

# Compal Confidential

## Schematics Document

Intel CLARKSFIELD/ARRANDALE  
with IBEX PEAK-M core logic

# Cartier DIS

# LA-4901P

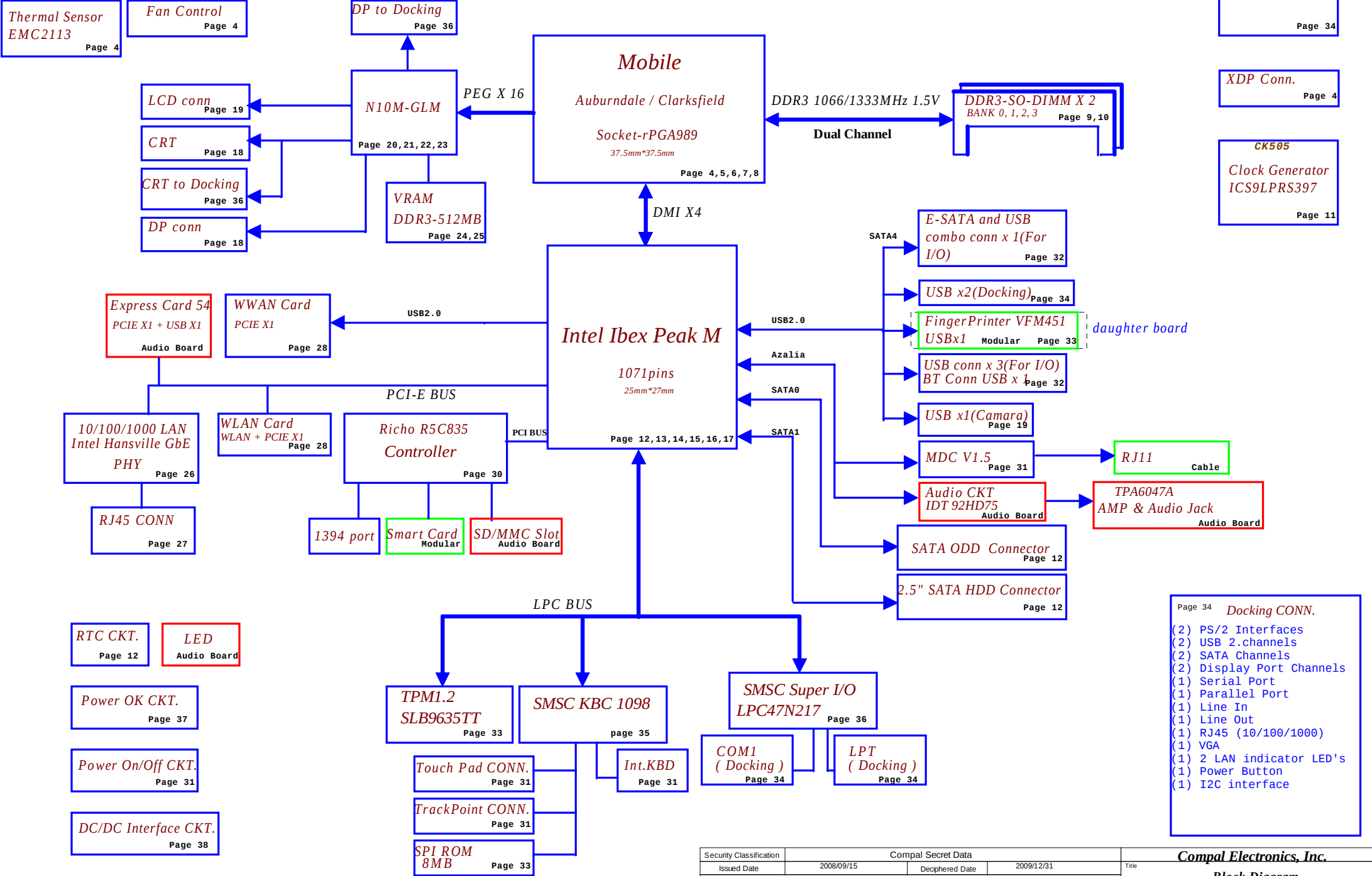
2009-12-01

REV:1.0

|             |      |  |
|-------------|------|--|
| 機<br>等<br>密 | 破體二部 |  |
|             | 產出人員 |  |
|             | 產出日期 |  |
|             | 解密日期 |  |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                    |                 |            |                          |                 |     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-----------------|------------|--------------------------|-----------------|-----|
| Security Classification                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Compal Secret Data |                 |            | Compal Electronics, Inc. |                 |     |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                    |                 |            | Custom                   | LA-4901P        | 1.0 |
| Date: Tuesday, December 15, 2009                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                    |                 |            | Sheet                    | 1 of 54         |     |

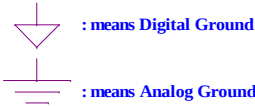
# Cartier DIS



Voltage Rails ( 0 MEANS ON X MEANS OFF )

| <div>power plane</div> <div>State</div> | +RTCVCC | +B<br>+3VL | +5VALW<br>+3VALW | +3VM<br>+1.05VM | +1.5V<br>+0.75V | +5VS<br>+3VS<br>+1.5VS<br>+VGA_CORE<br>+VCCP<br>+CPU_CORE<br>+1.05VS<br>+1.8VS |
|-----------------------------------------|---------|------------|------------------|-----------------|-----------------|--------------------------------------------------------------------------------|
| S0                                      | 0       | 0          | 0                | 0               | 0               | 0                                                                              |
| S1                                      | 0       | 0          | 0                | 0               | 0               | 0                                                                              |
| S3                                      | 0       | 0          | 0                | 0               | 0               | X                                                                              |
| S5 S4/AC                                | 0       | 0          | 0                | 0               | X               | X                                                                              |
| S5 S4/ Battery only                     | 0       | 0          | X                | X               | X               | X                                                                              |
| S5 S4/AC & Battery don't exist          | 0       | X          | X                | X               | X               | X                                                                              |

Symbol Note :



Install below 45 level BOM structure

45@ : means just put it in the BOM of 45 level.

Install below 43 level BOM structure

@ : means just reserve , no build  
CONN@ : means ME part.  
VRAM@ : means VRAM strip pin part.

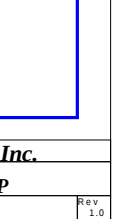
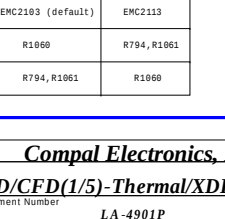
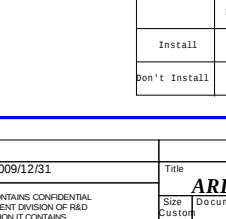
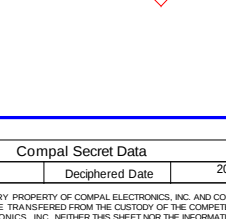
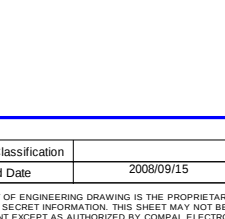
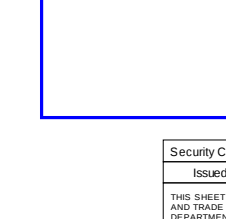
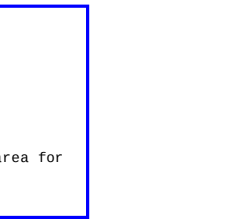
SMBUS Control Table

|                          | SOURCE   | BATT | XDP | SODIMM | CLK CHIP | MINI CARD | DOCK | NIC | THERMAL SENSOR | G-SENSOR |
|--------------------------|----------|------|-----|--------|----------|-----------|------|-----|----------------|----------|
| SMB_EC_CK1<br>SMB_EC_DA1 | SMSC1098 | V    | X   | X      | X        | X         | X    | X   | X              | X        |
| SMBCLK<br>SMBDATA        | Calpella | X    | V   | V      | V        | V         | V    | X   | X              | V        |
| SML0CLK<br>SML0DATA      | Calpella | X    | X   | X      | X        | X         | X    | V   | X              | X        |
| SML1CLK<br>SML1DATA      | Calpella | X    | X   | X      | X        | X         | X    | X   | V              | X        |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                    |            |                          |                             |
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| Security Classification                                                                                                                                                                                                                                                                                                                                                                                                                                       |            | Compal Secret Data |            | Compal Electronics, Inc. |                             |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                    |            | Sheet                    | 3 of 54                     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                    |            | Rev                      | 1.0                         |

## REMOTE Thermal sensor

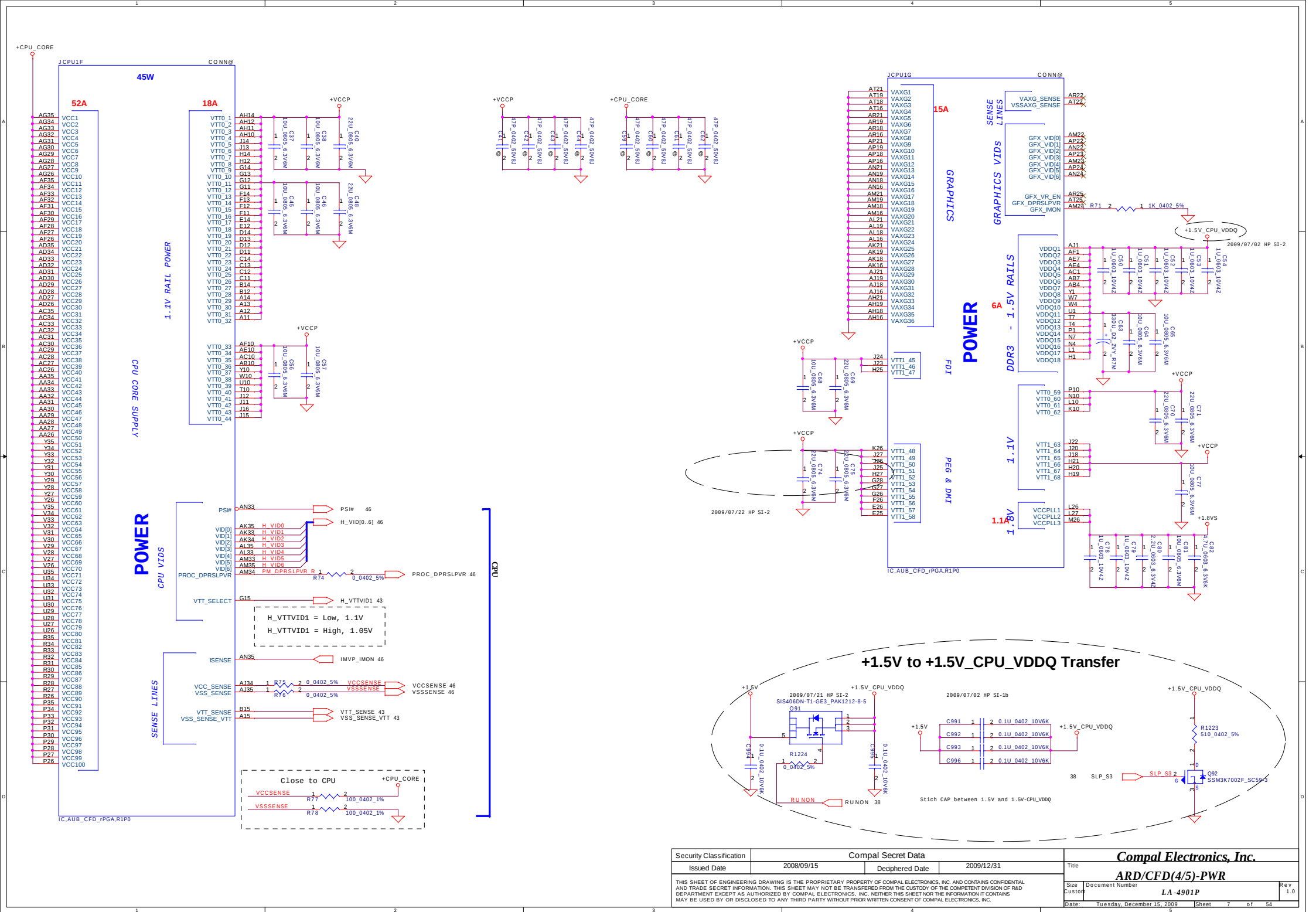
Layout Note:  
place near the hottest spot a  
NB & top SODIMM.



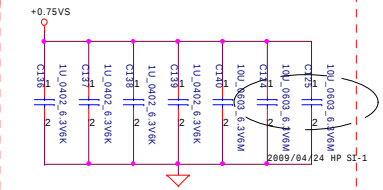
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |                    |  | ARD/CFD(1/5)-Thermal/XDP        |                            |            |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |                    |  | Size                            | Document Number            | Rev        |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |                    |  | Custom                          | LA-4901P                   | 1.0        |   |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | 4                  |  |                                 |                            |            |   |









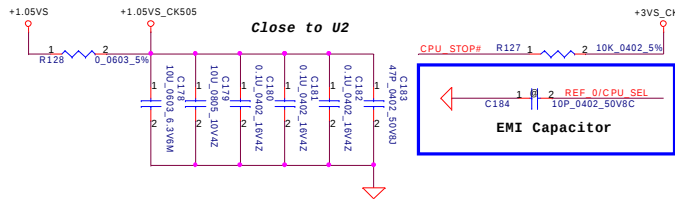
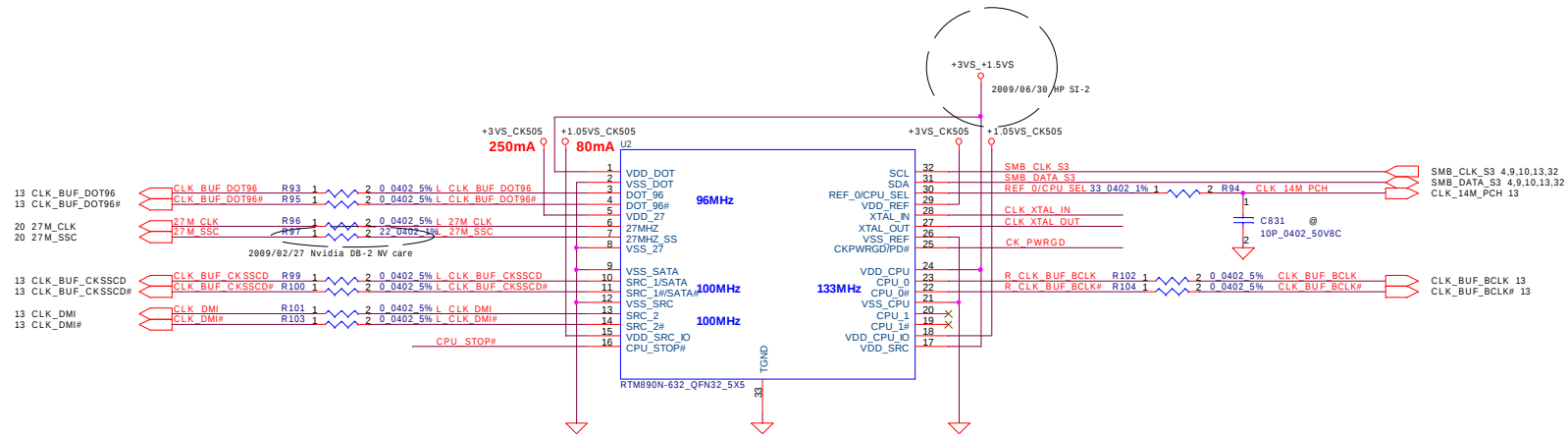


|                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                    |                 |            |                                 |                            |               |
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| Issued Date                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 2008/09/15         | Deciphered Date | 2009/12/31 | Title                           | <b>DDRIII-SODIMM SLOT1</b> |               |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                    |                 |            | Date:                           | Tuesday, December 15, 2009 | Sheet 9 of 54 |

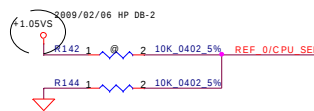
## 3A01.5W



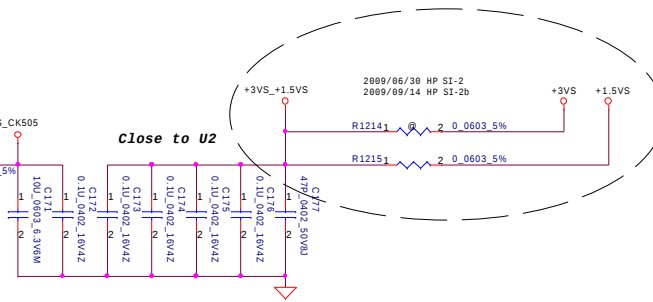
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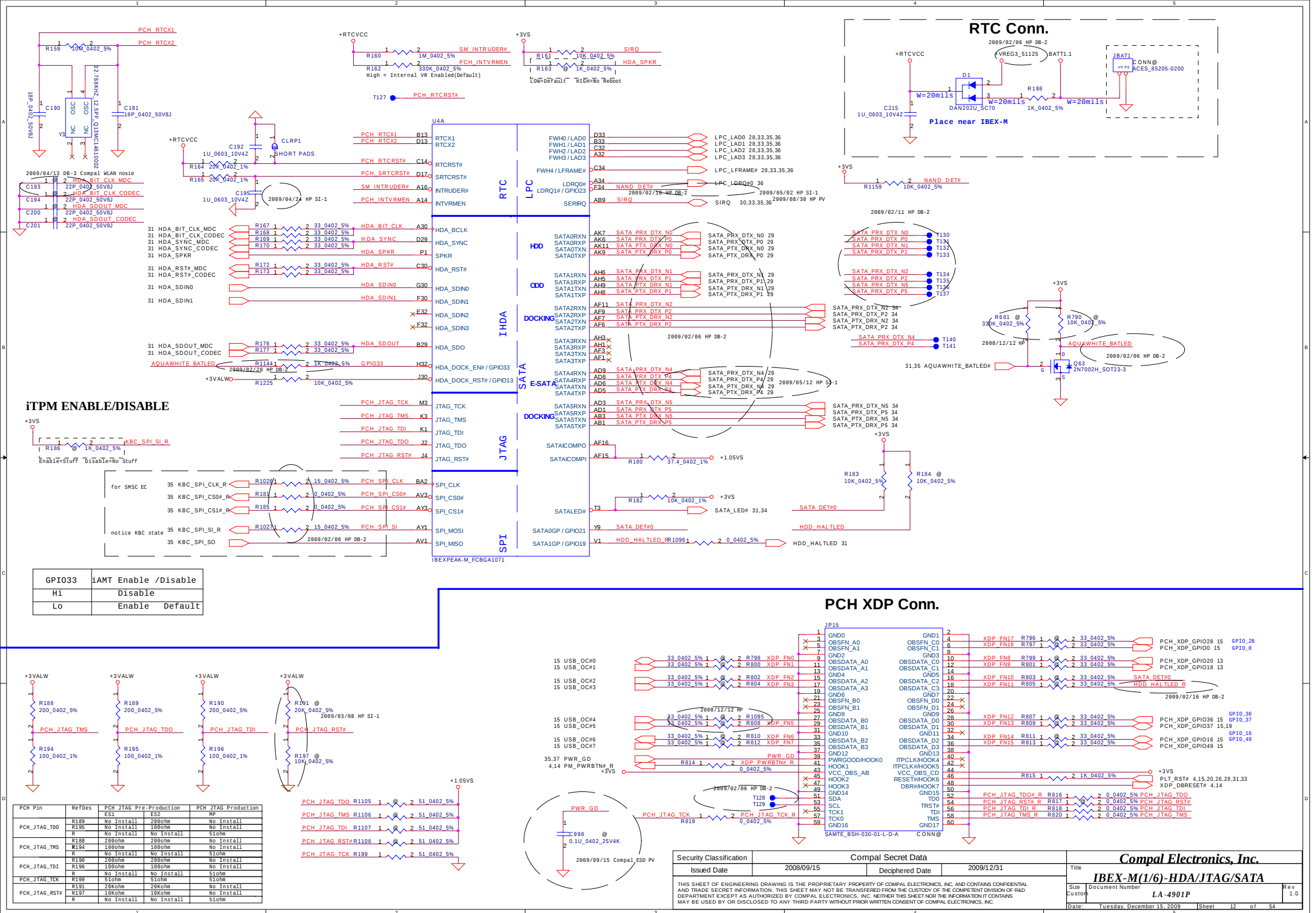


| PIN 30      | CPU_0  | CPU_1  |
|-------------|--------|--------|
| 0 (Default) | 133MHz | 133MHz |
| 1           | 100MHz | 100MHz |

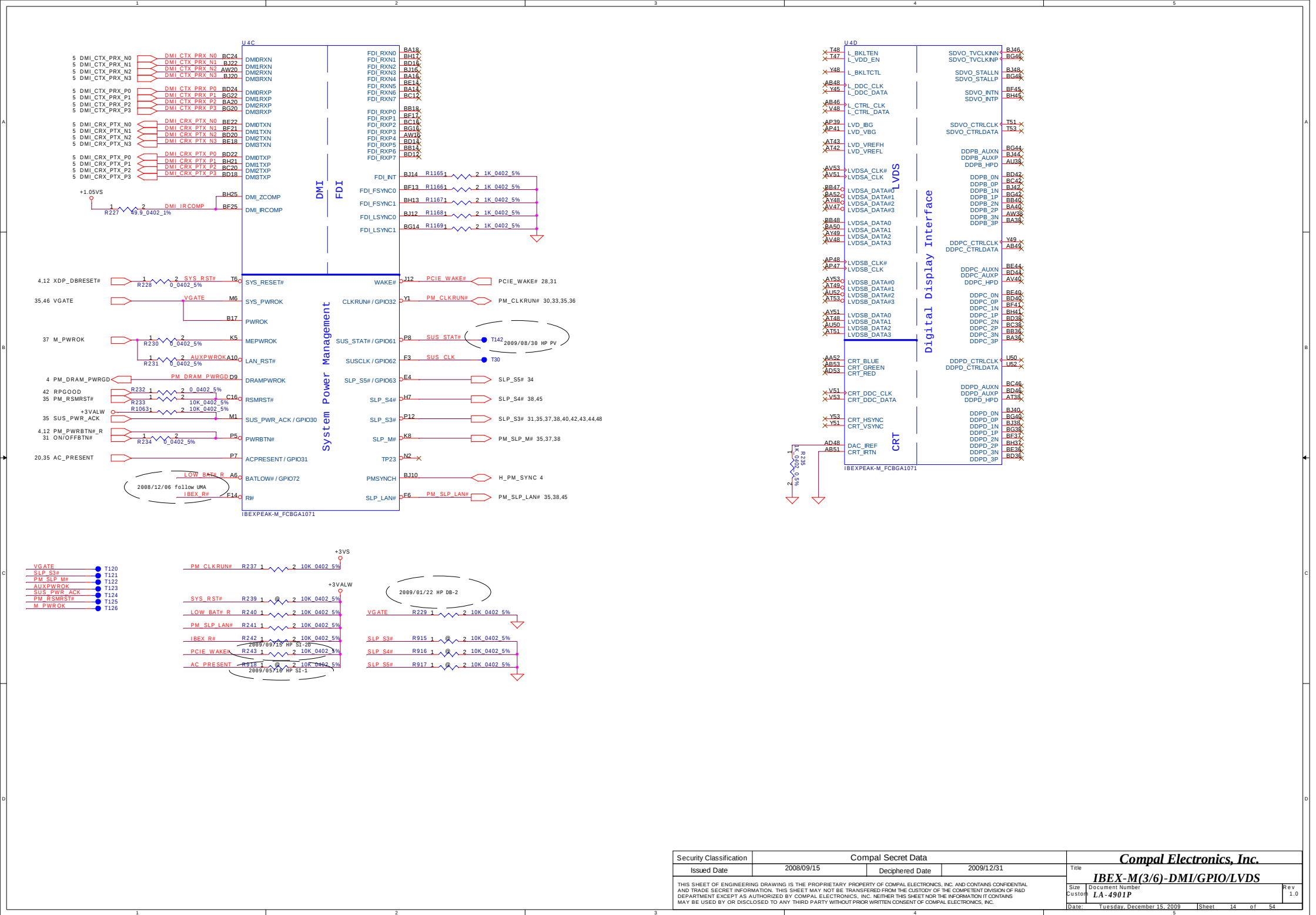


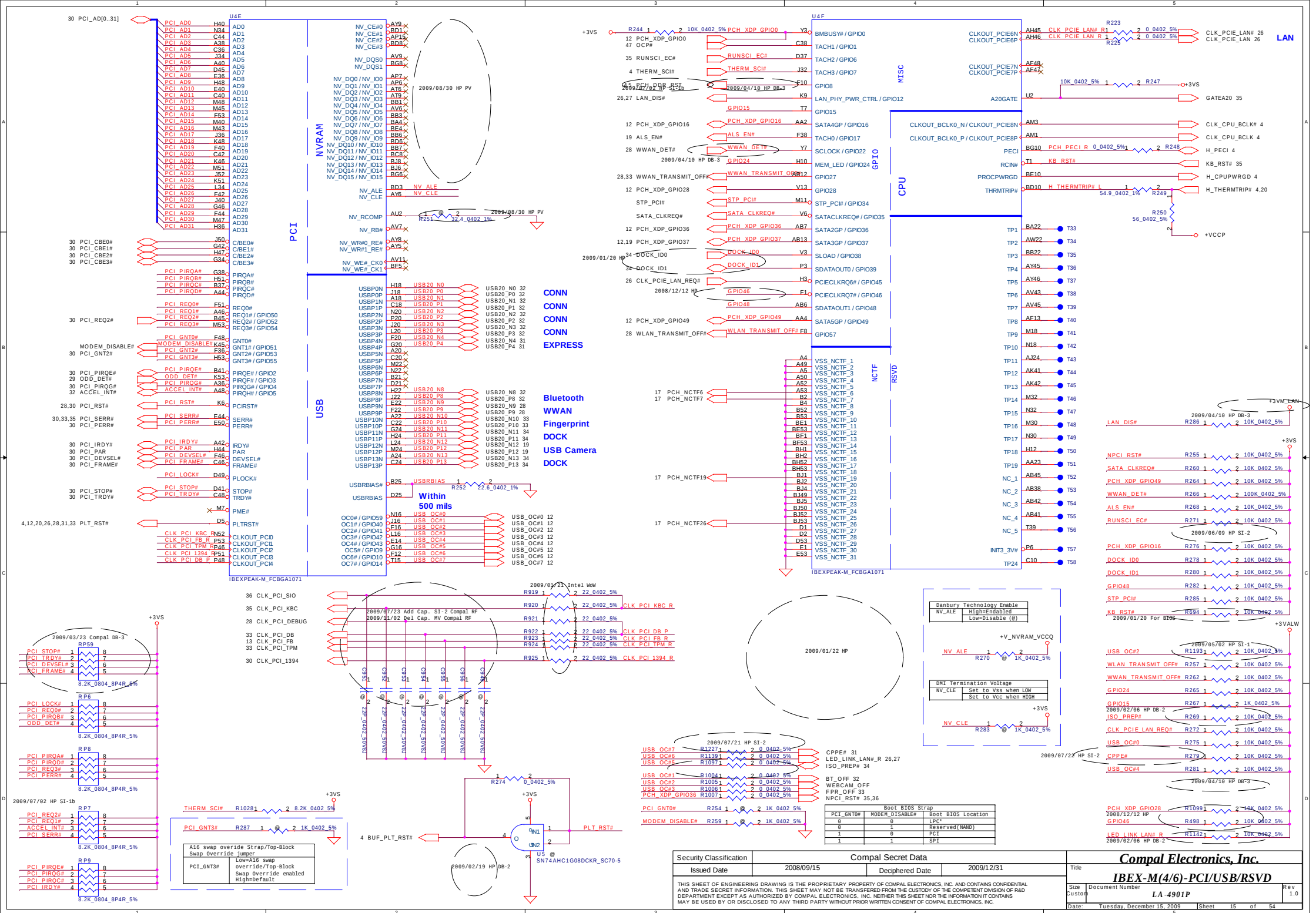
Close to U2



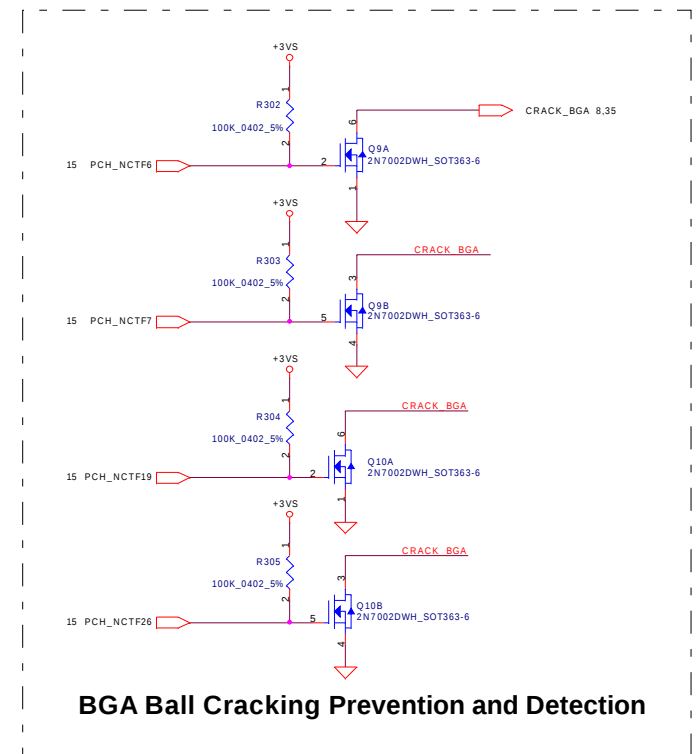
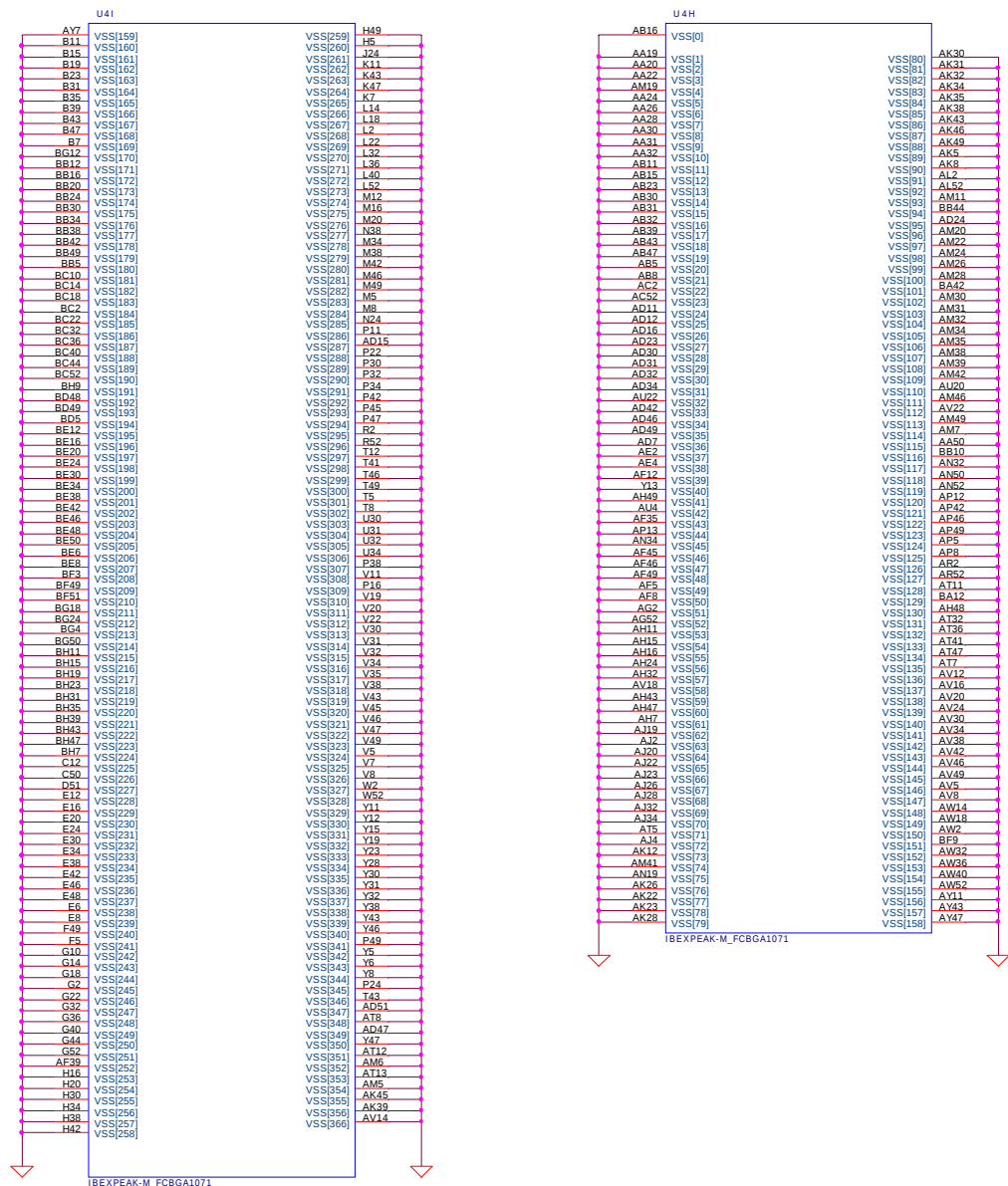


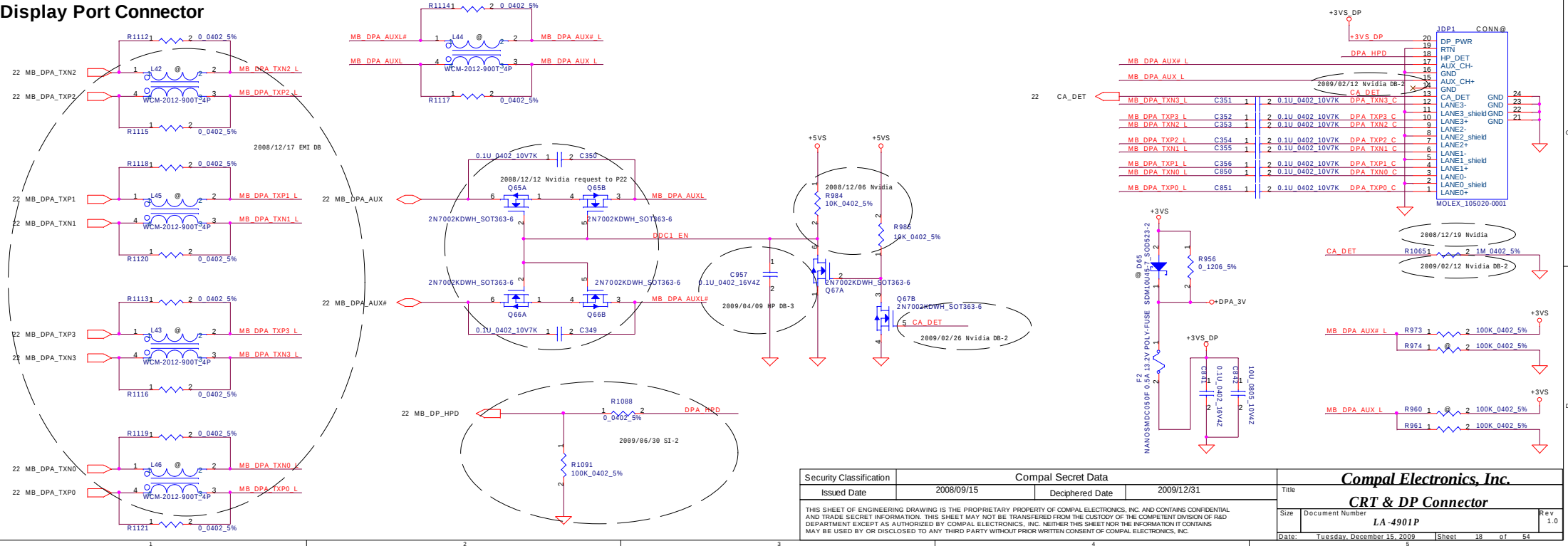
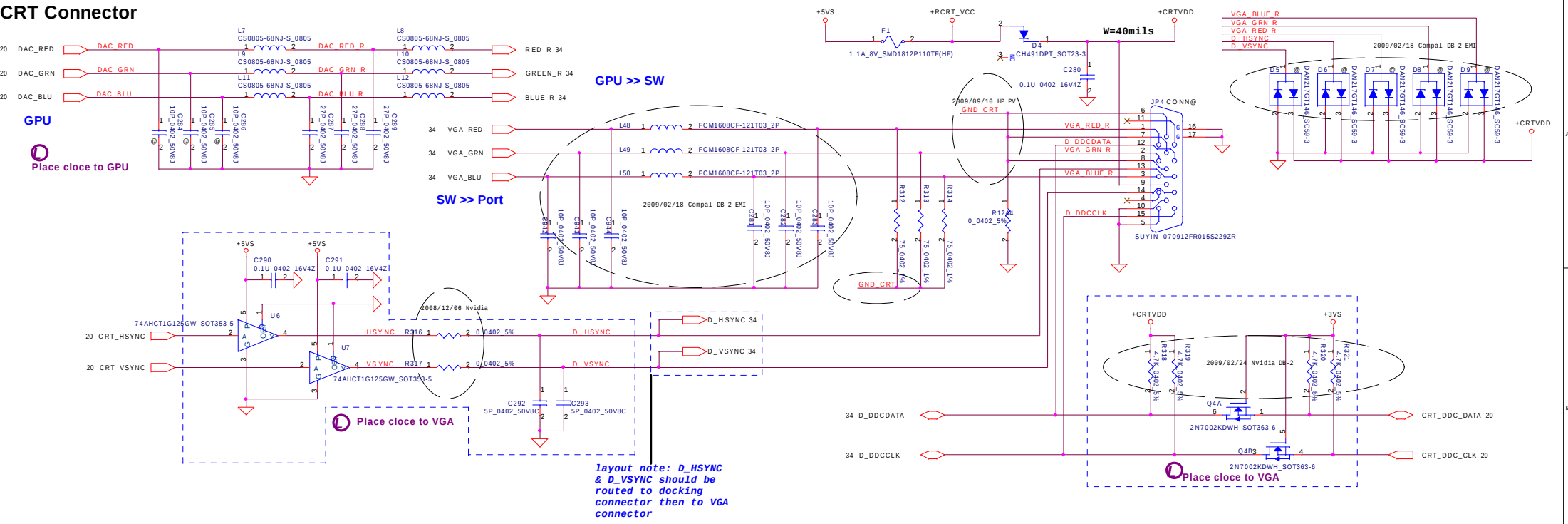




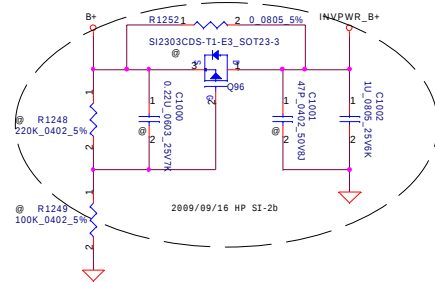
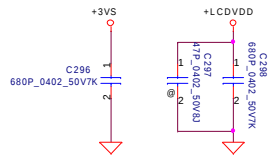




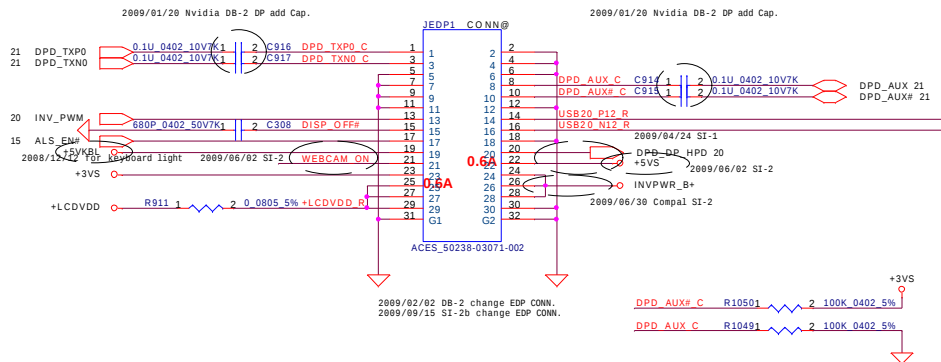
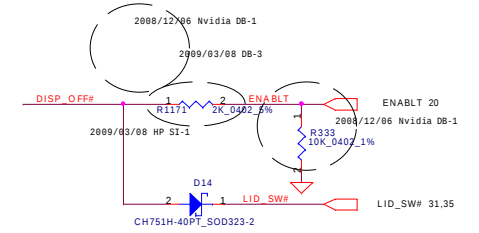
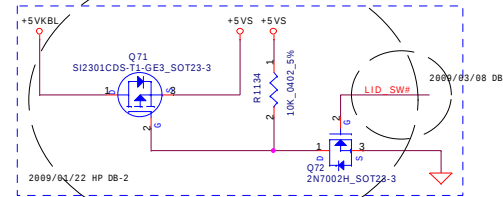




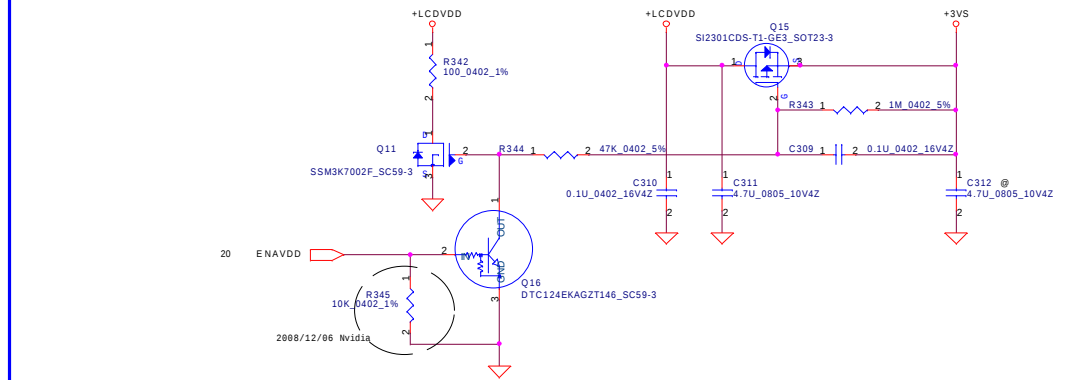
# LCD/PANEL BD. CONN.



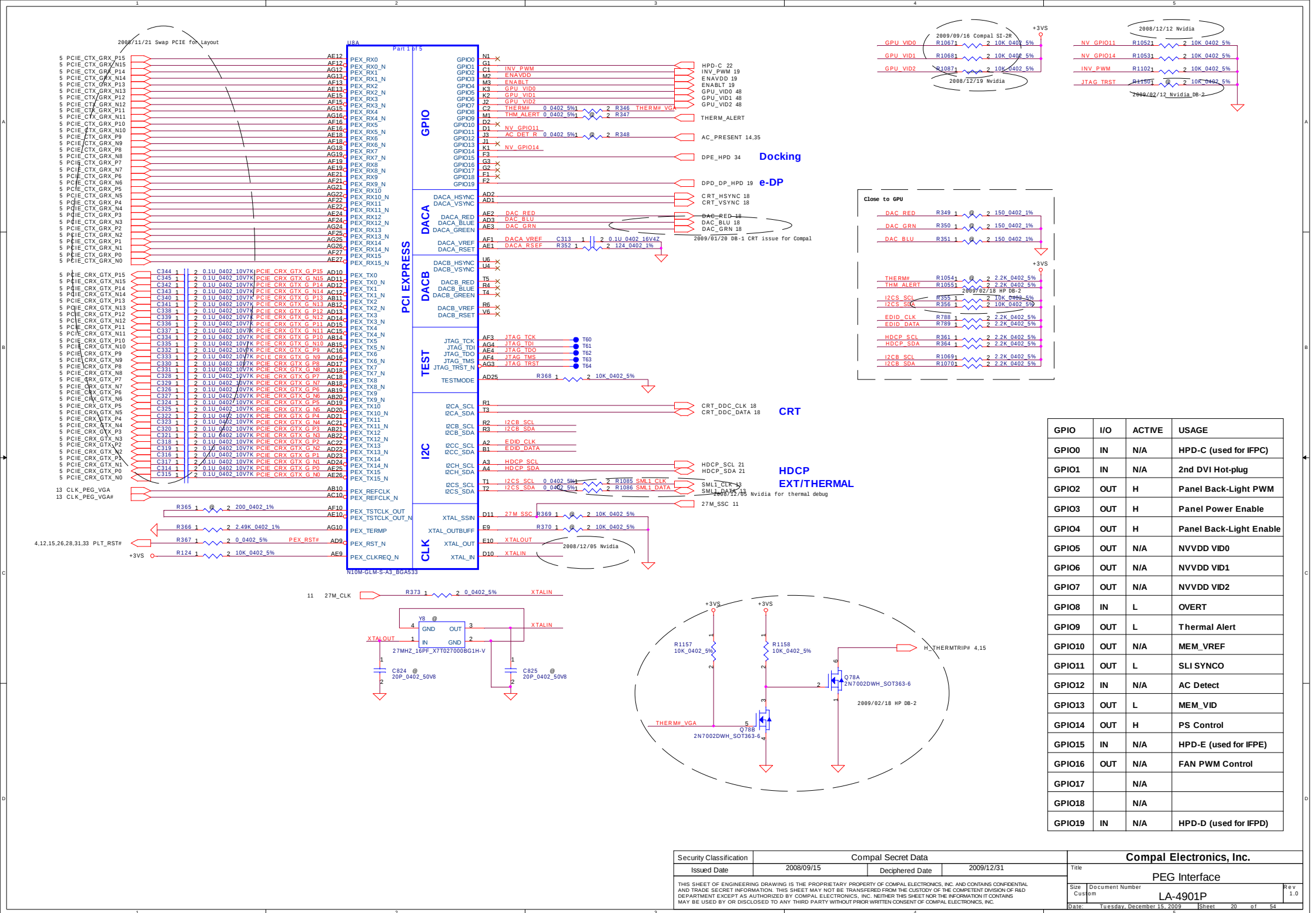
## Key\_Board\_Light power Control



## LCD POWER CIRCUIT



|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                    |            |                          |                            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------------|------------|--------------------------|----------------------------|
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                    |            | Sheet                    | 19 of 54                   |



Pin list for the NVIDIA Tegra 114 (Nvidia DB-2) showing connections to the URC and various peripheral blocks. The pin list is organized into columns: URC, LPDS / TMD5, GENERAL, SERIAL, STRAP, RFU, and NC. Each pin is labeled with its name, a reference number, and its function. Some pins are marked with 'X' indicating they are not used. The diagram also includes two circular callouts for the '2009/01/20 Nvidia DB-2' board, showing the physical layout of the pins.

| Pin      | Function    | Block                          |
|----------|-------------|--------------------------------|
| AC4      | IPFA_TXC    | NC                             |
| AD4      | IPFA_TXC_N  | NC                             |
| V5       | IPFA_TXD0   | NC                             |
| A5       | IPFA_TXD0_N | NC                             |
| AA4      | IPFA_TXD1   | NC                             |
| W3       | IPFA_TXD1_N | NC                             |
| W4       | IPFA_TXD2   | NC                             |
| AB4      | IPFA_TXD2_N | NC                             |
| AB4      | IPFA_TXD3   | NC                             |
| AB5      | IPFA_TXD3_N | NC                             |
| AB3      | IPFB_TXC    | NC                             |
| AB2      | IPFB_TXC_N  | NC                             |
| W1       | IPFB_TXD4   | NC                             |
| W2       | IPFB_TXD4_N | NC                             |
| W3       | IPFB_TXD5   | NC                             |
| A2       | IPFB_TXD5_N | NC                             |
| AA3      | IPFB_TXD6   | NC                             |
| AB1      | IPFB_TXD6_N | NC                             |
| AA1      | IPFB_TXD7   | NC                             |
| AA1      | IPFB_TXD7_N | NC                             |
| DPA_AUX  | G4          | IPFC_AUX_ICW_SCL               |
| DPA_AUX# | G5          | IPFC_AUX_ICW_SDA_N             |
|          | P4          | IPFC_L0                        |
|          | M5          | IPFC_L0_N                      |
|          | M4          | IPFC_L1                        |
|          | L4          | IPFC_L1_N                      |
|          | K4          | IPFC_L2                        |
|          | H4          | IPFC_L2_N                      |
|          | H4          | IPFC_L3                        |
|          | H4          | IPFC_L3_N                      |
| DPD_AUX  | D3          | IPFD_AUX_ICW_SCL               |
| DPD_AUX# | D4          | IPFD_AUX_ICW_SDA_N             |
|          | F5          | IPFD_L0                        |
|          | E4          | IPFD_L0_N                      |
|          | X4          | IPFD_L1                        |
|          | D5          | IPFD_L1_N                      |
|          | C3          | IPFD_L2                        |
|          | C4          | IPFD_L2_N                      |
|          | B3          | IPFD_L3                        |
|          | B4          | IPFD_L3_N                      |
| DPE_AUX  | F7          | IPFE_AUX_ICW_SCL               |
| DPE_AUX# | G6          | IPFE_AUX_ICW_SDA_N             |
|          | D6          | IPFE_L0                        |
|          | A6          | IPFE_L0_N                      |
|          | A7          | IPFE_L1                        |
|          | B6          | IPFE_L1_N                      |
|          | B7          | IPFE_L2                        |
|          | E0          | IPFE_L2_N                      |
|          | E0          | IPFE_L3                        |
|          | E7          | IPFE_L3_N                      |
|          |             | IPFAB_RSET R386 1 2 1K 0402 1% |
|          |             | IPFC_RSET R387 1 2 1K 0402 1%  |
|          |             | IPFD_RSET R791 1 2 1K 0402 1%  |
|          |             | IPFE_RSET R975 1 2 1K 0402 1%  |
|          |             | IPFAB_RSET R386 1 2 1K 0402 1% |
|          |             | IPFC_RSET R387 1 2 1K 0402 1%  |
|          |             | IPFD_RSET R791 1 2 1K 0402 1%  |
|          |             | IPFE_RSET R975 1 2 1K 0402 1%  |

|          |       |   |                                                                                   |   |      |      |    |
|----------|-------|---|-----------------------------------------------------------------------------------|---|------|------|----|
| DPA AUX  | R976  | 1 |  | 2 | 100K | 0402 | 5% |
| DPA AUX# | R977  | 1 |  | 2 | 100K | 0402 | 5% |
| DPD AUX  | R1056 | 1 |  | 2 | 100K | 0402 | 5% |
| DPD AUX# | R1057 | 1 |  | 2 | 100K | 0402 | 5% |
| DPE AUX  | R1103 | 1 |  | 2 | 100K | 0402 | 5% |
| DPE AUX# | R1104 | 1 |  | 2 | 100K | 0402 | 5% |

### MULTI LEVEL STRAPS

FB HW Strap for DDR3: (RAM\_CFG @ ROM\_S1)

- Hynix 64Kx16: 0000 (R395 pull-down 15K)
- Samsung 64Kx16: 0001 (R395 pull-down 20K)

Stuff R394 -> N10M-GLM, N10M-NS

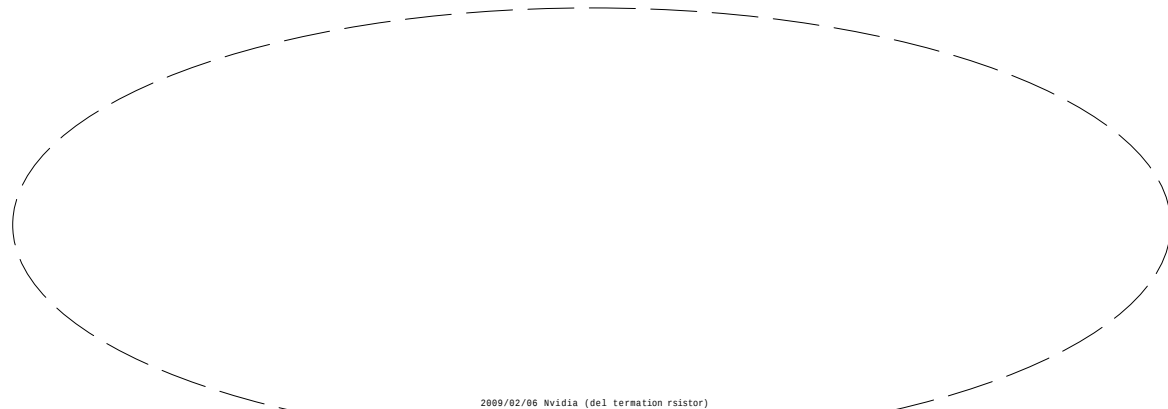
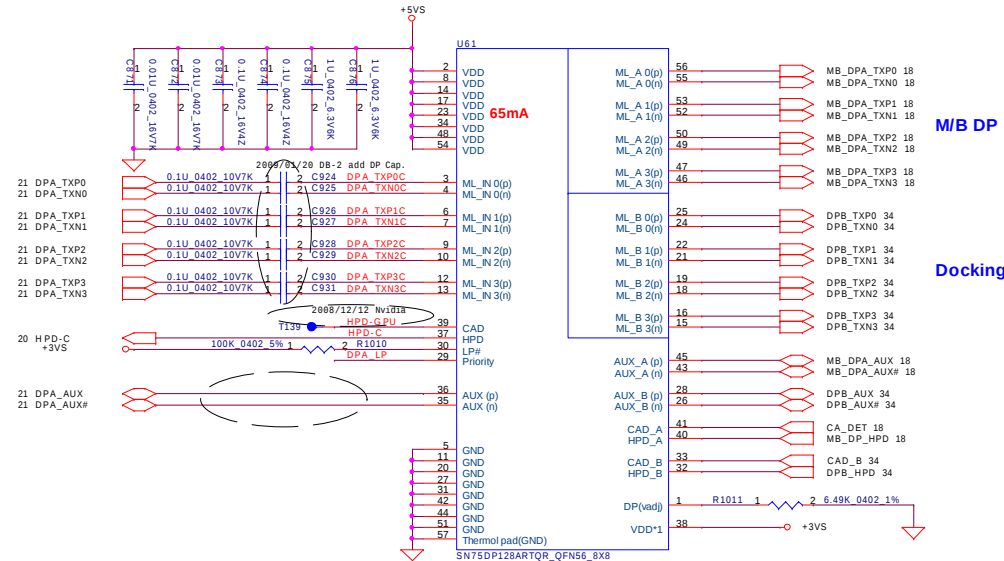
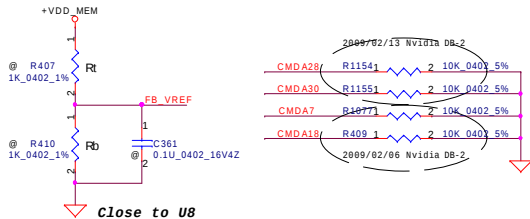
Stuff R402 -> N10M-NS

Stuff R403 -> N10M-GLM

R402/R403:

- 15K: VBIOS combined in SBIOS
- 35K: use VBIOS rom chip

|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                    |            |                                                                        |                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------------|------------|------------------------------------------------------------------------|----------------|
| Security Classification                                                                                                                                                                                                                                                                                                                                                                                                                                       |            | Compal Secret Data |            | <b>Compal Electronics, Inc.</b><br><b>N10M(2) LVDS&amp;DP&amp;HDCP</b> |                |
| Issued Date                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 2008/09/15 | Deciphered Date    | 2009/12/31 | Title                                                                  |                |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                    |            | Custom                                                                 | 1.0            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                    |            | Document Number<br><b>LA-4901P</b>                                     |                |
| Date:                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |                    |            | Tuesday, December 15, 2009                                             | Sheet 21 of 54 |





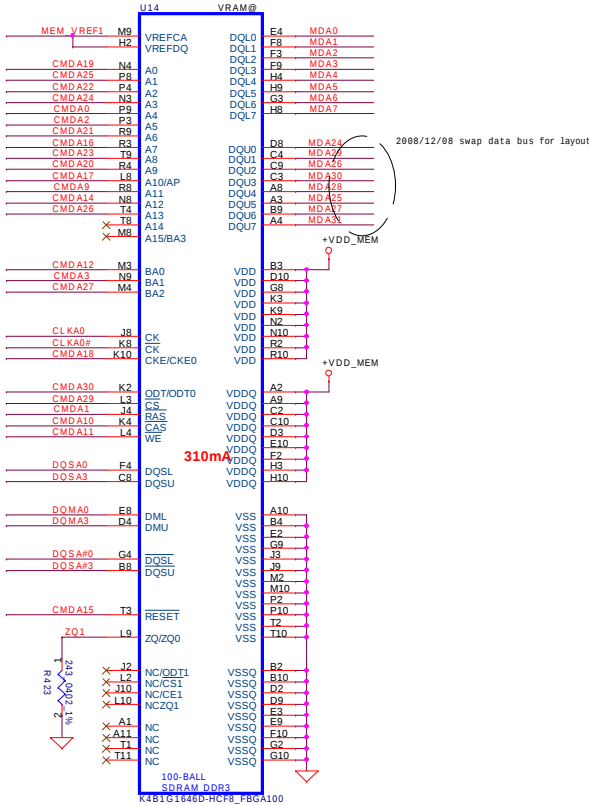
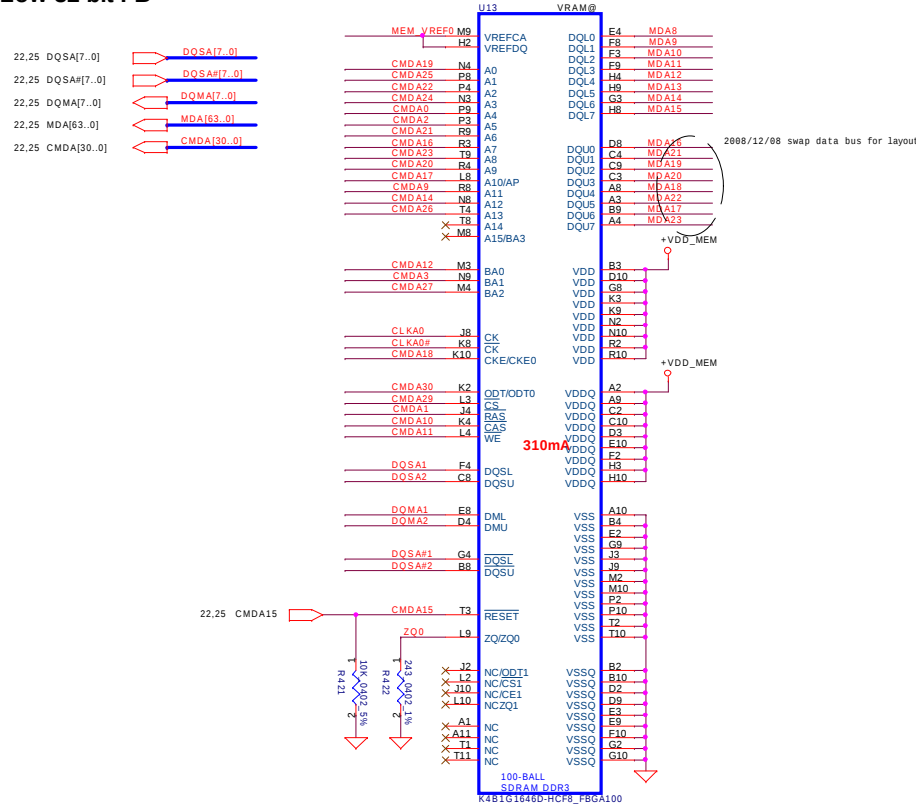
1 2 3 4 5 Date: Tuesday, December 15, 2009 Sheet 23 of 54

VRAM DDR3 chips (512MB)

64Mx16 DDR3 800MHz\*4==>512MB

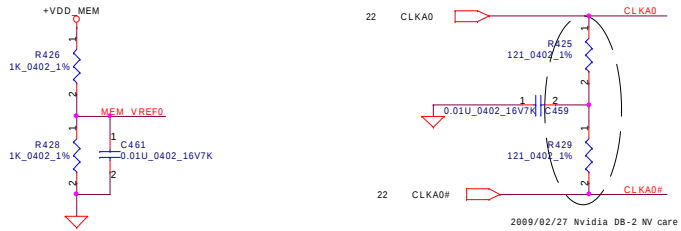
Low 32 bit FB

Hynix : H5TQ1G63BFR-12C-->SA000032400  
Samsung : K4W1G1646E-HC12-->SA000035700

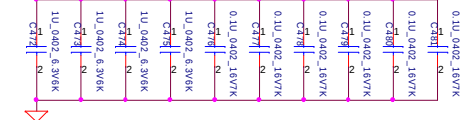


| DATA Bus |       |        |
|----------|-------|--------|
| Address  | 0..31 | 32..63 |
| CMD0     | A4    |        |
| CMD1     | RAS#  | RAS#   |
| CMD2     | A5    |        |
| CMD3     | BA1   | BA1    |
| CMD4     |       | A2     |
| CMD5     |       | A4     |
| CMD6     |       | A3     |
| CMD7     |       | CKE    |
| CMD8     |       | CS#    |
| CMD9     | A11   | A11    |
| CMD10    | CAS#  | CAS#   |
| CMD11    | WE#   | WE#    |
| CMD12    | BA0   | BA0    |
| CMD13    |       | A5     |
| CMD14    | A12   | A12    |
| CMD15    | RST   | RST    |
| CMD16    | A7    | A7     |
| CMD17    | A10   | A10    |
| CMD18    | CKE   |        |
| CMD19    | A0    | A0     |
| CMD20    | A9    | A9     |
| CMD21    | A6    | A6     |
| CMD22    | A2    |        |
| CMD23    | A8    | A8     |
| CMD24    | A3    |        |
| CMD25    | A1    | A1     |
| CMD26    | A13   | A13    |
| CMD27    | BA2   | BA2    |
| CMD28    |       | ODT    |
| CMD29    | CS#   |        |
| CMD30    | ODT   |        |

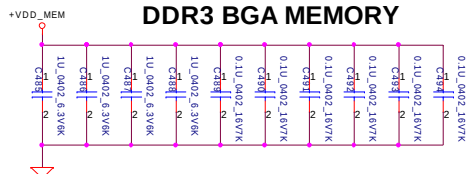
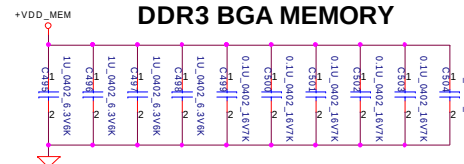
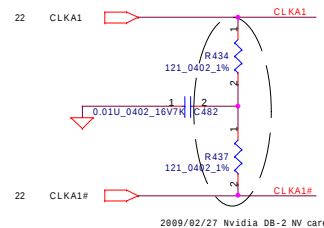
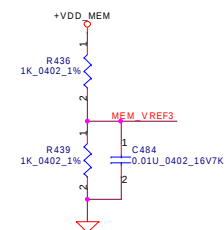
LOW HIGH



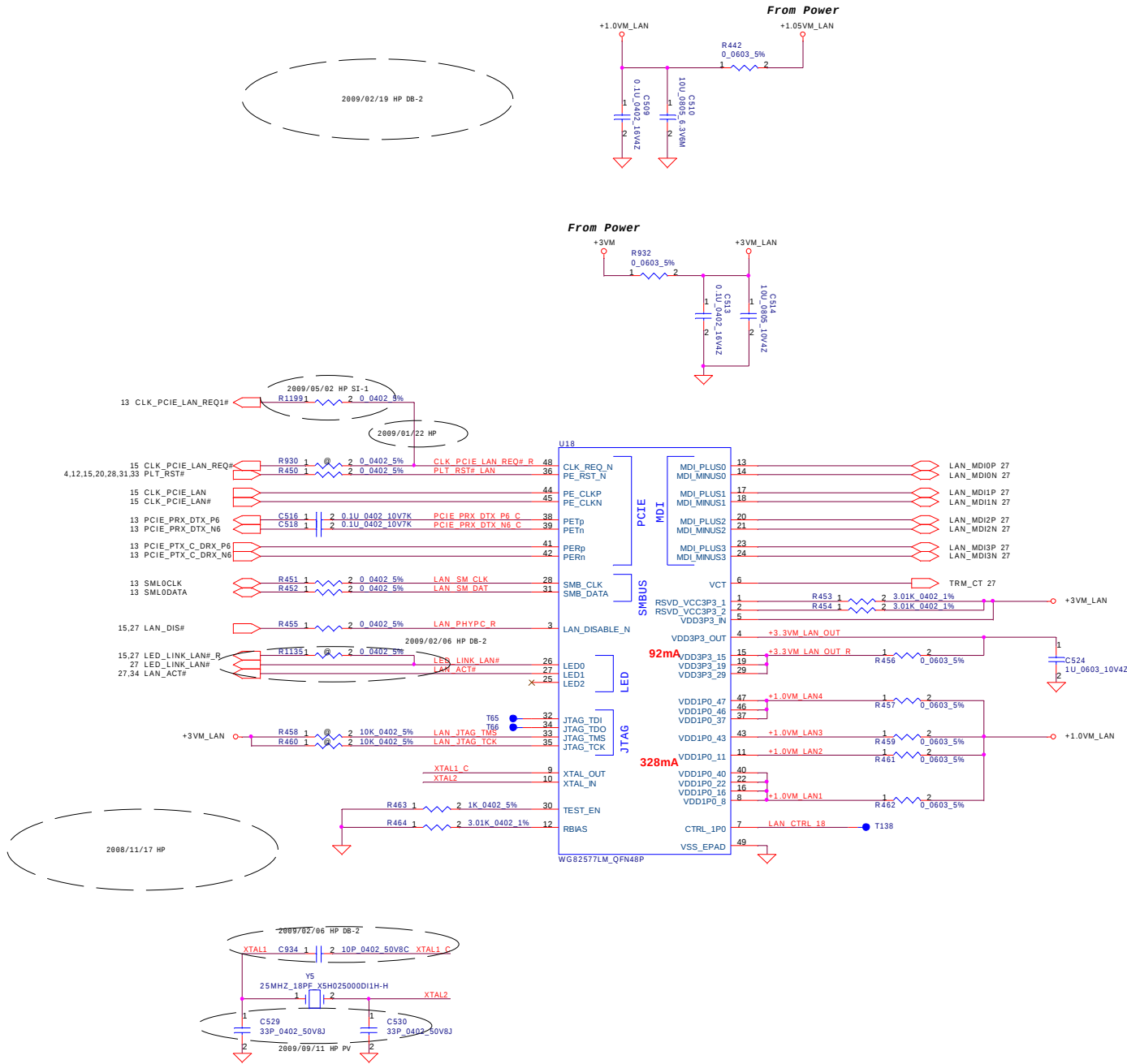
DDR3 BGA MEMORY



## High 32 bit FB

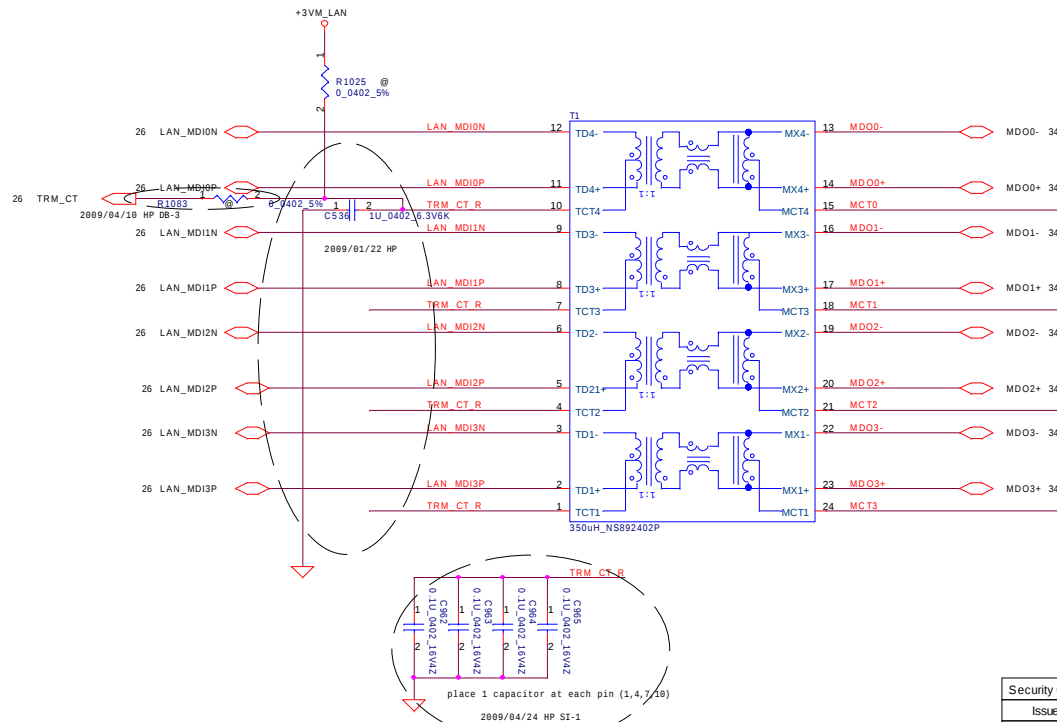
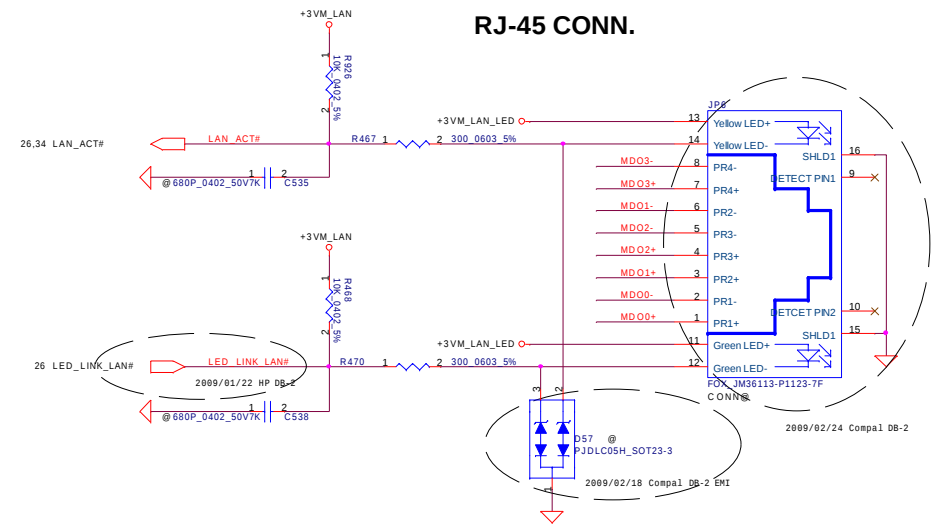
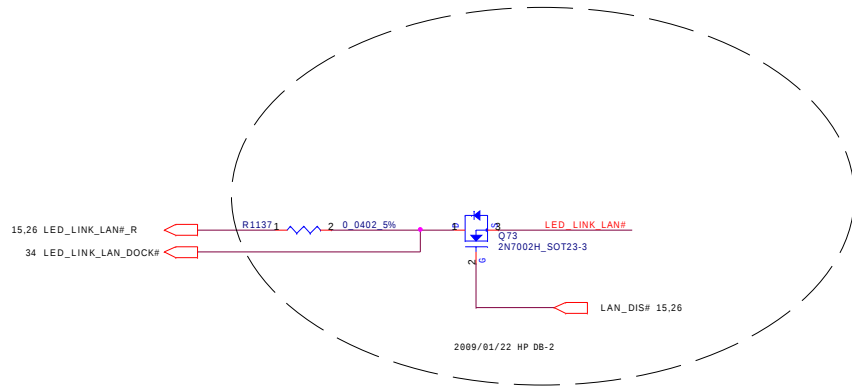


|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                    |            |                                                                                 |                            |                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------------|------------|---------------------------------------------------------------------------------|----------------------------|----------------|
| Security Classification                                                                                                                                                                                                                                                                                                                                                                                                                                       |            | Compal Secret Data |            | <div>Compal Electronics, Inc.</div> <div>VRAM DDR3</div> <div>Cartier DIS</div> |                            |                |
| Issued Date                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 2008/09/15 | Deciphered Date    | 2009/12/31 |                                                                                 |                            |                |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                    |            | Size                                                                            | Document Number            | Rev 0.1        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                    |            | Date:                                                                           | Tuesday, December 15, 2009 | Sheet 25 of 54 |

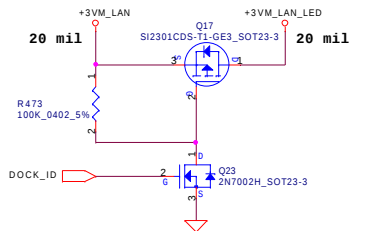
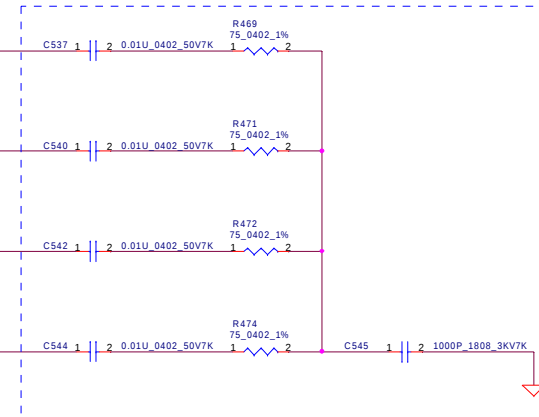


|                         |                 |                    |            |                          |                            |
|-------------------------|-----------------|--------------------|------------|--------------------------|----------------------------|
| Security Classification |                 | Compal Secret Data |            | Compal Electronics, Inc. |                            |
| Issued Date             | 2008/09/15      | Deciphered Date    | 2009/12/31 | Title                    |                            |
|                         |                 |                    |            | Intel 82566 Nineveh      |                            |
| Size                    | Document Number |                    |            | Rev                      | 1.0                        |
|                         |                 |                    |            | Date:                    | Tuesday, December 15, 2009 |
|                         |                 |                    |            | Sheet                    | 26 of 54                   |

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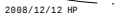
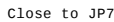


Change design. 10/12



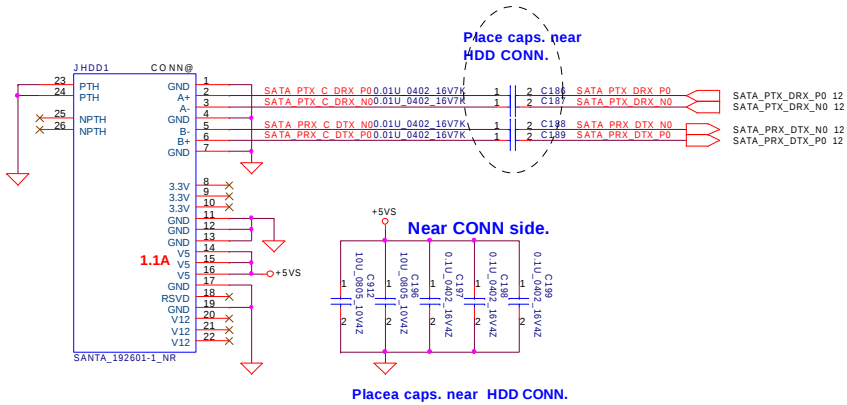
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| Security Classification                                                                                                                                                                                                                                                                                                                                                                                                                                       |            | Compal Secret Data |            | Title           |                            |
| Issued Date                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 2008/09/15 | Deciphered Date    | 2009/12/31 | Magnetic & RJ45 |                            |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                    |            | Date            | Tuesday, December 15, 2009 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                    |            | Sheet           | 27 of 54                   |

## WLAN (Halt mini Card)

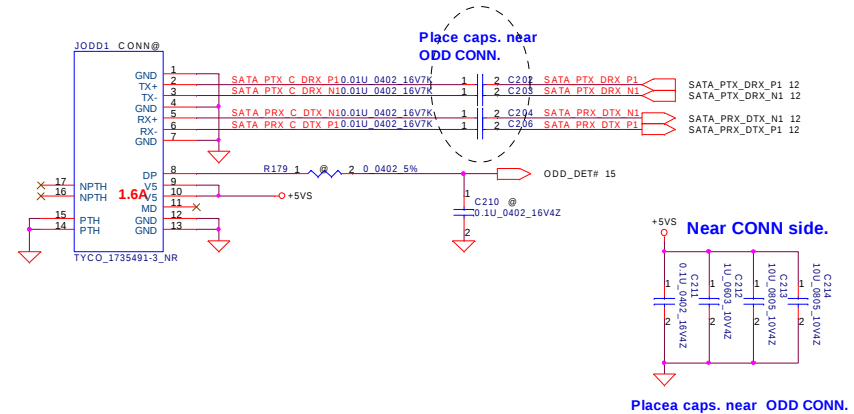


|                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                    |                 |            |                                 |                            |       |    |    |    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-----------------|------------|---------------------------------|----------------------------|-------|----|----|----|
| Security Classification                                                                                                                                                                                                                                                                                                                                                                                                                                     | Compal Secret Data |                 |            | <b>Compal Electronics, Inc.</b> |                            |       |    |    |    |
| Issued Date                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 2008/09/15         | Deciphered Date | 2009/12/31 | Title                           |                            |       |    |    |    |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                    |                 |            | Size                            | Document Number            | Rev   |    |    |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                    |                 |            |                                 | LA-4901P                   | 1.0   |    |    |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                    |                 |            | Date:                           | Tuesday, December 15, 2009 | Sheet | 28 | of | 54 |

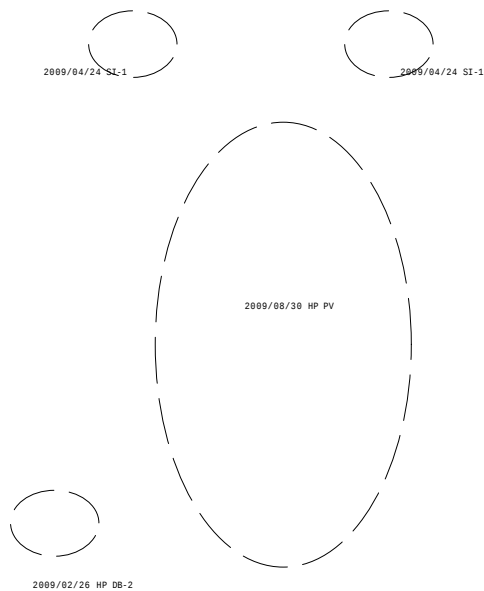
## SATA HDD CONN.



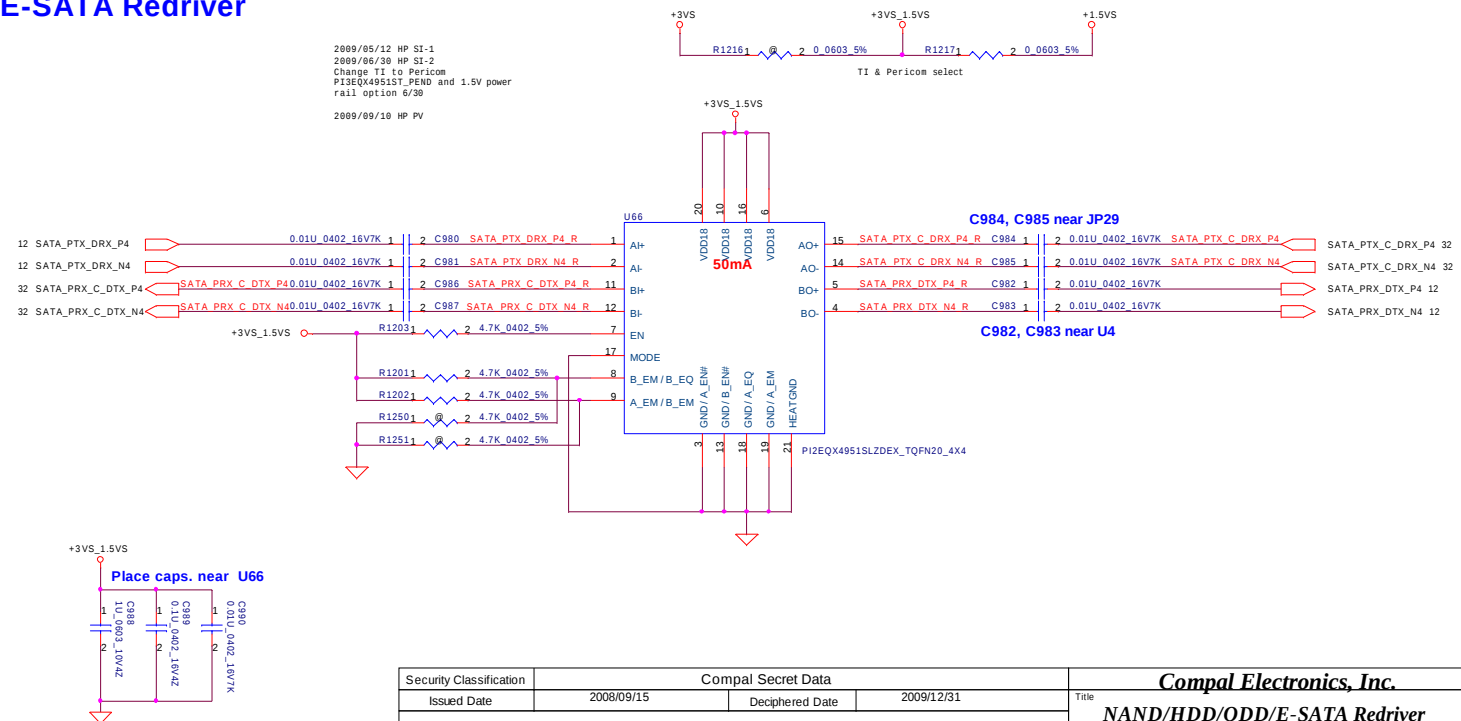
## SATA ODD CONN.



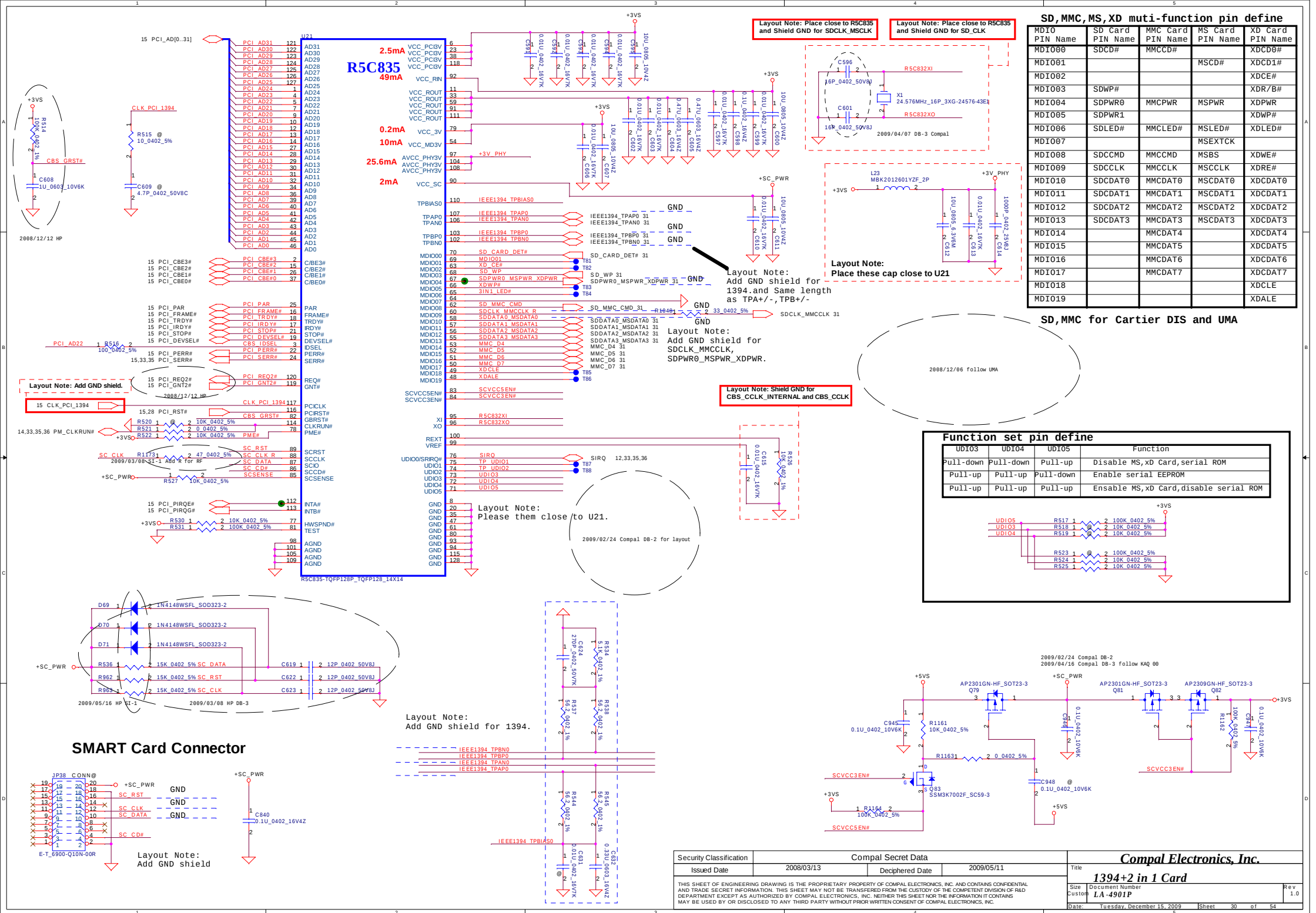
## NAND FLASH



## E-SATA Redriver

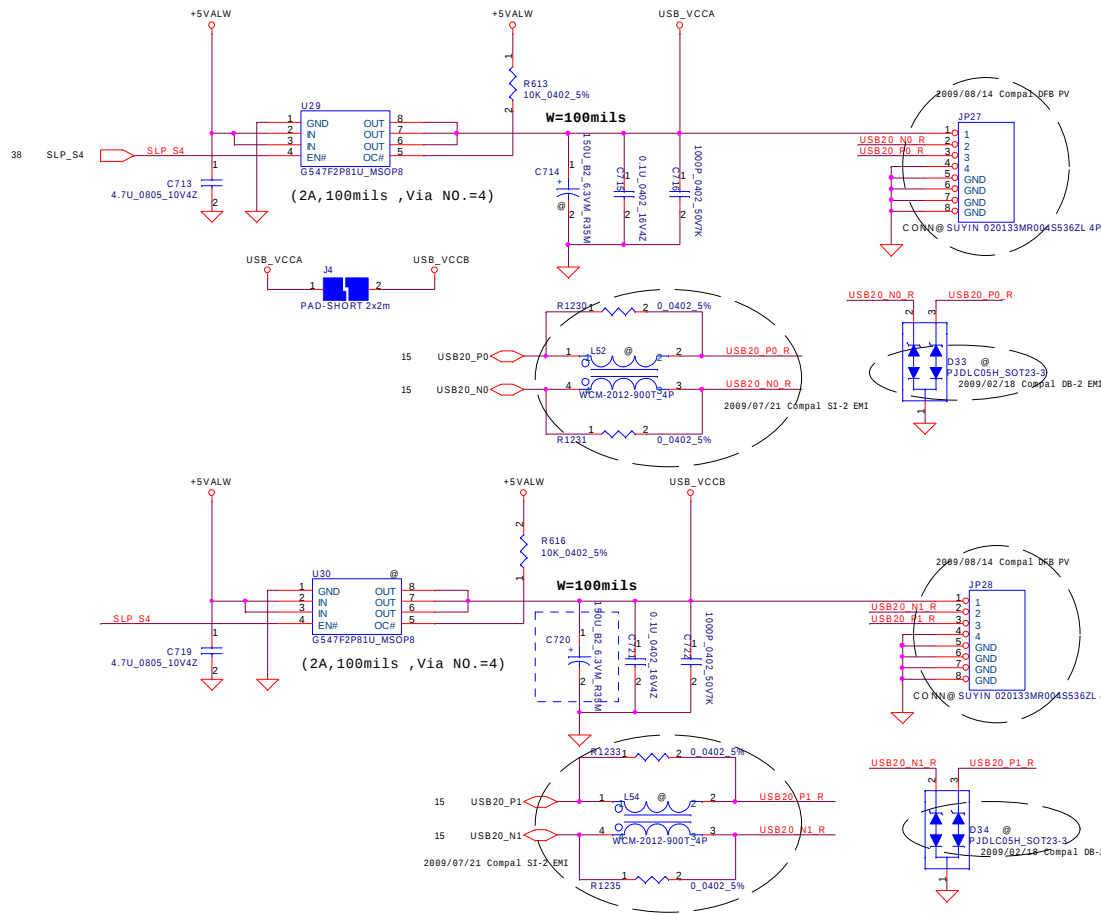


|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                    |            |                              |                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------------|------------|------------------------------|-----------------|
| Security Classification                                                                                                                                                                                                                                                                                                                                                                                                                                       |            | Compal Secret Data |            | Title                        |                 |
| Issued Date                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 2008/09/15 | Deciphered Date    | 2009/12/31 | NAND/HDD/ODD/E-SATA Redriver |                 |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                    |            | LA-4901P                     | Rev 1.0         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                    |            | Date                         | Rev             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                    |            | Tuesday, December 15, 2009   | 1.0             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                    |            | Sheet                        | 29 of 54        |



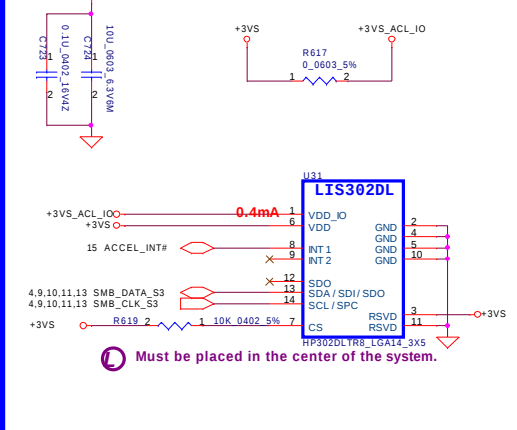


USB CONN.

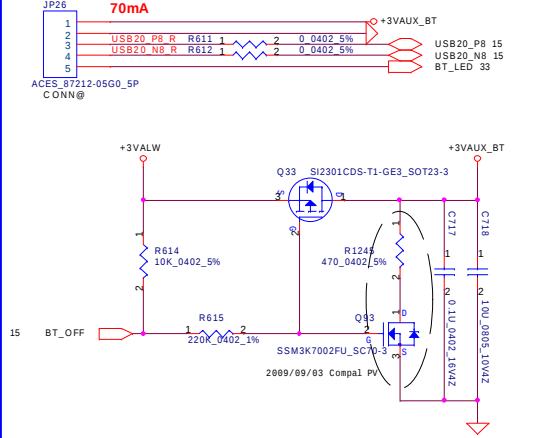


ACCELEROMETER

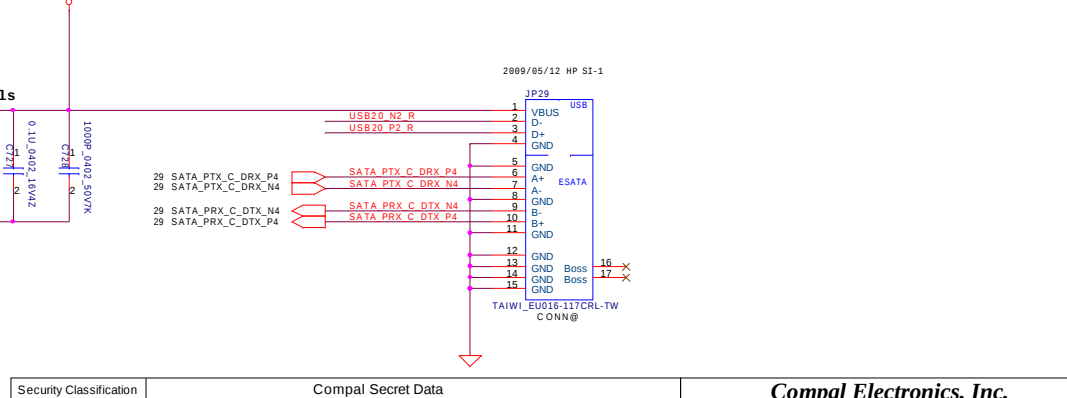
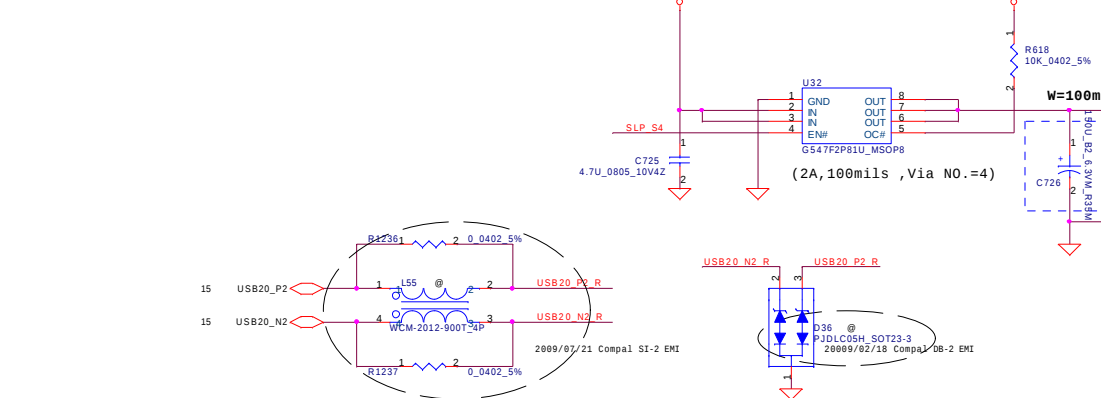
ODM part# HP302DLTR8-MBD



BT Connector



USB and E-SATA Combo CONN.



|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                            |  |                 |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------|--|-----------------|--|
| Security Classification                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | Compal Secret Data         |  | Title           |  |
| Issued Date                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  | Deciphered Date            |  | Size            |  |
| 2008/09/15                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  | 2009/12/31                 |  | Document Number |  |
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| Date                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | Tuesday, December 15, 2009 |  | Sheet           |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | 32                         |  | of              |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | 54                         |  | Rev             |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | 1.0                        |  |                 |  |

# LPC Debug Port

The diagram illustrates the LPC Debug Port connections. The LPC1114 is connected to the JTAG connector JP13. The connections are as follows:

- 80S1\_RECOVER# (LPC1114) to R632, 200K, 0402 5%, and +3V\_L.
- B+\_DEBUG (LPC1114) to JP13 pin 1.
- JP13 pin 2 to Ground.
- JP13 pin 3 to LPC\_PCI\_CLK.
- JP13 pin 4 to Ground.
- JP13 pin 5 to LPC\_FRAME#.
- JP13 pin 6 to +VS.
- JP13 pin 7 to LPC\_RESET#.
- JP13 pin 8 to +VS.
- JP13 pin 9 to LPC\_AD0.
- JP13 pin 10 to LPC\_AD1.
- JP13 pin 11 to LPC\_AD2.
- JP13 pin 12 to LPC\_AD3.
- JP13 pin 13 to VCC\_3V4.
- JP13 pin 14 to PWR\_LED#.
- JP13 pin 15 to CAPS\_LED#.
- JP13 pin 16 to NUM\_LED#.
- JP13 pin 17 to VCC1\_PWRGD.
- JP13 pin 18 to SPI\_CLK\_JP.
- JP13 pin 19 to SPI\_CS0#\_JP.
- JP13 pin 20 to SPI\_SI\_JP.
- JP13 pin 21 to SPI\_SO\_JP.
- JP13 pin 22 to SPI\_HOLD#\_0.
- JP13 pin 23 to Reserved.
- JP13 pin 24 to Reserved.

Other connections shown in the diagram include:

- 15 CLK\_PCI\_DB
- 12,28,35,36 LPC\_LFRAME#
- 12,30,33,36 SIRO
- 4,12,15,20,26,28,31 PLT\_RST#
- 15,30,35 PCI\_SERR#
- 12,28,35,36 LPC\_LAD0
- 12,28,35,36 LPC\_LAD1
- 12,28,35,36 LPC\_LAD2
- 12,28,35,36 LPC\_LAD3
- 35 80S1TX
- 35 80S1RX
- 35 80S1\_RECOVER#
- 42 DEBUG\_KBCRST
- 35 SPI\_CS1#

[illegible][illegible]

**TrackPoint CONN.**

**T/P CONN.**

3P24

1 2 3 4 5 6 7 8 9 10 11 12

1 2 3 4 5 6 7 8 9 10 11 12

SP\_CLK

SP\_DATA 35

ACES\_87153-08011 CONN@

0.1U\_0402\_16V42

3P25

1 2 3 4 5 6 7 8 9 10 11 12

1 2 3 4 5 6 7 8 9 10 11 12

TP\_DATA

TP\_CLK

ACES\_85203-04021 CONN@

0.1U\_0402\_16V42

D32 @ PJDLCO5H\_SOT23-3 2009/02/15 Compaq DB-2 EMI

**WLAN/WWAN/BT LED**

2009/04/24 HP SI-1  
2009/08/30 HP SI-2b

28 WL\_LED# WL\_LED# R11911 2 0 0402\_5%

15,28 WWAN\_TRANSMIT\_OFF#

28 WW\_LED# WW\_LED# R11921 2 0 0402\_5%

32 BT\_LED

Q60B  
2N7002DWH\_SOT363-6

Q60A  
2N7002DWH\_SOT363-6

R953  
47K\_0402\_5%

R954 1 2 100K\_0402\_5%

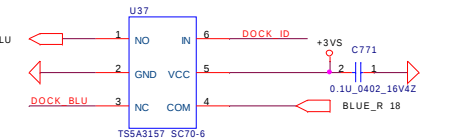
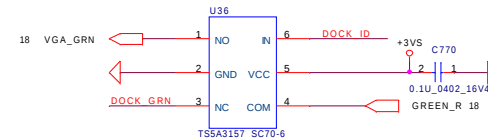
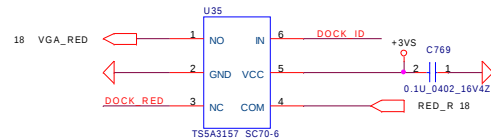
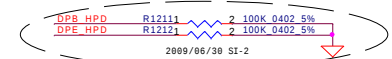
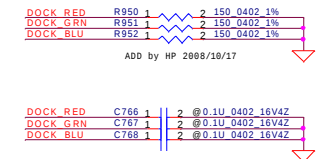
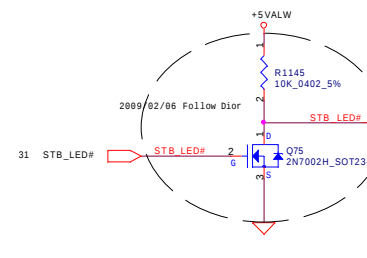
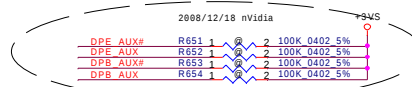
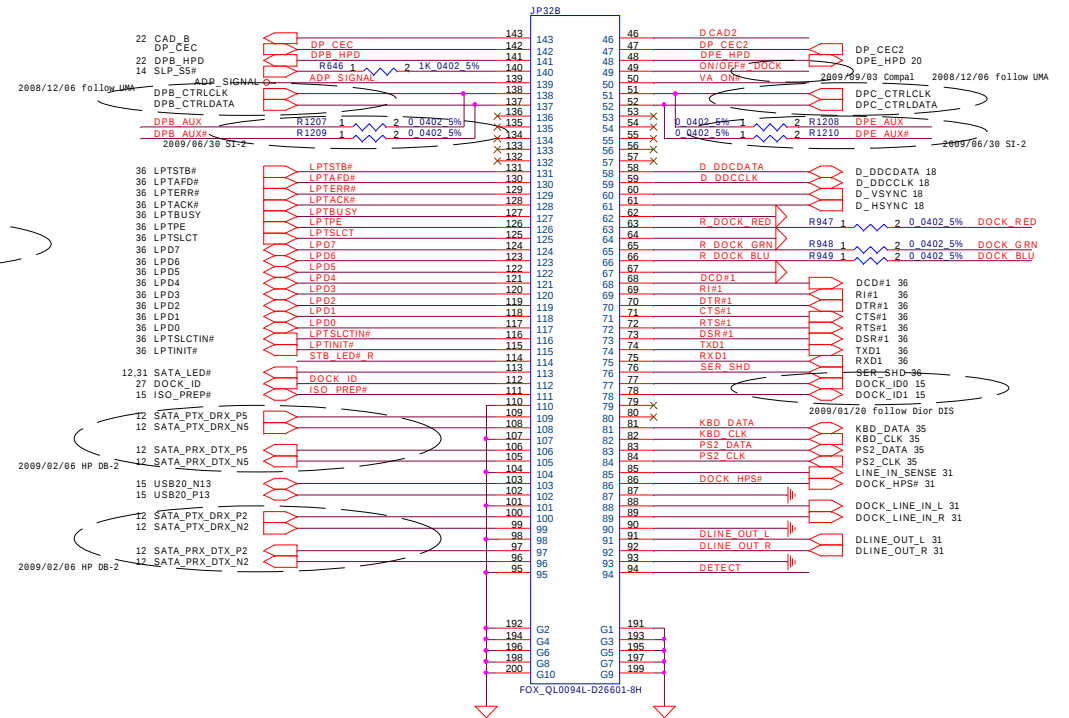
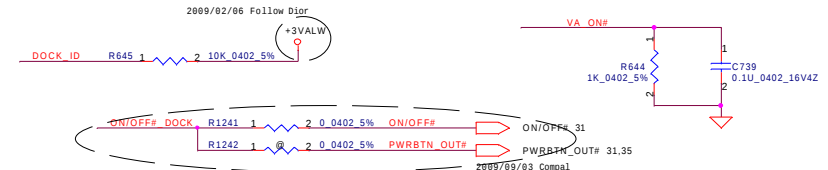
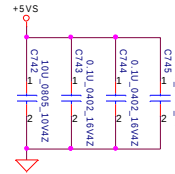
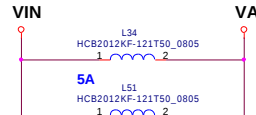
R955 1 2 100K\_0402\_5%

+3VS

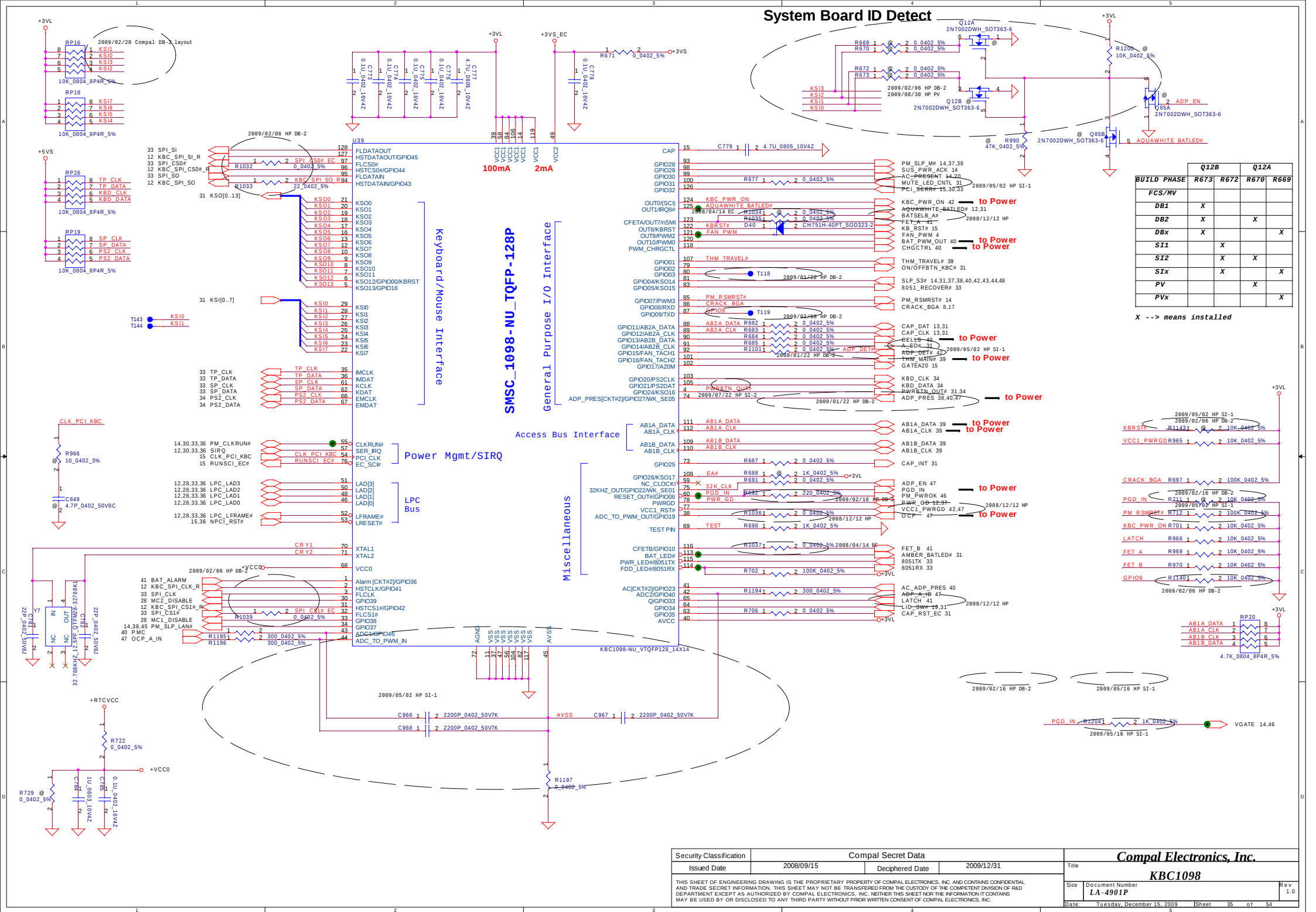
WL/BT\_LED# WL/BT\_LED# 31

## DOCKING CONNECT

- 



|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                    |            |                                 |                            |                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------------|------------|---------------------------------|----------------------------|----------------|
| Security Classification                                                                                                                                                                                                                                                                                                                                                                                                                                       |            | Compal Secret Data |            | <b>Compal Electronics, Inc.</b> |                            |                |
| Issued Date                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 2008/09/15 | Deciphered Date    | 2009/12/31 | Title                           | <b>DOCK CONN</b>           |                |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                    |            | Custid                          | <b>LA-4901P</b>            | 1.0            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                    |            | Date:                           | Tuesday, December 15, 2009 | Sheet 34 of 54 |



System Board ID Detect

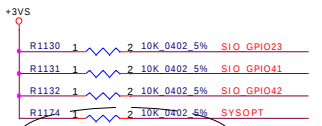
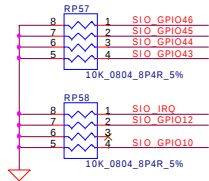
| BUILD PHASE | R673 | R672 | R670 | R669 |
|-------------|------|------|------|------|
|             |      |      |      |      |
| FCS/MV      |      |      |      |      |
| DB1         | X    |      |      |      |
| DB2         | X    |      | X    |      |
| DBx         | X    |      |      | X    |
| SI1         |      | X    |      |      |
| SI2         |      | X    | X    |      |
| SIx         |      | X    |      | X    |
| PV          |      |      | X    |      |
| PVx         |      |      |      | X    |

X --> means installed

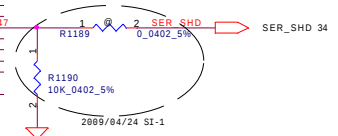
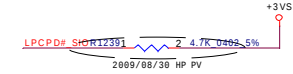
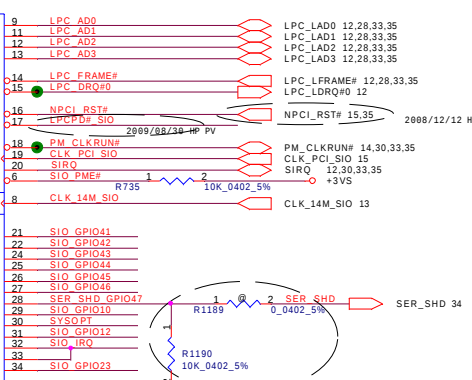
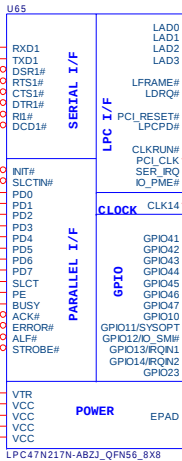
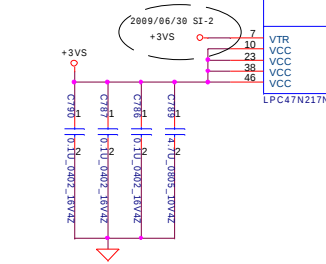
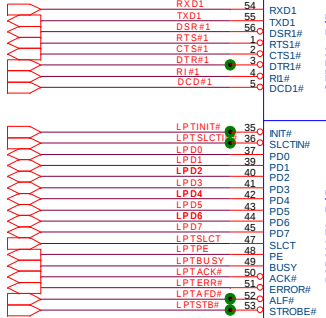
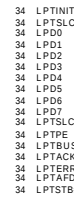
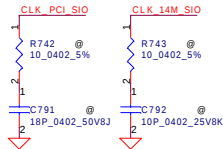
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                            |                    |            |                          |         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|--------------------|------------|--------------------------|---------|
| Security Classification                                                                                                                                                                                                                                                                                                                                                                                                                                       |                            | Compal Secret Data |            | Compal Electronics, Inc. |         |
| Issued Date                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 2008/09/15                 | Deciphered Date    | 2009/12/31 | Title                    | KBC1098 |
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| Size                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Document Number            | Rev                |            |                          | 1.0     |
| Date                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Tuesday, December 15, 2009 | Sheet              | 35         | of                       | 54      |

**T0 LPC47N217N**

**TO LPC47N217N**



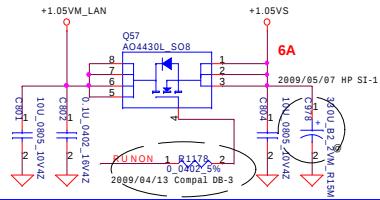
Base I/O Address 2009/03/23 Compal DB-3  
0 = 02Eh  
1 = 04Eh



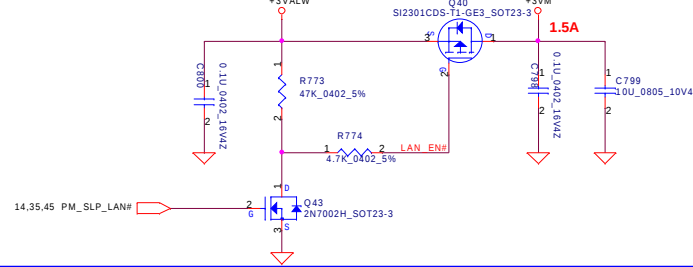
|                                                                                                                                                                                                                                                                                                                                                                                                                                                              |            |                    |            |                                                                     |                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------------|------------|---------------------------------------------------------------------|----------------------------|
| Security Classification                                                                                                                                                                                                                                                                                                                                                                                                                                      |            | Compal Secret Data |            | <b>Compal Electronics, Inc.</b><br><b>SUPER I/O LPC47N217N-ABZZ</b> |                            |
| Issued Date                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 2008/09/09 | Deciphered Date    | 2009/09/09 | Title                                                               |                            |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                              |            |                    |            |                                                                     | LA-4901P                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                              |            |                    |            |                                                                     | Rev 1.0                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                              |            |                    |            | Date:                                                               | Tuesday, December 15, 2009 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                              |            |                    |            | Sheet                                                               | 36 of 54                   |



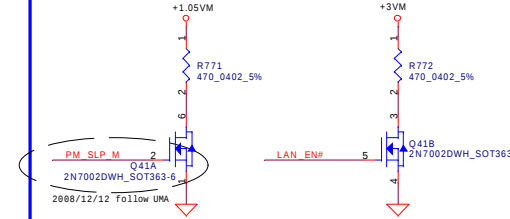
### +1.05VM to +1.05VS Transfer



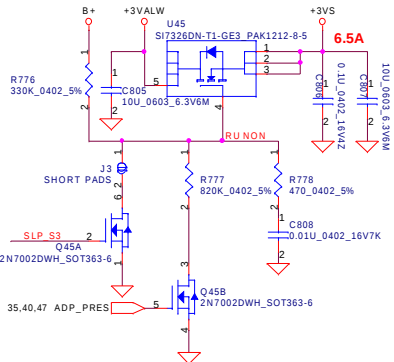
### +3VALW to +3VM Transfer



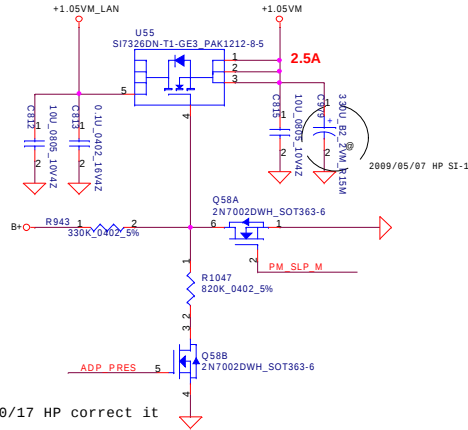
### Discharge circuit-2 for V-M



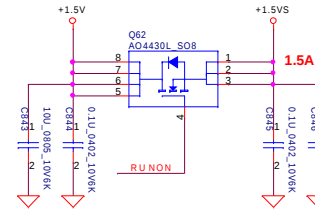
### +3VALW to +3VS Transfer



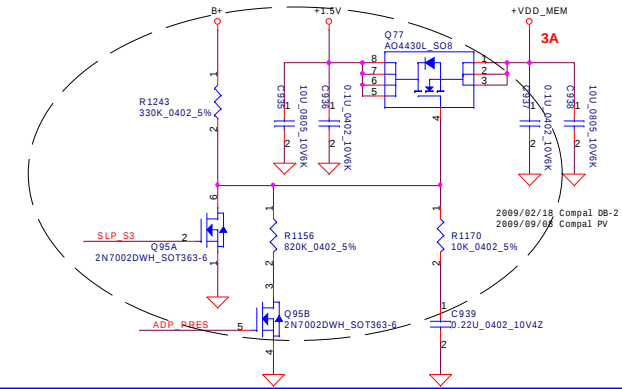
### +1.05VM\_LAN to +1.05VM Transfer



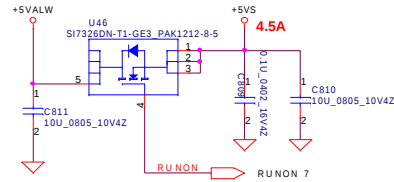
### +1.5V to +1.5VS Transfer



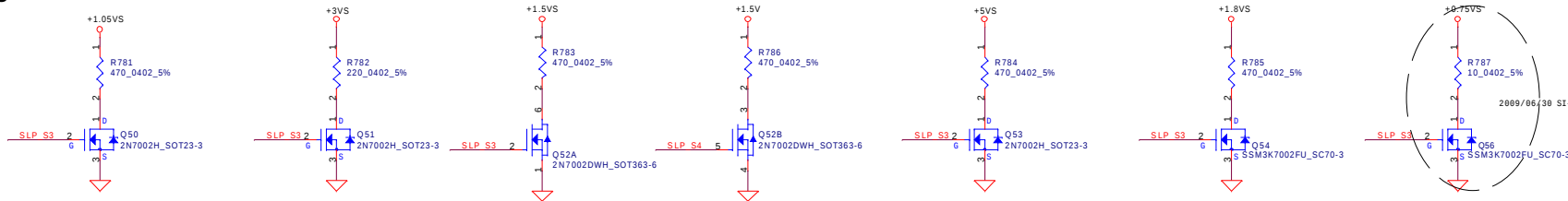
### +1.5V to +VDD\_MEM Transfer



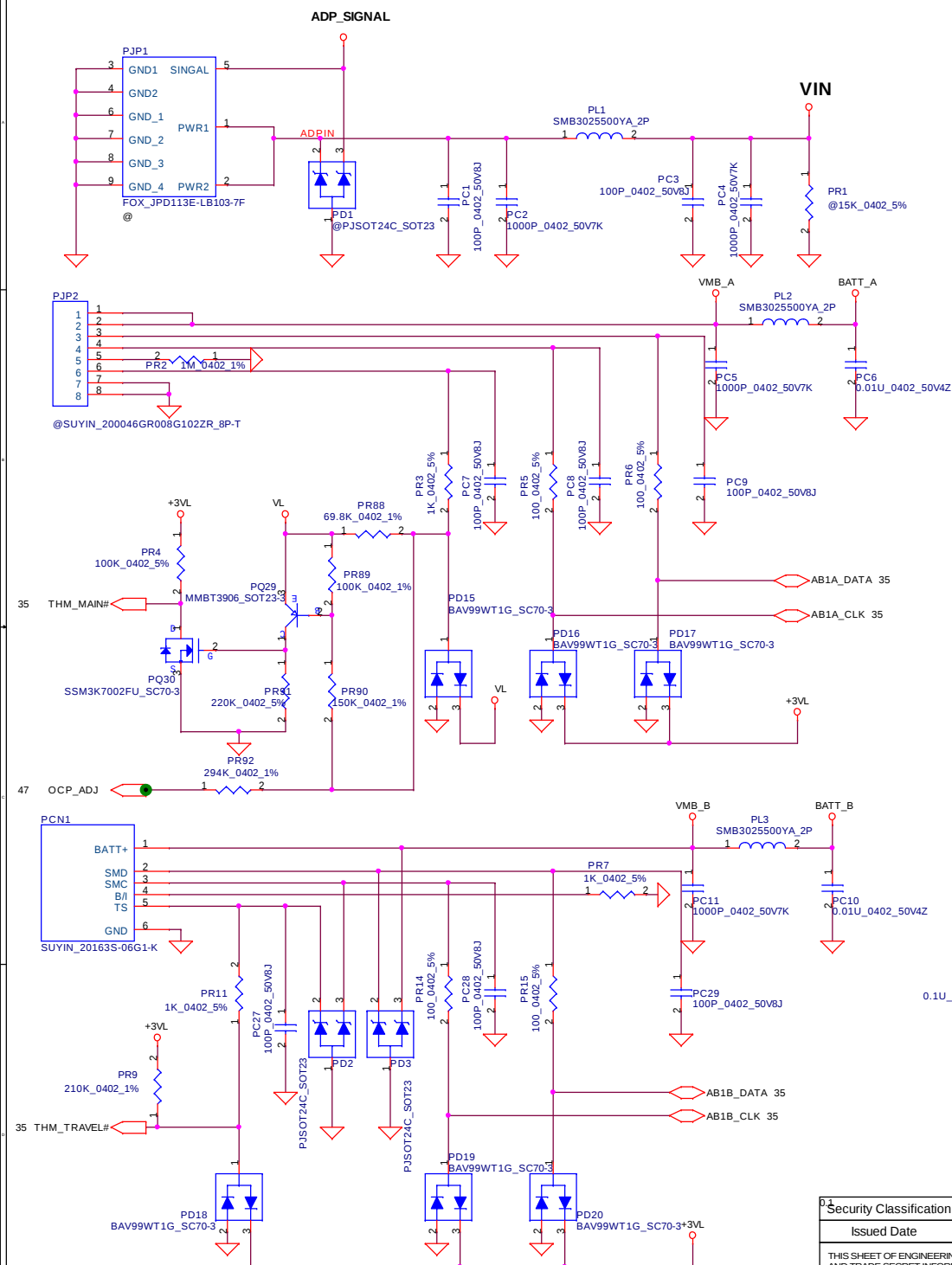
### +5VALW to +5VS Transfer



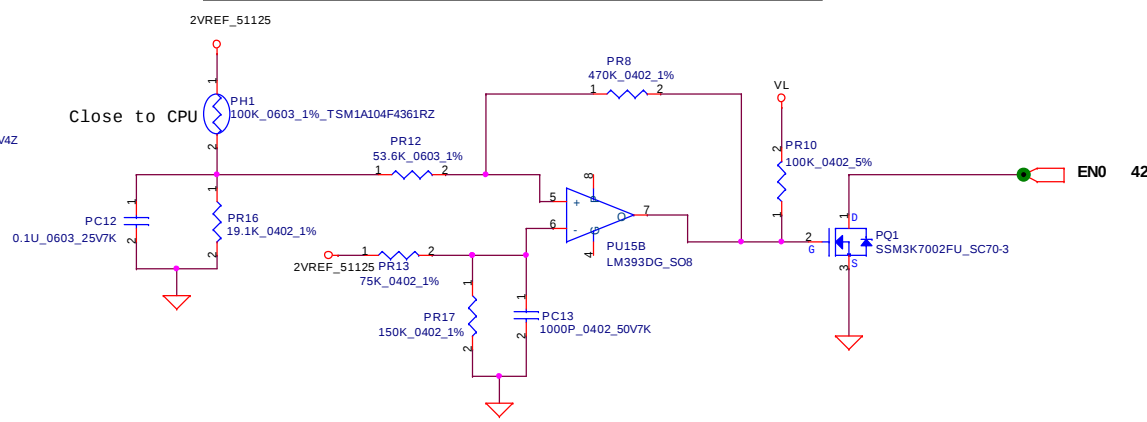
### Discharge circuit-1



|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                    |                 |                                 |                            |                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------|-----------------|---------------------------------|----------------------------|----------------|
| Security Classification                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | Compal Secret Data |                 | <b>Compal Electronics, Inc.</b> |                            |                |
| Issued Date                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  | 2008/09/15         | Deciphered Date |                                 | 2009/12/31                 |                |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                    |                 | DC/DC Circuits                  |                            |                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                    |                 | Size                            | Document Number            | Rev            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                    |                 |                                 | LA-4901P                   | 1.0            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                    |                 | Date:                           | Tuesday, December 15, 2009 | Sheet 38 of 54 |

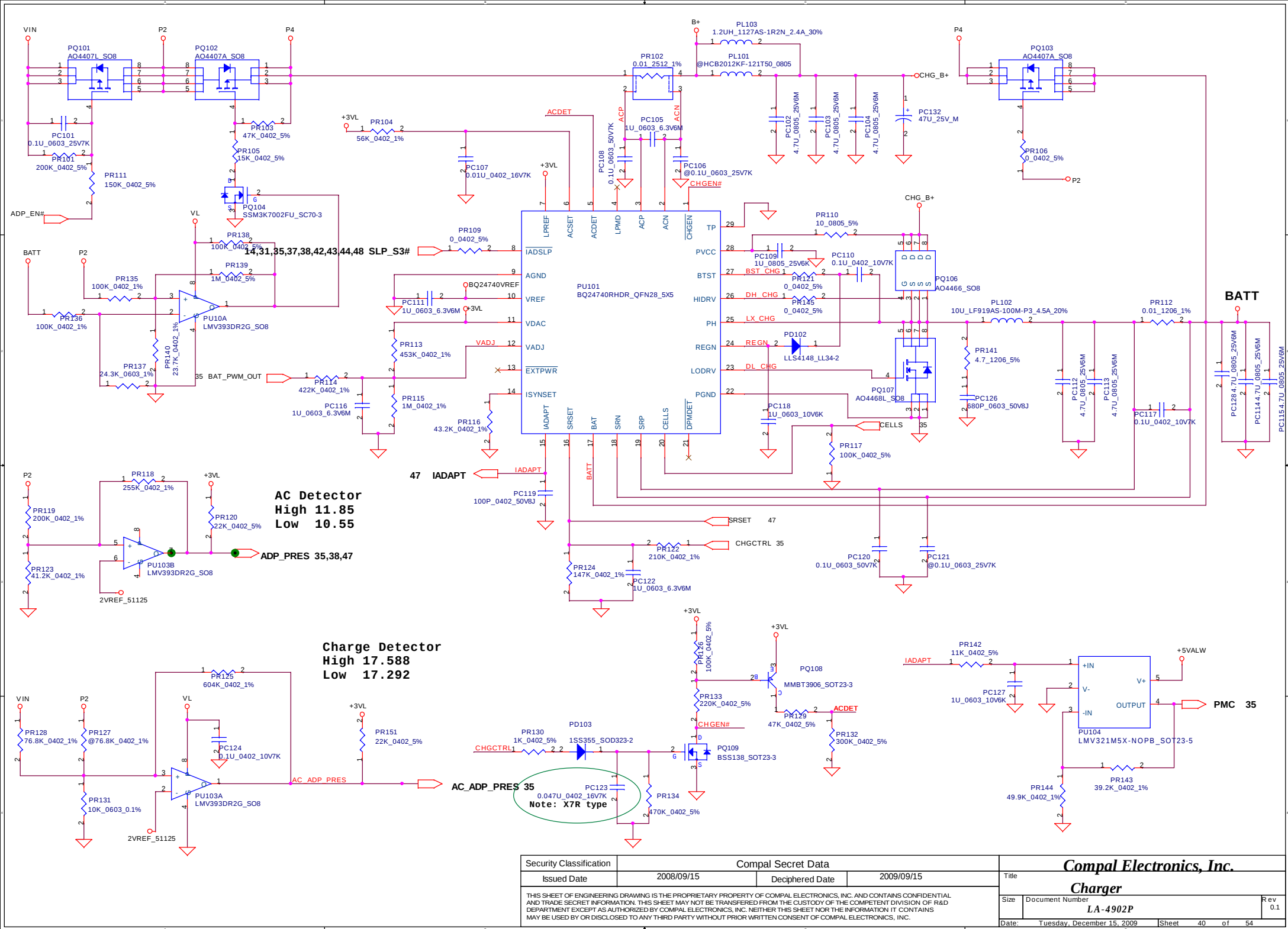


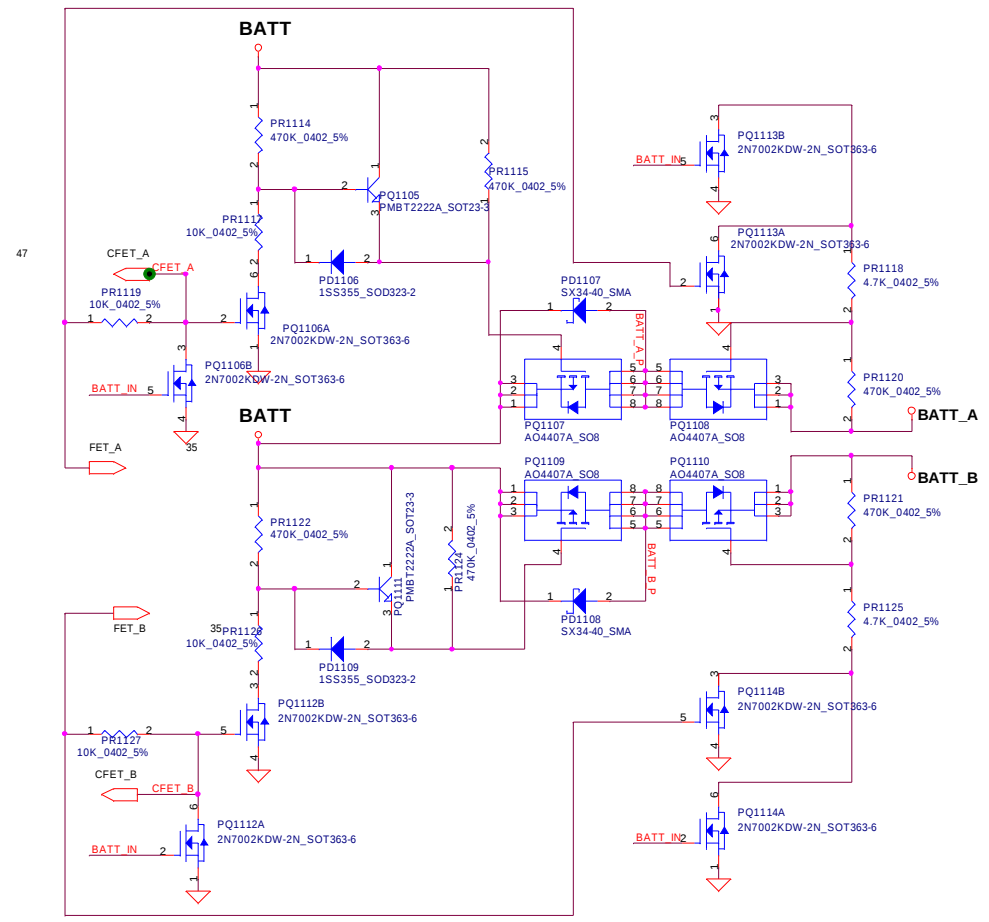
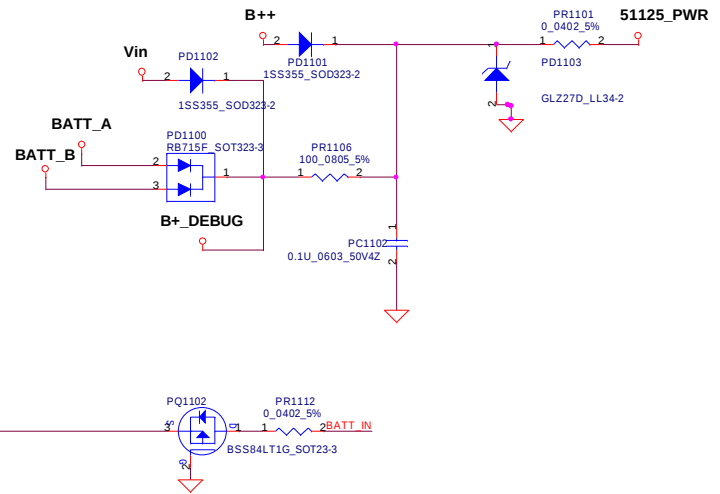
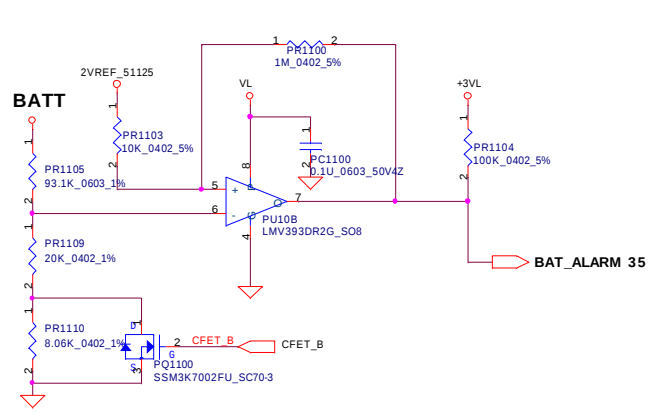
**PH1 under CPU botten side :**  
 CPU thermal protection at 90 +-3 degree C  
 (Need to be checked)



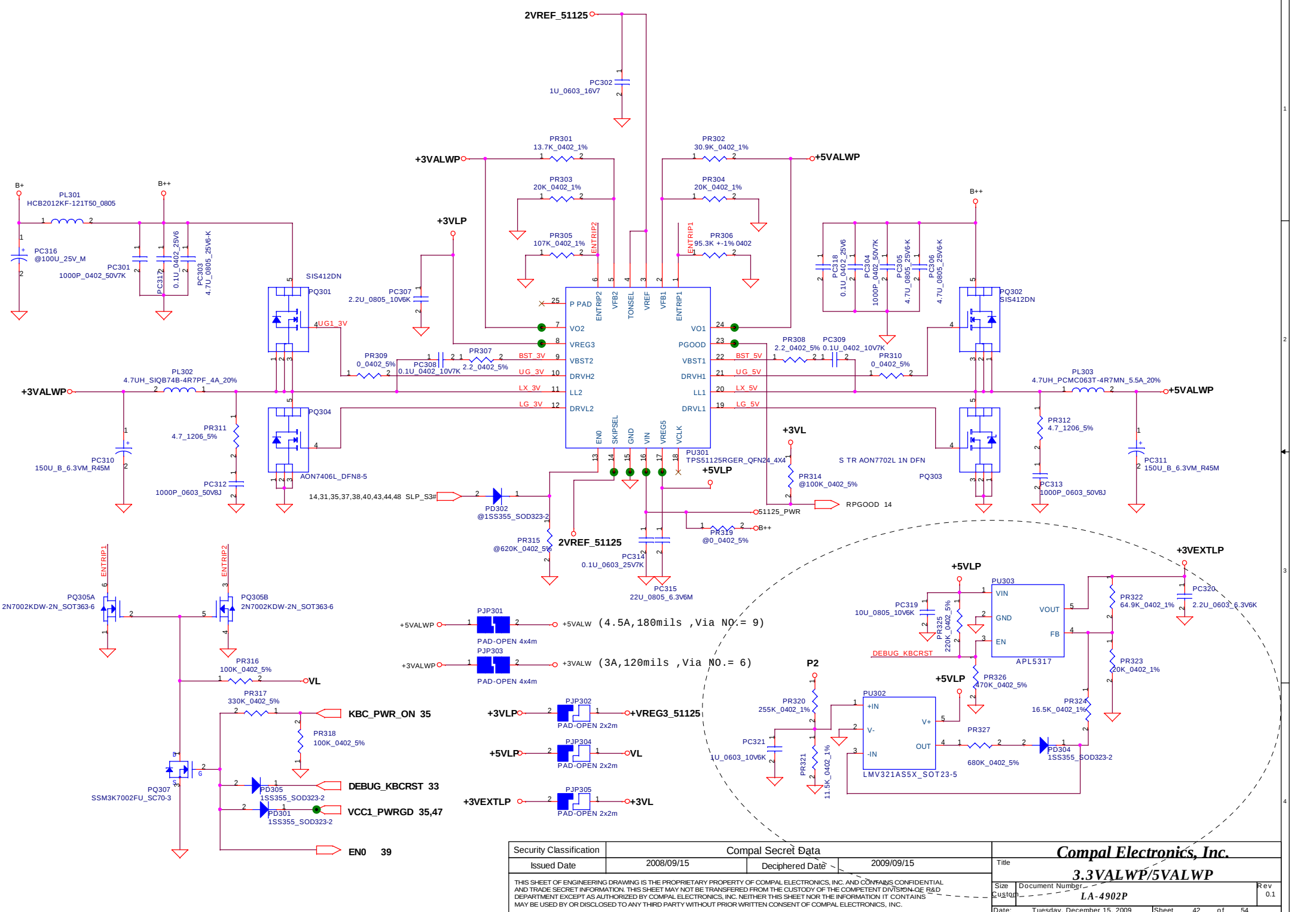
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|-------------------------|--|----------------------------|--|--------------------|--|------------|--|--------------------------|--|----|--|
| Security Classification |  |                            |  | Compal Secret Data |  |            |  | Compal Electronics, Inc. |  |    |  |
| Issued Date             |  | 2008/09/15                 |  | Deciphered Date    |  | 2009/09/15 |  | Title                    |  |    |  |
|                         |  |                            |  |                    |  |            |  | DC-IN/ BATTERY CONN      |  |    |  |
| Size                    |  | Document Number            |  |                    |  |            |  | Rev                      |  |    |  |
| Custom                  |  | LA-4902P                   |  |                    |  |            |  |                          |  |    |  |
| Date:                   |  | Tuesday, December 15, 2009 |  | Sheet              |  | 39         |  | of                       |  | 54 |  |

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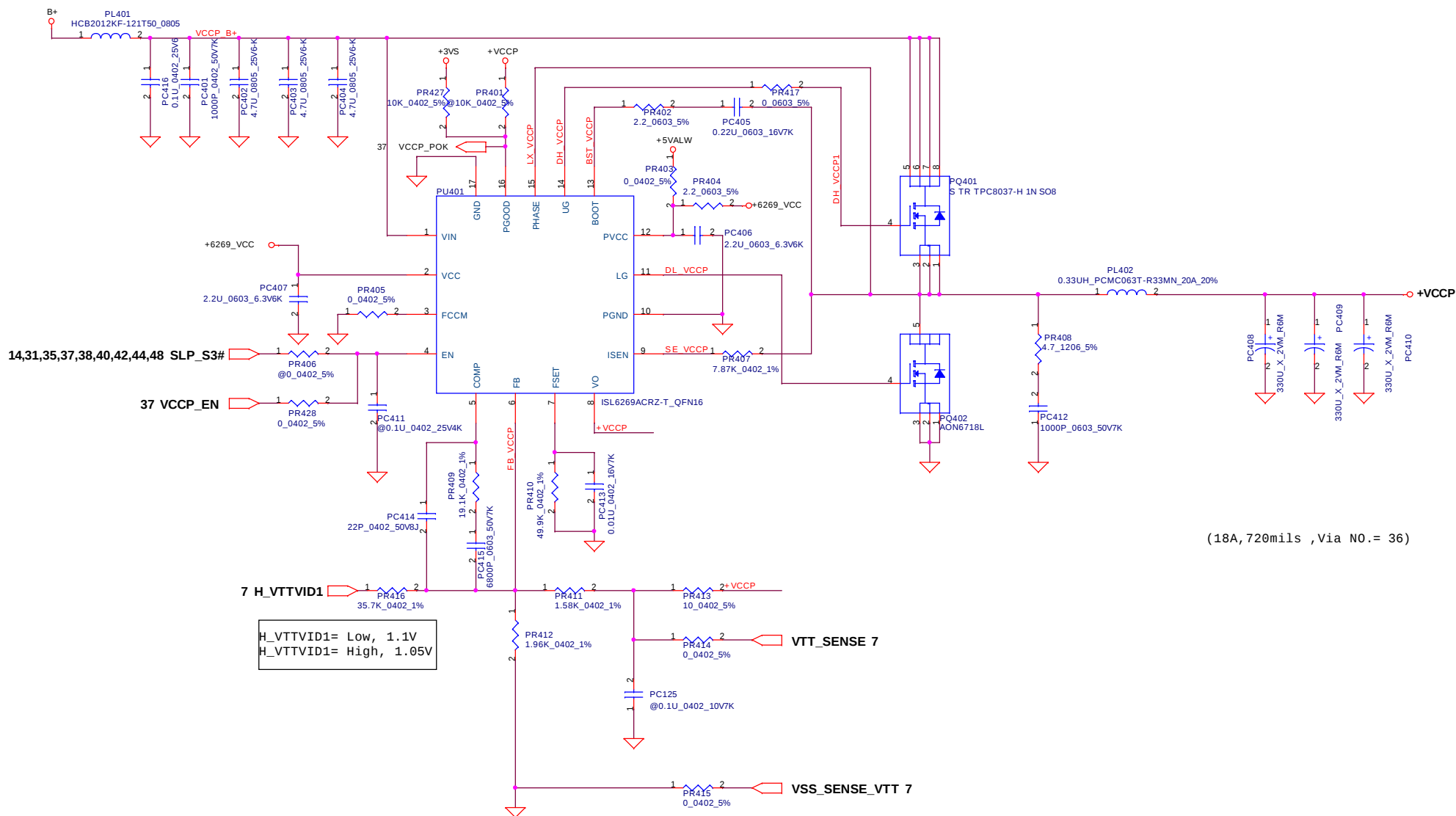




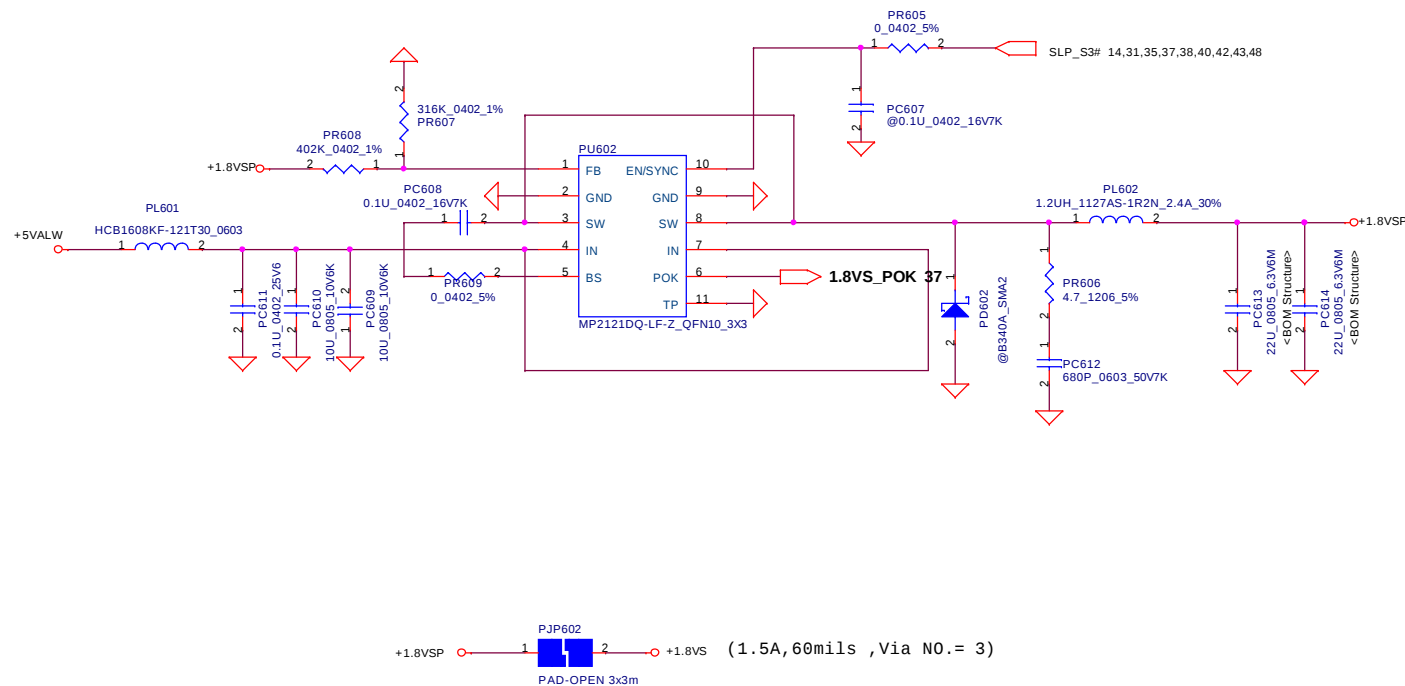
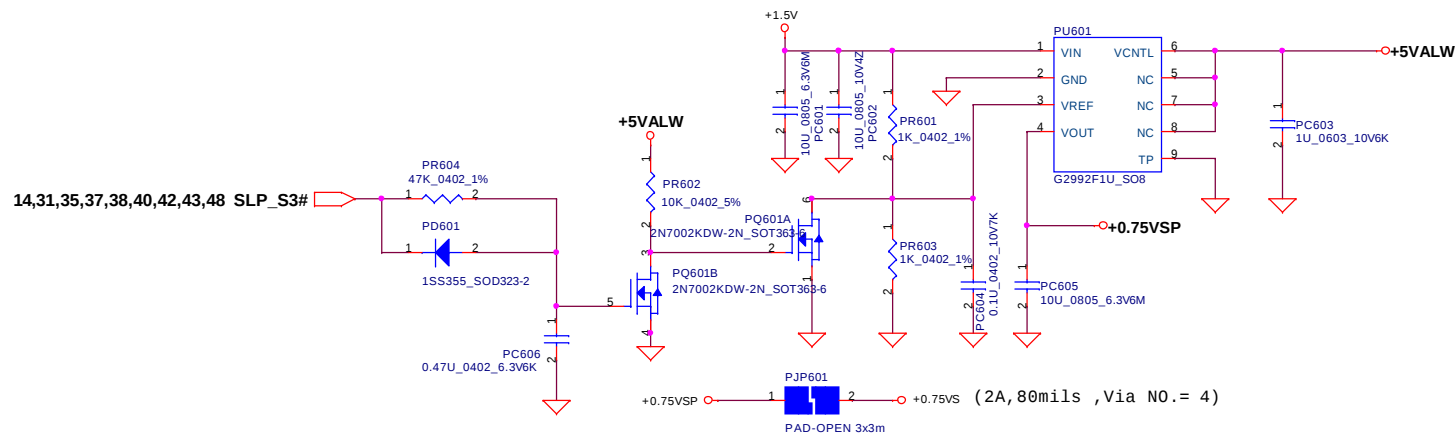
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                    |                 |                          |            |                            |       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------|-----------------|--------------------------|------------|----------------------------|-------|
| Security Classification                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | Compal Secret Data |                 | Compal Electronics, Inc. |            |                            |       |
| Issued Date                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  | 2008/09/15         | Deciphered Date |                          | 2009/09/15 |                            |       |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                    |                 | Size                     |            | Document Number            | Rev   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                    |                 | Custom                   |            | LA-4902P                   |       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                    |                 | Date:                    |            | Tuesday, December 15, 2009 | Sheet |



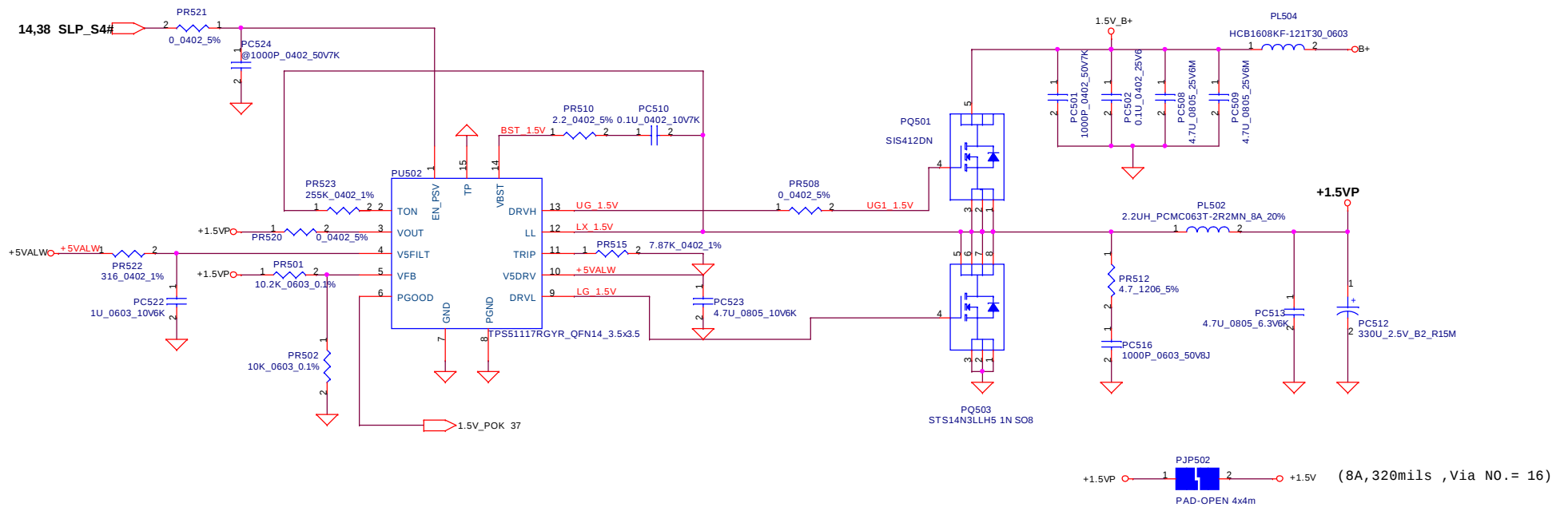
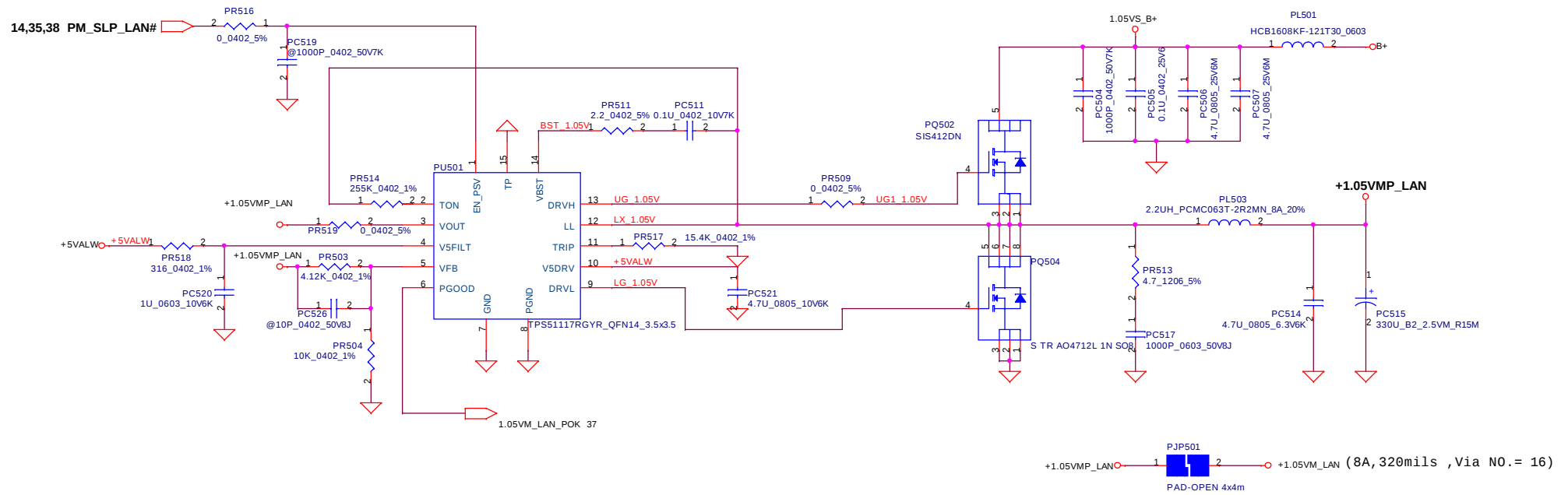
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                    |            |                            |          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------------|------------|----------------------------|----------|
| Security Classification                                                                                                                                                                                                                                                                                                                                                                                                                                       |            | Compal Secret Data |            | Title                      |          |
| Issued Date                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 2008/09/15 | Deciphered Date    | 2009/09/15 | 3.3VALWP/5VALWP            |          |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                    |            | Document Number            | 0.1      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                    |            | LA-4902P                   |          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                    |            | Date                       | Sheet    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                    |            | Tuesday, December 15, 2009 | 42 of 54 |



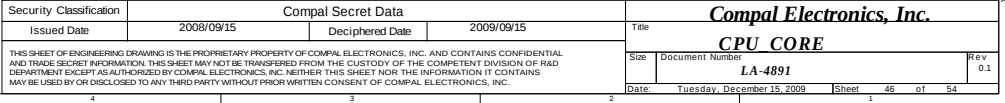
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                            |                    |            |                          |    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|--------------------|------------|--------------------------|----|
| Security Classification                                                                                                                                                                                                                                                                                                                                                                                                                                       |                            | Compal Secret Data |            | Compal Electronics, Inc. |    |
| Issued Date                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 2008/09/15                 | Deciphered Date    | 2009/09/15 | Title                    |    |
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| Size                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Document Number            | Rev                |            | 0.1                      |    |
| Date:                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Tuesday, December 15, 2009 | Sheet              | 43         | of                       | 54 |

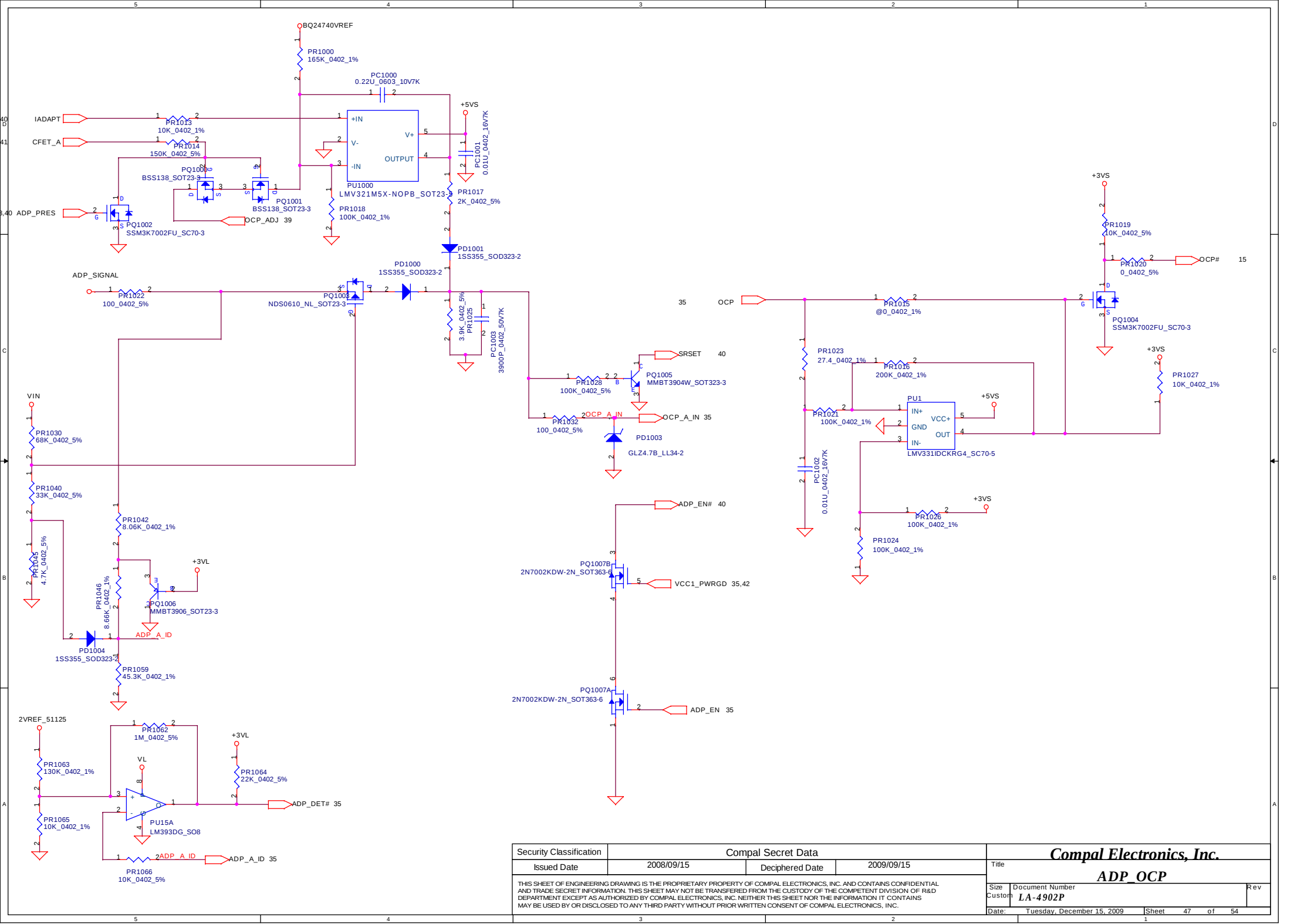


|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                    |            |                          |                            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------------|------------|--------------------------|----------------------------|
| Security Classification                                                                                                                                                                                                                                                                                                                                                                                                                                       |            | Compal Secret Data |            | Compal Electronics, Inc. |                            |
| Issued Date                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 2008/09/15 | Deciphered Date    | 2009/09/15 | Title                    |                            |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                    |            |                          | LA-4902P                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                    |            | Date:                    | Tuesday, December 15, 2009 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                    |            | Sheet                    | 44 of 54                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                    |            | Rev                      | 0.1                        |



|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                            |            |                          |                 |     |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----------------------------|------------|--------------------------|-----------------|-----|--|
| Security Classification                                                                                                                                                                                                                                                                                                                                                                                                                                       |            | Compal Secret Data         |            | Compal Electronics, Inc. |                 |     |  |
| Issued Date                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 2008/09/15 | Deciphered Date            | 2009/09/15 | Title                    |                 |     |  |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                            |            | Size                     | Document Number | Rev |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                            |            | LA-4902P                 |                 | 0.1 |  |
| Date:                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            | Tuesday, December 15, 2009 |            | Sheet                    | 45 of 54        |     |  |





|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                            |                    |            |                          |    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|--------------------|------------|--------------------------|----|
| Security Classification                                                                                                                                                                                                                                                                                                                                                                                                                                       |                            | Compal Secret Data |            | Title                    |    |
| Issued Date                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 2008/09/15                 | Deciphered Date    | 2009/09/15 | Compal Electronics, Inc. |    |
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| Size                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Document Number            | Rev                |            |                          |    |
| Custom                                                                                                                                                                                                                                                                                                                                                                                                                                                        | LA-4902P                   |                    |            |                          |    |
| Date:                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Tuesday, December 15, 2009 | Sheet              | 47         | of                       | 54 |





# Version Change List ( P. I. R, List ) for HW Circuit DB-1>> DB-2

| Item | Page # | Date       | Request Owner | Solution Description                                                                                               | Rev. |
|------|--------|------------|---------------|--------------------------------------------------------------------------------------------------------------------|------|
| 1    | 01     | 2009/02/06 | HP            | Del R4, R6, R8 for XDP.                                                                                            | 0.2  |
| 2    | 01     | 2009/02/06 | HP            | Del R40 for Thermal sensor.                                                                                        | 0.2  |
| 3    | 01     | 2009/02/06 | HP            | Del R34, R36, R46, R49, R37 for XDP.                                                                               | 0.2  |
| 4    | 01     | 2009/02/24 | HP            | Change R31 24.9K ohm to 1.5K ohm and R33 12.4K ohm to 750 ohm for intel WOW.                                       | 0.2  |
| 5    | 01     | 2009/02/25 | HP            | Debug port design guide changed XDP debug ports to CFG4 - pin 28, CFG5 - pin 30, CFG10 - pin 22, and CFG11 pin 24. | 0.2  |
| 6    | 02     | 2009/02/19 | HP            | No install R60, R61.                                                                                               | 0.2  |
| 7    | 12     | 2009/02/25 | Compal        | Install C193, C194 for WLAN nosie                                                                                  | 0.2  |
| 8    | 12     | 2009/02/06 | HP            | Change R1026, R181, R185, R1027 from 15 ohm to 0 ohm.                                                              | 0.2  |
| 9    | 12     | 2009/02/06 | HP            | Del C205, C207, C208, C209 for docking.                                                                            | 0.2  |
| 10   | 12     | 2009/02/06 | HP            | Change D1 pin 2 form +3VL to +VREG3_51125                                                                          | 0.2  |
| 11   | 12     | 2009/02/06 | HP            | Del JP15 pin 51, 53 trace (SMB_DATA_S3, SMB_CLK_S3) and add test point.                                            | 0.2  |
| 12   | 12     | 2009/02/11 | HP            | Add R1144 1K ohm                                                                                                   | 0.2  |
| 13   | 12     | 2009/02/11 | HP            | Add Test point for SATA bus.                                                                                       | 0.2  |
| 14   | 12     | 2009/02/18 | HP            | Add NAND Flash dect pin (BRAID_DET)                                                                                | 0.2  |
| 15   | 13     | 2009/02/06 | HP            | Install R354                                                                                                       | 0.2  |
| 16   | 13     | 2009/02/06 | HP            | Add R1138 10K ohm                                                                                                  | 0.2  |
| 17   | 13     | 2009/02/20 | HP            | Change R1092, R1093 power sourece form +3VS to +3VS.                                                               | 0.2  |
| 18   | 13     | 2009/02/20 | HP            | Del R208, R210                                                                                                     | 0.2  |
| 19   | 13     | 2009/02/22 | HP            | Add Q76A and Q76B for CBB                                                                                          | 0.2  |
| 20   | 13     | 2009/02/22 | HP            | Reserve R1146 and R1147 for external VGA thermal                                                                   | 0.2  |
| 21   | 14     | 2009/01/22 | HP            | Del R238, because double pull down.                                                                                | 0.2  |
| 22   | 14     | 2009/02/19 | HP            | Del R288                                                                                                           | 0.2  |
| 23   | 14     | 2009/02/06 | HP            | Stuff R296                                                                                                         | 0.2  |
| 24   | 14     | 2009/02/06 | HP            | Add R1142 10K ohm                                                                                                  | 0.2  |
| 25   | 14     | 2009/02/25 | Compal        | Add C949 for RF                                                                                                    | 0.2  |
| 26   | 16     | 2009/01/22 | HP            | Del L1, C228, C229 and add test point.                                                                             | 0.2  |
| 27   | 16     | 2009/01/22 | HP            | Del L2, C241 and add test point.                                                                                   | 0.2  |
| 28   | 16     | 2009/01/22 | HP            | Del C847 and add test point.                                                                                       | 0.2  |
| 29   | 16     | 2009/01/22 | HP            | Del L4, C269 and add test point.                                                                                   | 0.2  |
| 30   | 16     | 2009/01/22 | HP            | Del L3, C263, C262 and add test point.                                                                             | 0.2  |
| 31   | 16     | 2009/02/03 | HP            | Change R299, R300 form 10 ohm to 100ohm.                                                                           | 0.2  |
| 32   | 16     | 2009/02/03 | HP            | Change C278 form 0.1uF to 1uF.                                                                                     | 0.2  |
| 33   | 16     | 2009/02/05 | HP            | Change C243, C244 form 10uF to 22uF.                                                                               | 0.2  |
| 34   | 18     | 2009/02/18 | Compal        | Add L48, L49, L50, C944, C943, C942 for EMI                                                                        | 0.2  |
| 35   | 18     | 2009/02/24 | Nvidia        | Change R321, R320, R319, R318 form 2.2K ohm to 4.7K ohm.                                                           | 0.2  |
| 36   | 18     | 2009/02/18 | Compal        | Reserve D5, D6, D7, D8, D9 for ESD                                                                                 | 0.2  |
| 37   | 18     | 2009/02/12 | Nvidia        | Del R1066                                                                                                          | 0.2  |
| 38   | 19     | 2009/01/22 | HP            | Add Q71, Q72, R1134 for Keyboard light                                                                             | 0.2  |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                    |            |                          |                                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------------|------------|--------------------------|--------------------------------|
| Security Classification                                                                                                                                                                                                                                                                                                                                                                                                                                       |            | Compal Secret Data |            | Compal Electronics, Inc. |                                |
| Issued Date                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 2006/02/13 | Deciphered Date    | 2006/03/10 | Title                    | Hardware revision (0.1 to 0.2) |
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# Version Change List ( P. I. R, List ) for HW Circuit DB-1>> DB-2

| Item | Page # | Date       | Request Owner | Solution Description                                                                                  | Rev. |
|------|--------|------------|---------------|-------------------------------------------------------------------------------------------------------|------|
| 39   | 19     | 2009/02/06 | Nvidia        | Add C914, C915, C916, C917 for eDP.                                                                   | 0.2  |
| 40   | 19     | 2009/02/06 | HP            | Change R341 pin 1 power plan form +5VS to +3VALW.                                                     | 0.2  |
| 41   | 20     | 2009/02/12 | Nvidia        | Reserve R1150                                                                                         | 0.2  |
| 42   | 20     | 2009/02/24 | HP            | Change R355, R356 from 2K ohm to 10K ohm.                                                             | 0.2  |
| 43   | 20     | 2009/02/25 | HP            | Add Q78, R1158, R1157 for thermal trip.                                                               | 0.2  |
| 44   | 21     | 2009/01/20 | HP            | Del LVDS function                                                                                     | 0.2  |
| 45   | 21     | 2009/02/26 | Nvidia        | Del C346, because no SPDIF.                                                                           | 0.2  |
| 46   | 22     | 2009/01/20 | Nvidia        | Add C924 ~ C931 for DP function                                                                       | 0.2  |
| 47   | 22     | 2009/02/06 | Nvidia        | Del RP28, 31, 34, 40, 49, 52, 55, 29, 43, 35, 39, 44, 48, 53, 56, 30, 33, 36, 38, 45, 46, 42 for VRAM | 0.2  |
| 48   | 22     | 2009/02/06 | Nvidia        | Del C904, 899, 900, 901, 902, 903 for VRAM                                                            | 0.2  |
| 49   | 23     | 2009/02/23 | Nvidia        | Add L47, C941 for SP_PLLVDD                                                                           | 0.2  |
| 50   | 26     | 2009/02/19 | HP            | Del C505, C509, C507, C508, C905, Q18, R440, R1062, R441                                              | 0.2  |
| 51   | 26     | 2009/02/06 | HP            | Add C934                                                                                              | 0.2  |
| 52   | 27     | 2009/02/18 | HP            | ReserveD57 for ESD                                                                                    | 0.2  |
| 53   | 28     | 2009/02/06 | HP            | Recover Q25, R503, R483                                                                               | 0.2  |
| 54   | 29     | 2009/02/26 | HP            | Add R1159 for NAND Flash detect                                                                       | 0.2  |
| 55   | 30     | 2009/02/24 | Compal        | Del R529, R528, R535, C618, U22                                                                       | 0.2  |
| 56   | 30     | 2009/02/24 | Compal        | Add Q79 ~ Q83, R1163, R1162, R1164, C945, C946, C947, C948                                            | 0.2  |
| 57   | 31     | 2009/02/22 | Compal        | Del D30, U28, C711, R608                                                                              | 0.2  |
| 58   | 32     | 2009/02/18 | HP            | Reserve D33, D34, D36, D68 for ESD                                                                    | 0.2  |
| 59   | 33     | 2009/02/18 | Compal        | Reserve D32 for ESD                                                                                   | 0.2  |
| 60   | 34     | 2009/02/06 | HP            | Add JP32 of pin 179, 178, 11, 10 to +5VS                                                              | 0.2  |
| 61   | 34     | 2009/01/22 | HP            | Del C746 ~ C761                                                                                       | 0.2  |
| 62   | 34     | 2009/02/06 | HP            | Add Q75, R1145.                                                                                       | 0.2  |
| 63   | 34     | 2009/02/06 | HP            | Del R647~ R650                                                                                        | 0.2  |
| 64   | 35     | 2009/02/06 | HP            | Reserve R711                                                                                          | 0.2  |
| 65   | 35     | 2009/02/06 | HP            | Add R1140                                                                                             | 0.2  |
| 66   | 35     | 2009/02/16 | HP            | Change R692 from 10K ohm to 220 ohm                                                                   | 0.2  |
| 67   | 35     | 2009/01/22 | HP            | Del L4, C269 and add test point.                                                                      | 0.2  |
| 68   | 36     | 2009/02/18 | Compal        | change Super IQ from ITE to SMSC                                                                      | 0.2  |
| 69   | 37     | 2009/02/25 | HP            | Del R758                                                                                              | 0.2  |
| 70   | 37     | 2009/02/06 | HP            | Change R941 pin from PM_SLP_LAN# to PM_SLP_M#                                                         | 0.2  |
| 71   | 37     | 2009/02/25 | HP            | change R1044 from 49.9K ohm to 78.7K ohm.                                                             | 0.2  |
| 72   | 38     | 2009/02/18 | Compal        | Add Q77, R1170, C939, R1156, C935 ~ C938                                                              | 0.2  |
| 73   |        |            |               |                                                                                                       | 0.2  |
| 74   |        |            |               |                                                                                                       | 0.2  |
| 75   |        |            |               |                                                                                                       | 0.2  |
| 76   |        |            |               |                                                                                                       | 0.2  |

*Version Change List ( P. I. R. List ) for HW Circuit DB-2>>DB-3*

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| Security Classification                                                                                                                                                                                                                                                                                                                                                                                                                                       |            | Compal Secret Data |            | <b>Compal Electronics, Inc.</b><br><b>Hardware revision (0.2 to 0.3)</b> |                 |
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| Date: Tuesday, December 15, 2009                                                                                                                                                                                                                                                                                                                                                                                                                              |            |                    |            | Sheet                                                                    | 52 of 54        |

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| Item | Page # | Date       | Request Owner | Solution Description                      | Rev. |
|------|--------|------------|---------------|-------------------------------------------|------|
| 01   | 16     | 2009/04/24 | HP            | Del R294                                  | 0.4  |
| 02   | 13     | 2009/04/24 | HP            | Del CLRP2                                 | 0.4  |
| 03   | 14     | 2009/04/24 | HP            | Del C147, C148 location                   | 0.4  |
| 04   | 14     | 2009/04/24 | HP            | Add C961                                  | 0.4  |
| 05   | 14     | 2009/04/24 | HP            | Add R1188, R1187 for intel spec           | 0.4  |
| 06   | 27     | 2009/04/24 | HP            | Add C962 ~ C965                           | 0.4  |
| 07   | 36     | 2009/04/24 | HP            | Add R1190, R1189                          | 0.4  |
| 08   | 29     | 2009/04/24 | HP            | Del C574~C577 and C579~C582.              | 0.4  |
| 09   | 33     | 2009/04/24 | HP            | Add R1191, R1192                          | 0.4  |
| 10   | 26     | 2009/05/02 | HP            | Add R1198, R1199                          | 0.4  |
| 11   | 04     | 2009/05/02 | HP            | Install R1060                             | 0.4  |
| 12   | 35     | 2009/05/02 | HP            | Add R1197, C967, C966, C968, R1195, R1196 | 0.4  |
| 13   | 38     | 2009/05/02 | HP            | Add C978, C979                            | 0.4  |

Version Change List ( P. I. R, List )for HW Circuit SI-1>> SI-16

| Item | Page # | Date       | Request Owner | Solution Description                                                                          | Rev. |
|------|--------|------------|---------------|-----------------------------------------------------------------------------------------------|------|
| 01   | 04     | 2009/07/21 | HP            | Add C997, R1219, Q87, R1218 for CPU S3 power savings issue                                    | 0.5  |
| 02   | 04     | 2009/07/02 | HP            | Add R1226 for CPU S3 power savings issue                                                      | 0.5  |
| 03   | 05     | 2009/07/21 | HP            | Add Q88, Q89 and reserve R1220, R1222 for CPU S3 power savings issue                          | 0.5  |
| 04   | 07     | 2009/07/02 | HP            | Add Q91, R1224, C994, C995, C991, C992, C993, C996, Q92, R1223 for CPU S3 power savings issue | 0.5  |
| 05   | 19     | 2009/06/30 | HP            | Add R1213, D72 for Lid SW issue                                                               | 0.5  |
| 06   | 37     | 2009/07/09 | HP            | Change C864 from 0.047uF to 0.068uF.                                                          | 0.5  |

*Version Change List ( P. I. R. List ) for HW Circuit SI-16>>SI-2*

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|                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                    |            | Date: Tuesday, December 15, 2009                                         | Sheet 54 of 54 |