

Petronas-15

CPU :LLANO
Chip Set :AMD HUDSON M2(A60M)
GFX :PX
Remarks :SABINE PLATFORM

Model Name : Petronas-D 15
PBA Name : MAIN
PCB Code : BA41-01681A (GCE)
BA41-01681A (GBM)
BA41-01681A (NY)

Dev. Step : PR
Revision : 1.0
T.R. Date : 2011.05.17

Design	CHECK	APPROVAL

Owner : SEC Mobile R & D Signature : X

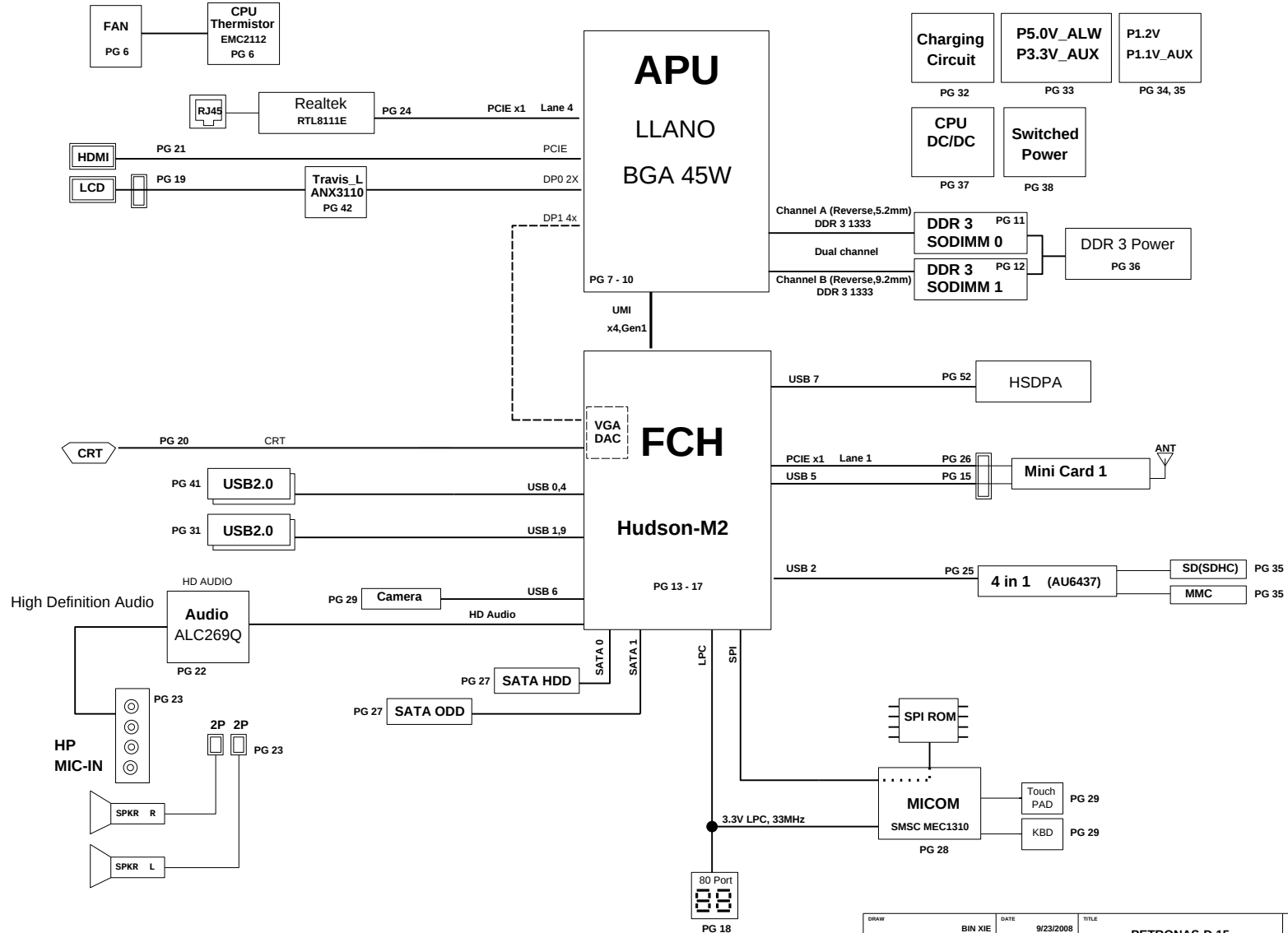
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DRAW	BIN XIE	DATE	10/10/2008	TITLE	PETRONAS-D 15	SAMSUNG
CHECK	LEI GUO	DEV. STEP	PV	MAIN		ELECTRONICS
APPROVAL	BC LEE	REV	REV 1.0	COVER		PART NO. BA41-####A
MODULE CODE		LAST EDIT	May 10, 2011 10:53:25 AM	PAGE	1	OF 54

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BLOCK DIAGRAM



DRAW	BIN XIE	DATE	9/23/2008	TITLE	PETRONAS-D 15 MAIN BLOCK DIAGRAM	SAMSUNG ELECTRONICS PART NO. BA41-####A
CHECK	LEI GUO	DEV. STEP	PV			
APPROVAL	BC LEE	REV	REV 1.0			
MODULE CODE		LAST EDIT				
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SCHEMATIC ANNOTATIONS AND BOARD INFORMATION

Voltage Rails		Active in
VDC P3.3V_MICOM P5.0V_ALW P5.0V_STB	Primary DC system power supply (7 to 21V) 3.3V always power rail (for Micom) 5.0V always power rail 5.0V always power rail	S4 - S5
P5.0V_AUX P3.3V_AUX P1.1V_AUX	5.0V switched on power rail (off in S4-S5) 3.3V switched on power rail (off in S4-S5) 1.5V power rail for DDR (off in S4-S5)	S3
P5.0V P3.3V P1.1V P0.75V	5.0V switched power rail (off in S3-S5) 3.3V switched power rail (off in S3-S5) 1.1V switched power rail (off in S3-S5) 0.75V power rail for DDR (off in S3-S5)	S0
CPU_CORE CPU_VDDNB P1.2V (VDDP/VDDR)	Core Voltage for CPU Core Voltage for CPU VCC for APU	S0

USB PORT Assign		PCI Express Assign	
PORT #	ASSIGNED TO	PORT #	ASSIGNED TO
0	SYSTEM PORT 1	1	Mini Card 1 (WLAN)
1	SYSTEM PORT 2	2	NC
2	MMC 14"	3	NC
3	USIM	4	NC
4	SYSTEM PORT 3	5	NC
5	Mini Card 1 (WLAN)	6	NC
6	Camera	7	NC
7	HSDPA	8	NC
8	BLUETOOTH		
9	SYSTEM PORT 4		
10	NC		
11	NC		
12	NC		
13	NC		

SATA PORT Assign	
PORT #	ASSIGNED TO
0	HDD
1	ODD
2	NC
3	NC
4	NC
5	NC

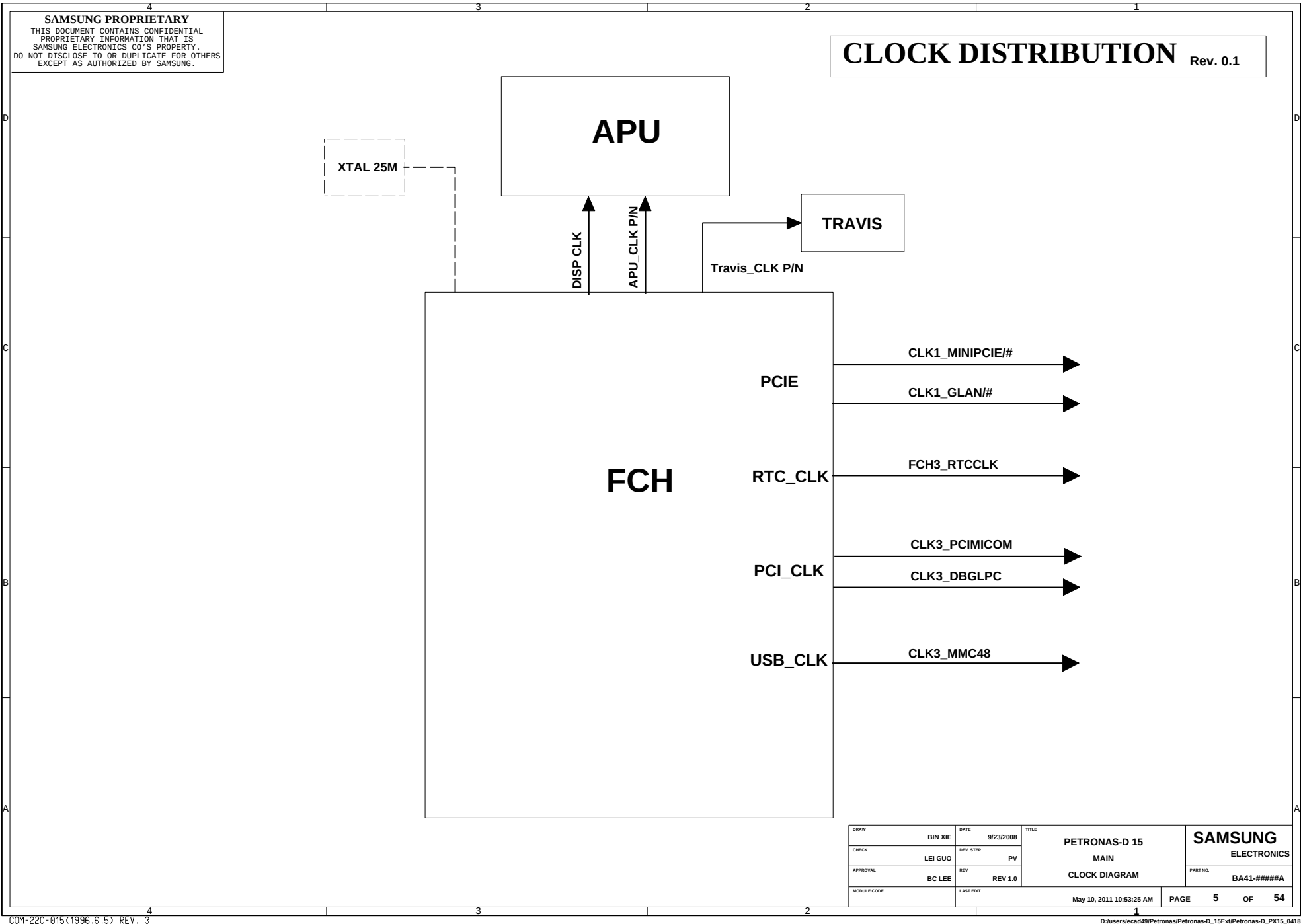
Crystal / Oscillator			
TYPE	FREQ	DEVICE	USAGE
Crystal	32.768KHz	FCH	Real Time Clock
Crystal	25MHz	LAN	Wired LAN
Crystal	25MHz	FCH	

LCD Pannel Detect (TBD)		
Devices	Resolution	PANNEL_DETECT_0

I ² C / SMB Address			
Devices	Address	Hex	Bus
IBEX PEAK	Master	-	SMBUS Master
CPU Thermal Sensor	0111 101x	7Ah	Thermal Sensor
SODIMM0	1010 000x	A0h	-
SODIMM1	1010 010x	A4h	-
Thermal Sensor on SODIMM0	0011 000x	30h	-
Thermal Sensor on SODIMM1	0011 010x	34h	-

DRAW	BIN XIE	DATE	9/23/2008	TITLE	PETRONAS-D 15 MAIN BOARD INFO	SAMSUNG ELECTRONICS
CHECK	LEI GUO	REV. STEP	PV			
APPROVAL	BC LEE	REV	REV 1.0			
MODULE CODE	LAST EDIT		May 10, 2011 10:53:25 AM			
				PAGE	3	OF 54



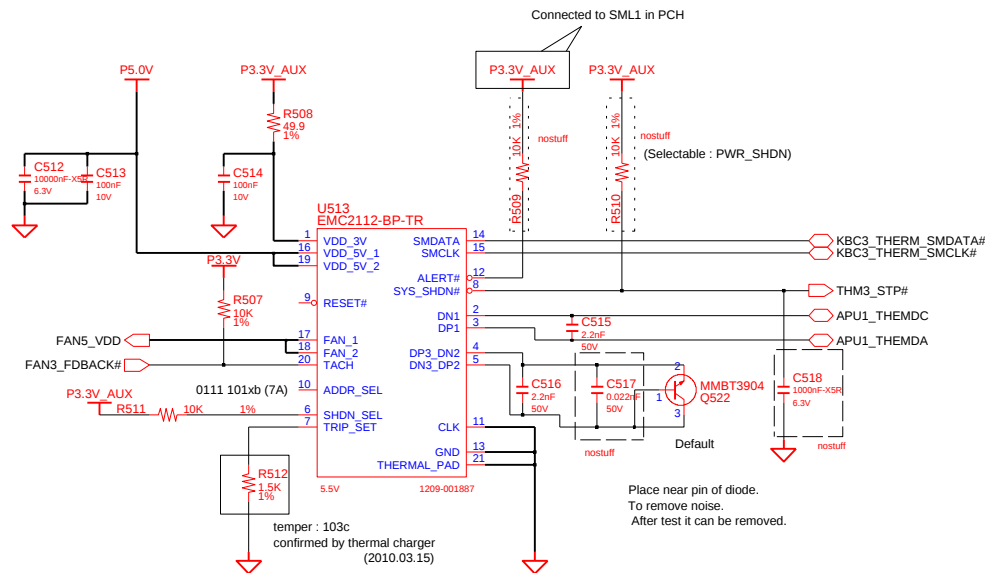


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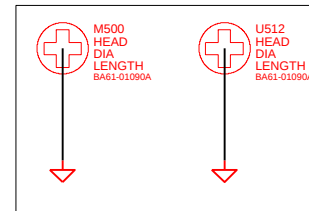
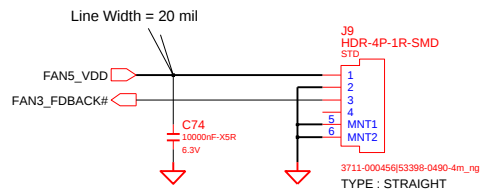
THERMAL SENSOR & FAN CONTROL

ADDRESSSEL MODE	
0	0101 111xb
✓ HIGH Z	0111 101xb (7A)
1	0101 110xb

SHDN_SEL MODE	
0	INTEL TR MODE
HIGH Z	AMD CPU/DIODE MODE
✓ 1	EXT.DIODE 2 MODE

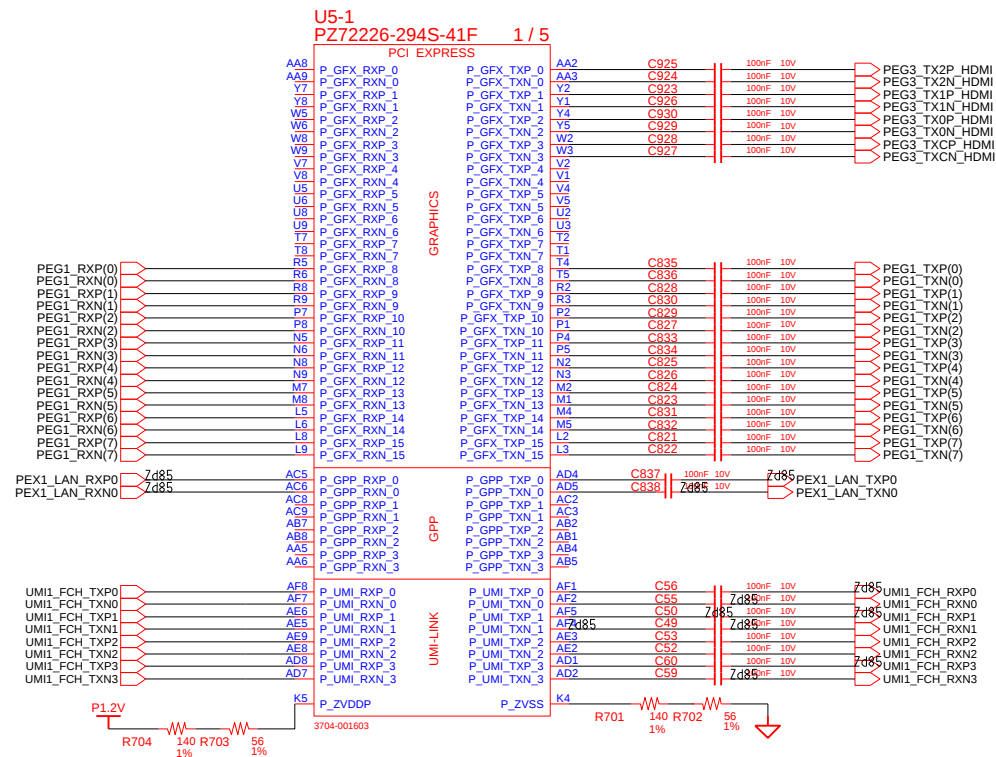


FAN PEM

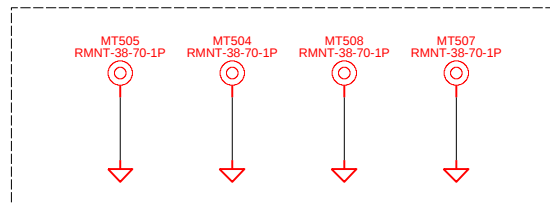


DESIGN	BIN XIE	DATE	9/23/2008	TITLE	PETRONAS-D 15	SAMSUNG
CHECK	LEI GUO	DEV. STEP	PV		THERMAL SENSOR	ELECTRONICS
APPROVAL	BC LEE	REV	REV 1.0		THERMAL SENSOR EMC2112	PART NO.
MODULE CODE		LAST EDIT				BA41-####A
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Llano Processor (FS1)

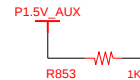
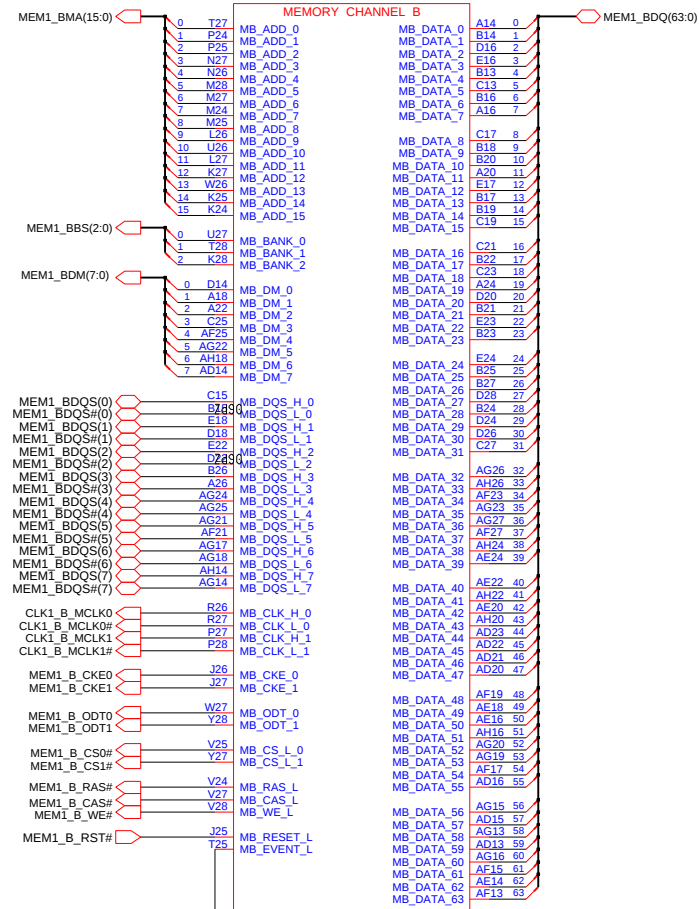
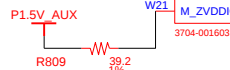
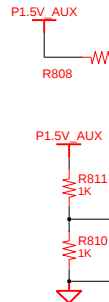
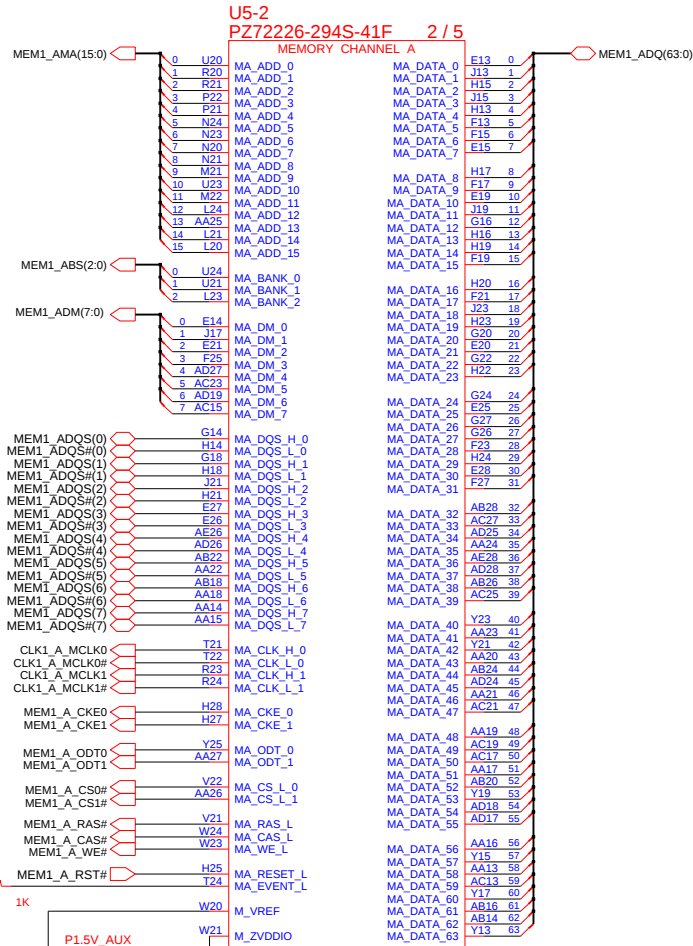


CPU MOUNT

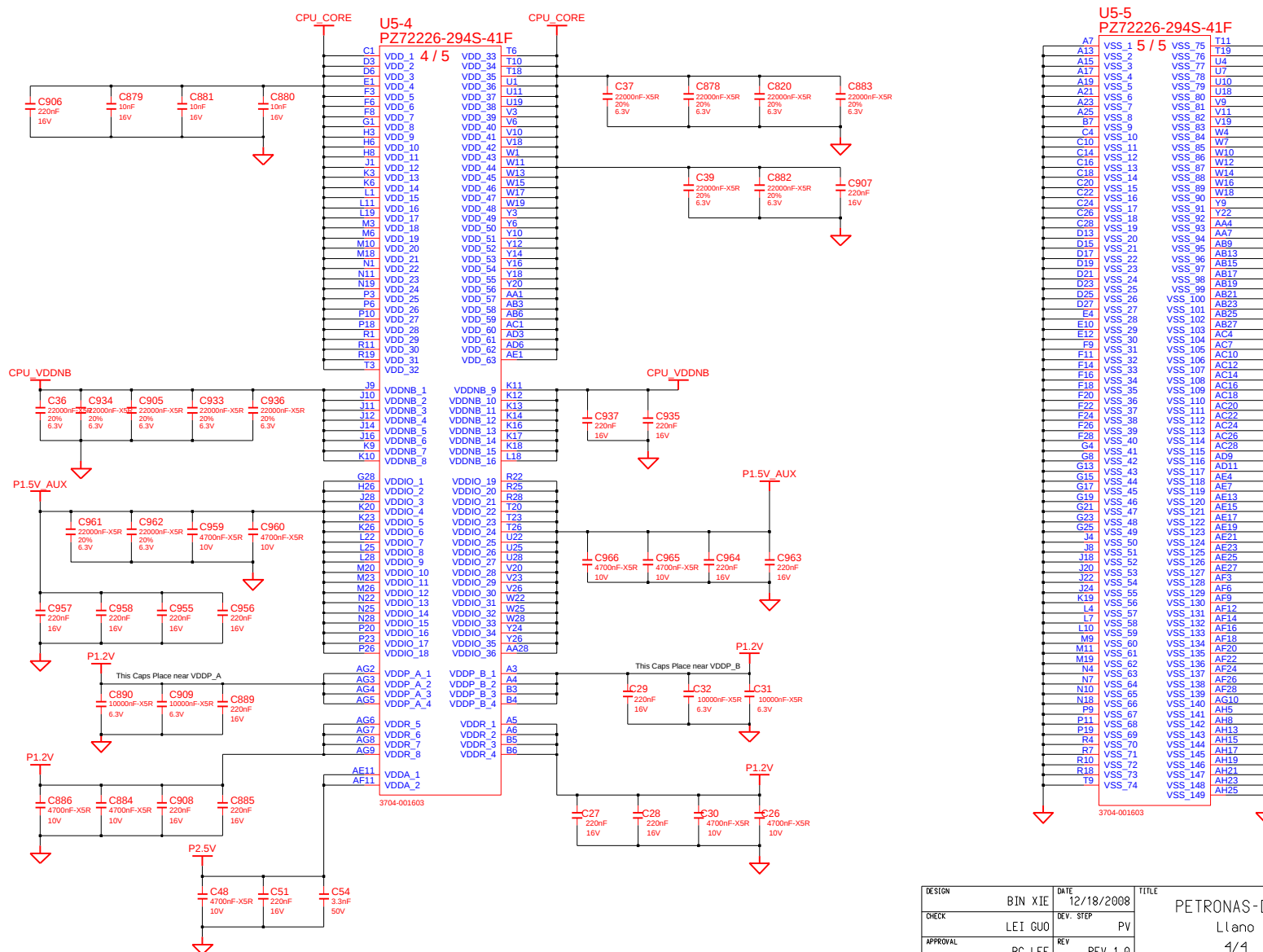


DESIGN	BIN XIE	DATE	12/18/2008	TITLE	PETRONAS-D 15	SAMSUNG ELECTRONICS
CHECK	LEI GUO	DEV. STEP	PV	Llano		
APPROVAL	BC LEE	REV	REV 1.0	1/4		PART NO. BA41-#####A
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DESIGN	BIN XIE	DATE	12/18/2008	TITLE	PETRONAS-D 15	SAMSUNG ELECTRONICS PART NO. BA41-#####A
CHECK	LEI GUO	DEV. STEP	PV		Llano	
APPROVAL	BC LEE	REV	REV 1.0		2/4	
MODULE CODE		LAST EDIT				
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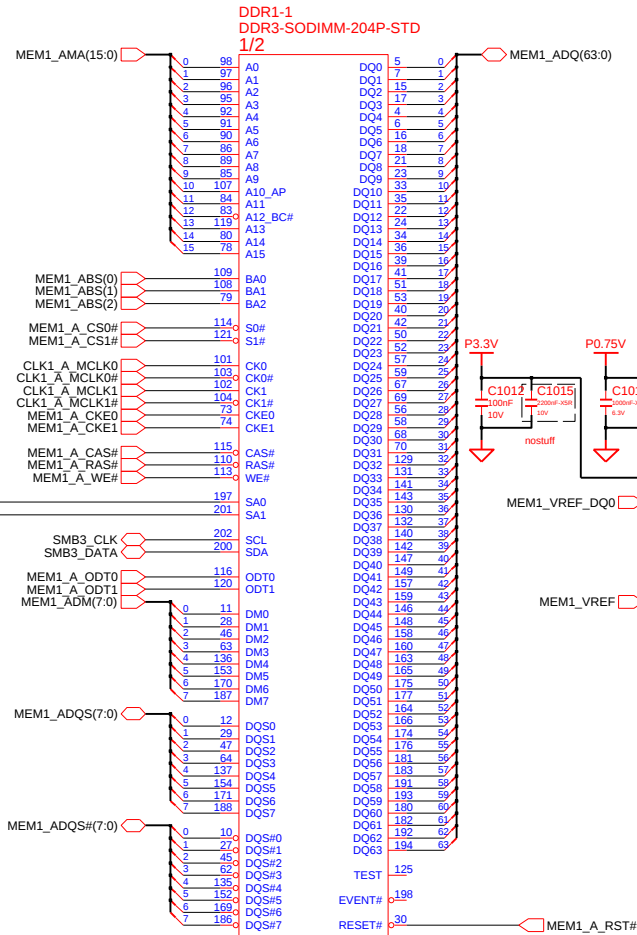


DESIGN	BIN XIE	DATE	12/18/2008	TITLE	PETRONAS-D 15	SAMSUNG ELECTRONICS	
CHECK	LEI GUO	DEV. STEP	PV				
APPROVAL	BC LEE	REV	REV 1.0				
MODULE CODE	LAST EDIT		May 10, 2011 10:53:25 AM				PAGE
						PART NO.	BA41-#####

SO-DIMM#0 : 2nd SO-DIMM

DDR SO-DIMM #0

Height : 9.2 mm (STD)



P1.5V_AUX

DDR1-2
DDR3-SODIMM-204P-STD
2/2

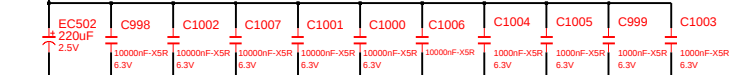
P1.5V_AUX

R882 1%
R883 1%
SHORT501 INSTPAR
U507 INSTPAR

Place between two memory Connector

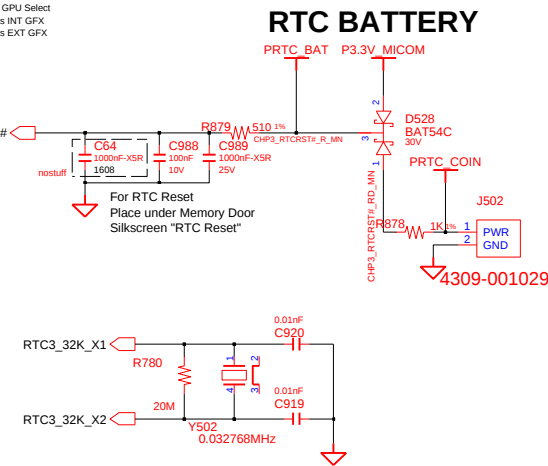
P1.5V_AUX

Place near SO-DIMM0



DRAW	BIN XIE	DATE	9/23/2008	TITLE	PETRONAS-D 15	SAMSUNG
CHECK	LEI GUO	DEV. STEP	PV		SODIMM 0	ELECTRONICS
APPROVAL	BC LEE	REV	REV 1.0		DDR3	PART NO.
MODULE CODE	undefined	LAST EDIT	May 10, 2011 10:53:25 AM			BA41-####A
					PAGE	11 OF 54

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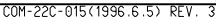
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CHECK	LEI GUO	DEV. STEP	PV	FCH		
APPROVAL	BC LEE	REV	REV 1.0	1/4		
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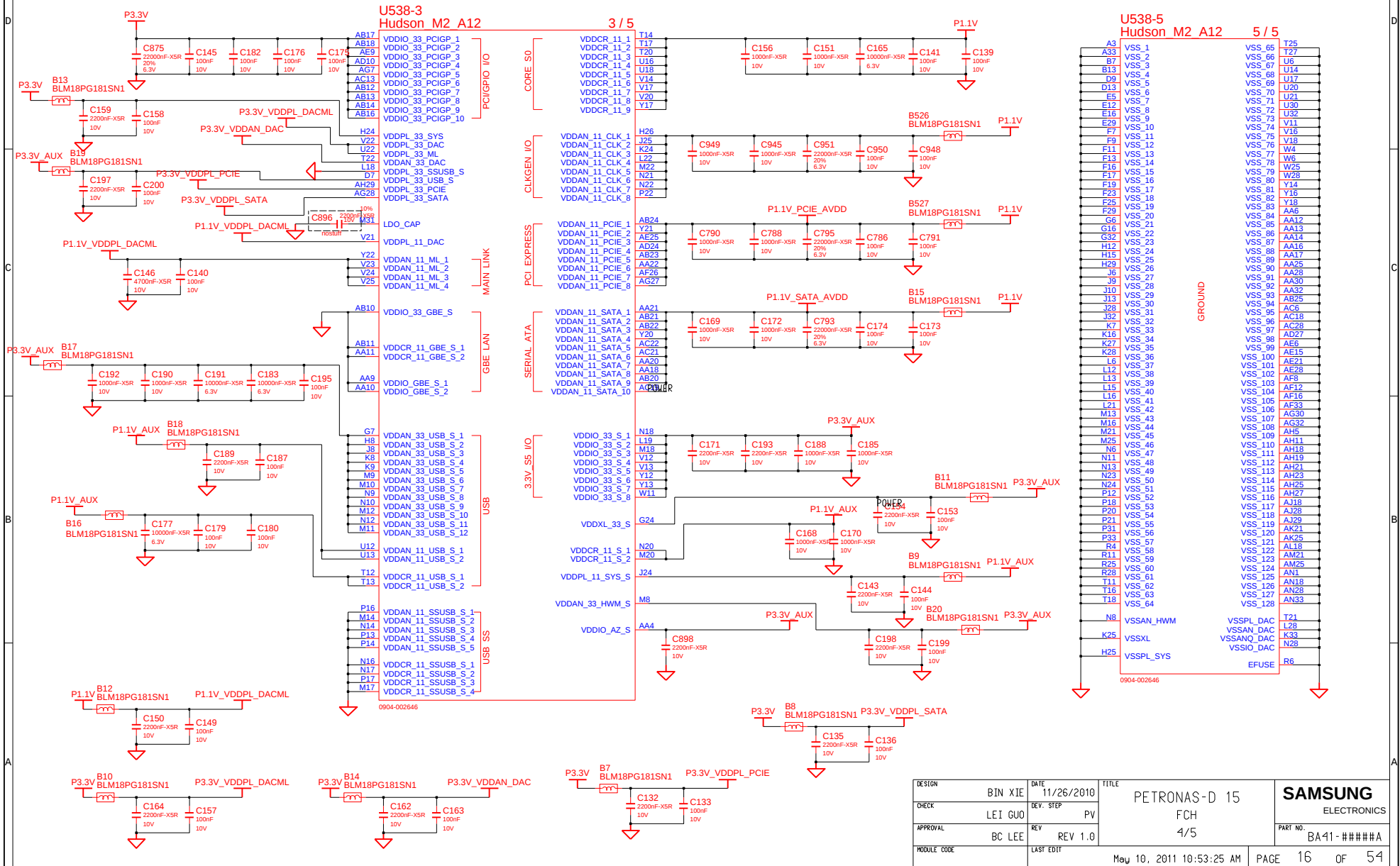


DESIGN	BIN XIE	DATE	11/26/2010	TITLE	PETRONAS-D 15	
CHECK	LEI GUO	DEV. STEP	PV	FCH		
APPROVAL	BC LEE	REV	REV 1.0	2/4		
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DEBUG STRAPS

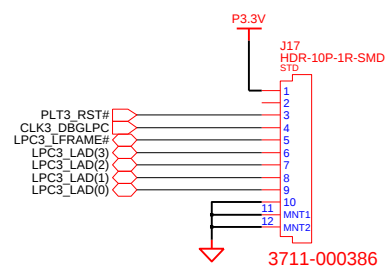
STRAP	PCI3_AD(27)	PCI3_AD(25)	PCI3_AD(24)	PCI3_AD(23)
	USE PCI PLL	Nomal REFCLK Termination	DISABLE I2C ROM	DISABLED BOOT FROM PCI MEM
STRAP LOW	BYPASS PCI PLL	Inverted REFCLK Termination	ENABLE I2C ROM	ENABLED BOOT FROM PCI MEM

STRAP	PCI3_CLK1	PCI3_CLK3	PCI3_CLK4	LPC3_CLK0	LPC3_CLK1	EC_PWM2	RTC_CLK
HIGH	ALLOW PCIE GEN2 DEFAULT	USER DEBUG STRAPS	NON_FUSION CLOCK MODE	EC ENABLED	CLKGEN ENABLED	LPC ROM	S5 PLUS MODE DISABLE DEFAULT
LOW	FORCE PCIE GEN1	IGNORE DEBUG STRAPS	FUSION CLOCK MODE DEFAULT	EC DISABLED	CLKGEN DISABLED	SPI ROM DEFAULT	S5 PLUS MODE ENABLED

DRAW	BIN XIE	DATE	09/16/2010	TITLE	PETRONAS-D 15		SAMSUNG ELECTRONICS
CHECK	LEI GUO	DEV. STEP	PV	FCH Strap		PART NO.	
APPROVAL	BC LEE	REV	REV 1.0			BA41-####A	
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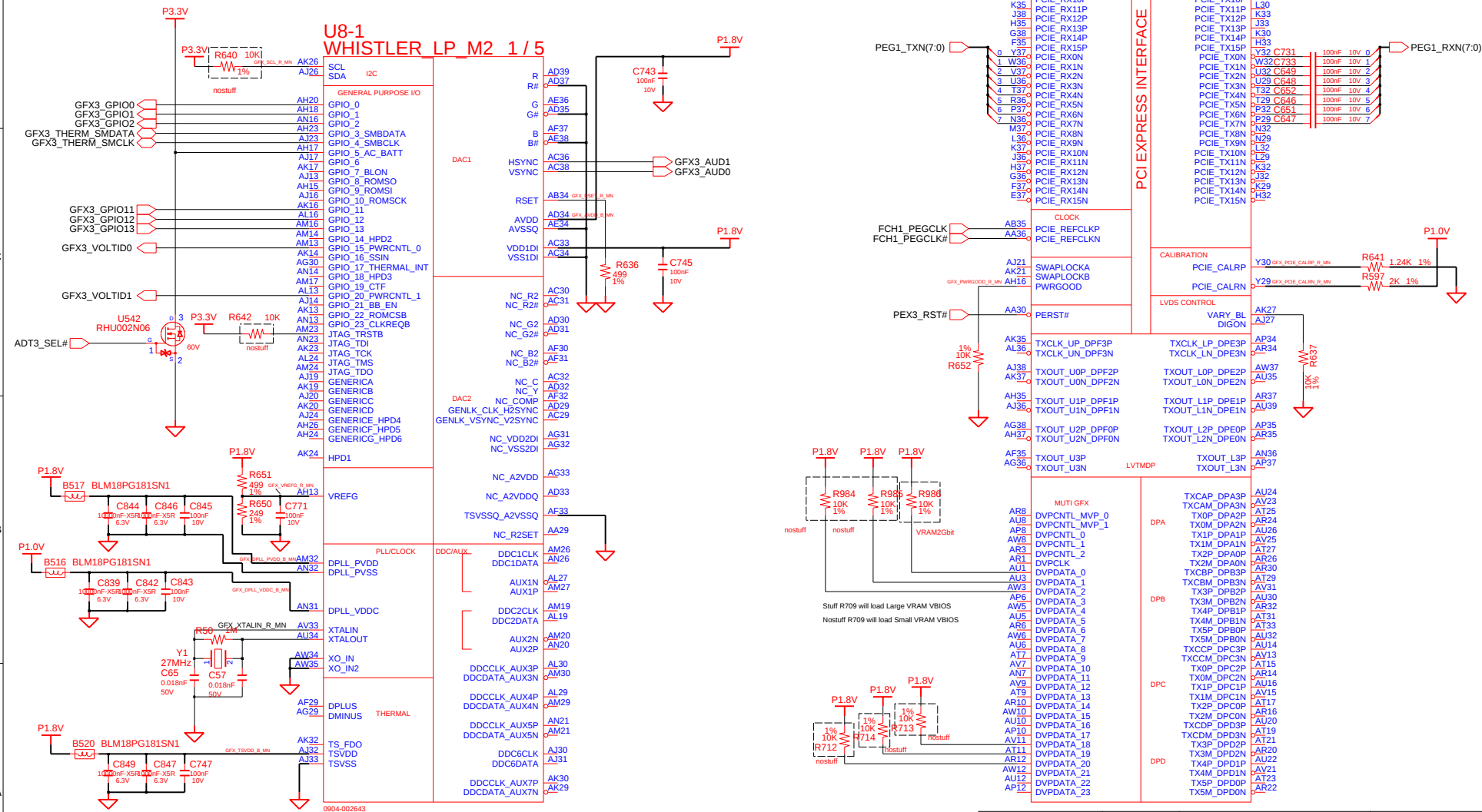
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80H PORT DEBUG



DESIGN	BIN XIE	DATE	11/10/2008	TITLE PETRONAS-D 15 DEBUG PORT 80H DECODER	SAMSUNG ELECTRONICS
CHECK	LEI GUO	DEV. STEP	PV		
APPROVAL	BC LEE	REV	REV 1.0		
MODULE CODE	LAST EDIT		May 10, 2011 10:53:25 AM		
				PART NO.	BA41-#####

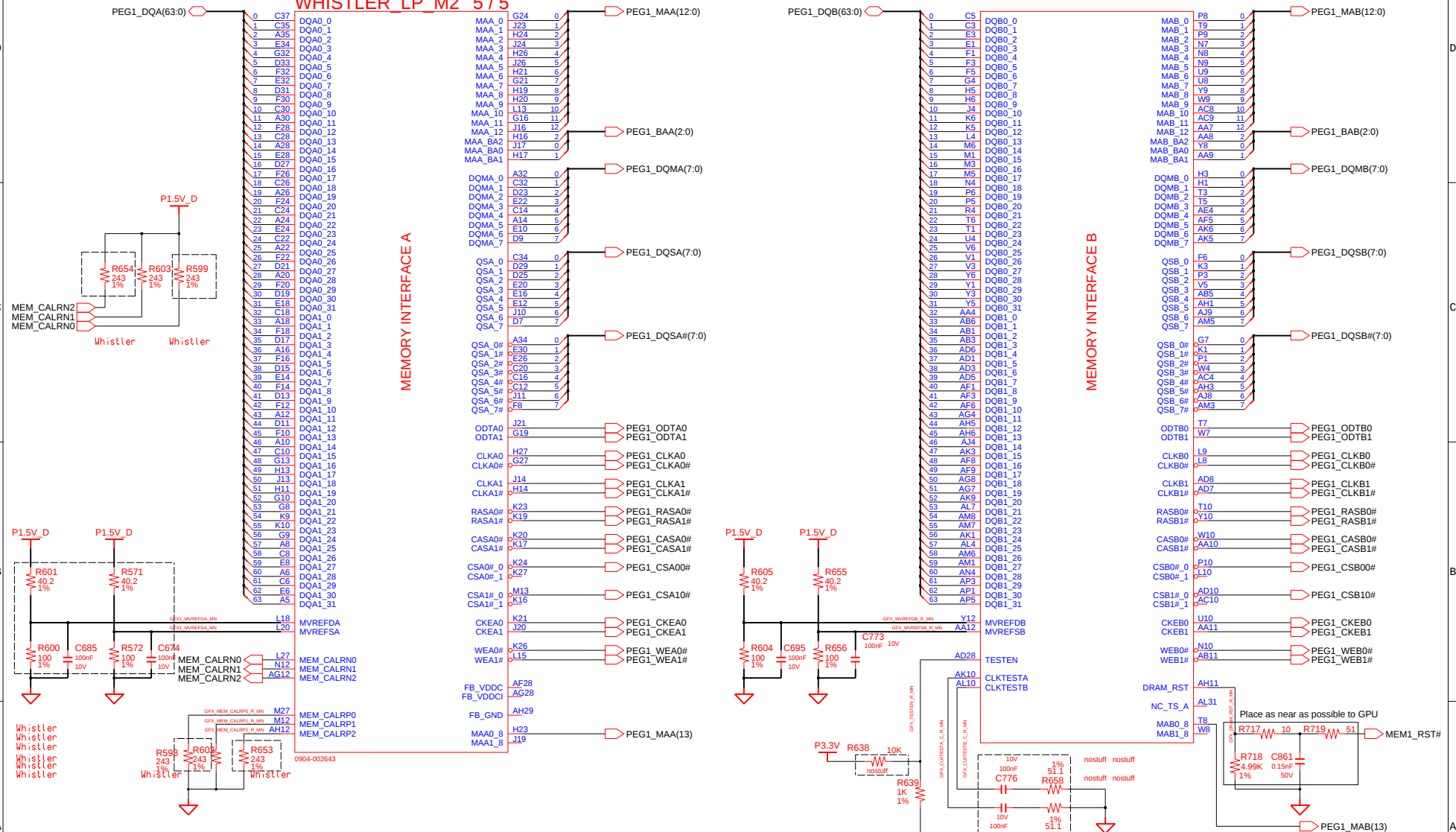
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DESIGN	BIN XIE	DATE	03/14/2009	TITLE	PETRONAS-D 15 N10X_40NM(1/5) N10X_40NM(1/5)	SAMSUNG ELECTRONICS
CHECK	LEI GUO	DEV. STEP	PV			
APPROVAL	BC LEE	REV	REV 1.0			
MODULE CODE	LAST EDIT		May 10, 2011 10:53:25 AM		PAGE	19 OF 54

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U8-5
WHISTLER LP M2 5 / 5



DESIGN	BIN XIE	DATE	03/14/2009	TITLE	PETRONAS-D 15 N10X_40NM(2/5) N10X_40NM(2/5)	SAMSUNG ELECTRONICS	
CHECK	LEI GUO	DEV. STEP	PV				
APPROVAL	BC LEE	REV	REV 1.0				
MODULE CODE	LAST EDIT		May 10, 2011 10:53:25 AM				PAGE
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U8-4 WHISTLER LP M2 4 / 5

DP C/D POWER

DP A/B POWER

DP E/F POWER

DP PLL POWER

DP VSSR 11

DP VSSR 12

DP VSSR 13

DP VSSR 14

DP VSSR 15

DP VSSR 16

DP VSSR 17

DP VSSR 18

DP VSSR 19

DP VSSR 20

DP VSSR 21

DP VSSR 22

DP VSSR 23

DP VSSR 24

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DP VSSR 234

DP VSSR 235

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DP VSSR 240

DP VSSR 241

DP VSSR 242

DP VSSR 243

DP VSSR 244

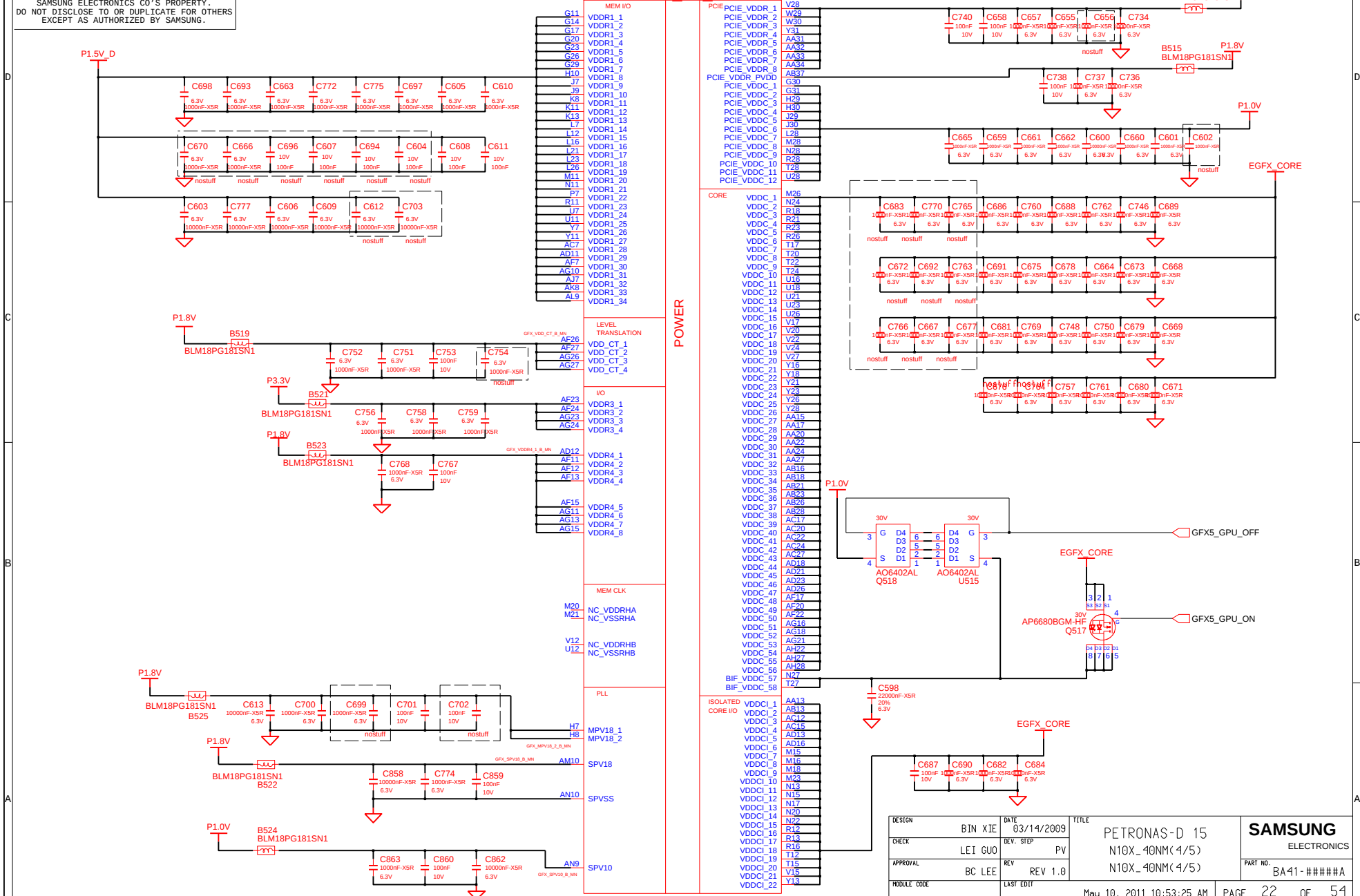
DP VSSR 245

DP VSSR 246

DESIGN	BIN XIE	DATE	03/14/2009	TITLE	PETRONAS-D 15	
CHECK	LEI GUO	REV. STEP	PV	N10X_40NM(3/5)		
APPROVAL	BC LEE	REV	REV 1.0	N10X_40NM(3/5)	PART NO.	
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U8-3
WHISTLER LP M2 3 / 5



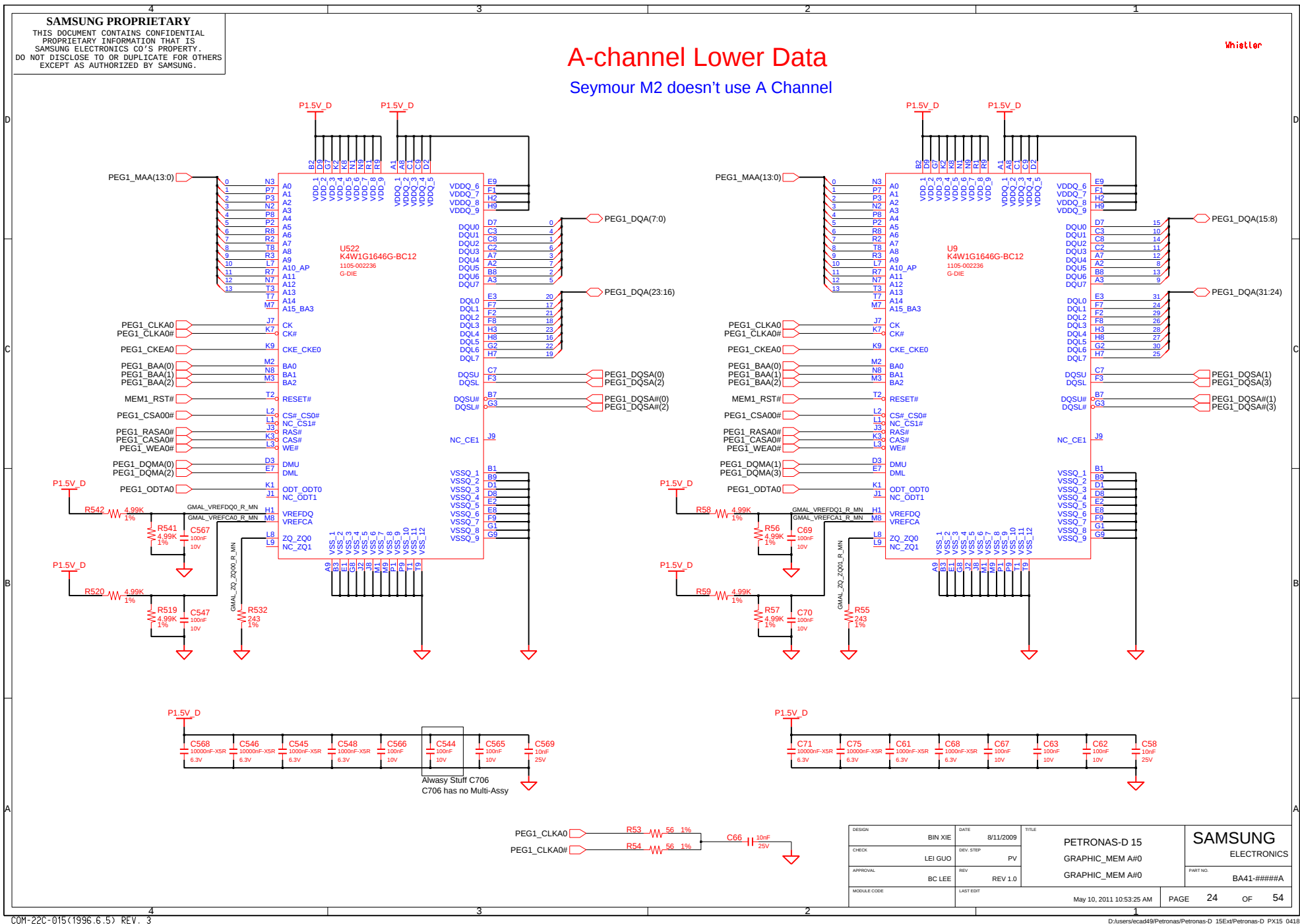
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9	DATE: 11/11/2019	TIME: 11:11
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A-channel Lower Data

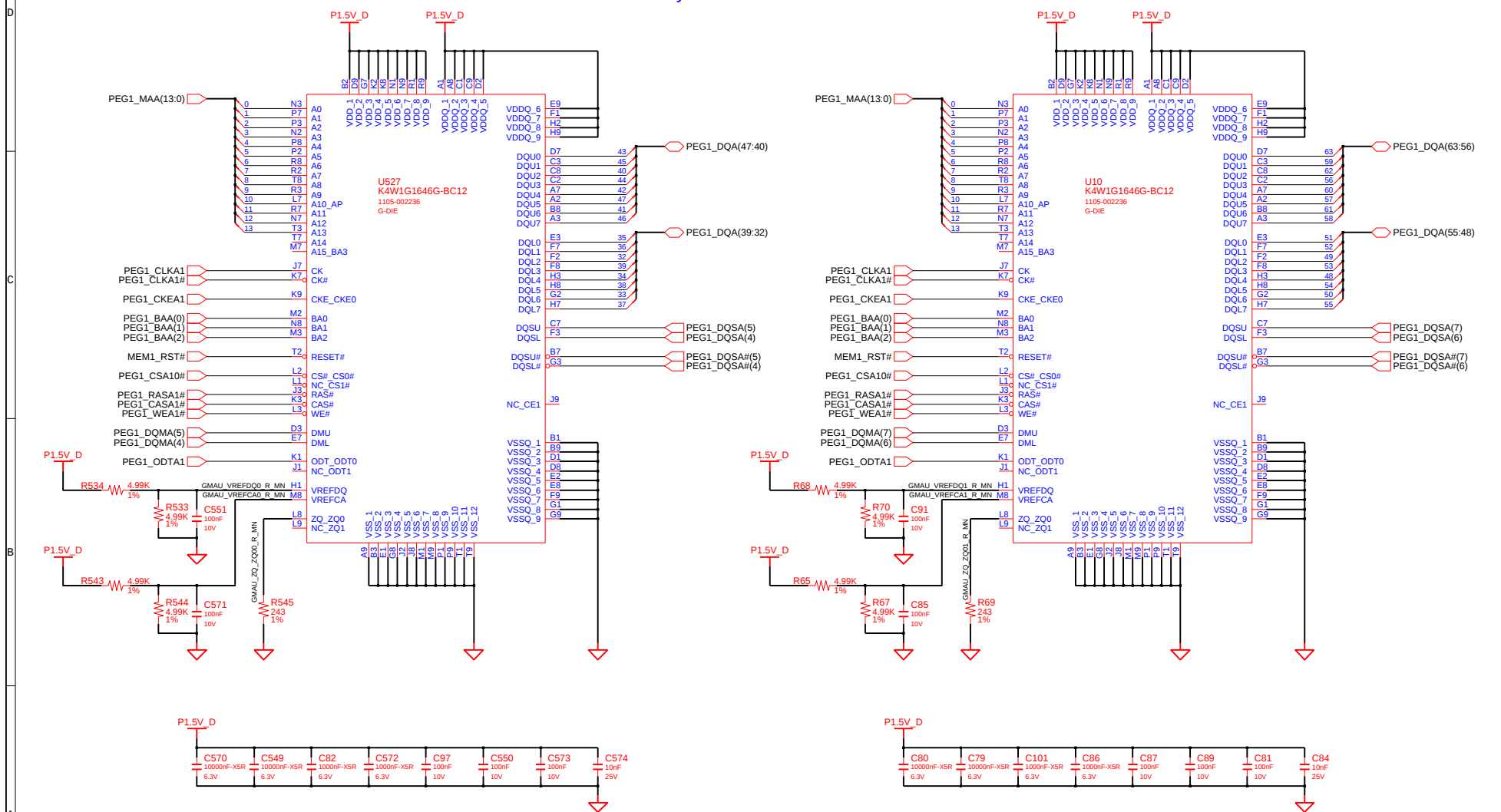
Seymour M2 doesn't use A Channel



A-channel Upper Data

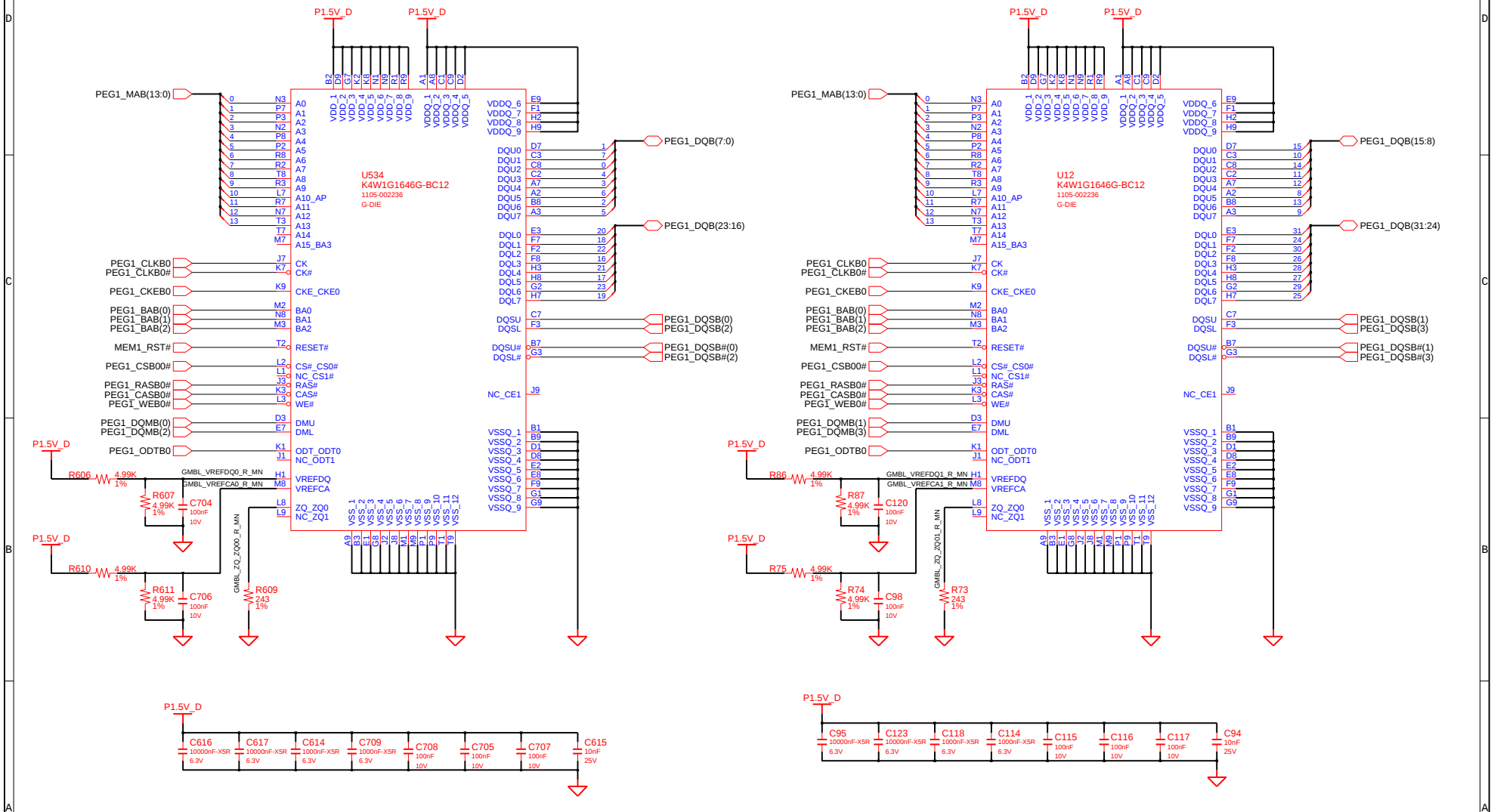
Seymour M2 doesn't use A Channel

Whistler



DESIGN	BIN XIE	DATE	8/11/2009	TITLE	PETRONAS-D 15 GRAPHIC_MEM A#1 GRAPHIC_MEM A#1	SAMSUNG		
CHECK	LEI GUO	DEV. STEP	PV			ELECTRONICS		
APPROVAL	BC LEE	REV	REV 1.0			PART NO.	BA41-#####A	
MODULE CODE	LAST EDIT					May 10, 2011 10:53:25 AM	PAGE	25

B-channel Lower Data

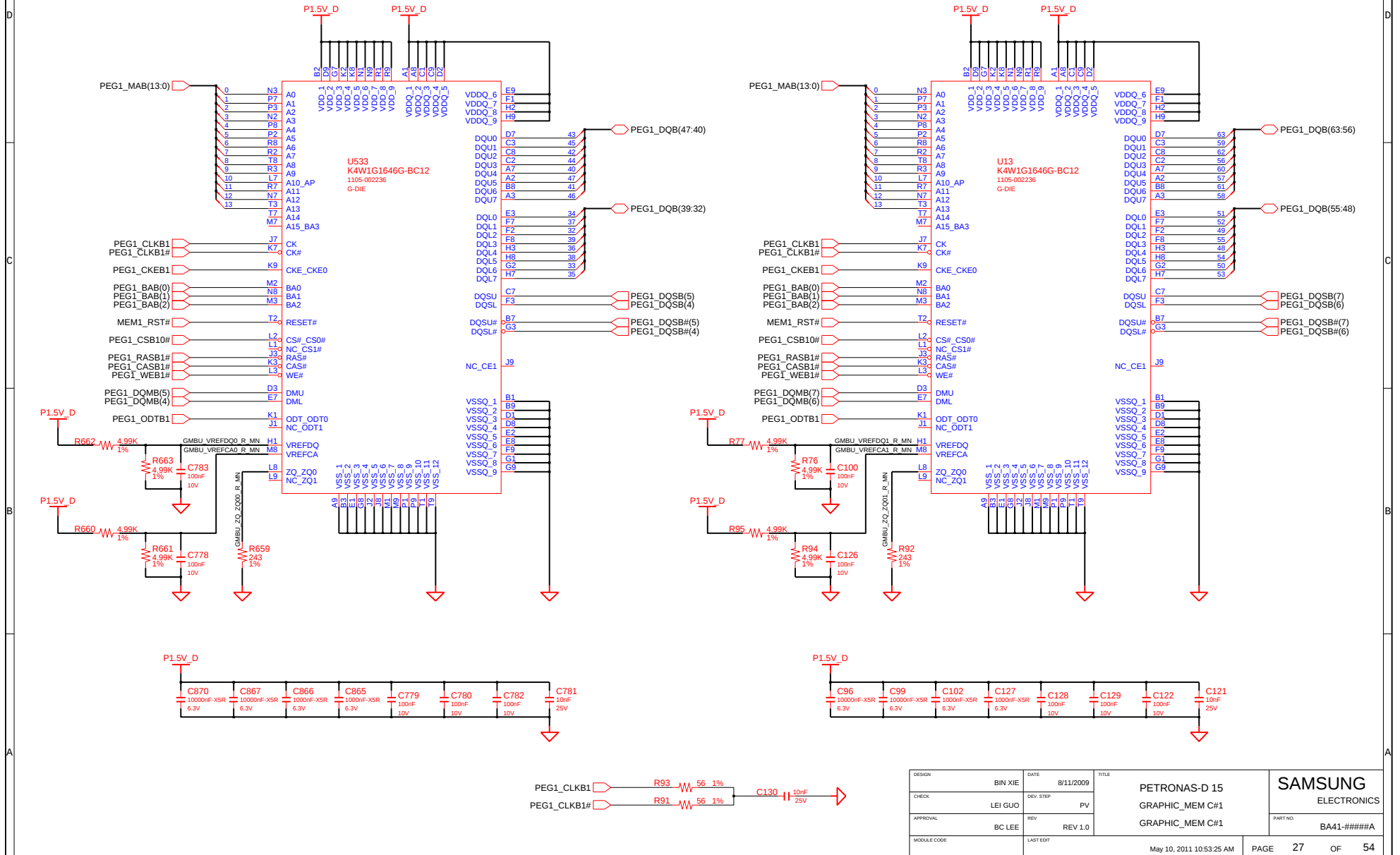


PEG1_CLKB0 R84 56 1%
PEG1_CLKB0# R83 56 1% C119 10nF 25V

DESIGN	BIN XIE	DATE	8/11/2009	TITLE	PETRONAS-D 15	SAMSUNG ELECTRONICS
CHECK	LEI GUO	DEV. STEP	PV	GRAPHIC_MEM C#0	PART NO.	
APPROVAL	BC LEE	REV	REV 1.0	GRAPHIC_MEM C#0	BA41-####A	
MODULE CODE	LAST EDIT	May 10, 2011 10:53:25 AM	PAGE	26	OF	54

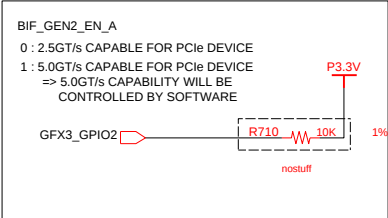
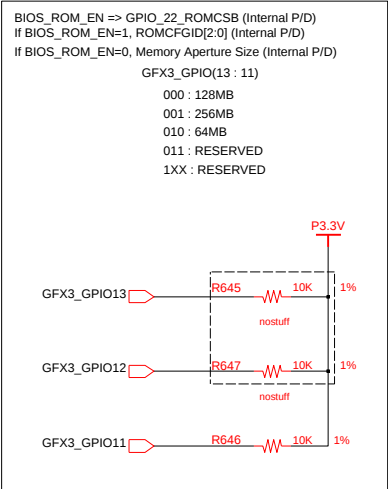
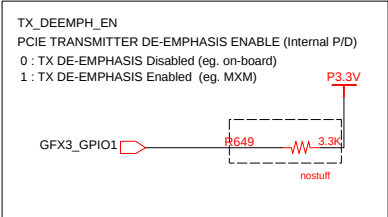
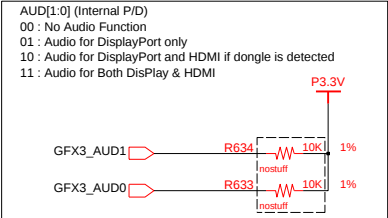
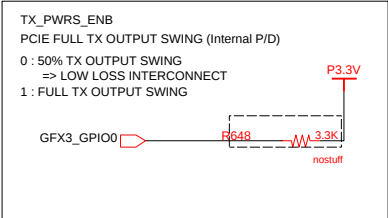
B-channel Upper Data

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DESIGN	BIN XIE	DATE	8/11/2009	TITLE	PETRONAS-D 15	SAMSUNG ELECTRONICS
CHECK	LEI GUO	DEV. STEP	PV	GRAPHIC_MEM C#1	PART NO.	
APPROVAL	BC LEE	REV	REV 1.0	GRAPHIC_MEM C#1	BA41-####A	
MODULE CODE	LAST EDIT	May 10, 2011 10:53:25 AM	PAGE	27	OF	

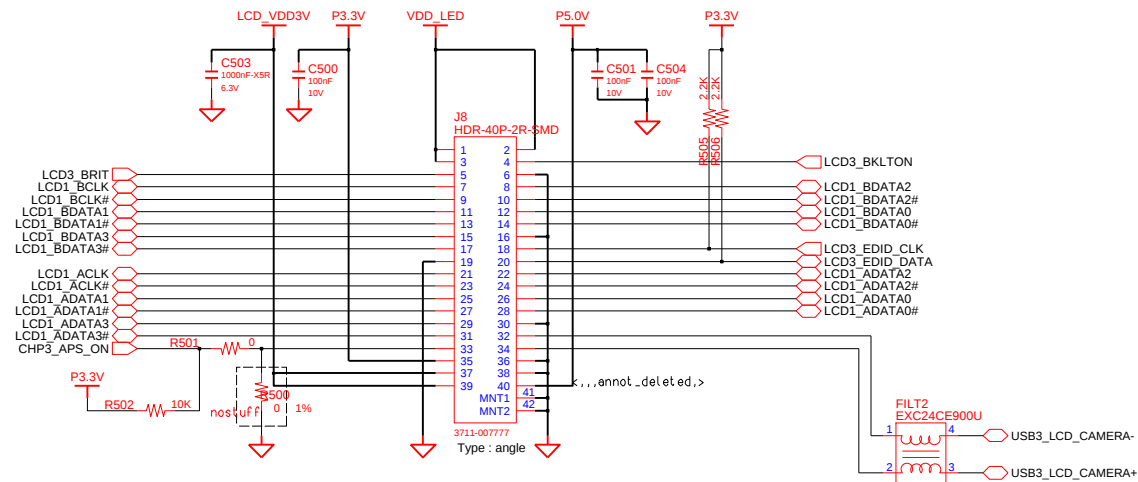
Straps



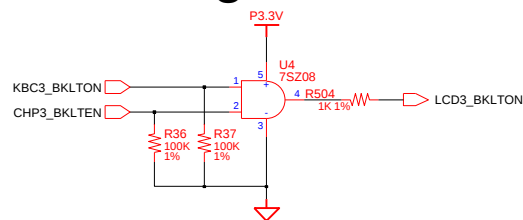
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CHECK	LEI GUO	DEV. STEP	PV		N11X_40NM STRAP	ELECTRONICS
APPROVAL	BC LEE	REV	REV 1.0		N11X_40NM STRAP	PART NO.
MODULE CODE		LAST EDIT	May 10, 2011 10:53:25 AM	PAGE	28	BA41-####A
				OF	54	

LVDS LOGIC

1Ch. LCD Connector + CAMERA

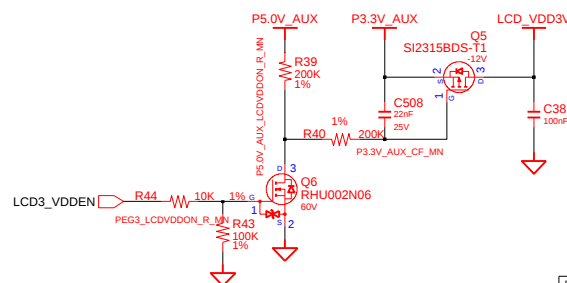


Backlight On

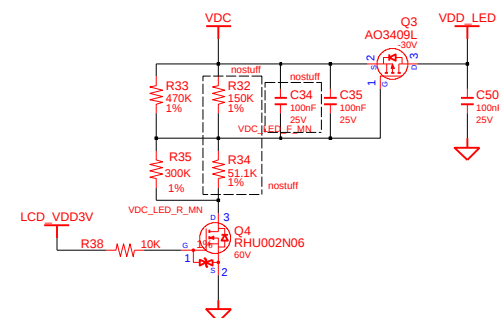


LCD Power

EBL Purpose



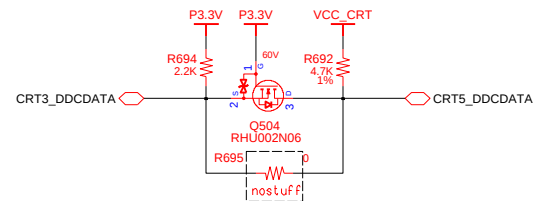
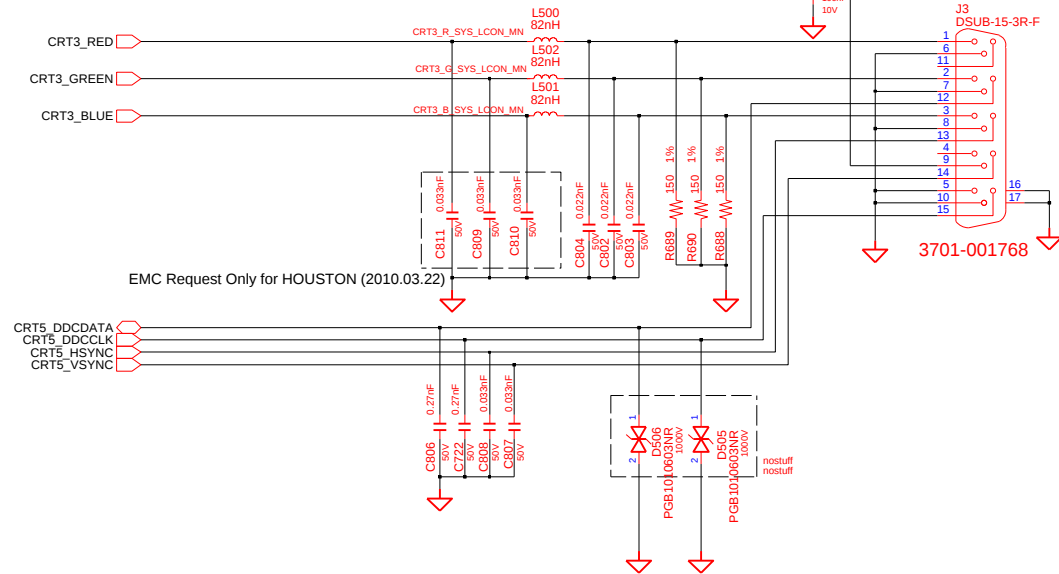
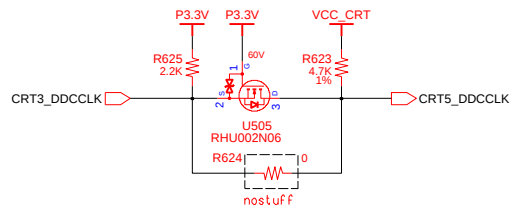
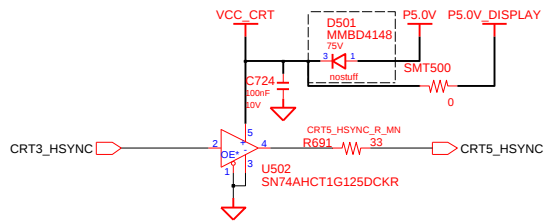
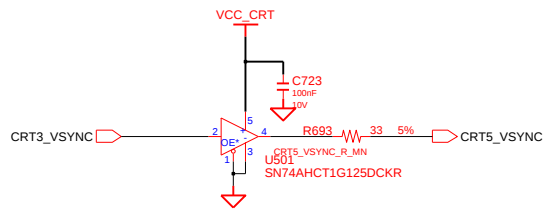
LED Power



DESIGN	BIN XIE	DATE	9/23/2008	TITLE	PETRONAS-D 15	SAMSUNG ELECTRONICS
CHECK	LEI GUO	DEV. STEP	PV	GRAPHICS_IF		
APPROVAL	BC LEE	REV	REV 1.0	LVDS		
MODULE CODE		LAST EDIT	May 10, 2011 10:53:25 AM	PAGE	29	OF 54

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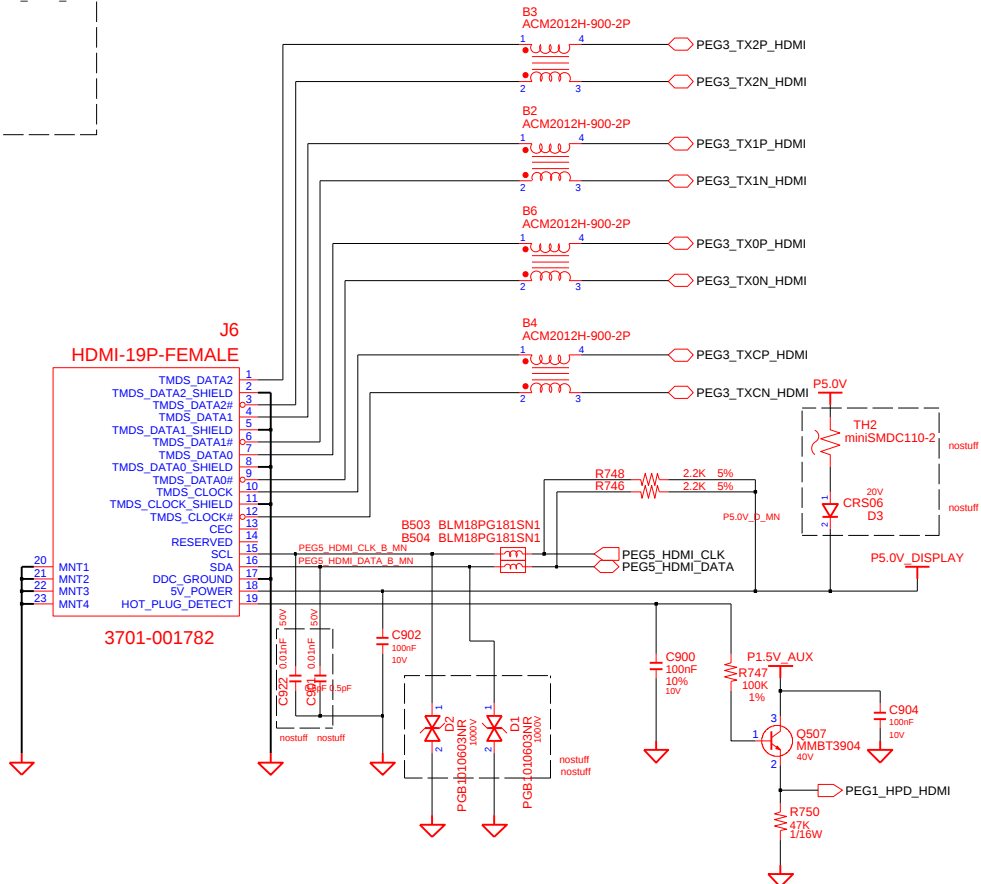
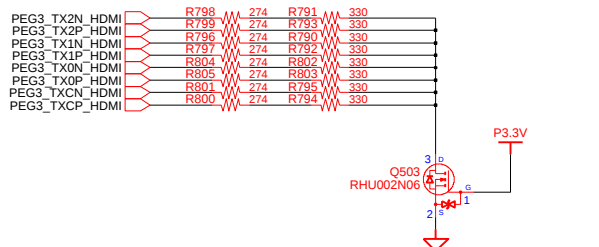
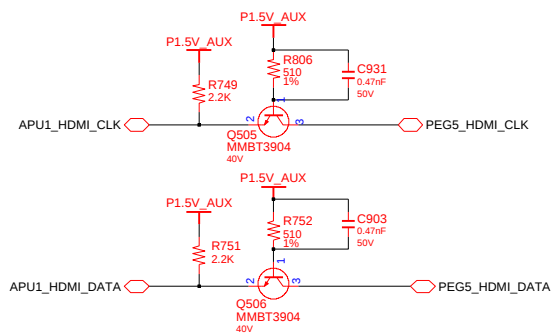
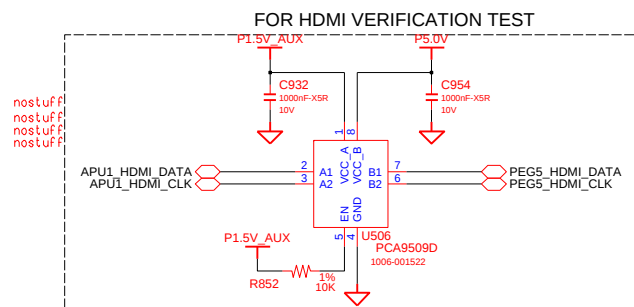
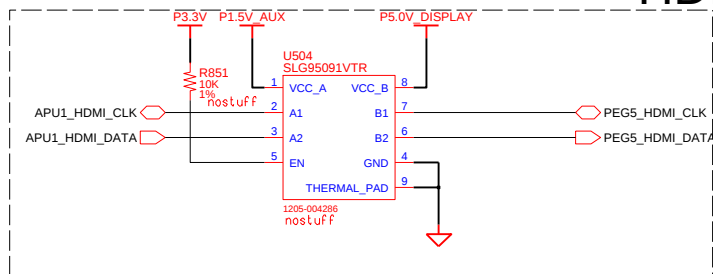
CRT LOGIC



DESIGN	BIN XIE	DATE	9/23/2008	TITLE	PETRONAS-D 15 GRAPHICS_IF	SAMSUNG ELECTRONICS
CHECK	LEI GUO	DEV. STEP	PV			PART NO. BA41-####A
APPROVAL	BC LEE	REV	REV 1.0		CRT	
MODULE CODE		LAST EDIT	May 10, 2011 10:53:25 AM	PAGE	30	OF 54

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HDMI Graphic



DESIGN	BIN XIE	DATE	9/23/2008	TITLE PETRONAS-D 15 GRAPHICS_IF HDMI	SAMSUNG ELECTRONICS
CHECK	LEI GUO	DEV. STEP	PV		
APPROVAL	BC LEE	REV	REV 1.0		
PART NO.			BA4I-#####A		
MODULE CODE	LAST EDIT			May 10, 2011 10:53:25 AM	PAGE 31 OF 54

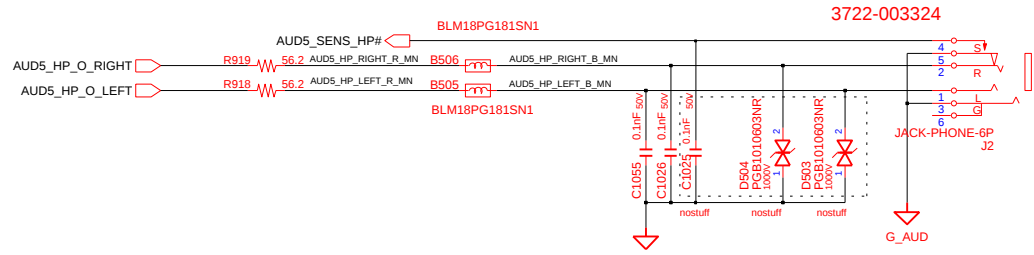
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D

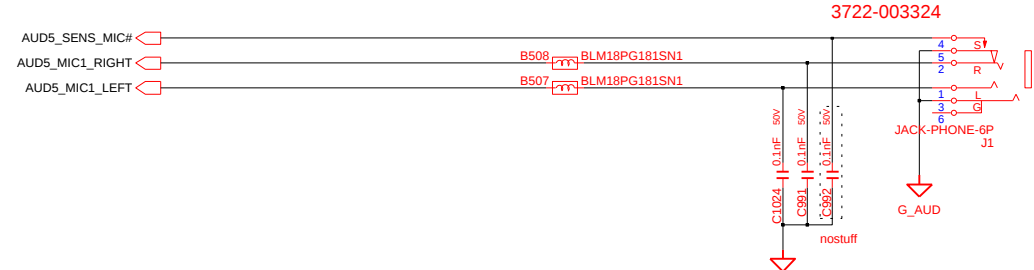


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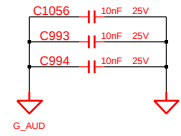
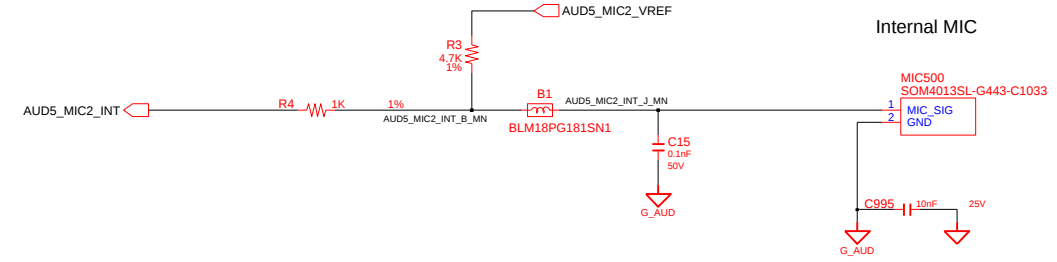
HEADPHONE



MIC JACK

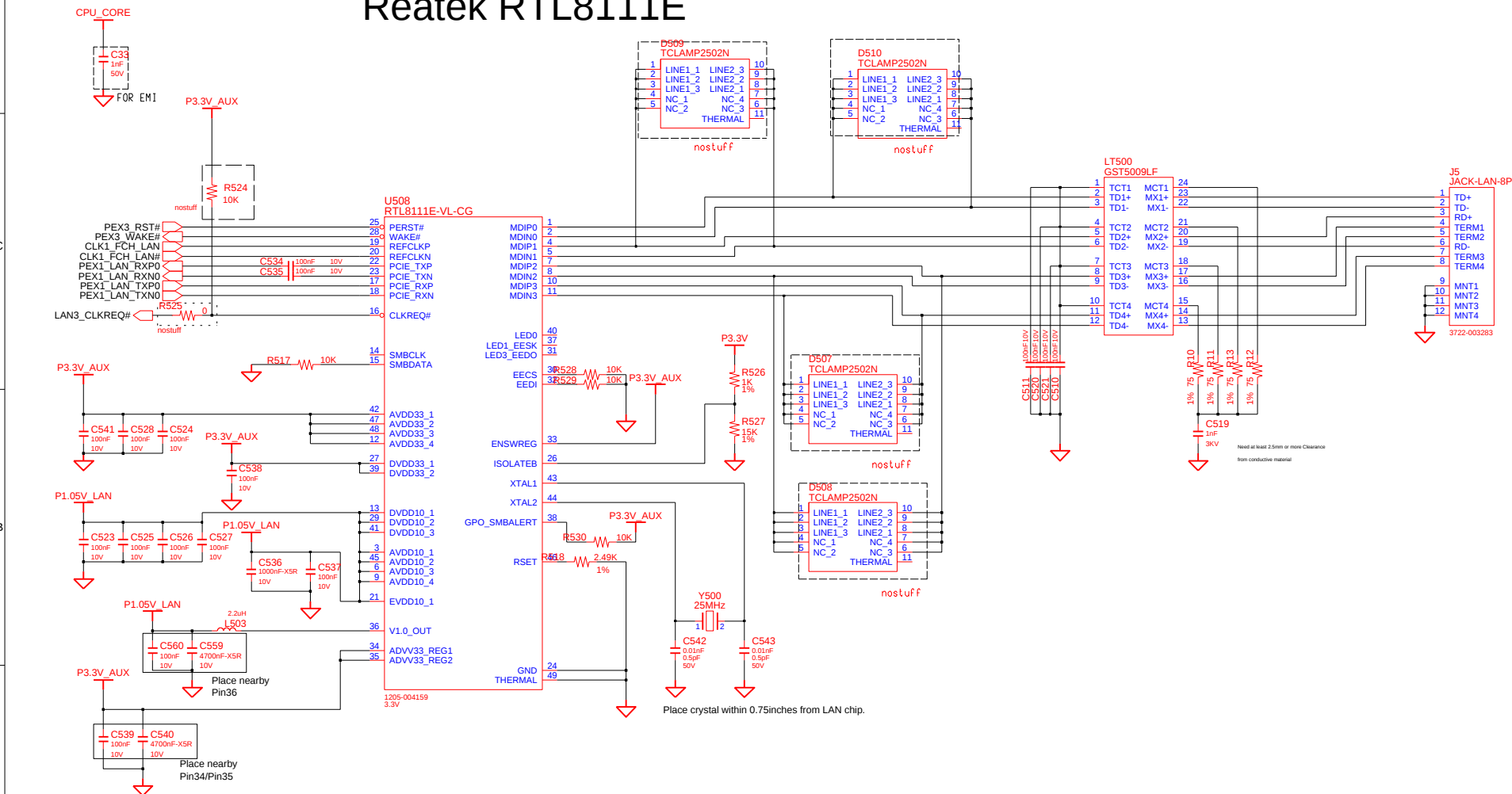


Internal MIC



DESIGN	BIN XIE	DATE	9/23/2008	TITLE	PETRONAS-D 15 HDA_CODEC AUDIO JACK	SAMSUNG ELECTRONICS		
CHECK	LEI GUO	DEV. STEP	PV				PART NO.	BA41-#####
APPROVAL	BC LEE	REV	REV 1.0					
MODULE CODE	LAST EDIT		May 10, 2011 10:53:25 AM		PAGE	33 OF 54		

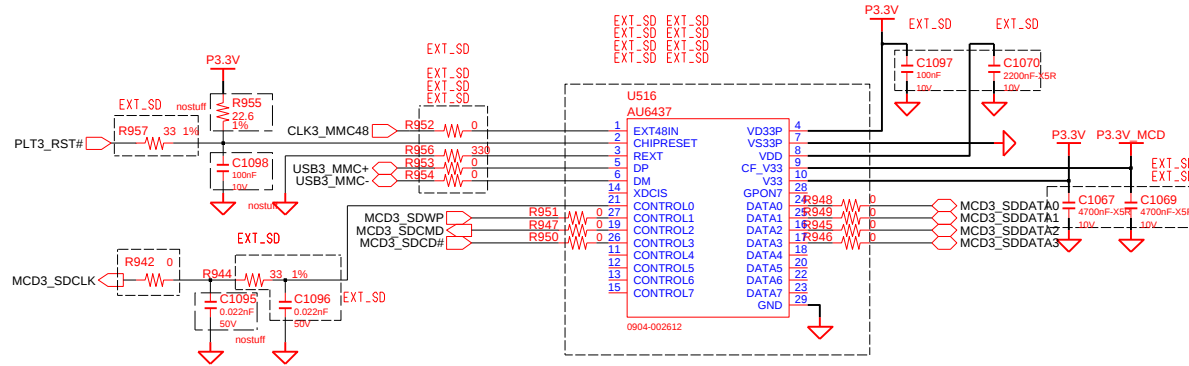
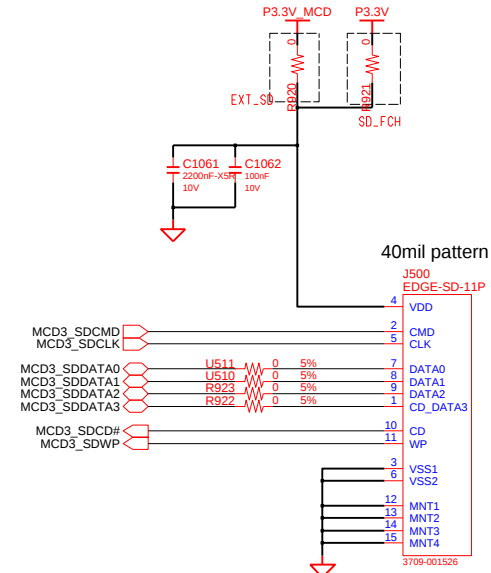
Reatek RTL8111E



DESIGN	BIN XIE	DATE	9/23/2008	TITLE	PETRONAS-D 15	SAMSUNG ELECTRONICS
CHECK	LEI GUO	DEV. STEP	PV		LAN	
APPROVAL	BC LEE	REV	REV 1.0		LAN_Reatek_RTL8103EL	
MODULE CODE		LAST EDIT				PART NO. BA41-####A
				May 10, 2011 10:53:25 AM	PAGE	34 OF 54

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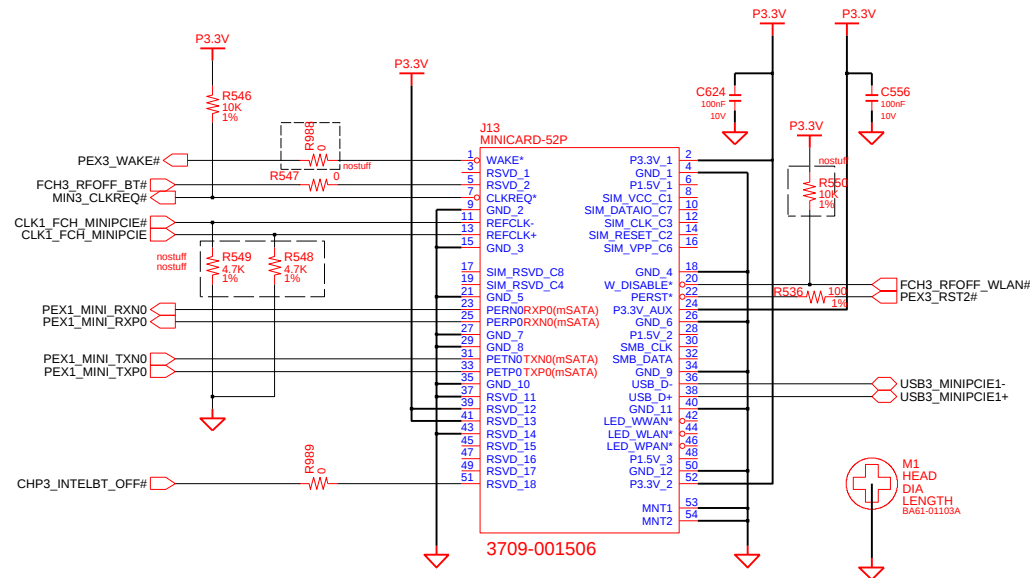
4 IN 1 CARD



DESIGN	BIN XIE	DATE	9/23/2008	TITLE	PETRONAS-D 15 MULTICARD 3 IN 1 CARD(AU6473)	SAMSUNG ELECTRONICS
CHECK	LEI GUO	DEV. STEP	PV			PART NO. BA41-####A
APPROVAL	BC LEE	REV	REV 1.0			
MODULE CODE		LAST EDIT	May 10, 2011 10:53:25 AM	PAGE	35	OF 54

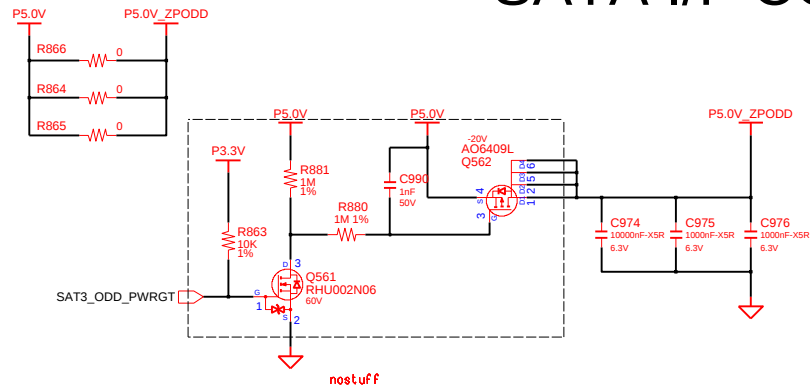
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WLAN, 7mm



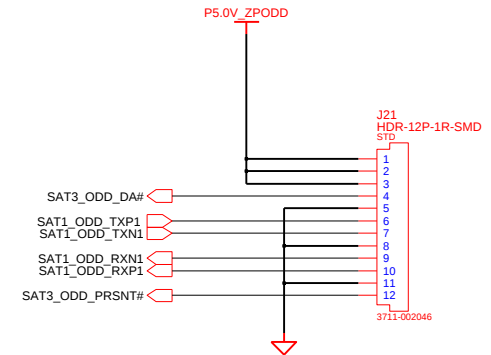
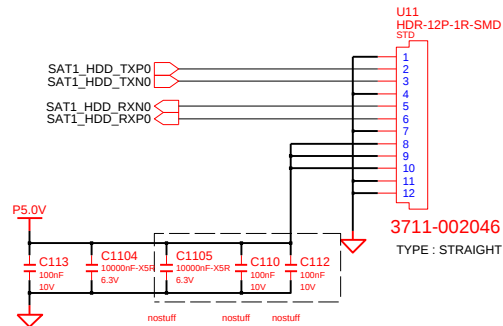
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SATA I/F CONN



SATA ODD CONN 15"

SATA HDD CONN



DESIGN	BIN XIE	DATE	8/11/2009	TITLE	PETRONAS-D 15	SAMSUNG
CHECK	LEI GUO	DEV. STEP	PV	SATA_DEVICES		ELECTRONICS
APPROVAL	BC LEE	REV	REV 1.0	HDD & ODD SUB CONNECTOR	PART NO.	BA41-####A
MODULE CODE		LAST EDIT	May 10, 2011 10:53:25 AM	PAGE	37	OF 54

MAIN BOARD (MICOM)

U543 MX25L1605D

1107-001709

1 CS#

2 DI

3 CLK

4 DO

5 CLK

6 DO

7 P3.3V_MICOM

8 P3.3V_MICOM

R687 10K 1%

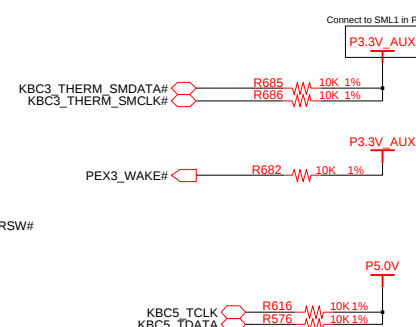
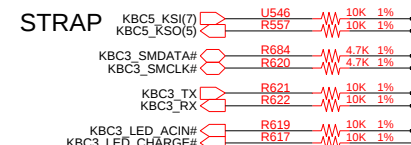
P3.3V_MICOM_HOLD#_R_MN

KBC3_SPI_CS#

KBC3_SPI_DI

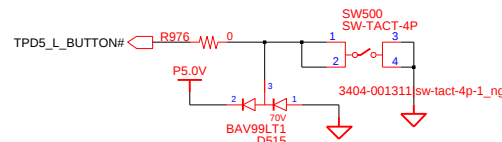
KBC3_SPI_CLK

KBC3_SPI_DO



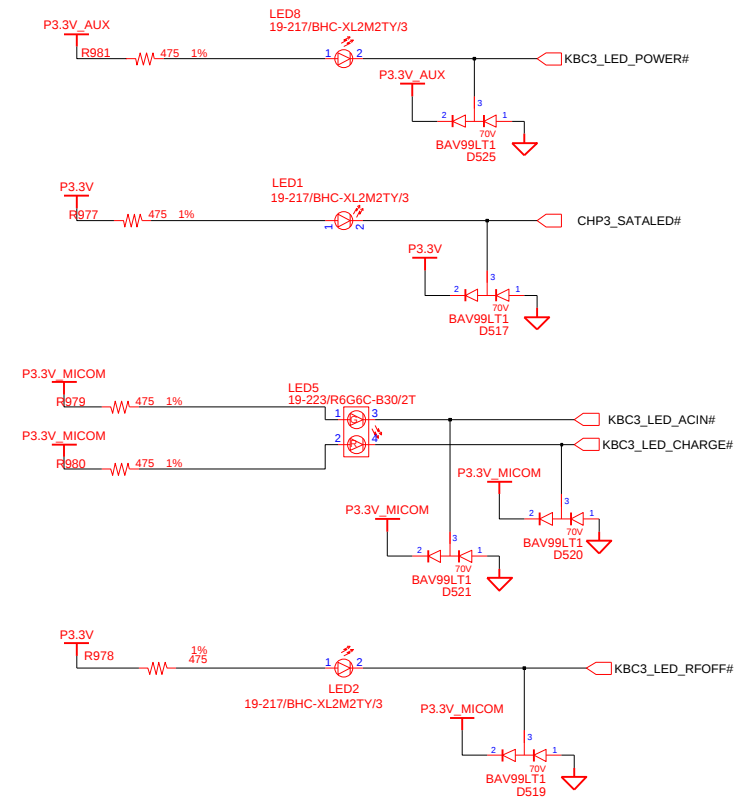
DRAM	BIN XIE	DATE	11/17/2008	TITLE	PETRONAS-D 15	SAMSUNG	
CHECK	LEI GUO	DEV. STEP	PV		MICOM	ELECTRONICS	
APPROVAL	BC LEE	REV	REV 1.0		MICOM_SMSC_MEC1308	PART NO.	BA41-#####A
MODULE CODE	LAST EDIT		May 10, 2011 10:53:25 AM			PAGE	38 OF 54

LID_SWITCH

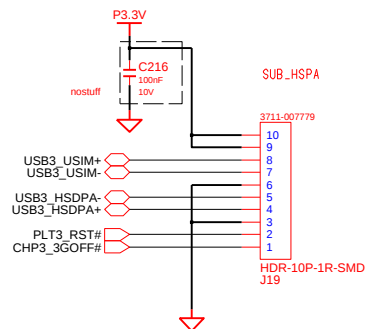


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LED MAIN



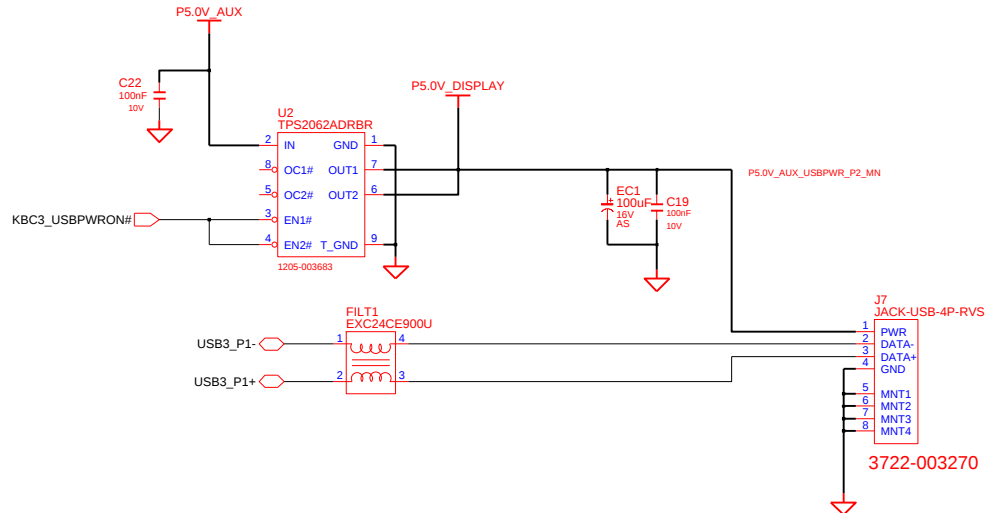
HSPA Sub board Connector



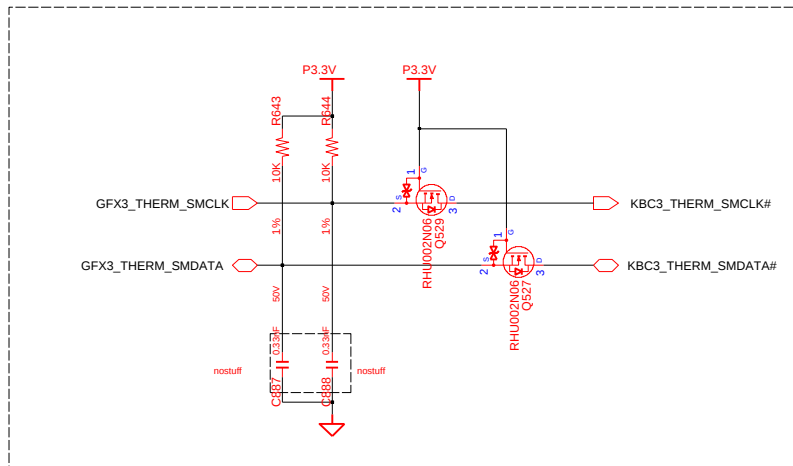
DRAW	BIN XIE	DATE	9/23/2008	TITLE	PETRONAS-D 15	SAMSUNG
CHECK	LEI GUO	DEV. STEP	PV	LED_SWITCH	LED_SWITCH	ELECTRONICS
APPROVAL	BC LEE	REV	REV 1.0	LED_SWITCH		PART NO.
MODULE CODE		LAST EDIT				BA41-####A
				May 10, 2011 10:53:25 AM	PAGE	40 OF 54

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USB Single connector



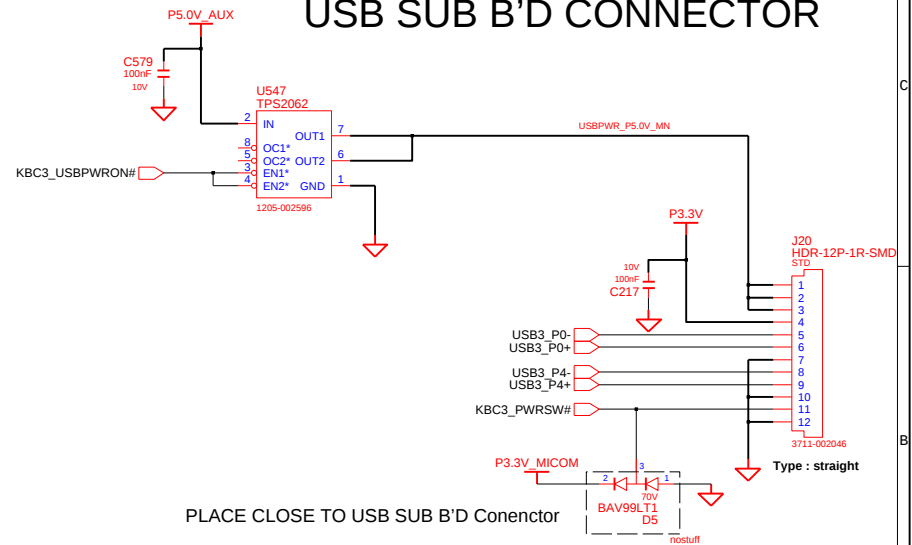
GPU LEVEL SHIFTER FOR POWERXPRESS



MAIN TO SUB USB CONN

Right 2USB Port

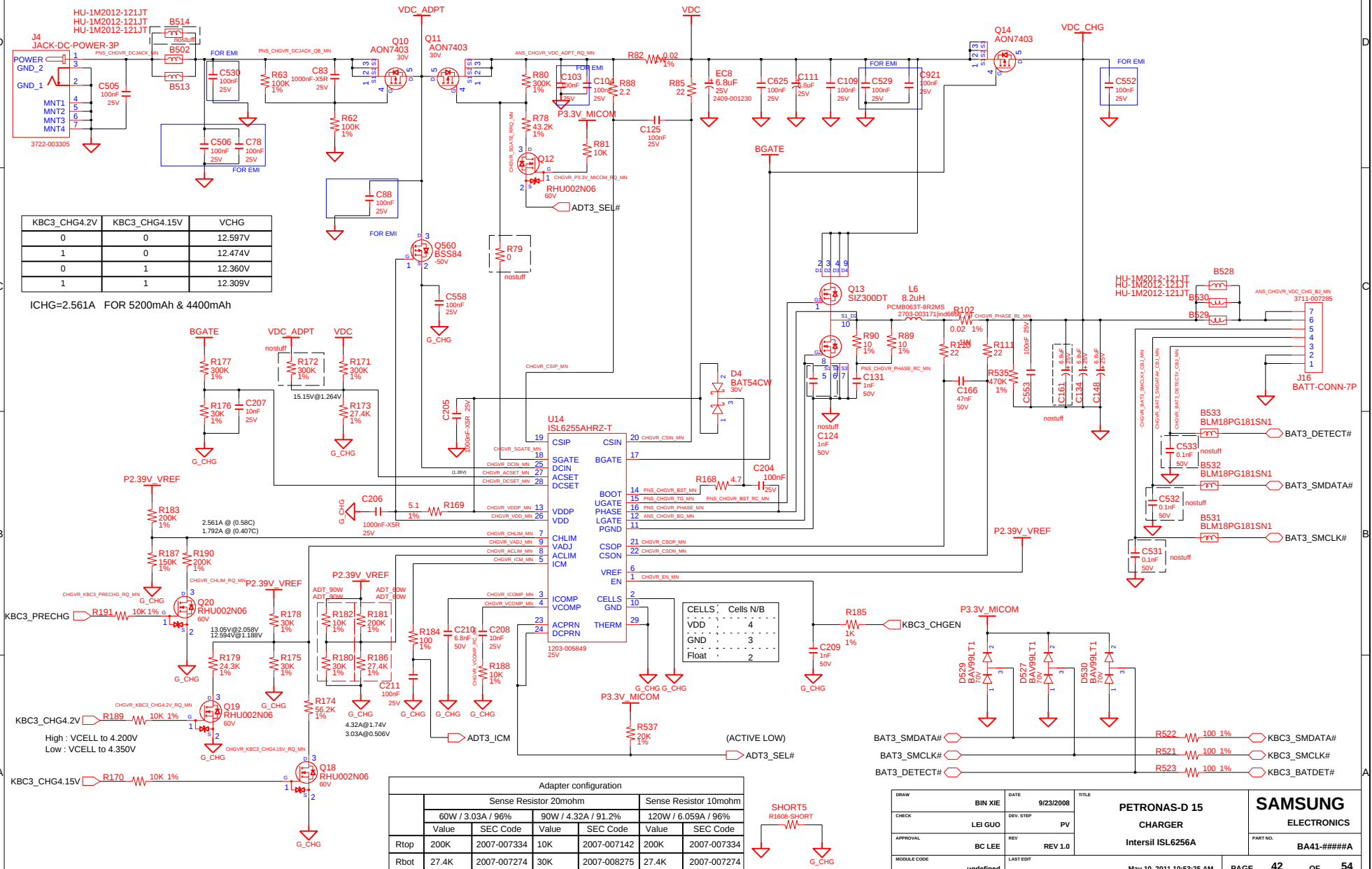
USB SUB B'D CONNECTOR



DESIGN	BIN XIE	DATE	9/23/2008	TITLE	PETRONAS-D 15 USB_CONN	SAMSUNG ELECTRONICS
CHECK	LEI GUO	DEV. STEP	PV			PART NO. BA41-####A
APPROVAL	BC LEE	REV	REV 1.0		USB & eSATA	
MODULE CODE		LAST EDIT	May 10, 2011 10:53:25 AM	PAGE	41	OF 54

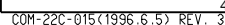
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CHARGER & POWER MANAGEMENT



A

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



D:/users/ecad49/Petronas/Petronas-D_15Ext/Petronas-D_PX15_0418

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Chipset Power (P1.1V_AUX)

COMPONENTS:

- U539:** TPS5117RGRYR
- Q550:** Si2300DT
- Q555:** RHU002N06
- D524:** BAT54CW
- D523:** MMBD4148
- R893:** 300 1/10W
- R897:** 10K 1%
- R891:** 10K 1%
- R892:** 2.2
- R895:** 15K 1%
- R896:** 47K 1/16W
- R894:** 80.6K 1%
- R873:** 10
- R874:** 10
- R876:** 4.7K 1%
- R917:** 80.6K 1%
- R988:** 30K 1%
- R989:** 10K 1%
- C1021:** 1000nF-XSR 6.3V
- C986:** 4700nF-XSR 10V
- C1022:** 47nF 50V
- C1020:** 10nF 25V
- C982:** 100nF 25V
- C981:** 1000nF-XSR 25V
- EC512:** 6.8uF 25V
- EC513:** 6.8uF 25V
- C987:** 100nF 10V
- EC516:** 330uF 2.5V
- C1049:** 0.22nF 50V
- L505:** 3.3uH
- PCMC063T-3R3MN:** 2703-003170
- U540:** 0-1005

FUNCTIONAL BLOCKS:

- FOR EMI:** Indicated by a dashed box around C982 and C981.
- Place close to Output Cap:** Indicated by a dashed box around U540.
- AL CAP:** Indicated by a dashed box around EC516.

TEST POINTS:

- AUX3_PWRGD:** Input signal.
- P1.1V_AUX:** Output voltage.
- KBC3_LOWVWR#:** Input signal.

PARAMETERS:

- OCV:** 10.2A@10.4mohm
- 1203-005536:** 5.5V
- SHORT502:** INSTPAR

REVISION HISTORY:

REV.	DESCRIPTION
1	Initial Release
2	Update Schematic
3	Update Schematic
4	Update Schematic

DATE: 10/22/2010

DESIGNER: BIN XIE

CHECKER: LEI GUO

APPROVAL: BC LEE

MODULE CODE: undefined

FILE NAME: PETRONAS-D 15 P1.1V_AUX

DATE: May 10, 2011 10:53:25 AM

PAGE: 44 OF 54

SAMSUNG ELECTRONICS

PART NO.: BA41-#####

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Chipset Power (P1.1V_AUX)

COMPONENTS:

- U539:** TPS5117RGRYR
- Q550:** Si2300DT
- Q555:** RHU002N06
- D524:** BAT54CW
- D523:** MMBD4148
- R893:** 300 1/10W
- R897:** 10K 1%
- R891:** 10K 1%
- R892:** 2.2
- R895:** 15K 1%
- R896:** 47K 1/16W
- R894:** 80.6K 1%
- R873:** 10
- R874:** 10
- R876:** 4.7K 1%
- R917:** 80.6K 1%
- R988:** 30K 1%
- R989:** 10K 1%
- C1021:** 1000nF-XSR 6.3V
- C986:** 4700nF-XSR 10V
- C1022:** 47nF 50V
- C1020:** 10nF 25V
- C982:** 100nF 25V
- C981:** 1000nF-XSR 25V
- EC512:** 6.8uF 25V
- EC513:** 6.8uF 25V
- C987:** 100nF 10V
- EC516:** 330uF 2.5V
- C1049:** 0.22nF 50V
- L505:** 3.3uH
- PCMC063T-3R3MN:** 2703-003170
- U540:** 0-1005

FUNCTIONAL BLOCKS:

- FOR EMI:** Indicated by a dashed box around C982 and C981.
- Place close to Output Cap:** Indicated by a dashed box around U540.
- AL CAP:** Indicated by a dashed box around EC516.

TEST POINTS:

- AUX3_PWRGD:** Input signal.
- P1.1V_AUX:** Output voltage.
- KBC3_LOWVWR#:** Input signal.

PARAMETERS:

- OCV:** 10.2A@10.4mohm
- 1203-005536:** 5.5V
- SHORT502:** INSTPAR

REVISION HISTORY:

REV.	DESCRIPTION
1	Initial Release
2	Update Schematic
3	Update Schematic
4	Update Schematic

DATE: 10/22/2010

DESIGNER: BIN XIE

CHECKER: LEI GUO

APPROVAL: BC LEE

MODULE CODE: undefined

FILE NAME: PETRONAS-D 15 P1.1V_AUX

DATE: May 10, 2011 10:53:25 AM

PAGE: 44 OF 54

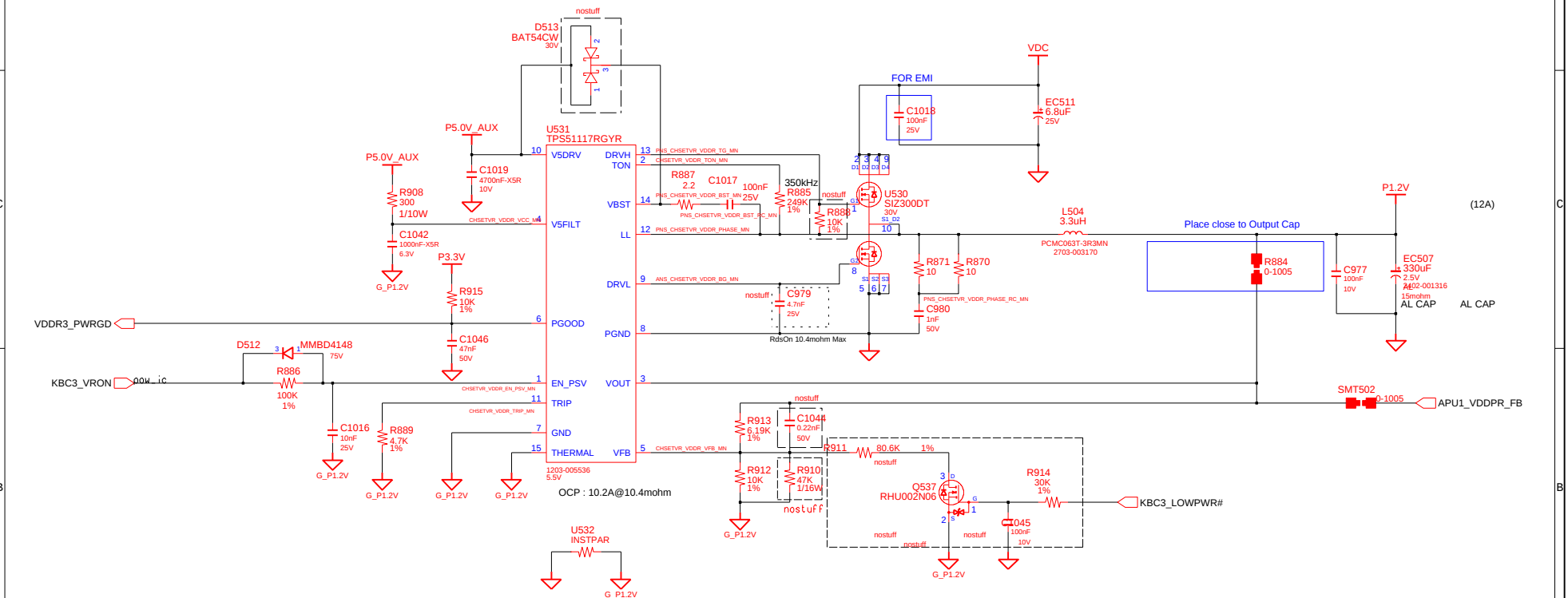
SAMSUNG ELECTRONICS

PART NO.: BA41-#####

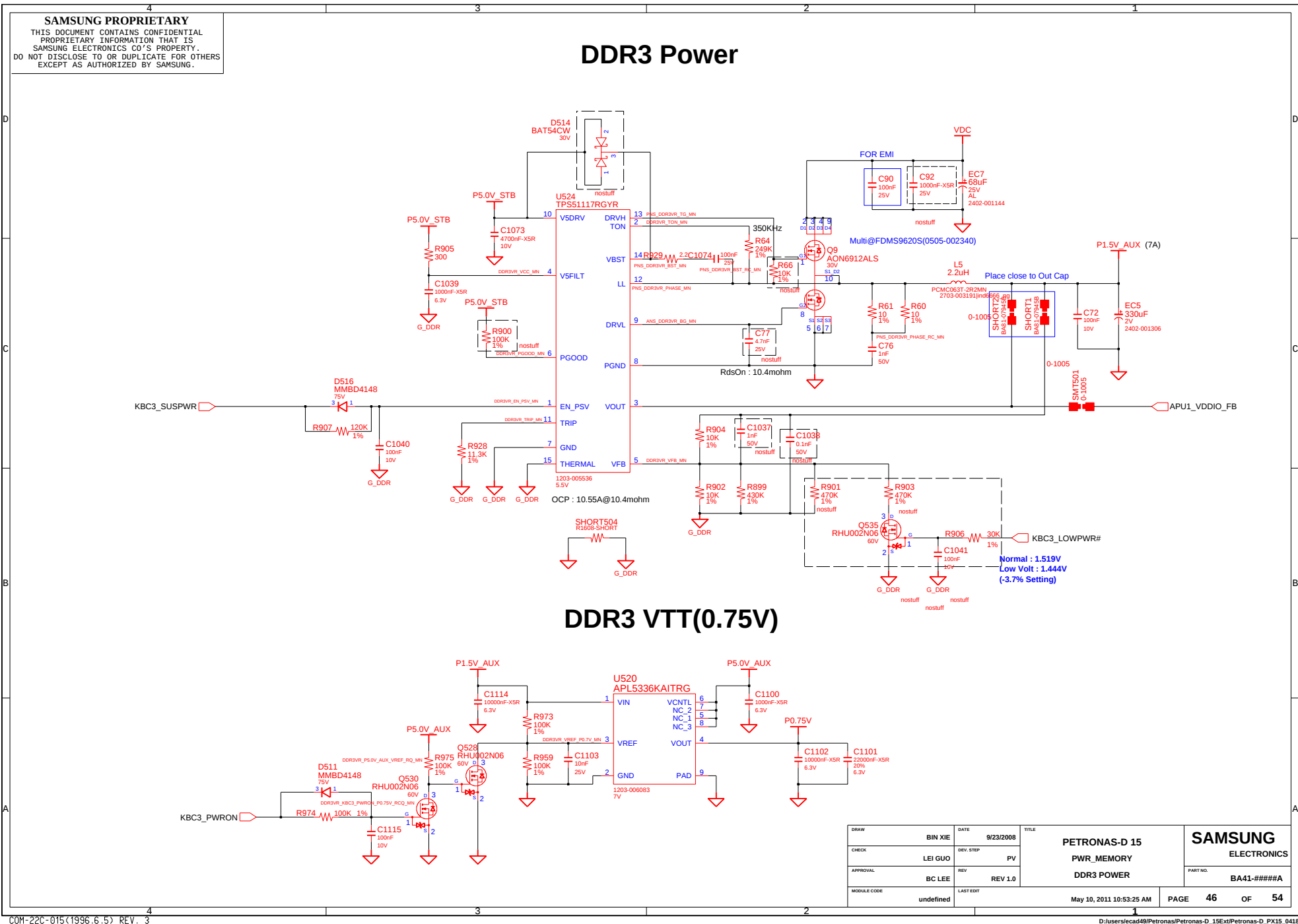
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Chipset Power (P1.2V)

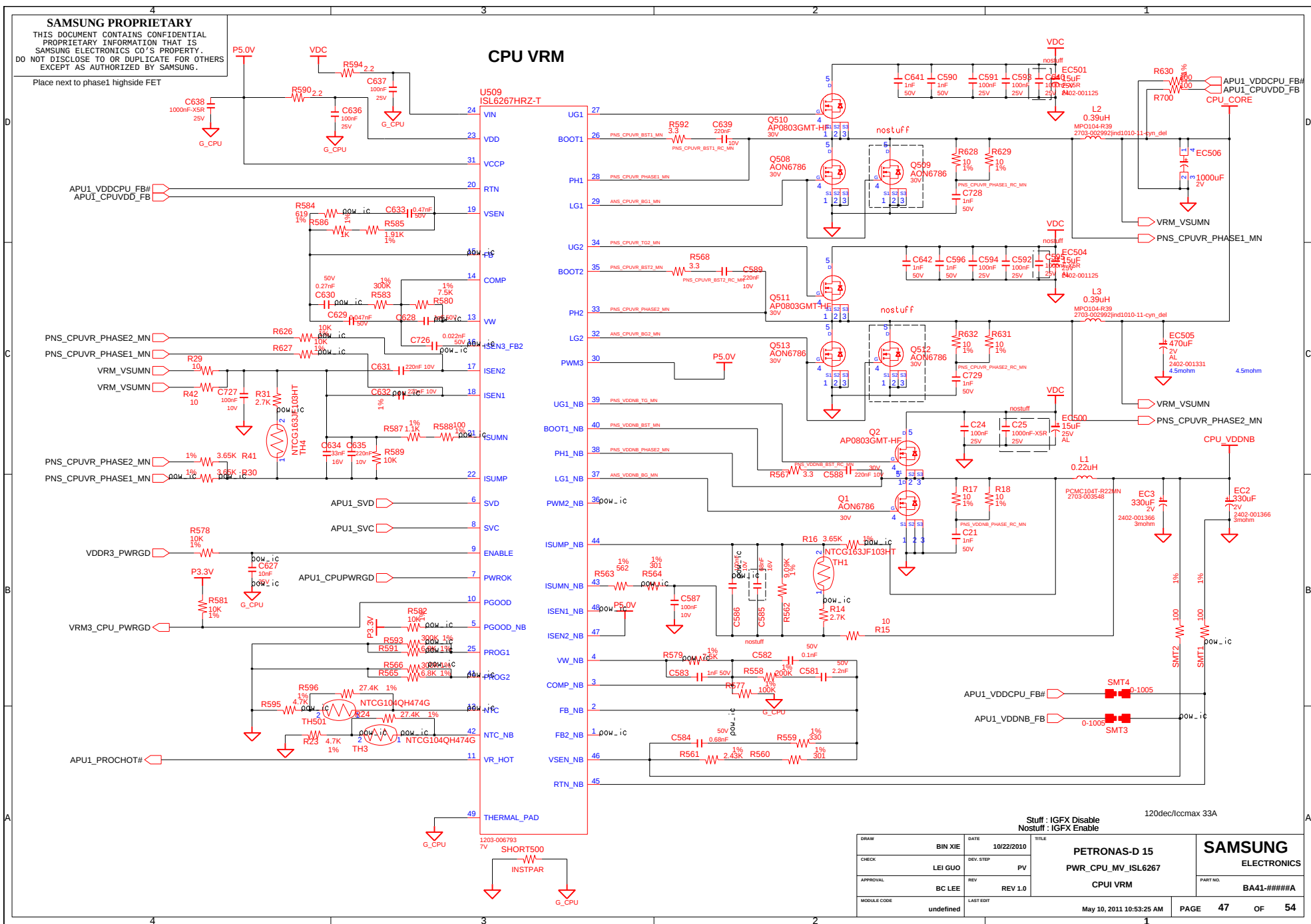


DRAW	BIN XIE	DATE	10/22/2010	TITLE	PETRONAS-D 15 P1.2V P1.2V(Chipset Power)	SAMSUNG ELECTRONICS
CHECK	LEI GUO	DEV. STEP	PV			PART NO. BA41-#####A
APPROVAL	BC LEE	REV	REV 1.0			
MODULE CODE	undefined	LAST EDIT	May 10, 2011 10:53:25 AM	PAGE	45 OF 54	



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Place next to phase1 highside FET

U509
ISL6267HRZ-T

A

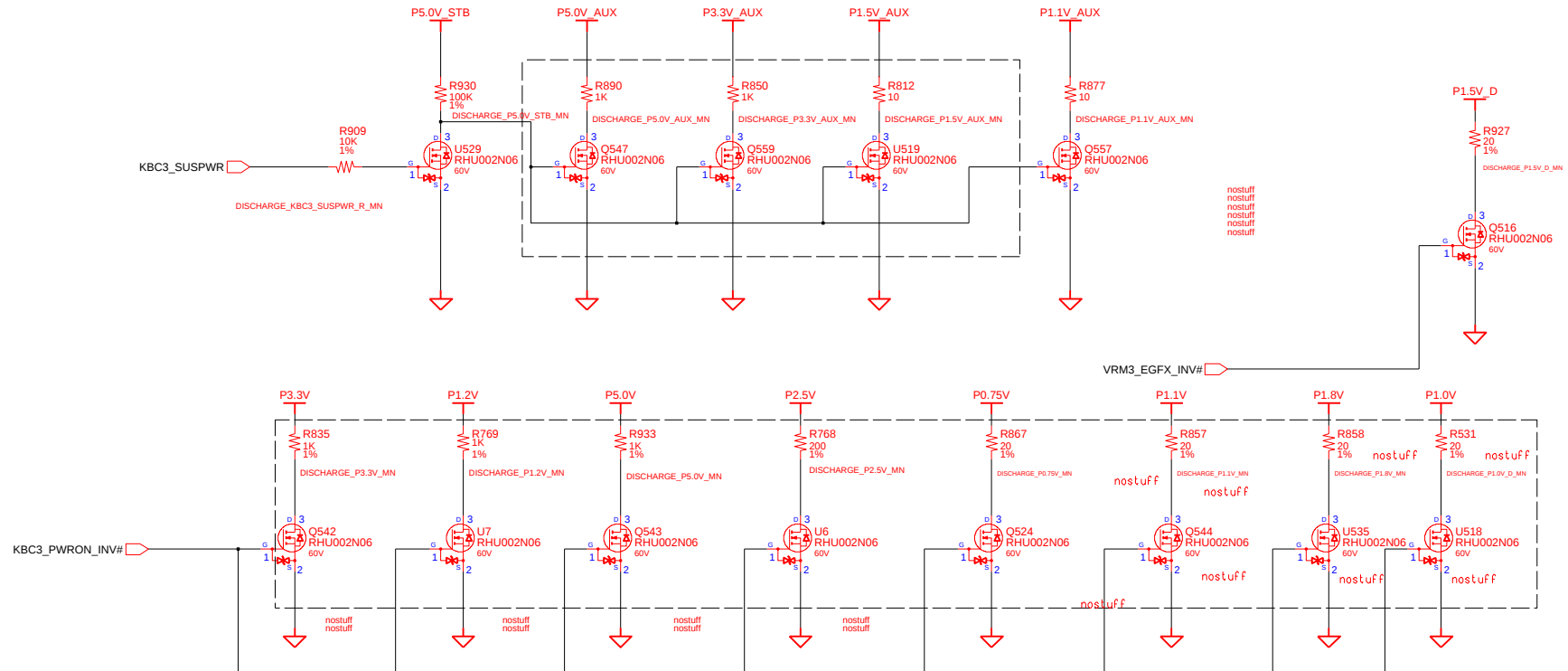


DRAW	BIN XIE	DATE	8/11/2009	PETRONAS-D 15 PWR_MV_SWITCHED SWITCHED POWER	SAMSUNG ELECTRONICS PART NO. BA41-####A			
CHECK	LEI GUO	DEV. STEP	PV					
APPROVAL	BC LEE	REV	REV 1.0					
MODULE CODE	LAST EDIT							May 10, 2011 10:53:25 AM

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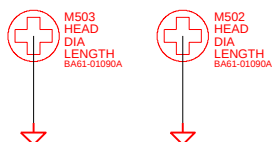
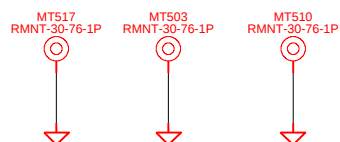
POWER DISCHARGER



DESIGN	BIN XIE	DATE	8/11/2009	TITLE	PETRONAS-D 15	SAMSUNG
CHECK	LEI GUO	DEV. STEP	PV		PWR_DISCHARGE	ELECTRONICS
APPROVAL	BC LEE	REV	REV 1.0		PWR_DISCHARGE	PART NO.
MODULE CODE		LAST EDIT				BA41-####A
				May 10, 2011 10:53:25 AM	PAGE	51 OF 54

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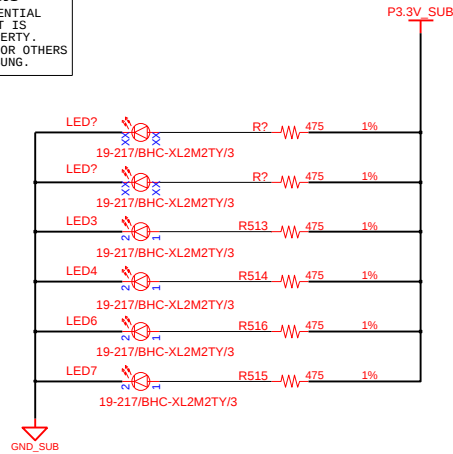
Diagram showing the connection of five MT500 series modules to a common bus. The modules are labeled MT506, MT518, MT512, MT516, and MT511, each with a corresponding RMNT-30-76-1P connector. The modules are connected via red lines to a common red triangle symbol at the bottom.



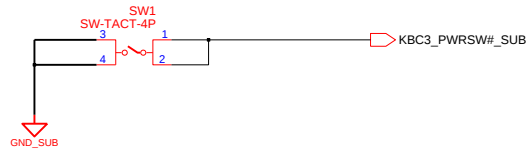
DESIGN	BIN XIE	DATE	6/4/2010	TITLE	PETRONAS-D 15 MOUNT MOUNT	SAMSUNG ELECTRONICS
CHECK	LEI GUO	DEV. STEP	PV			
APPROVAL	BC LEE	REV	REV 1.0			
MODULE CODE	LAST EDIT		May 10, 2011 10:53:25 AM			
				PART NO.	BA41-#####	

USB SUB BOARD

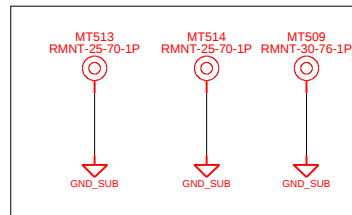
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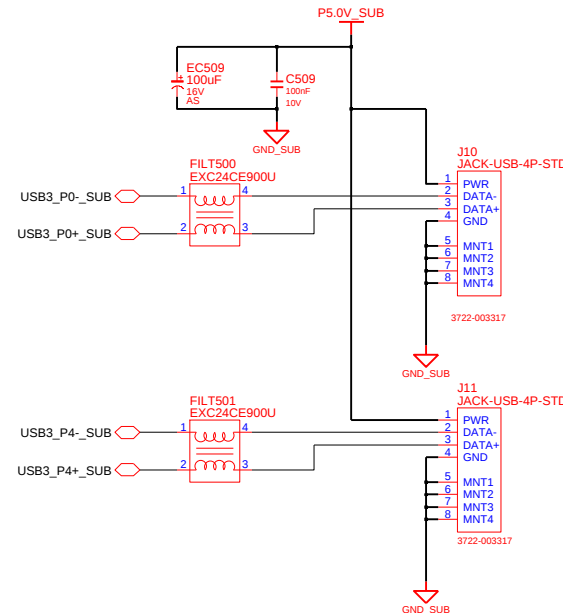
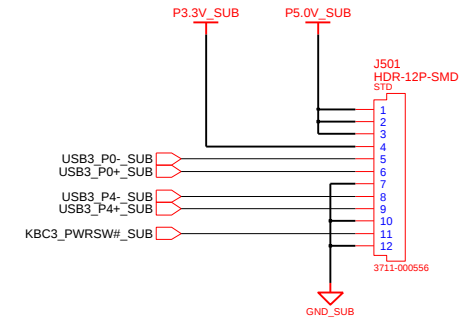
Power Switch Button



PCB Mount



SUB TO MAIN



PLACE CLOSE TO USB SUB B'D Conenctor

DESIGN	BIN XIE	DATE	6/4/2010	TITLE	PETRONAS-D 15	SAMSUNG ELECTRONICS PART NO. BA41-####A
CHECK	LEI GUO	DEV. STEP	PV	USB SUB BOARD		
APPROVAL	BC LEE	REV	REV 1.0	SUB BOARD		
MODULE CODE		LAST EDIT	May 10, 2011 10:53:25 AM			

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