

Cambridge

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

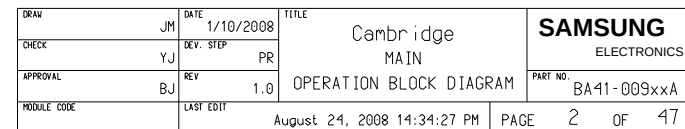
Model Name : Cambridge
PBA Name : MAIN
PCB Code : BA41-00XXXXA

Dev. Step : PR
Revision : 1.0
T.R. Date : 2008.08.22

DRAW	CHECK	APPROVAL

■ Owner : SEC Mobile R & D Signature : X

DRAW	JM	DATE	1/10/2008	TITLE	Cambridge COVER	SAMSUNG ELECTRONICS
CHECK	YJ	DEV. STEP	PR			
APPROVAL	BJ	REV	1.0			
MODULE CODE	LAST EDIT			August 24, 2008 14:34:27 PM	PAGE	1 OF 47



BOARD INFORMATION

SCHEMATIC ANNOTATIONS AND BOARD INFORMATION

PCI Devices

Devices	IDSEL#	REQ/GNT#	Interrupts
Cardbus	AD25	3	A,B,C
USB	AD29(internal)	-	USB2.0 #0 (USB0) : A USB2.0 #1 (USB1) : D USB2.0 #2 (USB4) : C USB2.0 #3 (USB5) : E USB2.0 #4 (EHCI) : H
Hub to PCI	AD30(internal)	-	-
LPC bridge/IDE/AC97/SMBUS	AD31(internal)	-	B
Internal MAC	AD24(internal)	-	E
AC Link	-	-	B
GLAN	-	-	F

Voltage Rails

VDC	Primary DC system power supply (7 to 21V)
VCC_CORE	Core Voltage for CPU
GPU_CORE	Core Voltage for GPU
P1.05V (VCCP)	VTT for CPU, Crestline & ICH8-M
P3.3V_MICOM	3.3V always power rail (for Micom)
P1.5V	1.5V switched power rail (off in S3-S5)
P1.8V	1.8V switched power rail (off in S3-S5)
P1.8V_AUX	1.8V power rail for DDR (off in S4-S5)
P0.9V	0.9V power rail for DDR (off in S3-S5)
P3.3V	3.3V switched power rail (off in S3-S5)
P3.3V_AUX	3.3V switched on power rail (off in S4-S5)
P5.0V	5.0V switched power rail (off in S3-S5)
P5.0V_AUX	5.0V switched on power rail (off in S4-S5)
P5.0V_ALW	5.0V always power rail

Crystal / Oscillator

TYPE	FREQUENCY	DEVICE	USAGE
Crystal	32.768KHz	ICH8-M	Real Time Clock
Crystal	10MHz	MICOM	HD64F2169/2160
Crystal	14.318MHz	CLOCK-Generator	CK-505
Crystal	25MHz	LAN	Intel LAN

LCD Pannel Detect (TBD)

Devices	Resolution	PANNEL_DETECT_0

I C / SMB Address

Devices	Address	Hex	Bus
ICH8-m	Master	-	SMBUS Master
CPU Thermal Sensor	0111 101x	7Ah	Thermal Sensor
SODIMM0	1010 000x	A0h	-
SODIMM1	1010 010x	A4h	-
Thermal Sensor on SODIMM0	0011 000x	30h	-
Thermal Sensor on SODIMM1	0011 010x	34h	-
CK-505M (Clock Generator)	1101 001x	D2h	Clock, Unused Clock Output Disable

REVISION HISTORY

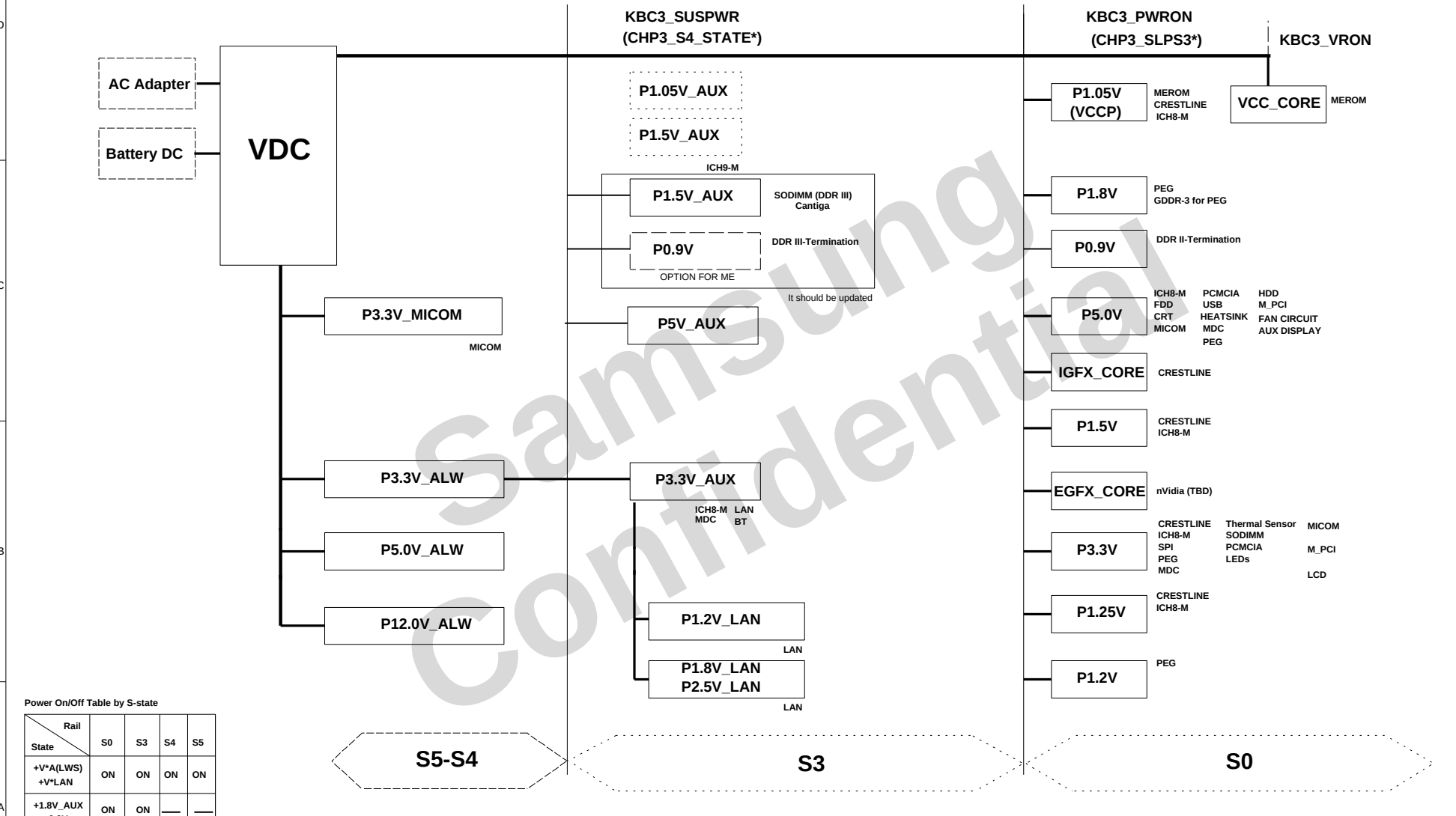
See rev notes for more information.

USB PORT Assign		PCI Express Assign	
PORT #	ASSIGNED TO	PORT #	ASSIGNED TO
	SYSTEM PORT 0	0	NC
	SYSTEM PORT 1	1	Mini Card 1 (WLAN)
	SYSTEM PORT 2	2	NC
	NC	3	LOM
	NC	4	Mini Card 2 (ROBSON or DVB-T)
	Bluetooth	5	NC
	Mini PCI Express 2		
	Camera		
	NC		
	NC		

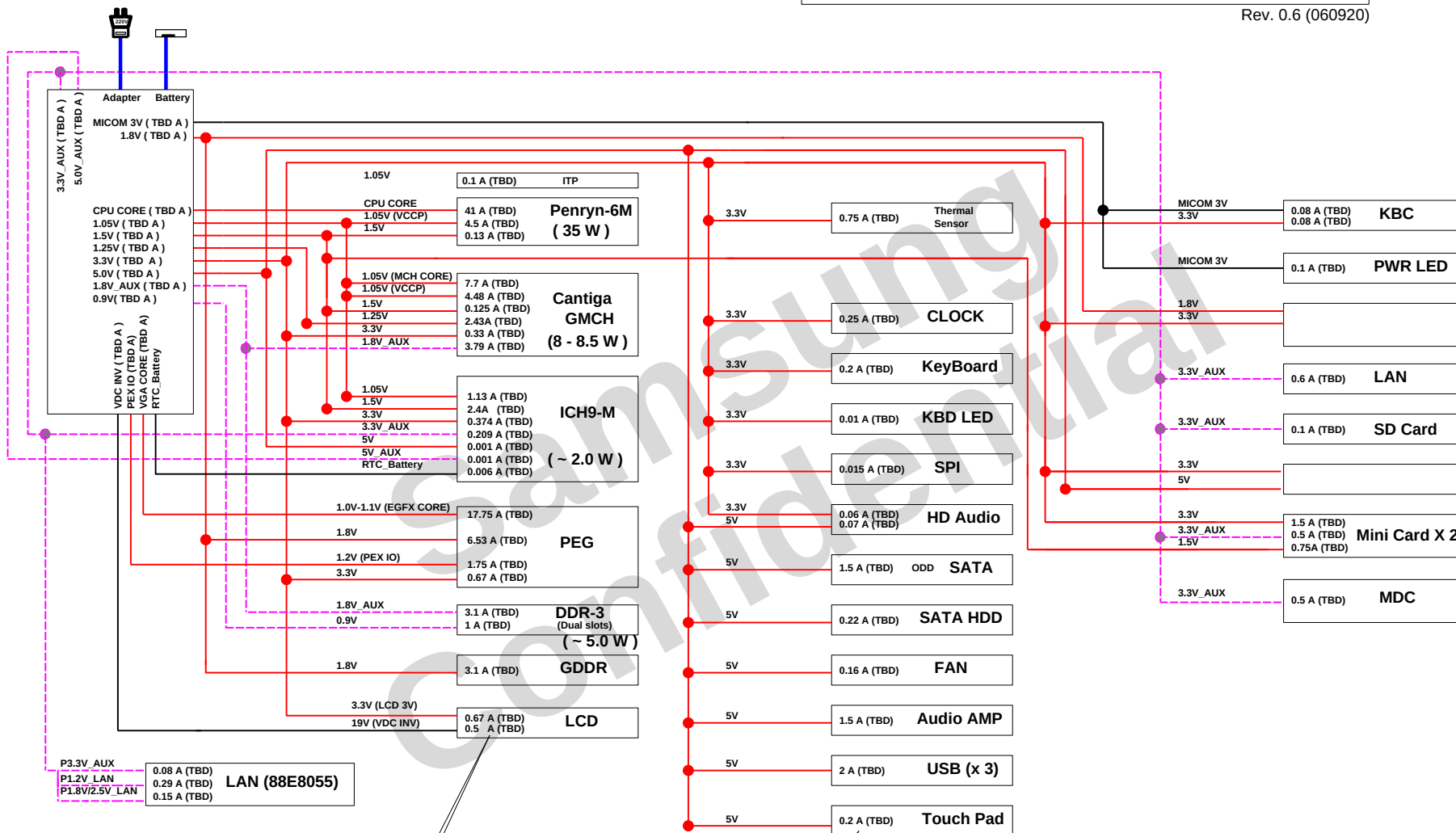
DESIGN	JM	DATE	1/10/2008	Cambridge CHIPSET POWER UNDEFINED	SAMSUNG ELECTRONICS	
CHECK	YJ	DEV. STEP	PR			
APPROVAL	BJ	REV	1.0			
					PART NO.	BA41-009xxA
MODULE CODE	LAST EDIT		August 24, 2008 14:34:27 PM		PAGE	3 OF 47

POWER DIAGRAM

Rev 0.1

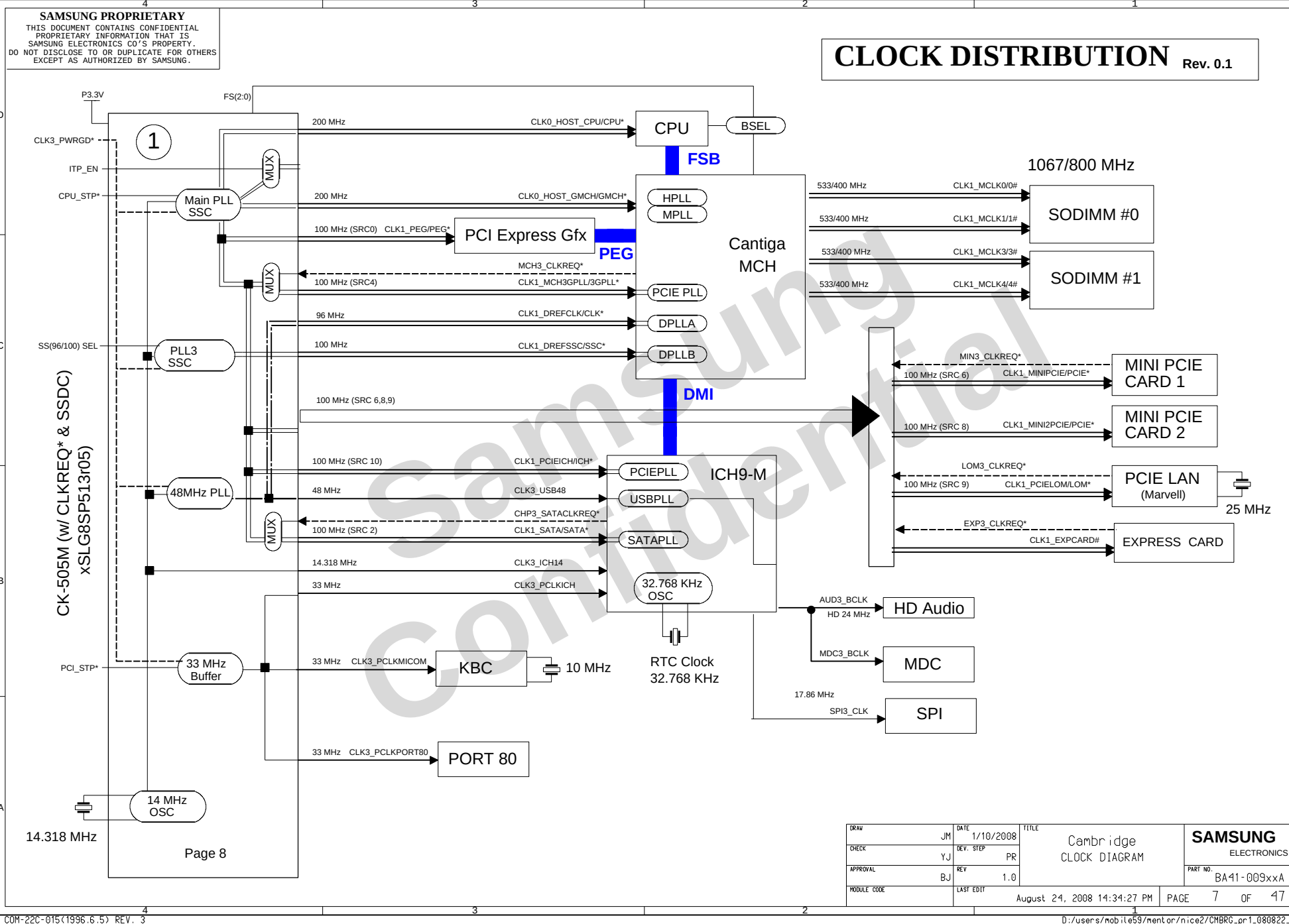


Rev. 0.6 (060920)



Value by Datasheet/Application notes (Value by measurement)

DESIGN	JM	DATE	1/10/2008	TITLE Cambridge CHIPSET POWER UNDEFINED	SAMSUNG ELECTRONICS
CHECK	YJ	DEV. STEP	PR		
APPROVAL	BJ	REV	1.0		
MODULE CODE	LAST EDIT		August 24, 2008 14:34:27 PM		
				PART NO.	BA41-009xxA

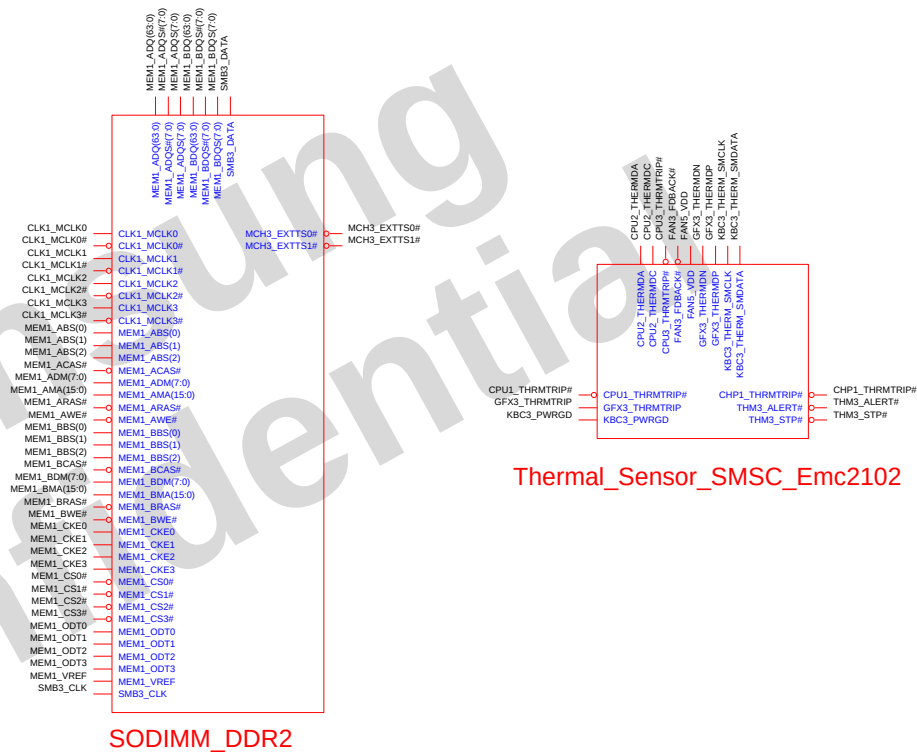


SAMSUNG PROPRIETARY
THIS DOCUMENT CONTAINS CONFIDENTIAL
PROPRIETARY INFORMATION THAT IS
SAMSUNG ELECTRONICS CO.'S PROPERTY.
DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
EXCEPT AS AUTHORIZED BY SAMSUNG.

CLOCK DISTRIBUTION

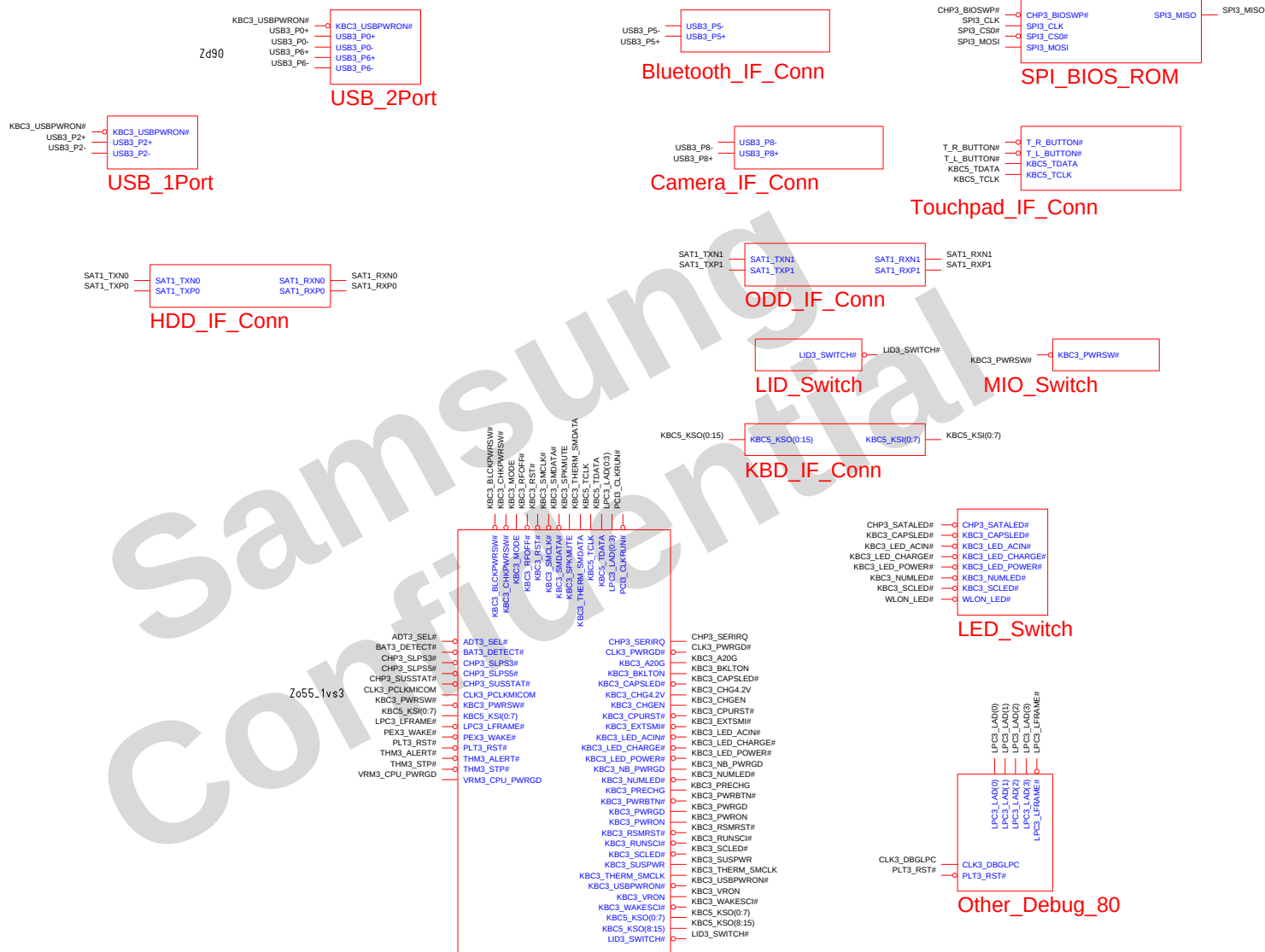
Rev. 0.1

DRAW	JM	DATE	1/10/2008	TITLE	Cambridge CLOCK DIAGRAM	SAMSUNG ELECTRONICS
CHECK	YJ	DEV. STEP	PR			PART NO.
APPROVAL	BJ	REV	1.0			BA41-009xxA
MODULE CODE		LAST EDIT				
August 24, 2008 14:34:27 PM						PAGE 7 OF 47



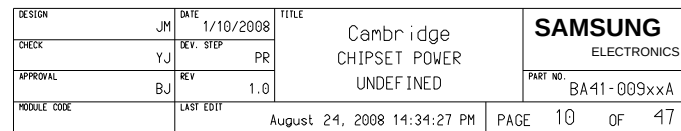
Thermal_Sensor_SMSC_Emc2102

DRAW	JM	DATE	1/10/2008	TITLE Cambridge MAIN PENRYN CPU (1/3)		SAMSUNG ELECTRONICS	
CHECK	YJ	DEV. STEP	PR				
APPROVAL	BJ	REV	1.0				
MODULE CODE		LAST EDIT		August 24, 2008 14:34:27 PM		PAGE	8 OF 47



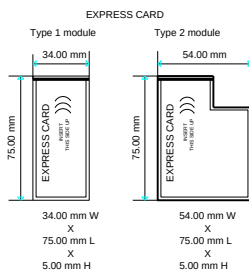
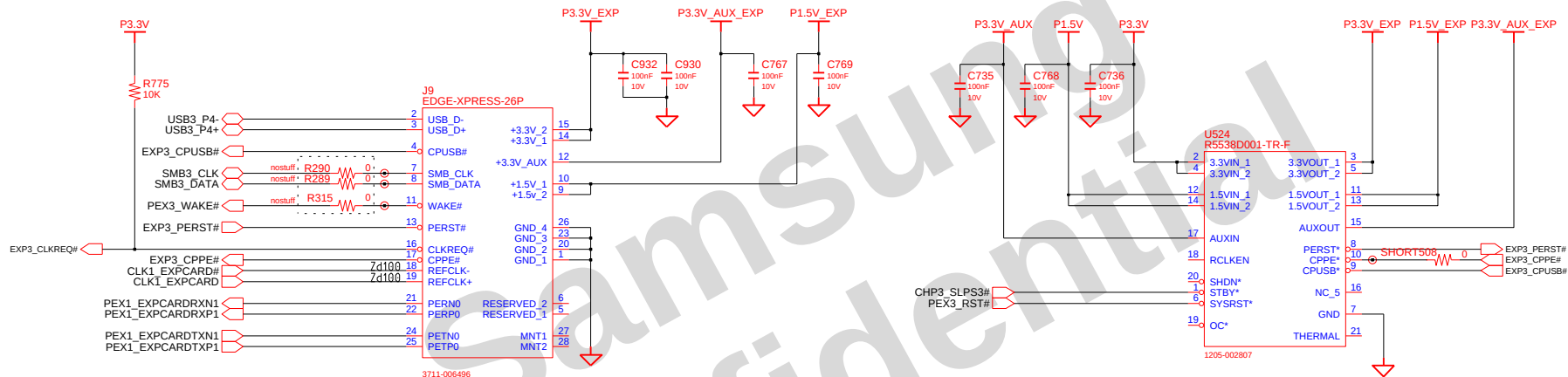
MICOM_Renesas2110_100p

DESIGN	JM	DATE	1/10/2008	TITLE Cambridge CHIPSET POWER UNDEFINED	SAMSUNG ELECTRONICS
CHECK	YJ	DEV. STEP	PR		
APPROVAL	BJ	REV	1.0		
MODULE CODE	LAST EDIT		August 24, 2008 14:34:27 PM		
				PART NO.	BA41-009xxA



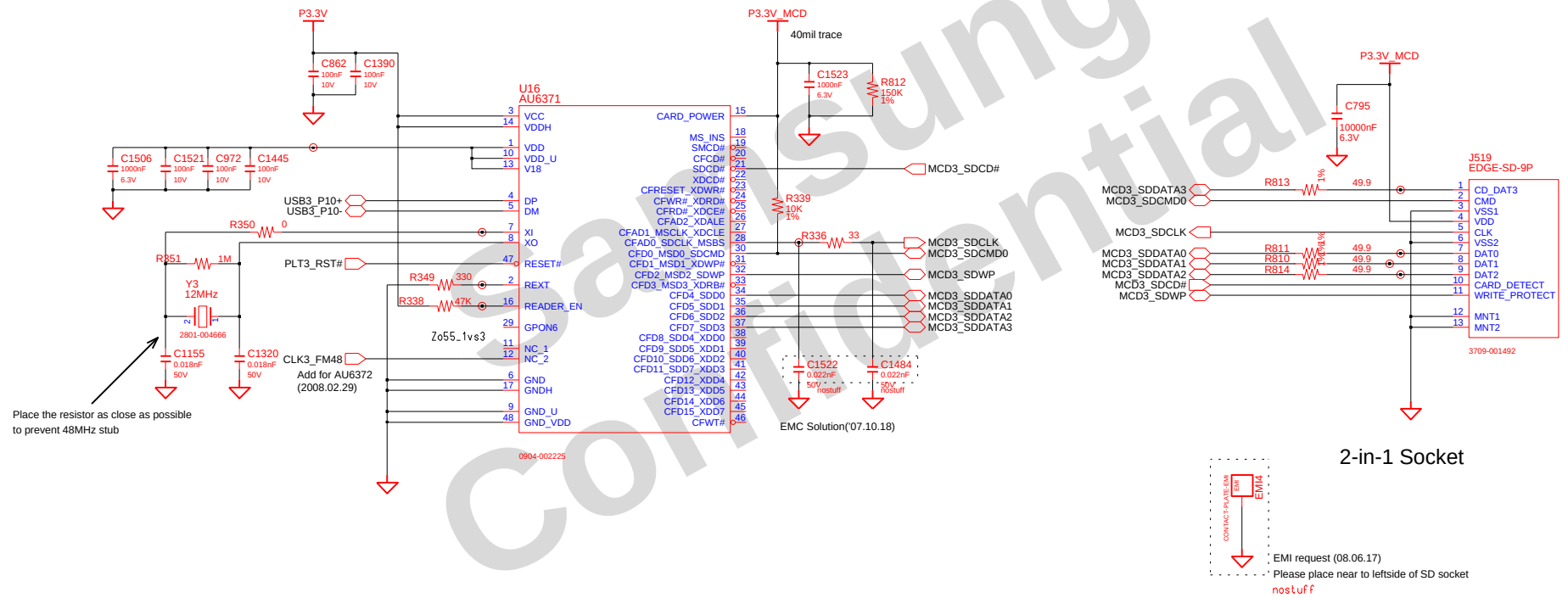
SAMSUNG PROPRIETARY

THIS DOCUMENT CONTAINS CONFIDENTIAL
PROPRIETARY INFORMATION THAT IS
SAMSUNG ELECTRONICS CO.'S PROPERTY.
DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
EXCEPT AS AUTHORIZED BY SAMSUNG.

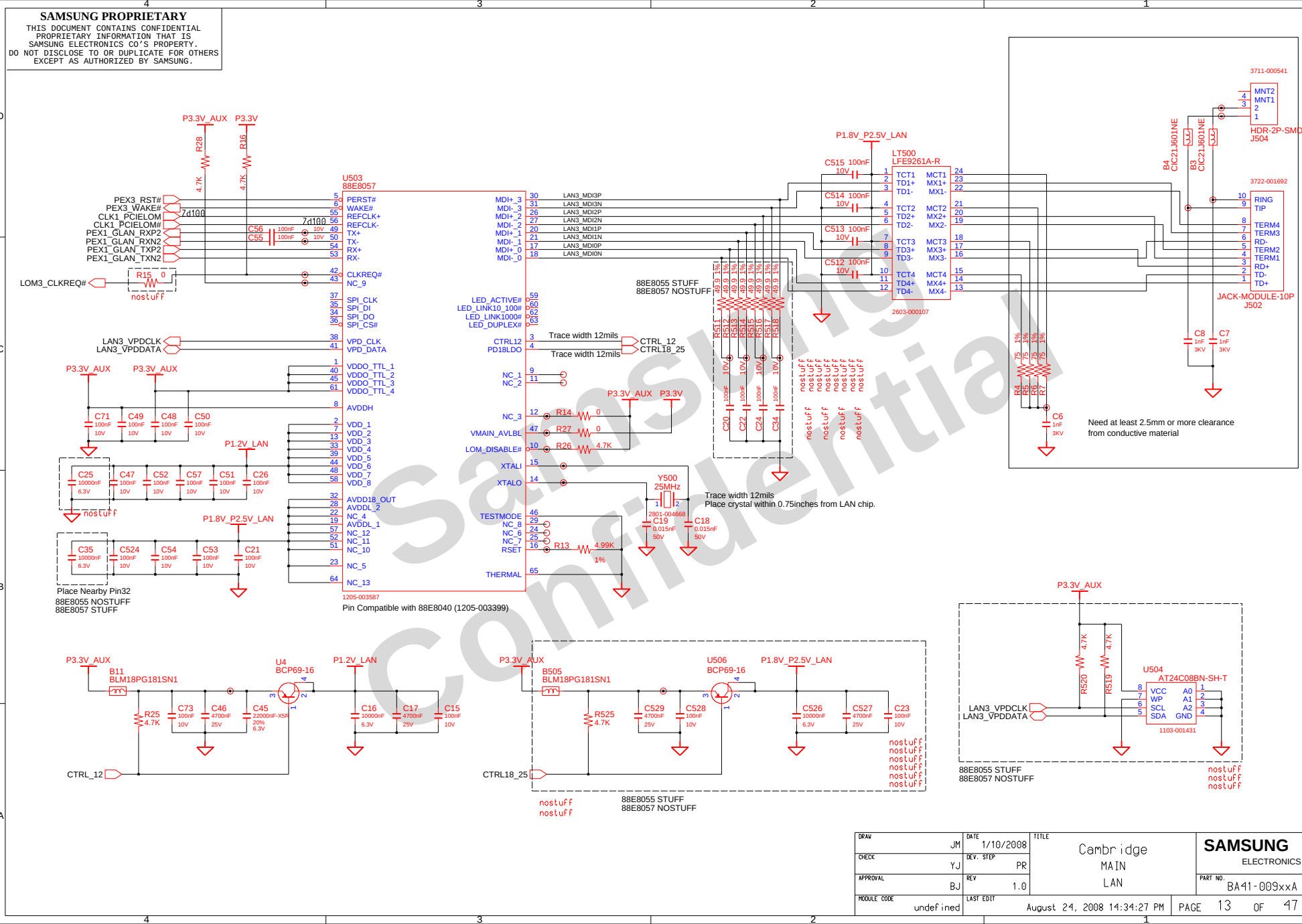


DRAW	JM	DATE	1/10/2008	TITLE	Cambridge	SAMSUNG ELECTRONICS
CHECK	YJ	DEV. STEP	PR			
APPROVAL	BJ	REV	1.0		EXPRESS CARD	PART NO. BA41-009xxA
MODULE CODE	undefined	LAST EDIT		August 24, 2008 14:34:27 PM	PAGE	11 OF 47

2 IN 1 CARD



DRAW	JM	DATE	1/10/2008	TITLE	Cambridge	SAMSUNG ELECTRONICS
CHECK	YJ	DEV. STEP	PR			
APPROVAL	BJ	REV	1.0	2 in 1 Socket	PART NO.	
MODULE CODE	LAST EDIT				BA41-009xxA	
				August 24, 2008 14:34:27 PM	PAGE 12 OF 47	

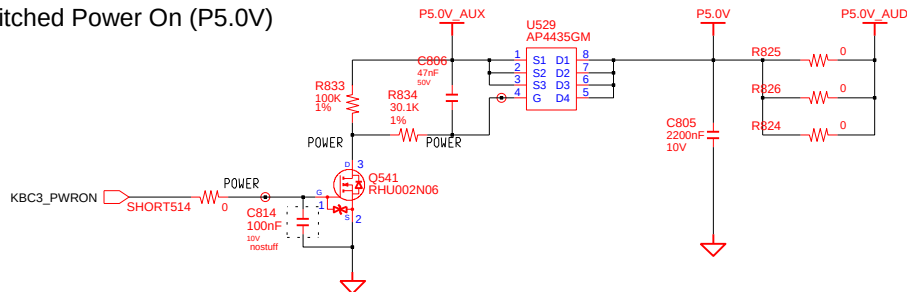


SAMSUNG PROPRIETARY

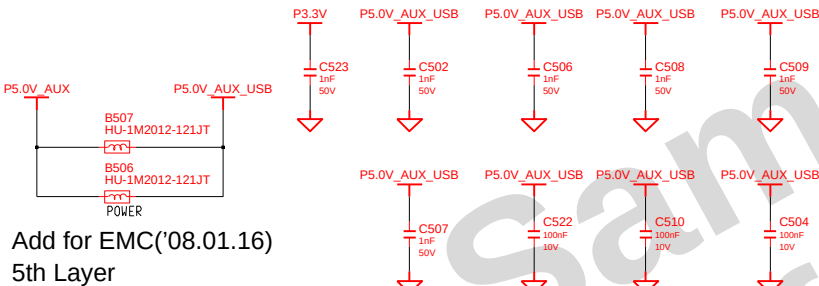
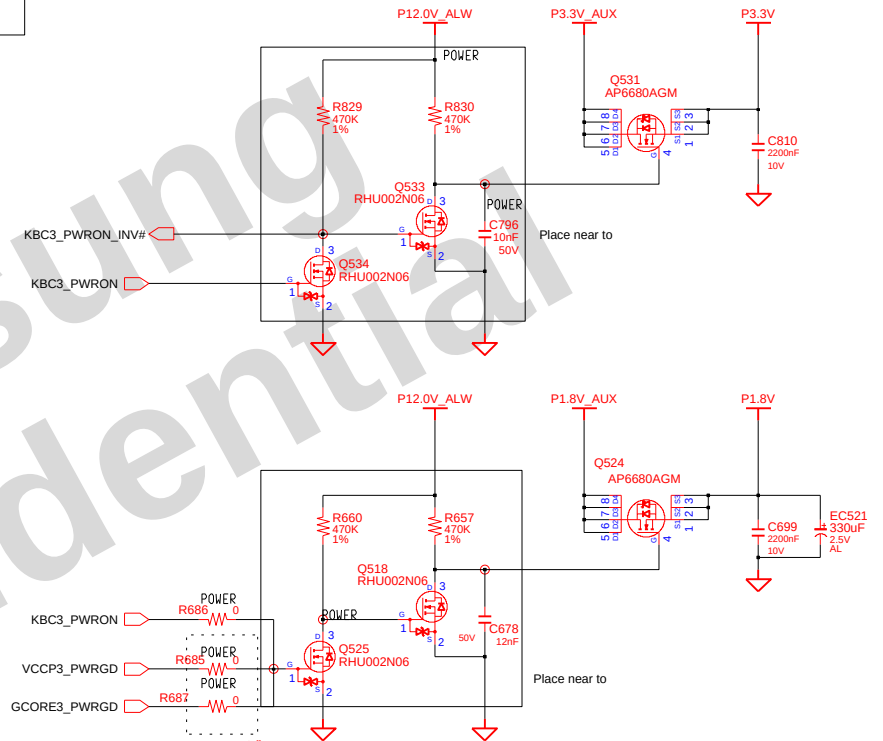
THIS DOCUMENT CONTAINS CONFIDENTIAL
PROPRIETARY INFORMATION THAT IS
SAMSUNG ELECTRONICS CO.'S PROPERTY.
DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
EXCEPT AS AUTHORIZED BY SAMSUNG.

DRAW	JM	DATE	1/10/2008	TITLE	Cambridge	SAMSUNG		
CHECK	YJ	DEV. STEP	PR				MAIN	ELECTRONICS
APPROVAL	BJ	REV	1.0				LAN	PART NO.
MODULE CODE	undefined	LAST EDIT	August 24, 2008 14:34:27 PM			BA41-009xxA		
				PAGE	13	OF 47		

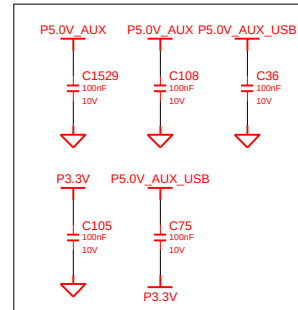
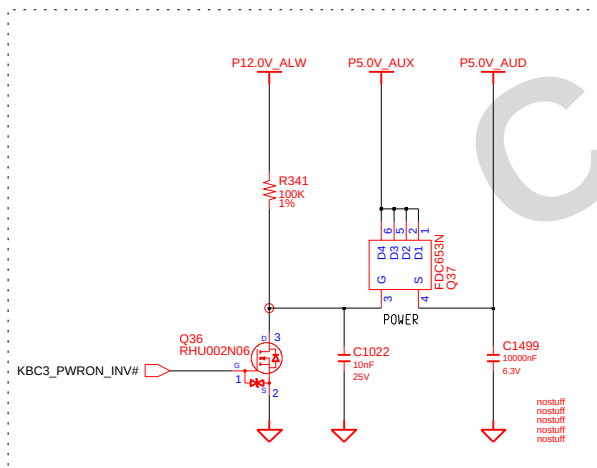
Switched Power On (P5.0V)



Switched Power On (P3.3V & 1.8V)



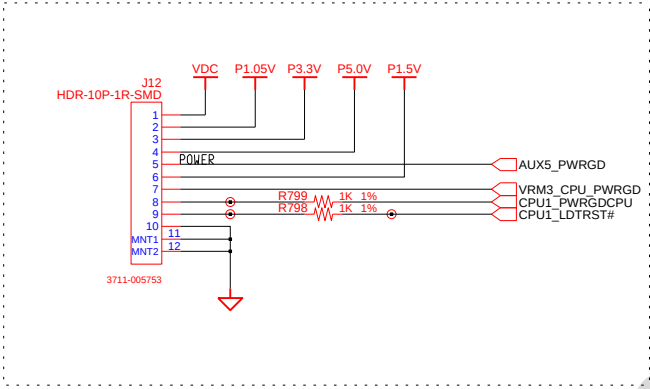
Audio Power (nostuff)



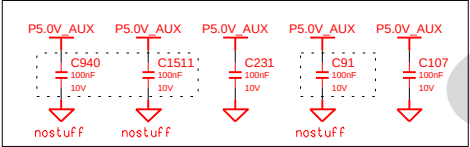
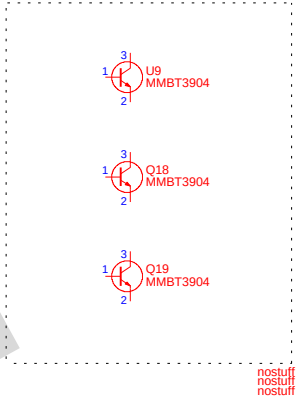
Add for SI(2007.12.6)

DRAW	JM	DATE	1/10/2008	TITLE	Cambridge	SAMSUNG
CHECK	YJ	DEV. STEP	PR	MAIN	ELECTRONICS	
APPROVAL	BJ	REV	1.0	MICOM & SWITCHED POWER	PART NO.	BA41-009xxA
MODULE CODE	undefined	LAST EDIT	August 24, 2008 14:34:27 PM	PAGE	14	OF 47

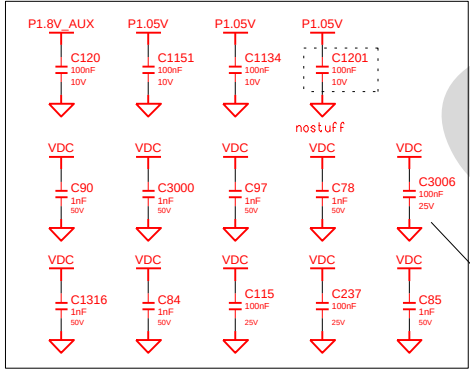
ICT PORT (Need to check net name)



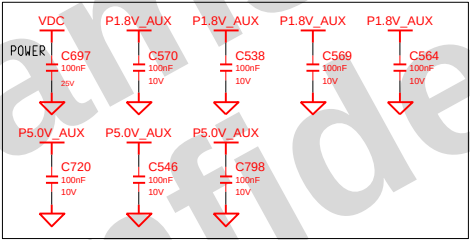
For Debugging



Add for EMC ('08.01.16)
5th Layer



Add for EMC ('08.01.16)
Top Side



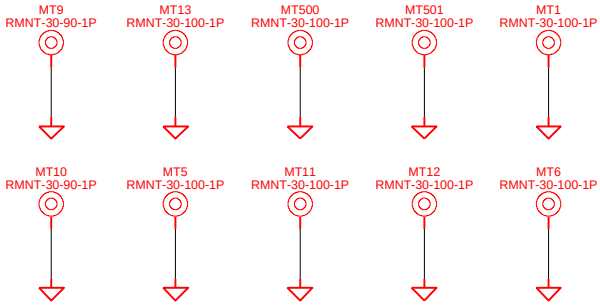
Add for EMC ('08.01.16)
Bottom Side



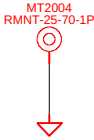
EMC Request('08.06.16)

Please place on Bottom side

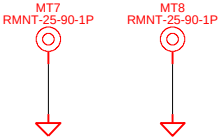
System



Board



Keyboard



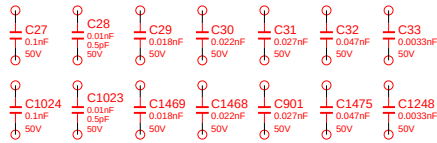
DRAW	JM	DATE	1/10/2008	TITLE	Cambridge	SAMSUNG ELECTRONICS
CHECK	YJ	DEV. STEP	PR			
APPROVAL	BJ	REV	1.0	ICT PORT	PART NO. BA41-009xxA	
MODULE CODE	undefined	LAST EDIT	August 24, 2008 14:34:27 PM	PAGE	15	OF 47

SAMSUNG PROPRIETARY
THIS DOCUMENT CONTAINS CONFIDENTIAL
PROPRIETARY INFORMATION THAT IS
SAMSUNG ELECTRONICS CO.'S PROPERTY.
DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
EXCEPT AS AUTHORIZED BY SAMSUNG.

Samsung
Confidential

REV1
1O
2O 3

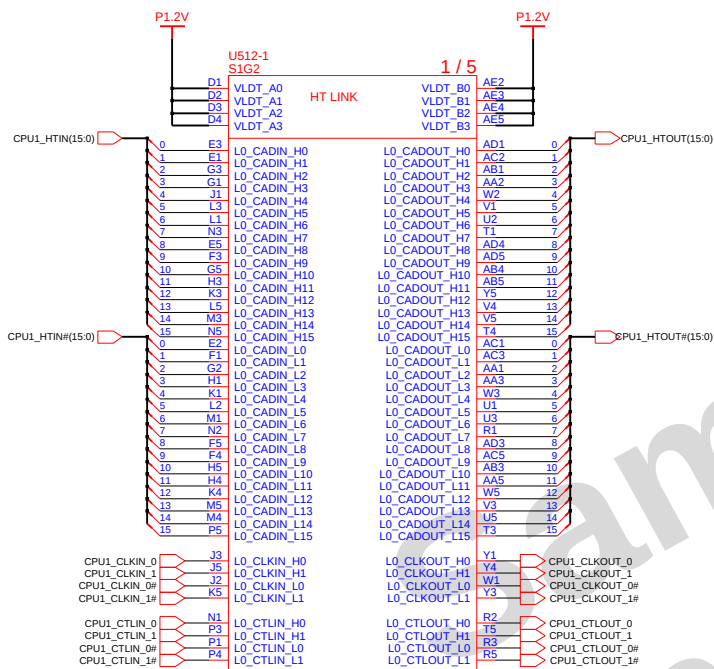
PCB REVISION CONTROL (ICT)				
NO	CONNECTION	DATE(Y/M/D)	REVISION	STEP
1	N.C.			
2	1-2			
3	2-3			
4	3-1			
5	1-2-3			
6	N.C.			
7	1-2			
8	2-3			
9	3-1			
10	1-2-3			



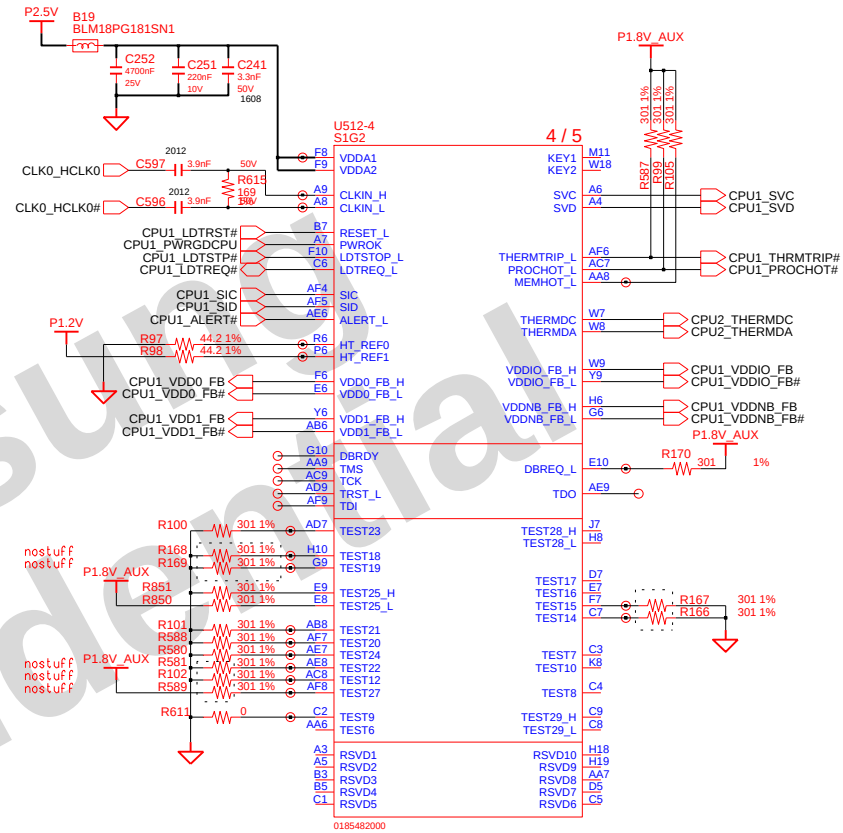
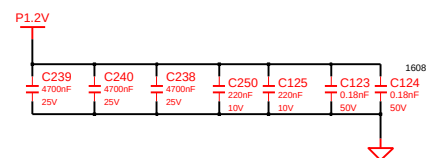
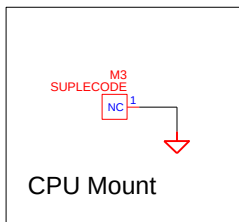
DRAW	JM	DATE	1/10/2008	TITLE		Cambridge	SAMSUNG ELECTRONICS
CHECK	YJ	DEV. STEP	PR				
APPROVAL	BJ	REV	1.0	TP		PART NO.	BA41-009xxA
MODULE CODE	undefined	LAST EDIT	August 24, 2008 14:34:27 PM	PAGE	16	OF	47

SAMSUNG PROPRIETARY
THIS DOCUMENT CONTAINS CONFIDENTIAL
PROPRIETARY INFORMATION THAT IS
SAMSUNG ELECTRONICS CO'S PROPERTY.
DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
EXCEPT AS AUTHORIZED BY SAMSUNG.

THIS DOCUMENT CONTAINS CONFIDENTIAL
PROPRIETARY INFORMATION THAT IS
SAMSUNG ELECTRONICS CO'S PROPERTY.
NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
EXCEPT AS AUTHORIZED BY SAMSUNG.

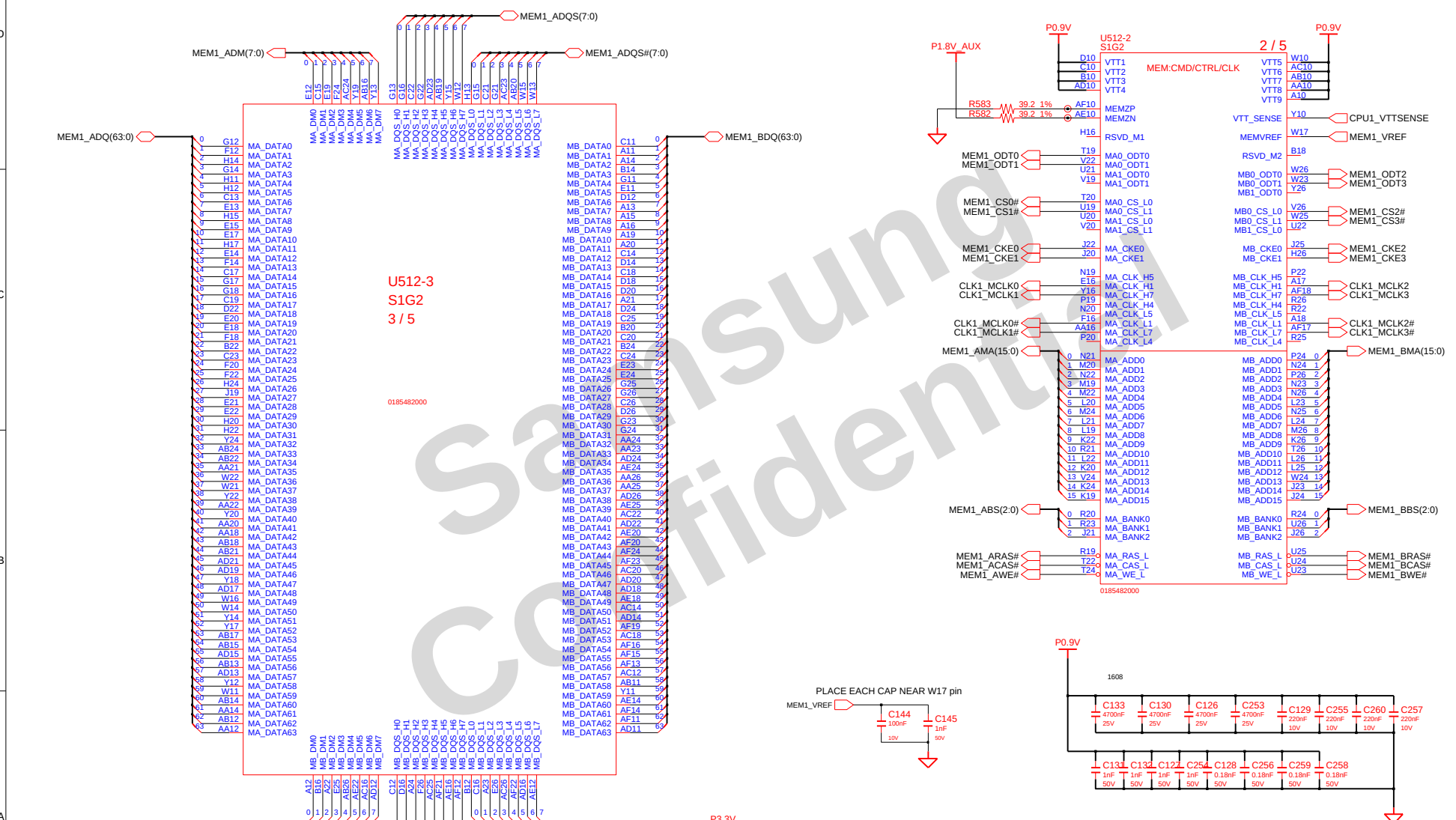


CPU Socket : 0185482000 (3704-001228)



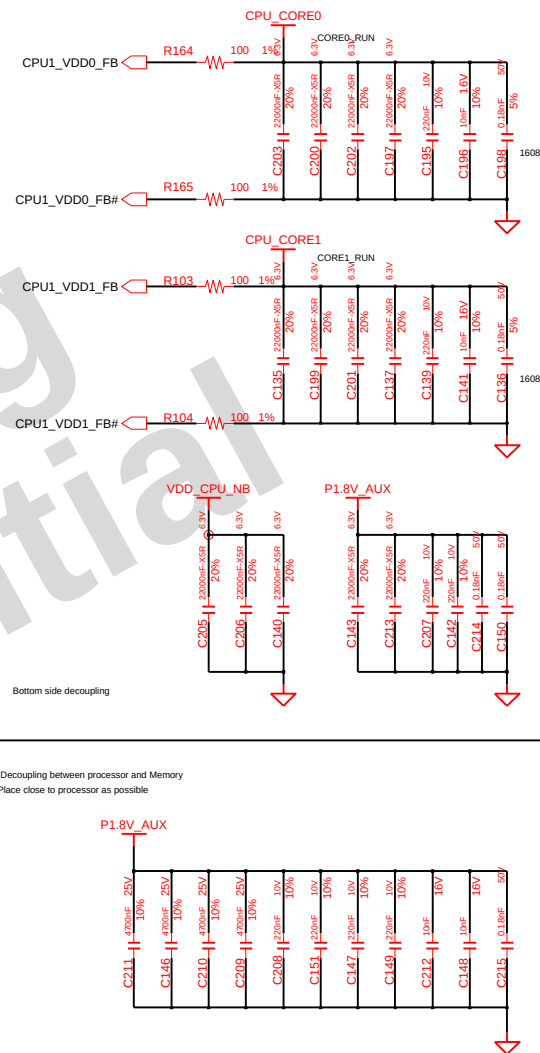
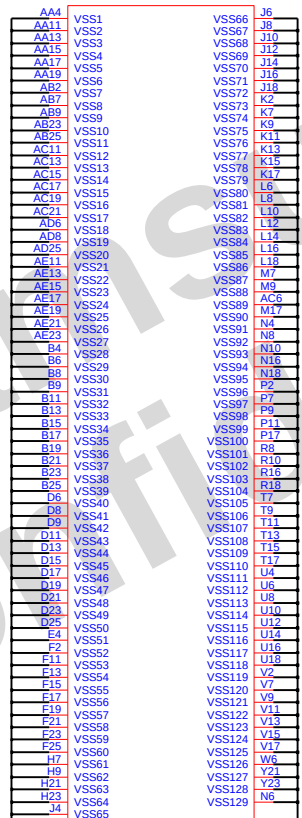
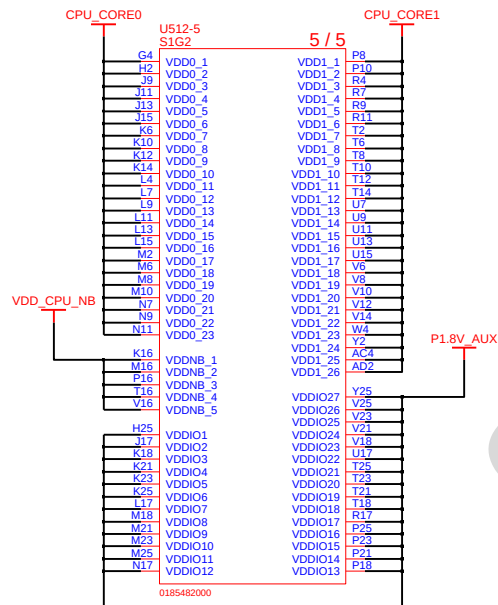
DESIGN	DATE	TITLE	SAMSUNG ELECTRONICS
CHECK	3/19/2008	Cambridge	
DEV. STEP	PR	s1g2 CPU (1/3)	
APPROVAL	REV	1.0	
MODULE CODE	LAST EDIT	August 24, 2008 14:34:27 PM	PAGE 18 OF 47

SAMSUNG PROPRIETARY
THIS DOCUMENT CONTAINS CONFIDENTIAL
PROPRIETARY INFORMATION THAT IS
SAMSUNG ELECTRONICS CO.'S PROPERTY.
DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
EXCEPT AS AUTHORIZED BY SAMSUNG.



MEM1_BDM(7:0)   MEM1_BDQS#(7:0)  0 1 2 3 4 5 6 7  MEM1_BDQS(7:0)  1% 10K 18-C3 14-B1  1% 10K 14-B1 19-C3 MCH3_EXTTS0# MCH3_EXTTS1#					<table><tr><td>DRAW</td><td>JM</td><td>DATE</td><td>1/10/2008</td><td colspan="2" rowspan="2">TITLE</td><td rowspan="4">SAMSUNG ELECTRONICS PART NO. BA41-009xxA</td></tr><tr><td>CHECK</td><td>YJ</td><td>DEV. STEP</td><td>PR</td><td rowspan="3">s1g2 CPU (2/3)</td></tr><tr><td>APPROVAL</td><td>BJ</td><td>REV</td><td>1.0</td></tr><tr><td>MODULE CODE</td><td colspan="2">LAST EDIT</td><td>August 24, 2008 14:34:27 PM</td><td>PAGE</td><td>19 OF 47</td></tr><tr><td colspan="3">undefined</td><td colspan="3"></td><td></td></tr></table>	DRAW	JM	DATE	1/10/2008	TITLE		SAMSUNG ELECTRONICS PART NO. BA41-009xxA	CHECK	YJ	DEV. STEP	PR	s1g2 CPU (2/3)	APPROVAL	BJ	REV	1.0	MODULE CODE	LAST EDIT		August 24, 2008 14:34:27 PM	PAGE	19 OF 47	undefined						
DRAW	JM	DATE	1/10/2008	TITLE		SAMSUNG ELECTRONICS PART NO. BA41-009xxA																												
CHECK	YJ	DEV. STEP	PR				s1g2 CPU (2/3)																											
APPROVAL	BJ	REV	1.0																															
MODULE CODE	LAST EDIT		August 24, 2008 14:34:27 PM	PAGE	19 OF 47																													
undefined																																		

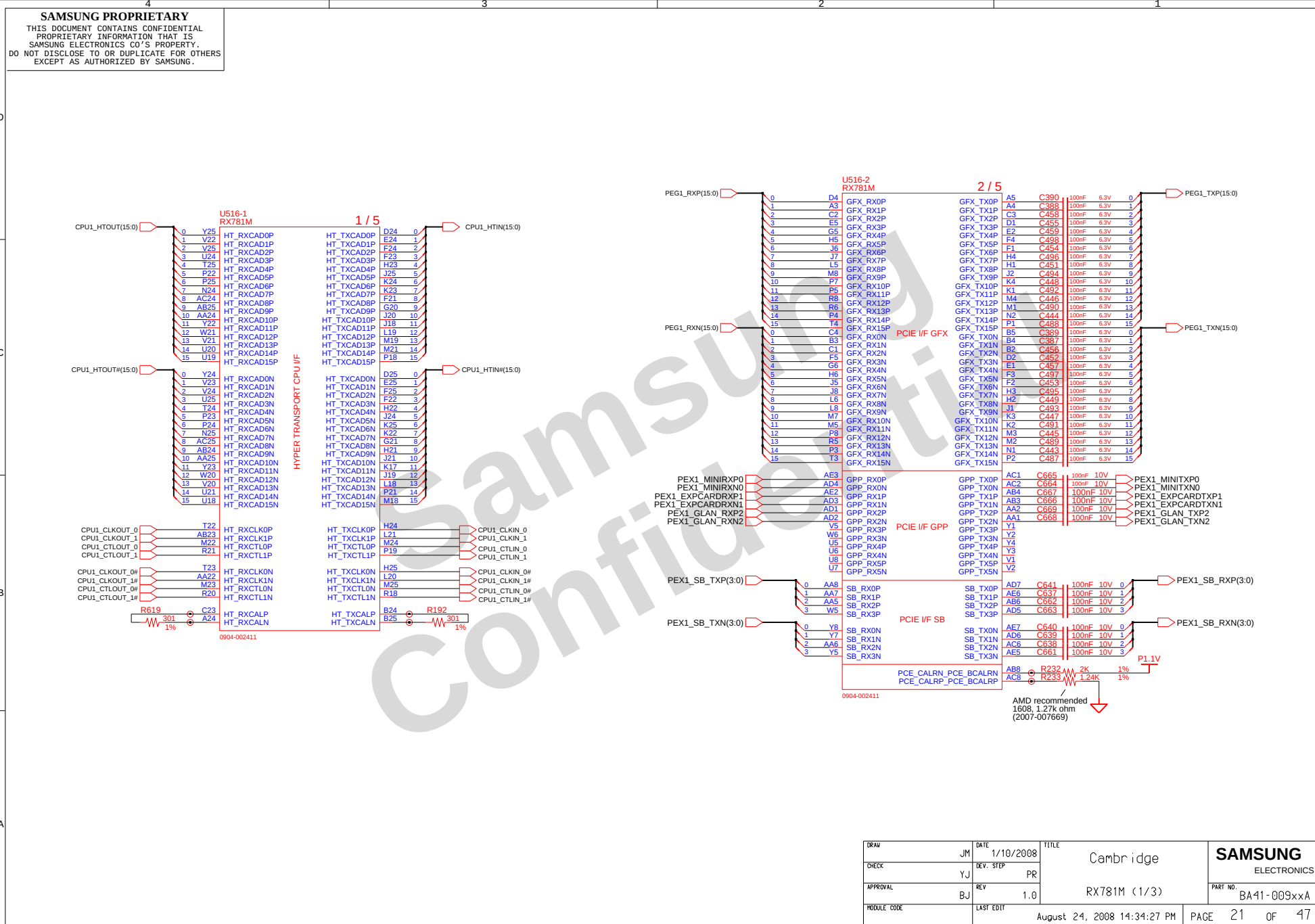
CPU Socket : 0185482000

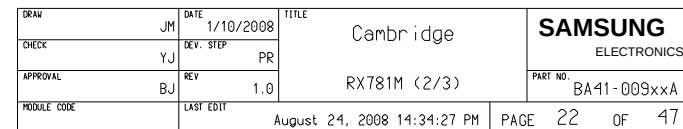


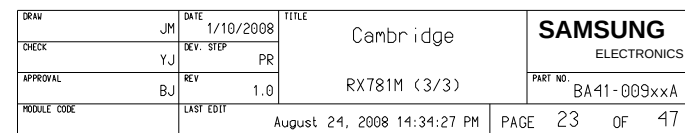
Bottom side decoupling

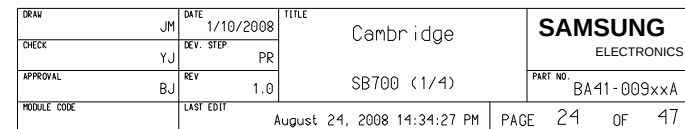
Decoupling between processor and Memory
Place close to processor as possible

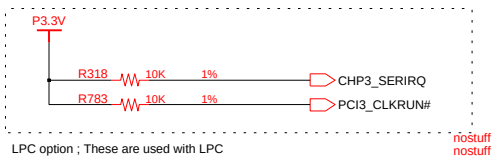
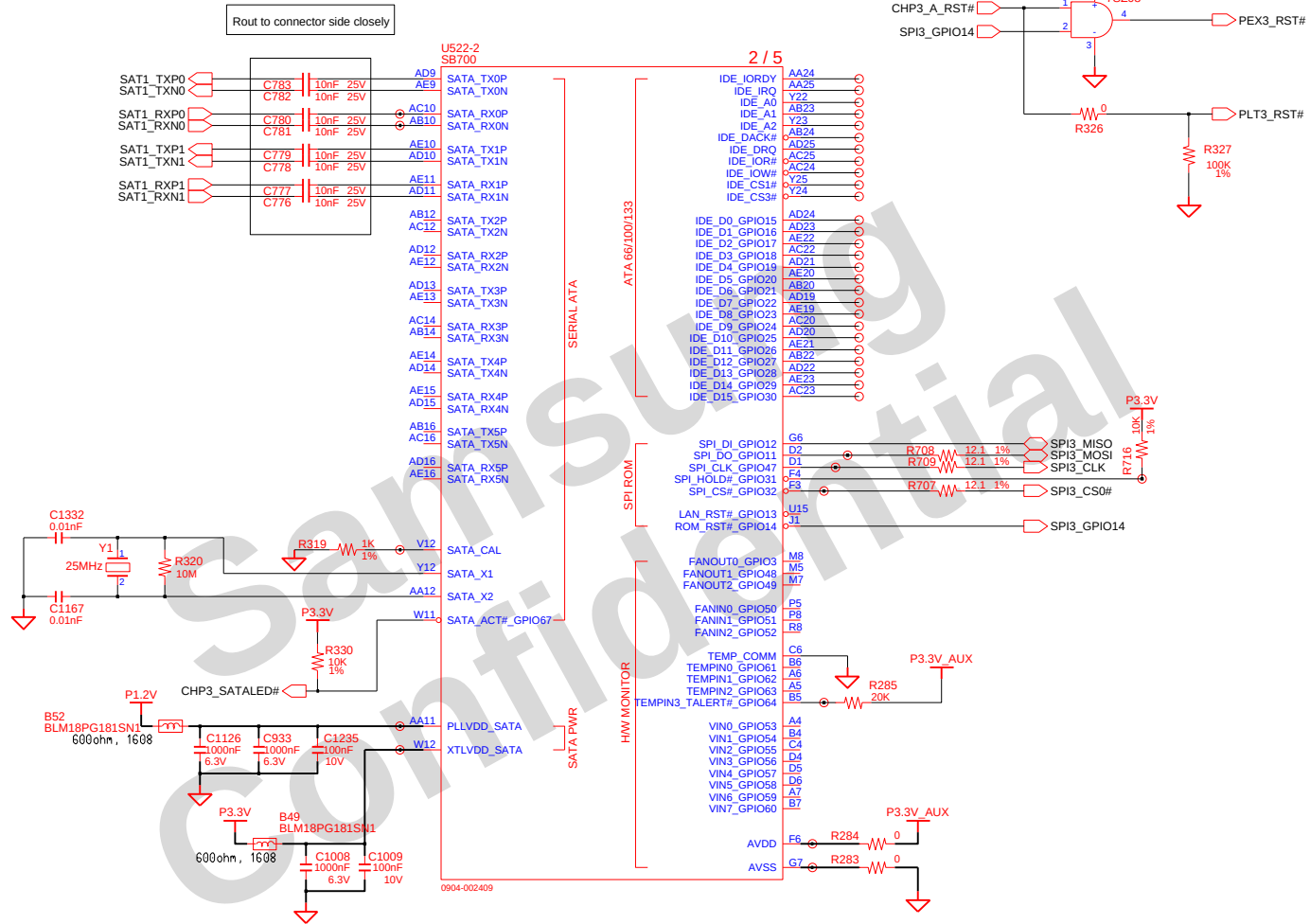
DRAW	JM	DATE	1/10/2008	TITLE	Cambridge SAMSUNG ELECTRONICS	
CHECK	YJ	DEV. STEP	PR			
APPROVAL	BJ	REV	1.0			
MODULE CODE	undefined	LAST EDIT	August 24, 2008 14:34:27 PM		PAGE	20 OF 47



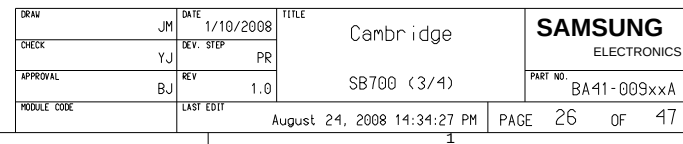








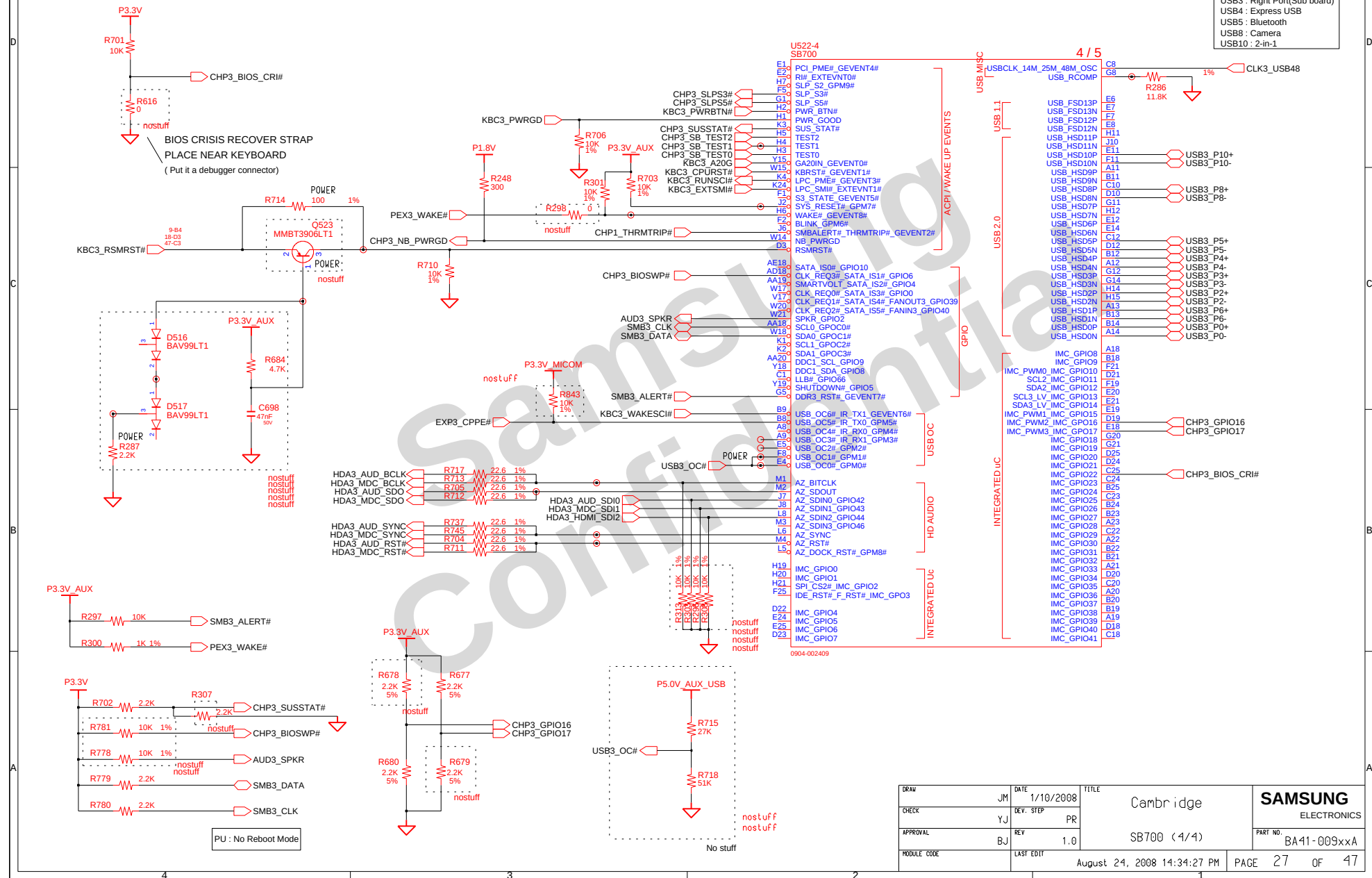
DRAW	JM	DATE	1/10/2008	TITLE	Cambridge	SAMSUNG ELECTRONICS
CHECK	YJ	DEV. STEP	PR			
APPROVAL	BJ	REV	1.0		SB700 (2/4)	PART NO. BA41-009xxA
MODULE CODE		LAST EDIT				
				August 24, 2008 14:34:27 PM	PAGE	25 OF 47



SAMSUNG PROPRIETARY
THIS DOCUMENT CONTAINS CONFIDENTIAL
PROPRIETARY INFORMATION THAT IS
SAMSUNG ELECTRONICS CO'S PROPERTY.
DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
EXCEPT AS AUTHORIZED BY SAMSUNG.

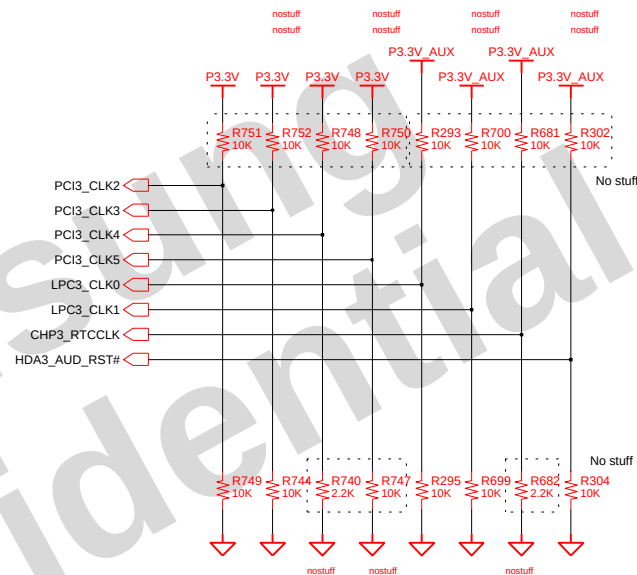
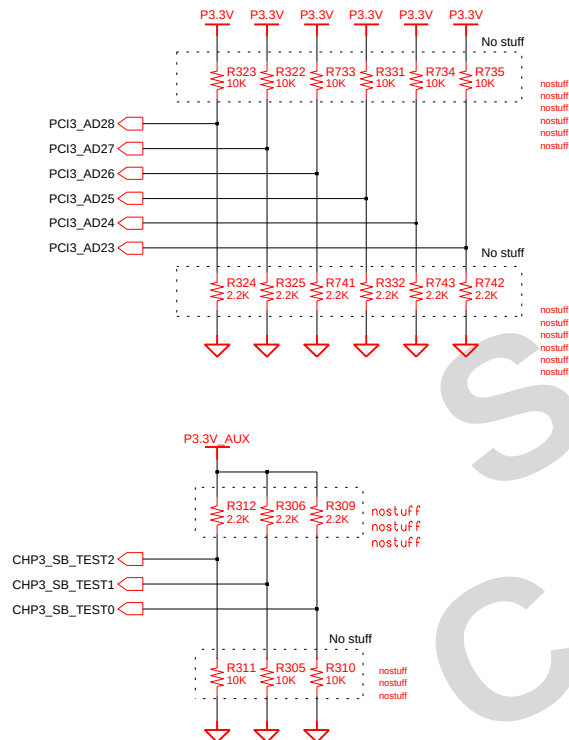
USB0 and 6 ports should be connected with external ports

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

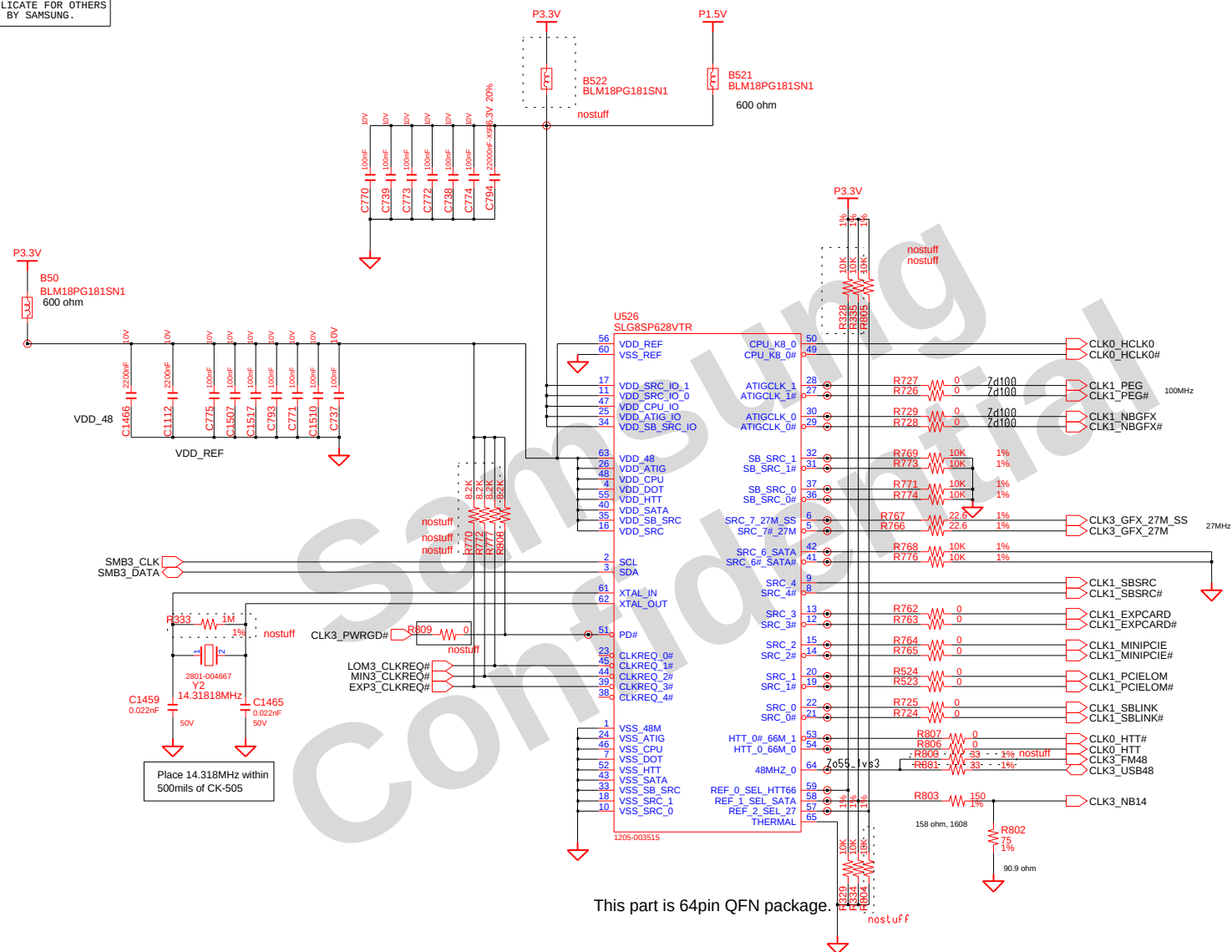
THIS DOCUMENT CONTAINS CONFIDENTIAL
PROPRIETARY INFORMATION THAT IS
SAMSUNG ELECTRONICS CO.'S PROPERTY.
DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
EXCEPT AS AUTHORIZED BY SAMSUNG.



DRAW	JM	DATE	1/10/2008	TITLE	Cambridge	SAMSUNG ELECTRONICS
CHECK	YJ	DEV. STEP	PR			
APPROVAL	BJ	REV	1.0		Strap	PART NO. BA41-009xxA
MODULE CODE	undefined	LAST EDIT	August 24, 2008 14:34:27 PM	PAGE	28	OF 47

SAMSUNG PROPRIETARY

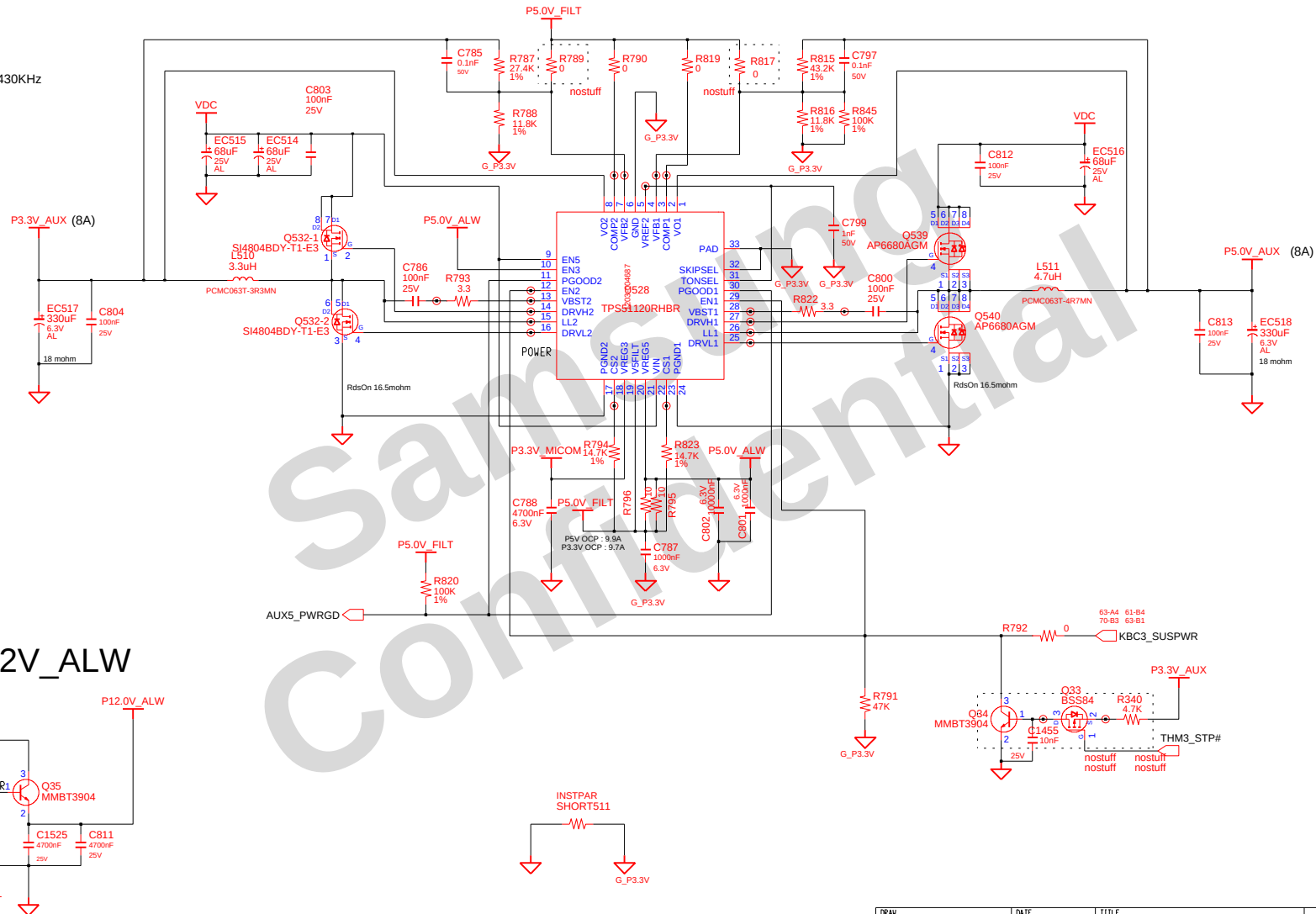
THIS DOCUMENT CONTAINS CONFIDENTIAL
PROPRIETARY INFORMATION THAT IS
SAMSUNG ELECTRONICS CO.'S PROPERTY.
DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
EXCEPT AS AUTHORIZED BY SAMSUNG.



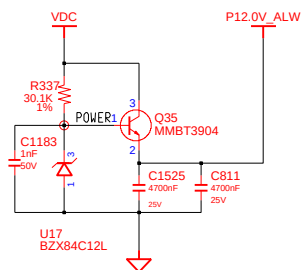
DRAW	JM	DATE	1/10/2008	TITLE	Cambridge Main_Clock_Circuit CK for AMD CPU	SAMSUNG ELECTRONICS
CHECK	YJ	DEV. STEP	PR	REV	1.0	PART NO. BA41-009xxA
APPROVAL	BJ	LAST EDIT				
MODULE CODE	undefined					
					August 24, 2008 14:34:27 PM	PAGE 29 OF 47

P3.3V_AUX & P5.0V_AUX

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



P12V_ALW

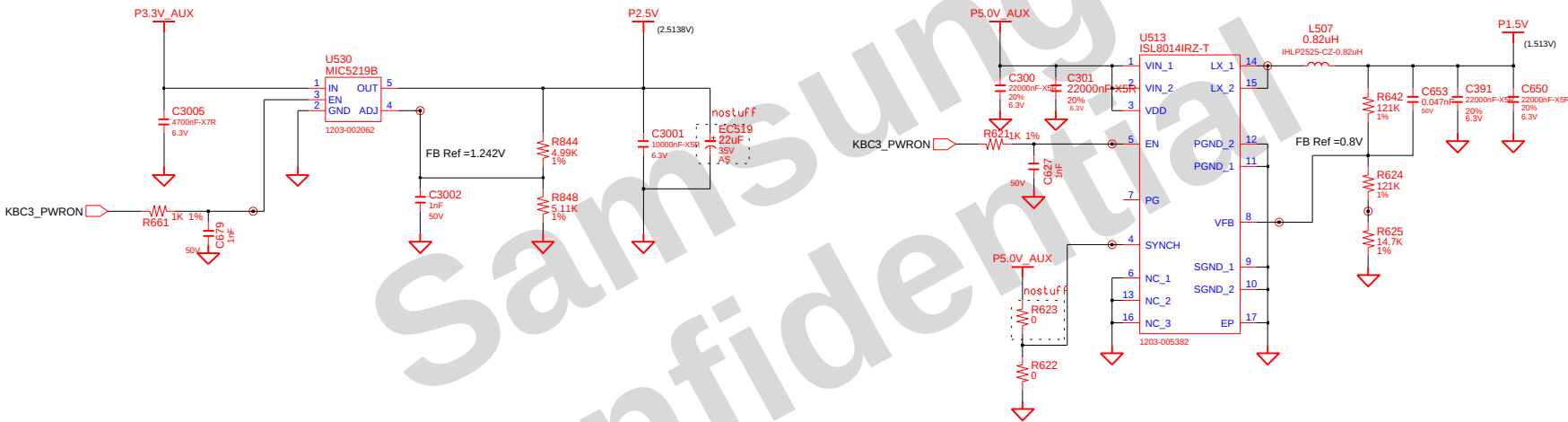


DRAW	JM	DATE	11/8/2006	TITLE	Cambridge PWR_MV_3V_5V P3.3V_AUX / P5.0V_AUX	SAMSUNG ELECTRONICS
CHECK	YJ	DEV. STEP	PR	REV	1.0	PART NO. BA41-009xxA
APPROVAL	BJ	LAST EDIT				
MODULE CODE	undefined					
					August 24, 2008 14:34:27 PM	PAGE 31 OF 47

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

P2.5V

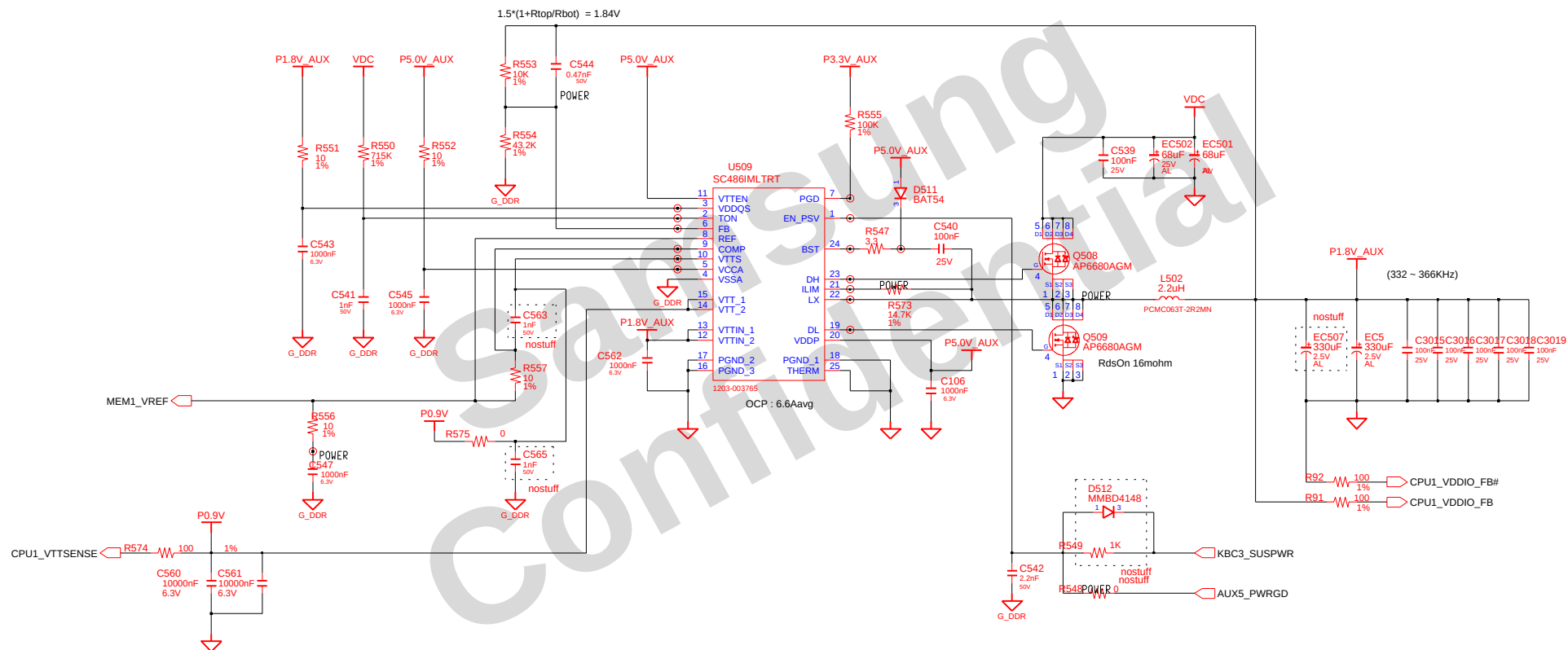
P1.5V



DRAW	JM	DATE	8/14/2007	TITLE	Cambridge	SAMSUNG
CHECK	YJ	DEV. STEP	PR	PWR_MV_Cantiga	ELECTRONICS	
APPROVAL	BJ	REV	1.0	Chipset Power (P1.05V_M, P1.2V)	PART NO.	BA41-009xxA
MODULE CODE	undefined	LAST EDIT	August 24, 2008 14:34:27 PM	PAGE	33	OF 47

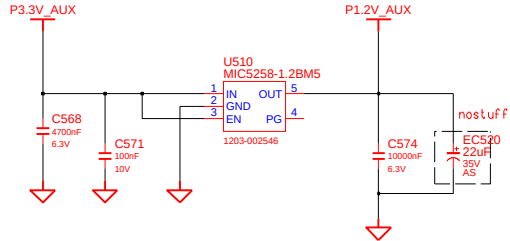
INSTPAR
SHORT2

G_DDP

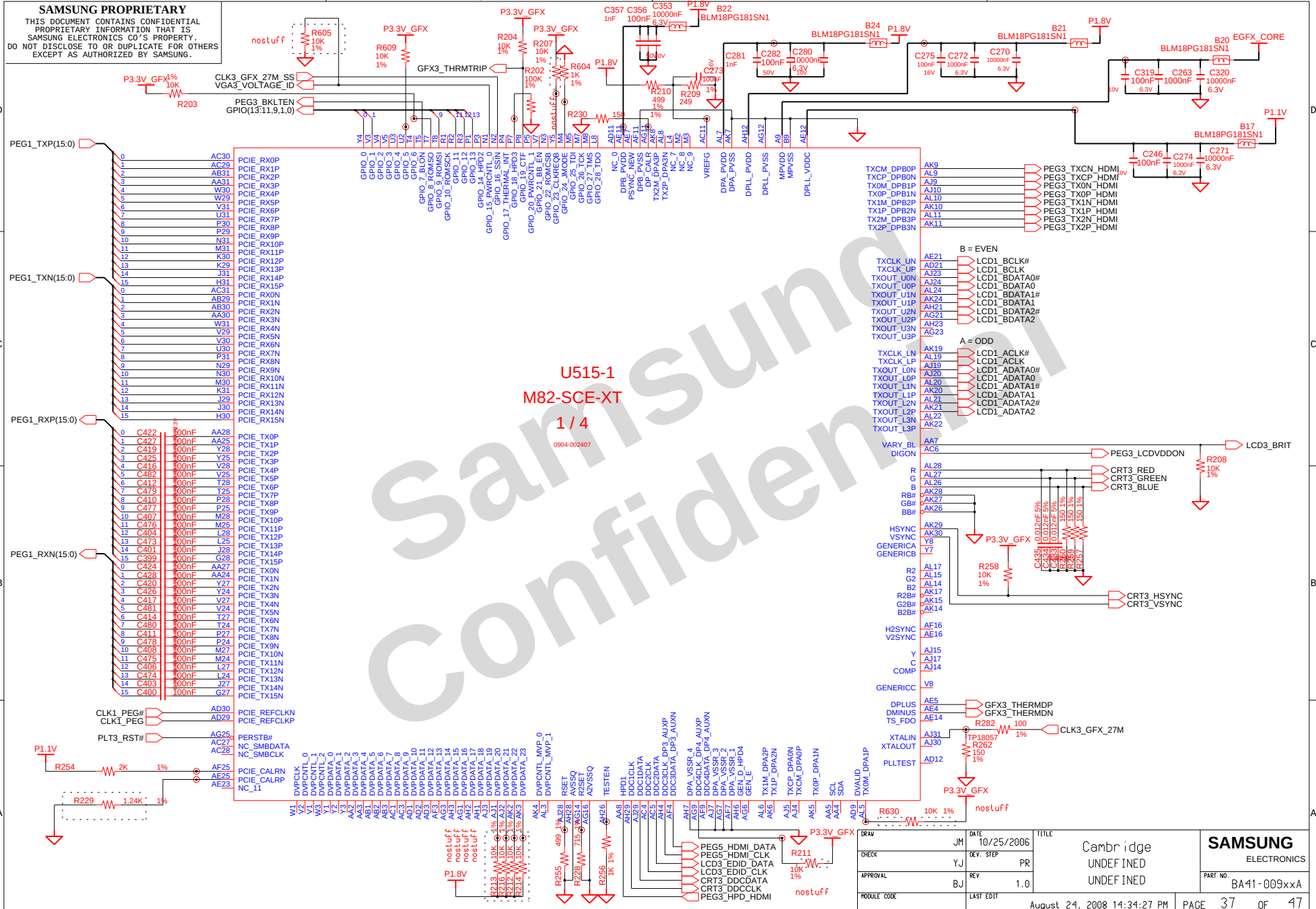


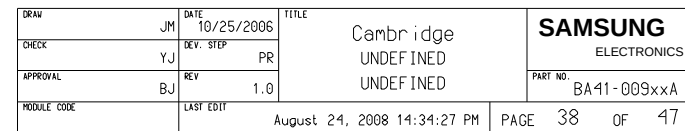
DRAW	JM	DATE	12/5/2007	Cambridge SC486 DDR2 POWER	SAMSUNG ELECTRONICS
CHECK	YJ	DEV. STEP	PR		
APPROVAL	BJ	REV	1.0		
MODULE CODE	undefined	LAST EDIT	August 24, 2008 14:34:27 PM		
			PAGE		34 OF 47

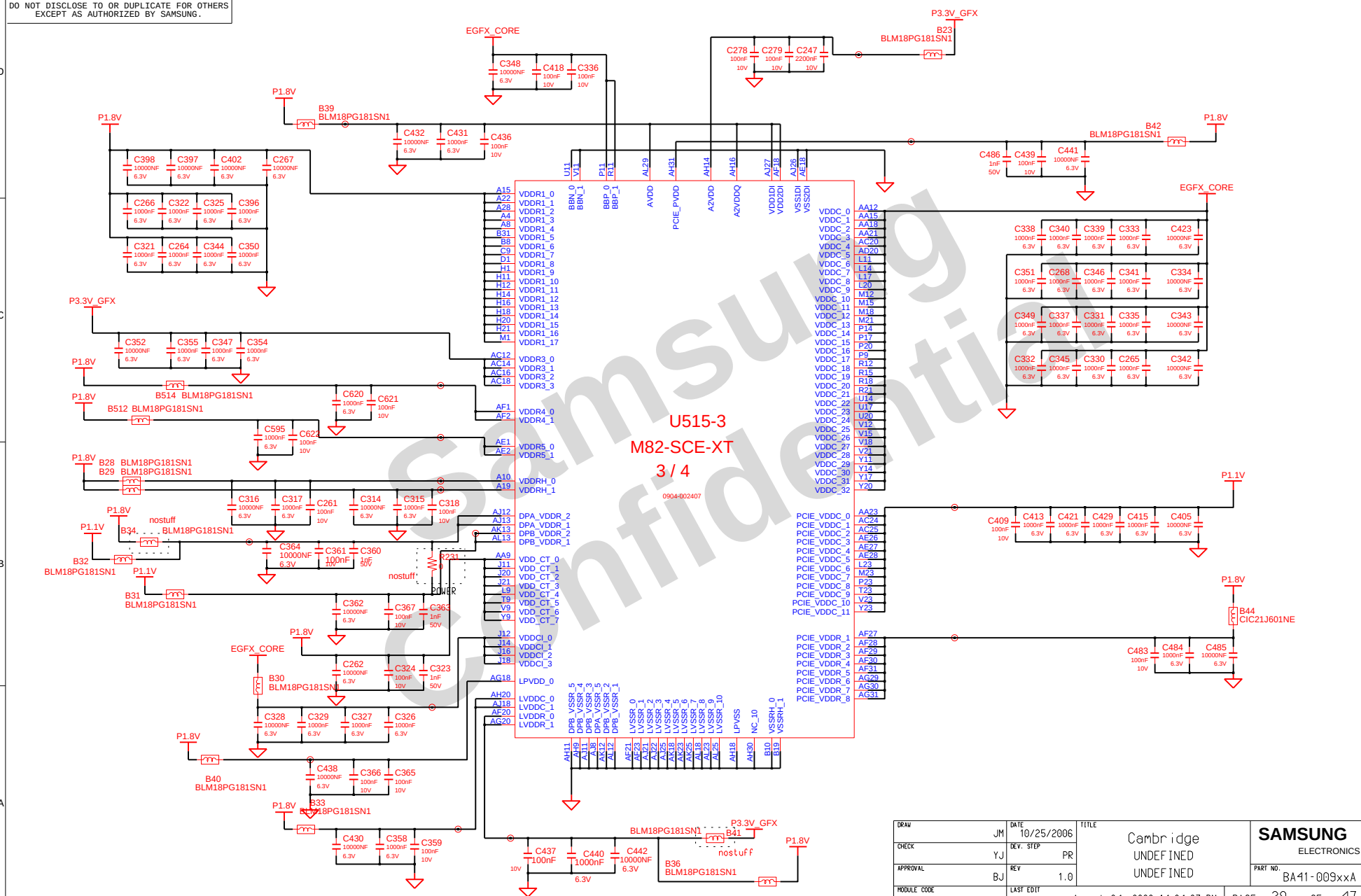
P1.2V_AUX



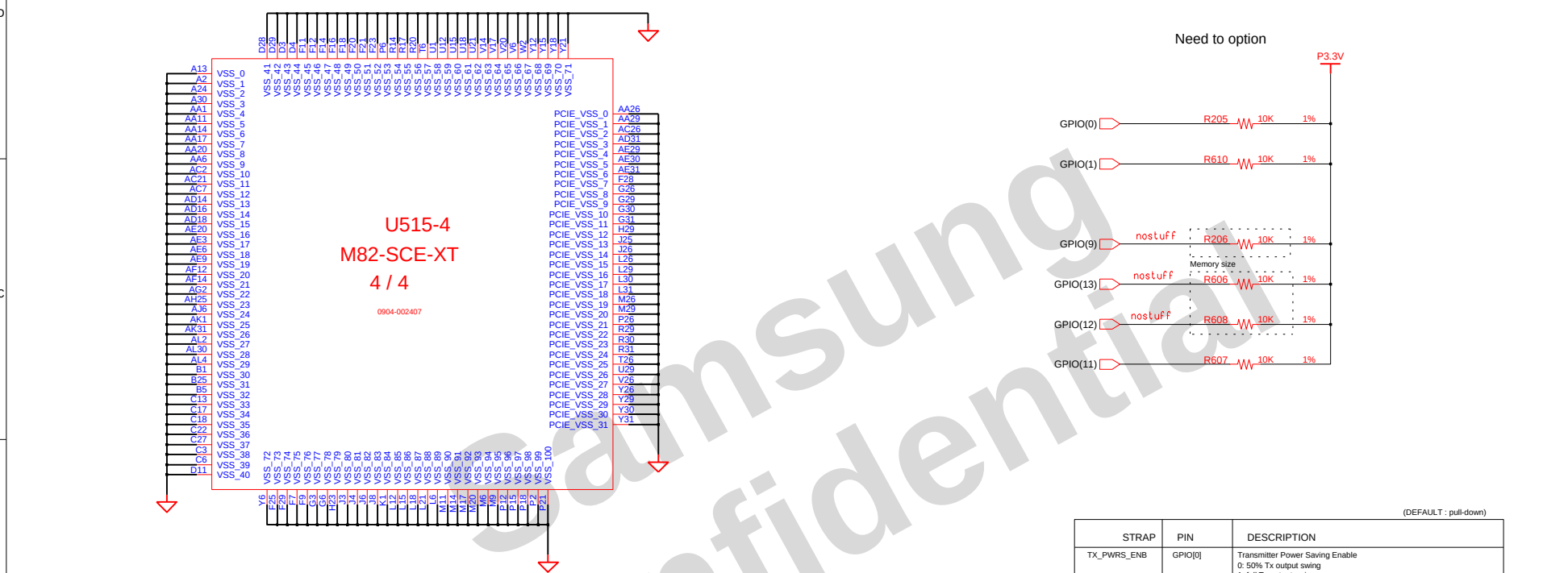
DRAW	JM	DATE	2/13/2008	TITLE	Cambridge Evaluation Board P1.8V_AUX, P1.5V	SAMSUNG ELECTRONICS
CHECK	YJ	DEV. STEP	PR			
APPROVAL	BJ	REV	1.0			
MODULE CODE		LAST EDIT	August 24, 2008 14:34:27 PM	PAGE	36	OF 47



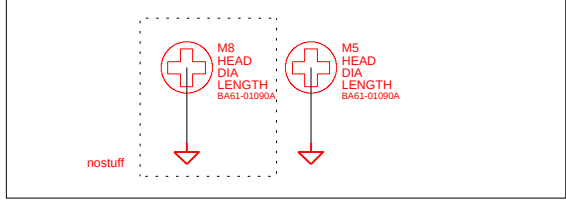




DRAW	JM	DATE	10/25/2006	TITLE	Cambridge	SAMSUNG
CHECK	YJ	DEV. STEP	PR	UNDEFINED	UNDEFINED	ELECTRONICS
APPROVAL	BJ	REV	1.0	UNDEFINED	UNDEFINED	PART NO.
MODULE CODE		LAST EDIT				BA41-009xxA
				August 24, 2008 14:34:27 PM	PAGE	39 OF 47



VIDEO HEATSINK HOLE

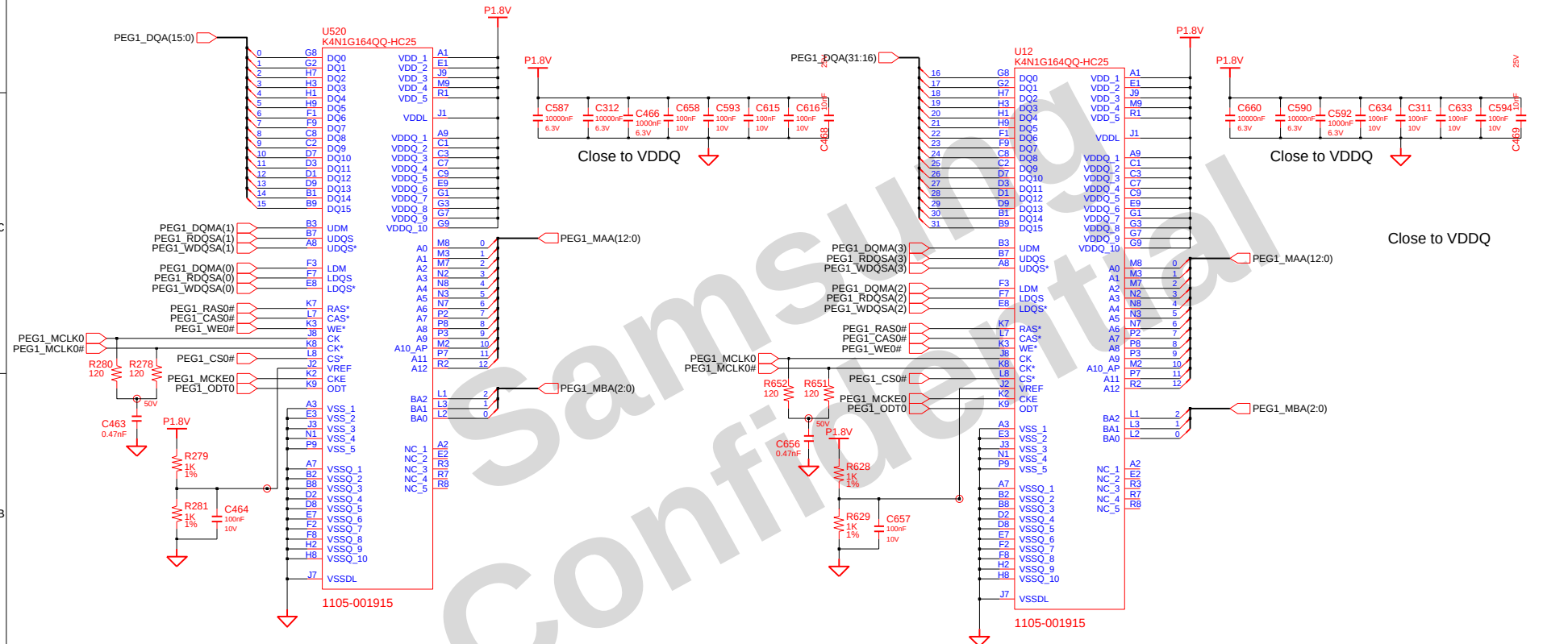


SB thermal plate RHE assembly

(DEFAULT : pull-down)

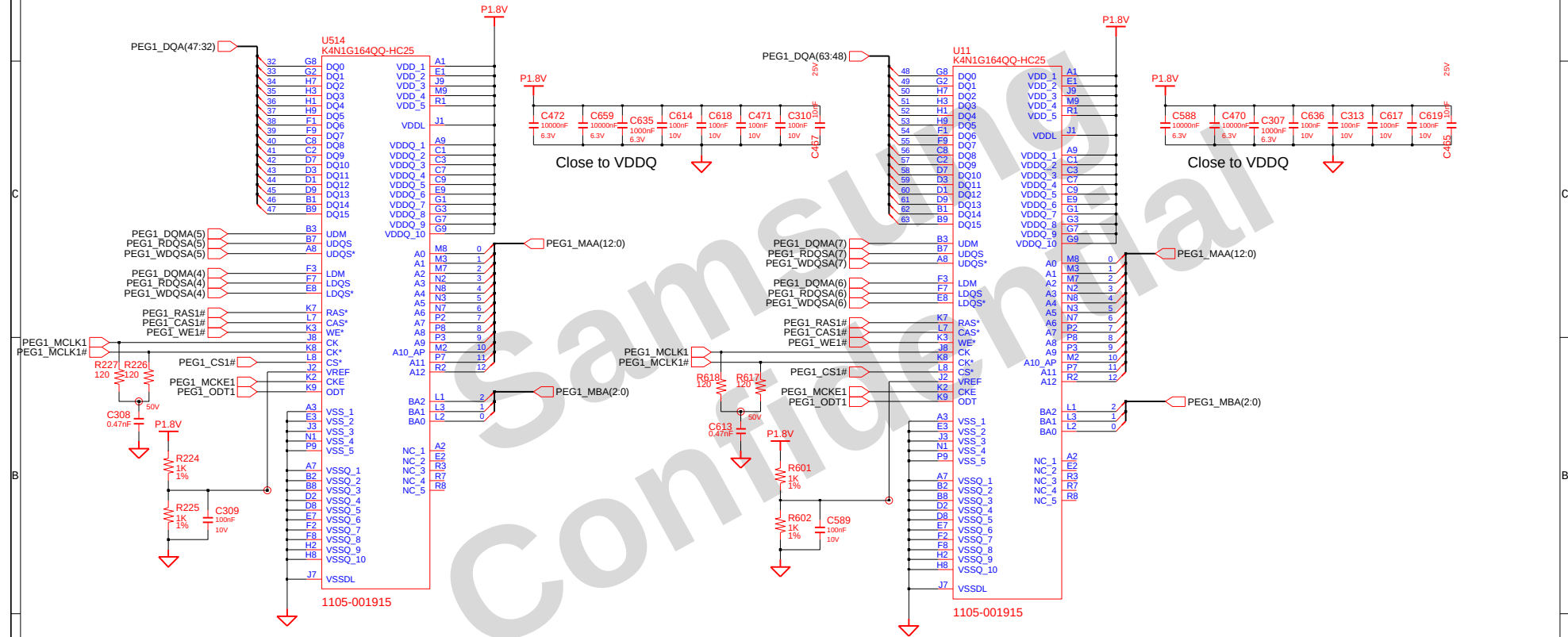
STRAP	PIN	DESCRIPTION
TX_PWRS_ENB	GPIO[0]	Transmitter Power Saving Enable 0: 50% Tx output swing 1: full Tx output swing
TX_DEEMPH_EN	GPIO[1]	Transmitter De-emphasis Enable 0: Tx De-emphasis disabled 1: Tx de-emphasis enabled
DEBUG_ACCESS	GPIO[4]	Strap to set the debug muxes to bring out DEBUG signals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

LOWER SUB PARTITION



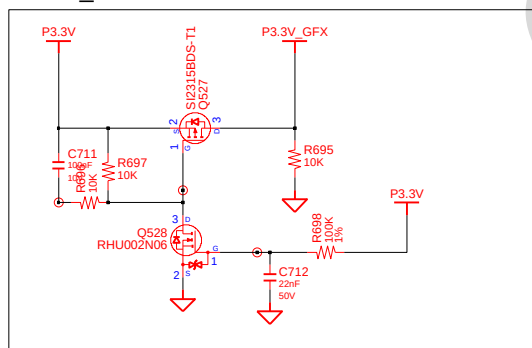
DRAW	JM	DATE	8/12/2006	TITLE	Cambridge	SAMSUNG
CHECK	YJ	DEV. STEP	PR	Graphics_Memory(GDDR2)		ELECTRONICS
APPROVAL	BJ	REV	1.0	Graphics_Memory_Nvidia #1	PART NO.	BA41-009xxA
MODULE CODE		LAST EDIT		August 24, 2008 14:34:27 PM	PAGE	41 OF 47

UPPER SUB PARTITION



DRAW	JM	DATE	8/12/2006	TITLE	Cambridge	SAMSUNG ELECTRONICS
CHECK	YJ	DEV. STEP	PR		Graphics_Memory(GDDR2)	
APPROVAL	BJ	REV	1.0		Graphics_Memory.Nvidia #2	
MODULE CODE		LAST EDIT				
					August 24, 2008 14:34:27 PM	PAGE 42 OF 47

(AVE MAX : 14A)

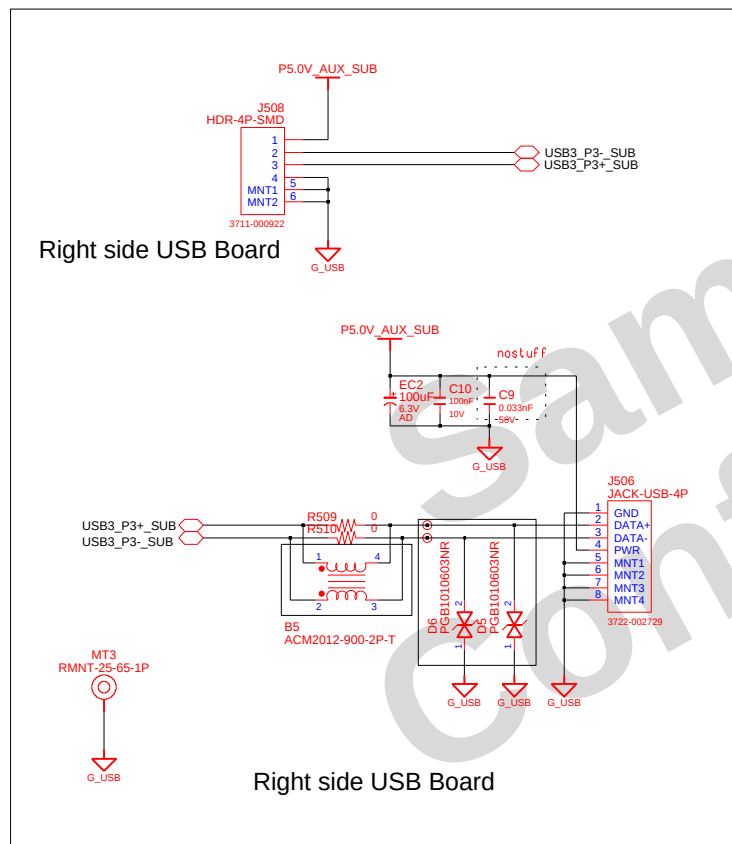


M82-S $\begin{cases} \text{H} : 0.9\text{V} \\ \text{L} : 1.0\text{V} \end{cases}$ R596 = 27.4K

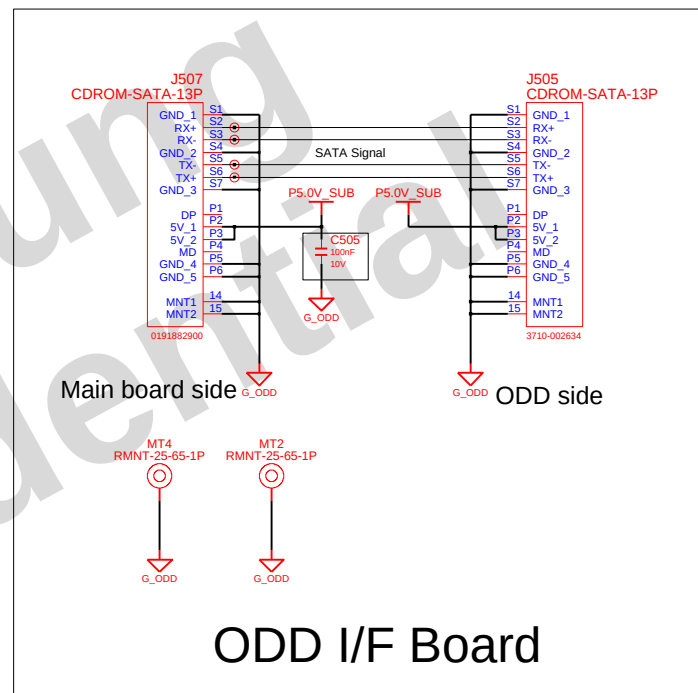
M82-SXT $\begin{cases} \text{H} : 0.9\text{V} \\ \text{L} : 1.2\text{V} \end{cases}$ R596 = 0

DRAW	JM	DATE	10/26/2006	TITLE Cambridge UNDEFINED UNDEFINED		SAMSUNG ELECTRONICS	
CHECK	YJ	REV. STEP	PR				
APPROVAL	BJ	REV	1.0				
MODULE CODE		LAST EDIT		August 24, 2008 14:34:27 PM		PAGE	43 OF 47
						PART NO. BA41-009xxA	

Sub Board (16" only)



nostuff
nostuff
nostuff
nostuff
nostuff
nostuff
nostuff
nostuff
nostuff

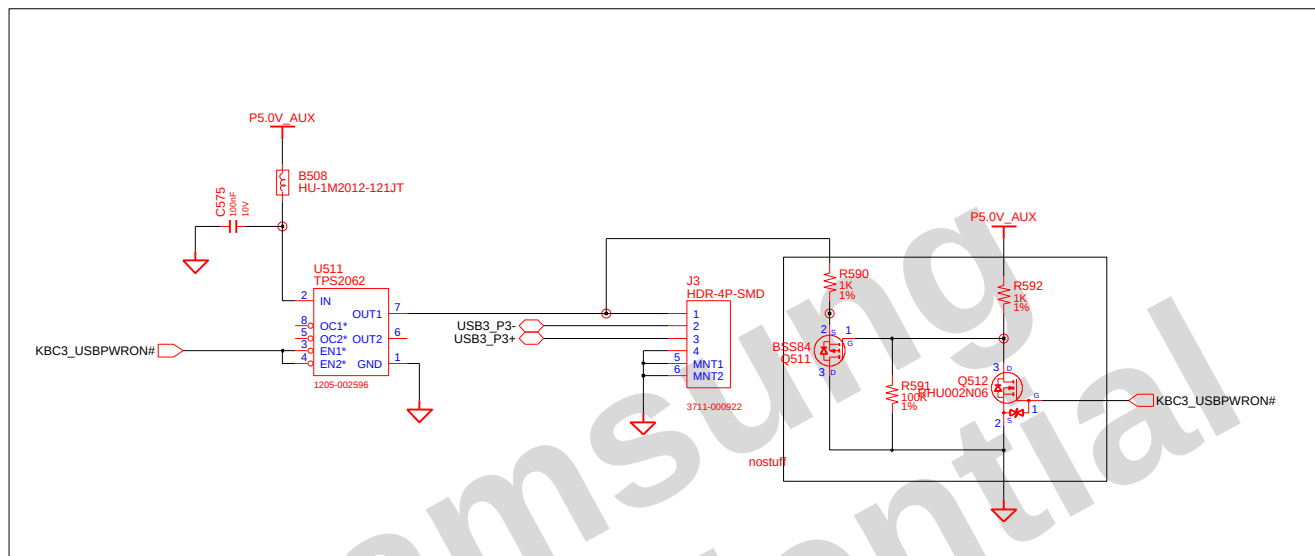


no stuff
no stuff
no stuff

DESIGN	JM	DATE	6/10/2008	TITLE	Cambridge	SAMSUNG ELECTRONICS
CHECK	YJ	DEV. STEP	PR			
APPROVAL	BJ	REV	1.0			
MODULE CODE	LAST EDIT		August 24, 2008 14:34:27 PM			
				PART NO.		BA41-009xxA

THIS DOCUMENT CONTAINS CONFIDENTIAL
PROPRIETARY INFORMATION THAT IS
SAMSUNG ELECTRONICS CO'S PROPERTY.
DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
EXCEPT AS AUTHORIZED BY SAMSUNG.

to 4th USB Sub Board Connector (16" Only)



DESIGN	JM	DATE	6/10/2008	TITLE	Cambr idge	SAMSUNG ELECTRONICS		
CHECK	YJ	REV. STEP	PR					
APPROVAL	BJ	REV	1.0				PART NO.	BA41-009xxA
MODULE CODE	LAST EDIT		August 24, 2008 14:34:27 PM				PAGE	45 OF 47

SAMSUNG PROPRIETARY
THIS DOCUMENT CONTAINS CONFIDENTIAL
PROPRIETARY INFORMATION THAT IS
SAMSUNG ELECTRONICS CO.'S PROPERTY.
DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
EXCEPT AS AUTHORIZED BY SAMSUNG.

CP10<0>
CP10<1>
CP10<9>

CP10<11>
CP10<12>
CP10<13>

CHG_BGATE
CHG_DCPRN
CLK3_NB14

CLPC3_CLK0
CLPC3_CLK1

OPC13_CLK2
OPC13_CLK3
OPC13_CLK4
OPC13_CLK5

OPEX3_RST#

CHP3_A_RST#
CHP3_RTCLK

CLK3_PWRGD#

KBC5_KSI<1>

OBCG3_HSYNC
OBCG3_VSYNC

BG_EGFX
BG_P1.2V
BP1.2V
BP1.8V
BP2.5V
BP1.2V_AUX
BP3.3V_GFX
BP5.0V_SUB
BP5.0V_AUX_SUB
BVDD_5.0V
BVDD_CPU_NB
BAD_DC
BCPU_CORE0
BCPU_CORE1
BG_ODD
BG_USB

PEG3_BKL TEN
VGA3_VOL TAGE_ID
PEG3_HPD_HDMI
PEG3_LCDVDDON

CHP3_NB_PWRGD
CHP3_SB_TEST0
CHP3_SB_TEST2

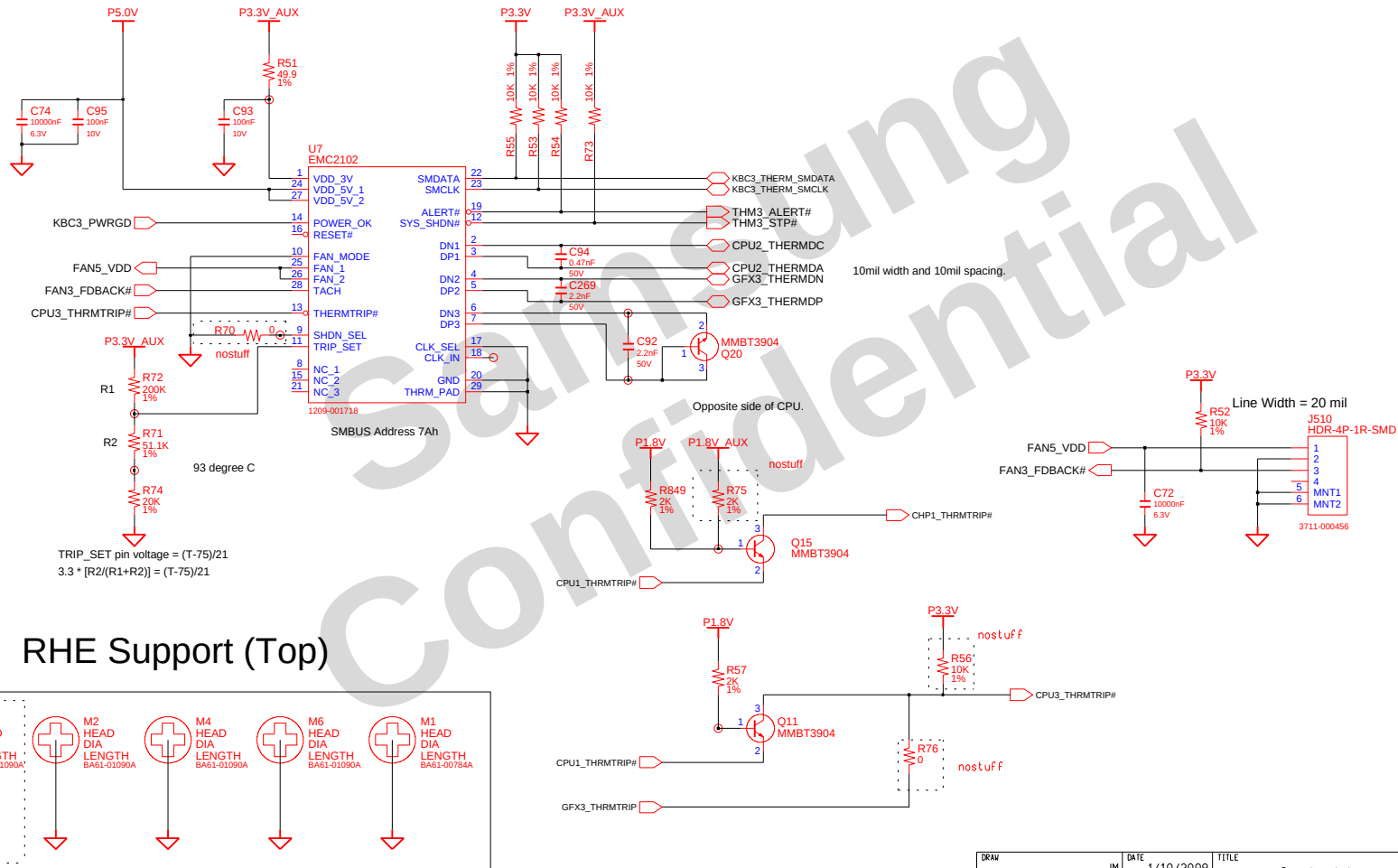
KBC3_LED_ACTN#
KBC3_NB_PWRGD
PEG5_HDMI_DATA

CCORE3_PWRGD
GFX3_THERMTRIP
GFX3_THERMDN
GFX3_THERMDP

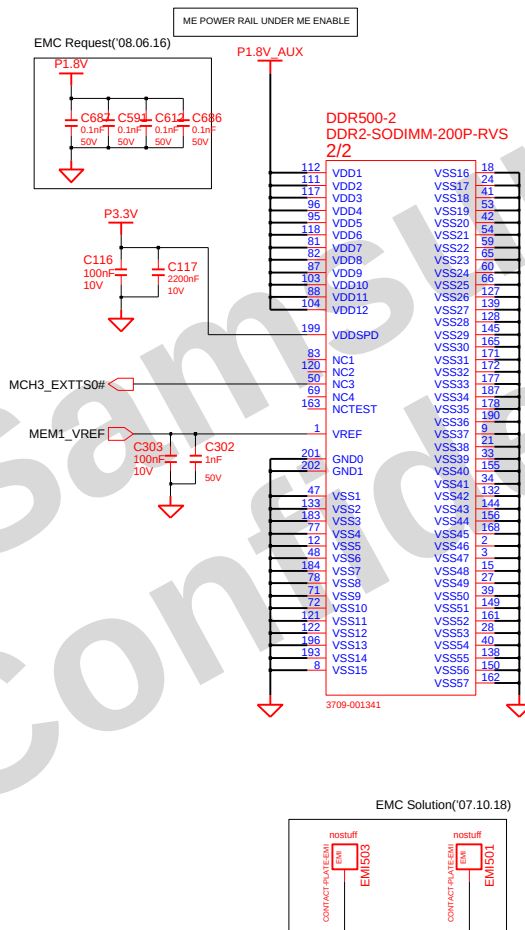
CLK3_GFX_27M_SS
SPI3_GP1014
CLK3_GFX_27M

DESIGN	JM	DATE	6/27/2008	TITLE	Cambridge	SAMSUNG ELECTRONICS
CHECK	YJ	DEV. STEP	PR			
APPROVAL	BJ	REV	1.0		PART NO.	BA41-009xxA
MODULE CODE		LAST EDIT	August 24, 2008 14:34:27 PM		PAGE	46 OF 47

THERMAL SENSOR & FAN CONTROL

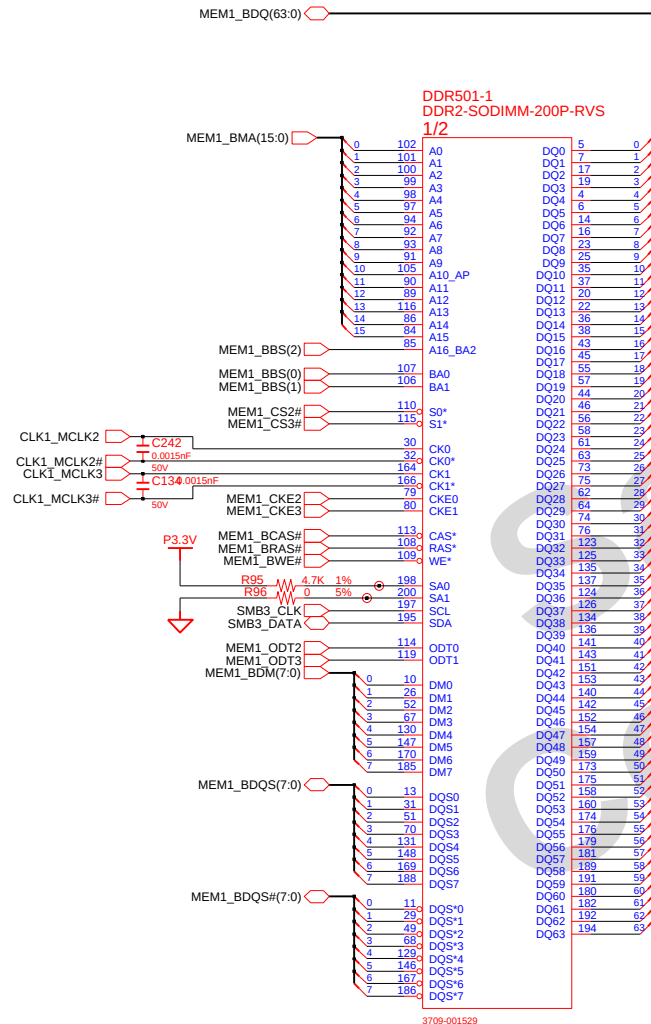


DRAW	JM	DATE	1/10/2008	TITLE	Cambridge	SAMSUNG
CHECK	YJ	DEV. STEP	PR	thermal_Sensor_SMSC_Enc2102		ELECTRONICS
APPROVAL	BJ	REV	1.0	thermal_Sensor_SMSC_Enc2102	PART NO.	BA41-009xxA
MODULE CODE		LAST EDIT				
				August 24, 2008 14:34:27 PM	PAGE	68 OF 64



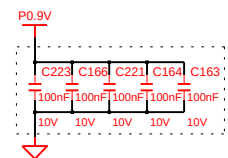
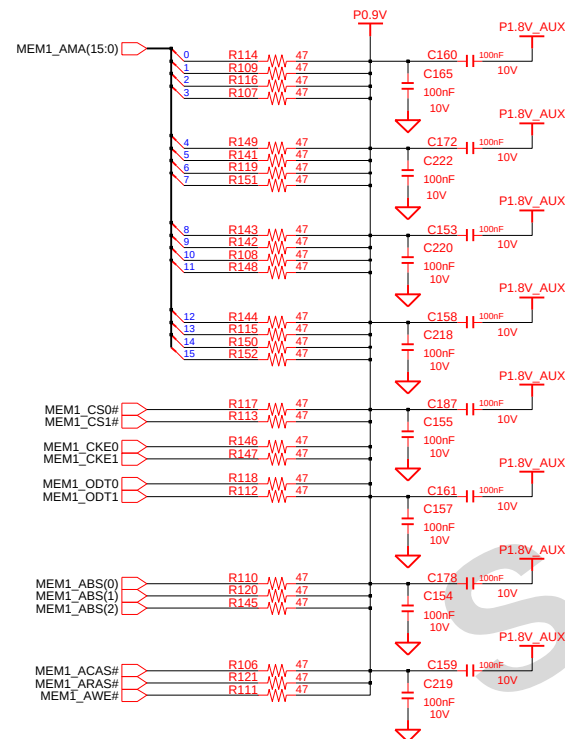
DDR SO-DIMM #1

Height : 9.2mm (Reverse)

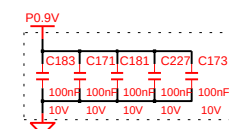
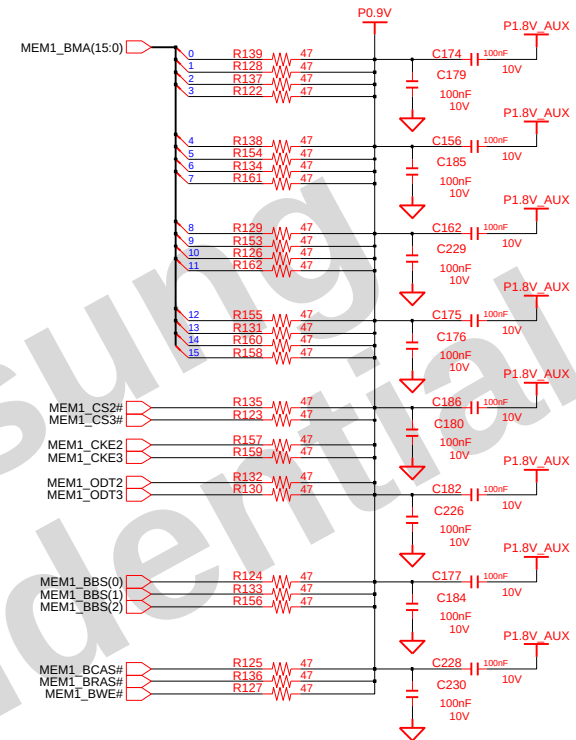
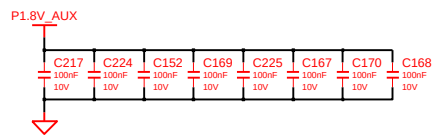


Foxcn : 3709-001390
Suyin : 3709-001503

DRAW	JM	DATE	1/10/2008	TITLE	Cambridge SODIMM_DDR2	SAMSUNG ELECTRONICS
CHECK	YJ	DEV. STEP	PR			
APPROVAL	BJ	REV	1.0		SODIMM_DDR2 #2	PART NO. BA41-009xxA
MODULE CODE		LAST EDIT				
				August 24, 2008 14:34:27 PM	PAGE	65 OF 64



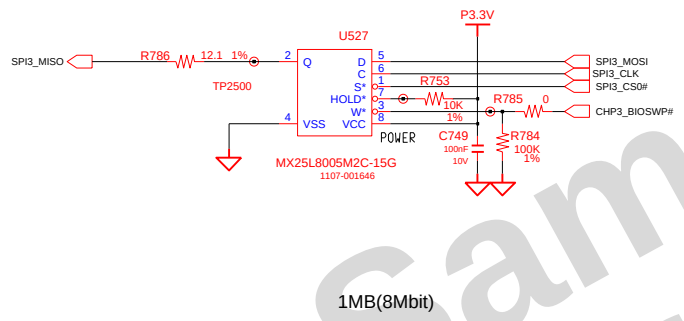
Place near SO-DIMM0



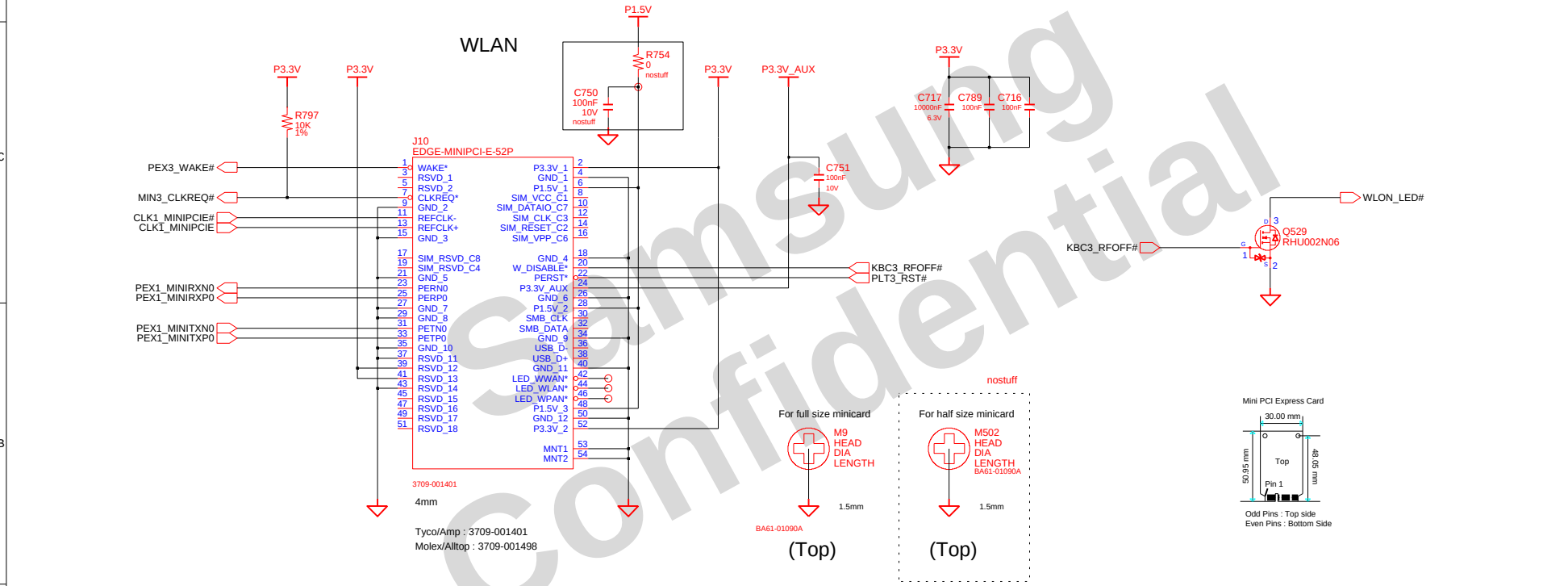
Place near SO-DIMM1

DRAW	JM	DATE	1/10/2008	TITLE	Cambridge SODIMM_DDR2 SODIMM_DDR2 #3	SAMSUNG ELECTRONICS PART NO. BA41-009xxA
CHECK	YJ	DEV. STEP	PR	REV	1.0	
APPROVAL	BJ	LAST EDIT				
MODULE CODE						
August 24, 2008 14:34:27 PM						PAGE 66 OF 64

- SPI ROM LIST -



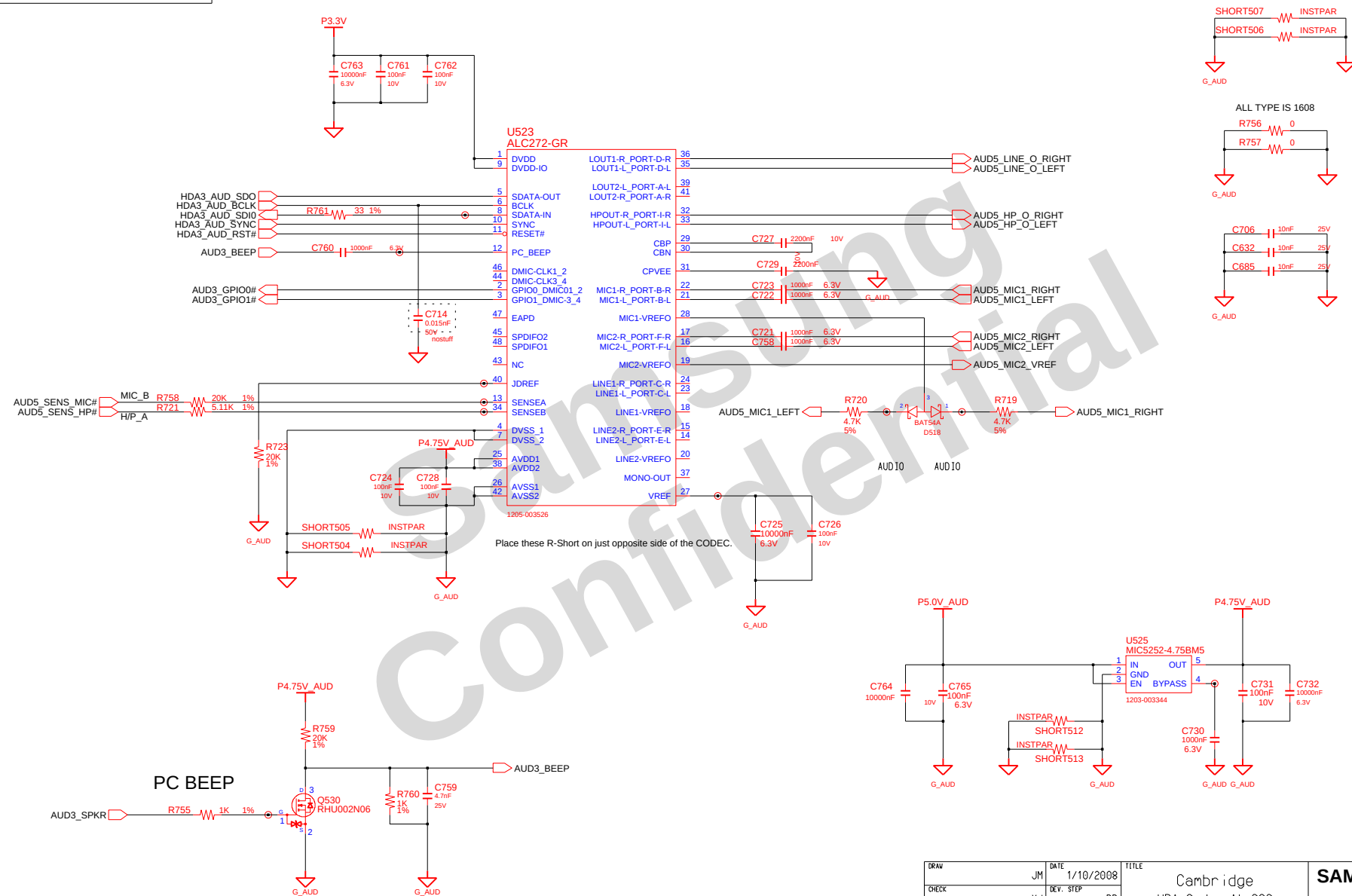
02	VERIFY REAL MODE	66	CONFIGURE ADVANCE CACHE REG.
03	DISABLE NMI	6A	DISPLAY EXTERNAL CACHE SIZE
04	GET CPU TYPE	6C	DISPLAY SHADOW MESSAGE
06	INIT. SYSTEM H/W	6E	DISPLAY NON-DISPOSABLE SEGMENT
08	INIT. CHIPSET REG.	70	DISPLAY ERROR MESSAGE
09	SET IN POST FLAG	72	CHECK FOR CONFIGURATION ERROR
0A	INIT 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 COPROCESSER 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. TYPOMATIC 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	89	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 PCIE_Minicard_Slot PCIE_Minicard_Slot	SAMSUNG ELECTRONICS
CHECK	YJ	DEV. STEP	PR	REV	1.0	PART NO. BA41-009xxA
APPROVAL	BJ	LAST EDIT				
MODULE CODE	undefined				August 24, 2008 14:34:27 PM	PAGE 62 OF 64

SAMSUNG PROPRIETARY

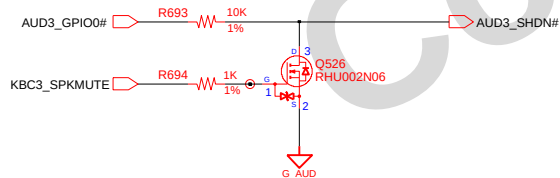
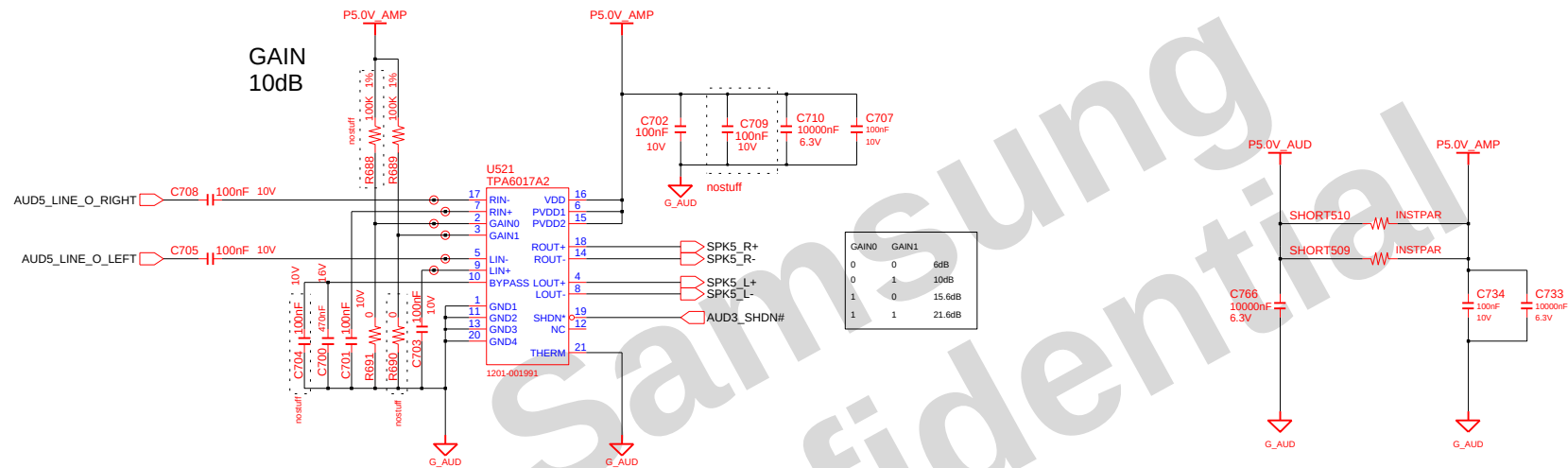
THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO.'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.



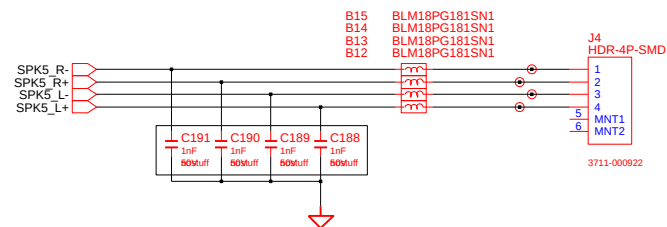
DRAW	JM	DATE	1/10/2008	TITLE	Cambridge HDA_Codec_Alc262	SAMSUNG ELECTRONICS
CHECK	YJ	DEV. STEP	PR	REV	1.0	
APPROVAL	BJ	LAST EDIT				PART NO. BA41-009xxA
MODULE CODE	undefined				August 24, 2008 14:34:27 PM	PAGE 49 OF 64

SAMSUNG PROPRIETARY

THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO.'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.



INTERNAL STEREO SPEAKERS



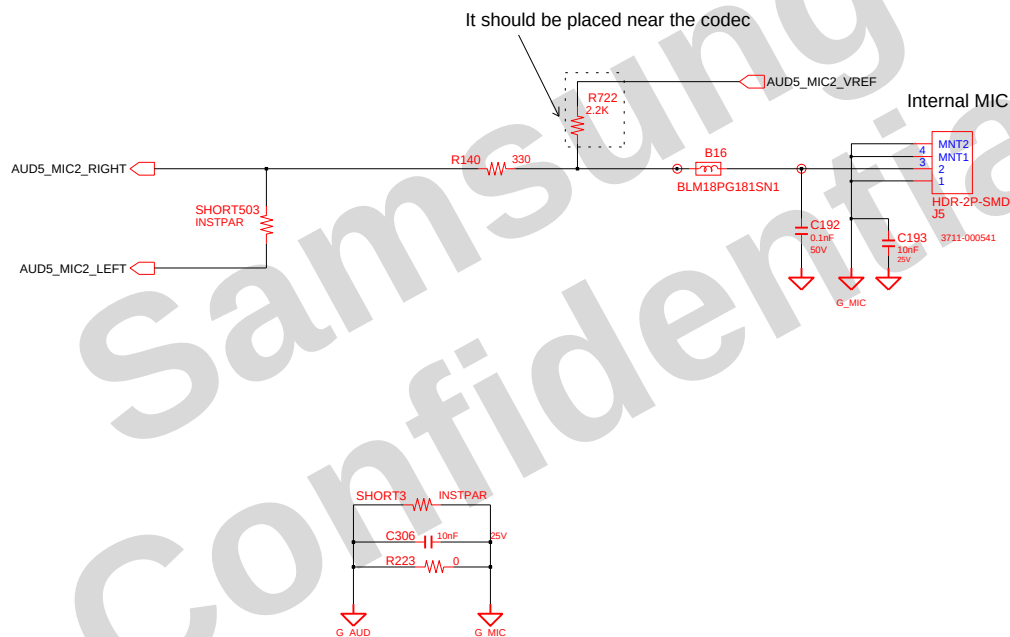
DRAW	JM	DATE	1/10/2008	TITLE	Cambridge	SAMSUNG ELECTRONICS
CHECK	YJ	DEV. STEP	PR	HDA_Codex_A1c262		
APPROVAL	BJ	REV	1.0	HDA_Codex_A1c262 #2		
MODULE CODE		LAST EDIT				

August 24, 2008 14:34:27 PM

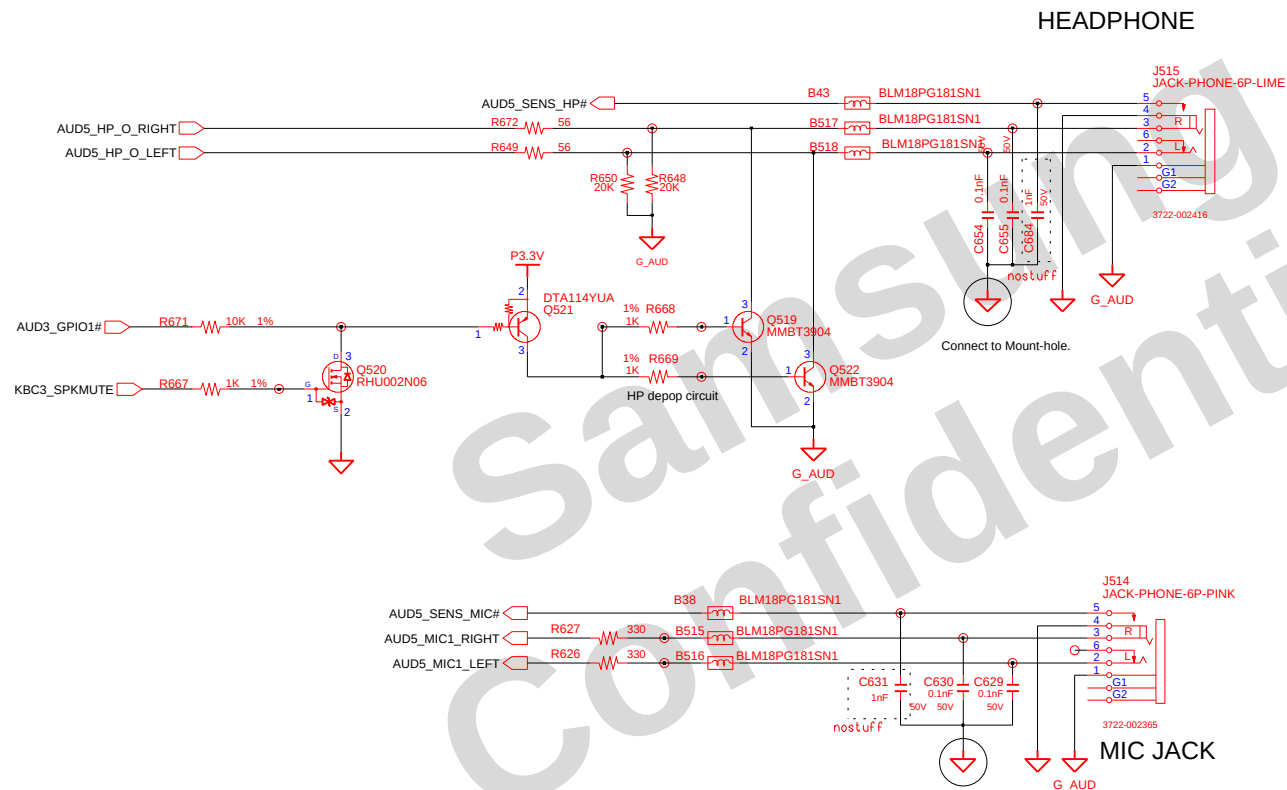
PAGE 50 OF 64

SAMSUNG PROPRIETARY

THIS DOCUMENT CONTAINS CONFIDENTIAL
PROPRIETARY INFORMATION THAT IS
SAMSUNG ELECTRONICS CO.'S PROPERTY.
DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
EXCEPT AS AUTHORIZED BY SAMSUNG.



DRAW	JM	DATE	1/10/2008	TITLE	Cambridge HDA_Codec_Alc262	SAMSUNG ELECTRONICS
CHECK	YJ	DEV. STEP	PR			
APPROVAL	BJ	REV	1.0		HDA_Codec_Alc262 #3	PART NO. BA41-009xxA
MODULE CODE	undefined	LAST EDIT	August 24, 2008 14:34:27 PM	PAGE	51	OF 64

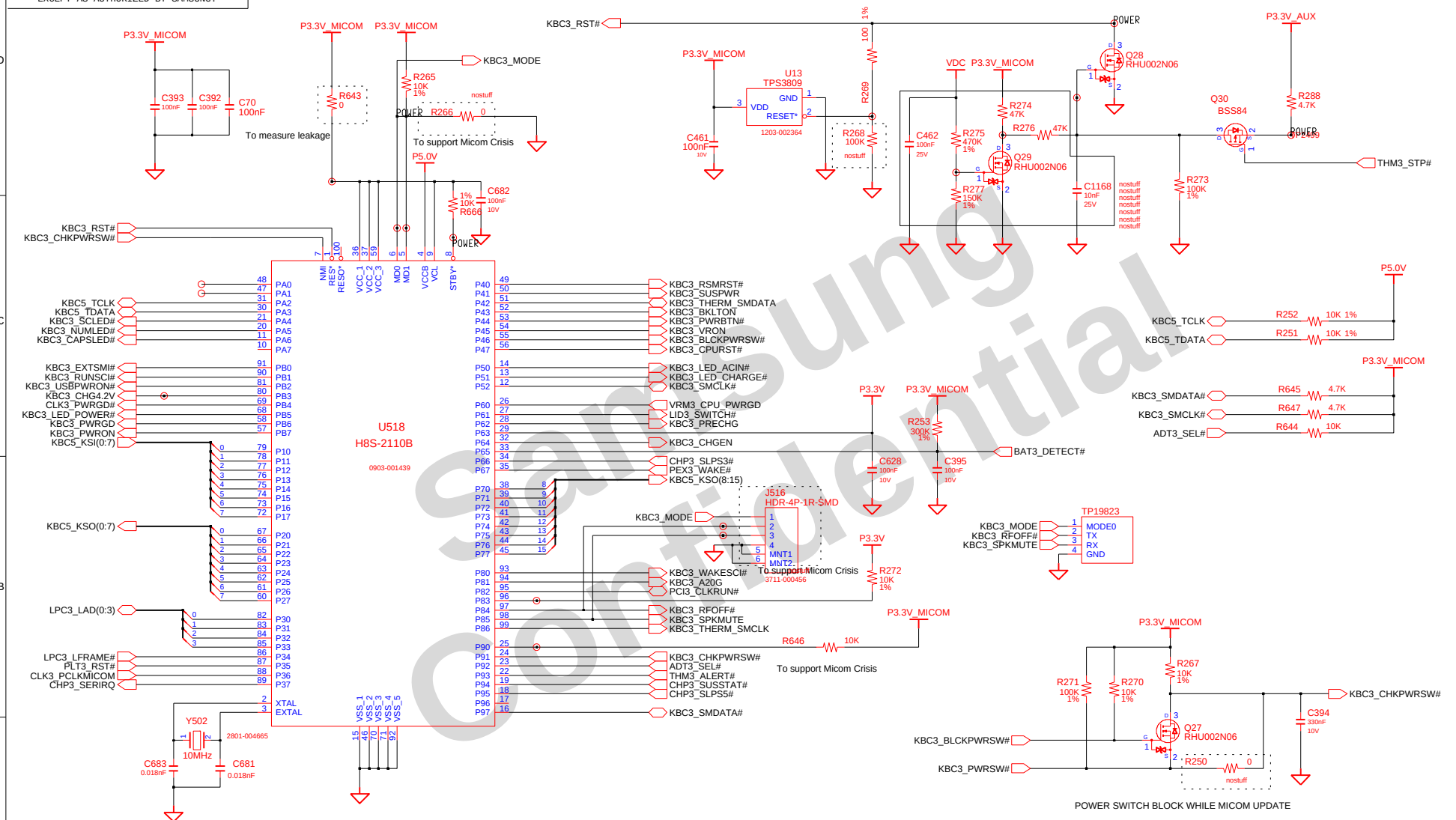


The traces led to Audio Jacks have the width over 10mil

DRAW	DATE	1/10/2008		Cambridge HDA_Codec_A1c262 HDA_Codec_A1c262 #4	SAMSUNG ELECTRONICS		
CHECK	DES. STEP	PR					
APPROVAL	REV	1.0				PART NO.	BA41-009xxA
MODULE CODE	LAST EDIT		August 24, 2008 14:34:27 PM			PAGE 52 OF 64	

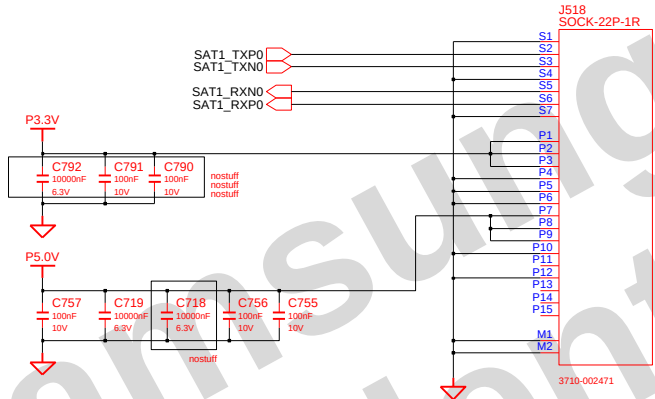
SAMSUNG PROPRIETARY
THIS DOCUMENT CONTAINS CONFIDENTIAL
PROPRIETARY INFORMATION THAT IS
SAMSUNG ELECTRONICS CO.'S PROPERTY.
DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
EXCEPT AS AUTHORIZED BY SAMSUNG.

MICOM RESET



DRAW	JM	DATE	1/10/2008	TITLE	Cambridge	SAMSUNG ELECTRONICS
CHECK	YJ	DEV. STEP	PR	MICOM_Renesas2110_100p		
APPROVAL	BJ	REV	1.0	MICOM_Renesas2110_100p		
MODULE CODE		LAST EDIT				
				August 24, 2008 14:34:27 PM	PAGE 58 OF 64	

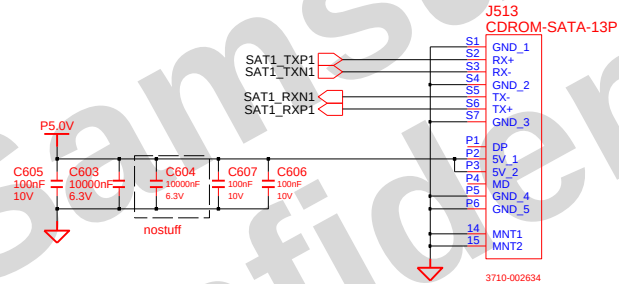
Main to HDD



DRAW	JM	DATE	1/10/2008	TITLE Cambridge HDD_IF_Conn HDD_IF_Conn	SAMSUNG ELECTRONICS PART NO. BA41-009xxA
CHECK	YJ	DEV. STEP	PR		
APPROVAL	BJ	REV	1.0		
MODULE CODE	LAST EDIT			August 24, 2008 14:34:27 PM	PAGE 54 OF 64

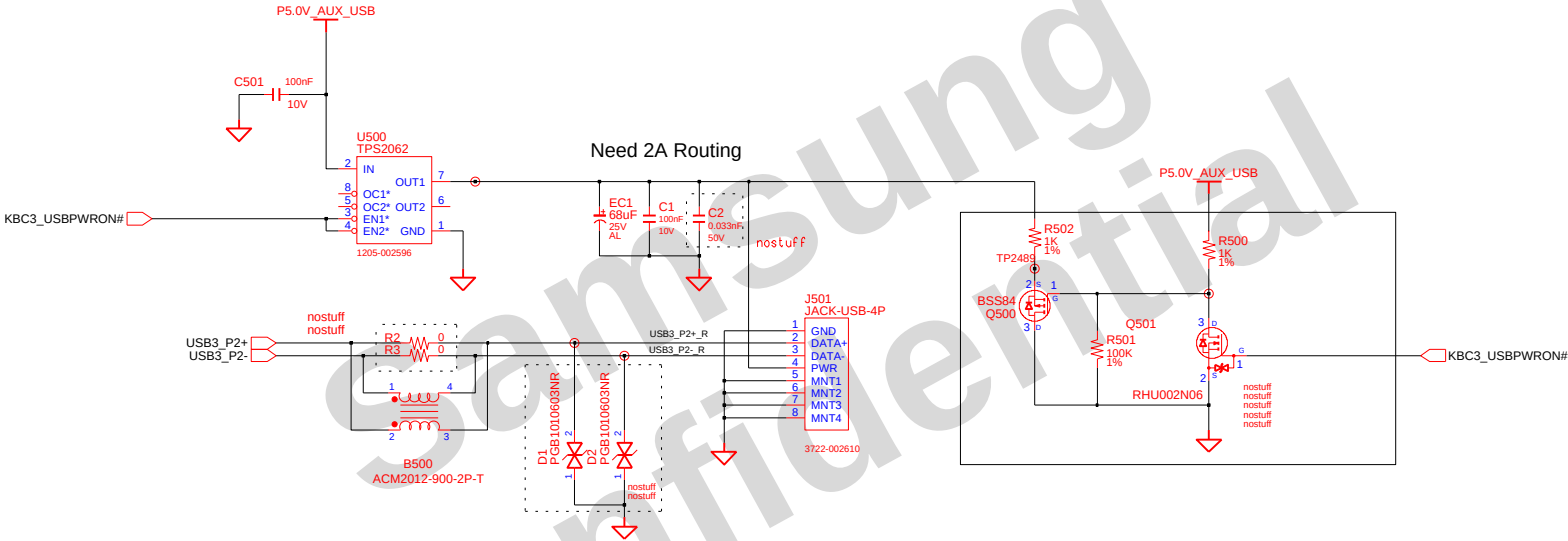
Samsung
Confidential

SATA ODD



DRAW	JM	DATE	1/10/2008	Cambridge ODD_IF_Conn ODD_IF_Conn		SAMSUNG ELECTRONICS	
CHECK	YJ	DEV. STEP	PR				
APPROVAL	BJ	REV	1.0				
				PART NO.		BA41-009xxA	
MODULE CODE	LAST EDIT			August 24, 2008 14:34:27 PM		PAGE	60 OF 64

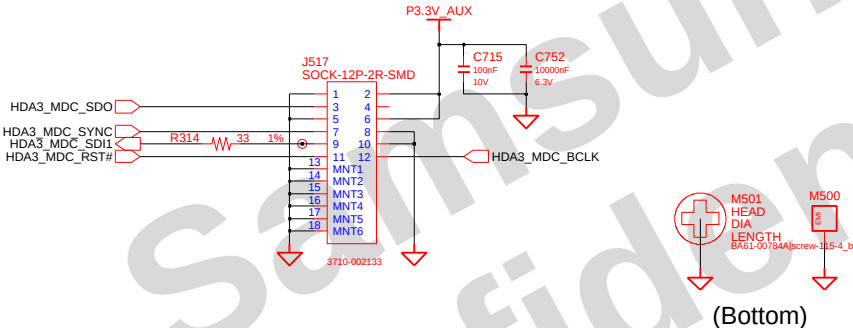
1 PORT USB CONNECTOR



DRAW	JM	DATE	1/10/2008	TITLE	Cambridge USB_1Port USB_1Port	SAMSUNG ELECTRONICS
CHECK	YJ	DEV. STEP	PR			PART NO. BA41-009xxA
APPROVAL	BJ	REV	1.0			
MODULE CODE		LAST EDIT		August 24, 2008 14:34:27 PM	PAGE 70 OF 64	

DRAW	JM	DATE	1/10/2008	TITLE	Cambridge USB_2Port USB_2Port	SAMSUNG ELECTRONICS
CHECK	YJ	DEV. STEP	PR			
APPROVAL	BJ	REV	1.0			
MODULE CODE	LAST EDIT		August 24, 2008 14:34:27 PM		PAGE	71 OF 64

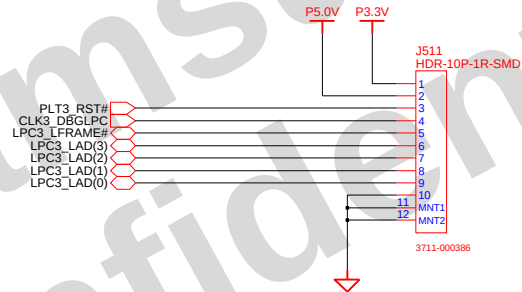
MDC Connector



(Bottom)

DRAW	JM	DATE	1/10/2008	TITLE	Cambridge HDA_Modem HDA_Modem	SAMSUNG ELECTRONICS
CHECK	YJ	DEV. STEP	PR			PART NO. BA41-009xxA
APPROVAL	BJ	REV	1.0			
MODULE CODE		LAST EDIT		August 24, 2008 14:34:27 PM	PAGE 53 OF 64	

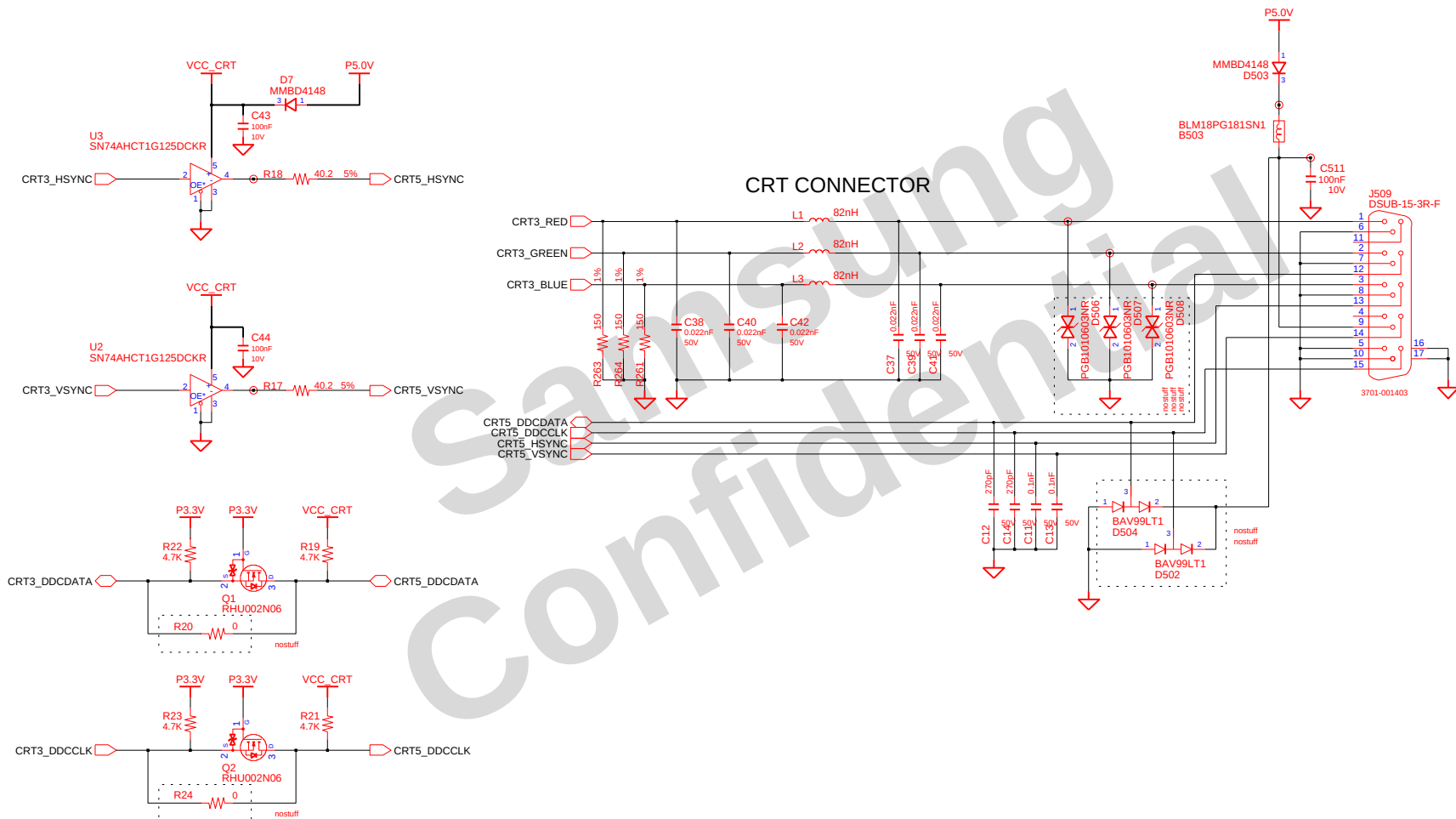
80H DECODER CONNECTOR



DRAW	JM	DATE	1/10/2008	TITLE	Cambridge	SAMSUNG ELECTRONICS
CHECK	YJ	DEV. STEP	PR	Other_Debug_80		
APPROVAL	BJ	REV	1.0	Other_Debug_80	PART NO.	
MODULE CODE	LAST EDIT	August 24, 2008 14:34:27 PM	PAGE	61	OF 64	

SAMSUNG PROPRIETARY

THIS DOCUMENT CONTAINS CONFIDENTIAL
PROPRIETARY INFORMATION THAT IS
SAMSUNG ELECTRONICS CO.'S PROPERTY.
DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
EXCEPT AS AUTHORIZED BY SAMSUNG.

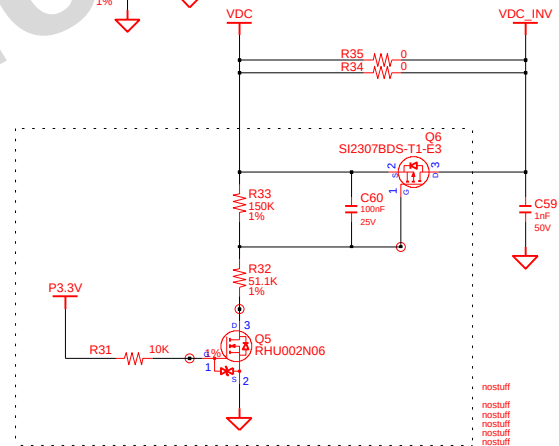
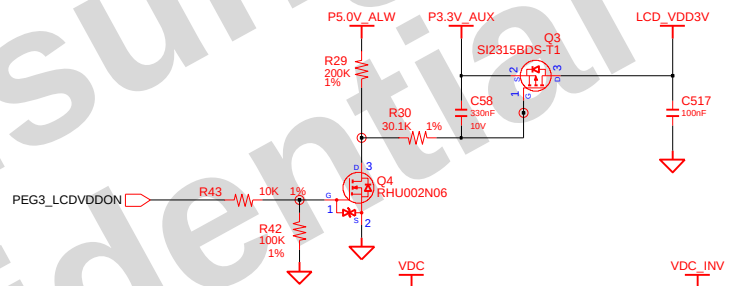
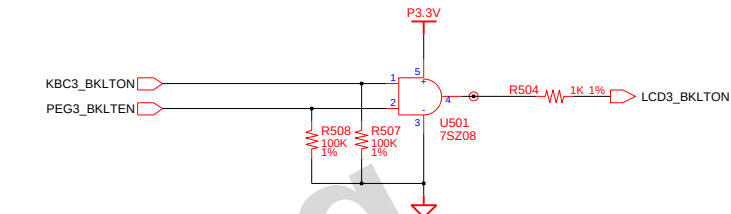
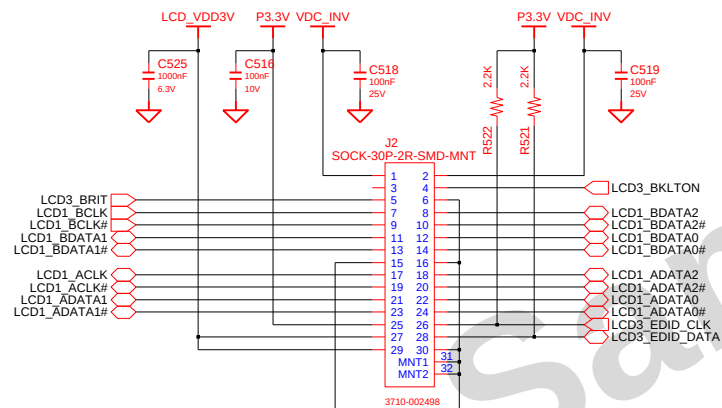


DRAW	JM	DATE	1/10/2008	TITLE	Cambridge Interface_Circuit Graphics_IF_CRT	SAMSUNG ELECTRONICS
CHECK	YJ	DEV. STEP	PR			PART NO. BA41-009xxA
APPROVAL	BJ	REV	1.0			
MODULE CODE		LAST EDIT				

August 24, 2008 14:34:27 PM PAGE 46 OF 64

SAMSUNG PROPRIETARY

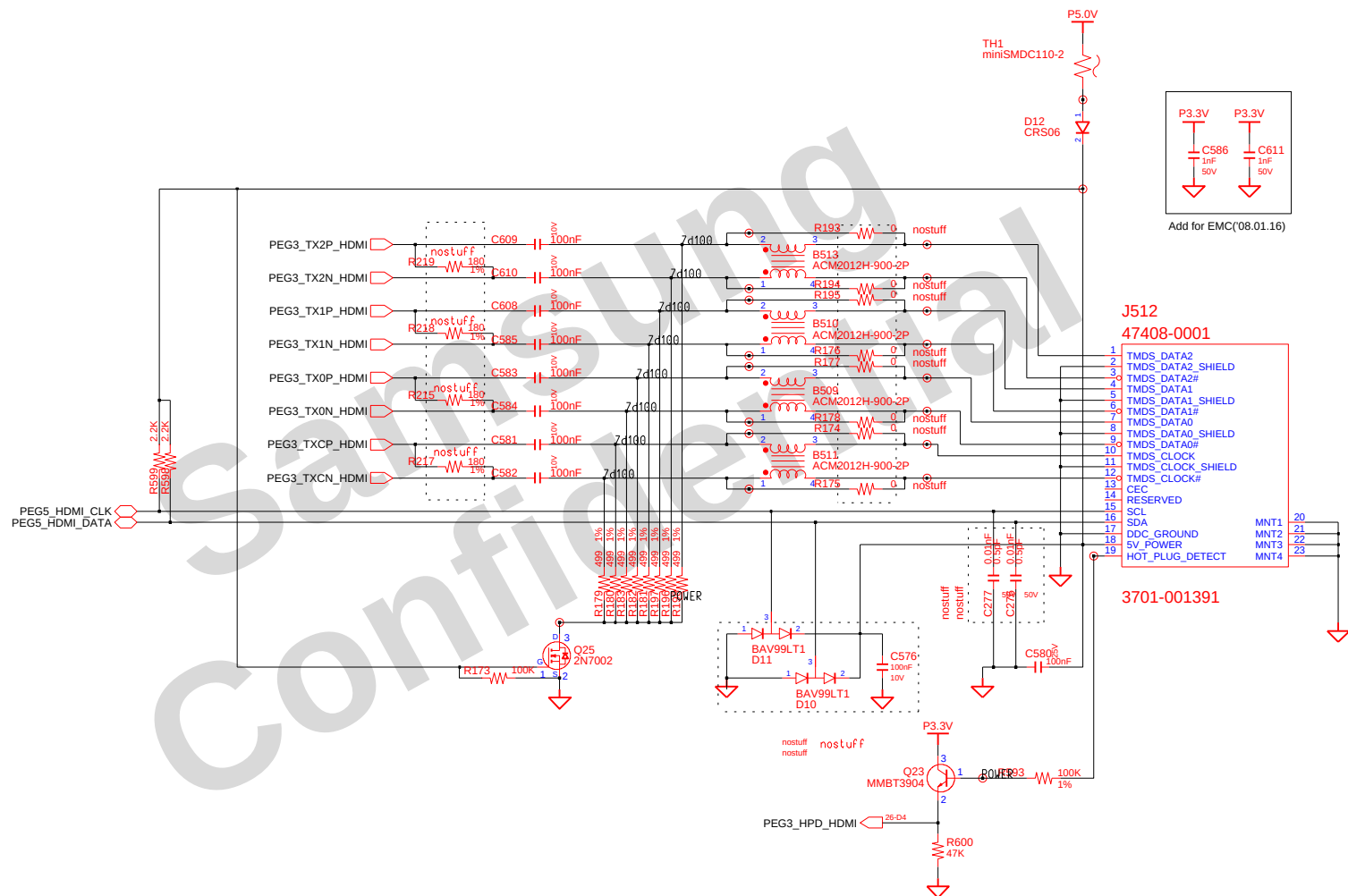
THIS DOCUMENT CONTAINS CONFIDENTIAL
PROPRIETARY INFORMATION THAT IS
SAMSUNG ELECTRONICS CO.'S PROPERTY.
DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
EXCEPT AS AUTHORIZED BY SAMSUNG.



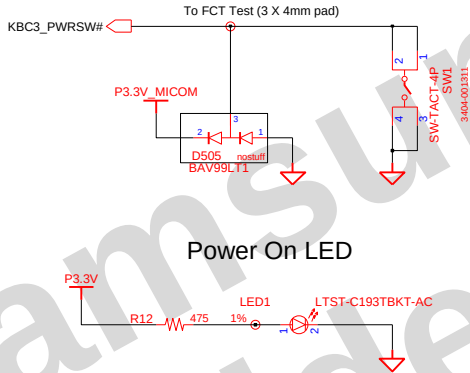
DRAW	JM	DATE	1/10/2008	TITLE	Cambridge Interface_Circuit Graphics_IF_LCD	SAMSUNG ELECTRONICS
CHECK	YJ	DEV. STEP	PR			PART NO.
APPROVAL	BJ	REV	1.0			BA41-009xxA
MODULE CODE		LAST EDIT				
August 24, 2008 14:34:27 PM						PAGE 12 of 12

SAMSUNG PROPRIETARY

THIS DOCUMENT CONTAINS CONFIDENTIAL
PROPRIETARY INFORMATION THAT IS
SAMSUNG ELECTRONICS CO.'S PROPERTY.
DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
EXCEPT AS AUTHORIZED BY SAMSUNG.

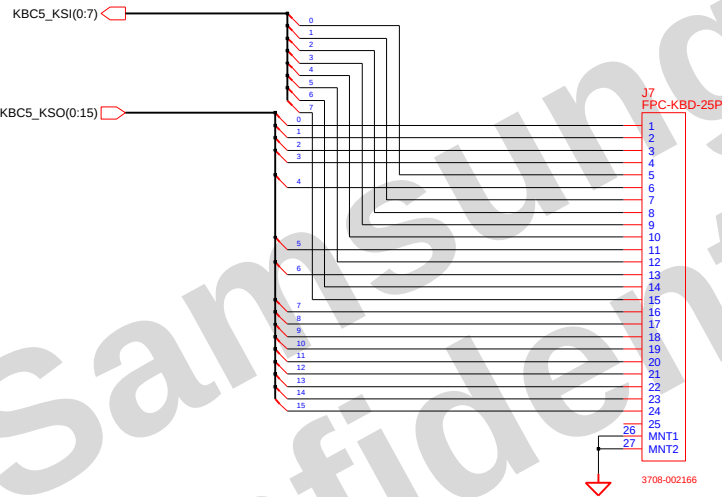


Put this LED located near PWRSW from ME recommendation
Power LED, Blue color



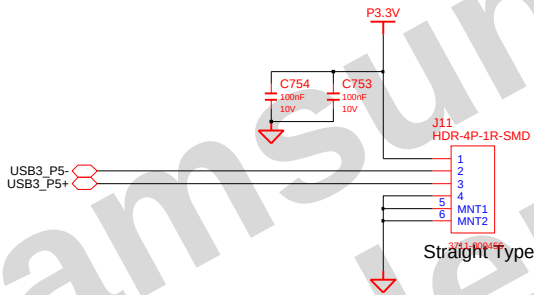
DRAW	JM	DATE	1/10/2008	TITLE	Cambridge MIO_Switch MIO_Switch	SAMSUNG ELECTRONICS PART NO. BA41-009xxA
CHECK	YJ	DEV. STEP	PR			
APPROVAL	BJ	REV	1.0			
MODULE CODE		LAST EDIT		August 24, 2008 14:34:27 PM	PAGE	59 OF 64

KEYBOARD



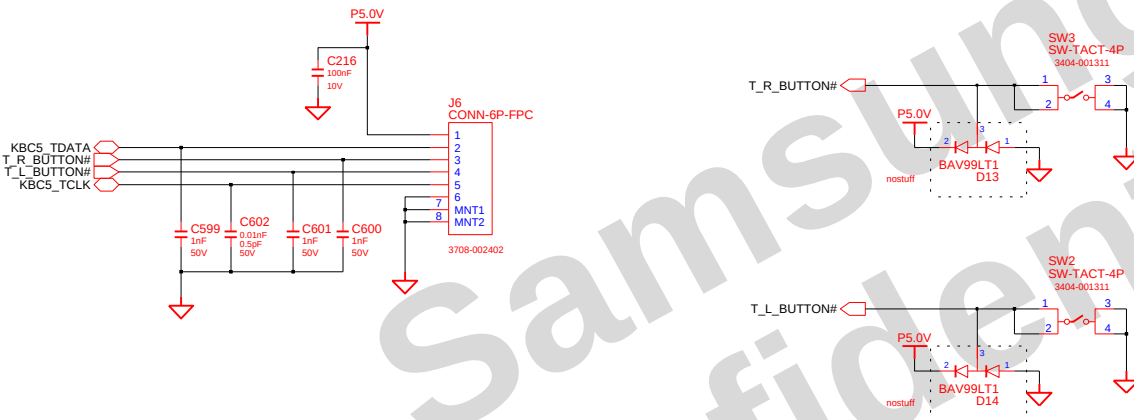
DRAW	JM	DATE	1/10/2008	TITLE	Cambridge	SAMSUNG ELECTRONICS
CHECK	YJ	DEV. STEP	PR	KBD_IF_Conn		
APPROVAL	BJ	REV	1.0	KBD_IF_Conn		
MODULE CODE		LAST EDIT				
				August 24, 2008 14:34:27 PM	PAGE 55 OF 64	

Bluetooth Interface

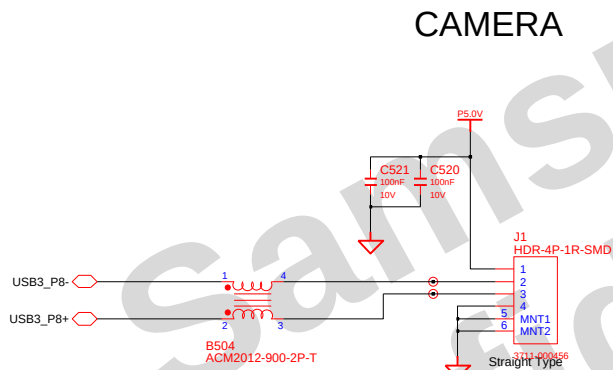


DRAW	JM	DATE	1/10/2008	TITLE	Cambridge	SAMSUNG ELECTRONICS
CHECK	YJ	DEV. STEP	PR	Bluetooth_IF_Conn	Bluetooth_IF_Conn	
APPROVAL	BJ	REV	1.0	Bluetooth_IF_Conn	Bluetooth_IF_Conn	
MODULE CODE		LAST EDIT	August 24, 2008 14:34:27 PM	PAGE	44	OF 64

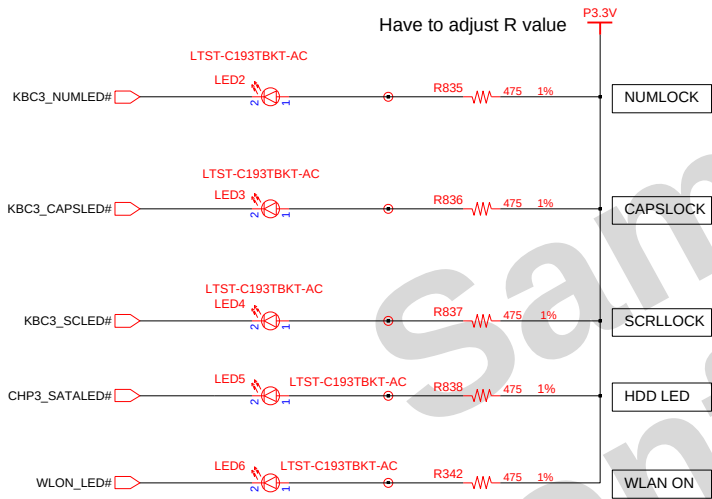
TOUCHPAD



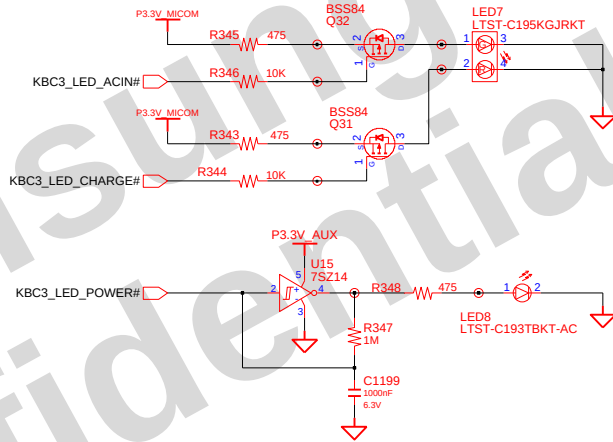
DRAW	JM	DATE	1/10/2008	TITLE	Cambridge Touchpad_IF_Conn Touchpad_IF_Conn	SAMSUNG ELECTRONICS
CHECK	YJ	DEV. STEP	PR			PART NO. BA41-009xxA
APPROVAL	BJ	REV	1.0			
MODULE CODE		LAST EDIT	August 24, 2008 14:34:27 PM	PAGE	69	OF 64



DRAW	JM	DATE	1/10/2008	TITLE	Cambridge Camera_IF_Conn Camera_IF_Conn	SAMSUNG ELECTRONICS	
CHECK	YJ	DEV. STEP	PR				PART NO. BA41-009xxA
APPROVAL	BJ	REV	1.0				
MODULE CODE	LAST EDIT			August 24, 2008 14:34:27 PM	PAGE 45	OF 64	



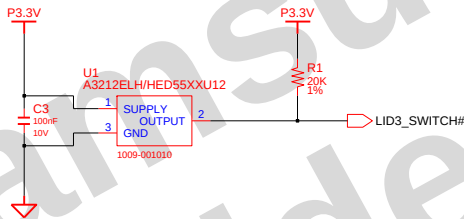
ADAPTERIN/CHARGING LED



DRAW	JM	DATE	1/10/2008	TITLE	Cambridge LED_Switch LED_Switch	SAMSUNG ELECTRONICS
CHECK	YJ	DEV. STEP	PR			PART NO. BA41-009xxA
APPROVAL	BJ	REV	1.0			
MODULE CODE		LAST EDIT				
				August 24, 2008 14:34:27 PM	PAGE 56	OF 64

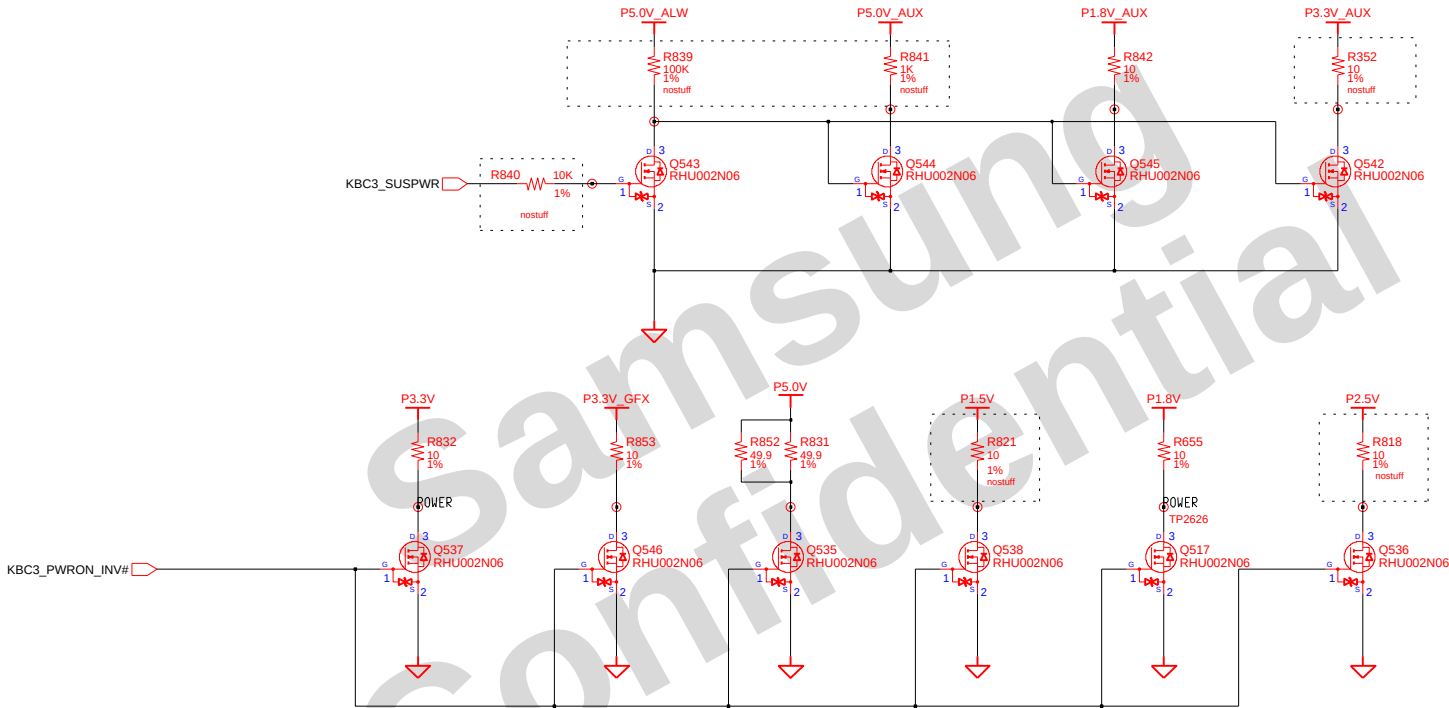
SAMSUNG PROPRIETARY
THIS DOCUMENT CONTAINS CONFIDENTIAL
PROPRIETARY INFORMATION THAT IS
SAMSUNG ELECTRONICS CO.'S PROPERTY.
DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
EXCEPT AS AUTHORIZED BY SAMSUNG.

LID_SWITCH



DRAW	JM	DATE	1/10/2008	TITLE	Cambridge LID_Switch LID_Switch	SAMSUNG ELECTRONICS
CHECK	YJ	DEV. STEP	PR			
APPROVAL	BJ	REV	1.0			
MODULE CODE	LAST EDIT			August 24, 2008 14:34:27 PM	PAGE	57 OF 64

POWER DISCHARGER



DRAW	JM	DATE	1/10/2008	TITLE		SAMSUNG ELECTRONICS
CHECK	YJ	DEV. STEP	PR			
APPROVAL	BJ	REV	1.0	Cambridge PWR_MV_DisCharger DISCHARGING LOGIC		PART NO. BA41-009xxA
MODULE CODE	undefined	LAST EDIT	August 24, 2008 14:34:27 PM	PAGE	63	OF 64

Sheet1 ----- Root[sheet1]
Sheet2 ----- Root[sheet2]
Sheet3 ----- Root[sheet3]
Sheet4 ----- Root[sheet4]
Sheet5 ----- Root[sheet5]
Sheet6 ----- Root[sheet6]
Sheet7 ----- Root[sheet7]
Sheet8 ----- Root[sheet8]
Sheet9 ----- Root[sheet9]
Sheet10 ----- Root[sheet10]
Sheet11 ----- Root[sheet11]
Sheet12 ----- Root[sheet12]
Sheet13 ----- Root[sheet13]
Sheet14 ----- Root[sheet14]
Sheet15 ----- Root[sheet15]
Sheet16 ----- Root[sheet16]
Sheet17 ----- Root[sheet17]
Sheet18 ----- Root[sheet18]
Sheet19 ----- Root[sheet19]
Sheet20 ----- Root[sheet20]
Sheet21 ----- Root[sheet21]
Sheet22 ----- Root[sheet22]
Sheet23 ----- Root[sheet23]
Sheet24 ----- Root[sheet24]
Sheet25 ----- Root[sheet25]
Sheet26 ----- Root[sheet26]
Sheet27 ----- Root[sheet27]
Sheet28 ----- Root[sheet28]
Sheet29 ----- Root[sheet29]
Sheet30 ----- Root[sheet30]
Sheet31 ----- Root[sheet31]
Sheet32 ----- Root[sheet32]
Sheet33 ----- Root[sheet33]
Sheet34 ----- Root[sheet34]
Sheet35 ----- Root[sheet35]
Sheet36 ----- Root[sheet36]
Sheet37 ----- Root[sheet37]
Sheet38 ----- Root[sheet38]
Sheet39 ----- Root[sheet39]
Sheet40 ----- Root[sheet40]
Sheet41 ----- Root[sheet41]
Sheet42 ----- Root[sheet42]
Sheet43 ----- Root[sheet43]
Sheet44 ----- Root[sheet44]
Sheet45 ----- Root[sheet45]
Sheet46 ----- Root[sheet46]
Sheet47 ----- Root[sheet47]
Sheet48 ----- Thermal_Sensor_SMSC_Emc2102[sheet1]
Sheet49 ----- SODIMM_DDR2[sheet1]
Sheet50 ----- 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]