

SUZHOU-D

CPU : AMD Caspin
Chip Set : AMD RX881+SB710
Remarks : Tigris Platform

Model Name : Suzhou-D
PBA Name : MAIN
PCB Code : GCE :
NAN :
HAN :
Dev. Step : PV
Revision : 1.0
T.R. Date : 2009.11.10

Design	CHECK	APPROVAL
XIE BIN	GUO LEI	BC LEE

Owner : SEC Mobile R & D Signature : X

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DRAW	XIE BIN	DATE	08/18/2009	TITLE	Suzhou-D	SAMSUNG
CHECK	GUO LEI	DEV. STEP	ADV	MAIN		ELECTRONICS
APPROVAL	BC LEE	REV	0.1	COVER		PART NO. BA41-xxxxxxA
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BOARD INFORMATION

SCHEMATIC ANNOTATIONS AND BOARD INFORMATION

Voltage Rails

VDC	Primary DC system power supply (7 to 21V)
CPU_CORE0	Core Voltage for CPU
CPU_CORE1	Core Voltage for CPU
EGFX_CORE	Core Voltage for GPU
P1.1V	VTT for M92, RX881
P1.2V	Core Voltage for SB710
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_AUX	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_STB	5.0V always power rail
P12.0V_ALW	12.0V always power rail

Crystal / Oscillator

TYPE	FREQUENCY	DEVICE	USAGE
Crystal	32.768KHz	SB710	Real Time Clock
Crystal	10MHz	MICOM	MEC1308-NU
Crystal	14.318MHz	CLOCK-Generator	CK-505
Crystal	25MHz	LAN	88E8040
Crystal	25MHz	SATA	SB710

I²C / SMB Address

Devices	Address	Hex	Bus
SB710	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 0010	D2h	Clock, Unused Clock Output Disable

USB PORT Assign

PORT #	ASSIGNED TO
0	SYSTEM PORT 0
1	SYSTEM PORT 1
2	NC
3	NC
4	3 IN 1
5	Bluetooth
6	SYSTEM PORT 2
7	NC
8	Camera
9	NC
10	EXPRESS CARD

PCI Express Assign

PORT #	ASSIGNED TO
0	Mini Card (WLAN)
1	EXPRESS CARD
2	LOM
3	NC
4	NC
5	NC

LCD Pannel Detect (TBD)

Devices	Resolution	PANNEL_DETECT_0(strap0)
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REVISION HISTORY

See rev notes for more information.

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APPROVAL	BC LEE	REV	0.1	BOARD INFORMATION	PART NO.	BA41-xxxxxxA
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POWER DIAGRAM

Rev 0.1

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AC Adapter

Battery DC

VDC

P3.3V_MICOM

MICOM LED SB710

P5.0V_STB

USB N Charger

P12.0V_ALW

KBC3_SUSPWR
(CHP3_S4_STATE*)

P1.8V_AUX

AMD S1G3
SODIMM (DDR II)

P5V_AUX

USB connector

P0.9V_AUX

DDR II-Termination

P1.2V_AUX

SB710

P3.3V_AUX

SB710
EXPRESS CARD
WLAN
LAN
MDC
THERMAL
LVDS
LED

P1.2V_LAN

LAN

KBC3_PWRON
(CHP3_SLPS3*)

P1.8V

RX881
PARK
gDDR-3 for PARK
eSATA Reapter
AU6336

P5.0V

THERMAL CRT HDMI
SB710 MICOM AUDIO
ODD HDD CAMERA
TOUCH PAD

EGFX_CORE

PARK

P1.0V

PARK

P1.5V

CK505
WLAN
EXPRESS CARD

P2.5V

S1G3

P3.3V

CK505 THERMAL RX881
DDR2 PARK CRT
LVDS HDMI SB710
SPI WLAN LEDS
LAN AUDIO BT
HDD EXPRESS CARD
AU6336

KBC3_VRON

CPU_CORE0,1

S1G3

P1.2V

S1G3
RX881
SB710

P1.1V

RX881
PARK

Power On/Off Table by S-state

Rail	S0	S3	S4	S5
+V*A(LWS)	ON	ON	ON	ON
+V*LAN	ON	ON	ON	ON
+1.8V_AUX	ON	ON	ON	ON
+0.9V_AUX	ON	ON	ON	ON
+V*AUX	ON	ON	ON	ON
+V	ON	ON	ON	ON
+V* (CORE)	ON	ON	ON	ON

S5-S4

S3

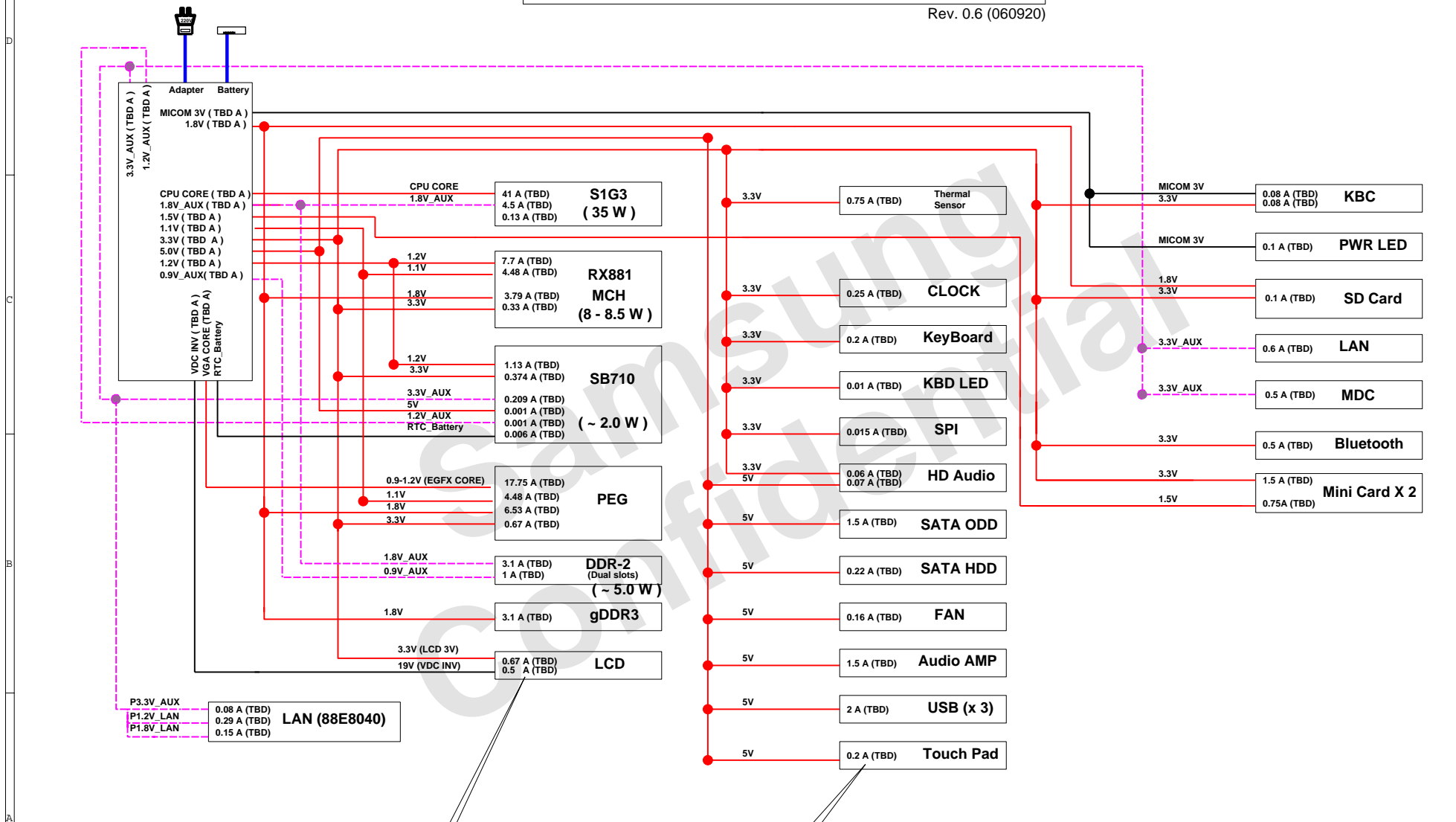
S0

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CHECK	GUO LEI	DEV. STEP	ADV	MAIN	
APPROVAL	BC LEE	REV	0.1	POWER DIAGRAM	
MODULE CODE		LAST EDIT	July 15, 2009 19:25:13 PM	PAGE	4 OF 58

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PART NO.
BA41-xxxxxxA

POWER RAILS ANALYSIS

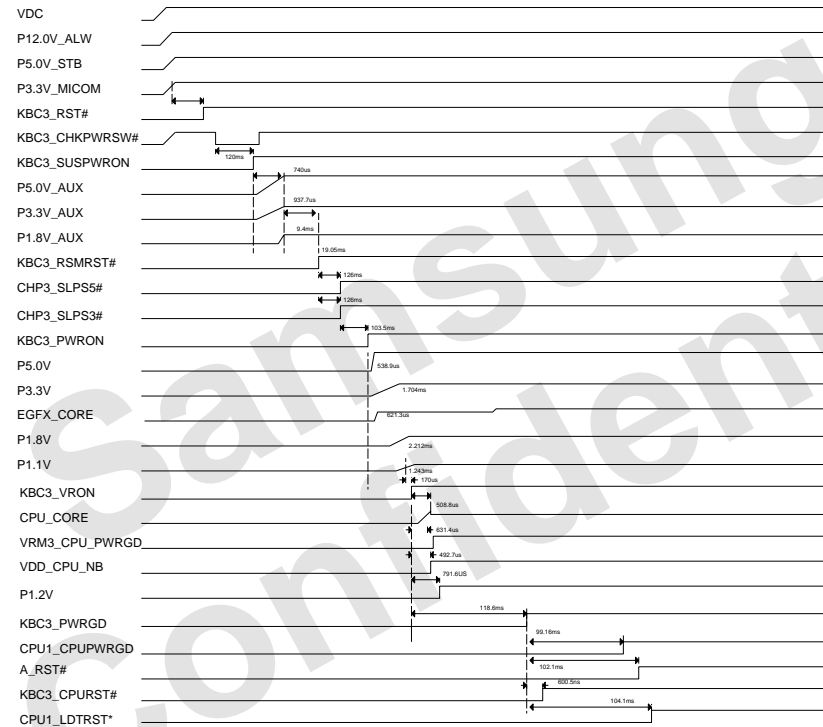
Rev. 0.6 (060920)



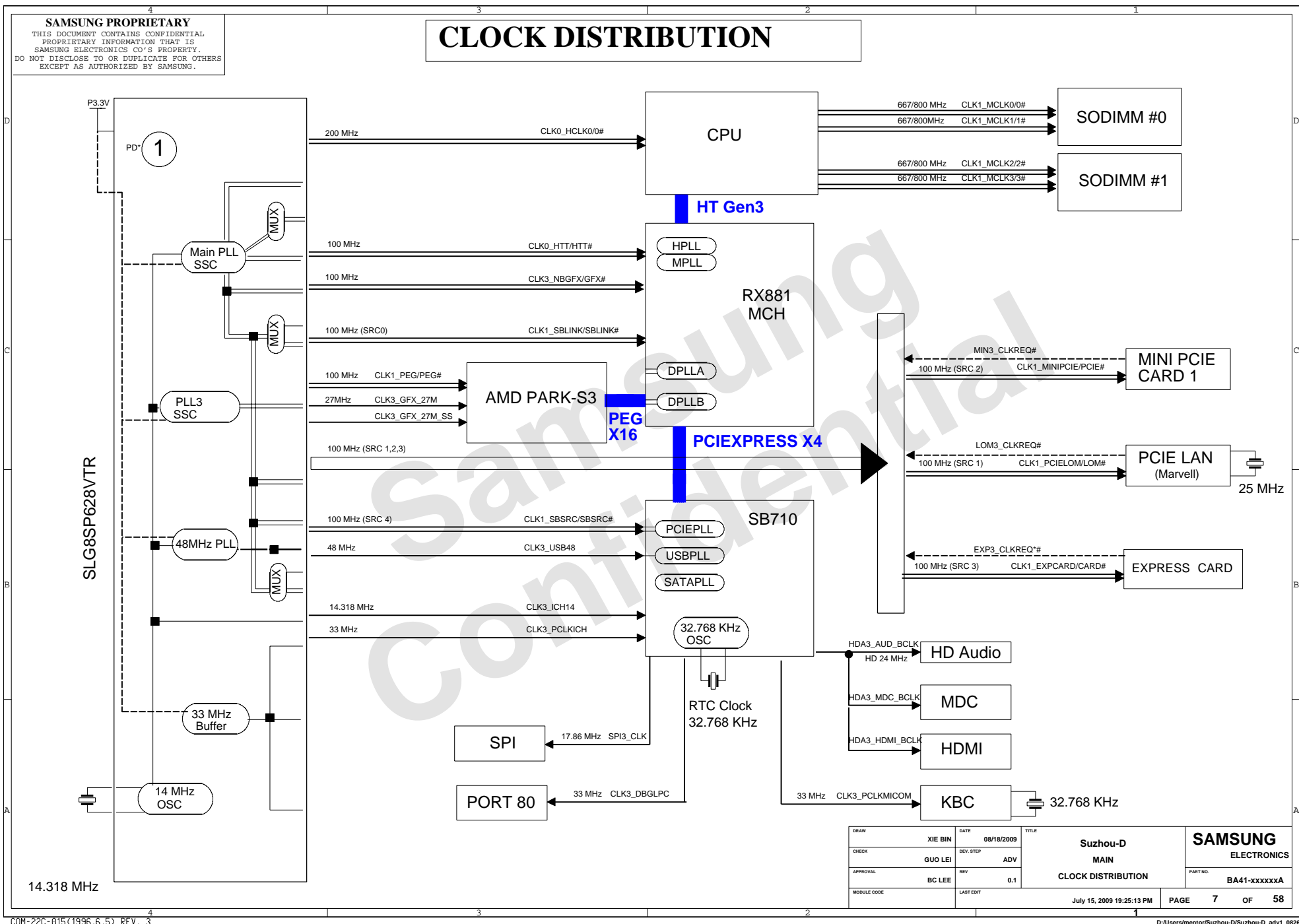
Value by Datasheet/Application notes (Value by measurement)

DRAW	XIE BIN	DATE	08/18/2009	TITLE	Suzhou-D	SAMSUNG
CHECK	GUO LEI	DEV. STEP	ADV	MAIN	MAIN	ELECTRONICS
APPROVAL	BC LEE	REV	0.1	POWER RAILS ANALYSIS	PART NO.	BA41-xxxxxxA
MODULE CODE		LAST EDIT	July 15, 2009 19:25:13 PM	PAGE	5	OF 58

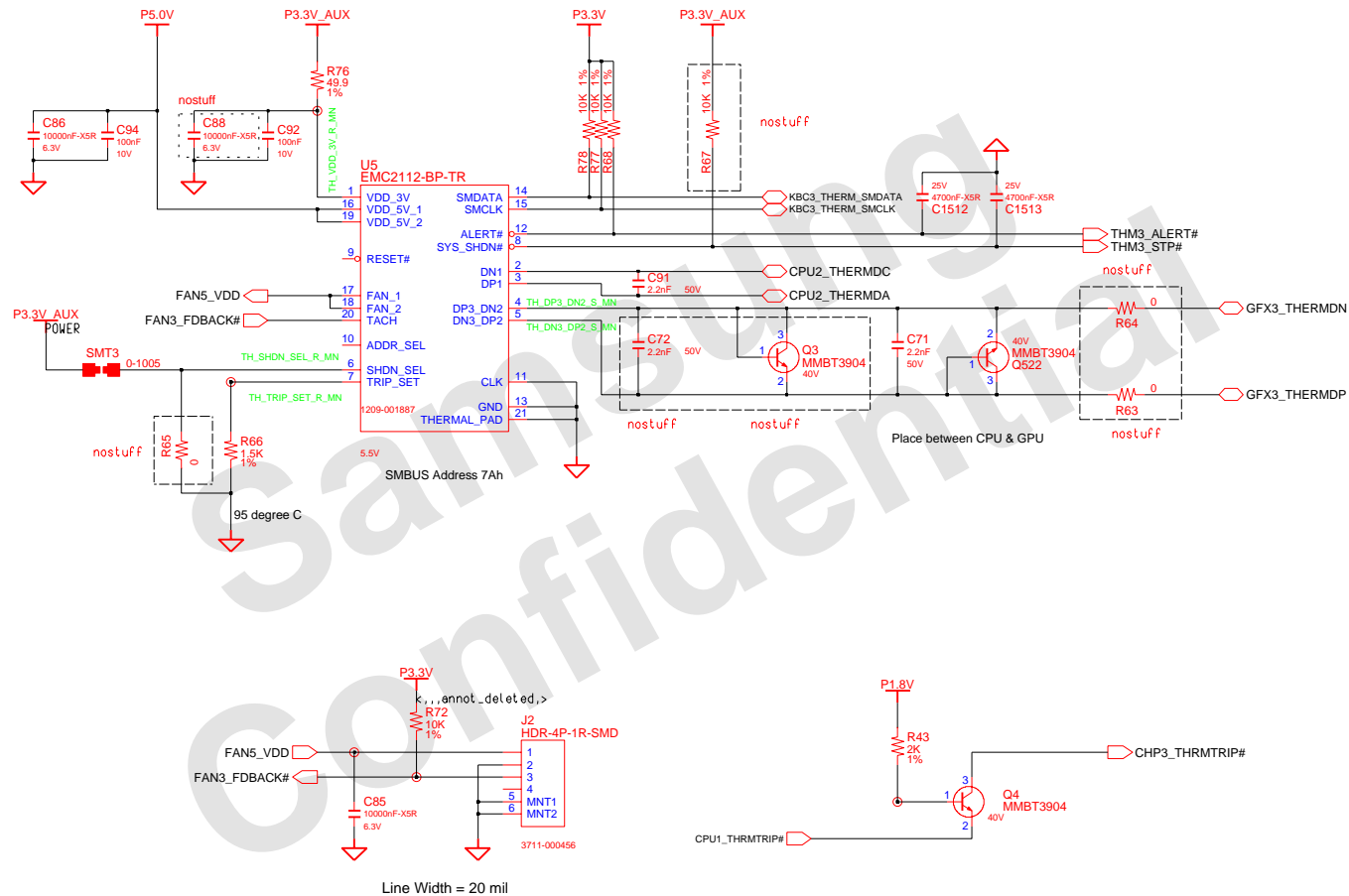
Timing Diagram, Power ON Rev..1.0 2009-08-27



DRAW	XIE BIN	DATE	08/18/2009	TITLE	Suzhou-D	SAMSUNG
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MODULE CODE		LAST EDIT	July 15, 2009 19:25:13 PM	PAGE	6	OF 58

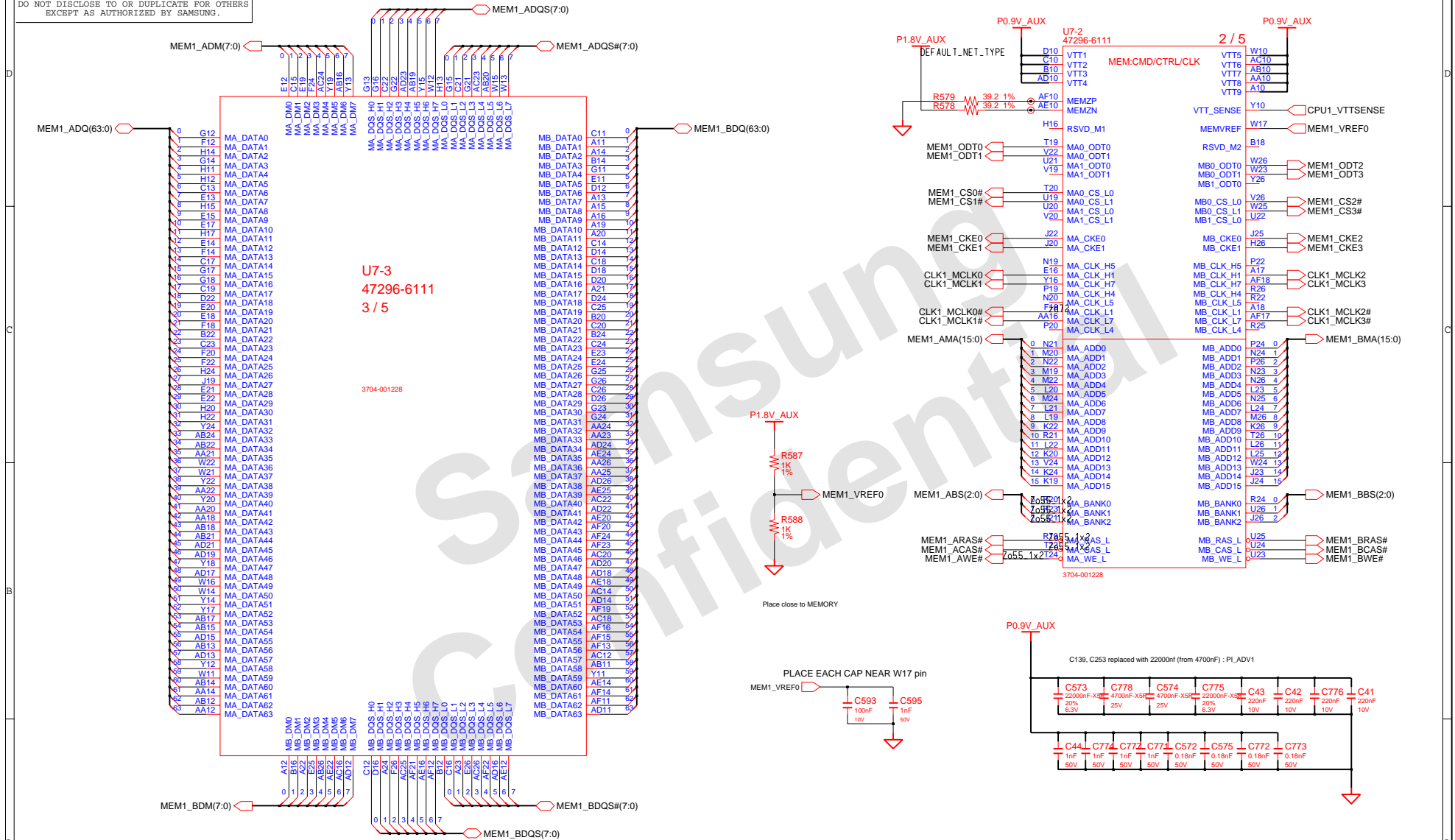


THERMAL SENSOR & FAN CONTROL



DRAW	XIE BIN	DATE	08/18/2009	TITLE	Suzhou-D	SAMSUNG
CHECK	GUO LEI	DEV. STEP	ADV		THERMAL SENSOR	ELECTRONICS
APPROVAL	BC LEE	REV	0.1		EMC2112	PART NO.
MODULE CODE		LAST EDIT	July 15, 2009 19:25:13 PM	PAGE	8	BA41-xxxxxA
				OF	58	

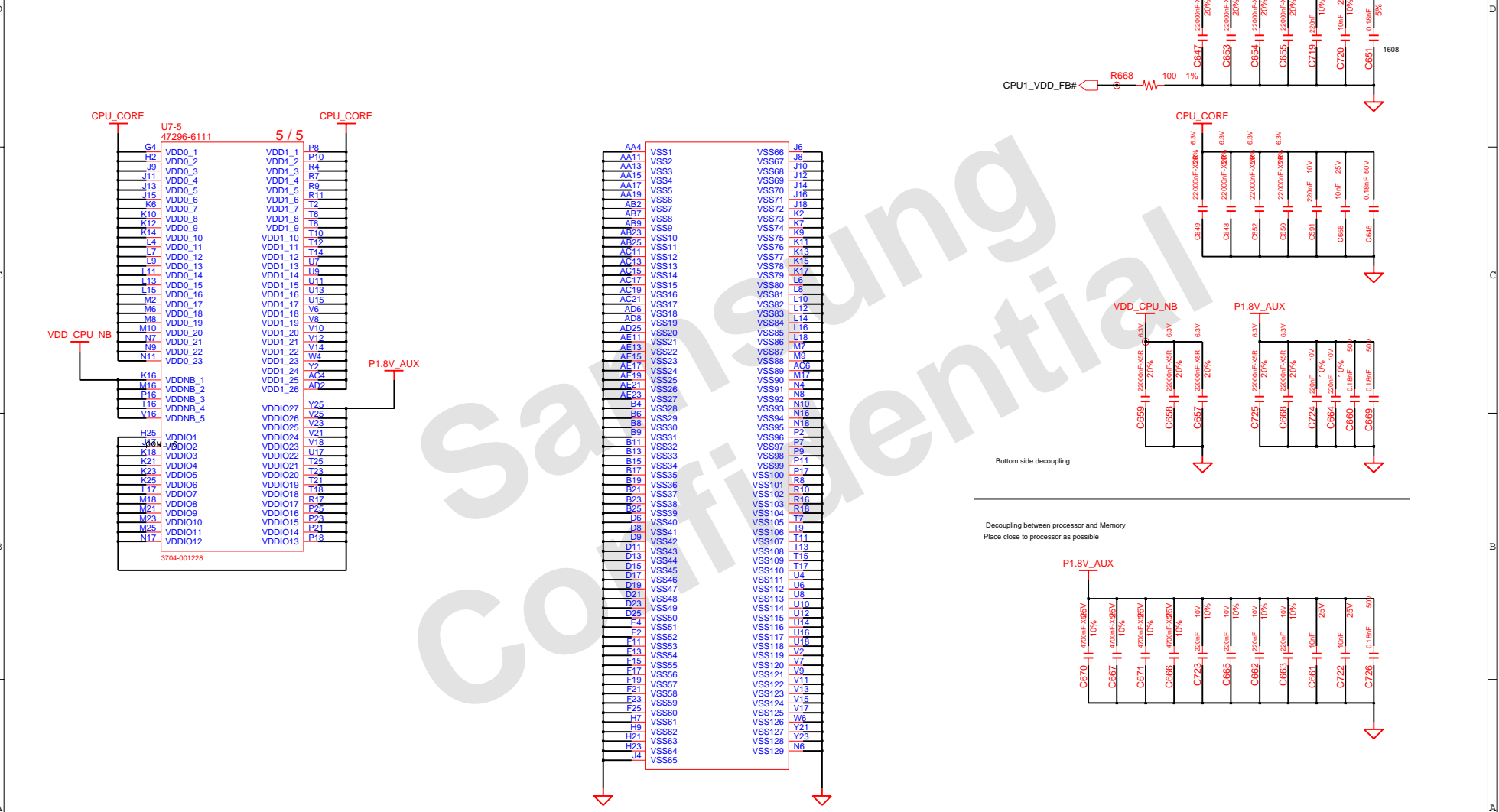
CPU_Caspian



DRAW	XIE BIN	DATE	08/18/2009	TITLE	Suzhou-D
CHECK	GUO LEI	DEV. STEP	ADV		Caspian CPU
APPROVAL	BC LEE	REV	0.1		S1G3 CPU (2/3)
MODULE CODE		LAST EDIT		July 15, 2009 19:25:13 PM	
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BA41-xxxxxA

CPU_Caspian



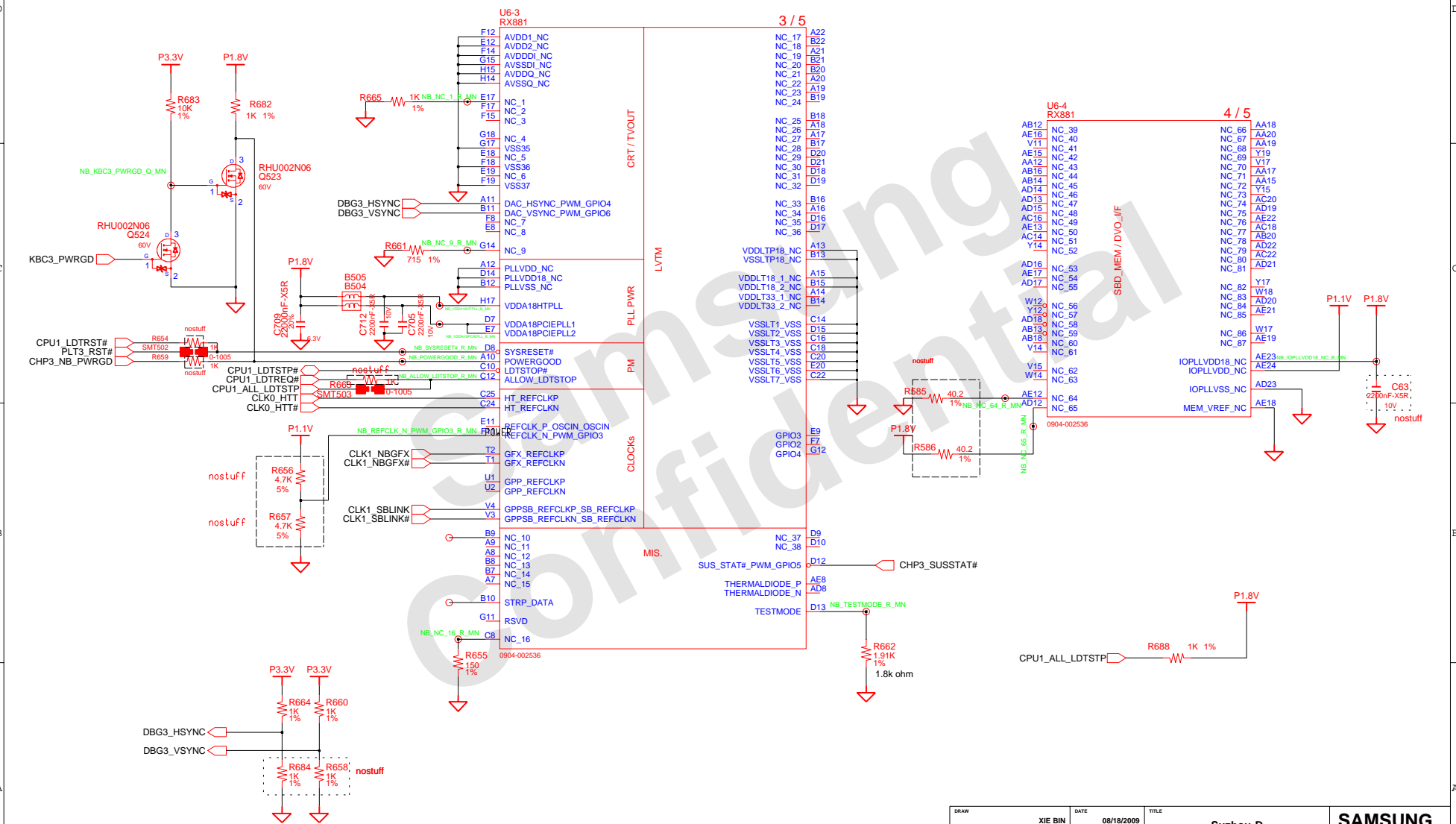
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CHECK	GUO LEI	DEV. STEP	ADV	Caspian CPU		
APPROVAL	BC LEE	REV	0.1	S1G3 CPU (3/3)		
MODULE CODE		LAST EDIT				
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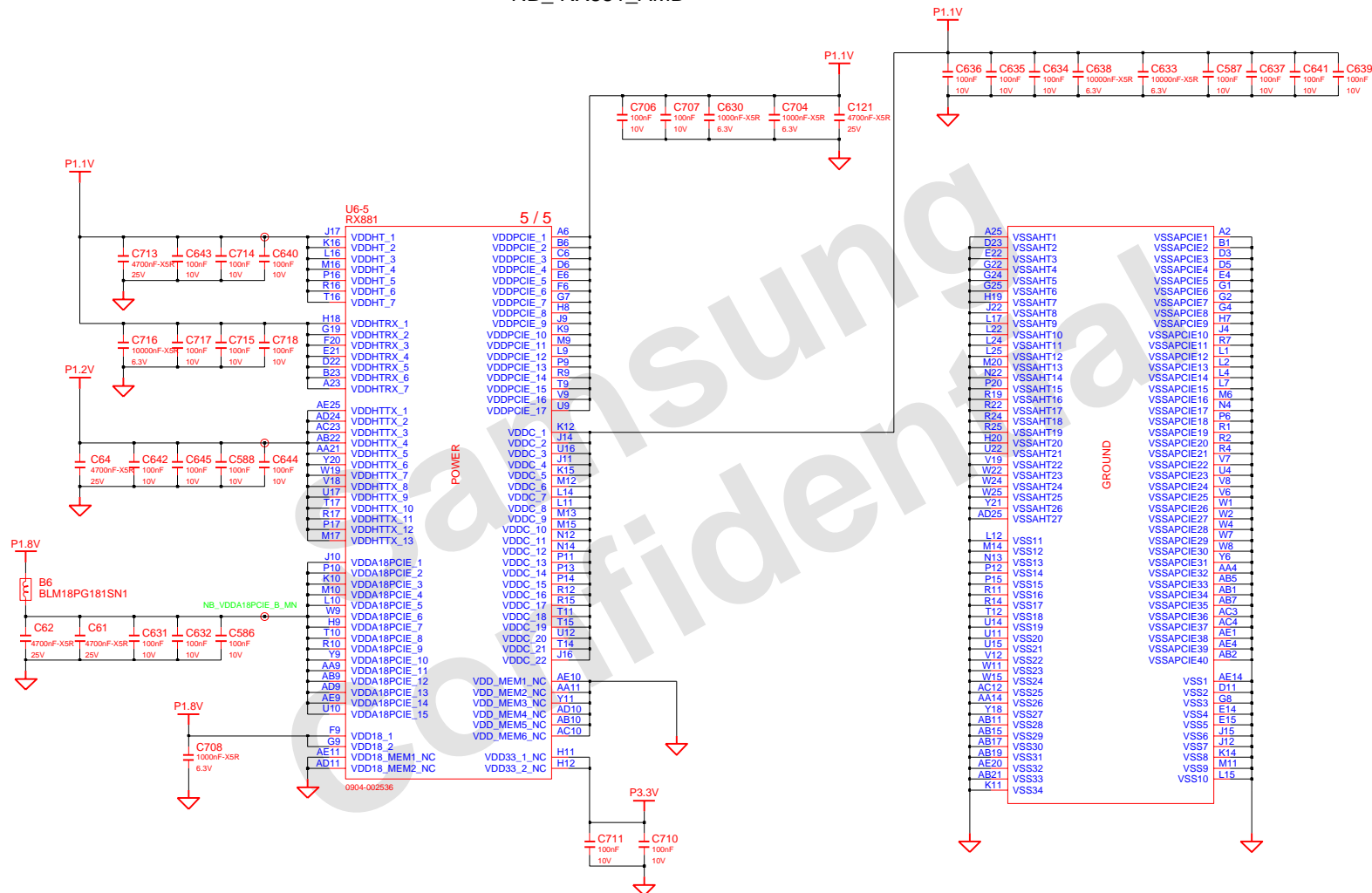


COM-22C-015(1996.6.5) REV. 3	3	2	1
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NB_RX881_AMD

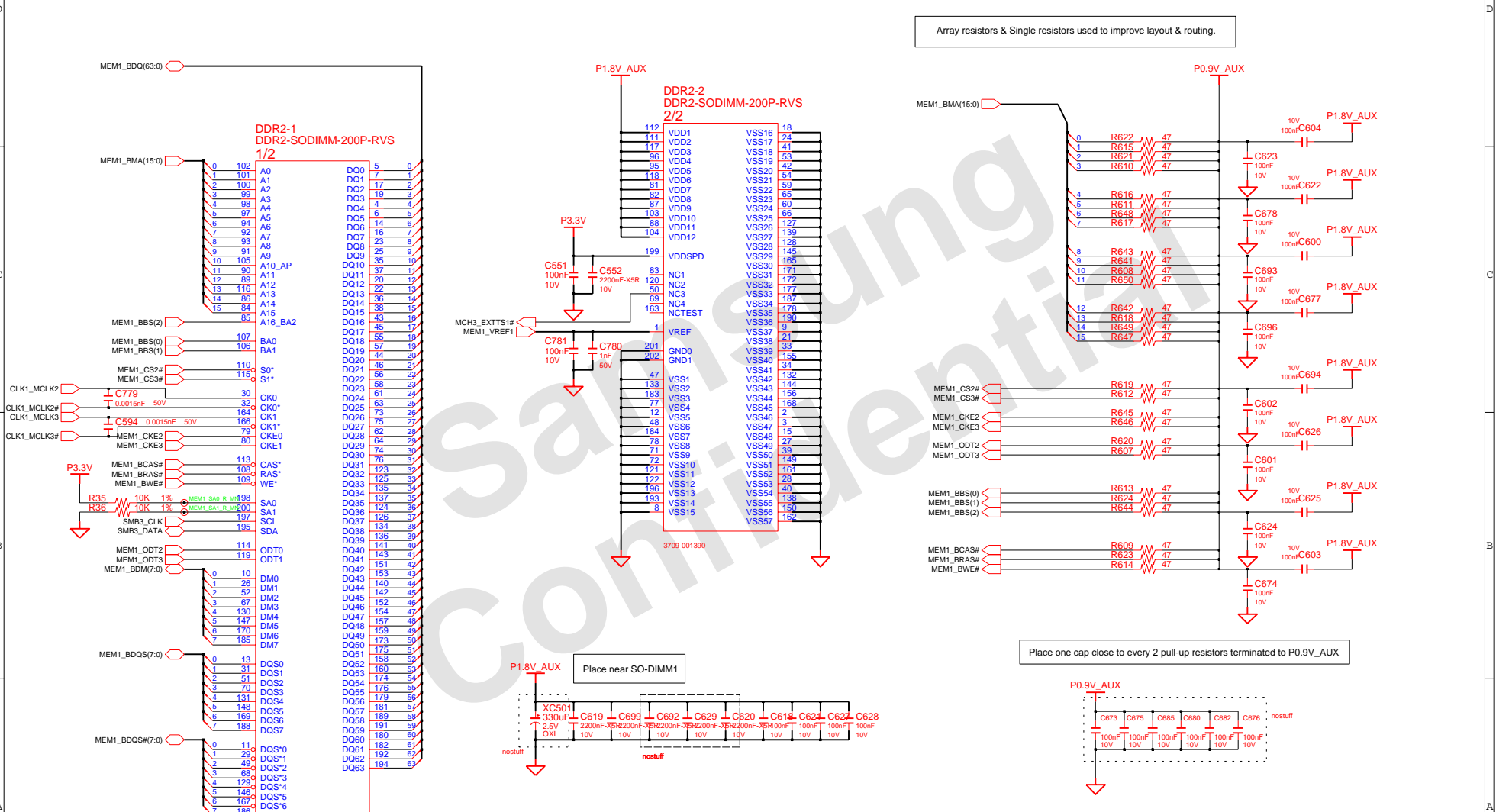


NB_RX881_AMD



DRAW	XIE BIN	DATE	08/18/2009	TITLE	Suzhou-D	SAMSUNG ELECTRONICS
CHECK	GUO LEI	DEV. STEP	ADV	MCH		
APPROVAL	BC LEE	REV	0.1	RX881 (3/3)	PART NO. BA41-xxxxxA	
MODULE CODE		LAST EDIT		July 15, 2009 19:25:13 PM	PAGE 15 OF 58	

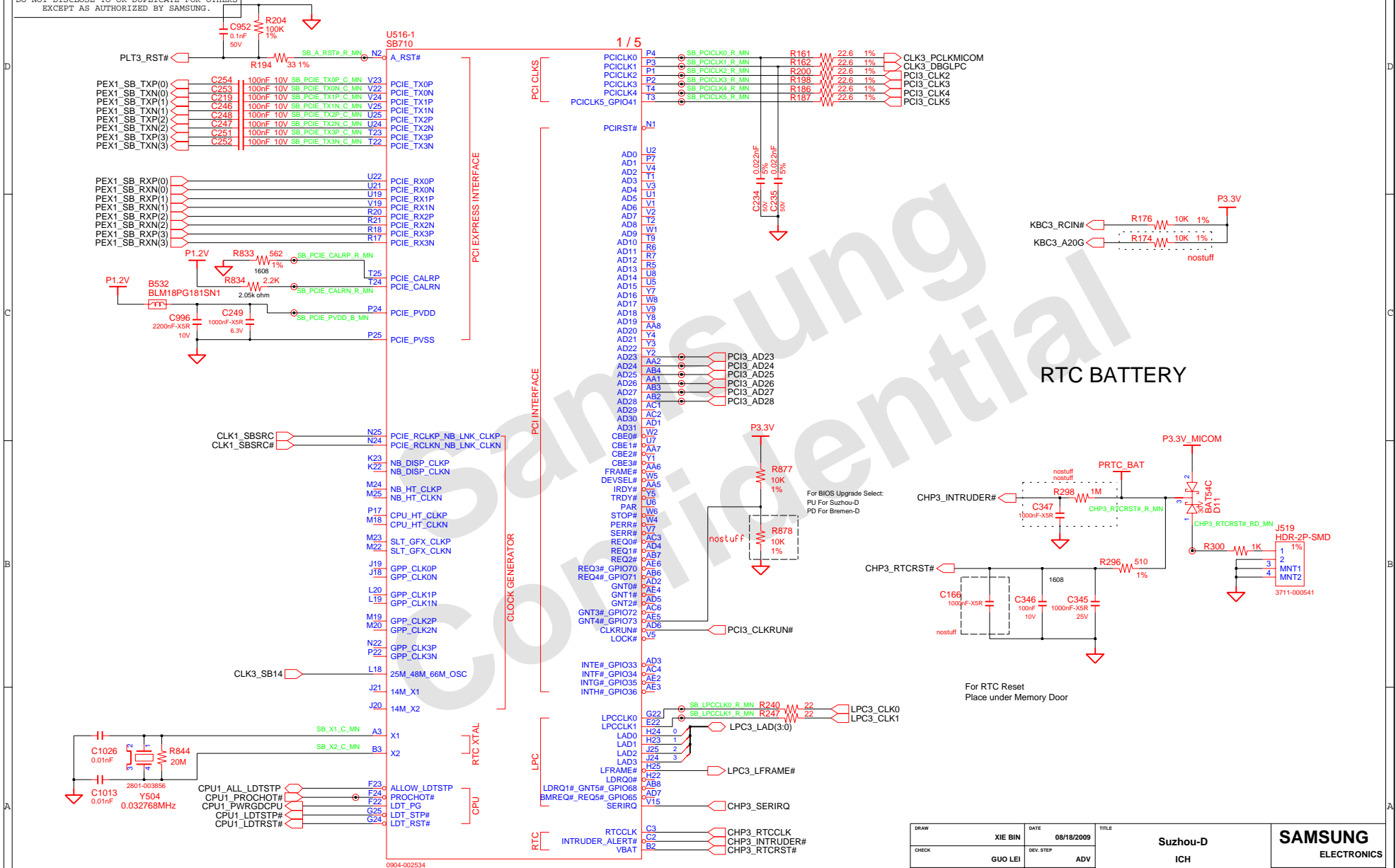
DDR SO-DIMM #1



DRAW	XIE BIN	DATE	08/18/2009	TITLE	Suzhou-D	SAMSUNG ELECTRONICS PART NO. BA41-xxxxxA
CHECK	GUO LEI	DEV. STEP	ADV		SODIMM_DDR2	
APPROVAL	BC LEE	REV	0.1		SODIMM_DDR2 (2/2)	
MODULE CODE		LAST EDIT				
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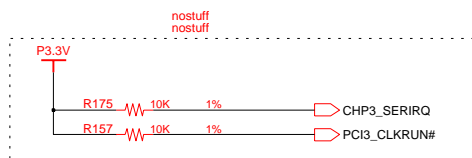
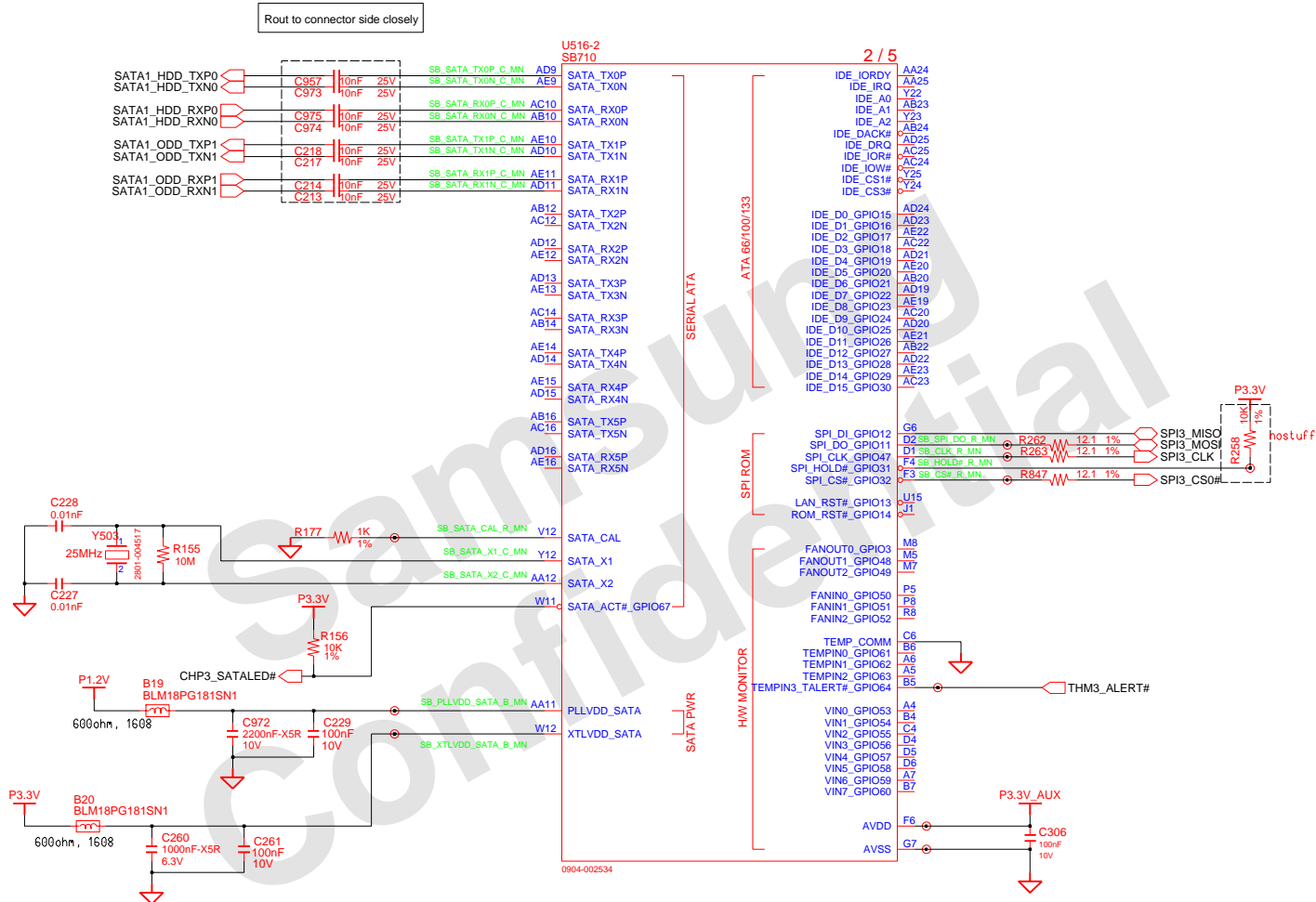
SB_710_AMD

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CHECK	GUO LEI	DEV. STEP	ADV	ICH		
APPROVAL	BC LEE	REV	0.1	SB710 (1/5)		
MODULE CODE		LAST EDIT				
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SB_710_AMD



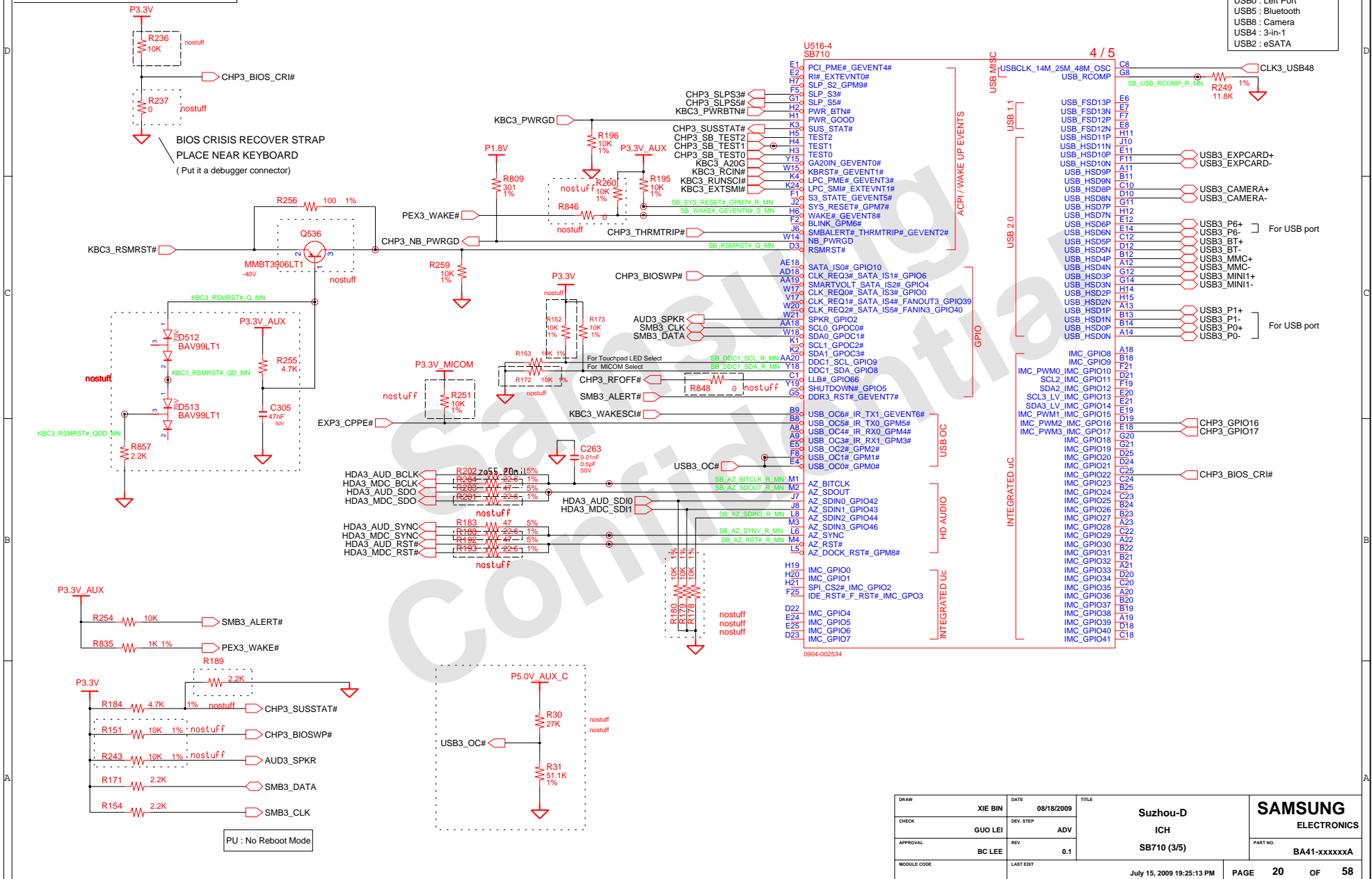
LPC option ; These are used with LPC

DRAW	XIE BIN	DATE	08/18/2009	TITLE	Suzhou-D ICH SB710 (2/5)	<div>SAMSUNG ELECTRONICS</div>
CHECK	GUO LEI	DEV. STEP	ADV			
APPROVAL	BC LEE	REV	0.1			
MODULE CODE		LAST EDIT				

SB_710_AMD

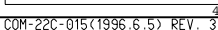
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USB1, 6 : Right Port
USB0 : Left Port
USB5 : Bluetooth
USB8 : Camera
USB4 : 3-in-1
USB2 : eSATA



DRAW	XIE BIN	DATE	08/18/2009	TITLE	Suzhou-D	SAMSUNG ELECTRONICS
CHECK	GUO LEI	DEV. STEP	ADV	ICH	SB710 (3/5)	
APPROVAL	BC LEE	REV	0.1			
MODULE CODE		LAST EDIT				
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COM-22C-015(1996.6.5) REV. 3

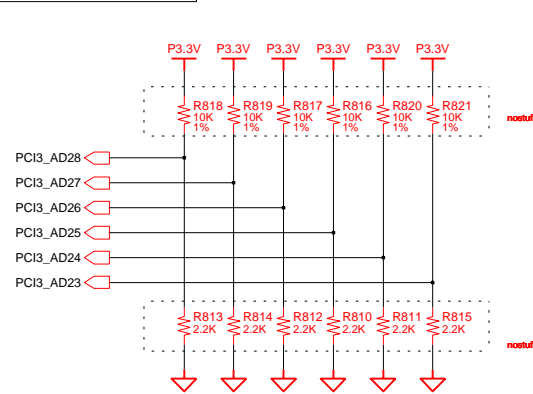


COM-22C-015(1996.6.5) REV. 3

Strap

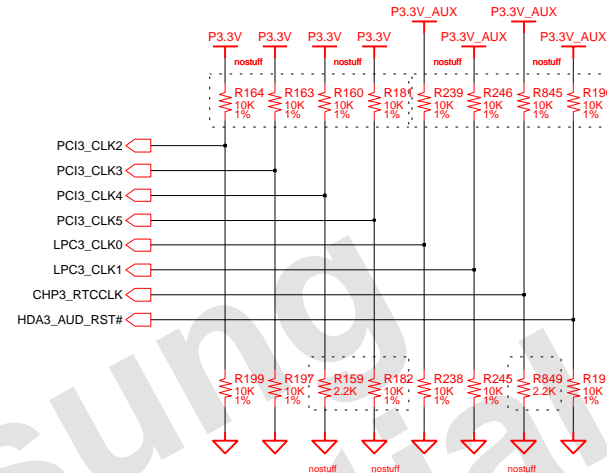
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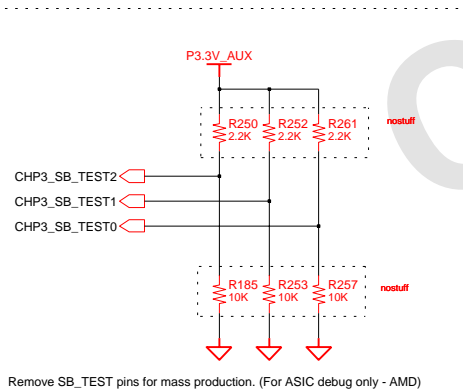


DEBUG STRAPS

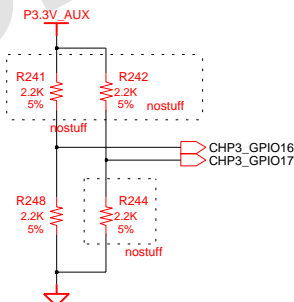
	PCI3_AD(28)	PCI3_AD(27)	PCI3_AD(26)	PCI3_AD(25)	PCI3_AD(24)	PCI3_AD(23)
STRAP HIGH	USE LONG RESET	USE PCI PLL	USE ACPI BCLK	USE IDE PLL	USE DEFAULT PCIE STRAPS	BOOTFAILTIMER DISABLED
STRAP LOW	USE SHORT RESET	BYPASS PCI PLL	BYPASS ACPI BCLK	BYPASS IDE PLL	USE EEPROM PCIE STRAPS	BOOTFAILTIMER ENABLED



	PCI3_CLK2	PCI3_CLK3	PCI3_CLK4	PCI3_CLK5	LPC3_CLK0	LPC3_CLK1	RTC_CLK	AUD_RST#
STRAP HIGH	BOOTFAIL TIMER ENABLED	USER DEBUG STRAPS	RESERVED	RESERVED	EC ENABLED	CLKGEN ENABLED	INTERNAL RTC	ENABLE PCI MEM BOOT
STRAP LOW	BOOTFAIL TIMER DISABLED	IGNORE DEBUG STRAPS	RESERVED	RESERVED	EC DISABLED	CLKGEN DISABLED	EXRERNAL RTC (PD on X1, Apply 32KHz to RTC_CLK)	DISABLE PCI MEM BOOT



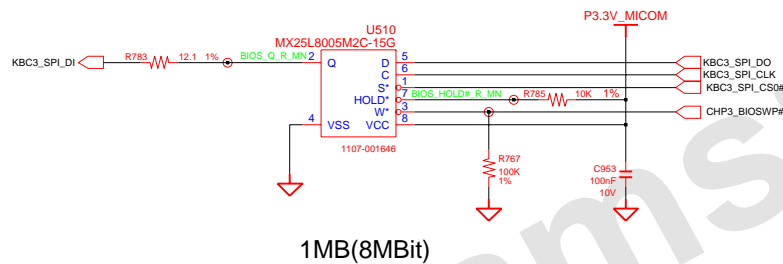
Remove SB_TEST pins for mass production. (For ASIC debug only - AMD)



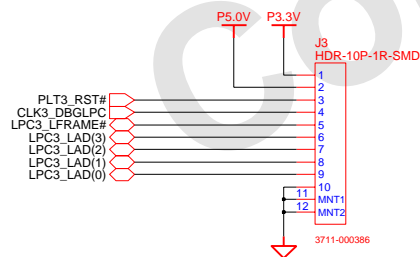
GPIO17	GPIO16
ROM TYPE	
NC, NC = RSVD	
NC, L = SPI ROM	
L, NC = LPC ROM	
L, L = FWH ROM	

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CHECK	GUO LEI	DEV. STEP	ADV	ICH		
APPROVAL	BC LEE	REV	0.1	SB710 Strap(5/5)		
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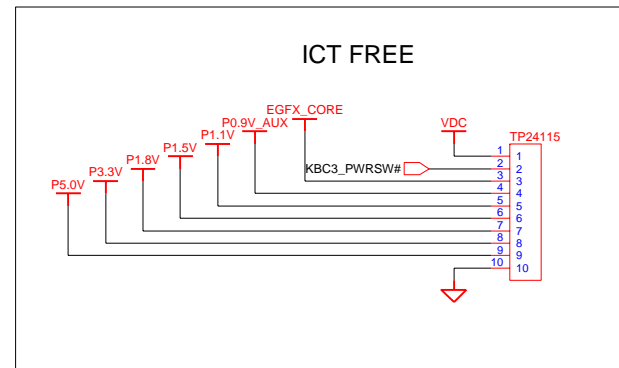
SPI_BIOS_ROM



80H DECODER CONNECTOR



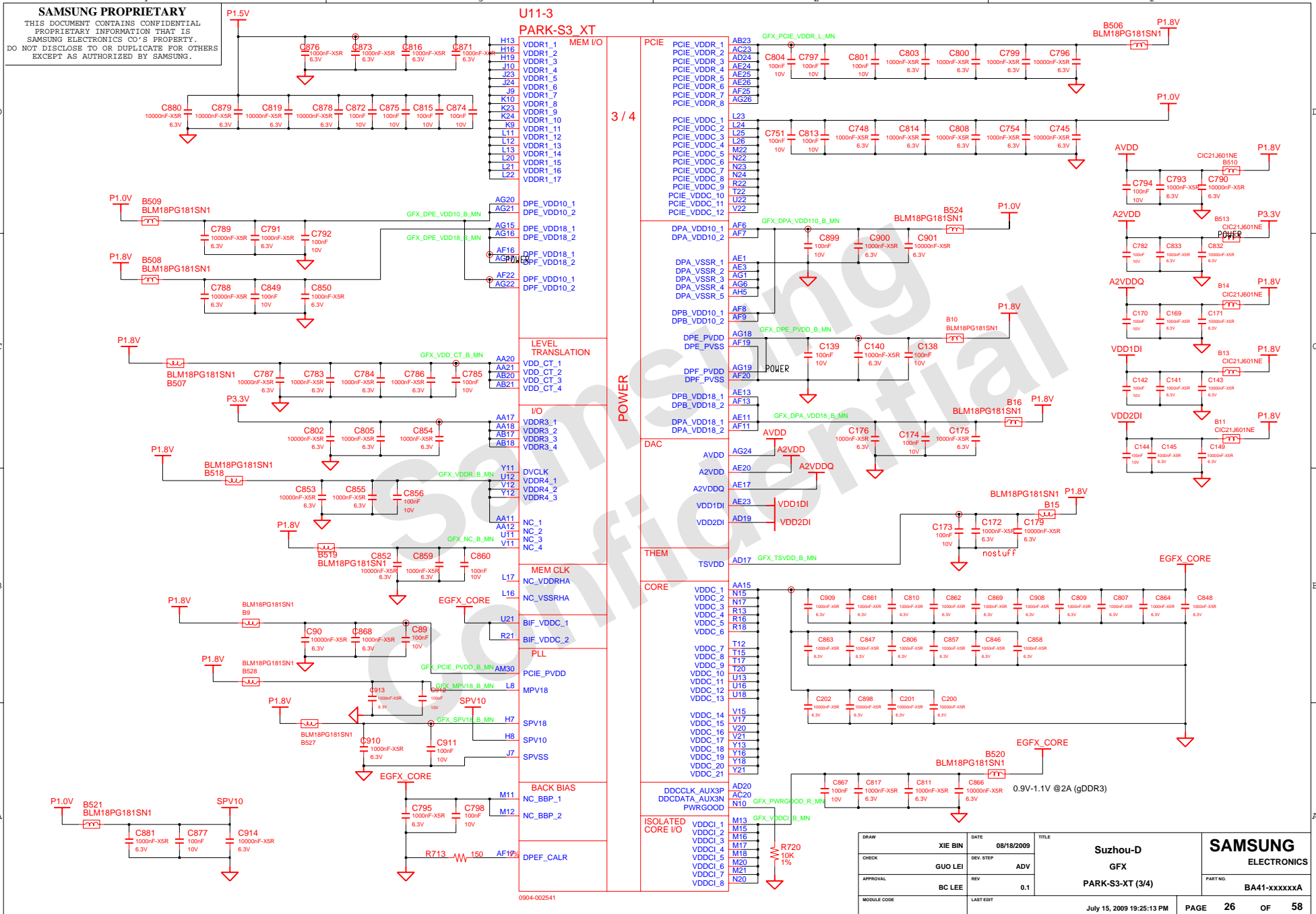
02	VERIFY REAL MODE	66	CONFIGURE ADVANCE CACHE REG.
03	DISABLE NMI	6A	DISPLAY EXT. CACHE SIZE
04	GET CPU TYPE	6B	DISPLAY SHADOW MESSAGE
06	INIT. SYSTEM H/W	6E	DISPLAY NON-DISPOSABLE SEGMENT
08	INIT. CHIPSET REG.	70	DISPLAY ERROR MESSAGE
09	SET IN POST FLAG	72	CHECK FOR CONFIGURATION ERROR
0A	INIT CPU REG	74	TEST REAL-TIME CLOCK
0B	CPU CACHE ON	76	CHECK FOR KEYBOARD ERROR
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
14	WITH INITIAL POST VALUE	88	INIT. BIOS DATA ROM
16	INIT. KEYBOARD CONTROLLER	8A	INIT. EXTENDED BIOS DATA AREA
18	CHECK CHECKSUM	8C	INIT. FDD CONTROLLER
20	8254 TIMER INIT.	9A	SHADOW OPTION ROMS
22	8237 DMA CONTROLLER INIT.	9C	SETUP POWER MANAGEMENT
24	RESET INTERRUPT CONTROLLER	9E	ENABLE H/W INTERRUPT
26	TEST DRAM REFRESH	A0	SET TIME OF DAY
28	TEST 8742 KEYBOARD CONTROLLER	A4	INIT. TYPEMATIC RATE
2A	SET ES SEGMENT REG. TO 4GB	A8	ERASE F2 PROMPT
2C	ENABLE A20	AA	SCAN FOR F2 KEY STROKE
2E	AUTO SIZING DRAM	AC	ENTER SETUP
30	COMPUTE THE CPU SPEED	AE	CLEAR IN POST FLAG
32	TEST CMOS RAM	B0	CHECK FOR ERRORS
34	SHADOW SYSTEM BIOS ROM	B2	POST DONE-PREPARE TO BOOT O/S
36	AUTO SIZING CACHE	B4	ONE BEEP
38	CONFIGURE ADVANCED CHIPSET REG.	B6	CHECK PASSWORD (OPTION)
3A	LOAD ALTERNATE REG. WITH CMOS VALUE	B8	ACPI INIT
3C	INIT. INTERRUPT VECTOR	BA	DMI INIT
3E	INIT. BIOS INTERRUPT	BE	CLEAR SCREEN
40	CHECK ROM COPYRIGHT NOTICE	C0	TRY BOOT WITH INT19
42	INIT. I20 SUPPORT IF INSTALLED	C2	INTERRUPT HANDLER ERROR
44	CHECK VIDEO CONFIGURE AGAINST CMOS	D2	UNKNOWN INTERRUPT ERROR
46	INIT. PCI BUS AND DEVICE	D4	PENDING INTERRUPT ERROR
48	INIT. ALL VIDEO BIOS ROM	D6	SHUTDOWN 5
4A	SHADOW VIDEO BIOS ROM	DA	SHUTDOWN ERROR
4C	DISPLAY CPU TYPE AND SPEED	DC	EXTENDED BLOCK MOVE
4E	TEST KEYBOARD	89	SHUTDOWN 10
50	SET KEYCLICK IF ENABLED	90	ENABLE NMI
52	ENABLE KEYBOARD	91	INIT. HDD CONTROLLER
54	TEST FOR UNEXPECTED INTERRUPTS	92	INIT. LOCAL BUS HDD CONTROLLER
56	DISPLAY "PRESS... SETUP"	94	JUMP TO USER PATCH 2
58	TEST RAM BETWEEN 512K AND 640K	96	DISABLE A20 ADDRESS LINE
60	TEST EXTENDED MEMORY	98	CLEAR HUGE ES SEGMENT REG.
62	TEST EXTENDED MEMORY ADDRESS LINE		SEARCH FOR OPTION ROMS
64	JUMP TO USER PATCH 1		



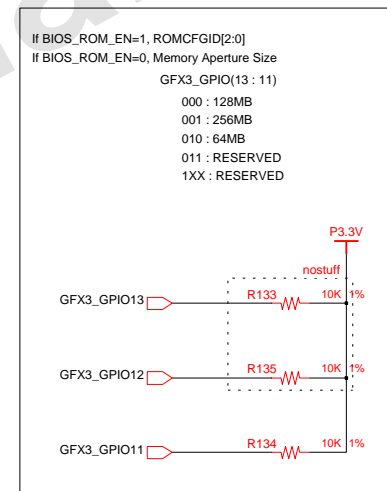
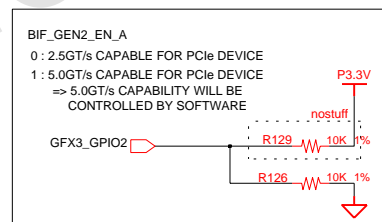
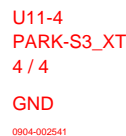
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CHECK	GUO LEI	DEV. STEP	ADV		SPI_BIOS_ROM	
APPROVAL	BC LEE	REV	0.1		SPI_BIOS_ROM	
MODULE CODE		LAST EDIT				
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D:/Users/mentor/Suzhou-D/Suzhou-D_adv1_082

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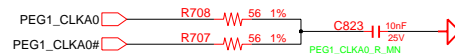
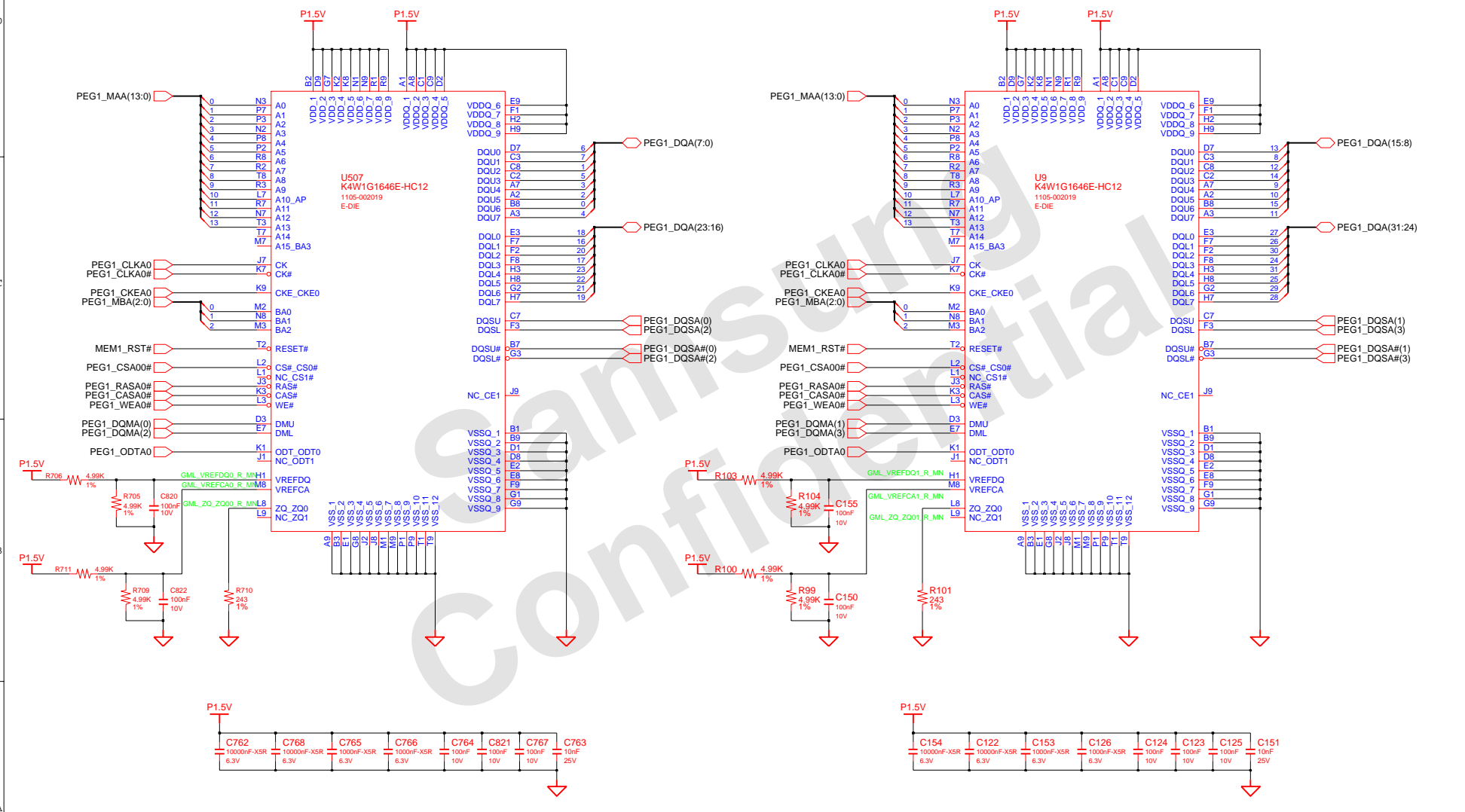


PARK Straps



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

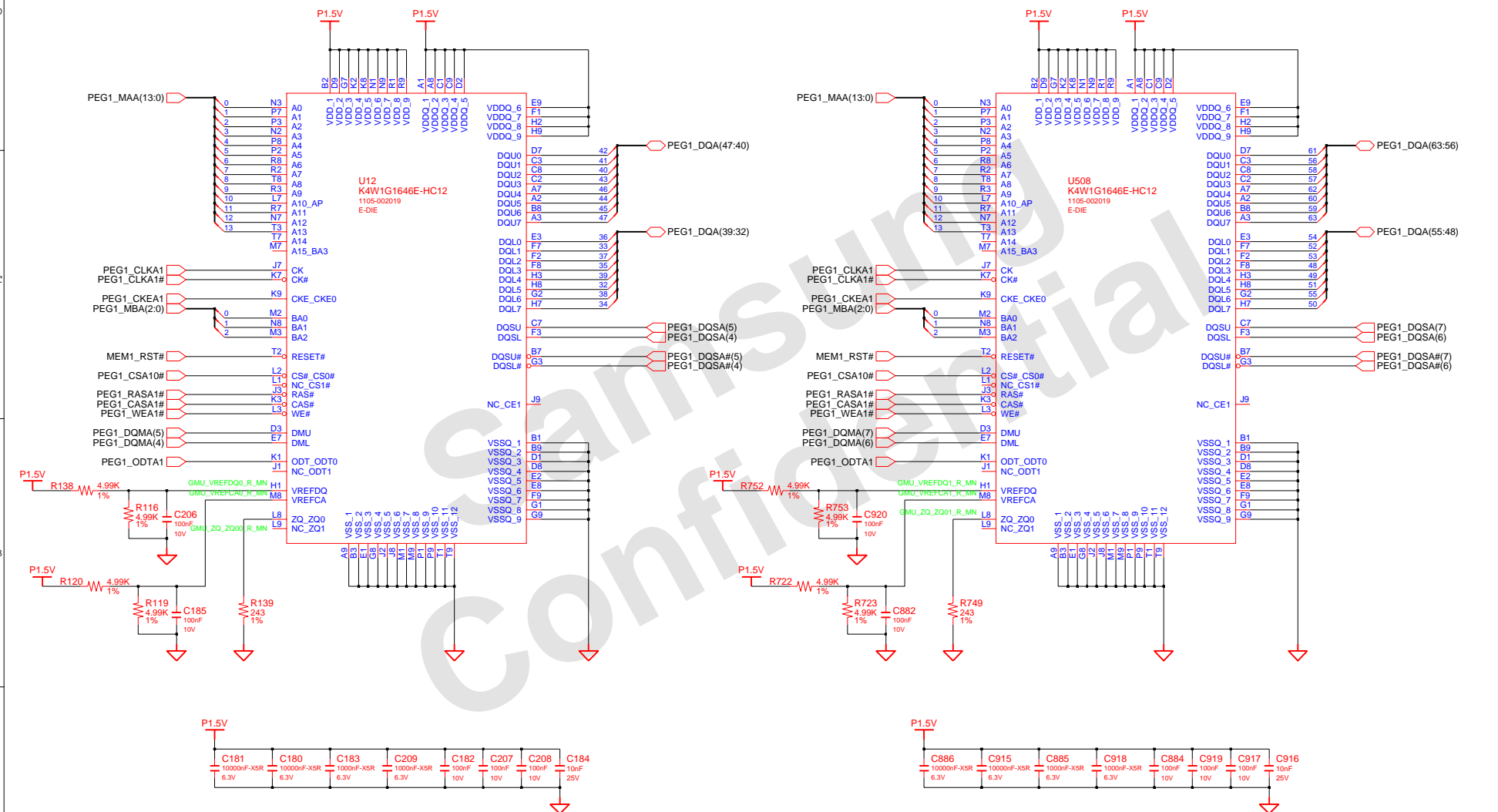
A-channel Lower Data



DRAW	XIE BIN	DATE	08/18/2009	TITLE	Suzhou-D
CHECK	GUO LEI	DEV. STEP	ADV	GRAPHICS_MEMORY	
APPROVAL	BC LEE	REV	0.1	gDDR3 (1/2)	
MODULE CODE		LAST EDIT			

July 15, 2009 19:25:13 PM	PAGE	28	OF	58
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A-channel Upper Data

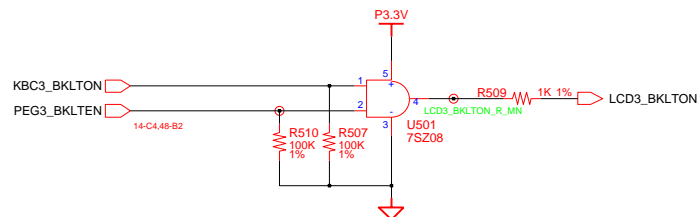


PEG1_CLKA1# R751 56 1%
PEG1_CLKA1# R750 56 1%
PEG1_CLKA1# R750 56 1%
PEG1_CLKA1# R750 56 1%

DRAW	XIE BIN	DATE	08/18/2009	TITLE	Suzhou-D	SAMSUNG ELECTRONICS
CHECK	GUO LEI	DEV. STEP	ADV		GRAPHICS_MEMORY	
APPROVAL	BC LEE	REV	0.1		gDDR3 (2/2)	
MODULE CODE		LAST EDIT				
July 15, 2009 19:25:13 PM						PAGE 29 OF 58

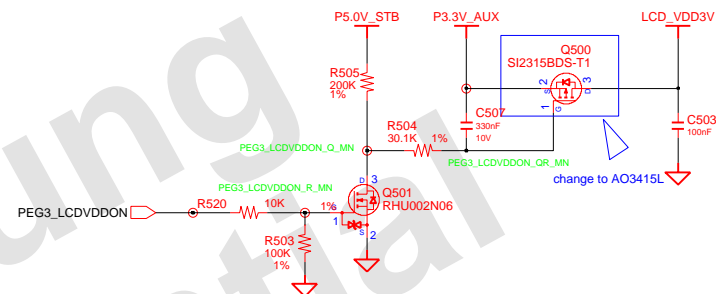
LVDS

Backlight On

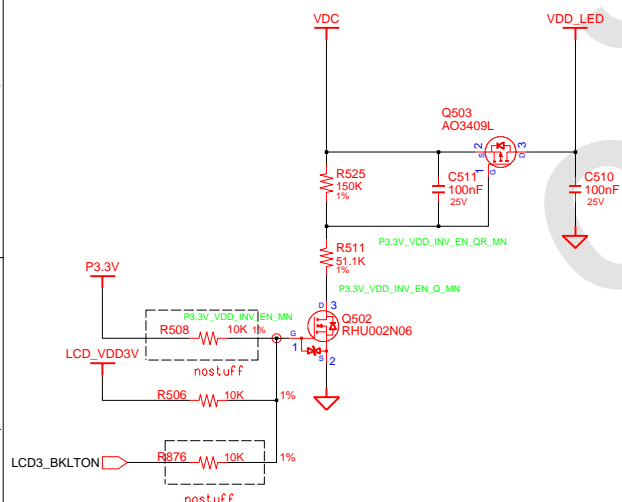


LCD Power

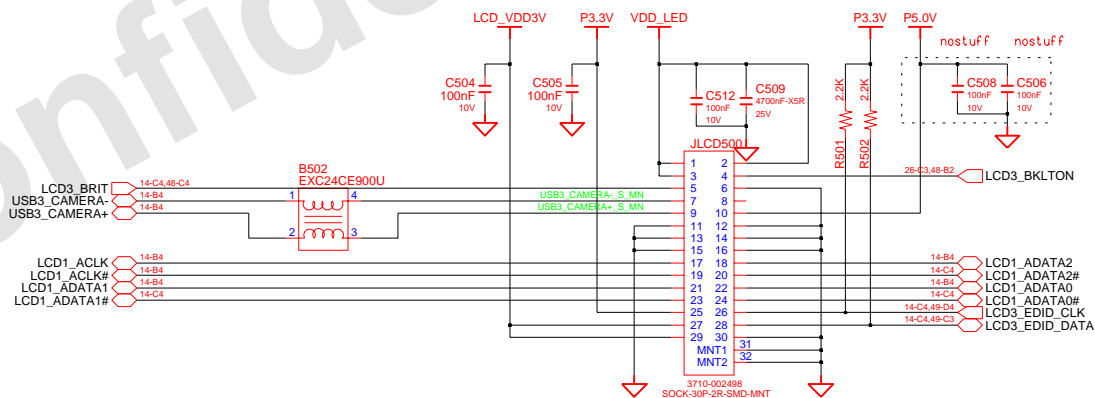
EBL Purpose



Converter Power



Camera + LCD Connector



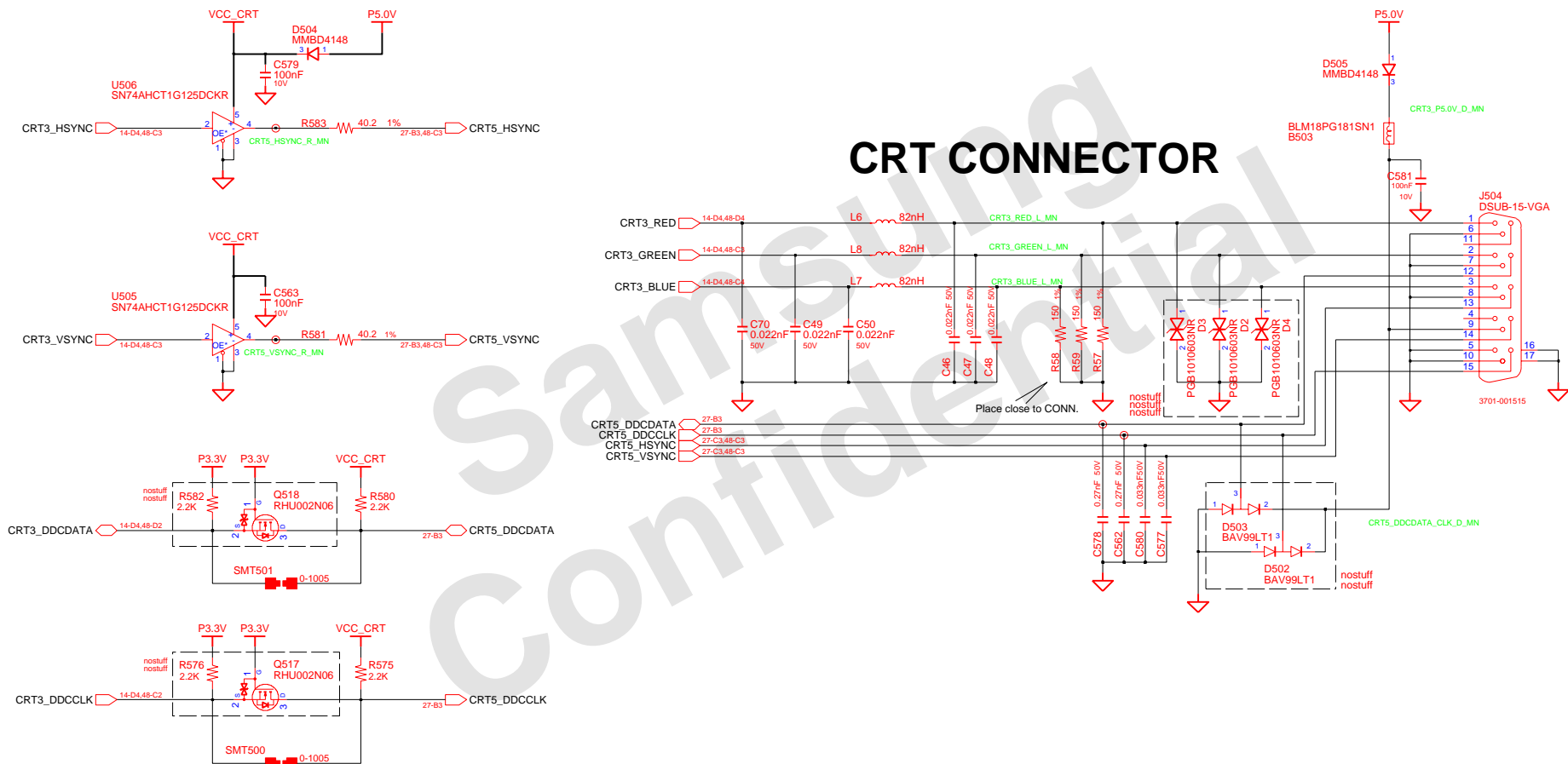
DRAW	XIE BIN	DATE	08/18/2009	TITLE	Suzhou-D	SAMSUNG ELECTRONICS
CHECK	GUO LEI	DEV. STEP	ADV			PART NO. BA41-xxxxxxA
APPROVAL	BC LEE	REV	0.1		GRAPHICS_IF (1/2)	
MODULE CODE		LAST EDIT			July 15, 2009 19:25:13 PM	PAGE 30 OF 58

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CRT

CRT CONNECTOR



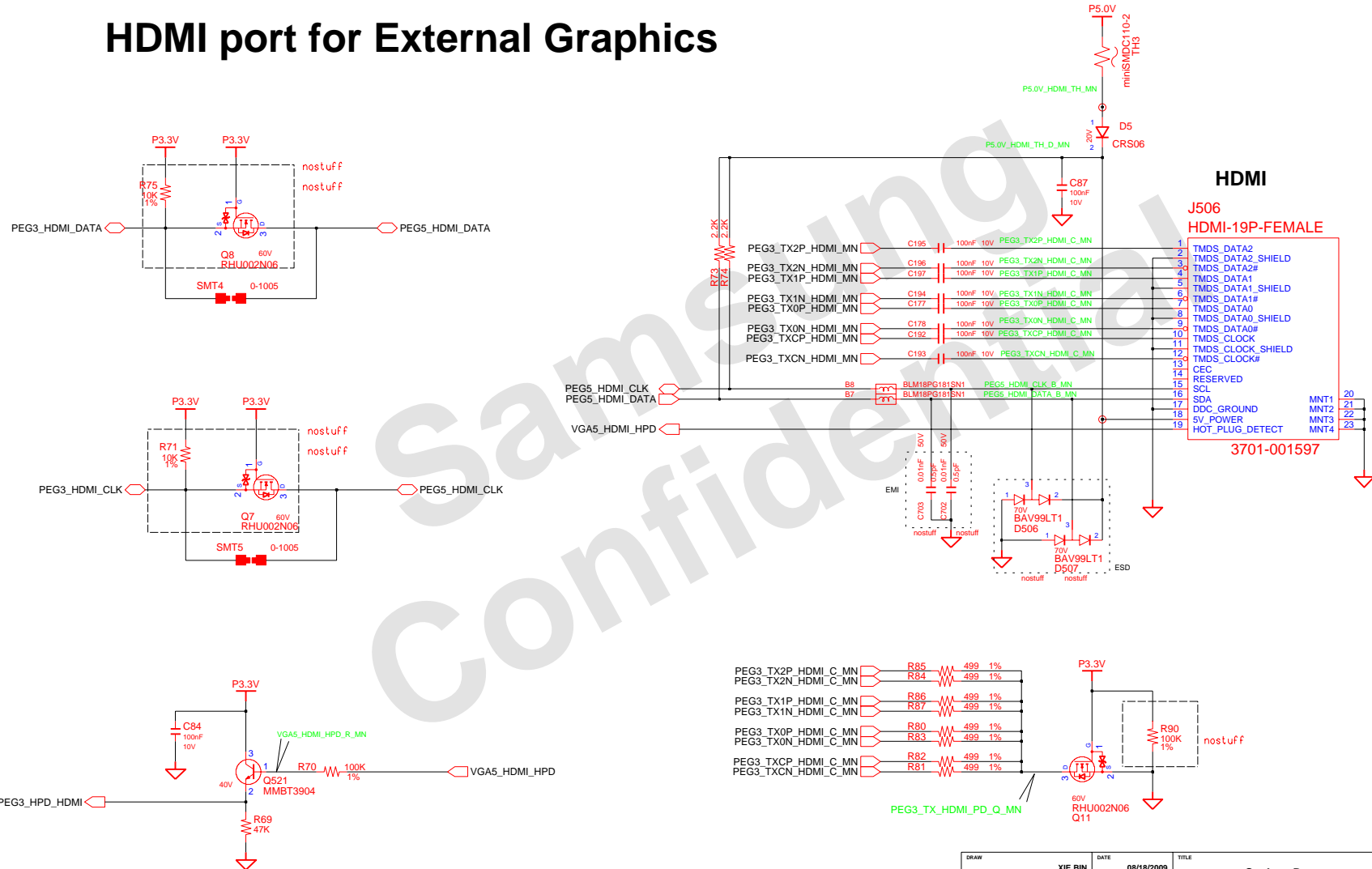
Check "CRT3_DDCCLK/DATA" Voltage Level
2N06 Can be replaced with SM6K2

DRAW	XIE BIN	DATE	08/18/2009	TITLE	Suzhou-D	SAMSUNG ELECTRONICS
CHECK	GUO LEI	DEV. STEP	ADV			
APPROVAL	BC LEE	REV	0.1	GRAPHICS_IF (2/2)	PART NO.	
MODULE CODE		LAST EDIT	July 15, 2009 19:25:13 PM	PAGE	31 OF 58	

HDMI

HDMI port for External Graphics

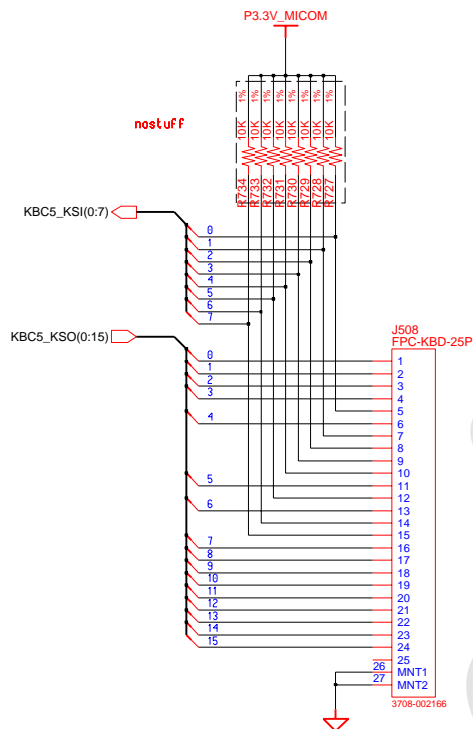
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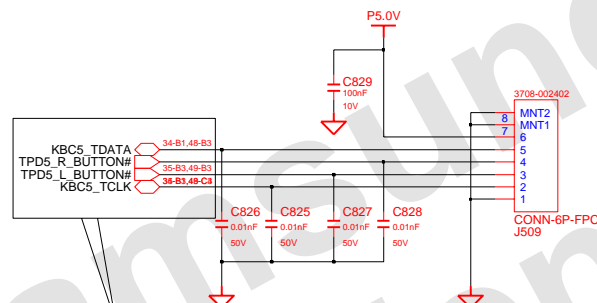
DRAW	XIE BIN	DATE	08/18/2009	TITLE	Suzhou-D	SAMSUNG ELECTRONICS PART NO. BA41-xxxxxA
CHECK	GUO LEI	DEV. STEP	ADV	GRAPHICS_IF		
APPROVAL	BC LEE	REV	0.1	HDMI		
MODULE CODE		LAST EDIT				
July 15, 2009 19:25:13 PM						PAGE 32 OF 58

Micom Glue Logic

KEYBOARD

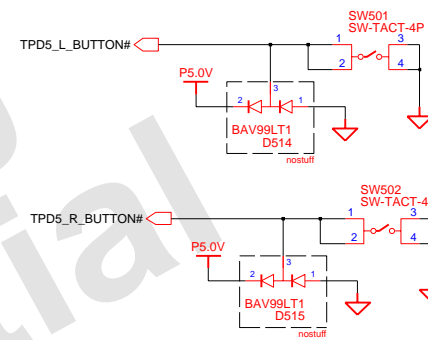


TOUCHPAD

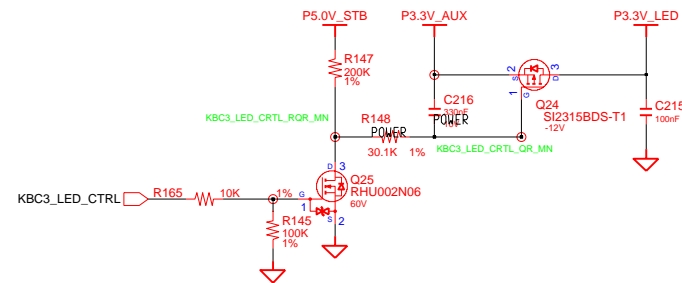


Confirm that there are PU on Touch PAD module side or micom.

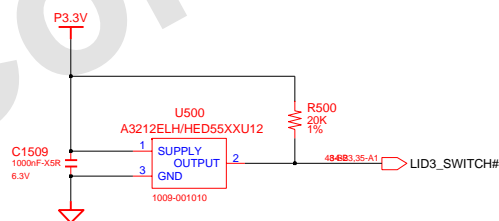
TOUCHPAD BUTTON



TOUCHPAD LED POWER



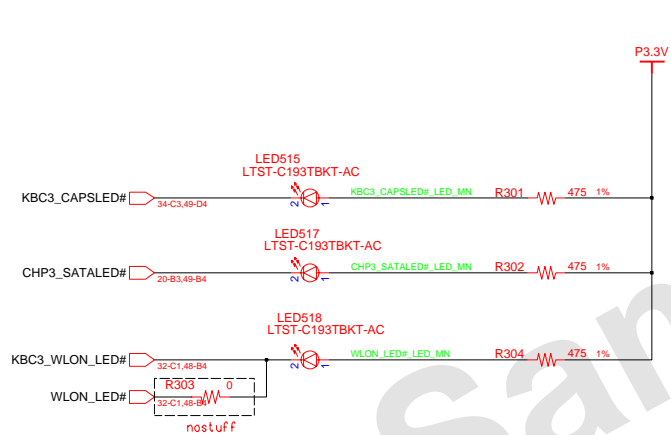
LID SWITCH



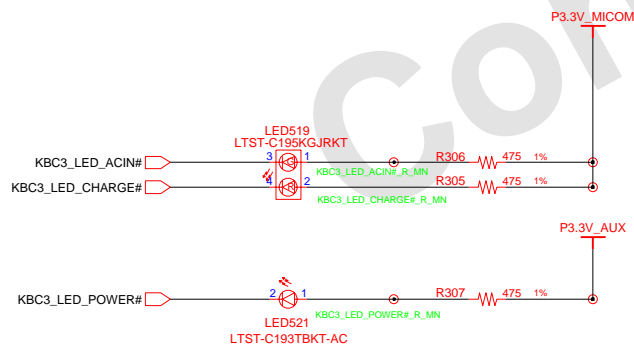
DRAW	XIE BIN	DATE	08/18/2009	TITLE	Suzhou-D	SAMSUNG ELECTRONICS
CHECK	GUO LEI	DEV. STEP	ADV			PART NO. BA41-xxxxxxA
APPROVAL	BC LEE	REV	0.1		MICOM_GLUE	
MODULE CODE		LAST EDIT	July 15, 2009 19:25:13 PM	PAGE	34	OF 58

LEDs

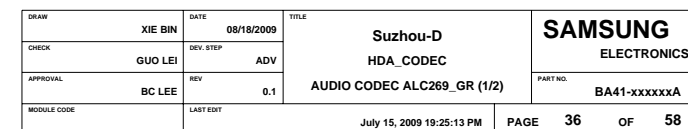
FUNCTION KEY LED

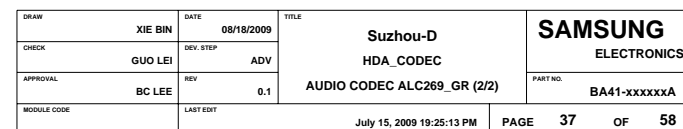


ADAPTERIN/CHARGING LED

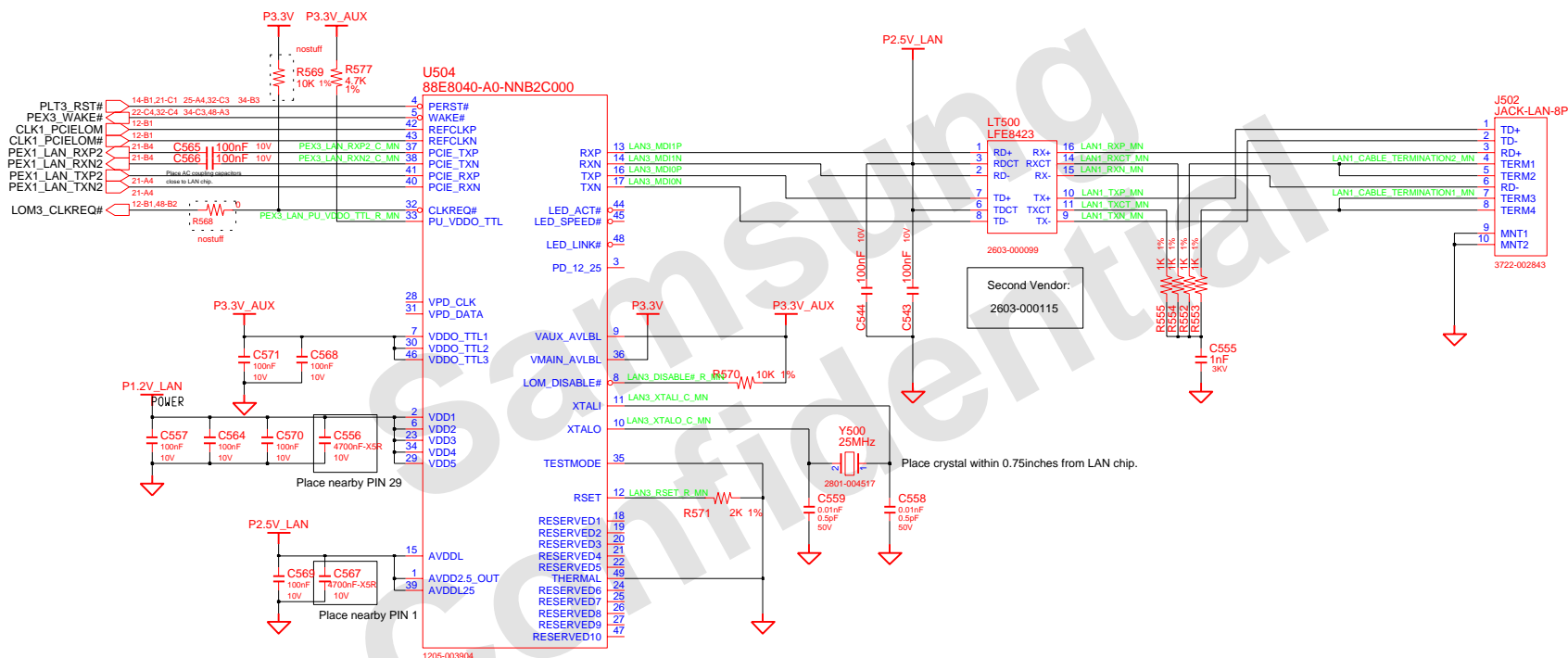


DRAW	XIE BIN	DATE	08/18/2009	TITLE	Suzhou-D	SAMSUNG ELECTRONICS
CHECK	GUO LEI	DEV. STEP	ADV	LED_SWITCH	LED_SWITCH	
APPROVAL	BC LEE	REV	0.1			PART NO. BA41-xxxxxxA
MODULE CODE		LAST EDIT		July 15, 2009 19:25:13 PM	PAGE	35 OF 58





LAN Controller (Marvell 88E8040)



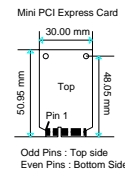
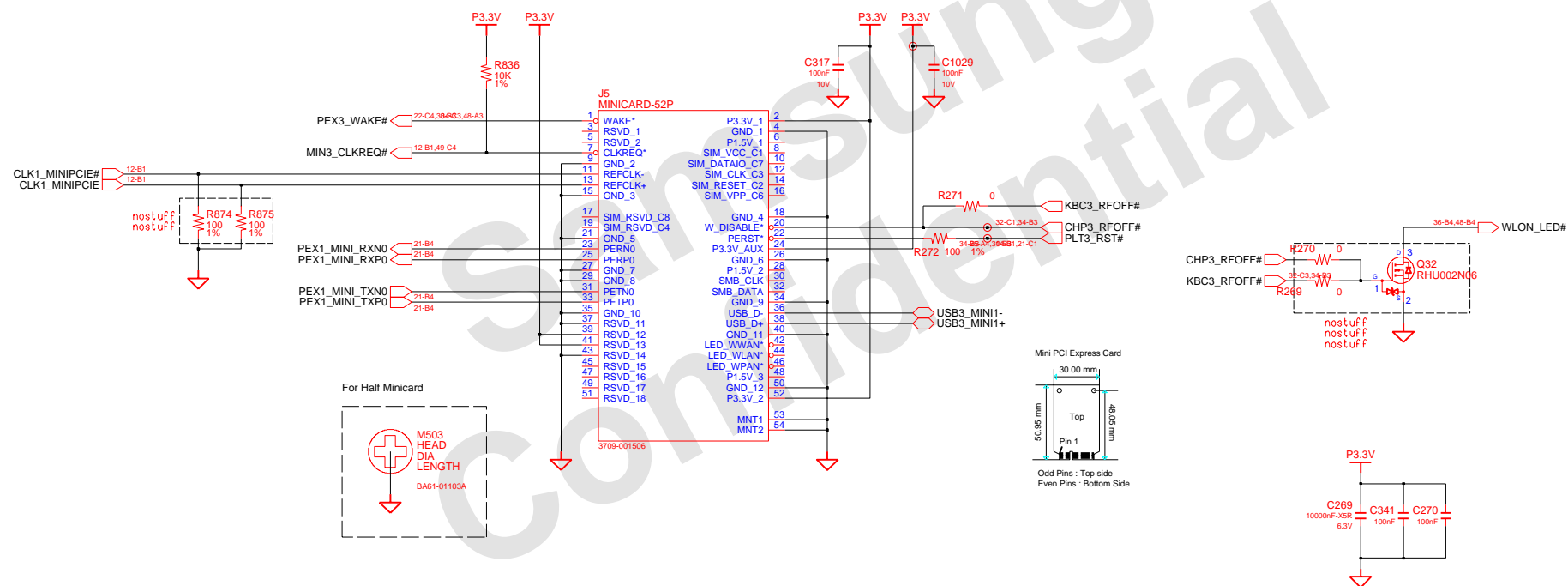
DRAW	XIE BIN	DATE	08/18/2009	TITLE	Suzhou-D	SAMSUNG ELECTRONICS PART NO. BA41-xxxxxxA
CHECK	GUO LEI	DEV. STEP	ADV	LAN		
APPROVAL	BC LEE	REV	0.1	LAN_Marvell 88E8040		
MODULE CODE		LAST EDIT				
				July 15, 2009 19:25:13 PM	PAGE 38 OF 58	

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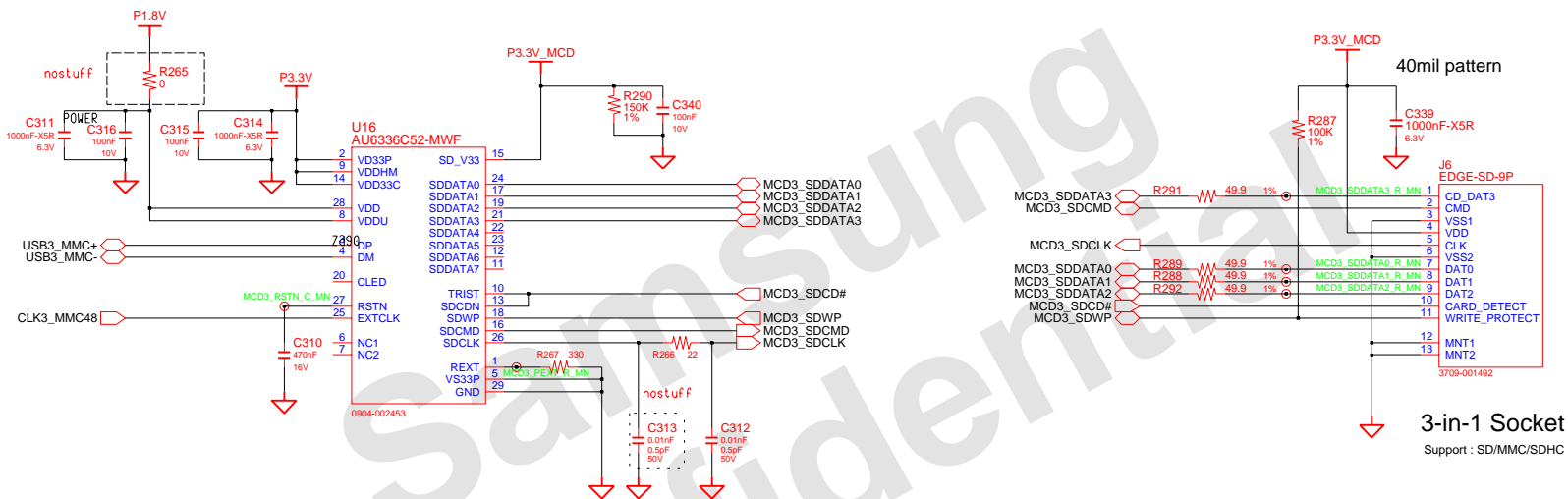
Wireless LAN

WLAN, 4mm



DRAW	XIE BIN	DATE	08/18/2009	TITLE	Suzhou-D	SAMSUNG
CHECK	GUO LEI	DEV. STEP	ADV	MINI_PCIE_CONN	ELECTRONICS	
APPROVAL	BC LEE	REV	0.1	Wireless LAN	PART NO.	BA41-xxxxxxA
MODULE CODE		LAST EDIT		July 15, 2009 19:25:13 PM	PAGE	39 OF 58

Card Reader (AU6336)

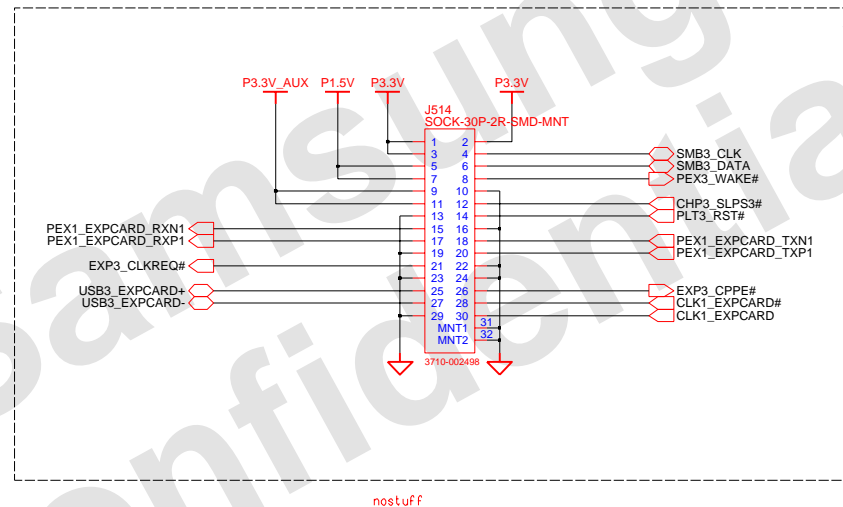


MCD3_SD_SPD	SD v1.0 Clock Option
PU / PD : No Stuff	24 MHz (default)
PU : Stuff, PD : No Stuff	15 MHz

MCD3_CLK_IN	827S Clock Source option
PU : X, PD : X	12MHz, fixed S/N
PU : No Stuff, PD : Stuff	12MHz, no S/N
PU : Stuff, PD : No Stuff	48MHz

DRAW	XIE BIN	DATE	08/18/2009	Suzhou-D MULTICARD 3 IN 1 CARD		SAMSUNG ELECTRONICS			
CHECK	GUO LEI	DEV. STEP	ADV						
APPROVAL	BC LEE	REV	0.1						
MODULE CODE		LAST EDIT		July 15, 2009 19:25:13 PM		PAGE	40	OF	58

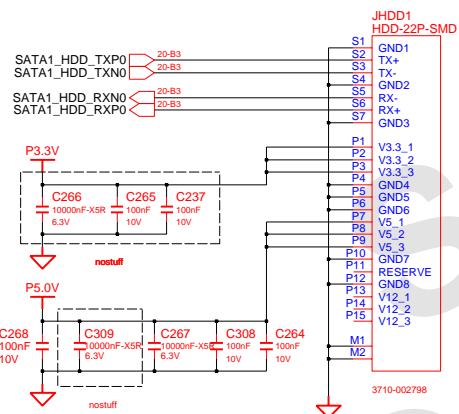
Express Card Connector



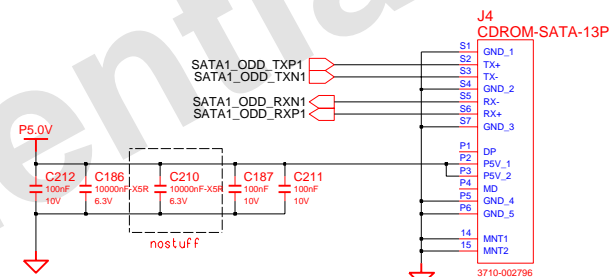
DRAW	XIE BIN	DATE	08/18/2009	TITLE	Suzhou-D	SAMSUNG ELECTRONICS
CHECK	GUO LEI	DEV. STEP	ADV			PART NO.
APPROVAL	BC LEE	REV	0.1	EXPRESS CARD		BA41-xxxxxxA
MODULE CODE		LAST EDIT	July 15, 2009 19:25:13 PM	PAGE	41	OF 58

SATA I/F CONN

SATA HDD CONN

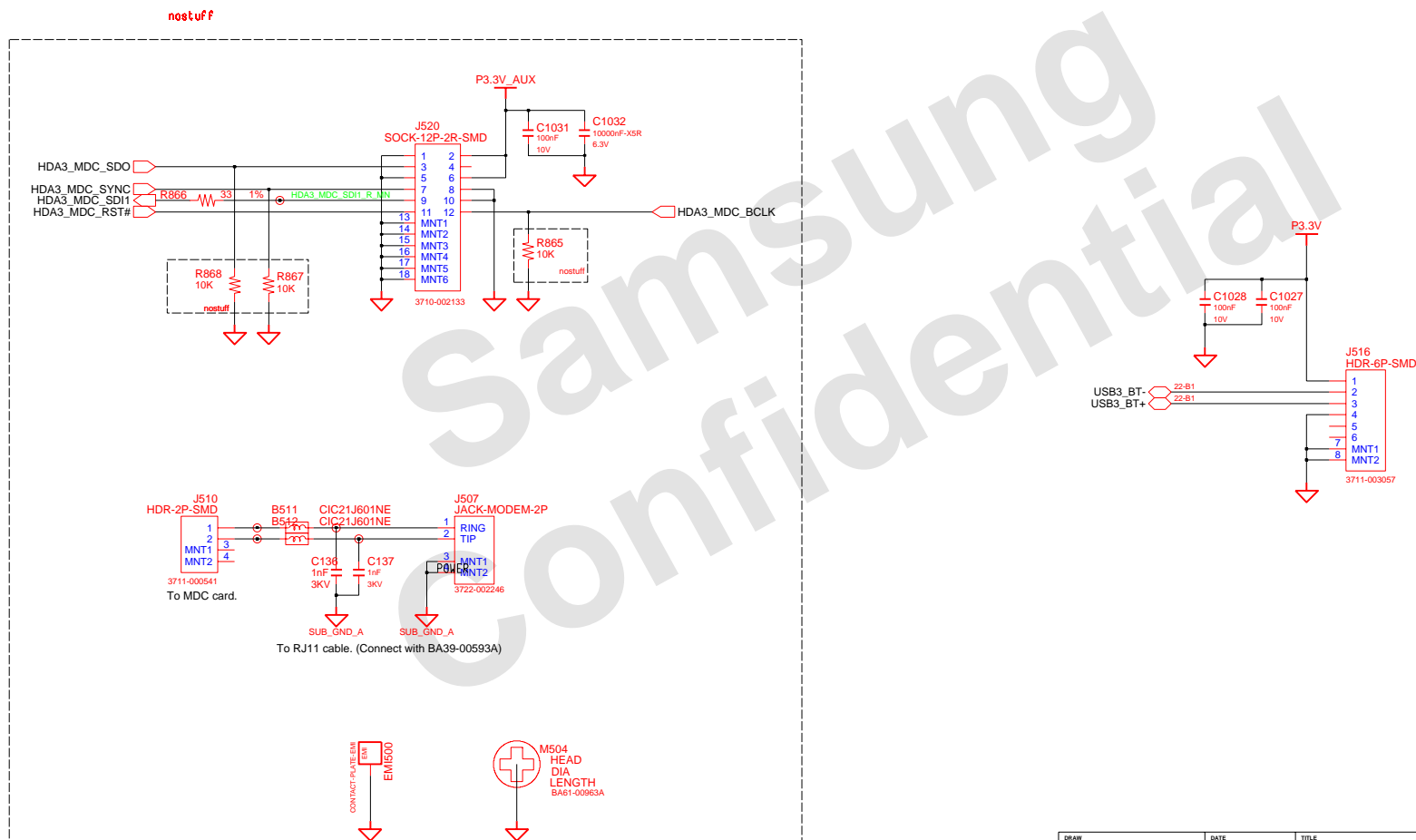


ODD CONN



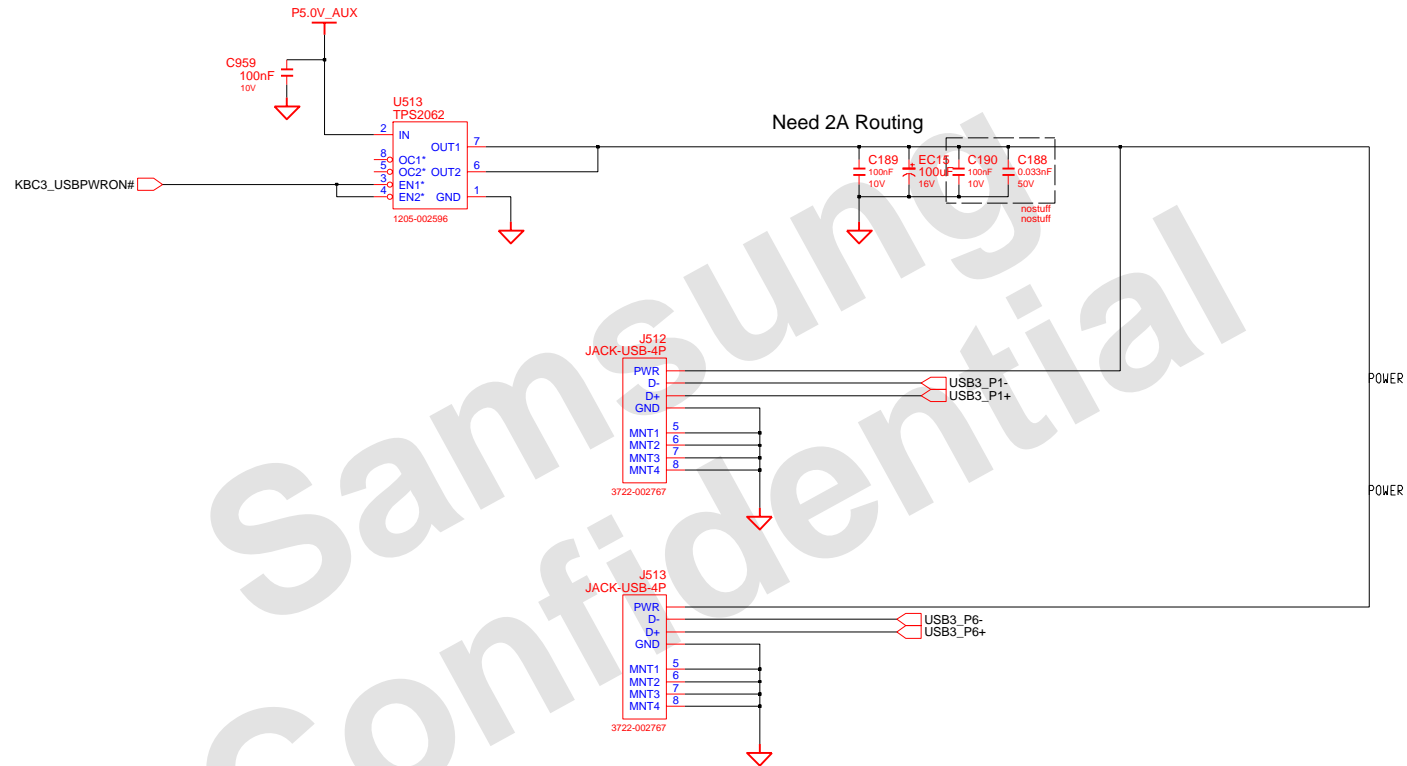
DRAW	XIE BIN	DATE	08/18/2009	TITLE	Suzhou-D SATA_DEVICES HDD & ODD SUB BONNECTOR	SAMSUNG ELECTRONICS
CHECK	GUO LEI	DEV. STEP	ADV			PART NO. BA41-xxxxxxA
APPROVAL	BC LEE	REV	0.1			
MODULE CODE		LAST EXT		July 15, 2009 19:25:13 PM	PAGE 42 OF 58	

BLUETOOTH



DRAW	XIE BIN	DATE	08/18/2009	<div>Suzhou-D</div> <div>HDA_MODEM & BLUETOOTH</div> <div>MODEM & BLUETOOTH</div>	<div>SAMSUNG</div> <div>ELECTRONICS</div>	
CHECK	GUO LEI	DEV. STEP	ADV			
APPROVAL	BC LEE	REV	0.1		PART NO.	BA41-xxxxxxA
MODULE CODE	LAST EDIT				July 15, 2009 19:25:13 PM	PAGE 43 OF 58

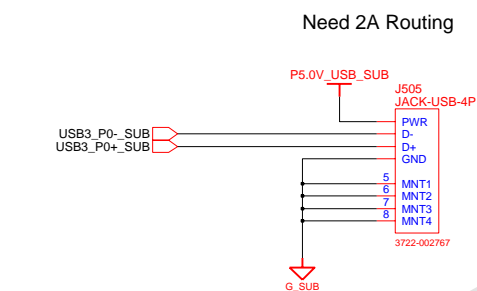
LEFT USB PORT



DRAW	XIE BIN	DATE	08/18/2009	TITLE	Suzhou-D	SAMSUNG ELECTRONICS
CHECK	GUO LEI	DEV. STEP	ADV	USB_CONNECTOR	USB_CONNECTOR	
APPROVAL	BC LEE	REV	0.1	USB_CONNECTOR (1/2)	PART NO.	BA41-xxxxxxA
MODULE CODE	LAST EXT				July 15, 2009 19:25:13 PM	PAGE 44 OF 58

USB PORT & POWER S/W SUB B'D

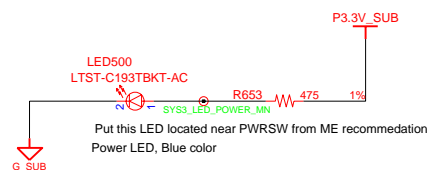
TOP RIGHT USB PORT



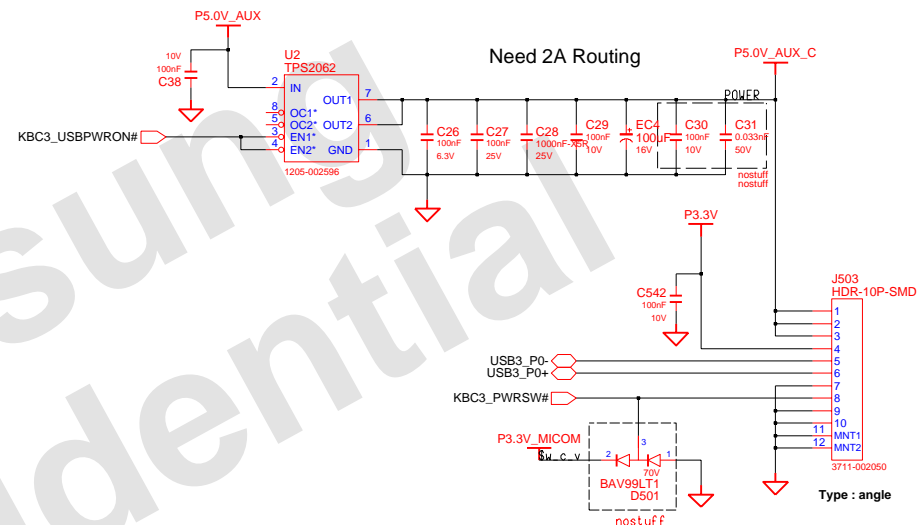
Power Button



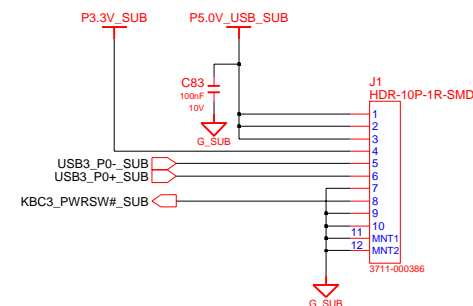
Power ON LED



MAIN TO SUB USB CONN

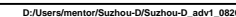


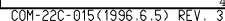
SUB TO MAIN USB CONN



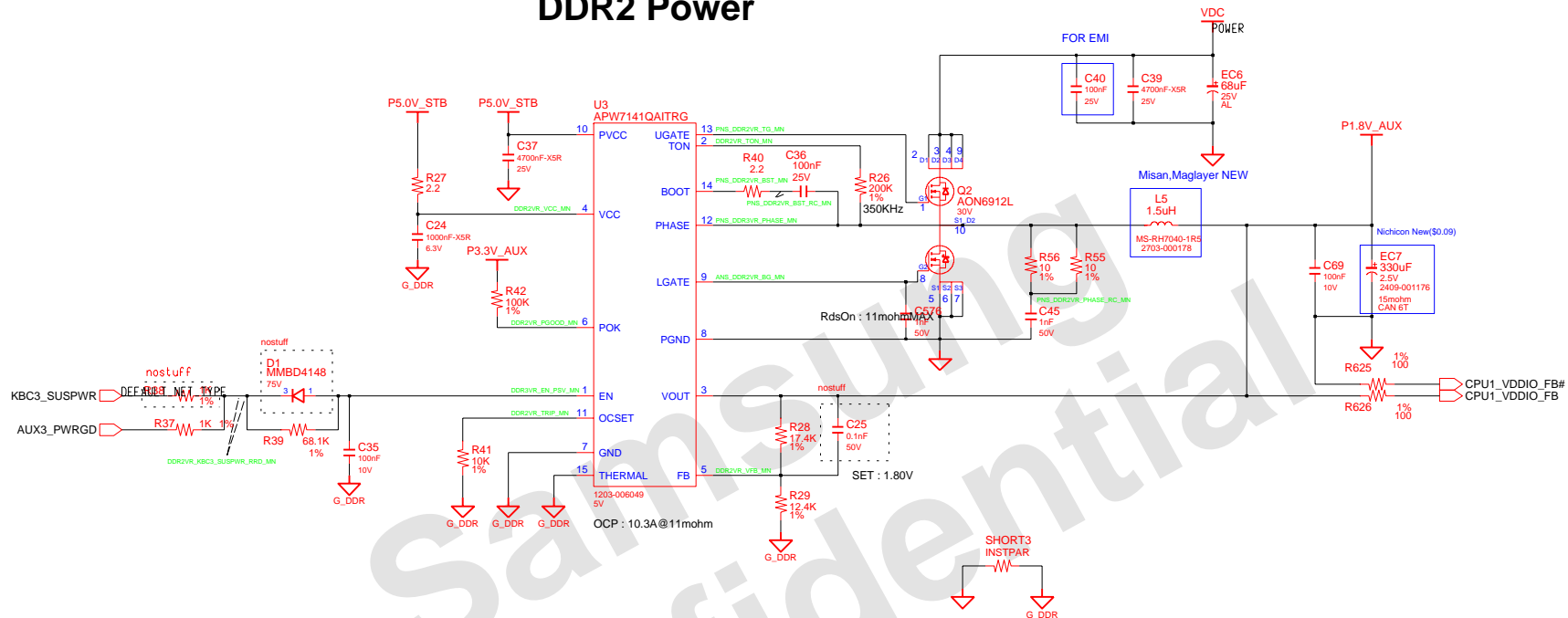
DRAW	XIE BIN	DATE	08/18/2009	TITLE	Suzhou-D	SAMSUNG
CHECK	GUO LEI	DEV. STEP	ADV	USB_CONNECTOR	USB_CONNECTOR	ELECTRONICS
APPROVAL	BC LEE	REV	0.1	USB_CONNECTOR (2/2)	PART NO.	BA41-xxxxxxA
MODULE CODE		LAST EDIT	July 15, 2009 19:25:13 PM	PAGE	45	OF 58

CHARGER & POWER MANAGEMENT

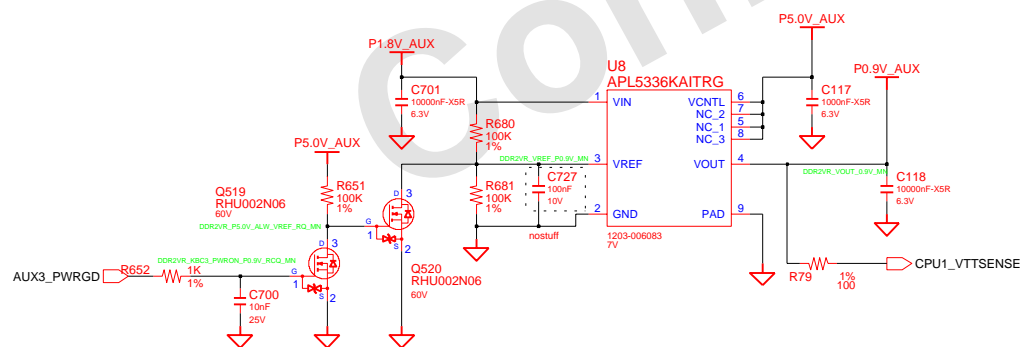




DDR2 Power



DDR2 VTT(P0.9V_AUX)



DRAW	XIE BIN	DATE	08/18/2009	TITLE	Suzhou-D	SAMSUNG ELECTRONICS PART NO. BA41-xxxxxxA
CHECK	GUO LEI	DEV. STEP	ADV	PWR_MEMORY		
APPROVAL	BC LEE	REV	0.1	DDR2 POWER		
MODULE CODE		LAST EDIT				
					July 15, 2009 19:25:13 PM	PAGE 48 OF 58

VW & COMP / 2.33 + 0.29) uS
2.6KHz@6.8Kohm
 $1 / ((1.5 \times 10^{-6}) * R_{fsetnb})$ Hz
13KHz@22Kohm

VFIXEN VID CODES			
SVC	SVD	VOUT	
0	0	1.4V	
0	1	1.2V	
1	0	1.0V	
1	1	0.8V	

Pre-PWROK Metal VID			
SVC	SVD	VOUT	
0	0	1.1V	
0	1	1.0V	
1	0	0.9V	
1	1	0.8V	

DRAW	XIE BIN	DATE	TITLE
CHECK <td>GUO LEI <td>08/18/2009 <td>Suzhou-D</td> </td></td>	GUO LEI <td>08/18/2009 <td>Suzhou-D</td> </td>	08/18/2009 <td>Suzhou-D</td>	Suzhou-D
		DEV. STEP	PWR_CPU_MV_ISL6265HRT
		ADV	

Figure 1: VFIEN and VFIEN[1:0] bit settings for VFIEN[1:0] = 00

OFS/VFIEN(1Pin)	
	OFS VFIEN
3.3V	Disable , Enable
GND	Enable , Disable
5V	Disable , Disable

VFIEN VID CODES		
SVC	SVD	VOUT
0	0	1.4V
0	1	1.2V
1	0	1.0V
1	1	0.8V

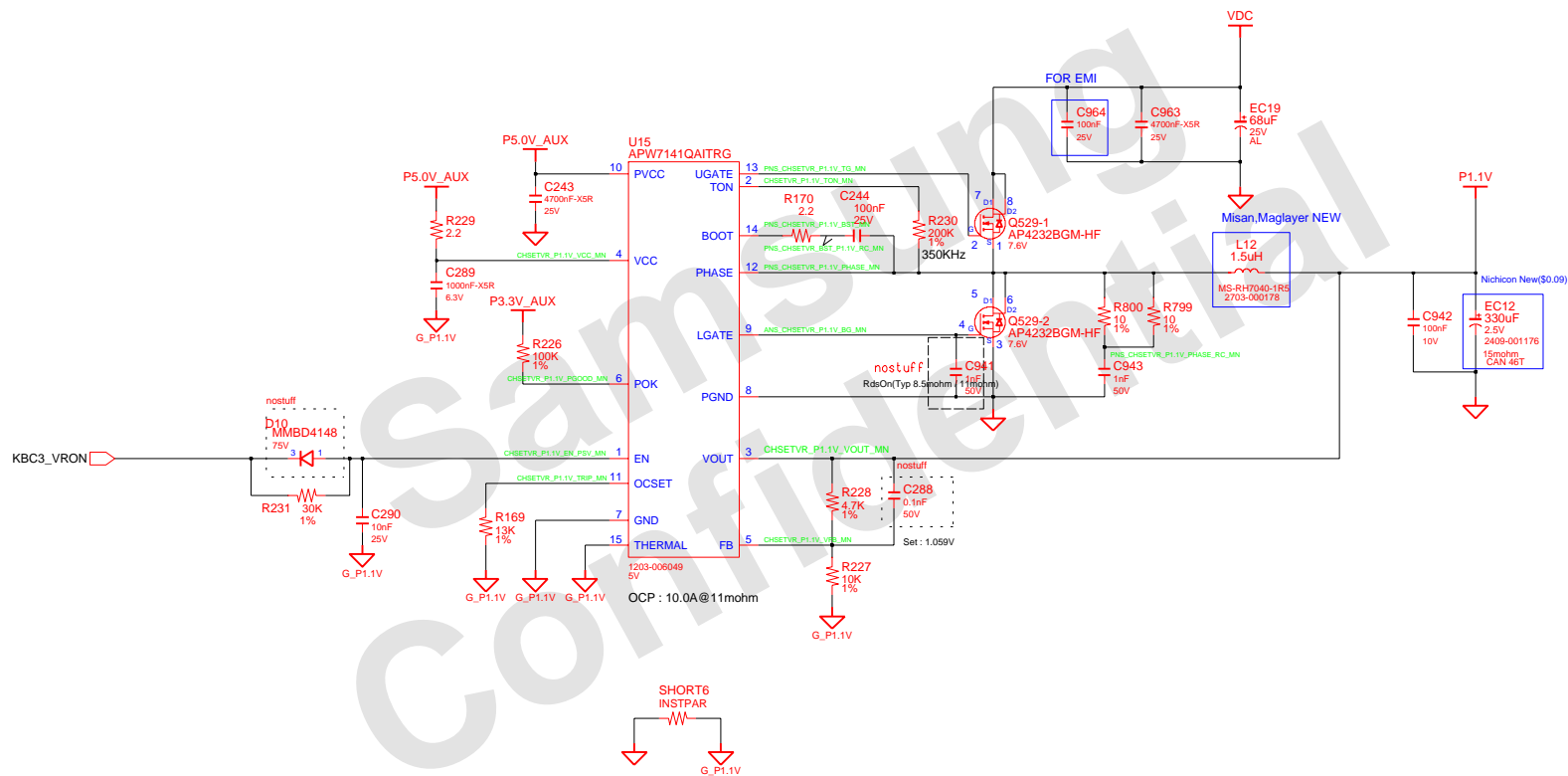
Pre-PWROK Metal VID		
SVC	SVD	VOUT
0	0	1.1V
0	1	1.0V
1	0	0.9V
1	1	0.8V

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

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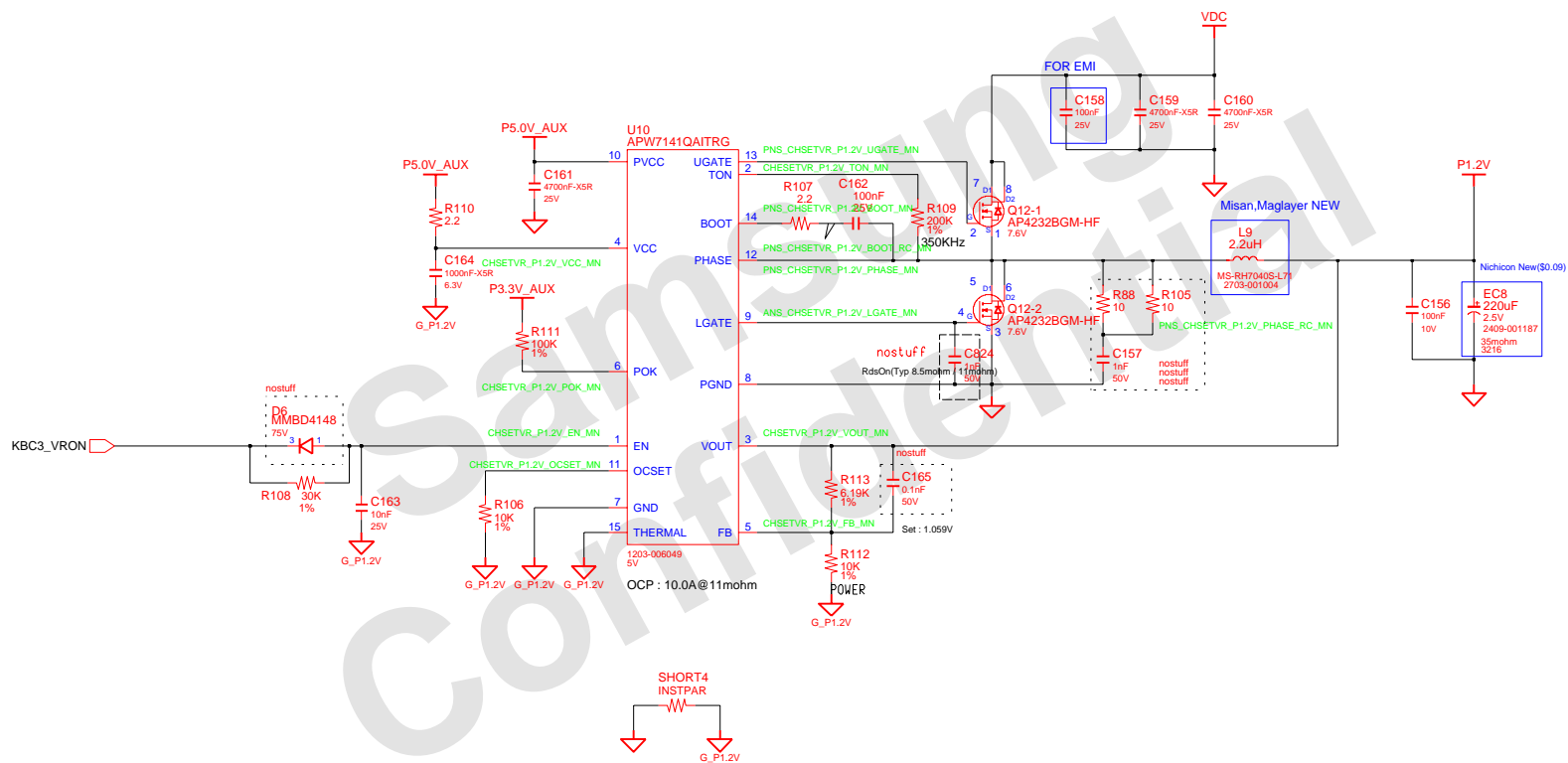
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CHIPSET POWER(P1.1V)



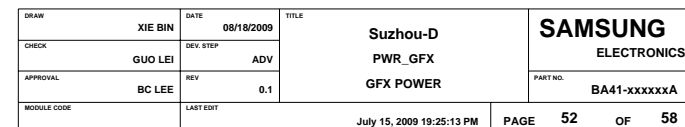
DRAW	XIE BIN	DATE	08/18/2009	TITLE	Suzhou-D	SAMSUNG
CHECK	GUO LEI	DEV. STEP	ADV	PWR_MV_RX881	ELECTRONICS	
APPROVAL	BC LEE	REV	0.1	P1.1V	PART NO.	BA41-xxxxxA
MODULE CODE		LAST EDIT	July 15, 2009 19:25:13 PM	PAGE	50	OF 58

CHIPSET POWER(P1.2V)



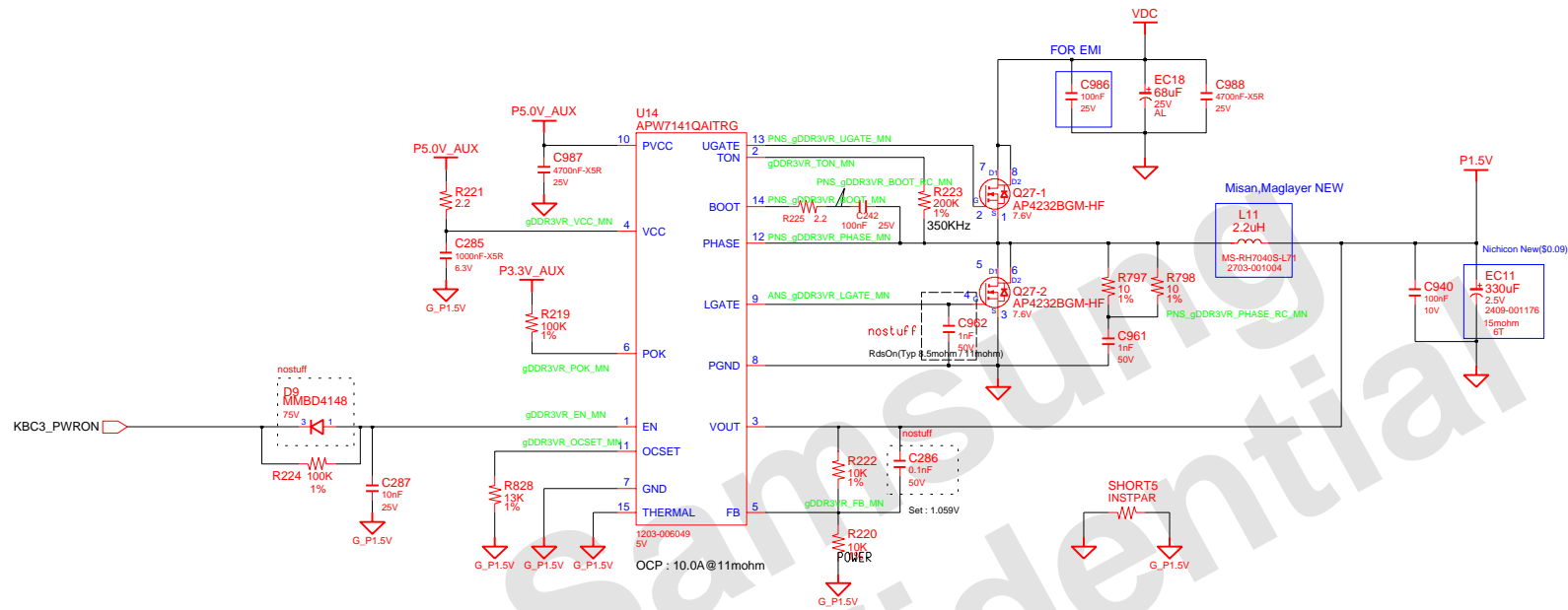
DRAW	XIE BIN	DATE	08/18/2009	Suzhou-D PWR_MV_RX881 P1.2V	SAMSUNG ELECTRONICS	
CHECK	GUO LEI	DEV. STEP	ADV			
APPROVAL	BC LEE	REV	0.1		PART NO.	BA41-xxxxxxA
MODULE CODE	LAST EDIT				July 15, 2009 19:25:13 PM	PAGE 51 OF 58

Graphic Core Power

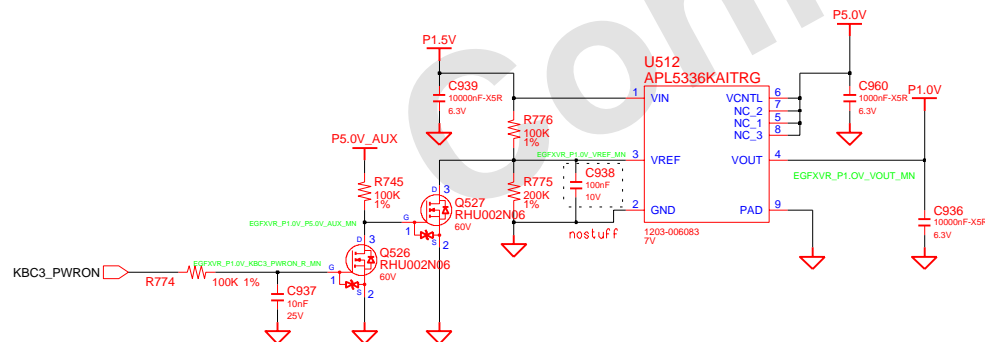


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gDDR3 POWER(P1.5V)



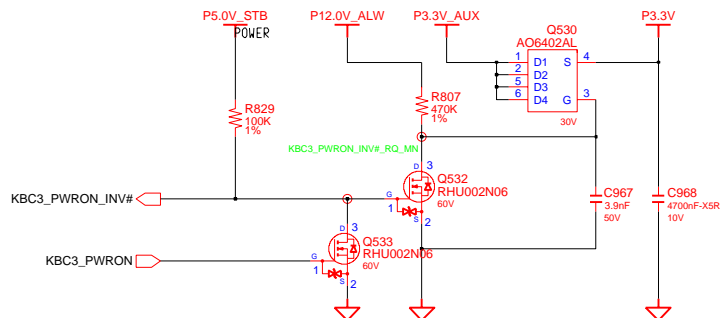
P1.0V



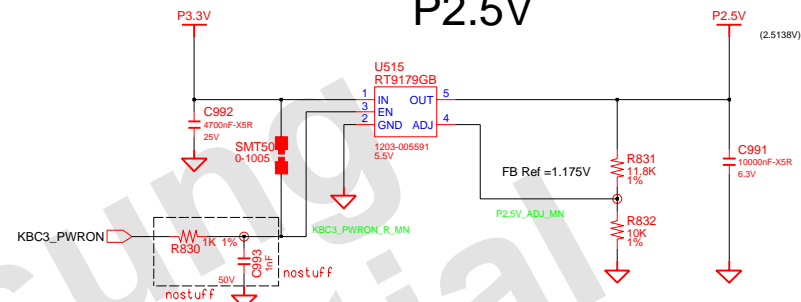
DRAW	XIE BIN	DATE	08/18/2009	TITLE	Suzhou-D	SAMSUNG
CHECK	GUO LEI	DEV. STEP	ADV	PWR GFX MEMORY		ELECTRONICS
APPROVAL	BC LEE	REV	0.1	gDDR3 POWER	PART NO.	BA41-xxxxxxA
MODULE CODE		LAST EDIT		July 15, 2009 19:25:13 PM	PAGE	53 OF 58

Switched Power

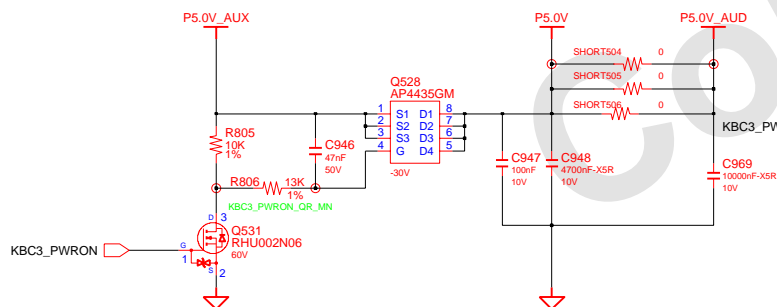
Switched Power On (P3.3V)



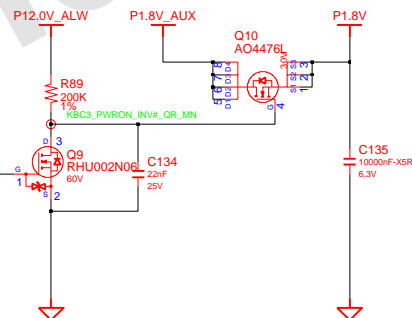
P2.5V



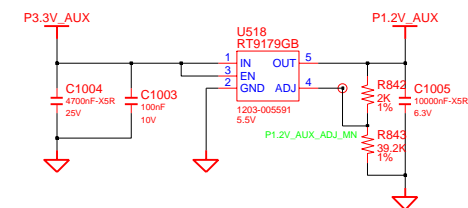
Switched Power On (P5.0V)



Switched Power On (P1.8V)

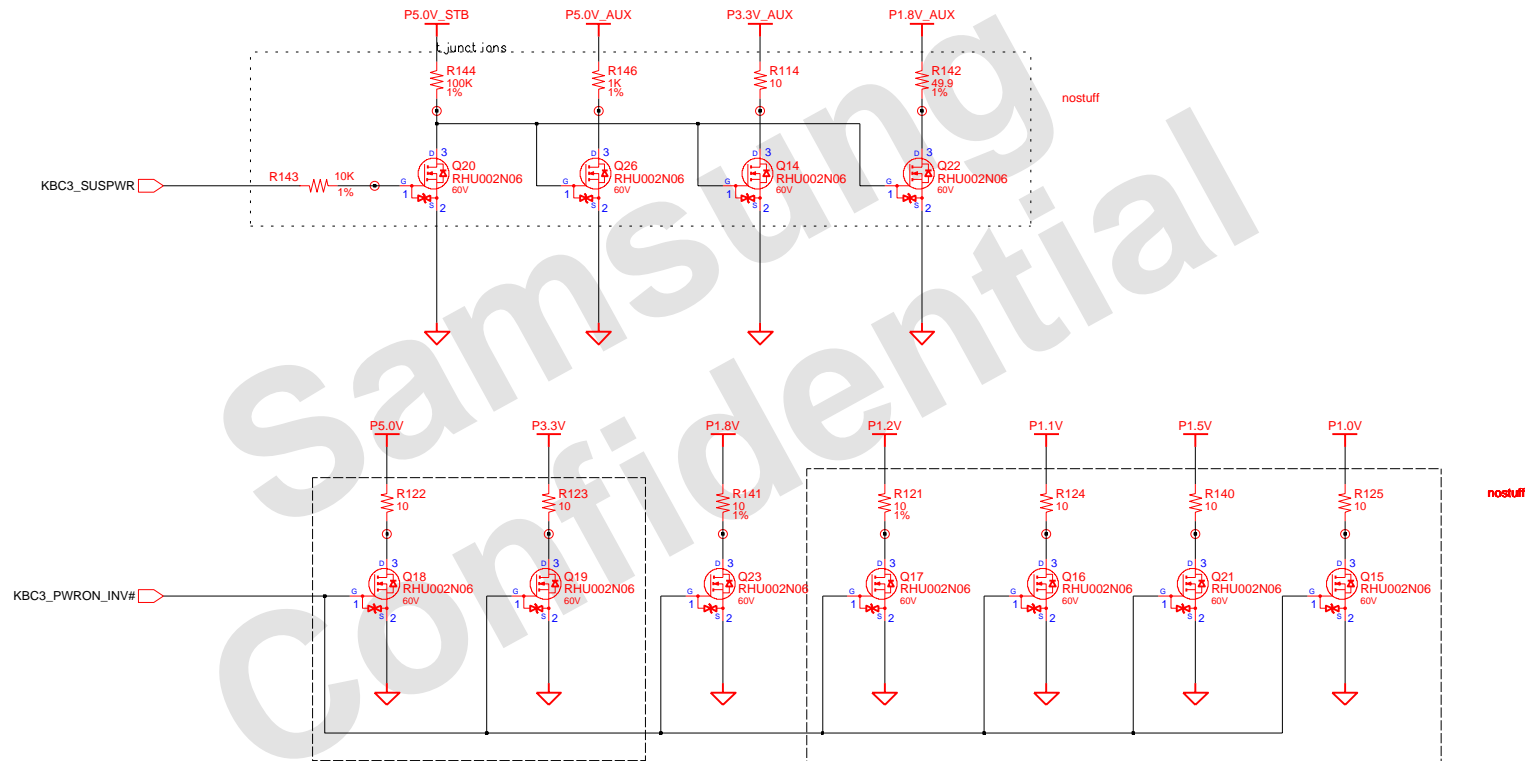


P1.2V_AUX

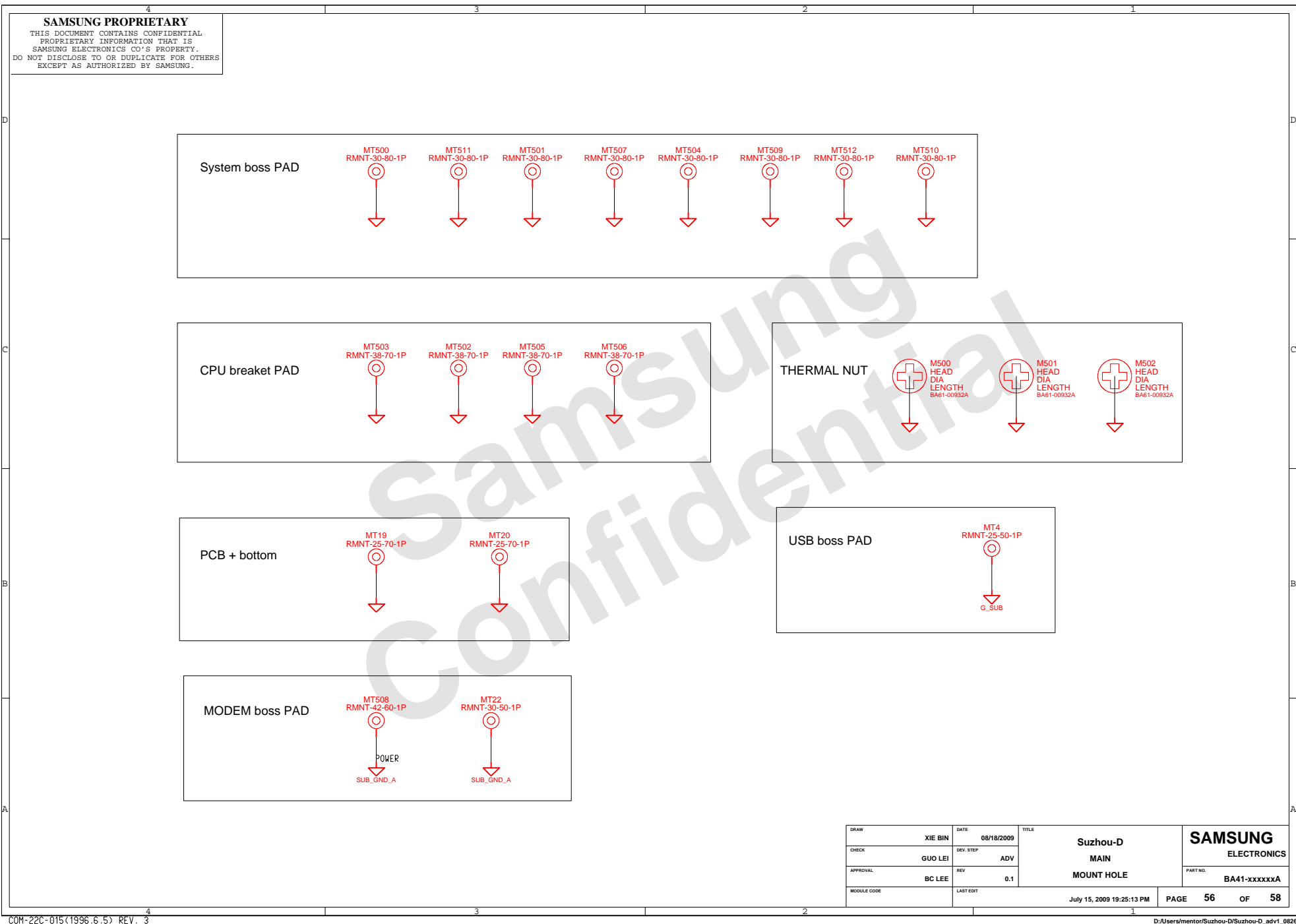


DRAW	XIE BIN	DATE	08/18/2009	TITLE	Suzhou-D	SAMSUNG ELECTRONICS
CHECK	GUO LEI	DEV. STEP	ADV	PWR_SWITCH	PWR_SWITCH	
APPROVAL	BC LEE	REV	0.1	SWITCH POWER	SWITCH POWER	
MODULE CODE		LAST EDIT		July 15, 2009 19:25:13 PM	PAGE 54 OF 58	

POWER DISCHARGER



DRAW	XIE BIN	DATE	08/18/2009	TITLE	Suzhou-D	SAMSUNG ELECTRONICS PART NO. BA41-xxxxxxA
CHECK	GUO LEI	DEV. STEP	ADV	PWR_CPU_MV_IDISCHARGER		
APPROVAL	BC LEE	REV	0.1	DISCHARGER LOGIC		
MODULE CODE		LAST EDIT	July 15, 2009 19:25:13 PM	PAGE 55 OF 58		



○VREFG
○CPU1_SIC
○CPU1_SID
○CPU1_SVC
○CPU1_SVD
○CRT3_RED
○SMB3_CLK
○SPI3_CLK
○ADT3_SEL#
○CRT3_BLUE
○KBC3_A20G
○KBC3_VRON
○KBC3_TCLK
○LCD1_ACLK
○LCD3_BRIT
○LPC3_CLK0
○LPC3_CLK1
○MCD3_SDWP
○SMB3_DATA
○SPI3_CS0#
○SPI3_MISO
○SPI3_MOSI
○THM3_STP#
○WLON_LED#
○CRT3_GREEN
○CRT3_HSYNC
○CRT3_VSYNC
○CRT5_HSYNC
○CRT5_VSYNC
○DBG3_HSYNC
○DBG3_VSYNC
○GFX3_GPIO0
○GFX3_GPIO1
○GFX3_GPIO2
○KBC3_CHGEN
○KBC3_PWRGD
○KBC3_PWRON
○KBC3_RGIN#
○KBC3_TDATA
○MCD3_SDC0#
○MCD3_SDC1K
○MCD3_SDCMD
○MEM1_VREF0
○MEM1_VREF1
○PEX3_WAKE#
○SB_X1_C_MN
○SB_X2_C_MN

○CHGVR_EN_MN
○CHP3_GPIO16
○CHP3_GPIO17
○CHP3_RTCLK
○CHP3_SERIRQ
○CHP3_SLPS3#
○CHP3_SLPS5#
○CK_PDR_R_MN
○CPU1_ALERT#
○CRT3_DDCCLK
○GFX_NC_B_MN
○KBC3_BKLTON
○KBC3_PRECHG
○KBC3_PWR5W#
○KBC3_RFOFF#
○KBC3_SCLEID#
○KBC3_SMCLK#
○KBC3_SPI_DI
○KBC3_SPI_DO
○KBC5_KSI0
○CRT3_RED_L_MN
○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_KSI(10)
○KBC5_KSI(11)
○KBC5_KSI(12)
○KBC5_KSI(13)
○KBC5_KSI(14)
○KBC5_KSI(15)
○KBC5_KSI(16)
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○KBC5_KSI(96)
○KBC5_KSI(97)
○KBC5_KSI(98)
○KBC5_KSI(99)
○KBC5_KSI(100)

○CHGVR_EN_MN
○CHP3_GPIO16
○CHP3_GPIO17
○CHP3_RTCLK
○CHP3_SERIRQ
○CHP3_SLPS3#
○CHP3_SLPS5#
○CK_PDR_R_MN
○CPU1_ALERT#
○CRT3_DDCCLK
○GFX_NC_B_MN
○KBC3_BKLTON
○KBC3_PRECHG
○KBC3_PWR5W#
○KBC3_RFOFF#
○KBC3_SCLEID#
○KBC3_SMCLK#
○KBC3_SPI_DI
○KBC3_SPI_DO
○KBC5_KSI0
○CRT3_RED_L_MN
○KBC5_KSI(2)
○KBC5_KSI(3)
○KBC5_KSI(4)
○KBC5_KSI(5)
○KBC5_KSI(6)

○GDDR3VR_EN_MN
○GDDR3VR_FB_MN
○GFX_RSET_R_MN
○KBC3_CAPSLD#
○KBC3_LED_CTRL
○KBC3_SPI_CS0#
○KBC3_SPMUTE#
○KBC3_WAKESIG#
○LCD3_EDID_CLK
○PEG3_HPD_HDMI
○PEG5_HDMI_CLK
○VGA5_HDMI_HPD
○CHGVR_ACUM_MN
○CHGVR_ACSET_MN
○CHGVR_CHLM_MN
○CHGVR_DOPRN_MN
○CHGVR_DCSET_MN
○CHGVR_ICOMP_MN
○CHGVR_ICOM_MN
○CHGVR_VDD_MN
○CHP3_BIOS_CRIP
○CHP3_INTRUDER#
○CHP3_THRMTRIP#
○CPU1_THRMTRIP#
○CPU1_VDDIO_FB#
○CPU1_VDDNB_FB#
○CPUVR_VSEN1_MN
○DDR2VR_TRIP_MN
○EGFXVR_SETO_MN
○EGFXVR_SETI_MN
○EGFXVR_SET2_MN
○EGFXVR_SREF_MN
○GDDR3VR_POK_MN
○GDDR3VR_TON_MN
○GDDR3VR_VCC_MN
○GFX_MP18_B_MN
○GFX_PX_EN_R_MN
○GFX_R2SET_R_MN
○KBC3_KCLK_R_MN
○KBC3_KDAT_R_MN
○KBC3_LED_ACIN#
○KBC3_USBPWRON#
○KBC3_WLON_LED#
○LAN3_RSET_R_MN
○LCD3_EDID_DATA
○PEG3_HDMI_DATA
○PEG5_HDMI_DATA
○TPD5_L_BUTTON#
○TPD5_R_BUTTON#
○VRM3_CPU_PWRGD
○CHGVR_ICM_RC_MN
○COUVR_ENABLE_MN
○CPU1_ALL_LDTSTP
○CRT3_GREEN_L_MN
○CRT3_P5_0V_D_MN
○DDR2VR_PGOOD_MN
○EGFXVR_OCSET_MN
○GFX_TESTEN_R_MN
○GFX_XTALIN_R_MN
○KBC3_EMCLK_R_MN
○KBC3_EMDAT_R_MN
○KBC3_LED_POWER#
○CHP3_SATALED#
○ANS_DDR2VR_BG_MN
○ANS_SVSVR_BG1_MN
○ANS_SVSVR_BG2_MN
○CHGVR_SCATE_R_MN
○CHGVR_VADJ_R_MN
○DDR3VR_EN_PSV_MN
○GDDR3VR_OCSET_MN
○GFX_MVREFSA_R_MN
○GFX_PWRGOOD_R_MN
○GML_VREFCA0_R_MN
○GML_VREFCA1_R_MN
○GML_VREFDQ0_R_MN

○GDDR3VR_EN_MN
○GDDR3VR_FB_MN
○GFX_RSET_R_MN
○KBC3_CAPSLD#
○KBC3_LED_CTRL
○KBC3_SPI_CS0#
○KBC3_SPMUTE#
○KBC3_WAKESIG#
○LCD3_EDID_CLK
○PEG3_HPD_HDMI
○PEG5_HDMI_CLK
○VGA5_HDMI_HPD
○CHGVR_ACUM_MN
○CHGVR_ACSET_MN
○CHGVR_CHLM_MN
○CHGVR_DOPRN_MN
○CHGVR_DCSET_MN
○CHGVR_ICOMP_MN
○CHGVR_ICOM_MN
○CHGVR_VDD_MN
○CHP3_BIOS_CRIP
○CHP3_INTRUDER#
○CHP3_THRMTRIP#
○CPU1_THRMTRIP#
○CPU1_VDDIO_FB#
○CPU1_VDDNB_FB#
○CPUVR_VSEN1_MN
○DDR2VR_TRIP_MN
○EGFXVR_SETO_MN
○EGFXVR_SETI_MN
○EGFXVR_SET2_MN
○EGFXVR_SREF_MN
○GDDR3VR_POK_MN
○GDDR3VR_TON_MN
○GDDR3VR_VCC_MN
○GFX_MP18_B_MN
○GFX_PX_EN_R_MN
○GFX_R2SET_R_MN
○KBC3_KCLK_R_MN
○KBC3_KDAT_R_MN
○KBC3_LED_ACIN#
○KBC3_USBPWRON#
○KBC3_WLON_LED#
○LAN3_RSET_R_MN
○LCD3_EDID_DATA
○PEG3_HDMI_DATA
○PEG5_HDMI_DATA
○TPD5_L_BUTTON#
○TPD5_R_BUTTON#
○VRM3_CPU_PWRGD
○CHGVR_ICM_RC_MN
○COUVR_ENABLE_MN
○CPU1_ALL_LDTSTP
○CRT3_GREEN_L_MN
○CRT3_P5_0V_D_MN
○DDR2VR_PGOOD_MN
○EGFXVR_OCSET_MN
○GFX_TESTEN_R_MN
○GFX_XTALIN_R_MN
○KBC3_EMCLK_R_MN
○KBC3_EMDAT_R_MN
○KBC3_LED_POWER#
○CHP3_SATALED#
○ANS_DDR2VR_BG_MN
○ANS_SVSVR_BG1_MN
○ANS_SVSVR_BG2_MN
○CHGVR_SCATE_R_MN
○CHGVR_VADJ_R_MN
○DDR3VR_EN_PSV_MN
○GDDR3VR_OCSET_MN
○GFX_MVREFSA_R_MN
○GFX_PWRGOOD_R_MN
○GML_VREFCA0_R_MN
○GML_VREFCA1_R_MN
○GML_VREFDQ0_R_MN

○GML_VREFDQ1_R_MN
○GML_ZQ_Z000_R_MN
○GML_ZQ_Z001_R_MN
○GML_VREFCA0_R_MN
○GML_VREFCA1_R_MN
○GML_VREFDQ0_R_MN
○GML_VREFDQ1_R_MN
○GML_ZQ_Z000_F_MN
○GML_ZQ_Z001_F_MN
○PNS_CHGVR_BST_MN
○KBC3_THERM_SMCLK
○PNS_CHGVR_BST_MN
○PNS_DDR2VR_TG_MN
○PNS_SVSVR_TG1_MN
○PNS_SVSVR_TG2_MN
○SB_DDC1_SCL_R_MN
○SB_DDC1_SDA_R_MN
○TH_SHDN_SEL_R_MN
○WLON_LED#_LED_MN
○CHGVR_VCOMP_RC_MN
○CPU1_TEST25_H_R_MN
○CPU1_TEST25_L_R_MN
○GFX_CLKTESTA_C_MN
○GFX_TESTEN_2_R_MN
○KBC3_THERM_SMDATA
○PNS_DDR2VR_BST_MN
○PNS_EGFXVR_BST_MN
○CHGVR_SCATE_RRG_MN
○GFX_DPA8_CALR_R_MN
○GFX_DPA_VDD18_B_MN
○GDDR3VR_POK_MN
○GFX_DPL_VDDC_B_MN
○LAN3_DISABLE_R_MN
○PEG5_HDMI_CLK_B_MN
○VGA5_HDMI_HPD_R_MN
○CHSETVR_P1_2V_EN_MN
○CHSETVR_P1_2V_FB_MN
○DDR2VR_VOUT_0_9V_MN
○GFX_MEM_CALRNO_R_MN
○GFX_MEM_CALRPO_R_MN
○GFX_POIE_CALRN_R_MN
○GFX_POIE_CALRP_R_MN
○PEG3_LCDVDDON_QR_MN
○PNS_CHGVR_BST_RC_MN
○PNS_DDR3VR_PHASE_MN
○PNS_GDDR3VR_BOOT_MN
○ANS_GDDR3VR_LGATE_MN
○CHP3_SATALED#_LED_MN
○CHSETVR_P1_1V_TON_MN
○CHSETVR_P1_1V_VCC_MN
○CHSETVR_P1_1V_VFB_MN
○CHSETVR_P1_2V_POK_MN
○CHSETVR_P1_2V_VCC_MN
○DDR2VR_VREF_P0_9V_MN
○EGFXVR_P1_0V_VREF_MN
○EGFXVR_P1_0V_VOUT_MN
○KBC3_CAPSLD#_LED_MN
○PNS_DDR2VR_BST_RC_MN
○PNS_EGFXVR_BST_RC_MN
○PNS_GDDR3VR_PHASE_MN
○PNS_GDDR3VR_LGATE_MN
○CHSETVR_P1_1V_TRIP_MN
○KBC3_LED_CHARGE#_R_MN
○NB_ALLOW_LDTSTP_R_MN
○P3_3V_VDD_INV_EN_Q_MN
○PNS_CHGVR_PHASE_RC_MN
○CHSETVR_P1_1V_PGOOD_MN
○CHSETVR_P1_2V_OCSET_MN
○P3_3V_VDD_INV_EN_QR_MN
○PNS_DDR2VR_PHASE_RC_MN
○PNS_GDDR3VR_BOOT_RC_MN
○PNS_SVSVR_PHASE2_RC_MN

○GML_VREFDQ1_R_MN
○GML_ZQ_Z000_R_MN
○GML_ZQ_Z001_R_MN
○GML_VREFCA0_R_MN
○GML_VREFCA1_R_MN
○GML_VREFDQ0_R_MN
○GML_VREFDQ1_R_MN
○GML_ZQ_Z000_F_MN
○GML_ZQ_Z001_F_MN
○PNS_CHGVR_BST_MN
○KBC3_THERM_SMCLK
○PNS_CHGVR_BST_MN
○PNS_DDR2VR_TG_MN
○PNS_SVSVR_TG1_MN
○PNS_SVSVR_TG2_MN
○SB_DDC1_SCL_R_MN
○SB_DDC1_SDA_R_MN
○TH_SHDN_SEL_R_MN
○WLON_LED#_LED_MN
○CHGVR_VCOMP_RC_MN
○CPU1_TEST25_H_R_MN
○CPU1_TEST25_L_R_MN
○GFX_CLKTESTA_C_MN
○GFX_TESTEN_2_R_MN
○KBC3_THERM_SMDATA
○PNS_DDR2VR_BST_MN
○PNS_EGFXVR_BST_MN
○CHGVR_SCATE_RRG_MN
○GFX_DPA8_CALR_R_MN
○GFX_DPA_VDD18_B_MN
○GDDR3VR_POK_MN
○GFX_DPL_VDDC_B_MN
○LAN3_DISABLE_R_MN
○PEG5_HDMI_CLK_B_MN
○VGA5_HDMI_HPD_R_MN
○CHSETVR_P1_2V_EN_MN
○CHSETVR_P1_2V_FB_MN
○DDR2VR_VOUT_0_9V_MN
○GFX_MEM_CALRNO_R_MN
○GFX_MEM_CALRPO_R_MN
○GFX_POIE_CALRN_R_MN
○GFX_POIE_CALRP_R_MN
○PEG3_LCDVDDON_QR_MN
○PNS_CHGVR_BST_RC_MN
○PNS_DDR3VR_PHASE_MN
○PNS_GDDR3VR_BOOT_MN
○ANS_GDDR3VR_LGATE_MN
○CHP3_SATALED#_LED_MN
○CHSETVR_P1_1V_TON_MN
○CHSETVR_P1_1V_VCC_MN
○CHSETVR_P1_1V_VFB_MN
○CHSETVR_P1_2V_POK_MN
○CHSETVR_P1_2V_VCC_MN
○DDR2VR_VREF_P0_9V_MN
○EGFXVR_P1_0V_VREF_MN
○EGFXVR_P1_0V_VOUT_MN
○KBC3_CAPSLD#_LED_MN
○PNS_DDR2VR_BST_RC_MN
○PNS_EGFXVR_BST_RC_MN
○PNS_GDDR3VR_PHASE_MN
○PNS_GDDR3VR_LGATE_MN
○CHSETVR_P1_1V_TRIP_MN
○KBC3_LED_CHARGE#_R_MN
○NB_ALLOW_LDTSTP_R_MN
○P3_3V_VDD_INV_EN_Q_MN
○PNS_CHGVR_PHASE_RC_MN
○CHSETVR_P1_1V_PGOOD_MN
○CHSETVR_P1_2V_OCSET_MN
○P3_3V_VDD_INV_EN_QR_MN
○PNS_DDR2VR_PHASE_RC_MN
○PNS_GDDR3VR_BOOT_RC_MN
○PNS_SVSVR_PHASE2_RC_MN

○ANS_CHSETVR_P1_1V_BG_MN
○CHGVR_KBC3_PRECHG_RQ_MN
○CHGVR_P3_3V_MICOM_RQ_MN
○CHSETVR_P1_1V_EN_PSV_MN
○CK_REF_0_SEL_HTT66_R_MN
○PNS_CHSETVR_P1_1V_TG_MN
○PNS_GDDR3VR_PHASE_RC_MN
○CHGVR_KBC3_CHG4_2V_RQ_MN
○PNS_CHSETVR_P1_1V_BST_MN
○DDR2VR_KBC3_SUSPWR_RRD_MN
○EGFXVR_P1_0V_P5_0V_AUX_MN
○PNS_CHSETVR_P1_2V_BOOT_MN
○ANS_CHSETVR_P1_2V_LGATE_MN
○NB_REFCLK_N_PWM_GPIO3_R_MN
○PNS_CHSETVR_P1_1V_PHASE_MN
○PNS_CHSETVR_P1_2V_PHASE_MN
○PNS_CHSETVR_P1_2V_LGATE_MN
○DDR2VR_P5_0V_ALW_VREF_RQ_MN
○PNS_CHSETVR_BST_P1_1V_RC_MN
○EGFXVR_P1_0V_KBC3_PWRON_R_MN
○PNS_CHSETVR_P1_2V_BOOT_RC_MN
○PNS_CHSETVR_P1_1V_PHASE_RC_MN
○PNS_CHSETVR_P1_2V_PHASE_RC_MN
○DDR2VR_KBC3_PWRON_P0_9V_RCQ_MN
○AVDD
○A2VDD
○A2VDDQ
○CPU_CORE
○CPU_CORE
○DPC_PWD0
○DPC_VDD18
○G_CHG
○G_CPU
○G_DDR
○G_SUB
○G_EGFX
○G_P1_1V
○G_P1_2V
○G_P1_5V
○G_P3_3V
○LCD_VDD3V
○P1_0V
○P2_5V
○P0_9V_AUX
○P1_2V_AUX
○P1_2V_LAN
○P1_8V_AUX
○P2_0V_REF
○P2_1V_LAN
○P3_3V_LED
○P3_3V_LED
○VDD_LED
○P3_3V_MCD
○P3_3V_MCD
○P3_3V_SUB
○P5_0V_AUX
○P5_0V_AUX
○P5_0V_STB
○P5_0V_STB
○P12_0V_ALW
○P12_0V_ALW
○P4_75V_AUD
○P2_39V_VREF
○P2_39V_VREF
○P5_0V_AUX_C
○P5_0V_USB_SUB
○P5_0V_USB_SUB
○SPV10
○SUB_GND_A
○VDC
○VDD1D1
○VDD2D1
○VCC_CRT
○VDD_LED

○ANS_CHSETVR_P1_1V_BG_MN
○CHGVR_KBC3_PRECHG_RQ_MN
○CHGVR_P3_3V_MICOM_RQ_MN
○CHSETVR_P1_1V_EN_PSV_MN
○CK_REF_0_SEL_HTT66_R_MN
○PNS_CHSETVR_P1_1V_TG_MN
○PNS_GDDR3VR_PHASE_RC_MN
○CHGVR_KBC3_CHG4_2V_RQ_MN
○PNS_CHSETVR_P1_1V_BST_MN
○DDR2VR_KBC3_SUSPWR_RRD_MN
○EGFXVR_P1_0V_P5_0V_AUX_MN
○PNS_CHSETVR_P1_2V_BOOT_MN
○ANS_CHSETVR_P1_2V_LGATE_MN
○NB_REFCLK_N_PWM_GPIO3_R_MN
○PNS_CHSETVR_P1_1V_PHASE_MN
○PNS_CHSETVR_P1_2V_PHASE_MN
○PNS_CHSETVR_P1_2V_LGATE_MN
○DDR2VR_P5_0V_ALW_VREF_RQ_MN
○PNS_CHSETVR_BST_P1_1V_RC_MN
○EGFXVR_P1_0V_KBC3_PWRON_R_MN
○PNS_CHSETVR_P1_2V_BOOT_RC_MN
○PNS_CHSETVR_P1_1V_PHASE_RC_MN
○PNS_CHSETVR_P1_2V_PHASE_RC_MN
○DDR2VR_KBC3_PWRON_P0_9V_RCQ_MN
○AVDD
○A2VDD
○A2VDDQ
○CPU_CORE
○CPU_CORE
○DPC_PWD0
○DPC_VDD18
○G_CHG
○G_CPU
○G_DDR
○G_SUB
○G_EGFX
○G_P1_1V
○G_P1_2V
○G_P1_5V
○G_P3_3V
○LCD_VDD3V
○P1_0V
○P2_5V
○P0_9V_AUX
○P1_2V_AUX
○P1_2V_LAN
○P1_8V_AUX
○P2_0V_REF
○P2_1V_LAN
○P3_3V_LED
○P3_3V_LED
○VDD_LED
○P3_3V_MCD
○P3_3V_MCD
○P3_3V_SUB
○P5_0V_AUX
○P5_0V_AUX
○P5_0V_STB
○P5_0V_STB
○P12_0V_ALW
○P12_0V_ALW
○P4_75V_AUD
○P2_39V_VREF
○P2_39V_VREF
○P5_0V_AUX_C
○P5_0V_USB_SUB
○P5_0V_USB_SUB
○SPV10
○SUB_GND_A
○VDC
○VDD1D1
○VDD2D1
○VCC_CRT
○VDD_LED

DRAW	XIE BIN	DATE	08/18/2009	TITLE	Suzhou-D Test Point	SAMSUNG ELECTRONICS
CHECK	GUO LEI	DEV. STEP	ADV			
APPROVAL	BC LEE	REV	0.1			
				PART NO.	BA41-xxxxxxA	
MODULE CODE	LAST EDIT			July 15, 2009 19:25:13 PM		PAGE 57 OF 58