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SYDNEY

CPU : Intel Merom-4M (800/667 MHz)
Chip Set : Intel 965PM & ICH8-M
Remarks : Mobility Platform

Model Name : SYDNEY

PBA Name : MAIN

PCB Code : BA41-0071#A

Dev. Step : PR

Revision : 1.0

T.R. Date :

BA41-00717A:GCE
BA41-00718A:TFT
BA41-00719A:NANYA

DRAW	CHECK	APPROVAL

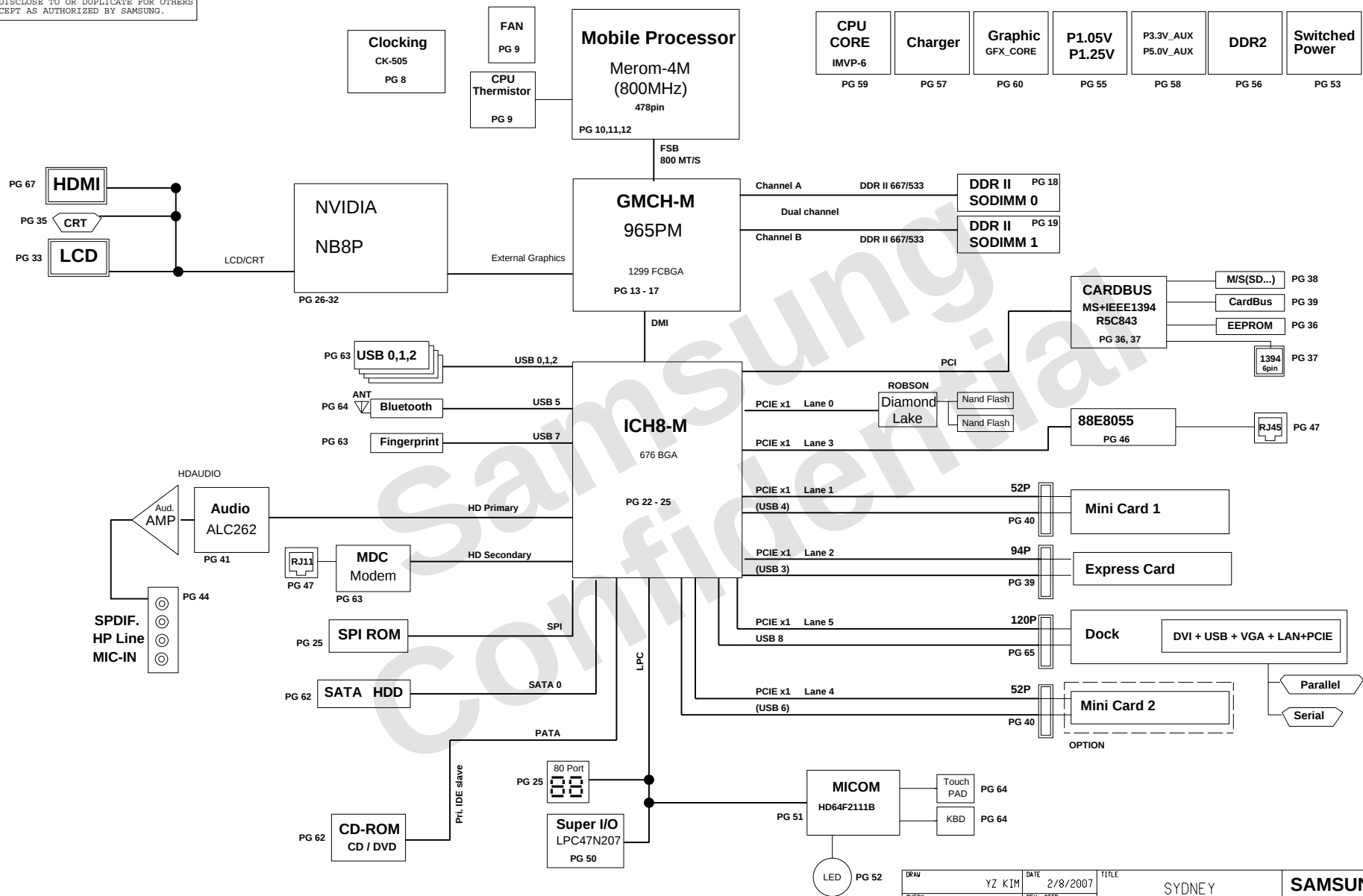
Owner : SEC Mobile R & D Signature : X

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DRAW	YZ KIM	DATE	2/8/2007	TITLE	SYDNEY SANTA ROSA STD COVER	SAMSUNG ELECTRONICS
CHECK	SW PARK	DEV. STEP	PR			PART NO. BA41-0071#A
APPROVAL	BJ LEE	REV	1.0			
MODULE CODE		LAST EDIT	February 8, 2007 10:00:08 PM	PAGE	1	OF 74

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DRAW	YZ KIM	DATE	2/8/2007	TITLE	SYDNEY	SAMSUNG ELECTRONICS PART NO. BA41-0071#A
CHECK	SW PARK	REV. STEP	PR			
APPROVAL	BJ LEE	REV	1.0			
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BOARD INFORMATION

SCHEMATIC ANNOTATIONS AND BOARD INFORMATION

PCI Devices

Devices	IDSEL#	REQ/GNT#	Interrupts
Cardbus	AD25	0	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 LPC bridge/IDE/AC97/SMBUS	AD30(internal) AD31(internal)	- -	- B
Internal MAC AC Link	AD24(internal) -	- -	E B

Voltage Rails

VDC	Primary DC system power supply (7 to 21V)
CPU_CORE	Core Voltage for CPU
P1.05V	VCCP for CPU, Crestline & ICH8-M
P0.9V	0.9V switched power rail (off in S3-S5)
P1.25V	1.25V switched power rail (off in S3-S5)
P1.5V	1.5V switched power rail (off in S3-S5)
P1.8V	1.8V switched power rail (off in S3-S5)
P3.3V	3.3V switched power rail (off in S3-S5)
P5.0V	5.0V switched power rail (off in S3-S5)
EGFX_CORE	Core Volatge for GPU
P1.2V	1.2V switched power rail (off in S3-S5)
P2.5V	2.5V switched power rail (off in S3-S5)
MEM1_VREF	0.9V power rail for DDR (off in S4-S5)
P1.8V_AUX	1.8V power rail for DDR (off in S4-S5)
P3.3V_AUX	3.3V power rail (off in S4-S5)
P5.0V_AUX	5.0V power rail (off in S4-S5)
P3V_MICOM	3.3V always power rail
P3.3V_ALW	3.3V always power rail (only AC mode)
P3.3V_LAN	3.3V always power rail (only AC mode)

Crystal / Oscillator

TYPE	FREQUENCY	DEVICE	USAGE
Crystal	32.768KHz	ICH8-M	Real Time Clock
Crystal	10MHz	MICOM	HD64F2169/2111B
Crystal	14.318MHz	CLOCK-Generator	CK-505
Crystal	24.576MHz	Cardbus Controller	1394
Crystal	25MHz	LAN	

I²C / SMB Address

Devices	Address	Hex	Bus
ICH8-M	Master	-	SMBUS Master
SODIMM0	1010 000X	A0h	-
SODIMM1	1010 001X	A4h	-
CK-505	1010 001x	D2h	-
MICOM	Master	-	SMBUS Master
EMC2102	0101 101X	7Ah	Thermal Sensor
BATTERY	0001 011X	16h	

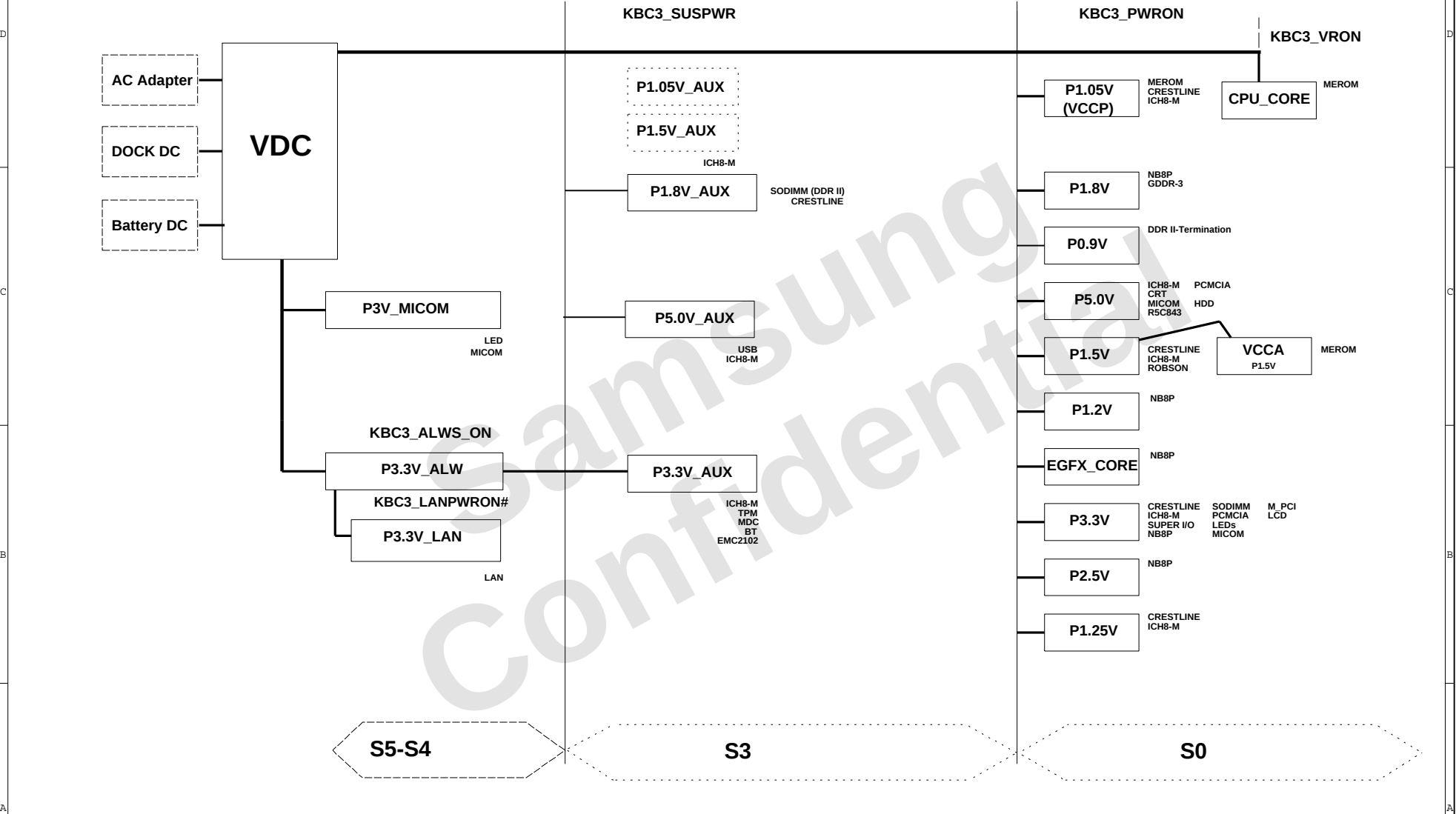
USB PORT Assign

PORT #	ASSIGNED TO
0	SYSTEM PORT 0
1	SYSTEM PORT 1
2	SYSTEM PORT 2
3	(Express Card)
4	(Mini Card 1)
5	Bluetooth
6	(Mini Card 2)
7	Fingerprint
8	DOCKING
9	-

PCI Express Assign

PORT #	ASSIGNED TO
0	ROBSON
1	Mini Card 1
2	Express Card
3	GLAN
4	Mini Card 2
5	DOCKING

POWER DIAGRAM



DRAW	YZ KIM	DATE	2/8/2007	TITLE	SYDNEY	SAMSUNG
CHECK	SW PARK	REV. STEP	PR			ELECTRONICS
APPROVAL	BJ LEE	REV	1.0	POWER DIAGRAM	PART NO.	BA41-0071#A
MODULE CODE	undefined	LAST EDIT	February 8, 2007 10:00:08 PM	PAGE	4	OF 74

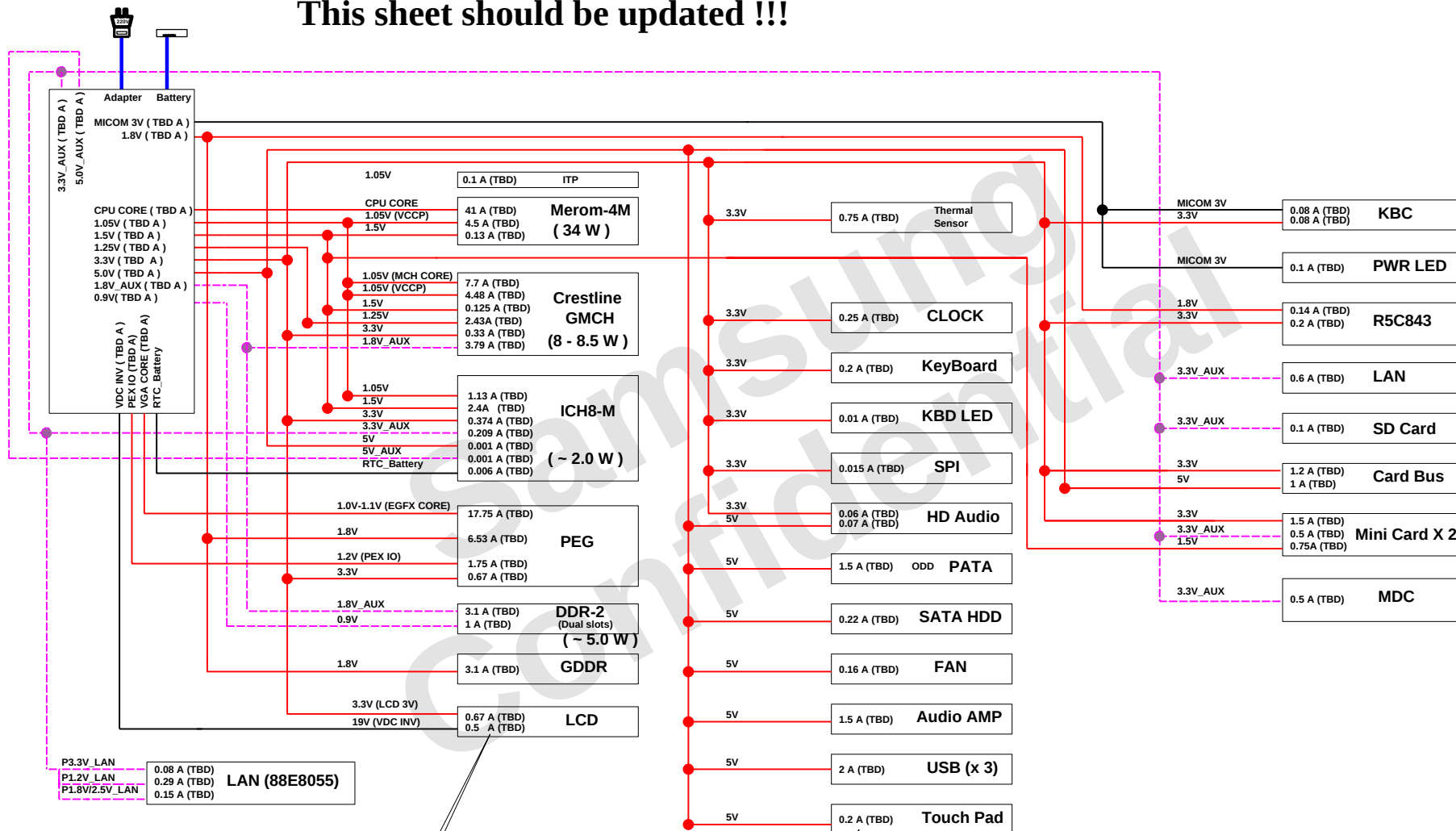
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POWER RAILS ANALYSIS

Rev. 0.8

This sheet should be updated !!!

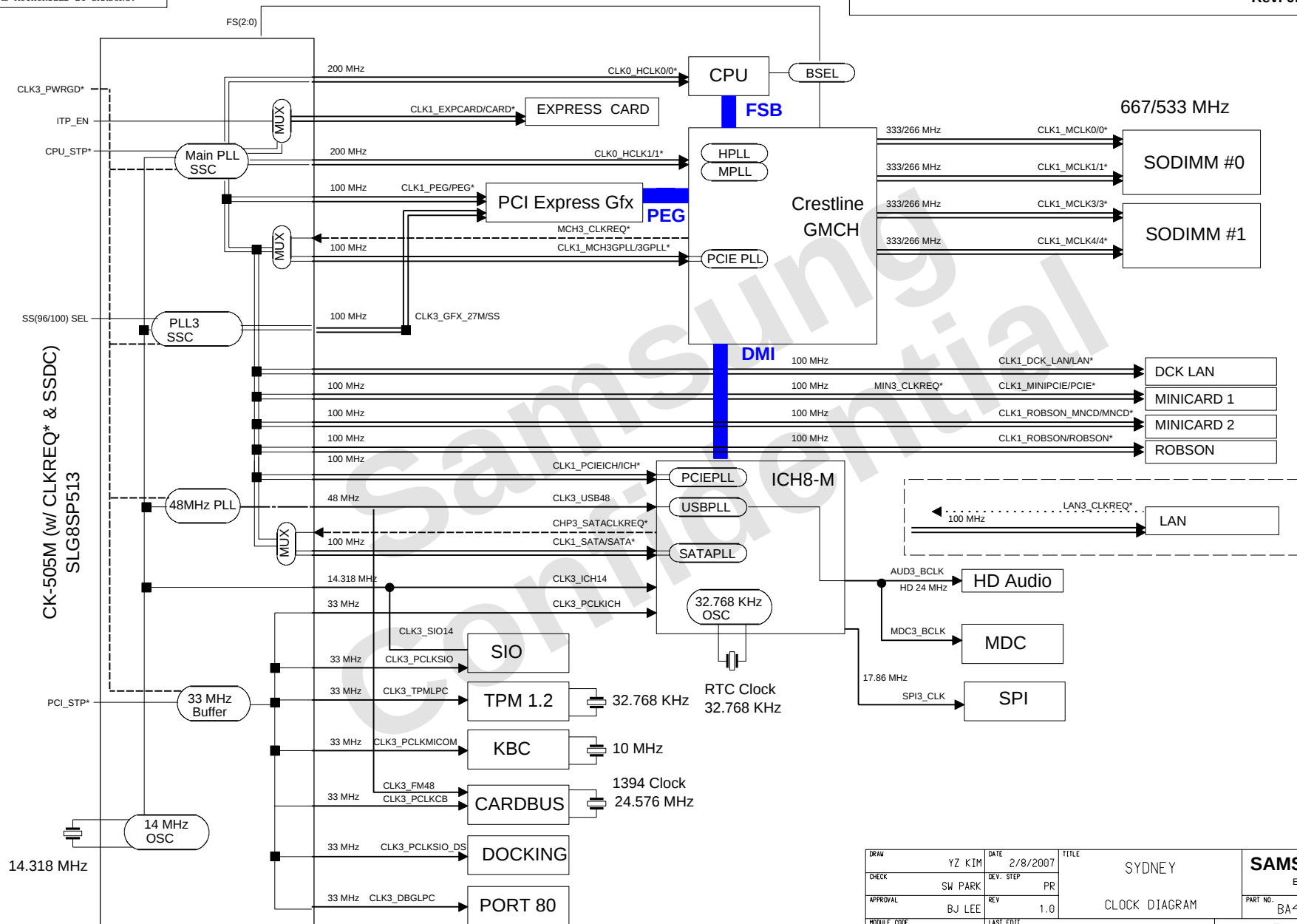


Value by Datasheet/Application notes (Value by measurement)

DRAW	YZ KIM	DATE	2/8/2007	TITLE	SYDNEY	SAMSUNG
CHECK	SW PARK	REV. STEP	PR			ELECTRONICS
APPROVAL	BJ LEE	REV	1.0	POWER RAILS	PART NO.	BA41-0071#A
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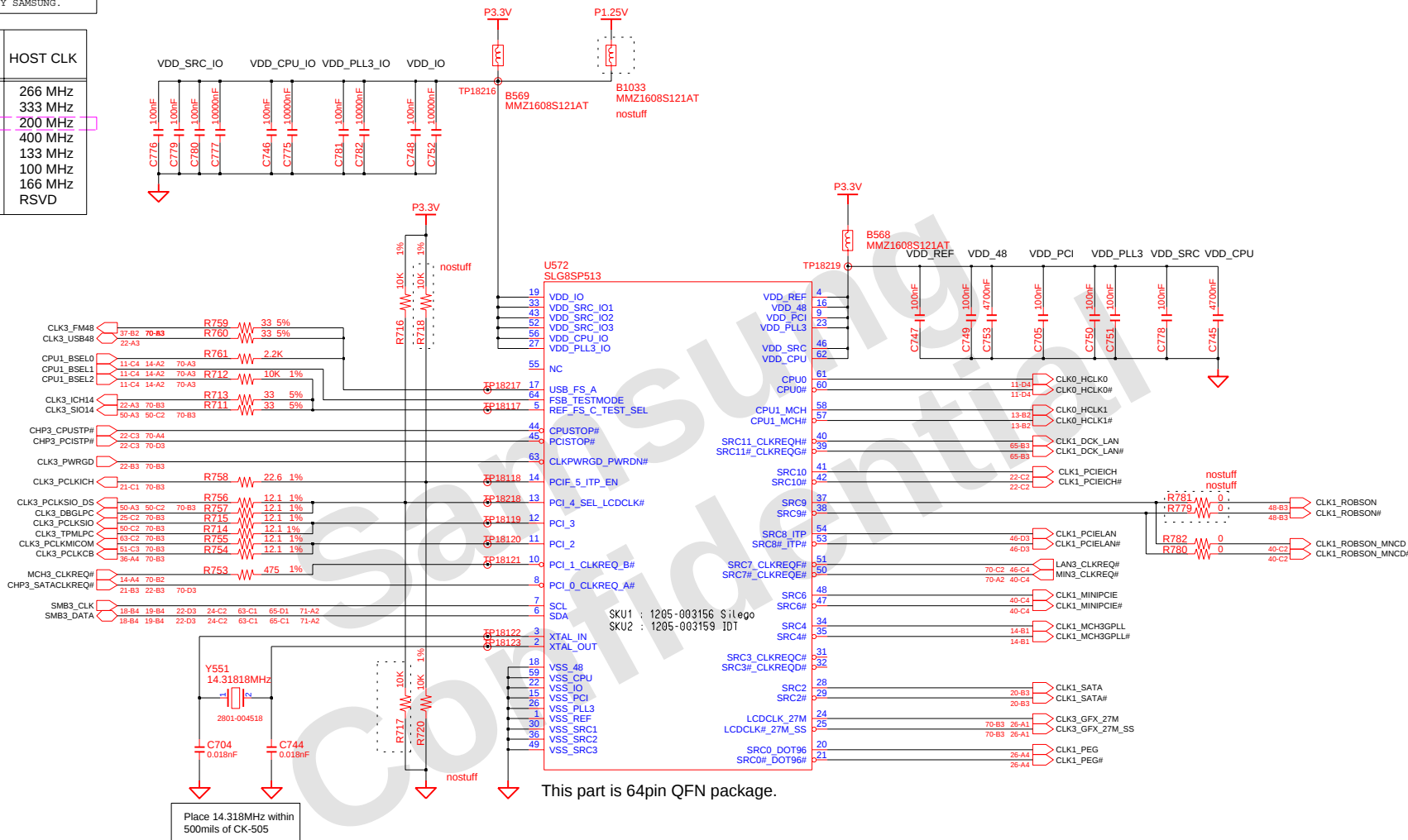
CLOCK DISTRIBUTION Rev. 0.8



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FSA BSEL0	FSB BSEL1	FSC BSEL2	HOST CLK
0	0	0	266 MHz
0	0	1	333 MHz
0	1	0	200 MHz
0	1	1	400 MHz
1	0	0	133 MHz
1	0	1	100 MHz
1	1	0	166 MHz
1	1	1	RSVD



CLK REQ	DEVICE	SRC PORT
CLK REQ A	SATA	SRC2
CLK REQ B	GMCH	SRC4
CLK REQ E	MINI CARD	SRC6
CLK REQ F	LAN	SRC8

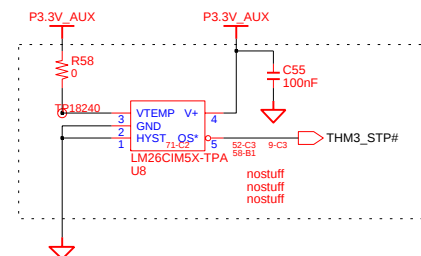
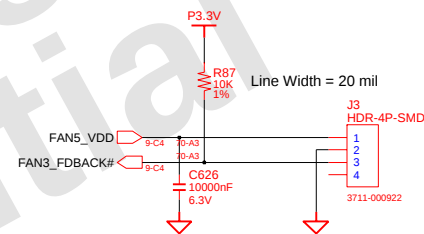
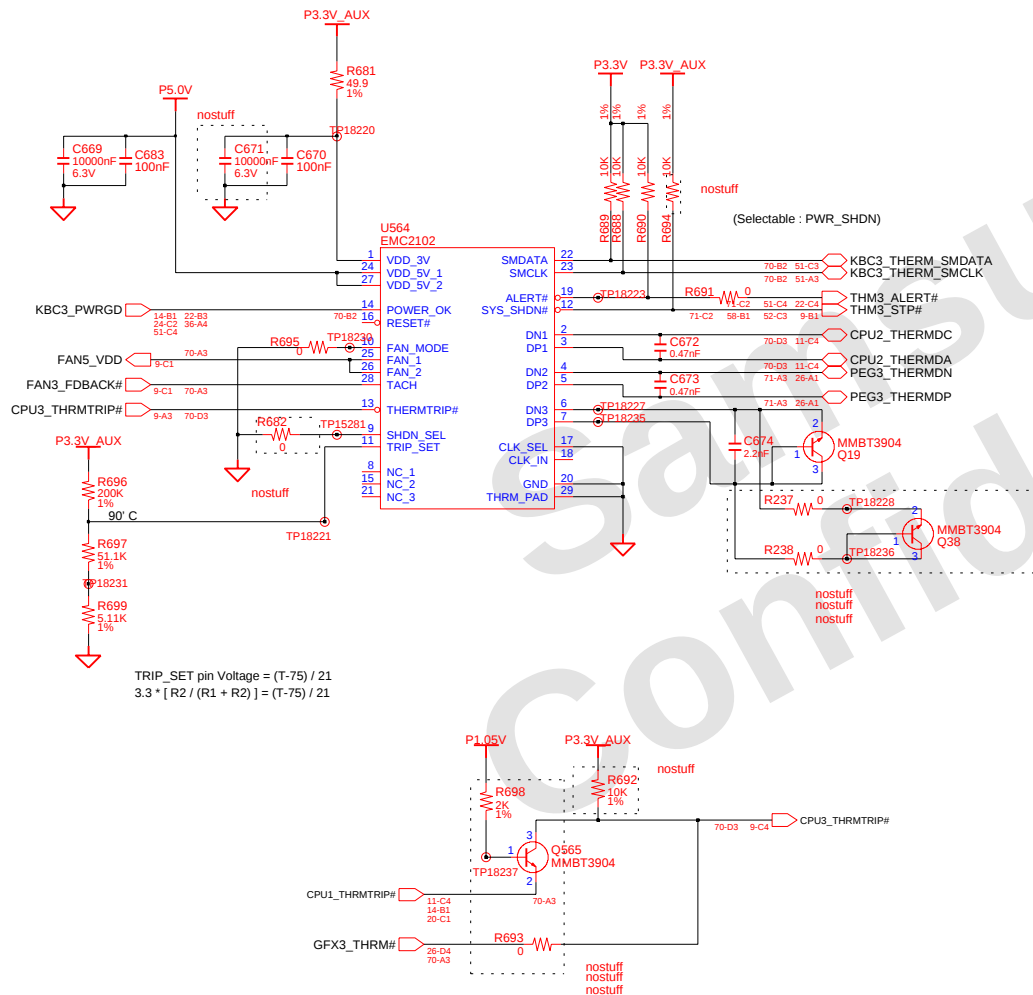
SEL_LCDCCLK# (24,25,20,21)
LOW LCD CLK / DOT96
HIGH 27M / SRC0

DRAW	YZ KIM	DATE	2/8/2007	TITLE	SYDNEY CLOCK GENERATOR CK-505	SAMSUNG ELECTRONICS
CHECK	SW PARK	REV. STEP	PR			PART NO. BA41-0071HA
APPROVAL	BJ LEE	REV	1.0			
MODULE CODE	undefined	LAST EDIT	February 8, 2007 10:00:08 PM	PAGE	8	OF 74

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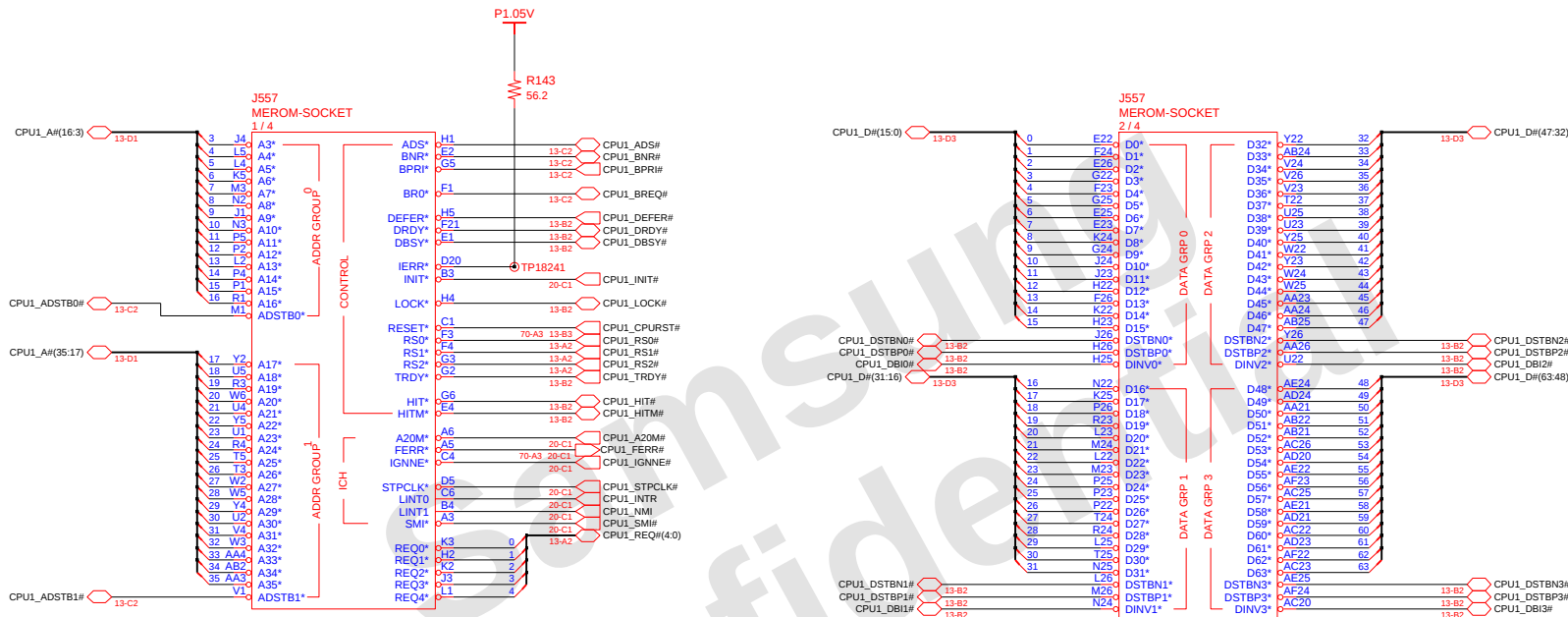
THERMAL SENSOR & FAN CONTROL



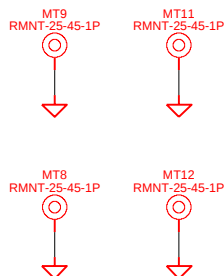
DATE	2/8/2007	TITLE	SYDNEY THERMAL BLOCK THERMAL & FAN CONTROL	SAMSUNG ELECTRONICS
CHECK	SW PARK	REV	PR	PART NO. BA41-0071#A
APPROVAL	BJ LEE	REV	1.0	
MODULE CODE		LAST EDIT	February 8, 2007 10:00:08 PM	PAGE 9 OF 74

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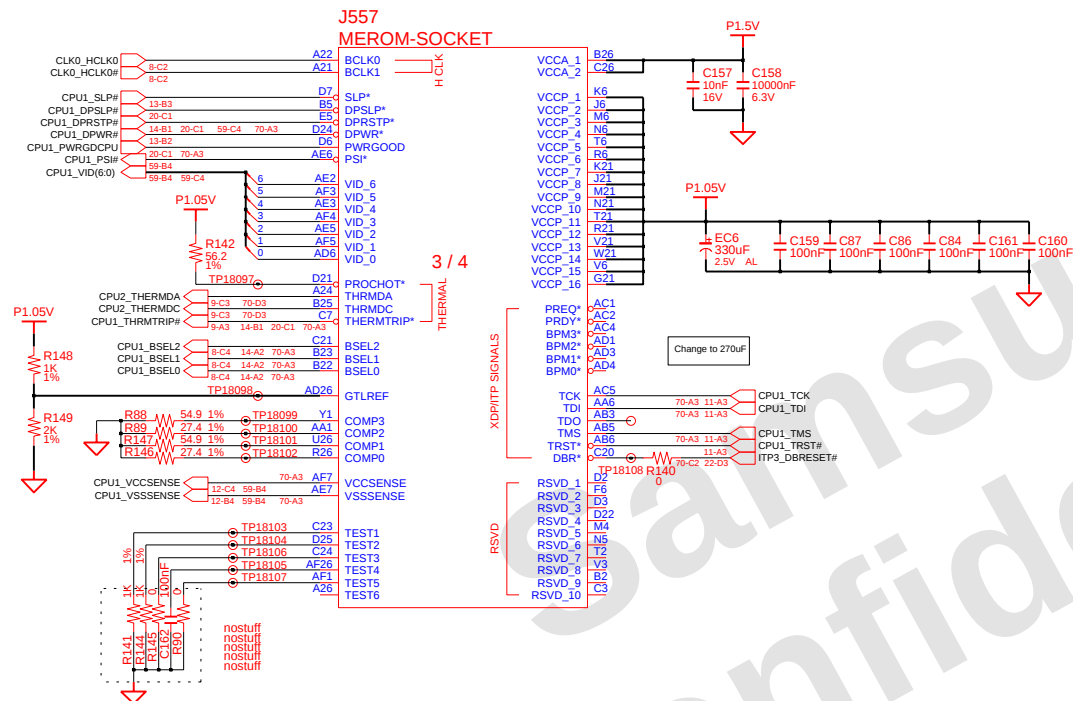
**NOTE



RHE SUPPORTER(CICHLID2 BASED)

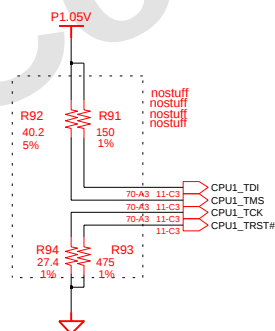
BGA BASED, PGA TYPE MAY NEED ANOTHER RHE

DRAW	YZ KIM	DATE	2/8/2007	TITLE	SYDNEY CPU MEROM (1/3)	SAMSUNG ELECTRONICS PART NO. BA41-0071HA
CHECK	SW PARK	REV. STEP	PR			
APPROVAL	BJ LEE	REV	1.0			
MODULE CODE	undefined	LAST EDIT	February 8, 2007 10:00:08 PM	PAGE 10 OF 74		



BSEL & ITP DISABLE

FSA BSEL0	FSB BSEL1	FSC BSEL2	HOST CLK
0	1	0	200 MHz
1	1	0	166 MHz



CPU Core Voltage Table IMVP-6

Active Mode		Active/Deeper Sleep Dual Mode Region		Deeper Sleep/Extended Deeper Sleep Dual Mode Region	
VID(6.0)	Voltage	VID(6.0)	Voltage	VID(6.0)	Voltage
0 0 0 0 0 0 0 0 1	1.5000 V	0 1 0 1 0 0 0 0 0	1.0000 V	1 0 0 1 0 0 0 0 1	0.4875 V
0 0 0 0 0 0 0 0 1	1.4875 V	0 1 0 1 0 0 0 0 1	0.9875 V	1 1 0 1 0 0 0 0 1	0.4750 V
0 0 0 0 0 0 0 1 0	1.4750 V	0 1 0 1 0 0 1 0 0	0.9750 V	1 0 1 0 0 0 0 1 1	0.4625 V
0 0 0 0 0 0 0 1 1	1.4625 V	0 1 0 1 0 0 1 0 1	0.9625 V	1 0 1 0 0 1 0 0 0	0.4500 V
0 0 0 0 0 1 0 0 0	1.4500 V	0 1 0 1 0 1 1 0 0	0.9500 V	1 0 1 0 0 1 0 1 0	0.4375 V
0 0 0 0 0 1 0 0 1	1.4375 V	0 1 0 1 0 1 1 0 1	0.9375 V	1 1 0 1 0 1 0 1 0	0.4250 V
0 0 0 0 0 1 1 0 0	1.4250 V	0 1 0 1 0 1 1 0 1	0.9250 V	1 0 1 0 1 1 0 1 1	0.4125 V
0 0 0 0 0 1 1 0 1	1.4125 V	0 1 0 1 0 1 1 1 1	0.9125 V	1 0 1 0 1 1 0 0 0	0.4000 V
0 0 0 0 0 1 1 0 0	1.4000 V	0 1 1 0 0 0 0 0 0	0.9000 V	1 0 1 0 1 0 0 0 1	0.3875 V
0 0 0 0 0 1 0 0 0	1.3875 V	0 1 1 0 0 0 0 0 1	0.8875 V	1 0 1 0 1 0 0 1 0	0.3750 V
0 0 0 0 0 1 0 0 1	1.3750 V	0 1 1 0 0 0 0 1 0	0.8750 V	1 1 0 1 0 1 0 1 0	0.3625 V
0 0 0 0 0 1 0 0 1	1.3625 V	0 1 1 0 0 0 0 1 0	0.8625 V	1 0 1 0 1 1 0 0 0	0.3500 V
0 0 0 0 0 1 1 0 0	1.3500 V	0 1 1 0 0 1 0 0 0	0.8500 V	1 0 1 0 1 1 0 0 1	0.3375 V
0 0 0 0 0 1 1 0 1	1.3375 V	0 1 1 0 0 1 0 0 1	0.8375 V	1 0 1 0 1 1 1 0 0	0.3250 V
0 0 0 0 0 1 1 0 1	1.3250 V	0 1 1 0 0 1 1 0 0	0.8250 V	1 0 1 0 1 1 1 0 1	0.3125 V
0 0 0 0 0 1 1 1 0	1.3125 V	0 1 1 0 0 1 1 0 1	0.8125 V	1 1 0 0 0 0 0 0 0	0.3000 V
0 0 0 0 0 1 0 0 0	1.3000 V	0 1 1 1 0 0 0 0 0	0.8000 V	1 1 0 0 0 0 0 0 1	0.2875 V
0 0 0 0 0 1 0 0 1	1.2875 V	0 1 1 1 0 0 0 0 1	0.7875 V	1 1 0 0 0 0 0 1 0	0.2750 V
0 0 0 0 0 1 0 0 1	1.2750 V	0 1 1 1 0 0 0 1 0	0.7750 V	1 1 0 0 0 0 0 1 1	0.2625 V
0 0 0 0 0 1 0 0 0	1.2625 V	0 1 1 1 0 0 0 1 0	0.7625 V	1 1 0 0 0 0 0 1 0	0.2500 V
0 0 0 0 0 1 0 0 0	1.2500 V	0 1 1 1 0 1 0 0 0	0.7500 V	1 1 0 0 0 0 0 1 1	0.2375 V
0 0 0 0 0 1 0 0 1	1.2375 V	0 1 1 1 0 1 0 0 1	0.7375 V	1 1 0 0 0 0 1 0 0	0.2250 V
0 0 0 0 0 1 0 1 0	1.2250 V	0 1 1 1 0 1 1 0 0	0.7250 V	1 1 0 0 0 0 1 0 1	0.2125 V
0 0 0 0 0 1 0 1 1	1.2125 V	0 1 0 0 0 1 1 0 0	0.7125 V	1 1 0 0 0 0 1 0 0	0.2000 V
0 0 0 0 0 1 1 0 0	1.2000 V	1 0 0 0 0 0 0 0 0	0.7000 V	1 1 0 0 0 0 1 0 1	0.1875 V
0 0 0 0 0 1 1 0 0	1.1875 V	1 0 0 0 0 0 0 0 1	0.6875 V	1 1 0 0 0 1 0 0 0	0.1750 V
0 0 0 0 0 1 1 0 0	1.1750 V	1 0 0 0 0 0 0 1 0	0.6750 V	1 1 0 0 0 1 0 0 1	0.1625 V
0 0 0 0 0 1 1 0 0	1.1625 V	1 0 0 0 0 0 0 1 1	0.6625 V	1 1 0 0 0 1 0 0 0	0.1500 V
0 0 0 0 0 1 1 0 0	1.1500 V	1 0 0 0 0 0 0 1 0	0.6500 V	1 1 0 0 0 1 0 0 1	0.1375 V
0 0 0 0 0 1 1 1 0	1.1375 V	1 0 0 0 0 0 0 1 0	0.6375 V	1 1 0 0 0 1 1 0 0	0.1250 V
0 0 0 0 0 1 1 1 0	1.1250 V	1 0 0 0 0 0 1 0 0	0.6250 V	1 1 0 0 0 1 1 0 1	0.1125 V
0 0 0 0 0 1 1 1 1	1.1125 V	1 0 0 0 0 0 1 0 1	0.6125 V	1 1 0 0 0 1 0 0 0	0.1000 V
0 0 1 0 0 0 0 0 0	1.1000 V	1 0 0 0 0 0 1 0 0	0.6000 V	1 1 0 0 0 1 0 0 1	0.0875 V
0 0 1 0 0 0 0 0 1	1.0875 V	1 0 0 0 0 0 1 0 0	0.5875 V	1 1 0 0 0 1 0 0 0	0.0750 V
0 0 1 0 0 0 0 1 0	1.0750 V	1 0 0 0 0 0 1 0 1	0.5750 V	1 1 0 0 0 1 0 0 1	0.0625 V
0 0 1 0 0 0 0 1 1	1.0625 V	1 0 0 0 0 0 1 1 0	0.5625 V	1 1 0 0 0 1 0 0 0	0.0500 V
0 0 1 0 0 0 1 0 0	1.0500 V	1 0 0 0 0 1 0 0 0	0.5500 V	1 1 0 0 0 1 0 0 1	0.0375 V
0 0 1 0 0 0 1 0 1	1.0375 V	1 0 0 0 0 1 0 0 1	0.5375 V	1 1 0 0 0 1 0 0 0	0.0250 V
0 0 1 0 0 0 1 1 0	1.0250 V	1 0 0 0 0 1 1 0 0	0.5250 V	1 1 0 0 0 1 1 0 1	0.0125 V
0 0 1 0 0 0 1 1 1	1.0125 V	1 0 0 0 0 1 1 0 1	0.5125 V	1 1 0 0 0 1 1 0 0	0.0000 V
		1 0 0 0 0 1 0 0 0	0.5000 V	1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V
				1 1 0 0 0 1 1 0 0	0.0000 V

*Yonah Processor (2.33 GHz / 800 MHz : TBD)

GTLREF : Keep the Voltage divider within 0.5" of the first GTLREF0 pin with $Z_0=55\Omega$ trace. Minimize coupling of any switching signals to this net

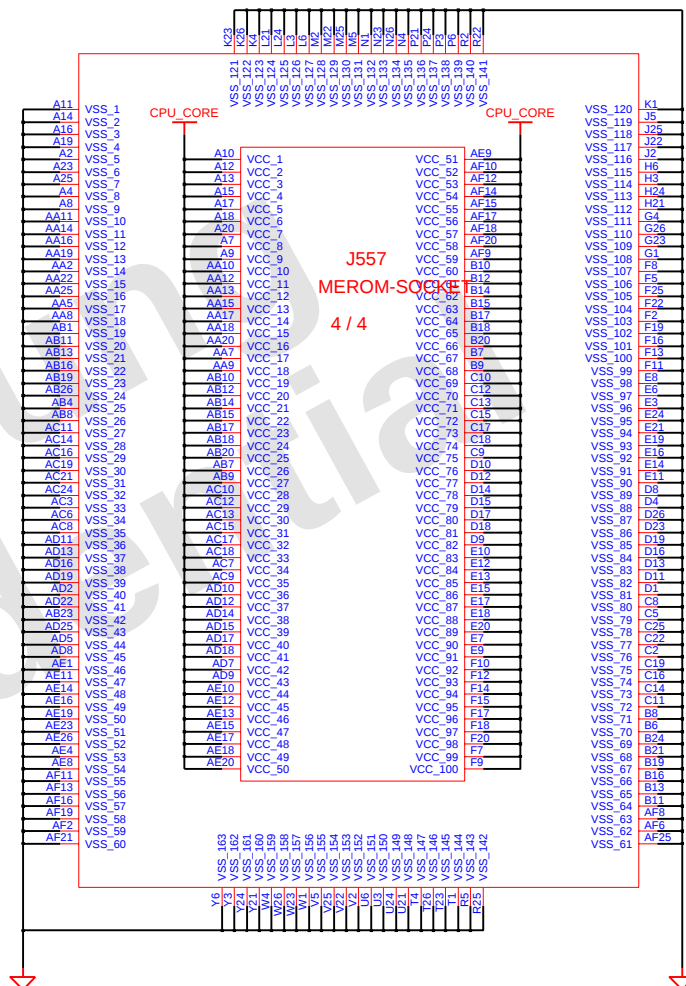
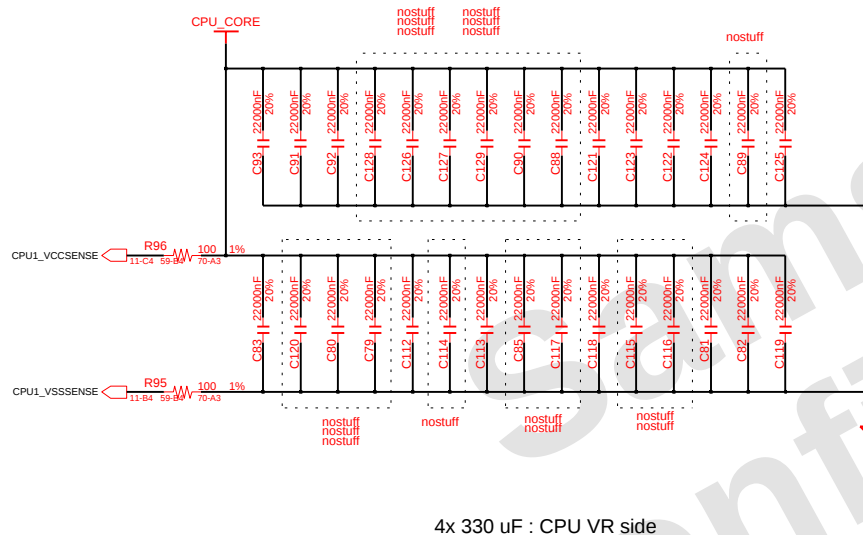
COMP0,2 (COMP1,3) should be connected with $Z_0=27.4\text{ohm}(55\text{ohm})$ trace shorter than 1/2" to their respective Banias socket pins.

GND test points within 100mil of the VCC/VSSense at the end of the line.
Route the VCC/VSSense as a $Z_0=55\text{ohm}$ traces with equal length.
Observe 3:1 spacing b/w VCC/VSSense lines and 25mil away
(preferred 50mil) from any other signal. And GND via 100mil away
from each of the VCC/VSS test point vias.

DRAW	YZ KIM	DATE	2/8/2007	TITLE	SYDNEY CPU MEROM (2/3)	SAMSUNG ELECTRONICS		
CHECK	SW PARK	DEV. STEP	PR					
APPROVAL	BJ LEE	REV	1.0					
MODULE CODE	undef ined	LAST EDIT	February 8, 2007 10:00:08 PM				PAGE	11
				PART NO.	BA41-0071#A			

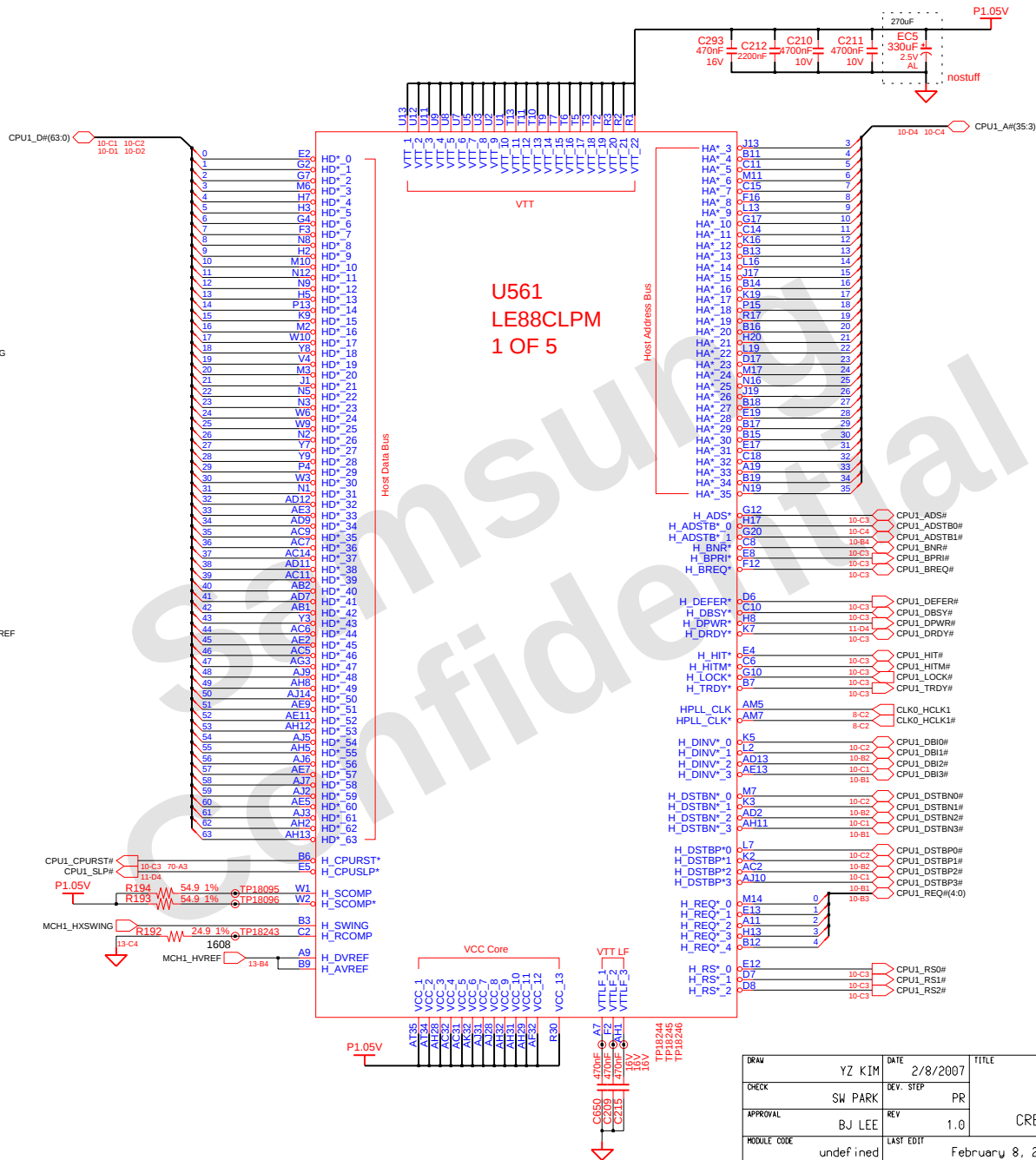
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DRAW	YZ KIM	DATE	2/8/2007	TITLE	SYDNEY CPU MEROM (3/3)	SAMSUNG ELECTRONICS
CHECK	SW PARK	REV. STEP	PR			PART NO.
APPROVAL	BJ LEE	REV	1.0			BA41-0071#A
MODULE CODE	undefined	LAST EDIT	February 8, 2007 10:00:08 PM	PAGE	12	OF 74

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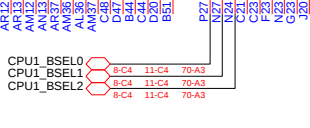
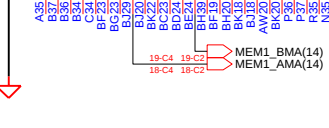
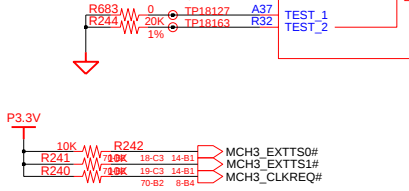
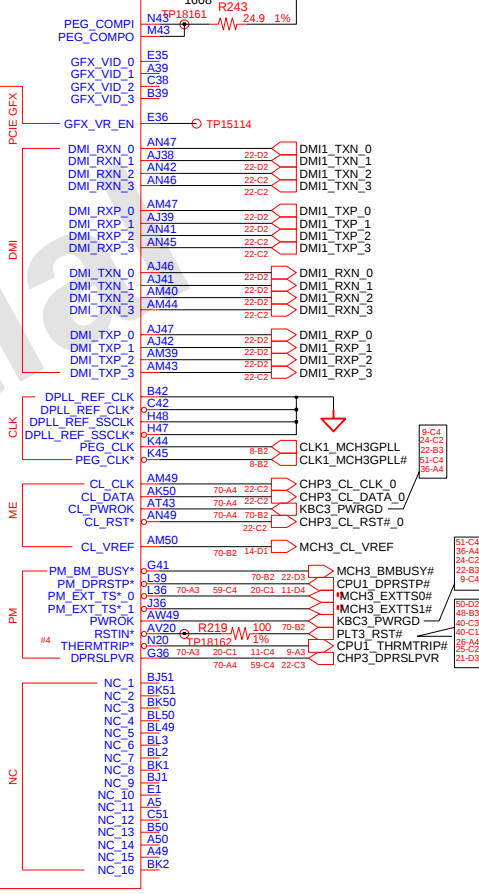
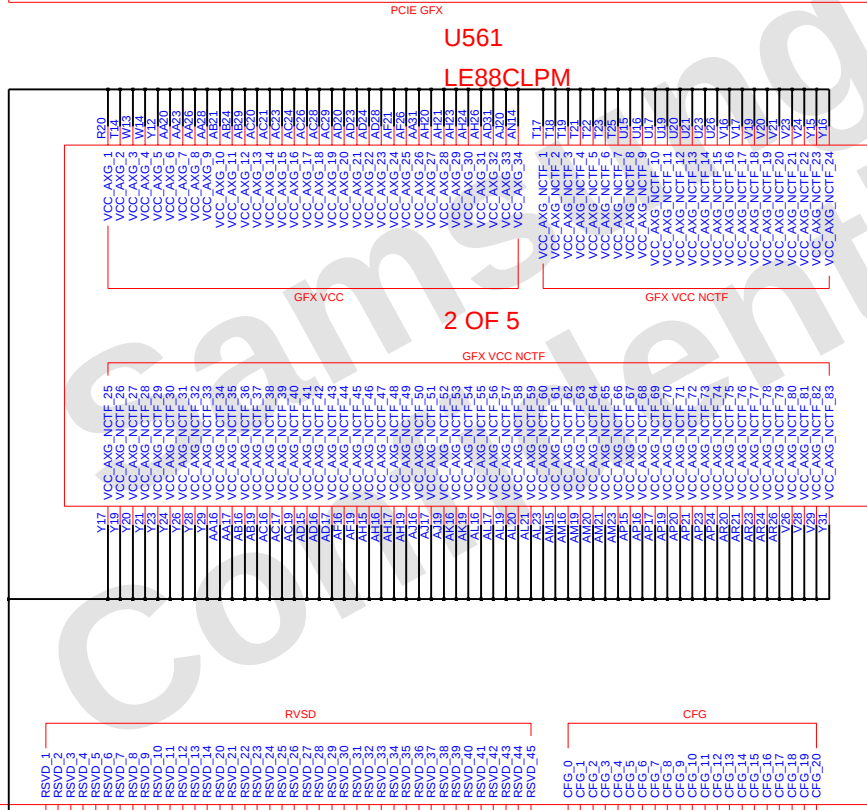
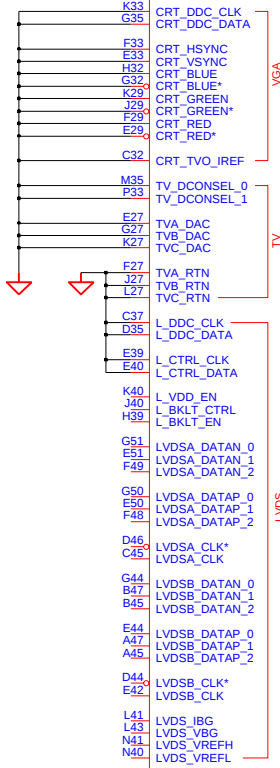
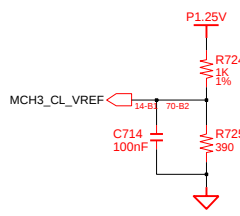
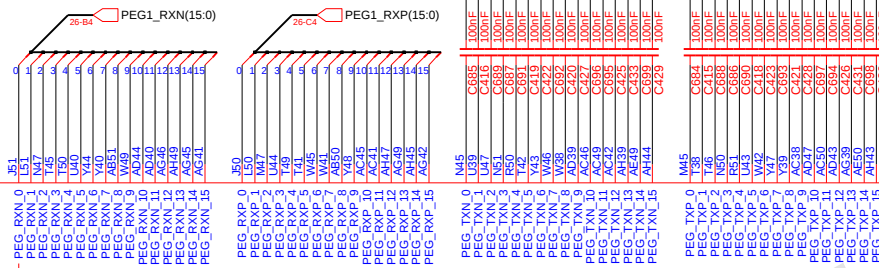


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APPROVAL	BJ LEE	REV	1.0			
MODULE CODE	undefined	LAST EDIT		February 8, 2007 10:00:08 PM	PAGE	13 OF 74

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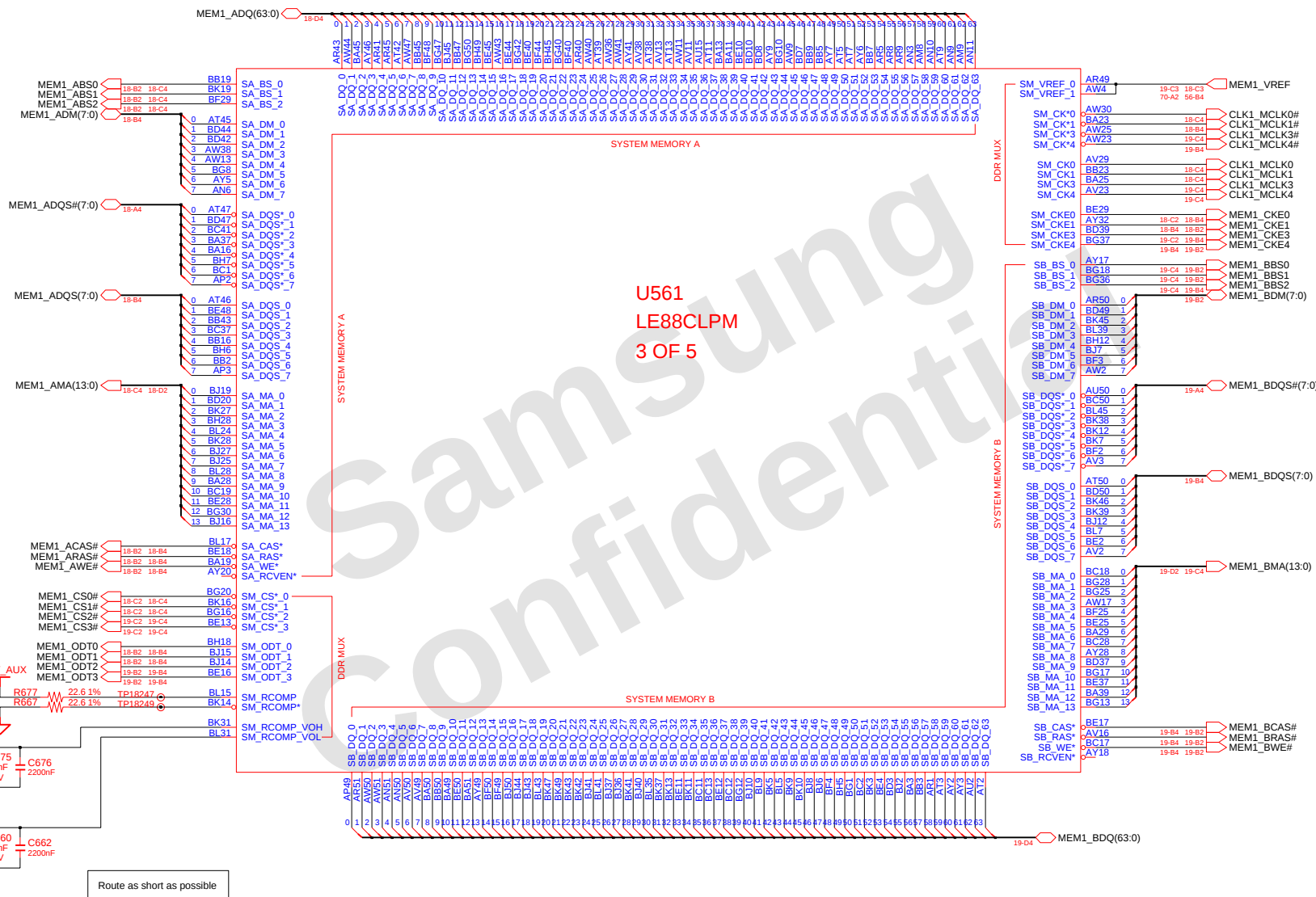
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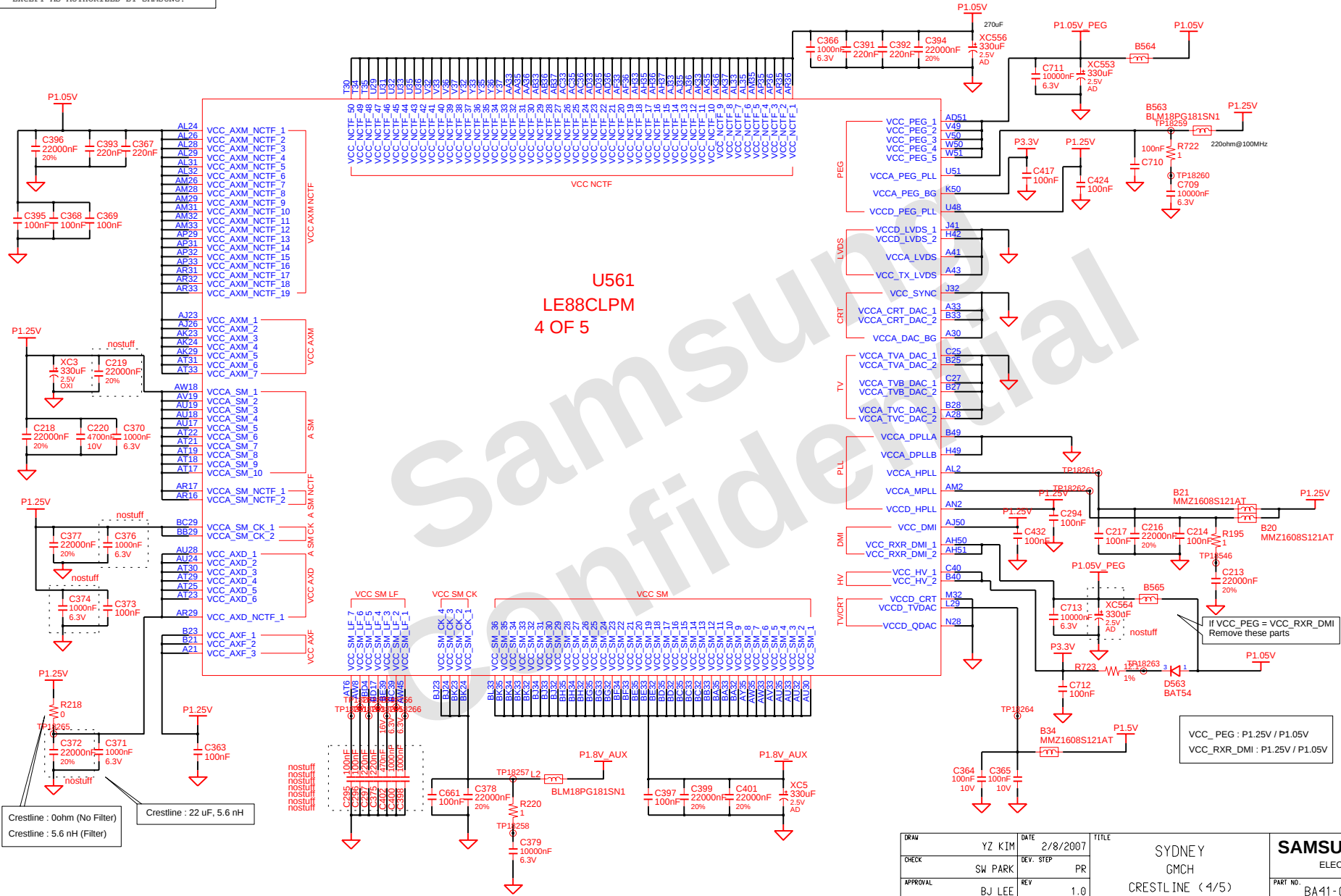
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APPROVAL	BJ LEE	REV	1.0			
MODULE CODE	undefined	LAST EDIT	February 8, 2007 10:00:08 PM	PAGE	14	OF 74

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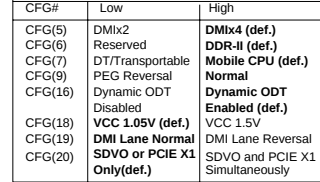
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APPROVAL		BJ LEE	REV	1.0				
MODULE CODE		LAST EDIT						
					February 8, 2007 10:00:08 PM		PAGE	15 OF 74

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DRAM	YZ KIM	DATE	2/8/2007	TITLE	SYDNEY GMCH CRESTLINE (4/5)	SAMSUNG ELECTRONICS		
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APPROVAL	BJ LEE	REV	1.0				PART NO.	BA14-0071#A
MODULE CODE	LAST EDIT		February 8, 2007 10:00:08 PM				PAGE 16 OF 74	

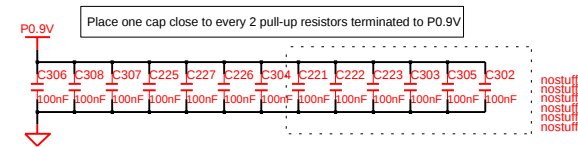
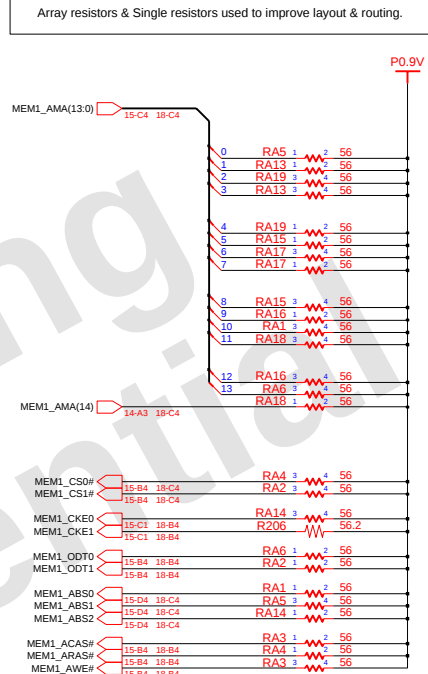
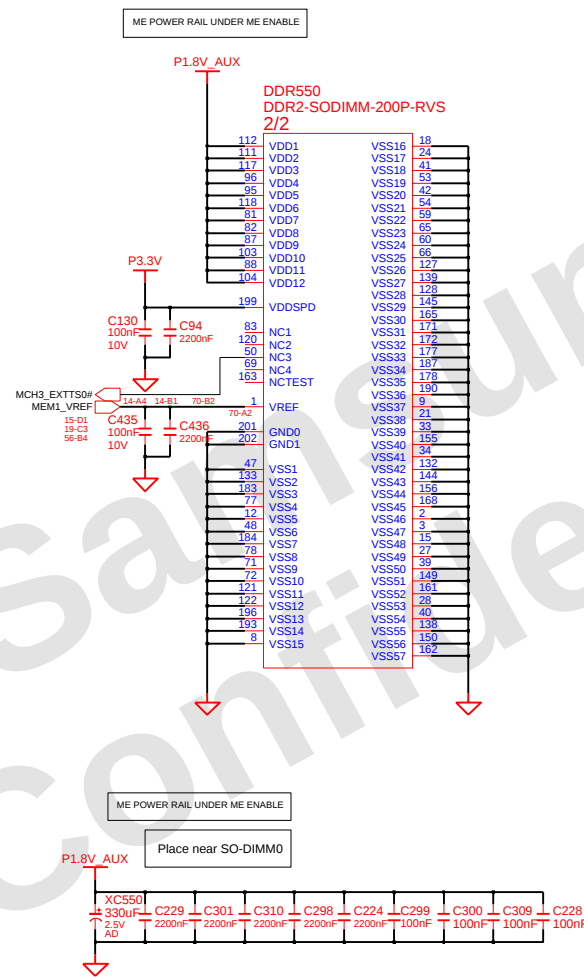
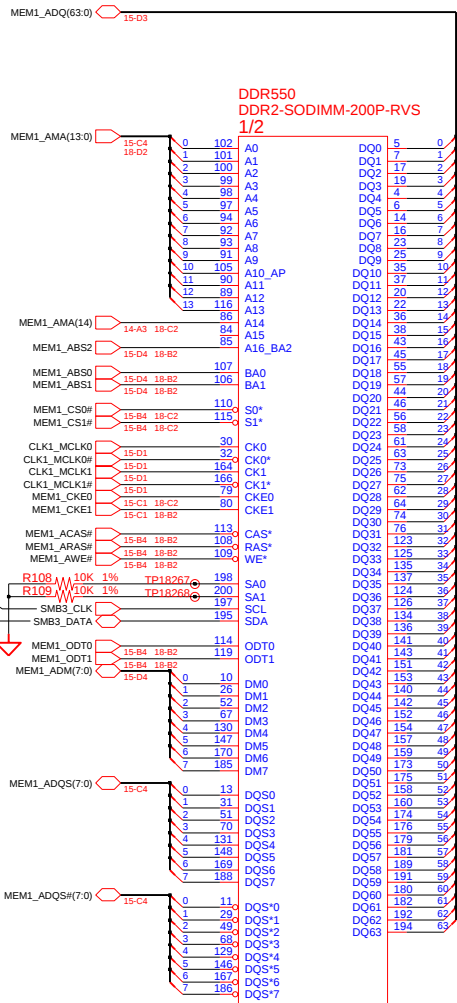
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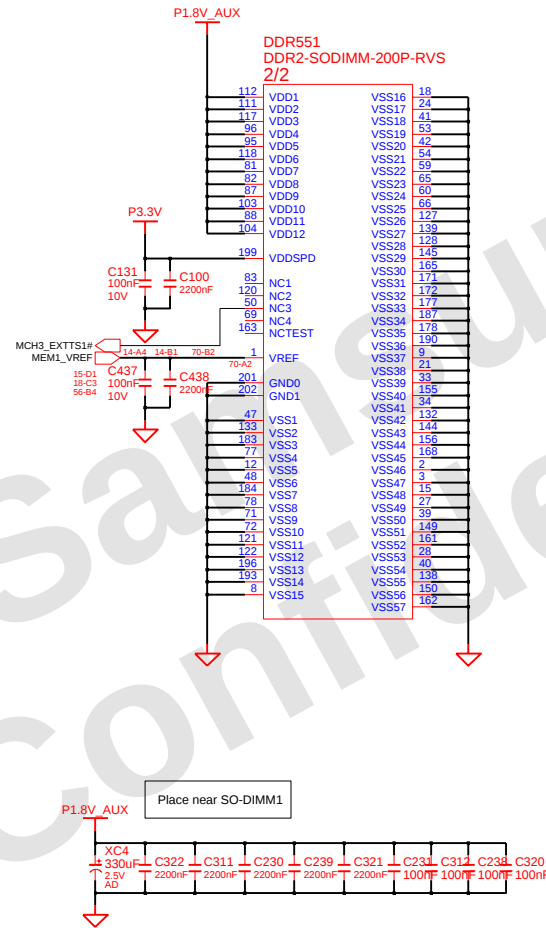
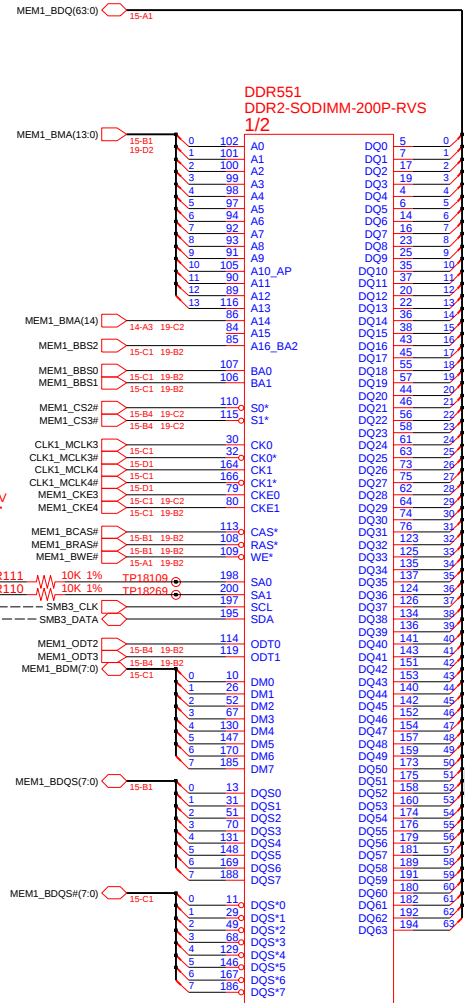
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DDR SO-DIMM #0

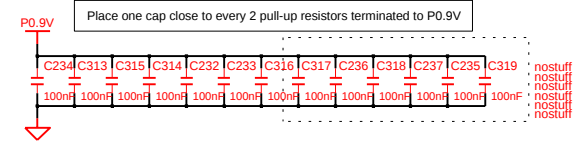
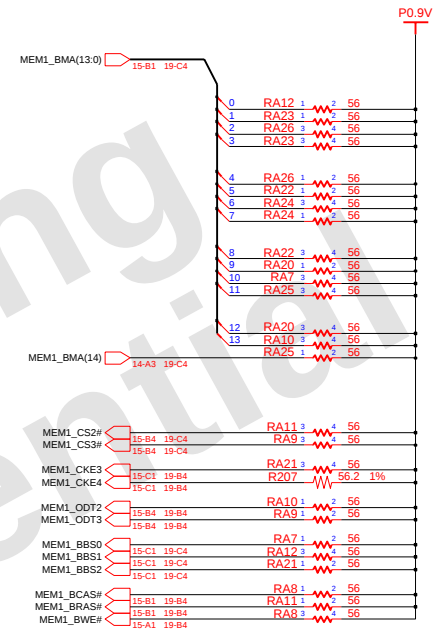


DRAW	YZ KIM	DATE	2/8/2007	TITLE	SYDNEY SODIMM DDR II CH A	SAMSUNG ELECTRONICS
CHECK	SW PARK	REV. STEP	PR			PART NO. BA41-00711#A
APPROVAL	BJ LEE	REV	1.0			
MODULE CODE		LAST EDIT	February 8, 2007 10:00:08 PM	PAGE	18	OF 74

DDR SO-DIMM #1



Array resistors & Single resistors used to improve layout & routing.



DRAW	YZ KIM	DATE	2/8/2007	TITLE	SYDNEY SODIMM	SAMSUNG ELECTRONICS
CHECK	SW PARK	REV. STEP	PR	DDR II CH B	PART NO.	BA41-0071HA
APPROVAL	BJ LEE	REV	1.0	February 8, 2007 10:00:08 PM	PAGE	19 OF 74
MODULE CODE		LAST EDIT				

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Internal VR Strap	
INTVRMEN	Pull up VccSus1_05, VccSus1_5, VccCL1_5
LAN100_SLP	Pull up VccLAN1_05, VccCL1_05

CHP3_LAN100_SLP
 CHP3_INTVRMEN

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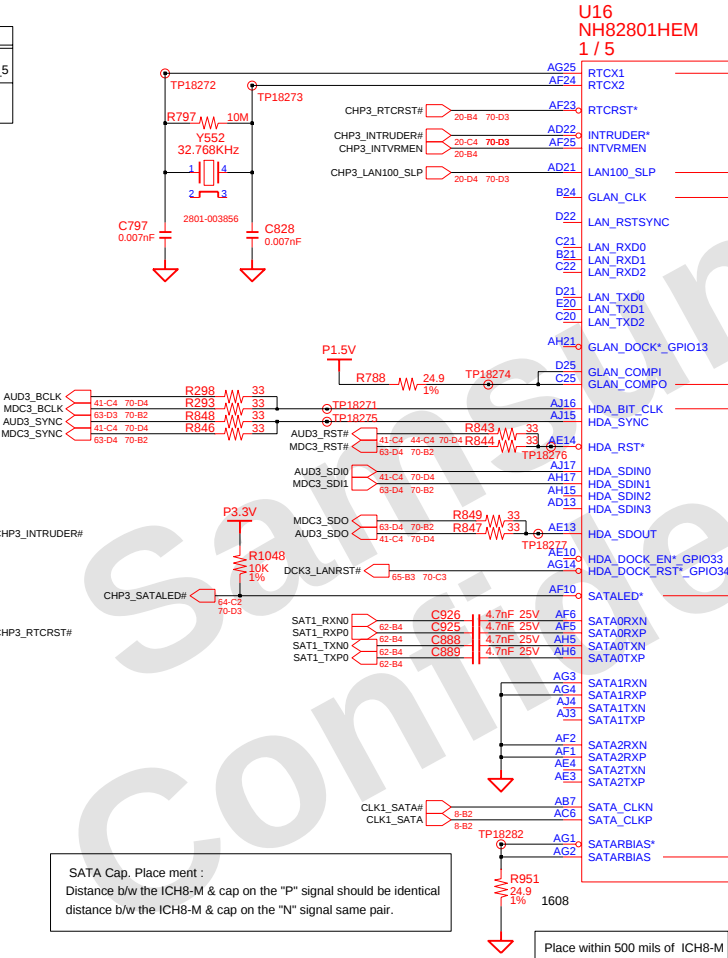
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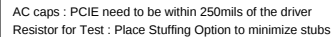


SATA Cap. Place ment :
 Distance b/w the ICH8-M & cap on the "P" signal should be identical
 distance b/w the ICH8-M & cap on the "N" signal same pair.

Place within 500 mils of ICH8-M

DRAW	YZ KIM	DATE	2/8/2007	TITLE	SYDNEY ICH8-M ICH8-M (1/5)	SAMSUNG ELECTRONICS
CHECK	SW PARK	REV. STEP	PR			PART NO. BA41-0071HA
APPROVAL	BJ LEE	REV	1.0			
MODULE CODE		LAST EDIT	February 8, 2007 10:00:08 PM	PAGE	20	OF 74

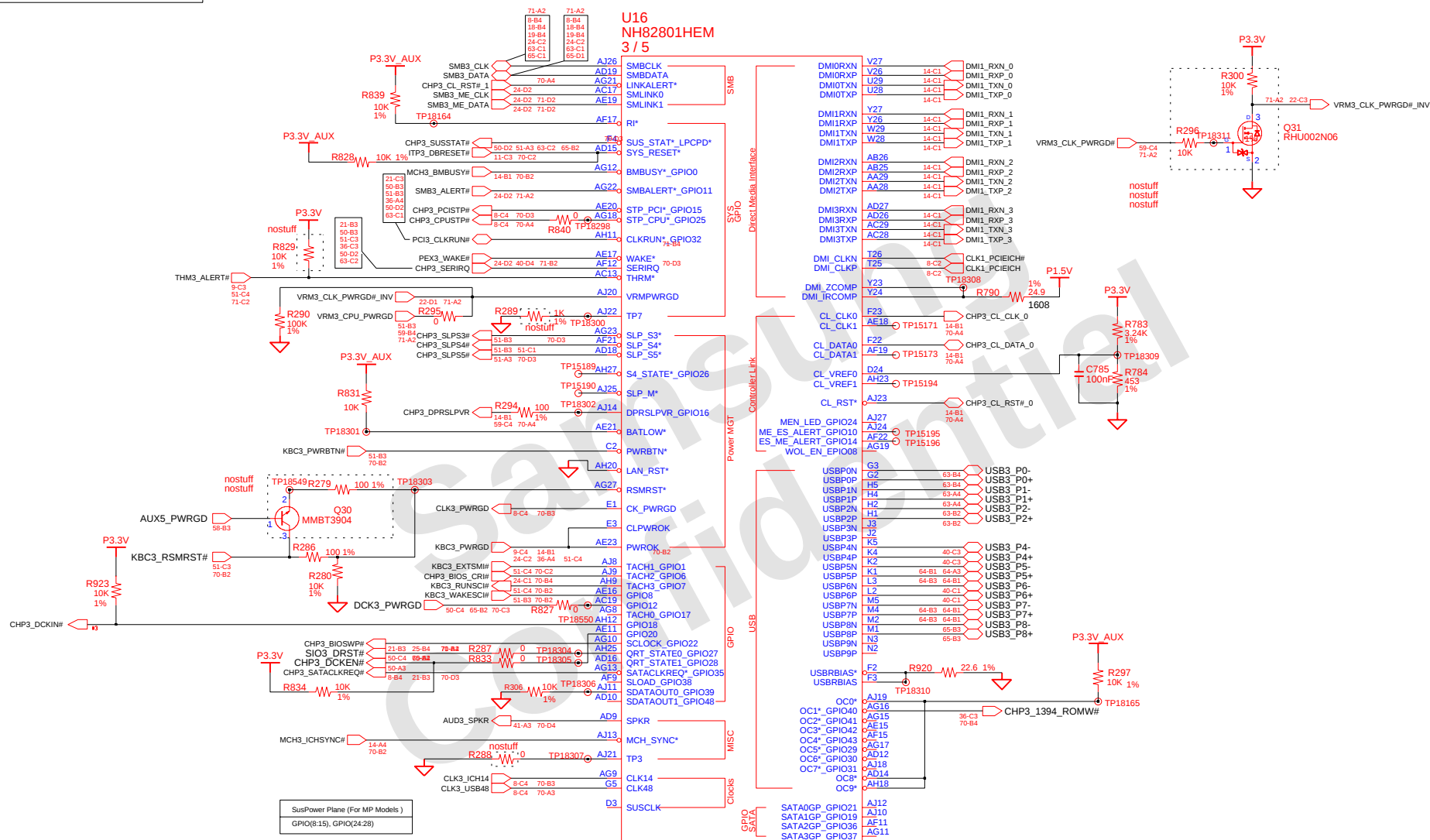
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DRAW	YZ KIM	DATE	2/8/2007	TITLE	SYDNEY ICH8-M ICH8-M(2/5)	
CHECK	SW PARK	DEV. STEP	PR			
APPROVAL	BJ LEE	REV	1.0			
MODULE CODE	undefined	LAST EDIT		February 8, 2007 10:00:08 PM	PAGE	21 OF 74

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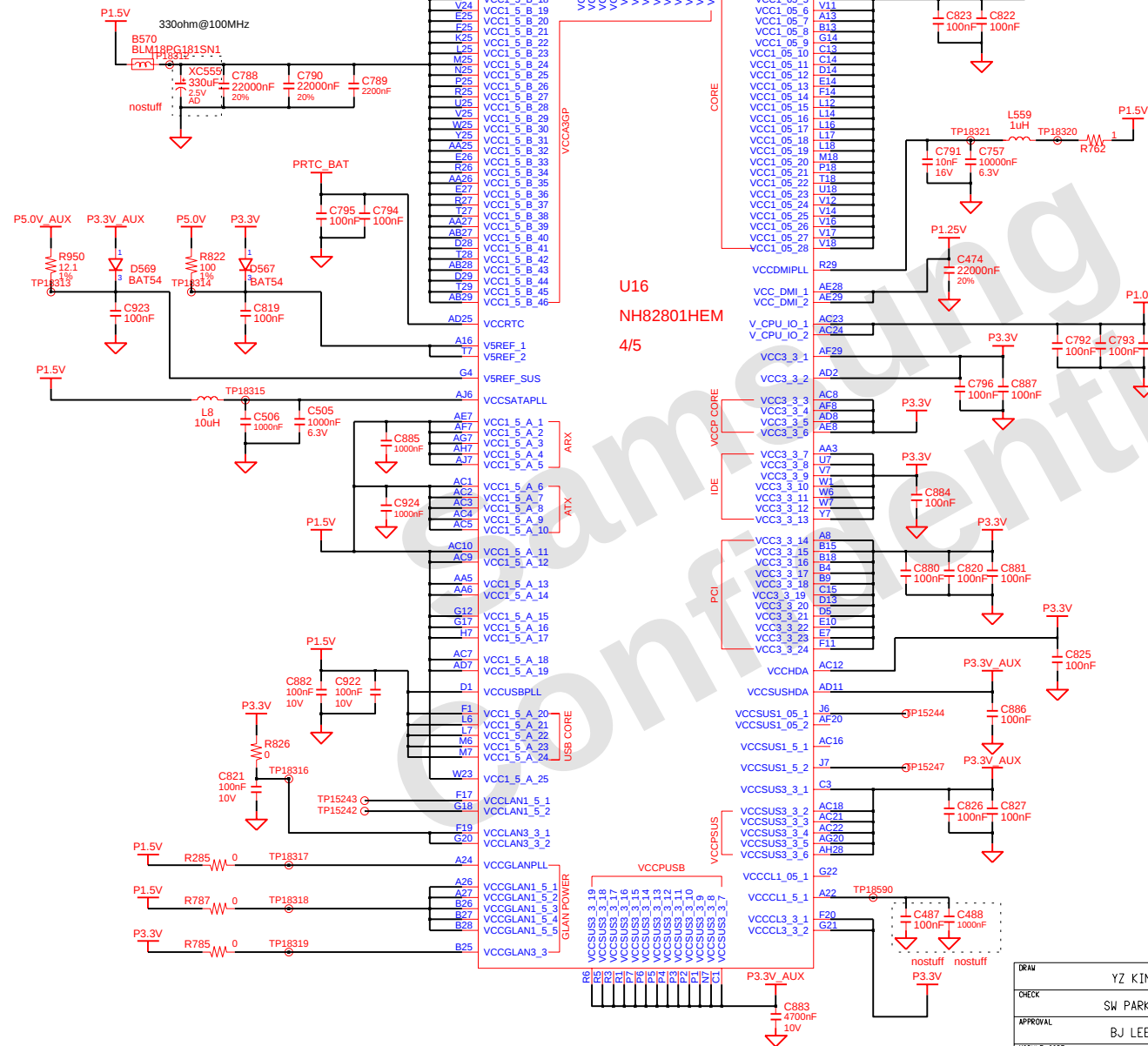
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U16
NH82801HEM
3 / 5

DRAW	YZ KIM	DATE	2/8/2007	TITLE	SIDNEY ICH8-M	SAMSUNG ELECTRONICS
CHECK	SW PARK	REV. STEP	PR		ICH8-M (3/5)	PART NO. BA41-0071HA
APPROVAL	BJ LEE	REV	1.0			
MODULE CODE		LAST EDIT	February 8, 2007 10:00:08 PM	PAGE	22	OF 74

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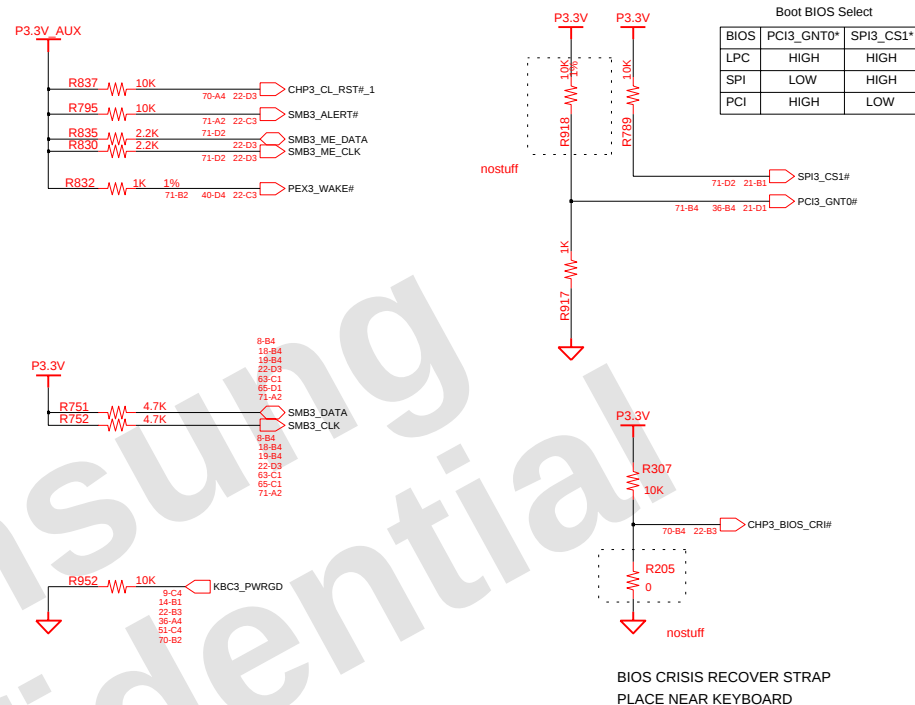
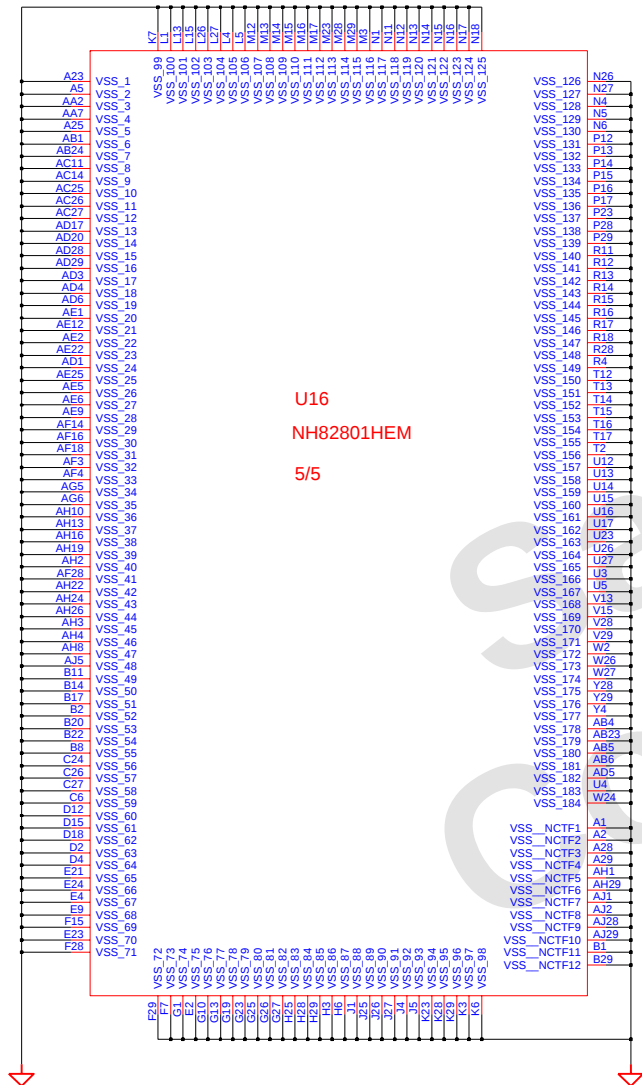
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DRAW	YZ KIM	DATE	2/8/2007	TITLE		SAMSUNG ELECTRONICS
CHECK	SW PARK	REV. STEP	PR	SYDNEY ICH8-M		
APPROVAL	BJ LEE	REV	1.0	ICH8-M (4/5)		
				PART NO.	BA11-0071#A	
MODULE CODE	LAST EDIT		February 8, 2007 10:00:08 PM		PAGE	23 OF 74

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BIOS CRISIS RECOVER STRAP
PLACE NEAR KEYBOARD

DRAW	YZ KIM	DATE	2/8/2007	TITLE	SYDNEY ICH8-M ICH8-M (5/5)	SAMSUNG ELECTRONICS PART NO. BA41-0071#A
CHECK	SW PARK	REV. STEP	PR			
APPROVAL	BJ LEE	REV	1.0			
MODULE CODE		LAST EDIT	February 8, 2007 10:00:08 PM	PAGE	24 OF 74	

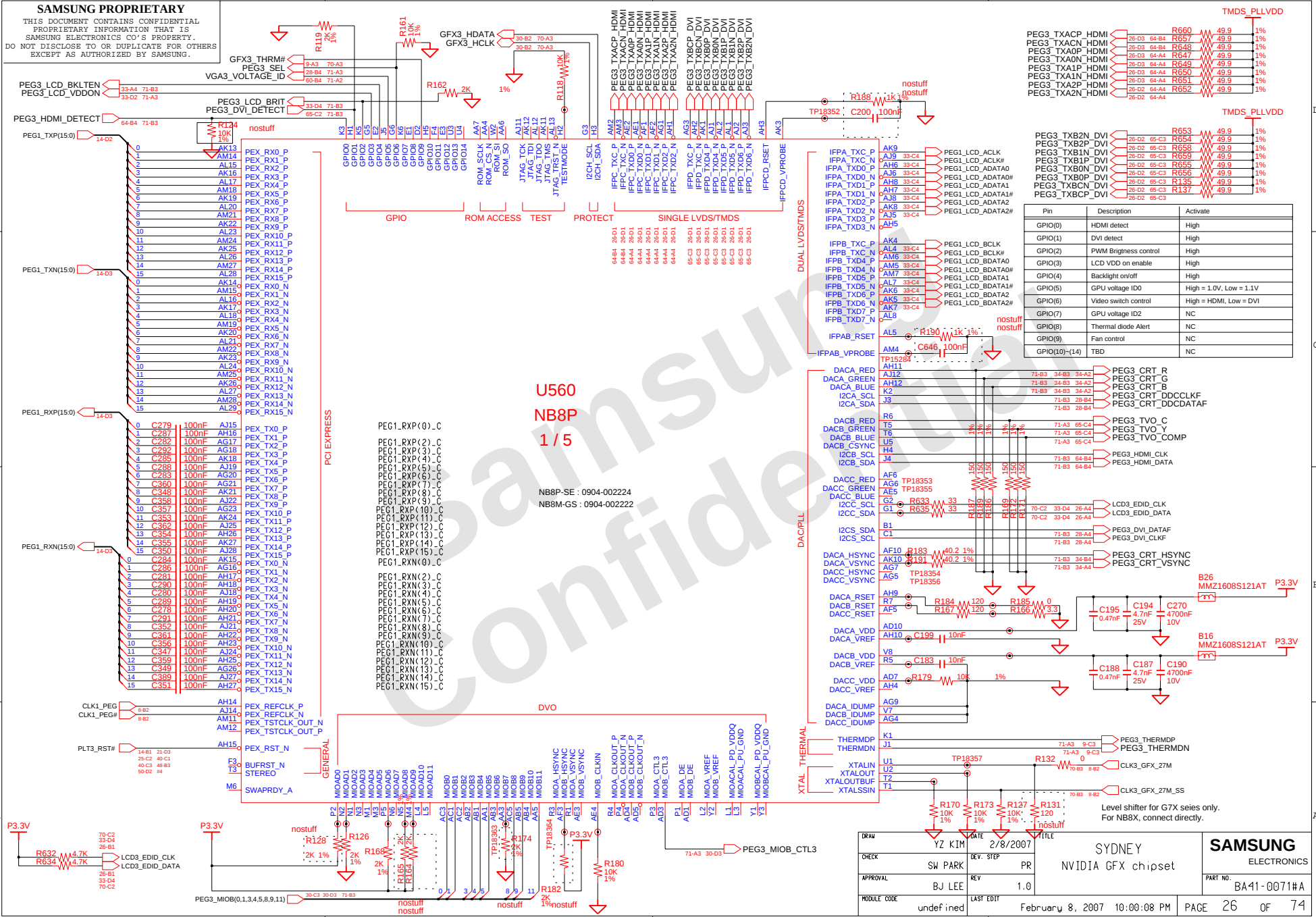
SPI ROM

80H DECODER CONNECTOR

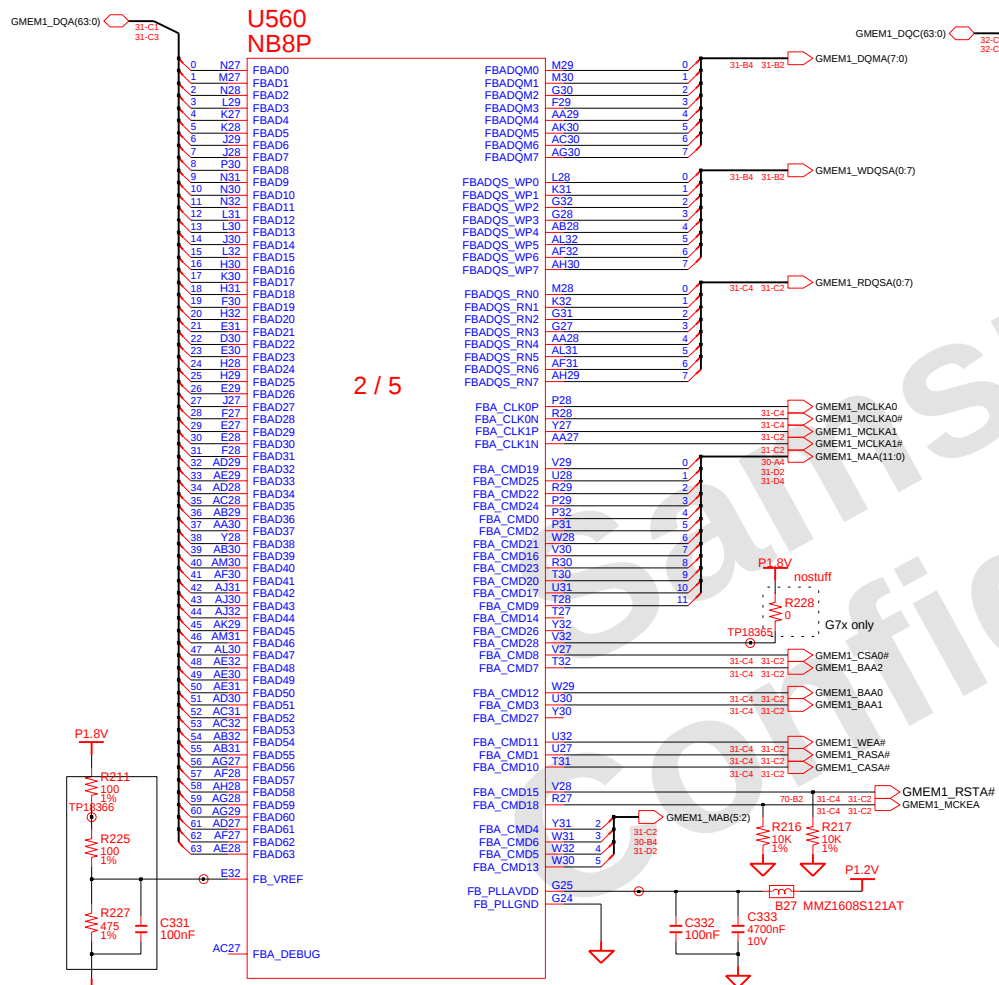


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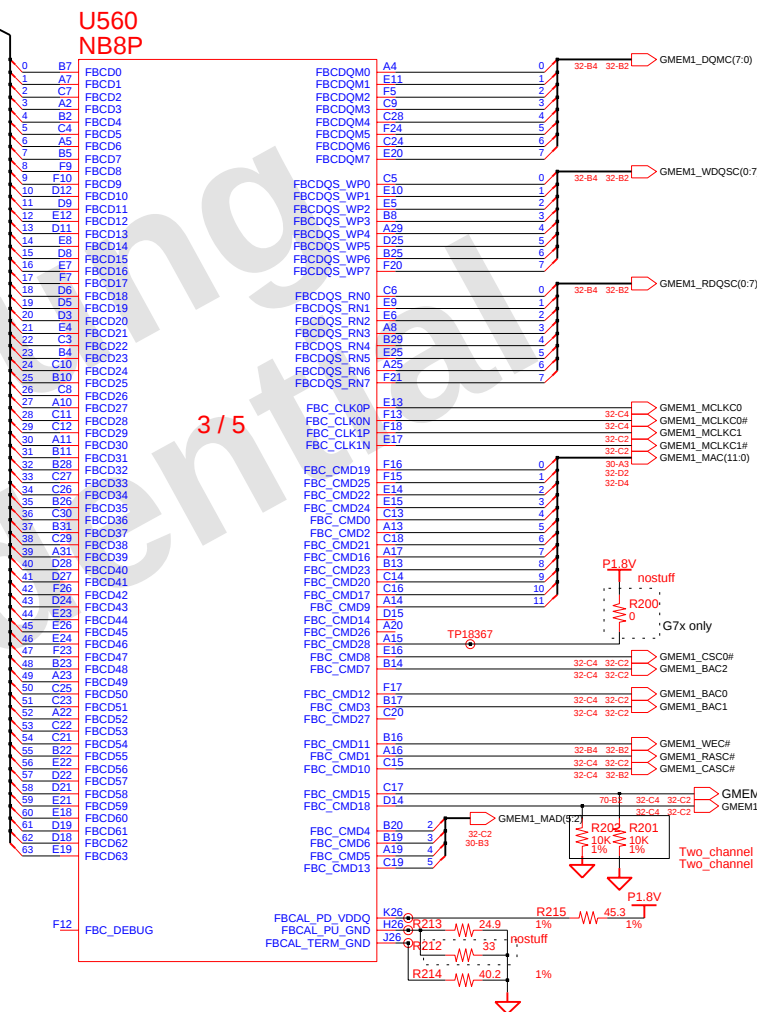


Graphic Memory I/F
(Using FBA Channel)



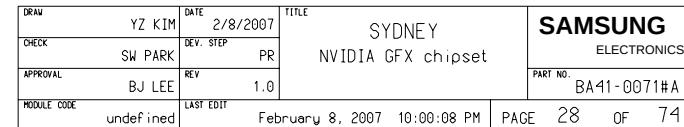
Use for G72M, don't need for G73M

Graphic Memory I/F
(Using FBC Channel)



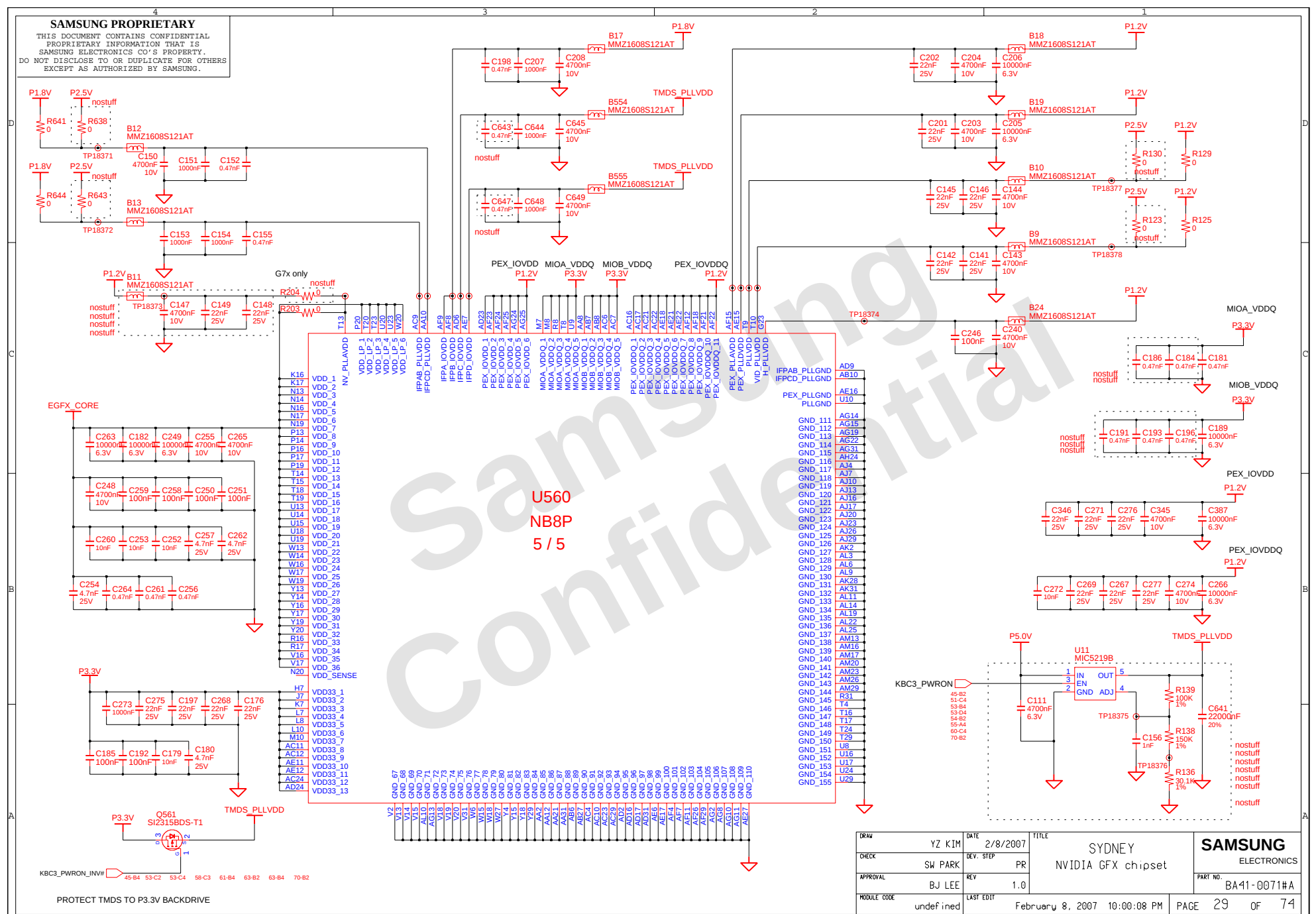
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APPROVAL	BJ LEE	REV	1.0				
MODULE CODE	undefined	LAST EDIT	February 8, 2007 10:00:08 PM				
				PAGE	27	OF	74

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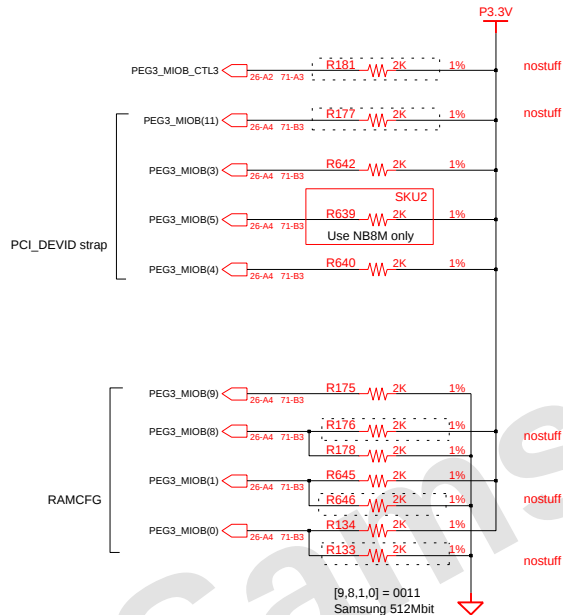
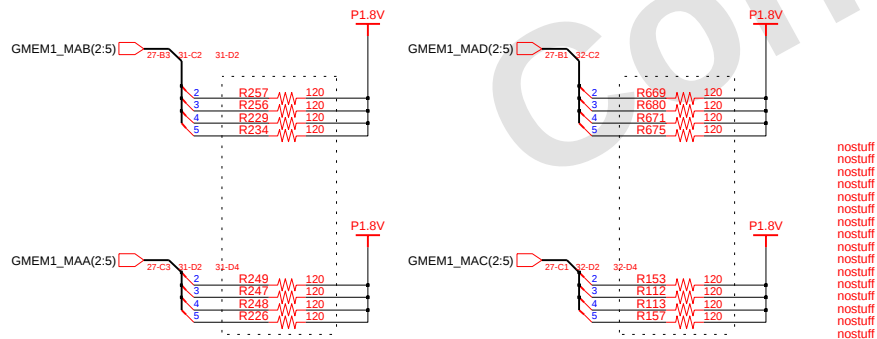


DRAW	YZ KIM	DATE	2/8/2007	TITLE	SYDNEY	SAMSUNG ELECTRONICS
CHECK	SW PARK	REV. STEP	PR		NVIDIA GFX chipset	
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MODULE CODE	undefined	LAST EDIT	February 8, 2007 10:00:08 PM	PAGE	29 OF 74	

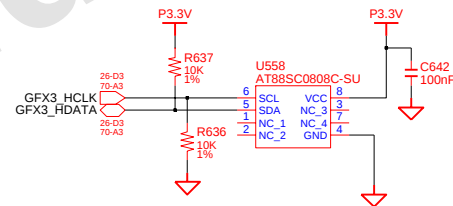
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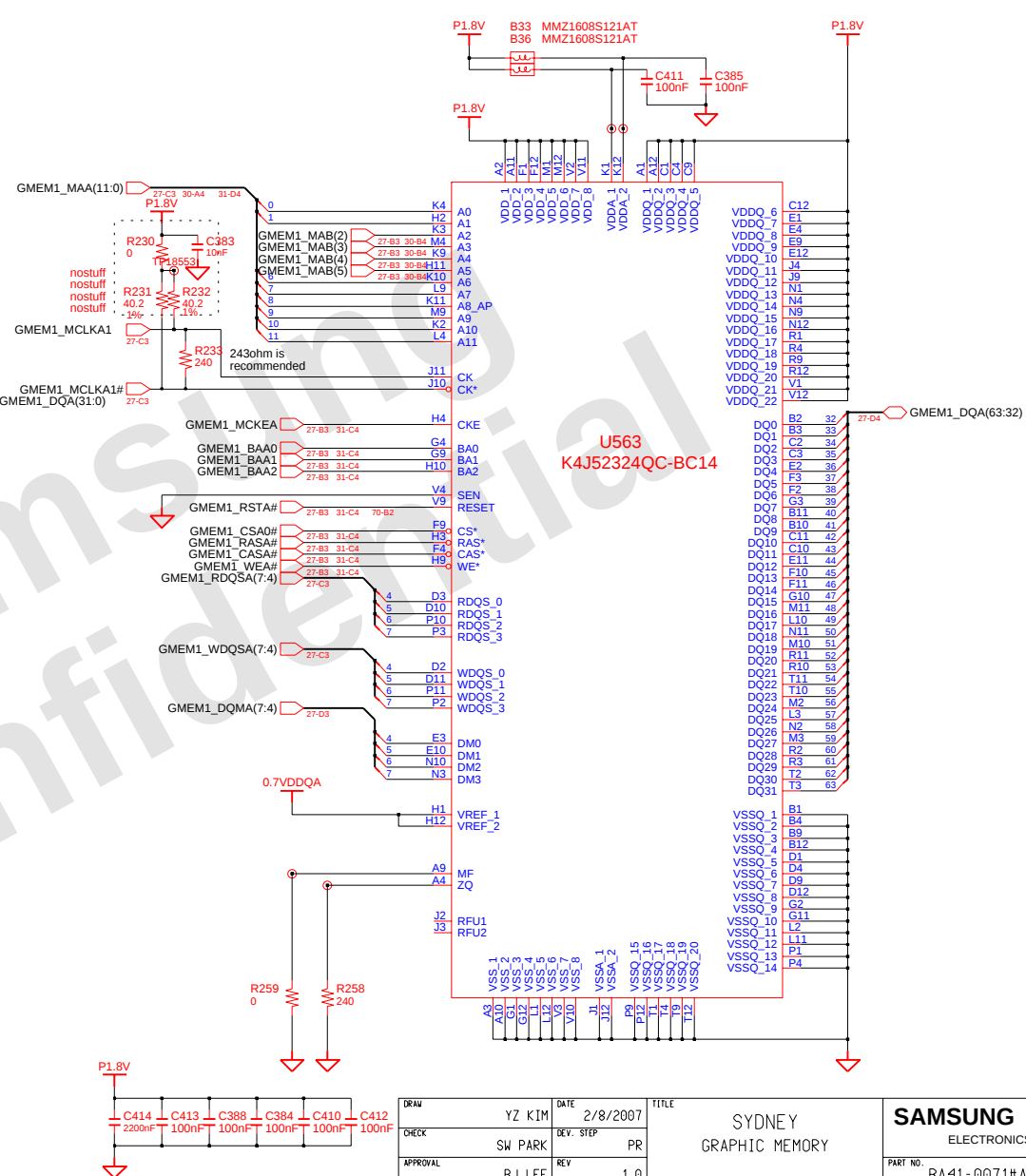
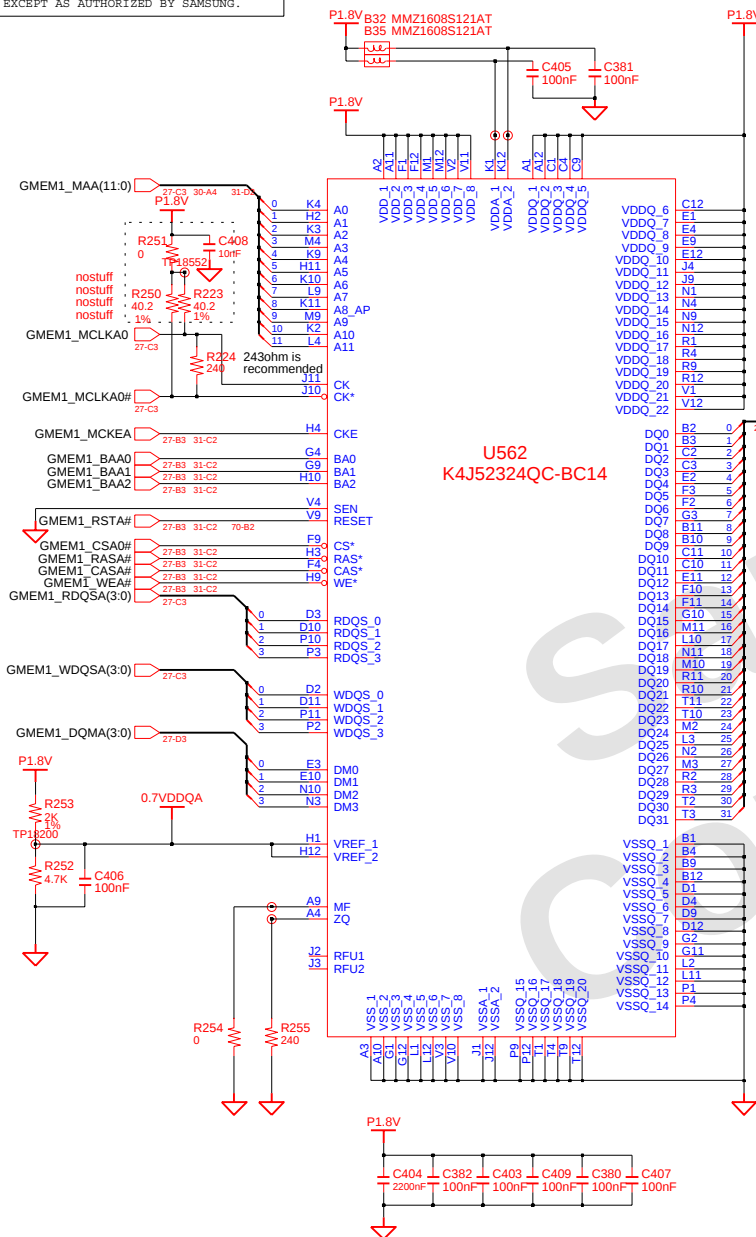


Straps	Pin # (Rev.A02)	Descriptions
SUB_VENDOR	MIOAD(1)	0 : No BIOS 1 : Read from BIOS(Default)
RAMCFG(3.0) [9.8.1.0]	MIOB(9) MIOB(8) MIOB(1) MIOB(0)	0111 : samsung GDDR3 256Mbit 0101 : Qimonda GDDR3 256Mbit 0011 : samsung GDDR3 512Mbit 0001 : Qimonda GDDR3 512Mbit
CRYSTAL(0)	MIOB(2)	0 : 27 MHz (Default) 1 : Reserved
TV_MODE(2.0)	MIOB(6) MIOAD(10) MIOAD(7)	000 : NTSC M 001 : NTSC J (default) 010 : PAL M 011 : PAL N 100 : PAL CN 101 : PAL BDGHI 110 : Reserved 111 : Reserved
PCI_DEVID(4.0)	CTL3 MIOB(11) MIOB(3) MIOB(5) MIOB(4)	0111 (0x407) : NB8P-GS 0101 (0x425) : NB8P-SE 0111 (0x427) : NB8M-GS
ROM_TYPE(1.0)	MIOB(10) MIOBVSNC	No ROM (NC)
USER STRAP	MIOAD(2.5)	EDID



DRAW	YZ KIM	DATE	2/8/2007	TITLE	SYDNEY GFX STRAP	SAMSUNG ELECTRONICS
CHECK	SW PARK	REV. STEP	PR			
APPROVAL	BJ LEE	REV	1.0			
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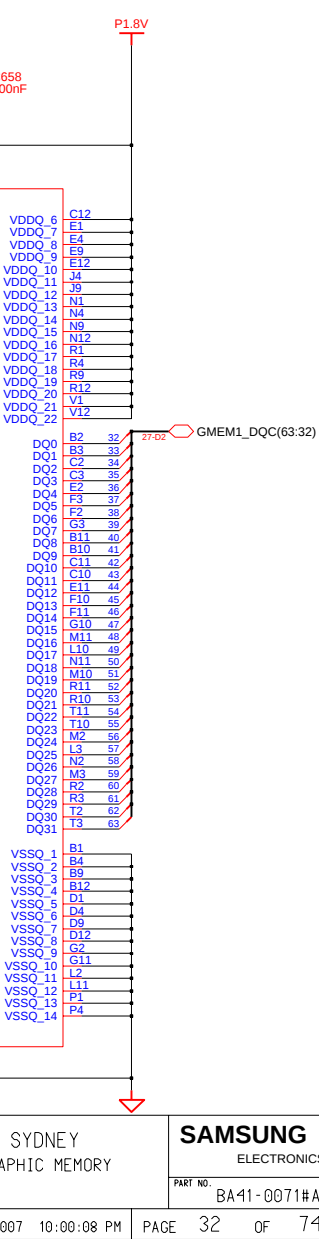
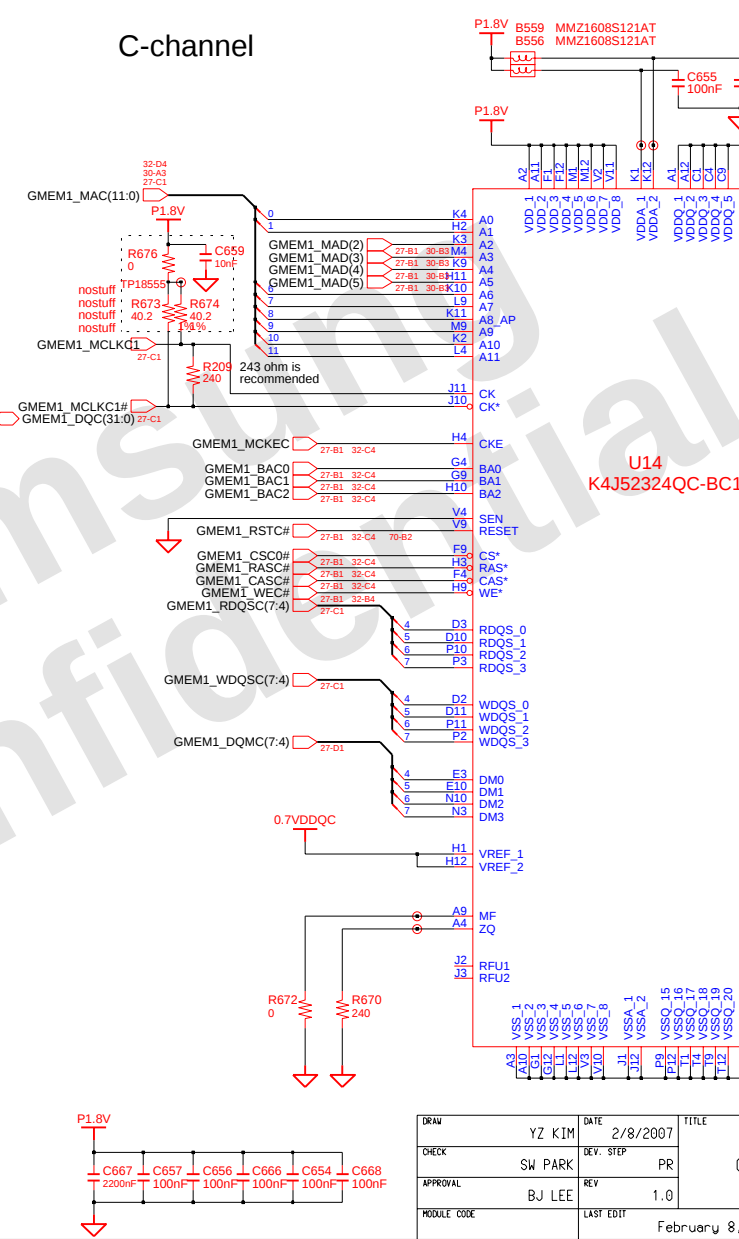
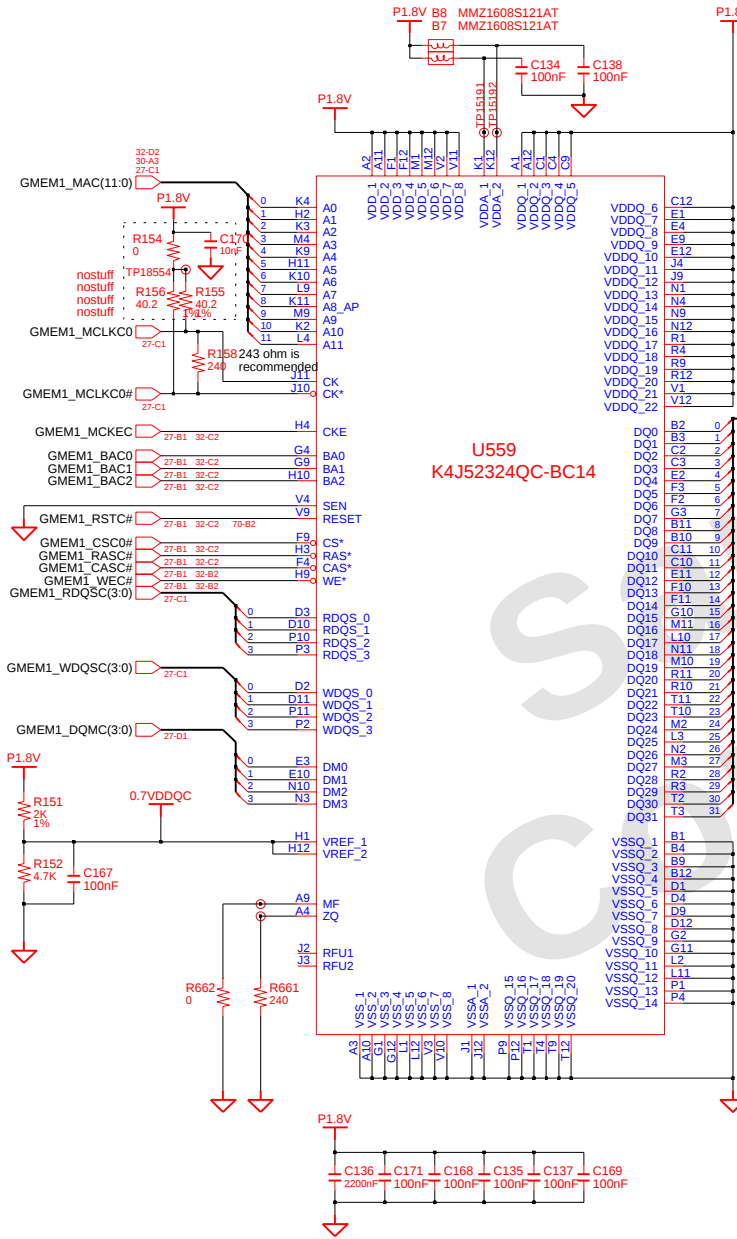
A-channel



DRAW	YZ KIM	DATE	2/8/2007	SYDNEY GRAPHIC MEMORY			SAMSUNG ELECTRONIC			
CHECK	SW PARK	DEV. STEP	PR							
APPROVAL	BJ LEE	REV	1.0							
MODULE CODE	LAST EDIT									February 8, 2007 10:00:08 PM
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This page is for "2channel-model". (only use for SKU1)

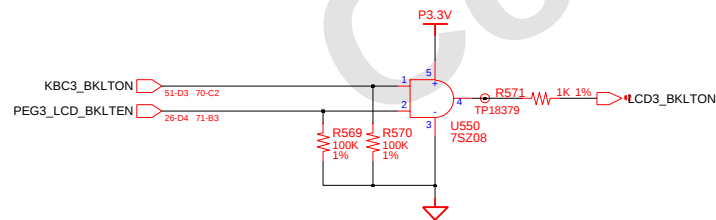
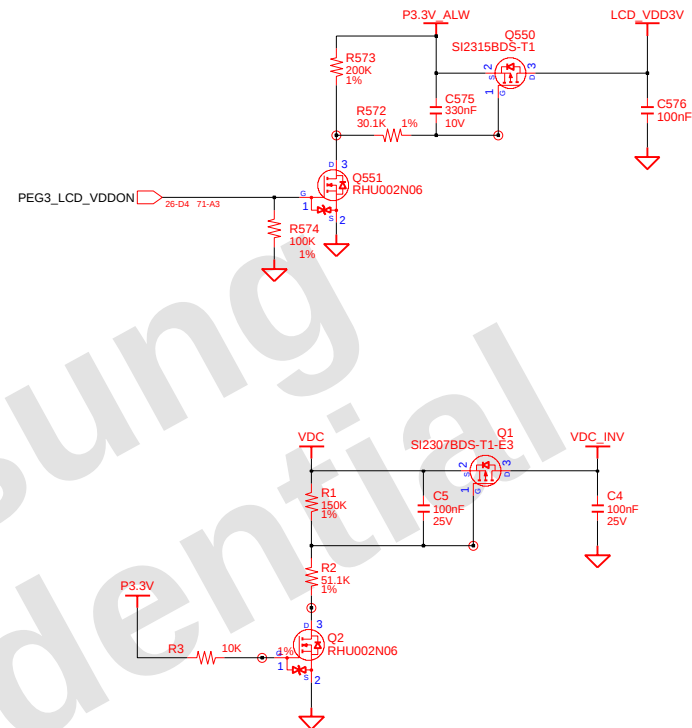
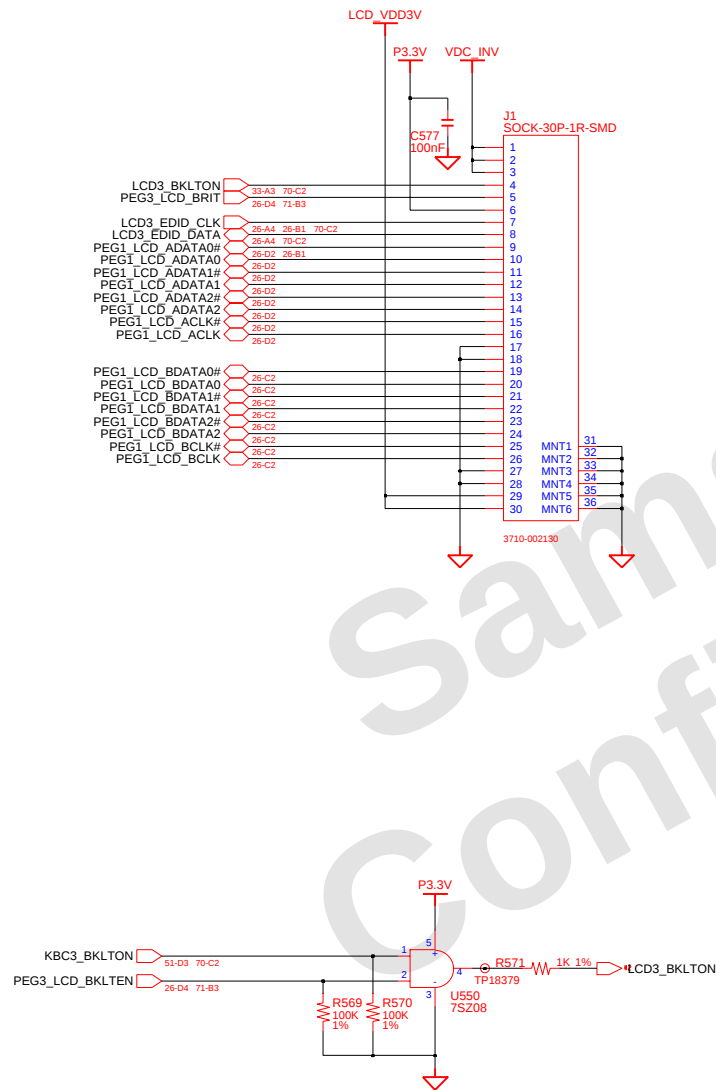
C-channel



DRAW	YZ KIM	DATE	2/8/2007	TITLE	SYDNEY	SAMSUNG ELECTRONICS
CHECK	SW PARK	REV. STEP	PR	GRAPHIC MEMORY		
APPROVAL	BJ LEE	REV	1.0			PART NO.
MODULE CODE		LAST EDIT	February 8, 2007 10:00:08 PM	PAGE	32	OF 74
						BA41-00711A

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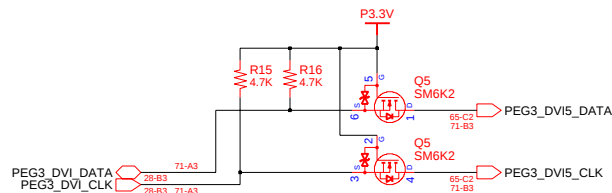
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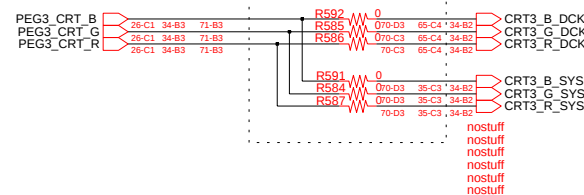
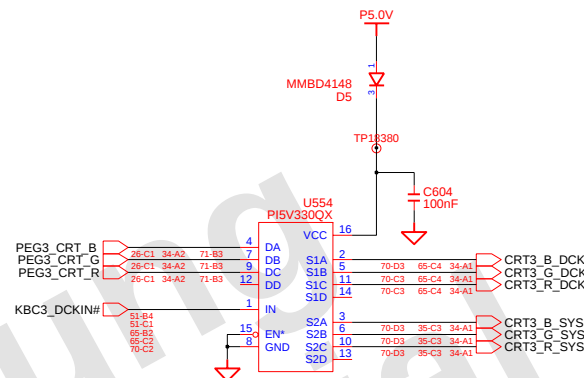
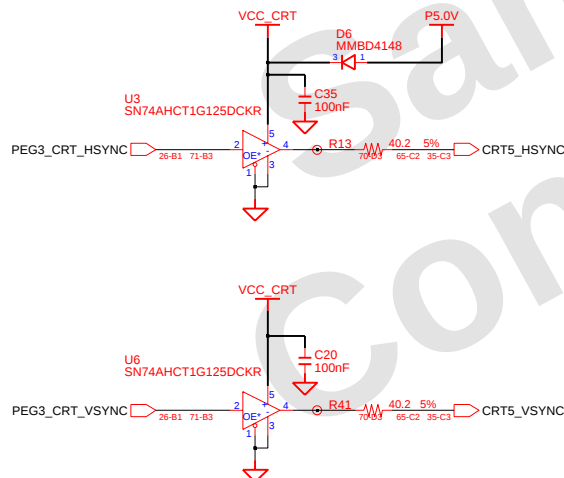
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CHECK	SW PARK	REV. STEP	PR			PART NO. BA41-00711#A
APPROVAL	BJ LEE	REV	1.0			
MODULE CODE		LAST EDIT	February 8, 2007 10:00:08 PM	PAGE	33	OF 74

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To Docking



DRAW	YZ KIM	DATE	2/8/2007	TITLE	SYDNEY	SAMSUNG
CHECK	SW PARK	REV. STEP	PR			ELECTRONICS
APPROVAL	BJ LEE	REV	1.0		CRT&TVO BUS SWITCH	PART NO. BA41-00711A
MODULE CODE		LAST EDIT	February 8, 2007 10:00:08 PM	PAGE	34	OF 74

CRT CONNECTOR

The schematic diagram illustrates the internal circuitry of the CRT connector. It shows the connection between the CRT connector pins and the internal components. The components include:

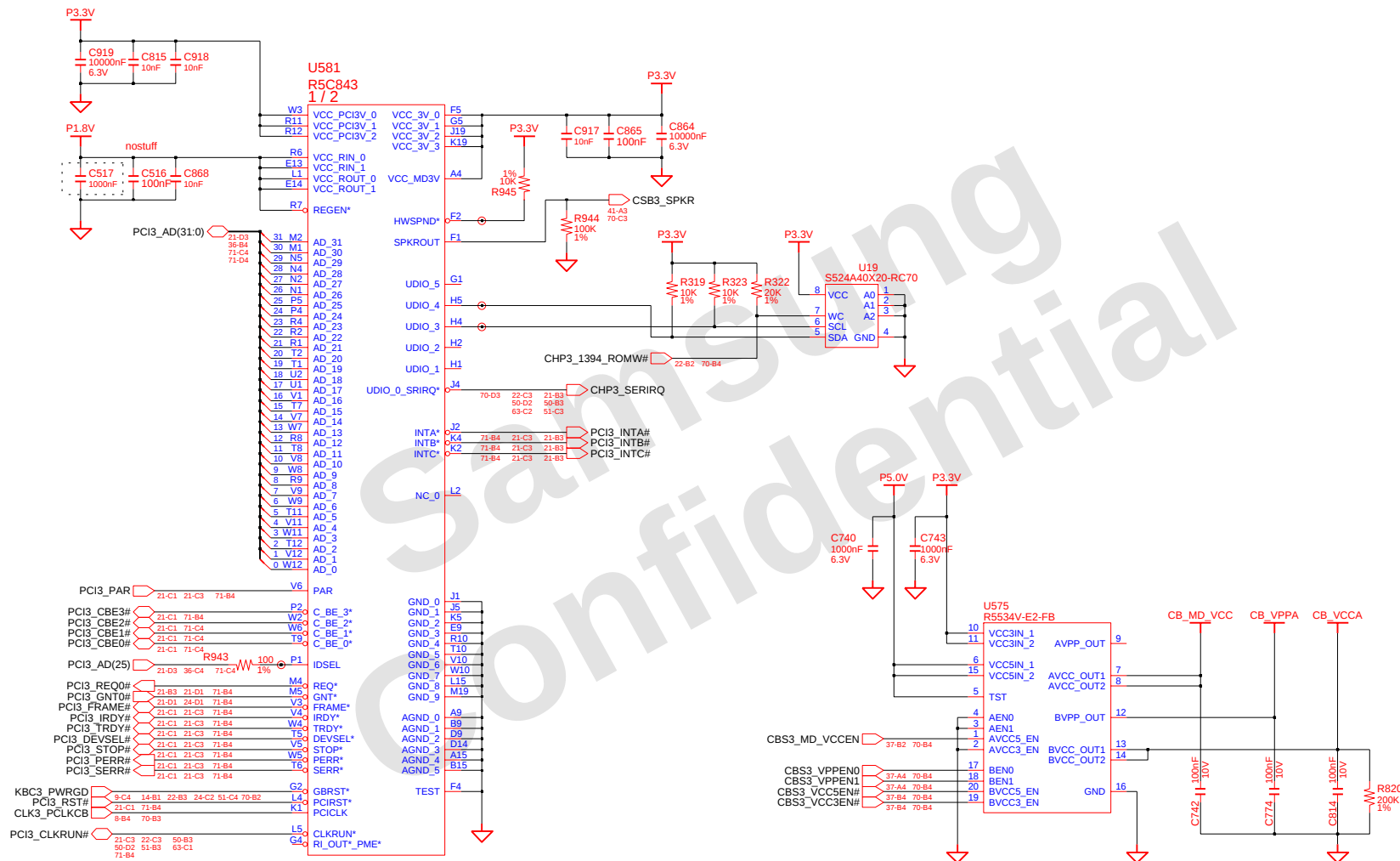
- CRT Connector Pins:** CRT3_R_SYS, CRT3_G_SYS, CRT3_B_SYS, CRT5_DDCCDATA, CRT5_DDCCCLK, CRT5_HSYNC, CRT5_VSYNC.
- Resistors:** R554, R553, R552, R14, R19, R575.
- Capacitors:** C571, C560, C559, C570, C557, C551, C555, C553, C569.
- Inductors:** L550, L552, L551.
- Diodes:** MMBD4148 D553, MMZ1608S121AT B552, D552, D551, D550.
- Other Components:** P5.0V, C569, J552, DSUB-15-3R-F, 3701-001326.

The diagram is labeled "CART CONNECTOR".

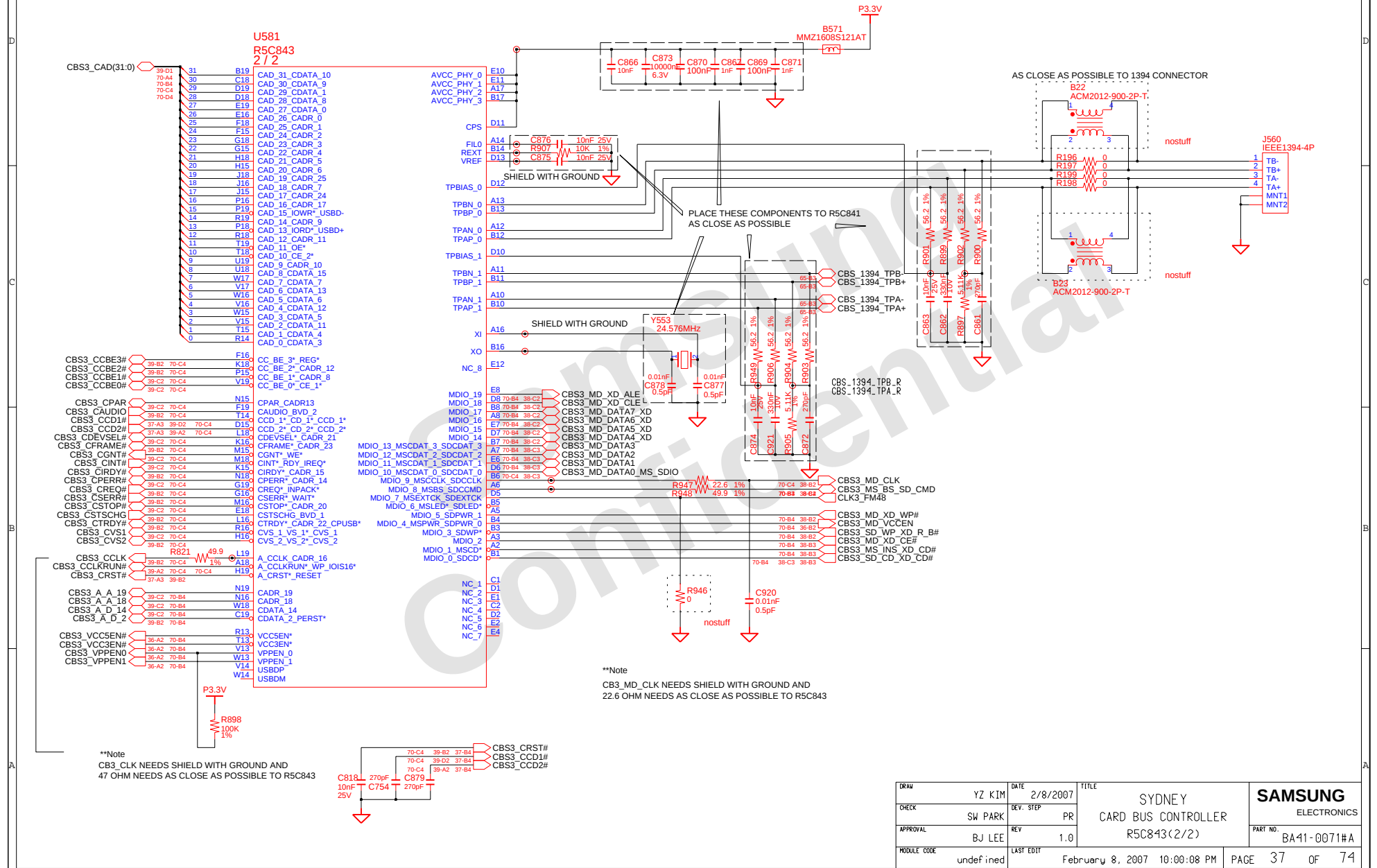
DRAM	YZ KIM	DATE	2/8/2007	TITLE SYDNEY CRT CRT CONNECTOR	SAMSUNG ELECTRONICS PART NO. BA14-0071#A
CHECK	SW PARK	DEV. STEP	PR		
APPROVAL	BJ LEE	REV	1.0		
MODULE CODE	LAST EDIT		February 8, 2007 10:00:08 PM		

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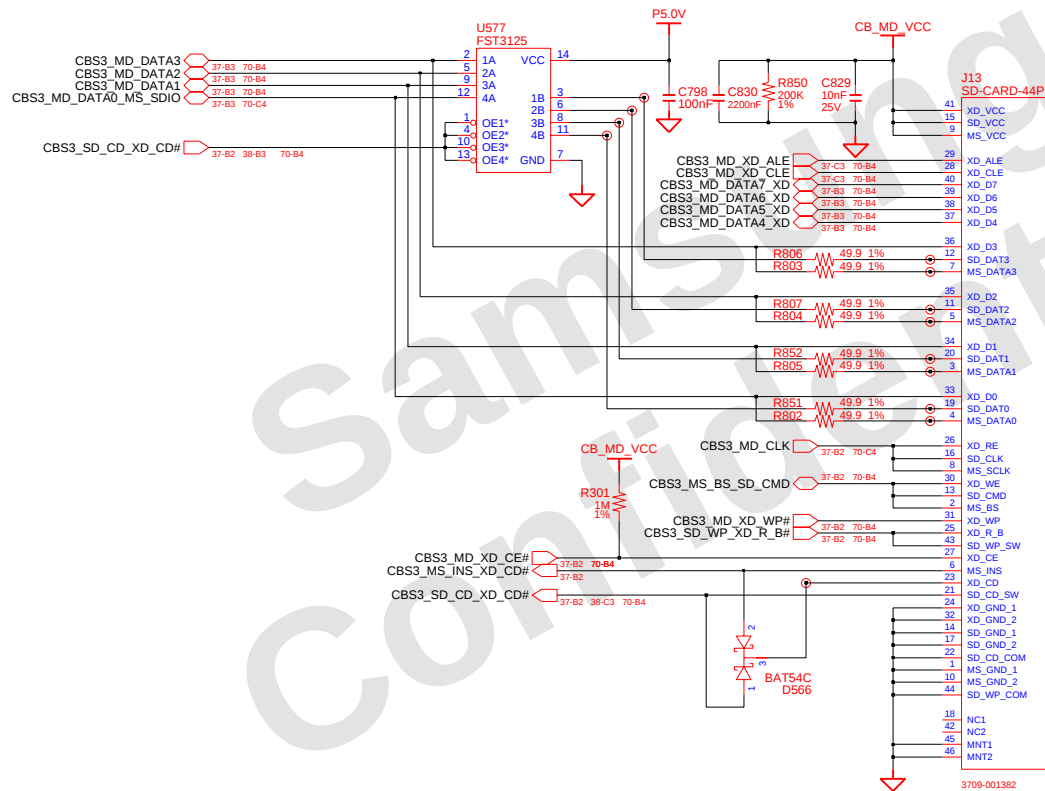


DRAW	YZ KIM	DATE	2/8/2007	TITLE	SYDNEY	SAMSUNG ELECTRONICS
CHECK	SW PARK	REV. STEP	PR	CARD BUS CONTROLLER		
APPROVAL	BJ LEE	REV	1.0	R5C843(1/2)	PART NO.	BA41-0071HA
MODULE CODE		LAST EDIT	February 8, 2007 10:00:08 PM	PAGE	36	OF 74



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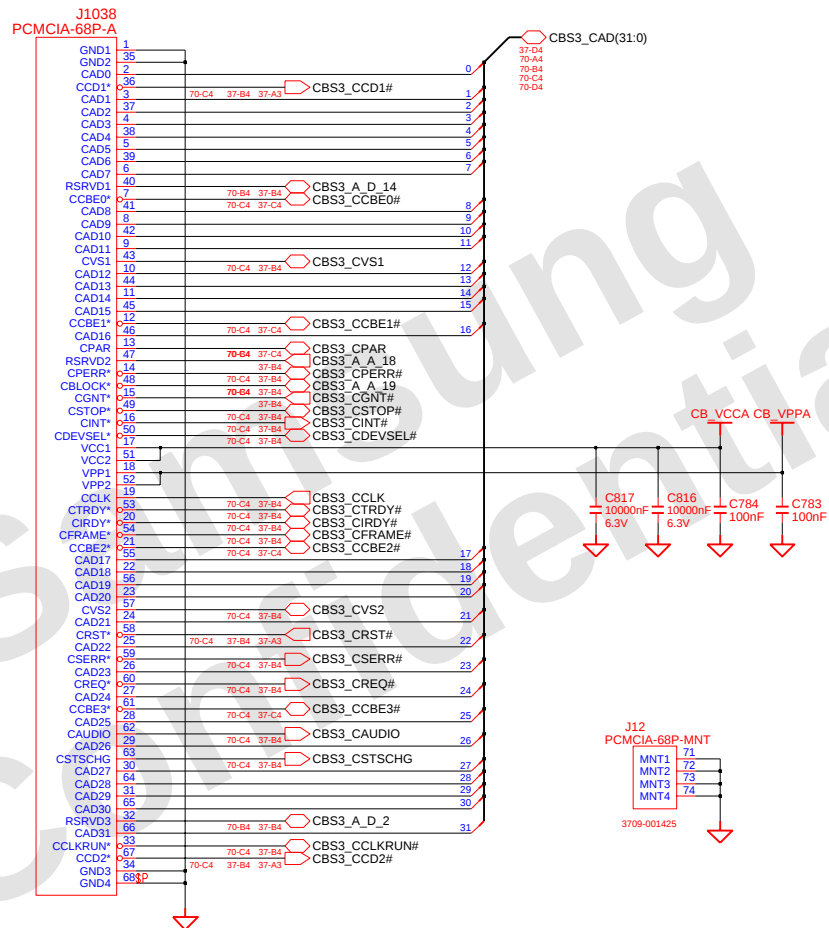
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DRAW	YZ KIM	DATE	2/8/2007	TITLE	SYDNEY CARD BUS CONTROLLER 4-I ONE CONNECTOR	SAMSUNG ELECTRONICS
CHECK	SW PARK	REV. STEP	PR			PART NO. BA41-00711#A
APPROVAL	BJ LEE	REV	1.0			
MODULE CODE	undefined	LAST EDIT	February 8, 2007 10:00:08 PM	PAGE	38	OF 74

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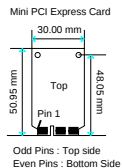
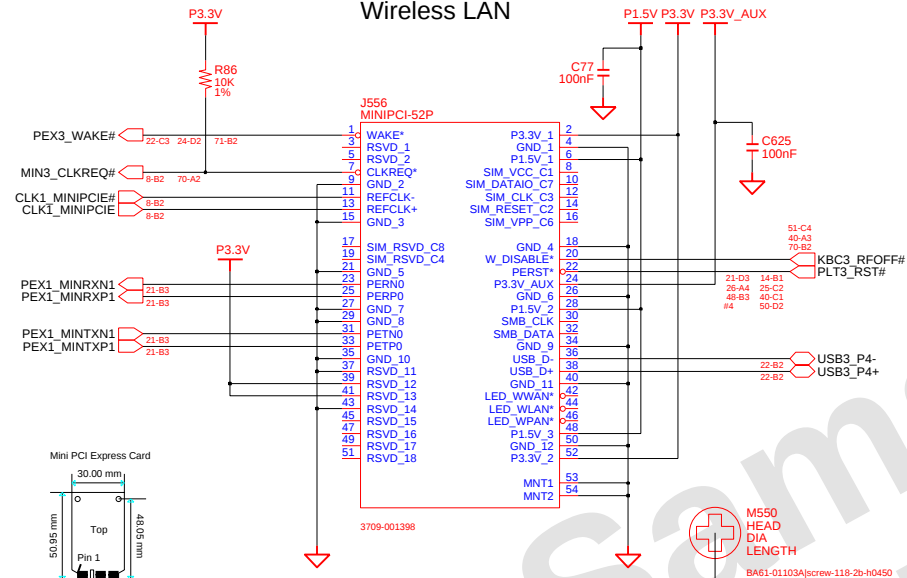


DRAW	YZ KIM	DATE	2/8/2007	TITLE	SYDNEY	SAMSUNG
CHECK	SW PARK	REV. STEP	PR	CARD BUS CONTROLLER	ELECTRONICS	
APPROVAL	BJ LEE	REV	1.0	EXPRESS CARD & PCMCIA CONN	PART NO.	BA41-0071#A
MODULE CODE	undefined	LAST EDIT	February 8, 2007 10:00:08 PM	PAGE	39	OF 74

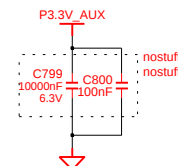
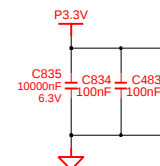
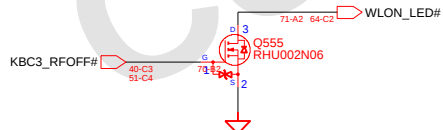
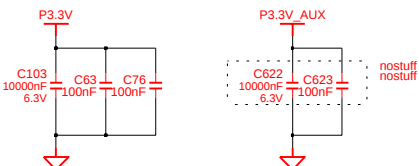
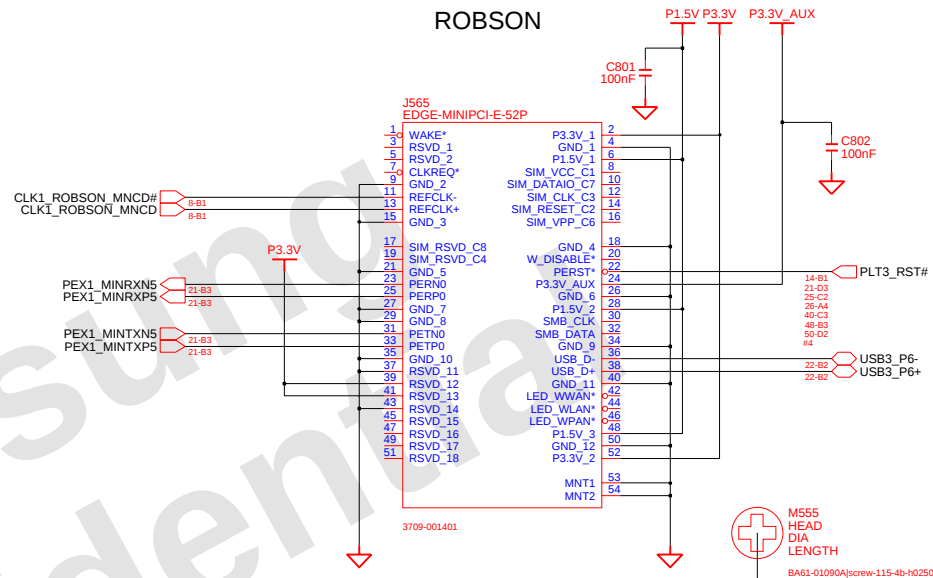
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Wireless LAN



ROBSON



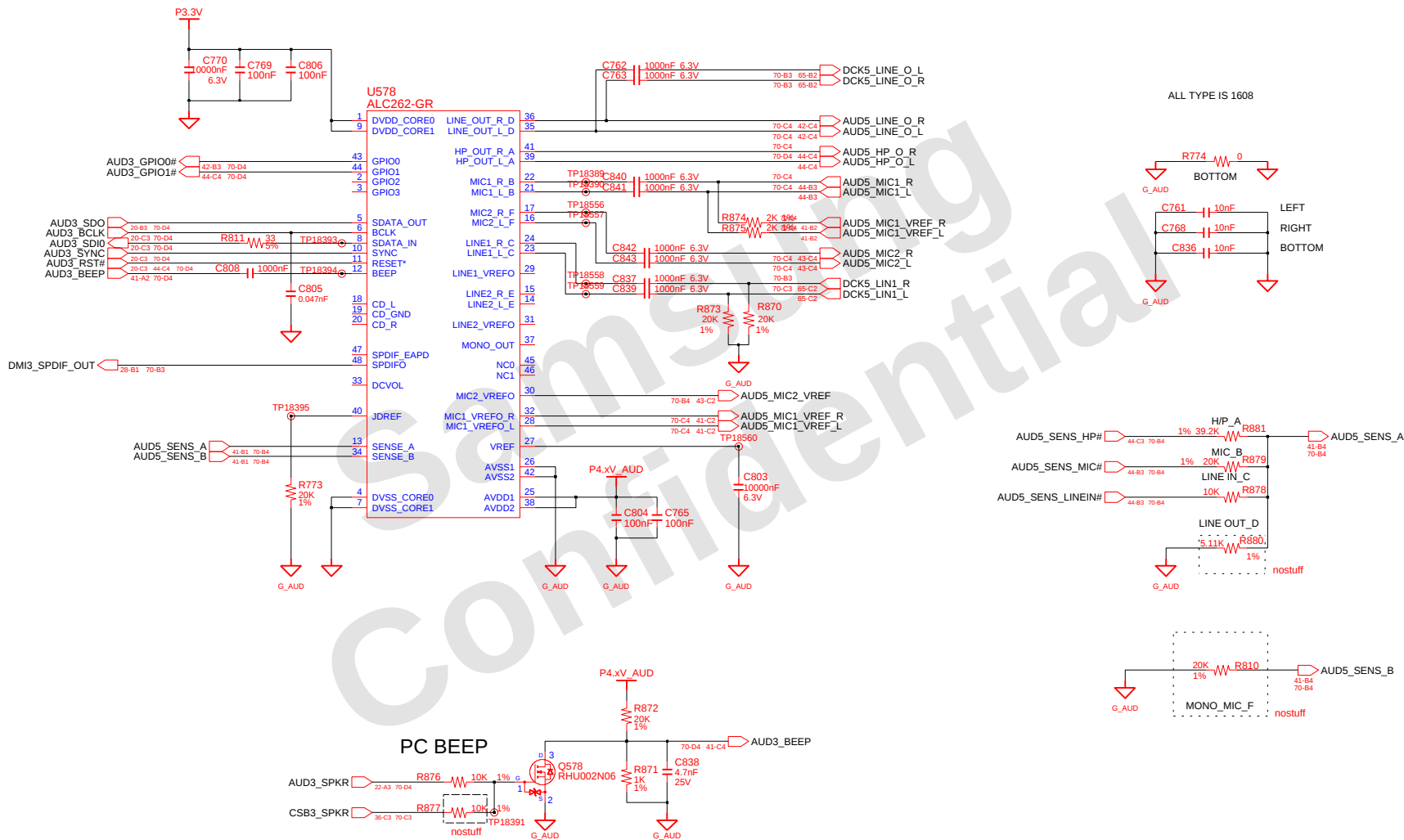
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CHECK	SW PARK	REV. STEP	PR			
APPROVAL	BJ LEE	REV	1.0			
MODULE CODE		LAST EDIT	February 8, 2007 10:00:08 PM	PAGE	40	OF 74

SAMSUNG ELECTRONICS

PART NO. BA41-00711#A

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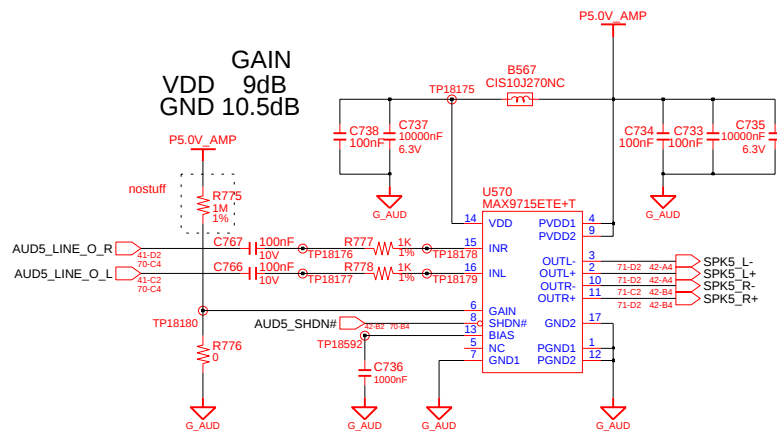
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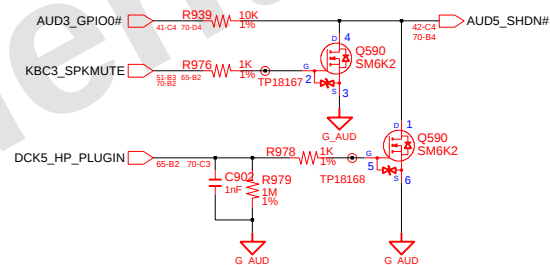
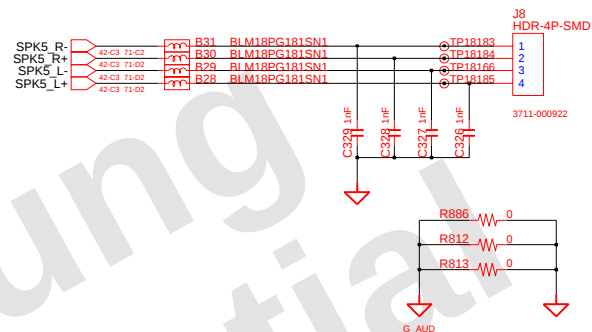
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CHECK	SW PARK	REV. STEP	PR			PART NO. BA41-0071#A
APPROVAL	BJ LEE	REV	1.0			
MODULE CODE	undefined	LAST EDIT	February 8, 2007 10:00:08 PM	PAGE	41	OF 74

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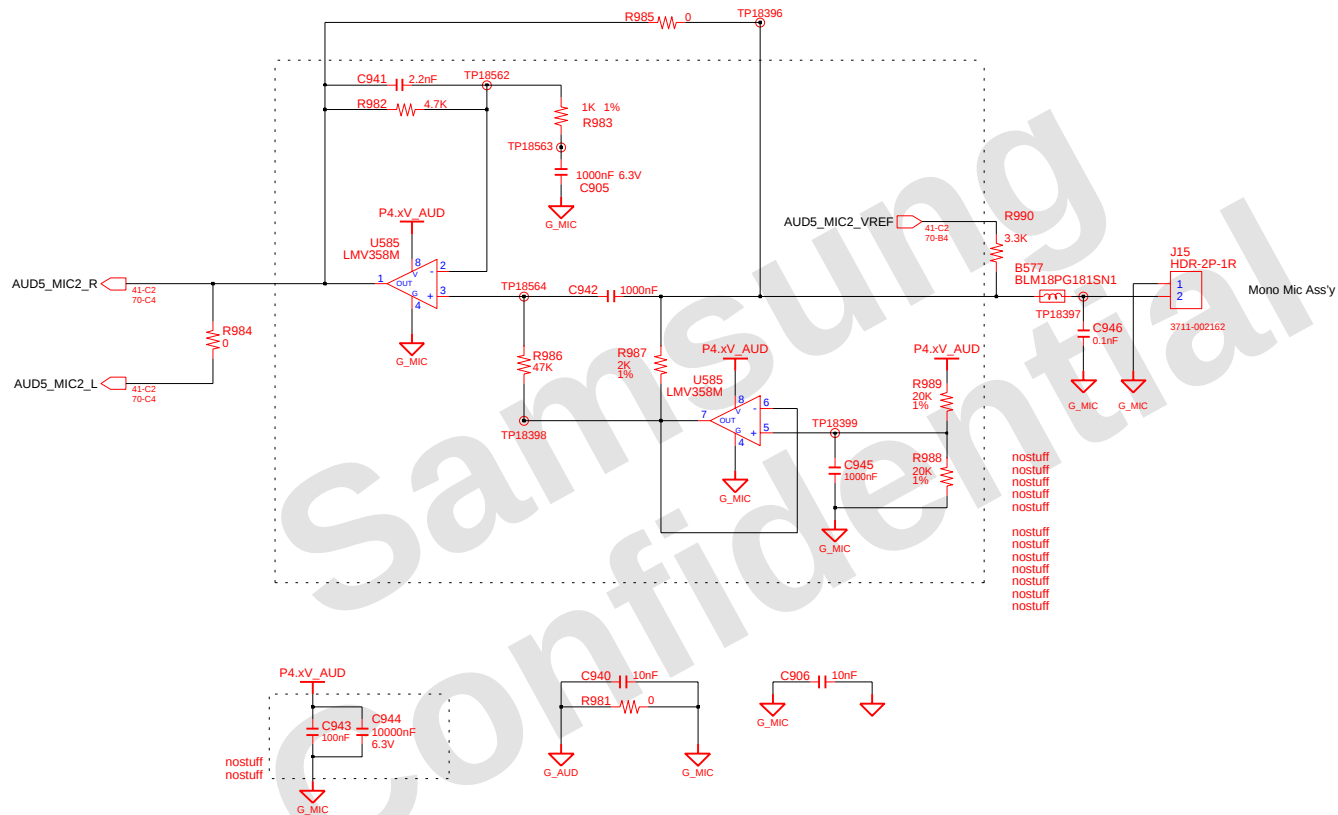
INTERNAL STEREO SPEAKERS



DRAW	YZ KIM	DATE	2/8/2007	TITLE	SYDNEY AUDIO	SAMSUNG ELECTRONICS
CHECK	SW PARK	REV. STEP	PR	2nd CODEC / SPEAKER	PART NO.	BA41-0071#A
APPROVAL	BJ LEE	REV	1.0	February 8, 2007 10:00:08 PM	PAGE	42 OF 74
MODULE CODE		LAST EDIT				

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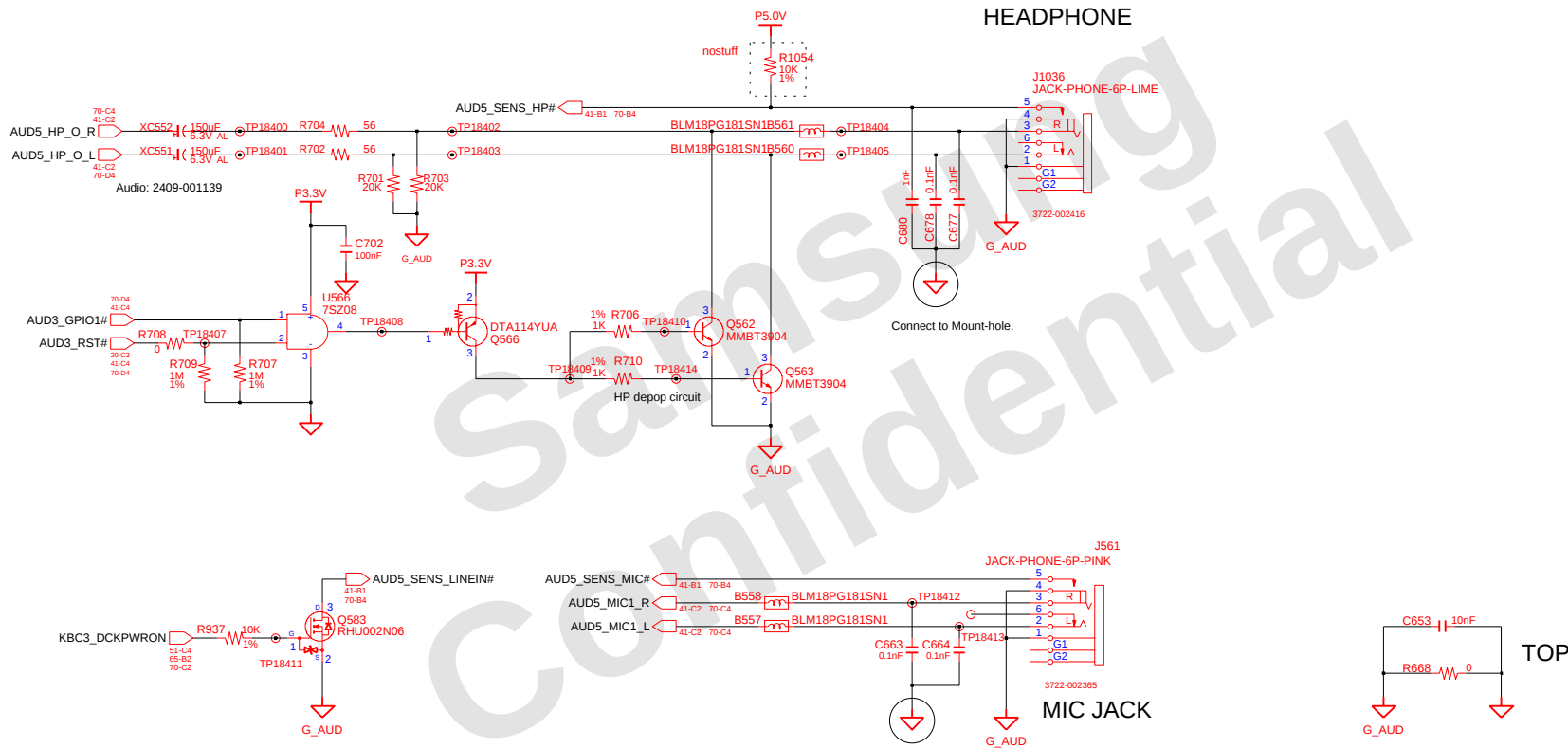
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DRAW	YZ KIM	DATE	2/8/2007	TITLE	SYDNEY AUDIO MONO MIC	SAMSUNG ELECTRONICS
CHECK	SW PARK	REV. STEP	PR			
APPROVAL	BJ LEE	REV	1.0			
MODULE CODE	undefined	LAST EDIT	February 8, 2007 10:00:08 PM	PAGE	43	OF 74

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DRAW	YZ KIM	DATE	2/8/2007	TITLE	SYDNEY AUDIO HEADPHONE & MIC JACK	SAMSUNG ELECTRONICS PART NO. BA41-0071#A
CHECK	SW PARK	REV. STEP	PR			
APPROVAL	BJ LEE	REV	1.0			
MODULE CODE		LAST EDIT	February 8, 2007 10:00:08 PM	PAGE 44 OF 74		

The schematic diagram illustrates the power management circuitry for the Raspberry Pi 4 Model B. It shows the following components and connections:

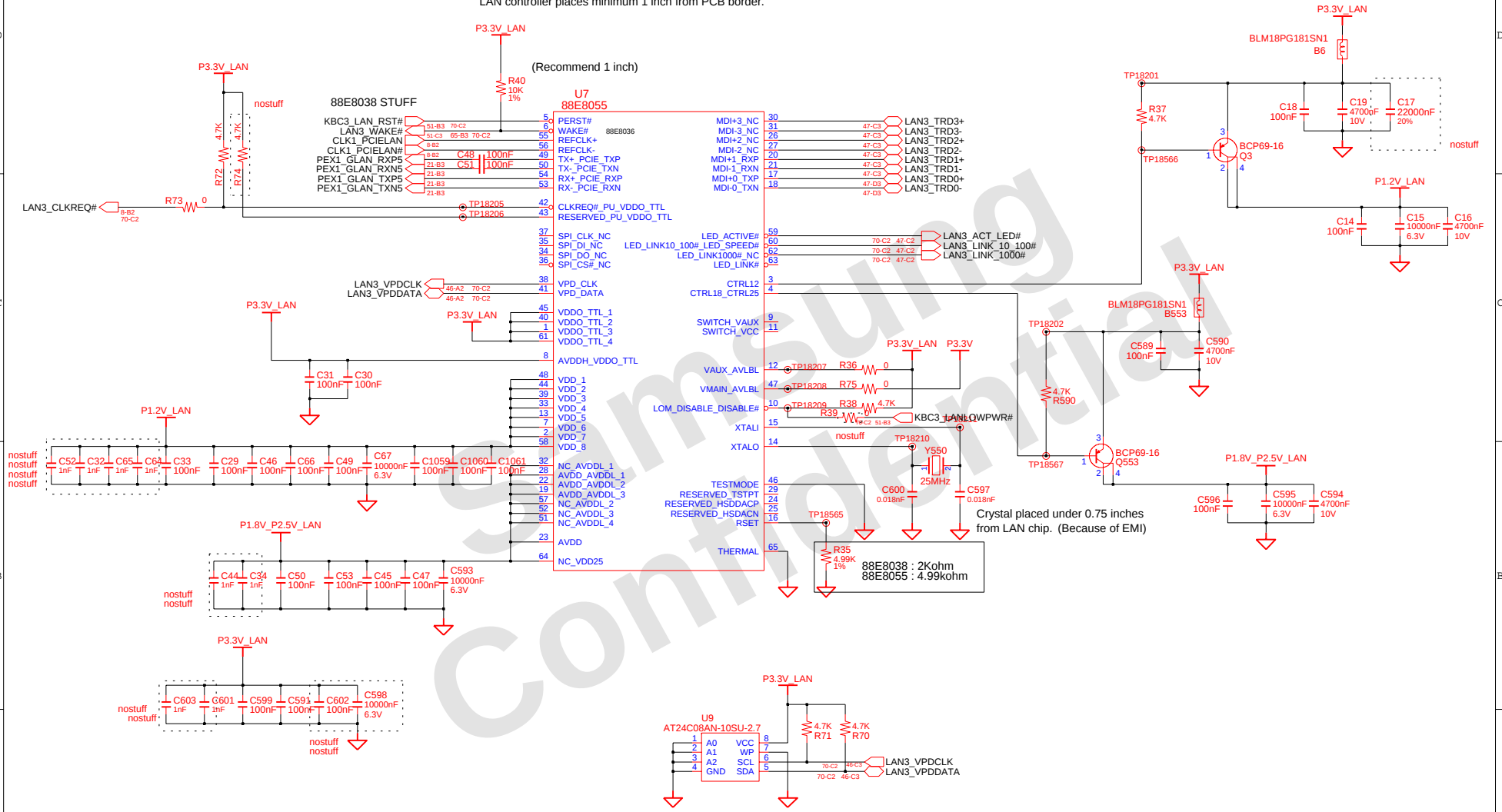
- Input Power:** P12.0V_ALW (red) and P5.0V_AUX (red).
- Resistors:** R936 (100K, 1%), R748 (100K, 1%), R749 (30.1K, 1%), R770 (5.11K, 1%), R771 (0), R772 (49.9, 1%).
- Capacitors:** C899 (10nF, 16V), C900 (10000nF, 6.3V), C730 (10000nF, 6.3V), C731 (10000nF, 6.3V), C764 (100nF).
- Transistors/MOSFETs:** Q582 (RHU002N06), Q563N (Q563N), Q571 (Si2315BDS-T1).
- ICs:** U569 (MIC5159BM6), B566 (CIS10J270NC).
- Connectors/Pins:** TP18110, TP18111, TP18112, TP18113, TP18114.
- Other Labels:** KBC3_PWRON_INV#, KBC3_PWRON, nostuff, nostuff, nostuff, nostuff.

The diagram shows the connection of the input power rails to the various components, including the MOSFETs and capacitors, which are used to regulate and filter the power supply. The output of the circuit is connected to the P5.0V_AMP (red) rail.

DRAW	YZ KIM	DATE	2/8/2007	TITLE SYDNEY AUDIO AUDIO AMP POWER		SAMSUNG ELECTRONICS	
CHECK	SW PARK	DEV. STEP	PR				
APPROVAL	BJ LEE	REV	1.0				
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(Recommend 1 inch)

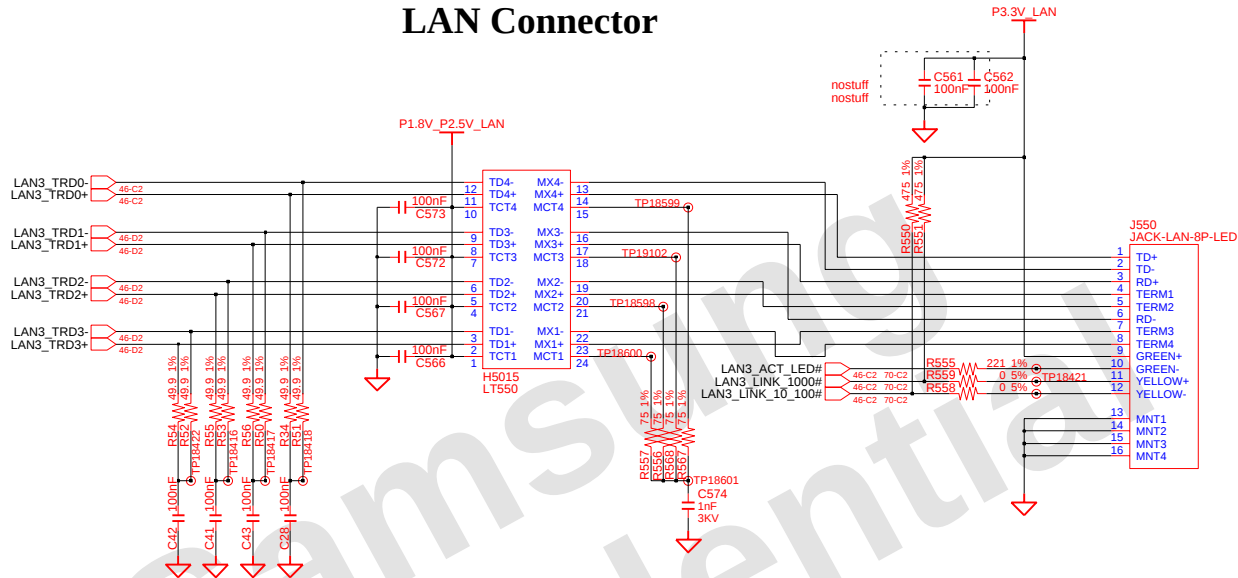


DRAM	YZ KIM	DATE	2/8/2007	TITLE SYDNEY WIRED LAN MARVELL 88E8055		SAMSUNG ELECTRONICS	
CHECK	SW PARK	DEV. STEP	PR				
APPROVAL	BJ LEE	REV	1.0				
MODULE CODE		LAST EDIT		February 8, 2007 10:00:08 PM	PAGE	46	OF 74

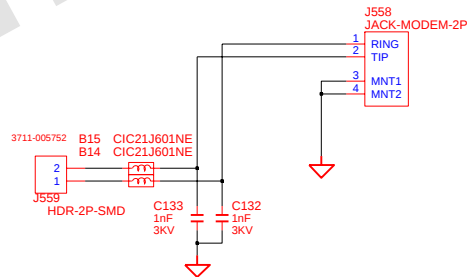
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LAN Connector



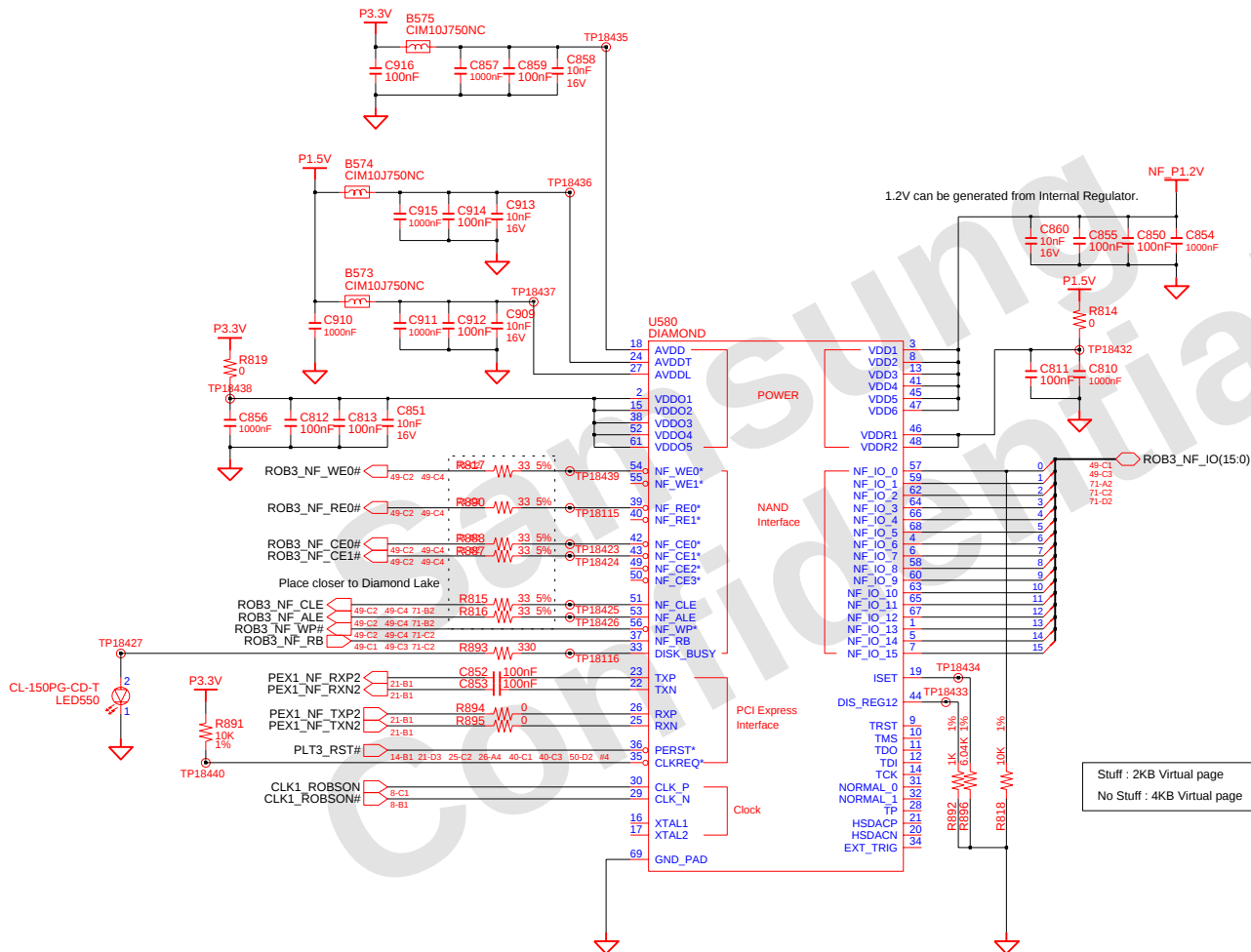
MODEM Connector (Jack)



DRAW	YZ KIM	DATE	2/8/2007	TITLE	SYDNEY	SAMSUNG
CHECK	SW PARK	REV. STEP	PR	WIRED LAN / MODEM		ELECTRONICS
APPROVAL	BJ LEE	REV	1.0	RJ45 / RJ11		PART NO. BA41-0071#A
MODULE CODE		LAST EDIT	February 8, 2007 10:00:08 PM	PAGE	47	OF 74

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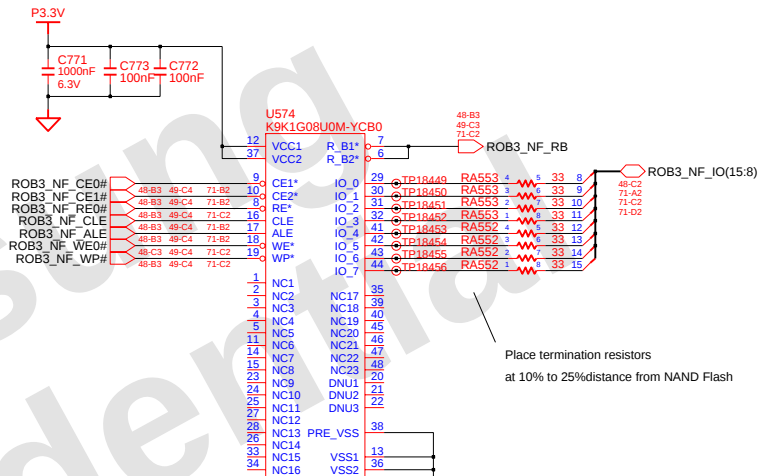
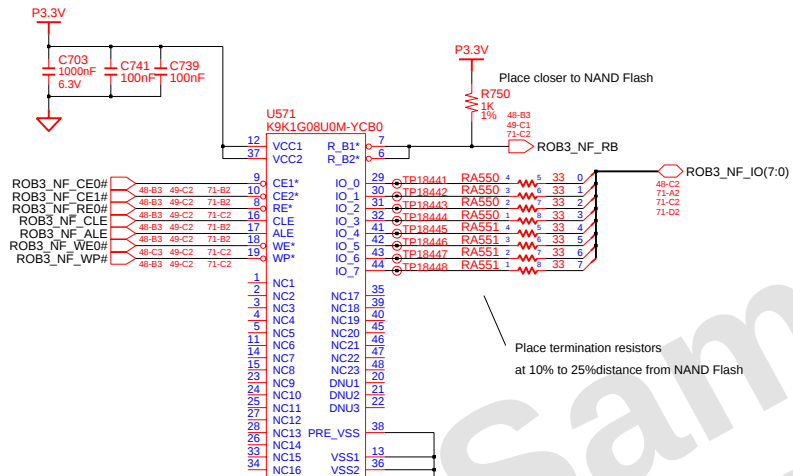


Stuff : 2KB Virtual page
No Stuff : 4KB Virtual page

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CHECK	SW PARK	REV. STEP	PR			PART NO.
APPROVAL	BJ LEE	REV	1.0			BA41-0071#A
MODULE CODE		LAST EDIT	February 8, 2007 10:00:08 PM	PAGE	48	OF 74

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> Samsung NAND Flash

4Gb : K9K4G08U0M (Lead Free)

2Gb : K9K2G08U0M (Lead Free)

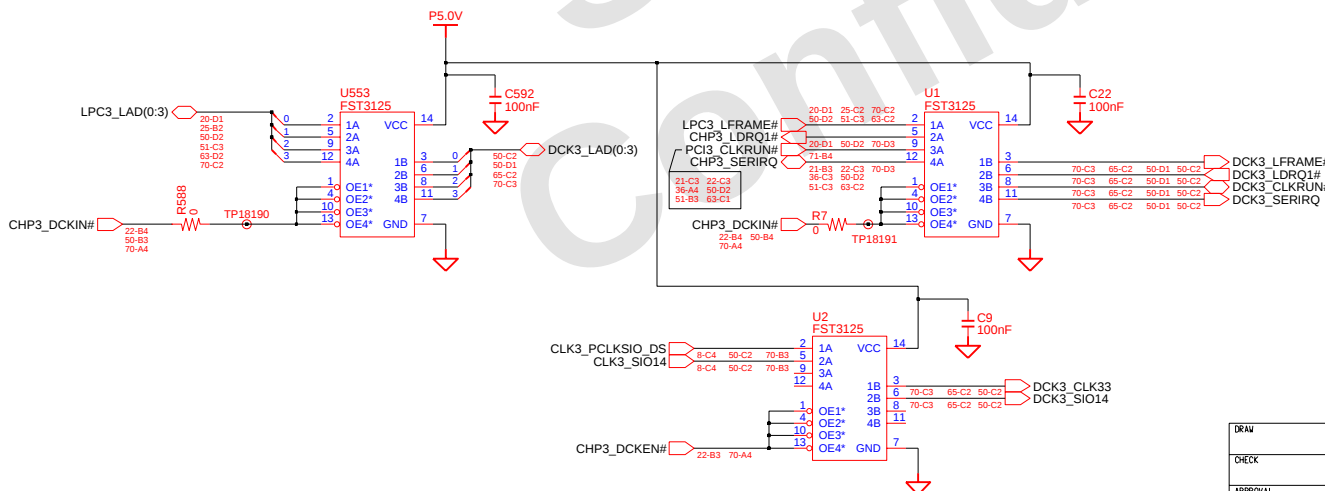
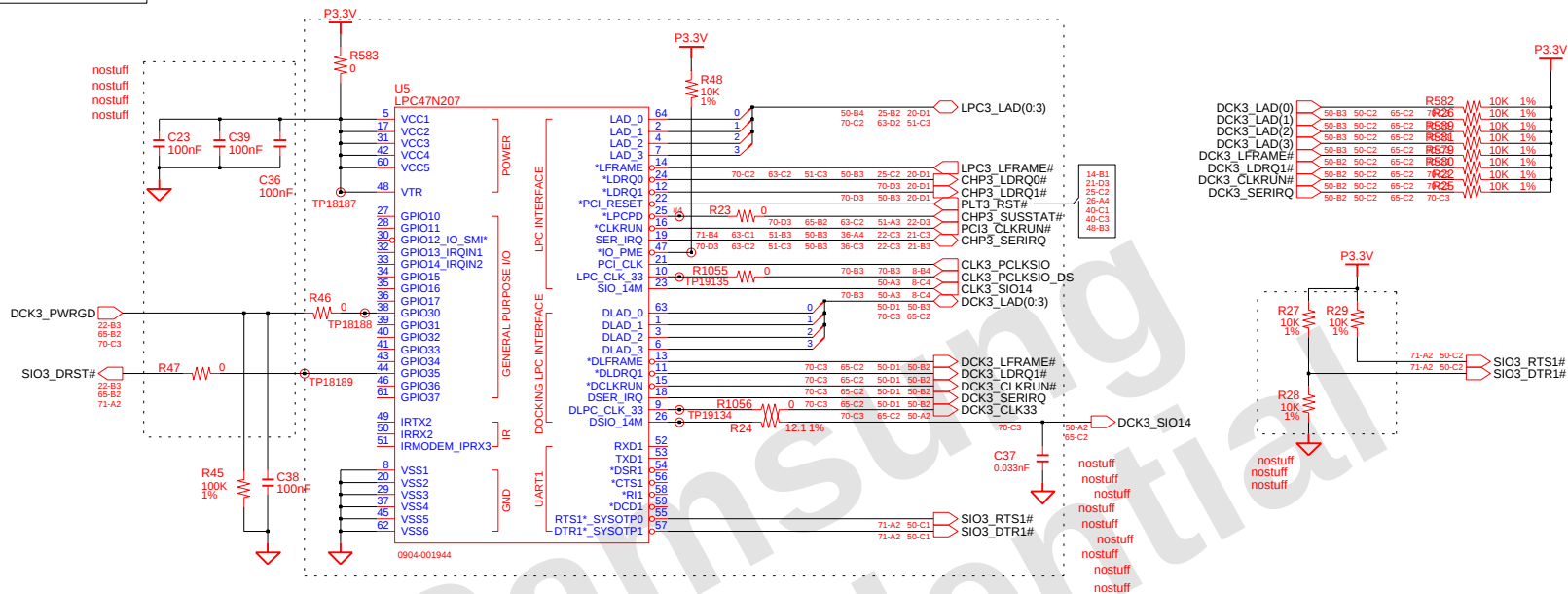
1Gb : K9F1G08U0A (Lead Free)

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DRAW	YZ KIM	DATE	2/8/2007	TITLE	SYDNEY ROBSON NAND FLASH	SAMSUNG ELECTRONICS
CHECK	SW PARK	REV. STEP	PR			PART NO.
APPROVAL	BJ LEE	REV	1.0			BA41-0071#A
MODULE CODE		LAST EDIT	February 8, 2007 10:00:08 PM	PAGE	49	OF 74

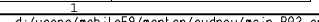
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DRAW	YZ KIM	DATE	2/8/2007	TITLE	SYDNEY SIO 47N207	SAMSUNG ELECTRONICS
CHECK	SW PARK	REV. STEP	PR			PART NO. BA41-00711A
APPROVAL	BJ LEE	REV	1.0			
MODULE CODE		LAST EDIT	February 8, 2007 10:00:08 PM	PAGE	50	OF 74

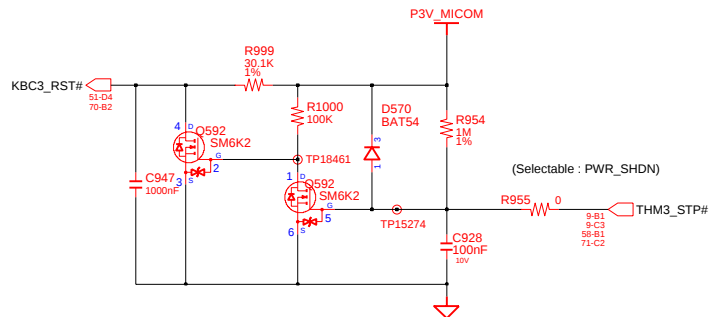
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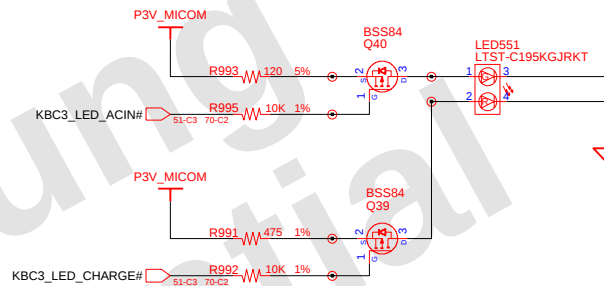
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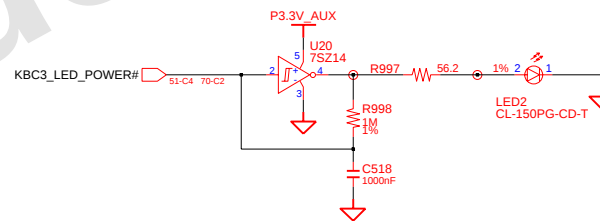
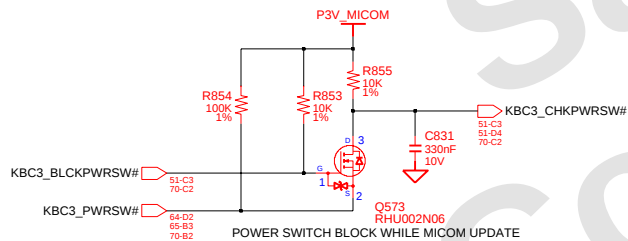
MICOM RESET



ADAPTER IN / CHARGING LED

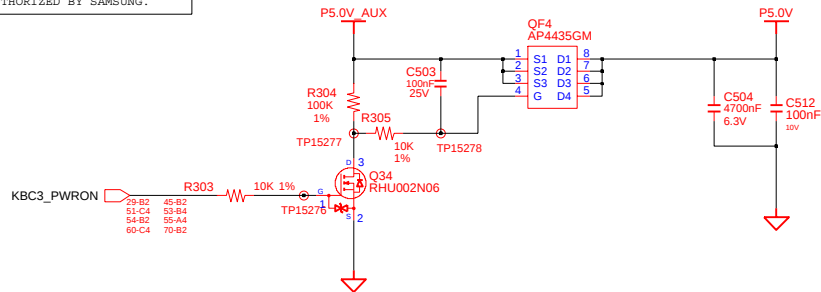


FOR MICOM UPDATE

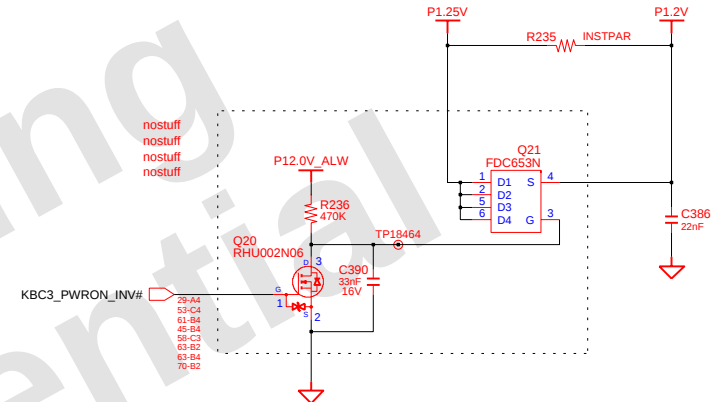


DRAW	YZ KIM	DATE	2/8/2007	TITLE	SYDNEY POWER MICOM & POWER Logic	SAMSUNG ELECTRONICS
CHECK	SW PARK	REV. STEP	PR			
APPROVAL	BJ LEE	REV	1.0			
MODULE CODE		LAST EDIT	February 8, 2007 10:00:08 PM	PAGE	52	OF 74

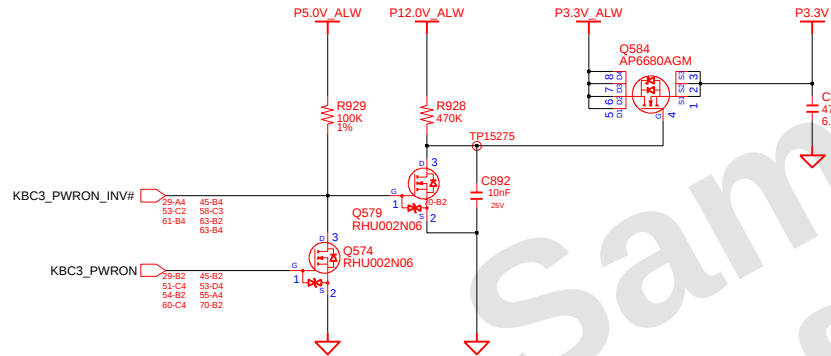
Switched Power On (P5V)



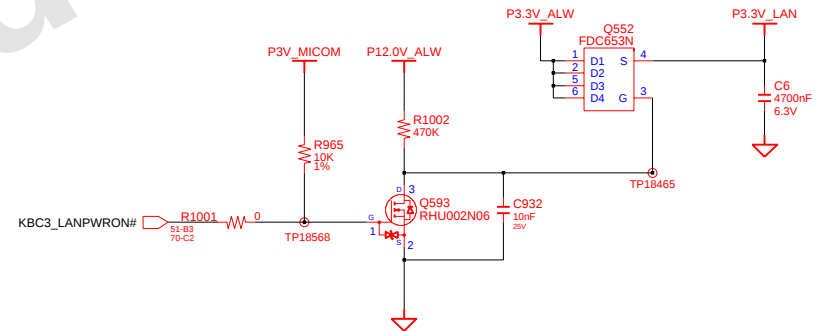
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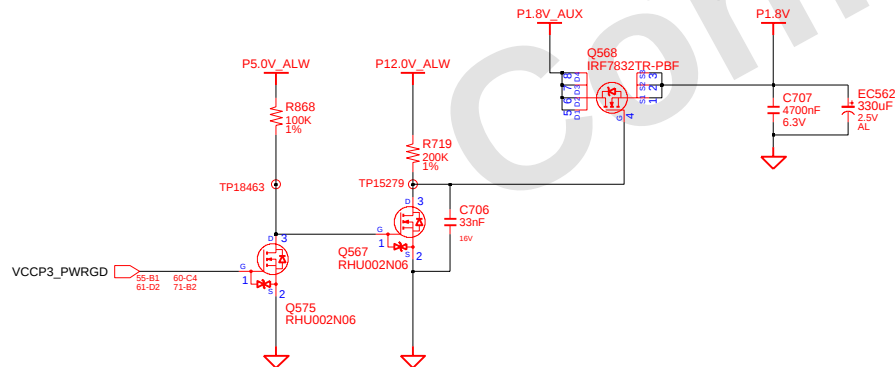
Switched Power On (P3.3V)



Switched Power On (P3.3V_LAN)



Switched Power On (P1.8V)



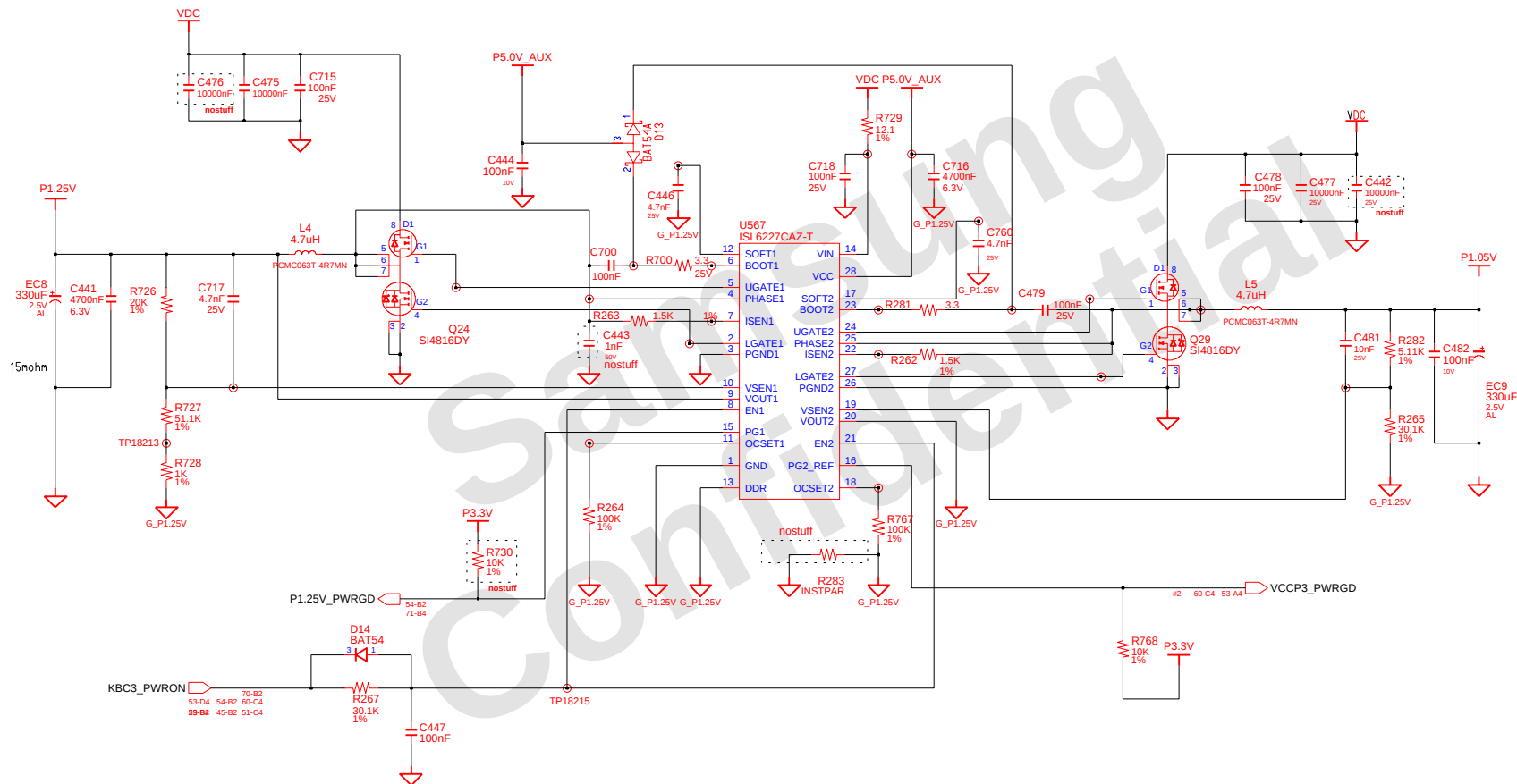
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CHECK	SW PARK	REV. STEP	PR			
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MODULE CODE	undefined	LAST EDIT	February 8, 2007 10:00:08 PM	PAGE	53	OF 74

DRAM	YZ KIM	DATE	2/8/2007	TITLE		SYDNEY POWER	SAMSUNG ELECTRONICS
CHECK	SW PARK	DEV. STEP	PR				
APPROVAL	BJ LEE	REV	1.0	P1.5V POWER		PART NO.	BA41-0071#A
MODULE CODE	LAST EDIT						
				February 8, 2007 10:00:08 PM		PAGE	54 OF 74

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P1.25V / P1.05V POWER

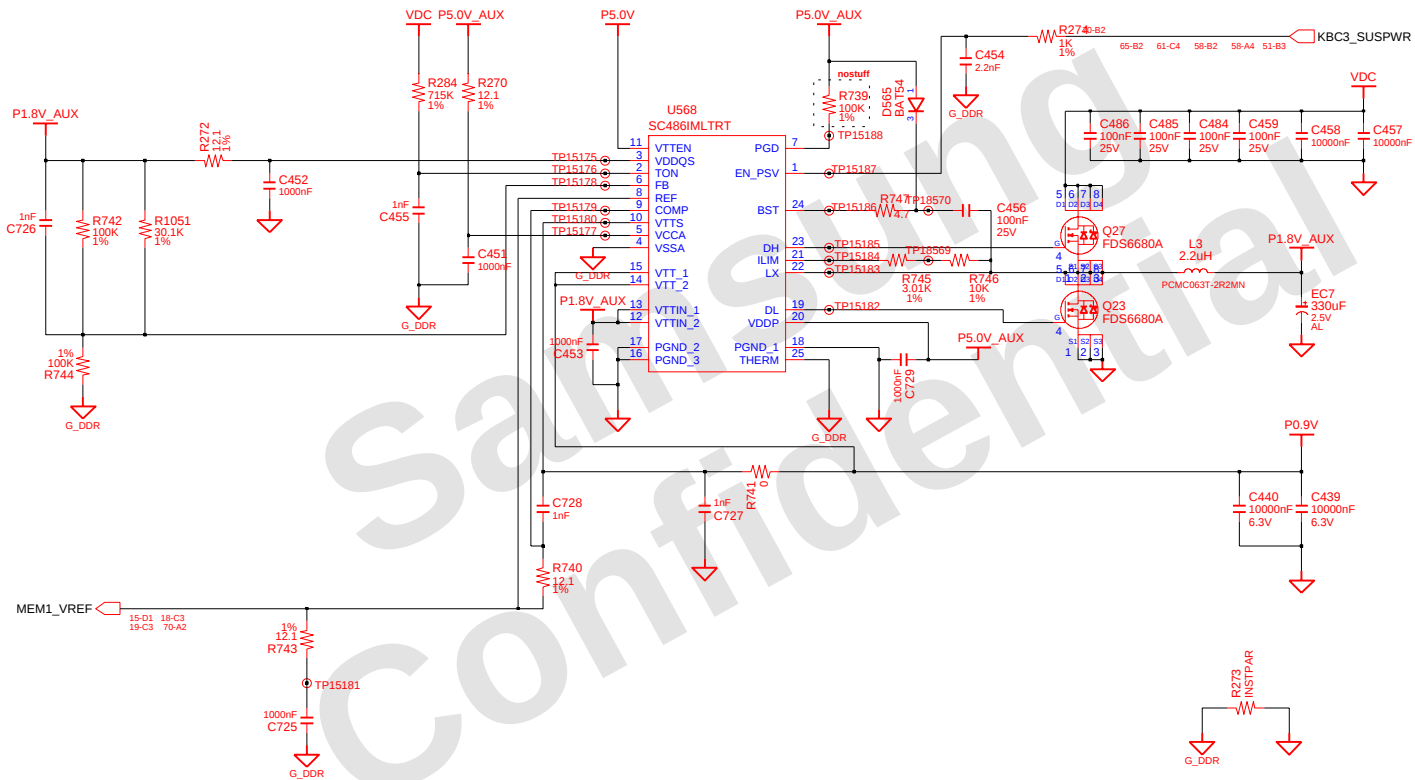


DRAW	YZ KIM	DATE	2/8/2007	TITLE	SYDNEY POWER	SAMSUNG ELECTRONICS
CHECK	SW PARK	REV. STEP	PR			
APPROVAL	BJ LEE	REV	1.0		TPS5130(P1.05,P1.5V)	PART NO. BA41-00711A
MODULE CODE		LAST EDIT	February 8, 2007 10:00:08 PM	PAGE	55	OF 74

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DDR2 Power

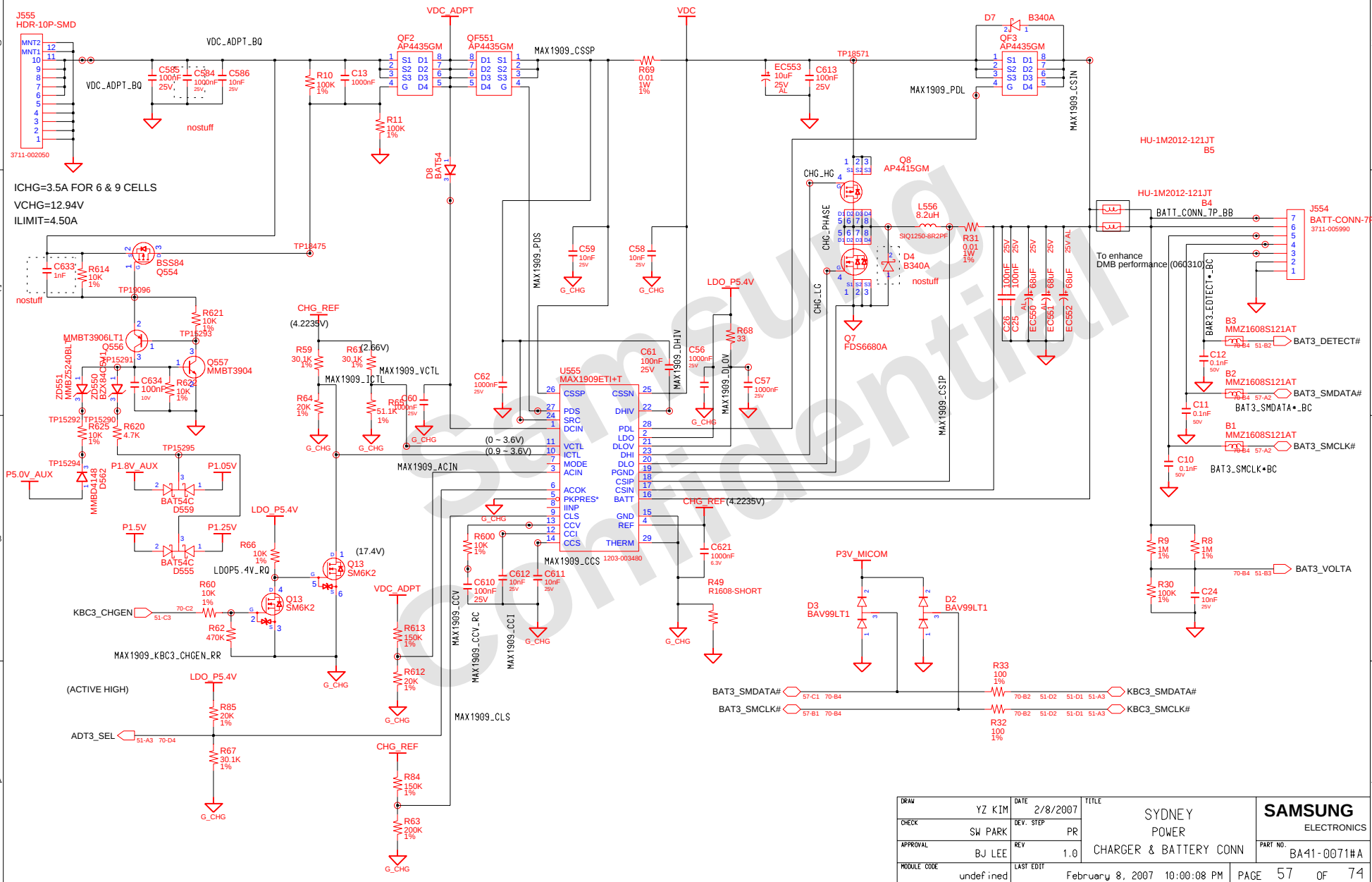


DRAW	YZ KIM	DATE	2/8/2007	TITLE	SYDNEY POWER DDR2 POWER	SAMSUNG ELECTRONICS
CHECK	SW PARK	REV. STEP	PR			PART NO. BA41-0071#A
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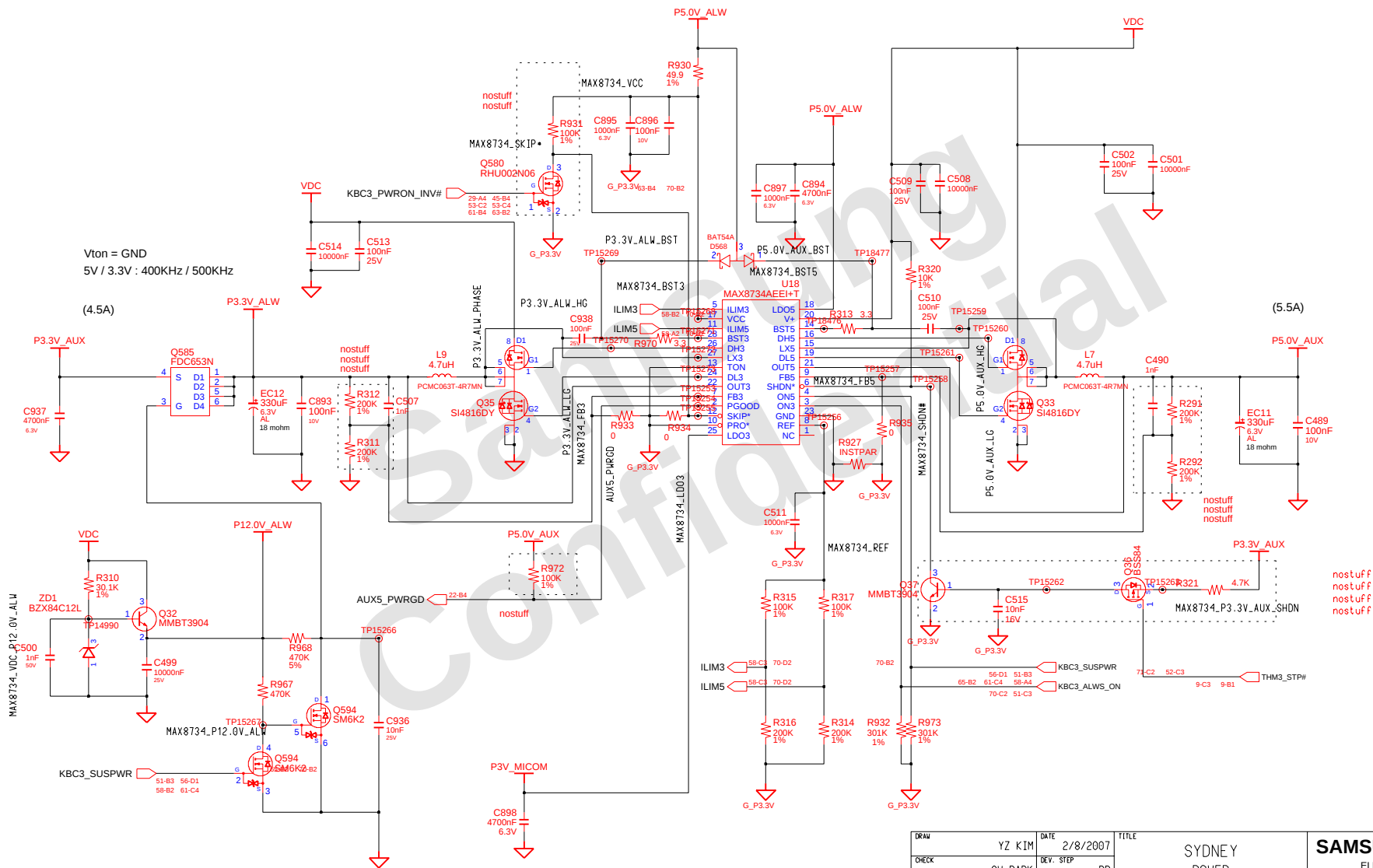
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CHARGER & POWER MANAGEMENT



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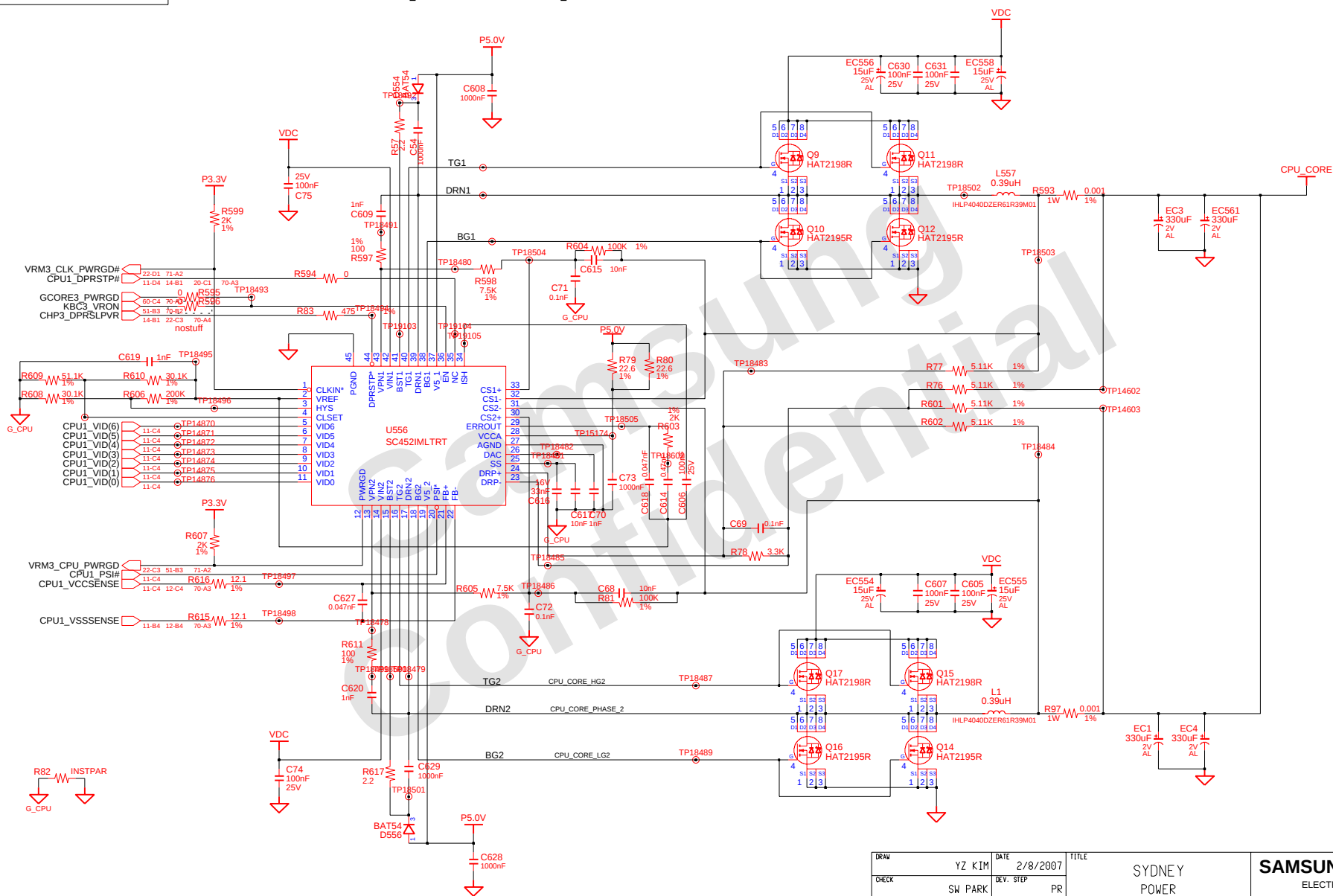
P3.3V_AUX & P5.0V_AUX



DRAW	YZ KIM	DATE	2/8/2007	SYDNEY POWER		SAMSUNG ELECTRONICS	
CHECK	SW PARK	DEV. STEP	PR				
APPROVAL	BJ LEE	REV	1.0	ALWS/AUX POWER		PART NO.	BA41-0071#A
MODULE CODE		LAST EDIT		February 8, 2007 10:00:08 PM	PAGE	58	OF 74

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CPU VRM [SEMTECH]

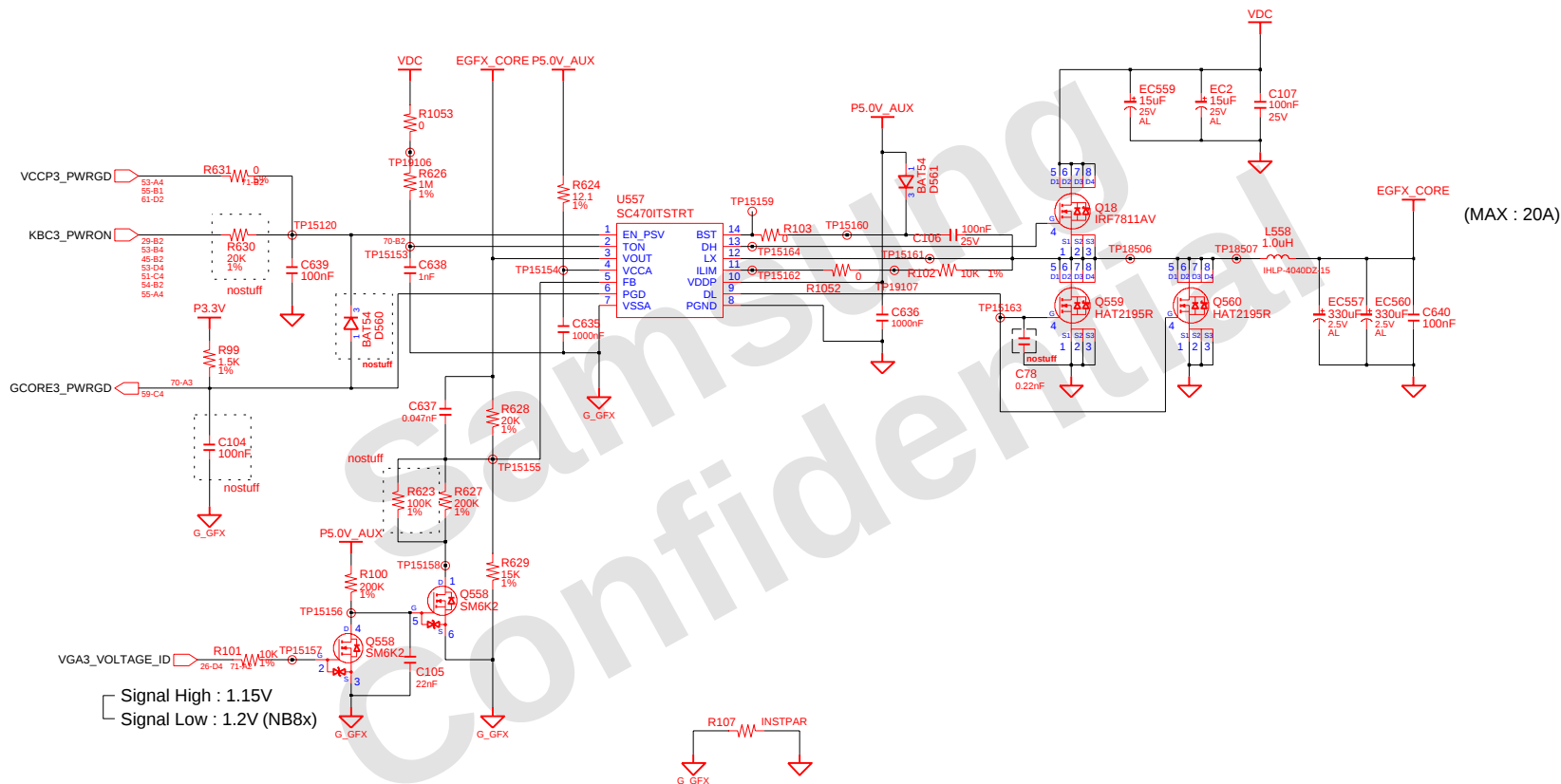


DRAW	YZ KIM	DATE	2/8/2007	TITLE	SYDNEY POWER CPUPI VRM (IMVP6+)	SAMSUNG ELECTRONICS	
CHECK	SW PARK	DEV. STEP	PR				
APPROVAL	BJ LEE	REV	1.0				
MODULE CODE	undefined	LAST EDIT	February 8, 2007 10:00:08 PM				PAGE

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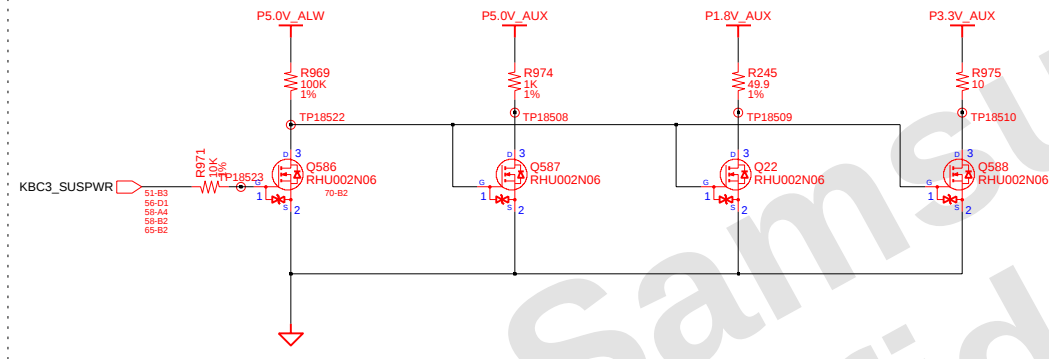
GFX CORE [SEMTECH]



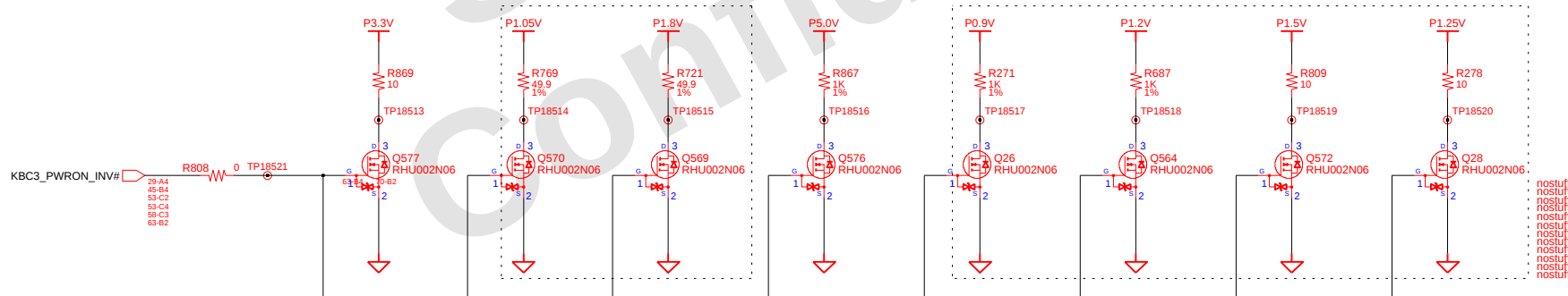
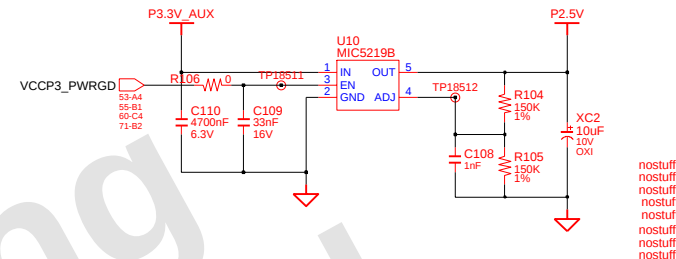
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CHECK	SW PARK	REV. STEP	PR			PART NO. BA41-0071#A
APPROVAL	BJ LEE	REV	1.0			
MODULE CODE	undefined	LAST EDIT	February 8, 2007 10:00:08 PM	PAGE	60	OF 74

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P2.5V POWER (After DV will be removed)

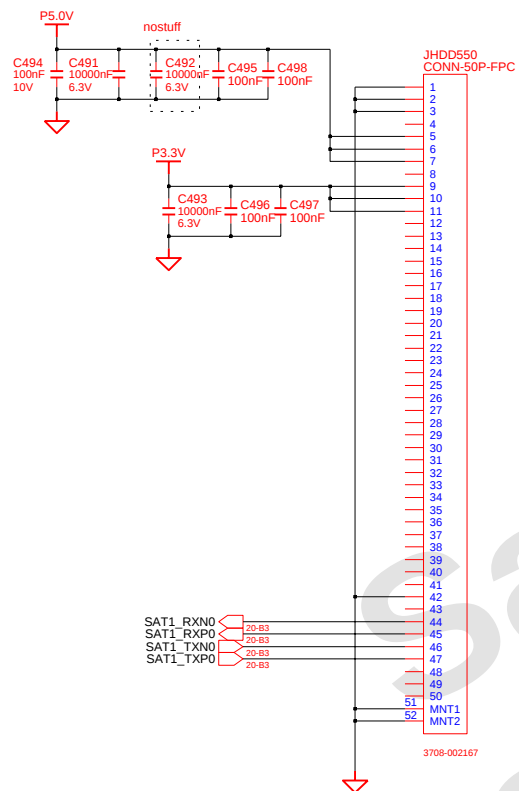


DRAW	YZ KIM	DATE	2/8/2007	TITLE	SYDNEY POWER P2.5V	SAMSUNG ELECTRONICS
CHECK	SW PARK	REV. STEP	PR			PART NO. BA41-0071#A
APPROVAL	BJ LEE	REV	1.0			
MODULE CODE	undefined	LAST EDIT	February 8, 2007 10:00:08 PM	PAGE	61	OF 74

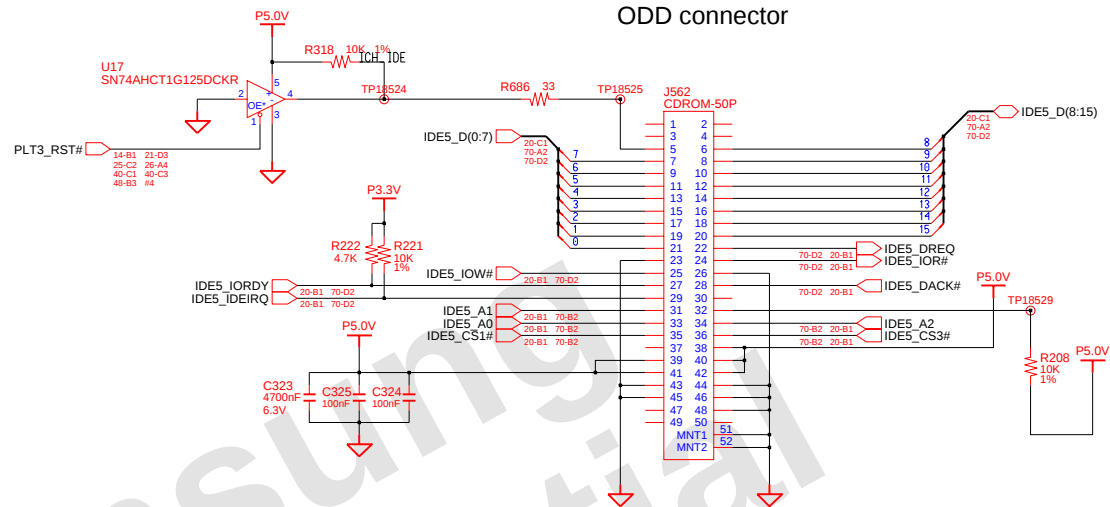
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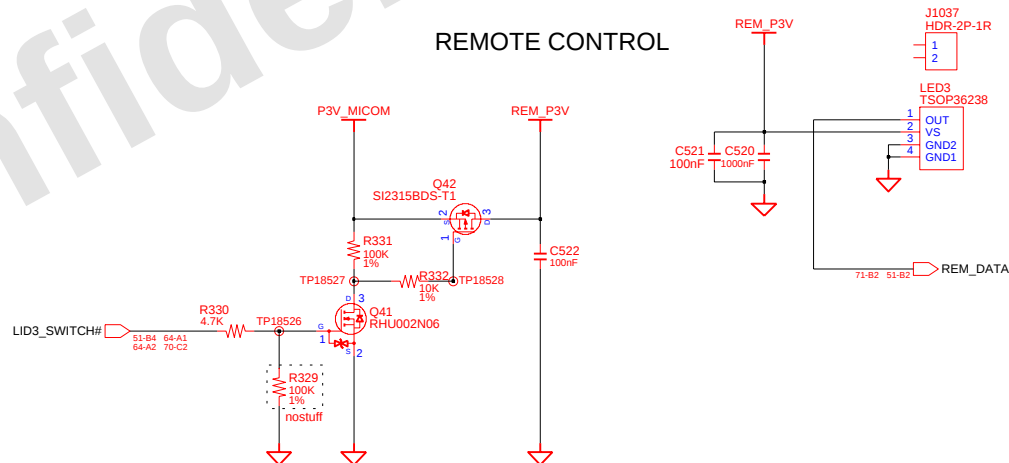
HDD connector



ODD connector



REMOTE CONTROL

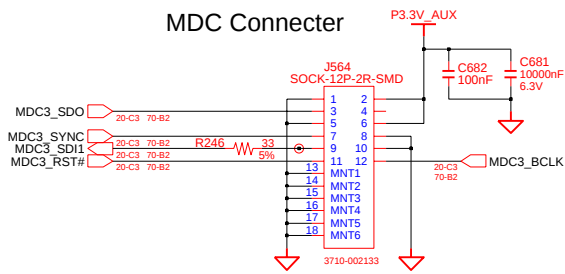


DRAW	YZ KIM	DATE	2/8/2007	TITLE	SYDNEY CONNECTOR	SAMSUNG ELECTRONICS
CHECK	SW PARK	REV. STEP	PR	HDD / ODD / REMOCON	PART NO.	BA41-0071#A
APPROVAL	BJ LEE	REV	1.0	February 8, 2007 10:00:08 PM	PAGE	62
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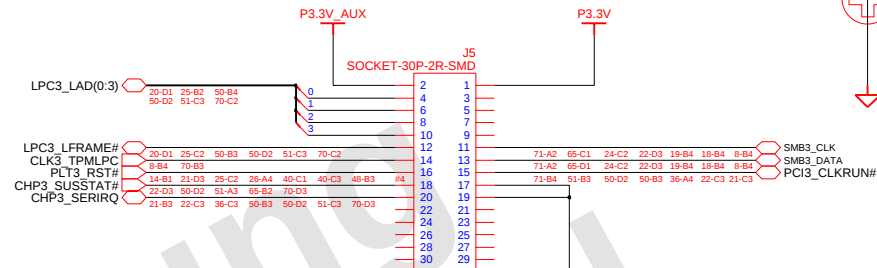
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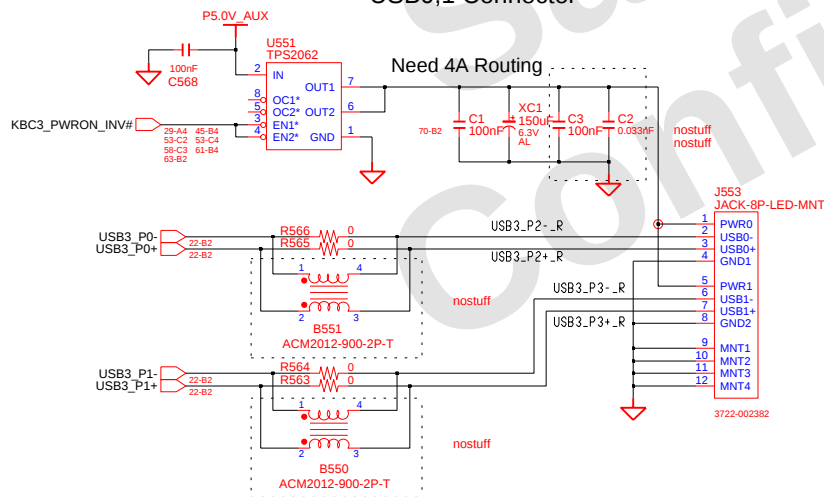
MDC Connector



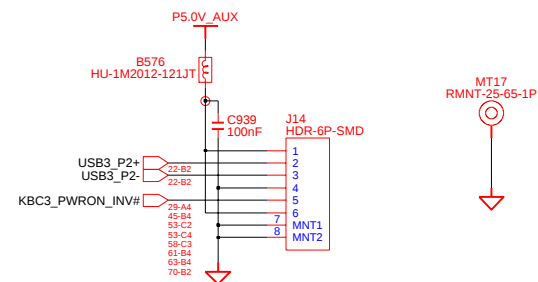
TO TPM BOARD



USB0,1 Connector



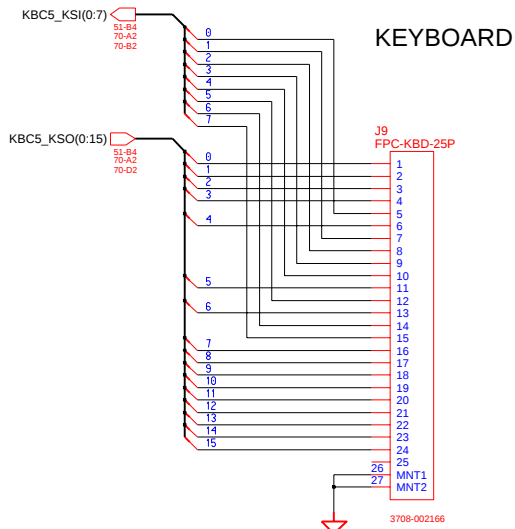
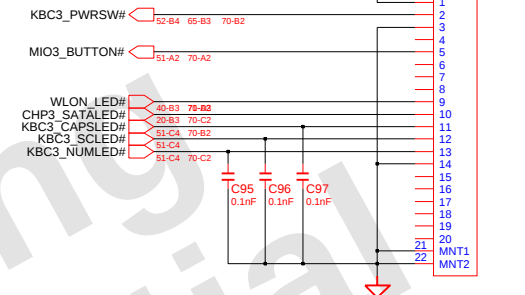
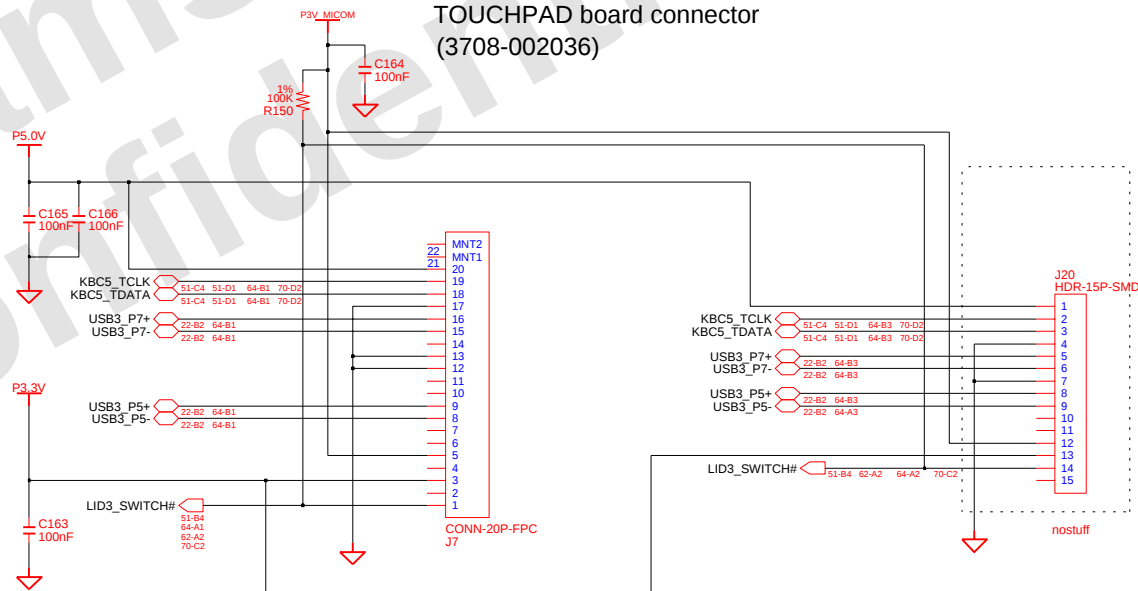
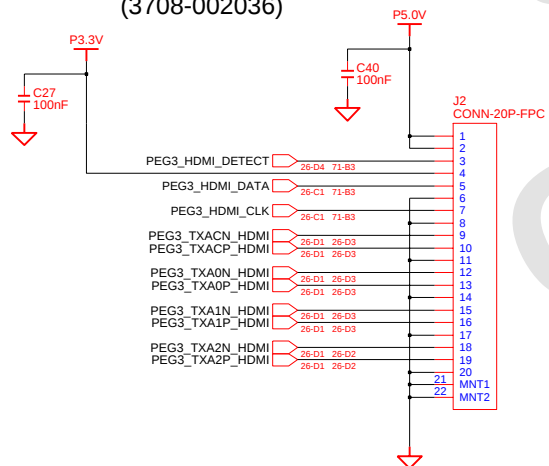
TO USB BOARD



DRAW	YZ KIM	DATE	2/8/2007	TITLE	SYDNEY CONNECTOR	SAMSUNG ELECTRONICS
CHECK	SW PARK	REV. STEP	PR			
APPROVAL	BJ LEE	REV	1.0	TPM/USB/BLUETOOTH/MDC CONN	PART NO. BA41-0071#A	
MODULE CODE	undefined	LAST EDIT	February 8, 2007 10:00:08 PM	PAGE	63	OF 74

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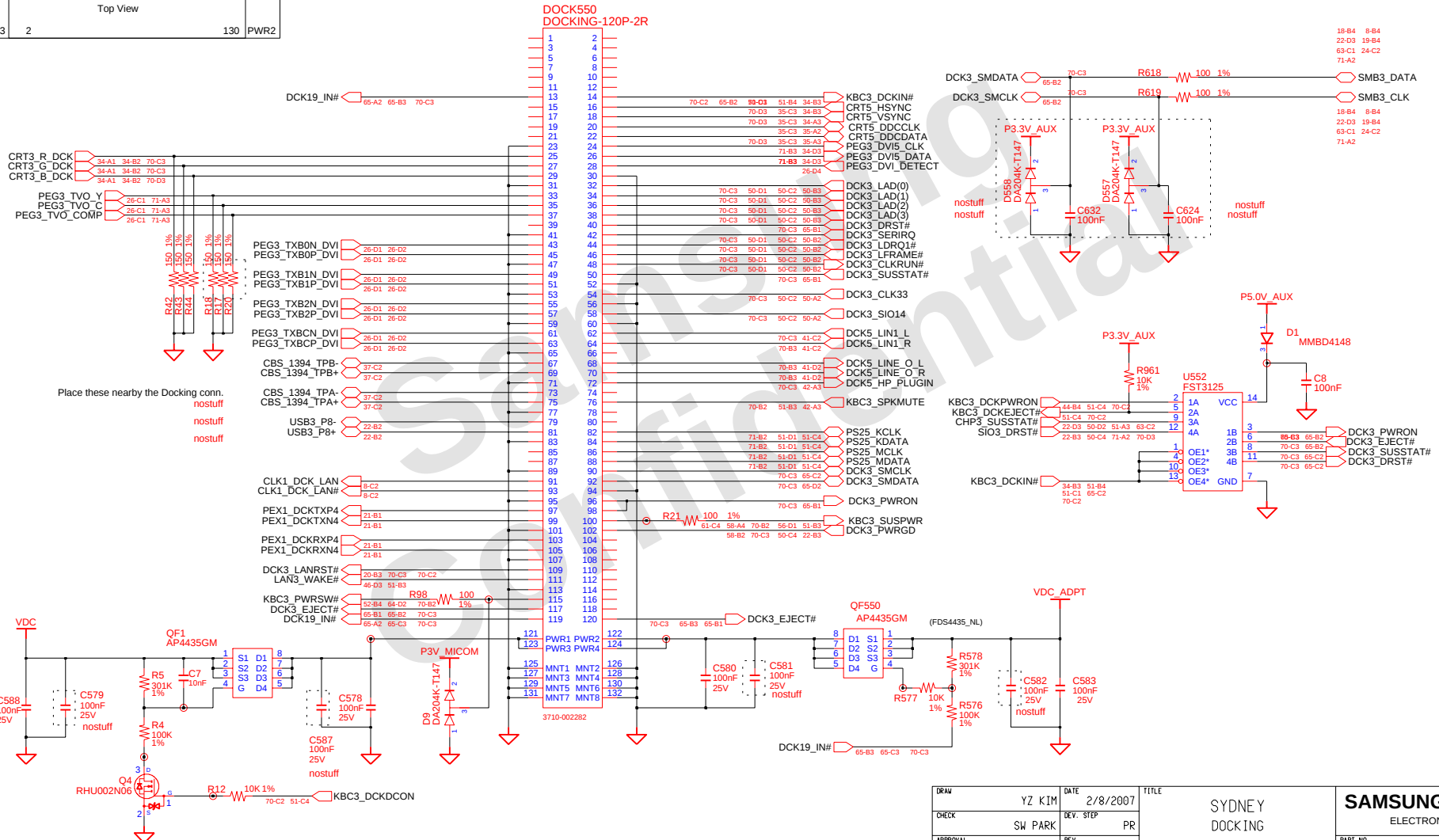
**MIO/LED board connector
(3708-002036)****TOUCHPAD board connector
(3708-002036)****FFC connector (from HDMI subboard)
(3708-002036)**

DRAW	YZ KIM	DATE	2/8/2007	TITLE	SYDNEY CONNECTOR I/F CONN ON MAINBOARD	SAMSUNG ELECTRONICS
CHECK	SW PARK	REV. STEP	PR			PART NO. BA41-0071#A
APPROVAL	BJ LEE	REV	1.0			
MODULE CODE		LAST EDIT	February 8, 2007 10:00:08 PM	PAGE	64	OF 74

DOCKING CONNECTOR (130PIN)

Docking Placement

PWR1	1	129	PWR4
Top View			
PWR3	2	130	PWR2



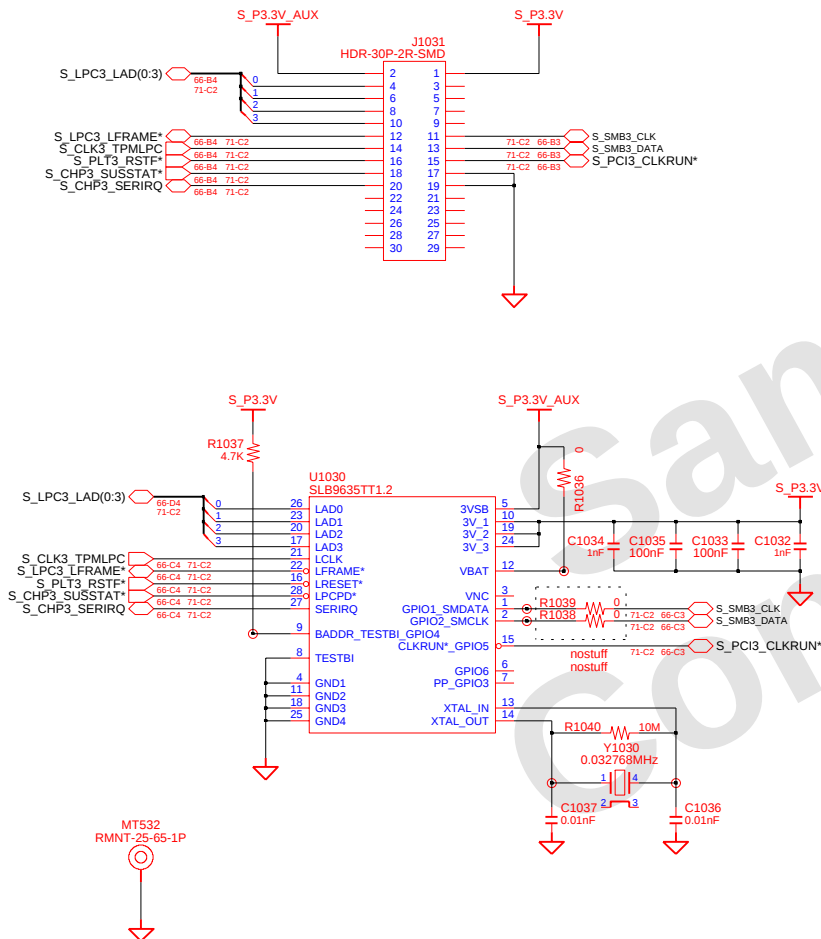
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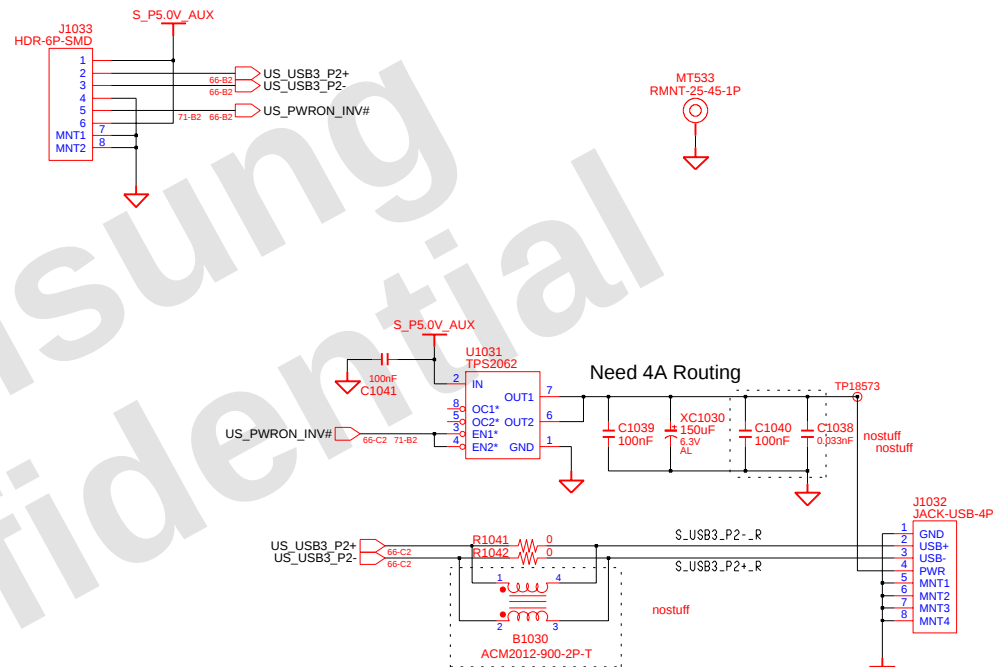
Sub Board

(TPM, USB sub board)

TPM BOARD



USB BOARD



DRAW	YZ KIM	DATE	2/8/2007	TITLE	SYDNEY SUB BOARD	SAMSUNG ELECTRONICS
CHECK	SW PARK	REV. STEP	PR			
APPROVAL	BJ LEE	REV	1.0		TPM/USB BOARD	PART NO. BA41-00711A
MODULE CODE		LAST EDIT	February 8, 2007 10:00:08 PM	PAGE	66	OF 74

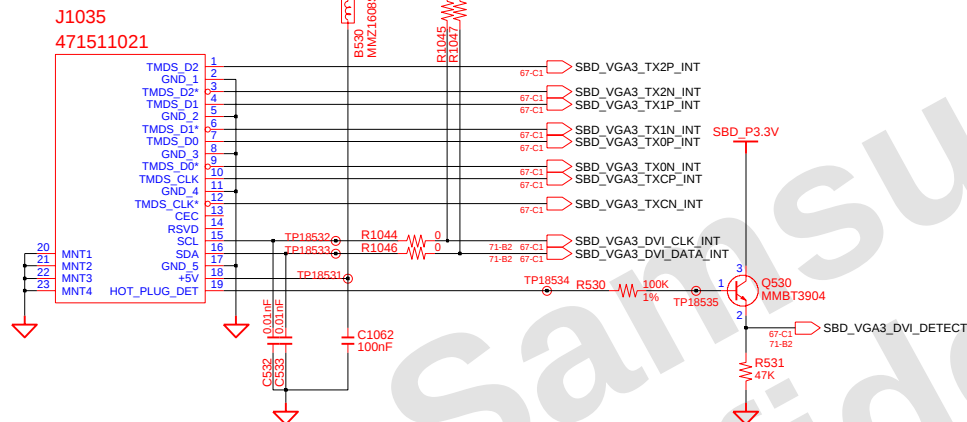
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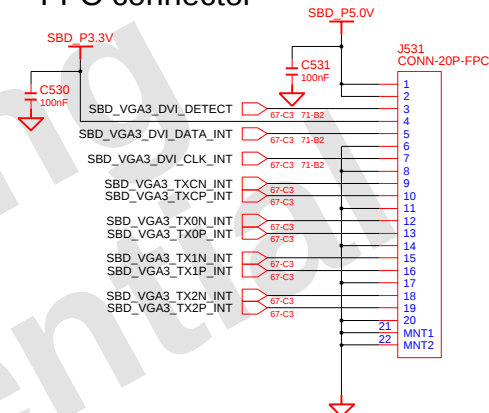
Sub Board

(HDMI sub board)

HDMI connector

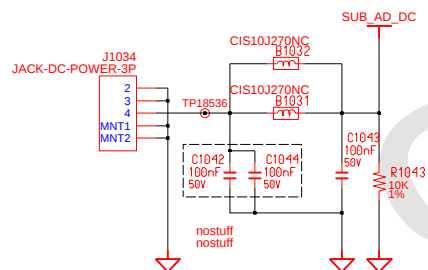


FFC connector

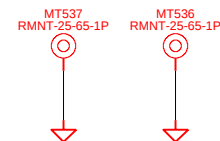
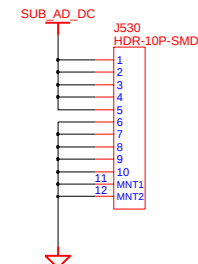


AD-DC

Adapter power -> AD_DC



DC-in connector



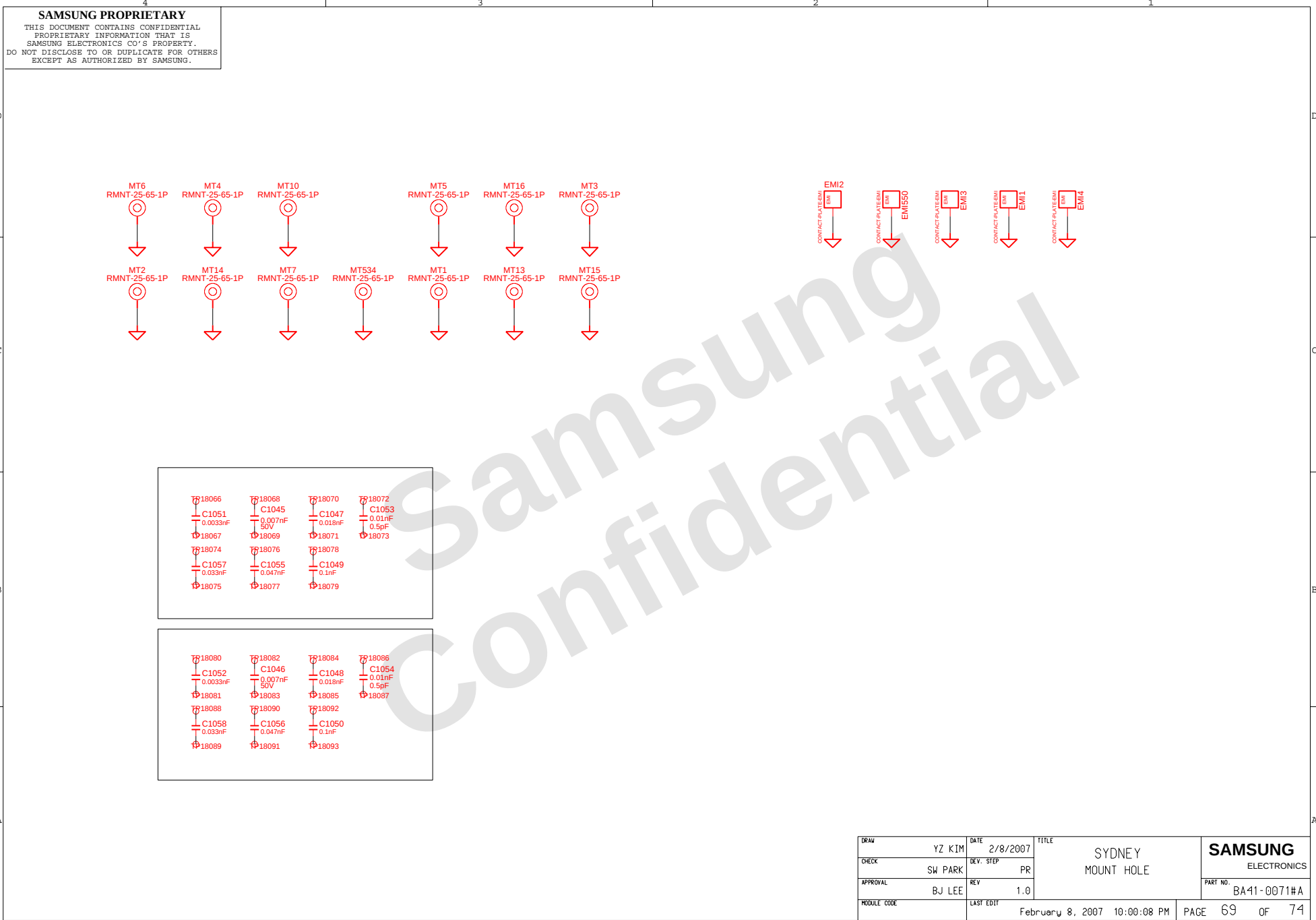
DRAW	YZ KIM	DATE	2/8/2007	TITLE	SYDNEY SUB BOARD HDMI BOARD	SAMSUNG ELECTRONICS
CHECK	SW PARK	REV. STEP	PR			PART NO. BA41-0071#A
APPROVAL	BJ LEE	REV	1.0			
MODULE CODE		LAST EDIT	February 8, 2007 10:00:08 PM	PAGE	67	OF 74

4
3
2
1

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DRAW	YZ KIM	DATE	2/8/2007	TITLE SYDNEY SUBBOARD ONTOP BOARD	SAMSUNG ELECTRONICS
CHECK	SW PARK	REV. STEP	PR		
APPROVAL	BJ LEE	REV	1.0		
MODULE CODE	undefined	LAST EDIT	February 8, 2007 10:00:08 PM	PAGE 68	OF 74



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TP18067
TP18068
C1045
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50V
TP18069
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DRAW		DATE		TITLE		SYDNEY MOUNT HOLE		SAMSUNG ELECTRONICS	
CHECK		DEV. STEP		PR					
APPROVAL		REV		1.0		PART NO.		BA41-0071#A	
MODULE CODE		LAST EDIT		February 8, 2007 10:00:08 PM		PAGE		69	OF 74

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TP15906○AUD3_BEEP	TP15858○CBS3_CAD(24)	TP15747○OHP3_LAN100_SLP	TP15880○CRT5_DDCCLK	TP18842○IDE5_D(4)	TP18791○KBC5_KSO(12)
TP15908○AUD3_GP100#	TP15859○CBS3_CAD(25)	TP15748○OHP3_LDRQ0#	TP15881○CRT5_DDCDATA	TP18843○IDE5_D(5)	TP18792○KBC5_KSO(13)
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	TP15878○CBS3_CAD(43)		TP15549○DCK3_CLKRUN#	TP18797○KBC3_CHGEN	
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TP15903○CBS3_A_D_14	TP15903○CBS3_A_D_14			TP18768○KBC3_SMCLK#	
TP15840○CBS3_A_D_2	TP15841○CBS3_CAD(0)			TP18769○KBC3_SMDATA	
TP15841○CBS3_CAD(0)	TP15842○CBS3_CAD(1)			TP18770○KBC3_SPMUTE	TP18718○CMDC3_BCLK
TP15842○CBS3_CAD(1)	TP15843○CBS3_CAD(10)				TP18719○CMDC3_RST#
TP15843○CBS3_CAD(10)	TP15844○CBS3_CAD(11)			TP18774○KBC3_THERM_SMCLK	TP18720○CMDC3_S011
TP15844○CBS3_CAD(11)	TP15845○CBS3_CAD(12)			TP18775○KBC3_THERM_SMDATA	TP18721○CMDC3_S00
TP15845○CBS3_CAD(12)	TP15846○CBS3_CAD(13)			TP18776○KBC3_VRON	TP18722○CMDC3_SYNC
TP15846○CBS3_CAD(13)	TP15847○OHP3_OL_CLK_0			TP18777○KBC3_WAKESC1#	
TP15847○OHP3_OL_CLK_0	TP15848○OHP3_CL_DATA_0				
TP15848○OHP3_CL_DATA_0	TP15849○OHP3_CL_RST#_0			TP18826○KBC3_KS1(0)	TP18726○CMEM1_VREF
TP15849○OHP3_CL_RST#_0	TP15850○OHP3_CL_RST#_1			TP18827○KBC3_KS1(1)	
TP15850○OHP3_CL_RST#_1	TP15851○OHP3_CL_RST#_2			TP18828○KBC3_KS1(2)	TP18728○CMIN3_CLKREQ#
TP15851○OHP3_CL_RST#_2	TP15852○CBS3_CAD(19)			TP18829○KBC3_KS1(3)	TP18729○CMIO3_BUTTON#
TP15852○CBS3_CAD(19)	TP15853○CBS3_CAD(20)			TP18830○KBC3_KS1(4)	
TP15853○CBS3_CAD(20)	TP15854○CBS3_CAD(21)			TP18831○KBC3_KS1(5)	
TP15854○CBS3_CAD(21)				TP18832○KBC3_KS1(6)	
				TP18833○KBC3_KS1(7)	
				TP18834○KBC3_KS1(8)	
				TP18835○KBC3_KS1(9)	
				TP18836○KBC3_KS1(10)	
				TP18837○KBC3_KS1(11)	
				TP18838○KBC3_KS1(12)	
				TP18839○KBC3_KS1(13)	
				TP18840○KBC3_KS1(14)	
				TP18841○KBC3_KS1(15)	

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D	TP18678QCLCD_VDD3V TP18679QCLCD_VDD3V	TP18651OP2.5V	TP18637OSBD_P5.0V TP18638OSBD_P5.0V
	TP18680QLD0_P5.4V	TP18656OP3.3V TP18657OP3.3V TP18658OP3.3V TP18659OP3.3V TP18660OP3.3V TP18661OP3.3V_ALW TP18662OP3.3V_ALW TP18663OP3.3V_ALW TP18664OP3.3V_ALW TP18665OP3.3V_ALW TP18666OP3.3V_AUX TP18667OP3.3V_AUX TP18668OP3.3V_AUX TP18669OP3.3V_AUX TP18670OP3.3V_AUX	TP18639OSUB_AD_DC TP18640OSUB_AD_DC TP18641OS_P3.3V TP18644OS_P3.3V_AUX TP18645OS_P5.0V_AUX
	TP18681ONF_P1.2V TP18682ONF_P1.2V		
	TP18685OP0.9V TP18686OP0.9V		TP18604OTMDS_PLL_VDD
C	TP18687OP1.05V TP18688OP1.05V		
	TP18689OP1.05V_PEG TP18690OP1.05V_PEG	TP18675OP3.3V_LAN TP18676OP3.3V_LAN	TP18605OVCC_CRT
	TP18691OP1.25V TP18692OP1.25V	TP18677OP3V_MICOM TP18614OP3V_MICOM	TP18606OVDC TP18607OVDC TP18608OVDC
	TP18693OP1.2V TP18694OP1.2V	TP18615OP4.XV_AUD TP18616OP4.XV_AUD	TP18609OVDC_ADP1 TP18610OVDC_ADP1 TP18611OVDC_ADP1 TP19108OVDC_ADP1 TP19109OVDC_ADP1
B	TP18695OP1.2V_LAN TP18696OP1.2V_LAN	TP18617OP5.0V TP18618OP5.0V TP18619OP5.0V TP18620OP5.0V TP18621OP5.0V	TP18612OVDC_INV TP18613OVDC_INV
	TP18697OP1.5V TP18698OP1.5V	TP18625OP5.0V_ALW TP18627OP5.0V_AMP TP18628OP5.0V_AMP	TP19110OGROUND TP19111OGROUND TP19112OGROUND TP19113OGROUND TP19114OGROUND TP19115OGROUND TP19116OGROUND TP19117OGROUND TP19118OGROUND TP19119OGROUND
	TP18701OP1.8V TP18702OP1.8V TP18703OP1.8V TP18704OP1.8V TP18705OP1.8V TP18706OP1.8V_AUX TP18707OP1.8V_AUX TP18708OP1.8V_AUX TP18709OP1.8V_AUX TP18646OP1.8V_AUX TP18647OP1.8V_P2.5V_LAN TP18648OP1.8V_P2.5V_LAN	TP18629OP5.0V_AUD TP18630OP5.0V_AUD TP18631OPRTC_BAT TP18634OREM_P3V	TP19120OGROUND TP19121OGROUND TP19122OGROUND TP19123OGROUND TP19124OGROUND TP19125OGROUND TP19127OGROUND TP19126OGROUND TP19128OGROUND
	TP18650OP12.0V_ALW	TP18635OSBD_P3.3V TP18636OSBD_P3.3V	
A			

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