

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO.'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.

MILAN

CPU : MEROM
 Chip Set : SANTAROSA CHIPSET
 Remarks : Mobility Platform

Model Name : MILAN
 PBA Name : MAIN
 PCB Code : BA41-00745A
 Dev. Step : SR
 Revision : 1.0
 T.R. Date :

DRAW	CHECK	APPROVAL

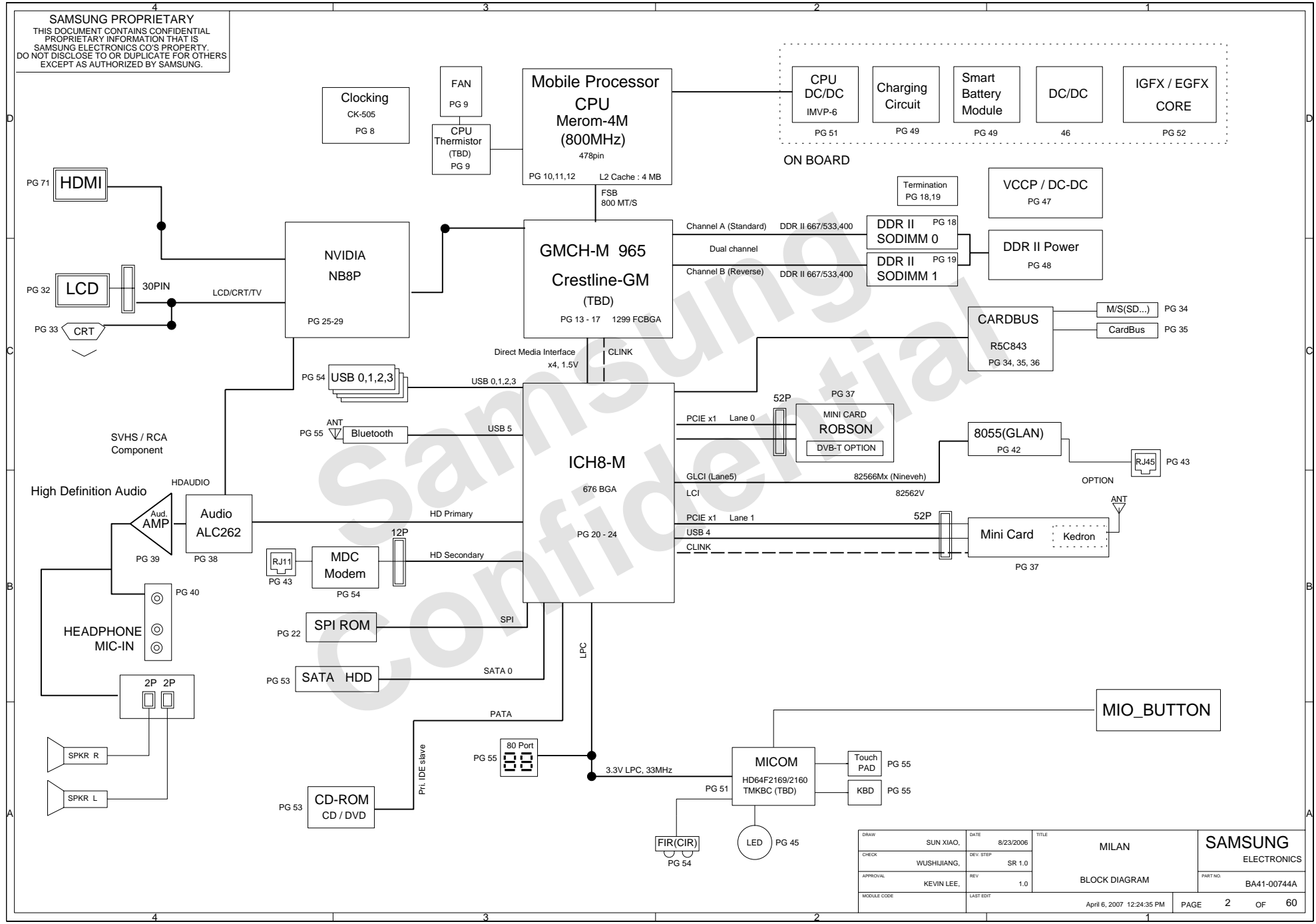
Table of Contents

Sheet 1	Cover
Sheet 2	Diagram (Block/Power) & Annotations
Sheet 8	Clock Generator
Sheet 9	Thermal Sensor & FAN
Sheet 10-12	Merom-4M CPU
Sheet 13-17	Crestline-GMCH
Sheet 18	DDR2 SODIMM A
Sheet 19	DDR2 SODIMM B
Sheet 20-23	ICH8-M
Sheet 24	ICH8-M STRAP
Sheet 25-28	NVIDIA NB8P
Sheet 29	NVIDIA NB8P STRAP
Sheet 30	Video Memory Channel A
Sheet 31	Video Memory Channel B
Sheet 32	LCD Connector
Sheet 33	CRT PORT
Sheet 34-36	CRADBUS CONTROLER
Sheet 37	MINI CARD AND ROBSON DVB-T
Sheet 38	AUDIO - ALC262
Sheet 39	AUDIO - AMP
Sheet 40	AUDIO - HEADPHONE & MIC JACK
Sheet 41	AUDIO - POWER
Sheet 42-43	LAN AND CONNECTOR
Sheet 44-45	MICOM AND MICOM POWER LOGIC
Sheet 46	POWER - SWITCH POWER
Sheet 47	POWER - SANTAROSA PLATFORM POWER
Sheet 48	POWER - DDR2 POWER
Sheet 49	POWER - CHARGE & POWER MANAGEMENT
Sheet 50	POWER - P3.3V_ALW & P5V_AUX
Sheet 51	POWER - CPU VRM
Sheet 52	POWER - GFX CORE
Sheet 53	HDD & ODD Connector
Sheet 54	USB/MDC/IR Connector
Sheet 55	KEYBOARD TOUCHPAD & 80 PORT Connector
Sheet 56-58	Test Point
Sheet 59-60	MIO Board

DRAW	SUN XIAO,	DATE	8/23/2006	TITLE	MILAN	SAMSUNG ELECTRONICS
CHECK	WUSHUJIANG,	DEV. STEP	SR 1.0	MILAN		
APPROVAL	KEVIN LEE,	REV	1.0	COVER		PART NO. BA41-00744A
MODULE CODE		LAST EDIT				

April 6, 2007 12:24:35 PM PAGE 1 OF 60

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO.'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.



DRAWN	SUN XIAO,	DATE	8/23/2006	TITLE	MILAN	SAMSUNG ELECTRONICS
CHECK	WUSHUIJANG,	DEV. STEP	SR 1.0			
APPROVAL	KEVIN LEE,	REV	1.0		BLOCK DIAGRAM	PART NO. BA41-00744A
MODULE CODE		LAST EDIT				
					April 6, 2007 12:24:35 PM	PAGE 2 OF 60

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.

BOARD INFORMATION

SCHEMATIC ANNOTATIONS AND BOARD INFORMATION

Devices	IDSEL#	REQ/GNT#	Interrupts
Cardbus	AD25	3	B,C,D
DT PCI SLOT	AD22	1	B,C,D,C
MiniPCI SLOT	AD23	2	A,B
USB	AD29(internal)	-	USB2.0 #0 (USB0) : A USB2.0 #1 (USB1) : D USB2.0 #2 (USB4) : C USB2.0 #3 (USB5) : E USB2.0 #4 (EHCI) : H
Hub to PCI	AD30(internal)	-	
LPC bridge/IDE/AC97/SMBUS	AD31(internal)	-	B
Internal MAC	AD24(internal)	-	E
AC Link	-	-	B
GLAN	-	-	F

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

LCD Panel Detect (TBD)		
Devices	Resolution	PANNEL_DETECT_0

Voltage Rails	
VDC	Primary DC system power supply (7 to 21V)
VCC_CORE	Core Voltage for CPU
MCH_CORE	Core Voltage for CPU
ICH_CORE	Core Voltage for CPU
P1.05V (VCCP)	VTT for CPU, Crestline & ICH8-M
P1.05V_M	1.05V switched power rail for ME (on in M0/M1)
P1.25V_M	1.25V switched power rail for ME (on in M0/M1)
P3.3V_M	3.3V switched power rail for ME (on in M0/M1)
P3.3V_A	3.3V always power rail (by KBC3_ALWS_ON)
MICOM_P3V	3.3V always power rail (for Micom)
LAN_3.3V	3.3V always power rail (for LAN)
P1.5V	1.5V switched off power rail (off in S3-S5)
P1.5V_AUX	1.5V switched on power rail
P2.5V	2.5V switched off power rail (off in S3-S5)
P1.8V	1.8V switched off power rail (off in S3-S5)
P1.8V_AUX	1.8V power rail for DDR
P0.9V	0.9V power rail for DDR
P3.3V	3.3V switched off power rail (off in S3-S5)
P3.3V_AUX	3.3V switched on power rail
P5V	5.0V switched off power rail (off in S3-S5)
PSV_AUX	5.0V switched on power rail

I ² C / SMB Address			
Devices	Address	Hex	Bus
ICH8-m	Master	-	SMBUS Master
CPU Thermal Sensor	1001 110x	9Ch	Thermal Sensor
SODIMM0	1010 000x	A0h	-
SODIMM1	1010 010x	A4h	-
Thermal Sensor on SODIMM0	0011 000x	30h	-
Thermal Sensor on SODIMM1	0011 010x	34h	-
CK-505M (Clock Generator)	1101 001x	D2h	Clock, Unused Clock Output Disable
DB400 (PCI Express Clocks)	1101 110x	DCh	Clock Buffer for PCI Express
TBD	0100 1100	4Ch	Thermal Sensor
TBD : (LVDS BackLight Inverter)	0101 1000	58h	-
TBD : (ALS)	0111 0010	72h	Ambient Light Sensor
TBD : (AUX DISPLAY)	0011 110x	3Ch	EMA
LAN	1100 1000	C8h	52556
PCI Express Docking	TBD	TBD	TBD
TPM	TBD	TBD	TBD

USB PORT Assign		PCI Express Assign	
PORT #	ASSIGNED TO	PORT #	ASSIGNED TO
0	SYSTEM PORT 0	0	PCIe x1 Slot
1	SYSTEM PORT 1	1	Mini Card (Golan)
2	DMB	2	Mini Card (WIBRO : RSVD)
3	Expresas Card	3	Expresas Card
4	DOCKING PORT 0	4	DOCKING PORT 0
5	Bluetooth	5	GLAN
6	Mini PCI Express		
7	Aux Display		
8	Test Port (RSVD)		
9	WWAN/WIBRO (TBD)		

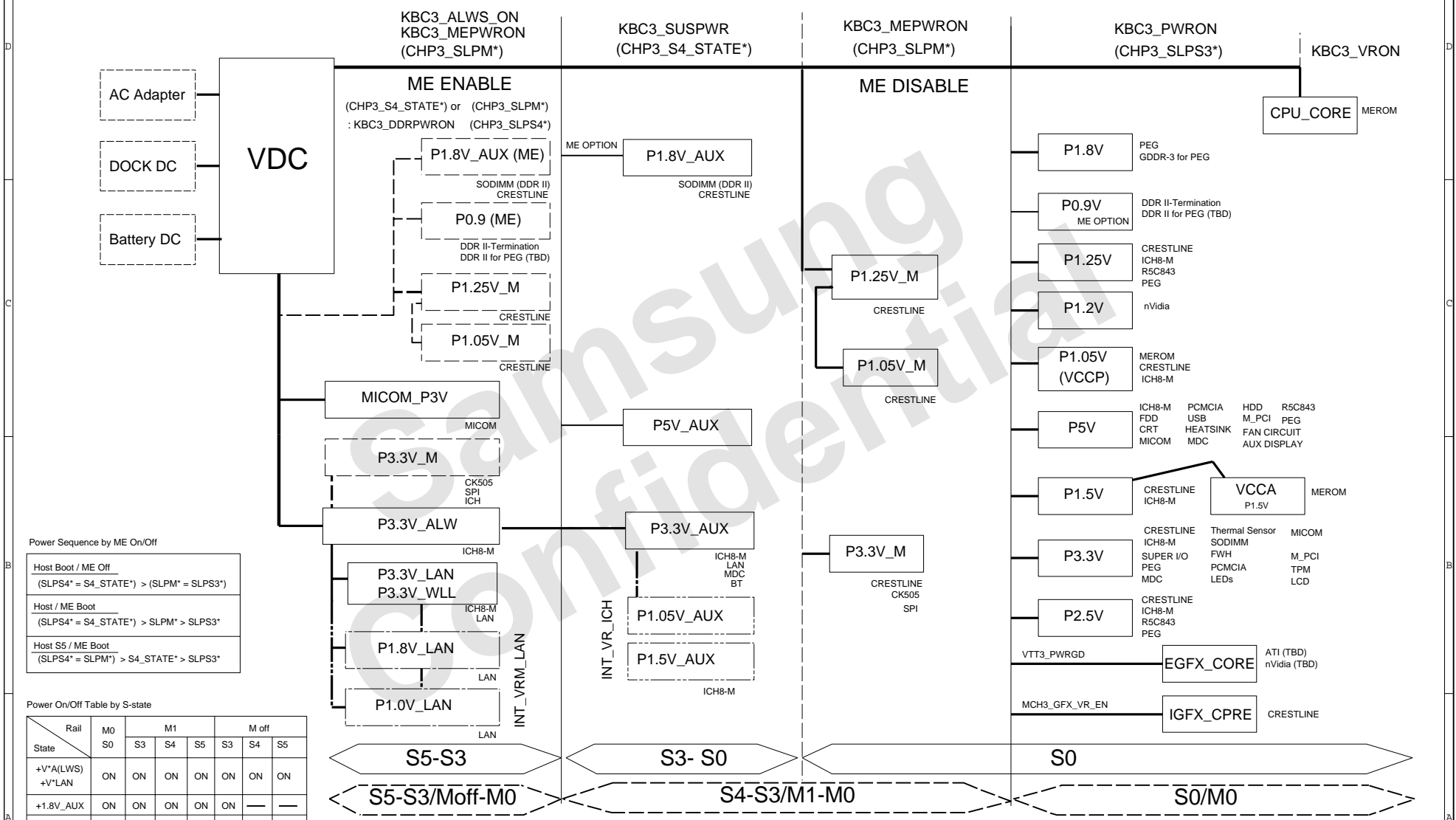
REVISION HISTORY

See rev notes for more information.

DRAW	SUN XIAO,	DATE	8/23/2006	TITLE	MILAN	SAMSUNG ELECTRONICS
CHECK	WUSHUIJANG,	DEV. STEP	SR 1.0			
APPROVAL	KEVIN LEE,	REV	1.0		BOARD INFO	PART NO.
MODULE CODE		LAST EDIT				BA41-00744A
				April 6, 2007 12:24:35 PM	PAGE	3 OF 60

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO.'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.

POWER DIAGRAM

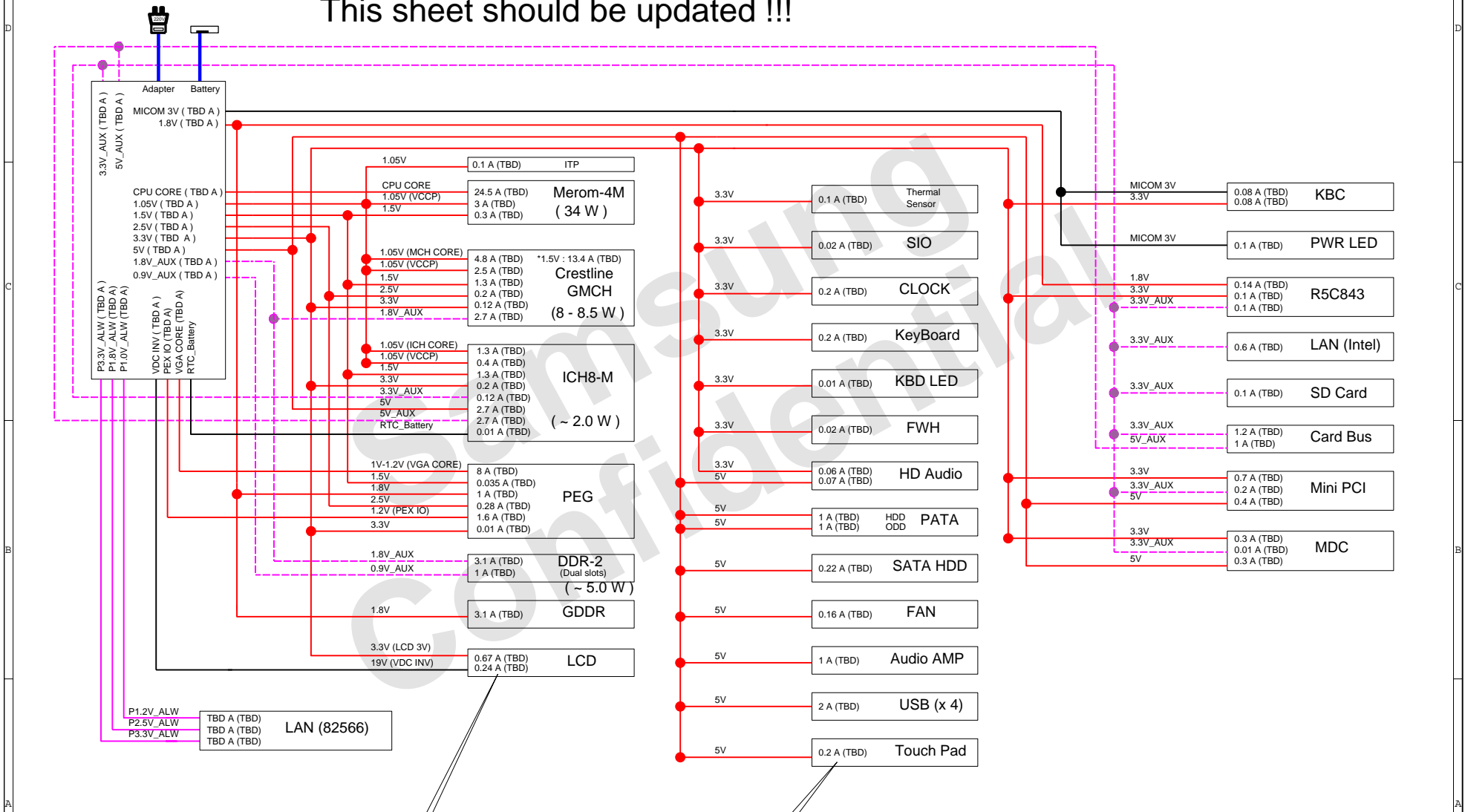


DRAWN	SUN XIAO,	DATE	8/23/2006	TITLE	MILAN	SAMSUNG ELECTRONICS
CHECK	WUSHUIJANG,	DEV. STEP	SR 1.0	POWER DIAGRAM	PART NO.	
APPROVAL	KEVIN LEE,	REV	1.0	April 6, 2007 12:24:35 PM	PAGE	4 OF 60
MODULE CODE		LAST EDIT				

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.

POWER RAILS ANALYSIS Rev. 0.5

This sheet should be updated !!!



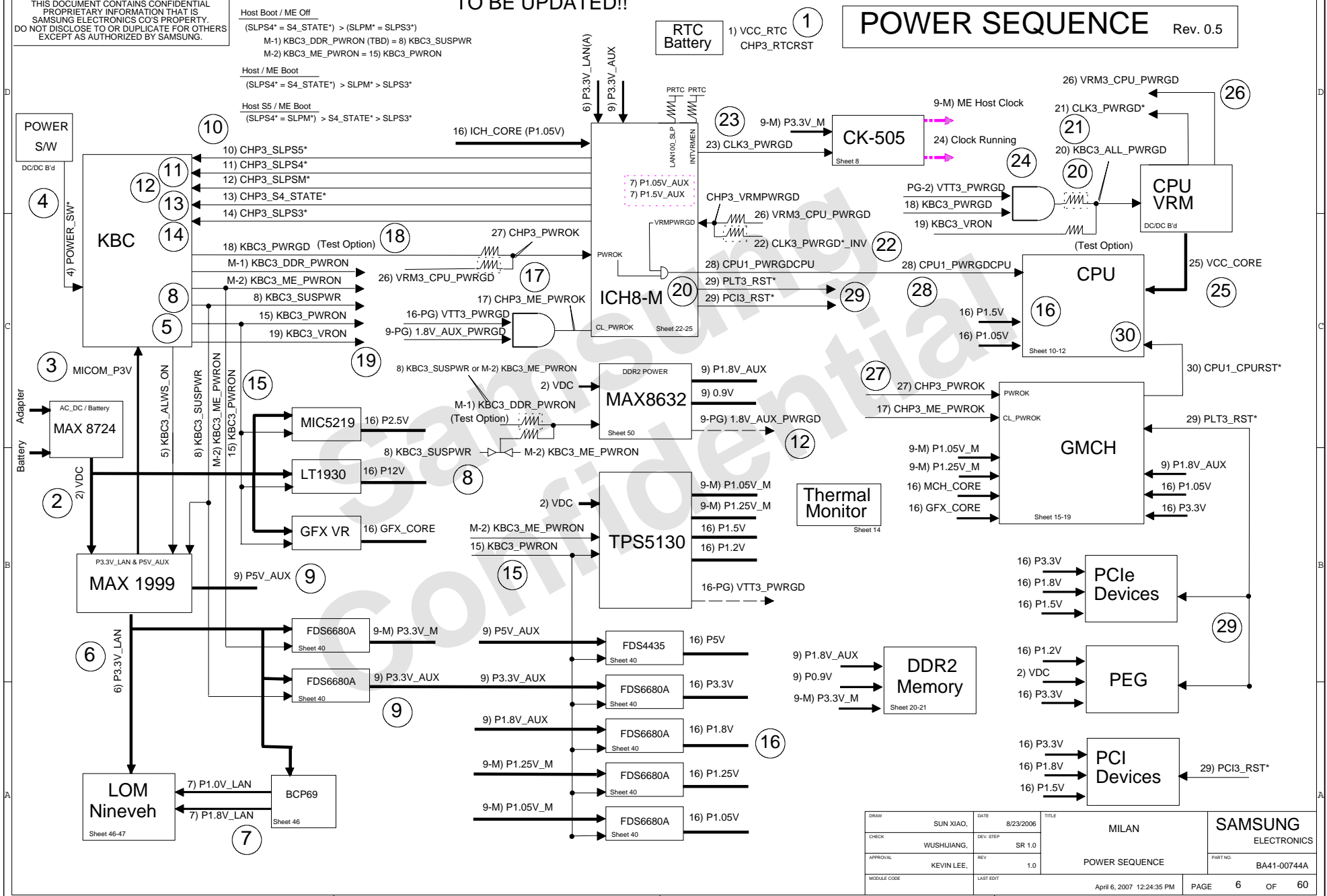
Value by Datasheet/Application notes (Value by measurement)

DRAW	SUN XIAO,	DATE	8/23/2006	TITLE	MILAN	SAMSUNG ELECTRONICS
CHECK	WUSHUIJANG,	DEV. STEP	SR 1.0			
APPROVAL	KEVIN LEE,	REV	1.0		POWER RAILS	PART NO.
MODULE CODE		LAST EDIT				BA41-00744A
					April 6, 2007 12:24:35 PM	PAGE 5 OF 60

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO.'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.

TO BE UPDATED!!

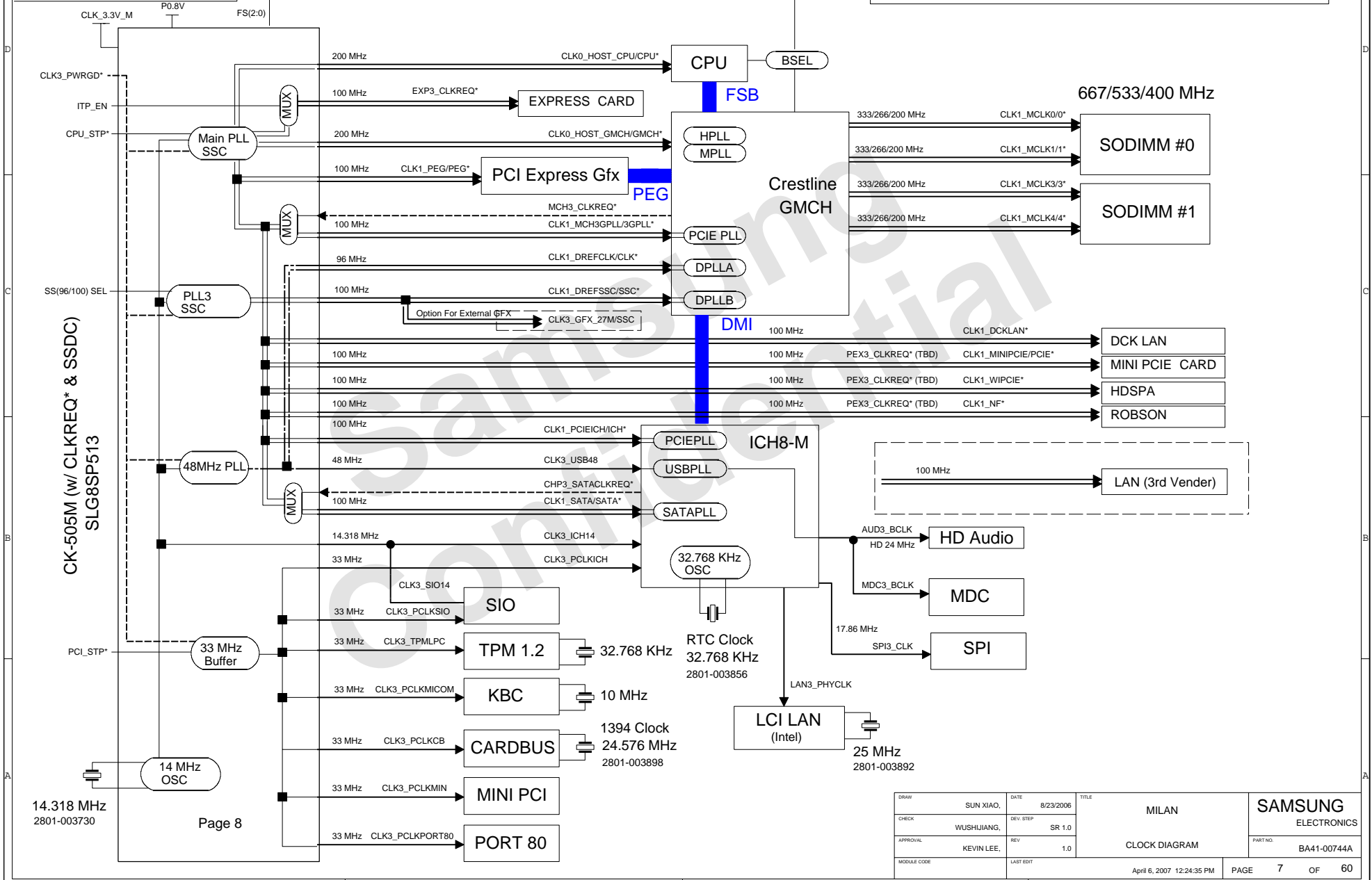
POWER SEQUENCE Rev. 0.5



DRAWN	SUN XIAO,	DATE	8/23/2006	TITLE	MILAN	SAMSUNG ELECTRONICS PART NO. BA41-00744A
CHECK	WUSHUIJANG,	DEV. STEP	SR 1.0	POWER SEQUENCE		
APPROVAL	KEVIN LEE,	REV	1.0	April 6, 2007 12:24:35 PM		
MODULE CODE		LAST EDIT		PAGE 6 OF 60		

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO.'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.

CLOCK DISTRIBUTION Rev. 0.8



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

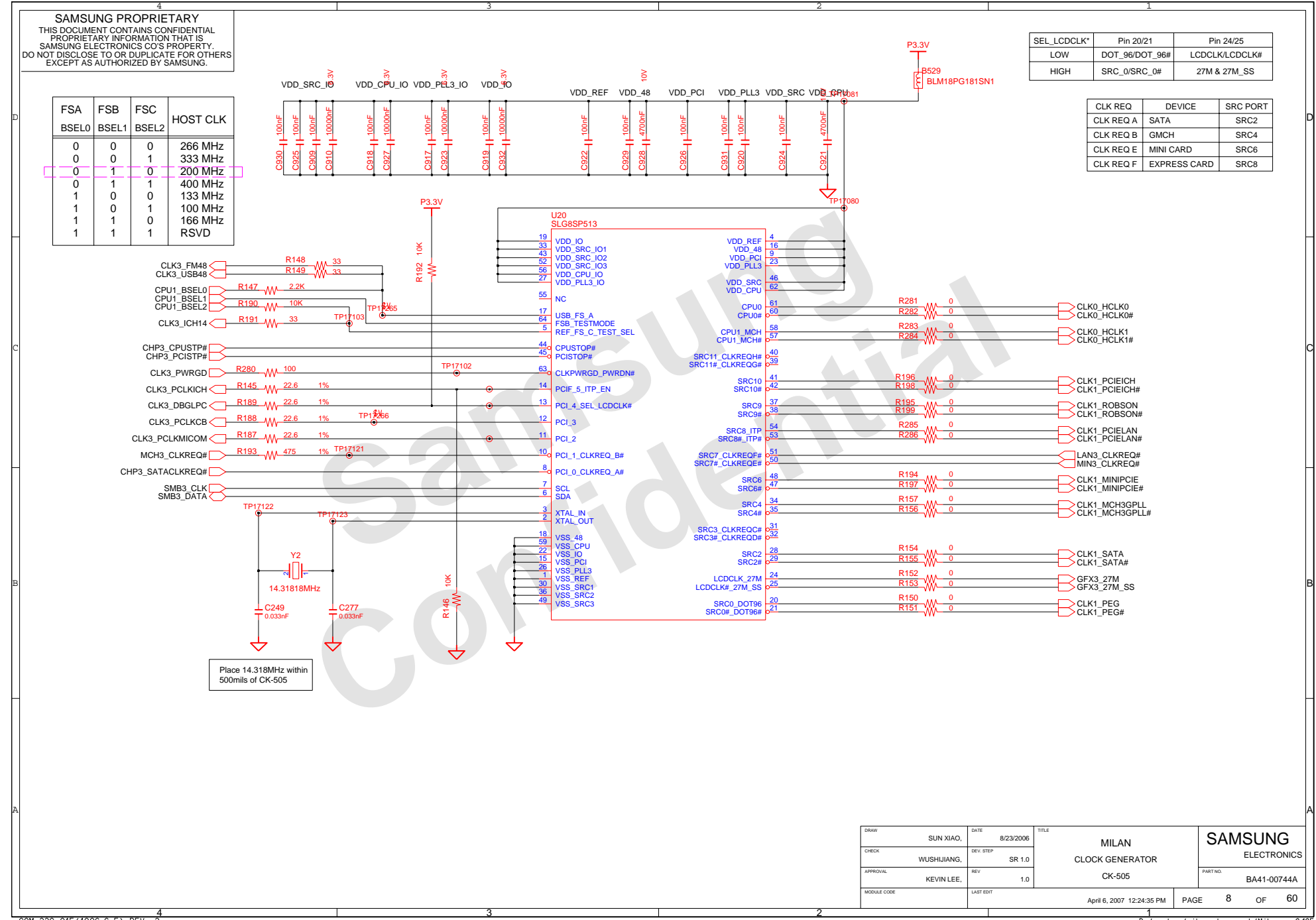
DRAWN	SUN XIAO,	DATE	8/23/2006	TITLE	MILAN	SAMSUNG ELECTRONICS
CHECK	WUSHUIJANG,	DEV. STEP	SR 1.0	CLOCK DIAGRAM		
APPROVAL	KEVIN LEE,	REV	1.0	PART NO.		BA41-00744A
MODULE CODE		LAST EDIT		April 6, 2007 12:24:35 PM		PAGE 7 OF 60

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO.'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.

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

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

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

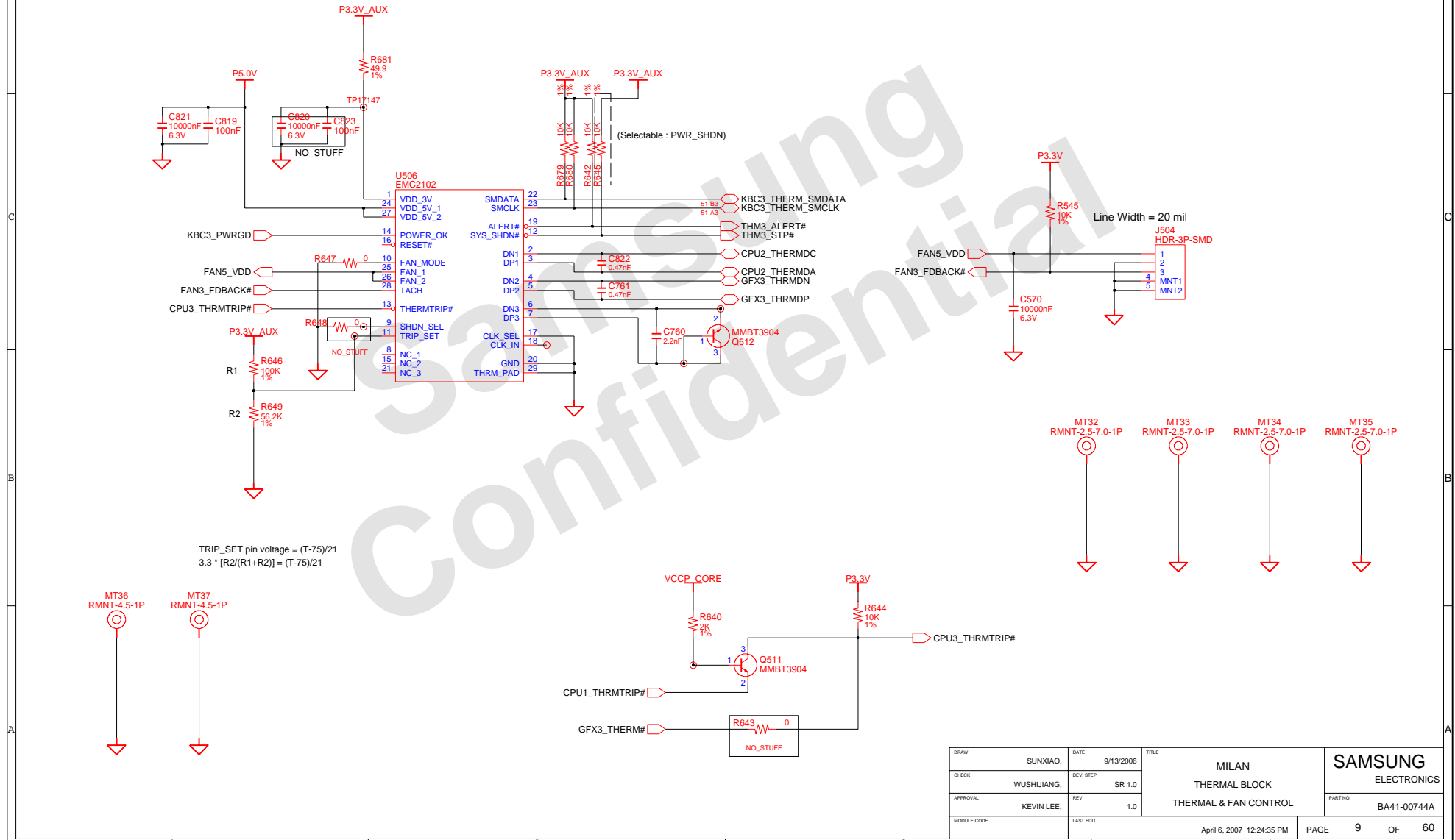


Place 14.31818MHz within
500mils of CK-505

DRAW	SUN XIAO,	DATE	8/23/2006	TITLE	MILAN	SAMSUNG ELECTRONICS
CHECK	WUSHUIJANG,	DEV. STEP	SR 1.0	CLOCK GENERATOR		
APPROVAL	KEVIN LEE,	REV	1.0	CK-505		PART NO. BA41-00744A
MODULE CODE		LAST EDIT			April 6, 2007 12:24:35 PM	PAGE 8 OF 60

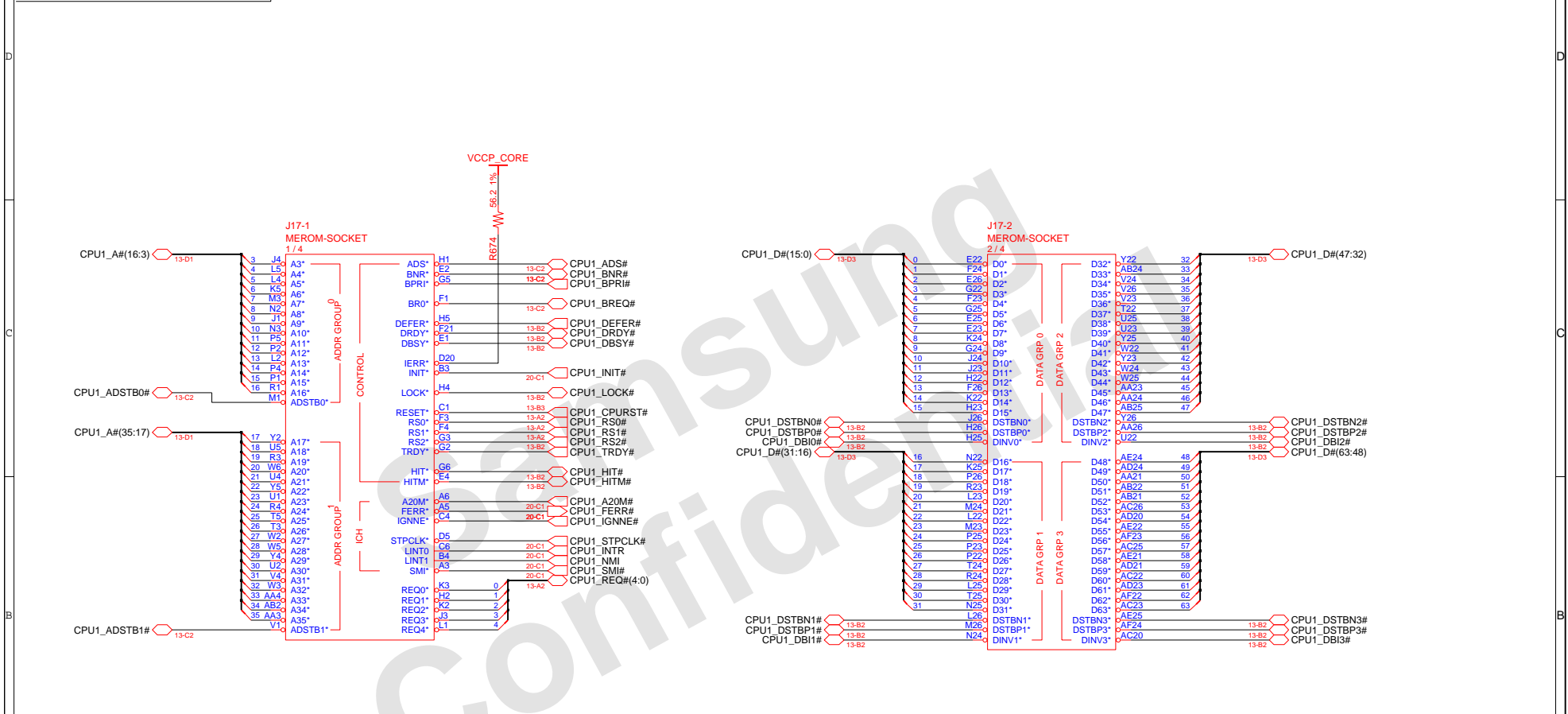
SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.

THERMAL SENSOR & FAN CONTROL

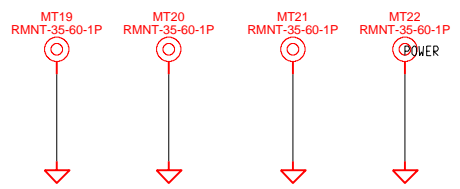


DRAWN	SUNXIAO,	DATE	9/13/2006	TITLE	MILAN	SAMSUNG ELECTRONICS
CHECK	WUSHUIJANG,	DEV. STEP	SR 1.0	THERMAL BLOCK		
APPROVAL	KEVIN LEE,	REV	1.0	THERMAL & FAN CONTROL		PART NO. BA41-00744A
MODULE CODE		LAST EDIT		April 6, 2007 12:24:35 PM	PAGE	9 OF 60

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.

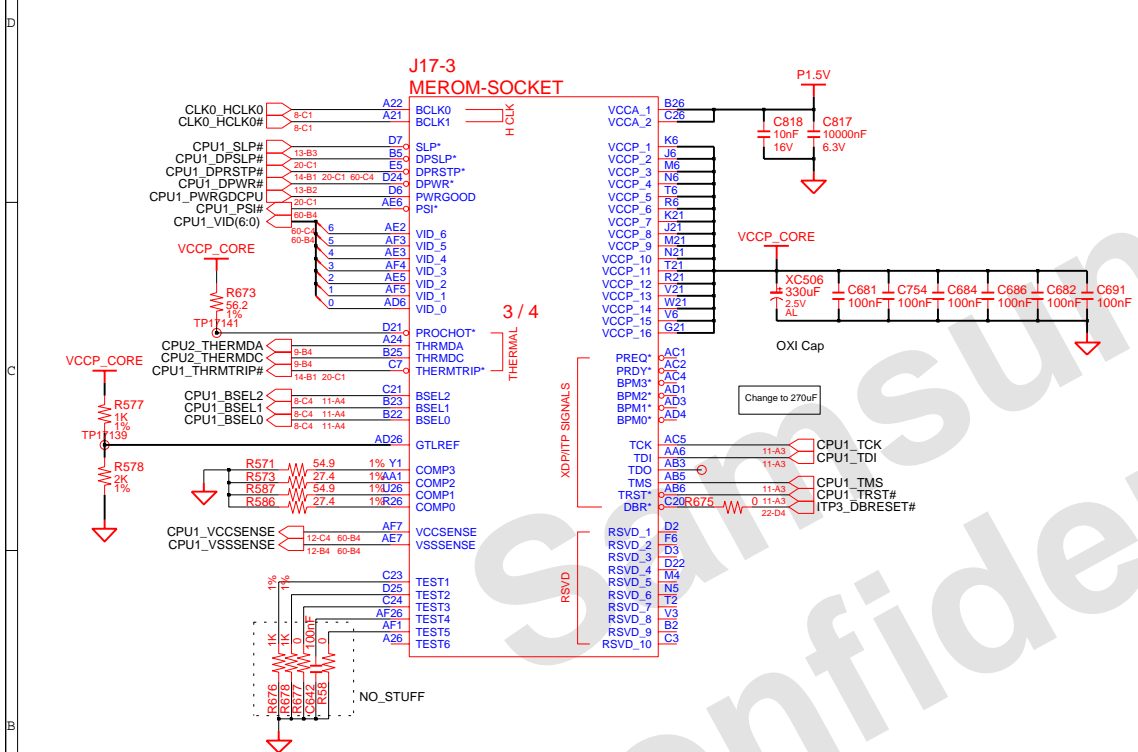


CPU CONNECTOR PART NUMBER 3704-001153

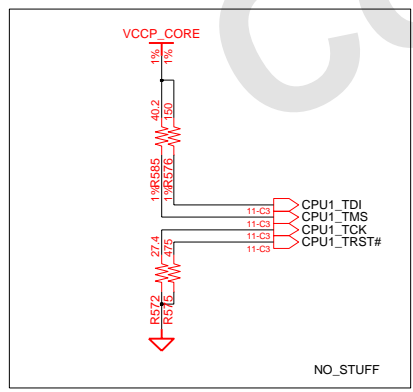


DRAW	SUNXIAO,	DATE	8/31/2006	TITLE	MILAN	SAMSUNG ELECTRONICS
CHECK	WUSHUIJANG,	DEV. STEP	SR 1.0		CPU	
APPROVAL	KEVIN LEE,	REV	1.0		MEROM(1/3)	PART NO. BA41-00744A
MODULE CODE	undefined	LAST EDIT		April 6, 2007 12:24:35 PM	PAGE	10 OF 60

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.



ITP DISABLE



CPU Core Voltage Table MVP-6

Active Mode		Active/Deeper Sleep Dual Mode Region		Deeper Sleep/Extended Deeper Sleep Dual Mode Region	
VID(6:0)	Voltage	VID(6:0)	Voltage	VID(6:0)	Voltage
0 0 0 0 0 0 0	1.5000 V	0 1 0 1 0 0 0	1.0000 V	1 0 1 0 0 0 1	0.4875 V
0 0 0 0 0 0 1	1.4875 V	0 1 0 1 0 0 1	0.9875 V	1 0 1 0 0 1 0	0.4750 V
0 0 0 0 0 1 0	1.4750 V	0 1 0 1 0 1 0	0.9750 V	1 0 1 0 0 1 1	0.4625 V
0 0 0 0 0 1 1	1.4625 V	0 1 0 1 1 0 0	0.9625 V	1 0 1 0 1 0 0	0.4500 V
0 0 0 0 1 0 0	1.4500 V	0 1 0 1 1 0 1	0.9500 V	1 0 1 0 1 0 1	0.4375 V
0 0 0 0 1 0 1	1.4375 V	0 1 0 1 1 1 0	0.9375 V	1 0 1 0 1 1 0	0.4250 V
0 0 0 0 1 1 0	1.4250 V	0 1 0 1 1 1 1	0.9250 V	1 0 1 0 1 1 1	0.4125 V
0 0 0 1 0 0 0	1.4125 V	0 1 1 0 0 0 0	0.9125 V	1 0 1 1 0 0 0	0.4000 V
0 0 0 1 0 0 1	1.4000 V	0 1 1 0 0 0 1	0.9000 V	1 0 1 1 0 0 1	0.3875 V
0 0 0 1 0 1 0	1.3875 V	0 1 1 0 0 1 0	0.8875 V	1 0 1 1 0 1 0	0.3750 V
0 0 0 1 0 1 1	1.3750 V	0 1 1 0 0 1 1	0.8750 V	1 0 1 1 0 1 1	0.3625 V
0 0 0 1 1 0 0	1.3625 V	0 1 1 0 1 0 0	0.8625 V	1 0 1 1 1 0 0	0.3500 V
0 0 0 1 1 0 1	1.3500 V	0 1 1 0 1 0 1	0.8500 V	1 0 1 1 1 0 1	0.3375 V
0 0 0 1 1 1 0	1.3375 V	0 1 1 0 1 1 0	0.8375 V	1 0 1 1 1 1 0	0.3250 V
0 0 0 1 1 1 1	1.3250 V	0 1 1 1 0 0 0	0.8250 V	1 0 1 1 1 1 1	0.3125 V
0 0 1 0 0 0 0	1.3125 V	0 1 1 1 0 0 1	0.8125 V	1 1 0 0 0 0 0	0.3000 V
0 0 1 0 0 0 1	1.3000 V	0 1 1 1 0 0 1	0.8000 V	1 1 0 0 0 0 1	0.2875 V
0 0 1 0 0 1 0	1.2875 V	0 1 1 1 0 1 0	0.7875 V	1 1 0 0 0 1 0	0.2750 V
0 0 1 0 0 1 1	1.2750 V	0 1 1 1 0 1 1	0.7750 V	1 1 0 0 0 1 1	0.2625 V
0 0 1 0 1 0 0	1.2625 V	0 1 1 1 1 0 0	0.7625 V	1 1 0 0 1 0 0	0.2500 V
0 0 1 0 1 0 1	1.2500 V	0 1 1 1 1 0 1	0.7500 V	1 1 0 0 1 0 1	0.2375 V
0 0 1 0 1 1 0	1.2375 V	0 1 1 1 1 1 0	0.7375 V	1 1 0 0 1 1 0	0.2250 V
0 0 1 0 1 1 1	1.2250 V	0 1 1 1 1 1 1	0.7250 V	1 1 0 0 1 1 1	0.2125 V
0 0 1 1 0 0 0	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 1	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 1 0	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 1	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 1 0 0	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 1	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 1 0	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 1	1.1250 V	1 0 0 0 1 1 0	0.6250 V	1 1 0 1 1 1 1	0.1125 V
0 1 0 0 0 0 0	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 1	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 1 0	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 1	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 1 0 0	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 1	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 1 0	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 1	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 1 0 0 0	1.0125 V	1 0 0 1 1 1 1	0.5125 V	1 1 1 1 0 0 0	0.0000 V
0 1 0 1 0 0 1	1.0125 V	1 0 0 1 1 1 1	0.5000 V	1 1 1 1 0 0 1	0.0000 V
		1 0 0 1 1 1 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

**11111111*: 0V power good asserted.

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

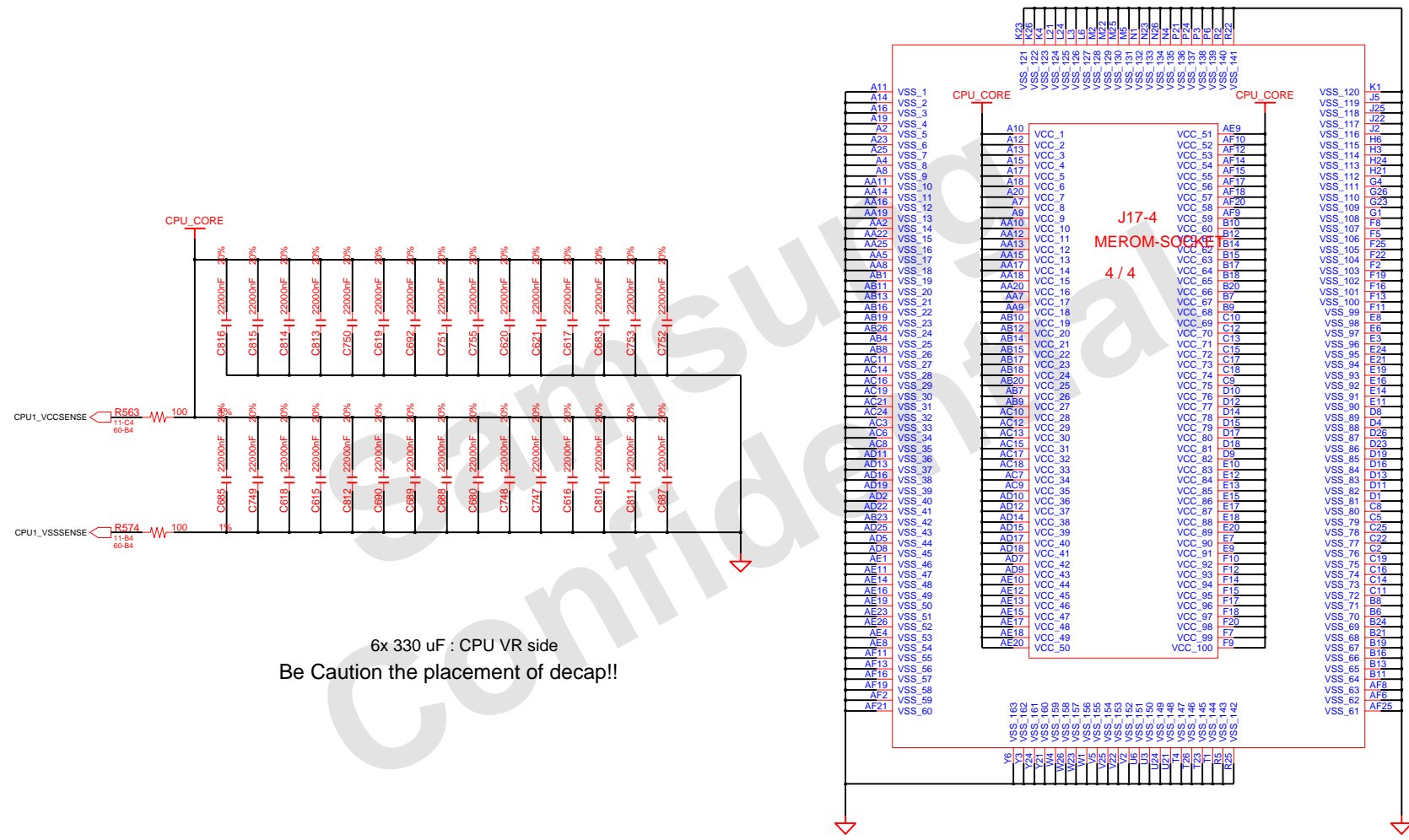
GTLREF : Keep the Voltage divider within 0.5° of the first GTLREF0 pin with Zo=55ohm trace. Minimize coupling of any switching signals to this net.

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.

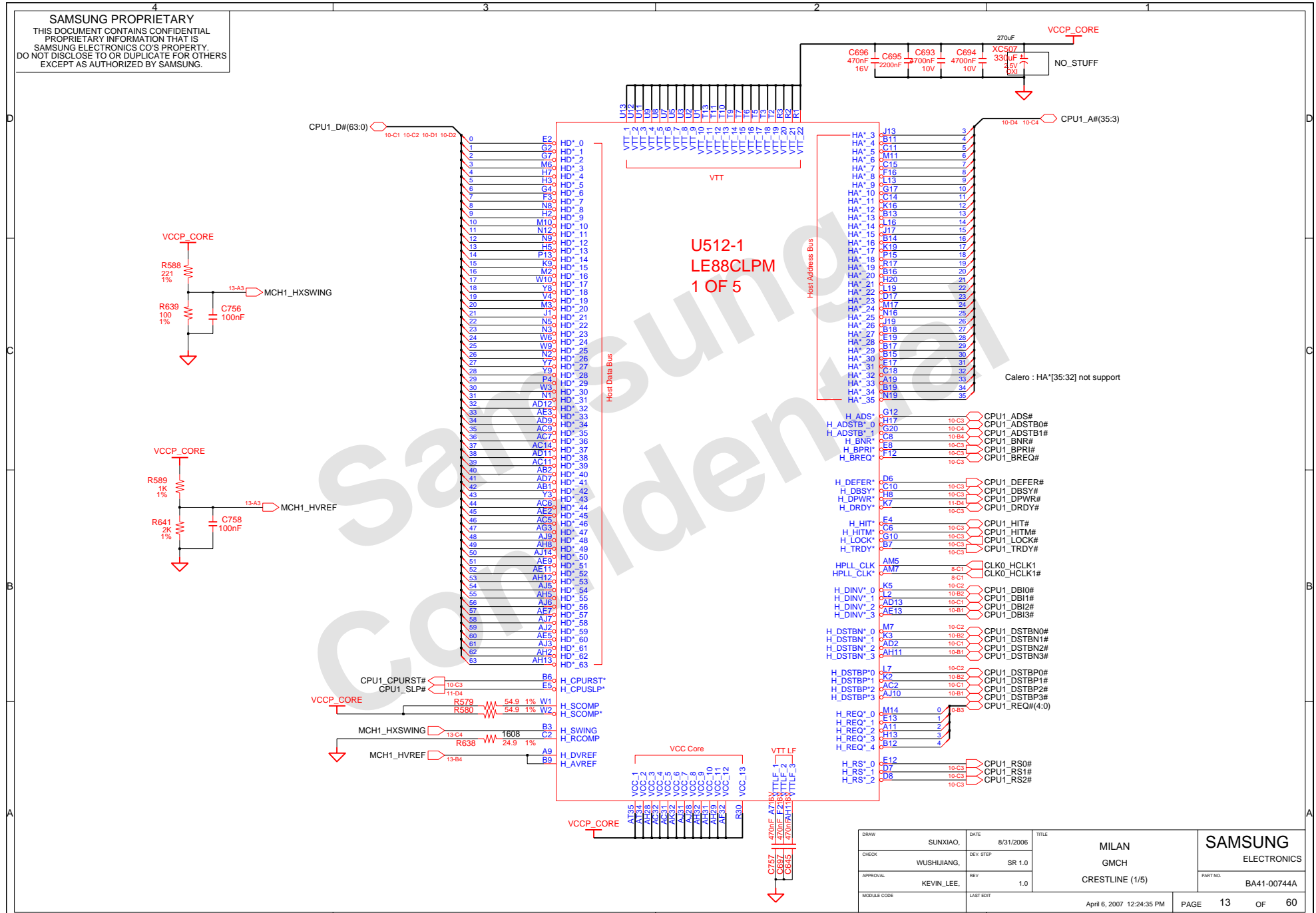
DRAWN	SUNXIAO,	DATE	8/31/2006	TITLE	MILAN	SAMSUNG ELECTRONICS
CHECK	WUSHUIJANG,	DEV STEP	SR 1.0		CPU	
APPROVAL	KEVIN_LEE,	REV	1.0		MEROM(2/3)	PART NO. BA41-00744A
MODULE CODE		LAST EDIT			April 6, 2007 12:24:35 PM	PAGE 11 OF 60

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.



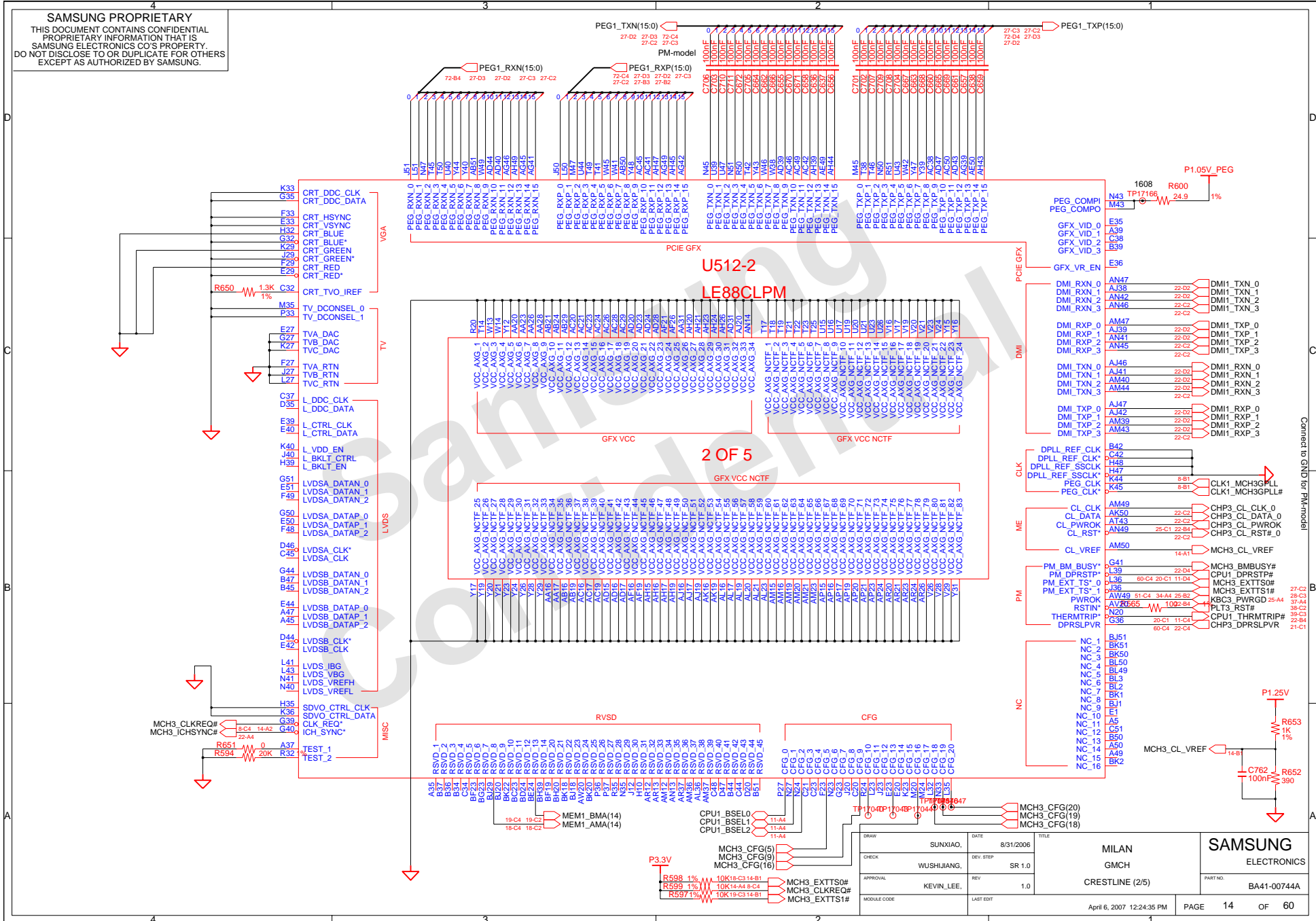
DRAW	SUNXIAO,	DATE	8/31/2006	TITLE	MILAN	SAMSUNG ELECTRONICS	
CHECK	WUSHUIJANG,	DEV. STEP	SR 1.0		CPU		
APPROVAL	KEVIN_LEE,	REV	1.0		MEROM(3/3)	PART NO.	
MODULE CODE		LAST EDIT				BA41-00744A	
April 6, 2007 12:24:35 PM						PAGE	12 OF 60

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO.'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.



DRAWN	SUNXIAO,	DATE	8/31/2006	TITLE	MILAN	SAMSUNG ELECTRONICS
CHECK	WUSHUIJANG,	DEV. STEP	SR 1.0		GMCH	
APPROVAL	KEVIN_LEE,	REV	1.0		CRESTLINE (1/5)	PART NO. BA41-00744A
MODULE CODE		LAST EDIT			April 6, 2007 12:24:35 PM	PAGE 13 OF 60

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO.'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.

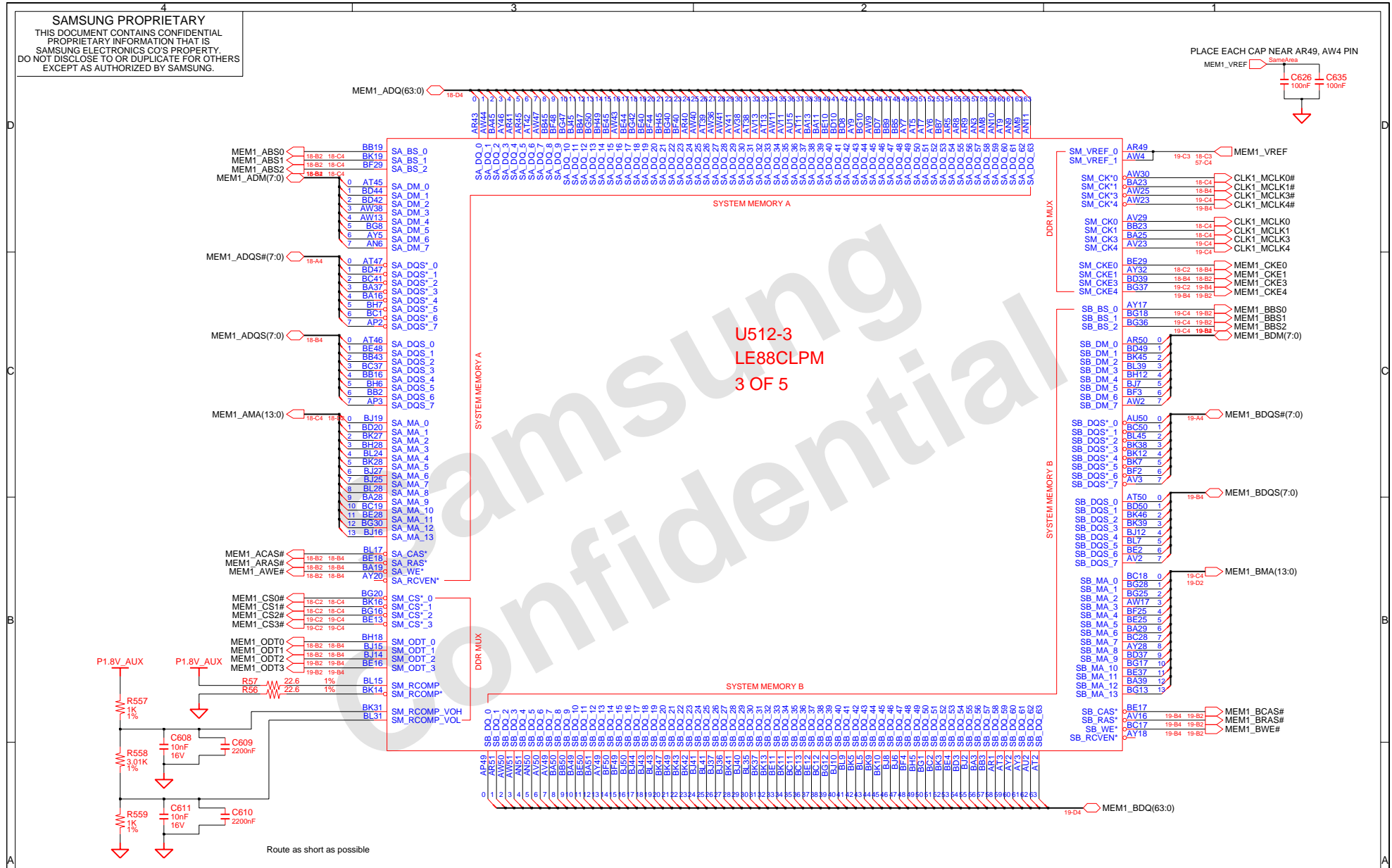


DRAW	SUNXIAO,	DATE	8/31/2006	TITLE
CHECK	WUSHUJIANG,	DEV. STEP	SR 1.0	MILAN GMCH
APPROVAL	KEVIN_LEE,	REV	1.0	CRESTLINE (2/5)
MODULE CODE		LAST EDIT		

SAMSUNG ELECTRONICS	
PART NO.	BA41-00744A
DATE	April 6, 2007 12:24:35 PM
PAGE	14 OF 60

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO.'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.

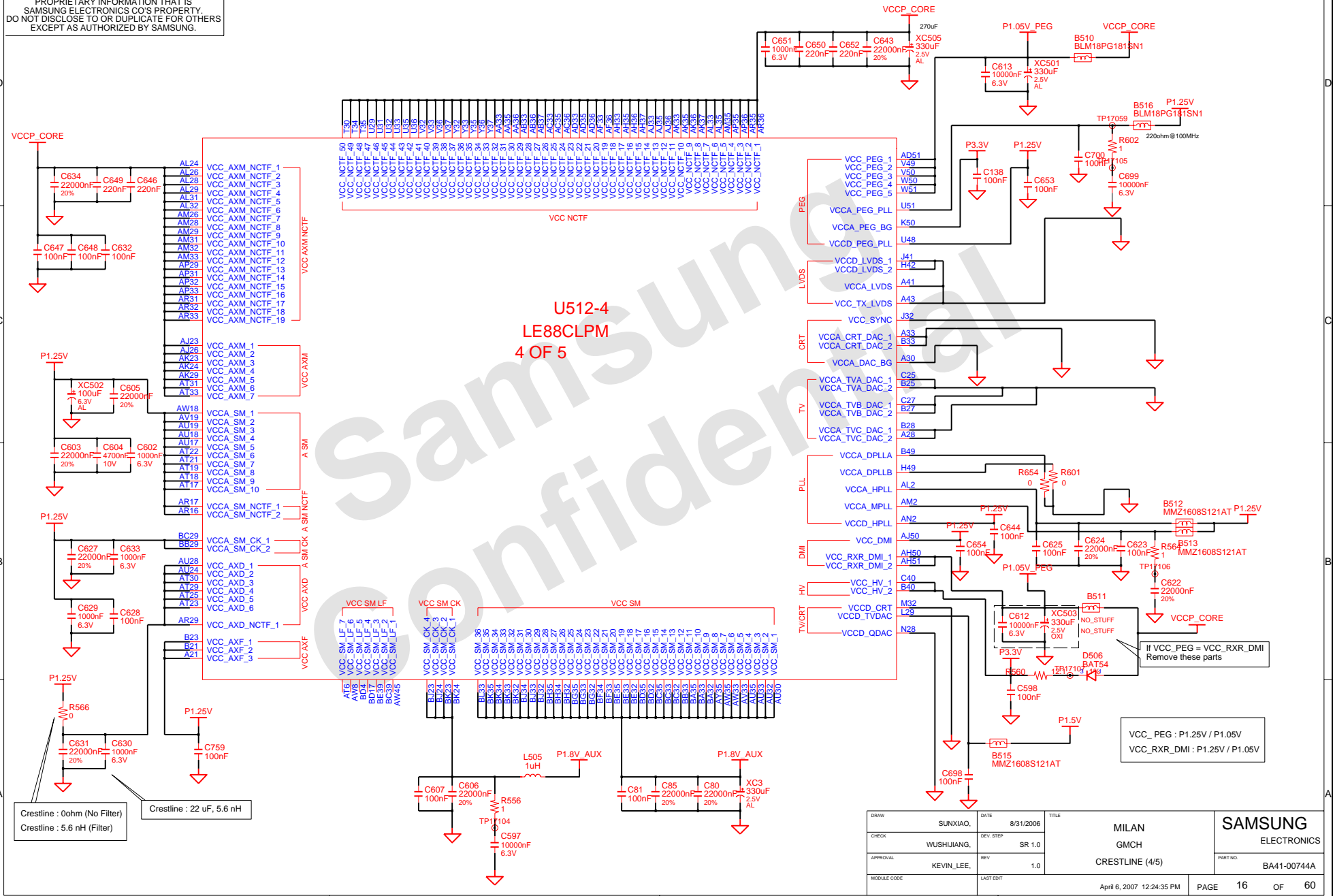
PLACE EACH CAP NEAR AR49, AW4 PIN



U512-3
 LE88CLPM
 3 OF 5

DRAWN	SUNXIAO,	DATE	8/31/2006	TITLE	MILAN GMCH	SAMSUNG ELECTRONICS
CHECK	WUSHUIJIANG,	DEV. STEP	SR 1.0	CRESTLINE (3/5)	PART NO.	
APPROVAL	KEVIN_LEE,	REV	1.0		BA41-00744A	
MODULE CODE		LAST EDIT		April 6, 2007 12:24:35 PM	PAGE	15 OF 60

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO.'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.



**U512-4
 LE88CLPM
 4 OF 5**

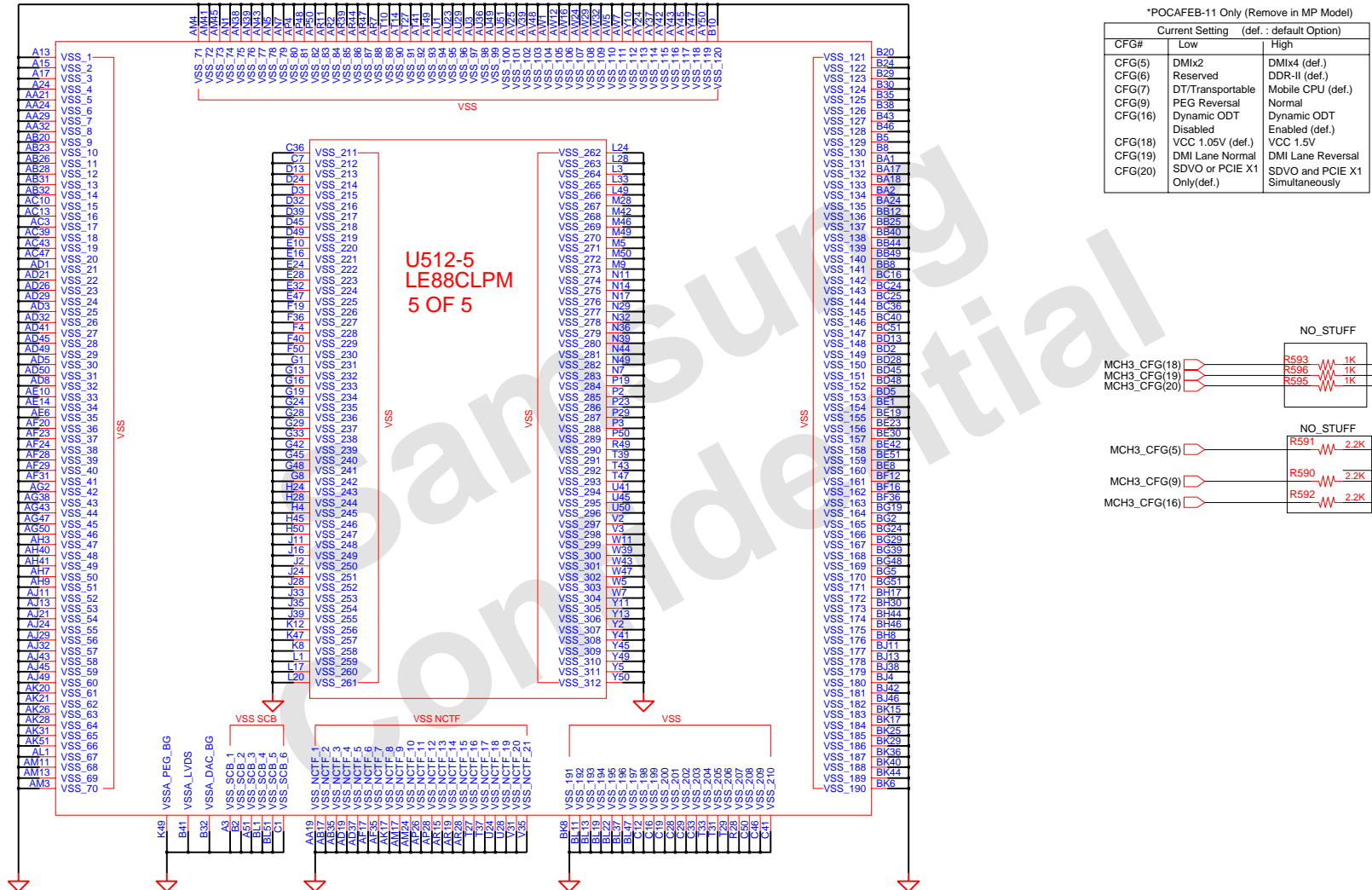
Crestline : 0ohm (No Filter)
 Crestline : 5.6 nH (Filter)

VCC_PEG : P1.25V / P1.05V
 VCC_RXR_DMI : P1.25V / P1.05V

If VCC_PEG = VCC_RXR_DMI
 Remove these parts

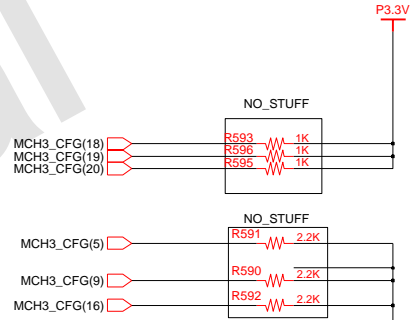
DRAWN	SUNXIAO,	DATE	8/31/2006	TITLE	MILAN	SAMSUNG ELECTRONICS
CHECK	WUSHUIJANG,	DEV. STEP	SR 1.0		GMCH	
APPROVAL	KEVIN_LEE,	REV	1.0		CRESTLINE (4/5)	PART NO.
MODULE CODE		LAST EDIT				BA41-00744A
					April 6, 2007 12:24:35 PM	PAGE 16 OF 60

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.



*POCAFEB-11 Only (Remove in MP Model)

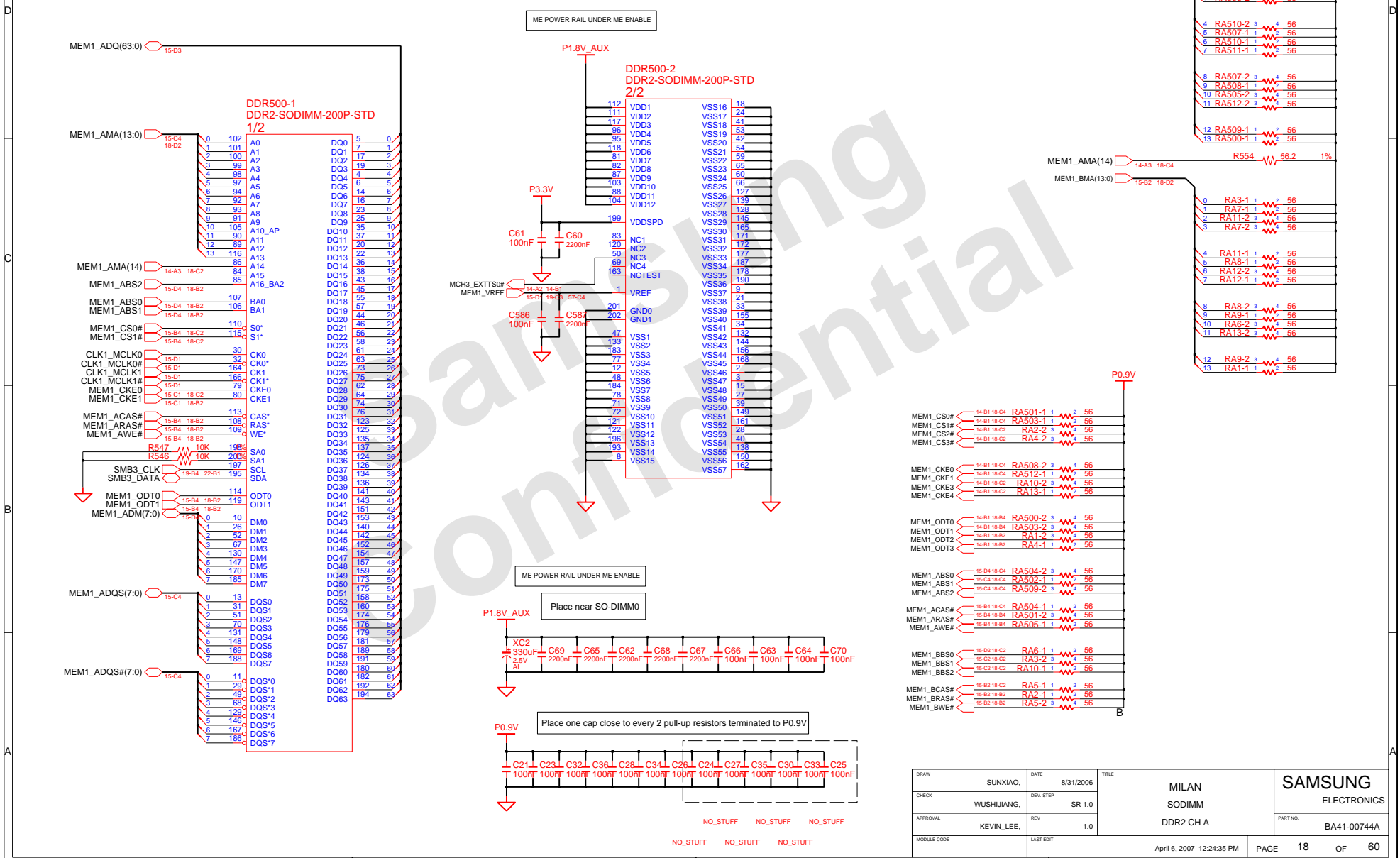
Current Setting (def.: default Option)		
CFG#	Low	High
CFG(5)	DMix2	DMix4 (def.)
CFG(6)	Reserved	DDR-II (def.)
CFG(7)	DT/Transportable	Mobile CPU (def.)
CFG(9)	PEG Reversal	Normal
CFG(16)	Dynamic ODT	Dynamic ODT
	Disabled	Enabled (def.)
CFG(18)	VCC 1.05V (def.)	VCC 1.5V
CFG(19)	DMI Lane Normal	DMI Lane Reversal
CFG(20)	SDVO or PCIE X1 Only(def.)	SDVO and PCIE X1 Simultaneously



DRAWN	SUNXIAO,	DATE	8/31/2006	TITLE	MILAN	SAMSUNG ELECTRONICS	
CHECK	WUSHUIJANG,	DEV. STEP	SR 1.0		GMCH		
APPROVAL	KEVIN_LEE,	REV	1.0		CRESTLINE (5/5)	PART NO.	
MODULE CODE		LAST EDIT				BA41-00744A	
April 6, 2007 12:24:35 PM						PAGE	17 OF 60

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.

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

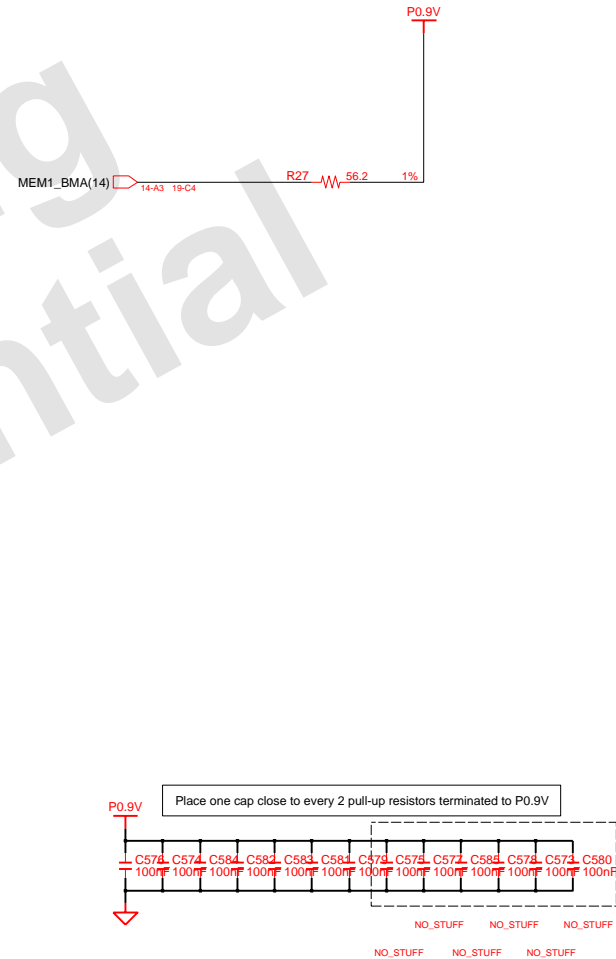
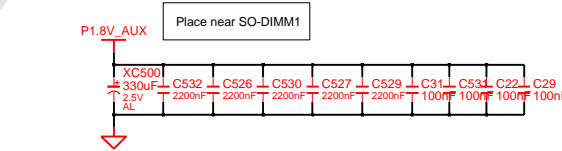
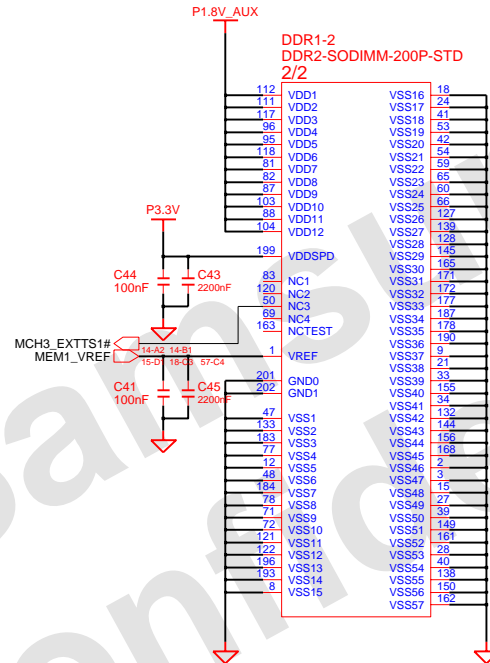
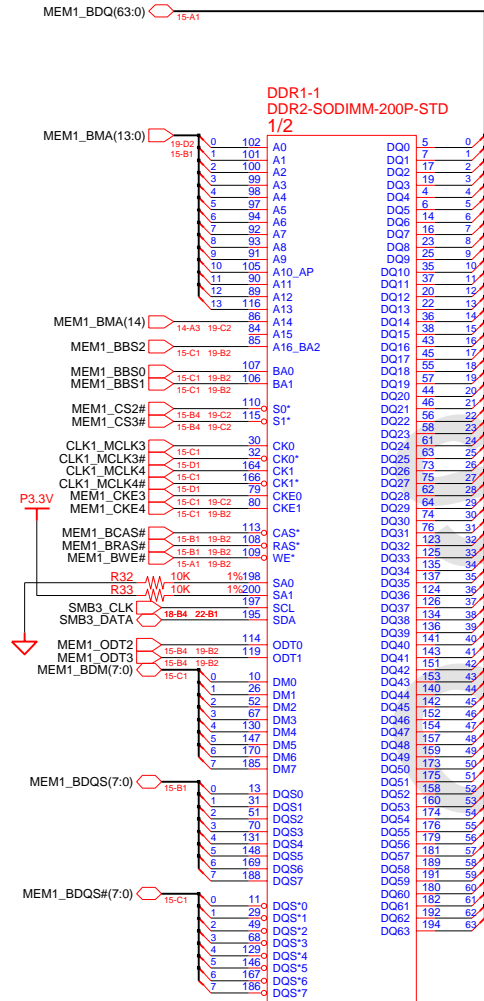


<table border="1"> <tr> <td>DRAWN</td> <td>SUNXIAO,</td> <td>DATE</td> <td>8/31/2006</td> <td>TITLE</td> <td>MILAN SODIMM DDR2 CH A</td> <td rowspan="4"> SAMSUNG ELECTRONICS PART NO. BA41-00744A </td> </tr> <tr> <td>CHECK</td> <td>WUSHUIJANG,</td> <td>DEV. STEP</td> <td>SR 1.0</td> <td></td> <td></td> </tr> <tr> <td>APPROVAL</td> <td>KEVIN_LEE,</td> <td>REV</td> <td>1.0</td> <td></td> <td></td> </tr> <tr> <td>MODULE CODE</td> <td></td> <td>LAST EDIT</td> <td></td> <td></td> <td></td> </tr> </table>	DRAWN	SUNXIAO,	DATE	8/31/2006	TITLE	MILAN SODIMM DDR2 CH A	SAMSUNG ELECTRONICS PART NO. BA41-00744A	CHECK	WUSHUIJANG,	DEV. STEP	SR 1.0			APPROVAL	KEVIN_LEE,	REV	1.0			MODULE CODE		LAST EDIT				April 6, 2007 12:24:35 PM PAGE 18 OF 60
DRAWN	SUNXIAO,	DATE	8/31/2006	TITLE	MILAN SODIMM DDR2 CH A	SAMSUNG ELECTRONICS PART NO. BA41-00744A																				
CHECK	WUSHUIJANG,	DEV. STEP	SR 1.0																							
APPROVAL	KEVIN_LEE,	REV	1.0																							
MODULE CODE		LAST EDIT																								

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO.'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.

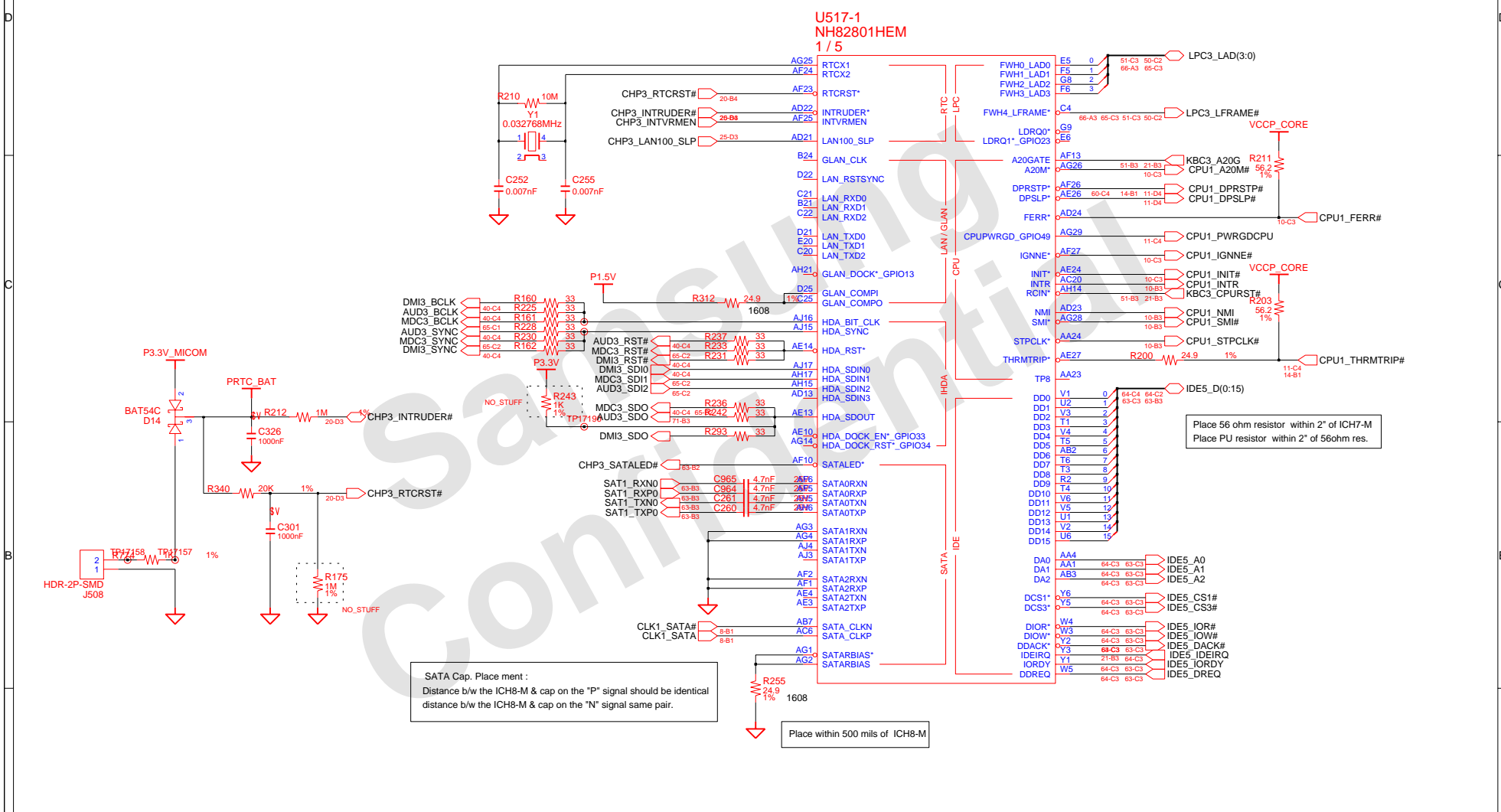
DDR SO-DIMM #1

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



DRAWN	SUNXIAO,	DATE	8/31/2006	TITLE	MILAN SODIMM DDR2 CH B	SAMSUNG ELECTRONICS PART NO. BA41-00744A
CHECK	WUSHUIJANG,	DEV. STEP	SR 1.0			
APPROVAL	KEVIN_LEE,	REV	1.0			
MODULE CODE		LAST EDIT				
				April 6, 2007 12:24:35 PM	PAGE	19 OF 60

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO.'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.



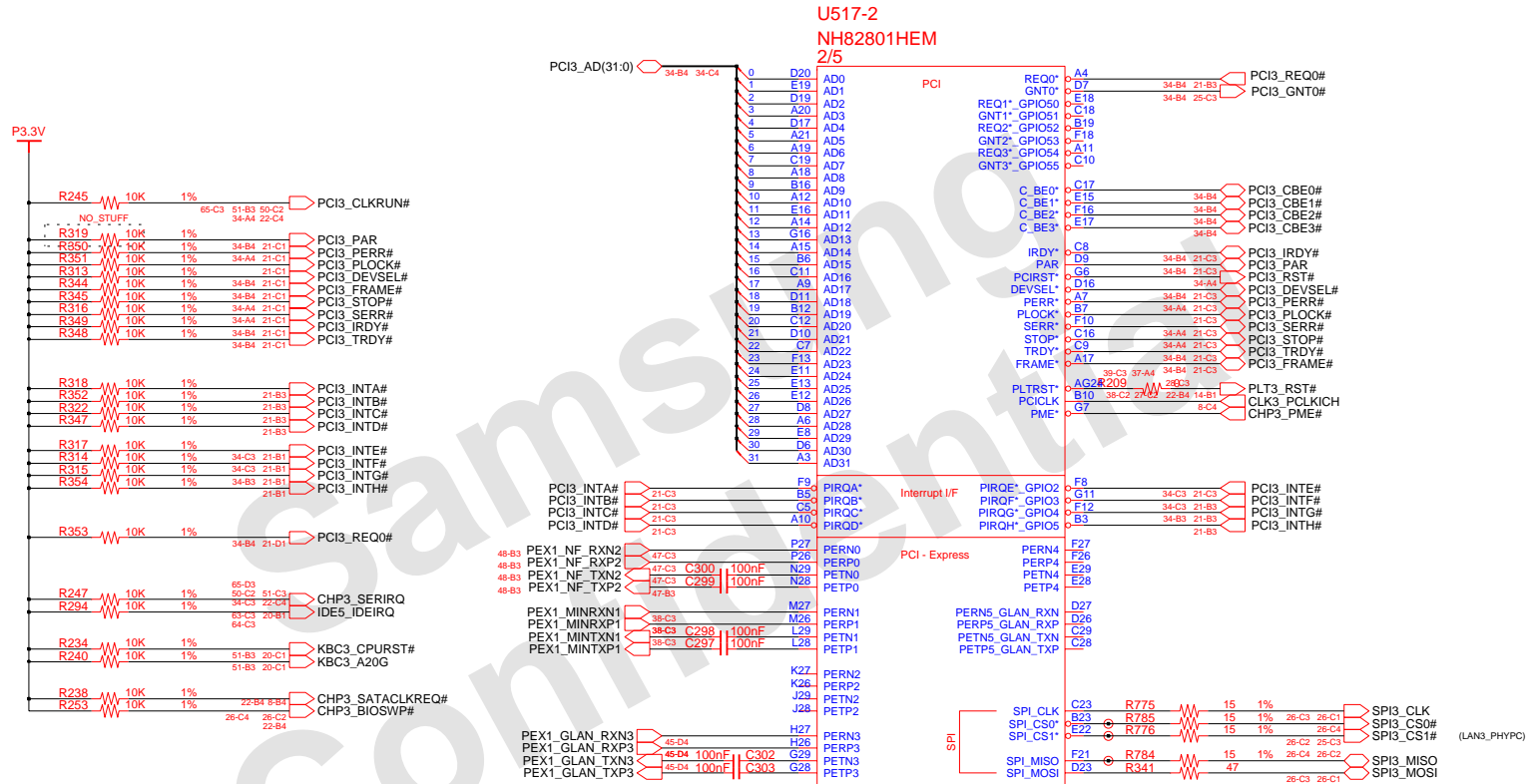
SATA Cap. Place ment :
 Distance b/w the ICH8-M & cap on the "P" signal should be identical
 distance b/w the ICH8-M & cap on the "N" signal same pair.

Place within 500 mils of ICH8-M

Place 56 ohm resistor within 2" of ICH7-M
 Place PU resistor within 2" of 56ohm res.

DRAWN	SUNXIAO,	DATE	8/31/2006	TITLE	MILAN	SAMSUNG ELECTRONICS
CHECK	WUSHUIJANG,	DEV. STEP	SR 1.0		ICH8-M	
APPROVAL	KEVIN_LEE,	REV	1.0		ICH8-M (1/5)	PART NO.
MODULE CODE		LAST EDIT				BA41-00744A
				April 6, 2007 12:24:35 PM	PAGE	20 OF 60

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.



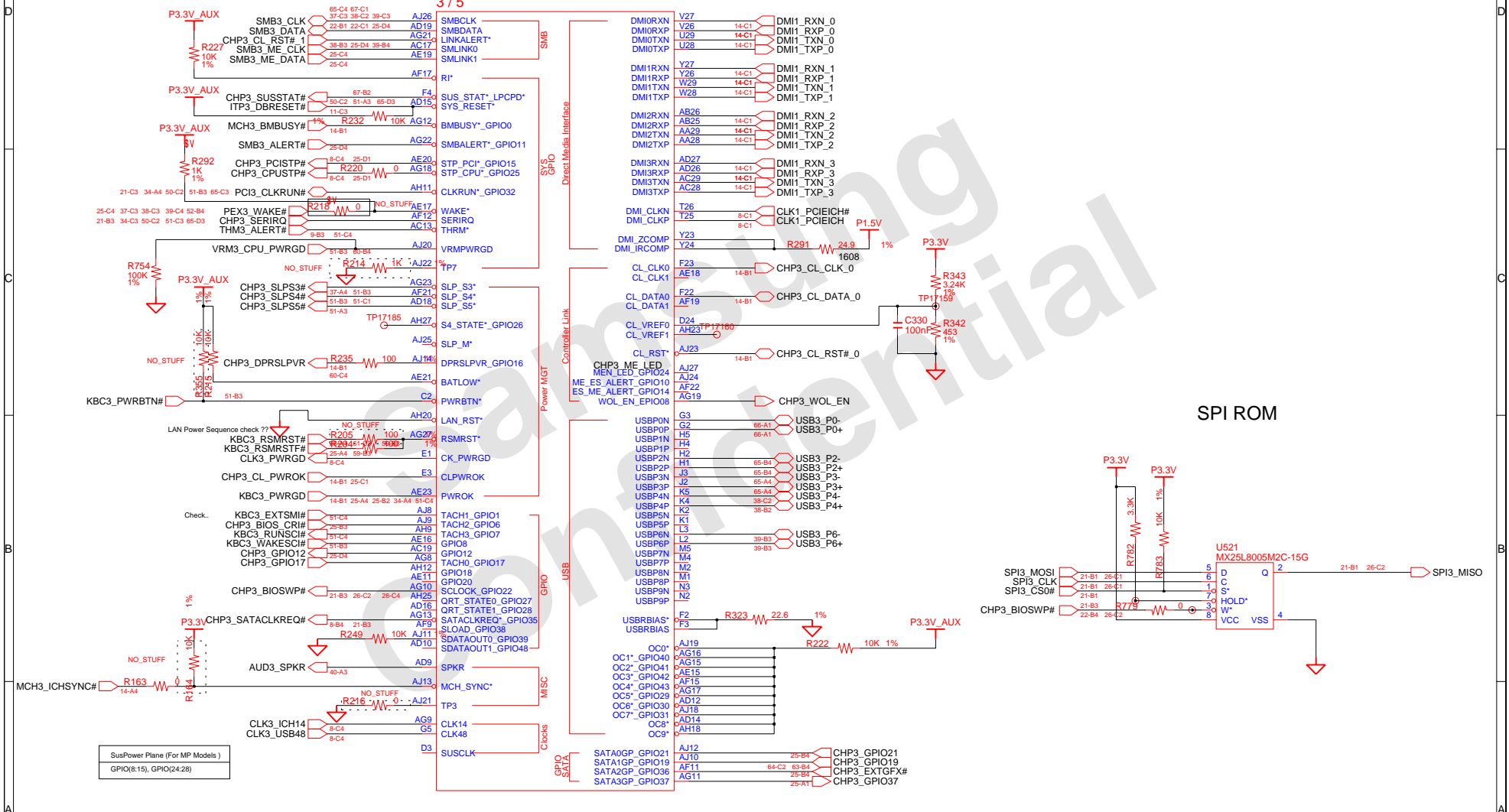
U517-2
NH82801HEM
2/5

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

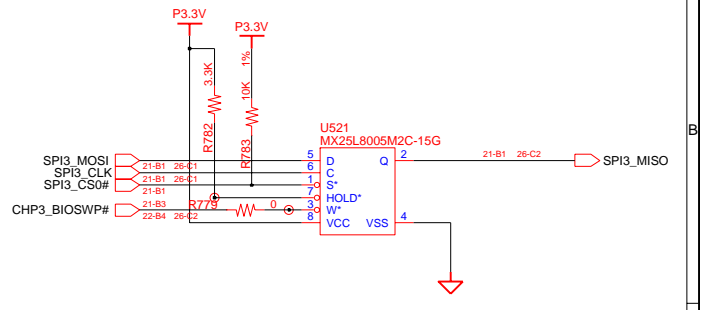
DRAWN	SUNXIAO,	DATE	8/31/2006	TITLE	MILAN ICH8-M	SAMSUNG ELECTRONICS
CHECK	WUSHUJIANG,	DEV. STEP	SR 1.0		ICH8-M (2/5)	
APPROVAL	KEVIN_LEE,	REV	1.0			PART NO. BA41-00744A
MODULE CODE		LAST EDIT				April 6, 2007 12:24:35 PM
						PAGE 21 OF 60

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.

**U517-3
 NH82801HEM
 3 / 5**



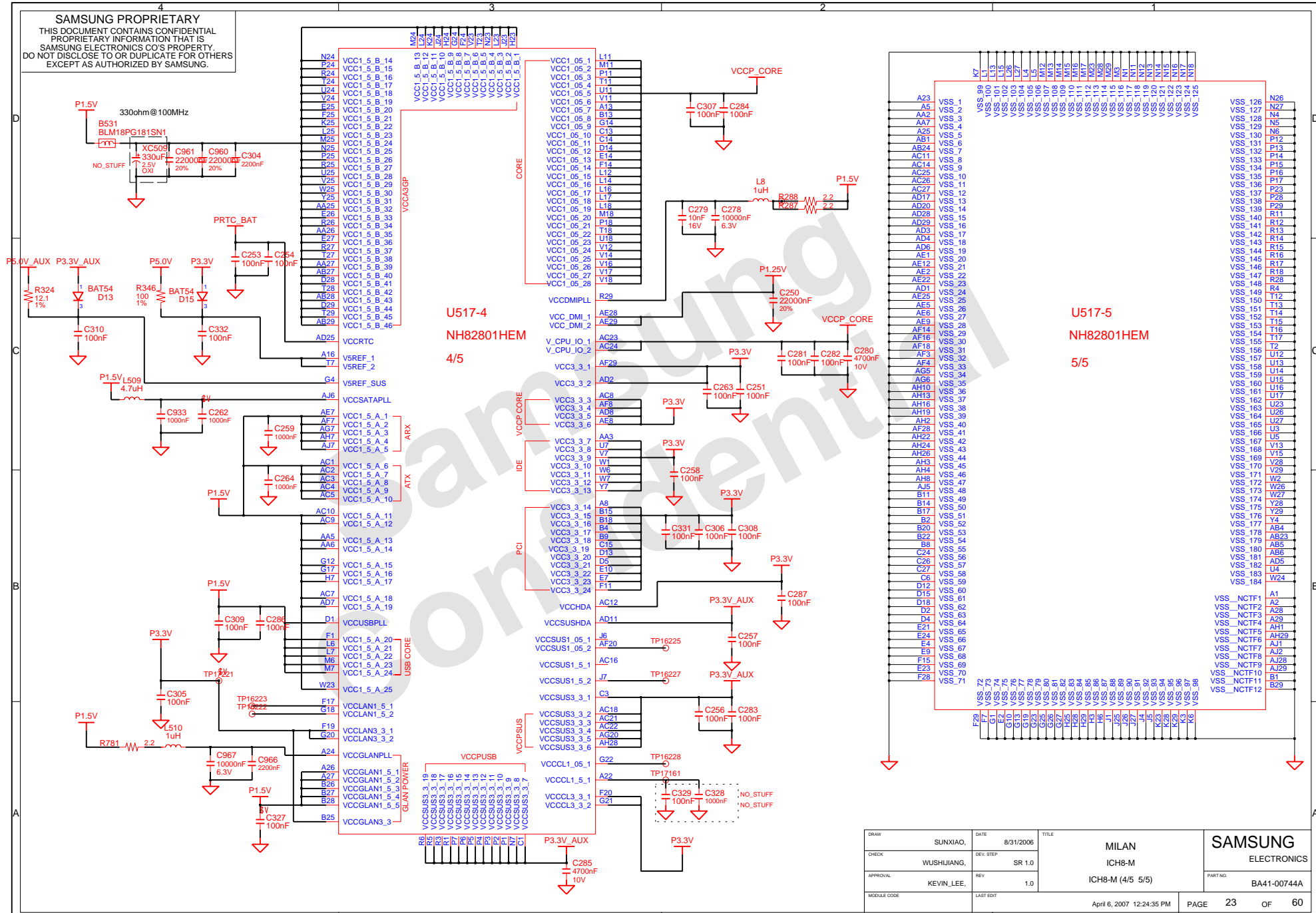
SPI ROM



SusPower Plane (For MP Models)
 GPIO(8:15), GPIO(24:28)

DRAWN	SUNXIAO,	DATE	8/31/2006	TITLE	MILAN	SAMSUNG ELECTRONICS
CHECK	WUSHUIJANG,	DEV. STEP	SR 1.0		ICH8-M	
APPROVAL	KEVIN_LEE,	REV	1.0		ICH8-M (3/5)	PART NO. BA41-00744A
MODULE CODE		LAST EDIT				

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO.'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.

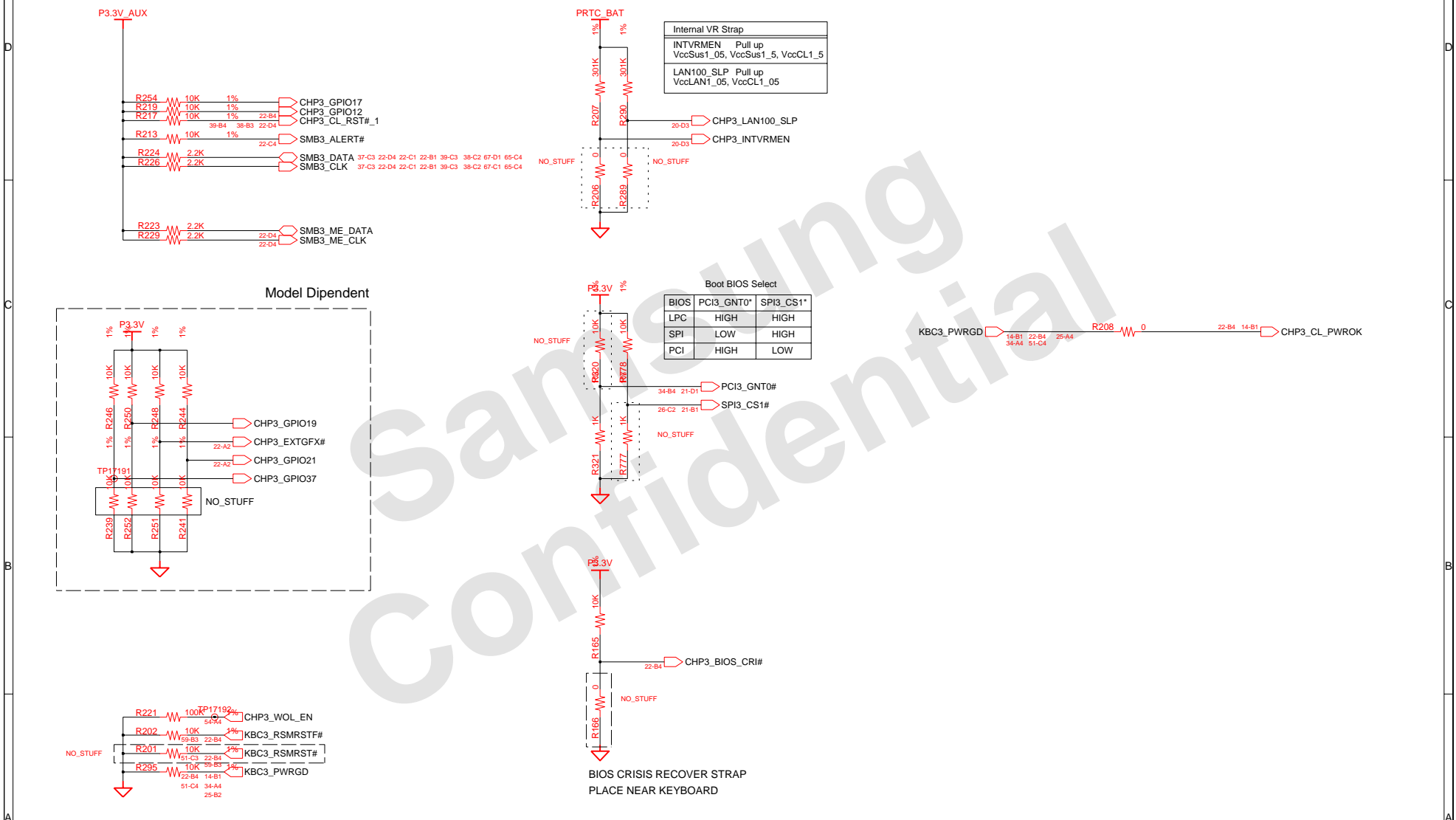


U517-4
 NH82801HEM
 4/5

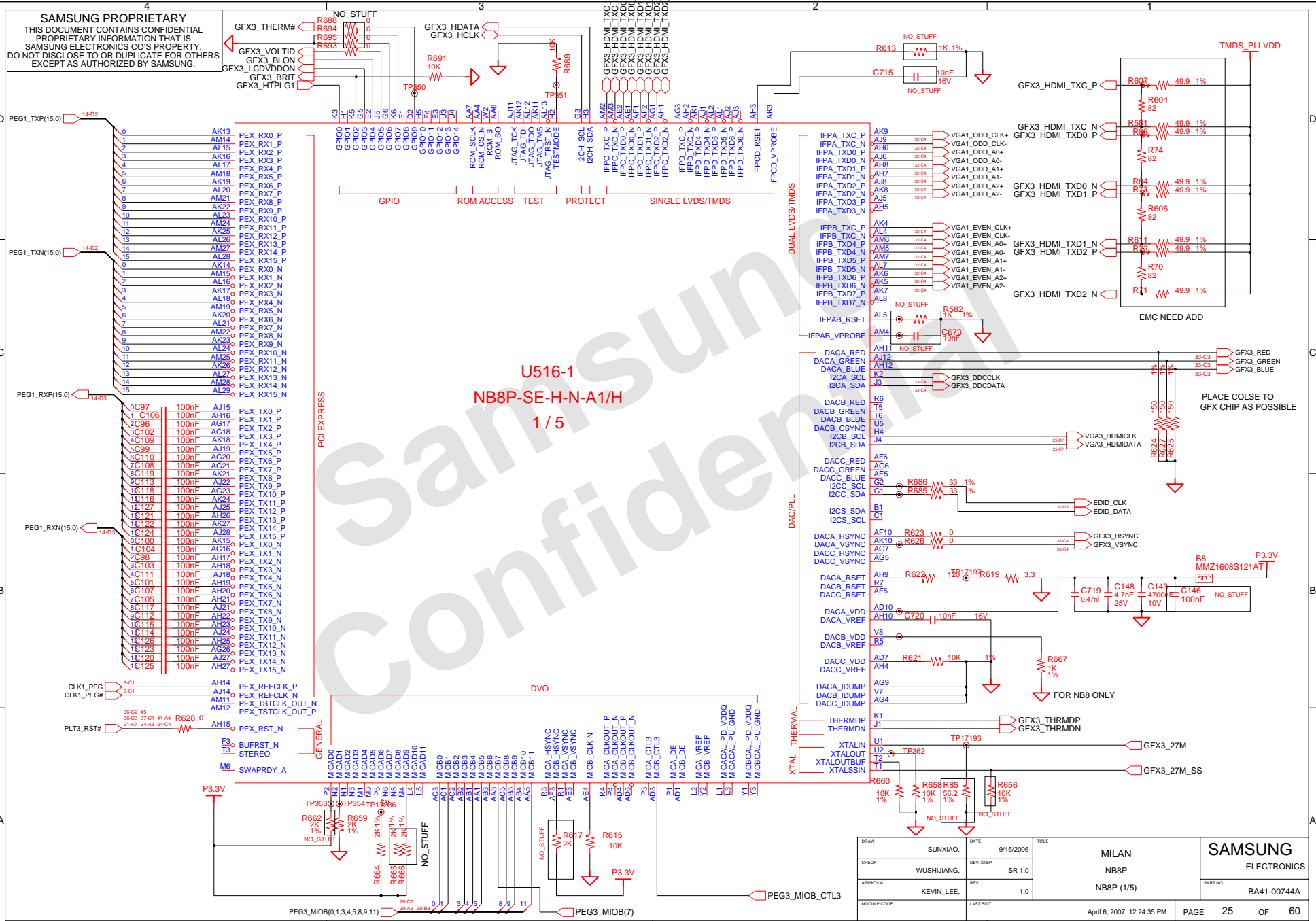
U517-5
 NH82801HEM
 5/5

DATE	8/31/2006	TITLE	MILAN	SAMSUNG ELECTRONICS
DRAWN	SUNXIAO,	DEV. STEP	ICH8-M	
CHECK	WUSHUJIANG,	REV	1.0	PART NO. BA41-00744A
APPROVAL	KEVIN_LEE,	LAST EDIT	1.0	
MODULE CODE				
April 6, 2007 12:24:35 PM			PAGE	23 OF 60

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.



DRAWN	SUNXIAO,	DATE	8/31/2006	TITLE	MILAN	SAMSUNG ELECTRONICS
CHECK	WUSHUIJANG,	DEV. STEP	SR 1.0		ICH8-M	
APPROVAL	KEVIN_LEE,	REV	1.0		ICH8-M STAP	PART NO.
MODULE CODE		LAST EDIT				BA41-00744A
				April 6, 2007 12:24:35 PM	PAGE	24 OF 60

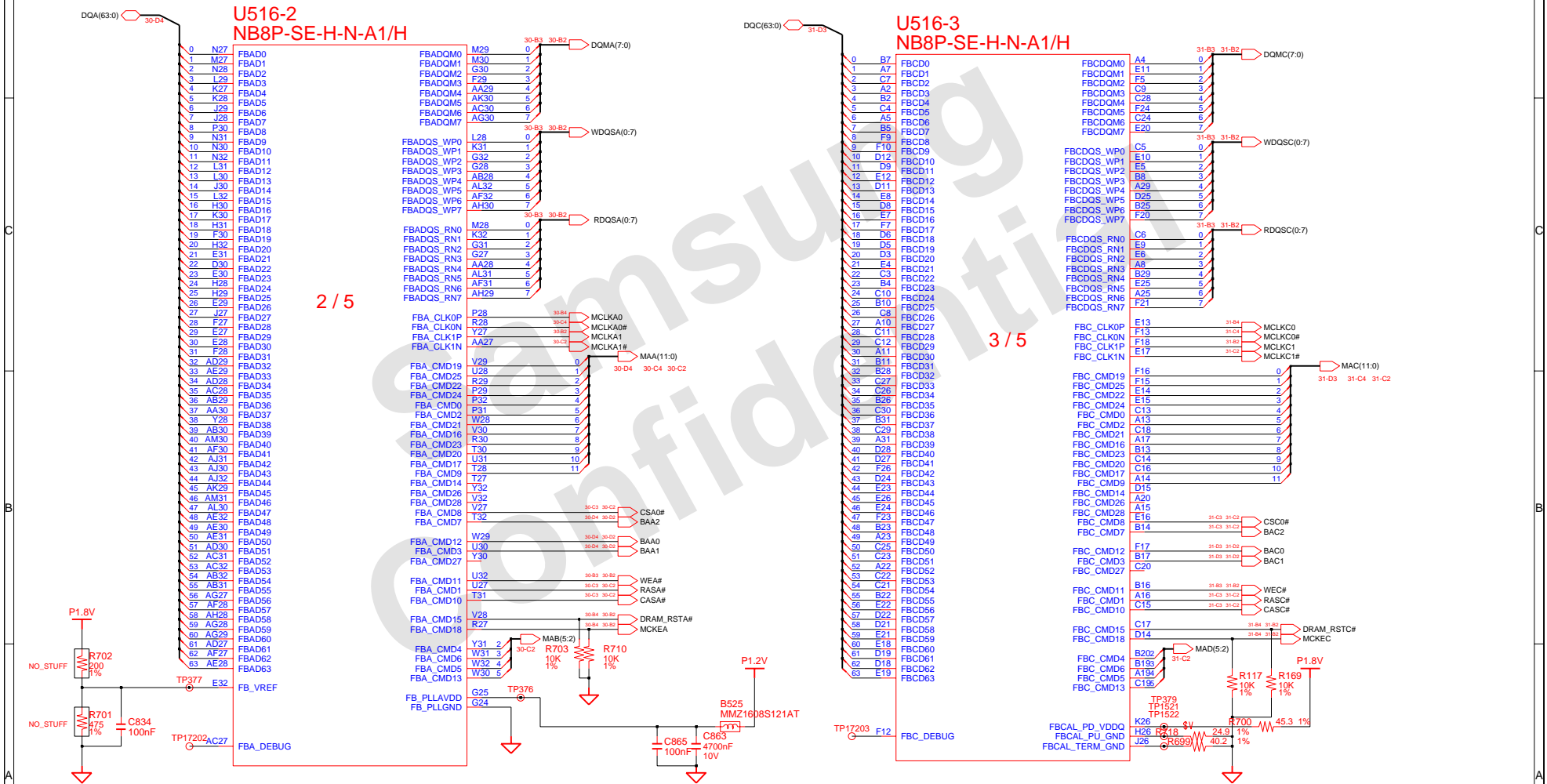


DRAW	SUNXIAO,	DATE	9/15/2006	TITLE	MILAN	SAMSUNG	
CHECK	WUSHUIJIANG,	DEV. STEP	SR 1.0		NB8P	ELECTRONICS	
APPROVAL	KEVIN_LEE,	REV	1.0		NB8P (1/5)	PART NO.	BA41-00744A
MODULE CODE		LAST EDIT			April 6, 2007 12:24:35 PM	PAGE	25 OF 60

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.

Graphic Memory I/F (Using FBA Channel)

Graphic Memory I/F (Using FBC Channel)

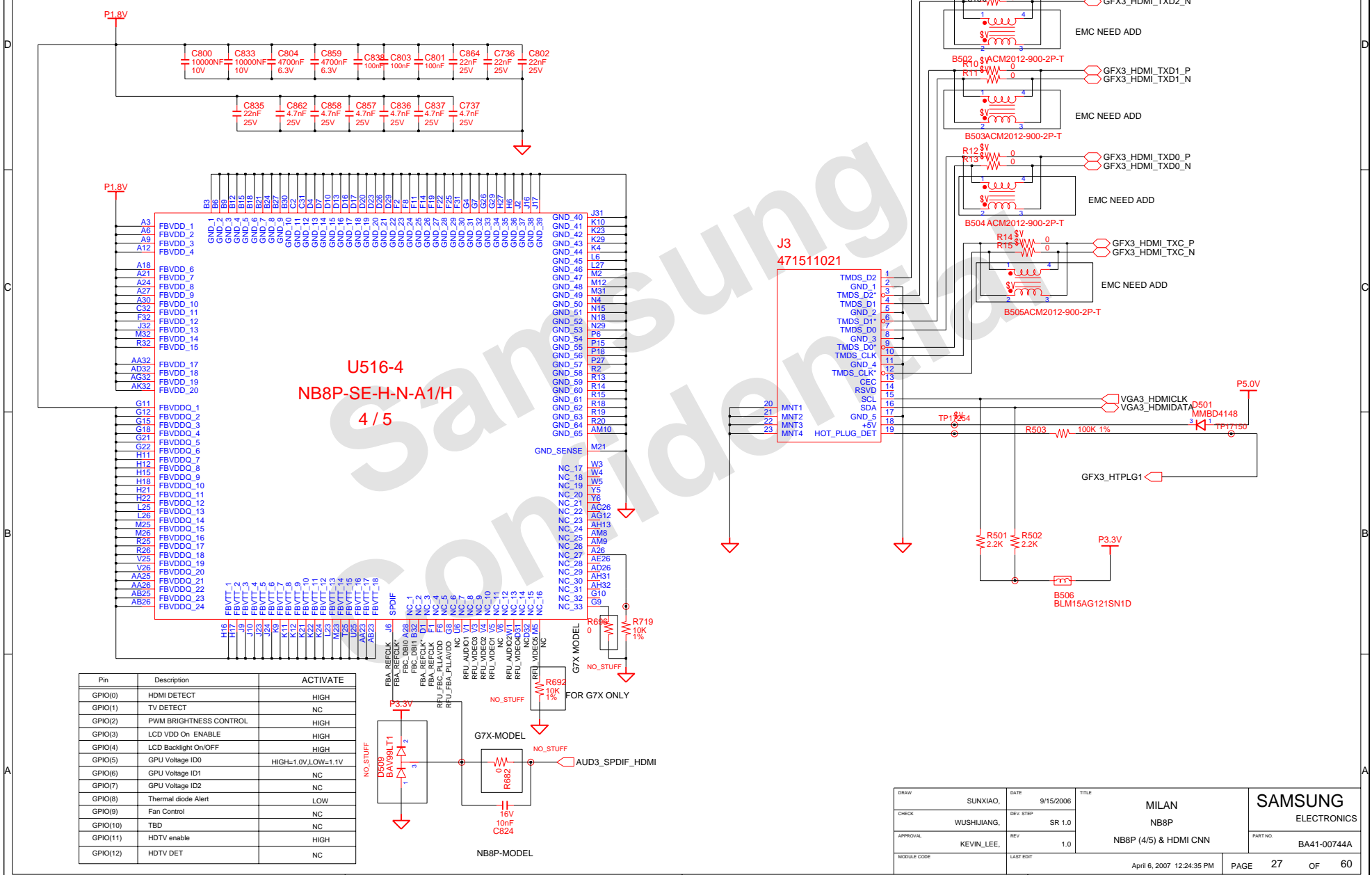


2 / 5

3 / 5

DRAWN	SUNXIAO,	DATE	9/15/2006	TITLE	MILAN	SAMSUNG ELECTRONICS
CHECK	WUSHUIJANG,	DEV. STEP	SR 1.0		NB8P	
APPROVAL	KEVIN_LEE,	REV	1.0		NB8P (2/5 3/5)	PART NO. BA41-00744A
MODULE CODE		LAST EDIT				April 6, 2007 12:24:35 PM
						PAGE 26 OF 60

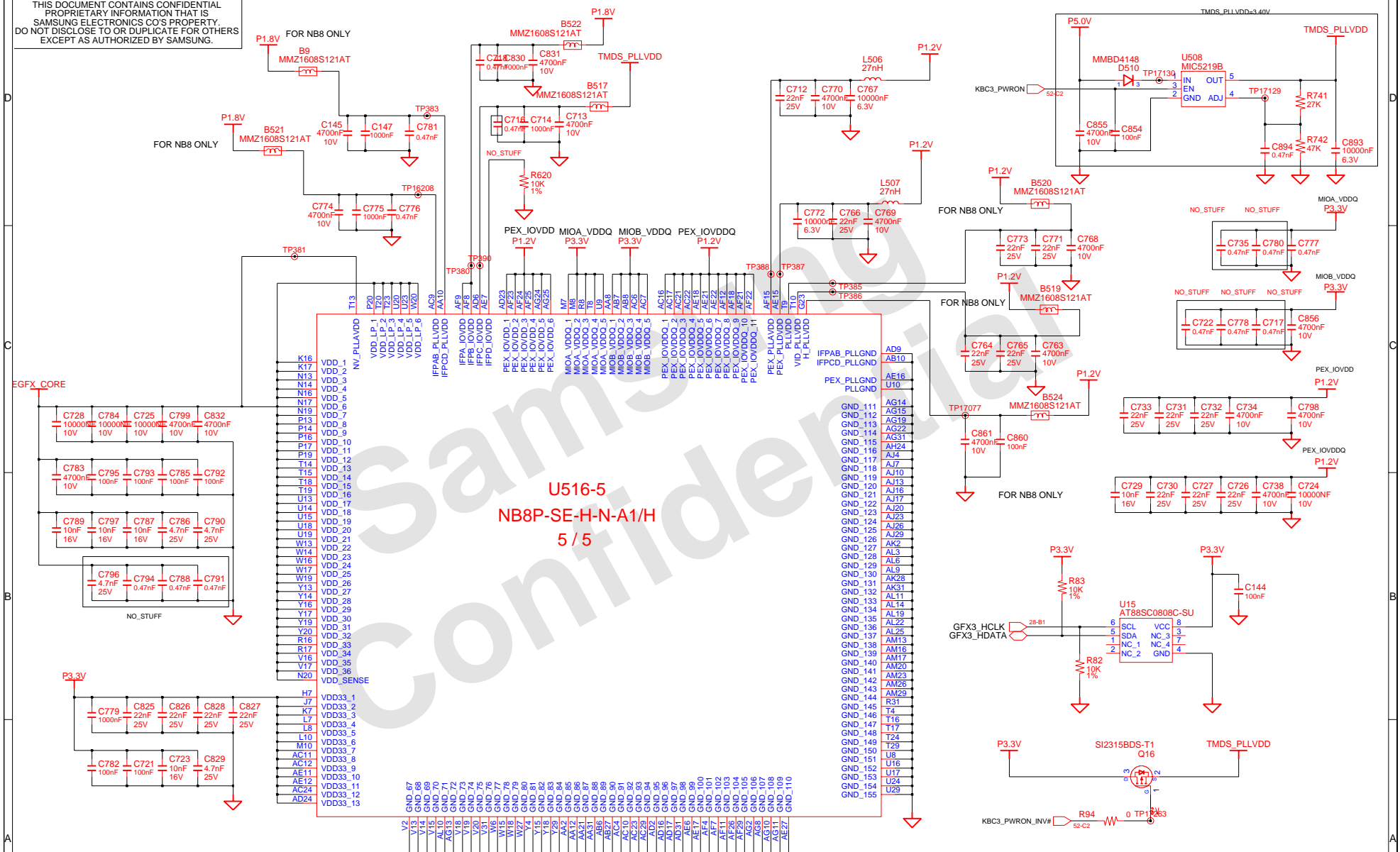
SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.



Pin	Description	ACTIVATE
GPIO(0)	HDMI DETECT	HIGH
GPIO(1)	TV DETECT	NC
GPIO(2)	PWM BRIGHTNESS CONTROL	HIGH
GPIO(3)	LCD VDD On ENABLE	HIGH
GPIO(4)	LCD Backlight On/OFF	HIGH
GPIO(5)	GPU Voltage ID0	HIGH=1.0V/LOW=1.1V
GPIO(6)	GPU Voltage ID1	NC
GPIO(7)	GPU Voltage ID2	NC
GPIO(8)	Thermal diode Alert	LOW
GPIO(9)	Fan Control	NC
GPIO(10)	TBD	NC
GPIO(11)	HDTV enable	HIGH
GPIO(12)	HDTV DET	NC

DRAWN	SUNXIAO,	DATE	9/15/2006	TITLE	MILAN	SAMSUNG ELECTRONICS
CHECK	WUSHUIJANG,	DEV. STEP	SR 1.0		NB8P	
APPROVAL	KEVIN_LEE,	REV	1.0		NB8P (4/5) & HDMI CNN	PART NO. BA41-00744A
MODULE CODE		LAST EDIT				
April 6, 2007 12:24:35 PM						PAGE 27 OF 60

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO.'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.



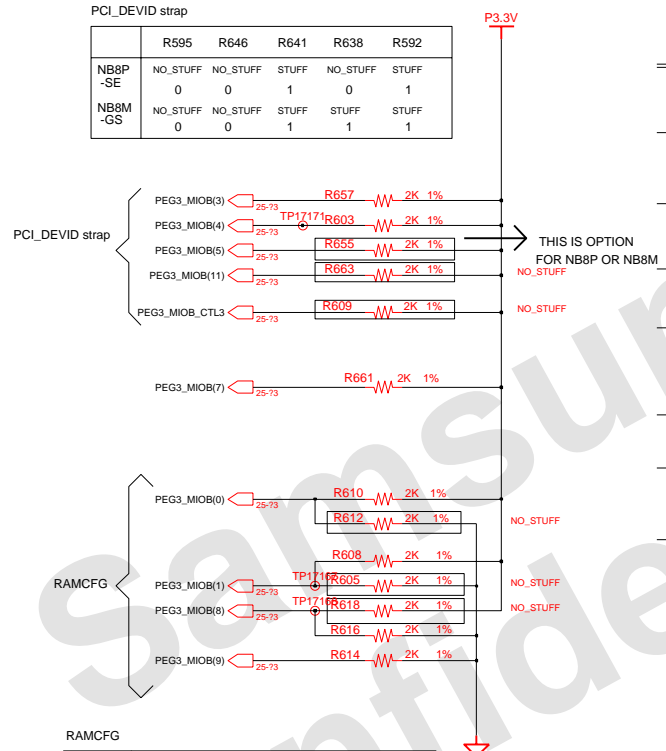
U516-5
NB8P-SE-H-N-A1/H
5 / 5

DRAWN	SUNXIAO,	DATE	9/15/2006	TITLE	MILAN	SAMSUNG ELECTRONICS
CHECK	WUSHUIJIANG,	DEV. STEP	SR 1.0		NB8P	
APPROVAL	KEVIN_LEE,	REV	1.0		NB8P (5/5)	PART NO.
MODULE CODE		LAST EDIT				BA41-00744A
April 6, 2007 12:24:35 PM						PAGE 28 OF 60

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO.'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.

PCI_DEVID strap

	R595	R646	R641	R638	R592
NB8P-SE	NO_STUFF	NO_STUFF	STUFF	NO_STUFF	STUFF
NB8M-GS	0	0	1	0	1
NB8M-GS	NO_STUFF	NO_STUFF	STUFF	STUFF	STUFF
NB8M-GS	0	0	1	1	1

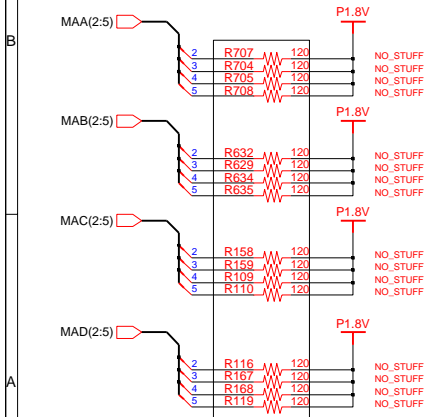


Straps	Pin # (Rev.A02)	Descriptions
SUB_VENDOR	MIOAD(1)	0 : No BIOS 1 : Read from BIOS
RAMCFG(3:0) [9,8,1,0]	MIOB(9) MIOB(8) MIOB(1) MIOB(0)	0111 : SAMSUNG GDDR3 256Mbit 0101 : INFINEON GDDR3 256Mbit 0011 : SAMSUNG GDDR3 512Mbit 0001 : INFINEON GDDR3 512Mbit
CRYSTAL(1:0)	MIOB(2) MIOB(6)	01 : 14.318 MHz 10 : 27 MHz 11 : Unknown 00 : 13.5 MHz
TV_MODE(1:0)	MIOAD(7) MIOAD(10)	00 : SECAM 01 : NTSC 10 : PAL 11 : CRT
PCI_DEVID(4:0) [CTL3,11,3,5,4]	MIOB_CTL(3) MIOB(11) MIOB(3) MIOB(5) MIOB(4)	NB8M-GS: 00111 NB8M-SE: 01000 NB8M-GT: 00110 NB8P-GS: 00111 NB8P-SE: 00101 NB8P-GT: 01000
ROM_TYPE(1:0)	MIOB(10) MIOBVSYNC	NO ROM(NC)
USER STRAP	MIOAD(2:5)	EDID
GPIO(12:0)	Sheet 25	Refer to Sheet 25

Test Options for GPIO should be updated..

RAMCFG

	R602	R600	R594	R593
SS 256Mbit	STUFF	NO_STUFF	STUFF	NO_STUFF
IF 256Mbit	STUFF	NO_STUFF	NO_STUFF	STUFF
SS 512Mbit	NO_STUFF	STUFF	STUFF	NO_STUFF
IF 512Mbit	NO_STUFF	STUFF	NO_STUFF	STUFF

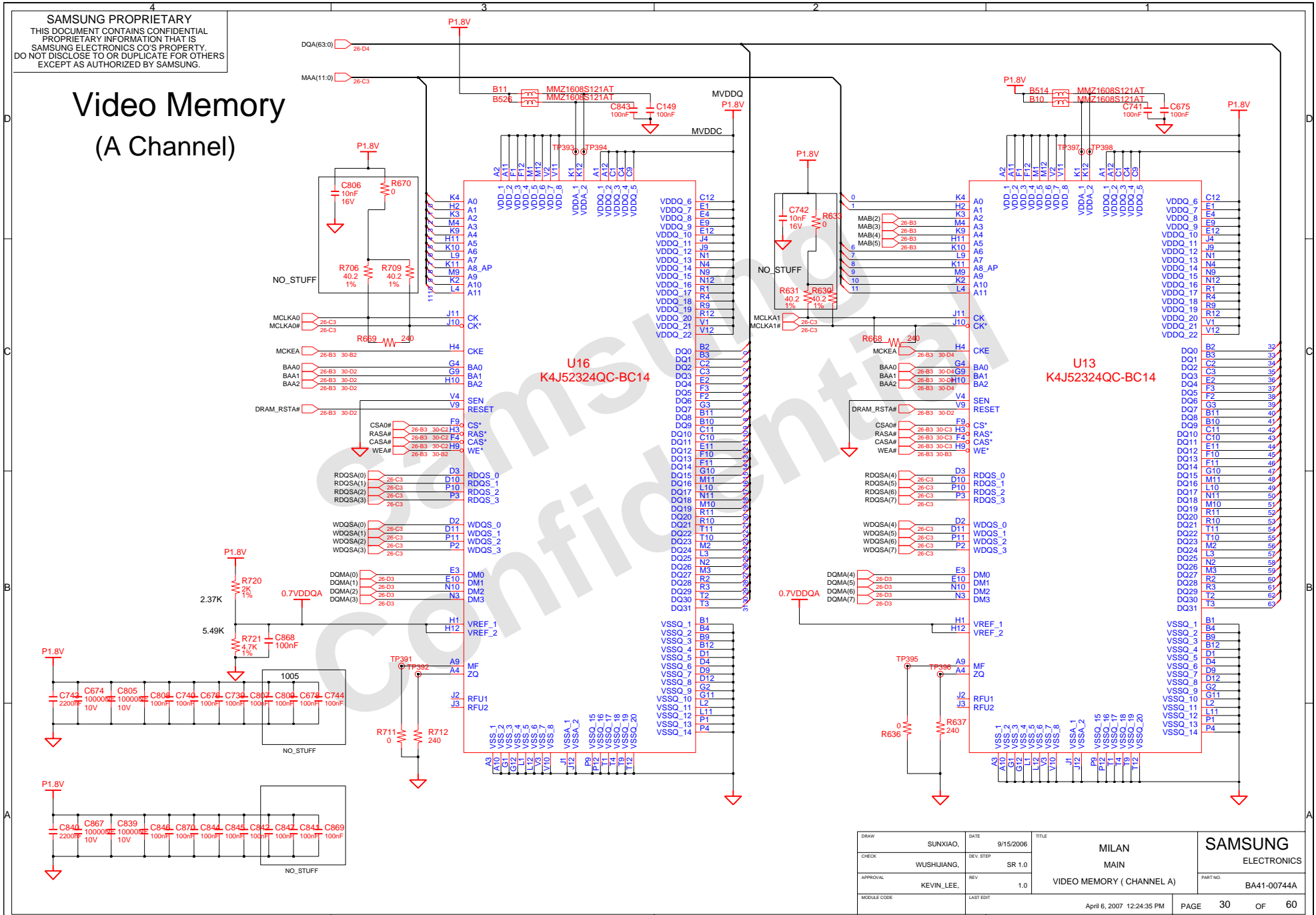


Samsung		Infineon	
256Mbit	512Mbit	256Mbit	512Mbit
K4J55323QG (1.2/1.4/1.6/2.0)	K4J52324QC (1.2/1.4/1.6/2.0)	HYB18H256321AF1-20(2.0)	HYB18H512321AF1-20(2.0)
K4J55323QF (1.4/1.6/2.0)		HYB18H256324AF-20(2.0)	HYB18H512324AF-20(1.6)
		HYB18H256321AF-14(1.4)	HYB18H512321AF-14(1.4)
		HYB18H256321AF-12(1.2)	HYB18H512321AF-12(1.2)
8M*32BIT	16M*32BIT	8M*32BIT	16M*32BIT

DRAWN	SUNXIAO,	DATE	9/15/2006	TITLE	MILAN	SAMSUNG ELECTRONICS
CHECK	WUSHUIANG,	DEV. STEP	SR 1.0		NB8P	
APPROVAL	KEVIN_LEE,	REV	1.0		NB8P STRAP	PART NO.
MODULE CODE		LAST EDIT				BA41-00744A

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO.'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.

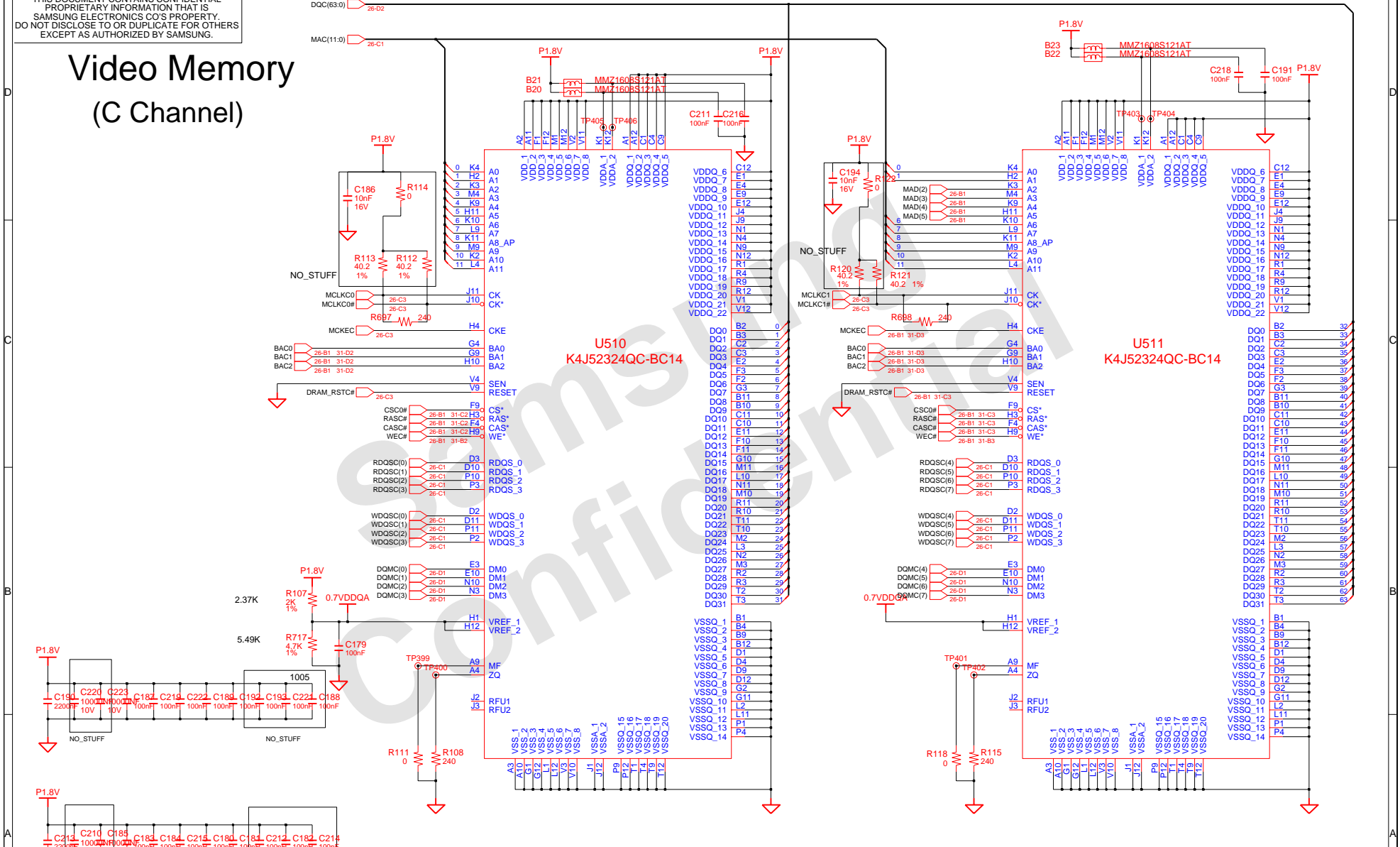
Video Memory (A Channel)



DRAWN	SUNXIAO,	DATE	9/15/2006	TITLE	MILAN	SAMSUNG ELECTRONICS	
CHECK	WUSHUIJIANG,	DEV. STEP	SR 1.0		MAIN		
APPROVAL	KEVIN_LEE,	REV	1.0		VIDEO MEMORY (CHANNEL A)	PART NO.	
MODULE CODE		LAST EDIT				BA41-00744A	
April 6, 2007 12:24:35 PM						PAGE	30
OF						60	

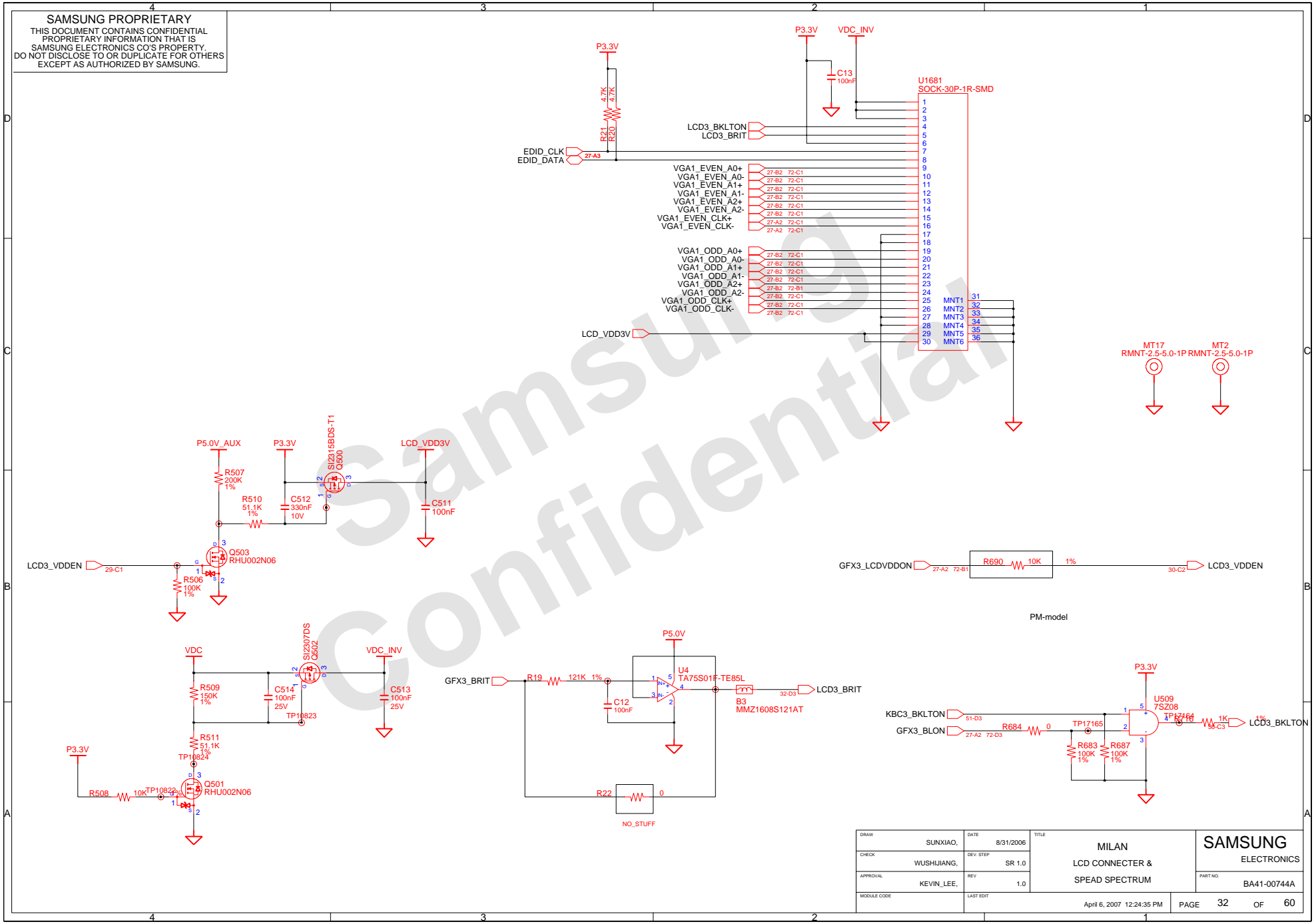
SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO.'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.

Video Memory (C Channel)



DRAWN	SUNXIAO,	DATE	9/15/2006	TITLE	MILAN	SAMSUNG ELECTRONICS
CHECK	WUSHUIJANG,	DEV. STEP	SR 1.0		MAIN	
APPROVAL	KEVIN_LEE,	REV	1.0		VIDEO MEMORY (CHANNEL B)	
MODULE CODE		LAST EDIT				
April 6, 2007 12:24:35 PM						PART NO. BA41-00744A
PAGE 31 OF 60						

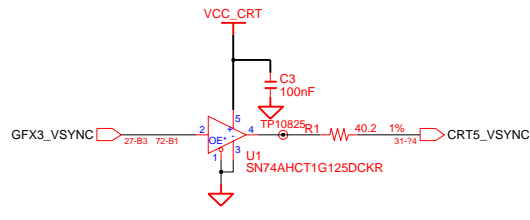
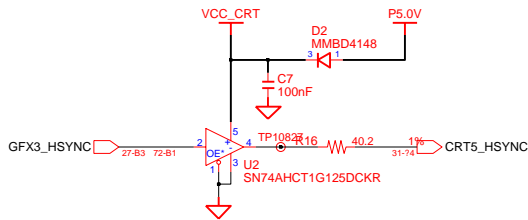
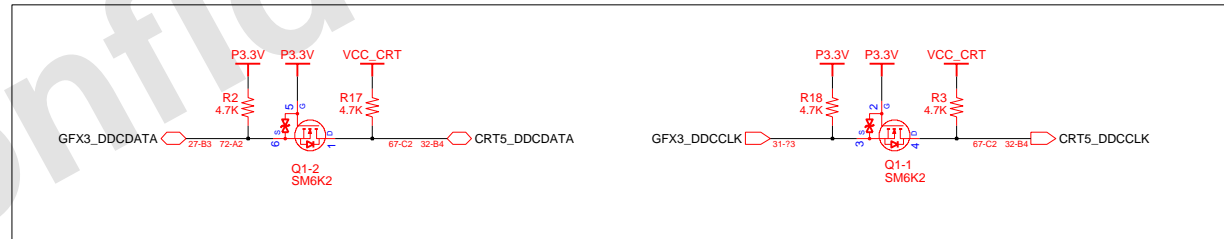
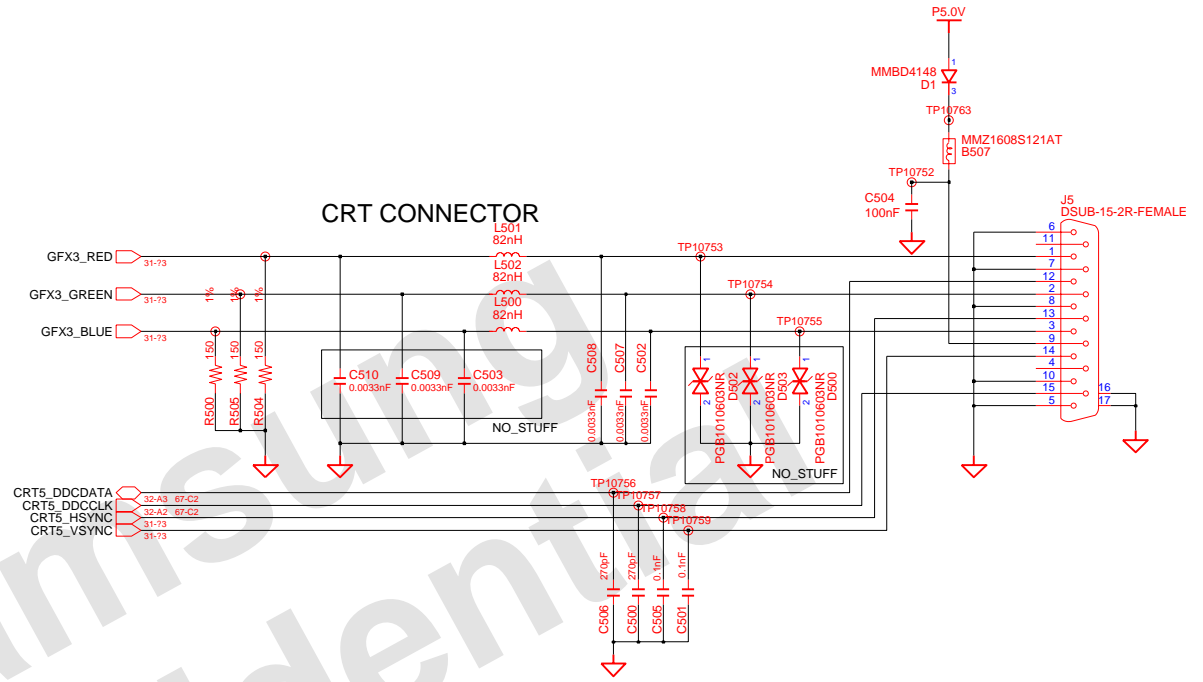
SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.



DRAWN	SUNXIAO,	DATE	8/31/2006	TITLE	MILAN	SAMSUNG ELECTRONICS
CHECK	WUSHUIJANG,	DEV. STEP	SR 1.0	LCD CONNECTER & SPEED SPECTRUM		
APPROVAL	KEVIN_LEE,	REV	1.0			PART NO.
MODULE CODE		LAST EDIT		April 6, 2007 12:24:35 PM		BA41-00744A
						PAGE 32 OF 60

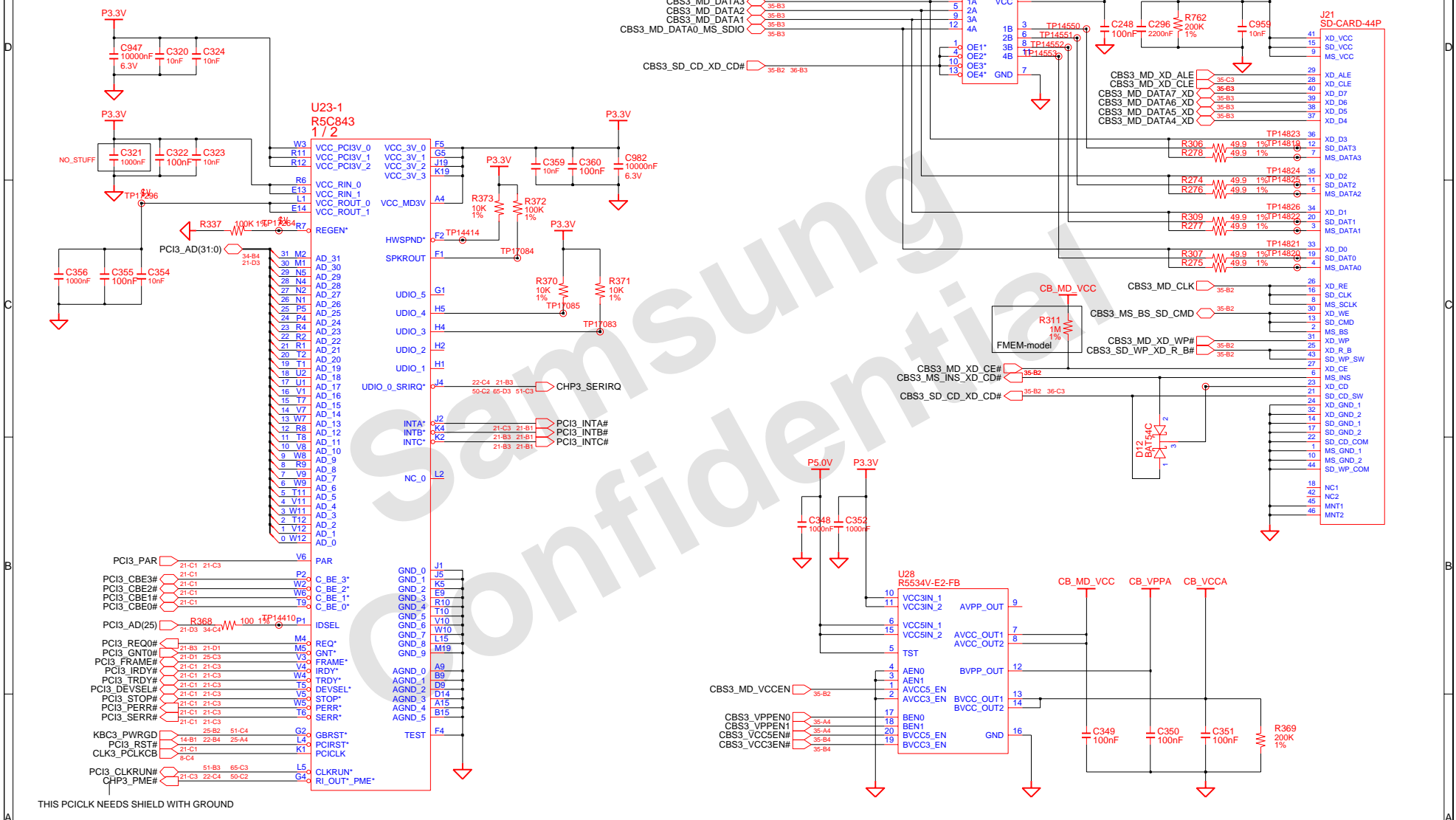
SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO.'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.

CRT CONNECTOR



DRAWN	SUNXIAO,	DATE	8/31/2006	TITLE	MILAN	SAMSUNG ELECTRONICS
CHECK	WUSHUIANG,	DEV. STEP	SR 1.0		MIAN	
APPROVAL	KEVIN_LEE,	REV	1.0		CRT PORT	PART NO.
MODULE CODE		LAST EDIT				BA41-00744A
				April 6, 2007 12:24:35 PM	PAGE	33 OF 60

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO.'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.

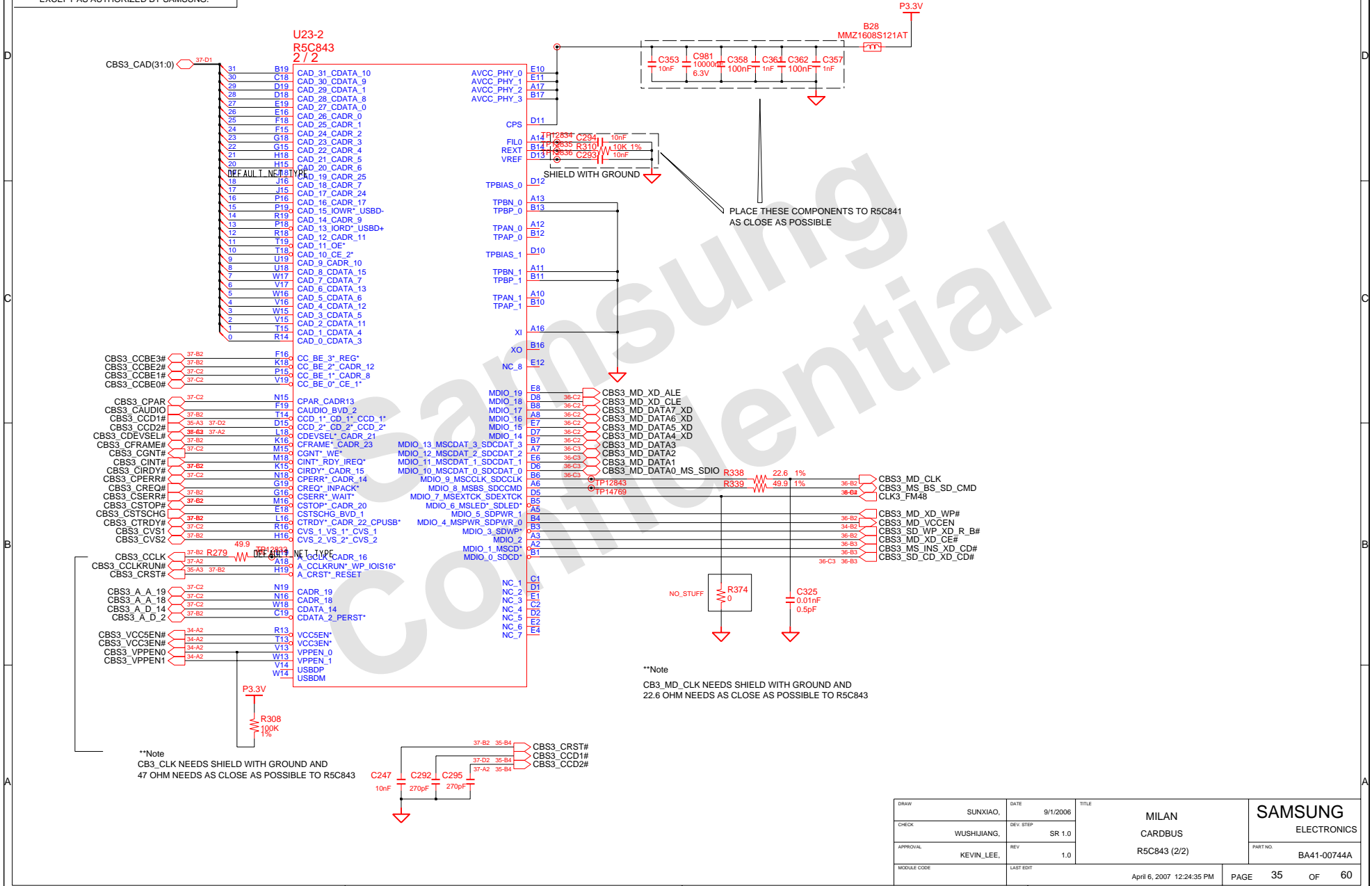


THIS PCICKL NEEDS SHIELD WITH GROUND

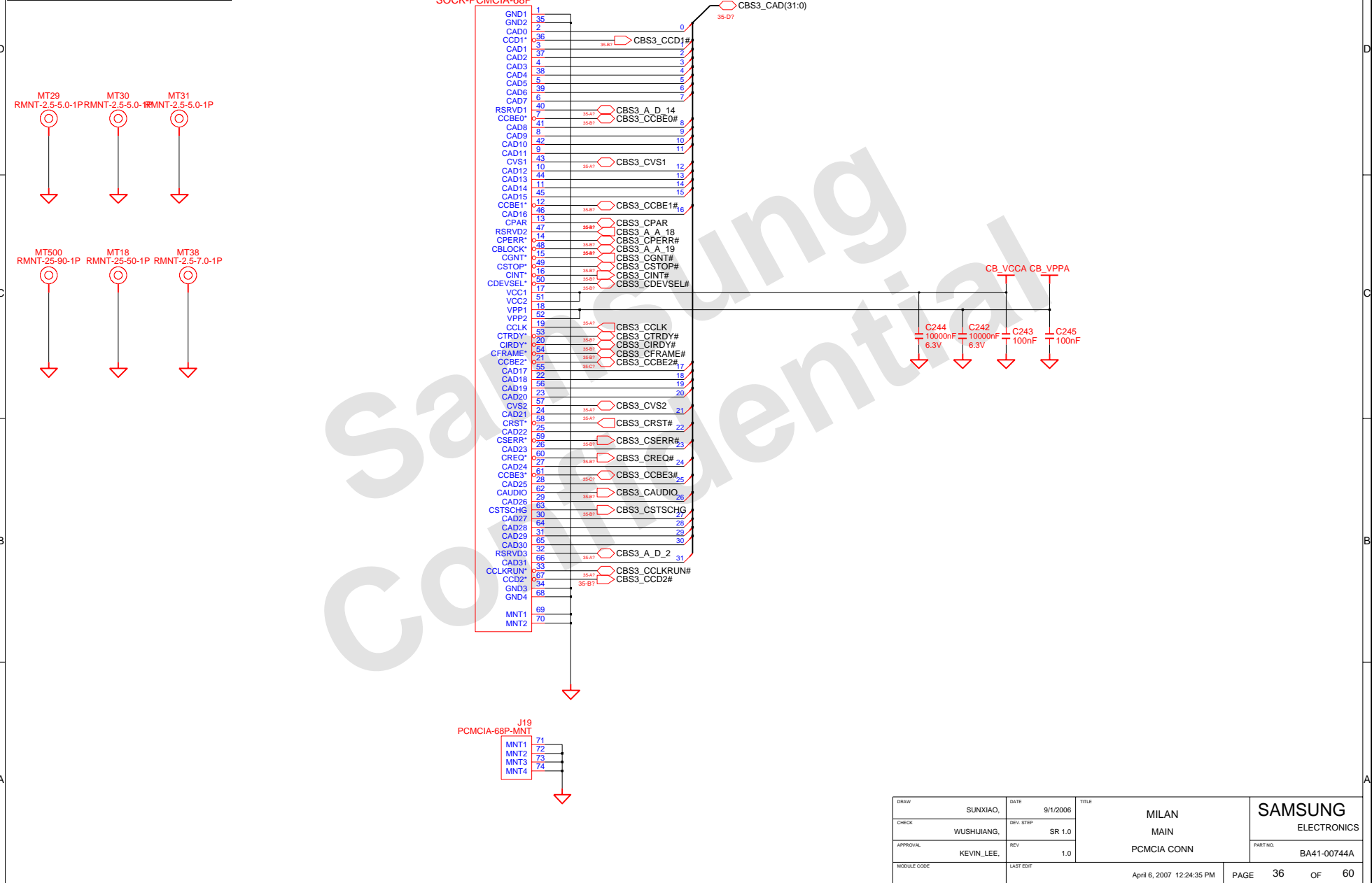
DRWN	SUNXIAO,	DATE	9/1/2006	TITLE	MILAN	SAMSUNG ELECTRONICS
CHECK	WUSHUIJANG,	DEV. STEP	SR 1.0	CARDBUS		
APPROVAL	KEVIN_LEE,	REV	1.0	R5C843 & MS CONN (1/2)	PART NO.	BA41-00744A
MODULE CODE		LAST EDIT			PAGE	34 OF 60

April 6, 2007 12:24:35 PM

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.



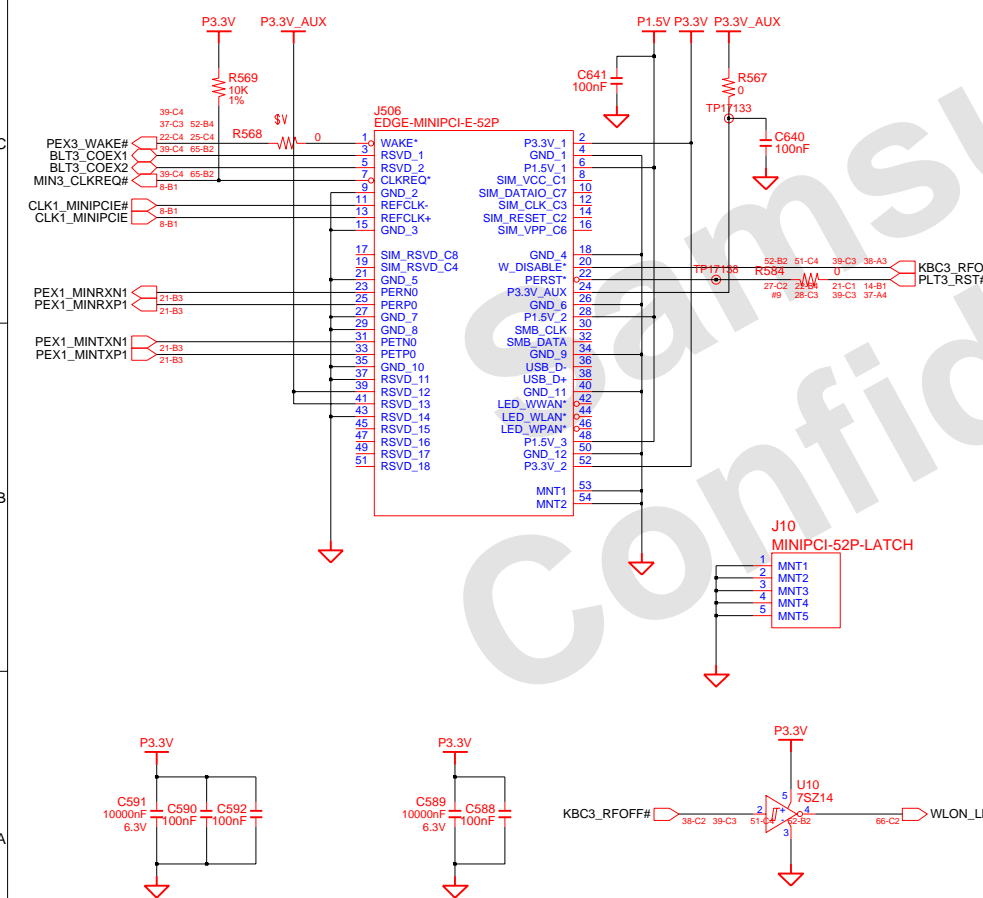
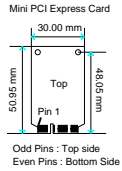
SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.



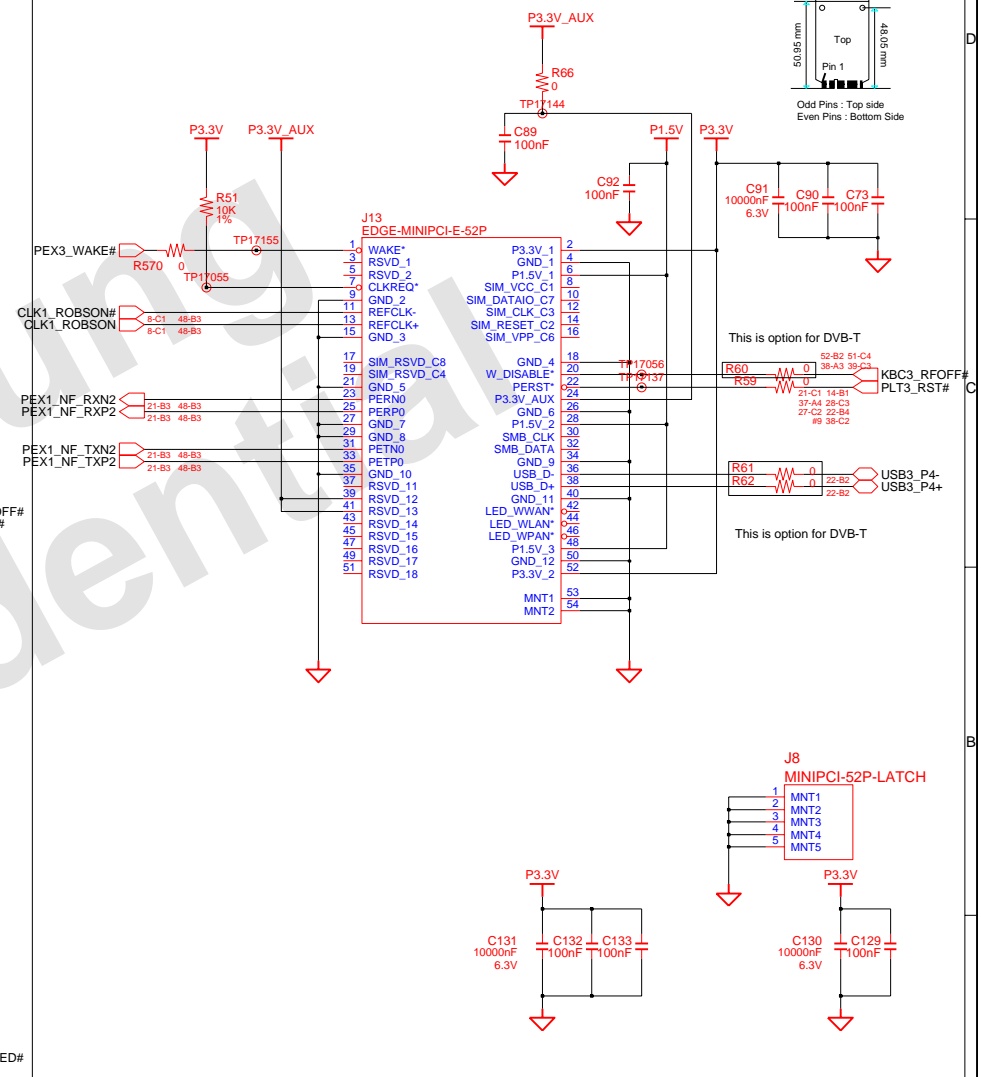
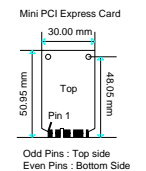
DRAWN	SUNXIAO,	DATE	9/1/2006	TITLE	MILAN	SAMSUNG ELECTRONICS
CHECK	WUSHUIJANG,	DEV. STEP	SR 1.0		MAIN	
APPROVAL	KEVIN_LEE,	REV	1.0		PCMCIA CONN	PART NO. BA41-00744A
MODULE CODE		LAST EDIT		April 6, 2007 12:24:35 PM	PAGE	36 OF 60

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.

Mini Card

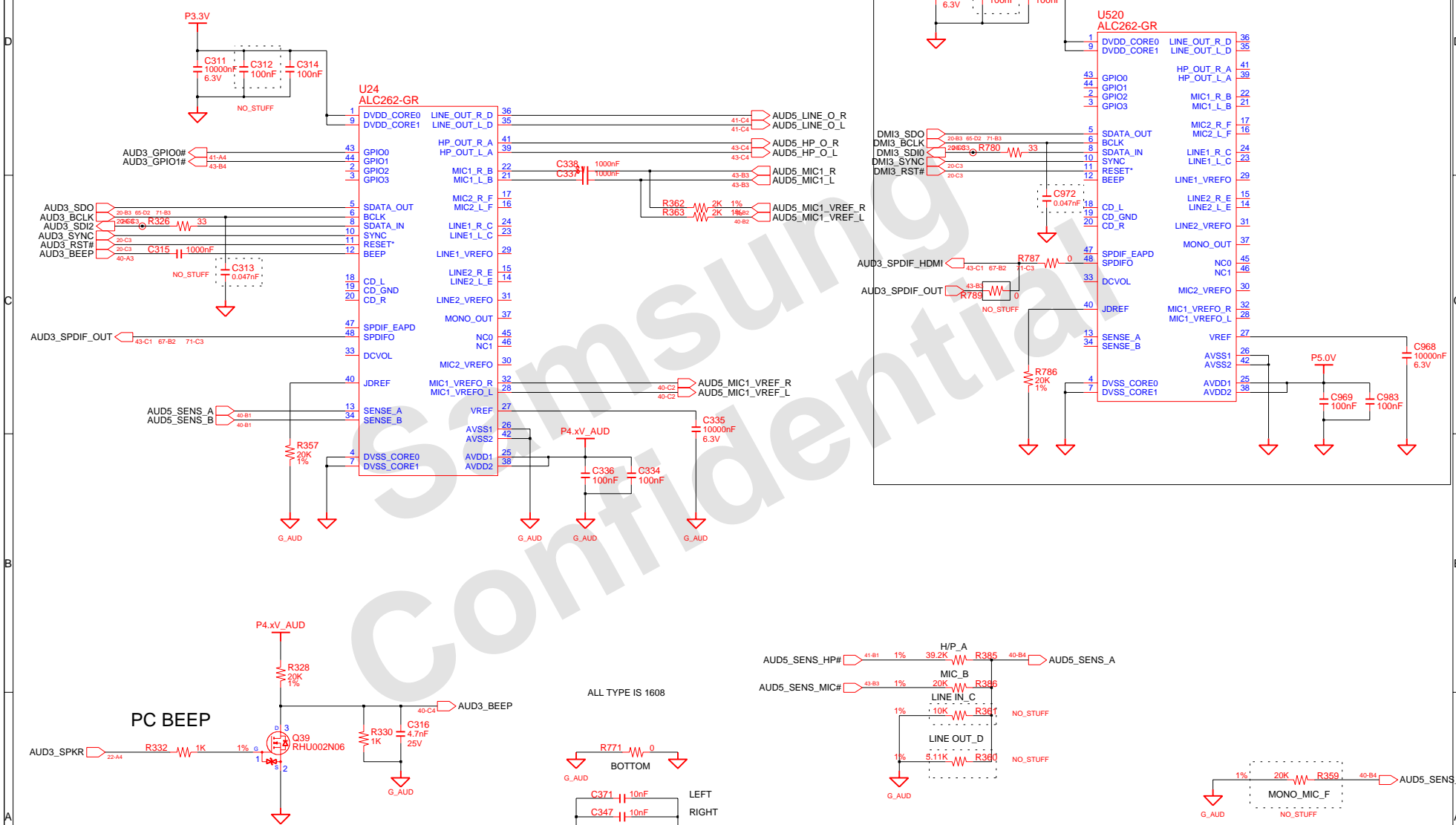


MINI CARD FOR DVB-T AND ROBSON



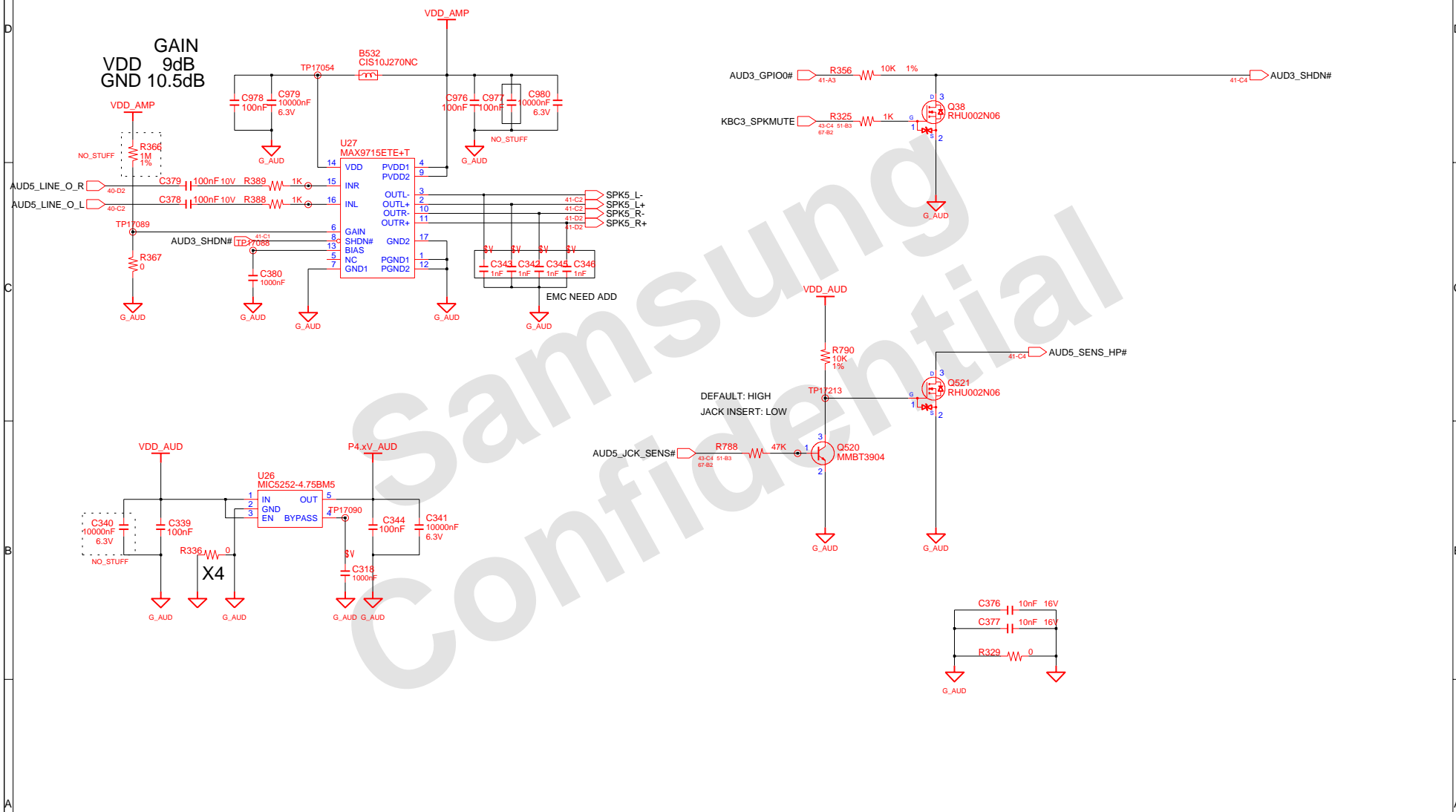
DRAWN	SUNXIAO,	DATE	9/1/2006	TITLE	MILAN	SAMSUNG ELECTRONICS
CHECK	WUSHUJIANG,	DEV. STEP	SR 1.0		MINI CARD	
APPROVAL	KEVIN_LEE,	REV	1.0		FRO BOBSON AND DVB-T	PART NO. BA41-00744A
MODULE CODE		LAST EDIT		April 6, 2007 12:24:35 PM	PAGE	37 OF 60

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO.'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.



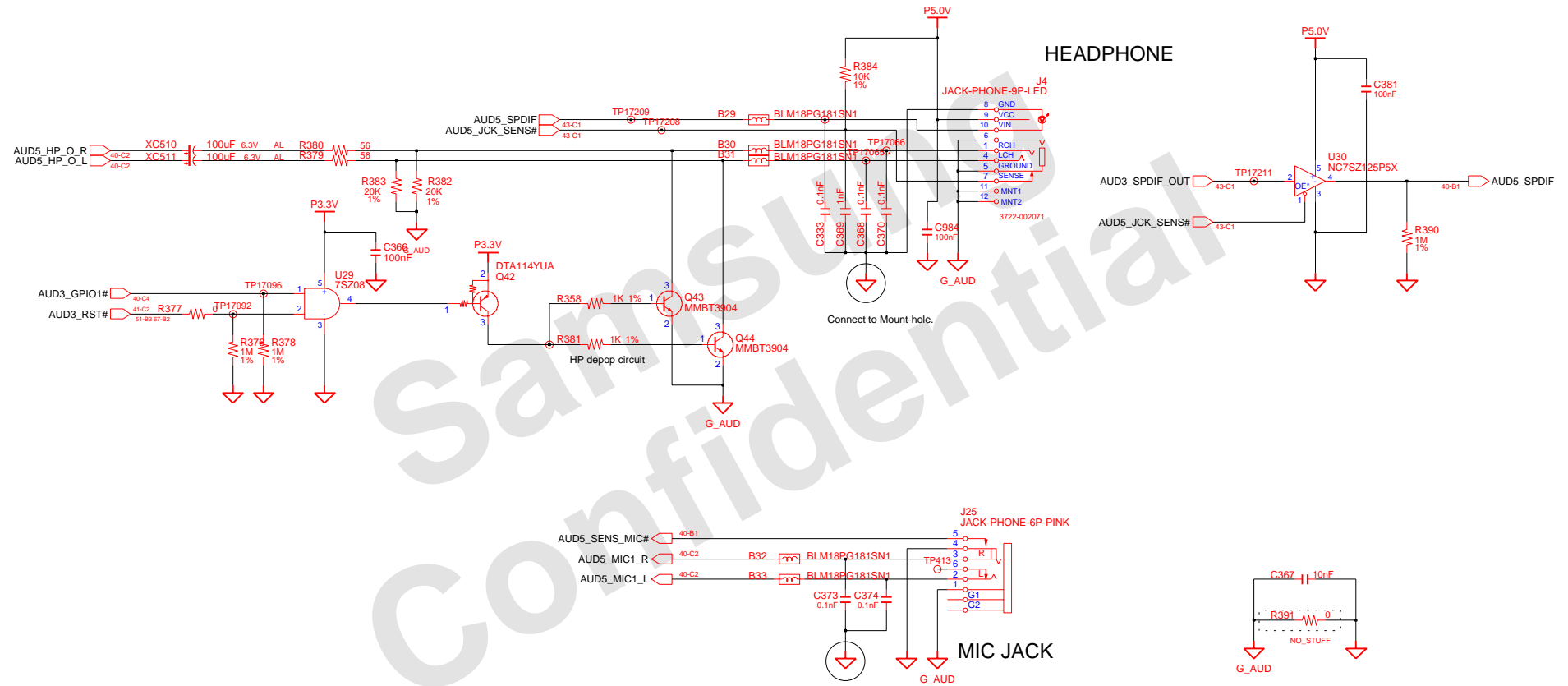
DRAWN	SUNXIAO,	DATE	9/1/2006	TITLE	MILAN	SAMSUNG ELECTRONICS
CHECK	WUSHUIJANG,	DEV. STEP	SR 1.0		AUDIO CODEC	
APPROVAL	KEVIN_LEE,	REV	1.0		FRO HDMI	PART NO.
MODULE CODE		LAST EDIT				BA41-00744A
April 6, 2007 12:24:35 PM						PAGE 38 OF 60

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO.'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.



DRAWN	SUNXIAO,	DATE	9/1/2006	TITLE	MILAN AUDIO AMP	SAMSUNG ELECTRONICS
CHECK	WUSHUJIANG,	DEV. STEP	SR 1.0			
APPROVAL	KEVIN_LEE,	REV	1.0			PART NO. BA41-00744A
MODULE CODE		LAST EDIT				

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO.'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.

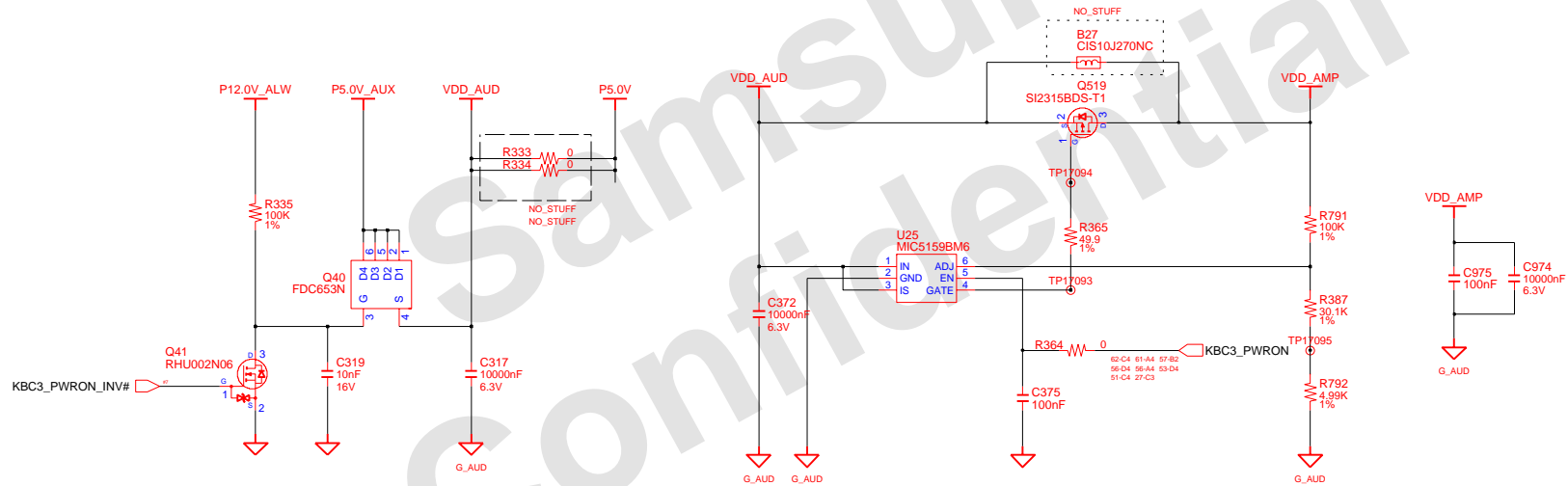


The traces led to Audio Jacks have the width over 10mil

DRAWN	SUNXIAO,	DATE	9/1/2006	TITLE	MILAN	SAMSUNG ELECTRONICS
CHECK	WUSHUIJANG,	DEV. STEP	SR 1.0		HEAD PHONE JACK	
APPROVAL	KEVIN_LEE,	REV	1.0		AND MIC JACK	PART NO. BA41-00744A
MODULE CODE		LAST EDIT		April 6, 2007 12:24:35 PM	PAGE	40 OF 60

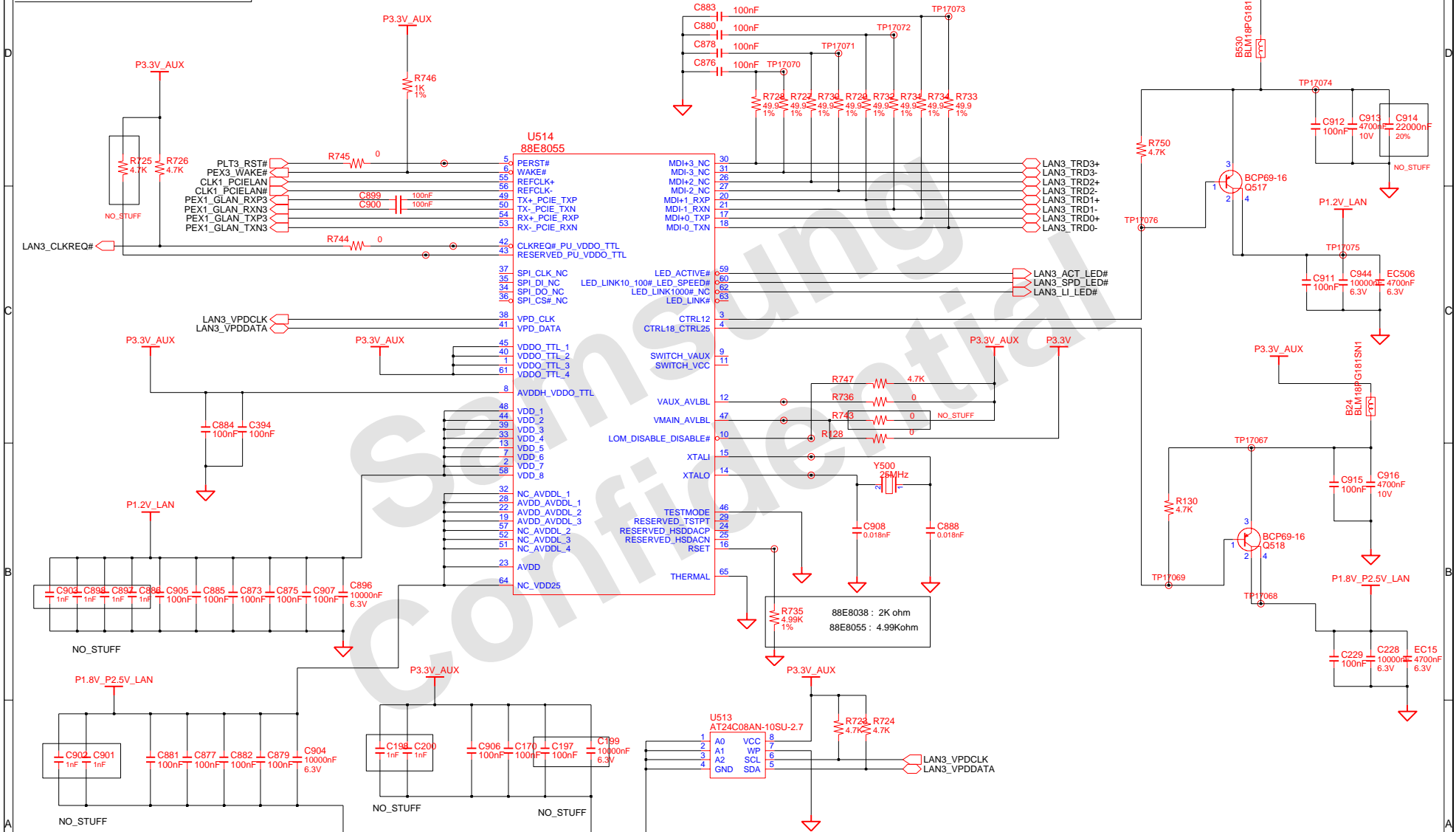
SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.

AUDIO POWER



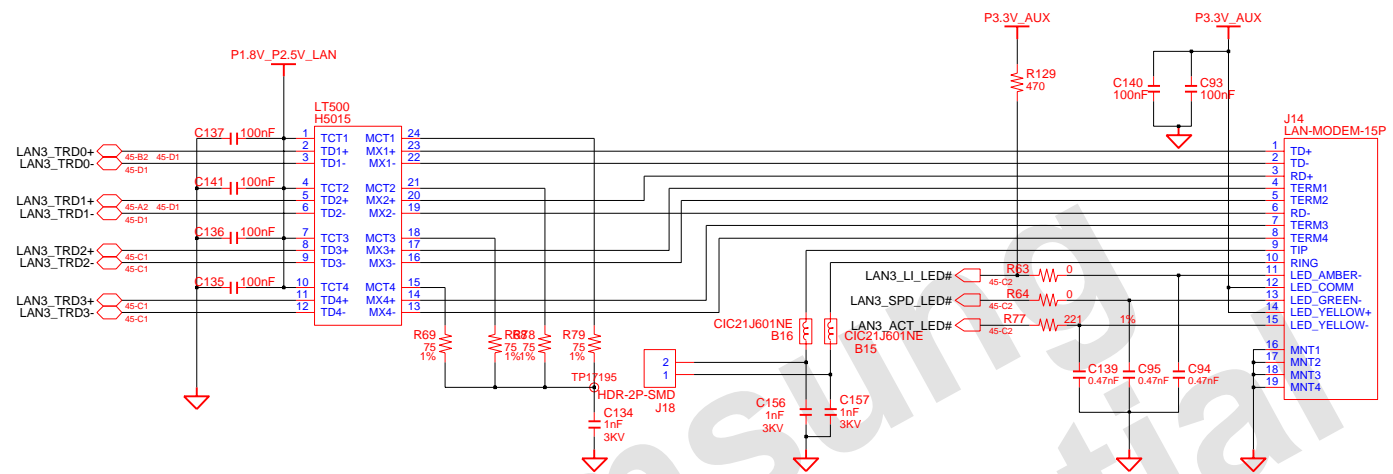
DRAWN	SUNXIAO,	DATE	9/1/2006	TITLE	MILAN AUDIO AUDIO POWER	SAMSUNG ELECTRONICS
CHECK	WUSHUJIANG,	DEV. STEP	SR 1.0			
APPROVAL	KEVIN_LEE,	REV	1.0			PART NO. BA41-00744A
MODULE CODE		LAST EDIT		April 6, 2007 12:24:35 PM	PAGE 41 OF 60	

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO.'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.



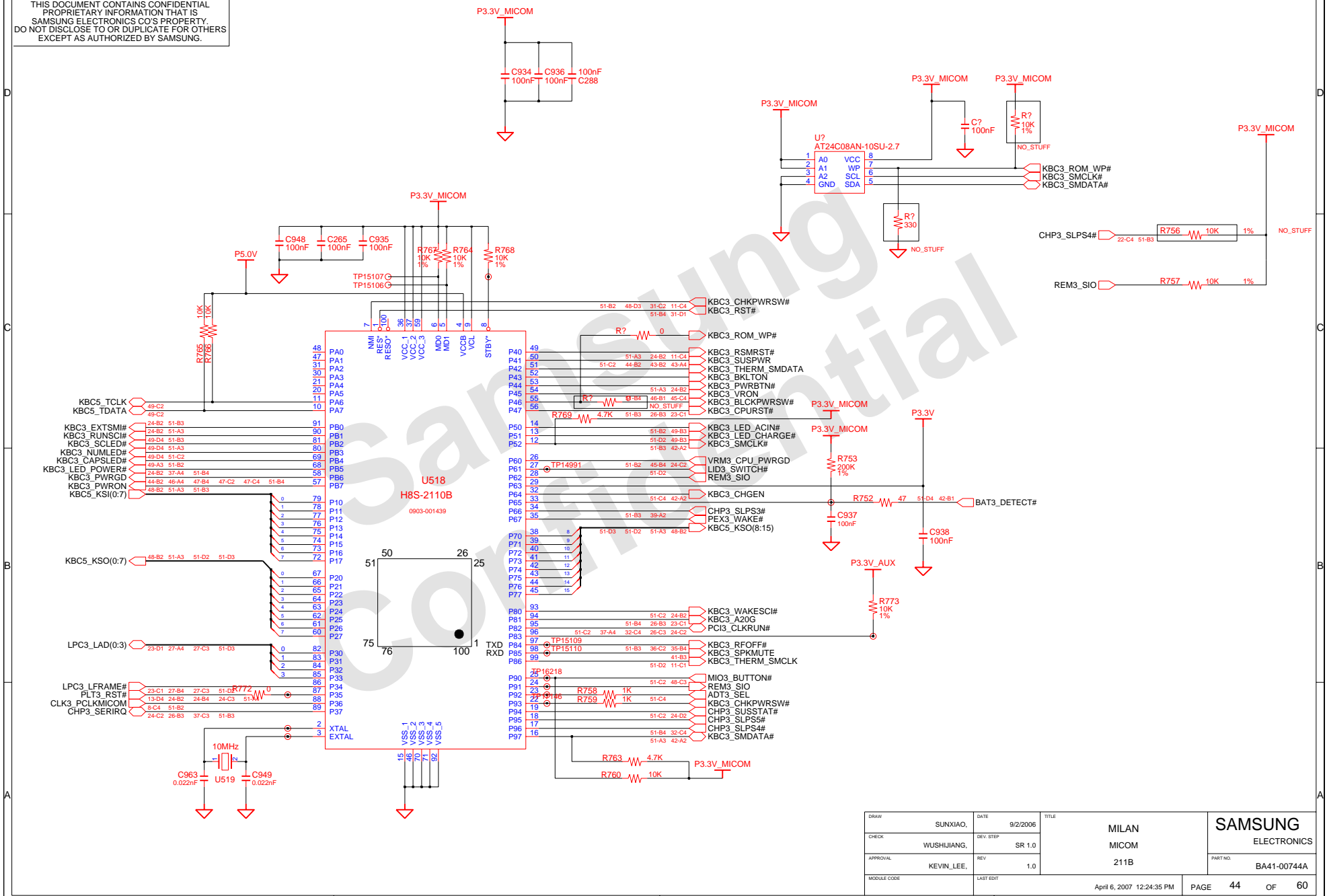
DRAWN	SUNXIAO,	DATE	9/2/2006	TITLE	MILAN	SAMSUNG ELECTRONICS	
CHECK	WUSHUJIANG,	DEV. STEP	SR 1.0		LAN		
APPROVAL	KEVIN_LEE,	REV	1.0		88E8055	PART NO.	
MODULE CODE		LAST EDIT				BA41-00744A	
April 6, 2007 12:24:35 PM						PAGE	42
						OF	60

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO.'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.



DRAWN	SUNXIAO,	DATE	9/2/2006	TITLE	MILAN	SAMSUNG ELECTRONICS
CHECK	WUSHUJIANG,	DEV. STEP	SR 1.0	LAN	LAN	
APPROVAL	KEVIN_LEE,	REV	1.0	LAN JACK RJ45	PART NO.	BA41-00744A
MODULE CODE		LAST EDIT		April 6, 2007 12:24:35 PM	PAGE	43 OF 60

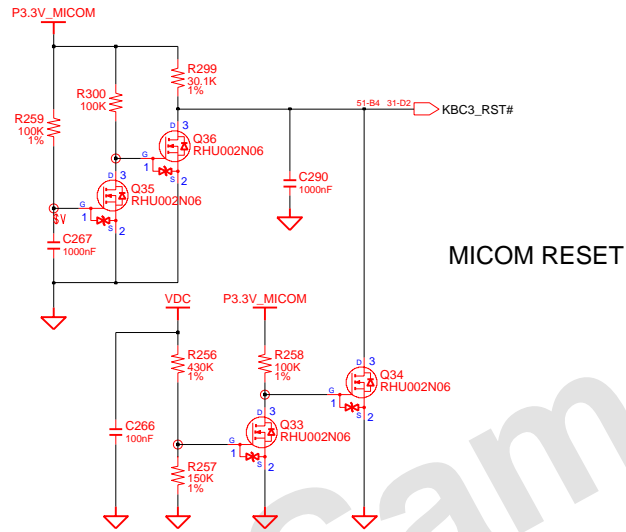
SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.



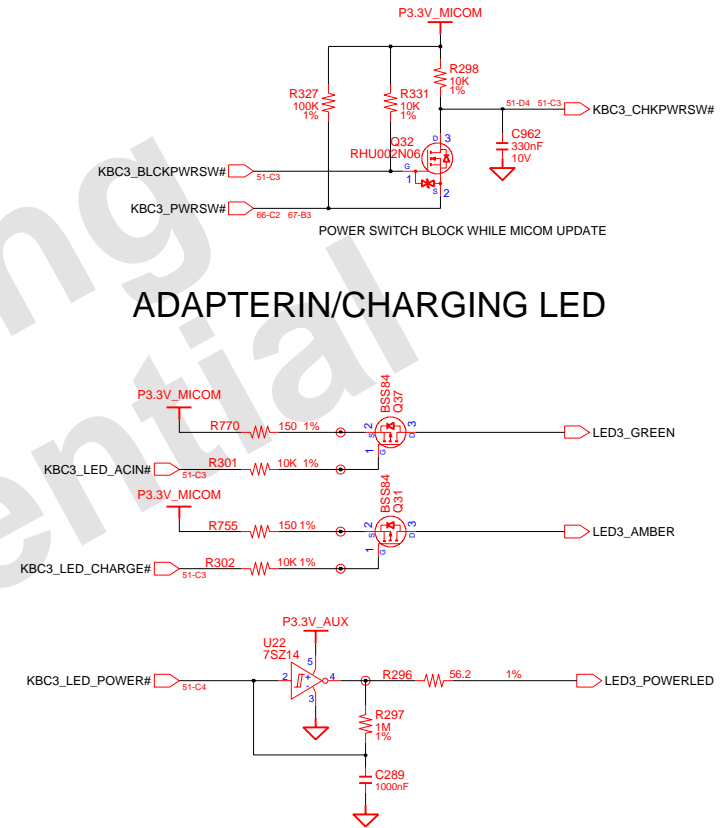
DATE	9/2/2006	TITLE	MILAN MICOM 211B	SAMSUNG ELECTRONICS
DEV. STEP	SR 1.0			
CHECK	WUSHUIJANG,	REV	1.0	PART NO. BA41-00744A
APPROVAL	KEVIN_LEE,	LAST EDIT	April 6, 2007 12:24:35 PM	PAGE 44 OF 60
MODULE CODE				

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO.'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.

FOR MICOM UPDATE



MICOM RESET

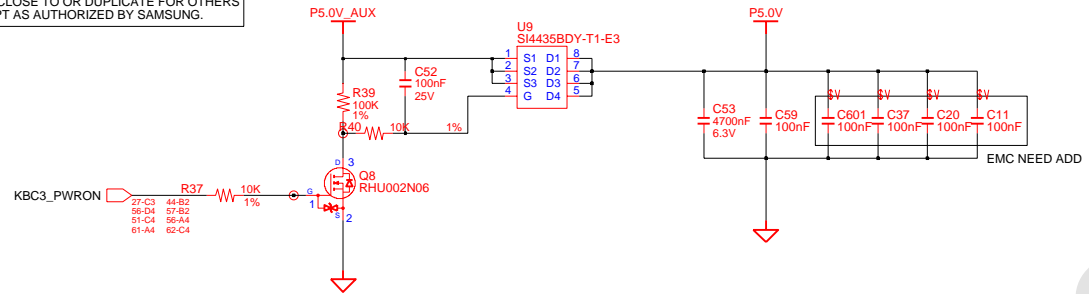


ADAPTERIN/CHARGING LED

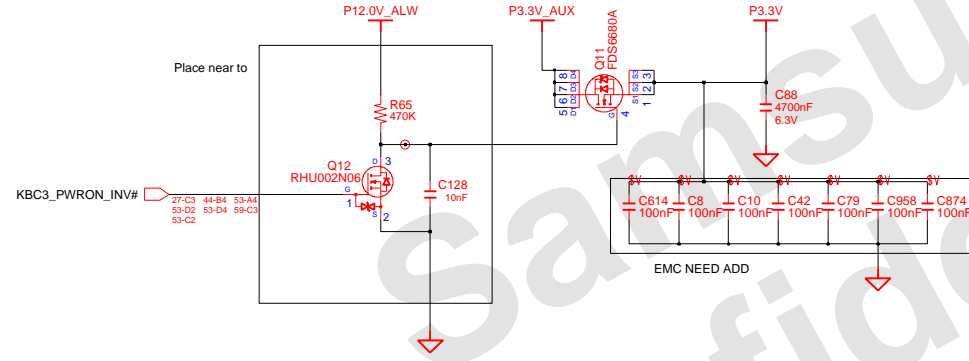
DRAWN	SUNXIAO,	DATE	9/15/2006	TITLE	MILAN	SAMSUNG ELECTRONICS
CHECK	WUSHUIJANG,	DEV. STEP	SR 1.0		MICOM	
APPROVAL	KEVIN_LEE,	REV	1.0		MICOM LOGIC SCH	PART NO.
MODULE CODE		LAST EDIT				BA41-00744A
					April 6, 2007 12:24:35 PM	PAGE 45 OF 60

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO.'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.

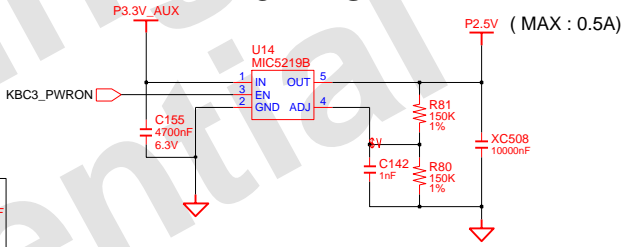
Switched Power On (P5V)



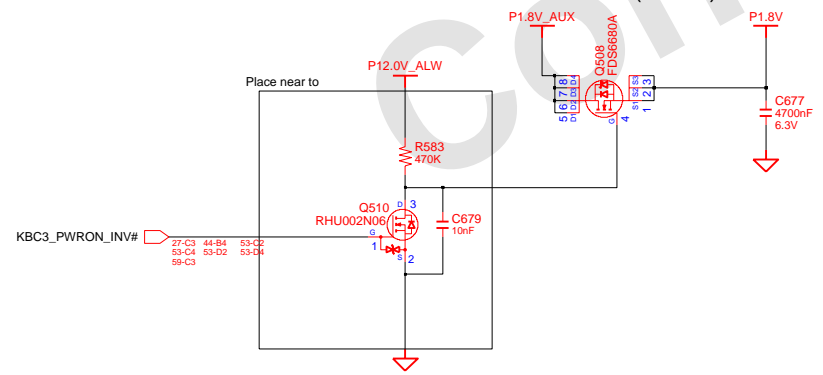
Switched Power On (P3.3V)



P2.5V POWER

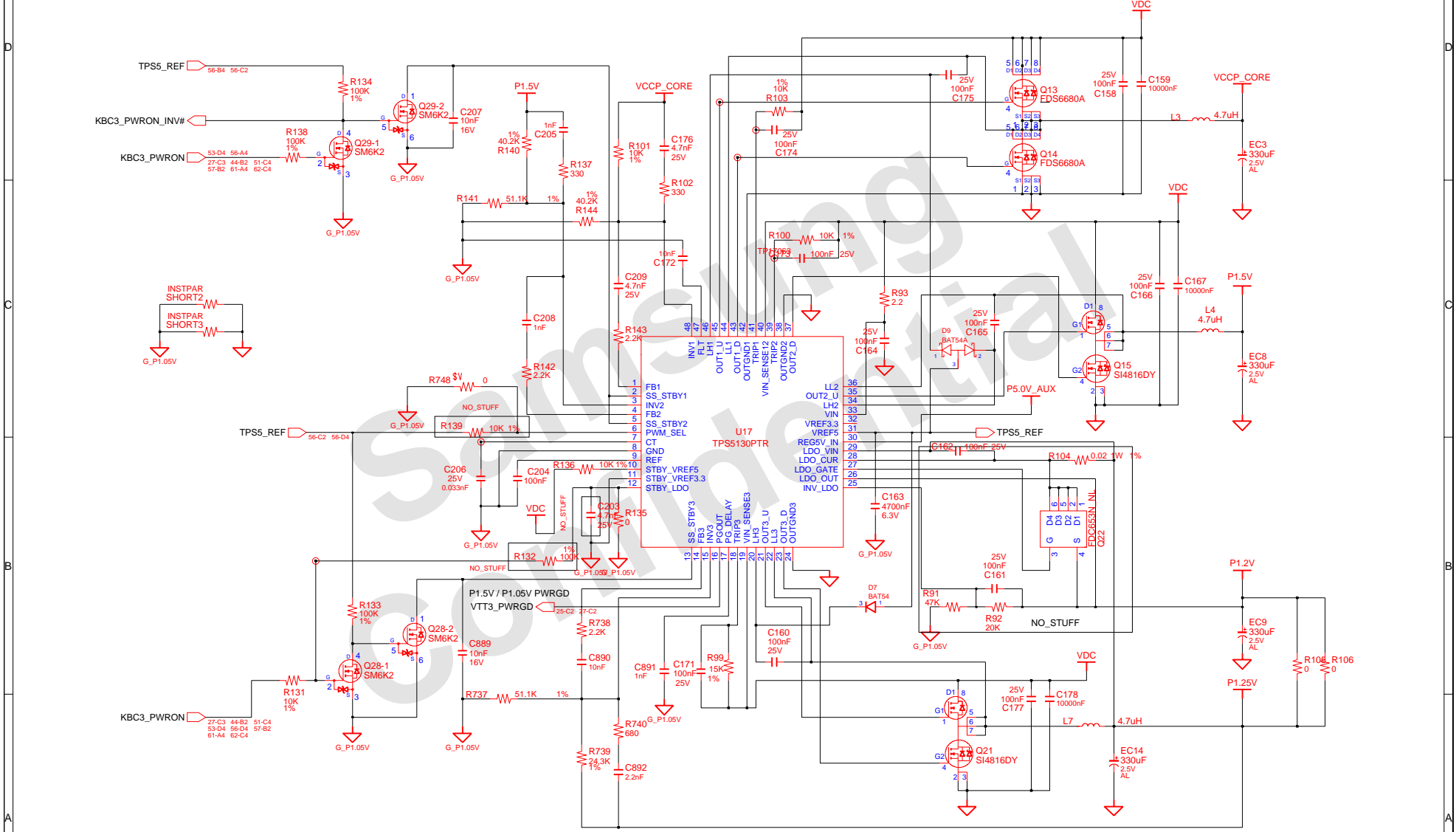


Switched Power On (P1.8V)



DRAWN	SUNXIAO,	DATE	9/2/2006	TITLE	MILAN MAIN SWITCH POWER	SAMSUNG ELECTRONICS
CHECK	WUSHUIJANG,	DEV. STEP	SR 1.0			
APPROVAL	KEVIN_LEE,	REV	1.0			PART NO. BA41-00744A
MODULE CODE		LAST EDIT		April 6, 2007 12:24:35 PM	PAGE 46	OF 60

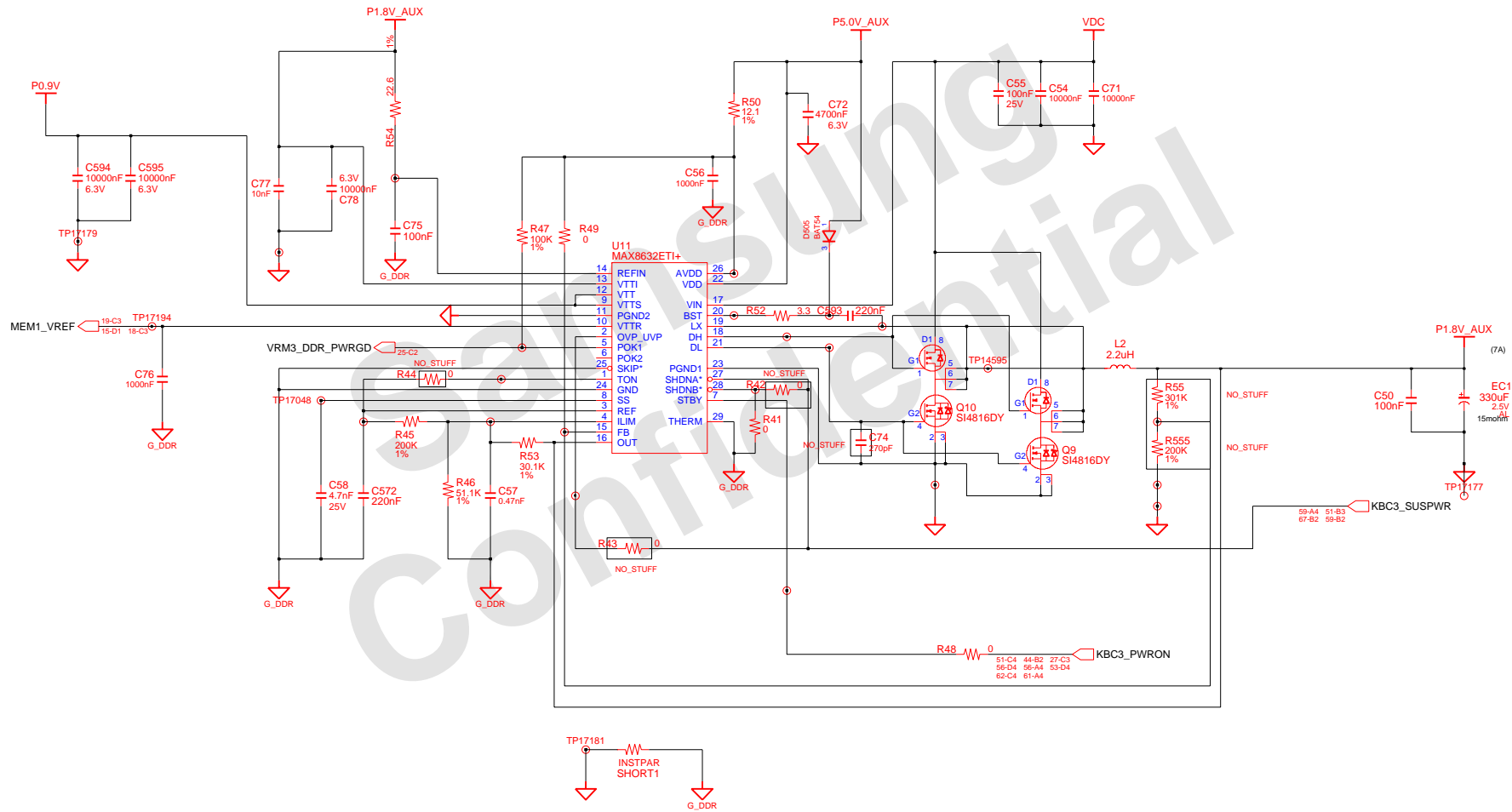
SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.



DRWN	SUNXIAO,	DATE	9/2/2006	TITLE	MILAN	SAMSUNG ELECTRONICS	
CHECK	WUSHUIJANG,	DEV. STEP	SR 1.0		MAIN		
APPROVAL	KEVIN_LEE,	REV	1.0		SANTAROSA PLATFORM POWER	PART NO.	
MODULE CODE		LAST EDIT				BA41-00744A	
April 6, 2007 12:24:35 PM						PAGE	47 OF 60

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO.'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.

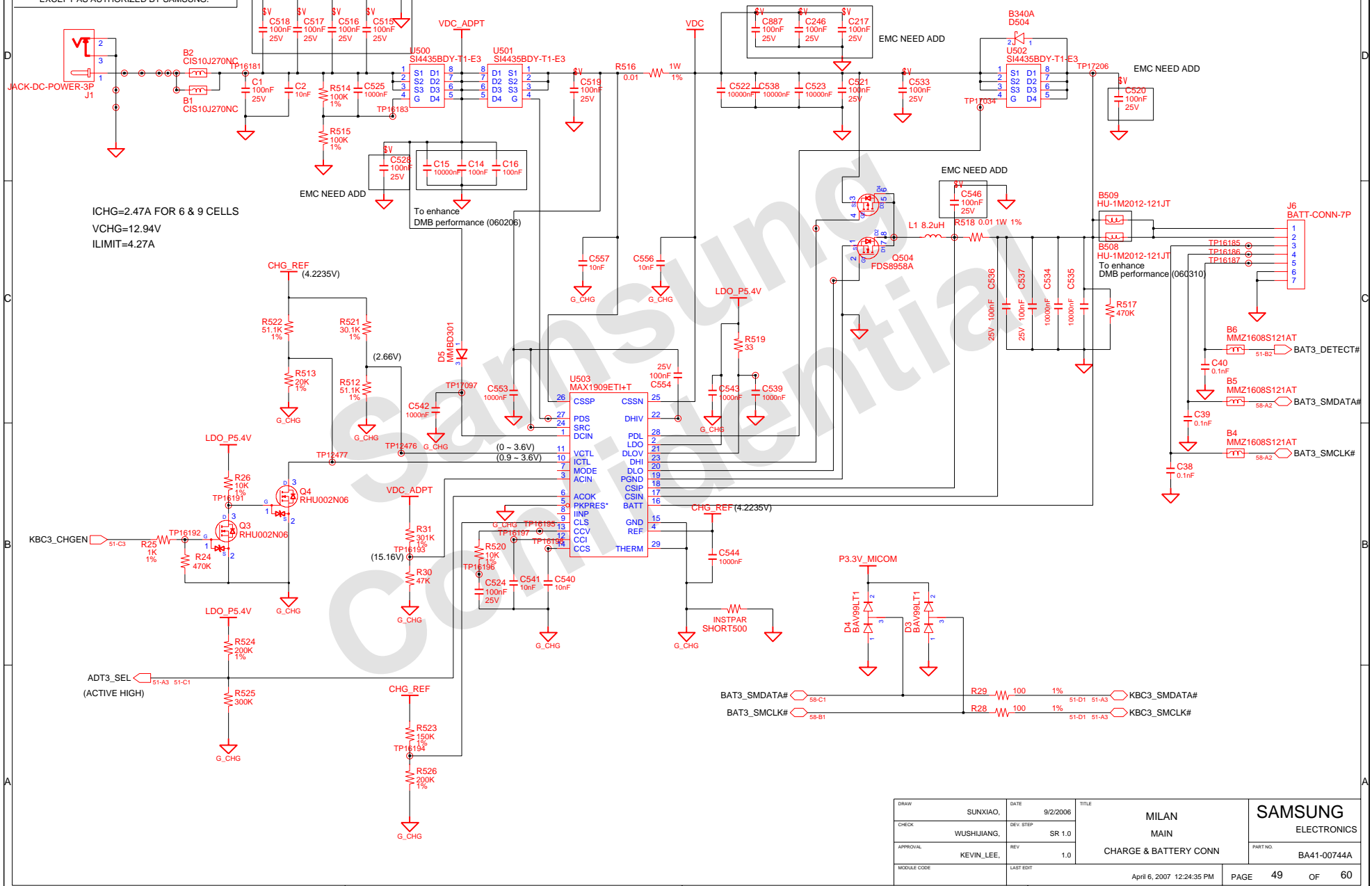
DDR2 Power



DRAWN	SUNXIAO,	DATE	9/2/2006	TITLE	MILAN MAIN	SAMSUNG ELECTRONICS
CHECK	WUSHUIANG,	DEV. STEP	SR 1.0			
APPROVAL	KEVIN_LEE,	REV	1.0		DDR2 POWER	PART NO.
MODULE CODE		LAST EDIT				BA41-00744A
				April 6, 2007 12:24:35 PM	PAGE	48 OF 60

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO.'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.

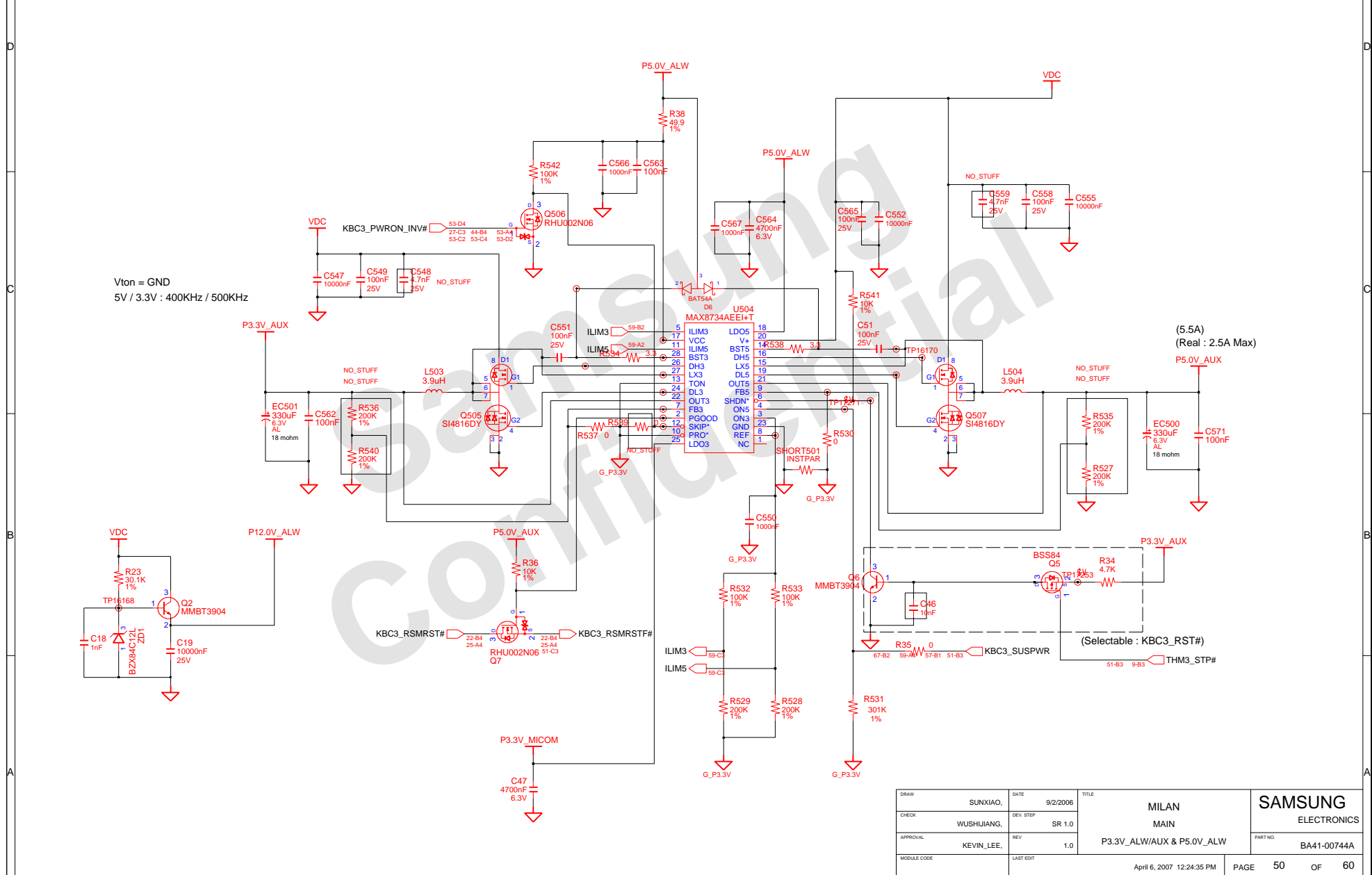
CHARGER & POWER MANAGEMENT



DRAWN	SUNXIAO,	DATE	9/2/2006	TITLE	MILAN	SAMSUNG ELECTRONICS	
CHECK	WUSHUIJIANG,	DEV. STEP	SR 1.0		MAIN		
APPROVAL	KEVIN_LEE,	REV	1.0		CHARGE & BATTERY CONN	PART NO.	
MODULE CODE		LAST EDIT				BA41-00744A	
April 6, 2007 12:24:35 PM						PAGE	49 OF 60

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.

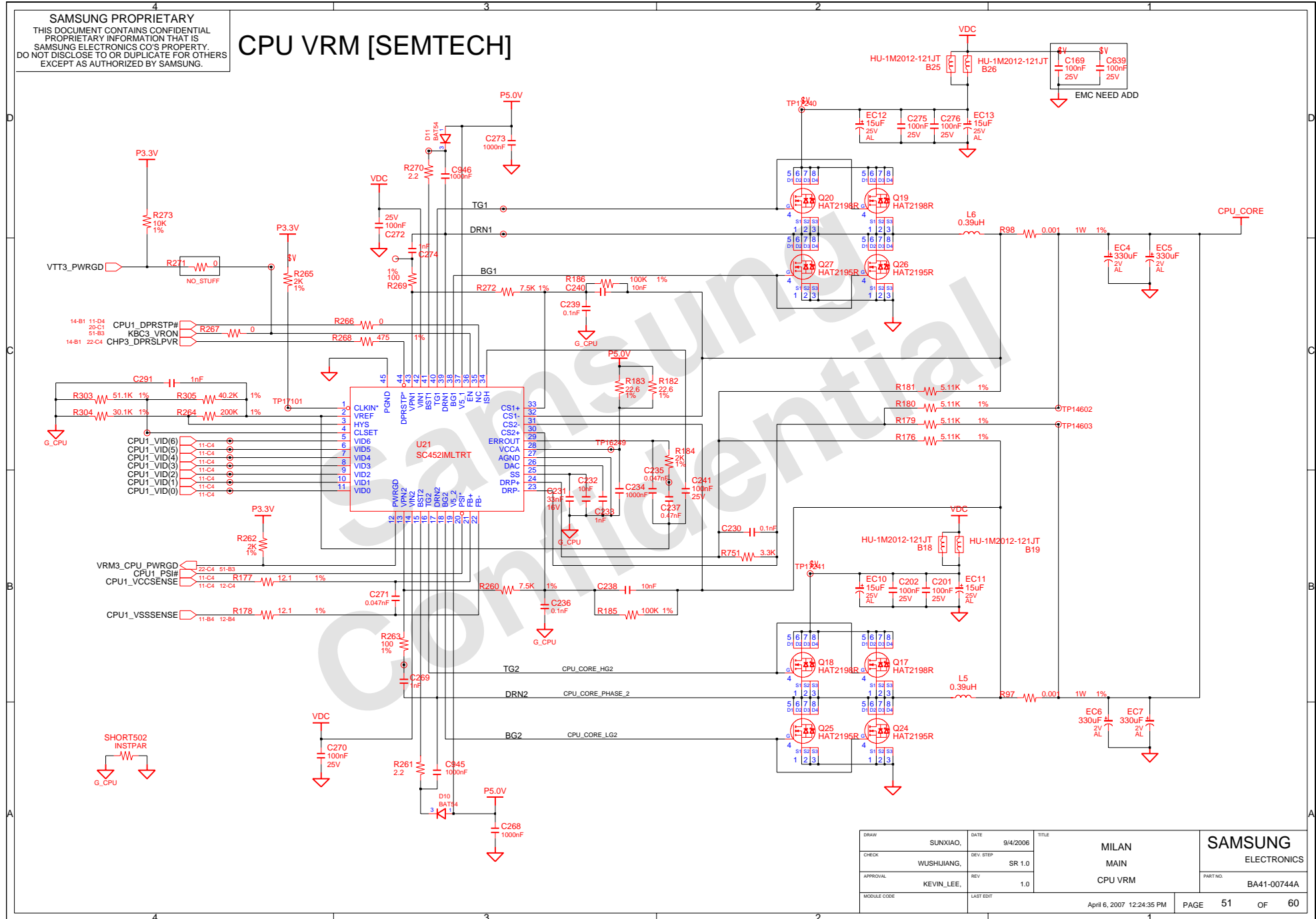
P3.3V_ALW/AUX & P5V_AUX



DRAWN	SUNXIAO,	DATE	9/2/2006	TITLE	MILAN	SAMSUNG ELECTRONICS	
CHECK	WUSHUIANG,	DEV. STEP	SR 1.0		MAIN		
APPROVAL	KEVIN_LEE,	REV	1.0		P3.3V_ALW/AUX & P5.0V_ALW	PART NO.	
MODULE CODE		LAST EDIT				BA41-00744A	
April 6, 2007 12:24:35 PM						PAGE	50 OF 60

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.

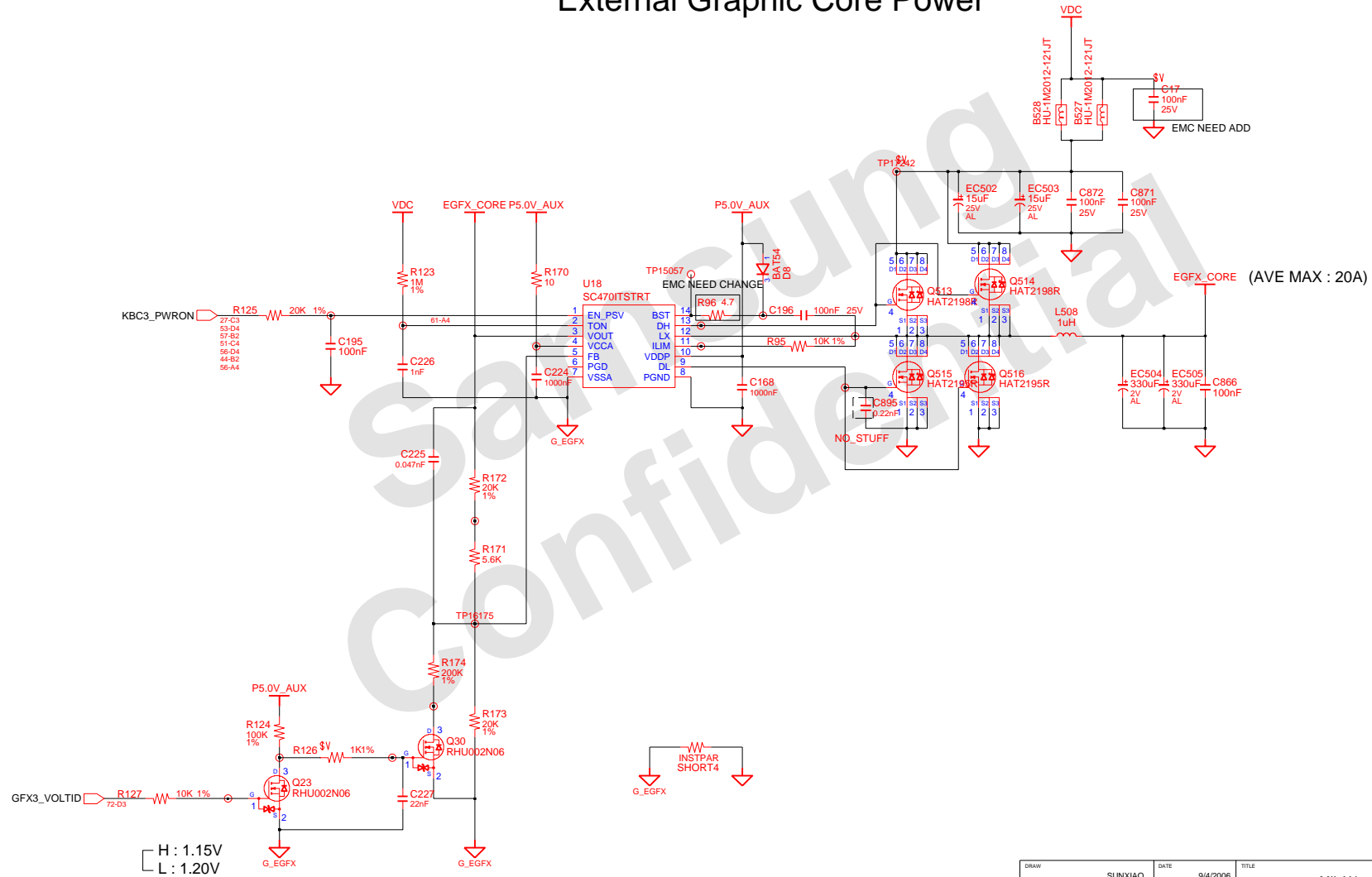
CPU VRM [SEMTECH]



DRAWN	SUNXIAO,	DATE	9/4/2006	TITLE	MILAN	SAMSUNG ELECTRONICS			
CHECK	WUSHUIJANG,	DEV. STEP	SR 1.0		MAIN				
APPROVAL	KEVIN_LEE,	REV	1.0		CPU VRM				
MODULE CODE		LAST EDIT							
April 6, 2007 12:24:35 PM						PAGE	51	OF	60

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.

External Graphic Core Power



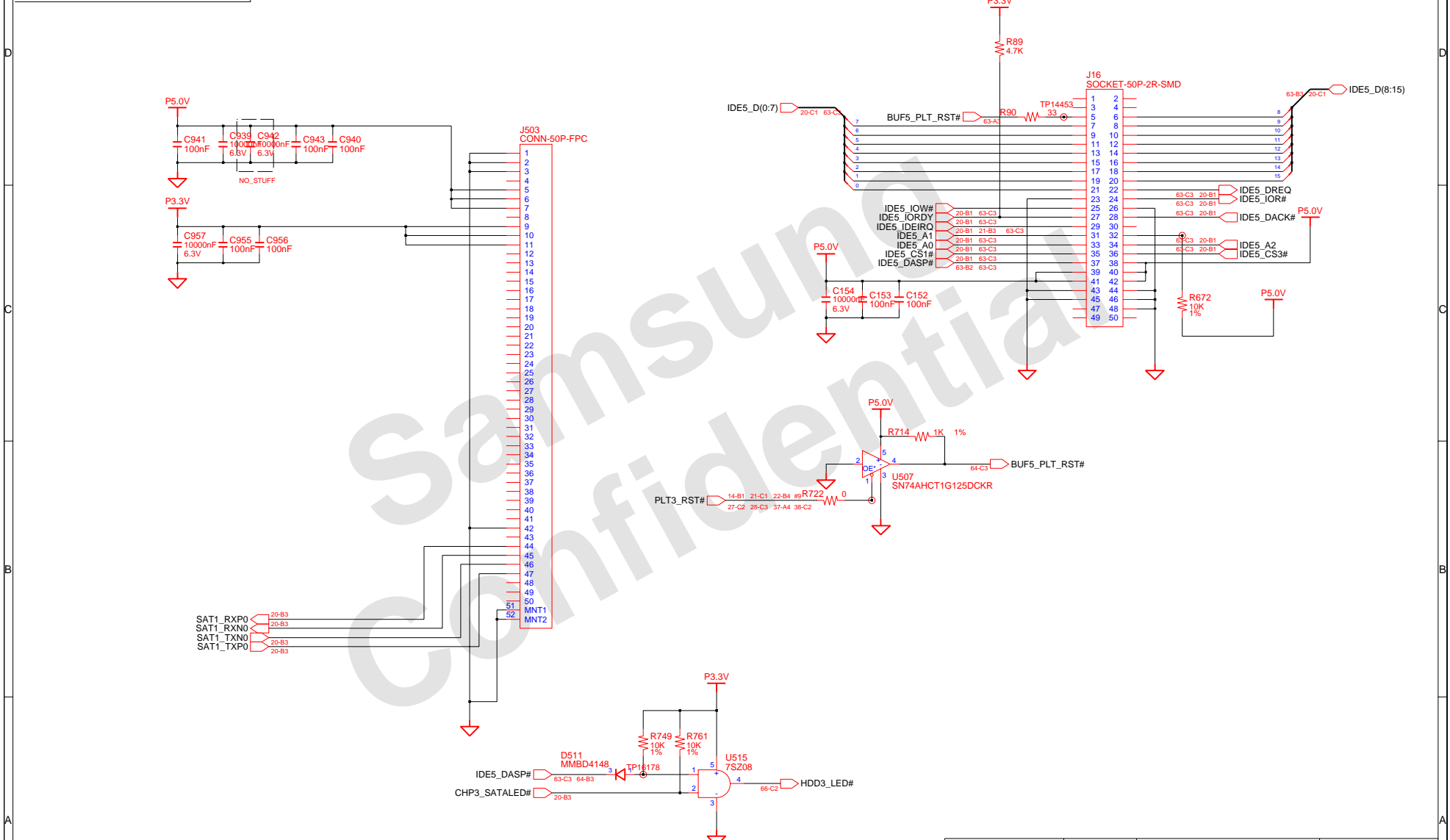
H : 1.15V
 L : 1.20V

DRAWN	SUNXIAO,	DATE	9/4/2006	TITLE	MILAN MAIN	SAMSUNG ELECTRONICS
CHECK	WUSHUIJANG,	DEV. STEP	SR 1.0	EXTERNAL GFX POWER VRM		
APPROVAL	KEVIN_LEE,	REV	1.0			PART NO. BA41-00744A
MODULE CODE		LAST EDIT		April 6, 2007 12:24:35 PM		PAGE 52 OF 60

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.

Main to HDD

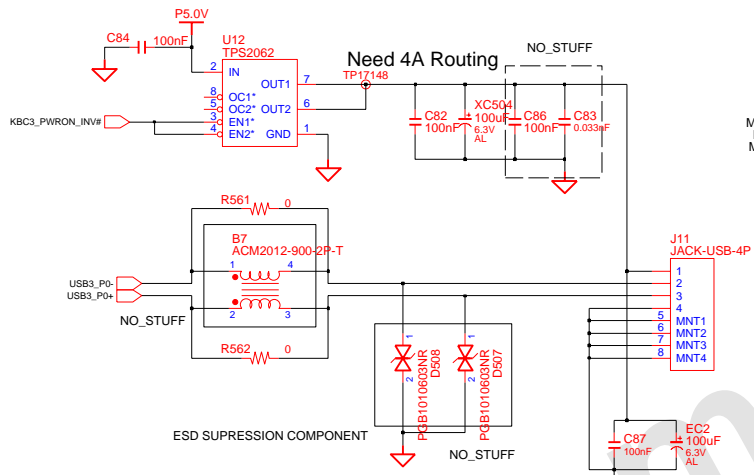
Main to Swap B'd



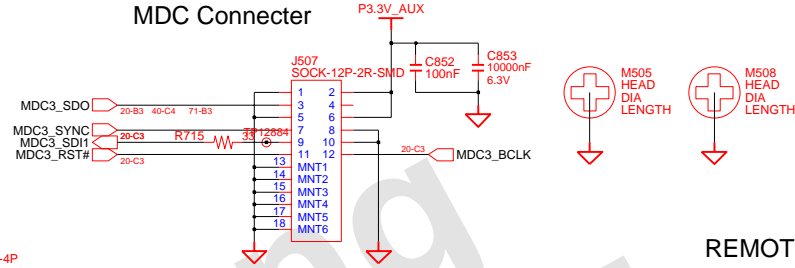
DRAWN	SUNXIAO,	DATE	9/4/2006	TITLE	MILAN	SAMSUNG ELECTRONICS
CHECK	WUSHUIJANG,	DEV. STEP	SR 1.0	CONNECTOR		
APPROVAL	KEVIN_LEE,	REV	1.0	HDD & ODD CONNECTOR		PART NO.
MODULE CODE		LAST EDIT		April 6, 2007 12:24:35 PM		BA41-00744A
						PAGE 53 OF 60

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.

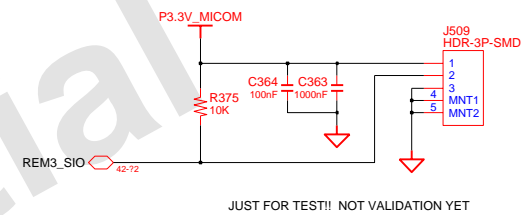
USB Connector



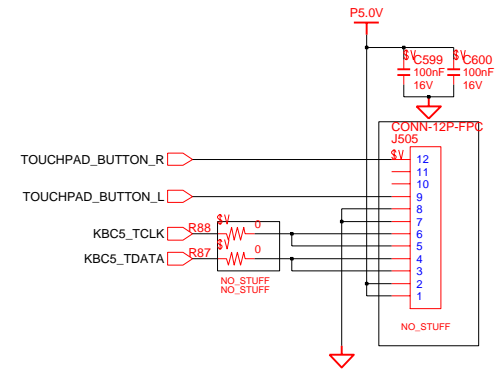
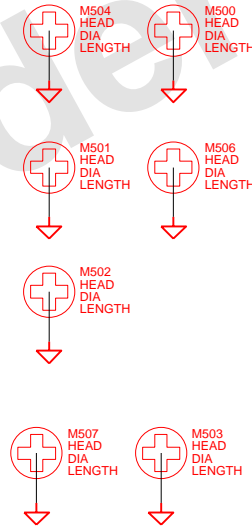
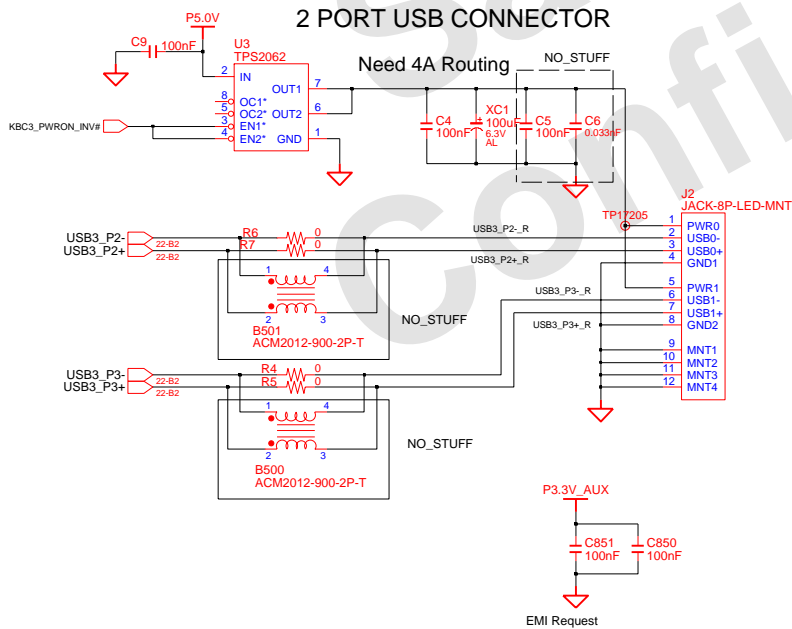
MDC Connector



REMOTE CONTROL

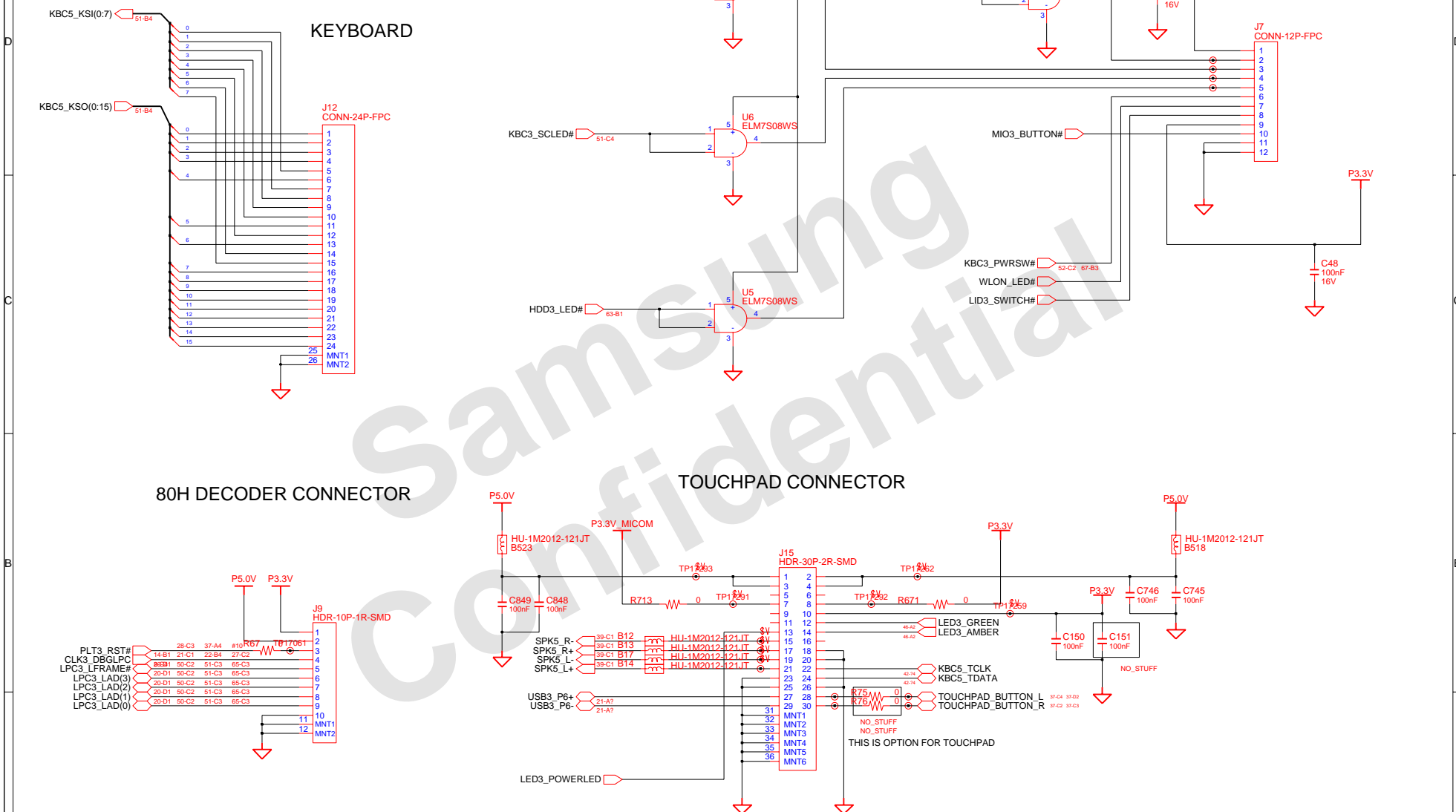


2 PORT USB CONNECTOR



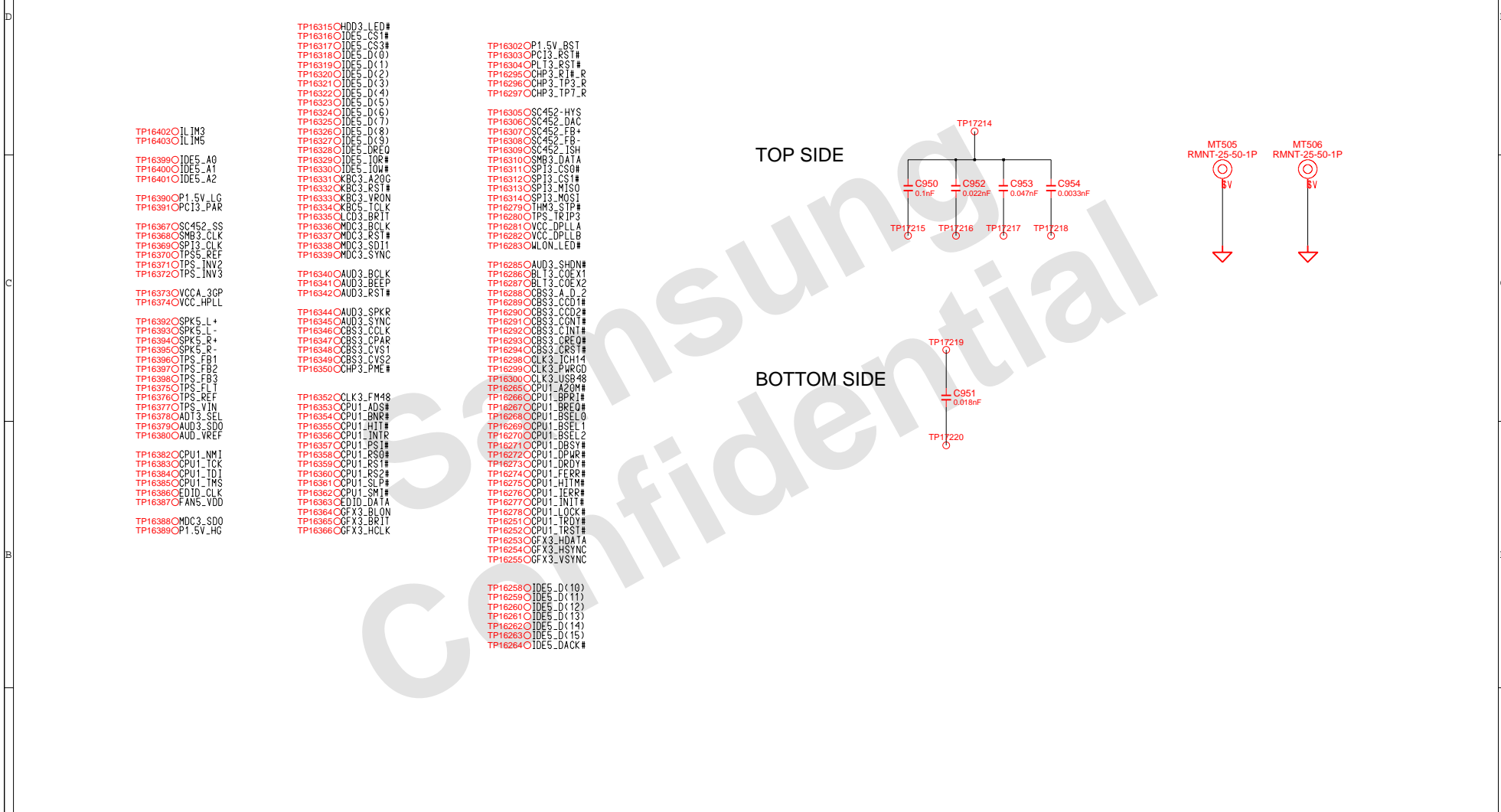
DRAWN	SUNXIAO,	DATE	9/4/2006	TITLE	MILAN	SAMSUNG ELECTRONICS
CHECK	WUSHUIJANG,	DEV. STEP	SR 1.0	USB MDC & MAIN TOP CNN		
APPROVAL	KEVIN_LEE,	REV	1.0			PART NO. BA41-00744A
MODULE CODE		LAST EDIT		April 6, 2007 12:24:35 PM		PAGE 54 OF 60

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO.'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.



DRAWN	SUNXIAO,	DATE	9/4/2006	TITLE	MILAN	SAMSUNG ELECTRONICS
CHECK	WUSHUJIANG,	DEV. STEP	SR 1.0	KEYBOARD 80PORT		
APPROVAL	KEVIN_LEE,	REV	1.0	TOUCHPAD CNN		
MODULE CODE		LAST EDIT				
				April 6, 2007 12:24:35 PM	PAGE	55 OF 60

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO.'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.



- TP16315CHDD3_LED#
- TP16316OIDE5_CS1#
- TP16317OIDE5_CS3#
- TP16318OIDE5_D(0)
- TP16319OIDE5_D(1)
- TP16320OIDE5_D(2)
- TP16321OIDE5_D(3)
- TP16322OIDE5_D(4)
- TP16323OIDE5_D(5)
- TP16324OIDE5_D(6)
- TP16325OIDE5_D(7)
- TP16326OIDE5_D(8)
- TP16327OIDE5_D(9)
- TP16328OIDE5_DREQ
- TP16329OIDE5_IOR#
- TP16330OIDE5_IOM#
- TP16331OKBC3_A20G
- TP16332CKBC3_RST#
- TP16333CKBC3_VRON
- TP16334CKBC5_CLK
- TP16335CLKD3_BRT1
- TP16336MDC3_BCLK
- TP16337MDC3_RST#
- TP16338MDC3_SD11
- TP16339MDC3_SYNC
- TP16340AUD3_BCLK
- TP16341AUD3_BEEP
- TP16342AUD3_RST#
- TP16344AUD3_SPKR
- TP16345AUD3_SYNC
- TP16346CBS3_CCLK
- TP16347CBS3_CPAR
- TP16348CBS3_CVS1
- TP16349CBS3_CVS2
- TP16350CHP3_PNE#
- TP16352CLK3_FM48
- TP16353CPU1_AD9#
- TP16354CPU1_BNR#
- TP16355CPU1_HIT#
- TP16356CPU1_INT#
- TP16357CPU1_PS1#
- TP16358CPU1_RS0#
- TP16359CPU1_RS1#
- TP16360CPU1_RS2#
- TP16361CPU1_SL_P#
- TP16362CPU1_SM1#
- TP16363CEDID_DATA
- TP16364CFX3_B1ON
- TP16365CFX3_BRT1
- TP16366CFX3_HCLK
- TP16390OIDE5_A0
- TP16400OIDE5_A1
- TP16401OIDE5_A2
- TP16390OP1_5V_LG
- TP16391OPC13_PAR
- TP16367OSC452_SS
- TP16368OSMB3_CLK
- TP16369OSP13_CLK
- TP16370TPS5_REF
- TP16371TPS_INV2
- TP16372TPS_INV3
- TP16373OVCCA_3CP
- TP16374OVCC_HP1L
- TP16392OSPK5_L+
- TP16393OSPK5_L-
- TP16394OSPK5_R+
- TP16395OSPK5_R-
- TP16396TPS_FB1
- TP16397TPS_FB2
- TP16398TPS_FB3
- TP16375TPS_F1
- TP16376TPS_REF
- TP16377TPS_VIN
- TP16378ADT3_SEL
- TP16379AUD3_SDO
- TP16380AUD_VREF
- TP16382OCPU1_NMI
- TP16383OCPU1_TCK
- TP16384OCPU1_TDI
- TP16385OCPU1_TMS
- TP16386CEDID_CLK
- TP16387CFAN5_VDD
- TP16388MDC3_SDO
- TP16389OP1_5V_HG
- TP16302CP1_5V_RST
- TP16303PC13_RST#
- TP16304OPL13_RST#
- TP16295OCHP3_RJ#_R
- TP16296OCHP3_TP3_R
- TP16297OCHP3_TP1_R
- TP16305SC452_HYS
- TP16306SC452_DAC
- TP16307SC452_FB+
- TP16308SC452_FB-
- TP16309SC452_ISH
- TP16310OSMB3_DATA
- TP16311OSP13_CS0#
- TP16312OSP13_CS1#
- TP16313OSP13_MISO
- TP16314OSP13_MOSI
- TP16279IHM3_STP#
- TP16280TPS_TRIP3
- TP16281OVCC_DP1L_A
- TP16282OVCC_DP1L_B
- TP16283OWLON_LED#
- TP16285OAUD3_SHDN#
- TP16286OBL13_COE_X1
- TP16287OBL13_COE_X2
- TP16288OCBS3_A_D_2
- TP16289OCBS3_CCD1#
- TP16290OCBS3_CCD2#
- TP16291OCBS3_CGN1#
- TP16292OCBS3_CINT1#
- TP16293OCBS3_CRE0#
- TP16294OCBS3_CRS1#
- TP16298CLK3_ICH14
- TP16299CLK3_PWRGD
- TP16300CLK3_USB48
- TP16265OCPU1_A20#
- TP16266OCPU1_BPR1#
- TP16267OCPU1_BRE0#
- TP16268OCPU1_BSEL0
- TP16269OCPU1_BSEL1
- TP16270OCPU1_BSEL2
- TP16271OCPU1_DBSV#
- TP16272OCPU1_DPWR#
- TP16273OCPU1_DRDY#
- TP16274OCPU1_FERR#
- TP16275OCPU1_HITM#
- TP16276OCPU1_IERR#
- TP16277OCPU1_INIT#
- TP16278OCPU1_LOCK#
- TP16251OCPU1_TRDY#
- TP16252OCPU1_TRST#
- TP16253OCFX3_HDATA
- TP16254OCFX3_HSYNC
- TP16255OCFX3_VSYNC

DRAWN	SUNXIAO,	DATE	11/13/2006	TITLE	MILAN TP	SAMSUNG ELECTRONICS
CHECK	WUSHIJIANG,	DEV. STEP	SR 1.0			
APPROVAL	KEVIN LEE,	REV	1.0			PART NO. BA41-00744A
MODULE CODE		LAST EDIT	April 6, 2007 12:24:35 PM			PAGE 56 OF 60

SAMSUNG PROPRIETARY
THIS DOCUMENT CONTAINS CONFIDENTIAL PROPRIETARY INFORMATION THAT IS SAMSUNG ELECTRONICS CO.'S PROPERTY. DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS EXCEPT AS AUTHORIZED BY SAMSUNG.

D	TP16679OIDE5_DASP# TP16680OIDE5_IORDY TP16681OKBC3_CHGEN TP16683OKBC3_PARGD TP16683OKBC3_PWRON TP16684OKBC5_TDATA TP16685OLED3_AMBER TP16688OLED3_GREEN TP16688OMCH1_HVREF TP16690OP1_05V_BST TP16693OP13_AD(0) TP16692OP13_AD(1) TP16693OP13_AD(2) TP16694OP13_AD(3) TP16695OP13_AD(4) TP16696OP13_AD(5) TP16697OP13_AD(6) TP16697OP13_AD(7) TP16698OP13_AD(8) TP16699OP13_CBE3# TP16699OP13_CBE0# TP16651OP13_CBE1# TP16652OP13_CBE2# TP16653OP13_CBE3# TP16654OP13_GNTO# TP16655OP13_INTA# TP16656OP13_INTB# TP16657OP13_INTC# TP16658OP13_INTD# TP16659OP13_INTE# TP16660OP13_INTF# TP16661OP13_INTG# TP16662OP13_INTH# TP16663OP13_IROY# TP16664OP13_PERR# TP16665OP13_REQ0# TP16666OP13_SERR# TP16667OP13_STOP# TP16668OP13_TRDY# TP16669OP13_WAKE# TP16670OSC452_CS1- TP16671OSC452_BS1# TP16672OSC452_BS12 TP16673OSC452_CS1+ TP16674OSC452_CS2+ TP16675OSC452_CS2- TP16676OSC452_DRP+ TP16677OSC452_DRP- TP16678OSC452_VCCA TP16679OSC452_VPN1 TP16680OSC452_VPN2 TP16681OSC452_VREF TP16682OTPS_FB1_RC TP16683OTPS_FB2_RC TP16684OTPS_FB3_RC TP16685OTPS_LDO_CR TP16627OVCCSATAPLL TP16628OVIT3_PARGD TP16629AUD3_GP100# TP16630AUD3_GP101# TP16588OCLK3_DBGLPC TP16589OCLK3_PCLKCB	TP16631AUD3_SPKR_R TP16632AUD5_HP_O_L TP16633AUD5_HP_O_R TP16634AUD5_M1C1_L TP16635AUD5_M1C1_R TP16636AUD5_SENS_A TP16637AUD5_SENS_B TP16638AUD_JDREF_R TP16639BAT3_SMCLK# TP16640CBS3_A.A_18 TP16641OCBS3_A.A_19 TP16642OCBS3_A.D_14 TP16643OCBS3_CAD(0) TP16644OCBS3_CAD(1) TP16645OCBS3_CAD(2) TP16646OCBS3_CAD(3) TP16647OCBS3_CAD(4) TP16648OCBS3_CAD(5) TP16649OCBS3_CAD(6) TP16649OCBS3_CAD(7) TP16649OCBS3_CAD(8) TP16649OCBS3_CAD(9) TP16596OCBS3_CAUD10 TP16597OCBS3_CCBEO# TP16598OCBS3_CCBE1# TP16599OCBS3_CCBE2# TP16600OCBS3_CCBE3# TP16601OCBS3_CSTRDY# TP16602OCBS3_CPERR# TP16603OCBS3_CSERR# TP16604OCBS3_CSTOP# TP16605OCBS3_CTRDY# TP16606OCBS3_MD_CLK TP16607OCBS3_VPPEN0 TP16608OCBS3_VPPEN1 TP16609OHP3_GP1012 TP16610OHP3_GP1017 TP16611OHP3_GP1019 TP16612OHP3_GP1021 TP16614OHP3_SERIRQ TP16615OHP3_SLP3# TP16616OHP3_SLP34# TP16617OHP3_SLP35# TP16577OCPU1_DEFER# TP16578OCPU1_DPSLP# TP16579OCPU1_IQWNE# TP16580CFGX3_27M_3S TP16581CFGX3_DOCCLK TP16582CFGX3_H1PLG1 TP16583CFGX3_THERM# TP16584CFGX3_THRMDN TP16585CFGX3_THRMDP TP16586CFGX3_VOL11D TP16587OHA3_RST#_R TP16588OIDE5_IDE_IR0 TP16589OKBC3_BKLTON TP16590OKBC3_PWRSW# TP16591OKBC3_SLED# TP16592OKBC3_SMCLK# TP16593OKBC3_SUSPWR TP16594OKBC5_KS1(0) TP16595OKBC5_KS1(1) TP16596OKBC5_KS1(2) TP16597OKBC5_KS1(3) TP16598OKBC5_KS1(4) TP16599OKBC5_KS1(5) TP16598OKBC5_KS1(6) TP16599OKBC5_KS1(7) TP16599OKBC5_KS0(0)	TP16561OKBC5_KS0(1) TP16562OKBC5_KS0(2) TP16563OKBC5_KS0(3) TP16564OKBC5_KS0(4) TP16565OKBC5_KS0(5) TP16566OKBC5_KS0(6) TP16567OKBC5_KS0(7) TP16568OKBC5_KS0(8) TP16569OKBC5_KS0(9) TP16570OLAN3_VPDCLK TP16571OLAN3_BKLTON TP16572OLPC3_LAD(0) TP16573OLPC3_LAD(1) TP16574OLPC3_LAD(2) TP16575OLPC3_LAD(3) TP16539OMCH3_CFG(5) TP16542OMCH3_CFG(9) TP16543OMCH1_TEST1_R TP16544OMCH1_TEST2_R TP16508OP1_05V_INV1 TP16509OP1_25V_M_HG TP16510OP1_25V_M_LG TP16511OP1_5V_PHASE TP16512OP1_0V_VSREF TP16513OP13_AD(10) TP16514OP13_AD(11) TP16515OP13_AD(12) TP16516OP13_AD(13) TP16517OP13_AD(14) TP16518OP13_AD(15) TP16519OP13_AD(16) TP16520OP13_AD(17) TP16521OP13_AD(18) TP16522OP13_AD(19) TP16523OP13_AD(20) TP16524OP13_AD(21) TP16525OP13_AD(22) TP16526OP13_AD(23) TP16527OP13_AD(24) TP16528OP13_AD(25) TP16529OP13_AD(26) TP16530OP13_AD(27) TP16531OP13_AD(28) TP16532OP13_AD(29) TP16533OP13_AD(30) TP16534OP13_AD(31) TP16506OP13_FRAME# TP16507OP13_PL0CK# TP16468OCLK3_PCLKICH TP16469OCPU1_COMP0_R TP16470OCPU1_COMP1_R TP16471OCPU1_COMP2_R TP16472OCPU1_COMP3_R TP16473OCPU1_CPUREST# TP16474OCPU1_DPRSTP#	TP16475OSC452_CLSET TP16476OSMB3_ALERT# TP16477OSMB3_ME_CLK TP16478OSMB3_ALERT# TP16479OTPS_INV3_RC TP16480OTPS_INV_LDO TP16481OTPS_PGDDELAY TP16482OTPS_PWM_SEL TP16484AUD3_BEEP_CU TP16485AUD3_SDIO_RU TP16486OCBAT3_DETECT# TP16487OCBAT3_SMDATA# TP16488OCBS3_CAD(10) TP16489OCBS3_CAD(11) TP16490OCBS3_CAD(12) TP16491OCBS3_CAD(13) TP16492OCBS3_CAD(14) TP16493OCBS3_CAD(15) TP16494OCBS3_CAD(16) TP16495OCBS3_CAD(17) TP16496OCBS3_CAD(18) TP16497OCBS3_CAD(19) TP16498OCBS3_CAD(20) TP16499OCBS3_CAD(21) TP16500OCBS3_CAD(22) TP16501OCBS3_CAD(23) TP16502OCBS3_CAD(24) TP16503OCBS3_CAD(25) TP16504OCBS3_CAD(26) TP16505OCBS3_CAD(27) TP16452OCBS3_CAD(28) TP16453OCBS3_CAD(29) TP16454OCBS3_CAD(30) TP16455OCBS3_CAD(31) TP16456OCBS3_FRAME# TP16457OCBS3_CSTISCHG TP16458OCBS3_VCC3EN# TP16459OCBS3_VCC5EN# TP16460OHP3_BIOSUP# TP16461OHP3_CPUS1P# TP16462OHP3_EXTGFX# TP16463OHP3_PCISTP# TP16464OHP3_R1CRST# TP16414OMAX8734_BST5 TP16415OMCH1_HXSWING TP16416OMCH3_BMBUSY# TP16417OMCH3_CLCREQ# TP16418OMCH3_CL_VREF TP16419OMCH3_EXTSISO# TP16420OMCH3_EXTSIS1#	TP16421OCPU1_REQ#(0) TP16422OCPU1_REQ#(1) TP16423OCPU1_REQ#(2) TP16424OCPU1_REQ#(3) TP16426OCPU1_STPCLK# TP16427OCPU1_TEST1_R TP16428OCPU1_TEST2_R TP16429OCPU1_TEST3_R TP16430OCPU1_TEST4_R TP16431OCPU1_TEST5_R TP16433OCPU2_THERMDA TP16433OCPU2_THERMDC TP16435OCPU_CORE_HG2 TP16437OCPU_CORE_LG2 TP16438OFAN3_FDBACK# TP16439OGFX3_DDCDATA TP16440OKBC3_CPUREST# TP16441OKBC3_EXTSW1# TP16442OKBC3_NUMLED# TP16443OKBC3_PWRBTN# TP16444OKBC3_RSMRST# TP16445OKBC3_RUNSCJ# TP16446OKBC3_SMDATA# TP16447OKBC5_KS0(10) TP16448OKBC5_KS0(11) TP16449OKBC5_KS0(12) TP16450OKBC5_KS0(13) TP16451OKBC5_KS0(14) TP16452OKBC5_KS0(15) TP16453OKBC5_KS0(16) TP16454OKBC5_KS0(17) TP16455OKBC5_KS0(18) TP16456OKBC5_KS0(19) TP16457OKBC5_KS0(20) TP16458OKBC5_KS0(21) TP16459OKBC5_KS0(22) TP16459OKBC5_KS0(23) TP16460OKBC5_KS0(24) TP16461OKBC5_KS0(25) TP16462OKBC5_KS0(26) TP16463OKBC5_KS0(27) TP16464OKBC5_KS0(28) TP16465OKBC5_KS0(29) TP16466OKBC5_KS0(30) TP16467OKBC5_KS0(31) TP16468OKBC5_KS0(32) TP16469OKBC5_KS0(33) TP16470OKBC5_KS0(34) TP16471OKBC5_KS0(35) TP16472OKBC5_KS0(36) TP16473OKBC5_KS0(37) TP16474OKBC5_KS0(38) TP16475OKBC5_KS0(39) TP16476OKBC5_KS0(40) TP16477OKBC5_KS0(41) TP16478OKBC5_KS0(42) TP16479OKBC5_KS0(43) TP16480OKBC5_KS0(44) TP16481OKBC5_KS0(45) TP16482OKBC5_KS0(46) TP16483OKBC5_KS0(47) TP16484OKBC5_KS0(48) TP16485OKBC5_KS0(49) TP16486OKBC5_KS0(50) TP16487OKBC5_KS0(51) TP16488OKBC5_KS0(52) TP16489OKBC5_KS0(53) TP16490OKBC5_KS0(54) TP16491OKBC5_KS0(55) TP16492OKBC5_KS0(56) TP16493OKBC5_KS0(57) TP16494OKBC5_KS0(58) TP16495OKBC5_KS0(59) TP16496OKBC5_KS0(60) TP16497OKBC5_KS0(61) TP16498OKBC5_KS0(62) TP16499OKBC5_KS0(63) TP16500OKBC5_KS0(64) TP16501OKBC5_KS0(65) TP16502OKBC5_KS0(66) TP16503OKBC5_KS0(67) TP16504OKBC5_KS0(68) TP16505OKBC5_KS0(69) TP16506OKBC5_KS0(70) TP16507OKBC5_KS0(71) TP16508OKBC5_KS0(72) TP16509OKBC5_KS0(73) TP16510OKBC5_KS0(74) TP16511OKBC5_KS0(75) TP16512OKBC5_KS0(76) TP16513OKBC5_KS0(77) TP16514OKBC5_KS0(78) TP16515OKBC5_KS0(79) TP16516OKBC5_KS0(80) TP16517OKBC5_KS0(81) TP16518OKBC5_KS0(82) TP16519OKBC5_KS0(83) TP16520OKBC5_KS0(84) TP16521OKBC5_KS0(85) TP16522OKBC5_KS0(86) TP16523OKBC5_KS0(87) TP16524OKBC5_KS0(88) TP16525OKBC5_KS0(89) TP16526OKBC5_KS0(90) TP16527OKBC5_KS0(91) TP16528OKBC5_KS0(92) TP16529OKBC5_KS0(93) TP16530OKBC5_KS0(94) TP16531OKBC5_KS0(95) TP16532OKBC5_KS0(96) TP16533OKBC5_KS0(97) TP16534OKBC5_KS0(98) TP16535OKBC5_KS0(99)
C					
B					
A					

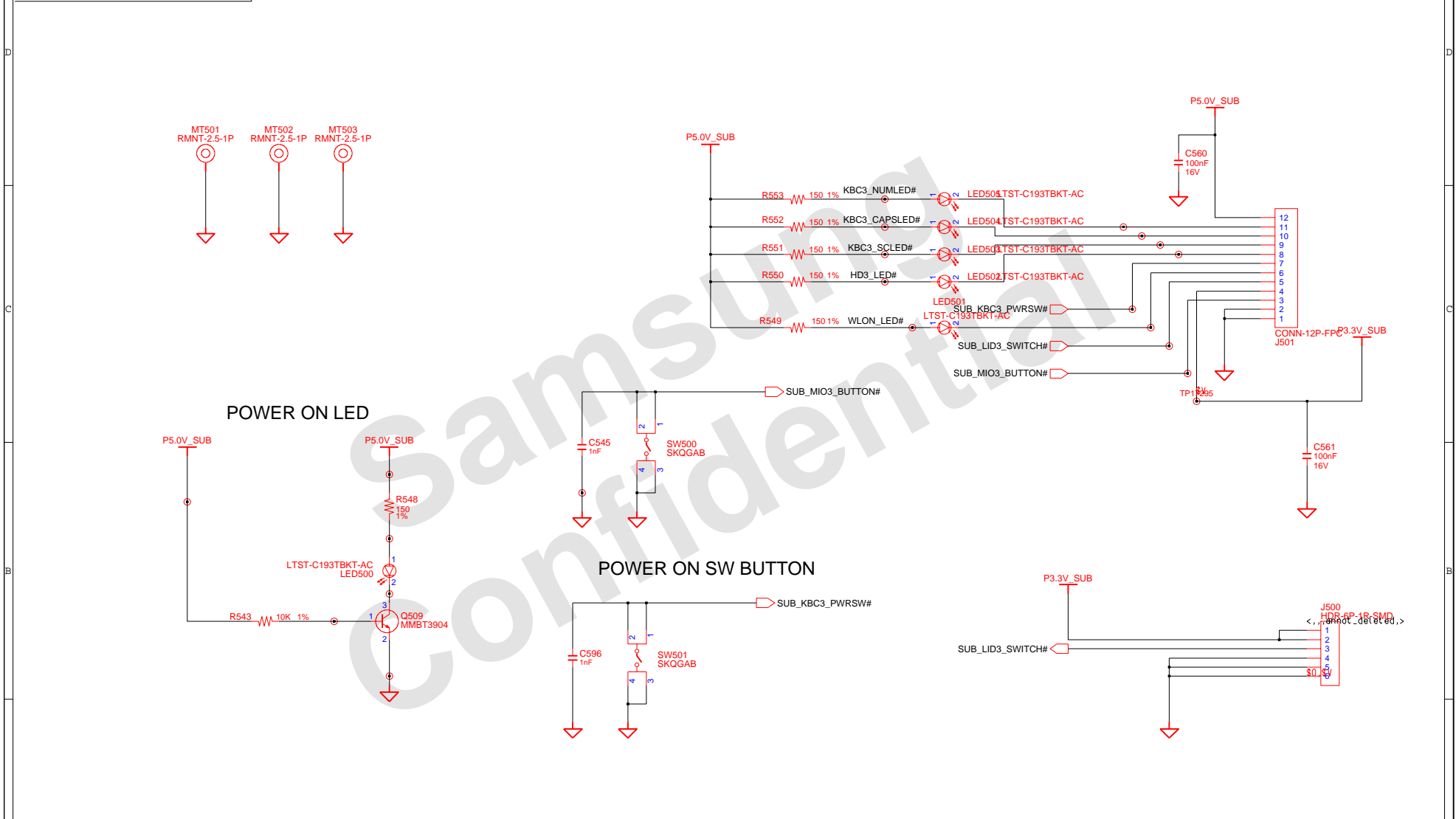
DRAW	SUNXIAO,	DATE	12/21/2006	TITLE	MILAN TP	SAMSUNG ELECTRONICS PART NO. BA41-00744A
CHECK	WUSHIJIANG,	DEV. STEP	SR 1.0			
APPROVAL	KEVIN LEE,	REV	1.0			
MODULE CODE		LAST EDIT	April 6, 2007 12:24:35 PM	PAGE	57 OF 60	

SAMSUNG PROPRIETARY

THIS DOCUMENT CONTAINS CONFIDENTIAL PROPRIETARY INFORMATION THAT IS SAMSUNG ELECTRONICS CO.'S PROPERTY. DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS EXCEPT AS AUTHORIZED BY SAMSUNG.

TP17033CMIC5219B_ADJ	TP16970OP3_3V_ALW_BST	TP16910OSP13_CLK_R_ICH	TP16854OP1_8V_AUX_RCOMP_R	TP16806OP0_9V	TP16698OVDC
TP17025CM1N3_CLKRE#	TP16971OP5_0V_AUX_BST	TP16911OTPS_SS_STBY1_2	TP16855OCBS3_MS_INS_XD_CD#	TP16807OP0_9V	TP16699OVDC
TP17026OP1_05V_PHASE	TP16972OP5_0V_USB_CON	TP16912OVCC_GLANPLL_RL	TP16856OCBS3_SD_WP_XD_R_B#	TP16808OP0_9V	TP16700OVDC
TP17027OP1_25V_M_BST			TP16857OCBS3_CPUSP#_R_ICH	TP16809OP0_9V	TP16701OVDC
TP17028OP3_3V_ALW_HG	TP16974OSC452_BST2_RC	TP16915OVDM3_CPU_PWRGD	TP16858OKBC3_PWRON_INV#_RQ	TP16810OP1_2V	TP16702OVCC_CRT
TP17029OP3_3V_ALW_LG	TP16975OSC452_DPRSTP#	TP16916CBAT1_CONN_TP_BB	TP16859OKBC3_RSMRST#_R_ICH	TP16811OP1_2V	TP16703OVCC_CRT
TP17030OPS_0V_AUX_M_CP	TP16976OTPS_PWRON_RQ	TP16917OCHP3_LAN100_SLP	TP16860OP1_8V_AUX_RCOMP#_R	TP16812OP1_2V	TP16704OVCC_CRT
TP17031OCPI3_CLKRUN#	TP16977OVCC_GLANPLL_L	TP16918OCHP3_USBRRTIAS_R	TP16861OPS_0V_ALW_SRE#_SUS	TP16813OP1_2V	TP16705OVCC_CRT
TP17032OCPI3_DEVSEL#	TP16978OVCC_GLANPLL_R	TP16919OCHP3_USBRRTIAS_R	TP16862OCHP3_DPRSLPWR_ICH	TP16814OP1_5V	TP16706OVDC_INV
TP17020OSC452_DPRSLP	TP16979OCHP3_SANATA1_SATRTIAS_R	TP16920OCHP3_USBRRTIAS_R	TP16863OCH3_CRT_TVO_JREF#_R	TP16815OP1_5V	TP16707OVDC_INV
TP17021OSC452_ERRROUT	TP16974AUAUD5_HP_0_L_CR	TP16921OCHP3_SANATA1_SATRTIAS_R	TP16864OP1_5V_GLAN_COMP10_R	TP16816OP1_5V	TP16708OVDC_INV
TP17022OSMB3_ME_DATA	TP16975AUAUD5_HP_0_L_RB	TP16922OCHP3_SANATA1_SATRTIAS_R	TP16865OP1_8V_AUX_VCC_SH_CK	TP16817OP1_5V	TP16709OVDC_INV
TP17023OTPS_SS_STBY3	TP16976AUAUD5_HP_0_R_RB	TP16923OCHP3_SANATA1_SATRTIAS_R	TP16866CMAX8734_THM3_STP#_QD	TP16818OP1_8V	TP16710OVDD_AMP
TP17024OVCC_DMTPILL_L	TP16977OCHP3_SANATA1_SATRTIAS_R	TP16924OCHP3_SANATA1_SATRTIAS_R	TP16867OCHP3_SANATA1_SATRTIAS_R	TP16819OP1_8V	TP16711OVDD_AMP
TP16994OVGA3_HDMICLK	TP16978OCHP3_SANATA1_SATRTIAS_R	TP16925OCHP3_SANATA1_SATRTIAS_R	TP16868OCBS3_MD_DATA0_MS_SDIO	TP16820OP1_8V	TP16712OVDD_AMP
TP16995OAUD5_OP101R_U	TP16979OCHP3_SANATA1_SATRTIAS_R	TP16926OCHP3_SANATA1_SATRTIAS_R	TP16869OKBC3_PWRON_INV#_P1_8V	TP16821OP1_8V	TP16713OVDD_AMP
TP16996OAUD5_LINE_0_L	TP16980OCHP3_SANATA1_SATRTIAS_R	TP16927OCHP3_SANATA1_SATRTIAS_R	TP16870OP1_8V_AUX_RCOMP_VOH#	TP16822OP1_8V	TP16714OVDD_AUD
TP16997OAUD5_LINE_0_R	TP16981OCHP3_SANATA1_SATRTIAS_R	TP16928OCHP3_SANATA1_SATRTIAS_R	TP16871OP1_8V_AUX_RCOMP_VOL#	TP16823OP2_5V	TP16715OVDD_AUD
TP16998OAUD5_SENS_HP#	TP16982OCHP3_SANATA1_SATRTIAS_R	TP16929OCHP3_SANATA1_SATRTIAS_R	TP16872OTPS_KBC3_ME_PWRON_RQ	TP16824OP2_5V	TP16716OVDD_AUD
TP16999OBUF5_PLT_RST#	TP16983OCHP3_SANATA1_SATRTIAS_R	TP16930OCHP3_SANATA1_SATRTIAS_R	TP16873OP2_5V	TP16825OP2_5V	TP16717OVDD_AUD
TP17000OCBS3_CCLKRUN#	TP16984OCHP3_SANATA1_SATRTIAS_R	TP16931OCHP3_SANATA1_SATRTIAS_R	TP16874OV7VDD0A	TP16826OP3_3V	TP16718OVDD_ADPT
TP17001OCBS3_CDEYSEL#	TP16985OCHP3_SANATA1_SATRTIAS_R	TP16932OCHP3_SANATA1_SATRTIAS_R	TP16875OV7VDD0A	TP16827OP3_3V	TP16719OVDD_ADPT
TP17002OCBS3_MD_DATA1	TP16986OCHP3_SANATA1_SATRTIAS_R	TP16933OCHP3_SANATA1_SATRTIAS_R	TP16876OV7VDD0A	TP16828OP3_3V	TP16720OVDC_ADPT
TP17003OCBS3_MD_DATA2	TP16987OCHP3_SANATA1_SATRTIAS_R	TP16934OCHP3_SANATA1_SATRTIAS_R	TP16877OV7VDD0A	TP16829OP3_3V	TP16721OVDC_ADPT
TP17004OCBS3_MD_DATA3	TP16988OCHP3_SANATA1_SATRTIAS_R	TP16935OCHP3_SANATA1_SATRTIAS_R	TP16878OCB_VCCA	TP16830OP5_0V	TP16722OVCCP_CORE
TP17005OCBS3_MD_VCCEN	TP16989OCHP3_SANATA1_SATRTIAS_R	TP16936OCHP3_SANATA1_SATRTIAS_R	TP16879OCB_VCCA	TP16831OP5_0V	TP16723OVCCP_CORE
TP17006OCHP3_CL_CLK_0	TP16990OCHP3_SANATA1_SATRTIAS_R	TP16937OCHP3_SANATA1_SATRTIAS_R	TP16880OCB_VCCA	TP16832OP5_0V	TP16724OVCCP_CORE
TP17007OCHP3_CL_PWRON	TP16991OCHP3_SANATA1_SATRTIAS_R	TP16938OCHP3_SANATA1_SATRTIAS_R	TP16881OCB_VCCA	TP16833OP1_25V	TP16725OVCCP_CORE
TP17008OCHP3_DPRSLPVR	TP16992OCHP3_SANATA1_SATRTIAS_R	TP16939OCHP3_SANATA1_SATRTIAS_R	TP16882OCB_VPPA	TP16834OP1_25V	
TP17009OCHP3_INTVREN	TP16993OCHP3_SANATA1_SATRTIAS_R	TP16940OCHP3_SANATA1_SATRTIAS_R	TP16883OCB_VPPA	TP16835OP1_25V	
TP17010OCHP3_SATALED#	TP16994OCHP3_SANATA1_SATRTIAS_R	TP16941OCHP3_SANATA1_SATRTIAS_R	TP16884OCB_VPPA	TP16836OP1_25V	
TP17011OCHP3_SUSSTAT#	TP16995OCHP3_SANATA1_SATRTIAS_R	TP16942OCHP3_SANATA1_SATRTIAS_R	TP16885OCB_VPPA	TP16837OP1_25V	
	TP16996OCHP3_SANATA1_SATRTIAS_R	TP16943OCHP3_SANATA1_SATRTIAS_R	TP16886OCB_VPPA	TP16838OP1_25V	
	TP16997OCHP3_SANATA1_SATRTIAS_R	TP16944OCHP3_SANATA1_SATRTIAS_R	TP16887OCB_VPPA	TP16839OP1_25V	
TP17016OCPU1_PWRGD CPU	TP16998OCHP3_SANATA1_SATRTIAS_R	TP16945OCHP3_SANATA1_SATRTIAS_R	TP16888OCB_VPPA	TP16840OP1_25V	
TP17017OCPU1_VCCSENSE	TP16999OCHP3_SANATA1_SATRTIAS_R	TP16946OCHP3_SANATA1_SATRTIAS_R	TP16889OCB_VPPA	TP16841OP1_25V	
TP17018OCPU1_VSSSENSE	TP17000OCHP3_SANATA1_SATRTIAS_R	TP16947OCHP3_SANATA1_SATRTIAS_R	TP16890OCB_VPPA	TP16842OP1_25V	
TP17019OCF33_LCVDVDDN	TP17001OCHP3_SANATA1_SATRTIAS_R	TP16948OCHP3_SANATA1_SATRTIAS_R	TP16891OCB_VPPA	TP16843OP1_25V	
TP16978OTPS_DBRESET#	TP17002OCHP3_SANATA1_SATRTIAS_R	TP16949OCHP3_SANATA1_SATRTIAS_R	TP16892OCB_VPPA	TP16844OP1_25V	
TP16979OKBC3_CAPSLED#	TP17003OCHP3_SANATA1_SATRTIAS_R	TP16950OCHP3_SANATA1_SATRTIAS_R	TP16893OCB_VPPA	TP16845OP1_25V	
TP16980OKBC3_RSMRSTF#	TP17004OCHP3_SANATA1_SATRTIAS_R	TP16951OCHP3_SANATA1_SATRTIAS_R	TP16894OCB_VPPA	TP16846OP1_25V	
TP16981OKBC3_WAKESC#	TP17005OCHP3_SANATA1_SATRTIAS_R	TP16952OCHP3_SANATA1_SATRTIAS_R	TP16895OCB_VPPA	TP16847OP1_25V	
TP16982OLAN3_ACT_LED#	TP17006OCHP3_SANATA1_SATRTIAS_R	TP16953OCHP3_SANATA1_SATRTIAS_R	TP16896OCB_VPPA	TP16848OP1_25V	
TP16983OLAN3_SPD_LED#	TP17007OCHP3_SANATA1_SATRTIAS_R	TP16954OCHP3_SANATA1_SATRTIAS_R	TP16897OCB_VPPA	TP16849OP1_25V	
TP16984OLED3_POWERLED	TP17008OCHP3_SANATA1_SATRTIAS_R	TP16955OCHP3_SANATA1_SATRTIAS_R	TP16898OCB_VPPA	TP16850OP1_25V	
TP16985CMCH1_HRCOMP_R	TP17009OCHP3_SANATA1_SATRTIAS_R	TP16956OCHP3_SANATA1_SATRTIAS_R	TP16899OCB_VPPA	TP16851OP1_25V	
TP16986CMCH1_HSCOMP_R	TP17010OCHP3_SANATA1_SATRTIAS_R	TP16957OCHP3_SANATA1_SATRTIAS_R	TP16900OCB_VPPA	TP16852OP1_25V	
TP16987CMCH1_VTTFL1_C	TP17011OCHP3_SANATA1_SATRTIAS_R	TP16958OCHP3_SANATA1_SATRTIAS_R	TP16901OP1_25V_M_VCC_AXD	TP16853OP1_25V	
TP16988CMCH1_VTTFL2_C		TP16959OCHP3_SANATA1_SATRTIAS_R	TP16902OP1_25V_M_VCC_AXD	TP16854OP1_25V	
TP16989CMCH3_ICHSYNC#		TP16960OCHP3_SANATA1_SATRTIAS_R	TP16903OP1_25V_M_VCC_AXD	TP16855OP1_25V	
TP16990OP1_5V_INV2_RC		TP16961OCHP3_SANATA1_SATRTIAS_R	TP16904OP1_25V_M_VCC_AXD	TP16856OP1_25V	
		TP16962OCHP3_SANATA1_SATRTIAS_R	TP16905OP1_25V_M_VCC_AXD	TP16857OP1_25V	
		TP16963OCHP3_SANATA1_SATRTIAS_R	TP16906OP1_25V_M_VCC_AXD	TP16858OP1_25V	
		TP16964OCHP3_SANATA1_SATRTIAS_R	TP16907OP1_25V_M_VCC_AXD	TP16859OP1_25V	
		TP16965OCHP3_SANATA1_SATRTIAS_R	TP16908OP1_25V_M_VCC_AXD	TP16860OP1_25V	
		TP16966OCHP3_SANATA1_SATRTIAS_R	TP16909OP1_25V_M_VCC_AXD	TP16861OP1_25V	
		TP16967OCHP3_SANATA1_SATRTIAS_R	TP16910OP1_25V_M_VCC_AXD	TP16862OP1_25V	
		TP16968OCHP3_SANATA1_SATRTIAS_R	TP16911OP1_25V_M_VCC_AXD	TP16863OP1_25V	
		TP16969OCHP3_SANATA1_SATRTIAS_R	TP16912OP1_25V_M_VCC_AXD	TP16864OP1_25V	
		TP16970OCHP3_SANATA1_SATRTIAS_R	TP16913OP1_25V_M_VCC_AXD	TP16865OP1_25V	
		TP16971OCHP3_SANATA1_SATRTIAS_R	TP16914OP1_25V_M_VCC_AXD	TP16866OP1_25V	
		TP16972OCHP3_SANATA1_SATRTIAS_R	TP16915OP1_25V_M_VCC_AXD	TP16867OP1_25V	
		TP16973OCHP3_SANATA1_SATRTIAS_R	TP16916OP1_25V_M_VCC_AXD	TP16868OP1_25V	
		TP16974OCHP3_SANATA1_SATRTIAS_R	TP16917OP1_25V_M_VCC_AXD	TP16869OP1_25V	
		TP16975OCHP3_SANATA1_SATRTIAS_R	TP16918OP1_25V_M_VCC_AXD	TP16870OP1_25V	
		TP16976OCHP3_SANATA1_SATRTIAS_R	TP16919OP1_25V_M_VCC_AXD	TP16871OP1_25V	
		TP16977OCHP3_SANATA1_SATRTIAS_R	TP16920OP1_25V_M_VCC_AXD	TP16872OP1_25V	
		TP16978OCHP3_SANATA1_SATRTIAS_R	TP16921OP1_25V_M_VCC_AXD	TP16873OP1_25V	
		TP16979OCHP3_SANATA1_SATRTIAS_R	TP16922OP1_25V_M_VCC_AXD	TP16874OP1_25V	
		TP16980OCHP3_SANATA1_SATRTIAS_R	TP16923OP1_25V_M_VCC_AXD	TP16875OP1_25V	
		TP16981OCHP3_SANATA1_SATRTIAS_R	TP16924OP1_25V_M_VCC_AXD	TP16876OP1_25V	
		TP16982OCHP3_SANATA1_SATRTIAS_R	TP16925OP1_25V_M_VCC_AXD	TP16877OP1_25V	
		TP16983OCHP3_SANATA1_SATRTIAS_R	TP16926OP1_25V_M_VCC_AXD	TP16878OP1_25V	
		TP16984OCHP3_SANATA1_SATRTIAS_R	TP16927OP1_25V_M_VCC_AXD	TP16879OP1_25V	
		TP16985OCHP3_SANATA1_SATRTIAS_R	TP16928OP1_25V_M_VCC_AXD	TP16880OP1_25V	
		TP16986OCHP3_SANATA1_SATRTIAS_R	TP16929OP1_25V_M_VCC_AXD	TP16881OP1_25V	
		TP16987OCHP3_SANATA1_SATRTIAS_R	TP16930OP1_25V_M_VCC_AXD	TP16882OP1_25V	
		TP16988OCHP3_SANATA1_SATRTIAS_R	TP16931OP1_25V_M_VCC_AXD	TP16883OP1_25V	
		TP16989OCHP3_SANATA1_SATRTIAS_R	TP16932OP1_25V_M_VCC_AXD	TP16884OP1_25V	
		TP16990OCHP3_SANATA1_SATRTIAS_R	TP16933OP1_25V_M_VCC_AXD	TP16885OP1_25V	
		TP16991OCHP3_SANATA1_SATRTIAS_R	TP16934OP1_25V_M_VCC_AXD	TP16886OP1_25V	
		TP16992OCHP3_SANATA1_SATRTIAS_R	TP16935OP1_25V_M_VCC_AXD	TP16887OP1_25V	
		TP16993OCHP3_SANATA1_SATRTIAS_R	TP16936OP1_25V_M_VCC_AXD	TP16888OP1_25V	
		TP16994OCHP3_SANATA1_SATRTIAS_R	TP16937OP1_25V_M_VCC_AXD	TP16889OP1_25V	
		TP16995OCHP3_SANATA1_SATRTIAS_R	TP16938OP1_25V_M_VCC_AXD	TP16890OP1_25V	
		TP16996OCHP3_SANATA1_SATRTIAS_R	TP16939OP1_25V_M_VCC_AXD	TP16891OP1_25V	
		TP16997OCHP3_SANATA1_SATRTIAS_R	TP16940OP1_25V_M_VCC_AXD	TP16892OP1_25V	
		TP16998OCHP3_SANATA1_SATRTIAS_R	TP16941OP1_25V_M_VCC_AXD	TP16893OP1_25V	
		TP16999OCHP3_SANATA1_SATRTIAS_R	TP16942OP1_25V_M_VCC_AXD	TP16894OP1_25V	
		TP17000OCHP3_SANATA1_SATRTIAS_R	TP16943OP1_25V_M_VCC_AXD	TP16895OP1_25V	
		TP17001OCHP3_SANATA1_SATRTIAS_R	TP16944OP1_25V_M_VCC_AXD	TP16896OP1_25V	
		TP17002OCHP3_SANATA1_SATRTIAS_R	TP16945OP1_25V_M_VCC_AXD	TP16897OP1_25V	
		TP17003OCHP3_SANATA1_SATRTIAS_R	TP16946OP1_25V_M_VCC_AXD	TP16898OP1_25V	
		TP17004OCHP3_SANATA1_SATRTIAS_R	TP16947OP1_25V_M_VCC_AXD	TP16899OP1_25V	
		TP17005OCHP3_SANATA1_SATRTIAS_R	TP16948OP1_25V_M_VCC_AXD	TP16900OP1_25V	
		TP17006OCHP3_SANATA1_SATRTIAS_R	TP16949OP1_25V_M_VCC_AXD	TP16901OP1_25V	
		TP17007OCHP3_SANATA1_SATRTIAS_R	TP16950OP1_25V_M_VCC_AXD	TP16902OP1_25V	
		TP17008OCHP3_SANATA1_SATRTIAS_R	TP16951OP1_25V_M_VCC_AXD	TP16903OP1_25V	
		TP17009OCHP3_SANATA1_SATRTIAS_R	TP16952OP1_25V_M_VCC_AXD	TP16904OP1_25V	
		TP17010OCHP3_SANATA1_SATRTIAS_R	TP16953OP1_25V_M_VCC_AXD	TP16905OP1_25V	
		TP17011OCHP3_SANATA1_SATRTIAS_R	TP16954OP1_25V_M_VCC_AXD	TP16906OP1_25V	
			TP16955OP1_25V_M_VCC_AXD	TP16907OP1_25V	
			TP16956OP1_25V_M_VCC_AXD	TP16908OP1_25V	
			TP16957OP1_25V_M_VCC_AXD	TP16909OP1_25V	
			TP16958OP1_25V_M_VCC_AXD	TP16910OP1_25V	
			TP16959OP1_25V_M_VCC_AXD	TP16911OP1_25V	
			TP16960OP1_25V_M_VCC_AXD	TP16912OP1_25V	
			TP16961OP1_25V_M_VCC_AXD	TP16913OP1_25V	
			TP16962OP1_25V_M_VCC_AXD	TP16914OP1_25V	
			TP16963OP1_25V_M_VCC_AXD	TP16915OP1_25V	
			TP16964OP1_25V_M_VCC_AXD	TP16916OP1_25V	
			TP16965OP1_25V_M_VCC_AXD	TP16917OP1_25V	
			TP16966OP1_25V_M_VCC_AXD	TP16918OP1_25V	
			TP16967OP1_25V_M_VCC_AXD	TP16919OP1_25V	
			TP16968OP1_25V_M_VCC_AXD	TP16920OP1_25V	
			TP16969OP1_25V_M_VCC_AXD	TP16921OP1_25V	
			TP16970OP1_25V_M_VCC_AXD	TP16922OP1_25V	
			TP16971OP1_25V_M_VCC_AXD	TP16923OP1_25V	
			TP16972OP1_25V_M_VCC_AXD	TP16924OP1_25V	
			TP16973OP1_25V_M_VCC_AXD	TP16925OP1_25V	
			TP16974OP1_25V_M_VCC_AXD	TP16926OP1_25V	
			TP16975OP1_25V_M_VCC_AXD	TP16927OP1_25V	
			TP16976OP1_25V_M_VCC_AXD	TP16928OP1_25V	
			TP16977OP1_25V_M_VCC_AXD	TP16929OP1_25V	
			TP16978OP1_25V_M_VCC_AXD	TP16930OP1_25V	
			TP16979OP1_25V_M_VCC_AXD	TP16931OP1_25V	
			TP16980OP1_25V_M_VCC_AXD	TP16932OP1_25V	
			TP16981OP1_25V_M_VCC_AXD	TP16933OP1_25V	

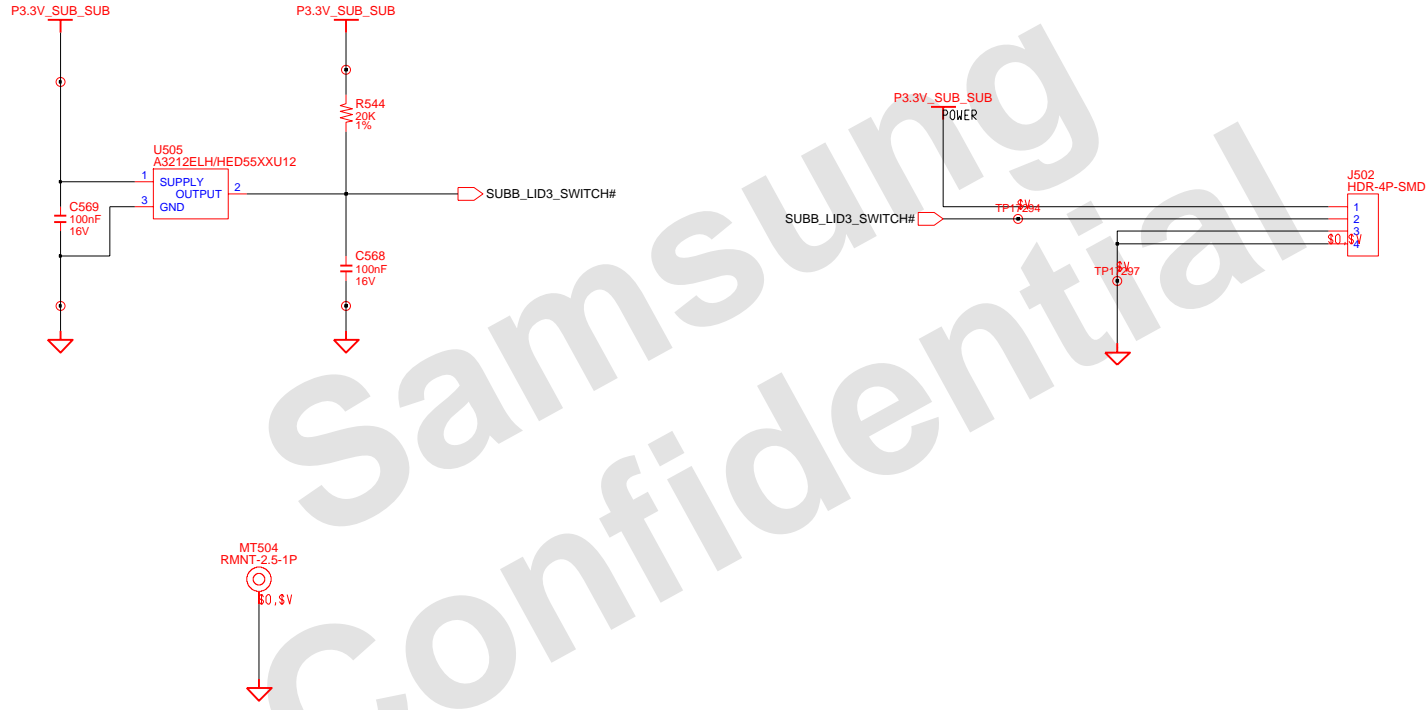
SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO.'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.



DRAW	SUNXIAO,	DATE	2/13/2007	TITLE	MILAN MIO BOARD	SAMSUNG ELECTRONICS
CHECK	WUSHIJIANG,	DEV. STEP	SR 1.0			
APPROVAL	KEVIN_LEE,	REV	1.0			PART NO. BA41-00744A
MODULE CODE		LAST EDIT	April 6, 2007 12:24:35 PM			PAGE 59 OF 60

SAMSUNG PROPRIETARY
 THIS DOCUMENT CONTAINS CONFIDENTIAL
 PROPRIETARY INFORMATION THAT IS
 SAMSUNG ELECTRONICS CO.'S PROPERTY.
 DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS
 EXCEPT AS AUTHORIZED BY SAMSUNG.

LID_SWITCH



Samsung
Confidential

DRAW	SUNXIAO,	DATE	3/19/2007	TITLE	MILAN	SAMSUNG ELECTRONICS
CHECK	WUSHIJIANG,	DEV. STEP	SR 1.0	MIO BOARD		
APPROVAL	KEVIN_LEE,	REV	1.0	LID SWITCH	PART NO.	BA41-00744A
MODULE CODE		LAST EDIT	April 6, 2007 12:24:35 PM	PAGE	60	OF 60