

GENEVA

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

Model Name : GENEVA
PBA Name : MAIN
PCB Code : BA41-XXXXX
Dev. Step : PV2
Revision : 1.0
T.R. Date :

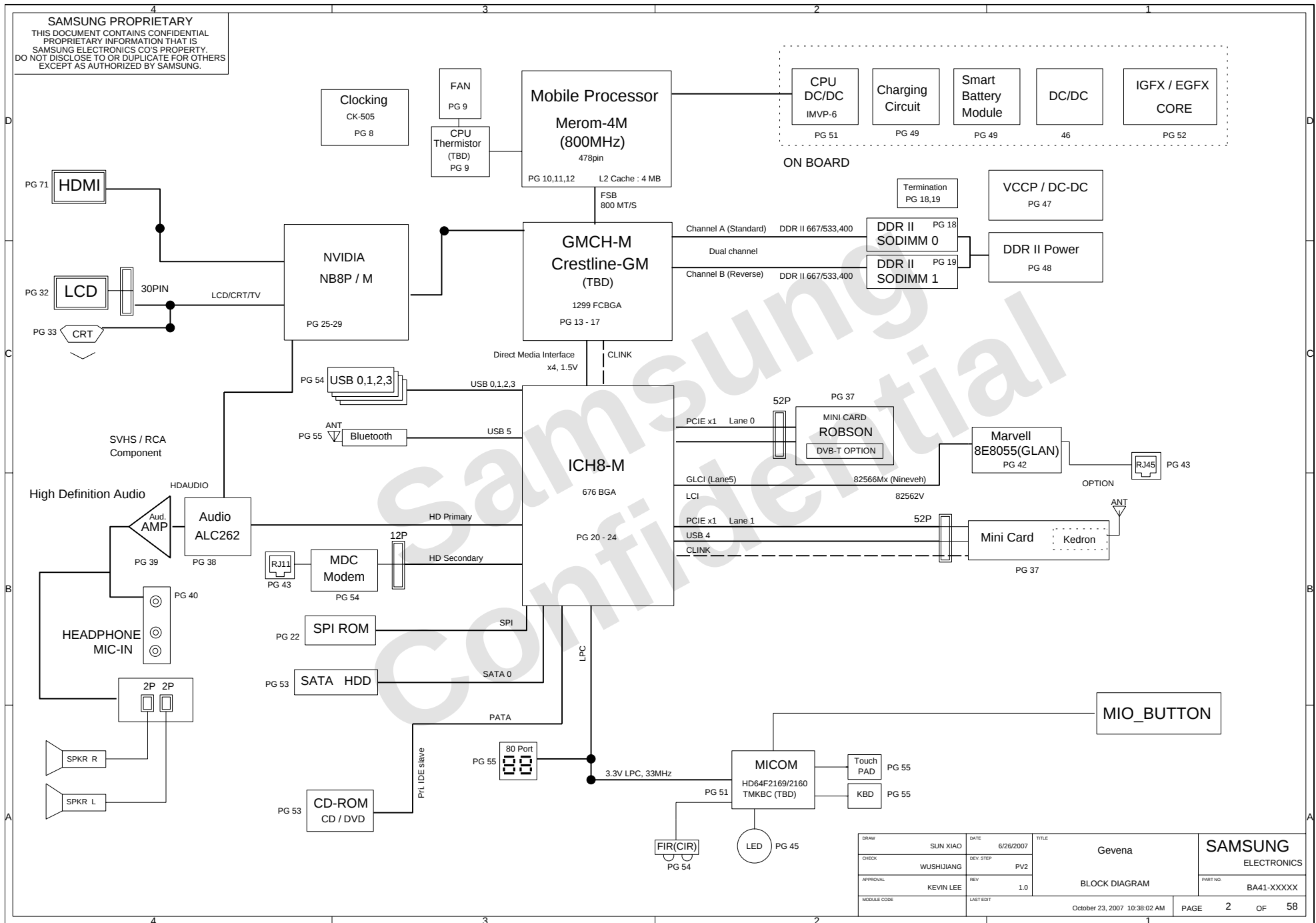
DRAW	CHECK	APPROVAL

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CHECK	WUSHIJIANG	DEV. STEP	PV2	MILAN	ELECTRONICS	
APPROVAL	KEVIN LEE	REV	1.0	COVER		PART NO.
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CHECK	WUSHIJIANG	DEV. STEP	PV2			ELECTRONICS
APPROVAL	KEVIN LEE	REV	1.0	BLOCK DIAGRAM	PART NO.	BA41-XXXXX
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BOARD INFORMATION

SCHEMATIC ANNOTATIONS AND BOARD INFORMATION

PCI Devices

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 (EHC1) : H
Hub to PCI	AD30(internal)	-	-
LPC bridge/IDE/AC97/SMBUS	AD31(internal)	-	B
Internal MAC	AD24(internal)	-	E
AC Link	-	-	B
GLAN	-	-	F

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
PSV	5.0V switched off power rail (off in S3-S5)
PSV_AUX	5.0V switched on power rail

USB PORT Assign

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

PCI Express Assign

PORT #	ASSIGNED TO
0	PCIE x1 Slot
1	Mini Card (Golan)
2	Mini Card (WIBRO : RSVD)
3	Expresas Card
4	DOCKING PORT 0
5	GLAN

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 Pannel Detect (TBD)

Devices	Resolution	PANNEL_DETECT_0

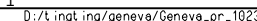
I²C / SMB Address

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	82566
PCI Express Docking	TBD	TBD	TBD
TPM	TBD	TBD	TBD

REVISION HISTORY

See rev notes for more information.

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CHECK	WUSHIJIANG	DEV. STEP	PV2			ELECTRONICS
APPROVAL	KEVIN LEE	REV	1.0	BOARD INFO		PART NO. BA41-XXXXX
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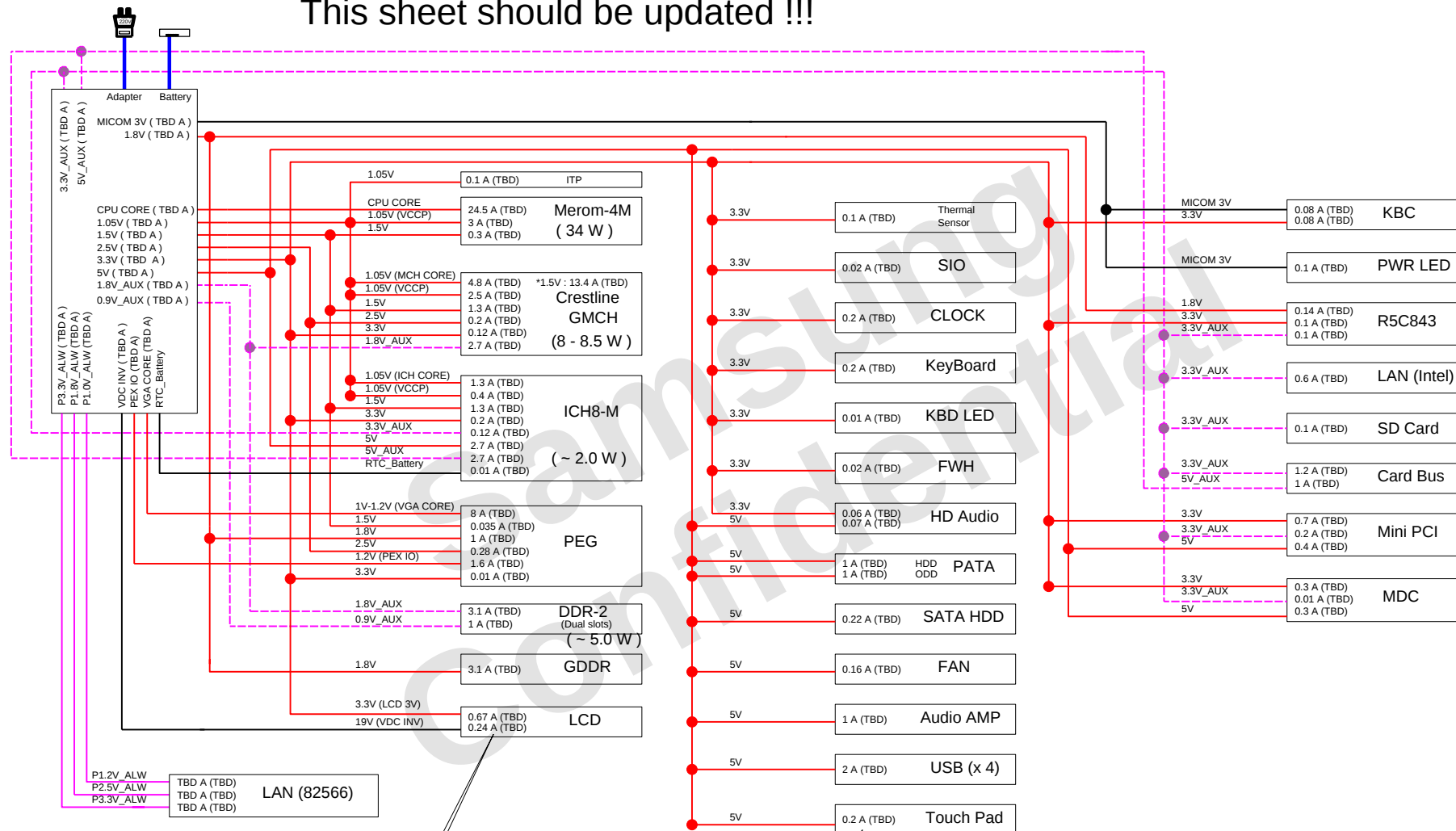


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POWER RAILS ANALYSIS

Rev. 0.5

This sheet should be updated !!!



Value by Datasheet/Application notes (Value by measurement)

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CHECK	WUSHIJIANG	DEV. STEP	PV2			PART NO. BA41-XXXXX
APPROVAL	KEVIN LEE	REV	1.0	POWER RAILS		
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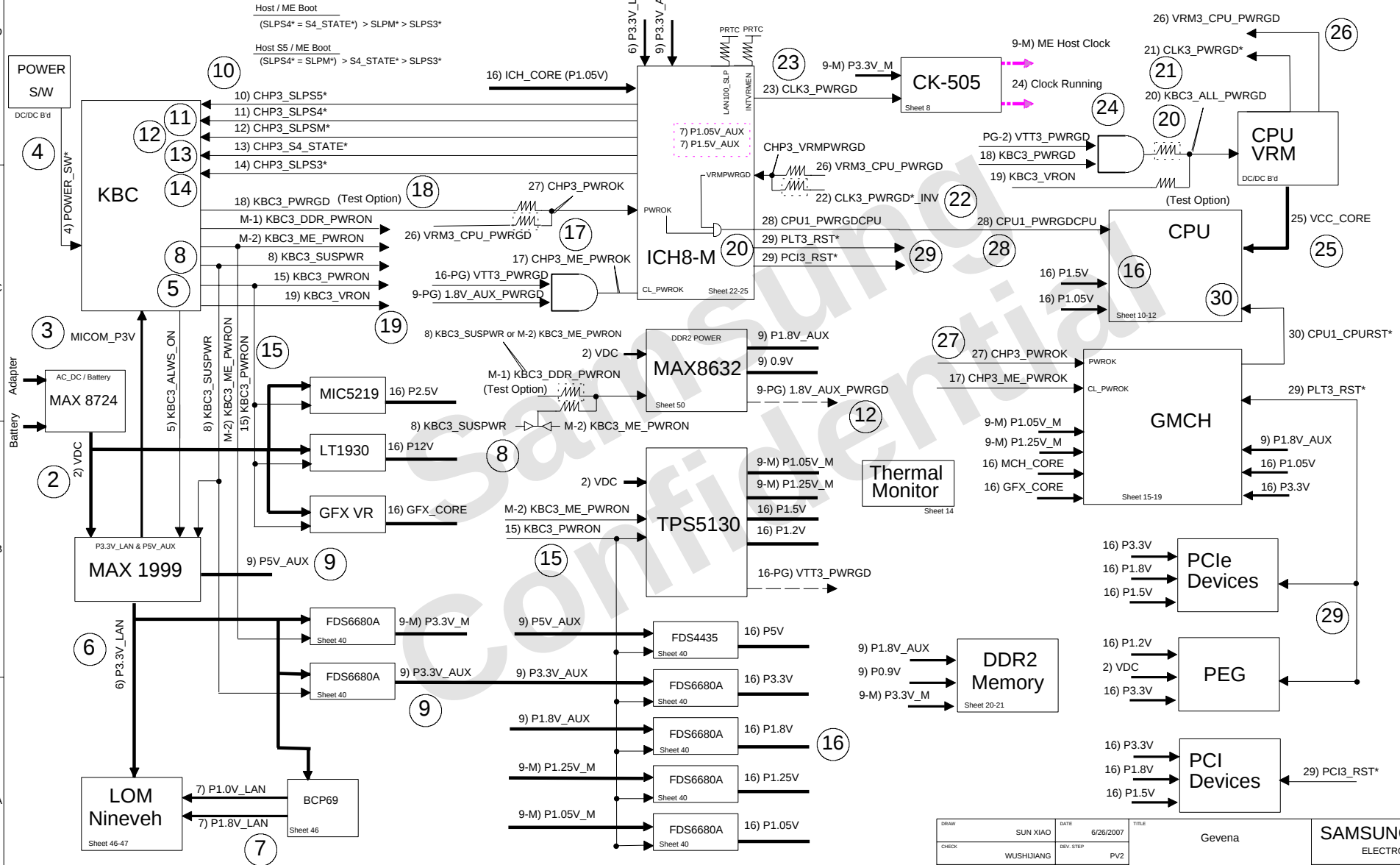
TO BE UPDATED!!

RTC
Battery

1) VCC_RTC
CHP3_RTCRST

POWER SEQUENCE

Rev. 0.5

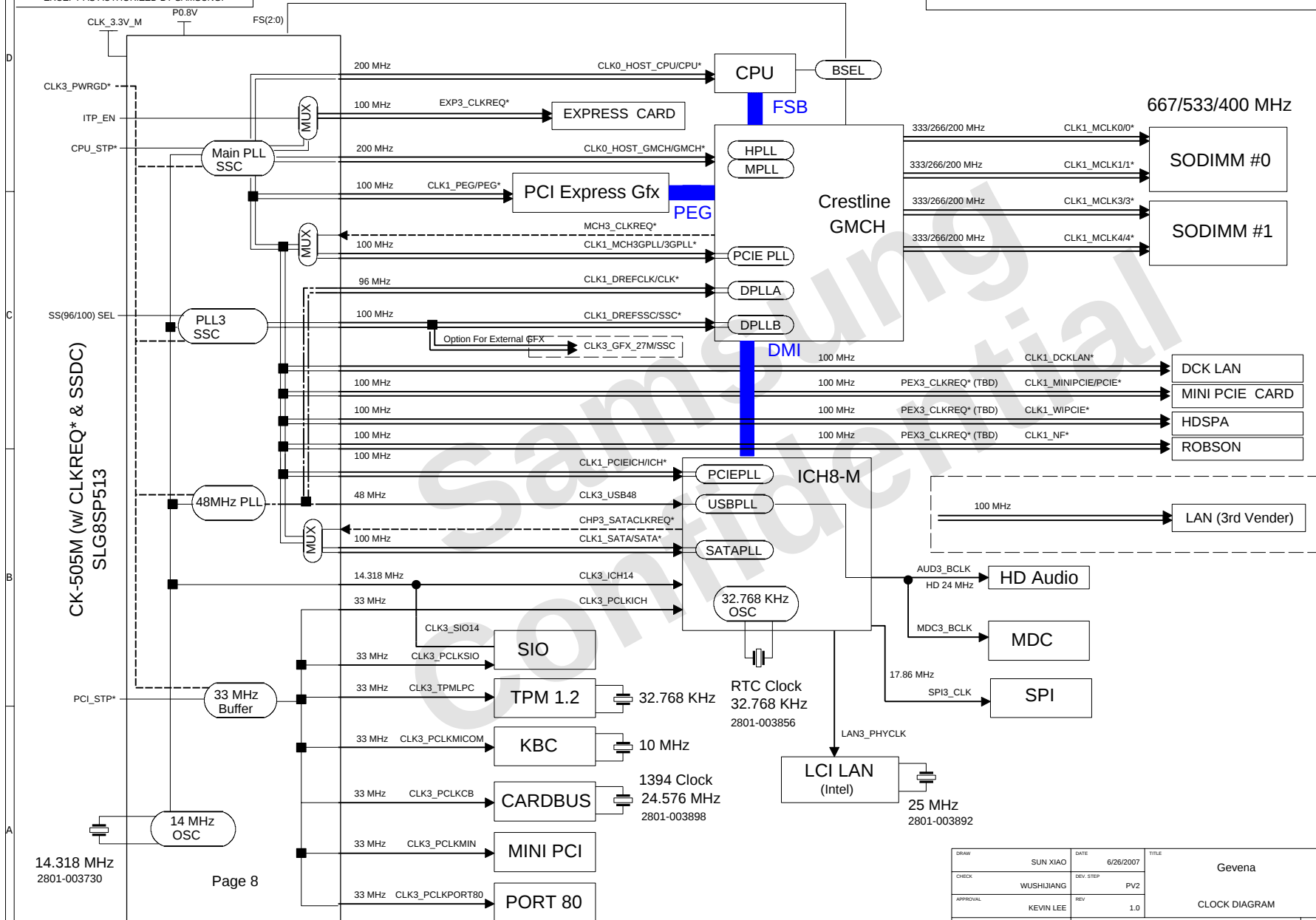


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CHECK	WUSHIJIANG	DEV. STEP	PV2			ELECTRONICS
APPROVAL	KEVIN LEE	REV	1.0	POWER SEQUENCE	PART NO.	BA41-XXXXX
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CLOCK DISTRIBUTION

Rev. 0.8

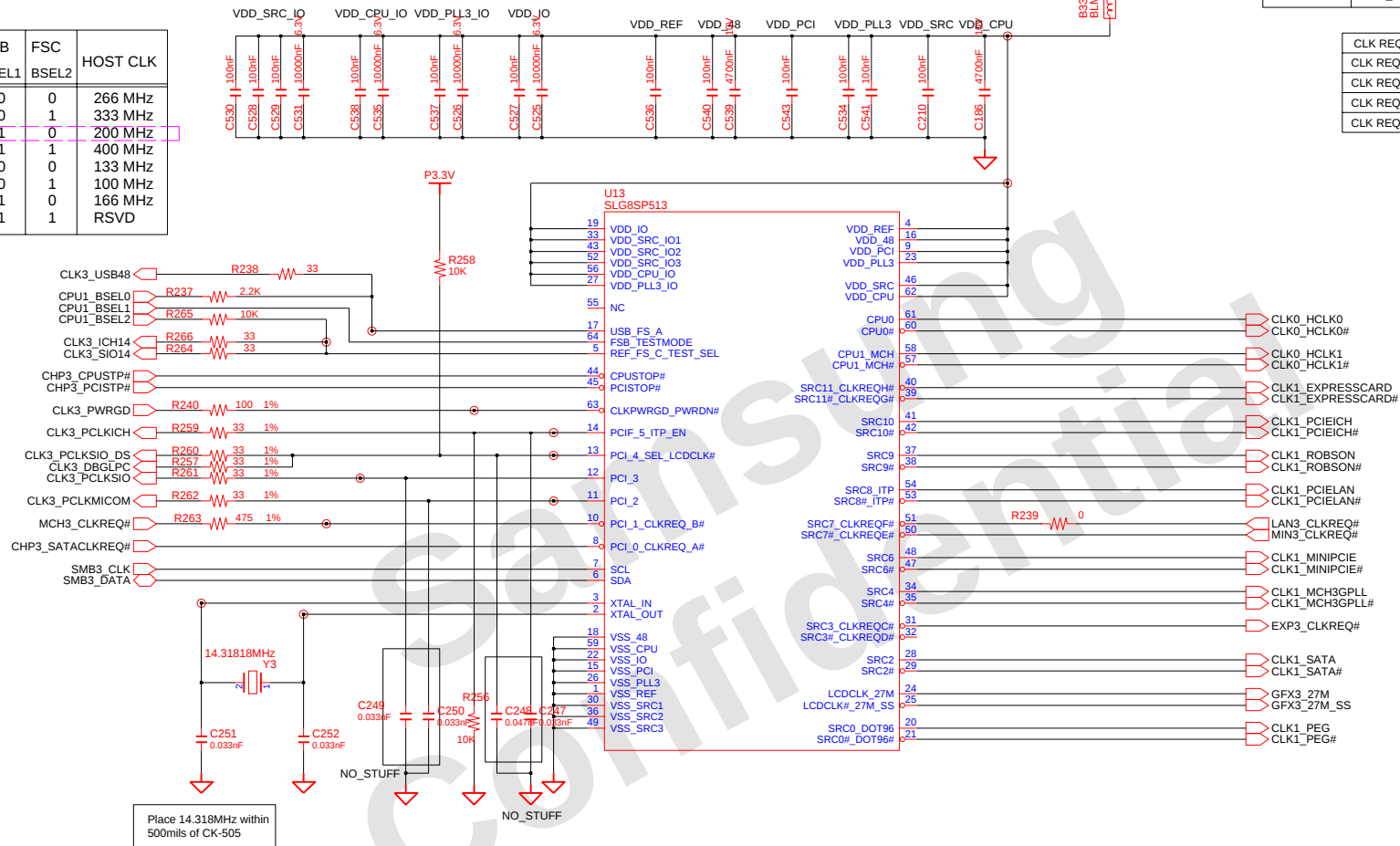


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CHECK	WUSHIJIANG	DEV. STEP	PV2			ELECTRONICS
APPROVAL	KEVIN LEE	REV	1.0	CLOCK DIAGRAM		PART NO. BA41-XXXXX
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FSA	FSB	FSC	HOST CLK
BSEL0	BSEL1	BSEL2	
0	0	0	266 MHz
0	0	1	333 MHz
0	1	0	200 MHz
0	1	1	400 MHz
1	0	0	133 MHz
1	0	1	100 MHz
1	1	0	166 MHz
1	1	1	RSVD

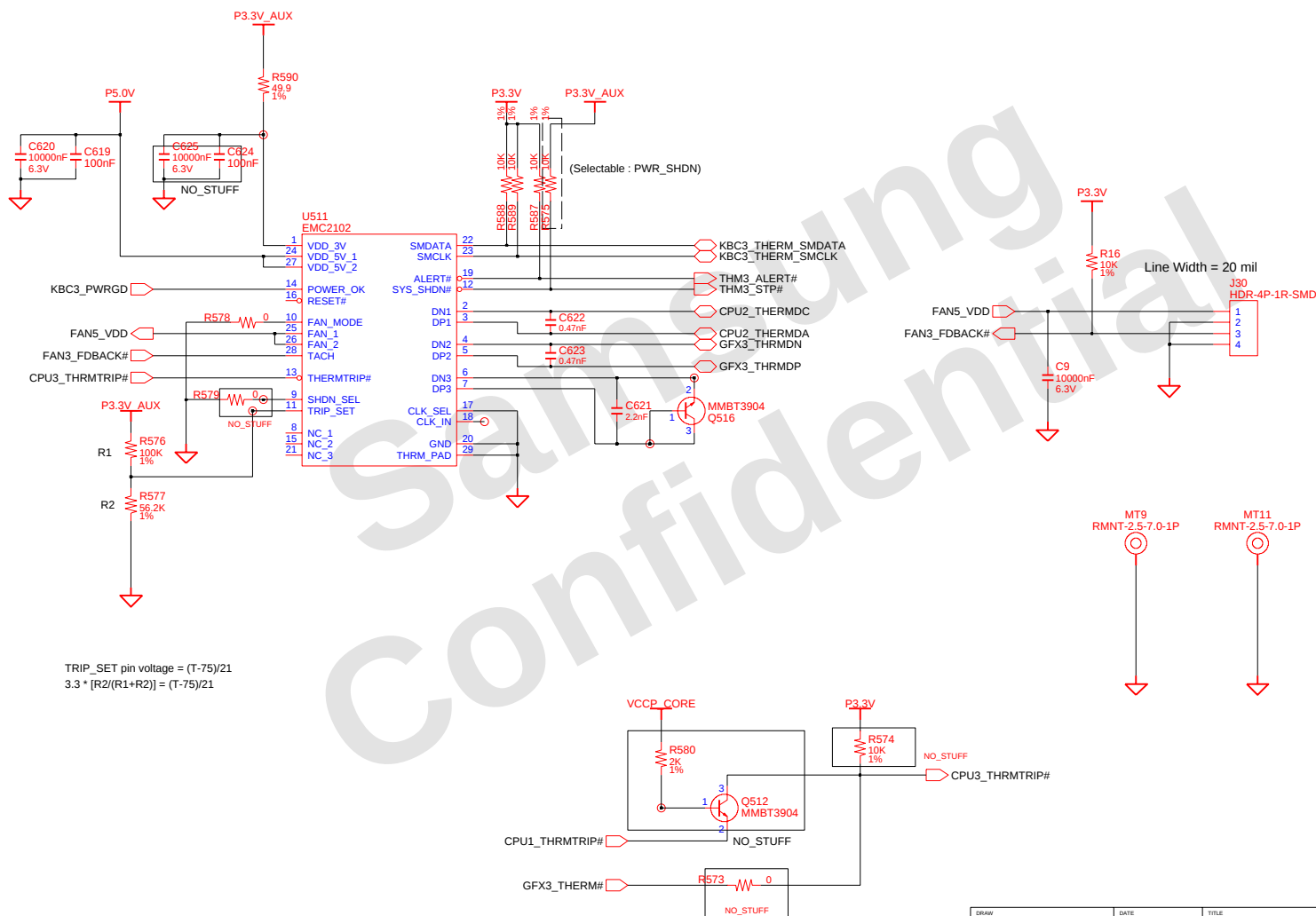


SEL_LCDCLK*	Pin 20/21	Pin 24/25
LOW	DOT_96/DOT_96#	LCDCLK/LCDCLK#
HIGH	SRC_0/SRC_0#	27M & 27M_SS

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

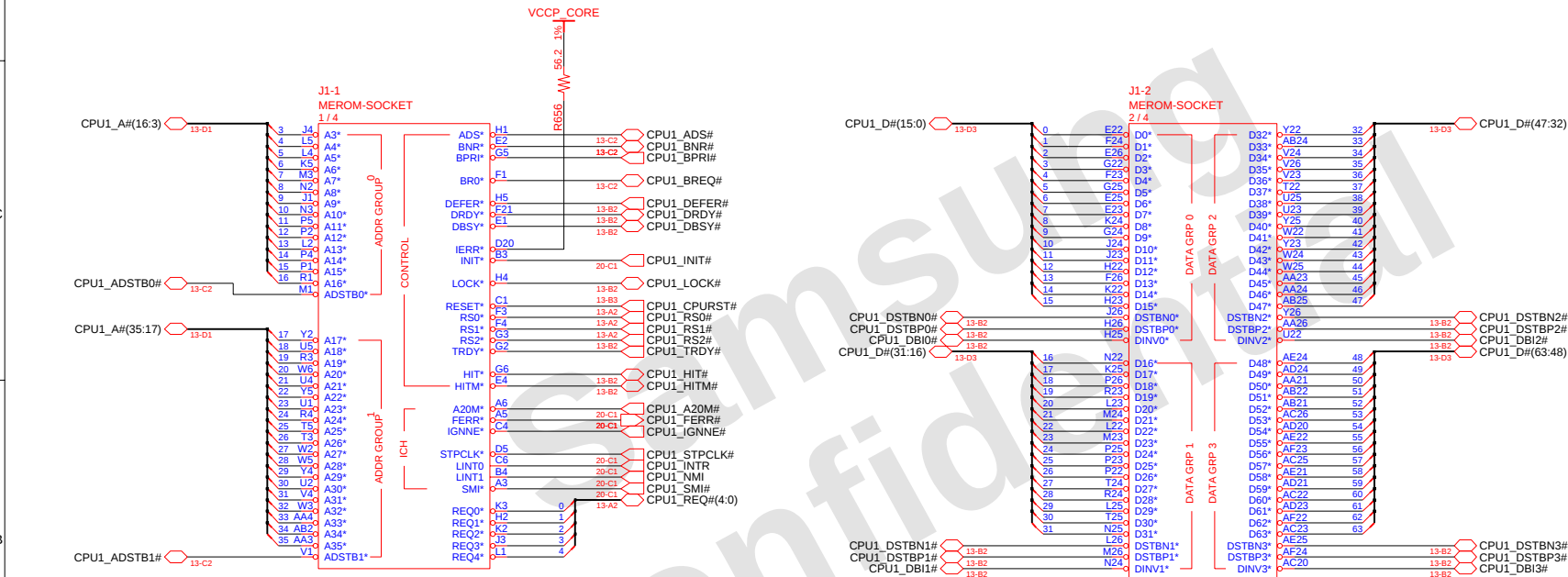
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APPROVAL	KEVIN LEE	REV	1.0	CK-505		
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THERMAL SENSOR & FAN CONTROL

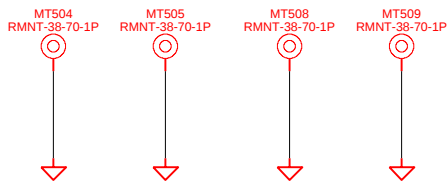


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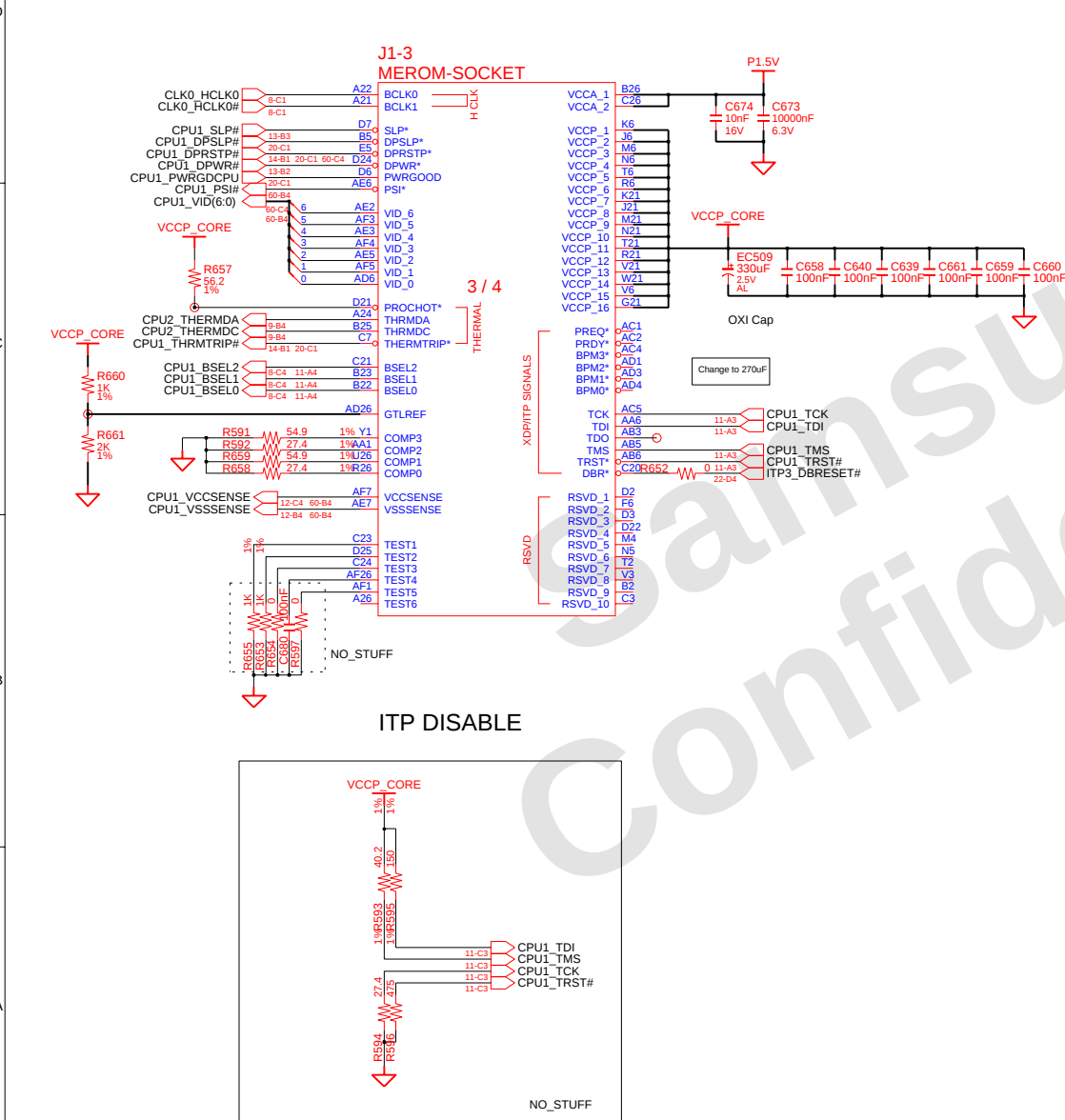


CPU CONNECTOR PART NUMBER 3704-001153

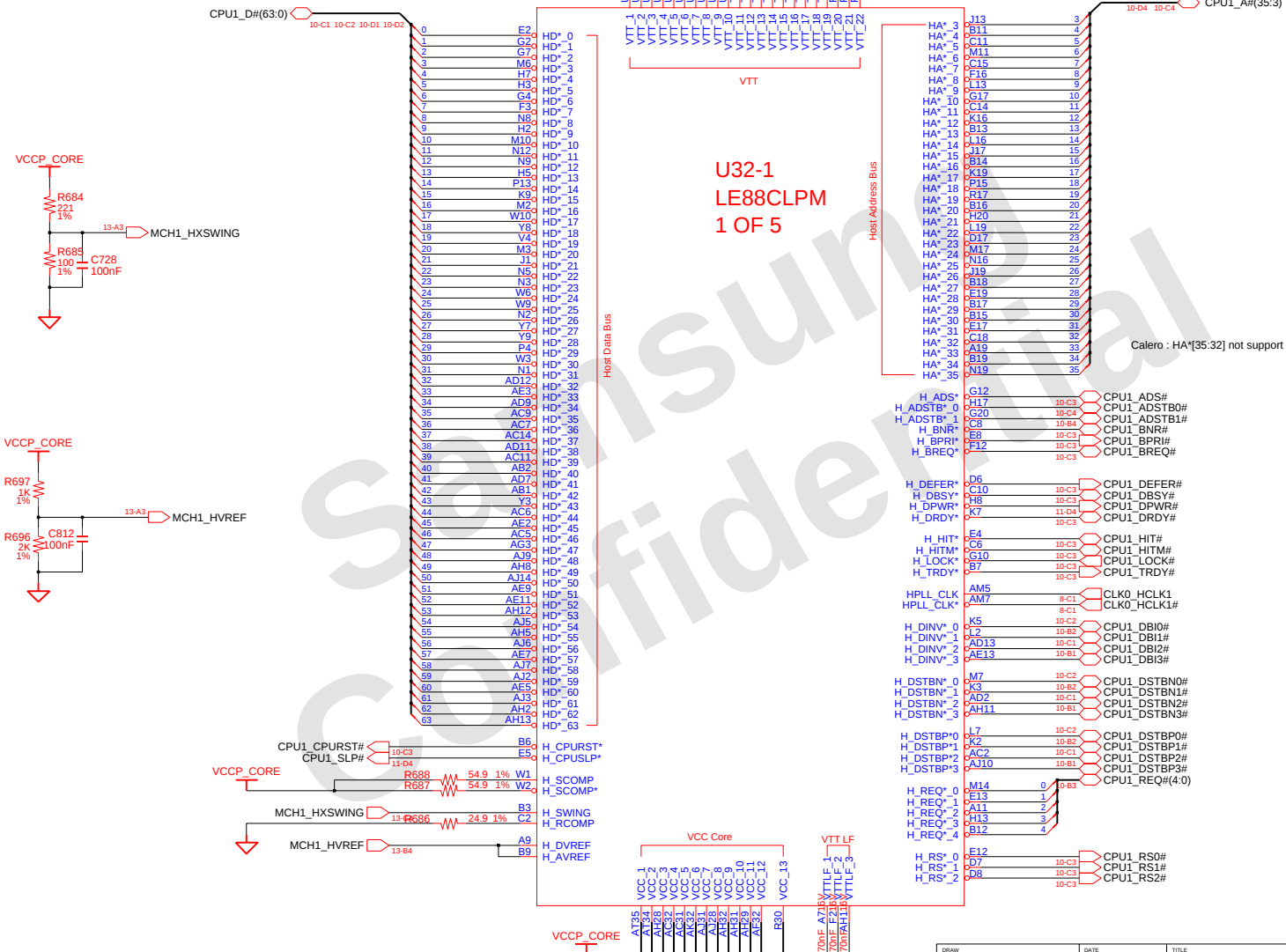


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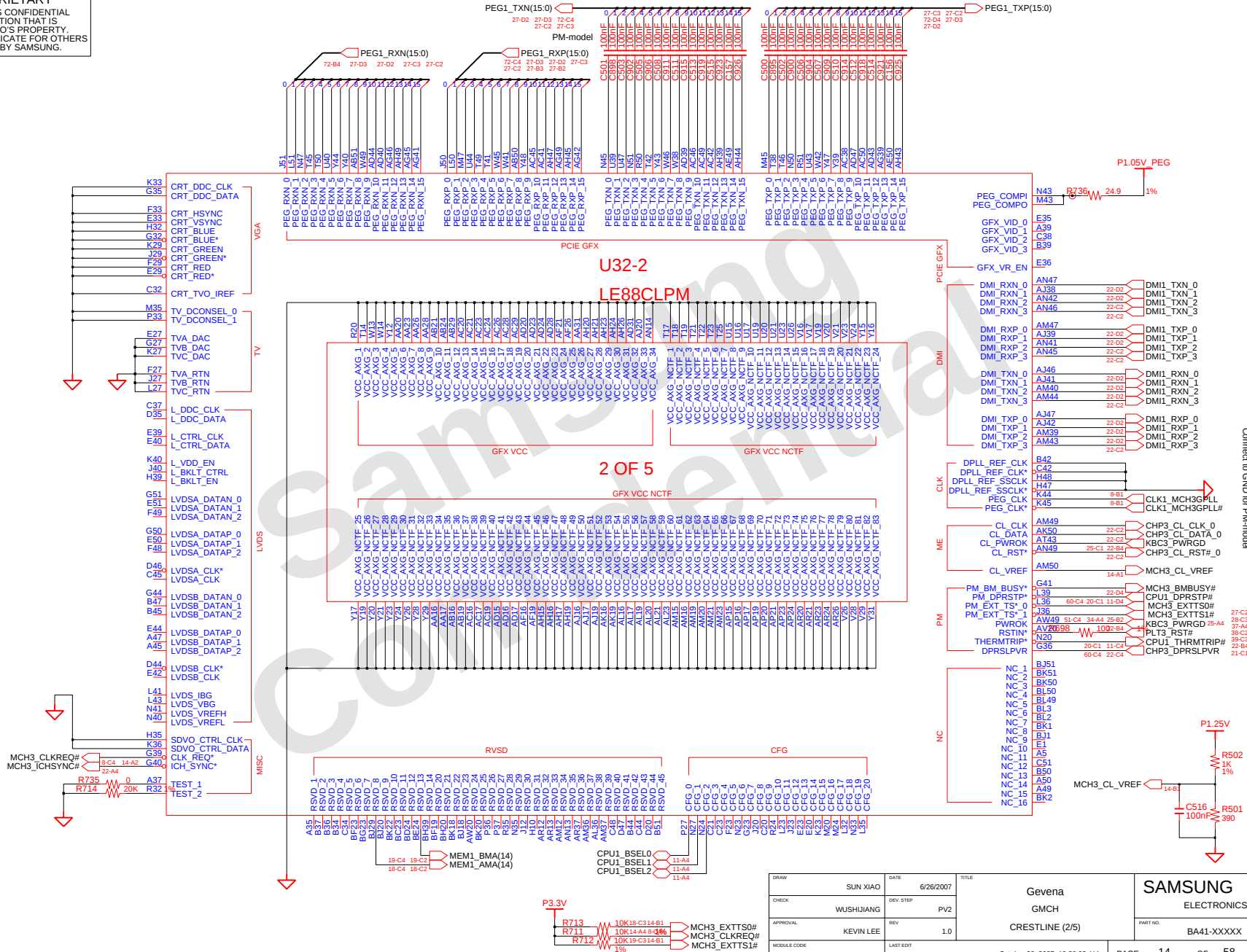


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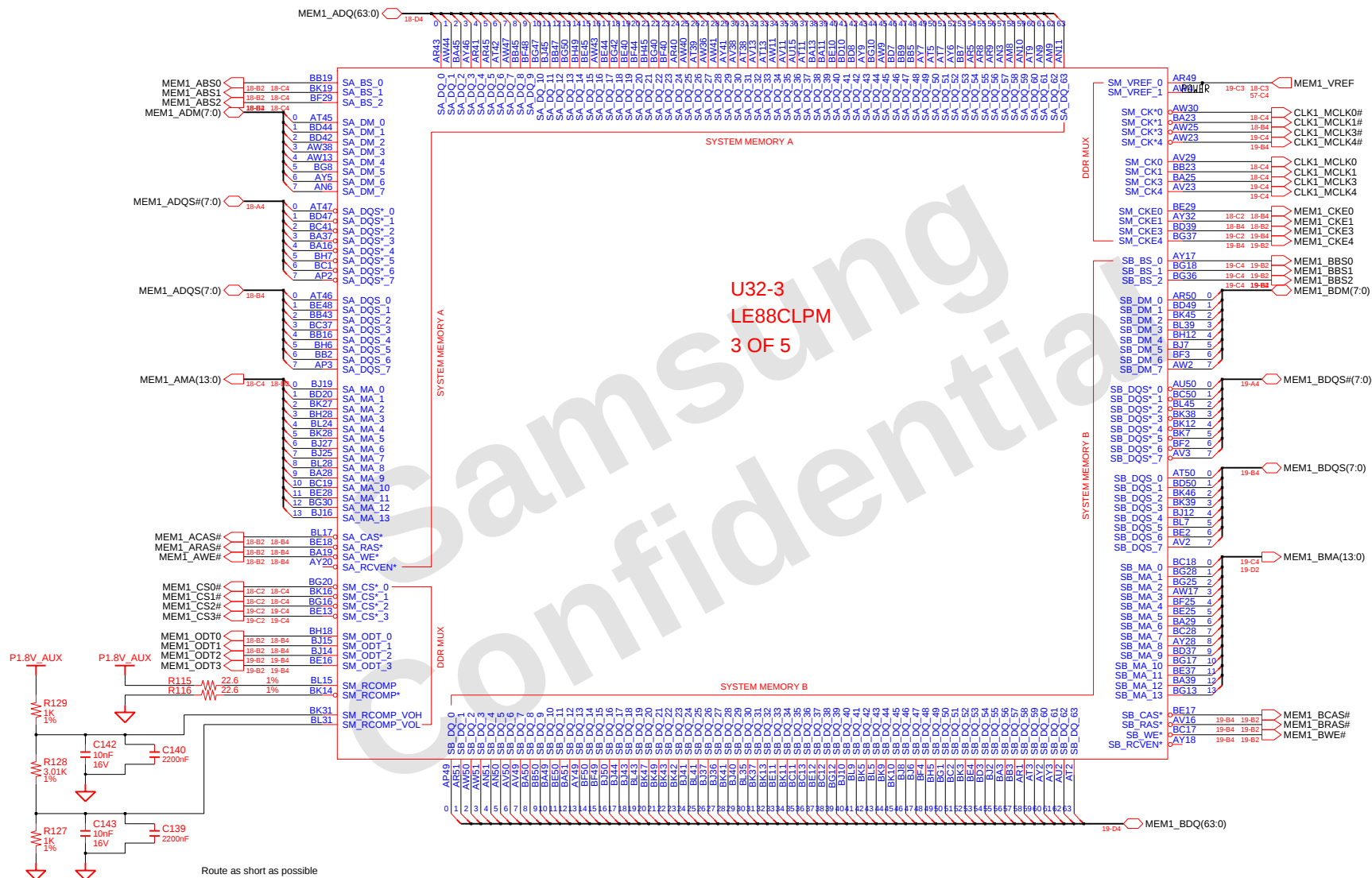
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CHECK	WUSHUJIANG	DEV STEP	PV2		CMCH	
APPROVAL	KEVIN LEE	REV	1.0		CRESTLINE (1/5)	
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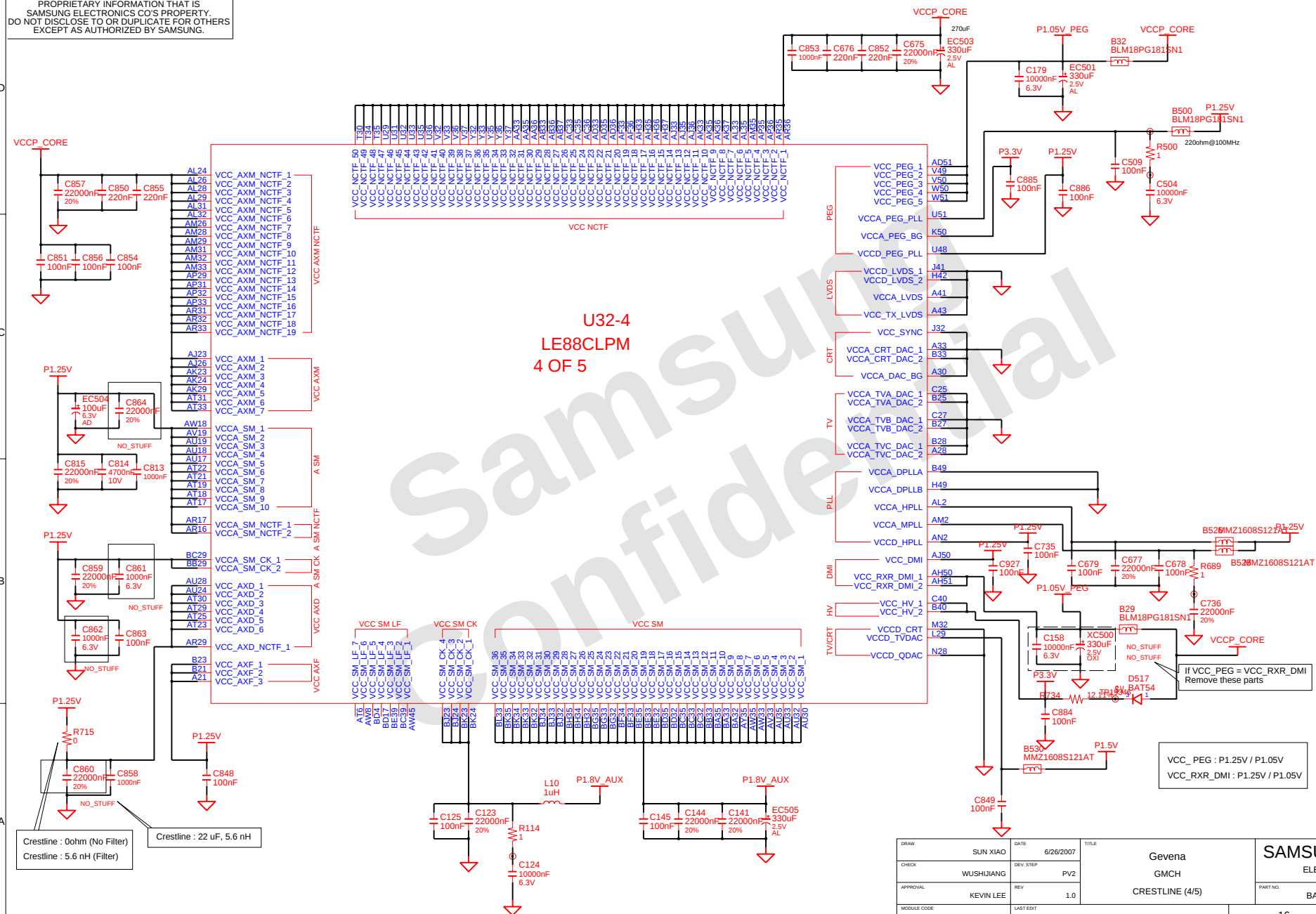
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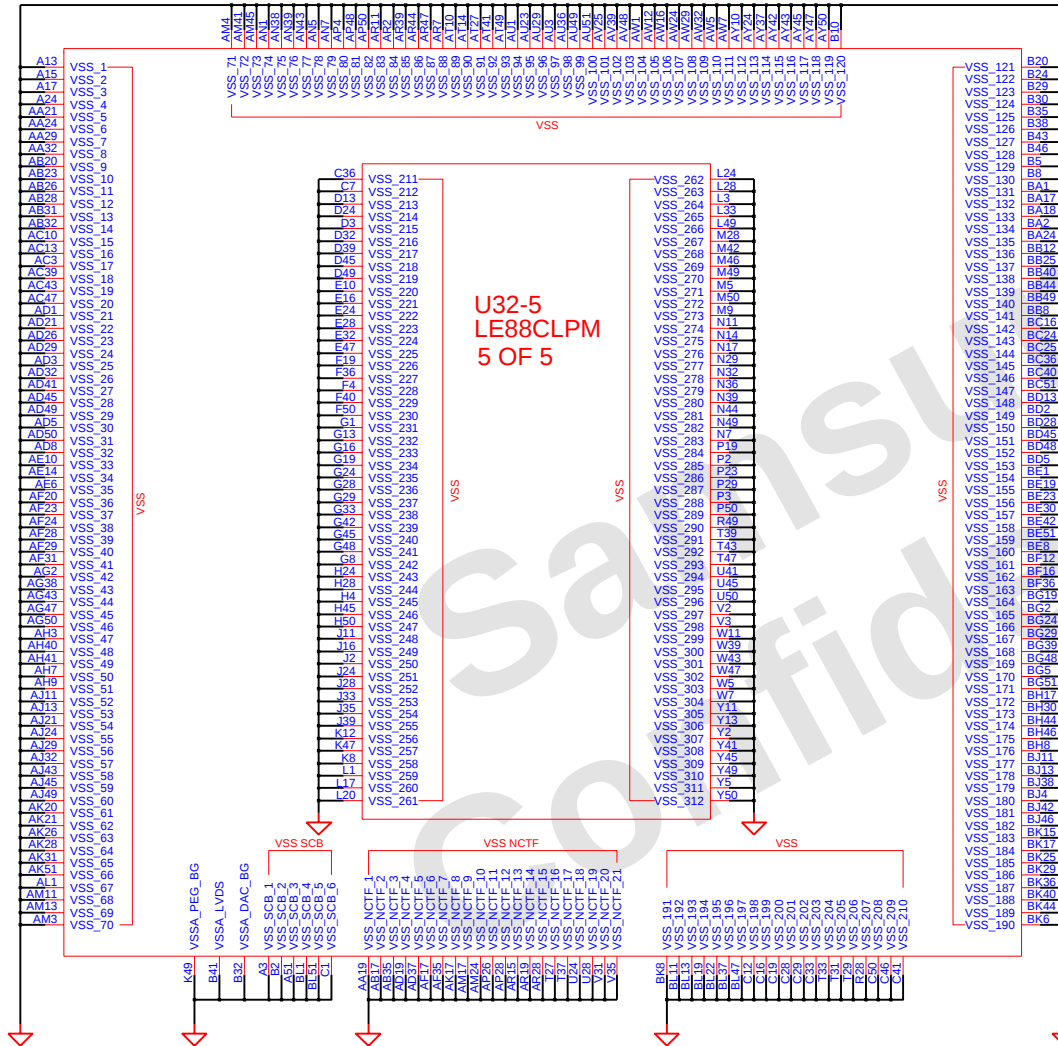
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APPROVAL	KEVIN LEE	REV	1.0		PART NO.	BA41-XXXXX
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CHECK	WUSHIJIANG	DEV-STEP	PV2			
APPROVAL	KEVIN LEE	REV	1.0		PART NO.	BA41-XXXXX
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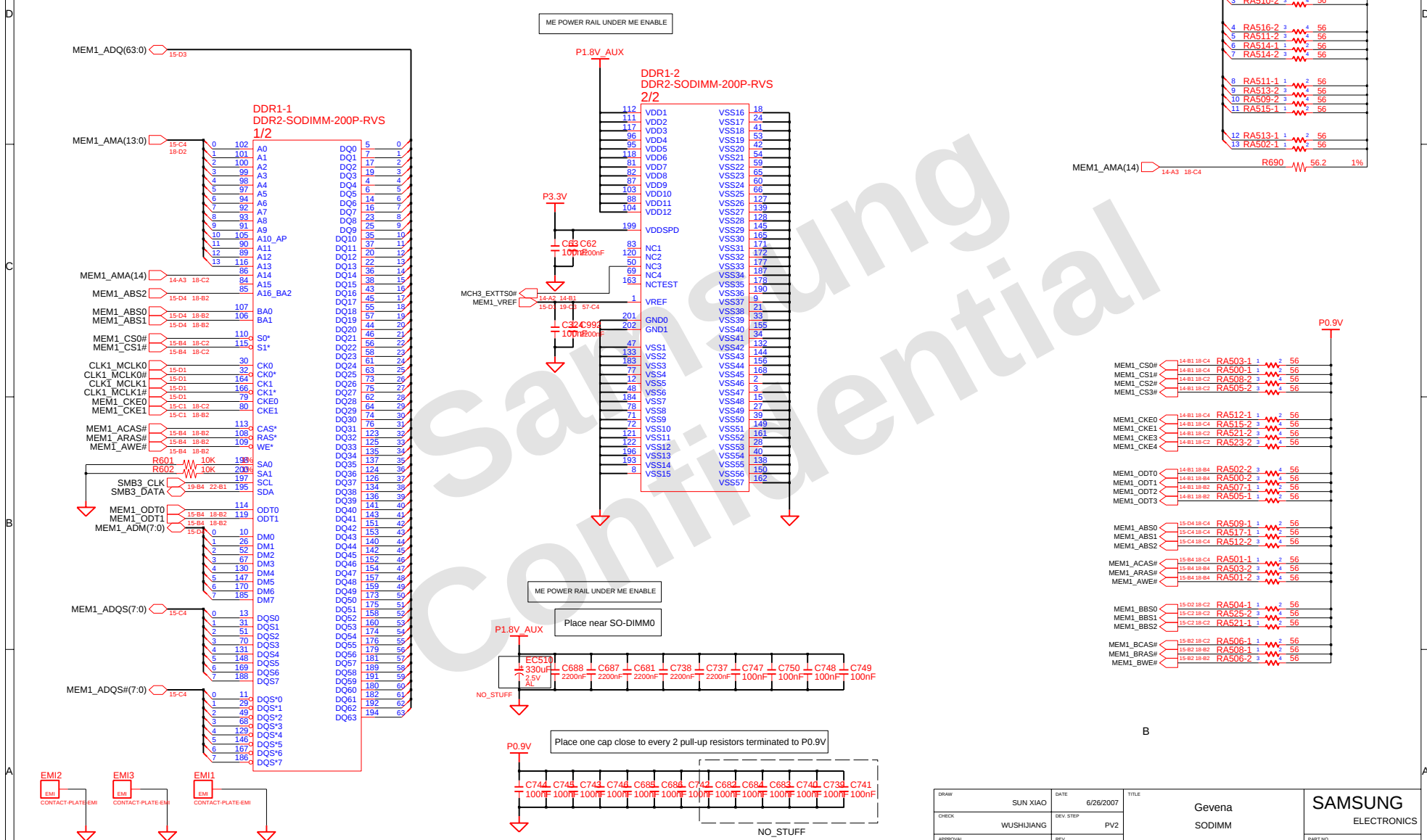
*POCAFEB-11 Only (Remove in MP Model)

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 Disabled	Dynamic ODT 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

DRAW	SUN XIAO	DATE	6/26/2007	TITLE	Gevena	SAMSUNG ELECTRONICS
CHECK	WUSHUJIANG	DEV. STEP	PV2		GMCH	
APPROVAL	KEVIN LEE	REV	1.0		CRESTLINE (5/5)	
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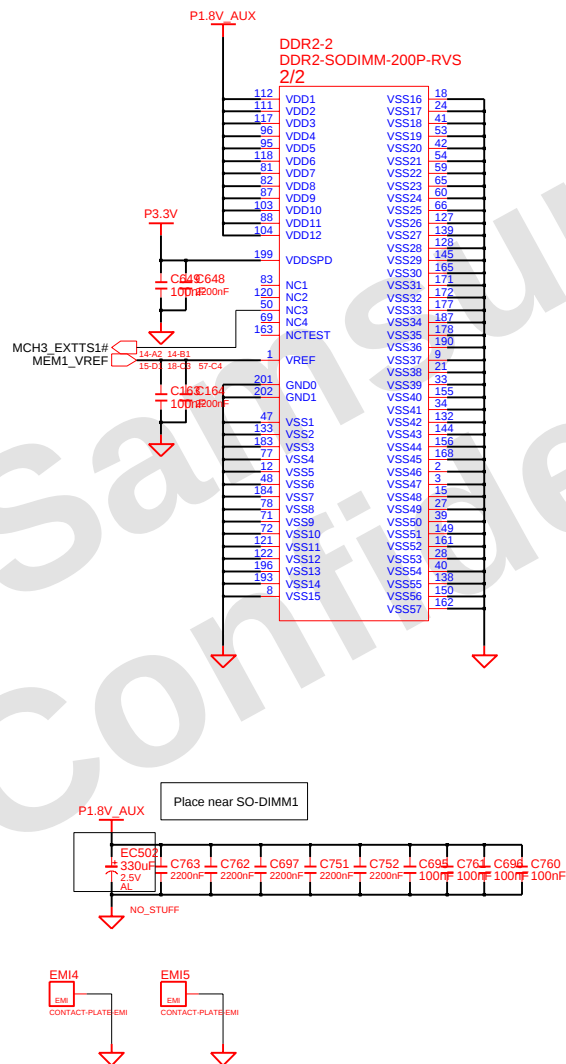
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Array resistors & Single resistors used to improve layout & routing.



DRAW	SUN XIAO	DATE	6/26/2007	Gevena SODIMM DDR2 CH A	SAMSUNG ELECTRONICS	
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DDR SO-DIMM #1



MEM1_BMA(14) 14-A3 19-C4

MEM1_BMA(13.0) 15-B2 18-D2

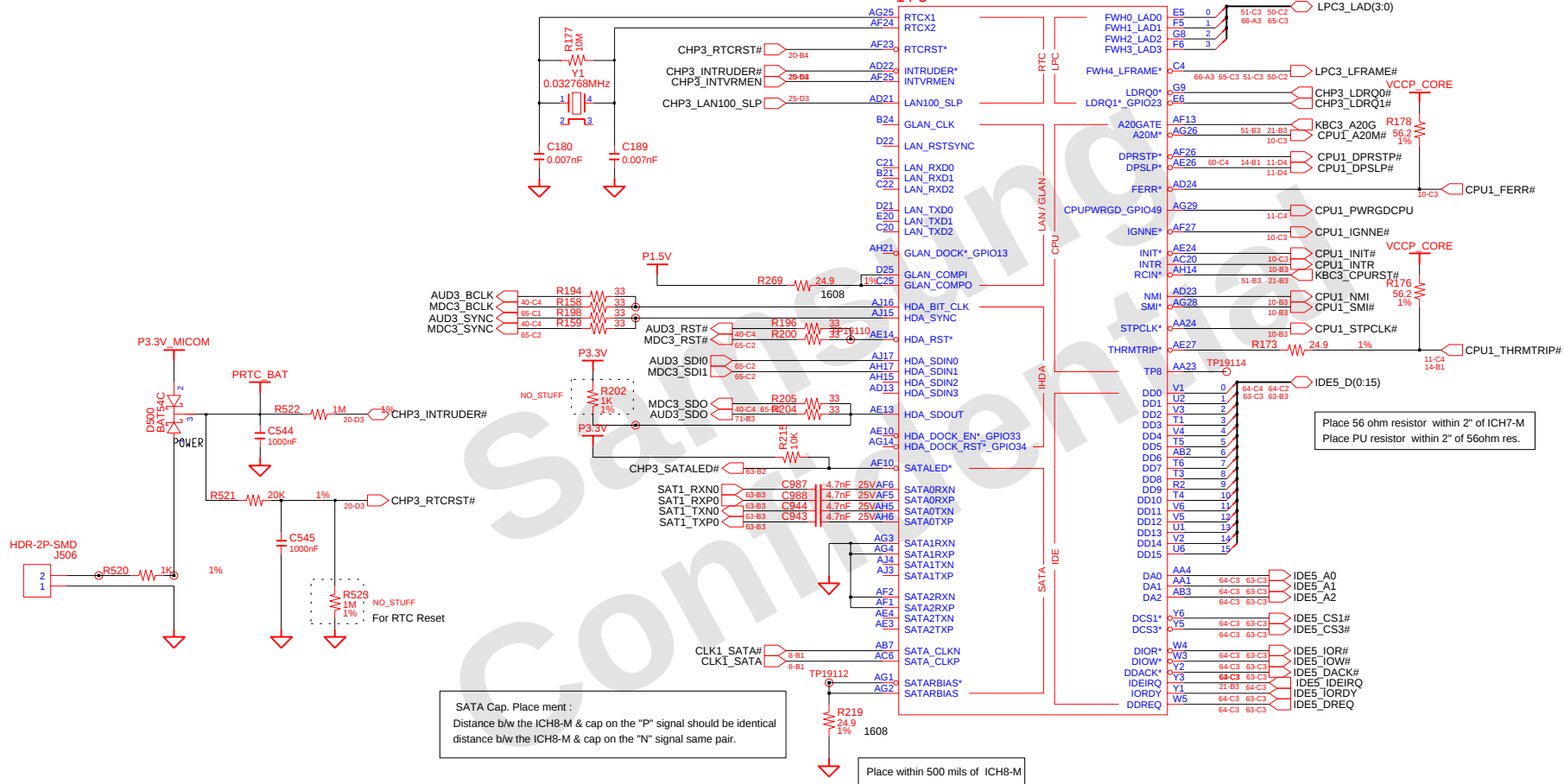
R691 56.2 1%

0 RA525-1 56
1 RA518-1 56
2 RA524-2 56
3 RA518-2 56
4 RA524-1 56
5 RA519-1 56
6 RA522-2 56
7 RA522-1 56
8 RA519-2 56
9 RA520-1 56
10 RA504-2 56
11 RA523-1 56
12 RA520-2 56
13 RA507-2 56

DRAWN	SUN XIAO	DATE	6/26/2007	TITLE Gevena SODIMM DDR2 CH B	SAMSUNG ELECTRONICS
CHECK	WUSHIJIANG	DEV. STEP	PV2		
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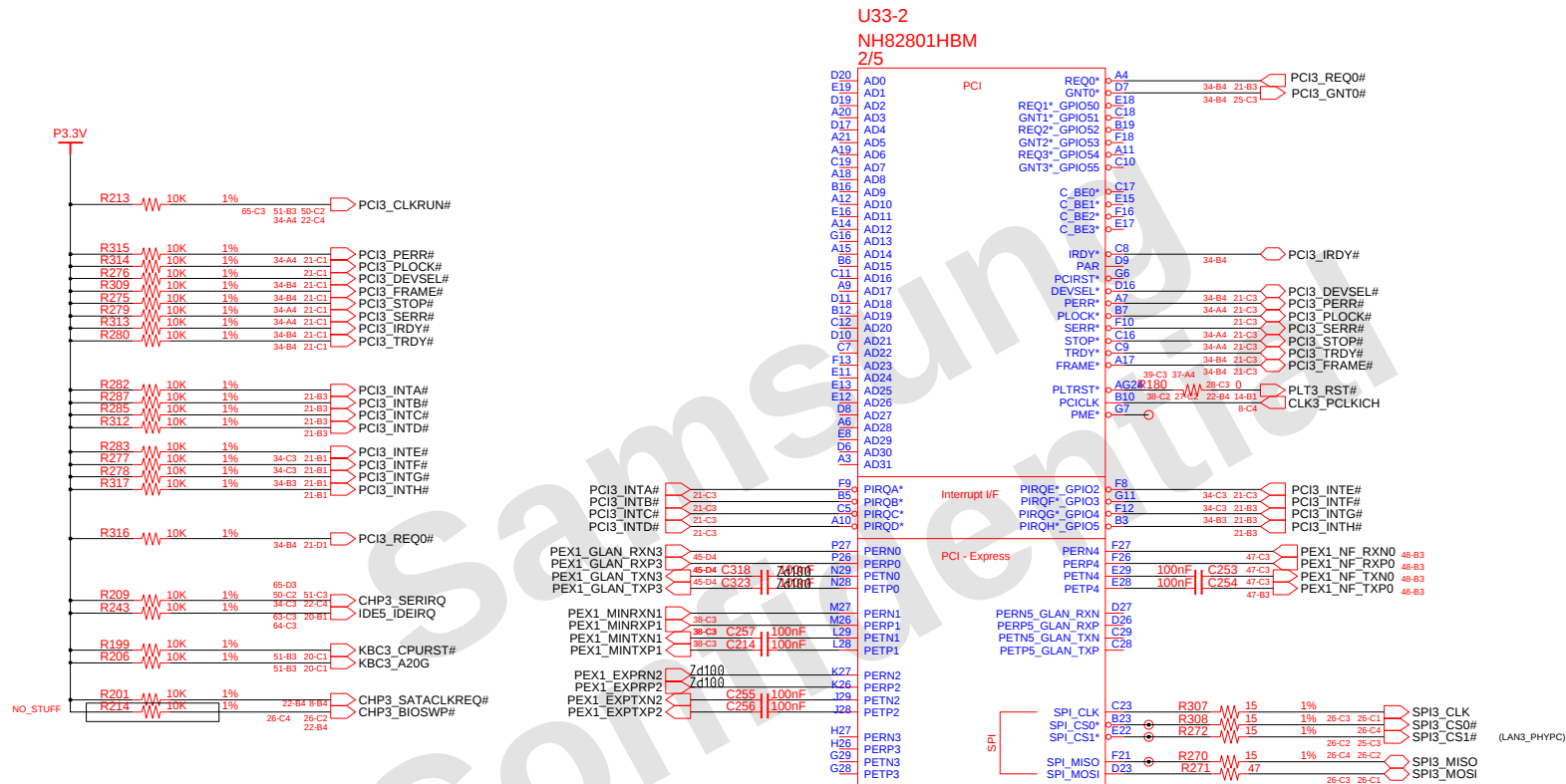
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U33-1
NH82801HBM
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CHECK	WUSHUJIANG	DEV STEP	PV2		ICH8-M	ELECTRONICS
APPROVAL	KEVIN LEE	REV	1.0		ICH8-M (1/5)	PART NO. BA41-XXXXX
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AC caps : PCIE need to be within 250mils of the driver
Resistor for Test : Place Stuffed Option to minimize stubs

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CHECK	WUSHIJIANG	DEV STEP	PV2		ICH8-M	ELECTRONICS
APPROVAL	KEVIN LEE	REV	1.0		ICH8-M (2/5)	PART NO.
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U33-3
NH82801HBM
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SMB
SMB3_CLK
SMB3_DATA
CHP3_CL_RST#_1
SMB3_ME_CLK
SMB3_ME_DATA

SYS
CHP3_SUSSTAT#
ITP3_DBRESET#
MCH3_BMBUSY#
SMB3_ALERT#
CHP3_PCISTP#
CHP3_CPUSTP#
PCI3_CLKRUN#
PEX3_WAKE#
CHP3_SERIRQ
THM3_ALERT#
VRM3_CPU_PWRGD#
CHP3_SLPS3#
CHP3_SLPS4#
CHP3_SLPS5#
CHP3_DPRSLPVR#
KBC3_PWRBTN#
LAN Power Sequence check 2#
KBC3_RSMRST#
KBC3_RSMRSTF#
CLK3_PWRGD#
KBC3_PWRGD#
Check..
KBC3_EXTSMI#
CHP3_BIOS_CRI#
KBC3_RUNSCI#
KBC3_WAKESC#
CHP3_GPIO12
CHP3_GPIO17
CHP3_BIOSWP#
CHP3_SATACLKREQ#
AUD3_SPKR#
MCH3_ICHSYNC#

GPIO
AF17
F4
AD15
AG22
AE20
AG18
AH11
AE17
AF12
AC13
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AG23
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AD18
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AJ14
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AH20
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E3
AJ8
AJ9
AH9
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AG8
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AE11
AG10
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AJ11
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AD9
AJ13
AJ21
AG9
G5
D3

GPIO
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AD15
AG22
AE20
AG18
AH11
AE17
AF12
AC13
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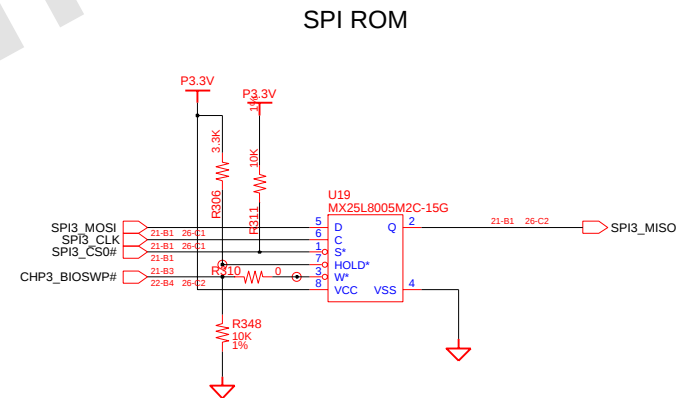
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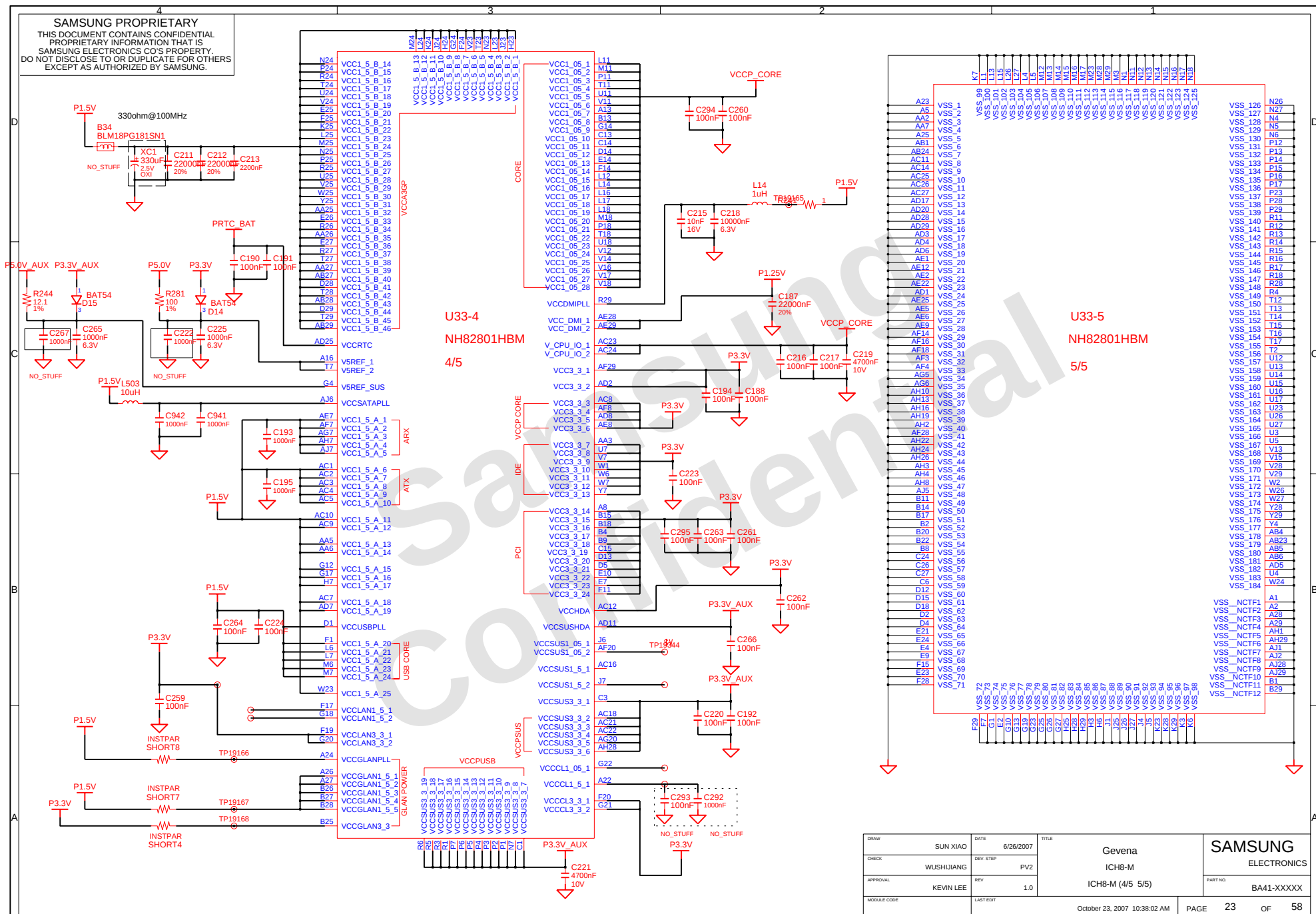
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DRRAW	SUN XIAO	DATE	6/26/2007	Gevena ICH8-M ICH8-M (3/5)	SAMSUNG ELECTRONICS			
CHECK	WUSHIJIANG	DEV. STEP	PV2		PART NO. BA41-XXXXX			
APPROVAL	KEVIN LEE	REV	1.0					
MODULE CODE	LAST EDIT		October 23, 2007 10:38:02 AM		PAGE	22	OF	58

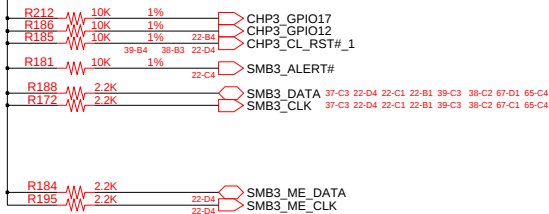
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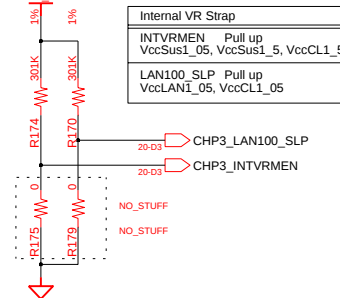
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Approval	KEVIN LEE	Rev	1.0		ICH8-M (4/5 5/5)	Part No.
Module Code		Last Edit				BA41-XXXXX
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P3.3V_AUX

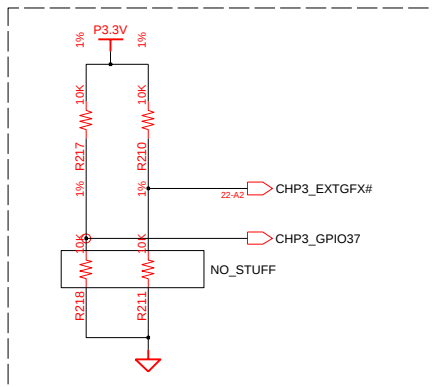


PRTC BAT



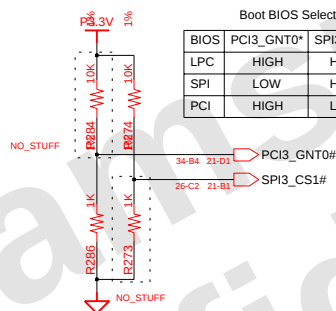
Internal VR Strap	
INTVRMEN	Pull up VccSus1_05, VccSus1_5, VccCL1_5
LAN100_SLP	Pull up VccLAN1_05, VccCL1_05

Model Dipendent

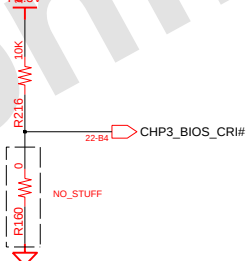


Boot BIOS Select

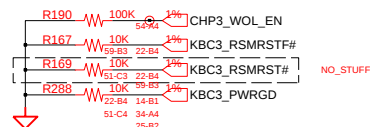
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LPC	HIGH	HIGH
SPI	LOW	HIGH
PCI	HIGH	LOW



P3.3V

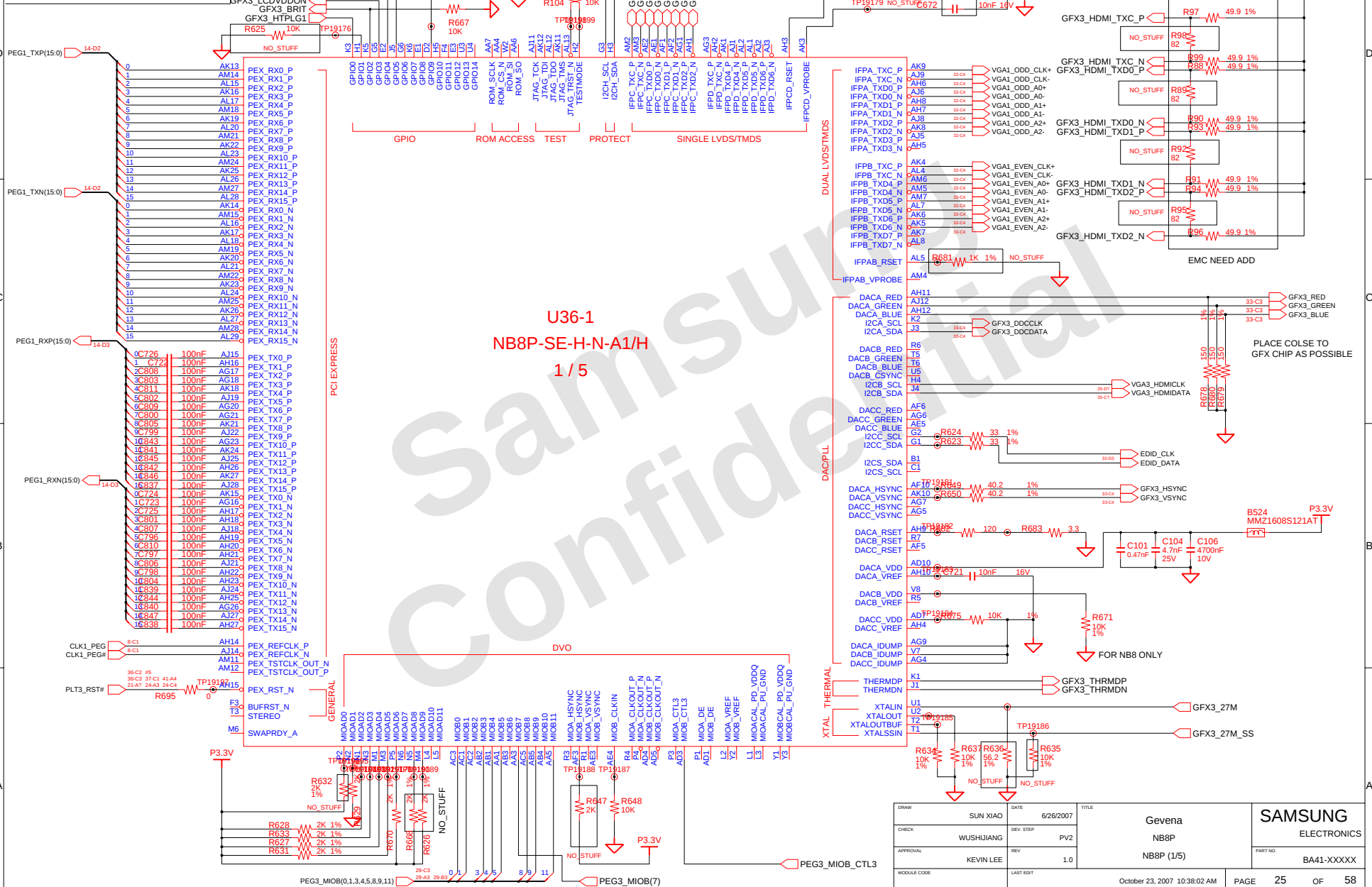


BIOS CRISIS RECOVER STRAP
PLACE NEAR KEYBOARD



DRAW	SUN XIAO	DATE	6/26/2007	Gevena ICH8-M ICH8-M STAP		SAMSUNG		
CHECK	WUSHIJIANG	DEV. STEP	PV2			ELECTRONICS		
APPROVAL	KEVIN LEE	REV	1.0			PART NO.	BA41-XXXXX	
MODULE CODE	LAST EDIT			October 23, 2007 10:38:02 AM	PAGE	24	OF	58

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DATE	6/26/2007	TITLE	Gevena	SAMSUNG ELECTRONICS
DEV. STEP	PV2	REV	1.0	
REV	1.0	REV	1.0	
LAST EDIT	October 23, 2007 10:38:02 AM	PAGE	25 OF 58	

DRAW	SUN XIAO	DATE	6/26/2007	TITLE	Gevena
CHECK	WUSHUJIANG	DEV. STEP	PV2	REV	1.0
APPROVAL	KEVIN LEE	REV	1.0	REV	1.0
MODULE CODE		LAST EDIT	October 23, 2007 10:38:02 AM	PAGE	25 OF 58

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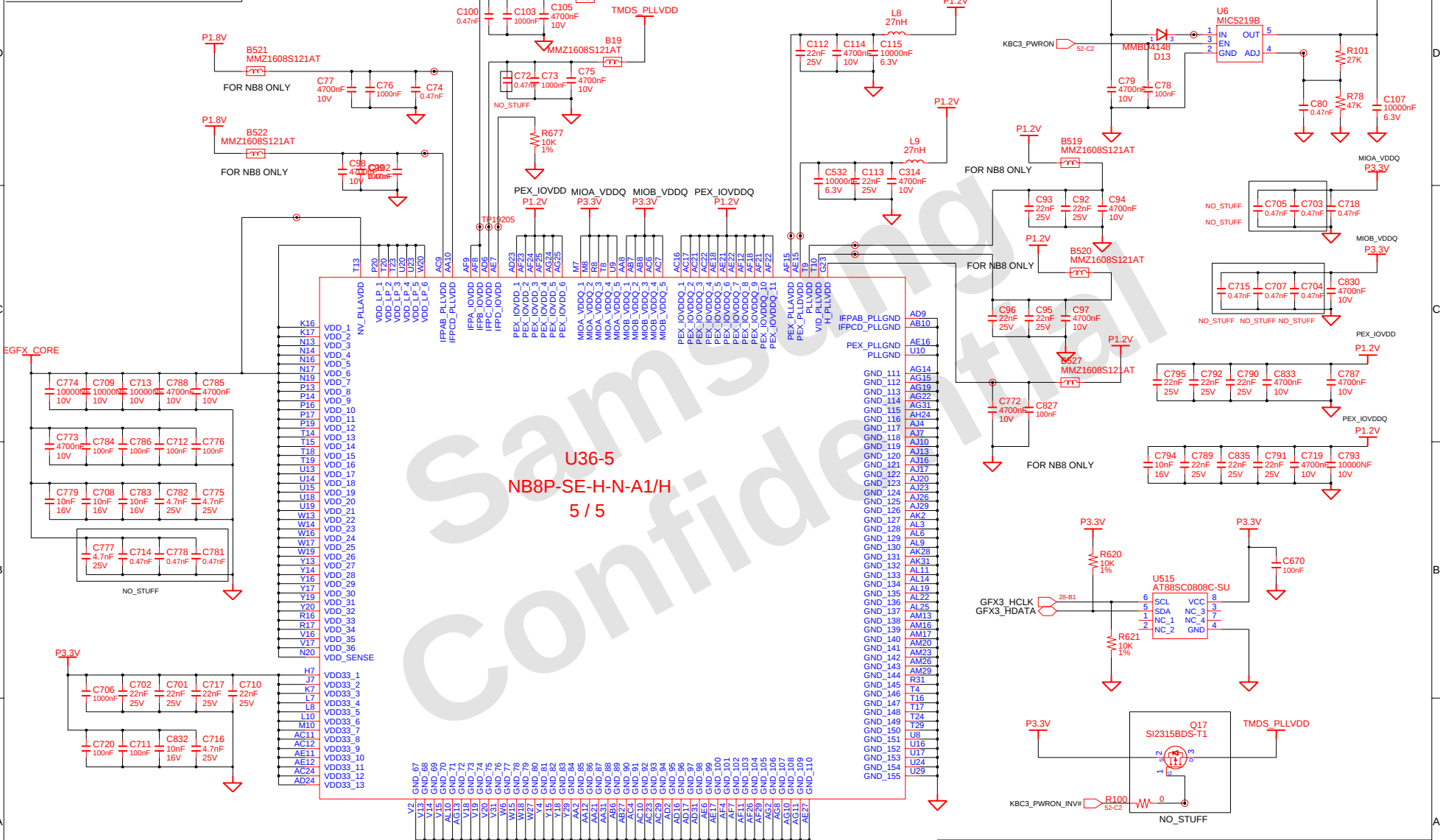
P1.8V

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C882 10000NF 10V
C770 4700nF 6.3V
C880 4700nF 6.3V
C699 100nF
C771 100nF
C831 100nF
C700 22nF 25V
C820 22nF 25V
C825 22nF 25V
C822 22nF 25V
C821 4.7nF 25V
C823 4.7nF 25V
C828 4.7nF 25V
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C834 4.7nF 25V
C836 4.7nF 25V

P1.8V

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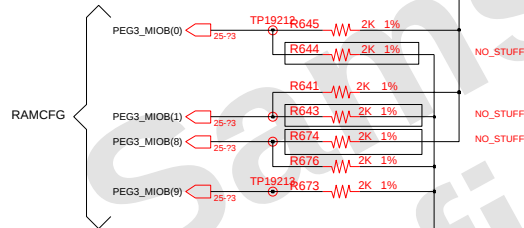
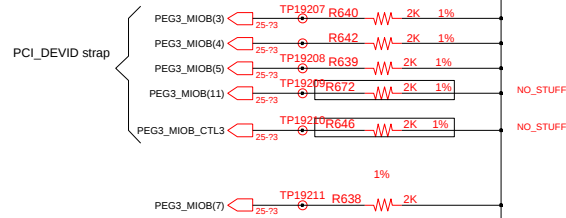
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APPROVAL	KEVIN LEE	REV	1.0		NB8P (5/5)
MODULE CODE		LAST EDIT	October 23, 2007 10:38:02 AM	PAGE	28 OF 58

SAMSUNG	BA41-XXXXX
ELECTRONICS	

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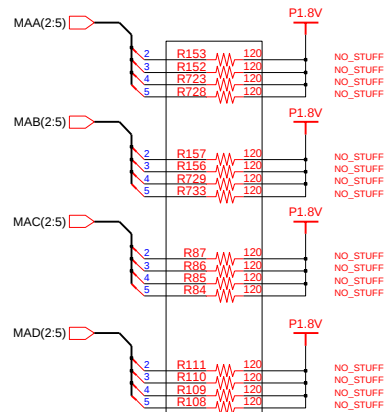
PCI_DEVID strap

	R646	R672	R640	R639	R642
NB8P-SE	NO_STUFF	NO_STUFF	STUFF	NO_STUFF	STUFF
NB8M-GS	0	0	1	1	1
	NO_STUFF	NO_STUFF	STUFF	STUFF	STUFF
	0	0	1	1	1



RAMCFG

	R674	R676	R641	R643
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



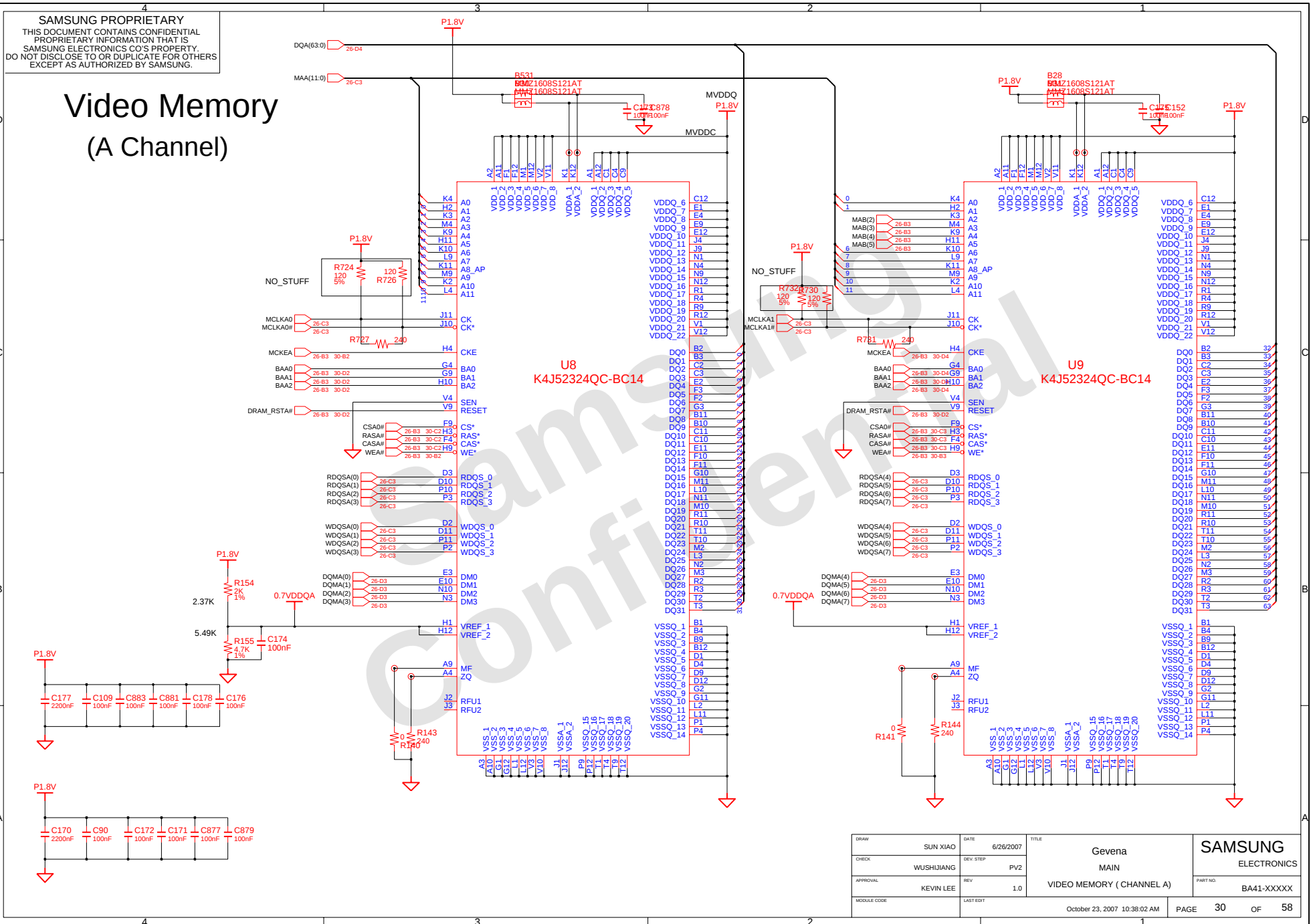
Straps	Pin # (Rev.A02)	Descriptions
SUB_VENDOR	MIOAD(1)	0 : No BIOS 1 : Read from BIOS
RAMCFG(3:0) [9,8,1,0]	MIOB(9) MIOB(8) MIOB(1) MIOB(0)	0111 : SAMSUNG GDDR3 256Mbit 0101 : INFINEON GDDR3 256Mbit 0011 : SAMSUNG GDDR3 512Mbit 0001 : INFINEON GDDR3 512Mbit
CRYSTAL(1:0)	MIOB(2) MIOB(6)	01 : 14.318 MHz 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) MIOBVSYN	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..

Samsung		Infineon	
256Mbit	512Mbit	256Mbit	512Mbit
K4J55323QG (1.2/1.4/1.6/2.0) K4J55323QF (1.4/1.6/2.0)	K4J52324QC (1.2/1.4/1.6/2.0)	HYB18H256321AFL20(2.0) HYB18H256321AFL16(1.6) HYB18H256324AF-20(2.0) HYB18H256321AF-14(1.4) HYB18H256321AF-12(1.2)	HYB18H512321AFL20(2.0) HYB18H512321AFL16(1.6) HYB18H512324AF-20(1.6) HYB18H512321AF-14(1.4) HYB18H512321AF-12(1.2)
8M*32BIT	16M*32BIT	8M*32BIT	16M*32BIT

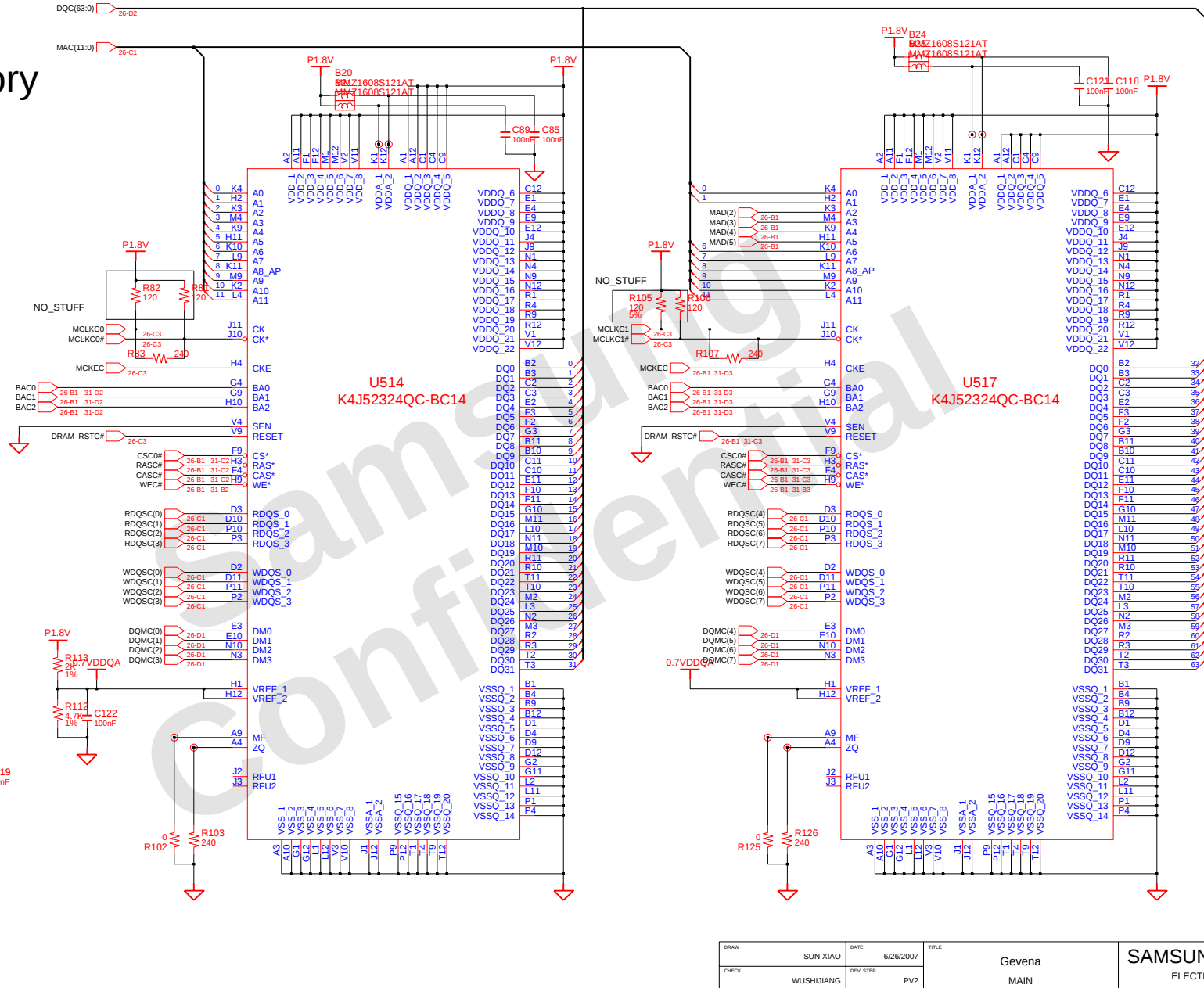
DRAW	SUN XIAO	DATE	6/26/2007	TITLE	Geneva	SAMSUNG ELECTRONICS
CHECK	WUSHUJIANG	DEV. STEP	PV2		NB8P	
APPROVAL	KEVIN LEE	REV	1.0		NB8P STRAP	
MODULE CODE		LAST EDIT	October 23, 2007 10:38:02 AM			
				PAGE	29	OF 58

Video Memory (A Channel)



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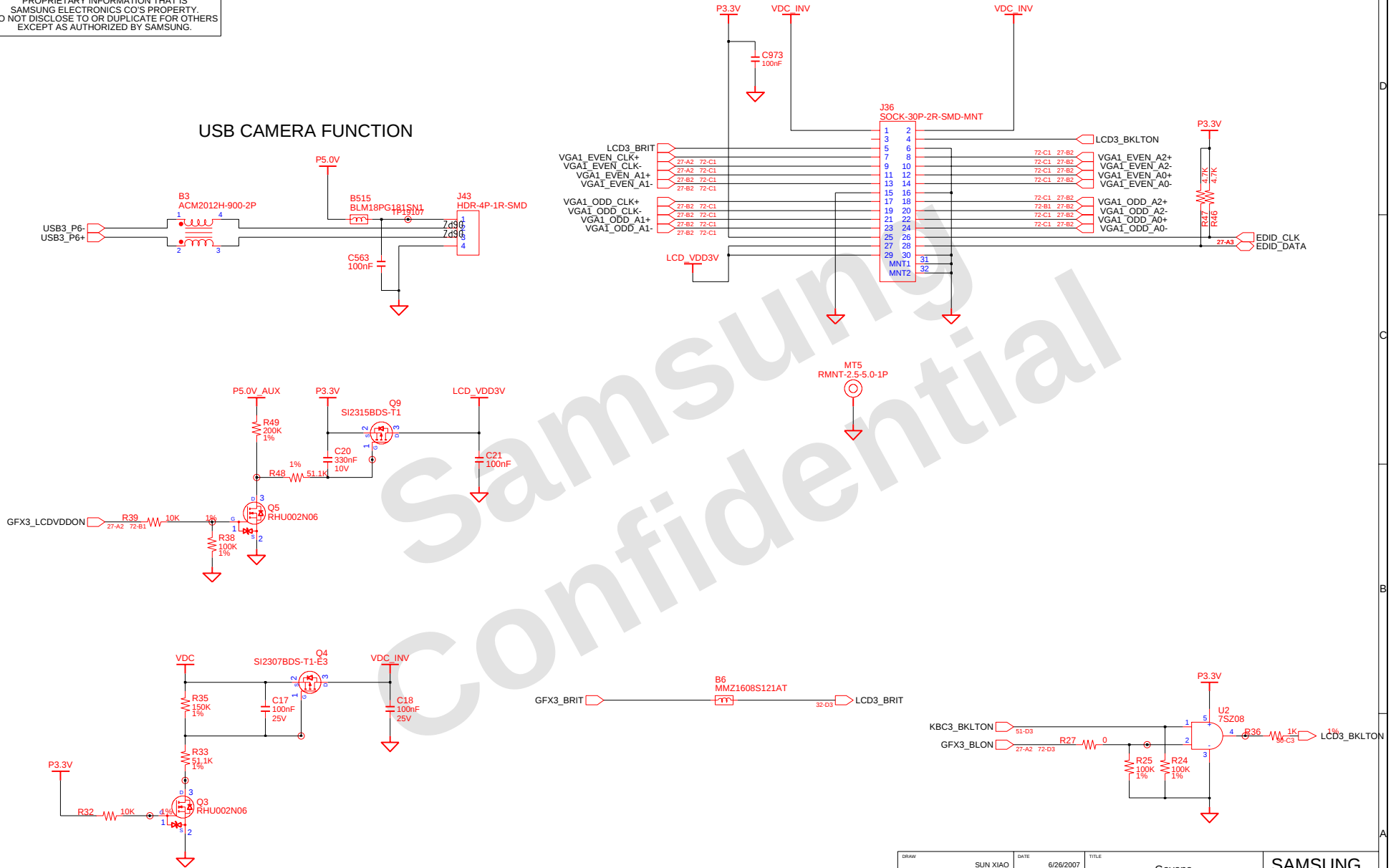
Video Memory (C Channel)



DRAW	SUN XIAO	DATE	6/26/2007	TITLE	Gevena MAIN VIDEO MEMORY (CHANNEL B)	SAMSUNG ELECTRONICS PART NO. BA41-XXXXX
CHECK	WUSHIJIANG	DEV STEP	PV2			
APPROVAL	KEVIN LEE	REV	1.0			
MODULE CODE		LAST EDIT				
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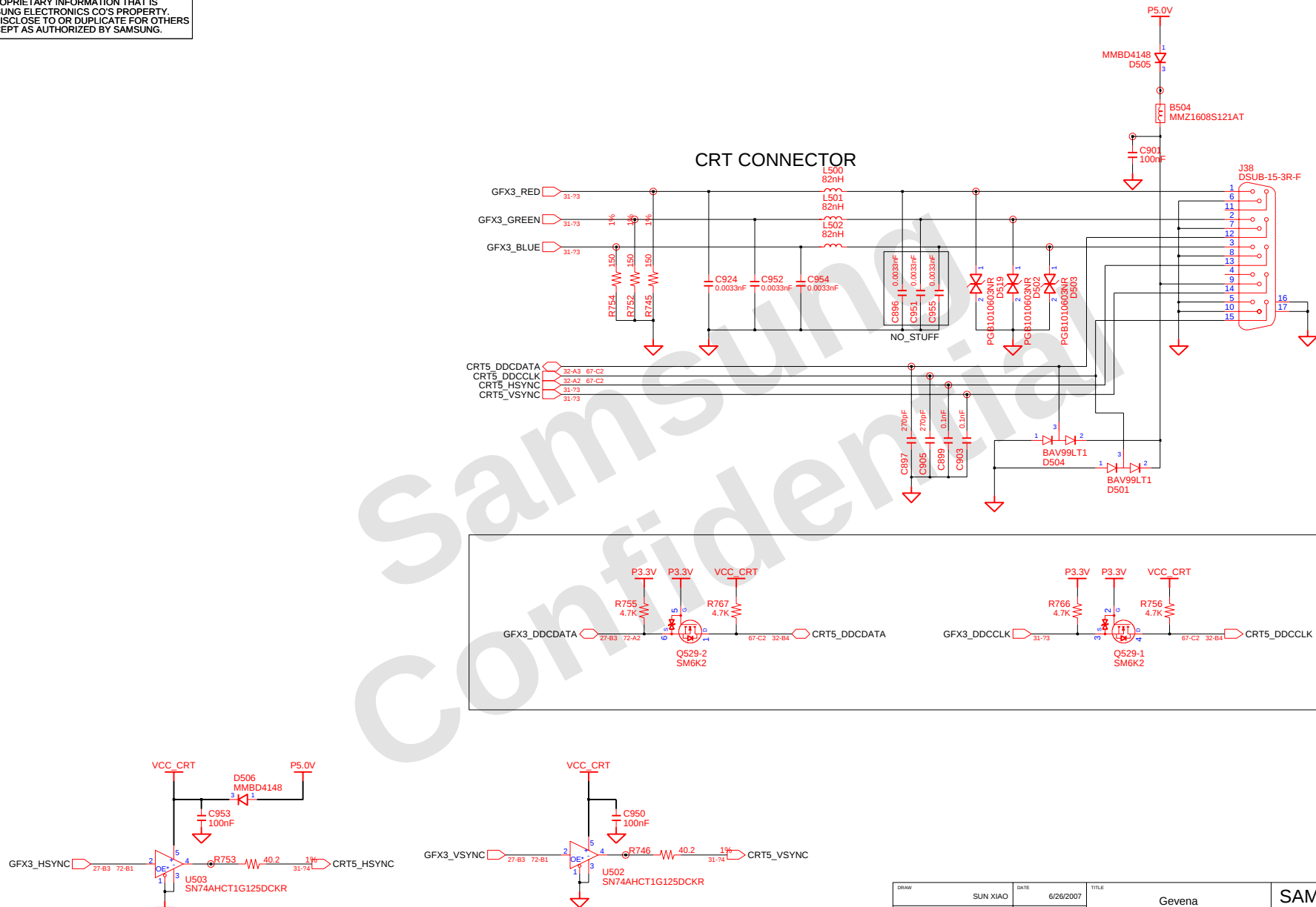
USB CAMERA FUNCTION



DRAW	SUN XIAO	DATE	6/26/2007	TITLE	Gevena	SAMSUNG
CHECK	WUSHUJIANG	DEV STEP	PV2	LCD CONNECTER & SPEED SPECTRUM	ELECTRONICS	
APPROVAL	KEVIN LEE	REV	1.0		PART NO.	BA41-XXXXX
MODULE CODE		LAST EDIT	October 23, 2007 10:38:02 AM	PAGE	32	OF 58

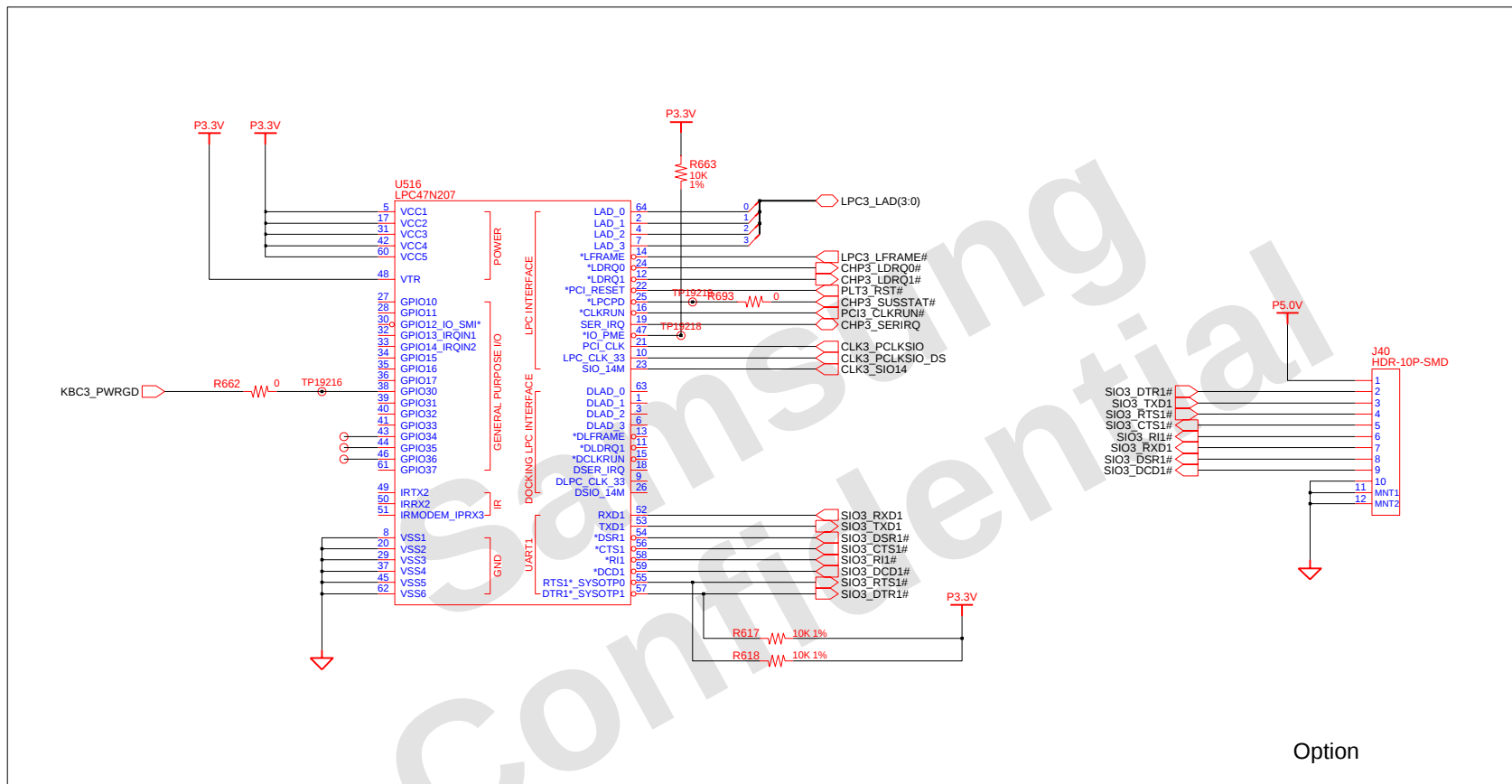
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CRT CONNECTOR



DRAW	SUN XIAO	DATE	6/26/2007	TITLE	Gevena MIAN CRT PORT	SAMSUNG ELECTRONICS PART NO. BA41-XXXXX
CHECK	WUSHIJIANG	DEV. STEP	PV2			
APPROVAL	KEVIN LEE	REV	1.0			
MODULE CODE		LAST EDIT				
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Option

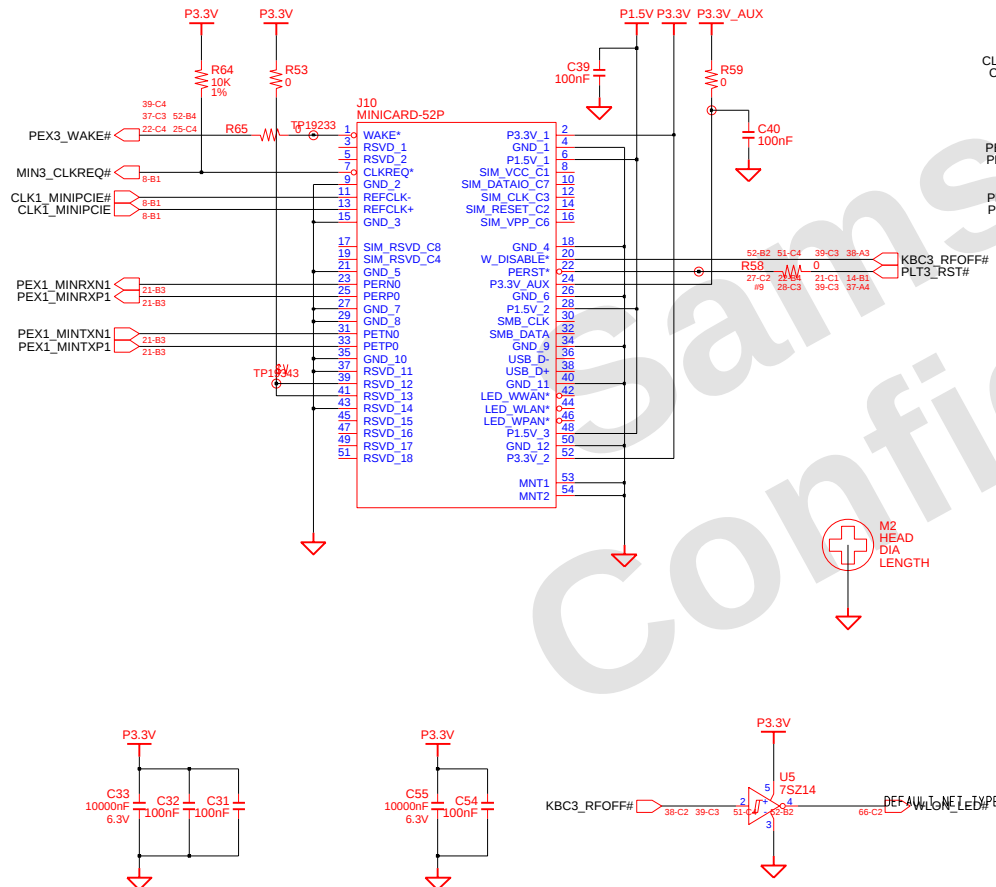
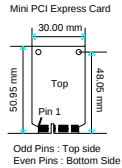
DRAW	SUN XIAO	DATE	6/26/2007	TITLE	Gevena	SAMSUNG ELECTRONICS
CHECK	WUSHUJIANG	DEV. STEP	PV2		SIO CHIPSET	
APPROVAL	KEVIN LEE	REV	1.0			PART NO. BA41-
MODULE CODE		LAST EDIT		October 23, 2007 10:38:02 AM	PAGE 34 OF 68	

A

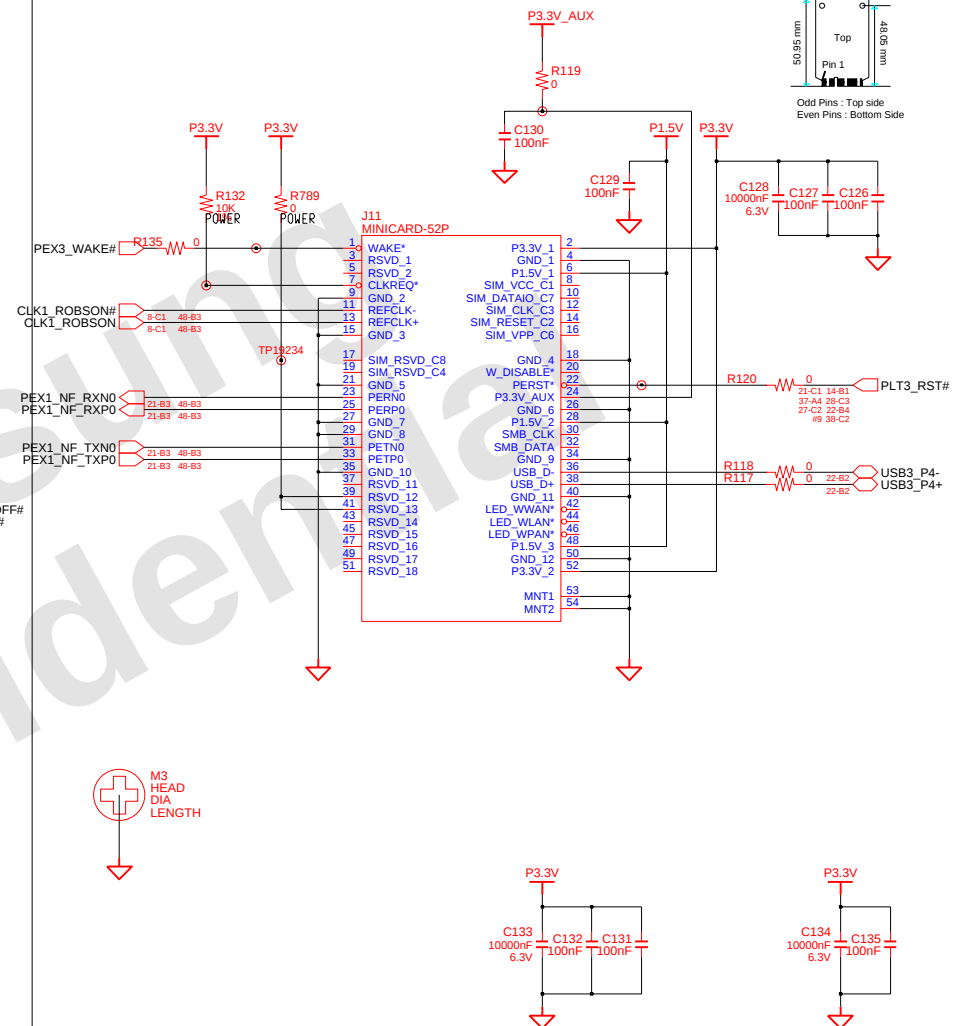
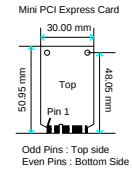
4

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Mini Card

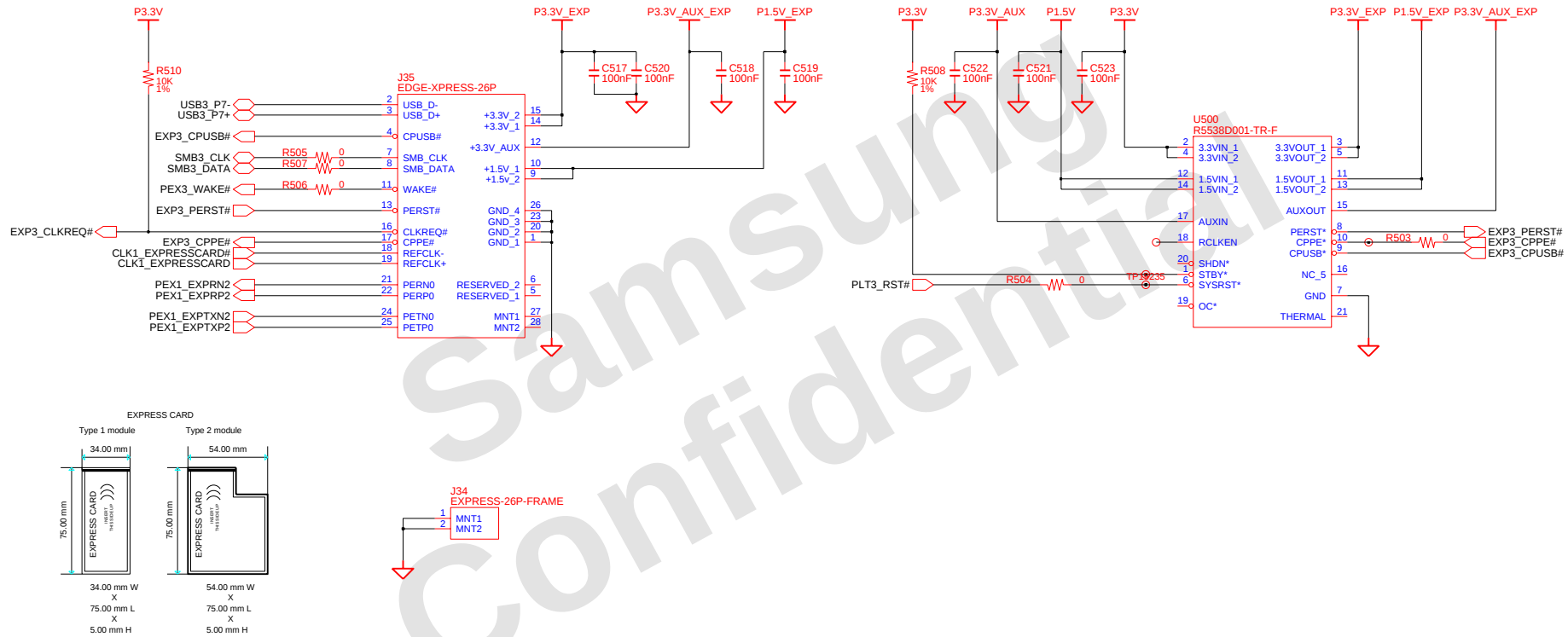


MINI CARD FOR ROBSON



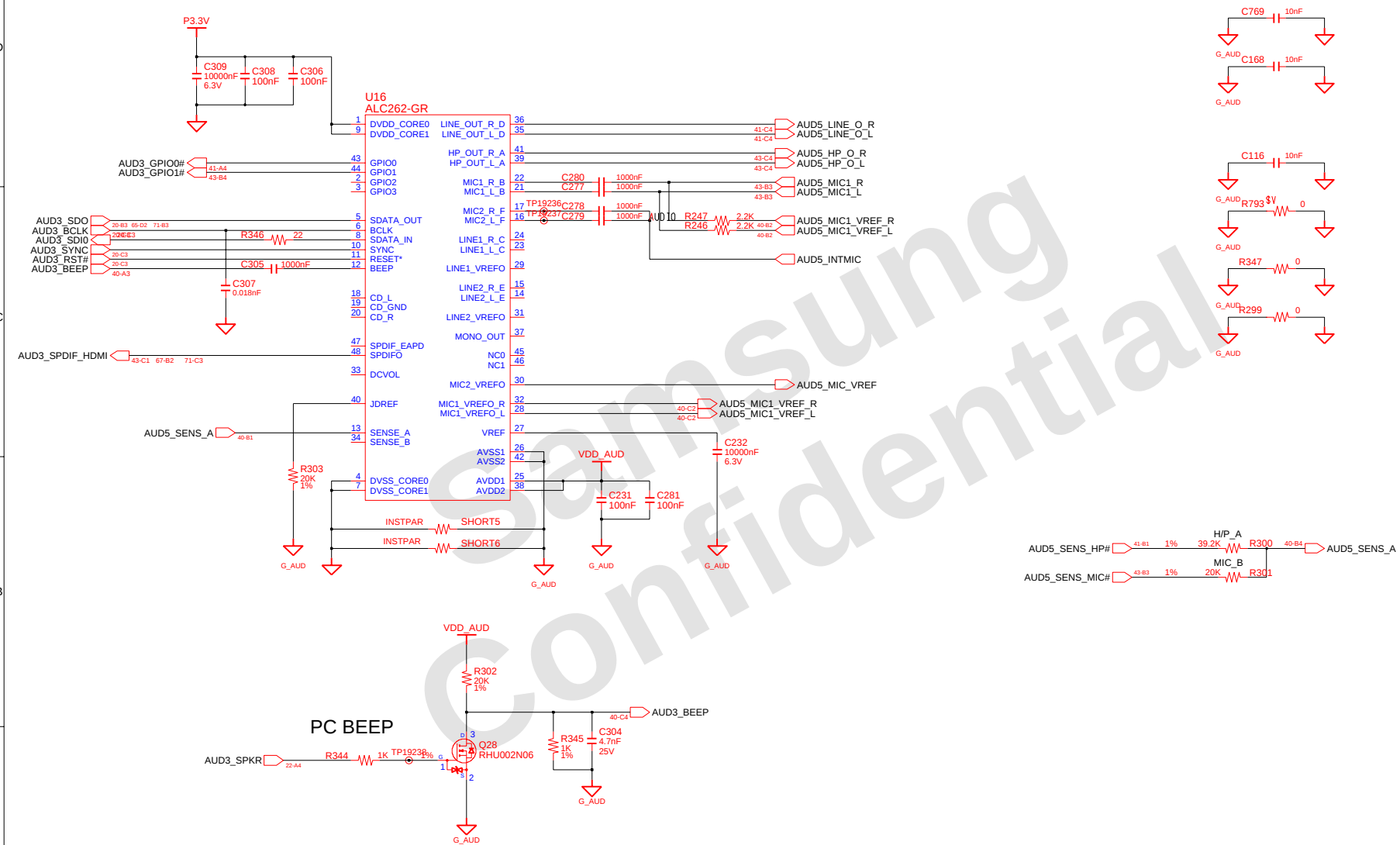
DRAW	SUN XIAO	DATE	6/26/2007	TITLE	Gevena	SAMSUNG
CHECK	WUSHUJIANG	DEV. STEP	PV2		MINI CARD	ELECTRONICS
APPROVAL	KEVIN LEE	REV	1.0		FRO BOBSON AND DVB-T	PART NO.
MODULE CODE		LAST EDIT				BA41-XXXXX
				October 23, 2007 10:38:02 AM	PAGE	36 OF 58

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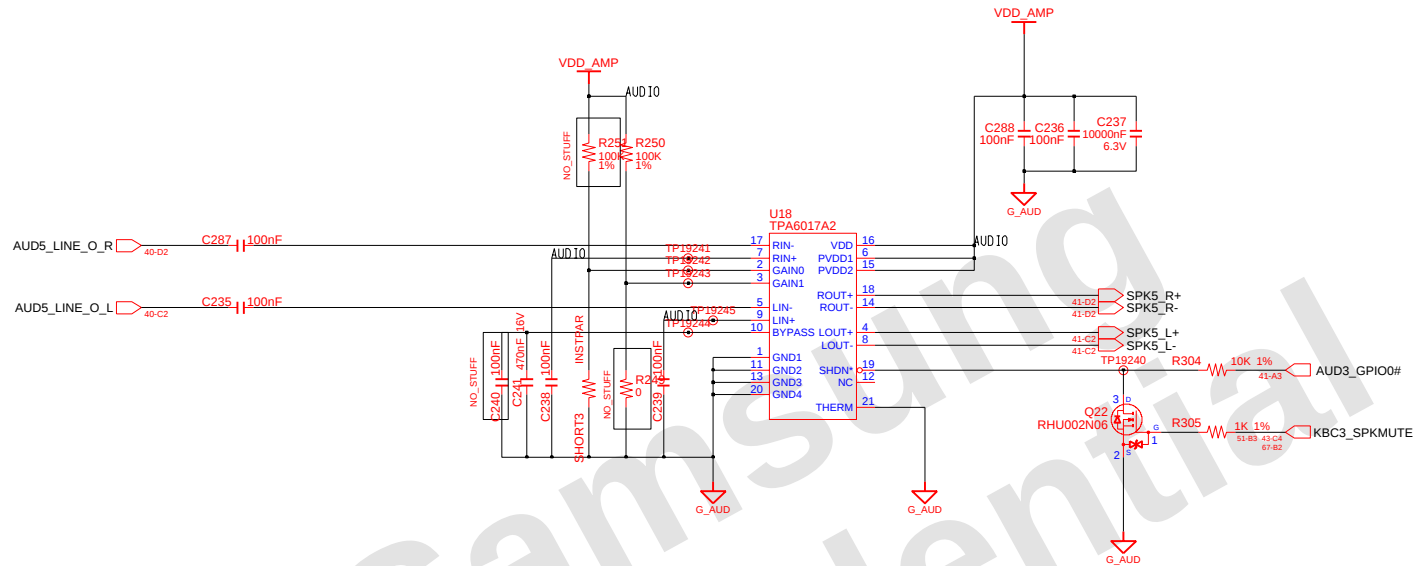
DRAW	SUN XIAO	DATE	6/27/2007	TITLE	Geneva MIO BOARD EXPRESS CARD	SAMSUNG ELECTRONICS PART NO. BA41-XXXX
CHECK	WUSHIJIANG	DEV. STEP	PV2			
APPROVAL	KEVIN LEE	REV	1.0			
MODULE CODE		LAST EDIT	October 23, 2007 10:38:02 AM	PAGE	37 OF 60	

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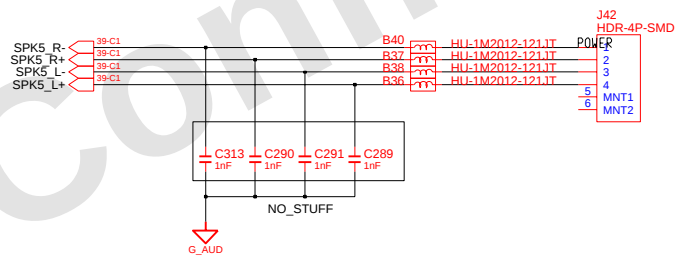


DRAW	SUN XIAO	DATE	6/26/2007	TITLE	Gevena	SAMSUNG
CHECK	WUSHIJIANG	DEV. STEP	PV2	AUDIO CODEC	ELECTRONICS	
APPROVAL	KEVIN LEE	REV	1.0	FRO HDMI	PART NO.	BA41-XXXXX
MODULE CODE		LAST EDIT	October 23, 2007 10:38:02 AM	PAGE	38	OF 58

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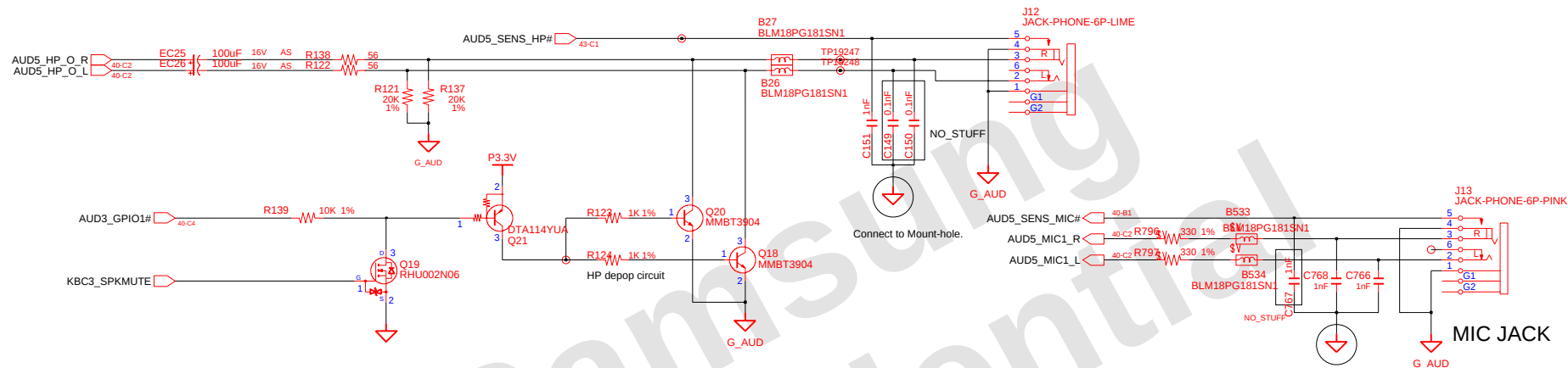
INTERNAL STEREO SPEAKERS



DRAW	SUN XIAO	DATE	6/26/2007	TITLE	Gevena	SAMSUNG ELECTRONICS
CHECK	WUSHIJIANG	DEV. STEP	PV2	AUDIO		
APPROVAL	KEVIN LEE	REV	1.0	AMP		
MODULE CODE		LAST EDIT	October 23, 2007 10:38:02 AM	PAGE	39	OF 58

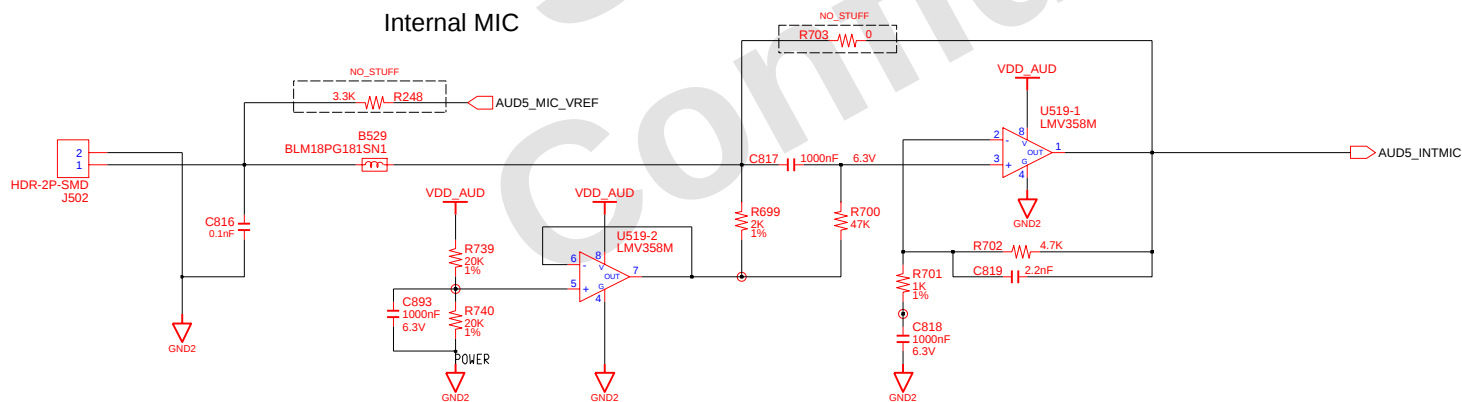
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HEADPHONE



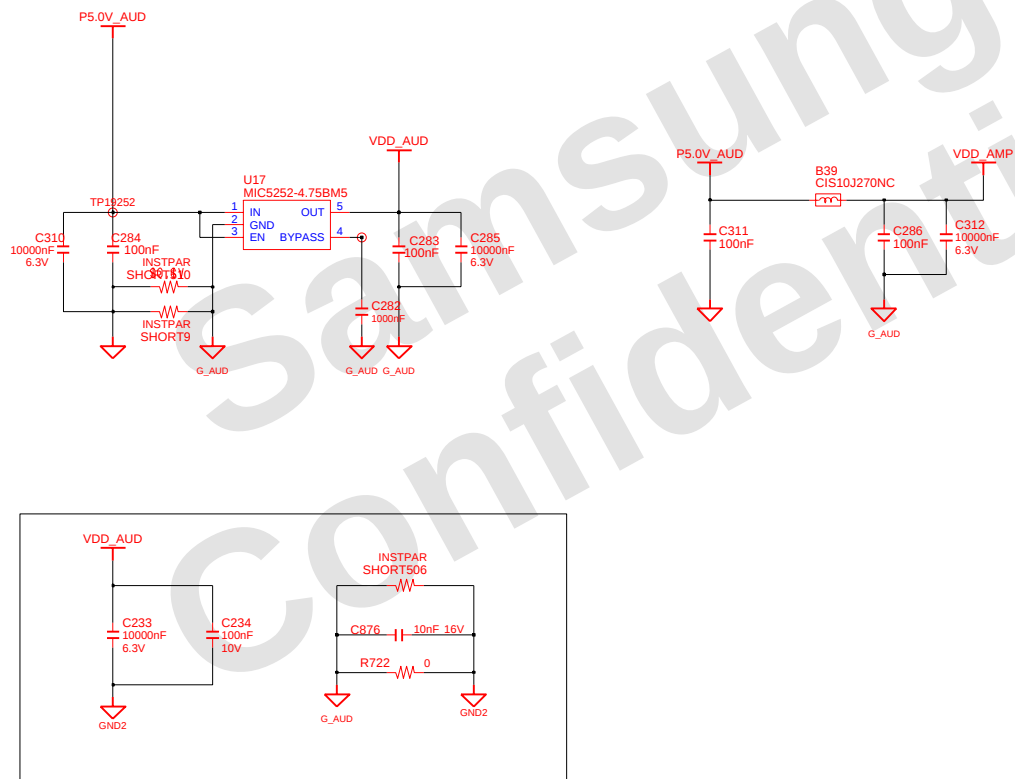
The traces led to Audio Jacks have the width over 10mil

Internal MIC



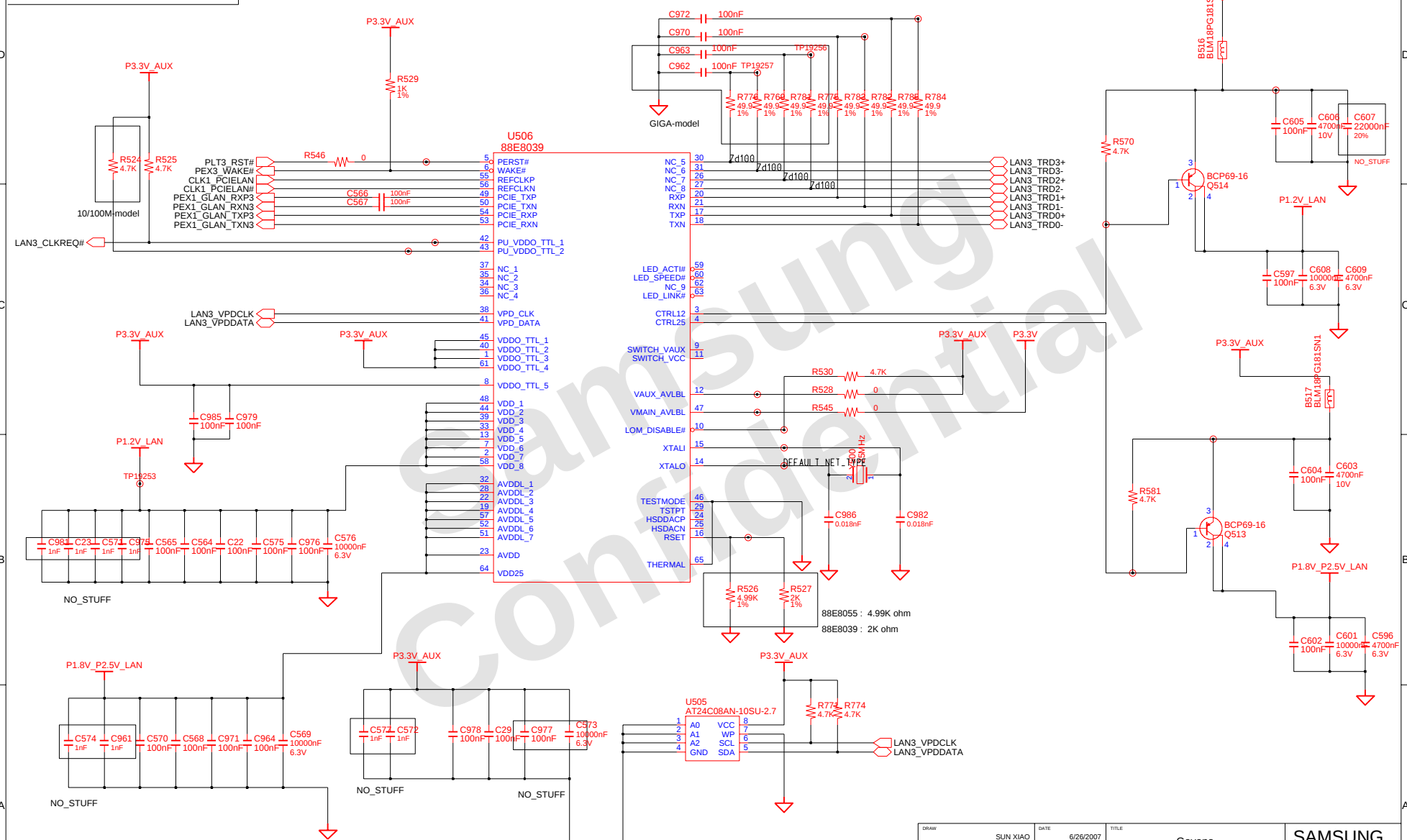
DRAW	SUN XIAO	DATE	6/26/2007	TITLE	Gevena	SAMSUNG ELECTRONICS
CHECK	WUSHUJIANG	DEV. STEP	PV2		HEAD PHONE JACK	
APPROVAL	KEVIN LEE	REV	1.0		AND MIC JACK	
MODULE CODE		LAST EDIT				
					October 23, 2007 10:38:02 AM	PAGE 40 OF 58

AUDIO POWER



DRAW	SUN XIAO	DATE	6/26/2007	TITLE	Gevena AUDIO AUDIO POWER	SAMSUNG ELECTRONICS
CHECK	WUSHUJIANG	DEV. STEP	PV2			PART NO. BA41-XXXXX
APPROVAL	KEVIN LEE	REV	1.0			
MODULE CODE		LAST EDIT	October 23, 2007 10:38:02 AM	PAGE	41 OF 58	

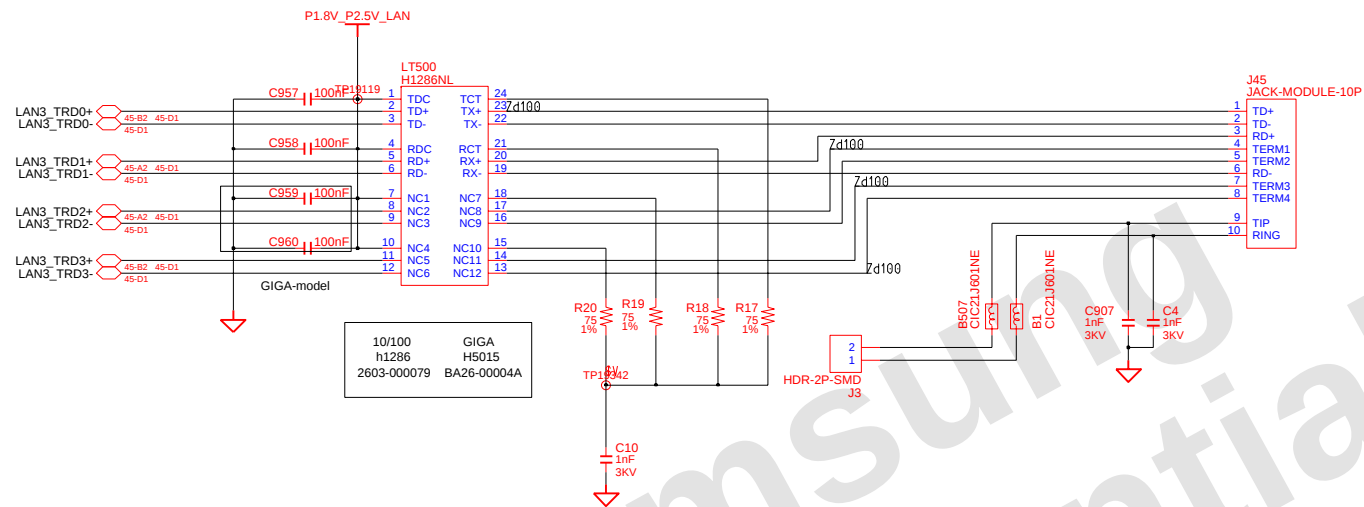
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DRAW	SUN XIAO	DATE	6/26/2007	Gevena LAN 88E8055	SAMSUNG ELECTRONICS	
CHECK	WUSHIJIANG	DEV STEP	PV2			
APPROVAL	KEVIN LEE	REV	1.0		PART NO.	BA41-XXXXX
MODULE CODE	LAST EDIT				October 23, 2007 10:38:02 AM	PAGE 42 OF 58

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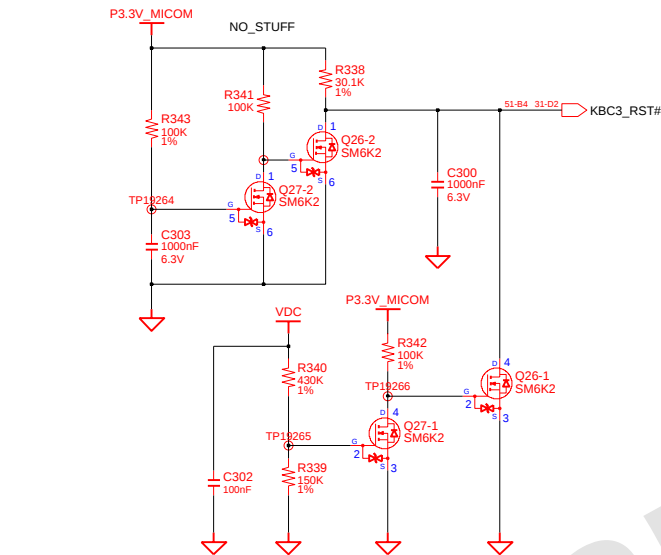
The distance between LAN controller
and transformer is designed to extend less than two inches.



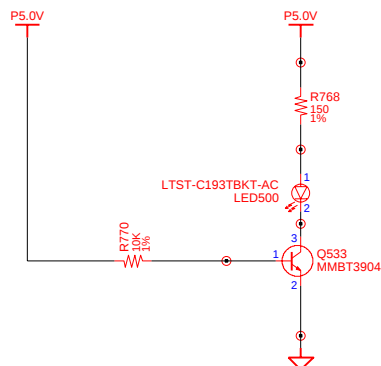
DRAW	SUN XIAO	DATE	6/26/2007	TITLE	Gevena LAN LAN JACK RJ45	SAMSUNG ELECTRONICS
CHECK	WUSHIJIANG	DEV. STEP	PV2			PART NO. BA41-XXXXX
APPROVAL	KEVIN LEE	REV	1.0			
MODULE CODE		LAST EDIT	October 23, 2007 10:38:02 AM	PAGE	43	OF 58

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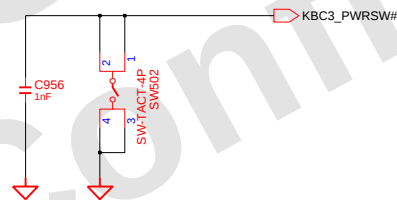
MICOM RESET



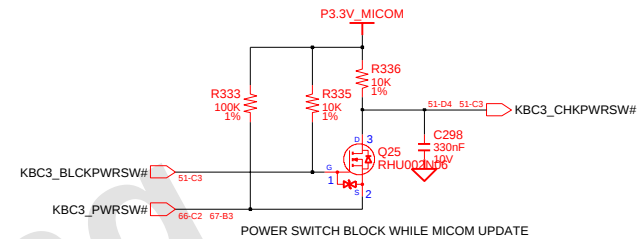
POWER ON LED



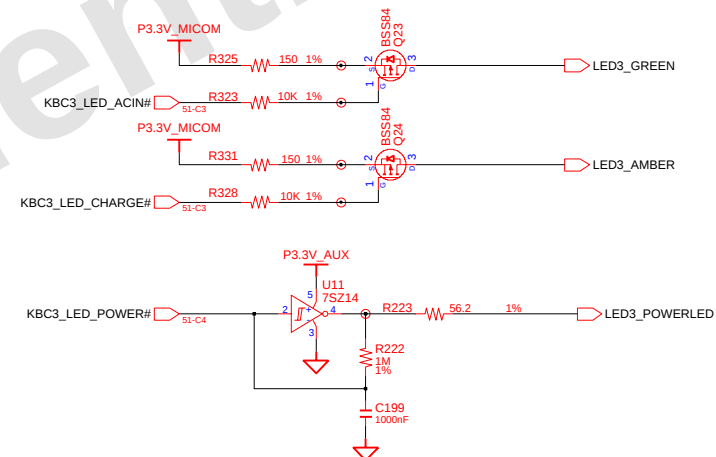
POWER ON SW BUTTON



FOR MICOM UPDATE



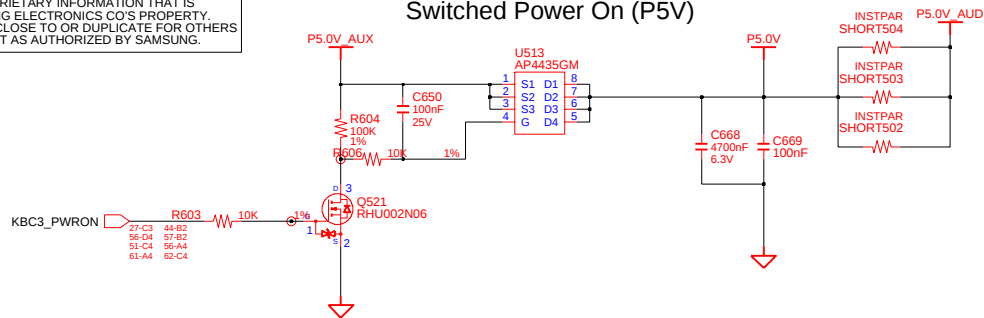
ADAPTERIN/CHARGING LED



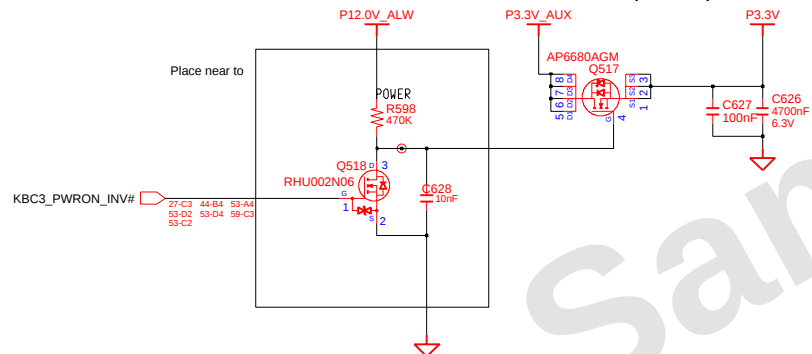
DRAW	SUN XIAO	DATE	6/26/2007	TITLE	Gevena	SAMSUNG ELECTRONICS
CHECK	WUSHUJIANG	DEV. STEP	PV2		MICOM	
APPROVAL	KEVIN LEE	REV	1.0		MICOM LOGIC SCH	
MODULE CODE		LAST EDIT				
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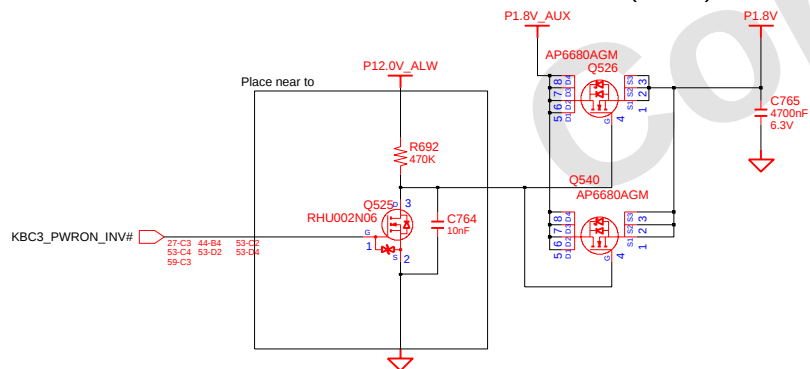
Switched Power On (P5V)



Switched Power On (P3.3V)

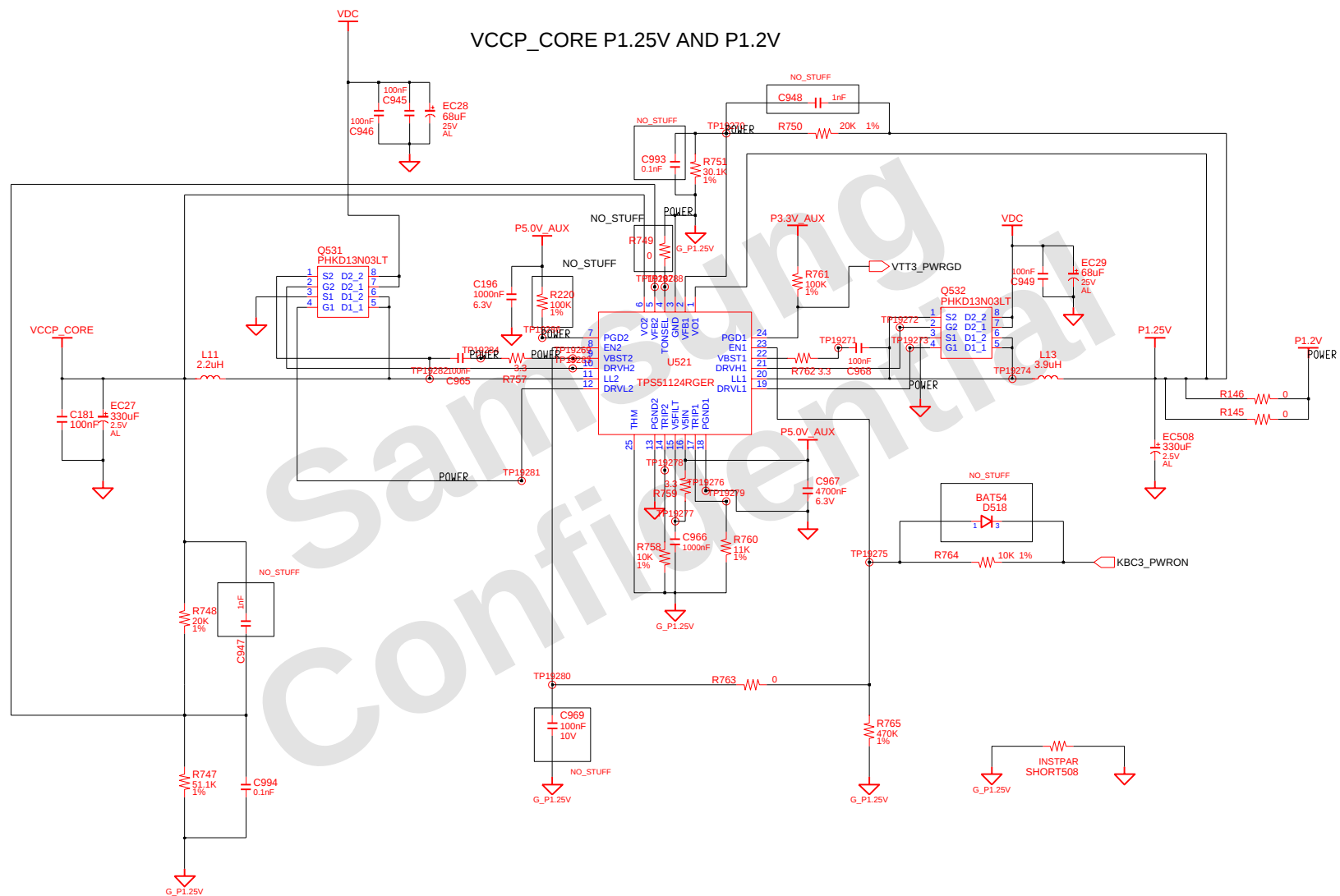


Switched Power On (P1.8V)



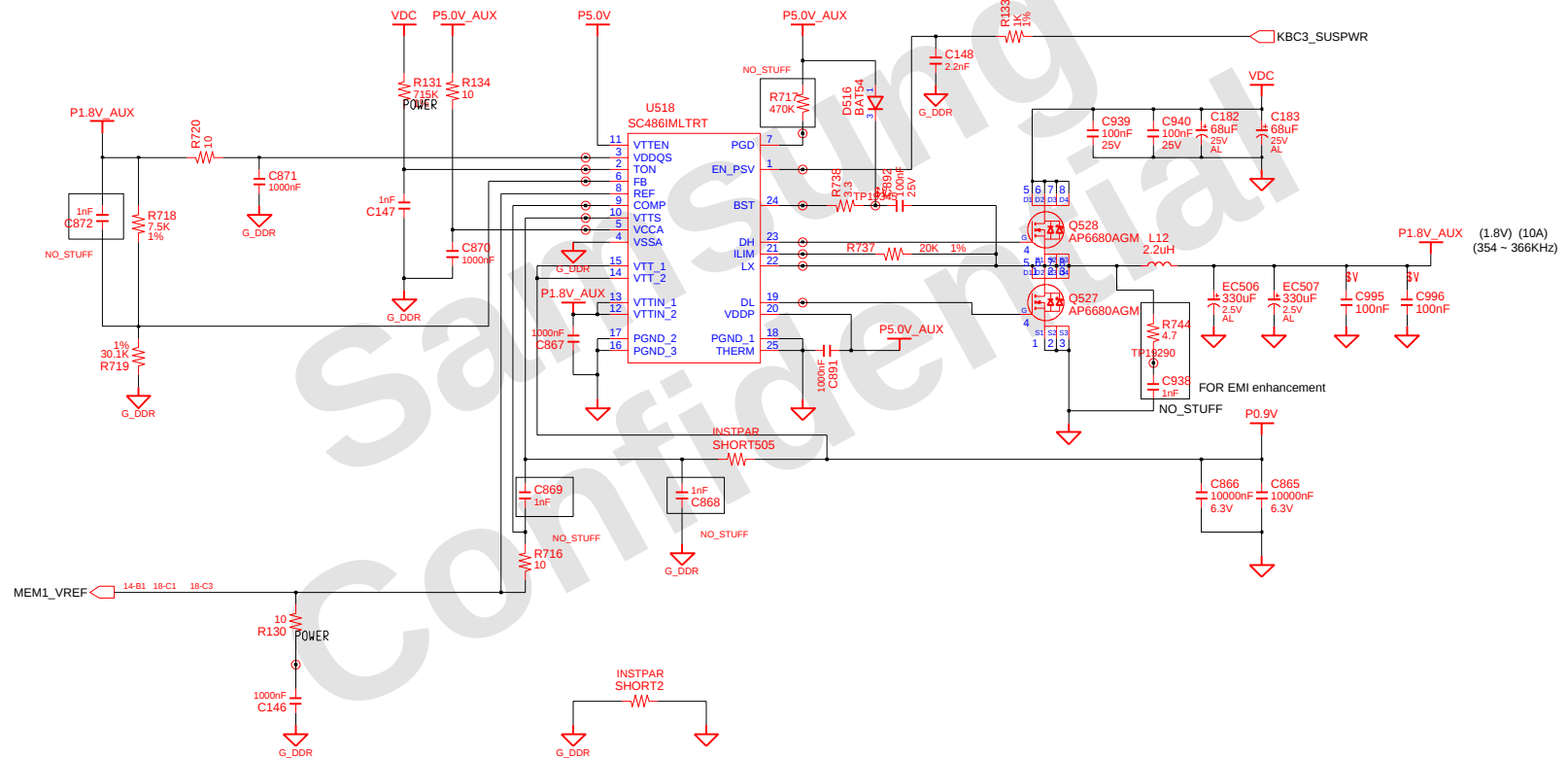
DRAW	SUN XIAO	DATE	6/26/2007	TITLE	Gevena MAIN	SAMSUNG ELECTRONICS
CHECK	WUSHIJIANG	DEV. STEP	PV2			PART NO. BA41-XXXXX
APPROVAL	KEVIN LEE	REV	1.0		SWITCH POWER P1.5V	
MODULE CODE		LAST EDIT	October 23, 2007 10:38:02 AM	PAGE	46	OF 58

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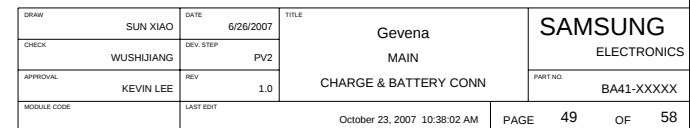
DRAW	SUN XIAO	DATE	6/26/2007	TITLE	Gevena MAIN VCCP P1.25V AND P1.2V	SAMSUNG ELECTRONICS PART NO. BA41-XXXXX
CHECK	WUSHUJIANG	DEV. STEP	PV2			
APPROVAL	KEVIN LEE	REV	1.0			
MODULE CODE		LAST EDIT	October 23, 2007 10:38:02 AM	PAGE	47 OF 58	

DDR2 Power



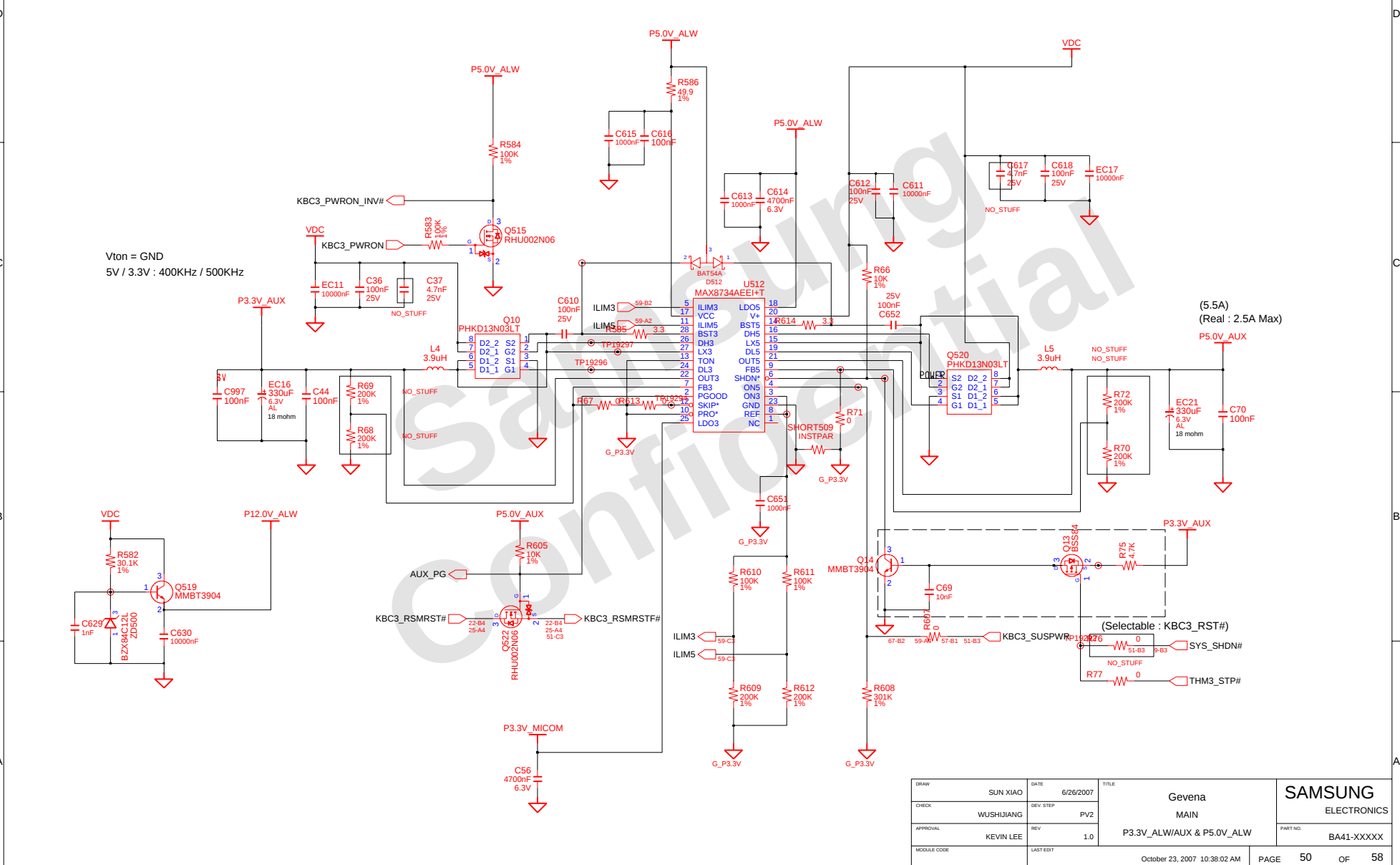
DRAW	SUN XIAO	DATE	6/26/2007	TITLE	Gevena MAIN	SAMSUNG ELECTRONICS
CHECK	WUSHIJIANG	DEV. STEP	PV2			PART NO. BA41-XXXXX
APPROVAL	KEVIN LEE	REV	1.0		DDR2 POWER	
MODULE CODE		LAST EDIT				
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CHARGER & POWER MANAGEMENT



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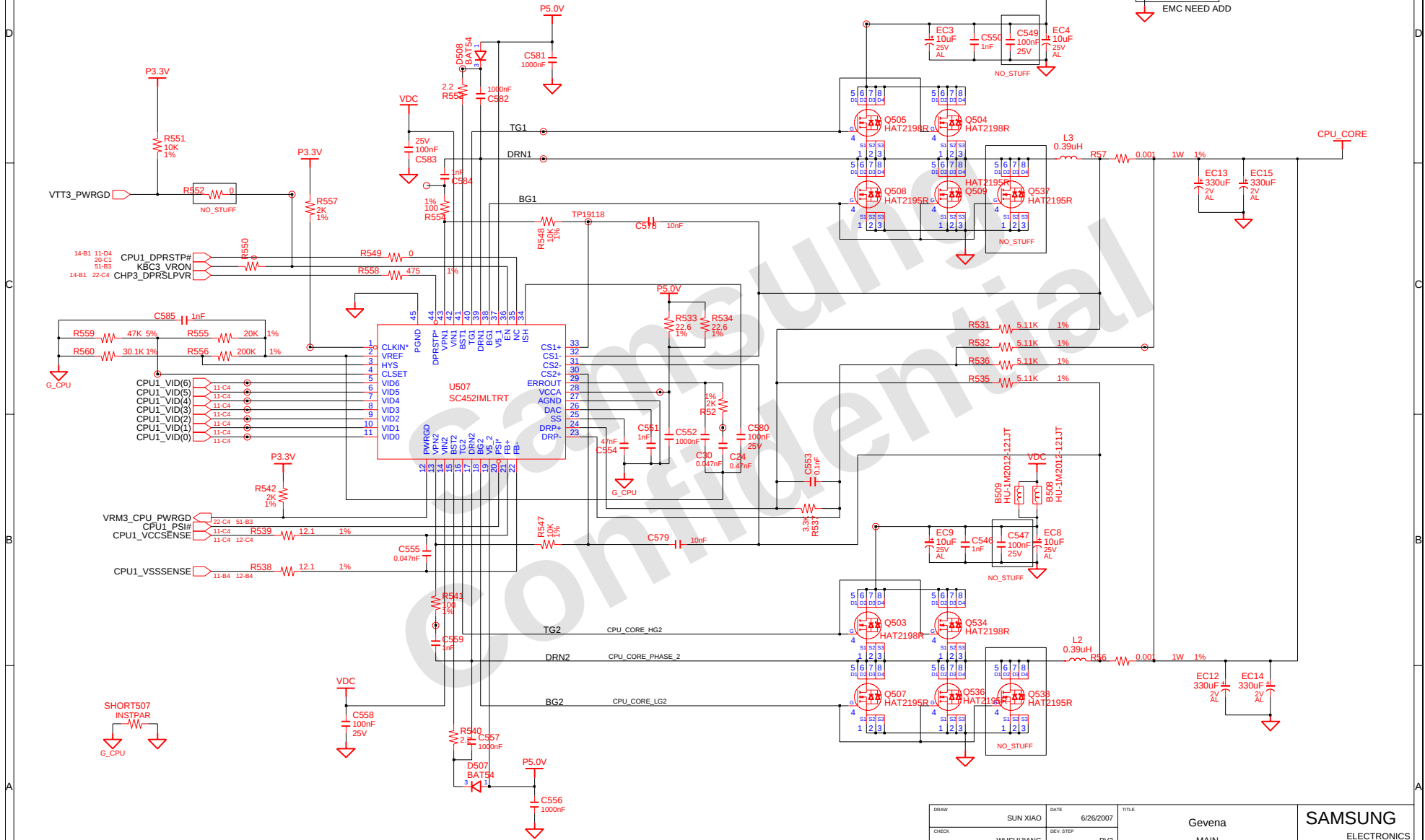
P3.3V_ALW/AUX & P5V_AUX



DRAW	SUN XIAO	DATE	6/26/2007	TITLE	Gevena
CHECK	WUSHUJIANG	DEV. STEP	PV2		MAIN
APPROVAL	KEVIN LEE	REV	1.0	P3.3V_ALW/AUX & P5.0V_ALW	
MODULE CODE		LAST EDIT		October 23, 2007 10:38:02 AM	
				PAGE	50 OF 58
					SAMSUNG ELECTRONICS
					PART NO. BA41-XXXXX

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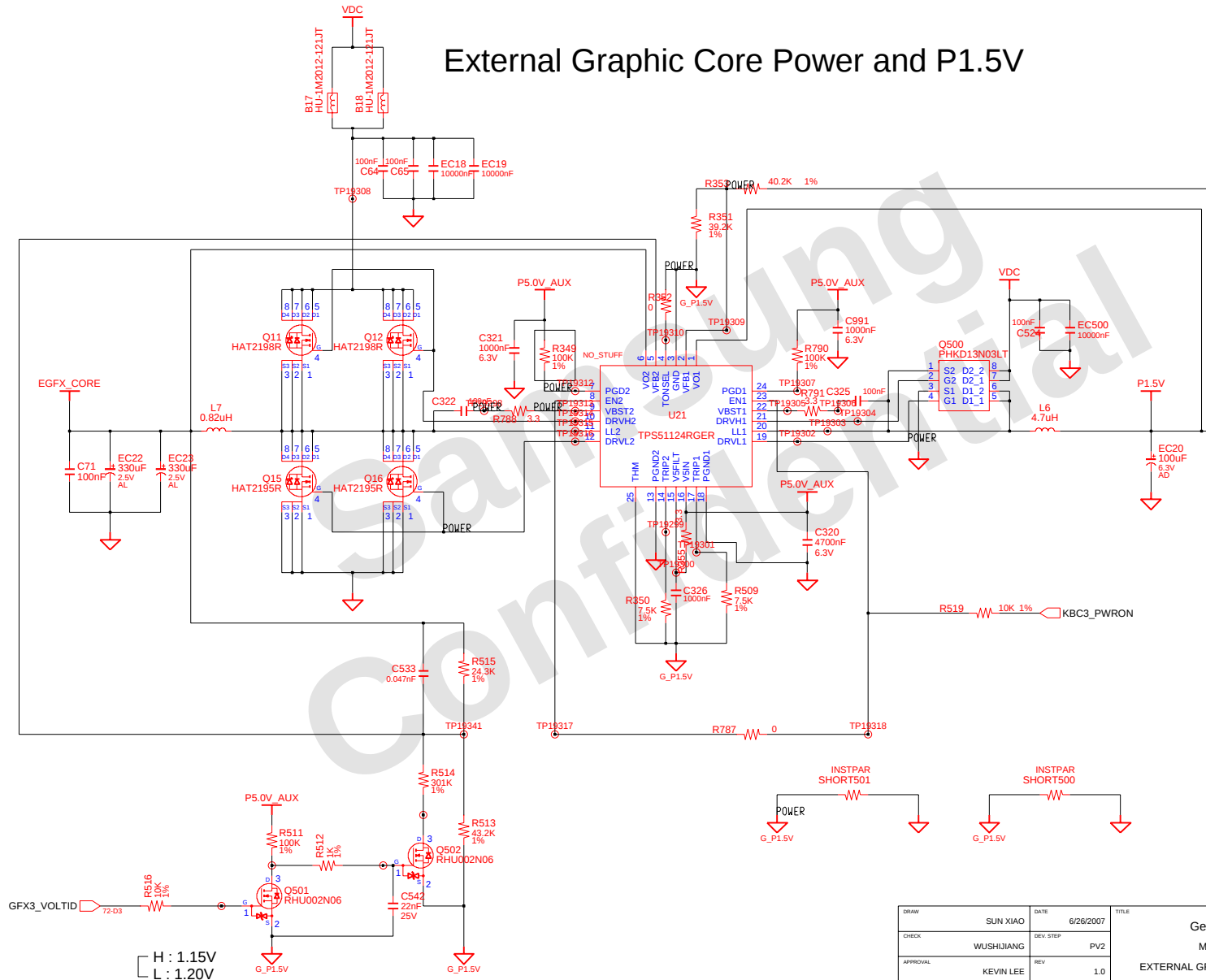
CPU VRM [SEMTECH]



DRAW	SUN XIAO	DATE	6/26/2007	TITLE	Gevena MAIN CPU VRM	SAMSUNG ELECTRONICS
CHECK	WUSHIJIANG	DEV STEP	PV2			PART NO. BA41-XXXXX
APPROVAL	KEVIN LEE	REV	1.0			
MODULE CODE		LAST EDIT				
October 23, 2007 10:38:02 AM						PAGE 51 OF 58

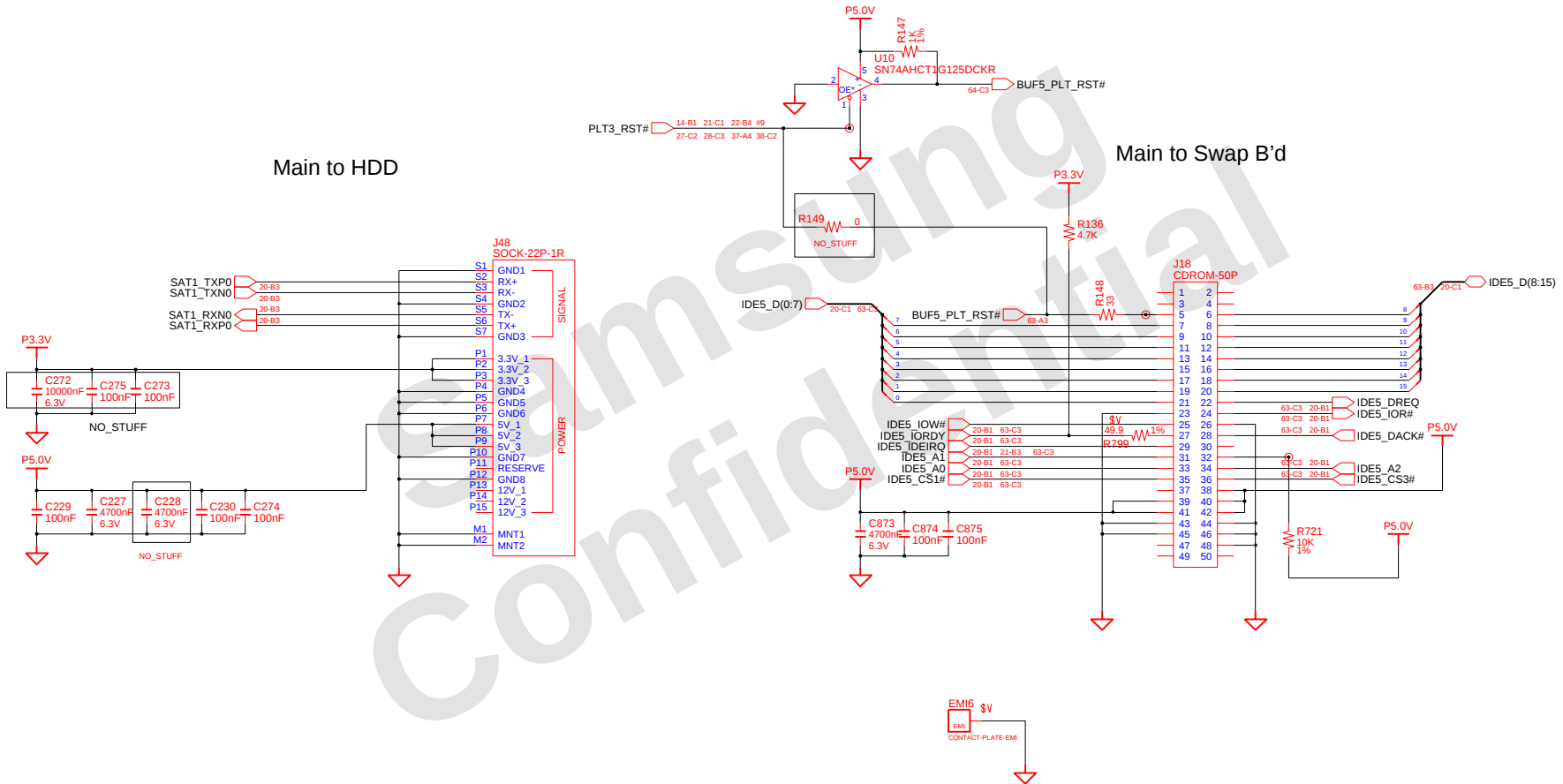
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External Graphic Core Power and P1.5V



H : 1.15V
L : 1.20V

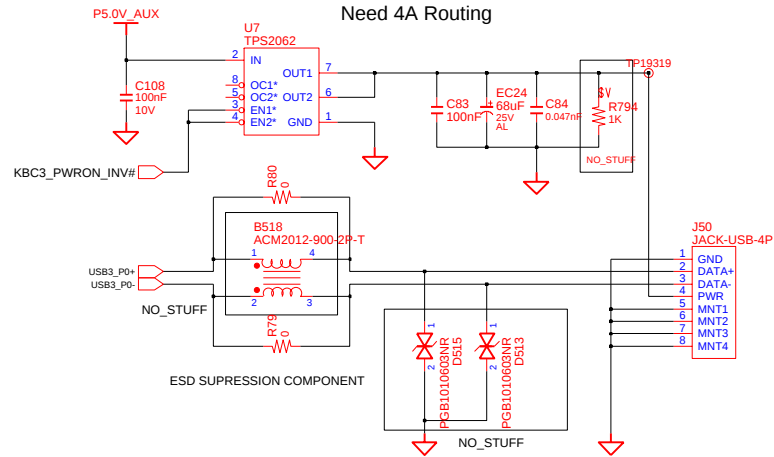
DRAW	SUN XIAO	DATE	6/26/2007	TITLE	Gevena MAIN	SAMSUNG ELECTRONICS
CHECK	WUSHIJIANG	DEV. STEP	PV2			
APPROVAL	KEVIN LEE	REV	1.0	EXTERNAL GFX POWER VRM		PART NO. BA41-XXXXX
MODULE CODE		LAST EDIT		October 23, 2007 10:38:02 AM	PAGE 52	OF 58



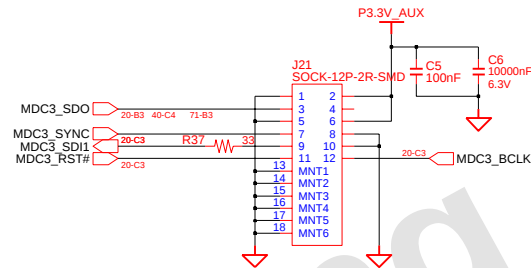
DRAW	SUN XIAO	DATE	6/26/2007	TITLE	Gevena	SAMSUNG ELECTRONICS
CHECK	WUSHIJIANG	DEV STEP	PV2	CONNECTOR		
APPROVAL	KEVIN LEE	REV	1.0	HDD & ODD CONNECTOR		
MODULE CODE		LAST EDIT	October 23, 2007 10:38:02 AM			
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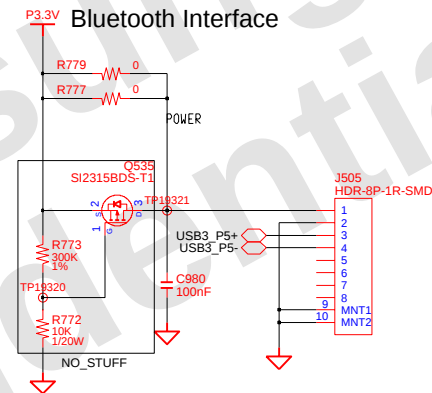
1 PORT USB CONNECTOR



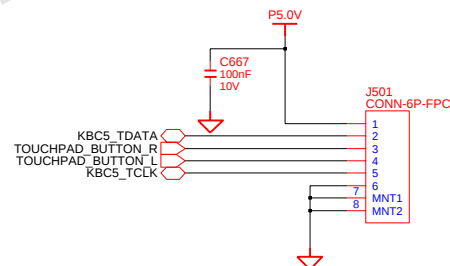
MDC Connector



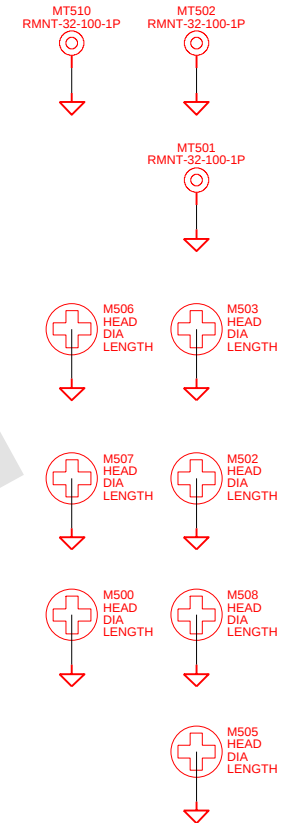
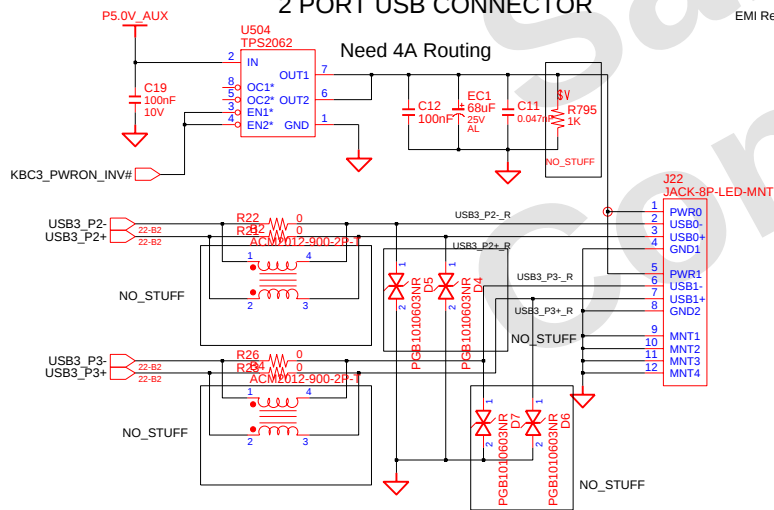
Bluetooth Interface



TOUCHPAD CONNECTOR

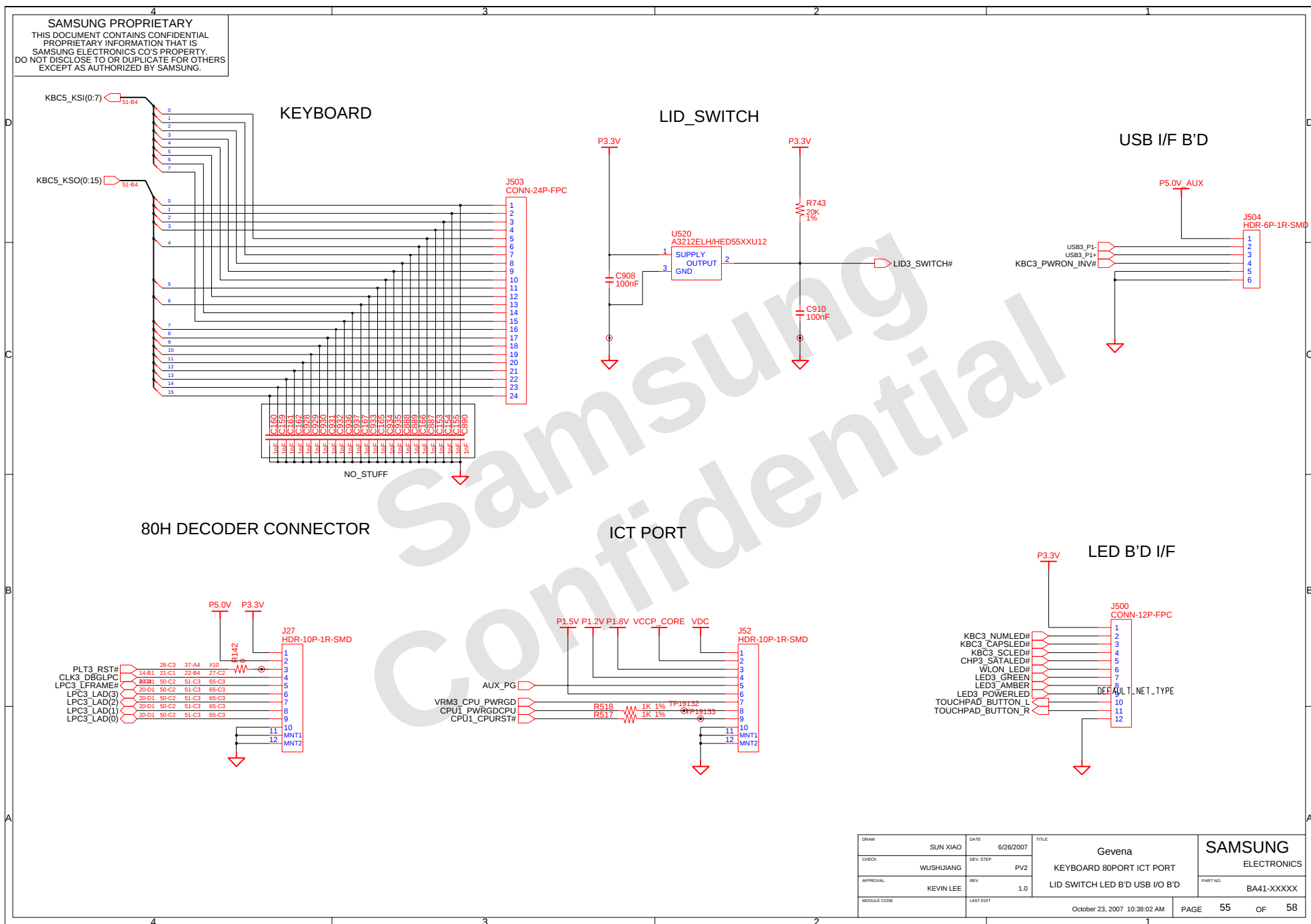


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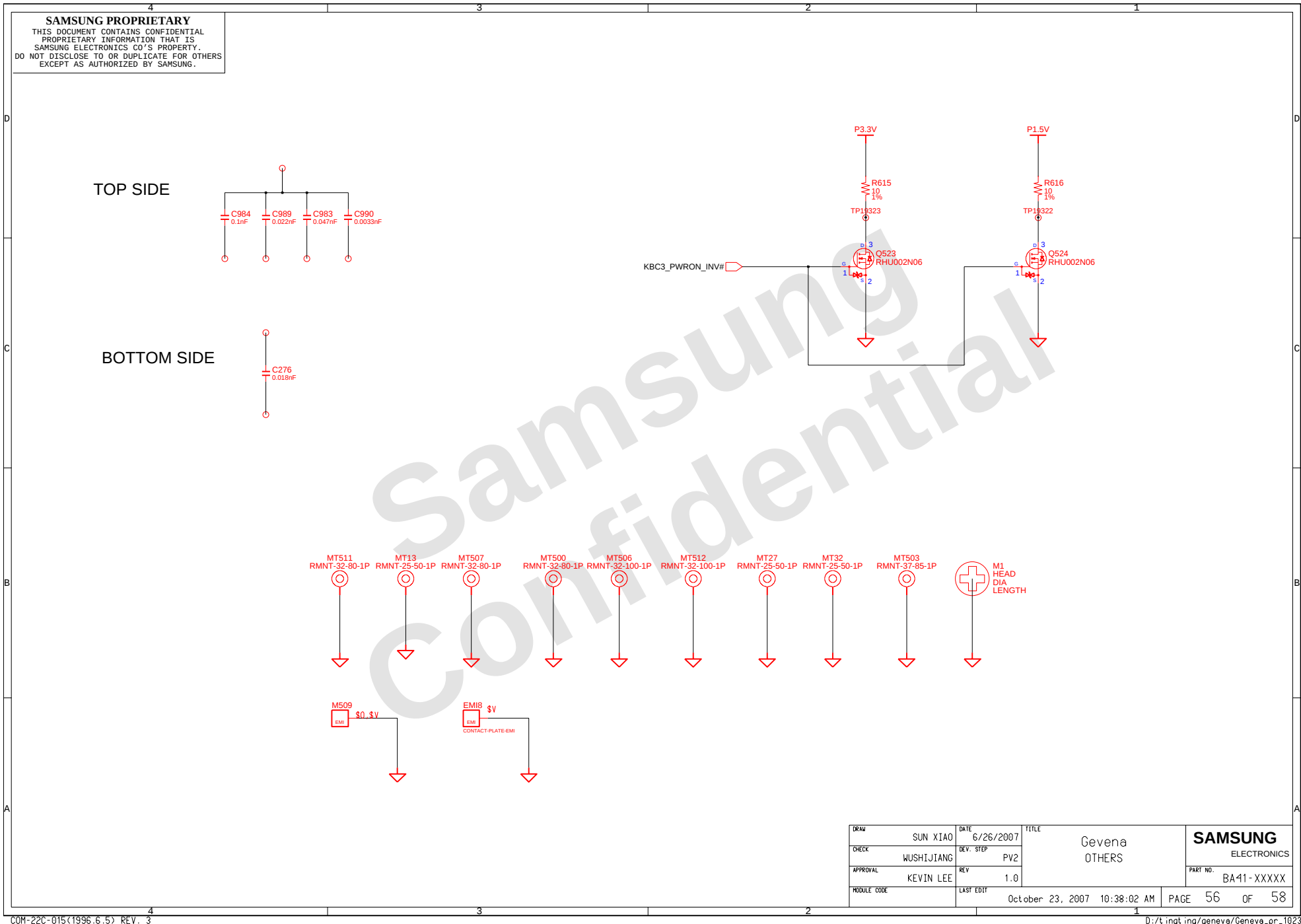


DRAW	SUN XIAO	DATE	6/26/2007	TITLE	Gevena	SAMSUNG
CHECK	WUSHIJIANG	DEV STEP	PV2		USB MDC &	ELECTRONICS
APPROVAL	KEVIN LEE	REV	1.0		TOUCHPAD BLUETOOTH I/F	PART NO. BA41-XXXXX
MODULE CODE		LAST EDIT	October 23, 2007 10:38:02 AM	PAGE	54	OF 58

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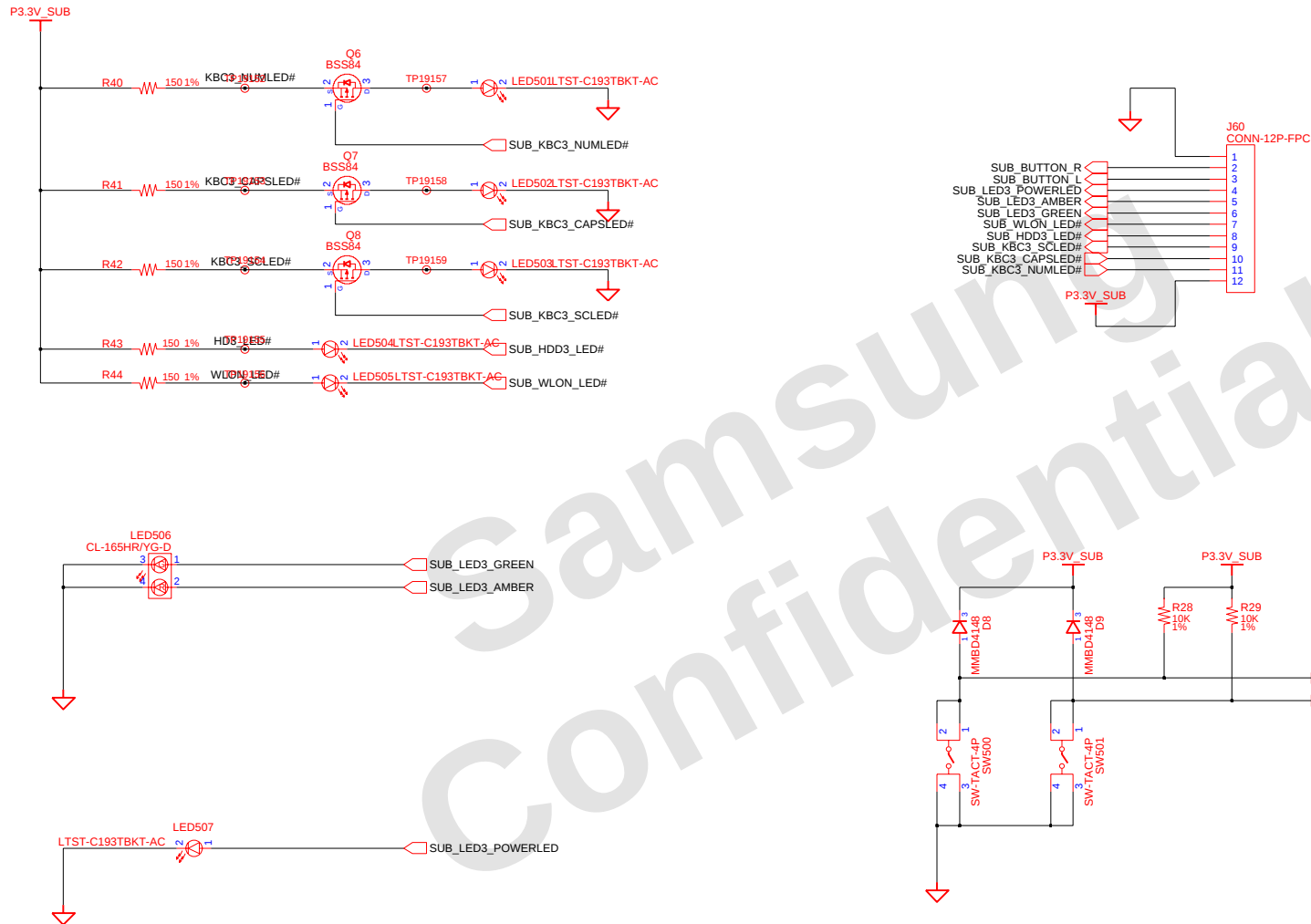


DRAW	SUN XIAO	DATE	6/26/2007	TITLE	Gevena	SAMSUNG
CHECK	WUSHUJIANG	DEV. STEP	PV2	KEYBOARD 80PORT ICT PORT		ELECTRONICS
APPROVAL	KEVIN LEE	REV	1.0	LID SWITCH LED B'D USB I/O B'D	PART NO.	BA41-XXXXX
MODULE CODE		LAST EDIT	October 23, 2007 10:38:02 AM	PAGE	55	OF 58



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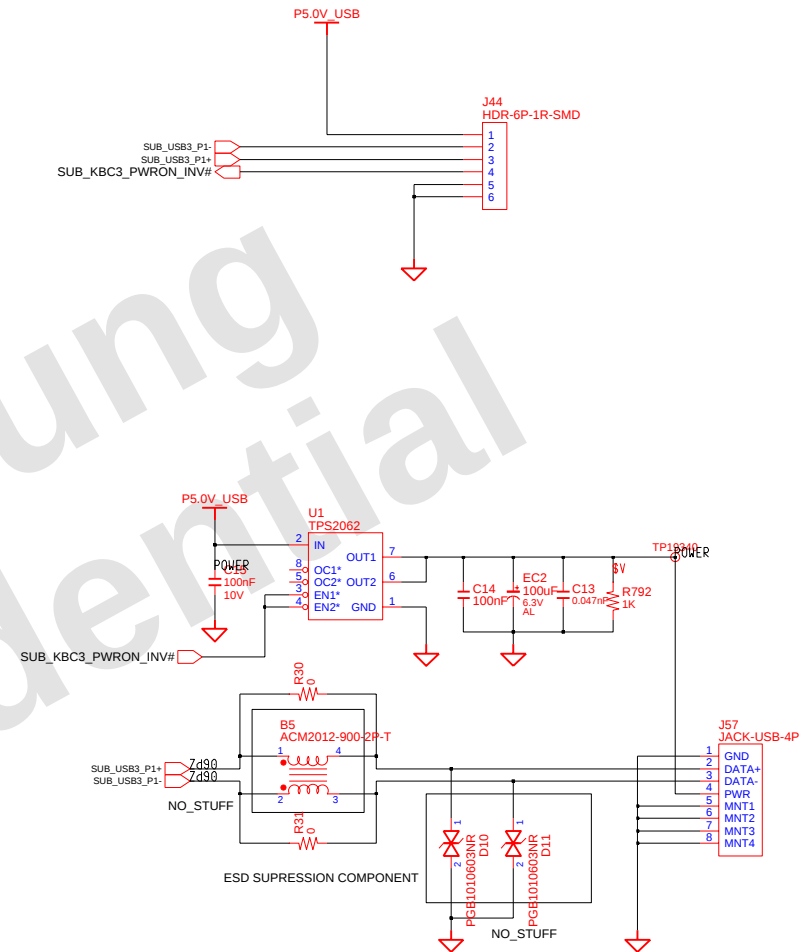
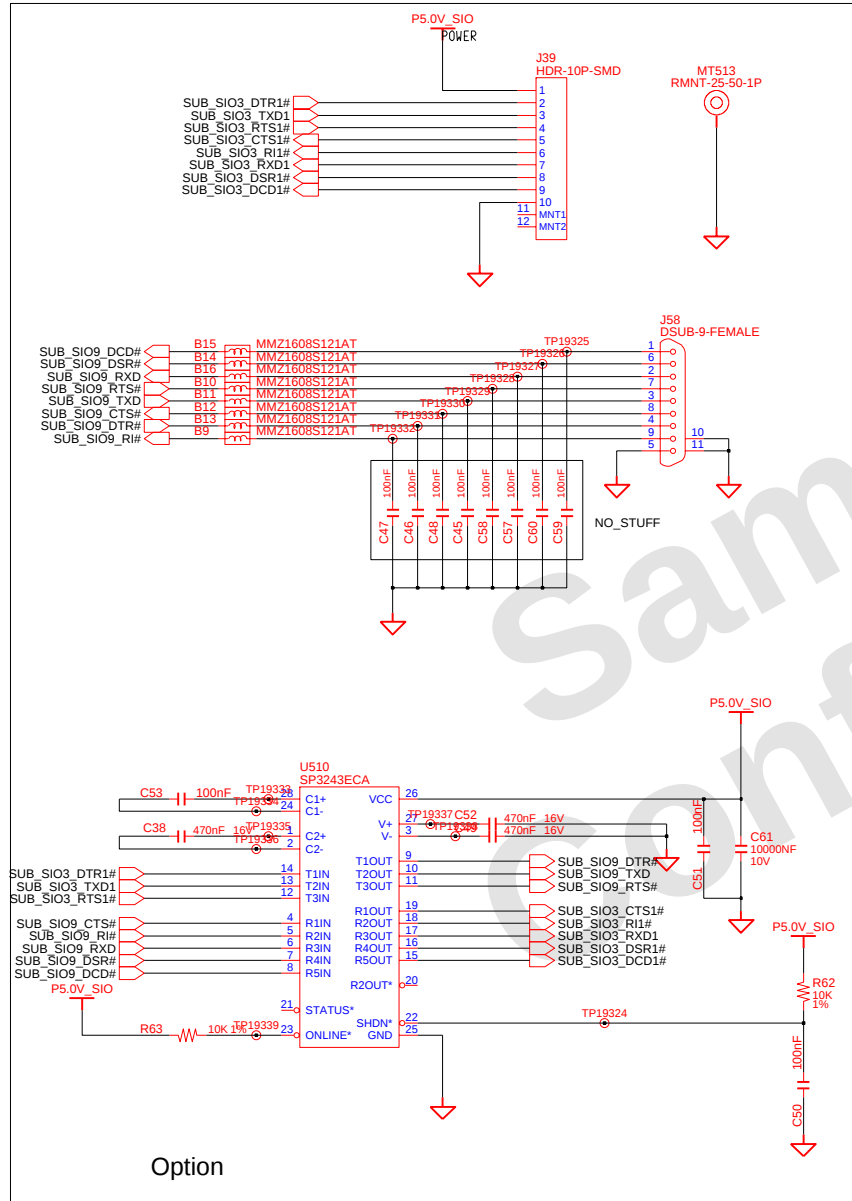
TOUCHPAD AND LED B'D



DRAW	SUN XIAO	DATE	6/26/2007	Gevena TOUCHPAD AND LED B'D		SAMSUNG ELECTRONICS	
CHECK	WUSHIJIANG	DEV. STEP	PV2				
APPROVAL	KEVIN LEE	REV	1.0				
MODULE CODE	LAST EDIT						
October 23, 2007 10:38:02 AM				PAGE	57	OF	608

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SIO AND USB SUB B'D



DRAW	SUN XIAO	DATE	6/30/2007	TITLE	Geneva	SAMSUNG ELECTRONICS PART NO. BA41-undef ined
CHECK	WUSHIJIANG	DEV. STEP	PV2		MIO BOARD	
APPROVAL	KEVIN LEE	REV	1.0		USB AND SIO SUB B'D	
MODULE CODE		LAST EDIT	October 23, 2007 10:38:02 AM	PAGE	58 OF 60	

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TP18398OAU5_HP_O_R_CR
TP18399OAU5_HP_O_R_RB
TP18400OAU5_INTMIC
TP18401OAU5_L_LINE_O_L
TP18402OAU5_L_LINE_O_L_CU
TP18403OAU5_L_LINE_O_R
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TP17804OGFX3_VOLT10
TP17805OGFX3_VSYNC

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DRAW	SUNXIAO	DATE	9/10/2007	TITLE	Gevena TEST POINT	SAMSUNG ELECTRONICS PART NO. BA41 - undef ined
CHECK	WUSHIJIANG	DEV. STEP	PV2			
APPROVAL	KEVIN.LEE	REV	1.0			
MODULE CODE		LAST EDIT	October 23, 2007 10:38:02 AM	PAGE	59 OF 59	

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TP186067 OMCH1.HSCOMP#_R
TP186068 OMCH1.HVREF
TP186069 OMCH1.HXSING
TP186100 OMCH1.VITLIF_C
TP186101 OMCH1.VITLIF_C
TP185855 OMCH1.VITLIF_3_C
TP185886 OMCH3.BMBUS#
TP185887 OMCH3.CLKREQ#
TP185888 OMCH3.CL_VREF
TP185889 OMCH3.EXITSS#
TP185890 OMCH3.EXITSS#
TP185891 OMCH3.ICHSYNCH#
TP185892 OMCH3.ICHSYNCH#_R
TP185893 OMCH1.TEST1_R
TP185894 OMCH1.TEST2_R
TP185895 OMDC3.BCLK
TP185896 OMDC3.RST#
TP185897 OMDC3.SD11
TP185898 OMDC3.SD11_R
TP185899 OMDC3.SD0
TP186000 OMDC3.SYNC
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TP185836 OMCH1.VREF
TP185839 OMIN3.CLKREQ#

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TP18541 OMODEM_TIP_BCON

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T919070 OSP T3.CLK_R.ICH
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T919073 OSP T3.C52#
T919074 OSP T3.MOS1
T919075 OSP T3.MOS1_R.ICH
T919076 OSP K5.L+
T919077 OSP K5.L+
T919078 OSP K5.R+
T919079 OSP K5.R+
T919080 SUB BUTTION_L
T919081 SUB BUTTION_R
T919082 SUB HD03_LED
T919083 SUB KB_C3.CAPSLD#
T919084 SUB KB_C3.C5LED#
T919085 SUB KB_C3.PURON_IN#
T919086 SUB KB_C3.NCLED#
T919087 SUB LED3.AMBER
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T919099 SUB S103.XD2#
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T919160 SUB S103.XD2
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[illegible]TP18053 OPEX3_WAKE#
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TP19055VTT13.PWRGD
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TP18245CG.AUD
TP18198CG.CPU
TP18200CG.CPU
TP18204CG.DDR
TP18205CG.DDR
TP18212CG.P1.5V
TP18217CG.P3.3V
TP18222LCD.VDD03V
TP18223LCD.VDD03V
TP18224LCD.VDD03V
TP18225LCD.VDD03V
TP18116PRTC.BAT
TP18122VDDMOS.PLLVDD
TP18124VCCP.CORE
TP18125VCCP.CORE
TP18130VCC.CRT
TP18131VCC.CRT
TP18081VDDC
TP18084VDDC.ADPT
TP18089VDDC.INV
TP18090VDDC.INV
TP18098VDDA.VDD

TP18164OP0.9V
TP18170OP1.05V_PEG
TP18172OP1.25V
TP18178OP1.2V
TP18183OP1.5V
TP18187OP1.5V_EXP
TP18188OP1.8V
TP18192OP1.8V_AUX
TP18134OP12.0V_ALW
TP18136OP3.3V_AUX
TP18141OP3.3V_AUX_EXP
TP18146OP3.3V_EXP
TP18150OP3.3V_MCD
TP18152OP3.3V_MICOM
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TP18161OP5.0V_ALW
TP18104OP5.0V_AUX
TP18109OP5.0V_SIO
TP18112OP5.0V_SIB

DATE	9/10/2007	TITLE	Gevena TEST POINT		SAMSUNG ELECTRONICS	
CHECK	WUSHUIJIANG,	DEV. STEP	PV2		PART NO.	BA41-undef i
APPROVAL	KEVIN.LEE,	REV	1.0			
MODULE CODE	LAST EDIT		October 23, 2007 10:38:02 AM	PAGE	60	OF 60