BJT control by NB_AC_OFF | X03 |
| 14 | 48 | Charger | 11/8 | Compal | Charger of ISL88731 will turn off When ACIN is no power | Add LM393 to replace ISL88731 ACOK function(PU11B) | X03 |
| 15 | 48 | Charger | 11/09 | Merle Dell | +PWR_SRC exist on Docking connector through the DOCK_DCIN_IS+ and - | Add PQ62 NTGD4161PT1G series DOCK_DCIN_IS+ and - Add PQ63 RHU002N06 to control PQ62 on/off | X03 |
| 16 | 43 | +DC_IN | 11/09 | Kyle DELL | No pop PD13, PR67 and PC254. Reduce mass build risk | No pop PD13, PR67 and PC254. | X03 |
| 17 | 48 49 | Charger Selector | 11/12 | Merle DELL | A global signal name change for all notebooks | From "ACAV_IN_DOCK" to "ACAV_DOCK_SRC" From "ACAV_IN_DOCK#" to "ACAV_DOCK_SRC#" | X03 |
| 18 | 48 | Charger | 11/12 | Merle DELL | Add pull up resistor at PU11.7.to +3.3V_ALW Change signal name at Node PR157.1 from "ACAV_IN_NB" to "ACAV_IN" Show PR156 as a stuff. | Remove PR337, Change PR145 from +DC_IN to +SDC_IN. Pop PR145 and PR156, change PR157 net name from ACAV_IN_NB to ACAV_IN. Add PR341 100K_0402 pull up +3.3V_ALW at PU11B output. | X03 |
| 19 | 43 | +DC_IN | 11/22 | Merle DELL | NB and Dock adapter swap issue | PR21 change to 1M_0402_5% PC5 change to 0.022uF_0805_50V | X03 |
| 20 | 56 | VGA_PM | 11/22 | Compal DELL | GFX_CORE support 0.9V/1.09V/1.17V | PC197, PC253 change to 330pF_0402 PR201 change to 26.1K_0402_1% PR289 change to 68.1K_0402_1% PR205 change to 49.9K_0402_1% PR209 change to 46.4K_0402_1% PR288 change to 162K_0402_1% | X03 |
| 21 | 48 | Charger | 11/30 | Greg DELL | Comparator Circuit for E-Dock | PC256 change from 100pF to 0.1uF | X04 |
| 22 | 49 | Selector | 11/30 | Merle DELL | PBATT back drive to Battery Slice vias charger high side MOSFET | Add PQ65 between PBATT+ and +VCHGR Use PBATT_OFF control PQ64 to switch PQ65 | X04 |
| 20 | 56 | VGA_PM | 11/30 | Guangyong DELL | GFX_CORE support 0.9V/1.09V/1.17V | Un-pop PC190 | X04 |
| 21 | 57 | VGA_PM | 11/31 | Guangyong DELL | To fix dynamic MAX8632 PGOOD drop issue. | Reserve PC257 between MAX8632 FB to GND | X04 |
| 22 | 43 | +DC_IN | 12/05 | Greg DELL | PJPDC1 change to 7pin connector | PJPDC1 change to MOLEX_87437-0763_7P-T Change PC67 to 0_0402_5% and populate | X04 |
| 23 | 43 | +DC_IN | 12/07 | AJ Compal | P-MOS Vgs too high | PQ61 change to FDN338P_NL | X04 |
| 25 | 48 | Charger | 12/10 | Guangyong DELL | Modify Charger schematic Follow Intersil suggestion | Add PD33 BAT54CW_SOT323, +DOCK_PWR_BAR/+DC_IN_SS Reserve PR356 0_0402_5% form +SDC_IN to PU10 PIN22 Add PR354 10_0402_1% to CSSP, PR355 10_0402_1% to CSON Add PC260 0.1U_0603_25V to CSSN, PC261 0.1U_0603_25V to CSOP PC143 and PC166 change to 0.1U_0402_10V PR161 change to 100_040_5% | X04 |

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|------|-------|---------------------|-------|-------------------|--|---|------|
| 26 | 50 | Selector | 12/10 | AJ Compal | PBATT_OFF connect to DOCK_AC_OFF | Add PD34 RB751V-40 | X04 |
| 27 | 57 | VGA_PM | 12/17 | Guangyong DELL | To fix dynamic MAX8632 PGOOD drop issue. | Change PC197 form 330pF to 820pF | X04 |
| 28 | 47 | +VCORE | 12/19 | Saha Compal | INTEL CPA line need adjust | PR131 change to 9.76K_0402_1% | X04 |
| 29 | 50 | Selector | 12/20 | Merle DELL | Hot dock issue, adapter crowber | Add PR357 330K_0402 form +DOCK_PWR_BAR to GND. Add PQ66 RHU002N06 parallel PQ43, series PR358 0_0402 to EN_DOCK_PWR_BAR# | X04 |
| 30 | 48 | Charger | 12/21 | Merle DELL | Charger Isense MOSFET timing change | PC142 change to 0.047u_0603_25V | X04 |
| 31 | 47 | +VCORE | 1/25 | Guangyong DELL | Change VCORE OCSET | Change PR117 form 11.5K to 12.7K_0402_1% | X05 |
| 32 | 48 | Charger | 1/25 | Guangyong DELL | Change ACAV_IN_NB pull high voltage | Add PR362 100K_0402_5% form PU11B out pull high to ISL88731_VREF De-pop PR341 | X05 |
| 33 | 49 | Selector | 1/25 | AJ Compal | Charger for Battery Slice | Change PQ63 to 2N7002DW Add PR360 0_0402_5% between PQ63 and SLICE_BAT_PRES | X05 |
| 34 | 50 | Selector | 2/12 | Merle DELL | Fix BITS CR196131 and CR196130 | Add PR363 1K_1206 and PC262 1U_0603_25V from +NBDOCK_DC_IN_SS to ground Add PD35 RB751S40T1_SOD523-2 from NB_AC_OFF# to ACAV_IN_NB | X05 |
| 35 | 48 | Charger | 2/25 | Power Compal | Change Charger sunbber resistor size form 0805 to 1206. | Change PR281 from 4.7_0805 to 4.7_1206 | X05 |
| 36 | 47/48 | CPU_CORE Charger | 3/6 | EMI Compal | To solve CPU_CORE and Charger BB noise | Add Bead PL21 on PJP33, Pop PL12 | X05 |
| 37 | PWR | All power | 3/6 | WWAN Compal | Change all power rail snubber resistor form 0805 to 1206 size. | Change all power rail snubber resistor form 0805 to 1206 size. | X05 |
| 38 | 50 | Seletor | 3/6 | Power Compal | Fix Battery slice discharge issue | Change PR260 from 240K to 620K, PR261 from 47K to 33 PQ55 from IMD2AT to 2N7002DW Add PR364 390K, PR365 390K, PD36 RB751S40T1, PC263 1U_0603. | X05 |
| 39 | 47 | CPU_CORE | 3/7 | EMI Compal | To solve CPU_CORE and Charger BB noise | Add PC264 680p_0402 and PC265 470p_0402 at PL12 +PWR_SRC | X05 |
| 40 | PWR | All PWR | 3/17 | EMI Compal | Plastic palmrest logic up BB noise solution | Pop +3.3V, +5V, +1.05V, +1.5V, +1.8V, VGA_CORE snubber R=2.2_1206 C=1000pF_0603 Pop VGH snubber R=4.7_1206 C=1000pF_0603 Change +3.3V, +1.05V, VGH, VGA_CORE and VCORE boot resistor PR37=2.2_0603 PR62=2.2_0603 PR155=2.2_0603 PR198=2.2_0603 PR87, PR98, PR121 change to 2.2_0603 Pop PC155=3300pF and PC154=220pF | X05 |
| 35 | 48 | Charger | 5/9 | Elick Compal | populate ADAPT_OC function(90W setting) | Pop PR167,PR166,PR171,PR172,PC168,PC169,PC170,PC171,PC172,PR164,PR168 ,PC167,PR165,PQ33 un-pop PR170 | X07 |

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| 42 | 48 | Charger | 5/21 | Merle DELL | Reduce delay time between NB adapter removal and ACAV_IN_NB de-assert from 1.6mS to-400uS. | change PC256 from .1uF to 100pF. change PR175 from 100K to 24K. | X07 |
| 43 | 47 | V-CORE | 5/21 | Elick Compal | Add 33K as a reservation on pin2 of 8791 (CPU driver all 3 phases) for Maxim V_CORE solution. | Add un-pop PR366(33K 0402) between pin2 of PU6 and GND. Add un-pop PR367(33K 0402) between pin2 of PU8 and GND. Add un-pop PR368(33K 0402) between pin2 of PU9 and GND. | X07 |
| 44 | 43 | DC-IN | 6/3 | Elick Compal | Glitch issue on SLICE_BAT_PRES# | Add PC266:SE074152K8L(S CER CAP 1500P 50V +-10% X7R 0402) between pin2 of PQ61 and GND. | X07 |
| 45 | 49 | Selector | 6/5 | Elick Compal | Reserve a pull high resistor between +3.3V_ALW2 and SLICE_BAT_PRES# | Add un-pop PR369:SD02847018L(S RES 1/16W 4.7K +-5% 0402) between +3.3V_ALW2 and PQ40B.5. | X07 |
| 46 | 48 | Charger | 6/5 | Elick Compal | un-pop ADAPT_OC function. | un-Pop PR167,PR166,PR171,PR172,PC168,PC169,PC170,PC171,PC172,PR164,PR168,PC167,PR165,PQ33 populate PR170:SD02810018L(S RES 1/16W 1K +-5% 0402) | X07 |
| 47 | 48 | Charger | 6/5 | Elick Compal | Reserve a 0402 size capacitor between NB_AC_OFF# to GND | Add un-pop PC267 0402 size between PQ35.2 to GND. | X07 |

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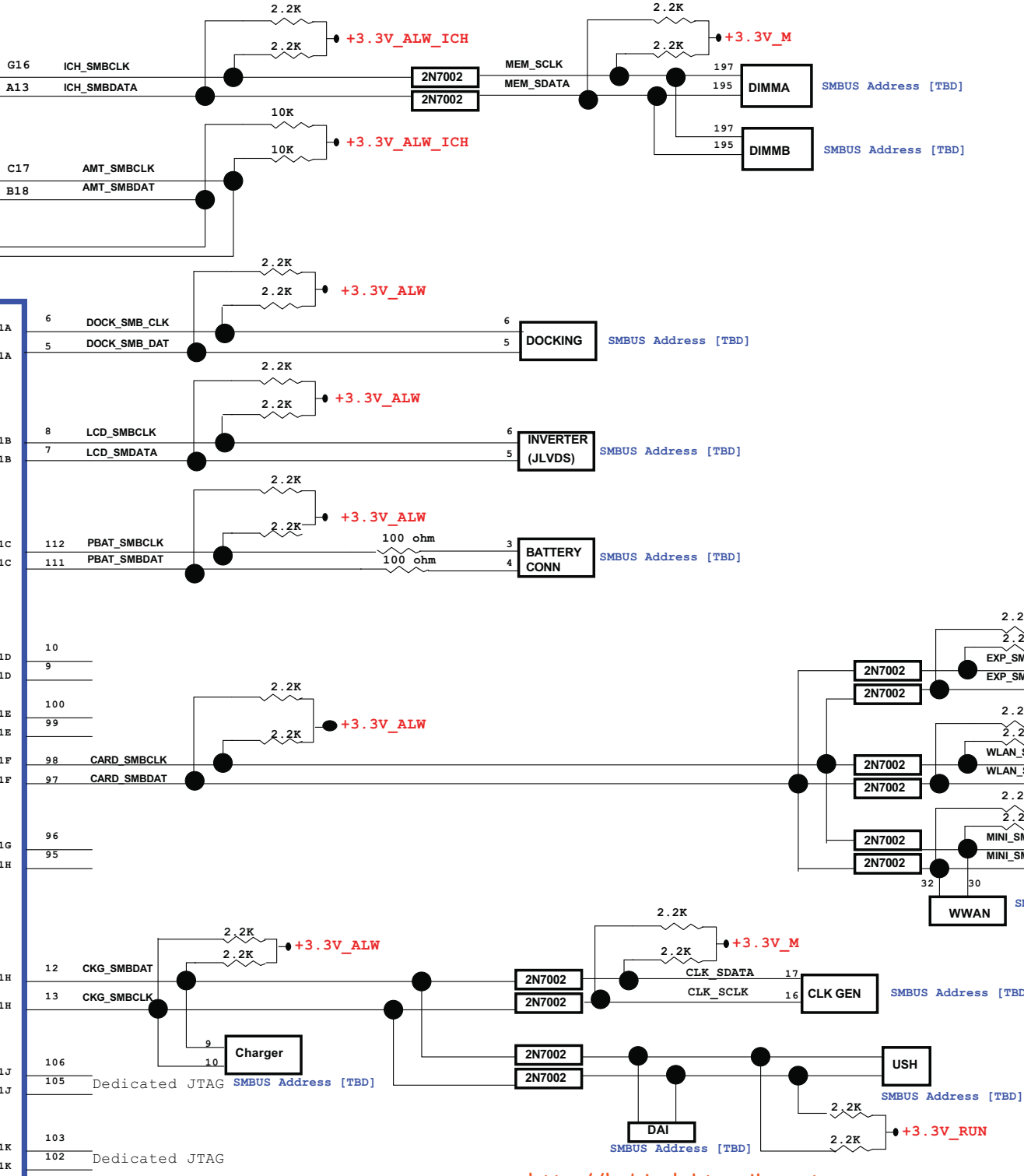
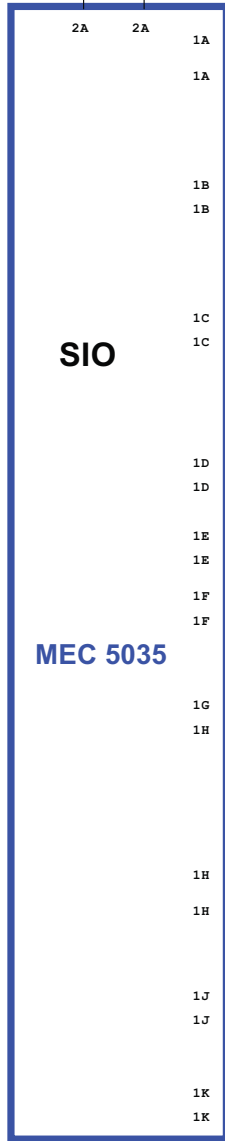
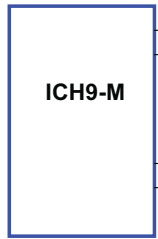


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