SAMSUNG

SENS

R60 Plus

PRAHA

NT-R60 Plusxxxx/xxx

SERVICE Manual

SENS R60 Plus

Feature

1. Simple & Essential Note PC
-. Intel Core2 Duo/Celeron M Processor
-. AMD RS600ME + AMD SB600
-. ATI M64S Graphics
2. High Performance & Security
-. 15.4" WXGA/WXGA+ Super Bright Glare LCD/Non Glare LCD
-. AVS now, Bluetooth.

If there are the contents not included in this book, please refer to K-zone Service Manual

- CONTENTS -

2. Introduction and Specification

1) Introduction

(1) High Performance Note PC

- Intel® Core™ 2 Duo Processor
- Intel® Core™ Duo Processor
- Intel® Pentium Dual Core™ Processor
- Intel® Celeron® M Processor
- Wireless LAN (Option), Bluetooth (Option).

(2) Convenient AV

-Touch Pad Under Plastic

-Wireless On/Off indicator & Button

-ASF Solution Ready

(3) Communications

-Wireless Solution (F. Option)

-AtherosAR2423 (802.11bg)

-Bluetooth V2.0

-MDC (F. Option) .

Delphi(D40)

2) Specification

Processor and Motherboard	***Description***
CPU	Intel® Core™ 2 Duo Processor Intel® Pentium Dual Core™ Processor+ AMD RS600ME + AMD SB600 Intel® Celeron® M Processor
Speed	R60 : Intel® Core™Duo Processor T2450 (2.0GHz) ~ Intel® Core™ 2 Duo Processor T5600 (1.83GHz) Intel® Pentium Dual Core Processor T2080 (1.73GHz) ~ T2130 (1.86GHz) Intel® Celeron M Processor 430 (1.73GHz) ~ 530 (1.73GHz)
	R60 Plus : Intel® Core™ 2 Duo Processor T5250 (1.5GHz) ~ T7700 (2.4GHz) Intel® Celeron Processor 530 (1.73GHz) ~ 550 (2.0GHz)
Cache	4MB (Intel® Core™ 2 Duo Processor T7700, T7500, T7300) 2MB (Intel® Core™ 2 Duo Processor) 1MB (Intel® Pentium Dual Core Processor, Intel® Celeron®M Processor)
Chipset	RS600ME + SB600
BIOS	8 Mbit, Flash upgradable, SPI ROM
Thermal Design Performance	MAX. 35W
Memory	
Memory / Max. Memory	1GB ~ MAX 4GB
Memory type	PC2-5300(667MHz) DDR2 SODIMM
Memory Modules	1GB, 2GB, 4GB SODIMM
Sockets	2-slot SODIMM's
Display and Graphics	
LCD	15.4" WXGA (Glare/NonGlare)
LCD Vendor	AMLCD/CPT
ATI External GFx	ATI External GFx
Video Memory	ATI Radeon Xpress 2300
ATI	32MB ~ Max. 256MB Shared Memory
Max.Resolution for LFP LVDS	1280 x 800 x 32Bits color (WXGA)
Max.Resolution for External Monitor	2048 x 1536 @ 32bps (CRT)

2. Introduction and Specification

Storage	
Hard Disk Drive	9.5mmH 2.5" HDD, Removable
Supports	SMART Ultra DMA 33/66/100, DMA Mode 2/4 ; SATA
Average Access Time	13m sec.
Speed	5400 / 7200 RPM , Hybrid HDD, TMR/PMR Type
Capacity	80GB / 100GB / 120GB / 160GB / 200GB : HGST, Hitachi, Samsung - 80 ~ 160GB SATA 5400rpm - 200GB SATA 4200rpm (June '07)
Optical Disk Drive	DVD/CD-ROM/Combo / Super Multi (12.7mm) ; Factory Option
Type	Fixed type (Factory Option)
S/W supplied	Cyberlink DVD Solution
Security	RPC-II Regional Encoding
Optical Driver Modules	
Combo Drive 1	**Factory Option**
Module type	Fixed 12.7mm Slim
Speed	8x DVD-ROM, 24x RW, 24x CD-R : TSST, TS-L332A
Average Access Time	DVD 130ms Typ, CD 130ms Typ
Weight	176g or less
S/W Supplied	Cyberlink DVD Solution
Security	RPC-II Regional Encoding
Combo Drive 2	**Factory Option**
Module type	Fixed 12.7mm Slim
Speed	8x DVD-ROM, 24x RW, 24x CD-R, 24x CD : TSST, TS-L462D
Average Access Time	DVD 130ms Typ, CD 130ms Typ,.
Weight	176g or less
S/W supplied	Cyberlink DVD Solution
Security	RPC-II Regional Encoding
Super Multi Dual Layer 1	**Factory Option**
Module type	Fixed 12.7mm Slim
Speed	5x DVD-RAM, 8x DVD±R 2.4x DVD+R DL, 4x DVD±RW, 24x CD-R, 16x CD-RW, 8x DVD, 24x CD : Panasonic UJ-850
Average Access Time	DVD 130ms Typ., CD 130ms Typ.
Weight	190g or less
S/W supplied	Cyberlink DVD Solution
Security	RPC-II Regional Encoding
Super Multi Dual Layer 2	**Factory Option**
Module type	Fixed 12.7mm Slim
Speed	5x DVD-RAM, 8x DVD±R, 6x DVD±R DL, 8x DVD+RW, 6x DVD-RW, 24x CD-R/RW, 8x DVD, 24x CD : *TSSTTS-L632D*

2. Introduction and Specification

Average Access Time	DVD 130ms Typ., CD 130ms Typ.
Weight	180g or less
S/W supplied	Cyberlink DVD Solution
Security	RPC-II Regional Encoding
Super MultiDual Layer 3	**Factory Option**
Module type	Fixed 12.7mm Slim
Speed	5x DVD-RAM, 8x DVD±R, 6x DVD±R DL, 8x DVD+RW, 6x DVD-RW, 24x CD-R/RW, 8x DVD, 24x CD : *TeacDV-W28EC*
Average Access Time	DVD 130ms Typ., CD 130ms Typ.
Weight	180g or less
S/W supplied	Cyberlink DVD Solution
Security	RPC-II Regional Encoding
Network Tools	
Fax/Modem	56Kbps / V.92 Azalia Modem, DELPHI (D40) (Factory Opeion)
Chipset	CSP1040 AGR A3 & A3 5V1
Features	RJ11 Output
LAN	10/100 Ethernet UTP
Chipset	Marvell 88E8039
Features	Integrated PHY, MAC 10/100, RJ45 Output
802.11b/g Wireless LAN	AtherosAR2423: Factory option
Type	Mini card (Factory Option)
Chipset	AR2423
Bluetooth	BCM92045NMD : Factory Option
Type	USB daughter card with integrated PIFA antenna
Chipset	Broadcom BCM2045
Standard	version 2.0
I/O Interface	
PC CardBus Slots	PCI Express Card Slot
I/O Ports	
USB Port	3 (USB2.0)
Video (CRT) Port	1
	1
Audio Jacks	HeadPhone-out
Modem / LAN	RJ11, RJ45
Power	1 DC-in (5pie)
Input Devices	
Key board	88KEY(KR/US) Travel length 2.6mm / Key Pitch 19.05mm
Touchpad	Synaptics Touchpad (Plat type with Scroll area)
Easy Button	-

2. Introduction and Specification

Power and Power Management	
Battery (Standard)	AA-PB3NC6B (6cells, Smart Li-Ion Battery)
Dimension	204 x 48 x 20mm
Weight	350g (max)
Recharge Time	2 hours to 100% with Windows on & off
Battery Life	over 2.5hour (Battery mark 4.01)
Details of Cell	6cells (2Parallel 3Serial) - Standard only
Voltage	11.1Vdc
Battery Capacity	2000mAh/cell
Battery Rating	11.1V / 4000mAh (44.4Wh)
Battery (LongLife)	AA-PL2NC9B (9cells, Smart Li-Ion Battery)
Recharge Time	4 hours to 100% with Windows on & off
Battery Life	over 5hour (Battery mark 4.01)
Details of Cell	9cells (3Parallel 3Serial)
Voltage	11.1Vdc
Battery Capacity	2600mAh/cell
Battery Rating	11.1V / 7800mAh (86.58Wh)
AC Adapter	AD-9019S(2.0GHz↑)
Output Power	90Watts
Dimension	126 X 51 X 30 mm
Weight (AC Adapter)	270g (typ)
Worldwide Compatibility	Auto-sensing 100 - 240VAC
Line Frequency	50 / 60Hz
Adapter Rating - Input	100V - 240V, 1.5A(Min)
Adapter Rating - Output	19.0VDC , 4.74A
Power Management Features	ACPI 3.0 support, Standby(S3), Hibernate(S4)
AC Adapter	AD-6019S(2.0GHz↓)
Output Power	60 Watts
Dimension	108 x 46.5 x 28mm
Weight (AC Adapter)	320g (max)
Worldwide Compatibility	Auto-sensing 100 - 240VAC
Line Frequency	50 / 60Hz
Adapter Rating - Input	100V - 240V, 1.4A
Adapter Rating - Output	19.0VDC / 3.16A
Power Management Features	ACPI 1.0b support, Standby(S3), Hibernate(S4)

2. Introduction and Specification

System Dimensions	
Dimensions (W X D X H)	358 x 265.2 x 31.3 ~ 35.8 (37.4)mm
Weight (Full system w/4cell Battery)	**2.68Kg**
	Status : Combo , 4cell battery, 2.5" 80GB HDD
Materials	LCD Front: PC, Back: PC/ABS
	Top: PC/ABS, Bottom: Mg

2. Introduction and Specification

3) Specification comparison

3-1) Subsidiary company model comparison

모델명			
		R40 plus	**R60 plus**
Platform		Intel Yonah (FSB667, 2MB L2)	Intel Merom (FSB800, 2MB L2) +ATI RS600ME+ATI SB600
LCD		15.4" WXGA	15.4" WXGA
Graphics	Internal	RadeonXPress 1250M	RadeonXPress 2300
Network	Modem	56Kbps F.Option	56Kbps F.Option
	Ethernet	10/100	10/100
	Wireless	bg	bg
Port		PCMCIA, 4USB, TV-out, VGA, Audio	PCI Express Card, 3USB, VGA, Audio
Size (cm)		340.4 x 259.6 31.1~38.7	358 x 265.2 x 31.3 ~ 35.8 (37.4)mm
Weight (kg)		2.46	2.68

2. Introduction and Specification

3) Specification comparison

3-2) Other firm model comparison

Model Name				
	ACER 5611-300	Sony (VGN-FE41E)	Toshiba A100-733	Samsung(R60+)
CPU	T2050	T5500	T5600	T7100
LCD	15.4" WXGA	15.4" WXGA	15.4" WXGA	15.4" WXGA
Graphics	nVIDIA 7300	nVIDIA 7400	nVIDIA 7600	ATI X2300
Memory	DDR2 1G	DDR2 1G	DDR2 2G	DDR2 512MB
HDD	160GB	120GB	120GB	160GB
ODD	Super-Multi	Super-Multi	Super-Multi	Super-Multi
Network	Modem 10/100 802.11a/b/g	Modem 10/100 802.11a/b/g	Modem 10/100 802.11a/b/g	Modem(56Kbps) 10/100 802.11b/g
Battery	6 Cell	6 Cell	6 Cell	6 Cell/ 9 Cell
PC Card Slot	5-in-1	5-in-1	3-in-1	2-in-1
Port	4xUSB, VGA,	4xUSB, VGA	4xUSB, BT, VGA	3xUSB, , BT, VGA,
Size (cm)	358 x 269 x 29~36 mm	360 x 274.5 x 26~35 mm	360 x 267 x 36.8 mm	358 x 265.2 x 31.3~35.8(37.4)mm
Weight (kg)	2.89	2.8	2.72	2.68

2. Introduction and Specification

4) Wireless LAN Specification

(1) Wireless LAN Standard (802.11BG card)

Atheros Wireless Network Adapter

Item		Detailed Specifications
Physical Specifications	Dimensions	(Width X Height) 59.75 X 44.70 mm
	operation temperature and humidity	Same as system operation
		Temperature: 0°C ~ 70°C Humidity: less than 85%
Power Specification	Power Saving Mode	70 mW
	Receiving Mode	0.825W
	Transmission Mode	1.25W
	Power	3.3V
Network Specifications	Compatibility	IEEE802.11b, IEEE802.11g
	Operating System	Microsoft Windows XP - NDIS5 Miniport Driver
	Media Access Protocol	CSMA/CA (Collision Avoidance) with Acknowledgement(ACK)
	Security	Wired Equivalent Privacy support (WEP) 64bit / 128bit WPA*, CCX*

* This piece of equipment supports the Wi-Fi wireless LAN security standard, WPA (Wi-Fi Protected Access) and CCX (Cisco Compatible eXtensions). To connect to a wireless network consisting of the WPA and CCX, certificates or PROSet may be required depending on the network settings. For driver update, visit www.samsung.com and for information on the PROSet installation, refer to "Wireless Network Setup Using the Wireless LAN Setup Program" (p67). For more information, ask your network administrator.

Radio Specifications

RF Band	2.4GHz
Support Channels	Channels allowed per country.
Device	Transceiver
Standard Output Power	MAX 10mW
Transmission Method	11b mode: DSSS 11g mode: OFDM
Transmission Rate (Mbps) *	11b mode: 11, 5.5, 2, and 1 11g mode** : 54, 48, 36, 24, 18, 12, 9, and 6
Antenna Type	Internal Antenna 2 EA (Main/Aux)

* The transmission rate may differ from the actual transmission rate.
**11g mode is supported only when you are connected to an IEEE 802.11g device (e.g. An Access Point supporting IEEE 802.11g).

5) Option list

HDD 		
BA59-01999A	HTS541660J9SA00	5400rpm, , 60G, SATA, 8M
BA59-01946A	MHV2060BH-PL	5400rpm, , 60G, SATA, 8M
BA59-02084A	MHW2060BH	5400rpm, , 60G, SATA, 8M
BA59-02038A	HM060HI	5400rpm, , 60G, SATA, 8M
BA59-02001A	HTS541680J9SA00	5400rpm, , 80G, SATA, 8M
BA59-01947A	MHV2080BH-PL	5400rpm, , 80G, SATA, 8M
BA59-02085A	MHW2080BH	5400rpm, , 80G, SATA, 8M
BA59-02009A	ST980815AS	5400rpm, , 80G, SATA, 8M
BA59-01742A	HTS541010G9SA00	5400rpm, , 100G,SATA , 8M
BA59-01948A	MHV2100BH-PL	5400rpm, , 100G, SATA, 8M
BA59-02086A	MHW2100BH	5400rpm, , 100G, SATA, 8M
BA59-02014A	HM101JI	5400rpm, , 100G, SATA, FFS
BA59-02010A	ST9100828AS	5400rpm, , 100G, SATA, 8M
BA59-02002A	HTS541612J9SA00	5400rpm, , 120G, SATA, 8M
BA59-01957A	MHV2120BH-PL	5400rpm, , 120G, SATA, 8M
BA59-02087A	MHW2120BH	5400rpm, , 120G, SATA, 8M
BA59-02013A	hm121JI	5400rpm, , 120G, SATA, FFS
BA59-02039A	HM120JI	5400rpm, , 120G, SATA, 8M
BA59-02011A	ST9120822AS	5400rpm, , 120G, SATA, 8M
BA59-02003A	HTS541616J9SA00	5400rpm, , 160G, SATA, 8M
BA59-02012A	ST9160821AS	5400rpm, , 160G, SATA, 8M
BA59-02110A	MHW2160BH-PL	5400rpm, , 160G, SATA, 8M
LCD 		
BA59-01814A	15.4WXGA	
BA59-02147A	15.4WXGA	

2. Introduction and Specification

MEMORY

1105-001683	DDR2 667Mhz 512MB	M470T6554CZ3-CE6
1105-001684	DDR2 667Mhz 1GB	M470T2953CZ3-CE6
1105-001783	DDR2 667MHz 512MB	NT512T64UH8B0FN-3C
1105-001790	DDR2 667MHz 1GB	NT1GT64U8HB0BN-3C
1105-001825	DDR2 667MHz 2GB	M470T5663CZ3

CPU

0902-002196	T_T7100(Merom Dual Core)	1.8Ghz(FSB800) 2MB
0902-002197	T_T7300(Merom Dual Core)	2.0Ghz(FSB800) 4MB
0902-002198	T_T7500(Merom Dual Core)	2.2Ghz(FSB800) 4MB
0902-002199	T_T7700(Merom Dual Core)	2.4Ghz(FSB800) 4MB

BATTERY

BA43-00155A	BATTERY	6 Cell
BA43-00162A	BATTERY	6 Cell
BA43-00151A	BATTERY	9 Cell

BLUETOOTH

BA59-01691A	MODULE-BLUETOOTH	Bluetooth V2.0,T60H928.01,Bluetooth Module,USB I/F,V2.0,C
BA59-01916A	MODULE-BLUETOOTH	Bluetooth Version 2.0,BTO2P0B2SA,Bluetooth Module,

2. Introduction and Specification

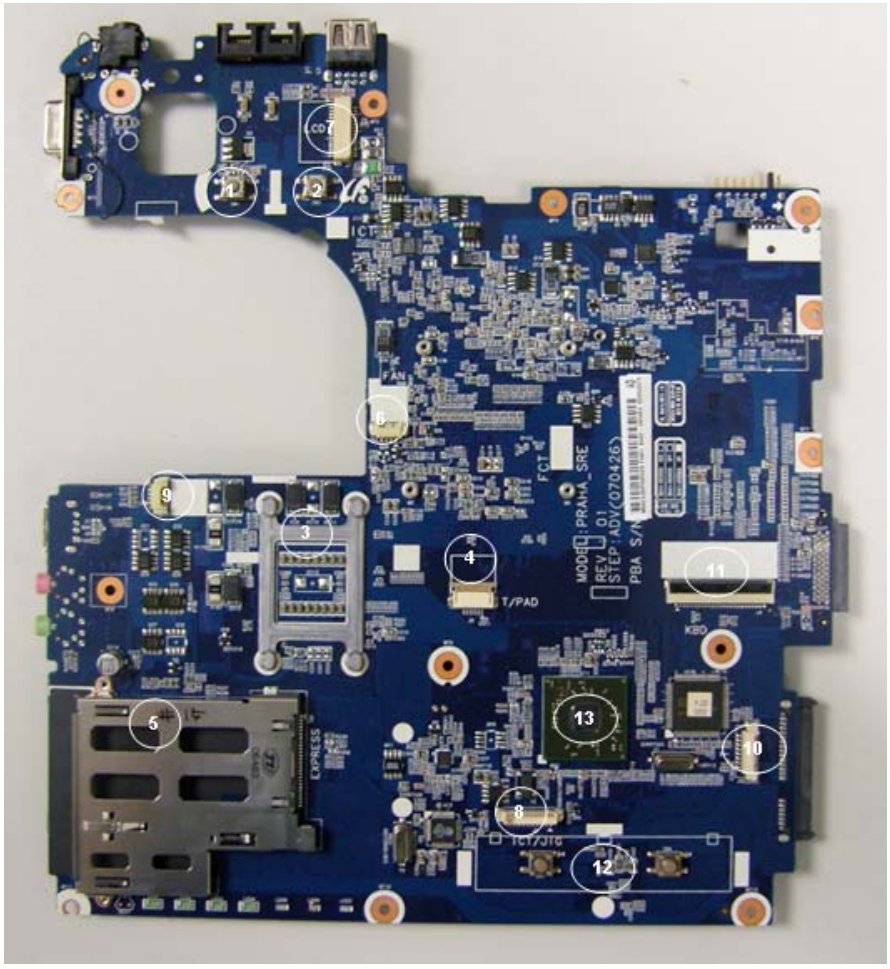
ODD 		
BA96-03223A	S_MULTI(DV228EC)	TEAC
BA96-03241A	S_MULTI(UJ-850)	MATSUHITA
BA96-03242A	S_MULTI(TS-L632D)	TSST
BA96-03222A	ROM(DW-224E-R)	TEAC
BA96-03239A	COMBO(TS-L462D)	TSST
WLAN		
BA59-02154A	802.1 /b/g	WLL3141

6) S/W List (Driver & Application)

Item		Specification	Ver
Driver	ATI Graphic driver		8.383_RC2
	Atheros Wireless LAN driver		7.3.0.64
	Sound Driver		6.0.1.5433
	Sound driver		6.0.1.5380
	Touchpad Driver		9.1.22.0
	Modem Driver		2.1.75.0
	Bluetooth Driver		6.0.1.5000
	LAN Driver		10.14.6.3
Application		Samsung Battery Manager 3.0	3.2.1.2
		Samsung Recovery Solution 2	1.0.2.0
		Samsung Update Plus	1.3.0.11
		Samsung Magic Doctor 5.0	5.014
		CyberLink DVD Solution	108-Vista
		Adobe Reader(Others)	7.0.8.218
		McAfee Anti-Virus	7.2.142.0
		Screen Saver	1.0.2.0
		Wallpaper	2.0.0.0
		Play Camera	1.0.0.28
		AV Station Movie/Music/Digioke	4.1.20.46
		Set Display Resolution	1.2.0.0
		Easy Speedup Manager	2.0.0.11
		Easy Display Manager	2.1.5.3
		Easy Network Manager	3.0.1.7
		Easy Partition Manager	2.2.1.8

7) Description of Main-Board

7)-1. Top



1	**Power Button**	SW1
2	**AVSNow Button**	SW2
3	**CPU Support**	-
4	**Touchpad FFC Connector**	J5
5	**PCI Express Card Frame**	J6,J7
6	**FAN Connector**	J2
7	**LCD Connector**	J1
8	**Pre-FCT Connector**	J9
9	**Speaker Connector**	J3
10	**Bluetooth Cable Connector**	J8
11	**Keyboard Connector**	J4
12	**Touch Pad Button**	SW3, SW4
13	**SB600**	U11

7)-2. Bottom

1	DC-in Connector	J500	11	Battery Connector	J505
2	USB Connector (x2)	J502	12	Mini Card Socket	J506
3	RJ45/RJ11 Combo	J501	13	SODIMM Socket (DDRII)	DDR500, DDR501
4	VGA Port	J503	14	ODD Connector	J509
5	USB Connector (x1)	U514	15	SATA HDD Connector	J512
6	Mic-in	J507	16	2-in-1 Connector	J514
7	H/P-out	J510	17	RTC Battery	J511
8	CPU	CPU500	18	Debug Card Connector	J508
9	RS600ME	U513	19	MDC	J513
10	ATI Gfx	U509	20	MDC Connector	J504

PRAHA EXT GFX

CPU : Intel Merom (800MHz)
Chip Set : RS600ME & SB600
Remarks : Mobility Platform

Model Name : PRAHA EXT GFX
PBA Name : MAIN
PCB Code : NANYA:BA41-00806A
GCE :BA41-00812A
TPT :BA41-00814A
Dev. Step : PR2 (8-Layer)
Revision : 1.0
T.R. Date : 2007.06.24

DRAW	CHECK	APPROVAL

■ *Owner : SEC Mobile R & D* *Signature :* *X*

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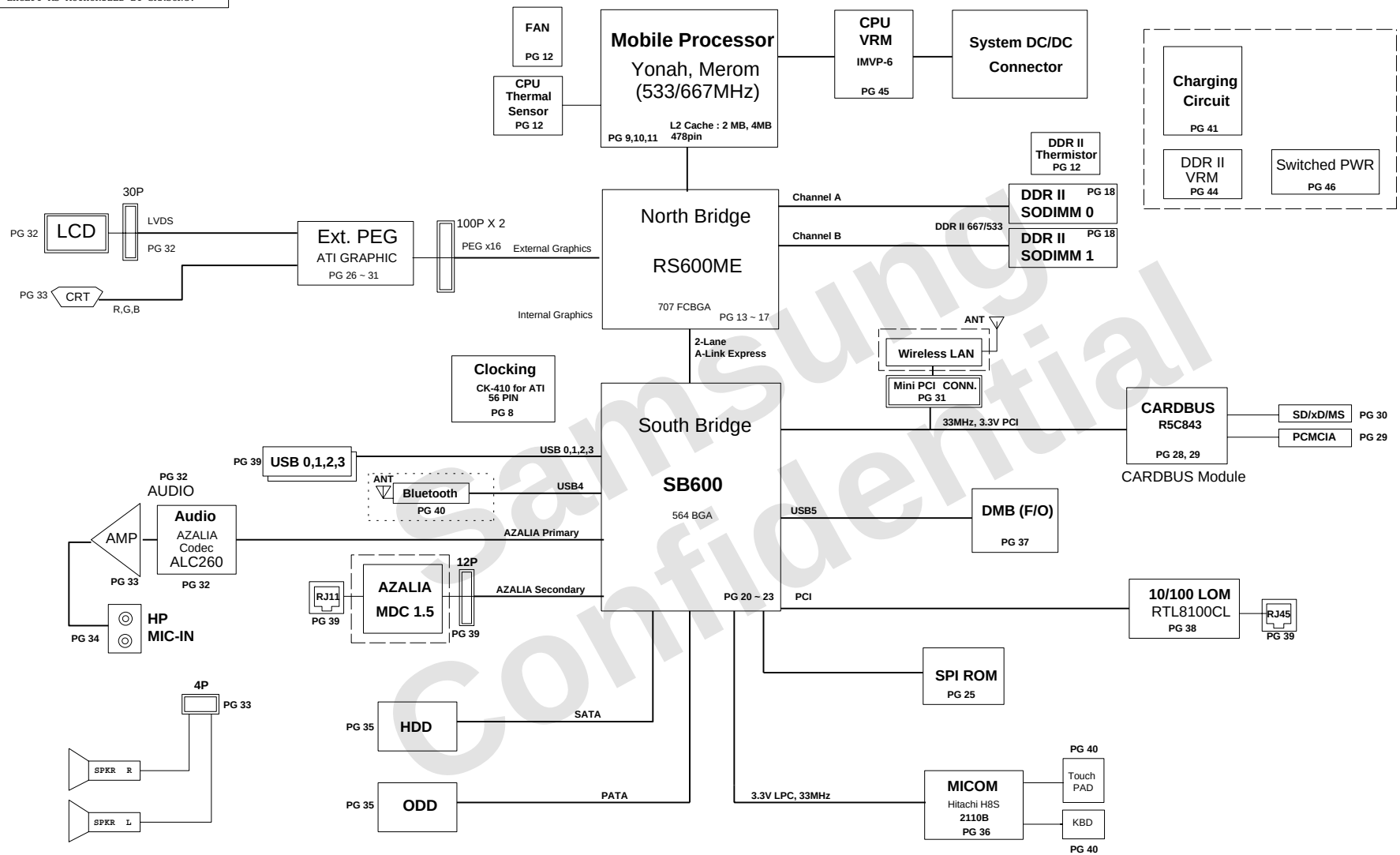
USE ICT PORT

DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT COVER	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR		
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE:	LAST EDIT: May 28, 2007 10:24:00 AM	PAGE 1 OF 54	



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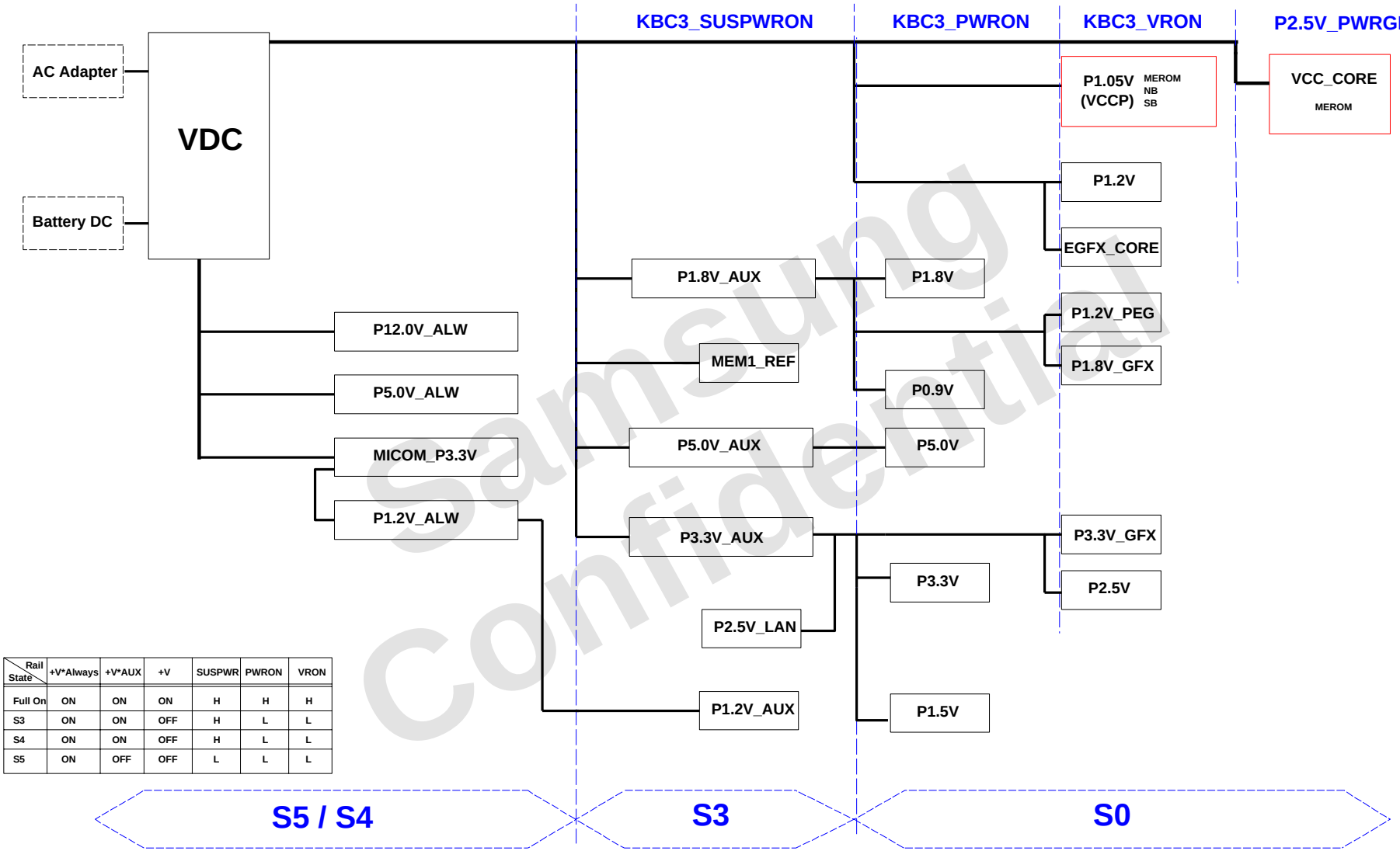
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE:	LAST EDIT: May 28, 2007 10:24:00 AM	PAGE 2 OF 54	

Power Diagram



Rail / State	+V*Always	+V*AUX	+V	SUSPWR	PWRON	VRON
Full On	ON	ON	ON	H	H	H
S3	ON	ON	OFF	H	L	L
S4	ON	ON	OFF	H	L	L
S5	ON	OFF	OFF	L	L	L

DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT MAIN POWER DIAGRAM	SAMSUNG ELECTRONICS
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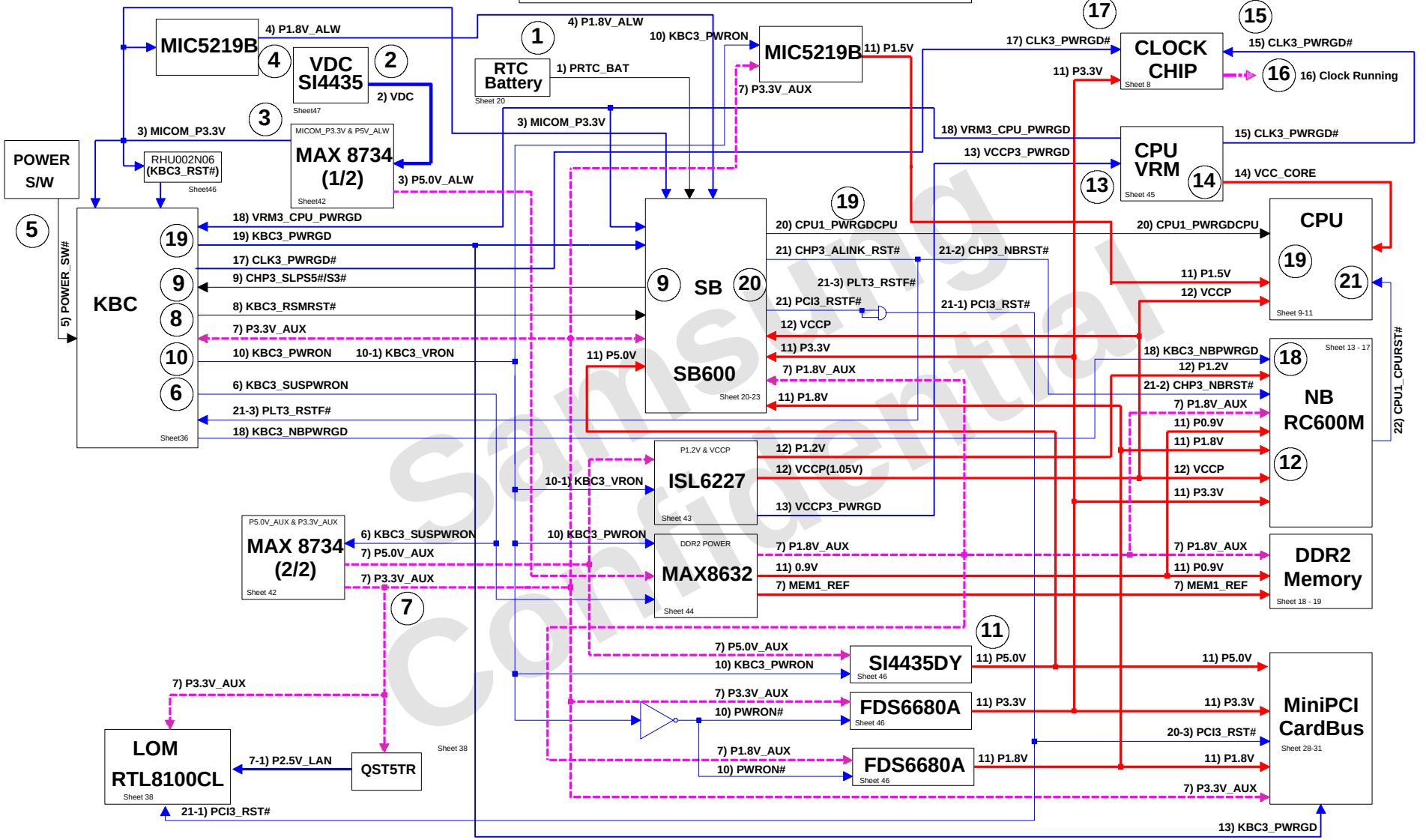
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE	LAST EDIT: May 28, 2007 10:24:00 AM		PAGE 3 OF 54

POWER SEQUENCE Rev. 0.1



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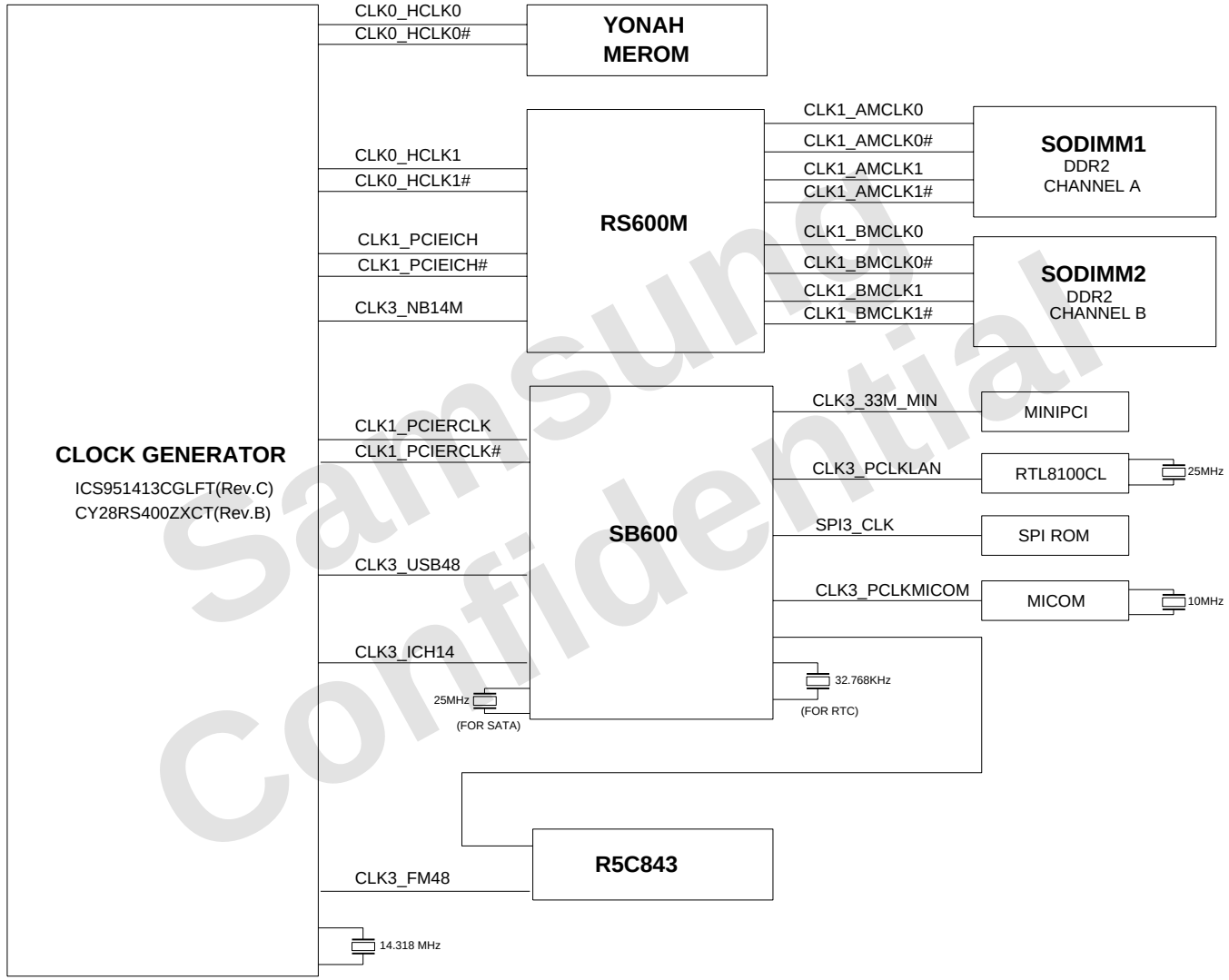
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE:	LAST EDIT: May 28, 2007 10:24:00 AM	PAGE 4 OF 54	



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APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE:	LAST EDIT: May 28, 2007 10:24:00 AM	PAGE 5 OF 54	

SCHEMATIC ANNOTATIONS AND BOARD INFORMATION

PCI Devices

Devices	IDSEL#	REQ/GNT#	Interrupts
Cardbus	AD25	0	A, B, C
LAN	AD21	1	D
MINIPCI	AD23	2	A,B
USB	AD30(internal)	-	-
			-
			-
Hub to PCI	AD31(internal)	-	-
LPC bridge/IDE/AC97/SMBUS	AD31(internal)	-	--
Internal MAC	AD31(internal)	-	-
AC Link	-	-	-

Voltage Rails

VDC	Primary DC system power supply (7 to 21V)
VCC_CORE	Core voltage for YONAH (0~1.5V)
VCCP	YONAH Processor System Bus(PSB) Termination (1.05V)
P0.9V	0.9V switched power rail (off in S3-S5)
P1.2V	1.2V switched power rail (off in S3-S5)
P1.5V	1.5V switched power rail (off in S3-S5)
P1.5V_AUX	1.5V power rail (off in S4-S5)
P1.8V	1.8V switched power rail (off in S3-S5)
P1.8V_AUX	1.8V power rail(off in S4-S5)
P1.8V_ALWS	1.8V power rail (Always On)
P2.5V_LAN	2.5V power rail (off in S4-S5)
MICOM_P3.3V	3.3V always on power rail for MICOM
P3.3V	3.3V switched power rail (off in S3-S5)
P3.3V_AUX	3.3V power rail (off in S4-S5)
P5V	5.0V switched power rail (off in S3-S5)
P5V_AUX	5.0V power rail (off in S4-S5)
P5.0V_ALWS	5.0V power rail (Always On)
P12V_ALWS	12V power rail (Always On)

I²C / SMB Address

Devices	Address	Hex	Bus
SB600	Master	-	SMBUS Master
SODIMM0	1010 0100	A4h	-
SODIMM1	1010 0110	A6h	-
CK-410 (Clock Generator)	1101 001x	D2h	Clock, Unused Clock Output Disable

USB PORT Assign

PORT NUMBER	ASSIGNED TO
0, 1	SYSTEM PORT A
2, 3	SYSTEM PORT B
4	BLUETOOTH
5	DMB

Crystal / Oscillator

TYPE	FREQUENCY	DEVICE	USAGE
Crystal	32.768KHz	SB600	Real Time Clock
Crystal	25MHz	SB600	SATA
Crystal	10MHz	MICOM	H8S-2110B
Crystal	14.318MHz	CLOCK-Generator	CK-410M
Crystal	25MHz	LAN	LOM

CPU Core Voltage Table

IMVP-6

Active Mode

VID(6:0)	Voltage
0 0 0 0 0 0 0	1.5000 V
0 0 0 0 0 0 1	1.4875 V
0 0 0 0 0 1 0	1.4750 V
0 0 0 0 0 1 1	1.4625 V
0 0 0 0 1 0 0	1.4500 V
0 0 0 0 1 0 1	1.4375 V
0 0 0 0 1 1 0	1.4250 V
0 0 0 0 1 **1** **1**	1.4125 V
0 0 0 1 0 0 0	1.4000 V
0 0 0 1 0 0 1	1.3875 V
0 0 0 1 0 1 0	1.3750 V
0 0 0 1 0 1 1	1.3625 V
0 0 0 1 1 0 0	1.3500 V
0 0 0 1 1 0 1	1.3375 V
0 0 0 1 1 1 0	1.3250 V
0 0 0 1 1 1 1	1.3125 V
0 0 1 0 0 0 0	1.3000 V
0 0 1 0 0 0 1	1.2875 V
0 0 1 0 0 1 0	1.2750 V
0 0 1 0 0 1 1	1.2625 V
0 0 1 0 1 0 0	1.2500 V
0 0 1 0 1 0 1	1.2375 V
0 0 1 0 1 1 0	1.2250 V
0 0 **1** 0 1 **1** **1**	1.2125 V
0 0 1 1 0 0 0	1.2000 V
0 0 1 1 0 0 1	1.1875 V
0 0 1 1 0 1 0	1.1750 V
0 0 1 1 0 1 1	1.1625 V
0 0 1 1 1 0 0	1.1500 V
0 0 1 1 1 0 1	1.1375 V
0 0 1 1 1 1 0	1.1250 V
0 0 1 1 1 1 1	1.1125 V
0 1 0 0 0 0 0	1.1000 V
0 1 0 0 0 0 1	1.0875 V
0 1 0 0 0 1 0	1.0750 V
0 1 0 0 0 1 1	1.0625 V
0 1 0 0 1 0 0	1.0500 V
0 1 0 0 1 0 1	1.0375 V
0 1 0 0 1 1 0	1.0250 V
0 **1** 0 0 **1** **1** 1	1.0125 V

Active

DPRSLPVR	0
DPRSTP*	1
PSI2*	0 or 1

Active/Deeper Sleep Dual Mode Region

VID(6:0)	Voltage
0 1 0 1 0 0 0	1.0000 V
0 1 0 1 0 0 1	0.9875 V
0 1 0 1 0 1 0	0.9750 V
0 1 0 1 0 1 1	0.9625 V
0 1 0 1 1 0 0	0.9500 V
0 1 0 1 1 0 1	0.9375 V
0 1 0 1 1 1 0	0.9250 V
0 1 0 1 1 **1** **1**	0.9125 V
0 1 1 0 0 0 0	0.9000 V
0 1 1 0 0 0 1	0.8875 V
0 1 1 0 0 1 0	0.8750 V
0 1 1 0 0 1 1	0.8625 V
0 1 1 0 1 0 0	0.8500 V
0 1 1 0 1 0 1	0.8375 V
0 1 1 0 1 1 0	0.8250 V
0 1 1 0 1 1 1	0.8125 V
0 1 1 1 0 0 0	0.8000 V
0 1 1 1 0 0 1	0.7875 V
0 1 1 1 0 1 0	0.7750 V
0 1 1 1 0 1 1	0.7625 V
0 1 1 1 1 0 0	0.7500 V
0 1 1 1 1 0 1	0.7375 V
0 1 1 1 1 1 0	0.7250 V
0 1 **1** 1 1 **1** **1**	0.7125 V
1 0 0 0 0 0 0	0.7000 V
1 0 0 0 0 0 1	0.6875 V
1 0 0 0 0 1 0	0.6750 V
1 0 0 0 0 1 1	0.6625 V
1 0 0 0 1 0 0	0.6500 V
1 0 0 0 1 0 1	0.6375 V
1 0 0 0 1 1 0	0.6250 V
1 0 0 0 1 1 1	0.6125 V
1 0 0 1 0 0 0	0.6000 V
1 0 0 1 0 0 1	0.5875 V
1 0 0 1 0 1 0	0.5750 V
1 0 0 1 0 1 1	0.5625 V
1 0 0 1 1 0 0	0.5500 V
1 0 0 1 1 0 1	0.5375 V
1 0 0 1 1 1 0	0.5250 V
1 **0** 0 1 **1** **1** 1	0.5125 V
1 **0** 1 0 **0** **0** 0	0.5000 V

Deeper Slp

DPRSLPVR	1
DPRSTP*	0
PSI2*	0 or 1

Deeper Sleep/Extended Deeper Sleep Dual Mode Region

VID(6:0)	Voltage
1 0 1 0 0 0 1	0.4875 V
1 0 1 0 0 1 0	0.4750 V
1 0 1 0 0 1 1	0.4625 V
1 0 1 0 1 0 0	0.4500 V
1 0 1 0 1 0 1	0.4375 V
1 0 1 0 1 1 0	0.4250 V
1 0 1 0 1 1 1	0.4125 V
1 0 1 1 0 **0** 0	0.4000 V
1 0 1 1 0 0 1	0.3875 V
1 0 1 1 0 1 0	0.3750 V
1 0 1 1 0 1 1	0.3625 V
1 0 1 1 1 0 0	0.3500 V
1 0 1 1 1 0 1	0.3375 V
1 0 1 1 1 1 0	0.3250 V
1 0 1 1 1 1 1	0.3125 V
1 1 0 0 0 0 0	0.3000 V
1 1 0 0 0 0 1	0.2875 V
1 1 0 0 0 1 0	0.2750 V
1 1 0 0 0 1 1	0.2625 V
1 1 0 0 1 0 0	0.2500 V
1 1 0 0 1 0 1	0.2375 V
1 1 0 0 1 1 0	0.2250 V
1 1 0 0 1 1 1	0.2125 V
1 1 **0** 1 0 0 **0**	0.2000 V
1 1 0 1 0 0 1	0.1875 V
1 1 0 1 0 1 0	0.1750 V
1 1 0 1 0 1 1	0.1625 V
1 1 0 1 1 0 0	0.1500 V
1 1 0 1 1 0 1	0.1375 V
1 1 0 1 1 1 0	0.1250 V
1 1 0 1 1 1 1	0.1125 V
1 1 1 0 0 0 0	0.1000 V
1 1 1 0 0 0 1	0.0875 V
1 1 1 0 0 1 0	0.0750 V
1 1 1 0 0 1 1	0.0625 V
1 1 1 0 1 0 0	0.0500 V
1 1 1 0 1 0 1	0.0375 V
1 1 1 0 1 1 0	0.0250 V
1 1 1 0 1 1 1	0.0125 V
1 **1** 1 1 0 **0** 0	0.0000 V
1 1 1 1 0 0 1	0.0000 V
1 1 1 1 0 1 0	0.0000 V
1 1 1 1 0 1 1	0.0000 V
1 1 1 1 1 0 0	0.0000 V
1 1 1 1 1 0 1	0.0000 V
1 1 1 1 1 1 0	0.0000 V
1 1 1 1 1 1 1	0.0000 V

*"1111111" : 0V power good asserted.

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

System Power States

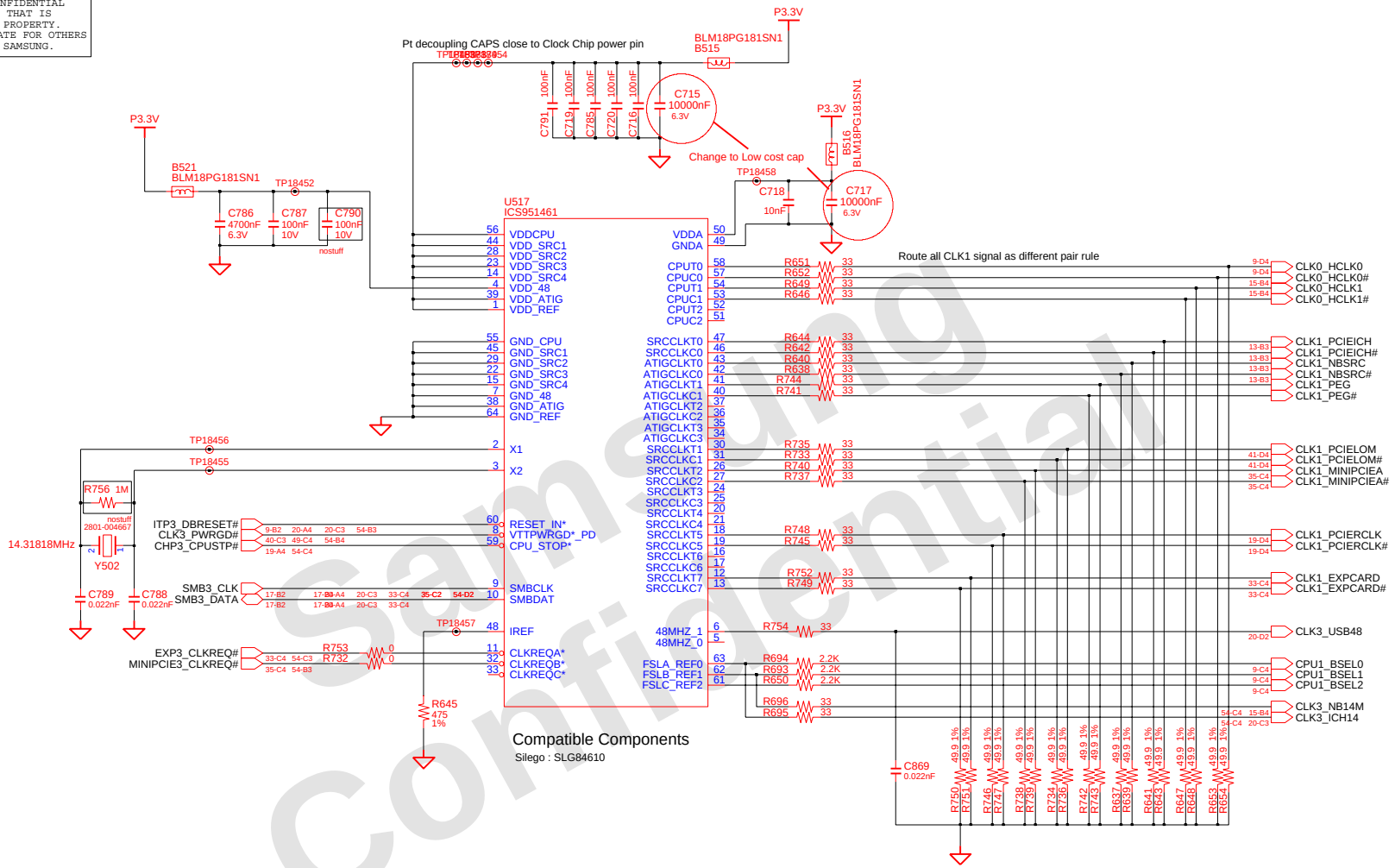
CHP3_SLPS1* S1, Powered-On-Suspend(POS) : In this state, all clocks(except the 32.768KHz clock) are stopped.
The system context is maintained in system DRAM. Power is maintained to PCI, the CPU, memory controller, memory, and all other criticial subsystems.
Note that this state does not preclude power 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_SLP4S* 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.

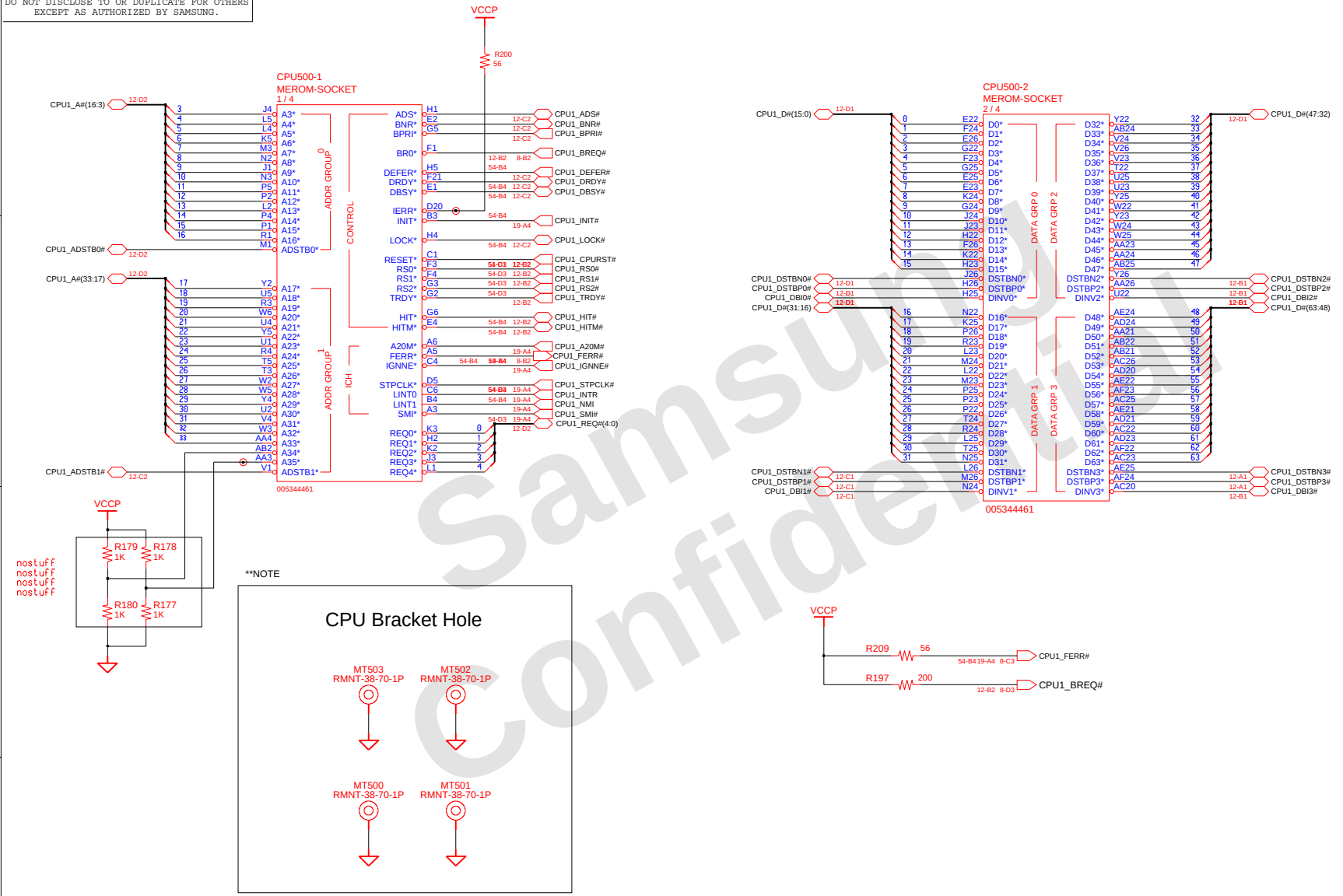
CHP3_SLPS5* S5, Soft Off(SOFF) : System context is not maintained. All power is shut off except for the logic required to restart. A full boot is required when waking.

DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT MAIN BOARD INFORMATION	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR		
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE:	LAST EDIT: May 28, 2007 10:24:00 AM		PAGE 6 OF 54

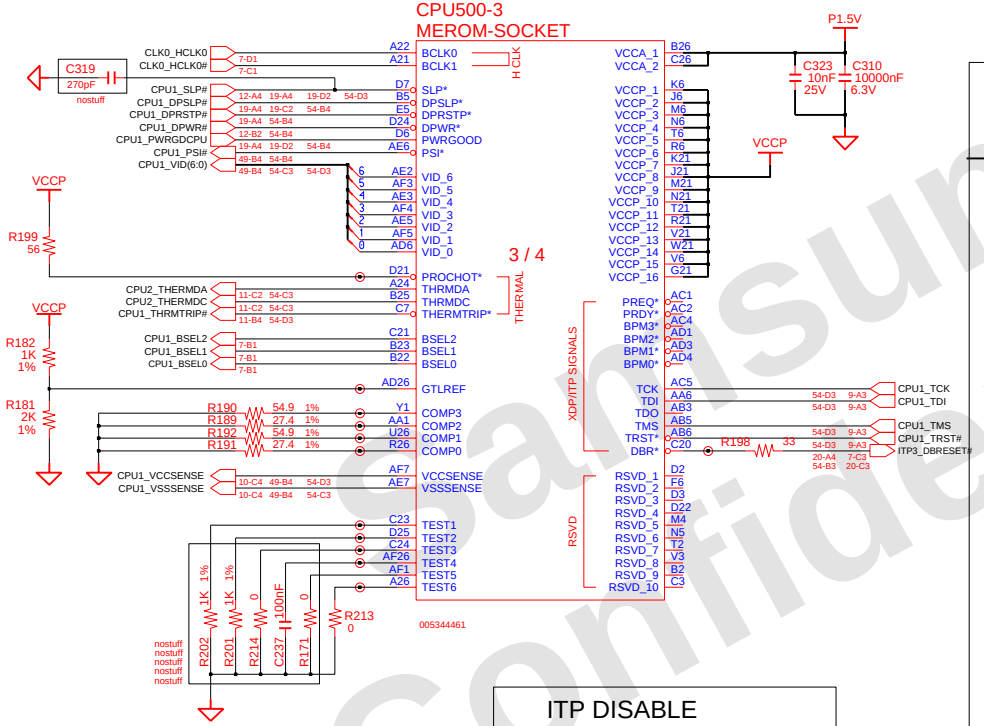


CPU	FSA BSEL0	FSB BSEL1	FSC BSEL2	HOST CLK	
	0	0	0	266 MHz	
	0	0	1	333 MHz	
	0	1	0	200 MHz	
	0	1	1	400 MHz	
	1	0	0	133 MHz	Celeron 533MHz
	1	0	1	100 MHz	
	1	1	0	166 MHz	Yonah 667MHz
	1	1	1	RSVD	

DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT MAIN CLOCK GENERATOR	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR		
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE	LAST EDIT: May 28, 2007 10:24:00 AM		PAGE 7 OF 54



DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT MAIN MEROM CPU (1/3)	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR		
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE:	LAST EDIT: May 28, 2007 10:24:00 AM	PAGE 8 OF 54	

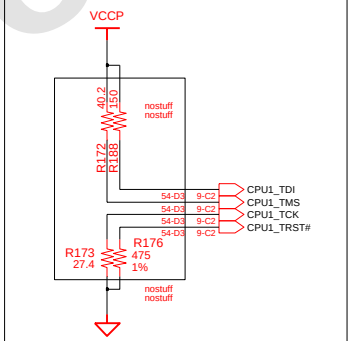


GTLREF : Keep the Voltage divider within 0.5" of the first GTLREF0 pin with Zo=55ohm trace. Minimize coupling of any switching signals to this net.

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.

ITP DISABLE



CPU Core Voltage Table

IMVP-6

Active Mode VID(6:0)	Voltage	Active/Deeper Sleep Dual Mode Region VID(6:0)	Voltage	Deeper Sleep/Extended Deeper Sleep Dual Mode Region 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 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 0 1	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 0 1 1 0	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	1.4000 V	0 1 1 0 0 0 0	0.9000 V	1 0 1 1 0 0 1	0.3875 V
0 0 0 1 0 0 1	1.3875 V	0 1 1 0 0 0 1	0.8875 V	1 0 1 1 0 1 0	0.3750 V
0 0 0 1 0 1 0	1.3750 V	0 1 1 0 0 1 0	0.8750 V	1 0 1 1 0 1 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 1 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 1 0 1	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 1 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 1	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 0 1 1	1.2625 V	0 1 1 1 0 1 1	0.7625 V	1 1 0 0 1 0 0	0.2500 V
0 0 1 0 1 0 0	1.2500 V	0 1 1 1 1 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 1 0 1	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 1 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 1 0 0 0	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 1	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 1 0	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 1	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 1 0 0	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 1	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 1 0	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 1	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
		1 0 1 0 0 0 0	0.5000 V	1 1 1 1 0 0 1	0.0000 V
				1 1 1 1 0 1 0	0.0000 V
				1 1 1 1 0 1 1	0.0000 V
				1 1 1 1 1 0 0	0.0000 V
				1 1 1 1 1 0 1	0.0000 V
				1 1 1 1 1 1 0	0.0000 V
				1 1 1 1 1 1 1	0.0000 V

Active	
DPRSLPVR	0
DPRSTP*	1
PSI2*	0 or 1

Deeper Slp	
DPRSLPVR	1
DPRSTP*	0
PSI2*	0 or 1

*"1111111" : 0V power good asserted.

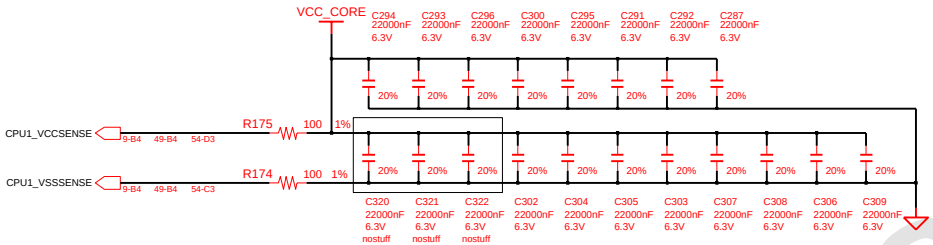
*Yonah Processor (2.33 GHz / 800 MHz : TBD)

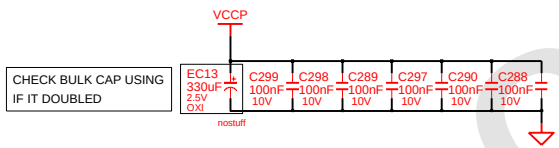
DRAW	KI IM	DATE	5/28/2007	TITLE	PRAHA_EXT MAIN MEROM CPU(2/3)
CHECK	SS BAIK	DEV. STEP	PR		
APPROVAL	KK BIN	REV	1.0		
MODULE CODE		LAST EDIT	May 28, 2007 10:24:00 AM	PAGE	9 OF 54

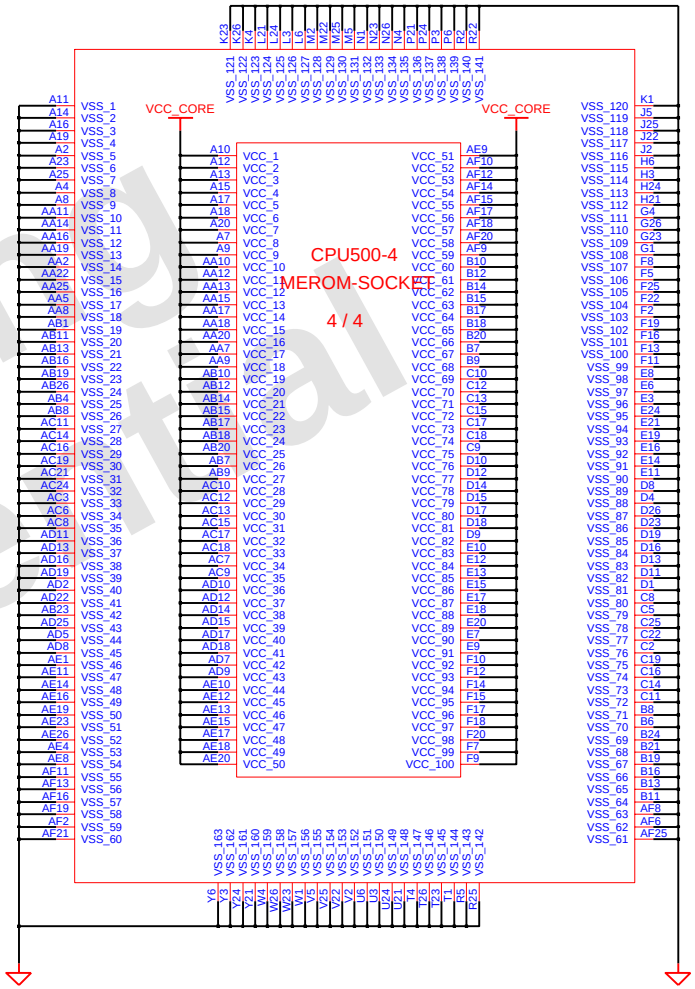
SAMSUNG ELECTRONICS

PART NO. BA41-00806A

Deleted 13 De-cap (Only use 19pcs out of 32)





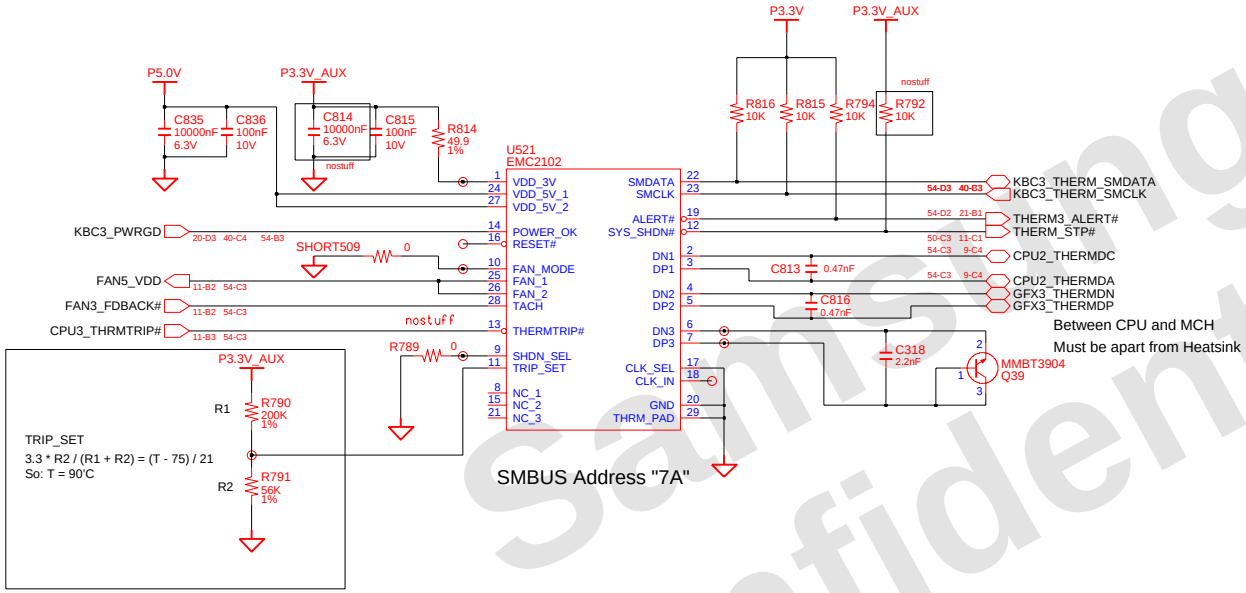


DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT MAIN MEROM CPU(3/3)	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR		
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE:	LAST EDIT: May 28, 2007 10:24:00 AM		PAGE 10 OF 54

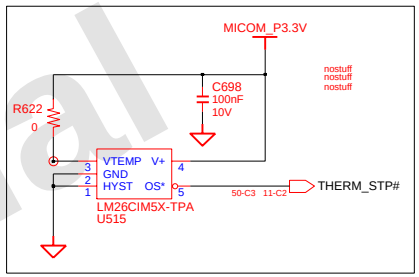
Refer To Thermal Sensor Layout Guidelines.

- Place the Thermal Sensor close to a remote diode.
- Keep traces away from high voltage (+12V bus)
- Keep traces away from fast data buses and CRT signal.
- Use recommended trace widths and spacings (10mil)
- Place a ground plane under the traces.
- Use guard traces flanking DXP and DXN and connecting to GND

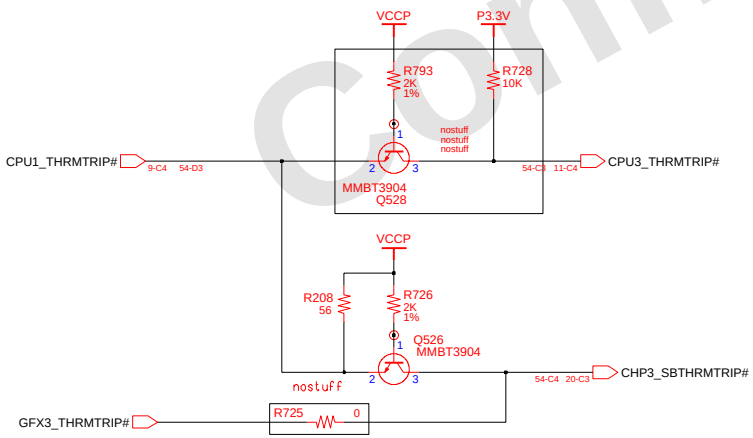
Thermal Monitor

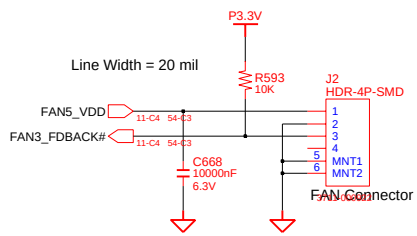


OTP (NOSTUFF)

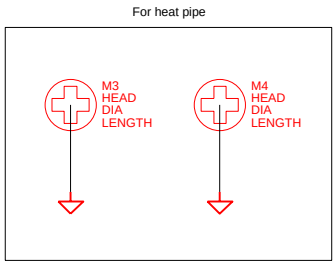


FAN Control





DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT MAIN THERMAL SENSOR/FAN CNTRL	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR		
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE	LAST EDIT: May 28, 2007 10:24:00 AM		PAGE 11 OF 54



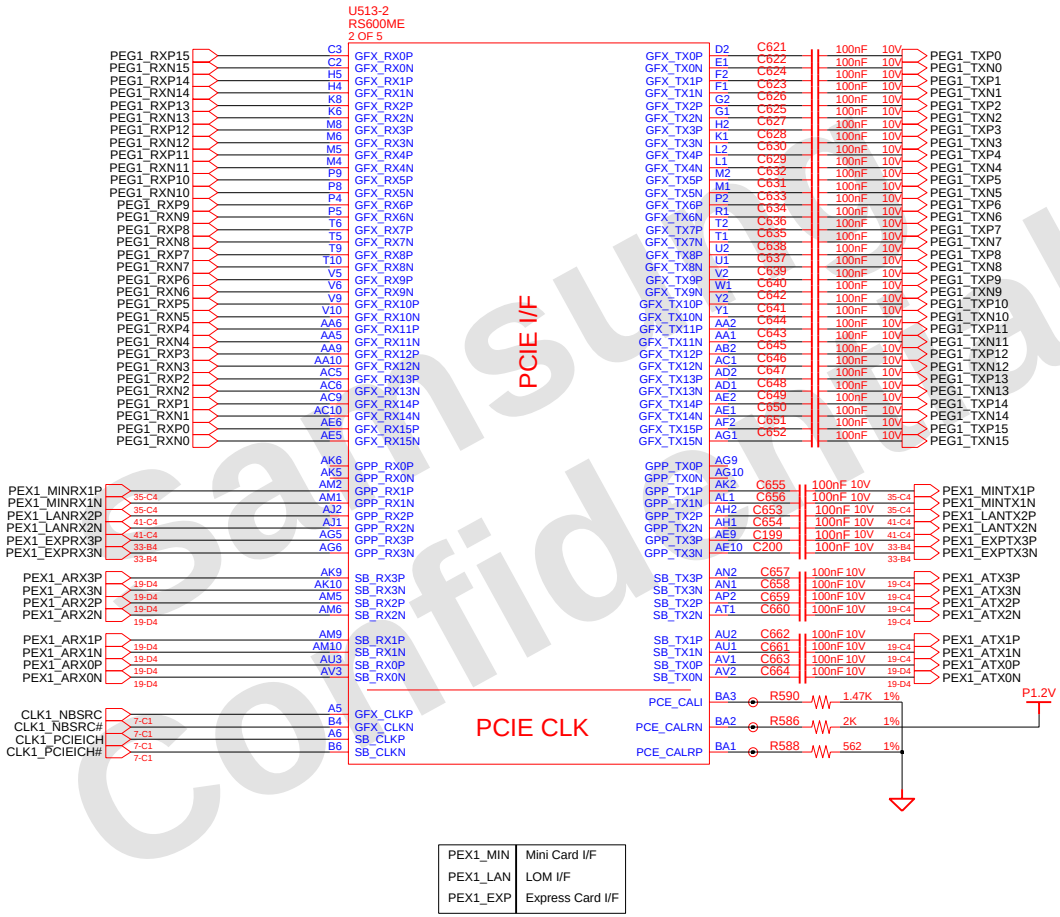
U513-1
RS600ME
1 OF 5
P-4 AGTL + I/F

CPU1_A#(33:3)
CPU1_REQ#(4:0)
CPU1_ADSTB0#
CPU1_ADSTB1#
CPU1_ADS#
CPU1_BNR#
CPU1_BPRI#
CPU1_DEFER#
CPU1_DRDY#
CPU1_DBSY#
CPU1_LOCK#
CPU1_CPURST#
CPU1_RS2#
CPU1_RS1#
CPU1_RS0#
CPU1_BREQ#
CPU1_TRDY#
CPU1_HIT#
CPU1_HITM#
CPU1_DPWR#
CPU1_D#(63:0)
CPU1_DBI0#
CPU1_DSTBN0#
CPU1_DSTBP0#
CPU1_DBI1#
CPU1_DSTBN1#
CPU1_DSTBP1#
CPU1_DBI2#
CPU1_DSTBN2#
CPU1_DSTBP2#
CPU1_DBI3#
CPU1_DSTBN3#
CPU1_DSTBP3#

ADDR.GROUP 0
ADDR.GROUP 1
CONTROL
MISC
DATA GROUP 0
DATA GROUP 1
DATA GROUP 2
DATA GROUP 3

CHP3_SUSSTAT#
KBC3_NBPWRGD
CHP3_NBRST#
R110 0 nostuff
R112 4.7K nostuff
R183 0 nostuff
R610 49.9 1%
R139 24.9 1%
R111 1K 1% nostuff
P1.8V_AUX
P1.8V
P1.2V
VCCP
P3.3V
SHORT8
Q25 RHU002N06
B34 BLM18PG181SN1
B35 BLM18PG181SN1
C244 2200nF 10V
C247 2200nF 10V
R115 4.7K
R117 20K 1%
R121 4.7K
R141 61.9 1%
R140 127 1%
C677 1000nF 6.3V
C678 270pF
Q30 MMBT3904
Q29 MMBT3904
CPU1_SLP#
R116 2.2K
PLACE CLOSE TO NB
USE 10/10MIL WIDTH/SPACE

DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT MAIN RS600ME(1/5)	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR		
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE	LAST EDIT: May 28, 2007 10:24:00 AM	PAGE 12 OF 54	



PEX1_MIN	Mini Card I/F
PEX1_LAN	LOM I/F
PEX1_EXP	Express Card I/F

DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT MAIN RS600ME(2/5)	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR		
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE	LAST EDIT: May 28, 2007 10:24:00 AM	PAGE 13 OF 54	

U513-3
3 OF 5
RS600ME

A CHANNEL

B CHANNEL

MEM1_ADQ(63:0) 17-D4

MEM1_BDQ(63:0) 17-D2

MEM1_AMA(14:0) 17-D4 18-C4

MEM1_ABS0 17-C4 18-C4

MEM1_ABS1 17-C4 18-C4

MEM1_ABS2 17-C4 18-C4

MEM1_ADM(7:0) 17-B4

MEM1_ADQS(7:0) 17-B4

MEM1_ADQS#(7:0) 17-A4

CLK1_AMCLK1# 17-C4 nostuff R113 100 1%

CLK1_AMCLK1 17-C4

CLK1_AMCLK2# 17-C4 nostuff R184 100 1%

CLK1_AMCLK2 17-C4

To reduce EMI noise Nearby RS600ME

MEM1_ACKE0 17-C4 18-D4

MEM1_ACKE1 17-C4 18-D4

MEM1_ACS0# 17-C4 18-D4

MEM1_ACS1# 17-C4 18-D4

MEM1_AODT0 17-B4 18-D4

MEM1_AODT1 17-B4 18-D4

MEM1_AWE# 17-B4 18-C4

MEM1_ACAS# 17-C4 18-C4

MEM1_ARAS# 17-B4 18-C4

MEM1_REF

R621 0 nostuff

P1.8V_AUX

R619 1K 1%

R620 1K 1%

C693 100nF 10V

C694 100nF 10V

MEM_VREF

MEMA_A0 MEMA_A1 MEMA_A2 MEMA_A3 MEMA_A4 MEMA_A5 MEMA_A6 MEMA_A7 MEMA_A8 MEMA_A9 MEMA_A10 MEMA_A11 MEMA_A12 MEMA_A13 MEMA_A14

MEMA_BA0 MEMA_BA1 MEMA_BA2

MEMA_DM0 MEMA_DM1 MEMA_DM2 MEMA_DM3 MEMA_DM4 MEMA_DM5 MEMA_DM6 MEMA_DM7

MEMA_DQS0P MEMA_DQS1P MEMA_DQS2P MEMA_DQS3P MEMA_DQS4P MEMA_DQS5P MEMA_DQS6P MEMA_DQS7P

MEMA_DQS0N MEMA_DQS1N MEMA_DQS2N MEMA_DQS3N MEMA_DQS4N MEMA_DQS5N MEMA_DQS6N MEMA_DQS7N

MEMA_CK0N MEMA_CK0P MEMA_CK1N MEMA_CK1P MEMA_CK2N MEMA_CK2P MEMA_CK3N MEMA_CK3P MEMA_CK4N MEMA_CK4P MEMA_CK5N MEMA_CK5P

MEMA_CKE0 MEMA_CKE1 MEMA_CKE2 MEMA_CKE3

MEMA_CS0# MEMA_CS1# MEMA_CS2# MEMA_CS3#

MEMA_ODT0 MEMA_ODT1 MEMA_ODT2 MEMA_ODT3

MEMA_WEB# MEMA_CASB# MEMA_RASB#

MEMA_DQ0 MEMA_DQ1 MEMA_DQ2 MEMA_DQ3 MEMA_DQ4 MEMA_DQ5 MEMA_DQ6 MEMA_DQ7 MEMA_DQ8 MEMA_DQ9 MEMA_DQ10 MEMA_DQ11 MEMA_DQ12 MEMA_DQ13 MEMA_DQ14 MEMA_DQ15 MEMA_DQ16 MEMA_DQ17 MEMA_DQ18 MEMA_DQ19 MEMA_DQ20 MEMA_DQ21 MEMA_DQ22 MEMA_DQ23 MEMA_DQ24 MEMA_DQ25 MEMA_DQ26 MEMA_DQ27 MEMA_DQ28 MEMA_DQ29 MEMA_DQ30 MEMA_DQ31 MEMA_DQ32 MEMA_DQ33 MEMA_DQ34 MEMA_DQ35 MEMA_DQ36 MEMA_DQ37 MEMA_DQ38 MEMA_DQ39 MEMA_DQ40 MEMA_DQ41 MEMA_DQ42 MEMA_DQ43 MEMA_DQ44 MEMA_DQ45 MEMA_DQ46 MEMA_DQ47 MEMA_DQ48 MEMA_DQ49 MEMA_DQ50 MEMA_DQ51 MEMA_DQ52 MEMA_DQ53 MEMA_DQ54 MEMA_DQ55 MEMA_DQ56 MEMA_DQ57 MEMA_DQ58 MEMA_DQ59 MEMA_DQ60 MEMA_DQ61 MEMA_DQ62 MEMA_DQ63

MEMB_A0 MEMB_A1 MEMB_A2 MEMB_A3 MEMB_A4 MEMB_A5 MEMB_A6 MEMB_A7 MEMB_A8 MEMB_A9 MEMB_A10 MEMB_A11 MEMB_A12 MEMB_A13 MEMB_A14 → MEM1_BMA(14:0) 18-C3 17-D2

MEMB_BA0 MEMB_BA1 MEMB_BA2 → MEM1_BBS0 MEM1_BBS1 MEM1_BBS2 18-C3 17-C2

MEM1_BDM(7:0) 17-B2

MEMB_DM0 MEMB_DM1 MEMB_DM2 MEMB_DM3 MEMB_DM4 MEMB_DM5 MEMB_DM6 MEMB_DM7

MEM1_BDQS(7:0) 17-B2

MEMB_DQS0P MEMB_DQS1P MEMB_DQS2P MEMB_DQS3P MEMB_DQS4P MEMB_DQS5P MEMB_DQS6P MEMB_DQS7P

MEM1_BDQS#(7:0) 17-A2

MEMB_DQS0N MEMB_DQS1N MEMB_DQS2N MEMB_DQS3N MEMB_DQS4N MEMB_DQS5N MEMB_DQS6N MEMB_DQS7N

CLK1_BMCLK1# 17-C2 R114 100 1% nostuff

CLK1_BMCLK1 17-C2

CLK1_BMCLK2# 17-C2 R854 100 1% nostuff

CLK1_BMCLK2 17-C2

To reduce EMI noise Nearby RS600ME

MEMB_CK0N MEMB_CK0P MEMB_CK1N MEMB_CK1P MEMB_CK2N MEMB_CK2P MEMB_CK3N MEMB_CK3P MEMB_CK4N MEMB_CK4P MEMB_CK5N MEMB_CK5P

MEMB_CKE0 MEMB_CKE1 MEMB_CKE2 MEMB_CKE3 → MEM1_BCKE0 MEM1_BCKE1 18-D3 17-C2

MEMB_CS0# MEMB_CS1# MEMB_CS2# MEMB_CS3# → MEM1_BCS0# MEM1_BCS1# 18-D3 17-C2

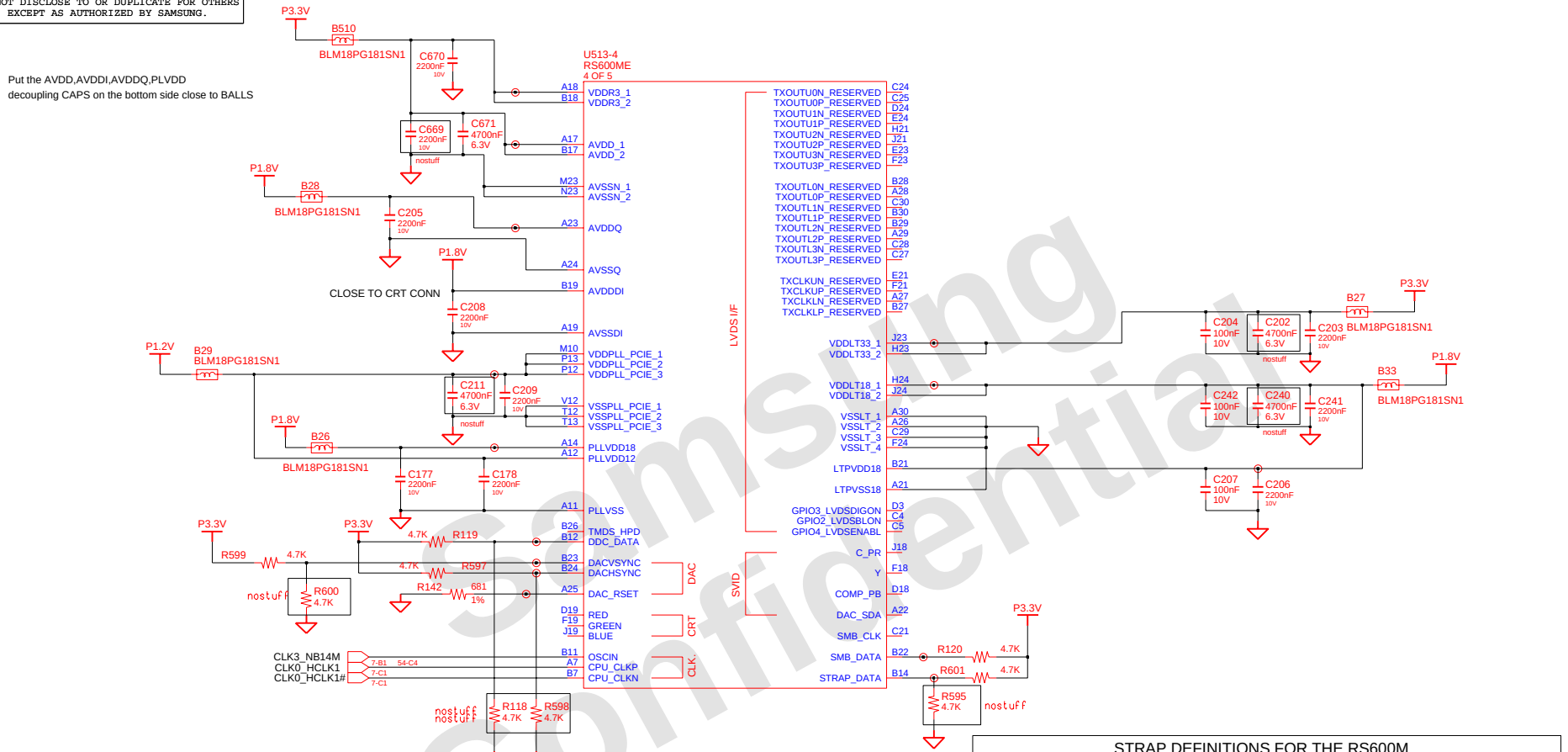
MEMB_ODT0 MEMB_ODT1 MEMB_ODT2 MEMB_ODT3 → MEM1_BODT0 MEM1_BODT1 18-D3 17-B2

MEMB_WEB# MEMB_CASB# MEMB_RASB# → MEM1_BWE# MEM1_BCAS# MEM1_BRAS# 18-C3 17-B2

MEM_COMPN AT45 R624 40.2 1%

MEM_COMPP AT46 R625 40.2 1%

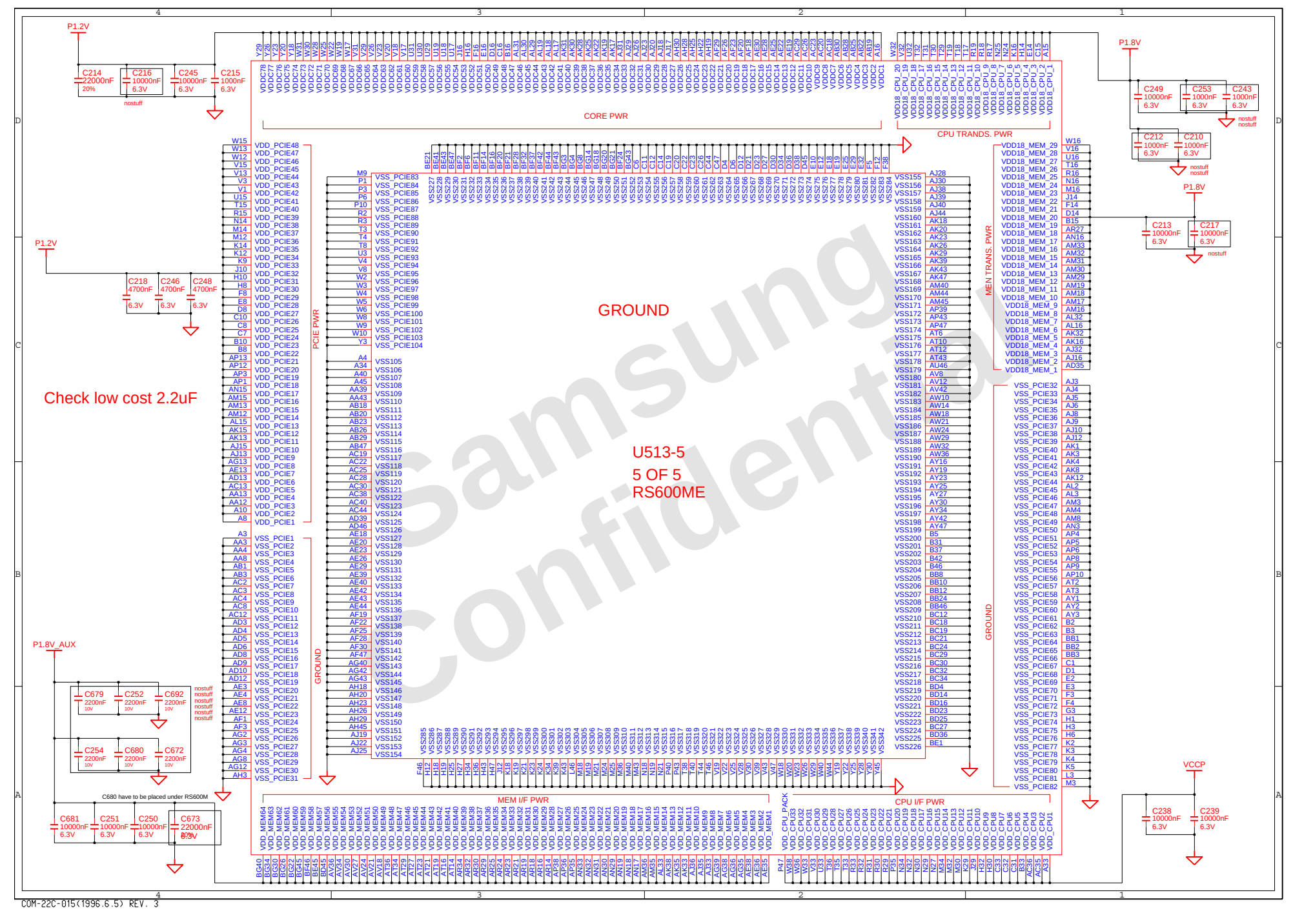
P1.8V_AUX



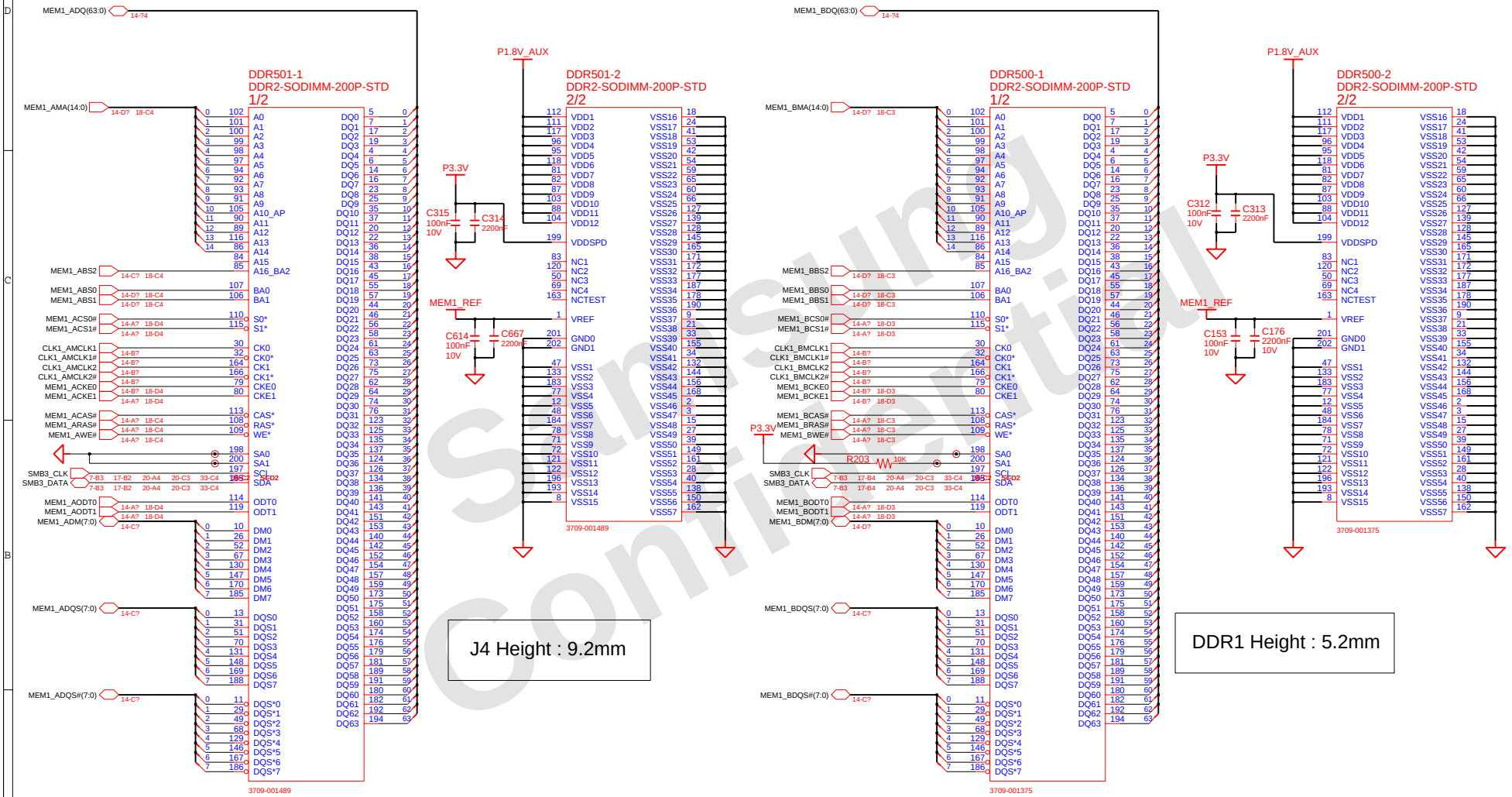
STRAP DEFINITIONS FOR THE RS600M

STRAP PIN	DESCRIPTION
DACHSYNC	Enable/Disable integrated graphics. 0 : Enable integrated graphics 1 : Disable integrated graphics
STRP_DATA	Debug strap configuration. This strap should not be set to "0" on production boards. 0 : Select Memory Channel A to be a debug bus 1 : Read debug straps from an external EEPROM, or disable debug mode when an EEPROM is absent.
DACVSYNC	Select configuration of the integrated graphics engine. 0 : Reserved 1 : Required setting for the RS600M
DDC_DATA	Select DDR2 or DDR3 signalling level for the memory interface. 0 : DDR3. On DDR3, it is necessary to put an isolation FET in series with the pull-up resistor on this strap to separate it from the I2C circuit during an NB reset 1 : DDR2

DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT MAIN RS600ME(4/5)	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR		
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE: undefined	LAST EDIT: May 28, 2007 10:24:00 AM	PAGE 15 OF 54	



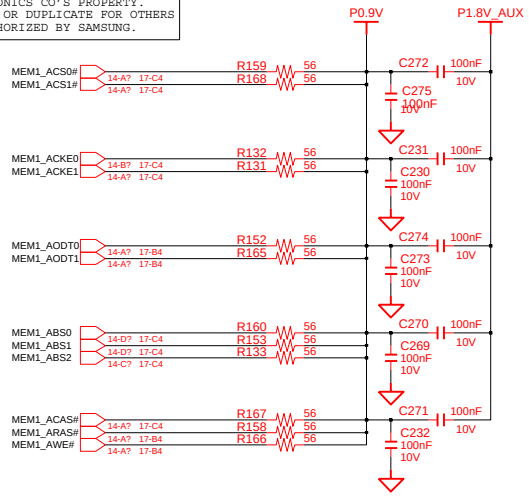
COM-22C-015(1996.6.5) REV. 3

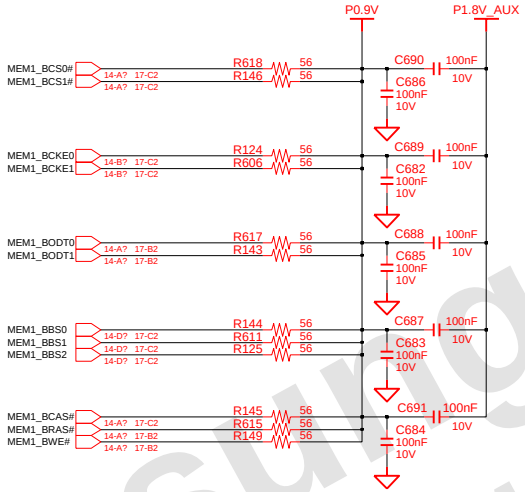


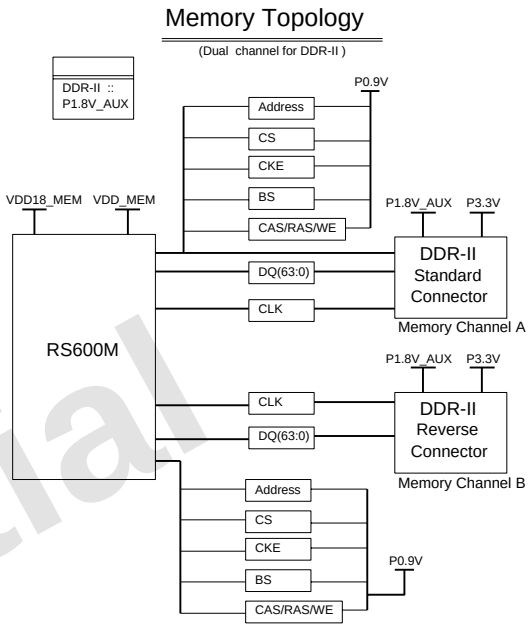
DRAW	KI IM	DATE	5/28/2007	TITLE	PRAHA_EXT MAIN DDR2 - SODIMM
CHECK	SS BAIK	DEV. STEP	PR		
APPROVAL	KK BIN	REV	1.0		
MODULE CODE	undefined	LAST EDIT	May 28, 2007 10:24:00 AM		

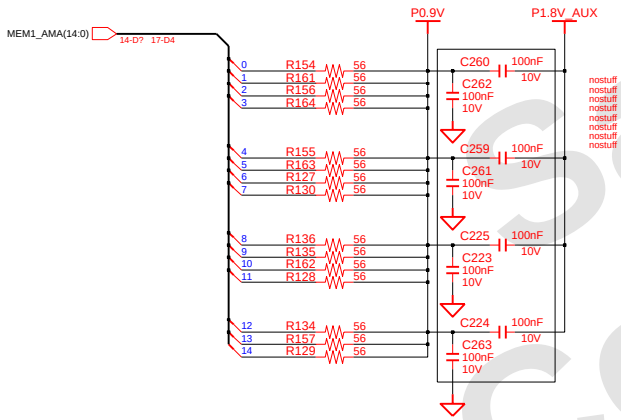
SAMSUNG ELECTRONICS

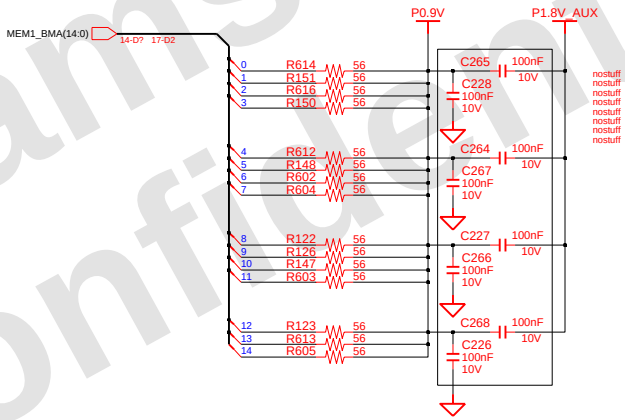
PART NO. BA41-00806A

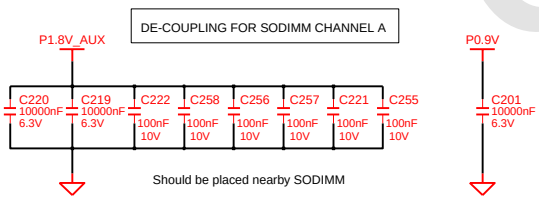


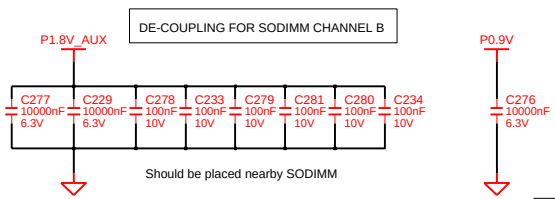




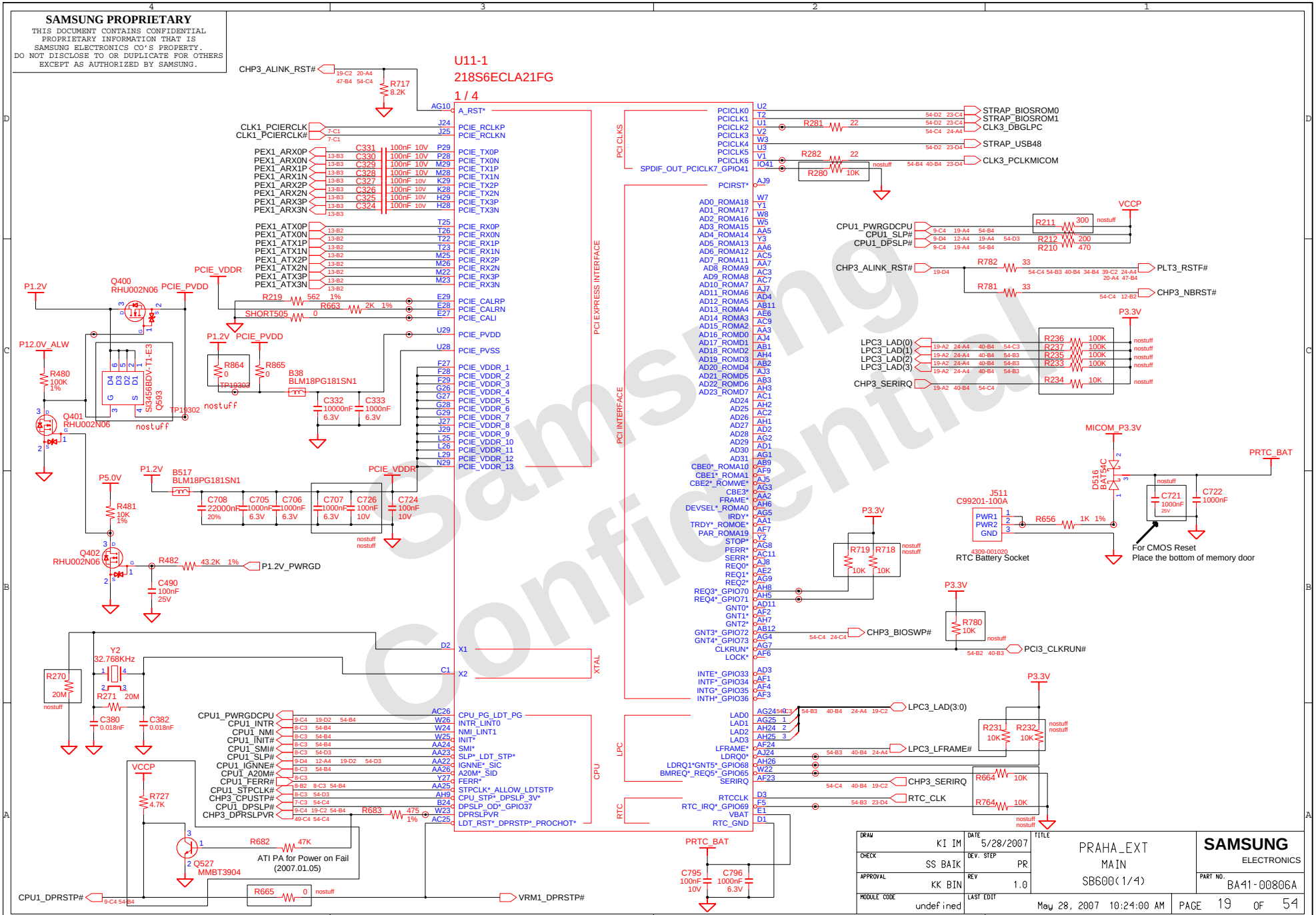






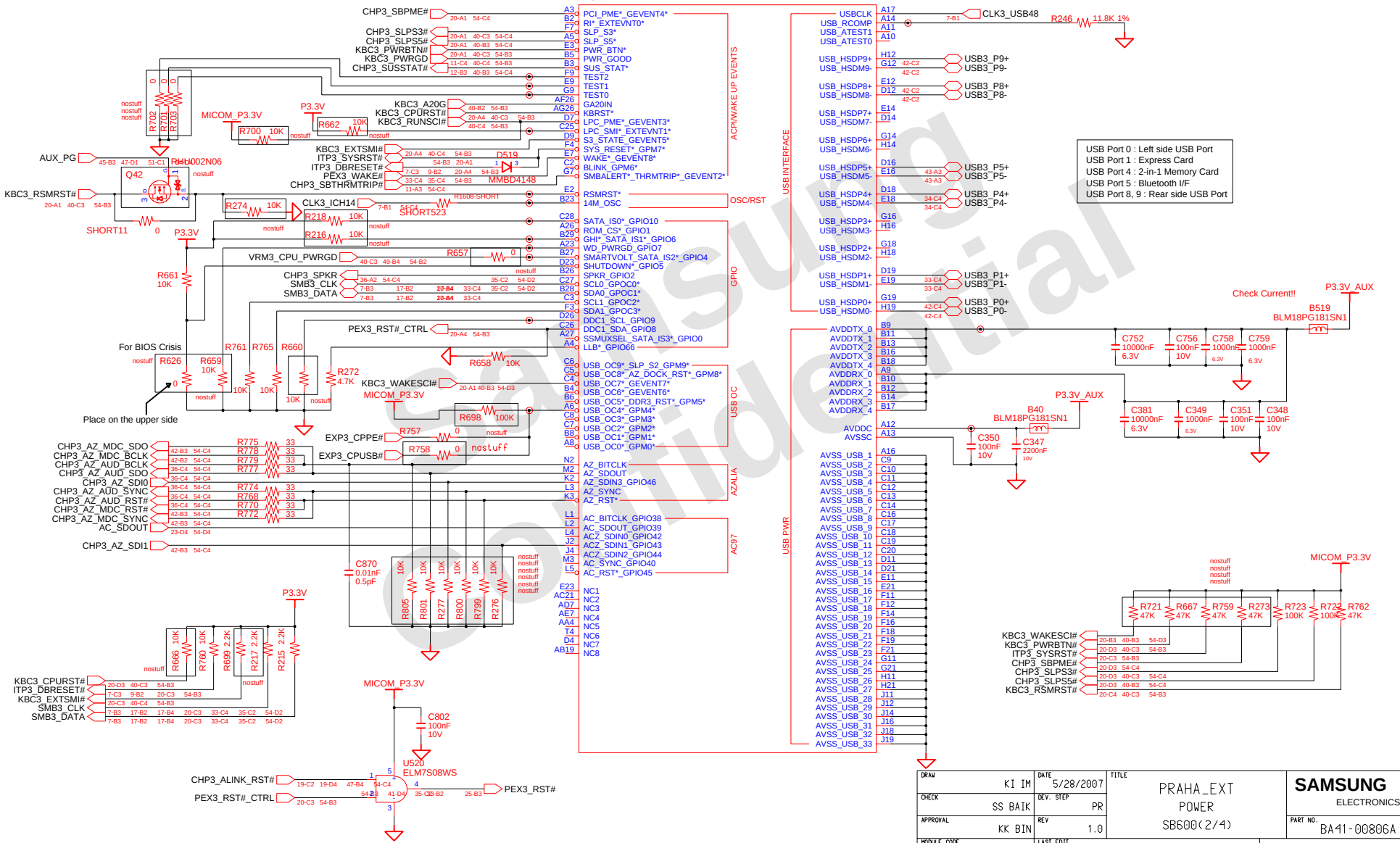


DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT MAIN DDR2 - TERMINATION	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR		
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE: undefined	LAST EDIT: May 28, 2007 10:24:00 AM	PAGE 18 OF 54	



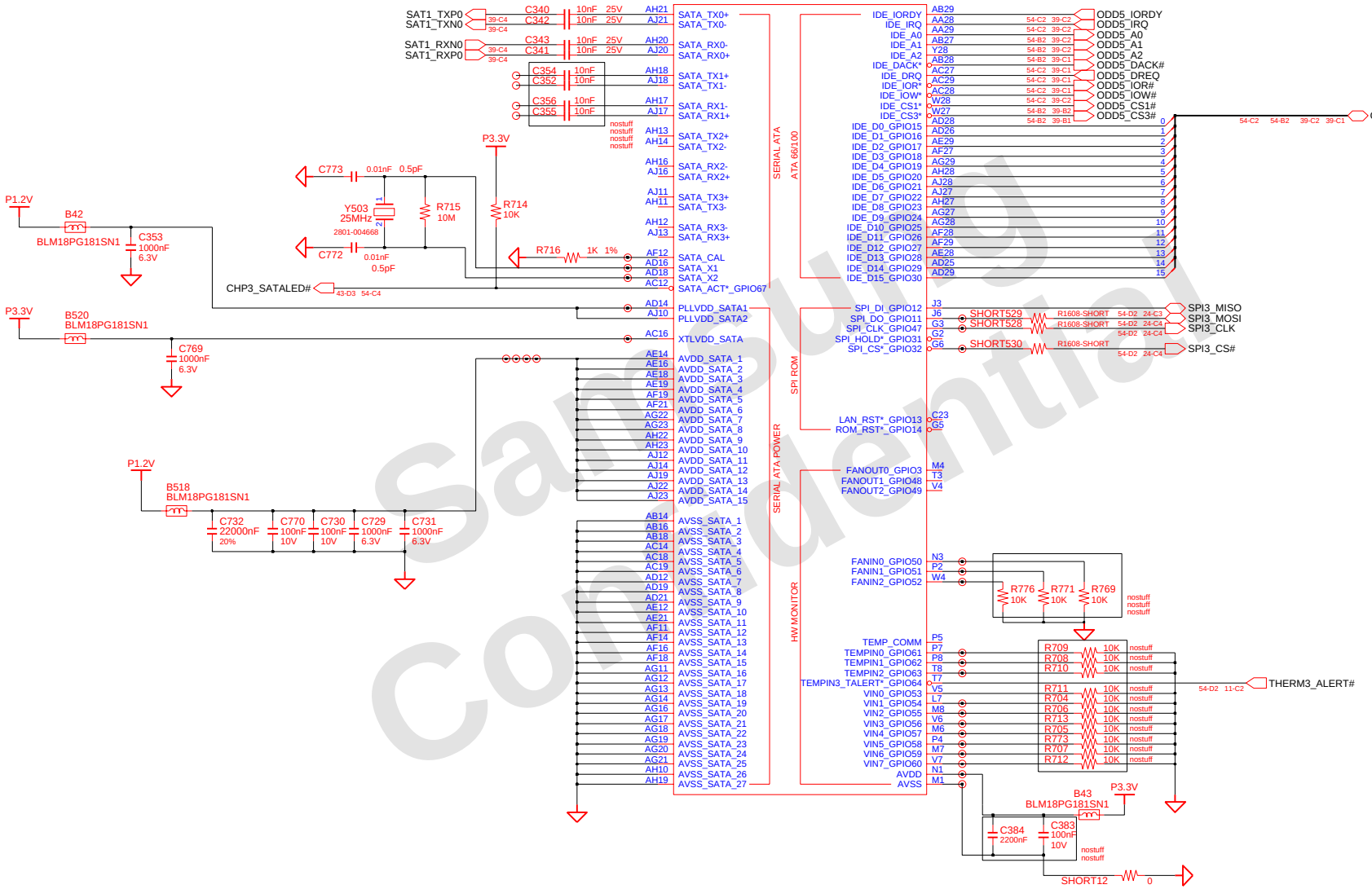
DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT MAIN SB600(1/4)	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR		
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE: undefined	LAST EDIT: May 28, 2007 10:24:00 AM		PAGE 19 OF 54

U11-2
218S6ECLA21FG
2 / 4

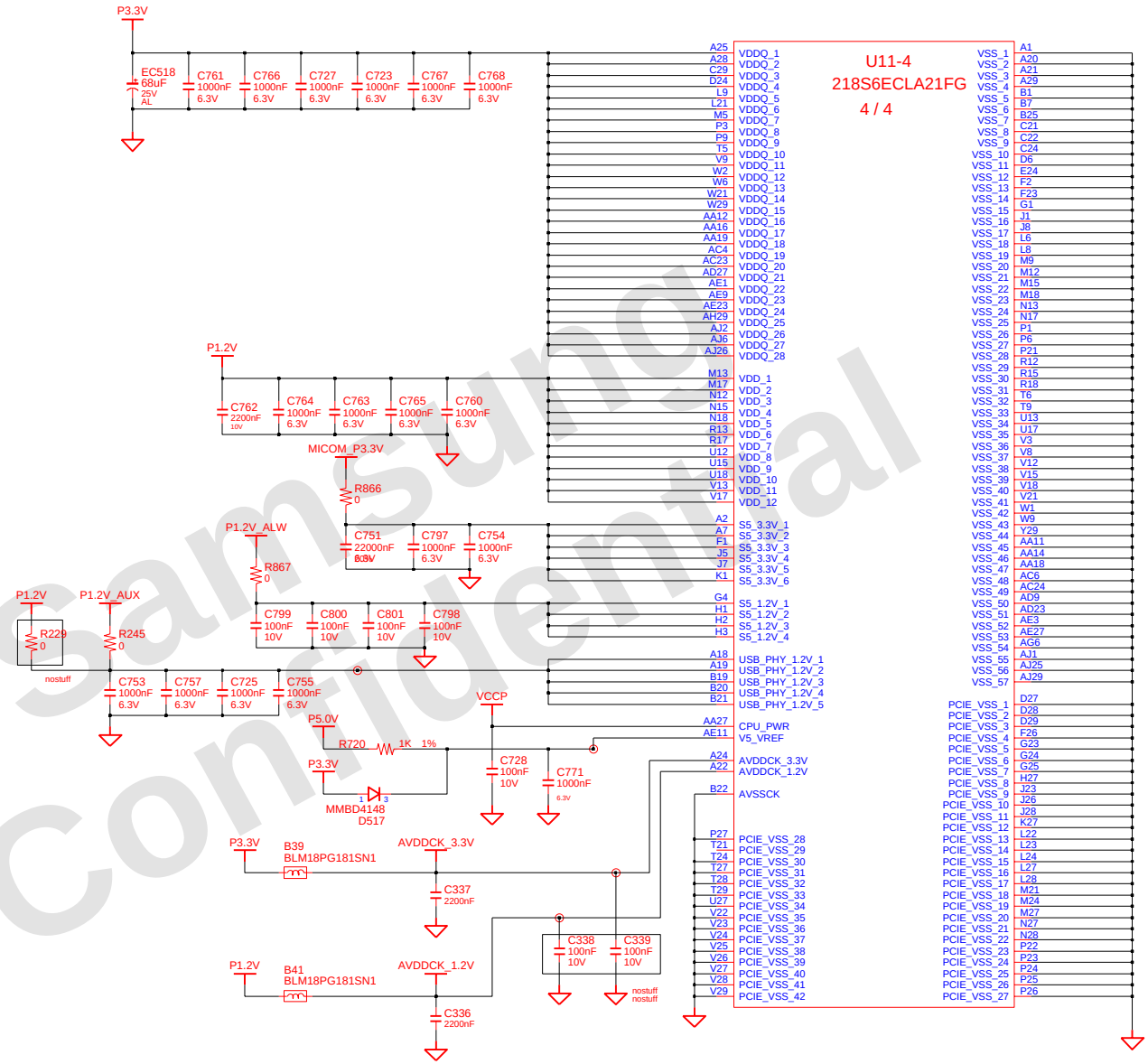


DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT POWER SB600(2/4)	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR		
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE: undefined	LAST EDIT: May 28, 2007 10:24:00 AM		PAGE 20 OF 54

U11-3
218S6ECLA21FG
3 / 4



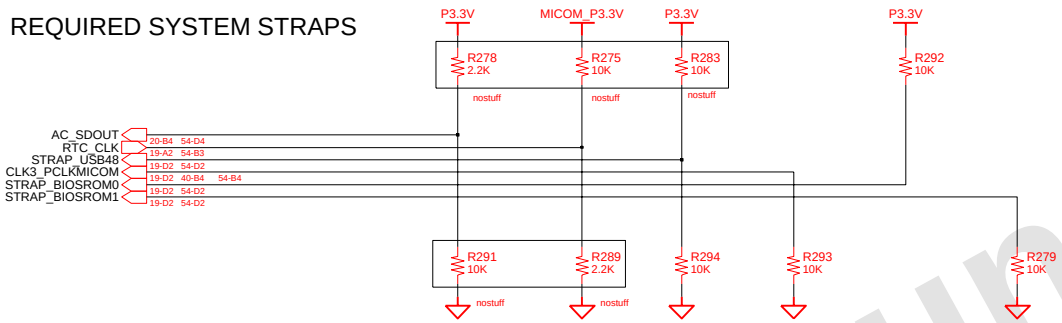
DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT MAIN SB600(3/4)	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR		
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE: undefined	LAST EDIT: May 28, 2007 10:24:00 AM		PAGE 21 OF 54



DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT MAIN SB600(4/4)	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR		
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE: undefined	LAST EDIT: May 28, 2007 10:24:00 AM	PAGE 22 OF 54	

SB600 HAS AN INTERNAL PD FOR AC_SDOUT
SB600 HAS AN INTERNAL PU FOR RTC_CLK

REQUIRED SYSTEM STRAPS

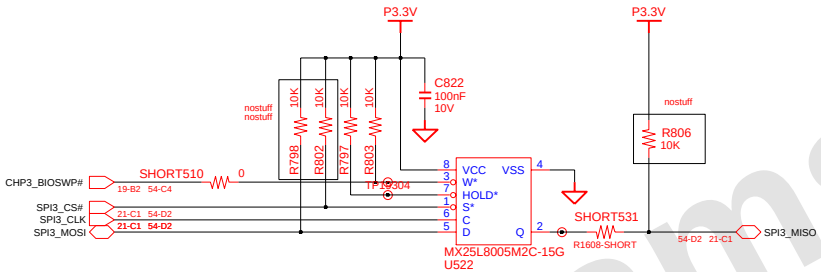


	AC_SDOUT	RTC_CLK	PCI3_CLK4	PCI3_CLK6	PCI3_CLK0 PCI3_CLK1
STRAP HIGH	USE DEBUG STRAPS	INTERNAL RTC	USE INTERNAL PLL48	CPU I/F = K8	ROM TYPE H, H = PCI ROM H, L = SPI ROM L, H = LPC ROM L, L = FWH ROM
STRAP LOW	IGNORE DEBUG STRAPS	EXRERNAL RTC (PD on X1, Apply 32KHz to RTC_CLK)	USE EXTERNAL 48MHz	CPU I/F = P4	

DEBUG STRAPS

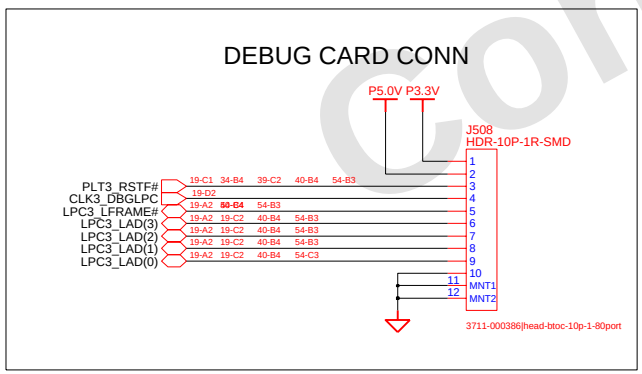
	PCI3_AD(28)	PCI3_AD(27)	PCI3_AD(26)	PCI3_AD(25)	PCI3_AD(24)	PCI3_AD(23)
STRAP HIGH	USE LONG RESET	USE PCI PLL	USE ACPI BCLK	USE IDE PLL	USE DEFAULT PCIE STRAPS	BOOTFAILTIMER DISABLED
STRAP LOW	USE SHORT RESET	BYPASS PCI PLL	BYPASS ACPI BCLK	BYPASS IDE PLL	USE EEPROM PCIE STRAPS	BOOTFAILTIMER ENABLED

DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR	STRAPS	
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE: undefined	LAST EDIT: May 28, 2007 10:24:00 AM	PAGE 23 OF 54	



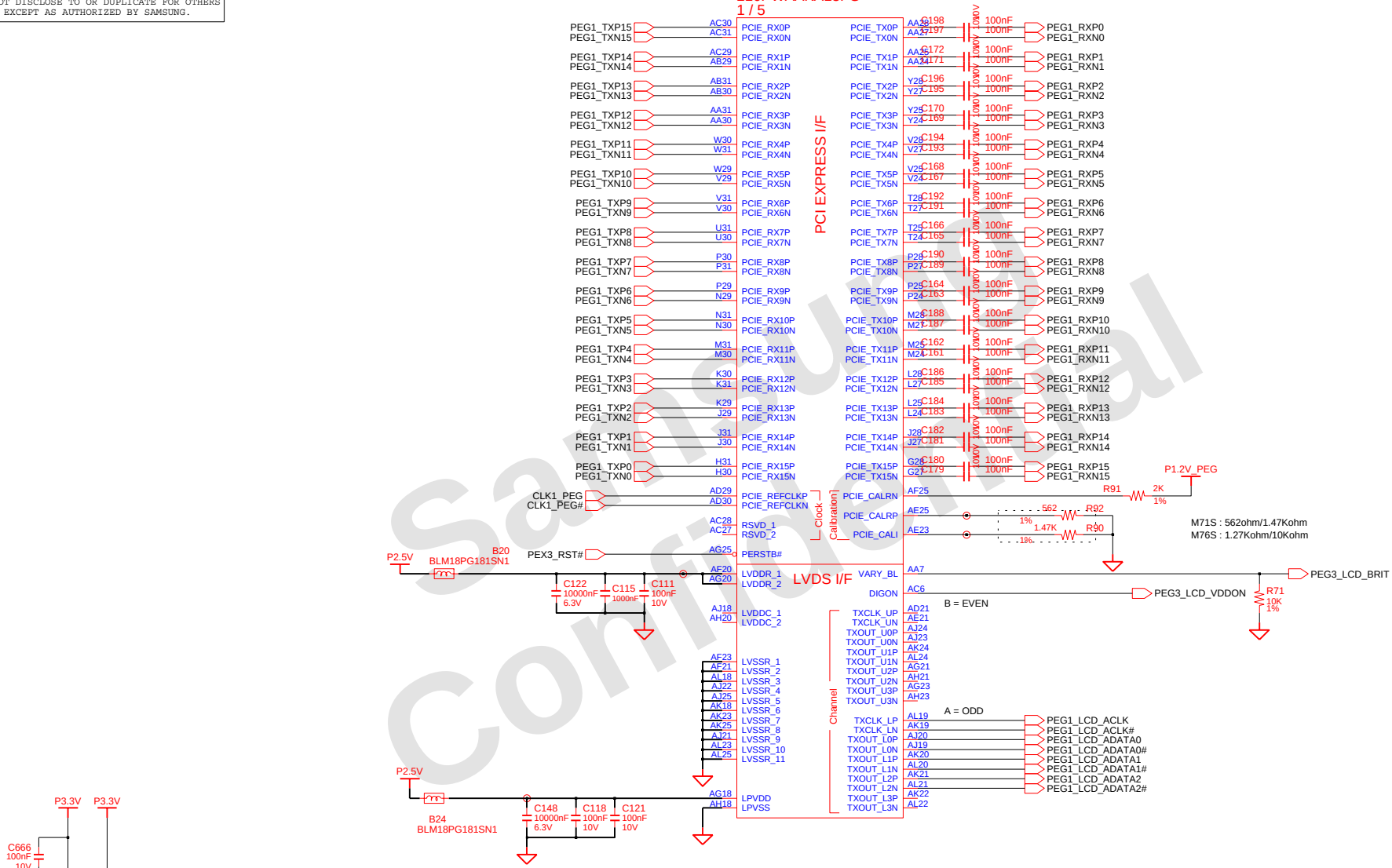
SPI3_CS#

SB600 prior to A21 : Pulled up to P3.3V_ALW with 1Kohm resistor.
SB600 A21 and newer : No external pull-up resistor required.

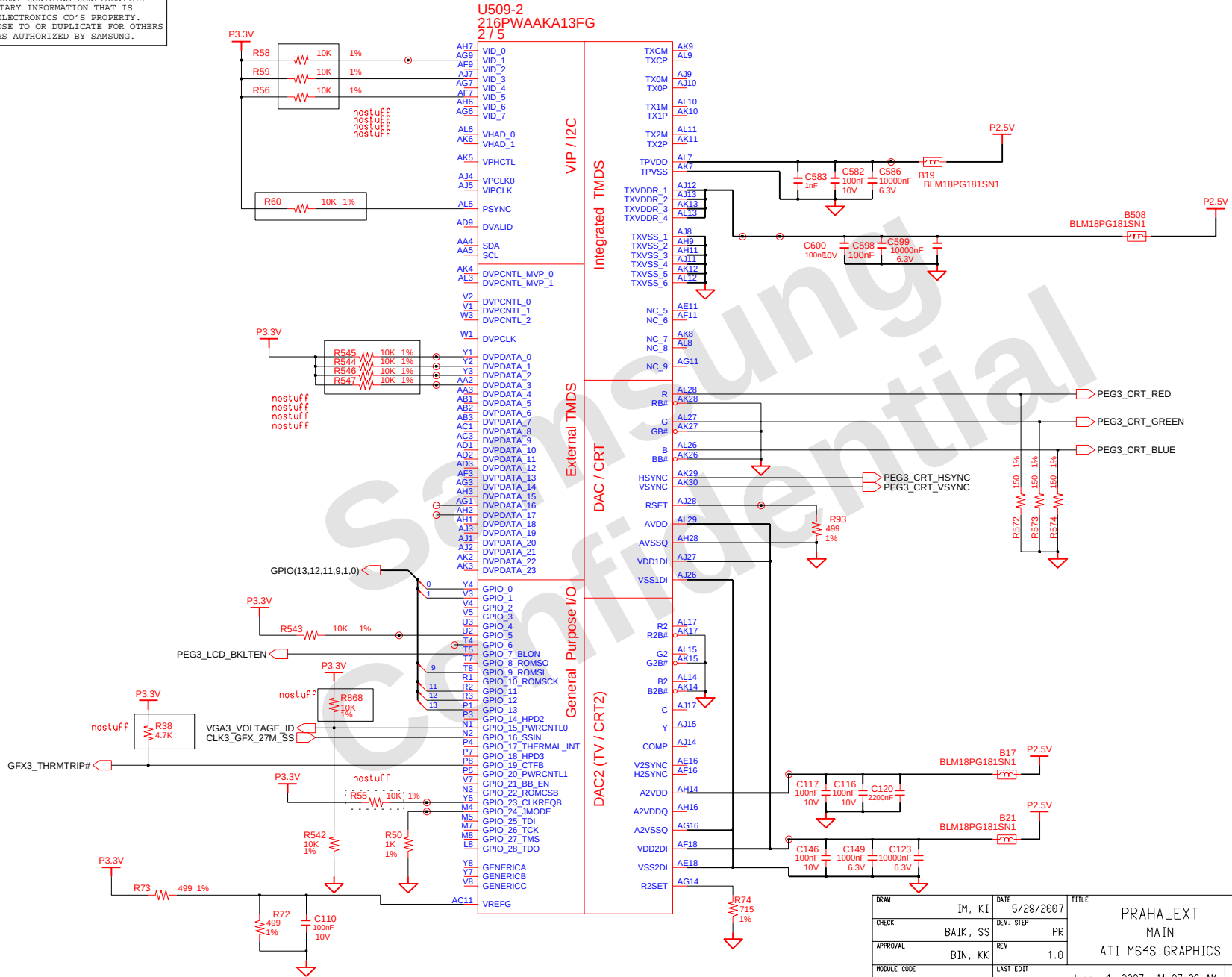


02 VERIFY REAL MODE	66 CONFIGURE ADVANCE CACHE REG.
03 DISABLE NMI	6A DISPLAY EXTERNAL CACHE SIZE
04 GET CPU TYPE	6C DISPLAY SHADOW MESSAGE
06 INIT. SYSTEM H/W	6E DISPLAY NON-DISPOSABLE SEGMENT
08 INIT. CHIPSET REG.	70 DISPLAY ERROR MESSAGE
09 SET IN POST FLAG	72 CHECK FOR CONFIGURATION ERROR
0A INIT CPU.REG	74 TEST REAL-TIME CLOCK
0B CPU CACHE ON	76 CHECK FOR KEYBOARD EERROR
0C INIT.CACHE TO POST	7C SETUP HARDWARE INTERRUPT VECTOR
OE 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 INTERRUP 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 GETWEEN 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

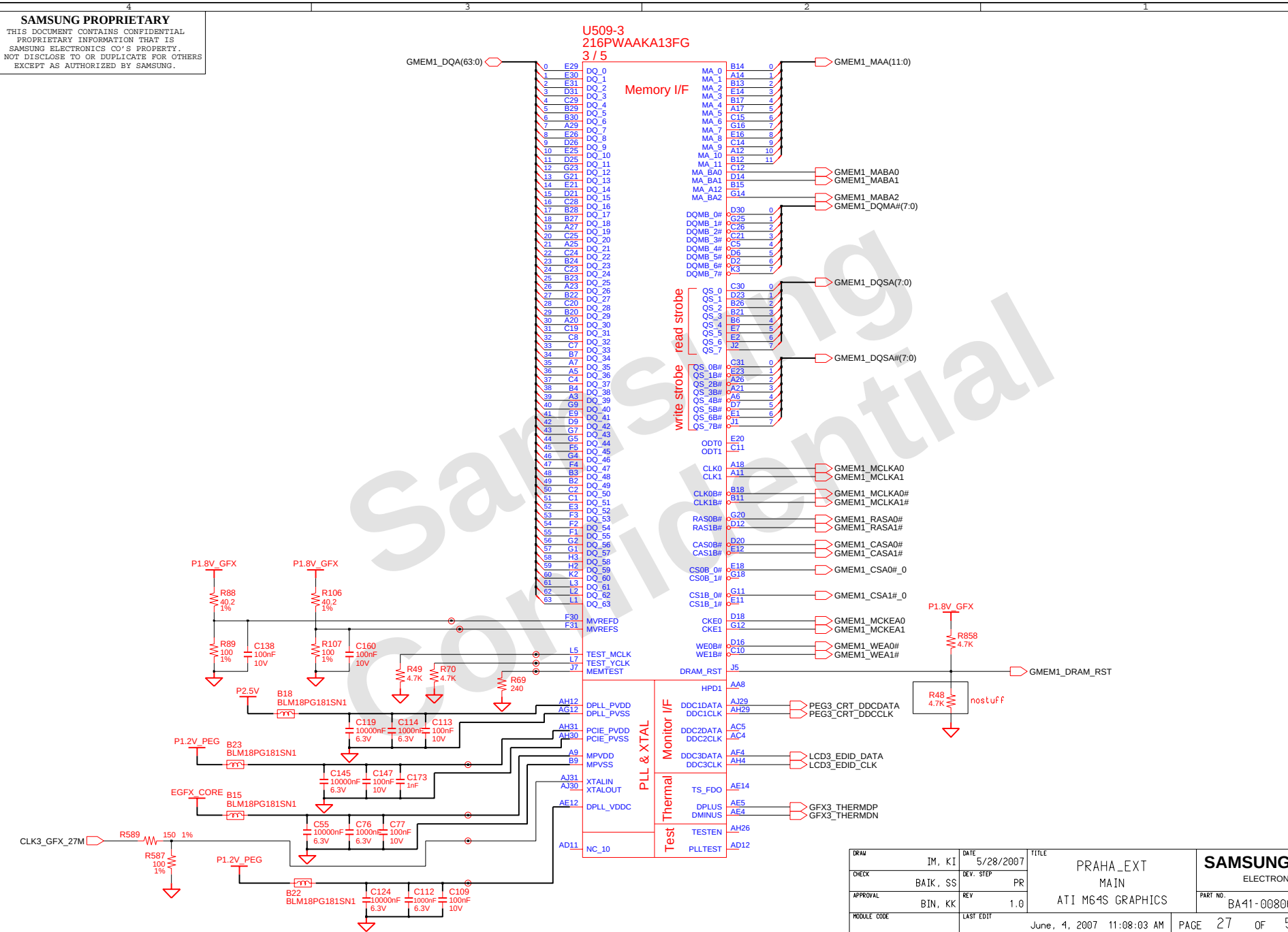
DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT MAIN SPI ROM & DEBUG PORT	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR		
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE: undefined	LAST EDIT: May 28, 2007 10:24:00 AM	PAGE 24 OF 54	



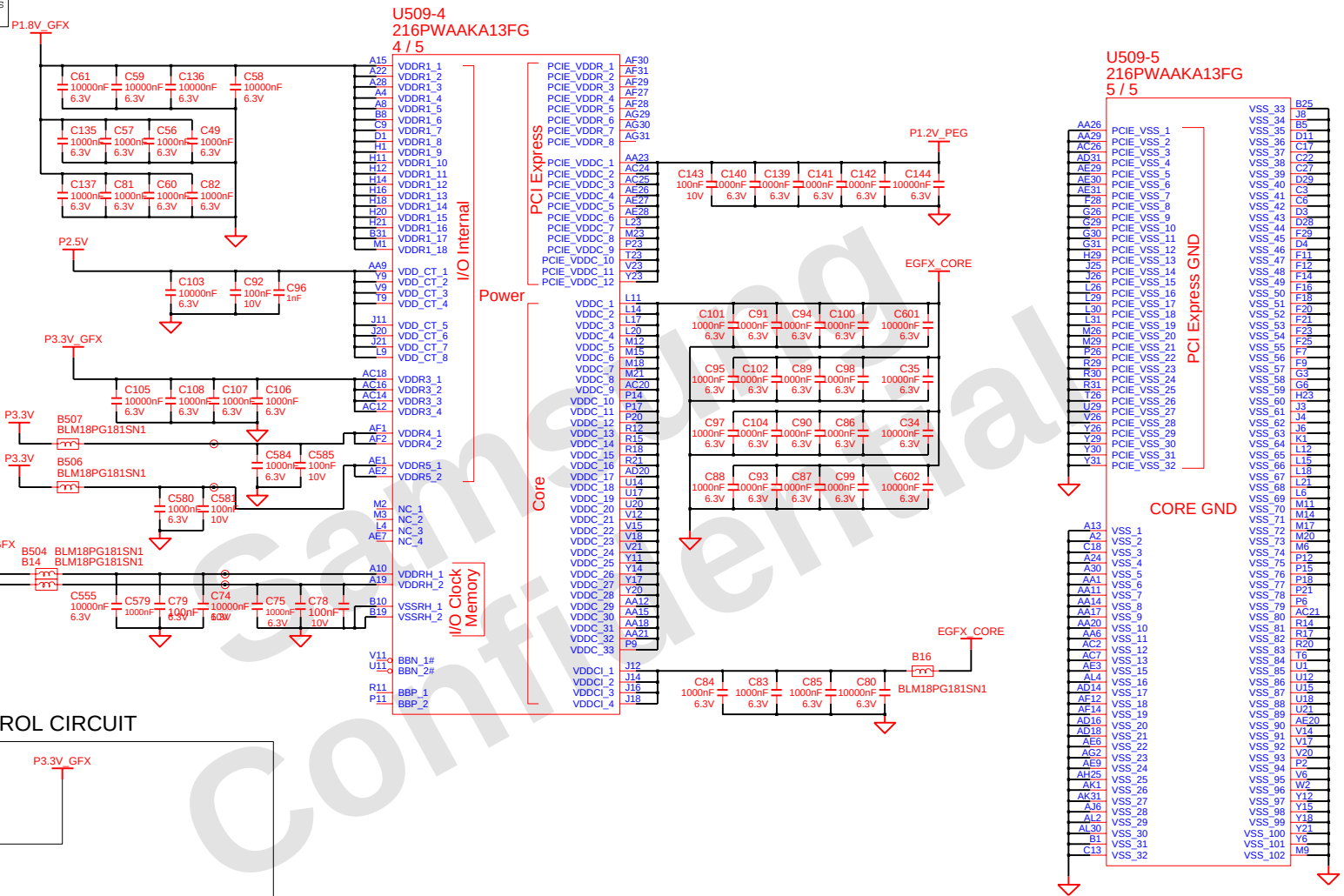
DRAW: IM, KI	DATE: 6/4/2007	TITLE: PRAHA_EXT MAIN ATI M64S GRAPHICS	SAMSUNG ELECTRONICS
CHECK: BAIK, SS	DEV. STEP: PR		
APPROVAL: BIN, KK	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE	LAST EDIT: June, 4, 2007 11:06:57 AM		PAGE 25 OF 54



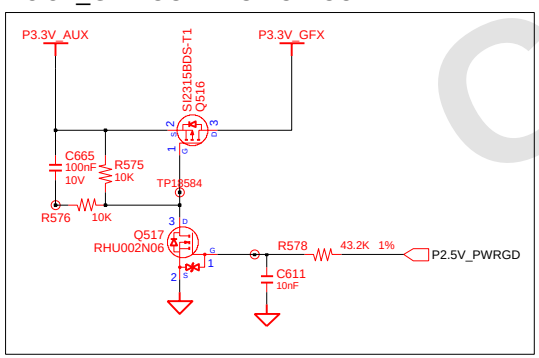
DRAW: IM, KI	DATE: 5/28/2007	TITLE: PRAHA_EXT MAIN ATI M64S GRAPHICS	SAMSUNG ELECTRONICS
CHECK: BAIK, SS	DEV. STEP: PR		
APPROVAL: BIN, KK	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE	LAST EDIT: June, 4, 2007 11:07:26 AM	PAGE 26 OF 54	



DRAW: IM, KI	DATE: 5/28/2007	TITLE: PRAHA_EXT MAIN ATI M64S GRAPHICS	SAMSUNG ELECTRONICS
CHECK: BAIK, SS	DEV. STEP: PR		
APPROVAL: BIN, KK	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE	LAST EDIT: June, 4, 2007 11:08:03 AM		PAGE 27 OF 54

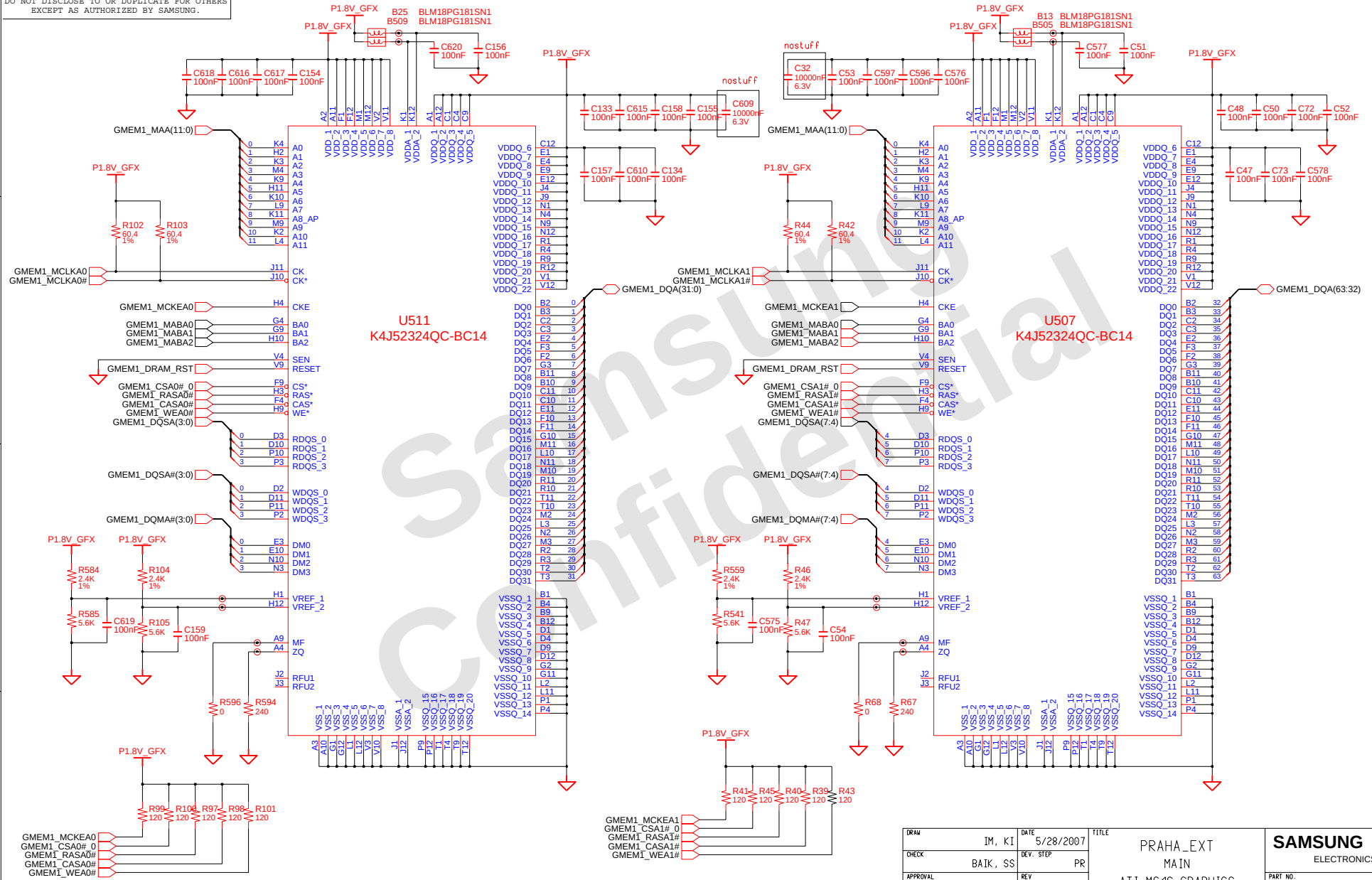


P3.3V_GFX CONTROL CIRCUIT



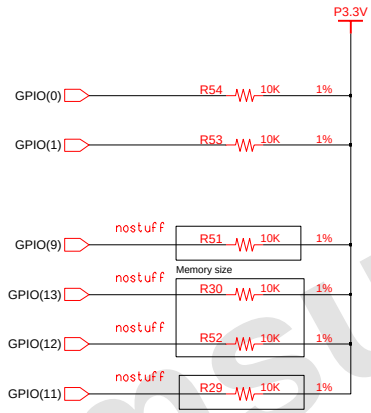
DRAW: IM, KI	DATE: 5/28/2007	TITLE: PRAHA_EXT MAIN ATI M64S GRAPHICS	SAMSUNG ELECTRONICS
CHECK: BAIK, SS	DEV. STEP: PR		
APPROVAL: BIN, KK	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE	LAST EDIT: June, 4, 2007 11:08:39 AM		PAGE 28 OF 54

A-channel



DRAW: IM, KI	DATE: 5/28/2007	TITLE: PRAHA_EXT MAIN ATI M64S GRAPHICS	SAMSUNG ELECTRONICS
CHECK: BAIK, SS	DEV. STEP: PR		
APPROVAL: BIN, KK	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE	LAST EDIT: June, 4, 2007 11:09:15 AM	PAGE 29 OF 54	

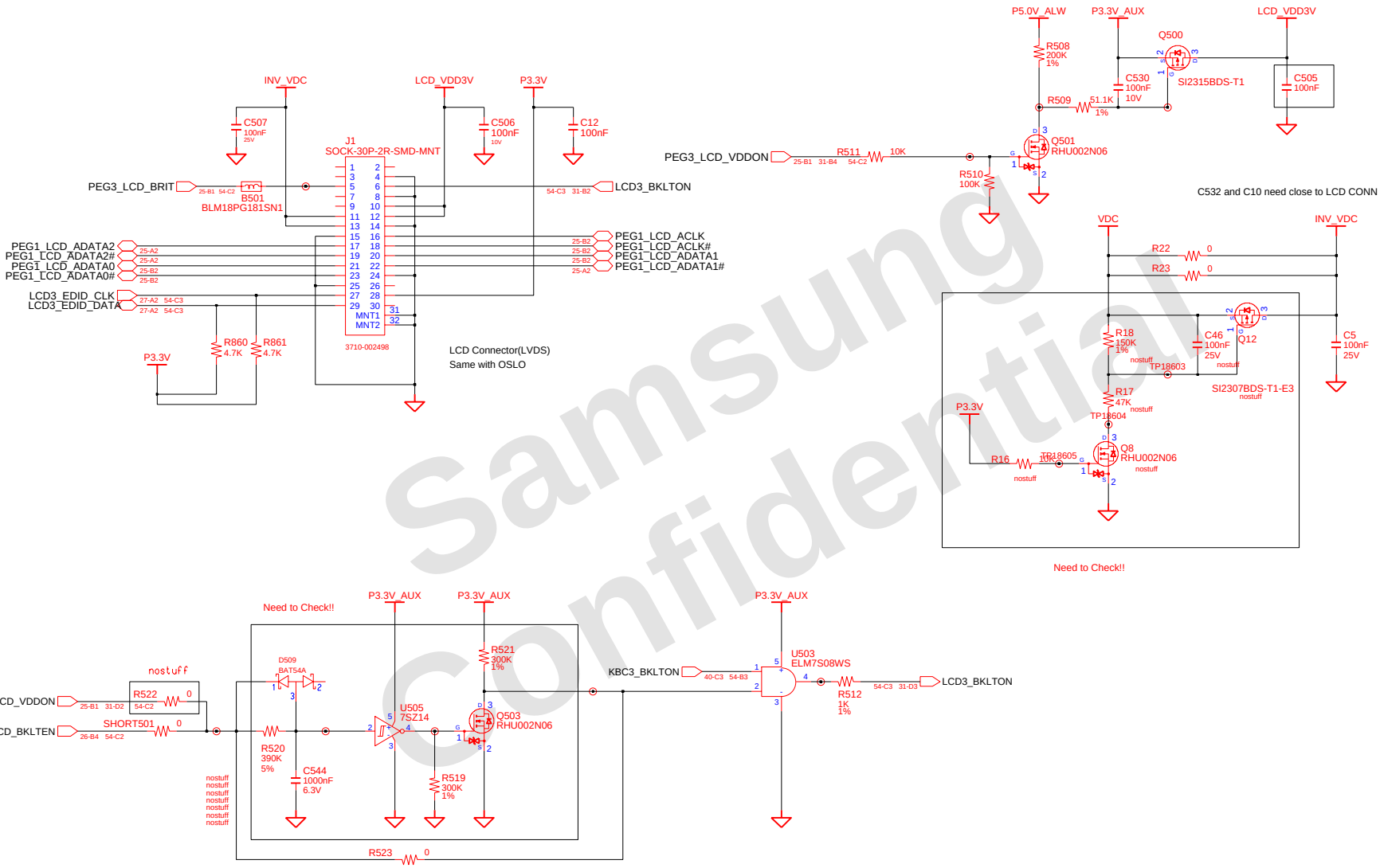
Need to option



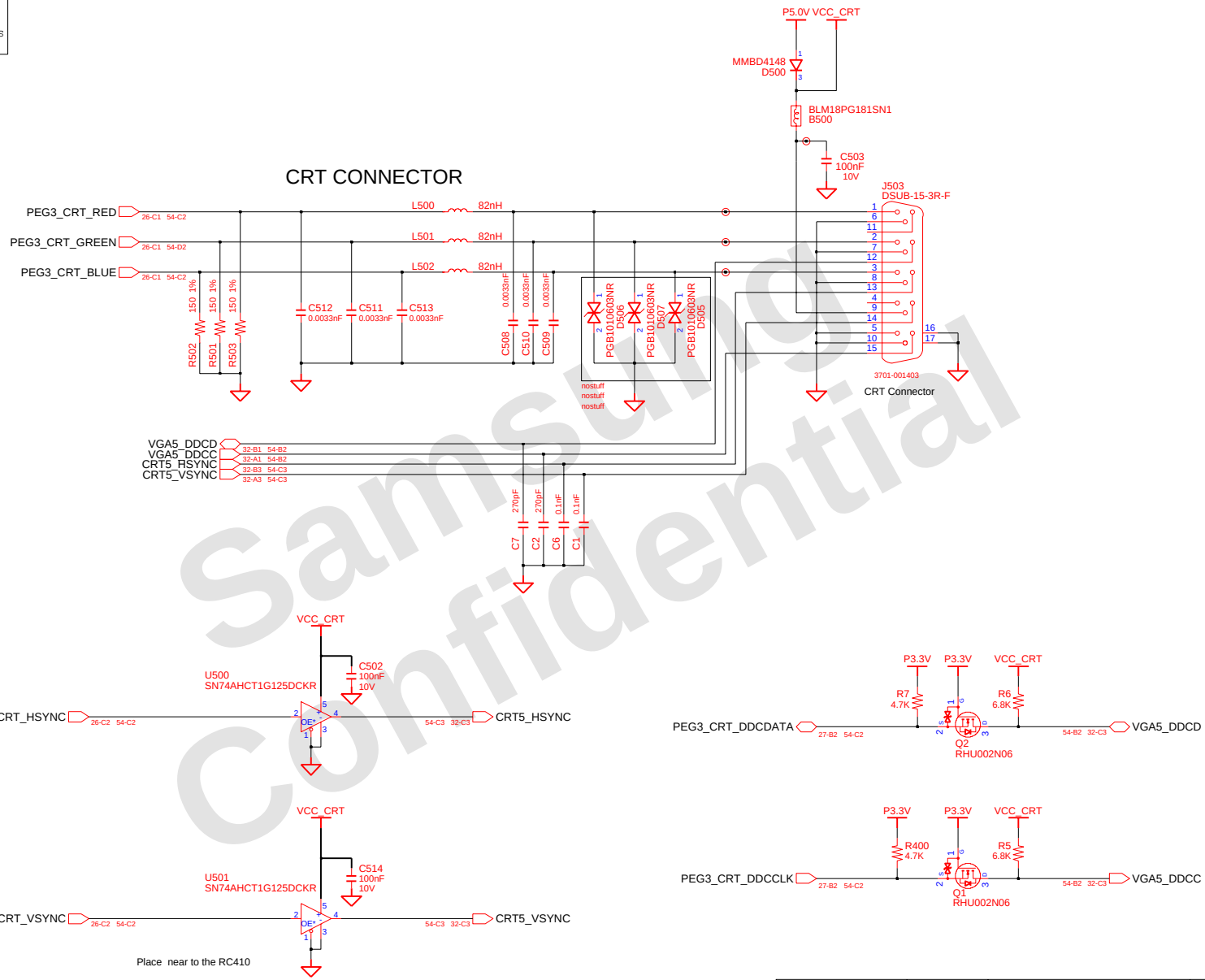
(DEFAULT : pull-down)

STRAP	PIN	DESCRIPTION
TX_PWRS_ENB	GPIO[0]	Transmitter Power Saving Enable 0: 50% Tx output swing 1: full Tx output swing
TX_DEEMPH_EN	GPIO[1]	Transmitter De-emphasis Enable 0: Tx De-emphasis disabled 1: Tx de-emphasis enabled
DEBUG_ACCESS	GPIO[4]	Strap to set the debug muxes to bring out DEBUG signals even if registers are inaccessible.
ROMIDCFG[3:0]	GPIO[9,13:11]	When no ROM is attached, GPIO[9] is set to 0. GPIO[13:12] is used to select the frame buffer aperture size. GPIO[13:12] = 00: 128M frame buffer GPIO[13:12] = 01: 256M frame buffer GPIO[13:12] = 10: 64M frame buffer GPIO[13:12] = 11: reserved

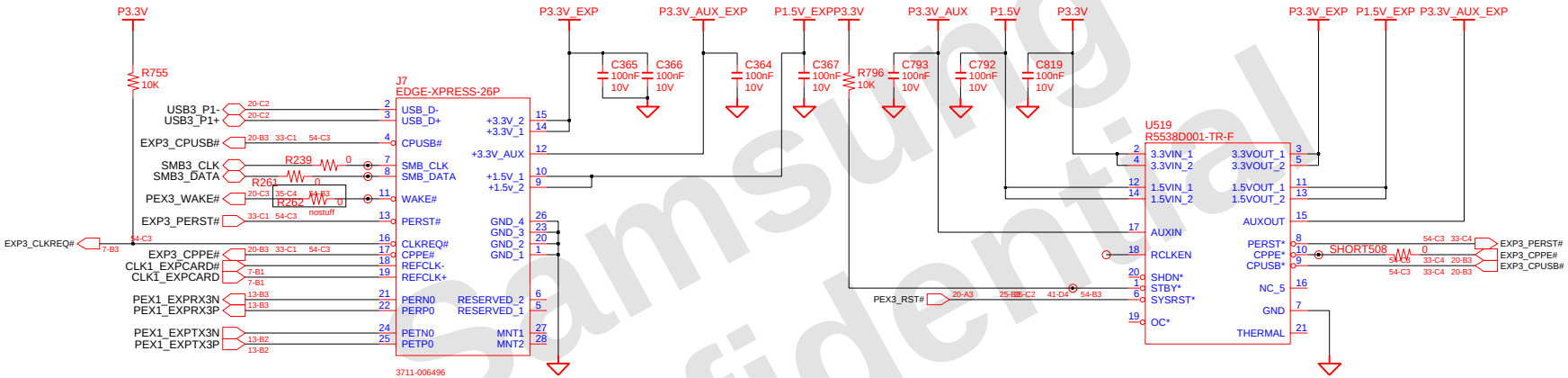
DRAW: IM, KI	DATE: 5/28/2007	TITLE: PRAHA_EXT MAIN ATI M64S GRAPHICS	SAMSUNG ELECTRONICS
CHECK: BAIK, SS	DEV. STEP: PR		
APPROVAL: BIN, KK	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE:	LAST EDIT: June, 4, 2007 11:09:49 AM	PAGE 30 OF 54	

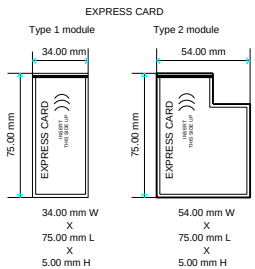


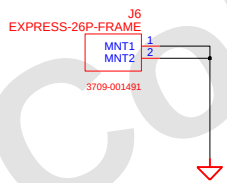
DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT LCD Connector & SPREAD SPECTRUM	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR		
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE: undefined	LAST EDIT: May 28, 2007 10:24:00 AM	PAGE 31 OF 54	



DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR	CRT	
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE: undefined	LAST EDIT: May 28, 2007 10:24:00 AM	PAGE 32 OF 54	

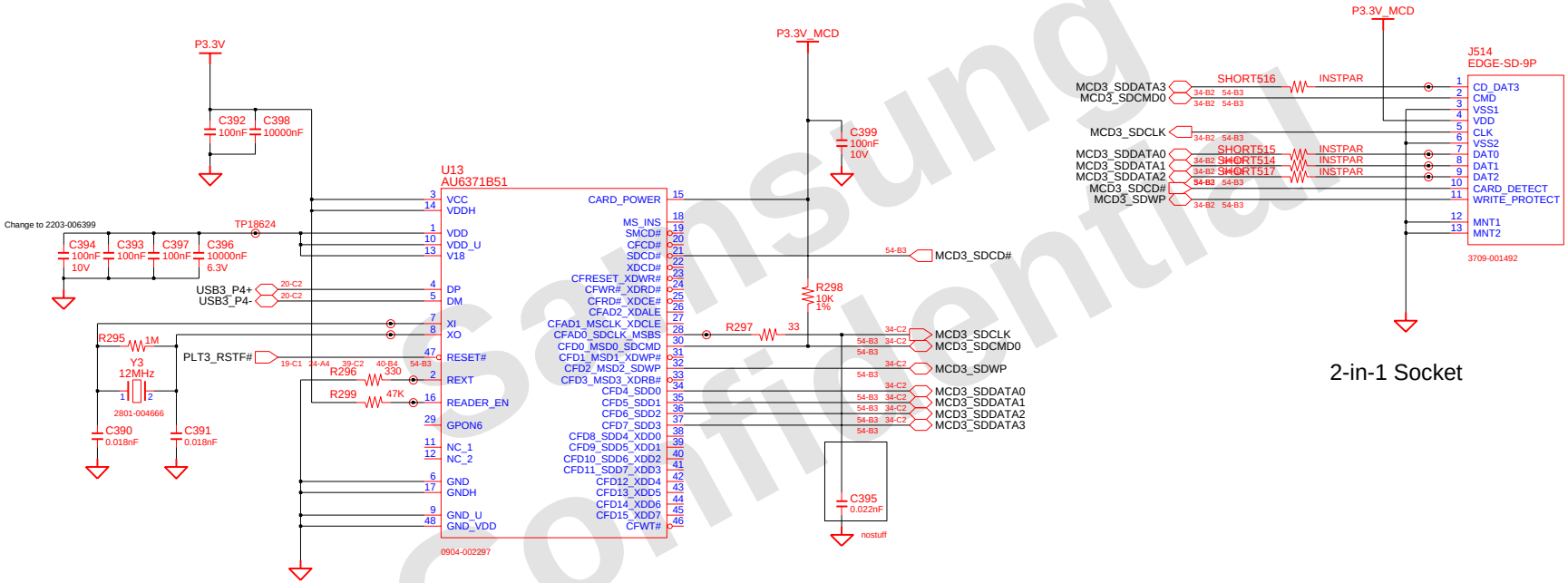






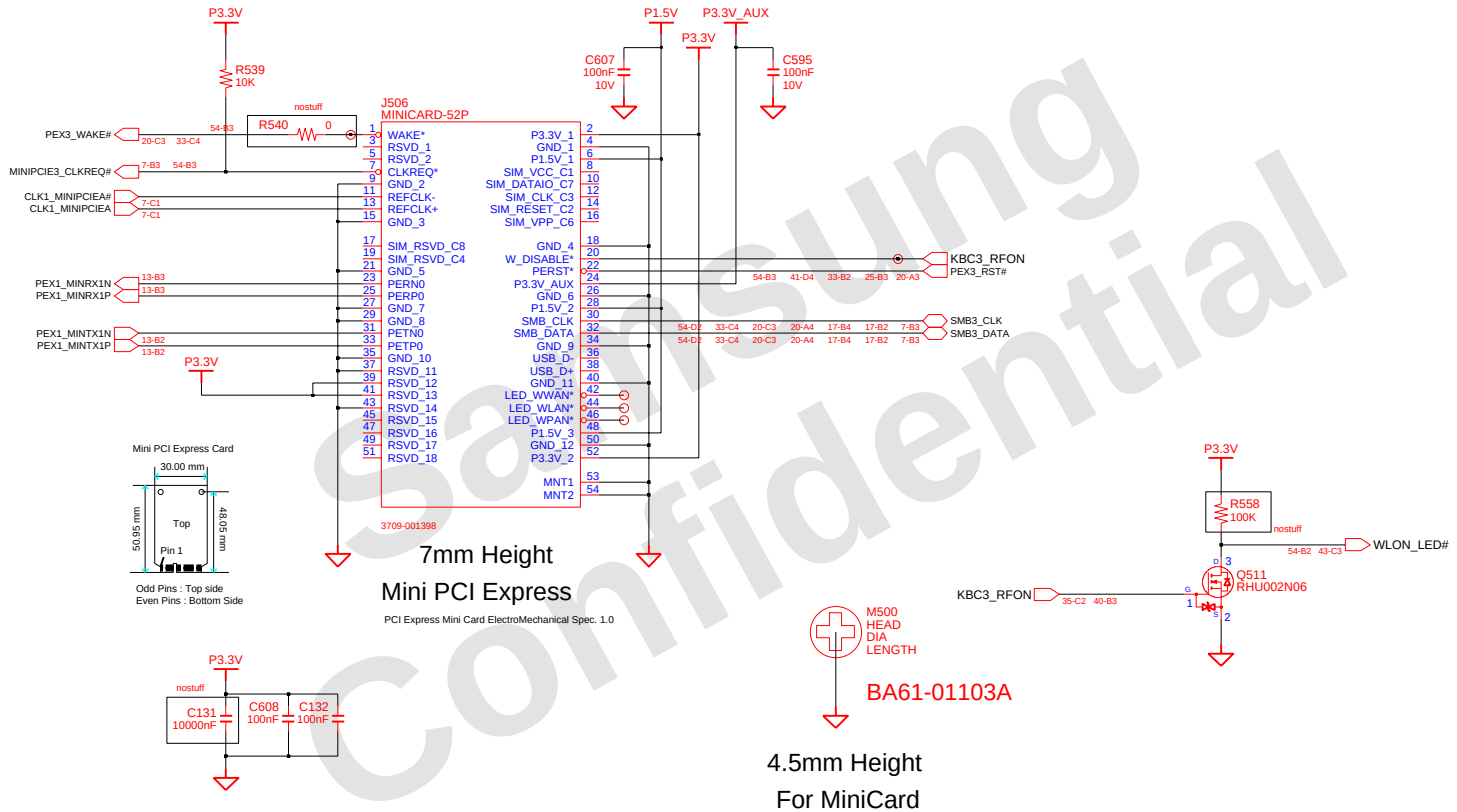
DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR	EXPRESS CARD	
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE: undefined	LAST EDIT: May 28, 2007 10:24:00 AM	PAGE 33 OF 54	

2 IN 1 CARD



2-in-1 Socket

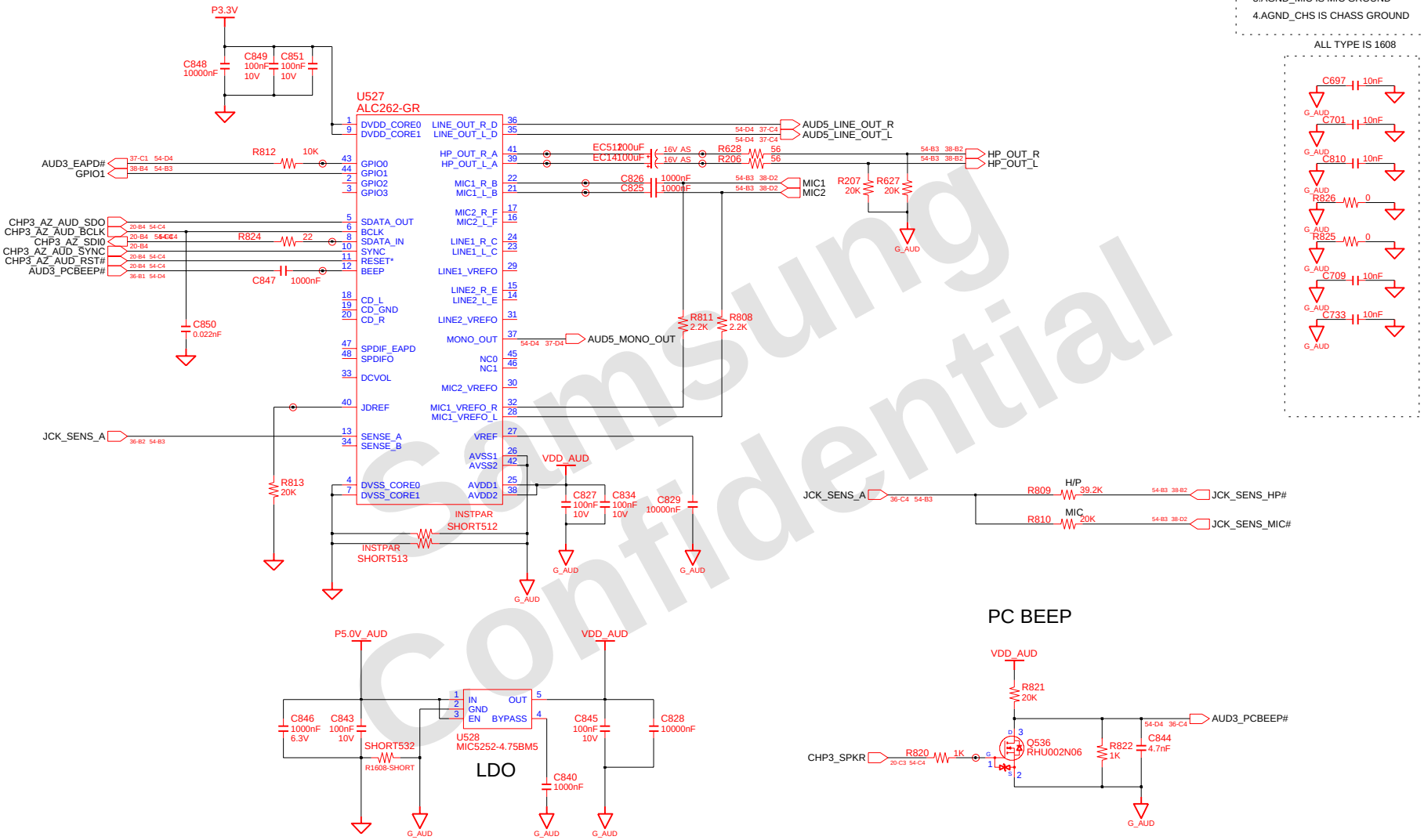
DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR	2 in 1 Socket	
APPROVAL: KK BIN	REV: 1.0		PART NO. BA41-00806A
MODULE CODE	LAST EDIT: May 28, 2007 10:24:00 AM		PAGE 34 OF 54



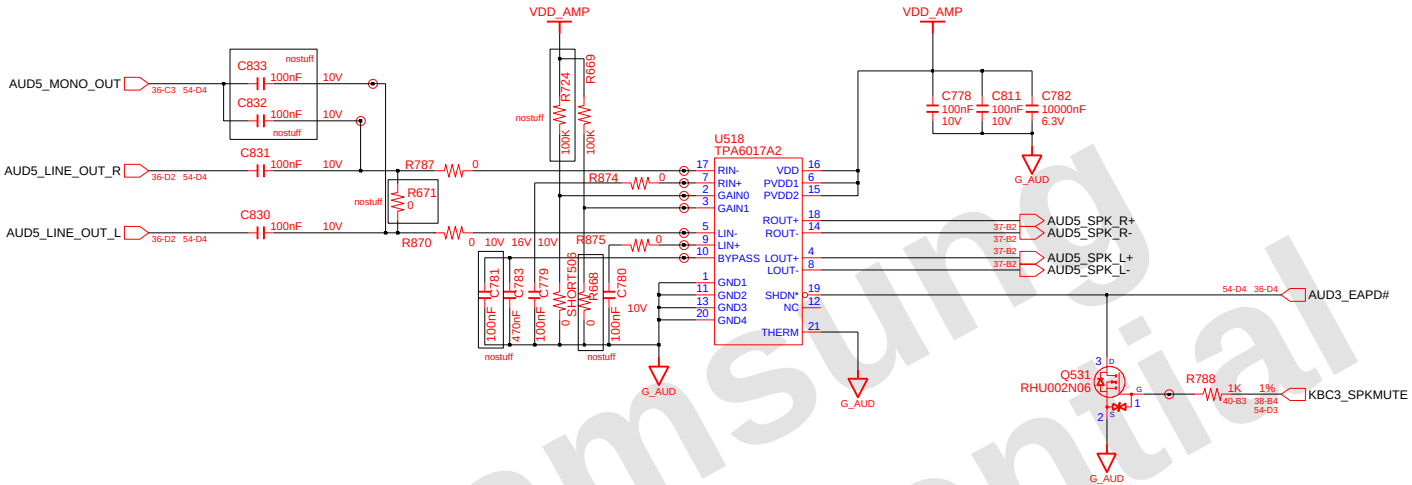
DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT MAIN MINI CARD	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR		
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE: undefined	LAST EDIT: May 28, 2007 10:24:00 AM	PAGE 35 OF 54	

1.AGND_AUD IS AUDIO GROUND
2. GND IS DIGITAL GROUND
3.AGND_MIC IS MIC GROUND
4.AGND_CHS IS CHASS GROUND

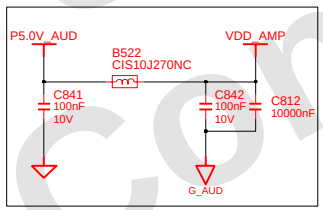
ALL TYPE IS 1608



DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT MAIN AUDIO CODEC	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR		
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE: undefined	LAST EDIT: May 28, 2007 10:24:00 AM	PAGE 36 OF 54	

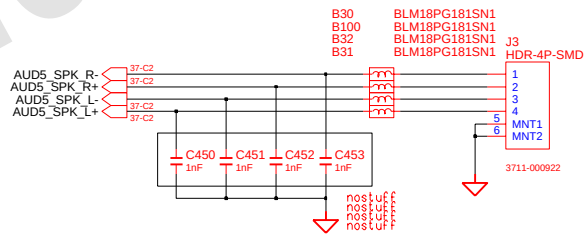


AMP_VDD



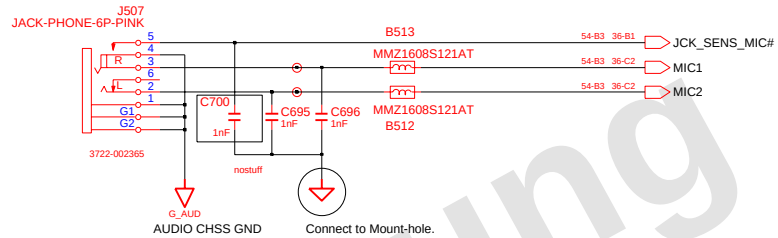
INTERNAL STEREO SPEAKERS

The trace bigger than 30mil

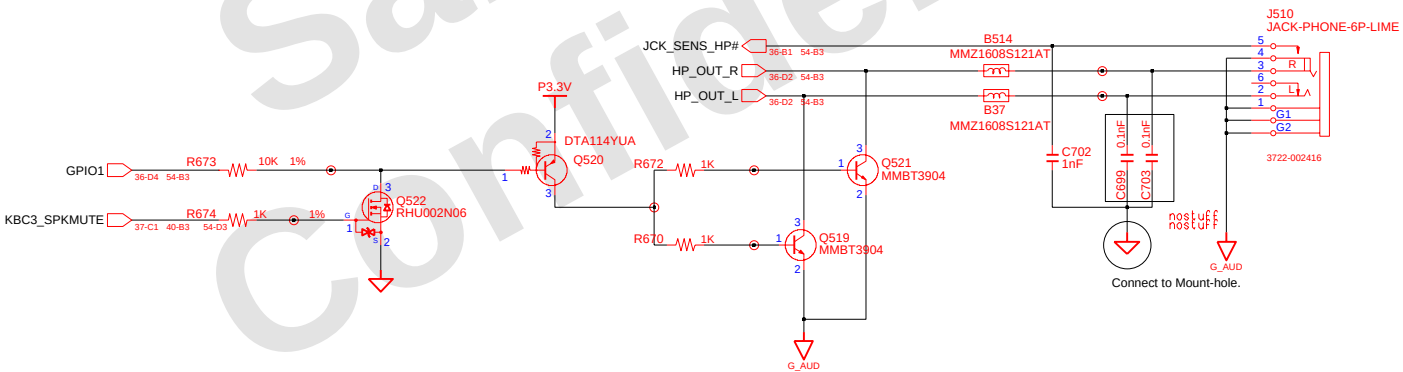


DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT / MAIN / LIMITER & AMP	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR		
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE: undefined	LAST EDIT: May 28, 2007 10:24:00 AM	PAGE 37 OF 54	

MIC JACK



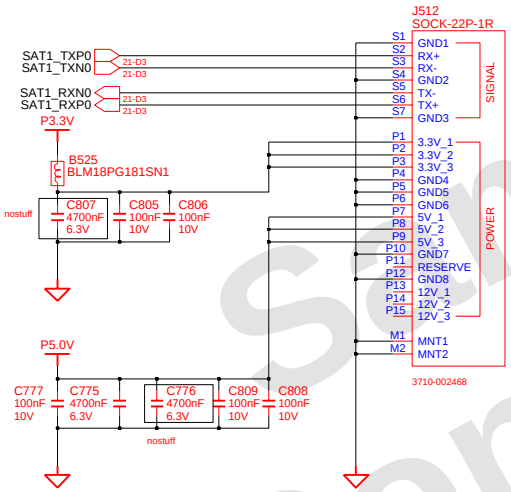
HEADPHONE



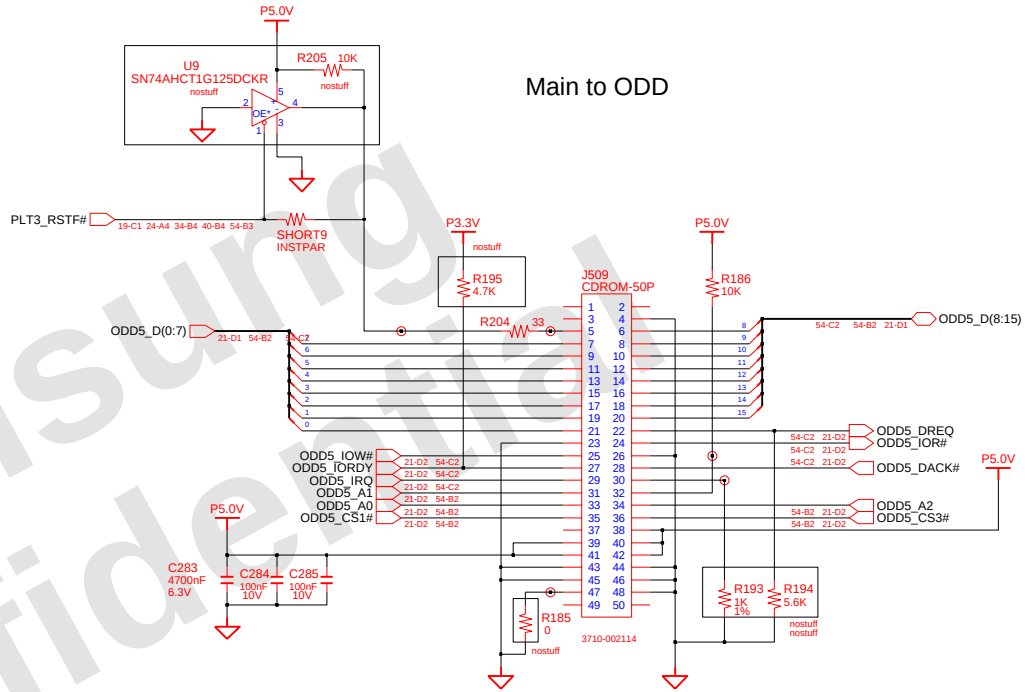
The traces led to Audio Jacks have the width over 10mil

DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT / MAIN / MIC & HEADPHONE	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR		
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE: undefined	LAST EDIT: May 28, 2007 10:24:00 AM		PAGE 38 OF 54

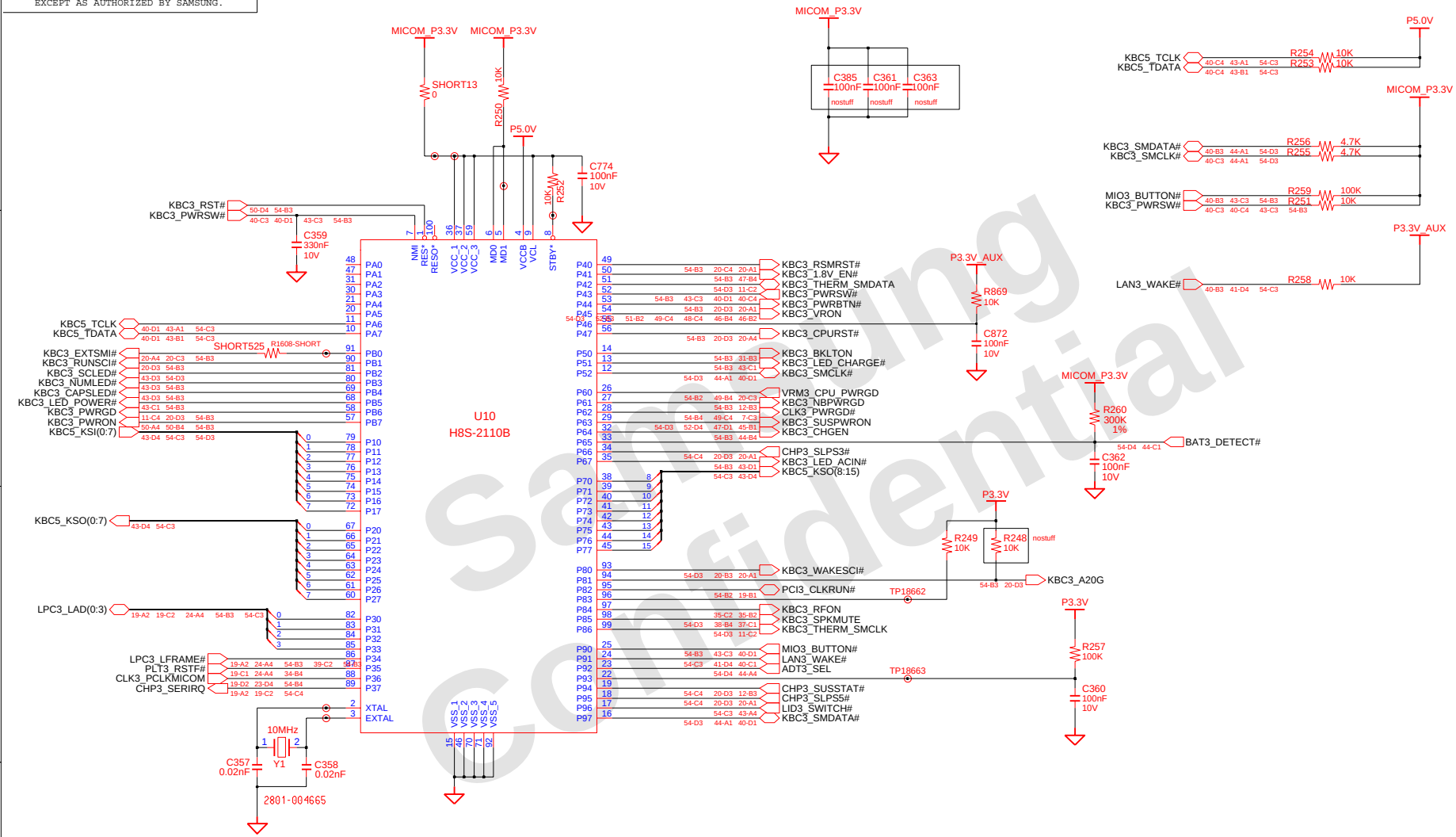
Main to HDD



Main to ODD



DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT POWER HDD & ODD	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR		
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE: undefined	LAST EDIT: May 28, 2007 10:24:00 AM		PAGE 39 OF 54



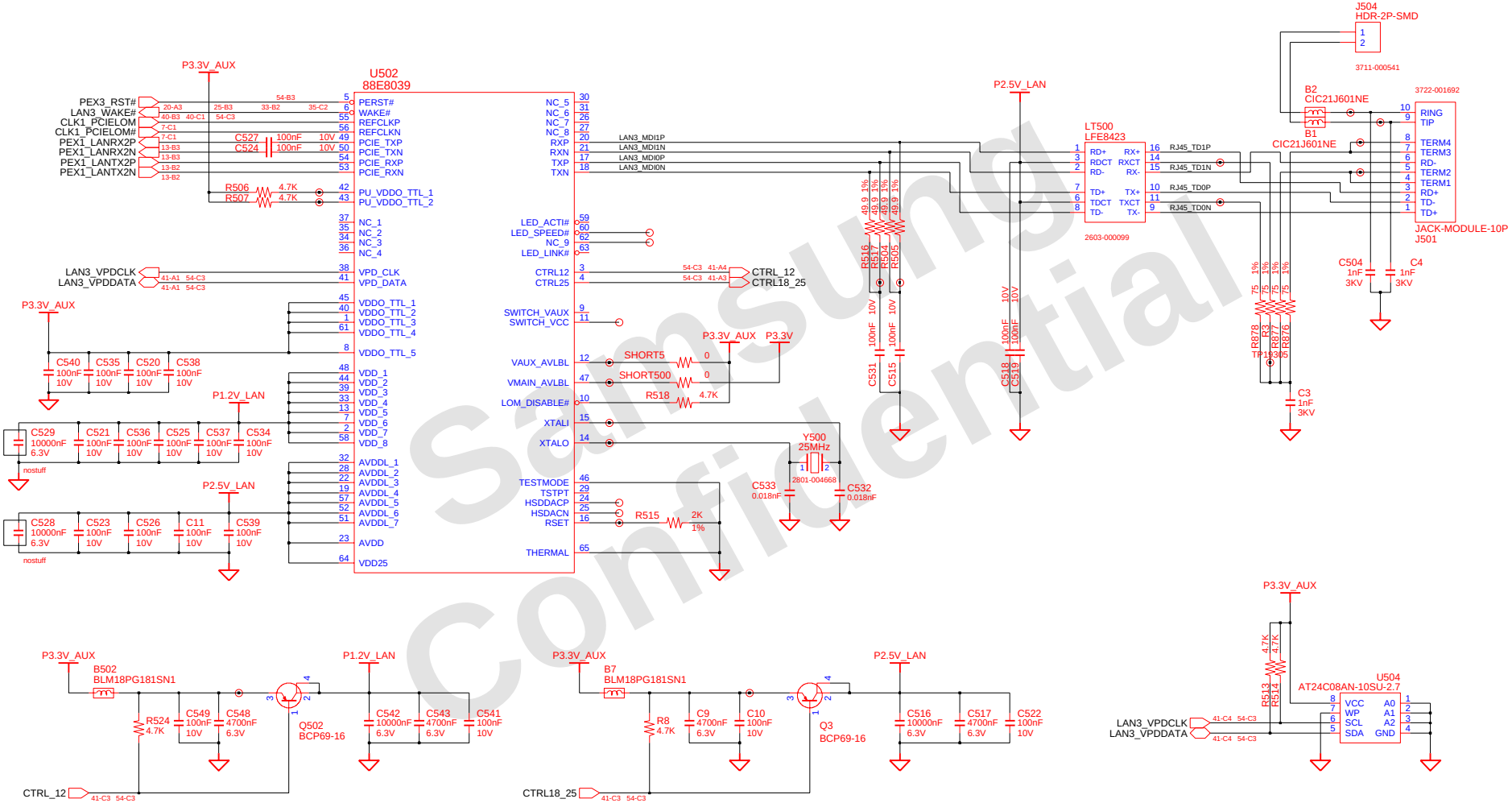
MICOM Crisis Update

Condition: P90=P91=P92=High(MICOM_P3V)
MD0=MD1=Low(0V)
Serial Port: P84 & P85

The removed signal compaired from 144pin

- KBC5_CAL_THRM*
- THRM_ALERT*
- LCD3_BKLTEN
- FAN3_FDBACK*
- THERM_STP*

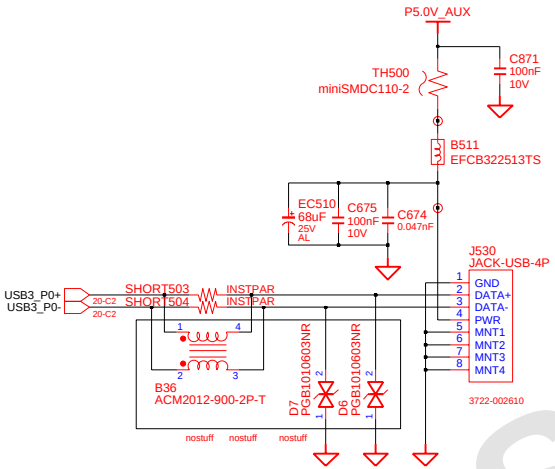
DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT POWER MICOM	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR		
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE: undefined	LAST EDIT: May 28, 2007 10:24:00 AM	PAGE 40 OF 54	



DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT / MAIN / LAN	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR		
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE: undefined	LAST EDIT: May 28, 2007 10:24:00 AM	PAGE 41 OF 54	

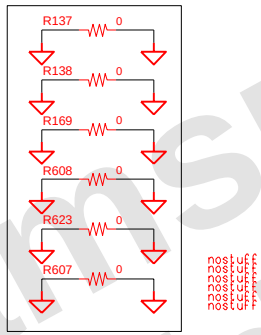
Check if need USB Power S/W(TPS2062)

Side USB Connecter



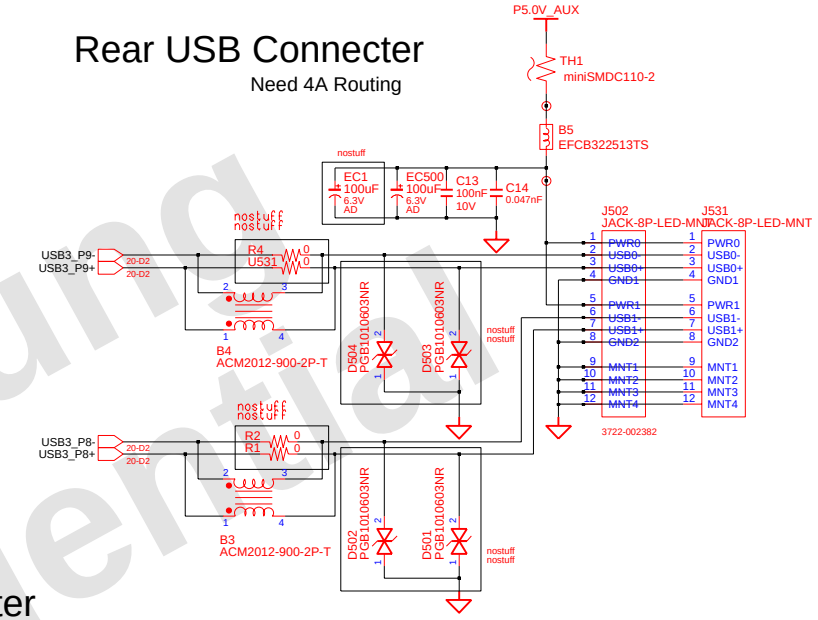
Connect left side USB GND with CPU GND

Top : 3EA Bottom : 3EA

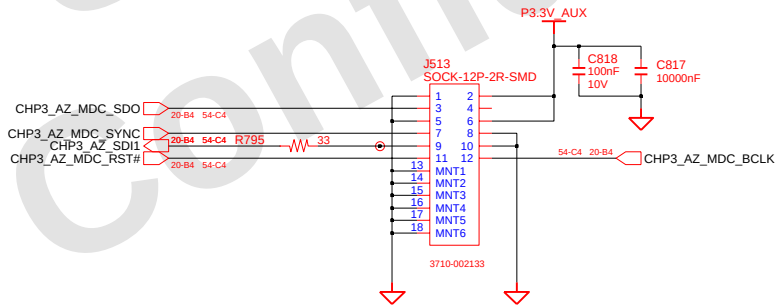


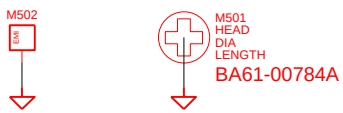
Rear USB Connecter

Need 4A Routing



MDC Connecter

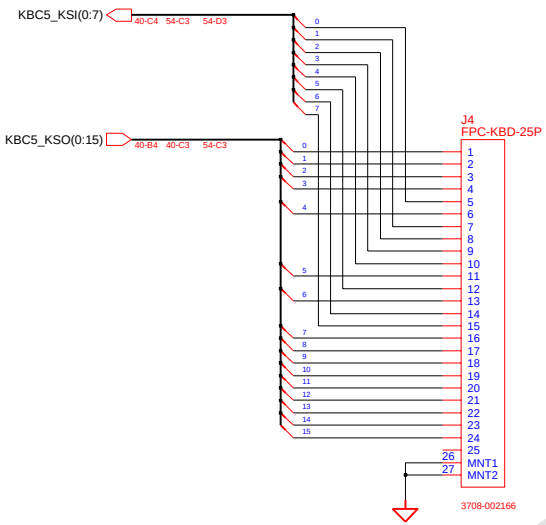


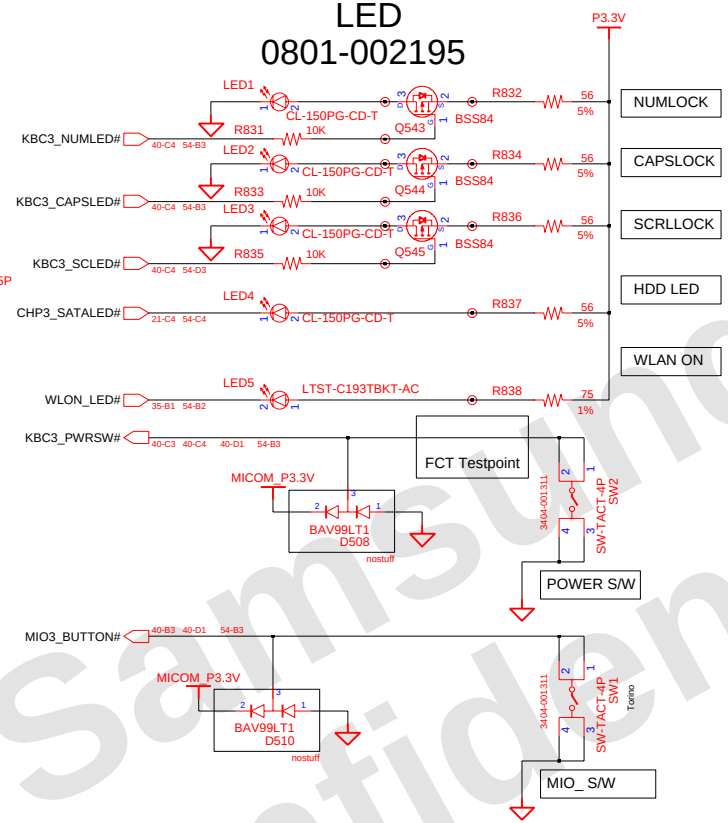


DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR	MAIN	
APPROVAL: KK BIN	REV: 1.0	USB PORT & MDC Conn.	PART NO.: BA41-00806A
MODULE CODE: undefined	LAST EDIT: May 28, 2007 10:24:00 AM	PAGE 42 OF 54	

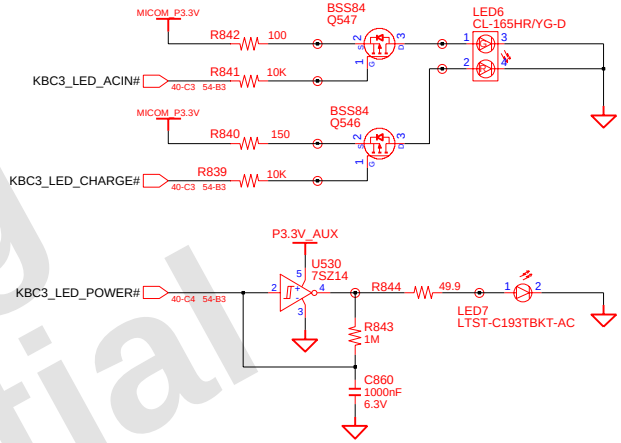
LED
0801-002195

KEYBOARD

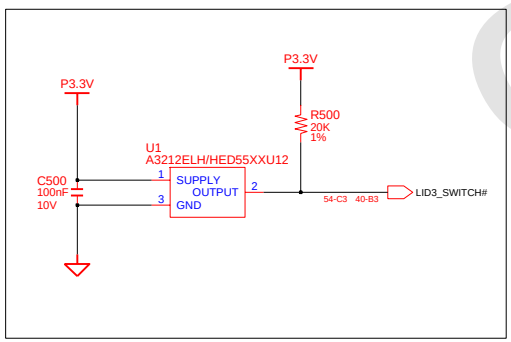




ADAPTERIN/CHARGING LED

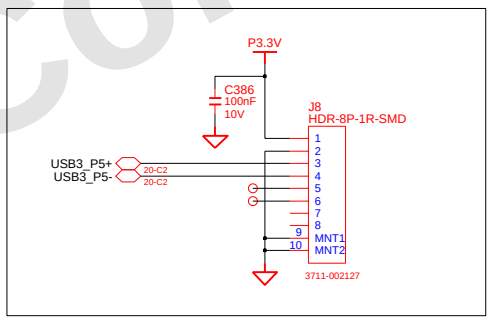


LID SWITCH

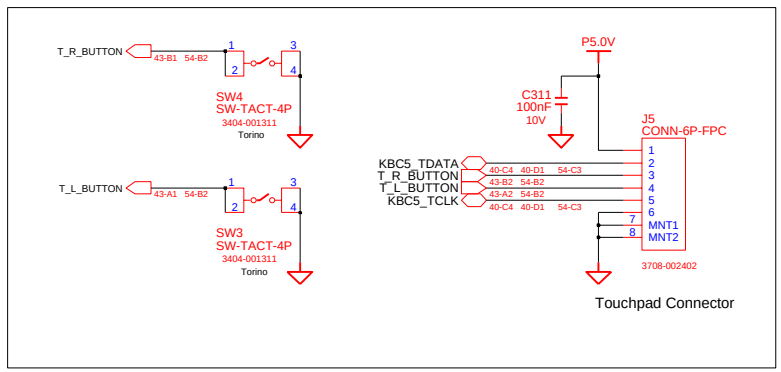


Bluetooth Interface

Factory Option

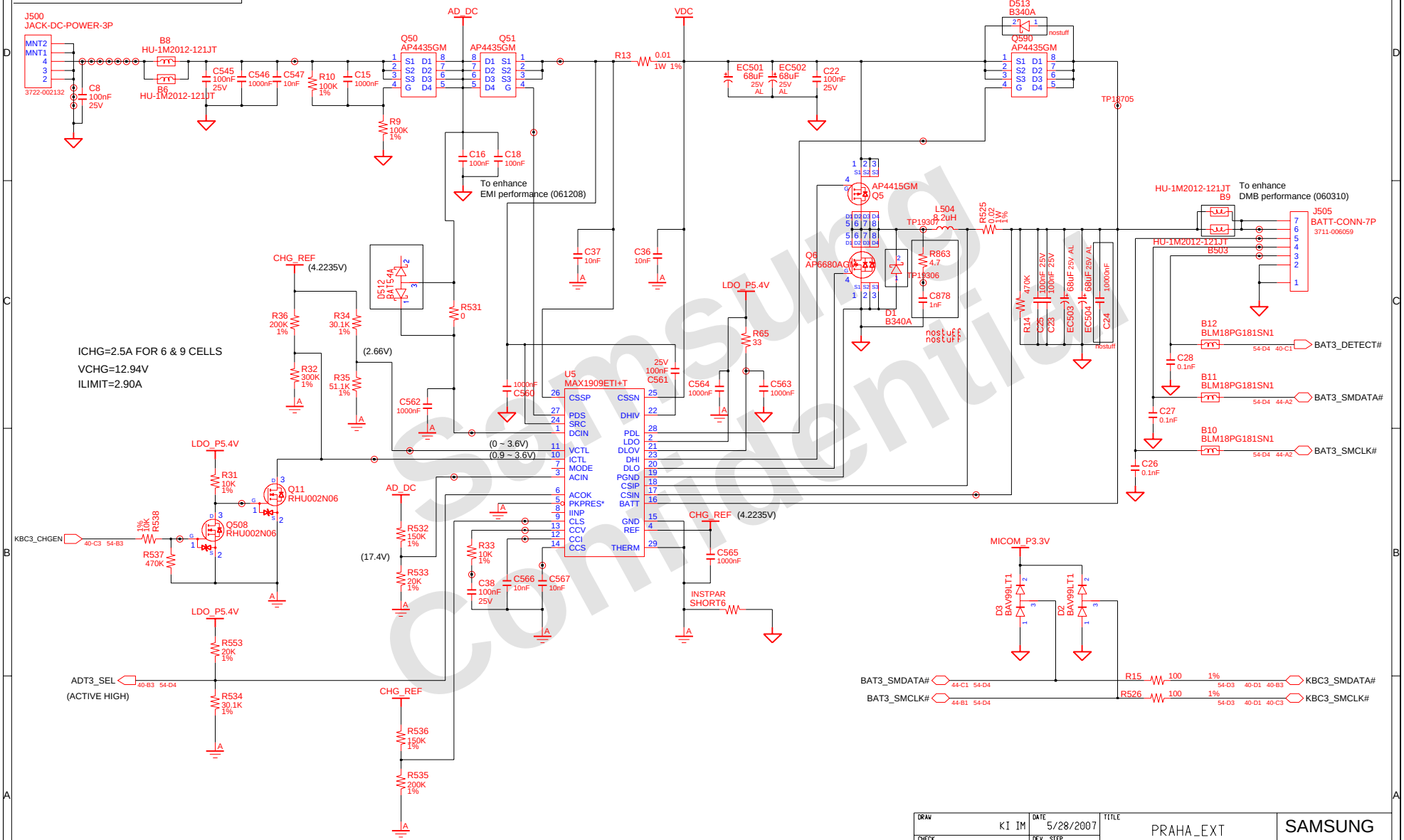


TOUCHPAD



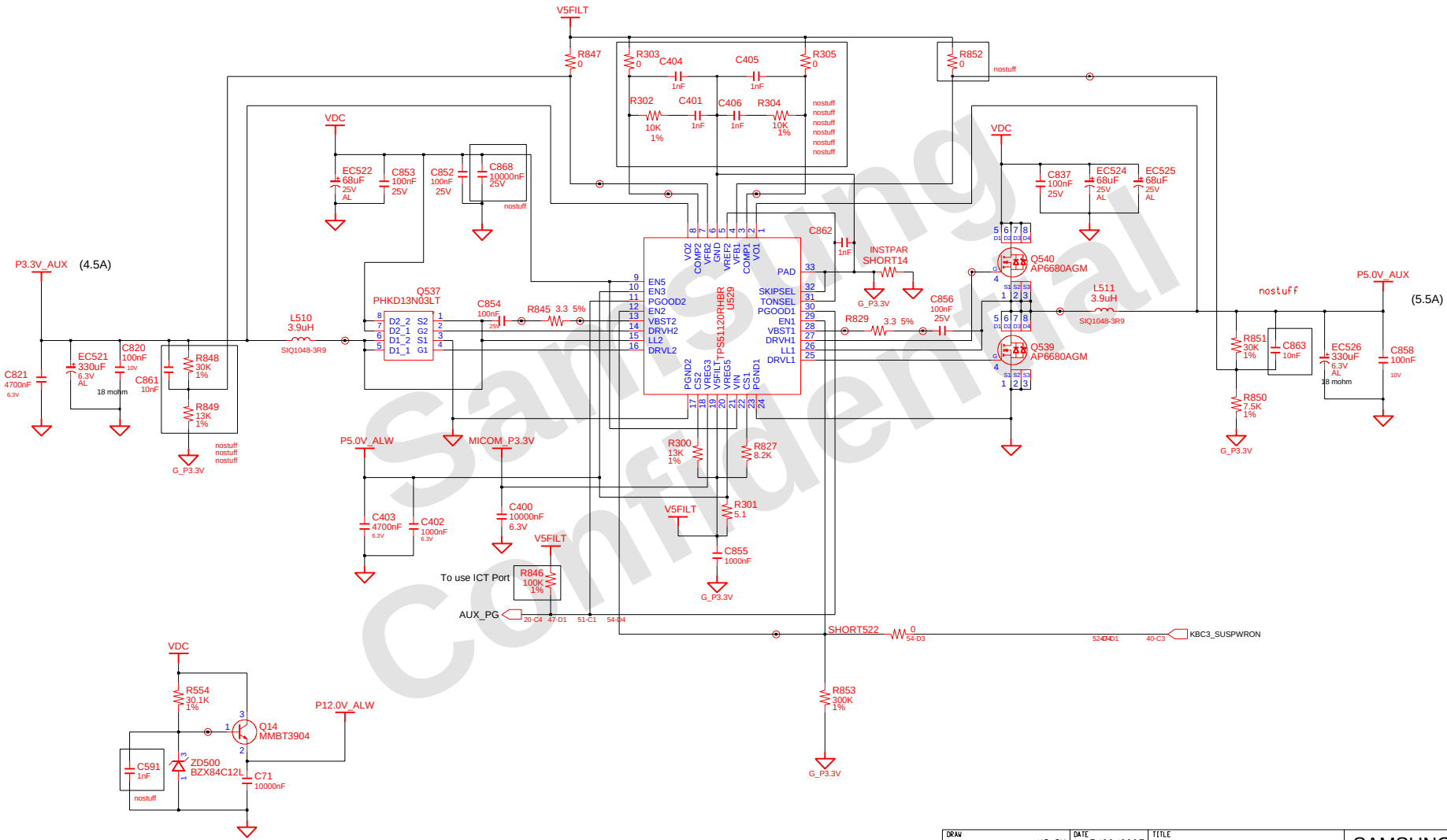
DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT LED & BLUETOOTH TOUCHPAD & KBD & LID S/W	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR		
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE: undefined	LAST EDIT: May 28, 2007 10:24:00 AM		PAGE 43 OF 54

CHARGER & POWER MANAGEMENT



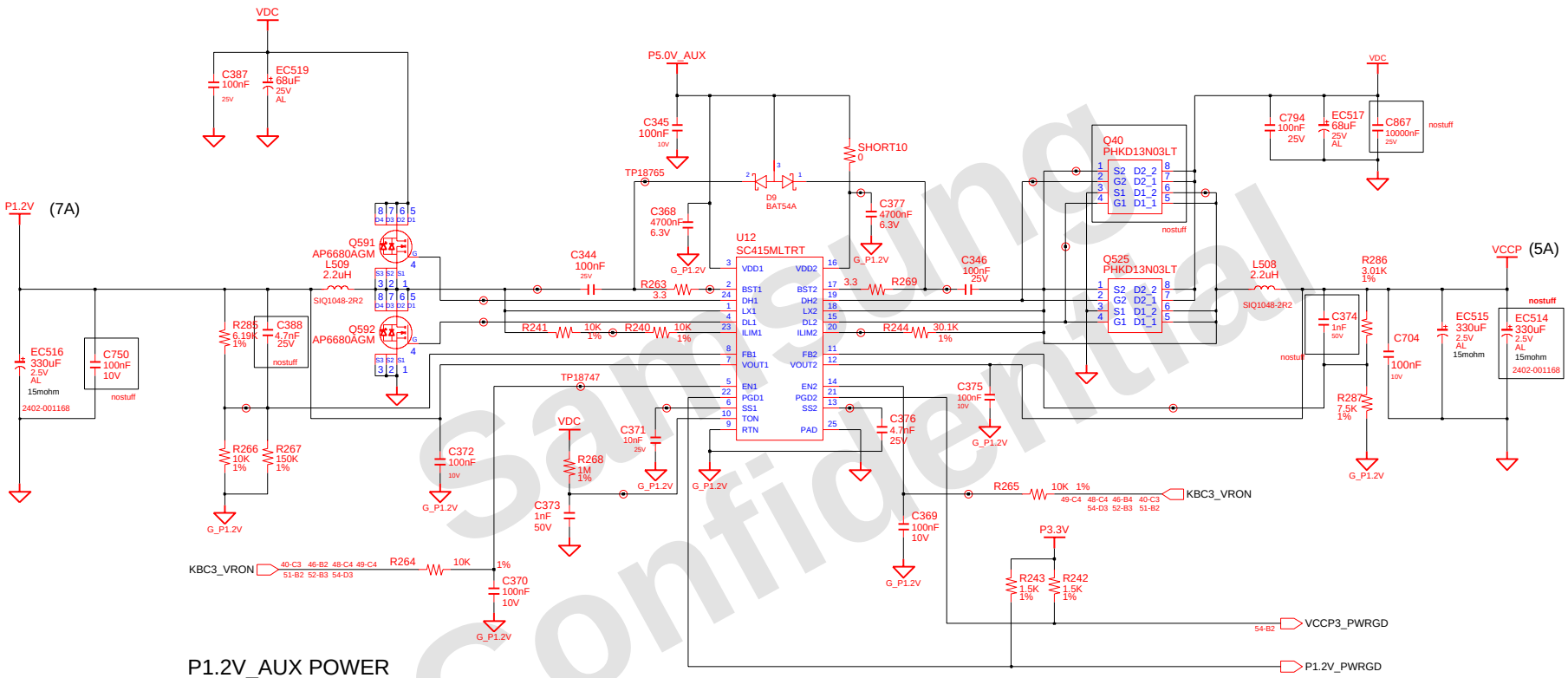
DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT MAIN CHARGER	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR		
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE: undefined	LAST EDIT: May 28, 2007 10:24:00 AM		PAGE 44 OF 54

P3.3V_AUX & P5V_AUX

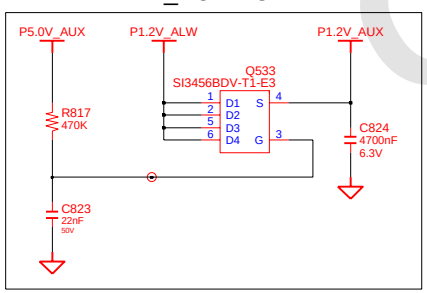


DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT POWER P3.3V_AUX & P5V_AUX	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR		
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE: undefined	LAST EDIT: May 28, 2007 10:24:00 AM		PAGE 45 OF 54

P1.2V & VCCP (1.05V)



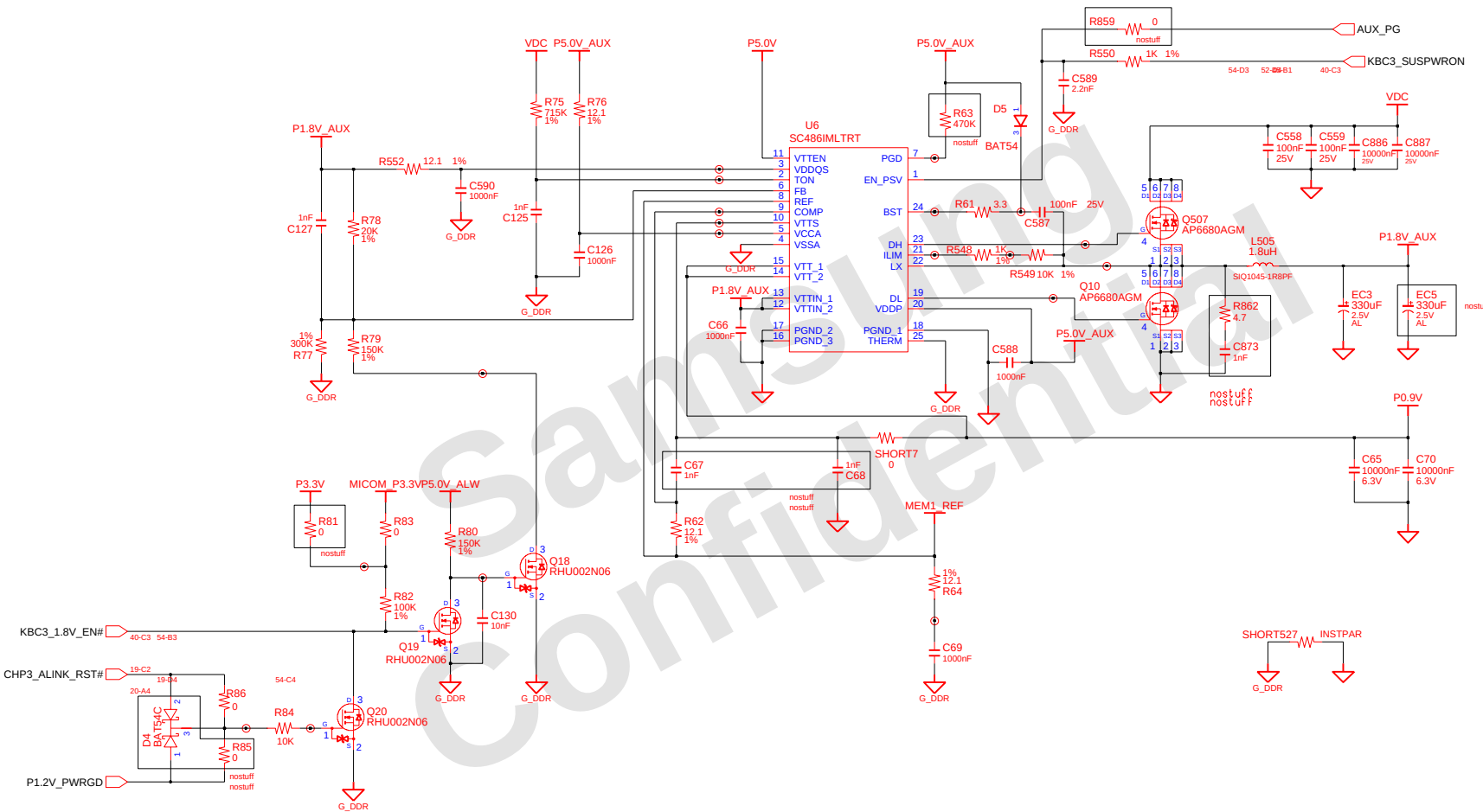
P1.2V_AUX POWER



SHORT526 R1608-SHORT

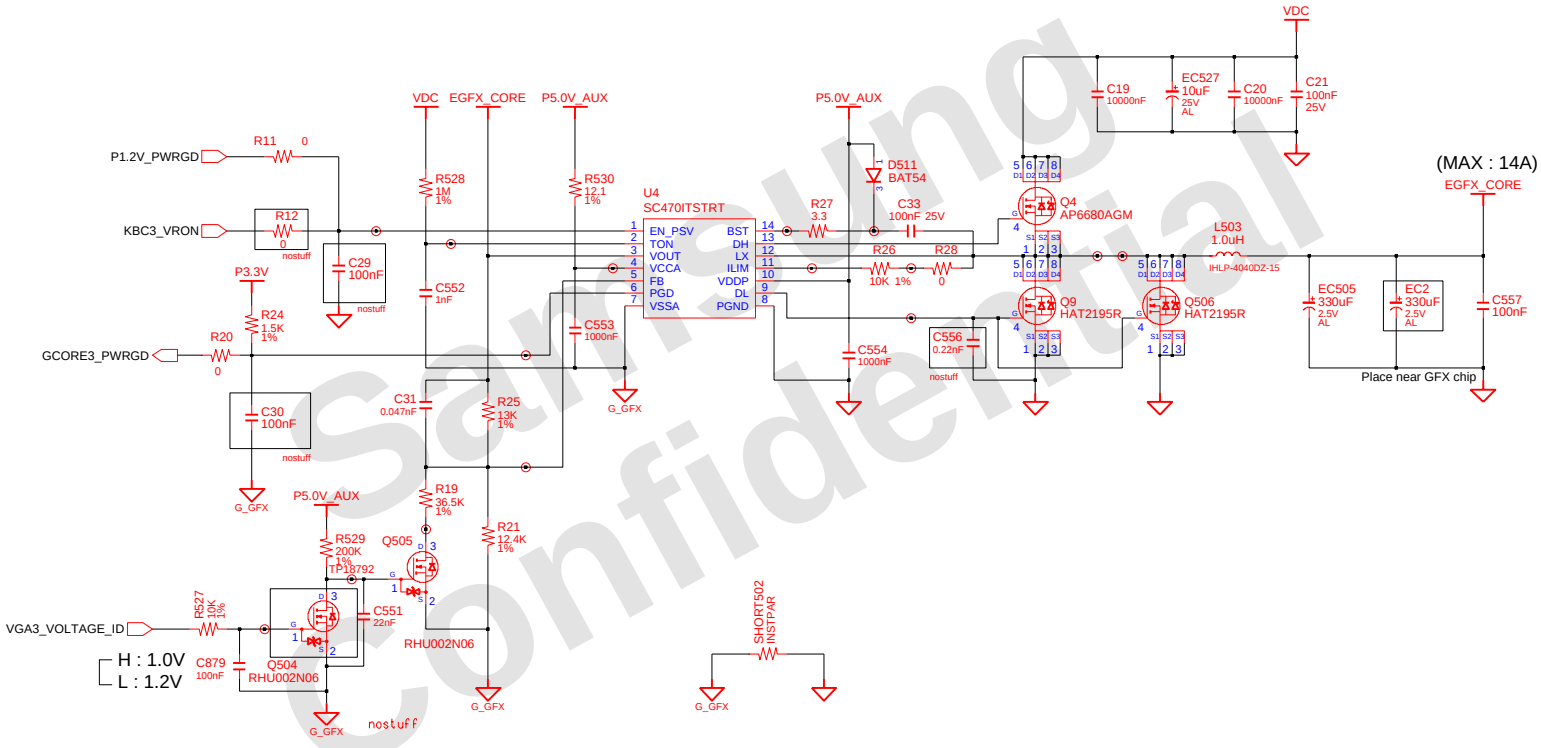
DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT POWER P1.2V & P1.2V_AUX &VCCP	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR		
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE: undefined	LAST EDIT: May 28, 2007 10:24:00 AM		PAGE 46 OF 54

DDR2 Power



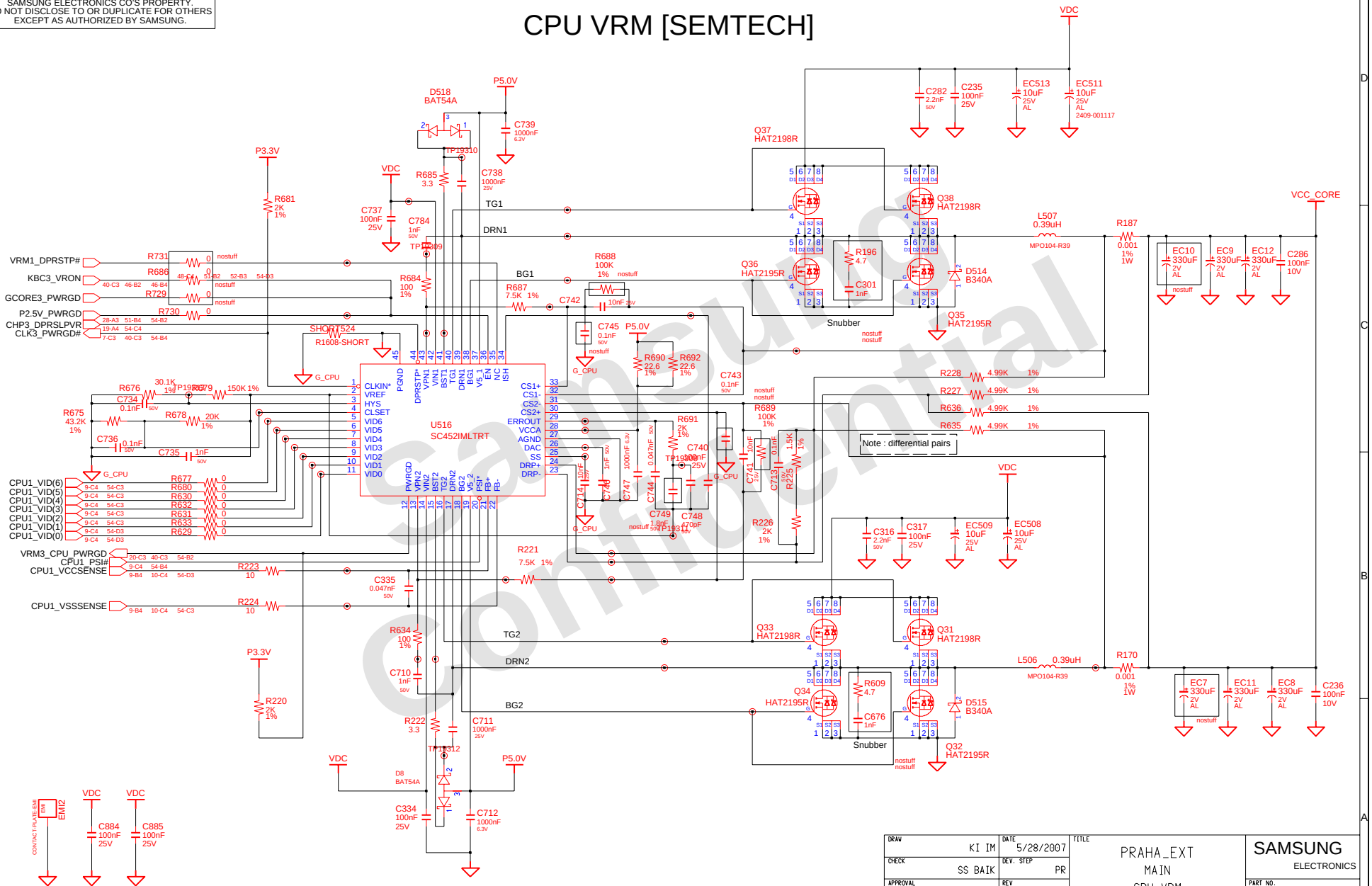
DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT MAIN DDR2 POWER	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR		
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE: undefined	LAST EDIT: May 28, 2007 10:24:00 AM	PAGE 47 OF 54	

GFX CORE [SEMTECH]



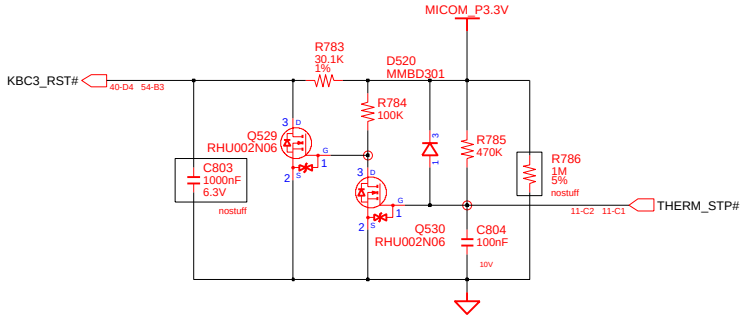
DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT UNDEFINED UNDEFINED	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR		
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE:	LAST EDIT: May 28, 2007 10:24:00 AM		PAGE 48 OF 54

CPU VRM [SEMTECH]

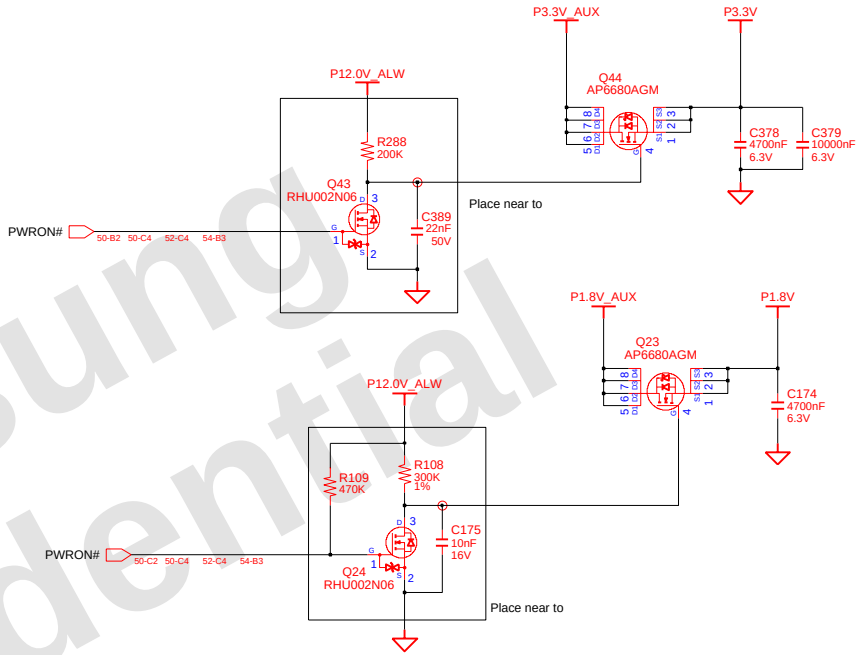


DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT / MAIN / CPU VRM	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR		
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE: undefined	LAST EDIT: May 28, 2007 10:24:00 AM		PAGE 49 OF 54

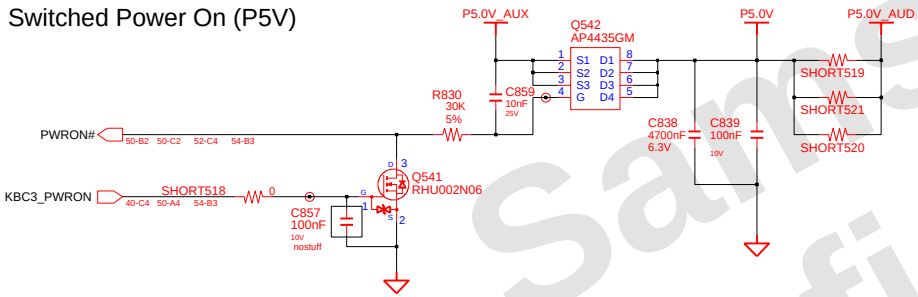
MICOM RESET



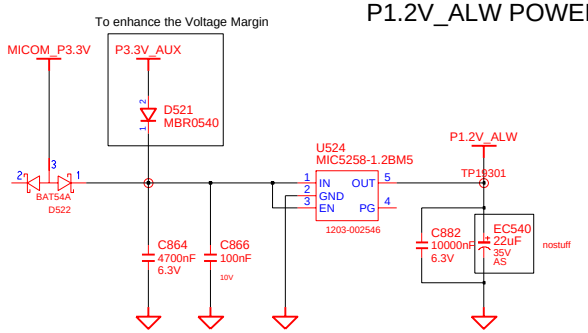
Switched Power On (P3.3V & 1.8V)



Switched Power On (P5V)

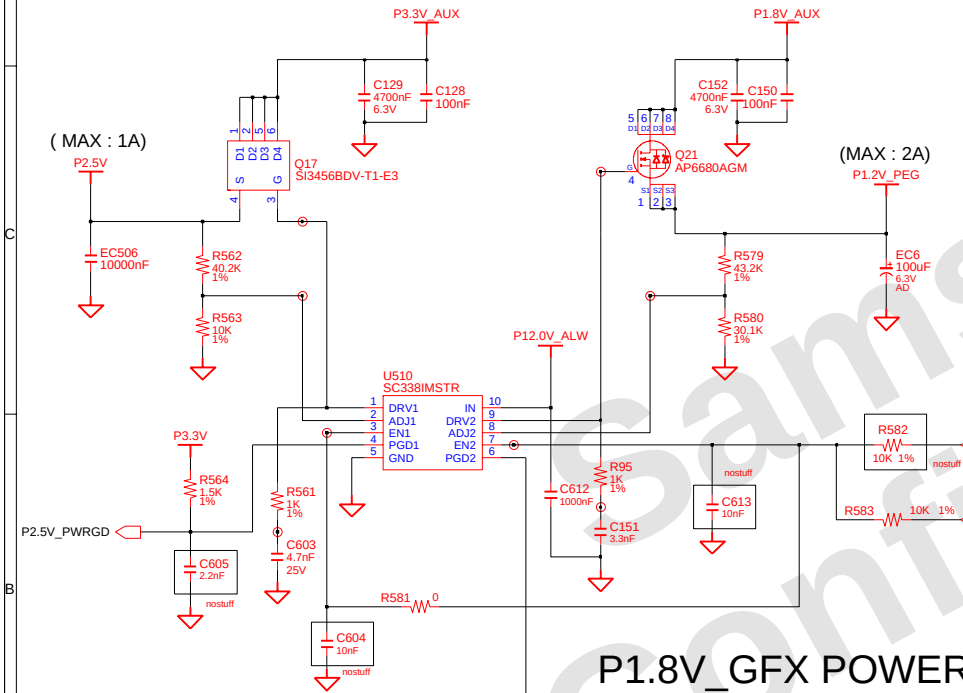


P1.2V_ALW POWER

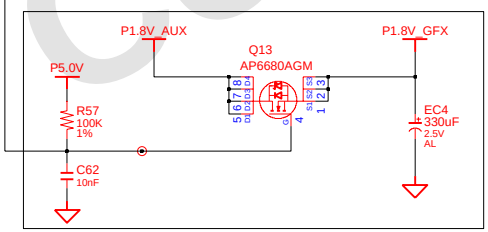


DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR	MAIN	
APPROVAL: KK BIN	REV: 1.0	MICOM & SWITCHED POWER	PART NO.: BA41-00806A
MODULE CODE: undefined	LAST EDIT: May 28, 2007 10:24:00 AM	PAGE 50 OF 54	

P1.2V_NB / P2.5V POWER

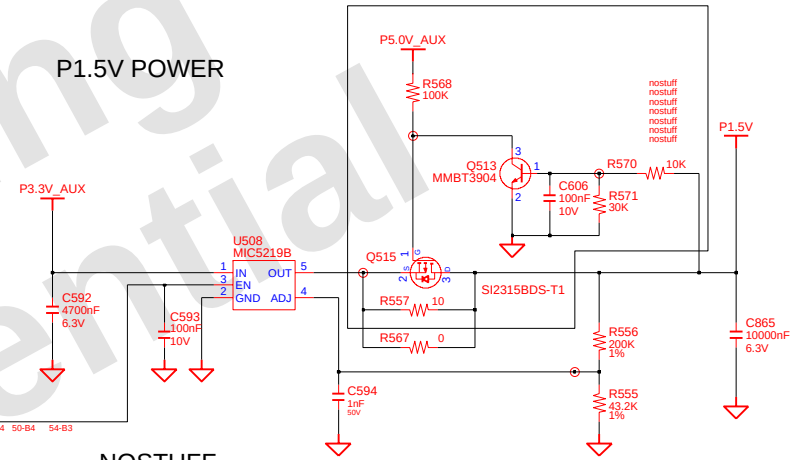


P1.8V_GFX POWER

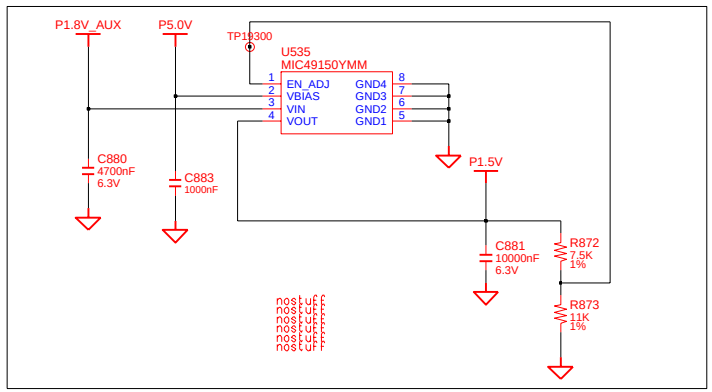


Place near GFX chip.

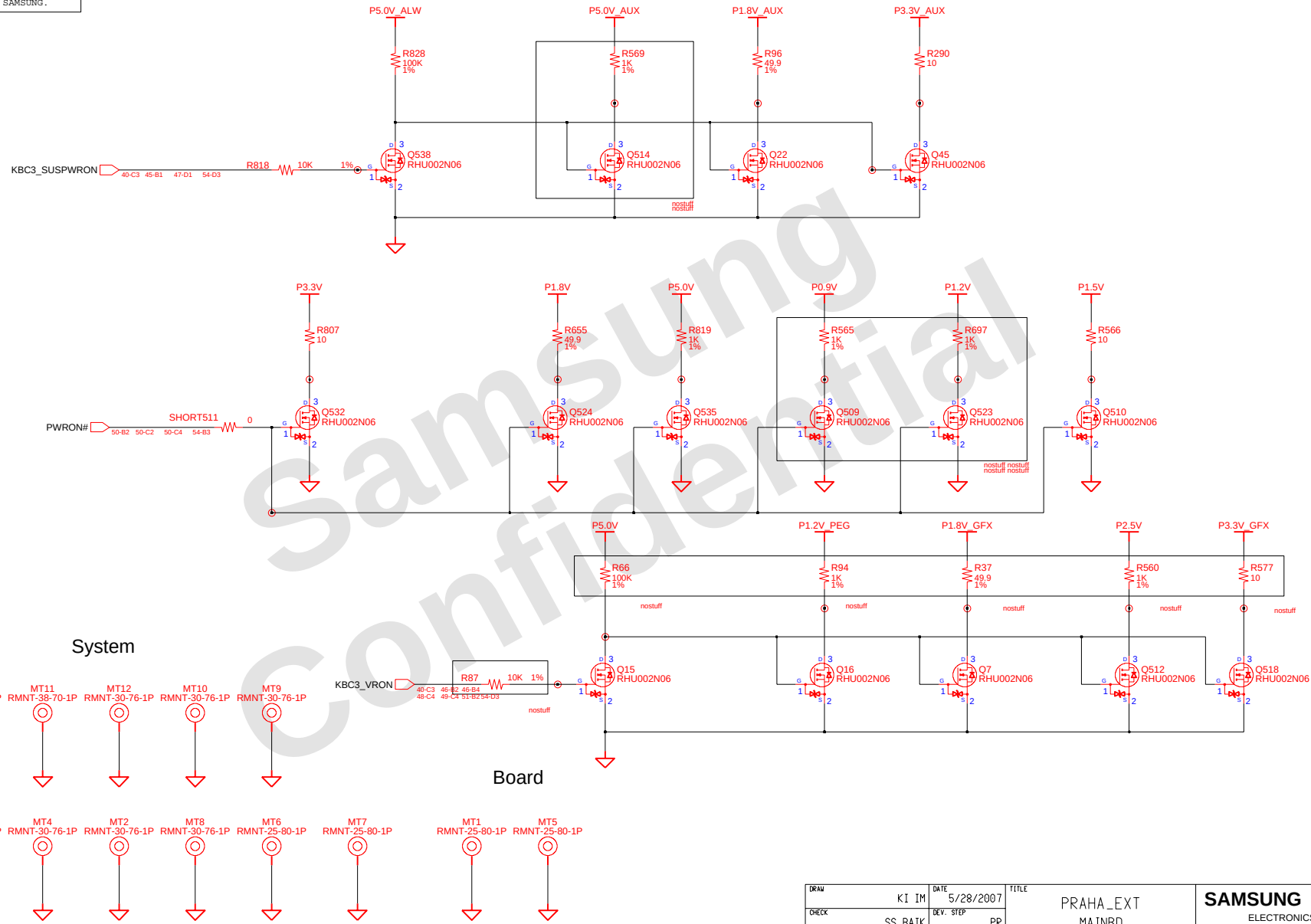
P1.5V POWER



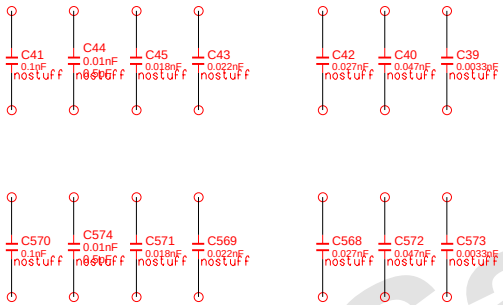
NOSTUFF



DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR		
APPROVAL: KK BIN	REV: 1.0	ICT PORT	PART NO.: BA41-00806A
MODULE CODE: undefined	LAST EDIT: May 28, 2007 10:24:00 AM	PAGE 51 OF 54	

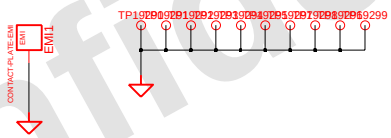


DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT MAINBD POWER DRAW & MNT HOLE	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR		
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE: undefined	LAST EDIT: May 28, 2007 10:24:00 AM	PAGE 52 OF 54	

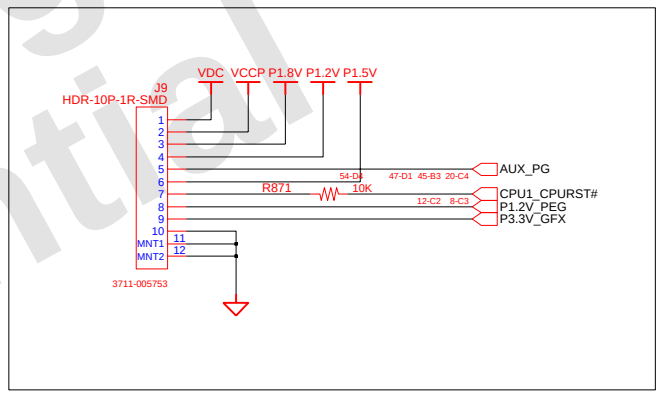


PCB REVISION CONTROL (ICT)

NO	CONNECTION	DATE(YY/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			



ICT PORT



DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR	TP	
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE: undefined	LAST EDIT: May 28, 2007 10:24:00 AM	PAGE 53 OF 54	

TP18982 AC_SDOUT
TP18983 ADT3_SEL
TP18984 AUD3_EAPD#
TP18985 AUD3_PCBEEP#
TP18986 AUD5_LINE_OUT_L
TP18987 AUD5_LINE_OUT_R
TP18988 AUD5_MONO_OUT

TP18993 AUX_PG
TP18994 BAT3_DETECT#
TP18995 BAT3_SMCLK#
TP18996 BAT3_SMDATA#
TP18997 CHP3_ALINK_RST#
TP18998 CHP3_AZ_AUD_BCLK
TP18999 CHP3_AZ_AUD_RST#
TP19000 CHP3_AZ_AUD_SDO
TP19001 CHP3_AZ_AUD_SYNC
TP19002 CHP3_AZ_MDC_BCLK
TP19003 CHP3_AZ_MDC_RST#
TP19004 CHP3_AZ_MDC_SDO
TP19005 CHP3_AZ_MDC_SYNC
TP19006 CHP3_AZ_SDIO
TP19007 CHP3_AZ_SDI1
TP19008 CHP3_BIOSWP#
TP19009 CHP3_CPUSTP#
TP19010 CHP3_DPRSLPVR
TP19011 CHP3_NBRST#
TP19012 CHP3_SATALED#
TP19013 CHP3_SBPME#
TP18976 CHP3_SBTHRMTRIP#
TP18977 CHP3_SERIRQ
TP18978 CHP3_SLPS3#
TP18979 CHP3_SLPS5#
TP18980 CHP3_SPKR
TP18981 CHP3_SUSSTAT#
TP18968 CLK3_DBGLPC
TP18969 CLK3_GFX_27M
TP18970 CLK3_GFX_27M_SS
TP18971 CLK3_ICH14
TP18972 CLK3_NB14M
TP18973 CLK3_PCLKMICOM
TP18974 CLK3_PWRGD#

TP18962 CPU1_DBSY#
TP18963 CPU1_DEFER#
TP18964 CPU1_DPRSTP#
TP18965 CPU1_DPSLP#
TP18966 CPU1_DPWR#
TP18967 CPU1_DRDY#
TP18939 CPU1_FERR#
TP18940 CPU1_HIT#
TP18941 CPU1_HITM#
TP18942 CPU1_IGNNE#
TP18943 CPU1_INIT#
TP18944 CPU1_INTR
TP18945 CPU1_LOCK#
TP18946 CPU1_NMI
TP18947 CPU1_PSI#
TP18948 CPU1_PWRGDCPU

TP18949 CPU1_RS0#
TP18950 CPU1_RS1#
TP18951 CPU1_RS2#
TP18952 CPU1_SLP#
TP18953 CPU1_SMI#
TP18954 CPU1_STPCLK#
TP18955 CPU1_TCK
TP18956 CPU1_TDI
TP18957 CPU1_THRMTRIP#
TP18958 CPU1_TMS
TP18959 CPU1_TRDY#
TP18960 CPU1_TRST#
TP18961 CPU1_VCCSENSE
TP18914 CPU1_VID(0)
TP18915 CPU1_VID(1)
TP18916 CPU1_VID(2)
TP18917 CPU1_VID(3)
TP18918 CPU1_VID(4)
TP18919 CPU1_VID(5)
TP18920 CPU1_VID(6)
TP18921 CPU1_VSSSENSE
TP18922 CPU2_THERMDA
TP18923 CPU2_THERMDC
TP18924 CPU3_THRMTRIP#
TP18925 CRT5_HSYNC
TP18926 CRT5_VSYNC
TP18927 CTRL18_25
TP18928 CTRL_12
TP18929 EXP3_CLKREQ#
TP18930 EXP3_CPPE#
TP18931 EXP3_CPUSB#
TP18932 EXP3_PERST#
TP18933 FAN3_FDBACK#
TP18934 FAN5_VDD
TP18935 GCORE3_PWRGD

TP18938 GFX3_THRMTRIP#

TP18899 GPIO(11)

TP18901 GPIO(13)

TP18903 GPIO1
TP18904 HP_OUT_L
TP18905 HP_OUT_R
TP18906 ITP3_DBRESET#
TP18907 ITP3_SYSRST#
TP18908 JCK_SENS_A
TP18909 JCK_SENS_HP#
TP18910 JCK_SENS_MIC#
TP18911 KBC3_1.8V_EN#
TP18912 KBC3_A20G
TP18913 KBC3_BKLTON
TP18865 KBC3_CAPSLED#
TP18866 KBC3_CHGEN
TP18867 KBC3_CPURST#
TP18868 KBC3_EXTSMI#
TP18869 KBC3_LED_ACIN#
TP18870 KBC3_LED_CHARGE#
TP18871 KBC3_LED_POWER#
TP18872 KBC3_NBPWRGD
TP18873 KBC3_NUMLED#
TP18874 KBC3_PWRBTN#
TP18875 KBC3_PWRGD
TP18876 KBC3_PWRON
TP18877 KBC3_PWRSW#
TP18878 KBC3_RSMRST#
TP18879 KBC3_RST#
TP18880 KBC3_RUNSCI#

TP18881 KBC3_SCLED#
TP18882 KBC3_SMCLK#
TP18883 KBC3_SMDATA#
TP18884 KBC3_SPKMUTE
TP18885 KBC3_SUSPWRON
TP18886 KBC3_THERM_SMCLK
TP18887 KBC3_THERM_SMDATA
TP18888 KBC3_VRON
TP18889 KBC3_WAKESCI#
TP18890 KBC5_KSI(0)
TP18891 KBC5_KSI(1)
TP18892 KBC5_KSI(2)
TP18893 KBC5_KSI(3)
TP18894 KBC5_KSI(4)
TP18895 KBC5_KSI(5)
TP18896 KBC5_KSI(6)
TP18837 KBC5_KSI(7)
TP18838 KBC5_KSO(0)
TP18839 KBC5_KSO(1)
TP18840 KBC5_KSO(10)
TP18841 KBC5_KSO(11)
TP18842 KBC5_KSO(12)
TP18843 KBC5_KSO(13)
TP18844 KBC5_KSO(14)
TP18845 KBC5_KSO(15)
TP18846 KBC5_KSO(2)
TP18847 KBC5_KSO(3)
TP18848 KBC5_KSO(4)
TP18849 KBC5_KSO(5)
TP18850 KBC5_KSO(6)
TP18851 KBC5_KSO(7)
TP18852 KBC5_KSO(8)
TP18853 KBC5_KSO(9)
TP18854 KBC5_TCLK
TP18855 KBC5_TDATA
TP18856 LAN3_VPDCLK
TP18857 LAN3_VPDDATA
TP18858 LAN3_WAKE#
TP18859 LCD3_BKLTON
TP18860 LCD3_EDID_CLK
TP18861 LCD3_EDID_DATA
TP18862 LID3_SWITCH#
TP18863 LPC3_LAD(0)
TP18864 LPC3_LAD(1)
TP18826 LPC3_LAD(2)
TP18827 LPC3_LAD(3)
TP18828 LPC3_LFRAME#
TP18829 MCD3_SDCD#
TP18830 MCD3_SDCLK
TP18831 MCD3_SDCMD0
TP18832 MCD3_SDDATA0
TP18833 MCD3_SDDATA1
TP18834 MCD3_SDDATA2
TP18835 MCD3_SDDATA3
TP18836 MCD3_SDWP
TP19014 MIC1
TP19015 MIC2
TP19016 MINIPCIE3_CLKREQ#
TP19017 MIO3_BUTTON#
TP19018 PEX3_RST#
TP19019 PEX3_RST#_CTRL
TP19020 PEX3_WAKE#
TP19021 PLT3_RSTF#
TP19022 PWRON#
TP19023 RTC_CLK

TP19025 SC486_EN_PSV
TP19026 SC486_FB

TP19028 SMB3_CLK
TP19029 SMB3_DATA
TP19030 SPI3_CLK
TP19031 SPI3_CS#
TP19032 SPI3_MISO
TP19033 SPI3_MOSI
TP19034 STRAP_BIOSROM0
TP19035 STRAP_BIOSROM1
TP19036 STRAP_USB48
TP19037 THERM3_ALERT#
TP19039 PEG3_CRT_GREEN
TP19040 PEG3_CRT_HSYNC
TP19041 PEG3_CRT_RED
TP19042 PEG3_CRT_VSYNC
TP19043 PEG3_LCD_BKLTEN
TP19044 PEG3_LCD_BRIT
TP19045 PEG3_LCD_VDDON
TP19046 PEG3_CRT_BLUE
TP19047 PEG3_CRT_DDCCLK
TP19038 PEG3_CRT_DDCDATA
TP19048 ODD5_D(11)
TP19049 ODD5_D(12)
TP19050 ODD5_D(13)
TP19051 ODD5_D(14)
TP19052 ODD5_D(15)
TP19053 ODD5_D(2)
TP19054 ODD5_D(3)
TP19055 ODD5_D(4)
TP19056 ODD5_D(5)
TP19057 ODD5_D(6)
TP19058 ODD5_D(7)
TP19059 ODD5_D(8)
TP19060 ODD5_D(9)
TP19061 ODD5_DACK#
TP19062 ODD5_DREQ
TP19063 ODD5_IOR#
TP19064 ODD5_IORDY
TP19065 ODD5_IOW#
TP19066 ODD5_IRQ
TP19067 P1.2V_PWRGD
TP19068 P2.5V_PWRGD
TP19069 PCI3_CLKRUN#
TP19070 ODD5_A0
TP19071 ODD5_A1
TP19072 ODD5_A2
TP19073 ODD5_CS1#
TP19074 ODD5_CS3#
TP19075 ODD5_D(0)
TP19076 ODD5_D(1)
TP19077 ODD5_D(10)
TP19078 T_L_BUTTON
TP19079 T_R_BUTTON
TP19083 AGND_CHG

TP19092 VCCP3_PWRGD
TP19093 VGA3_VOLTAGE_ID
TP19094 VGA5_DDCC
TP19095 VGA5_DDCD
TP19096 VRM1_DPRSTP#
TP19097 VRM3_CPU_PWRGD
TP19091 WLON_LED#
TP19090 AD_DC

TP19099 V5F ILT

TP19103 VCCP
TP19107 VCC_CORE
TP19111 VCC_CRT
TP19115 VDC
TP19119 VDD_AMP
TP19123 VDD_AUD
TP19127 P3.3V_EXP
TP19128 P3.3V_GFX
TP19135 P3.3V_MCD
TP19136 P5.0V
TP19140 P5.0V_ALW
TP19144 P5.0V_AUD
TP19148 P5.0V_AUX
TP19152 PCIE_VDDR

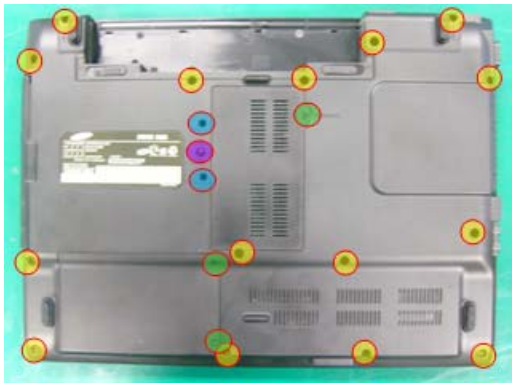
TP19159 P1.8V_AUX
TP19160 P1.8V_GFX
TP19167 P12.0V_ALW
TP19168 P2.5V
TP19175 P2.5V_LAN
TP19176 P3.3V
TP19183 P3.3V_AUX
TP19187 P3.3V_AUX_EXP
TP19191 P1.2V

TP19199 P1.2V_AUX
TP19200 P1.2V_LAN
TP19207 P1.2V_PEG
TP19208 P1.5V
TP19215 P1.5V_EXP
TP19216 P1.8V
TP19227 G_P3.3V
TP19228 INV_VDC
TP19235 LCD_VDD3V
TP19239 LDO_P5.4V
TP19240 MEM_REF
TP19247 MICOM_P3.3V
TP19248 P0.9V
TP19275 G_CPU
TP19276 G_DDR
TP19260 CHG_REF
TP19267 GFX_CORE
TP19268 G_AUD

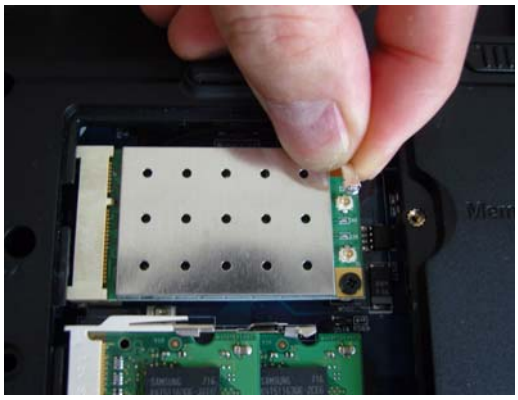
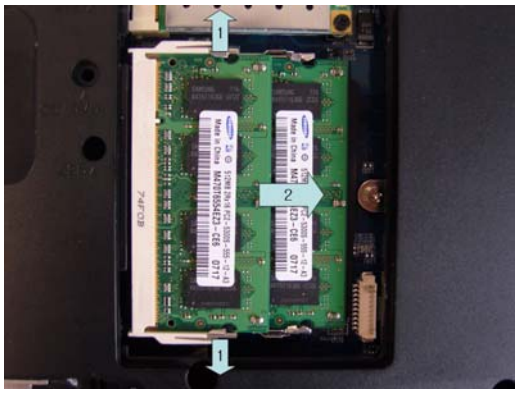
TP19283 G_GFX
TP19284 G_P1.2V

DRAW: KI IM	DATE: 5/28/2007	TITLE: PRAHA_EXT TP	SAMSUNG ELECTRONICS
CHECK: SS BAIK	DEV. STEP: PR		
APPROVAL: KK BIN	REV: 1.0		PART NO.: BA41-00806A
MODULE CODE:	LAST EDIT: May 28, 2007 10:24:00 AM	PAGE 54 OF 54	

3. Disassembling and Reassembling

Area	Picture	Description
Main System		1. Separate AC adaptor and battery certainly before disassembling system. 2. Push out battery on like figure 2 times after is compregnated KNOB to a finish to arrow direction like figure 1 times registered to picture.
		3. If push BATTERY upward, BATTERY is separated.
		4. Remove Bottom Screws. - M2.6 L8 : 16 EA - M2 L7 : 2 EA - M2 L4 : 3 EA
		5. Remove HDD DOOR. 6. Remove MEMORY DOOR. 7. Remove ODD.

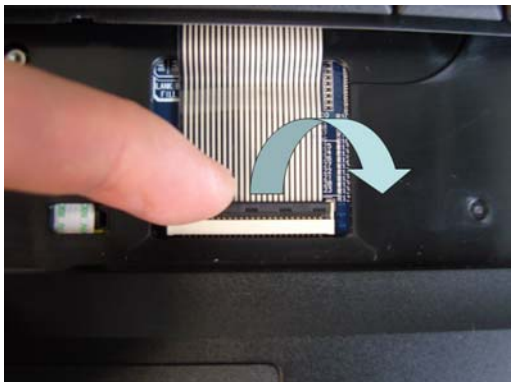
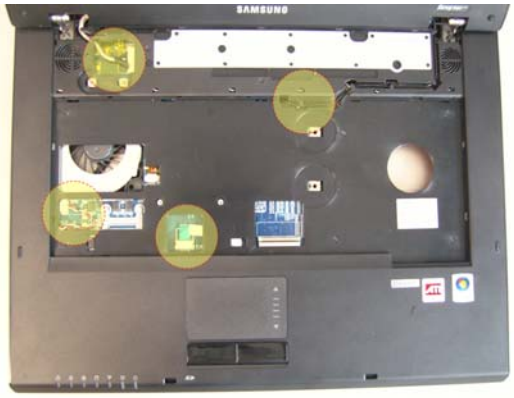
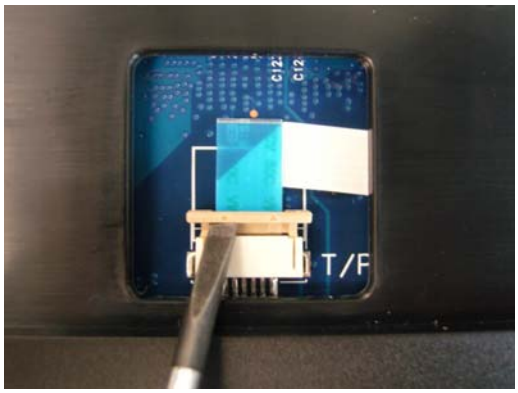
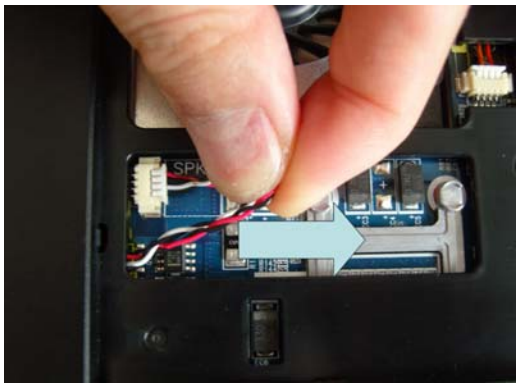
3. Disassembling and Reassembling

Area	Picture	Description
Main System		8. Separate from Connector catches handle with picture and pushes HDD to arrow direction. *Caution When leave out HDD to back, do not inflict unreasonable force. Remove from HDD certainly before upset system.
		9. Separate first Wireless LAN Antenna, and after that Wireless LAN CardScrew solves and lifts and removes . - M2 L4 : 1 EA *Caution PRAHA model have only one Wireless LAN Antenna
		10. After Memory lifts Memory pulling Socket with picture to right and left, Memory extracts forward and separate.
		11. Remove ODD side Screw. - M2 L3 : 1 EA

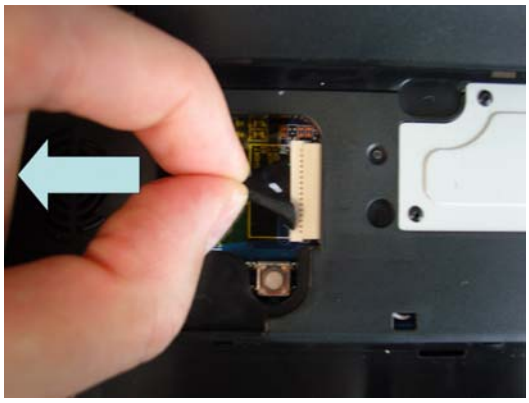
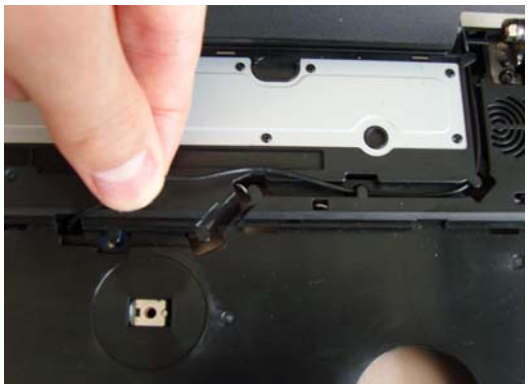
3. Disassembling and Reassembling

Area	Picture	Description
Main System		12. After remove HDD, Wireless LAN, Memory, ODD Module image
		13. When overturn System, use Hook of where is registered to picture for Top Cover and Keyboard separation.
		14. Lift by "-" screw driver using Hole between "Pause Break" height and "Insert" height to remove Top Cover.
		15. At Keyboard Hook separation tweezers or tree knife, do to use '-' screw driver. *Caution 1. Take care so that safety accident and Top surface at tool use may not rake. 2. Keyboard lifts furtively and uncovers FPC because was linked by System and FPC.

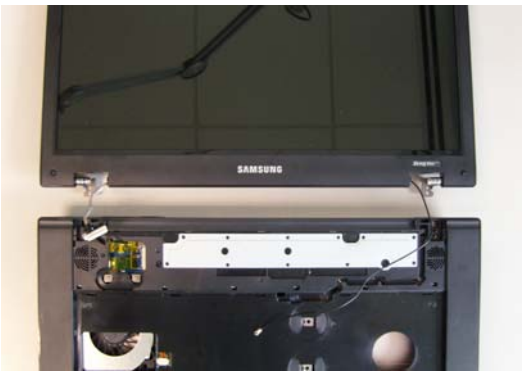
3. Disassembling and Reassembling

Area	Picture	Description
Main System		16. Lifts Keyboard FPC and Linked Connector Cover with picture and separates Keyboard. *Caution Observe because Connector is damaged in case of lift Connector Cover perforce.
		17. Remove Cable plain of your part to disjoint Top.
		18. Separate Touchpad FFC after lift FFC Connector's Cover on. *Caution Observe because Connector is damaged in case of lift Connector Cover perforce.
		19. Pulls Connector to arrow direction and separates Speaker Cable.

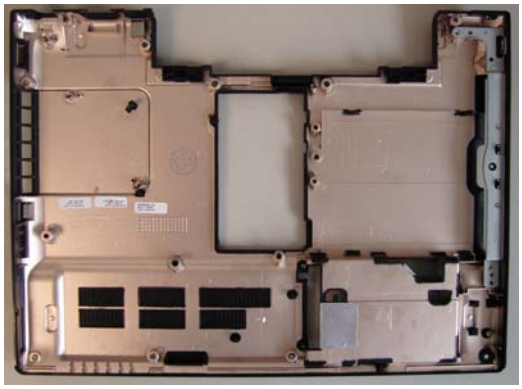
3. Disassembling and Reassembling

Area	Picture	Description
Main System		20. Catches LCD Cable and pulls to left and separates Cable. *Caution Because Main Board's Connector drops easily in case of lift Top without separating LCD Cable LCD Cable separation availabilityTop exclusion certainly confirm.
		21. Pull Wireless LAN Antenna carefully vertically. *Caution Is expired because Wireless LAN Antenna takes or work so that may not be damaged with meticulous care.
		22. Extracts Wireless LAN Antenna to arrow direction carefully and separates with Top. *Caution Is expired because Wireless LAN Antenna takes or work so that may not be damaged with meticulous care.
		23. Separate LCD Ass' y after remove two Screws registered to picture. - M2.6 L8 : 2 EA

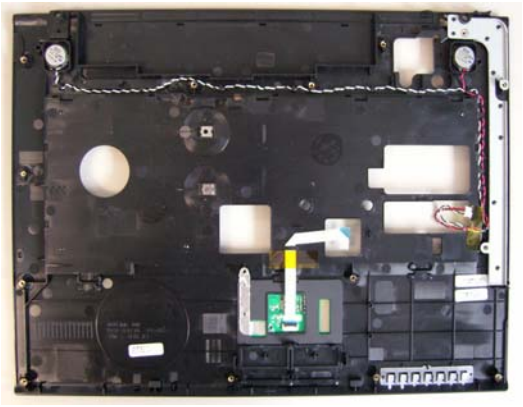
3. Disassembling and Reassembling

Area	Picture	Description
Main System		24. After separate LCD Ass' y image
		25. Lifts on and separates Top from right side with picture.
		26. Separate Bluetooth Cable at confidential talk to arrow direction after remove five Screws to separate Main Board, Fan, Bluetooth. - M2 L4 : 5 EA
		27. Fan separates all Cables at confidential talk to arrow direction for separation.

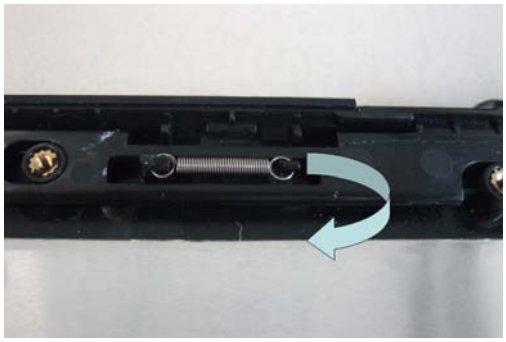
3. Disassembling and Reassembling

Area	Picture	Description
Main System		28. Lifts Main Board from right side part and separates from Bottom. *Caution Lift from right side certainly because there is Port damage worry in case of lift perforce from left side
		29. Bottom after Main Board exclusion

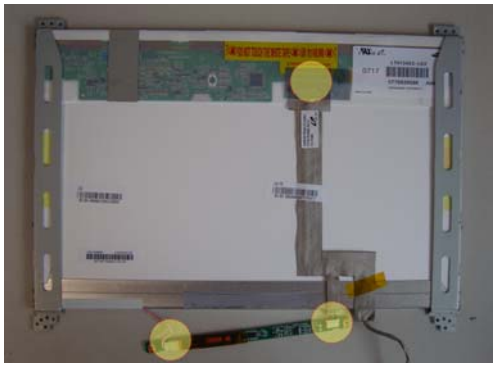
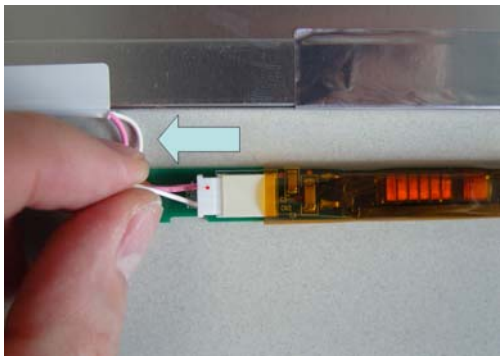
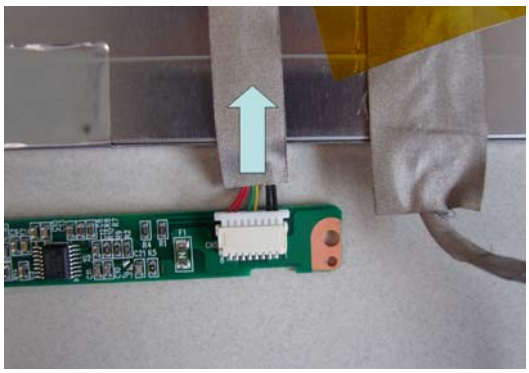
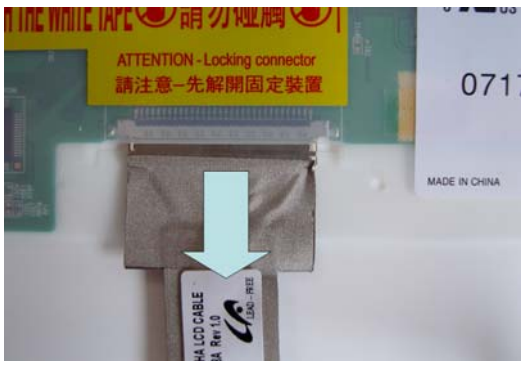
3. Disassembling and Reassembling

Area	Picture	Description
Top Ass'y		1. Remove Speaker. *Caution If Touchpad Module is not all-important occasion because was fixed by Top and two faces tape, Module does not separate. Press resources are not Bunrigadoe because become anastomosis.
LCD Ass'y		1. Screw exclusion after LCD Front's Rubber 5 exclusion - M2 L6 : 5 EA
		2. Do to use tweezers or tree sword, '-' screw driver at Rubber removal.
		3. Twists hors furtively in inside with picture and separates Front. *Caution Inflict force perforce and take care so that Front may not bend.

3. Disassembling and Reassembling

Area	Picture	Description
LCD Ass'y		4. Separate + Inverter from LCD Back to LCD Module removing 7 Screws. - M2 L6 : 7 EA
		5. Removes 2 Screws and separates Bracket Upper. - M2 L4 : 2 EA
		6. Separate Knob Latch after remove Spring landing on pulling Spring's right furtively.
		7. LCD Back after LCD Module, Bracket Upper, Knob Latch exclusion *Caution Because Wireless LAN Antenna was fixed by two faces tape to LCD Back, Antenna does not separate except all-important occasion.

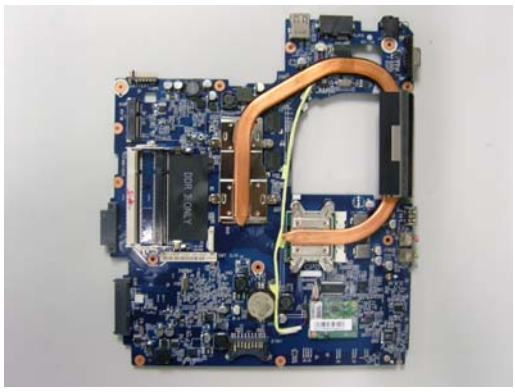
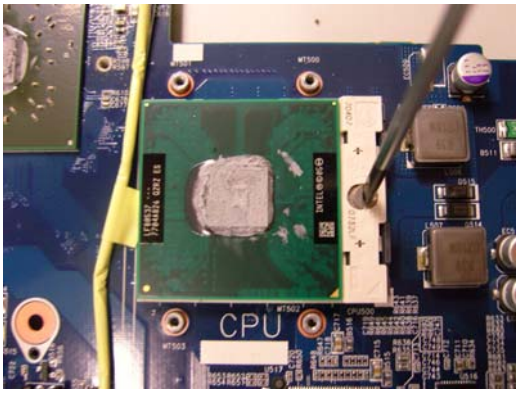
3. Disassembling and Reassembling

Area	Picture	Description
LCD Ass'y		8. Separate Connector 3 places in LCD Module.
		9. Has pushed Connector to arrow direction and separates LCD Module and Inverter.
		10. Pulls Connector to arrow direction and separates LCD Module and Inverter.
		11. Separate LCD Module and LCD Cable pushing LCD Cable to arrow direction after silver color tape exclusion for protection.

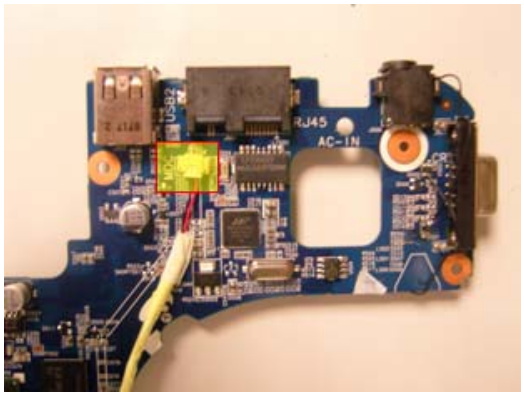
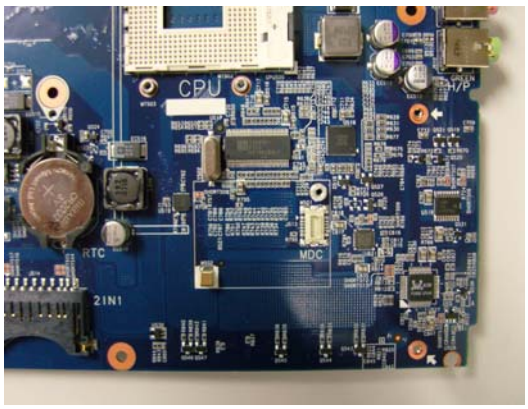
3. Disassembling and Reassembling

Area	Picture	Description
LCD Ass'y		12. Removes 6 side Screws and removes right and left Bracket. - M2 L3 : 6 EA *Caution Take care so that LCD surface at Screw exclusion may not rake.
		13. LCD Module after LCD Cable, right and left Bracket, Inverter exclusion

3. Disassembling and Reassembling

Area	Picture	Description
Main Board		1. Main Board
		2. Remove 8 Screws for HeatSink separation. - Special Screw : 8 EA *Caution HeatSink Screws couldn't be disassembled.
		3. CPU & MDC part
		4. Lift CPU by right angle after turn Screw to direction such as the picture for CPU separation. *Caution Take care so that CPU Pin may not bend.

3. Disassembling and Reassembling

Area	Picture	Description
Main Board		5. Separate relevant Screw to separate MDC. - M2 L6 : 1 EA
		6. Cancel MDC cable and connection between baud.
		7. Remove 2 Screws to separate EXPRESS Frame. - M2 L6 : 2 EA
		8. Lift metal Geolrimbu 2 places vertically to separate EXPRESS Frame with picture. *Caution Take care so that metal Geolrimbu may not bend forever.

3. Disassembling and Reassembling

Area	Picture	Description
Main Board		9. EXPRESS Frame with picture separates confidential talk to right.
		10. After remove Thermal Duct, Heatsink, CPU, EXPRESS Frame, MDC Main Board image

4. Troubleshooting

1) General

(1) Tools used for repairing the product

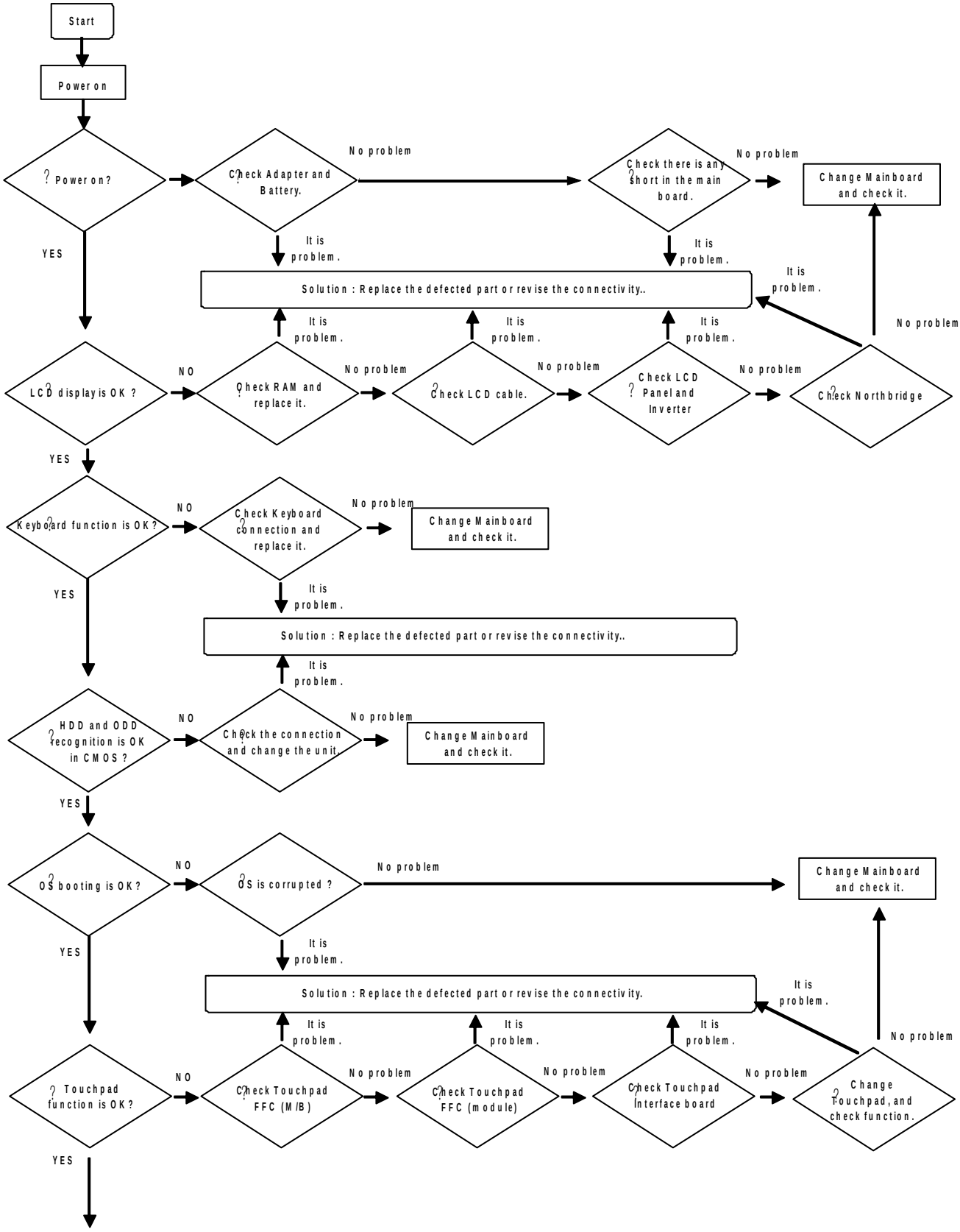
System Diagnostics Disk
MS-DOS Booting Disk
System Diagnostics Card
Screwdrivers (+,—)
Tweezers
Multi-meter
Oscilloscope
Logic Analyzer

(2) Replaceable Units (FRU: Field Replaceable Unit)

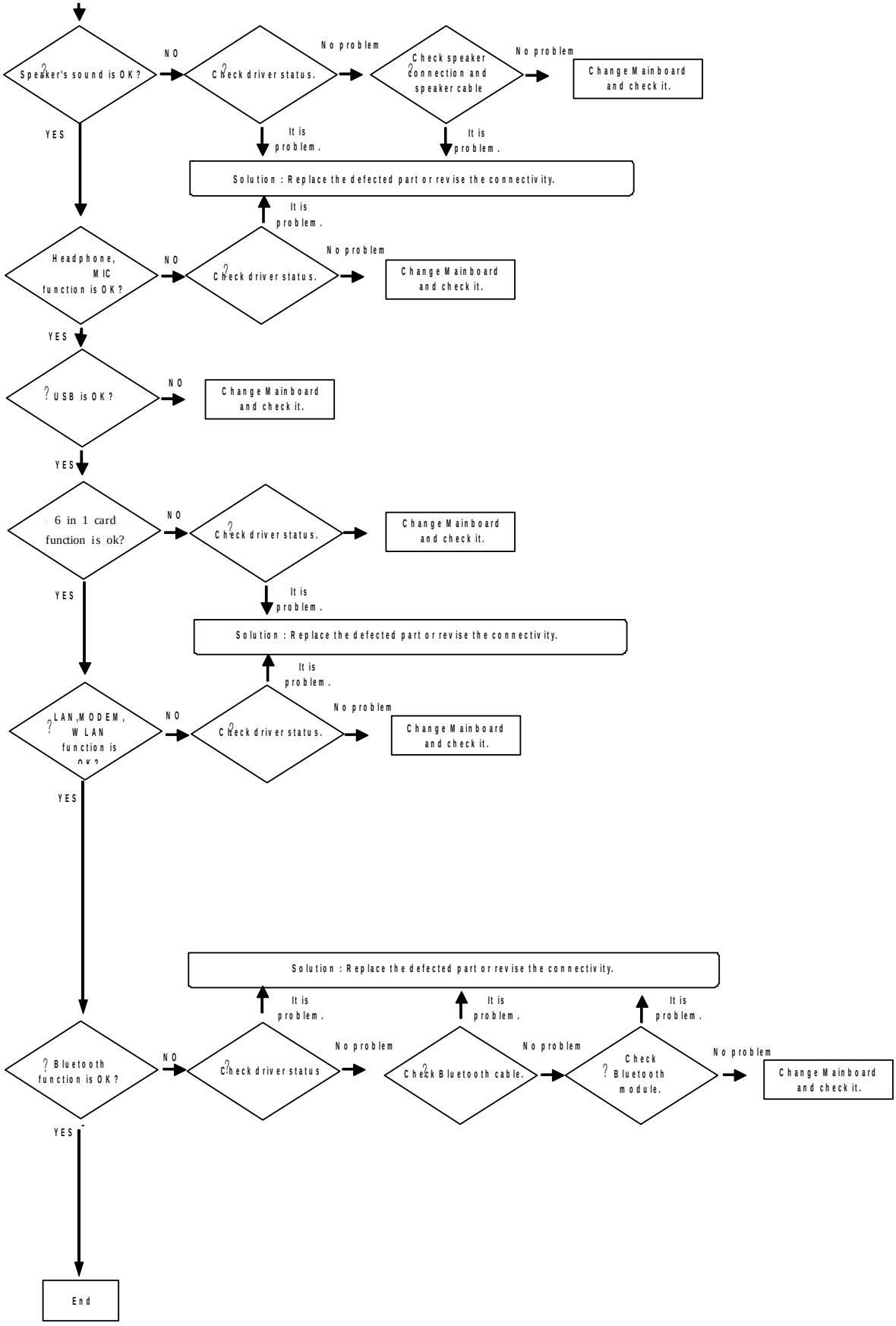
DDR2 RAM Module
9.5mmH 2.5” SATA HDD
ODD – Super multi Dual layer drive or DVD Combo Drive or Etc.
Wireless LAN Module
Bluetooth Module
MDC Module
Keyboard
System FAN
Touch Pad
LCD Panel
LCD Inverter
Main Board
PCI Express Card Frame
Harness Cable – Bluetooth Cable, RJ11 Cable, MDC Cable, LCD Cable
Wireless LAN Antenna
FFC - Touch Pad FFC.

4. Troubleshooting

2) Debugging Flow Chart



4. Troubleshooting



4. Troubleshooting

3) System Diagnosis

(1) System Diagnostics Card

The Diagnostics Card shows the system operations during the POST (Power On Self Test) in a 2 digit hexadecimal number by connecting the cable to the 10 pin connector below the PCMCIA slot after separating the Top part. The card is used to evaluate the reason for the malfunction without disassembling the system when the system malfunctions and to test if the system operates normally after replacing a defective FRU.

(2) Debugging Code

In general, if a defect of the circuit or part is detected during the system test, the system stops at a particular code. The error codes for each part of the system are listed in the following table.

Code	Beeps	POST Routine Description
02h		Verify Real Mode
03h		Disable Non-Maskable Interrupt
04h		Get CPU type
06h		Initialize system hardware
08h		Initialize chipset with initial POST values
09h		Set IN POST flag
0Ah		Initialize CPU registers
0Bh		Enable CPU cache
0Ch		Initialize caches to initial POST values
0Eh		Initialize I/O component
0Fh		Initialize the local bus IDE
10h		Initialize Power Management
11h		Load alternate registers with initial POST values
12h		Restore CPU control word during warm boot
13h		Initialize PCI Bus Mastering devices
14h		Initialize keyboard controller
16h	1-2-2-3	BIOS ROM checksum
17h		Initialize cache before memory auto size
18h		8254 timer initialization
1Ah		8237 DMA controller initialization
1Ch		Reset Programmable Interrupt Controller
20h	1-3-1-1	Test DRAM refresh
22h	1-3-1-3	Test 8742 Keyboard Controlle
24h		Set ES segment register to 4 GB
26h		Enable A20 line
28h		Auto size DRAM
29h		Initialize POST Memory Manager
2Ah		Clear 512 KB base RAM
2Ch	1-3-4-1	RAM failure on address line xxxx*
2Eh	1-3-4-3	RAM failure on data bits xxxx* of low byte of memory bus
2Fh		Enable cache before system BIOS shadow
30h	1-4-1-1	RAM failure on data bits xxxx* of high byte of memory bus
32h		Test the CPU bus-clock frequency
33h		Initialize Phoenix Dispatch Manager
36h		Warm start shutdown

4. Troubleshooting

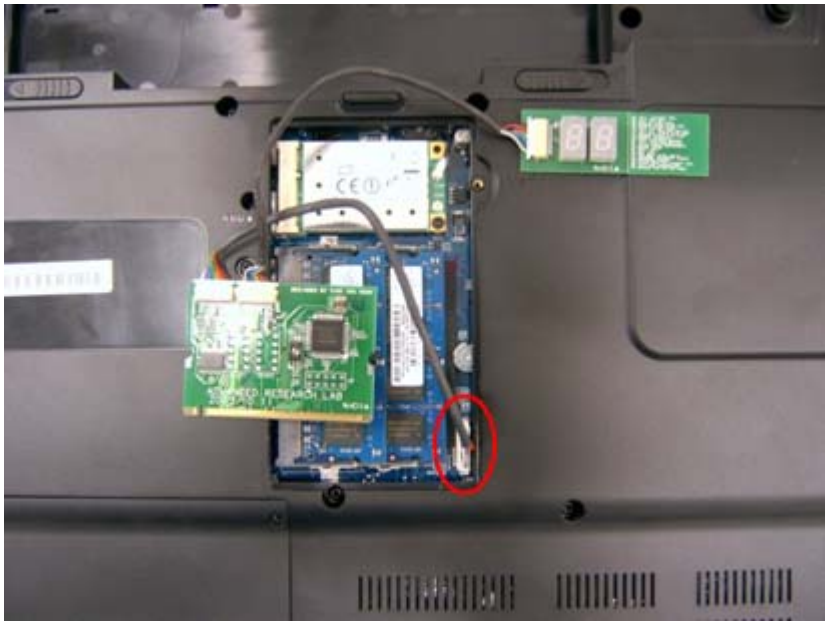
38h		Shadow system BIOS ROM
3Ah		Auto size cache
3Ch		Advanced configuration of chipset registers
3Dh		Load alternate registers with CMOS values
42h		Initialize interrupt vectors
45h		POST device initialization
46h	2-1-2-3	Check the ROM copyright notice
48h		Check the video configuration against CMOS
49h		Initialize PCI bus and devices
4Ah		Initialize all video adapters on the system
4Bh		Quiet Boot start (optional)
4Ch		Shadow video BIOS ROM
4Eh		Display the BIOS copyright notice
50h		Display the CPU type and speed
51h		Initialize EISA board
52h		Test the keyboard
54h		Set key click if enabled
58h	2-2-3-1	Test for unexpected interrupts
59h		Initialize POST display service
5Ah		Display the prompt "Press F2 to enter SETUP"
5Bh		Disable CPU cache
5Ch		Test RAM between 512 and 640 KB
60h		Test extended memory
62h		Test extended memory address lines
64h		Jump to UserPatch1
66h		Configure advanced cache registers
67h		Initialize Multi Processor APIC
68h		Enable external and CPU caches
69h		Setup System Management Mode (SMM) area
6Ah		Display external L2 cache size
6Bh		Load custom defaults (optional)
6Ch		Display shadow-area message
6Eh		Display possible high address for UMB recovery
70h		Display error messages
72h		Check for configuration errors
76h		Check for keyboard errors
7Ch		Set up hardware interrupt vectors
7Eh		Initialize coprocessor if present
80h		Disable onboard Super I/O ports and IRQs
81h		Late POST device initialization
82h		Detect and install external RS232 ports
83h		Configure non-MCD IDE controllers
84h		Detect and install external parallel ports
85h		Initialize PC-compatible PnP ISA devices
86h		Re-initialize onboard I/O ports.
87h		Configure Mothe board Configurable Devices
88h		Initialize BIOS Data Area
89h		Enable Non-Maskable Interrupts (NMIs)
8Ah		Initialize Extended BIOS Data Area

4. Troubleshooting

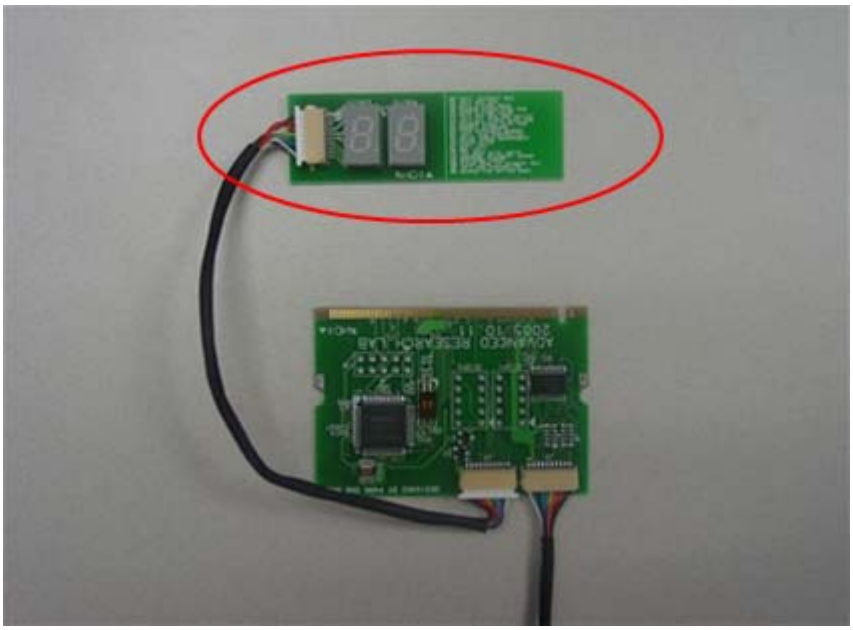
8Bh		Test and initialize PS/2 mouse
8Ch		Initialize floppy controller
8Fh		Determine number of ATA drives (optional)
90h		Initialize hard-disk controllers
91h		Initialize local-bus hard-disk controllers
92h		Jump to UserPatch2
93h		Build MPTABLE for multi-processor boards
95h		Install CD ROM for boot
96h		Clear huge ES segment register
97h		Fixup Multi Processor table
98h	1-2	Search for option ROMs. One long, two short beeps on
che		checksum failure
99h		Check for SMART Drive (optional)
9Ah		Shadow option ROMs
9Ch		Set up Power Management
9Dh		Initialize security engine (optional)
9Eh		Enable hardware interrupts
9Fh		Determine number of ATA and SCSI drives
A0h		Set time of day
A2h		Check key lock
A4h		Initialize Typematic rate
A8h		Erase F2 prompt
AAh		Scan for F2 key stroke
ACh		Enter SETUP
AEh		Clear Boot flag
B0h		Check for errors
B2h		POST done - prepare to boot operating system
B4h	1	One short beep before boot
B5h		Terminate QuietBoot (optional)
B6h		Check password (optional)
B9h		Prepare Boot
BAh		Initialize DMI parameters
BBh		Initialize PnP Option ROMs
BCh		Clear parity checkers
BDh		Display Multi Boot menu
BEh		Clear screen (optional)
BFh		Check virus and backup reminders
C0h		Try to boot with INT 19
C1h		Initialize POST Error Manager (PEM)
C2h		Initialize error logging
C3h		Initialize error display function
C4h		Initialize system error handler
C5h		PnPnd dual CMOS (optional)

4. Troubleshooting

(3) Use of Debug card



-. Like upper picture, debug card is connected to DEBUG connector(as following) in Main board.

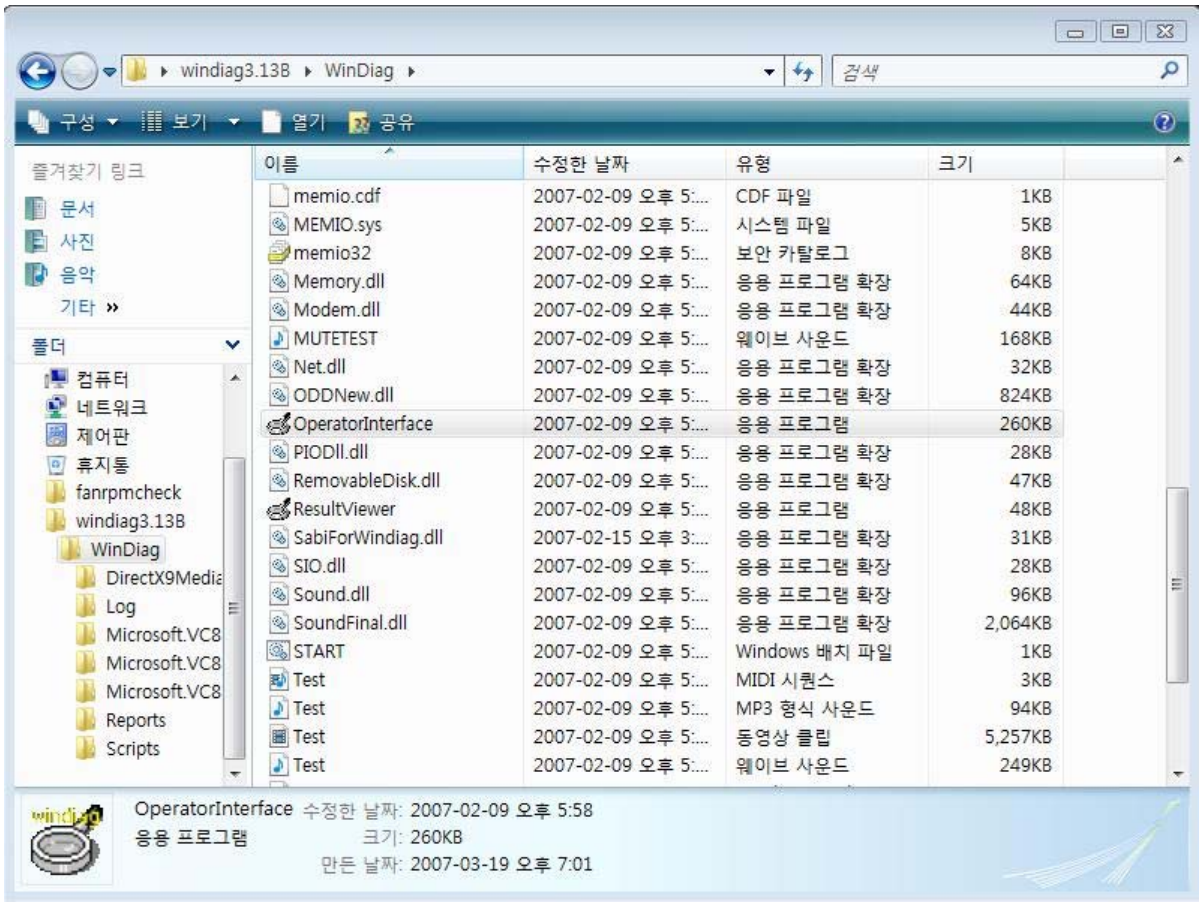


-. Debug code is shown at the viewer in red line.

4. Troubleshooting

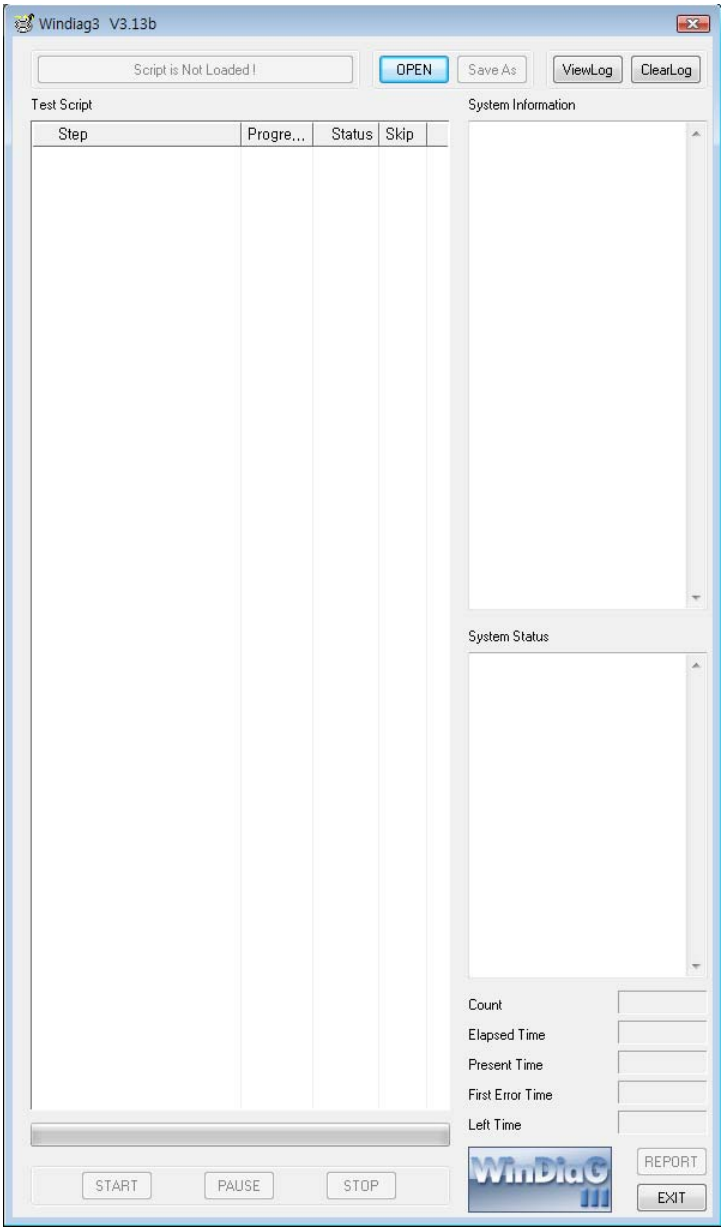
4) Use of diagnostic program

4)-1 Execute OperatorInterface.exe after copy Windiag3 to free folder.



4. Troubleshooting

4)-2 You can see screen such as lower part if click "OperatorInterface" Icon



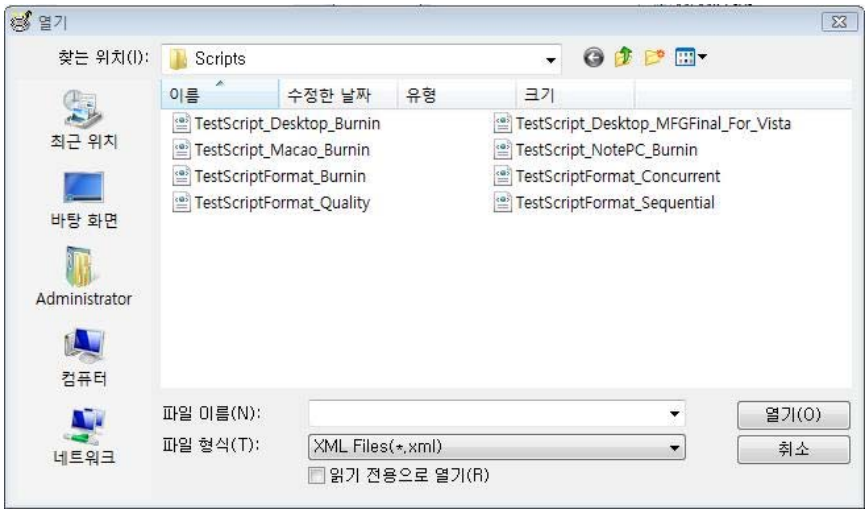
4)-3 Click the "Open" Button to open Script file.

In Note PC relationship occasion : Select TestScript_NotePC_Burnin.xml

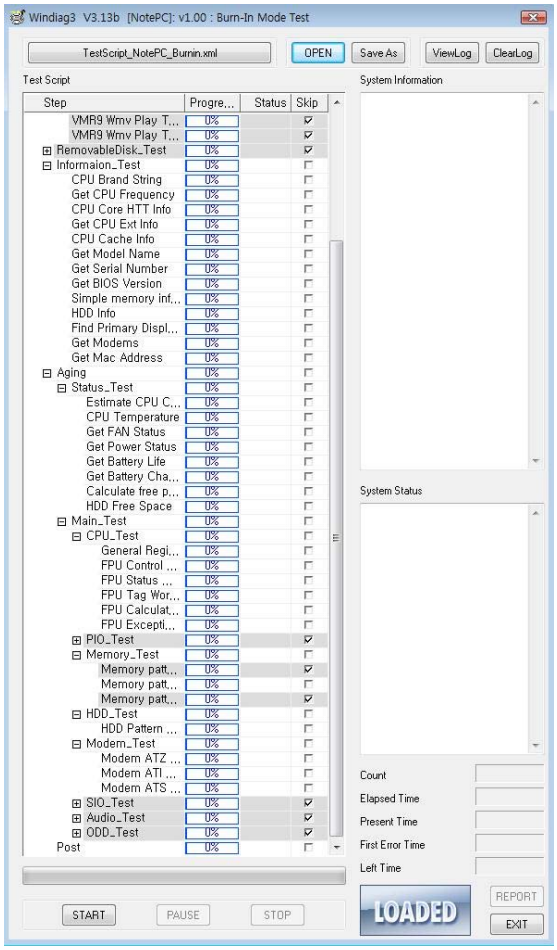
In Desktop relationship occasion : Select TestScript_Desktop_Burnin.xml

If you want to execute each item once : Select TestScriptFormat_Concurrent.xml

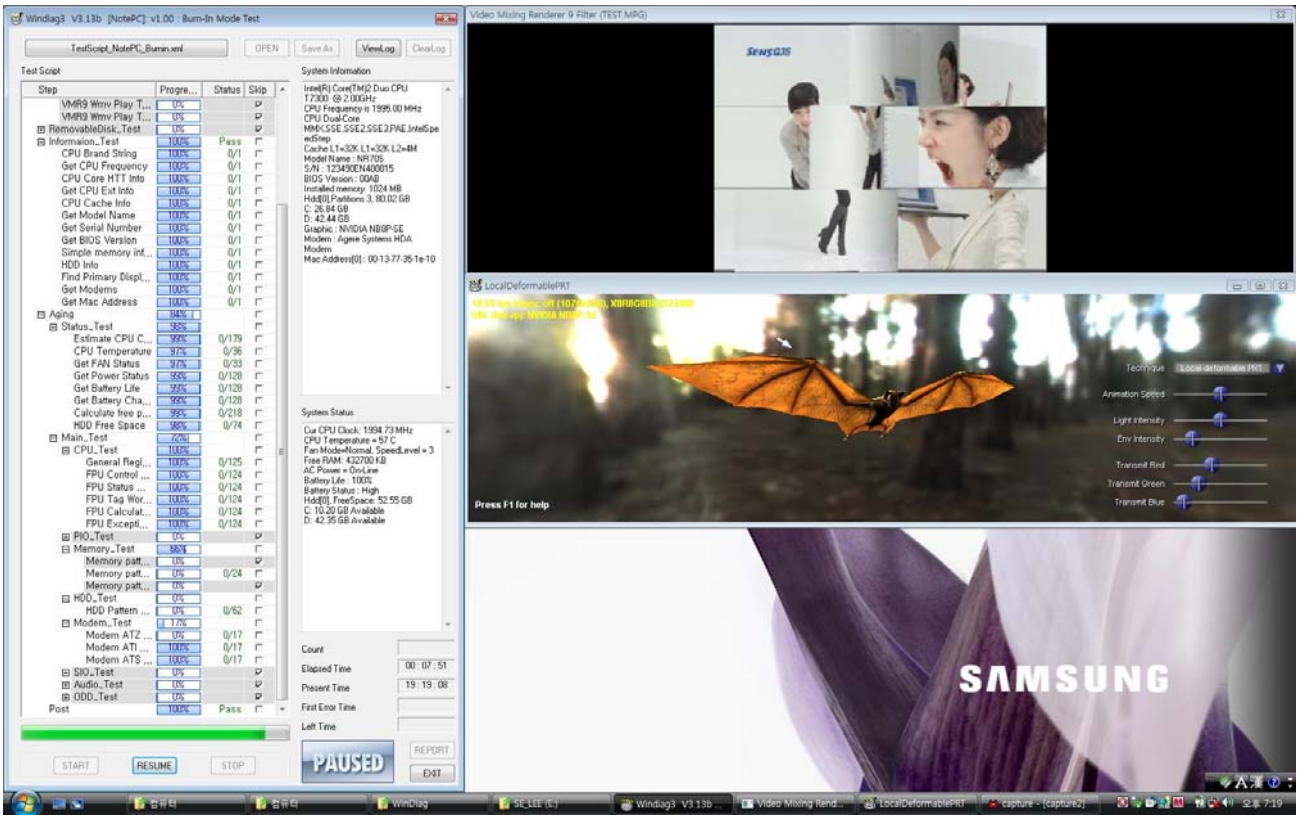
4. Troubleshooting



4)-4 If select enumeration, show relevant script on left side screen in OperatorInterface.



4. Troubleshooting

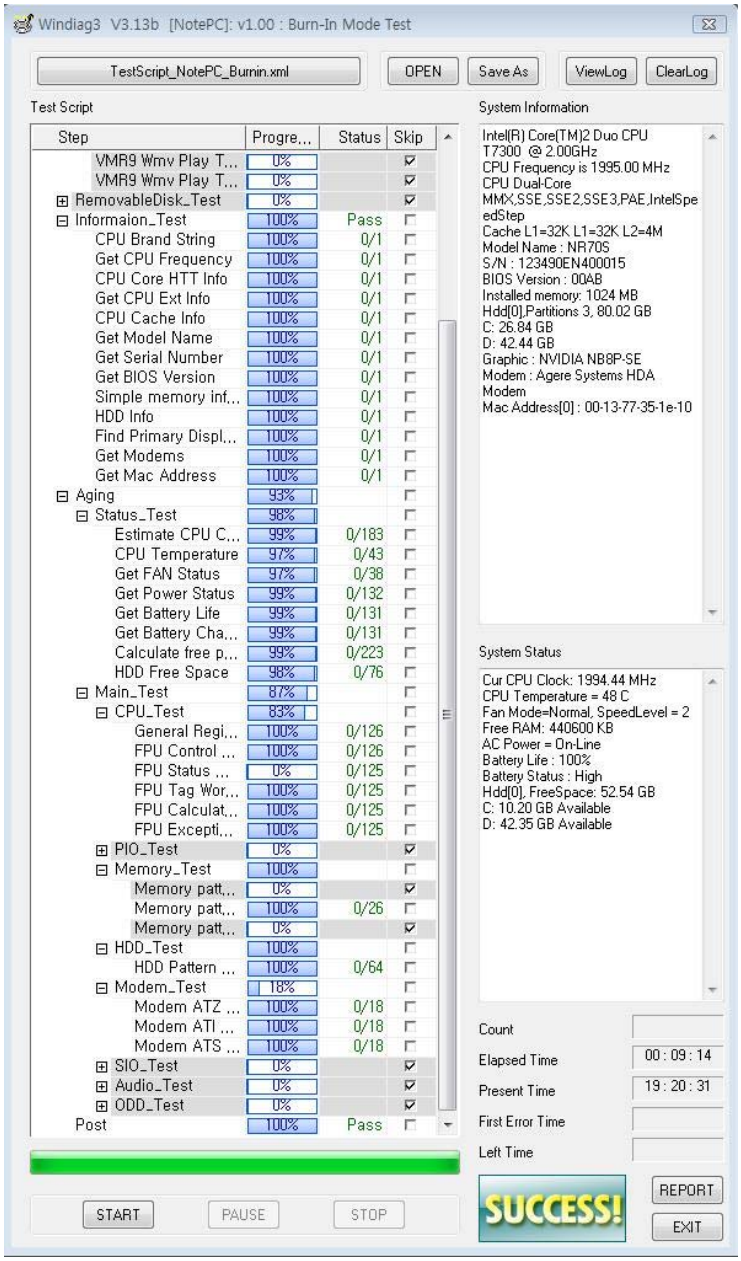


4)-6. If do click stop, test disengages.

If all modules do not disengage normally normally in 30 drafts 2 minutes, message will be lance that ask whether will end Windiag3 compulsorily appears.

This time, can end Windiag3 compulsorily if stop selecting instance.

4. Troubleshooting



4)-7 End Windiag because EXIT does click.

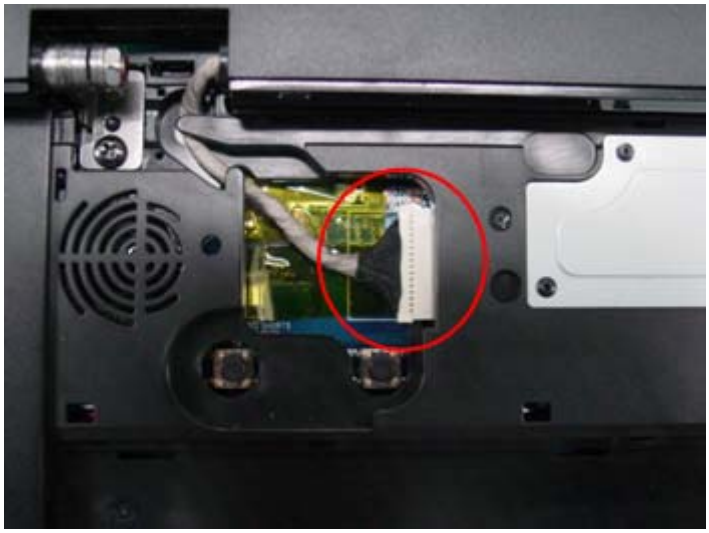
4. Troubleshooting

5) Hardware Troubleshooting

For the procedures to disassemble each part, refer to the descriptions of Chapter 4, “Disassembly and Reassembly”.

◆ **LCD Related Troubles**

1. The screen is dark or the colors of the screen are distorted.
   → Check the connection status between the LCD module and the LCD cable, between the LCD cable and the main board LCD connector and between the LCD cable and the LCD inverter.
   → Replace the LCD cable or LCD inverter.
   → Check if there is a part of the LCD that is bent or broken due to impact.



2. No picture appears on the screen.
   → Check the connection status between the LCD module and the LCD cable, between the LCD cable and the main board LCD connector and between the LCD cable and the LCD inverter.
   → Replace the LCD cable or LCD inverter.
   → Check if the System LED of the main board is blinking. (Check if it is operating or not)
   → Check if the memory module is out of order.
   → Check if the Power button can be normally pressed.

3. The LCD brightness is not adjusted.
   → Check if the LCD inverter is out of order.
   → Check the BIOS version and check if the standard adapter is used.
   → Replace the LCD cable or LCD inverter and check if it is out of order.

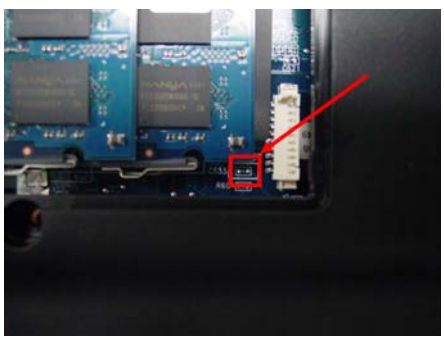
4. Troubleshooting

4. The LCD blinks while the system is in operation.
   → Check if there is a magnetic body near the touch pad button or the system or check if there is an exterior defect to the LCD or system.
   → Replace the LCD cable or LCD inverter and check if it is out of order.
   → Check if a standard adapter is being used (19V/4.17A/90W).

◆ **Main System Troubles**

5. The system is not turned off.
   → Check if the AC adapter LED is lit and if the adapter is properly connected to the system. (Check the adapter LED)
   → If the AC adapter is not connected, check the charge status of the battery. Even if the battery is charged, if the remaining battery charge is too low, the system may not be turned on.
   (As the following figure shows, press the PUSH button on the battery and check the remaining battery charge via the LEDs)
   → Check if there are any alien substances in the Power switch. if have,change the LED

6. Although system power is supplied, the system does not boot or immediately turns off after being turned on.
   → Since this may be a short circuit in the system, disconnect the power immediately, disassemble the system and check if there are any conducting alien objects such as a screw inside.
   → Check the connection status between the CPU and the RHE.
   → Replace the memory module and check if it is out of order.
   → Reset the RTC Reset terminal next to the memory socket.
   Remove RTC cabel from RTC connector
   Connect the two pad of the cap for a while



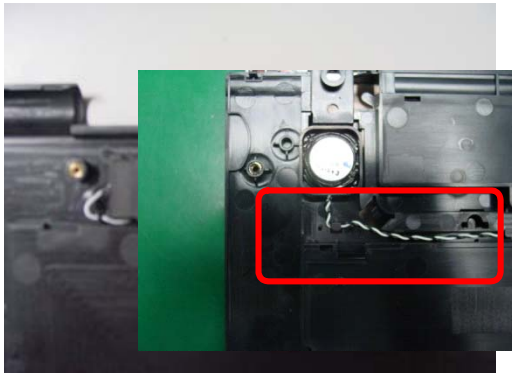
   → Replace the main board.

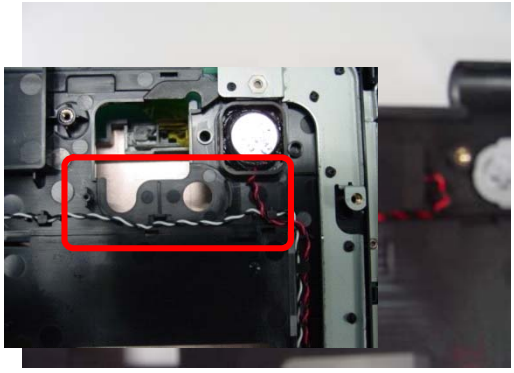
4. Troubleshooting

7. The Express card is not inserted or the Eject button does not work.
   → This may occur when the insulator within the Express card slot is enwrapped.
   → Replace the Express card slot frame and check if it is out of order.

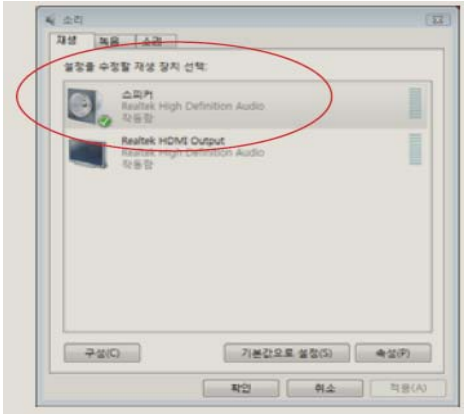
8. There is no sound from the speaker.
   (Insert the figure of the audio jacks so that the reader can check via the figure.)
   → Check if the earphones or headphones are connected to the MIC jack of if there are any alien substances in the jack.

   → Check if the sound is muted after booting up Windows.
   → Check the connection status of the speaker cable and check if the speaker is out of order.
   → Check if there is a magnetic object near the speaker.





9. I cannot hear sound through the headphones.
   → Check if the sound is muted in Windows.
   → Turn the volume up.
   → Replace the main board



10. The external microphone does not work normally.
   → Check the audio driver settings and change them if necessary.
   → Replace the main board

4. Troubleshooting

11. The HDD is not recognized.

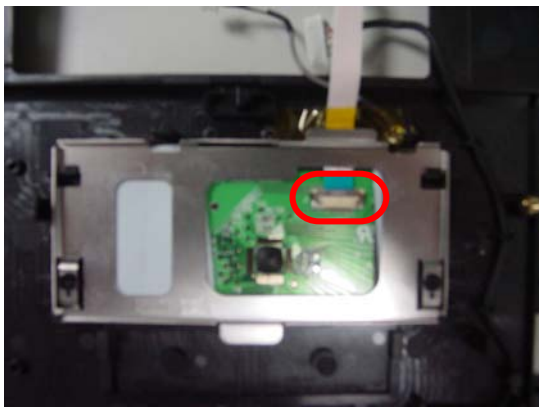
→ Check the connection status of the HDD connector. fixup HDD, check whether the system can be found. if not,change the connector on the motherboard and check again.

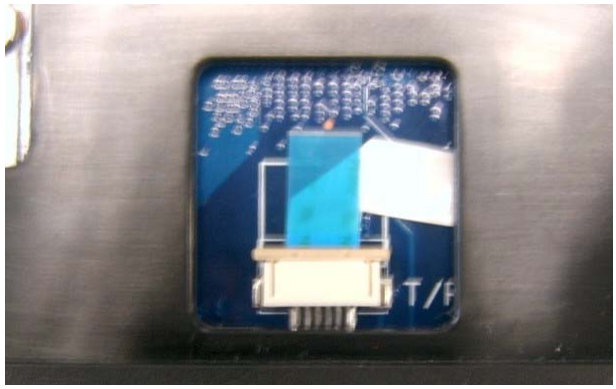
→ If the 'Operating system not found' message appears during the booting process even though the HDD is recognized by CMOS, the operating system of the HDD may be corrupted or the HDD is out of order. In this case, format the HDD and reinstall the operating system or replace the HDD with a new one.

12. The Touch Pad does not work or is malfunctioning.

→ Check the connection status of the Touch Pad FFC.

→ Check the connection status of the Touch Pad module





→ If there is no problem with the connections, replace any suspicious parts and check if they are out of order.

4. Troubleshooting

13. The battery is not charged or the battery charge LED malfunctions.

→ Check the standard voltage of the adapter.

→ Check if the battery is defective.

→ Replace the main board.

14. The LAN function does not work.

→ Check if the LAN cable is properly connected.

→ Check if the LAN driver is properly installed.

→ If the driver is properly installed, check if the LAN cable jack is out of order.

→ Replace the main board

16. The wireless LAN does not work normally.

→ Check if the WLAN slide switch is in the ON position.

→ Check if the WLAN driver is properly installed.

→ Check if the wireless LAN antenna cable is properly connected.

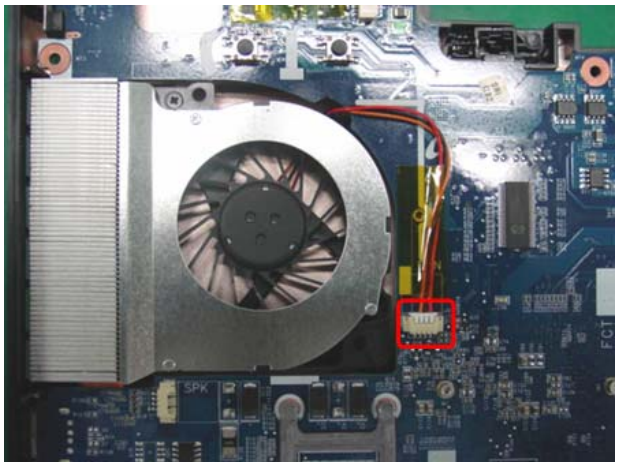
→ Replace the main board

4. Troubleshooting

17. The Fan does not work normally

→ Check if the Thermal is locked tightly.

→ Check if the Fan cable is properly connected



FAN Control Table

Item	Mode	rpm Design guideline SPEC : ± 10%
FAN Control	OFF	0
	LOW	2318 rpm
	MID 1	2508 rpm
	MID 2	2731 rpm
	MID 3	2858 rpm
	HIGH	3234 rpm

4. Troubleshooting

◆ **When booting up the computer**

18. The "Invalid System Disk. Replace the Disk and then press any key" message appears.
   → This message may appear when the connected USB memory or CD media does not include bootable data.
   → The "Reboot and Select the proper Boot device or Insert a bootable media in the selected Boot device and press a key" message appears.
   → Check if the signal and power cables are properly connected to the hard disk drive.
   → Check if the hard disk drive is recognized in the BIOS SETUP.
   → The operating system on the hard disk drive is corrupted. Reinstall Windows.

19. The "To enter BIOS SETUP, press <F2>. To continue, press <F1>." message appears.
   → This may happen when the BIOS settings are different from the system environment. In this case, setup the BIOS according to your system environment.
   → Press <F2> to enter the BIOS SETUP.
   → Check if the date and time are correct in the BIOS SETUP.
   → Save the settings and restart the system.

20. The 'CMOS Checksum error' message appears.
   → This message may appear when the CMOS battery of the main board is completely discharged. In this case, replace the battery with a new one of the same type and set up the BIOS SETUP according to your system environment.

21. Windows boots up in safe mode.
   → This may happen when Windows was not shut down normally. Therefore, shut down the system by selecting Start > Turn Off Computer.
   → This may happen when the system settings have been incompletely recognized.
   → Run Check Disk.

22. I cannot boot up the computer with a USB floppy drive or from USB memory.
   → Check if the diskette is bootable.
   → This may happen when the booting priority of the device is low. In this case, change the booting priority in the BIOS SETUP.

◆ **When shutting down the computer**

23. The computer is not shut down
   → If Windows does not end normally, you can forcibly shut down the system by pressing the Power button. If the power-saving feature is activated on the Power button, press the Power button for more than 4 seconds to turn the computer off. If the computer is then turned on again, Check Disk is automatically run.

4. Troubleshooting

◆ **Windows / Screen Related Problems**

24. The computer hangs while running a program.

→ If the running program causes an error:

In Windows XP, press the <Ctrl>, <Alt> and <Del> key combination, select the application program and click on End Task in the Applications tab of the [Windows Task Manager] window.

In Windows 2000, press the <Ctrl>, <Alt> and <Del> key combination, select the application program or an application that does not respond and click on End Task in the [End Program] window.

→ If Windows does not respond, restart the computer. Restart the computer by pressing the Power button.

25. No picture is displayed on the external monitor.

→ Press the Switch LCD/CRT Monitor function key and check if the screen output is output to another display device.

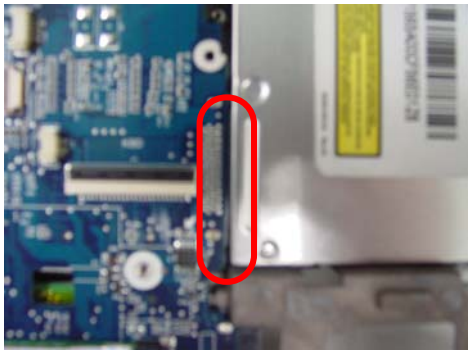
→ Check if the hardware is out of order referring to the descriptions in the LCD related section of the Hardware Troubleshooting.

→ For models with external graphics, replace the VGA board and check if it is out of order.

◆ **CD/DVD-ROM Related Troubles**

26. A disc is not recognized or read.

→ Check if the ODD module and the main board are properly connected with the 50 pin connector



. → Replace the ODD, if necessary.

◆ **Power-Saving Mode Related Troubles**

27. Connecting a USB device to the computer in standby mode.

→ If a USB device is connected to the computer in standby mode, the screen may be abnormally displayed.

You have to connect a USB device when the computer is operating normally.

28. A USB device is not working normally when the computer returns from standby mode.

→ In this case, separate and reconnect the USB device.

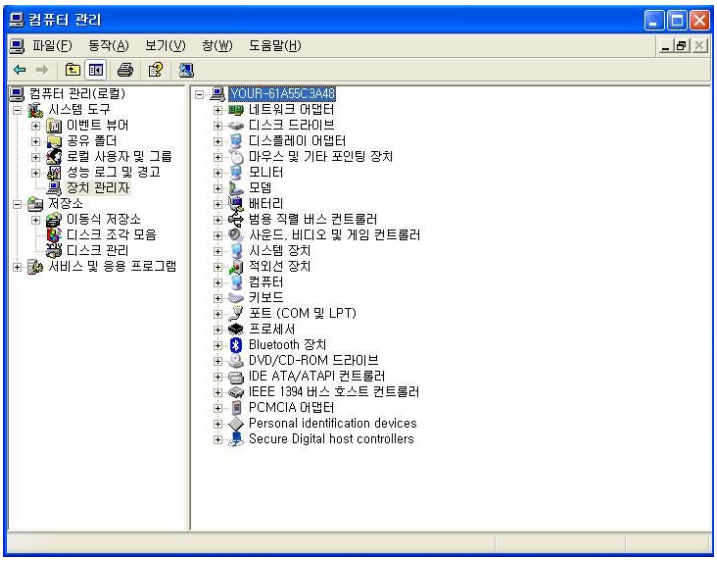
29. The picture is displayed abnormally when the computer running the Command Prompt (MS-DOS) enters standby mode and then returns from standby mode.

→ Press the <Alt> and <Tab> key combination to display the picture on the screen.

4. Troubleshooting

6) Device Settings Related Software Diagnosis

(1) Check if the drivers of each of the devices are properly installed. That is, check if there are any yellow exclamation marks in the Device Manager.



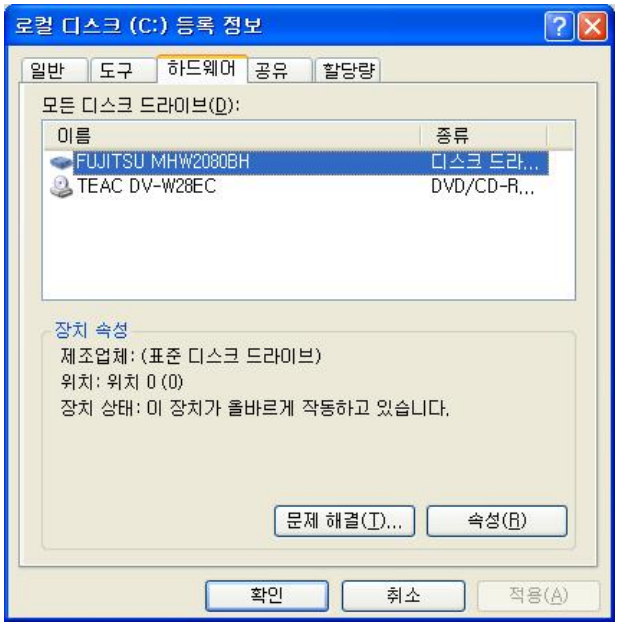
(2) Check the device driver version and check if it is conflicting with another driver. If the driver is not properly installed, install a new driver.
(The following figure illustrates the properties of the Internal GFx device driver).

(3) Check if the program is properly installed.

4. Troubleshooting

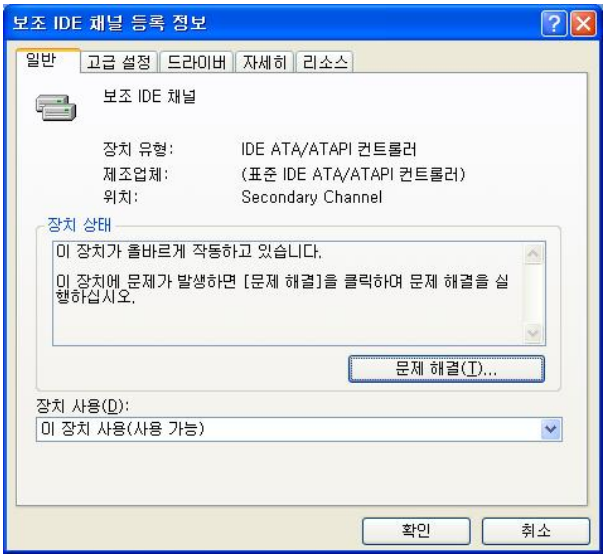
(4) HDD and ODD Related Problems

For an HDD, check if the HDD operates in Ultra DMA Mode 5 by selecting the Primary IDE Channel in the Control Panel as follows. If it does not, check the BIOS SETUP, reinstall the operating system or replace the HDD-FPC or HDD, if necessary.



4. Troubleshooting

For an ODD, check if it operates in Ultra DMA Mode 2. If it does not, check if the disc inserted into the ODD is clean. If the disc is contaminated, the access speed may slows down. If the disc is clean, check the BIOS SETUP, reinstall the operating system or ODD, if necessary.



Check if the HDD and ODD models are properly displayed. If not, check the BIOS SETUP or replace the FPC or drive, if necessary.

(5) Windows Vista System

The operating system(OS) installed on this product is the latest version of Windows Vista, You cannot install an operating system other than vista as well as any unauthorized copy of Windows Vista.

Other operating systems (Windows 98,Windows ME,Windows 2000,Windows XP,Windows 2003 Server,UNIX and LINUX.other Windows Vista versions,etc.)other than the operating system already installed on this computer are not supported.

Installing a program that does not support Windows Vista,may cause the program to not work properly.

In this case,ask the corresponding software manufacturer about the problem . if you request our services to resolve a problem caused bu incompatible software.

(6) Other Problems

Press each corresponding button and check its operation.

The following figure illustrates the operation of the volume control button.

4. Troubleshooting

7) Battery Use Time

Check the following check lists for systems where the battery use time is too short to diagnose problems.

(1) Check the battery

Check if the battery is out of order referring to the Battery check program distributed to Service Centers and the 'Battery Check Manual' included in the 'Note-PC A/S Guide'.

1. Battery Check List

Please mark "✓" in the box (☐) of each applicable items, after checking the battery status with the "battery checking program"

1. Does the battery communicate normally with system?
   - ✓ PASS
   - ☐ FAIL
2. Is the battery charged normally?
   - ✓ PASS
   - ☐ FAIL
3. Is the battery discharged normally?
   - ✓ PASS
   - ☐ FAIL
4. Is the battery still in warranty?
   - ☐ Excess than 6 months : Out of warranty
   - ✓ Excess than 300 Cycles : Out of warranty
   - ✓ Less than 6 months : PASS
   - ☐ Less than 6 months : FAIL

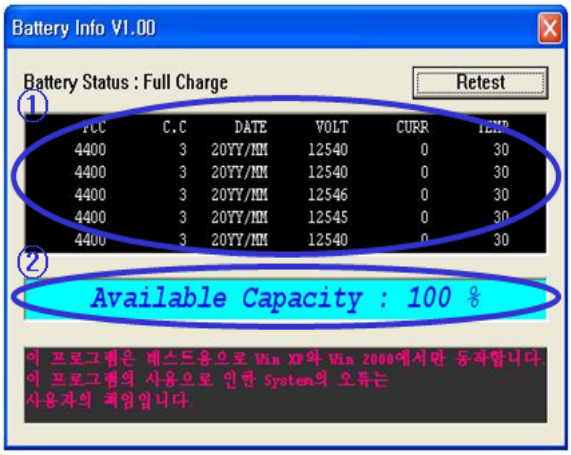
2. Criteria for each of the check lists.

1. Does the battery communicate normally with system?

☐ PASS

①: Data displayed in the data window.

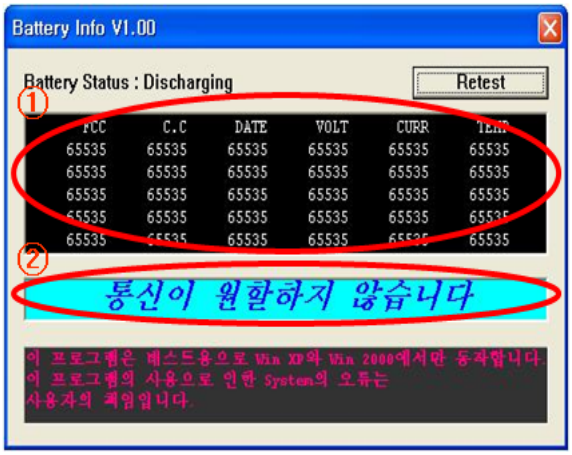
②: Available capacity displayed : 0 ~ 100%



☐ FAIL

①: The code 65535 displayed

②: Displayed the error message in Korean "통신이 원할 하지 않습니다"



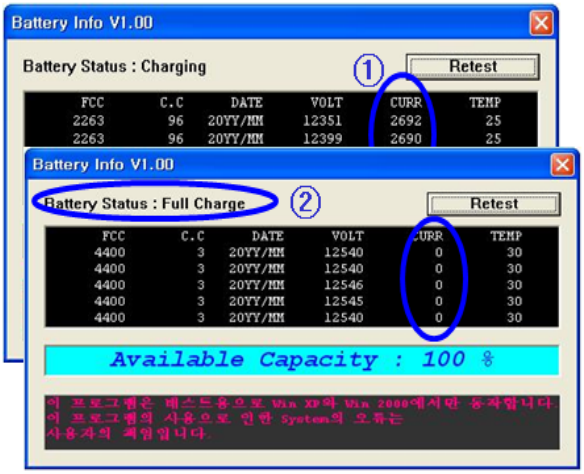
☞ recommended : When the communication failed, please set a normal battery to the system and check first which -battery or system- has the problem.

4. Troubleshooting

2. Is the battery charged normally?

☐ PASS

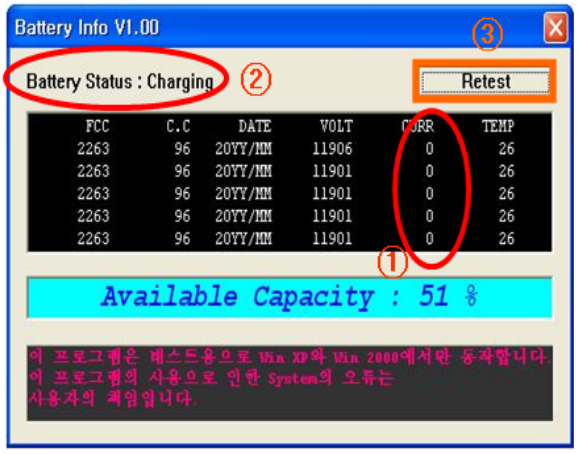
①: Pass, if the CURR values are within 35 ~ 3500



②: Pass, even if the **CURR** value is **0** but the battery is in status of **Full Charge**

☐ FAIL

①,②: Fail, if the CURR values are **0** and the battery status is in **Charging**.

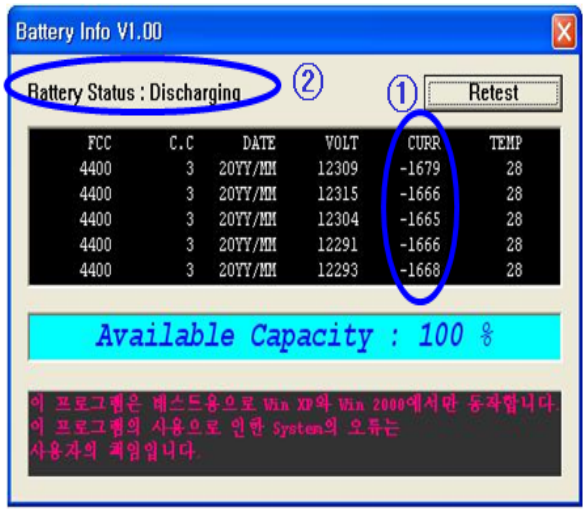


③: if the **CURR** value is **0** and in status of **Charging**, please reconfirm the "fail" after 2~3 times of **Retest**.

3. Is the battery discharged normally?

☐ PASS

①,②: Pass, if the **CURR** values are within -50 ~ -5000 and the battery status is in **Discharging**.



☐ FAIL

Fail, if the **System is off status when the adaptor is removed** from the System

4. Troubleshooting

4. Is the battery still in warranty?

☐ Excess than 6 months : Out of warranty

☐ Excess than 300 cycles : Out of warranty

☞ **Warranty period** : Within **6 months after sales date**, more than **60% of initial electric capacity after 300 cycles.**

*** Reference** : If a battery is out of warranty, the battery can not be considered as "defected". So if a customer requests to exchange his battery in this case, the battery should be provided **onerously with sales price**. So please persuade customer to use continuously his battery, with the explanation of effective capacity of his battery, if the battery have no defect but only small decrease of capacity.

☐ Less than 6 months : PASS

☐ Less than 6 months : FAIL

☞ **①Please refer to "Capacity Standard Table" (or ②Capacity Standard Graph). Please judge Pass or Fail after checking the sales date of a battery. Pass, if the capacity of the battery is over than the value of corresponded date of "Available Capacity" column in the Table. Fail, if the capacity is lower than the value.**

* Reference : The battery capacity can have individual error according to the user's circumstance of the battery. So it is recommended that the battery should be checked (with Battery Check Program) after calibration (Smart Battery Calibration: Full charge/discharge or Full discharge/charge)

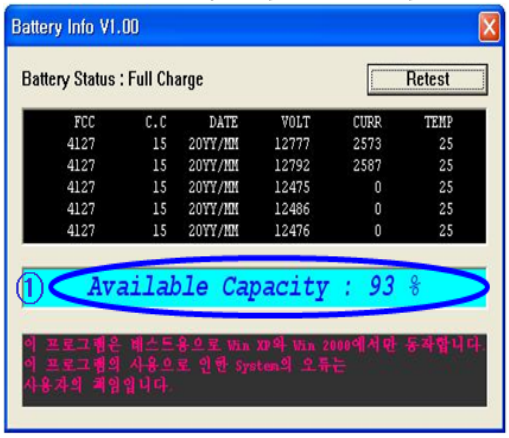
[Example]

☐ Less than 6 months: PASS

①: Available Capacity: 93%

Duration of Use : 1month(30days)

Available Capacity of warranty: 87.8%

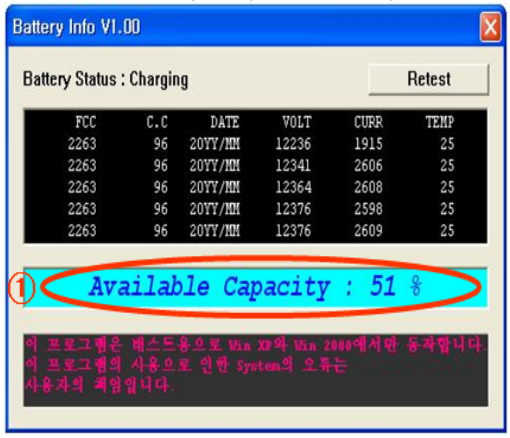


☐ Less than 6 months: FAIL

①: Available Capacity: 51%

Duration of Use : 1month(30days)

Available Capacity of warranty: 87.8%



* Reference : If the sale date is 2004.5.10 and service receipt date is 2004.6.10, the Duration of Use is regarded as 1 month(30days)

4. Troubleshooting

:

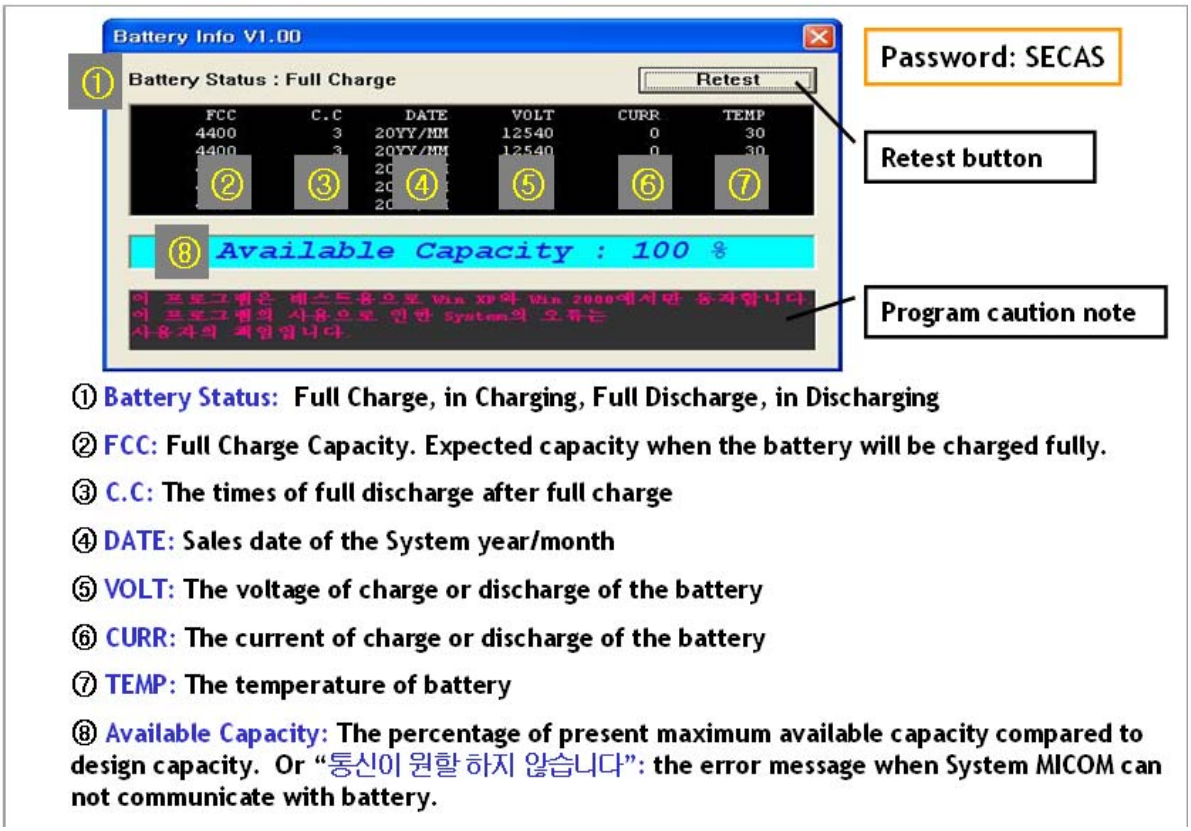
Duration of Use	Available Capacity(%)
Within 0.5month (15days)	More than 93.6 %
Within 1.0month (30days)	More than 87.8 %
Within 1.5month (45days)	More than 82.5 %
Within 2.0month (60days)	More than 77.8 %
Within 2.5month (75days)	More than 73.6 %
Within 3.0month (90days)	More than 70.0 %
Within 3.5month (105days)	More than 66.9 %
Within 4.0month (120days)	More than 64.4 %
Within 4.5month (135days)	More than 62.5 %
Within 5.0month (150days)	More than 61.1 %
Within 5.5month (165days)	More than 60.3 %
Within 6.0month (180days)	More than 60.0 %

* Reference

Duration of Use : The using period from the sales date of the system (with battery)

Available Capacity(%) : The real capacity of the battery, decreased from the design capacity by the user's circumstance, keeping status or etc.

4. Battery Check Program



① **Battery Status:** Full Charge, in Charging, Full Discharge, in Discharging

② **FCC:** Full Charge Capacity. Expected capacity when the battery will be charged fully.

③ **C.C:** The times of full discharge after full charge

④ **DATE:** Sales date of the System year/month

⑤ **VOLT:** The voltage of charge or discharge of the battery

⑥ **CURR:** The current of charge or discharge of the battery

⑦ **TEMP:** The temperature of battery

⑧ **Available Capacity:** The percentage of present maximum available capacity compared to design capacity. Or "통신이 원할 하지 않습니다": the error message when System MICOM can not communicate with battery.

4. Troubleshooting

(2) Check the battery use environment

1. Generally, the battery usage time in advertisements by notebook manufacturers refers to the maximum battery use time. Since the system specifications and the usage environment may differ, the user's battery usage time may differ from the advertisement even if there is no problem with the system.

2. Conditions for the company's maximum battery use time
   a. Minimum LCD brightness, base system, the wireless LAN R/F is turned off, BatteryManager-Maximum Battery Mode
   b. Measuring Tool: BatteryMark v.4.0.1

3. If a customer complains about the battery usage time, let them know that the battery usage time may differ depending on the model specifications and the usage environment and recommend the following usage environment for longer battery time.
   a. Use the company's power-saving program, BatteryManager, and set BatteryManager to Maximum Battery Mode.
   b. LCD brightness: Set to the minimum level as long as the user does not experience inconvenience.
   c. Disable unnecessary devices
      : Turn the wireless LAN R/F switch off and disable USB devices (DMB, fingerprint recognition and Bluetooth)

4. Troubleshooting

8) Other

8)-1. CPU Spec

CPU	4-6 code	Type	업체 P/N	Description
T7700	0902-002199	uFCPGA	LF80537GG0564M	2.4GHz,uFCPGA,479P,TR,PLASTIC,1.05V,34W,0to+100C,4MB,FSB800
T7500	0902-002198	uFCPGA	LF80537GG0494M	2.2GHz,uFCPGA,479P,TR,PLASTIC,1.05V,34W,0to+100C,4MB,FSB800
T7300	0902-002197	uFCPGA	LF80537GG0414M	2.0GHz,uFCPGA,479P,TR,PLASTIC,1.05V,34W,0to+100C,4MB,FSB800
T7100	0902-002196	uFCPGA	LF80537GG0332M	1.8GHz,uFCPGA,479P,TR,PLASTIC,1.05V,34W,0to+100C,2MB,FSB800

8)-2. Model Numbering Rule

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	S	P	2	8	N	H	*	*	*	*	/	2	0	0
Desc-ription	Transaction Group	Model Group	Model Name (Project)		CPU type	OS type	Derived Code (H/W & S/W)				Deli-miter	CPU Clock or Transaction Route Name		
		Product Name			Model Property									

- ■ Field 1 : Transaction Group (For a newly added transaction group, the code is notified to the: Strategy Group)
- ■ Field 2~4 : Product Group by Model and Line-up
- ■ Field 5 : CPU type in an alphanumeric character
- ■ Field 6 : OS in an alphanumeric character
- ■ Field 7~10 : The derived Model Number including the CPU clock (34-decimal code, Representative model is numbered in a separate numbering)
- ■ Field 11: Delimiter
- ■ Field 12~14: The CPU clock according to the standard (For Notebooks, special and direct sales are numbered by additional numbering)

1. Detailed rules for each field

- ■ Field 1~4: Transaction Group, Model Name, and Model Group depending on the model properties
- • Field 1: Transaction Group

Desktop	M	D	G	C	W
Note PC	S				N

- • Field 2: Model Group

Multi-Media	-	-	M
High End	T	H	T
Performance	P	B	P
Value	V	R	V
Entry	A	E	A
Slim D/T	F	F	-
Ultra Slim	Z	Z	Q
Slim 2 spindle	-	-	X

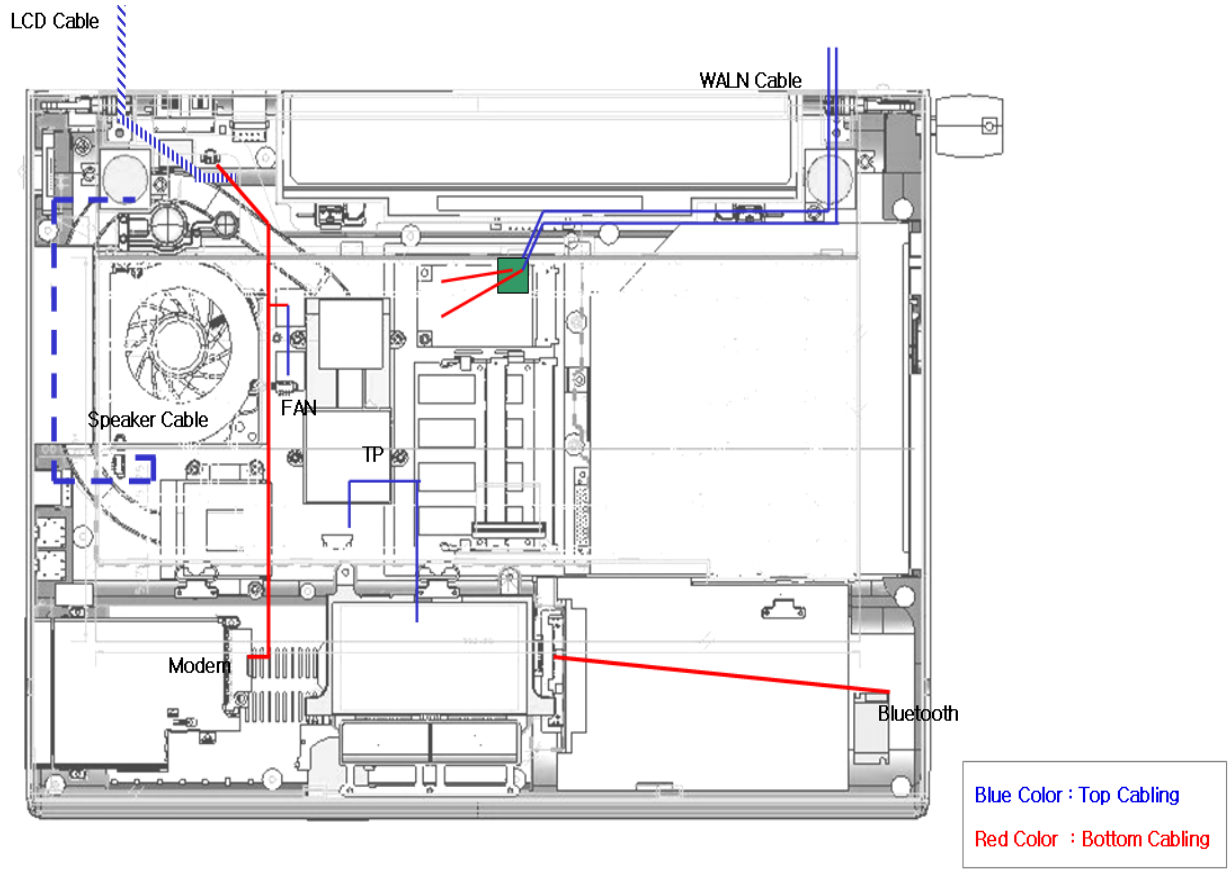
- • Field 3~4: Unique Model Name

Item	Numbering	Change of 3rd Code	Change of 4th Code
Contents	by Series	Major Change	Minor Change

※ The standard for identifying major or minor changes is determined by the market situation (reflecting the roadmap).

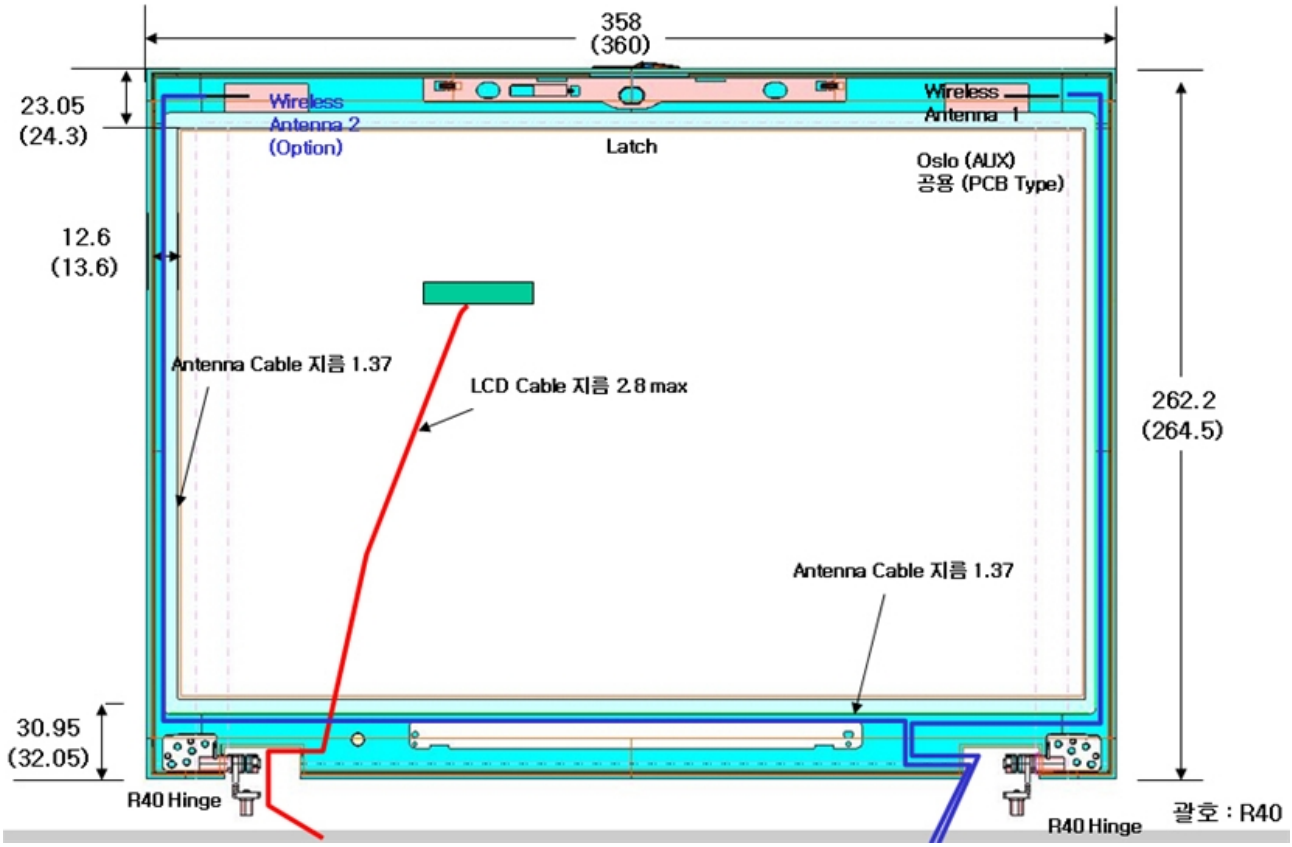
7. System Wire Diagram

1) Wiring Diagram (Top / Bottom)



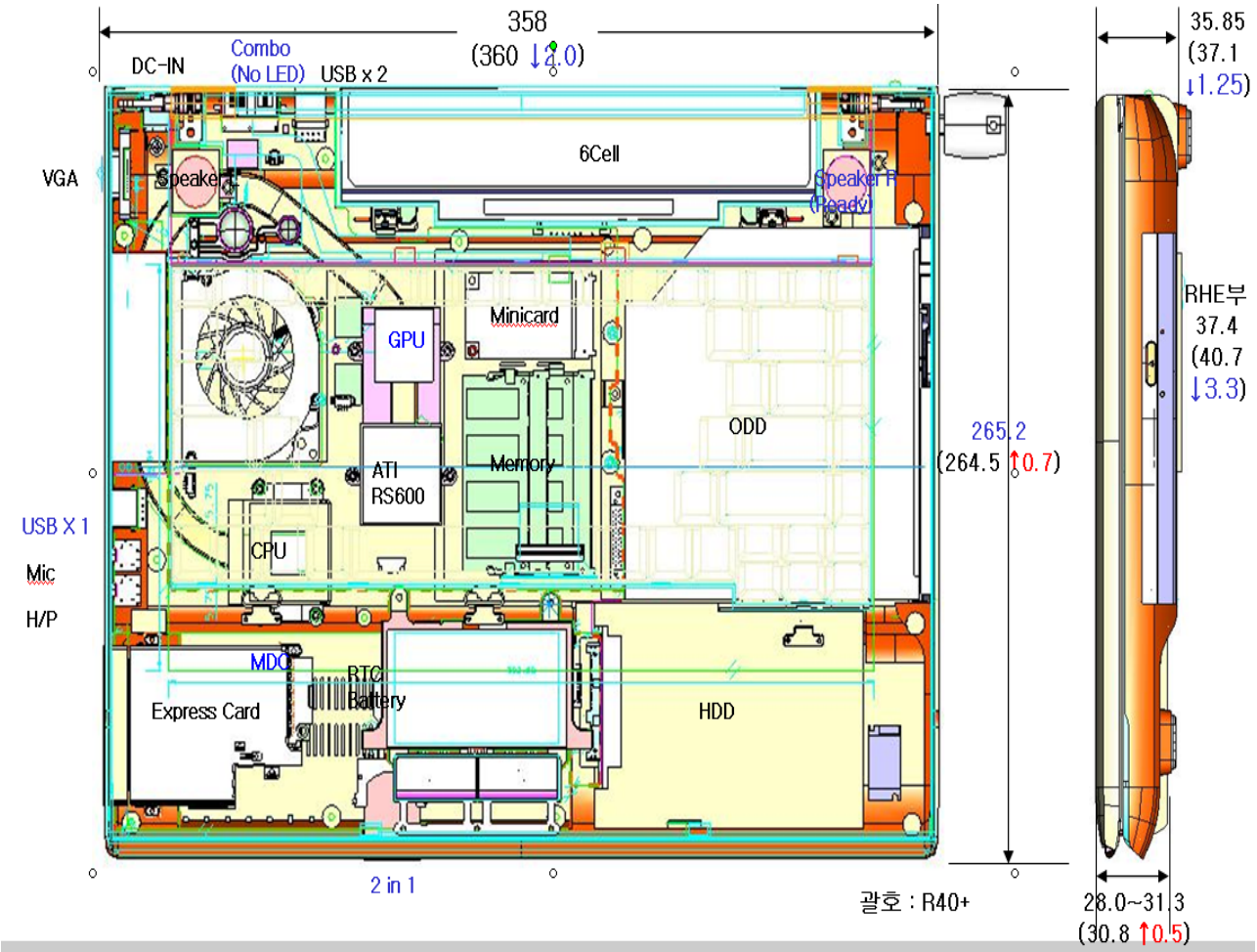
7. System Wire Diagram

2) LCD



7. System Wire Diagram

3) System Layout



Main System						
NAME	LEVEL	PART CODE	SPEC	Qty	SA/SNA	Option
D2	0.3	0401-000132	BAV99,70V,50mA,SOT-23,TP	1	SNA	
D3	0.3	0401-000132	BAV99,70V,50mA,SOT-23,TP	1	SNA	
D500	0.3	0401-000191	MMBD4148,75V,200mA,SOT-23,TP	1	SNA	
D517	0.3	0401-000191	MMBD4148,75V,200mA,SOT-23,TP	1	SNA	
D519	0.3	0401-000191	MMBD4148,75V,200mA,SOT-23,TP	1	SNA	
D521	0.3	0402-001024	MBR0540,40V,0.5A,SOD-123,TP	1	SNA	
D1	0.3	0402-001405	B340A,40V,3000mA,SMA,TP	1	SNA	
D514	0.3	0402-001405	B340A,40V,3000mA,SMA,TP	1	SNA	
D515	0.3	0402-001405	B340A,40V,3000mA,SMA,TP	1	SNA	
ZD500	0.3	0403-001047	BZX84C12L,5%,225mW,SOT-23,TP	1	SA	
D520	0.3	0404-000114	MMBD301,30V,200MA,SOT-23,TP	1	SNA	
D5	0.3	0404-001017	BAT54,30V,200MA,SOT-23,TP	1	SNA	
D511	0.3	0404-001017	BAT54,30V,200MA,SOT-23,TP	1	SNA	
D516	0.3	0404-001020	BAT54C,30V,200mA,SOT-23,TP	1	SNA	
D8	0.3	0404-001084	BAT54A,30V,200MA,SOT-23,TP	1	SNA	
D9	0.3	0404-001084	BAT54A,30V,200MA,SOT-23,TP	1	SNA	
D512	0.3	0404-001084	BAT54A,30V,200MA,SOT-23,TP	1	SNA	
D518	0.3	0404-001084	BAT54A,30V,200MA,SOT-23,TP	1	SNA	
D522	0.3	0404-001084	BAT54A,30V,200MA,SOT-23,TP	1	SNA	
Q14	0.3	0501-000465	MMBT3904,NPN,350mW,SOT-23,TP,30-300	1	SA	
Q30	0.3	0501-000465	MMBT3904,NPN,350mW,SOT-23,TP,30-300	1	SA	
Q39	0.3	0501-000465	MMBT3904,NPN,350mW,SOT-23,TP,30-300	1	SA	
Q519	0.3	0501-000465	MMBT3904,NPN,350mW,SOT-23,TP,30-300	1	SA	
Q521	0.3	0501-000465	MMBT3904,NPN,350mW,SOT-23,TP,30-300	1	SA	
Q526	0.3	0501-000465	MMBT3904,NPN,350mW,SOT-23,TP,30-300	1	SA	
Q527	0.3	0501-000465	MMBT3904,NPN,350mW,SOT-23,TP,30-300	1	SA	
Q3	0.3	0502-001226	BCP69,PNP,1350MW,SOT-223,TP,100-250	1	SNA	
Q502	0.3	0502-001226	BCP69,PNP,1350MW,SOT-223,TP,100-250	1	SNA	
Q520	0.3	0504-001157	DTA114YUA,PNP,200mW,10K/47K,UMT3,TP	1	SA	
Q543	0.3	0505-001049	BSS84,-50V,20V,-130mA,360mW,SOT-23,TP	1	SNA	
Q544	0.3	0505-001049	BSS84,-50V,20V,-130mA,360mW,SOT-23,TP	1	SNA	
Q545	0.3	0505-001049	BSS84,-50V,20V,-130mA,360mW,SOT-23,TP	1	SNA	
Q546	0.3	0505-001049	BSS84,-50V,20V,-130mA,360mW,SOT-23,TP	1	SNA	
Q547	0.3	0505-001049	BSS84,-50V,20V,-130mA,360mW,SOT-23,TP	1	SNA	
Q40	0.3	0505-001173	PHKD13N03LT,N,30V,10.4A,0.02ohm,3.57W,SO-8	1	SNA	
Q525	0.3	0505-001173	PHKD13N03LT,N,30V,10.4A,0.02ohm,3.57W,SO-8	1	SNA	
Q537	0.3	0505-001173	PHKD13N03LT,N,30V,10.4A,0.02ohm,3.57W,SO-8	1	SNA	
Q17	0.3	0505-001760	Si3456BDV,N,30V,6A,0.035ohm,2W,TSOP	1	SNA	
Q533	0.3	0505-001760	Si3456BDV,N,30V,6A,0.035ohm,2W,TSOP	1	SNA	
Q500	0.3	0505-001861	SI2315BDS,P,-12V,-3A,0.100OHM,0.75W,SOT-23	1	SNA	
Q516	0.3	0505-001861	SI2315BDS,P,-12V,-3A,0.100OHM,0.75W,SOT-23	1	SNA	
Q1	0.3	0505-001883	RHU002N06,N,60V,200MA,3.3OHM,0.15W,SOT-323	1	SNA	
Q11	0.3	0505-001883	RHU002N06,N,60V,200MA,3.3OHM,0.15W,SOT-323	1	SNA	
Q15	0.3	0505-001883	RHU002N06,N,60V,200MA,3.3OHM,0.15W,SOT-323	1	SNA	
Q16	0.3	0505-001883	RHU002N06,N,60V,200MA,3.3OHM,0.15W,SOT-323	1	SNA	
Q18	0.3	0505-001883	RHU002N06,N,60V,200MA,3.3OHM,0.15W,SOT-323	1	SNA	
Q19	0.3	0505-001883	RHU002N06,N,60V,200MA,3.3OHM,0.15W,SOT-323	1	SNA	
Q2	0.3	0505-001883	RHU002N06,N,60V,200MA,3.3OHM,0.15W,SOT-323	1	SNA	
Q20	0.3	0505-001883	RHU002N06,N,60V,200MA,3.3OHM,0.15W,SOT-323	1	SNA	
Q22	0.3	0505-001883	RHU002N06,N,60V,200MA,3.3OHM,0.15W,SOT-323	1	SNA	
Q24	0.3	0505-001883	RHU002N06,N,60V,200MA,3.3OHM,0.15W,SOT-323	1	SNA	
Q25	0.3	0505-001883	RHU002N06,N,60V,200MA,3.3OHM,0.15W,SOT-323	1	SNA	
Q400	0.3	0505-001883	RHU002N06,N,60V,200MA,3.3OHM,0.15W,SOT-323	1	SNA	
Q401	0.3	0505-001883	RHU002N06,N,60V,200MA,3.3OHM,0.15W,SOT-323	1	SNA	
Q402	0.3	0505-001883	RHU002N06,N,60V,200MA,3.3OHM,0.15W,SOT-323	1	SNA	
Q43	0.3	0505-001883	RHU002N06,N,60V,200MA,3.3OHM,0.15W,SOT-323	1	SNA	
Q45	0.3	0505-001883	RHU002N06,N,60V,200MA,3.3OHM,0.15W,SOT-323	1	SNA	
Q7	0.3	0505-001883	RHU002N06,N,60V,200MA,3.3OHM,0.15W,SOT-323	1	SNA	
Q501	0.3	0505-001883	RHU002N06,N,60V,200MA,3.3OHM,0.15W,SOT-323	1	SNA	
Q505	0.3	0505-001883	RHU002N06,N,60V,200MA,3.3OHM,0.15W,SOT-323	1	SNA	
Q508	0.3	0505-001883	RHU002N06,N,60V,200MA,3.3OHM,0.15W,SOT-323	1	SNA	
Q510	0.3	0505-001883	RHU002N06,N,60V,200MA,3.3OHM,0.15W,SOT-323	1	SNA	
Q511	0.3	0505-001883	RHU002N06,N,60V,200MA,3.3OHM,0.15W,SOT-323	1	SNA	
Q512	0.3	0505-001883	RHU002N06,N,60V,200MA,3.3OHM,0.15W,SOT-323	1	SNA	
Q517	0.3	0505-001883	RHU002N06,N,60V,200MA,3.3OHM,0.15W,SOT-323	1	SNA	
Q518	0.3	0505-001883	RHU002N06,N,60V,200MA,3.3OHM,0.15W,SOT-323	1	SNA	
Q522	0.3	0505-001883	RHU002N06,N,60V,200MA,3.3OHM,0.15W,SOT-323	1	SNA	
Q524	0.3	0505-001883	RHU002N06,N,60V,200MA,3.3OHM,0.15W,SOT-323	1	SNA	
Q529	0.3	0505-001883	RHU002N06,N,60V,200MA,3.3OHM,0.15W,SOT-323	1	SNA	

NAME	LEVEL	PART CODE	SPEC	Qty	SA/SNA	Option
Q530	0.3	0505-001883	RHU002N06,N,60V,200MA,3.3OHM,0.15W,SOT-323	1	SNA	
Q531	0.3	0505-001883	RHU002N06,N,60V,200MA,3.3OHM,0.15W,SOT-323	1	SNA	
Q532	0.3	0505-001883	RHU002N06,N,60V,200MA,3.3OHM,0.15W,SOT-323	1	SNA	
Q535	0.3	0505-001883	RHU002N06,N,60V,200MA,3.3OHM,0.15W,SOT-323	1	SNA	
Q536	0.3	0505-001883	RHU002N06,N,60V,200MA,3.3OHM,0.15W,SOT-323	1	SNA	
Q538	0.3	0505-001883	RHU002N06,N,60V,200MA,3.3OHM,0.15W,SOT-323	1	SNA	
Q541	0.3	0505-001883	RHU002N06,N,60V,200MA,3.3OHM,0.15W,SOT-323	1	SNA	
Q32	0.3	0505-001920	HAT2195R,N,30V,18A,0.0084ohm,2.5W,SOP-8	1	SNA	
Q34	0.3	0505-001920	HAT2195R,N,30V,18A,0.0084ohm,2.5W,SOP-8	1	SNA	
Q35	0.3	0505-001920	HAT2195R,N,30V,18A,0.0084ohm,2.5W,SOP-8	1	SNA	
Q36	0.3	0505-001920	HAT2195R,N,30V,18A,0.0084ohm,2.5W,SOP-8	1	SNA	
Q506	0.3	0505-001920	HAT2195R,N,30V,18A,0.0084ohm,2.5W,SOP-8	1	SNA	
Q9	0.3	0505-001920	HAT2195R,N,30V,18A,0.0084ohm,2.5W,SOP-8	1	SNA	
Q31	0.3	0505-001921	HAT2198R,N,30V,14A,0.014ohm,2.5W,SOP-8	1	SNA	
Q33	0.3	0505-001921	HAT2198R,N,30V,14A,0.014ohm,2.5W,SOP-8	1	SNA	
Q37	0.3	0505-001921	HAT2198R,N,30V,14A,0.014ohm,2.5W,SOP-8	1	SNA	
Q38	0.3	0505-001921	HAT2198R,N,30V,14A,0.014ohm,2.5W,SOP-8	1	SNA	
Q5	0.3	0505-002182	AP4415GM,P,-30V,-7A,0.032ohm,2.5W,SO-8	1	SNA	
Q50	0.3	0505-002183	AP4435GM,P,-30V,-8A,0.015ohm,2.5W,SO-8	1	SNA	
Q51	0.3	0505-002183	AP4435GM,P,-30V,-8A,0.015ohm,2.5W,SO-8	1	SNA	
Q542	0.3	0505-002183	AP4435GM,P,-30V,-8A,0.015ohm,2.5W,SO-8	1	SNA	
Q590	0.3	0505-002183	AP4435GM,P,-30V,-8A,0.015ohm,2.5W,SO-8	1	SNA	
Q10	0.3	0505-002189	AP6680AGM,N,30V,12A,0.0165ohm,2.5W,SO-8	1	SNA	
Q13	0.3	0505-002189	AP6680AGM,N,30V,12A,0.0165ohm,2.5W,SO-8	1	SNA	
Q21	0.3	0505-002189	AP6680AGM,N,30V,12A,0.0165ohm,2.5W,SO-8	1	SNA	
Q23	0.3	0505-002189	AP6680AGM,N,30V,12A,0.0165ohm,2.5W,SO-8	1	SNA	
Q4	0.3	0505-002189	AP6680AGM,N,30V,12A,0.0165ohm,2.5W,SO-8	1	SNA	
Q44	0.3	0505-002189	AP6680AGM,N,30V,12A,0.0165ohm,2.5W,SO-8	1	SNA	
Q591	0.3	0505-002189	AP6680AGM,N,30V,12A,0.0165ohm,2.5W,SO-8	1	SNA	
Q592	0.3	0505-002189	AP6680AGM,N,30V,12A,0.0165ohm,2.5W,SO-8	1	SNA	
Q6	0.3	0505-002189	AP6680AGM,N,30V,12A,0.0165ohm,2.5W,SO-8	1	SNA	
Q507	0.3	0505-002189	AP6680AGM,N,30V,12A,0.0165ohm,2.5W,SO-8	1	SNA	
Q539	0.3	0505-002189	AP6680AGM,N,30V,12A,0.0165ohm,2.5W,SO-8	1	SNA	
Q540	0.3	0505-002189	AP6680AGM,N,30V,12A,0.0165ohm,2.5W,SO-8	1	SNA	
LED1	0.3	0601-000189	SMD,P-GRN,3.2X1.6X1.1MM,557NM,3.2X1.6X1.1MM	1	SNA	
LED2	0.3	0601-000189	SMD,P-GRN,3.2X1.6X1.1MM,557NM,3.2X1.6X1.1MM	1	SNA	
LED3	0.3	0601-000189	SMD,P-GRN,3.2X1.6X1.1MM,557NM,3.2X1.6X1.1MM	1	SNA	
LED4	0.3	0601-000189	SMD,P-GRN,3.2X1.6X1.1MM,557NM,3.2X1.6X1.1MM	1	SNA	
LED6	0.3	0601-001402	SMD,RED/Y-GRN,1.2X1.5MM,660/570NM,1.2X1.5X0.7MM	1	SA	
LED5	0.3	0601-002037	SMD,BLUE,1.6x0.8x0.4mm,465/470nm,1.6x0.8x0.4mm	1	SA	
LED7	0.3	0601-002037	SMD,BLUE,1.6x0.8x0.4mm,465/470nm,1.6x0.8x0.4mm	1	SA	
U503	0.3	0801-002195	7S08,AND GATE,SOT-25,5P,63MIL,SINGLE,TP,-,7V,0.26V,-40to+85C,200mW,4.2V,25mA,0.	1	SA	
U520	0.3	0801-002195	7S08,AND GATE,SOT-25,5P,63MIL,SINGLE,TP,-,7V,0.26V,-40to+85C,200mW,4.2V,25mA,0.	1	SA	
U530	0.3	0801-002478	7SZ14,SCHMITT TRIGGER,SOT23,5P,63MIL,SINGLE,TR,PLASTIC,-,-,6V,-40to+85C,200mW,-0	1	SNA	
U500	0.3	0801-002998	74AHCT1G125,Single buffer,SC-70,5P,2x1.25mm,SINGLE,TP,3-STATE,4.5/5.5V,0.44V,-40	1	SNA	
U501	0.3	0801-002998	74AHCT1G125,Single buffer,SC-70,5P,2x1.25mm,SINGLE,TP,3-STATE,4.5/5.5V,0.44V,-40	1	SNA	
U10	0.3	0903-001439	H8S/2110B,16Bit,TQFP,100P,16x16mm,10MHz,TR,PLASTIC,3.3V,30mA,-20to+75C,2KB,8Bit,	1	SA	
U513	0.3	0904-002207	216MEP6CLA14FG,FCBGA,1201P,35x35mm,667MHz,TP,Plastic,1.2V,12W,-55to+105C,-	1	SA	
U13	0.3	0904-002225	AU6371,LQFP,48P,7x7mm,50MHz,TR,PLASTIC,3.3V,-,0to+70C,SDHC	1	SA	
U11	0.3	0904-002230	SB600,FcBGA,549P,23x23mm,100MHz,TR,PLASTIC,3.3V,10W,0to+95C,Rev:A21	1	SA	
U509	0.3	0904-002270	216PWAVA12FG,BGA,632P,25x25mm,100MHz,TR,PLASTIC,1.1V,12,0to+105C,M64-S	1	SA	
U1	0.3	1009-001036	HED59XXU12,SC-59A,4P,1.7x1.0x0.4mm,TP,PLASTIC,1.5-3.6V,3mA,-40to+85,-,-	1	SA	
U504	0.3	1103-001333	24C08A,1Kx8Bit,SOP,8P,5x4mm,-,2.7/5.5V,-,-40to+85C,1.6uA,TP	1	SA	
U507	0.3	1105-001688	K4J52324QC,GDDR3,512Mbit,8x2Mx32Bit,FBGA,136P,11x14mm,1.4ns,1.7/1.9V,-,0to+85C,	1	SA	
U511	0.3	1105-001688	K4J52324QC,GDDR3,512Mbit,8x2Mx32Bit,FBGA,136P,11x14mm,1.4ns,1.7/1.9V,-,0to+85C,	1	SA	
U522	0.3	1107-001646	MX25L8005,8Mbit,8Mx1,SOP,8P,5.28x5.23mm,-,2.7/3.6V,-,0to+70,50uA,TR	1	SA	
U518	0.3	1201-001991	TPA6017A2PWPR,TSSOP,20P,6.5x4.4mm,4,21.6dB,PLASTIC,6V,1.4W,-40to+85C,-,-,-,-,-	1	SA	
U508	0.3	1203-002062	5219,SOT-23,5P,63MIL,PLASTIC,-,-,-40to+125C,500mA,-,TR,-	1	SNA	
U524	0.3	1203-002546	MIC5258,SOT-23-5,5P,65MIL,PLASTIC,1.2V,-,-40TO+125C,150MA,5V,TP	1	SA	
U528	0.3	1203-003344	MIC5252,SOT-23,5P,2.9x1.6mm,PLASTIC,4.702/4.797V,-,–40to+125C,425mA,-,TP,-	1	SA	
U5	0.3	1203-003480	MAX1909,TQFN,28P,5x5mm,PLASTIC,9.12/17.65V,1666mW,-40to+85C,-,4.2023/4.2447V,TP	1	SA	
U6	0.3	1203-003765	SC486IMLTRT,MLP,24P,4x4mm,PLASTIC,1.5/3V,-,-40to+150C,2A,-,TP	1	SA	
U516	0.3	1203-003898	SC452IMLTRT,MLP,44P,7x7mm,PLASTIC,0.3/6.5V,-,-40to+125C,-,1.97/2.03V,TP	1	SA	
U4	0.3	1203-003903	SC470ITSTRT,TSSOP,14P,5x4.4mm,PLASTIC,0.5/5.5V,-,-40to+125C,-,-,TP	1	SA	
U510	0.3	1203-003905	SC338IMSTR,MSOP,10P,3x3mm,PLASTIC,4.5/13.2V,-,-40to+85C,-,0.487/0.512V,TP	1	SC	
U12	0.3	1203-004685	SC415,MLPQ,24P,4x4mm,PLASTIC,0.75/5V,-,-40to+85C,-,-,TP	1	SA	
U529	0.3	1203-004687	TPS51120,QFN,32P,5x5mm,PLASTIC,-0.1/5.5V,2600mW,-40to+85C,20A,1.97/2.03V,TP	1	SA	
U512	0.3	1205-002541	CY25100SXC-004AT,SOIC,8P,150MIL,PLASTIC,3.45V,350mW,0to+70C,TP,-	1	SNA	
U519	0.3	1205-002807	R5538D001-TR-F,QFN,20P,4x4mm,PLASTIC,3.6V,40mW,-40to+85C,TP,Express Card Power S	1	SA	

NAME	LEVEL	PART CODE	SPEC	Qty	SA/SNA	Option
U527	0.3	1205-002853	ALC262-GR,LQFP,48P,7x7mm,PLASTIC,5.5V,-,0to+70C,TR,Intel Azalia Interface	1	SA	
U502	0.3	1205-003090	88E8039,QFN,64P,9x9mm,PLASTIC,3.465V,380mW,0to+70C,TR,PCI-E 10/100 Ethernet	1	SA	
U517	0.3	1205-003157	ICS951461,TSSOP,64P,17x6.1mm,PLASTIC,3.3V,-,0to+70C,TR,-	1	SA	
U521	0.3	1209-001718	EMC2102,QFN,28P,5x5mm,PLASTIC,5.5V,0.9W,0to+125C,TP	1	SA	
TH1	0.3	1404-001089	0.21ohm,-,-,6Vac,40A,2.2A,TP	1	SNA	
TH500	0.3	1404-001089	0.21ohm,-,-,6Vac,40A,2.2A,TP	1	SNA	
R673	0.3	2007-000052	10Kohm,1%,1/10W,TP,1608	1	SA	
R562	0.3	2007-000057	40.2Kohm,1%,1/10W,TP,1608	1	SNA	
R11	0.3	2007-000070	0ohm,5%,1/10W,TP,1608	1	SNA	
R137	0.3	2007-000070	0ohm,5%,1/10W,TP,1608	1	SNA	
R138	0.3	2007-000070	0ohm,5%,1/10W,TP,1608	1	SNA	
R169	0.3	2007-000070	0ohm,5%,1/10W,TP,1608	1	SNA	
R20	0.3	2007-000070	0ohm,5%,1/10W,TP,1608	1	SNA	
R22	0.3	2007-000070	0ohm,5%,1/10W,TP,1608	1	SNA	
R23	0.3	2007-000070	0ohm,5%,1/10W,TP,1608	1	SNA	
R239	0.3	2007-000070	0ohm,5%,1/10W,TP,1608	1	SNA	
R245	0.3	2007-000070	0ohm,5%,1/10W,TP,1608	1	SNA	
R865	0.3	2007-000070	0ohm,5%,1/10W,TP,1608	1	SNA	
R523	0.3	2007-000070	0ohm,5%,1/10W,TP,1608	1	SNA	
R567	0.3	2007-000070	0ohm,5%,1/10W,TP,1608	1	SNA	
R607	0.3	2007-000070	0ohm,5%,1/10W,TP,1608	1	SNA	
R608	0.3	2007-000070	0ohm,5%,1/10W,TP,1608	1	SNA	
R623	0.3	2007-000070	0ohm,5%,1/10W,TP,1608	1	SNA	
R825	0.3	2007-000070	0ohm,5%,1/10W,TP,1608	1	SNA	
R826	0.3	2007-000070	0ohm,5%,1/10W,TP,1608	1	SNA	
R866	0.3	2007-000070	0ohm,5%,1/10W,TP,1608	1	SNA	
R867	0.3	2007-000070	0ohm,5%,1/10W,TP,1608	1	SNA	
R210	0.3	2007-000077	470ohm,5%,1/10W,TP,1608	1	SNA	
R215	0.3	2007-000141	2.2Kohm,5%,1/16W,TP,1005	1	SNA	
R217	0.3	2007-000141	2.2Kohm,5%,1/16W,TP,1005	1	SNA	
R650	0.3	2007-000141	2.2Kohm,5%,1/16W,TP,1005	1	SNA	
R693	0.3	2007-000141	2.2Kohm,5%,1/16W,TP,1005	1	SNA	
R694	0.3	2007-000141	2.2Kohm,5%,1/16W,TP,1005	1	SNA	
R808	0.3	2007-000141	2.2Kohm,5%,1/16W,TP,1005	1	SNA	
R811	0.3	2007-000141	2.2Kohm,5%,1/16W,TP,1005	1	SNA	
R115	0.3	2007-000143	4.7Kohm,5%,1/16W,TP,1005	1	SNA	
R119	0.3	2007-000143	4.7Kohm,5%,1/16W,TP,1005	1	SNA	
R120	0.3	2007-000143	4.7Kohm,5%,1/16W,TP,1005	1	SNA	
R121	0.3	2007-000143	4.7Kohm,5%,1/16W,TP,1005	1	SNA	
R255	0.3	2007-000143	4.7Kohm,5%,1/16W,TP,1005	1	SNA	
R256	0.3	2007-000143	4.7Kohm,5%,1/16W,TP,1005	1	SNA	
R272	0.3	2007-000143	4.7Kohm,5%,1/16W,TP,1005	1	SNA	
R49	0.3	2007-000143	4.7Kohm,5%,1/16W,TP,1005	1	SNA	
R7	0.3	2007-000143	4.7Kohm,5%,1/16W,TP,1005	1	SNA	
R70	0.3	2007-000143	4.7Kohm,5%,1/16W,TP,1005	1	SNA	
R8	0.3	2007-000143	4.7Kohm,5%,1/16W,TP,1005	1	SNA	
R860	0.3	2007-000143	4.7Kohm,5%,1/16W,TP,1005	1	SNA	
R861	0.3	2007-000143	4.7Kohm,5%,1/16W,TP,1005	1	SNA	
R506	0.3	2007-000143	4.7Kohm,5%,1/16W,TP,1005	1	SNA	
R507	0.3	2007-000143	4.7Kohm,5%,1/16W,TP,1005	1	SNA	
R513	0.3	2007-000143	4.7Kohm,5%,1/16W,TP,1005	1	SNA	
R514	0.3	2007-000143	4.7Kohm,5%,1/16W,TP,1005	1	SNA	
R518	0.3	2007-000143	4.7Kohm,5%,1/16W,TP,1005	1	SNA	
R524	0.3	2007-000143	4.7Kohm,5%,1/16W,TP,1005	1	SNA	
R597	0.3	2007-000143	4.7Kohm,5%,1/16W,TP,1005	1	SNA	
R599	0.3	2007-000143	4.7Kohm,5%,1/16W,TP,1005	1	SNA	
R601	0.3	2007-000143	4.7Kohm,5%,1/16W,TP,1005	1	SNA	
R727	0.3	2007-000143	4.7Kohm,5%,1/16W,TP,1005	1	SNA	
R858	0.3	2007-000143	4.7Kohm,5%,1/16W,TP,1005	1	SNA	
R5	0.3	2007-000146	6.8Kohm,5%,1/16W,TP,1005	1	SNA	
R6	0.3	2007-000146	6.8Kohm,5%,1/16W,TP,1005	1	SNA	
R717	0.3	2007-000147	8.2Kohm,5%,1/16W,TP,1005	1	SNA	
R827	0.3	2007-000147	8.2Kohm,5%,1/16W,TP,1005	1	SNA	
R186	0.3	2007-000148	10Kohm,5%,1/16W,TP,1005	1	SNA	
R203	0.3	2007-000148	10Kohm,5%,1/16W,TP,1005	1	SNA	
R249	0.3	2007-000148	10Kohm,5%,1/16W,TP,1005	1	SNA	
R250	0.3	2007-000148	10Kohm,5%,1/16W,TP,1005	1	SNA	
R251	0.3	2007-000148	10Kohm,5%,1/16W,TP,1005	1	SNA	
R252	0.3	2007-000148	10Kohm,5%,1/16W,TP,1005	1	SNA	

NAME	LEVEL	PART CODE	SPEC	Qty	SA/SNA	Option
R253	0.3	2007-000148	10Kohm,5%,1/16W,TP,1005	1	SNA	
R254	0.3	2007-000148	10Kohm,5%,1/16W,TP,1005	1	SNA	
R258	0.3	2007-000148	10Kohm,5%,1/16W,TP,1005	1	SNA	
R279	0.3	2007-000148	10Kohm,5%,1/16W,TP,1005	1	SNA	
R292	0.3	2007-000148	10Kohm,5%,1/16W,TP,1005	1	SNA	
R293	0.3	2007-000148	10Kohm,5%,1/16W,TP,1005	1	SNA	
R294	0.3	2007-000148	10Kohm,5%,1/16W,TP,1005	1	SNA	
R84	0.3	2007-000148	10Kohm,5%,1/16W,TP,1005	1	SNA	
R869	0.3	2007-000148	10Kohm,5%,1/16W,TP,1005	1	SNA	
R511	0.3	2007-000148	10Kohm,5%,1/16W,TP,1005	1	SNA	
R575	0.3	2007-000148	10Kohm,5%,1/16W,TP,1005	1	SNA	
R576	0.3	2007-000148	10Kohm,5%,1/16W,TP,1005	1	SNA	
R593	0.3	2007-000148	10Kohm,5%,1/16W,TP,1005	1	SNA	
R658	0.3	2007-000148	10Kohm,5%,1/16W,TP,1005	1	SNA	
R661	0.3	2007-000148	10Kohm,5%,1/16W,TP,1005	1	SNA	
R714	0.3	2007-000148	10Kohm,5%,1/16W,TP,1005	1	SNA	
R760	0.3	2007-000148	10Kohm,5%,1/16W,TP,1005	1	SNA	
R761	0.3	2007-000148	10Kohm,5%,1/16W,TP,1005	1	SNA	
R765	0.3	2007-000148	10Kohm,5%,1/16W,TP,1005	1	SNA	
R794	0.3	2007-000148	10Kohm,5%,1/16W,TP,1005	1	SNA	
R797	0.3	2007-000148	10Kohm,5%,1/16W,TP,1005	1	SNA	
R803	0.3	2007-000148	10Kohm,5%,1/16W,TP,1005	1	SNA	
R815	0.3	2007-000148	10Kohm,5%,1/16W,TP,1005	1	SNA	
R816	0.3	2007-000148	10Kohm,5%,1/16W,TP,1005	1	SNA	
R831	0.3	2007-000148	10Kohm,5%,1/16W,TP,1005	1	SNA	
R833	0.3	2007-000148	10Kohm,5%,1/16W,TP,1005	1	SNA	
R835	0.3	2007-000148	10Kohm,5%,1/16W,TP,1005	1	SNA	
R839	0.3	2007-000148	10Kohm,5%,1/16W,TP,1005	1	SNA	
R841	0.3	2007-000148	10Kohm,5%,1/16W,TP,1005	1	SNA	
R830	0.3	2007-000156	30Kohm,5%,1/16W,TP,1005	1	SNA	
R299	0.3	2007-000157	47Kohm,5%,1/16W,TP,1005	1	SNA	
R682	0.3	2007-000157	47Kohm,5%,1/16W,TP,1005	1	SNA	
R762	0.3	2007-000157	47Kohm,5%,1/16W,TP,1005	1	SNA	
R257	0.3	2007-000162	100Kohm,5%,1/16W,TP,1005	1	SNA	
R259	0.3	2007-000162	100Kohm,5%,1/16W,TP,1005	1	SNA	
R510	0.3	2007-000162	100Kohm,5%,1/16W,TP,1005	1	SNA	
R669	0.3	2007-000162	100Kohm,5%,1/16W,TP,1005	1	SNA	
R722	0.3	2007-000162	100Kohm,5%,1/16W,TP,1005	1	SNA	
R723	0.3	2007-000162	100Kohm,5%,1/16W,TP,1005	1	SNA	
R288	0.3	2007-000165	200Kohm,5%,1/16W,TP,1005	1	SNA	
R109	0.3	2007-000168	470Kohm,5%,1/16W,TP,1005	1	SNA	
R14	0.3	2007-000168	470Kohm,5%,1/16W,TP,1005	1	SNA	
R537	0.3	2007-000168	470Kohm,5%,1/16W,TP,1005	1	SNA	
R785	0.3	2007-000168	470Kohm,5%,1/16W,TP,1005	1	SNA	
R817	0.3	2007-000168	470Kohm,5%,1/16W,TP,1005	1	SNA	
R843	0.3	2007-000170	1Mohm,5%,1/16W,TP,1005	1	SNA	
R213	0.3	2007-000171	0ohm,5%,1/16W,TP,1005	1	SNA	
R28	0.3	2007-000171	0ohm,5%,1/16W,TP,1005	1	SNA	
R303	0.3	2007-000171	0ohm,5%,1/16W,TP,1005	1	SNA	
R305	0.3	2007-000171	0ohm,5%,1/16W,TP,1005	1	SNA	
R68	0.3	2007-000171	0ohm,5%,1/16W,TP,1005	1	SNA	
R83	0.3	2007-000171	0ohm,5%,1/16W,TP,1005	1	SNA	
R86	0.3	2007-000171	0ohm,5%,1/16W,TP,1005	1	SNA	
R531	0.3	2007-000171	0ohm,5%,1/16W,TP,1005	1	SNA	
R581	0.3	2007-000171	0ohm,5%,1/16W,TP,1005	1	SNA	
R596	0.3	2007-000171	0ohm,5%,1/16W,TP,1005	1	SNA	
R730	0.3	2007-000171	0ohm,5%,1/16W,TP,1005	1	SNA	
R732	0.3	2007-000171	0ohm,5%,1/16W,TP,1005	1	SNA	
R753	0.3	2007-000171	0ohm,5%,1/16W,TP,1005	1	SNA	
R757	0.3	2007-000171	0ohm,5%,1/16W,TP,1005	1	SNA	
R758	0.3	2007-000171	0ohm,5%,1/16W,TP,1005	1	SNA	
R787	0.3	2007-000171	0ohm,5%,1/16W,TP,1005	1	SNA	
R847	0.3	2007-000171	0ohm,5%,1/16W,TP,1005	1	SNA	
R281	0.3	2007-000173	22ohm,5%,1/16W,TP,1005	1	SNA	
R282	0.3	2007-000173	22ohm,5%,1/16W,TP,1005	1	SNA	
R824	0.3	2007-000173	22ohm,5%,1/16W,TP,1005	1	SNA	
R223	0.3	2007-000309	10ohm,5%,1/10W,TP,1608	1	SA	
R224	0.3	2007-000309	10ohm,5%,1/10W,TP,1608	1	SA	
R290	0.3	2007-000309	10ohm,5%,1/10W,TP,1608	1	SA	

NAME	LEVEL	PART CODE	SPEC	Qty	SA/SNA	Option
R566	0.3	2007-000309	10ohm,5%,1/10W,TP,1608	1	SA	
R807	0.3	2007-000309	10ohm,5%,1/10W,TP,1608	1	SA	
R197	0.3	2007-000539	200ohm,5%,1/10W,TP,1608	1	SNA	
R212	0.3	2007-000539	200ohm,5%,1/10W,TP,1608	1	SNA	
R67	0.3	2007-000608	240ohm,5%,1/10W,TP,1608	1	SNA	
R69	0.3	2007-000608	240ohm,5%,1/10W,TP,1608	1	SNA	
R594	0.3	2007-000608	240ohm,5%,1/10W,TP,1608	1	SNA	
R222	0.3	2007-000695	3.3ohm,5%,1/10W,TP,1608	1	SNA	
R263	0.3	2007-000695	3.3ohm,5%,1/10W,TP,1608	1	SNA	
R269	0.3	2007-000695	3.3ohm,5%,1/10W,TP,1608	1	SNA	
R27	0.3	2007-000695	3.3ohm,5%,1/10W,TP,1608	1	SNA	
R61	0.3	2007-000695	3.3ohm,5%,1/10W,TP,1608	1	SNA	
R685	0.3	2007-000695	3.3ohm,5%,1/10W,TP,1608	1	SNA	
R829	0.3	2007-000695	3.3ohm,5%,1/10W,TP,1608	1	SNA	
R845	0.3	2007-000695	3.3ohm,5%,1/10W,TP,1608	1	SNA	
R851	0.3	2007-000736	30Kohm,1%,1/10W,TP,1608	1	SNA	
R862	0.3	2007-000882	4.7ohm,5%,1/10W,TP,1608	1	SNA	
R863	0.3	2007-000882	4.7ohm,5%,1/10W,TP,1608	1	SNA	
R301	0.3	2007-000972	5.1ohm,5%,1/4W,TP,3216	1	SA	
R105	0.3	2007-000982	5.6Kohm,5%,1/16W,TP,1005	1	SNA	
R47	0.3	2007-000982	5.6Kohm,5%,1/16W,TP,1005	1	SNA	
R541	0.3	2007-000982	5.6Kohm,5%,1/16W,TP,1005	1	SNA	
R585	0.3	2007-000982	5.6Kohm,5%,1/16W,TP,1005	1	SNA	
R791	0.3	2007-001038	56Kohm,1%,1/10W,TP,1608	1	SNA	
R206	0.3	2007-001044	56ohm,5%,1/10W,TP,1608	1	SNA	
R628	0.3	2007-001044	56ohm,5%,1/10W,TP,1608	1	SNA	
R221	0.3	2007-001139	7.5Kohm,1%,1/10W,TP,1608	1	SNA	
R287	0.3	2007-001139	7.5Kohm,1%,1/10W,TP,1608	1	SNA	
R687	0.3	2007-001139	7.5Kohm,1%,1/10W,TP,1608	1	SNA	
R850	0.3	2007-001139	7.5Kohm,1%,1/10W,TP,1608	1	SNA	
R198	0.3	2007-001292	33ohm,5%,1/16W,TP,1005	1	SNA	
R204	0.3	2007-001292	33ohm,5%,1/16W,TP,1005	1	SNA	
R297	0.3	2007-001292	33ohm,5%,1/16W,TP,1005	1	SNA	
R65	0.3	2007-001292	33ohm,5%,1/16W,TP,1005	1	SNA	
R638	0.3	2007-001292	33ohm,5%,1/16W,TP,1005	1	SNA	
R640	0.3	2007-001292	33ohm,5%,1/16W,TP,1005	1	SNA	
R642	0.3	2007-001292	33ohm,5%,1/16W,TP,1005	1	SNA	
R644	0.3	2007-001292	33ohm,5%,1/16W,TP,1005	1	SNA	
R646	0.3	2007-001292	33ohm,5%,1/16W,TP,1005	1	SNA	
R649	0.3	2007-001292	33ohm,5%,1/16W,TP,1005	1	SNA	
R651	0.3	2007-001292	33ohm,5%,1/16W,TP,1005	1	SNA	
R652	0.3	2007-001292	33ohm,5%,1/16W,TP,1005	1	SNA	
R695	0.3	2007-001292	33ohm,5%,1/16W,TP,1005	1	SNA	
R696	0.3	2007-001292	33ohm,5%,1/16W,TP,1005	1	SNA	
R733	0.3	2007-001292	33ohm,5%,1/16W,TP,1005	1	SNA	
R735	0.3	2007-001292	33ohm,5%,1/16W,TP,1005	1	SNA	
R737	0.3	2007-001292	33ohm,5%,1/16W,TP,1005	1	SNA	
R740	0.3	2007-001292	33ohm,5%,1/16W,TP,1005	1	SNA	
R741	0.3	2007-001292	33ohm,5%,1/16W,TP,1005	1	SNA	
R744	0.3	2007-001292	33ohm,5%,1/16W,TP,1005	1	SNA	
R745	0.3	2007-001292	33ohm,5%,1/16W,TP,1005	1	SNA	
R748	0.3	2007-001292	33ohm,5%,1/16W,TP,1005	1	SNA	
R749	0.3	2007-001292	33ohm,5%,1/16W,TP,1005	1	SNA	
R752	0.3	2007-001292	33ohm,5%,1/16W,TP,1005	1	SNA	
R754	0.3	2007-001292	33ohm,5%,1/16W,TP,1005	1	SNA	
R768	0.3	2007-001292	33ohm,5%,1/16W,TP,1005	1	SNA	
R770	0.3	2007-001292	33ohm,5%,1/16W,TP,1005	1	SNA	
R772	0.3	2007-001292	33ohm,5%,1/16W,TP,1005	1	SNA	
R774	0.3	2007-001292	33ohm,5%,1/16W,TP,1005	1	SNA	
R775	0.3	2007-001292	33ohm,5%,1/16W,TP,1005	1	SNA	
R777	0.3	2007-001292	33ohm,5%,1/16W,TP,1005	1	SNA	
R778	0.3	2007-001292	33ohm,5%,1/16W,TP,1005	1	SNA	
R779	0.3	2007-001292	33ohm,5%,1/16W,TP,1005	1	SNA	
R781	0.3	2007-001292	33ohm,5%,1/16W,TP,1005	1	SNA	
R782	0.3	2007-001292	33ohm,5%,1/16W,TP,1005	1	SNA	
R795	0.3	2007-001292	33ohm,5%,1/16W,TP,1005	1	SNA	
R100	0.3	2007-001305	120ohm,5%,1/16W,TP,1005	1	SNA	
R101	0.3	2007-001305	120ohm,5%,1/16W,TP,1005	1	SNA	
R39	0.3	2007-001305	120ohm,5%,1/16W,TP,1005	1	SNA	

NAME	LEVEL	PART CODE	SPEC	Qty	SA/SNA	Option
R40	0.3	2007-001305	120ohm,5%,1/16W,TP,1005	1	SNA	
R41	0.3	2007-001305	120ohm,5%,1/16W,TP,1005	1	SNA	
R43	0.3	2007-001305	120ohm,5%,1/16W,TP,1005	1	SNA	
R45	0.3	2007-001305	120ohm,5%,1/16W,TP,1005	1	SNA	
R97	0.3	2007-001305	120ohm,5%,1/16W,TP,1005	1	SNA	
R98	0.3	2007-001305	120ohm,5%,1/16W,TP,1005	1	SNA	
R99	0.3	2007-001305	120ohm,5%,1/16W,TP,1005	1	SNA	
R296	0.3	2007-001313	330ohm,5%,1/16W,TP,1005	1	SNA	
R244	0.3	2007-002910	30.1Kohm,1%,1/10W,TP,1608	1	SNA	
R34	0.3	2007-002910	30.1Kohm,1%,1/10W,TP,1608	1	SNA	
R534	0.3	2007-002910	30.1Kohm,1%,1/10W,TP,1608	1	SNA	
R554	0.3	2007-002910	30.1Kohm,1%,1/10W,TP,1608	1	SNA	
R580	0.3	2007-002910	30.1Kohm,1%,1/10W,TP,1608	1	SNA	
R676	0.3	2007-002910	30.1Kohm,1%,1/10W,TP,1608	1	SNA	
R783	0.3	2007-002910	30.1Kohm,1%,1/10W,TP,1608	1	SNA	
R35	0.3	2007-002918	51.1Kohm,1%,1/10W,TP,1608	1	SNA	
R509	0.3	2007-002918	51.1Kohm,1%,1/10W,TP,1608	1	SNA	
R122	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R123	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R124	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R125	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R126	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R127	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R128	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R129	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R130	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R131	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R132	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R133	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R134	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R135	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R136	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R143	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R144	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R145	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R146	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R147	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R148	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R149	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R150	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R151	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R152	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R153	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R154	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R155	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R156	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R157	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R158	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R159	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R160	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R161	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R162	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R163	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R164	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R165	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R166	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R167	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R168	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R199	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R200	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R208	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R209	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R602	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R603	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R604	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R605	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R606	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R611	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R612	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R613	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	

NAME	LEVEL	PART CODE	SPEC	Qty	SA/SNA	Option
R614	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R615	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R616	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R617	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R618	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R832	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R834	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R836	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R837	0.3	2007-002970	56ohm,5%,1/16W,TP,1005	1	SNA	
R525	0.3	2007-007046	0.02ohm,1%,1W,TP,6432	1	SNA	
R715	0.3	2007-007100	10Mohm,5%,1/16W,TP,1005	1	SNA	
R10	0.3	2007-007107	100Kohm,1%,1/16W,TP,1005	1	SNA	
R480	0.3	2007-007107	100Kohm,1%,1/16W,TP,1005	1	SNA	
R57	0.3	2007-007107	100Kohm,1%,1/16W,TP,1005	1	SNA	
R82	0.3	2007-007107	100Kohm,1%,1/16W,TP,1005	1	SNA	
R9	0.3	2007-007107	100Kohm,1%,1/16W,TP,1005	1	SNA	
R535	0.3	2007-007107	100Kohm,1%,1/16W,TP,1005	1	SNA	
R784	0.3	2007-007107	100Kohm,1%,1/16W,TP,1005	1	SNA	
R828	0.3	2007-007107	100Kohm,1%,1/16W,TP,1005	1	SNA	
R846	0.3	2007-007107	100Kohm,1%,1/16W,TP,1005	1	SNA	
R482	0.3	2007-007108	43.2Kohm,1%,1/16W,TP,1005	1	SNA	
R555	0.3	2007-007108	43.2Kohm,1%,1/16W,TP,1005	1	SNA	
R578	0.3	2007-007108	43.2Kohm,1%,1/16W,TP,1005	1	SNA	
R579	0.3	2007-007108	43.2Kohm,1%,1/16W,TP,1005	1	SNA	
R675	0.3	2007-007108	43.2Kohm,1%,1/16W,TP,1005	1	SNA	
R25	0.3	2007-007131	13Kohm,1%,1/16W,TP,1005	1	SNA	
R300	0.3	2007-007131	13Kohm,1%,1/16W,TP,1005	1	SNA	
R240	0.3	2007-007142	10Kohm,1%,1/16W,TP,1005	1	SNA	
R241	0.3	2007-007142	10Kohm,1%,1/16W,TP,1005	1	SNA	
R26	0.3	2007-007142	10Kohm,1%,1/16W,TP,1005	1	SNA	
R264	0.3	2007-007142	10Kohm,1%,1/16W,TP,1005	1	SNA	
R265	0.3	2007-007142	10Kohm,1%,1/16W,TP,1005	1	SNA	
R266	0.3	2007-007142	10Kohm,1%,1/16W,TP,1005	1	SNA	
R298	0.3	2007-007142	10Kohm,1%,1/16W,TP,1005	1	SNA	
R31	0.3	2007-007142	10Kohm,1%,1/16W,TP,1005	1	SNA	
R33	0.3	2007-007142	10Kohm,1%,1/16W,TP,1005	1	SNA	
R481	0.3	2007-007142	10Kohm,1%,1/16W,TP,1005	1	SNA	
R53	0.3	2007-007142	10Kohm,1%,1/16W,TP,1005	1	SNA	
R54	0.3	2007-007142	10Kohm,1%,1/16W,TP,1005	1	SNA	
R71	0.3	2007-007142	10Kohm,1%,1/16W,TP,1005	1	SNA	
R527	0.3	2007-007142	10Kohm,1%,1/16W,TP,1005	1	SNA	
R538	0.3	2007-007142	10Kohm,1%,1/16W,TP,1005	1	SNA	
R539	0.3	2007-007142	10Kohm,1%,1/16W,TP,1005	1	SNA	
R542	0.3	2007-007142	10Kohm,1%,1/16W,TP,1005	1	SNA	
R543	0.3	2007-007142	10Kohm,1%,1/16W,TP,1005	1	SNA	
R549	0.3	2007-007142	10Kohm,1%,1/16W,TP,1005	1	SNA	
R563	0.3	2007-007142	10Kohm,1%,1/16W,TP,1005	1	SNA	
R583	0.3	2007-007142	10Kohm,1%,1/16W,TP,1005	1	SNA	
R755	0.3	2007-007142	10Kohm,1%,1/16W,TP,1005	1	SNA	
R796	0.3	2007-007142	10Kohm,1%,1/16W,TP,1005	1	SNA	
R812	0.3	2007-007142	10Kohm,1%,1/16W,TP,1005	1	SNA	
R818	0.3	2007-007142	10Kohm,1%,1/16W,TP,1005	1	SNA	
R96	0.3	2007-007226	49.9ohm,1%,1/10W,TP,1608	1	SNA	
R504	0.3	2007-007226	49.9ohm,1%,1/10W,TP,1608	1	SNA	
R505	0.3	2007-007226	49.9ohm,1%,1/10W,TP,1608	1	SNA	
R516	0.3	2007-007226	49.9ohm,1%,1/10W,TP,1608	1	SNA	
R517	0.3	2007-007226	49.9ohm,1%,1/10W,TP,1608	1	SNA	
R655	0.3	2007-007226	49.9ohm,1%,1/10W,TP,1608	1	SNA	
R814	0.3	2007-007226	49.9ohm,1%,1/10W,TP,1608	1	SNA	
R142	0.3	2007-007228	681ohm,1%,1/10W,TP,1608	1	SNA	
R139	0.3	2007-007302	24.9ohm,1%,1/10W,TP,1608	1	SNA	
R107	0.3	2007-007306	100ohm,1%,1/16W,TP,1005	1	SNA	
R15	0.3	2007-007306	100ohm,1%,1/16W,TP,1005	1	SNA	
R174	0.3	2007-007306	100ohm,1%,1/16W,TP,1005	1	SNA	
R175	0.3	2007-007306	100ohm,1%,1/16W,TP,1005	1	SNA	
R89	0.3	2007-007306	100ohm,1%,1/16W,TP,1005	1	SNA	
R526	0.3	2007-007306	100ohm,1%,1/16W,TP,1005	1	SNA	
R587	0.3	2007-007306	100ohm,1%,1/16W,TP,1005	1	SNA	
R634	0.3	2007-007306	100ohm,1%,1/16W,TP,1005	1	SNA	
R684	0.3	2007-007306	100ohm,1%,1/16W,TP,1005	1	SNA	

NAME	LEVEL	PART CODE	SPEC	Qty	SA/SNA	Option
R842	0.3	2007-007306	100ohm,1%,1/16W,TP,1005	1	SNA	
R501	0.3	2007-007307	150ohm,1%,1/16W,TP,1005	1	SNA	
R502	0.3	2007-007307	150ohm,1%,1/16W,TP,1005	1	SNA	
R503	0.3	2007-007307	150ohm,1%,1/16W,TP,1005	1	SNA	
R572	0.3	2007-007307	150ohm,1%,1/16W,TP,1005	1	SNA	
R573	0.3	2007-007307	150ohm,1%,1/16W,TP,1005	1	SNA	
R574	0.3	2007-007307	150ohm,1%,1/16W,TP,1005	1	SNA	
R589	0.3	2007-007307	150ohm,1%,1/16W,TP,1005	1	SNA	
R840	0.3	2007-007307	150ohm,1%,1/16W,TP,1005	1	SNA	
R117	0.3	2007-007312	20Kohm,1%,1/16W,TP,1005	1	SNA	
R207	0.3	2007-007312	20Kohm,1%,1/16W,TP,1005	1	SNA	
R78	0.3	2007-007312	20Kohm,1%,1/16W,TP,1005	1	SNA	
R500	0.3	2007-007312	20Kohm,1%,1/16W,TP,1005	1	SNA	
R533	0.3	2007-007312	20Kohm,1%,1/16W,TP,1005	1	SNA	
R553	0.3	2007-007312	20Kohm,1%,1/16W,TP,1005	1	SNA	
R627	0.3	2007-007312	20Kohm,1%,1/16W,TP,1005	1	SNA	
R678	0.3	2007-007312	20Kohm,1%,1/16W,TP,1005	1	SNA	
R810	0.3	2007-007312	20Kohm,1%,1/16W,TP,1005	1	SNA	
R813	0.3	2007-007312	20Kohm,1%,1/16W,TP,1005	1	SNA	
R821	0.3	2007-007312	20Kohm,1%,1/16W,TP,1005	1	SNA	
R182	0.3	2007-007318	1Kohm,1%,1/16W,TP,1005	1	SNA	
R50	0.3	2007-007318	1Kohm,1%,1/16W,TP,1005	1	SNA	
R95	0.3	2007-007318	1Kohm,1%,1/16W,TP,1005	1	SNA	
R512	0.3	2007-007318	1Kohm,1%,1/16W,TP,1005	1	SNA	
R548	0.3	2007-007318	1Kohm,1%,1/16W,TP,1005	1	SNA	
R550	0.3	2007-007318	1Kohm,1%,1/16W,TP,1005	1	SNA	
R561	0.3	2007-007318	1Kohm,1%,1/16W,TP,1005	1	SNA	
R619	0.3	2007-007318	1Kohm,1%,1/16W,TP,1005	1	SNA	
R620	0.3	2007-007318	1Kohm,1%,1/16W,TP,1005	1	SNA	
R656	0.3	2007-007318	1Kohm,1%,1/16W,TP,1005	1	SNA	
R670	0.3	2007-007318	1Kohm,1%,1/16W,TP,1005	1	SNA	
R672	0.3	2007-007318	1Kohm,1%,1/16W,TP,1005	1	SNA	
R674	0.3	2007-007318	1Kohm,1%,1/16W,TP,1005	1	SNA	
R716	0.3	2007-007318	1Kohm,1%,1/16W,TP,1005	1	SNA	
R720	0.3	2007-007318	1Kohm,1%,1/16W,TP,1005	1	SNA	
R788	0.3	2007-007318	1Kohm,1%,1/16W,TP,1005	1	SNA	
R819	0.3	2007-007318	1Kohm,1%,1/16W,TP,1005	1	SNA	
R820	0.3	2007-007318	1Kohm,1%,1/16W,TP,1005	1	SNA	
R822	0.3	2007-007318	1Kohm,1%,1/16W,TP,1005	1	SNA	
R36	0.3	2007-007334	200Kohm,1%,1/16W,TP,1005	1	SNA	
R508	0.3	2007-007334	200Kohm,1%,1/16W,TP,1005	1	SNA	
R529	0.3	2007-007334	200Kohm,1%,1/16W,TP,1005	1	SNA	
R556	0.3	2007-007334	200Kohm,1%,1/16W,TP,1005	1	SNA	
R790	0.3	2007-007334	200Kohm,1%,1/16W,TP,1005	1	SNA	
R271	0.3	2007-007382	20Mohm,5%,1/10W,TP,1608	1	SA	
R219	0.3	2007-007441	562ohm,1%,1/10W,TP,1608	1	SA	
R92	0.3	2007-007441	562ohm,1%,1/10W,TP,1608	1	SA	
R588	0.3	2007-007441	562ohm,1%,1/10W,TP,1608	1	SA	
R79	0.3	2007-007489	150Kohm,1%,1/16W,TP,1005	1	SNA	
R80	0.3	2007-007489	150Kohm,1%,1/16W,TP,1005	1	SNA	
R532	0.3	2007-007489	150Kohm,1%,1/16W,TP,1005	1	SNA	
R536	0.3	2007-007489	150Kohm,1%,1/16W,TP,1005	1	SNA	
R679	0.3	2007-007489	150Kohm,1%,1/16W,TP,1005	1	SNA	
R225	0.3	2007-007528	1.5Kohm,1%,1/16W,TP,1005	1	SNA	
R24	0.3	2007-007528	1.5Kohm,1%,1/16W,TP,1005	1	SNA	
R242	0.3	2007-007528	1.5Kohm,1%,1/16W,TP,1005	1	SNA	
R243	0.3	2007-007528	1.5Kohm,1%,1/16W,TP,1005	1	SNA	
R564	0.3	2007-007528	1.5Kohm,1%,1/16W,TP,1005	1	SNA	
R227	0.3	2007-007549	4.99Kohm,1%,1/10W,TP,1608	1	SNA	
R228	0.3	2007-007549	4.99Kohm,1%,1/10W,TP,1608	1	SNA	
R635	0.3	2007-007549	4.99Kohm,1%,1/10W,TP,1608	1	SNA	
R636	0.3	2007-007549	4.99Kohm,1%,1/10W,TP,1608	1	SNA	
R246	0.3	2007-007615	11.8Kohm,1%,1/10W,TP,1608	1	SNA	
R102	0.3	2007-007619	60.4ohm,1%,1/10W,TP,1608	1	SNA	
R103	0.3	2007-007619	60.4ohm,1%,1/10W,TP,1608	1	SNA	
R42	0.3	2007-007619	60.4ohm,1%,1/10W,TP,1608	1	SNA	
R44	0.3	2007-007619	60.4ohm,1%,1/10W,TP,1608	1	SNA	
R62	0.3	2007-007642	12.1ohm,1%,1/16W,TP,1005	1	SNA	
R64	0.3	2007-007642	12.1ohm,1%,1/16W,TP,1005	1	SNA	
R76	0.3	2007-007642	12.1ohm,1%,1/16W,TP,1005	1	SNA	

NAME	LEVEL	PART CODE	SPEC	Qty	SA/SNA	Option
R530	0.3	2007-007642	12.1ohm,1%,1/16W,TP,1005	1	SNA	
R552	0.3	2007-007642	12.1ohm,1%,1/16W,TP,1005	1	SNA	
R104	0.3	2007-007697	2.4Kohm,1%,1/16W,TP,1005	1	SNA	
R46	0.3	2007-007697	2.4Kohm,1%,1/16W,TP,1005	1	SNA	
R559	0.3	2007-007697	2.4Kohm,1%,1/16W,TP,1005	1	SNA	
R584	0.3	2007-007697	2.4Kohm,1%,1/16W,TP,1005	1	SNA	
R181	0.3	2007-007766	2Kohm,1%,1/16W,TP,1005	1	SNA	
R220	0.3	2007-007766	2Kohm,1%,1/16W,TP,1005	1	SNA	
R226	0.3	2007-007766	2Kohm,1%,1/16W,TP,1005	1	SNA	
R91	0.3	2007-007766	2Kohm,1%,1/16W,TP,1005	1	SNA	
R515	0.3	2007-007766	2Kohm,1%,1/16W,TP,1005	1	SNA	
R586	0.3	2007-007766	2Kohm,1%,1/16W,TP,1005	1	SNA	
R663	0.3	2007-007766	2Kohm,1%,1/16W,TP,1005	1	SNA	
R681	0.3	2007-007766	2Kohm,1%,1/16W,TP,1005	1	SNA	
R691	0.3	2007-007766	2Kohm,1%,1/16W,TP,1005	1	SNA	
R726	0.3	2007-007766	2Kohm,1%,1/16W,TP,1005	1	SNA	
R75	0.3	2007-007778	715Kohm,1%,1/10W,TP,1608	1	SNA	
R19	0.3	2007-007843	36.5Kohm,1%,1/10W,TP,1608	1	SA	
R268	0.3	2007-007942	1Mohm,1%,1/16W,TP,1005	1	SNA	
R295	0.3	2007-007942	1Mohm,1%,1/16W,TP,1005	1	SNA	
R528	0.3	2007-007942	1Mohm,1%,1/16W,TP,1005	1	SNA	
R1	0.3	2007-008015	75ohm,1%,1/16W,TP,1005	1	SNA	
R2	0.3	2007-008015	75ohm,1%,1/16W,TP,1005	1	SNA	
R3	0.3	2007-008015	75ohm,1%,1/16W,TP,1005	1	SNA	
R4	0.3	2007-008015	75ohm,1%,1/16W,TP,1005	1	SNA	
R838	0.3	2007-008015	75ohm,1%,1/16W,TP,1005	1	SNA	
R21	0.3	2007-008134	12.4Kohm,1%,1/16W,TP,1005	1	SA	
R809	0.3	2007-008223	39.2Kohm,1%,1/10W,TP,1608	1	SNA	
R645	0.3	2007-008293	475OHM,1%,1/16W,TP,1005	1	SNA	
R683	0.3	2007-008293	475OHM,1%,1/16W,TP,1005	1	SNA	
R610	0.3	2007-008298	49.9ohm,1%,1/16W,TP,1005	1	SNA	
R637	0.3	2007-008298	49.9ohm,1%,1/16W,TP,1005	1	SNA	
R639	0.3	2007-008298	49.9ohm,1%,1/16W,TP,1005	1	SNA	
R641	0.3	2007-008298	49.9ohm,1%,1/16W,TP,1005	1	SNA	
R643	0.3	2007-008298	49.9ohm,1%,1/16W,TP,1005	1	SNA	
R647	0.3	2007-008298	49.9ohm,1%,1/16W,TP,1005	1	SNA	
R648	0.3	2007-008298	49.9ohm,1%,1/16W,TP,1005	1	SNA	
R653	0.3	2007-008298	49.9ohm,1%,1/16W,TP,1005	1	SNA	
R654	0.3	2007-008298	49.9ohm,1%,1/16W,TP,1005	1	SNA	
R734	0.3	2007-008298	49.9ohm,1%,1/16W,TP,1005	1	SNA	
R736	0.3	2007-008298	49.9ohm,1%,1/16W,TP,1005	1	SNA	
R738	0.3	2007-008298	49.9ohm,1%,1/16W,TP,1005	1	SNA	
R739	0.3	2007-008298	49.9ohm,1%,1/16W,TP,1005	1	SNA	
R742	0.3	2007-008298	49.9ohm,1%,1/16W,TP,1005	1	SNA	
R743	0.3	2007-008298	49.9ohm,1%,1/16W,TP,1005	1	SNA	
R746	0.3	2007-008298	49.9ohm,1%,1/16W,TP,1005	1	SNA	
R747	0.3	2007-008298	49.9ohm,1%,1/16W,TP,1005	1	SNA	
R750	0.3	2007-008298	49.9ohm,1%,1/16W,TP,1005	1	SNA	
R751	0.3	2007-008298	49.9ohm,1%,1/16W,TP,1005	1	SNA	
R844	0.3	2007-008298	49.9ohm,1%,1/16W,TP,1005	1	SNA	
R141	0.3	2007-008299	61.9ohm,1%,1/16W,TP,1005	1	SA	
R189	0.3	2007-008303	27.4ohm,1%,1/16W,TP,1005	1	SNA	
R191	0.3	2007-008303	27.4ohm,1%,1/16W,TP,1005	1	SNA	
R108	0.3	2007-008304	300Kohm,1%,1/16W,TP,1005	1	SNA	
R260	0.3	2007-008304	300Kohm,1%,1/16W,TP,1005	1	SNA	
R32	0.3	2007-008304	300Kohm,1%,1/16W,TP,1005	1	SNA	
R77	0.3	2007-008304	300Kohm,1%,1/16W,TP,1005	1	SNA	
R853	0.3	2007-008304	300Kohm,1%,1/16W,TP,1005	1	SNA	
R190	0.3	2007-008314	54.9ohm,1%,1/16W,TP,1005	1	SNA	
R192	0.3	2007-008314	54.9ohm,1%,1/16W,TP,1005	1	SNA	
R591	0.3	2007-008330	22.6OHM,1%,1/16W,TP,1005	1	SNA	
R592	0.3	2007-008330	22.6OHM,1%,1/16W,TP,1005	1	SNA	
R690	0.3	2007-008330	22.6OHM,1%,1/16W,TP,1005	1	SNA	
R692	0.3	2007-008330	22.6OHM,1%,1/16W,TP,1005	1	SNA	
R286	0.3	2007-008359	3.01Kohm,1%,1/16W,TP,1005	1	SNA	
R90	0.3	2007-008373	1.47kohm,1%,1/10W,TP,1608	1	SNA	
R590	0.3	2007-008373	1.47kohm,1%,1/10W,TP,1608	1	SNA	
R72	0.3	2007-008429	499ohm,1%,1/16W,TP,1005	1	SNA	
R73	0.3	2007-008429	499ohm,1%,1/16W,TP,1005	1	SNA	
R93	0.3	2007-008429	499ohm,1%,1/16W,TP,1005	1	SNA	

NAME	LEVEL	PART CODE	SPEC	Qty	SA/SNA	Option
R74	0.3	2007-008438	715ohm,1%,1/16W,TP,1005	1	SNA	
R140	0.3	2007-008535	127ohm,1%,1/16W,TP,1005	1	SNA	
R285	0.3	2007-008597	6.19Kohm,1%,1/16W,TP,1005	1	SNA	
R106	0.3	2007-008708	40.2ohm,1%,1/16W,TP,1005	1	SNA	
R88	0.3	2007-008708	40.2ohm,1%,1/16W,TP,1005	1	SNA	
R624	0.3	2007-008708	40.2ohm,1%,1/16W,TP,1005	1	SNA	
R625	0.3	2007-008708	40.2ohm,1%,1/16W,TP,1005	1	SNA	
R13	0.3	2007-008714	0.01ohm,1%,1W,TP,6432	1	SNA	
R170	0.3	2007-008789	0.001ohm,1%,1W,TP,6432	1	SA	
R187	0.3	2007-008789	0.001ohm,1%,1W,TP,6432	1	SA	
C1	0.3	2203-000233	0.1nF,5%,50V,C0G,1005	1	SNA	
C26	0.3	2203-000233	0.1nF,5%,50V,C0G,1005	1	SNA	
C27	0.3	2203-000233	0.1nF,5%,50V,C0G,1005	1	SNA	
C28	0.3	2203-000233	0.1nF,5%,50V,C0G,1005	1	SNA	
C6	0.3	2203-000233	0.1nF,5%,50V,C0G,1005	1	SNA	
C713	0.3	2203-000233	0.1nF,5%,50V,C0G,1005	1	SNA	
C734	0.3	2203-000233	0.1nF,5%,50V,C0G,1005	1	SNA	
C736	0.3	2203-000233	0.1nF,5%,50V,C0G,1005	1	SNA	
C175	0.3	2203-000254	10nF,10%,16V,X7R,1005	1	SNA	
C611	0.3	2203-000257	10nF,10%,50V,X7R,1608	1	SNA	
C697	0.3	2203-000257	10nF,10%,50V,X7R,1608	1	SNA	
C701	0.3	2203-000257	10nF,10%,50V,X7R,1608	1	SNA	
C709	0.3	2203-000257	10nF,10%,50V,X7R,1608	1	SNA	
C733	0.3	2203-000257	10nF,10%,50V,X7R,1608	1	SNA	
C810	0.3	2203-000257	10nF,10%,50V,X7R,1608	1	SNA	
C511	0.3	2203-000278	0.01nF,0.5pF,50V,C0G,1005	1	SNA	
C512	0.3	2203-000278	0.01nF,0.5pF,50V,C0G,1005	1	SNA	
C513	0.3	2203-000278	0.01nF,0.5pF,50V,C0G,1005	1	SNA	
C772	0.3	2203-000278	0.01nF,0.5pF,50V,C0G,1005	1	SNA	
C773	0.3	2203-000278	0.01nF,0.5pF,50V,C0G,1005	1	SNA	
C870	0.3	2203-000278	0.01nF,0.5pF,50V,C0G,1005	1	SNA	
C380	0.3	2203-000425	0.018nF,5%,50V,C0G,1005	1	SNA	
C382	0.3	2203-000425	0.018nF,5%,50V,C0G,1005	1	SNA	
C390	0.3	2203-000425	0.018nF,5%,50V,C0G,1005	1	SNA	
C391	0.3	2203-000425	0.018nF,5%,50V,C0G,1005	1	SNA	
C532	0.3	2203-000425	0.018nF,5%,50V,C0G,1005	1	SNA	
C533	0.3	2203-000425	0.018nF,5%,50V,C0G,1005	1	SNA	
C125	0.3	2203-000438	1nF,10%,50V,X7R,1005	1	SNA	
C127	0.3	2203-000438	1nF,10%,50V,X7R,1005	1	SNA	
C173	0.3	2203-000438	1nF,10%,50V,X7R,1005	1	SNA	
C873	0.3	2203-000438	1nF,10%,50V,X7R,1005	1	SNA	
C874	0.3	2203-000438	1nF,10%,50V,X7R,1005	1	SNA	
C875	0.3	2203-000438	1nF,10%,50V,X7R,1005	1	SNA	
C876	0.3	2203-000438	1nF,10%,50V,X7R,1005	1	SNA	
C877	0.3	2203-000438	1nF,10%,50V,X7R,1005	1	SNA	
C878	0.3	2203-000438	1nF,10%,50V,X7R,1005	1	SNA	
C96	0.3	2203-000438	1nF,10%,50V,X7R,1005	1	SNA	
C552	0.3	2203-000438	1nF,10%,50V,X7R,1005	1	SNA	
C583	0.3	2203-000438	1nF,10%,50V,X7R,1005	1	SNA	
C594	0.3	2203-000438	1nF,10%,50V,X7R,1005	1	SNA	
C695	0.3	2203-000438	1nF,10%,50V,X7R,1005	1	SNA	
C696	0.3	2203-000438	1nF,10%,50V,X7R,1005	1	SNA	
C699	0.3	2203-000438	1nF,10%,50V,X7R,1005	1	SNA	
C702	0.3	2203-000438	1nF,10%,50V,X7R,1005	1	SNA	
C703	0.3	2203-000438	1nF,10%,50V,X7R,1005	1	SNA	
C710	0.3	2203-000438	1nF,10%,50V,X7R,1005	1	SNA	
C735	0.3	2203-000438	1nF,10%,50V,X7R,1005	1	SNA	
C746	0.3	2203-000438	1nF,10%,50V,X7R,1005	1	SNA	
C784	0.3	2203-000438	1nF,10%,50V,X7R,1005	1	SNA	
C862	0.3	2203-000438	1nF,10%,50V,X7R,1005	1	SNA	
C373	0.3	2203-000440	1nF,10%,50V,X7R,1608	1	SNA	
C282	0.3	2203-000489	2.2nF,10%,50V,X7R,1005	1	SNA	
C316	0.3	2203-000489	2.2nF,10%,50V,X7R,1005	1	SNA	
C318	0.3	2203-000489	2.2nF,10%,50V,X7R,1005	1	SNA	
C589	0.3	2203-000489	2.2nF,10%,50V,X7R,1005	1	SNA	
C357	0.3	2203-000627	0.022nF,5%,50V,C0G,1005	1	SNA	
C358	0.3	2203-000627	0.022nF,5%,50V,C0G,1005	1	SNA	
C788	0.3	2203-000627	0.022nF,5%,50V,C0G,1005	1	SNA	
C789	0.3	2203-000627	0.022nF,5%,50V,C0G,1005	1	SNA	
C850	0.3	2203-000627	0.022nF,5%,50V,C0G,1005	1	SNA	

NAME	LEVEL	PART CODE	SPEC	Qty	SA/SNA	Option
C869	0.3	2203-000627	0.022nF,5%,50V,C0G,1005	1	SNA	
C2	0.3	2203-000654	0.27nF,10%,50V,X7R,1005	1	SNA	
C7	0.3	2203-000654	0.27nF,10%,50V,X7R,1005	1	SNA	
C678	0.3	2203-000654	0.27nF,10%,50V,X7R,1005	1	SNA	
C151	0.3	2203-000715	3.3nF,10%,50V,X7R,1608	1	SNA	
C748	0.3	2203-000940	0.47nF,10%,50V,X7R,1005	1	SNA	
C813	0.3	2203-000940	0.47nF,10%,50V,X7R,1005	1	SNA	
C816	0.3	2203-000940	0.47nF,10%,50V,X7R,1005	1	SNA	
C14	0.3	2203-000995	0.047nF,5%,50V,C0G,1005	1	SNA	
C31	0.3	2203-000995	0.047nF,5%,50V,C0G,1005	1	SNA	
C335	0.3	2203-000995	0.047nF,5%,50V,C0G,1005	1	SNA	
C674	0.3	2203-000995	0.047nF,5%,50V,C0G,1005	1	SNA	
C744	0.3	2203-000995	0.047nF,5%,50V,C0G,1005	1	SNA	
C783	0.3	2203-001652	470nF,+80-20%,16V,Y5V,1608	1	SNA	
C389	0.3	2203-002398	22nF,10%,50V,X7R,1608	1	SNA	
C551	0.3	2203-002398	22nF,10%,50V,X7R,1608	1	SNA	
C823	0.3	2203-002398	22nF,10%,50V,X7R,1608	1	SNA	
C376	0.3	2203-002487	4.7nF,10%,25V,X7R,1005	1	SA	
C603	0.3	2203-002487	4.7nF,10%,25V,X7R,1005	1	SA	
C844	0.3	2203-002487	4.7nF,10%,25V,X7R,1005	1	SA	
C21	0.3	2203-002711	100nF,10%,25V,X7R,1608	1	SNA	
C22	0.3	2203-002711	100nF,10%,25V,X7R,1608	1	SNA	
C23	0.3	2203-002711	100nF,10%,25V,X7R,1608	1	SNA	
C235	0.3	2203-002711	100nF,10%,25V,X7R,1608	1	SNA	
C25	0.3	2203-002711	100nF,10%,25V,X7R,1608	1	SNA	
C317	0.3	2203-002711	100nF,10%,25V,X7R,1608	1	SNA	
C33	0.3	2203-002711	100nF,10%,25V,X7R,1608	1	SNA	
C334	0.3	2203-002711	100nF,10%,25V,X7R,1608	1	SNA	
C344	0.3	2203-002711	100nF,10%,25V,X7R,1608	1	SNA	
C346	0.3	2203-002711	100nF,10%,25V,X7R,1608	1	SNA	
C38	0.3	2203-002711	100nF,10%,25V,X7R,1608	1	SNA	
C387	0.3	2203-002711	100nF,10%,25V,X7R,1608	1	SNA	
C490	0.3	2203-002711	100nF,10%,25V,X7R,1608	1	SNA	
C5	0.3	2203-002711	100nF,10%,25V,X7R,1608	1	SNA	
C8	0.3	2203-002711	100nF,10%,25V,X7R,1608	1	SNA	
C545	0.3	2203-002711	100nF,10%,25V,X7R,1608	1	SNA	
C558	0.3	2203-002711	100nF,10%,25V,X7R,1608	1	SNA	
C559	0.3	2203-002711	100nF,10%,25V,X7R,1608	1	SNA	
C561	0.3	2203-002711	100nF,10%,25V,X7R,1608	1	SNA	
C587	0.3	2203-002711	100nF,10%,25V,X7R,1608	1	SNA	
C737	0.3	2203-002711	100nF,10%,25V,X7R,1608	1	SNA	
C740	0.3	2203-002711	100nF,10%,25V,X7R,1608	1	SNA	
C794	0.3	2203-002711	100nF,10%,25V,X7R,1608	1	SNA	
C837	0.3	2203-002711	100nF,10%,25V,X7R,1608	1	SNA	
C852	0.3	2203-002711	100nF,10%,25V,X7R,1608	1	SNA	
C853	0.3	2203-002711	100nF,10%,25V,X7R,1608	1	SNA	
C854	0.3	2203-002711	100nF,10%,25V,X7R,1608	1	SNA	
C856	0.3	2203-002711	100nF,10%,25V,X7R,1608	1	SNA	
C130	0.3	2203-002720	10nF,10%,25V,X7R,1005	1	SNA	
C323	0.3	2203-002720	10nF,10%,25V,X7R,1005	1	SNA	
C340	0.3	2203-002720	10nF,10%,25V,X7R,1005	1	SNA	
C341	0.3	2203-002720	10nF,10%,25V,X7R,1005	1	SNA	
C342	0.3	2203-002720	10nF,10%,25V,X7R,1005	1	SNA	
C343	0.3	2203-002720	10nF,10%,25V,X7R,1005	1	SNA	
C36	0.3	2203-002720	10nF,10%,25V,X7R,1005	1	SNA	
C37	0.3	2203-002720	10nF,10%,25V,X7R,1005	1	SNA	
C371	0.3	2203-002720	10nF,10%,25V,X7R,1005	1	SNA	
C62	0.3	2203-002720	10nF,10%,25V,X7R,1005	1	SNA	
C547	0.3	2203-002720	10nF,10%,25V,X7R,1005	1	SNA	
C566	0.3	2203-002720	10nF,10%,25V,X7R,1005	1	SNA	
C567	0.3	2203-002720	10nF,10%,25V,X7R,1005	1	SNA	
C714	0.3	2203-002720	10nF,10%,25V,X7R,1005	1	SNA	
C718	0.3	2203-002720	10nF,10%,25V,X7R,1005	1	SNA	
C741	0.3	2203-002720	10nF,10%,25V,X7R,1005	1	SNA	
C742	0.3	2203-002720	10nF,10%,25V,X7R,1005	1	SNA	
C859	0.3	2203-002720	10nF,10%,25V,X7R,1005	1	SNA	
C863	0.3	2203-002720	10nF,10%,25V,X7R,1005	1	SNA	
C508	0.3	2203-005052	0.0033nF,0.25pF,50V,NP0,1005	1	SA	
C509	0.3	2203-005052	0.0033nF,0.25pF,50V,NP0,1005	1	SA	
C510	0.3	2203-005052	0.0033nF,0.25pF,50V,NP0,1005	1	SA	

NAME	LEVEL	PART CODE	SPEC	Qty	SA/SNA	Option
C10	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C109	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C11	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C110	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C111	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C113	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C116	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C117	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C118	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C121	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C13	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C132	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C138	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C143	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C146	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C147	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C153	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C160	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C161	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C162	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C163	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C164	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C165	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C166	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C167	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C168	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C169	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C170	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C171	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C172	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C179	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C180	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C181	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C182	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C183	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C184	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C185	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C186	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C187	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C188	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C189	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C190	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C191	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C192	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C193	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C194	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C195	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C196	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C197	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C198	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C199	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C200	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C204	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C207	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C221	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C222	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C230	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C231	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C232	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C233	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C234	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C236	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C242	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C255	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C256	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C257	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C258	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C269	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C270	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C271	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	

NAME	LEVEL	PART CODE	SPEC	Qty	SA/SNA	Option
C272	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C273	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C274	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C275	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C278	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C279	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C280	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C281	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C284	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C285	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C286	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C288	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C289	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C290	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C297	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C298	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C299	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C311	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C312	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C315	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C324	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C325	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C326	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C327	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C328	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C329	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C330	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C331	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C345	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C348	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C350	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C351	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C360	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C362	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C364	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C365	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C366	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C367	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C369	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C370	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C372	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C375	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C386	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C392	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C393	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C394	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C397	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C399	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C77	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C78	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C79	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C872	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C92	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C500	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C501	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C502	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C503	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C505	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C514	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C515	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C518	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C519	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C520	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C521	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C522	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C523	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C524	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C525	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C526	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C527	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	

NAME	LEVEL	PART CODE	SPEC	Qty	SA/SNA	Option
C530	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C531	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C534	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C535	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C536	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C537	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C538	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C539	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C540	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C541	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C549	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C581	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C582	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C585	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C593	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C595	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C600	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C607	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C608	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C614	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C653	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C654	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C655	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C656	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C657	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C658	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C659	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C660	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C661	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C662	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C663	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C664	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C665	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C666	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C675	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C682	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C683	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C684	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C685	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C686	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C687	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C688	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C689	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C690	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C691	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C693	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C694	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C704	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C716	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C719	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C720	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C724	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C728	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C730	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C756	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C770	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C774	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C777	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C778	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C779	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C780	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C785	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C787	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C791	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C792	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C793	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C795	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C798	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C799	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C800	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	

NAME	LEVEL	PART CODE	SPEC	Qty	SA/SNA	Option
C801	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C802	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C804	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C805	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C806	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C808	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C809	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C811	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C815	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C818	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C819	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C820	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C822	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C827	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C830	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C831	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C834	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C836	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C839	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C841	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C842	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C843	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C845	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C849	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C851	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C858	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C866	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C871	0.3	2203-005482	100nF,10%,10V,X5R,1005	1	SNA	
C359	0.3	2203-005509	330nF,+80-20%,10V,Y5V,1005	1	SNA	
C115	0.3	2203-005918	1000nF,10%,6.3V,X7R,1608	1	SA	
C126	0.3	2203-005918	1000nF,10%,6.3V,X7R,1608	1	SA	
C402	0.3	2203-005918	1000nF,10%,6.3V,X7R,1608	1	SA	
C66	0.3	2203-005918	1000nF,10%,6.3V,X7R,1608	1	SA	
C69	0.3	2203-005918	1000nF,10%,6.3V,X7R,1608	1	SA	
C553	0.3	2203-005918	1000nF,10%,6.3V,X7R,1608	1	SA	
C554	0.3	2203-005918	1000nF,10%,6.3V,X7R,1608	1	SA	
C565	0.3	2203-005918	1000nF,10%,6.3V,X7R,1608	1	SA	
C588	0.3	2203-005918	1000nF,10%,6.3V,X7R,1608	1	SA	
C590	0.3	2203-005918	1000nF,10%,6.3V,X7R,1608	1	SA	
C712	0.3	2203-005918	1000nF,10%,6.3V,X7R,1608	1	SA	
C738	0.3	2203-005918	1000nF,10%,6.3V,X7R,1608	1	SA	
C739	0.3	2203-005918	1000nF,10%,6.3V,X7R,1608	1	SA	
C747	0.3	2203-005918	1000nF,10%,6.3V,X7R,1608	1	SA	
C855	0.3	2203-005918	1000nF,10%,6.3V,X7R,1608	1	SA	
C3	0.3	2203-006000	1NF,10%,3KV,X7R,TP,4520	1	SA	
C4	0.3	2203-006000	1NF,10%,3KV,X7R,TP,4520	1	SA	
C504	0.3	2203-006000	1NF,10%,3KV,X7R,TP,4520	1	SA	
C12	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C128	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C133	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C134	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C150	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C154	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C155	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C156	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C157	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C158	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C159	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C47	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C48	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C50	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C51	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C52	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C53	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C54	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C72	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C73	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C506	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C557	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C575	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	

NAME	LEVEL	PART CODE	SPEC	Qty	SA/SNA	Option
C576	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C577	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C578	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C596	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C597	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C598	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C610	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C615	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C616	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C617	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C618	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C619	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C620	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C621	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C622	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C623	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C624	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C625	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C626	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C627	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C628	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C629	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C630	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C631	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C632	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C633	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C634	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C635	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C636	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C637	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C638	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C639	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C640	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C641	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C642	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C643	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C644	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C645	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C646	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C647	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C648	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C649	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C650	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C651	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C652	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C879	0.3	2203-006048	100nF,10%,10V,X7R,1005	1	SA	
C129	0.3	2203-006069	4700nF,10%,6.3V,X7R,2012	1	SNA	
C152	0.3	2203-006069	4700nF,10%,6.3V,X7R,2012	1	SNA	
C174	0.3	2203-006069	4700nF,10%,6.3V,X7R,2012	1	SNA	
C218	0.3	2203-006069	4700nF,10%,6.3V,X7R,2012	1	SNA	
C246	0.3	2203-006069	4700nF,10%,6.3V,X7R,2012	1	SNA	
C248	0.3	2203-006069	4700nF,10%,6.3V,X7R,2012	1	SNA	
C283	0.3	2203-006069	4700nF,10%,6.3V,X7R,2012	1	SNA	
C368	0.3	2203-006069	4700nF,10%,6.3V,X7R,2012	1	SNA	
C377	0.3	2203-006069	4700nF,10%,6.3V,X7R,2012	1	SNA	
C378	0.3	2203-006069	4700nF,10%,6.3V,X7R,2012	1	SNA	
C403	0.3	2203-006069	4700nF,10%,6.3V,X7R,2012	1	SNA	
C9	0.3	2203-006069	4700nF,10%,6.3V,X7R,2012	1	SNA	
C517	0.3	2203-006069	4700nF,10%,6.3V,X7R,2012	1	SNA	
C543	0.3	2203-006069	4700nF,10%,6.3V,X7R,2012	1	SNA	
C548	0.3	2203-006069	4700nF,10%,6.3V,X7R,2012	1	SNA	
C592	0.3	2203-006069	4700nF,10%,6.3V,X7R,2012	1	SNA	
C671	0.3	2203-006069	4700nF,10%,6.3V,X7R,2012	1	SNA	
C775	0.3	2203-006069	4700nF,10%,6.3V,X7R,2012	1	SNA	
C786	0.3	2203-006069	4700nF,10%,6.3V,X7R,2012	1	SNA	
C821	0.3	2203-006069	4700nF,10%,6.3V,X7R,2012	1	SNA	
C824	0.3	2203-006069	4700nF,10%,6.3V,X7R,2012	1	SNA	
C838	0.3	2203-006069	4700nF,10%,6.3V,X7R,2012	1	SNA	
C864	0.3	2203-006069	4700nF,10%,6.3V,X7R,2012	1	SNA	
C103	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	

NAME	LEVEL	PART CODE	SPEC	Qty	SA/SNA	Option
C105	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C119	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C122	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C123	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C124	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C136	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C144	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C145	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C148	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C201	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C213	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C219	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C220	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C229	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C238	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C239	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C245	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C249	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C250	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C251	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C276	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C277	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C310	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C332	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C34	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C35	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C379	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C381	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C396	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C398	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C400	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C55	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C58	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C59	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C61	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C65	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C70	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C74	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C80	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C516	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C542	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C555	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C586	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C599	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C601	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C602	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C668	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C681	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C715	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C717	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C752	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C782	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C812	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C817	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C828	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C829	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C835	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C848	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C865	0.3	2203-006090	10000nF,10%,6.3V,X5R,2012	1	SA	
C16	0.3	2203-006166	100nF,10%,25V,X5R,1005	1	SNA	
C18	0.3	2203-006166	100nF,10%,25V,X5R,1005	1	SNA	
C507	0.3	2203-006166	100nF,10%,25V,X5R,1005	1	SNA	
C120	0.3	2203-006324	2200nF,10%,10V,X5R,1608	1	SNA	
C176	0.3	2203-006324	2200nF,10%,10V,X5R,1608	1	SNA	
C177	0.3	2203-006324	2200nF,10%,10V,X5R,1608	1	SNA	
C178	0.3	2203-006324	2200nF,10%,10V,X5R,1608	1	SNA	
C203	0.3	2203-006324	2200nF,10%,10V,X5R,1608	1	SNA	
C205	0.3	2203-006324	2200nF,10%,10V,X5R,1608	1	SNA	
C206	0.3	2203-006324	2200nF,10%,10V,X5R,1608	1	SNA	
C208	0.3	2203-006324	2200nF,10%,10V,X5R,1608	1	SNA	

NAME	LEVEL	PART CODE	SPEC	Qty	SA/SNA	Option
C209	0.3	2203-006324	2200nF,10%,10V,X5R,1608	1	SNA	
C241	0.3	2203-006324	2200nF,10%,10V,X5R,1608	1	SNA	
C244	0.3	2203-006324	2200nF,10%,10V,X5R,1608	1	SNA	
C247	0.3	2203-006324	2200nF,10%,10V,X5R,1608	1	SNA	
C313	0.3	2203-006324	2200nF,10%,10V,X5R,1608	1	SNA	
C314	0.3	2203-006324	2200nF,10%,10V,X5R,1608	1	SNA	
C336	0.3	2203-006324	2200nF,10%,10V,X5R,1608	1	SNA	
C337	0.3	2203-006324	2200nF,10%,10V,X5R,1608	1	SNA	
C347	0.3	2203-006324	2200nF,10%,10V,X5R,1608	1	SNA	
C667	0.3	2203-006324	2200nF,10%,10V,X5R,1608	1	SNA	
C670	0.3	2203-006324	2200nF,10%,10V,X5R,1608	1	SNA	
C762	0.3	2203-006324	2200nF,10%,10V,X5R,1608	1	SNA	
C19	0.3	2203-006336	10000nF,10%,25V,X5R,3216	1	SNA	
C20	0.3	2203-006336	10000nF,10%,25V,X5R,3216	1	SNA	
C71	0.3	2203-006336	10000nF,10%,25V,X5R,3216	1	SNA	
C15	0.3	2203-006348	1000nF,10%,25V,X5R,1608	1	SNA	
C546	0.3	2203-006348	1000nF,10%,25V,X5R,1608	1	SNA	
C560	0.3	2203-006348	1000nF,10%,25V,X5R,1608	1	SNA	
C562	0.3	2203-006348	1000nF,10%,25V,X5R,1608	1	SNA	
C563	0.3	2203-006348	1000nF,10%,25V,X5R,1608	1	SNA	
C564	0.3	2203-006348	1000nF,10%,25V,X5R,1608	1	SNA	
C612	0.3	2203-006348	1000nF,10%,25V,X5R,1608	1	SNA	
C711	0.3	2203-006348	1000nF,10%,25V,X5R,1608	1	SNA	
C100	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C101	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C102	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C104	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C106	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C107	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C108	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C112	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C114	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C135	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C137	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C139	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C140	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C141	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C142	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C149	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C215	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C333	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C349	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C353	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C49	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C56	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C57	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C60	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C75	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C76	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C81	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C82	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C83	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C84	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C85	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C86	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C87	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C88	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C89	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C90	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C91	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C93	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C94	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C95	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C97	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C98	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C99	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C579	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C580	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C584	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C677	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	

NAME	LEVEL	PART CODE	SPEC	Qty	SA/SNA	Option
C705	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C706	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C722	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C723	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C725	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C727	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C729	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C731	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C753	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C754	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C755	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C757	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C758	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C759	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C760	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C761	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C763	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C764	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C765	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C766	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C767	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C768	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C769	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C771	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C796	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C797	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C825	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C826	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C840	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C846	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C847	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C860	0.3	2203-006399	1000nF,10%,6.3V,X5R,1005	1	SNA	
C214	0.3	2203-006474	22000nF,20%,6.3V,X5R,2012	1	SA	
C287	0.3	2203-006474	22000nF,20%,6.3V,X5R,2012	1	SA	
C291	0.3	2203-006474	22000nF,20%,6.3V,X5R,2012	1	SA	
C292	0.3	2203-006474	22000nF,20%,6.3V,X5R,2012	1	SA	
C293	0.3	2203-006474	22000nF,20%,6.3V,X5R,2012	1	SA	
C294	0.3	2203-006474	22000nF,20%,6.3V,X5R,2012	1	SA	
C295	0.3	2203-006474	22000nF,20%,6.3V,X5R,2012	1	SA	
C296	0.3	2203-006474	22000nF,20%,6.3V,X5R,2012	1	SA	
C300	0.3	2203-006474	22000nF,20%,6.3V,X5R,2012	1	SA	
C302	0.3	2203-006474	22000nF,20%,6.3V,X5R,2012	1	SA	
C303	0.3	2203-006474	22000nF,20%,6.3V,X5R,2012	1	SA	
C304	0.3	2203-006474	22000nF,20%,6.3V,X5R,2012	1	SA	
C305	0.3	2203-006474	22000nF,20%,6.3V,X5R,2012	1	SA	
C306	0.3	2203-006474	22000nF,20%,6.3V,X5R,2012	1	SA	
C307	0.3	2203-006474	22000nF,20%,6.3V,X5R,2012	1	SA	
C308	0.3	2203-006474	22000nF,20%,6.3V,X5R,2012	1	SA	
C309	0.3	2203-006474	22000nF,20%,6.3V,X5R,2012	1	SA	
C673	0.3	2203-006474	22000nF,20%,6.3V,X5R,2012	1	SA	
C708	0.3	2203-006474	22000nF,20%,6.3V,X5R,2012	1	SA	
C732	0.3	2203-006474	22000nF,20%,6.3V,X5R,2012	1	SA	
C751	0.3	2203-006474	22000nF,20%,6.3V,X5R,2012	1	SA	
EC506	0.3	2203-006650	10000nF,20%,4V,X6S,-,2012	1	SNA	
EC14	0.3	2402-001042	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	1	SNA	
EC500	0.3	2402-001042	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	1	SNA	
EC512	0.3	2402-001042	100uF,20%,16V,GP,TP,6.6x6.6x5.4mm	1	SNA	
EC540	0.3	2402-001048	22uF,20%,35V,LZ,TP,5.3x5.3x6	1	SNA	
EC521	0.3	2402-001120	330uF,0.2,6.3V,-,TP,7.3x4.3x2.8,0	1	SA	
EC526	0.3	2402-001120	330uF,0.2,6.3V,-,TP,7.3x4.3x2.8,0	1	SA	
EC501	0.3	2402-001144	68uF,20%,25V,LZ,TP,6.3*5.8mm	1	SNA	
EC502	0.3	2402-001144	68uF,20%,25V,LZ,TP,6.3*5.8mm	1	SNA	
EC503	0.3	2402-001144	68uF,20%,25V,LZ,TP,6.3*5.8mm	1	SNA	
EC504	0.3	2402-001144	68uF,20%,25V,LZ,TP,6.3*5.8mm	1	SNA	
EC510	0.3	2402-001144	68uF,20%,25V,LZ,TP,6.3*5.8mm	1	SNA	
EC517	0.3	2402-001144	68uF,20%,25V,LZ,TP,6.3*5.8mm	1	SNA	
EC518	0.3	2402-001144	68uF,20%,25V,LZ,TP,6.3*5.8mm	1	SNA	
EC519	0.3	2402-001144	68uF,20%,25V,LZ,TP,6.3*5.8mm	1	SNA	
EC522	0.3	2402-001144	68uF,20%,25V,LZ,TP,6.3*5.8mm	1	SNA	
EC524	0.3	2402-001144	68uF,20%,25V,LZ,TP,6.3*5.8mm	1	SNA	

NAME	LEVEL	PART CODE	SPEC	Qty	SA/SNA	Option
EC525	0.3	2402-001144	68uF,20%,25V,LZ,TP,6.3*5.8mm	1	SNA	
EC2	0.3	2402-001168	330uF,20%,2.5V,WT,TP,7.3*4.3*1.8mm,-	1	SNA	
EC3	0.3	2402-001168	330uF,20%,2.5V,WT,TP,7.3*4.3*1.8mm,-	1	SNA	
EC4	0.3	2402-001168	330uF,20%,2.5V,WT,TP,7.3*4.3*1.8mm,-	1	SNA	
EC505	0.3	2402-001168	330uF,20%,2.5V,WT,TP,7.3*4.3*1.8mm,-	1	SNA	
EC515	0.3	2402-001168	330uF,20%,2.5V,WT,TP,7.3*4.3*1.8mm,-	1	SNA	
EC516	0.3	2402-001168	330uF,20%,2.5V,WT,TP,7.3*4.3*1.8mm,-	1	SNA	
EC11	0.3	2402-001306	330µF,20%,2V,-,Tape and Reel,7.3x4.3x1.9mm	1	SNA	
EC12	0.3	2402-001306	330µF,20%,2V,-,Tape and Reel,7.3x4.3x1.9mm	1	SNA	
EC8	0.3	2402-001306	330µF,20%,2V,-,Tape and Reel,7.3x4.3x1.9mm	1	SNA	
EC9	0.3	2402-001306	330µF,20%,2V,-,Tape and Reel,7.3x4.3x1.9mm	1	SNA	
EC508	0.3	2409-001117	10uF,20%,25V,CAN,TP,6.8*6.8*6.0mm,-	1	SNA	
EC509	0.3	2409-001117	10uF,20%,25V,CAN,TP,6.8*6.8*6.0mm,-	1	SNA	
EC511	0.3	2409-001117	10uF,20%,25V,CAN,TP,6.8*6.8*6.0mm,-	1	SNA	
EC513	0.3	2409-001117	10uF,20%,25V,CAN,TP,6.8*6.8*6.0mm,-	1	SNA	
EC527	0.3	2409-001117	10uF,20%,25V,CAN,TP,6.8*6.8*6.0mm,-	1	SNA	
EC6	0.3	2409-001129	100uF,20%,6.3V,WT,TP,3.5*2.8*1.9,-	1	SNA	
LT500	0.3	2603-000099	-,1:1,8mA,8P:8P,12.7x7.11x1.9mm,TP	1	SNA	
L500	0.3	2703-001839	82nH,5%,1608	1	SNA	
L501	0.3	2703-001839	82nH,5%,1608	1	SNA	
L502	0.3	2703-001839	82nH,5%,1608	1	SNA	
L504	0.3	2703-002771	8.2uH,20%,12.5x12.5mm	1	SNA	
L503	0.3	2703-002841	1uH,20%,10x10mm	1	SNA	MB-01-2-50
L505	0.3	2703-002988	1.8uH,20%,10x10mm	1	SNA	
L508	0.3	2703-002988	1.8uH,20%,10x10mm	1	SNA	
L509	0.3	2703-002988	1.8uH,20%,10x10mm	1	SNA	
L506	0.3	2703-002992	0.39uH,20%,10x10mm	1	SNA	
L507	0.3	2703-002992	0.39uH,20%,10x10mm	1	SNA	
L510	0.3	2703-002996	3.9uH,20%,10x10mm	1	SNA	
L511	0.3	2703-002996	3.9uH,20%,10x10mm	1	SNA	
L503	0.3	2703-003259	1uH,20%,10x10mm	1	SNA	MB-02-2-50
Y2	0.3	2801-000111	0.032768MHz,20ppm,28-AAW,12.5pF,50000ohm,-	1	SNA	
Y501	0.3	2801-004634	27MHz,30ppm,-,16pF,50ohm,TP	1	SNA	
Y1	0.3	2801-004665	10MHz,50ppm,HC-49SMA,16pF,50ohm,TP	1	SNA	
Y3	0.3	2801-004666	12MHz,50ppm,HC-49SMA,12pF,50ohm,TP	1	SNA	
Y502	0.3	2801-004667	14.31818MHz,50ppm,-,16pF,70ohm,TP	1	SNA	
Y500	0.3	2801-004668	25MHz,50ppm,-,10pF,50ohm,TP	1	SNA	
Y503	0.3	2801-004668	25MHz,50ppm,-,10pF,50ohm,TP	1	SNA	
B37	0.3	3301-000314	120ohm,1.6x0.8x0.8mm,-,-,-	1	SNA	
B512	0.3	3301-000314	120ohm,1.6x0.8x0.8mm,-,-,-	1	SNA	
B513	0.3	3301-000314	120ohm,1.6x0.8x0.8mm,-,-,-	1	SNA	
B514	0.3	3301-000314	120ohm,1.6x0.8x0.8mm,-,-,-	1	SNA	
B5	0.3	3301-000326	60ohm,3225,-,43ohm/40MHz,83ohm/700MHz	1	SNA	
B511	0.3	3301-000326	60ohm,3225,-,43ohm/40MHz,83ohm/700MHz	1	SNA	
B6	0.3	3301-001272	120ohm,2x1.25x1mm,-,TR,-,-,-	1	SNA	
B8	0.3	3301-001272	120ohm,2x1.25x1mm,-,TR,-,-,-	1	SNA	
B9	0.3	3301-001272	120ohm,2x1.25x1mm,-,TR,-,-,-	1	SNA	
B503	0.3	3301-001272	120ohm,2x1.25x1mm,-,TR,-,-,-	1	SNA	
B526	0.3	3301-001272	120ohm,2x1.25x1mm,-,TR,-,-,-	1	SNA	
B527	0.3	3301-001272	120ohm,2x1.25x1mm,-,TR,-,-,-	1	SNA	
B1	0.3	3301-001569	600ohm,2012,1000mA,TP,520ohm/90MHz,730ohm/150MHz,0.1ohm	1	SNA	
B2	0.3	3301-001569	600ohm,2012,1000mA,TP,520ohm/90MHz,730ohm/150MHz,0.1ohm	1	SNA	
B10	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B100	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B11	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B12	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B13	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B14	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B15	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B16	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B17	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B18	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B19	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B20	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B21	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B22	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B23	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B24	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	

NAME	LEVEL	PART CODE	SPEC	Qty	SA/SNA	Option
B25	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B26	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B27	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B28	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B29	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B30	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B31	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B32	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B33	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B34	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B35	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B38	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B39	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B40	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B41	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B42	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B43	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B7	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B500	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B501	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B502	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B504	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B505	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B506	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B507	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B508	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B509	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B510	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B515	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B516	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B517	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B518	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B519	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B520	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B521	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B525	0.3	3301-001649	180ohm,1608,-,TP,-,226ohm/389MHz,-	1	SNA	
B522	0.3	3301-001772	27ohm,1608,-,TP,30ohm/120MHz,48ohm/550Mhz,-	1	SA	
SW1	0.3	3404-001311	12VDC,50mA,100gf,6.0x6.0x5.0mm,SPST	1	SA	
SW2	0.3	3404-001311	12VDC,50mA,100gf,6.0x6.0x5.0mm,SPST	1	SA	
SW3	0.3	3404-001311	12VDC,50mA,100gf,6.0x6.0x5.0mm,SPST	1	SA	
SW4	0.3	3404-001311	12VDC,50mA,100gf,6.0x6.0x5.0mm,SPST	1	SA	
J503	0.3	3701-001403	15P,2R,FEMALE,ANGLE,NI	1	SA	
CPU500	0.3	3704-001153	479P,PGA,AU,1.27mm	1	SNA	
J4	0.3	3708-002166	25P,0.5mm,SMD-A,AU,Y,FLIP,BOTTOM	1	SA	
J5	0.3	3708-002402	6P,1.0mm,SMD-A,SnBi,Y,SLIDE,BOTTOM	1	SA	
DDR500	0.3	3709-001375	200P,0.6mm,SMD,AUF,SODIMM	1	SA	
J506	0.3	3709-001398	52P,0.8mm,SMD-A,AU,Mini PCI express	1	SA	
DDR501	0.3	3709-001459	200P,0.6mm,SMD-A,Au,DDR2 SODIMM	1	SA	MD-01-2-50
DDR501	0.3	3709-001489	200P,0.6mm,SMD-A,Au,DDR2 SODIMM	1	SA	MD-02-2-50
J6	0.1	3709-001491	26P,1.0mm,ANGLE,AU,EXPRESS CARD	1	SA	
J514	0.3	3709-001492	9P,2.5mm,SMD-A,Au,2 IN 1 SD/MMC	1	SA	
J509	0.3	3710-002114	50P,2R,0.8mm,ANGLE,AU,BLK	1	SA	
J513	0.3	3710-002133	12P,2R,0.8mm,SMD-A,SN,NTR	1	SA	
J512	0.3	3710-002468	-,7+15P,1R,1.27mm,ANGLE,Au,BLK	1	SA	
J1	0.3	3710-002498	30P,2R,10mm,SMD-A,AU,IVORY	1	SA	
J508	0.3	3711-000386	BOX,10P,1R,1.25MM,SMD-S,SN,WHT	1	SA	
J504	0.3	3711-000541	BOX,2P,1R,1.25mm,SMD-A,SN,NTR	1	SA	
J2	0.3	3711-000922	BOX,4P,1R,1.25mm,SMD-A,SN,WHT	1	SNA	
J3	0.3	3711-000922	BOX,4P,1R,1.25mm,SMD-A,SN,WHT	1	SNA	
J8	0.3	3711-002127	BOX,8P,1R,1.25mm,SMD-A,SN,WHT	1	SA	
J9	0.3	3711-005753	BOX,10P,1R,1mm,SMD-A,Sn,IVORY	1	SA	
J505	0.3	3711-006059	NOWALL,7P,1R,2.5,BATTERY,AU,BLK	1	SA	
J7	0.3	3711-006496	NO WALL,26P,1R,1mm,SMD-A,Au,BLACK	1	SA	
J501	0.3	3722-001692	12P/10C,STANDARD,N,SMD-OFFSET,N,AU,2PORT	1	SA	
J500	0.3	3722-002132	3P,5.5mm,SN-P,BLK	1	SA	
J507	0.3	3722-002365	6P,AUF,PINK	1	SA	
J502	0.3	3722-002382	4P/2C,AUF,BLK,ANGLE-OFFSET,A TYPE	1	SA	

NAME	LEVEL	PART CODE	SPEC	Qty	SA/SNA	Option
J510	0.3	3722-002416	6P,AUF,LIME,ANGLE	1	SA	
J530	0.3	3722-002610	4P,AU,BLK,DIP,A-TYPE	1	SA	
RTC	0.1	4301-000108	3V,220mAH,BUTTON,20x3.2mm,NO	1	SC	
J511	0.3	4309-001020	COIN CELL,SPRING,25.4mm,28.45X19.30X4.98,TP,1.1g,1.1g	1	SA	
MODEM CABLE	0.1	BA39-00662A	PRAHA-SRE,HARNESS,-,2P,L220MM,BLACK,AWG28,FI-S02S,50058-8200,-,200V,1.25,L220MM,OD 0.61,A9117660,MODEM DATA CABLE	1	SA	MC-01-2-50
MODEM CABLE	0.1	BA39-00663A	PRAHA-SRE,HARNESS,-,2P,L220MM,BLACK,AWG28,TY-TU1213HN002,MO-510210200,-,200V,1.25,L220MM,OD 0.55,TC2007E041,MODEM DATA C	1	SA	MC-02-2-50
MODEM	0.1	BA59-02037A	T60M951.07 LF,56Kbps,Agere 2 Chip,-,-,12.288MHz,Delphi MDC1.5	1	SA	
M1	0.3	BA61-00784A	ARGO,CU ALLOY,T3.5,W3.5,L3.9,-,-	1	SA	
M2	0.3	BA61-00784A	ARGO,CU ALLOY,T3.5,W3.5,L3.9,-,-	1	SA	
M3	0.3	BA61-00784A	ARGO,CU ALLOY,T3.5,W3.5,L3.9,-,-	1	SA	
M4	0.3	BA61-00784A	ARGO,CU ALLOY,T3.5,W3.5,L3.9,-,-	1	SA	
M501	0.3	BA61-00784A	ARGO,CU ALLOY,T3.5,W3.5,L3.9,-,-	1	SA	
BRACKET-CPU	0.1	BA61-01060B	OSLO,AL,T1.5,W24,L43.5mm,Silver,Mylar	1	SA	
M500	0.3	BA61-01103A	OSLO,ALLOY,T1,W4,L4.5mm,NTR,-	1	SNA	
INSULATION-MEMORY	0.1	BA62-00389A	SEDONA,PC,T0.2,W64,L30mm,BLACK,-,-,-	1	SA	
BIOS LABEL	0.3	BA68-03588A	RIMINI,SEC,paper,-,W4.5,L4mm,white,white,SPI,Revsion,-,-,-	1	SNA	
ART LABEL	0.3	BA68-10191W	Note PC ALL,-,ARTPAPER,-,W6,L40mm,White,-,PCB-TOP/BOTTOM,Barcode-SMT	1	SNA	
LABEL-BARCODE	0.1	BA68-40005L	NOTE PC,-,WHITE PET,-,W40.0,L6.0MM,-,-,-,-	1	SNA	
ART PAPER	0.3	BA68-40012N	NOTE PC,-,ART PAPER,-,W6.2,L6.2MM,-,-,-,-	1	SNA	
MICOM LABEL	0.3	BA68-40012N	NOTE PC,-,ART PAPER,-,W6.2,L6.2MM,-,-,-,-	1	SNA	
SMT LABEL	0.3	BA68-40012N	NOTE PC,-,ART PAPER,-,W6.2,L6.2MM,-,-,-,-	1	SNA	
EMI1	0.3	BA70-00601A	EMISTOP,Be-Cu,T0.10,Au/gold color,W5.5,-,L4.5mm,-	1	SNA	
EMI2	0.3	BA70-00601A	EMISTOP,Be-Cu,T0.10,Au/gold color,W5.5,-,L4.5mm,-	1	SNA	
EMI3	0.3	BA70-00601A	EMISTOP,Be-Cu,T0.10,Au/gold color,W5.5,-,L4.5mm,-	1	SNA	
M502	0.3	BA70-00601A	EMISTOP,Be-Cu,T0.10,Au/gold color,W5.5,-,L4.5mm,-	1	SNA	
INSULATION-EXPRESS	0.1	BA81-03449A	HAINAN2,DOMESTIC,PC,W63*L50*T0.2mm,BLACK,INSULATOR-EXPRESS_CA	1	SA	
RUBBER-MINICARD	0.1	BA81-03525A	OSLO,SILICON,W5*L5*T4.0mm,BLACK,HS80,-,-	1	SNA	

1. Precautions

1) General After-Sales Service Precautions

(1) Do not let customers repair the product themselves.

☞ There is a danger of injury and the product life time may be shortened.

(2) Make sure to disconnect the power cord from the wall outlet before repairing the product (especially for after-sales service of electric parts).

☞ There is a danger of electric shock.

(3) Do not let customers plug several electric home appliances into a single wall outlet at the same time

☞ There is a danger of fire due to overheating.

(4) Check if the power plug or wall outlet are damaged in any way. ☞ If a defect is found, repair or replace it immediately. (There is a danger of electric shock or fire)

(5) Make sure that it is properly grounded. (Check the ground of the wall outlet)

☞ Electricity leakage may cause electric shock.

(6) Do not spray water on to the product to clean it.

☞ There is a danger of electric shock or fire and it may shorten the lifetime of the product.

(7) Check the assembly status of the product after the after-sales service.

☞ The assembly status of the product must be the same as before the after-sales service.

(8) Unplug the power cord holding the power plug (and not the cord).

☞ If the cord is disconnected, it may cause electric shock or fire.

(9) Repair the product using only authorized parts.

(10) Keep the product away from heating devices such as heaters.

☞ Exposure to heaters may cause deformation of the product or fire.

1. Precautions

2) Safety Precautions

(1) EMI

This device has been registered regarding EMI for residential use. It can be used in all areas.

(2) Circuit Test (Logic Test) Precautions

The LSI and MSI used in this product are semiconductor integrated circuits based on MOS-FET or CMOS. Since these types of devices are highly susceptible to static electricity or current leakage, an isolation break may be caused. Therefore read and follow the instructions below.

1. When handling an LSI or MSI, make sure your body is grounded through a few mega-ohms of resistance. In addition, wear gloves and a jacket made of cotton and not of synthetic fibers that easily generate static electricity.
2. When repairing the product, place a conductive material (e.g. aluminum foil) grounded to the earth on the worktable.
3. You must use a soldering iron without a leakage current.
4. Do not touch the pin of an IC and carefully insert the IC into the black plastic package.
5. When inserting an IC into a PCB, be careful with the direction of the IC. When installing an IC in the wrong direction, it might become damaged.
6. When carrying an IC, package the IC with conducting material such as aluminum foil or conducting sponge so as to keep the voltage level of each of the terminals the same.
7. Since the storage temperature of an IC is between -20 ~ +70 degrees, keep it at room temperature, if possible.
8. When installing or removing a device from a PCB or installing or removing a board, you must disconnect the power before taking any action.
9. When soldering an IC, solder it in as short a time as possible so that unnecessary heat is not applied to the device.
10. Avoid leaving excessive amounts of flux within a custom IC or between the pins when soldering a custom IC.
11. Take care to not damage the board when installing or separating an Option Board.
12. Take care to not break the printed circuit pattern on the PCB when separate an IC.

1. Precautions

3) Ground

The product must be grounded to protect it from static electricity and other dangers. When using a multitap, please use a multitap with a ground terminal only.

If you use a 220V wall outlet with a ground terminal, you do not need to ground it additionally. Avoid using wall outlets if they are not grounded even if they have a ground terminal.

To ground the product, connect the ground to an exclusive ground terminal or metal water pipe. Connect the ground cable to the ground terminal at the rear of the main body. To ground the product, connect the ground terminal of the product to a metal water pipe, wall outlet or exclusive ground terminal with an electric wire equal to or thicker than #18.

Never ground the product to a PVC water pipe, phone line, TV, radio antenna, aluminum window or gas pipe, because this does not actually ground the product and may be dangerous.

4) Static Electricity Precautions

Many parts of the system are susceptible to static electricity. Using an electrostatic discharge (ESD) device is very important for the safety of the user and the user's surroundings. Using an ESD device increases the probability of a successful repair and lowers the expenses for damaged parts.

To prevent static electricity, follow the instructions below.

(1) Perform the repair in a location without static electricity.

(2) Touch your hands to a metal water pipe or some metal object connected to the ground to discharge any static electricity from your body before handling the parts.

(3) Touch only the edges of the board, if possible.

(4) Do not touch any parts unless absolutely necessary

(5) Disassemble the parts on the anti-static-electricity pad.

(6) When a board is not installed in the system, package the board with an anti-static-electricity packaging.