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LISBON

CPU : Intel Merom-4M (800/667 MHz)

Chip Set : Intel GM965/PM965 &
 Intel ICH8M/ICH8M-E

Remarks : SantaRosa Platform

Model Name : Lisbon-P55

PBA Name : MAIN

PCB Code : BA41-#####A

Dev. Step : MP

Revision : 1.1

T.R. Date : 2007.04.19

DRAW	CHECK	APPROVAL
Ma Xinzhi	Wang Peng	Han Joonho

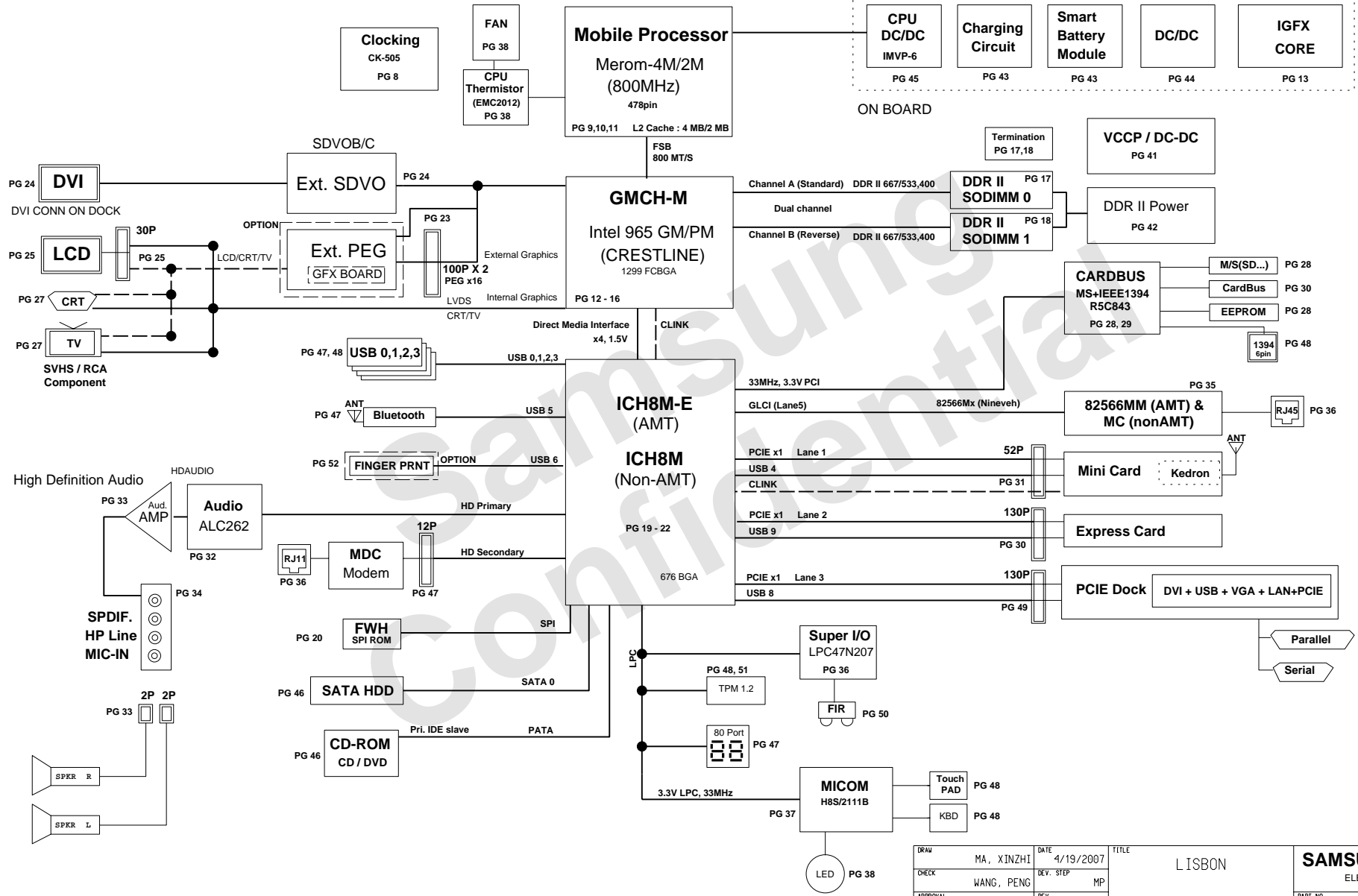
■ Owner : SESC Mobile R & D Signature : X

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CHECK	WANG, PENG	DEV. STEP	MP			
APPROVAL	HAN, JH	REV	1.1		COVER	PART NO. BA41-#####A
MODULE CODE		LAST EDIT		April 9, 2007 8:42:14 PM	PAGE	1 OF 54

BLOCK DIAGRAM

Rev. 0.5



DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON	SAMSUNG ELECTRONICS
CHECK	WANG, PENG	REV. STEP	MP	BLOCK DIAGRAM		
APPROVAL	HAN, JH	REV	1.1	PART NO. BA41-#####		PAGE 2 OF 54
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BOARD INFORMATION

SCHEMATIC ANNOTATIONS AND BOARD INFORMATION

PCI Devices			
Devices	IDSEL#	REQ/GNT#	Interrupts
Cardbus	AD25	3	A, B, C
USB	AD29(internal)	-	USB2.0 #0 USB2.0 #1 USB2.0 #2 USB2.0 #3 USB2.0 #4 USB2.0 #5
LPC bridge/IDE/AC97/SMBUS	AD31(internal)	-	B
Internal MAC	AD24(internal)	-	E
AC Link	-	-	B
GLAN	AD25 (internal)	-	F

Crystal / Oscillator			
TYPE	FREQUENCY	DEVICE	USAGE
Crystal	32.768KHz	ICH8-M	Real Time Clock
Crystal	10MHz	MICOM	HD64F2169/2160
Crystal	14.318MHz	CLOCK-Generator	CK-505
Crystal	24.576MHz	Cardbus Controller	1394
Crystal	25MHz	LAN	Intel LAN
Crystal	27MHz	VIDEO	PEG
Crystal	24.576MHz (TBD)	HD Audio	Audio

LCD Panel Detect (TBD)		
Devices	Resolution	PANNEL_DETECT_0

Voltage Rails	
VDC	Primary DC system power supply (7 to 21V)
CPU_CORE	Core Voltage for CPU
IGFX_CORE	Core Voltage for Internal Graphic
P1.05V	Core Voltage for Crestline & ICH8-M
P1.05V_M	1.05V switched power rail for ME (on in M0/M1)
P1.25V_M	1.25V switched power rail for ME (on in M0/M1)
P3.3V_M	3.3V switched power rail for ME (on in M0/M1)
P3.3V_ALW	3.3V always power rail (by KBC3_ALWS_ON)
P3.3V_MICOM	3.3V always power rail (for Micom)
P3.3V_LAN	3.3V always power rail (for LAN)
P1.8V_LAN	1.8V always power rail (for LAN)
P1.0V_LAN	1.0V always power rail (for LAN)
P1.5V	1.5V switched off power rail (off in S3-S5)
P1.5V_AUX	1.5V switched on power rail
P1.8V	1.8V switched off power rail (off in S3-S5)
P1.8V_AUX	1.8V power rail for DDR
P0.9V	0.9V power rail for DDR
P3.3V	3.3V switched off power rail (off in S3-S5)
P3.3V_AUX	3.3V switched on power rail
P5.0V	5.0V switched off power rail (off in S3-S5)
P5.0V_AUX	5.0V switched on power rail
P1.25V	1.25V switched off power rail (off in S3-S5)

I ² C / SMB Address			
Devices	Address	Hex	Bus
ICH8-m	Master		SMBUS Master
CK-505M (Clock Generator)	1101 001x	D2h	Clock, Unused Clock Output Disable
SODIMMO	1010 000x	A0h	
SODIMM1	1010 010x	A4h	
PCI Express Card	TBD	TBD	Express Card
TPM	TBD	TBD	TPM
Kedron	TBD	TBD	Minicard
USB Hub	00101101	2Dh	Docking USB Hub
MICOM	Master	-	SMBUS Master
Battery	0001011x	16h	Battery
Ext GFX THRM	10011000	98h	Ext GFX THRM
CPU Thermal Sensor	1111 010x	7Ah	Thermal Sensor
ICH8M	TBD	TBD	ME-EC

USB PORT Assign		PCI Express Assign	
PORT #	ASSIGNED TO	PORT #	ASSIGNED TO
0	SYSTEM PORT 0	0	RSVD (TBD)
1	SYSTEM PORT 1	1	Mini PCI Express Card
2	SYSTEM PORT 2	2	Express Card
3	SYSTEM PORT 3	3	DOCKING PORT 0
4	Mini PCI Express	4	RSVD (TBD)
5	Bluetooth	5	GLAN
6	RSVD (TBD)		
7	FingerPrinter		
8	DOCKING PORT 0		
9	Express Card		

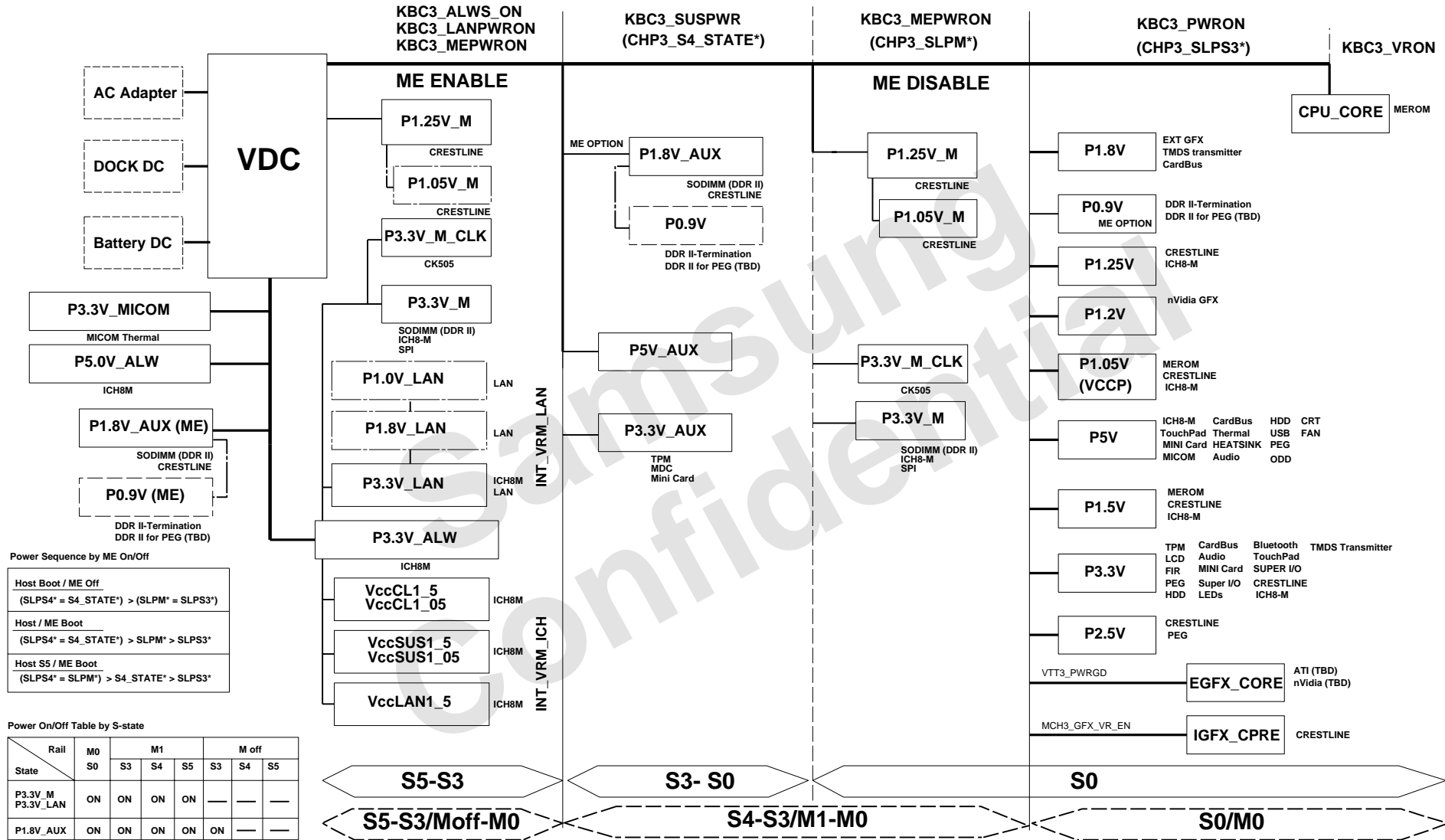
REVISION HISTORY

See rev notes for more information.

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APPROVAL	HAN, JH	REV	1.1	NOTES & ANNOTATIONS		PART NO. BA41-#####
MODULE CODE		LAST EDIT	February 6, 2007 11:03:39 PM	PAGE	3	OF 54

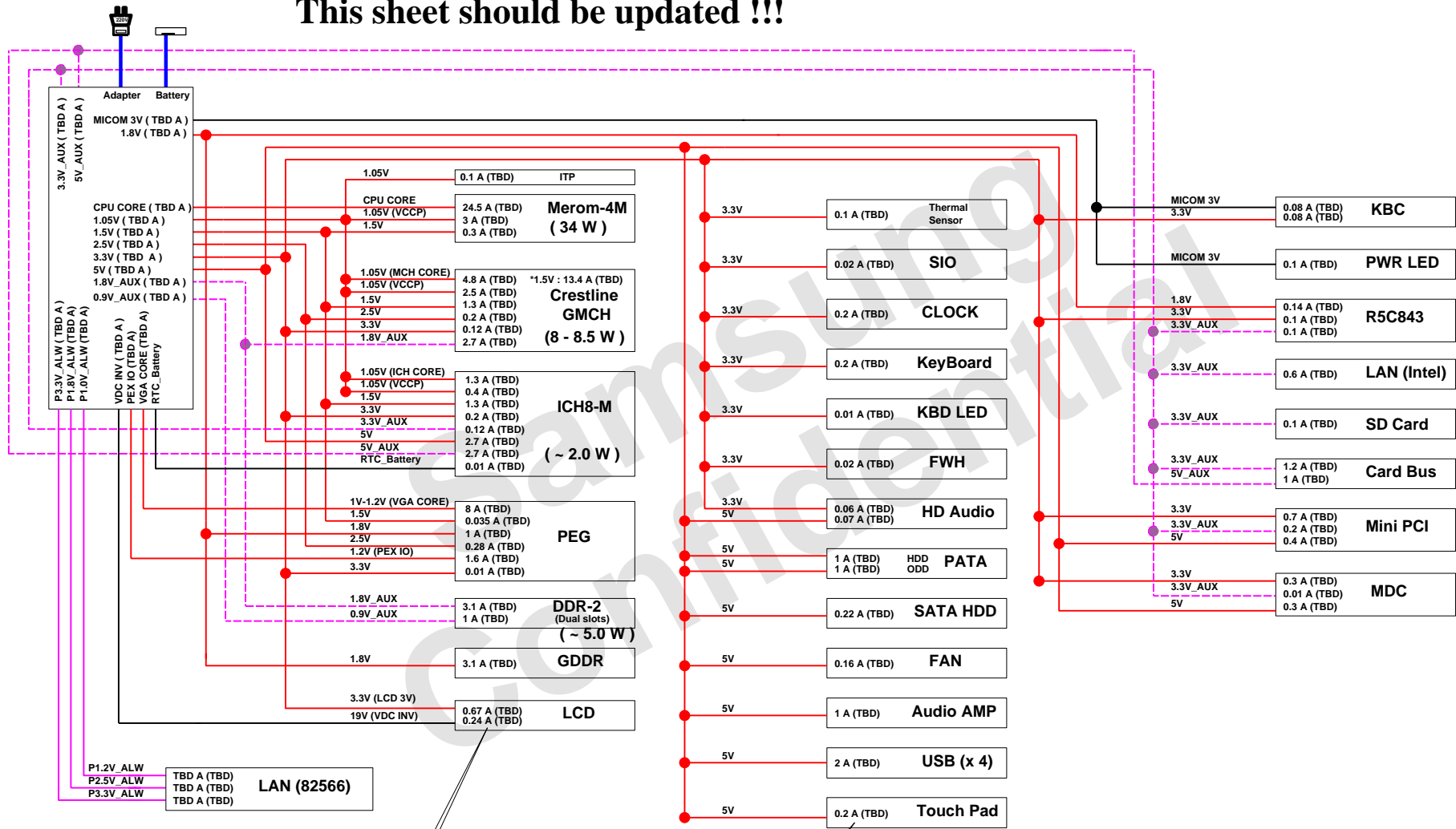
POWER DIAGRAM Rev. 0.5

TO BE UPDATED!!



DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON	SAMSUNG ELECTRONICS
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APPROVAL	HAN, JH	REV	1.1	PART NO. BA41-#####		PAGE 4 OF 54
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This sheet should be updated !!!



Value by Datasheet/Application notes (Value by measurement)

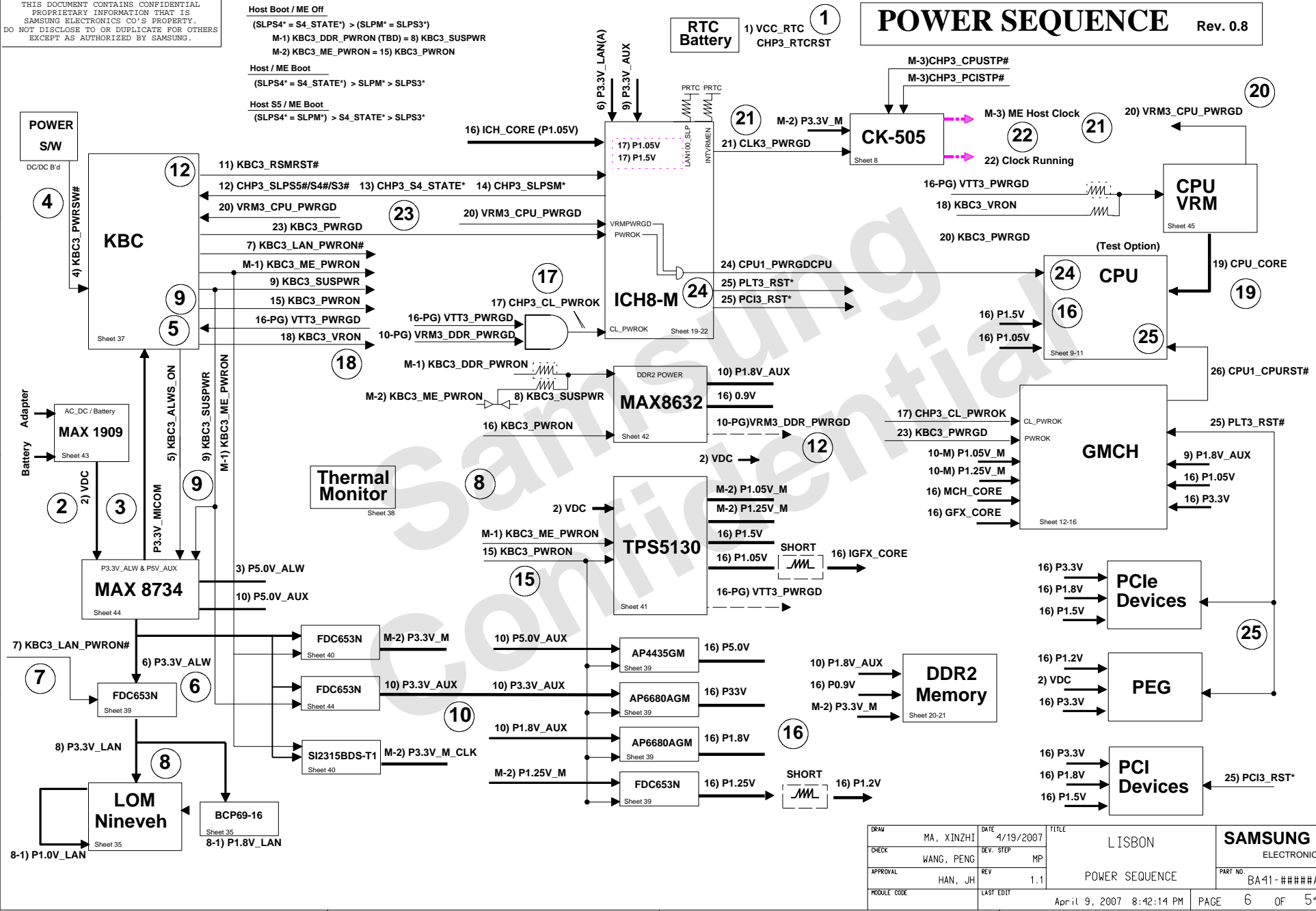
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APPROVAL	HAN, JH	REV	1.1	POWER RAILS		PART NO.
MODULE CODE	LAST EDIT			February 6, 2007 11:03:39 PM	PAGE	5 OF 54

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POWER SEQUENCE

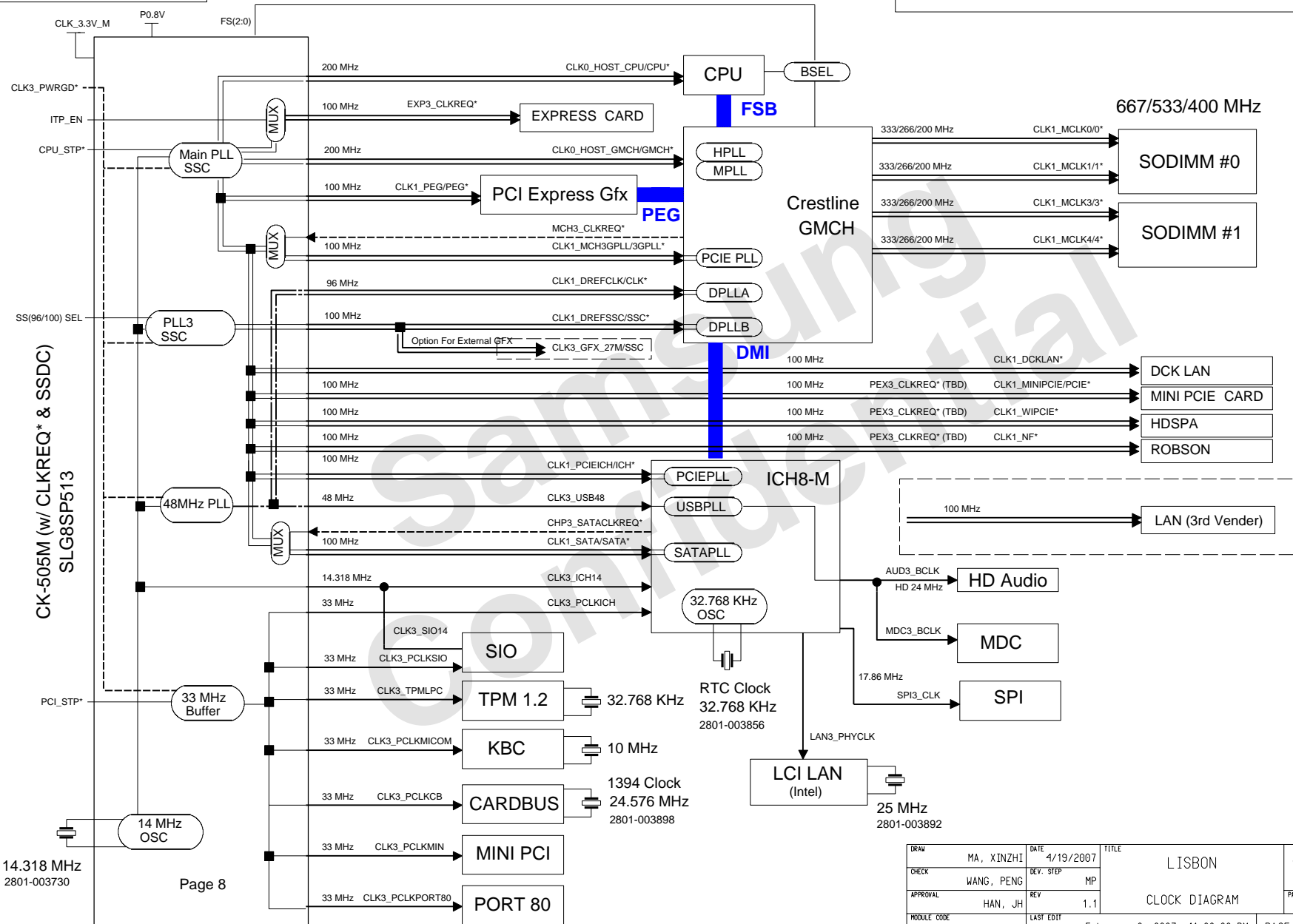
Rev. 0.8



DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON	SAMSUNG ELECTRONICS PART NO. BA41-####A
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APPROVAL	HAN, JH	REV	1.1	April 9, 2007 8:42:14 PM		
MODULE CODE		LAST EDIT		PAGE	6 OF 54	

TO BE UPDATED!!

CLOCK DISTRIBUTION Rev. 0.8



CK-505M (w/ CLKREQ* & SSSDC) SLG8SP513

14.318 MHz
2801-003730

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DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON	SAMSUNG ELECTRONICS
CHECK	WANG, PENG	REV. STEP	MP	CLOCK DIAGRAM		
APPROVAL	HAN, JH	REV	1.1	February 6, 2007 11:03:39 PM		PART NO. BA41-#####
MODULE CODE		LAST EDIT		PAGE	7	OF 54

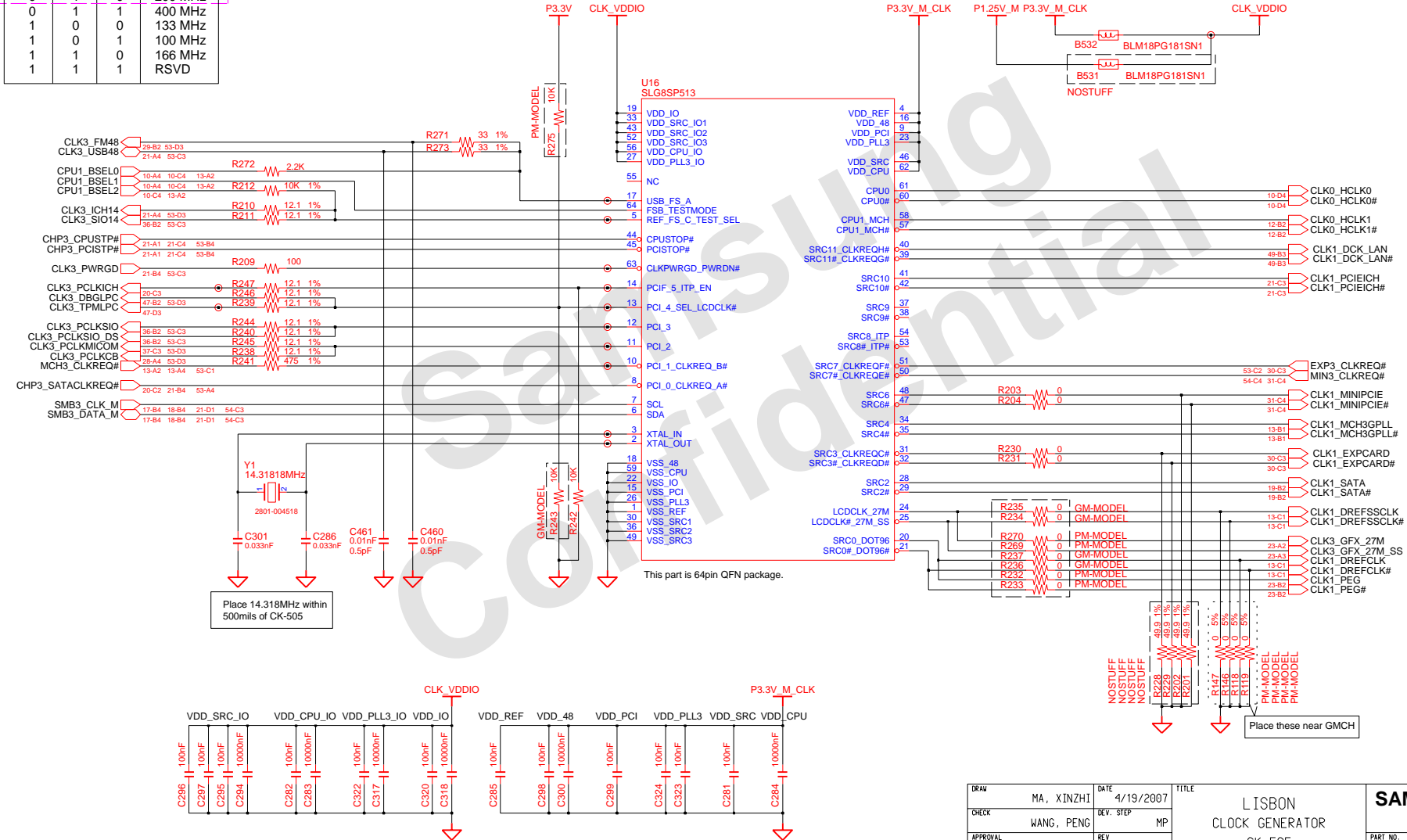
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SEL_LCDCLK*	
HIGH	27M & 27M_SS
LOW	LCD CLK

FSA	FSB	FSC	HOST CLK
BSEL0	BSEL1	BSEL2	
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	EXPRESS CARD	SRC8



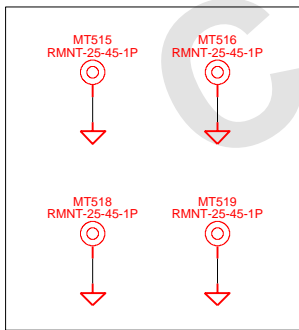
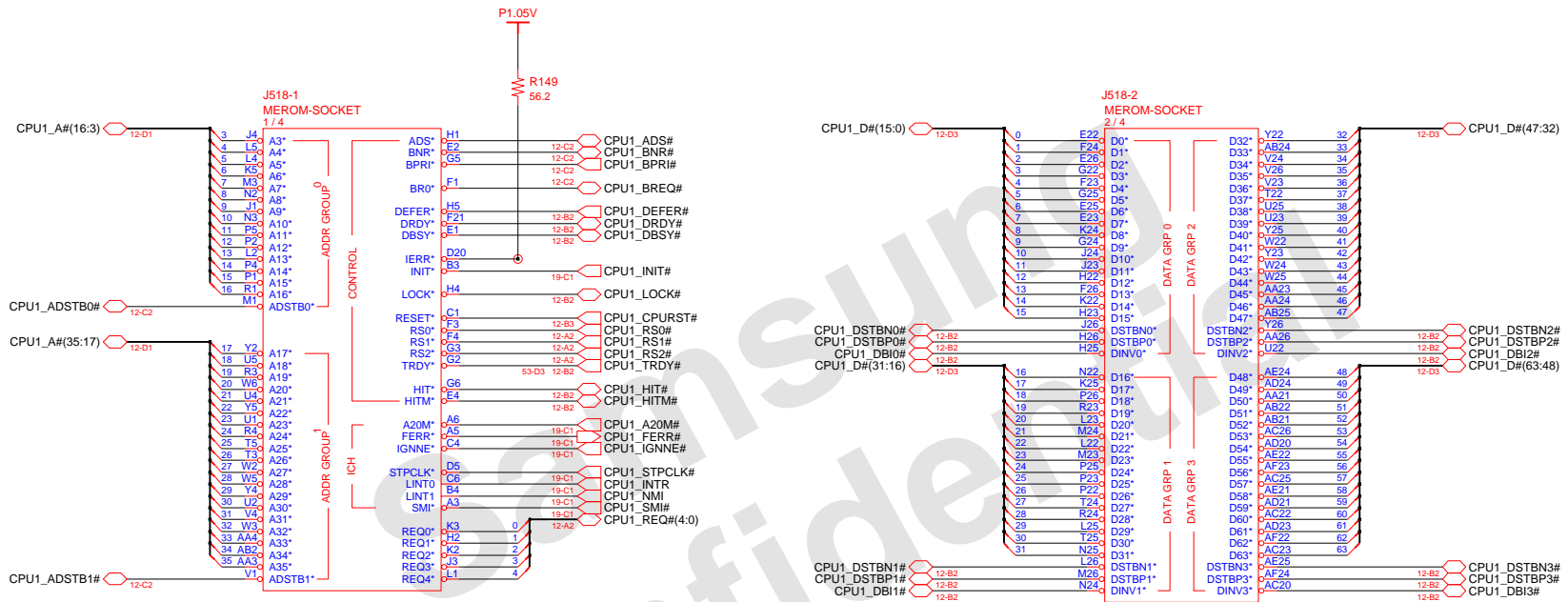
This part is 64pin QFN package.

Place these near GMCH

DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON	SAMSUNG ELECTRONICS
CHECK	WANG, PENG	REV. STEP	MP	CLOCK GENERATOR	CK-505	
APPROVAL	HAN, JH	REV	1.1			PART NO. BA41-#####
MODULE CODE	undefined	LAST EDIT	February 6, 2007 11:03:39 PM	PAGE	8	OF 54

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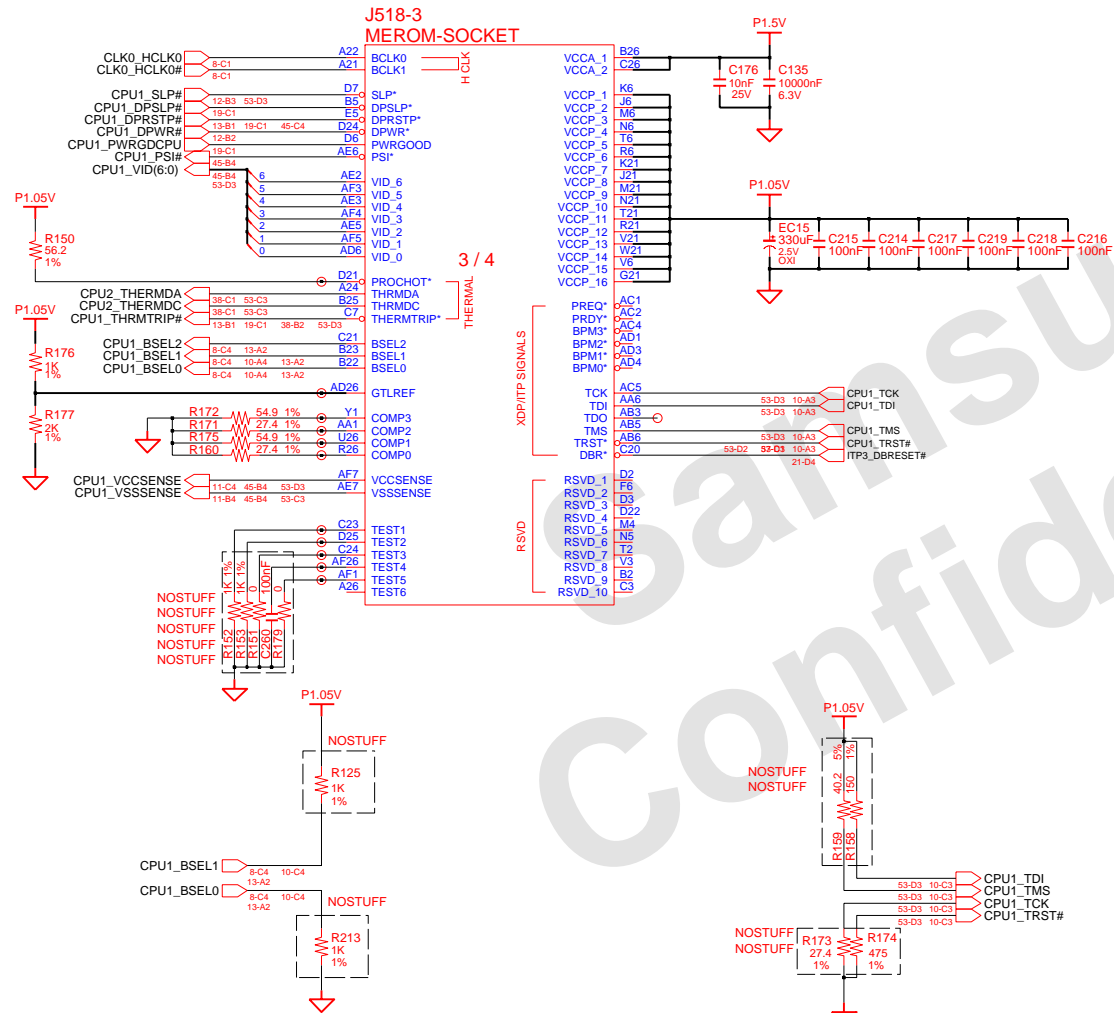
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CHECK	WANG, PENG	REV. STEP	MP		MEROM (1/3)	
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CPU Core Voltage Table MVP-6

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

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

GTLREF : Keep the Voltage divider within 0.5" of the first GTLREF pin with Zo=50ohm trace. Minimize coupling of any switching signals to this net.

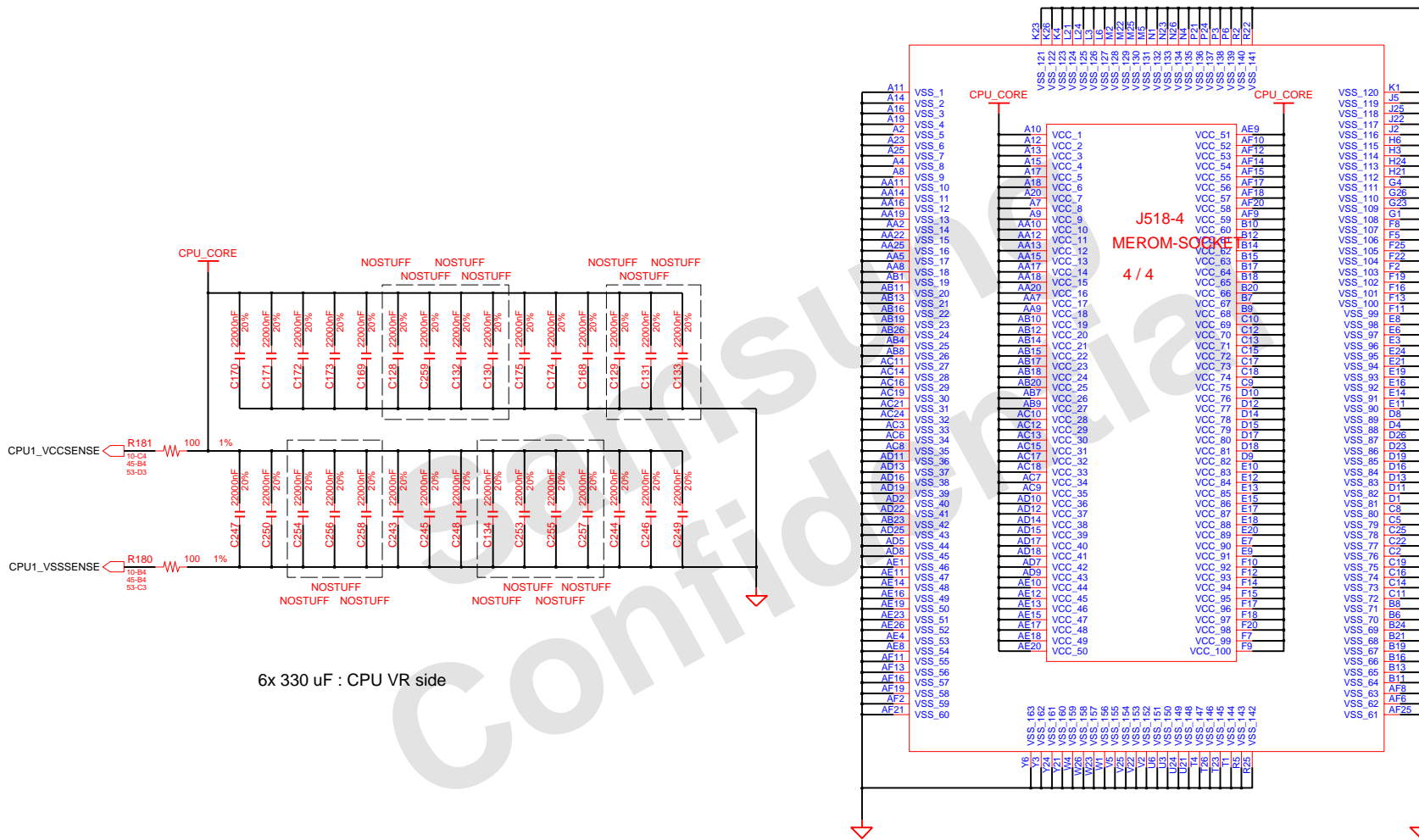
COMP0,2(COMP1,3) should be connected with Zo=27.4ohm(55ohm) trace shorter than 1/2" to their respective Banias socket pins.

GND test points within 100mil of the VCC/VSSsense at the end of the line. Route the VCC/VSSsense as a Zo=55ohm traces with equal length. Observe 3:1 spacing b/w VCC/VSSsense 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	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON CPU	PART NO.	SAMSUNG ELECTRONICS
CHECK	WANG, PENG	REV. STEP	MP	MEROM (2/3)	BA41-#####		
APPROVAL	HAN, JH	REV	1.1				
MODULE CODE	undefined	LAST EDIT	February 6, 2007 11:03:39 PM	PAGE	10	OF	54

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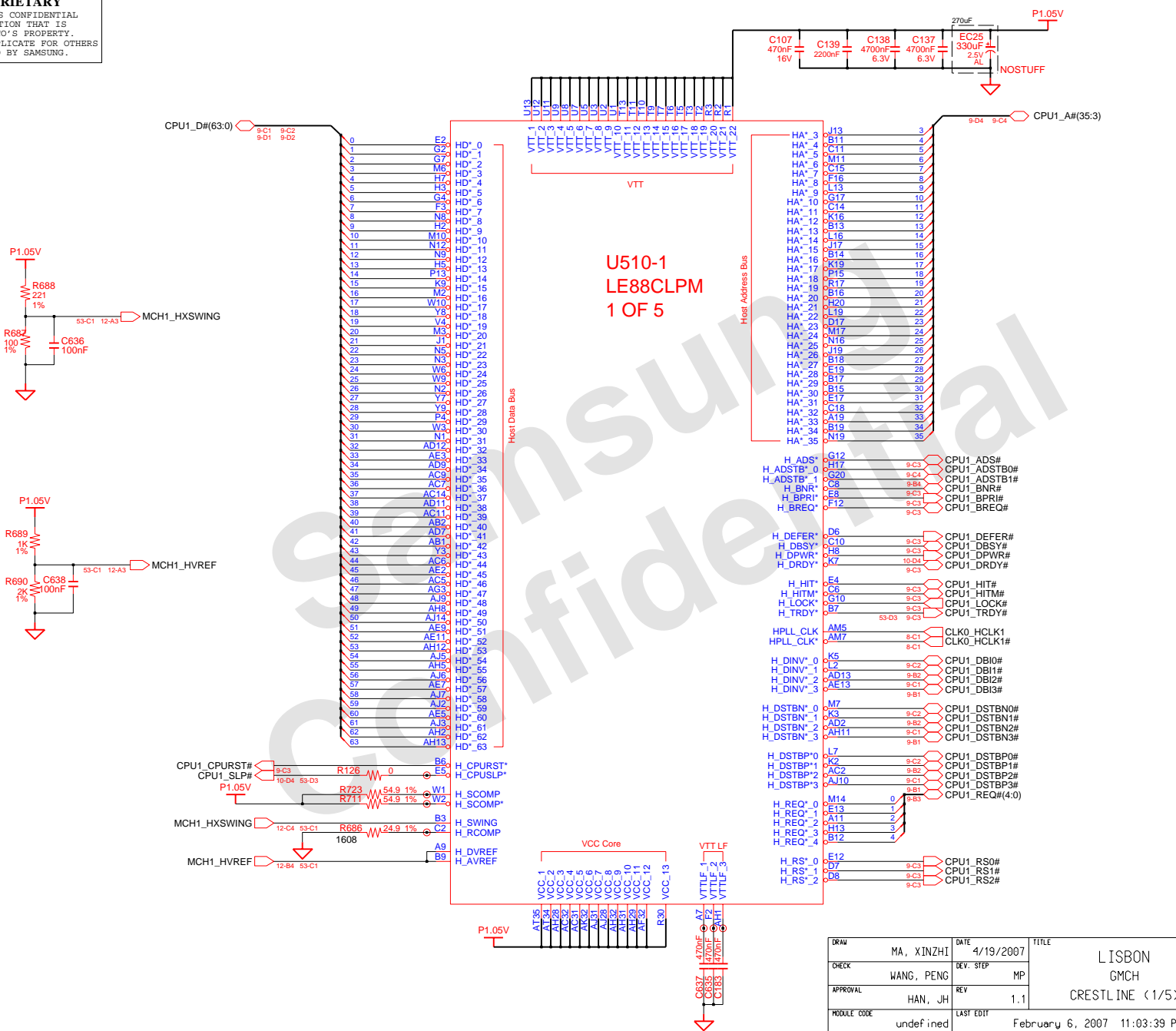
6x 330 uF : CPU VR side

DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON CPU MEROM (3/3)	PART NO. BA41-#####
CHECK	WANG, PENG	REV. STEP	MP			
APPROVAL	HAN, JH	REV	1.1			
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CHECK	WANG, PENG	REV. STEP	MP		GMCH	
APPROVAL	HAN, JH	REV	1.1		CRESTLINE (1/5)	PART NO.
MODULE CODE	undefined	LAST EDIT	February 6, 2007 11:03:39 PM	PAGE	12	OF 54

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TVDAC_A : CVBS, Pb
TVDAC_B : Y
TVDAC_C : C, Pr

RED, GREEN, BLUE
are GND referenced

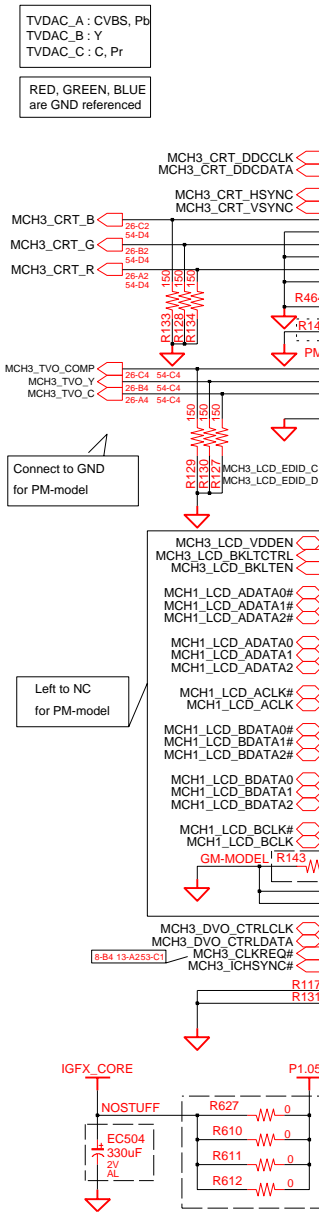
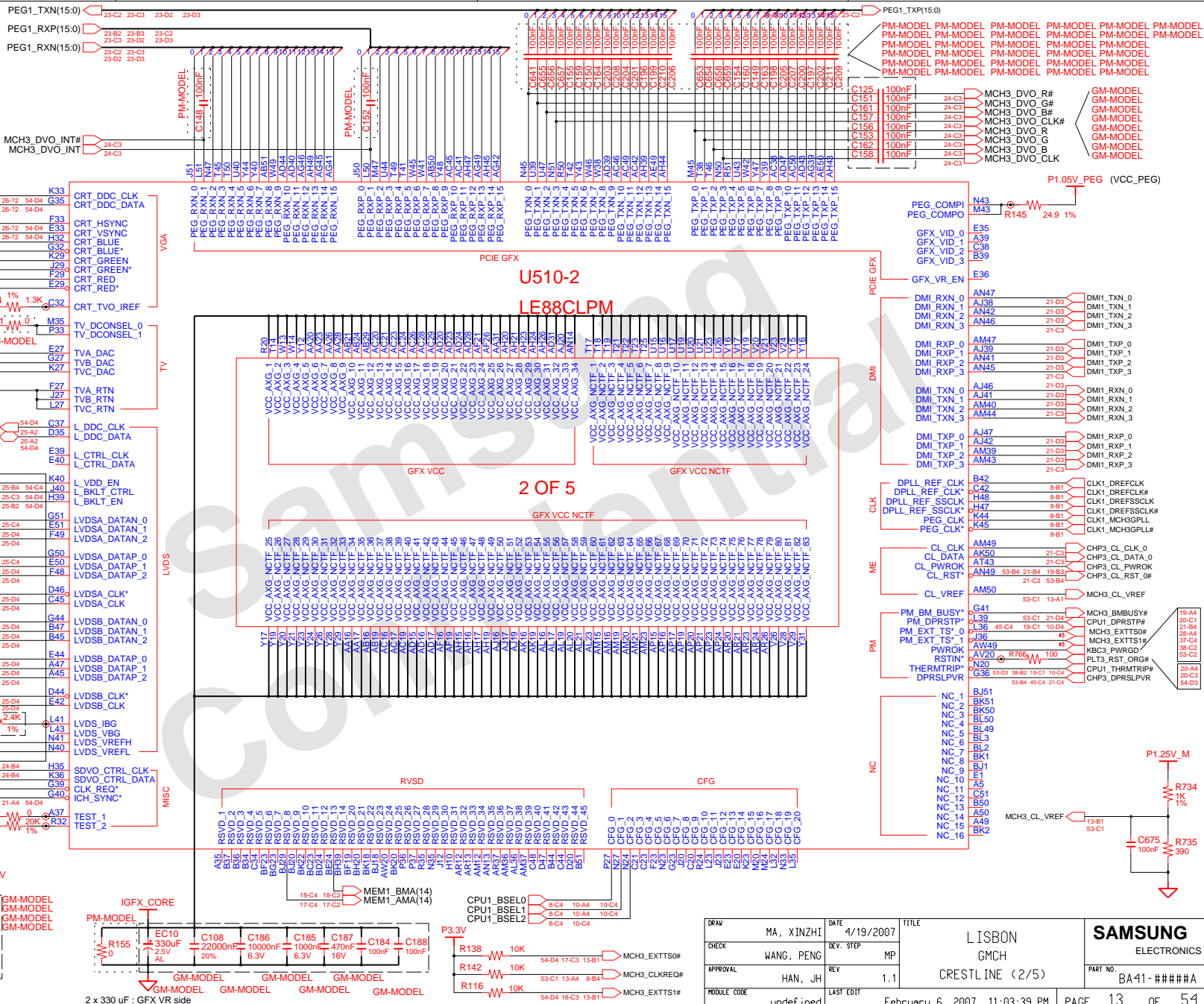
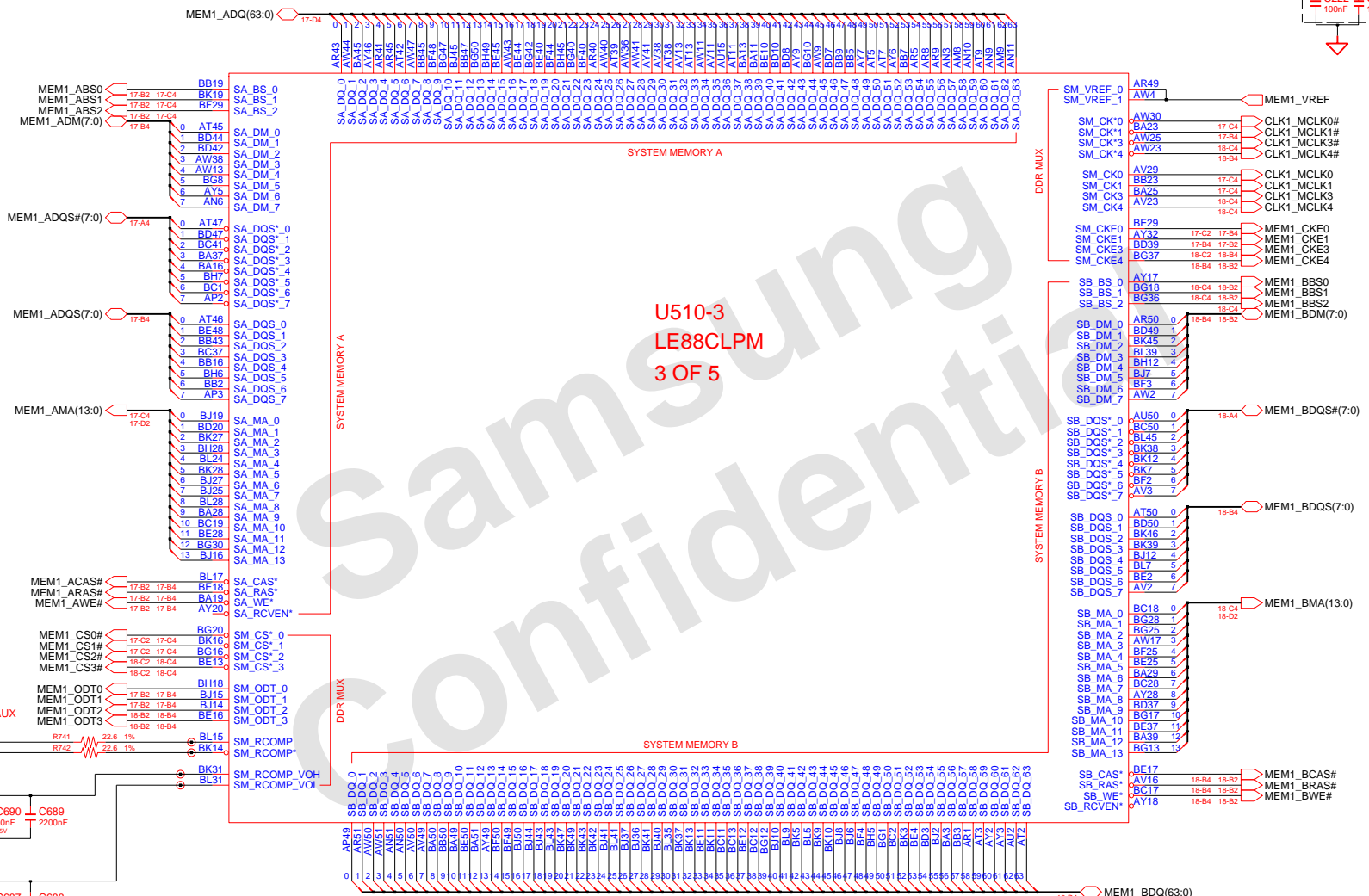
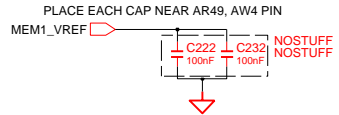


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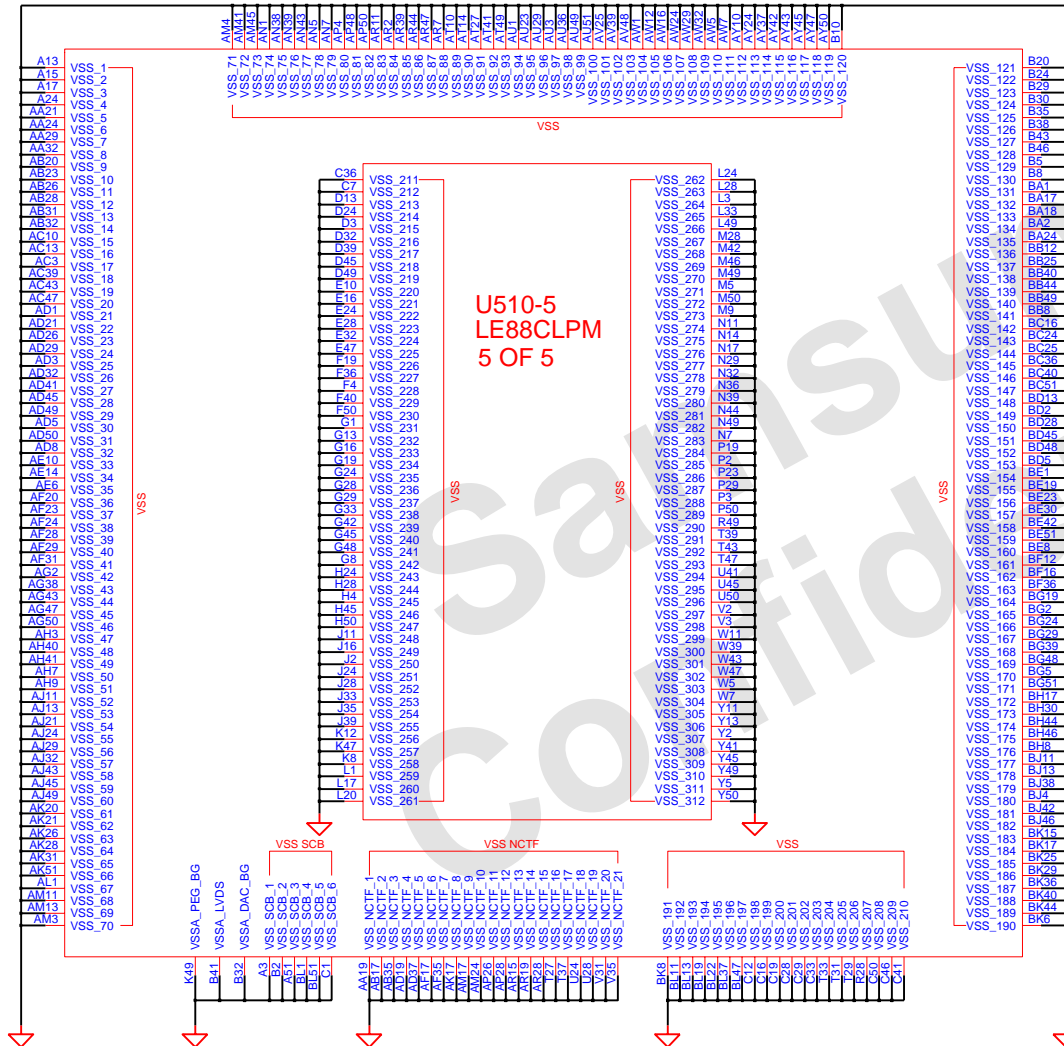
U510-3
LE88CLPM
3 OF 5

Route as short as possible

DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON	SAMSUNG ELECTRONICS
CHECK	WANG, PENG	REV. STEP	MP		GMCH	
APPROVAL	HAN, JH	REV	1.1		CRESTLINE (3/5)	PART NO. BA41-#####
MODULE CODE		LAST EDIT		February 6, 2007 11:03:39 PM	PAGE 14 OF 54	

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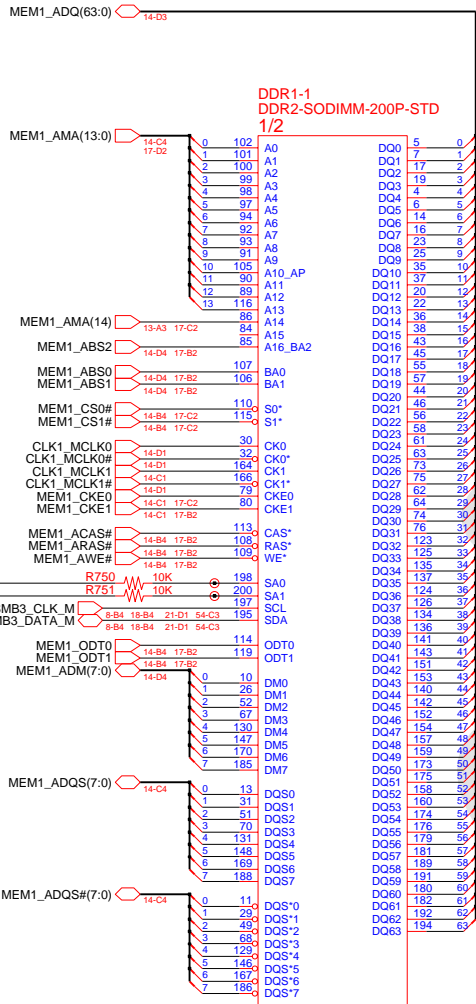
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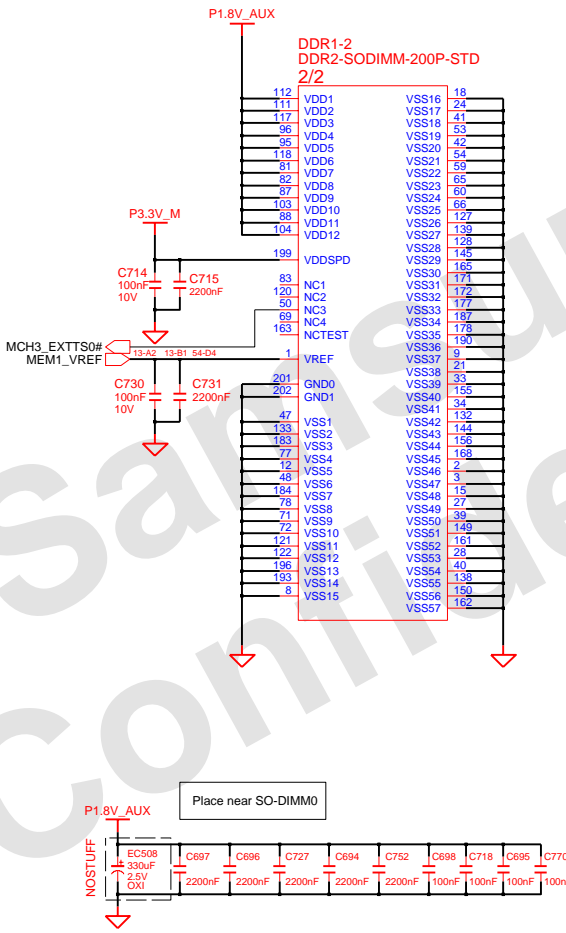
DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON	SAMSUNG ELECTRONICS
CHECK	WANG, PENG	REV. STEP	MP		GMCH	
APPROVAL	HAN, JH	REV	1.1		CRESTLINE (5/5)	PART NO.
MODULE CODE		LAST EDIT	February 6, 2007 11:03:39 PM			BA41-#####
				PAGE	16	OF 54

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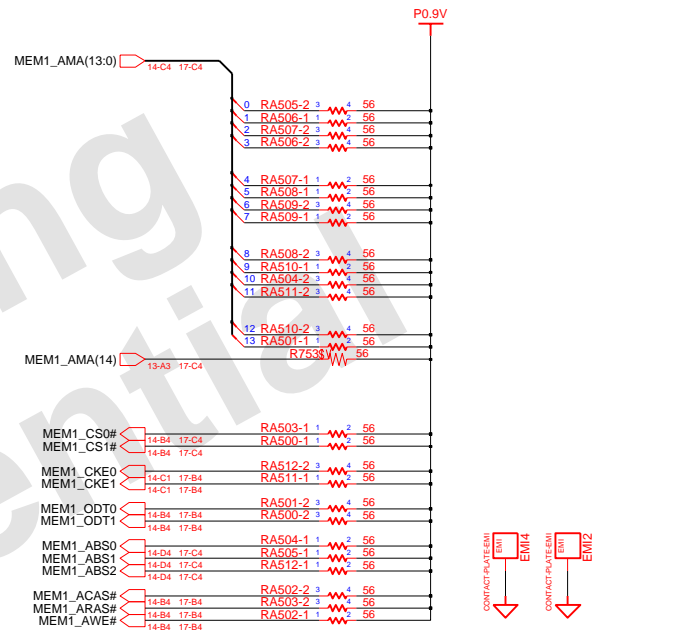
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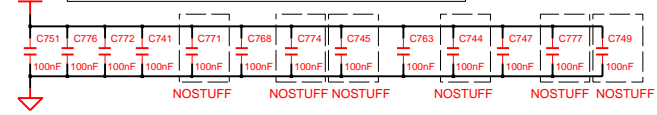
**DDR1-1
DDR2-SODIMM-200P-STD
1/2**



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



Place one cap close to every 2 pull-up resistors terminated to P0.9V

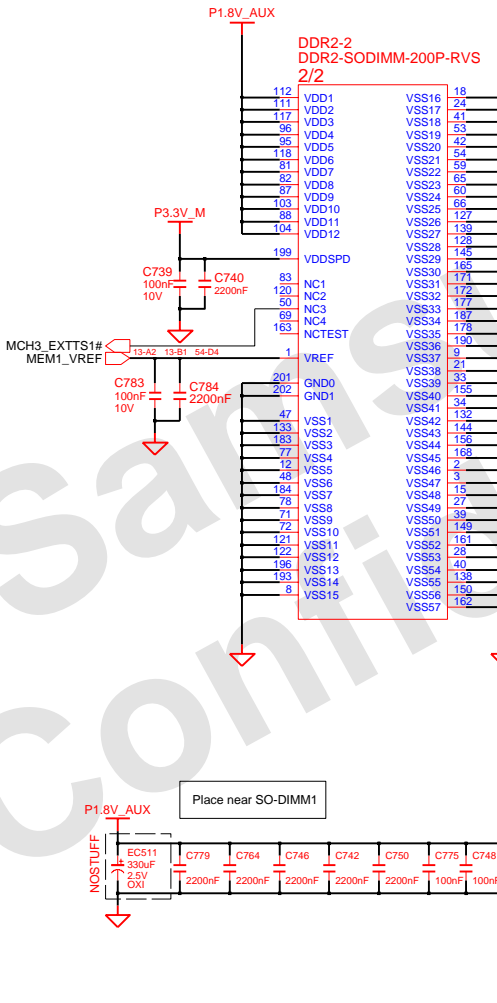
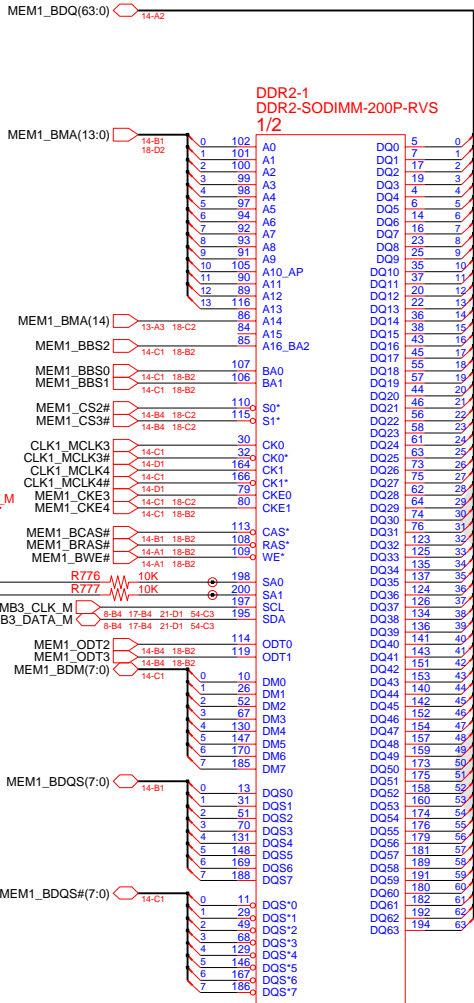


3709-001325

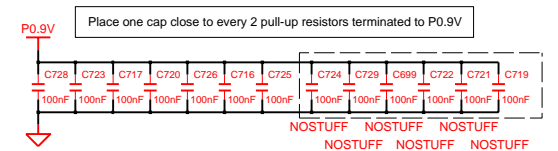
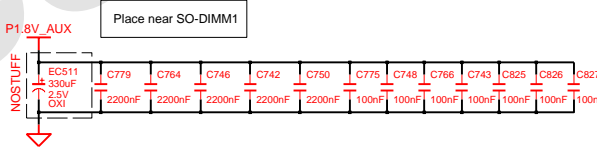
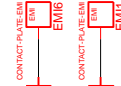
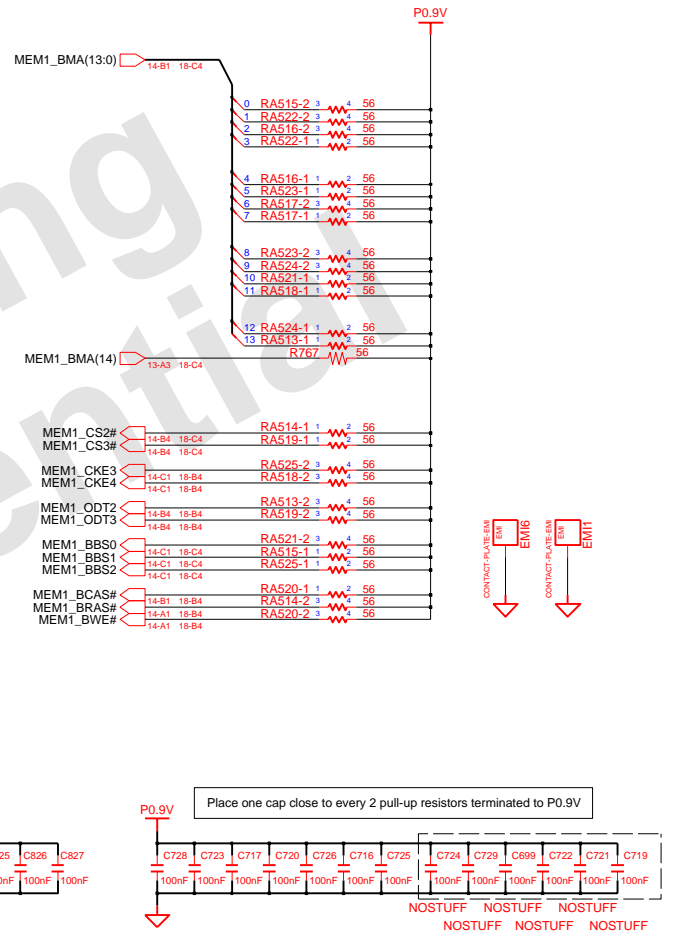
DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON DDR2 MEMORY CHANNEL A	SAMSUNG ELECTRONICS
CHECK	WANG, PENG	DEV. STEP	MP			
APPROVAL	HAN, JH	REV	1.1			PART NO. BA41-#####
MODULE CODE		LAST EDIT	February 6, 2007 11:03:39 PM	PAGE	17	OF 54

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

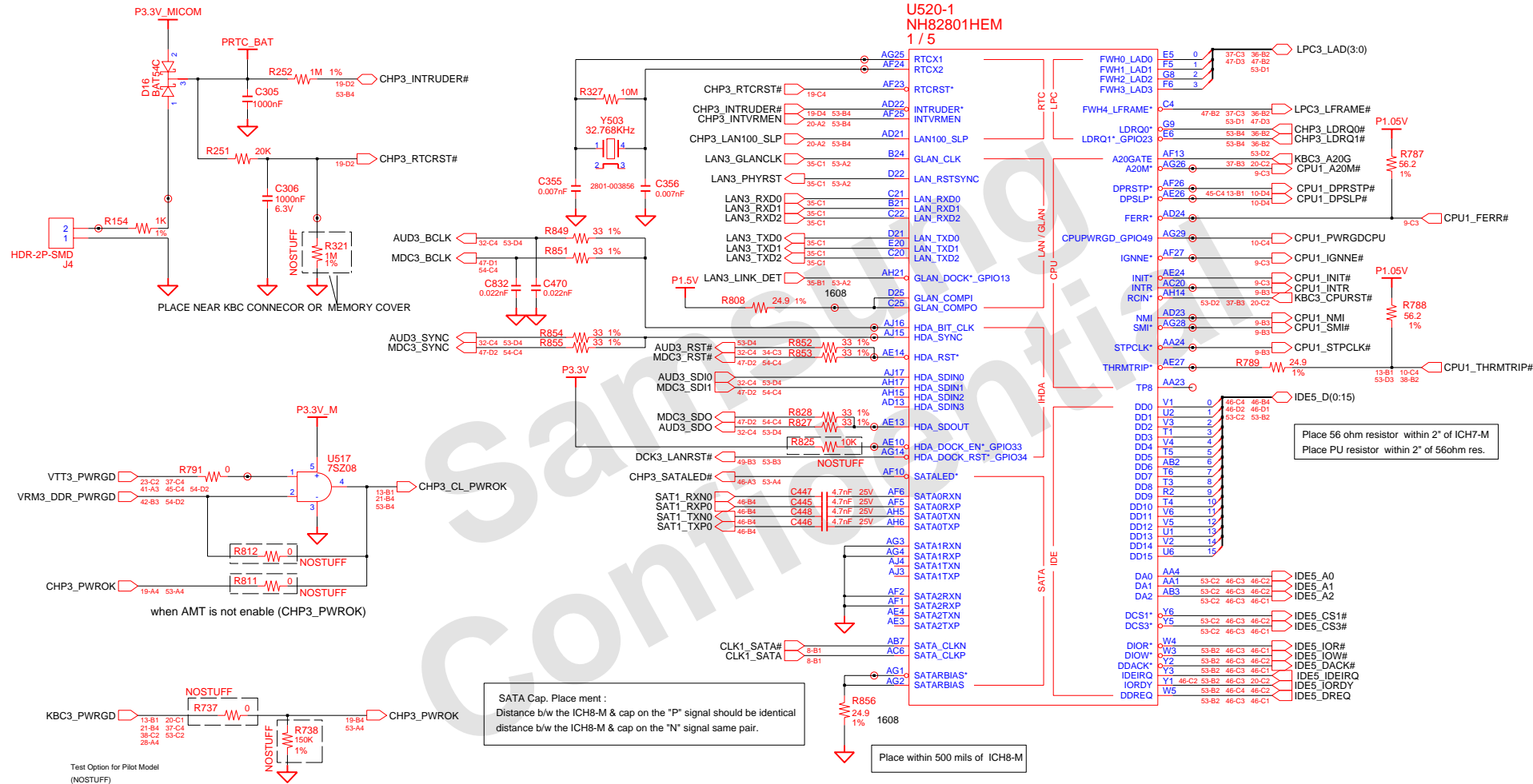


3709-001327

DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON	PART NO.	SAMSUNG ELECTRONICS
CHECK	WANG, PENG	REV. STEP	MP	DDR2 MEMORY	BA11-####A		
APPROVAL	HAN, JH	REV	1.1	CHANNEL B			
MODULE CODE		LAST EDIT	February 6, 2007 11:03:39 PM	PAGE	18	OF	54

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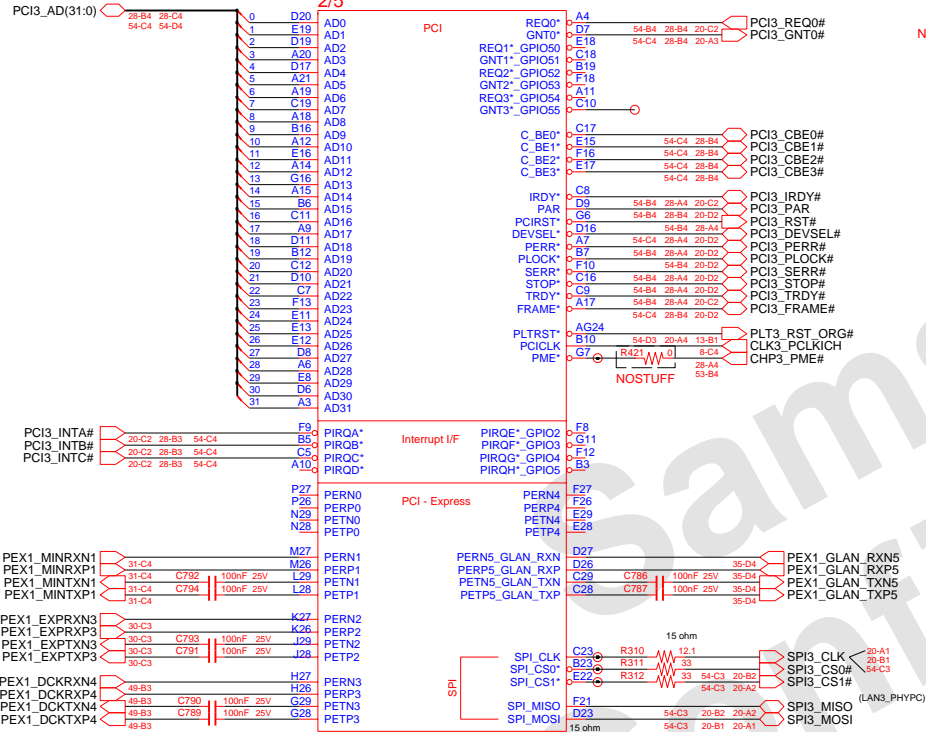


DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON ICH8-M	SAMSUNG ELECTRONICS
CHECK	WANG, PENG	REV. STEP	MP		ICH8-M (1/4)	
APPROVAL	HAN, JH	REV	1.1			PART NO. BA41-#####
MODULE CODE		LAST EDIT	February 6, 2007 11:03:39 PM	PAGE	19	OF 54

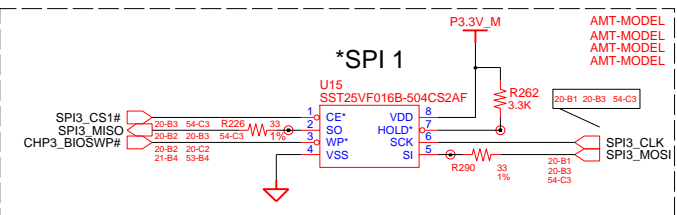
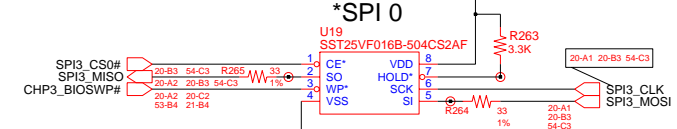
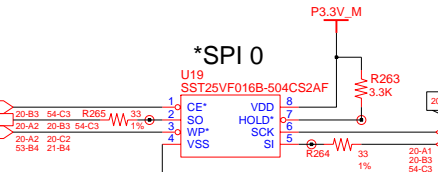
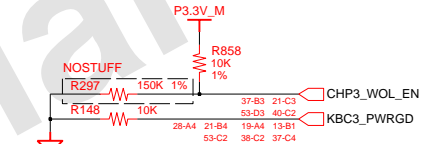
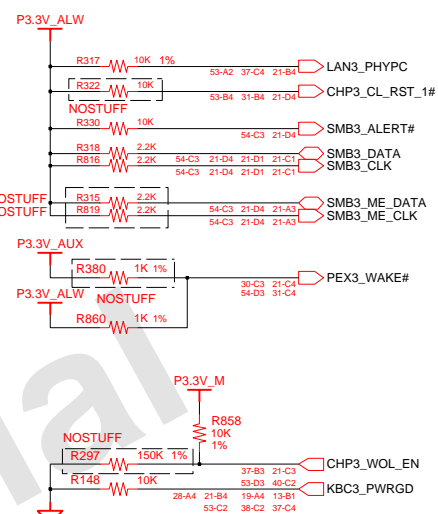
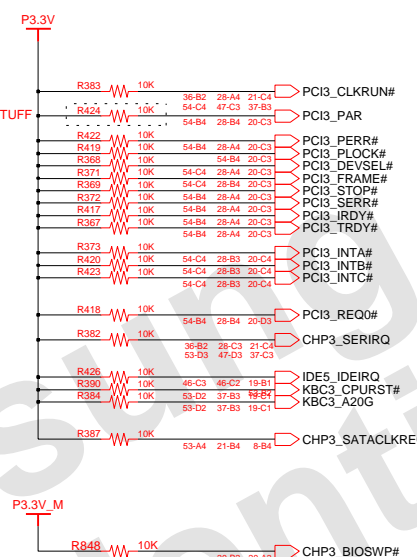
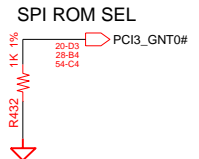
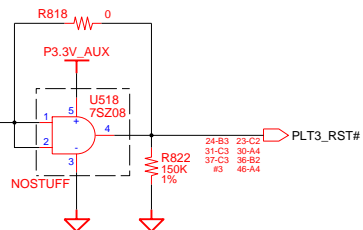
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**U520-2
NH82801HEM
2/5**



AC caps : PCIe need to be within 250mils of the driver
Resistor for Test : Place Stuffed Option to minimize stubs



Internal VR Strap

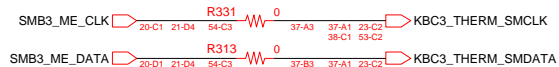
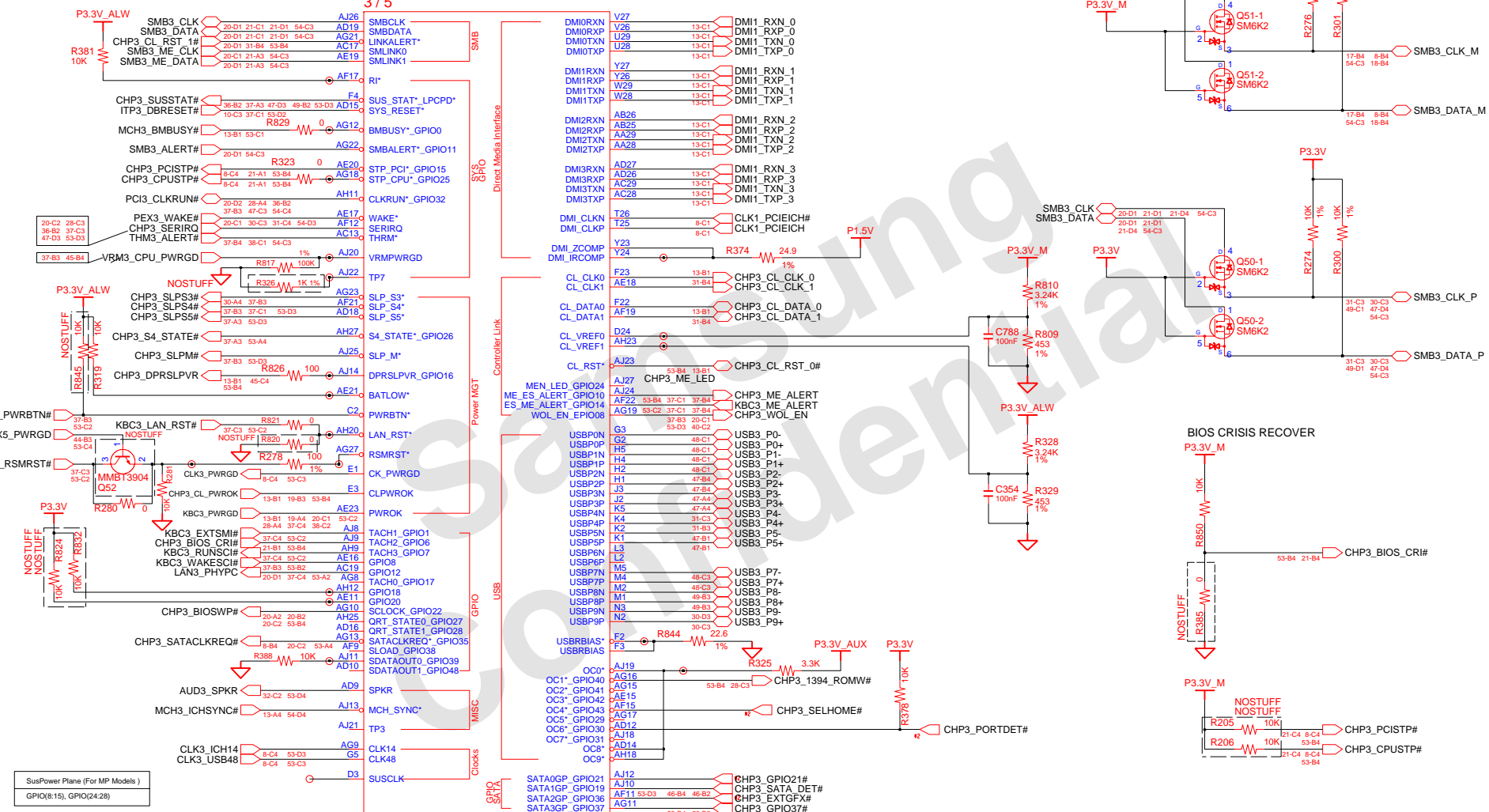
INTVRMEN	Pull up	VccSus1_05, VccSus1_5, VccCL1_5
LAN100_SLP	Pull up	VccLAN1_05, VccCL1_05

DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON ICH8-M	SAMSUNG ELECTRONICS	
CHECK	WANG, PENG	REV. STEP	MP		ICH8-M (2/4)		
APPROVAL	HAN, JH	REV	1.1			PART NO.	
MODULE CODE	undefined	LAST EDIT	February 6, 2007 11:03:39 PM	PAGE	20	OF	54

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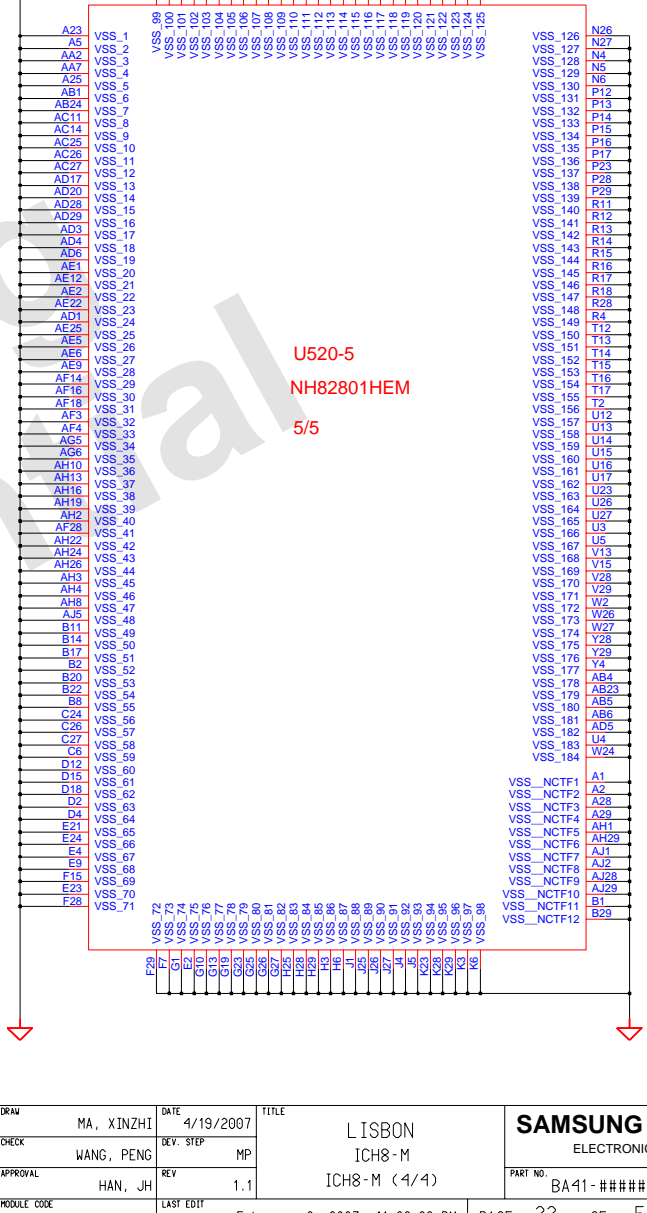
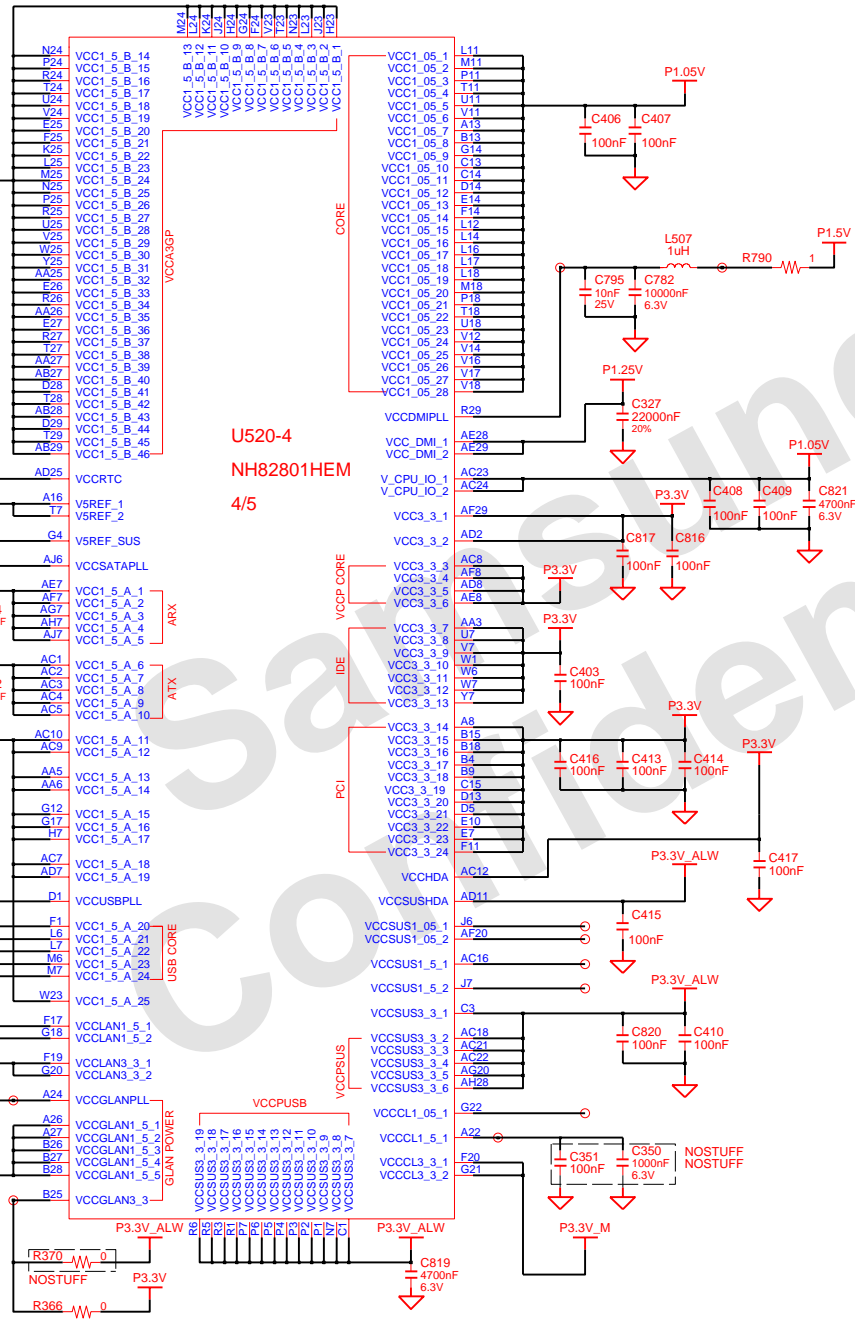
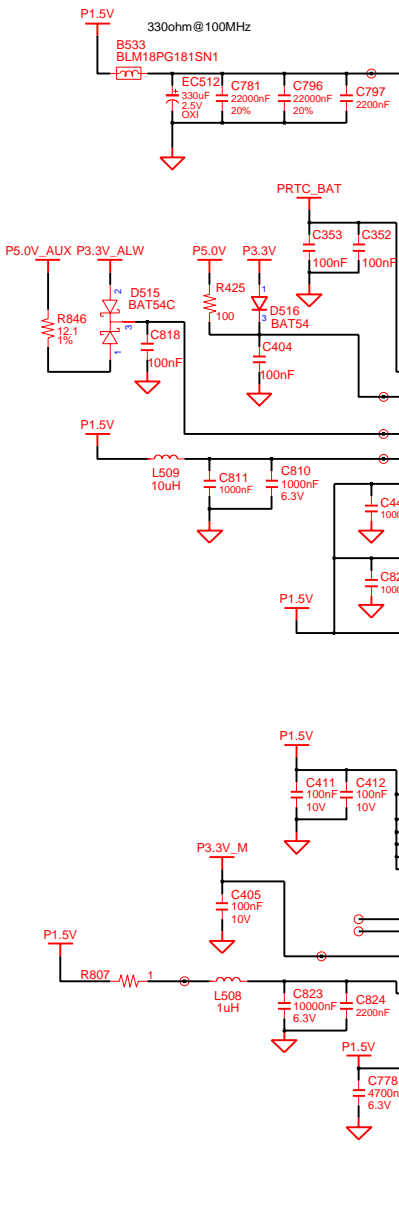
**U520-3
NH82801HEM
3 / 5**



DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON ICH8-M	SAMSUNG ELECTRONICS
CHECK	WANG, PENG	REV. STEP	MP			
APPROVAL	HAN, JH	REV	1.1		ICH8-M (3/4)	PART NO. BA41-#####
MODULE CODE		LAST EDIT	February 6, 2007 11:03:39 PM	PAGE	21 OF 54	

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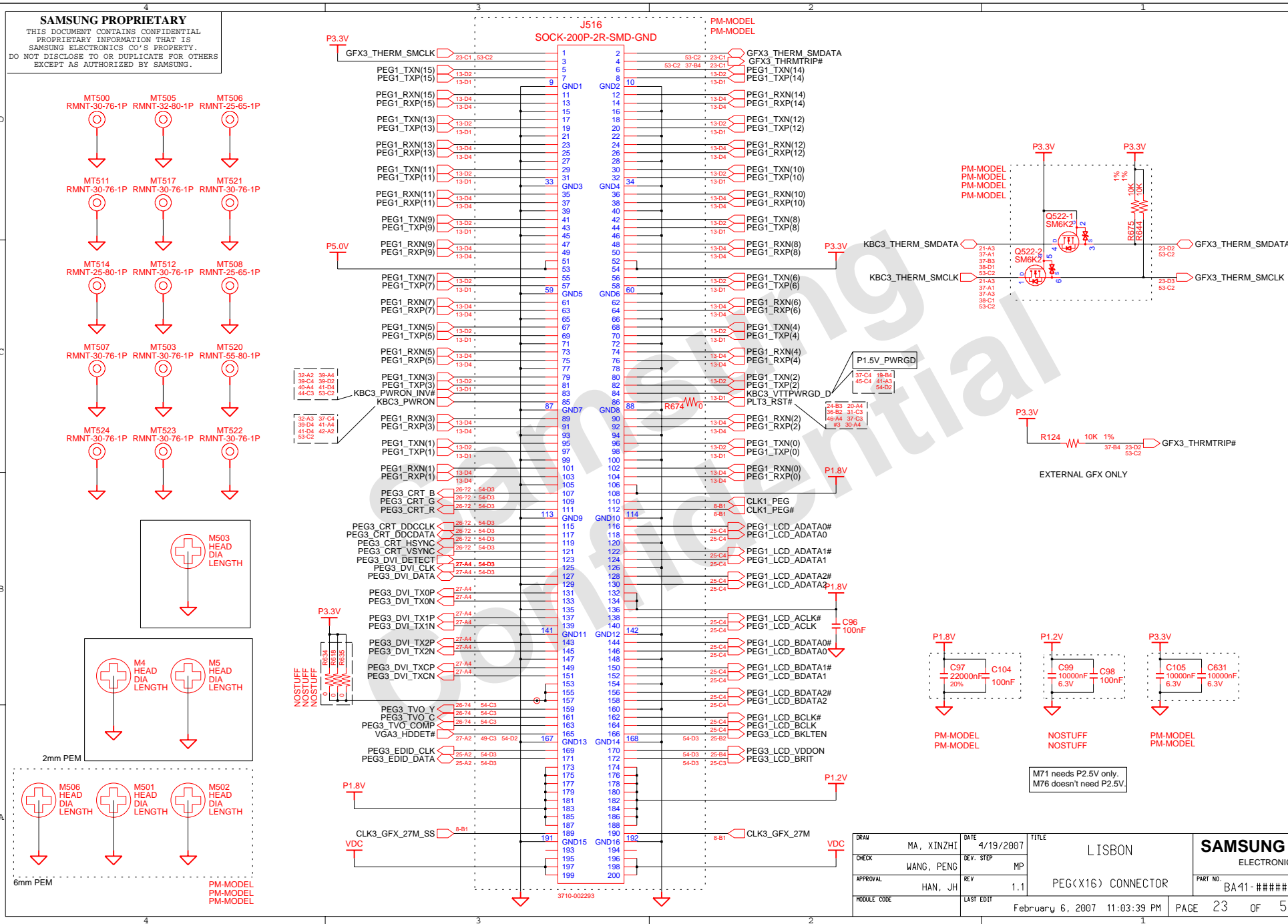
U520-4 NH82801HEM 4/5

U520-5 NH82801HEM 5/5

DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON ICH8-M	PART NO. BA41-#####
CHECK	WANG, PENG	REV. STEP	MP			
APPROVAL	HAN, JH	REV.	1.1		ICH8-M (4/4)	
MODULE CODE		LAST EDIT	February 6, 2007 11:03:39 PM	PAGE	22 OF 54	

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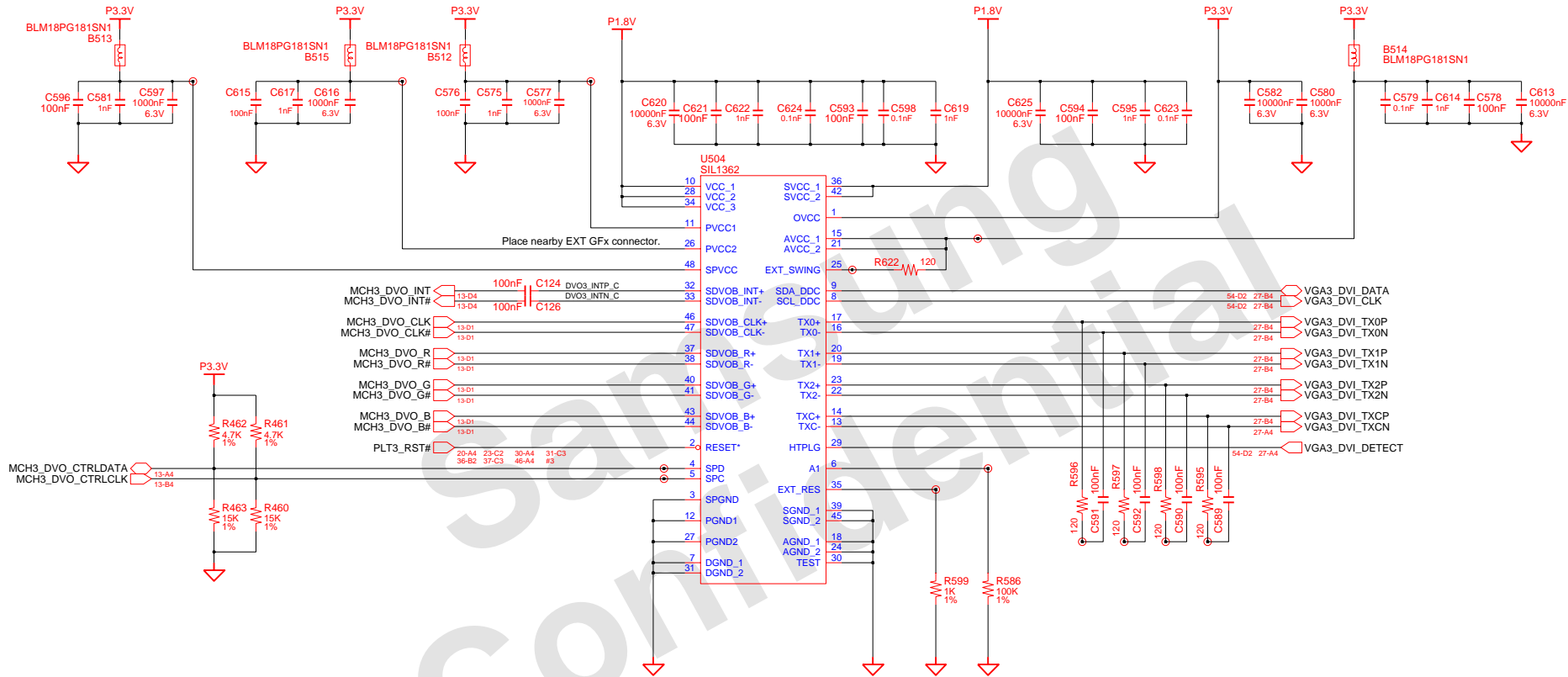


EXTERNAL GFX ONLY

M71 needs P2.5V only.
M76 doesn't need P2.5V.

DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON	SAMSUNG ELECTRONICS
CHECK	WANG, PENG	REV. STEP	MP	PEG(X16) CONNECTOR		
APPROVAL	HAN, JH	REV	1.1	PART NO. BA41-#####		PAGE 23 OF 54
MODULE CODE		LAST EDIT	February 6, 2007 11:03:39 PM	PAGE 23 OF 54		

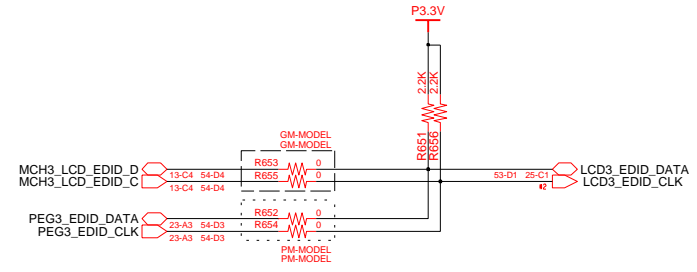
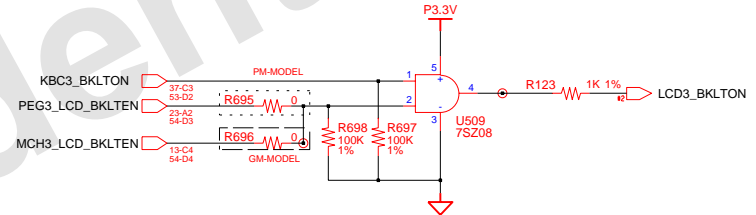
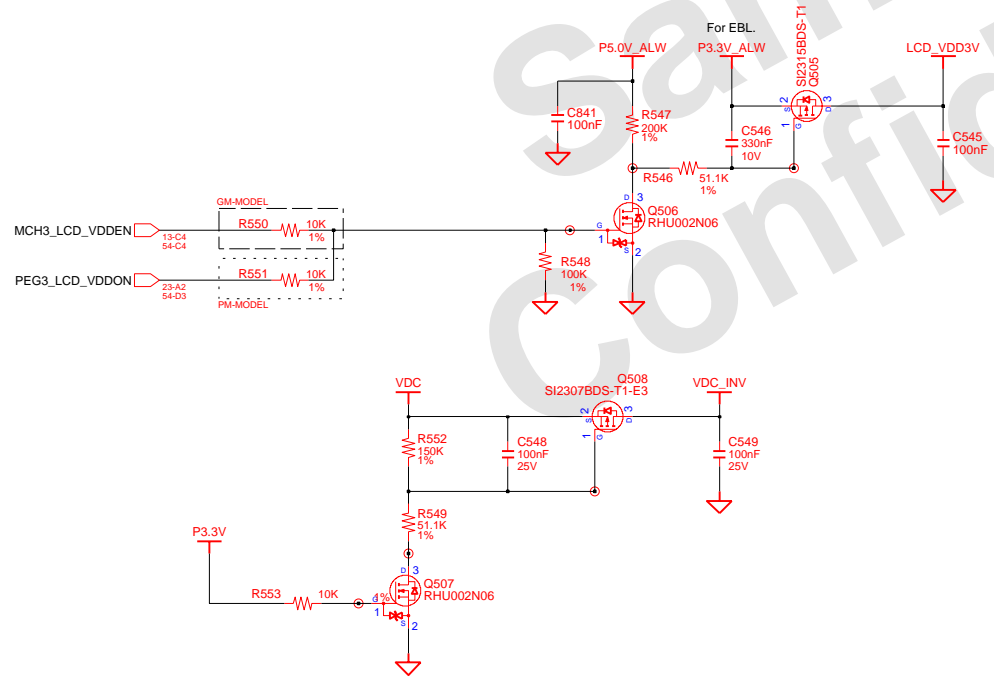
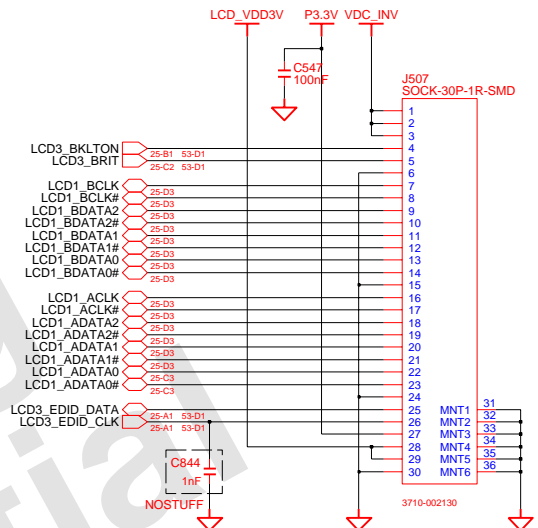
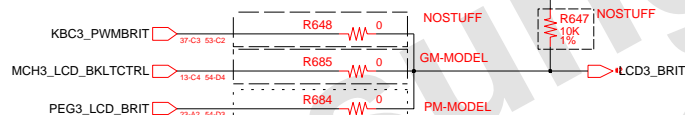
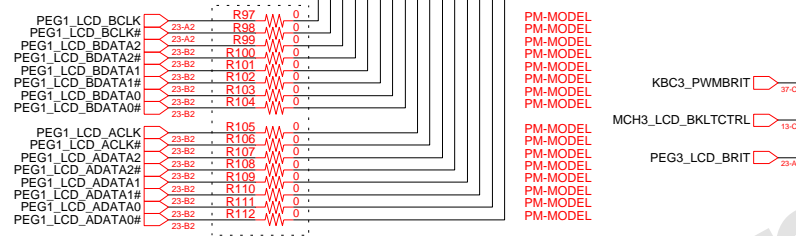
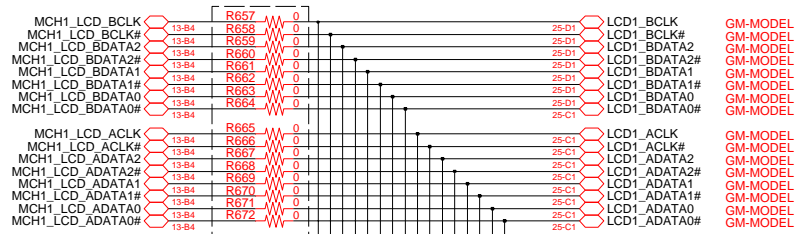
GM-MODEL Only



DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON	SAMSUNG ELECTRONICS
CHECK	WANG, PENG	REV. STEP	MP			
APPROVAL	HAN, JH	REV	1.1		SDVO	PART NO. BA41-#####
MODULE CODE		LAST EDIT	February 6, 2007 11:03:39 PM	PAGE	24	OF 54

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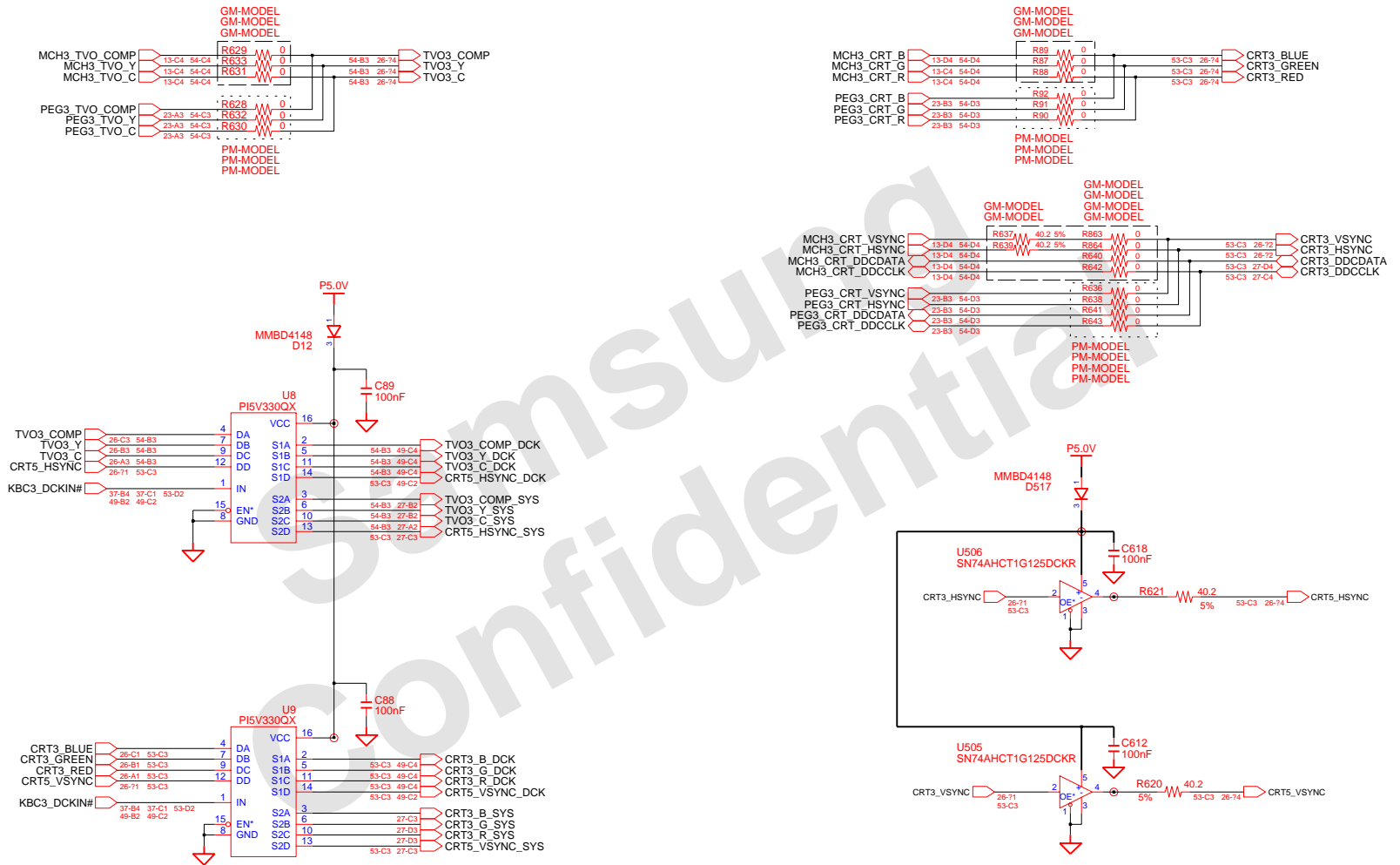
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DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON	SAMSUNG ELECTRONICS
CHECK	WANG, PENG	REV. STEP	MP		GFX SELECTOR	
APPROVAL	HAN, JH	REV	1.1		LVDS	PART NO. BA41-#####
MODULE CODE		LAST EDIT		February 6, 2007 11:03:39 PM	PAGE	25 OF 54

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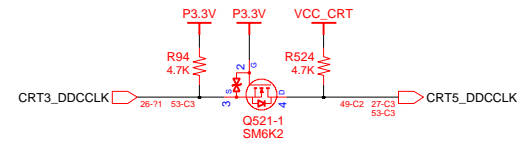
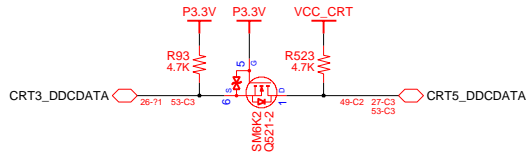
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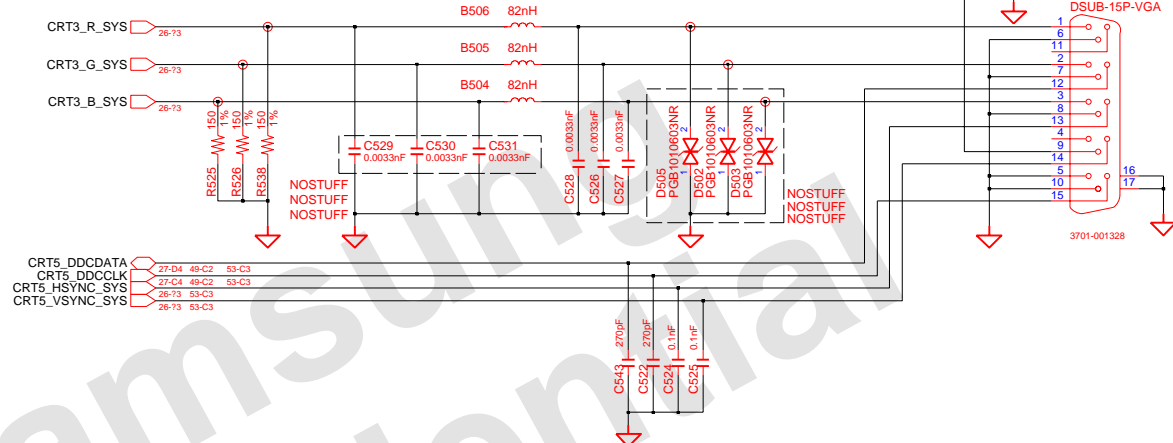
DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON GFX SELECTOR CRT & TVOUT	PART NO. BA41-#####
CHECK	WANG, PENG	REV. STEP	MP			
APPROVAL	HAN, JH	REV	1.1			
MODULE CODE		LAST EDIT	February 6, 2007 11:03:39 PM	PAGE	26	OF 54

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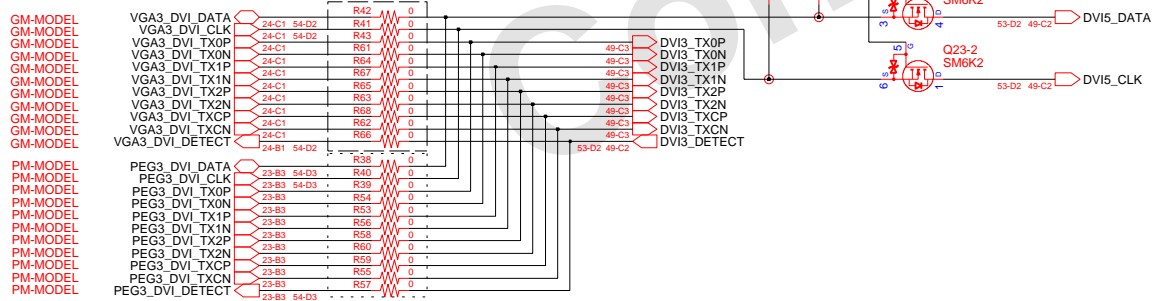
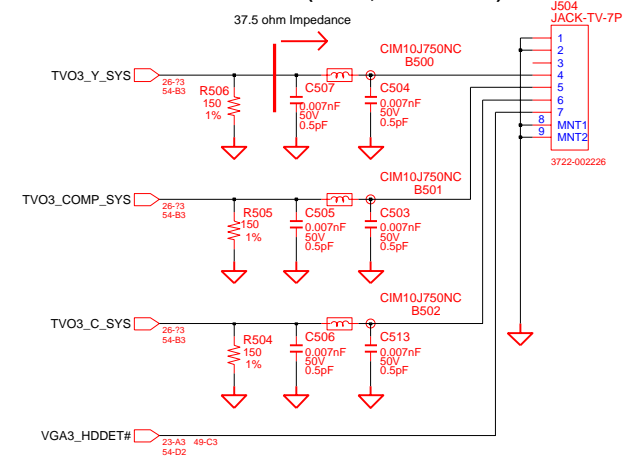
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CRT CONNECTOR



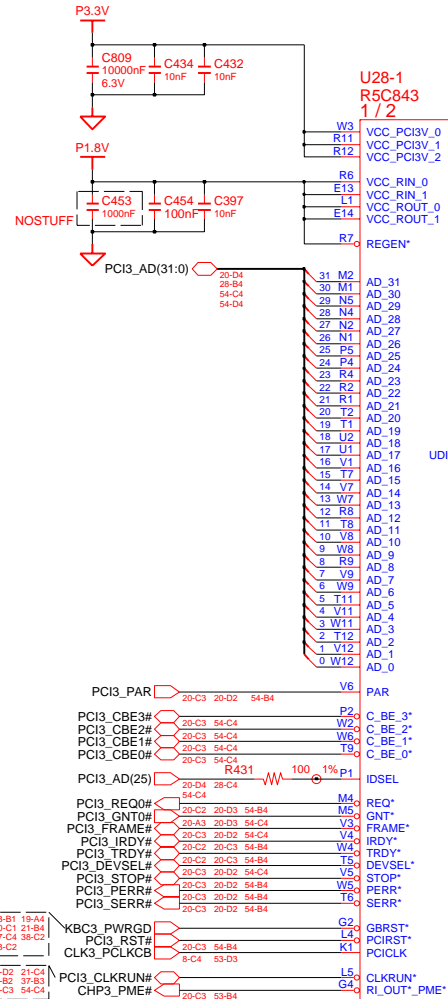
TV-OUT(S-VHS,COMPONENT)



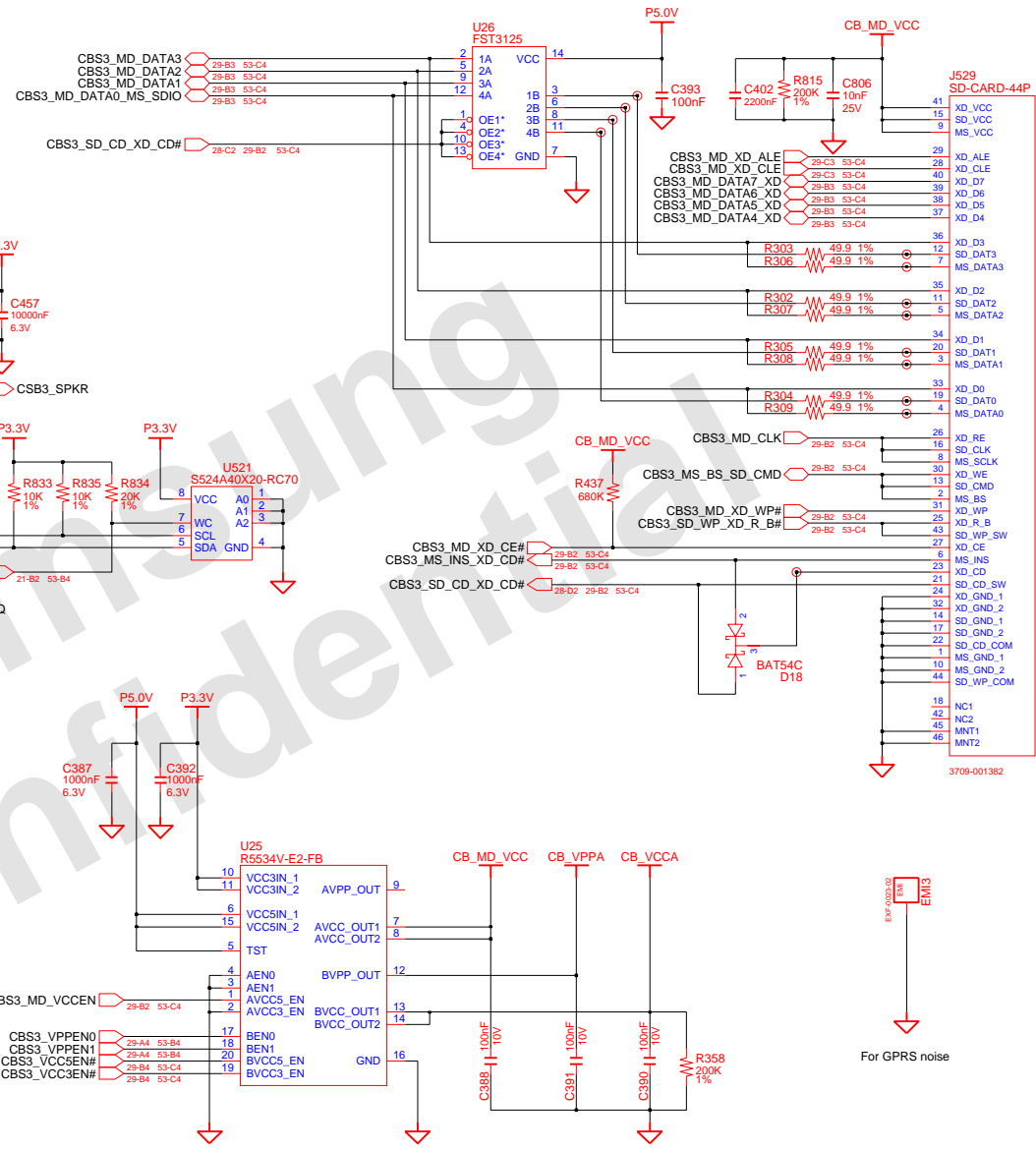
DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON	SAMSUNG ELECTRONICS	
CHECK	WANG, PENG	REV. STEP	MP		GFX SELECTOR		
APPROVAL	HAN, JH	REV	1.1		CRT & TVOUT & DVI	PART NO.	
MODULE CODE		LAST EDIT	February 6, 2007 11:03:39 PM			BA41-#####	
						PAGE	27 OF 54

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THIS PC1CLK NEEDS SHIELD WITH GROUND

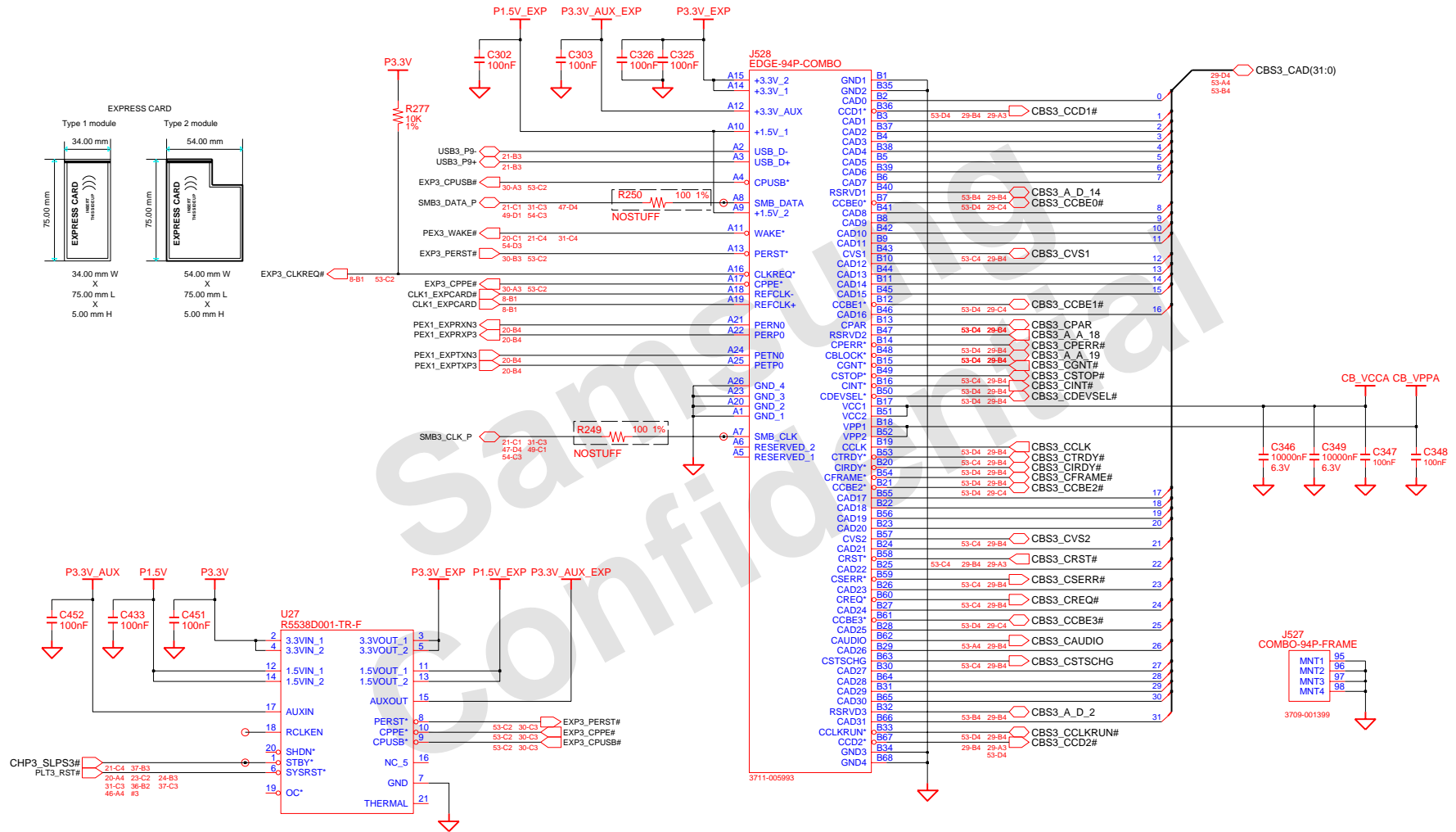
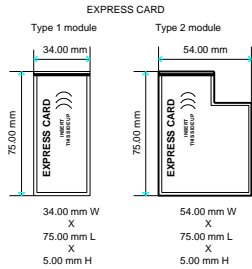


For GPRS noise

DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON	PART NO.	SAMSUNG ELECTRONICS
CHECK	WANG, PENG	REV. STEP	MP	CARD BUS CONTROLLER	BA1-#####		
APPROVAL	HAN, JH	REV	1.1	R5C843 (1/3)			
MODULE CODE		LAST EDIT					
				February 6, 2007 11:03:39 PM	PAGE	28	OF 54

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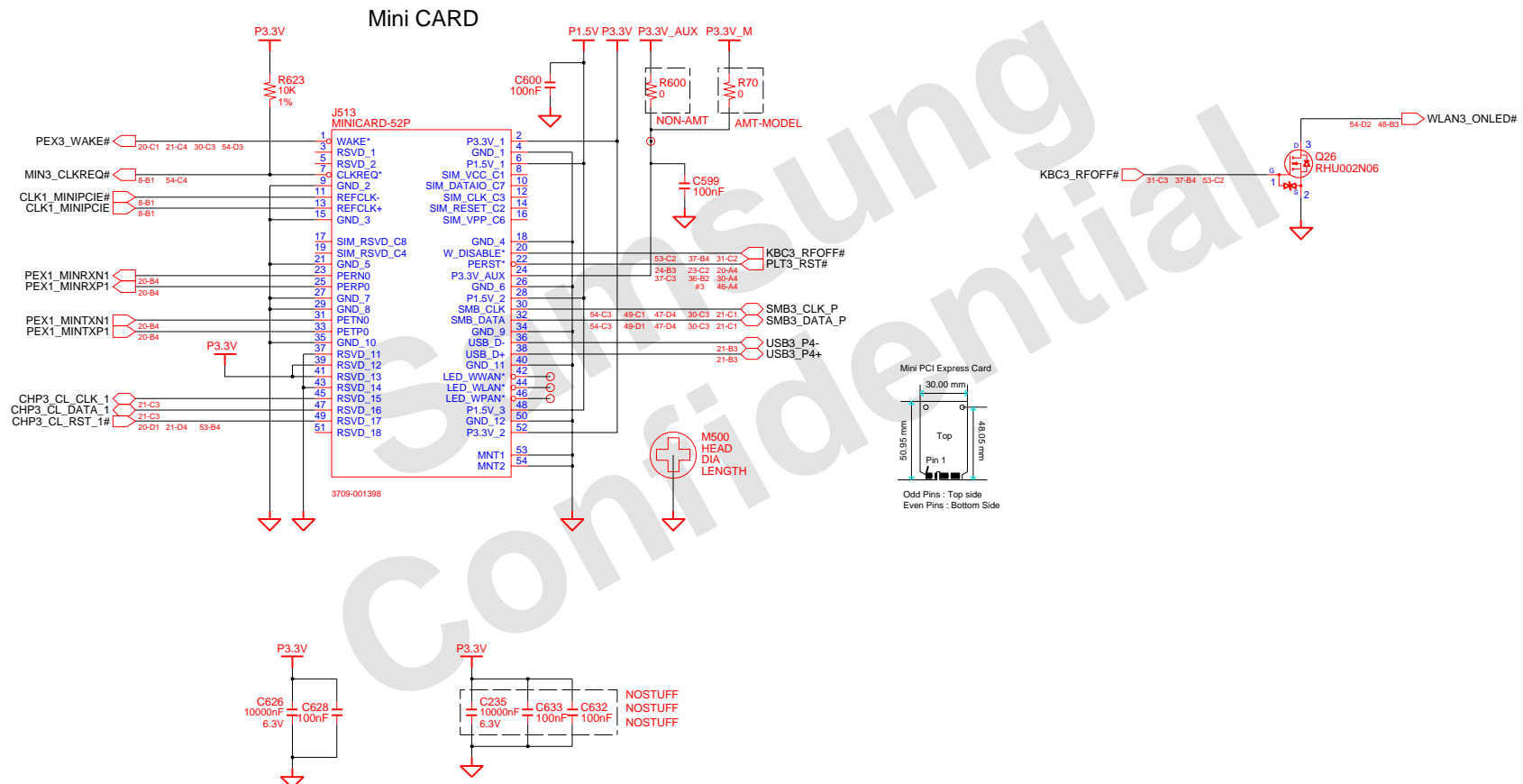
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DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON	PART NO.	SAMSUNG ELECTRONICS
CHECK	WANG, PENG	REV. STEP	MP	CARD BUS CONTROLLER	BA41-#####		
APPROVAL	HAN, JH	REV	1.1	R5C843 (3/3)			
MODULE CODE	undefined	LAST EDIT	February 6, 2007 11:03:39 PM	PAGE	30	OF	54

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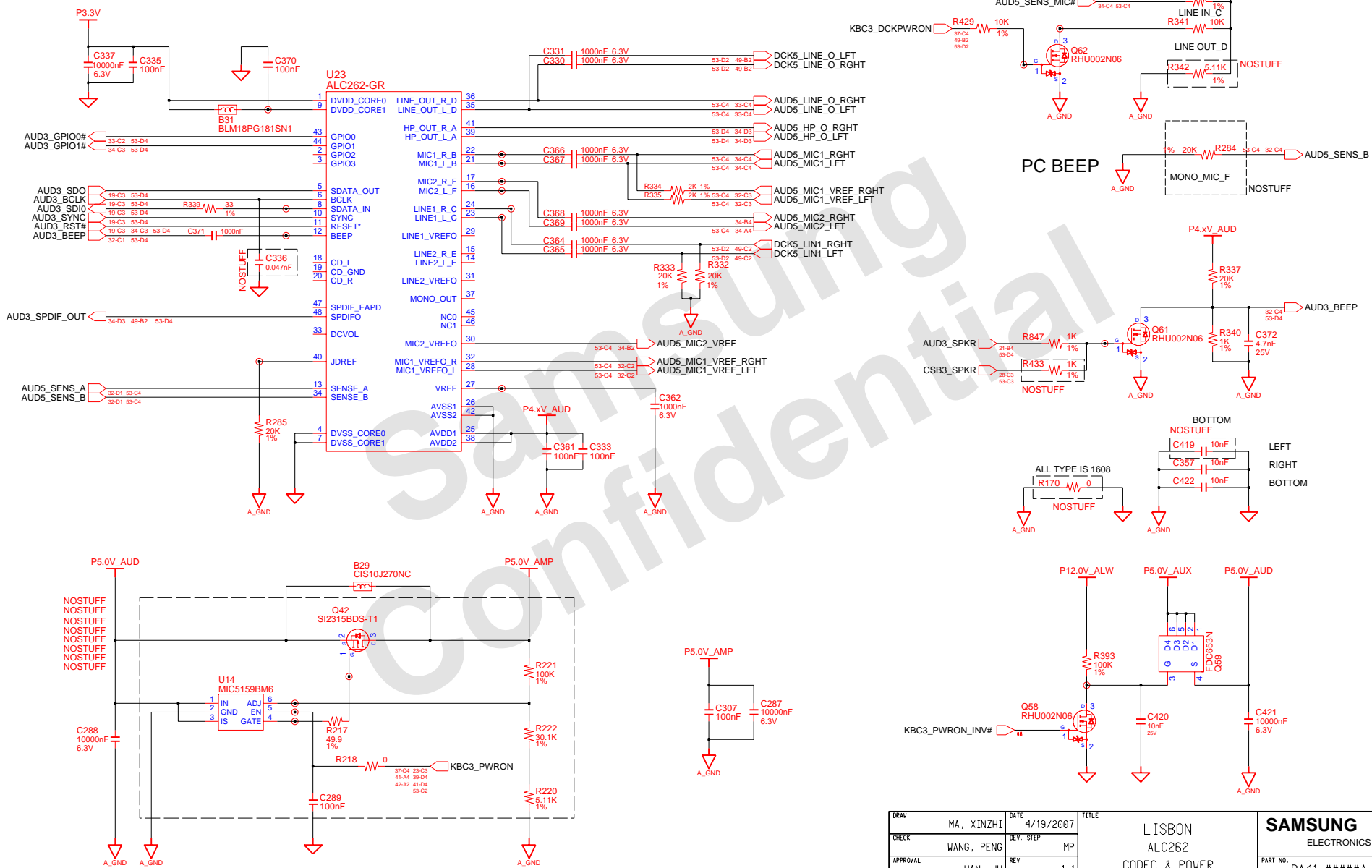
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DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON MINI CARD	SAMSUNG ELECTRONICS
CHECK	WANG, PENG	DEV. STEP	MP	HSDPA & KEDRON		
APPROVAL	HAN, JH	REV	1.1	PART NO. BA41-#####		PAGE 31 OF 54
MODULE CODE		LAST EDIT	February 6, 2007 11:03:39 PM			

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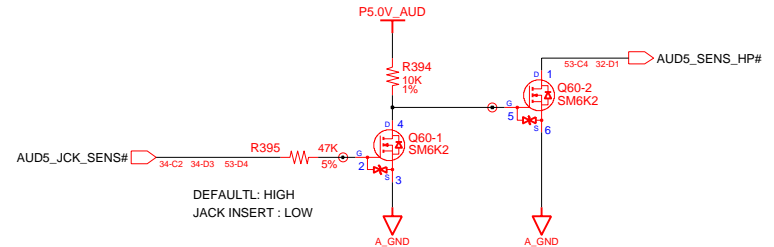
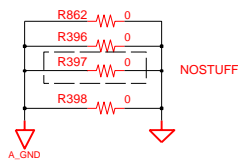
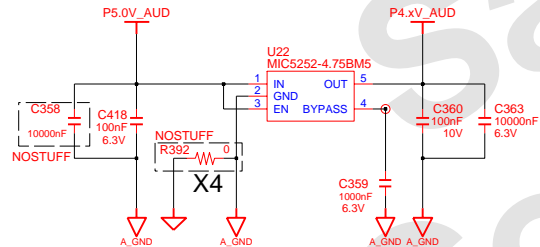
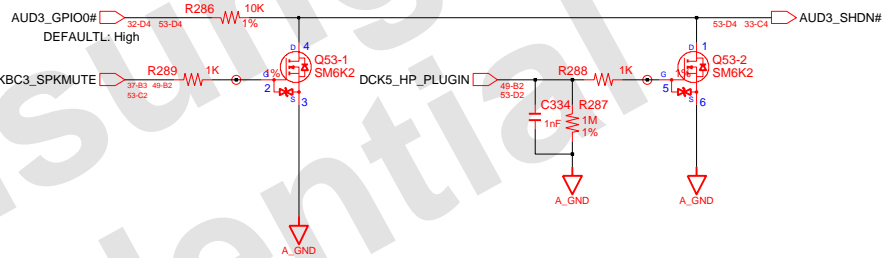
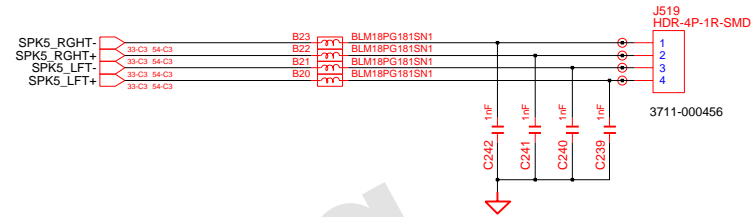
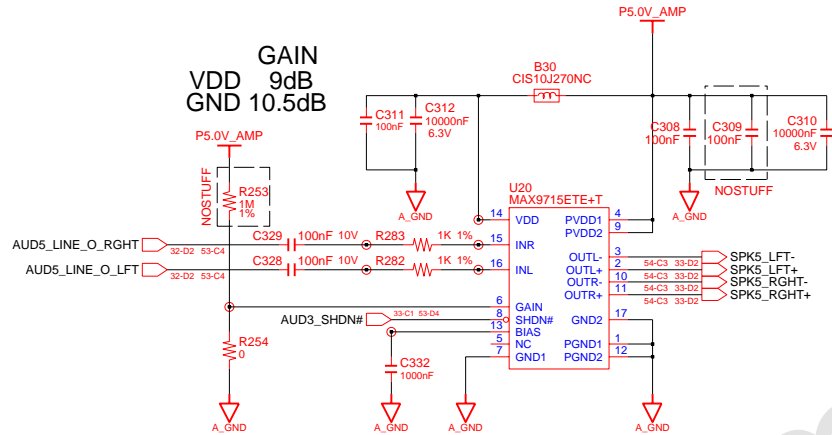


DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON ALC262	SAMSUNG ELECTRONICS
CHECK	WANG, PENG	REV. STEP	MP	CODEC & POWER	PART NO.	
APPROVAL	HAN, JH	REV	1.1			BA41-#####
MODULE CODE	undefined	LAST EDIT	February 6, 2007 11:03:39 PM	PAGE	32	OF 54

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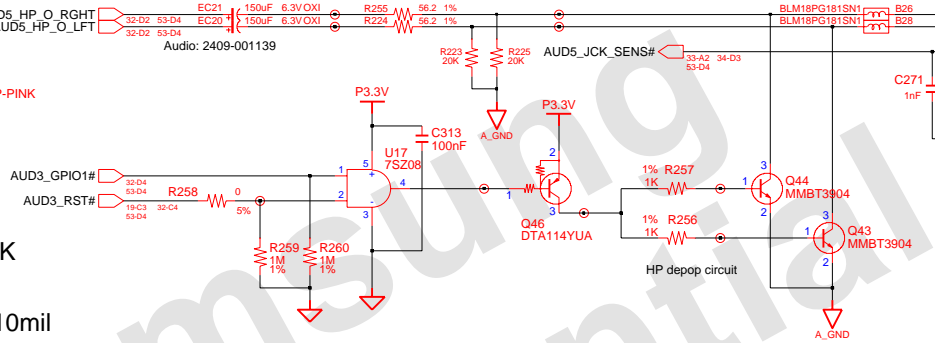
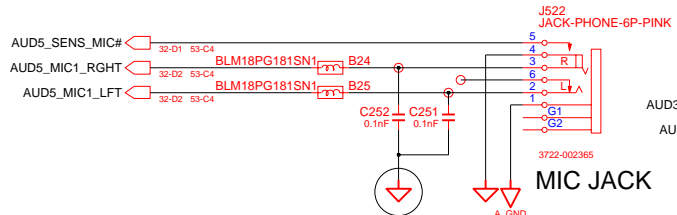
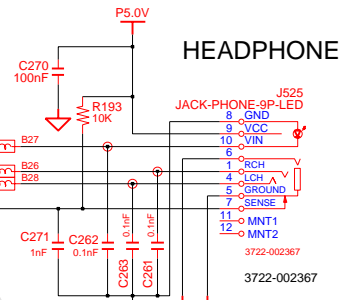
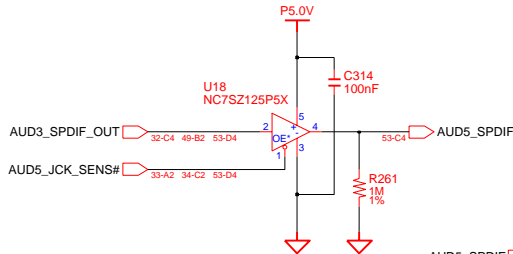
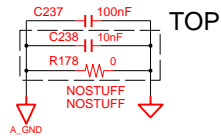
INTERNAL STEREO SPEAKERS
SPK ASS'y:BA96-02990A(HABANA)



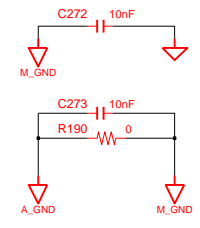
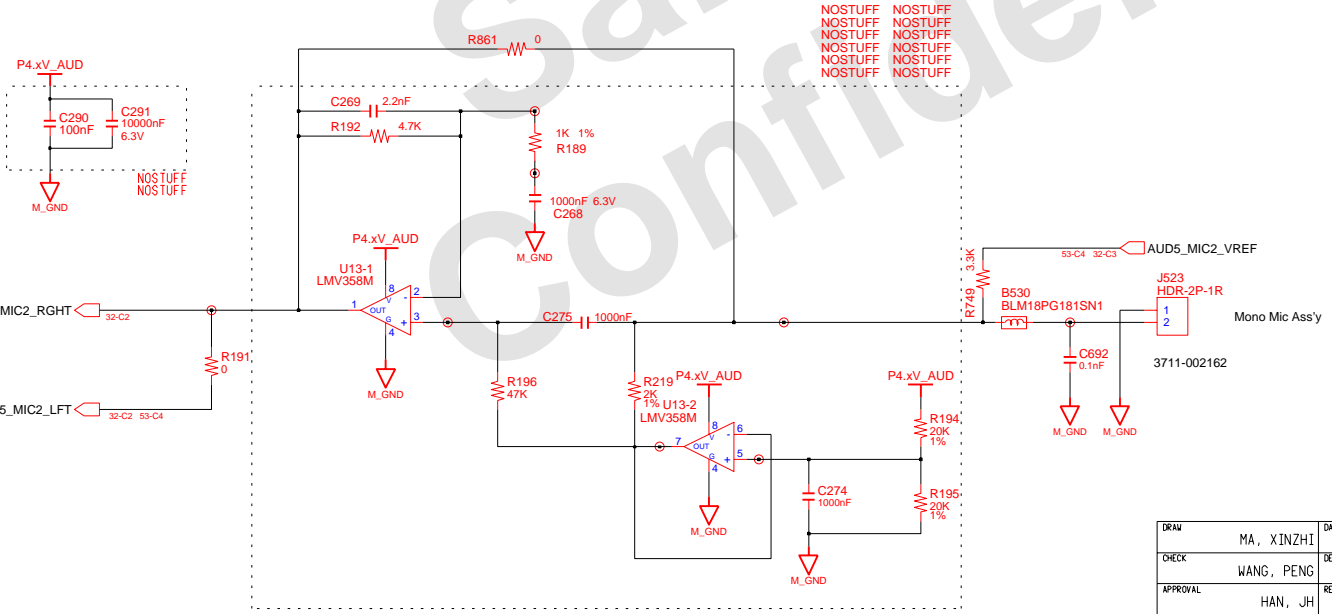
DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON	SAMSUNG ELECTRONICS
CHECK	WANG, PENG	REV. STEP	MP	ALC262	AMP	
APPROVAL	HAN, JH	REV	1.1			PART NO. BA41-#####
MODULE CODE		LAST EDIT	February 6, 2007 11:03:39 PM	PAGE	33	OF 54

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



DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON ALC262 JACK & MIC	PART NO. BA41-#####
CHECK	WANG, PENG	REV. STEP	MP			
APPROVAL	HAN, JH	REV	1.1			
MODULE CODE	undefined	LAST EDIT	February 6, 2007 11:03:39 PM	PAGE	34	OF 54

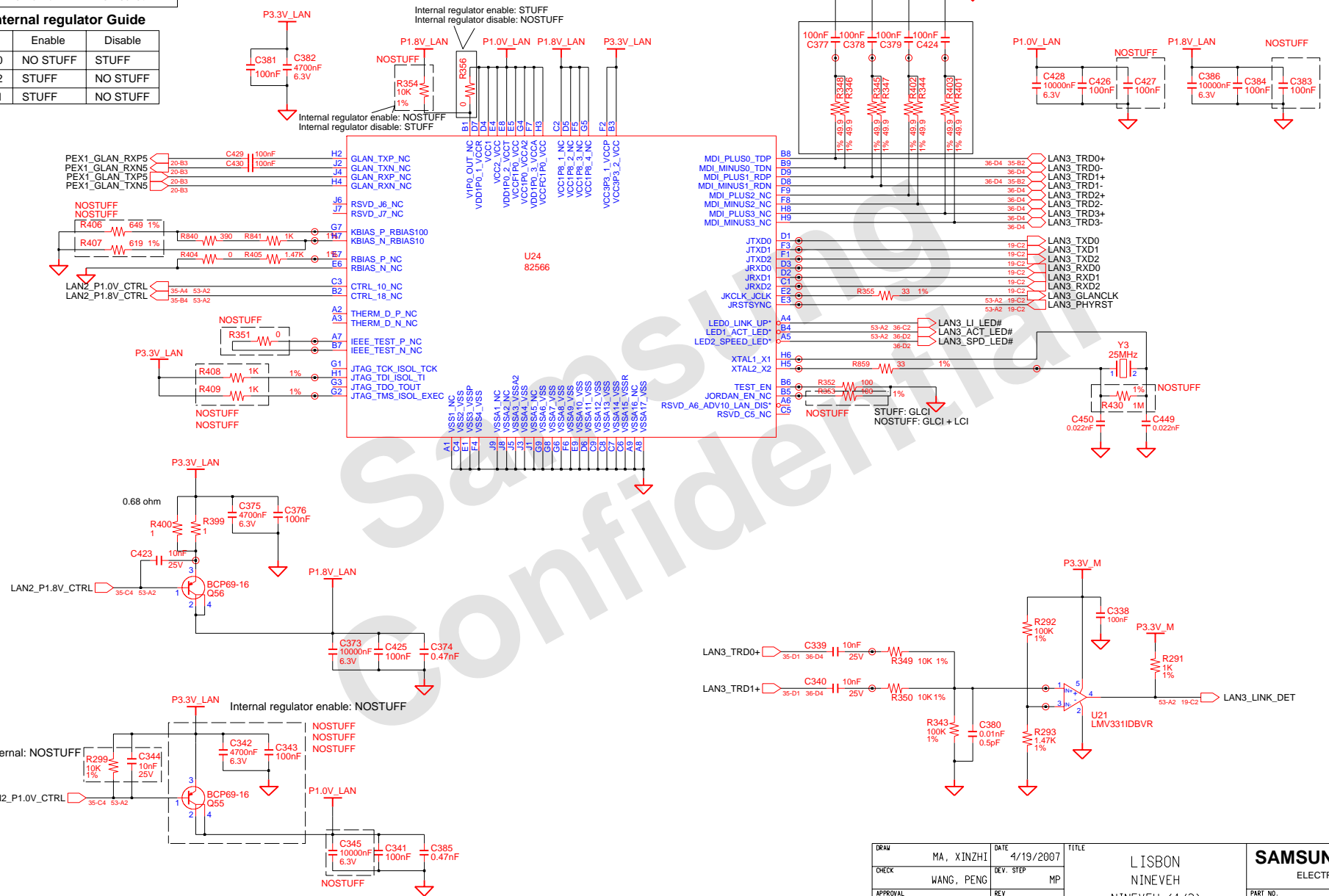
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Internal regulator Guide

	Enable	Disable
R370	NO STUFF	STUFF
R372	STUFF	NO STUFF
R311	STUFF	NO STUFF

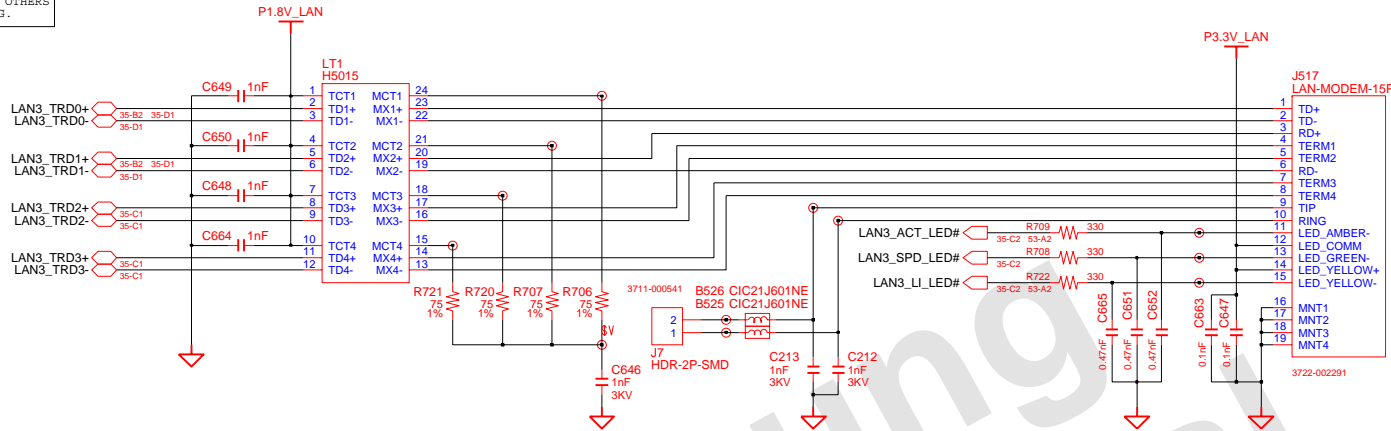
placed as close as possible to 82566



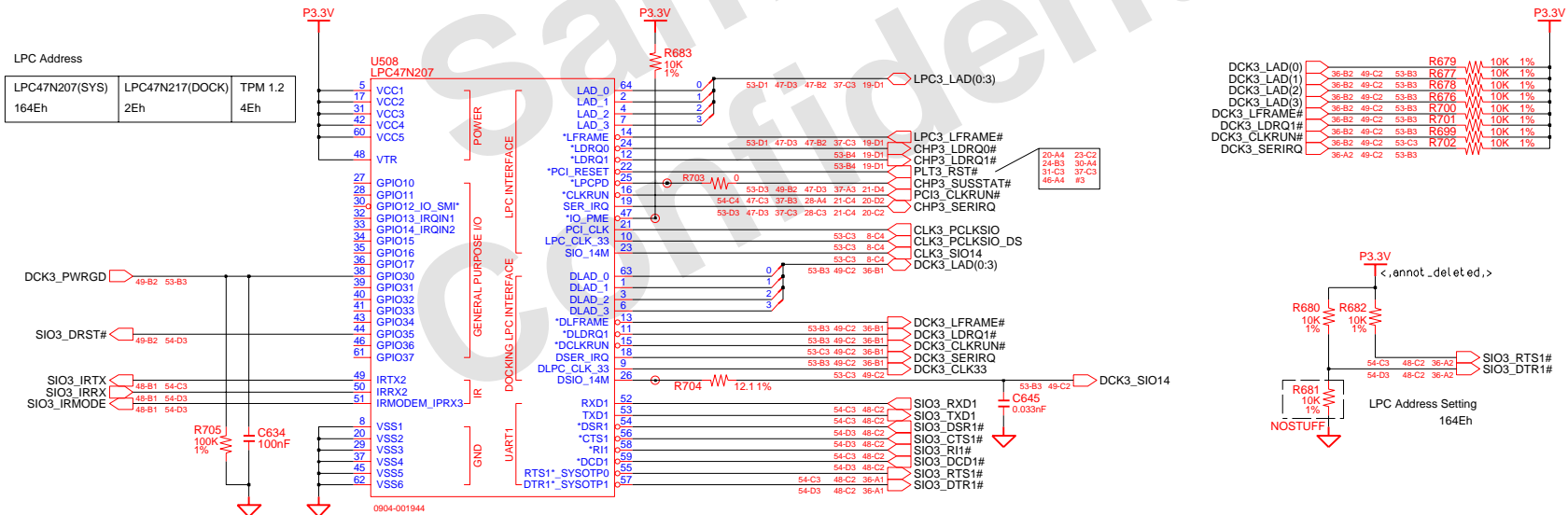
DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON NINEVEH NINEVEH (1/2)
CHECK	WANG, PENG	REV. STEP	MP		
APPROVAL	HAN, JH	REV	1.1		
MODULE CODE		LAST EDIT	February 6, 2007 11:03:39 PM	PAGE	35 OF 54
					SAMSUNG ELECTRONICS PART NO. BA41-#####

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Keep out other signals from MODEM signals. Layout should be changed in PV (L606)

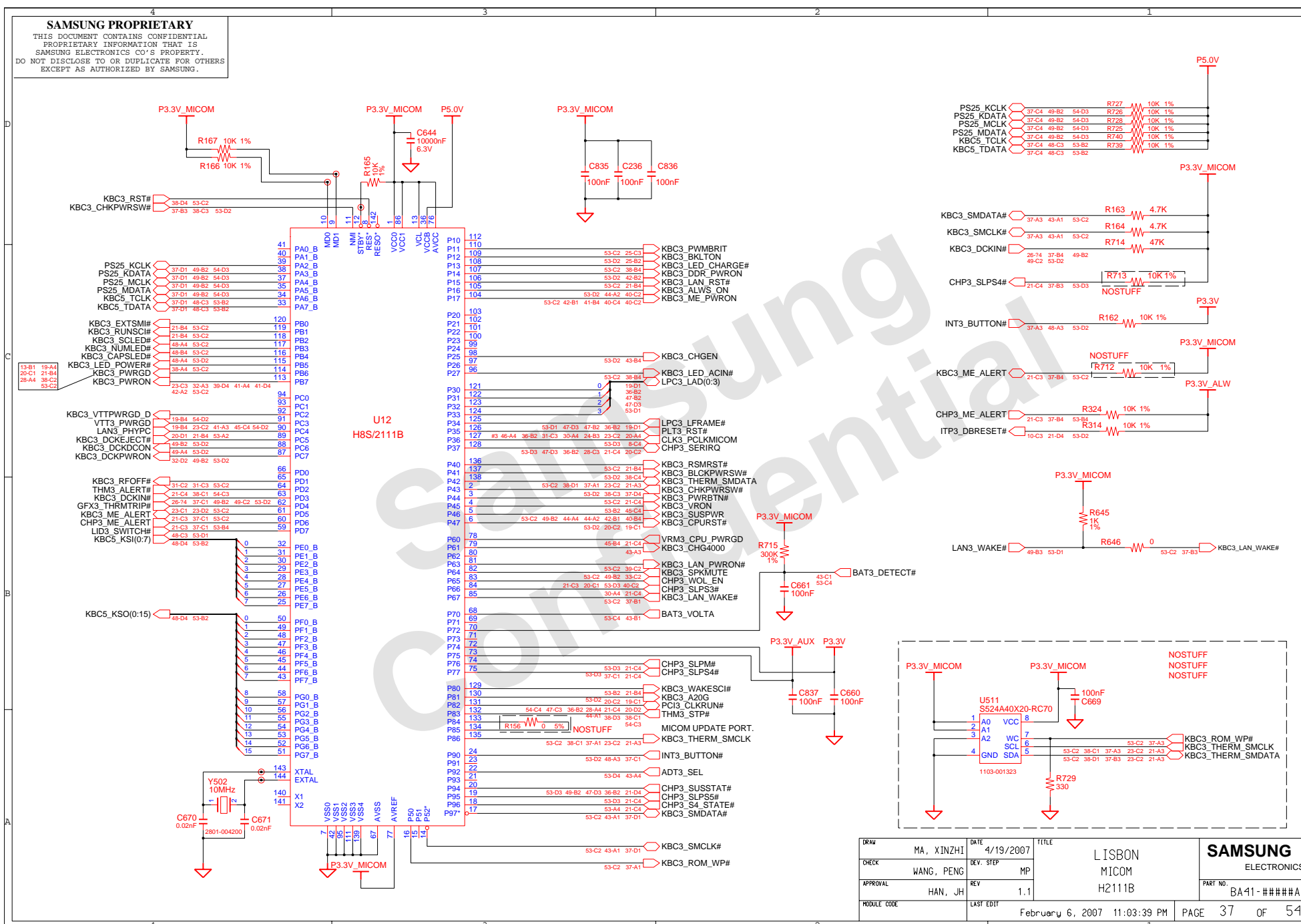


LPC Address	LPC47N207(SYS)	LPC47N217(DOCK)	TPM 1.2
164Eh	2Eh	4Eh	

DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LIBSON	PART NO.	SAMSUNG ELECTRONICS
CHECK	WANG, PENG	REV. STEP	MP	NINEVEH & SUPER I/O			
APPROVAL	HAN, JH	REV	1.1	NINVEH (2/2) & 47N207			
MODULE CODE		LAST EDIT	February 6, 2007 11:03:39 PM	PAGE	36	OF	54

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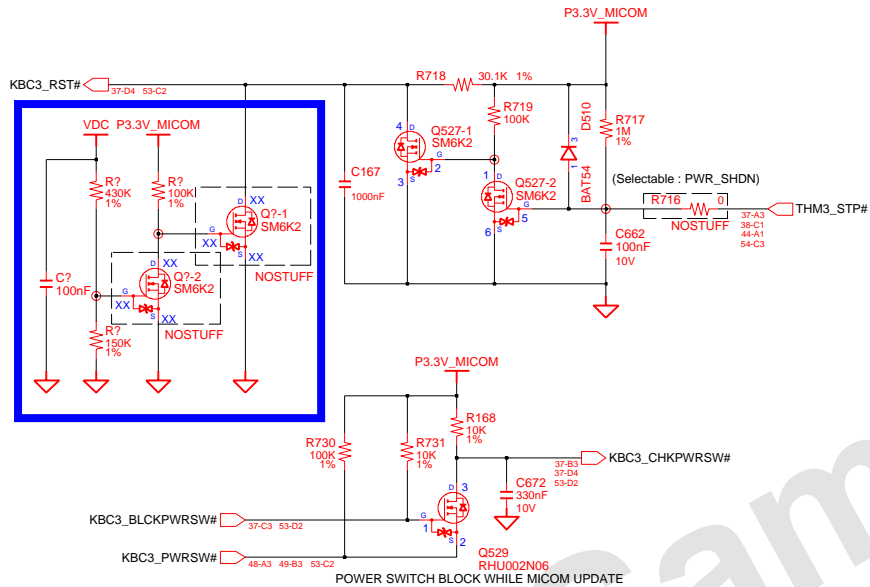
DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON MICOM H2111B
CHECK	WANG, PENG	REV. STEP	MP		
APPROVAL	HAN, JH	REV	1.1		
MODULE CODE		LAST EDIT	February 6, 2007 11:03:39 PM	PAGE	37 OF 54

SAMSUNG	
ELECTRONICS	
PART NO.	BA14-#####A

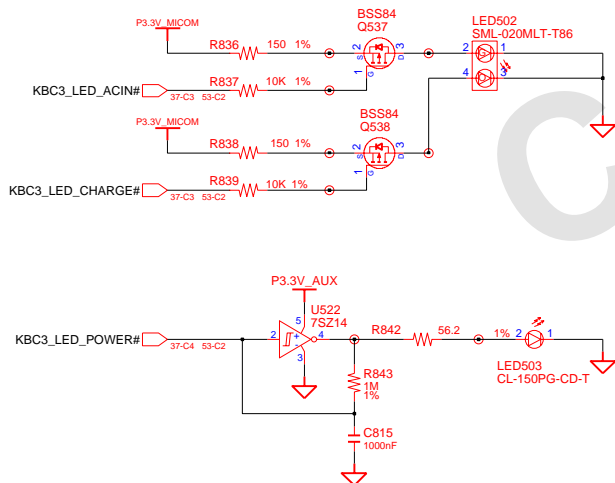
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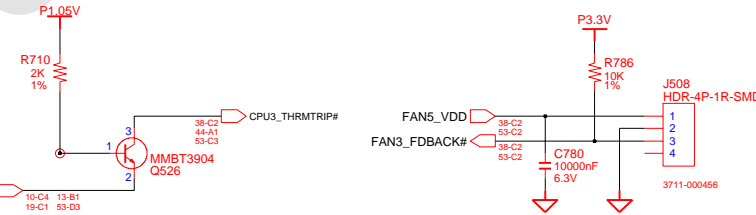
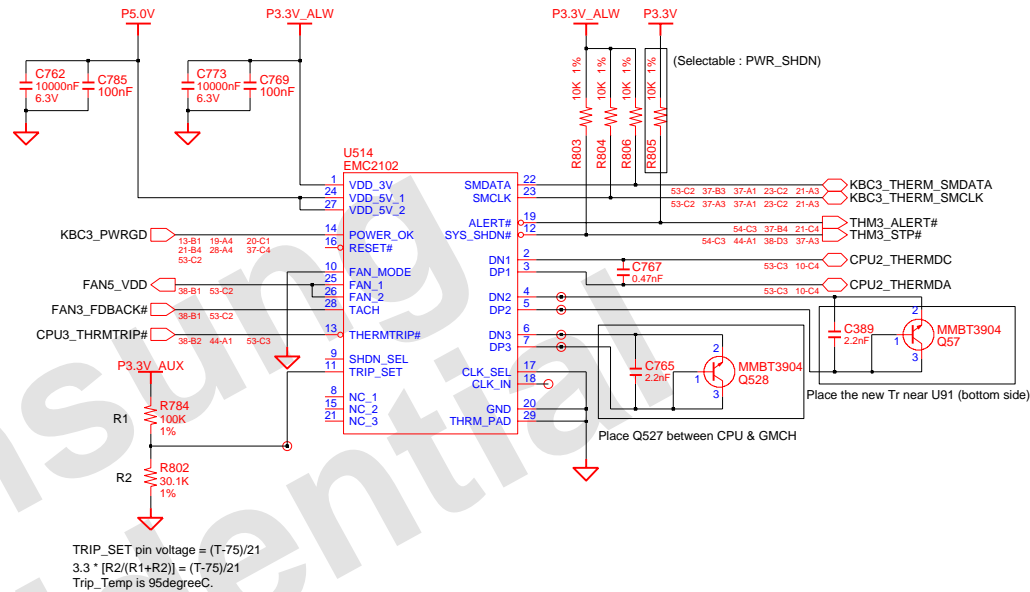
MICOM RESET



ADAPTERIN/CHARGING LED



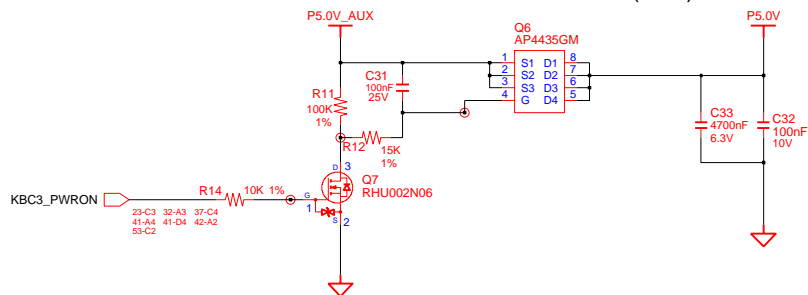
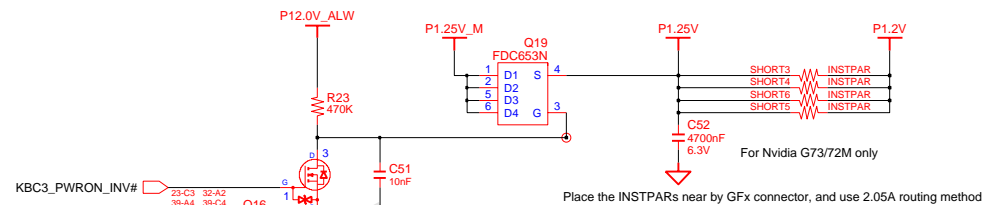
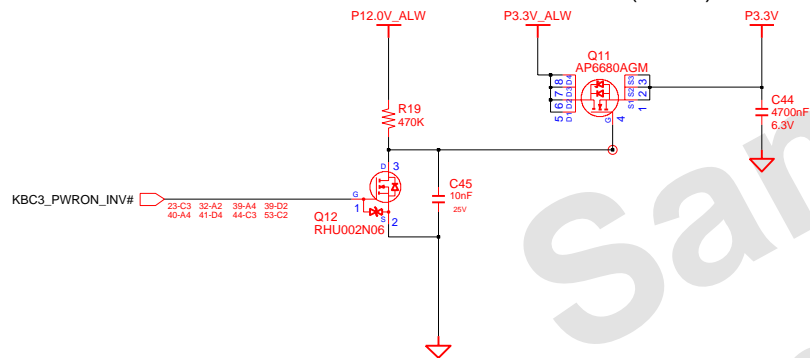
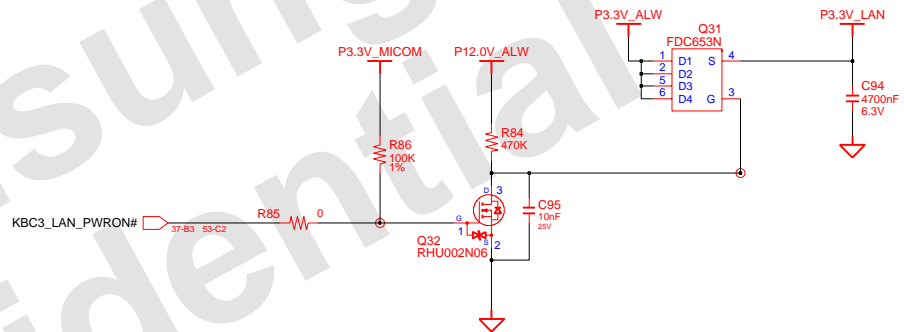
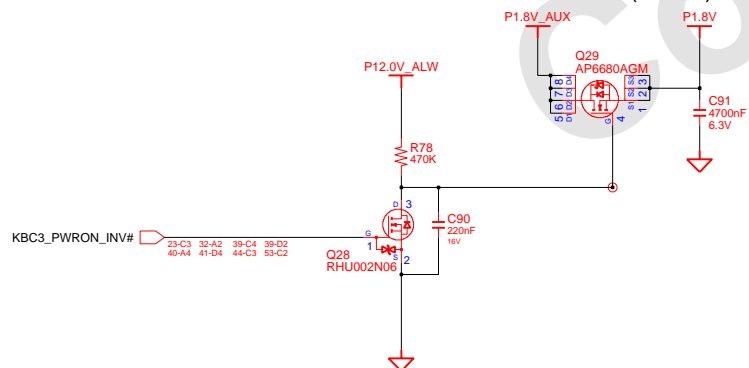
Thermal and Fan control



DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON	SAMSUNG ELECTRONICS
CHECK	WANG, PENG	REV. STEP	MP	MICOM & THERMAL		
APPROVAL	HAN, JH	REV	1.1	MICOM CIRCUITI & THERMAL		PART NO. BA41-#####
MODULE CODE		LAST EDIT	February 6, 2007 11:03:39 PM		PAGE	38 OF 54

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Switched Power On (P5V)**Switched Power On (P1.25V and P1.2V)****Switched Power On (P3.3V)****Switched Power On (P3.3V_LAN)****Switched Power On (P1.8V)**

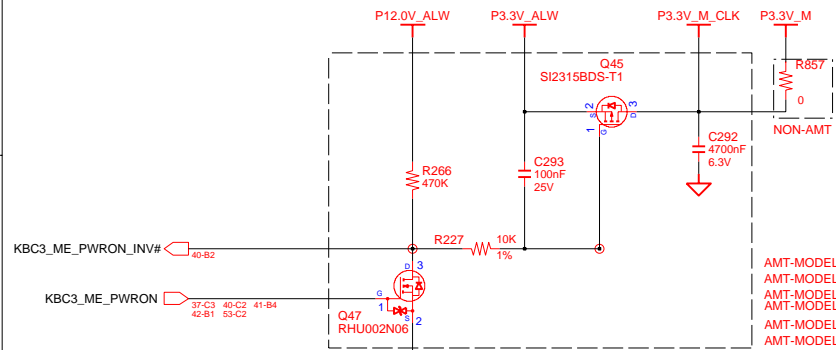
DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LIBSON POWER POWER ON LOGIC	SAMSUNG ELECTRONICS
CHECK	WANG, PENG	REV. STEP	MP	PART NO.		
APPROVAL	HAN, JH	REV	1.1	BA41-#####		
MODULE CODE	undefined	LAST EDIT	February 6, 2007 11:03:39 PM	PAGE	39	OF 54

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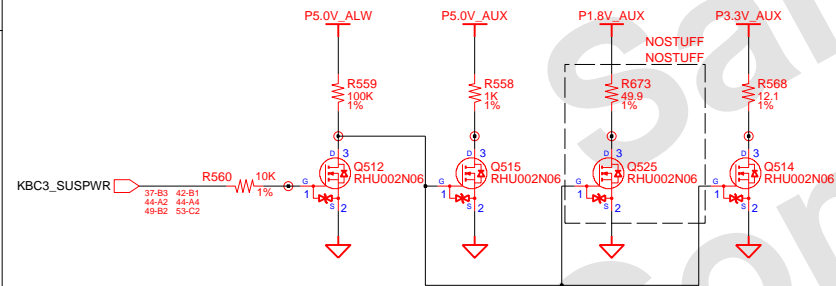
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Switched ME Power On (P3.3V_M)

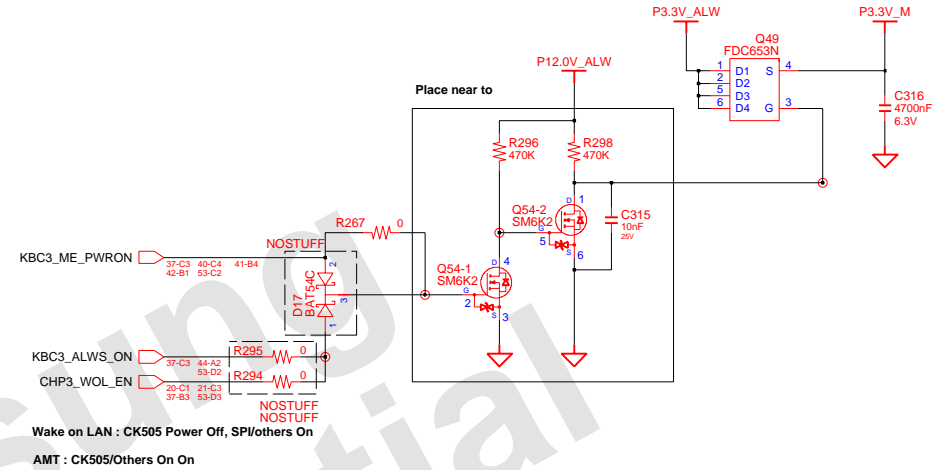
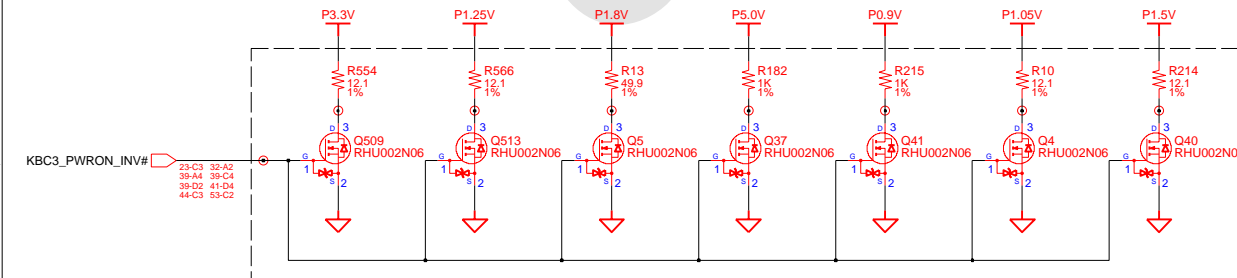
Switched ME Power On (P3.3V_CLK)



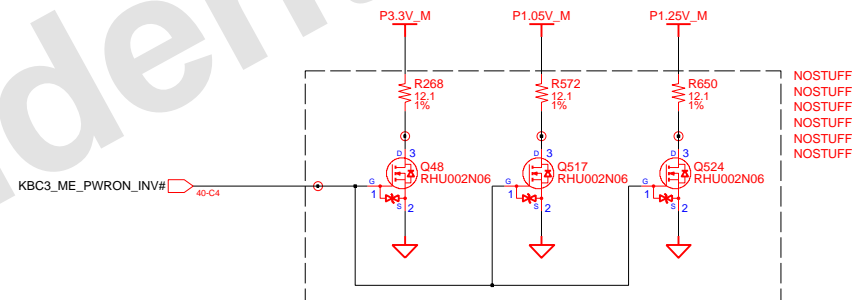
AUX power discharge circuit.



Switched power discharge circuit



ME power discharge circuit

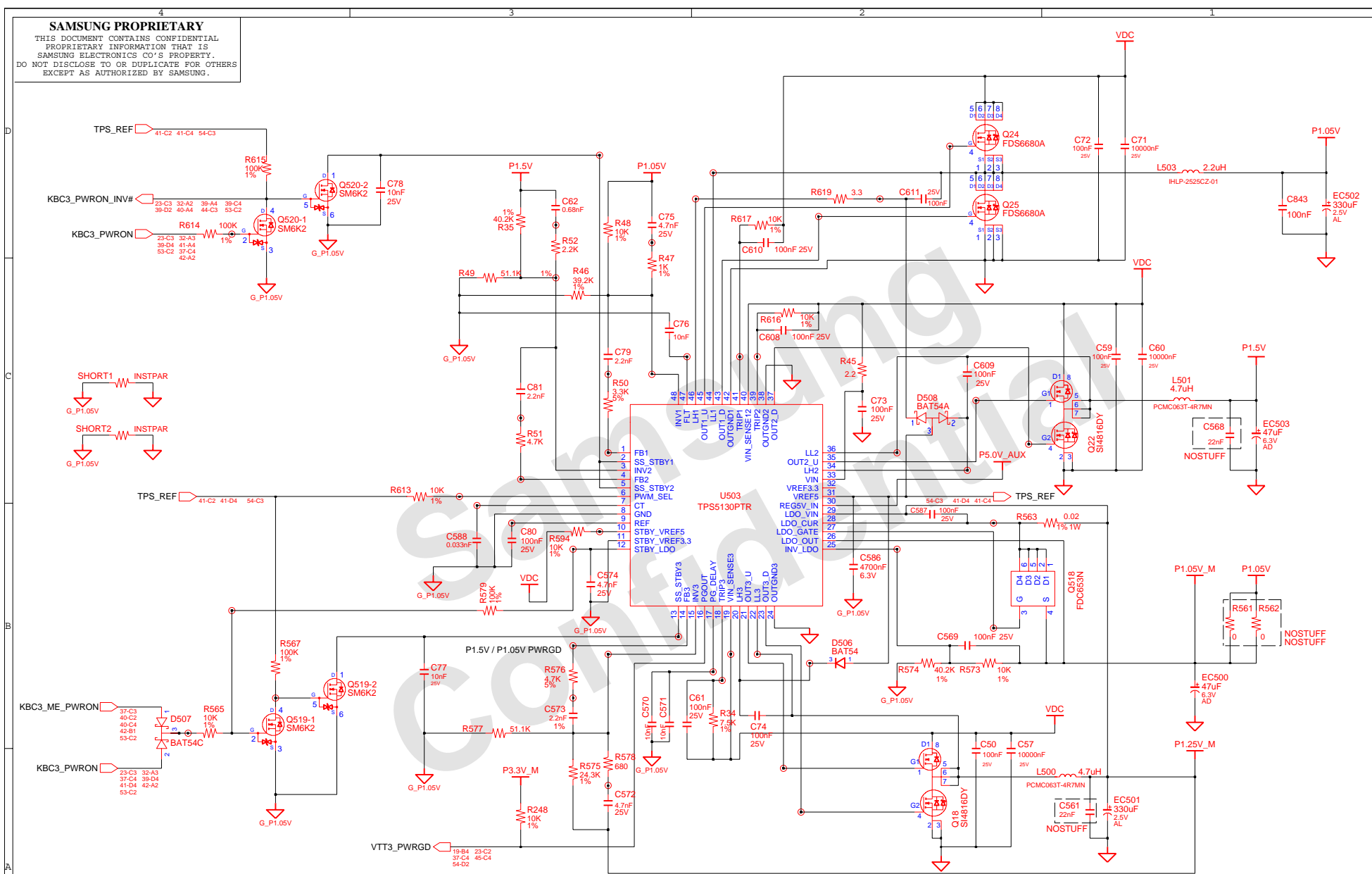


NOSTUFF NOSTUFF
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 NOSTUFF NOSTUFF
 NOSTUFF NOSTUFF
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 NOSTUFF NOSTUFF

DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON POWER	PART NO. BA41-#####
CHECK	WANG, PENG	REV. STEP	MP	POWER ON LOGIC (2/2)		
APPROVAL	HAN, JH	REV	1.1	February 6, 2007 11:03:39 PM		PAGE 40 OF 54
MODULE CODE		LAST EDIT				

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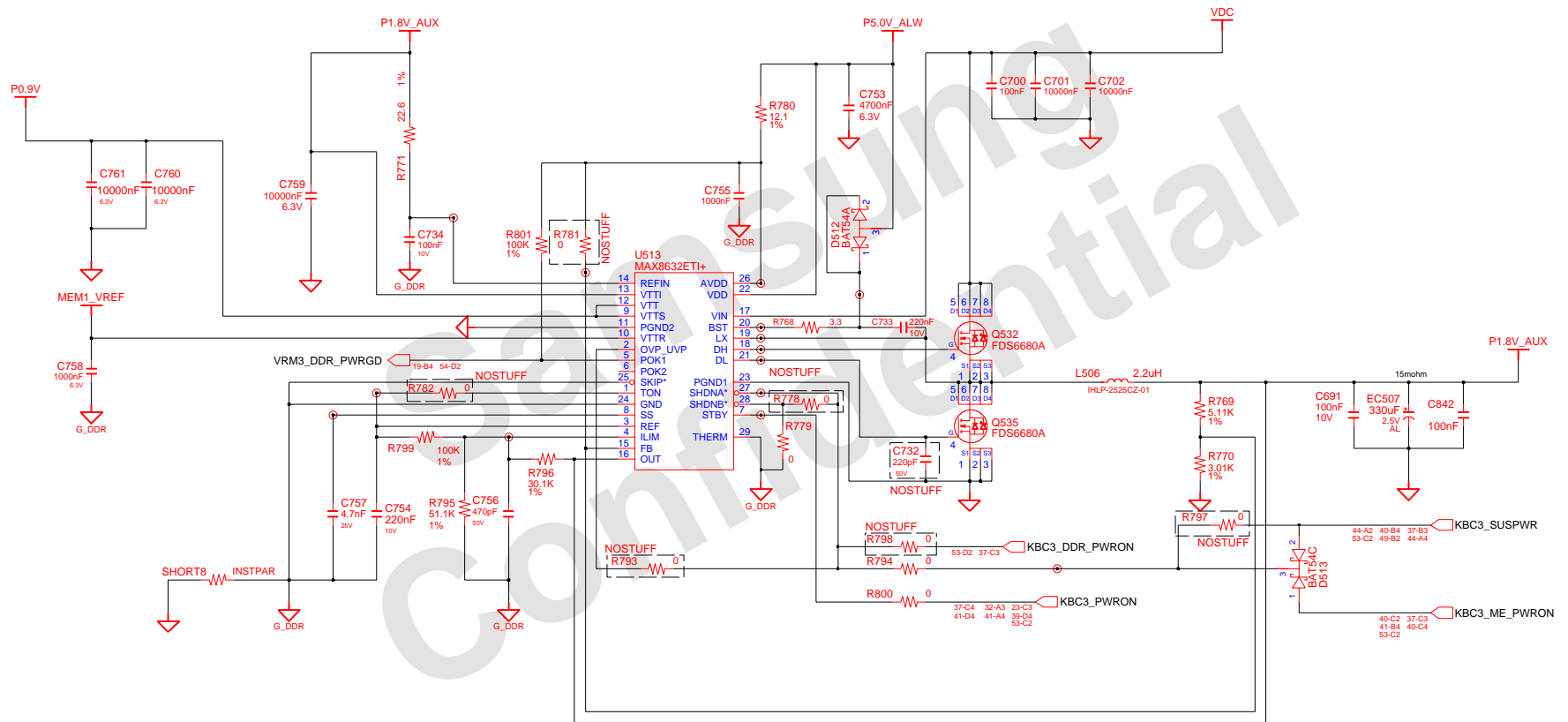
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DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON POWER	SAMSUNG ELECTRONICS
CHECK	WANG, PENG	REV. STEP	MP	TPS5130		
APPROVAL	HAN, JH	REV	1.1	February 6, 2007 11:03:39 PM		PART NO. BA41-#####
MODULE CODE	LAST EDIT		PAGE 41 OF 54			

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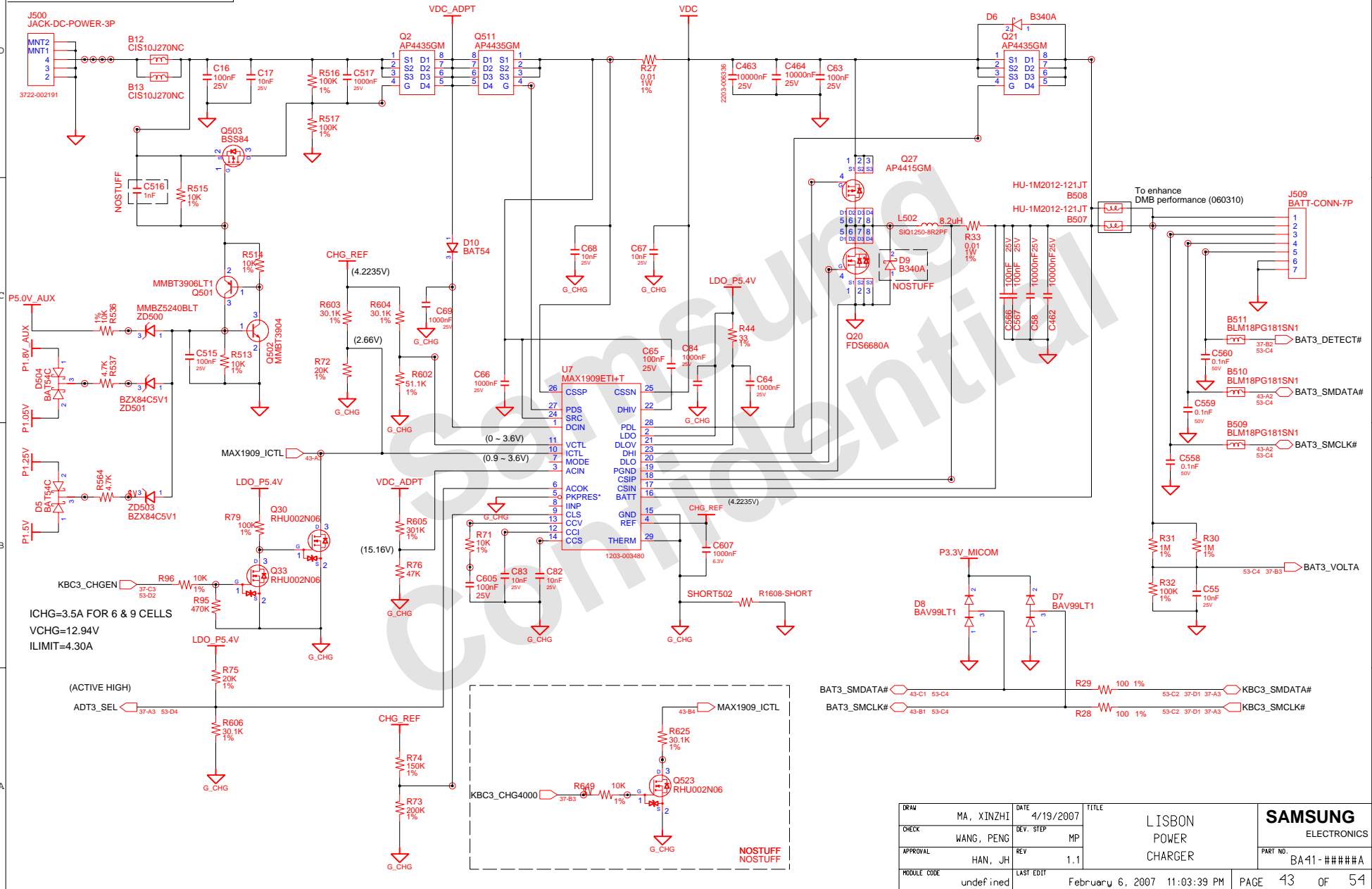
DDR2 Power

DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON POWER DDR2 POWER	SAMSUNG ELECTRONICS
CHECK	WANG, PENG	REV. STEP	MP			
APPROVAL	HAN, JH	REV	1.1			PART NO. BA41-#####
MODULE CODE	undefined	LAST EDIT	February 6, 2007 11:03:39 PM	PAGE	42	OF 54

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CHARGER & POWER MANAGEMENT

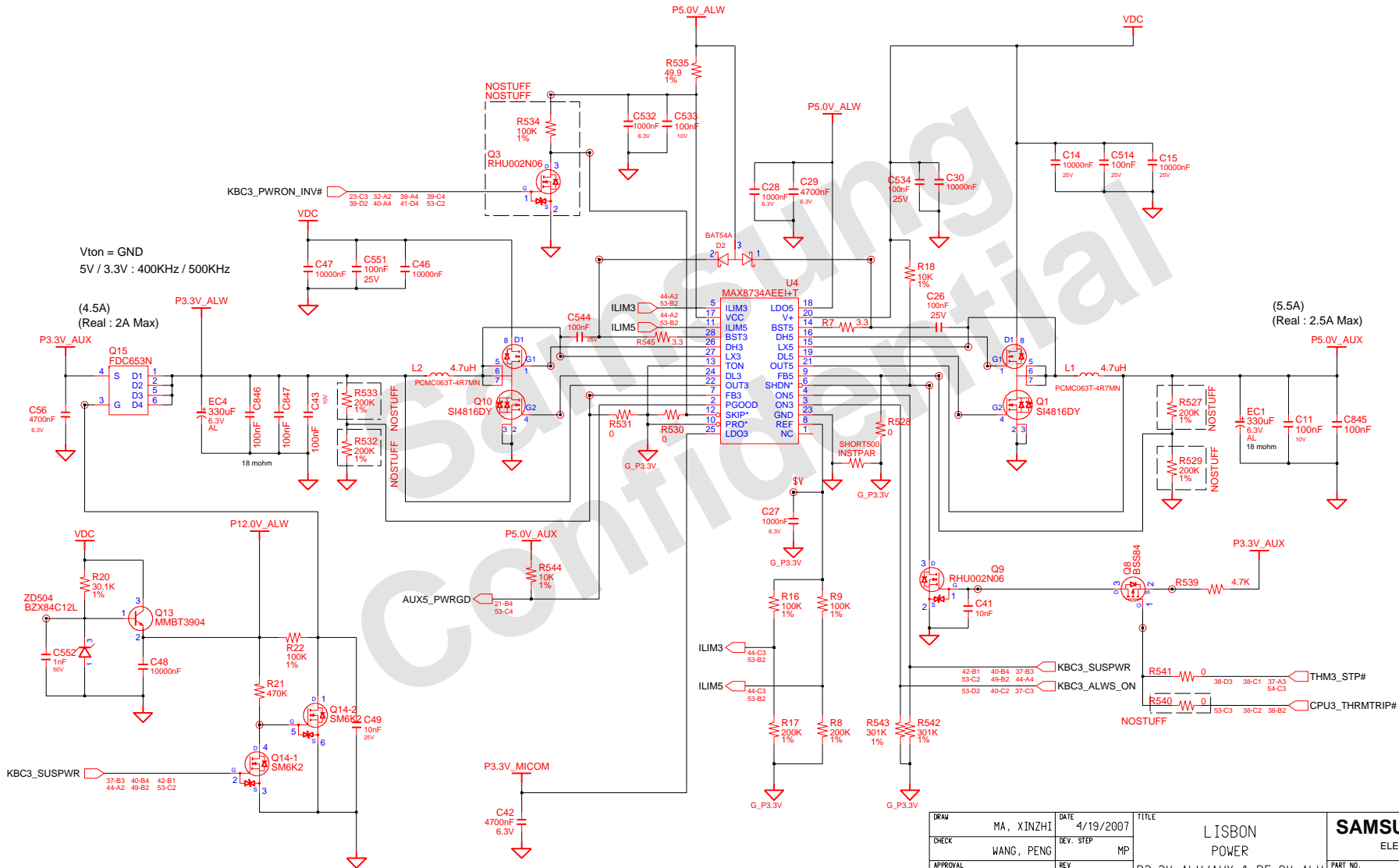


DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON POWER CHARGER	SAMSUNG ELECTRONICS
CHECK	WANG, PENG	REV. STEP	MP			
APPROVAL	HAN, JH	REV	1.1			PART NO. BA41-#####
MODULE CODE	undefined	LAST EDIT	February 6, 2007 11:03:39 PM	PAGE	43	OF 54

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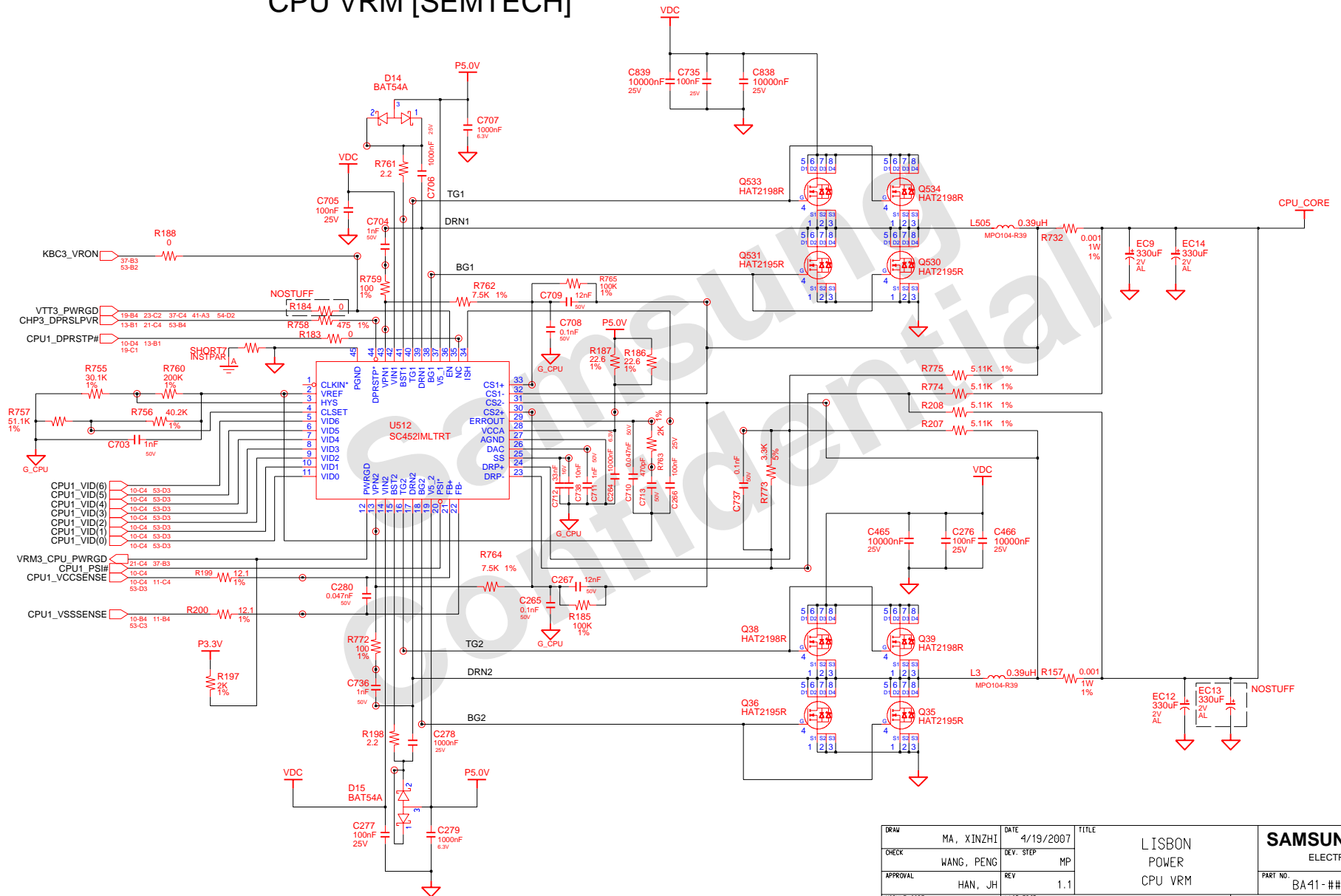
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P3.3V_ALW/AUX & P5V_AUX



DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON POWER	PART NO. BA41-#####
CHECK	WANG, PENG	REV. STEP	MP	P3.3V_ALW/AUX & P5.0V_ALW		
APPROVAL	HAN, JH	REV	1.1	February 6, 2007 11:03:39 PM		PAGE 44 OF 54
MODULE CODE	undefined	LAST EDIT				

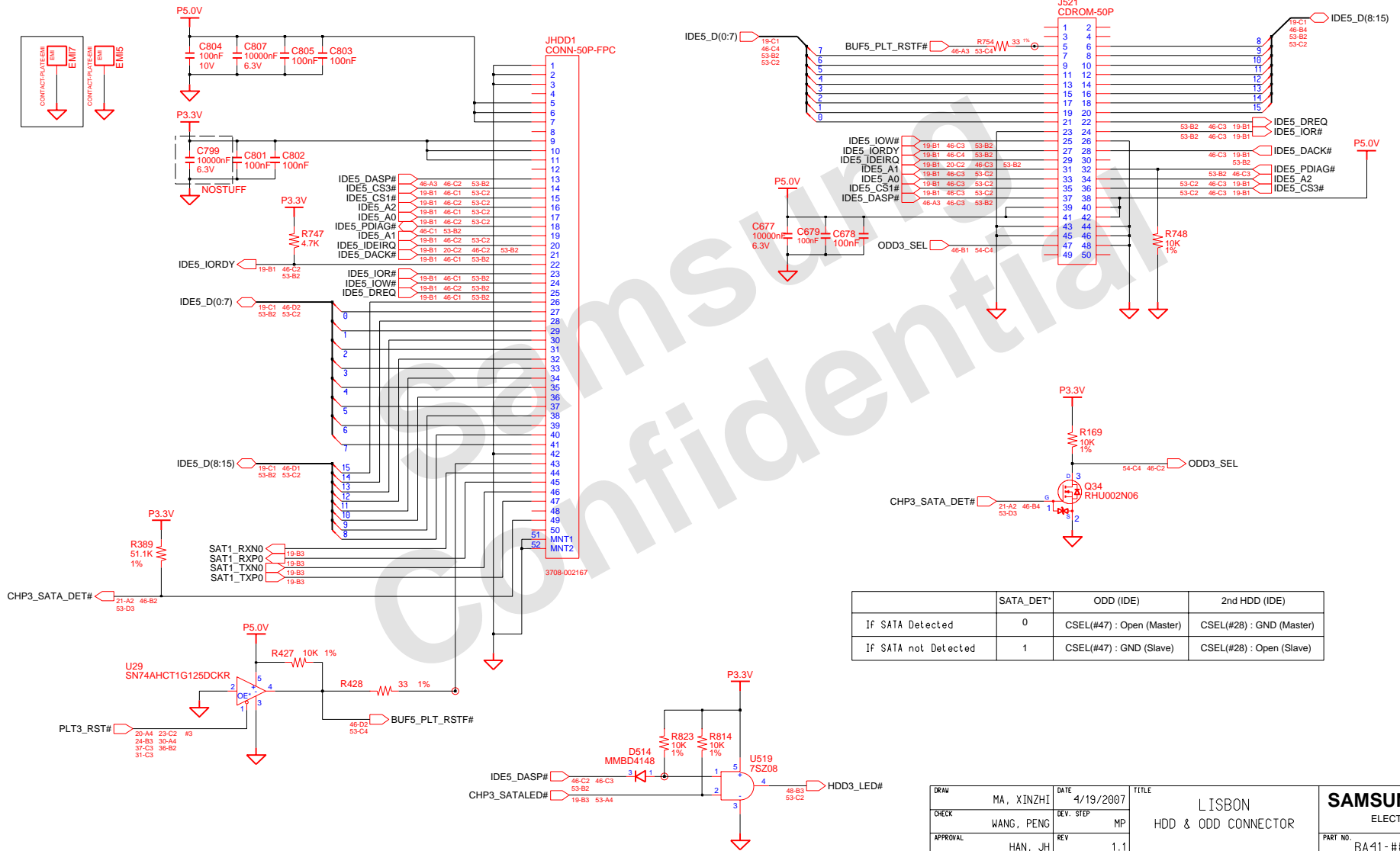
CPU VRM [SEMTECH]



DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON POWER CPU VRM	PART NO. BA41-#####
CHECK	WANG, PENG	REV. STEP	MP			
APPROVAL	HAN, JH	REV	1.1			
MODULE CODE	undefined	LAST EDIT	February 6, 2007 11:03:39 PM	PAGE	45 OF 54	

Main to HDD

Main to Swap B'd

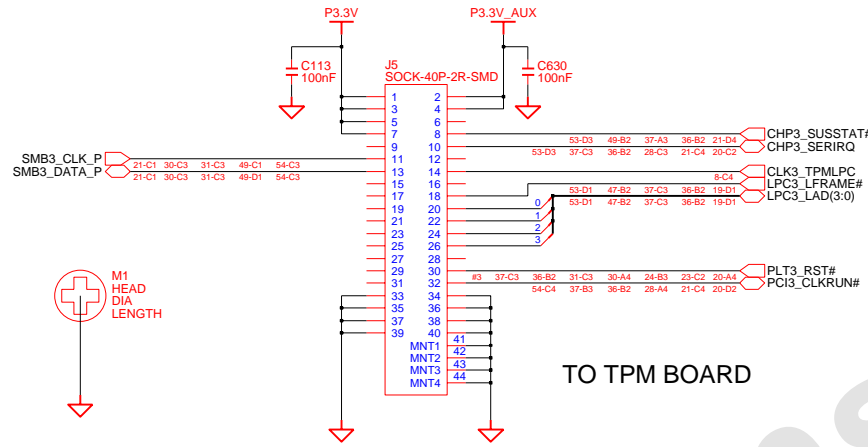


	SATA_DET*	ODD (IDE)	2nd HDD (IDE)
If SATA Detected	0	CSEL(#47) : Open (Master)	CSEL(#28) : GND (Master)
If SATA not Detected	1	CSEL(#47) : GND (Slave)	CSEL(#28) : Open (Slave)

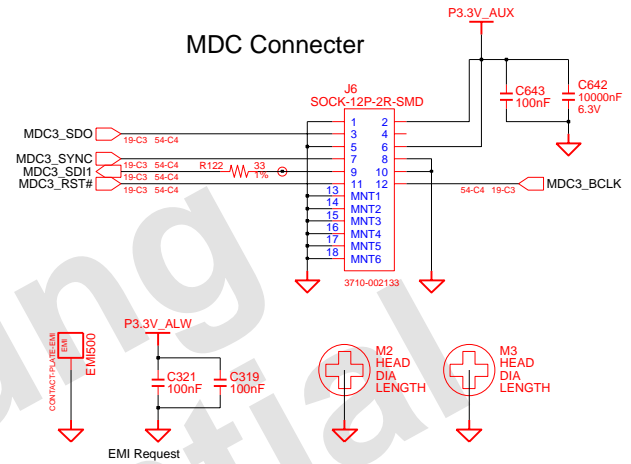
DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON	SAMSUNG ELECTRONICS
CHECK	WANG, PENG	DEV. STEP	MP	HDD & ODD CONNECTOR		
APPROVAL	HAN, JH	REV	1.1			PART NO. BA41-#####A
MODULE CODE	LAST EDIT		February 6, 2007 11:03:39 PM		PAGE	46 OF 54

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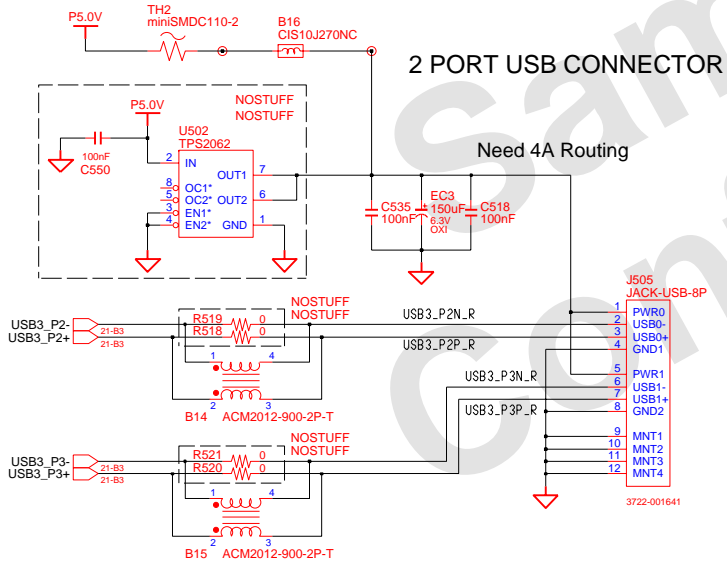


TO TPM BOARD



MDC Connector

EMI Request



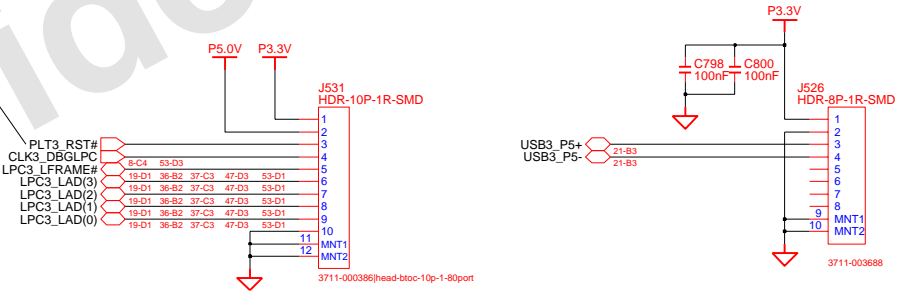
2 PORT USB CONNECTOR

Need 4A Routing

20-A4 23-C2
24-B3 30-A4
31-C3 36-B2
37-C3 #3

PLT3_RST#
CLK3_DBG_LPC
LPC3_LFRAME#
LPC3_LAD(3)
LPC3_LAD(2)
LPC3_LAD(1)
LPC3_LAD(0)

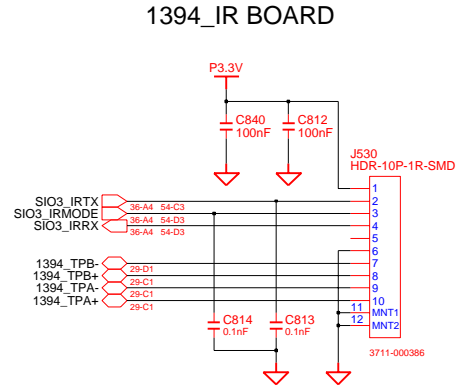
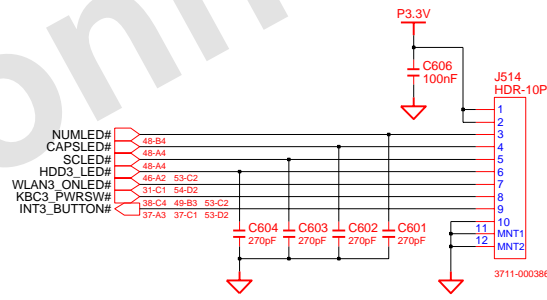
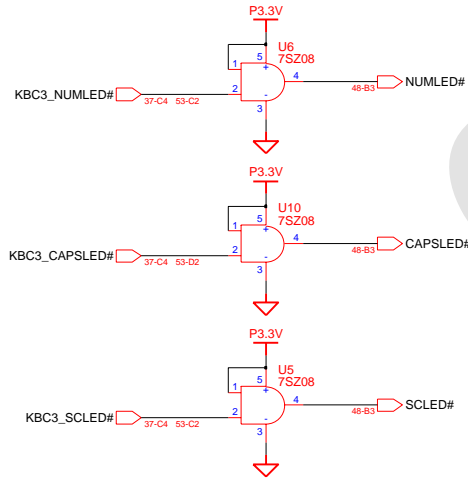
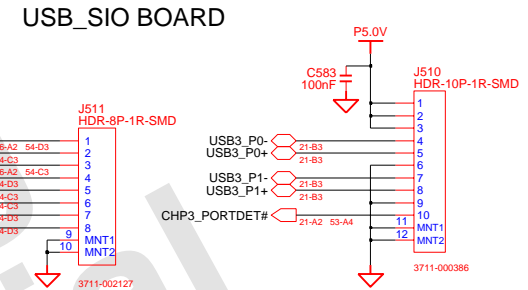
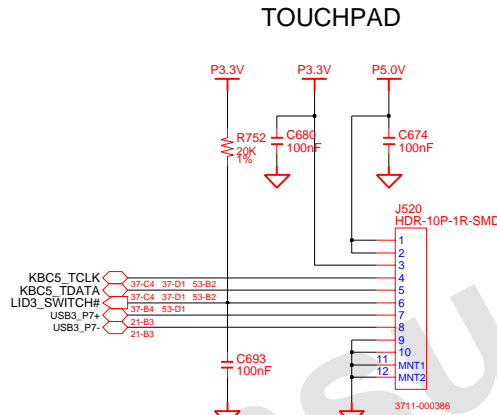
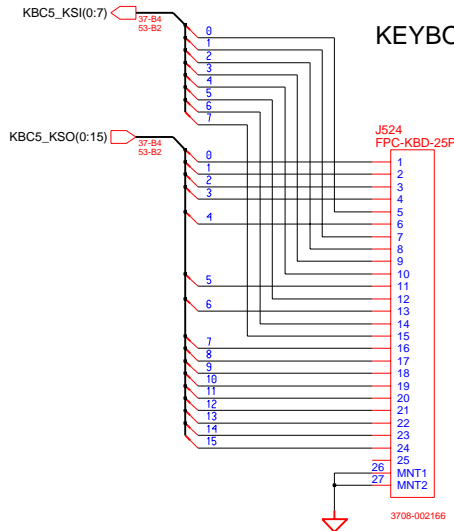
Bluetooth Interface



DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON	PART NO.	SAMSUNG ELECTRONICS
CHECK	WANG, PENG	REV. STEP	MP	SUB B'D CONNECTOR			
APPROVAL	HAN, JH	REV	1.1	TPM & MDC & USB & DEBUG			
MODULE CODE	undefined	LAST EDIT	February 6, 2007 11:03:39 PM	PAGE	47	OF	54

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DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON	PART NO.	SAMSUNG ELECTRONICS
CHECK	WANG, PENG	REV. STEP	MP	SUB B'D CONNECTOR			
APPROVAL	HAN, JH	REV	1.1	KBD & TOUCHPAD & IR & SIO		PAGE	48 OF 54
MODULE CODE	undefined	LAST EDIT	February 6, 2007 11:03:39 PM				

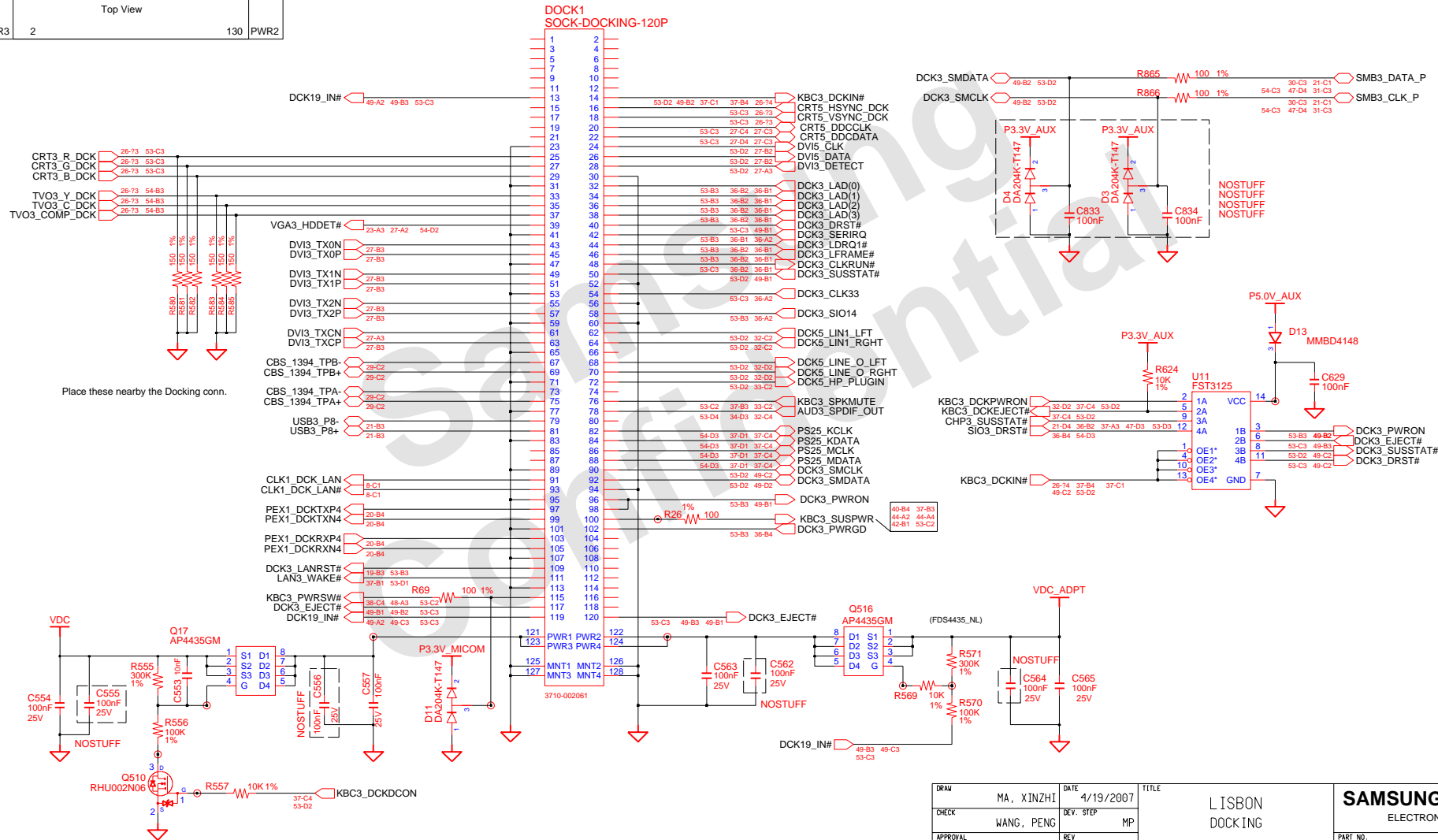
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DOCKING CONNECTOR (130PIN)

Docking Placement

PWR1	1	129	PWR4
Top View			
PWR3	2	130	PWR2

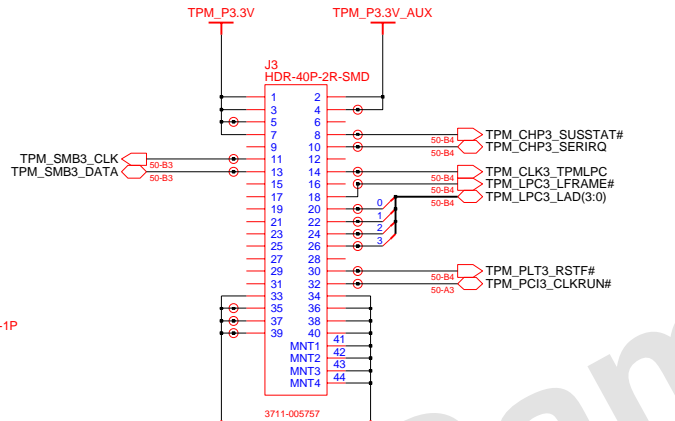


DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON DOCKING	SAMSUNG ELECTRONICS
CHECK	WANG, PENG	REV. STEP	MP			
APPROVAL	HAN, JH	REV	1.1			PART NO.
MODULE CODE	undefined	LAST EDIT	February 6, 2007 11:03:39 PM	PAGE	49	OF 54

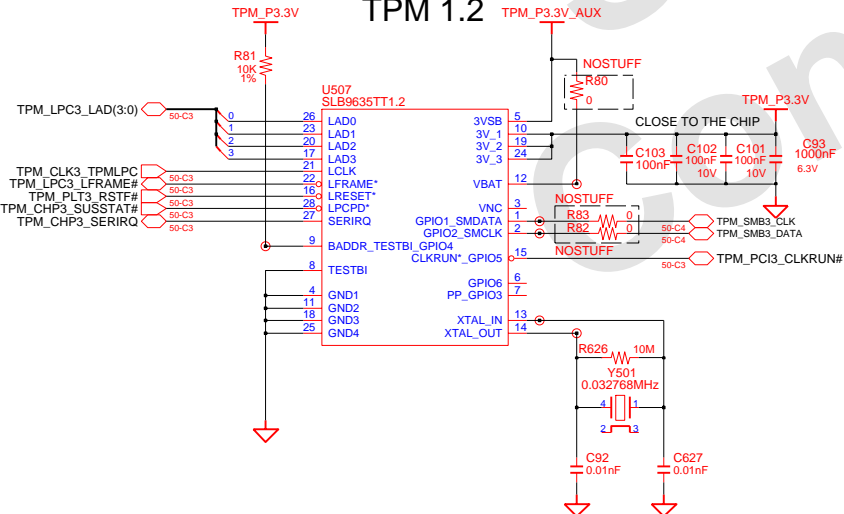
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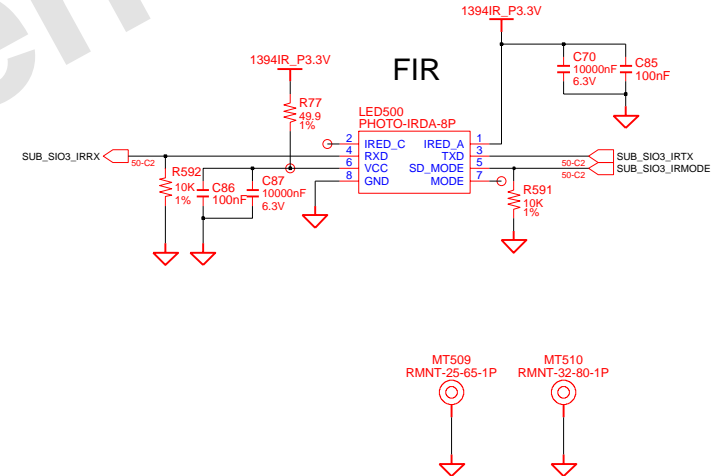
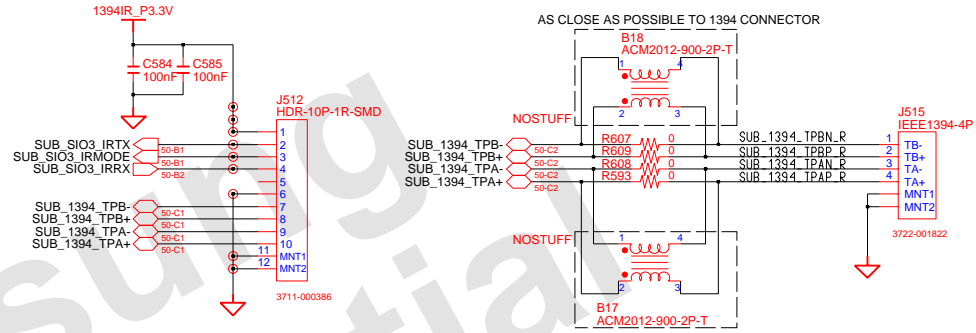
TPM BOARD



TPM 1.2



1394_IR BOARD

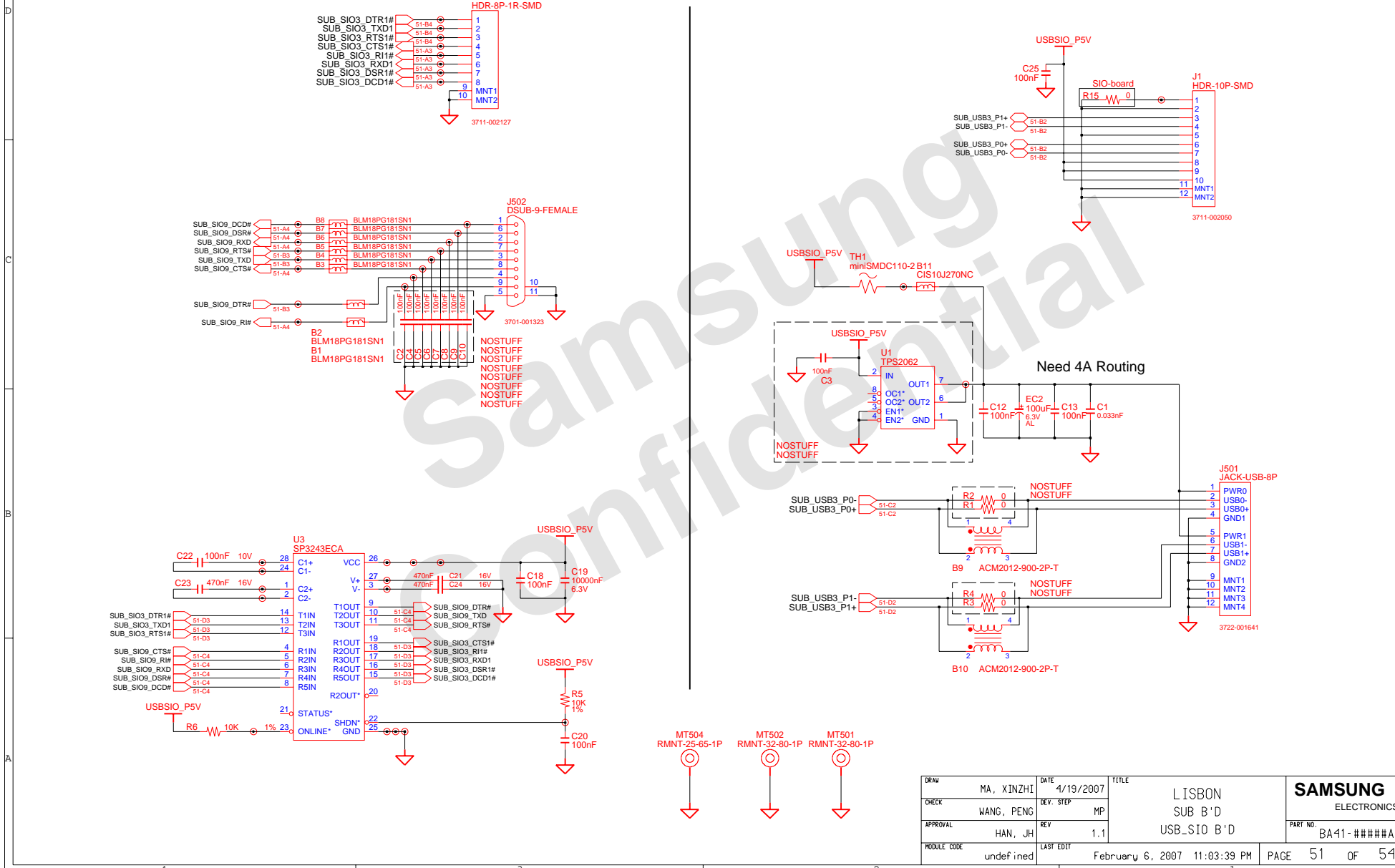


DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON SUB B'D	SAMSUNG ELECTRONICS
CHECK	WANG, PENG	REV. STEP	MP	TPM & 1394_IR B'D		
APPROVAL	HAN, JH	REV	1.1			PART NO. BA41-#####
MODULE CODE	undefined	LAST EDIT	February 6, 2007 11:03:39 PM	PAGE	50	OF 54

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USB_SIO BOARD

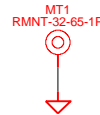
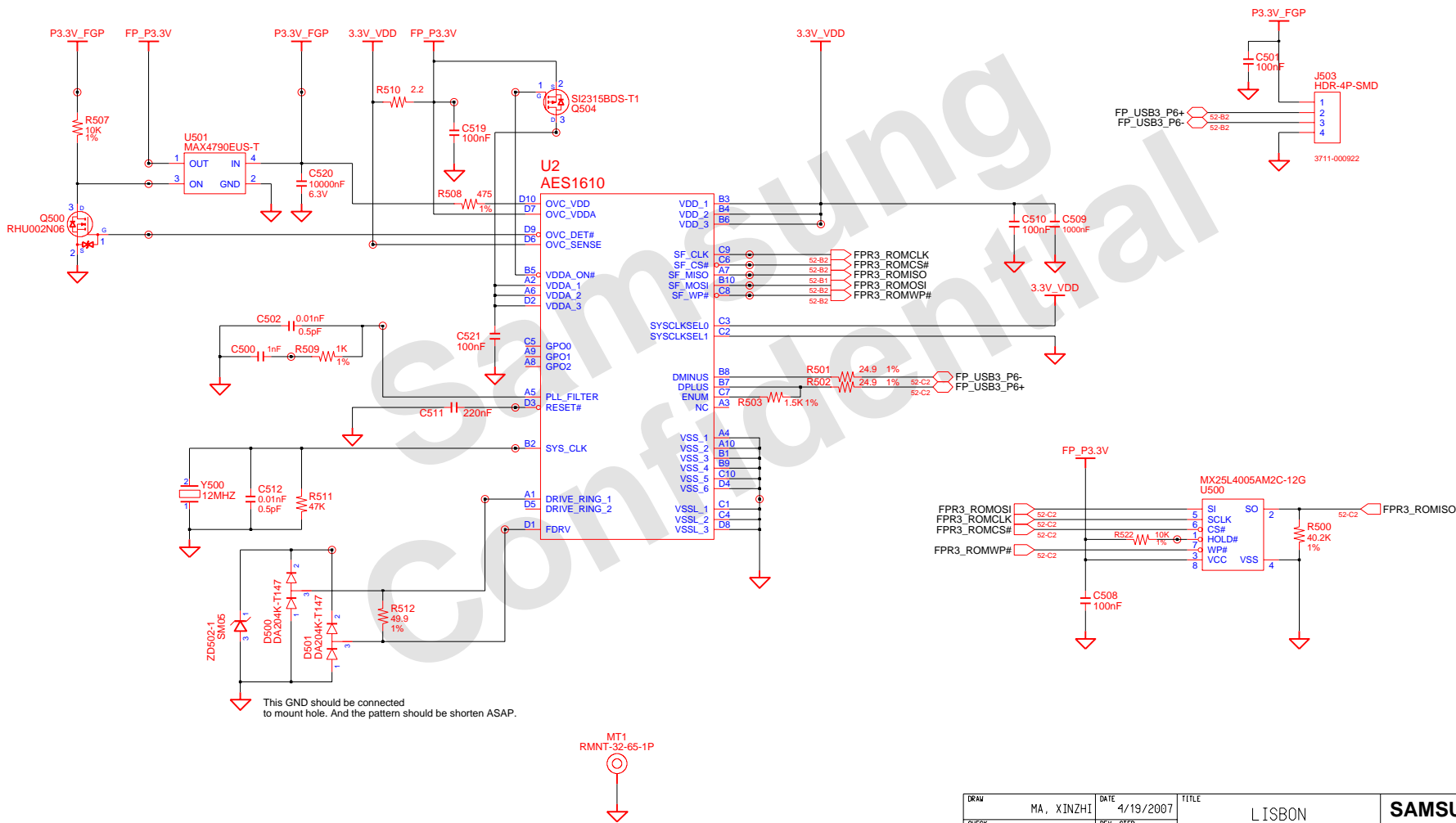


DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON SUB B'D USB_SIO B'D	SAMSUNG ELECTRONICS
CHECK	WANG, PENG	REV. STEP	MP			
APPROVAL	HAN, JH	REV	1.1			PART NO. BA41-#####
MODULE CODE	undefined	LAST EDIT	February 6, 2007 11:03:39 PM	PAGE	51	OF 54

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Finger Printer board



DRAW	MA, XINZH1	DATE	4/19/2007	TITLE	LISBON SUB B'D FINGER PRINT	SAMSUNG ELECTRONICS PART NO. BA41-#####
CHECK	WANG, PENG	REV. STEP	MP			
APPROVAL	HAN, JH	REV	1.1			
MODULE CODE	undefined	LAST EDIT	February 6, 2007 11:03:39 PM	PAGE	52	OF 54

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TP773 MCH3_CRT_B
 TP774 MCH3_CRT_DDCCLK
 TP771 MCH3_CRT_DDCDATA
 TP772 MCH3_CRT_G
 TP765 MCH3_CRT_HSYNC
 TP758 MCH3_CRT_R
 TP759 MCH3_CRT_VSYNC
 TP756 MCH3_EXTTSS0#
 TP757 MCH3_EXTTSS1#

TP763 MCH3_ICHSYNC#
 TP708 MCH3_LCD_BKLTCTRL
 TP709 MCH3_LCD_BKLTEN
 TP706 MCH3_LCD_EDID_C
 TP707 MCH3_LCD_EDID_D
 TP710 MCH3_LCD_VDDEN
 TP713 MCH3_TVO_C
 TP714 MCH3_TVO_COMP
 TP755 MCH3_TVO_Y
 TP768 MDC3_BCLK
 TP769 MDC3_RST#
 TP766 MDC3_SDI1
 TP767 MDC3_SDO
 TP770 MDC3_SYNC
 TP742 MINS_CLKREQ#

TP951 ODD3_SEL

TP948 PC13_AD(0)
 TP949 PC13_AD(1)
 TP940 PC13_AD(10)
 TP935 PC13_AD(11)
 TP936 PC13_AD(12)
 TP933 PC13_AD(13)
 TP934 PC13_AD(14)
 TP937 PC13_AD(15)
 TP940 PC13_AD(16)
 TP941 PC13_AD(17)
 TP938 PC13_AD(18)
 TP939 PC13_AD(19)
 TP952 PC13_AD(2)
 TP965 PC13_AD(20)
 TP966 PC13_AD(21)
 TP963 PC13_AD(22)
 TP973 PC13_AD(23)
 TP976 PC13_AD(24)
 TP979 PC13_AD(25)
 TP980 PC13_AD(26)
 TP977 PC13_AD(27)
 TP978 PC13_AD(28)
 TP981 PC13_AD(29)
 TP1004 PC13_AD(3)
 TP1095 PC13_AD(30)
 TP1002 PC13_AD(31)
 TP1003 PC13_AD(4)
 TP1006 PC13_AD(5)
 TP1009 PC13_AD(6)
 TP1010 PC13_AD(7)
 TP1007 PC13_AD(8)
 TP1008 PC13_AD(9)
 TP1001 PC13_CBE0#
 TP994 PC13_CBE1#
 TP995 PC13_CBE2#
 TP992 PC13_CBE3#
 TP983 PC13_CLKRUN#
 TP996 PC13_DEVSEL#
 TP999 PC13_FRAME#
 TP1000 PC13_GNT0#
 TP997 PC13_INT#
 TP998 PC13_INTB#
 TP945 PC13_INTC#
 TP946 PC13_IRDY#
 TP943 PC13_PAR
 TP944 PC13_PERR#
 TP947 PC13_PLOCK#
 TP950 PC13_REQ0#
 TP981 PC13_RST#
 TP974 PC13_SERR#
 TP975 PC13_STP#
 TP972 PC13_TRDY#

TP1089 PEG3_CRT_B
 TP984 PEG3_CRT_DDCCLK
 TP985 PEG3_CRT_DDCDATA
 TP982 PEG3_CRT_G
 TP983 PEG3_CRT_HSYNC
 TP986 PEG3_CRT_R
 TP989 PEG3_CRT_VSYNC
 TP990 PEG3_DVI_CLK
 TP987 PEG3_DVI_DATA
 TP988 PEG3_DVI_DETECT
 TP1197 PEG3_EDID_CLK
 TP1190 PEG3_EDID_DATA
 TP1191 PEG3_LCD_BKLTEN
 TP1188 PEG3_LCD_BRIT
 TP1189 PEG3_LCD_VDDON
 TP1192 PEG3_TVO_C
 TP1195 PEG3_TVO_COMP
 TP1196 PEG3_TVO_Y

TP1193 OPEX3_WAKE#
 TP1194 OPLT3_RST#
 TP1181 OPLT3_RST_ORG#
 TP1178 OPS25_KCLK
 TP1179 OPS25_KDATA
 TP1182 OPS25_MCLK
 TP1185 OPS25_MDATA
 TP1186 OSIO3_CTS1#
 TP1183 OSIO3_DCD1#
 TP1184 OSIO3_DRST#
 TP1177 OSIO3_DSR1#
 TP1170 OSIO3_DTR1#
 TP1171 OSIO3_IRMODE
 TP1180 OSIO3_IRRX
 TP1169 OSIO3_IRTX
 TP1172 OSIO3_RI1#
 TP1175 OSIO3_RTS1#
 TP1176 OSIO3_RXD1
 TP1173 OSIO3_TXD1
 TP1174 OSMB3_ALERT#
 TP1187 OSMB3_CLK
 TP1200 OSMB3_CLK_M
 TP1201 OSMB3_CLK_P
 TP1198 OSMB3_DATA
 TP1199 OSMB3_DATA_M
 TP1202 OSMB3_DATA_P
 TP1205 OSMB3_ME_CLK
 TP1206 OSMB3_ME_DATA
 TP1210 OSPI3_CLK
 TP1204 OSPI3_CS0#
 TP1240 OSPI3_CS1#
 TP1237 OSPI3_MISO
 TP1238 OSPI3_MOSI
 TP1241 OSPK5_LFT+
 TP1244 OSPK5_LFT-
 TP1245 OSPK6_RGHT+
 TP1242 OSPK6_RGHT-

TP1243 OTHM3_ALERT#
 TP1236 OTHM3_STP#
 TP1229 OTP3_REF
 TP1230 TVO3_C
 TP1227 TVO3_COMP
 TP1228 TVO3_COMP_DCK
 TP1231 TVO3_COMP_SYS
 TP1234 TVO3_C_DCK
 TP1235 TVO3_C_SYS
 TP1232 TVO3_Y
 TP1233 TVO3_Y_DCK
 TP1180 TVO3_Y_SYS

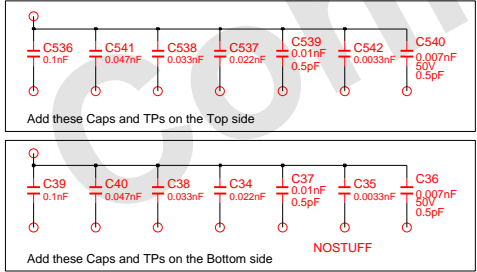
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 TP1212 VDC_ADPT_JACK
 TP1213 VGA3_DVI_CLK
 TP1226 VGA3_DVI_DATA
 TP1239 VGA3_DVI_DETECT
 TP1127 VGA3_HDDDET#
 TP1128 VRM3_DDR_PWRGD
 TP1125 VTT3_PWRGD
 TP1119 WLAN3_ONLED#

TP1036 GROUND
 TP1039 GROUND
 TP1038 GROUND
 TP1030 GROUND
 TP1032 GROUND
 TP1031 GROUND
 TP1112 O_A_GND
 TP1113 O_A_GND
 TP1110 O_A_GND
 TP1111 O_A_GND
 TP1114 CB_MD_VCC
 TP1117 CB_MD_VCC
 TP1118 CB_MD_VCC
 TP1115 CB_MD_VCC
 TP1116 CB_VCCA
 TP1220 CB_VCCA
 TP1217 CB_VCCA
 TP1218 CB_VPPA
 TP1221 CB_VPPA
 TP1219 CB_VPPA
 TP1225 CB_VPPA
 TP1222 CHG_REF
 TP1223 CHG_REF
 TP1216 CHG_REF
 TP1219 CHG_REF
 TP1210 CPU_CORE
 TP1207 CPU_CORE
 TP1208 CPU_CORE
 TP1211 CPU_CORE
 TP1214 CG_CHG
 TP1149 CG_CHG
 TP1150 CG_CHG
 TP1153 CG_CHG
 TP1156 CG_CPU
 TP1157 CG_CPU
 TP1154 CG_CPU
 TP1155 CG_CPU
 TP1102 G_DDR
 TP1103 G_DDR
 TP1100 G_DDR
 TP1101 G_DDR
 TP1106 G_P1.05V

TP1099 OG_P1.05V
 TP1092 OG_P1.05V
 TP1093 OG_P1.05V
 TP1090 OG_P3.3V
 TP1091 OG_P3.3V
 TP1094 OG_P3.3V
 TP1097 OG_P3.3V
 TP1098 OIGFX_CORE
 TP1095 OIGFX_CORE
 TP1096 OIGFX_CORE
 TP109 OIGFX_CORE
 TP122 OICLD_VDD3V
 TP123 OICLD_VDD3V
 TP120 OICLD_VDD3V
 TP121 OICLD_VDD3V
 TP1035 OIGROUND
 TP1124 OLDO_P5.4V
 TP1141 OLDO_P5.4V
 TP1142 OLDO_P5.4V
 TP1139 OLDO_P5.4V
 TP1140 MEM1_VREF
 TP1143 MEM1_VREF
 TP1146 MEM1_VREF
 TP1147 MEM1_VREF
 TP1144 O_M_GND
 TP1145 O_M_GND
 TP1138 O_M_GND
 TP1141 O_M_GND
 TP1132 O_P0.9V
 TP1129 O_P0.9V
 TP1130 O_P0.9V
 TP1133 O_P0.9V
 TP1136 O_P1.05V
 TP1137 O_P1.05V
 TP1134 O_P1.05V
 TP1135 O_P1.05V
 TP1142 O_P1.05V_M
 TP1161 O_P1.05V_M
 TP1162 O_P1.05V_M
 TP1159 O_P1.05V_M
 TP1180 O_P1.05V_PEG
 TP1163 O_P1.05V_PEG
 TP1166 O_P1.05V_PEG
 TP1167 O_P1.05V_PEG
 TP1164 O_P1.0V_LAN
 TP1165 O_P1.0V_LAN
 TP1158 O_P1.0V_LAN
 TP1151 O_P1.0V_LAN
 TP1152 O_P1.25V
 TP111 O_P1.25V
 TP112 O_P1.25V
 TP1102 O_P1.25V
 TP1105 O_P1.25V
 TP698 O_P1.25V_M
 TP699 O_P1.25V_M
 TP696 O_P1.25V_M
 TP697 O_P1.25V_M
 TP700 O_P1.2V
 TP703 O_P1.2V
 TP704 O_P1.2V
 TP701 O_P1.2V
 TP702 O_P1.5V
 TP715 O_P1.5V
 TP728 O_P1.5V
 TP729 O_P1.5V
 TP726 O_P1.5V_EXP
 TP727 O_P1.5V_EXP
 TP730 O_P1.5V_EXP
 TP733 O_P1.5V_EXP
 TP734 O_P1.8V
 TP731 O_P1.8V
 TP732 O_P1.8V
 TP725 O_P1.8V
 TP718 O_P1.8V_AUX
 TP719 O_P1.8V_AUX
 TP716 O_P1.8V_AUX
 TP717 O_P1.8V_AUX
 TP720 O_P1.8V_AUX
 TP723 O_P1.8V_AUX
 TP724 O_P1.8V_AUX
 TP721 O_P1.8V_AUX
 TP722 O_P12.0V_ALW

TP1023 P12.0V_ALW
 TP1024 P12.0V_ALW
 TP1021 P12.0V_ALW
 TP1020 P2.5V
 TP1025 P2.5V
 TP1028 P2.5V
 TP1029 P2.5V
 TP1026 P3.3V
 TP1027 P3.3V
 TP1020 P3.3V
 TP1013 P3.3V
 TP1014 P3.3V_ALW
 TP1011 P3.3V_ALW
 TP1012 P3.3V_ALW
 TP1015 P3.3V_ALW
 TP1018 P3.3V_AUX
 TP1019 P3.3V_AUX
 TP1016 P3.3V_AUX
 TP1017 P3.3V_AUX
 TP1030 P3.3V_AUX_EXP
 TP1043 P3.3V_AUX_EXP
 TP1044 P3.3V_AUX_EXP
 TP1041 P3.3V_AUX_EXP
 TP1042 P3.3V_EXP
 TP1045 P3.3V_EXP
 TP1048 P3.3V_EXP
 TP1049 P3.3V_EXP
 TP1046 P3.3V_LAN
 TP1047 P3.3V_LAN
 TP1040 P3.3V_LAN
 TP1033 P3.3V_LAN
 TP1065 P3.3V_M
 TP1066 P3.3V_M
 TP1059 P3.3V_M
 TP1052 P3.3V_MICOM
 TP1053 P3.3V_MICOM
 TP1050 P3.3V_MICOM
 TP1051 P3.3V_MICOM
 TP1054 P3.3V_M_CLK
 TP1057 P3.3V_M_CLK
 TP1058 P3.3V_M_CLK
 TP1055 P3.3V_M_CLK
 TP1056 P4.XV_AUD
 TP1068 P4.XV_AUD
 TP1082 P4.XV_AUD
 TP1083 P4.XV_AUD
 TP1080 P5.0V
 TP1071 P5.0V
 TP1081 P5.0V
 TP1074 P5.0V_AMP
 TP1070 P5.0V_AMP
 TP1077 P5.0V_AMP
 TP1078 P5.0V_AMP
 TP1075 P5.0V_AMP
 TP1076 P5.0V_AMP
 TP964 P5.0V_AUX
 TP967 P5.0V_AUX
 TP970 P5.0V_AUX
 TP971 PRTC_BAT
 TP968 PRTC_BAT
 TP969 PRTC_BAT
 TP962 PRTC_BAT
 TP955 VCC_CRT
 TP956 VCC_CRT
 TP963 VCC_CRT
 TP954 VCC_CRT
 TP957 VDD
 TP960 VDD
 TP961 VDD
 TP958 VDD
 TP959 VDD_ADPT

TP1062 VDC_ADPT
 TP1063 VDC_ADPT
 TP1064 VDC_INV
 TP1067 VDC_INV
 TP1068 VDC_INV



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

REV500
 1 O
 2 O O

DRAW	MA, XINZHI	DATE	4/19/2007	TITLE	LISBON		SAMSUNG ELECTRONICS
CHECK	WANG, PENG	REV. STEP	MP	PART NO. BA41-#####			
APPROVAL	HAN, JH	REV	1.1	TP			PAGE 54 OF 54
MODULE CODE	undefined	LAST EDIT	February 6, 2007 11:03:39 PM	PAGE 54 OF 54			