

COMPAL CONFIDENTIAL

MODEL NAME : *JAL21/22*

PCB NO : *LA-4051P (DAA00000R1L)*

BOM P/N : *43153431L01 (Avia TPM)*

43153431L02 (Avia Non TPM)

43153431L11(DSC TPM)

43153431L12 (DSC Non TPM)

M09 Avia / Maybach DIS uFCPGA Mobile Penryn Intel Cantiga PM + ICH9M

2008-06-16

REV : 1.0 (A00)

@ : Nopop Component

1@ : for Avia / JAL22 (NB9P) Component

2@ : for MayDSC / JAL21 (NB9M) Component

3@ : Disable TPM

4@ : Enable TPM

Fix Function Field

MB PCB	
Part Number	Description
DAA00000R1L	PCB 03P LA-4051P REV1 M/B



DELL CONFIDENTIAL/PROPRIETARY

Compal Electronics, Inc.

Cover Sheet		
Title	LA-4051P	
Size	Document Number	Rev
Date	Monday, June 16, 2008	1.0
Sheet 1 of 63		

<http://laptopblue.vn>



POWER STATES

Signal State	SLP S3#	SLP S4#	SLP S5#	S4 STATE#	SLP M#	ALWAYS PLANE	M PLANE	SUS PLANE	RUN PLANE	CLOCKS
S0 (Full ON) / M0	HIGH	HIGH	HIGH	HIGH	HIGH	ON	ON	ON	ON	ON
S3 (Suspend to RAM) / M1	LOW	HIGH	HIGH	HIGH	HIGH	ON	ON	ON	OFF	ON
S4 (Suspend to DISK) / M1	LOW	HIGH	HIGH	LOW	HIGH	ON	ON	ON	OFF	ON
S5 (SOFT OFF) / M1	LOW	HIGH	LOW	LOW	HIGH	ON	ON	ON	OFF	ON
S3 (Suspend to RAM) / M-OFF	LOW	HIGH	HIGH	HIGH	LOW	ON	OFF	ON	OFF	OFF
S4 (Suspend to DISK) / M-OFF	LOW	LOW	HIGH	LOW	LOW	ON	OFF	OFF	OFF	OFF
S5 (SOFT OFF) / M-OFF	LOW	LOW	LOW	LOW	LOW	ON	OFF	OFF	OFF	OFF

PM TABLE

power plane State	+15V_ALW +5V_ALW +3.3V_ALW_ICH +3.3V_RTC_LDO	+3.3V_SUS +1.8V_MEM	+5V_RUN +3.3V_RUN +2.5V_RUN +1.5V_RUN +0.9V_DDR_VTT +GPU_CORE +VCC_CORE +1.05V_VCCP +FBVDDQ +1.1V_GFX_PCIE	+3.3V_M +1.05V_M (M-OFF)	+3.3V_M +1.05V_M (M-OFF)
S0	ON	ON	ON	ON	ON
S3	ON	ON	OFF	ON	OFF
S5 S4/AC	ON	OFF	OFF	ON	OFF
S5 S4/AC don't exist	OFF	OFF	OFF	OFF	OFF

PCI TABLE

PCI DEVICE	IDSEL	REQ#/GNT#	PIRQ
R5C847	AD17	REQ#1 / GNT#1	PIRQ[B..D]

ICH9-M	USB PORT#	DESTINATION
	0	JUSB1 (Ext Right Side Top)
	1	JUSB1 (Ext Right Side Bottom)
	2	JESA1 (Ext Left Side Bottom)
	3	JESA1 (Ext Left Side TOP)
	4	WLAN
	5	WWAN
	6	WPAN
	7	Card Bus/Express card
	8	DOCKING
	9	DOCKING
	10	USH->BIO
	11	Camera

PCI EXPRESS	DESTINATION
Lane 1	MINI CARD-1 WWAN
Lane 2	MINI CARD-2 WLAN
Lane 3	MINI CARD-3 BT/UWB
Lane 4	EXPRESS CARD
Lane 5	None
Lane 6	10/100/1G LAN

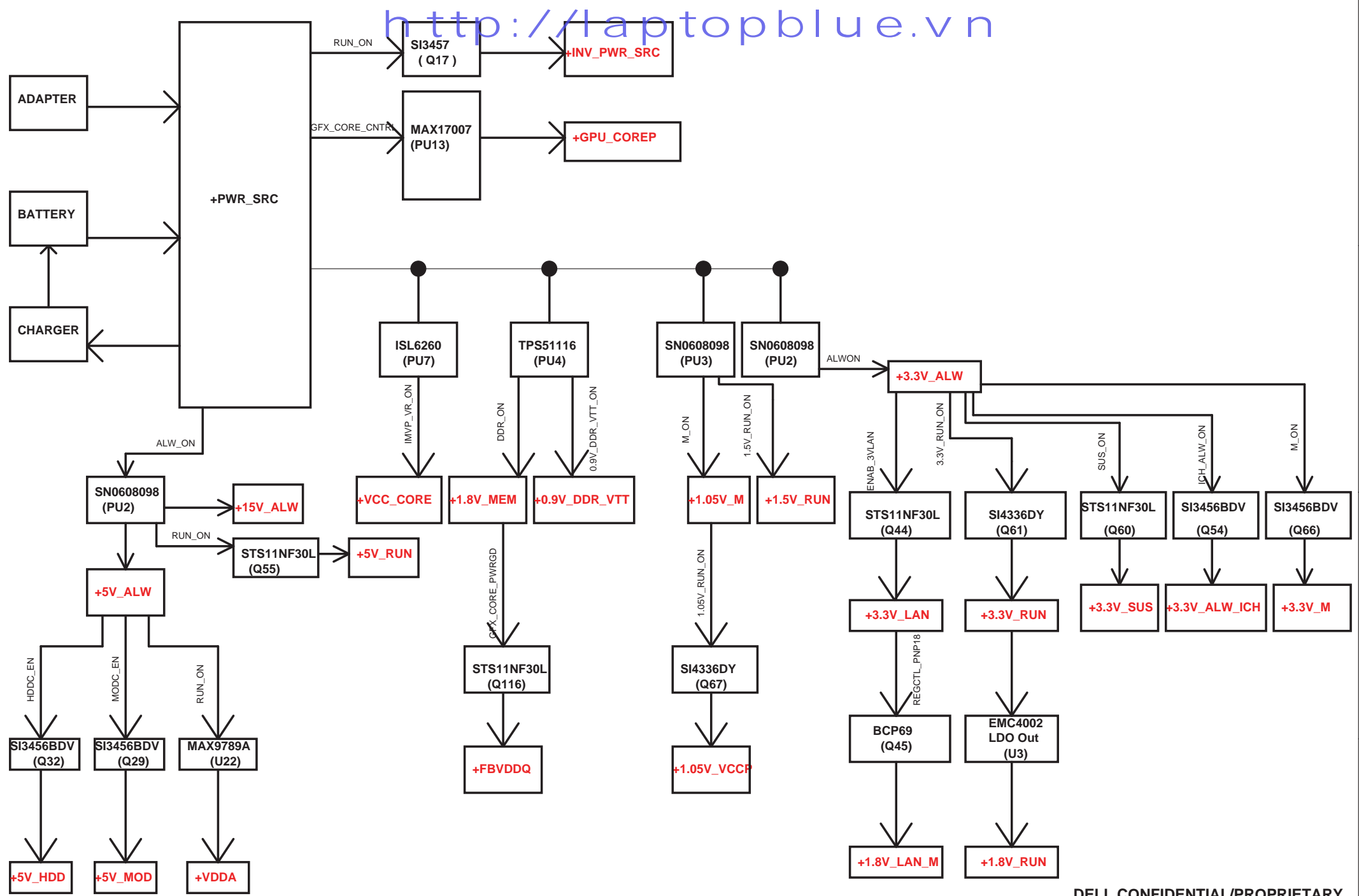
DELL CONFIDENTIAL/PROPRIETARY

Compal Electronics, Inc.


Title	Index and Config.		
Size	Document Number	Rev	1.0
Date	Thursday, June 05, 2008	Sheet	3 of 63



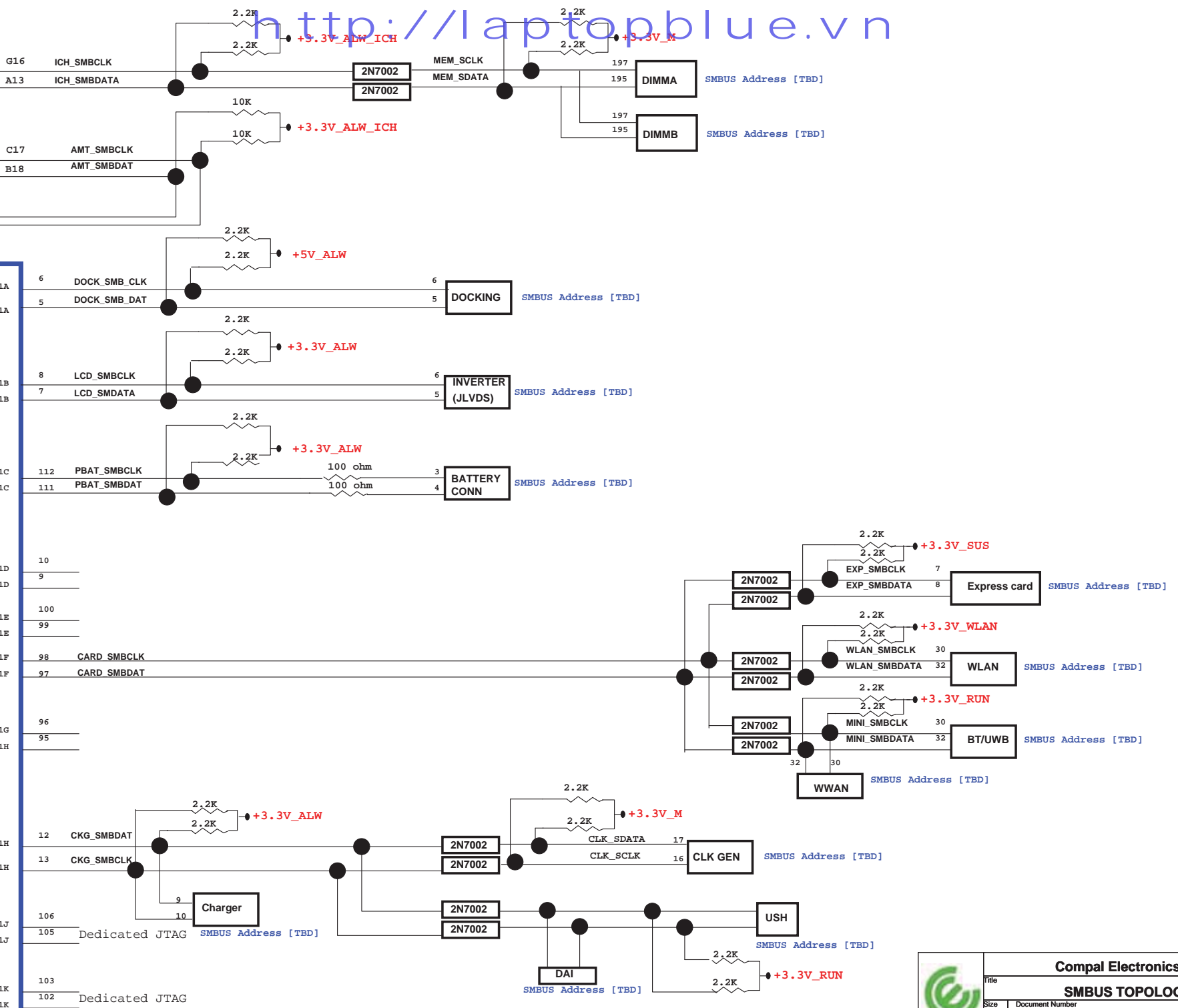
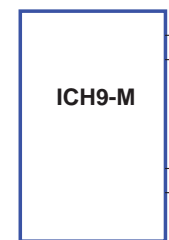
PROPRIETARY NOTE: THIS SHEET OF ENGINEERING DRAWING AND SPECIFICATIONS CONTAINS CONFIDENTIAL TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF DELL INC. ('DELL') THIS DOCUMENT MAY NOT BE TRANSFERRED OR COPIED WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF DELL. IN ADDITION, NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT DELL'S EXPRESS WRITTEN CONSENT.

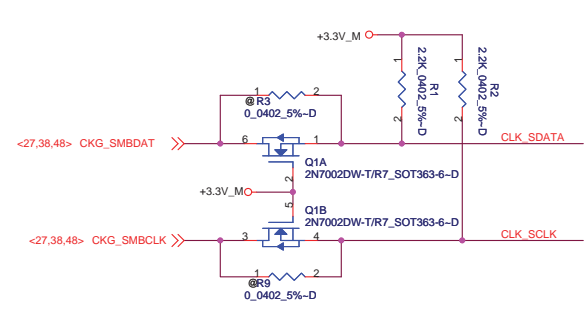


PROPRIETARY NOTE: THIS SHEET OF ENGINEERING DRAWING AND SPECIFICATIONS CONTAINS CONFIDENTIAL TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF DELL INC. ("DELL"). THIS DOCUMENT MAY NOT BE TRANSFERRED OR COPIED WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF DELL. IN ADDITION, NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT DELL'S EXPRESS WRITTEN CONSENT.

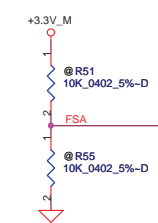


DELL CONFIDENTIAL/PROPRIETARY			
Compal Electronics, Inc.			
Title			
Power Rail			
Size	Document Number	Rev	
	LA-4051P	1.0	
Date:	Thursday, June 05, 2008	Sheet	4 of 63





FSC	CLKSEL2	FSB	CLKSEL1	FSA	CLKSEL0	CPU	MHz	SRC	MHz	PCI	MHz
0	0	0	0	0	0	266	100	33.3			
0	0	1	0	0	0	133	100	33.3			
0	1	0	0	0	0	200	100	33.3			
0	1	1	0	0	0	166	100	33.3			
1	0	0	0	0	0	333	100	33.3			
1	0	1	0	0	0	100	100	33.3			
1	1	0	0	0	0	400	100	33.3			

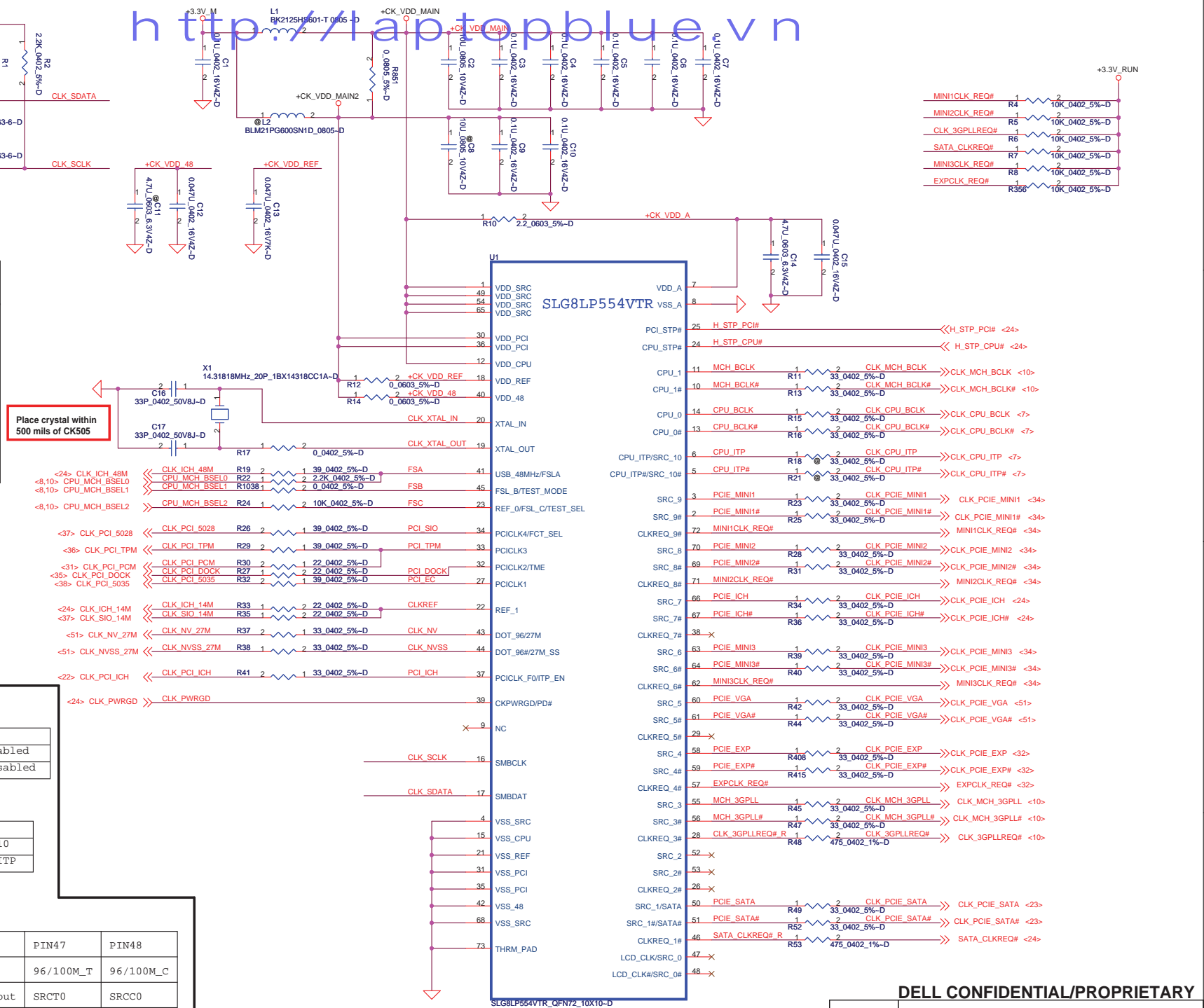


TME	PIN 32
0	overclocking enabled
1	overclocking disabled

ITP_EN	PIN 37
0	Pin 5/6 as SRC_10
1	Pin 5/6 as CPU_ITP

FCTSEL1	PIN43	PIN44	PIN47	PIN48
0=UMA	DOT96T	DOT96C	96/100M_T	96/100M_C
1=DIS	27M_out	27M SSout	SRCT0	SRCC0

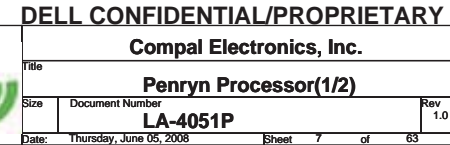
0=UMA
1=Disc. GRFX down
<http://hobi-elektronika.net>

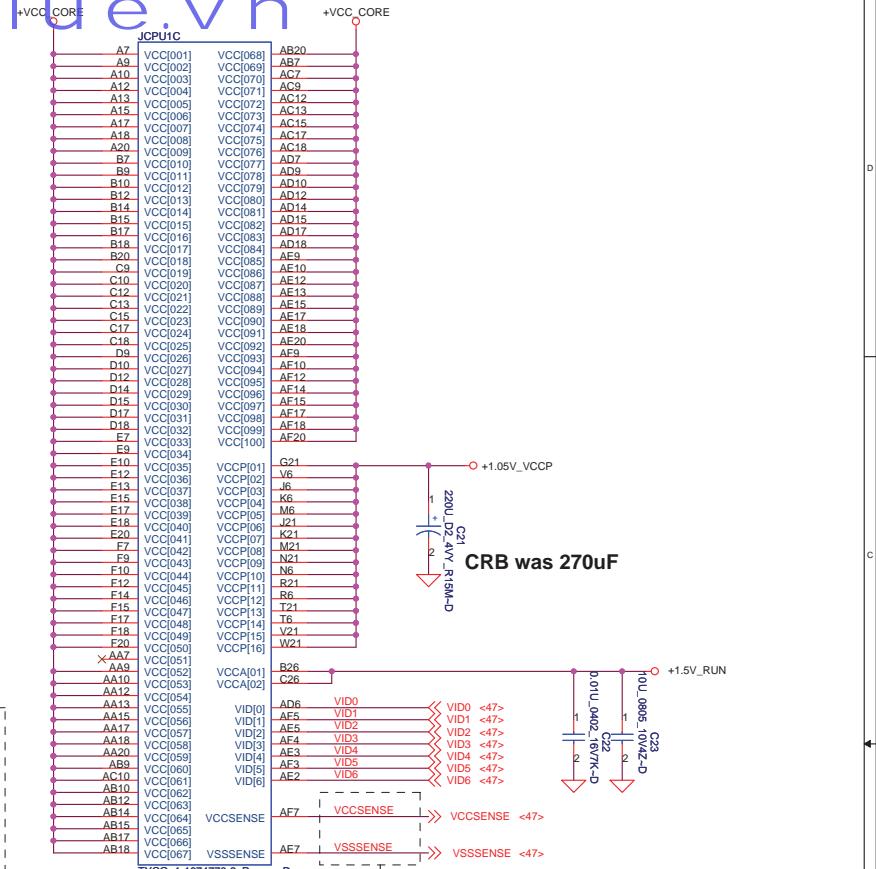


DELL CONFIDENTIAL/PROPRIETARY

Compal Electronics, Inc.			
Title			
Clock Generator			
Size	Document Number	Rev	
	LA-4051P	1.0	
Date:	Friday, June 13, 2008	Sheet	6 of 63

PROPRIETARY NOTE: THIS SHEET OF ENGINEERING DRAWING AND SPECIFICATIONS CONTAINS CONFIDENTIAL TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF DELL INC. ("DELL"). THIS DOCUMENT MAY NOT BE TRANSFERRED OR COPIED WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF DELL. IN ADDITION, NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT DELL'S EXPRESS WRITTEN CONSENT.





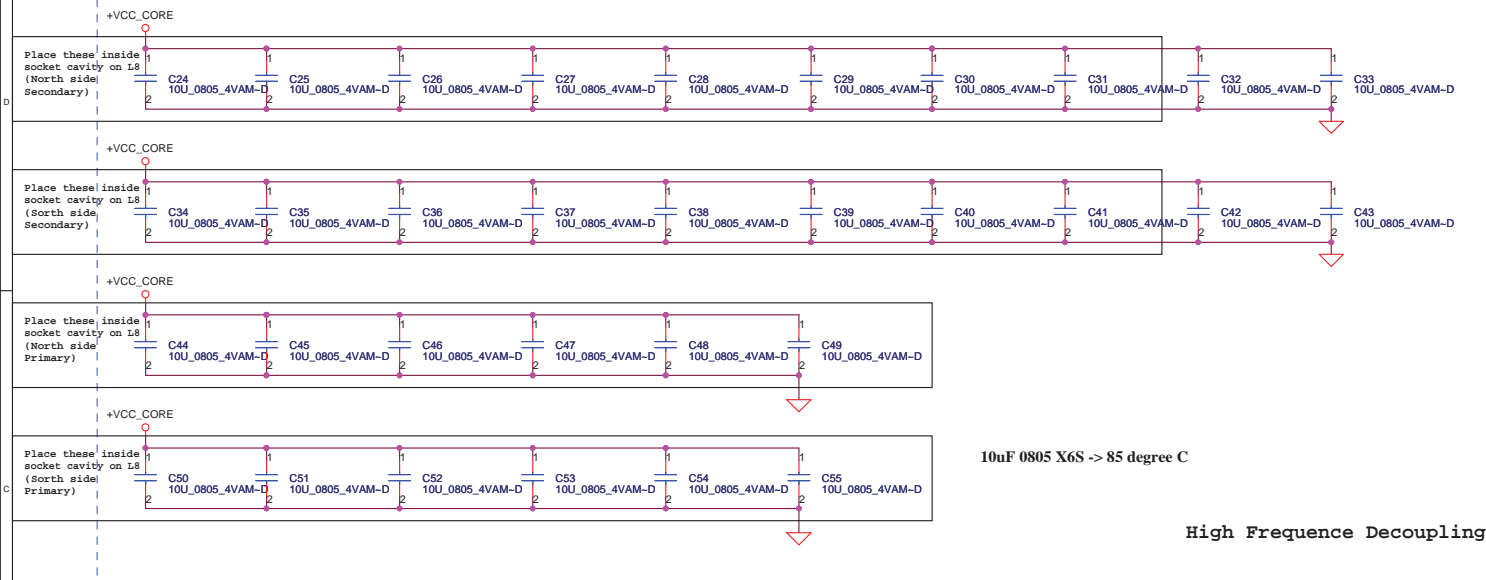
Length match within 25 mils, $Z_0=27.4$ ohm

Place R75 and R76 near CPU

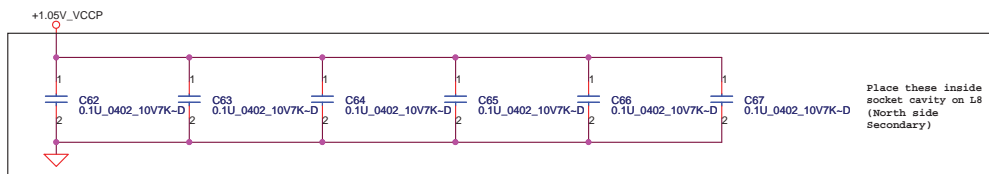
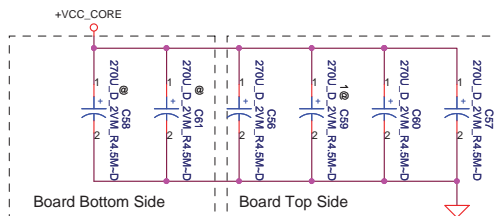


Layout close CPU PIN AD26
50 ohm, 0.5 inch (max)

http://laptopblue.vn



Near VCORE regulator.



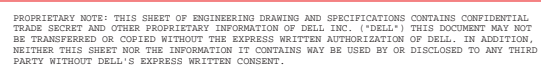
DELL CONFIDENTIAL/PROPRIETARY

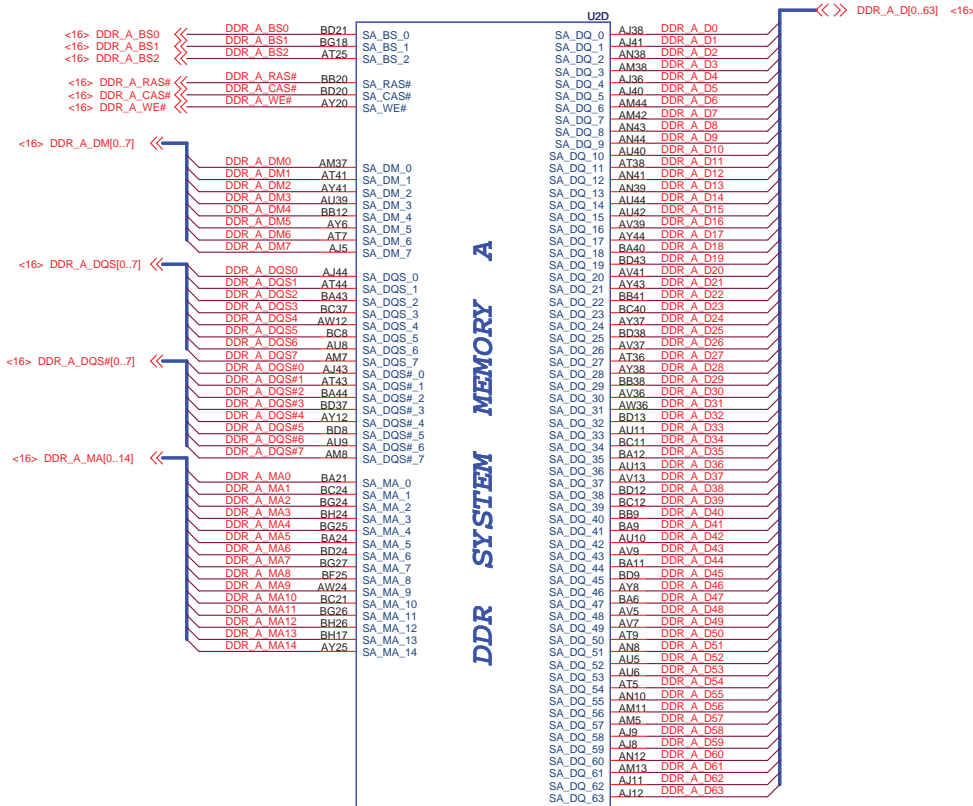
Compal Electronics, Inc.



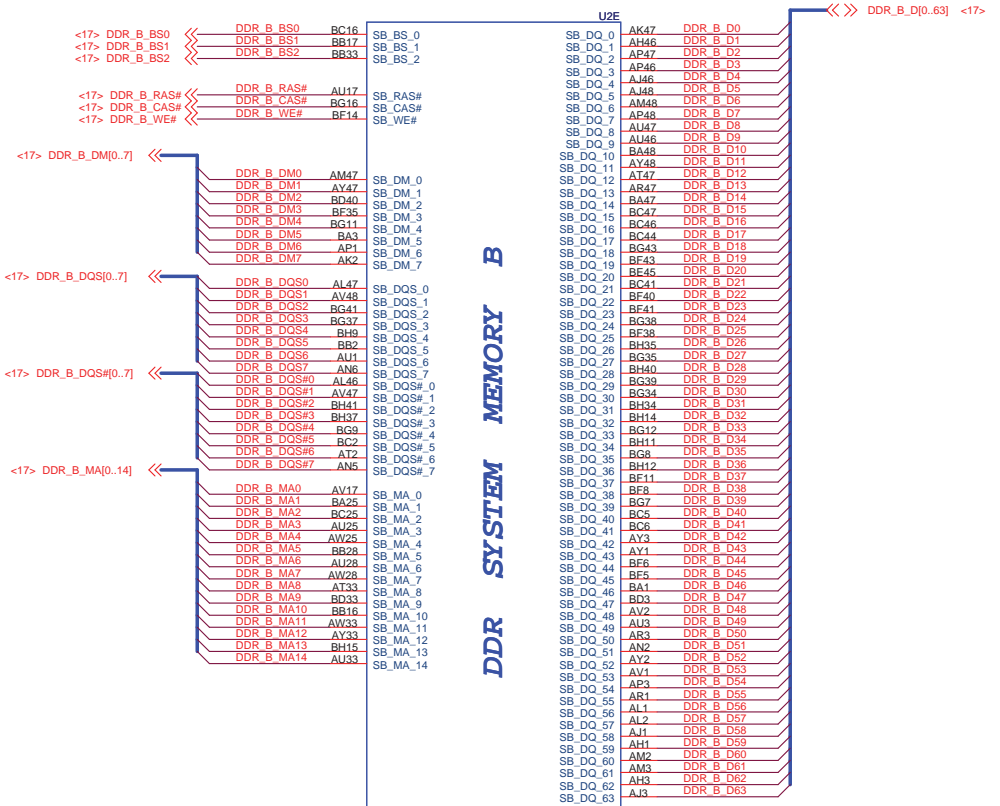
Title			
CPU Bypass			
Size	Document Number	Rev	
	LA-4051P	1.0	
Date:	Thursday, June 05, 2008	Sheet	9 of 63

PROPRIETARY NOTE: THIS SHEET OF ENGINEERING DRAWING AND SPECIFICATIONS CONTAINS CONFIDENTIAL TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF DELL INC. ("DELL"). THIS DOCUMENT MAY NOT BE TRANSFERRED OR COPIED WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF DELL. IN ADDITION, NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT DELL'S EXPRESS WRITTEN CONSENT.





CANTIGA ES_FCBGA1329-D



CANTIGA ES_FCBGA1329-D

PROPRIETARY NOTE: THIS SHEET OF ENGINEERING DRAWING AND SPECIFICATIONS CONTAINS CONFIDENTIAL TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF DELL INC. ("DELL"). THIS DOCUMENT MAY NOT BE TRANSFERRED OR COPIED WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF DELL. IN ADDITION, NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT DELL'S EXPRESS WRITTEN CONSENT.

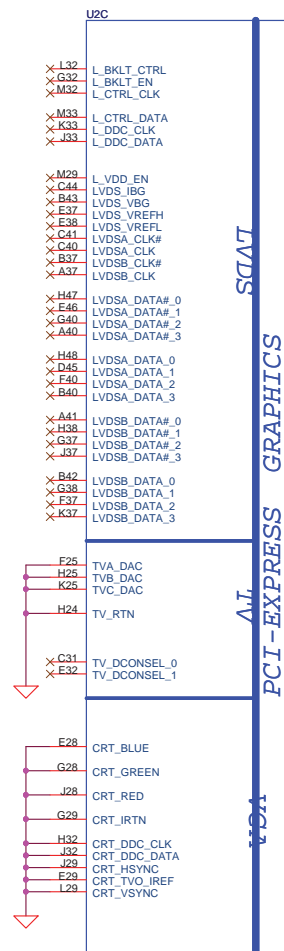


DELL CONFIDENTIAL/PROPRIETARY

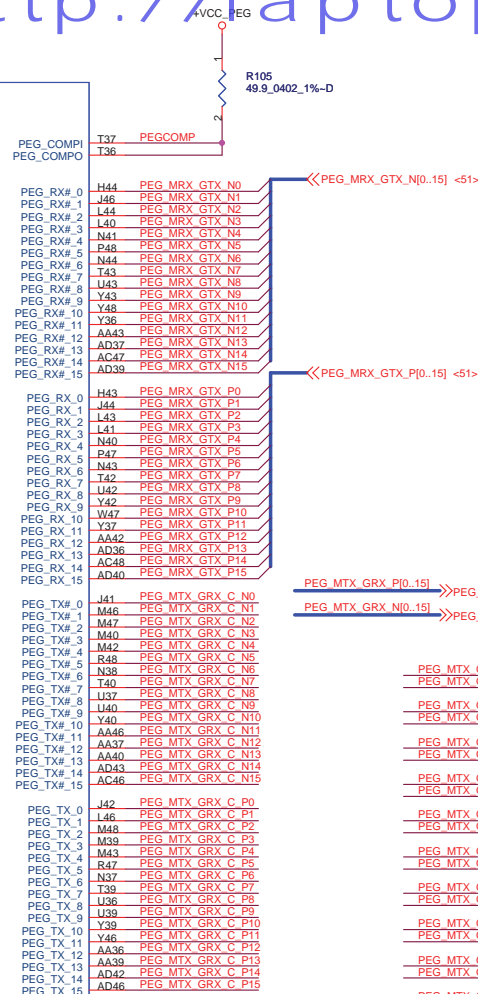
Compal Electronics, Inc.

Cantiga(2 of 6)

File	Document Number	Rev
LA-4051P		1.0
Date: Thursday, June 05, 2008	Sheet 11 of 63	



CANTIGA ES_FCBGA1329-D



CFG5	DMI X2 Select	Low = DMI x 2 High = DMI x 4 (Default)
CFG6	iTPM Host Interface	Low = iTPM enable High = iTPM disable(Default)
CFG7	Management Engine Crypto Strap	Low = TLS cipher suite with no confidentiality High = TLS cipher suite with confidentiality(Default)
CFG9	PCI Express Graphic Lane	Low = Reverse Lane High = Normal Operation(Default)
CFG16	FSB Dynamic ODT	Low=Dynamic ODT Disable High=Dynamic ODT Enable(default)
CFG19	DMI Lane Reversal	Low=Normal (default) High=Lane Reversed
CFG20	Digital Display Port Concurrent Operation	Low=Only digital display port (SDVO/DP/iHDMI) or PCIe is operational (default) High = Digital display port (SDVO/DP/iHDMI) and PCIe are operating simultaneously via the PEG port
SDVO_CTRL_DATA		Low=No SDVO Device Present (default) High=SDVO Device Present
DDPC_CTRLDATA		Low=DisplayPort disabled (default) High=DisplayPort device present

PEG MTX GRX C P0	C77	2	1	0.1U 0402	10V7K-D	PEG MTX GRX P0
PEG MTX GRX C N0	C78	2	1	0.1U 0402	10V7K-D	PEG MTX GRX N0
PEG MTX GRX C P1	C79	2	1	0.1U 0402	10V7K-D	PEG MTX GRX P1
PEG MTX GRX C N1	C80	2	1	0.1U 0402	10V7K-D	PEG MTX GRX N1
PEG MTX GRX C P2	C81	2	1	0.1U 0402	10V7K-D	PEG MTX GRX P2
PEG MTX GRX C N2	C82	2	1	0.1U 0402	10V7K-D	PEG MTX GRX N2
PEG MTX GRX C P3	C83	2	1	0.1U 0402	10V7K-D	PEG MTX GRX P3
PEG MTX GRX C N3	C84	2	1	0.1U 0402	10V7K-D	PEG MTX GRX N3
PEG MTX GRX C P4	C85	2	1	0.1U 0402	10V7K-D	PEG MTX GRX P4
PEG MTX GRX C N4	C86	2	1	0.1U 0402	10V7K-D	PEG MTX GRX N4
PEG MTX GRX C P5	C87	2	1	0.1U 0402	10V7K-D	PEG MTX GRX P5
PEG MTX GRX C N5	C88	2	1	0.1U 0402	10V7K-D	PEG MTX GRX N5
PEG MTX GRX C P6	C89	2	1	0.1U 0402	10V7K-D	PEG MTX GRX P6
PEG MTX GRX C N6	C90	2	1	0.1U 0402	10V7K-D	PEG MTX GRX N6
PEG MTX GRX C P7	C91	2	1	0.1U 0402	10V7K-D	PEG MTX GRX P7
PEG MTX GRX C N7	C92	2	1	0.1U 0402	10V7K-D	PEG MTX GRX N7
PEG MTX GRX C P8	C93	1	2	0.1U 0402	10V7K-D	PEG MTX GRX P8
PEG MTX GRX C N8	C94	1	2	0.1U 0402	10V7K-D	PEG MTX GRX N8
PEG MTX GRX C P9	C95	1	2	0.1U 0402	10V7K-D	PEG MTX GRX P9
PEG MTX GRX C N9	C96	1	2	0.1U 0402	10V7K-D	PEG MTX GRX N9
PEG MTX GRX C P10	C97	1	2	0.1U 0402	10V7K-D	PEG MTX GRX P10
PEG MTX GRX C N10	C98	1	2	0.1U 0402	10V7K-D	PEG MTX GRX N10
PEG MTX GRX C P11	C99	1	2	0.1U 0402	10V7K-D	PEG MTX GRX P11
PEG MTX GRX C N11	C100	1	2	0.1U 0402	10V7K-D	PEG MTX GRX N11
PEG MTX GRX C P12	C101	1	2	0.1U 0402	10V7K-D	PEG MTX GRX P12
PEG MTX GRX C N12	C102	1	2	0.1U 0402	10V7K-D	PEG MTX GRX N12
PEG MTX GRX C P13	C103	1	2	0.1U 0402	10V7K-D	PEG MTX GRX P13
PEG MTX GRX C N13	C104	1	2	0.1U 0402	10V7K-D	PEG MTX GRX N13
PEG MTX GRX C P14	C105	1	2	0.1U 0402	10V7K-D	PEG MTX GRX P14
PEG MTX GRX C N14	C106	1	2	0.1U 0402	10V7K-D	PEG MTX GRX N14
PEG MTX GRX C P15	C107	1	2	0.1U 0402	10V7K-D	PEG MTX GRX P15
PEG MTX GRX C N15	C108	1	2	0.1U 0402	10V7K-D	PEG MTX GRX N15

<10> CFG5 >> @R106 1 2 2.21K_0402 1%-D

<10> CFG6 >> @R107 1 2 2.21K_0402 1%-D

<10> CFG7 >> @R108 1 2 2.21K_0402 1%-D

<10> CFG9 >> @R109 1 2 2.21K_0402 1%-D

<10> CFG16 >> @R110 1 2 2.21K_0402 1%-D

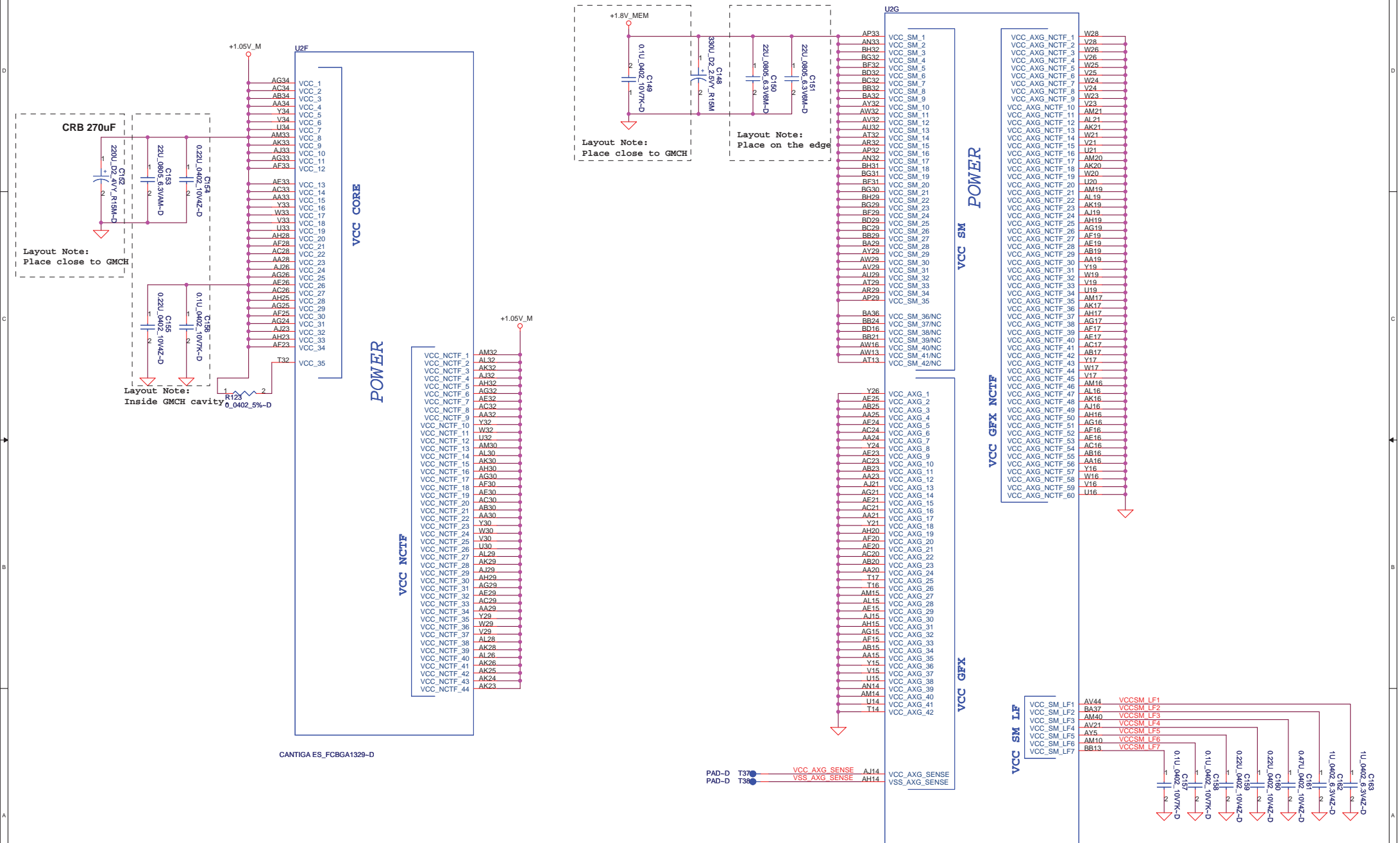
CFG[5:16] have internal pullup

+3.3V_RUN

<10> CFG19 @R111 1 2 4.02K_0402 1%-D

CFG[19:20] have internal pulldown





CANTIGA ES_FCBGA1329-D

CANTIGA ES_FCBGA1329-D

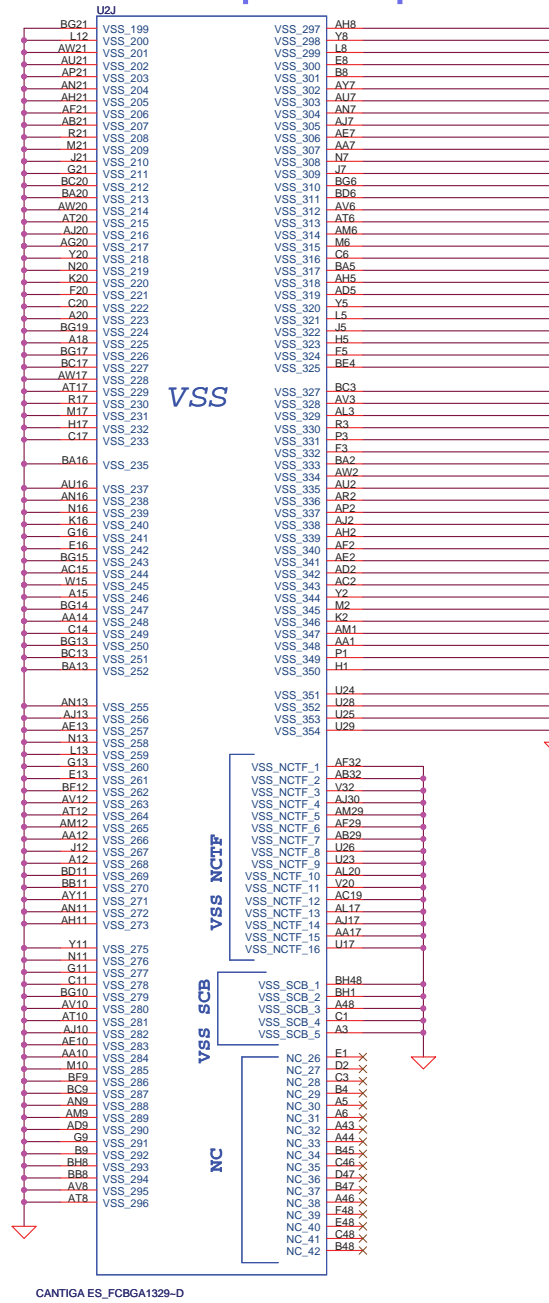
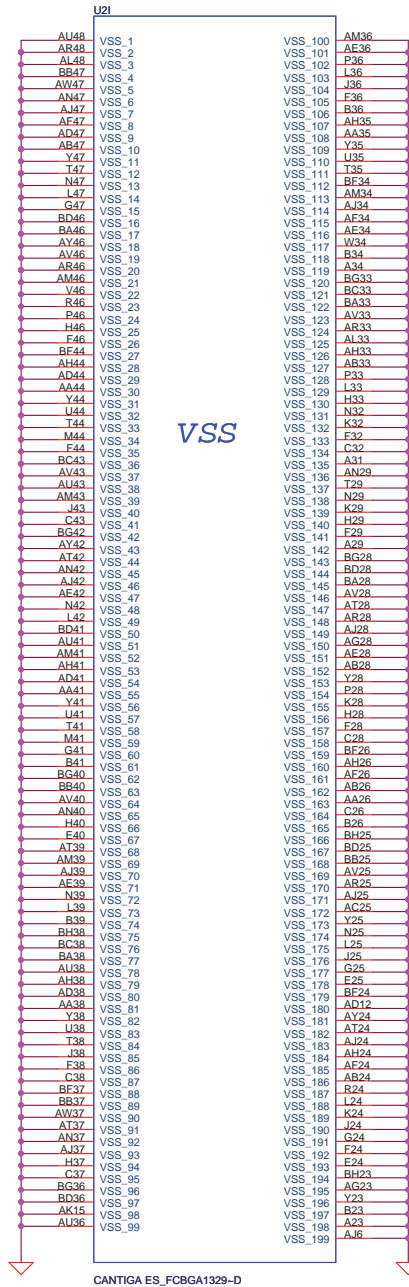
PROPRIETARY NOTE: THIS SHEET OF ENGINEERING DRAWING AND SPECIFICATIONS CONTAINS CONFIDENTIAL TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF DELL INC. ("DELL"). THIS DOCUMENT MAY NOT BE TRANSFERRED OR COPIED WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF DELL. IN ADDITION, NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT DELL'S EXPRESS WRITTEN CONSENT.

DELL CONFIDENTIAL/PROPRIETARY

Compal Electronics, Inc.

Cantiga(5 of 6)

Title	Document Number	Rev
LA-4051P	LA-4051P	1.0
Date	Thursday, June 05, 2008	Sheet 14 of 63



DELL CONFIDENTIAL/PROPRIETARY

Compal Electronics, Inc.

Title

Cantiga(6 of 6)

Size Document Number

LA-4051P

Rev 1.0

Date: Thursday, June 05, 2008 Sheet 15 of 63

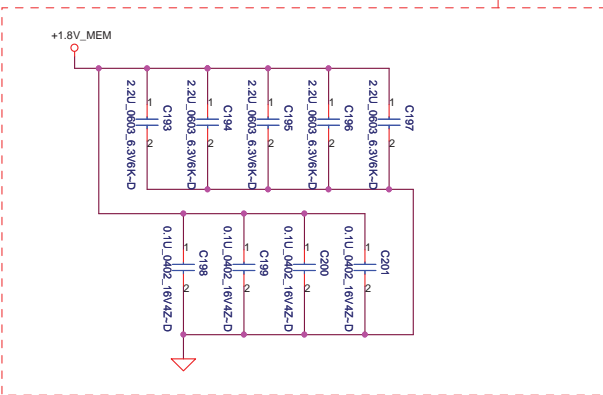
PROPRIETARY NOTE: THIS SHEET OF ENGINEERING DRAWING AND SPECIFICATIONS CONTAINS CONFIDENTIAL TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF DELL INC. ("DELL"). THIS DOCUMENT MAY NOT BE TRANSFERRED OR COPIED WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF DELL. IN ADDITION, NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT DELL'S EXPRESS WRITTEN CONSENT.



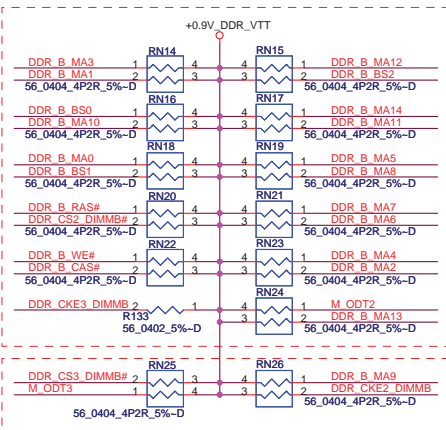
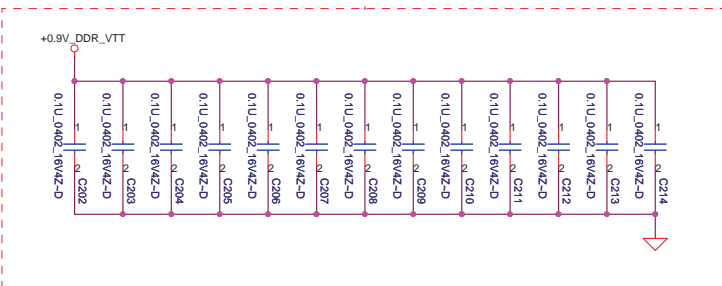
<http://hobi-elektronika.net>

<11> DDR_B_DQS#0..7 <<>>
 <11> DDR_B_DQ#0..63 <<>>
 <11> DDR_B_DM#0..7 <<>>
 <11> DDR_B_DQS#0..7 <<>>
 <11> DDR_B_MA#0..14 <<>>

Layout Note:
Place near JDIMMB

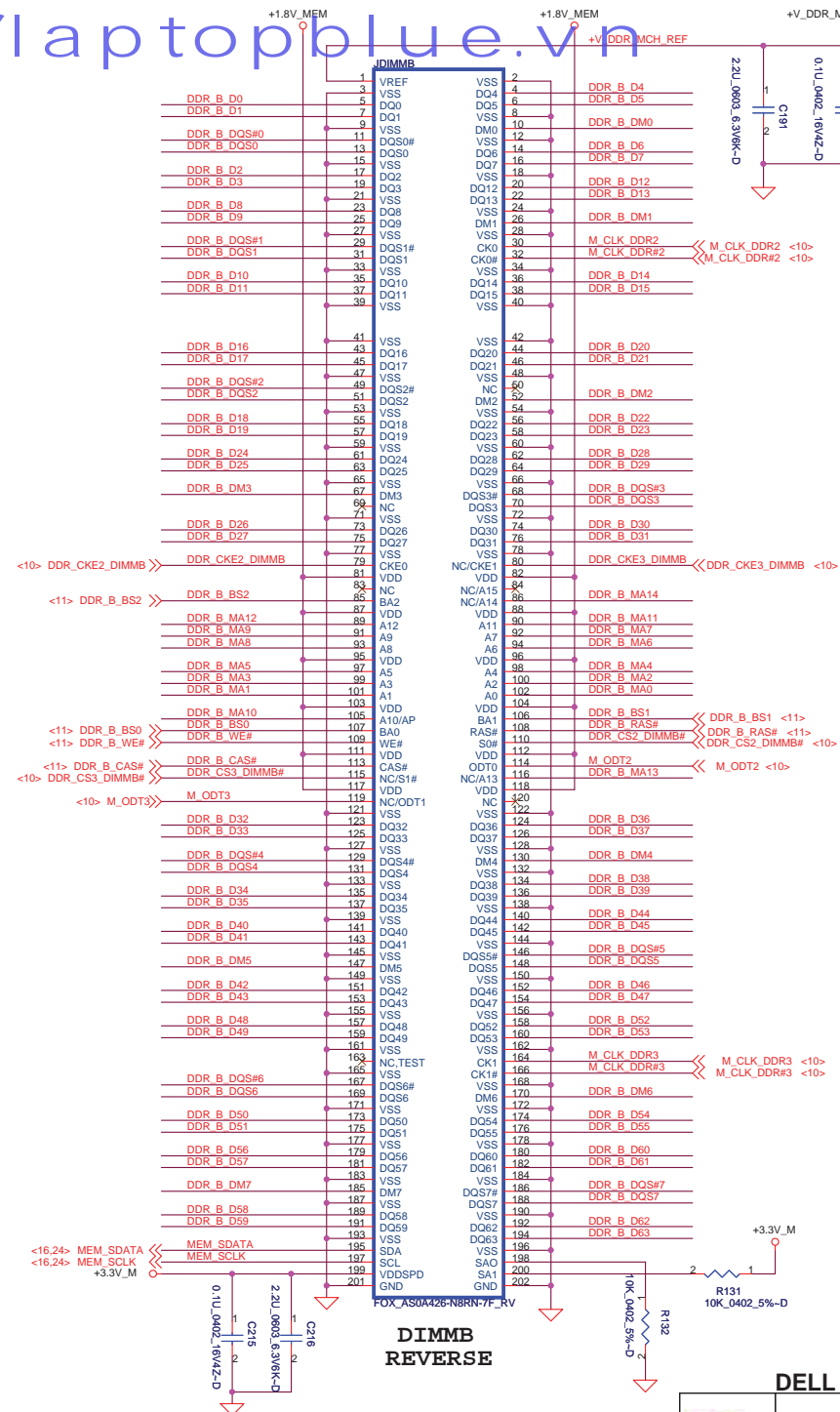


Layout Note:
Place one cap close to every 2 pullup resistors terminated to +0.9V_DDR_VTT



Layout Note:
Place these resistor closely JDIMMB, all trace length < 750 mil

Layout Note:
Place these resistor closely JDIMMB, all trace length Max=1.3"



DIMMB
REVERSE

DELL CONFIDENTIAL/PROPRIETARY

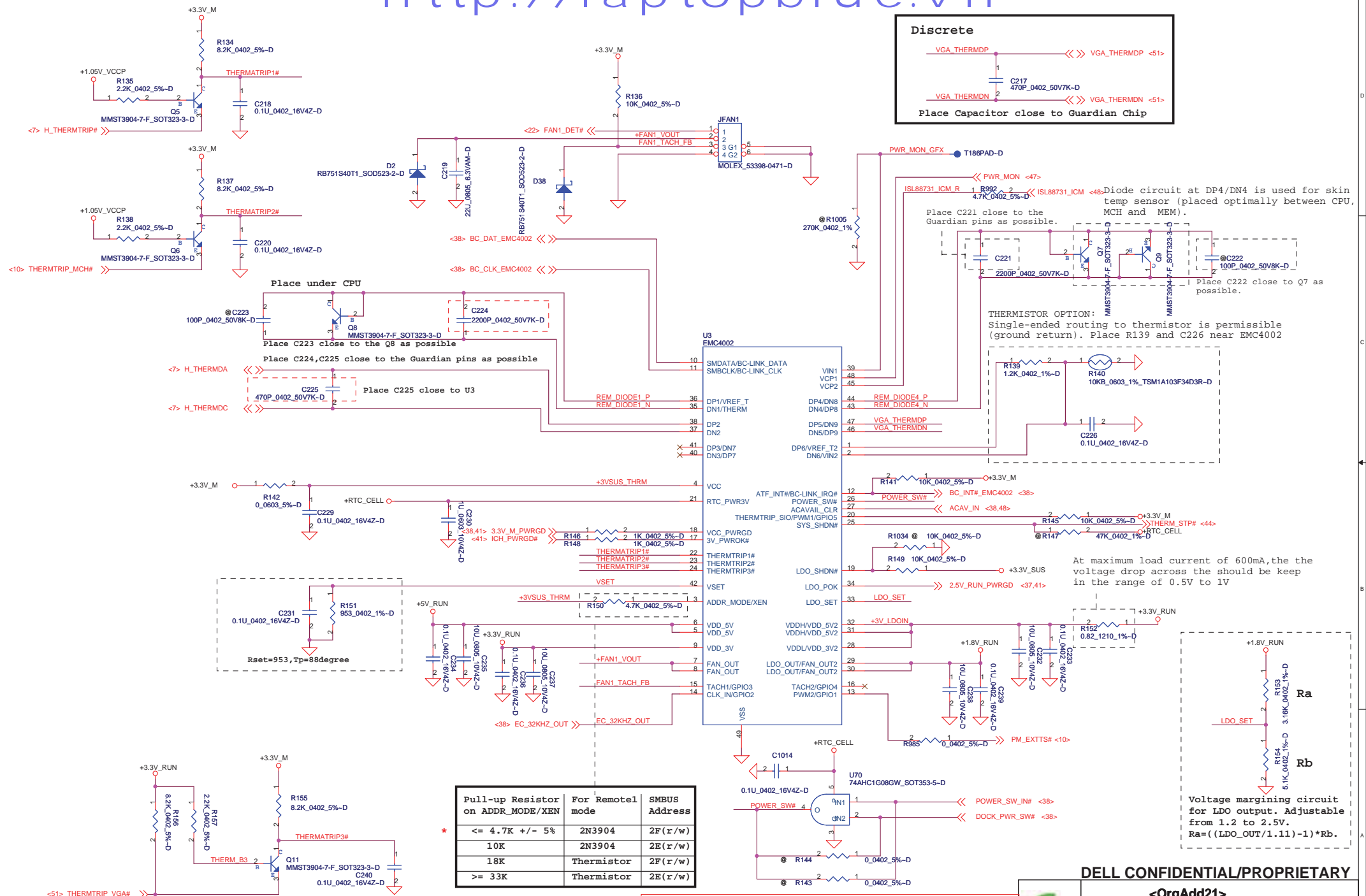
Compal Electronics, Inc.

DDR2-SODIMM SLOT2

LA-4051P

Rev 1.0

Date: Thursday, June 05, 2008 Sheet 17 of 63



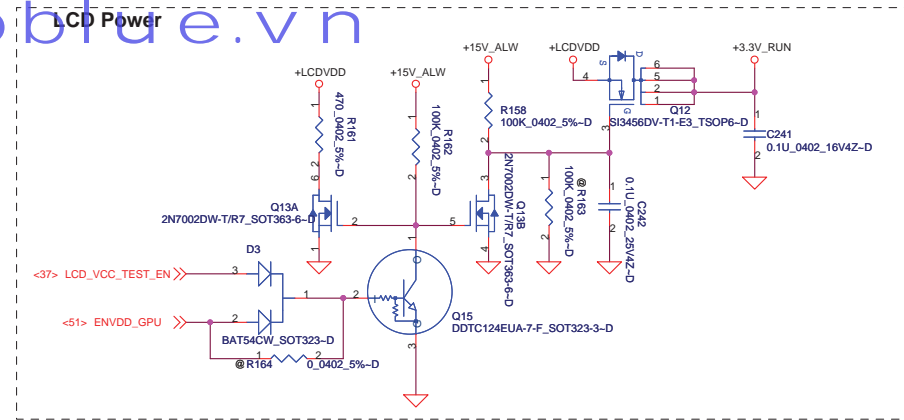
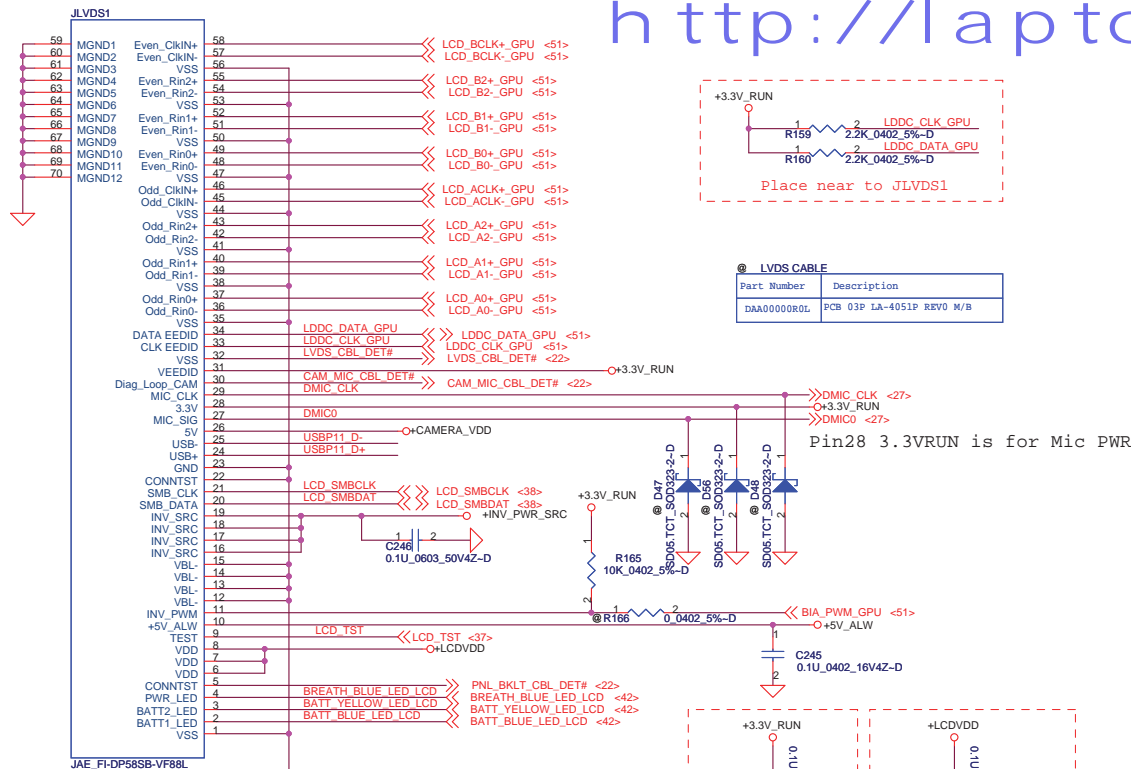
DELL CONFIDENTIAL/PROPRIETARY

<OrgAdd21>

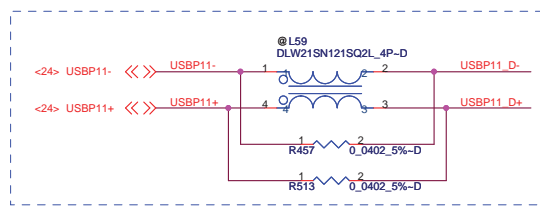
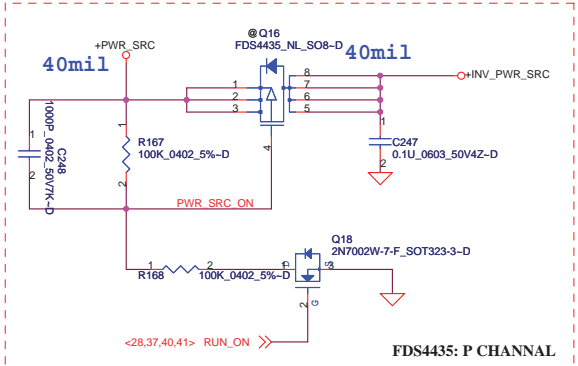
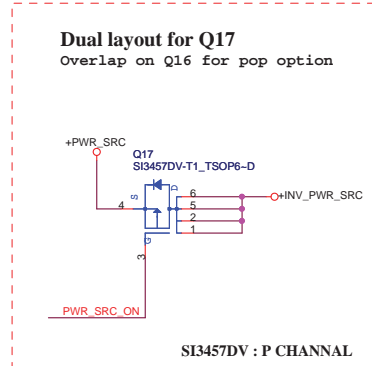
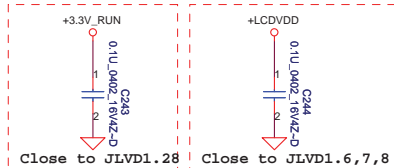
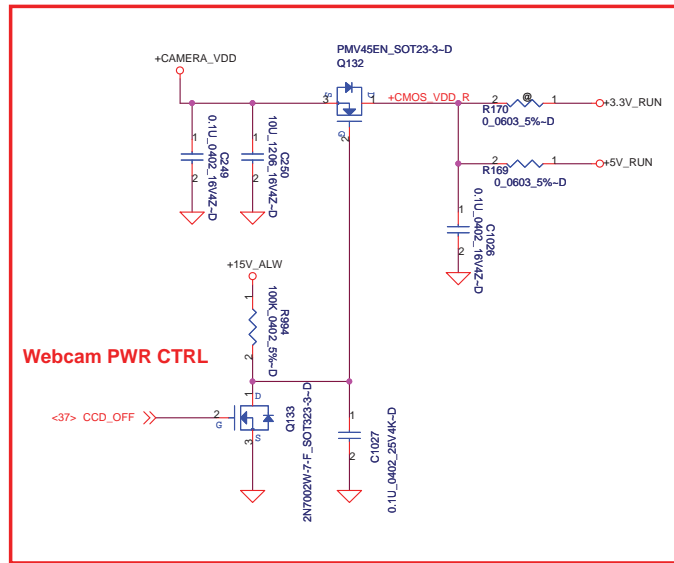
FAN & Thermal Sensor

LA-4051P

Thursday, June 05, 2008 Sheet 18 of 63

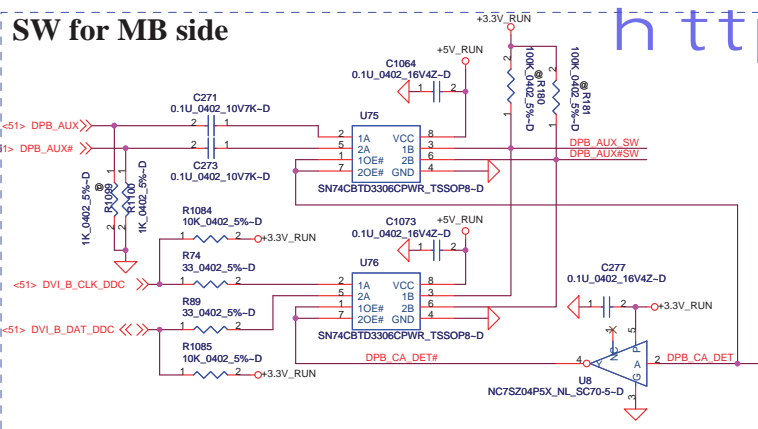


Pin28 3.3VRUN is for Mic PWR

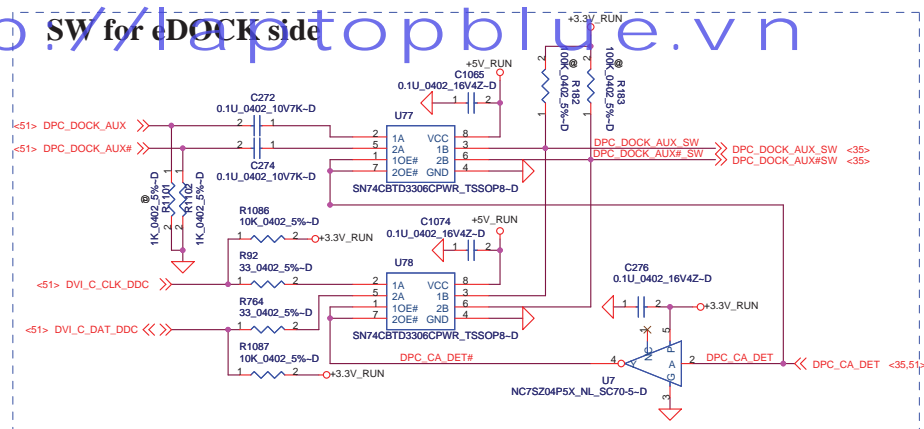


Sheet 20 of 63

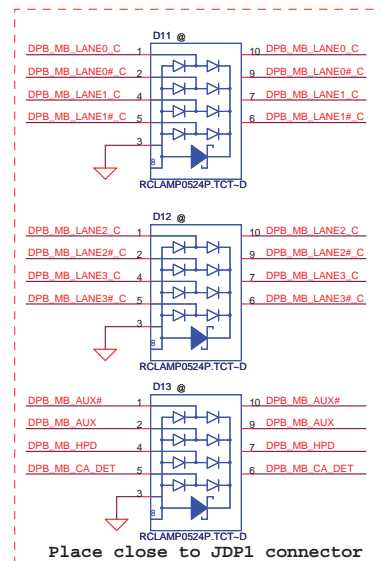
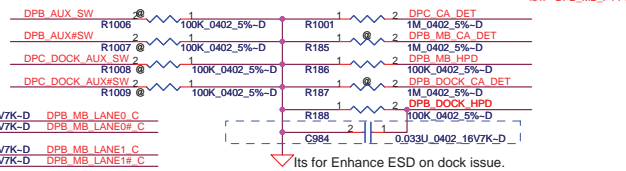
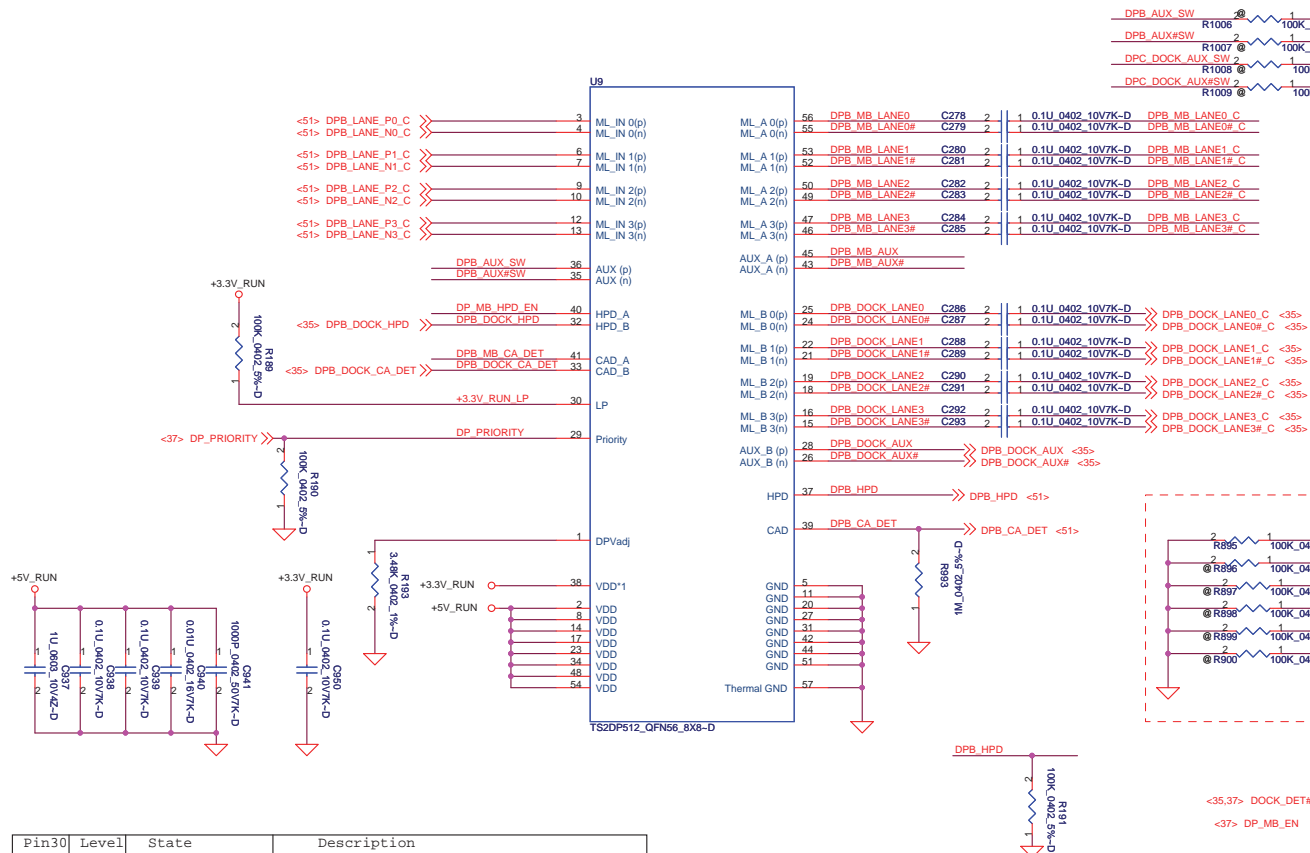
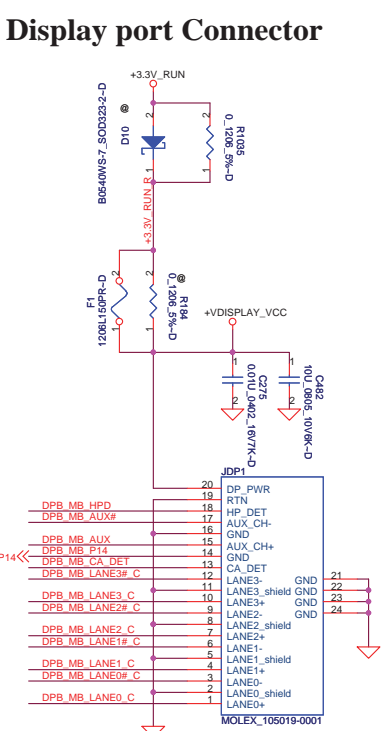
SW for MB side



SW for eDOCK side



Display port Connector



Pin30	Level	State	Description
LP	Hi	Normal Mode	Standard operational mode for device
	Low	Low power Mode	Device is forced into a low power mode causing the output s to go to a high-Z state, all other inputs are ignore

<http://hobi-elektronika.net>

PROPRIETARY NOTE: THIS SHEET OF ENGINEERING DRAWING AND SPECIFICATIONS CONTAINS CONFIDENTIAL, TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF DELL INC. ('DELL') THIS DOCUMENT MAY NOT BE TRANSFERRED OR COPIED WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF DELL. IN ADDITION, NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT DELL'S EXPRESS WRITTEN CONSENT.

DELL CONFIDENTIAL/PROPRIETARY

Compal Electronics, Inc.

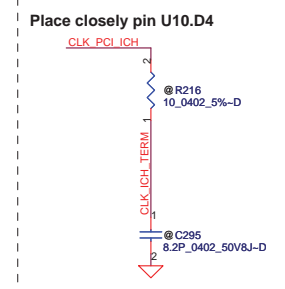
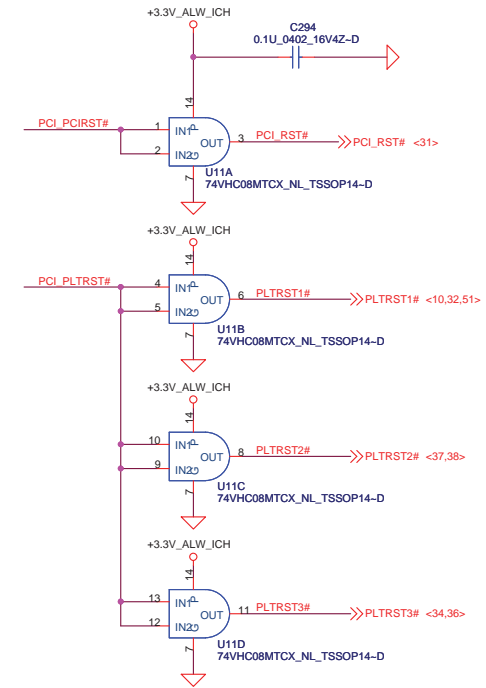
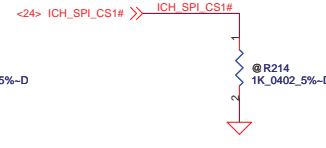
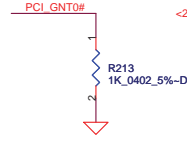
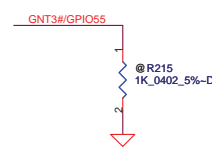
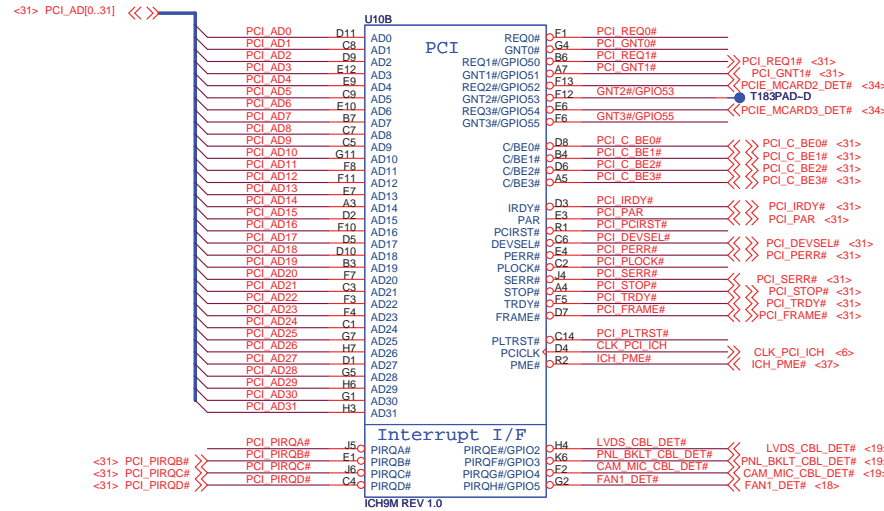
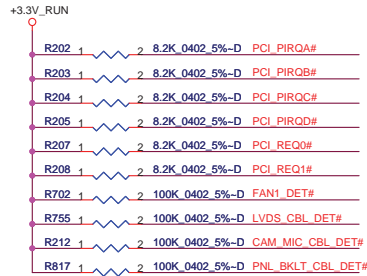
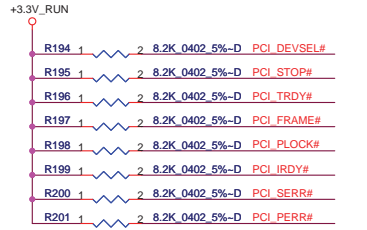
Display port

LA-4051B

Date: Friday, June 13, 2008

Sheet 21 of 62

63



A16 away override strap.	
PCI_GNT3#	Low = A16 swap override enabled. High = Default.

Boot BIOS Strap		
PCI_GNT0#	SPI_CS1#	Boot BIOS Location
0	1	SPI
1	0	PCI
1	1	LPC

DELL CONFIDENTIAL/PROPRIETARY

Compal Electronics, Inc.

File		Rev
ICH9-M(1/4)		1.0
Size	Document Number	Date
LA-4051P	Thursday, June 05, 2008	Sheet 22 of 63

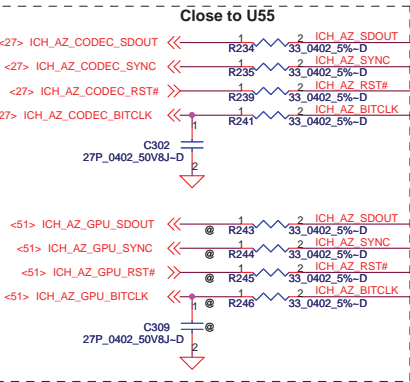
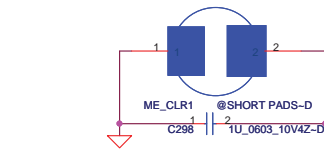
PROPRIETARY NOTE: THIS SHEET OF ENGINEERING DRAWING AND SPECIFICATIONS CONTAINS CONFIDENTIAL TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF DELL INC. ('DELL') THIS DOCUMENT MAY NOT BE TRANSFERRED OR COPIED WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF DELL. IN ADDITION, NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT DELL'S EXPRESS WRITTEN CONSENT.



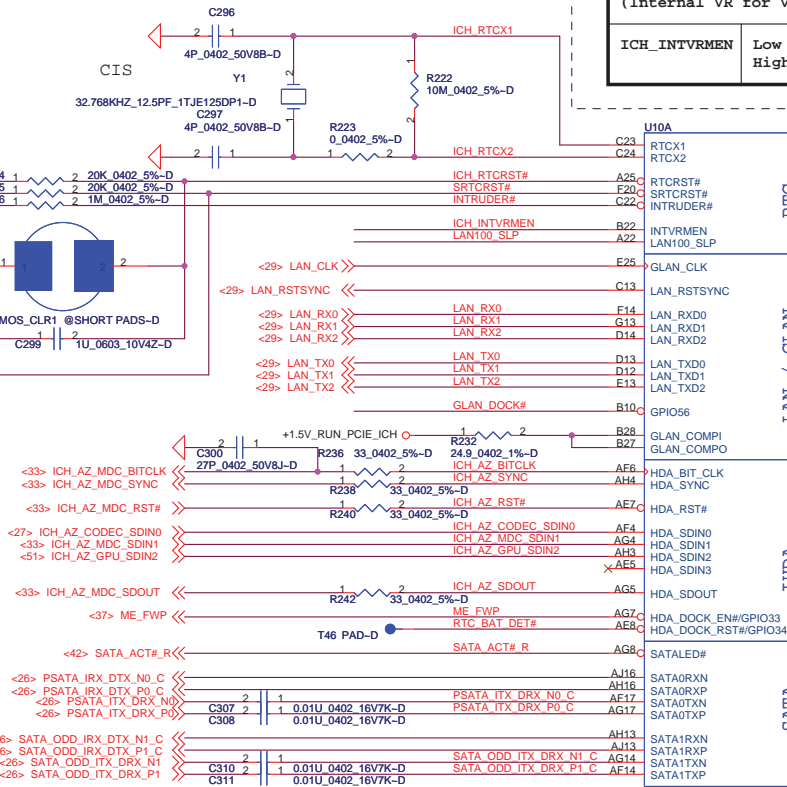


CMOS_CLR1	CMOS setting
Shunt	Clear CMOS
Open	Keep CMOS

ME_CLR1	TPM setting
Shunt	Clear ME RTC Registers
Open	Keep ME RTC Registers

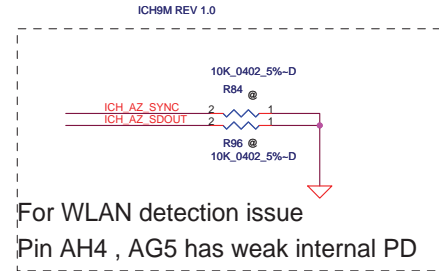
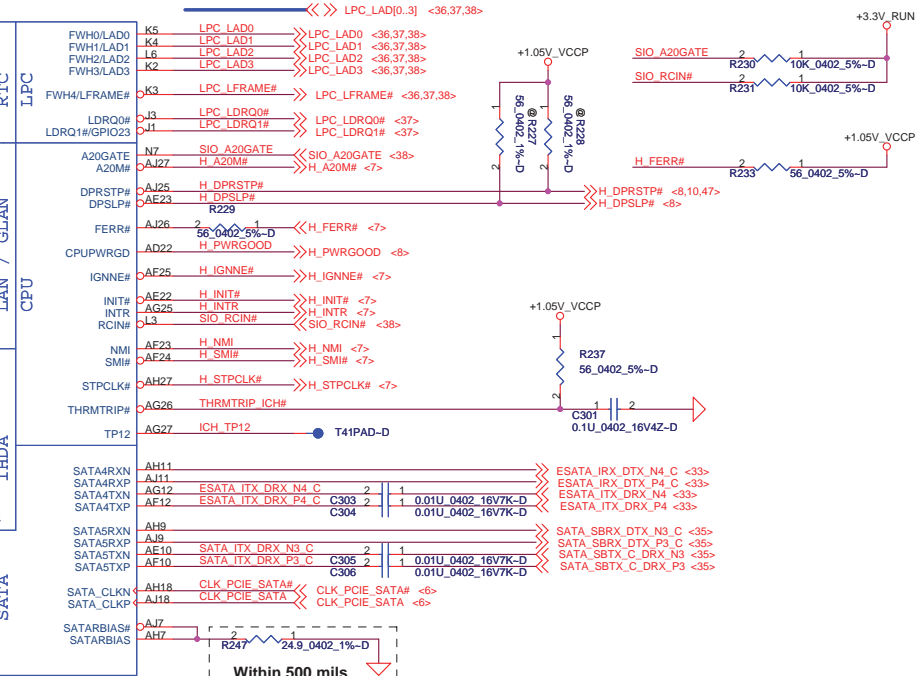


XOR Chain Entrance Strap		
ICH_RSVD_TP3	HDA SDOUT	Description
0	0	RSVD
0	1	Enter XOR Chain
1	0	Normal Operation (Default)
1	1	Set PCIE port config bit 1



ICH9M Internal VR Enable Strap (Internal VR for VccSus1.05, VccSus1.5, VccCL1.5)	
ICH_INTVRMEN	Low = Internal VR Disabled High = Internal VR Enabled(Default)

ICH9M LAN100 SLP Strap (Internal VR for VccLAN1.05 and VccCL1.05)	
ICH_LAN100_SLP	Low = Internal VR Disabled High = Internal VR Enabled(Default)



For WLAN detection issue
Pin AH4 , AG5 has weak internal PD

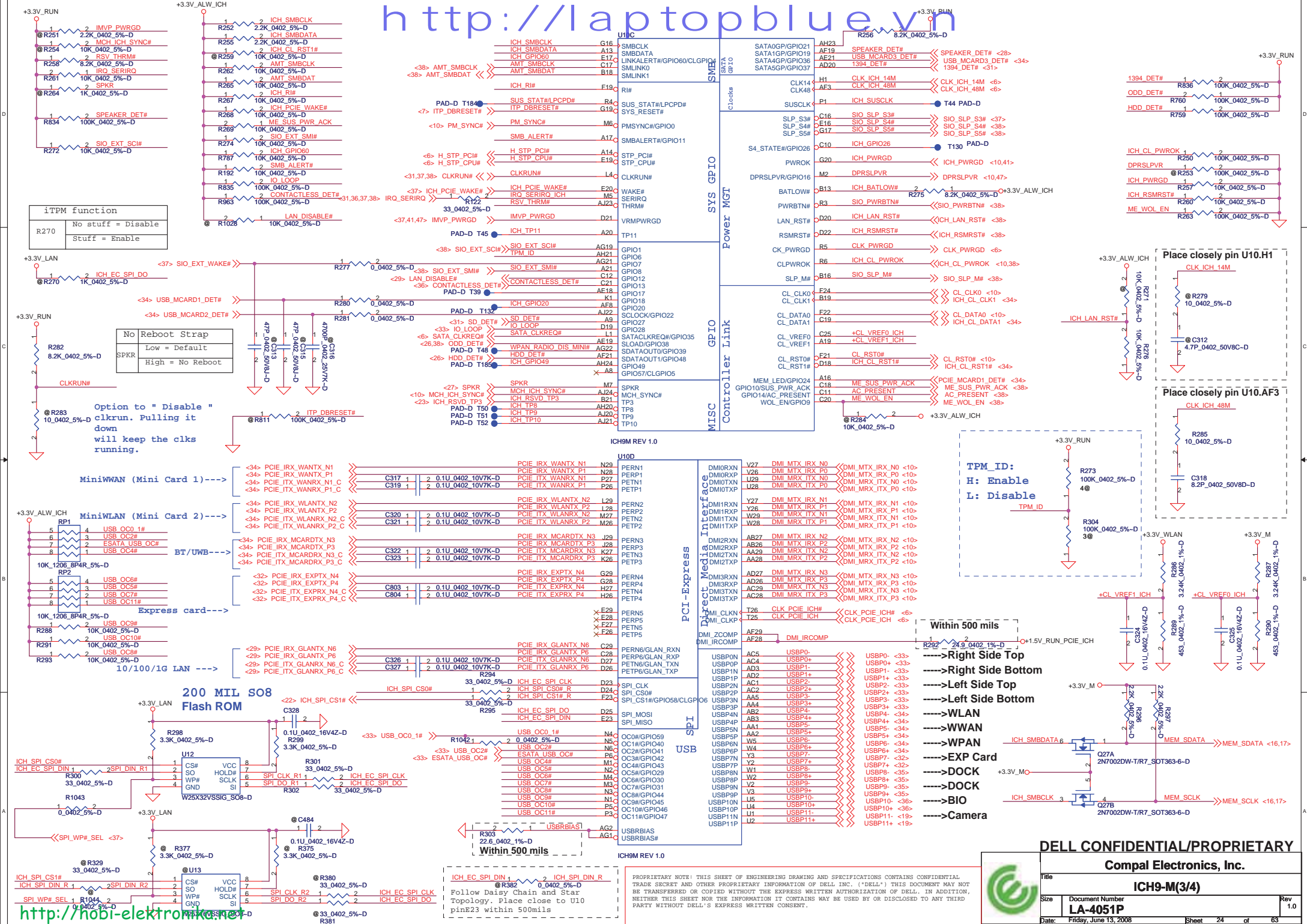
DELL CONFIDENTIAL/PROPRIETARY

Compal Electronics, Inc.

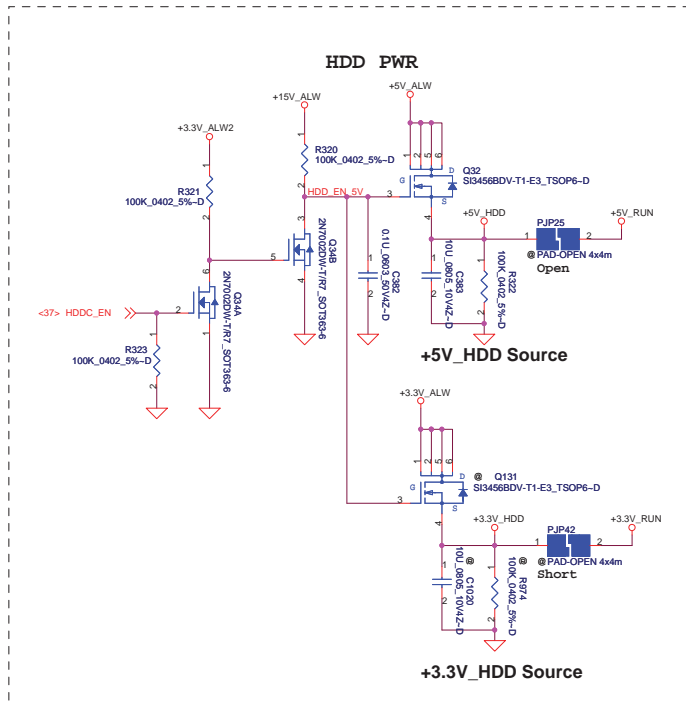
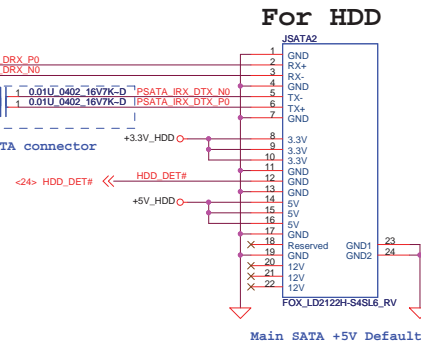
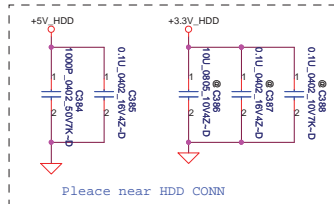
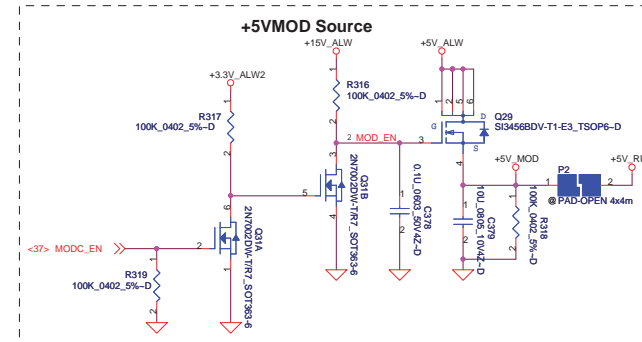
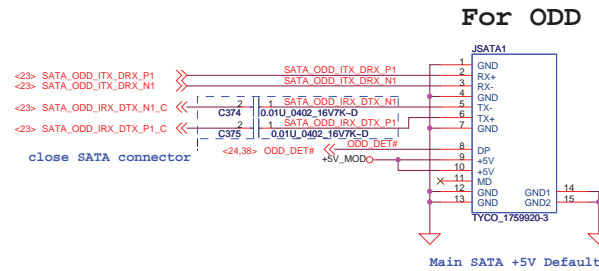
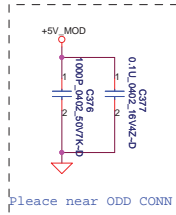
ICH9-M(2/4)

File	Document Number	Rev
LA-4051P	LA-4051P	1.0
Date: Friday, June 13, 2008	Sheet 23 of 63	

PROPRIETARY NOTE: THIS SHEET OF ENGINEERING DRAWING AND SPECIFICATIONS CONTAINS CONFIDENTIAL TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF DELL INC. ("DELL"). THIS DOCUMENT MAY NOT BE TRANSFERRED OR COPIED WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF DELL. IN ADDITION, NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT DELL'S EXPRESS WRITTEN CONSENT.







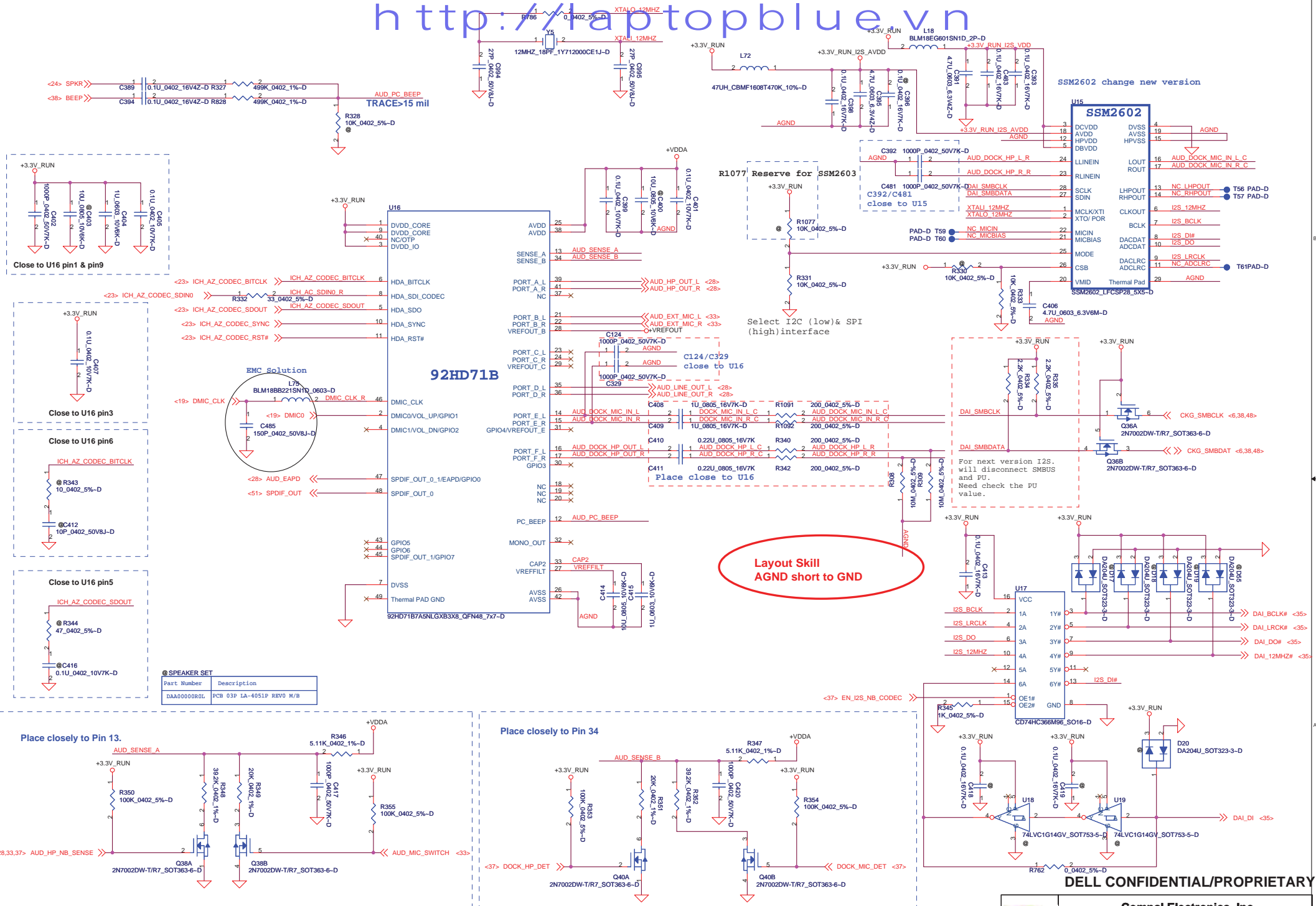
DELL CONFIDENTIAL/PROPRIETARY

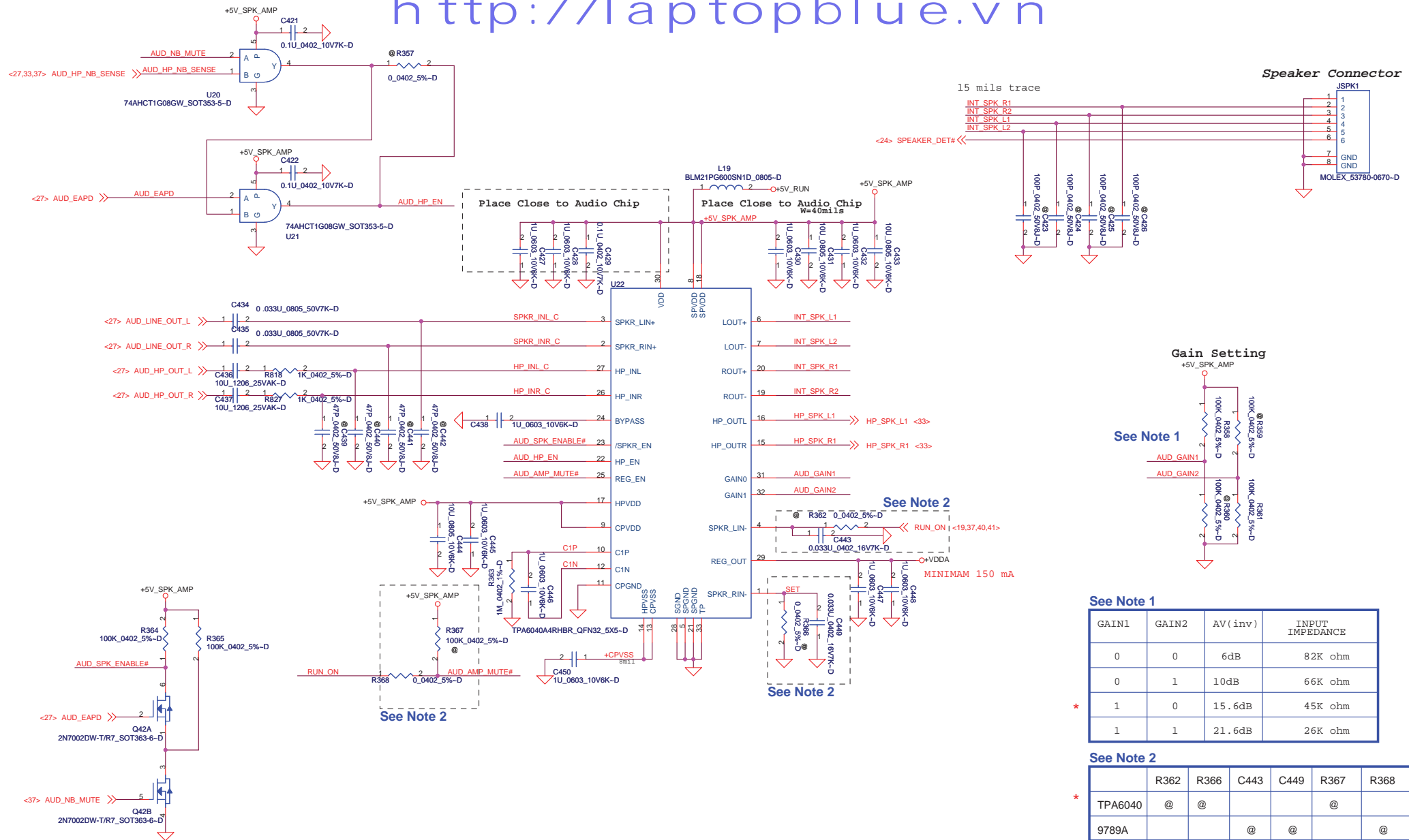
Compal Electronics, Inc.

File			
ODD/HDD CONNECTOR			
Size	Document Number	Rev	
	LA-4051P	1.0	
Date:	Thursday, June 05, 2008	Sheet	26 of 63

PROPRIETARY NOTE: THIS SHEET OF ENGINEERING DRAWING AND SPECIFICATIONS CONTAINS CONFIDENTIAL TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF DELL INC. (*DELL*) THIS DOCUMENT MAY NOT BE TRANSFERRED OR COPIED WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF DELL. IN ADDITION, NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT DELL'S EXPRESS WRITTEN CONSENT.





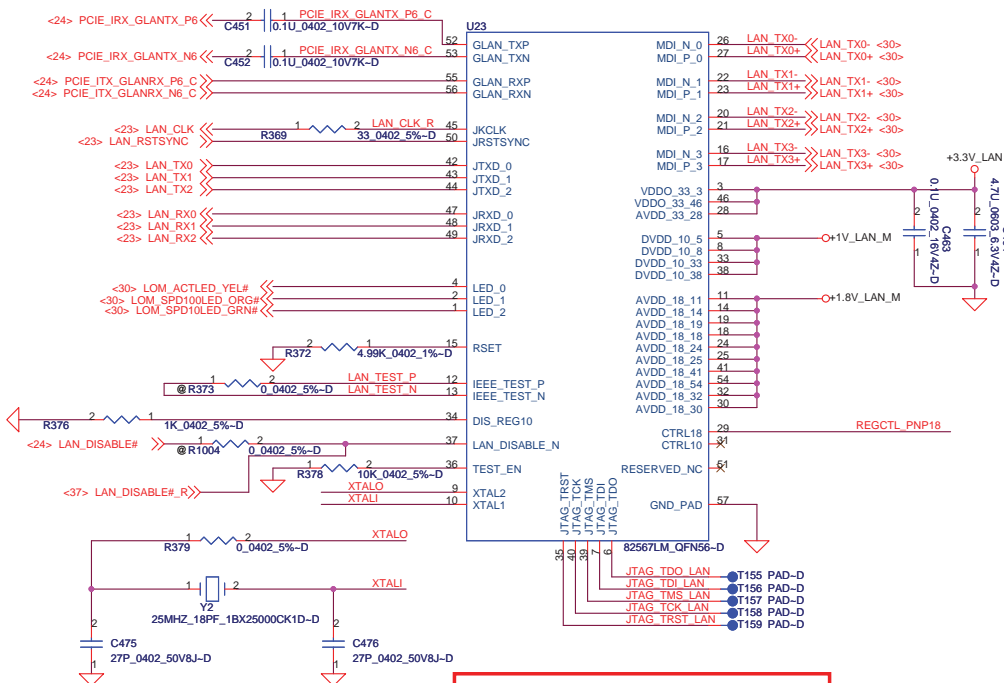


DELL CONFIDENTIAL/PROPRIETARY

Compal Electronics, Inc.					
Title					
AMP and PHONE JACK					
LA-4051P					
Rev 1.0					
Date:	Thursday, June 05, 2008	Sheet	28	of	63

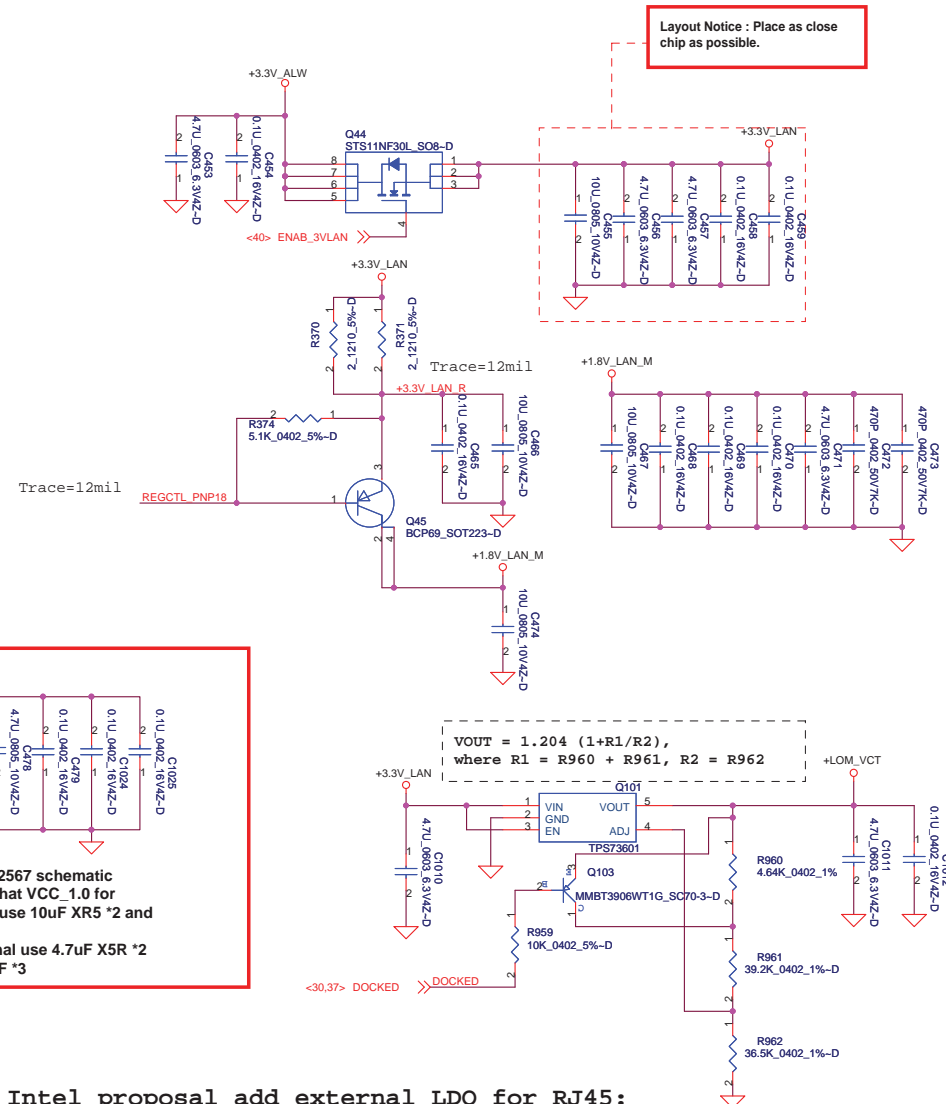
PROPRIETARY NOTE: THIS SHEET OF ENGINEERING DRAWING AND SPECIFICATIONS CONTAINS CONFIDENTIAL TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF DELL INC. ("DELL"). THIS DOCUMENT MAY NOT BE TRANSFERRED OR COPIED WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF DELL. IN ADDITION, NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT DELL'S EXPRESS WRITTEN CONSENT.





Need to ensure
crystal at least
300uW max power
drive-level

MA use internal 1V,NOT external solutions.
82567LM:
B0 version: 1.05V
A1 version: 1V



Intel proposal add external LDO for RJ45:	
MB:2.5V,	DEL
Dock:2.65V	

DELL CONFIDENTIAL/PROPRIETARY

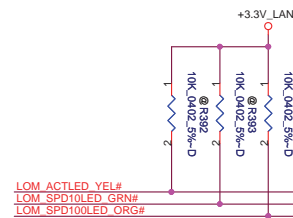
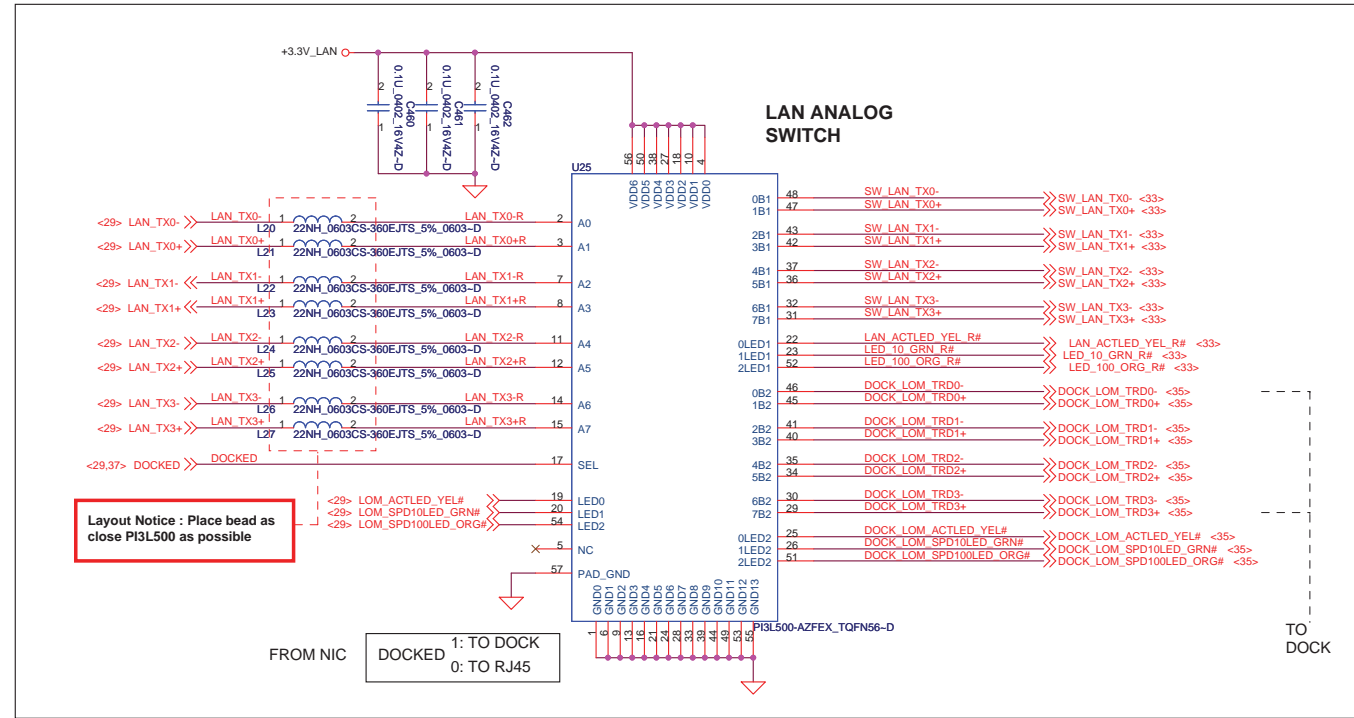
Compal Electronics, Inc.

LAN-82567LM

LA-4051P

1.0

PROPRIETARY NOTE: THIS SHEET OF ENGINEERING DRAWING AND SPECIFICATIONS CONTAINS CONFIDENTIAL TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF DELL INC. ('DELL') THIS DOCUMENT MAY NOT BE TRANSFERRED OR COPIED WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF DELL. IN ADDITION, NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT DELL'S EXPRESS WRITTEN CONSENT.



DELL CONFIDENTIAL/PROPRIETARY

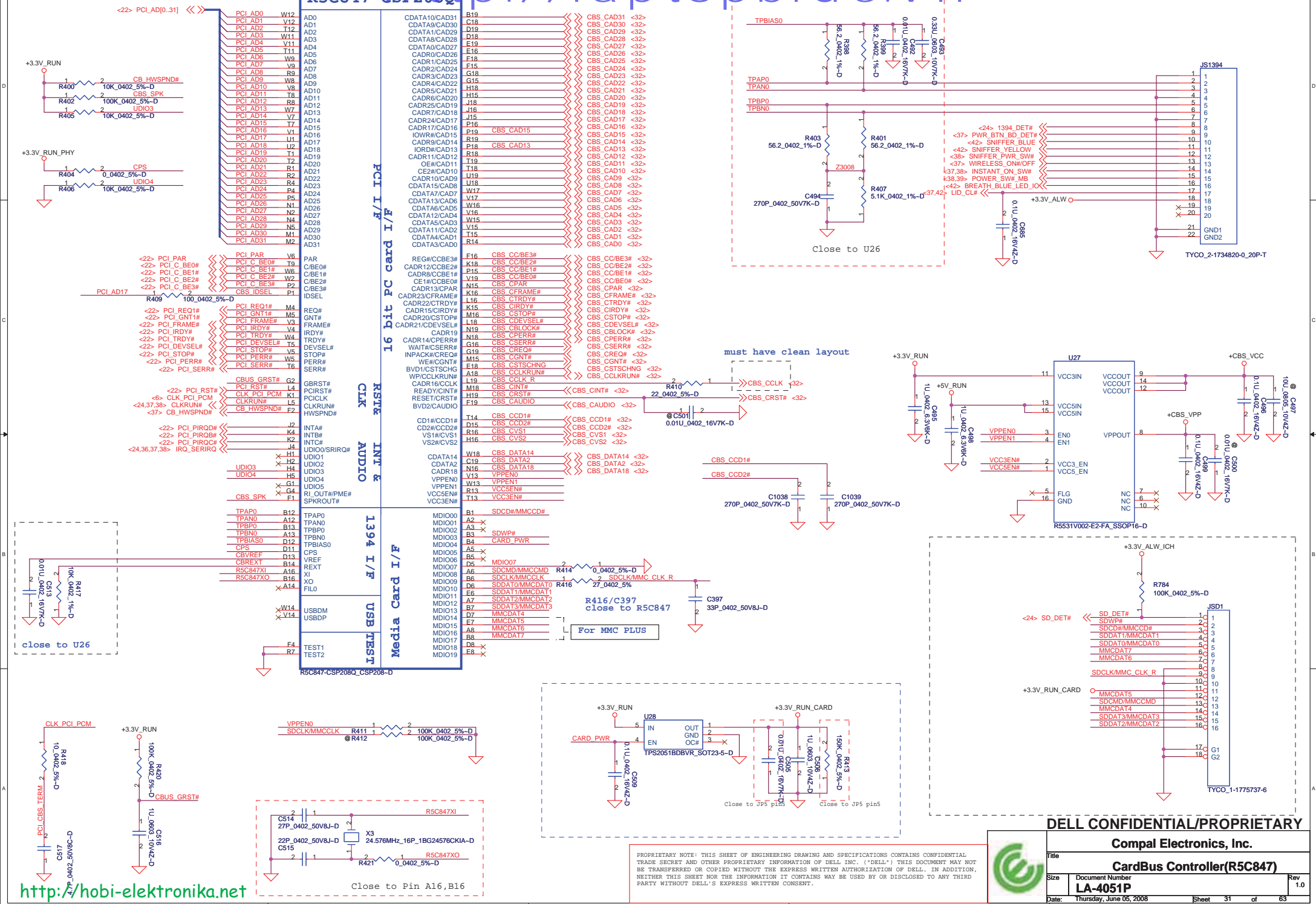
Compal Electronics, Inc.

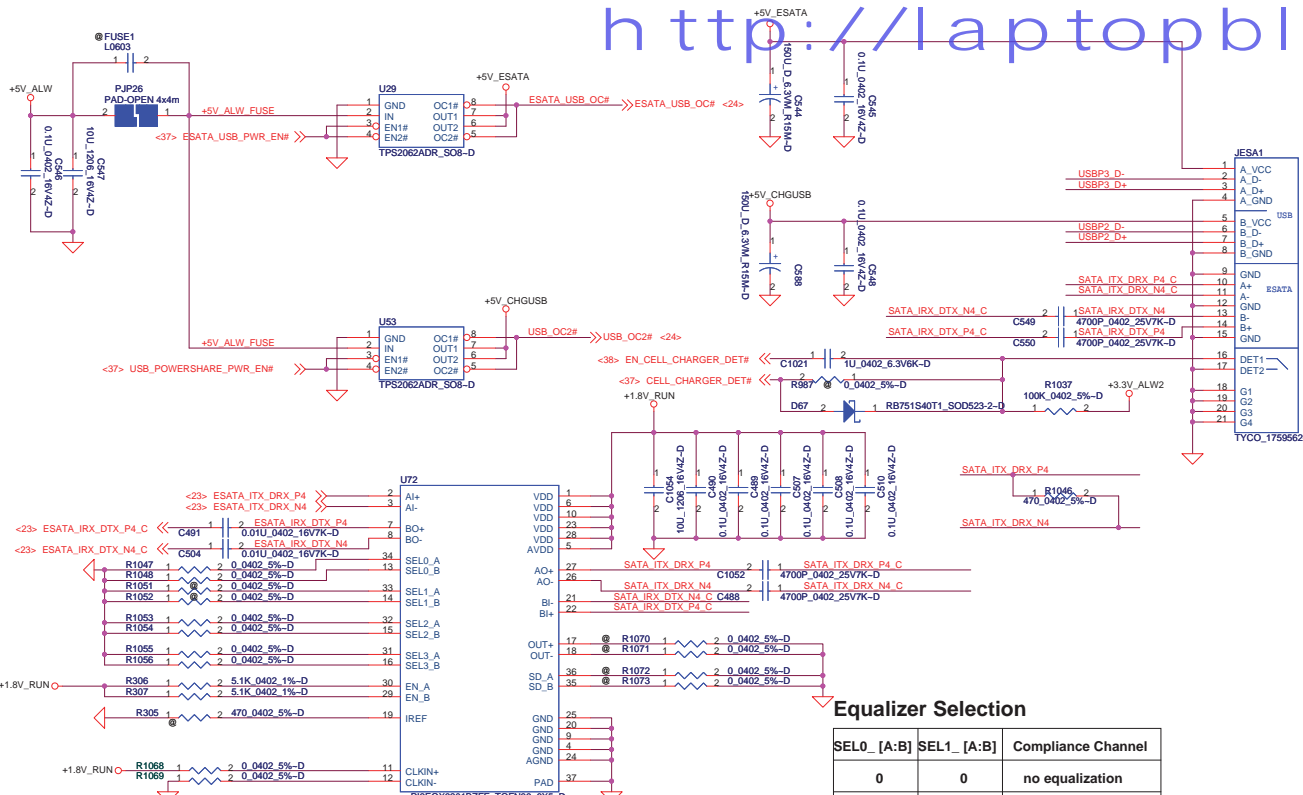
Title		
LAN TRANSFORMER		
Size	Document Number	Rev
	LA-4051P	1.0
Date	Thursday, June 05, 2008	Sheet 30 of 63



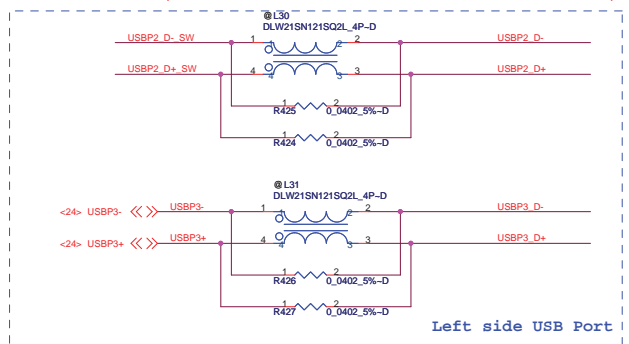
PROPRIETARY NOTE: THIS SHEET OF ENGINEERING DRAWING AND SPECIFICATIONS CONTAINS CONFIDENTIAL TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF DELL INC. ("DELL") THIS DOCUMENT MAY NOT BE TRANSFERRED OR COPIED WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF DELL. IN ADDITION, NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT DELL'S EXPRESS WRITTEN CONSENT.

<http://laptopblue.vn>





USB PORT#	DESTINATION
0	JUSB1 (Ext Right Side Top)
1	JUSB1 (Ext Right Side Bottom)
2	JESA1 (Ext Left Side Bottom)
3	JESA1 (Ext Left Side TOP)
4	WLAN
5	WWAN
6	WPAN
7	Express card
8	DOCKING
9	DOCKING
10	USH->BIO
11	Camera



Equalizer Selection

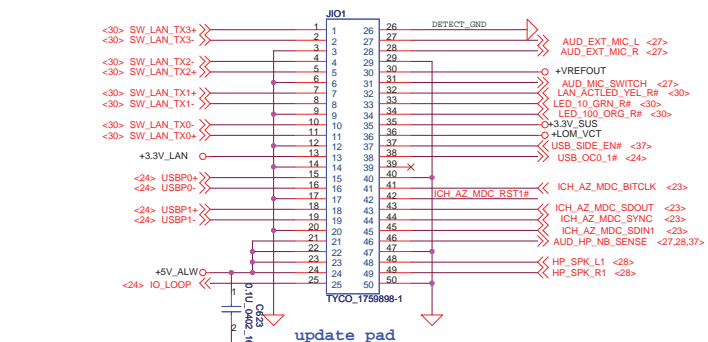
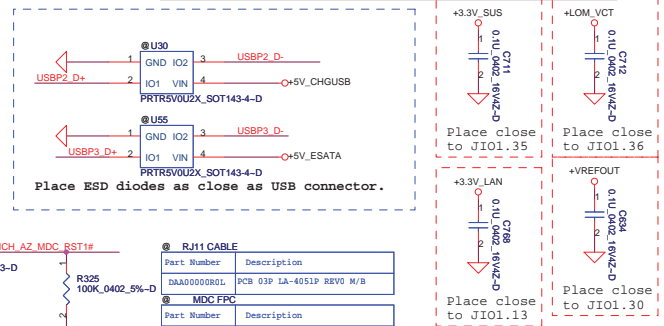
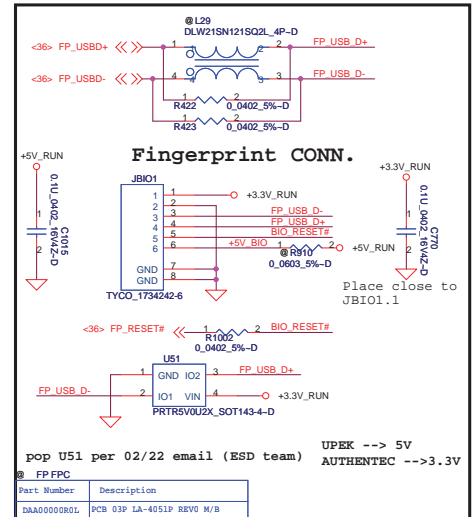
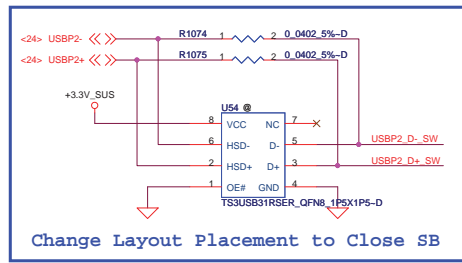
SEL0 [A:B]	SEL1 [A:B]	Compliance Channel
0	0	no equalization
0	1	[0:2.5dB] @ 1.6 GHz
1	0	[2.5:4.5dB] @ 1.6 GHz
1	1	[4.5:6.5dB] @ 1.6 GHz

Output Swing Control

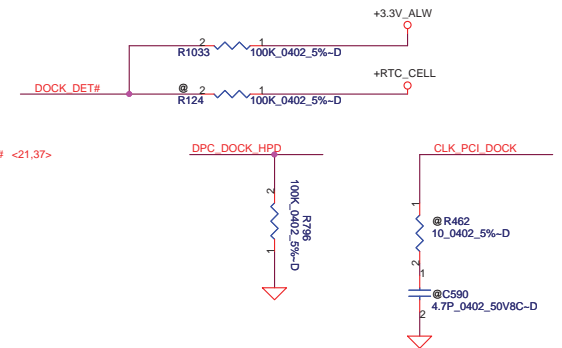
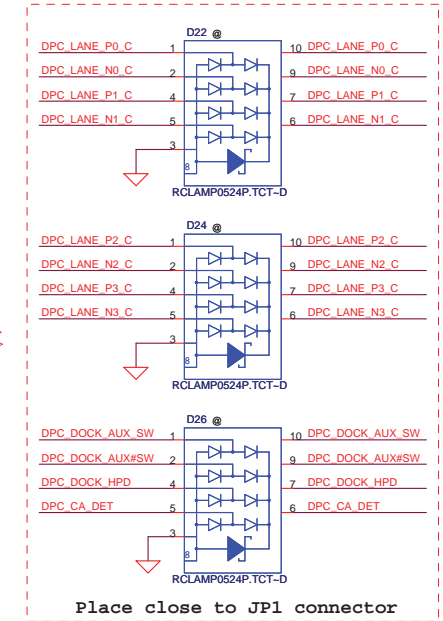
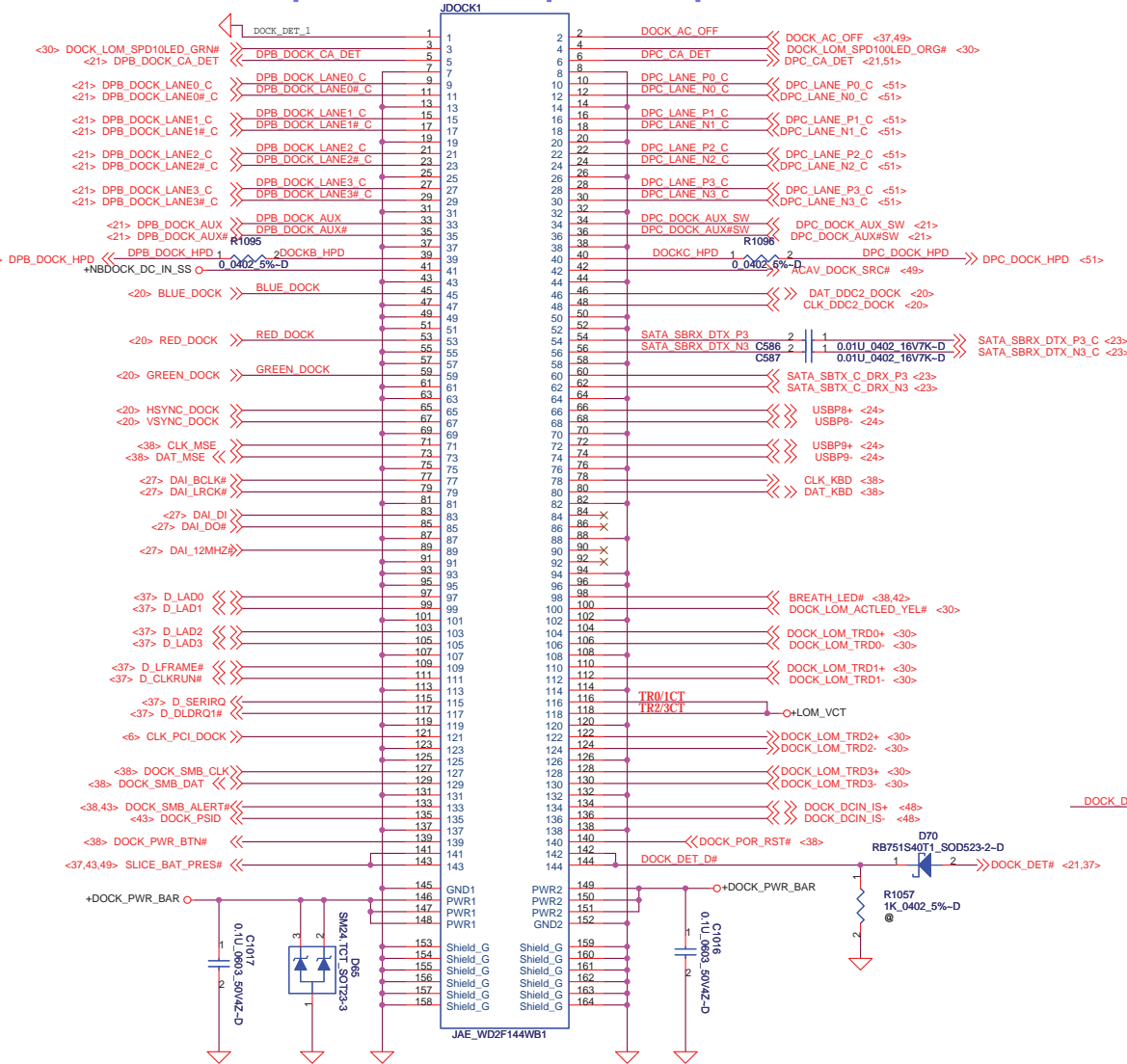
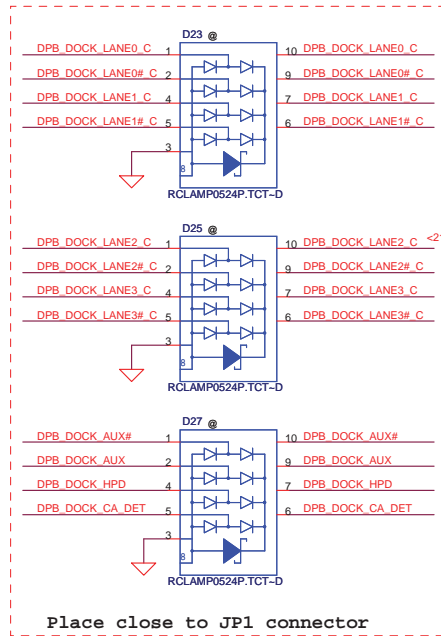
SEL2 [A:B]	Swing
0	1x
1	1.2x

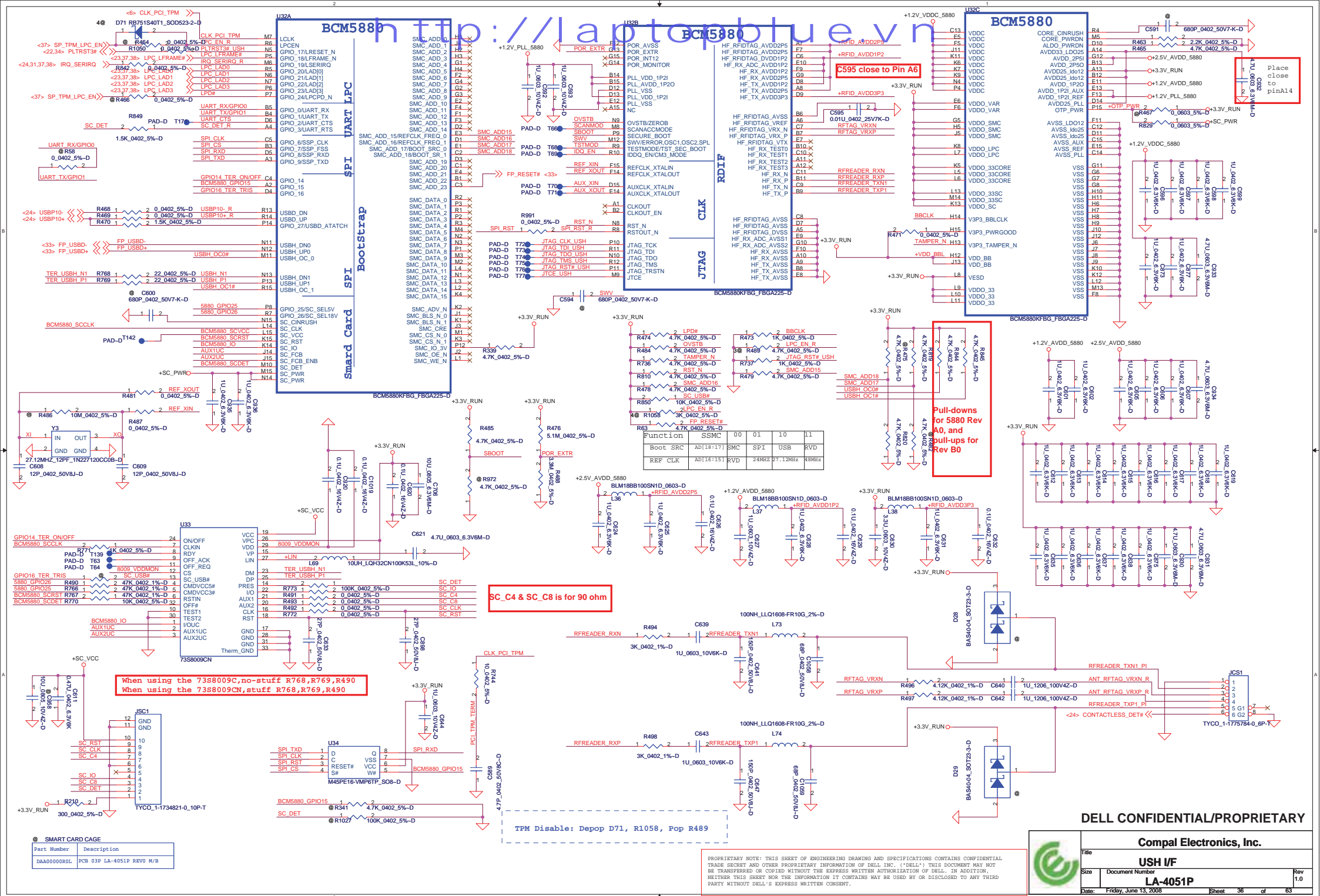
Output De-emphasis Adjustment

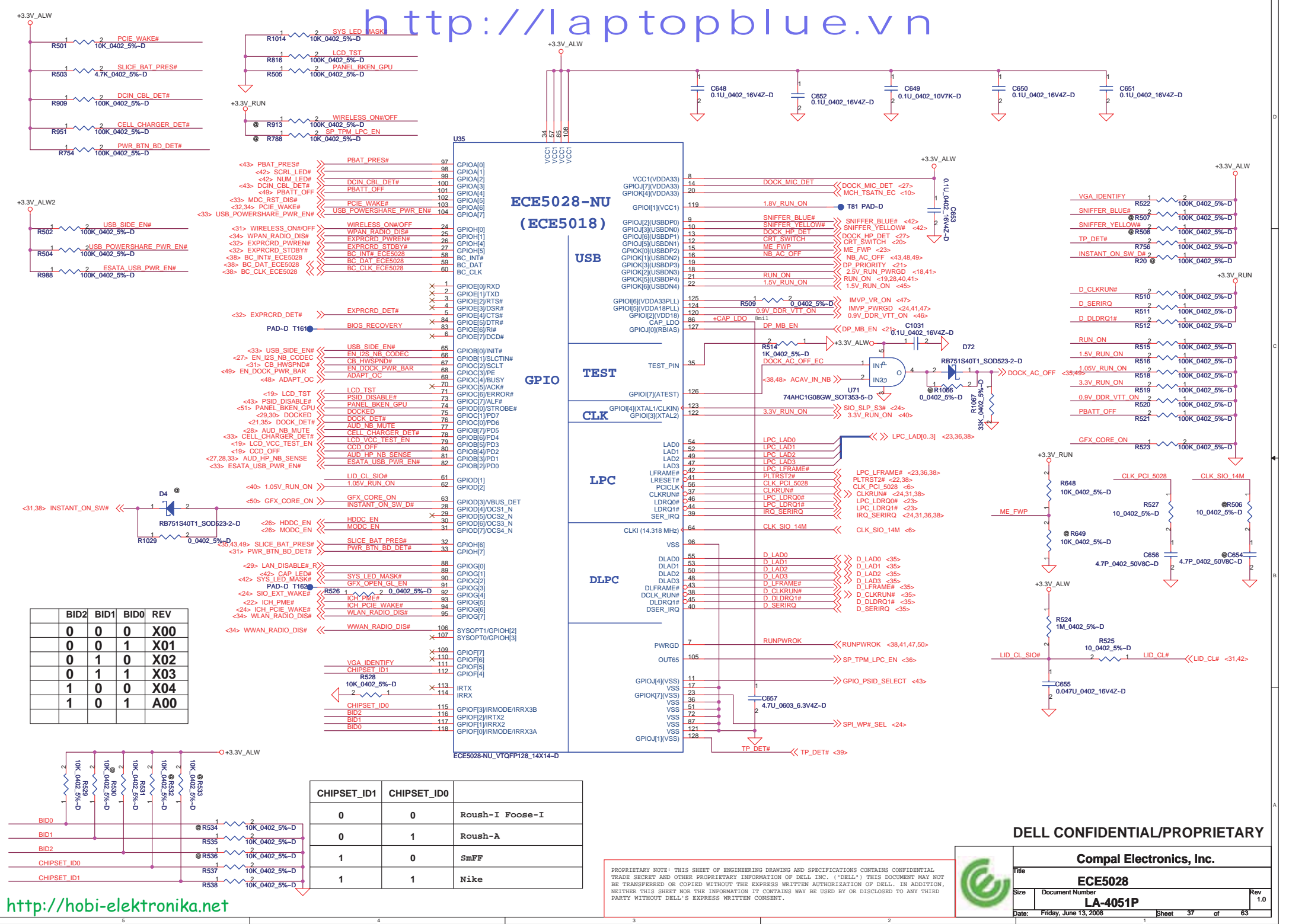
SEL3 [A:B]	De-emphasis
0	0dB
1	-3.5dB



PROPRIETARY NOTE: THIS SHEET OF ENGINEERING DRAWING AND SPECIFICATIONS CONTAINS CONFIDENTIAL TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF DELL INC. (*DELL*) THIS DOCUMENT MAY NOT BE TRANSFERRED OR COPIED WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF DELL. IN ADDITION, NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT DELL'S EXPRESS WRITTEN CONSENT.





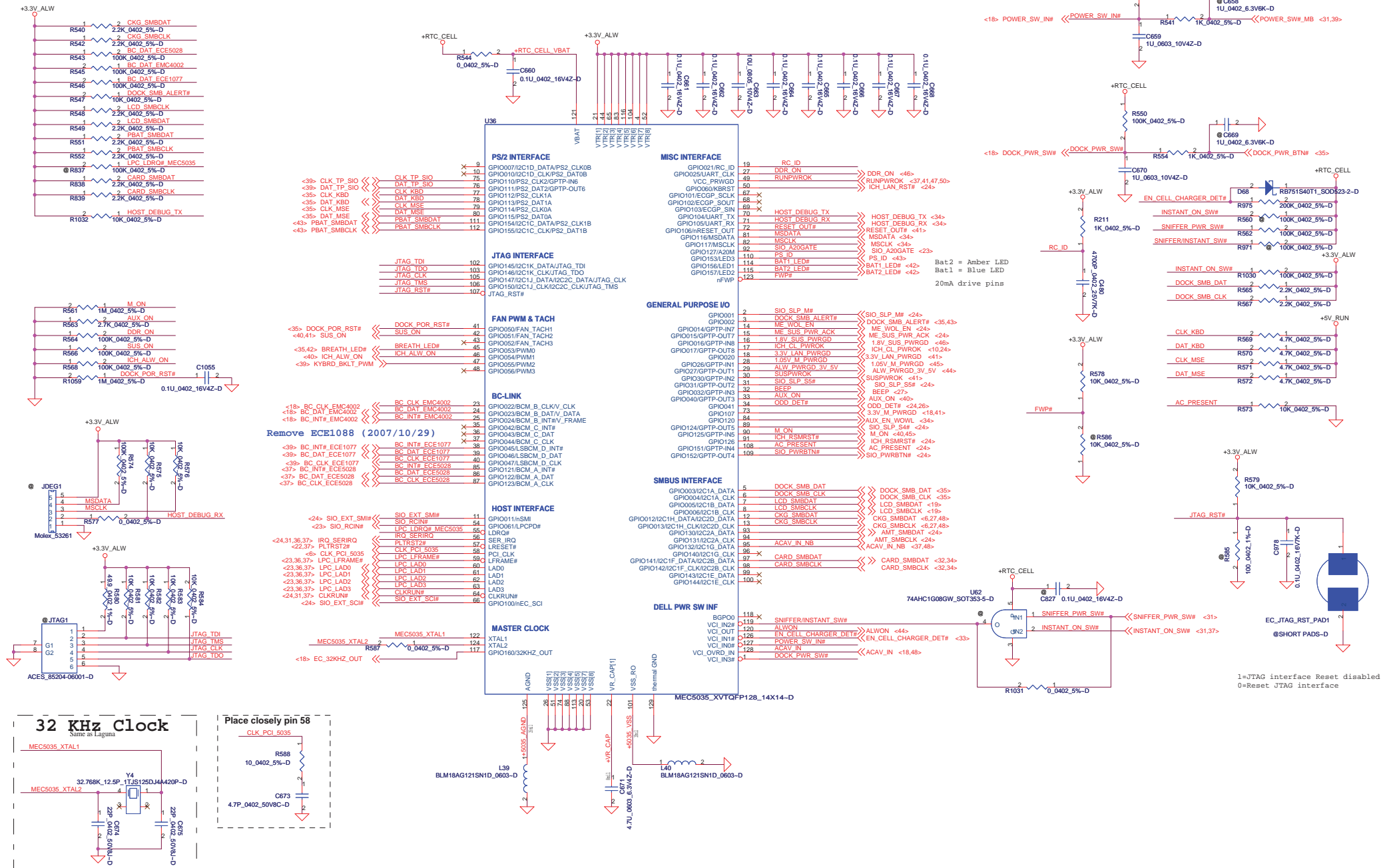


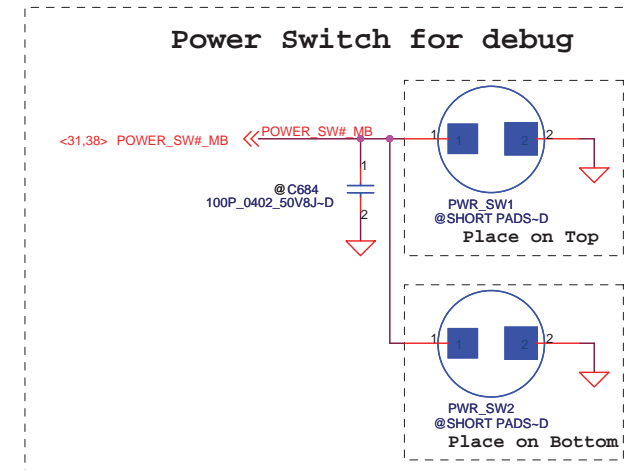
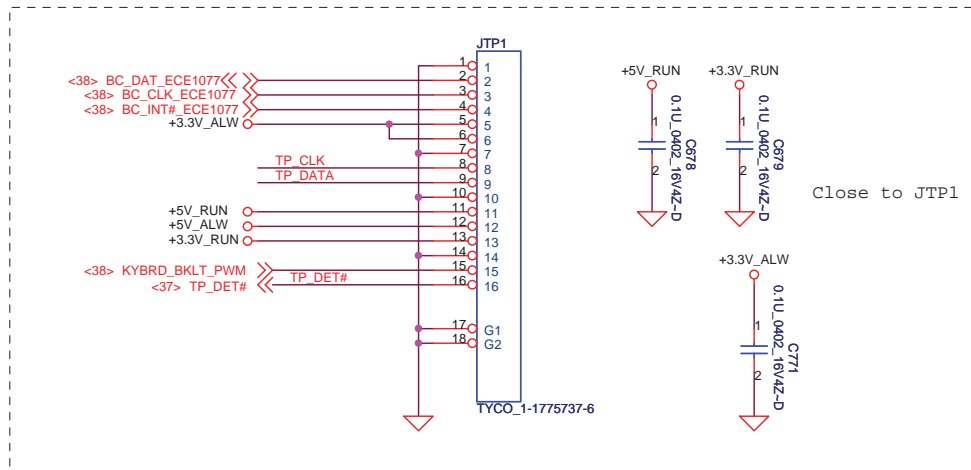
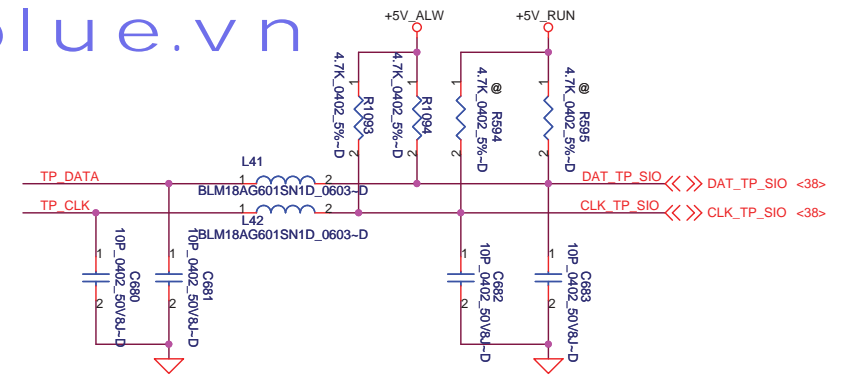
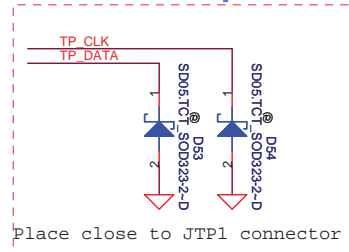
DELL CONFIDENTIAL/PROPRIETARY



Compal Electronics, Inc.			
ECE5028			
LA-4051P			
Friday, June 13, 2008	Sheet 37	of 63	Rev 1.0

PROPRIETARY NOTE: THIS SHEET OF ENGINEERING DRAWING AND SPECIFICATIONS CONTAINS CONFIDENTIAL TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF DELL INC. ("DELL"). THIS DOCUMENT MAY NOT BE TRANSMITTED OR COPIED WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF DELL. IN ADDITION, NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT DELL'S EXPRESS WRITTEN CONSENT.





PROPRIETARY NOTE: THIS SHEET OF ENGINEERING DRAWING AND SPECIFICATIONS CONTAINS CONFIDENTIAL TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF DELL INC. ("DELL") THIS DOCUMENT MAY NOT BE TRANSFERRED OR COPIED WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF DELL. IN ADDITION, NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT DELL'S EXPRESS WRITTEN CONSENT.



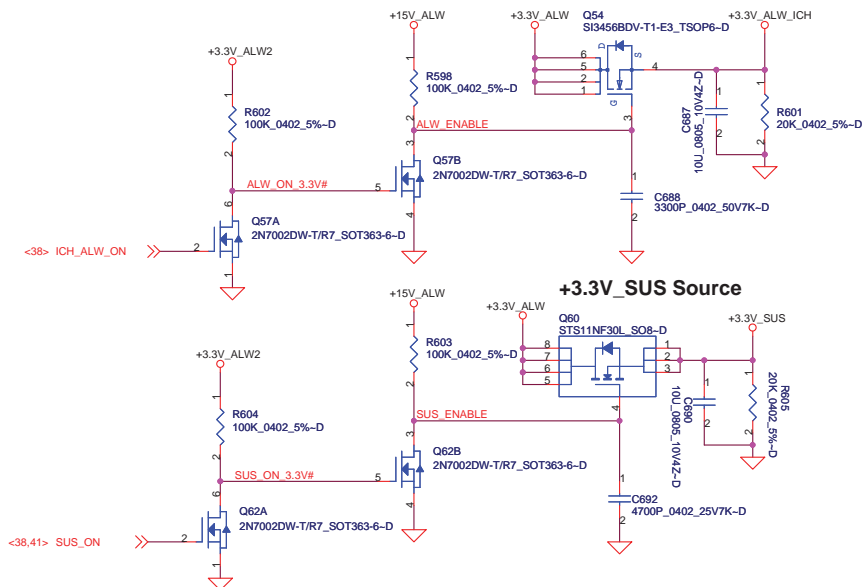
DELL CONFIDENTIAL/PROPRIETARY

Compal Electronics, Inc.

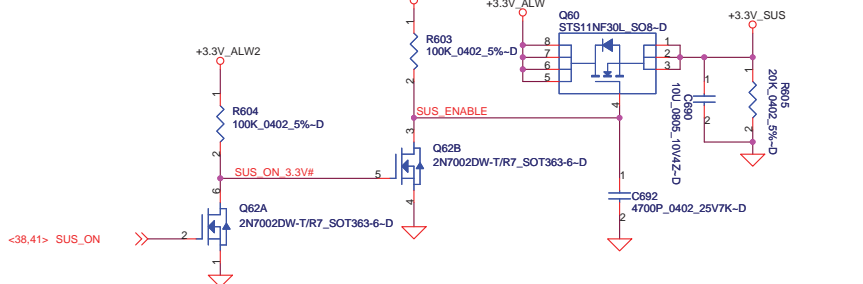
Title		Rev
Touch PAD/Int KB/LID		1.0
Size	Document Number	
	LA-4051P	
Date:	Thursday, June 05, 2008	Sheet 39 of 63

DC/DC Interface

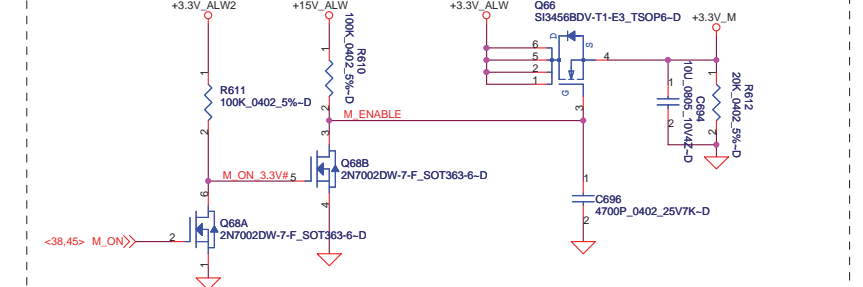
+3.3V_ALW_ICH Source



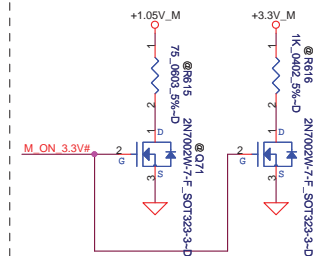
+3.3V_SUS Source



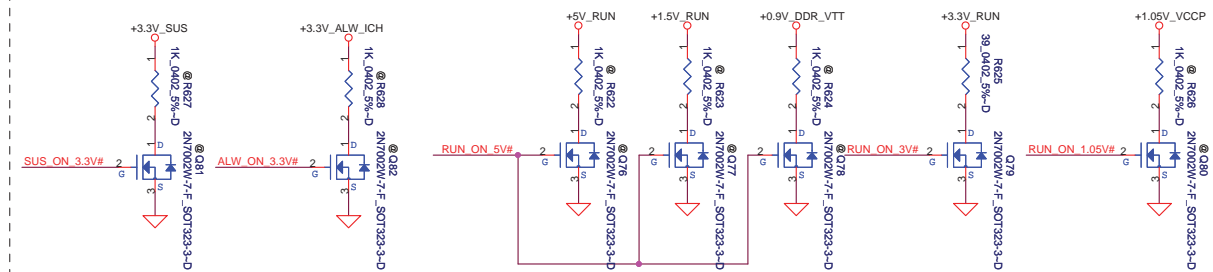
+3.3VM Source



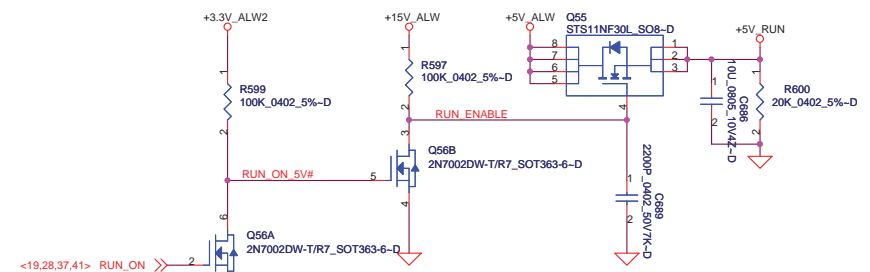
Discharge Circuit



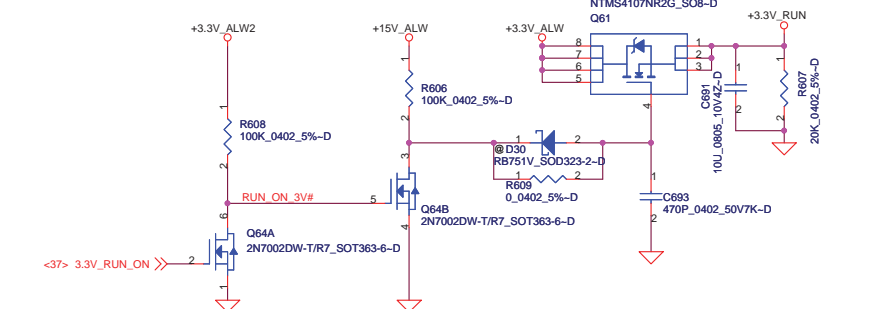
Discharge Circuit



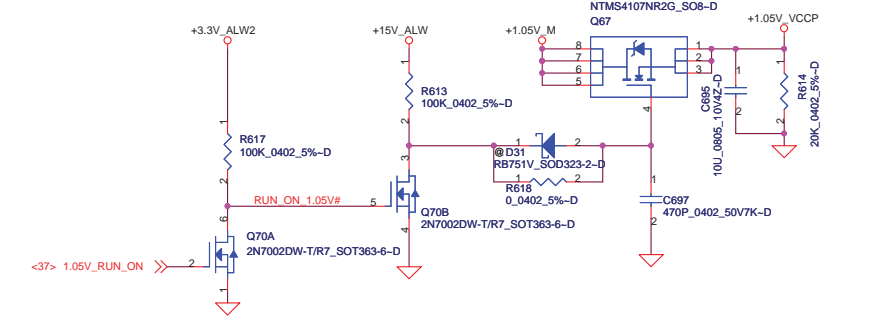
+5V_RUN Source



+3.3V_RUN Source



+1.05V_VCCP Source



DELL CONFIDENTIAL/PROPRIETARY

Compal Electronics, Inc.

POWER CONTROL

LA-4051P

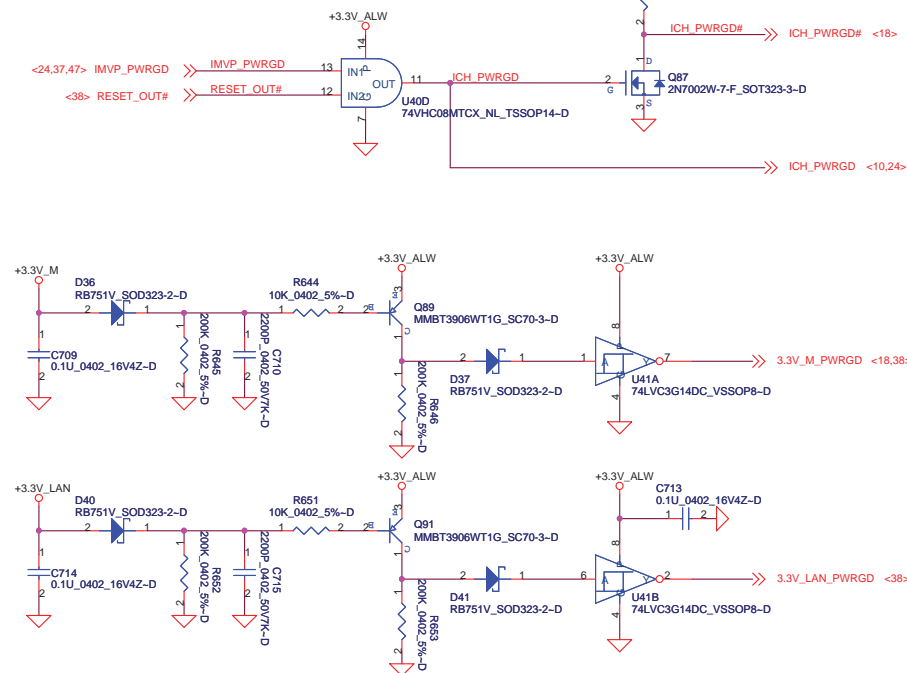
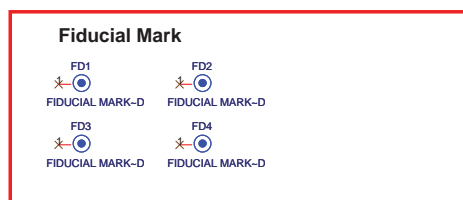
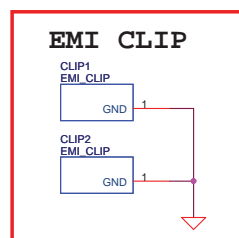
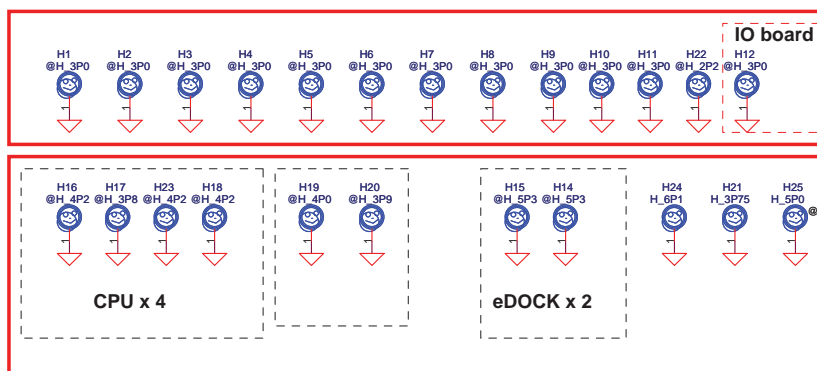
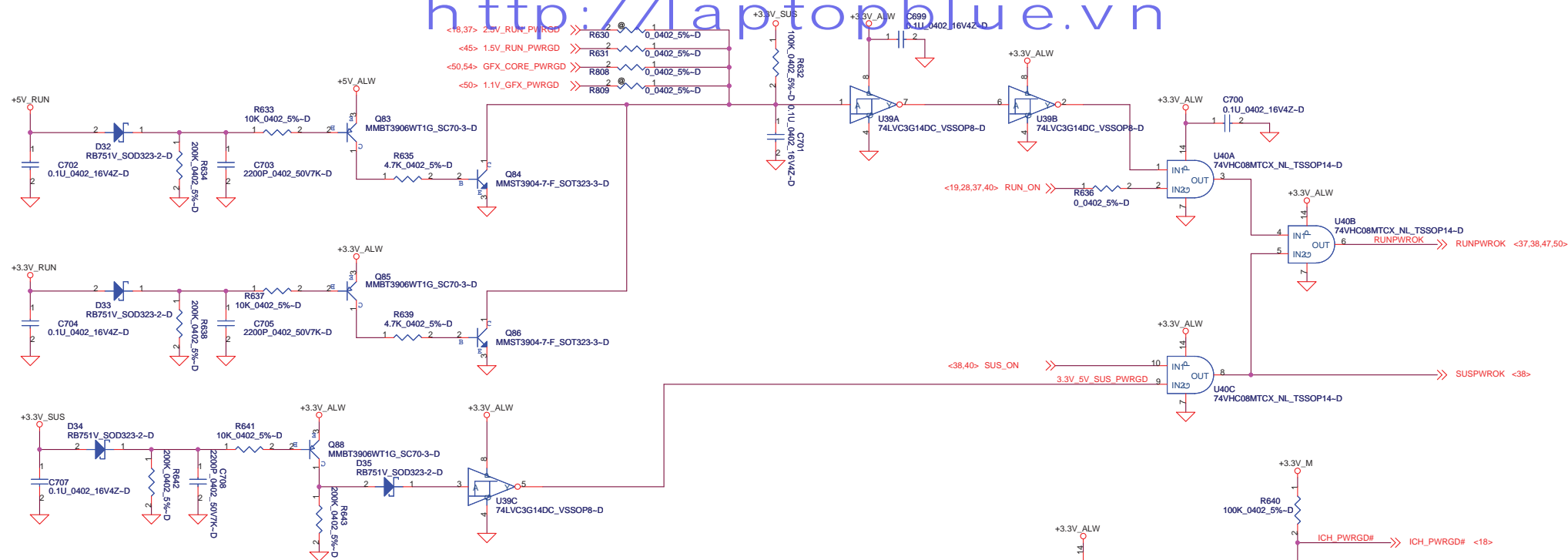
Rev 1.0

Date: Tuesday, June 10, 2008

Sheet 40 of 63

PROPRIETARY NOTE: THIS SHEET OF ENGINEERING DRAWING AND SPECIFICATIONS CONTAINS CONFIDENTIAL TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF DELL INC. ("DELL"). THIS DOCUMENT MAY NOT BE TRANSMITTED OR COPIED WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF DELL. IN ADDITION, NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT DELL'S EXPRESS WRITTEN CONSENT.





DELL CONFIDENTIAL/PROPRIETARY

Compal Electronics, Inc.

Power Good

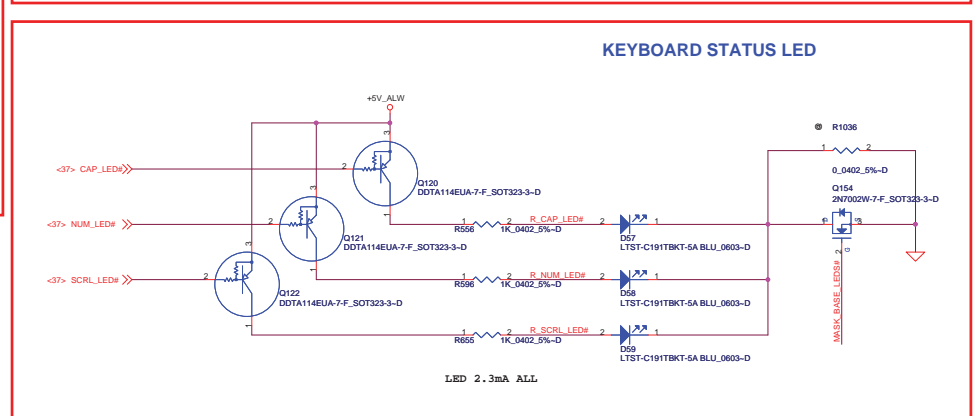
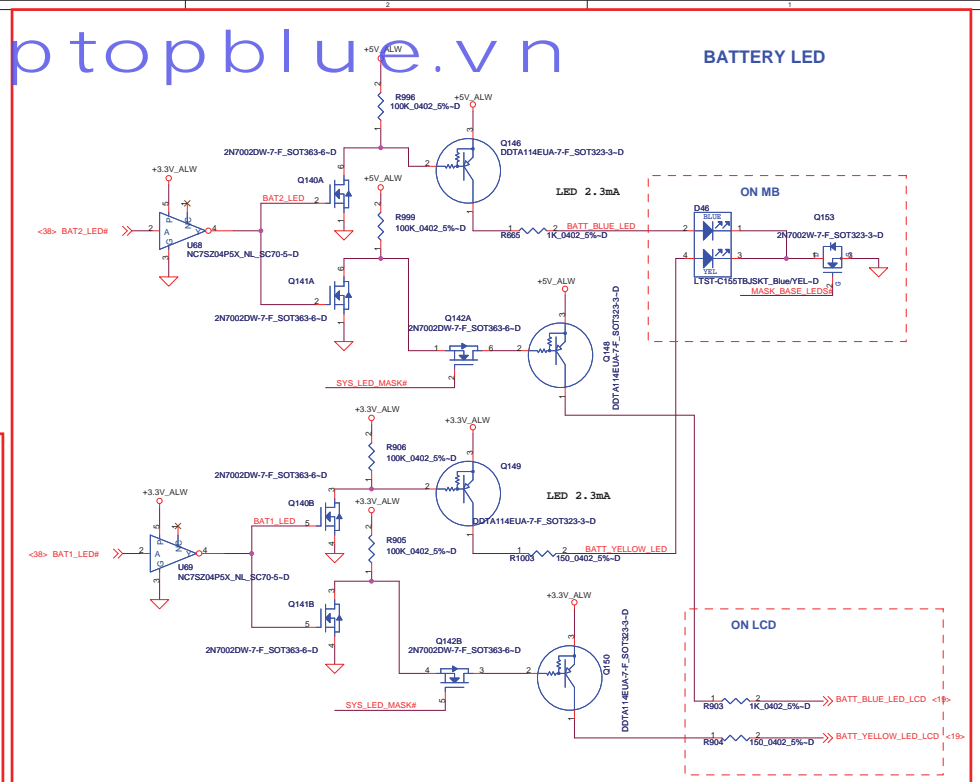
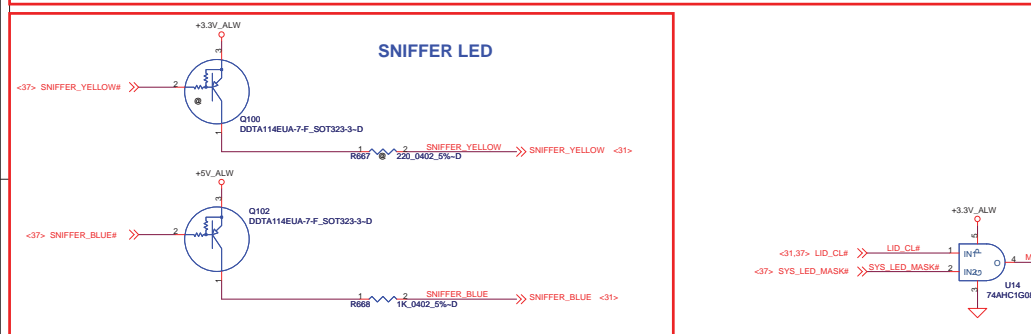
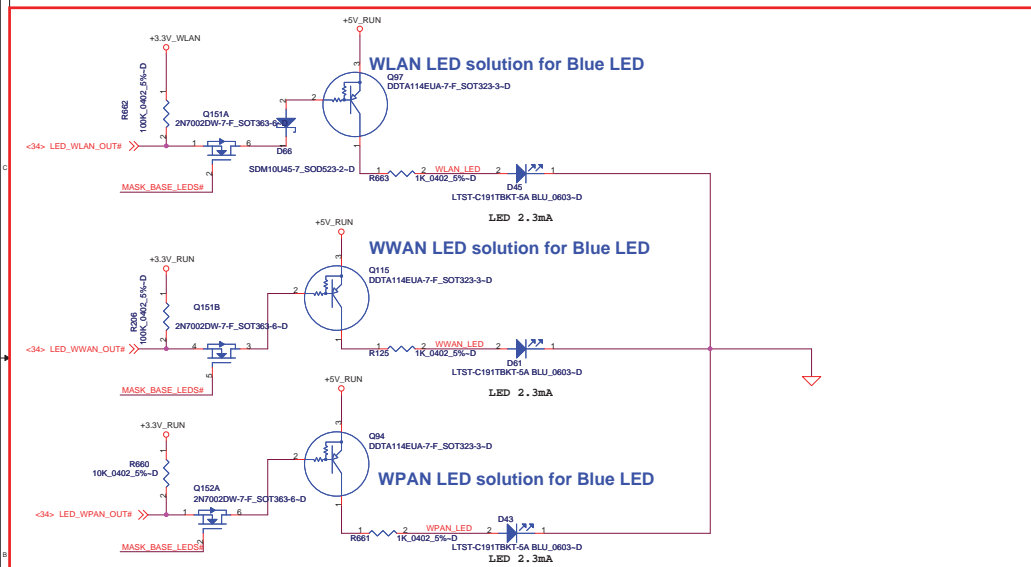
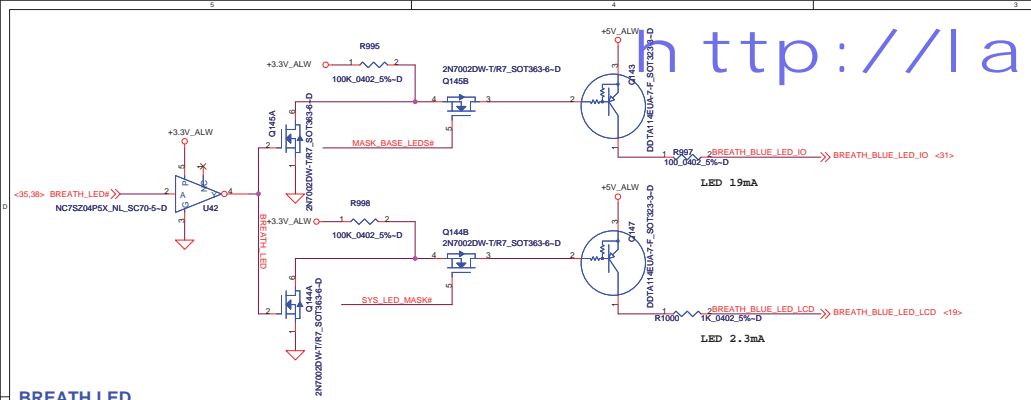
LA-4051P

Rev
1.0

Date: Thursday, June 05, 2008

Sheet 41 of

PROPRIETARY NOTE: THIS SHEET OF ENGINEERING DRAWING AND SPECIFICATIONS CONTAINS CONFIDENTIAL TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF DELL INC. ('DELL') THIS DOCUMENT MAY NOT BE TRANSFERRED OR COPIED WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF DELL. IN ADDITION NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT DELL'S EXPRESS WRITTEN CONSENT.



BIOS GPIO Table for LED Control

	SYS_LED_MASK#	LID_CL#
MASK ALL LED (SNIFFER FUNCTION)	Low	X
MASK BASE MB LEDs (Lid Closed)	High	Low
Do Not Mask LEDs (Lid Opened)	High	High

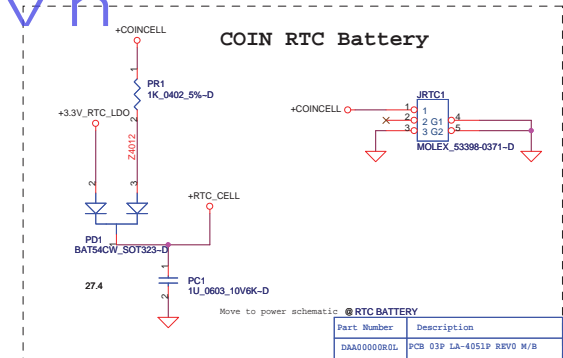
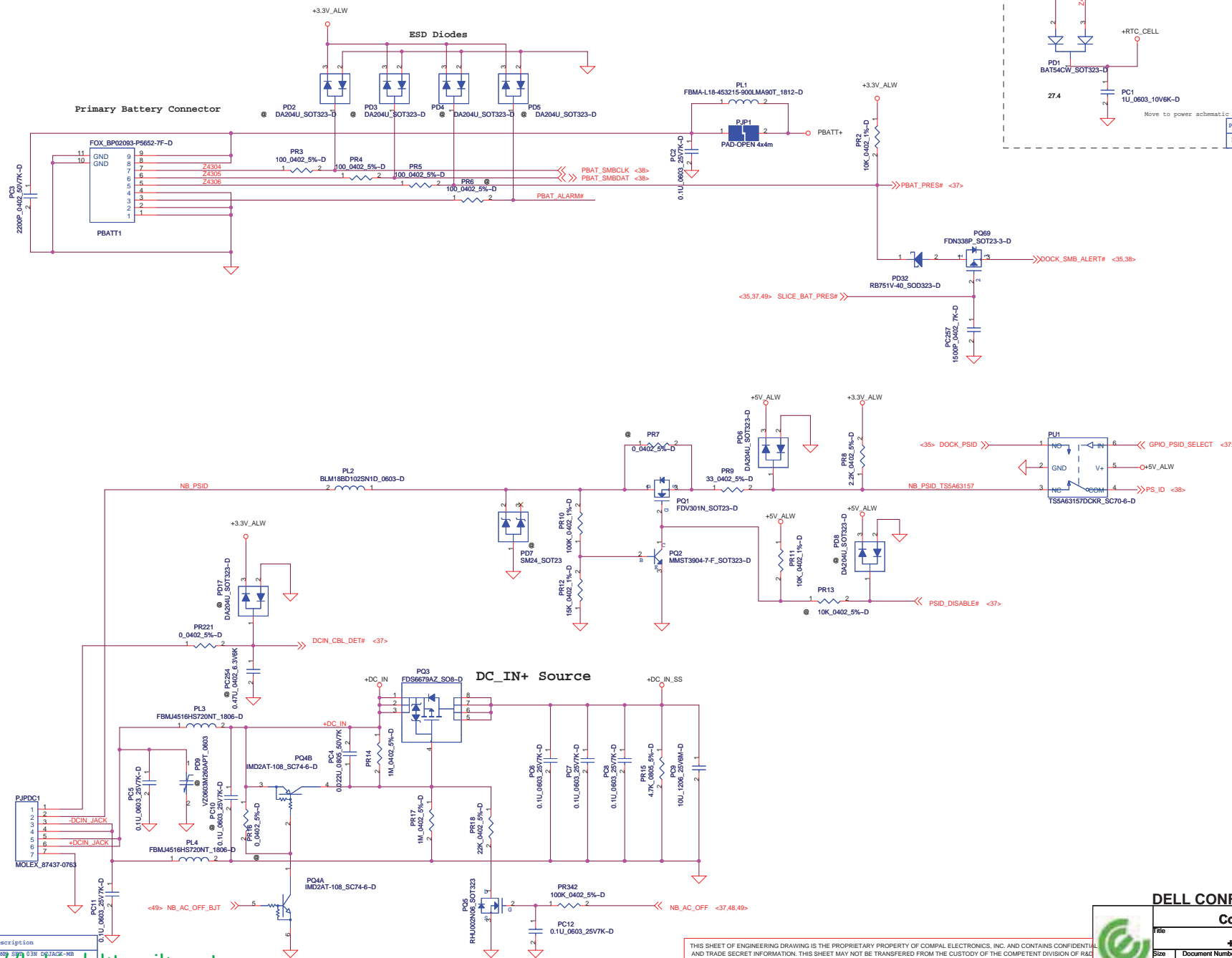
PROPRIETARY NOTE: THIS SHEET OF ENGINEERING DRAWING AND SPECIFICATIONS CONTAINS CONFIDENTIAL TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF DELL INC. ("DELL"). THIS DOCUMENT MAY NOT BE TRANSFERRED OR COPIED WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF DELL. IN ADDITION, NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT DELL'S EXPRESS WRITTEN CONSENT.

Compal Electronics, Inc.

LED

Size: LA-4051P

Date: Tuesday, June 10, 2008 Sheet 42 of 83



DELL CONFIDENTIAL/PROPRIETARY

Compal Electronics, Inc.

+DCIN

LA-4041P

Thursday, June 05, 2008 Sheet 43 of 63

THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

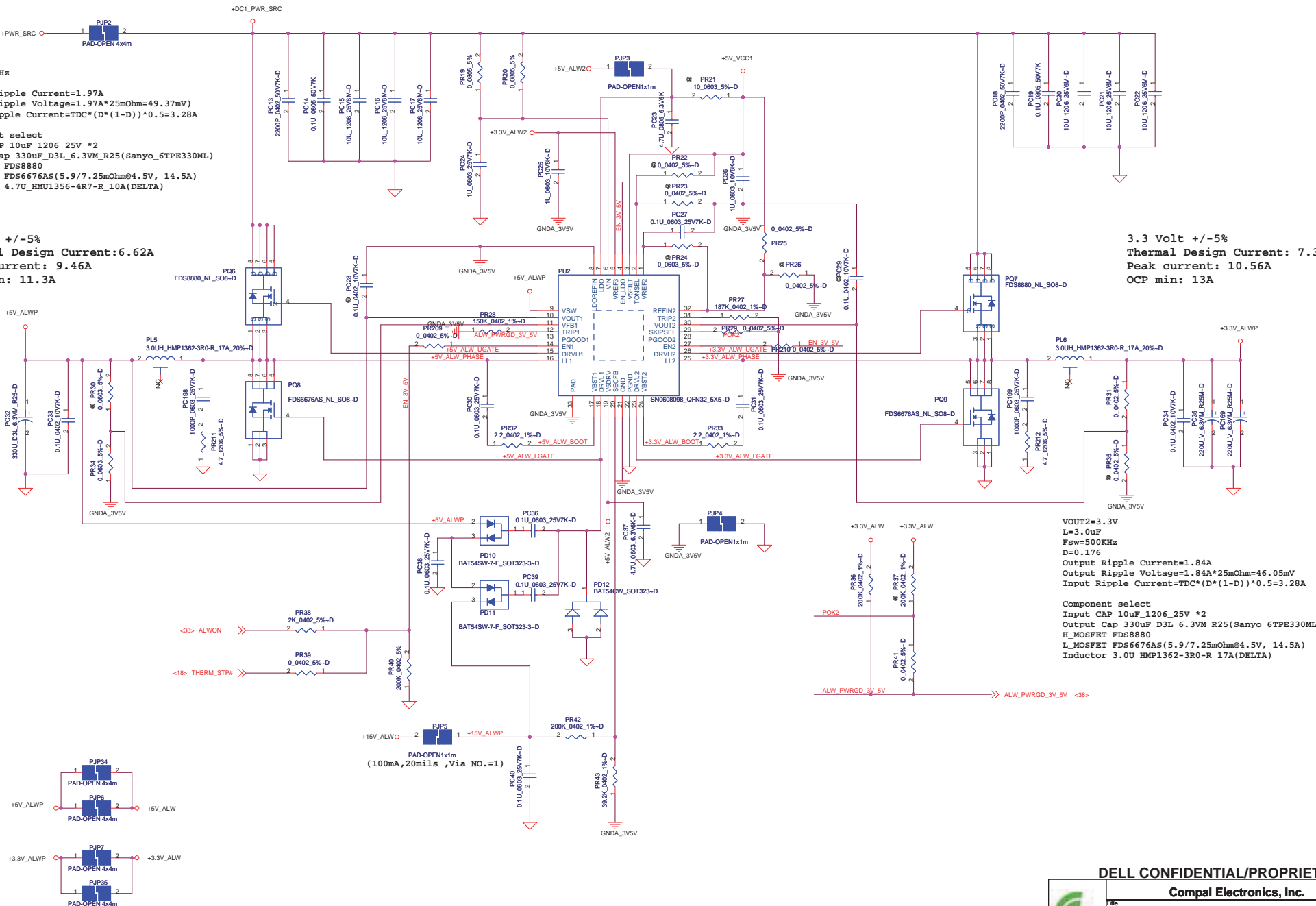
+3.3V_ALWP / +5V_ALWP / +5V_ALW2 / +15V_ALWP

VOUT1=5V
L=4.7uF
Fsw=400KHz
D=0.265
Output Ripple Current=1.97A
Output Ripple Voltage=1.97A*25mOhm=49.37mV
Input Ripple Current=TDC*(D*(1-D))^0.5=3.28A

Component select
Input CAP 10uF 1206 25V *2
Output Cap 330uF D3L 6.3VM R25(Sanyo_6TPE330ML)
H_MOSFET FDS8880
L_MOSFET FDS6676AS(5.9/7.25mOhm@4.5V, 14.5A)
Inductor 4.7U_HMU1356-4R7-R_10A(DELTA)

5 Volt +/-5%
Thermal Design Current:6.62A
Peak current: 9.46A
OCP min: 11.3A

3.3 Volt +/-5%
Thermal Design Current: 7.39A
Peak current: 10.56A
OCP min: 13A



DELL CONFIDENTIAL/PROPRIETARY

Compal Electronics, Inc.

DC/DC +3V/ +5V

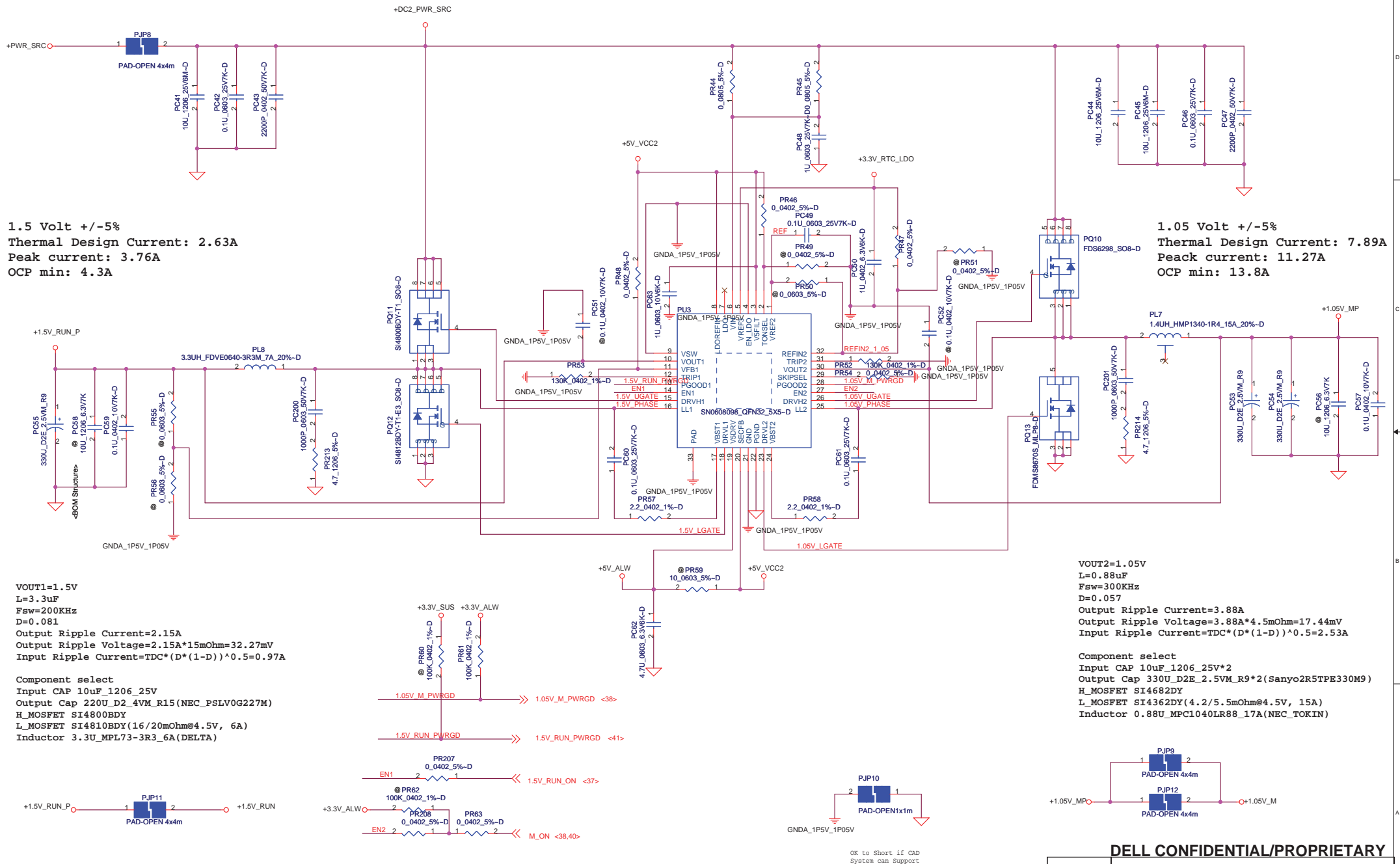
LA-4041P

Thursday, June 05, 2008

Sheet 44 of 63

1.5 Volt +/-5%
Thermal Design Current: 2.63A
Peak current: 3.76A
OCP min: 4.3A

1.05 Volt +/-5%
Thermal Design Current: 7.89A
Peak current: 11.27A
OCP min: 13.8A



VOUT1=1.5V
L=3.3uF
Fsw=200KHz
D=0.081
Output Ripple Current=2.15A
Output Ripple Voltage=2.15A*15mOhm=32.27mV
Input Ripple Current=TDC*(D*(1-D))^0.5=0.97A

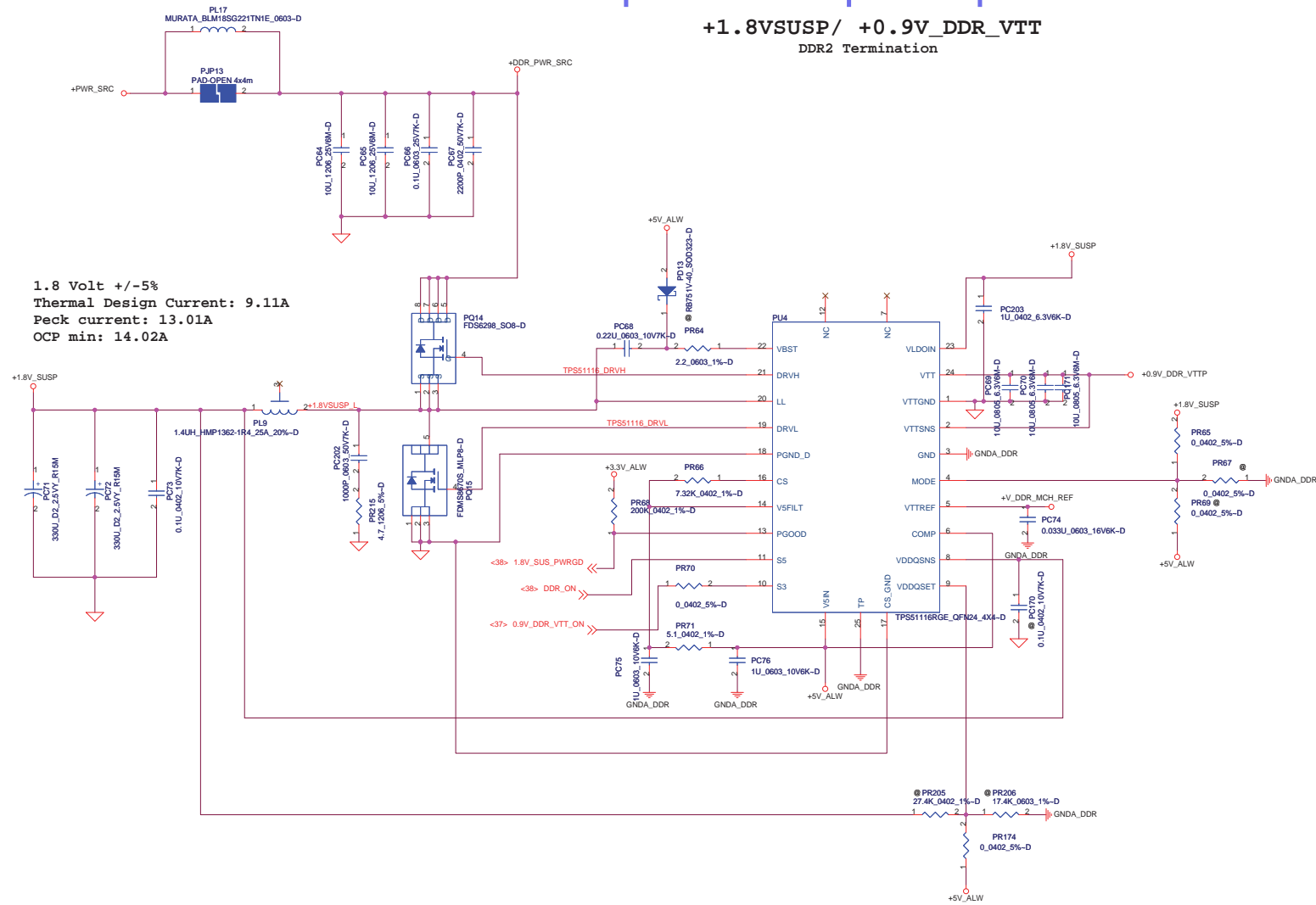
Component select
Input CAP 10uF 1206 25V
Output Cap 220U_D2 4VM_R15 (NEC_PSLV0G227M)
H_MOSFET SI4800BDY
L_MOSFET SI4810BDY (16/20mOhm@4.5V, 6A)
Inductor 3.3U_MPL73-3R3 6A (DELTA)

VOUT2=1.05V
L=0.88uF
Fsw=300KHz
D=0.057
Output Ripple Current=3.88A
Output Ripple Voltage=3.88A*4.5mOhm=17.44mV
Input Ripple Current=TDC*(D*(1-D))^0.5=2.53A

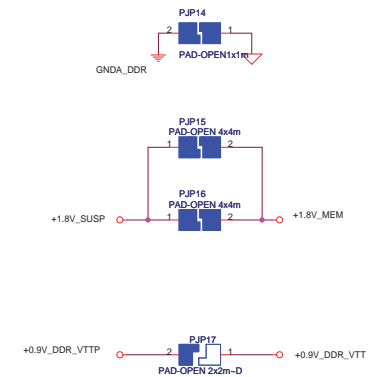
Component select
Input CAP 10uF 1206 25V*2
Output Cap 330U_D2E 2.5VM_R9*2 (Sanyo2R5TPE330M9)
H_MOSFET SI4682DY
L_MOSFET SI4362DY (4.2/5.5mOhm@4.5V, 15A)
Inductor 0.88U_MPC1040LR88_17A (NEC_TOKIN)

<http://laptopblue.vn>

+1.8VSUSP/ +0.9V_DDR_VTT
DDR2 Termination



Design current 0.7A for +0.9V_DDR_VTTP
Peak current 1A for +0.9V_DDR_VTTP



DELL CONFIDENTIAL/PROPRIETARY

Compal Electronics, Inc.

1.8VSUSP/0.9VDDR

LA-4041P

Rev	
1.0	

Date: Thursday, June 05, 2008

Sheet 46 of 63

PROPRIETARY NOTE: THIS SHEET OF ENGINEERING DRAWING AND SPECIFICATIONS CONTAINS CONFIDENTIAL TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF DELL INC. ('DELL') THIS DOCUMENT MAY NOT BE TRANSFERRED OR COPIED WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF DELL. IN ADDITION, NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT DELL'S EXPRESS WRITTEN CONSENT.



Date: Thursday, June 05, 2008		Sheet 46 of 63	
-------------------------------	--	----------------	--

<http://hobi-elektronika.net>

PU5 PU6 PU8
AVIA ISL6208
Maybach DIS MAX8791

PU7
AVIA ISL6260C
Maybach DIS MAX8786

AVIA
PC98 0.15uF
PR115 0 ohm
PR118 0 ohm
PC120 180pF
PR129 6.34K ohm
PR78, PR100, PR125 10K ohm
PR76, PR97, PR120 10 ohm
PC89, PC103, PC119 0.22uF
PL11, PL12, PL13 0.36uH

Maybach DIS
PC98 470pF
PR115 6.04K ohm
PR118 71.5K ohm
PC120 0.47uF
PR129 825 ohm
PR78, PR100, PR125 430 ohm
PR76, PR97, PR120 0 ohm
PC89, PC103, PC119 1uF
PL11, PL12, PL13 0.45uH

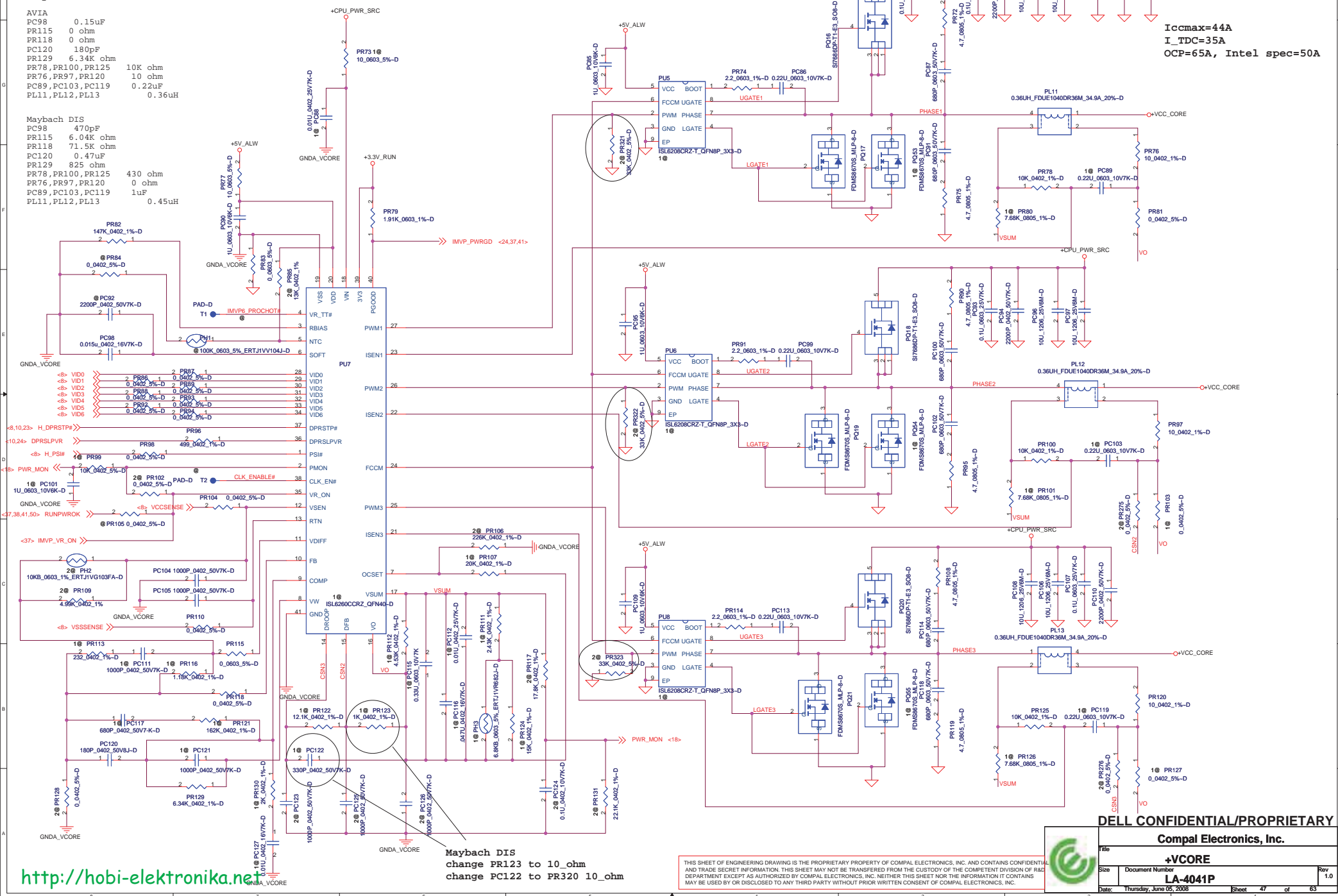
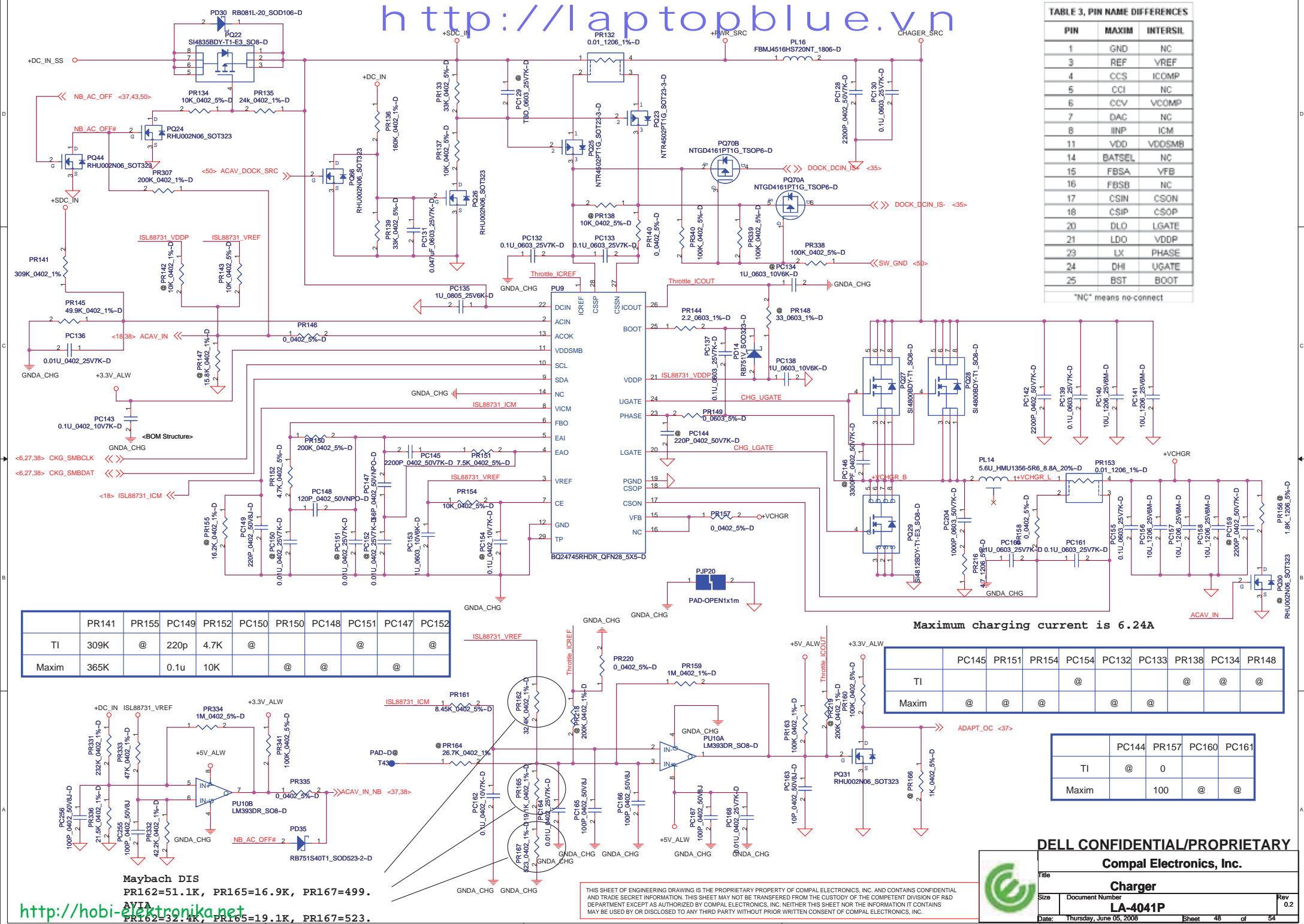


TABLE 3. PIN NAME DIFFERENCES

PIN	MAXIM	INTERSL
1	GND	NC
3	REF	VREF
4	CCS	ICOMP
5	CCI	NC
6	CCV	VCOMP
7	DAC	NC
8	IINP	ICM
11	VDD	VDDSMB
14	BATSEL	NC
15	FBSA	VFB
16	FBSB	NC
17	CSIN	CSOIN
18	CSIP	CSOP
20	DLO	LGATE
21	LDO	VDDP
23	LX	PHASE
24	DHI	UGATE
25	BST	BOOT
NC means no-connect		



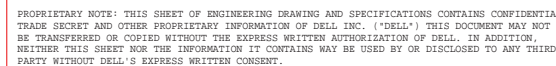
DELL CONFIDENTIAL/PROPRIETARY

Compal Electronics, Inc.

Charger

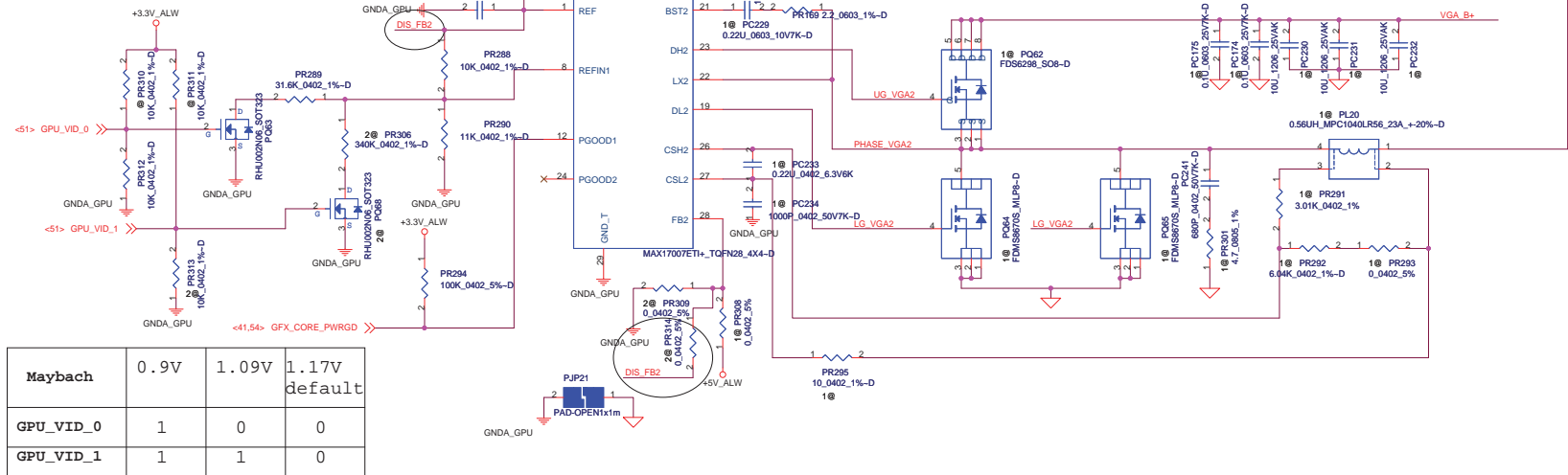
LA-4041P

Date: Thursday, June 05, 2008 Sheet 48 of 54



AVIA
PR288 10K
PR289 31.6K
PR290 11K

Maybach DIS
PR288 41.2K
PR289 107K
PR290 57.6K

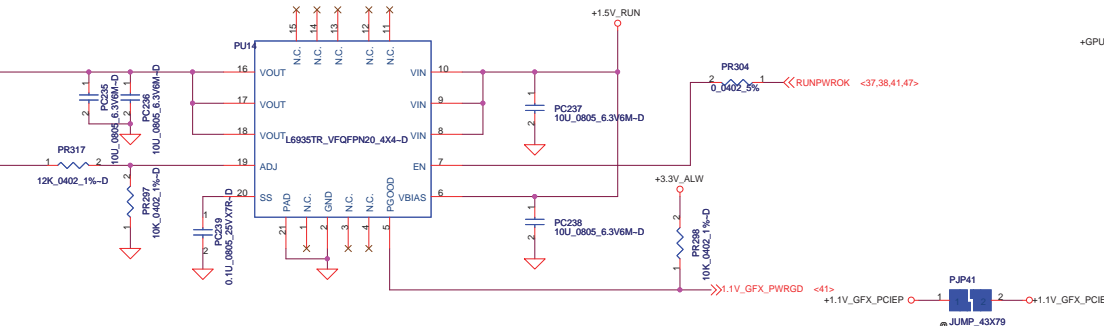


Maybach	0.9V	1.09V	1.17V default
GPU_VID_0	1	0	0
GPU_VID_1	1	1	0

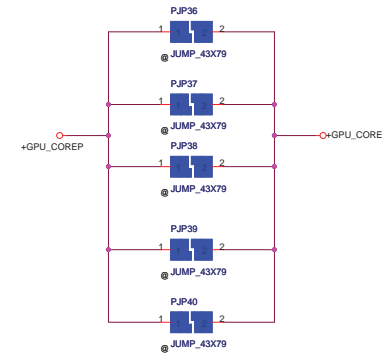
AVIA	0.89V	1.05V default	GLM2
GPU_VID_0	1	0	

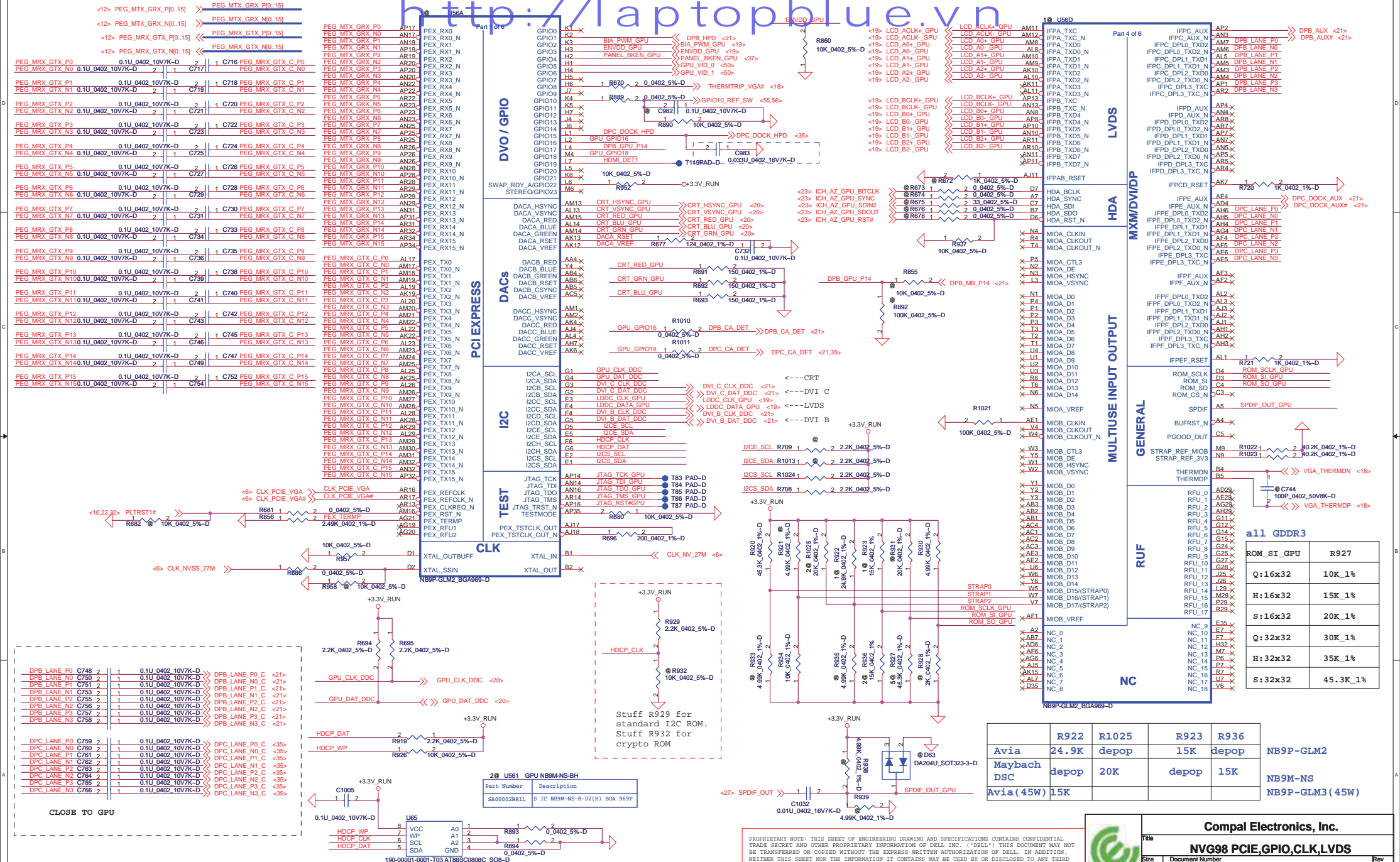
AVIA	0.89V	1.16V default	GLM3
GPU_VID_0	1	0	

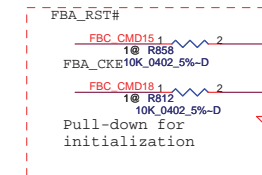
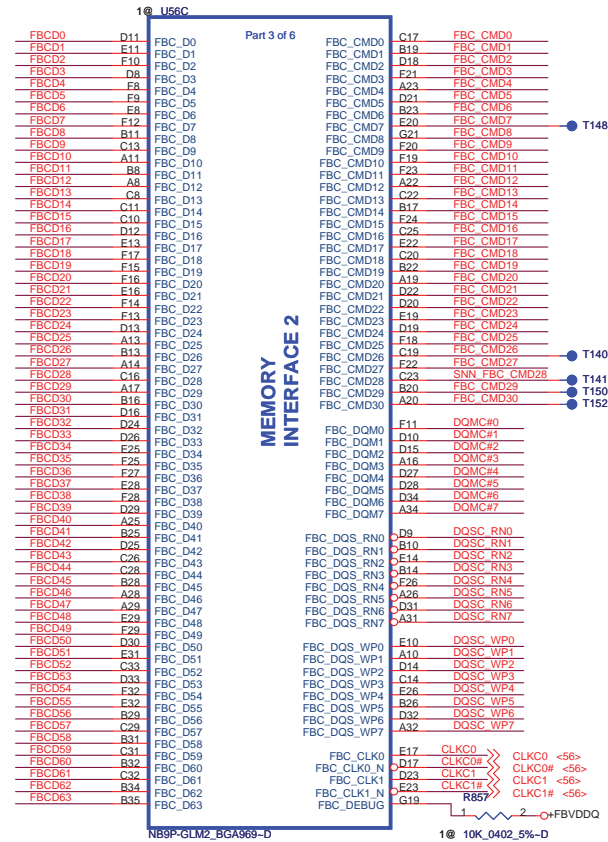
GLM3
PR288 change to 7.15K
PR290 change to 10K
PR289 change to 13.7K



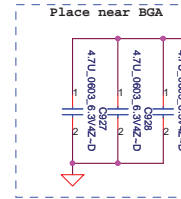
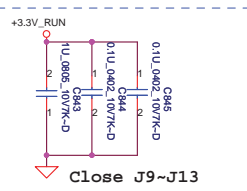
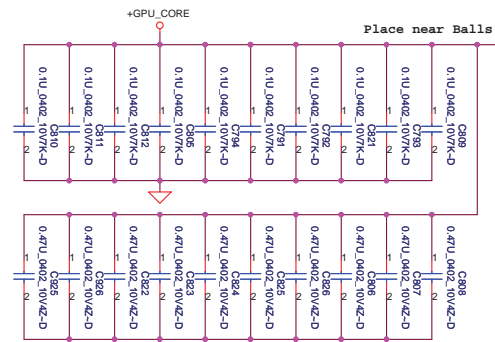
1.15V / 1.2V
thermal design current 25A
peak current 30A



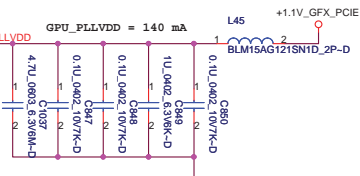
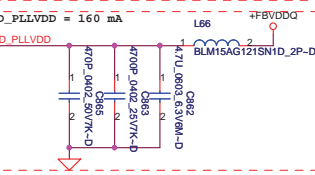
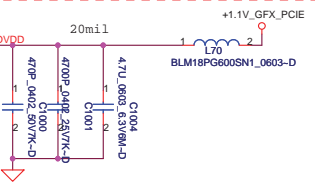
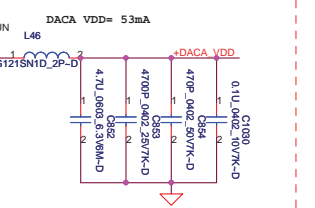




<http://hobi-elektronika.net>

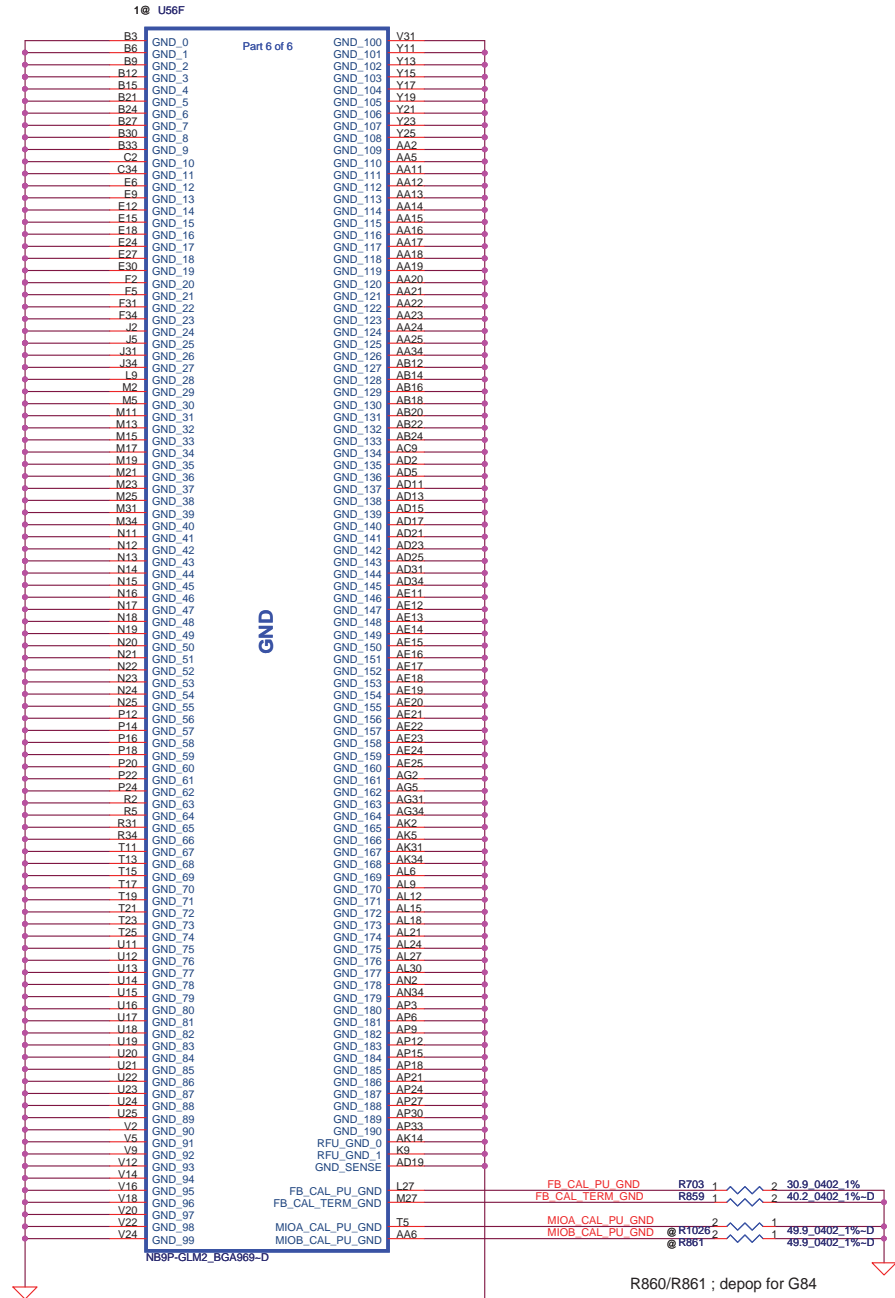
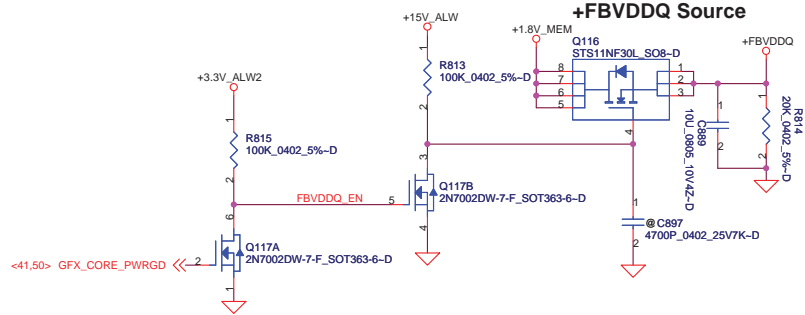


Delete TV Fucntion
2007/11/20



POWER

L11	VDD_0
L12	VDD_1
L13	VDD_2
L14	VDD_3
L15	VDD_4
L16	VDD_5
L17	VDD_6
L18	VDD_7
L19	VDD_8
L20	VDD_9
L21	VDD_10
L22	VDD_11
L23	VDD_12
L24	VDD_13
L25	VDD_14
L26	VDD_15
L27	VDD_16
L28	VDD_17
L29	VDD_18
L30	VDD_19
L31	VDD_20
L32	VDD_21
L33	VDD_22
L34	VDD_23
L35	VDD_24
L36	VDD_25
L37	VDD_26
L38	VDD_27
L39	VDD_28
L40	VDD_29
L41	VDD_30
L42	VDD_31
L43	VDD_32
L44	VDD_33
L45	VDD_34
L46	VDD_35
L47	VDD_36
L48	VDD_37
L49	VDD_38
L50	VDD_39
L51	VDD_40
L52	VDD_41
L53	VDD_42
L54	VDD_43
L55	VDD_44
L56	VDD_45
L57	VDD_46
L58	VDD_47
L59	VDD_48
L60	VDD_49
L61	VDD_50
L62	VDD_51
L63	VDD_52
L64	VDD_53
L65	VDD_54
L66	VDD_55
L67	VDD_56
L68	VDD_57
L69	VDD_58
L70	VDD_59
L71	VDD_60
L72	VDD_61
L73	VDD_62
L74	VDD_63
L75	VDD_64
L76	VDD_65
L77	VDD_66
L78	VDD_67
L79	VDD_68
L80	VDD_69
L81	VDD_70
L82	VDD_71
L83	VDD_72
L84	VDD_73
L85	VDD_74
L86	VDD_75
L87	VDD_76
L88	VDD_77
L89	VDD_78
L90	VDD_79
L91	VDD_80
L92	VDD_81
L93	VDD_82
L94	VDD_83
L95	VDD_84
L96	VDD_85
L97	VDD_86
L98	VDD_87
L99	VDD_88
L100	VDD_89
L101	VDD_90
L102	VDD_91
L103	VDD_92
L104	VDD_93
L105	VDD_94
L106	VDD_95
L107	VDD_96
L108	VDD_97
L109	VDD_98
L110	VDD_99
L111	VDD_100
L112	VDD_101
L113	VDD_102
L114	VDD_103
L115	VDD_104
L116	VDD_105
L117	VDD_106
L118	VDD_107
L119	VDD_108
L120	VDD_109
L121	VDD_110
L122	VDD_111
L123	VDD_112
L124	VDD_113
L125	VDD_114
L126	VDD_115
L127	VDD_116
L128	VDD_117
L129	VDD_118
L130	VDD_119
L131	VDD_120
L132	VDD_121
L133	VDD_122
L134	VDD_123
L135	VDD_124
L136	VDD_125
L137	VDD_126
L138	VDD_127
L139	VDD_128
L140	VDD_129
L141	VDD_130
L142	VDD_131
L143	VDD_132
L144	VDD_133
L145	VDD_134
L146	VDD_135
L147	VDD_136
L148	VDD_137
L149	VDD_138
L150	VDD_139
L151	VDD_140
L152	VDD_141
L153	VDD_142
L154	VDD_143
L155	VDD_144
L156	VDD_145
L157	VDD_146
L158	VDD_147
L159	VDD_148
L160	VDD_149
L161	VDD_150
L162	VDD_151
L163	VDD_152
L164	VDD_153
L165	VDD_154
L166	VDD_155
L167	VDD_156
L168	VDD_157
L169	VDD_158
L170	VDD_159
L171	VDD_160
L172	VDD_161
L173	VDD_162
L174	VDD_163
L175	VDD_164
L176	VDD_165
L177	VDD_166
L178	VDD_167
L179	VDD_168
L180	VDD_169
L181	VDD_170
L182	VDD_171
L183	VDD_172
L184	VDD_173
L185	VDD_174
L186	VDD_175
L187	VDD_176
L188	VDD_177
L189	VDD_178
L190	VDD_179
L191	VDD_180
L192	VDD_181
L193	VDD_182
L194	VDD_183
L195	VDD_184
L196	VDD_185
L197	VDD_186
L198	VDD_187
L199	VDD_188
L200	VDD_189
L201	VDD_190
L202	VDD_191
L203	VDD_192
L204	VDD_193
L205	VDD_194
L206	VDD_195
L207	VDD_196
L208	VDD_197
L209	VDD_198
L210	VDD_199
L211	VDD_200
L212	VDD_201
L213	VDD_202
L214	VDD_203
L215	VDD_204
L216	VDD_205
L217	VDD_206
L218	VDD_207
L219	VDD_208
L220	VDD_209
L221	VDD_210
L222	VDD_211
L223	VDD_212
L224	VDD_213
L225	VDD_214
L226	VDD_215
L227	VDD_216
L228	VDD_217
L229	VDD_218
L230	VDD_219
L231	VDD_220
L232	VDD_221
L233	VDD_222
L234	VDD_223
L235	VDD_224
L236	VDD_225
L237	VDD_226
L238	VDD_227
L239	VDD_228
L240	VDD_229
L241	VDD_230
L242	VDD_231
L243	VDD_232
L244	VDD_233
L245	VDD_234
L246	VDD_235
L247	VDD_236
L248	VDD_237
L249	VDD_238
L250	VDD_239
L251	VDD_240
L252	VDD_241
L253	VDD_242
L254	VDD_243
L255	VDD_244
L256	VDD_245
L257	VDD_246
L258	VDD_247
L259	VDD_248
L260	VDD_249
L261	VDD_250
L262	VDD_251
L263	VDD_252
L264	VDD_253
L265	VDD_254
L266	VDD_255
L267	VDD_256
L268	VDD_257
L269	VDD_258
L270	VDD_259
L271	VDD_260
L272	VDD_261
L273	VDD_262
L274	VDD_263
L275	VDD_264
L276	VDD_265
L277	VDD_266
L278	VDD_267
L279	VDD_268
L280	VDD_269
L281	VDD_270
L282	VDD_271
L283	VDD_272
L284	VDD_273
L285	VDD_274
L286	VDD_275
L287	VDD_276
L288	VDD_277
L289	VDD_278
L290	VDD_279
L291	VDD_280
L292	VDD_281
L293	VDD_282
L294	VDD_283
L295	VDD_284
L296	VDD_285
L297	VDD_286
L298	VDD_287
L299	VDD_288
L300	VDD_289
L301	VDD_290
L302	VDD_291
L303	VDD_292
L304	VDD_293
L305	VDD_294
L306	VDD_295
L307	VDD_296
L308	VDD_297
L309	VDD_298
L310	VDD_299
L311	VDD_300
L312	VDD_301
L313	VDD_302
L314	VDD_303
L315	VDD_304
L316	VDD_305
L317	VDD_306
L318	VDD_307
L319	VDD_308
L320	VDD_309
L321	VDD_310
L322	VDD_311
L323	VDD_312
L324	VDD_313
L325	VDD_314
L326	VDD_315
L327	VDD_316
L328	VDD_317
L329	VDD_318
L330	VDD_319
L331	VDD_320
L332	VDD_321
L333	VDD_322
L334	VDD_323
L335	VDD_324
L336	VDD_325
L337	VDD_326
L338	VDD_327
L339	VDD_328
L340	VDD_329
L341	VDD_330
L342	VDD_331
L343	VDD_332
L344	VDD_333
L345	VDD_334
L346	VDD_335
L347	VDD_336
L348	VDD_337
L349	VDD_338
L350	VDD_339
L351	VDD_340
L352	VDD_341
L353	VDD_342
L354	VDD_343
L355	VDD_344
L356	VDD_345
L357	VDD_346
L358	VDD_347
L359	VDD_348
L360	VDD_349
L361	VDD_350
L362	VDD_351
L363	VDD_352
L364	VDD_353
L365	VDD_354
L366	VDD_355
L367	VDD_356
L368	VDD_357
L369	VDD_358
L370	VDD_359
L371	VDD_360
L372	VDD_361
L373	VDD_362
L374	VDD_363
L375	VDD_364
L376	VDD_365
L377	VDD_366
L378	VDD_367
L379	VDD_368
L380	VDD_369
L381	VDD_370
L382	VDD_371
L383	VDD_372
L384	VDD_373
L385	VDD_374
L386	VDD_375
L387	VDD_376
L388	VDD_377
L389	VDD_378
L390	VDD_379
L391	VDD_380
L392	VDD_381
L393	VDD_382
L394	VDD_383
L395	VDD_384
L396	VDD_385
L397	VDD_386
L398	VDD_387
L399	VDD_388
L400	VDD_389
L401	VDD_390
L402	VDD_391
L403	VDD_392
L404	VDD_393
L405	VDD_394
L406	VDD_395
L407	VDD_396
L408	VDD_397
L409	VDD_398
L410	VDD_399
L411	VDD_400
L412	VDD_401
L413	VDD_402
L414	VDD_403
L415	VDD_404
L416	VDD_405
L417	VDD_406
L418	VDD_407
L419	VDD_408
L420	VDD_409
L421	VDD_410
L422	VDD_411
L423	VDD_412
L424	VDD_413
L425	VDD_414
L426	VDD_415
L427	VDD_416
L428	VDD_417
L429	VDD_418
L430	VDD_419
L431	VDD_420
L432	VDD_421
L433	VDD_422
L434	VDD_423
L435	VDD_424
L436	VDD_425
L437	VDD_426
L438	VDD_427
L439	VDD_428
L440	VDD_429
L441	VDD_430
L442	VDD_431
L443	VDD_432
L444	VDD_433
L445	VDD_434
L446	VDD_435
L447	VDD_436
L448	VDD_437
L449	VDD_438
L450	VDD_439
L451	VDD_440
L452	VDD_441
L453	VDD_442
L454	VDD_443
L455	VDD_444
L456	VDD_445
L457	VDD_446
L458	VDD_447
L459	VDD_448
L460	VDD_449
L461	VDD_450
L462	VDD_451
L463	VDD_452
L464	VDD_453
L465	VDD_454
L466	VDD_455
L467	VDD_456
L468	VDD_457
L469	VDD_458
L470	VDD_459
L471	VDD_460
L472	VDD



R860/R861 : depop for G84

DELL CONFIDENTIAL/PROPRIETARY

Compal Electronics, Inc.

Title		NVG98 GND	
Size	Document Number	LA-4051P	
Date:	Thursday, June 06, 2008	Sheet	54 of 63
Rev		1.0	

PROPRIETARY NOTE: THIS SHEET OF ENGINEERING DRAWING AND SPECIFICATIONS CONTAINS CONFIDENTIAL TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF DELL INC. ("DELL"). THIS DOCUMENT MAY NOT BE TRANSFERRED OR COPIED WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF DELL. IN ADDITION, NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT DELL'S EXPRESS WRITTEN CONSENT.



32Mx32 GDDR3

32Mx32 GDDR3

50 U57

50 U58

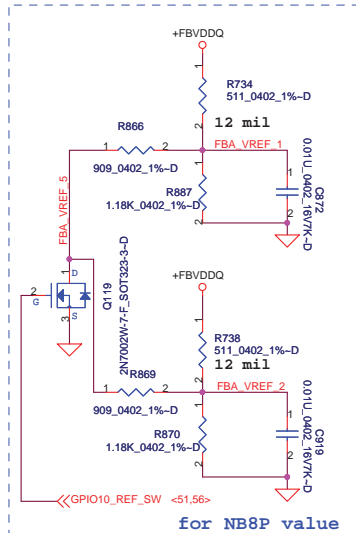
FBAD[0..63] <>> FBAD[0..63] <52>
 DQSA_WP[0..7] <>> DQSA_WP[0..7] <52>
 DQSA_RN[0..7] <>> DQSA_RN[0..7] <52>
 DQMA[0..7] <>> DQMA[0..7] <52>
 FBA_CMD[0..27] >>> FBA_CMD[0..27] <52>

243 ohm for NB8P
 475 ohm for NB9X
 Place close to U57

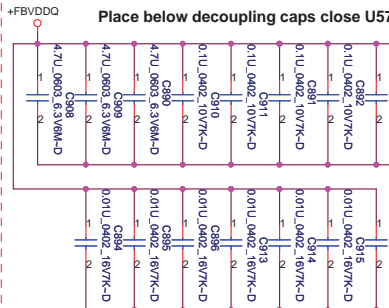
243 ohm for NB8P
 475 ohm for NB9X
 Place close to U58

Mirror U58

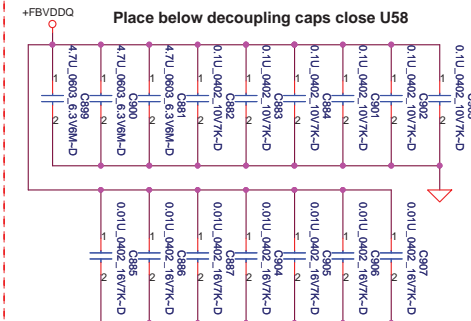
U58 is Mirror



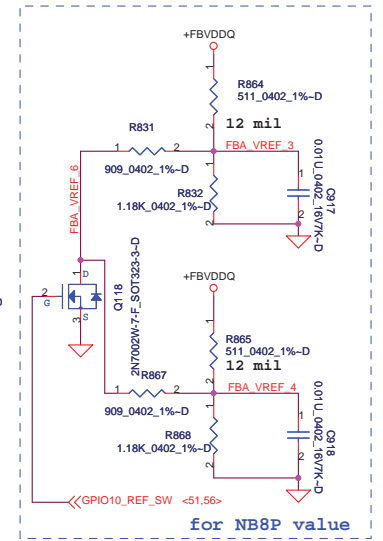
for NB8P value



Place below decoupling caps close U57



Place below decoupling caps close U58



for NB8P value

DELL CONFIDENTIAL/PROPRIETARY

Compal Electronics, Inc.

NVG94 External GDDR3-A

LA-4051P

Date: Thursday, June 05, 2008 Sheet 55 of 63

PROPRIETARY NOTE: THIS SHEET OF ENGINEERING DRAWING AND SPECIFICATIONS CONTAINS CONFIDENTIAL TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF DELL INC. ("DELL"). THIS DOCUMENT MAY NOT BE TRANSFERRED OR COPIED WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF DELL. IN ADDITION, NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT DELL'S EXPRESS WRITTEN CONSENT.



Version Change List (P. I. R. List)

<http://laptopblue.vn>

Item	Page#	Title	Date	Request Owner	Issue Description	Solution Description	Rev.
1	37	ECE5028	2007/10/09	Compal	change BID pop option to X01: SCH165393	R534 (depop) ; R529 (pop)	X01
2	33	USB2.0	2007/10/25	Compal	Charger USB Fail: SCH165395	Need to swap the connection for USB_CHARGER_PWR_EN# & ESATA_USB_PWR_EN#	X01
3	13	Cantiga	2007/10/25	Compal	modify JUMPER ref. name	Modify ref name from P1 to PJP22	X01
4	51	NV98	2007/10/25	Compal	VRAM strap pin pop option	depop R922, R923, R933, R934 and pop R920, R921, R935, R936 to match 16Mx32 (Sameung)	X01
5	51	NV98	2007/10/25	Compal	No more TV out function supported on Edock-LIO: SCH165398	Delete TV signals & Circuit, and remove R669, R762, R763	X01
6	20	CRT SW	2007/11/1	Compal	Clock 27M R37 Resistor Error: SCH165399	R37 change value to 33ohm	X01
7	6	Clock	2007/11/5	Compal	Clock 27M R37 Resistor Error: SCH165399	(1) Quad Core Support, stuff R941, R984, R945, R946, R943, R942, R944, Q14, Q129 (2) Quad Core ITP Support, stuff R976, R977, R978, R979, R980, R981, R982, R983	X01
8	7	Quad Core	2007/11/5	Compal	Support Quad Core CPU	(1) Support DP, all components stuff	X01
9	21	DP	2007/11/5	Compal	Support DP compoments		X01
10	21	DP	2007/11/5	Compal	DPB HPD# Voltage Level	Remove R1006 pull down 7.5K (UMA need the resistor), becasue Descrite level is 3.3V	X01
11	21	DP	2007/11/5	Compal	DOCK_DET# Double Pull Up	Remove R799 for Double Pull Up	X01
12	21	DP	2007/11/5	Compal	DP Spec for AUX/# need pull down 100k	add DPB_MB_AUX/# --> R895/R896 add DPB_DOCK_AUX/# --> R897/R898 add DPC_DOCK_AUX/# --> R899/R900 (no-stuff)	X01
13	22	SB	2007/11/5	Compal	MDC Reset Change Control By ECE5028 to 5V Level: SCH165401	SB U10 PinF6 change Name to GNT3#/GPIO55 only	X01
14	23	SB	2007/11/5	Compal	SB Remove RTC Detect Function	Remove R375, R961, R960, Q130 and Add T46 on U10 pinAE8	X01
15	23	SB	2007/11/5	Compal	Support HDCP Audio: SCH165403	SB Stuff 3rd HD Audio to GPU R243, R244, R245, R246 GPU Stuff R673, R674, R676, R678 0ohm, R675 33ohm	X01
16	24	SB	2007/11/5	Compal	SB GPIO Change: SCH165431	(1) Sniffer detect Remove From SB to ECE5028 GPIOH7, U10 pinAE8 add T39, pull up resistor R754 change to page37 (2) R266 USB MCARD3_DET# move to page34 (3) SB U10 pinC12 net named to "LAN_PHY_PWR_CNTRL"	X01
17	28	Audio	2007/11/5	Compal	Audio Test Result: SCH165433	C437/C436 change from 1uF_1206 to 2.2uF_1206	X01
18	31	PWR Board	2007/11/5	Compal	Power Board Detect pin name Changed: SCH165431	J51394 pin9 change name to "PWR_BTN_BD_DET#", and connect to page 37 ECE5028 pin33 GPIOH7	X01
19	29	LOM	2007/11/5	Compal	LOM Disable pin name changed: SCH165431	LOM Disable pin name changed to "LAN_PHY_PWR_CNTRL" and connect to page 37 ECE5028 pin88 GPIOG0	X01
20	33	ESATA	2007/11/5	Compal	ESATA Enable pin name Change: SCH165431	ESATA Enable pin name U29 Changed to "ESATA_USB_PWR_EN#" and connector to ECE5028 pin82 GPIOB2	X01
21	33	USB	2007/11/5	Compal	Charger USB Port pin name Change: SCH165431	Charger USB U53 Enable pin name changed to "USB_POWERSHARE_PWR_EN#" and connector to ECE5028 pin104 GPIOA7	X01
22	33	USB	2007/11/5	Compal	Charger USB Port Switch Eye Diagram Fail: SCH165434	U54 Change to TI Part TS3USB1RSER	X01
23	33	MDC	2007/12/5	Compal	MDC DIS pin Voltage to +3.3V too Low: SCH165431	R326 pull up to +5V_ALW and connrection changed from SB to ECE5028 pin102 GPIOA5 (2007/12/5 update to pull up +5V_ALW) Remove JLAT2	X01
24	34	WLAN	2007/11/5	Compal	New ME Drawing Remove Latch 2	stuff R438, R458, R449	X01
25	34	Nimi-card	2007/11/5	Compal	Correct Nimi-Card Detect	ESD Part D65, D66 stuff	X01
26	35	Dock-ESD	2007/11/5	Compal	Support Dock ESD	Smartcard SC_DET pin remove module port to EC	X01
27	36	USH	2007/11/5	Compal	Smartcard Detect Cancel: SCH165435	L69 change part >400mA of Murata LQH32CN100K53L	X01
28	36	USH	2007/11/5	Compal	Correct Smartcard Buffer 73S8009CN Power Bead Current Value: SCH165435	JCS1 change connector to TYCO 1-1775784-0 6P-T. But still wait contactless spec to update	X01
29	36	USH	2007/11/5	Compal	Contactless Connector Changed: SCH165435	(1) pin102 no need of PNL_LED_MASK#, change to MDC_RST_DIS# (3) pin70 GPIOC5 no need of ADAPT_TRIP_SET, NC (4) update CHIP_ID message, current set to {0,0}	X01
30	37	ECE5028	2007/11/5	Compal	ECE5028 change GPIO Define: SCH165431		

PROPRIETARY NOTE: THIS SHEET OF ENGINEERING DRAWING AND SPECIFICATIONS CONTAINS CONFIDENTIAL TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF DELL INC. ("DELL") THIS DOCUMENT MAY NOT BE TRANSFERRED OR COPIED WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF DELL. IN ADDITION, NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT DELL'S EXPRESS WRITTEN CONSENT.



DELL CONFIDENTIAL/PROPRIETARY

Title Changed-List History 1

Size	Document Number	Rev
	LA-4051P	1.0
Date:	Thursday, June 05, 2008	Sheet 57 of 63

<http://hobi-elektronika.net>

Version Change List (P. I. R. List)

<http://laptopblue.vn>

Item	Page#	Title	Date	Request Owner	Issue Description	Solution Description	Rev.
30	38	MEC5035	2007/11/05	Compal	MEC5035 pin19 add RC_ID: SCH165437	add R211/C480	X01
31	38	MEC5035	2007/11/05	Compal	MEC5035 SUSPWROK change Define: SCH165437	SUSPWROK change from pin19 to pin30	X01
32	38	MEC5035	2007/11/05	Compal	MEC5035 no need DEBUG_ENABLE#, support from KOST_DEBUG_RX: SCH165437	(1)JDEG1 pin 2 change to HOST_DEBUG_RX, Double pull up --> remove R553. (2)DEBUG_ENABLE# no need, remove R959	X01
33	38	MEC5035	2007/11/05	Compal	No Need EC SPI Rom Function: SCH165439	(1)Remove R591, R589, R590, R592, R593, C672, U37 (2)MEC5035 pin 67, 68, 69 : NC	X01
34	38 39	MEC5035	2007/11/05	Compal	No Need ECE1088: SCH165440	(1)MEC5035 pin35, 37 : NC (2)remove ECE1088: U38, C676, C677, R747, R650, R826	X01
35	39 38	ECE1088	2007/11/05	Compal	TouchPad Change Define: SCH165443	(1)TouchPad Connector Change pin define for pin 14/15/16 to GND/KYBD_BLJT_PWR/TP_DET# (2)KYBD_BLJT_PWR connect to MEC5035 pin47	X01
36	41	Screw	2007/11/05	Compal	ME Changed Screw Size	(1)Dock: H14/H15 --> H 5P3 (2)GPU: H19 --> 4P0, H20 --> 3P9, H21 --> 3P3 (3)H23 --> 4P0 (4)H22 --> 2P2	X01
37	42	LED	2007/11/05	Compal	LED Circuit Changed: SCH165444	(1)Add U14 AND Gate for Base LED Mark with L1D_CL# (2) Refer Page 42 for LED circuit changed	X01
38	37	MEC5028	2007/11/19	Compal	ALWON oscillation on Battery only with RTC battery: SCH165445	Cause the ECE5028 no power, add D4/R20 to separate	X01
39	24, 33, 36	USH/BIO	2007/11/19	Compal	USH add Reset# to BIO Module: SCH165061	BIO_DET# Function Delete, add R63 pull-up for FP_RESET#. And link to USH pin C3. And add R1002 for UPEK module	X01
40	29	LOM	2007/11/19	Compal	Intel LOM PHY 82576LM change to B0 version: SCH165446	Intel LOM PHY 82576LM change to B0 version	X01
41	10-15	NB	2007/11/19	Compal	Intel NB Cantiga change to B0: SCH165447	Intel NB Cantiga change to B0	X01
42	21, 35, 51	DP	2007/11/19	Compal	DP Port Cable Detect change to "H" Detect: SCH165448	Delete R783/Q10, and net name change to DPB_HPD Delete R795/Q114, and net name change to DPC_DOCK_HPD	X01
43	21	DP	2007/11/19	Compal	DP Port delete no use parts	Delete R895-R900, R209, R278, R336, R337, R419, R647 --> Dell want keep those parts	X01
44	21	DP	2007/11/19	Compal	DP Port delete function: SCH165448	DP Port delete function work, DPC_DOCK_AUX_SW/DPC_DOCK_AUX#SW add R1008/R1009 100k to GND DP Port delete function work, DPB_AUX_SW/DPB_AUX#SW add R1006/R1007 100k to GND, but depop U9 pin 1 R193 change to 3.48K 1%, and depop R180/R181/R896. pop R276/R336/R337	X01
45	35	DOCK	2007/11/19	Compal	Dock connect rename: SCH165449	Dock connect rename to JDOCK1	X01
46	35	DOCK	2007/11/20	Compal	Dock connect ESD Diode: SCH165449	add D65 SM24C.TCT_SOD23 ESD Diode on +DOCK_PWR_BAR	X01
47	18	Thermal	2007/11/20	Compal	No need for PWR_MON_GFX for DSC platform: SCH165450	un-stuff R1005	X01
48	20	CRT/ESD	2007/11/20	Compal	No stuff CRT ESD Diode D5, D6, D7: SCH165453	No stuff CRT ESD Diode D5, D6, D7	X01
49	55, 56	GDDR	2007/11/20	Compal	Chnage to NB9P, CLK Shunt Resistors Change Value: SCH165454	R750, R824, R871, R872 change to 475ohm 1%	X01
50	51	GPU	2007/11/20	Compal	need to add two series resistors for CA_DET: SCH165454	add R1010, R1011 Ohm, un-stuff	X01
51	12, 13, 20 51, 53	NB/GPU	2007/11/20	Compal	TV Function Remove from M09 Platform: SCH165454	NB: page12 U2 pinC31/E32 --> NC NB: page13 U2 pinM25 to GND, pinL28 to +1.5V RUN after a Bead (L49) SW: page20 U4 7B1/8B1/9B1, 7B2/8B2/9B2 --> NC and remove R669/R762/R763 GPU: page51, delete R679, C737. U56 pinAA4/Y4/AB4/AB6/AC5 NC GPU: page53, delete DACB: C867, C868, C869, C1031, L49, and add R1012 10K pull down DACB at pinAC6 U56 GPU pinD5/E5 I2CE_SCL/SDA add R709/R1013 10K pull up, but depop	X01
52	51	GPU	2007/11/20	Compal	Nvidia FAE suggest for I2C E channel pull up: SCH165454	U56 GPIO5 --> GPU_VID_0 GPIO6 --> GPU_VID_1	X01
53	51	GPU	2007/11/20	Compal	Nvidia GPU set threes different power level: 1.17V, 1.09V, 0.9V: SCH165454	U56 GPIO5 --> GPU_VID_0 GPIO6 --> GPU_VID_1	X01
54	35	DOCK	2007/11/20	Compal	DOCK pin out to support Battery Slice: SCH165449	JDock1 pin41 add net : +NBDOCK_DC_IN_SS	X01
55	30	LOM	2007/11/20	Compal	Remove Termination resistors capacitors and LED serial resistors: SCH165456	Remove MDI termination R384-R391, C488-C491, R395, R396, R397 move to IO Board	X01
56	18	EMC4002	2007/11/21	Compal	EMC4002, Power SW pin separate : SCH165450	Add AND Gate: U70 and C1014, R143/R144 depop	X01
57	29, 33, 35	LOM	2007/11/21	Compal	Intel LOM LDO for +2.65V/+2.5V: SCH165456	page29: Add LDO Q101/Q103, R959-R962, C1010-C1012 page33: IO connector pin36 change to +LOM_VCT page35: Dock pin116/118 change to +LOM_VCT	X01
58	30	LOM SW	2007/11/21	Compal	Change MDI bus Bead Value at L20 ~ L27 from 36nH to 22nH: SCH165456	Change MDI bus Bead Value at L20 ~ L27 from 36nH to 22nH, will improving the IEEE	X01
59	33	USB Port 2	2007/11/21	Compal	USB SW Vendor Suggest Change Design: SCH165434	USB Port Two Connection Changed for Port2: SB --> Switch--> Choke --> Connector, and Switch Chip close to SB	X01
60	21	DP	2007/11/21	Compal	Proper Compoments Derating	D10 change change to B0540WS-7_SOD323-2	X01
61	53	GPU Power	2007/11/21	Compal	Change from Nvidia NB8P to NB9P, remove some parts: SCH165457	For +IFPC_IOVDD remove Q127, R940, Q128, PJP43	X01
62	53	GPU Power	2007/11/21	Compal	pop for NB9P on +IFPE_IOVDD/ +IFPEF_PLLVDD: SCH165457	+IFPE_IOVDD: L70, C1000, C1001, C1004 +IFPEF_PLLVDD: L71, C1006, C1007, C1008	X01

PROPRIETARY NOTE: THIS SHEET OF ENGINEERING DRAWING AND SPECIFICATIONS CONTAINS CONFIDENTIAL TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF DELL INC. ('DELL') THIS DOCUMENT MAY NOT BE TRANSFERRED OR COPIED WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF DELL. IN ADDITION, NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT DELL'S EXPRESS WRITTEN CONSENT.



DELL CONFIDENTIAL/PROPRIETARY

Title Changed-List History -2

Size	Document Number	Rev
	LA-4051P	1.0
Date:	Thursday, June 05, 2008	Sheet 58 of 63

Version Change List (P. I. R. List) <http://laptopblue.vn>

Item	Page#	Title	Date	Request Owner	Issue Description	Solution Description	Rev.
63	38	MEC5035	2007/11/21	Compal	Change Netname following Power Circuit Changed: SCH165437	"ACAV_IN_DOCK" to "ACAV_DOCK_SRC" "ACAV_IN_DOCK#" to "ACAV_DOCK_SRC#" "ACAV_IN_MB/DOCK" to "ACAV_IN" Remove U64, C846, add U71, C1031	X01
64	37	MEC5028	2007/11/21	Compal	DF174483: [SSI2]The LCD/LED will keep had power with USB device when unplug AC & Battery.	1) Add 100k no pop pull-ups to +3.3V_ALW2 on: - USB_SIDE_EN# - ESATA_USB_PWR_EN# - USB_POWERSHARE_PWR_EN# 2) No stuff R502, R923, R929.	X01
65	37	MEC5028	2007/11/21	Compal	Change PU/PD on SYS_LED_MASK#: SCH165431	add R1014 100k PD	X01
66	36	USH	2007/11/21	Compal	Remove unnecessary parts on contact less: SCH165435	Remove R495, R499	X01
67	51	GPU	2007/11/21	Compal	Need to depop R855/R892 to pass HDMI spec: SCH165454	depop R855/R892	X01
68	27, 36	Crystal	2007/11/21	Compal	Y3 Y5 is not PSL parts: SCH165458	Update Y3, Y5 to PSL parts	X01
69	24, 29, 37	Crystal	2007/11/22	Compal	LAN_PHY_DISABLE# Change net name same with Roush: SCH165431	Change net name to LAN_DISABLE# for SB GPIO12 to PHY, and pass a 0ohm resistor for "LAN_DISABLE#_R" to ECE5028 GPIOG0	X01
70	7	CPU Quad Core	2007/11/22	Compal	Bom Separate for Avia and Maybach DSC for CPU: SCH165460	Change the R976- R983, R984, R941-R946 Q129, Q14 to 1@, then Avia Bom Stuff. MaybachDSC un-stuff Camera net name update to "+CAMERA_VDD"	X01
71	19	Camera VDD	2007/11/22	Compal	Camera net name update: SCH165461	U28 chnage to TI TPS2051BDBVR_SOT23-5	X01
72	31	PCMCIA	2007/11/22	Compal	Change SD Card Power Switch for PSL: SCH165463	JSD1 change to 16pin cable type connector, same with touchpad connector	X01
73	31	PCMCIA	2007/11/22	Compal	JSD1 connector changed from FPC type to Cable type: SCH165464	JBI01 change to "TYCO_1734242-6_6P-T"	X01
74	33	BIO	2007/11/22	Compal	BIO connector change to another part: SCH165464	JDOCK1 change to JAE_WD2F144WB1	X01
75	35	Docking	2007/11/22	Compal	Docking Connector Change Layout Symbol: SCH165449	JCS1 Contact Less Connector Changed to Tyco_1-1775784-0	X01
76	36	Contact Less	2007/11/22	Compal	Contact Less Connector Changed: SCH165435	We use I2C codec, no more for SPI Audio Codec, R329 can remove	X01
77	27	I2C Codec	2007/11/27	Compal	Reduce one components R329 for I2C Codec fixed: SCH165467	R845/R844 pop, delete R847/R846	X01
78	36	USH	2007/11/27	Compal	use B0 USH BCM5880 Chip, resistors setting changed: SCH165435	delete components: R307/R308/R309/R295/R305/R304/R306/C329/U13	X01
79	24	SPI/ICH9	2007/11/27	Compal	no more for 2nd SPI Rom, save board space: SCH165469	Add R1015-R1020 on ITP BPM#0-BPM#5, and depop first. Then we need hand soldering when we want use ITP	X01
80	7	ITP	2007/11/29	Compal	ESD suggest add 0-ohm resistors on ITP bus: SCH165507	remove D1/R122	X01
81	13	NB	2007/12/03	Intel	SCH165564, Intel provide remove D1/R122	(1) R788 SP TPM LPC_EN pull up pop (2) R490 depop (3) R472 resistor 100ohm (4) R829, depop R467 for B0 version (5) depop R849, due to Broadcom no need detect SC DET (6) R476 change to 5.1M, R488 change to 3.3M to reduce power consumption (7) depop C594 (8) add R1027 47K pull down	X01
82	37, 36	USH	2007/12/04	Broadcom	Broadcom Review Result	(1) PEX_IOVDDQ add C1035 1uF (2) PEX_IOVDD add C1034 (3) remove C778 (4) R699, R700, C755 no stuff (5) FBVDDQ C820 to 1u and add one C1036 (1u) (6) +FBVDDQ all 0.022u to 4700p, done (7) +FB_DLLAVDD add C1033 4.7u (8) +GPU_PLLVDD C850 change to 0.1u (9) +GPU_PLLVDD add C1037 4.7u (10) strap pin define change, STRAP0: Not stuff R933; Stuff R920 with 45.3K 1%. STRAP1: Not stuff R921; Stuff R934 with 10K 1%. (13) C982 Remove (14) Add pull down resiter on MIOA_CAL_PU_GND R1026 and not stuff (15) Add 10K pull down on MIOB_CLKIN R1021 (16) I2CE_SCL/SDA: Change R709 and R1013 to pull up +3.3V_RUN (17) I2CS_SCL/SDA: Add 10K pull up on I2CS_SCL. (18) R696 pop	X01
82	51, 52, 53, 54	Graphic	2007/12/04	Nvidia	Nvidia Review result	Qimonda 16Mx32 : Not stuff R931, Stuff R927 with 10K 1%. Hynix 16Mx32 : Not stuff R931, Stuff R927 with 15K 1%. Samsung 16Mx32 : Not stuff R931, Stuff R927 with 20K 1%. Qimonda 32Mx32 : Not stuff R931, Stuff R927 with 30K 1%. Hynix 32Mx32 : Not stuff R931, Stuff R927 with 35K 1%. Samsung 32Mx32 : Not stuff R931, stuff R927 with 45.3K 1% ROM_SO_GPU: Not stuff R928, Stuff R930 with 4.99K 1% (11) Add R1022 40.2K 1% on STRAP_REF_MIOB (12) Add R1023 40.2K 1% on STRAP_REF_3V3. (13) C982 Remove (14) Add pull down resiter on MIOA_CAL_PU_GND R1026 and not stuff (15) Add 10K pull down on MIOB_CLKIN R1021 (16) I2CE_SCL/SDA: Change R709 and R1013 to pull up +3.3V_RUN (17) I2CS_SCL/SDA: Add 10K pull up on I2CS_SCL. (18) R696 pop	X01
82	28	Audio	2007/12/05	IDT	IDT Audio Reference changed	R818. R827 change to 1K_0402	X01

DELL CONFIDENTIAL/PROPRIETARY

Compal Electronics, Inc.

Changed-List History-3

LA-4051P

Date: Thursday, June 05, 2008

Sheet 59 of 63

PROPRIETARY NOTE: THIS SHEET OF ENGINEERING DRAWING AND SPECIFICATIONS CONTAINS CONFIDENTIAL TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF DELL INC. ("DELL") THIS DOCUMENT MAY NOT BE TRANSFERRED OR COPIED WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF DELL. IN ADDITION, NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT DELL'S EXPRESS WRITTEN CONSENT.



Version Change List (P. I. R. List)

<http://laptopblue.vn>

Item	Page#	Title	Date	Request Owner	Issue Description	Solution Description	Rev.
83	32	CardBus/Express	2007/12/6	Ricoh	Ricoh review result	(1) CBS_CCD1#/CBS_CCD2# add C1038/C1039 270pF pull down (2) U52 +1.5V_CARD add C1041, +3.3V_CARDAUX ADD C1040 10uF_0805 (3) R657, R684, R790 depop, because chip internal have been pull up	X01
84	24	LOM	2007/12/10	Intel	Per Intel message, no use GPIO12 to control LAN_DISABLE#, then reserve to pull up	add R1028 pull up +3.3V_ALW_ICH, depop	X01
85	37, 38	EC	2007/12/10	Dell	INSTANT_ON_SW# design change (W1165505)	INSTANT_ON_SW# change design to add R1029, R1030, R1031, then depop R560, D4, C827, R20	X01
86	23, 51	SB/VGA	2007/12/10	Compal	HDMI Over Audio source changed, because it will impact S3 resume. HDMI source change from SPDIF	Depop R673, R674, R675, R676, R678, R243, R244, R245, R246.	X01
87	27	Codec	2007/12/12	Compal	IDT codec review result to change C408 - C411	Value from 1uF to 2.2uF	X01
88	18,21,37,38	EMC4002, DP	2007/12/13	Compal	The VCC tied to logic gate VCC isn't correct.	Change U70,U66,U71,U62,U14 from 74AHCT to 74AHC part. (VCC pin spec = 3.3V)	X01
89	35	DP	2007/12/17	Dell	SCH166257: DOCK_DET# add pull 100K	add R1033 100K, and depop R124	X02
90	38	DOCK/5035	2007/12/17	Dell	TASK166259: update GPIO Map	signal ACAV_DOCK_SRC# can be removed from the 5035	X02
91	29	LOM PHY	2007/12/17	Dell	SCH166263: De-pop R1004 for control LAN PHY enable from BIOS setting	De-pop R1004	X02
92	42	LED	2007/12/17	Compal	SCH165444: add D66 for +5V_RUN back drive issues	add D66 between Q151 and Q97	X02
93	18	+2.5V LDO	2007/12/17	Compal	SCH166267: Disable EMC4002 LDO for +2.5V_RUN	add R1034 10K pull low, and de-pop R149, C238, C239	X02
94	19	DP	2007/12/17	Compal	SCH166272: De-populate D10 with a 0ohm Resistor	D10 footprinter can't stuff for 0805 or 1210, reserve a 1210 resistor footprint first: R1035	X02
95	42	LED	2007/12/17	DELL	SCH166275: Mask signals for NUM/SCRL/CAPS LEDs	Add Q154/R1036 to control NUM/SCRL/CAPS LED on/off, R1036 de-pop	X02
96	33, 38	USB	2007/12/17	DELL	SCH166278: Update cell charger detect circuit	add D67/D68 R1037, del R986, update C1021 to 1uF	X02
97	6, 8, 24	CLOCK, CPU, ICH	2007/12/17	DELL	SCH166282: intel NOA tests points compliance	add R1038-R1042 on PT2	X02
98	33	eSATA	2007/12/17	Compal	SCH166284: eSATA add Repeater Chip	eSATA repeater for ICH to eSATA trace over 5inch issues, add U72, C1042-C1045, R1043-R1048, Q155. U72 change to P12EQX3201BZFE	X02
99	37	5035	2007/12/17	Compal	SCH166316: PT2 change to X02 BID	PT2 change the BID for X02: R530, R534 pop. R535, R529 de-pop	X02
100	35	Dock	2007/12/21	Compal	SCH166435: Hot Docking then Docking side Adapter Protect	add D70 and R1057 on docking connector, and add C1055, R1059. MEC5035 pin41 change to "DOCK_POR_RST#" to dock pin140	X02
101	9	CPU Bulk Caps	2008/2/4	Power	SCH166160: CPU Bulk change to 270u 4.5mohm to support QC CPU	C56-C61 change to 270U_D_2VM_R4.5M-D, C58, C61 depop	X03
102	21	DP	2008/2/13	Dell	SCH168227: DP Circuit Separate to Two Path for DP and DVI	Add C1056, C1057, R1060-R1063, Q155, Q156, U73, U74	X03
103	24, 36	SB (TPM), USH	2008/2/13	Dell	SCH168228: Disable TPM Strape pin on SB GPIO6	Add R304 (3@) pull low when disable TPM Strap, and depop R273. And USH Depop D71, R1058 (4@) Pop R489 (3@)	X03
104	27	Audio	2008/2/13	IDT	SCH168229: Reduce distortion, hissing, noise, and "pops" when changing PC BEEP volume	Depop R328, and R327/R828 change to 499K	X03
105	35	Dock	2008/2/13	Power	SCH168230: Prevent System as Docking Always	Depop R1057	X03
106	13	NB	2008/2/13	Compal	SCH168231: Debug +3.3V_Run backdrive issues	Reserve R1065 and stuff	X03
107	37	ECES028	2008/2/13	Power	SCH168232: Power Battery Slice Issues	Add D72/R1067, and reserve R1066	X03
108	33	eSATA	2008/2/13	Pericom	SCH168233: Vendor Suggest Reserve Some Resistors on ESATA Repeater Chip	R1068-R1069 pop, and R1070-R1073 depop. And pop R1046 470ohm for SATA Eye	X03
109	36	USH	2008/2/13	Dell	SCH168234: USH USB Signals Damping Resistor Value	R468/ R469 change to 0ohm	X03
110	33	USB Switch	2008/2/13	Dell	SCH168235: USB Switch Add Resistor Reserve	Add R1074, R1075, depop	X03
111	42	LED	2008/2/13	Compal	SCH168236: Follow Roush Test Result for LED Current Spec	Change to 1K: R663, R125, R661, R1000, R668, R659, R556, R596, R655, R903, R665 Change to 82ohm: R997	X03
112	18	EMC4002	2008/2/13	SMSC	SCH168237: For Proper ESATA Power Consumption on EMC4002 +3.3V LDO	R152 Change to 0.82 1210	X03
113	6	Clock	2008/2/13	Dell	SCH168238: For Proper Ferrite Bead Power Rating	L1 change to BK2125HS601 500mA	X03
114	36	USH	2008/2/13	Broadcom	SCH168239: For USH Support Low Power	Pop R849	X03
115	10	NB	2008/2/13	Intel	SCH168045: Reserve for Intel Debug	add R1088, Depop	X03
116	37	ECES028	2008/2/13	Compal	SCH168043: X03 Board ID Updated	Pop R529 and Depop R534	X03
117	27	Audio	2008/2/15	ADI	SCH168240: ADI Suggest	(1) L18 change to BLM18EG601SN1D for wider high frequency coverage (2) U15 pin 12/18 combine together and add L72(BLM18EG601SN1D) (3) C391, C395, C406 change to 4.7uF_0603 (IDT suggest 10uF_0805 better, but the package is too big) (4) C392 remove	X03
118	27 36	Audio USH	2008/2/15	IDT Broadcom	Chip Version changed	(1) U32 USH change to C0 version (2) U16 IDT Audio change to 92HD71B7A5NLGXB3X8_QFN48	
119	24 36	SB USH	2008/2/15	Compal	TFM Disable to Common Resistors Location with UMA, R1064 --> R304, R483 --> R489		

PROPRIETARY NOTE: THIS SHEET OF ENGINEERING DRAWING AND SPECIFICATIONS CONTAINS CONFIDENTIAL TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF DELL INC. ("DELL"). THIS DOCUMENT MAY NOT BE TRANSFERRED OR COPIED WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF DELL. IN ADDITION, NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT DELL'S EXPRESS WRITTEN CONSENT.



DELL CONFIDENTIAL/PROPRIETARY

Changed-List History 4

Size	Document Number	Rev
	LA-4051P	1.0
Date:	Thursday, June 05, 2008	Sheet 60 of 63

Version Change List (P. I. R. List) <http://laptopblue.vn>

Item	Page#	Title	Date	Request Owner	Issue Description	Solution Description	Rev.
120	7	ITP	2008/2/18	Intel	Change Some ITP Resistors Value	ITP Resistors: R67 --> 27, R64 --> 39 , R66 -> 649, R65 --> 150, R57 --> 124	X03
121	33	eSATA	2008/2/18	Compal	SCH168046: Follow eSATA EA Result, Add the Parallel Resistor	R1046 pop 470ohm	X03
122	27, 28	Audio	2008/2/20	ADI/Dell	SCH168466 : ADI Suggest to Update Separate AGND and Audio Precision Spec Update	(1) ADI SSM2602 add AGND net, include Audio Codec 92HD71 (2) Audio Precision spec for SNR and THD+N update, then C436/C437 change to 10uF	X03
123	21	DP	2008/2/20	Dell	SCH168467 : More DP Components Changed	(1) R1060 / R1061 / R1062 / R1063 change to 10K (2) R897/R336/R898/R337/R1008/R1009 Depopulate (3) R193 to 5.11K (4) R1001 change to 1M	X03
124	27	Codec	2008/2/22	ADI/Dell	SCH168468 : update codec circuit for noise problem	(1) C401, change to 0.1uF (2) add C124,C329,R308,R309,C392,C481 (3) delete C397 (4) C408/C409 change to 0.22uF (5) C410/C411 change to 0.068uF (6) R340/R342 change to 100 ohm	X03
125	36	USH5880	2008/2/22	Compal	SCH168469 : add PI circuit for EMI issue	Add L73/L74/C1059/C1058	X03
126	18	EMC4002	2008/2/25	Compal	SCH168531 : chnge R153 value to meet the formula of Ra	R153 change to 3.16K	X03
127	33	USB2.0	2008/2/29	Compal	SCH168774 : To pop U51 per ESD testing result	pop U51	X03
128	23,29,36	ICH,USH,LAN	2008/2/29	Compal	SCH168777 : X'tal EA result to change some Caps value	C296/C297 from 15pF to 10pF;C475/C476 from 27pF to 12pF;C609/C608 from 22pF to 12pF	X03
129	8	CPU	2008/3/3	Dell	SCH168828 : QC BU issue	Pin AA7 of the CPU has to be NC and we connect it to +VCC_CORE	X03
130	27	Codec	2008/3/3	Compal/IDT	SCH168836 : Follow Roush to add R1091/R1092 for Audio noise	add R1091/R1092 (100 ohm)	X03
131	39	TP/KB/LID	2008/3/3	Dell	SCH168838 : M09 S3 backdrive issue	Touch pad vendor use 5VALW for SMBUS,to add R1093,Ro1094, and depop R594/R595	X03
132	23	ICH	2008/3/3	Compal	SCH168843 : 24MHz noise issue (EMI feedback)	pop C300,C302,C309	X03
133	7	CPU	2008/4/28	Compal	SCH170946 : change R944 from 2K to 1.74K	R944 from 2K to 1.74K	X04
134	7	CPU	2008/4/28	Compal	POP R785 to support Quad Core circuit	POP R785 (51 ohm)	X04
135	10	MCH	2008/4/28	Compal	SCH170947 : R82 & R95 value for Quad core , Dual Core	R82 for Avia is 16.9 ohm ; R82 for DSC is 24.9 ohm R95 for Avia is 75 ohm ; R95 for DSC is 100 ohm	X04
136	21,51	GPU,DP	2008/4/28	Compal	SCH170948 : ESD requirement	C984 & C983 from 0.1uF to 0.033uF	X04
137	24	ICH	2008/4/28	Compal	SCH170949 : Depop 2nd SPI ROM	Depop R329,R1044,R377,U13,R375,C484,R380,R381,R382	X04
138	27	Codec	2008/4/28	Compal	SCH170950 : DMIC_CLK EMI issue	We pop C485 and change R338 to L75(POP)	X04
139	27	Codec	2008/4/28	Compal	SCH170952 : Bypass double inverter of DAI_DI	follow Roush to bypass U18,U19. so we depop U18,U19,C418,C419, and add R762(0 ohm) to bypass it.	X04
140	35	eDOCK	2008/4/28	Compal	SCH170955 : Follow Roush to add R1095, R1096	add R1095,R1096	X04
141	37	ECE5028	2008/4/28	Compal	SCH170956 : change BID	depop R529, add R534 ; depop R530, add R535 ; add R531, depop R536	X04
142	40	PWR CTRL	2008/4/28	Compal	SCH170957 : add discharge circuit of 3.3VRUN	add R625(39 ohm), Q79	X04
143	18	EMC4002	2008/5/7	Compal	SCH171232 : FAN speed couldnt be detected issue	add D38	X04
144	42	LED	2008/5/7	Compal	SCH171235 : SNIFFER LED only support blue color led	depop Q100,R667	X04
145	23	ICH	2008/5/8	Compal	SCH171330 : WLAN detection issue	Follow Roush to add R84,R96 PD 10K ohm	X04
146	40	PWR CTRL	2008/5/27	Compal	SCH172015 : Follow Roush to change C688 value	From 4700pF to 3300pF	A00
147	37	ECE5028	2008/5/27	Compal	SCH172018 : BID to A00(1.0)	pop R529, depop R534	A00
148	7,18	CPU,EMC4002	2008/5/29	Intel/DELL	SCH172109 : to disconnect the Quad Core 2nd Thermal sensor	delete the traces, H_THERMDAL / H_THERMDC1, and delete C227, C228	A00
149	7,37	CPU,ECE5028	2008/5/29	Compal	SCH172115 : to modify the Quad Core detect circuit	(1) disconnect ECE5028 pin3, pin4. make it NC. (2) delete R941, and CPU pin F8 connect to R945 pin2, the net name is QUAD_REF_CTRL (3) R945 change to 10K, and R945 pin 1 change PU to +1.05V_VCCP (4) R943 pin 1 change PU to +3.3V_RUN	A00
150	24,38	ICH,MEC5035	2008/6/2	DELL	SCH172198 : re-route ODD_DET#	add a connection to MEC5035 pin34 also.	A00
151	29	82567LM	2008/6/6	DELL	SCH172398 : LOM IEEE test result from Intel	C475 & C476 from 12PF to 27PF to pass LOM IEEE test	A00
152	42	LED	2008/6/6	Compal	SCH172400 : Breath LED current issue	R997 from 82 ohm to 100 ohm for current limited	A00
153	24	ICH	2008/6/6	Compal	SCH172402 : SAWTOOTH waveform on SERIRQ issue	Add R122(33 ohm)	A00
154	36	USH5880	2008/6/13	BRCM	BRCM feedback for PI circuit	C1058/C1059 from 5% to 1% ; C641/C647 from 5% to 1%	A00

PROPRIETARY NOTE: THIS SHEET OF ENGINEERING DRAWING AND SPECIFICATIONS CONTAINS CONFIDENTIAL TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF DELL INC. ("DELL"). THIS DOCUMENT MAY NOT BE TRANSFERRED OR COPIED WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF DELL. IN ADDITION, NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT DELL'S EXPRESS WRITTEN CONSENT.



DELL CONFIDENTIAL/PROPRIETARY

Title
Changed-List History 4

Size	Document Number	Rev
	LA-4051P	1.0
Date:	Friday, June 13, 2008	Sheet 61 of 63

Version Change List (P. I. R. List)

<http://laptopblue.vn>

Item	Page#	Title	Date	Request Owner	Issue Description	Solution Description	Rev.
1	43	+DC_IN	11/24	leverage Roush	Battery slice need detect NB battery is insert or not.	Add PQ69 NTR4502PT1G, and PD32 RB751_SOD323 Connect to DOCK_SMB_ALERT# and SLICE_BAT_PRES#	
2	43	+DC_IN	11/24	leverage Roush	DCIN_CBL_DET# damage ECE5028	Add ESD diode PD17 DA204U_SOT323 at DCIN_CBL_DET# Series PR221 1K_0402_5% between PJPDC1, PIN1 and DCIN_CBL_DET# Parallel PC254 0.47uF_0402_6.3V on DCIN_CBL_DET#	
3	43	+DC_IN	11/24	leverage Roush	Roush component and rework changes for Dcoking test	PC4 change form 0.47uF_0805_25V to 0.1uF_0805_25V PR14 change form 240K_0402_5% to 1M_0402_5% PR17 change form 47K_0402_1% to 220K_0402_5% PR18 change form 47K_0402_1% to 22K_0402_5% PR342 change form 0_0402_1% to 100K_0402_5%	
4	48	Charger	11/24	leverage Roush	NB DC blocking MOSFET won't turn off when Dock AC insert.	Add PQ44 RHU002N06 control NB DC blocking MOSFET. Control singal is NB_AC_OFF Series PR284 200K_0402_1% between PQ44 PIN1 and ACAV_IN Add PD30 B540C parallel PQ34	
5	48	Charger	11/24	leverage Roush	Charger of ISL88731 will turn off When ACIN is no power	Add LM393 to replace ISL88731 ACOK function(PU11B)	
6	48 49	Charger Selector	11/24	leverage Roush	+PWR_SRC exist on Docking connector through the DOCK_DCIN_IS+ and -	Add PQ70 NTGD4161PT1G series DOCK_DCIN_IS+ and - Add PQ71 RHU002N06 to control PQ70 on/off	
7	48 49	Charger Selector	11/24	leverage Roush	A global signal name change for all notebooks	From "ACAV_IN_DOCK" to "ACAV_DOCK_SRC" From "ACAV_IN_DOCK#" to "ACAV_DOCK_SRC#"	
8	48	Charger	11/24	leverage Roush	SCH165050: Validate EMC4002 VIN1/VCP1/VCP2 for UMA & Discrete for PT1 SMT	Depop UL circuit.	
9	49	Selector	11/24	leverage Roush	PBATT DC blocking MOSFET won't turn off when Docking AC insert. It will cause Battery or adapter protect.	Add PD18 RB715F_SOT323, PD20 and PD19 RB751V_SOD323, PR329 100K_0402_5% PR328 and PR327 47K_0402_5%, PR326 and PR325 240K_0402_5% PQ75 2N7002DW-7-F_SOT363-6, PQ72 NTG6161PT1G_TSOP6 Extra net name add +NBDOCK_DC_IN_SS from Docking connector	
10	43	+DCIN	11/24	EE / SCH165224	follow HW change	To delete the RTC detection circuit	
11	52	Graphic	11/24	Compal	support Maybach DIS and AVIA	Add PR308 and PR309 to switch 1 phase or 2 phase.	
12	48 49	Selector charger	11/30	Dell	for slice function implement	change charger output to FB pin15 net name from PBATT+ to +VCHGR Add PQ41 PQ70 PR351 PR352 PR353 between +VCHGR and PBATT+	
13	47	Vcore	12/17	Intersil	transent to meet Intel IMVP6+	change PR116 from 1.69K to 1.18K,PC111 from 680p to 1000pF, PR113 from 332 to 232,PR121 from 82.5K to 162k, PC117 from 1500p to 680pF,PC120 from 220p to 180pF, PR122 from 14.7K to 12.1K,PR107 from 11.5K to 20k, PR130 from 1K to 2k,PC116 from 0.033u to 0.047u, PC112 from 0.033u to 0.01uF	
14	47	Vcore	12/17	Maxim	fix voltage too low when no load	change PR78,PR100,PR120 from 2K to 430 ohm Change PC89,PC103,PC119 from 0.22u to 1uF	

<http://hobi-elektronika.net>

File		
<Title>		
Size	Document Number	Rev
C	<Doc>	1.0
Date:	Thursday, June 05, 2008	Sheet 62 of 63

Version Change List (P. I. R. List)

<http://laptopblue.vn>

Item	Page#	Title	Date	Request Owner	Issue Description	Solution Description	Rev.
15	43	+DCIN	12/17	Dell	change DCIN connector for ESD issue of "DCIN_CBL_DET#"	from Molex_87437_0663 to MOLEX_87437-0763	
16	49	selector	12/24	Dell	AC adaptor crowbar when docking	Add PR354 330K ohm Add PR355: 0 ohm Add PQ77 RHU002N06	
17	49	Selector	02/19	Merle DELL	Fix BITS CR196131 and CR196130	Add PR363 1K_1206 and PC262 1U_0603_25V from +NBDOCK_DC_IN_SS to ground Add PD35 RB751S40T1_SOD523-2 from NB_AC_OFF# to ACAV_IN_NB	
18	47	+Vcore	02/19	Dell / Maxim	Reduce Ring-backwithin 20mV when change bulk caps from 4*220uF to 3*270uF (Maybach DIS)	PR129 change from 909 ohm to 825 ohm	
19	47	+Vcore	02/19	Maxim	Fix Jitter issue	change PR123 to 10_ohm change PC122 to PR320 10_ohm	
20	50	Graphic	02/19	Maxim	MAX17007 cold boot issue back up circuit if IC versin change can not catch ST schedule	Add PQ73 RHU002N06 Add PR296	
21	48	Charger	03/06	Compal	Delete non-use circuit	delete +DC_IN_SS to PR217 and PR217.	
22	49	Selector	03/06	Compal	For slice battery hot docking issue	Change PQ40 from IMD2AT to 2N7002DW change PR202 from240K_ohm ot 620k_ohm change PR204 from 47K_ohm to 33_ohm add PR222 390K_ohm and PR223 390K_ohm add PD34 RB751S40T1	
23	47	+Vcore	03/11	Maxim	For driver IC power down issue	Add PR321 PR322 PR323 from IC pin 2 to GND	
24	50	Graphic	03/18	Compal	hardware delete NET	delete NET 1.1V_RUN_ON delete PR305	
25	50	Graphic	4/23	Compal	EMI soultion	change PR168 to 2.2ohm	
26	50	Graphic	4/23	Compal	hardware change control mode	un-pop PR310 pop PR312 (un-pop PR311 pop PR313 for JAL21)	
27	50	Graphic	4/23	Maxim	MAX17007 version change	un-pop PQ73 RHU002N06 un-pop PR296	
28	47	Vcore	4/23	Maxim	JAL21 Driver IC power down issue need change resistor value	change PR321 PR322 PR323 to 33K	
29	48	Charger	5/23	Dell	For Dell M09 platform	Change PR135 to 24K PC256 to 100p	
30	50	Graphic PWR	5/23	Nvidia	support GLM3	PR288 change to 7.15K, PR290 change to 10K, PR289 change to 13.7K	
31	43	DC-IN	6/3	Compal	Glitch issue on SLICE_BAT_PRES#	Add PC257:SE074152K8L(S CER CAP 1500P 50V +-10% X7R 0402) between pin2 of PQ69 and GND.	
32	49	Selector	6/4	Compal	Reserve a pull high resistor between +3.3V_ALW2 and SLICE_BAT_PRES#	Add un-pop PR330:SD02847018L(S RES 1/16W 4.7K +-5% 0402) between +3.3V_ALW2 and PQ40B.5.	
33	48	Charger	5/21	Merle DELL	Reduce delay time between NB adapter removal and ACAV_IN_NB de-assert from 1.6mS to~400uS.	change PC256 from .1uF to 100pF. change PR135 from 100K to 24K.	
34	50	Graphic PWR	6/10	Compal	change PL18 to PSL	change PL18 from SM01001821L (Tai tech) to SM01002078L (KC)	

<http://hobi-elektronika.net>

File		
<Title>		
Size	Document Number	Rev
C	<Doc>	0.4
Date:	Friday, June 13, 2008	Sheet 63 of 63