

AMD KABINI EA/EG-40/50
PX /UMA Schematics Document
AMD FT3 APU
AMD GPU SUN XT M2/64bit

EAEG50 KB UMA

緯創資通

Wistron Corporation

21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title

Cover Page

Size

A4

Document Number

KABINI

Rev

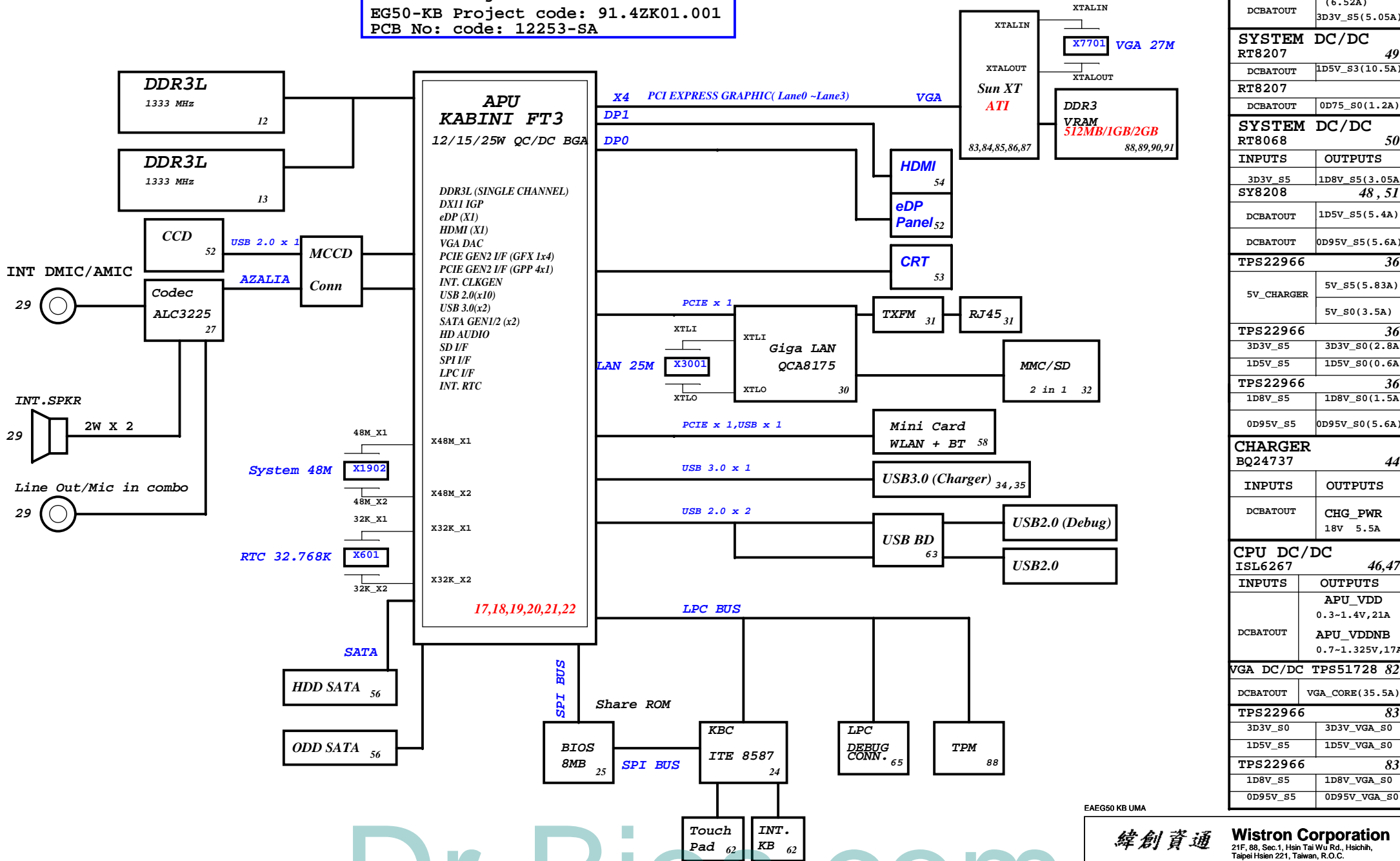
Date: Wednesday, October 24, 2012

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AMD KABINI

EA40-KB Project code: 91.4ZF01.001
 PCB No: code: 12247-SA
 EA50-KB Project code: 91.4YU01.001
 EG50-KB Project code: 91.4ZK01.001
 PCB No: code: 12253-SA



SYSTEM DC/DC		TPS51225		45	
INPUTS		OUTPUTS			
DCBATOUT		5V_CHARGER (6.52A)		3D3V_S5 (5.05A)	
SYSTEM DC/DC		RT8207		49	
DCBATOUT		1D5V_S3 (10.5A)		RT8207	
DCBATOUT		0D75_S0 (1.2A)			
SYSTEM DC/DC		RT8068		50	
INPUTS		OUTPUTS			
3D3V_S5		1D8V_S5 (3.05A)		SY8208	
48, 51		1D5V_S5 (5.44A)		DCBATOUT	
DCBATOUT		0D95V_S5 (5.6A)			
TPS22966				36	
5V_CHARGER		5V_S5 (5.83A)		TPS22966	
5V_S0 (3.5A)		3D3V_S5		36	
3D3V_S0 (2.8A)		1D5V_S5		36	
1D5V_S0 (0.6A)		1D8V_S5		36	
1D8V_S0 (1.5A)		0D95V_S5		36	
0D95V_S0 (5.6A)					
CHARGER		BQ24737		44	
INPUTS		OUTPUTS			
DCBATOUT		CHG_PWR		46,47	
18V 5.5A		APU_VDD		46,47	
0.3-1.4V, 21A		APU_VDDNB			
0.7-1.325V, 17A					
VGA DC/DC		TPS51728		82	
DCBATOUT		VGA_CORE (35.5A)		83	
TPS22966		3D3V_S0		83	
3D3V_S0		1D5V_S5		83	
1D5V_S5		1D8V_S5		83	
1D8V_S5		0D95V_S5		83	
0D95V_S5		3D3V_VGA_S0		83	
3D3V_VGA_S0		1D5V_VGA_S0		83	
1D5V_VGA_S0		1D8V_VGA_S0		83	
1D8V_VGA_S0		0D95V_VGA_S0		83	
0D95V_VGA_S0					

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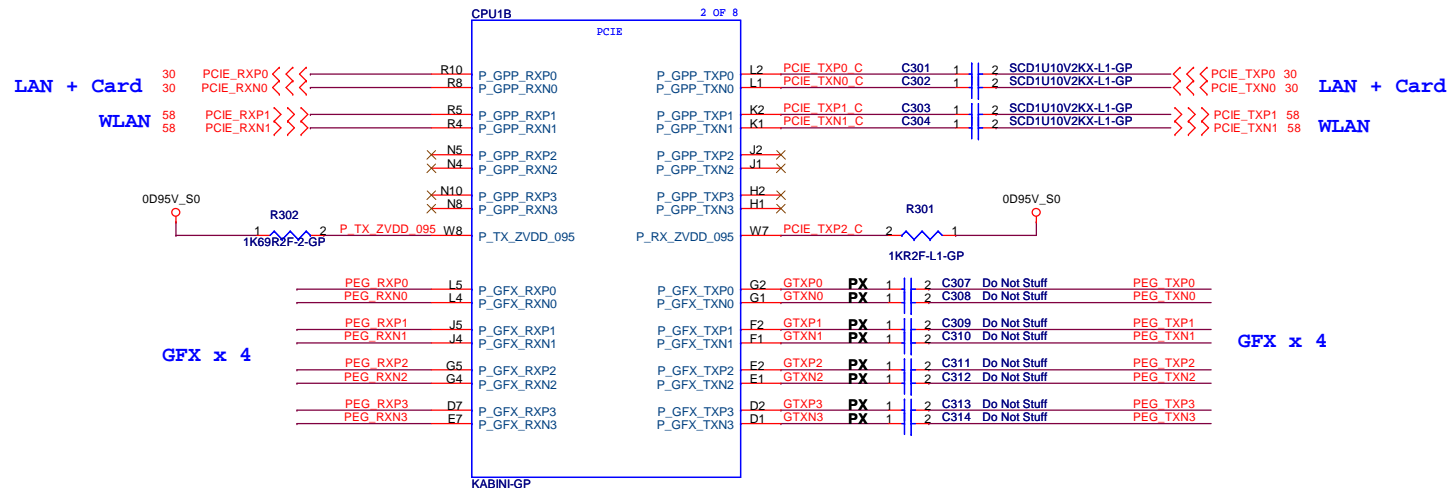
Block Diagram

Title: **KABINI**

Size A3 Document Number: **KABINI** Rev: **1**

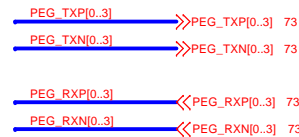
Date: Friday, February 01, 2013 Sheet 2 of 102

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PCIE Table

0	LAN + Card
1	WLAN
2	NC
3	NC

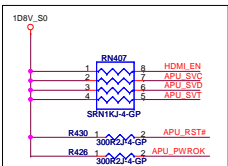


71.KABIN.B0U IC CPU Kabini 4110 1.5GHz 15W4C FT3 ES2 BGA
 71.KABIN.C0U IC CPU Kabini 5110 2.0GHz 25W4C FT3 ES2 BGA

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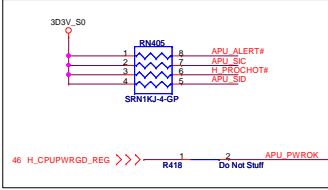
Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title	
CPU PCIE	
Size A3	Document Number
KABINI	
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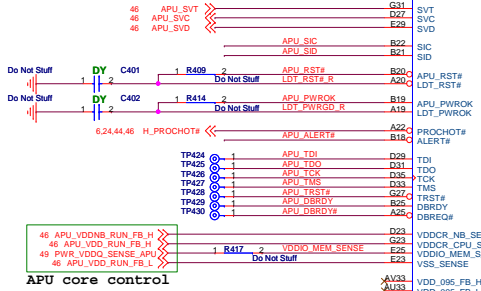
TABLE 6. PRE-PWROK METAL VID CODES

SVC	SVD	OUTPUT VOLTAGE (V)
0	0	1.1
0	1	1.0
1	0	0.9
1	1	0.8

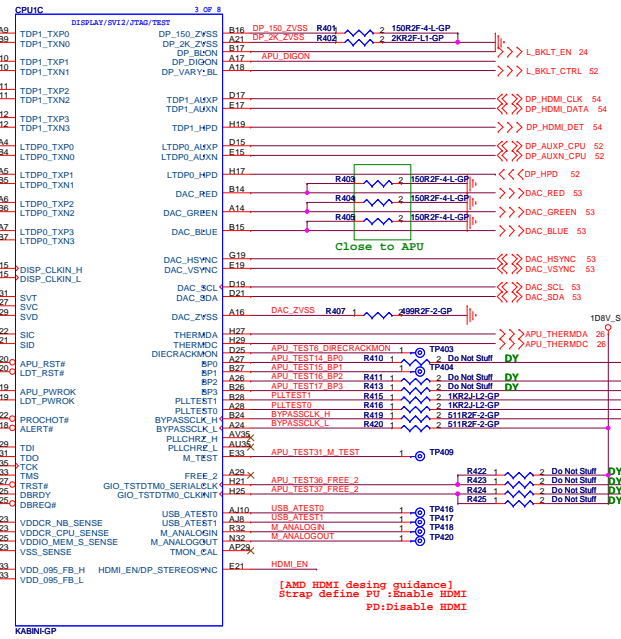
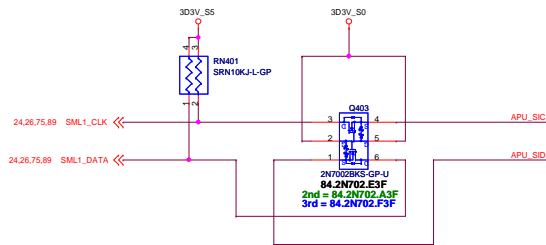


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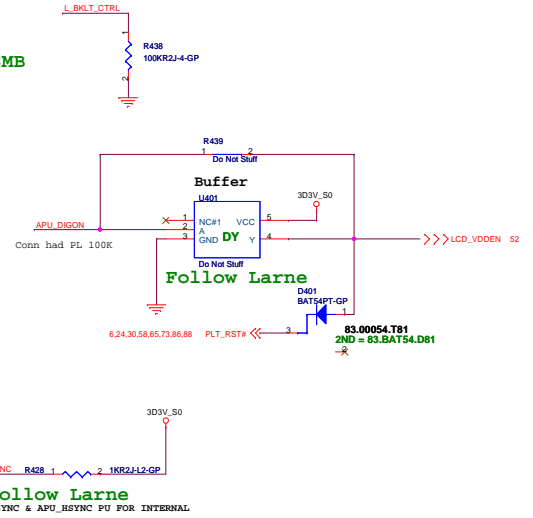
APU HDMI
APU EDP



APU core control



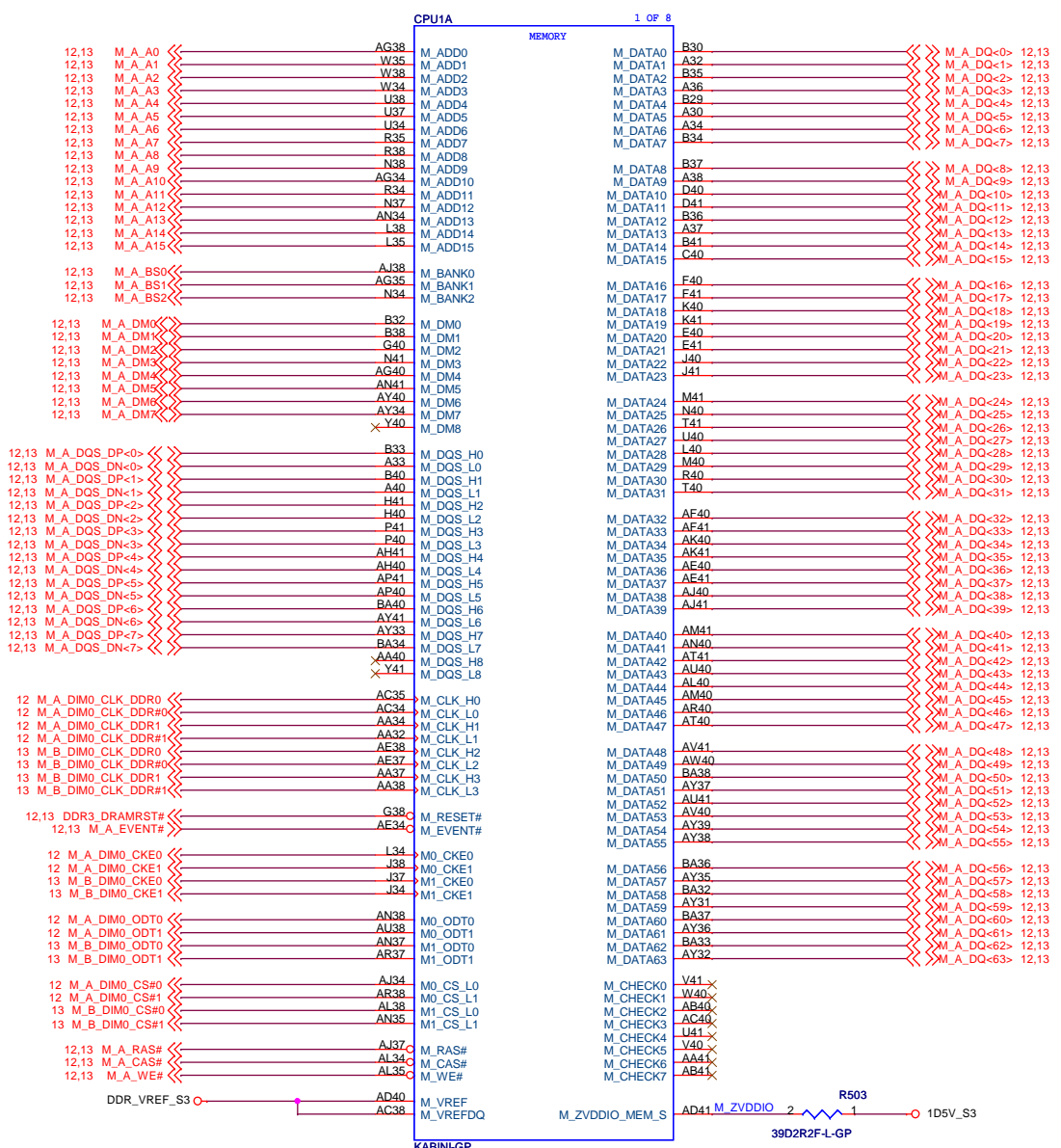
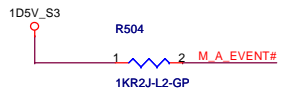
APU EDP
APU HDMI SMB
APU EDP
APU CRT



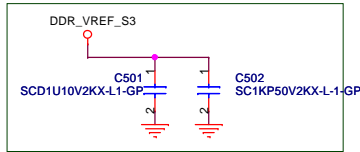
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APU_VREF_DQ



LAYOUT: place them close to APU

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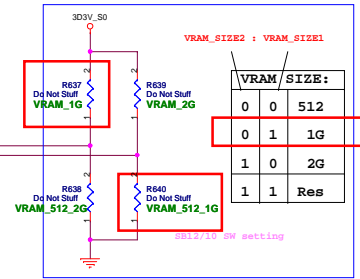
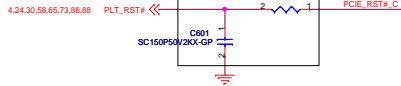
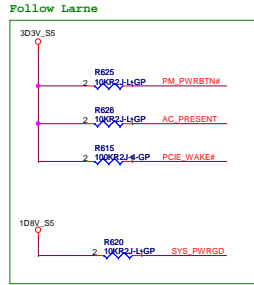
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Title		
CPU DDR		
Size	Document Number	Rev
A3	KABINI	
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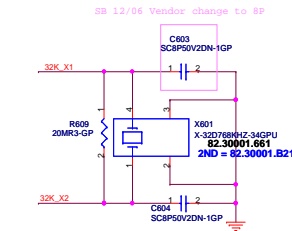
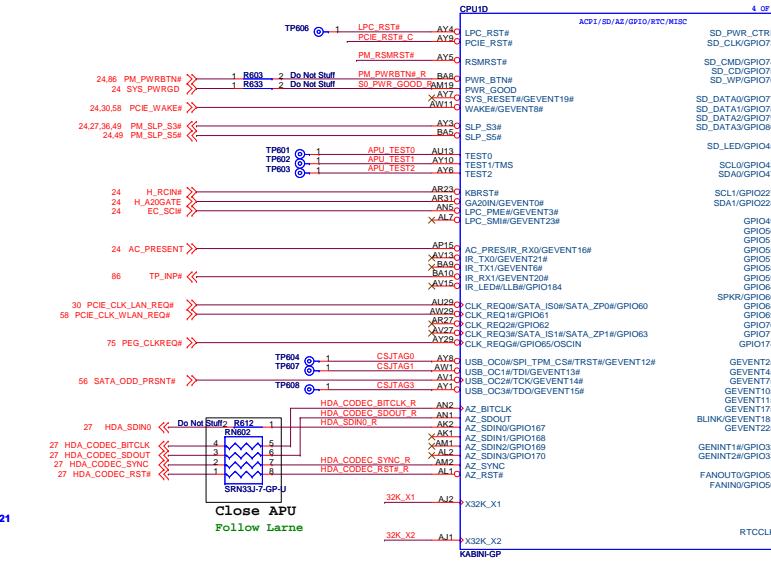
Pass Word Clear

Follow Larne



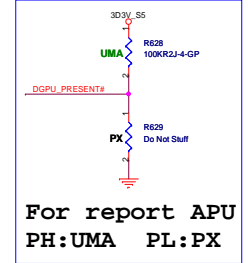
VRAM / SIZE:		
0	0	512
0	1	1G
1	0	2G
1	1	Res

SUN only 4 bank for 1G

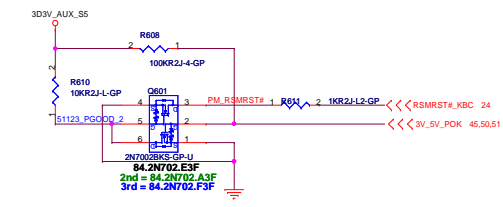


Close APU

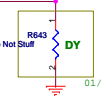
Follow Larne

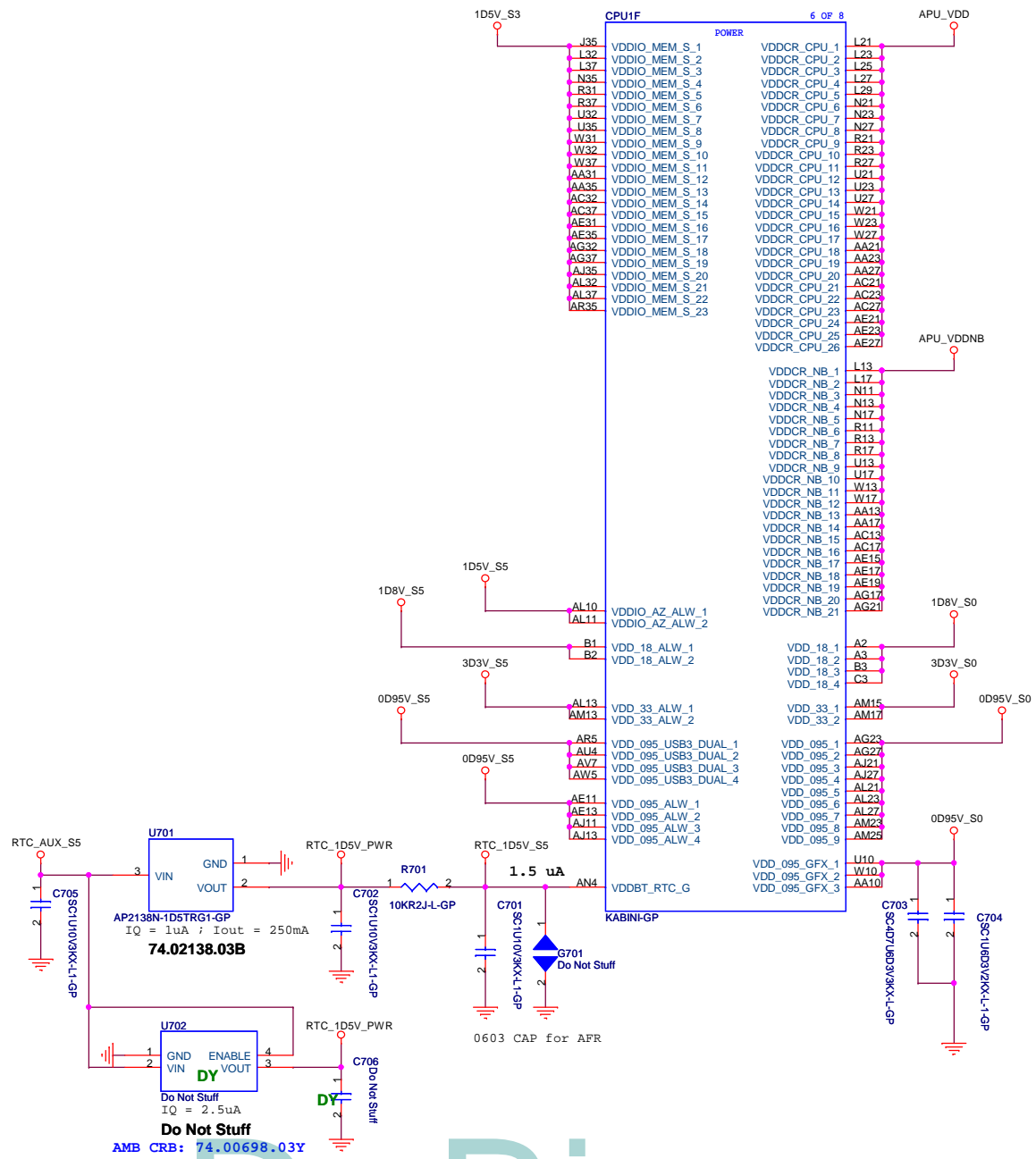


For report APU
PH:UMA PL:PX



HW setting MEM_IV5 H = 1.5V
L = 1.35V





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Title CPU VCC CORE		
Size A3	Document Number KABINI	Rev
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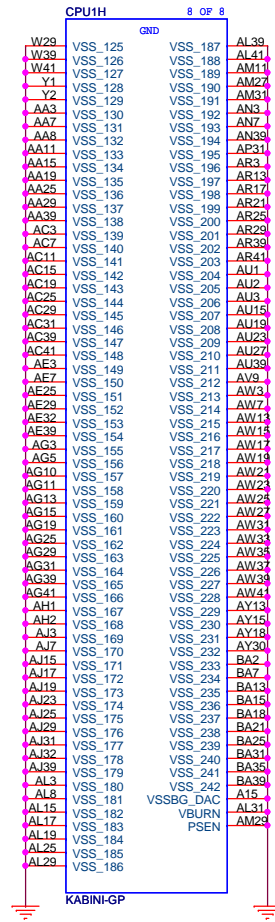
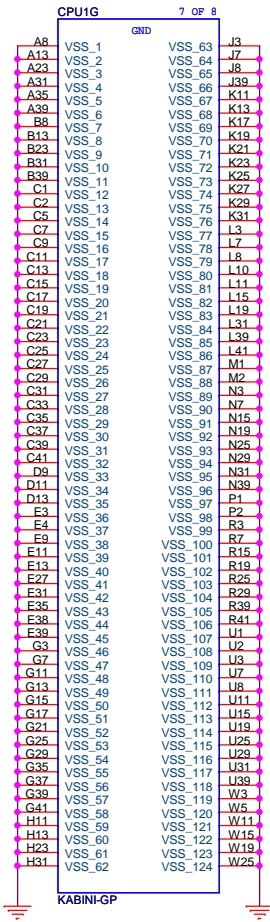
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Title	CPU VCC GFXCORE
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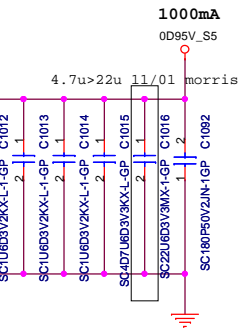
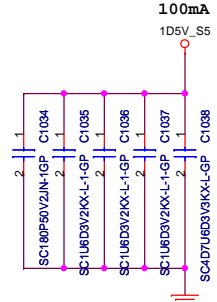
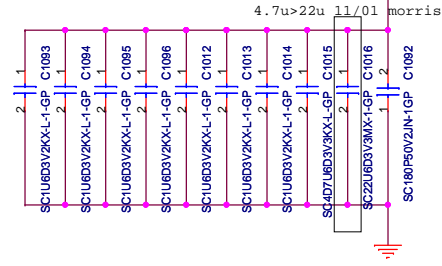
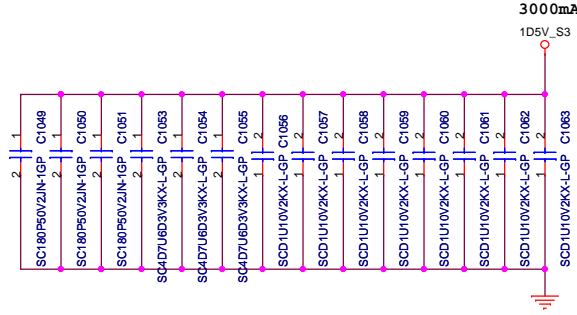
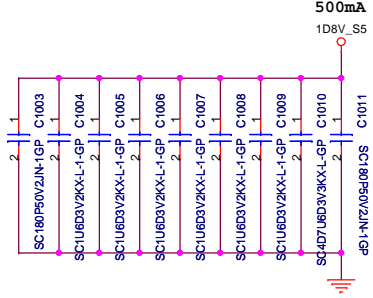
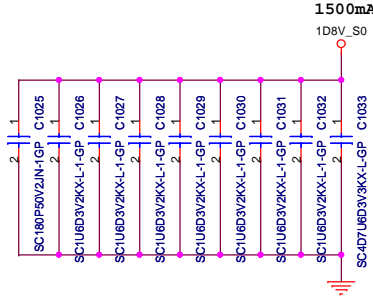
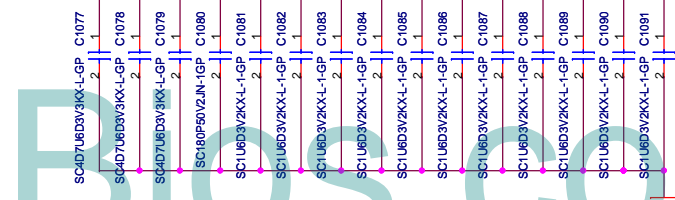
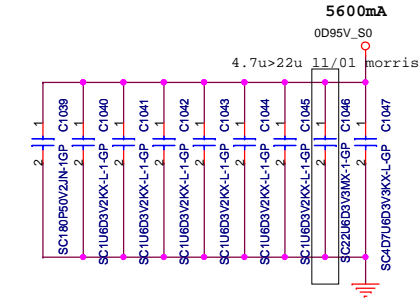
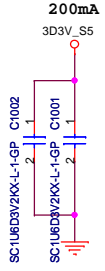
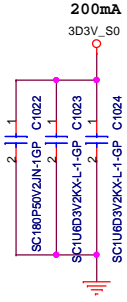
Size	Document Number	Rev
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Title	
CPU VSS	
Size	Document Number
A3	KABINI
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5

4

3

2

1

D

D

C

C

B

B

A

A

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Title

CPU POWER CAP2

Size

Document Number

Rev

A

KABINI

Date: Friday, September 07, 2012

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5

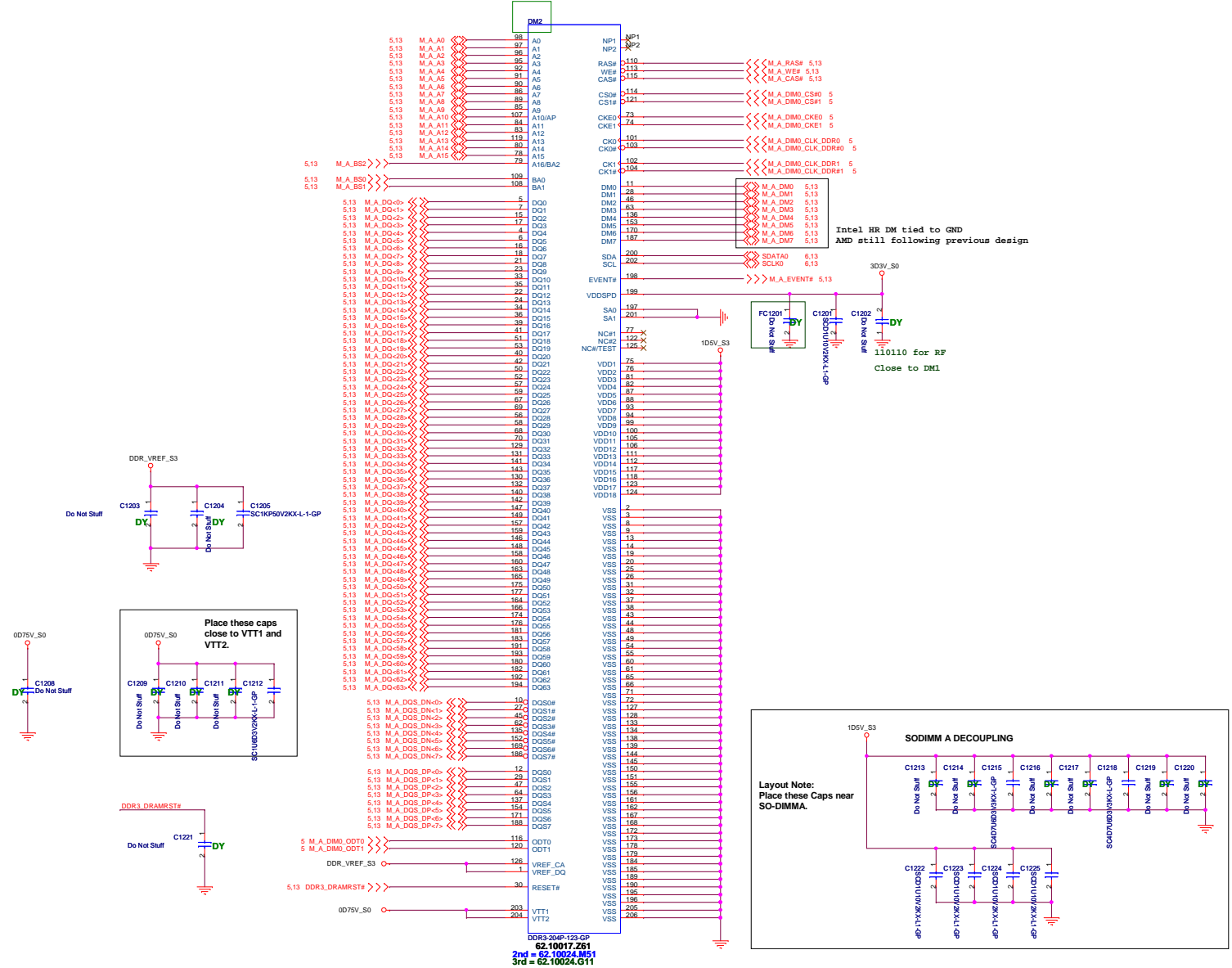
4

3

2

1

01/14 PD change location name for factory issue



Follow JE50-SB
H = 4mm

01/15 PD remove 62.10017.X31 for factory issue

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5

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2

1

D

D

C

C

B

B

A

A

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Taipei Hsien 221, Taiwan, R.O.C.

Title **CPU_PCIE/SMBUS/CLK/CL/SPI**

Size A	Document Number KABINI	Rev
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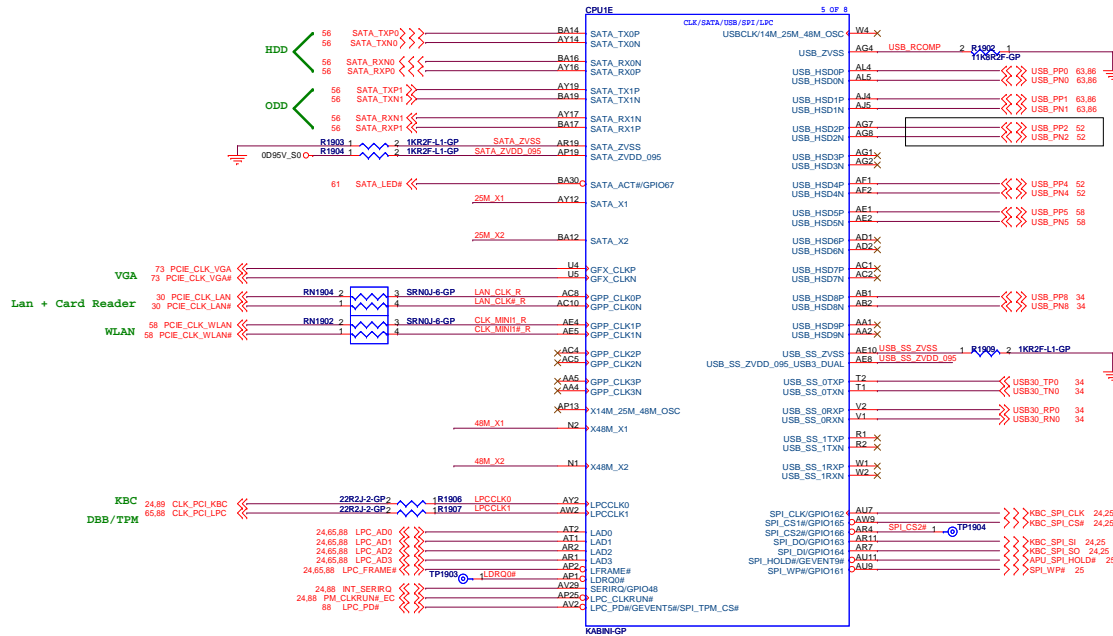
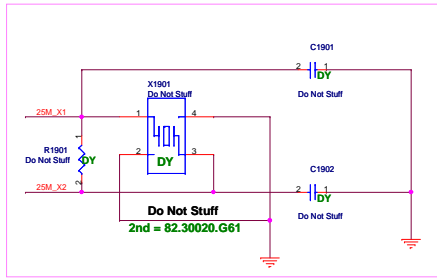
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SATA Table

0	HDD
1	ODD

SB 11/27 25M XTAL Reserved for AMD

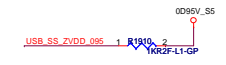


USB Table

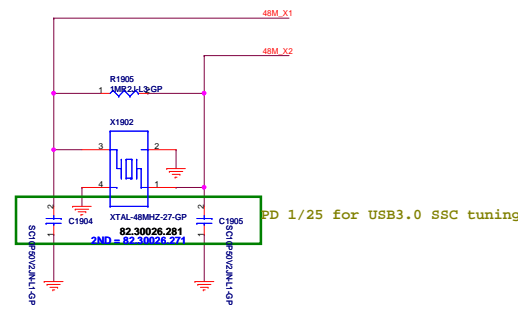
Pair	Device
0	USB2.0 Debug (DB Conn)
1	USB2.0 (DB Conn)
2	Touch Panel
3	
4	CCD (CCD Conn)
5	WLAN + BT (Mini PCI-E)
6	
7	
0/8	USB3.0 & USB 2.0 Charger (MB)
1/9	

Xtal Table

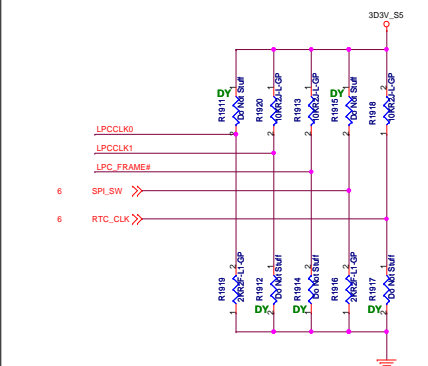
0	System & USB	CLK
1	RTC	32.768K
2	SATA	25M
3	LAN	25M
4	VGA	27M



SPI SHARE ROM



SYSTEM STRAPPINGS



	LPC_CLK0	LPC_CLK1	LFRAME #	EXPCARD_POE_FWREN#	RTC CLK
FULL	BOOT FAIL TIMER ENABLED	CLGEN ENABLED	SPI ROM	1.0V SPI ROM	NORMAL POWER UP/RESET TIMING
HIGH		(DEFAULT)	(DEFAULT)	(DEFAULT)	(DEFAULT)
FULL	BOOT FAIL TIMER DISABLED	CLGEN DISABLED	LPC ROM	3.3V SPI ROM	FAST POWER UP/RESET TIMING FOR SIMULATION
LOW	(DEFAULT)				

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Title		CPU GPIO/MISC
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Size	Document Number	Rev
A4	KABINI	

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Title		CPU POWER1
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Size	Document Number	Rev
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Title		CPU RSVD
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Size	Document Number	Rev
A4	KABINI	

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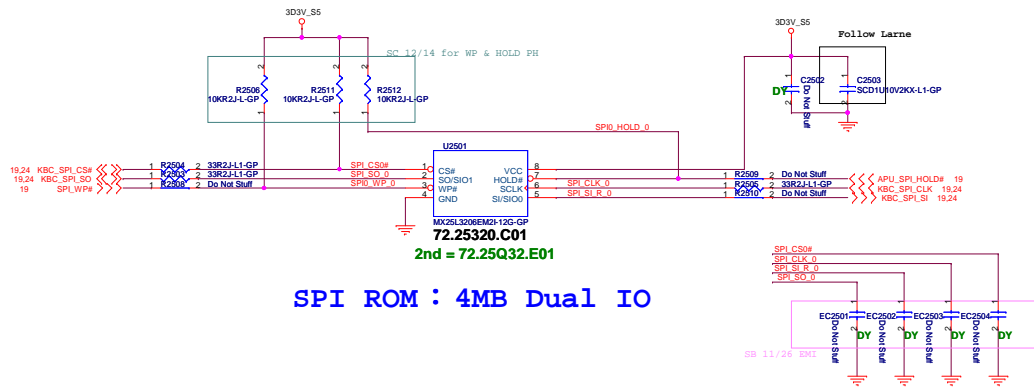
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Title		CPU VSS
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Size	Document Number	Rev
A4	KABINI	

SSID = Flash.ROM SPI FLASH ROM (4M byte) for KBC

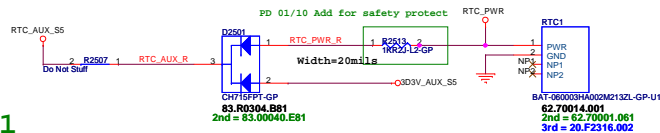
PD 1/28 SPI ROM : 4MB Dual IO
 1st. MXIC : 72.25320.C01
 2nd. WINBOND : 72.25Q32.E01
 (手置件)請PCC移至DIP件



SPI ROM : 4MB Dual IO

SSID = RBAT

CR2032額外備料:
 1.KTS: 23.20068.001
 2.DBV: 23.22065.001

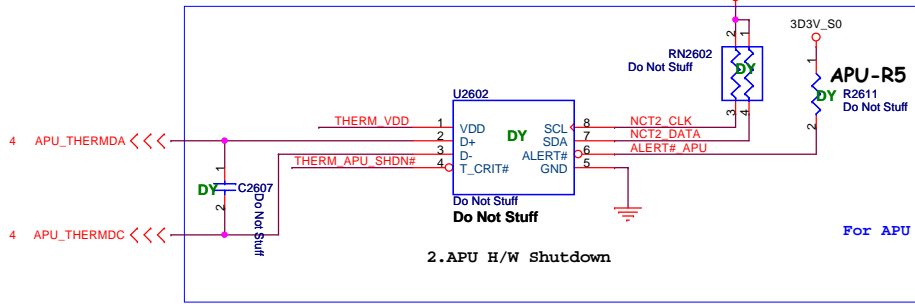
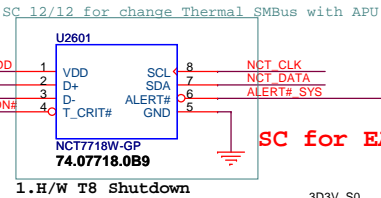
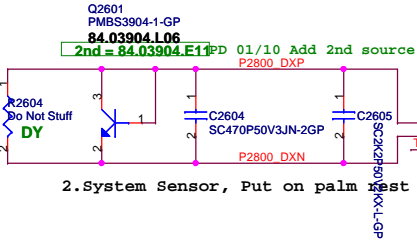


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SSID = Thermal

Thermal sensor NCT 7718W

Layout notice :
Both DXN and DXP routing 10 mil trace width and 10 mil spacing.

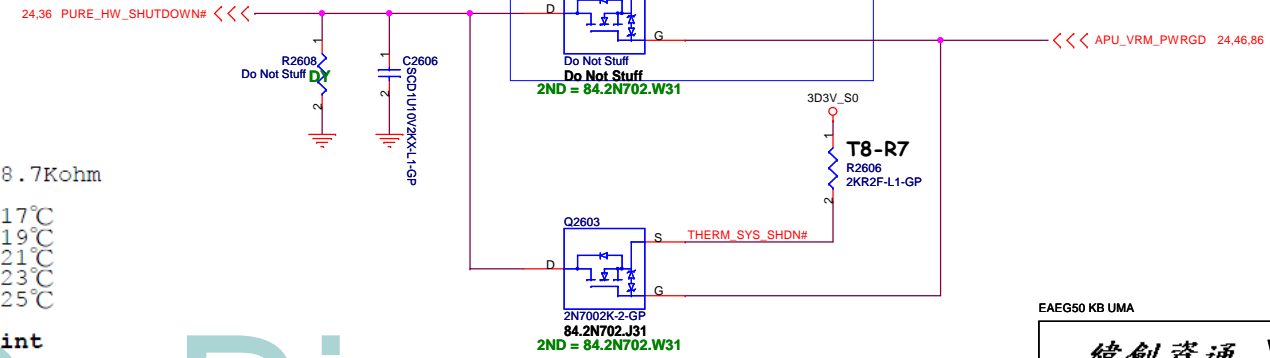
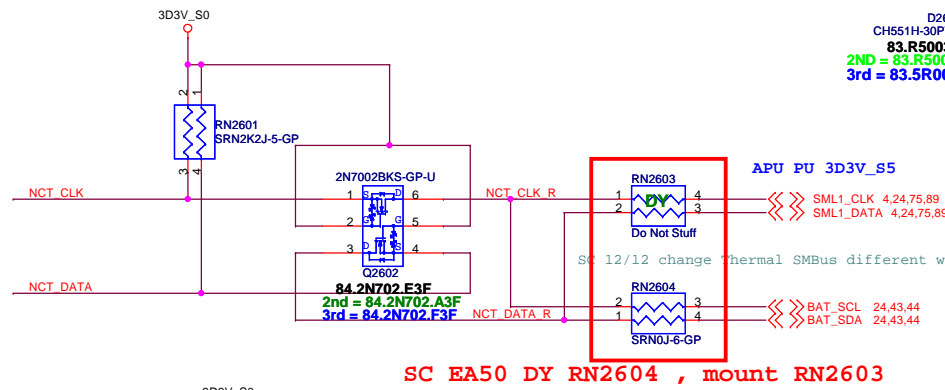


ALERT# /T CRIT#
Pull-up Resistor

R5	R7				
	2Kohm	7.5Kohm	10.5Kohm	14Kohm	18.7Kohm
2Kohm	77°C	87°C	97°C	107°C	117°C
7.5Kohm	79°C	89°C	99°C	109°C	119°C
10.5Kohm	81°C	91°C	101°C	111°C	121°C
14Kohm	83°C	93°C	103°C	113°C	123°C
18.7Kohm	85°C	95°C	105°C	115°C	125°C

T_CRIT temperature strapping point

T8=85 degree
SYS=85 degree
APU=125 degree



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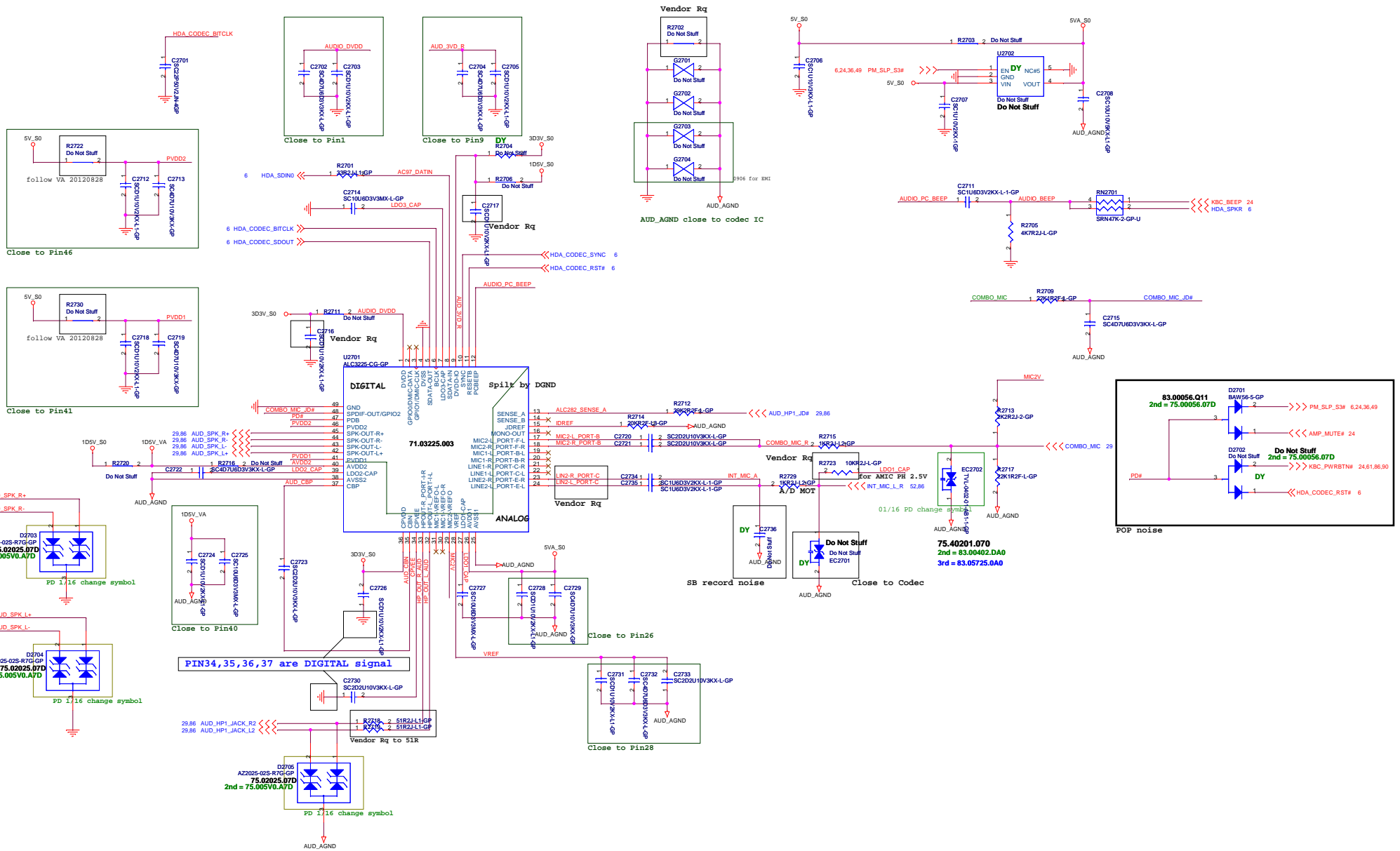
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Title: **Thermal 7718/Fan Controller P2793**

Size: Project Name: **KABINI** Rev: **SA**

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5

4

3

2

1

D

D

C

C

B

B

A

A

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Title		AMP ALC1001	
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Size	Project Name	KABINI	Rev	SA
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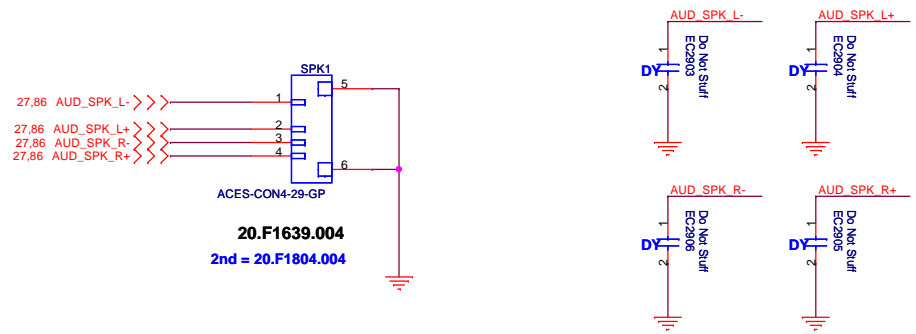
2

1

SSID = AUDIO

Speaker

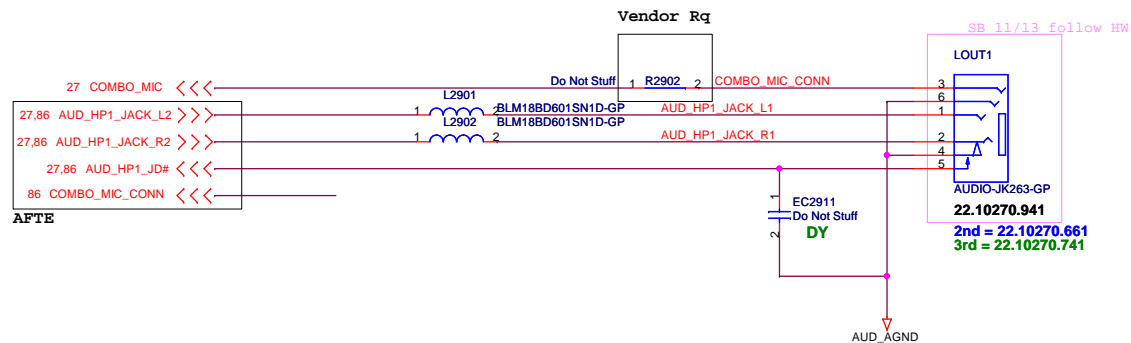
2W 4ohm X 2 speaker



Layout Note:

Trace width=40mil

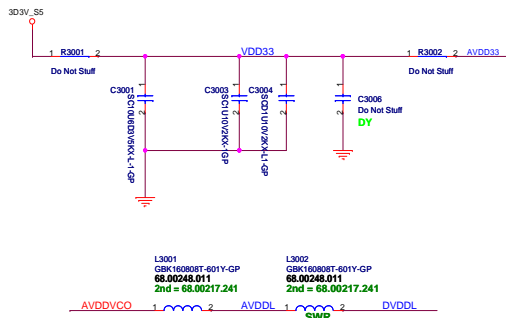
Combo Jack



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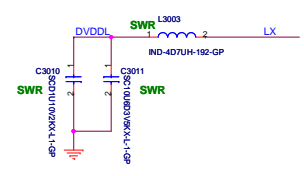
EAEG50 KB UMA

Wistron Corporation 21F, 88, Sec. 1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title Audio Jack	
Size	Project Name KABINI
Date: Monday, February 04, 2013	Rev SA
Sheet 29 of 102	

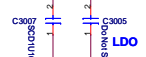


L3001 GRK180808T-601Y-GP
68.00248.011
2nd = 68.00217.241

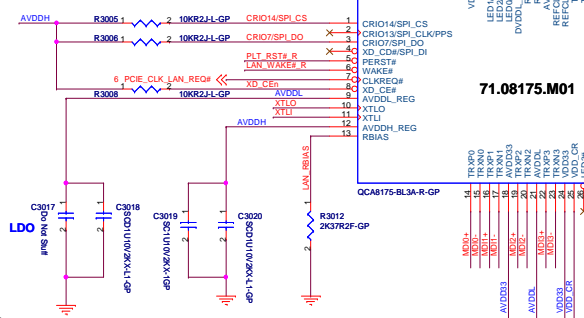
L3002 GRK180808T-601Y-GP
68.00248.011
2nd = 68.00217.241



PPS is used for IEEE 1588 timing synchronization and is an output pin to output an accurate 1Hz clock. Currently this pin can be floating.



71.08175.M01

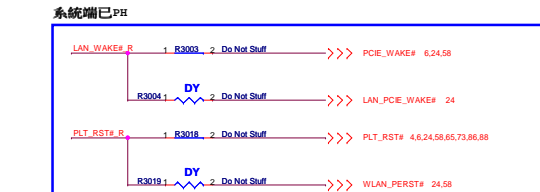
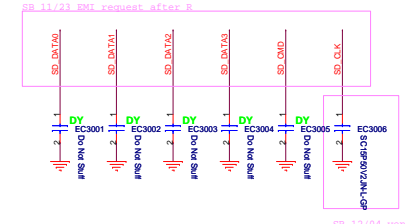
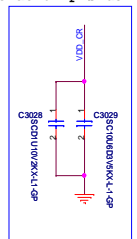
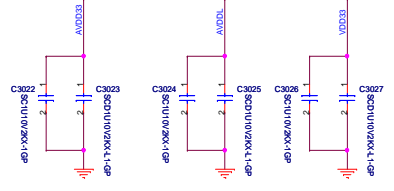
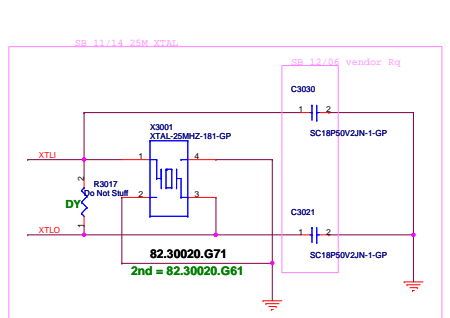


Power-On-Strapping Table

Pin	Description
LED[1]	1 Switch mode regulator (SWR) select
0	Linear regulator (LDO) select
LED[3]	1 25MHz clock input
0	48MHz clock input
[CRI014, CRI07]	1. Support xD, not support SPI.
	2. Can support PPS, PPS at LED[0] or LED[1] or LED[2] which is selected by eFuse.
01	1. Support SPI, not Support xD.
	2. Can support PPS, PPS at LED[0] or LED[1] or LED[2] which is selected by eFuse.
11	1. Not support xD, not support SPI.
	2. Only Support PPS, PPS always at CRI013.

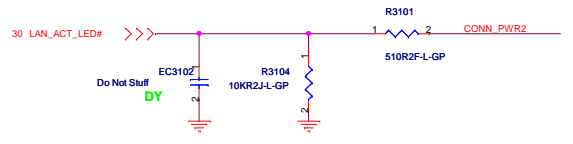
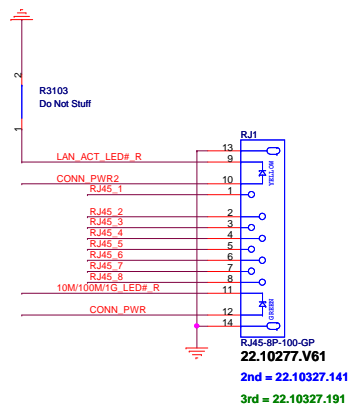
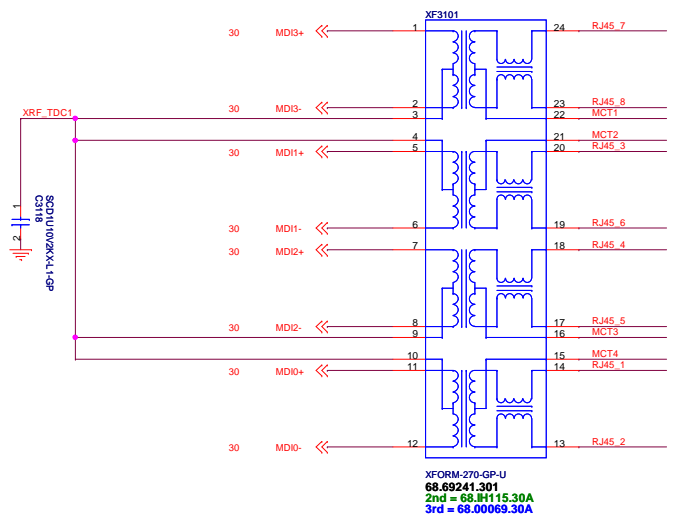
Check!!
ISOLATn is active low to isolate the whole chip to place in lowest power consumption mode.

place at chip side FAE suggest



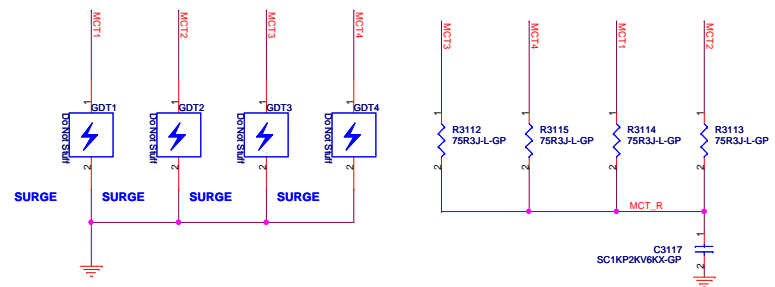
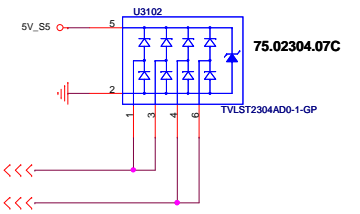
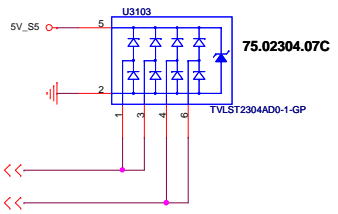
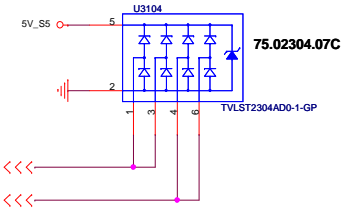
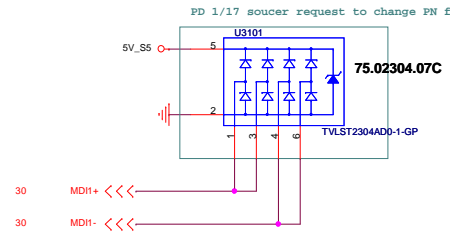
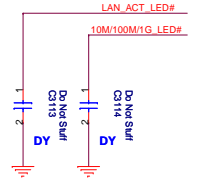
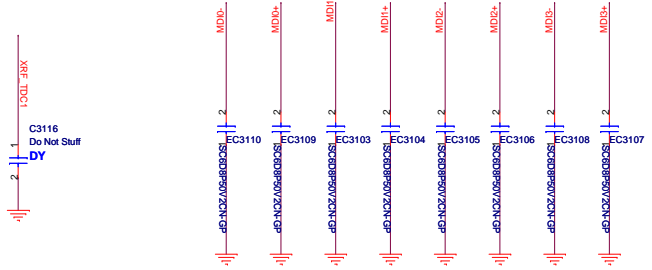
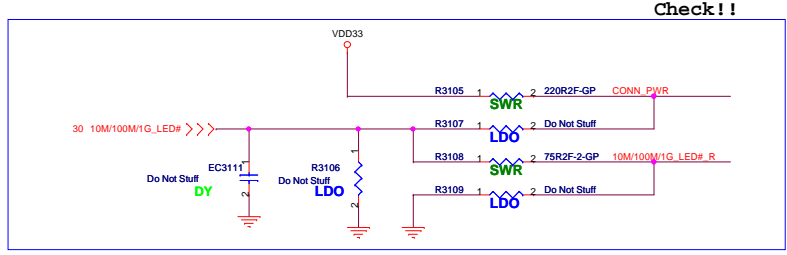
CRI0[14]	MS	MS	xD
CRI014	SDMMC eDn	MS DAT7	xD_ALE
CRI013	SDMMC eDn	MS DAT6	xD_RDBYn
CRI012	MMC DAT7	MS DAT7	xD_BSY
CRI011	MMC DAT6	MS DAT6	xDDATA6
CRI010	MMC DAT5	MS DAT5	xDDATA5
CRI09	MMC DAT4	MS DAT4	xDDATA4
CRI08	MMC DAT4	MS CLK	xD_CLE
CRI07	SD WP	MS BS	xD_WPh
CRI06	SDMMC CLK	MS DAT1	xD_PCS
CRI05	SDMMC CMD	MS CDn	xD_WEn
CRI04	SDMMC DAT9	MS DAT9	xDDATA9
CRI03	SDMMC DAT8	MS DAT8	xDDATA8
CRI02	SDMMC DAT2	MS DAT2	xDDATA2
CRI01	SDMMC DAT1	MS DAT1	xDDATA1
CRI00	SDMMC DAT0	MS DAT0	xDDATA0

SSID = LAN



- 86 RJ45_1 >>>
- 86 RJ45_2 >>>
- 86 RJ45_3 >>>
- 86 RJ45_4 >>>
- 86 RJ45_5 >>>
- 86 RJ45_6 >>>
- 86 RJ45_7 >>>
- 86 RJ45_8 >>>
- 86 LAN_ACT_LED#_R >>>
- 86 10M/100M/1G_LED#_R >>>
- 86 CONN_PWR >>>
- 86 CONN_PWR2 >>>

For AFTE



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5

4

3

2

1

D

D

C

C

B

B

A

A

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EAEG50 KB UMA

緯創資通		Wistron Corporation	
		21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	

Title		Card Reader IC	
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Size	Project Name	KABINI	Rev	SA
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Date: Friday, September 07, 2012	Sheet 32 of 102
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5

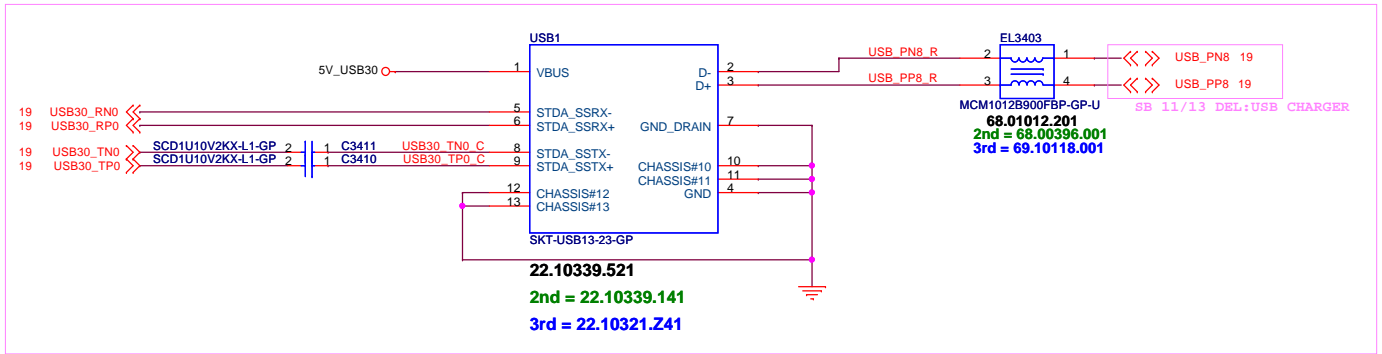
4

3

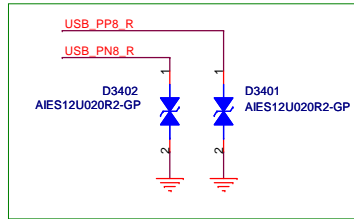
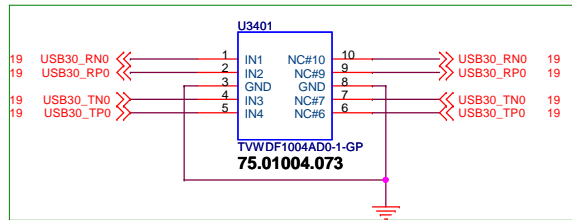
2

1

USB 2.0 CONTACT PIN		USB 3.0 CONTACT PIN	
PIN NO.	SIGNAL NAME	PIN NO.	SIGNAL NAME
1	VBUS	5	StdA_SSRX-
2	D-	6	StdA_SSRX+
3	D+	7	GND_DRAIN
4	GND	8	StdA_SSTX-
		9	StdA_SSTX+



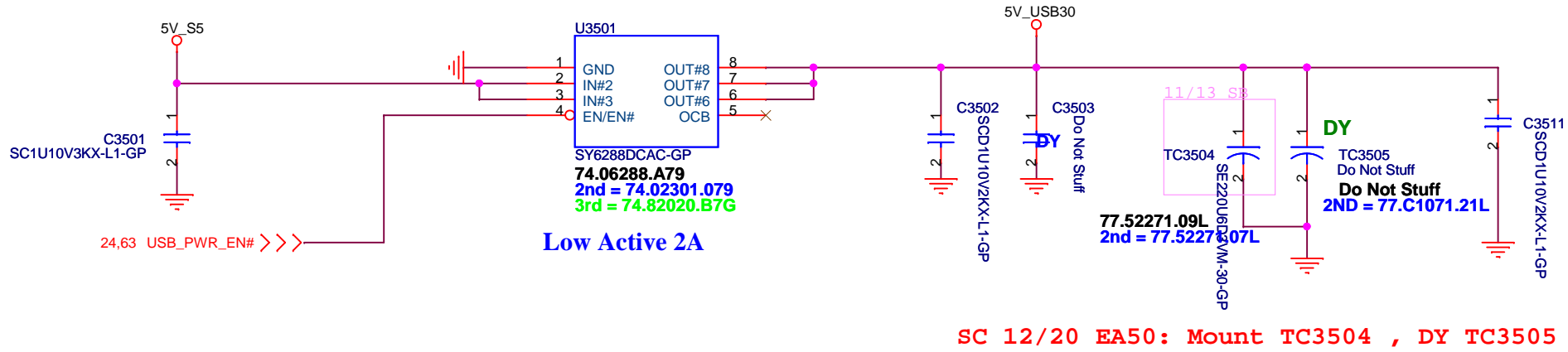
SB 11/13 Change USB30 P/N



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EAEG50 KB UMA

		Wistron Corporation 21F, 88, Sec. 1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.
Title		
USB 3.0 Port		
Size	Project Name	Rev
	KABINI	5A
Date: Monday, February 04, 2013		Sheet 34 of 102



EAE50 KB UMA

緯創資通

Wistron Corporation
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title		USB_Charger	
Size	Project Name	KABINI	Rev SA
Date:	Monday, February 04, 2013	Sheet 35	of 102

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5

4

3

2

1

D

D

C

C

B

B

A

A

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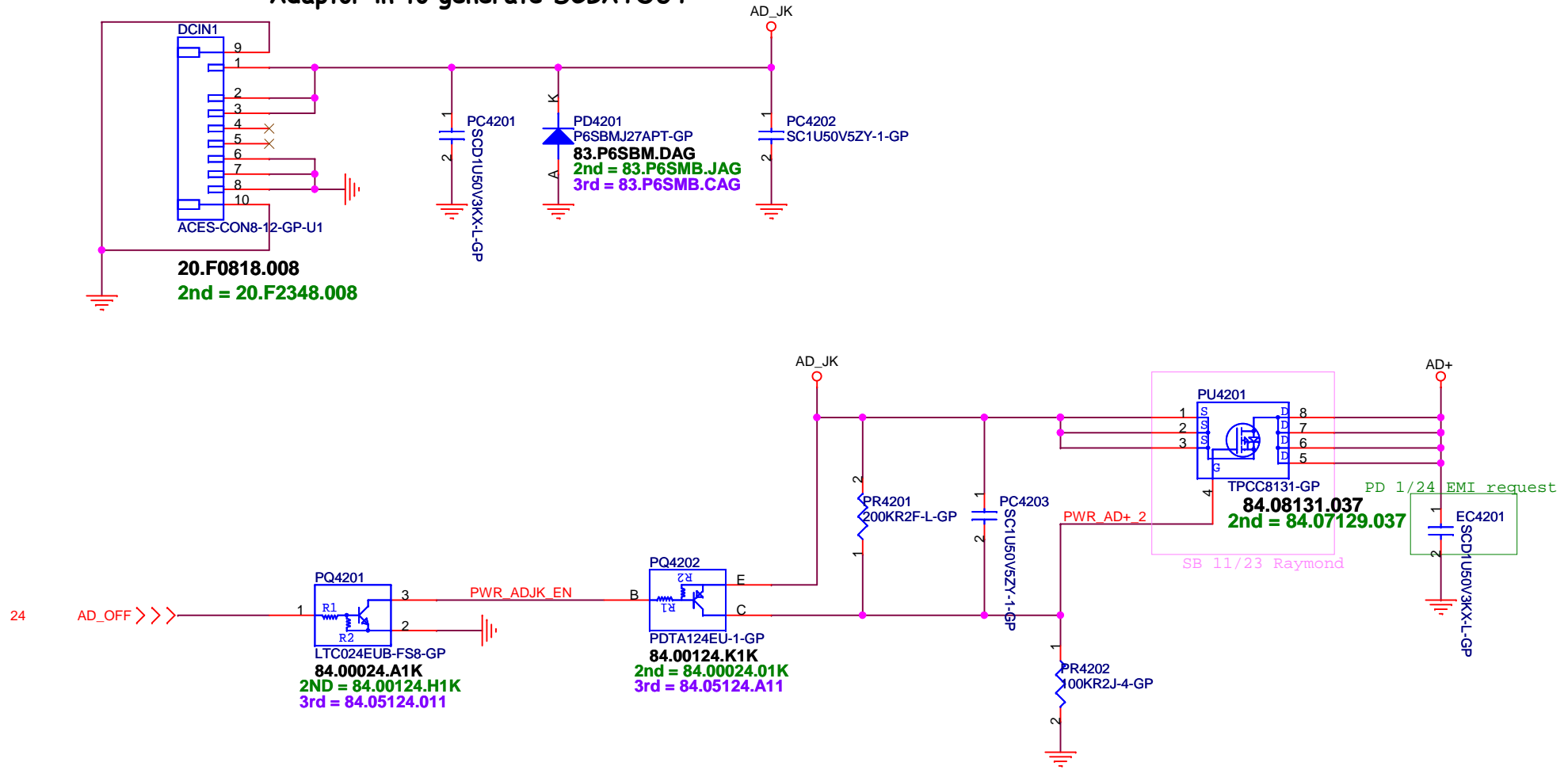
緯創資通		Wistron Corporation	
		21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	

Title

Size	Project Name	Rev
	KABINI	SA

ANNIE solution

Adaptor in to generate DCBATOUT



EAEG50 KB UMA

緯創資通

Wistron Corporation

21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title

DCIN JACK

Size

Project Name

KABINI

Rev

SA

Date: Tuesday, February 19, 2013

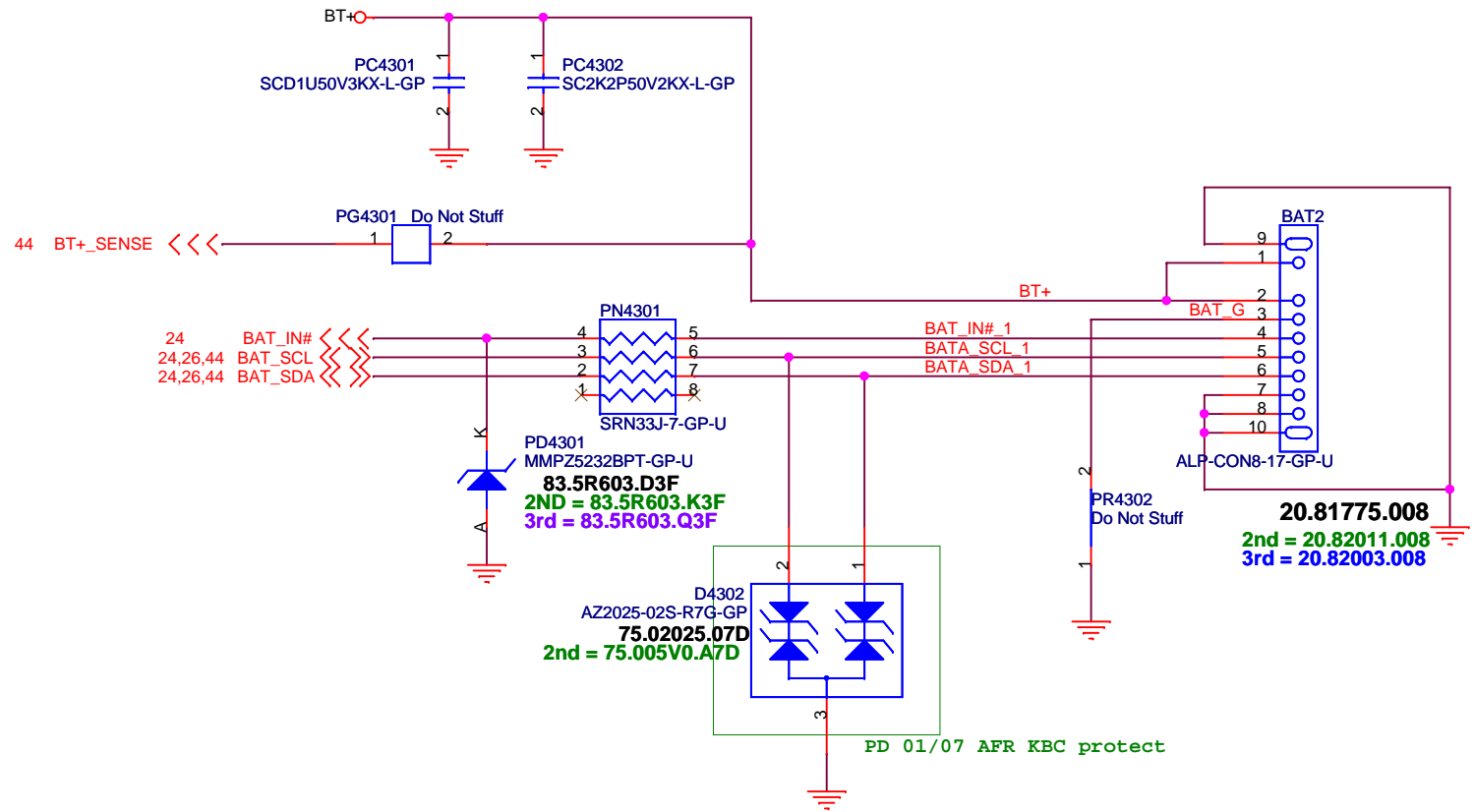
Sheet 42 of 102

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BATTERY CONNECTOR

86	BATA_SDA_1	>>>	_____
86	BATA_SCL_1	>>>	_____
86	BAT_IN#_1	>>>	_____
86	BAT_G	>>>	_____

For AFTE



EAE50 KB UMA

緯創資通 **Wistron Corporation**
 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
 Taipei Hsien 221, Taiwan, R.O.C.

Title		BATT CONN	
Size	Project Name	KABINI	
Date	Wednesday, February 20, 2013	Rev	SA
Sheet	43	of	102

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SSID = PWR.Plane.Regulator_3p3v5v

Cut off itself

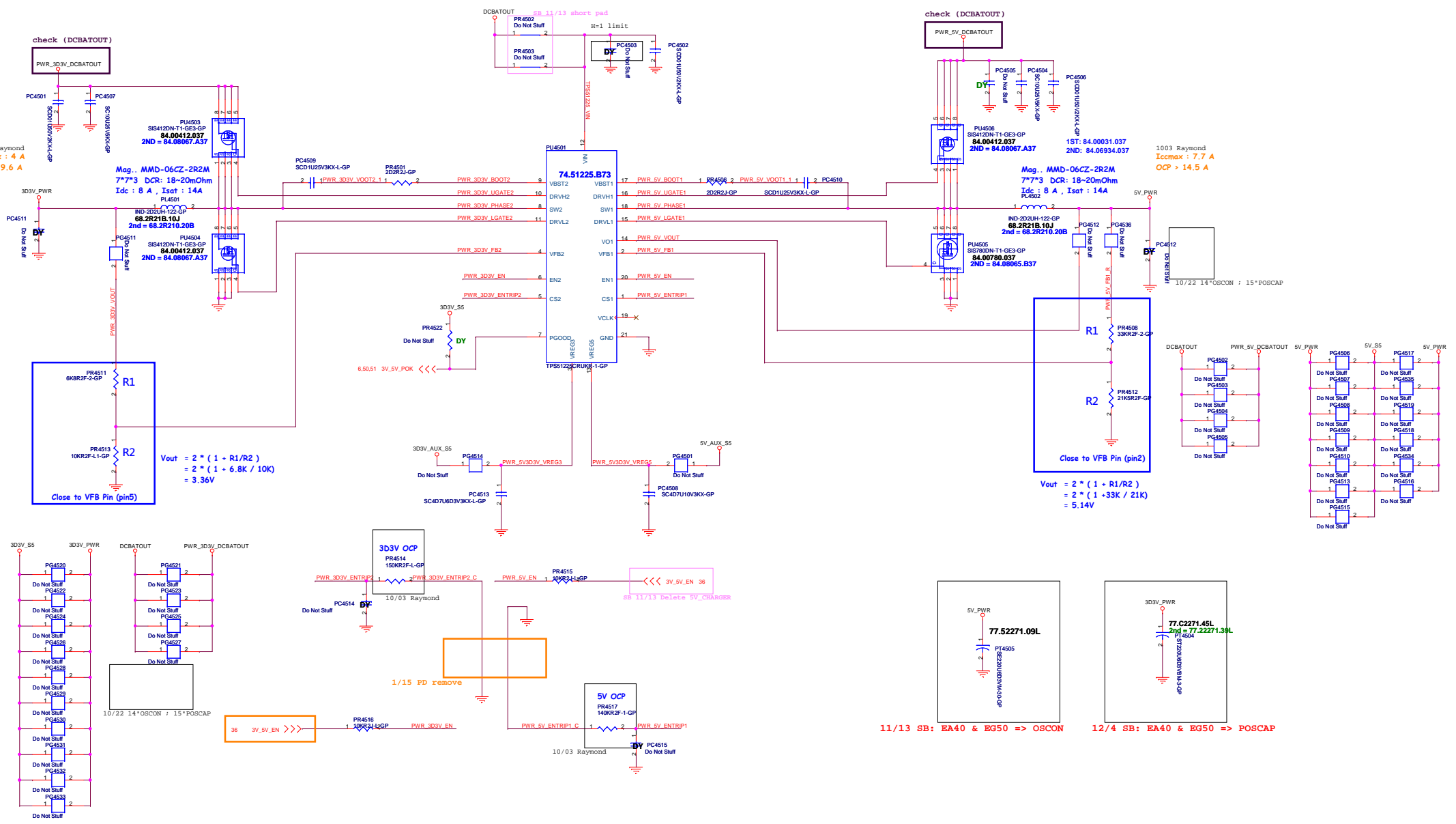
check (UVP)

check (DCBATOUT)

check (DCBATOUT)

1003 Raymond
Iccmax : 4.4 A
OCP > 9.6 A

1003 Raymond
Iccmax : 7.7 A
OCP > 14.5 A



Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4501
2nd = 84.00412.037
2ND = 84.08067.A37

Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4502
2nd = 84.00412.037
2ND = 84.08067.A37

Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4503
2nd = 84.00412.037
2ND = 84.08067.A37

Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4504
2nd = 84.00412.037
2ND = 84.08067.A37

Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4505
2nd = 84.00412.037
2ND = 84.08067.A37

Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4506
2nd = 84.00412.037
2ND = 84.08067.A37

Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4507
2nd = 84.00412.037
2ND = 84.08067.A37

Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4508
2nd = 84.00412.037
2ND = 84.08067.A37

Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4509
2nd = 84.00412.037
2ND = 84.08067.A37

Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4510
2nd = 84.00412.037
2ND = 84.08067.A37

Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4511
2nd = 84.00412.037
2ND = 84.08067.A37

Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4512
2nd = 84.00412.037
2ND = 84.08067.A37

Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4513
2nd = 84.00412.037
2ND = 84.08067.A37

Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4514
2nd = 84.00412.037
2ND = 84.08067.A37

Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4515
2nd = 84.00412.037
2ND = 84.08067.A37

Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4516
2nd = 84.00412.037
2ND = 84.08067.A37

Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4517
2nd = 84.00412.037
2ND = 84.08067.A37

Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4518
2nd = 84.00412.037
2ND = 84.08067.A37

Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4519
2nd = 84.00412.037
2ND = 84.08067.A37

Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4520
2nd = 84.00412.037
2ND = 84.08067.A37

Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4501
2nd = 84.00412.037
2ND = 84.08067.A37

Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4502
2nd = 84.00412.037
2ND = 84.08067.A37

Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4503
2nd = 84.00412.037
2ND = 84.08067.A37

Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4504
2nd = 84.00412.037
2ND = 84.08067.A37

Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4505
2nd = 84.00412.037
2ND = 84.08067.A37

Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4506
2nd = 84.00412.037
2ND = 84.08067.A37

Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4507
2nd = 84.00412.037
2ND = 84.08067.A37

Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4508
2nd = 84.00412.037
2ND = 84.08067.A37

Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4509
2nd = 84.00412.037
2ND = 84.08067.A37

Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4510
2nd = 84.00412.037
2ND = 84.08067.A37

Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4511
2nd = 84.00412.037
2ND = 84.08067.A37

Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4512
2nd = 84.00412.037
2ND = 84.08067.A37

Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4513
2nd = 84.00412.037
2ND = 84.08067.A37

Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4514
2nd = 84.00412.037
2ND = 84.08067.A37

Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4515
2nd = 84.00412.037
2ND = 84.08067.A37

Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4516
2nd = 84.00412.037
2ND = 84.08067.A37

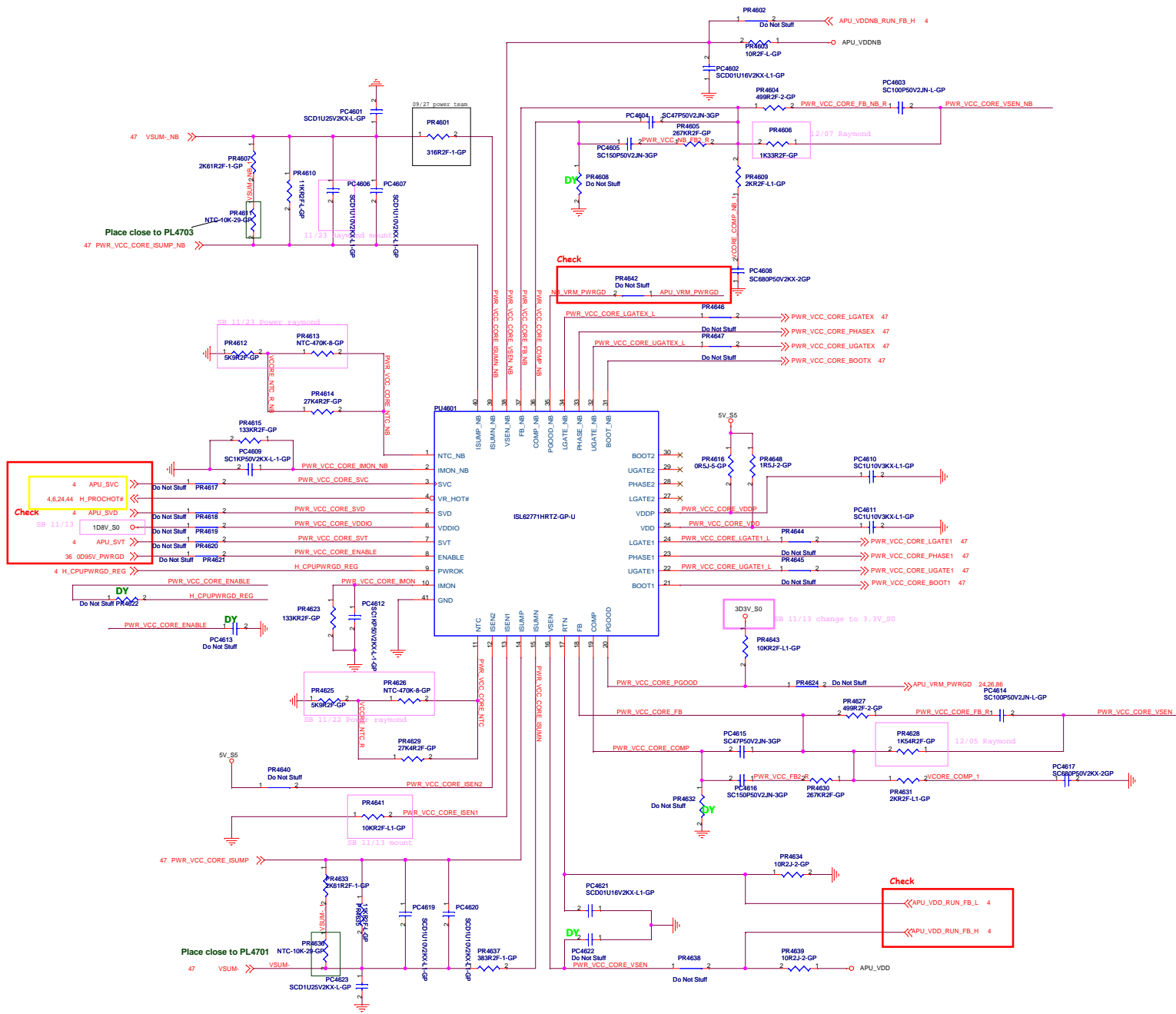
Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4517
2nd = 84.00412.037
2ND = 84.08067.A37

Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4518
2nd = 84.00412.037
2ND = 84.08067.A37

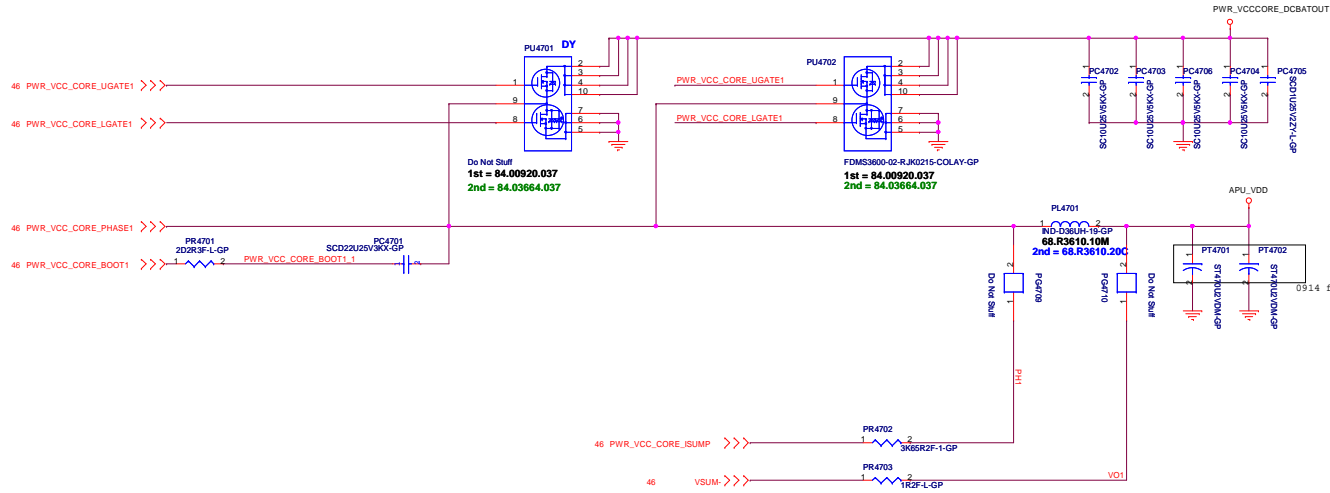
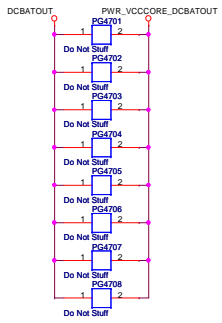
Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4519
2nd = 84.00412.037
2ND = 84.08067.A37

Mag. MMD-06CZ-2R2M
777*3 DCR: 18-20mOhm
I_{dc} : 8 A , I_{sat} : 14A
PL4520
2nd = 84.00412.037
2ND = 84.08067.A37

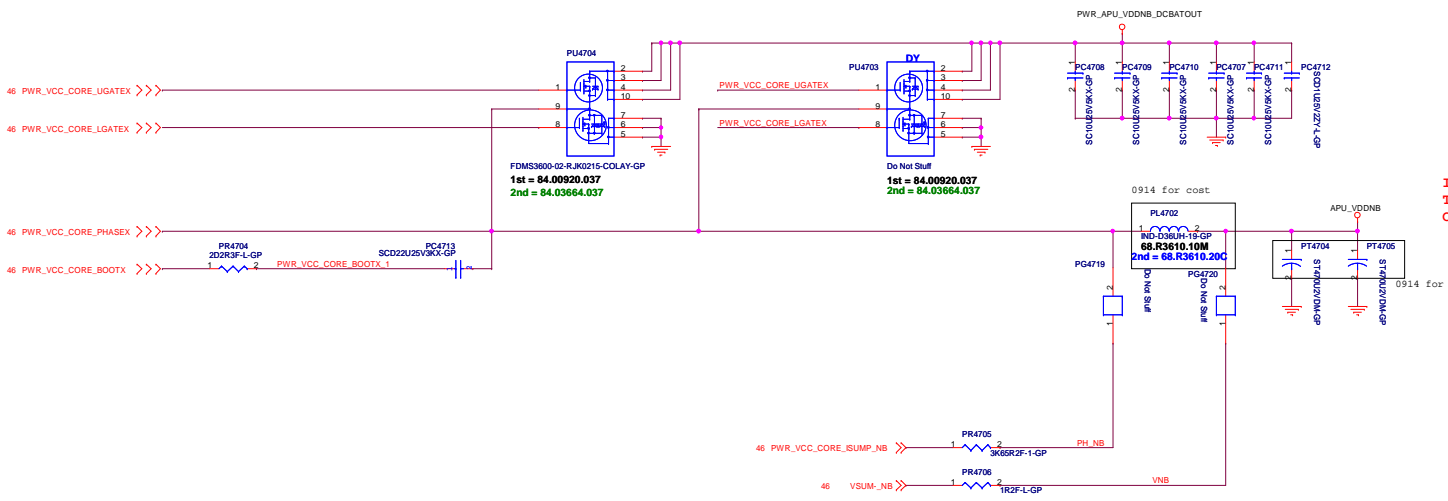
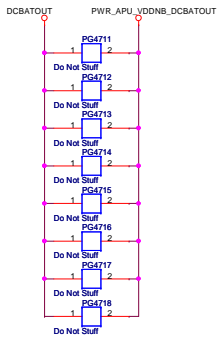
Dr-Bios.com



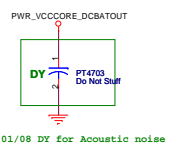
Dr-Bios.com



Iccmax=21A
TDC=16.8A
OCP>26.3A

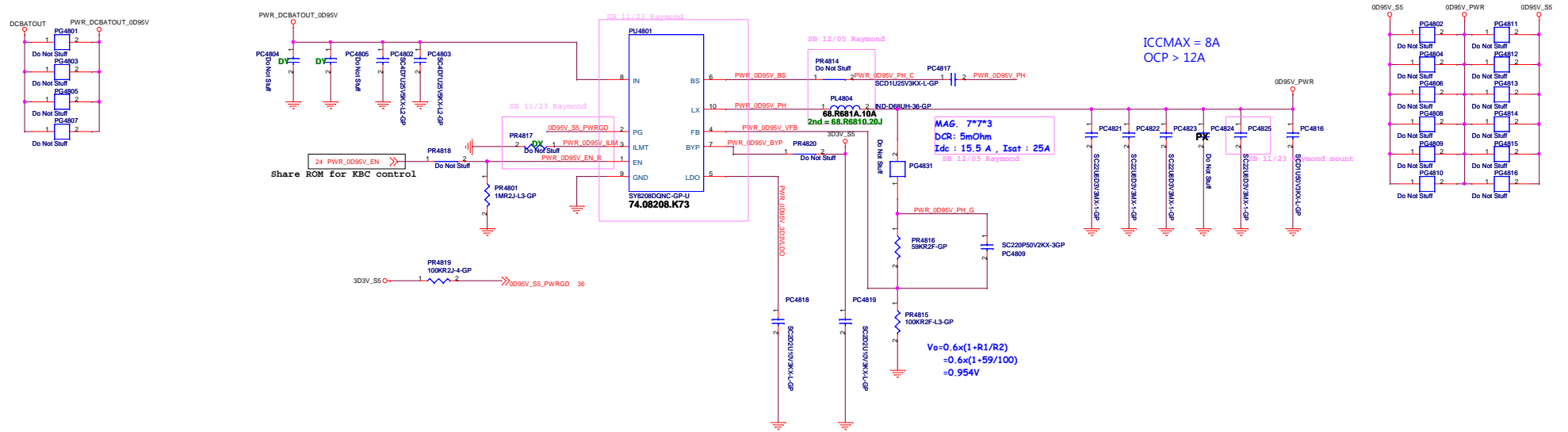


Iccmax=17A
TDC=13.6A
OCP>21.3A

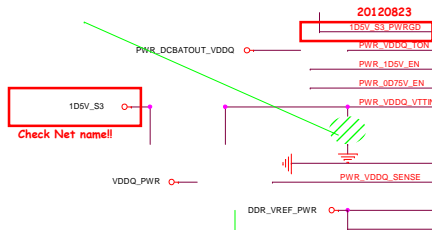
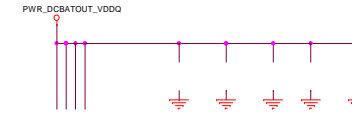
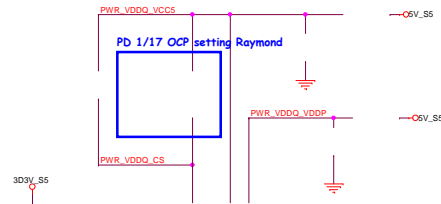
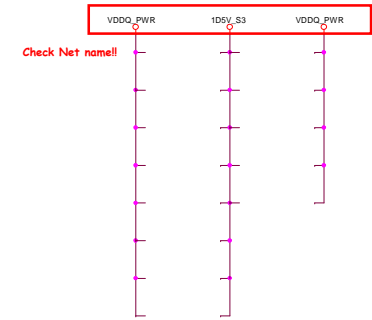
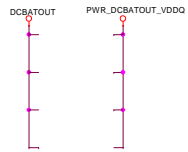


Dr-Bios.com

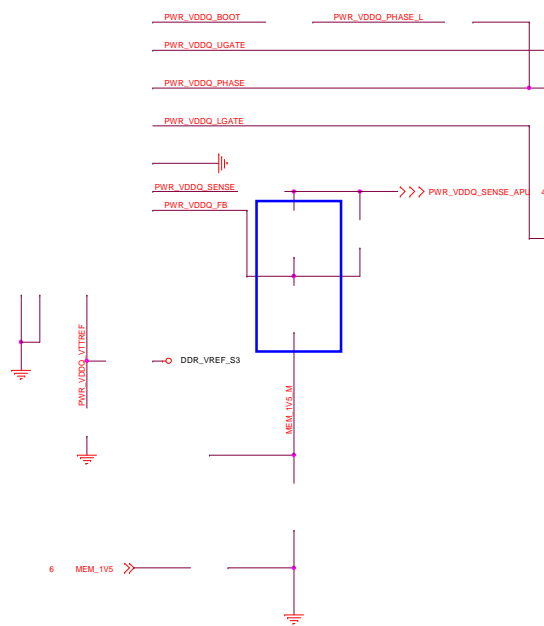
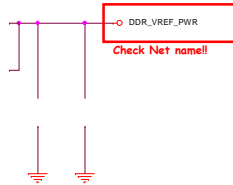
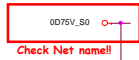
SY8208D for OD95V



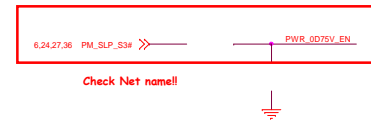
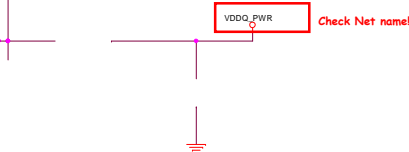
Dr-Bios.com



**I_omax=1A
OCP>1.5A**
Close to output cap pin1, not inside of the output cap

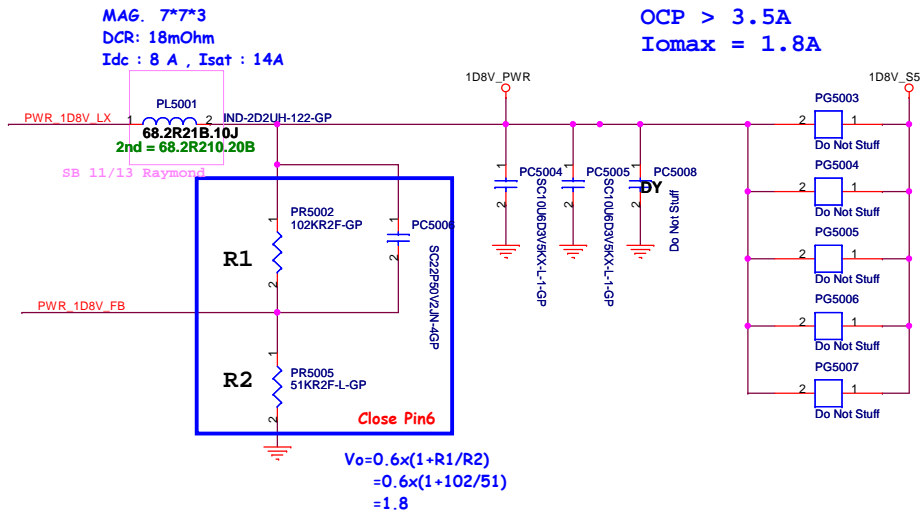
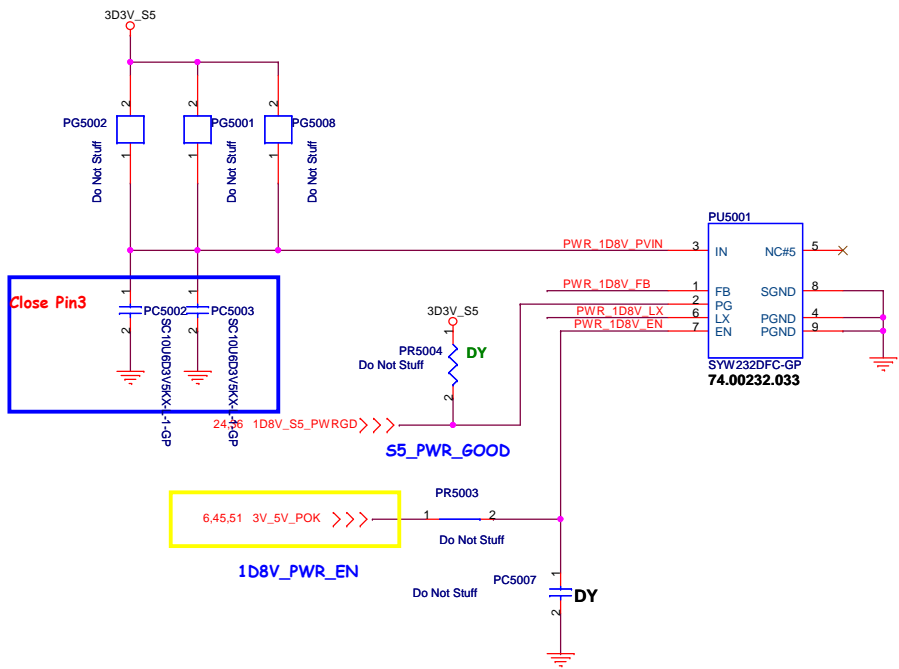


CYNTec. 0.68uH 7*7*3
DCR= 5 ~ 5.5 mohm
I_{dc}=15.5A, I_{sat}=25A



Dr-Bios.com

SSID = PWR.Plane.Regulator_1p8v

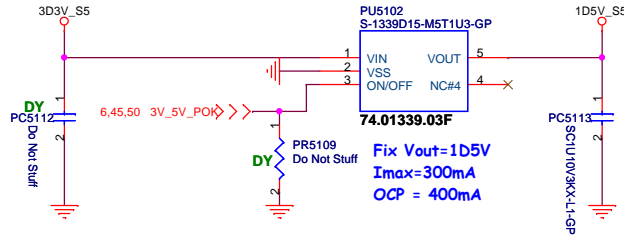


Dr-Bios.com

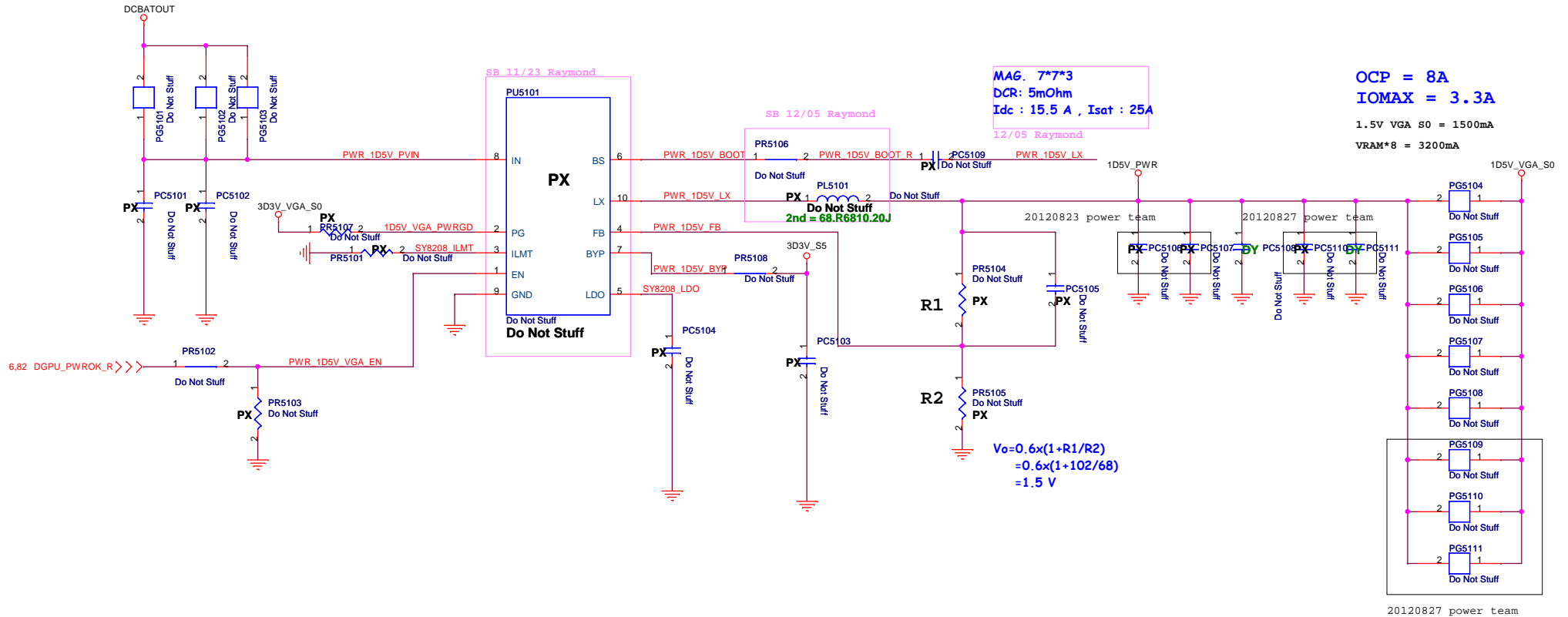
EAEG50 KB UMA		
緯創資通		Wistron Corporation
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.		
Title		1D8V_S0 SYW232
Size A3	Document Number	KABINI
Date: Monday, February 04, 2013	Sheet	50 of 102

LDO for 1D5V_S5 (SB 11/13)

$$1.5V\ S0 = 100mA(VDDIO_AZ) + 100mA(Audio) + 600mA(Minicard\ DY) = 200mA$$



SY8208D for 1D5V_VGA_S0 (SB 11/13)



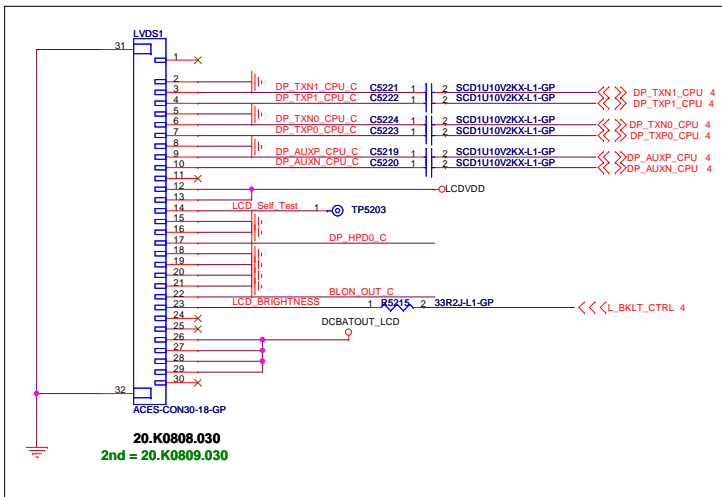
Dr-Bios.com

EAEG50 KB UMA

緯創資通 Wistron Corporation
 21F, 88, Sec. 1, Hsin Tai Wu Rd., Hsichih,
 Taipei Hsien 221, Taiwan, R.O.C.

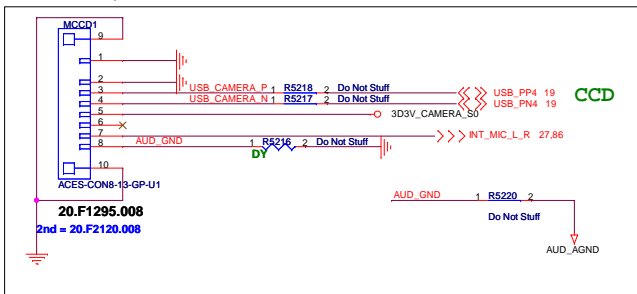
Title			1D5V_S5 SY8208D		
Size	Document Number	KABINI			Rev
A3					
Date:	Tuesday, February 19, 2013	Sheet	51	of	102

eDP Conn.



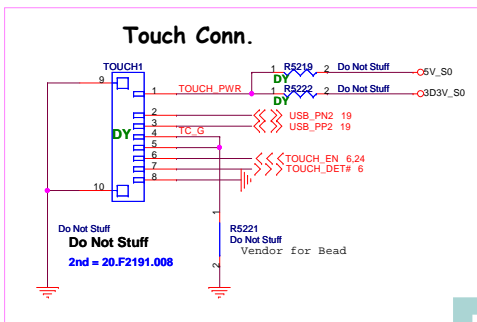
10/04 change to 20.K0808.030 for ME request

Camera+MIC Conn.



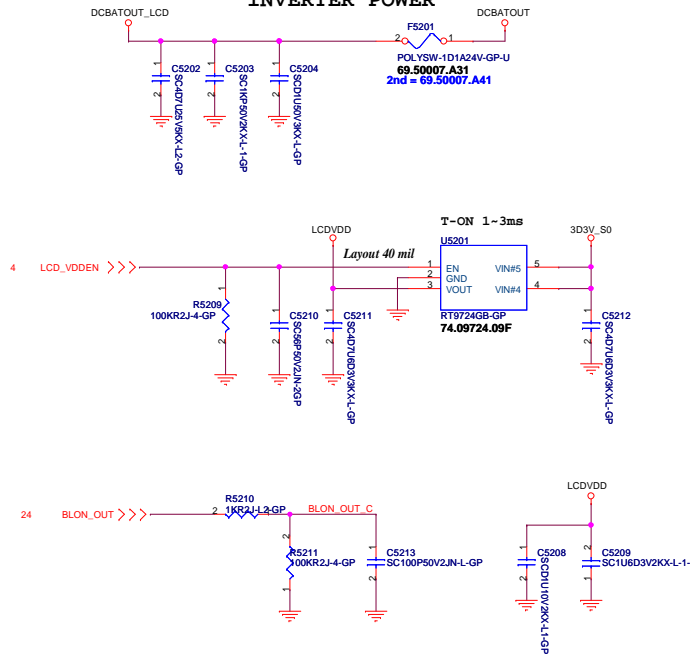
10/03 change to 8pin for del DMIC
10/15 change to 20.F1295.008 follow HW

Touch Conn.

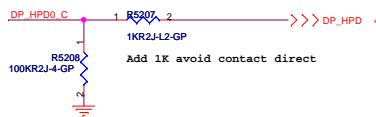


SB 12/12 DUMMY for ME issue
SC NO support

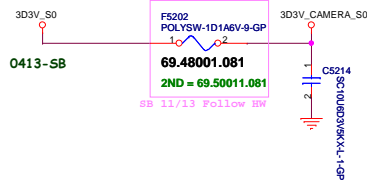
INVERTER POWER



EDP HPD High active

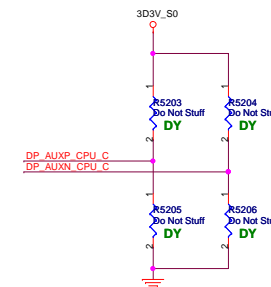


Camera Power



- 86 AUD_GND <<<
- 86 DP_HP00_C >>>
- 86 BLON_OUT_C >>>
- 86 LCD_BRIGHTNESS >>>
- 86 DP_TXN1_CPU_C >>>
- 86 DP_TXP1_CPU_C >>>
- 86 DP_TXN0_CPU_C >>>
- 86 DP_TXP0_CPU_C >>>
- 86 DP_AUXP_CPU_C <<<
- 86 DP_AUXN_CPU_C <<<

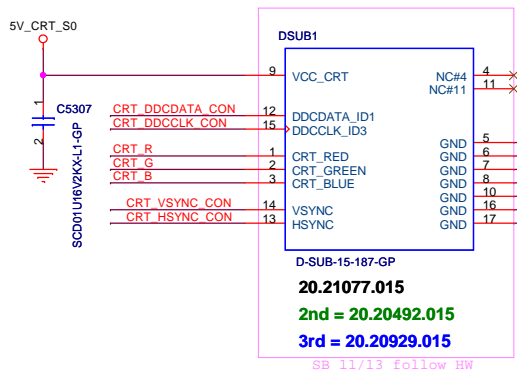
For AFTE



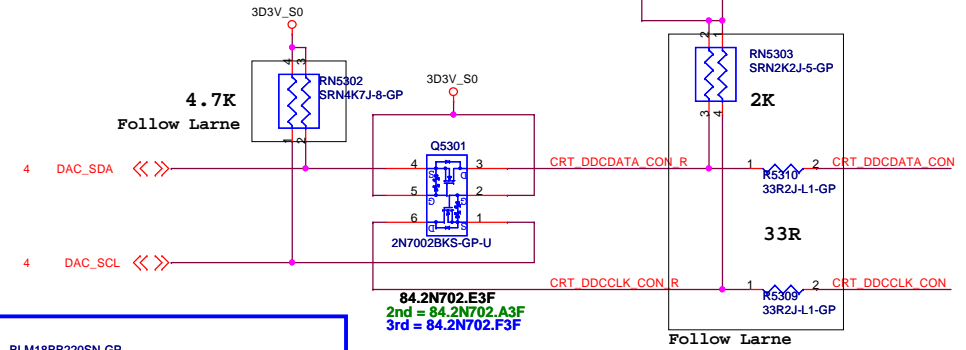
EAEG50 KB UMA

緯創資通 Wistron Corporation
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.

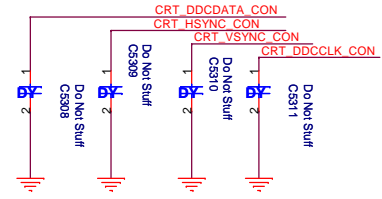
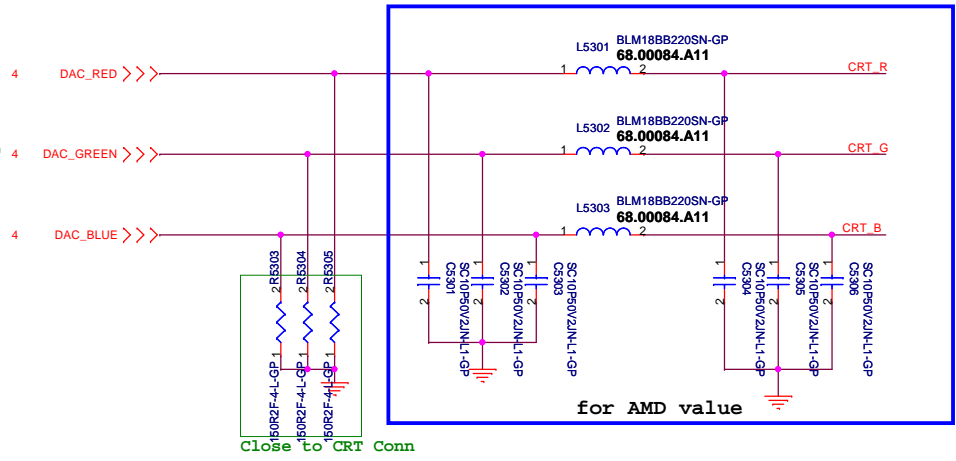
Title		LCD Connector	
Size	Project Name	KABINI	Rev SA
Date: Monday, February 25, 2013	Sheet	52	of 102



CRT DDCDATA & DDCCLK level shift

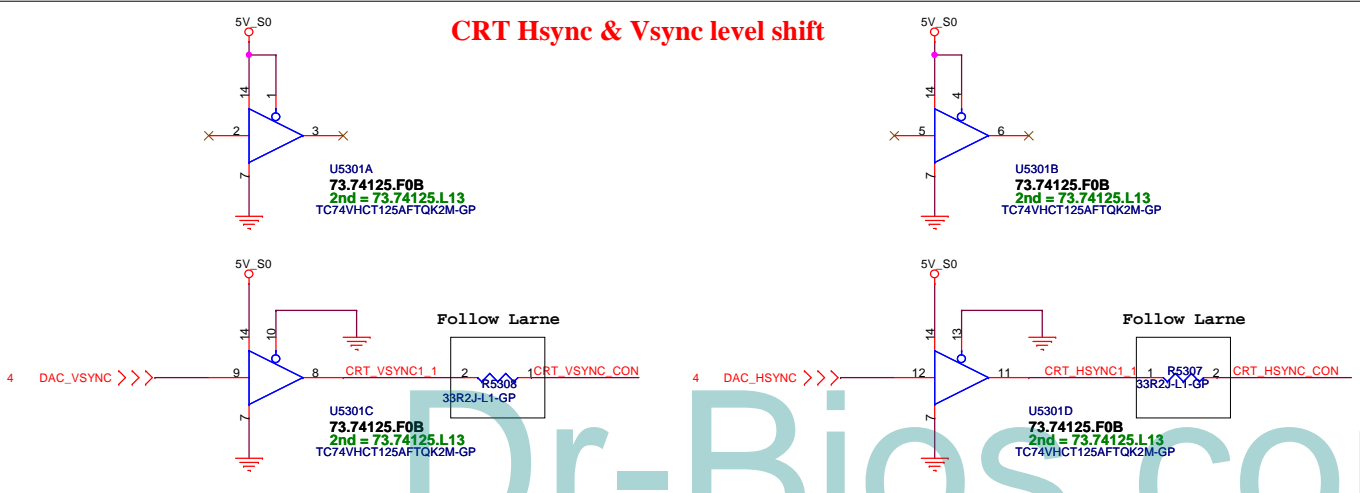


APU to CRT



10/16 follow COMAL

CRT Hsync & Vsync level shift

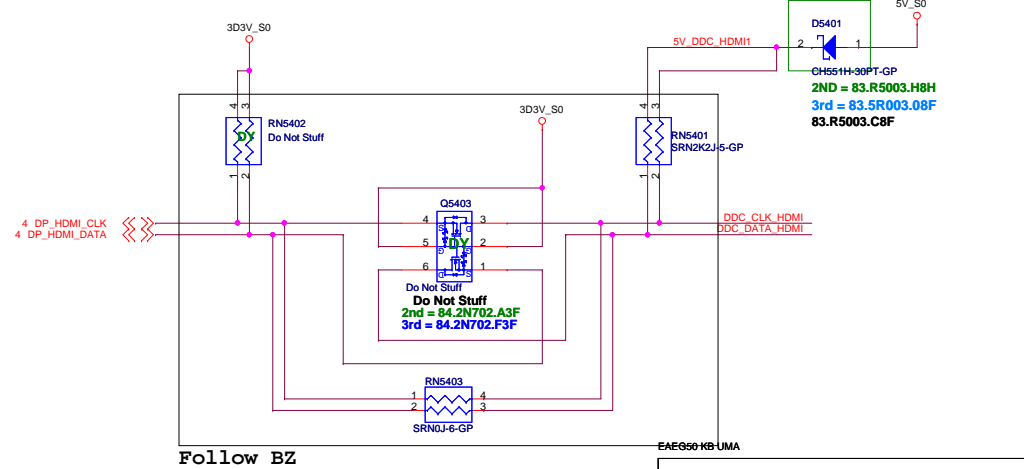
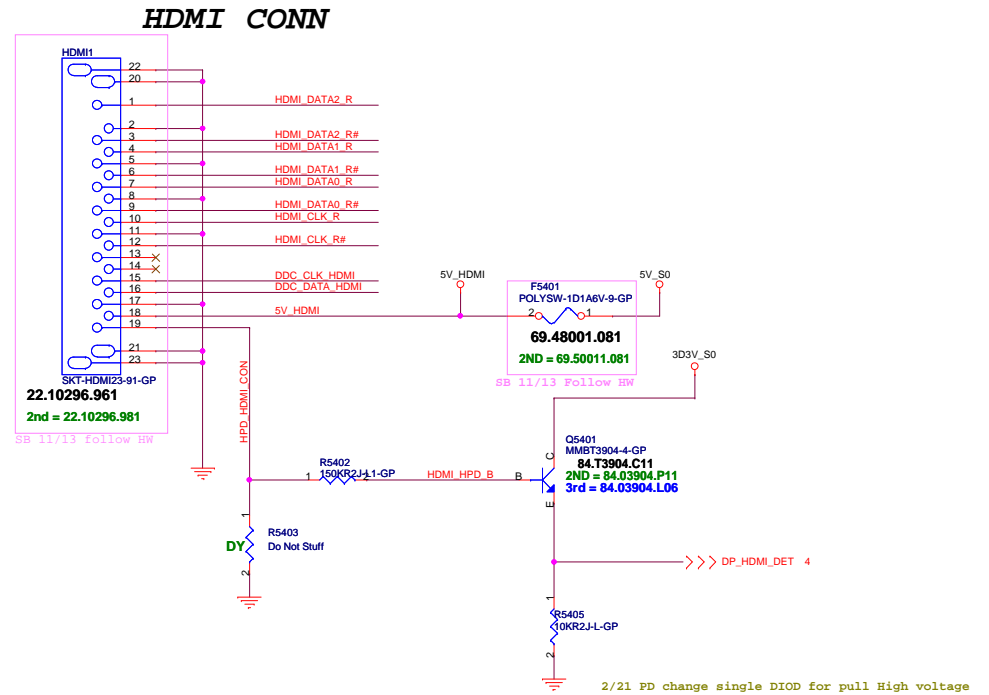
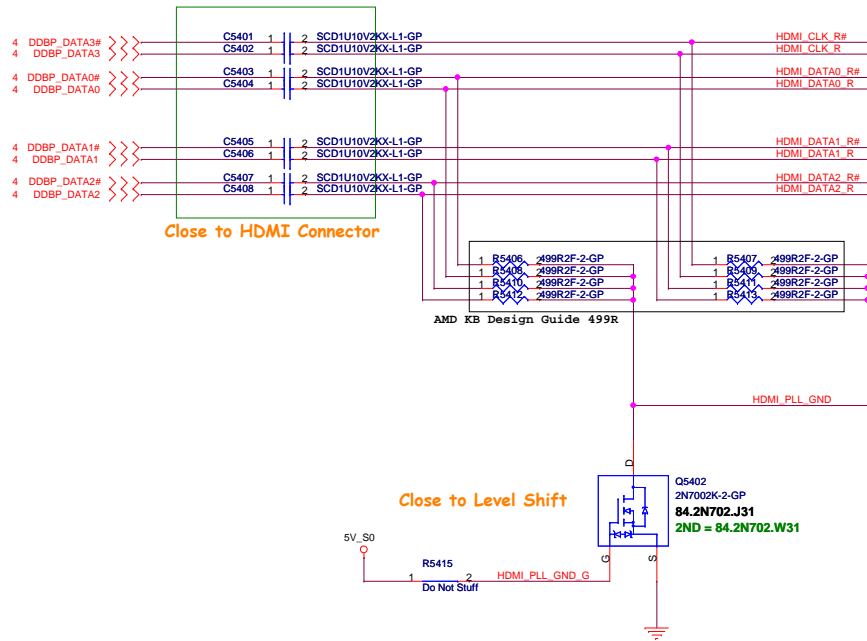


EAEG50 KB UMA

緯創資通 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.		Title	
		CRT Board Connector	
Size	Project Name	Rev	
	KABINI	SA	
Date: Monday, February 04, 2013	Sheet 53 of 102		

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SSID = VIDEO *HDMI Level Shifter & CONNECTOR*



緯創資通		Wistron Corporation	
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.			
HDMI Level Shifter/Connector			
Title		Rev	
Size	Project Name	KABINI	SA
Date: Thursday, February 21, 2013		Sheet 54	of 102

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Dr-Bios.com

EAEG50 KB UMA

緯創資通		Wistron Corporation	
		21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	

Title		Reserved	
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Size	Project Name	Rev
	KABINI	SA

Date: Friday, September 07, 2012	Sheet 55 of 102
----------------------------------	-----------------

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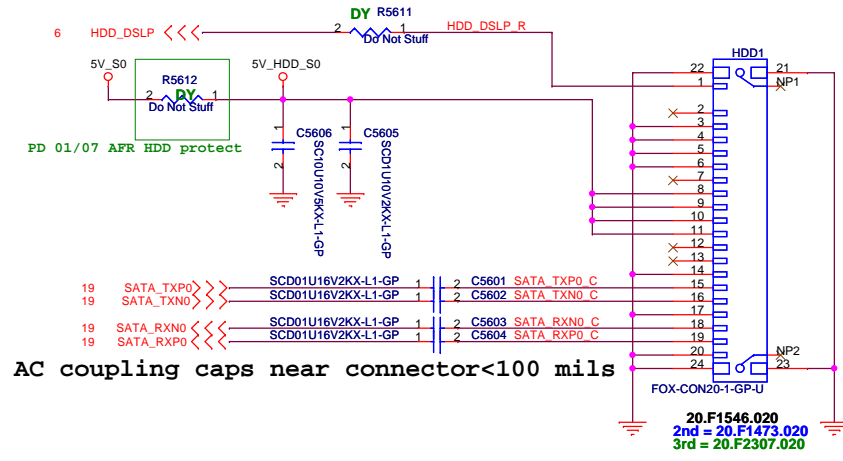
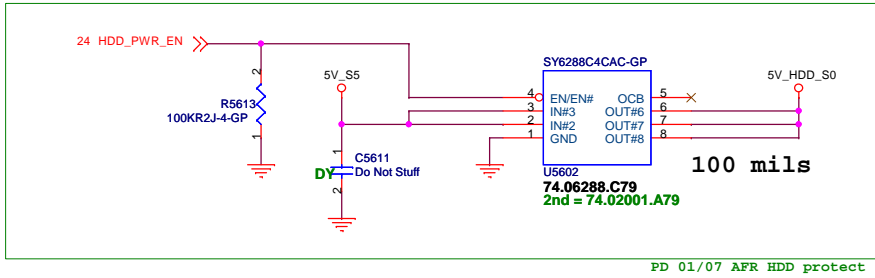
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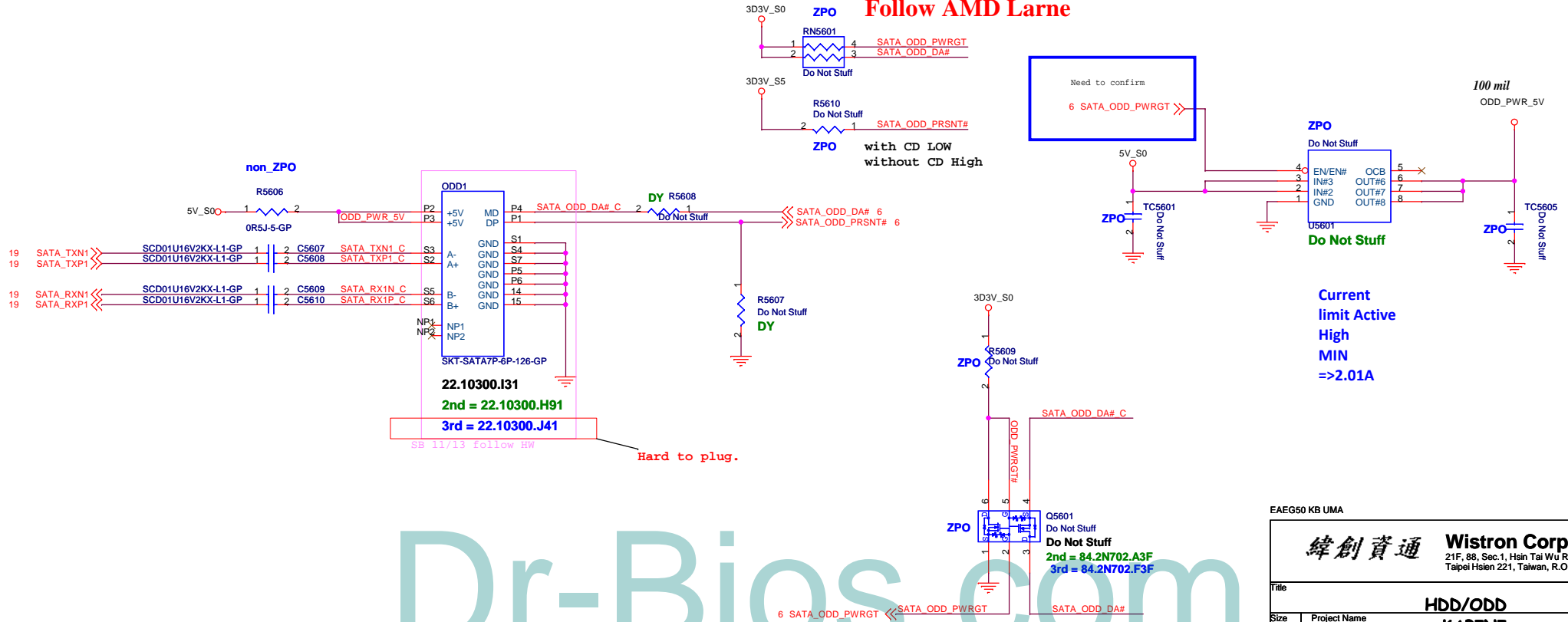
SSID = SATA

SATA HDD Connector



ODD Connector

SATA Zero Power ODD Follow AMD Larne



Dr-Bios.com

EAEG50 KB UMA

緯創資通 Wistron Corporation

21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.

Title	HDD/ODD	
Size	Project Name	Rev
	KABINI	SA
Date:	Monday, February 04, 2013	Sheet 56 of 102

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Dr-Bios.com

EAEG50 KB UMA

緯創資通		Wistron Corporation	
		21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	

Title		Reserved	
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Size	Project Name	Rev
	KABINI	SA

Date: Friday, September 07, 2012	Sheet 57 of 102
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SSID = Wireless

Mini Card Connector(WWAN)

EAE650 KB UMA

緯創資通

Wistron Corporation
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title

WWAN CONN

Size

Project Name

KABINI

Rev

SA

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SSID = mSATA

Mini Card Connector(mSATA)

EAE650 KB UMA

緯創資通 **Wistron Corporation**
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

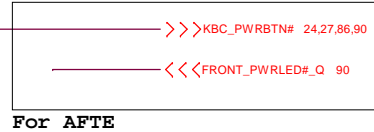
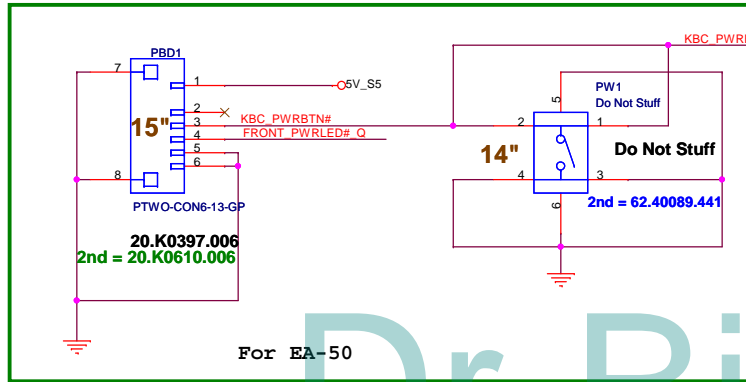
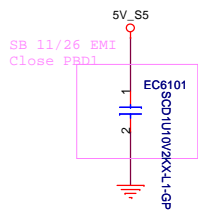
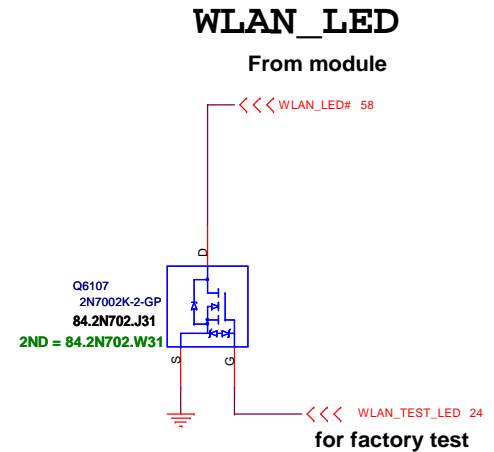
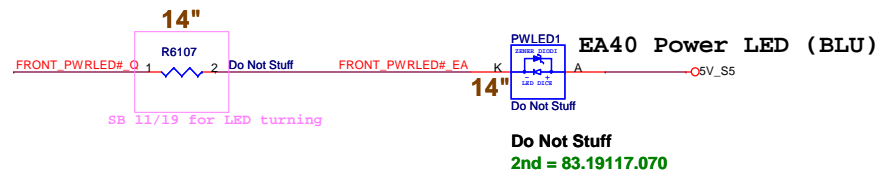
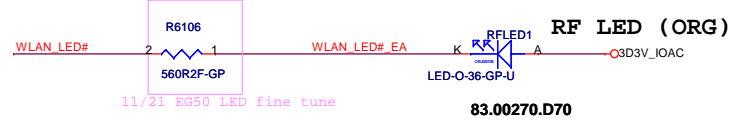
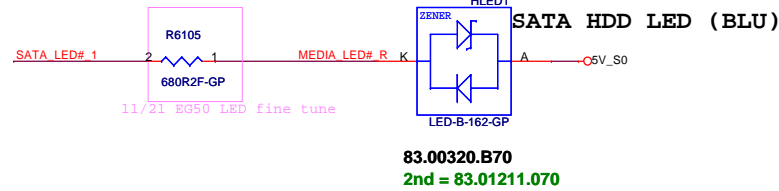
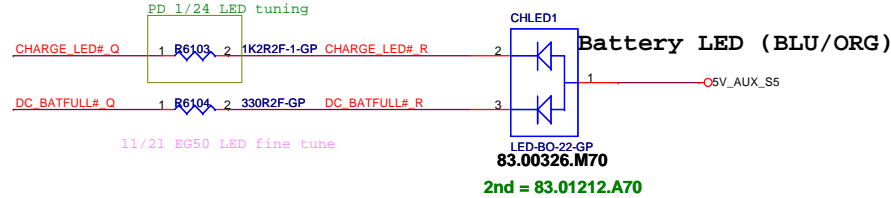
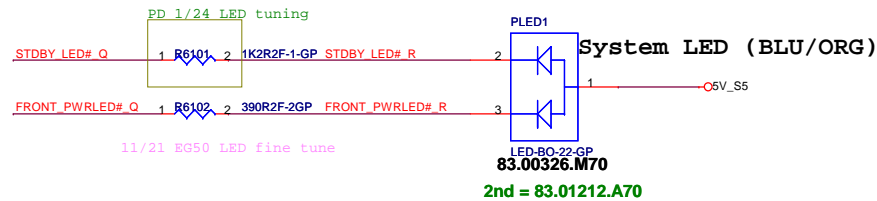
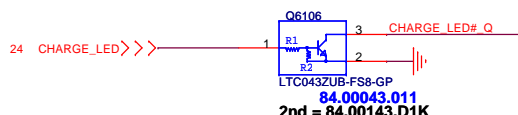
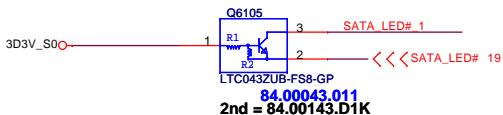
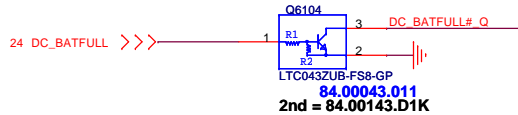
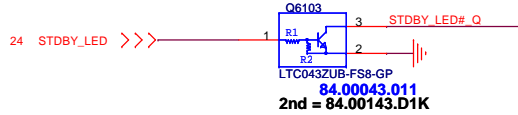
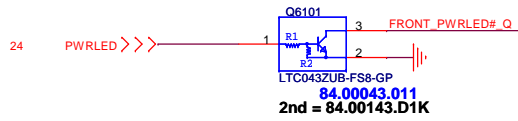
Title **mSATA Connector**

Size	Project Name	Rev
	KABINI	SA

Date: Friday, September 07, 2012 Sheet 60 of 102

Dr-Bios.com

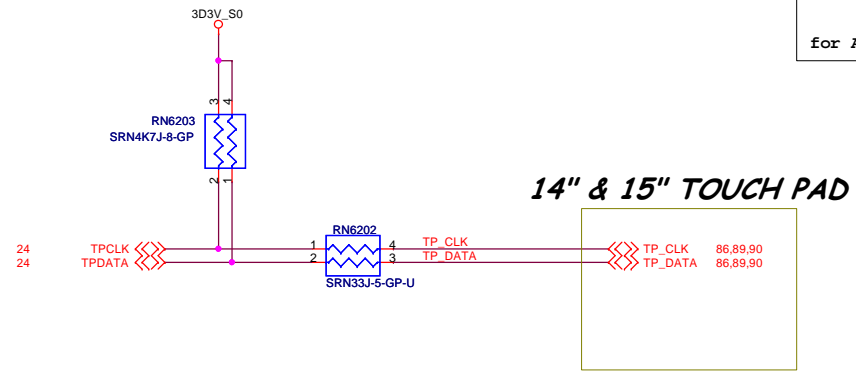
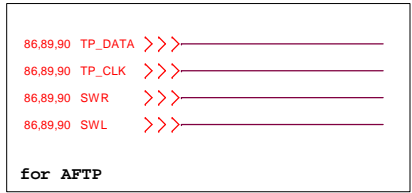
SSID = User.Interface



Dr-Bios.com

SSID = KBC

Internal Keyboard Connector



PD 1/14 Different 14" & 15" TOUCH PAD reversion

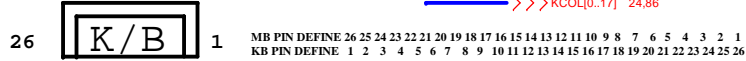
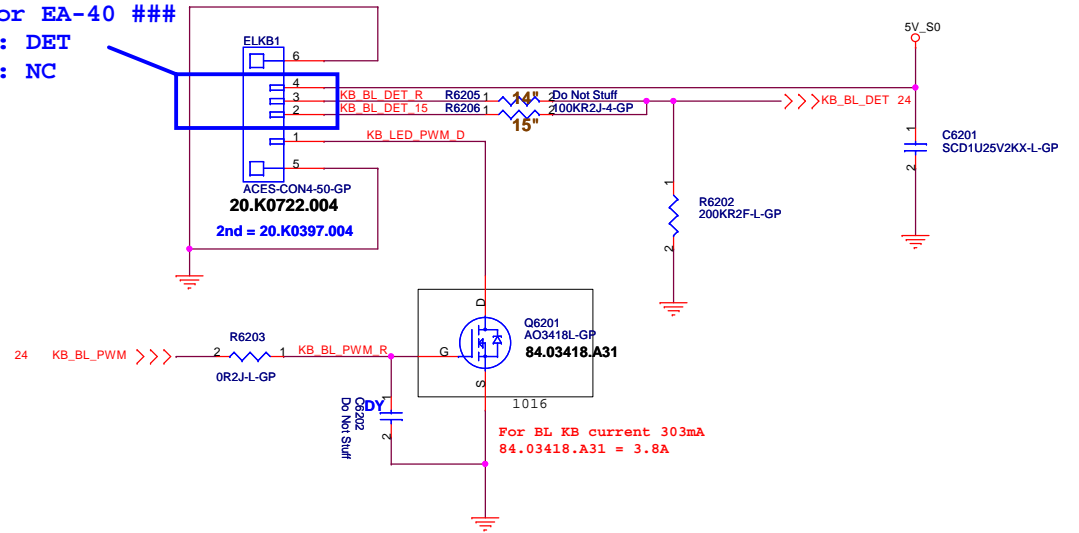
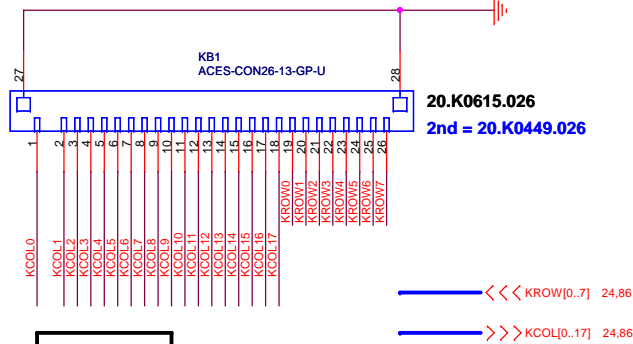
14"& 15" use the same KB

for EA/EG-50

Pin3 : NC
Pin2 : DET

for EA-40

Pin3 : DET
Pin2 : NC



EAEG50 KB UMA

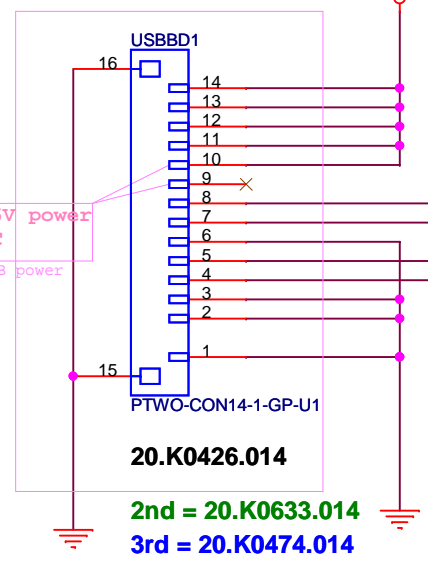
緯創資通 Wistron Corporation	
21F, 88, Sec. 1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Key Board/Touch Pad	
Size	Project Name
	KABINI
Date: Tuesday, February 19, 2013	Sheet 62 of 102
	Rev SA

Dr-Bios.com

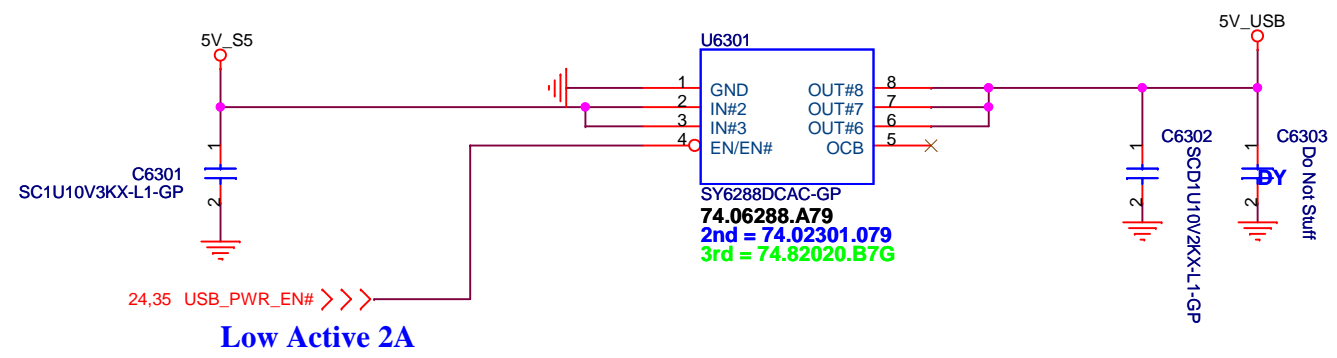
Dr-Bios.com

SB 11/14 change to 20.K0426.014

Pin10 change to 5V power
Pin9 change to NC
SB 11/19 change for USB power



USB_PN0 19,86 Debug Port (DB)
USB_PP0 19,86
USB_PN1 19,86 USB Port (DB)
USB_PP1 19,86



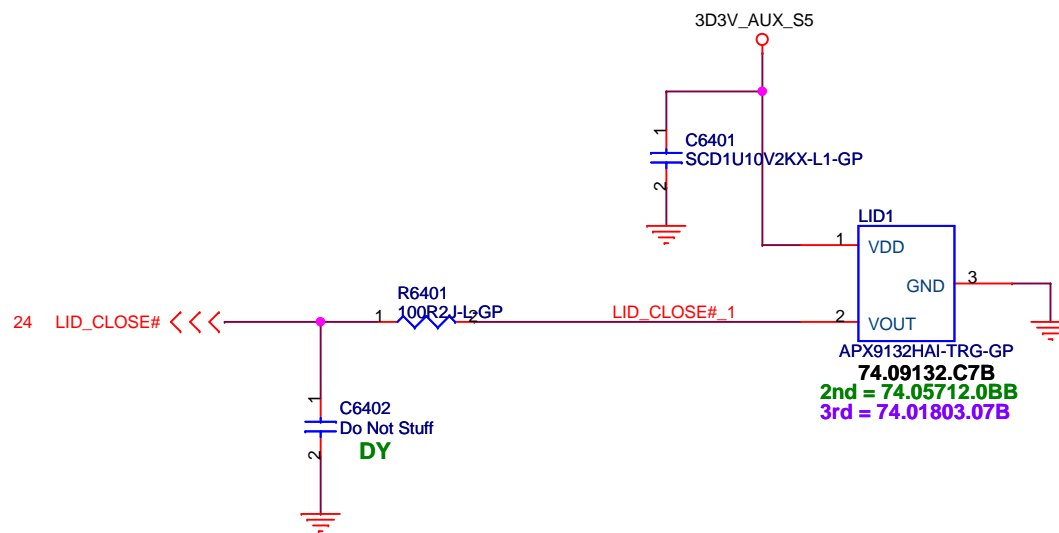
EAE50 KB UMA

緯創資通 Wistron Corporation
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title IO Board Connector

Size	Project Name	Rev
	KABINI	SA

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EAEG50 KB UMA

緯創資通

Wistron Corporation
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title

Hall Sensor

Size

Project Name

KABINI

Rev

SA

Date: Monday, February 04, 2013

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Dr-Bios.com

(Blanking)

EAEG50 KB UMA

緯創資通

Wistron Corporation
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title

Reserved

Size

Project Name

KABINI

Rev

SA

Date: Friday, September 07, 2012

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Dr-Bios.com

SSID = User.Interface

EAEG50 KB UMA

緯創資通

Wistron Corporation
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title

G Sensor

Size

Project Name

KABINI

Rev

SA

Date: Friday, September 07, 2012

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Dr-Bios.com

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Dr-Bios.com

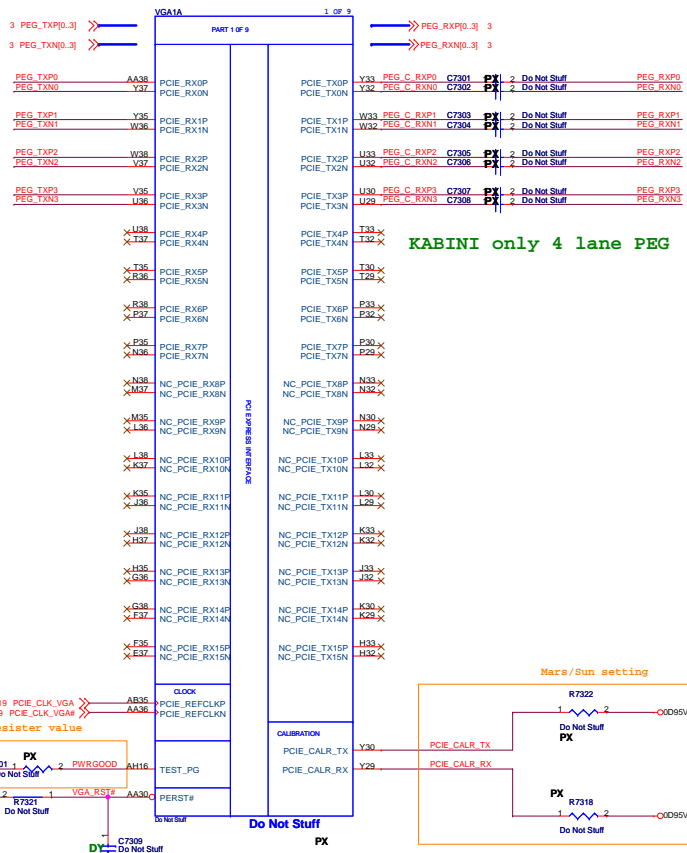
EAEG50 KB UMA

緯創資通		Wistron Corporation	
		21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	

Title		Thunderbolt (5/5)	
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Size	Project Name	Rev
	KABINI	SA

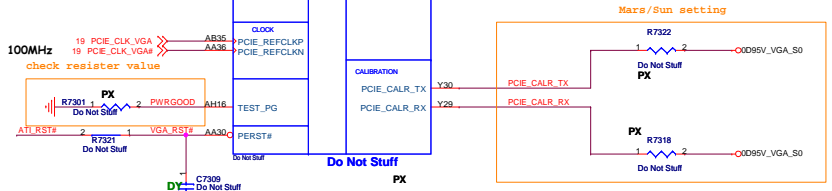
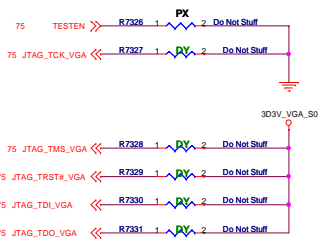
Date: Friday, September 07, 2012	Sheet 72 of 102
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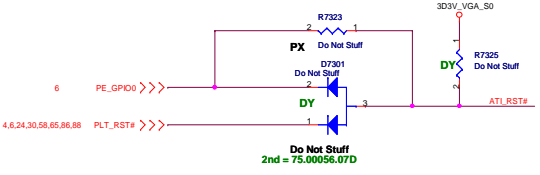
KABINI only 4 lane PEG

JTAG SIGNAL OPTION

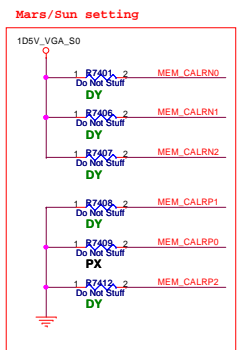
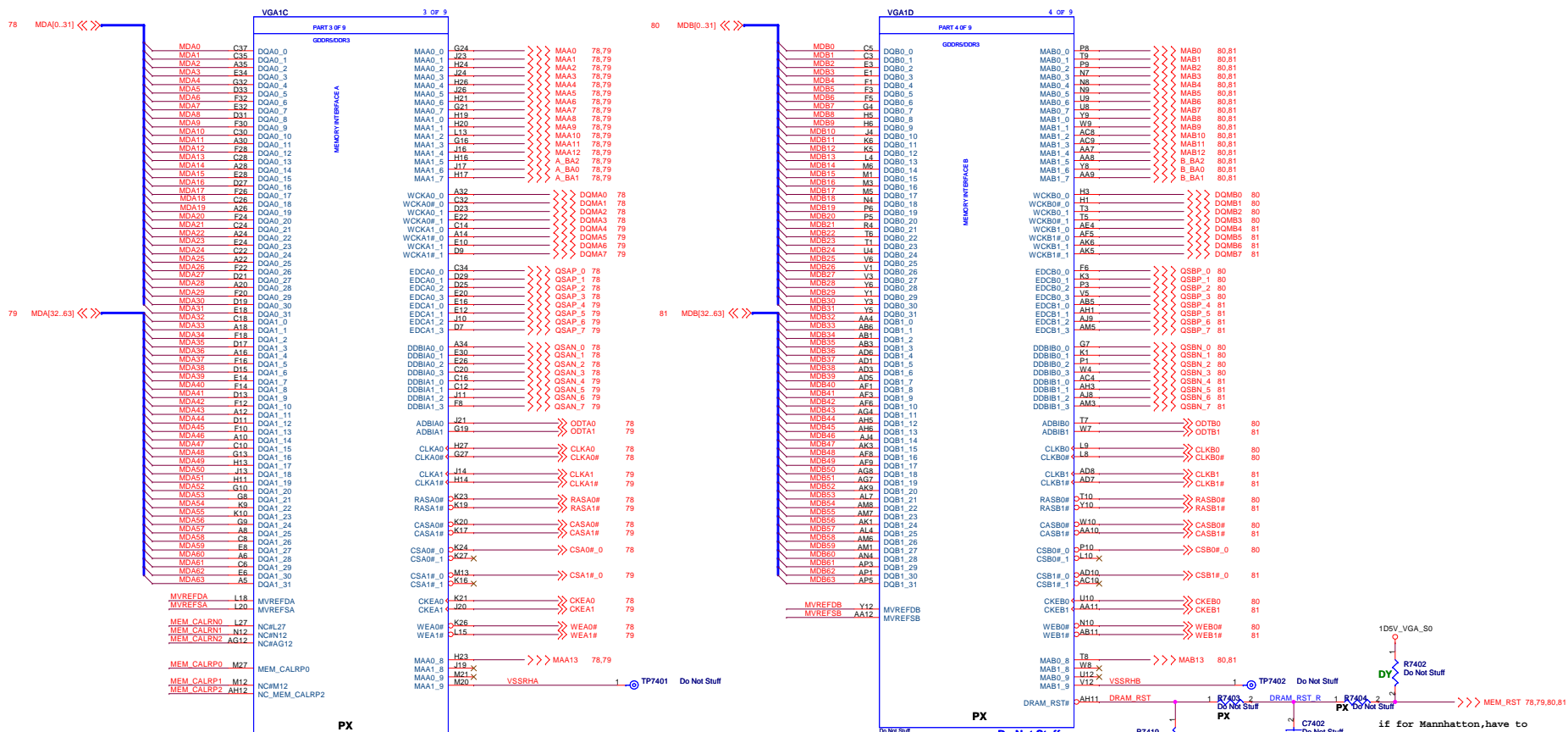
Signal	Normal mode	Debug mode	pilot run mode
TESTEN	"0" (PD)	"1" (PU)	"0" (PD)
JTAG_TRST#	"1" (PU)	"1" (PU)	NC
JTAG_TCK	"0" (PD)	"1" (PU)	NC
JTAG_TMS	"1" (PU)	"1" (PU)	NC



	PE_GPI00
dGPU mode	H
IGPU	L
IGPU with BACO	H



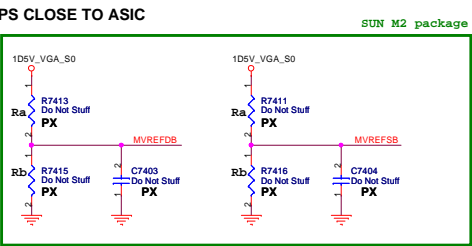
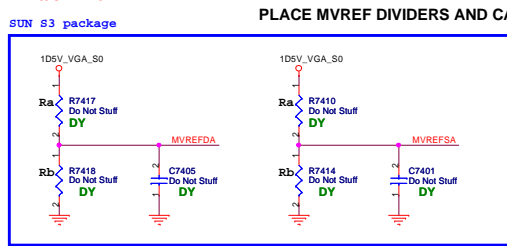
Dr-Bios.com



This basic topology should be used for DRAM_RAT for DDR3/GDDR5

DDR3/GDDR3 Memory Stuff Option (Mad/Park)

	GDDR5	GDDR3	DDR3
MVDDQ	1.5V	1.8V/1.5V	1.5V
Ra	40.2R	40.2R	40.2R
Rb	100R	100R	100R



MEM_CALRN0	Whistler/Thames: Connect to VDDR1 through a 240Ω (±0.5%) resistor. Preferred resistor tolerance is 0.5%, but 1% is acceptable. Seymour: NC Heathrow/Chelsea: NC	MEM_CALRP0	Whistler/Thames: need a 240Ω (1%) termination to ground. Seymour: NC Heathrow/Chelsea: Need a 120Ω (1%) termination to ground.
MEM_CALRN1	Whistler/Thames: NC Seymour: Connect to VDDR1 through a 240Ω (±0.5%) resistor. Heathrow/Chelsea: NC	MEM_CALRP1	Whistler/Thames: NC Seymour: MEM_CALRP1—need a 240Ω (1%) termination to ground.
MEM_CALRN2	Whistler/Thames: Connect to VDDR1 through a 240Ω (±0.5%) resistor. Seymour: NC Heathrow/Chelsea: NC	MEM_CALRP2	Whistler/Thames: MEM_CALRP2—need a 240Ω (1%) termination to ground. Seymour: NC Heathrow/Chelsea: Need a 120Ω (1%) termination to ground.



EAE650 KB UMA

緯創資通 Wistron Corporation
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Project Name: GPU_Digitalout
KABINI

Date: Monday, February 04, 2013 Sheet: 74 of 102

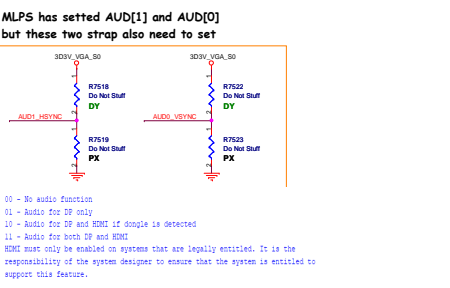
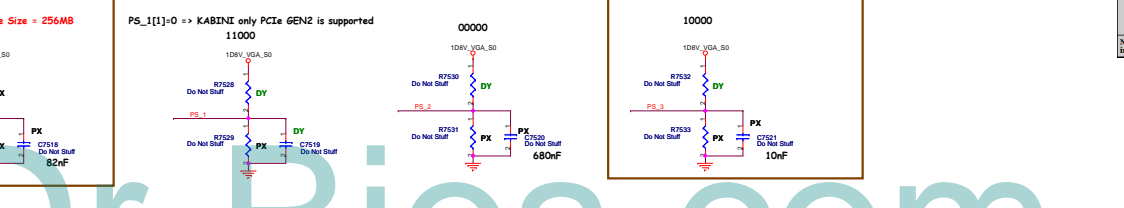
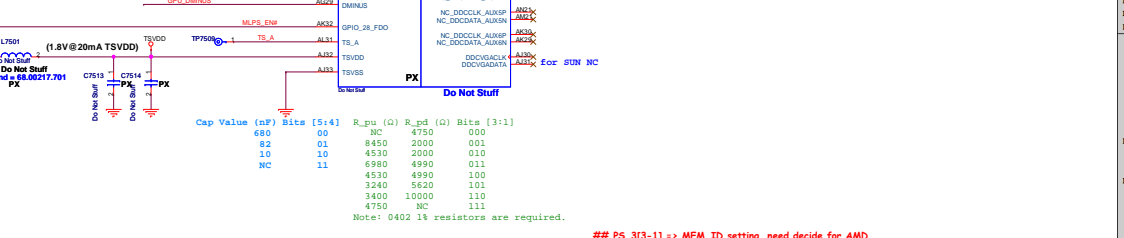
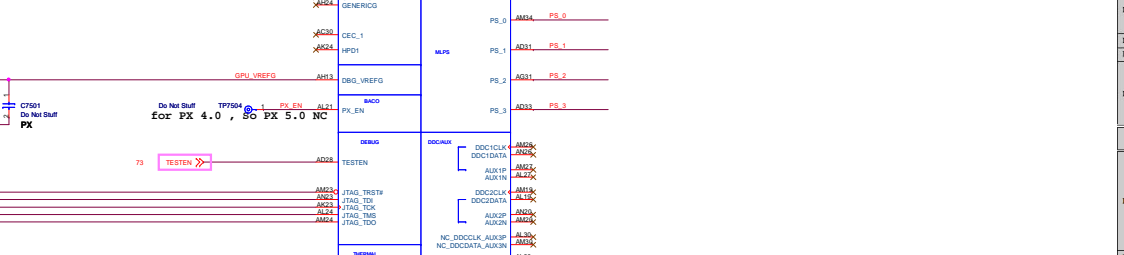
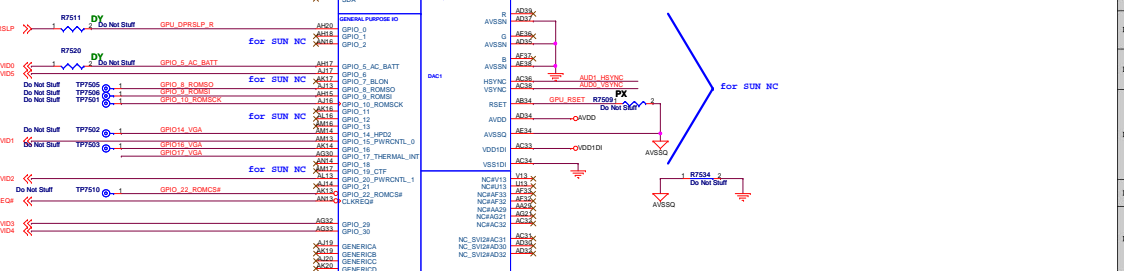
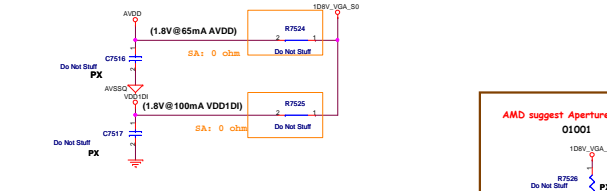
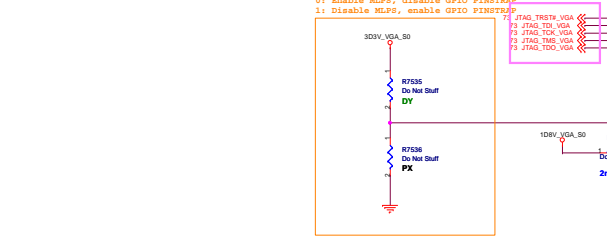
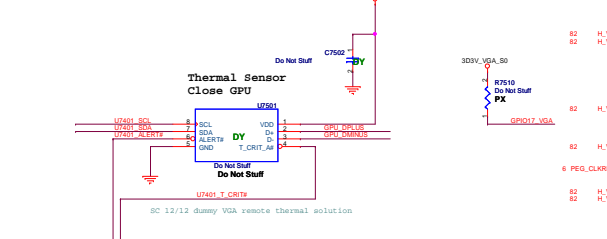
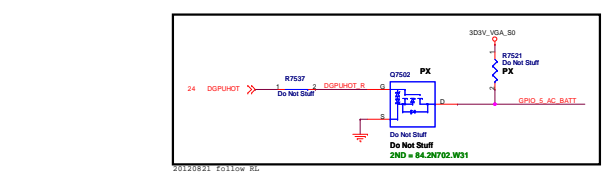
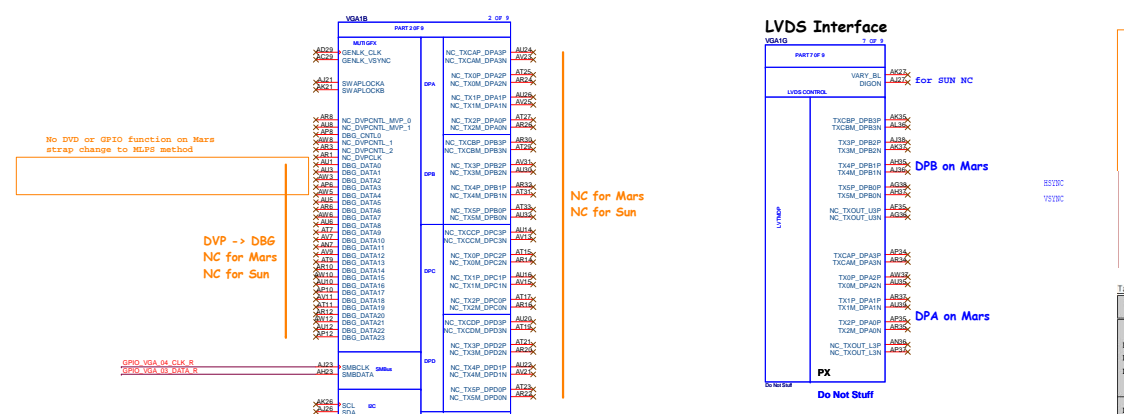
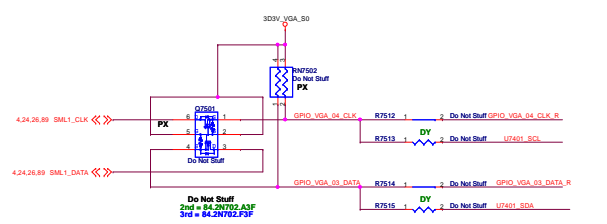


Table 3-31 Multi-level Pin Straps

MLPS Bit	Strap Name	Description	Recommended Settings
PS_011	ROM_CONFIG00	If STRAP BIOS_ROM_EN = 1, ROM_CONFIG00 defines the ROM type.	Design dependent; see the description.
PS_021	ROM_CONFIG01	If STRAP BIOS_ROM_EN = 0, ROM_CONFIG01 defines the primary memory aperture size. See Primary Memory Aperture Size (p. 48).	Design dependent; see the description.
PS_031	ROM_CONFIG02	If STRAP BIOS_ROM_EN = 0, ROM_CONFIG02 defines the primary memory aperture size. See Primary Memory Aperture Size (p. 48).	Design dependent; see the description.
PS_041	N/A	Reserved for internal use only. Must be 1 at reset.	1
PS_051	AUD_PORT_CONN_PINSTRAP01	The LED has significant heat of the strap option that indicates the number of audio-capable display outputs.	Design dependent; see the description.
PS_1111	STRAP_BIF_GEN3_ENA	PCIe GEN3 capability. 1 = PCIe GEN3 is supported. 0 = PCIe GEN3 is not supported. Determines whether or not the PCIe reference clock power management capability is supported in the PCI configuration space (otherwise known as CLREFCLK).	Design dependent; see the description.
PS_121	STRAP_BIF_CLK_PN_EN	1 = The CLREFCLK power management capability is disabled. 0 = The CLREFCLK power management capability is enabled.	0
PS_131	N/A	Reserved for internal use only. Must be 0 at reset.	0
PS_141	STRAP_TX_CFG_DRV_FULL_SWING	Control the transmitter full-half-swing mode. 1 = The transmitter full-swing is enabled. 0 = The transmitter half-swing is enabled.	1
PS_151	STRAP_TX_DEENPH_EN	PCI EXPRESS 8 transmitter de-emphasis enable. 0 = Tx de-emphasis disabled. 1 = Tx de-emphasis enabled.	Design dependent; see the description.
PS_211	N/A	Reserved.	N/A
PS_212	N/A	Reserved.	N/A
PS_213	STRAP_BIOS_ROM_EN	To enable the external BIOS ROM device. 0 = Disable the external BIOS ROM device. 1 = Enable the external BIOS ROM device.	Design dependent; see the description.
MLPS Bit	Strap Name	Description	Recommended Settings
PS_241	STRAP_BIF_VGA_DIS	VGA disable determines whether or not the card will be recognized as the system's VGA controller through the SUBCLASS5 field in the PCI configuration space. 0 = VGA controller capacity enabled. 1 = The device will not be recognized as the system's VGA controller.	0
PS_251	N/A	Reserved.	N/A
PS_311	BOARD_CONFIG00	Board configuration related strap, such as for memory ID.	Design dependent; see the description.
PS_312	BOARD_CONFIG01	Board configuration related strap, such as for memory ID.	Design dependent; see the description.
PS_313	BOARD_CONFIG02	Board configuration related strap, such as for memory ID.	Design dependent; see the description.
PS_314	AUD_PORT_CONN_PINSTRAP1	Determines the maximum number of digital display audio endpoints that will be presented to the OS and user. This should be set to the maximum number of digital display audio outputs that can be enabled simultaneously in the product, which is limited by the ASIC silicon stack, the number and type of connectors on the board (DP/DP++/DVI), and the number of cables for each DP connector (the DP MST hub port of the video driver). Unused endpoints should be disabled. This pin strap is encoded as an active low binary as follows to ensure zero enable all endpoints: 111 = No usable endpoints. 110 = One usable endpoint. 101 = Two usable endpoints. 100 = Three usable endpoints. 011 = Four usable endpoints. 010 = Five usable endpoints. 001 = Six usable endpoints. 000 = All endpoints are usable.	Design dependent; see the description.
PS_315	AUD_PORT_CONN_PINSTRAP2	Determines the maximum number of digital display audio endpoints that will be presented to the OS and user. This should be set to the maximum number of digital display audio outputs that can be enabled simultaneously in the product, which is limited by the ASIC silicon stack, the number and type of connectors on the board (DP/DP++/DVI), and the number of cables for each DP connector (the DP MST hub port of the video driver). Unused endpoints should be disabled. This pin strap is encoded as an active low binary as follows to ensure zero enable all endpoints: 111 = No usable endpoints. 110 = One usable endpoint. 101 = Two usable endpoints. 100 = Three usable endpoints. 011 = Four usable endpoints. 010 = Five usable endpoints. 001 = Six usable endpoints. 000 = All endpoints are usable.	Design dependent; see the description.

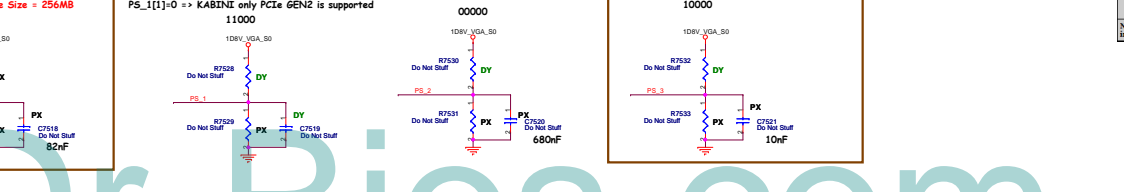
Note: AUD11 (on R530C) and AUD10 (on V530C) still need to be properly pin strapped even in a MLPS-based design.

Mars don't have AUX3-AUX6 function

Cap Value (nF)	Bits [5:4]	R _{pu} (Ω)	R _{pd} (Ω)	Bits [3:1]
680	00	NC	4750	000
82	01	8450	2000	001
10	10	4530	2000	010
680	00	6800	4990	011
4530	00	4530	4990	100
3240	00	3240	5620	101
3400	00	3400	10000	110
4750	00	4750	NC	111

Note: 0402 1% resistors are required.

PS_3[3-1] => MEM_ID setting, need decide for AMD



AMD suggest Aperture Size = 256MB

PS_1[1] => KABINI only PCIe GEN2 is supported

01001

11000

00000

10000

680nF

10nF

10nF

10nF

10nF

10nF

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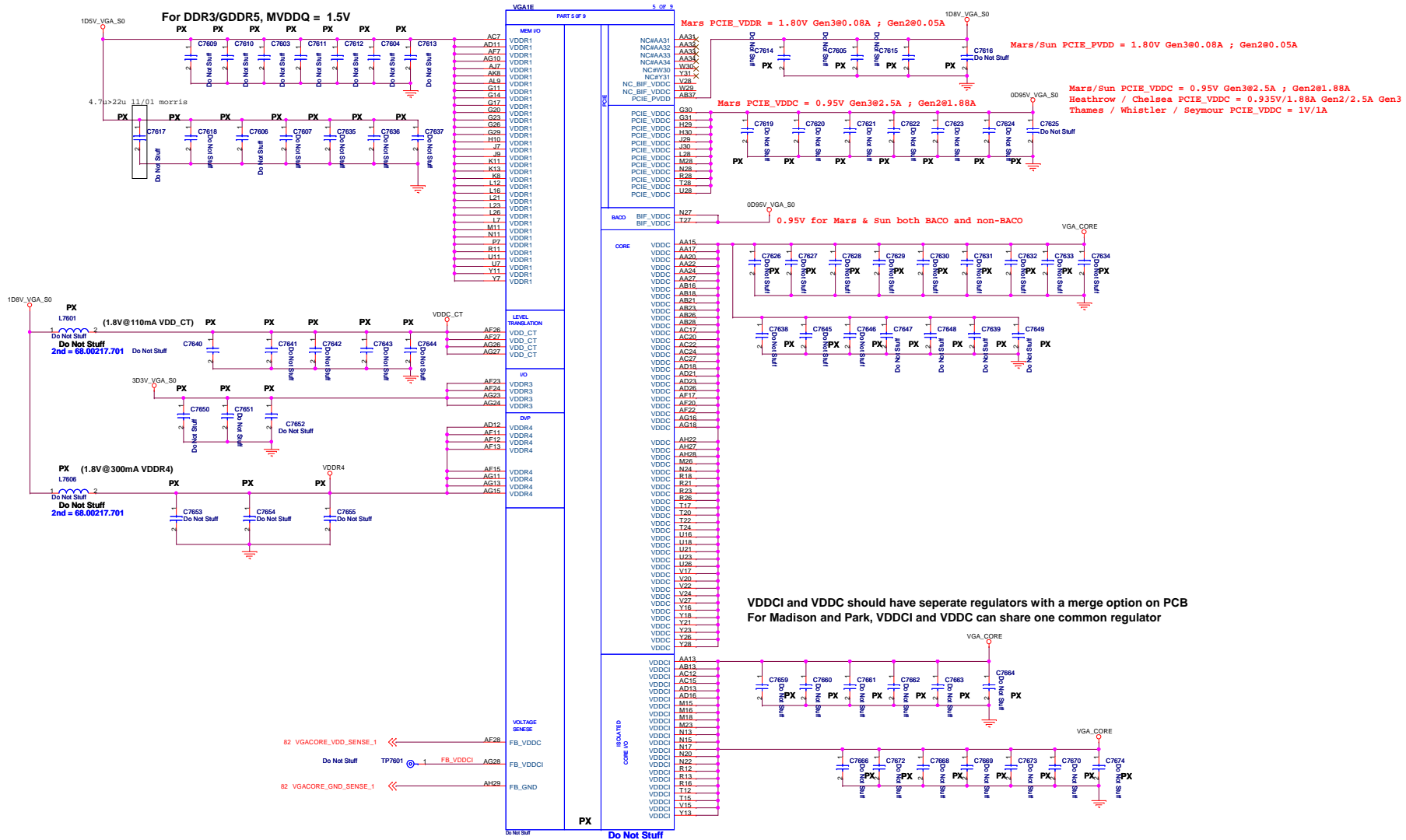
10nF

10nF

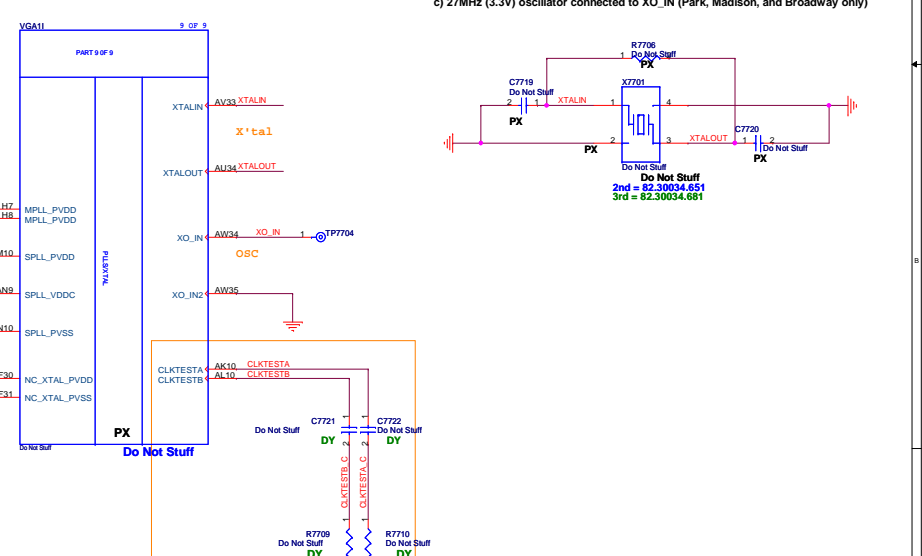
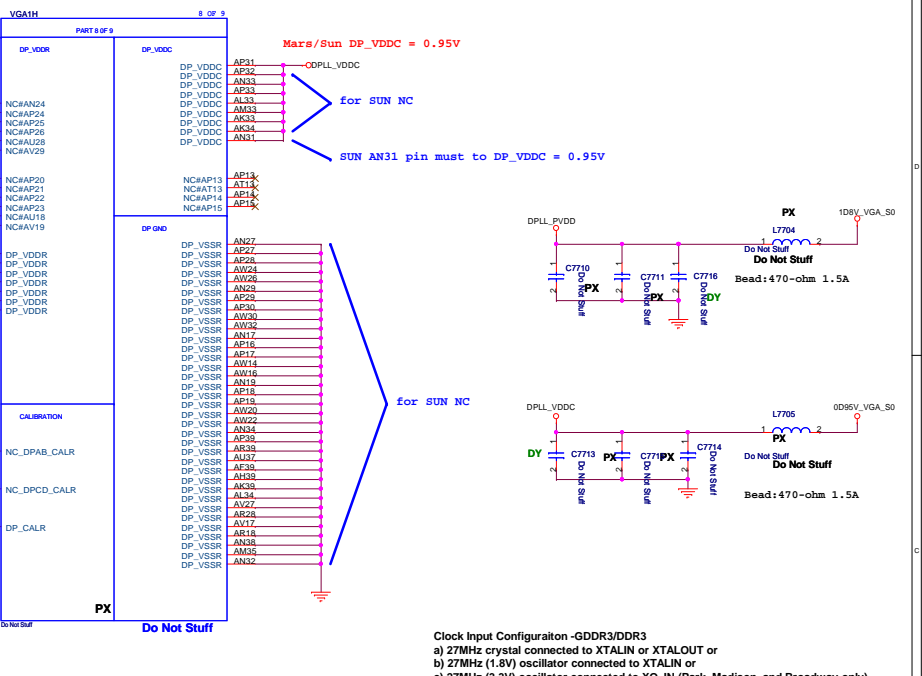
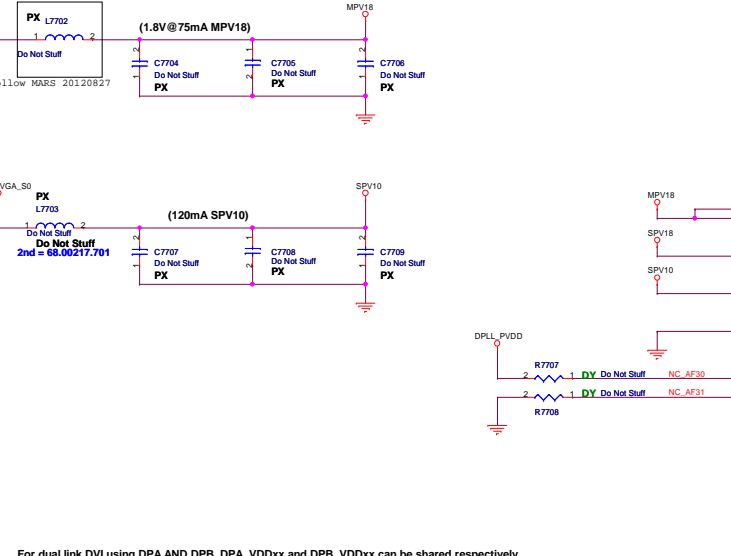
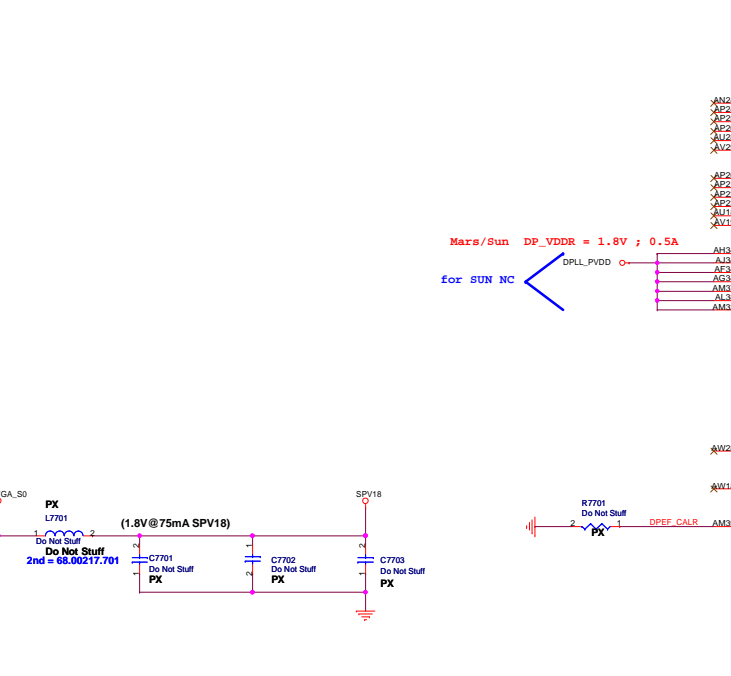
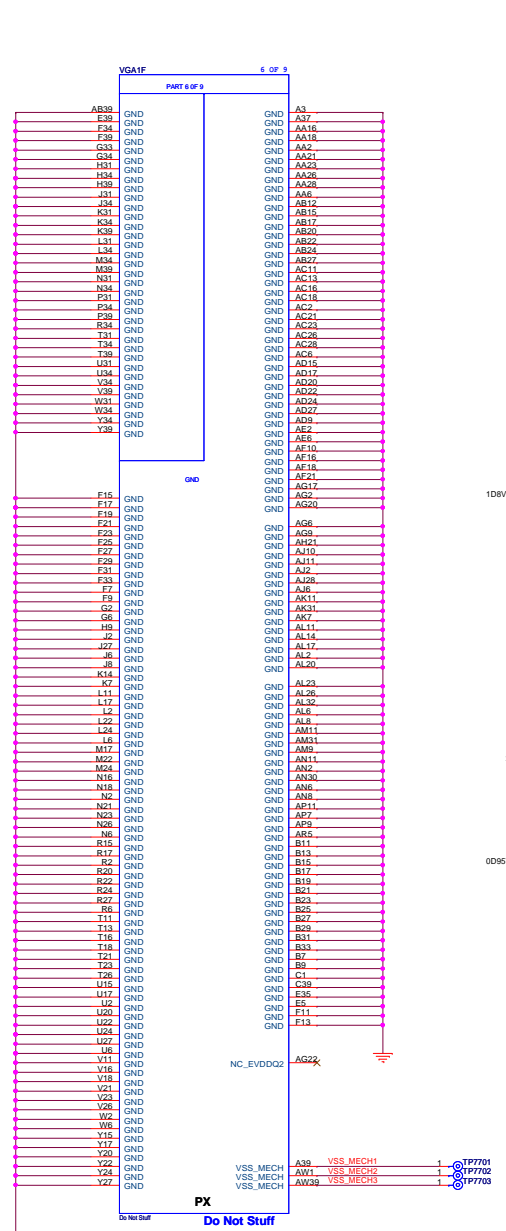
10nF

10nF

10n



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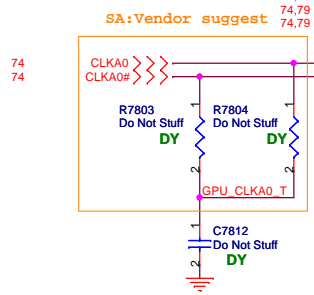
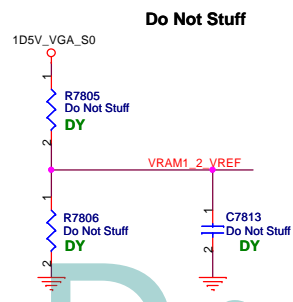
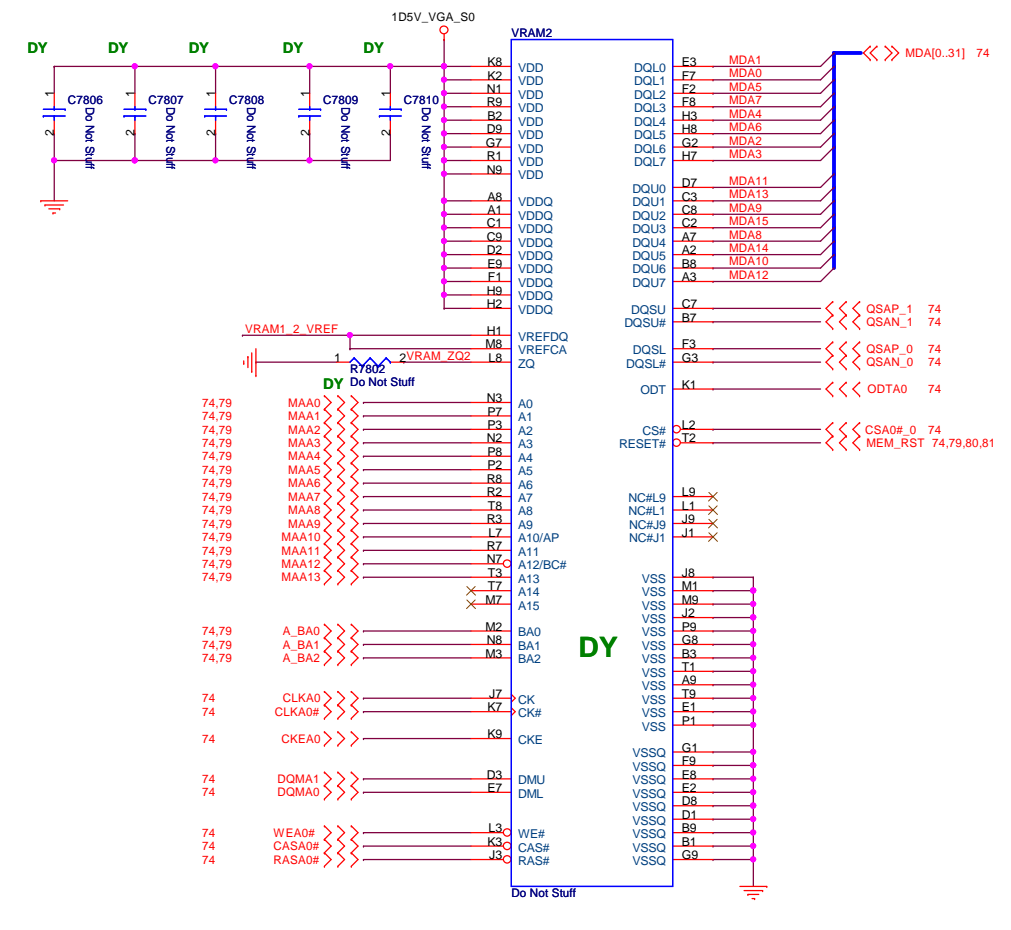
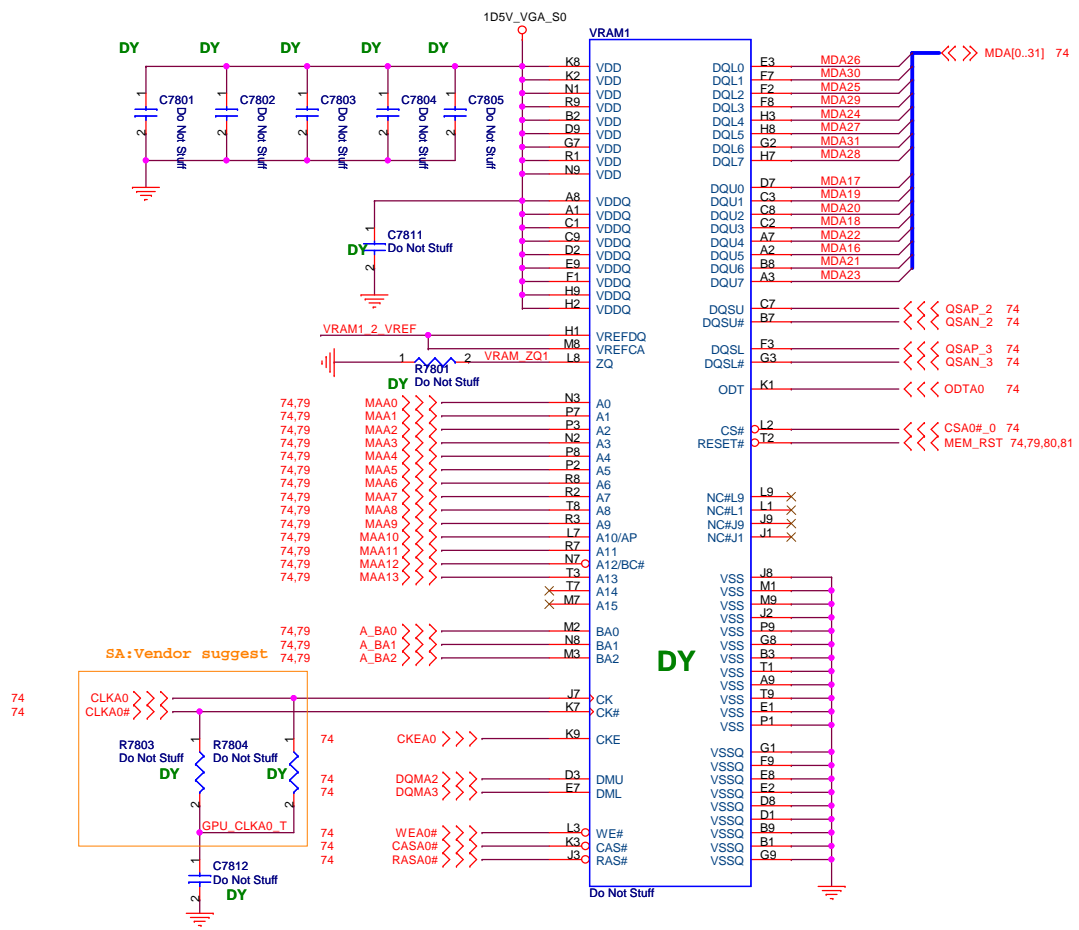


For dual link DVI using DPA AND DPB, DPA_VDDxx and DPB_VDDxx can be shared respectively

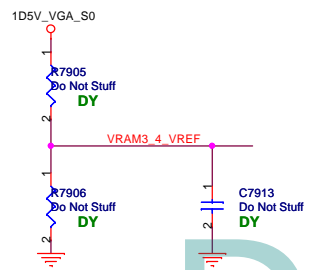
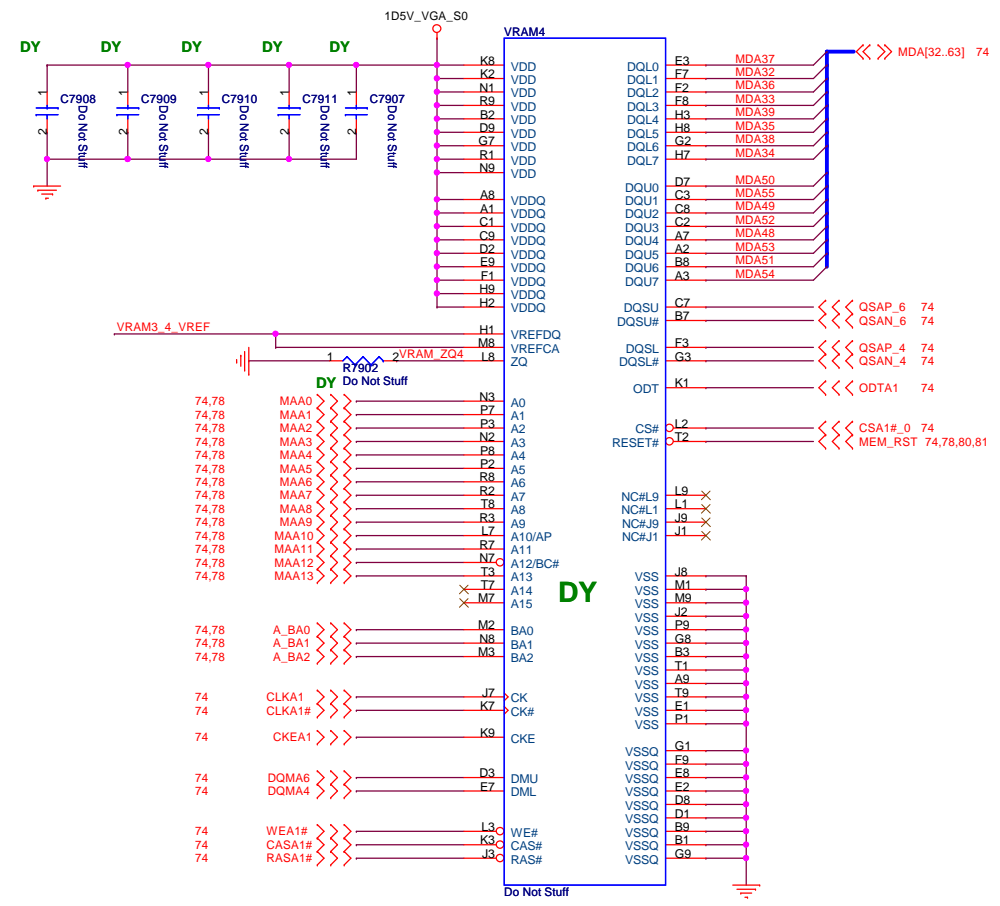
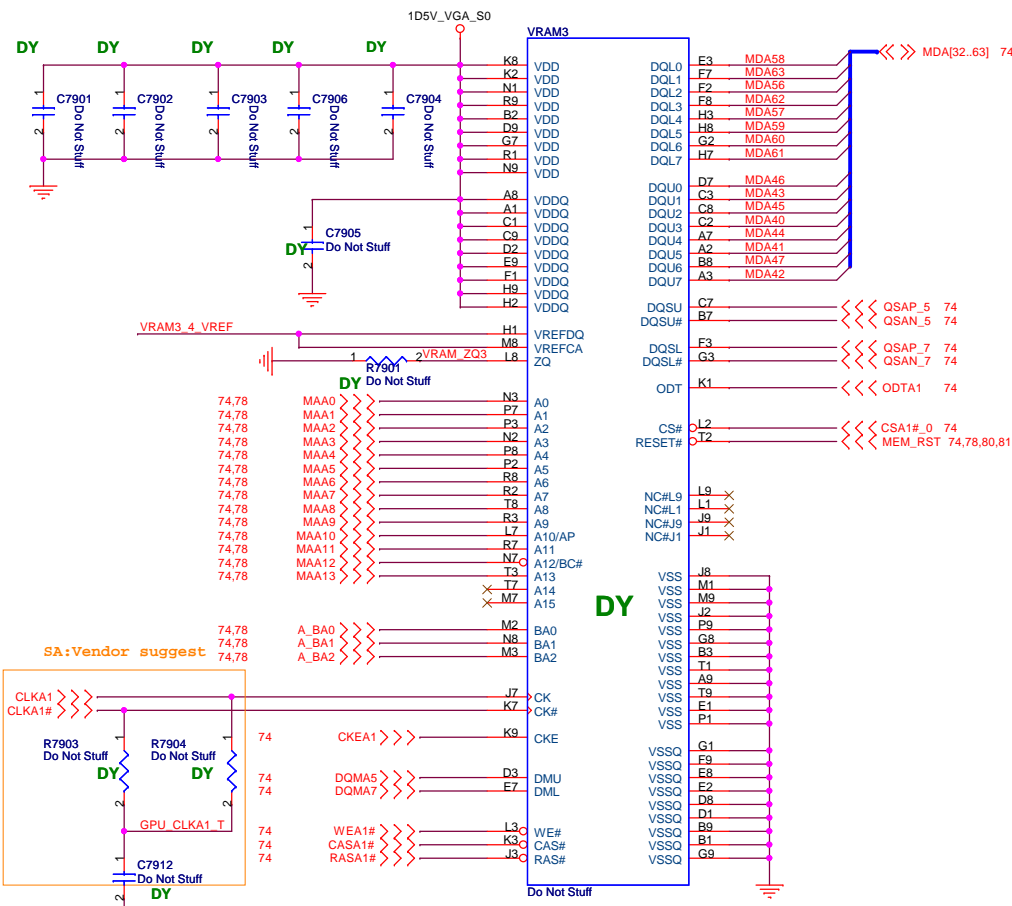
For dual link DVI using DPC AND DPD, DPC_VDDxx and DPD_VDDxx can be shared respectively

For dual link LVDS, DPE_VDDxx and DPF_VDDxx can be shared respectively

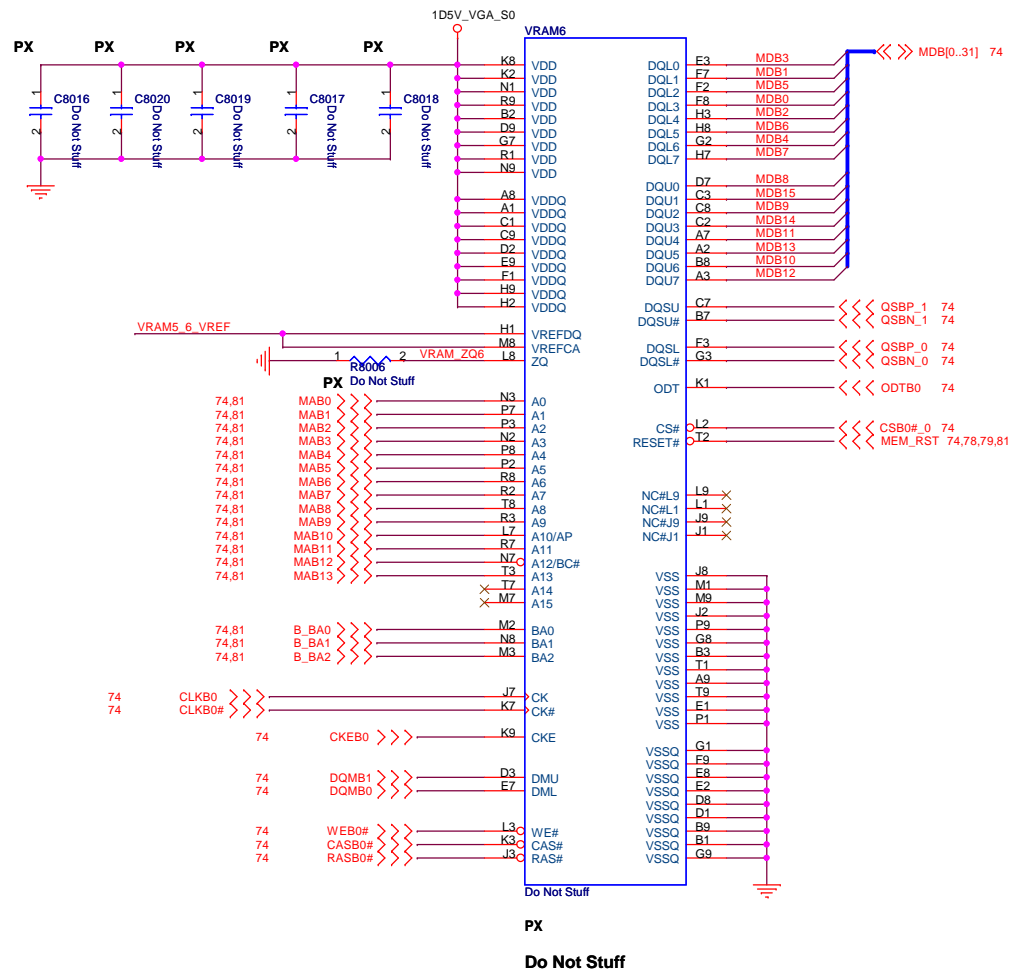
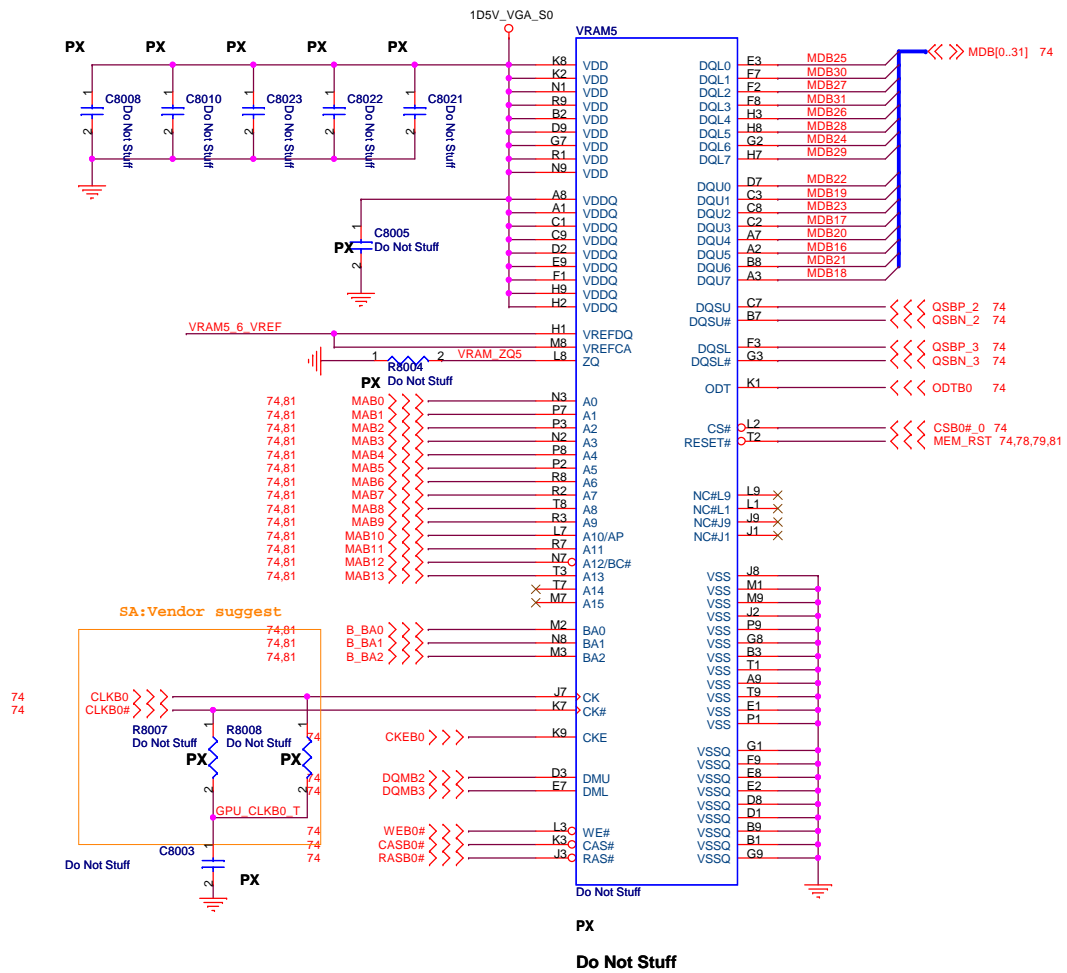
Debug only, for clock observation, if not needed, DNI



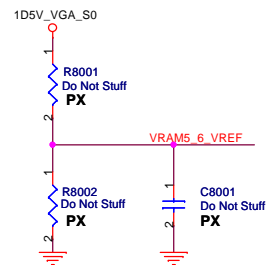
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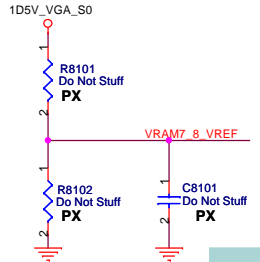
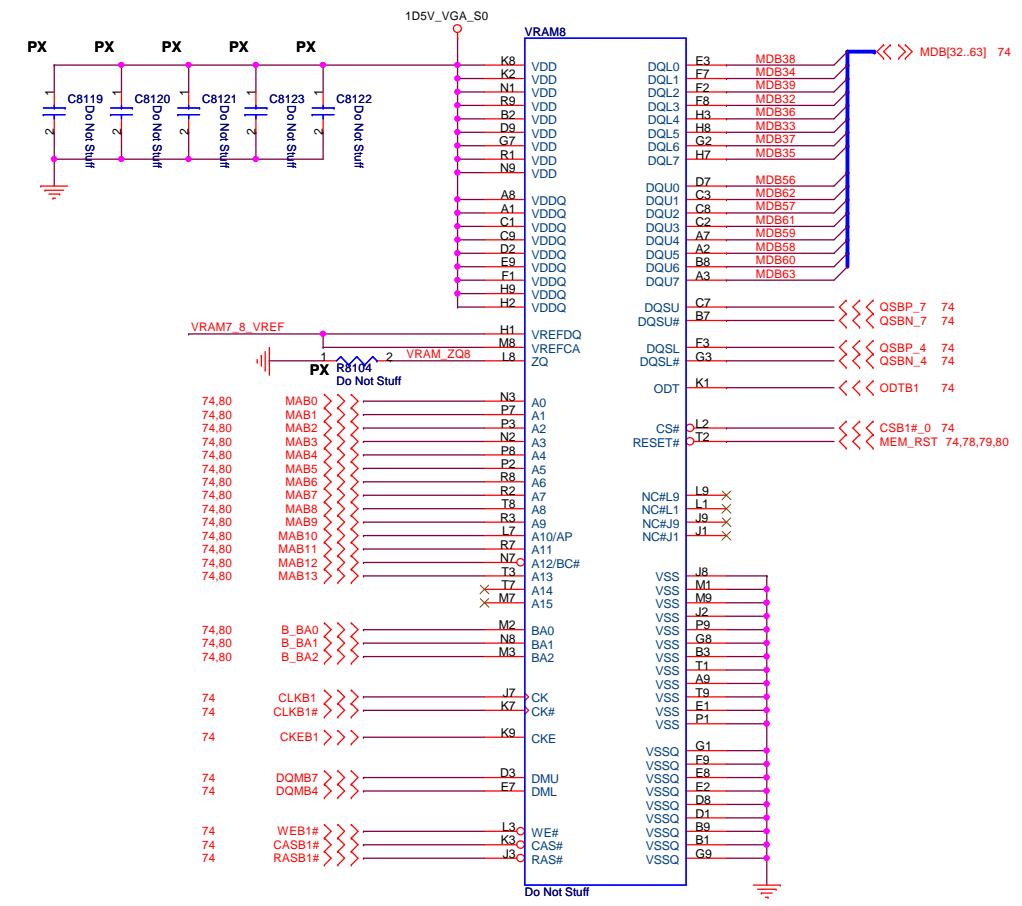
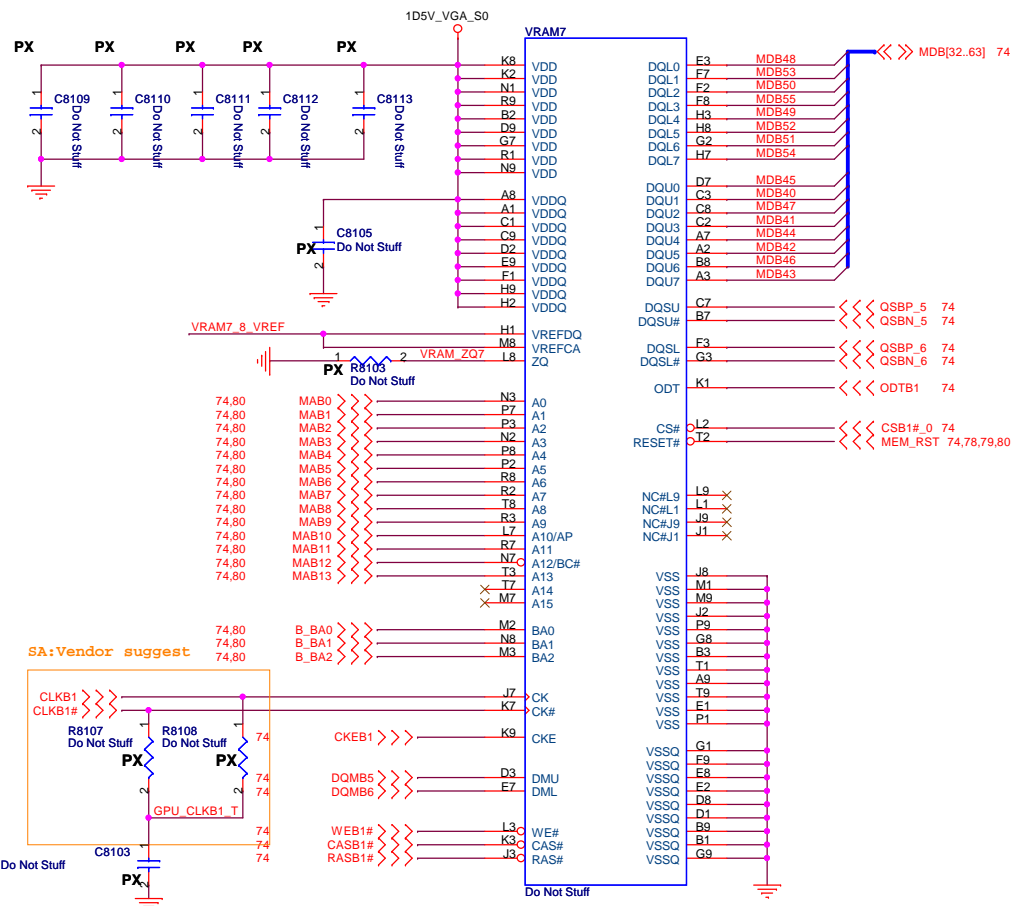
EG50 VRAM: 72.52G63.C0U (VR.2GB0G.005)
 IC VRAM H5TQ2G63DFR-11C FBGA 96P 128M*16 x4



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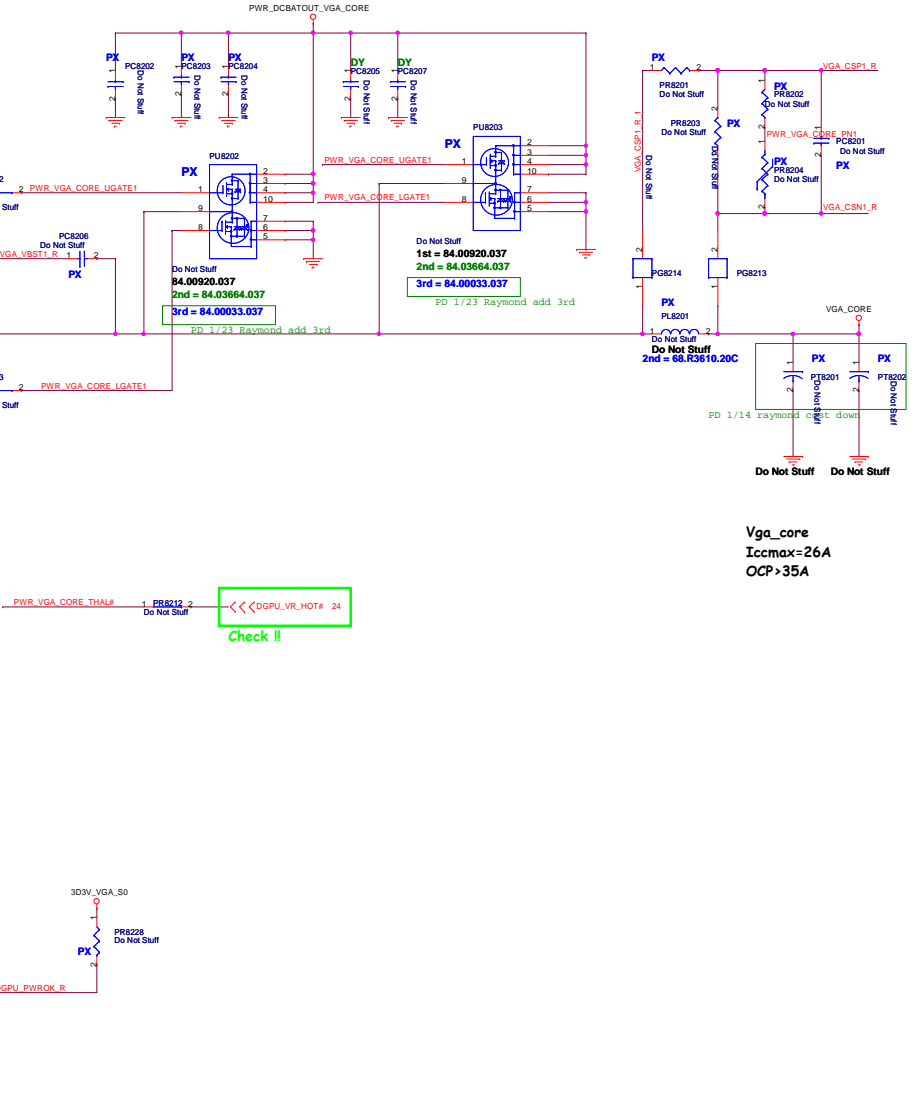
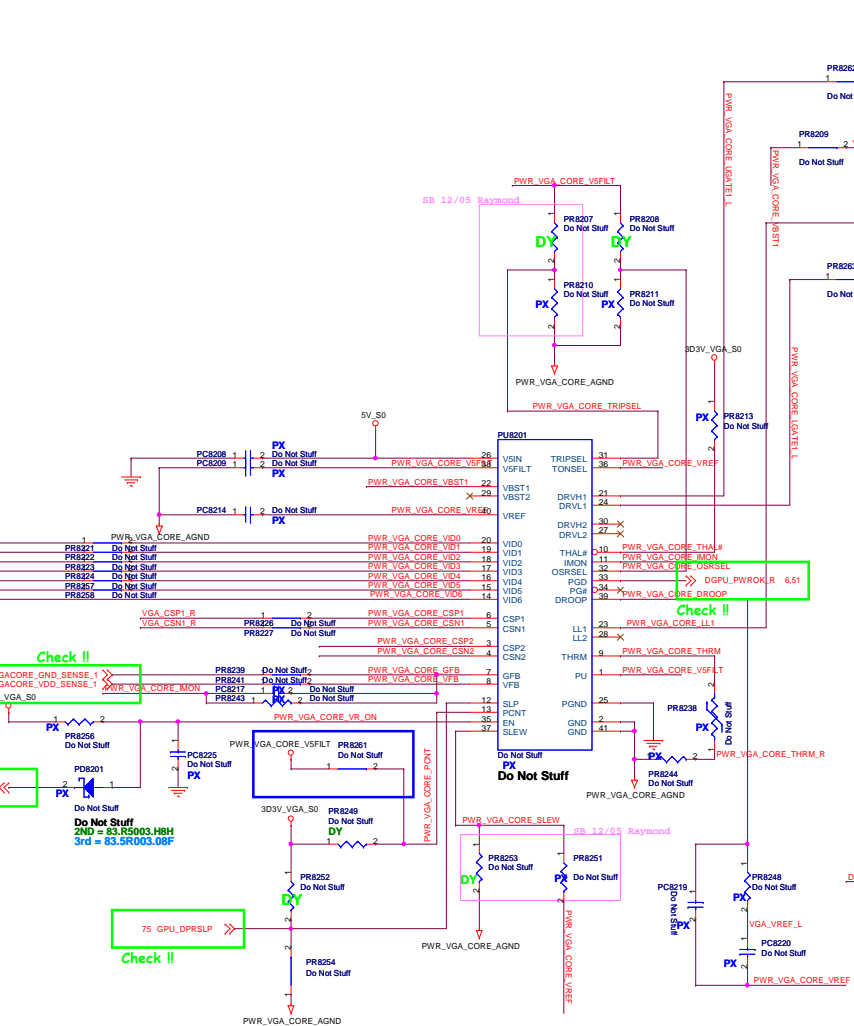
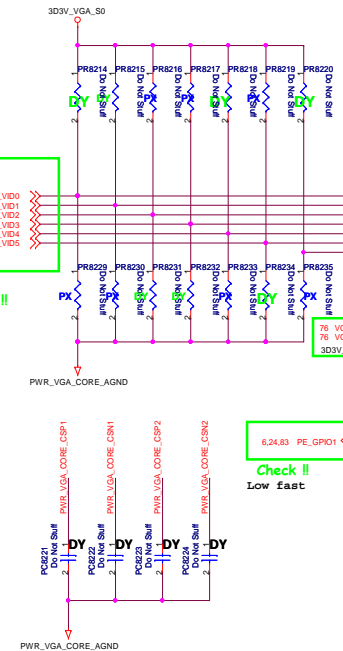
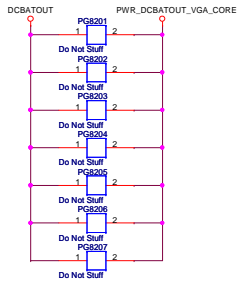
Wistron Corporation 21F, 88, Sec. 1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title	
VRAM 5,6	
Size	Project Name
	KABINI
Date: Monday, February 04, 2013	Rev 5A
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EG50 VRAM: 72.52G63.C0U (VR.2GB0G.005)
 IC VRAM H5TQ2G63DFR-11C FBGA 96P 128M*16 x4



SSID = PWR.Plane.Regulator_GFX



Vga_core
Iccmax=26A
OCP>35A

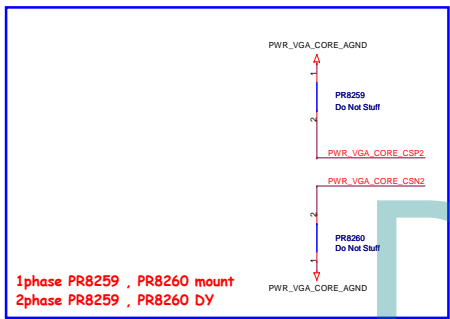
Check !!

Check !!

6.24.83 PE_GPI01
Check !!
Low Zast

75 GPU_DPRSIF
Check !!

Check !!



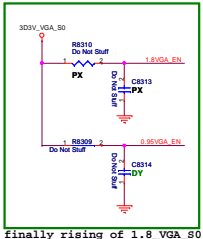
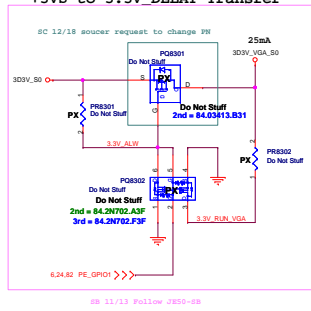
1phase PR8259 , PR8260 mount
2phase PR8259 , PR8260 DY

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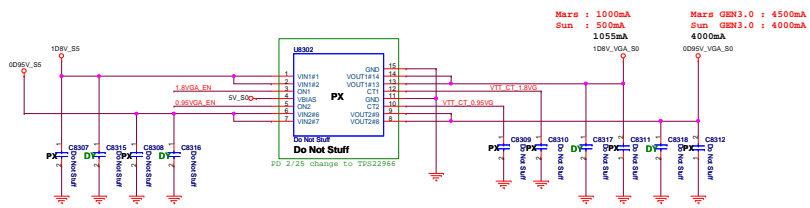
APL3523 for VGA_Power

	FE_GPI00	FE_GPI01
dGPU mode	H	H
IGPU	L	L
IGPU with BACO	H	H

+3VS to 3.3V_DELAY Transfer



finally rising of 1.8_VGA_S0



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緯創資通		Wistron Corporation	
		21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	

Title		Switch GFX	
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Size	Project Name	KABINI	Rev	SA
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緯創資通		Wistron Corporation	
		21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	

Title		Switch VGA	
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Size	Project Name	KABINI	Rev	SA
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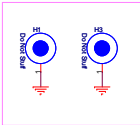
Date:	Friday, September 07, 2012	Sheet	85	of	102
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2

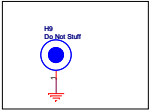
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ZZ.00PAD.2N1

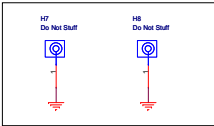
SB 11/14 follow HW for factory issue



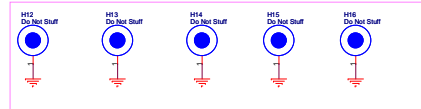
ZZ.00PAD.D01



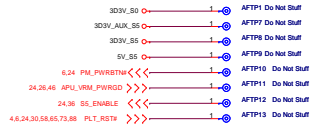
ZZ.00PAD.E01



SB 11/20 ZZ.00pad.2T1 for change BKT size



Check test point

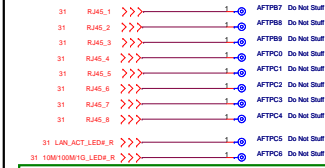


Test Point放在Dimm Door打開可量測處

10/15 follow HW 24.27,61,90_KBC_PWBSTN >>> AFTP91 Do Not Stuff



EDP + MIC connector



LAN_RJ45 connector



Card reader connector



USBED connector

DC IN connector



DC IN connector



Battery connector



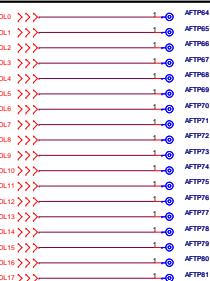
Speaker connector



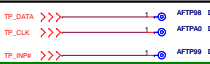
HP connector



FAN connector



Normal KB connector



Touch Pad connector



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緯創資通

Wistron Corporation
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title

NFC

Size

Project Name

KABINI

Rev

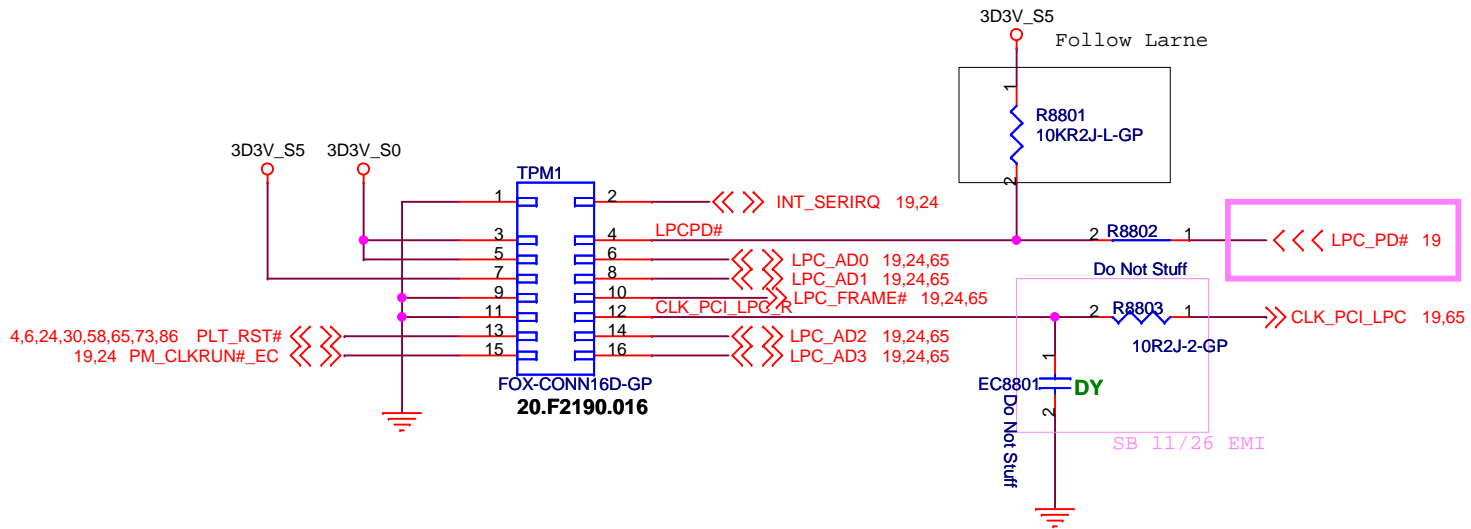
SA

Date: Friday, September 07, 2012

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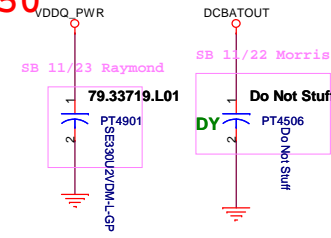
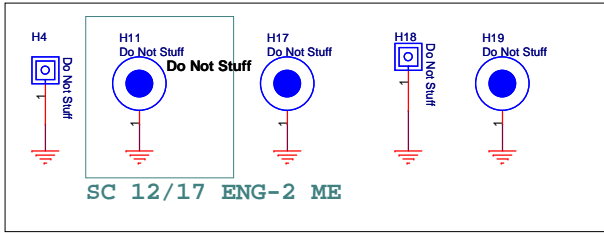
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 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
 Taipei Hsien 221, Taiwan, R.O.C.

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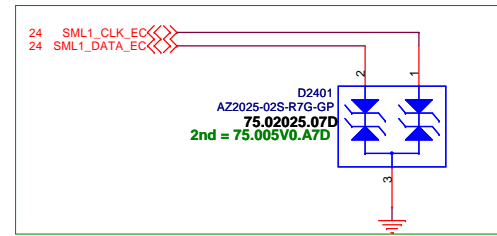
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H4 & H11 & H17 & H18 & H19 for EG50

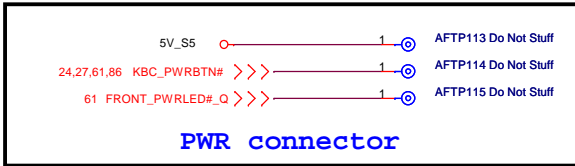


SB 11/23 3mm high limit in EG50

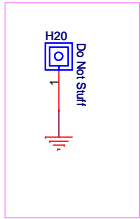
PD 01/31 Different Net name in 14" & 15" for placement



PWRBD AFTP for EG50

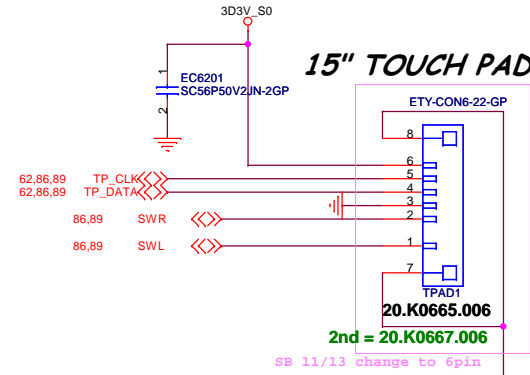
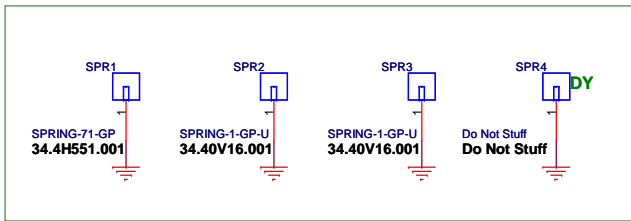


ZZ.00PAD.571



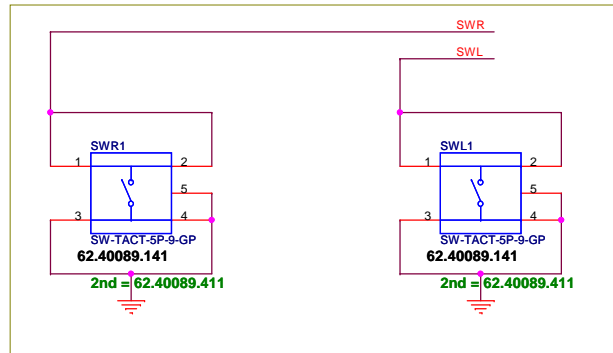
SB 11/20 location same with 14" H2

PD 1/23 EMI Jen



24,62,86	KCOL0	>>>
24,62,86	KCOL1	>>>
24,62,86	KCOL2	>>>
24,62,86	KCOL3	>>>
24,62,86	KCOL4	>>>
24,62,86	KCOL5	>>>
24,62,86	KCOL6	>>>
24,62,86	KCOL7	>>>
24,62,86	KCOL8	>>>
24,62,86	KCOL9	>>>
24,62,86	KCOL10	>>>
24,62,86	KCOL11	>>>
24,62,86	KCOL12	>>>
24,62,86	KCOL13	>>>
24,62,86	KCOL14	>>>
24,62,86	KCOL15	>>>
24,62,86	KCOL16	>>>
24,62,86	KCOL17	>>>
24,62,86	KROW0	>>>
24,62,86	KROW1	>>>
24,62,86	KROW2	>>>
24,62,86	KROW3	>>>
24,62,86	KROW4	>>>
24,62,86	KROW5	>>>
24,62,86	KROW6	>>>
24,62,86	KROW7	>>>

For AFTE



PD 1/21
SWL1 / SWR1 1st change to 62.40089.141, 2nd change to 62.40089.411 ,
because 160kg change to 100kg.

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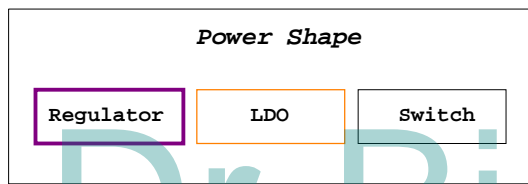
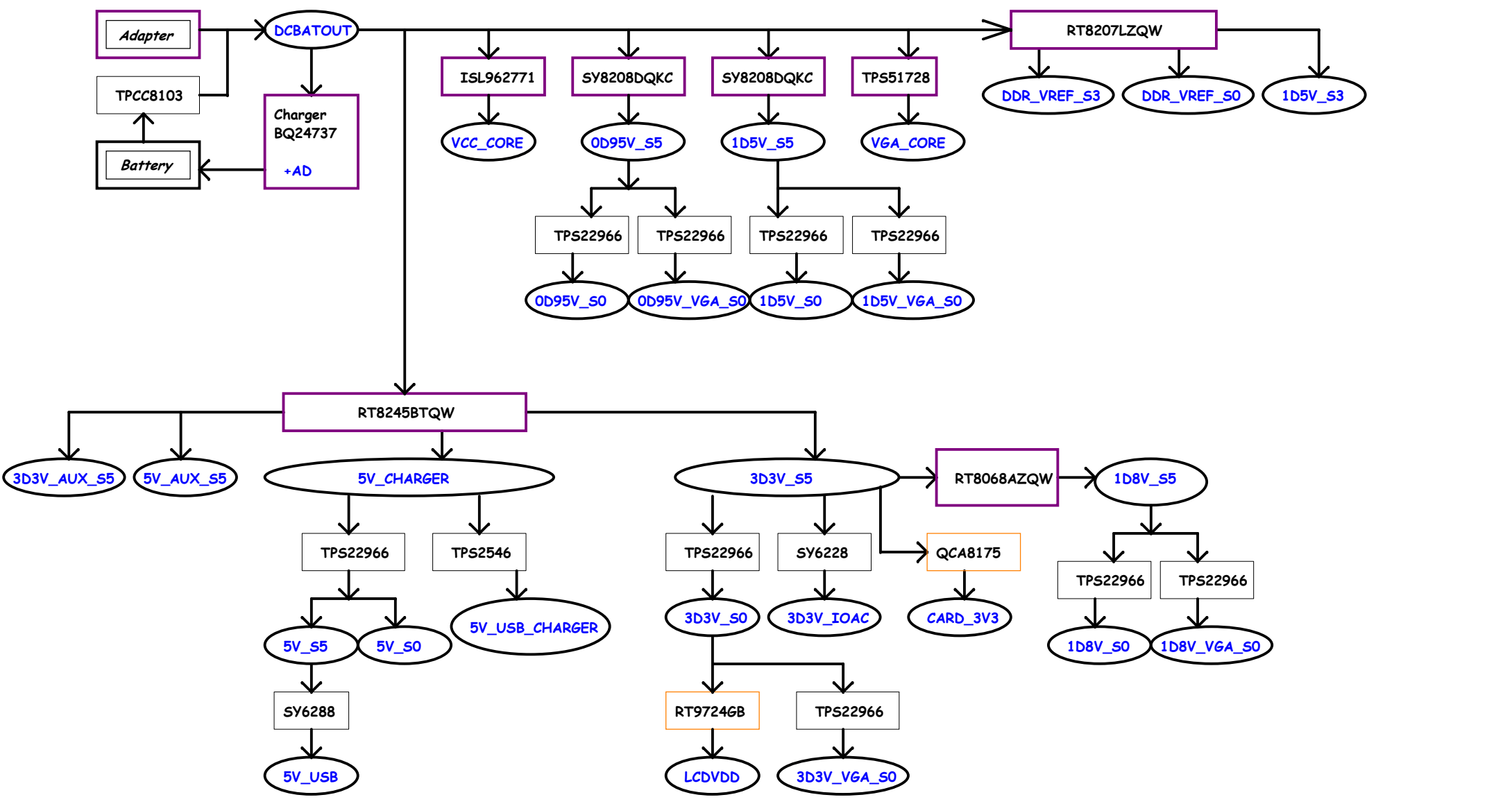
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		21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	

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Change History		

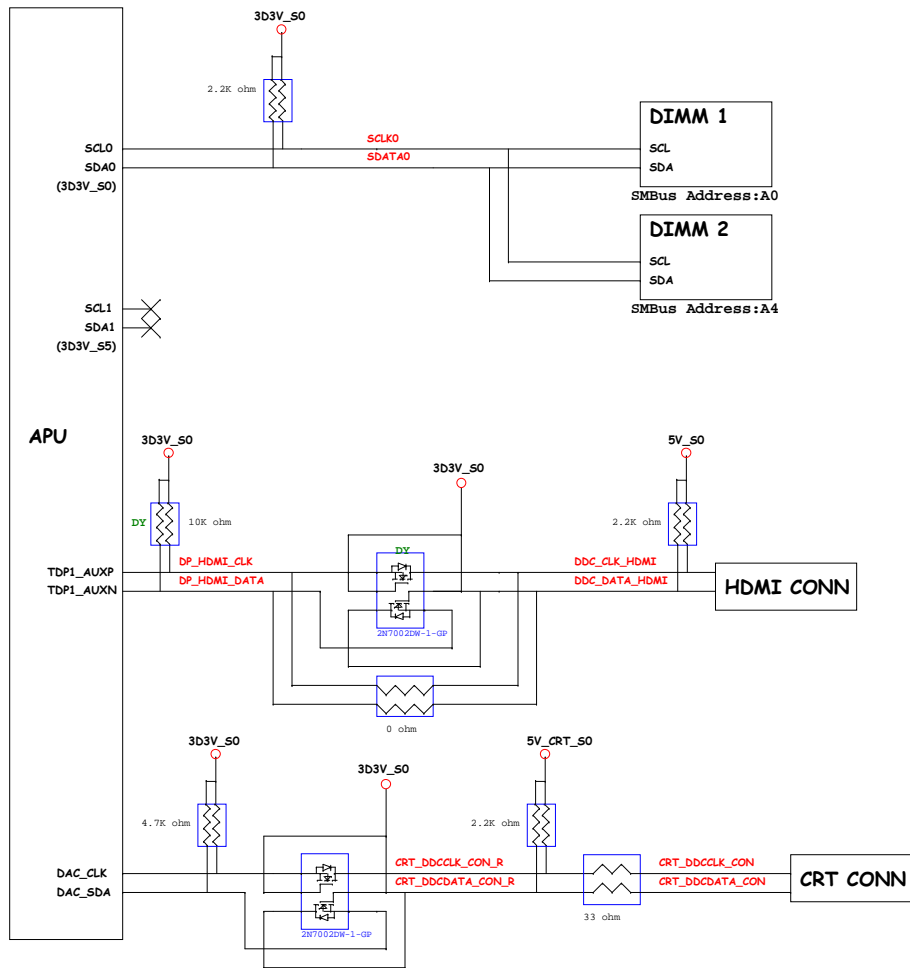
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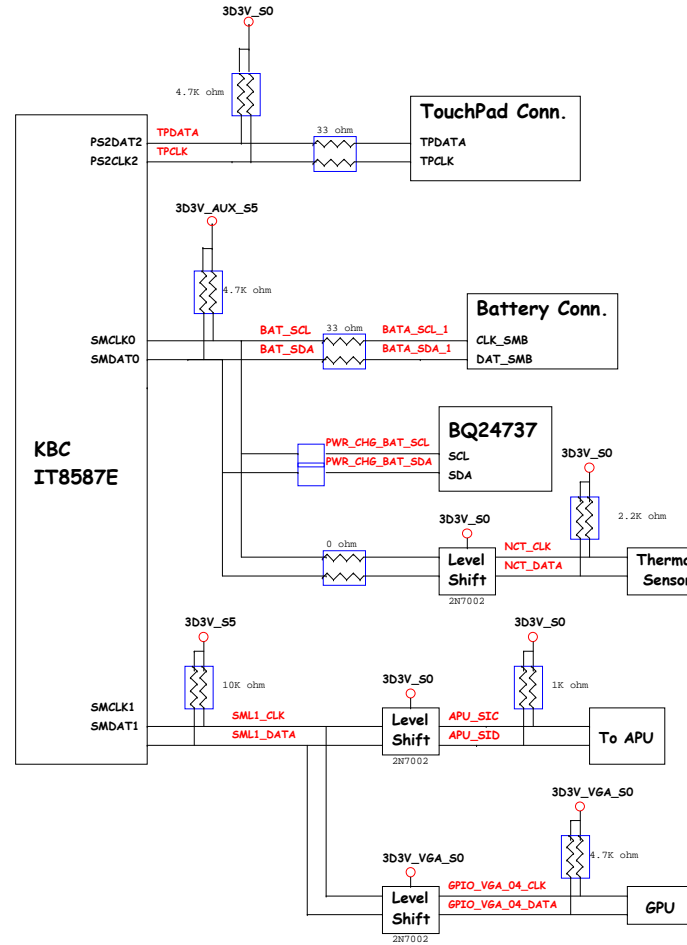


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SMBus Block Diagram

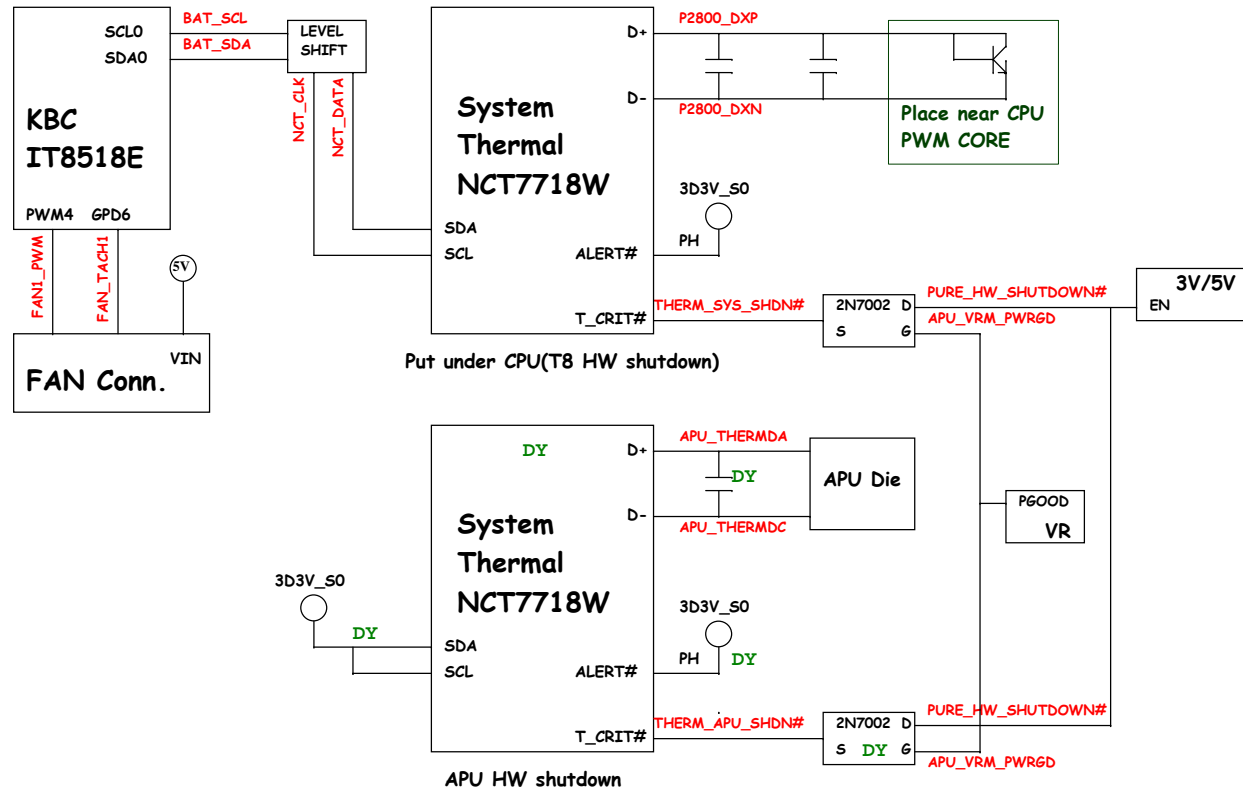


KBC SMBus Block Diagram

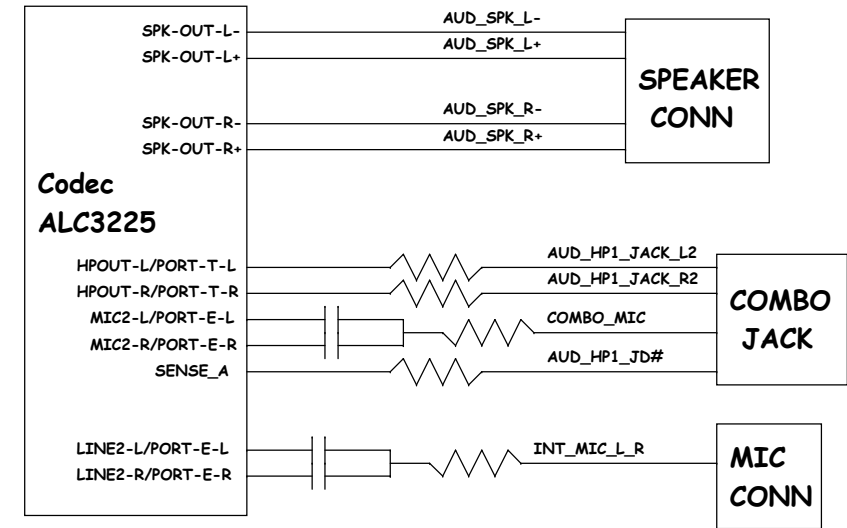


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Thermal Block Diagram



Audio Block Diagram



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