

# Cambridge

CPU : AMD s1g2  
Chip Set : AMD RX781M + SB700  
Remarks :

Model Name : Cambridge  
PBA Name : MAIN  
PCB Code : BA41-00XXXXA

Dev. Step : PR  
Revision : for review  
T.R. Date : 2008.08.18

| DRAW | CHECK | APPROVAL |
|------|-------|----------|
|      |       |          |
|      |       |          |

Owner : SEC Mobile R & D      Signature :      X

|             |    |           |                           |       |              |                        |
|-------------|----|-----------|---------------------------|-------|--------------|------------------------|
| DRAW        | JM | DATE      | 1/10/2008                 | TITLE | Cambridge    | SAMSUNG<br>ELECTRONICS |
| CHECK       | KS | DEV. STEP | PV                        | COVER | PART NO.     |                        |
| APPROVAL    | JG | REV       | 1.0                       |       | BA41-00xxxxA |                        |
| MODULE CODE |    | LAST EDIT | July 19, 2008 11:30:36 AM | PAGE  | 1 OF 47      |                        |



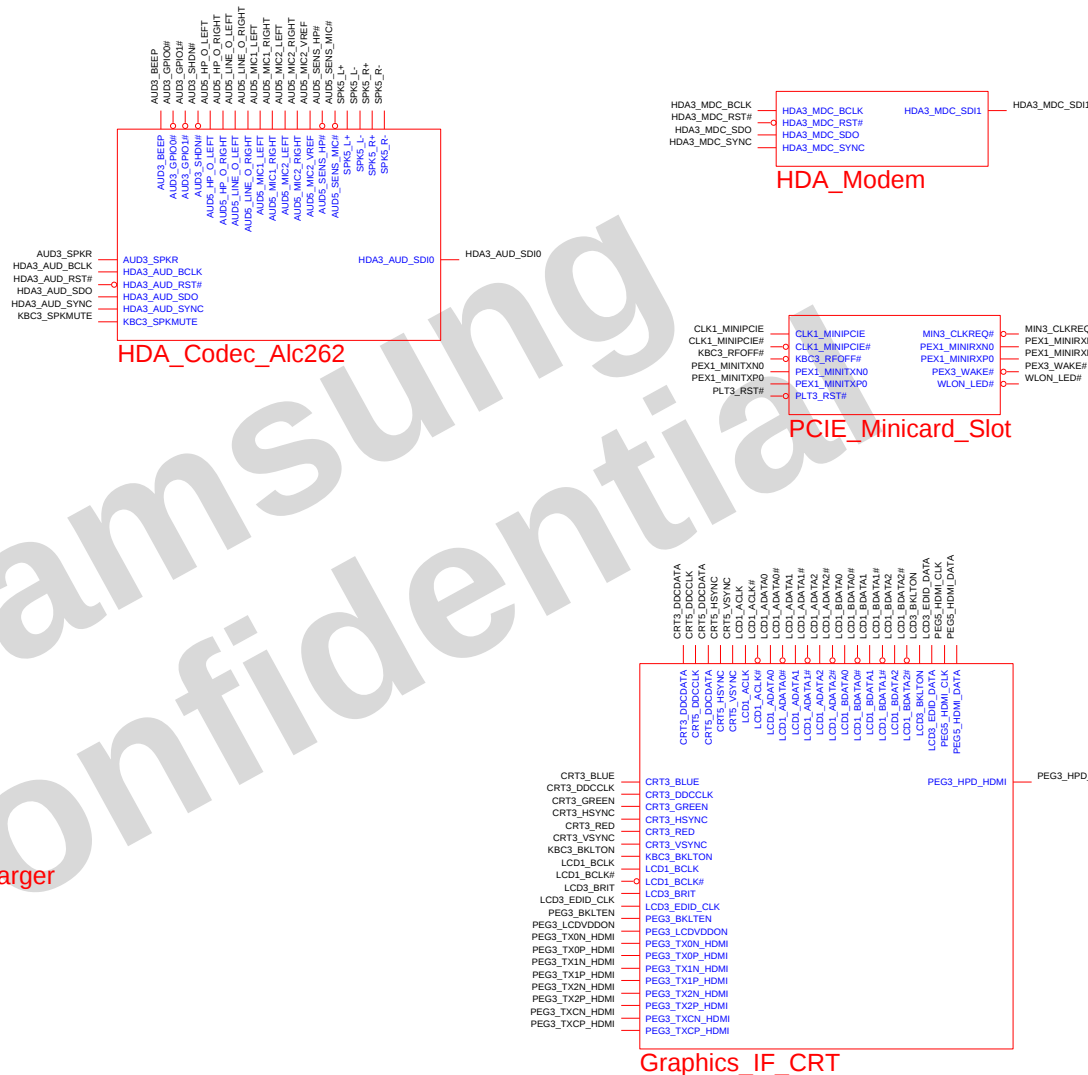
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| DRAW        | JM        | DATE      | 1/10/2008                 | TITLE | Cambridge<br>MAIN<br>PENRYN CPU (1/3) |      | SAMSUNG<br>ELECTRONICS |             |
| CHECK       | KS        | DEV. STEP | PV                        |       |                                       |      | PART NO.               | BA41-00xxxA |
| APPROVAL    | JG        | REV       | 1.0                       |       |                                       |      |                        |             |
| MODULE CODE | LAST EDIT |           | July 19, 2008 11:30:36 AM |       |                                       | PAGE | 8                      | OF 47       |



|             |           |           |                           |                                         |                               |  |
|-------------|-----------|-----------|---------------------------|-----------------------------------------|-------------------------------|--|
| DESIGN      | JM        | DATE      | 1/10/2008                 | Cambridge<br>CHIPSET POWER<br>UNDEFINED | <b>SAMSUNG</b><br>ELECTRONICS |  |
| CHECK       | KS        | DEV. STEP | PV                        |                                         |                               |  |
| APPROVAL    | JG        | REV       | 1.0                       |                                         |                               |  |
| MODULE CODE | LAST EDIT |           | July 19, 2008 11:30:36 AM |                                         |                               |  |

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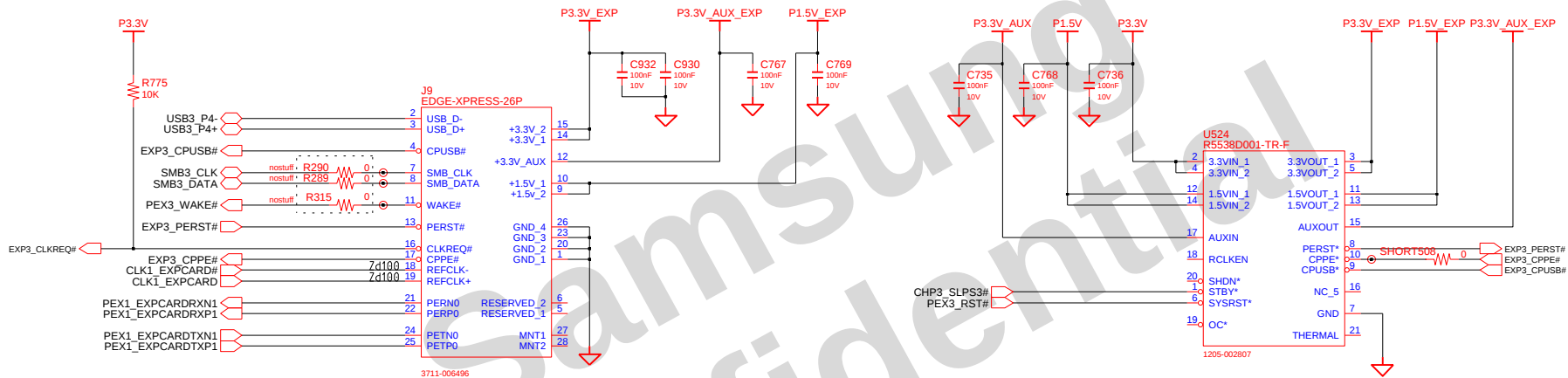
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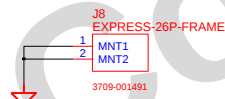
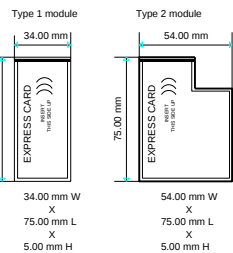
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| CHECK       | KS | REV.      | STEP      | PV                        | CHIPSET POWER |                        |
| APPROVAL    | JG | REV.      | 1.0       | UNDEFINED                 |               |                        |
| MODULE CODE |    | LAST EDIT |           |                           |               |                        |
|             |    |           |           | July 19, 2008 11:30:36 AM | PAGE 10 OF 47 | PART NO. BA41-00xxxxA  |

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## EXPRESS CARD

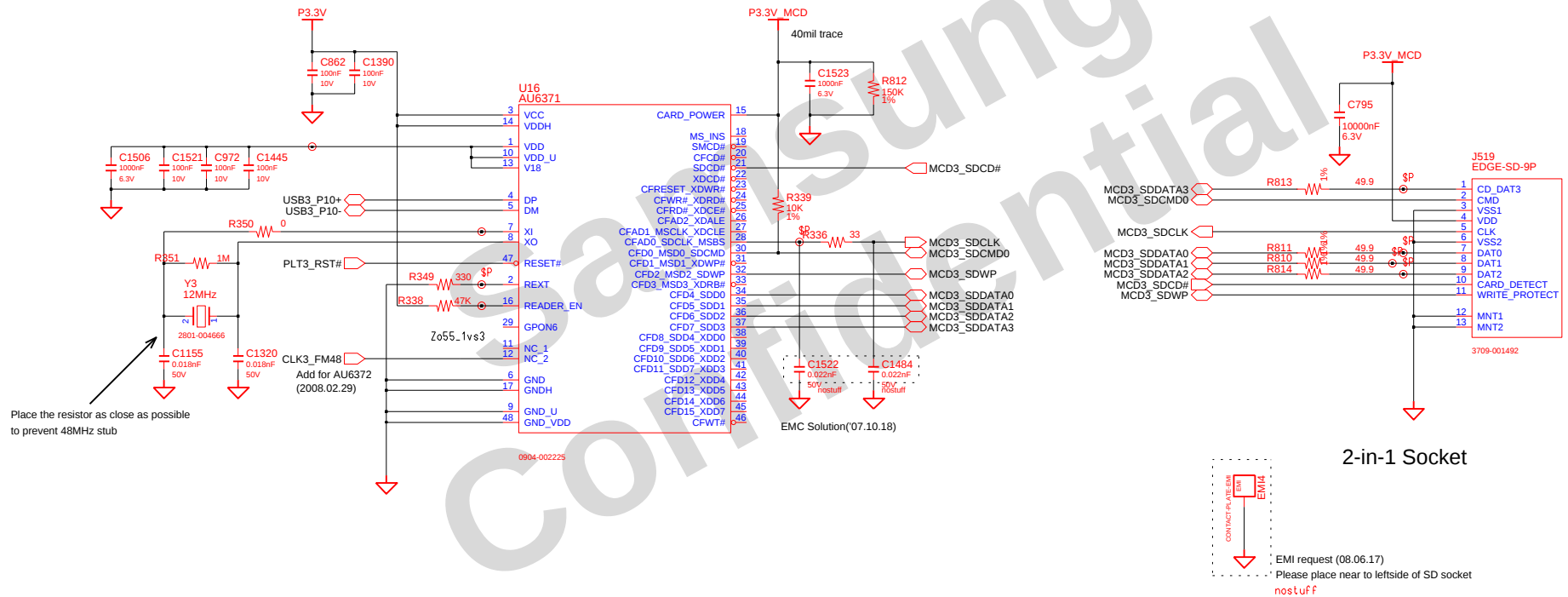


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| CHECK       | KS        | REV. STEP | PV                        |       |              |                        |
| APPROVAL    | JG        | REV       | 1.0                       |       | EXPRESS CARD | PART NO.               |
| MODULE CODE | undefined | LAST EDIT | July 19, 2008 11:30:36 AM | PAGE  | 11           | BA41-00xxxA            |
|             |           |           |                           |       | OF           | 47                     |

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## 2 IN 1 CARD

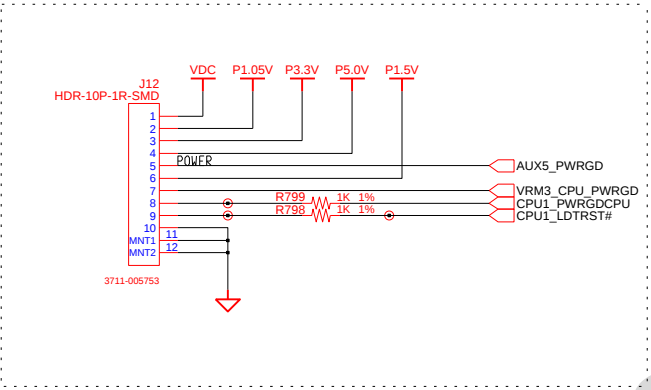


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| DRAW        | JM        | DATE      | 1/10/2008                 | TITLE         | Cambridge | SAMSUNG<br>ELECTRONICS |              |
| CHECK       | KS        | DEV. STEP | PV                        |               |           |                        |              |
| APPROVAL    | JG        | REV       | 1.0                       |               |           |                        |              |
|             |           |           |                           | 2 in 1 Socket |           | PART NO.               | BA41-00xxxxA |
| MODULE CODE | LAST EDIT |           | July 19, 2008 11:30:36 AM |               |           | PAGE                   | 12 OF 47     |

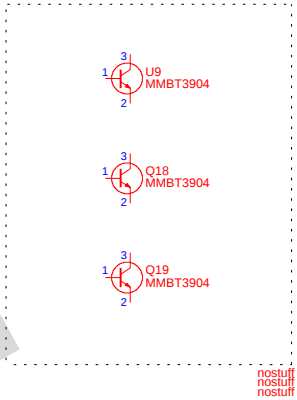




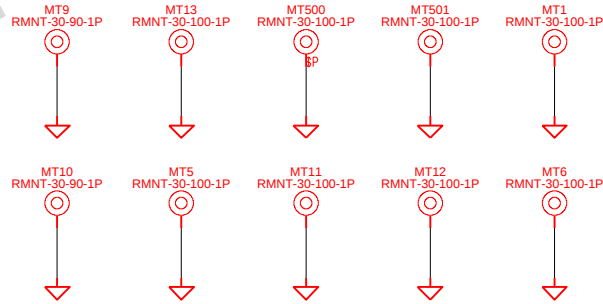
ICT PORT (Need to check net name)



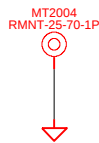
For Debugging



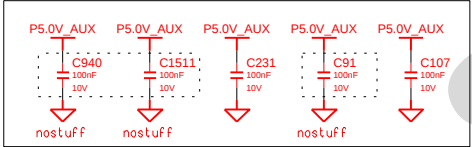
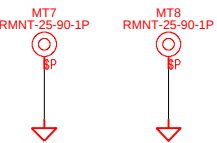
System



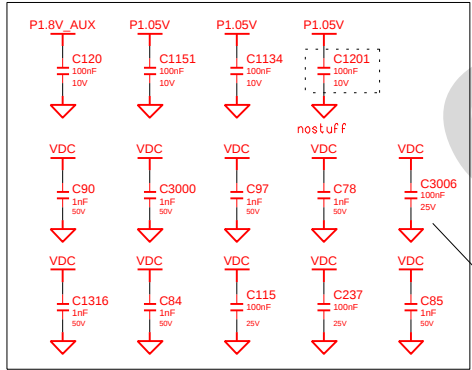
Board



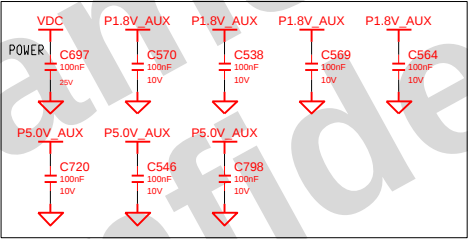
Keyboard



Add for EMC ('08.01.16)  
5th Layer



Add for EMC ('08.01.16)  
Top Side



Add for EMC ('08.01.16)  
Bottom Side



EMC Request('08.06.16)

Please place on Bottom side

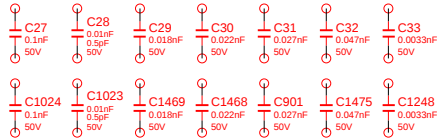
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| CHECK       | KS        | DEV. STEP | PV                        |          |           | ELECTRONICS |
| APPROVAL    | JG        | REV       | 1.0                       | ICT PORT |           | PART NO.    |
| MODULE CODE | undefined | LAST EDIT | July 19, 2008 11:30:36 AM |          |           | BA41-00xxxA |
|             |           |           |                           | PAGE     | 15        | OF 47       |

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REV1  
1 O  
2 O O3

| PCB REVISION CONTROL (ICT) |            |             |          |      |
|----------------------------|------------|-------------|----------|------|
| NO                         | CONNECTION | DATE(Y/M/D) | REVISION | STEP |
| 1                          | N.C.       |             |          |      |
| 2                          | 1-2        |             |          |      |
| 3                          | 2-3        |             |          |      |
| 4                          | 3-1        |             |          |      |
| 5                          | 1-2-3      |             |          |      |
| 6                          | N.C.       |             |          |      |
| 7                          | 1-2        |             |          |      |
| 8                          | 2-3        |             |          |      |
| 9                          | 3-1        |             |          |      |
| 10                         | 1-2-3      |             |          |      |



|             |           |           |                           |       |           |                                                       |
|-------------|-----------|-----------|---------------------------|-------|-----------|-------------------------------------------------------|
| DRAW        | JM        | DATE      | 1/10/2008                 | TITLE | Cambridge | <b>SAMSUNG</b><br>ELECTRONICS<br>PART NO. BA41-00xxxA |
| CHECK       | KS        | REV. STEP | PV                        |       |           |                                                       |
| APPROVAL    | JG        | REV       | 1.0                       | TP    |           |                                                       |
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AUX5\_PWRGD  
CTRL12  
SPK5\_L+  
SPK5\_L-  
SPK5\_R+  
SPK5\_R-

CRT3\_RED  
FANS\_VDD  
SMB3\_DATA  
SPI3\_CS#  
SPI3\_MISO  
SPI3\_MOSI  
THM3\_STP#

WLON\_LED#  
AUD3\_SHDN#  
EXP3\_CPEP#  
KBC3\_CHGEN  
KBC3\_PWRGD  
KBC3\_PWRON  
KBC5\_TDATA

CRT3\_GREEN  
CRT3\_HSYNC  
CRT3\_VSYNC  
CRT5\_HSYNC  
CRT5\_VSYNC

SMB3\_CLK  
SPI3\_CLK  
PEX3\_WAKE#  
AUD3\_GPIO0#  
AUD3\_GPIO1#

BAT3\_SMCLK#  
CHP3\_GPIO16  
CHP3\_GPIO17  
CHP3\_SERIRQ  
CHP3\_SLPSS3#

CHP3\_SLPSS#

CLK3\_USB48  
Z055\_1Vs3  
ADT3\_SEL#  
AUD3\_BEEP  
AUD3\_SPKR  
KBC3\_USBPWRON#  
CLK3\_FM48

CRT3\_BLUE  
CTRL18\_25  
KBC3\_A20G  
KBC3\_RST#  
KBC3\_VRON  
KBC5\_TCLK  
CLK3\_DBG LPC  
LCD3\_BRIT  
MCD3\_SDWP

CRT3\_DDCCLK  
CRT5\_DDCCLK  
EXP3\_CPUSB#  
EXP3\_PERST#  
MEM1\_VREF  
PLT3\_RST#

KBC3\_BKLTON  
KBC3\_PRECHG  
KBC3\_PWRSW#  
KBC3\_RFOFF#  
KBC3\_SCLED#  
KBC3\_SMCLK#  
KBC3\_SUSPWR  
KBC5\_KSI(8)

KBC5\_KSI(2)  
KBC5\_KSI(3)  
KBC5\_KSI(4)  
KBC5\_KSI(5)

KBC5\_KSI(6)  
KBC5\_KSI(7)  
KBC5\_KSI(8)  
KBC5\_KSI(9)  
KBC5\_KSO(1)  
KBC5\_KSO(2)  
KBC5\_KSO(3)  
KBC5\_KSO(4)  
KBC5\_KSO(5)  
KBC5\_KSO(6)  
KBC5\_KSO(7)  
KBC5\_KSO(8)  
KBC5\_KSO(9)  
LAN3\_VPDCLK  
LCD3\_BKLTON  
LPC3\_LAD(0)  
LPC3\_LAD(1)  
LPC3\_LAD(2)  
LPC3\_LAD(3)  
MCD3\_SDCMD0

MCD3\_SDCD#  
MCD3\_SDCLK

SMB3\_ALERT#  
THM3\_ALERT#  
OT\_L\_BUTTON#  
OT\_R\_BUTTON#  
VCCP3\_PWRGD  
BAT3\_DETECT#  
BAT3\_SMDATA#  
CHP3\_BIOSWP#

CHP3\_RTCRST#

KBC5\_KSO(14)  
KBC5\_KSO(15)  
LAN3\_VPDATA

CPU2\_THERMDA  
CPU2\_THERMDC  
CRT3\_DDCDATA  
CRT5\_DDCDATA  
EXP3\_CLKREQ#  
FAN3\_FDBACK#  
HDA3\_AUD\_SDO  
HDA3\_MDC\_SDO  
KBC3\_CPURST#  
KBC3\_EXTSM#  
KBC3\_NUMLED#  
KBC3\_PWRBNT#  
KBC3\_RSMRST#  
KBC3\_RUNSCH#  
KBC3\_SMDATA#  
KBC3\_SPKMUTE  
KBC5\_KSO(10)  
KBC5\_KSO(11)  
KBC5\_KSO(12)  
KBC5\_KSO(13)  
LID3\_SWITCH#  
LID3\_CLKREQ#  
LPC3\_LFRAME#  
MCD3\_SSDATA0  
MCD3\_SSDATA1  
MCD3\_SSDATA2  
MCD3\_SSDATA3

MIN3\_CLKREQ#  
PCIS\_CLKRUN#  
AUD5\_SENS\_HP#

CHP3\_SATALED#  
PEG5\_HDMI\_CLK

AUD5\_HP\_O\_LEFT  
AUD5\_MIC1\_LEFT  
AUD5\_MIC2\_LEFT  
AUD5\_MIC2\_VREF  
AUD5\_SENS\_MIC#  
CHP3\_BIOS\_CR#

CHP3\_INTRUDER#

CLK3\_PCLKMICOM  
CPU1\_THRMTRI#  
CPU3\_THRMTRI#

HDA3\_HDMI\_SDI2

KBC3\_CHKPWRSW#

LCD3\_EDID\_DATA  
CPU1\_PWRGDCPU

HDA3\_AUD\_BCLK  
HDA3\_AUD\_RST#  
HDA3\_AUD\_SDO  
HDA3\_AUD\_SYNC

HDA3\_MDC\_BCLK  
HDA3\_MDC\_RST#  
HDA3\_MDC\_SDI1  
HDA3\_MDC\_SYNC  
KBC3\_CAPSLED#  
KBC3\_WAKESTOP#  
LCD3\_EDID\_CLK

CHP3\_SUSSTAT#

KBC3\_BLKPWRSW#  
KBC3\_LED\_POWER#  
KBC3\_PWRON\_INV#  
AUD5\_LINE\_O\_LEFT

KBC3\_LED\_CHARGE#  
KBC3\_THERM\_SMCLK

AUD5\_LINE\_O\_RIGHT  
VPM3\_CPU\_PWRGD  
AUD5\_HP\_O\_RIGHT  
AUD5\_MIC1\_RIGHT  
AUD5\_MIC2\_RIGHT

KBC3\_THERM\_SMDATA

P3.3V\_AUX  
P3.3V\_AUX  
P3.3V\_AUX  
P3.3V\_AUX

VCC\_CRT

VDC\_CHG

VDC\_INV  
VDC\_INV  
VDC\_INV  
VDC\_INV

P3.3V\_AUX\_EXP

P1.8V\_P2.5V\_LAN

VDC  
VDC  
VDC  
VDC

VREF  
VREF  
VREF  
VREF

P5.0V\_FILT  
P5.0V\_FILT  
P3.3V\_MICOM

P4.75V\_AUD

P5.0V\_AUX  
P5.0V\_AUX  
P5.0V\_AUX  
P5.0V\_AUX

P12.0V\_ALW

CPU\_CORE  
CPU\_CORE  
CPU\_CORE  
CPU\_CORE

G\_AUD

G\_CHG

G\_DDR

G\_MIC

GROUND

GROUND

GROUND

GROUND

GROUND

GROUND

GROUND

P3.3V

LCD\_VDD3V

P0.9V

P0.9V

P0.9V

P0.9V

P1.5V

P1.5V

P1.5V

P3.3V

P3.3V

P5.0V

P5.0V

P5.0V

P1.05V

P1.05V

P1.05V

P1.05V

PRTC\_BAT

P1.2V\_LAN  
P1.2V\_LAN  
P1.2V\_LAN  
P1.2V\_LAN

P1.5V\_AUX  
P1.5V\_AUX  
P1.5V\_AUX  
P1.5V\_AUX

P1.5V\_EXP  
P1.5V\_EXP  
P1.5V\_EXP  
P1.5V\_EXP

P1.8V\_AUX  
P1.8V\_AUX  
P1.8V\_AUX  
P1.8V\_AUX

P3.3V\_EXP

P3.3V\_MCD

P5.0V\_ALW  
POWER

P5.0V\_AUD

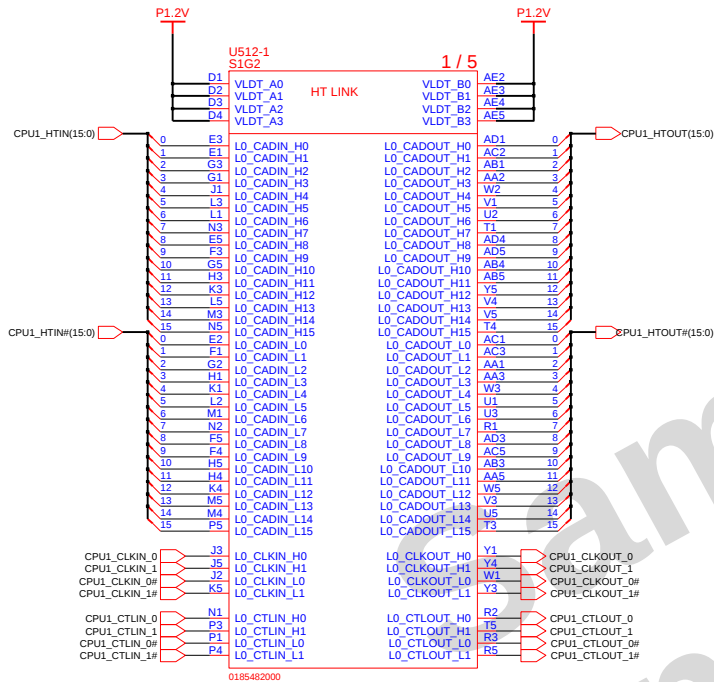
P5.0V\_AMP

P5.0V\_AUX\_USB

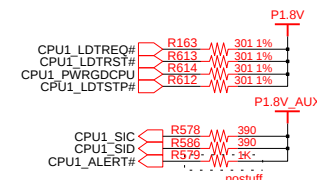
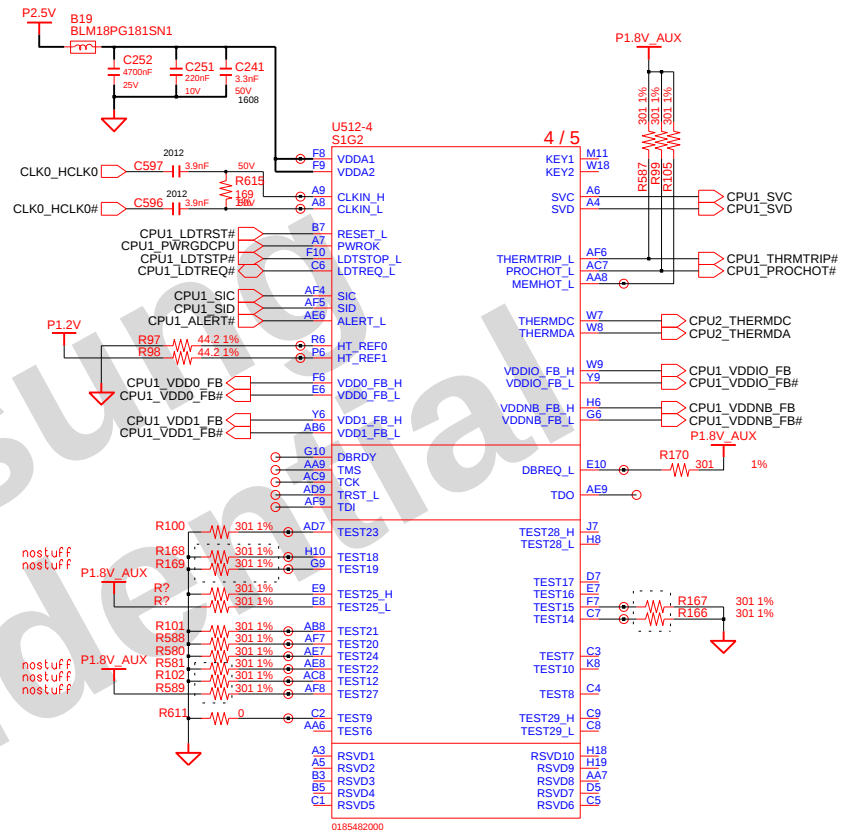
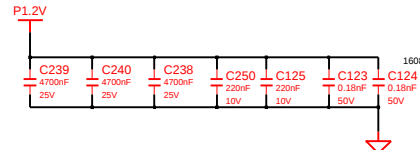
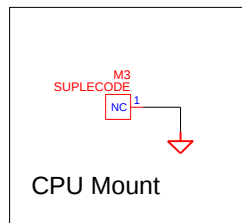
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| DESIGN      | JM | DATE      | 1/10/2008                 | TITLE     | Cambridge | SAMSUNG<br>ELECTRONICS |
| CHECK       | KS | DEV. STEP | PV                        | TP        |           |                        |
| APPROVAL    | JG | REV       | 1.0                       | UNDEFINED | PART NO.  | BA41-00xxxA            |
| MODULE CODE |    | LAST EDIT | July 19, 2008 11:30:36 AM | PAGE      | 17        | OF 47                  |

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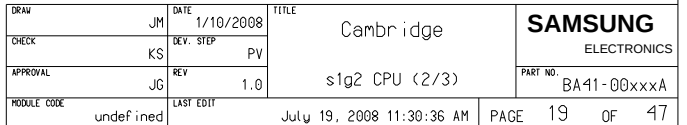
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CPU Socket : 0185482000 (3704-001228)



|             |           |           |                           |       |                |                        |
|-------------|-----------|-----------|---------------------------|-------|----------------|------------------------|
| DESIGN      | JM        | DATE      | 3/19/2008                 | TITLE | Cambridge      | SAMSUNG<br>ELECTRONICS |
| CHECK       | KS        | REV.      | STEP                      | PV    |                |                        |
| APPROVAL    | JG        | REV       | 1.0                       |       | s1g2 CPU (1/3) |                        |
| MODULE CODE | undefined | LAST EDIT | July 19, 2008 11:30:36 AM | PAGE  | 18 OF 47       |                        |



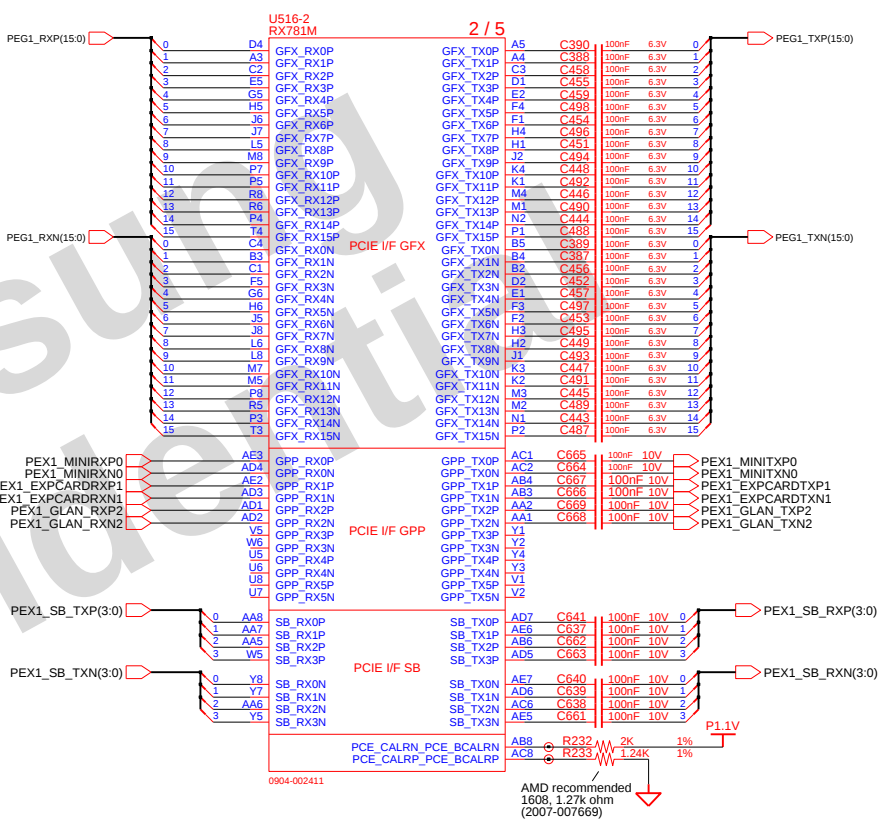
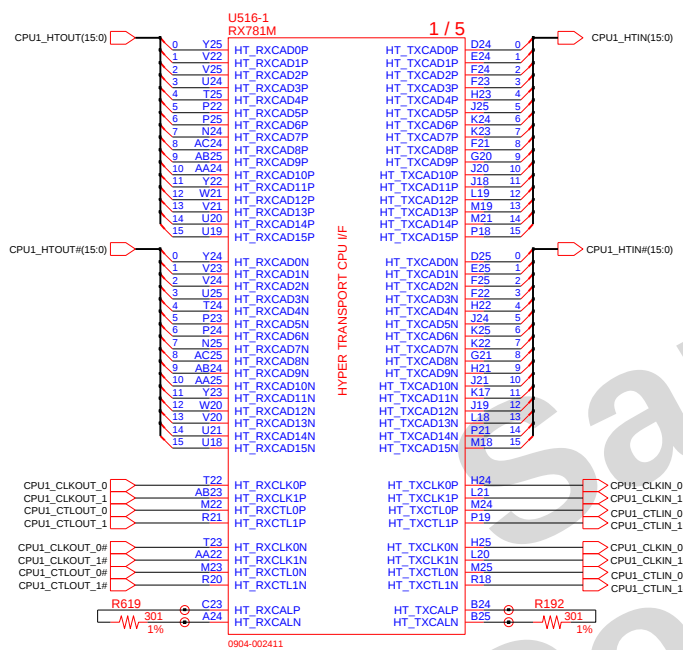


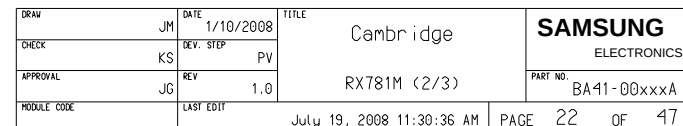
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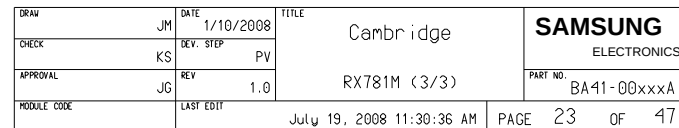
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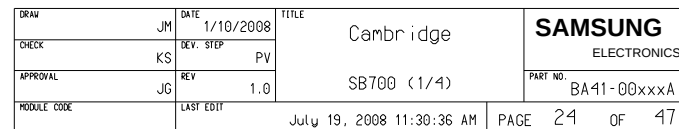
B

A

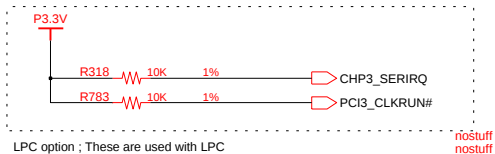








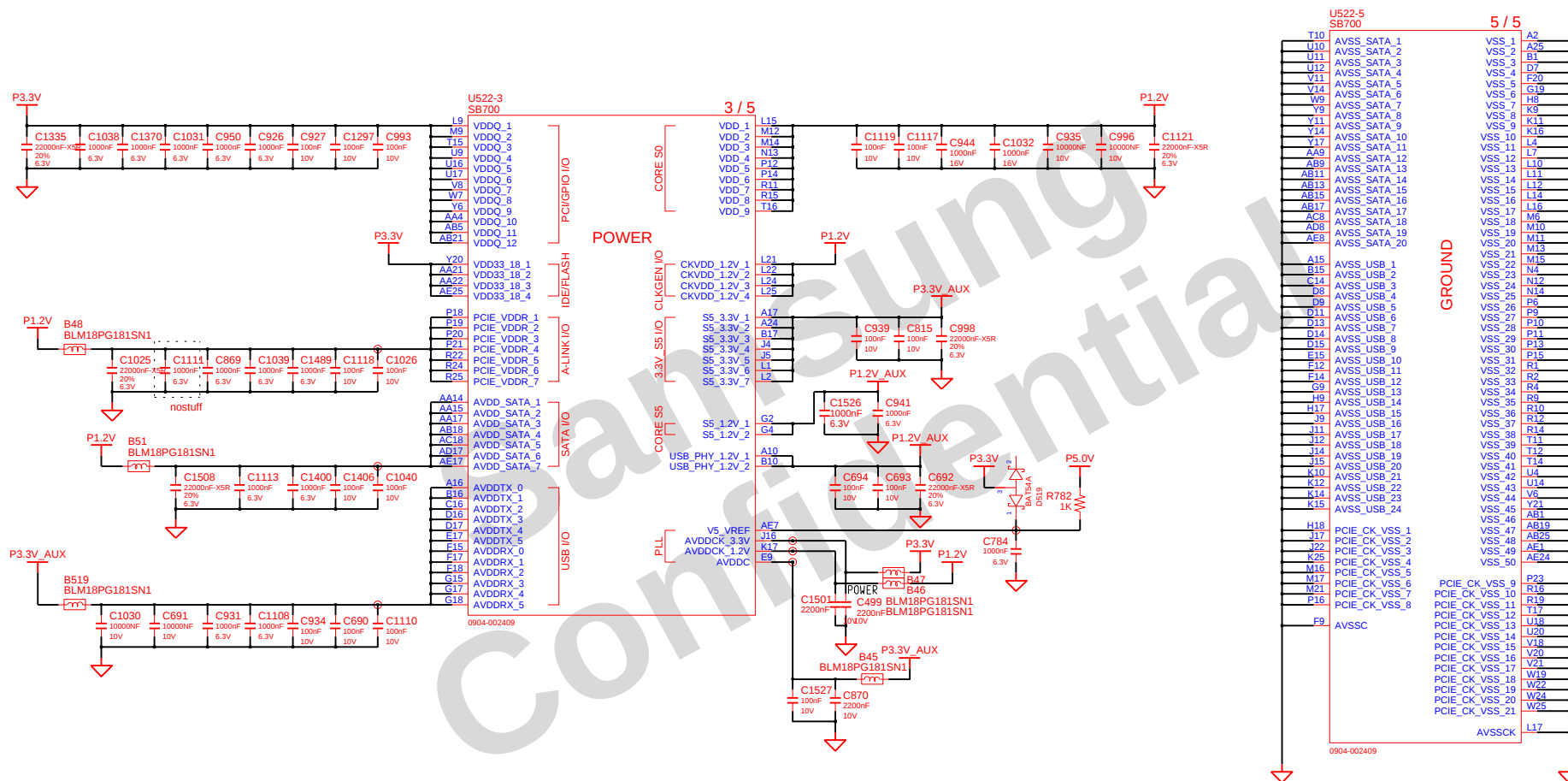
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|-------------|-----------|-----------|--------------------------|-------|------------|-------------------------------|----------|-------------|
| DRAW        | JM        | DATE      | 1/10/2008                | TITLE | Cambr idge | <b>SAMSUNG</b><br>ELECTRONICS |          |             |
| CHECK       | KS        | DEV. STEP | PV                       |       |            |                               |          |             |
| APPROVAL    | JG        | REV       | 1.0                      |       |            |                               | PART NO. | BA41-00xxxA |
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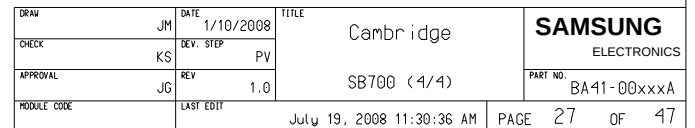
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| DRAW        | JM | DATE      | 1/10/2008 | TITLE                     | Cambridge     | <b>SAMSUNG</b><br>ELECTRONICS<br>PART NO. BA41-00xxxA |
| CHECK       | KS | DEV. STEP | PV        |                           |               |                                                       |
| APPROVAL    | JG | REV       | 1.0       | SB700 (3/4)               |               |                                                       |
| MODULE CODE |    | LAST EDIT |           | July 19, 2008 11:30:36 AM | PAGE 26 OF 47 |                                                       |

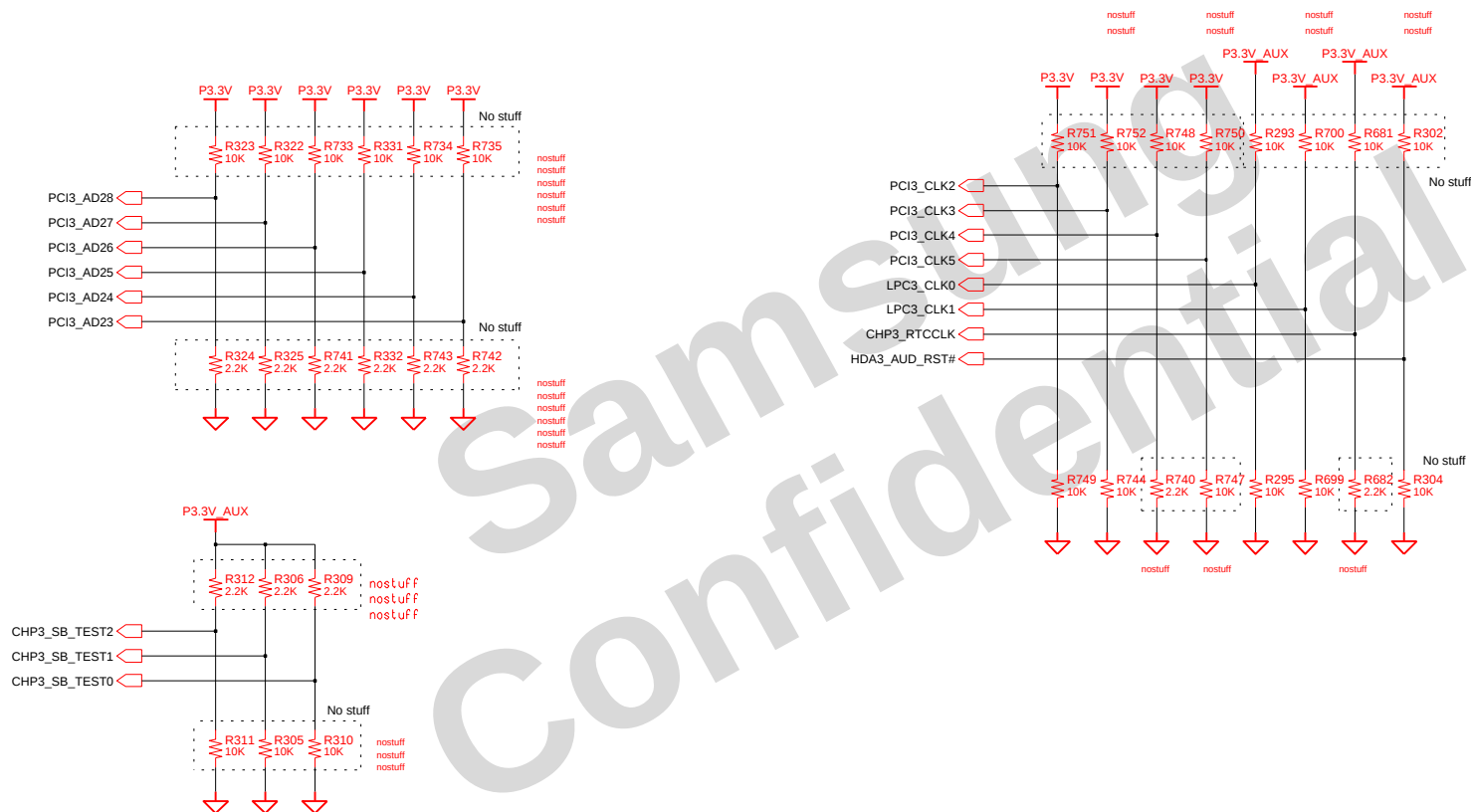
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USB0, 6 : Rear Port  
USB2 : Left Port  
USB3 : Right Port(Sub board)  
USB4 : Express USB  
USB5 : Bluetooth  
USB8 : Camera  
USB10 : 2 in 1



**SAMSUNG PROPRIETARY**

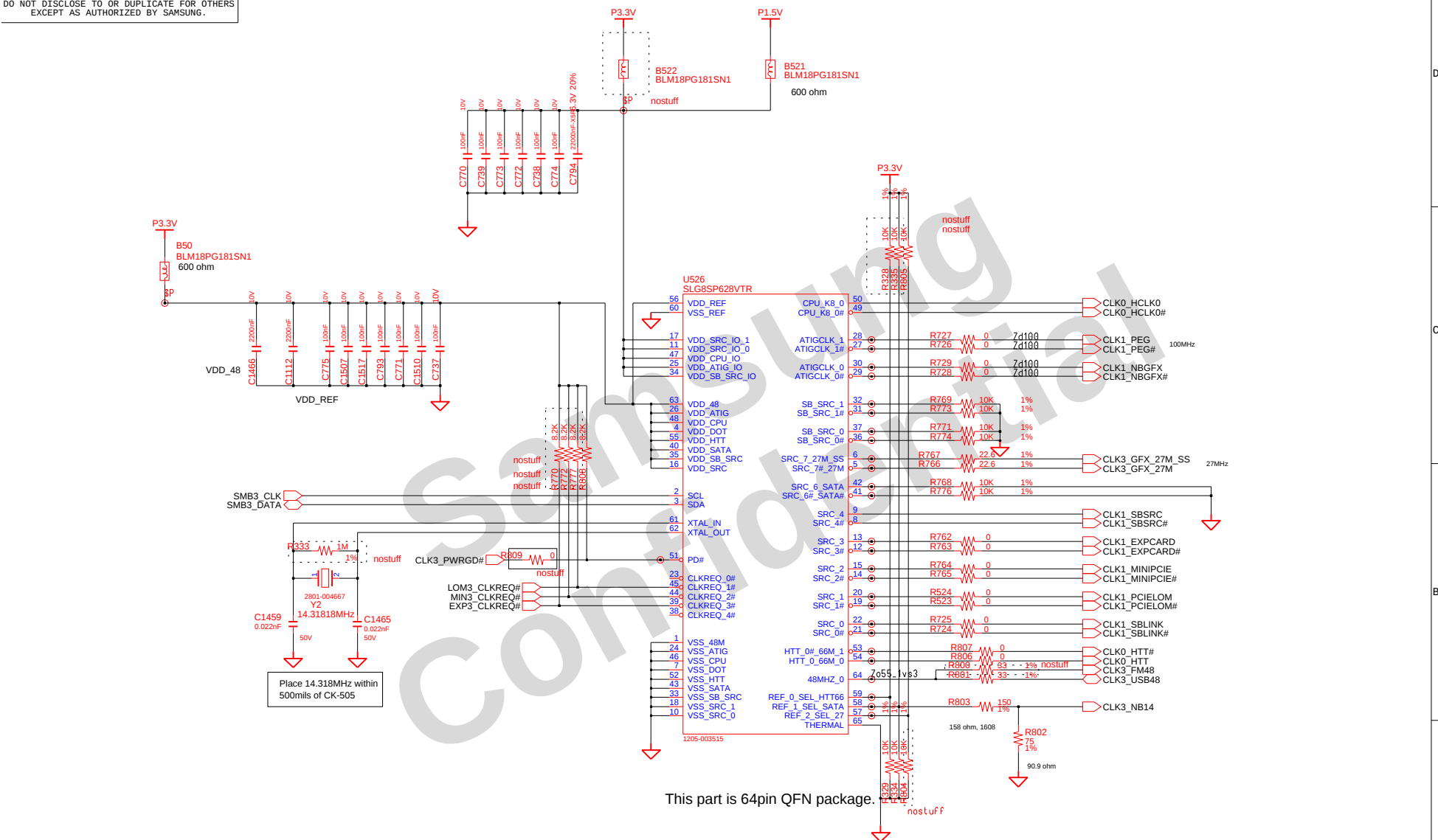
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|             |           |           |           |       |  |                           |  |
|-------------|-----------|-----------|-----------|-------|--|---------------------------|--|
| DRAW        | JM        | DATE      | 1/10/2008 | TITLE |  | SAMSUNG<br>ELECTRONICS    |  |
| CHECK       | KS        | DEV. STEP | PV        |       |  |                           |  |
| APPROVAL    | JG        | REV       | 1.0       | Strap |  |                           |  |
| MODULE CODE | undefined |           | LAST EDIT |       |  | July 19, 2008 11:30:36 AM |  |

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|             |           |           |                           |                    |             |              |
|-------------|-----------|-----------|---------------------------|--------------------|-------------|--------------|
| DRAW        | JM        | DATE      | 1/10/2008                 | TITLE              | Cambridge   | SAMSUNG      |
| CHECK       | KS        | REV. STEP | PV                        | Main_Clock_Circuit | ELECTRONICS |              |
| APPROVAL    | JG        | REV       | 1.0                       | CK For AMD CPU     | PART NO.    | BA41-00xxxxA |
| MODULE CODE | undefined | LAST EDIT | July 19, 2008 11:30:36 AM | PAGE               | 29          | OF 47        |

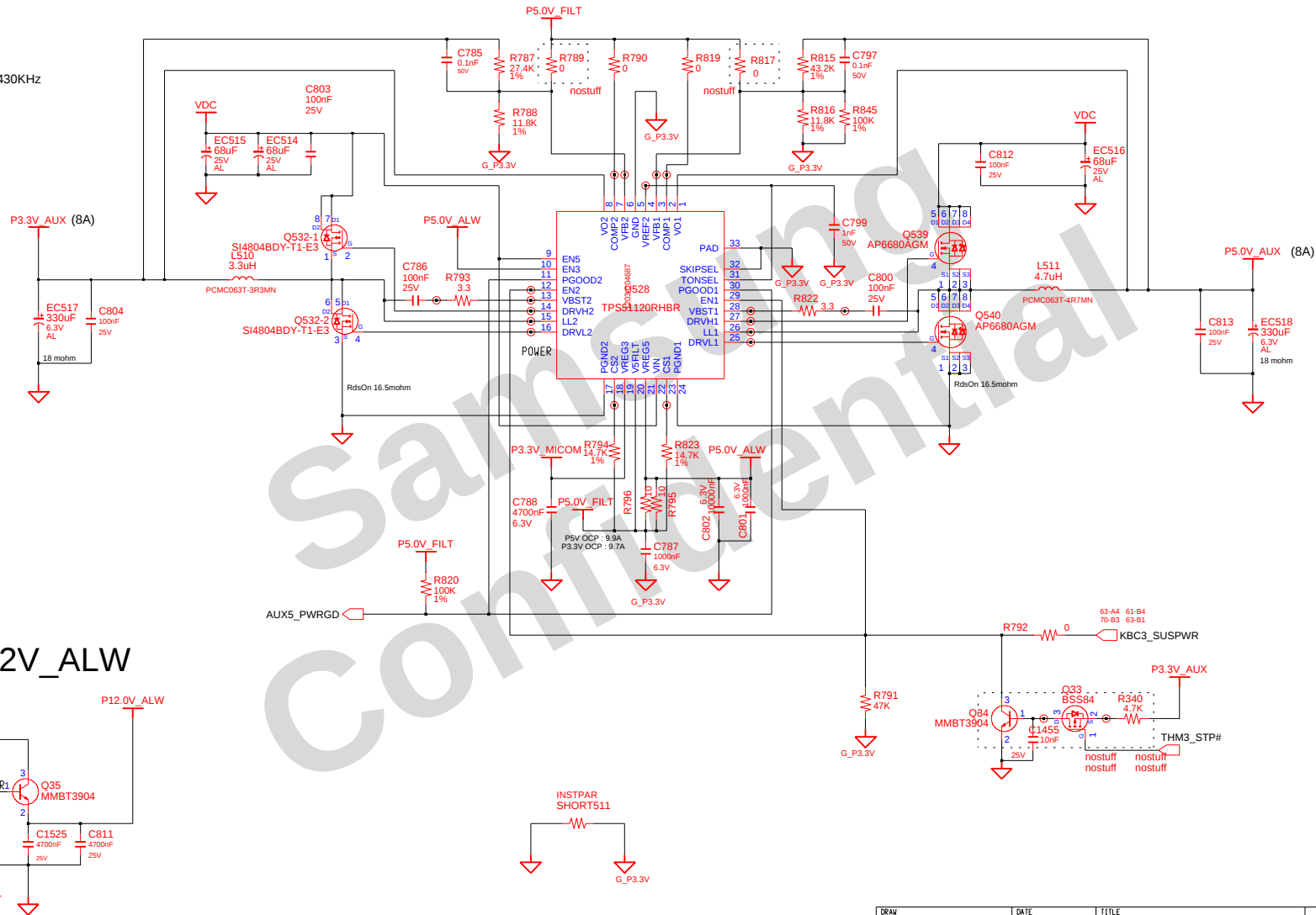


# SAMSUNG PROPRIETARY

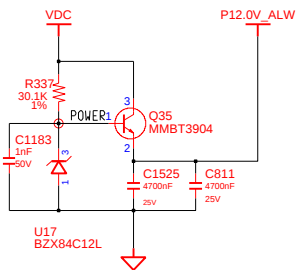
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## P3.3V\_AUX & P5.0V\_AUX

TONSEL VREF2  
5V / 3.3V : 280KHz / 430KHz



## P12V\_ALW



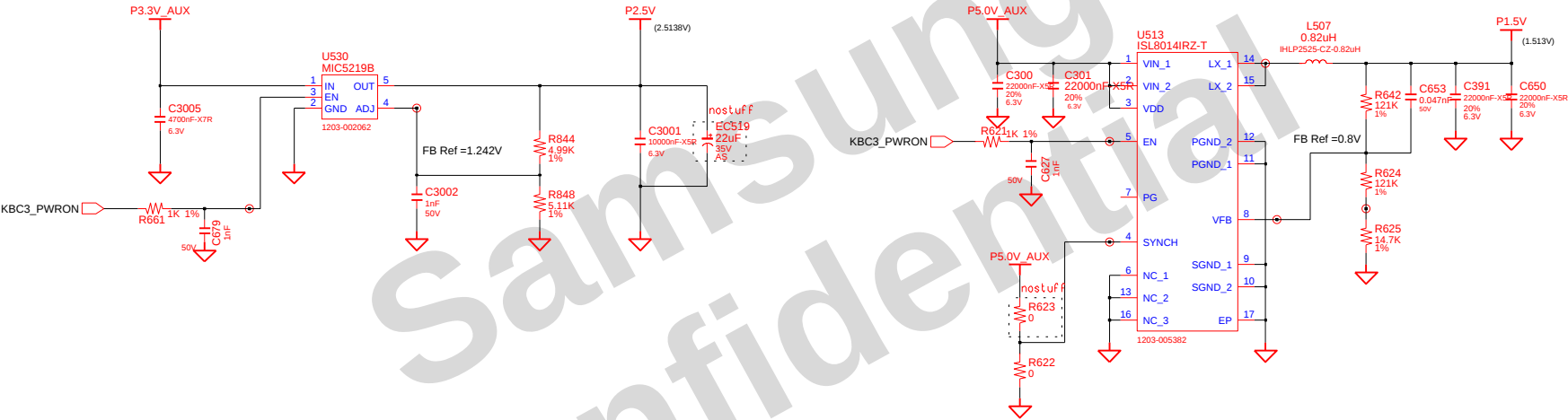
|             |           |           |                           |                       |             |              |
|-------------|-----------|-----------|---------------------------|-----------------------|-------------|--------------|
| DRAW        | JM        | DATE      | 11/8/2006                 | TITLE                 | Cambridge   | SAMSUNG      |
| CHECK       | KS        | REV. STEP | PV                        | PWR_MV_3V_5V          | ELECTRONICS |              |
| APPROVAL    | JG        | REV       | 1.0                       | P3.3V_AUX / P5.0V_AUX | PART NO.    | BA41-00xxxxA |
| MODULE CODE | undefined | LAST EDIT | July 19, 2008 11:30:36 AM | PAGE                  | 31          | OF 47        |



CHIPSET POWER(P2.5V & P1.5V)

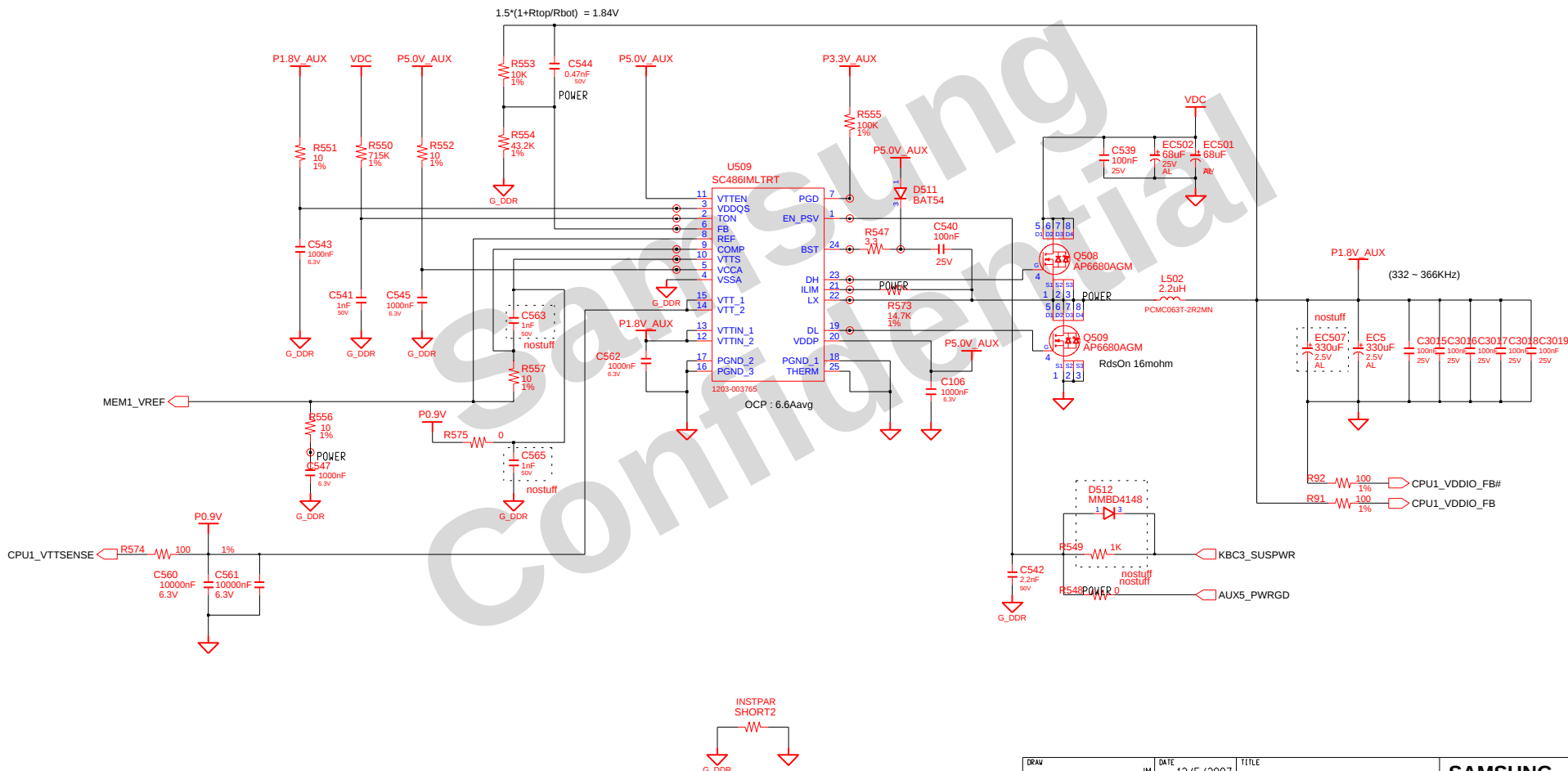
P2.5V

P1.5V



|             |           |           |                           |       |                                                                |                         |
|-------------|-----------|-----------|---------------------------|-------|----------------------------------------------------------------|-------------------------|
| DRAW        | JM        | DATE      | 8/14/2007                 | TITLE | Cambridge<br>PWR_MV_Cantiga<br>Chipset Power (P1.05V_M, P1.2V) | SAMSUNG<br>ELECTRONICS  |
| CHECK       | KS        | REV. STEP | PV                        |       |                                                                |                         |
| APPROVAL    | JG        | REV       | 1.0                       |       |                                                                | PART NO.<br>BA41-00xxxA |
| MODULE CODE | undefined | LAST EDIT | July 19, 2008 11:30:36 AM | PAGE  | 33                                                             | OF 47                   |

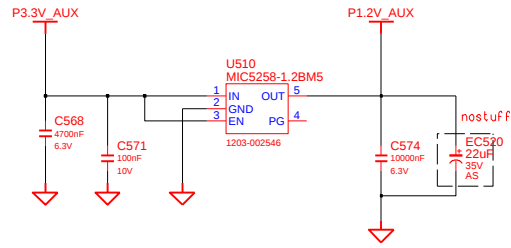
# DDR2 Power



|             |           |           |                           |       |                                  |                                                           |
|-------------|-----------|-----------|---------------------------|-------|----------------------------------|-----------------------------------------------------------|
| DRAW        | JM        | DATE      | 12/5/2007                 | TITLE | Cambridge<br>SC486<br>DDR2 POWER | <b>SAMSUNG</b><br>ELECTRONICS<br>PART NO.<br>BA41-00xxxxA |
| CHECK       | KS        | REV. STEP | PV                        |       |                                  |                                                           |
| APPROVAL    | JG        | REV       | 1.0                       |       |                                  |                                                           |
| MODULE CODE | undefined | LAST EDIT | July 19, 2008 11:30:36 AM | PAGE  | 34 OF 47                         |                                                           |



## P1.2V\_AUX

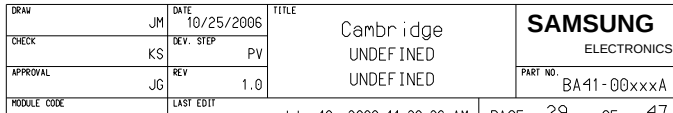


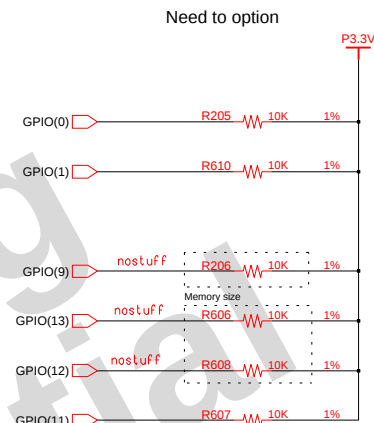
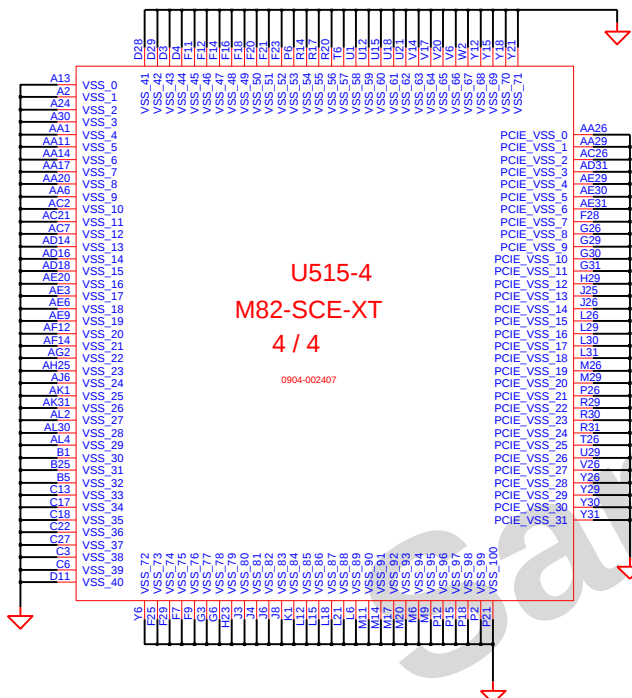
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|             |    |           |                           |       |                                                   |                        |
|-------------|----|-----------|---------------------------|-------|---------------------------------------------------|------------------------|
| DRAW        | JM | DATE      | 2/13/2008                 | TITLE | Cambridge<br>Evaluation Board<br>P1.8V_AUX, P1.5V | SAMSUNG<br>ELECTRONICS |
| CHECK       | KS | REV. STEP | PV                        |       |                                                   | PART NO. BA41-00xxxA   |
| APPROVAL    | JG | REV       | 1.0                       |       |                                                   |                        |
| MODULE CODE |    | LAST EDIT | July 19, 2008 11:30:36 AM | PAGE  | 36                                                | OF 47                  |

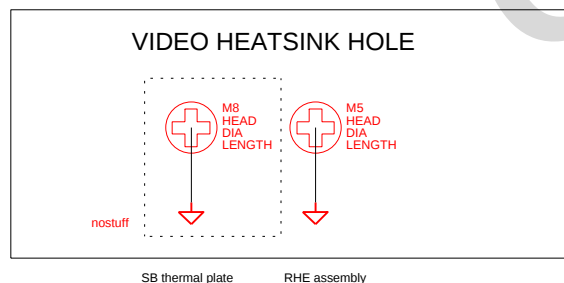






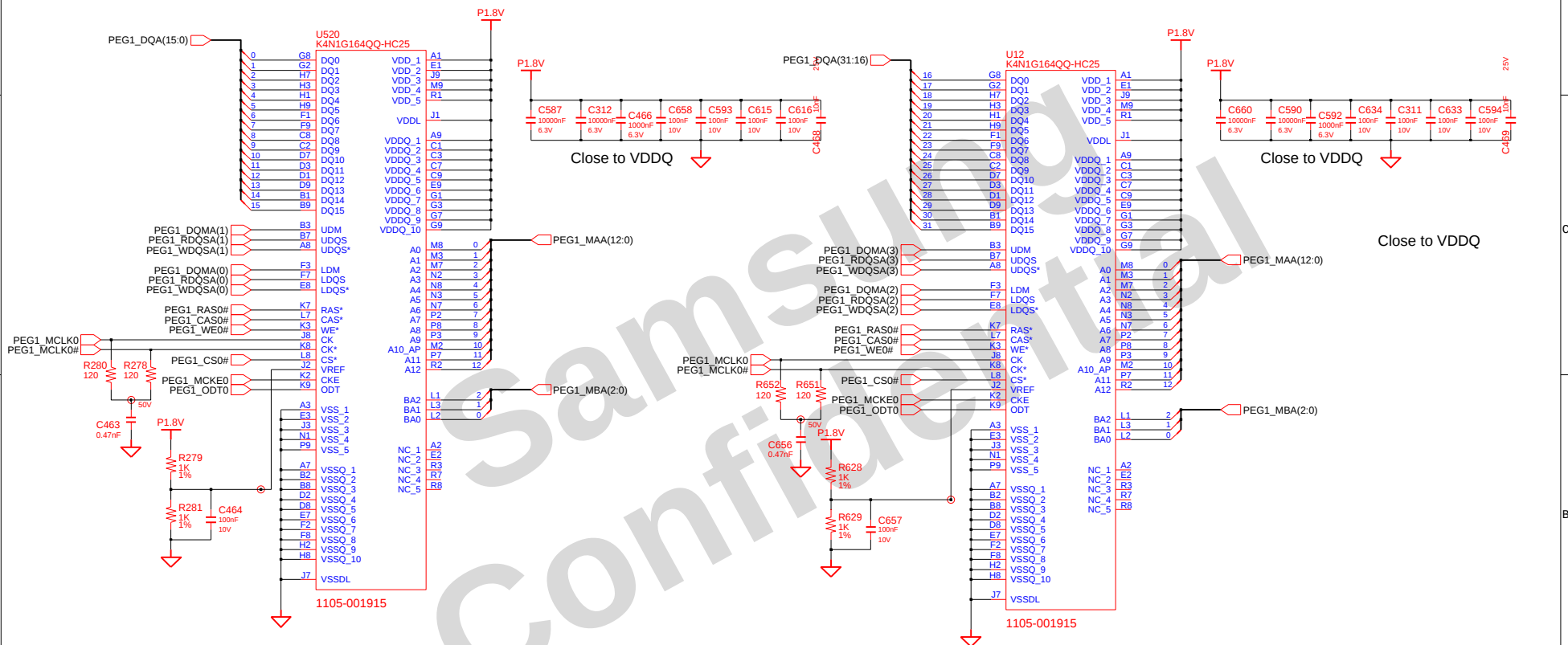


| (DEFAULT : pull-down) |               |                                                                                                                                                                                                                                                                      |
|-----------------------|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| STRAP                 | PIN           | DESCRIPTION                                                                                                                                                                                                                                                          |
| TX_PWRS_ENB           | GPIO[0]       | Transmitter Power Saving Enable<br>0: 50% Tx output swing<br>1: full Tx output swing                                                                                                                                                                                 |
| TX_DEEMPH_EN          | GPIO[1]       | Transmitter De-emphasis Enable<br>0: Tx De-emphasis disabled<br>1: Tx De-emphasis enabled                                                                                                                                                                            |
| DEBUG_ACCESS          | GPIO[4]       | Strap to set the debug muxes to bring out DEBUG signals even if registers are inaccessible.                                                                                                                                                                          |
| ROMIDCFG[3:0]         | GPIO[9,13:11] | When no ROM is attached, GPIO[9] is set to 0.<br>GPIO[13:12] is used to select the frame buffer aperture size.<br><br>GPIO[13:12] = 00: 128M frame buffer<br>GPIO[13:12] = 01: 256M frame buffer<br>GPIO[13:12] = 10: 64M frame buffer<br>GPIO[13:12] = 11: reserved |



|             |           |           |            |                           |           |                |              |
|-------------|-----------|-----------|------------|---------------------------|-----------|----------------|--------------|
| DRAW        | JM        | DATE      | 10/25/2006 | TITLE                     | Cambridge | <b>SAMSUNG</b> |              |
| CHECK       | KS        | DEV. STEP | PV         |                           | UNDEFINED | ELECTRONICS    |              |
| APPROVAL    | JG        | REV       | 1.0        |                           | UNDEFINED | PART NO.       | BA41-00xxxxA |
| MODULE CODE | LAST EDIT |           |            | July 19, 2008 11:30:36 AM | PAGE      | 40             | OF 47        |

## LOWER SUB PARTITION

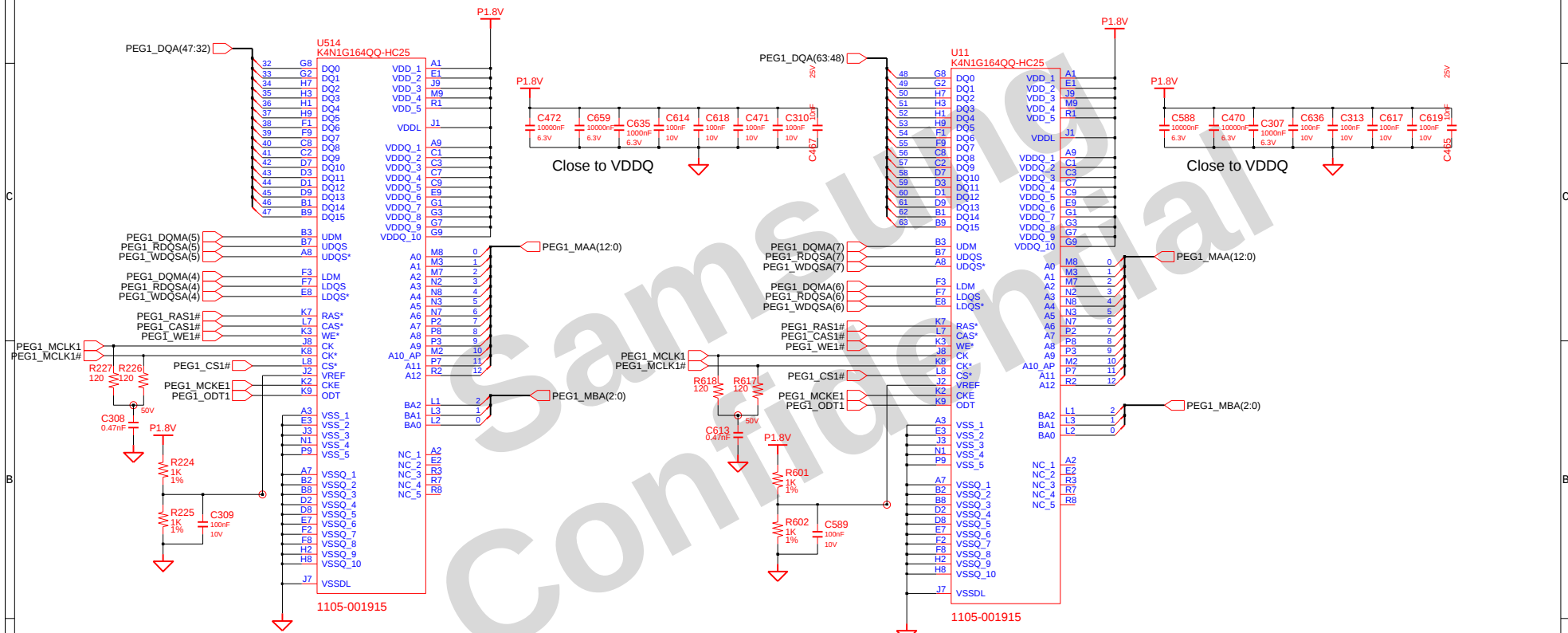


|             |    |           |           |                                     |    |                               |    |
|-------------|----|-----------|-----------|-------------------------------------|----|-------------------------------|----|
| DRAW        | JM | DATE      | 8/12/2006 | TITLE                               |    | <b>SAMSUNG</b><br>ELECTRONICS |    |
| CHECK       | KS | DEV. STEP | PV        | Cambridge<br>Graphics_Memory(GDDR2) |    |                               |    |
| APPROVAL    | JG | REV       | 1.0       | Graphics_Memory_Nvidia #1           |    |                               |    |
| MODULE CODE |    | LAST EDIT |           | July 19, 2008 11:30:36 AM           |    |                               |    |
|             |    |           |           | PAGE                                | 41 | OF                            | 47 |

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## UPPER SUB PARTITION

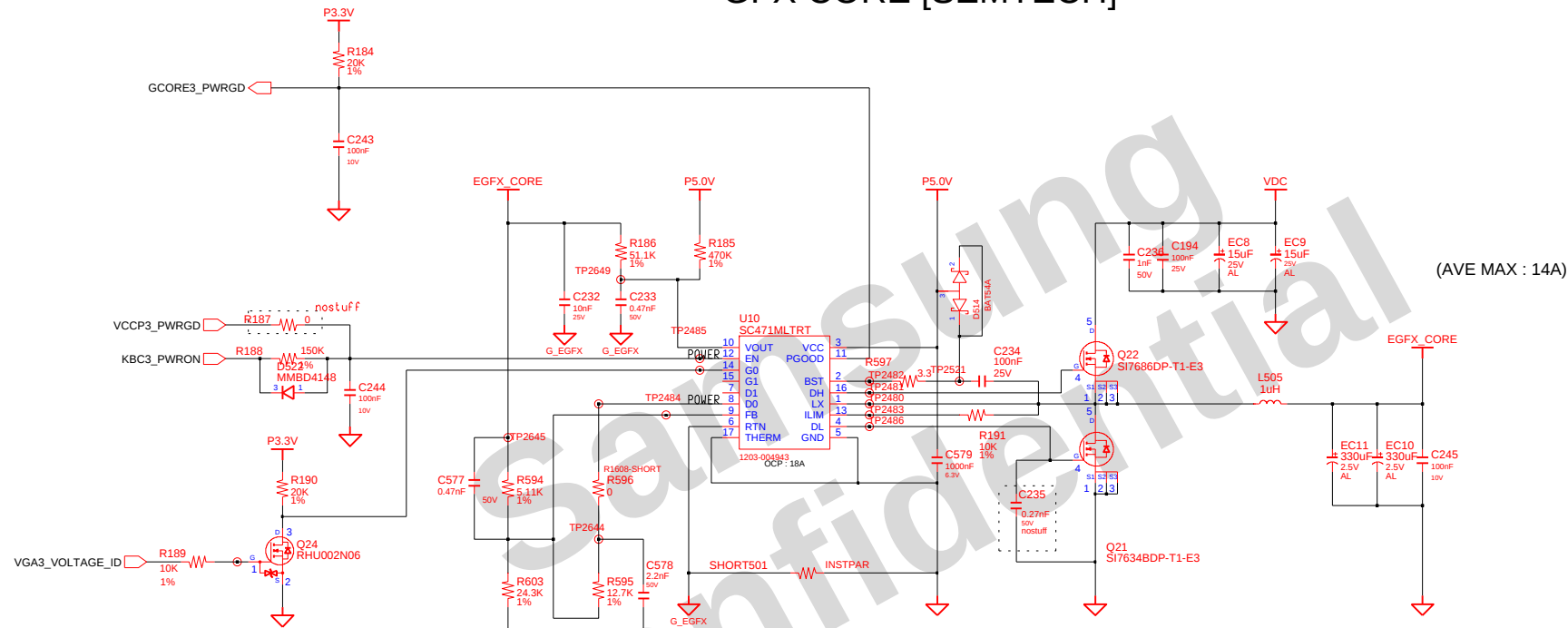


|             |    |           |                           |                                     |                               |             |
|-------------|----|-----------|---------------------------|-------------------------------------|-------------------------------|-------------|
| DRAW        | JM | DATE      | 8/12/2006                 | TITLE                               | <b>SAMSUNG</b><br>ELECTRONICS |             |
| CHECK       | KS | REV. STEP | PV                        | Cambridge<br>Graphics_Memory(GDDR2) |                               |             |
| APPROVAL    | JG | REV       | 1.0                       | Graphics_Memory_Nvidia #2           | PART NO.                      | BA41-00xxxA |
| MODULE CODE |    | LAST EDIT | July 19, 2008 11:30:36 AM |                                     | PAGE                          | 42 OF 47    |

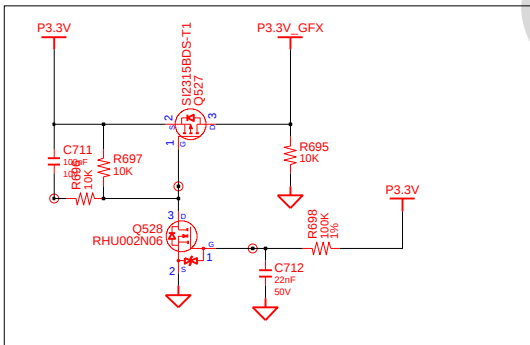
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## GFX CORE [SEMTECH]



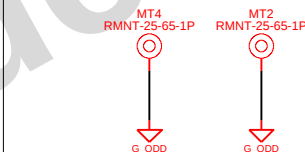
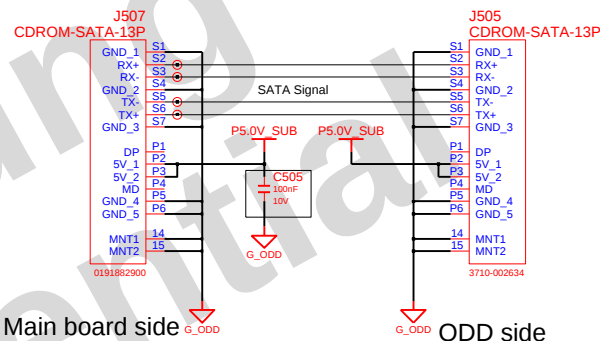
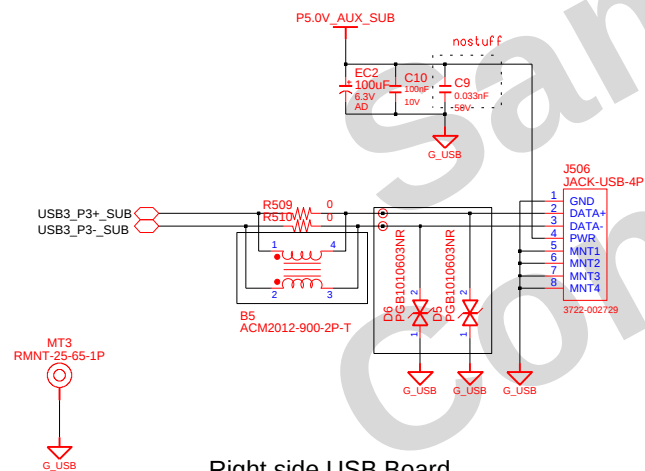
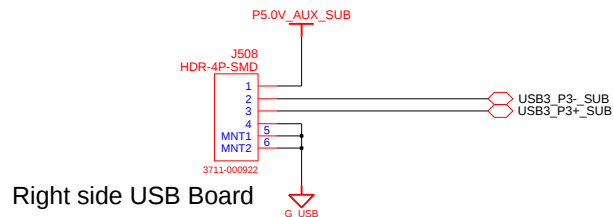
### P3.3V\_GFX CONTROL CIRCUIT



M82-S    H : 0.9V  
          L : 1.0V    R596 = 27.4K  
  
M82-SXT    H : 0.9V  
            L : 1.2V    R596 = 0

|             |           |           |            |                           |            |             |
|-------------|-----------|-----------|------------|---------------------------|------------|-------------|
| DRAW        | JM        | DATE      | 10/26/2006 | TITLE                     | Cambridge  | SAMSUNG     |
| CHECK       | KS        | REV. STEP | PV         | UNDEF INED                | UNDEF INED | ELECTRONICS |
| APPROVAL    | JG        | REV       | 1.0        | UNDEF INED                | UNDEF INED | PART NO.    |
| MODULE CODE | LAST EDIT |           |            | July 19, 2008 11:30:36 AM | PAGE 43    | OF 47       |

# Sub Board (16" only)



nostuff  
nostuff  
nostuff

nostuff  
nostuff  
nostuff  
nostuff  
nostuff  
nostuff  
nostuff  
nostuff  
nostuff

|             |    |           |                           |       |           |                                                           |
|-------------|----|-----------|---------------------------|-------|-----------|-----------------------------------------------------------|
| DESIGN      | JM | DATE      | 6/10/2008                 | TITLE | Cambridge | <b>SAMSUNG</b><br>ELECTRONICS<br>PART NO.<br>BA41-00xxxxA |
| CHECK       | KS | DEV. STEP | PV                        |       |           |                                                           |
| APPROVAL    | JG | REV       | 1.0                       |       |           |                                                           |
| MODULE CODE |    | LAST EDIT | July 19, 2008 11:30:36 AM | PAGE  | 44 OF 47  |                                                           |

|             |           |           |                           |       |            |                               |
|-------------|-----------|-----------|---------------------------|-------|------------|-------------------------------|
| DESIGN      | JM        | DATE      | 6/10/2008                 | TITLE | Cambr idge | <b>SAMSUNG</b><br>ELECTRONICS |
| CHECK       | KS        | DEV. STEP | PV                        |       |            |                               |
| APPROVAL    | JG        | REV       | 1.0                       |       |            | PART NO.                      |
| MOBILE CODE | LAST EDIT |           | July 19, 2008 11:30:36 AM |       | PAGE       | 45 OF 47                      |

CP10(0)  
CP10(1)  
CP10(9)

CP10(11)  
CP10(12)  
CP10(13)

CHG\_BGATE  
CHG\_DCPRN  
CLK3\_NB14

LPC3\_CLK0  
LPC3\_CLK1

PC13\_CLK2  
PC13\_CLK3  
PC13\_CLK4  
PC13\_CLK5

OPEX3\_RST#

CHP3\_A\_RST#  
CHP3\_RTCLK

CLK3\_PWRGD#

KBC5\_KSI(1)

DBG3\_HSYNC  
DBG3\_VSYNC

GEGFX  
GP12V  
GP12V  
GP18V  
GP25V  
GP12V\_AUX  
GP33V\_GFX  
GP50V\_SUB  
GP50V\_AUX\_SUB  
GVDD\_50V  
GVDD\_CPU\_NB  
GAD\_DC  
GCPUCORE0  
GCPUCORE1  
GODD  
GUSB

PEG3\_BKL TEN  
VGA3\_VOLTAGE\_ID  
PEG3\_HPD\_HDMI  
PEG3\_LCDVDDON

CHP3\_NB\_PWRGD  
CHP3\_SB\_TEST0  
CHP3\_SB\_TEST2

KBC3\_LED\_ACIN#  
KBC3\_NB\_PWRGD  
PEG5\_HDMI\_DATA

GCORE3\_PWRGD  
GFX3\_THERMTRIP  
GFX3\_THERMDN  
GFX3\_THERMDP

CLK3\_GFX\_27M\_SS  
SPI3\_GPI014  
CLK3\_GFX\_27M

|             |    |           |                           |       |           |                       |
|-------------|----|-----------|---------------------------|-------|-----------|-----------------------|
| DESIGN      | JM | DATE      | 6/27/2008                 | TITLE | Cambridge | SAMSUNG               |
| CHECK       | KS | DEV. STEP | PV                        |       |           | ELECTRONICS           |
| APPROVAL    | JG | REV       | 1.0                       |       |           | PART NO. BA41-00xxxxA |
| MODULE CODE |    | LAST EDIT | July 19, 2008 11:30:36 AM | PAGE  | 46        | OF 47                 |

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|-------------|----|-----------|---------------------------|-------|-----------|--------------------------------------------------------|
| DESIGN      | JM | DATE      | 6/27/2008                 | TITLE | Cambridge | <b>SAMSUNG</b><br>ELECTRONICS<br>PART NO. BA41-00xxxxA |
| CHECK       | KS | DEV. STEP | PV                        |       |           |                                                        |
| APPROVAL    | JG | REV       | 1.0                       |       |           |                                                        |
| MODULE CODE |    | LAST EDIT | July 19, 2008 11:30:36 AM | PAGE  | 47 OF 47  |                                                        |

**RHE Support (Top)**

93 degree C

TRIP\_SET pin voltage =  $(T-75)/21$   
 $3.3 * [R2/(R1+R2)] = (T-75)/21$

1209-001718 SMBUS Address 7Ah

10mil width and 10mil spacing.

Opposite side of CPU.

Line Width = 20 mil

3711-000456

DATE 1/10/2008

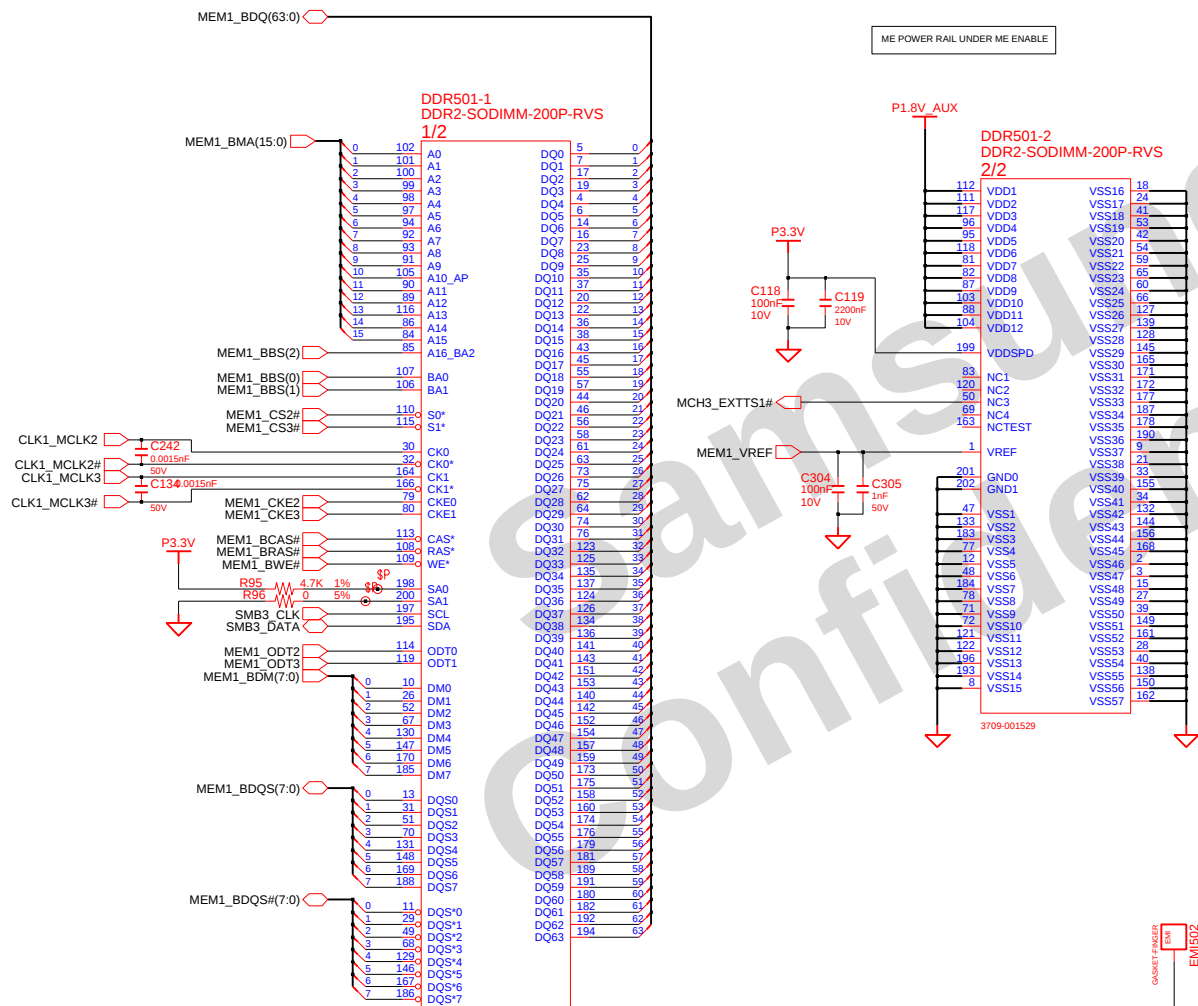
DEV. STEP

CAMBRIDGE

|             |           |           |                           |                             |  |             |             |         |    |
|-------------|-----------|-----------|---------------------------|-----------------------------|--|-------------|-------------|---------|----|
| DRAW        | JM        | DATE      | 1/10/2008                 | TITLE                       |  | Cambridge   |             | SAMSUNG |    |
| CHECK       | KS        | DEV. STEP | PV                        | thermal_Sensor_SMSC_Emc2102 |  | ELECTRONICS |             |         |    |
| APPROVAL    | JG        | REV       | 1.0                       | thermal_Sensor_SMSC_Emc2102 |  | PART NO.    | BA41-00xxxA |         |    |
| MODULE CODE | LAST EDIT |           | July 19, 2008 11:30:36 AM |                             |  | PAGE        | 68          | OF      | 64 |



Height : 9.2mm (Reverse)

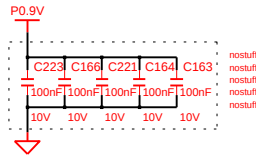
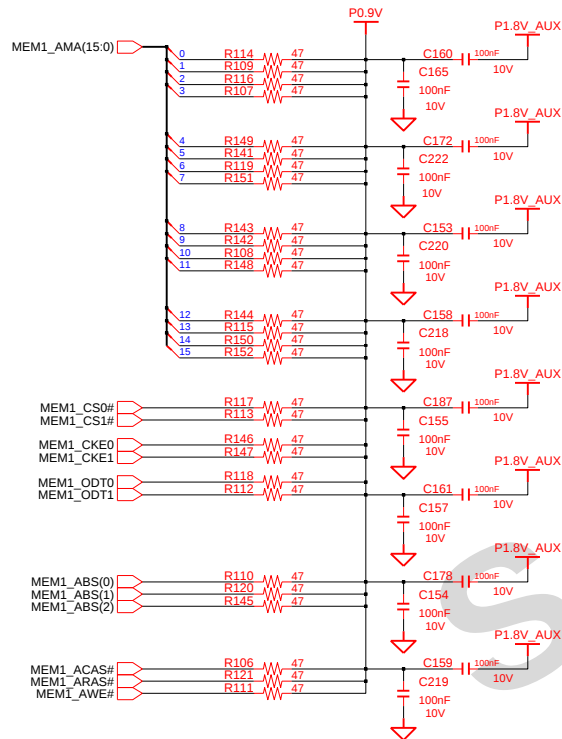


EM1

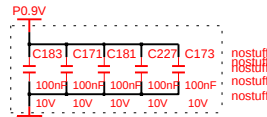
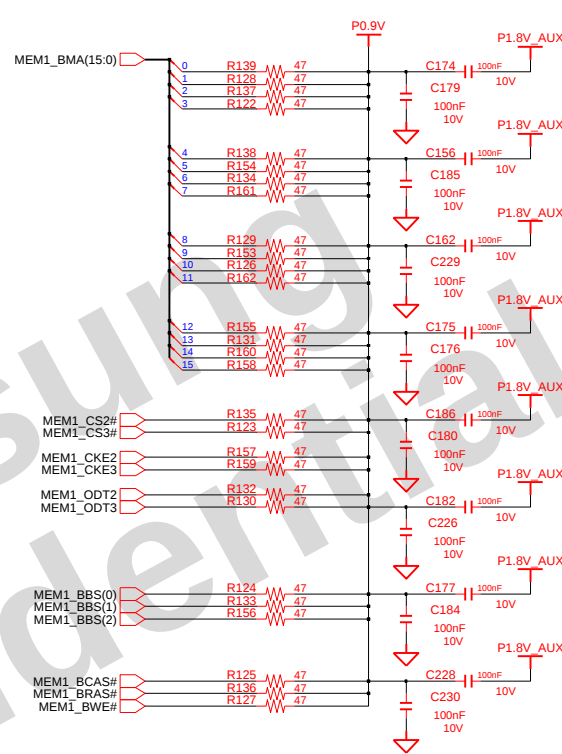
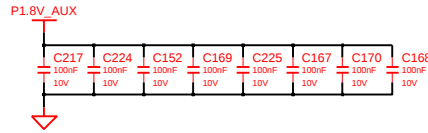
|             |           |           |                           |                                                     |                               |              |
|-------------|-----------|-----------|---------------------------|-----------------------------------------------------|-------------------------------|--------------|
| DRAW        | JM        | DATE      | 1/10/2008                 | TITLE<br>Cambridge<br>SODIMM_DDR2<br>SODIMM_DDR2 #2 | <b>SAMSUNG</b><br>ELECTRONICS |              |
| CHECK       | KS        | DEV. STEP | PV                        |                                                     |                               |              |
| APPROVAL    | JG        | REV       | 1.0                       |                                                     | PART NO.                      | BA41-00xxxxA |
| MODULE CODE | LAST EDIT |           | July 19, 2008 11:30:36 AM |                                                     | PAGE                          | 65 OF 64     |

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Place near SO-DIMM0



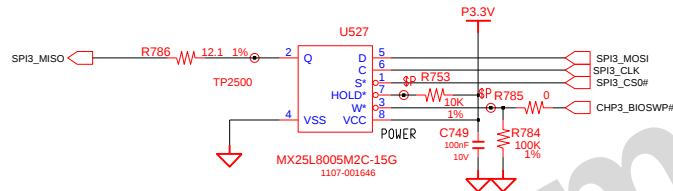
Place near SO-DIMM1

|             |    |           |           |                           |             |              |
|-------------|----|-----------|-----------|---------------------------|-------------|--------------|
| DRAW        | JM | DATE      | 1/10/2008 | TITLE                     | Cambridge   | SAMSUNG      |
| CHECK       | KS | REV. STEP | PV        | SODIMM_DDR2               | ELECTRONICS |              |
| APPROVAL    | JG | REV       | 1.0       | SODIMM_DDR2 #3            | PART NO.    | BA41-00xxxxA |
| MODULE CODE |    | LAST EDIT |           | July 19, 2008 11:30:36 AM | PAGE        | 66 OF 64     |

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## - SPI ROM LIST -



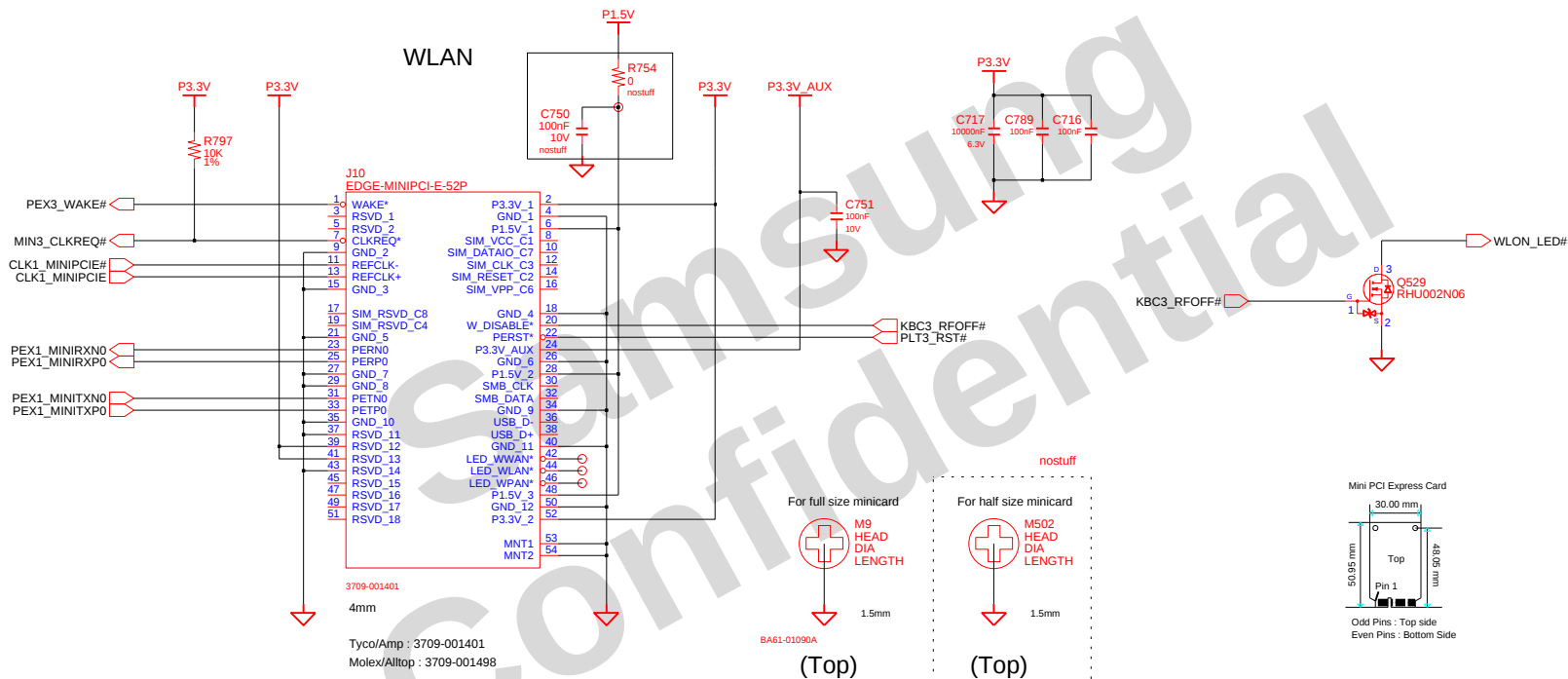
1MB(8Mbit)

|    |                                    |    |                                 |
|----|------------------------------------|----|---------------------------------|
| 02 | VERIFY REAL MODE                   | 66 | CONFIGURE ADVANCE CACHE REG.    |
| 03 | DISABLE NMI                        | 6A | DISPLAY EXTERNAL CACHE SIZE     |
| 04 | GET CPU TYPE                       | 6C | DISPLAY SHADOW MESSAGE          |
| 06 | INIT. SYSTEM H/W                   | 6E | DISPLAY NON-DISPOSABLE SEGMENT  |
| 08 | INIT. CHIPSET REG.                 | 70 | DISPLAY ERROR MESSAGE           |
| 09 | SET IN POST FLAG                   | 72 | CHECK FOR CONFIGURATION ERROR   |
| 0A | INIT CPU.REG                       | 74 | TEST REAL-TIME CLOCK            |
| 0B | CPU CACHE ON                       | 76 | CHECK FOR KEYBOARD EERROR       |
| 0C | INIT.CACHE TO POST                 | 7C | SETUP HARDWARE INTERRUPT VECTOR |
| 0E | INIT. I/O VALUE                    | 7E | TEST COPROCESSOR IF PRESENT     |
| 0F | ENABLE THE L-BUS IDE               | 80 | DISABLE ON-BOARD I/O PORT       |
| 10 | INIT. POWER MANAGER                | 82 | DETECT AND INSTALL EXT.RS232C   |
| 11 | LOAD ALTERNATE REG.                | 84 | DETECT AND INSTALL EXT.PARALLEL |
| 13 | PCI BUS MASTER RESET               | 86 | RE-INIT. ON-BOARD I/O PORT      |
|    | WITH INITIAL POST VALUE            | 88 | INIT. BIOS DATA ROM             |
| 14 | INIT. KEYBOARD CONTROLLER          | 8A | INIT.EXTENDED BIOS DATA AREA    |
| 16 | CHECK CHECKSUM                     | 8C | INIT. FDD CONTROLLER            |
| 18 | 8254 TIMER INIT.                   | 9A | SHADOW OPTION ROMS              |
| 1A | 8237 DMA CONTROLLER INIT.          | 9C | SETUP POWER MANAGEMENT          |
| 1C | RESET INTERRUPT CONTROLLER         | 9E | ENABLE H/W INTERRUPT            |
| 20 | TEST DRAM REFRESH                  | A0 | SET TIME OF DAY                 |
| 22 | TEST 8742 KEYBOARD CONTROLLER      | A4 | INIT. TYPEMATIC RATE            |
| 24 | SET ES SEGMENT REG. TO 4GB         | A8 | ERASE F2 PROMPT                 |
| 26 | ENABLE A20                         | AA | SCAN FOR F2 KEY STROKE          |
| 28 | AUTO SIZING DRAM                   | AC | ENTER SETUP                     |
| 32 | COMPUTE THE CPU SPEED              | AE | CLEAR IN POST FLAG              |
| 34 | TESET CMOS RAM                     | B0 | CHECK FOR ERRORS                |
| 38 | SHADOW SYSTEM BIOS ROM             | B2 | POST DONE-PREPARE TO BOOT O/S   |
| 3A | AUTO SIZING CACHE                  | B4 | ONE BEEP                        |
| 3C | CONFIGURE ADVANCED CHIPSET REG.    | B6 | CHECK PASSWORD (OPTION)         |
| 3D | LOAD ALTER REG. WITH CMOS VALUE    | B7 | ACPI INIT                       |
| 42 | INIT. INTERRUPT VECTOR             | BA | DMI INIT                        |
| 44 | INIT. BIOS INTERRUPT               | BE | CLEAR SCREEN                    |
| 46 | CHECK ROM COPYRIGHT NOTICE         | C0 | TRY BOOT WITH INT19             |
| 47 | INIT. I20 SUPPORT IF INSTALLED     | D0 | INTERRUPT HANDLER ERROR         |
| 48 | CHECK VIDEO CONFIGURE AGAINST CMOS | D2 | UNKNOWN INTERRUPT ERROR         |
| 49 | INIT. PCI BUS AND DEVICE           | D4 | PENDING INTERRUPT ERROR         |
| 4A | INIT. ALL VIDEO BIOS ROM           | D6 | SHUTDOWN 5                      |
| 4C | SHADOW VIDEO BIOS ROM              | D8 | SHUTDOWN ERROR                  |
| 50 | DISPLAY CPU TYPE AND SPEED         | DA | EXTENDED BLOCK MOVE             |
| 52 | TEST KEYBOARD                      | DC | SHUTDOWN 10                     |
| 54 | SET KEYCLICK IF ENABLED            | D9 | ENABLE NMI                      |
| 56 | ENABLE KEYBOARD                    | 90 | INIT. HDD CONTROLLER            |
| 58 | TEST FOR UNEXPECTED INTERRUPTS     | 91 | INIT. LOCAL BUS HDD CONTROLLER  |
| 5A | DISPLAY " PRESS ..... SETUP"       | 92 | JUMP TO USER PATCH 2            |
| 5C | TEST RAM BETWEEN 512K AND 640K     | 94 | DISABLE A20 ADDRESS LINE        |
| 60 | TEST EXTENDED MEMORY               | 96 | CLEAR HUGE ES SEGMENT REG.      |
| 62 | TEST EXTENDED MEMORY ADDRESS LINE  | 98 | SEARCH FOR OPTION ROMS          |
| 64 | JUMP TO USER PATCH 1               |    |                                 |

|             |    |           |                           |              |           |                        |
|-------------|----|-----------|---------------------------|--------------|-----------|------------------------|
| DRAW        | JM | DATE      | 1/10/2008                 | TITLE        | Cambridge | SAMSUNG<br>ELECTRONICS |
| CHECK       | KS | REV. STEP | PV                        | SPI_BIOS_ROM |           |                        |
| APPROVAL    | JG | REV       | 1.0                       | SPI_BIOS_ROM | PART NO.  |                        |
| MODULE CODE |    | LAST EDIT | July 19, 2008 11:30:36 AM | PAGE         | 67 OF 64  |                        |

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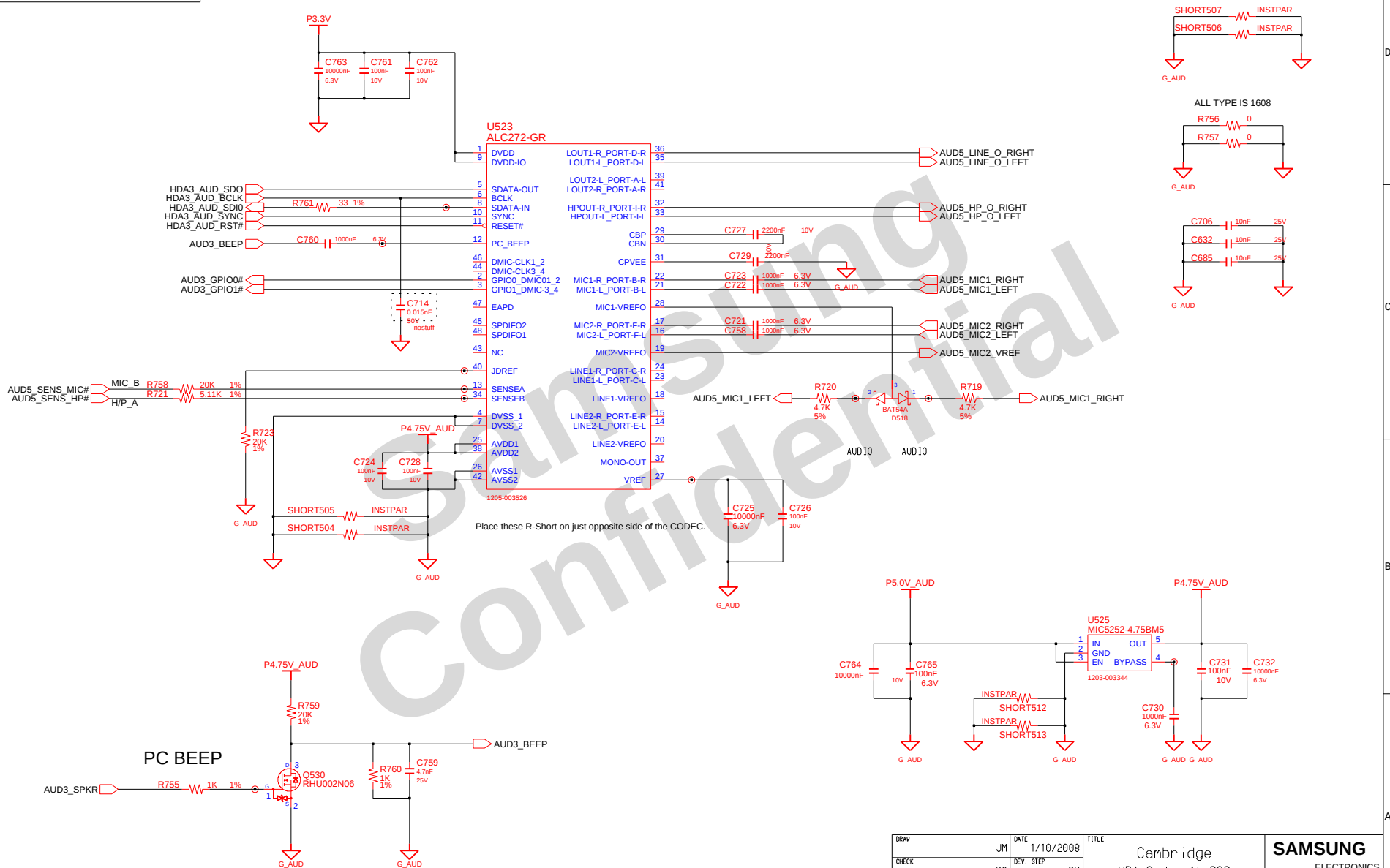
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|-------------|-----------|-----------|---------------------------|--------------------|--------------------|------------------------|
| DRAW        | JM        | DATE      | 1/10/2008                 | TITLE              | Cambridge          | SAMSUNG<br>ELECTRONICS |
| CHECK       | KS        | DEV. STEP | PV                        | PCIE_Minicard_Slot | PCIE_Minicard_Slot |                        |
| APPROVAL    | JG        | REV       | 1.0                       | PCIE_Minicard_Slot | PCIE_Minicard_Slot |                        |
| MODULE CODE | undefined | LAST EDIT | July 19, 2008 11:30:36 AM | PAGE               | 62 OF 64           |                        |

## SAMSUNG PROPRIETARY

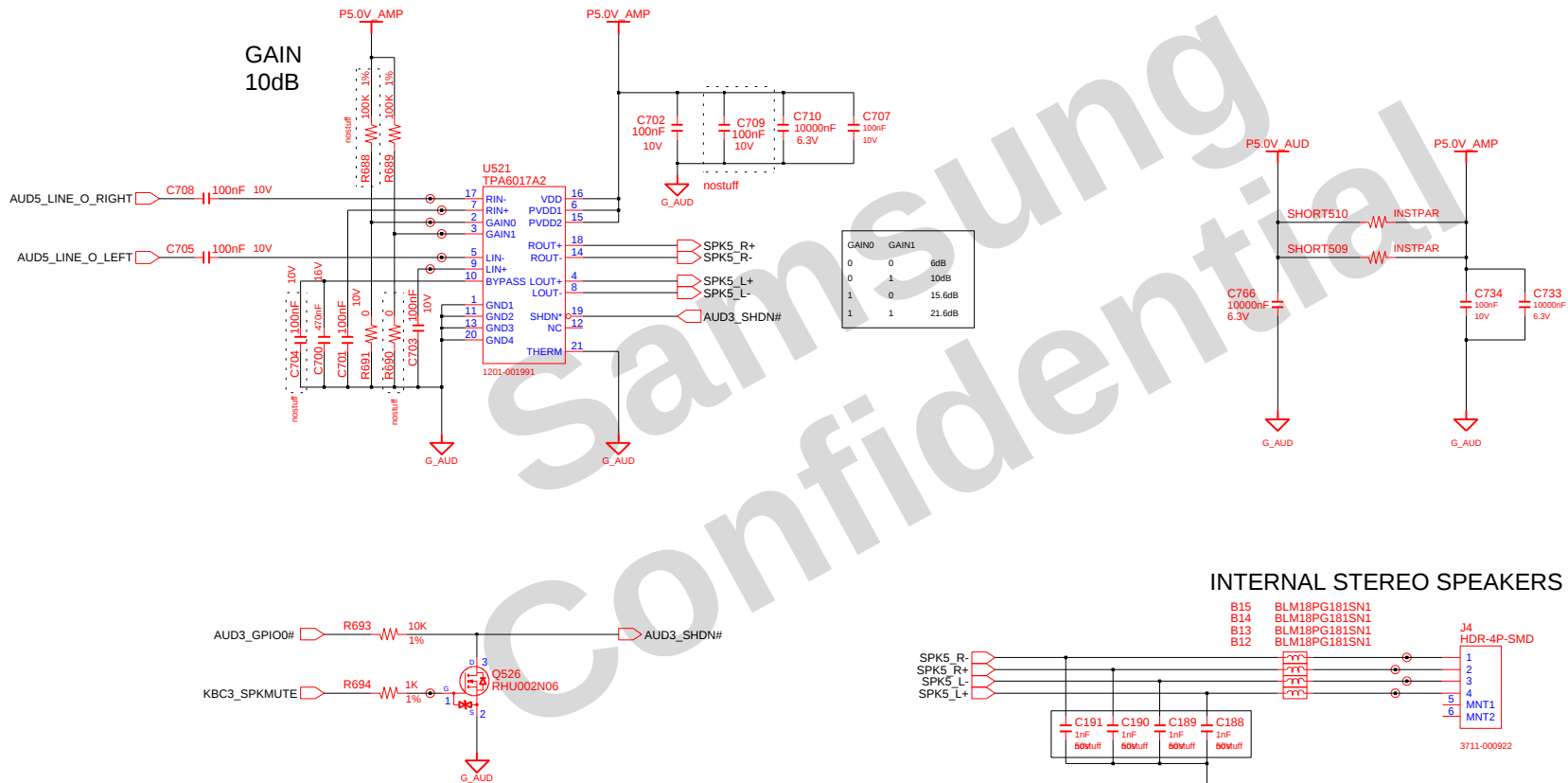
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|-------------|-----------|-----------|---------------------------|---------------------|-----------|------------------------|
| DRAW        | JM        | DATE      | 1/10/2008                 | TITLE               | Cambridge | SAMSUNG<br>ELECTRONICS |
| CHECK       | KS        | DEV. STEP | PV                        | HDA_Codec_Alc262    |           |                        |
| APPROVAL    | JG        | REV       | 1.0                       | HDA_Codec_Alc262 #1 | PART NO.  |                        |
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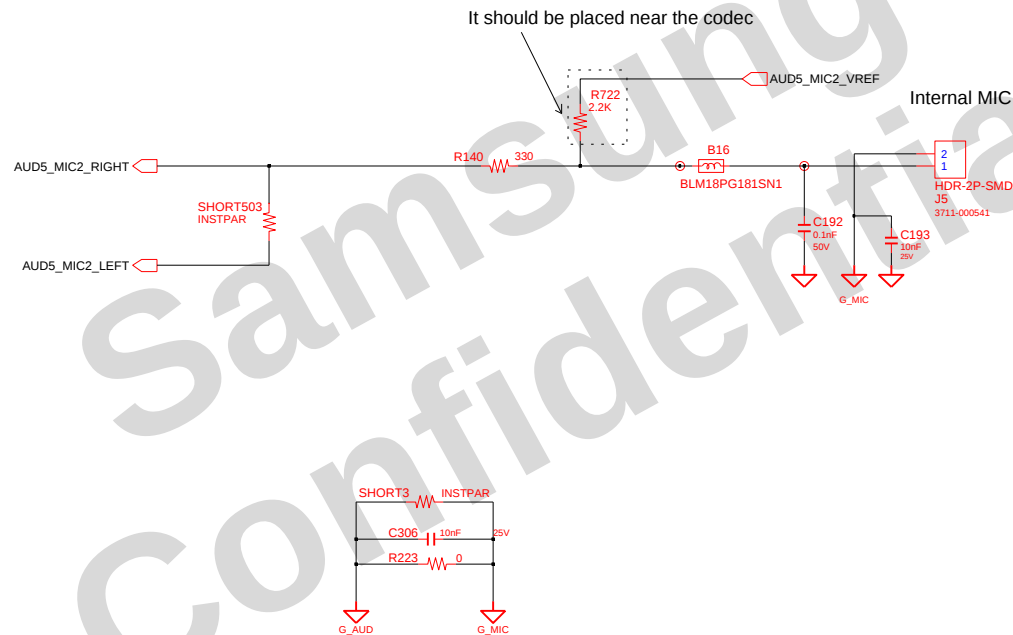
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|-------------|-----------|-----------|-----------|---------------------------|-----------|-------------|
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| CHECK       | KS        | DEV. STEP | PV        | HDA_Codec_Alc262          |           | ELECTRONICS |
| APPROVAL    | JG        | REV       | 1.0       | HDA_Codec_Alc262 #2       | PART NO.  | BA41-00xxxA |
| MODULE CODE | LAST EDIT |           |           | July 19, 2008 11:30:36 AM | PAGE      | 50 OF 64    |

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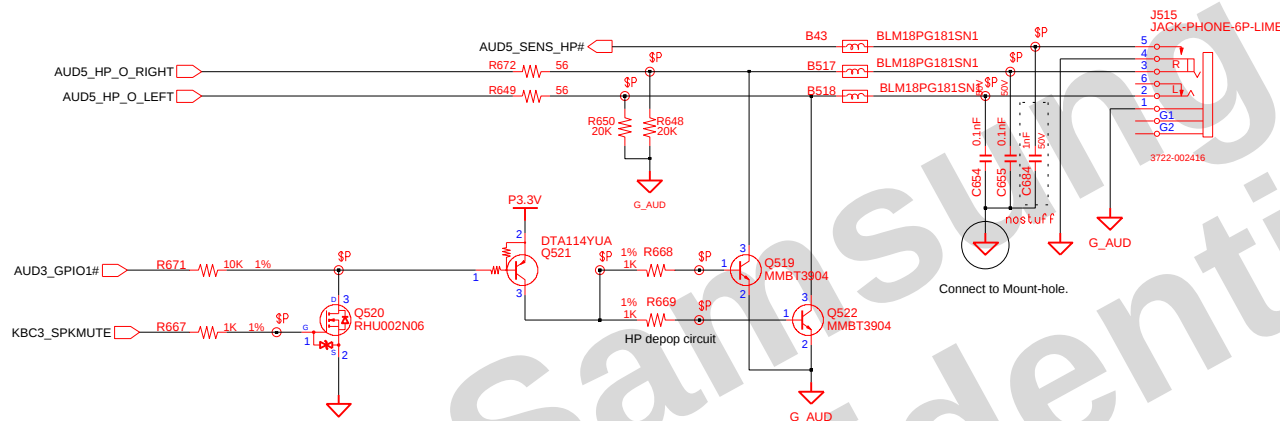


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| DRAW        | JM        | DATE      | 1/10/2008                 | TITLE               | Cambridge | <b>SAMSUNG</b><br>ELECTRONICS |
| CHECK       | KS        | DEV. STEP | PV                        | HDA_Codec_Alc262    |           |                               |
| APPROVAL    | JG        | REV       | 1.0                       | HDA_Codec_Alc262 #3 |           |                               |
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| PAGE        |           |           |                           | 51                  | OF        | 64                            |

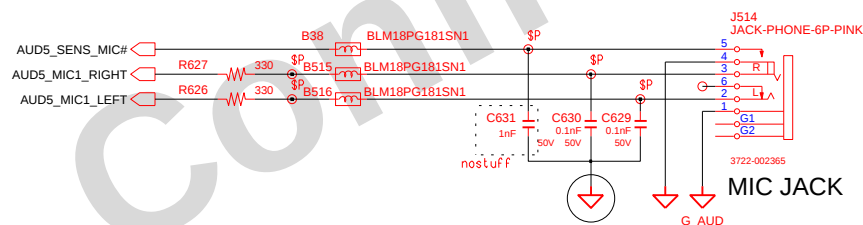
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## HEADPHONE



Connect to Mount-hole.



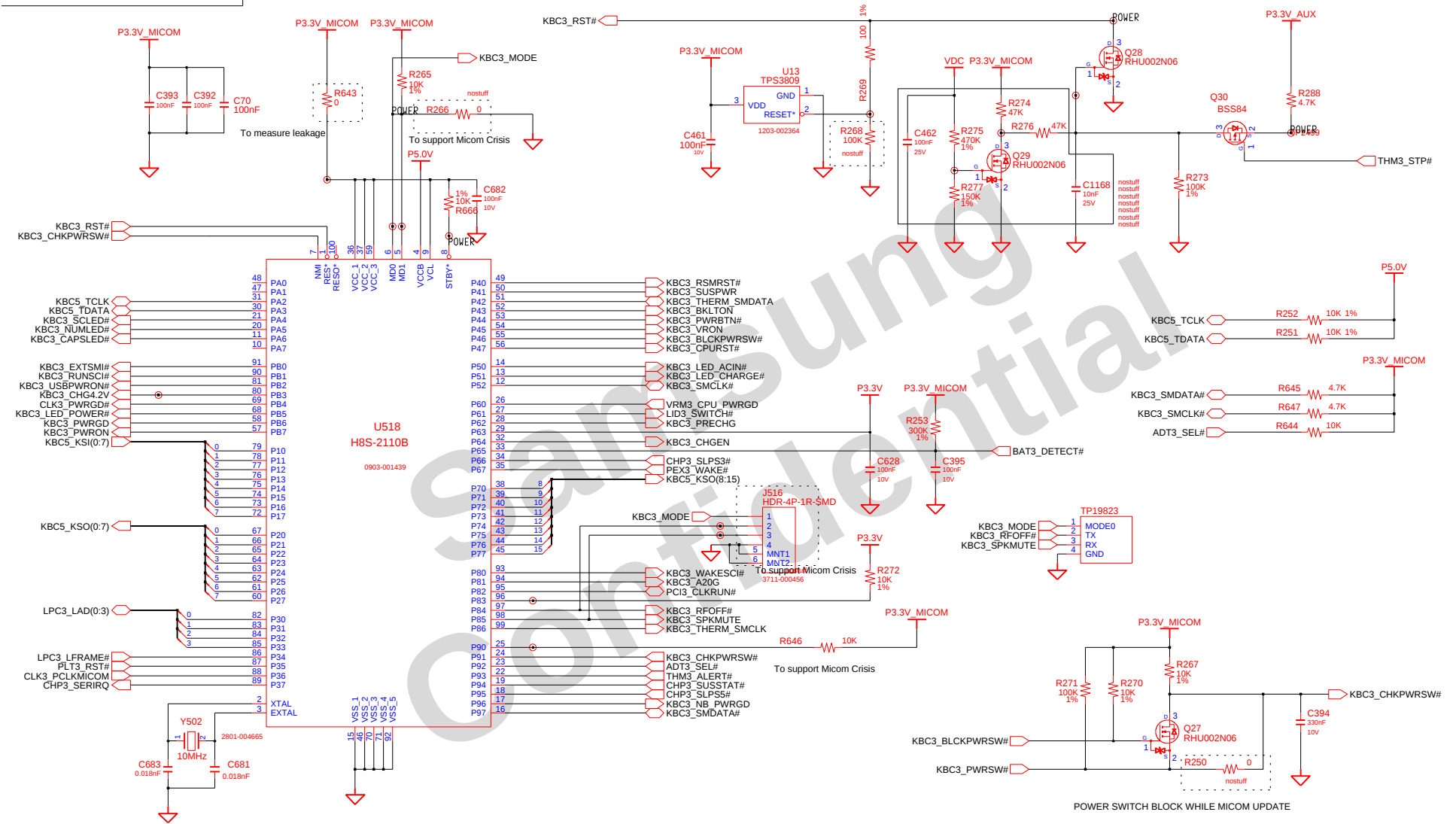
The traces led to Audio Jacks have the width over 10mil

|               |    |           |                           |                     |           |                        |
|---------------|----|-----------|---------------------------|---------------------|-----------|------------------------|
| DRAW          | JM | DATE      | 1/10/2008                 | TITLE               | Cambridge | SAMSUNG<br>ELECTRONICS |
| CHECK         | KS | DEV. STEP | PV                        | HDA_Codec_Alc262    |           |                        |
| APPROVAL      | JG | REV       | 1.0                       | HDA_Codec_Alc262 #4 |           |                        |
| MODULE CODE   |    | LAST EDIT | July 19, 2008 11:30:36 AM |                     |           |                        |
| PAGE 52 OF 64 |    |           |                           |                     |           | PART NO. BA41-00xxxA   |

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## MICOM RESET



### MICOM Crisis Update

Condition: P90=P91=P92=High(MICOM\_P3V)  
 MD0=MD1=Low(0V)  
 Serial Port: P84 & P85

|                          |    |           |           |       |                        |                        |
|--------------------------|----|-----------|-----------|-------|------------------------|------------------------|
| DRAW                     | JM | DATE      | 1/10/2008 | TITLE | Cambridge              | SAMSUNG<br>ELECTRONICS |
| CHECK                    | KS | REV.      | STEP      | PV    | MICOM_Renesas2110_100p |                        |
| APPROVAL                 | JG | REV       | 1.0       |       | MICOM_Renesas2110_100p |                        |
| MODULE CODE              |    | LAST EDIT |           |       |                        |                        |
| Jul 19, 2008 11:30:36 AM |    |           |           |       |                        | PAGE 58 OF 64          |

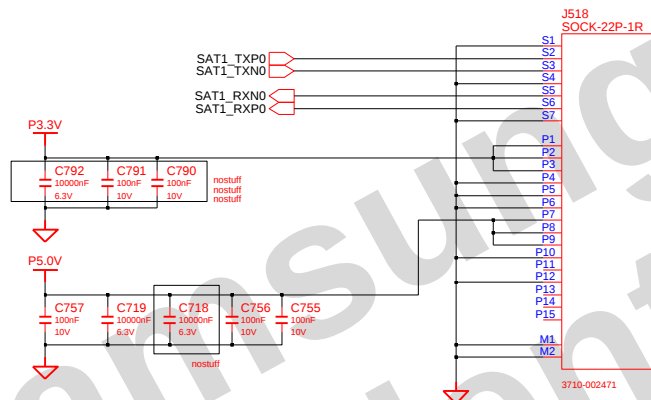
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SAT1\_TXP0 [

SAT1\_TXN0 [

SAT1\_RXN0 <

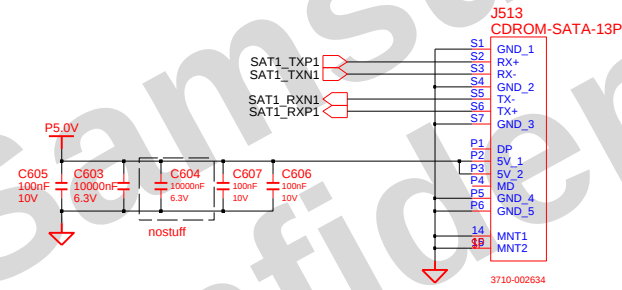
SAT1\_RXP0 <



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| CHECK       | KS        | DEV. STEP | PV                        |       |                                         |                                                                                       |
| APPROVAL    | JG        | REV       | 1.0                       |       |                                         |                                                                                       |
| MODULE CODE | LAST EDIT |           | July 19, 2008 11:30:36 AM |       | PAGE                                    | 54 OF 64                                                                              |

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SATA ODD



|             |    |           |                           |       |           |                        |          |             |
|-------------|----|-----------|---------------------------|-------|-----------|------------------------|----------|-------------|
| DRAW        | JM | DATE      | 1/10/2008                 | TITLE | Cambridge | SAMSUNG<br>ELECTRONICS |          |             |
| CHECK       | KS | DEV. STEP | PV                        |       |           |                        | PART NO. | BA41-00xxxA |
| APPROVAL    | JG | REV       | 1.0                       |       |           |                        |          |             |
| MODULE CODE |    | LAST EDIT | July 19, 2008 11:30:36 AM |       | PAGE      | 60 OF 64               |          |             |

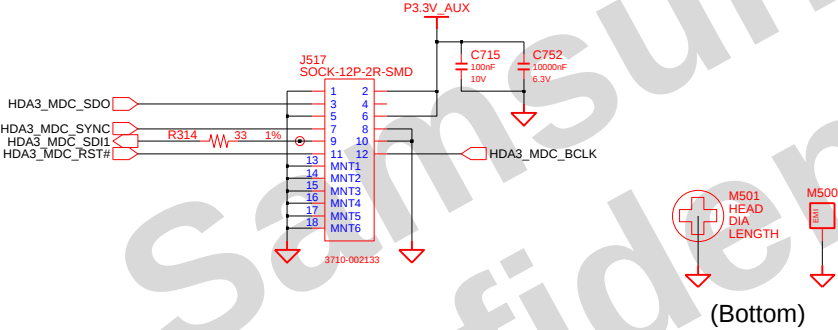
[illegible]

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| CHECK       | KS        | DEV. STEP | PV                        |       |                                     | ELECTRONICS    |              |       |
| APPROVAL    | JG        | REV       | 1.0                       |       |                                     | PART NO.       | BA41-00xxxxA |       |
| MODULE CODE | LAST EDIT |           | July 19, 2008 11:30:36 AM |       |                                     | PAGE           | 70           | OF 64 |

The schematic diagram illustrates the USB3\_P0+ and USB3\_P6+ signal paths. It shows the connection from the USB3\_P0+ and USB3\_P6+ pins to the USB3\_P0+\_R and USB3\_P6+\_R pins. The diagram includes components like resistors (R11, R10, R9, R8), capacitors (C530, C500, C503), and diodes (D501, D500, D4, D3). The schematic is labeled with "Need 4A Routing" and "nostuff".

|             |           |           |                           |       |                                     |                        |             |    |
|-------------|-----------|-----------|---------------------------|-------|-------------------------------------|------------------------|-------------|----|
| DRAW        | JM        | DATE      | 1/10/2008                 | TITLE | Cambridge<br>USB_2Port<br>USB_2Port | SAMSUNG<br>ELECTRONICS |             |    |
| CHECK       | KS        | DEV. STEP | PV                        |       |                                     |                        |             |    |
| APPROVAL    | JG        | REV       | 1.0                       |       |                                     |                        |             |    |
| MODULE CODE | LAST EDIT |           | July 19, 2008 11:30:36 AM |       |                                     |                        | PAGE        | 71 |
|             |           |           |                           |       |                                     | PART NO.               | BA41-00xxxA |    |

MDC Connector

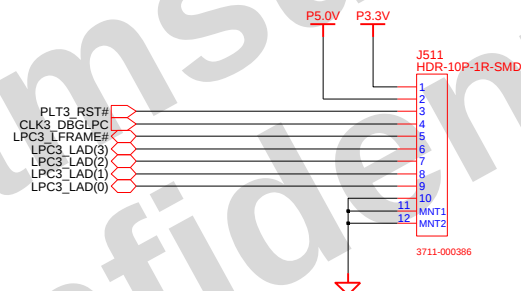


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| DRAW        | JM | DATE      | 1/10/2008 | Cambridge<br>HDA_Modem<br>HDA_Modem |  | <b>SAMSUNG</b><br>ELECTRONICS |          |
| CHECK       | KS | DEV. STEP | PV        |                                     |  |                               |          |
| APPROVAL    | JG | REV       | 1.0       |                                     |  |                               |          |
| MODULE CODE |    | LAST EDIT |           | July 19, 2008 11:30:36 AM           |  | PAGE                          | 53 OF 64 |

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80H DECODER CONNECTOR



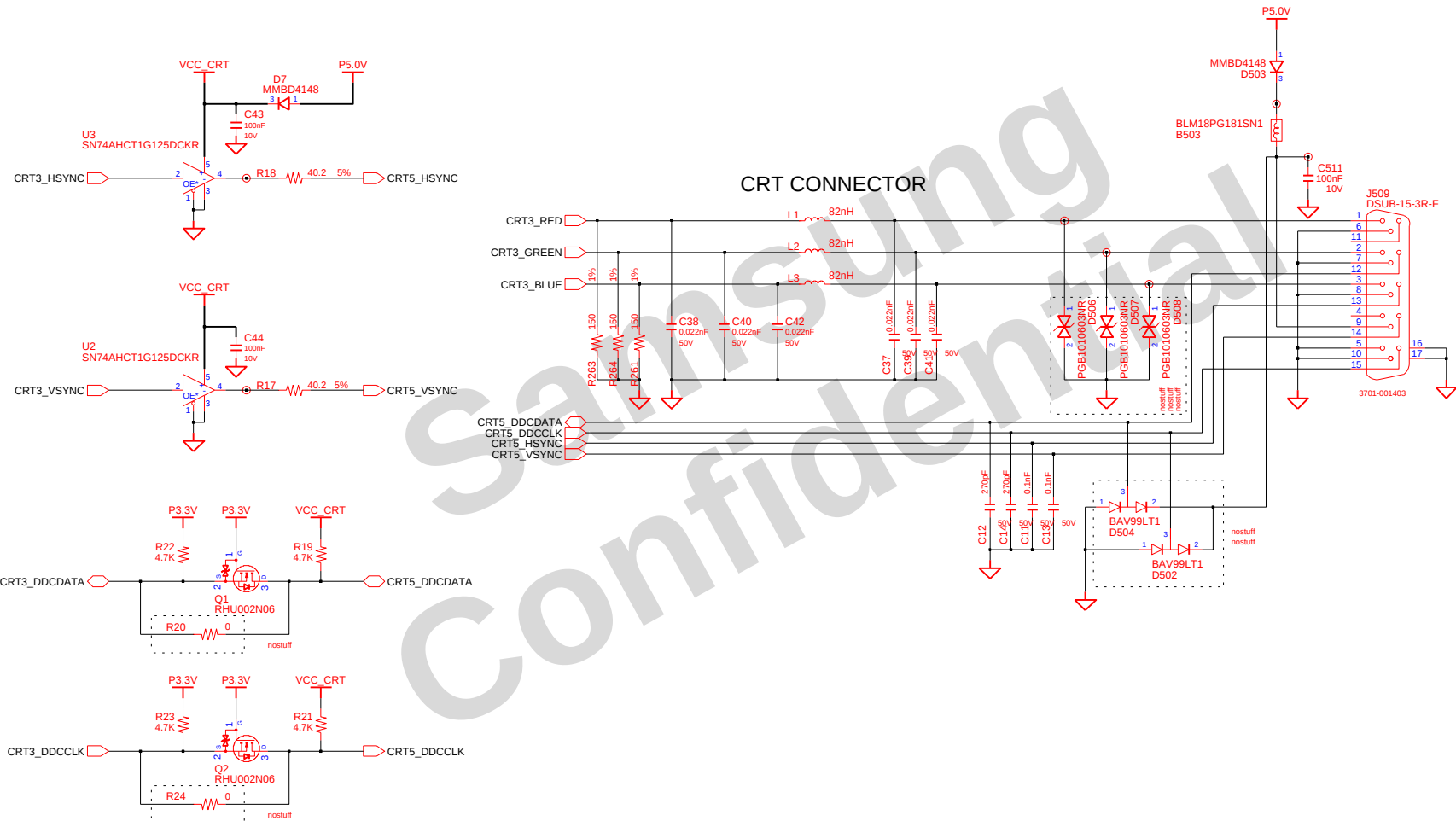
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| CHECK       | KS        | DEV. STEP | PV        | Other_Debug_80 | Other_Debug_80            |                        |
| APPROVAL    | JG        | REV       | 1.0       | Other_Debug_80 | Other_Debug_80            |                        |
| MODULE CODE | LAST EDIT |           |           |                | July 19, 2008 11:30:36 AM | PAGE 61 OF 64          |

PART NO. BA41-00xxxA

COM-22C-015(1996.6.5) REV. 3

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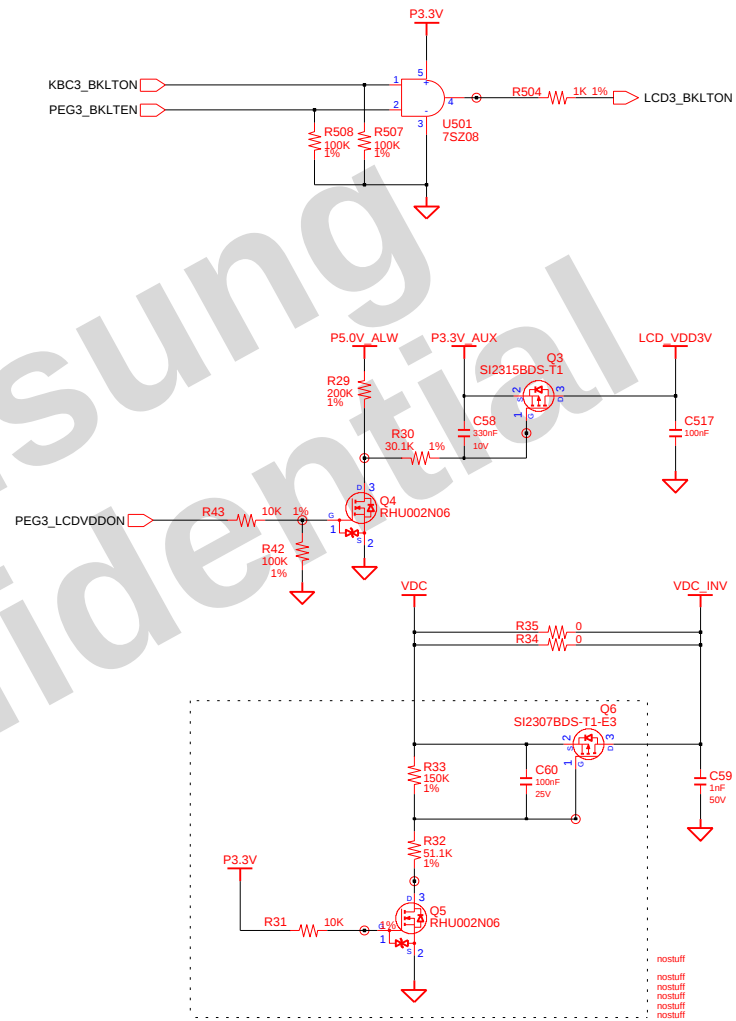
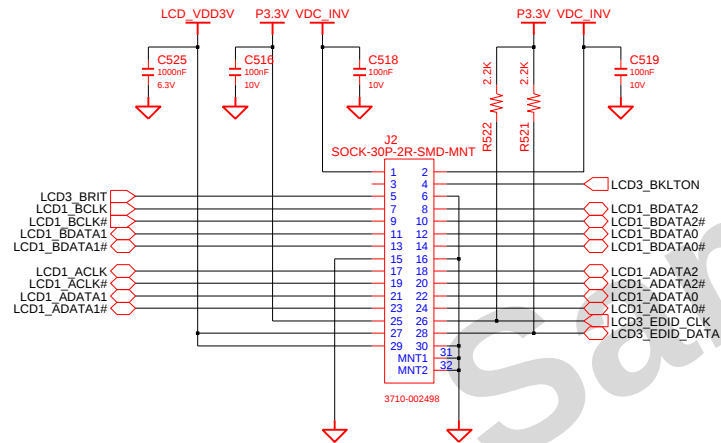
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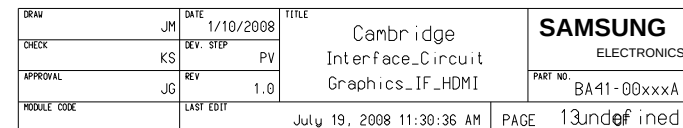
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| APPROVAL    | JG | REV       | 1.0                       |       |                                                   |                          |
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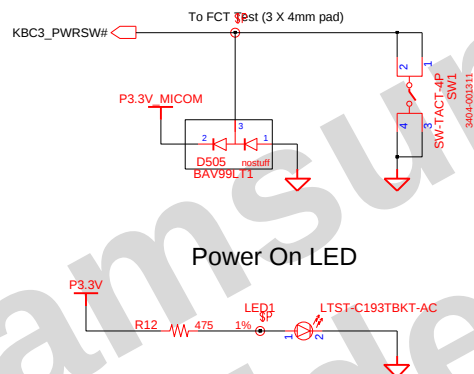
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| CHECK                     | KS | REV. STEP | PV        |       |                                                   |                                                          |
| APPROVAL                  | JG | REV       | 1.0       |       |                                                   |                                                          |
| MODULE CODE               |    | LAST EDIT |           |       |                                                   |                                                          |
| July 19, 2008 11:30:36 AM |    |           |           |       |                                                   | PAGE 12 of 12                                            |



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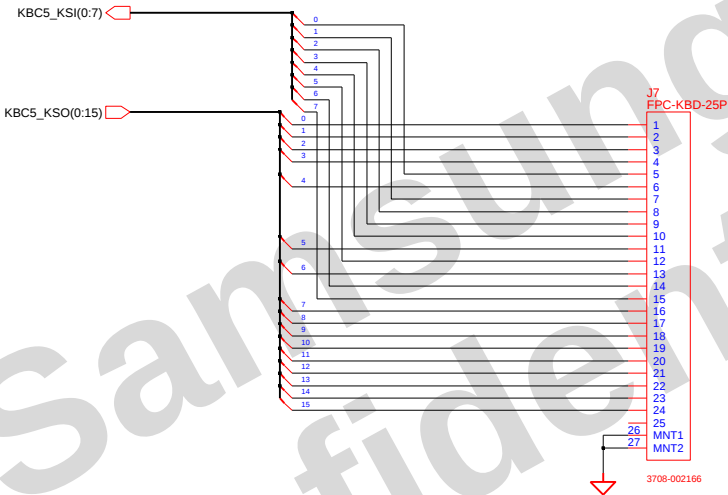
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Put this LED located near PWRSW from ME recommendation  
Power LED, Blue color



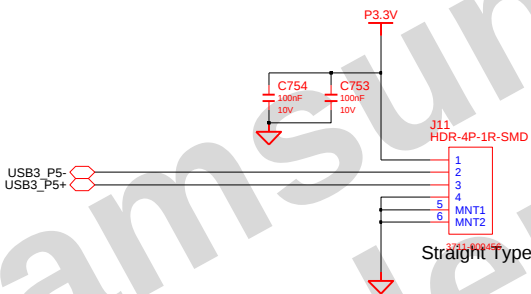
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| CHECK       | KS        | DEV. STEP | PV        |                                                 |  |                               |              |    |    |
| APPROVAL    | JG        | REV       | 1.0       |                                                 |  | PART NO.                      | BA41-00xxxxA |    |    |
| MODULE CODE | LAST EDIT |           |           | July 19, 2008 11:30:36 AM                       |  | PAGE                          | 59           | OF | 64 |

KEYBOARD



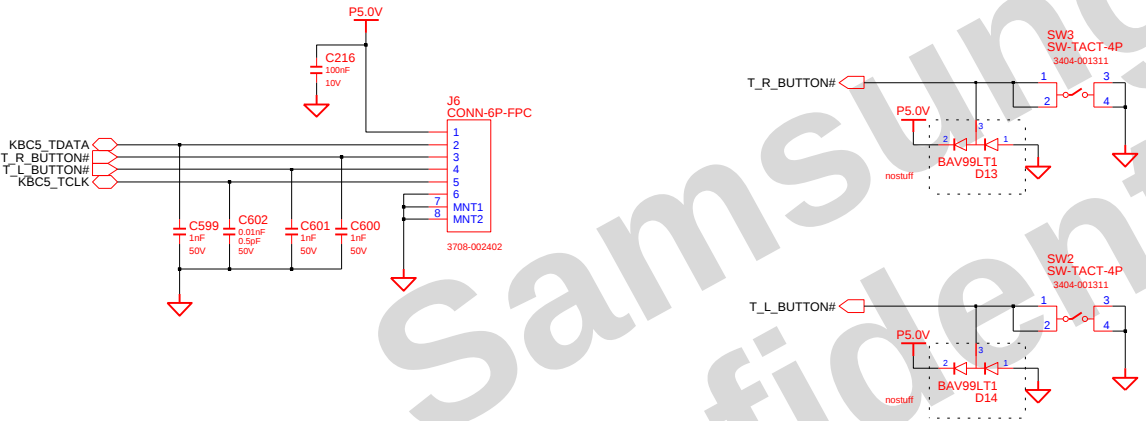
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| CHECK       | KS        | DEV. STEP | PV        |                                         |      |                               |       |
| APPROVAL    | JG        | REV       | 1.0       |                                         |      |                               |       |
| MODULE CODE | LAST EDIT |           |           | July 19, 2008 11:30:36 AM               | PAGE | 55                            | OF 64 |

Bluetooth Interface



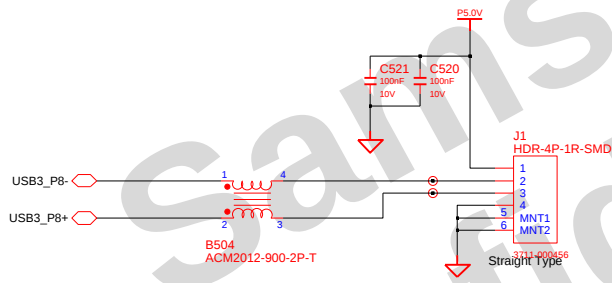
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| CHECK       | KS | DEV. STEP | PV                        |       |                                                     | PART NO.<br>BA41-00xxxA |
| APPROVAL    | JG | REV       | 1.0                       |       |                                                     |                         |
| MODULE CODE |    | LAST EDIT | July 19, 2008 11:30:36 AM | PAGE  | 44                                                  | OF 64                   |

TOUCHPAD

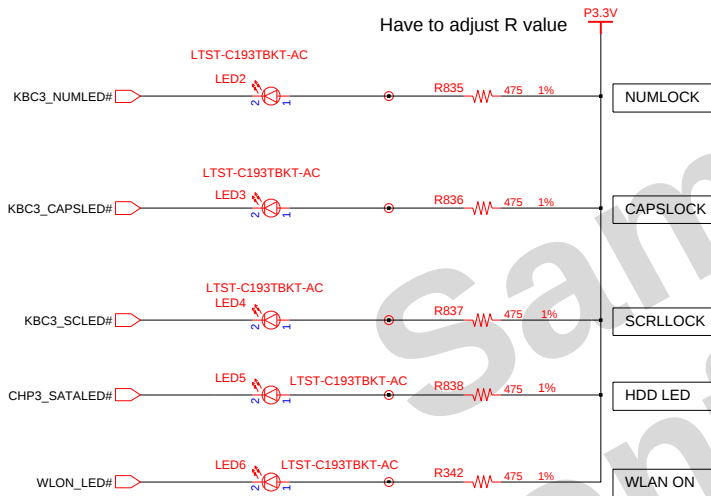


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| CHECK       | KS | DEV. STEP | PV                        |       |                                                   | PART NO.               |
| APPROVAL    | JG | REV       | 1.0                       |       |                                                   | BA41-00xxxA            |
| MODULE CODE |    | LAST EDIT | July 19, 2008 11:30:36 AM | PAGE  | 69                                                | OF 64                  |

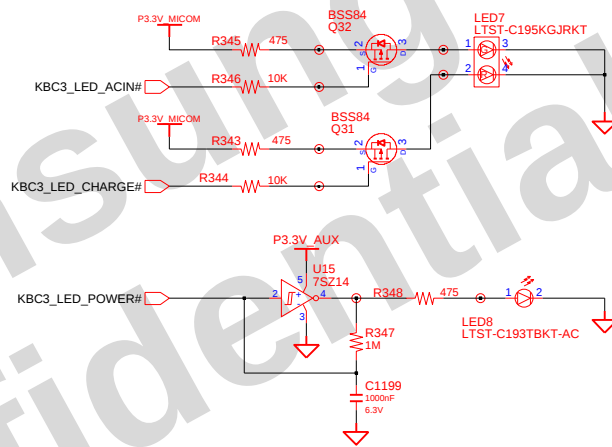
CAMERA



|             |    |           |                           |       |                                               |                         |
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| CHECK       | KS | DEV. STEP | PV                        |       |                                               | PART NO.<br>BA41-00xxxA |
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| MODULE CODE |    | LAST EDIT | July 19, 2008 11:30:36 AM | PAGE  | 45                                            | OF 64                   |

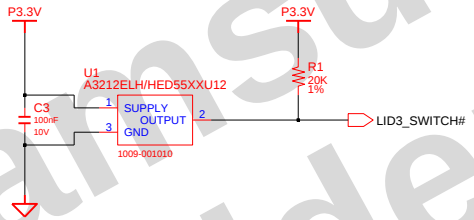


## ADAPTERIN/CHARGING LED



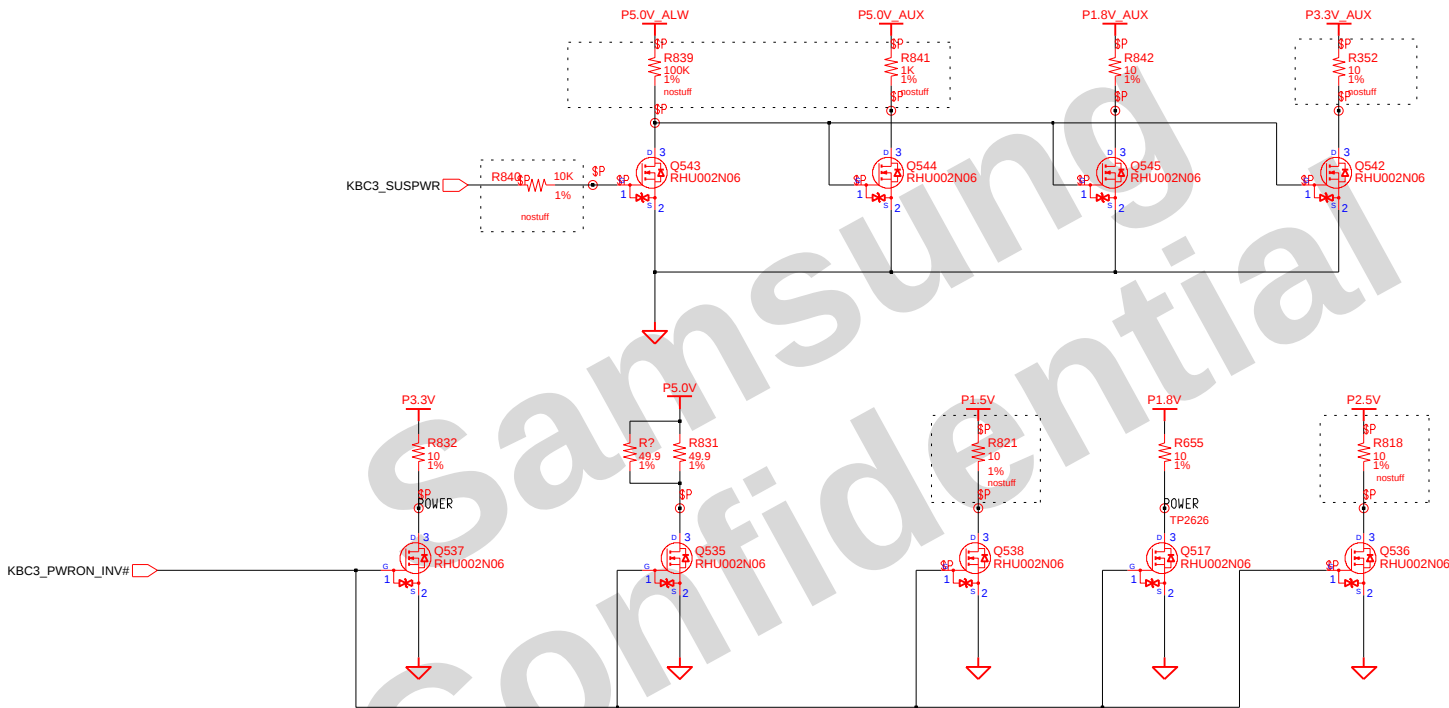
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|-------------|-----------|-----------|---------------------------|------------------------------------------------|------|-------------------------|-------|
| DRAW        | JM        | DATE      | 1/10/2008                 | TITLE<br>Cambridge<br>LED_Switch<br>LED_Switch |      | SAMSUNG<br>ELECTRONICS  |       |
| CHECK       | KS        | DEV. STEP | PV                        |                                                |      |                         |       |
| APPROVAL    | JG        | REV       | 1.0                       |                                                |      | PART NO.<br>BA41-00xxxA |       |
| MODULE CODE | LAST EDIT |           | July 19, 2008 11:30:36 AM |                                                | PAGE | 56                      | OF 64 |

LID\_SWITCH



|             |           |           |                           |                                                |      |                               |              |
|-------------|-----------|-----------|---------------------------|------------------------------------------------|------|-------------------------------|--------------|
| DRAW        | JM        | DATE      | 1/10/2008                 | TITLE<br>Cambridge<br>LID_Switch<br>LID_Switch |      | <b>SAMSUNG</b><br>ELECTRONICS |              |
| CHECK       | KS        | DEV. STEP | PV                        |                                                |      |                               |              |
| APPROVAL    | JG        | REV       | 1.0                       |                                                |      | PART NO.                      | BA41-00xxxxA |
| MODULE CODE | LAST EDIT |           | July 19, 2008 11:30:36 AM |                                                | PAGE | 57                            | OF 64        |

POWER DISCHARGER



|             |           |           |                           |                   |             |              |
|-------------|-----------|-----------|---------------------------|-------------------|-------------|--------------|
| DRAW        | JM        | DATE      | 1/10/2008                 | TITLE             | Cambridge   | SAMSUNG      |
| CHECK       | KS        | DEV. STEP | PV                        | PWR_MV_DisCharger | ELECTRONICS |              |
| APPROVAL    | JG        | REV       | 1.0                       | DISCHARGING LOGIC | PART NO.    | BA41-00xxxxA |
| MODULE CODE | undefined | LAST EDIT | July 19, 2008 11:30:36 AM | PAGE              | 63          | OF 64        |

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heet2 ----- Root[sheet2]  
heet3 ----- Root[sheet3]  
heet4 ----- Root[sheet4]  
heet5 ----- Root[sheet5]  
heet6 ----- Root[sheet6]  
heet7 ----- Root[sheet7]  
heet8 ----- Root[sheet8]  
heet9 ----- Root[sheet9]  
heet10 ----- Root[sheet10]  
heet11 ----- Root[sheet11]  
heet12 ----- Root[sheet12]  
heet13 ----- Root[sheet13]  
heet14 ----- Root[sheet14]  
heet15 ----- Root[sheet15]  
heet16 ----- Root[sheet16]  
heet17 ----- Root[sheet17]  
heet18 ----- Root[sheet18]  
heet19 ----- Root[sheet19]  
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heet26 ----- Root[sheet26]  
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heet30 ----- Root[sheet30]  
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heet37 ----- Root[sheet37]  
heet38 ----- Root[sheet38]  
heet39 ----- Root[sheet39]  
heet40 ----- Root[sheet40]  
heet41 ----- Root[sheet41]  
heet42 ----- Root[sheet42]  
heet43 ----- Root[sheet43]  
heet44 ----- Root[sheet44]  
heet45 ----- Root[sheet45]  
heet46 ----- Root[sheet46]  
heet47 ----- Root[sheet47]  
heet48 ----- Thermal\_Sensor\_SMSC\_Emc2102[sheet1]  
heet49 ----- SODIMM\_DDR2[sheet1]  
heet50 ----- SODIMM\_DDR2[sheet2]

Sheet51 ----- SODIMM\_DDR2[sheet3]  
Sheet52 ----- SPI\_BIOS\_ROM[sheet1]  
Sheet53 ----- PCIE\_Minicard\_Slot[sheet1]  
Sheet54 ----- HDA\_Codec\_Alc262[sheet1]  
Sheet55 ----- HDA\_Codec\_Alc262[sheet2]  
Sheet56 ----- HDA\_Codec\_Alc262[sheet3]  
Sheet57 ----- HDA\_Codec\_Alc262[sheet4]  
Sheet58 ----- MICOM\_Renesas2110\_100p[sheet1]  
Sheet59 ----- HDD\_IF\_Conn[sheet1]  
Sheet60 ----- ODD\_IF\_Conn[sheet1]  
Sheet61 ----- USB\_1Port[sheet1]  
Sheet62 ----- USB\_2Port[sheet1]  
Sheet63 ----- HDA\_Modem[sheet1]  
Sheet64 ----- Other\_Debug\_80[sheet1]  
Sheet65 ----- Graphics\_IF\_CRT[sheet1]  
Sheet66 ----- Graphics\_IF\_CRT[sheet2]  
Sheet67 ----- Graphics\_IF\_CRT[sheet3]  
Sheet68 ----- MIO\_Switch[sheet1]  
Sheet69 ----- KBD\_IF\_Conn[sheet1]  
Sheet70 ----- Bluetooth\_IF\_Conn[sheet1]  
Sheet71 ----- Touchpad\_IF\_Conn[sheet1]  
Sheet72 ----- Camera\_IF\_Conn[sheet1]  
Sheet73 ----- LED\_Switch[sheet1]  
Sheet74 ----- LID\_Switch[sheet1]  
Sheet75 ----- PWR\_MV\_DisCharger[sheet1]