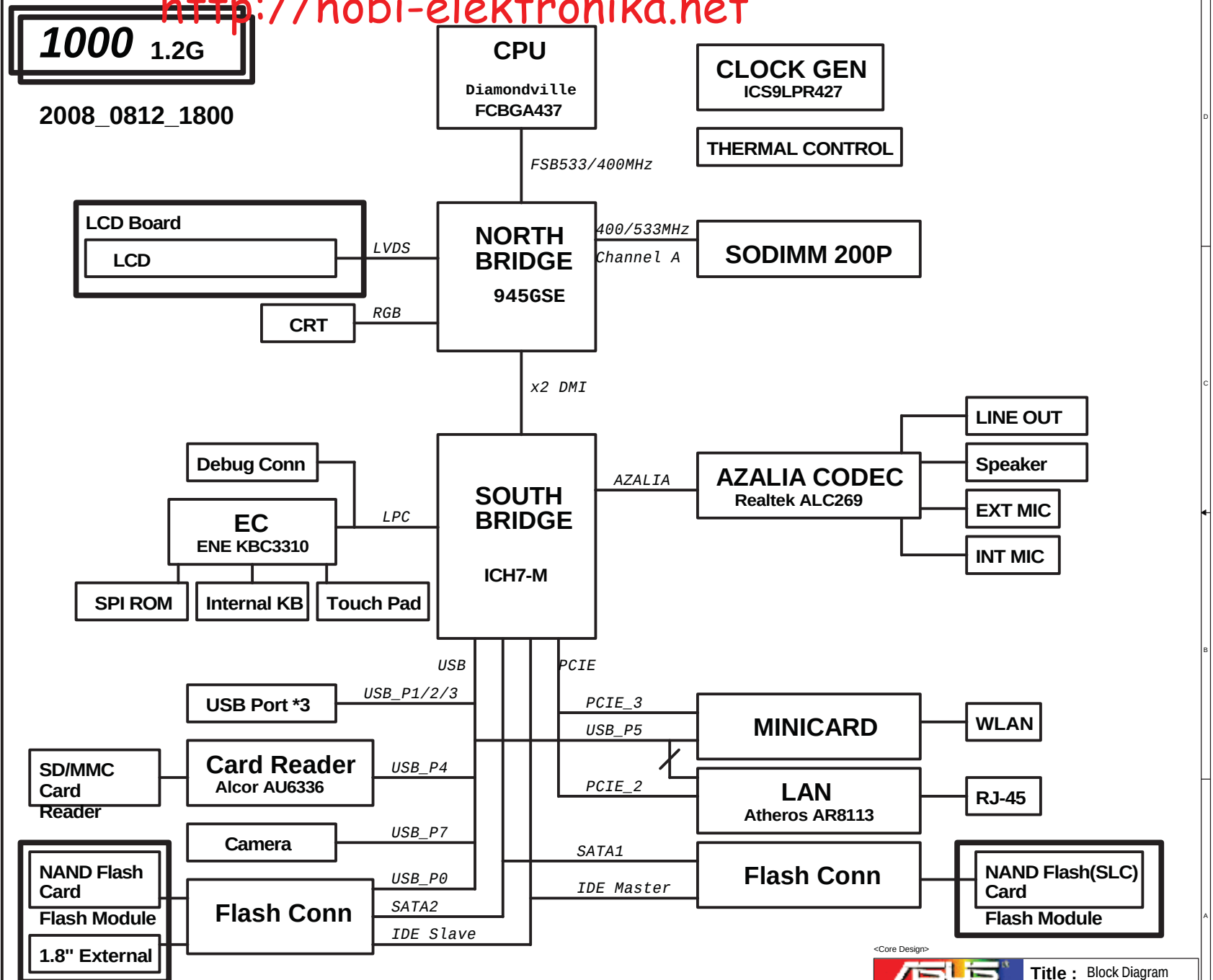


|                              |
|------------------------------|
| 01_Block Diagram             |
| 02_System Setting            |
| 03_Power Sequence            |
| 04_Clock Gen_ICS9LPR426      |
| 05_Diamondville_BUS          |
| 06_Diamondville_PWR          |
| 07_NB-945GMS(HOST)           |
| 08_NB-945GMS(DMI)            |
| 09_NB-945GMS(GRAPHIC)        |
| 10_NB-945GMS(DDR2)           |
| 11_NB-945GMS(PWR)            |
| 12_NB-945GMS(PWR2)           |
| 13_NB-945GMS(GND)            |
| 14_SB-ICH7M(PWR)             |
| 15_SB-ICH7M(1)               |
| 16_SB-ICH7M(2)               |
| 17_SB-ICH7M(3)               |
| 18_DDR2 SODIMM               |
| 19_DDR2 Termination          |
| 20_Onboard VGA               |
| 21_LCD Conn_LID              |
| 22_PCIEx 3.5G & Ext. Antenna |
| 23_Mini WIFI+ BT             |
| 24_LAN_Atheros AR8113        |
| 25_MDC_RJ11_RJ45             |
| 26_HD + Flash Conn           |
| 27_USB Port                  |
| 28_Camera Conn               |
| 29_Card Reader_AU6336C52     |
| 30_Codec_ALC269              |
| 31_Audio_AMP_Jack            |
| 32_EC_ENE KB3310             |
| 33_EC_UART controller        |
| 34_Switch_SPI ROM_Debug Conn |
| 35_Thermal Sensor_FAN        |
| 36_KB_Touch Pad              |
| 37_LED_THERMTRIP             |
| 38_Discharge                 |
| 39_PWR Jack                  |
| 40_Srew Hole                 |
| 41_EMI                       |
| 42_POWER FLOW                |
| 43_Vcore                     |
| 44_Power System              |
| 45_Power_+1.8V & VTTDDR      |
| 46_Power_VCCP                |
| 47_Power_+1.5VS & +2.5VS     |
| 48_Power_Charger             |
| 49_EC Pin Define             |
| 49_History                   |



<http://hobi-elektronika.net>

**EEE PC 701 PCB version**

| GPI37 | GPI38 | GPI39 | PCB version |
|-------|-------|-------|-------------|
| 0     | 0     | 0     |             |
| 0     | 0     | 0     |             |
| 0     | 0     | 1     |             |
| 0     | 0     | 1     |             |
| 0     | 1     | 0     |             |
| 0     | 1     | 0     |             |
| 0     | 1     | 1     |             |
| 0     | 1     | 1     |             |
| 1     | 0     | 0     |             |
| 1     | 0     | 0     |             |
| 1     | 0     | 1     |             |
| 1     | 0     | 1     |             |
| 1     | 1     | 0     |             |
| 1     | 1     | 0     |             |
| 1     | 1     | 1     |             |
| 1     | 1     | 1     |             |

**USB**

|       |             |
|-------|-------------|
| USB 0 | Flash Conn  |
| USB 1 | USB Conn    |
| USB 2 | USB Conn    |
| USB 3 | USB Conn    |
| USB 4 | Card Reader |
| USB 5 | Minicard    |
| USB 6 | NC          |
| USB 7 | Camera      |

**PCIE**

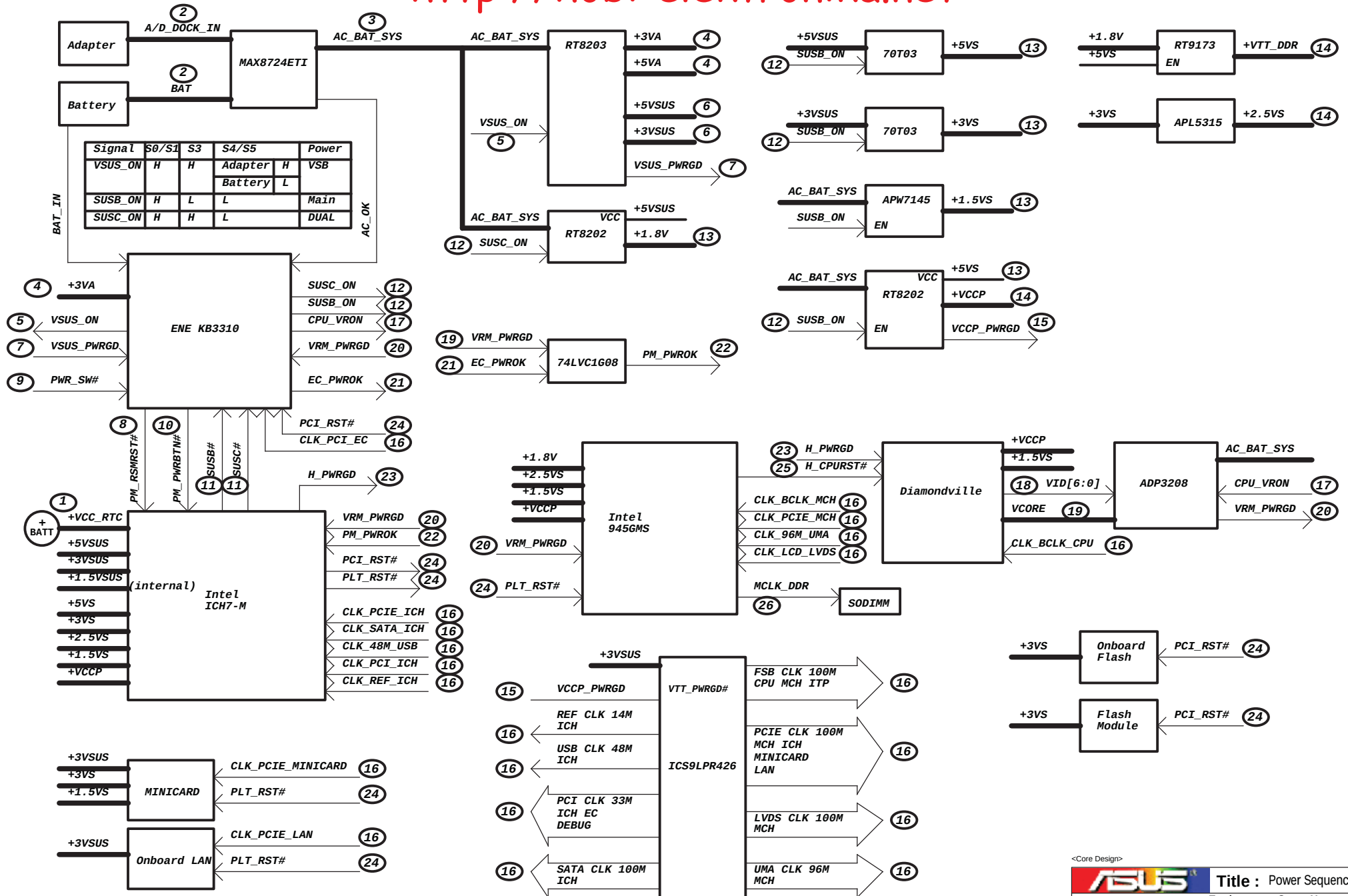
|        |          |
|--------|----------|
| PCIE 1 | NC       |
| PCIE 2 | LAN      |
| PCIE 3 | Minicard |
| PCIE 4 | NC       |

**Azalia**

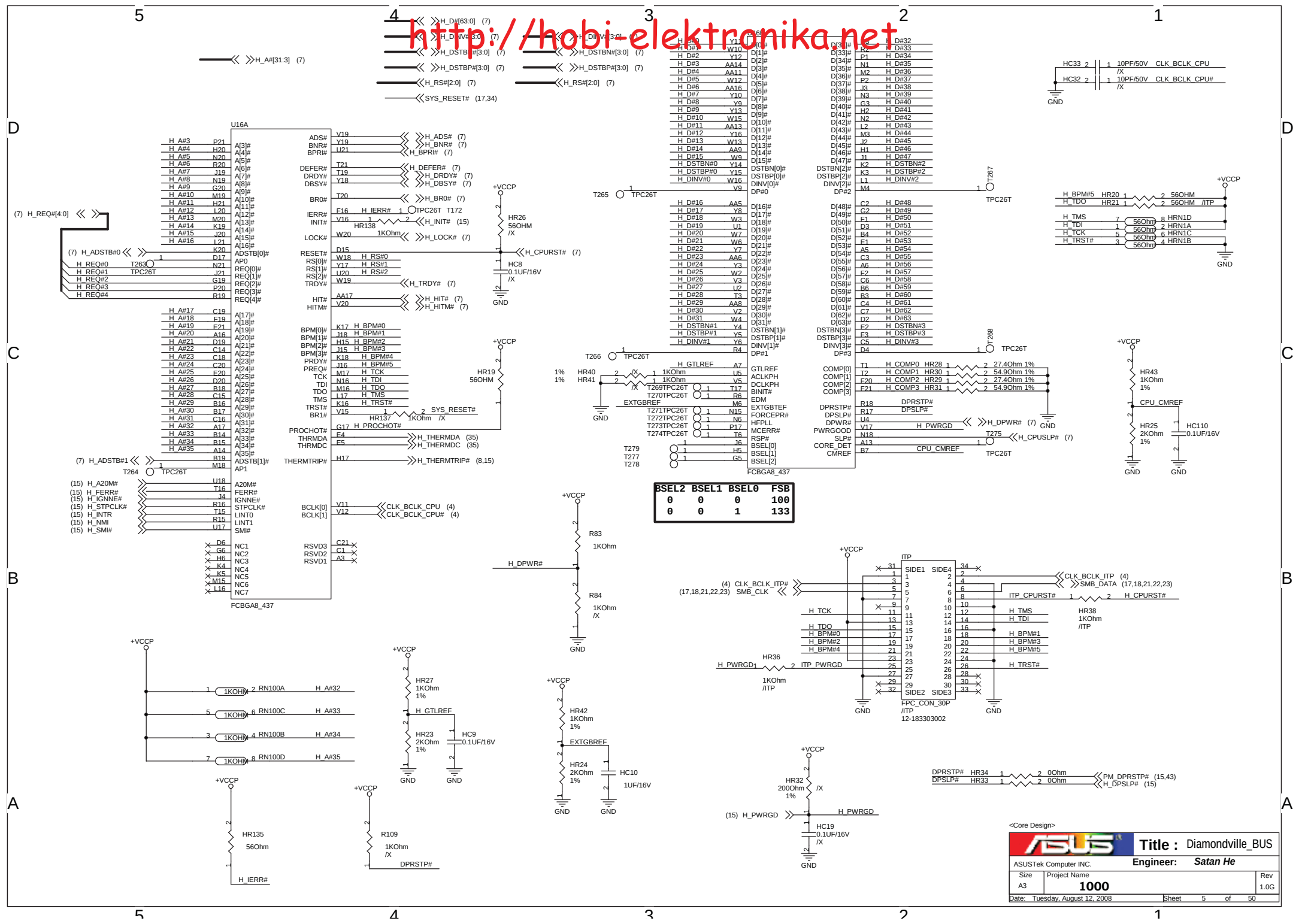
|           |       |
|-----------|-------|
| ACZ_SDIN0 | CODEC |
| ACZ_SDIN1 | MODEM |
| ACZ_SDIN2 | NC    |

<Core Design>

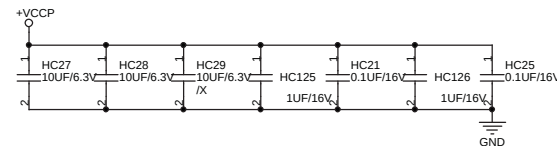
|                                                                                       |                             |                               |         |
|---------------------------------------------------------------------------------------|-----------------------------|-------------------------------|---------|
|  |                             | <b>Title :</b> System Setting |         |
| ASUSTek Computer INC.                                                                 |                             | <b>Engineer:</b> Satan_He     |         |
| Size<br>A3                                                                            | Project Name<br><b>1000</b> | Rev<br>1.0G                   |         |
| Date: Tuesday, August 12, 2008                                                        |                             | Sheet                         | 2 of 50 |







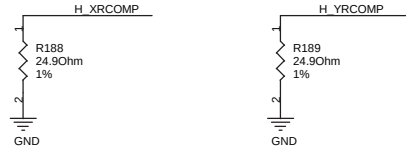
1



**Power:  
+VCCP**

### RCOMP

For Calibrating the FSB I/O Buffer



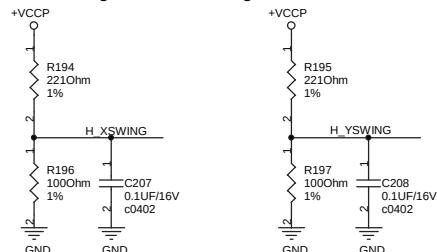
### SCOMP

For Slew Rate Compensation on the FSB

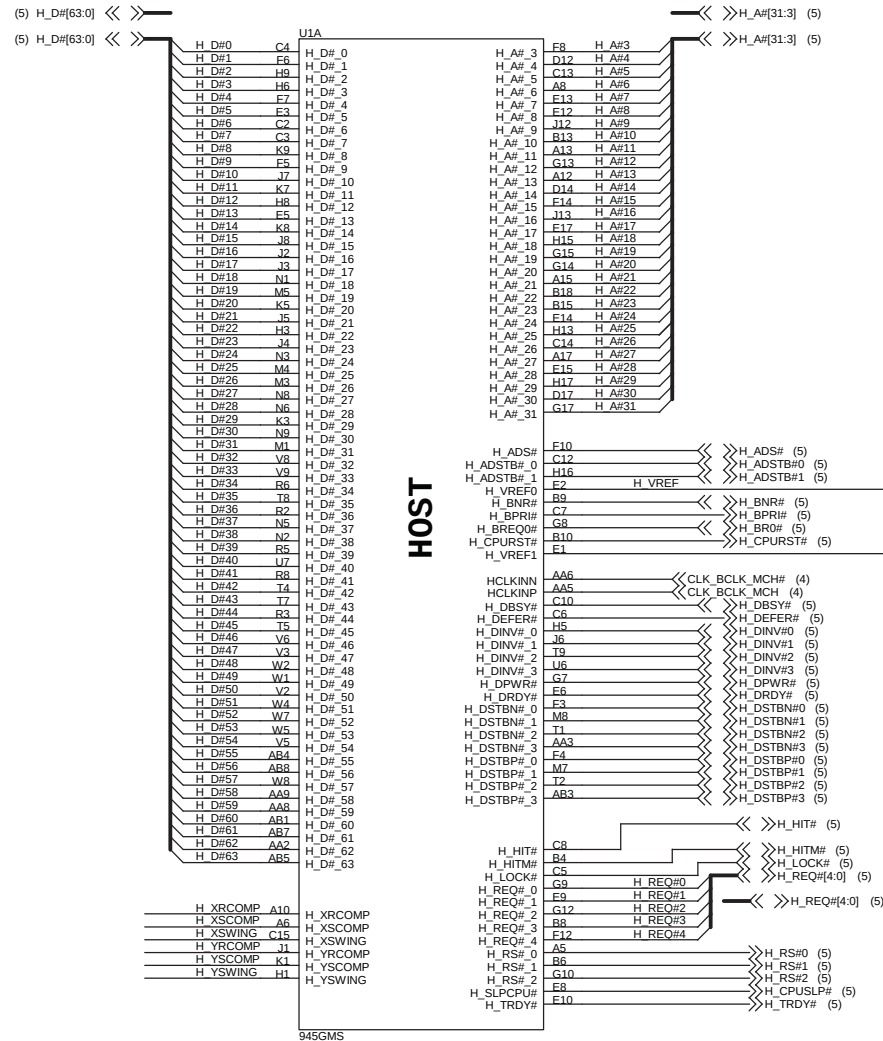


### Voltage Swing

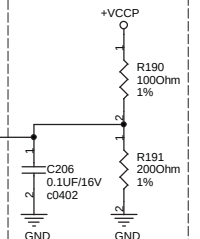
For Providing a Reference Voltage to The FSB RCOMP circuits



Signal voltage level =  
 $0.3125 \cdot VCCP$   
Trace should be 10 mil wide  
with 20 mil spacing



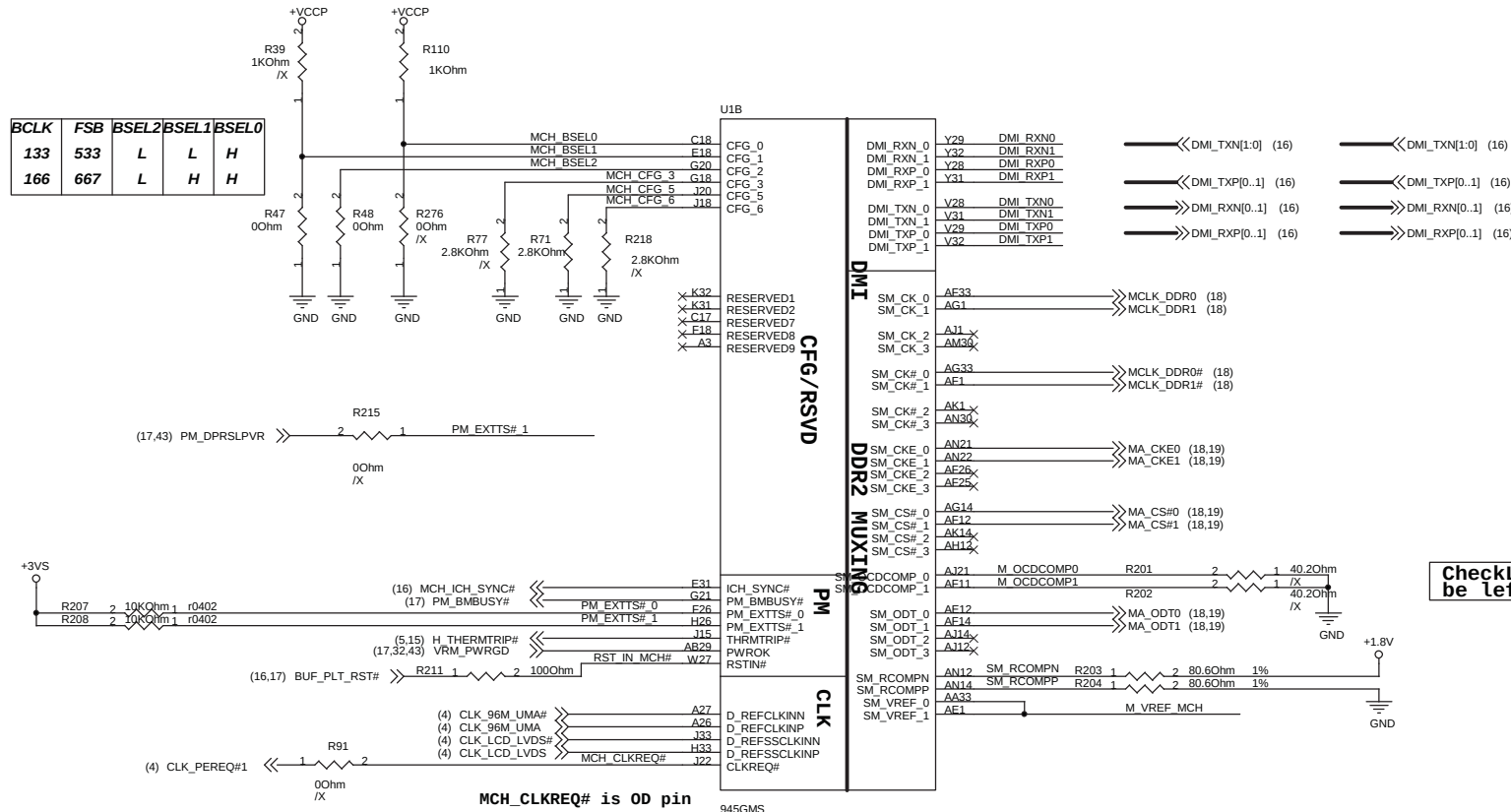
### AGTL+ I/O Voltage Reference



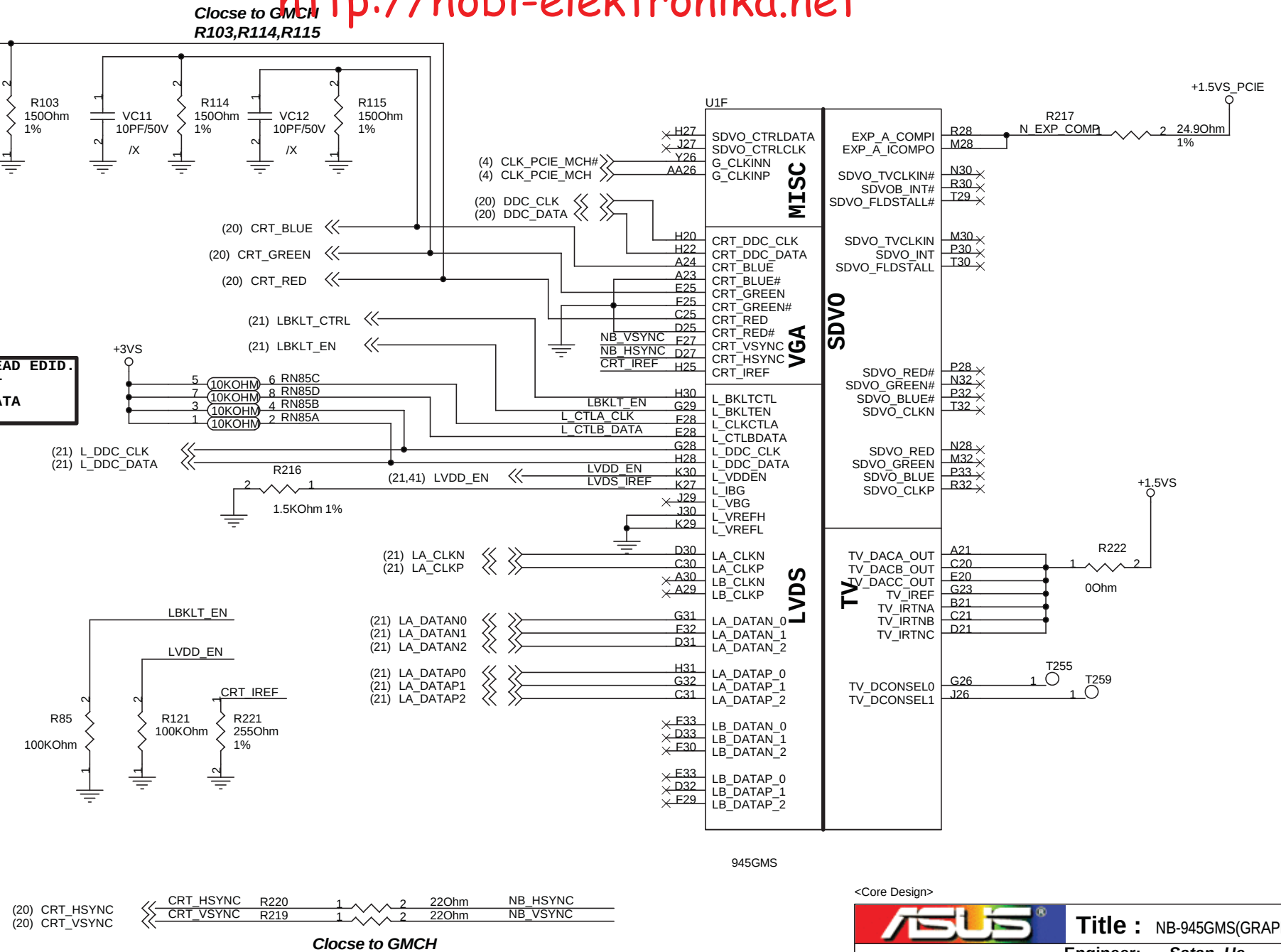
Layout Note:  
0.1uF should be placed 100mils or less from GMCH pin.

<Core Design>

|                                |                             |                         |  |
|--------------------------------|-----------------------------|-------------------------|--|
| <b>ASUS</b>                    |                             | Title : NB-945GMS(HOST) |  |
| ASUSTek COMPUTER INC.          |                             | Engineer: Satan He      |  |
| Size<br>A3                     | Project Name<br><b>1000</b> | Rev<br>1.0G             |  |
| Date: Tuesday, August 12, 2008 |                             | Sheet 7 of 50           |  |

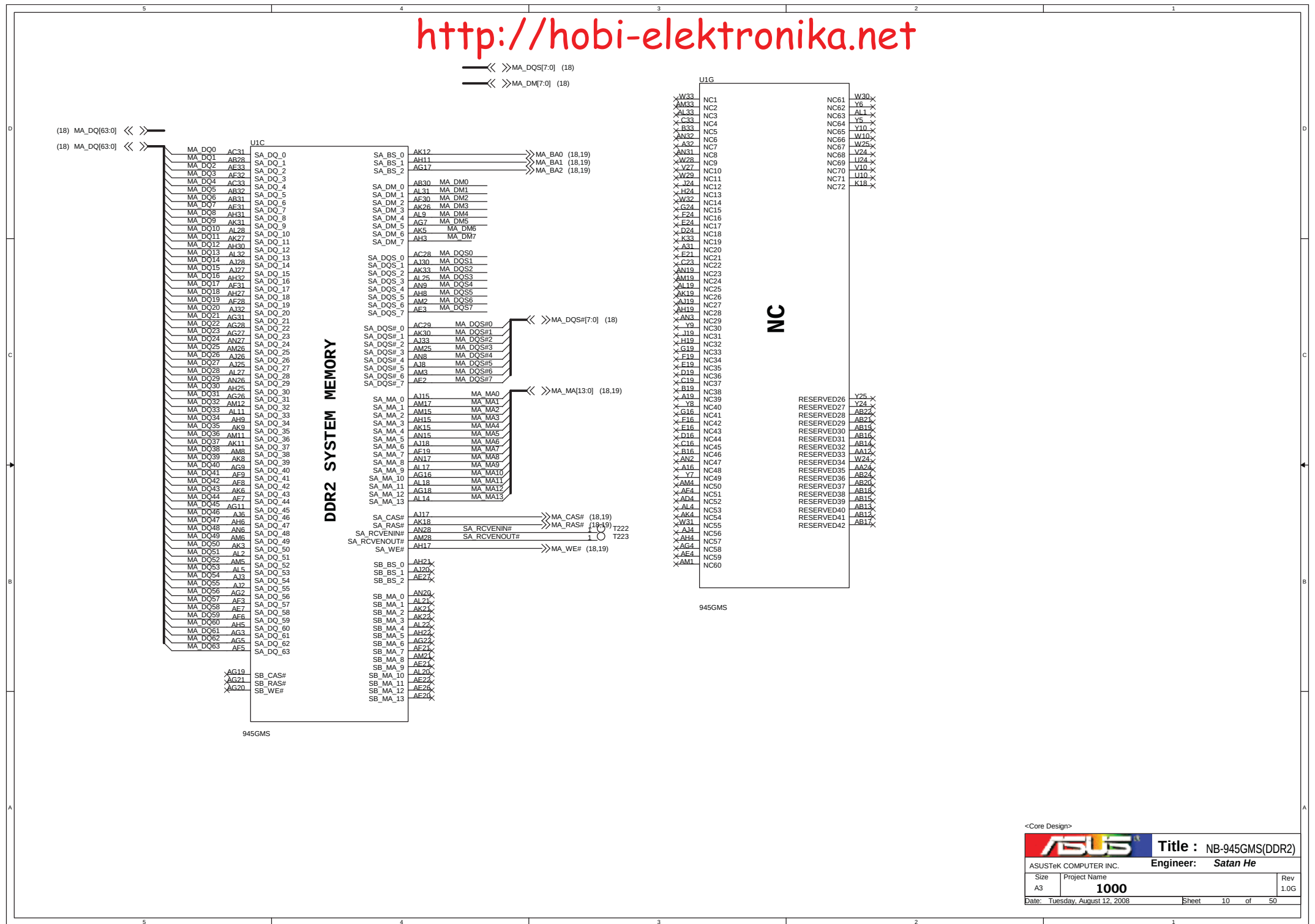


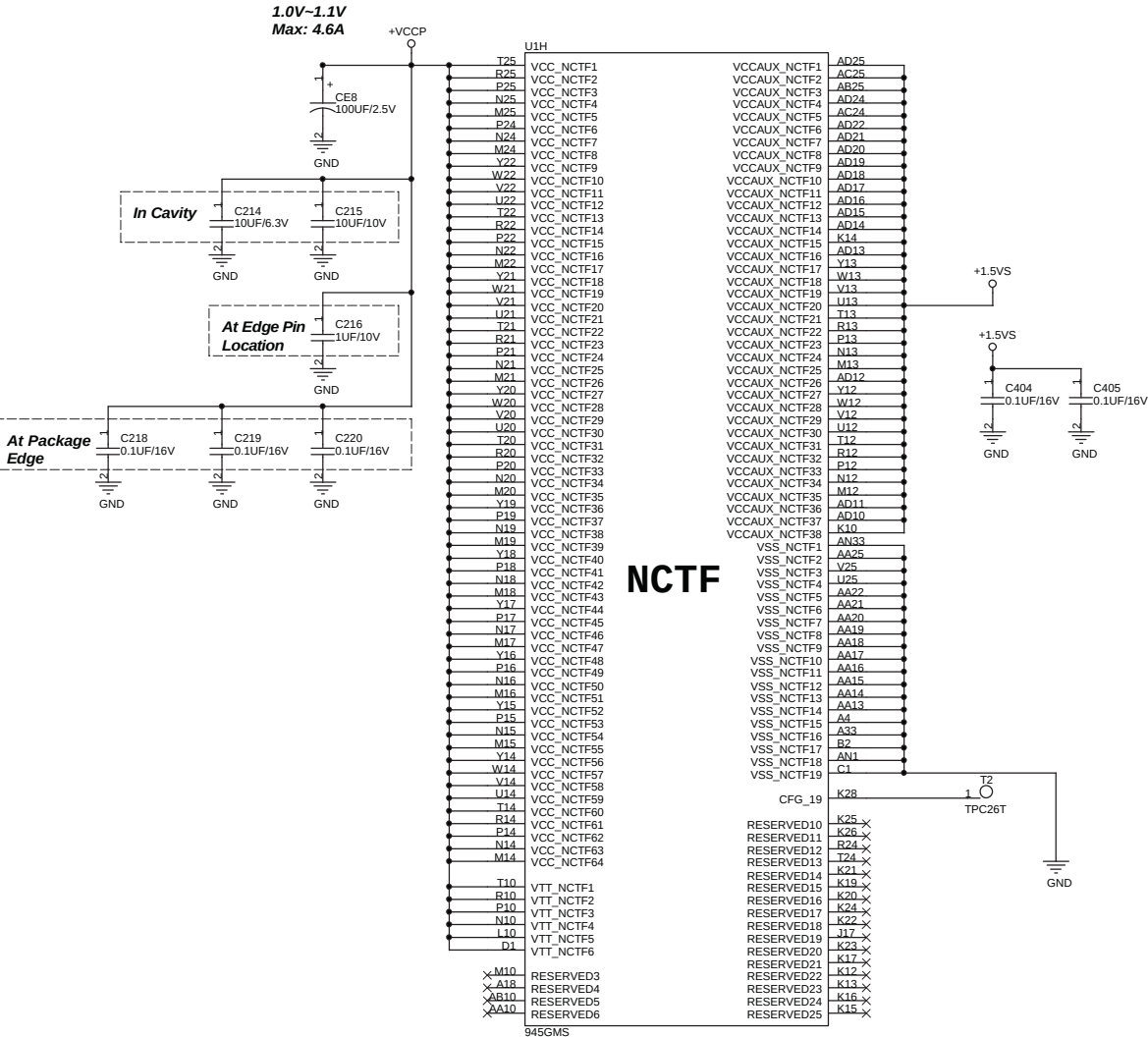




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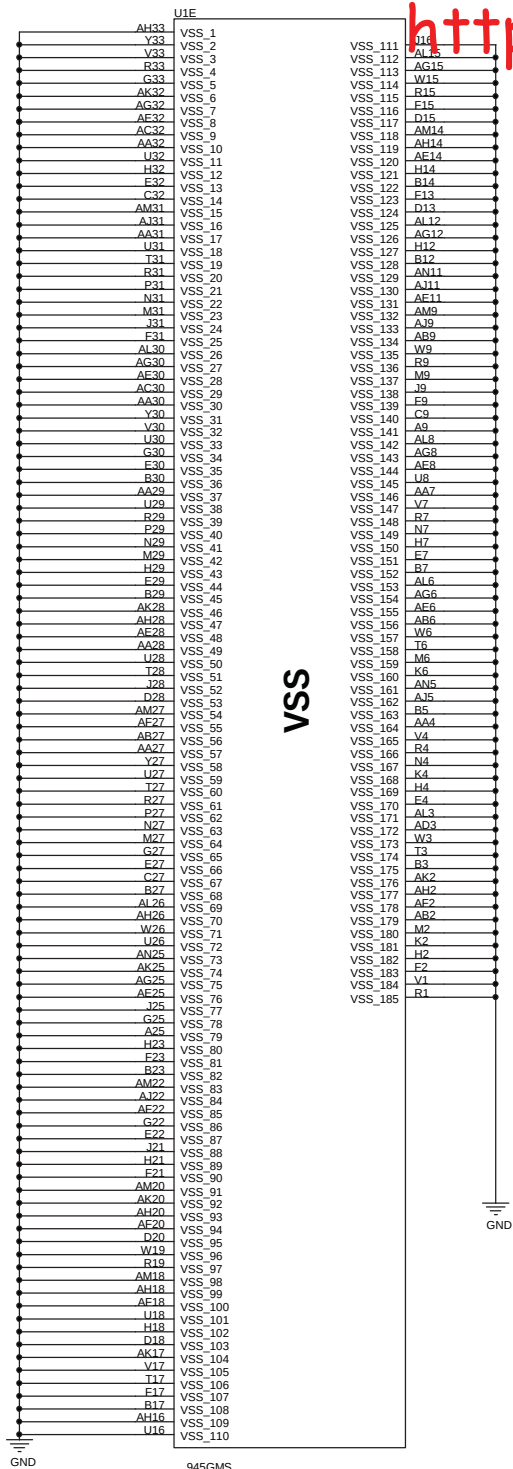
|                                                                                       |                             |                                   |         |
|---------------------------------------------------------------------------------------|-----------------------------|-----------------------------------|---------|
|  |                             | <b>Title :</b> NB-945GMS(GRAPHIC) |         |
| ASUSTeK COMPUTER INC.                                                                 |                             | <b>Engineer:</b> Satan_He         |         |
| Size<br>A4                                                                            | Project Name<br><b>1000</b> | Rev<br>1.0G                       |         |
| Date: Tuesday, August 12, 2008                                                        |                             | Sheet                             | 9 of 50 |





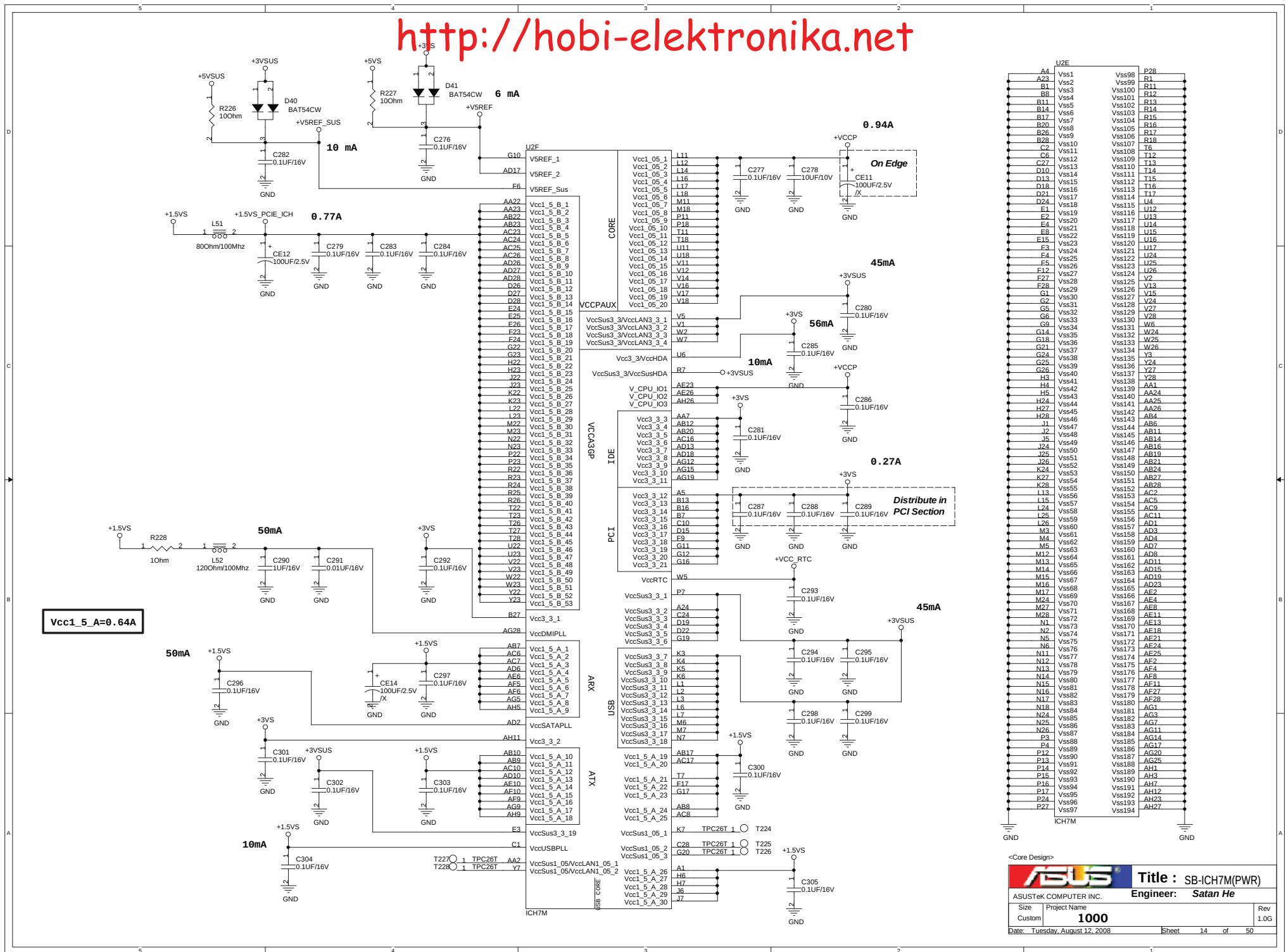
```
CFG_19(K28) Strapping :
DMI LANE Reversal:
0:Normal Operation (Default)
1.:Reversal Lanes, 3->0,2->1..etc
Note:945GMS doesn't support DMI Lane
Reversal
```

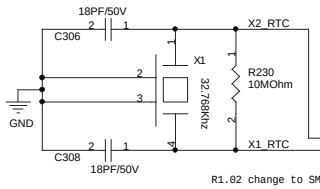




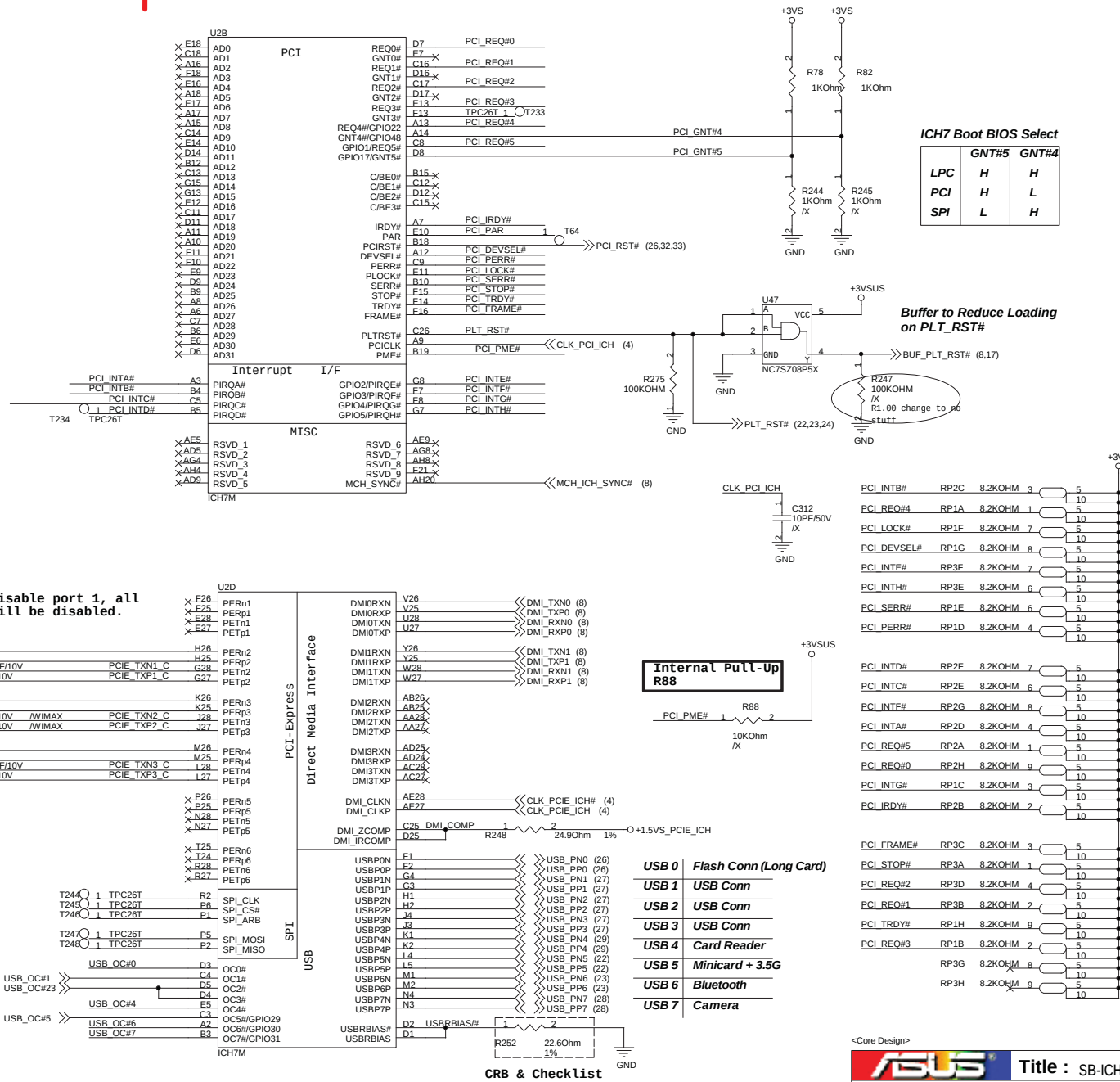
<Core Design>

|                                                                                       |              |                        |       |
|---------------------------------------------------------------------------------------|--------------|------------------------|-------|
|  |              | Title : NB-945PMS(GND) |       |
| ASUSTeK COMPUTER INC.                                                                 |              | Engineer: Satan_He     |       |
| Size                                                                                  | Project Name | Rev                    |       |
| A3                                                                                    | 1000         | 1.0G                   |       |
| Date: Tuesday, August 12, 2008                                                        | Sheet        | 13                     | of 50 |









&lt;Core Design&gt;



**Title :** SB-ICH7M(2)

ASUSTeK COMPUTER INC.

Engineer: *Satan He*

Size

|              |  |
|--------------|--|
| Project Name |  |
|--------------|--|

Custom

1000

1.0G

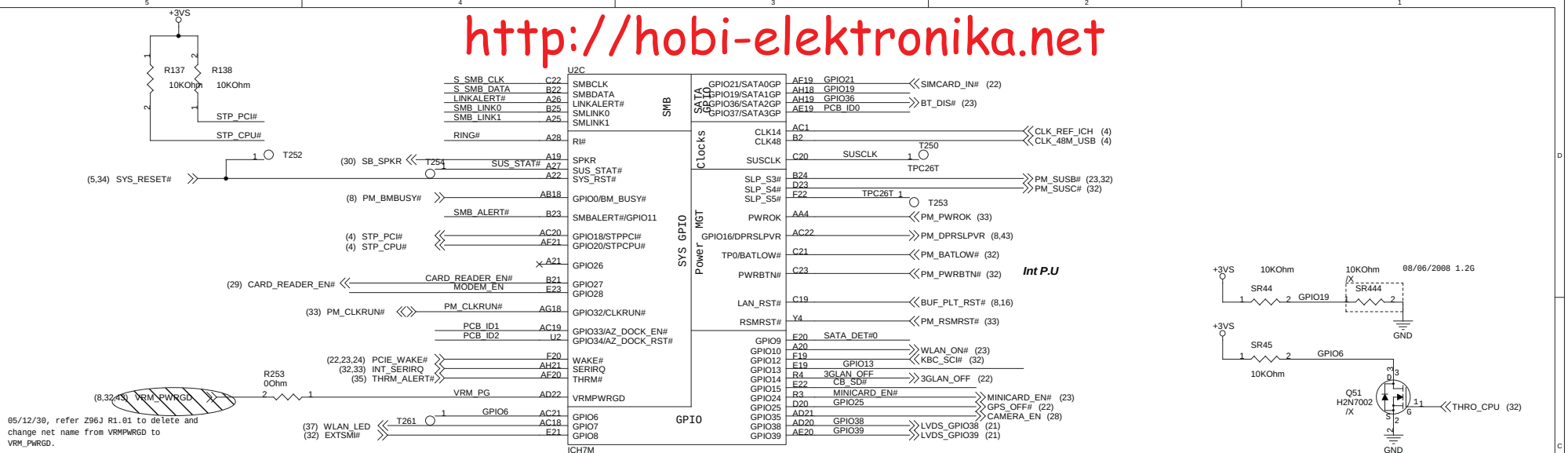
Date: Tuesday, August 12, 2008

Sheet 16 of 50

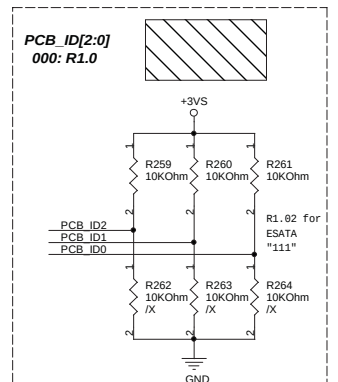
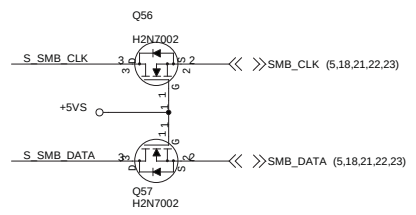
|  |  |
|--|--|
|  |  |
|--|--|

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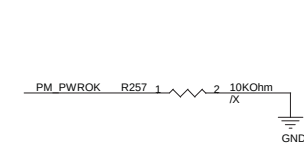
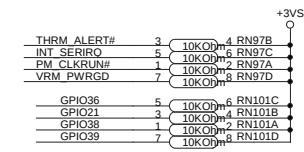
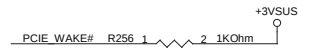
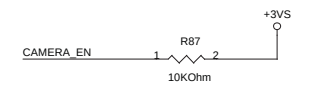
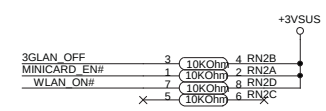
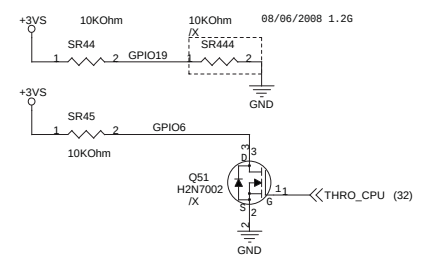
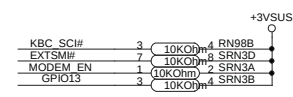
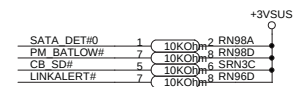
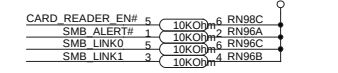
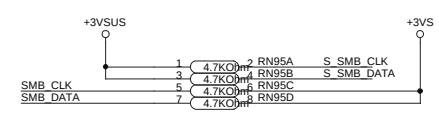
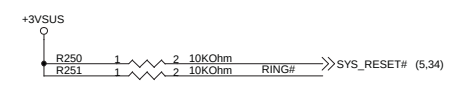


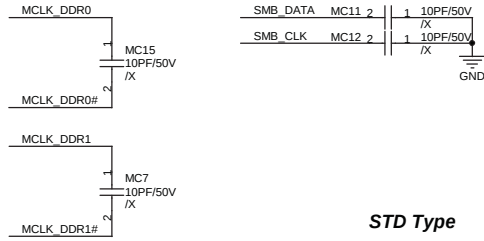
S\_SMB\_CLK << S\_SMB\_CLK (4)  
S\_SMB\_DATA << S\_SMB\_DATA (4)



| WLAN_LED | WLAN | BT |
|----------|------|----|
| High     | v    | v  |
| High     | v    | x  |
| High     | x    | v  |
| Low      | x    | x  |

| SKU          | PCB_ID3<br>SB GPIO 19 | PCB_ID2<br>SB GPIO 34 | PCB_ID1<br>SB GPIO 33 | PCB_ID0<br>SB GPIO 37 |
|--------------|-----------------------|-----------------------|-----------------------|-----------------------|
| DTV          | 1                     | 1                     | 1                     | 1                     |
| BASIC        | 1                     | 1                     | 1                     | 0                     |
| 3.5G         | 1                     | 1                     | 0                     | 1                     |
| GPS          | 1                     | 1                     | 0                     | 0                     |
| WiMAX        | 1                     | 0                     | 1                     | 1                     |
| BASIC (SATA) | 1                     | 0                     | 1                     | 0                     |

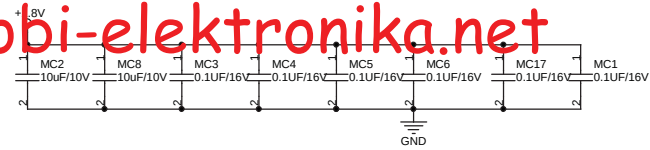




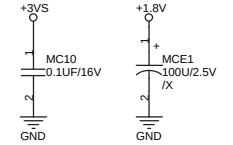
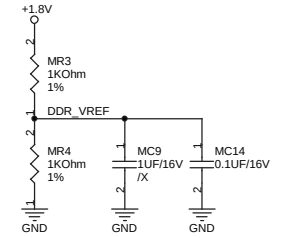
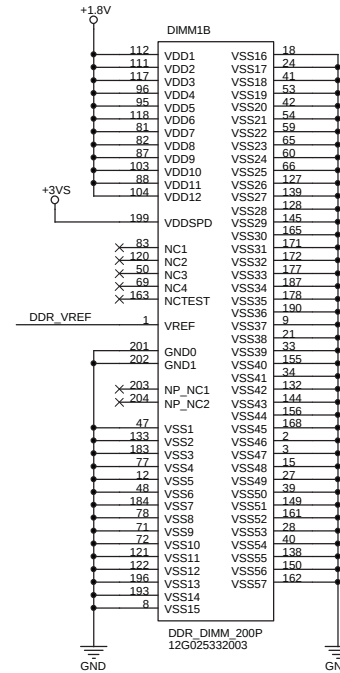
STD Type

| DIMM1A                   |     |          |      |
|--------------------------|-----|----------|------|
| MA MA0                   | 102 | A0       | DQ0  |
| MA MA1                   | 101 | A1       | DQ1  |
| MA MA2                   | 100 | A2       | DQ2  |
| MA MA3                   | 99  | A3       | DQ3  |
| MA MA4                   | 98  | A4       | DQ4  |
| MA MA5                   | 97  | A5       | DQ5  |
| MA MA6                   | 94  | A6       | DQ6  |
| MA MA7                   | 92  | A7       | DQ7  |
| MA MA8                   | 91  | A8       | DQ8  |
| MA MA9                   | 90  | A9       | DQ9  |
| MA MA10                  | 105 | A10/AP   | DQ10 |
| MA MA11                  | 90  | A11      | DQ11 |
| MA MA12                  | 89  | A12      | DQ12 |
| MA MA13                  | 116 | A13      | DQ13 |
|                          | 86  | A14      | DQ14 |
|                          | 84  | A15      | DQ15 |
| MA BA2                   | 85  | A16, BA2 | DQ16 |
| MA BA0                   | 107 | BA0      | DQ17 |
| MA BA1                   | 106 | BA1      | DQ18 |
|                          | 110 | SO#      | DQ19 |
| (8,19) MA_CS#0           | 115 | CK0      | DQ20 |
| (8,19) MA_CS#1           | 30  | CK0#     | DQ21 |
| (8) MCLK_DDR0            | 32  | CK1      | DQ22 |
| (8) MCLK_DDR0#           | 166 | CK1#     | DQ23 |
| (8) MCLK_DDR1            | 79  | CKE0     | DQ24 |
| (8) MCLK_DDR1#           | 80  | CKE1     | DQ25 |
| (8,19) MA_CKE0           | 113 | CAS#     | DQ26 |
| (10,19) MA_CAS#          | 108 | RAS#     | DQ27 |
| (10,19) MA_RAS#          | 109 | WE#      | DQ28 |
| (10,19) MA_WE#           | 198 | SA0      | DQ29 |
|                          | 200 | SA1      | DQ30 |
| (5,17,21,22,23) SMB_CLK  | 197 | SCL      | DQ31 |
| (5,17,21,22,23) SMB_DATA | 195 | SDA      | DQ32 |
|                          | 114 | ODT0     | DQ33 |
| (8,19) MA_ODT0           | 119 | ODT1     | DQ34 |
| (8,19) MA_ODT1           |     |          | DQ35 |
|                          | 10  | DM0      | DQ36 |
| MA DM2                   | 26  | DM1      | DQ37 |
| MA DM1                   | 52  | DM2      | DQ38 |
| MA DM3                   | 67  | DM3      | DQ39 |
| MA DM4                   | 130 | DM4      | DQ40 |
| MA DM5                   | 147 | DM5      | DQ41 |
| MA DM6                   | 170 | DM6      | DQ42 |
| MA DM7                   | 185 | DM7      | DQ43 |
|                          | 13  | DQS0     | DQ44 |
| MA DQS2                  | 31  | DQS1     | DQ45 |
| MA DQS1                  | 51  | DQS2     | DQ46 |
| MA DQS3                  | 70  | DQS3     | DQ47 |
| MA DQS4                  | 131 | DQS4     | DQ48 |
| MA DQS5                  | 148 | DQS5     | DQ49 |
| MA DQS6                  | 169 | DQS6     | DQ50 |
| MA DQS7                  | 188 | DQS7     | DQ51 |
| MA DQS#0                 | 11  | DQS#0    | DQ52 |
| MA DQS#2                 | 29  | DQS#1    | DQ53 |
| MA DQS#1                 | 49  | DQS#2    | DQ54 |
| MA DQS#3                 | 68  | DQS#3    | DQ55 |
| MA DQS#4                 | 129 | DQS#4    | DQ56 |
| MA DQS#5                 | 146 | DQS#5    | DQ57 |
| MA DQS#6                 | 167 | DQS#6    | DQ58 |
| MA DQS#7                 | 186 | DQS#7    | DQ59 |
|                          |     | DQ60     | DQ61 |
|                          |     | DQ62     | DQ63 |

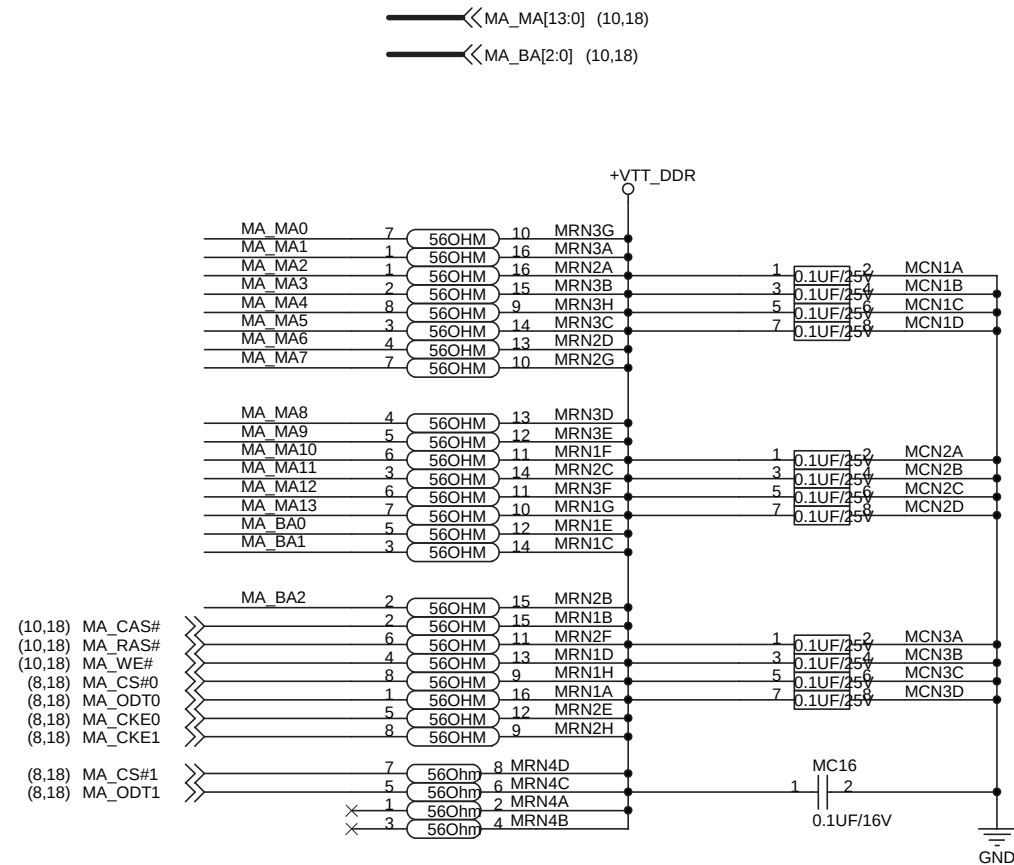
DDR\_DIMM\_200P  
12G025332003



GROUP1  
GROUP2  
SWAP

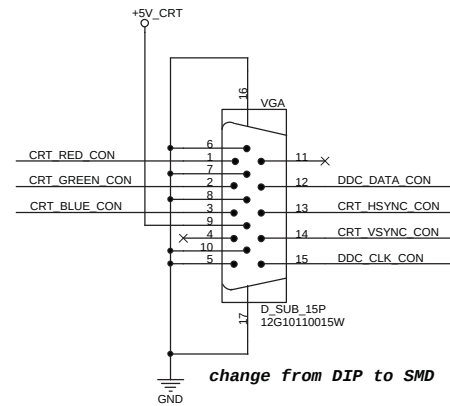
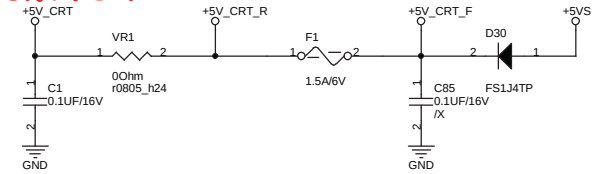
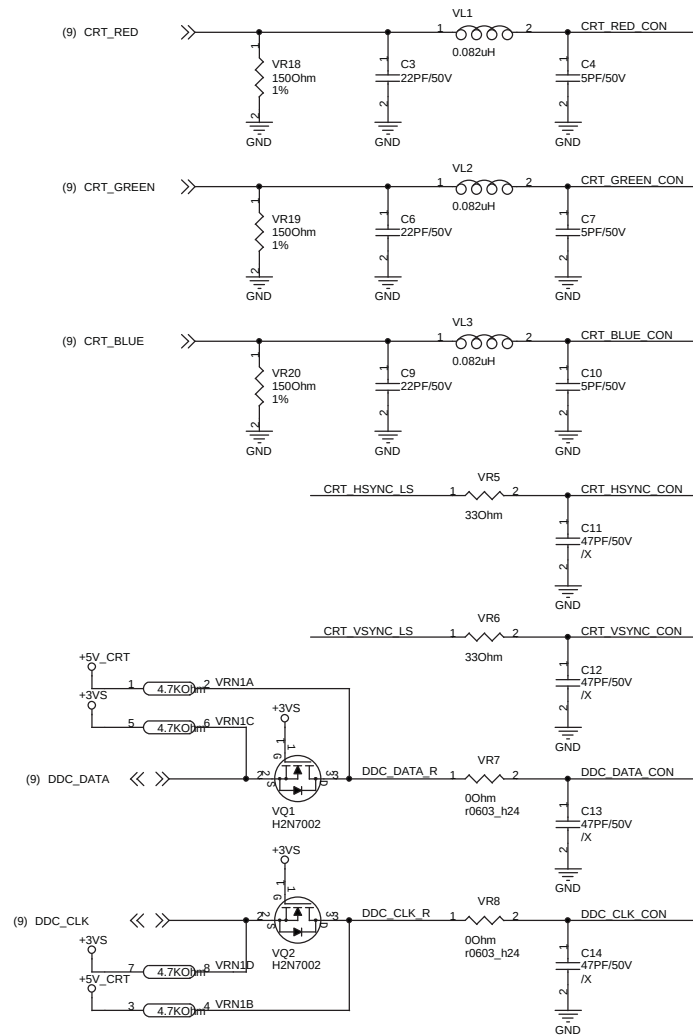


<Core Design>

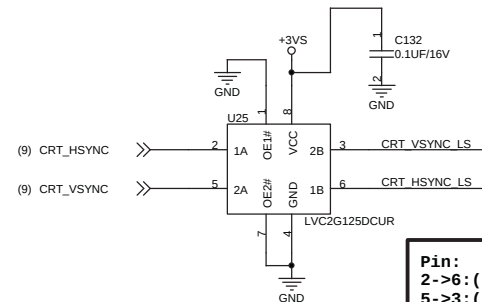
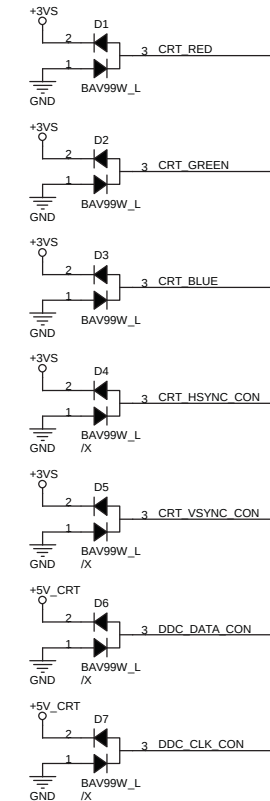


<Core Design>

|                                                                                       |                             |                          |             |
|---------------------------------------------------------------------------------------|-----------------------------|--------------------------|-------------|
|  |                             | Title : DDR2_Termination |             |
| ASUSTek Computer INC.                                                                 |                             | Engineer: Kell_Huang     |             |
| Size<br>A4                                                                            | Project Name<br><b>1000</b> |                          | Rev<br>1.0G |
| Date: Tuesday, August 12, 2008                                                        |                             | Sheet                    | 19 of 47    |



VGA use 12G10110015W & 12G10110015N



<Core Design>

|                                |                             |                             |  |
|--------------------------------|-----------------------------|-----------------------------|--|
| <b>ASUS</b>                    |                             | <b>Title : Onboard VGA</b>  |  |
| ASUSTek Computer INC.          |                             | Engineer: <b>Kell Huang</b> |  |
| Size<br>A3                     | Project Name<br><b>1000</b> | Rev<br>1.0G                 |  |
| Date: Tuesday, August 12, 2008 |                             | Sheet 20 of 47              |  |

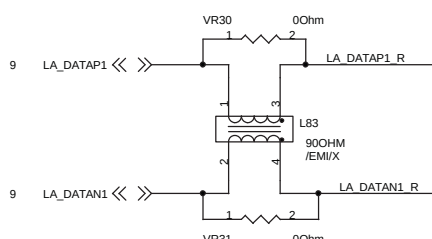
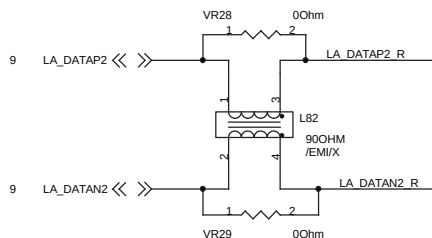
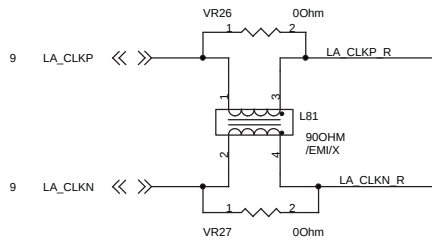
(9) LA\_CLKP <<>>  
(9) LA\_CLKN <<>>  
(9) LA\_DATAP2 <<>>  
(9) LA\_DATAN2 <<>>  
(9) LA\_DATAP1 <<>>  
(9) LA\_DATAN1 <<>>  
(9) LA\_DATAP0 <<>>  
(9) LA\_DATAN0 <<>>

(5,17,18,22,23) SMB\_DATA  
(5,17,18,22,23) SMB\_CLK

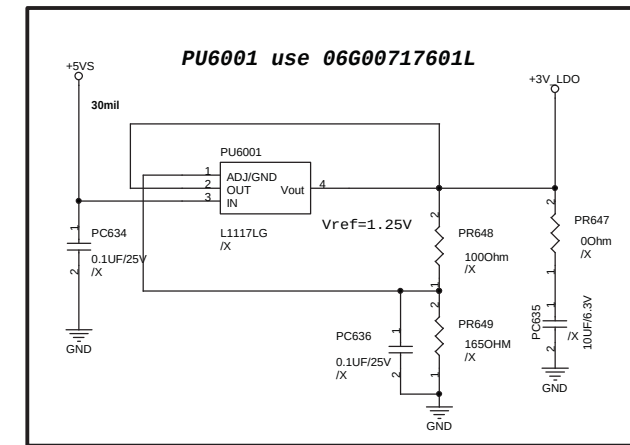
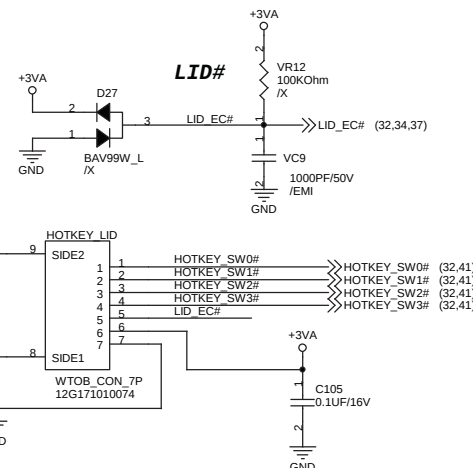
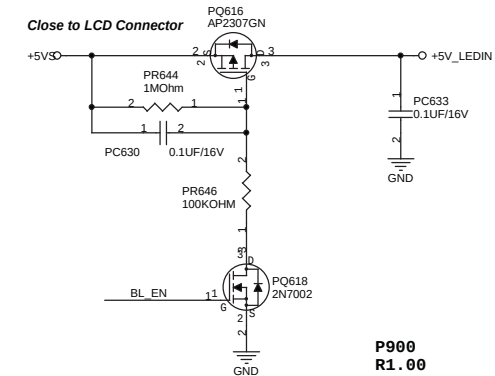
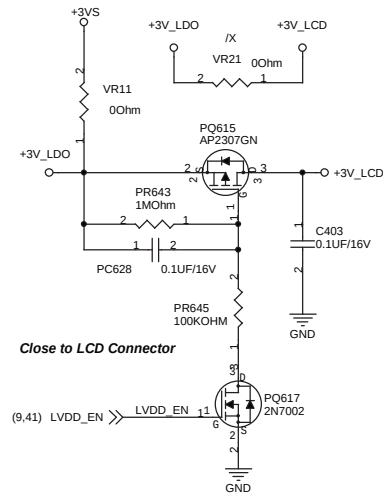
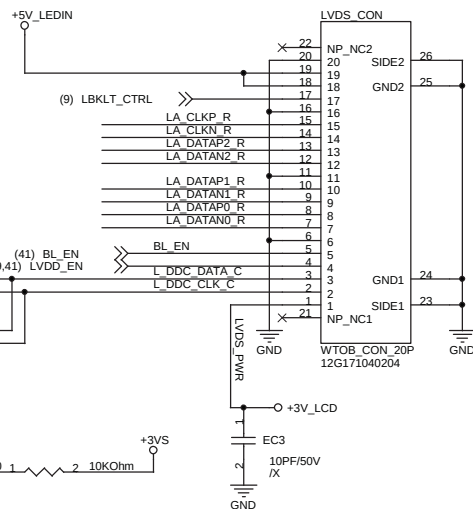
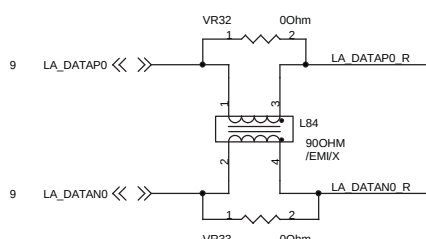
(9) L\_DDC\_DATA  
(9) L\_DDC\_CLK

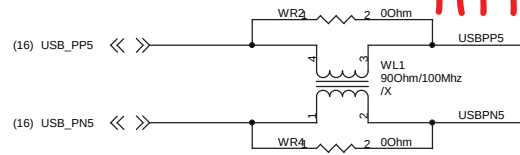
(17) LVDS\_GPIO38  
(17) LVDS\_GPIO39

(9) LBKLT\_EN <<>>  
(32) LCD\_BACKOFF# <<>>  
D26 BATS44W



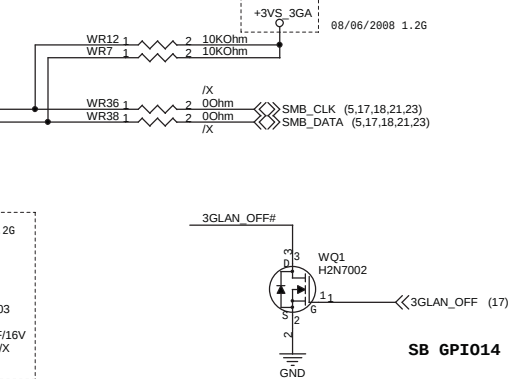
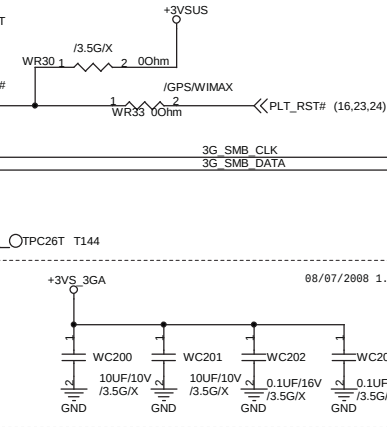
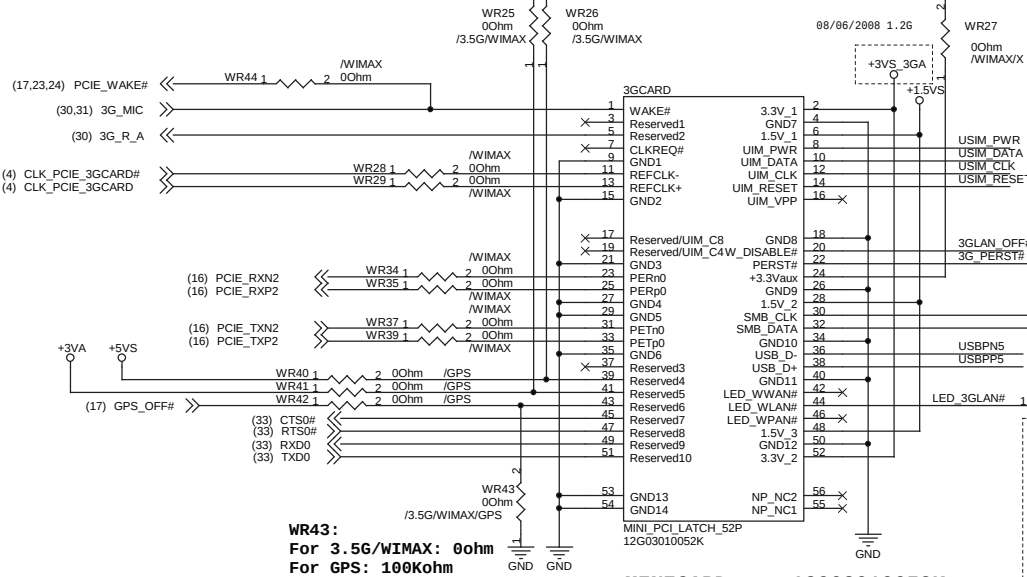
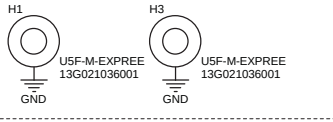
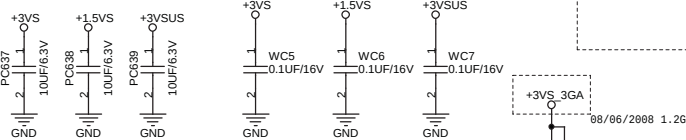
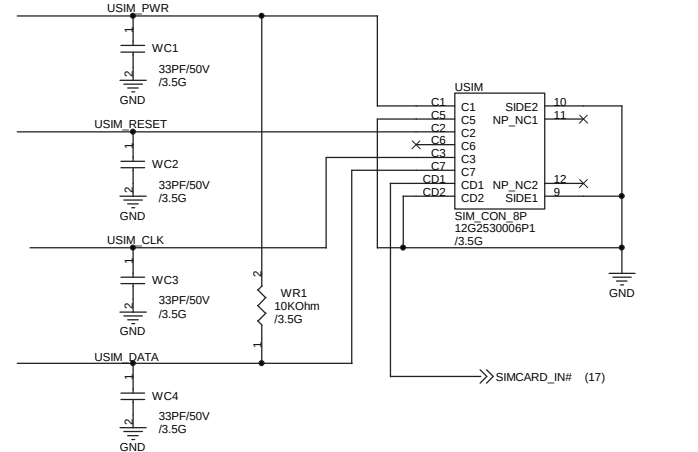
|              |     |   |   |          |
|--------------|-----|---|---|----------|
| L DDC CLK C  | EC1 | 2 | 1 | 10PF/50V |
| L DDC DATA C | EC2 | 2 | 1 | 10PF/50V |
| LA_CLKP_R    | VC1 | 2 | 1 | 10PF/50V |
| LA_CLKN_R    | VC2 | 2 | 1 | 10PF/50V |
| LA_DATAP2_R  | VC3 | 2 | 1 | 10PF/50V |
| LA_DATAN2_R  | VC4 | 2 | 1 | 10PF/50V |
| LA_DATAP1_R  | VC5 | 2 | 1 | 10PF/50V |
| LA_DATAN1_R  | VC6 | 2 | 1 | 10PF/50V |
| LA_DATAP0_R  | VC7 | 2 | 1 | 10PF/50V |
| LA_DATAN0_R  | VC8 | 2 | 1 | 10PF/50V |



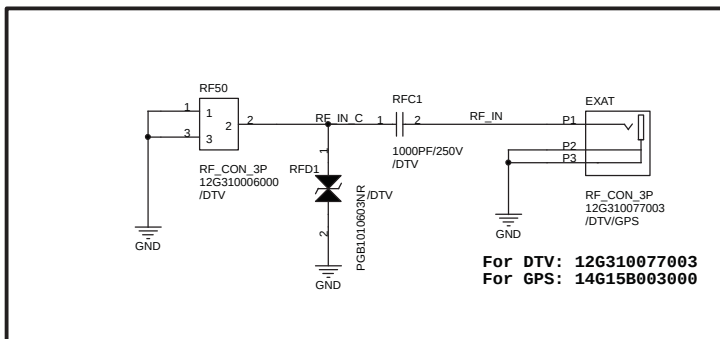


/GPS: AW-OPS-M09  
/DTV: ASUS MC3100U  
/3.5G: SIERRA 8780  
/WIMAX: INTEL5050

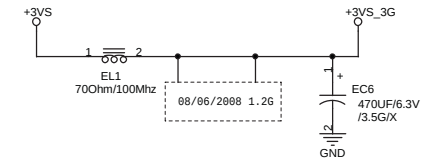
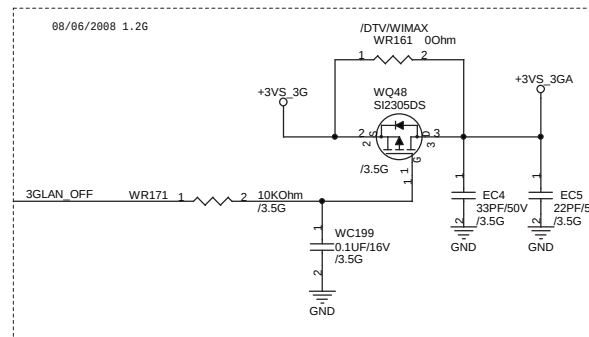
CAP Near SIM Socket



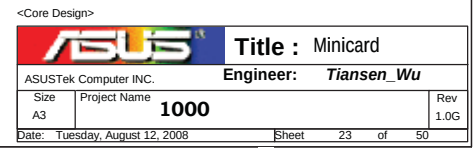
External Antenna

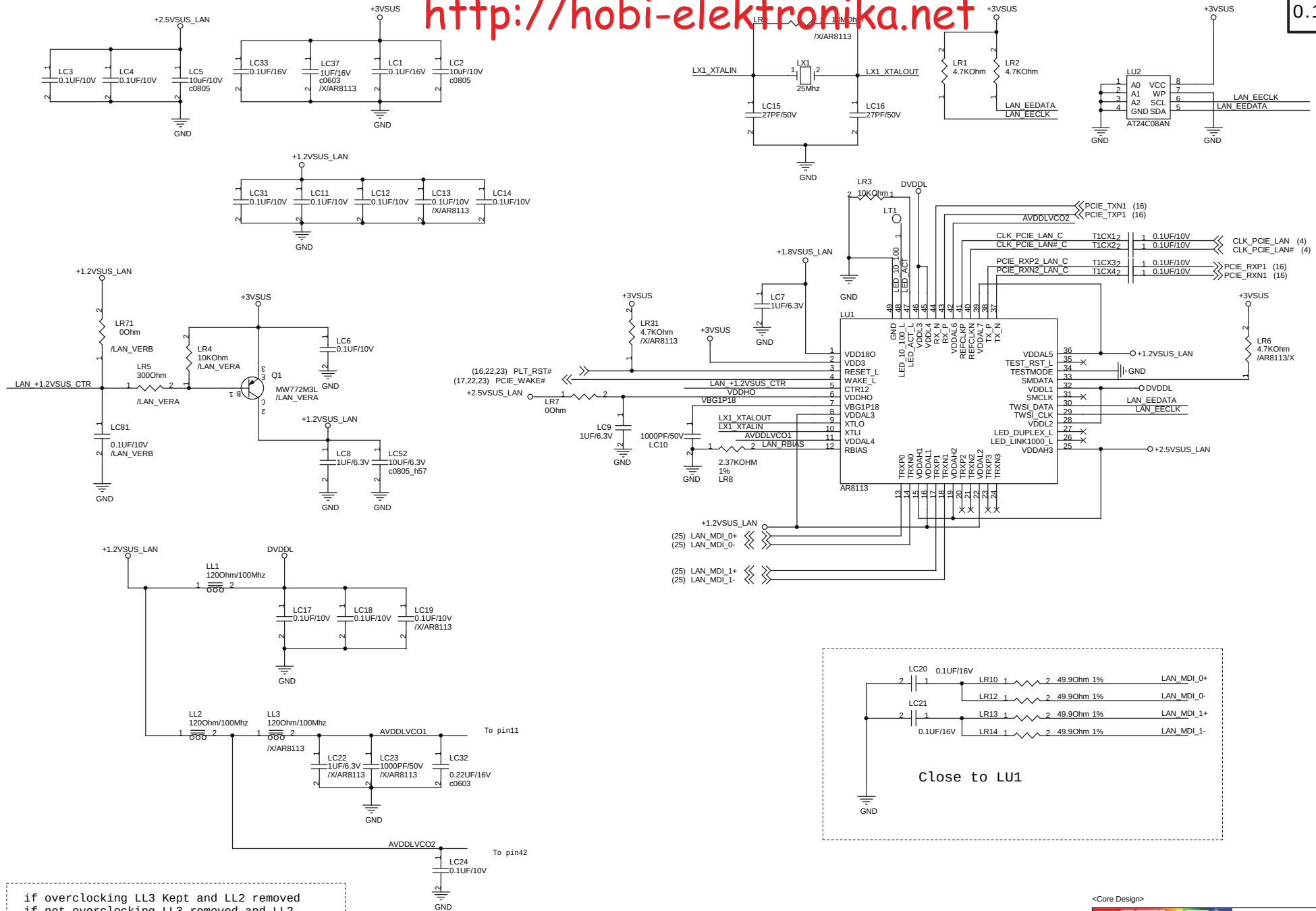


MINICARD use 12G03010052K



1

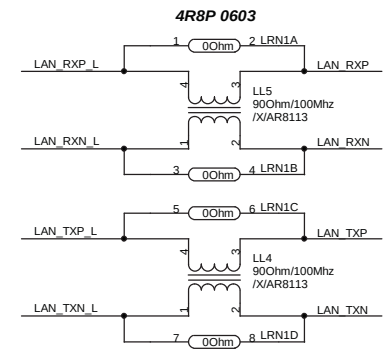
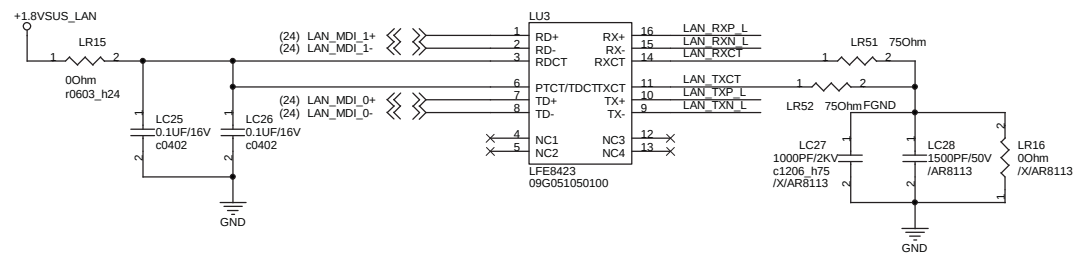




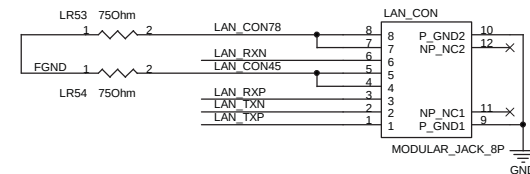
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|                                   |                             |                             |  |
|-----------------------------------|-----------------------------|-----------------------------|--|
| <b>ASUS</b>                       |                             | <b>Title : AR8113</b>       |  |
| ASUSTek Computer INC              |                             | Engineer: <b>Jenen_wang</b> |  |
| Size<br>A3                        | Project Name<br><b>1000</b> | Rev<br>1.0G                 |  |
| Date:<br>Tuesday, August 12, 2008 | Sheet<br>24                 | of<br>50                    |  |

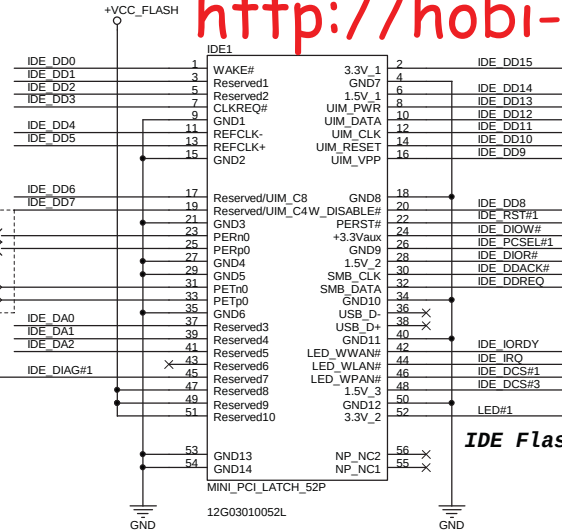
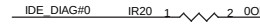
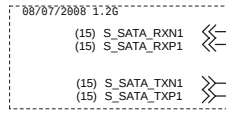
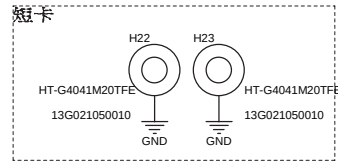




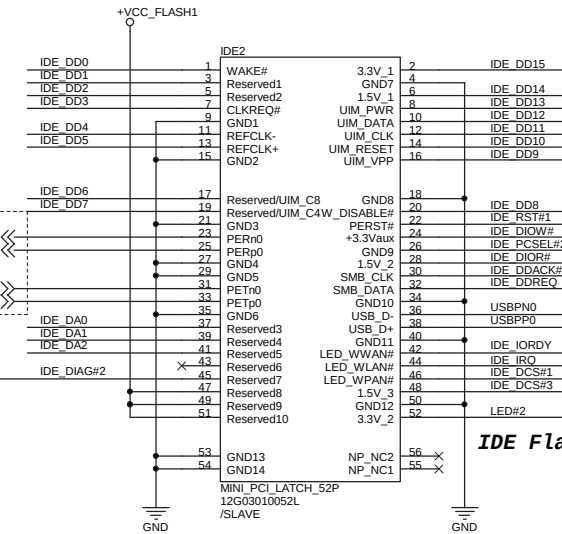
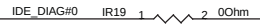
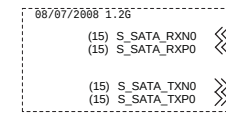
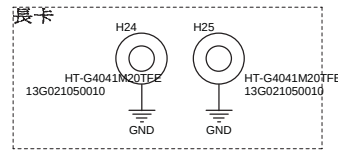
LAN connector: 12G148301086



<Core Design>

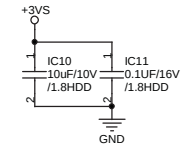
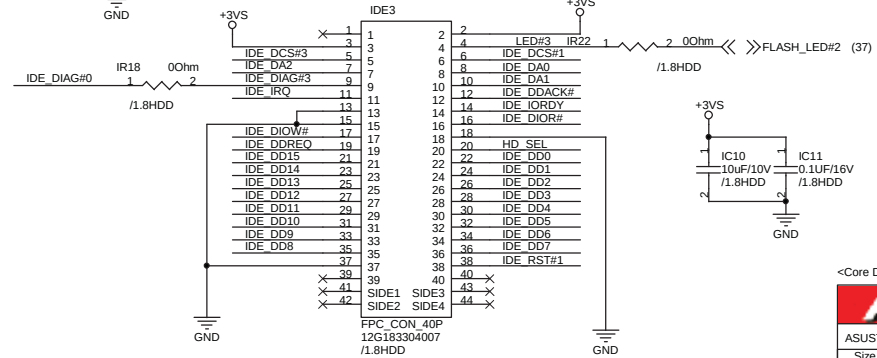
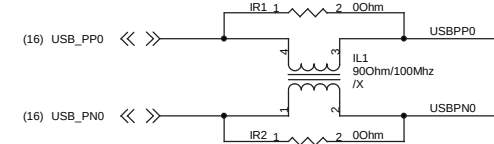
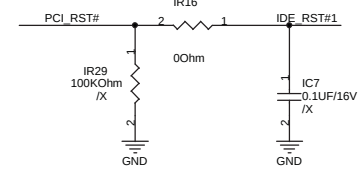
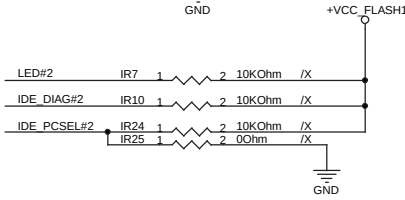
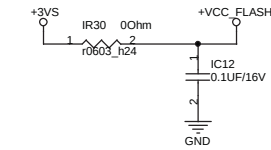
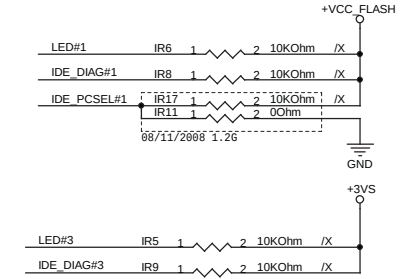
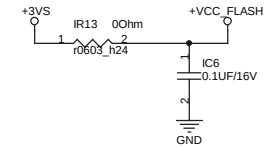
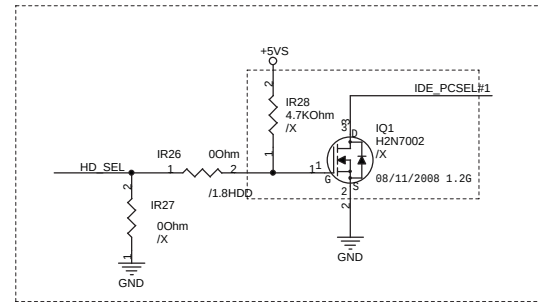


IDE Flash LED

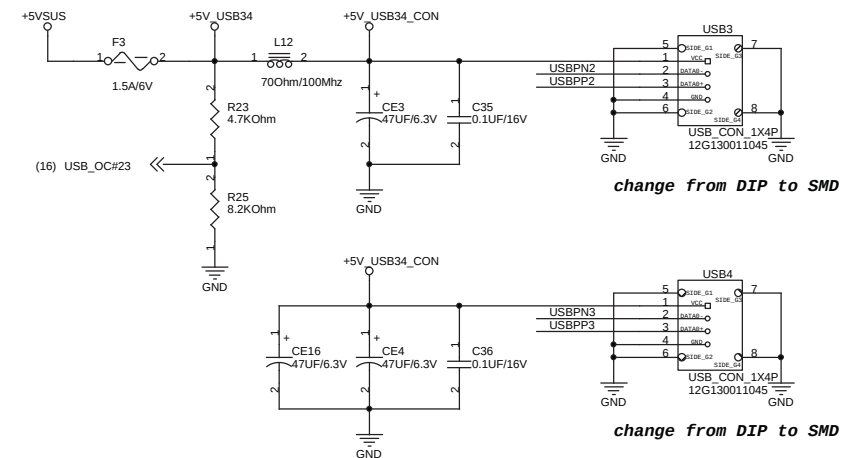
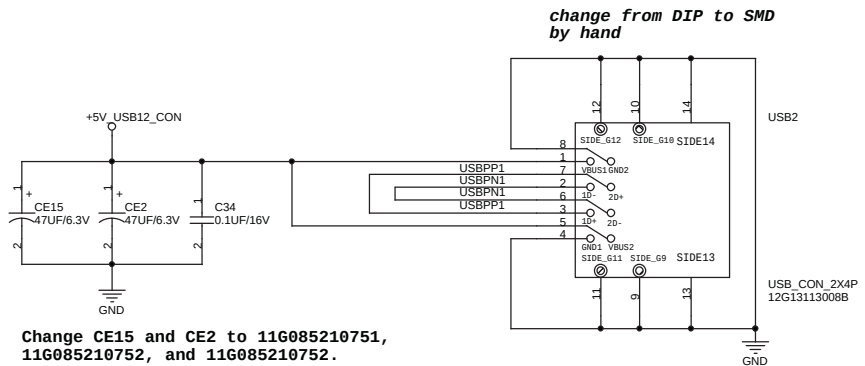
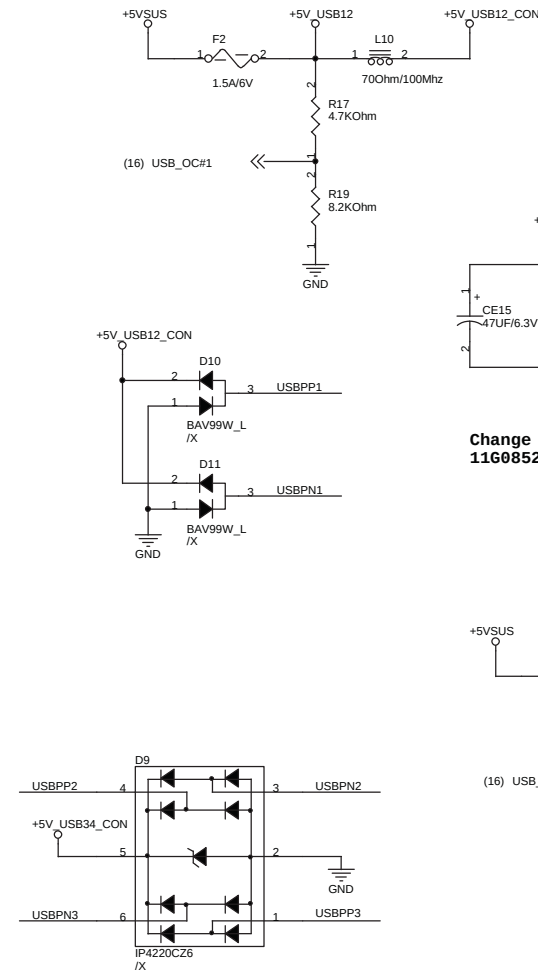
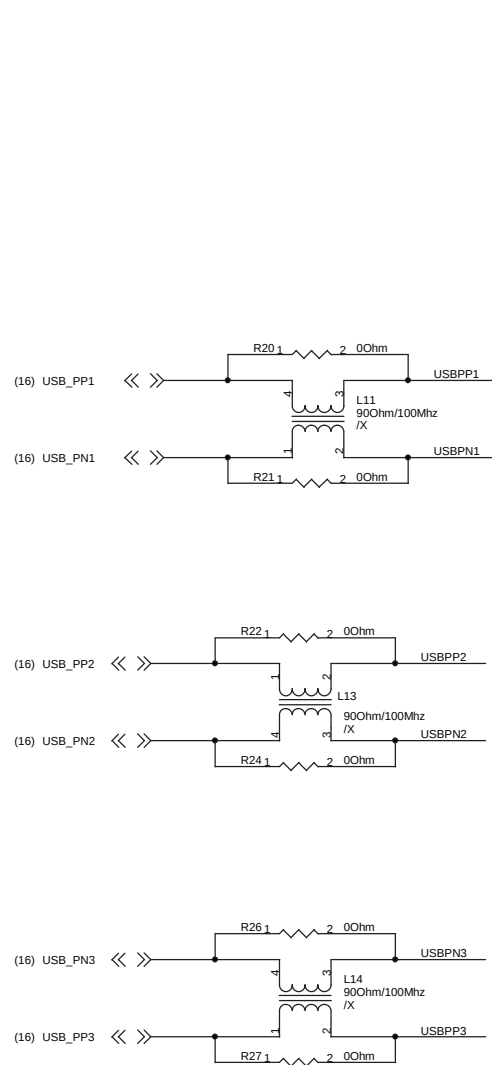


IDE Flash LED

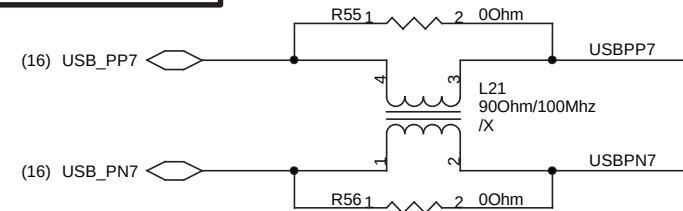
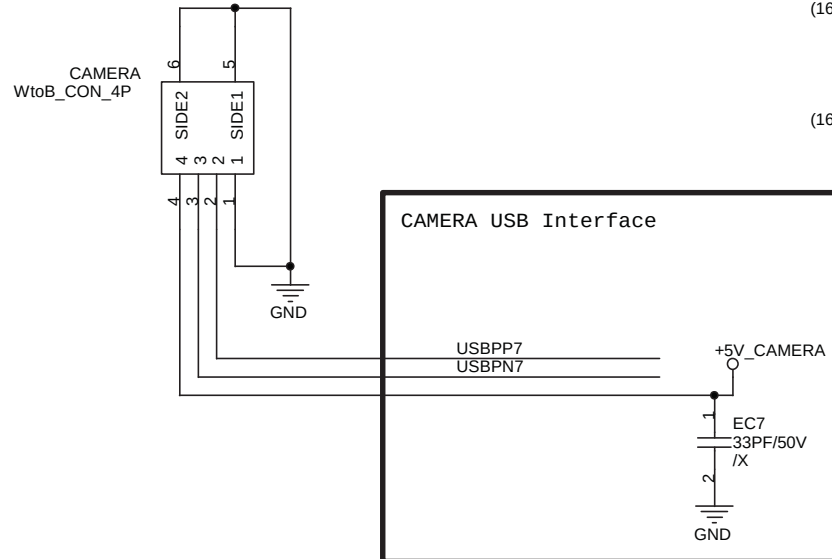
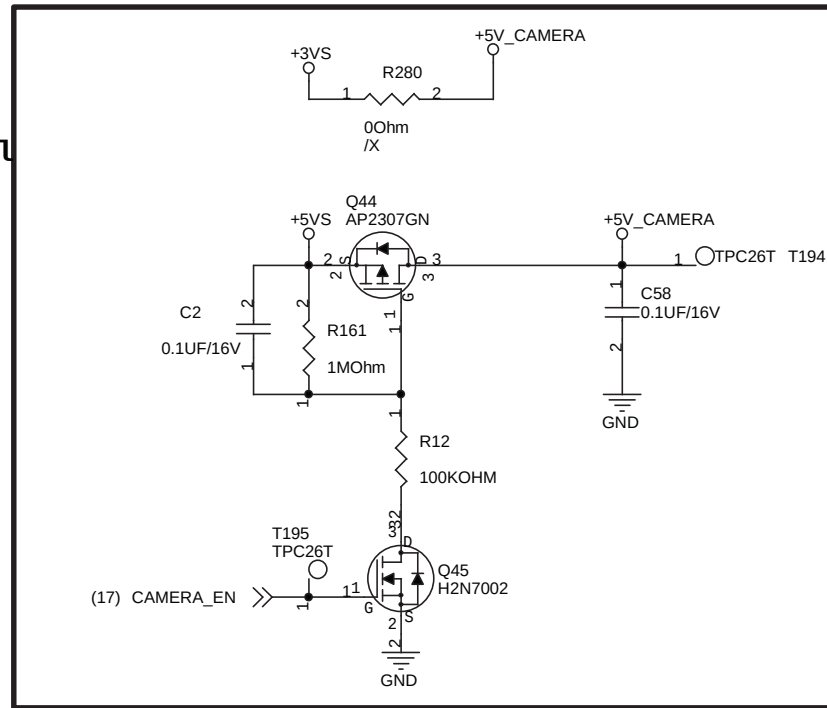
**HD Master/Slave:**  
Master:Low  
Slave :NC or High  
Default :High



**Naming Rule:**  
IC: IU?  
R: IR?  
C: IC?  
L: IL?

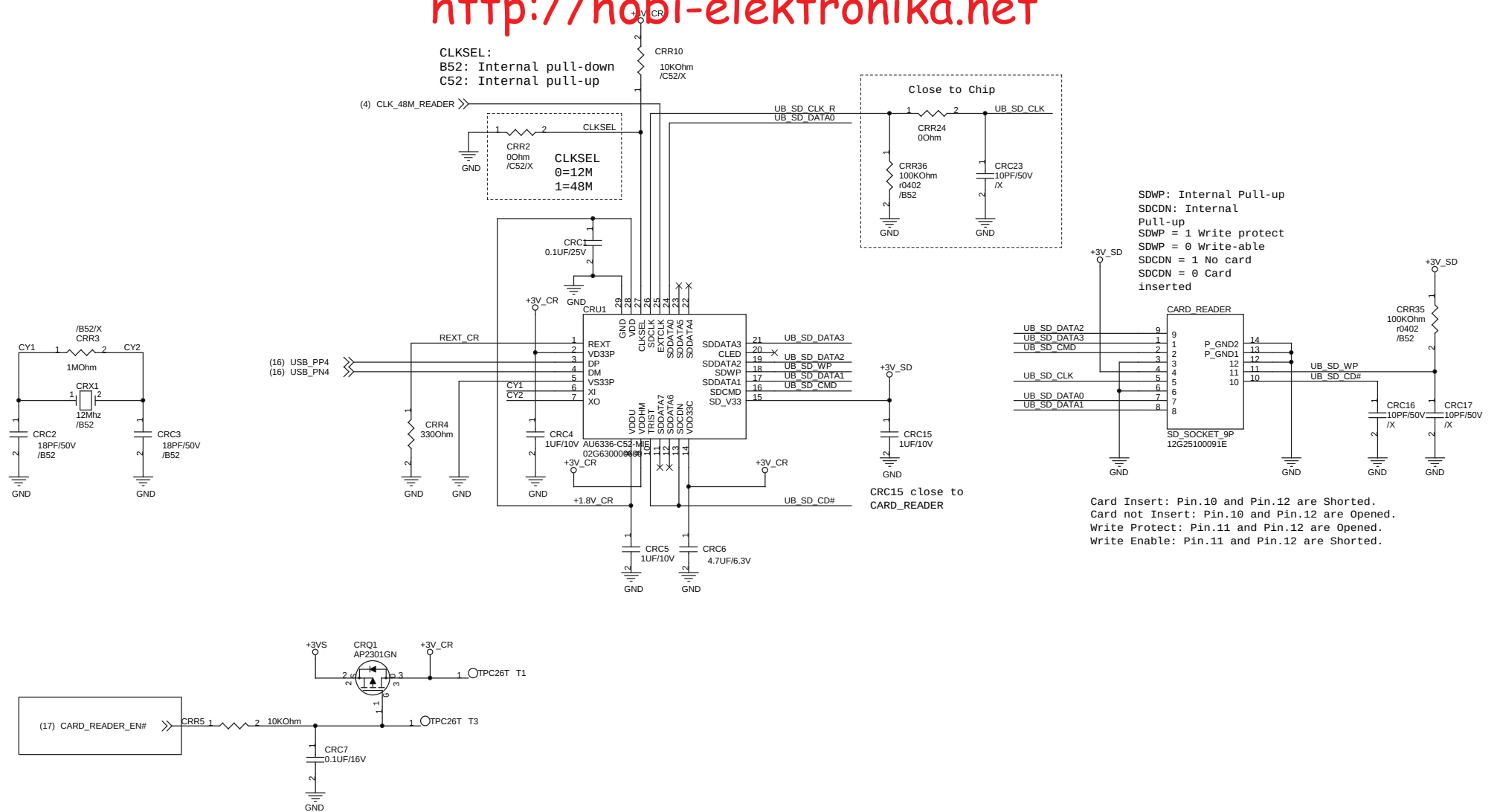


## Power Control



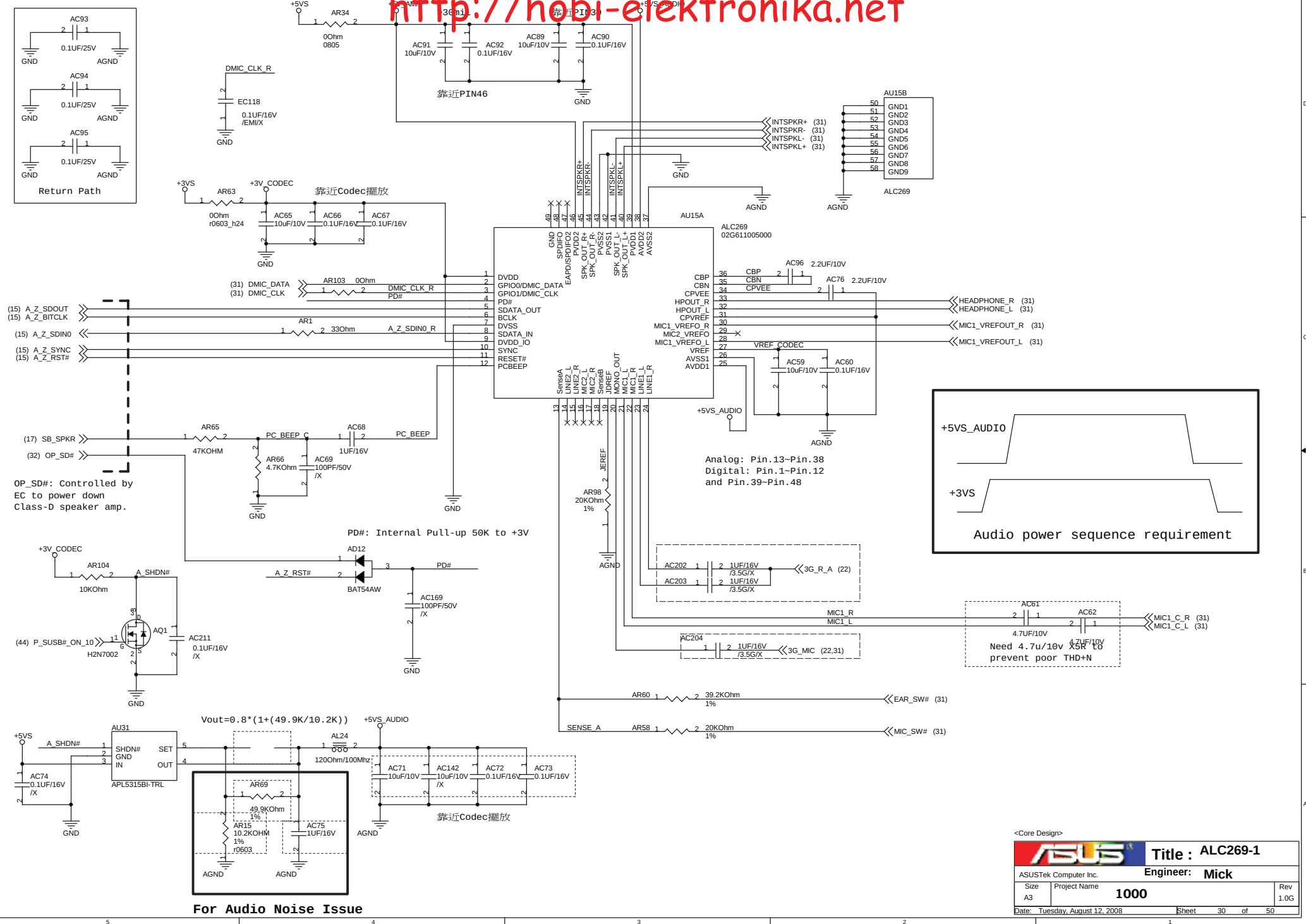
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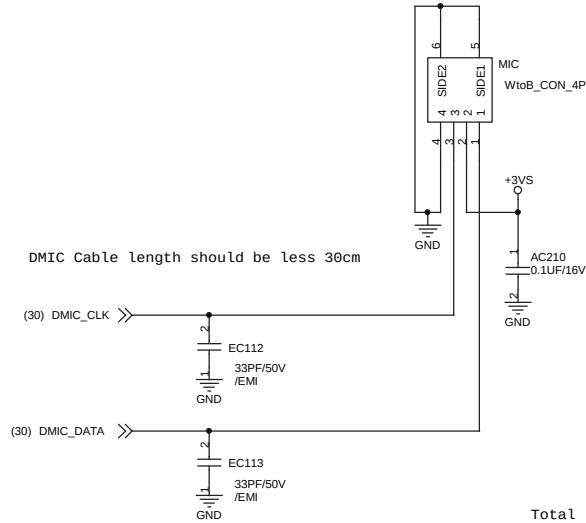
|                                |                             |                             |             |
|--------------------------------|-----------------------------|-----------------------------|-------------|
| <b>ASUS</b>                    |                             | <b>Title : Camera Power</b> |             |
| ASUSTek Computer INC.          |                             | <b>Engineer: Kell_Huang</b> |             |
| Size<br>A4                     | Project Name<br><b>1000</b> |                             | Rev<br>1.0G |
| Date: Tuesday, August 12, 2008 |                             | Sheet 28 of 47              |             |



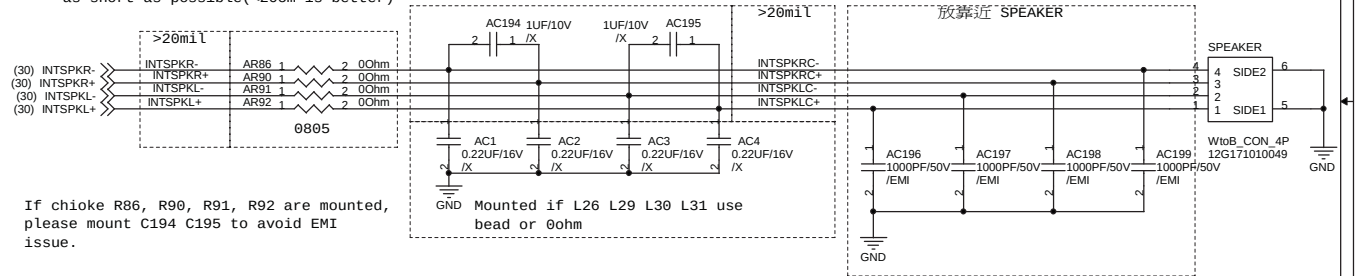
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|                                |                      |                       |  |
|--------------------------------|----------------------|-----------------------|--|
| <b>ASUS</b>                    |                      | Title : AU6336-C52    |  |
| ASUSTek Computer Inc.          |                      | Engineer: Boison Hung |  |
| Size<br>A3                     | Project Name<br>1000 | Rev<br>1.0G           |  |
| Date: Tuesday, August 12, 2008 |                      | Sheet 29 of 50        |  |



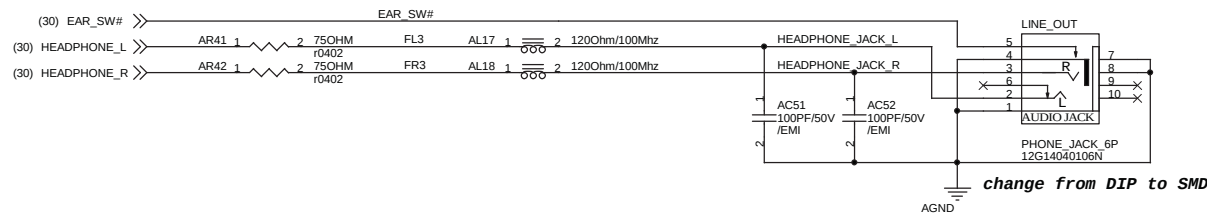


Total length from speakerR+ L+-(pin40 41 44 45) to internal speaker please as short as possible(<20cm is better)



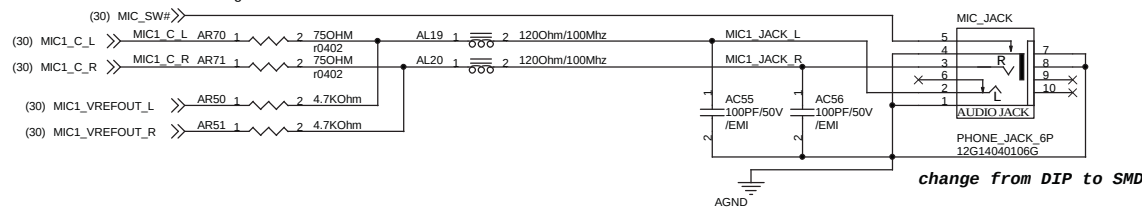
If chioke R86, R90, R91, R92 are mounted, please mount C194 C195 to avoid EMI issue.

### LINE\_OUT use 12G14040106N

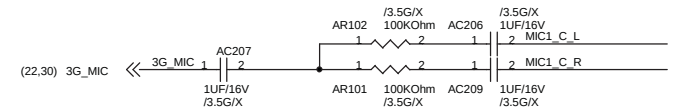


change from DIP to SMD

### MIC\_JACK use 12G14040106G



change from DIP to SMD

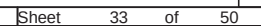


<Core Design>

|                                |                      |                  |  |
|--------------------------------|----------------------|------------------|--|
| <b>ASUS</b>                    |                      | Title : ALC269-2 |  |
| ASUSTek Computer Inc.          |                      | Engineer: MICK   |  |
| Size<br>A3                     | Project Name<br>1000 | Rev<br>1.0G      |  |
| Date: Tuesday, August 12, 2008 |                      | Sheet 31 of 50   |  |

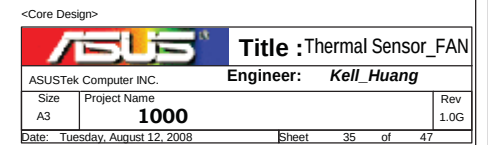






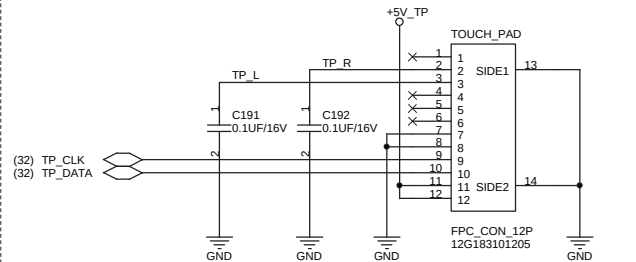
100



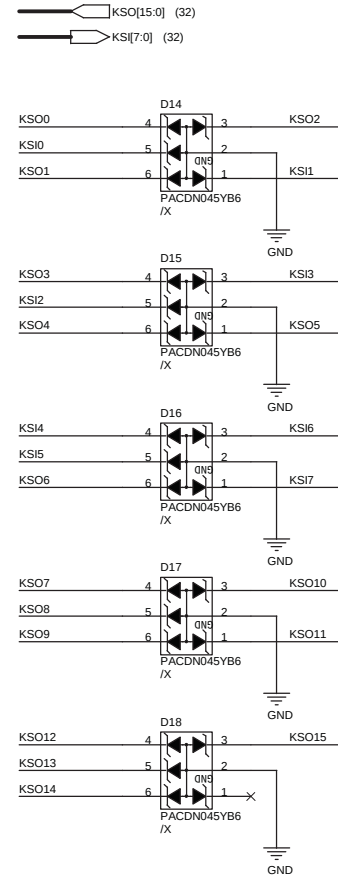
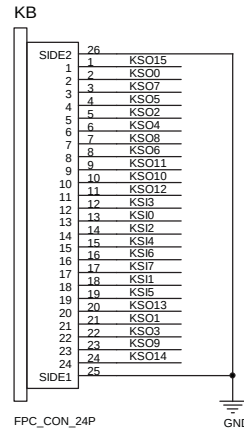
[illegible]

## For Touch-Pad

P900 R1.0G

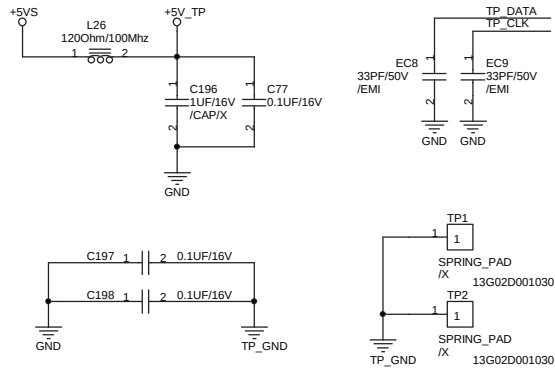
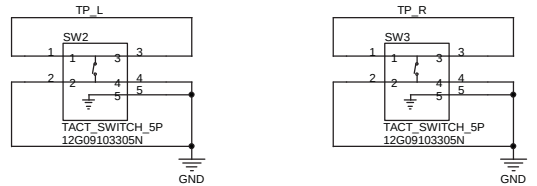


## For Keyboard Connector



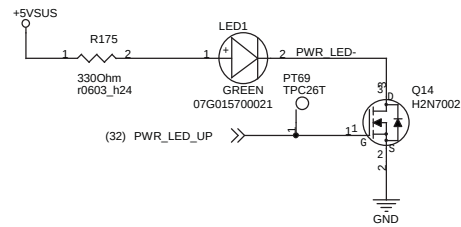
|       |      |   |   |          |
|-------|------|---|---|----------|
| KSI0  | EC10 | 1 | 2 | 33PF/50V |
| KSI1  | EC11 | 1 | 2 | 33PF/50V |
| KSI2  | EC12 | 1 | 2 | 33PF/50V |
| KSI3  | EC13 | 1 | 2 | 33PF/50V |
| KSI4  | EC14 | 1 | 2 | 33PF/50V |
| KSI5  | EC15 | 1 | 2 | 33PF/50V |
| KSI6  | EC16 | 1 | 2 | 33PF/50V |
| KSI7  | EC17 | 1 | 2 | 33PF/50V |
| KSO0  | EC18 | 1 | 2 | 33PF/50V |
| KSO1  | EC19 | 1 | 2 | 33PF/50V |
| KSO2  | EC20 | 1 | 2 | 33PF/50V |
| KSO3  | EC21 | 1 | 2 | 33PF/50V |
| KSO4  | EC22 | 1 | 2 | 33PF/50V |
| KSO5  | EC23 | 1 | 2 | 33PF/50V |
| KSO6  | EC24 | 1 | 2 | 33PF/50V |
| KSO7  | EC25 | 1 | 2 | 33PF/50V |
| KSO8  | EC26 | 1 | 2 | 33PF/50V |
| KSO9  | EC27 | 1 | 2 | 33PF/50V |
| KSO10 | EC28 | 1 | 2 | 33PF/50V |
| KSO11 | EC29 | 1 | 2 | 33PF/50V |
| KSO12 | EC30 | 1 | 2 | 33PF/50V |
| KSO13 | EC31 | 1 | 2 | 33PF/50V |
| KSO14 | EC32 | 1 | 2 | 33PF/50V |
| KSO15 | EC33 | 1 | 2 | 33PF/50V |

SW2, SW3 use 12G09103305N

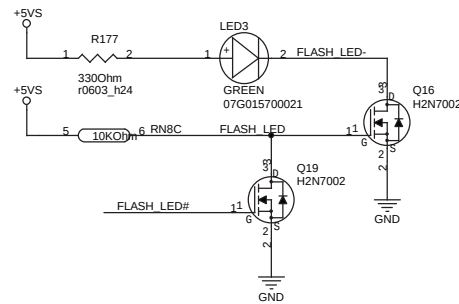


<Core Design>

**for POWER LED**

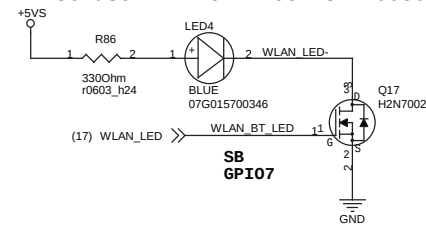


**for FLASH LED**

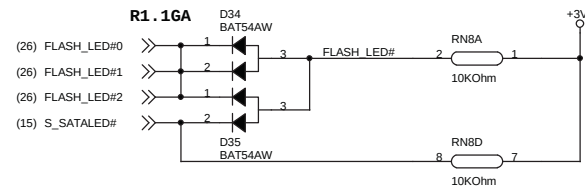
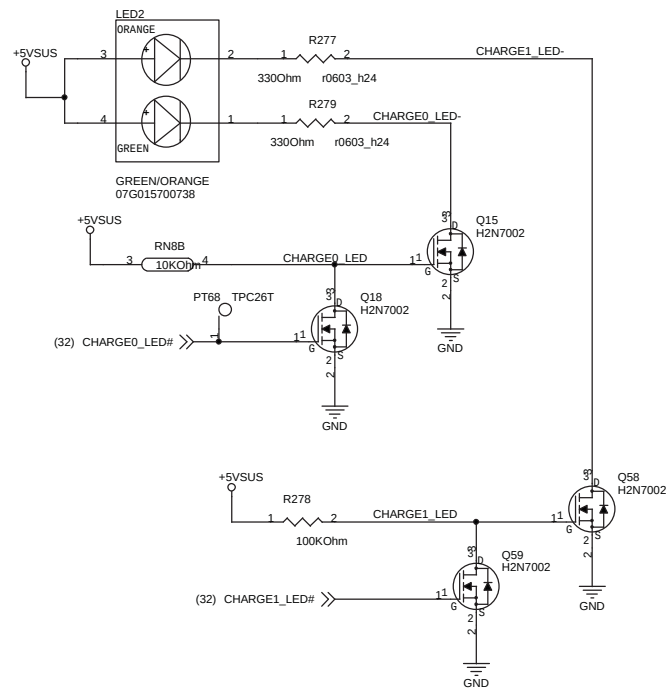


**for WLAN/BlueTooth LED**

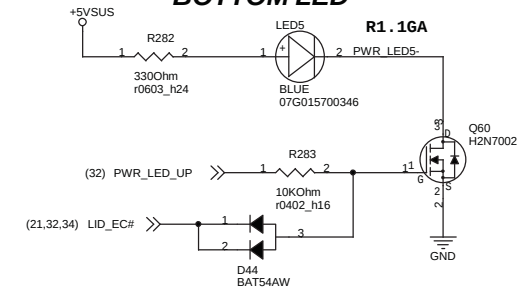
**R86 use 4.7K 0Hm 10G213472003030**



**for CHARGE LED**

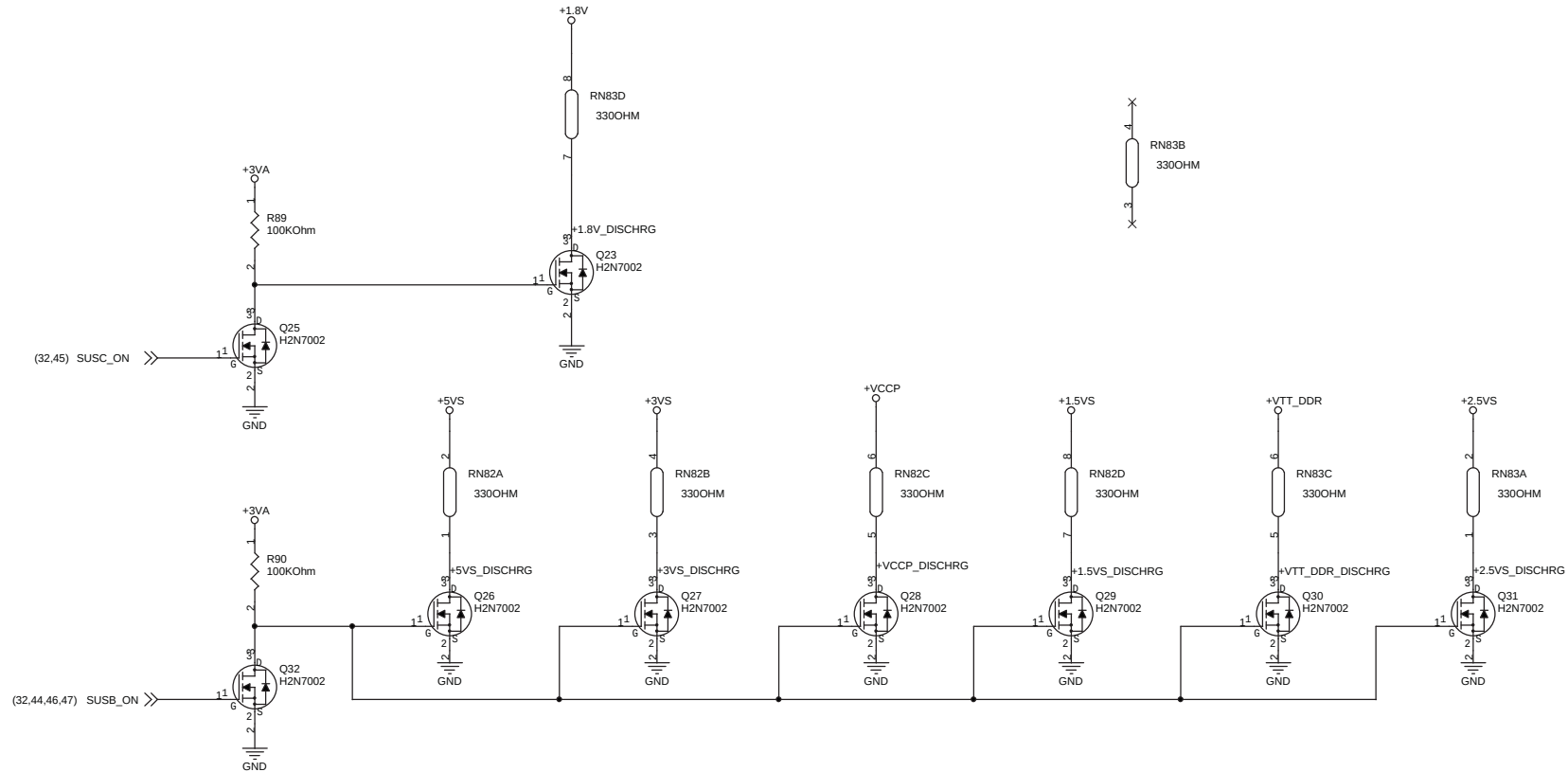


**for POWER BOTTOM LED**



<Core Design>

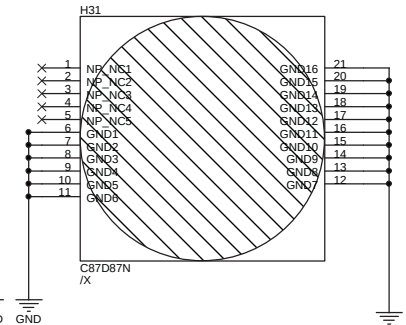
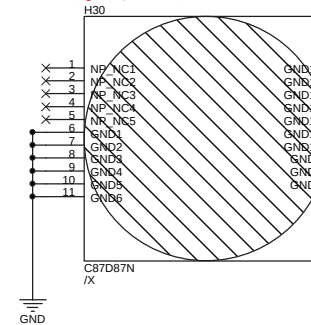
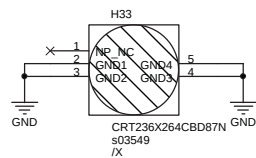
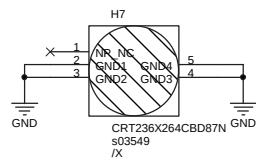
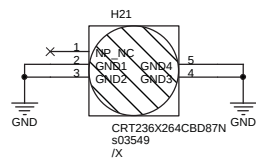
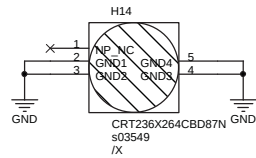
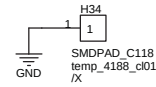
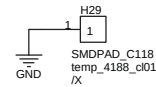
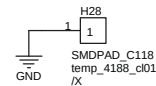
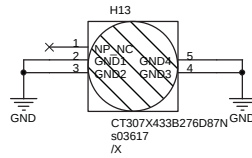
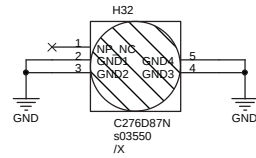
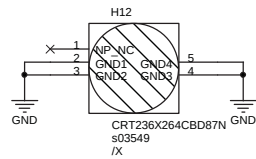
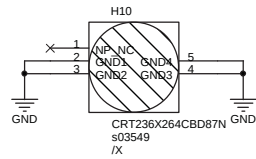
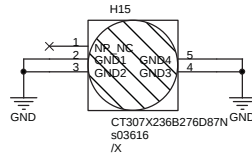
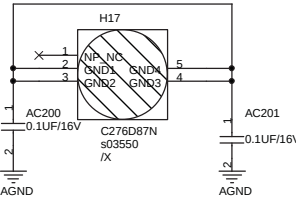
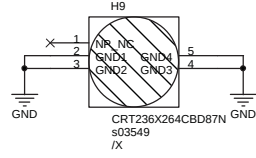
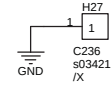
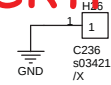
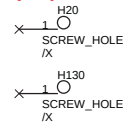
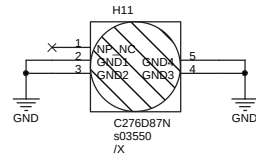
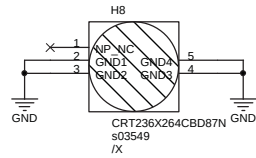
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|--------------------------------|-----------------------------|-----------------------------|--|
| <b>ASUS</b>                    |                             | <b>Title : LED</b>          |  |
| ASUSTek Computer INC.          |                             | Engineer: <b>Kell Huang</b> |  |
| Size<br>A3                     | Project Name<br><b>1000</b> | Rev<br>1.0G                 |  |
| Date: Tuesday, August 12, 2008 |                             | Sheet 37 of 47              |  |



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|                                |                             |                             |       |
|--------------------------------|-----------------------------|-----------------------------|-------|
| <b>ASUS</b>                    |                             | <b>Title : Discharge</b>    |       |
| ASUSTek Computer INC.          |                             | Engineer: <b>Kell_Huang</b> |       |
| Size<br>A3                     | Project Name<br><b>1000</b> | Rev<br>1.0G                 |       |
| Date: Tuesday, August 12, 2008 | Sheet                       | 38                          | of 47 |



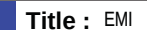


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|                                |                             |                             |       |
|--------------------------------|-----------------------------|-----------------------------|-------|
| <b>ASUS</b>                    |                             | <b>Title : Srew Hole</b>    |       |
| ASUSTek Computer INC.          |                             | Engineer: <b>Kell_Huang</b> |       |
| Size<br>A3                     | Project Name<br><b>1000</b> | Rev<br>1.0G                 |       |
| Date: Tuesday, August 12, 2008 | Sheet                       | 40                          | of 47 |



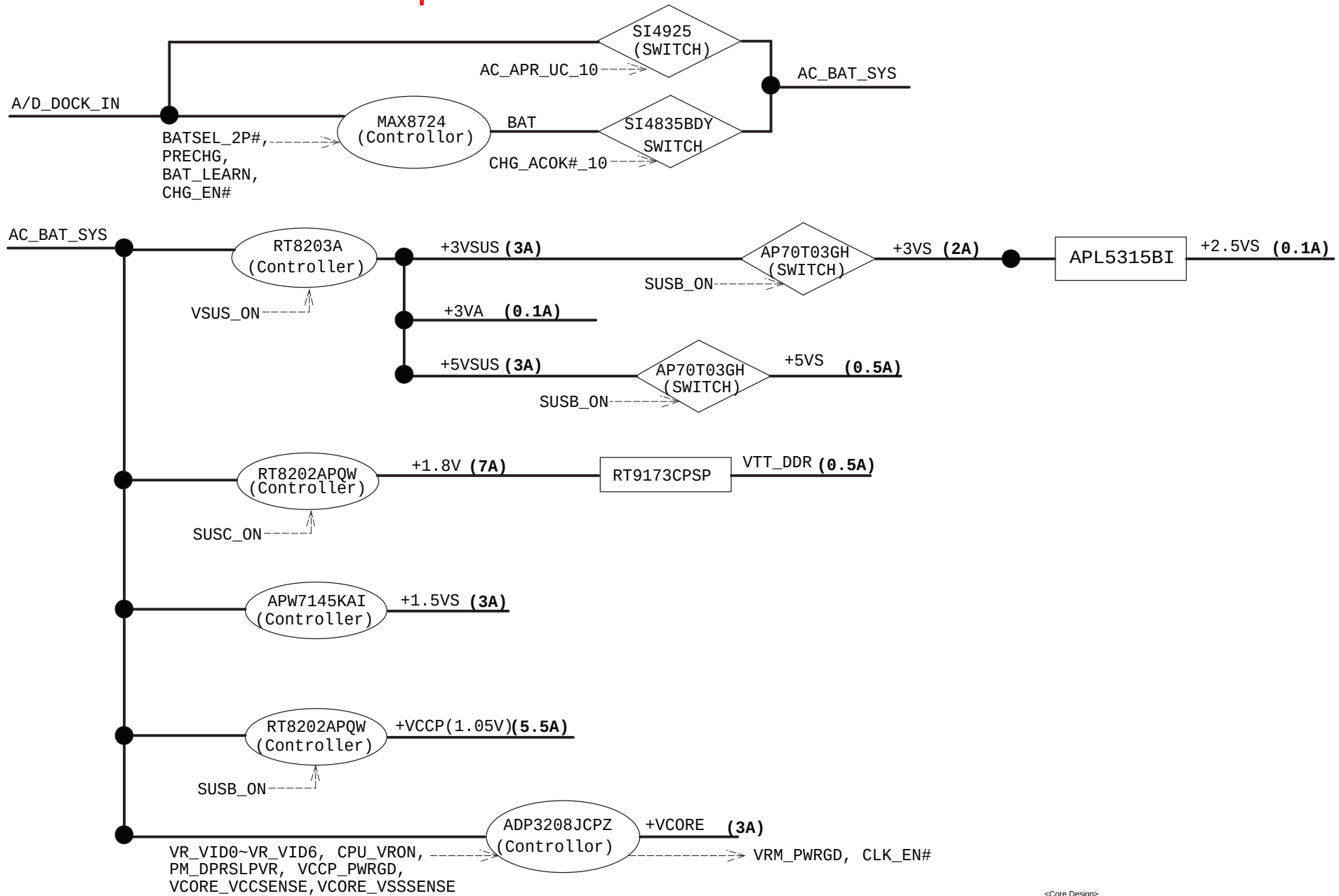
RF CAP :Default Mount



Engineer: *Kell\_Huang*

**1000**

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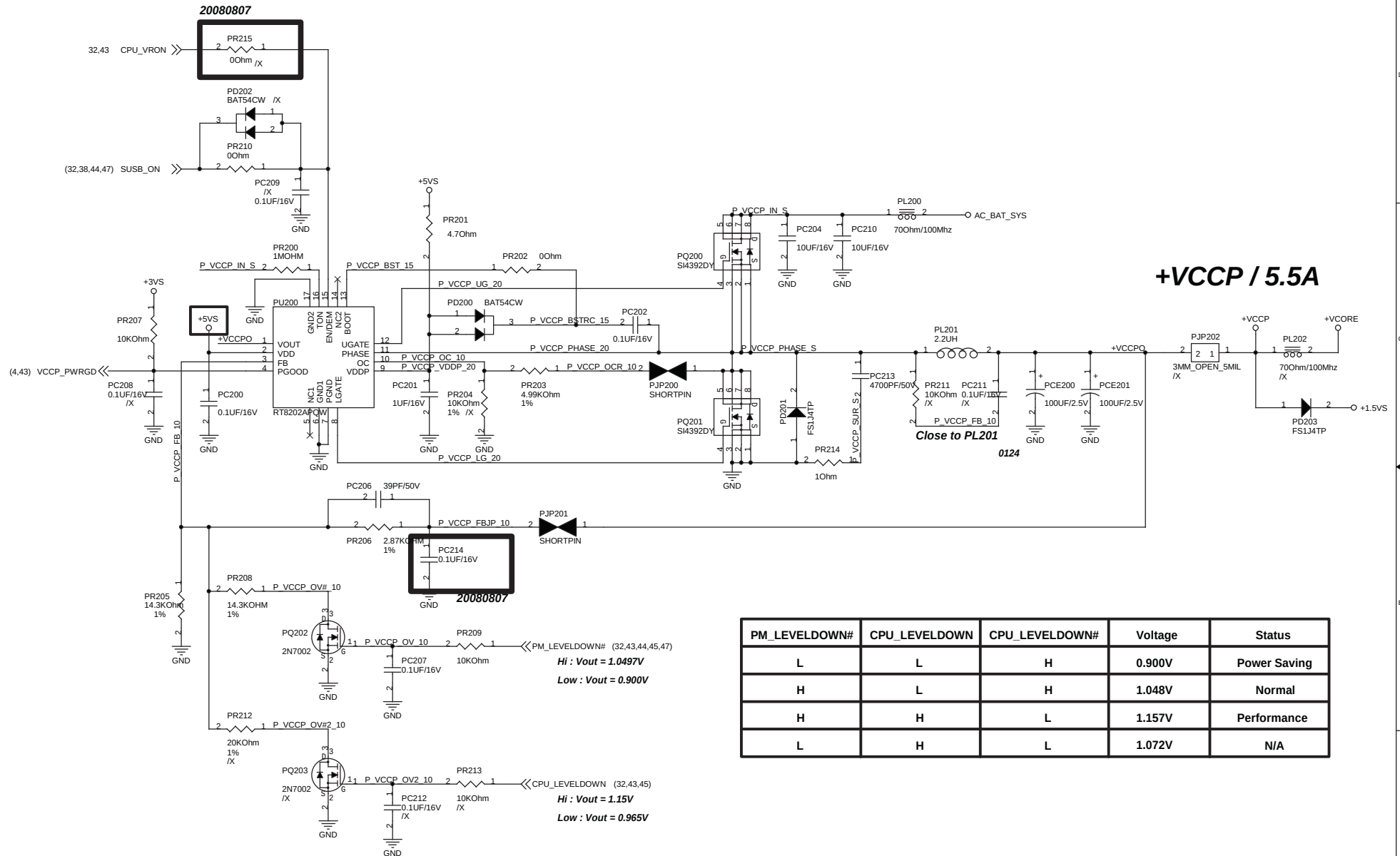
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|                                |                             |                           |       |
|--------------------------------|-----------------------------|---------------------------|-------|
| <b>ASUS</b>                    |                             | <b>Title : Power Flow</b> |       |
| ASUSTek Computer INC.          |                             | Engineer: <b>Joy_Zhou</b> |       |
| Size<br>A3                     | Project Name<br><b>1000</b> | Rev<br>1.0G               |       |
| Date: Tuesday, August 12, 2008 | Sheet                       | 42                        | of 50 |



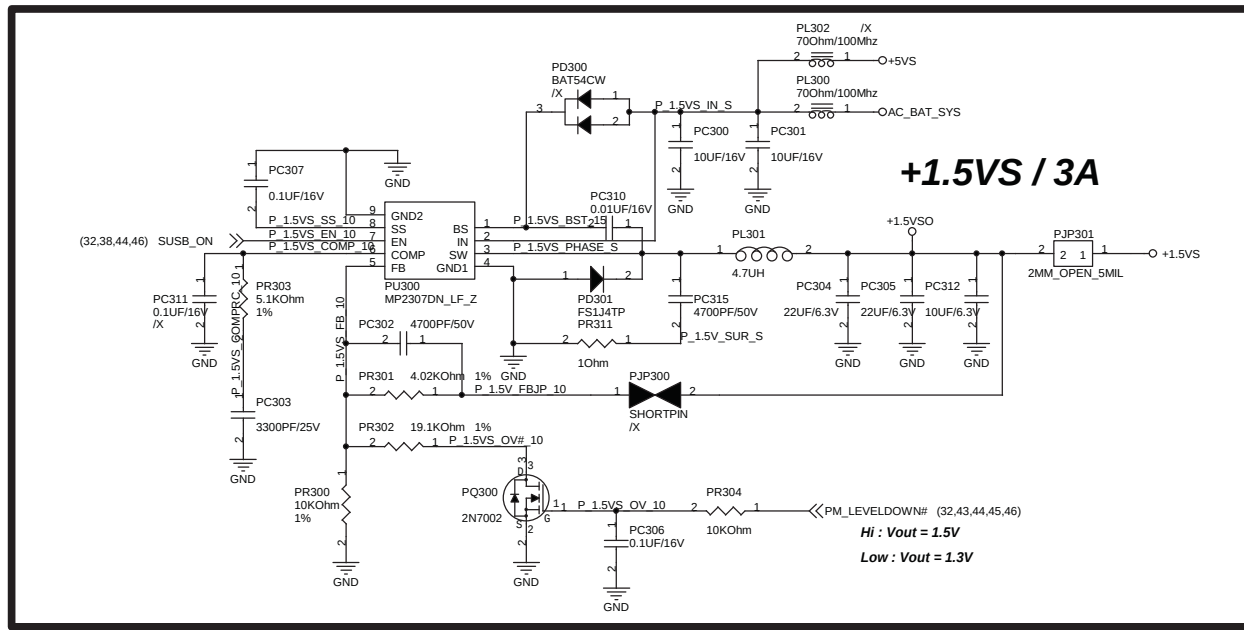
|                                |                             |                                                                                                                           |  |
|--------------------------------|-----------------------------|---------------------------------------------------------------------------------------------------------------------------|--|
| <Core Design>                  |                             |  <b>Title:</b> 3VSUS & +5VSUS & +3VA |  |
| ASUSTeK COMPUTER INC           |                             | <b>Engineer:</b> N/A                                                                                                      |  |
| Size<br>A3                     | Project Name<br><b>1000</b> | Rev<br>1.0G                                                                                                               |  |
| Date: Tuesday, August 12, 2008 |                             | Sheet 44 of 50                                                                                                            |  |



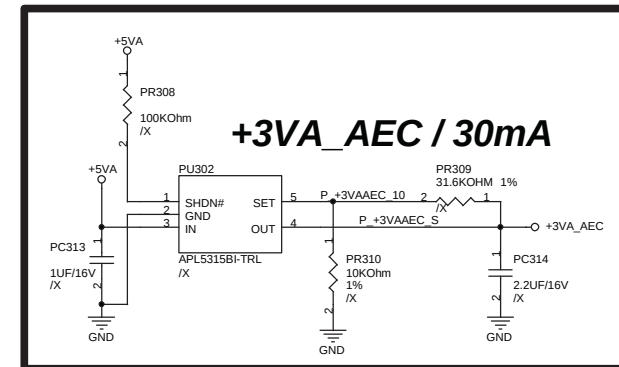
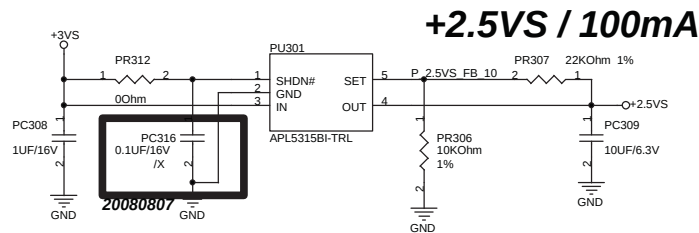


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|                                |                             |                    |  |
|--------------------------------|-----------------------------|--------------------|--|
| <b>ASUS</b>                    |                             | Title : VCCP       |  |
| ASUSTek Computer INC.          |                             | Engineer: Joy_Zhou |  |
| Size<br>A3                     | Project Name<br><b>1000</b> | Rev<br>1.0G        |  |
| Date: Tuesday, August 12, 2008 |                             | Sheet 46 of 50     |  |



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## EC KB3310 GPIO SETTING

| Pin | Pin Name            | Signal Name  | Type | Note                      |
|-----|---------------------|--------------|------|---------------------------|
| 1   | GPIO00/GA20         | A20GATE      | O    |                           |
| 2   | GPIO01/KBRST#       | RC_IN#       | O    |                           |
| 6   | GPIO04              | EMAIL_SW#    | I    | Internal pull high        |
| 13  | GPIO05/PCIRST#      | PCI_RST#     | I    |                           |
| 14  | GPIO07              | BAT_OTP      | I    | Battery over temperature  |
| 15  | GPIO08              | EXTSMI#      | OD   | 10K pull high to +3VSB    |
| 16  | GPIO0A              | LID_EC#      | I    | Internal pull high        |
| 17  | GPIO0B/ESB_CLK      | NC           | O    |                           |
| 18  | GPIO0C/ESB_DAT      | NC           | O    |                           |
| 19  | GPIO0D              | DISTP_SW#    | I    | Internal pull high        |
| 20  | GPIO0E/SCI#         | EXT_SCI#     | O    | 10K pull high to +3VSB    |
| 21  | GPIO0F/PWM0         | BL_PWM_DA    | O    |                           |
| 23  | GPIO10/PWM1         | BAT_CRITICAL | I    | Battery critical capacity |
| 25  | GPIO11/PWM2         | PM_PWRBTN#   | OD   | Internal pull high in ICH |
| 26  | GPIO12/FANPWM1      | FAN0_PWM     | O    | CPU Fan                   |
| 27  | GPIO13/FANPWM2      | FAN1_PWM     | O    | VGA Fan                   |
| 28  | GPIO14/FANFB1       | FAN0_TACH    | I    | CPU FanTach               |
| 29  | GPIO15/FANFB2       | FAN1_TACH    | I    | VGA FanTach               |
| 30  | GPIO16/E51_TX       | E51_TX       | O    | RS232 debug port          |
| 31  | GPIO17/E51_RX       | E51_RX       | I    | RS232 debug port          |
| 32  | GPIO18              | PWR_SW#      | I    | Internal pull high        |
| 34  | GPIO19/PWM3         | MAIL_LED#    | O    |                           |
| 36  | GPIO1A/NUMLED       | NUM_LED#     | O    |                           |
| 38  | GPIO1D/CLKRUN#      | NC           | O    |                           |
| 39  | GPIO20/KSO0/TP_TEST | KSO0         | O    |                           |
| 40  | GPIO21/KSO1/TP_PLL  | KSO1         | O    |                           |
| 41  | GPIO22/KSO2         | KSO2         | O    |                           |
| 42  | GPIO23/KSO3         | KSO3         | O    |                           |
| 43  | GPIO24/KSO4         | KSO4         | O    |                           |
| 44  | GPIO25/KSO5         | KSO5         | O    |                           |
| 45  | GPIO26/KSO6         | KSO6         | O    |                           |
| 46  | GPIO27/KSO7         | KSO7         | O    |                           |
| 47  | GPIO28/KSO8         | KSO8         | O    |                           |
| 48  | GPIO29/KSO9         | KSO9         | O    |                           |
| 49  | GPIO2A/KSO10        | KSO10        | O    |                           |
| 50  | GPIO2B/KSO11        | KSO11        | O    |                           |
| 51  | GPIO2C/KSO12        | KSO12        | O    |                           |
| 52  | GPIO2D/KSO13        | KSO13        | O    |                           |
| 53  | GPIO2E/KSO14        | KSO14        | O    |                           |
| 54  | GPIO2F/KSO15        | KSO15        | O    |                           |
| 55  | GPIO30/KSI0         | KSI0         | I    | Internal pull high        |
| 56  | GPIO31/KSI1         | KSI1         | I    | Internal pull high        |
| 57  | GPIO32/KSI2         | KSI2         | I    | Internal pull high        |
| 58  | GPIO33/KSI3         | KSI3         | I    | Internal pull high        |
| 59  | GPIO34/KSI4         | KSI4         | I    | Internal pull high        |
| 60  | GPIO35/KSI5         | KSI5         | I    | Internal pull high        |
| 61  | GPIO36/KSI6         | KSI6         | I    | Internal pull high        |
| 62  | GPIO37/KSI7         | KSI7         | I    | Internal pull high        |
| 63  | GPI38/AD0           | BAT_ICHG     | I    |                           |
| 64  | GPI39/AD1           | BAT_CONFIG   | I    | Battery configuration     |
| 65  | GPIO3A/AD2          | BAT_SENSE    | I    | Battery Voltage Sensor    |
| 66  | GPIO3B/AD3          | BAT_TS       | I    | Battery Thermal Sensor    |
| 68  | GPO3C/DA0           | DOC          | O    | Trigger Clock Gen         |

## EC KB3310 Other Pin SETTING

| Pin | Pin Name       | Signal Name | Type | Note                      |
|-----|----------------|-------------|------|---------------------------|
| 3   | SERIRQ         | INT_SERIRQ  | I/OD | 10K pull high to +3V      |
| 4   | LFRAME#        | LPC_FRAME#  | I    |                           |
| 5   | LAD3           | LPC_AD3     | I/O  |                           |
| 7   | LAD2           | LPC_AD2     | I/O  |                           |
| 8   | LAD1           | LPC_AD1     | I/O  |                           |
| 9   | VCC            | +3VA_EC     | P    |                           |
| 10  | LAD0           | LPC_AD0     | I/O  |                           |
| 11  | GND            | GND         | P    |                           |
| 12  | PCICLK         | CLK_PCI_EC  | I    |                           |
| 22  | VCC            | +3VA_EC     | P    |                           |
| 24  | GND            | GND         | P    |                           |
| 33  | VCC            | +3VA_EC     | P    |                           |
| 35  | GND            | GND         | P    |                           |
| 37  | ECRST#         | EC_RST#     | I    | 100K pull high to +3VA_EC |
| 67  | AVCC           | +3VACC      | P    |                           |
| 69  | AGND           | AGND        | P    |                           |
| 94  | GND            | GND         | P    |                           |
| 96  | VCC            | +3VA_EC     | P    |                           |
| 111 | VCC            | +3VA_EC     | P    |                           |
| 113 | GND            | GND         | P    |                           |
| 119 | RD#/SPIDI      | SPI_SO      | I    |                           |
| 120 | WR#/SPIDO      | SPI_SI      | O    |                           |
| 112 | XCLKI          | 32KXCLKI    | I    |                           |
| 123 | XCLKO          | 32KXCLKO    | O    |                           |
| 124 | V18R           | V18R        | P    | Reserved 1uF to GND       |
| 125 | VCC            | +3VA_EC     | P    |                           |
| 128 | SPICS#/SELMEM# | SPI_CE#     | O    |                           |

| Pin | Pin Name        | Signal Name   | Type | Note                                |
|-----|-----------------|---------------|------|-------------------------------------|
| 70  | GPO3D/DA1       | LCD_BACKOFF#  | O    |                                     |
| 71  | GPO3E/DA2       | CLK_PWRSERVE# | O    |                                     |
| 72  | GPO3F/DA3       | BAT_LL#       | O    | Battery Low Low                     |
| 73  | GPIO40          | AC_OK         | I    | AC Adaptor Plug in                  |
| 74  | GPIO41          | PM_RSMRST#    | O    | 10K pull down to GND                |
| 75  | GPI42           | BAT_IN        | I    |                                     |
| 76  | GPI43           | CLRTC_EC      | I    |                                     |
| 77  | GPIO44/SCL1     | SMB0_CLK      | I/OD | 4.7K pull high to +3VA_EC           |
| 78  | GPIO45/SDA1     | SMB0_DAT      | I/OD | 4.7K pull high to +3VA_EC           |
| 79  | GPIO46/SCL2     | SMB1_CLK      | I/OD | 10K pull high to +3V                |
| 80  | GPIO47/SDA2     | SMB1_DAT      | I/OD | 10K pull high to +3V                |
| 81  | GPIO48/KSO16    | KB pin 28     | I    | for KB type detection               |
| 82  | GPIO49/KSO17    | KB pin 27     | I    | for KB type detection               |
| 83  | GPIO4A/PSCLK1   | AUO_SCL       | O    | for AUO, default H at S0            |
| 84  | GPIO4B/PSDAT1   | AUO_SDA       | O    | for AUO, default L at S0            |
| 85  | GPIO4C/PSCLK2   | AUO_CSB       | O    | for AUO, default H at S0            |
| 86  | GPIO4D/PSDAT2   | LVDD_EN       | I    | for AUO 7" Panel                    |
| 87  | GPIO4E/PSCLK3   | TP_CLK        | I/OD | 10K pull high to +3V                |
| 88  | GPIO4F/PSDAT3   | TP_DAT        | I/OD | 10K pull high to +3V                |
| 89  | GPIO50/SELIO#   | BATSEL_3S     | O    | Battery series, H:3S, L:4S          |
| 90  | GPIO52/E51_CS#  | CHG_LED_UP#   | O    |                                     |
| 91  | GPIO53/CAPLED   | CAP_LED#      | O    |                                     |
| 92  | GPIO54          | PWR_LED_UP    | O    |                                     |
| 93  | GPIO55/SCRLLED  | SCRL_LED#     | O    |                                     |
| 95  | GPIO56          | PWR4G_SW#     | I    | Internal pull high                  |
| 97  | GPXOA00/SDICS#  | SPI_MODE#     | O    | 4.7K pull down to GND               |
| 98  | GPXOA01/SDICLK  | SUSC_ON       | O    |                                     |
| 99  | GPXOA02/SDIDO   | VSUS_ON       | O    |                                     |
| 100 | GPXOA03         | CPU_VRON      | O    |                                     |
| 101 | GPXOA04         | SUSB_ON       | O    |                                     |
| 102 | GPXOA05         | ICH_PWROK     | O    |                                     |
| 103 | GPXOA06         | VOLT_CTRL     | O    |                                     |
| 104 | GPXOA07         | CHG_EN#       | O    | Battery charging enabled            |
| 105 | GPXOA08         | PRECHG        | O    |                                     |
| 106 | GPXOA09         | SPI_WP#       | O    |                                     |
| 107 | GPXOA10         | OP_SD#        | O    | Audio OP                            |
| 108 | GPXOA11         | BAT_LEARN     | O    |                                     |
| 109 | GPXID0/SDIDI    | BATSEL_2P#    | O    | Battery parallel, H:1P, L:2P~3P     |
| 110 | GPXID1          | NC            | O    |                                     |
| 112 | GPXID2          | THRO_CPU      | O    | Active if CPU temperature over spec |
| 114 | GPXID3          | SUSB#         | I    | 100K pull down to GND               |
| 115 | GPXID4          | SUSC#         | I    | 100K pull down to GND               |
| 116 | GPXID5          | CPUPWR_GD     | I    | Pull high to +3V                    |
| 117 | GPXID6          | VSUS_GD       | I    |                                     |
| 118 | GPXID7          | NC            | O    |                                     |
| 121 | GPIO57          | INTERNET#     | I    | Internal pull high                  |
| 126 | GPIO57/SPICLK   | SPI_CLK       | O    |                                     |
| 127 | GPIO59/TEST_CLK | NC            | O    |                                     |

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|                                                                                       |                             |                              |  |
|---------------------------------------------------------------------------------------|-----------------------------|------------------------------|--|
|  |                             | <b>Title : EC Pin Define</b> |  |
| ASUSTek Computer INC.                                                                 |                             | Engineer: <b>Satan He</b>    |  |
| Size<br>A3                                                                            | Project Name<br><b>1000</b> | Rev<br>1.0G                  |  |
| Date: Tuesday, August 12, 2008                                                        |                             | Sheet 49 of 50               |  |

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|                                                                                       |                             |                           |             |
|---------------------------------------------------------------------------------------|-----------------------------|---------------------------|-------------|
|  |                             | Title : History           |             |
| ASUSTek Computer INC.                                                                 |                             | Engineer: <b>Satan He</b> |             |
| Size<br>A3                                                                            | Project Name<br><b>1000</b> |                           | Rev<br>1.0G |
| Date: Tuesday, August 12, 2008                                                        |                             | Sheet 50 of 50            |             |