

Samsung

NP-RV420, NP-RV520, NP-RV720

Scala2_R

CPU : Sandy Bridge PGA
Chip Set : Intel Cougar Point
GFX : N12P-GV/N12M-GE
Remarks : Huron River Platform

Model Name : Scala2_R
PBA Name : MAIN
PCB Code : BA41- 01609A (GCE)
BA41- 01608A (NY)
BA41- 01610A (HAN)
BA41-01XXXXA (GBM)
Dev. Step : ADV
Revision : 0.1
T.R. Date : 2011.01.20

Design	CHECK	APPROVAL
<i>GU HUI</i>	<i>SJ WU</i>	<i>BC LEE</i>

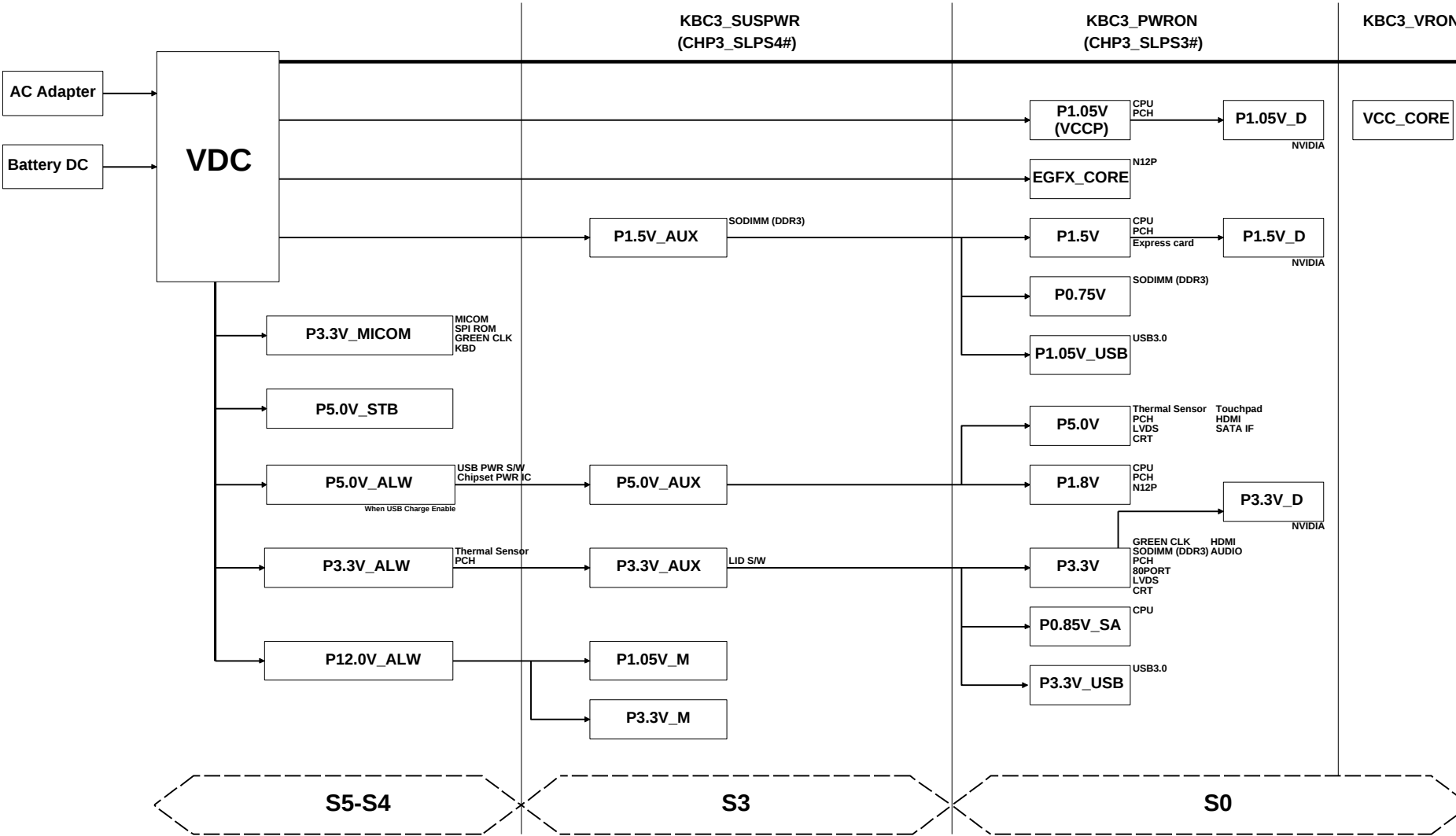
■ Owner : SRDC PD3

Signature : *GUHUI*

sheet01 : Cover
sheet02 : BLOCK DIAGRAM
sheet03 : BOARD INFORMATION
sheet04 : POWER DIAGRAM
sheet05 : CLOCK DISTRIBUTION
sheet06 : Thermal Sensor
sheet07 : CPU
sheet08 : CPU
sheet09 : CPU
sheet10 : CPU
sheet11 : DDR3 SODIMM #0
sheet12 : DDR3 SODIMM #1
sheet13 : PCH-CougarPoint
sheet14 : PCH-CougarPoint
sheet15 : PCH-CougarPoint
sheet16 : PCH-CougarPoint
sheet17 : PCH-CougarPoint
sheet18 : 80 port
sheet19 : N12P-GV
sheet20 : N12P-GV
sheet21 : N12P-GV
sheet22 : N12P-GV
sheet23 : GFX memory
sheet24 : GFX memory

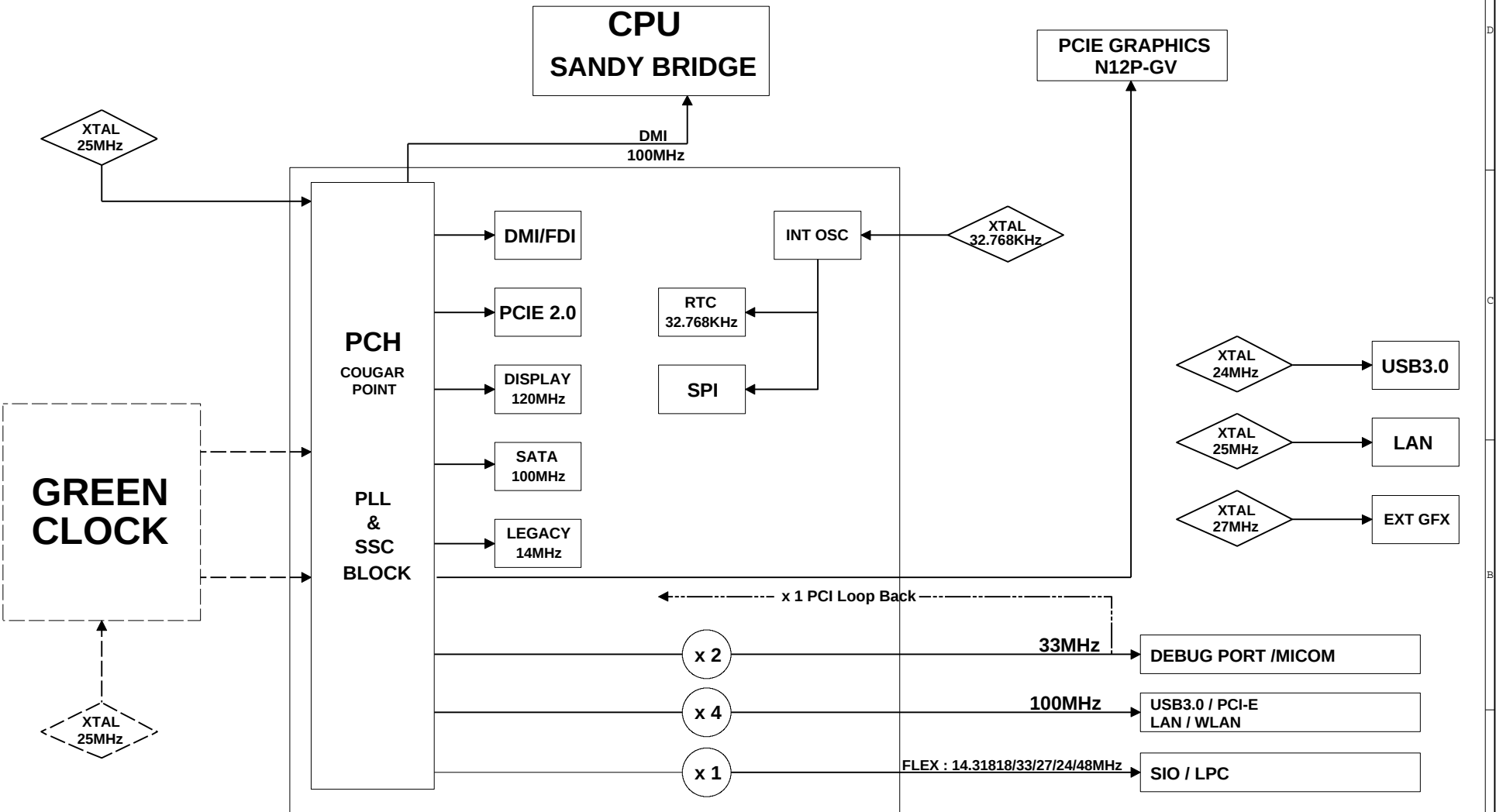
sheet25 : LVDS/CAMERA
sheet26 : CRT
sheet27 : HDMI
sheet28 : Audio - ALC269
sheet29 : Audio - HP/MIC
sheet30 : LAN (Realtek RTL8111E)
sheet31 : WLAN
sheet32 : SATA interface
sheet33 : MICOM / BIOS
sheet34 : MICOM Glue Logic (KBD / TP)
sheet35 : USB connector
sheet36 : Power - charger
sheet37 : Power - P3.3V_AUX / P5.0V_AUX
sheet38 : Power - P1.05V (Chipset Power)
sheet39 : Power - P0.8V (Chipset Power)
sheet40 : Power - DDR3
sheet41 : Power - CPU VRM
sheet42 : Power - EGFX_CORE
sheet43 : Power - Switched Power 1
sheet44 : Power - Switched Power 2
sheet45 : Power - Power Discharge
sheet46 : 3-in-1 card (AU6437)
sheet47 : Touchpad & LED
sheet48 : Mount Hole

DRAW	Gu Hui	DATE	1/03/2011	TITLE	Scala2-R	SAMSUNG ELECTRONICS
CHECK	SJ WU	DEV. STEP	ADV		MAIN	
APPROVAL	BC LEE	REV	rev. 0.1		COVER	
MODULE CODE		LAST EDIT	January 20, 2011 18:59:20 PM	PAGE	1 OF 48	
						PART NO. BA41-01XXXXA



DRAW	Gu Hui	DATE	1/03/2011	TITLE	Scala2-R MAIN POWER DIAGRAM	SAMSUNG ELECTRONICS PART NO. BA41-01XXXX
CHECK	SJ Wu	DEV. STEP	ADV			
APPROVAL	BC LEE	REV	rev. 0.1			
MODULE CODE	undefined	LAST EDIT		January 20, 2011 18:59:20 PM	PAGE 4 OF 48	

CLOCK DISTRIBUTION Rev. 0.8

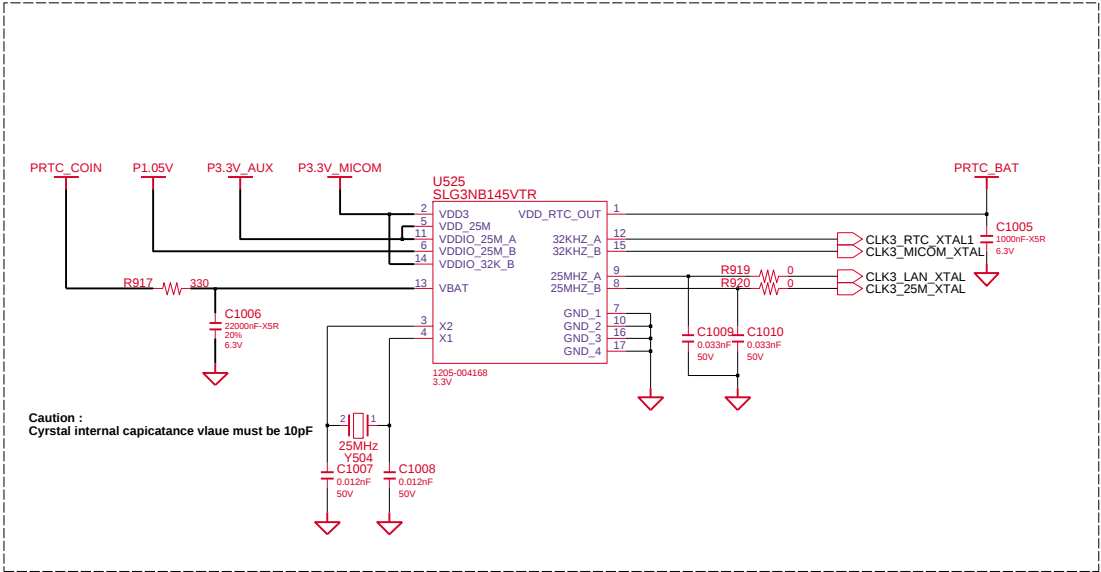


ORAW	Gu Hui	DATE	1/03/2011	TITLE	Scala2-R MAIN	SAMSUNG ELECTRONICS
CHECK	SJ Wu	DEV. STEP	ADV			
APPROVAL	BC LEE	REV	rev. 0.1			
MODULE CODE	undefined	LAST EDIT				
				January 20, 2011 18:59:20 PM	PAGE	5 OF 48

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CLOCK DISTIBUTOR



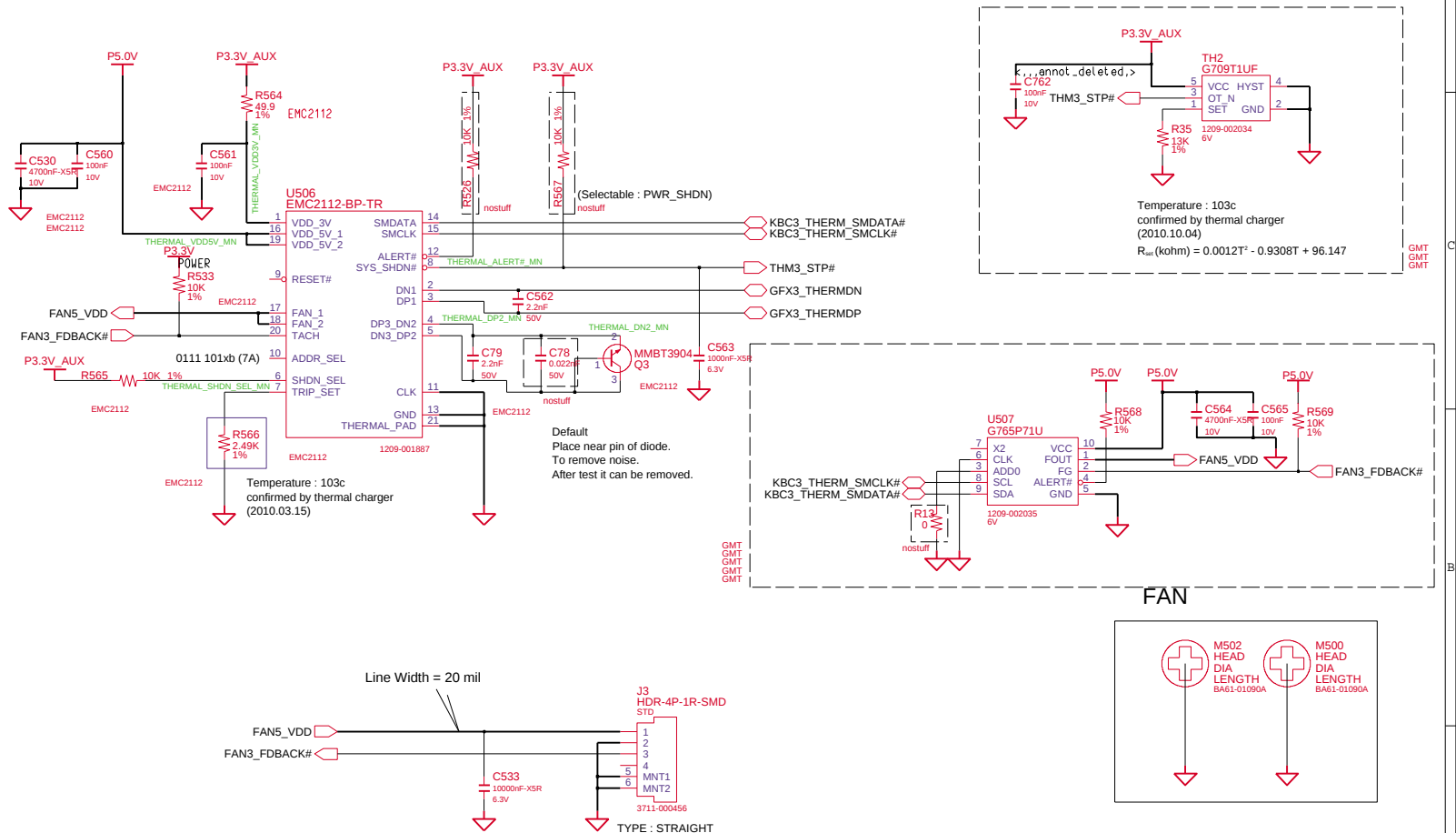
GREENCLK
GREENCLK
GREENCLK
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GREENCLK
GREENCLK
GREENCLK
GREENCLK
GREENCLK
GREENCLK
GREENCLK

ENGINEER	DATE	TITLE	SAMSUNG ELECTRONICS
DESIGNED BY	short_date	SCALA2-R_PV_MAIN	
CHANGED BY	DEV. STEP	Module Name	
FIG. CHK	REV	1.0	
LAST EDIT		last_edit	PAGE 6 OF XX

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THERMAL SENSOR & FAN CONTROL



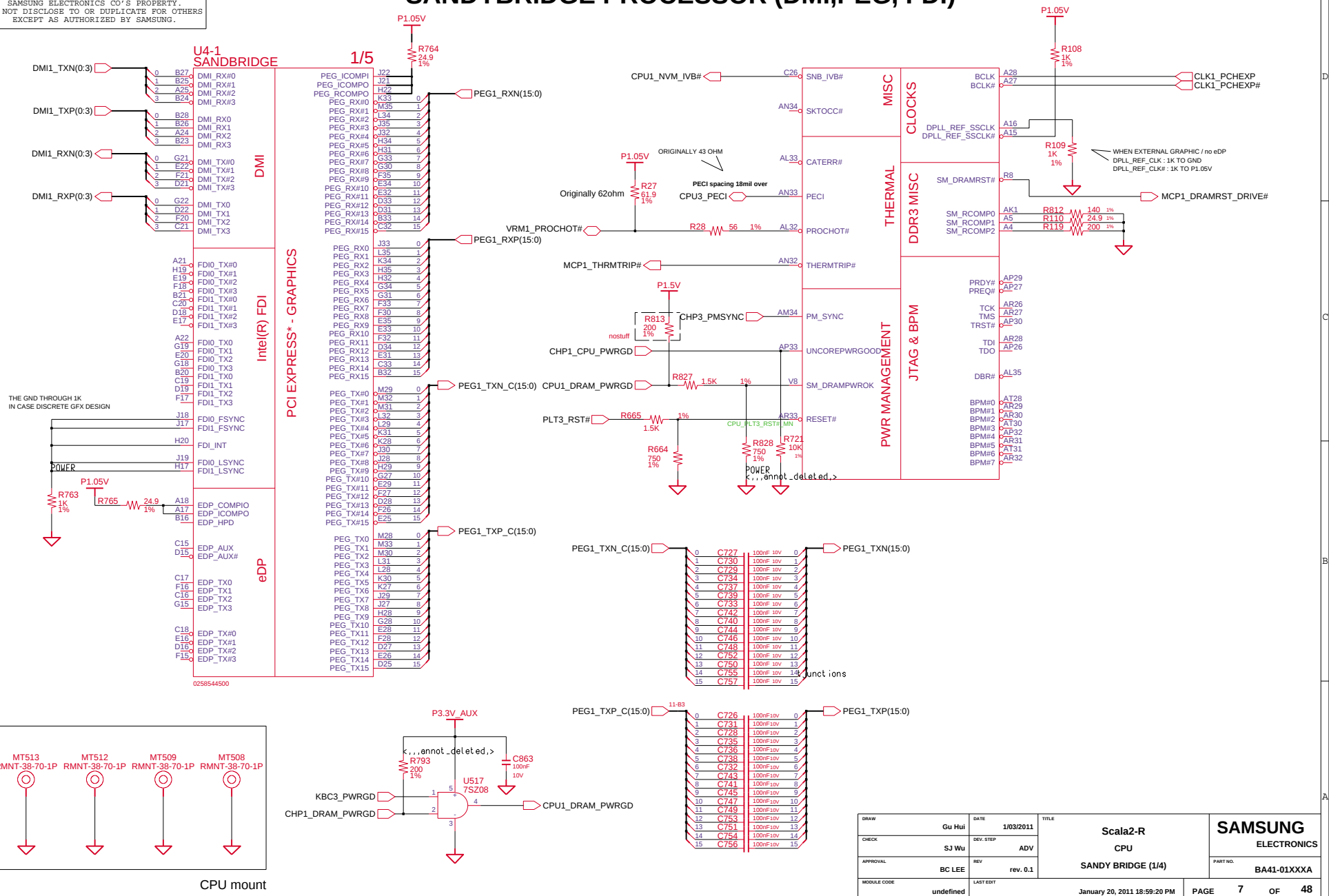
ADDRESSSEL MODE	
0	0101 111xb
✓ HIGH Z	0111 101xb (7A)
1	0101 110xb

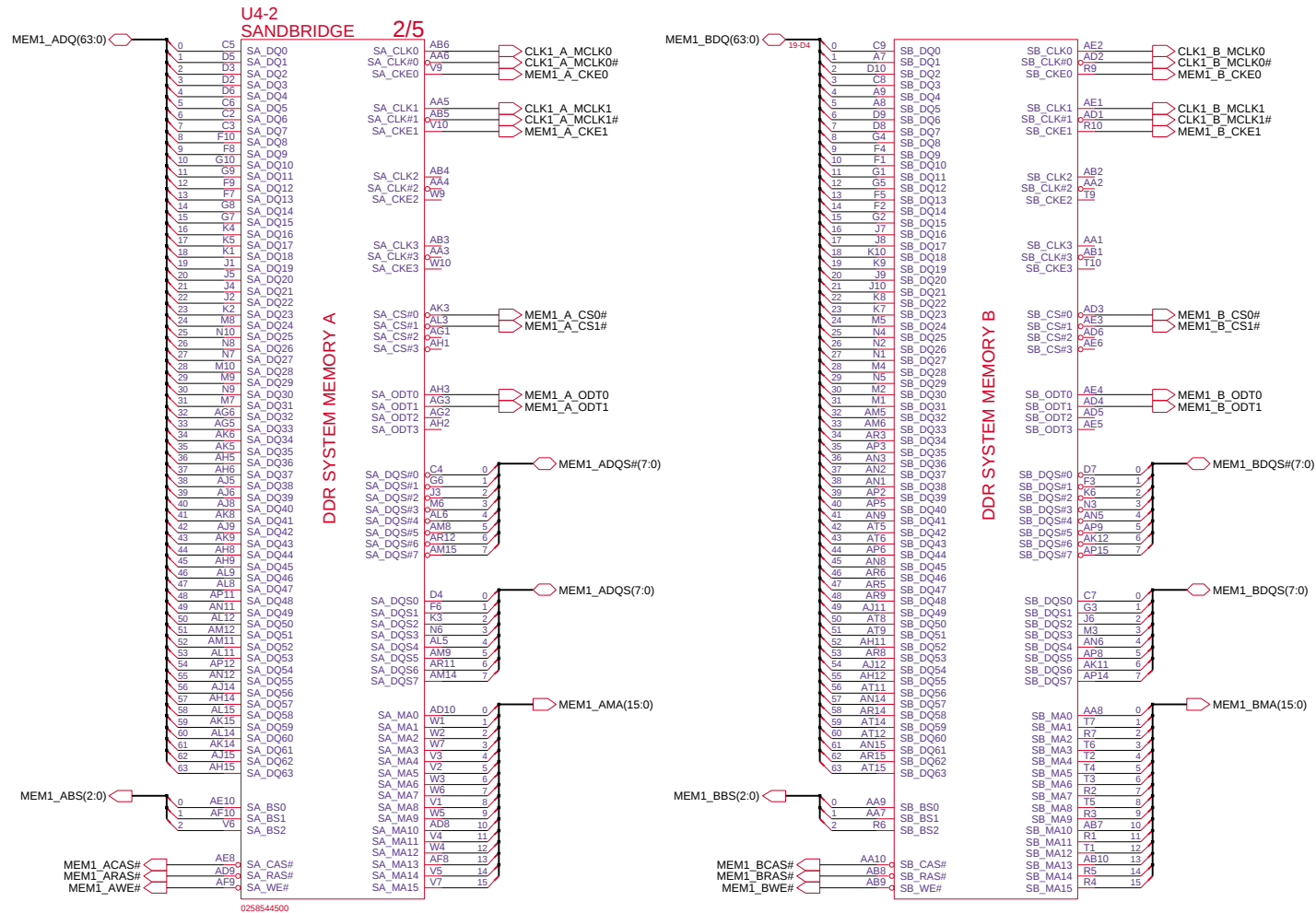
SHDNSEL MODE	
0	INTEL TR MODE
✓ HIGH Z	AMD CPU/DIODE MODE
1	EXT.DIODE 2 MODE

DESIGN	Gu Hui	DATE	1/03/2011	TITLE	Scala2-R	SAMSUNG ELECTRONICS
CHECK	SJ Wu	DEV. STEP	ADV		THERMAL SENSOR	
APPROVAL	BC LEE	REV	rev. 0.1		THERMAL SENSOR EMC2112	PART NO. BA41-01XXXA
MODULE CODE		LAST EDIT			January 20, 2011 18:59:20 PM	PAGE 6 OF 48

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SANDYBRIDGE PROCESSOR (DMI,PEG, FDI)

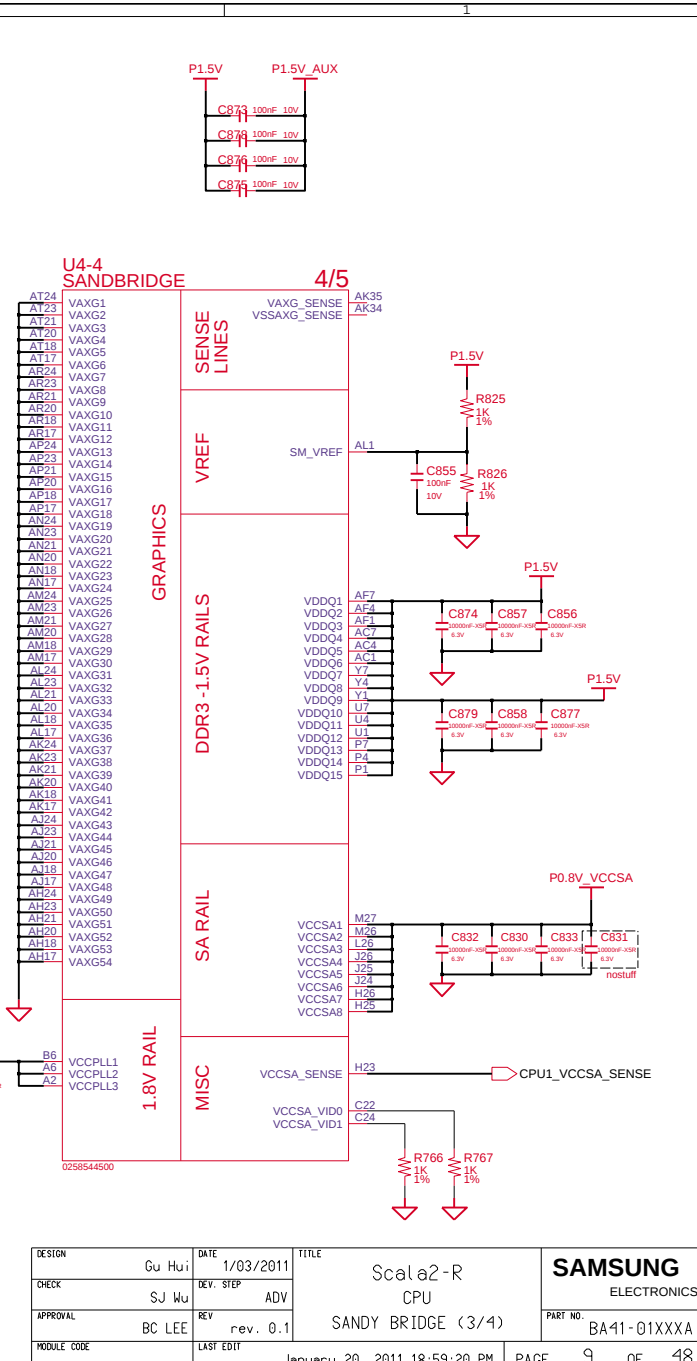
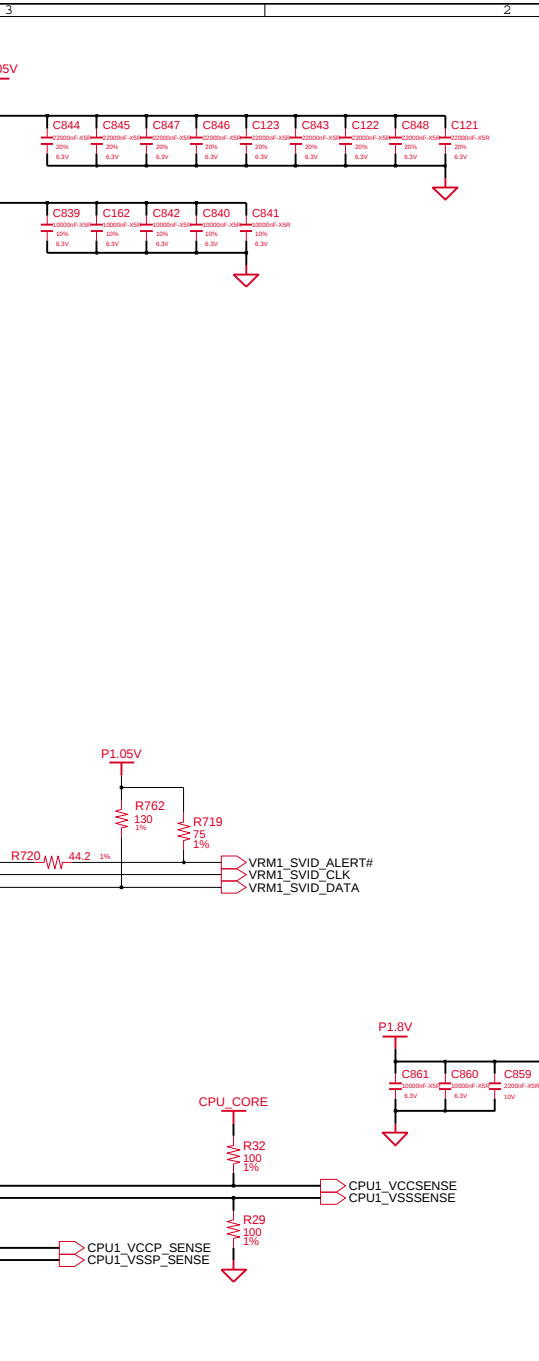
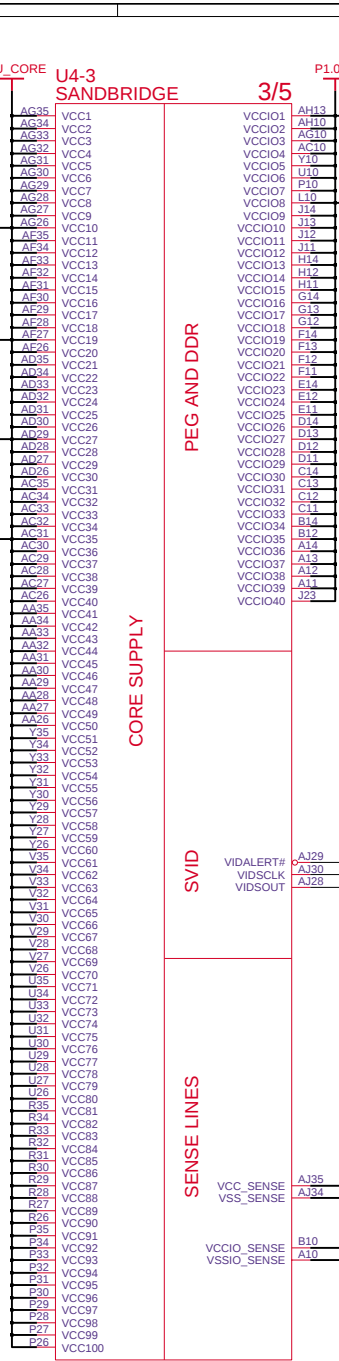
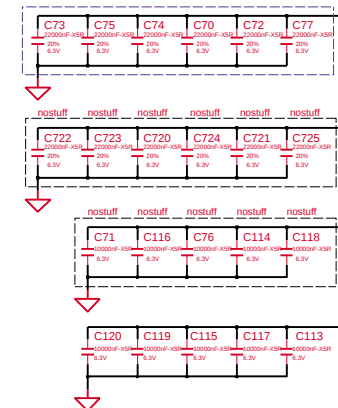




ORAW	Gu Hui	DATE	1/03/2011	TITLE	Scala2-R CPU	SAMSUNG ELECTRONICS
CHECK	SJ Wu	DEV. STEP	ADV			
APPROVAL	BC LEE	REV	rev. 0.1		SANDY BRIDGE (2/4)	PART NO. BA41-01XXXXA
MODULE CODE	undefined	LAST EDIT		January 20, 2011 18:59:20 PM	PAGE	8 OF 48

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Quadcore : Stuff
Dualcore : nostuff



DESIGN	Gu Hui	DATE	1/03/2011	TITLE	Scala2-R CPU	SAMSUNG ELECTRONICS PART NO. BA41-01XXXX
CHECK	SJ Wu	REV	ADV			
APPROVAL	BC LEE	REV	rev. 0.1			
MODULE CODE		LAST EDIT				
				January 20, 2011 18:59:20 PM	PAGE 9 OF 48	

U4-5
SANDBRIDGE 5/5

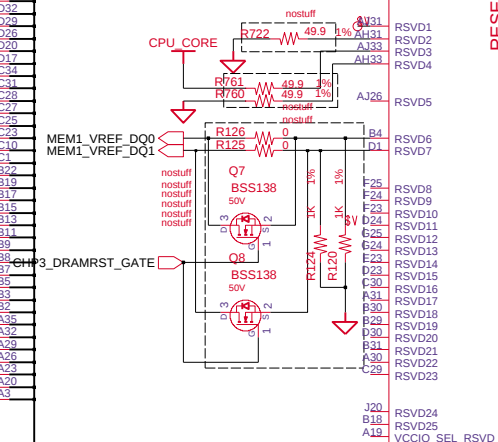
5/5

VSS

VSS

VSS231	F22
VSS235	F19
VSS236	E30
VSS237	F27
VSS238	F27
VSS239	F18
VSS240	F18
VSS241	F13
VSS242	F10
VSS243	F13
VSS244	E9
VSS245	E7
VSS246	E8
VSS247	F7
VSS248	F5
VSS249	F5
VSS250	E2
VSS251	E1
VSS252	E1
VSS253	D32
VSS254	D25
VSS255	D25
VSS256	D25
VSS257	D20
VSS258	D27
VSS259	C31
VSS260	C27
VSS261	C27
VSS262	C23
VSS263	C23
VSS264	C10
VSS265	C10
VSS266	B22
VSS267	B19
VSS268	B17
VSS269	B17
VSS270	B13
VSS271	B14
VSS272	B9
VSS273	B9
VSS274	C19
VSS275	B5
VSS276	B5
VSS277	B3
VSS278	B3
VSS279	A32
VSS280	A29
VSS281	A29
VSS282	A26
VSS283	A26
VSS284	A20
VSS285	A3

F22
F19
E30
E27
E24
E21
E18
E15
E13
E10
E9
E8
E7
E6
E5
E4
E3
E2
E1
D35
D32
D29
D26
D20
D17
C34
C31
C28
C27
C25
C23
C10
C1
B22
B19
B17
B13
B11
B9
B8
B7
B5
B3
B2
A35
A32
A29
A26
A23
A20
A3



RESERVED

AK29	CF60	RESERVED
AL26	CF61	
AL27	CF62	
AK26	CF63	
AL29	CF64	
AL30	CF65	
AM31	CF67	
AM32	CF68	
AM28	CF69	
AM26	CF70	
CF23	CF71	
AM26	CF72	
AM26	CF73	
AM27	CF74	
AK31	CF75	
AM29	CF76	
AM29	CF77	
AK33	RSVD1	
AK33	RSVD2	
AK33	RSVD3	
AK33	RSVD4	
	RSVD5	
A126	RSVD6	
B4	RSVD7	
D1		
F25	RSVD8	
F24	RSVD9	
F25	RSVD10	
F25	RSVD11	
F24	RSVD12	
F23	RSVD13	
F23	RSVD14	
F23	RSVD15	
F23	RSVD16	
F23	RSVD17	
F23	RSVD18	
F23	RSVD19	
F23	RSVD20	
F23	RSVD21	
F23	RSVD22	
F23	RSVD23	
J20	RSVD24	
A18	RSVD25	
B10	VCCIO_SEL	
	RSVD	

RSVD28	L7
RSVD29	AG7
RSVD30	AE7
RSVD31	AK2
RSVD32	W8
RSVD33	AT26
RSVD34	AM33
RSVD35	AJ27
RSVD37	T8
RSVD38	I16
RSVD39	H16
RSVD40	G16
RSVD41	AR35
RSVD42	AT34
RSVD43	AT33
RSVD44	AP35
RSVD45	AR34
RSVD46	B34
RSVD47	A33
RSVD48	B35
RSVD49	A34
RSVD50	C35
RSVD51	AJ32
RSVD52	AK32
RSVD53	AH27
RSVD54	AN35
RSVD55	AM35
RSVD56	AT2
RSVD57	AT1
RSVD58	AT1
RSVD59	AT1

FOR RPGA SOCKET
RSVD59 PIN SHOULD BE LEFT NC

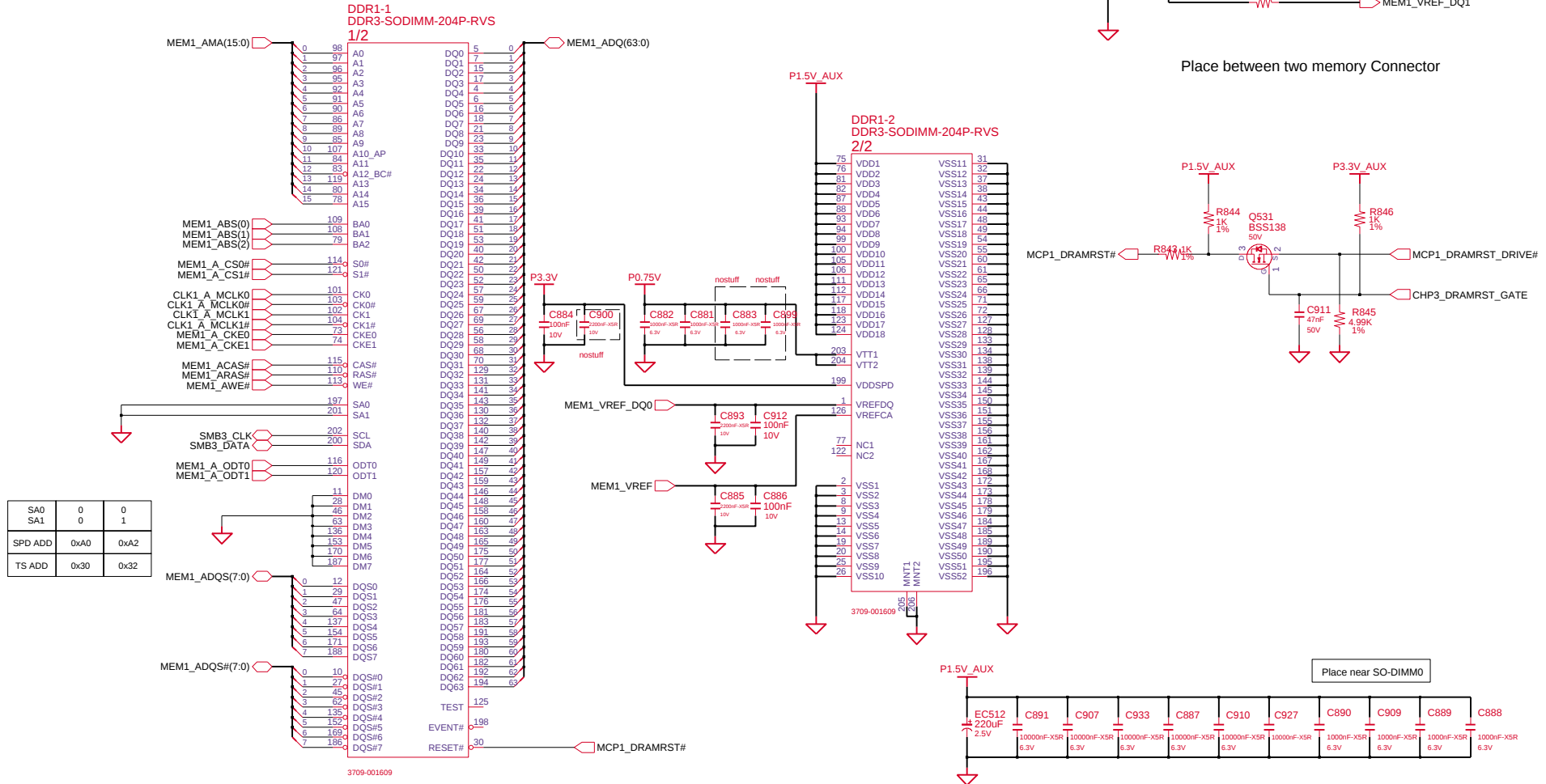
PEG STATIC LANE REVERSAL - CFG2 IS FOR THE 16X	
CFG2	1: (DEFAULT) NORMAL OPERATION 0: LANE REVERSED
PCIE PORT BIFURCACTION STRAPS	
CFG6[5]	11: (DEFAULT) X16 - DEVICE 1 FUNCTIONS 1 AND 2 DISABLED 10: X8, X8 - DEVICE 1 FUNCTION 1 ENABLED; FUNCTION 2 DISABLED 01: RESERVED - (DEVICE 1 FUNCTION 1 DISABLED; FUNCTION 2 ENABLED) 00: X8, X4, X4 - DEVICE 1 FUNCTIONS 1 AND 2 ENABLED
Display Port Presence	
CFG4	1: Disabled - No DP device is connected to eDP 0: Enabled - (DP device is connected to eDP
PEG DEFER TRAINING	
CFG7	1: (DEFAULT) PEG TRAIN IMMEDIATELY FOLLOWING XRESETB DEASSERTION 0: PEG WAIT FOR BIOS FOR TRAINING

DESIGN	Gu Hui	DATE	1/03/2011	TITLE Scala2-R CPU SANDY BRIDGE (4/4)	SAMSUNG ELECTRONICS
CHECK	SJ Wu	DEV. STEP	ADV		
APPROVAL	BC LEE	REV	rev. 0.1		
MODULE CODE		LAST EDIT	January 20, 2011 18:59:20 PM		
				PART NO.	BA41-01XXXXA

SO-DIMM#0 : 2nd SO-DIMM

DDR SO-DIMM #0

Height : 9.2 mm (REVERSE)
P/N : 3709-001609 (CONCRAFT)
P/N : 3709-001656 (Foxconn)



DRAW	Gu Hui	DATE	1/03/2011	TITLE	Scala2-R SODIMM A DDR3	PART NO.	SAMSUNG ELECTRONICS BA41-01XXXX
CHECK	SJ Wu	DEV. STEP	ADV				
APPROVAL	BC LEE	REV	rev. 0.1				
MODULE CODE	undefined	LAST EDIT	January 20, 2011 18:59:20 PM		PAGE	11	OF 48

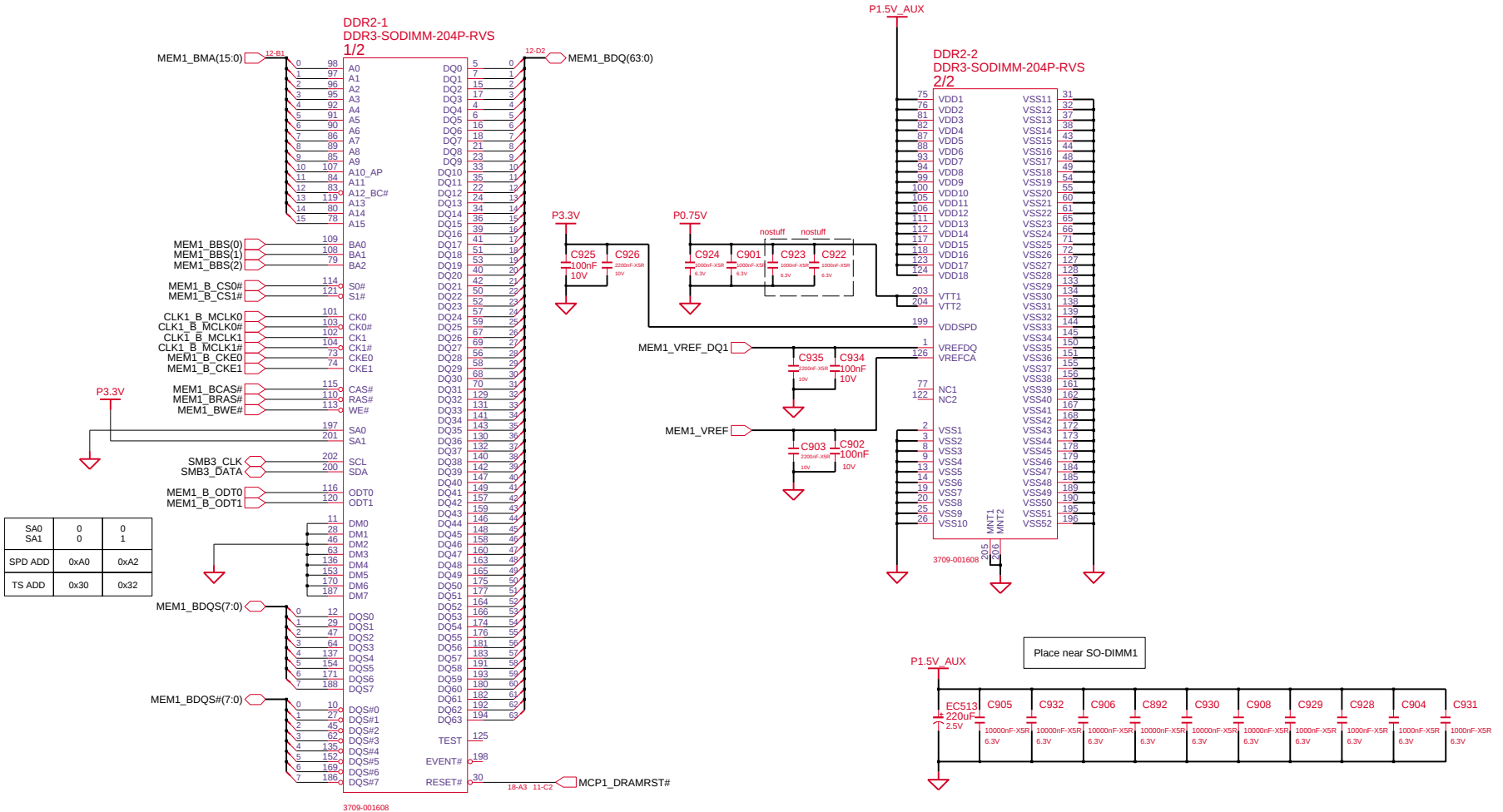
SO-DIMM#1 : 1st SO-DIMM

DDR SO-DIMM #1

Height : 4 mm (REVERSE)

P/N : 3709-001608 (CONCRAFT)

P/N : 3709-001654 (Foxconn)

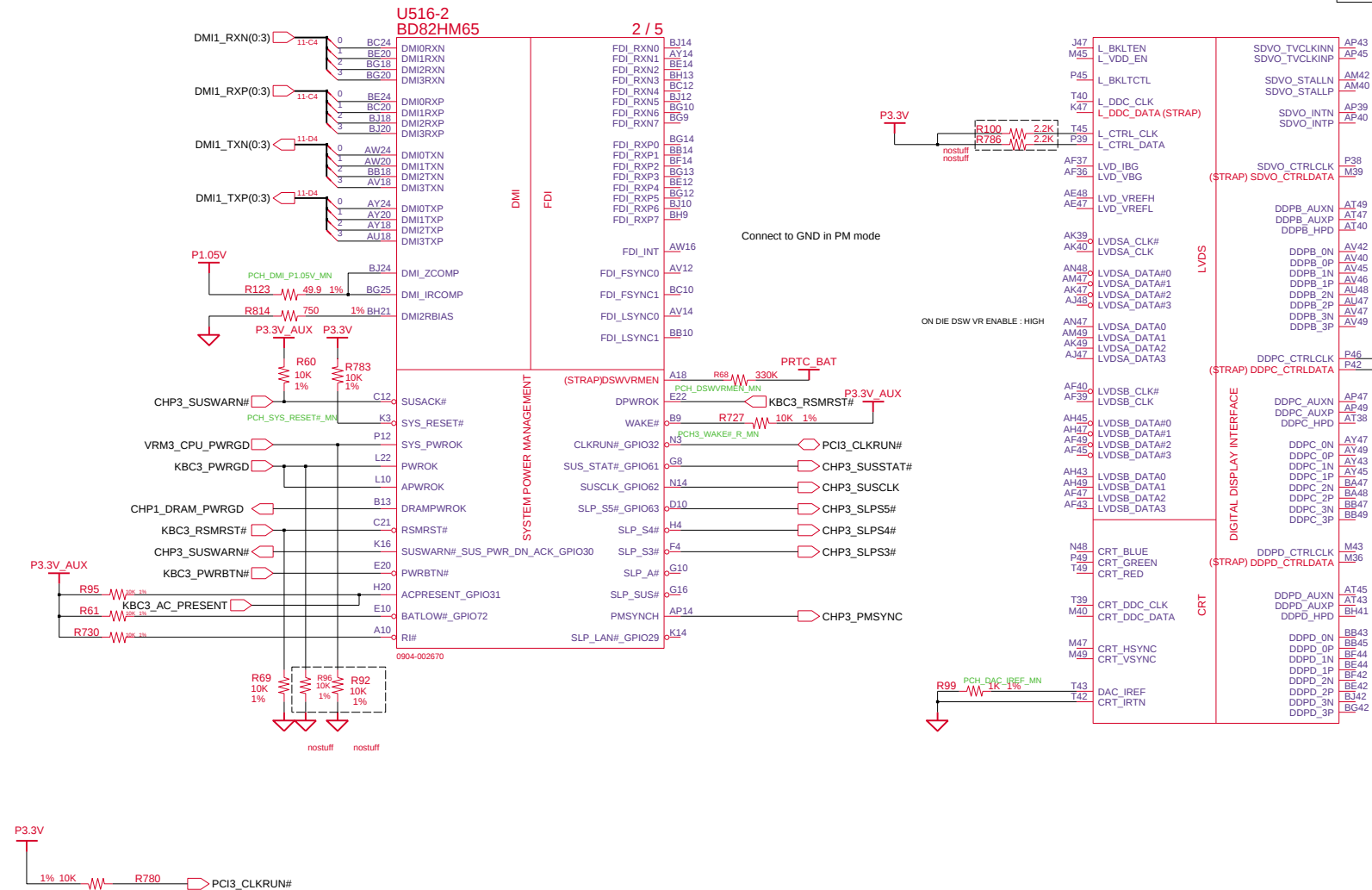


DRW	Gu Hui	DATE	1/03/2011	Scala2-R SODIMM B DDR3	SAMSUNG ELECTRONICS
CHECK	SJ Wu	DEV. STEP	ADV		
APPROVAL	BC LEE	REV	rev. 0.1		
				PART NO.	BA41-01XXXX
MODULE CODE	LAST EDIT			January 20, 2011 18:59:20 PM	PAGE 12 OF 48

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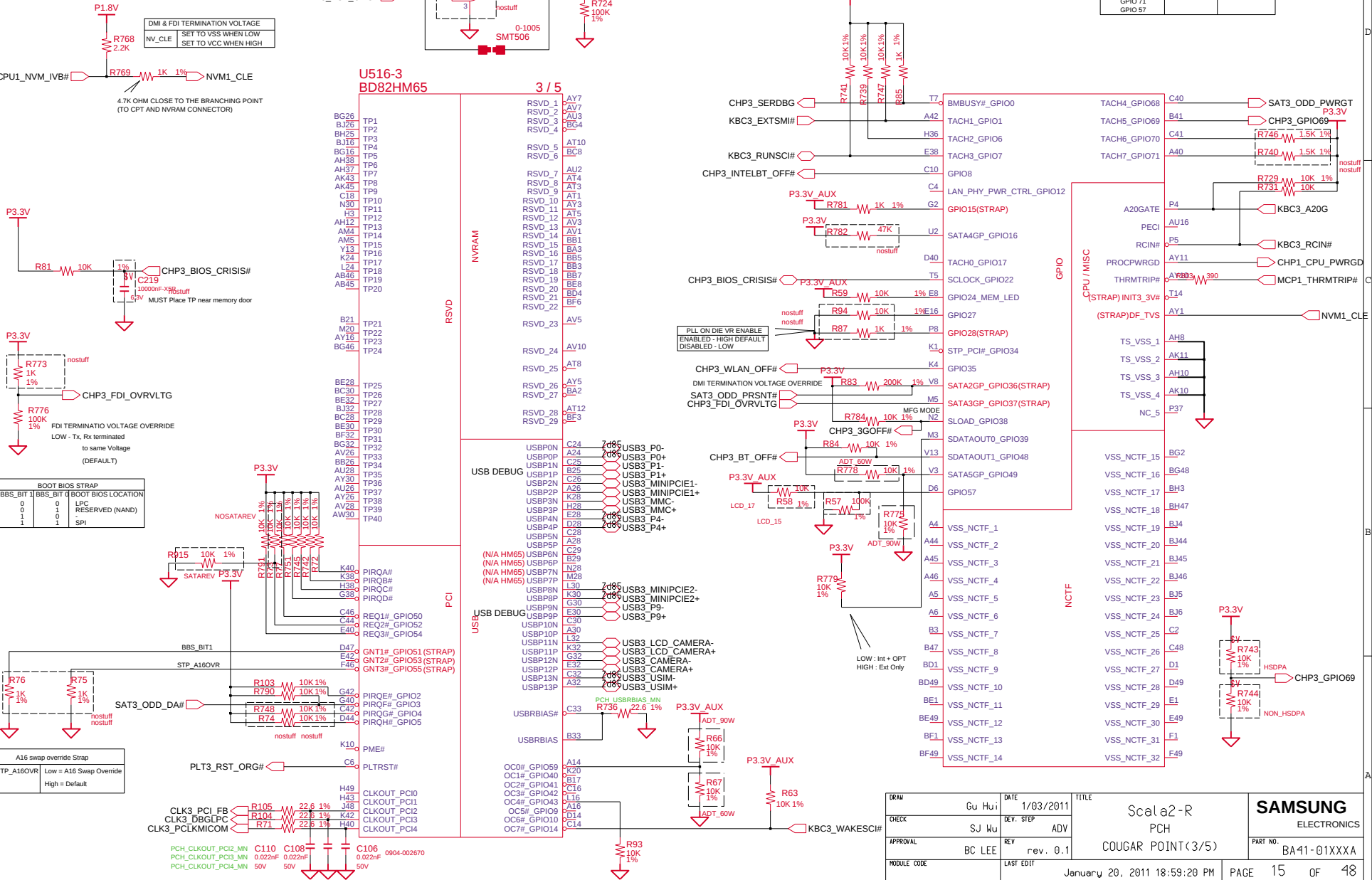


DDI PORT B DETECT	
SDVO_CTRL_DATA	1 PORT B DETECTED 0 PORT B NOT DETECTED

DRAW	Gu Hui	DATE	1/03/2011	TITLE	Scala2-R PCH	SAMSUNG ELECTRONICS
CHECK	SJ Wu	DEV. STEP	ADV			
APPROVAL	BC LEE	REV	rev. 0.1		COUGAR POINT(2/5)	PART NO. BA41-01XXXXA
MODULE CODE		LAST EDIT				

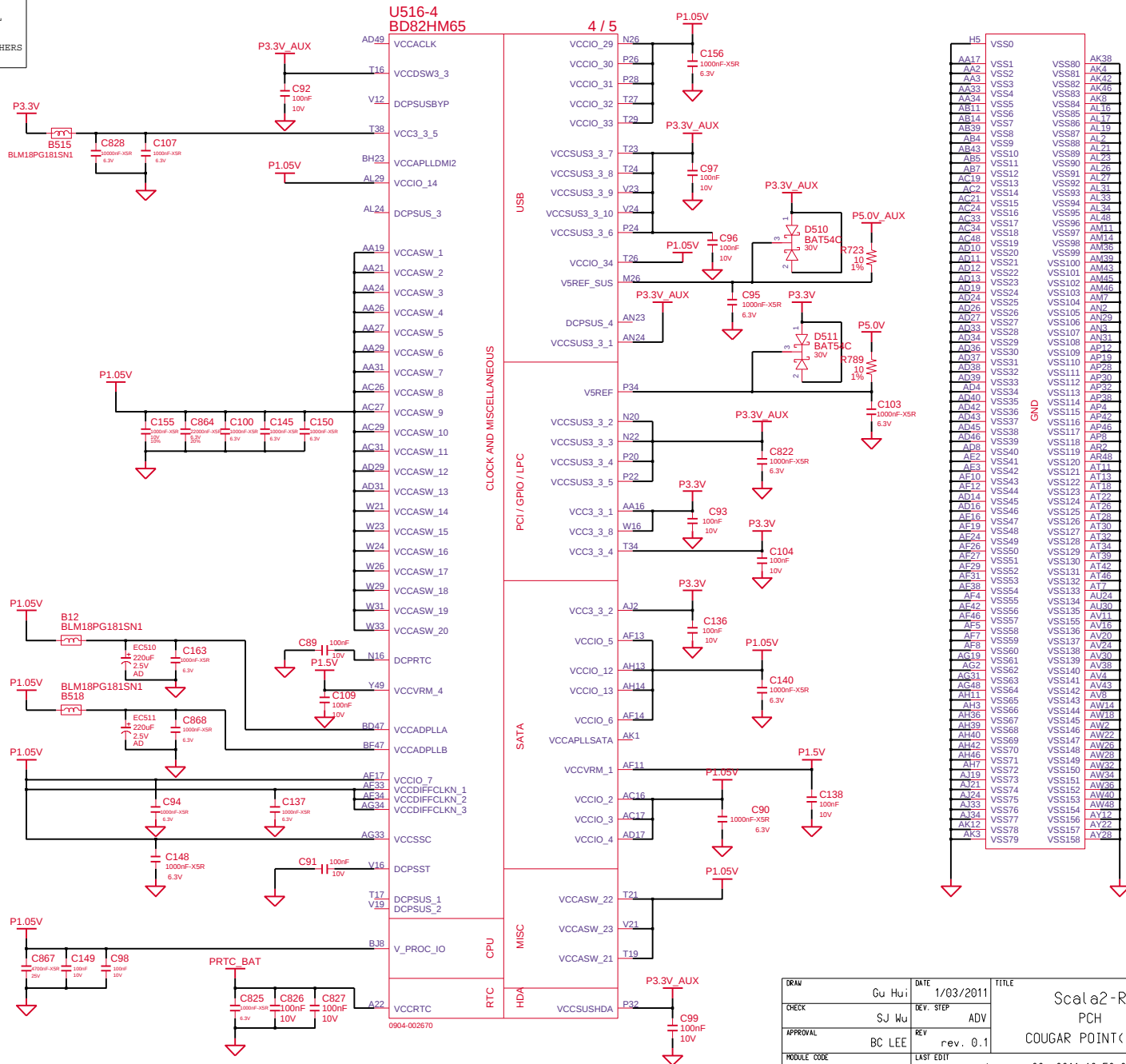
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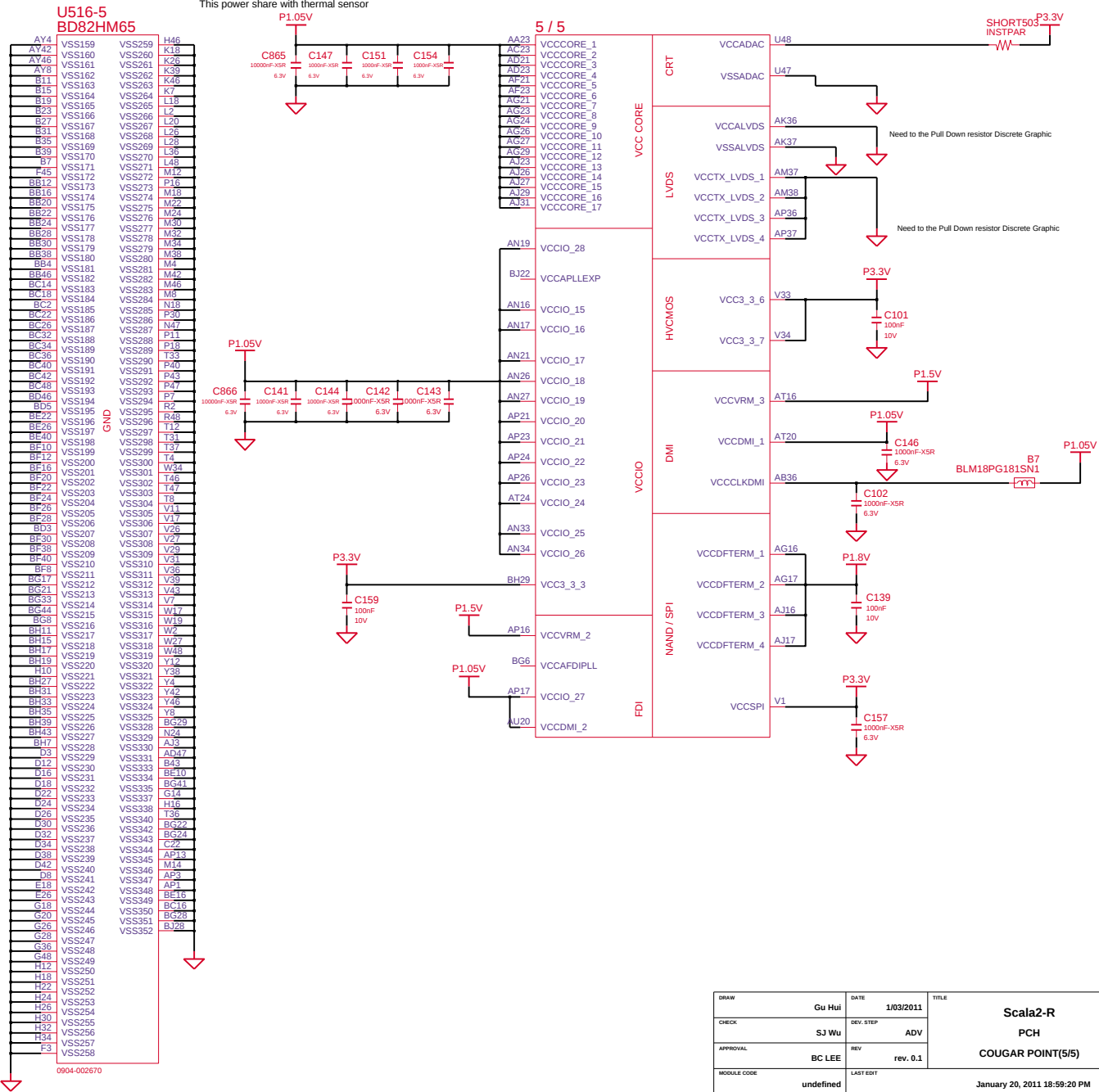


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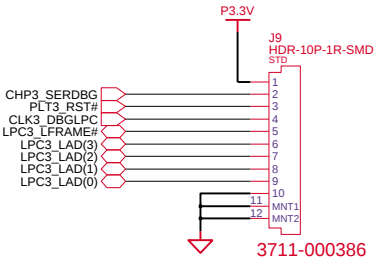
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CHECK	SJ Wu	DEV. STEP	ADV	PCH		
APPROVAL	BC LEE	REV	rev. 0.1	COUGAR POINT(5/5)	PART NO.	BA41-01XXXXA
MODULE CODE	undefined	LAST EDIT		January 20, 2011 18:59:20 PM	PAGE	17 OF 48

3

2

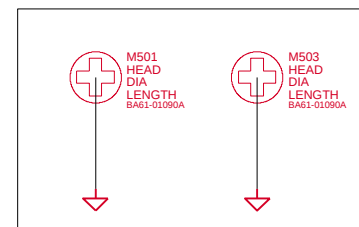
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80H PORT DEBUG



DESIGN	Gu Hui	DATE	1/03/2011	TITLE	Scale2-R DEBUG PORT 80H DECODER	SAMSUNG ELECTRONICS PART NO. BA41-01XXXX
CHECK	SJ Wu	DEV. STEP	ADV			
APPROVAL	BC LEE	REV	rev. 0.1			
MODULE CODE		LAST EDIT	January 20, 2011 18:59:20 PM	PAGE	18 OF 48	

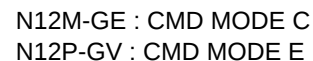
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Graphic PEM

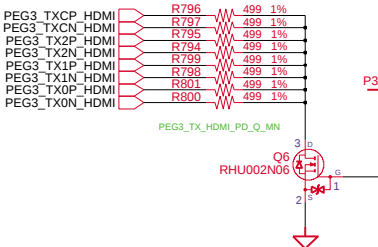
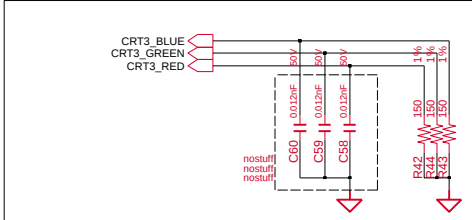
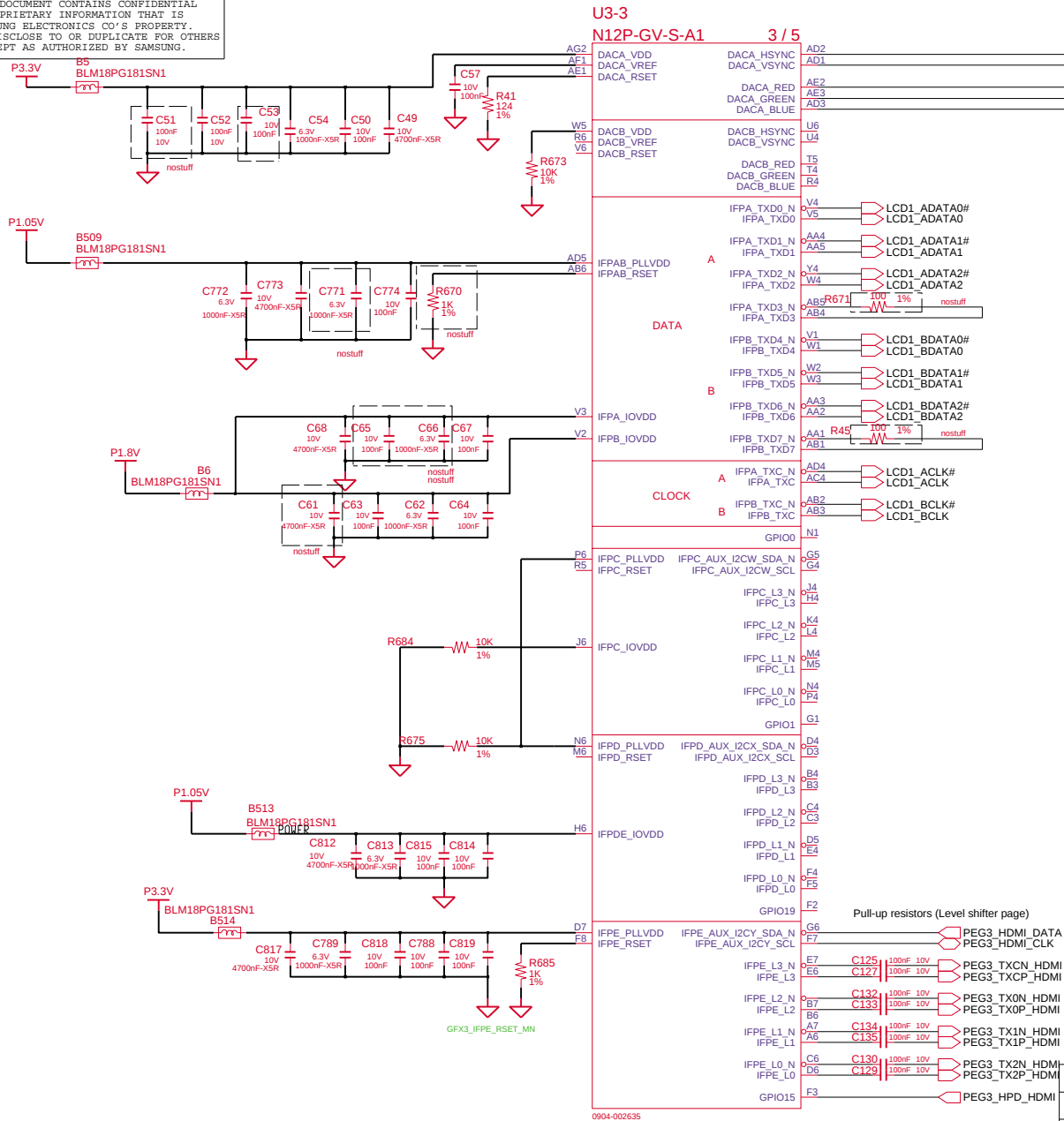
DESIGN	Gu Hui	DATE	1/03/2011	Scala2-R N12P_40NM(1/4) N12P_40NM(1/4)			
CHECK	SJ WU	DEV. STEP	ADV				
APPROVAL	BC LEE	REV	rev. 0.1				
MODULE CODE		LAST EDIT		January 20, 2011 18:59:20 PM	PAGE	19	OF 48

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DESIGN	Gu Hui	DATE	1/03/2011	Scala2-R N12P_40NM(2/4) N12P_40NM(2/4)	SAMSUNG ELECTRONICS
CHECK	SJ Wu	DEV. STEP	ADV		
APPROVAL	BC LEE	REV	rev. 0.1		
MODULE CODE			LAST EDIT		

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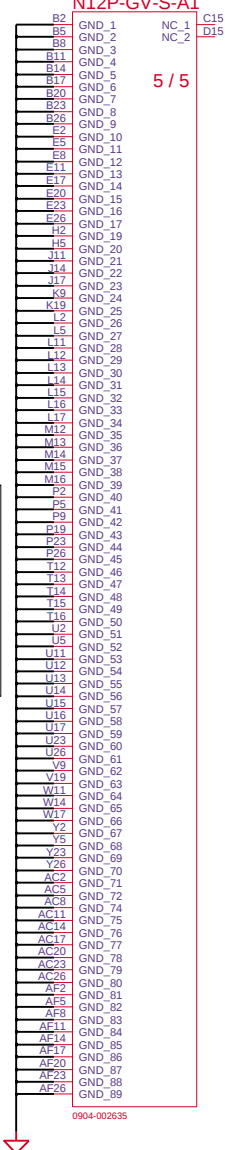


DESIGN	Gu Hui	DATE	1/03/2011	Scala2-R N12P_40NM(3/4) N12P_40NM(3/4)		SAMSUNG ELECTRONICS			
CHECK	SJ Wu	DEV. STEP	ADV						
APPROVAL	BC LEE	REV	rev. 0.1						
MODULE CODE		LAST EDIT		January 20, 2011 18:59:20 PM		PAGE	21	OF	48

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U3-5
N12P-GV-S-A1



Bit3	Bit2	Bit1	Bit0	
0	0	0	0	27M
1	0	1	0	N11M-GE GFX TPYE
0	0	1	0	N11M-LP1
0	0	1	1	gDDR3 1Gb
0	1	1	1	gDDR3 2Gb
0	0	0	0	N11M-GE2
0	1	0	1	N11M-GE1 DEVICE I
1	1	1	0	PEG PCIE swing level
1	1	1	1	EDID_EN



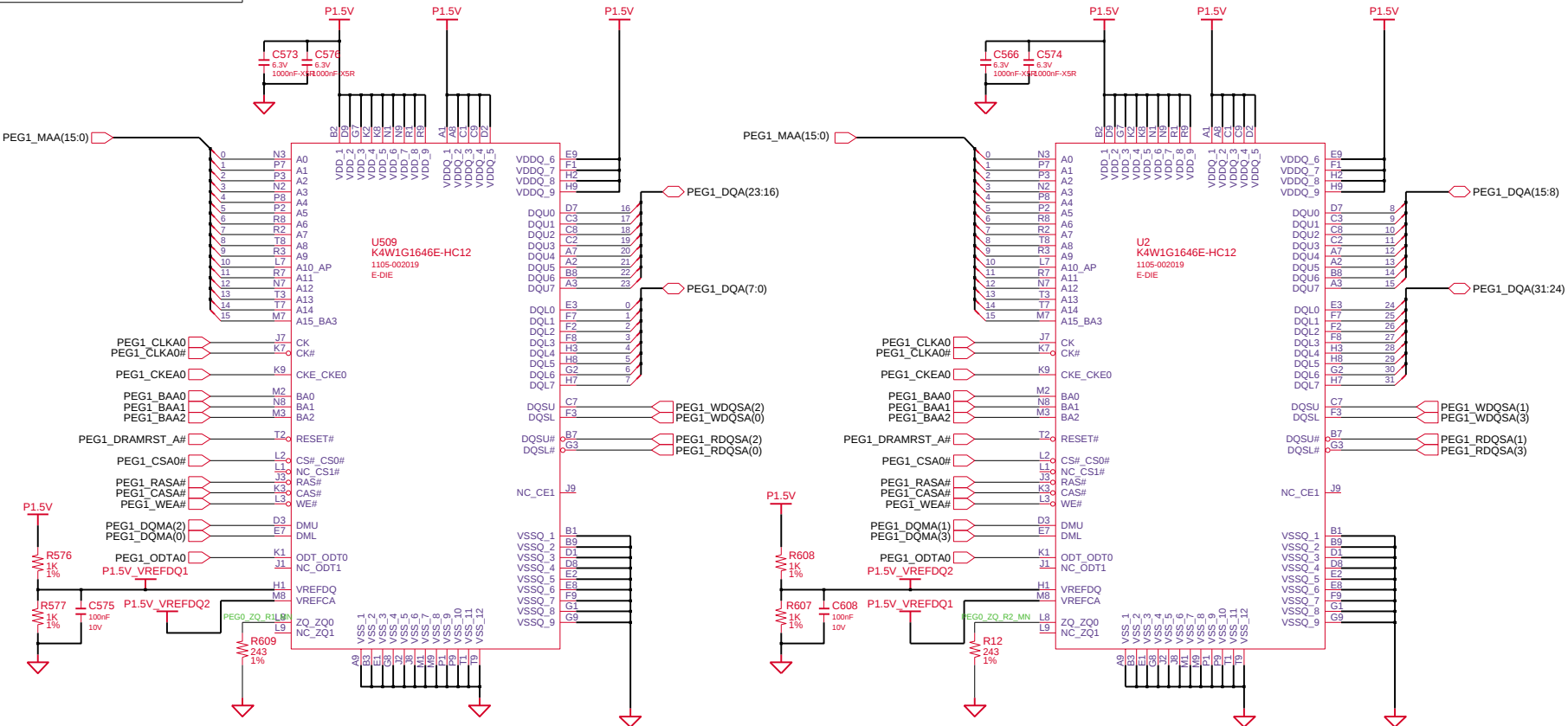
SFX3 STRAP3	Audio for Digital Display Optimus - 0x0	1000
SFX3 STRAP4	Reserved Reserved PCIe 2.0 support Reserved	0001



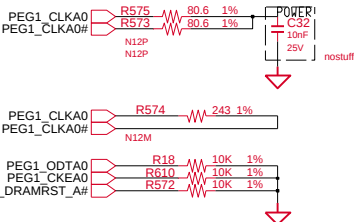
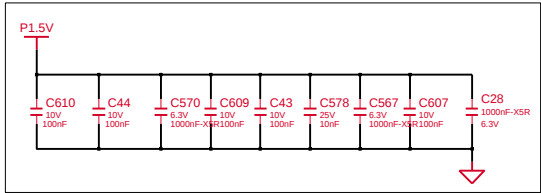
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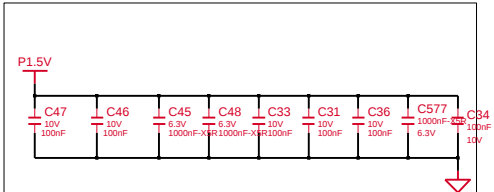
A-Channel #0



Place near to VDDQ



Place near to VDDQ

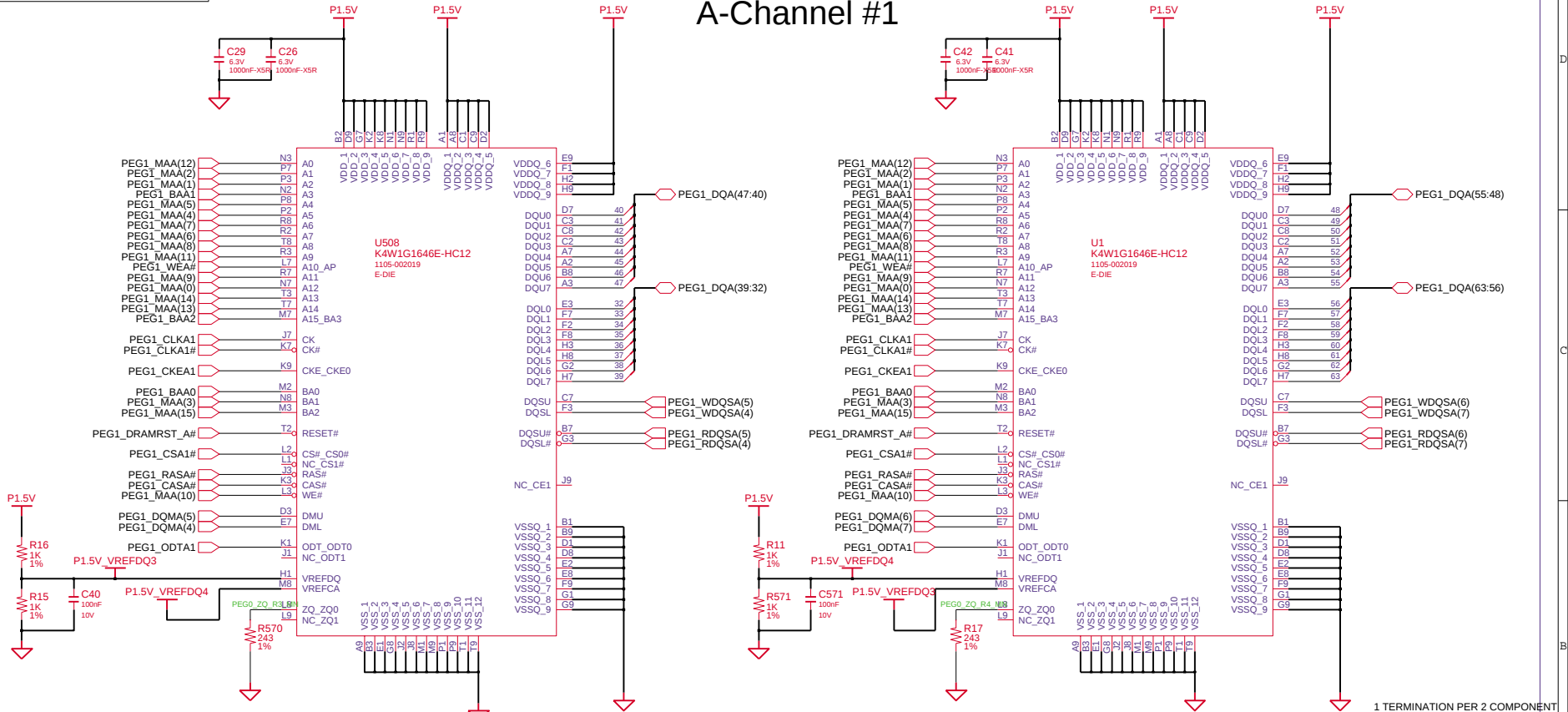


DESIGN	Gu Hui	DATE	1/03/2011	TITLE	Scala2-R	SAMSUNG ELECTRONICS
CHECK	SJ Wu	DEV. STEP	ADV	GRAPHIC_MEM_A#0	PART NO.	
APPROVAL	BC LEE	REV	rev. 0.1	GRAPHIC_MEM_A#0	BA41-01XXXXA	
MODULE CODE	LAST EDIT			January 20, 2011 18:59:20 PM	PAGE 23 OF 48	

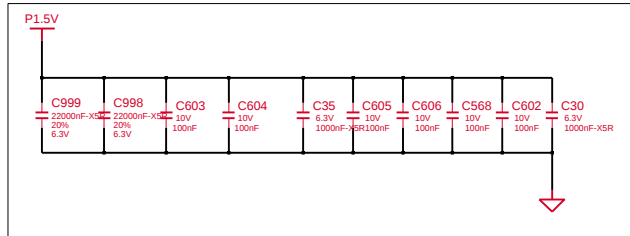
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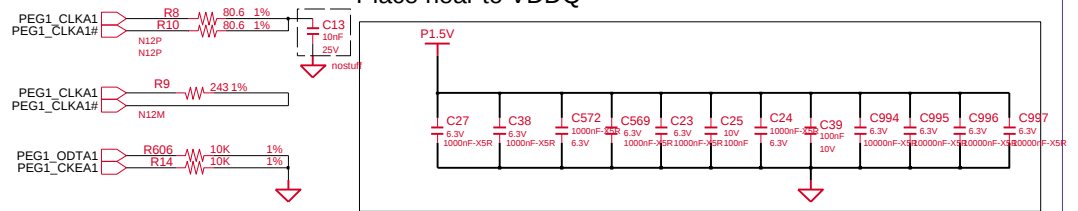
A-Channel #1



Place near to VDDQ



Place near to VDDQ



DESIGN	Gu Hui	DATE	1/03/2011	TITLE	Scala2-R
CHECK	SJ Wu	DEV. STEP	ADV	GRAPHIC_MEM A#1	
APPROVAL	BC LEE	REV	rev. 0.1	GRAPHIC_MEM A#1	
MODULE CODE		LAST EDIT			
January 20, 2011 18:59:20 PM					PAGE 24 OF 48

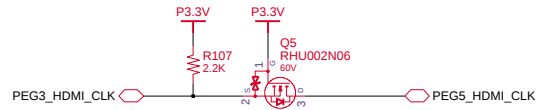
SAMSUNG
 ELECTRONICS
 PART NO. BA41-01XXXXA

SAMSUNG PROPRIETARY

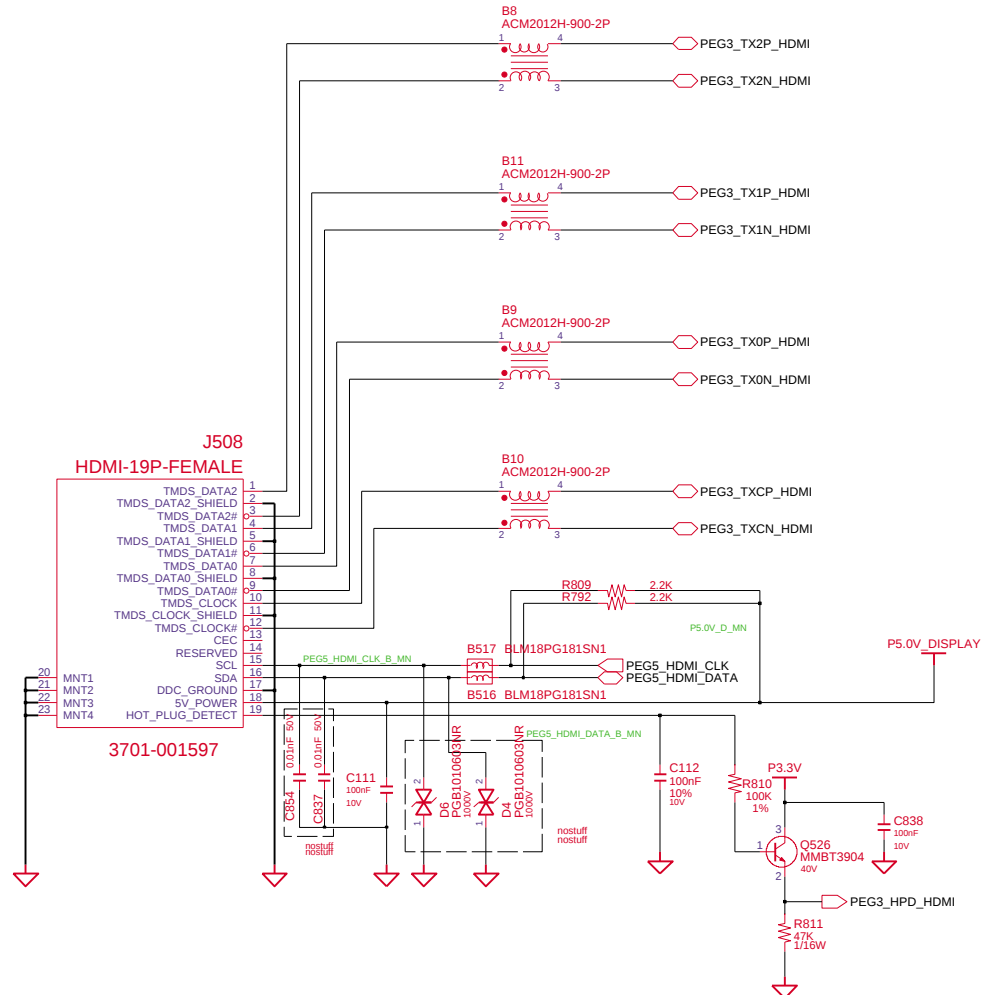
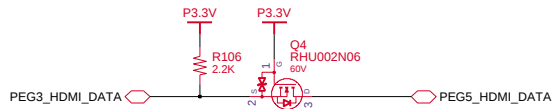
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HDMI Graphic

FOR HDMI VERIFICATION TEST



N10x/N11x_40nm HDMI/DP/LVDS support only 3.3V voltage tolerance

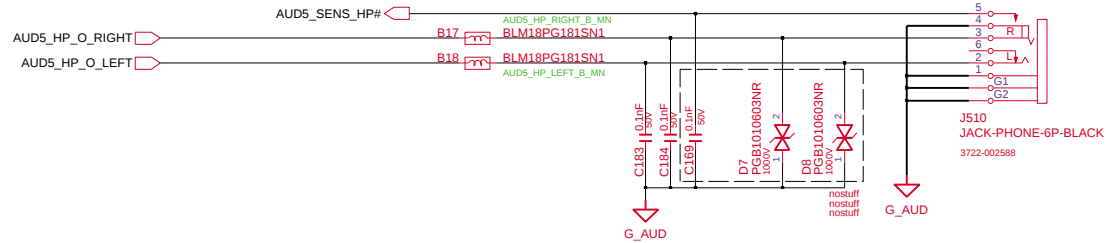


DESIGN	Gu Hui	DATE	1/03/2011	TITLE	Scala2-R	SAMSUNG ELECTRONICS
CHECK	SJ Wu	DEV. STEP	ADV	GRAPHICS_IF		
APPROVAL	BC LEE	REV	rev. 0.1	HDMI		
MODULE CODE		LAST EDIT				
January 20, 2011 18:59:20 PM						PAGE 27 OF 48

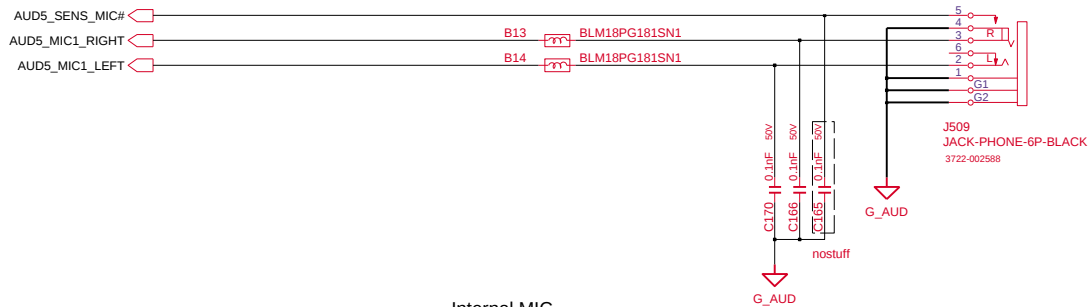
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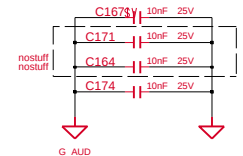
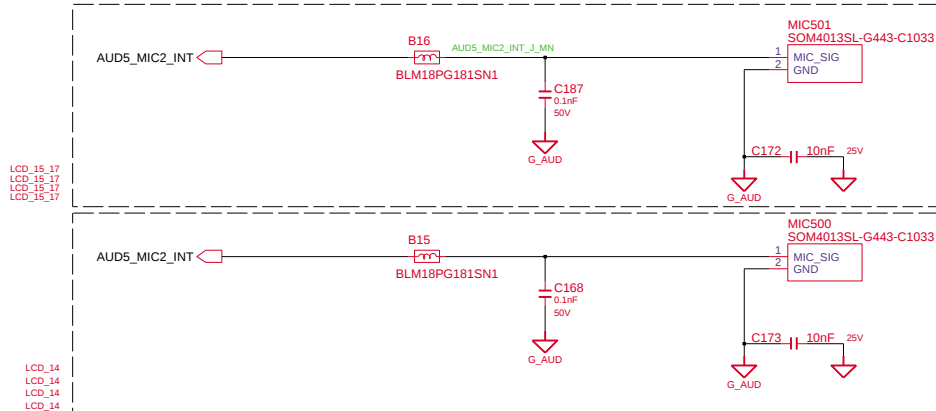
HEADPHONE



MIC JACK

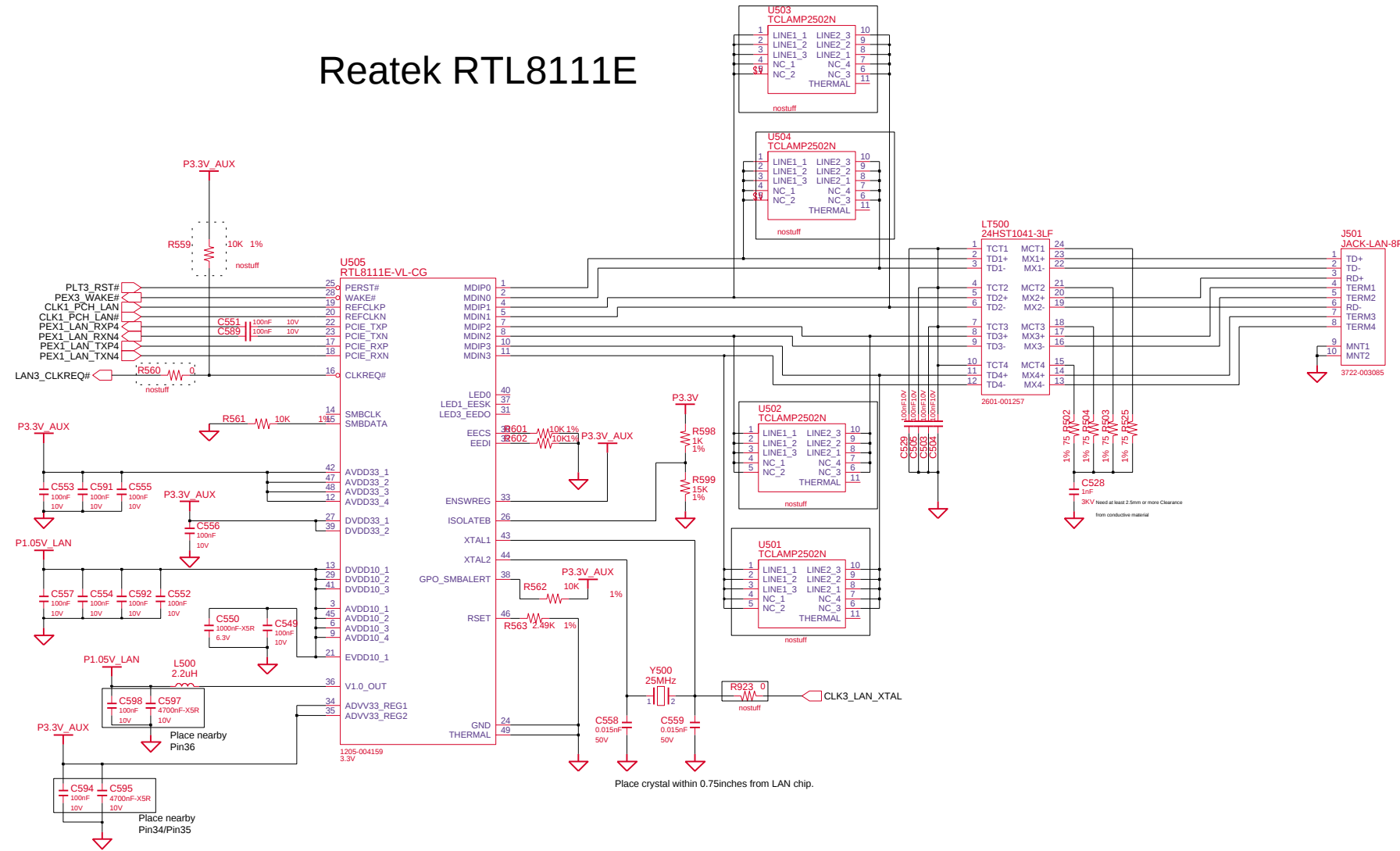


Internal MIC



DESIGN	Gu Hui	DATE	1/03/2011	TITLE	Scala2-R	SAMSUNG ELECTRONICS
CHECK	SJ Wu	DEV. STEP	ADV		HDA_CODEC & LED SUB	
APPROVAL	BC LEE	REV	rev. 0.1		AUDIO JACK & LED SUB	PART NO.
MODULE CODE		LAST EDIT				BA41-01XXXX
January 20, 2011 18:59:20 PM						PAGE 29 OF 48

Reatek RTL8111E



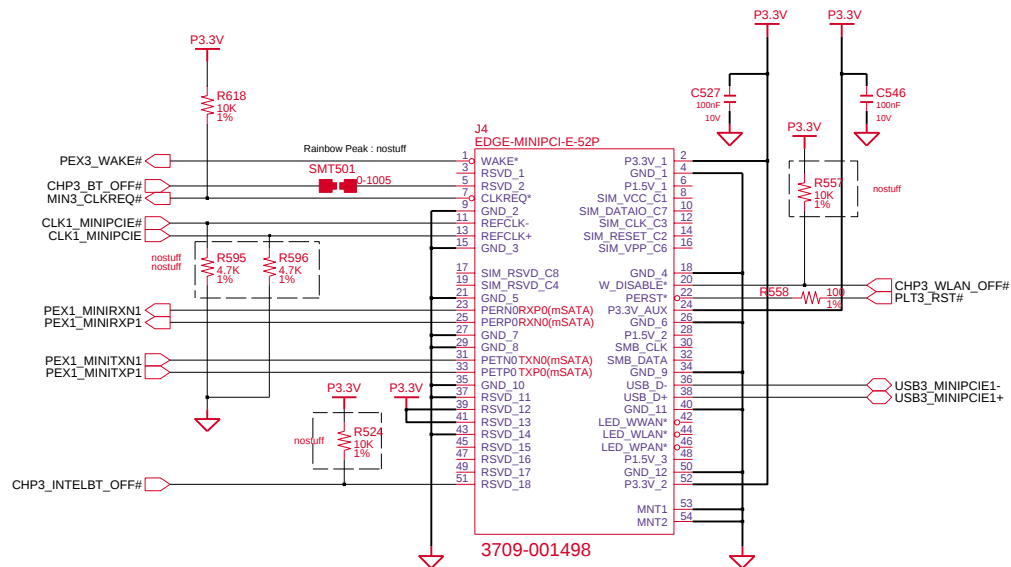
Place crystal within 0.75inches from LAN chip.

DESIGN	Gu Hui	DATE	1/03/2011	TITLE	Scala2-R LAN LAN Reatek RTL8111	SAMSUNG ELECTRONICS PART NO. BA41-01XXXX
CHECK	SJ Wu	DEV. STEP	ADV			
APPROVAL	BC LEE	REV	rev. 0.1			
MODULE CODE		LAST EDIT				
January 20, 2011 18:59:20 PM						PAGE 30 OF 48

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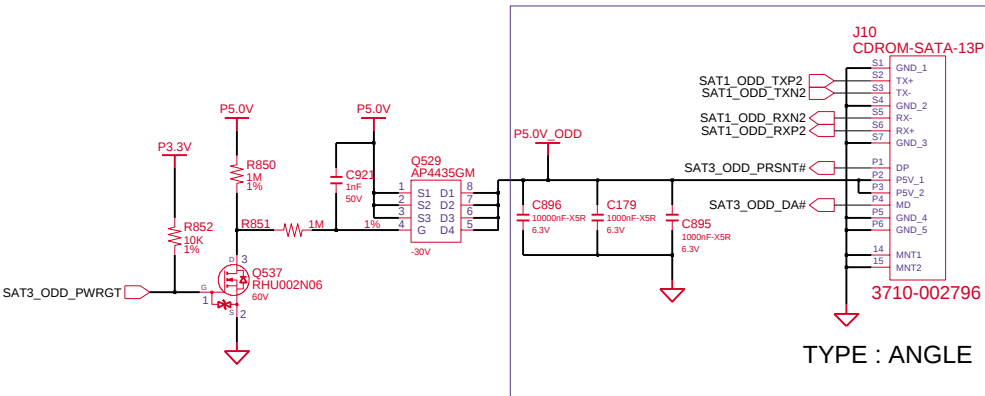
WLAN, 4mm



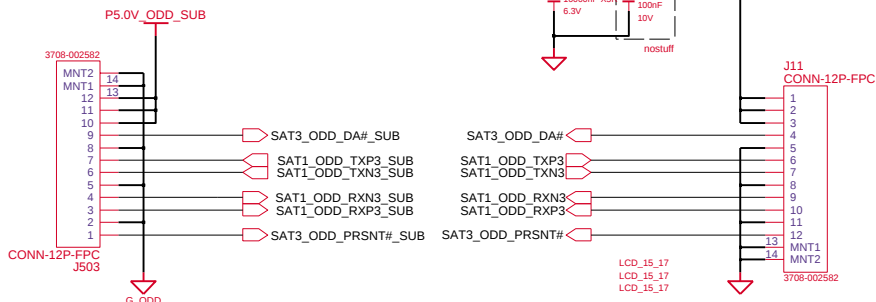
DESIGN	Gu Hui	DATE	1/03/2011	TITLE	Scala2-R	SAMSUNG ELECTRONICS
CHECK	SJ Wu	DEV. STEP	ADV	MINI_PCIE_CONN		
APPROVAL	BC LEE	REV	rev. 0.1	WLAN	PART NO.	BA41-01XXXXA
MODULE CODE		LAST EDIT			January 20, 2011 18:59:20 PM	PAGE 31 OF 48

SATA I/F CONN

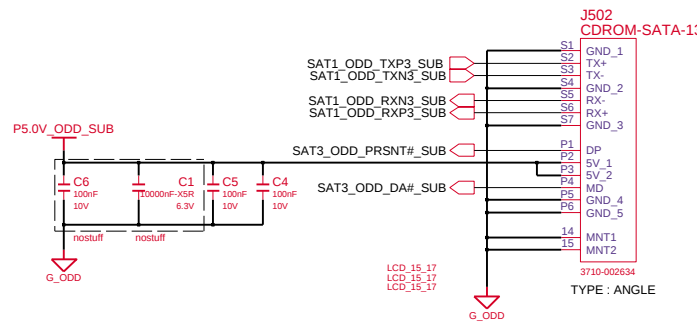
SATA ODD CONN



SUB TO MAIN : SATA ODD CONN

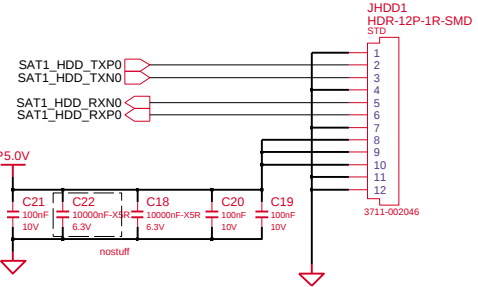


SATA ODD CONN

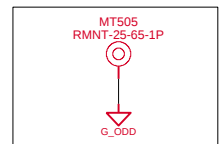
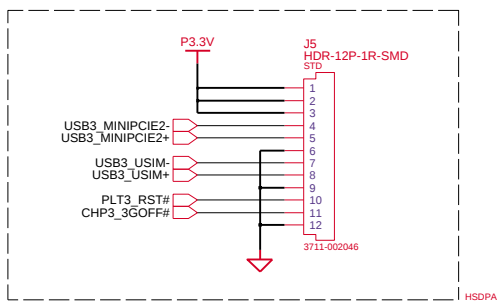


SATA HDD CONN

Cable Connector Type



MAIN to HSDPA SUB



ODD sub board mount hole

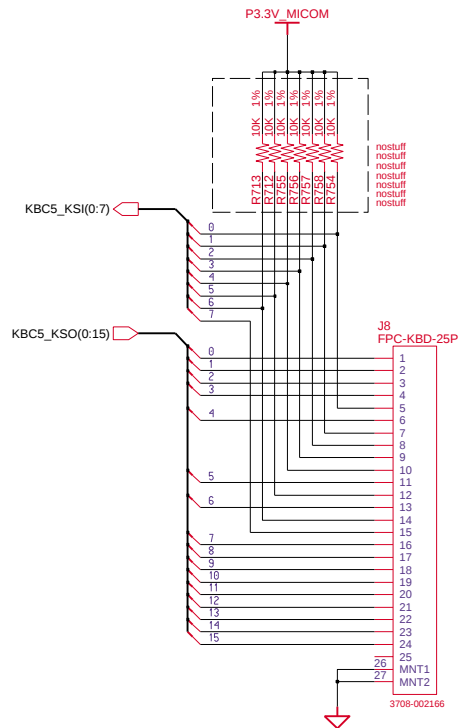
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CHECK	SJ Wu	DEV. STEP	ADV	SATA_DEVICES	ELECTRONICS	
APPROVAL	BC LEE	REV	rev. 0.1	SATA I/F Conn	PART NO.	BA41-01XXXXA
MODULE CODE		LAST EDIT		January 20, 2011 18:59:20 PM	PAGE	32 OF 48

SPI ROM SOCKET

DRWN	Gu Hui	DATE	1/03/2011	TITLE Scala2-R MICOM MICOM-SMSC-MEC1310-NU	SAMSUNG ELECTRONICS
CHECK	SJ Wu	REV. STEP	ADV		
APPROVAL	BC LEE	REV	rev. 0.1		
MODULE CODE		LAST EDIT	January 20, 2011 18:59:20 PM		

Micom Glue Logic

KEYBOARD



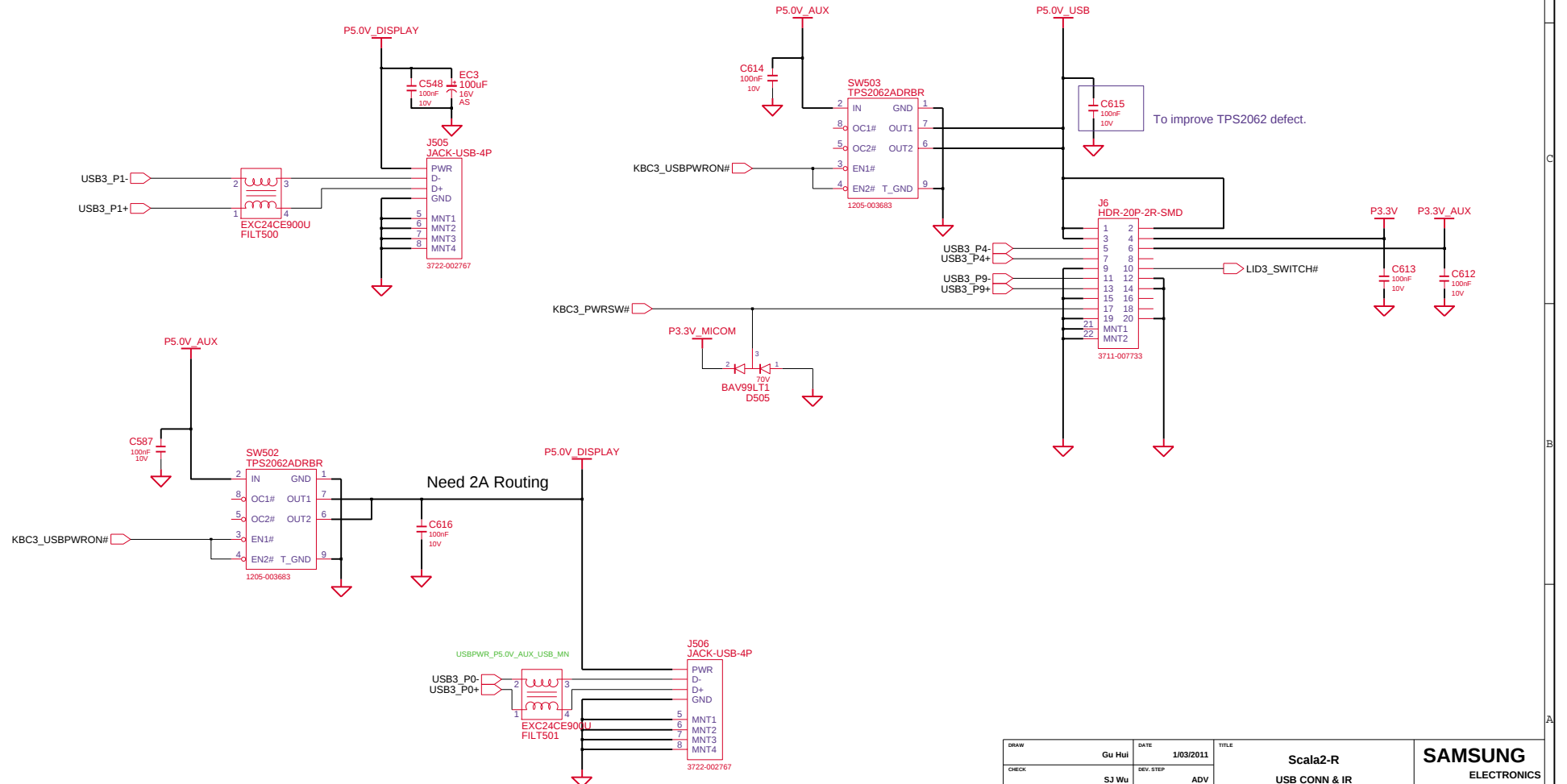
DRAW	Gu Hui	DATE	1/03/2011	TITLE	Scala2-R	SAMSUNG
CHECK	SJ Wu	DEV. STEP	ADV	MICOM GLUE LOGIC		ELECTRONICS
APPROVAL	BC LEE	REV	rev. 0.1	MICOM GLUE LOGIC	PART NO.	BA41-01XXXXA
MODULE CODE		LAST EDIT	January 20, 2011 18:59:20 PM	PAGE	34	OF 48

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POWER S/W SUB B'D CONNECTOR

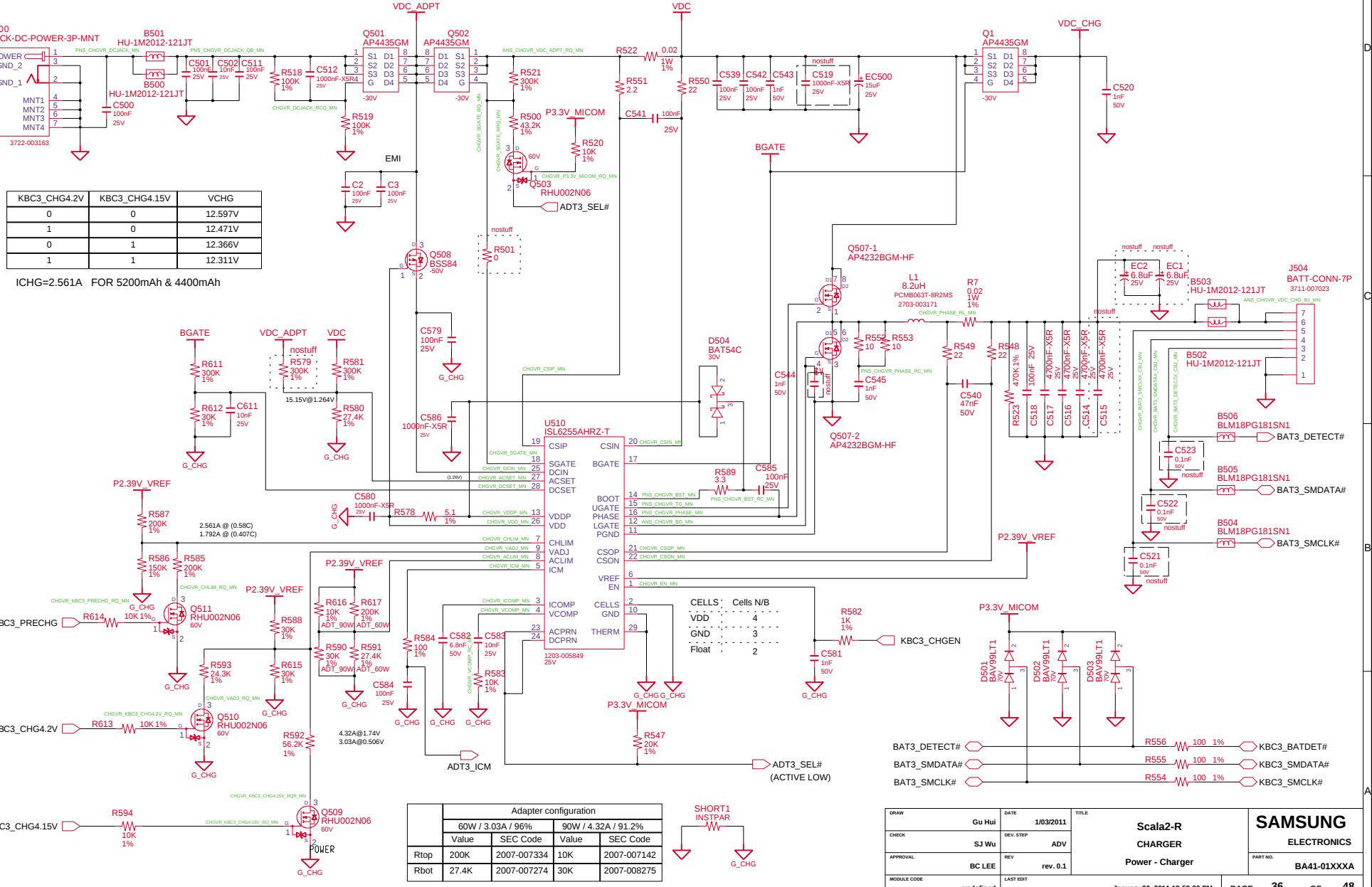
MAIN to SUB



DRAW	Gu Hui	DATE	1/03/2011	TITLE	Scala2-R	SAMSUNG ELECTRONICS
CHECK	SJ Wu	DEV. STEP	ADV		USB CONN & IR	
APPROVAL	BC LEE	REV	rev. 0.1		USB & IR	PART NO.
MODULE CODE		LAST EDIT				BA41-01XXXXA
January 20, 2011 18:59:20 PM						PAGE 35 OF 48

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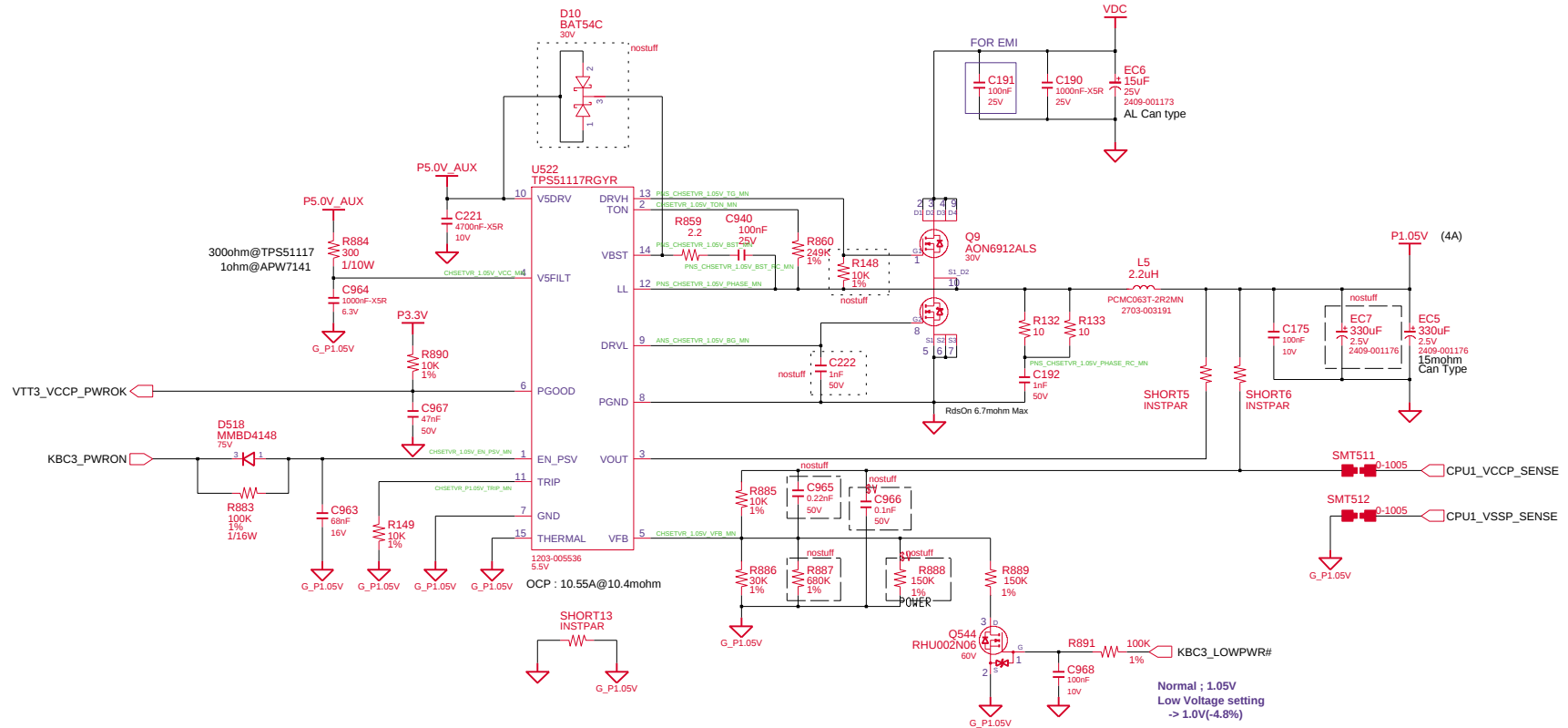
CHARGER & POWER MANAGEMENT



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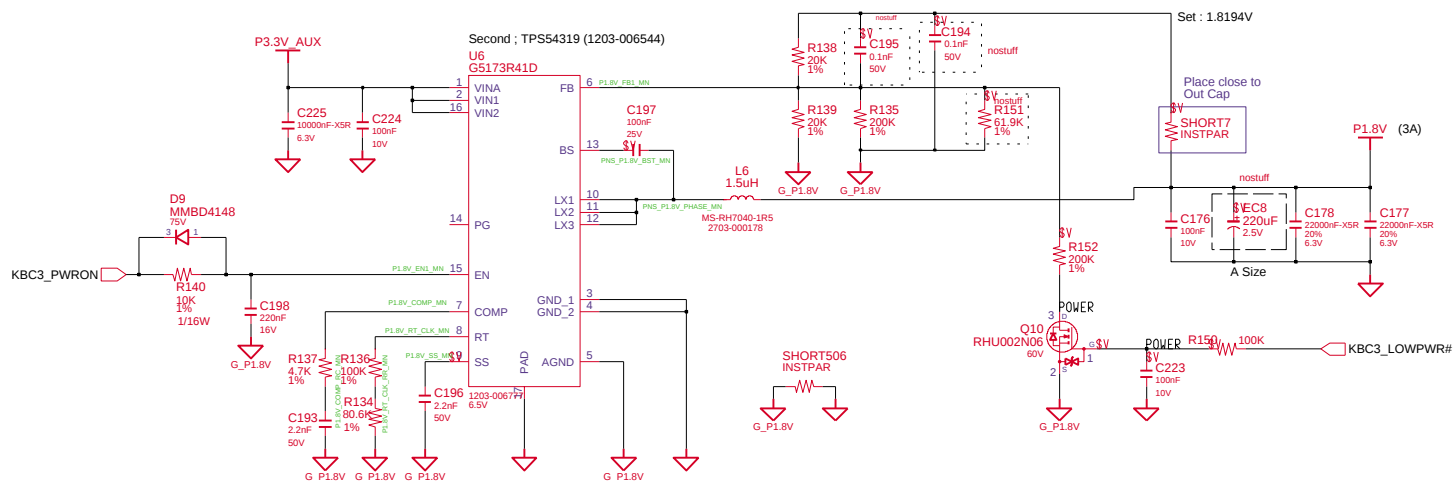
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CHIPSET POWER(P1.05V)



DRAW	Gu Hui	DATE	1/03/2011	TITLE	Scala2-R	SAMSUNG ELECTRONICS
CHECK	SJ Wu	REV. STEP	ADV		P1.05V	
APPROVAL	BC LEE	REV	rev. 0.1		P1.05V(Chipset Power)	
MODULE CODE	undefined	LAST EDIT				
				January 20, 2011 18:59:20 PM	PAGE 38	OF 48

CHIPSET POWER(VCCSA)

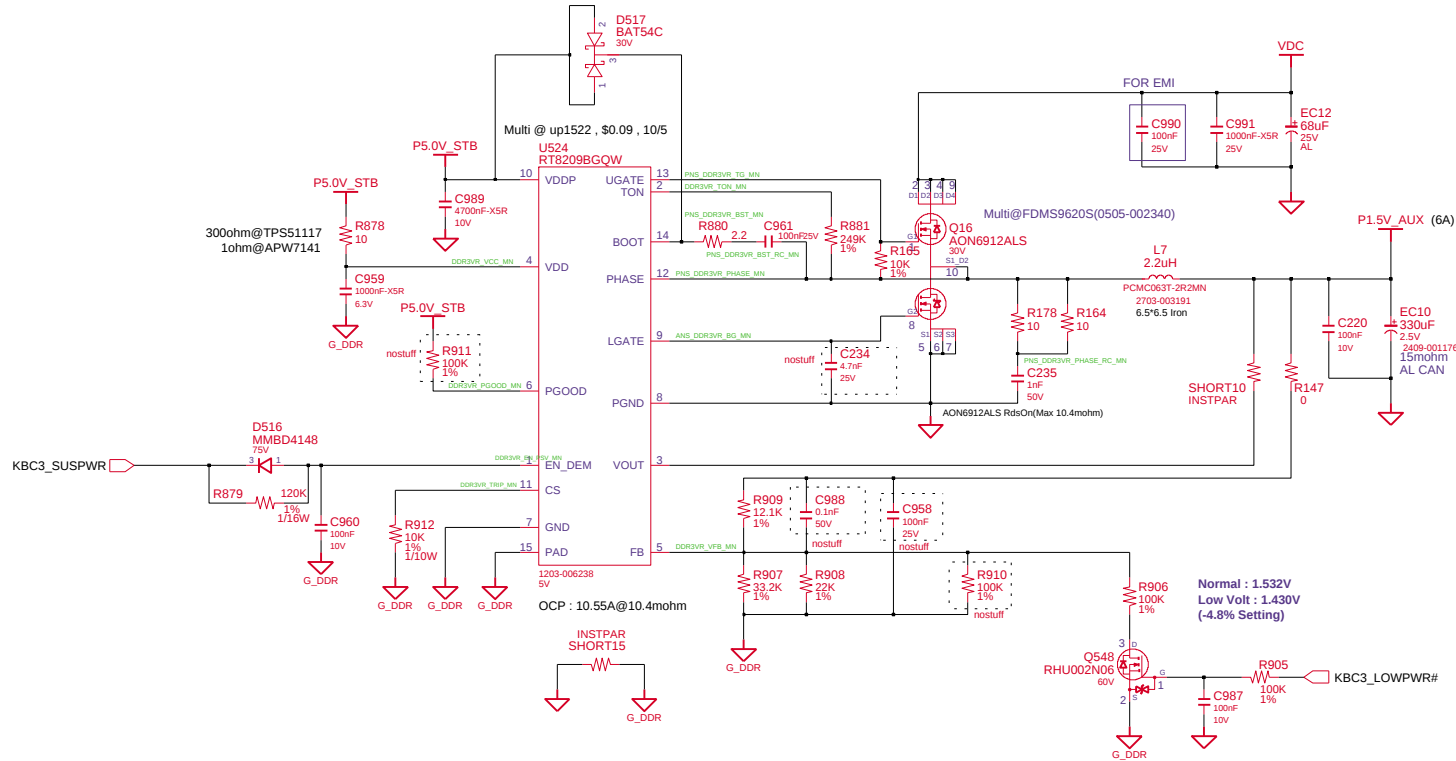


DESIGN	Gu Hui	DATE	1/03/2011	TITLE Scala2-R P1.1V_VTT P0.8V(Chipset Power)	SAMSUNG ELECTRONICS
CHECK	SJ Wu	DEV. STEP	ADV		
APPROVAL	BC LEE	REV	rev. 0.1		
MODULE CODE	LAST EDIT				
				January 20, 2011 18:59:20 PM	PAGE 39 OF 48

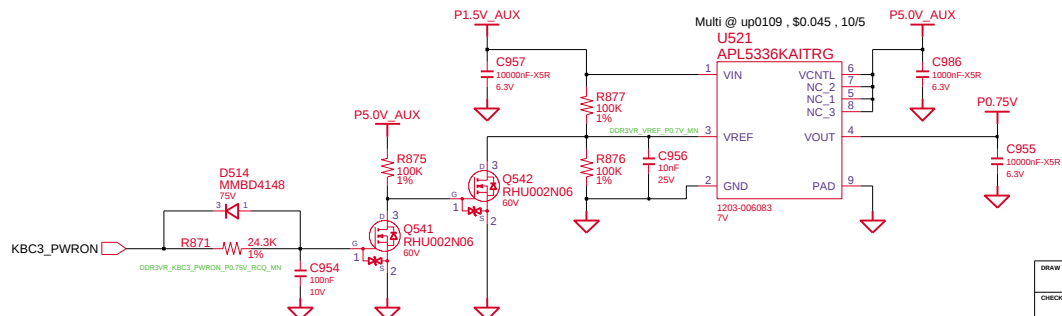
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DDR3 Power

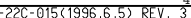


DDR3 VTT(0.75V)



DRAW	Gu Hui	DATE	1/03/2011	TITLE	Scala2-R	SAMSUNG
CHECK	SJ Wu	DEV. STEP	ADV	PWR_MEMORY	ELECTRONICS	
APPROVAL	BC LEE	REV	rev. 0.1	DDR3 POWER	PART NO.	BA41-01XXA
MODULE CODE	undefined	LAST EDIT	January 20, 2011 18:59:20 PM	PAGE	40	OF 48

8.57K@283KHz

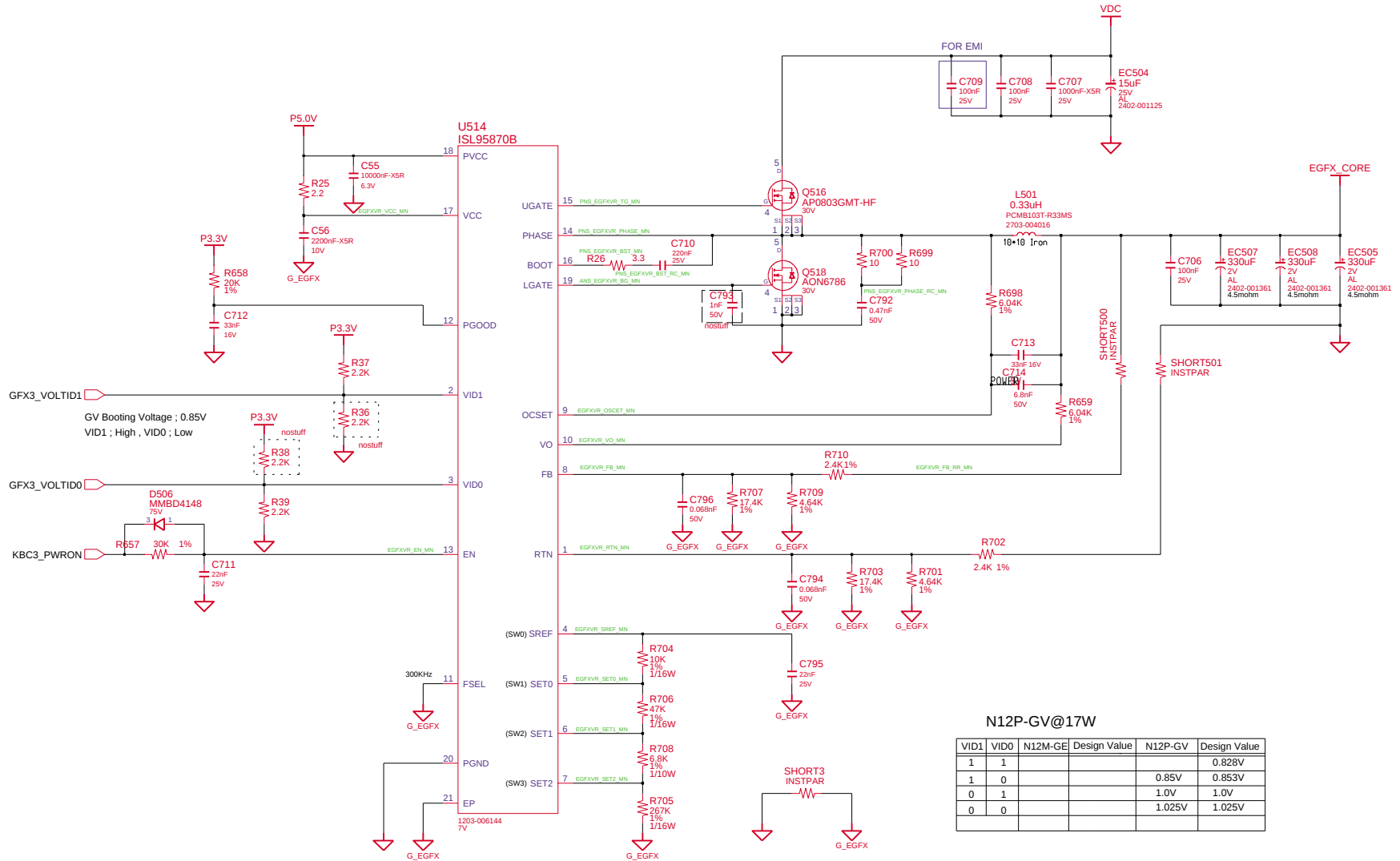


DRAW	Gu Hui	DATE	1/03/2011	TITLE Scala2-R PWR_CPU_MV_TPS51621 CPU1 VRM (IMVP6.5)	SAMSUNG ELECTRONICS				
CHECK	SJ Wu	DEV. STEP	ADV						
APPROVAL	BC LEE	REV	rev. 0.1		PART NO.	BA41-01XXXX			
MODULE CODE	undefined	LAST EDIT			January 20, 2011 18:59:20 PM	PAGE	41	OF	48

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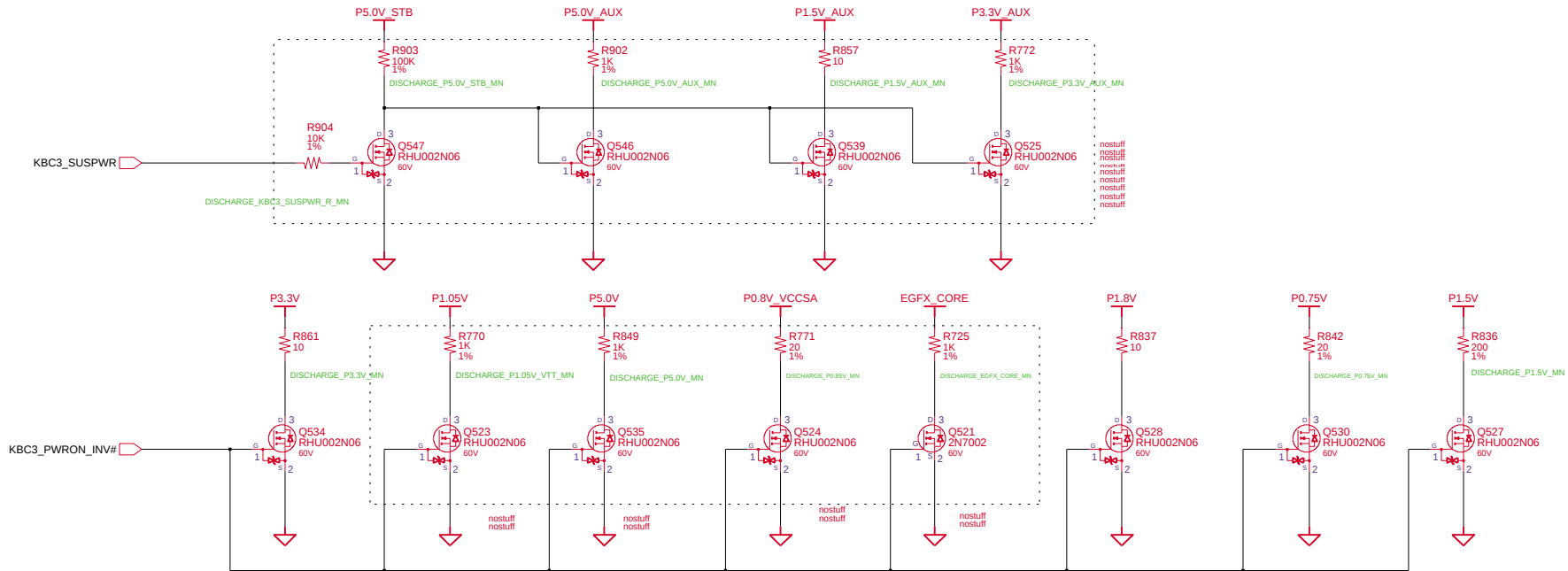
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External GFX Core Power



DRAW	Gu Hui	DATE	1/03/2011	TITLE	Scala2-R	SAMSUNG ELECTRONICS PART NO. BA41-01XXXXA
CHECK	SJ Wu	DEV. STEP	ADV		PWR_MV_SWITCHED	
APPROVAL	BC LEE	REV	rev. 0.1		Power-EGFX_CORE	
MODULE CODE		LAST EDIT				
January 20, 2011 18:59:20 PM						PAGE 42 OF 48

POWER DISCHARGER

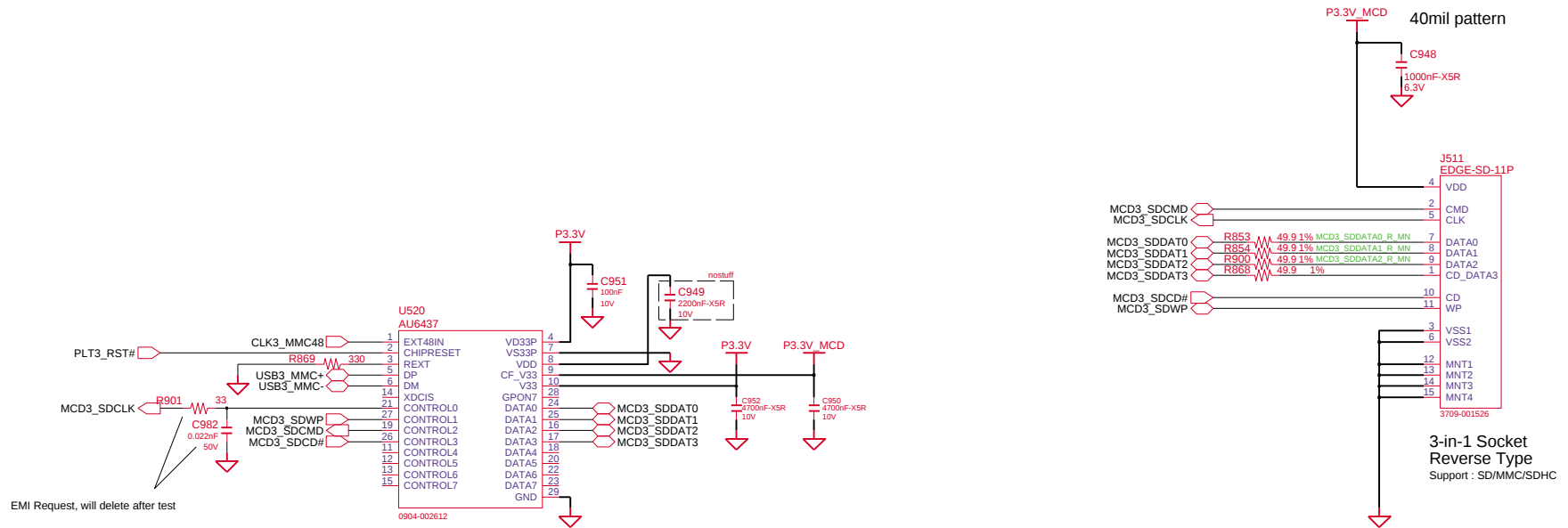


DESIGN	Gu Hui	DATE	1/03/2011	TITLE	Scala2-R
CHECK	SJ Wu	DEV. STEP	ADV	SUB BOARD1	SAMSUNG ELECTRONICS
APPROVAL	BC LEE	REV	rev. 0.1	Power Discharger	PART NO. BA41-01XXXXA
MODULE CODE		LAST EDIT		January 20, 2011 18:59:20 PM	PAGE 45 OF 48

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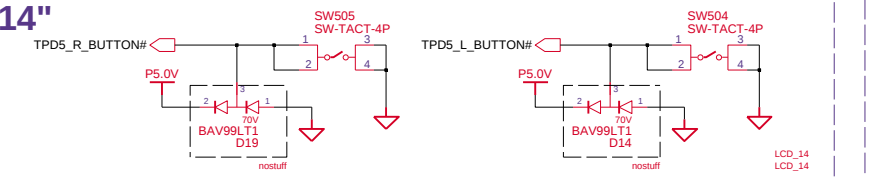
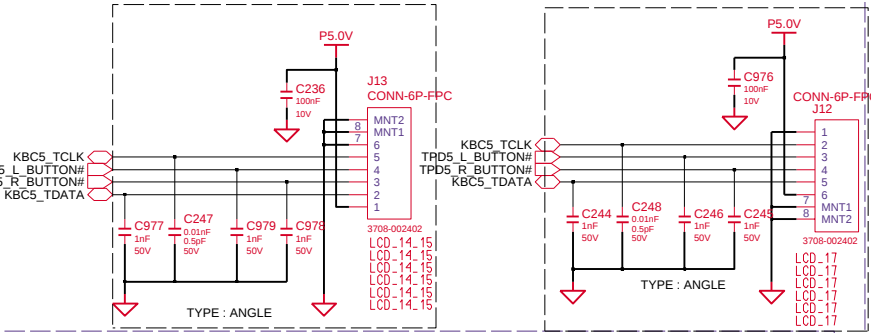
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AU6437 (4-in-1)

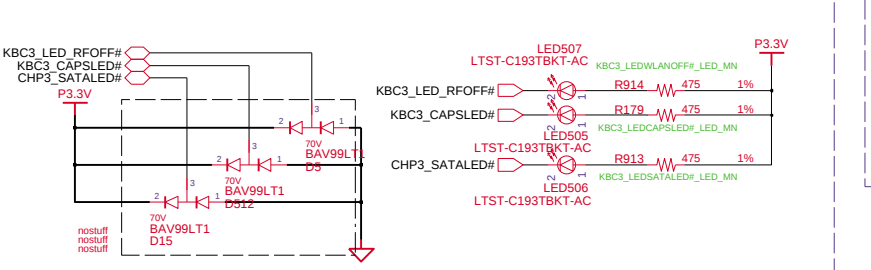
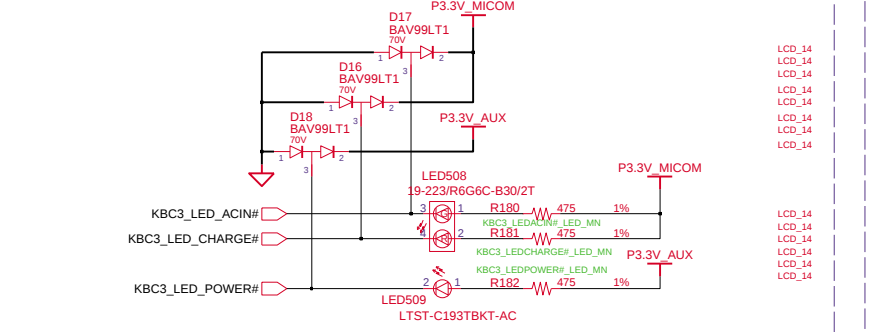


DESIGN	MS YANG	DATE	1/03/2011	TITLE	Jinmao-R	SAMSUNG ELECTRONICS
CHECK	MK KIM	DEV. STEP	ADV		AU 6437	
APPROVAL	BL LEE	REV	rev. 0.3		AU 6437	
MODULE CODE		LAST EDIT				
				January 18, 2011 08:10:20 AM	PAGE 46 OF 48	PART NO. BA41-01XXXXA

TOUCHPAD

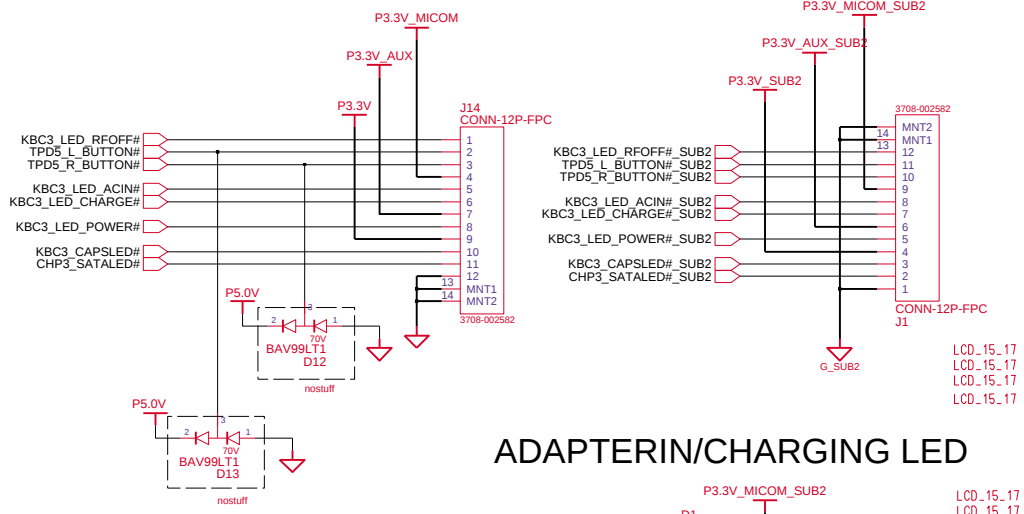


ADAPTERIN/CHARGING LED

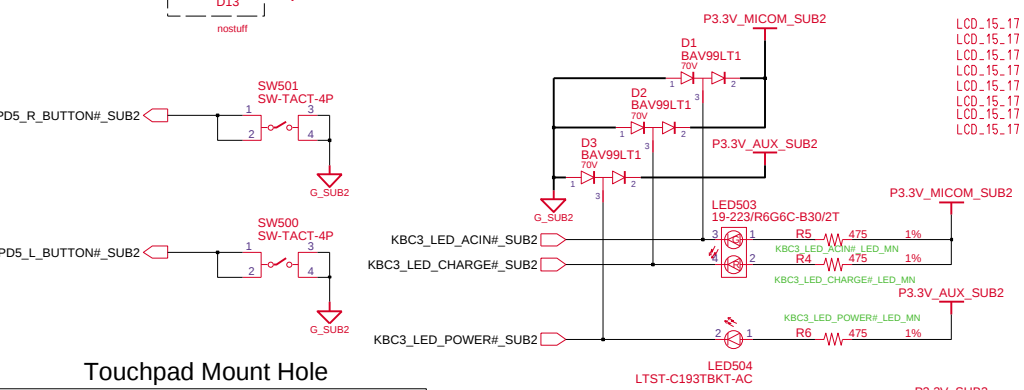


15.6" & 17.3"

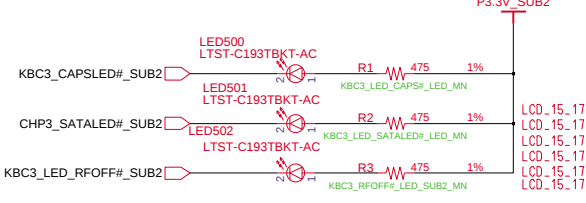
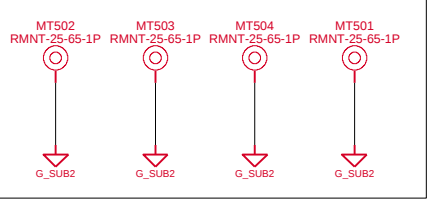
TOUCHPAD MAIN TO SUB TOUCHPAD SUB TO MAIN



ADAPTERIN/CHARGING LED

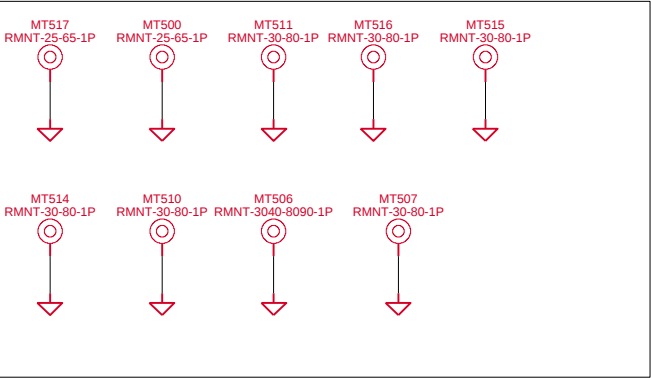


Touchpad Mount Hole

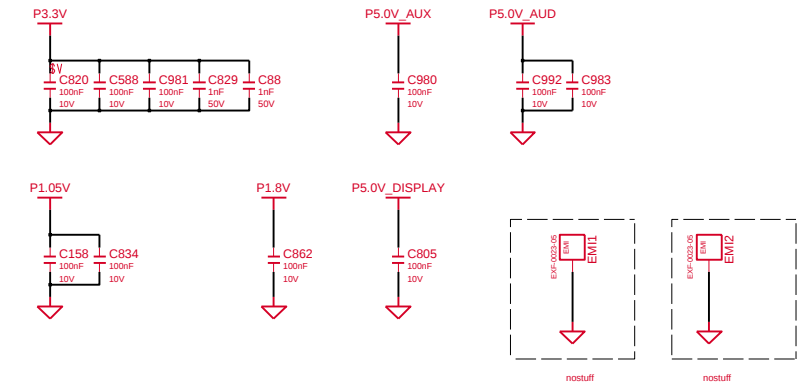
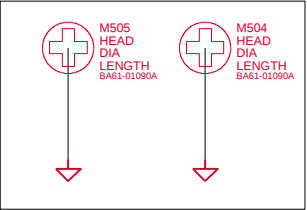


DRAW	MS YANG	DATE	1/03/2011	TITLE	Jinmao-R Touchpad	SAMSUNG ELECTRONICS PART NO. BA41-01XXXXA
CHECK	MK KIM	DEV. STEP	ADV			
APPROVAL	BL LEE	REV	rev. 0.3			
MODULE CODE		LAST EDIT				
January 18, 2011 08:10:20 AM						PAGE 47 OF 48

Mainboard Mount ((25-65)X2EA, (30-80)X7EA)



PCH Thermal



DESIGN	MS YANG	DATE	1/03/2011	TITLE	Jinmao-R	SAMSUNG ELECTRONICS
CHECK	MK KIM	DEV. STEP	ADV	MNT hole	MNT hole	
APPROVAL	BL LEE	REV	rev. 0.3			PART NO. BA41-01XXXXA
MODULE CODE		LAST EDIT			January 18, 2011 08:10:20 AM	PAGE 48 OF 48