

TORINO 2

PCB Thickness:1mm

CPU :INTEL MEROM
Chip Set :INTEL 965GM & ICH8-M
Remarks :w/o INTEL AMT
2 SODIMMs

Model Name : TORINO 2
PBA Name : MAIN
PCB Code : BA41-00727A / 728A
Dev. Step : MP
Revision : 1.0
T.R. Date : 2007.03.09

DRAW	CHECK	APPROVAL
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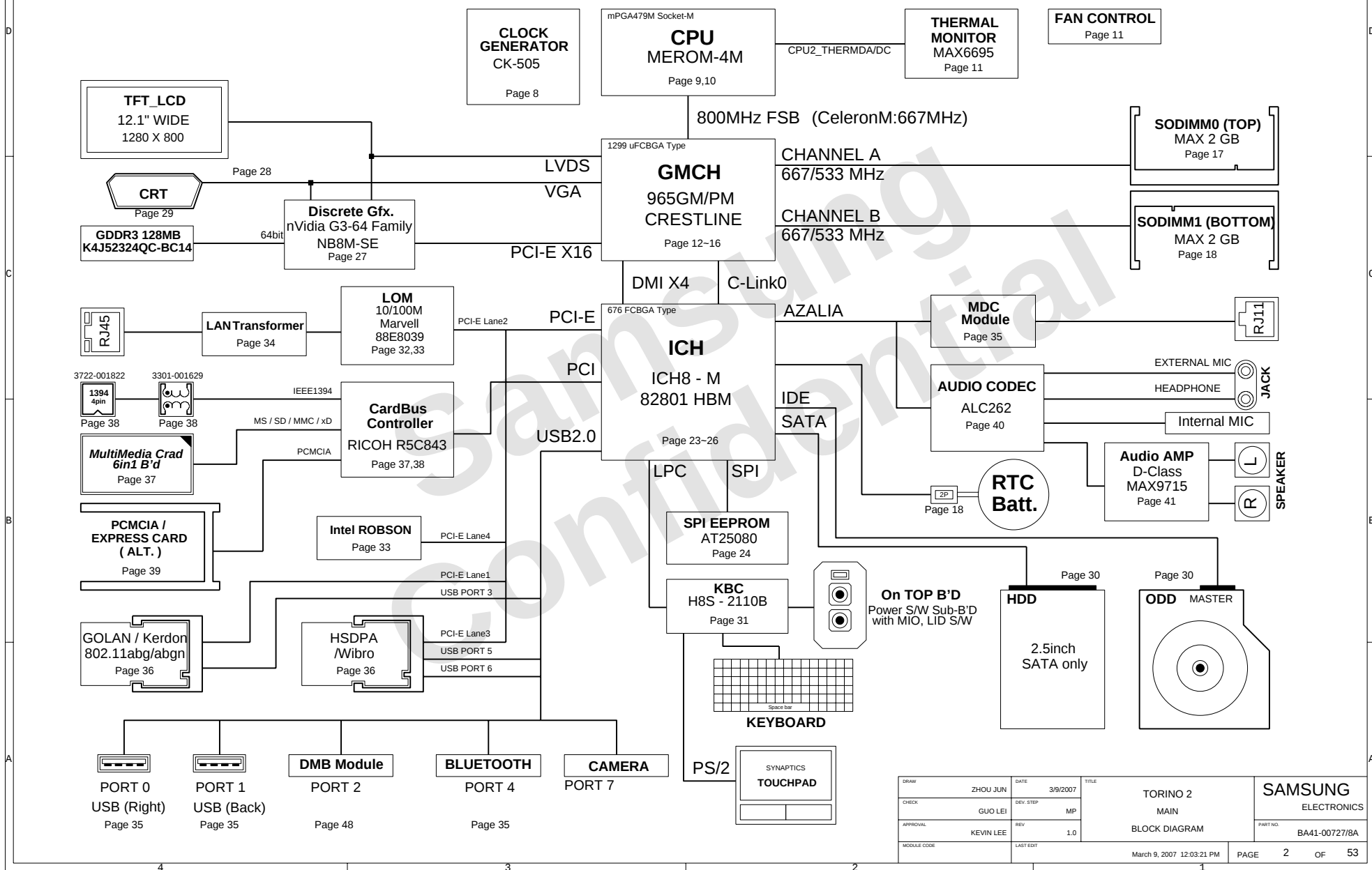
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DRAW	ZHOU JUN	DATE	3/9/2007	TITLE	TORINO 2	SAMSUNG
CHECK	GUO LEI	DEV. STEP	MP		COVER	ELECTRONICS
APPROVAL	KEVIN LEE	REV	1.0		CONTENTS	PART NO.
MODULE CODE		LAST EDIT	March 9, 2007 12:03:21 PM			BA41-00727/8A
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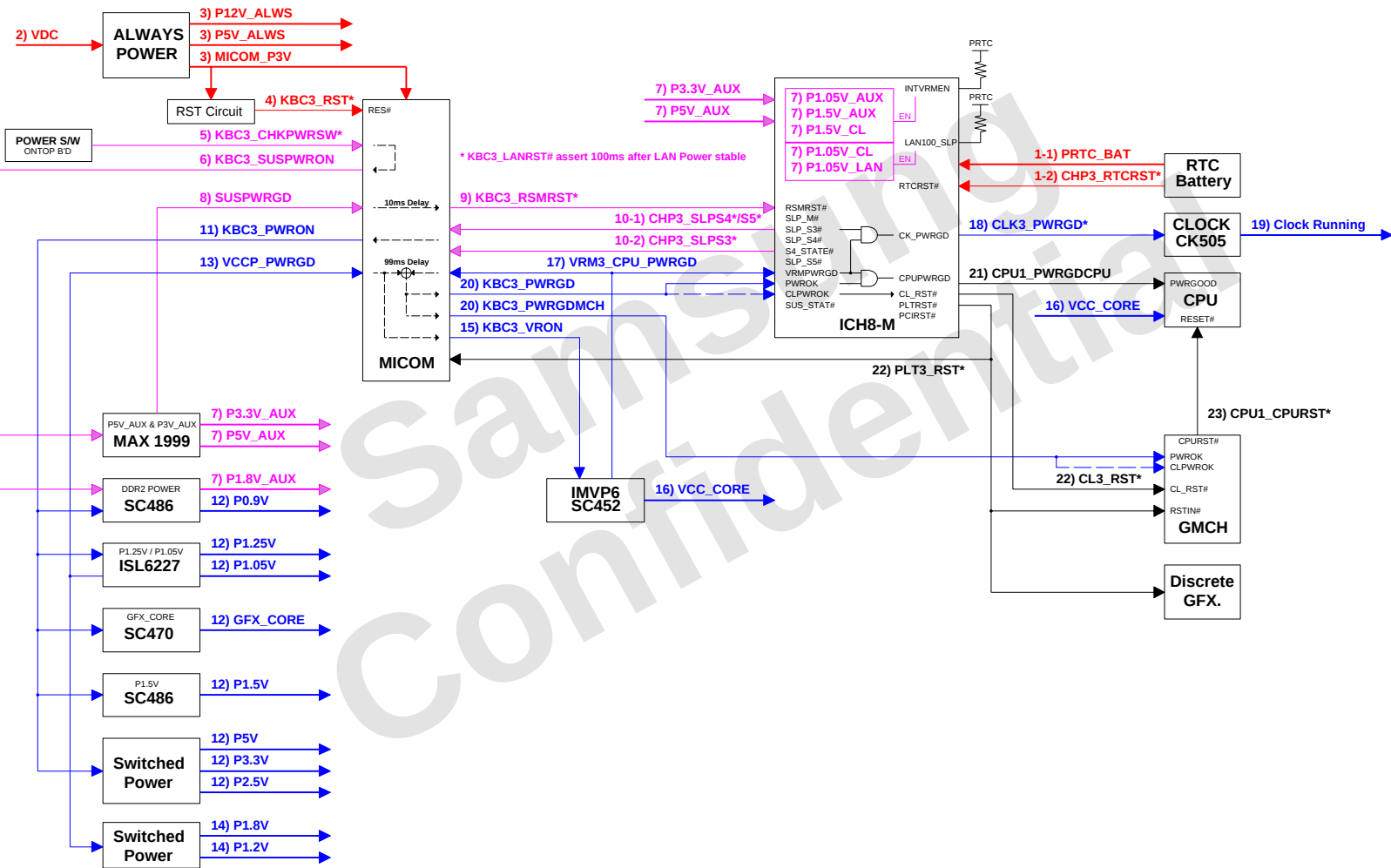
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OPERATION BLOCK DIAGRAM



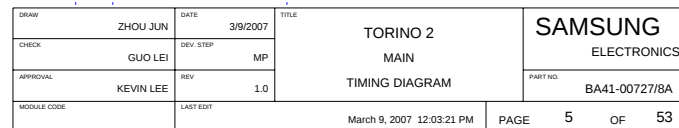


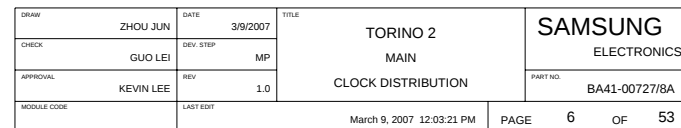
POWER SEQUENCE Rev. 0.1



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CHECK	GUO LEI	DEV. STEP	MP	MAIN	POWER SEQUENCE	ELECTRONICS
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Rev. 0.2 Phil 2006-9-21





SCHEMATIC ANNOTATIONS AND BOARD INFORMATION

Crystal / Oscillator

TYPE	FREQUENCY	DEVICE	USAGE
Crystal	32.768KHz	ICH8-M	Real Time Clock
Crystal	10MHz	MICOM	H8S/2110BV
Crystal	14.318MHz	CLOCK-Generator	CK-505
Crystal	24.576MHz	Cardbus Controller	1394
Crystal	25MHz	LAN.	LAN.

CPU Core Voltage Table

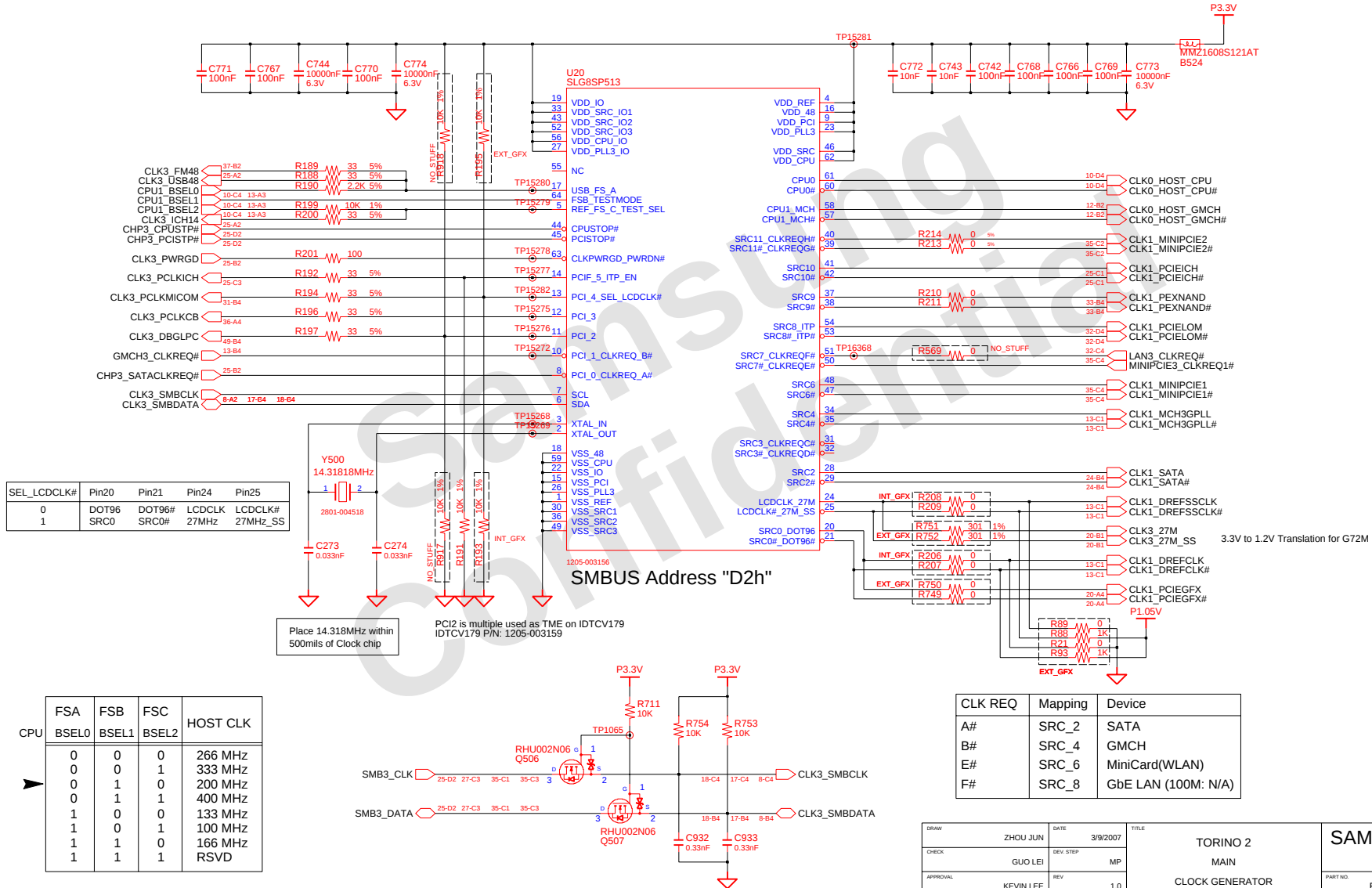
Active Mode							Active/Deeper Sleep Dual Mode Region							Deeper Sleep/Extended Deeper Sleep Dual Mode Region									
VID(6:0)			Voltage	VID(6:0)			Voltage	VID(6:0)			Voltage												
0	0	0	0	0	0	0	1500V V	0	1	0	1	0	0	0	1.0000 V	1	1	0	1	0	0	1	0.4875 V
0	0	0	0	0	0	1	1.4675 V	0	1	0	1	0	1	0	0.9875 V	1	1	1	0	1	0	0	0.4750 V
0	0	0	0	0	0	1	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	0	1	1.4625 V	0	1	0	1	0	1	1	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	0	0.9500 V	1	0	1	0	1	1	0	0.4375 V
0	0	0	0	1	0	1	1.4375 V	0	1	0	1	1	0	1	0.9375 V	1	0	1	1	1	0	1	0.4250 V
0	0	0	0	1	1	0	1.4250 V	0	1	0	1	1	1	0	0.9250 V	1	0	1	0	1	1	1	0.4125 V
0	0	0	0	1	1	1	1.4125 V	0	1	0	1	1	1	1	0.9125 V	1	0	1	1	0	0	0	0.4000 V
0	0	0	1	0	0	0	1.3750 V	0	1	1	0	0	0	0	0.9000 V	1	0	1	0	0	0	1	0.3875 V
0	0	0	1	0	0	1	1.3875 V	0	1	1	0	0	1	0	0.8875 V	1	0	1	0	1	0	1	0.3750 V
0	0	0	1	0	1	0	1.3750 V	0	1	1	0	1	0	1	0.8750 V	1	0	1	1	0	0	1	0.3625 V
0	0	0	1	0	1	1	1.3625 V	0	1	1	0	0	1	1	0.8625 V	1	0	1	1	0	0	0	0.3500 V
0	0	0	1	1	0	0	1.3500 V	0	1	1	0	1	0	0	0.8500 V	1	0	1	1	0	1	0	0.3375 V
0	0	0	1	1	0	1	1.3375 V	0	1	1	0	1	0	1	0.8375 V	1	0	1	1	1	0	0	0.3250 V
0	0	0	1	1	1	0	1.3250 V	0	1	1	0	1	1	0	0.8250 V	1	0	1	1	1	1	0	0.3125 V
0	0	0	1	1	1	1	1.3125 V	0	1	1	0	1	1	1	0.8125 V	1	1	0	0	0	0	0	0.3000 V
0	0	1	0	0	0	0	1.3000 V	0	1	1	1	0	0	0	0.8000 V	1	1	0	0	0	0	1	0.2875 V
0	0	1	0	0	0	1	1.2875 V	0	1	1	1	0	0	1	0.7875 V	1	1	0	0	0	1	0	0.2750 V
0	0	1	0	0	1	0	1.2750 V	0	1	1	1	0	1	0	0.7750 V	1	1	0	0	0	1	1	0.2625 V
0	0	1	0	1	0	0	1.2625 V	0	1	1	1	0	1	1	0.7625 V	1	1	0	0	0	1	0	0.2500 V
0	0	1	0	1	0	1	1.2500 V	0	1	1	1	0	0	0	0.7500 V	1	1	0	0	1	0	1	0.2375 V
0	0	1	0	1	0	1	1.2375 V	0	1	1	1	0	1	0	0.7375 V	1	1	0	0	1	1	0	0.2250 V
0	0	1	0	1	1	0	1.2250 V	0	1	1	1	0	1	0	0.7250 V	1	1	0	0	1	1	1	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	0	0	0.2000 V	
0	0	1	1	0	0	0	1.2000 V	1	0	0	0	0	0	0.7000 V	1	1	0	0	0	0	0	0.1875 V	
0	0	1	1	0	0	1	1.1875 V	1	0	0	0	0	0	0.6875 V	1	1	0	0	1	0	1	0.1750 V	
0	0	1	1	0	1	0	1.1750 V	1	0	0	0	0	1	0.6750 V	1	1	0	0	1	1	0	0.1625 V	
0	0	1	1	0	1	1	1.1625 V	1	0	0	0	0	1	0.6625 V	1	1	0	0	1	1	0	0.1500 V	
0	0	1	1	1	0	0	1.1500 V	1	0	0	0	1	0	0.6500 V	1	1	0	0	0	0	0	0.1375 V	
0	0	1	1	1	0	1	1.1375 V	1	0	0	0	1	0	0.6375 V	1	1	0	0	1	0	0	0.1250 V	
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0	1	0	0	0	0	0	1.1000 V	1	0	0	1	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	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	0	0.5750 V	1	1	1	0	0	1	0	0.0625 V	
0	1	0	0	0	1	1	1.0625 V	1	0	0	1	0	1	0.5625 V	1	1	1	0	0	1	0	0.0500 V	
0	1	0	0	1	0	0	1.0500 V	1	0	0	1	1	0	0.5500 V	1	1	1	0	1	0	0	0.0375 V	
0	1	0	0	1	0	1	1.0375 V	1	0	0	1	1	0	0.5375 V	1	1	1	1	0	1	0	0.0250 V	
0	1	0	0	1	1	0	1.0250 V	1	0	0	1	1	1	0.5250 V	1	1	1	0	0	0	0	0.0125 V	
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								1	0	1	0	0	0	0.5000 V	1	1	1	1	0	0	0	0.0000 V	
															1	1	1	1	0	0	0	0.0000 V	
															1	1	1	1	0	0	0	0.0000 V	
															1	1	1	1	0	0	0	0.0000 V	
															1	1	1	1	0	0	0	0.0000 V	
															1	1	1	1	0	0	0	0.0000 V	
															1	1	1	1	0	0	0	0.0000 V	
															1	1	1	1	0	0	0	0.0000 V	
															1	1	1	1	0	0	0	0.0000 V	
															1	1	1	1	0	0	0	0.0000 V	
															1	1	1	1	0	0	0	0.0000 V	
															1	1	1	1	0	0	0	0.0000 V	
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															1	1	1	1	0	0	0	0.0000 V	
															1	1	1	1	0	0	0	0.0000 V	
															1	1	1	1	0	0	0	0.0000 V	
															1	1	1	1	0	0	0	0.0000 V	
															1	1	1	1	0	0	0	0.0000 V	
															1	1	1	1	0	0	0	0.0000 V	
															1	1	1	1	0	0	0	0.0000 V	
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															1	1	1	1	0	0	0	0.0000 V	
															1	1	1	1	0	0	0	0.0000 V	
															1	1	1	1	0	0	0	0.0000 V	
															1	1	1	1	0	0	0	0.0000 V	
															1	1	1	1	0	0	0	0.0000 V	
															1	1	1	1	0	0	0	0.0000 V	
															1	1	1	1	0	0	0	0.0000 V	
															1	1	1	1	0	0	0	0.0000 V	
															1	1	1	1	0	0	0	0.0000 V	
															1</								

Devices	Address	Hex	Bus
ICH8	Master	-	SMBUS Master
SODIMM0	1010 000x	A0h	-
SODIMM1	1010 010x	A4h	-
GK-505 (Clock Generator)	1101 001x	D2h	Clock, Unused Clock Output Disable
MiCOM	Master	-	SMBUS Master
BATTERY	0001 011x	16h	-
EMC2102(Termal Sensor)	0111 101x	7Ah	Thermal Sensor

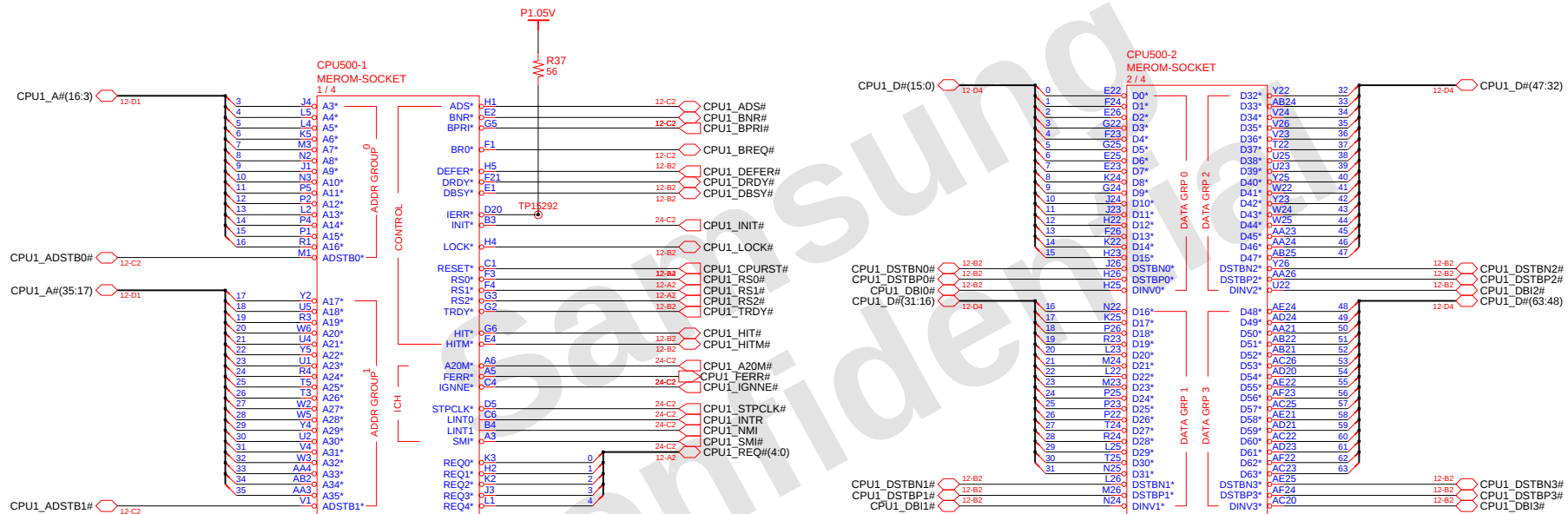
PORT NUMBER	ASSIGNED TO
0	SYSTEM PORT A
1	SYSTEM PORT B
2	DMB CARD
3	MINIPCI-E
4	BLUETOOTH
5	WIBRO SIM CARD
6	HSDPA
7	CAMERA

CHP3_SLP5S1*	S1, Powered-On-Suspend(POS) : In this state, all clocks(except the 32.768kHz clock) are stopped. The system context is maintained in system DRAM. Power is maintained to PCI, the CPU, memory controller, memory, and all other critical subsystems. Note that this state does not preclude power being removed from non-essential devices, such as disk drives. During this state, CPU can be selected for either Deep Sleep or Deeper Sleep. In Deeper Sleep, CPU voltage reduced in this state to reduce the leakage power.
CHP3_SLP5S3*	S3, Suspend-to-RAM(STR) : The system context is maintained in system DRAM, but power is shut off to non-critical circuits. Memory is retained, and refreshes continue. All clocks stop except RTC clock.
CHP3_SLP4S4*	S4, Suspend-to-Disk(STD) : The Context of the system is maintained on the disk. All power is then shut off to the system except for the logic required to resume. Context appears same as S5, but may have different voltage environment.
CHP3_SLP5S5*	S5, Soft Off(SOFF) : System context is not maintained. All power is shut off except for the logic required to restart. A full boot is required when waking.

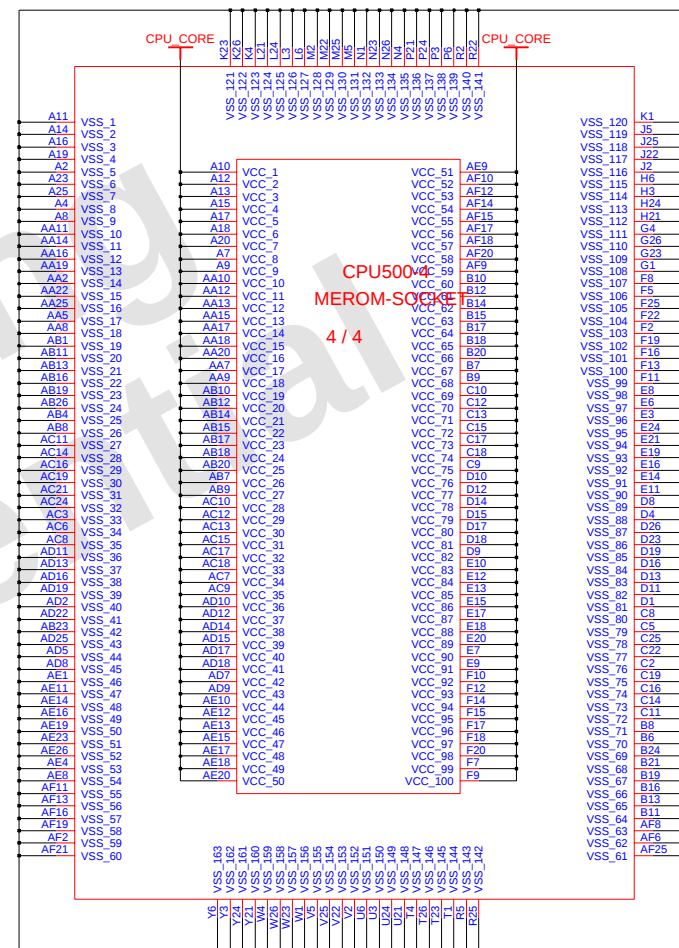
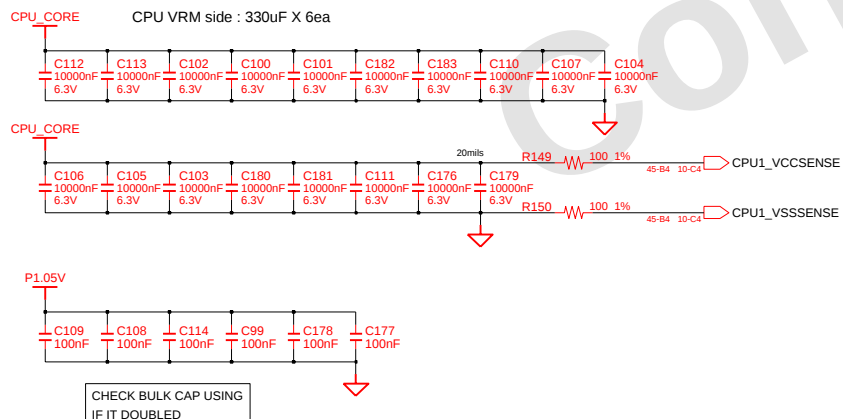
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CHECK	GUO LEI	DEV. STEP	MP		
APPROVAL	KEVIN LEE	REV	1.0		
MODULE CODE	LAST EDIT		March 9, 2007 12:03:21 PM		
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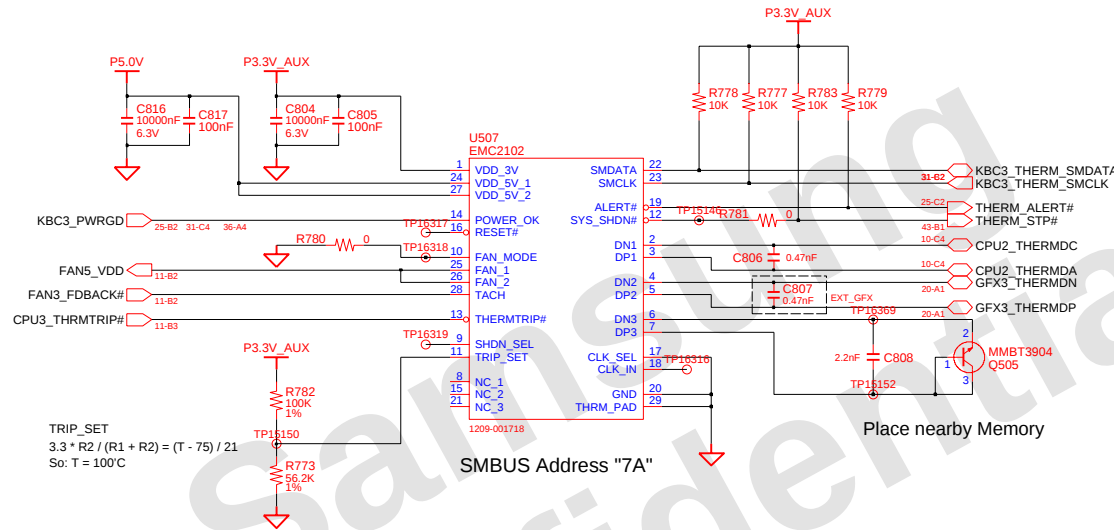
CPU SOCKET : MEROM



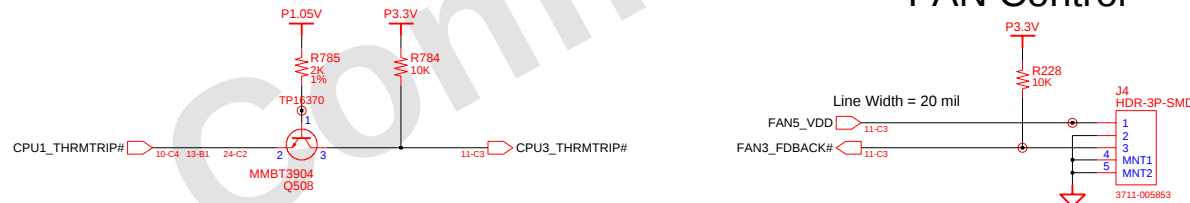
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APPROVAL	KEVIN LEE	REV	1.0	MEROM(1)	PART NO.	BA41-00727/8A
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COM-22C-015(1996.6.5) REV. 3

Thermal Monitor

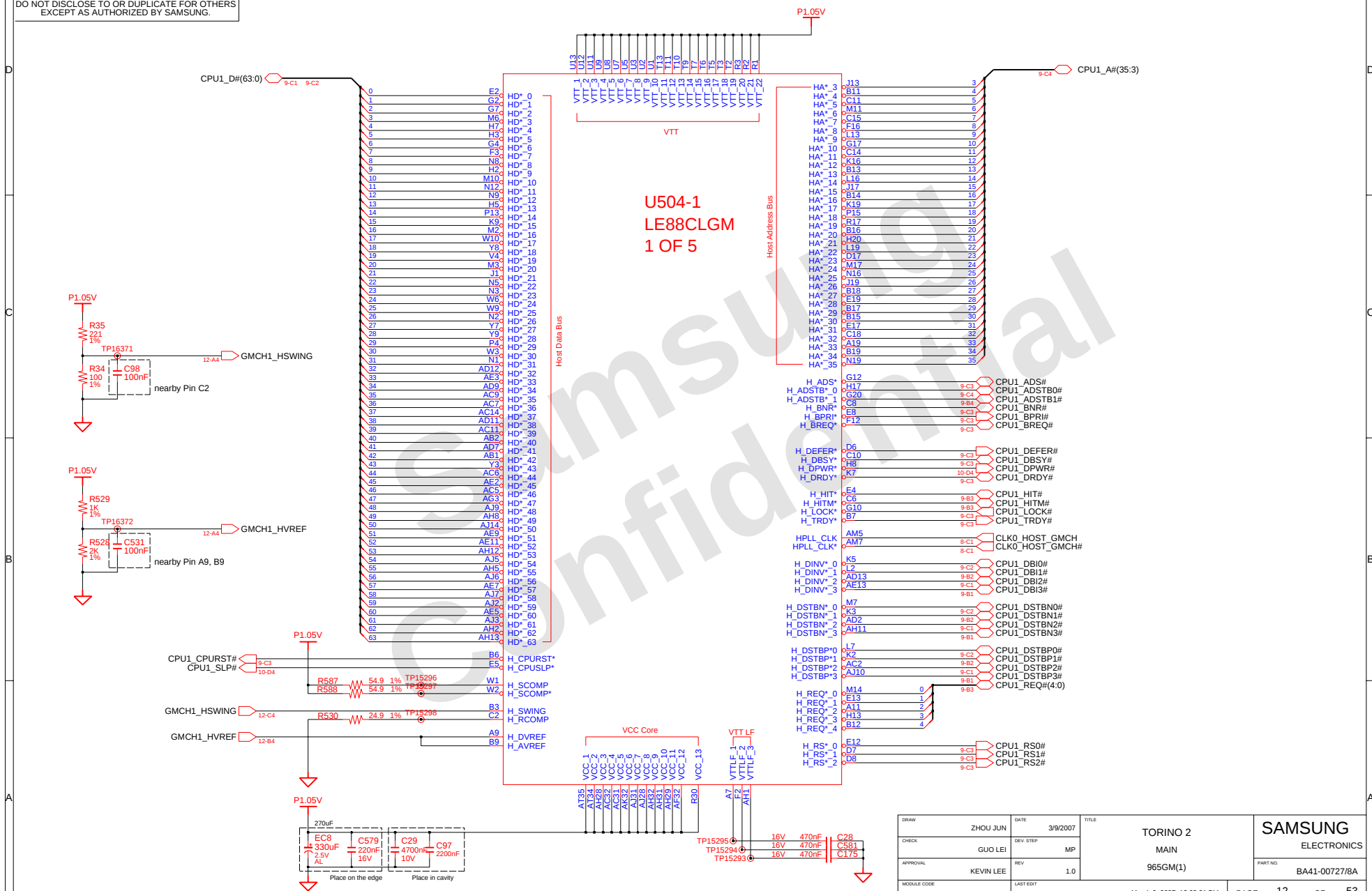


FAN Control



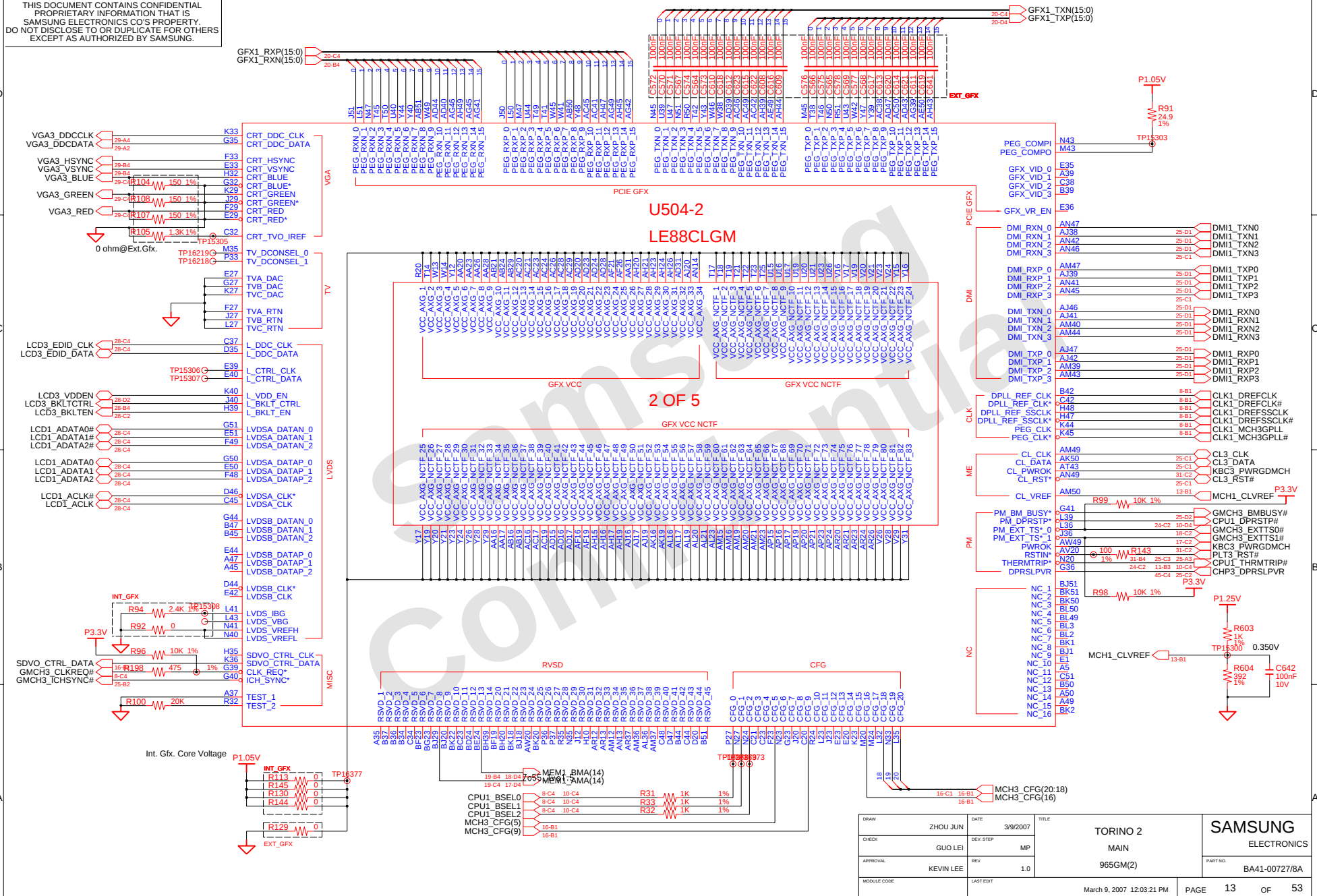
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CHECK	GUO LEI	DEV. STEP	MP	MAIN	MAIN	ELECTRONICS
APPROVAL	KEVIN LEE	REV	1.0	THERMAL MONITOR	PART NO.	BA41-00727/8A
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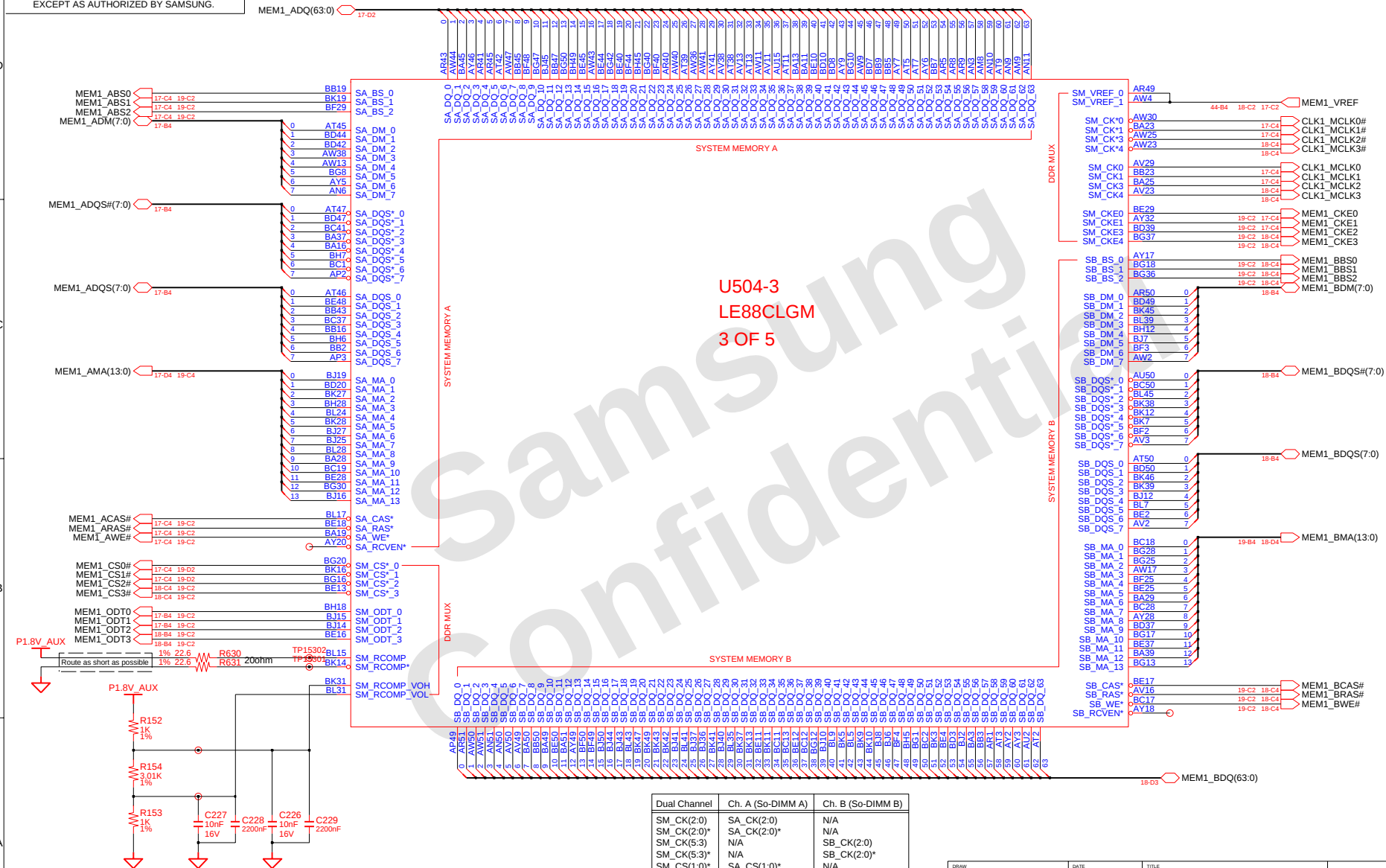


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CHECK	GUO LEI	DEV. STEP	MP			
APPROVAL	KEVIN LEE	REV	1.0			
MODULE CODE		LAST EDIT		March 9, 2007 12:03:21 PM		PAGE 12 OF 53

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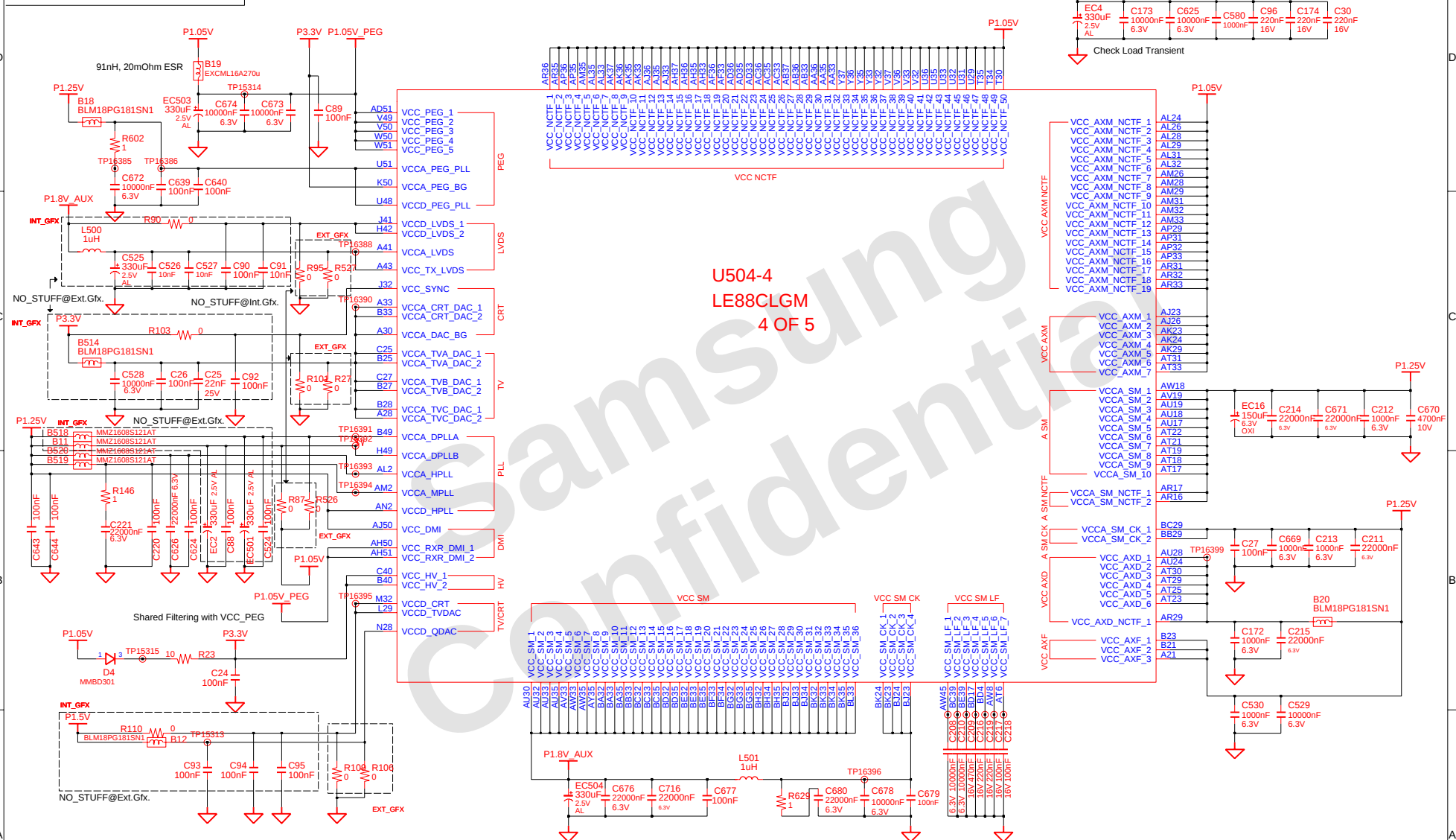
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Dual Channel	Ch. A (So-DIMM A)	Ch. B (So-DIMM B)
SM_CK(2:0)	SA_CK(2:0)	N/A
SM_CK(2:0)*	SA_CK(2:0)*	N/A
SM_CK(5:3)	N/A	SB_CK(2:0)
SM_CK(5:3)*	N/A	SB_CK(2:0)*
SM_CS(1:0)*	SA_CS(1:0)*	N/A
SM_CKE(1:0)	SA_CKE(1:0)	N/A
SM_ODT(1:0)	SA_ODT(1:0)	N/A
SM_CS(3:2)*	N/A	SB_CS(3:2)*
SM_SKE(3:2)	N/A	SB_CKE(3:2)
SM_ODT(3:2)	N/A	SB_ODT(3:2)

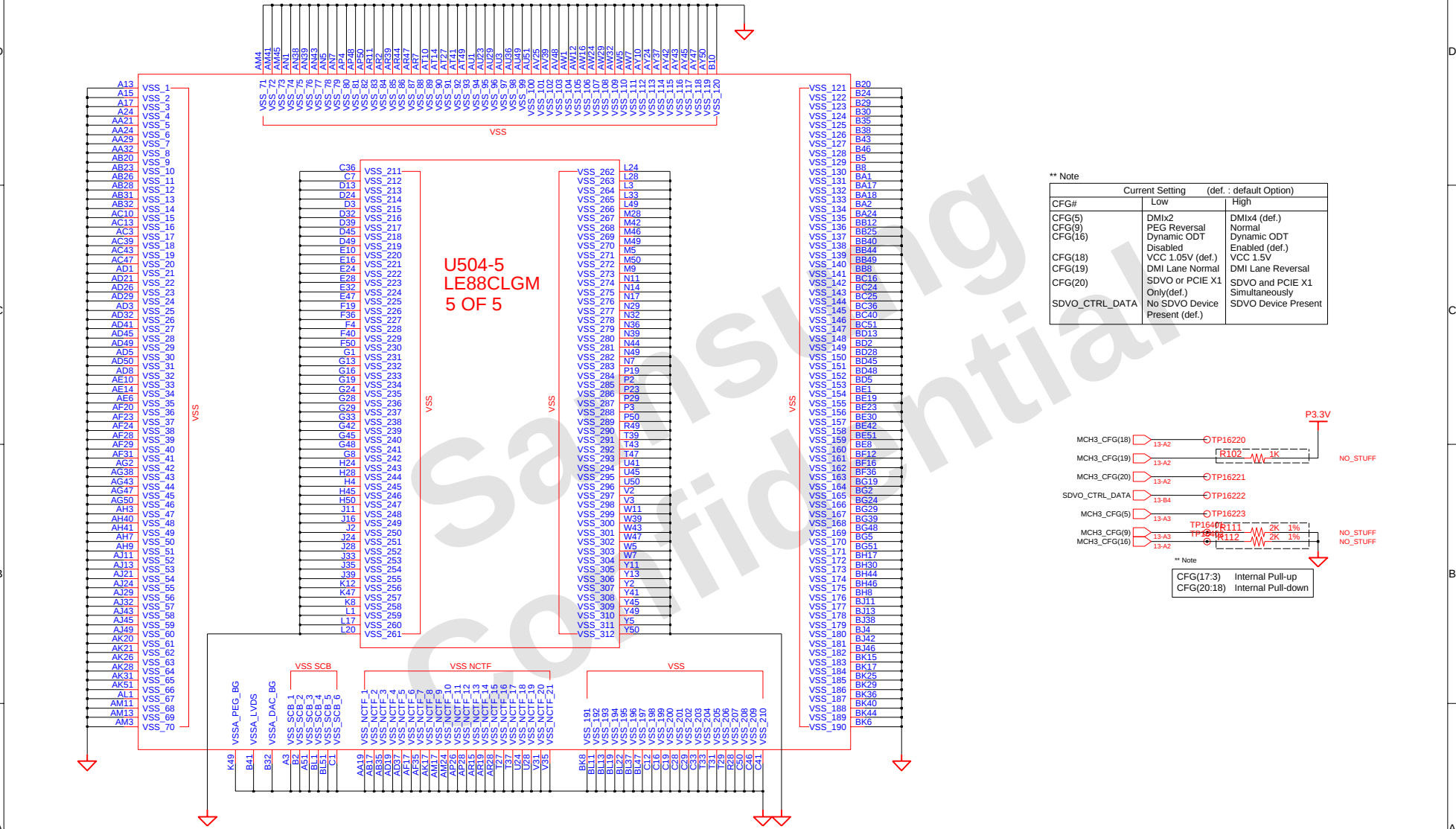
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CHECK	GUO LEI	DEV. STEP	MP		MAIN
APPROVAL	KEVIN LEE	REV	1.0		965GM(3)
MODULE CODE		LAST EDIT			
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				PART NO. BA41-00727/8A	

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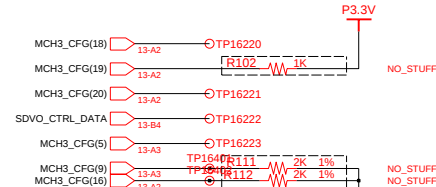
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APPROVAL	KEVIN LEE	REV	1.0			PART NO.	BA41-00727/8A	
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** Note

CFG#	Current Setting (def. : default Option)	
	Low	High
CFG(5)	DMix2	DMix4 (def.)
CFG(9)	PEG Reversal	Normal
CFG(16)	Dynamic ODT	Dynamic ODT
	Disabled	Enabled (def.)
CFG(18)	VCC 1.05V (def.)	VCC 1.5V
CFG(19)	DMI Lane Normal	DMI Lane Reversal
CFG(20)	SDVO or PCIE X1	SDVO and PCIE X1
	Only(def.)	Simultaneously
SDVO_CTRL_DATA	No SDVO Device Present (def.)	SDVO Device Present



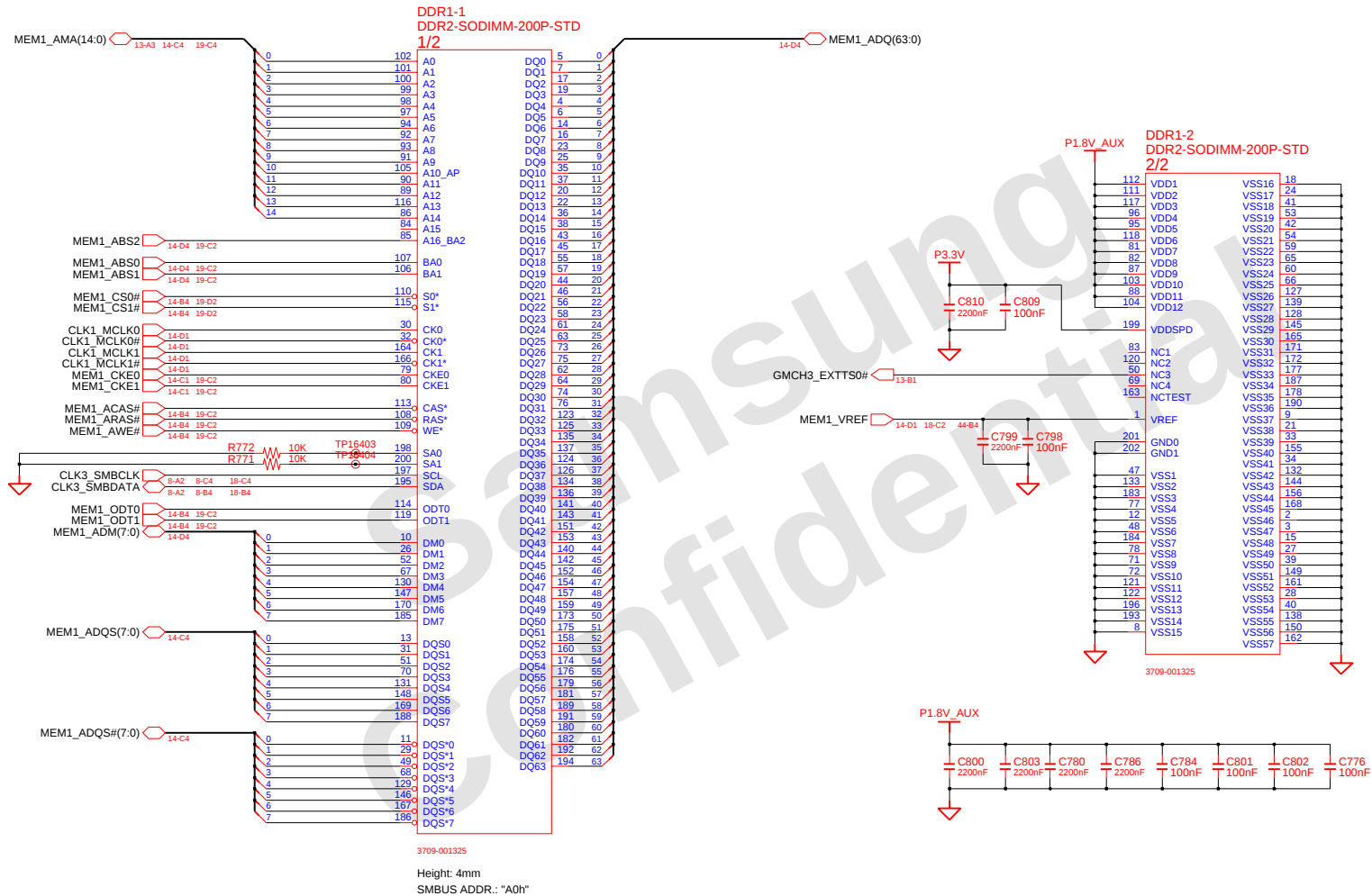
** Note

CFG(17:3)	Internal Pull-up
CFG(20:18)	Internal Pull-down

DRAW	ZHOU JUN	DATE	3/9/2007	TITLE	TORINO 2	SAMSUNG ELECTRONICS PART NO. BA41-00727/8A
CHECK	GUO LEI	DEV. STEP	MP		MAIN	
APPROVAL	KEVIN LEE	REV	1.0		965GM(5)	
MODULE CODE		LAST EDIT				
March 9, 2007 12:03:21 PM						PAGE 16 OF 53

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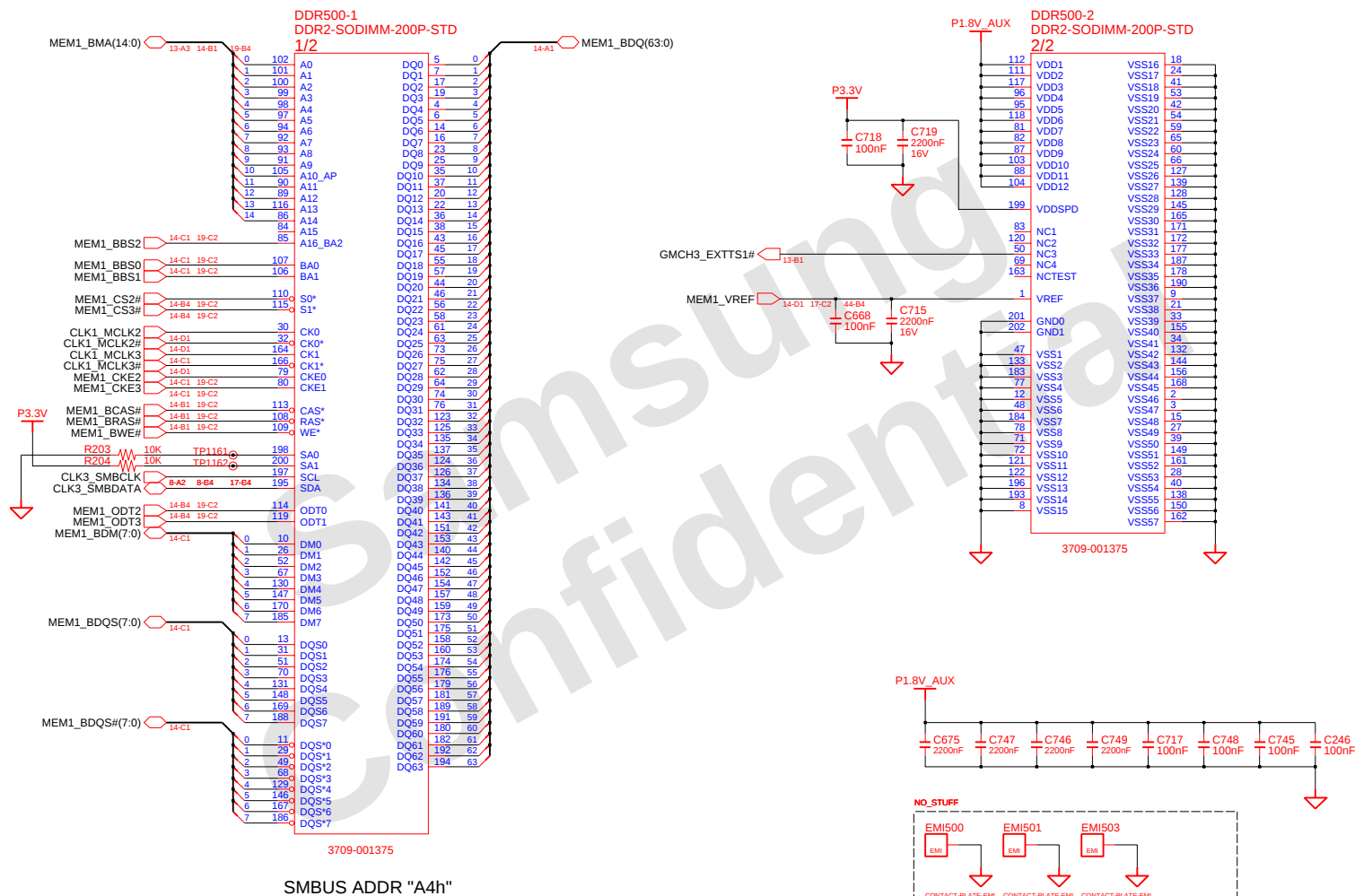
SODIMM0 (TOP)



DRAW	ZHOU JUN	DATE	3/9/2007	TITLE	TORINO 2	SAMSUNG
CHECK	GUO LEI	DEV. STEP	MP	MAIN	MAIN	ELECTRONICS
APPROVAL	KEVIN LEE	REV	1.0	DDR2 SODIMM (TOP)	PART NO.	BA41-00727/8A
MODULE CODE		LAST EDIT		March 9, 2007 12:03:21 PM	PAGE	17 OF 53

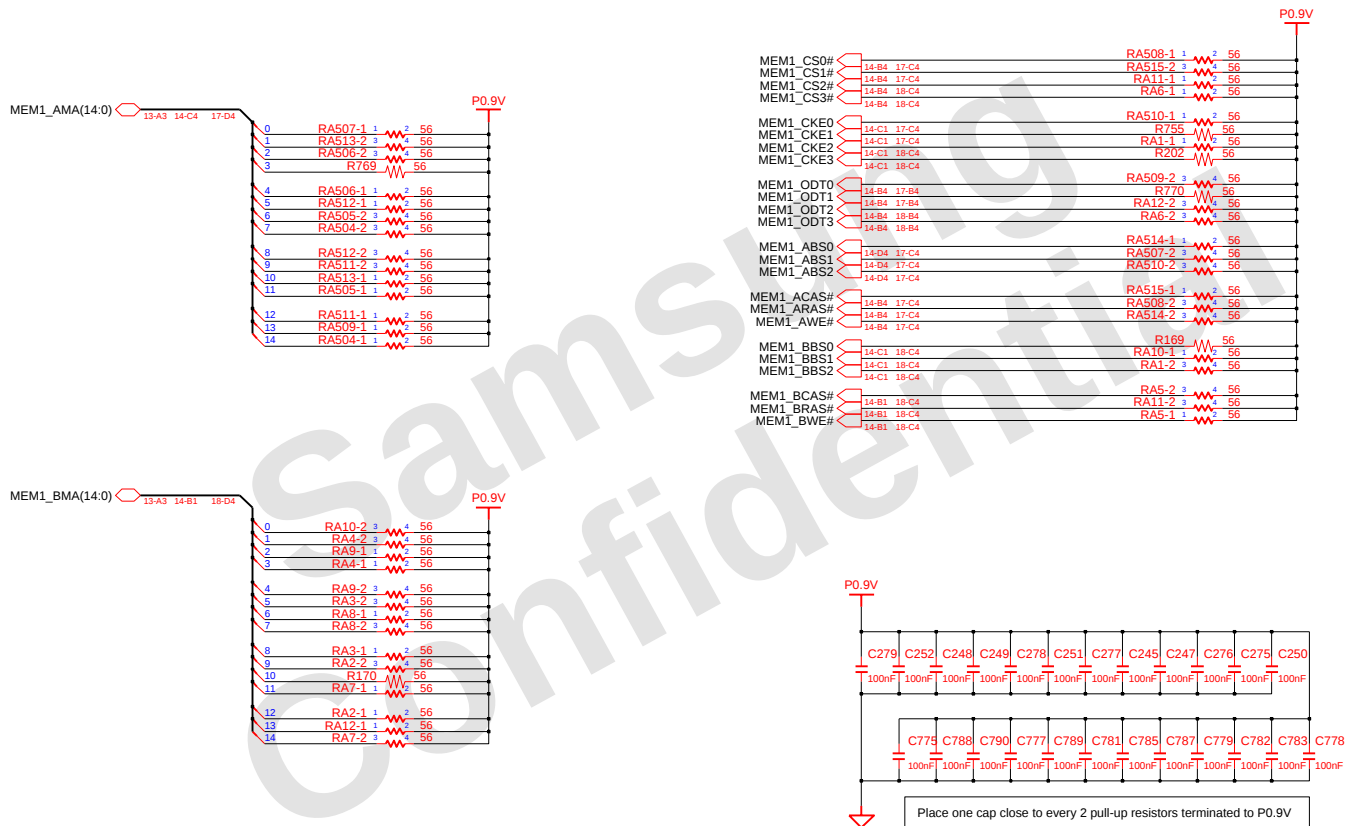
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SODIMM1 (BOTTOM)



DRAW	ZHOU JUN	DATE	3/9/2007	TITLE	TORINO 2	SAMSUNG
CHECK	GUO LEI	DEV. STEP	MP	MAIN	MAIN	ELECTRONICS
APPROVAL	KEVIN LEE	REV	1.0	DDR2 SODIMM (BOTTOM)	PART NO.	BA41-00727/8A
MODULE CODE		LAST EDIT		March 9, 2007 12:03:21 PM	PAGE	18 OF 53

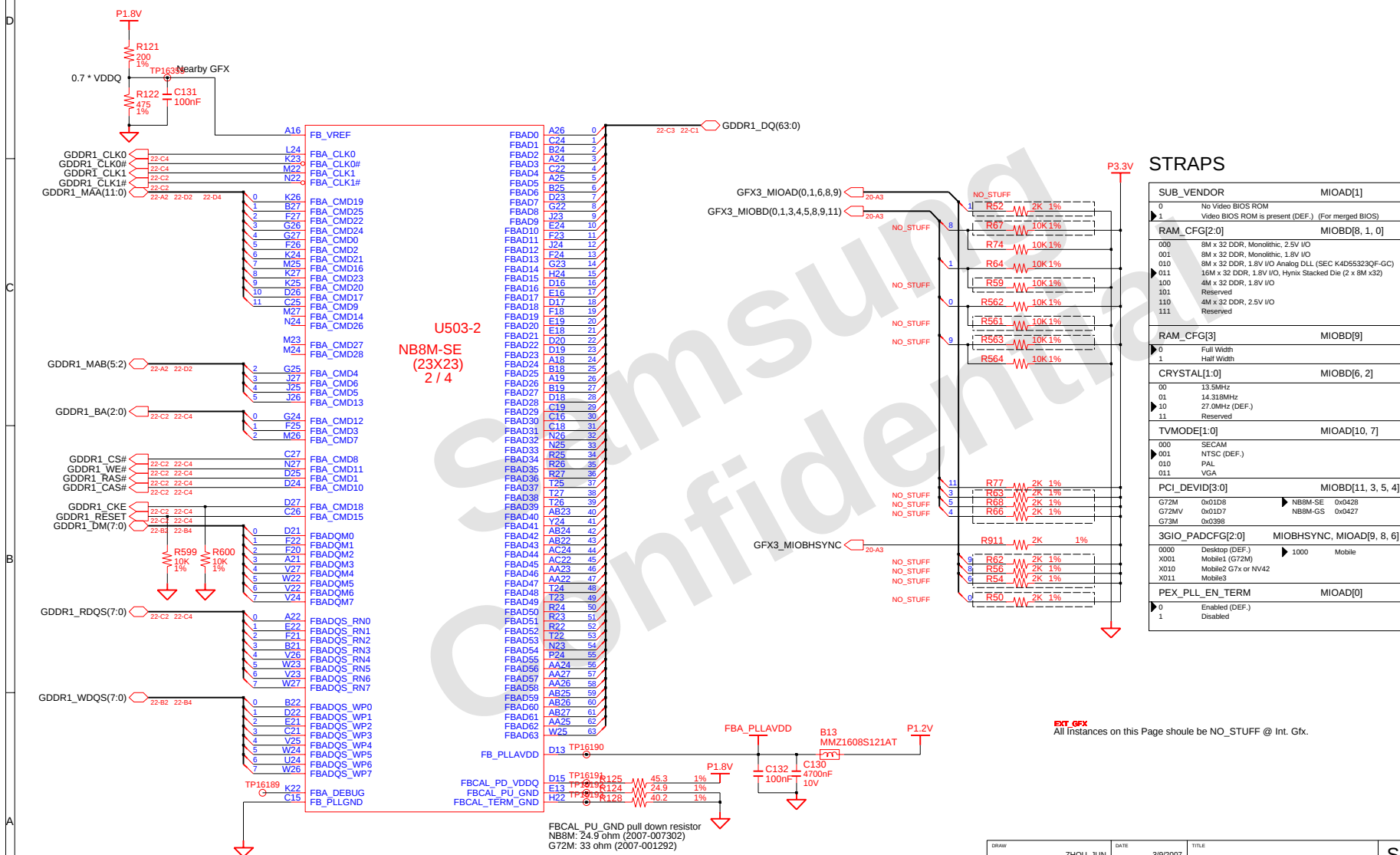
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DRAW	ZHOU JUN	DATE	3/9/2007	TITLE	TORINO 2	SAMSUNG
CHECK	GUO LEI	DEV. STEP	MP	MAIN	MAIN	ELECTRONICS
APPROVAL	KEVIN LEE	REV	1.0	DDR2 TERMINATION	PART NO.	BA41-00727/8A
MODULE CODE		LAST EDIT	March 9, 2007 12:03:21 PM	PAGE	19	OF 53

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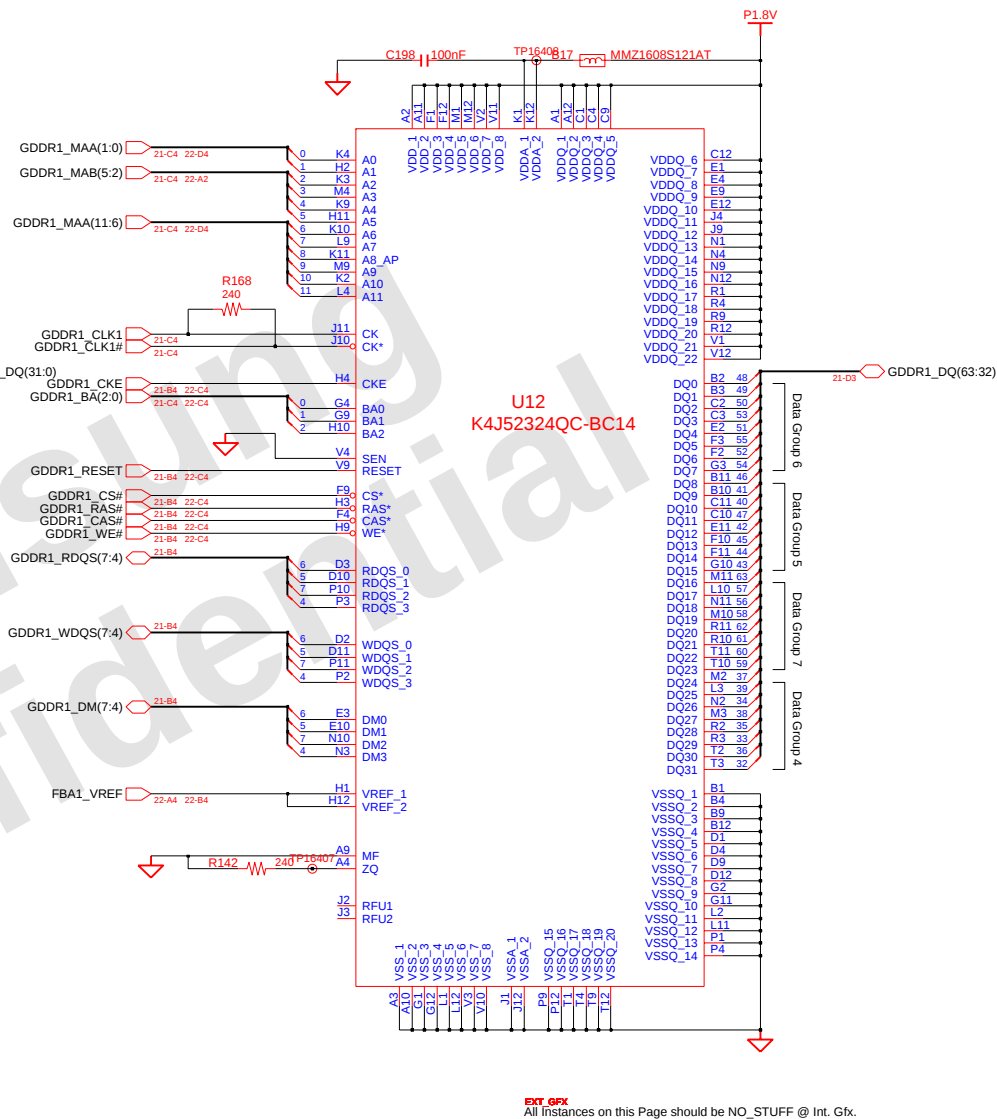
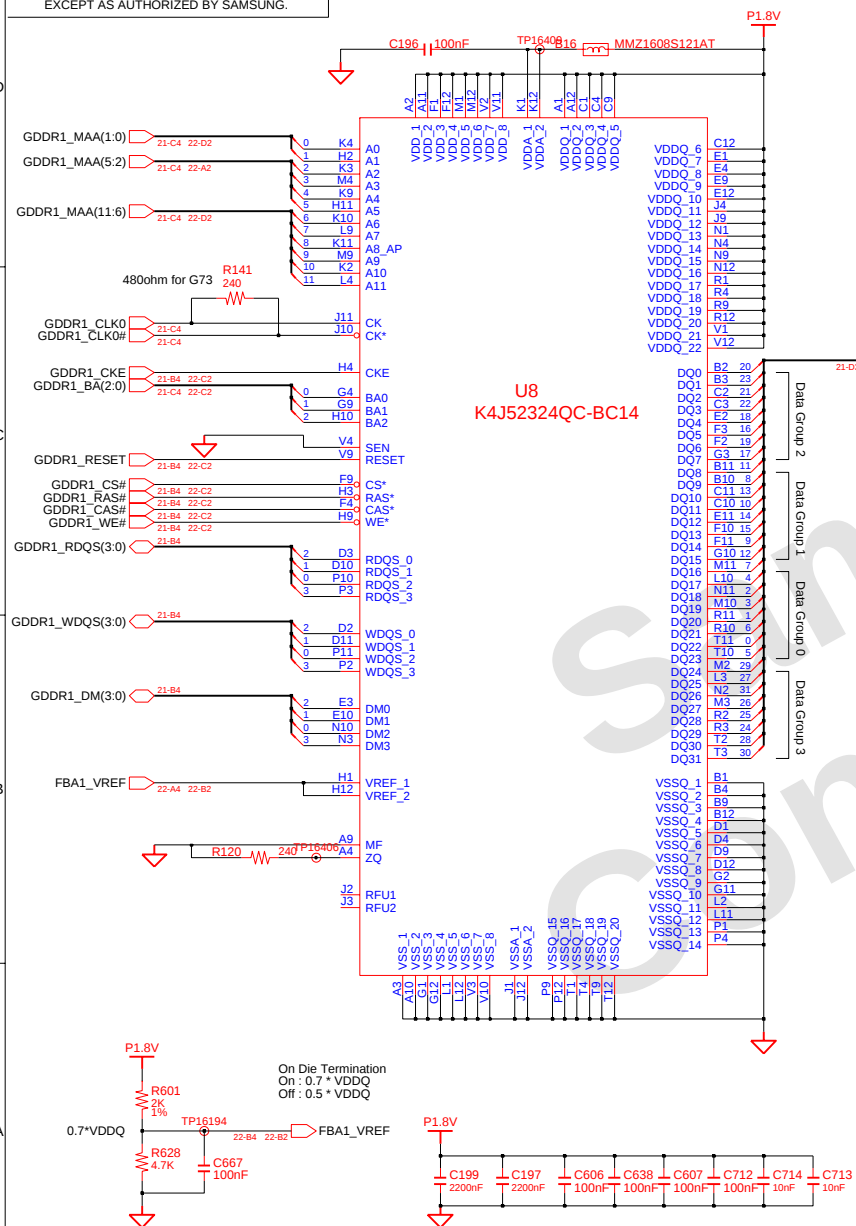


SUB_VENDOR		MIOAD[1]	
0	No Video BIOS ROM		
▶ 1	Video BIOS ROM is present (DEF.) (For merged BIOS)		
RAM_CFG[2:0]		MIOBD[8, 1, 0]	
000	8M × 32 DDR, Monolithic, 2.5V i/O		
001	8M × 32 DDR, Monolithic, 1.8V i/O		
010	16M × 32 DDR, 1.8V i/O Analog DLL (SEC K4D53230F-CC)		
▶ 011	16M × 32 DDR, 1.8V i/O, Hynix Stacked Die (2 × 8M x32)		
100	4M × 32 DDR, 1.8V i/O		
101	Reserved		
110	4M × 32 DDR, 2.5V i/O		
111	Reserved		
RAM_CFG[3]		MIOBD[9]	
▶ 0	Full Width		
1	Half Width		
CRYSTAL[1:0]		MIOBD[6, 5]	
00	13.5MHz		
01	14.318MHz		
▶ 10	27.0MHz (DEF.)		
11	Reserved		
TMVODE[1:0]		MIOAD[10, 7]	
000	SECAM		
001	NTSC (DEF.)		
▶ 010	PAL		
011	VGA		
PCI_DEVID[3:0]		MIOBD[11, 5, 4, 3]	
G72M	0x01D8	▶ NB8M-SE	0x0428
G72MV	0x01D7	NB8M-GS	0x0427
G73M	0x0398		
3GIO_PADCFG[2:0]		MIOBHSYNC, MIOAD[9, 8, 6]	
000	Desktop (DEF.)		
▶ X001	Mobile1 (G72M)	▶ 1000	Mobile
X010	Mobile2 G7x or NV42		
X011	Mobile3		
PEX_PLL_EN_TERM		MIOAD[0]	
▶ 0	Enabled (DEF.)		
1	Disabled		

EXT GFX
All Instances on this Page shoule be NO_STUFF @ Int. Gfx.

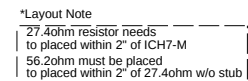
DRAW	ZHOU, JUN	DATE	3/9/2007	TITLE	TORINO 2 MAIN GFX (2)	SAMSUNG		
CHECK	GUO, LEI	DEV. STEP	MP			ELECTRONICS		
APPROVAL	LEE, KEVIN	REV	1.0			PART NO.	BA41-00727/8A	
MODULE CODE	LAST EDIT					March 9, 2007 12:03:21 PM	PAGE	21 OF 53

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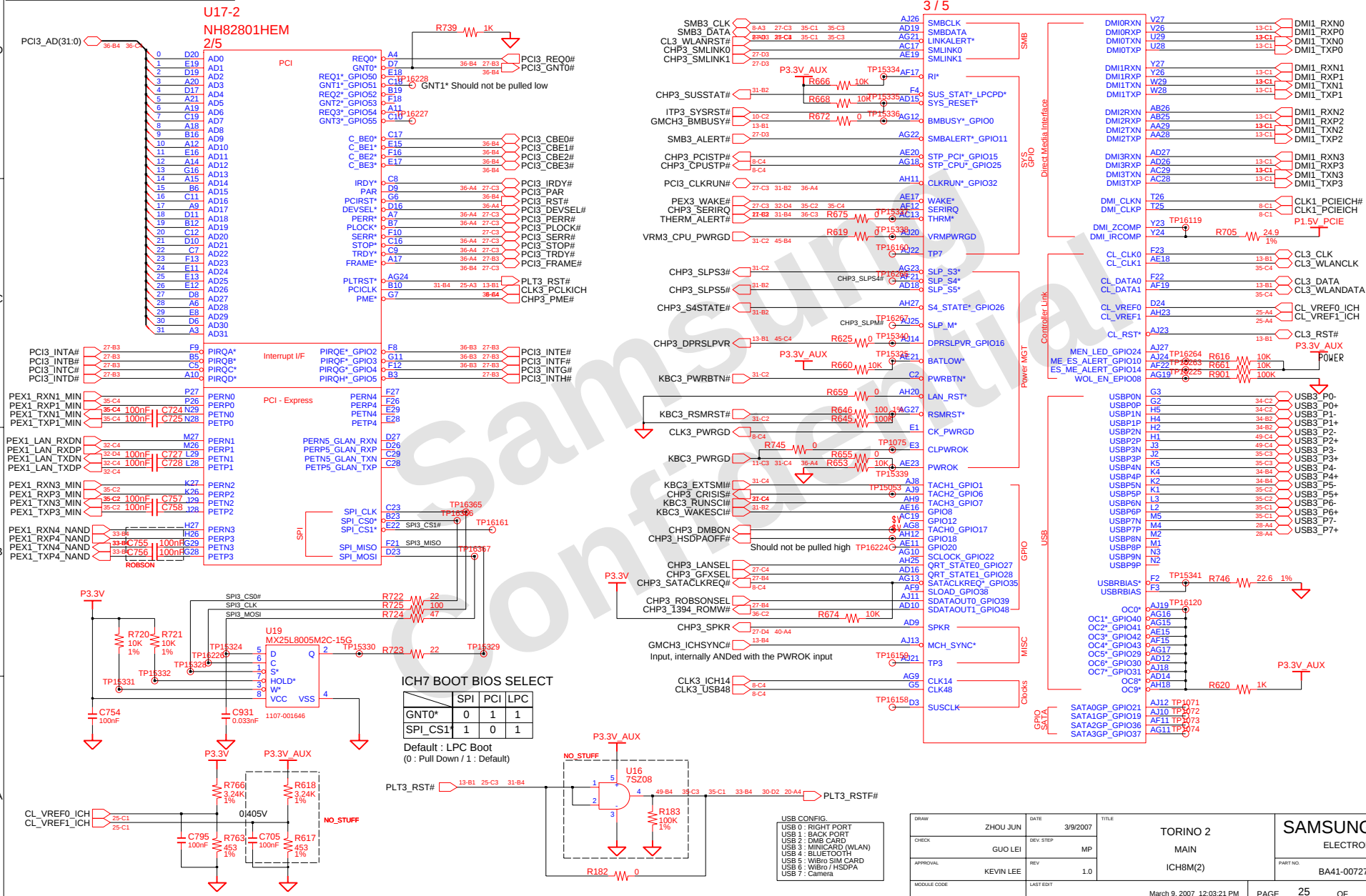
DRAW	ZHOU, JUN	DATE	3/9/2007	TITLE	TORINO 2 MAIN GFX (3)	SAMSUNG ELECTRONICS
CHECK	GUO, LEI	DEV. STEP	MP			
APPROVAL	LEE, KEVIN	REV	1.0			
MODULE CODE	LAST EDIT					
March 9, 2007 12:03:21 PM					PAGE	22 OF 53

DRAW	ZHOU, JUN	DATE	3/9/2007	TITLE	TORINO 2 MAIN GFX (4)	SAMSUNG ELECTRONICS
CHECK	GUO, LEI	DEV. STEP	MP			
APPROVAL	LEE, KEVIN	REV	1.0			
MODULE CODE		LAST EDIT		March 9, 2007 12:03:21 PM		PAGE 23 OF 53

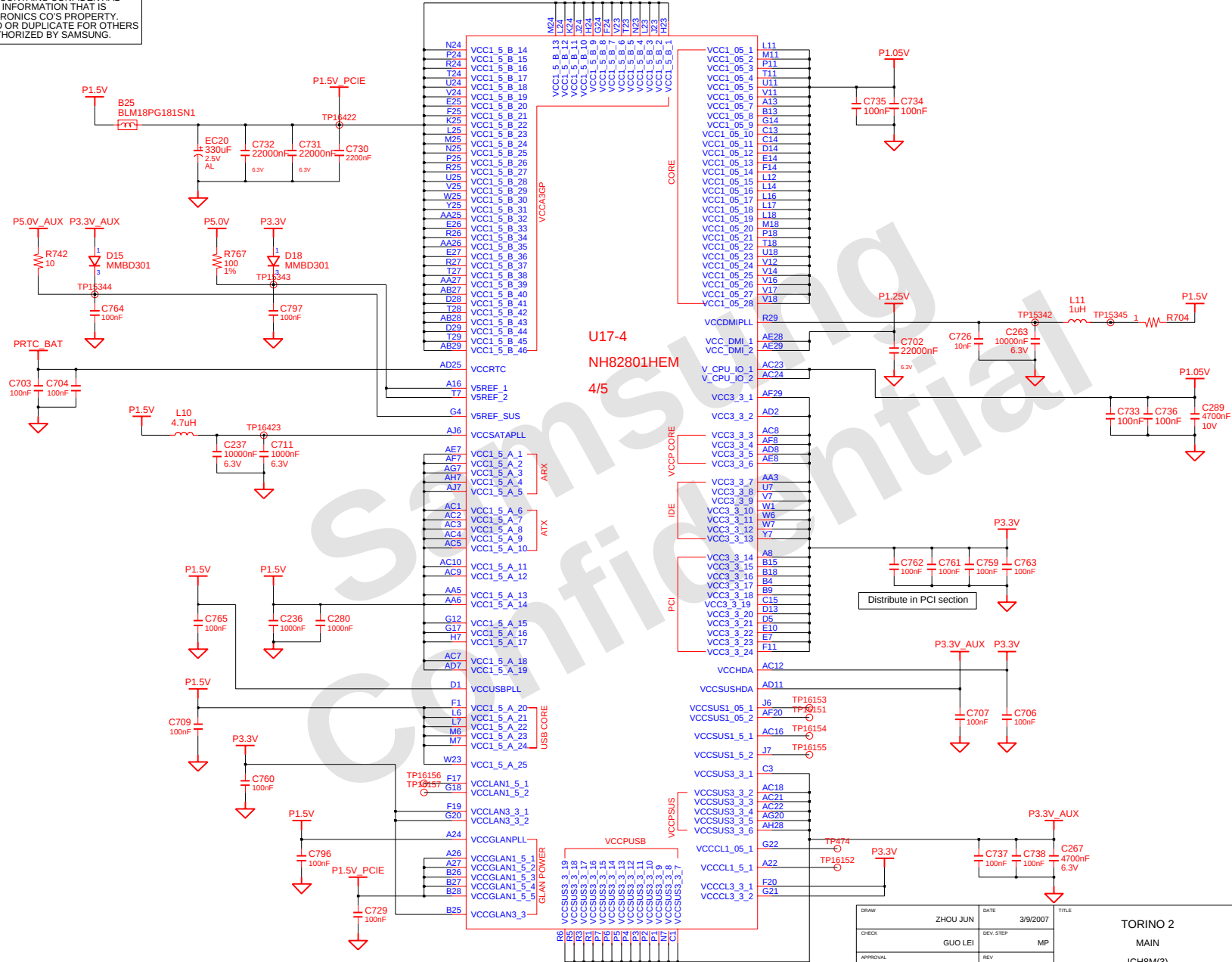
D:/users/mentor/Torino2/SR/T2 SR 0309

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

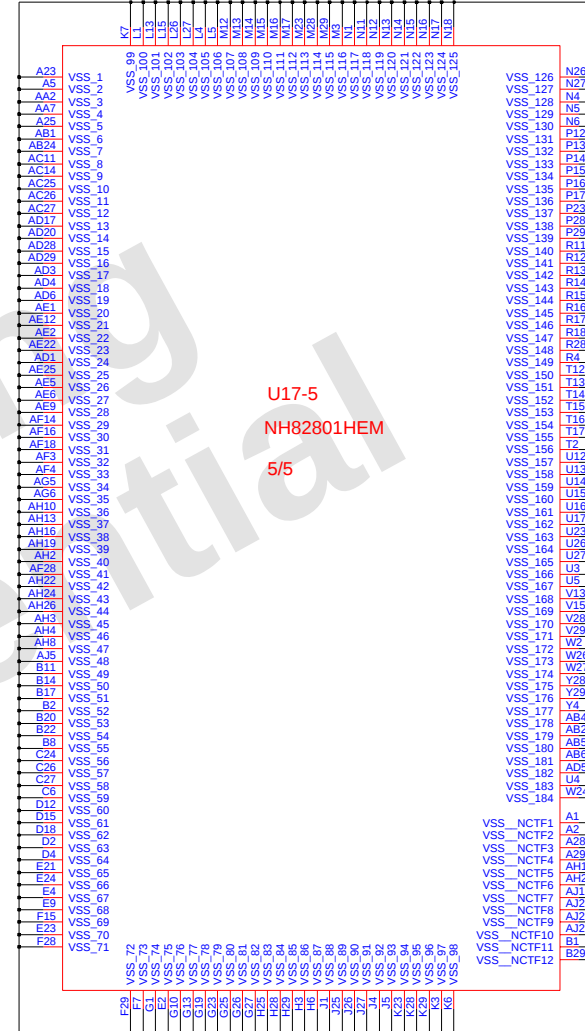
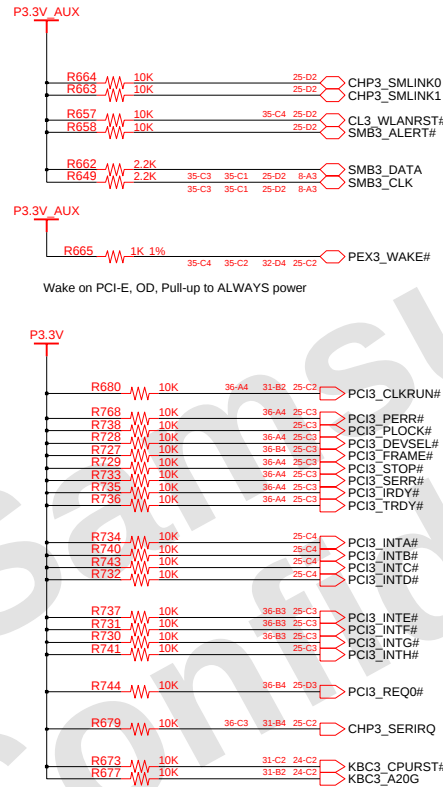
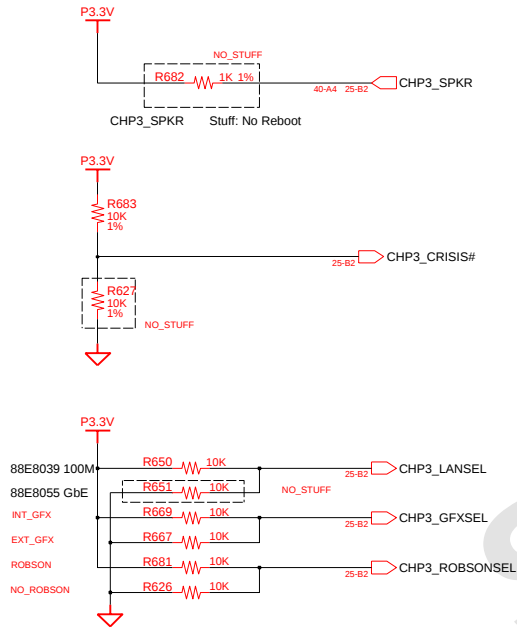


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DRAW	ZHOU JUN	DATE	3/9/2007	TITLE	TORINO 2 MAIN ICH8M(3)	SAMSUNG ELECTRONICS
CHECK	GUO LEI	DEV STEP	MP			PART NO. BA41-00727/8A
APPROVAL	KEVIN LEE	REV	1.0			
MODULE CODE		LAST EDIT				
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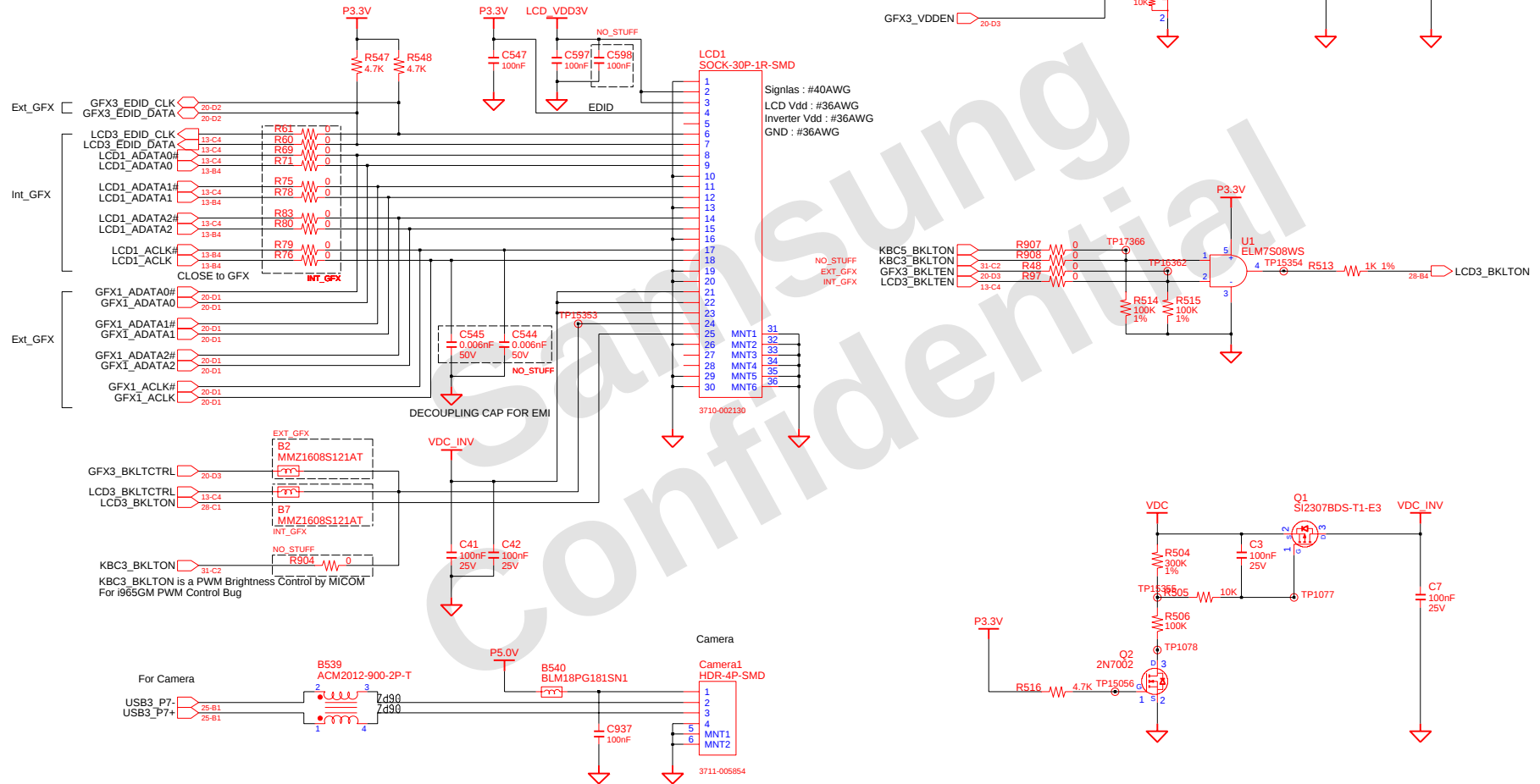
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DRAW	ZHOU JUN	DATE	3/9/2007	TITLE	TORINO 2	SAMSUNG
CHECK	GUO LEI	DEV. STEP	MP	MAIN	MAIN	ELECTRONICS
APPROVAL	KEVIN LEE	REV	1.0	ICH8M(4)	PART NO.	BA41-00727/8A
MODULE CODE		LAST EDIT			PAGE	27 OF 53
					March 9, 2007 12:03:21 PM	

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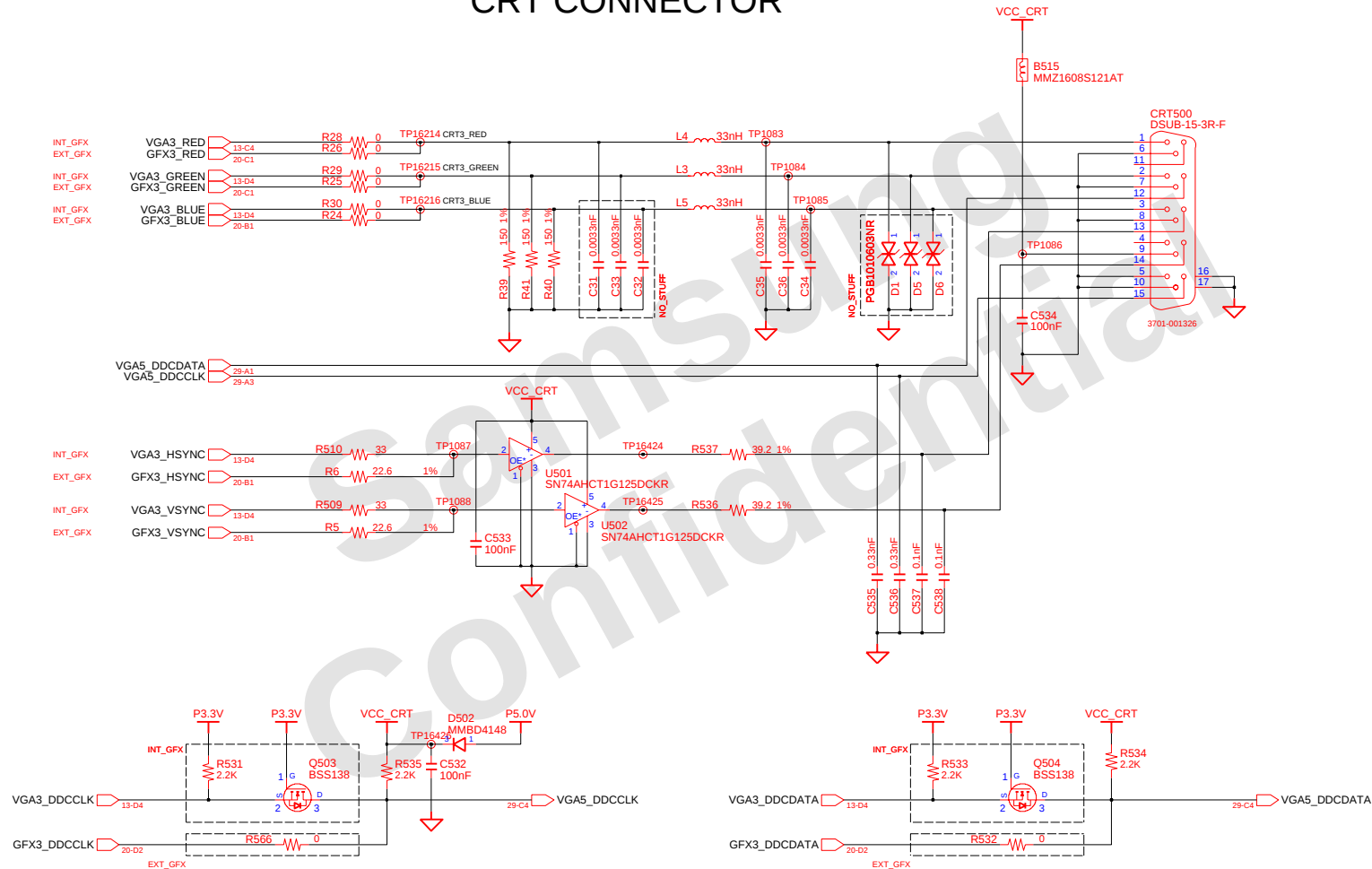
WXGA LCD CONNECTOR



DRAW	ZHOU JUN	DATE	3/9/2007	TITLE	TORINO 2	SAMSUNG
CHECK	GUO LEI	DEV. STEP	MP	MAIN	MAIN	ELECTRONICS
APPROVAL	KEVIN LEE	REV	1.0	LVDS	LVDS	PART NO.
MODULE CODE		LAST EDIT	March 9, 2007 12:03:21 PM	PAGE	28	BA41-00727/8A
				OF	53	

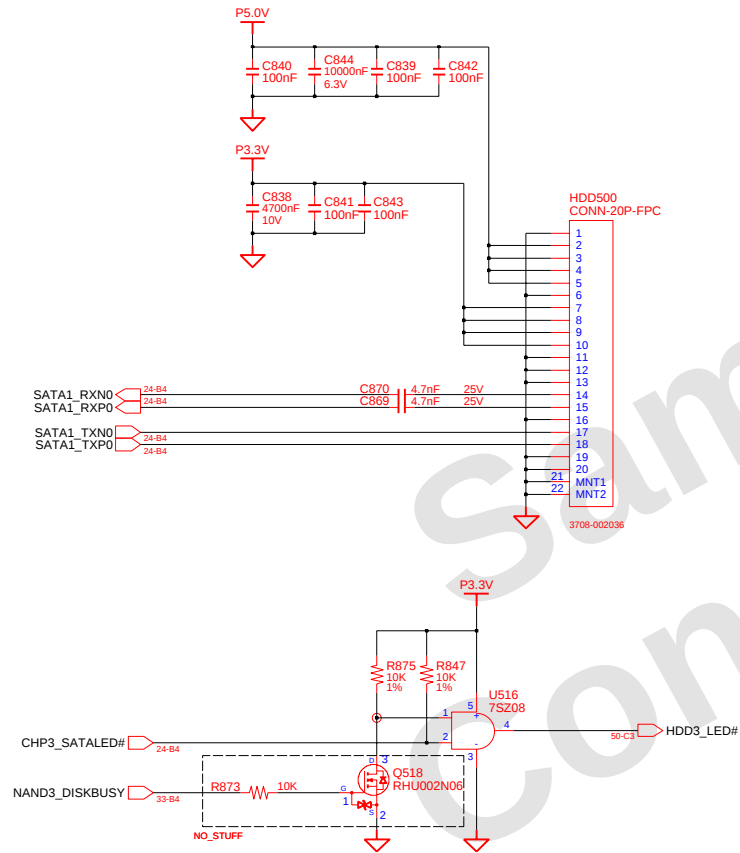
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CRT CONNECTOR

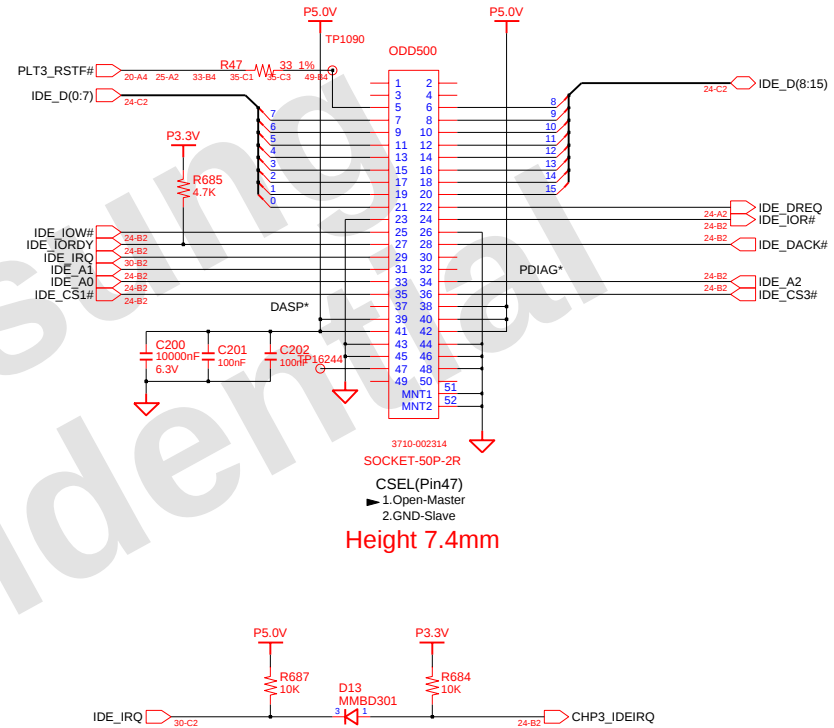


DRAW	ZHOU JUN	DATE	3/9/2007	TITLE	TORINO 2	SAMSUNG
CHECK	GUO LEI	DEV. STEP	MP	MAIN		ELECTRONICS
APPROVAL	KEVIN LEE	REV	1.0	CRT		PART NO.
MODULE CODE		LAST EDIT				BA41-00727/8A
				March 9, 2007 12:03:21 PM	PAGE	29 OF 53

Main to HDD



Main to ODD



DRAW	ZHOU JUN	DATE	3/9/2007	TITLE	TORINO 2	SAMSUNG
CHECK	GUO LEI	DEV. STEP	MP	MAIN	ELECTRONICS	
APPROVAL	KEVIN LEE	REV	1.0	IDE		
MODULE CODE		LAST EDIT				
			March 9, 2007 12:03:21 PM	PAGE	30	OF 53

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U15 H8S-2110B
0903-001439

MICOM RESET

Q23-1 SM6K2
Q25-1 SM6K2

Q23-2 SM6K2

Q25-2 SM6K2

Q25-3 SM6K2

Q25-4 SM6K2

Q25-5 SM6K2

Q25-6 SM6K2

Q25-7 SM6K2

Q25-8 SM6K2

Q25-9 SM6K2

Q25-10 SM6K2

Q25-11 SM6K2

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Q25-185 SM6K2

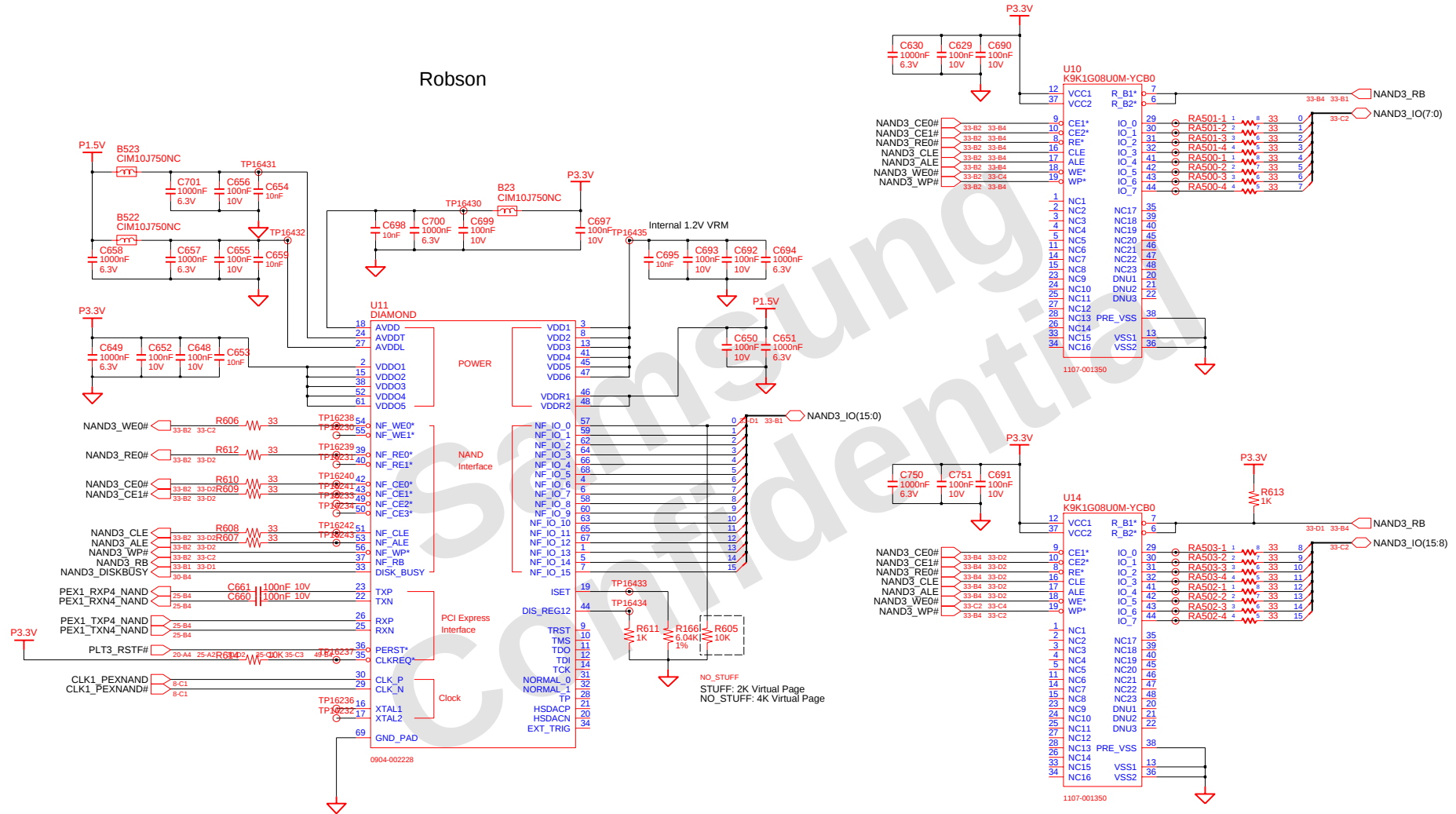
Q25-186 SM6K2

Q25-187 SM6K2

Q25-1

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Robson

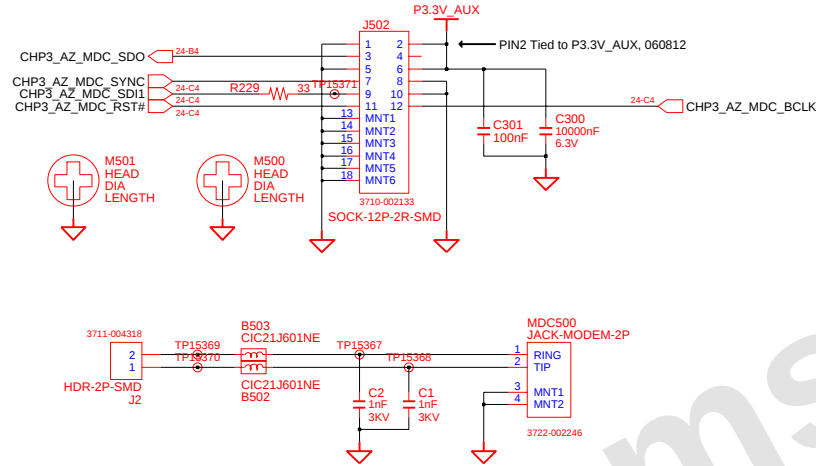


ROBSON
All instances on this page should be NO_STUFF if ROBSON is N/A

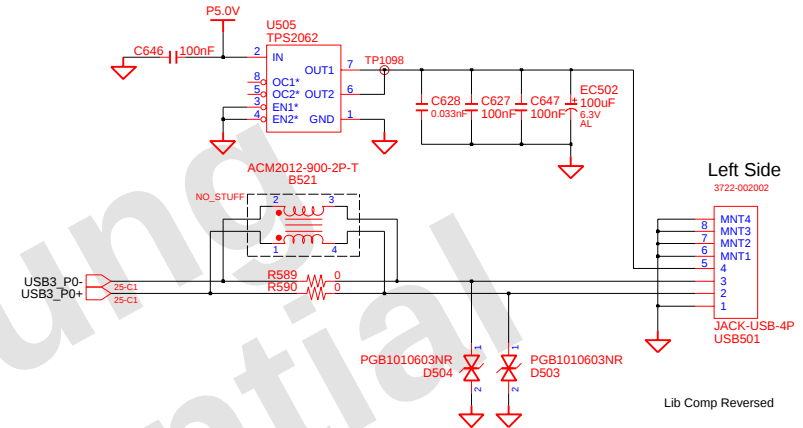
DRAW	ZHOU JUN	DATE	3/9/2007	TITLE	TORINO 2	SAMSUNG
CHECK	GUO LEI	DEV. STEP	MP	MAIN	MAIN	ELECTRONICS
APPROVAL	KEVIN LEE	REV	1.0	ROBSON	PART NO.	BA41-00727/8A
MODULE CODE		LAST EDIT				
				March 9, 2007 12:03:21 PM	PAGE	33 OF 53

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MDC connector

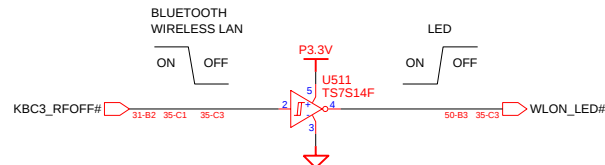
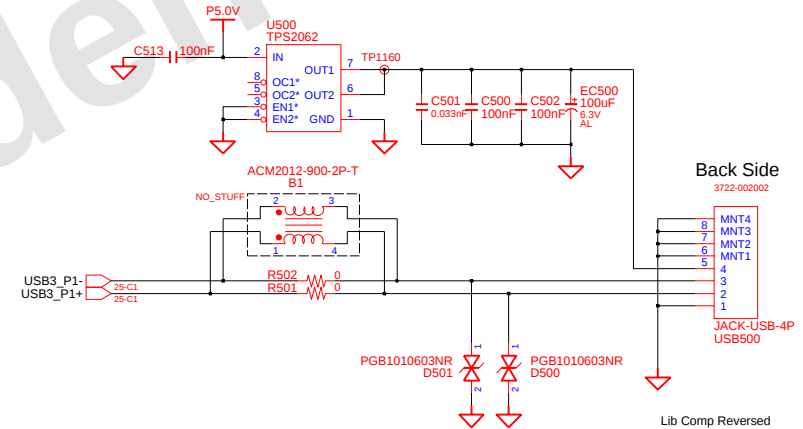
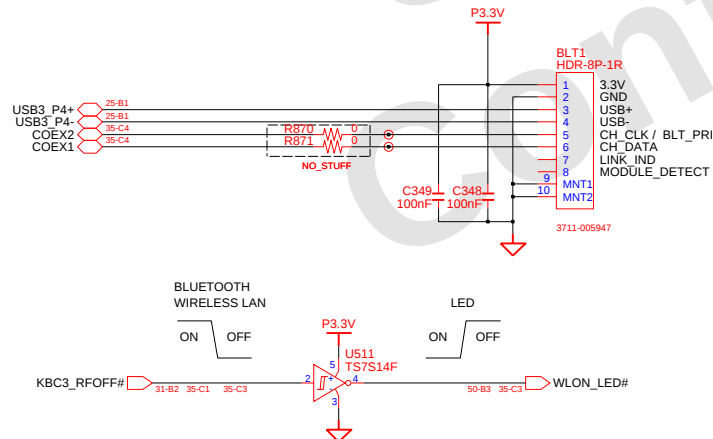


USB Port



BLUETOOTH

Bluetooth 2.0 Standard



DRAW	ZHOU JUN	DATE	3/9/2007	TITLE	TORINO 2	SAMSUNG
CHECK	GUO LEI	DEV. STEP	MP	MAIN	MAIN	ELECTRONICS
APPROVAL	KEVIN LEE	REV	1.0	USB, MDC & BLUETOOTH	PART NO.	BA41-00727/8A
MODULE CODE		LAST EDIT	March 9, 2007 12:03:21 PM		PAGE	34 OF 53

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Internal 1.8V VRM

U25-1
R5C843
1/2

TP1101

TP15373

TP1104

TP16268

TP15040

TP15041

TP14997

TP15002

TP15003

TP15004

TP15005

TP14998

TP15000

TP15001

TP1102

TP1105

TP1103

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TP1486

TP1487

The image shows a detailed PCB layout for the R5C843 component. The layout includes various components such as capacitors (C304, C313, C312, C310, C314, C303, C307, C306, C309, C823, C822, C298), resistors (R231, R233, R232, R230, R227, R226, R225, R844, R843, R842, R841), and a crystal (Y501). The layout also shows the placement of these components relative to the R5C843 component, with labels like "Place these components close to R5C843" and "Place this choke coil close to 1394 Connector".

The layout includes a list of components and their values, such as:

- C304: 1nF
- C313: 1nF
- C312: 10nF
- C310: 100nF
- C314: 1000nF, 6.3V
- C303: 10nF
- C307: 330nF
- C306: 270pF
- C309: 10nF
- C823: 0.01nF, 24.576MHz
- C822: 0.01nF, 0.5pF
- C298: 0.033nF
- R231: 56, 1%
- R233: 56, 1%
- R232: 56, 1%
- R230: 56, 1%
- R227: 33, 1%
- R226: 49.9, 1%
- R225: NO_STUFF
- R844: 0
- R843: 0
- R842: 0
- R841: 0

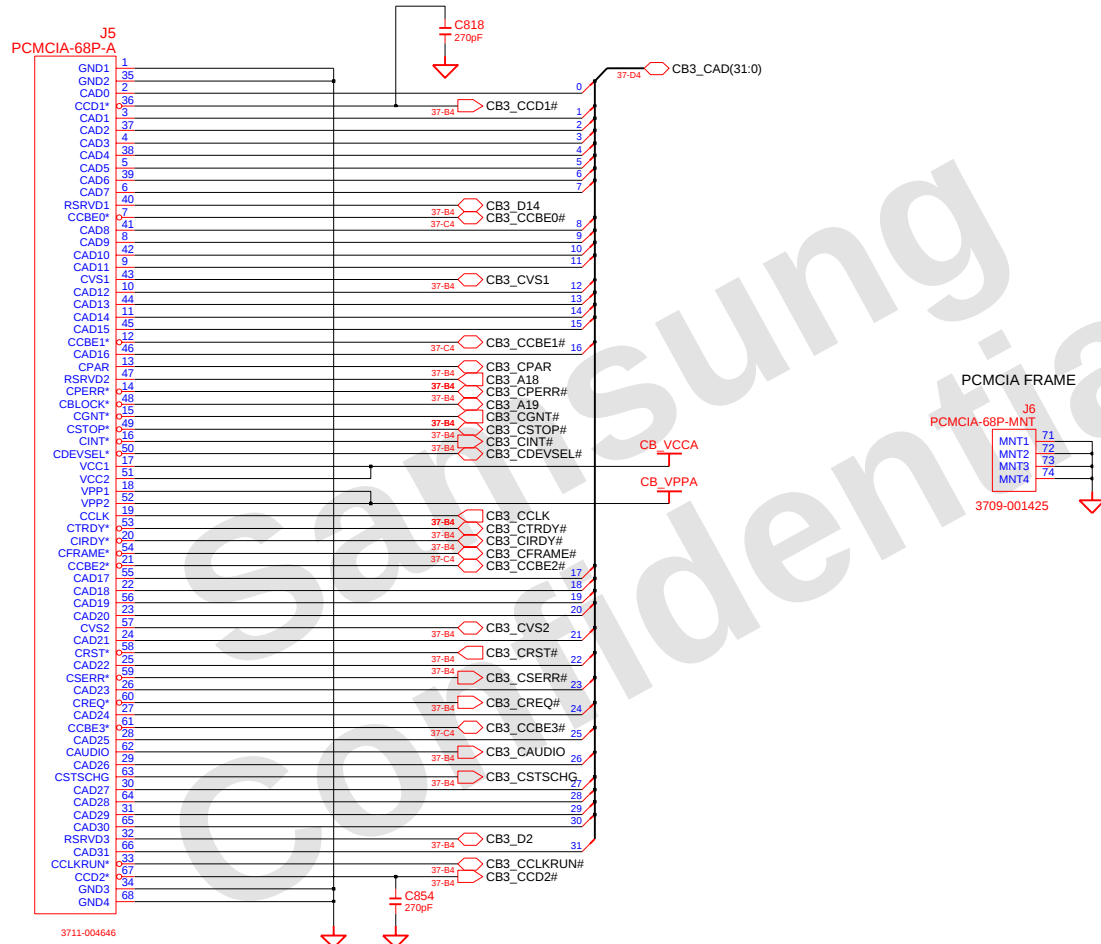
The layout also shows the placement of these components relative to the R5C843 component, with labels like "Place these components close to R5C843" and "Place this choke coil close to 1394 Connector".

The layout includes a list of components and their values, such as:

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- R227: 33, 1%
- R226: 49.9, 1%
- R225: NO_STUFF
- R844: 0
- R843: 0
- R842: 0
- R841: 0

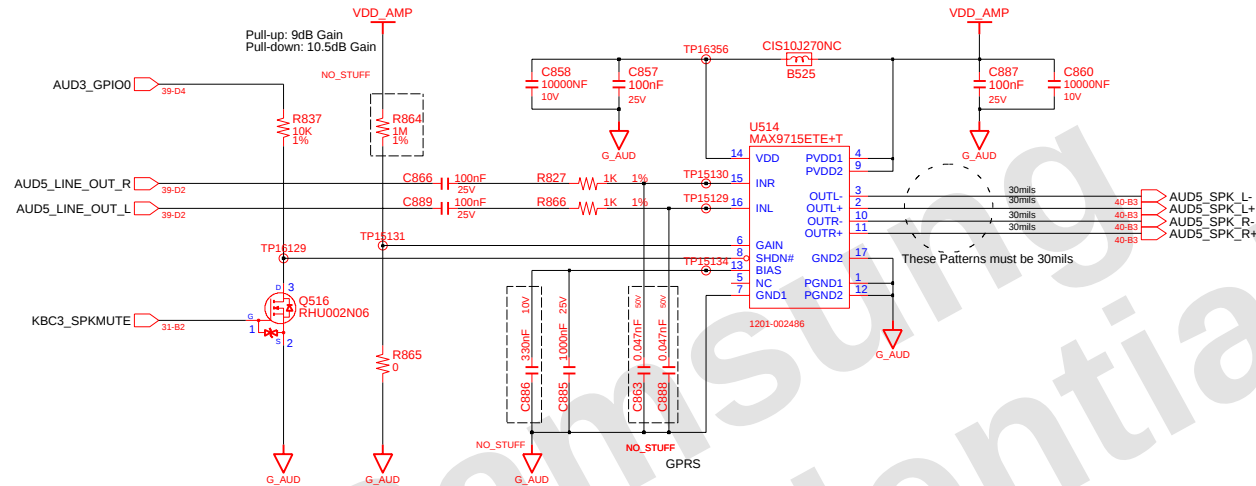
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CHECK	GUO LEI	DEV-STEP	MP			
APPROVAL	KEVIN LEE	REV	1.0			
MODULE CODE			LAST EDIT			
				PART NO. BA41-007278A		

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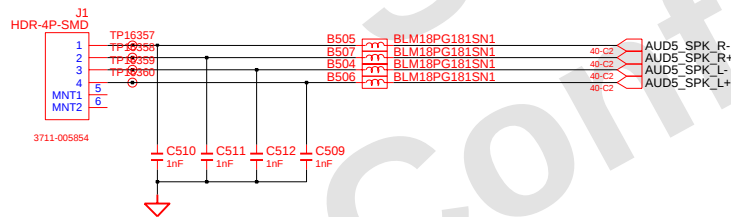


DRAW	ZHOU JUN	DATE	3/9/2007	TITLE	TORINO 2	SAMSUNG
CHECK	GUO LEI	DEV. STEP	MP	MAIN	CARDBUS (3)	ELECTRONICS
APPROVAL	KEVIN LEE	REV	1.0			PART NO. BA41-00727/8A
MODULE CODE		LAST EDIT	March 9, 2007 12:03:21 PM	PAGE	38	OF 53

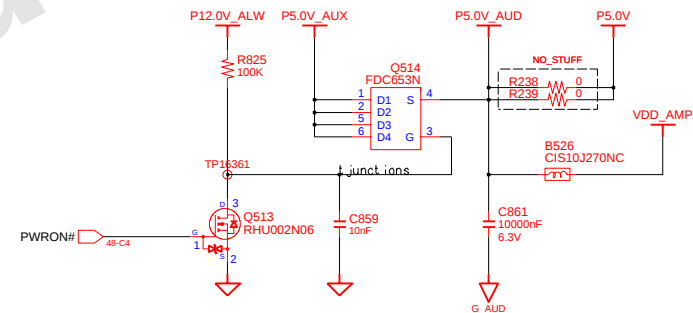
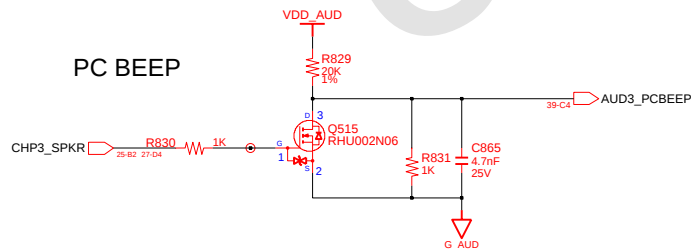
AUDIO AMP



INTERNAL STEREO SPEAKERS

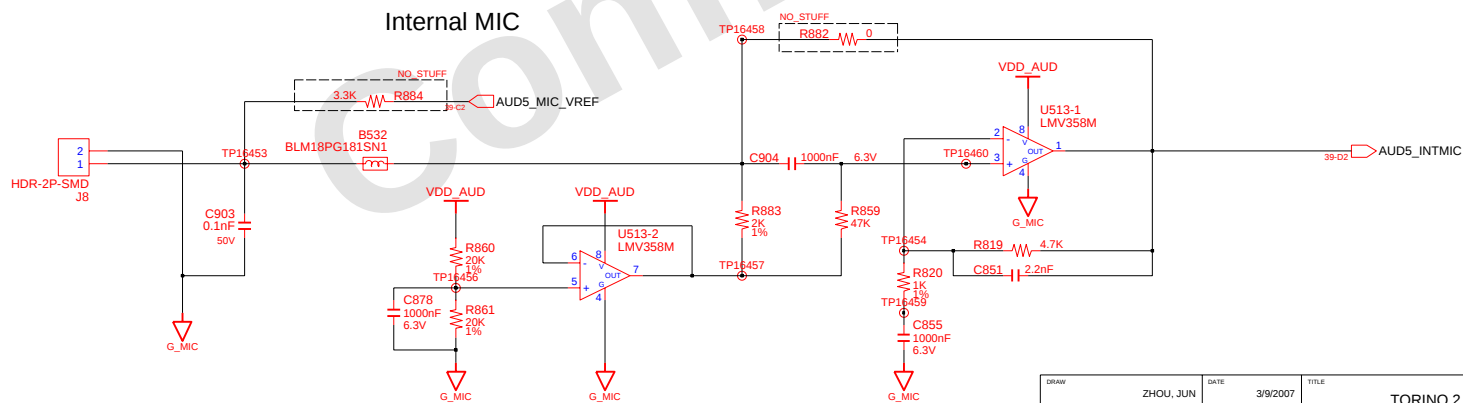
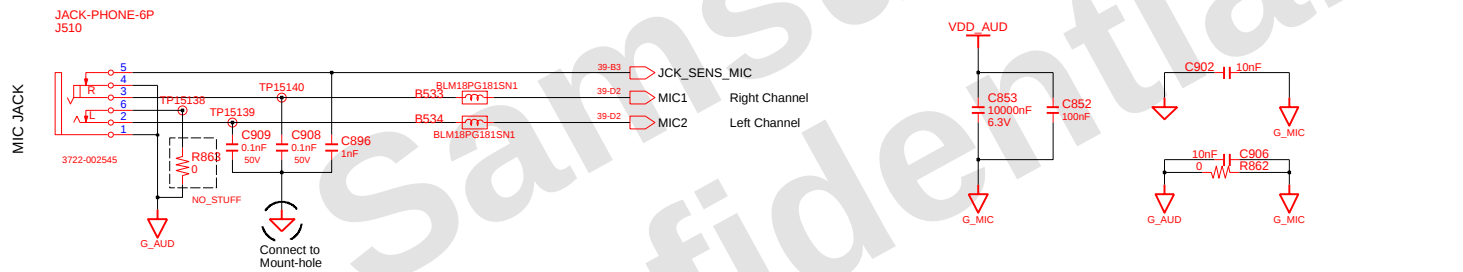
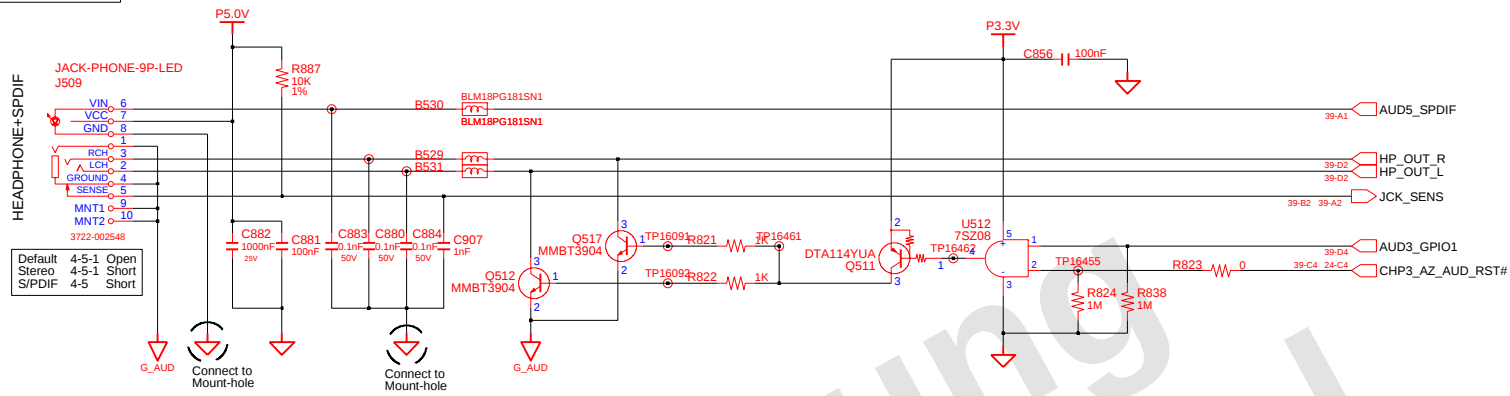


PC BEEP



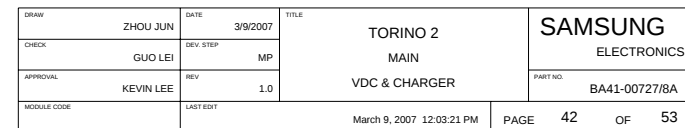
DRAW	ZHOU JUN	DATE	3/9/2007	TITLE	TORINO 2	SAMSUNG
CHECK	GUO LEI	DEV. STEP	MP	MAIN	MAIN	ELECTRONICS
APPROVAL	KEVIN LEE	REV	1.0	AUDIO AMPLIFIER	PART NO.	BA41-00727/8A
MODULE CODE		LAST EDIT	March 9, 2007 12:03:21 PM	PAGE	40	OF 53

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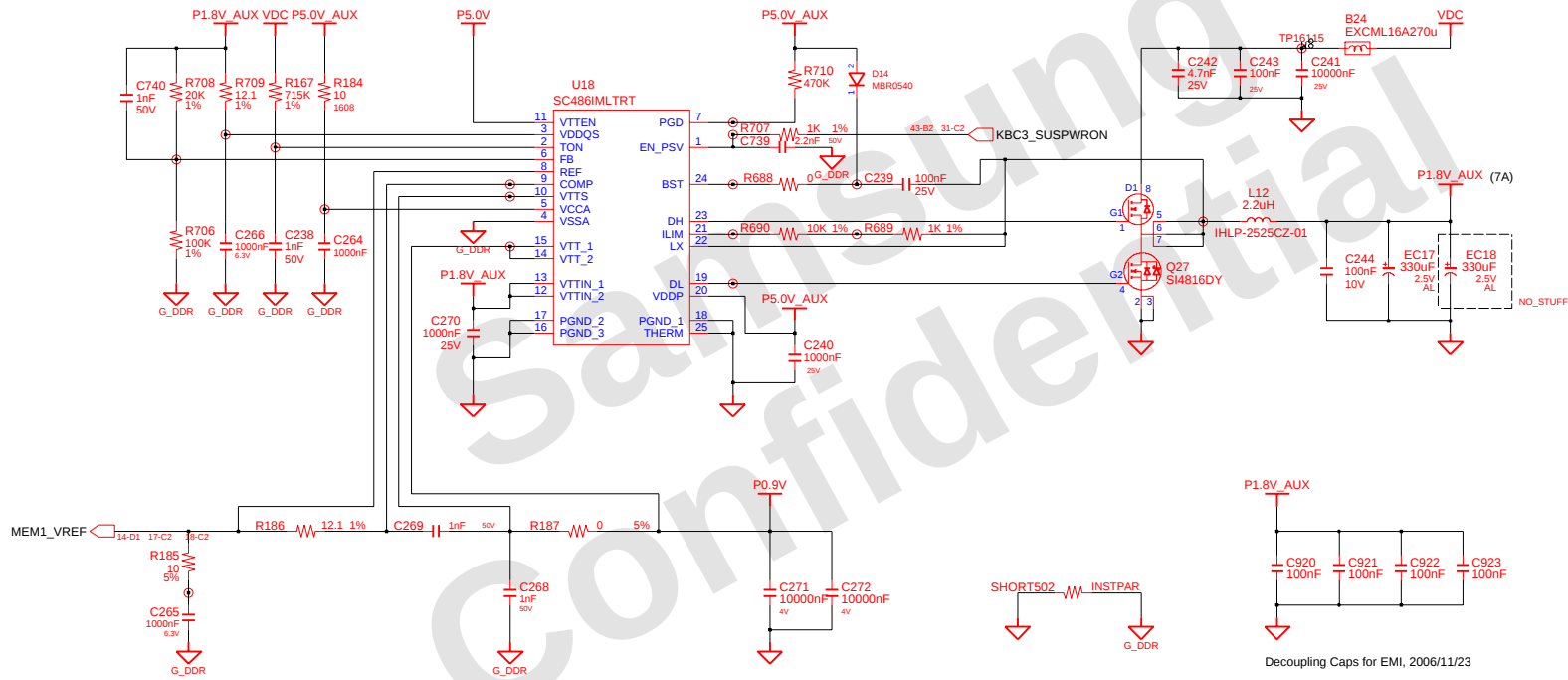


DRAW	ZHOU, JUN	DATE	3/9/2007	TITLE	TORINO 2	SAMSUNG
CHECK	GUO, LEI	DEV. STEP	MP	MAIN	MAIN	ELECTRONICS
APPROVAL	LEE, KEVIN	REV	1.0	AUDIO JACK	PART NO.	BA41-00727/8A
MODULE CODE		LAST EDIT	March 9, 2007 12:03:21 PM	PAGE	41	OF 53

CHARGER & POWER MANAGEMENT

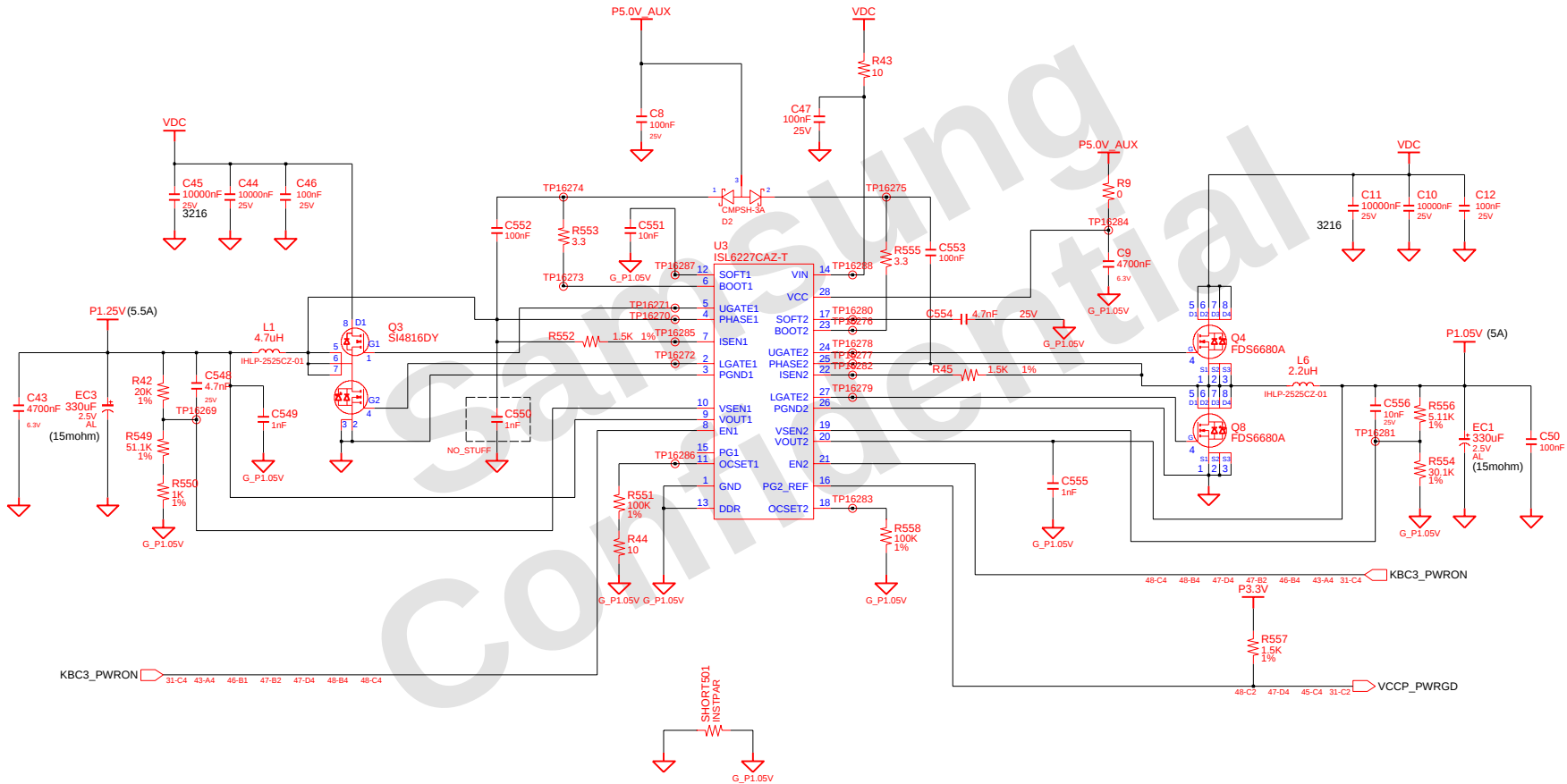


DDR2 POWER



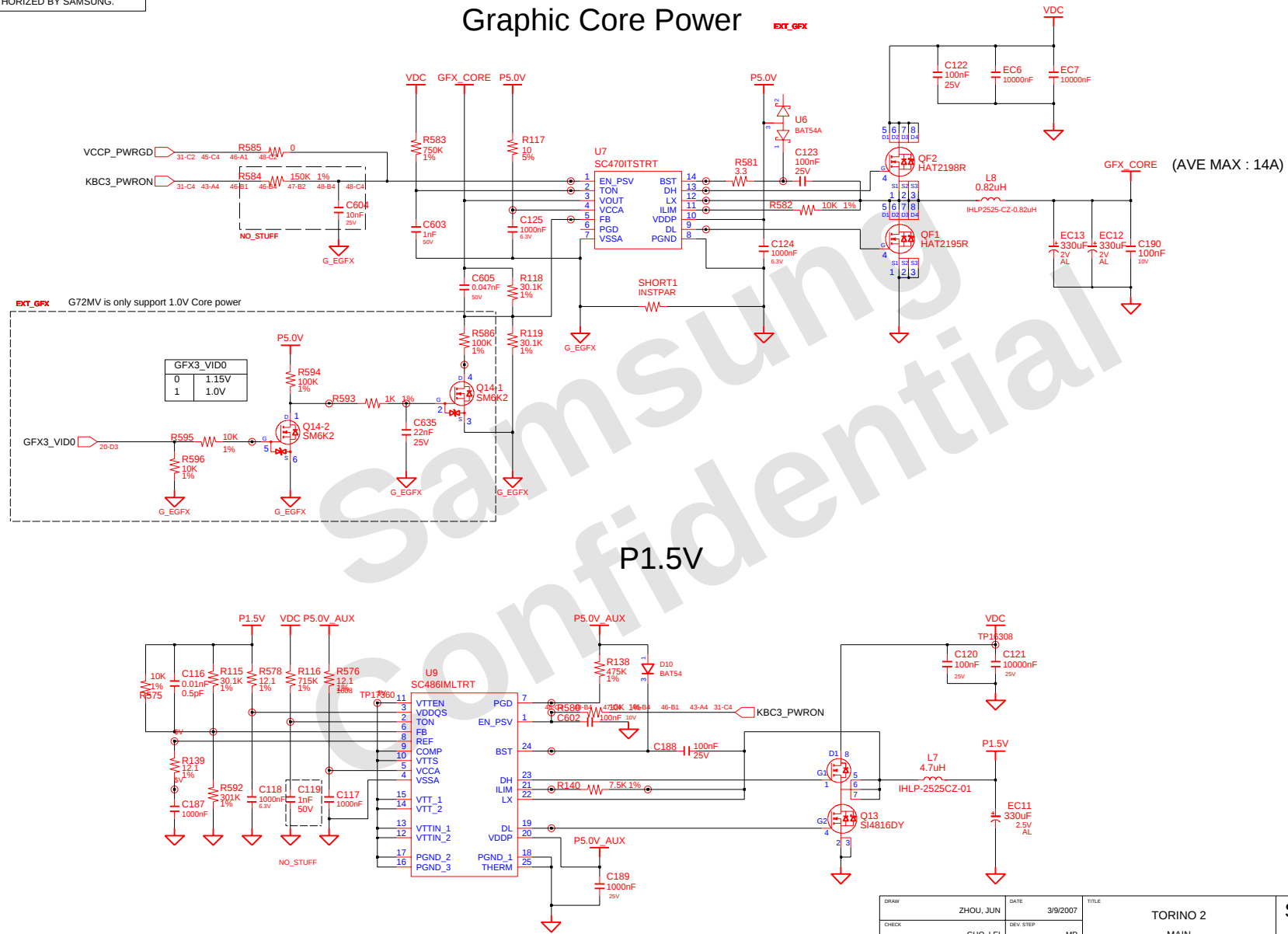
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CHECK	GUO LEI	DEV. STEP	MP			PART NO. BA41-00727/8A
APPROVAL	KEVIN LEE	REV	1.0			
MODULE CODE		LAST EDIT	March 9, 2007 12:03:21 PM	PAGE	44	OF 53

P1.25V & P1.05V



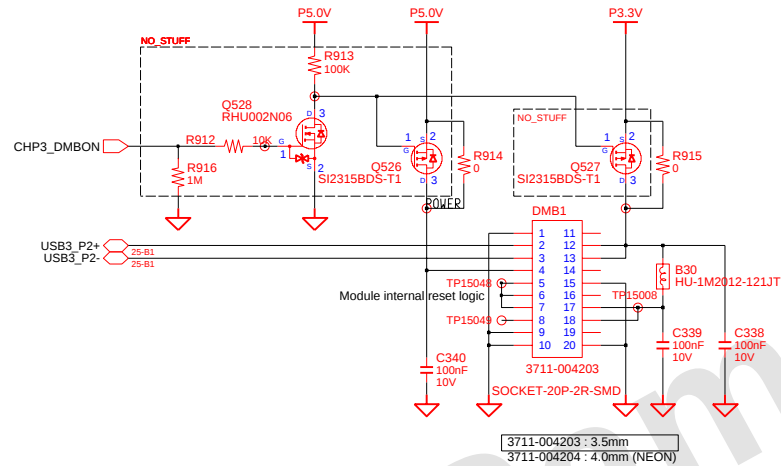
DRAW	ZHOU JUN	DATE	3/9/2007	TORINO 2 MAIN P1.25V & P1.05V		SAMSUNG ELECTRONICS	
CHECK	GUO LEI	DEV. STEP	MP				
APPROVAL	KEVIN LEE	REV	1.0				
				PART NO.		BA41-00727/8A	
MODULE CODE		LAST EDIT		March 9, 2007 12:03:21 PM		PAGE	46 OF 53

Graphic Core Power

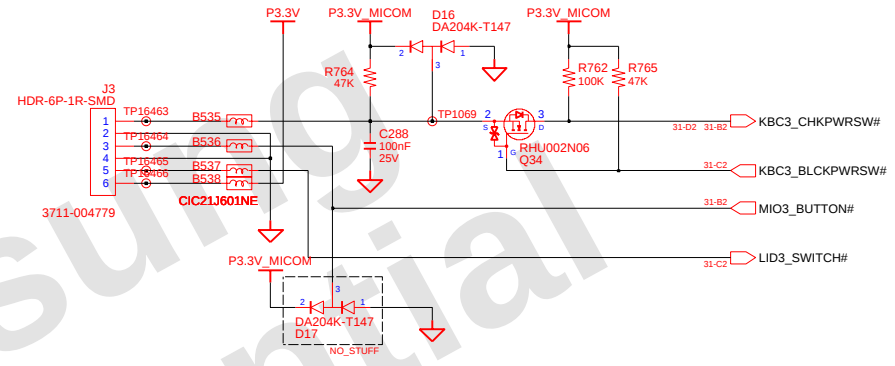


DRAW	ZHOU, JUN	DATE	3/9/2007	TITLE	TORINO 2	SAMSUNG
CHECK	GUO, LEI	DEV STEP	MP	MAIN	MAIN	ELECTRONICS
APPROVAL	LEE, KEVIN	REV	1.0	GFX_CORE & P1.5V	PART NO.	BA41-00727/8A
MODULE CODE		LAST EDIT	March 9, 2007 12:03:21 PM	PAGE	47	OF 53

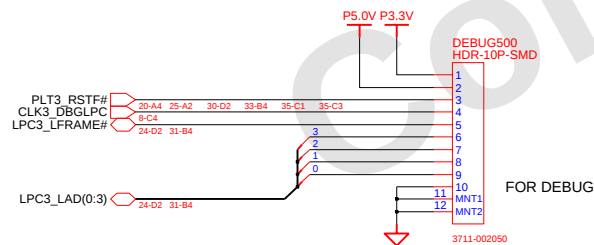
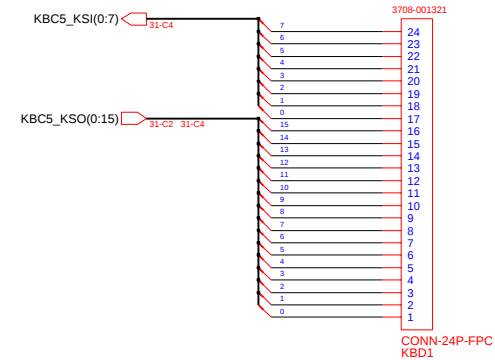
OPTION: DMB INTERFACE



Power Switch Connector

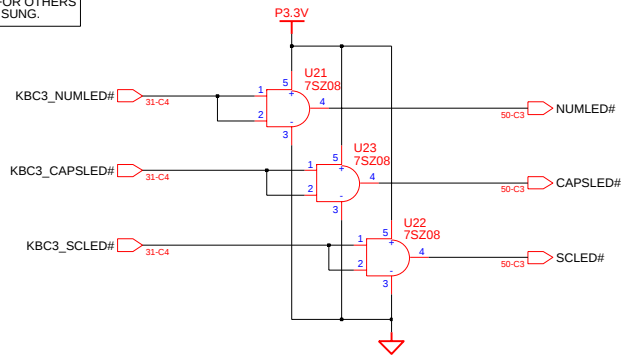


KEYBOARD

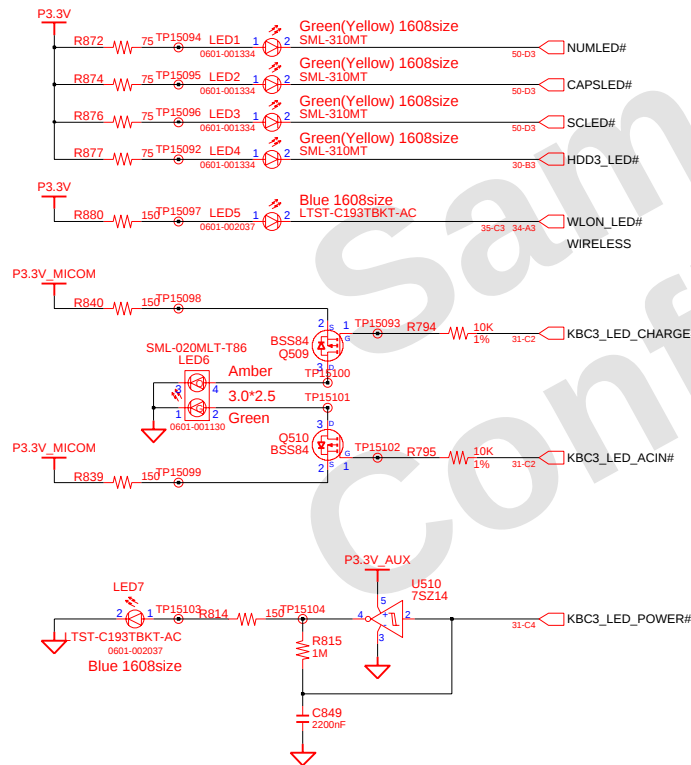


DRAW	ZHOU JUN	DATE	3/9/2007	TITLE	TORINO 2	SAMSUNG
CHECK	GUO LEI	DEV. STEP	MP	MAIN	MAIN	ELECTRONICS
APPROVAL	KEVIN LEE	REV	1.0	DMB & KBD & DEBUG & POWER S/W	PART NO.	BA41-00727/8A
MODULE CODE		LAST EDIT	March 9, 2007 12:03:21 PM	PAGE	49	OF 53

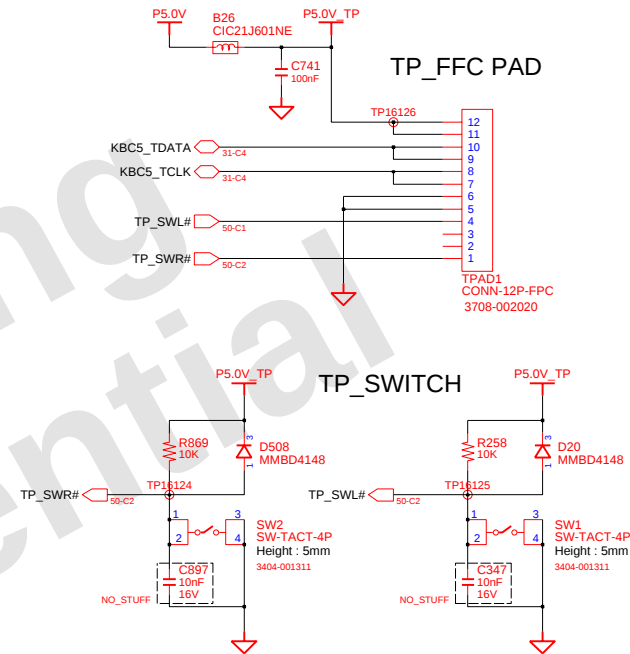
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LEDS



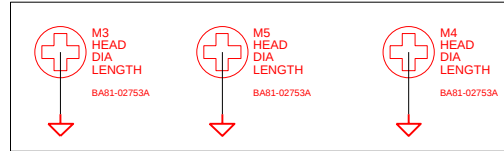
TOUCH PAD



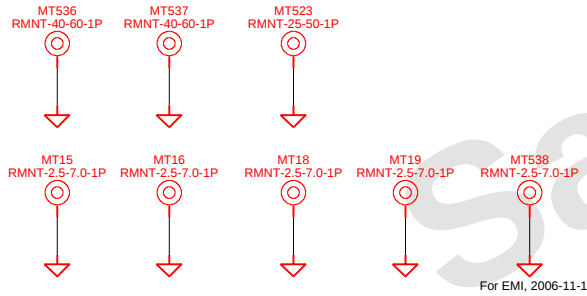
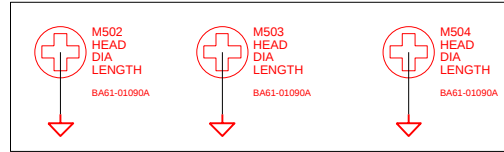
DRAW	ZHOU JUN	DATE	3/9/2007	TITLE	TORINO 2	SAMSUNG
CHECK	GUO LEI	DEV. STEP	MP	MAIN	MAIN	ELECTRONICS
APPROVAL	KEVIN LEE	REV	1.0	TOUCH PAD & LEDES	PART NO.	BA41-00727/8A
MODULE CODE		LAST EDIT	March 9, 2007 12:03:21 PM	PAGE	50	OF 53

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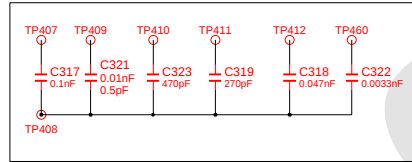
DMB-NUT



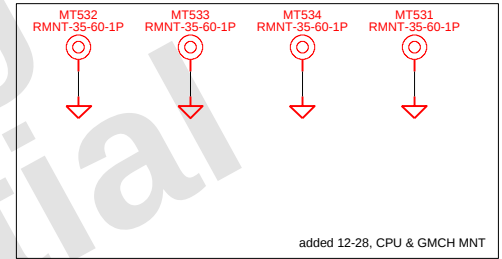
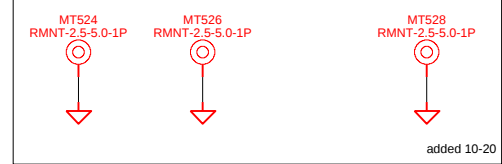
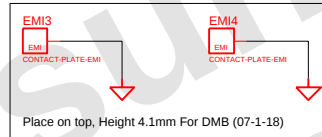
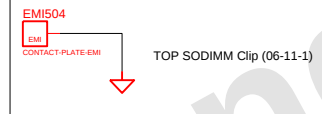
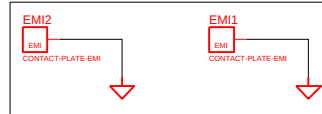
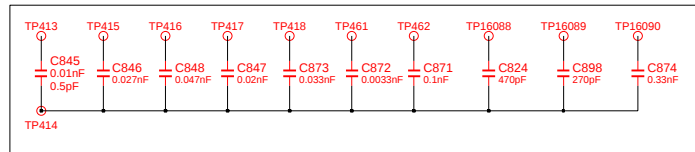
NUT for RHE, Locate on TOP of PCB



1 ~ 499 SIDE



500 ~ SIDE



REV1
1 O
2 O O3

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

DRAW	ZHOU JUN	DATE	3/9/2007	TITLE	TORINO 2	SAMSUNG ELECTRONICS
CHECK	GUO LEI	DEV. STEP	MP		MAIN	
APPROVAL	KEVIN LEE	REV	1.0		MOUNT HOLE	
MODULE CODE		LAST EDIT	March 9, 2007 12:03:21 PM	PAGE	51	OF 53

[illegible]

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REVISION HISTORY

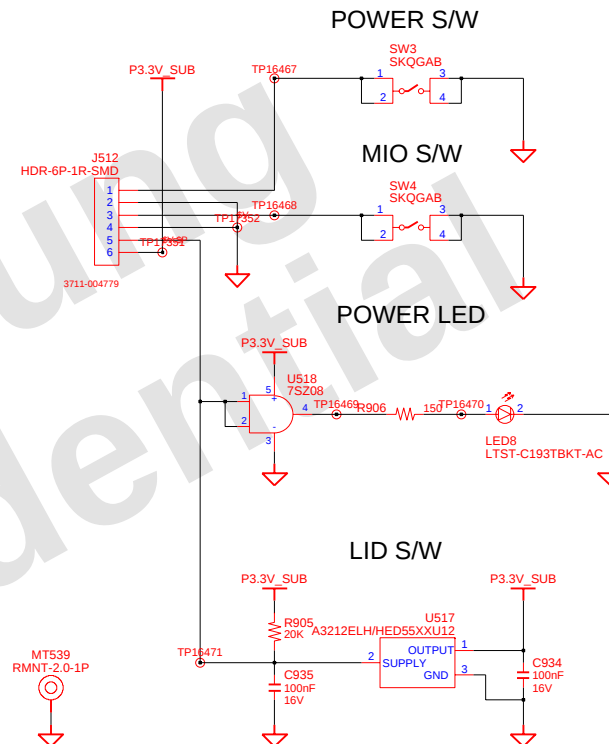
REVISION	DATE	NO.#	CONTENTS
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NOTES

Note1. Schematic Revision: MP 1.0.0
Development Stage
PCB Version
Schematic Version

Note2. PCB SEC Code
Vendor: SGCE P/N: BA41-??????
Vendor: TPT P/N: BA41-??????

ON TOP BOARD



DRAW	ZHOU JUN	DATE	3/9/2007	TITLE	TORINO 2	SAMSUNG ELECTRONICS
CHECK	GUO LEI	DEV. STEP	MP	MAIN		
APPROVAL	KEVIN LEE	REV	1.0	REVISION HISTORY		
MODULE CODE		LAST EDIT	March 9, 2007 12:03:21 PM			
						PAGE 53 OF 53