

XI'AN-MVI

PCB Thickness:1.1mm

CPU :INTEL MEROM/PENRYN
Chip Set :INTEL Montevina Platform
Remarks :GM45 INTERNAL GFX
2 SODIMMs DDR2

Model Name : XIAN-MVI
PBA Name : MAIN
PCB Code : BA41-00964/5/6A
Dev. Step : MP
Revision : 1.0
T.R. Date : 2008.08.26

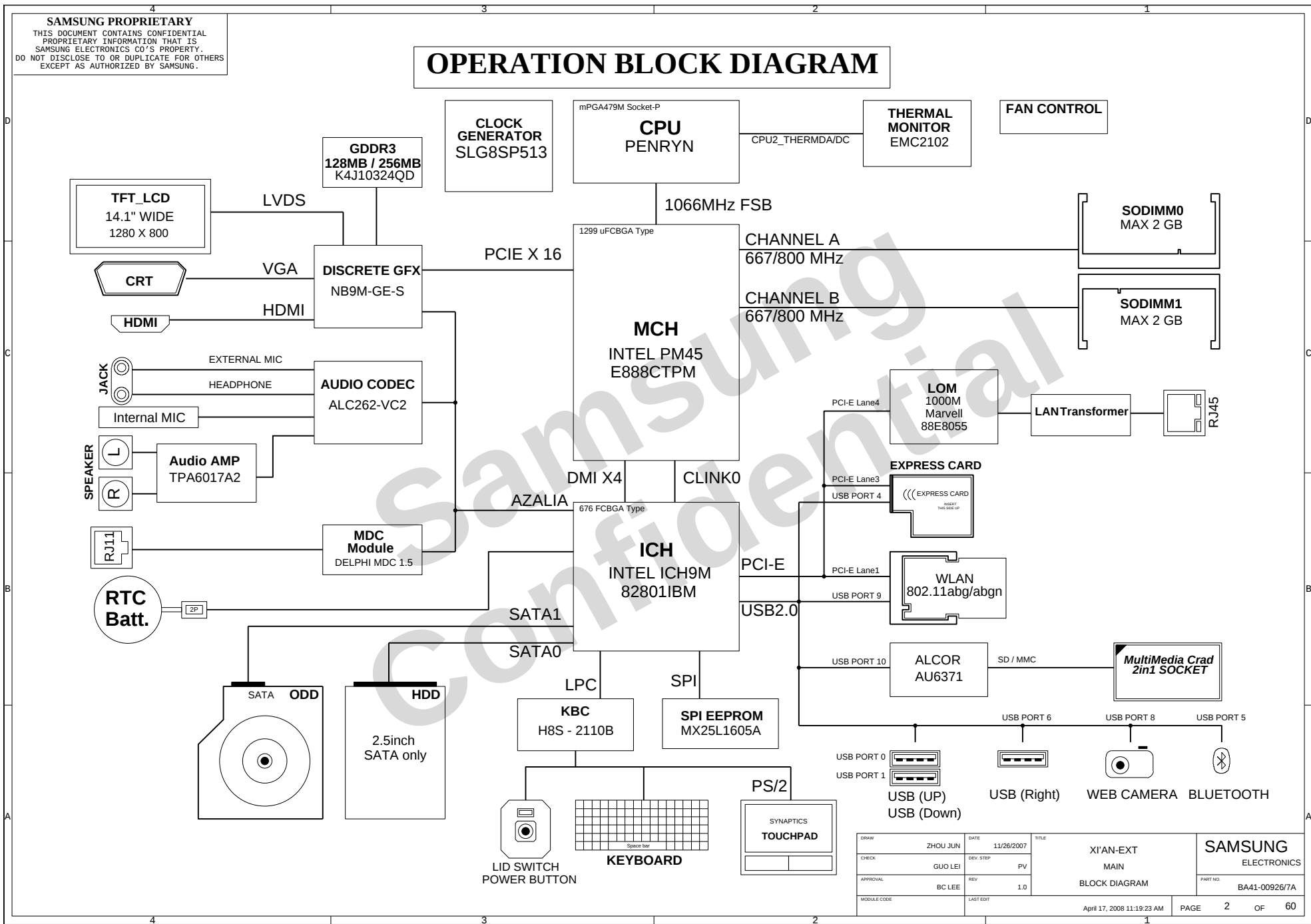
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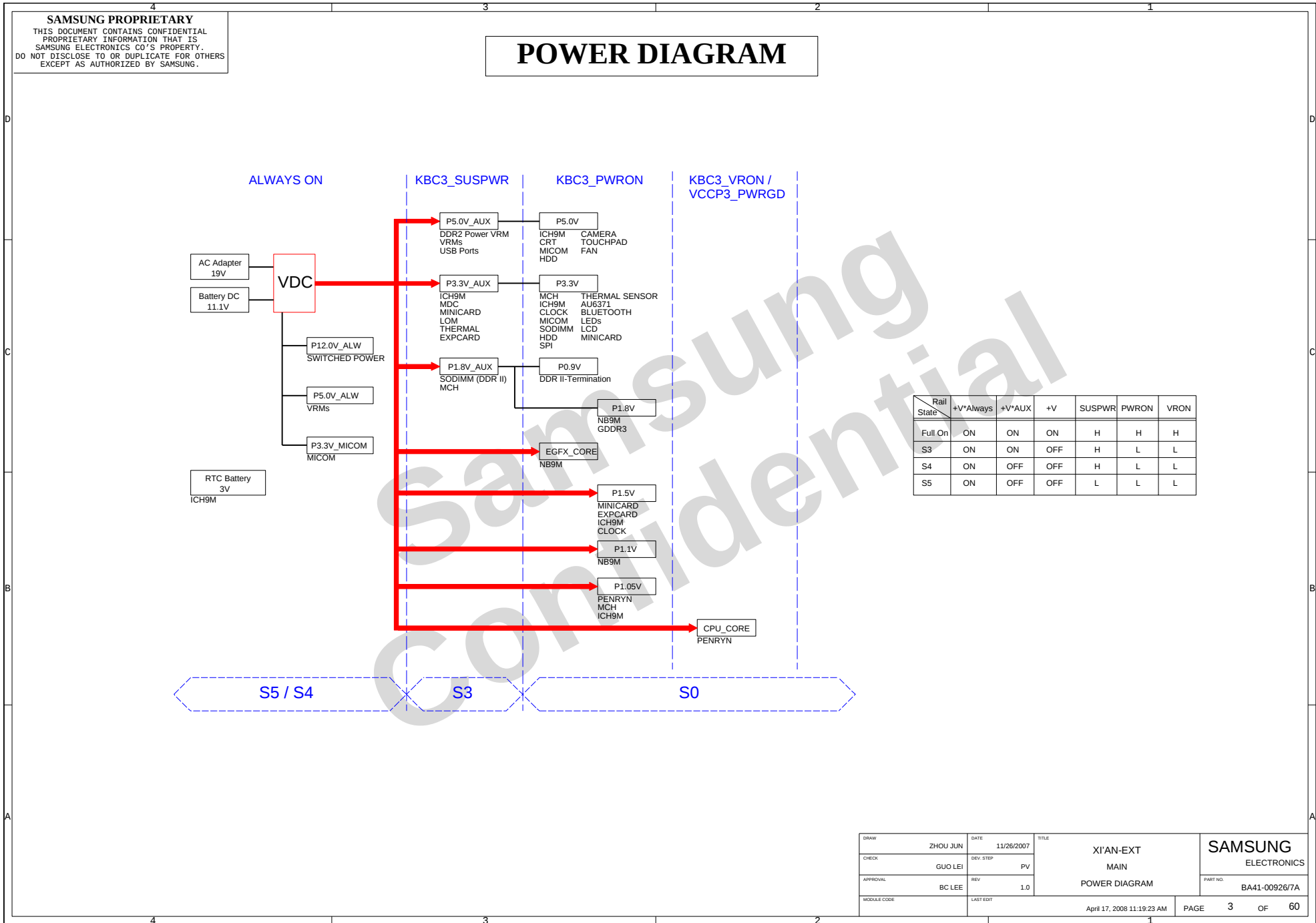
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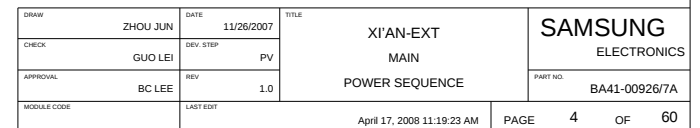
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DIAGRAM

DRAW	ZHOU JUN	DATE	11/26/2007	TITLE	XI'AN-EXT	SAMSUNG
CHECK	GUO LEI	DEV. STEP	PV		COVER	ELECTRONICS
APPROVAL	BC LEE	REV	1.0		CONTENTS	PART NO.
MODULE CODE		LAST EDIT				BA41-00926/7A
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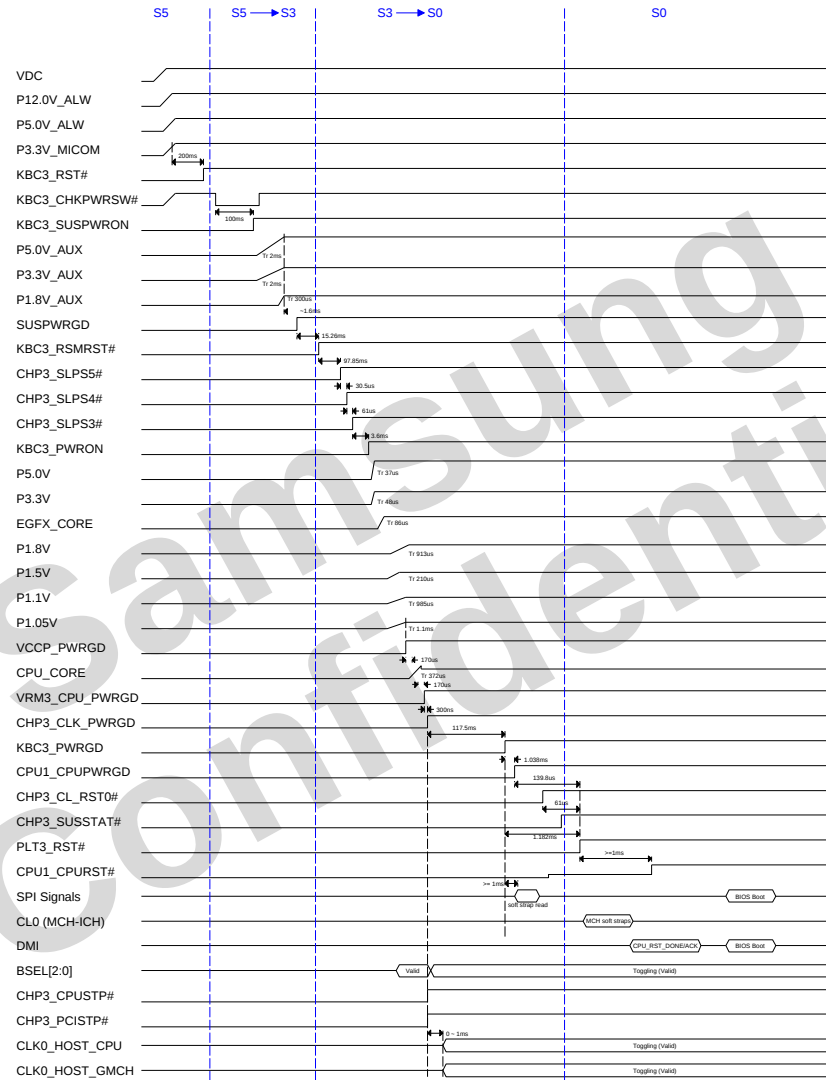






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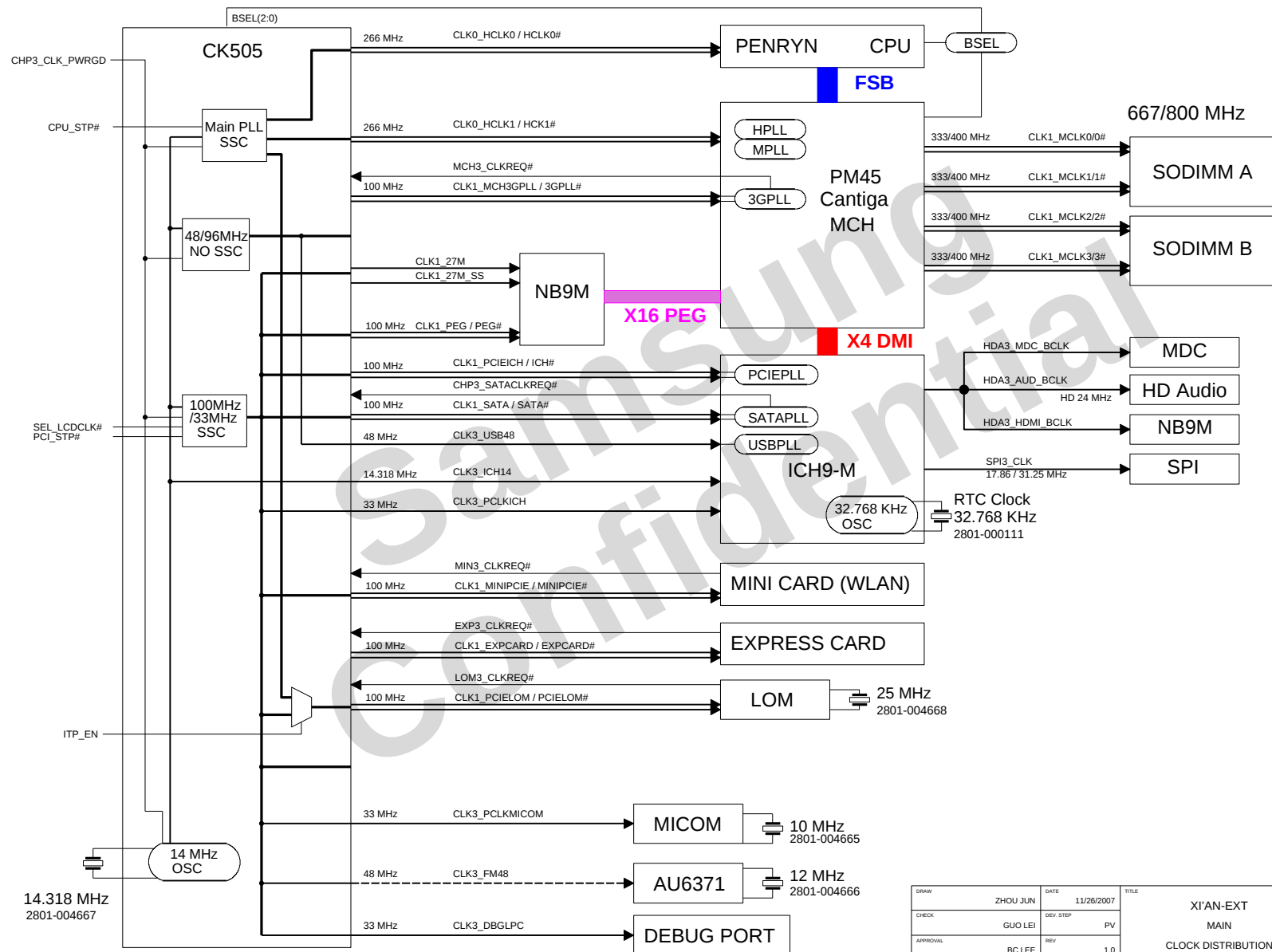
Timing Diagram, Power ON Rev. 0.1 Phil 2008-04-15



DRAW	ZHOU JUN	DATE	11/26/2007	TITLE	XI'AN-EXT MAIN TIMING DIAGRAM	SAMSUNG ELECTRONICS PART NO. BA41-00926/7A
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CLOCK DISTRIBUTION Rev. 0.1



DRAW	ZHOU JUN	DATE	11/26/2007	TITLE	XI'AN-EXT MAIN CLOCK DISTRIBUTION	SAMSUNG ELECTRONICS
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APPROVAL	BC LEE	REV	1.0			
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BOARD INFORMATION

SCHEMATIC ANNOTATIONS AND BOARD INFORMATION

PCI Devices

Devices	IDSEL#	REQ/GNT#	Interrupts
-	-	-	-

Voltage Rails

VDC	Primary DC system power supply (7 to 21V)
VCC_CORE	Core voltage for Processor (1.308~1.068V)
P1.05V	Processor System Bus(PSB) Termination (1.05V) GMCH & ICH8 Core Voltage
P1.8V_AUX	1.8V power rail for DDR2 (off in S4-S5)
P0.9V	0.9V switched power rail (off in S3-S5)
P1.8V	1.8V power rail for GDDR3 (off in S3-S5)
P1.1V	1.1V power rail for GFX (off in S3-S5)
P1.5V	1.5V power rail for ICH (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)
P3.3V_AUX	3.3V power rail (off in S4-S5)
P5V_AUX	5.0V power rail (off in S4-S5)
PRTC_BAT	3.0V power rail (ALWAYS ON)
P3.3V_MICOM	3.3V always on power rail for MICOM
P5.0V_ALW	5V power rail (Always On)
P12.0V_ALW	12V power rail (Always On)

I²C / SMB Address

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

USB PORT Assign

PORT NUMBER	ASSIGNED TO
0	SYSTEM PORT A
1	SYSTEM PORT B
4	EXPRESS CARD
5	BLUETOOTH
6	SYSTEM PORT C
8	CAMERA
9	MINIPCI-E (WLAN)
10	MEMORY CARD

System Power States

CHP3_SLPS1* 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_SLPS3* 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_SLPS4* 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.
Externally appears same as S5, but may have different wake events.
CHP3_SLPS5* 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.

Crystal / Oscillator

TYPE	FREQUENCY	DEVICE	USAGE
Crystal	32.768KHz	ICH	Real Time Clock
Crystal	10MHz	MICOM	H8S/2110BV
Crystal	14.318MHz	CLOCK-GENERATOR	ICS951461
Crystal	12MHz	MEMORY CARD	MEMORY CARD
Crystal	25MHz	LAN	LAN

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	1.5000 V	0 1 0 1 0 0 0 0	1.0000 V	1 0 1 0 0 0 0 1	0.4875 V
0 0 0 0 0 0 1 0	1.4875 V	0 1 0 1 0 0 1 0	0.9875 V	1 0 1 0 0 0 1 0	0.4750 V
0 0 0 0 0 1 0 0	1.4750 V	0 1 0 1 0 1 0 0	0.9750 V	1 0 1 0 0 1 0 0	0.4625 V
0 0 0 0 0 1 1 0	1.4625 V	0 1 0 1 1 0 0 0	0.9625 V	1 0 1 0 1 0 0 0	0.4500 V
0 0 0 0 1 0 0 0	1.4500 V	0 1 0 1 1 0 1 0	0.9500 V	1 0 1 0 1 0 1 0	0.4375 V
0 0 0 0 1 0 1 0	1.4375 V	0 1 0 1 1 1 0 0	0.9375 V	1 0 1 0 1 0 1 1	0.4250 V
0 0 0 0 1 1 0 0	1.4250 V	0 1 0 1 1 1 1 0	0.9250 V	1 0 1 0 1 1 0 0	0.4125 V
0 0 0 0 1 1 1 0	1.4125 V	0 1 0 1 1 1 1 1	0.9125 V	1 0 1 1 0 0 0 0	0.4000 V
0 0 0 0 1 1 1 1	1.4000 V	0 1 1 0 0 0 0 0	0.9000 V	1 0 1 1 0 0 0 1	0.3875 V
0 0 0 1 0 0 0 0	1.3875 V	0 1 1 0 0 0 0 1	0.8875 V	1 0 1 1 0 0 1 0	0.3750 V
0 0 0 1 0 0 0 1	1.3750 V	0 1 1 0 0 0 1 0	0.8750 V	1 0 1 1 0 0 1 1	0.3625 V
0 0 0 1 0 1 0 0	1.3625 V	0 1 1 0 0 1 0 0	0.8625 V	1 0 1 1 0 1 0 0	0.3500 V
0 0 0 1 0 1 0 1	1.3500 V	0 1 1 0 0 1 0 1	0.8500 V	1 0 1 1 0 1 0 1	0.3375 V
0 0 0 1 0 1 1 0	1.3375 V	0 1 1 0 1 0 0 0	0.8375 V	1 0 1 1 1 0 0 0	0.3250 V
0 0 0 1 0 1 1 1	1.3250 V	0 1 1 0 1 0 1 0	0.8250 V	1 0 1 1 1 0 1 0	0.3125 V
0 0 0 1 1 0 0 0	1.3125 V	0 1 1 0 1 0 1 1	0.8125 V	1 1 0 0 0 0 0 0	0.3000 V
0 0 0 1 1 0 0 1	1.3000 V	0 1 1 0 1 0 0 0	0.8000 V	1 1 0 0 0 0 0 1	0.2875 V
0 0 0 1 1 0 1 0	1.2875 V	0 1 1 1 0 0 0 0	0.7875 V	1 1 0 0 0 0 1 0	0.2750 V
0 0 0 1 1 0 1 1	1.2750 V	0 1 1 1 0 0 0 1	0.7750 V	1 1 0 0 0 0 1 1	0.2625 V
0 0 0 1 1 1 0 0	1.2625 V	0 1 1 1 0 0 1 0	0.7625 V	1 1 0 0 0 1 0 0	0.2500 V
0 0 0 1 1 1 0 1	1.2500 V	0 1 1 1 0 0 1 1	0.7500 V	1 1 0 0 0 1 0 1	0.2375 V
0 0 0 1 1 1 1 0	1.2375 V	0 1 1 1 1 0 0 0	0.7375 V	1 1 0 0 0 1 1 0	0.2250 V
0 0 0 1 1 1 1 1	1.2250 V	0 1 1 1 1 0 0 1	0.7250 V	1 1 0 0 0 1 1 1	0.2125 V
0 0 1 0 0 0 0 0	1.2125 V	0 1 1 1 1 0 1 0	0.7125 V	1 1 0 0 1 0 0 0	0.2000 V
0 0 1 0 0 0 0 1	1.2000 V	1 0 0 0 0 0 0 0	0.7000 V	1 1 0 0 1 0 0 1	0.1875 V
0 0 1 0 0 0 1 0	1.1875 V	1 0 0 0 0 0 0 1	0.6875 V	1 1 0 0 1 0 1 0	0.1750 V
0 0 1 0 0 0 1 1	1.1750 V	1 0 0 0 0 0 1 0	0.6750 V	1 1 0 0 1 0 1 1	0.1625 V
0 0 1 0 1 0 0 0	1.1625 V	1 0 0 0 0 0 1 1	0.6625 V	1 1 0 0 1 1 0 0	0.1500 V
0 0 1 0 1 0 0 1	1.1500 V	1 0 0 0 0 1 0 0	0.6500 V	1 1 0 0 1 1 0 1	0.1375 V
0 0 1 0 1 0 1 0	1.1375 V	1 0 0 0 0 1 0 1	0.6375 V	1 1 0 0 1 1 1 0	0.1250 V
0 0 1 0 1 0 1 1	1.1250 V	1 0 0 0 0 1 1 0	0.6250 V	1 1 0 0 1 1 1 1	0.1125 V
0 0 1 0 1 1 0 0	1.1125 V	1 0 0 0 0 1 1 1	0.6125 V	1 1 0 1 0 0 0 0	0.1000 V
0 0 1 0 1 1 0 1	1.1000 V	1 0 0 0 1 0 0 0	0.6000 V	1 1 0 1 0 0 0 1	0.0875 V
0 0 1 0 1 1 1 0	1.0875 V	1 0 0 0 1 0 0 1	0.5875 V	1 1 0 1 0 0 1 0	0.0750 V
0 0 1 0 1 1 1 1	1.0750 V	1 0 0 0 1 0 1 0	0.5750 V	1 1 0 1 0 0 1 1	0.0625 V
0 0 1 1 0 0 0 0	1.0625 V	1 0 0 0 1 0 1 1	0.5625 V	1 1 0 1 0 1 0 0	0.0500 V
0 0 1 1 0 0 0 1	1.0500 V	1 0 0 0 1 1 0 0	0.5500 V	1 1 0 1 0 1 0 1	0.0375 V
0 0 1 1 0 0 1 0	1.0375 V	1 0 0 0 1 1 0 1	0.5375 V	1 1 0 1 0 1 1 0	0.0250 V
0 0 1 1 0 0 1 1	1.0250 V	1 0 0 0 1 1 1 0	0.5250 V	1 1 0 1 0 1 1 1	0.0125 V
0 0 1 1 0 1 0 0	1.0125 V	1 0 0 1 1 1 1 0	0.5125 V	1 1 0 1 1 0 0 0	0.0000 V
		1 0 0 1 1 1 1 1	0.5000 V	1 1 1 1 0 0 0 0	0.0000 V
				1 1 1 1 0 0 0 1	0.0000 V
				1 1 1 1 0 0 1 0	0.0000 V
				1 1 1 1 0 0 1 1	0.0000 V
				1 1 1 1 0 1 0 0	0.0000 V
				1 1 1 1 0 1 0 1	0.0000 V
				1 1 1 1 0 1 1 0	0.0000 V
				1 1 1 1 0 1 1 1	0.0000 V
				1 1 1 1 1 0 0 0	0.0000 V
				1 1 1 1 1 0 0 1	0.0000 V
				1 1 1 1 1 0 1 0	0.0000 V
				1 1 1 1 1 0 1 1	0.0000 V
				1 1 1 1 1 1 0 0	0.0000 V
				1 1 1 1 1 1 0 1	0.0000 V
				1 1 1 1 1 1 1 0	0.0000 V
				1 1 1 1 1 1 1 1	0.0000 V
				**11111111* : 0V power good asserted.	

DRAW	ZHOU JUN	DATE	11/26/2007	TITLE	XI'AN-EXT MAIN BOARD INFORMATION	SAMSUNG ELECTRONICS PART NO. BA41-00926/7A
CHECK	GUO LEI	DEV. STEP	PV			
APPROVAL	BC LEE	REV	1.0			
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CK_Clock 505M

MCH CANTIGA PM DDR3

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

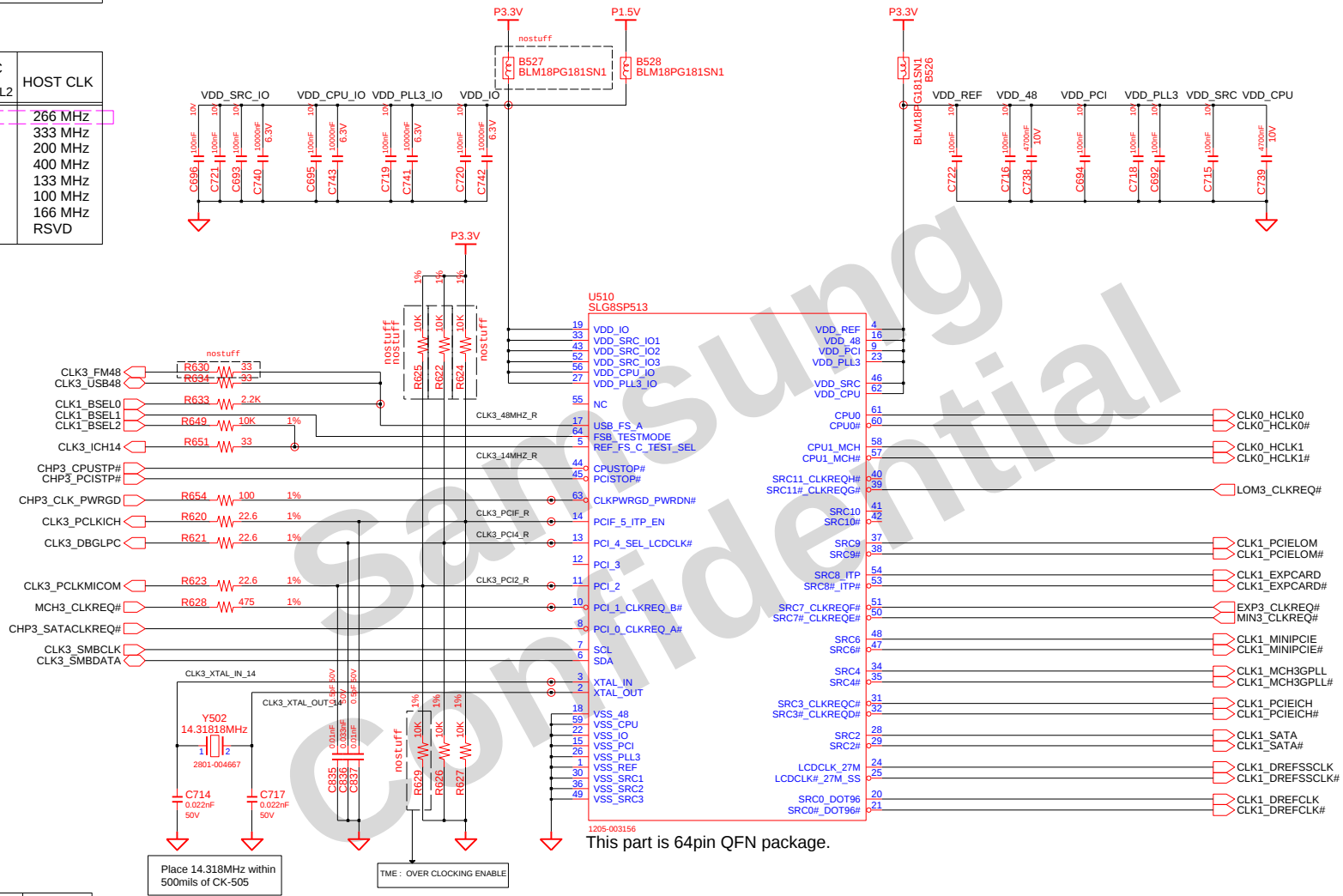
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FSA	FSB	FSC	HOST CLK
BSEL0	BSEL1	BSEL2	
0	0	0	266 MHz
0	0	1	333 MHz
0	1	0	200 MHz
0	1	1	400 MHz
1	0	0	133 MHz
1	0	1	100 MHz
1	1	0	166 MHz
1	1	1	RSVD

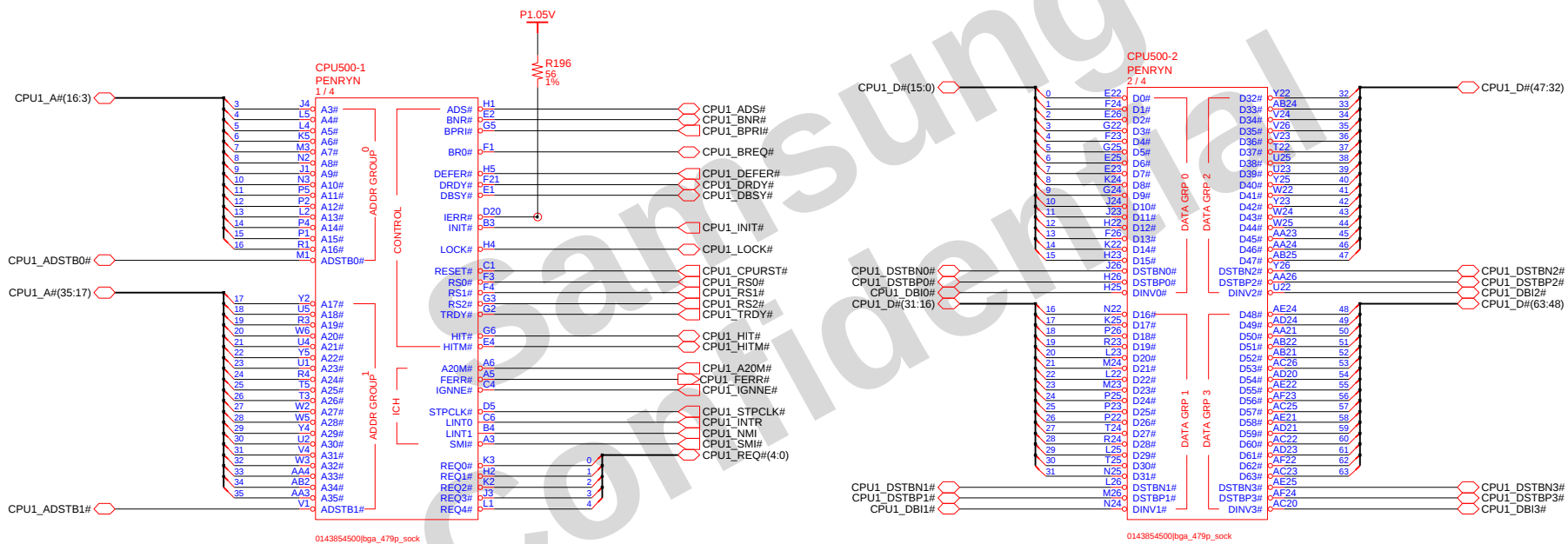


CLK REQ	DEVICE	SRC PORT
CLK REQ A	SATA	SRC2
CLK REQ B	GMCH	SRC4
CLK REQ E	MINI CARD	SRC6
CLK REQ F	LOM3_CLKREQ#	SRC8

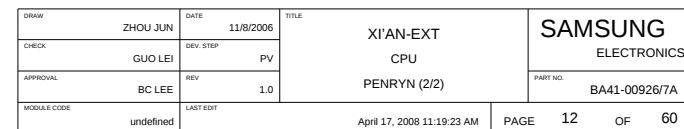
SEL_LCDCLK*	Pin 20/21	Pin 24/25
LOW	DOT_96/DOT_96#	PEG_CLK/PEG_CLK#
HIGH	SRC_0/SRC_0#	27M & 27M_SS

DRAW	ZHOU JUN	DATE	8/12/2006	TITLE	XI'AN-EXT CLOCK	SAMSUNG ELECTRONICS PART NO. BA41-00926/7A
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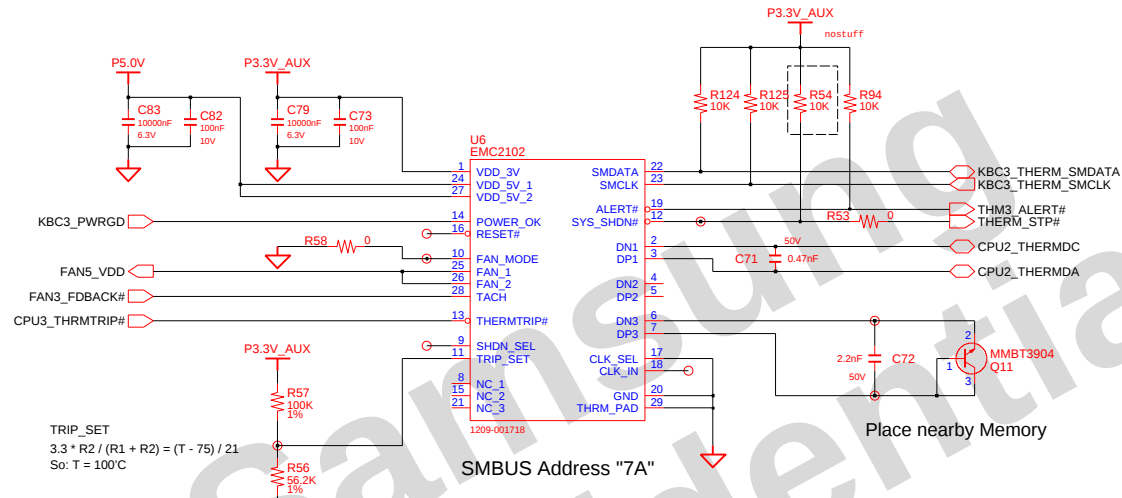
CPU SOCKET-P : MEROM / PENTYIN



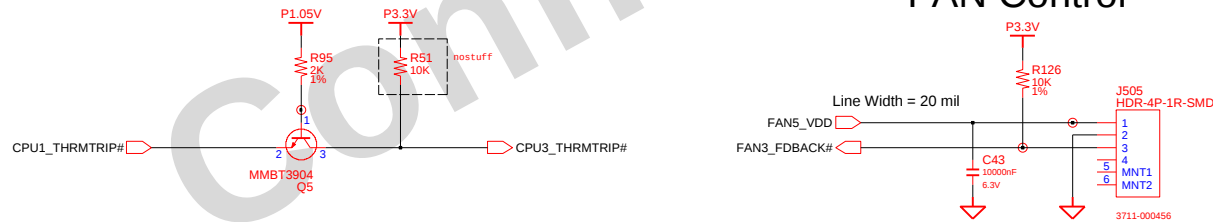
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Thermal Monitor

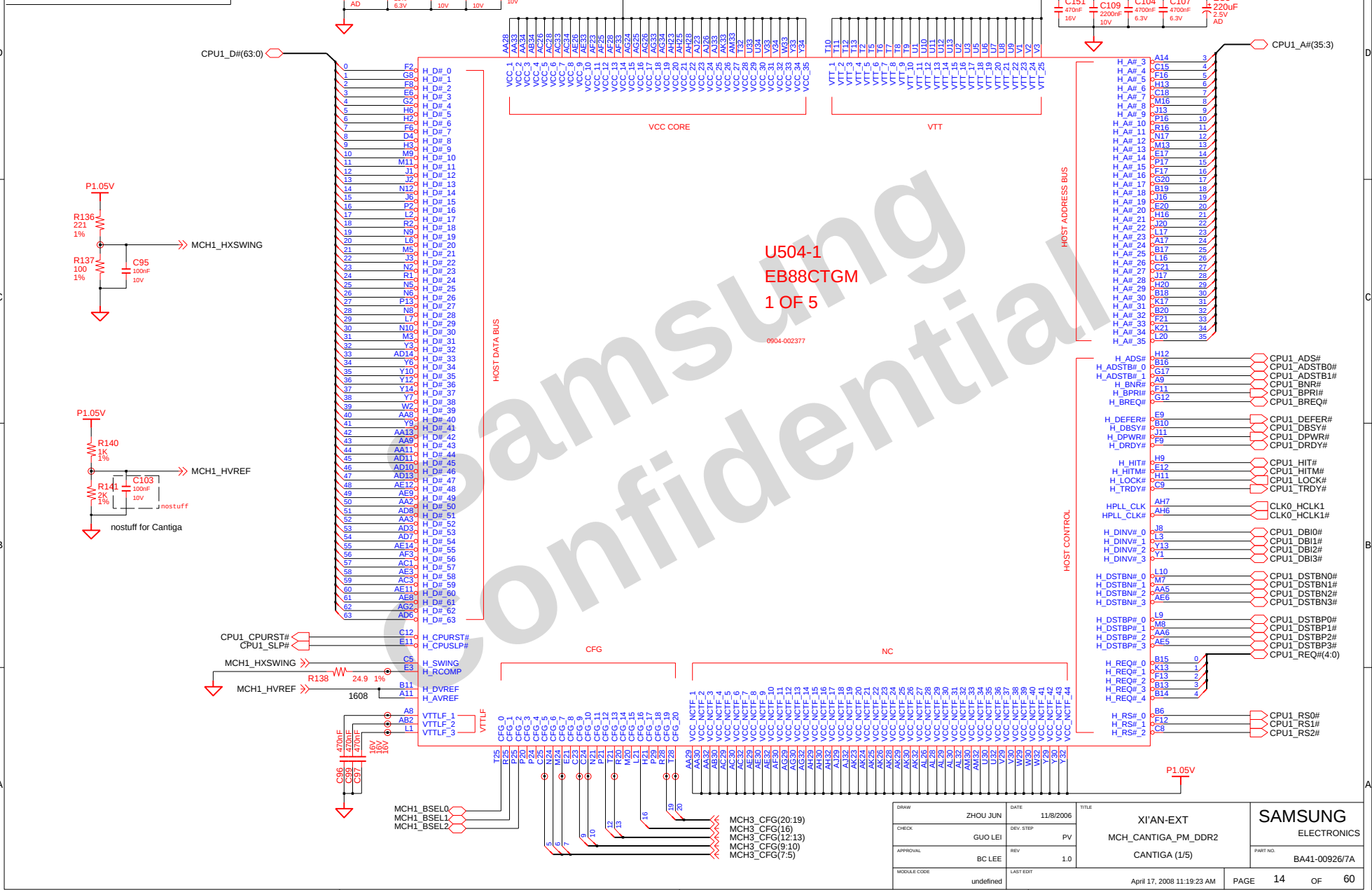


FAN Control

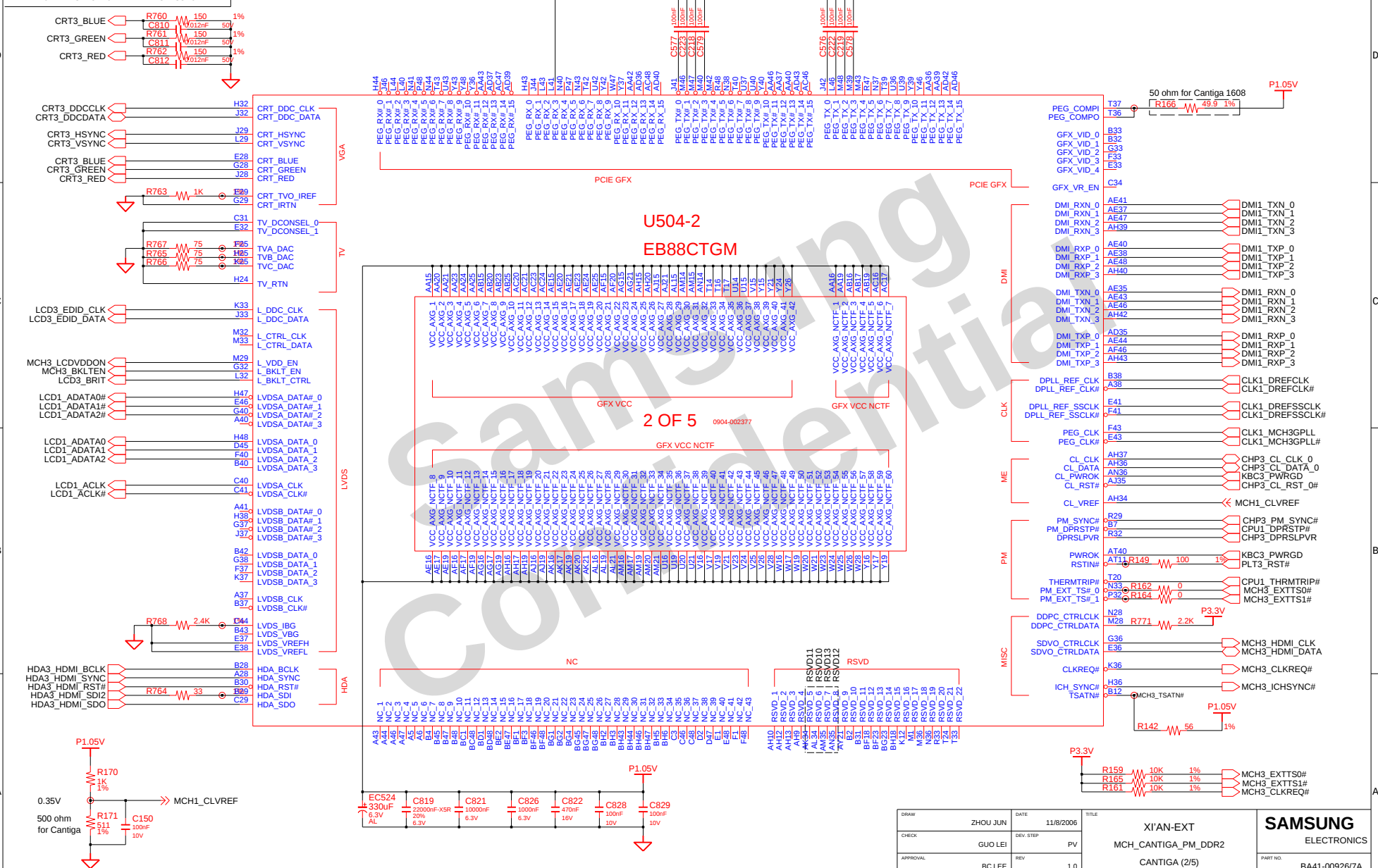


DESIGN	ZHOU JUN	DATE	4/15/2008	TITLE	XI'AN-EXT THERMAL SENSOR THERMAL SENSOR	SAMSUNG ELECTRONICS
CHECK	GUO LEI	DEV. STEP	PV			PART NO. BA41-00926/7A
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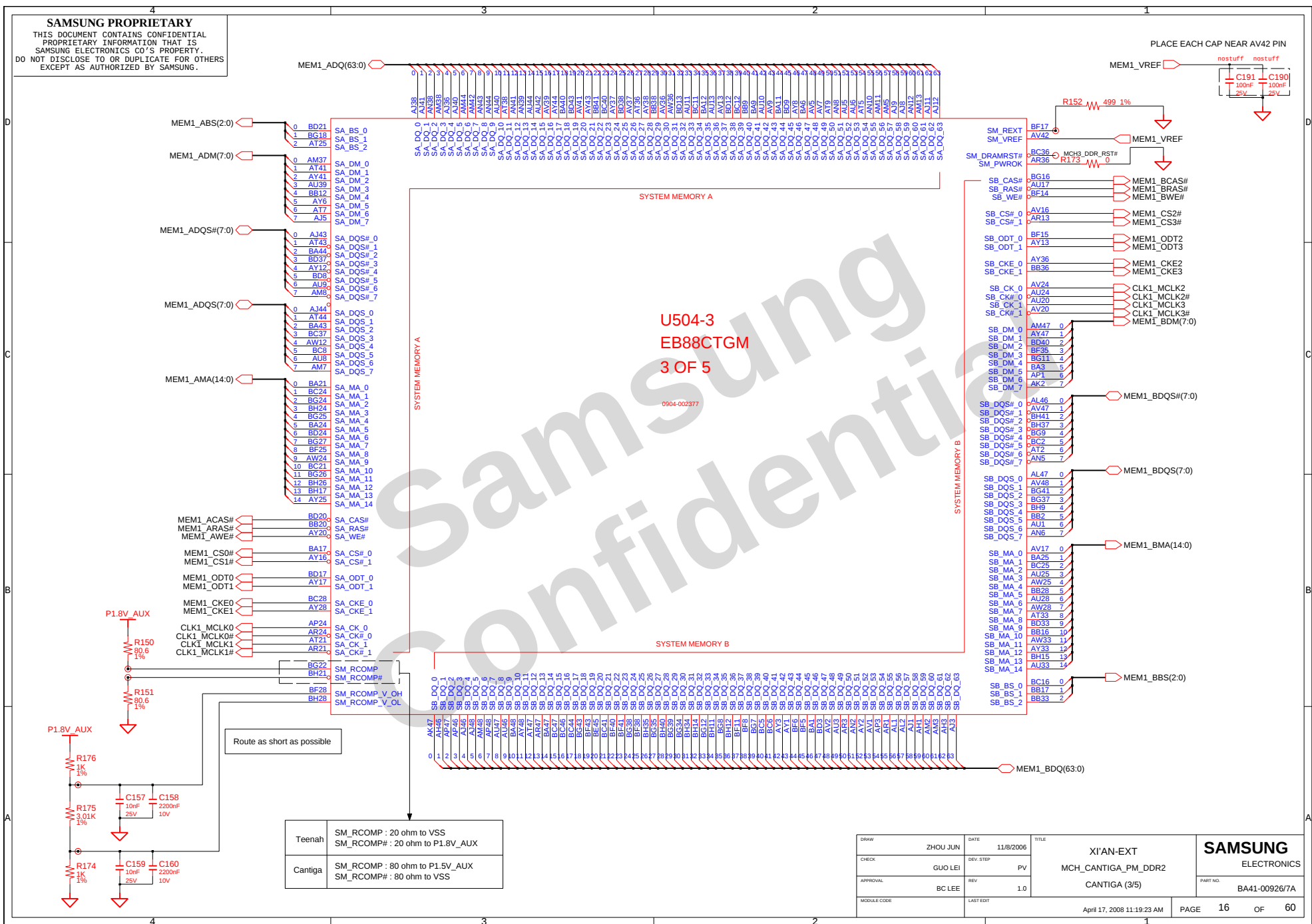


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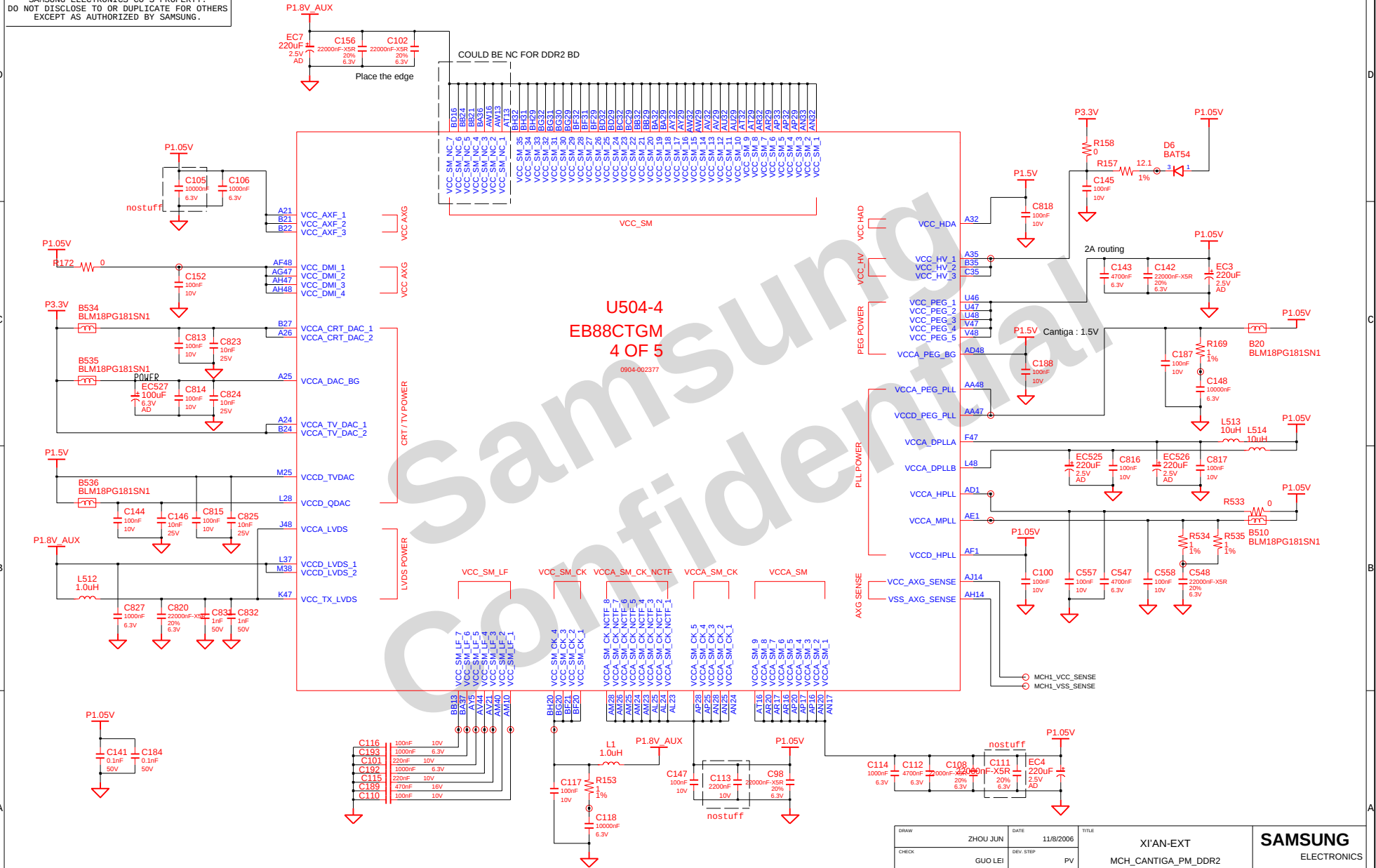


DRAW	ZHOU JUN	DATE	11/18/2006	XI'AN-EXT MCH_CANTIGA_PM_DDR2 CANTIGA (2/5)	SAMSUNG ELECTRONICS		
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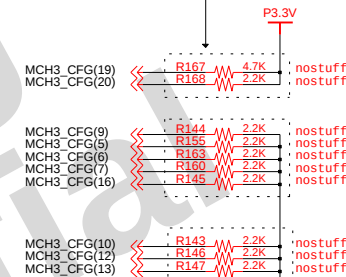
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***POCAFE-12 Only (Remove in MP Model)**

CFG#	Current Setting (def. : default Option)	
	Low	High
CFG(5)	DMIX2	DMIX4 (def.)
CFG(6)	ITPM Host Interface Enable	ITPM Host Interface Disable (def.)
CFG(7)	ME Crypto no confidentiality	ME Crypto confidentiality (def.)
CFG(9)	PEG Reversal (def.)	Normal
CFG(10)	PCIE Loop Back Enable	PCIE Loop Back Disable(def)
CFG(16)	Dynamic ODT Disabled	Dynamic ODT Enabled (def.)
CFG(19)	DMI Lane Normal (def.)	DMI Lane Reversal
CFG(20)	SDVO or PCIE X1 Only(def.)	SDVO and PCIE X1 Simultaneously

2.2K for Cantiga
4.02K for Teenah

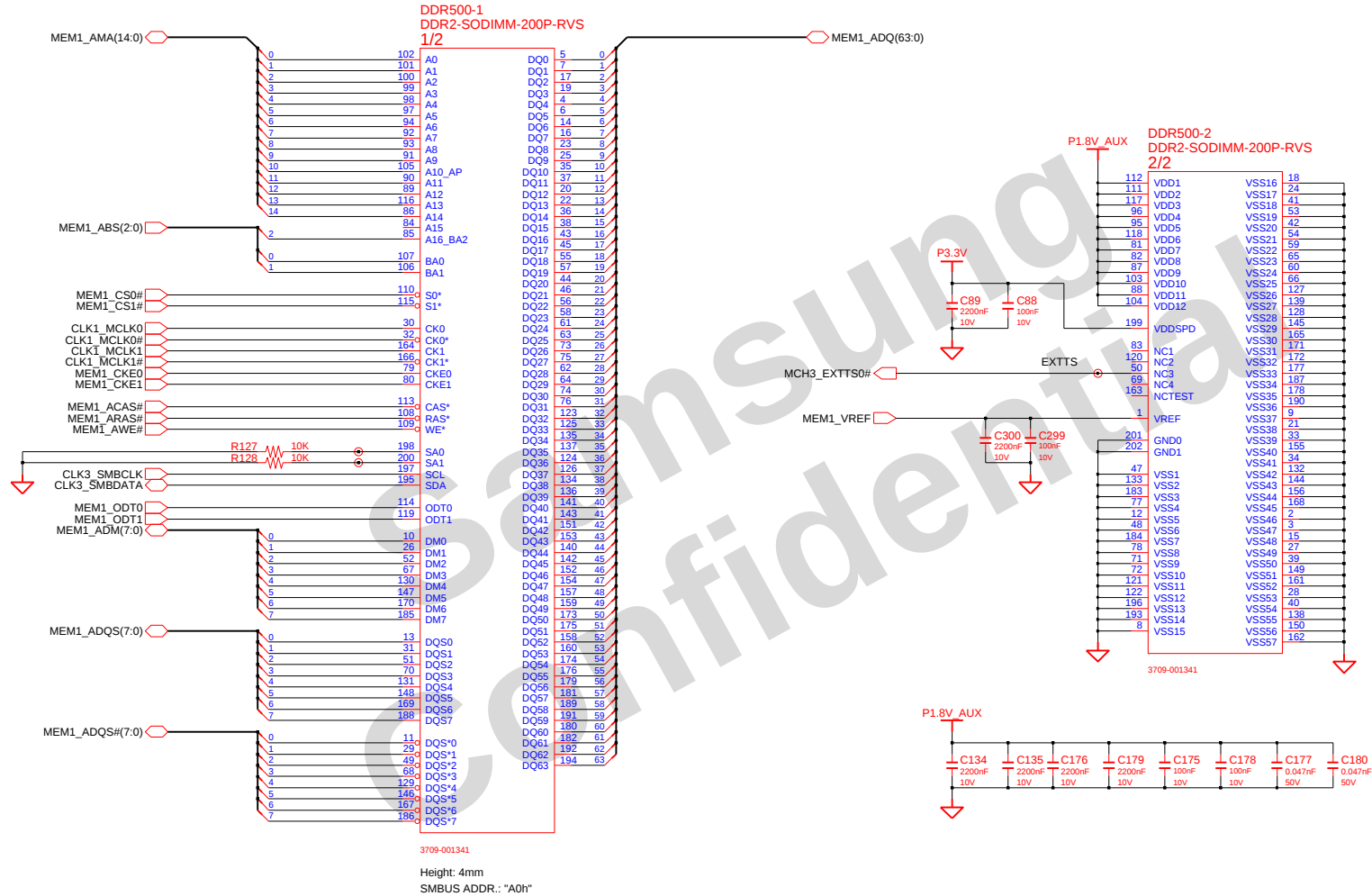


MCH CFG 10 PCIe Loopback Enable	
Low	Enabled
High	Disabled

XOR / ALLZ / Clock Un-gating	
MCH CFG 13	MCH CFG 12
0	0
1	0
0	1
1	1

DRAW	ZHOU JUN	DATE	11/8/2006	TITLE	XI'AN-EXT MCH_CANTIGA_PM_DDR2 CANTIGA (5/5)	SAMSUNG ELECTRONICS PART NO. BA41-00926/7A
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APPROVAL	BC LEE	REV	1.0			
MODULE CODE		LAST EDIT		April 17, 2008 11:23 AM	PAGE	18 OF 60

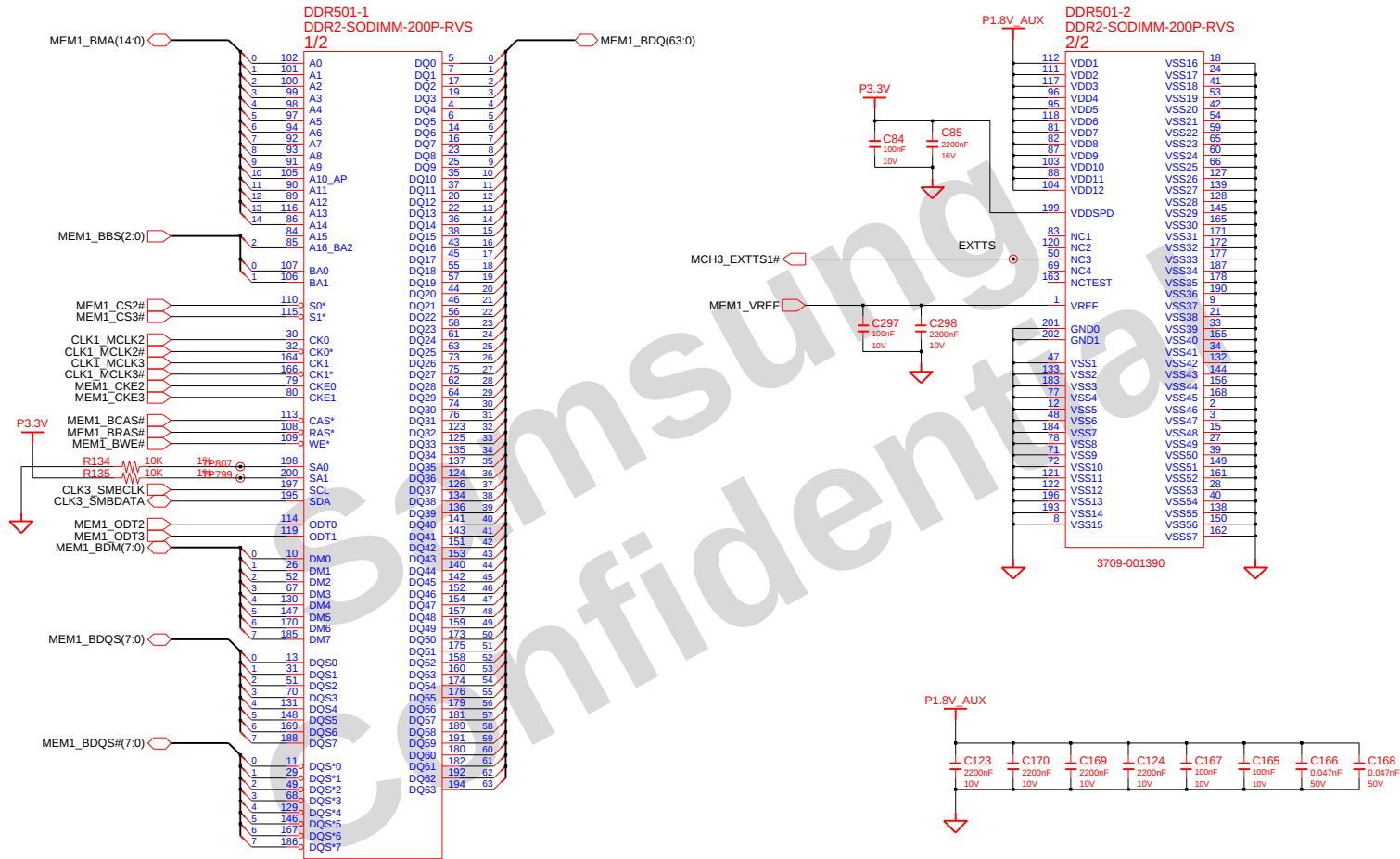
SODIMM0 (CHANNEL A)



DESIGN	ZHOU JUN	DATE	4/15/2008	TITLE	XI'AN-EXT	SAMSUNG ELECTRONICS
CHECK	GUO LEI	DEV. STEP	PV	DDR2		
APPROVAL	BC LEE	REV	1.0	SODIMM A	PART NO.	
MODULE CODE		LAST EDIT			BA41-00926/7A	
				April 17, 2008 11:19:23 AM	PAGE 19 OF 60	

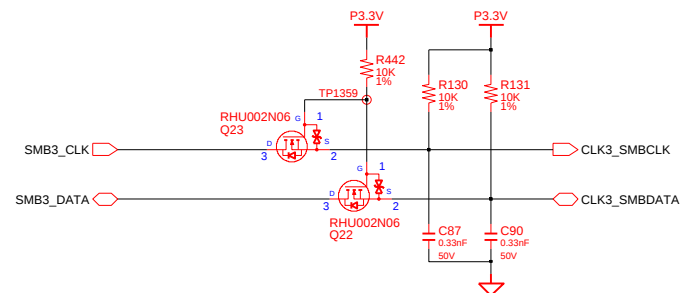
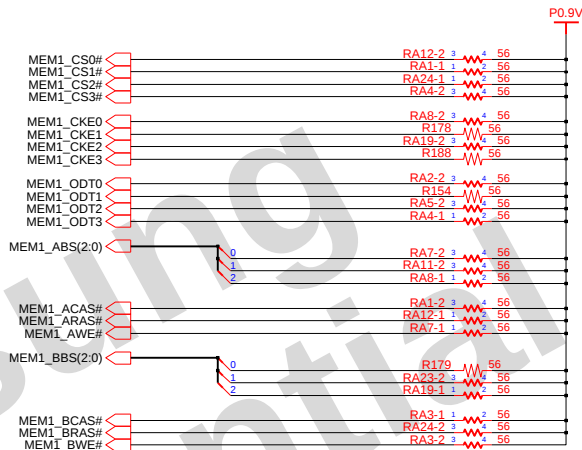
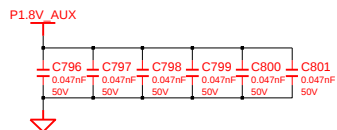
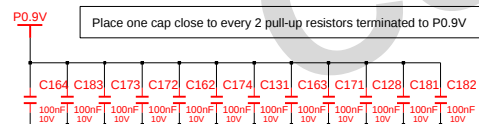
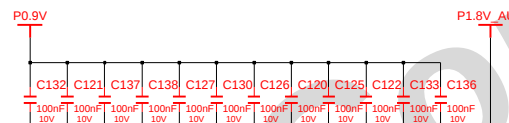
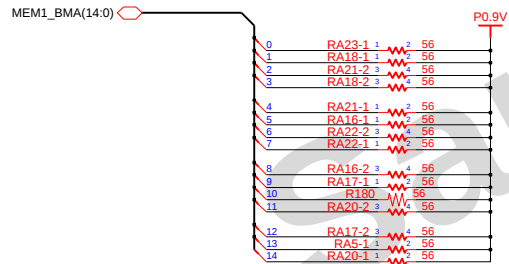
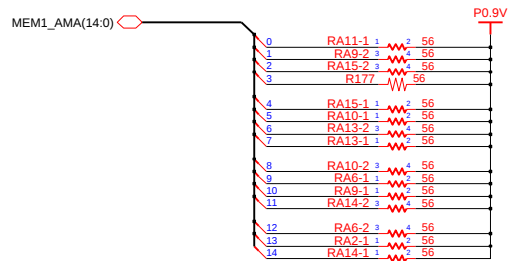
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SODIMM1 (CHANNEL B)



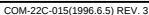
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CHECK	GUO LEI	DEV. STEP	PV		DDR2	
APPROVAL	BC LEE	REV	1.0		SODIMM B	
MODULE CODE		LAST EDIT				
April 17, 2008 11:19:23 AM						PAGE 20 OF 60

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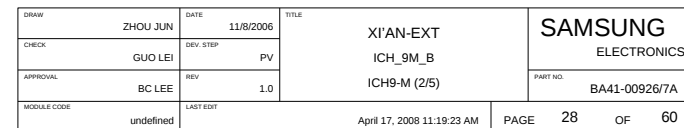


DESIGN	ZHOU JUN	DATE	4/15/2008	TITLE	XI'AN-EXT	SAMSUNG ELECTRONICS
CHECK	GUO LEI	DEV. STEP	PV		DDR2	
APPROVAL	BC LEE	REV	1.0		TERMINATIONS	
MODULE CODE		LAST EDIT				PART NO. BA41-00926/7A
				April 17, 2008 11:19:23 AM	PAGE	21 OF 60

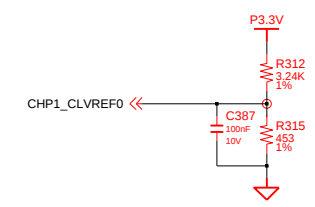
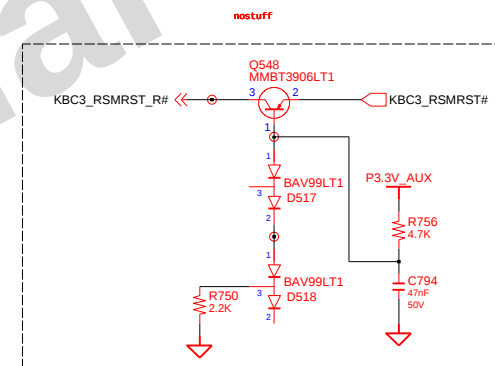
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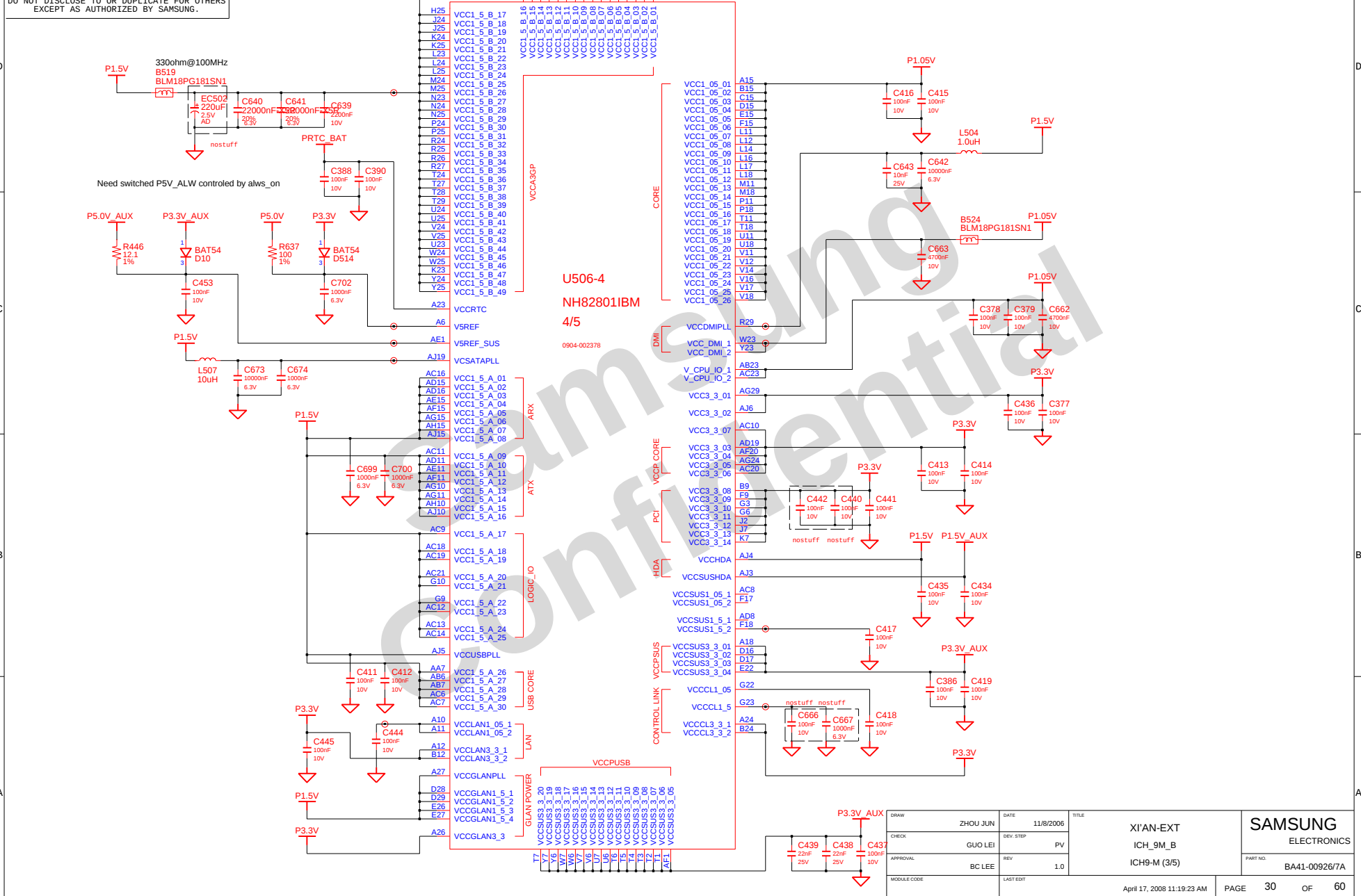


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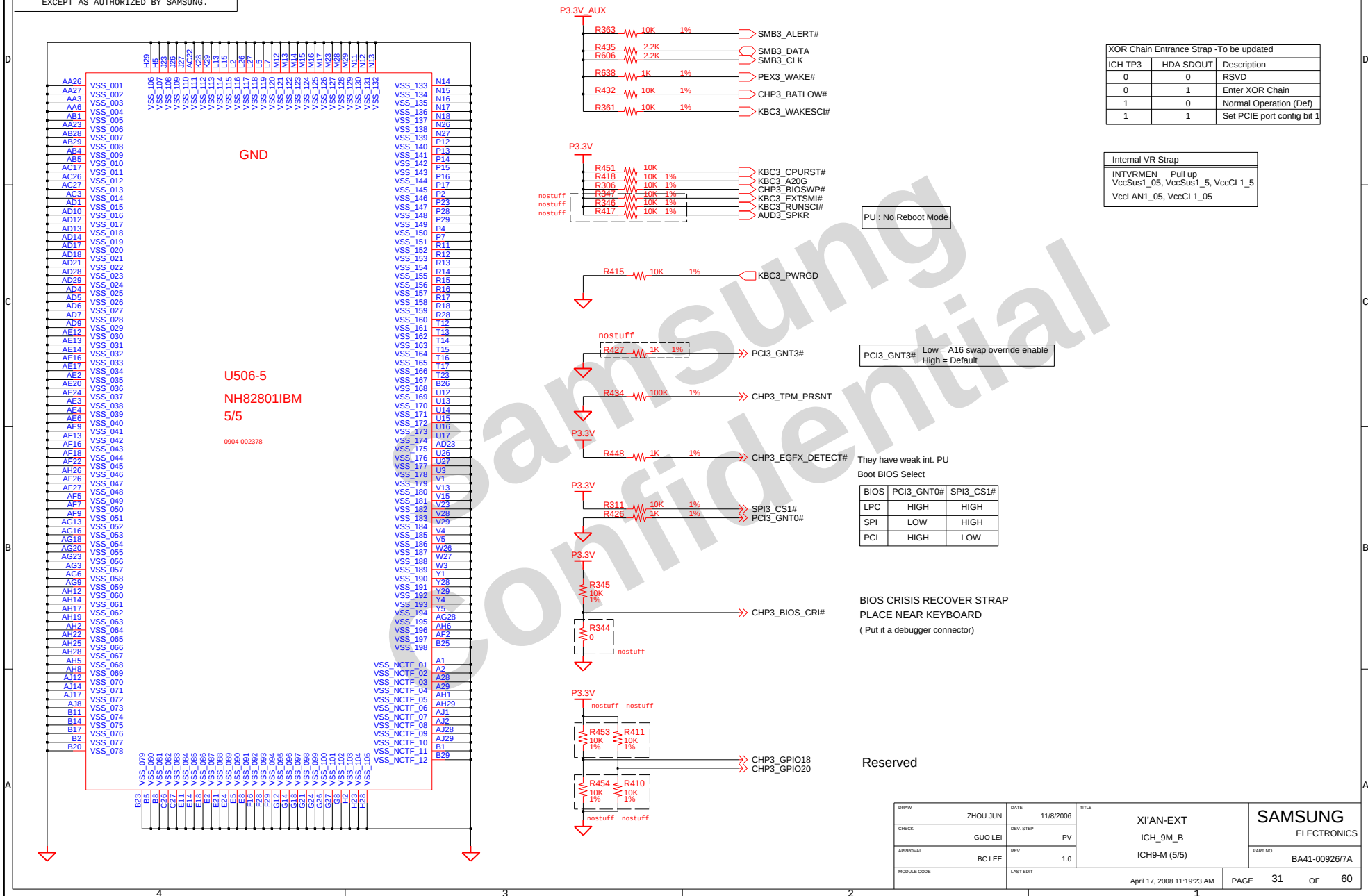


DRAW	ZHOU JUN	DATE	11/8/2006	TITLE	XI'AN-EXT ICH_9M_B ICH9-M (3/5)	SAMSUNG ELECTRONICS		
CHECK	GUO LEI	REV. STEP	PV					
APPROVAL	BC LEE	REV	1.0					
MODULE CODE	LAST EDIT							
April 17, 2008 11:19:23 AM					PAGE	29	OF	60

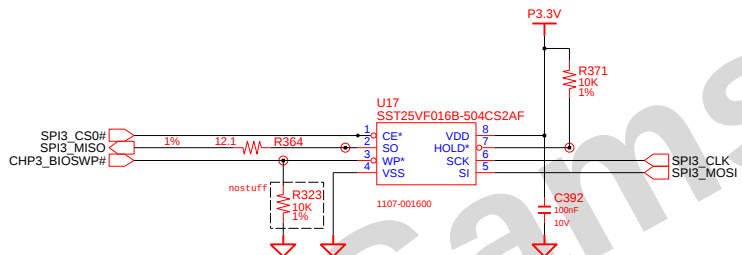
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BIOS ROM

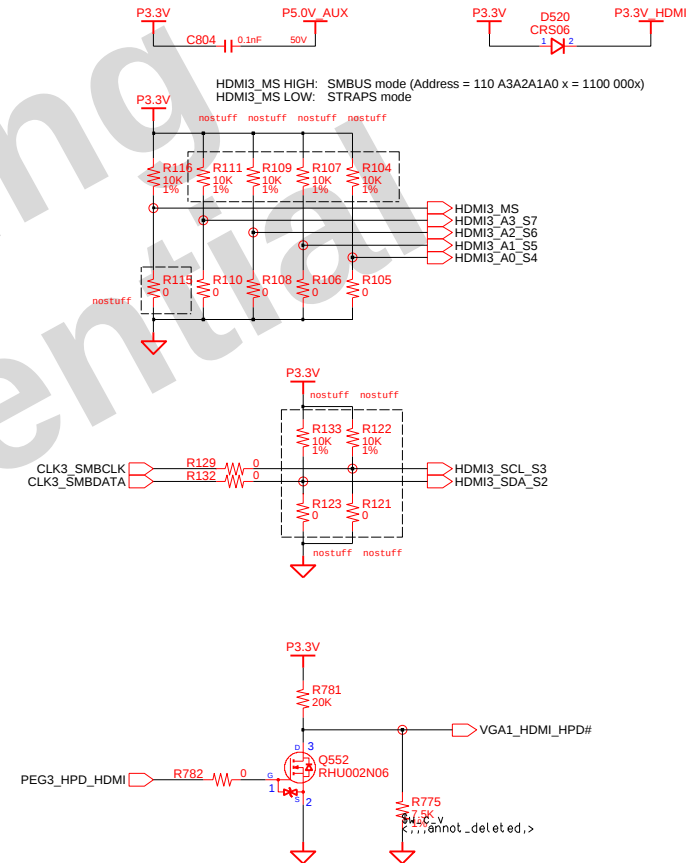
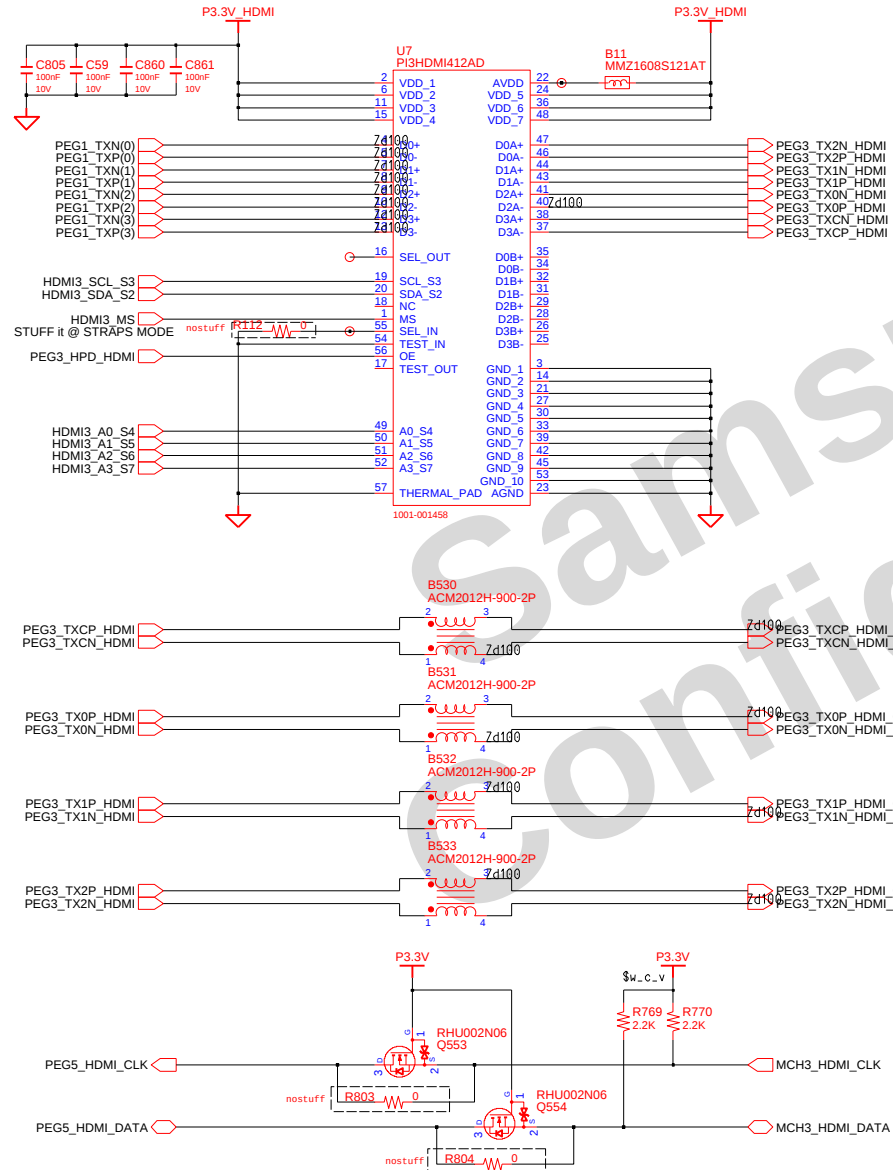


- | | | | |
|----|---|----|---------------------------------|
| 02 | VERIFY REAL MODE | 66 | CONFIGURE ADVANCE CACHE REG. |
| 03 | DISABLE NMI | 6A | DISPLAY EXTERNAL CACHE SIZE |
| 04 | GET CPU TYPE | 6C | DISPLAY SHADOW MESSAGE |
| 06 | INIT. SYSTEM H/W | 6E | DISPLAY NON-DISPOSABLE SEGMENT |
| 08 | INIT. CHIPSET REG. | 70 | DISPLAY ERROR MESSAGE |
| 09 | SET IN POST FLAG | 72 | CHECK FOR CONFIGURATION ERROR |
| 0A | INIT CPU.REG | 74 | TEST REAL-TIME CLOCK |
| 0B | CPU CACHE ON | 76 | CHECK FOR KEYBOARD ERROR |
| 0C | INIT.CACHE TO POST | 7C | SETUP HARDWARE INTERRUPT VECTOR |
| 0E | INIT. I/O VALUE | 7E | TEST COPROCESSER IF PRESENT |
| 0F | ENABLE THE L-BUS IDE | 80 | DISABLE ON-BOARD I/O PORT |
| 10 | INIT. POWER MANAGER | 82 | DETECT AND INSTALL EXT.RS232C |
| 11 | LOAD ALTERNATE REG. | 84 | DETECT AND INSTALL EXT.PARALLEL |
| 13 | PCI BUS MASTER RESET
WITH INITIAL POST VALUE | 86 | RE-INIT. ON-BOARD I/O PORT |
| 14 | INIT. KEYBOARD CONTROLLER | 88 | INIT. BIOS DATA ROM |
| 16 | CHECK CHECKSUM | 8A | INIT.EXTENDED BIOS DATA AREA |
| 18 | 8254 TIMER INIT. | 8C | INIT. FDD CONTROLLER |
| 1A | 8237 DMA CONTROLLER INIT. | 9A | SHADOW OPTION ROMS |
| 1C | RESET INTERRUPT CONTROLLER | 9C | SETUP POWER MANAGEMENT |
| 20 | TEST DRAM REFRESH | 9E | ENABLE H/W INTERRUPT |
| 22 | TEST 8742 KEYBOARD CONTROLLER | A0 | SET TIME OF DAY |
| 24 | SET ES SEGMENT REG. TO 4GB | A4 | INIT. TYPEMATIC RATE |
| 26 | ENABLE A20 | A8 | ERASE F2 PROMPT |
| 28 | AUTO SIZING DRAM | AA | SCAN FOR F2 KEY STROKE |
| 32 | COMPUTE THE CPU SPEED | AC | ENTER SETUP |
| 34 | TESET CMOS RAM | AE | CLEAR IN POST FLAG |
| 38 | SHADOW SYSTEM BIOS ROM | B0 | CHECK FOR ERRORS |
| 3A | AUTO SIZING CACHE | B2 | POST DONE-PREPARE TO BOOT O/S |
| 3C | CONFIGURE ADVANCED CHIPSET REG. | B4 | ONE BEEP |
| 3D | LOAD ALTER REG. WITH CMOS VALUE | B6 | CHECK PASSWORD (OPTION) |
| 42 | INIT. INTERRUPT VECTOR | B7 | ACPI INIT |
| 44 | INIT. BIOS INTERRUPT | BA | DMI INIT |
| 46 | CHECK ROM COPYRIGHT NOTICE | BE | CLEAR SCREEN |
| 47 | INIT. I20 SUPPORT IF INSTALLED | C0 | TRY BOOT WITH INT19 |
| 48 | CHECK VIDEO CONFIGURE AGAINST CMOS | D0 | INTERRUPT HANDLER ERROR |
| 49 | INIT. PCI BUS AND DEVICE | D2 | UNKNOWN INTERRUPT ERROR |
| 4A | INIT. ALL VIDEO BIOS ROM | D4 | PENDING INTERRUPT ERROR |
| 4C | SHADOW VIDEO BIOS ROM | D6 | SHUTDOWN 5 |
| 50 | DISPLAY CPU TYPE AND SPEED | D8 | SHUTDOWN ERROR |
| 52 | TEST KEYBOARD | DA | EXTENDED BLOCK MOVE |
| 54 | SET KEYCLICK IF ENABLED | DC | SHUTDOWN 10 |
| 56 | ENABLE KEYBOARD | 89 | ENABLE NMI |
| 58 | TEST FOR UNEXPECTED INTERRUPTS | 90 | INIT. HDD CONTROLLER |
| 5A | DISPLAY " PRESS SETUP" | 91 | INIT. LOCAL BUS HDD CONTROLLER |
| 5C | TEST RAM BETWEEN 512K AND 640K | 92 | JUMP TO USER PATCH 2 |
| 60 | TEST EXTENDED MEMORY | 94 | DISABLE A20 ADDRESS LINE |
| 62 | TEST EXTENDED MEMORY ADDRESS LINE | 96 | CLEAR HUGE ES SEGMENT REG. |
| 64 | JUMP TO USER PATCH 1 | 98 | SEARCH FOR OPTION ROMS |

DRAW	ZHOU JUN	DATE	8/12/2006	TITLE	XI'AN-EXT	SAMSUNG ELECTRONICS
CHECK	GUO LEI	DEV. STEP	PV		SPI_BIOS_ROM	
APPROVAL	BC LEE	REV	1.0		SPI_BIOS_ROM	
MODULE CODE		LAST EDIT		April 17, 2008 11:19:23 AM		PART NO. BA41-00926/7A
					PAGE	32 OF 60

HDMI REPEATER

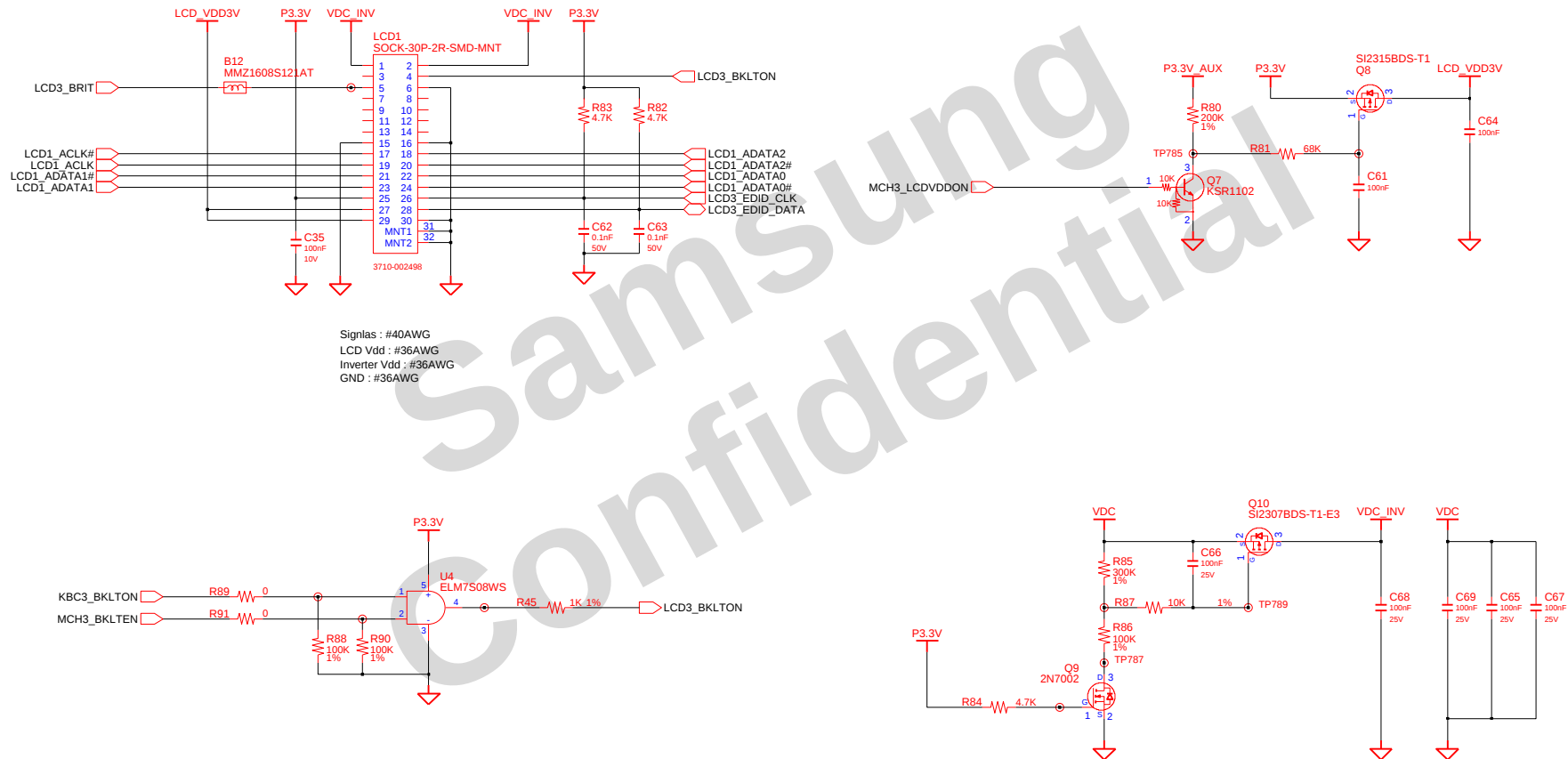
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DRAW	ZHOU JUN	DATE	11/26/2007	TITLE	XI'AN-EXT	SAMSUNG
CHECK	GUO LEI	DEV. STEP	PV	MAIN	MAIN	ELECTRONICS
APPROVAL	BC LEE	REV	1.0	HDMI REPEATER	PART NO.	BA41-00926/7A
MODULE CODE		LAST EDIT				
				April 17, 2008 11:19:23 AM	PAGE	33 OF 60

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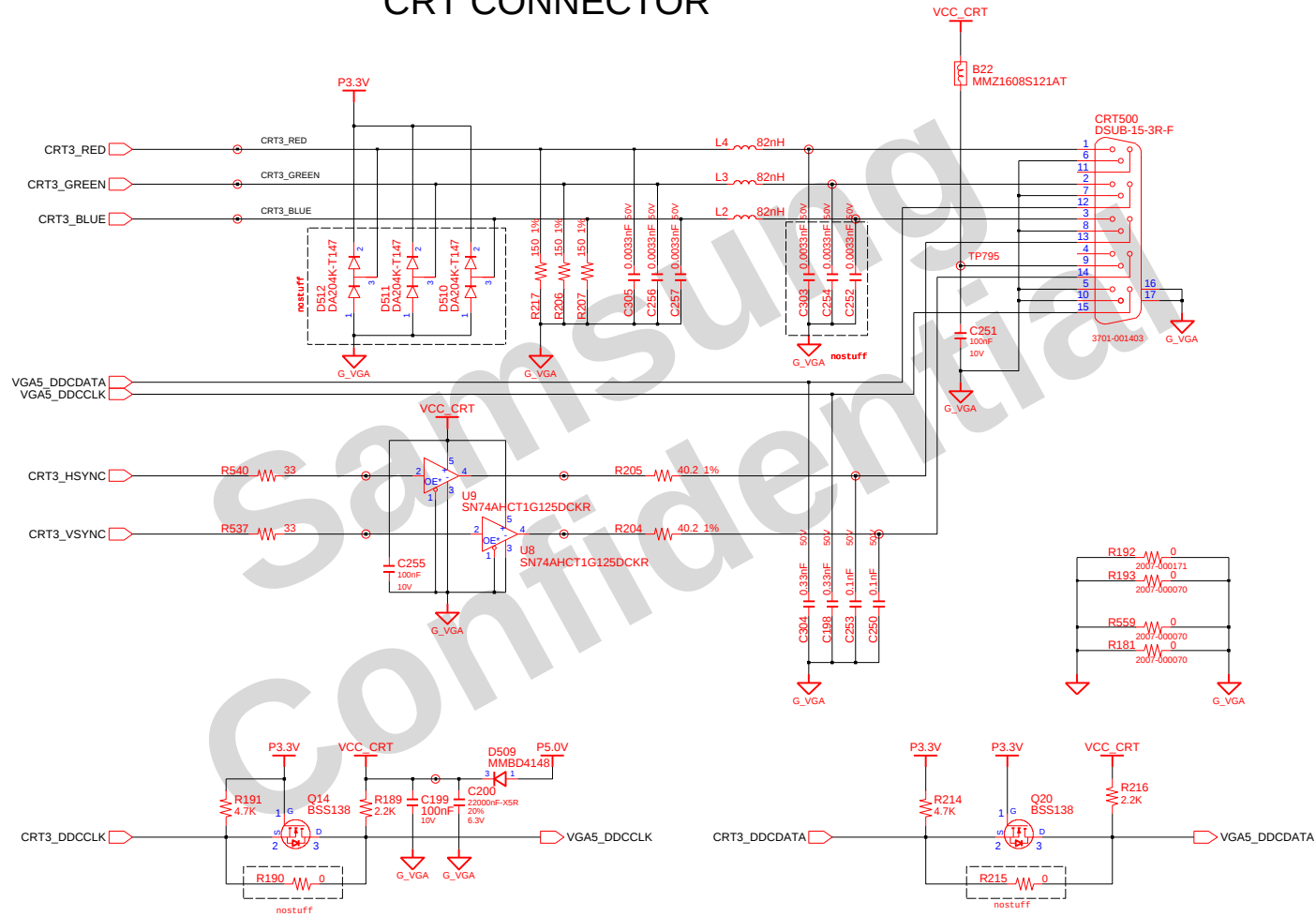
WXGA LCD CONNECTOR



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MODULE CODE	undefined	LAST EDIT	Apr 17, 2008 11:19:23 AM	PAGE	34	BA41-00926/7A
				OF	60	

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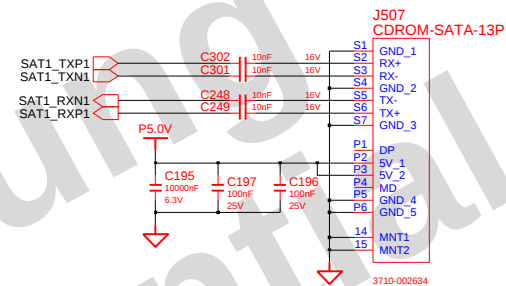
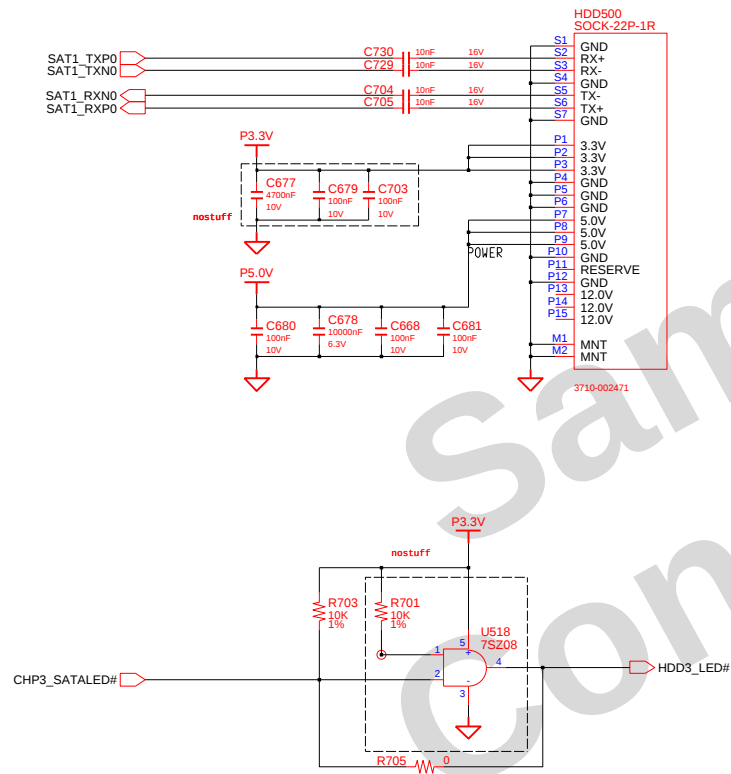
CRT CONNECTOR



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CHECK	GUO LEI	DEV. STEP	PV			PART NO. BA41-00926/7A
APPROVAL	BC LEE	REV	1.0			
MODULE CODE		LAST EDIT				
				April 17, 2008 11:19:23 AM	PAGE	35 OF 60

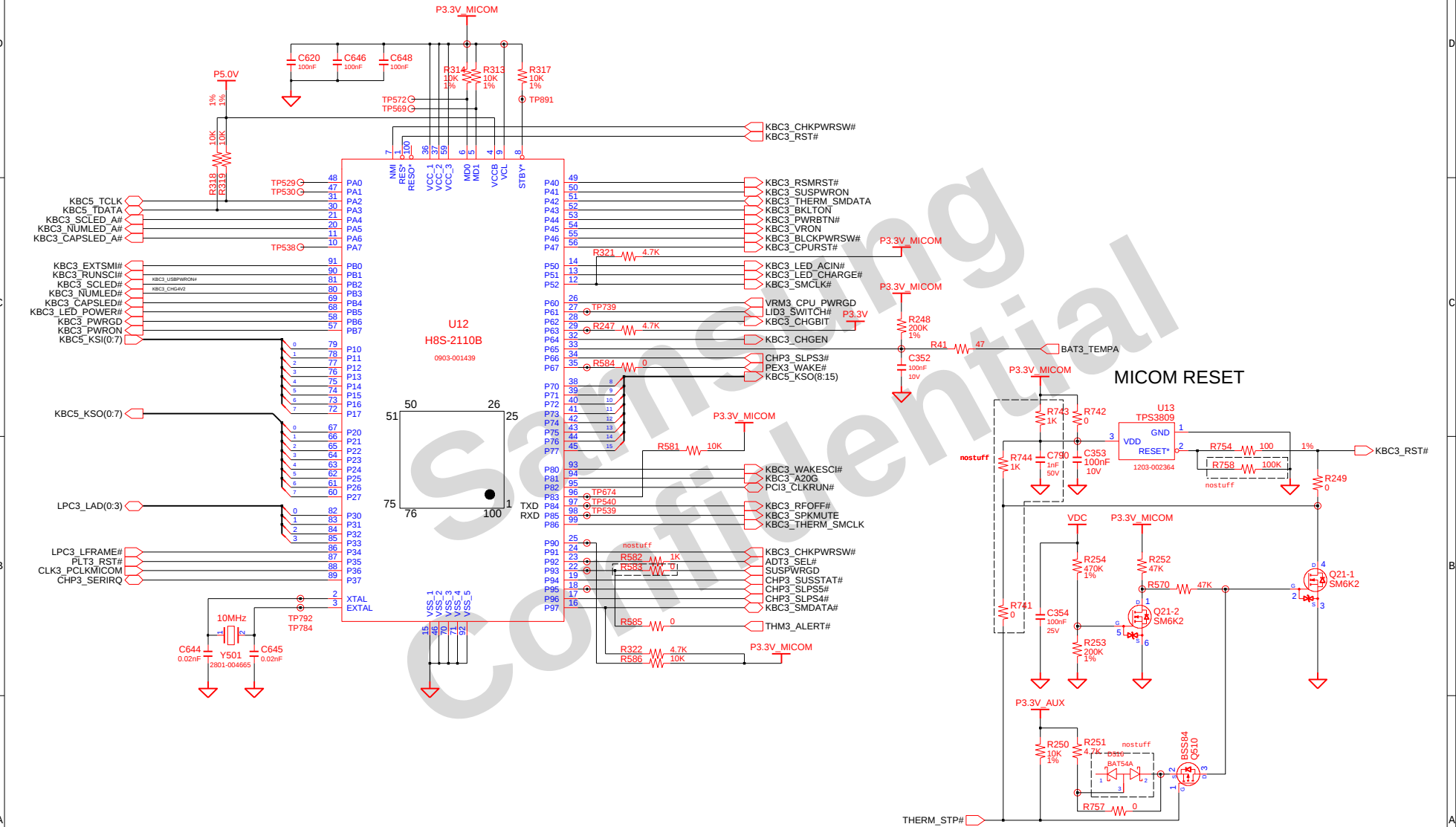
Main to HDD

Main to ODD



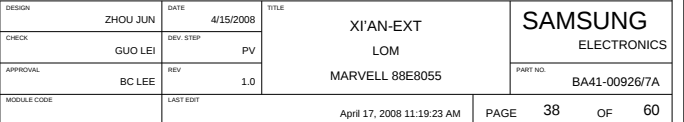
DRAW	ZHOU JUN	DATE	11/26/2007	TITLE	XI'AN-EXT MAIN HDD / ODD	SAMSUNG ELECTRONICS
CHECK	GUO LEI	DEV. STEP	PV			PART NO. BA41-00926/7A
APPROVAL	BC LEE	REV	1.0			
MODULE CODE		LAST EDIT		April 17, 2008 11:19:23 AM	PAGE 36 OF 60	

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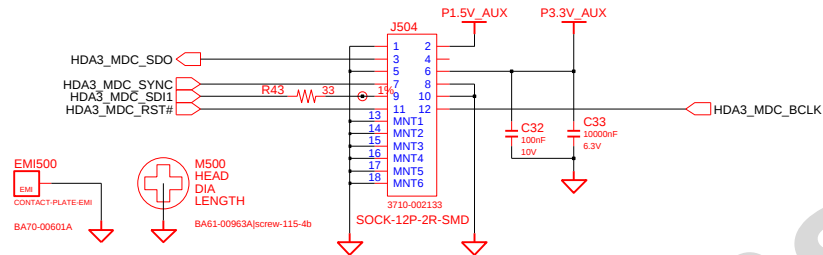


DESIGN	ZHOU JUN	DATE	4/15/2008	TITLE	XI'AN-EXT	SAMSUNG ELECTRONICS PART NO. BA41-00926/7A
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APPROVAL	BC LEE	REV	1.0		MICOM	
MODULE CODE		LAST EDIT				
April 17, 2008 11:19:23 AM						PAGE 37 OF 60

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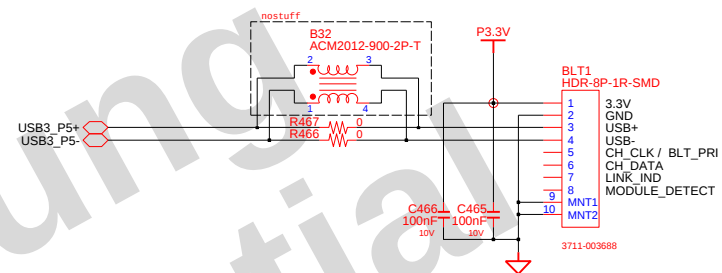


MDC connector



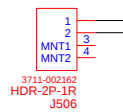
BLUETOOTH

Bluetooth 2.0 Standard

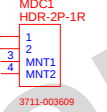


CAMERA

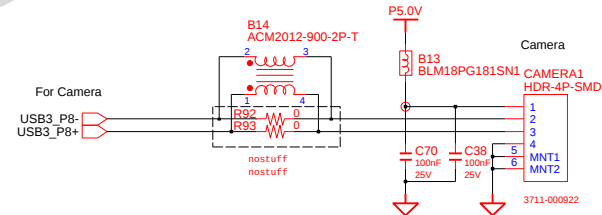
MDC Module to MainB'D



MainB'D to RJ11

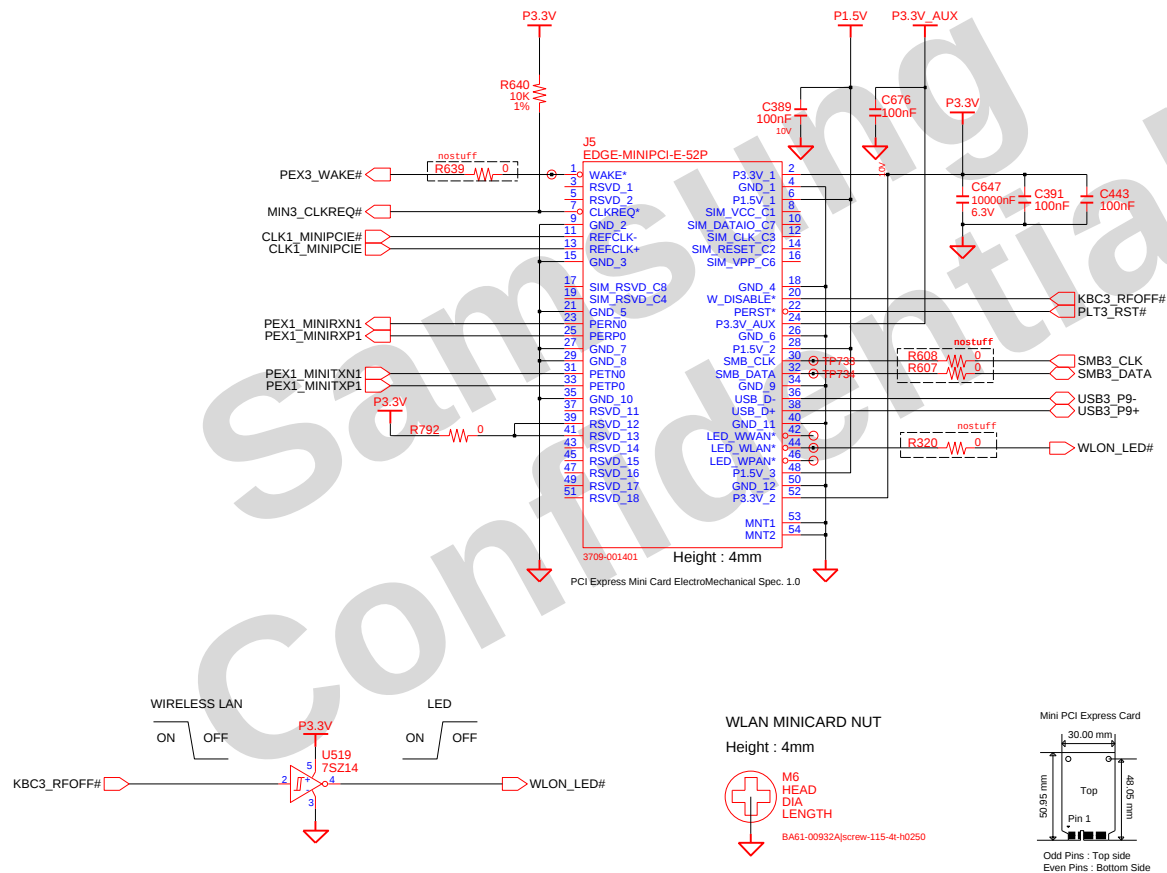


For Camera



DRAW	ZHOU JUN	DATE	11/26/2007	TITLE	XI'AN-EXT	SAMSUNG ELECTRONICS
CHECK	GUO LEI	DEV. STEP	PV	MAIN		
APPROVAL	BC LEE	REV	1.0	CAMERA, MDC && BLUETOOTH		
MODULE CODE		LAST EDIT				
April 17, 2008 11:19:23 AM						PAGE 39 OF 60

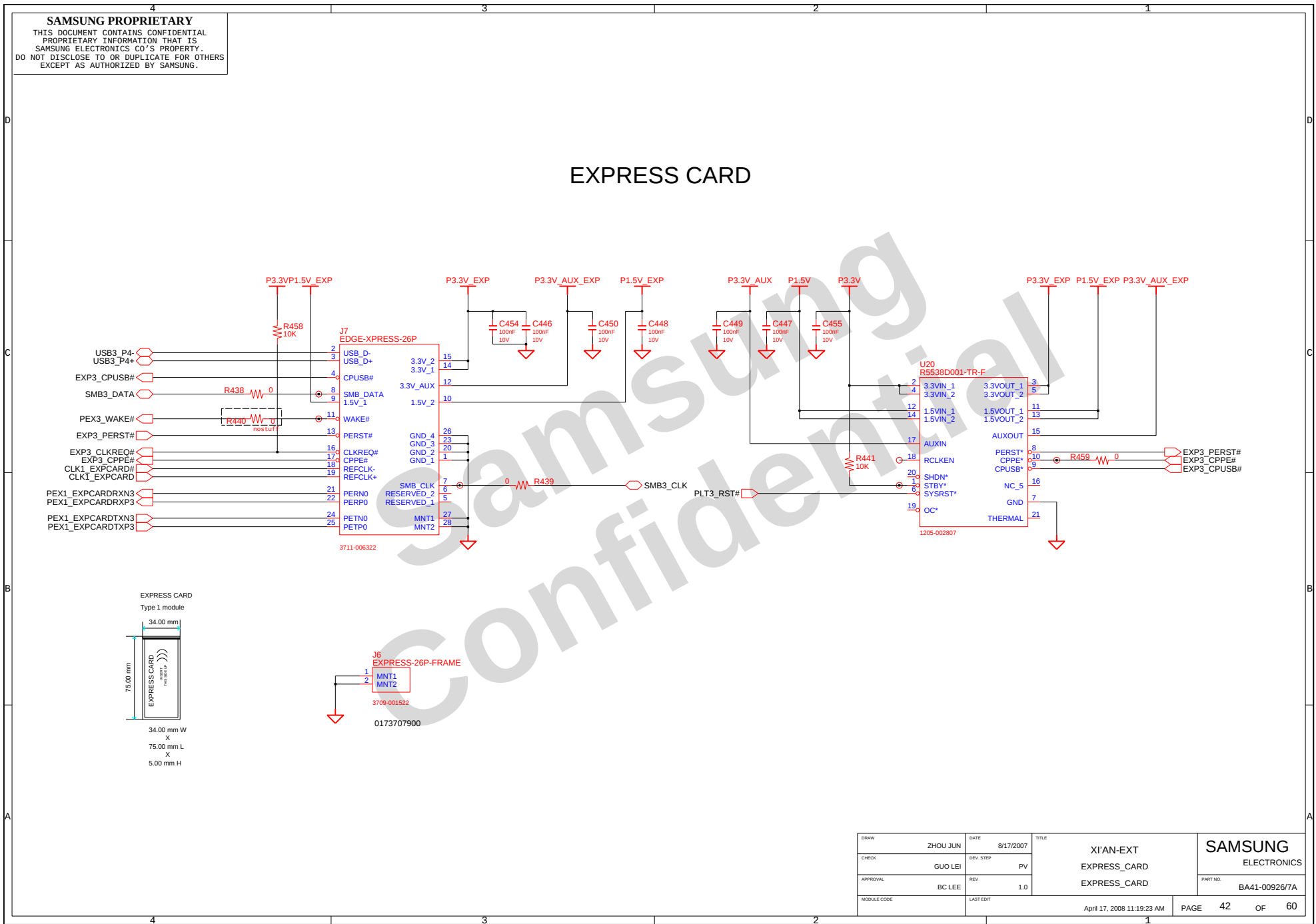
Mini PCI-E Card (WLAN)



DRAW	ZHOU JUN	DATE	8/12/2006	TITLE	XI'AN-EXT	SAMSUNG ELECTRONICS
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APPROVAL	BC LEE	REV	1.0	WLAN		
MODULE CODE	undefined	LAST EDIT	April 17, 2008 11:19:23 AM	PAGE	40	OF 60

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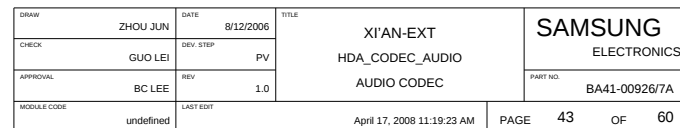
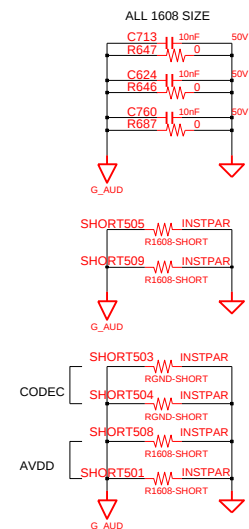
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CHECK	GUO LEI	DEV. STEP	PV			
APPROVAL	BC LEE	REV	1.0			
MODULE CODE		LAST EDIT		April 17, 2008 11:19:23 AM	PAGE	41 OF 60



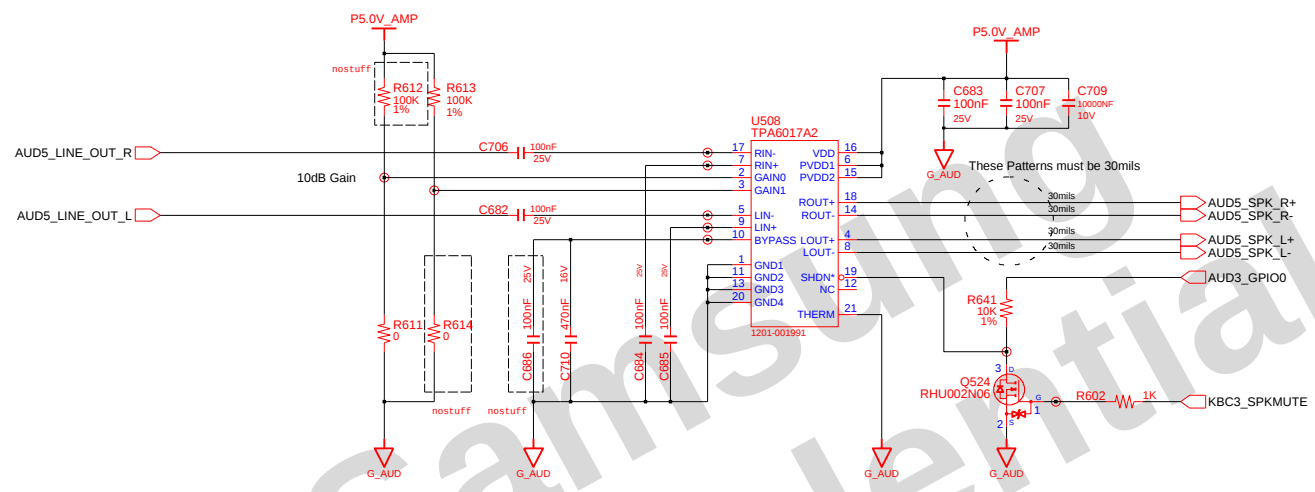
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CHECK	GUO LEI	DEV. STEP	PV			
APPROVAL	BC LEE	REV	1.0			
MODULE CODE		LAST EDIT				
				April 17, 2008 11:19:23 AM	PAGE 42 OF 60	BA41-00926/7A

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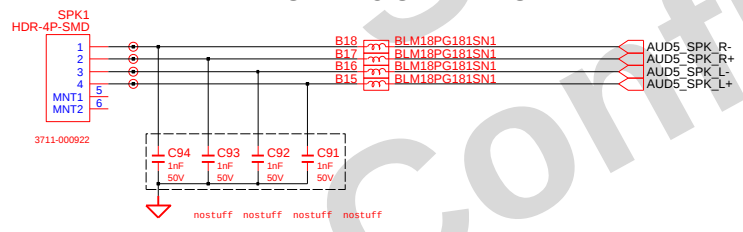
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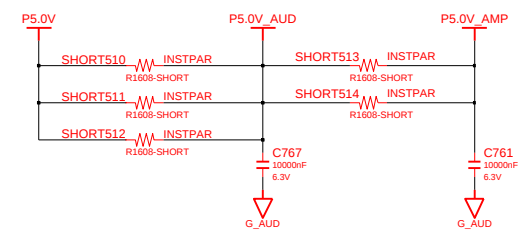
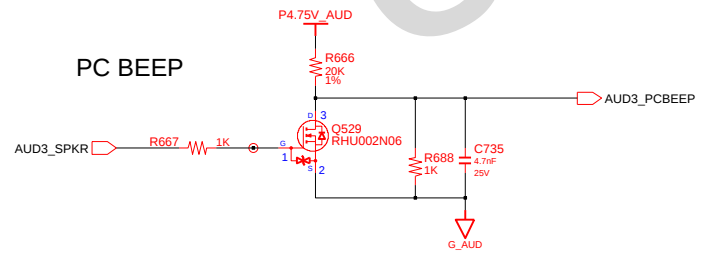
AUDIO AMP



INTERNAL STEREO SPEAKERS

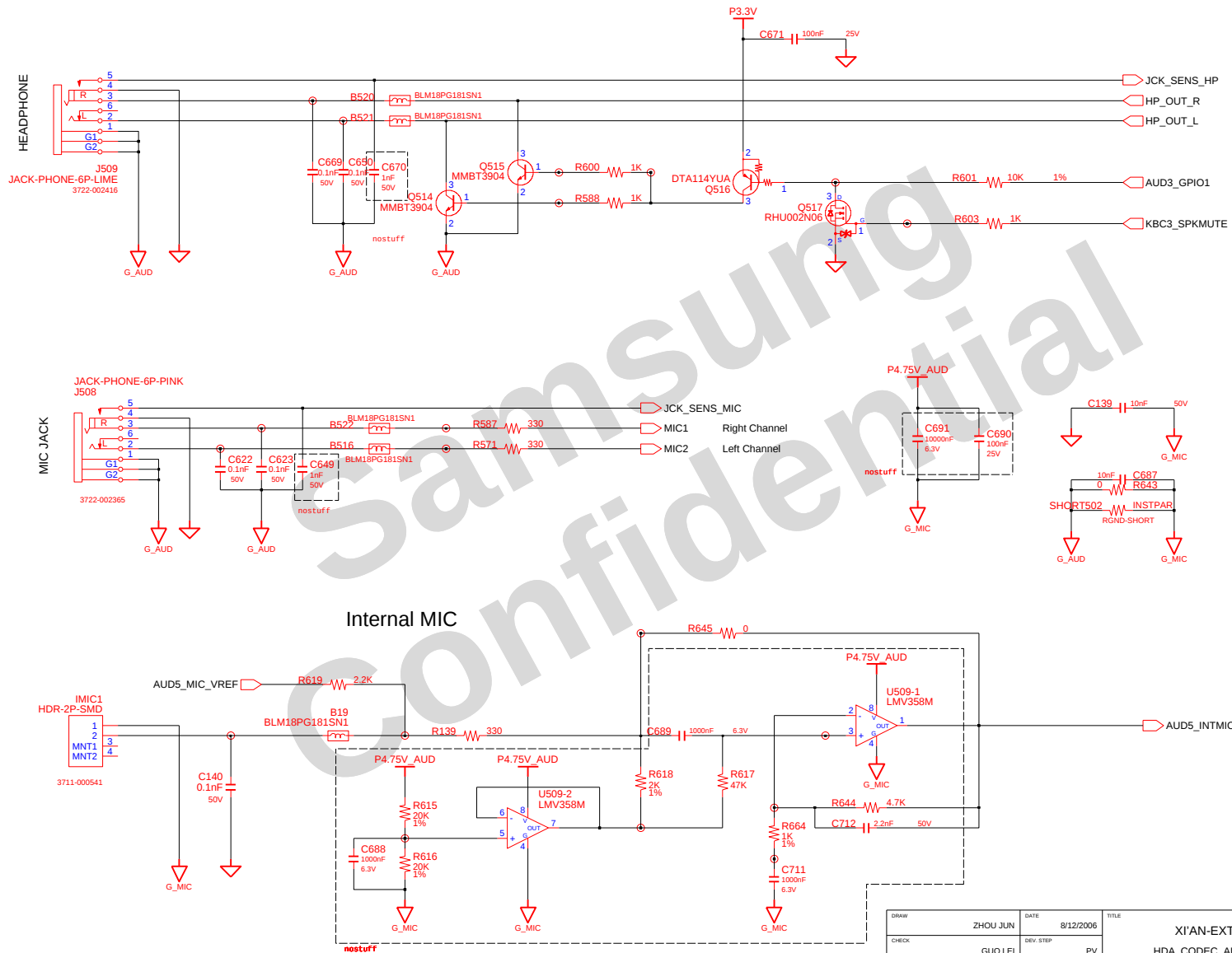


PC BEEP



DESIGN	ZHOU JUN	DATE	4/15/2008	TITLE	XI'AN-EXT HDA_CODEC_AUDIO AUDIO AMP	SAMSUNG ELECTRONICS
CHECK	GUO LEI	DEV. STEP	PV			PART NO. BA41-00926/7A
APPROVAL	BC LEE	REV	1.0			
MODULE CODE		LAST EDIT				

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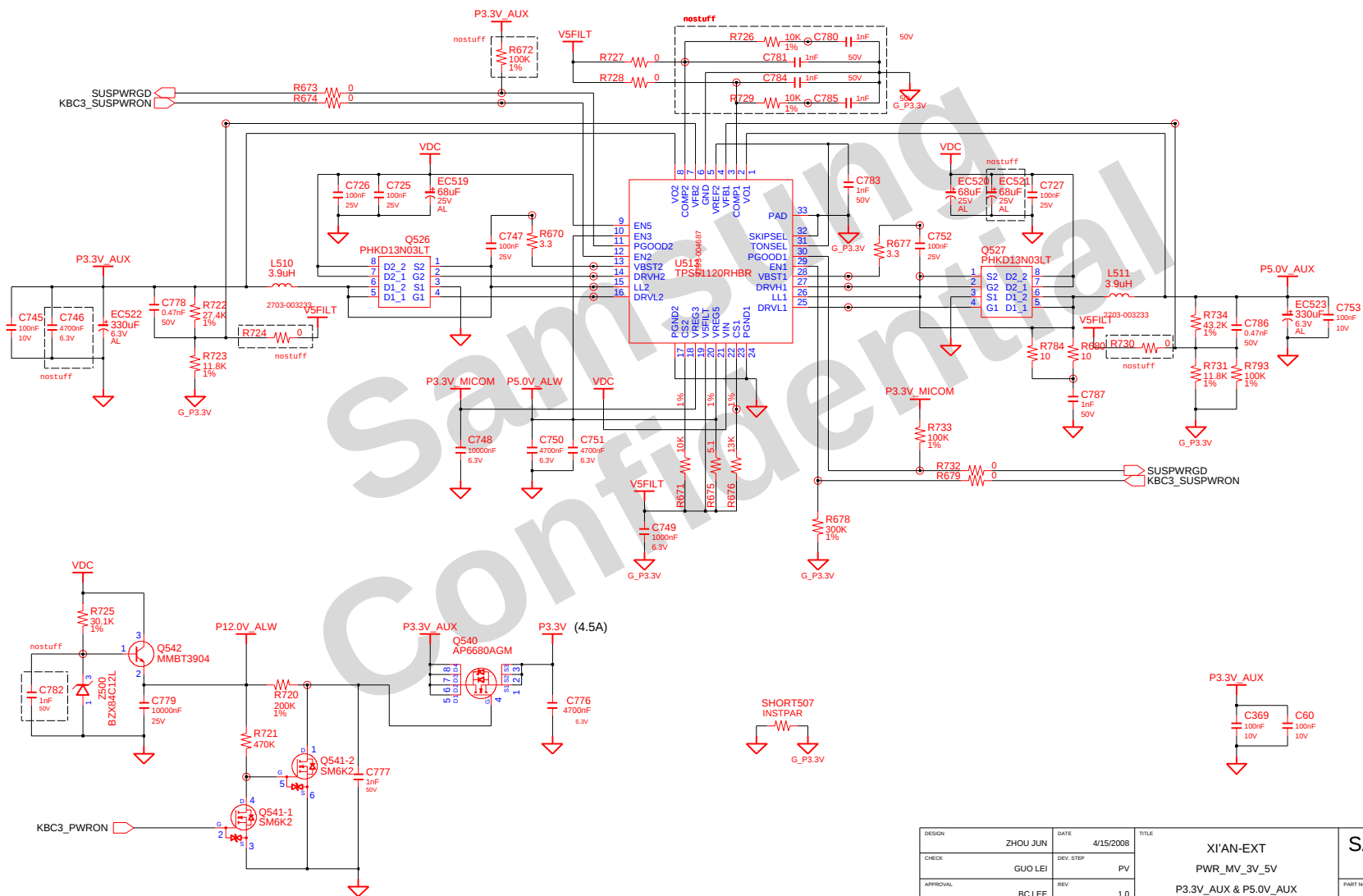
DRAW	ZHOU JUN	DATE	8/12/2006	TITLE	XI'AN-EXT HDA_CODEC_AUDIO AUDIO JACK	SAMSUNG ELECTRONICS
CHECK	GUO LEI	DEV. STEP	PV			PART NO. BA41-00926/7A
APPROVAL	BC LEE	REV	1.0			
MODULE CODE	undefined	LAST EDIT	April 17, 2008 11:19:23 AM	PAGE	45	OF 60

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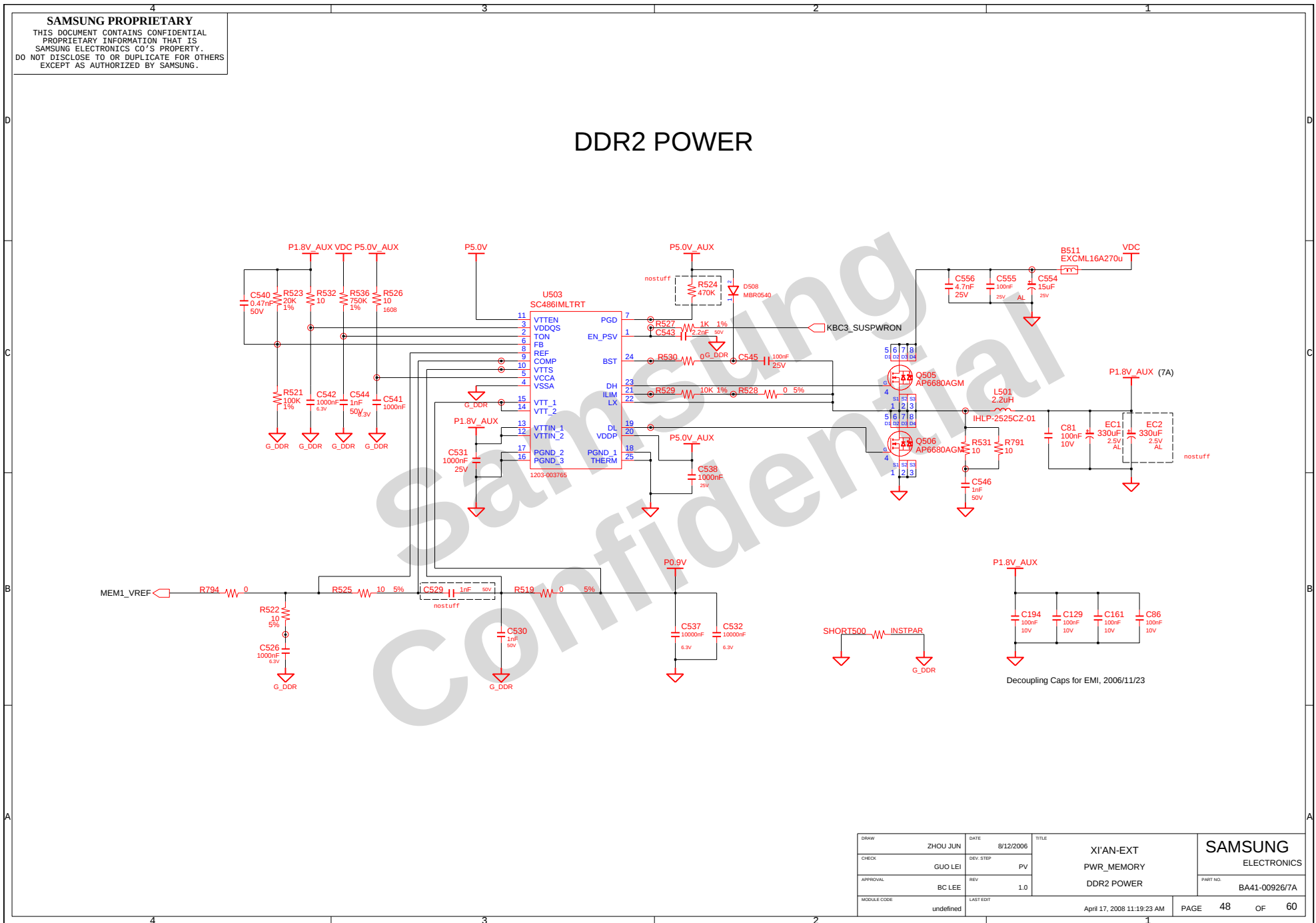
DESIGN	ZHOU JUN	DATE	4/15/2008	XI'AN-EXT PWR_MV_CHARGER CHARGER_ISL6256A			SAMSUNG			
CHECK	GUO LEI	DEV. STEP	PV				ELECTRONICS			
APPROVAL	BC LEE	REV	1.0				PART NO. BA41-00926/7A			
MODULE CODE		LAST EDIT		April 17, 2008 11:19:23 AM			PAGE	46	OF	60

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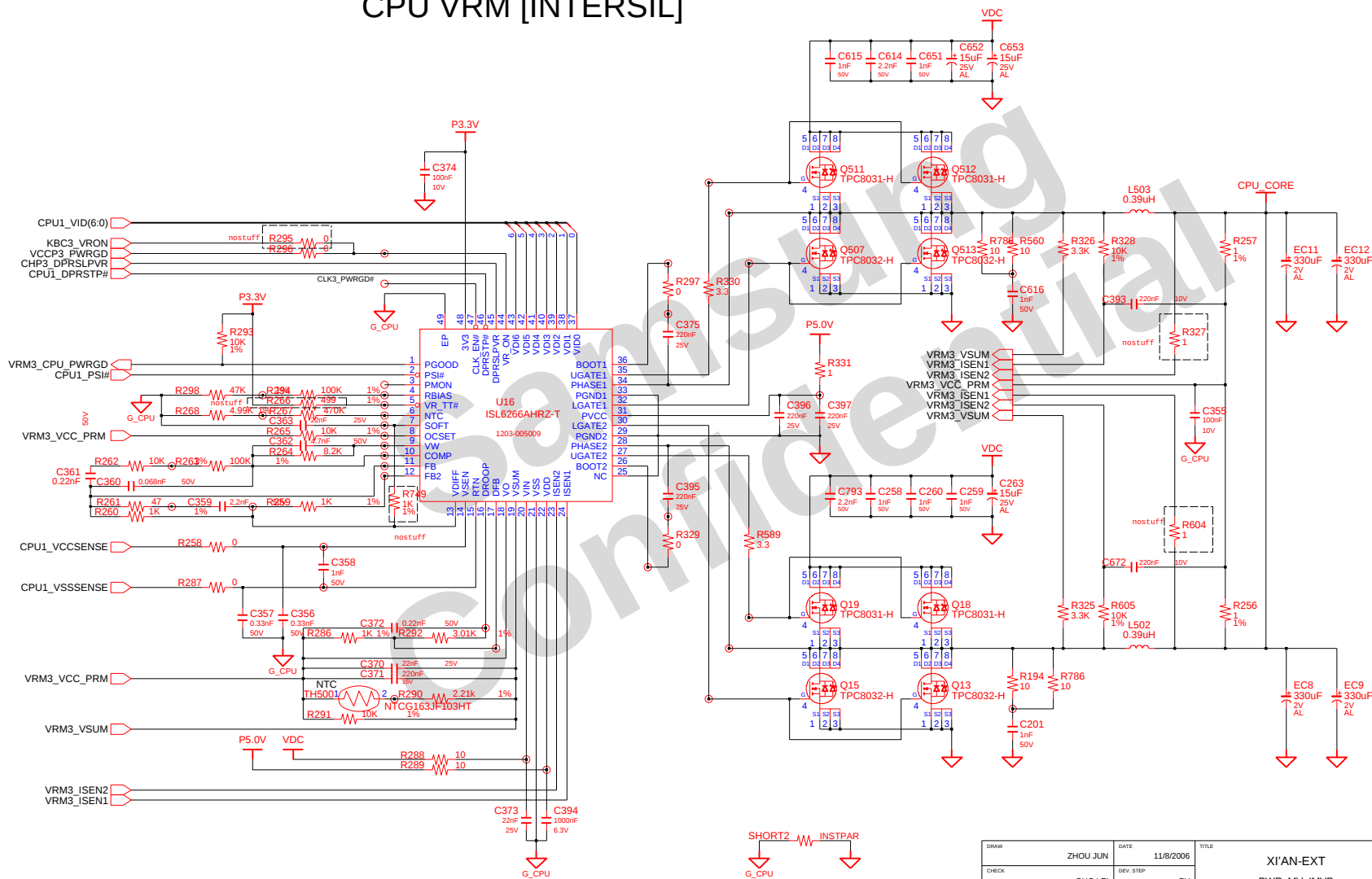
P5V_AUX & P3.3V_AUX



DESIGN	ZHOU JUN	DATE	4/15/2008	TITLE	XI'AN-EXT	SAMSUNG ELECTRONICS
CHECK	GUO LEI	DEV. STEP	PV		PWR_MV_3V_5V	
APPROVAL	BC LEE	REV	1.0		P3.3V_AUX & P5.0V_AUX	
MODULE CODE		LAST EDIT				
April 17, 2008 11:19:23 AM						PAGE 47 OF 60



CPU VRM [INTERSIL]



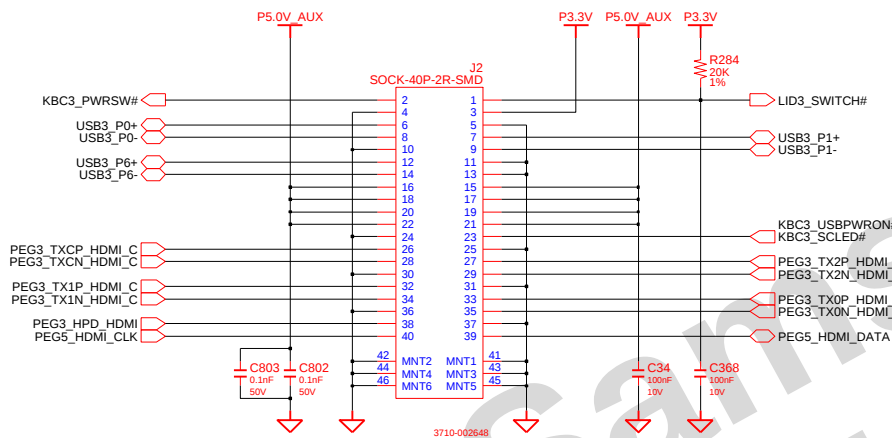
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DESIGN	ZHOU JUN	DATE	4/15/2008	TITLE	XI'AN-EXT PWR_MV_CANTIGA P1.1V & P1.05V	SAMSUNG			
CHECK	GUO LEI	DEV. STEP	PV			ELECTRONICS			
APPROVAL	BC LEE	REV	1.0			PART NO.	BA41-00926/7A		
MODULE CODE	LAST EDIT		April 17, 2008 11:19:23 AM			PAGE	50	OF	60

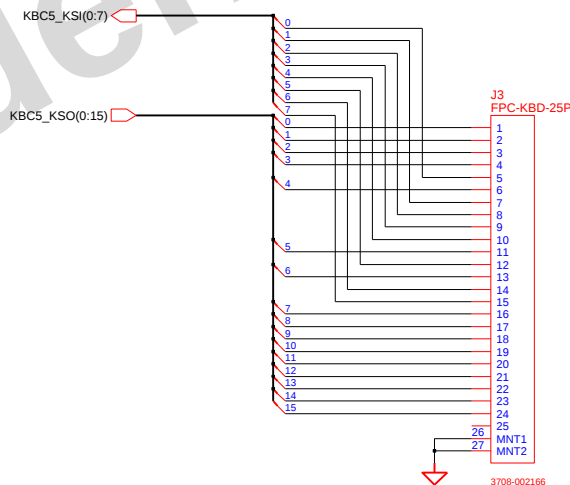
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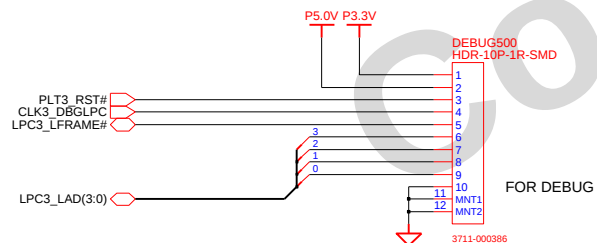
Main to SUB Connector



KEYBOARD

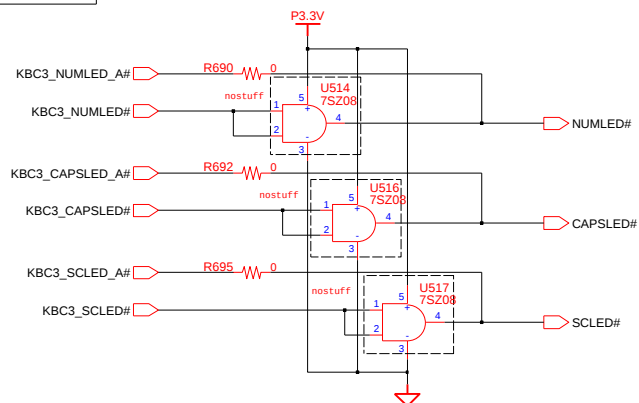


DEBUG PORT

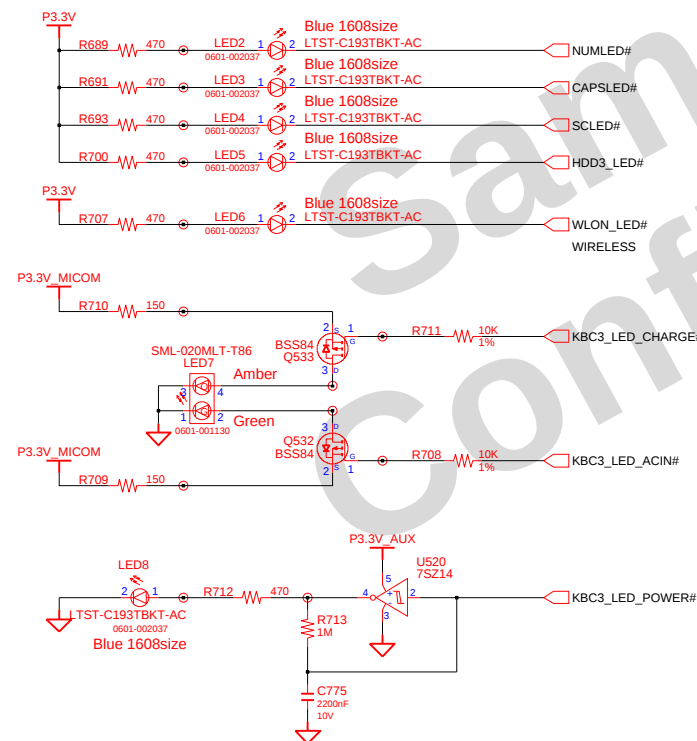


DRAW	ZHOU JUN	DATE	11/26/2007	TITLE	XI'AN-EXT	SAMSUNG
CHECK	GUO LEI	DEV. STEP	PV	MAIN	ELECTRONICS	
APPROVAL	BC LEE	REV	1.0	SUB, KBD && DEBUG	PART NO.	BA41-00926/7A
MODULE CODE		LAST EDIT				
				April 17, 2008 11:19:23 AM	PAGE	53 OF 60

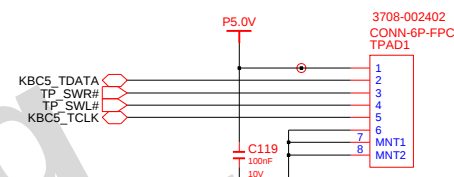
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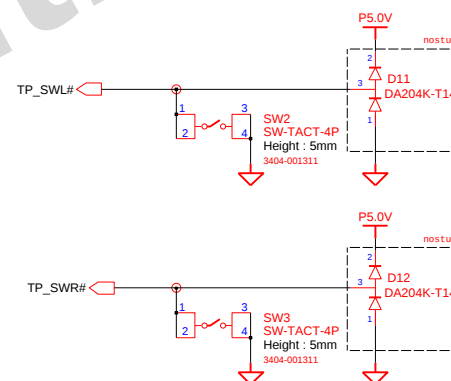
LEDS



TOUCH PAD



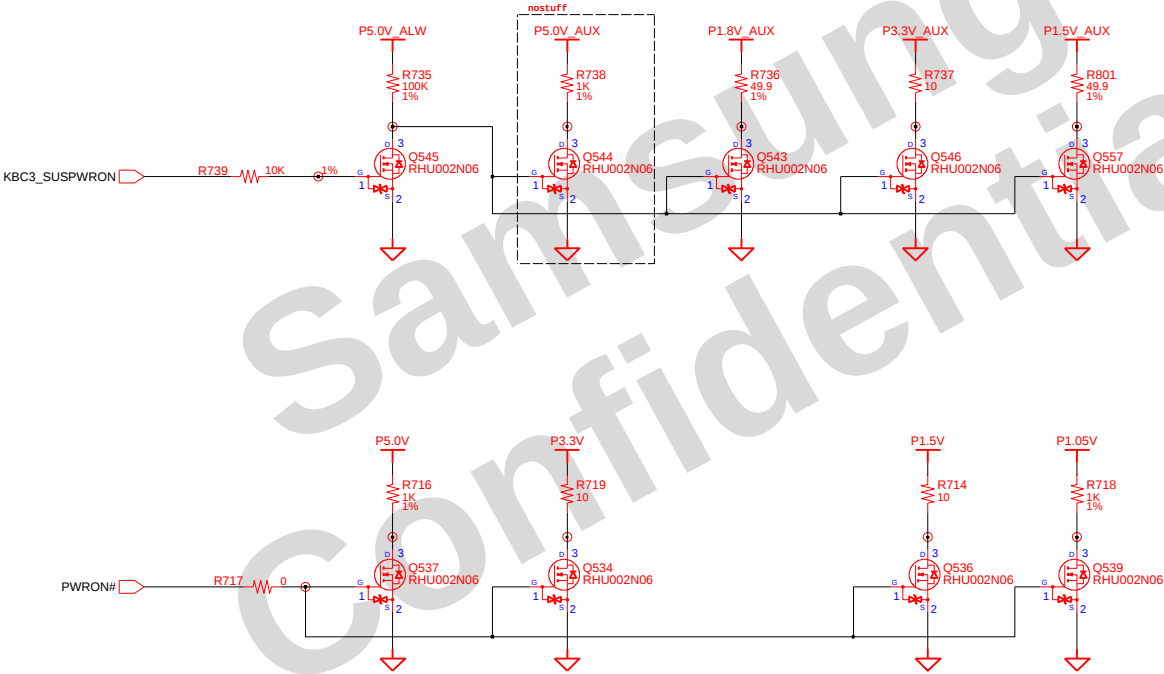
TP_SWITCH



DRAW	ZHOU JUN	DATE	11/26/2007	TITLE	XI'AN-EXT MAIN TOUCHPAD && LEDS	SAMSUNG ELECTRONICS
CHECK	GUO LEI	DEV. STEP	PV			PART NO. BA41-00926/7A
APPROVAL	BC LEE	REV	1.0			
MODULE CODE		LAST EDIT				
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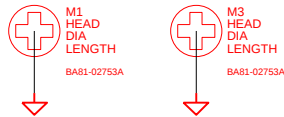
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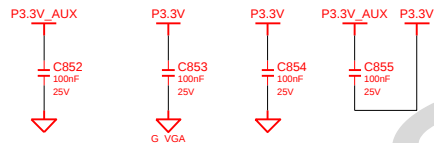
DRAW	ZHOU JUN	DATE	8/14/2007	TITLE	XI'AN-EXT	SAMSUNG ELECTRONICS
CHECK	GUO LEI	DEV. STEP	PV	PWR_MV_DISCHARGER		
APPROVAL	BC LEE	REV	1.0	DISCHARGING LOGIC	PART NO. BA41-00926/7A	
MODULE CODE	undefined	LAST EDIT	April 17, 2008 11:19:23 AM	PAGE	55	OF 60

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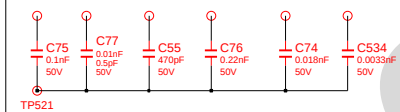
FAN-NUT



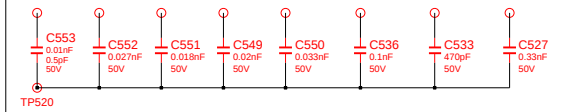
THERMAL-NUT



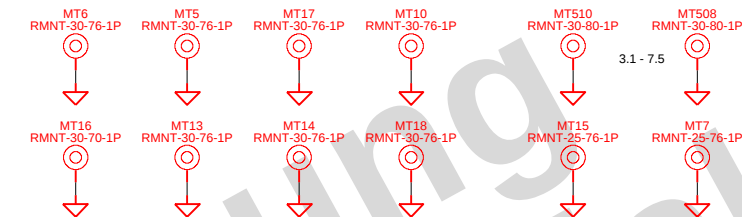
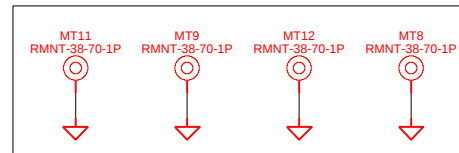
1 ~ 499 SIDE



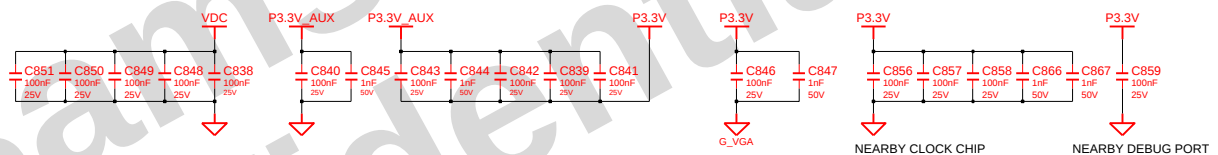
500 ~ SIDE



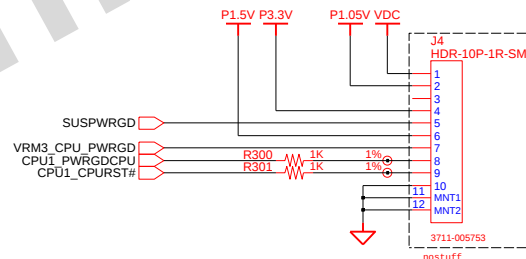
CPU RHE



FOR EMI



ICT PORT



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	11/26/2007	TITLE	XI'AN-EXT MAIN MOUNT HOLE	SAMSUNG ELECTRONICS PART NO. BA41-00926/7A
CHECK	GUO LEI	DEV. STEP	PV			
APPROVAL	BC LEE	REV	1.0			
MODULE CODE		LAST EDIT		April 17, 2008 11:19:23 AM	PAGE	56 OF 60

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- CLK33_ICH14
- CLK33_PCLKICH
- CLK33_PCLKMICOM
- CLK33_SMBCLK
- CLK33_SMBDATA
- CLK33_USB48
- CPU1_BSE0L
- CPU1_BSE1L
- CPU1_CPERST#
- CPU1_P1
- CPU1_PWRGDCPU
- CPU1_PLW#
- CPU1_SMI#
- CPU1_STPLCK#
- CPU1_TRIMTRIP#
- CPU1_VSSENSE
- CPU1_VID(0)
- CPU1_VID(1)
- CPU1_VID(2)
- CPU1_VID(3)
- CPU1_VID(4)
- CPU1_VID(5)
- CPU1_VID(6)
- CPU1_VSSSENSE
- CPU2_BSE0L
- CPU2_BSE1L
- CPU2_THERMDC
- CPU3_TRIMTRIP#
- CR13_D0CCLK
- CR13_D0CCLKDATA
- CR13_HSVCN
- CR13_VSSVCN
- CTRL18_25
- CTRL_12
- EXP3_CPERREQ#
- EXP3_CPER#
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- EXP3_CPER#

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HP_OUT_R
JCK_SENS_HP
JCK_SENS_MC
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KBC3_BKLTON
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KBC3_CAPSLED_A#
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 LAN3_LINK150#
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POWER

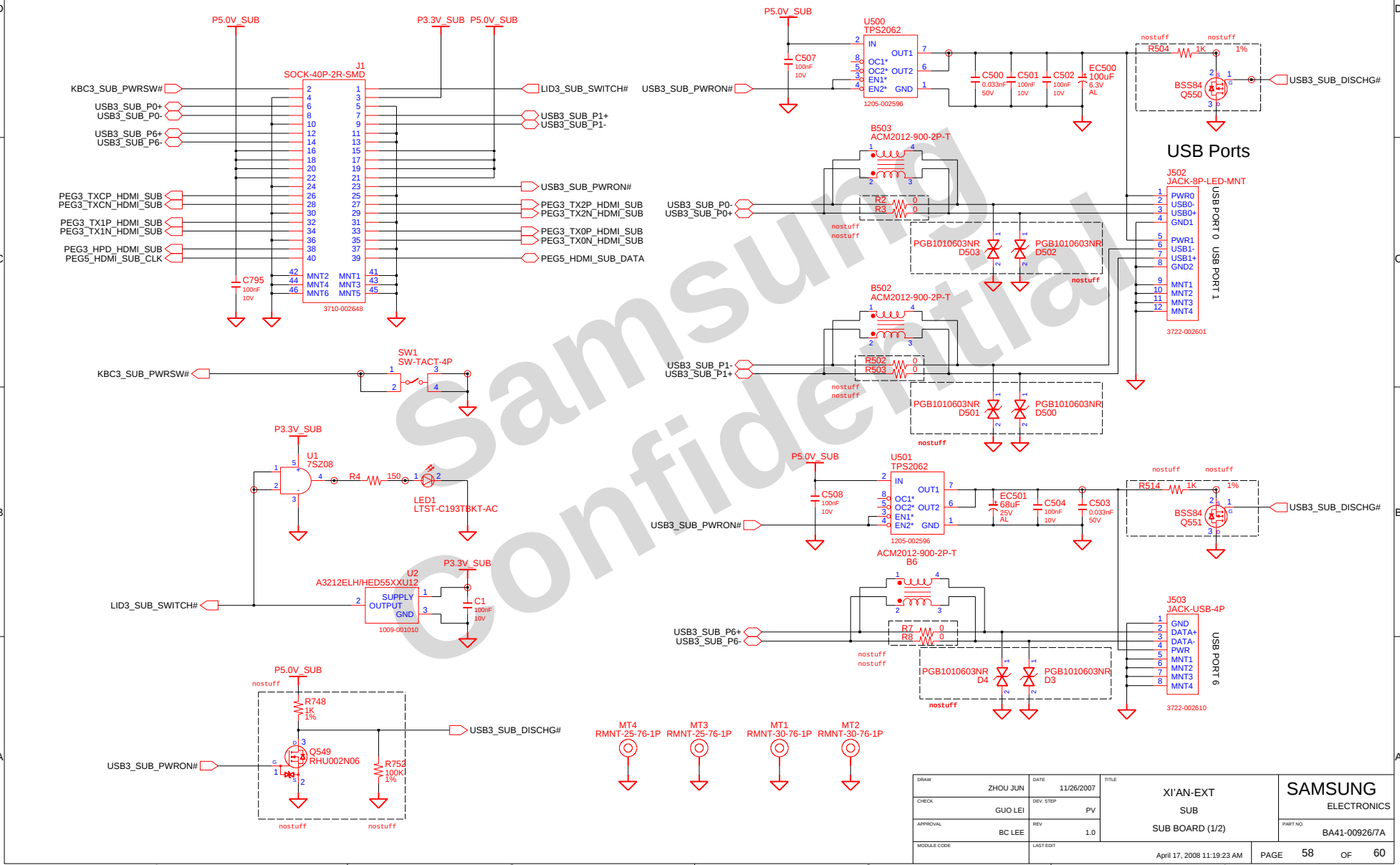
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- ☐ P1.5V
- ☐ P1.5V
- ☐ P1.5V
- ☐ P1.5V
- ☐ P1.5V_EXP
- ☐ P1.5V_AUX
- ☐ P1.5V_AUX
- ☐ P1.5V_AUX
-
- ☐ P1.8V_AUX
- ☐ P1.8V_AUX
- ☐ P1.8V_AUX
- ☐ P1.8V_AUX

- ☐ P1.8V_P2.5V_LAN
- ☐ P12.0V_ALW
- ☐ P3.3V_AUX
- ☐ P3.3V_AUX
- ☐ P3.3V_AUX
- ☐ P3.3V_AUX
- ☐ P3.3V_AUX_EXP
- ☐ P3.3V_HDMI
- ☐ P3.3V_EXP
- ☐ P3.3V_MCD
-
- ☐ P5.0V_ALW
- ☐ P5.0V_AUD
- ☐ P5.0V_AUX
- ☐ P5.0V_AUX
- ☐ P5.0V_AUX
- ☐ P5.0V_AUX
- ☐ P5.0V_CHG
- ☐ P5.0V_SUB

☐ PRTC_BAT
☐ PWR_DC
☐ PWR_DC
☐ PWR_DC
☐ PWR_DC
☐ V5FILT
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☐ VDC

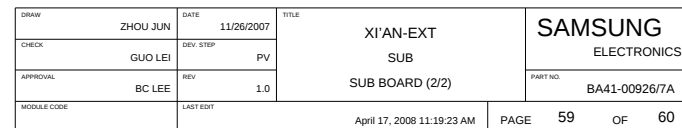
DRAW	ZHOU JUN	DATE	11/26/2007	XI'AN-EXT MAIN TEST POINT	SAMSUNG ELECTRONICS			
CHECK	GUO LEI	DEV. STEP	PV		PART NO. BA41-009267/A			
APPROVAL	BC LEE	REV	1.0					
MODULE CODE	LAST EDIT							
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DRAW	ZHOU JUN	DATE	11/26/2007	TITLE	XI'AN-EXT SUB SUB BOARD (1/2)	SAMSUNG ELECTRONICS
CHECK	GUO LEI	DEV. STEP	PV			PART NO. BA41-00926/7A
APPROVAL	BC LEE	REV	1.0			
MODULE CODE		LAST EDIT				
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Sheet43 -----	PWR_Memory[sheet1]		
Sheet44 -----	PWR_MV_CPU_Isl6266a[sheet1]		
Sheet45 -----	PWR_MV_Cantiga[sheet1]		
Sheet46 -----	Root[sheet13]		
Sheet47 -----	Root[sheet14]		
Sheet48 -----	Root[sheet15]		
Sheet49 -----	PWR_MV_DisCharger[sheet1]		
Sheet50 -----	Root[sheet16]		