

MODEL NAME : *PAR00*
PCB NO : *LA-6601P (DAA00002000)*
BOM P/N : *TBD*

Compal Confidential

Voyager

Schematic Document

Rev: 1.0(A00)

2010-11-30

@ : Nopop Component

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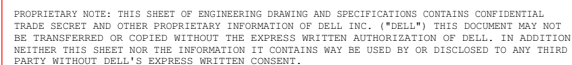


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Title		
Cover Sheet		
Size	Document Number	Rev
	LA-6601P	1.0
Date: Tuesday, November 30, 2010		
Sheet 1 of 83		

File Name : LA-6601P



Board ID Table for AD channel

Vcc	3.3V +/- 5%				
Ra	100K +/- 5%				
Board ID	Rb	VAD_BID min	VAD_BID typ	VAD_BID max	EC AD3
0	0	0 V	0 V	0.155 V	0x00-0x0C
1	8.2K +/- 5%	0.168 V	0.250 V	0.362 V	0x0D-0x1C
2	18K +/- 5%	0.375 V	0.503 V	0.621 V	0x1D-0x30
3	33K +/- 5%	0.634 V	0.819 V	0.945 V	0x31-0x49
4	56K +/- 5%	0.958 V	1.185 V	1.359 V	0x4A-0x69
5	100K +/- 5%	1.372 V	1.650 V	1.838 V	0x6A-0x8E
6	200K +/- 5%	1.851 V	2.200 V	2.420 V	0x8F-0xBB
7	NC	2.433 V	3.300 V	3.300 V	0xBC-0xFF

BOARD ID Table

Board ID	PCB Revision
0	0.1
1	0.2
2	0.3
3	0.4
4	1.0
5	
6	
7	

SMBUS Control Table

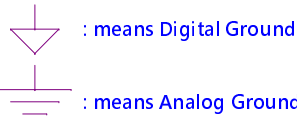
	SOURCE	MIINI1	BATT	MINI2	EXPRESS CARD	SODIMM	MXM
EC_SMB_CK1 EC_SMB_DA1	KB930	X	V	X	X	X	V
EC_SMB_CK2 EC_SMB_DA2	KB930	X	X	X	X	X	X
PCH_SMBCLK PCH_SMBDATA	PCH	V	X	V	V	X	X
MEM_SMBCLK MEM_SMBDATA	PCH	X	X	X	X	V	X

CLKOUT	DESTINATION
PCI0	PCH_LOOPBACK
PCI1	EC
PCI2	None
PCI3	None
PCI4	None

USB	USB PORT#	DESTINATION
	0	JUSB1
	1	JUSB2
	2	eDP CAMERA
	3	LVDS CAMERA
	4	JMINI1 (WLAN)
	5	JMINI2 (DMC)
	6	AlienFX/ELC
	7	IR SENSOR
	8	Bluetooth
	9	JESATA
	10	None
	11	None
	12	None
	13	None

CLK	DIFFERENTIAL	DESTINATION	FLEX CLOCKS	DESTINATION
	CLKOUT_PCIE0	None	CLKOUTFLEX0	None
	CLKOUT_PCIE1	10/100/1G LAN	CLKOUTFLEX1	CLK_14M
	CLKOUT_PCIE2	MINI CARD-2 DMC	CLKOUTFLEX2	None
	CLKOUT_PCIE3	MINI CARD-1 WLAN	CLKOUTFLEX3	None
	CLKOUT_PCIE4	CARD READER		
	CLKOUT_PCIE5	None		
	CLKOUT_PCIE6	USB 3.0		
	CLKOUT_PCIE7	None		
	CLKOUT_PEG_A	MXM		

Symbol Note :



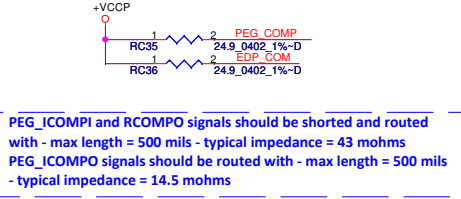
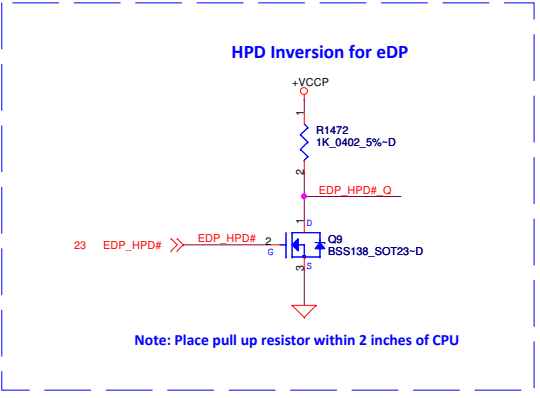
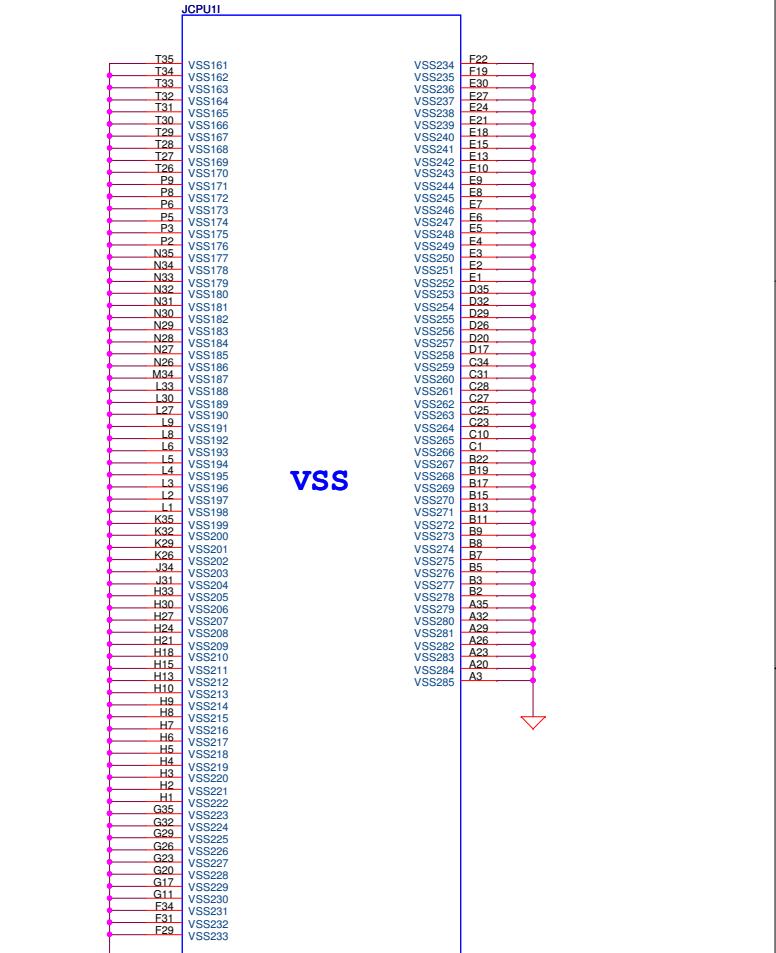
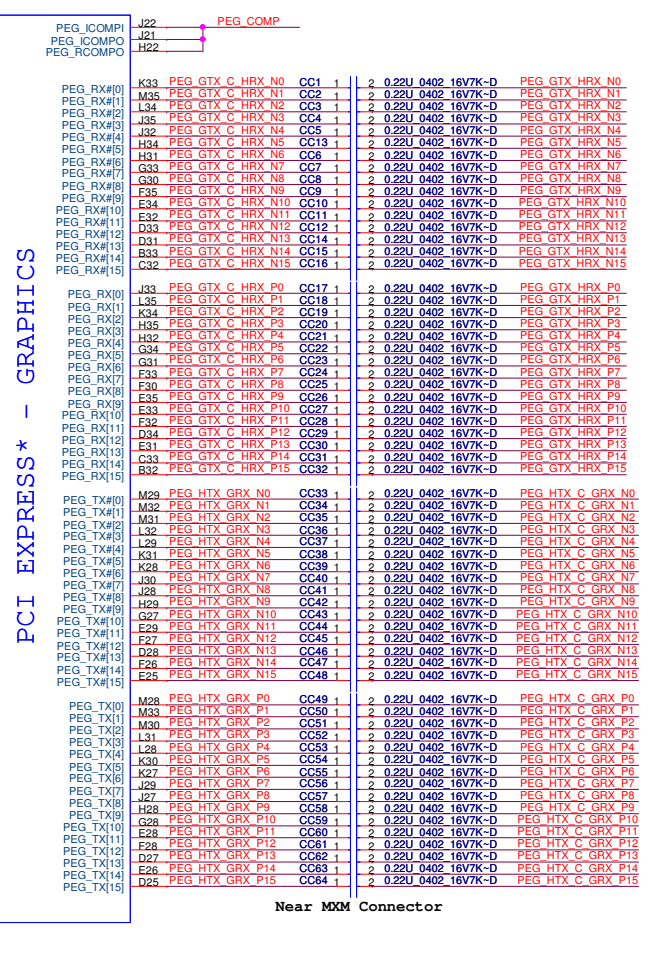
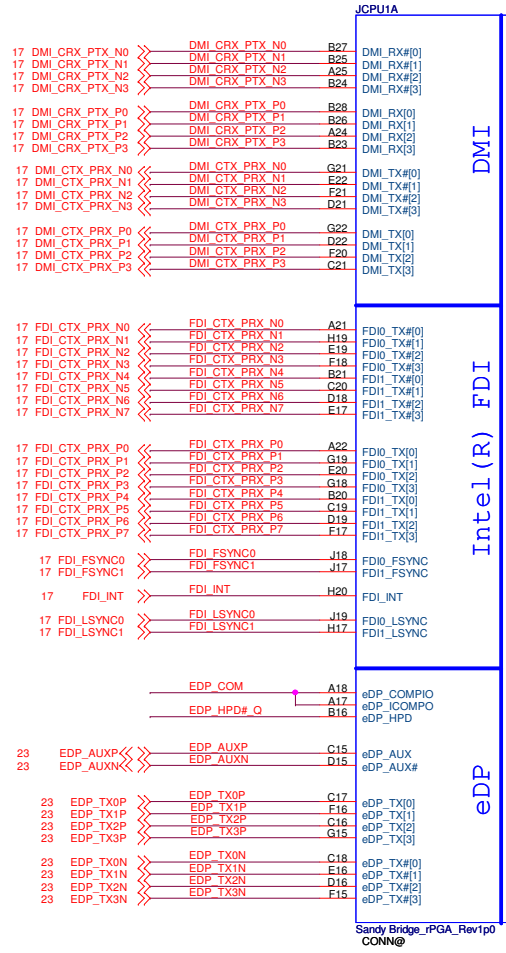
SATA	DESTINATION
SATA0	HDD1
SATA1	HDD2
SATA2	ODD
SATA3	NA
SATA4	ESATA
SATA5	None

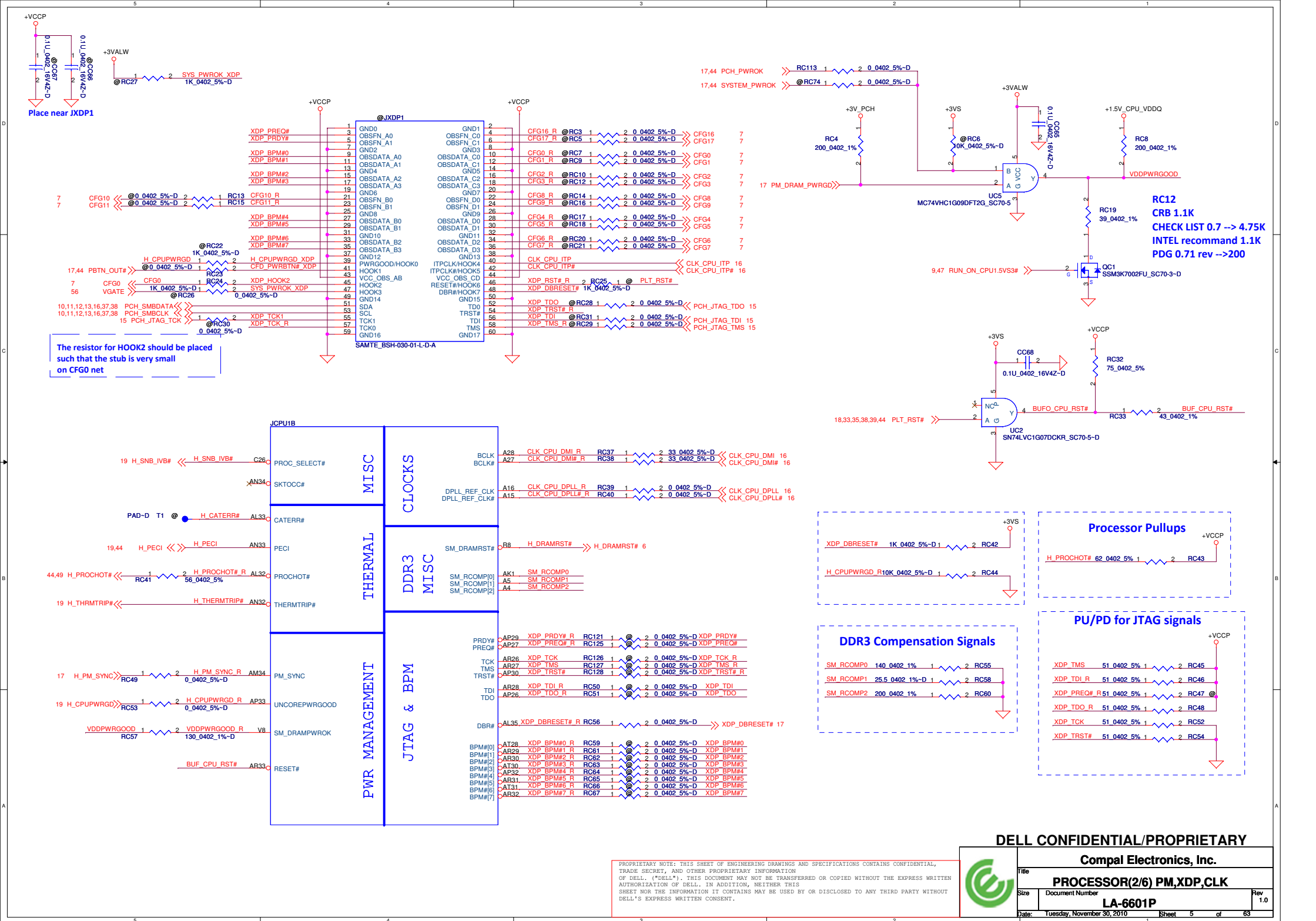
PCI EXPRESS	DESTINATION
Lane 1	10/100/1G LAN
Lane 2	MINI CARD-2 DMC
Lane 3	MINI CARD-1 WLAN
Lane 4	CARD READER
Lane 5	None
Lane 6	USB 3.0
Lane 7	None
Lane 8	None

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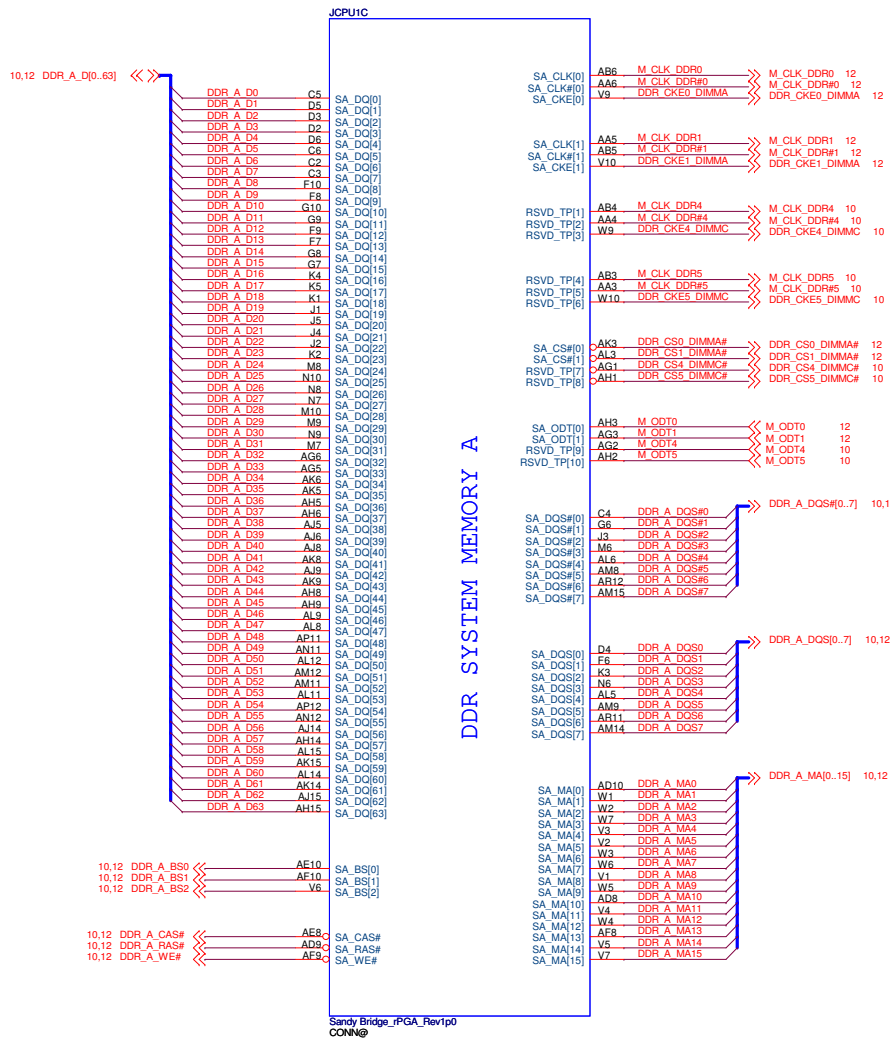
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Notes List			
Size	Document Number	Rev	
	LA-6601P	1.0	
Date:	Tuesday, November 30, 2010	Sheet	3 of 63

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Need to confired
when Intel spec release.



11,13 DDR_B_D[0.63] <<>

11,13 DDR_B_BS0 <<>

11,13 DDR_B_BS1 <<>

11,13 DDR_B_BS2 <<>

11,13 DDR_B_CAS# <<>

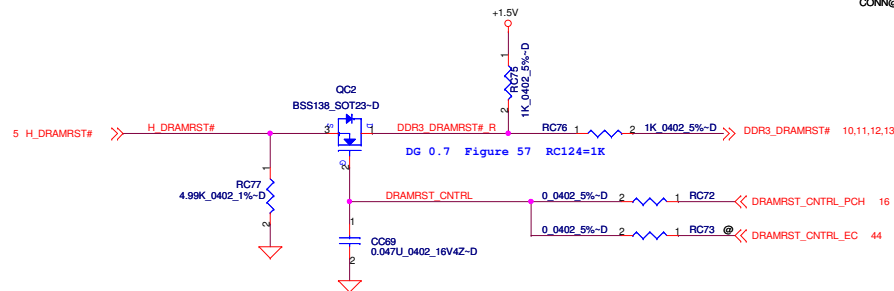
11,13 DDR_B_RAS# <<>

11,13 DDR_B_WE# <<>



DDR SYSTEM MEMORY A

DDR SYSTEM MEMORY B



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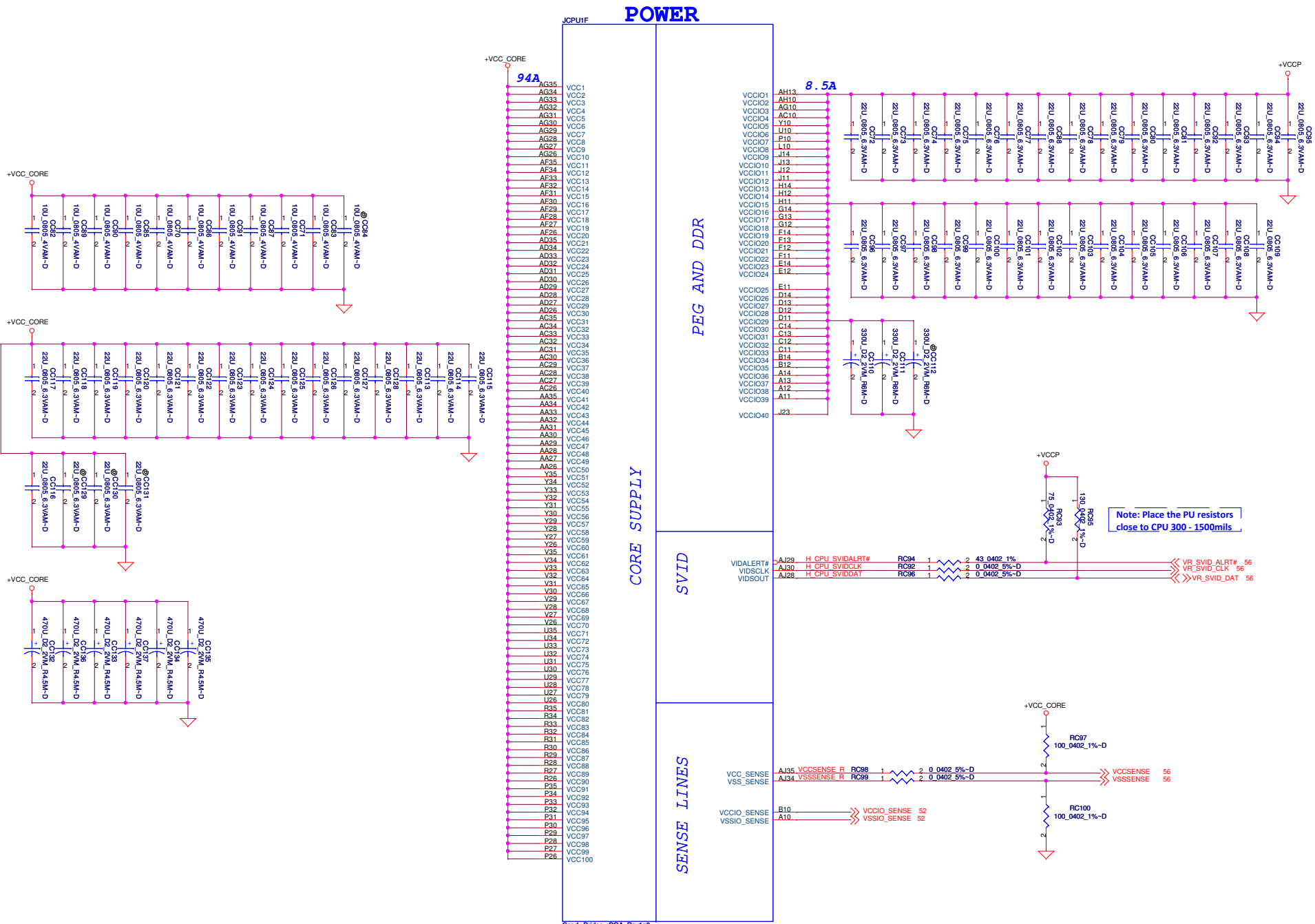
PROCESSOR(3/6) DDRIII

LA-6601P

Rev 1.0

Date: Tuesday, November 30, 2010 Sheet 6 of 63

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Note: Place the PU resistors close to CPU 300 - 1500mils

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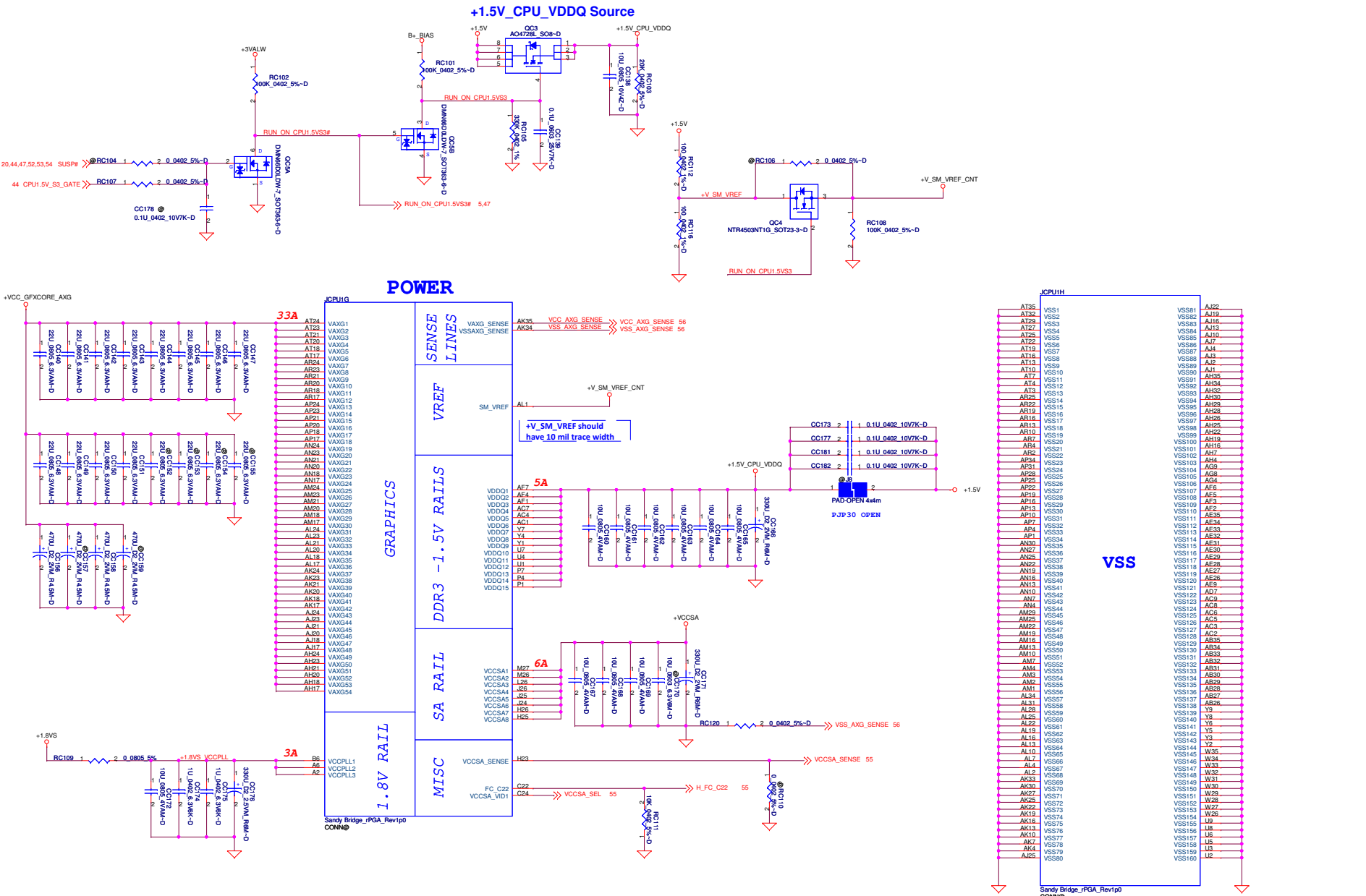
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PROCESSOR(5/6) PWR,BYPASS

LA-6601P

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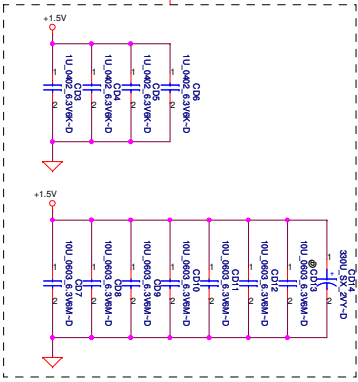




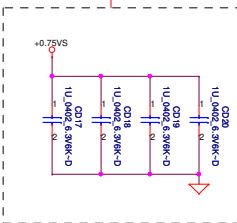
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6.12 DDR_A_DQS#(0..7)
6.12 DDR_A_DQS#(8..7)
6.12 DDR_A_DQS#(8..7)
6.12 DDR_A_MA(0..15)

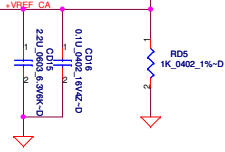
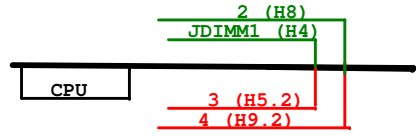
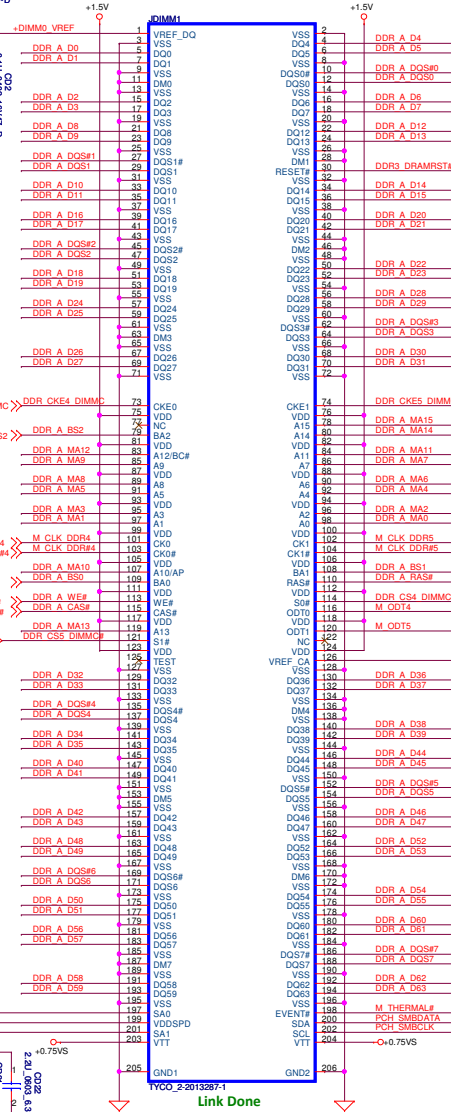
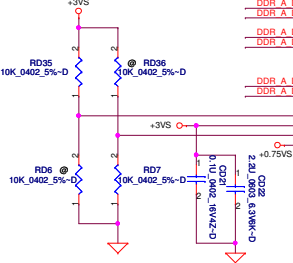
Layout Note:
Place near JDIMM1



Layout Note:
Place near JDIMM1.203,204



SA0	SA1	
1	0	DIMM1
1	1	DIMM2
0	0	DIMM3
0	1	DIMM4



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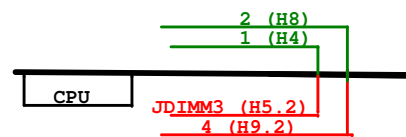
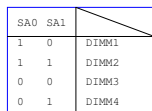
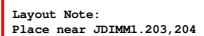
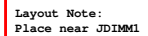
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DDRIII DIMMA

LA-6601P

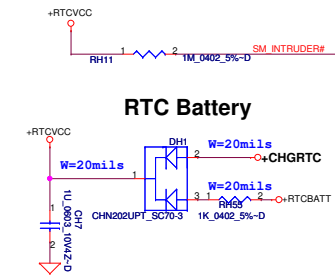
Document Number
Date: Tuesday, November 30, 2010
Sheet 10 of 63



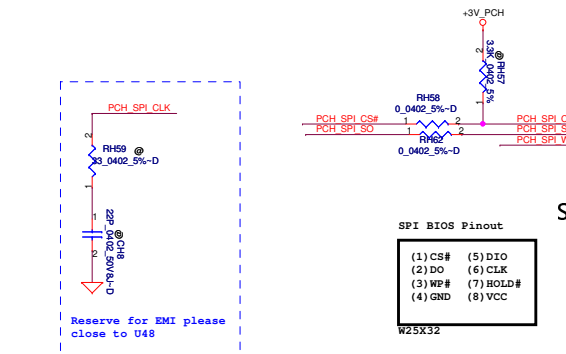
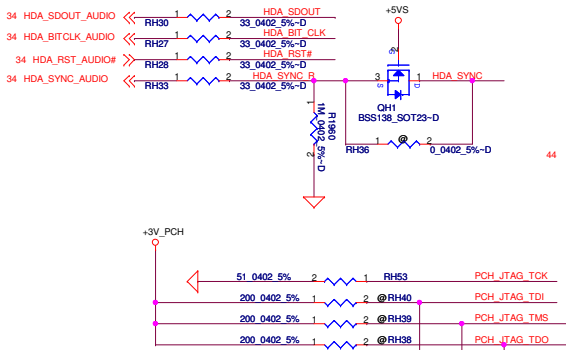
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RTC Battery

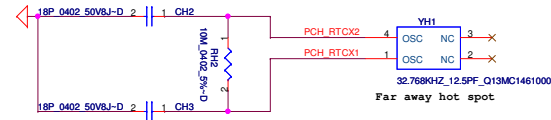
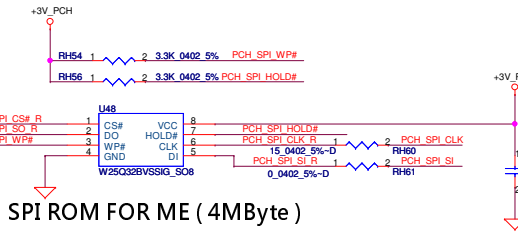


SPI BIOS Pinout

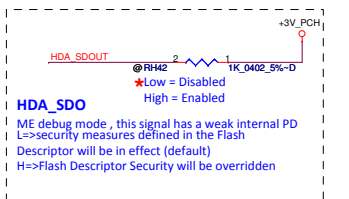
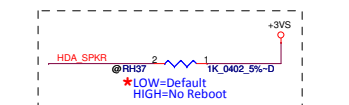
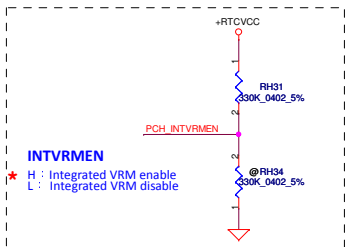
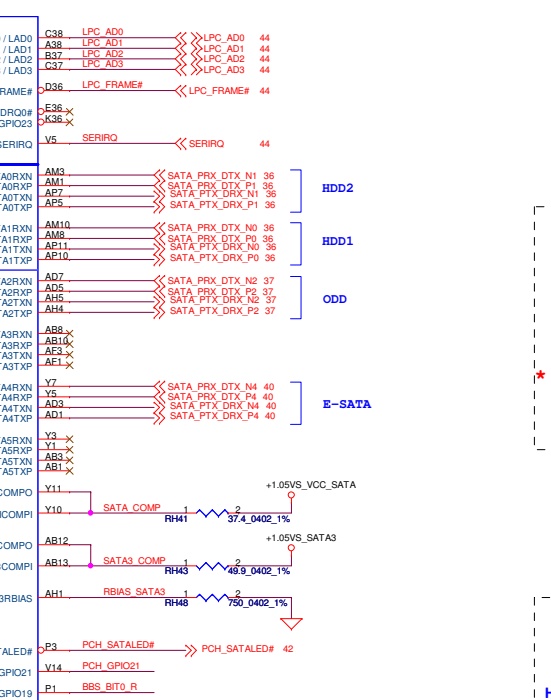
- (1) CS# (5) DIO
- (2) DO (6) CLK
- (3) WP# (7) HOLD#
- (4) GND (8) VCC

W25X32

SPI ROM FOR ME (4MByte)



Far away hot spot



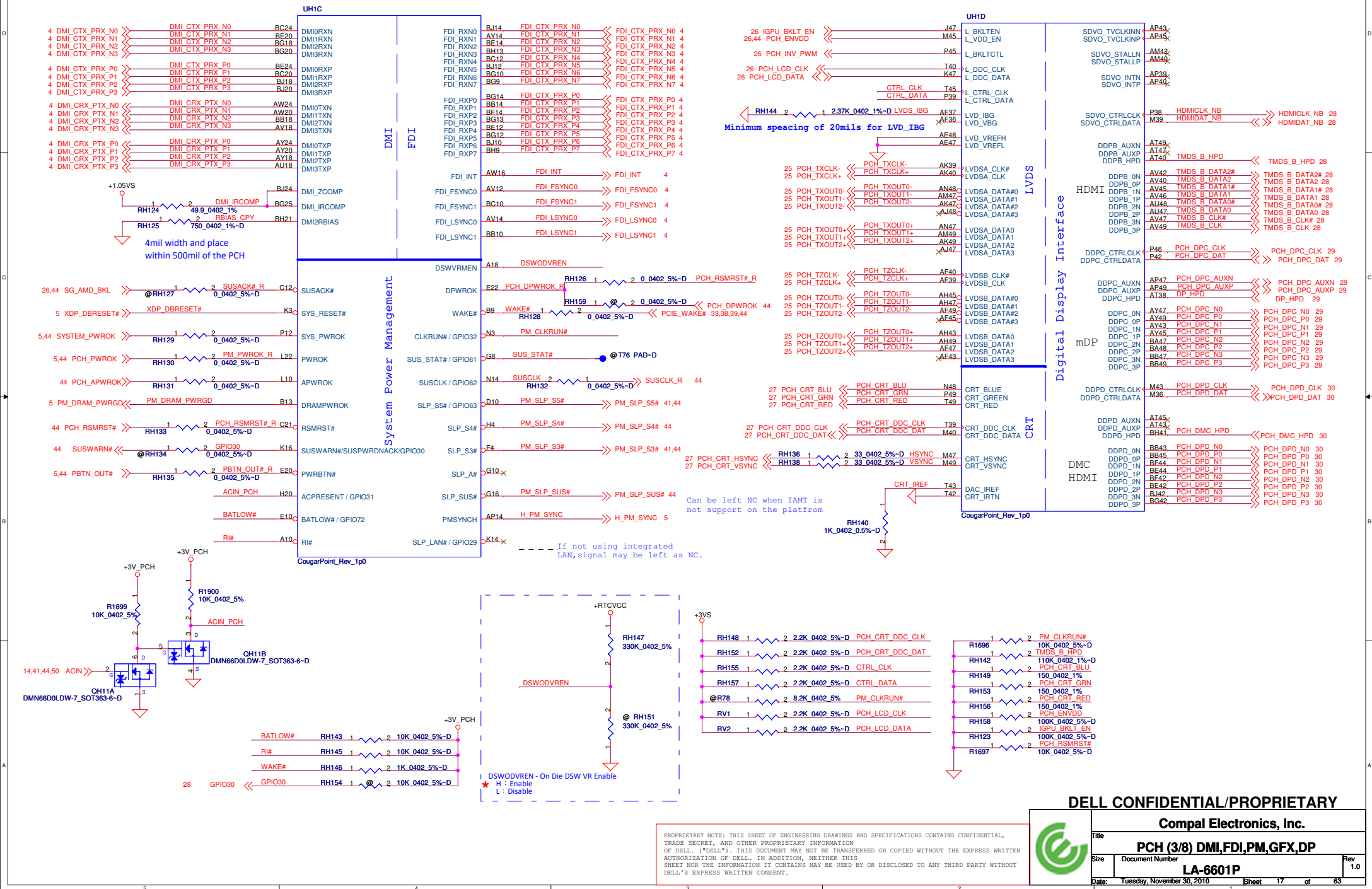
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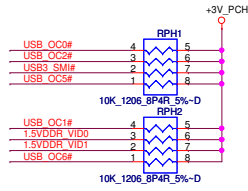
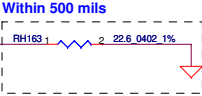
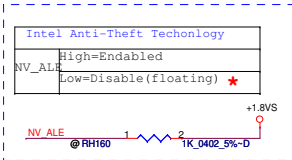
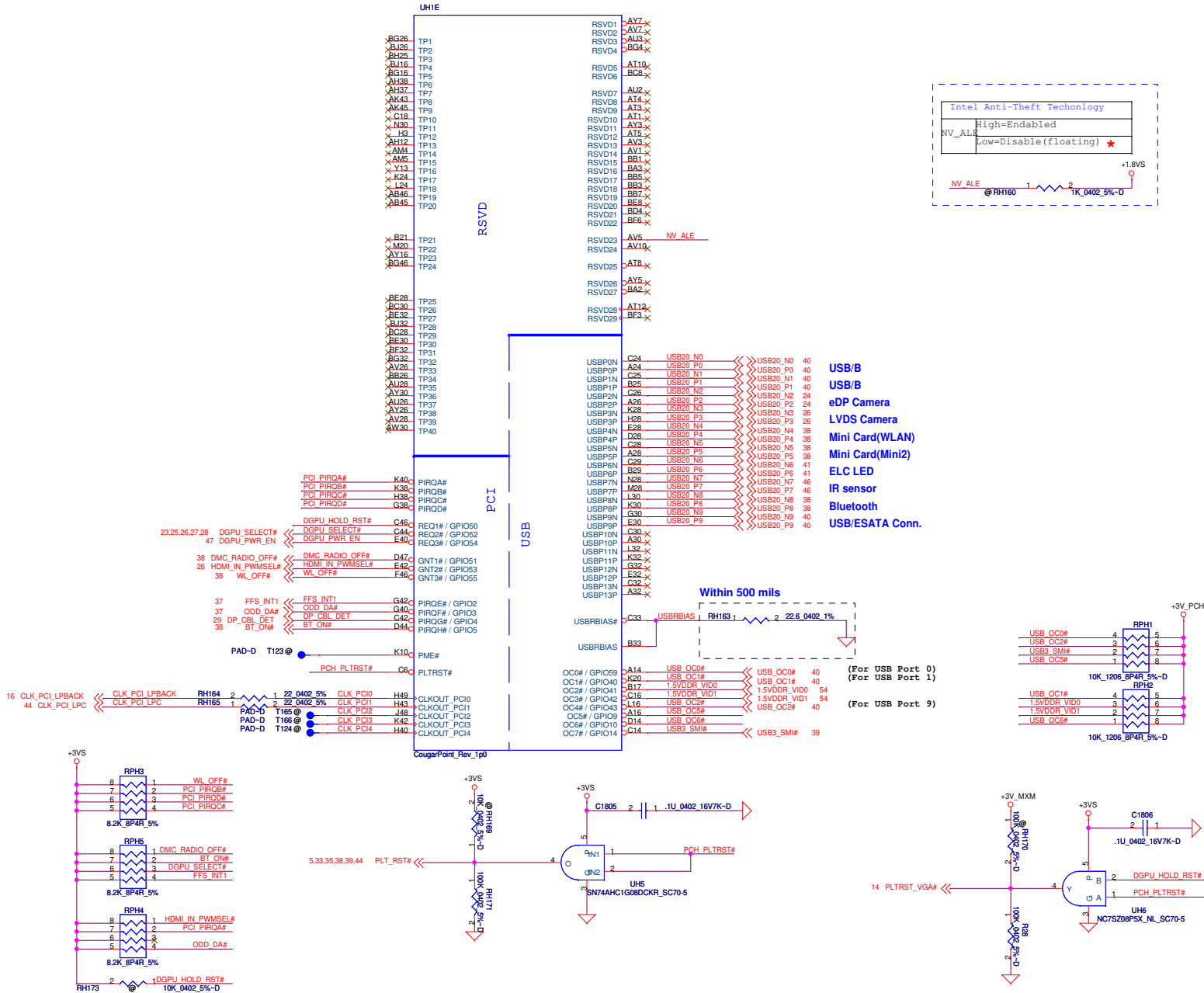
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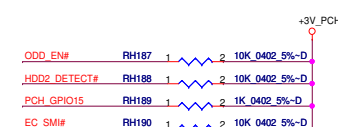
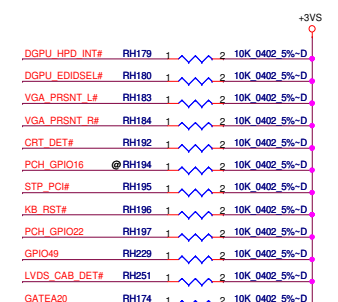
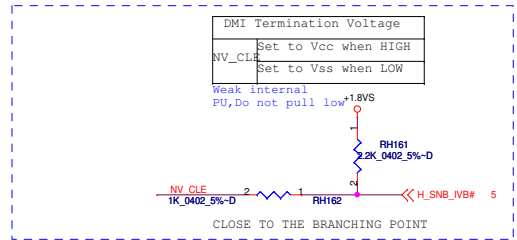
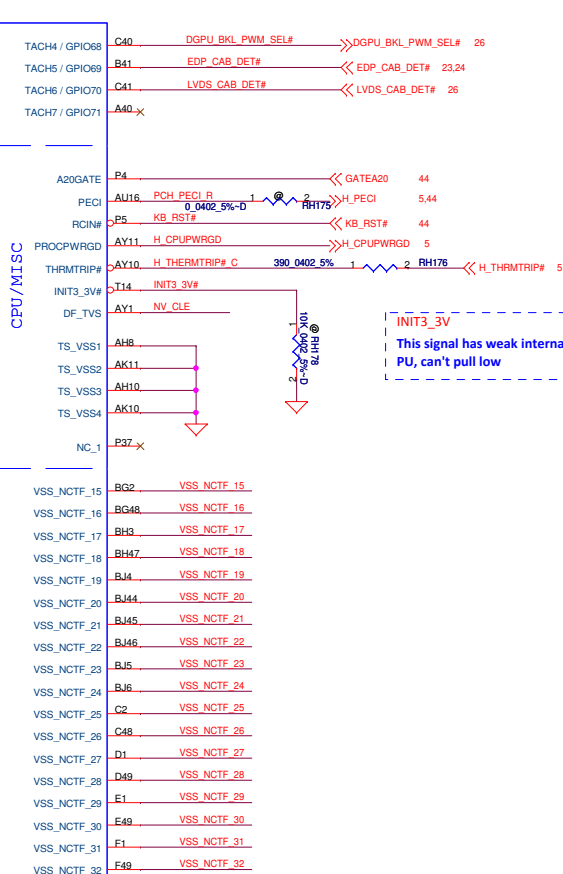
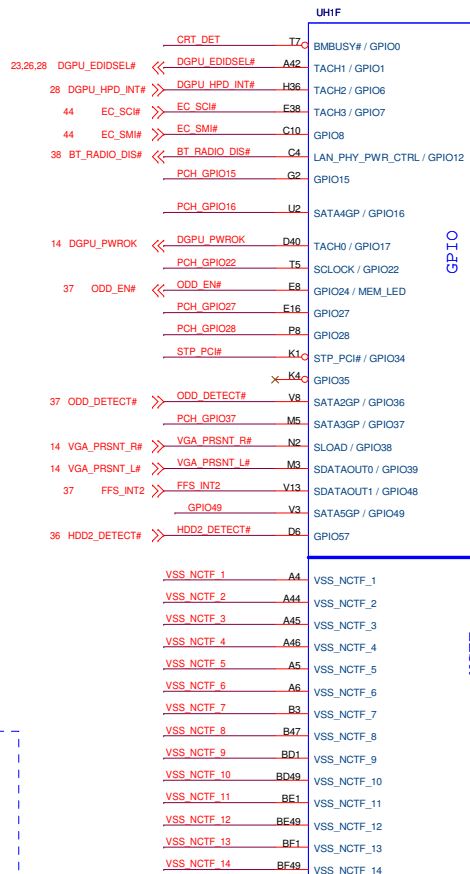
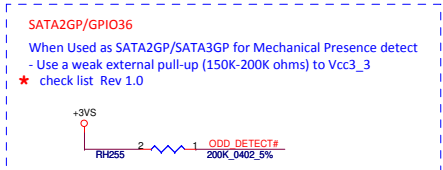
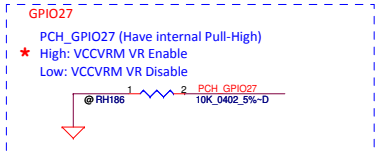
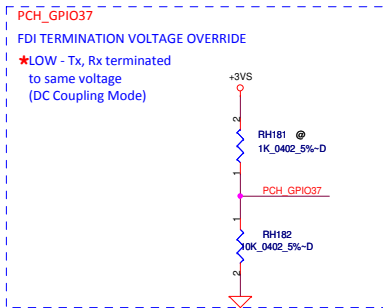
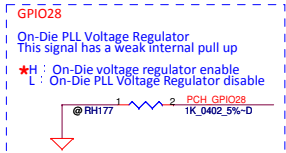
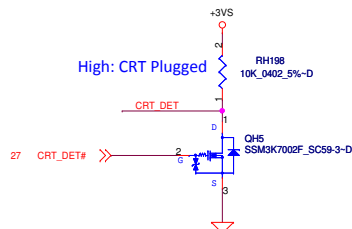


Title		PCH (1/8) SATA,HDA,SPI, LPC	
Size	Document Number	LA-6601P	Rev 1.0
Date:	Tuesday, November 30, 2010	Sheet 15	of 63

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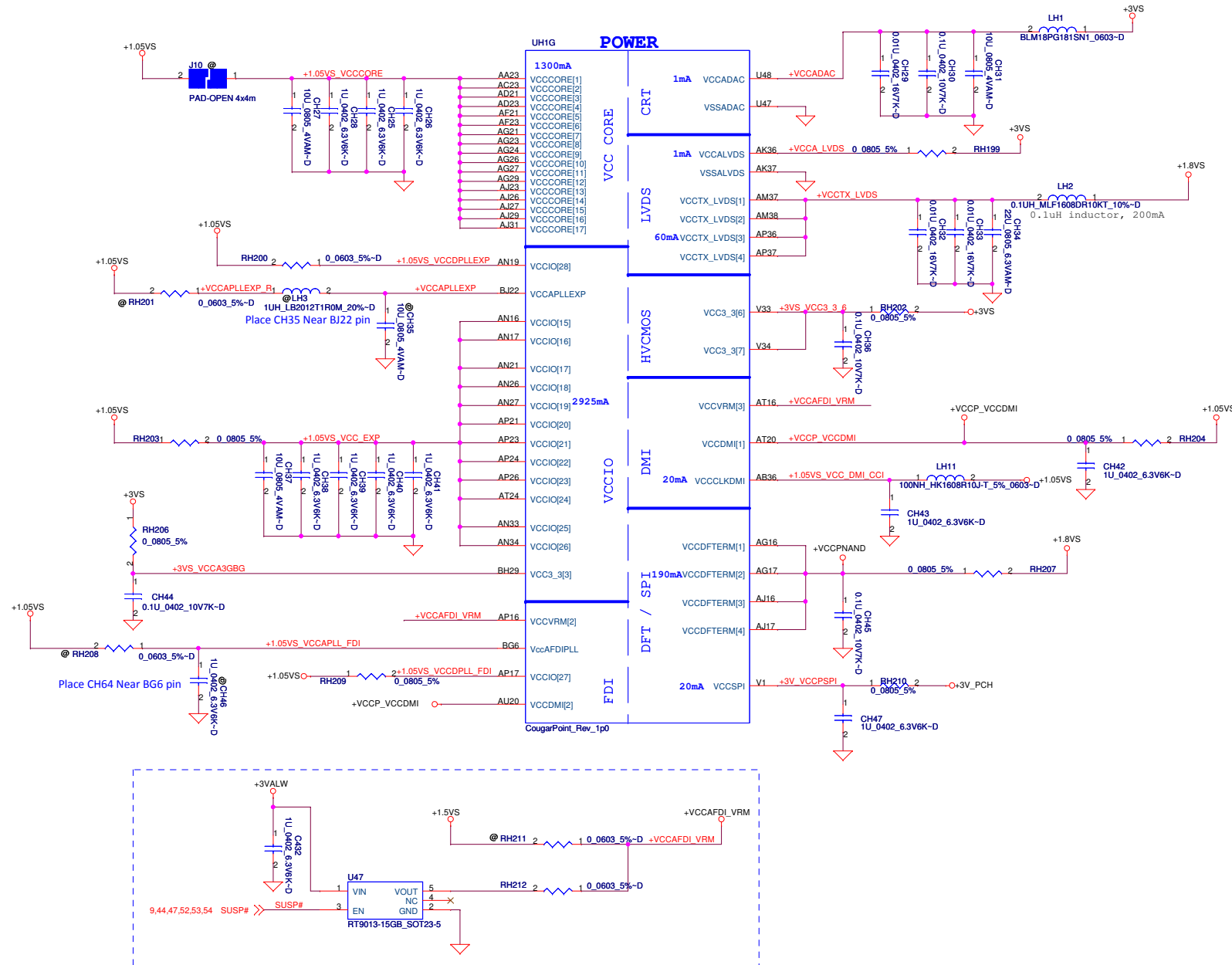
Layout note:
Trace wide 10mil & length 30mil
All NCTF pins should have thick traces at 45° from the pad.

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PCH (5/8) GPIO, CPU, MISC			
Size	Document Number	Rev	
	LA-6601P	1.0	
Date:	Tuesday, November 30, 2010	Sheet	19 of 63

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PCH Power Rail Table		
Voltage Rail	Voltage	S0 Iccmax Current (A)
V_PROC_IO	1.05	0.001
V5REF	5	0.001
V5REF_Sus	5	0.001
Vcc3_3	3.3	0.266
VccADAC	3.3	0.001
VccADFLA	1.05	0.08
VccADPLL	1.05	0.08
VccCore	1.05	1.3
VccDMI	1.05	0.042
VccIO	1.05	2.925
VccASW	1.05	1.01
VccSPI	3.3	0.02
VccDSW	3.3	0.003
VccpNAND	1.8	0.19
VccRTC	3.3	6 uA
VccSus3_3	3.3	0.119
VccSusHDA	3.3 / 1.5	0.01
VccVRM	1.8 / 1.5	0.16
VccCLKDMI	1.05	0.02
VccSSC	1.05	0.095
VccDIFFCLKN	1.05	0.055
VccALVDS	3.3	0.001
VccTX_LVDS	1.8	0.06

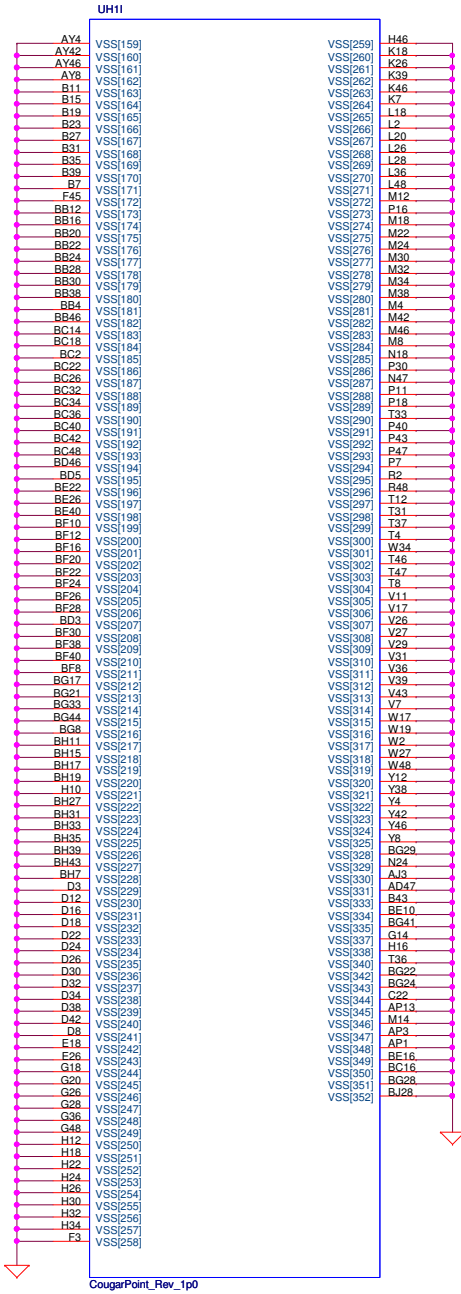
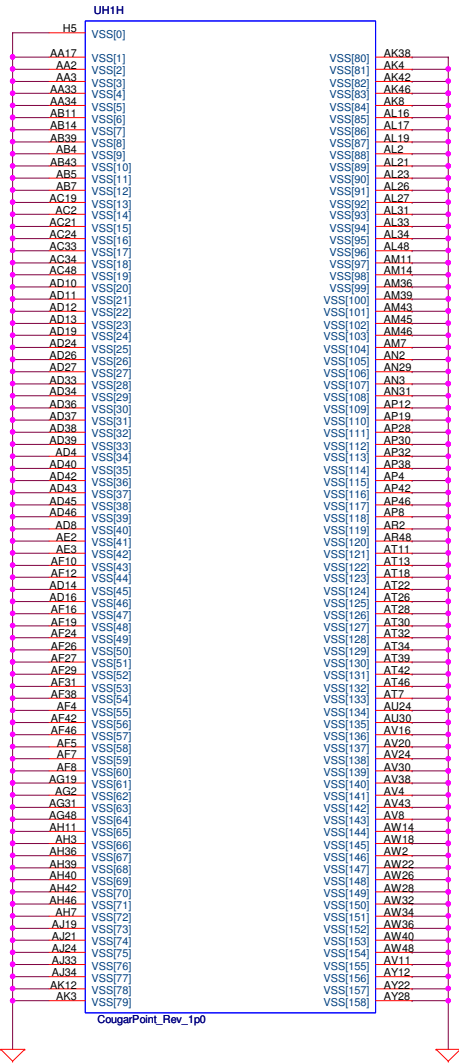
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Title		
PCH (6/8) PWR		
Size	Document Number	Rev
	LA-6601P	1.0
Date:	Tuesday, November 30, 2010	Sheet 20 of 63

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PCH (8/8) VSS

LA-6601P

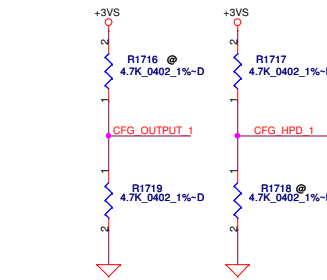
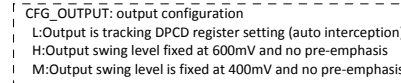
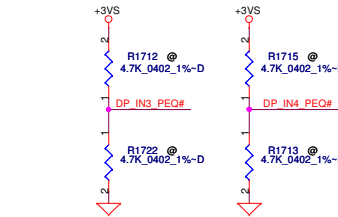
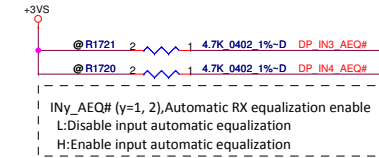
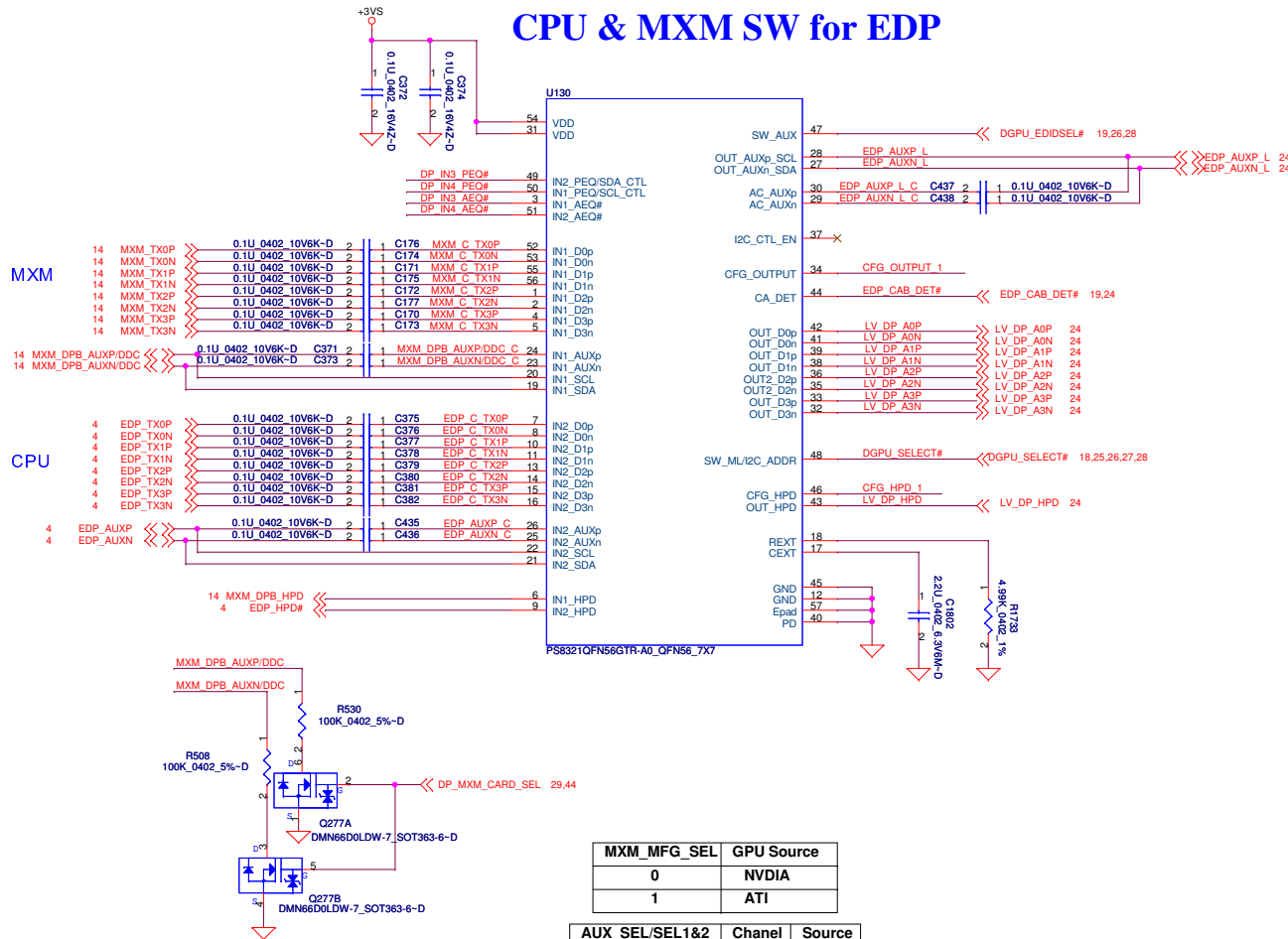
Rev 1.0

Date: Tuesday, November 30, 2010

Sheet 22 of 63

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CPU & MXM SW for EDP



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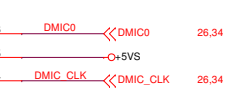
Compal Electronics, Inc.

eDP SW- GPU & CPU

LA-6601P

Date: Tuesday, November 30, 2010 Sheet 23 of 63

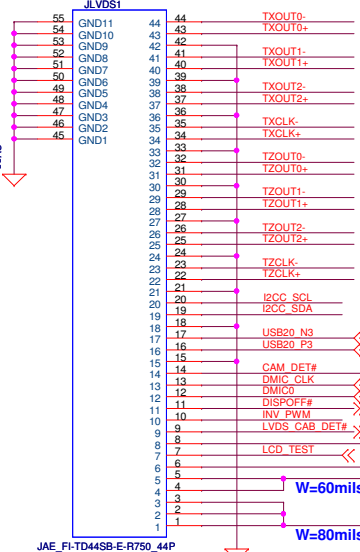
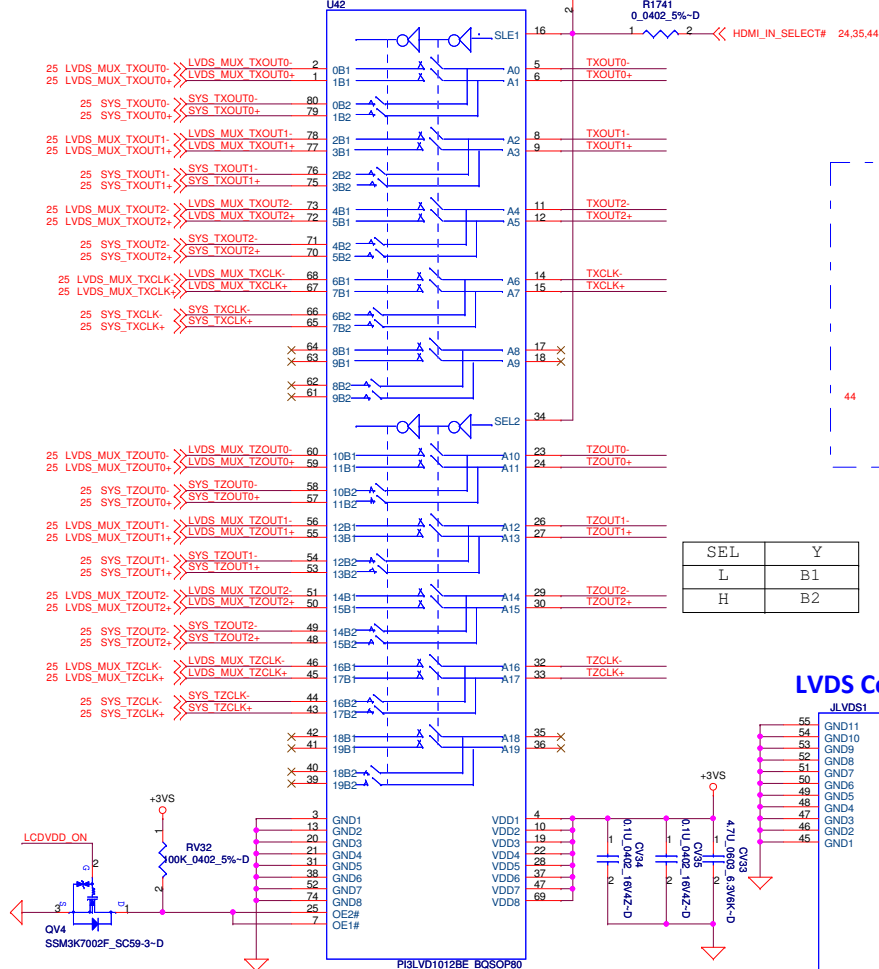
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PCH/GPU MUX & 6038 MUX SW for LVDS

[illegible]

LCD POWER



S1	S0	YA	YB	Y
0	0	A0	B0	HDMI IN
0	1	A1	B1	DSC
1	0	A2	B2	HDMI IN
1	1	A3	B3	UMA

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Compal Electronics, Inc.

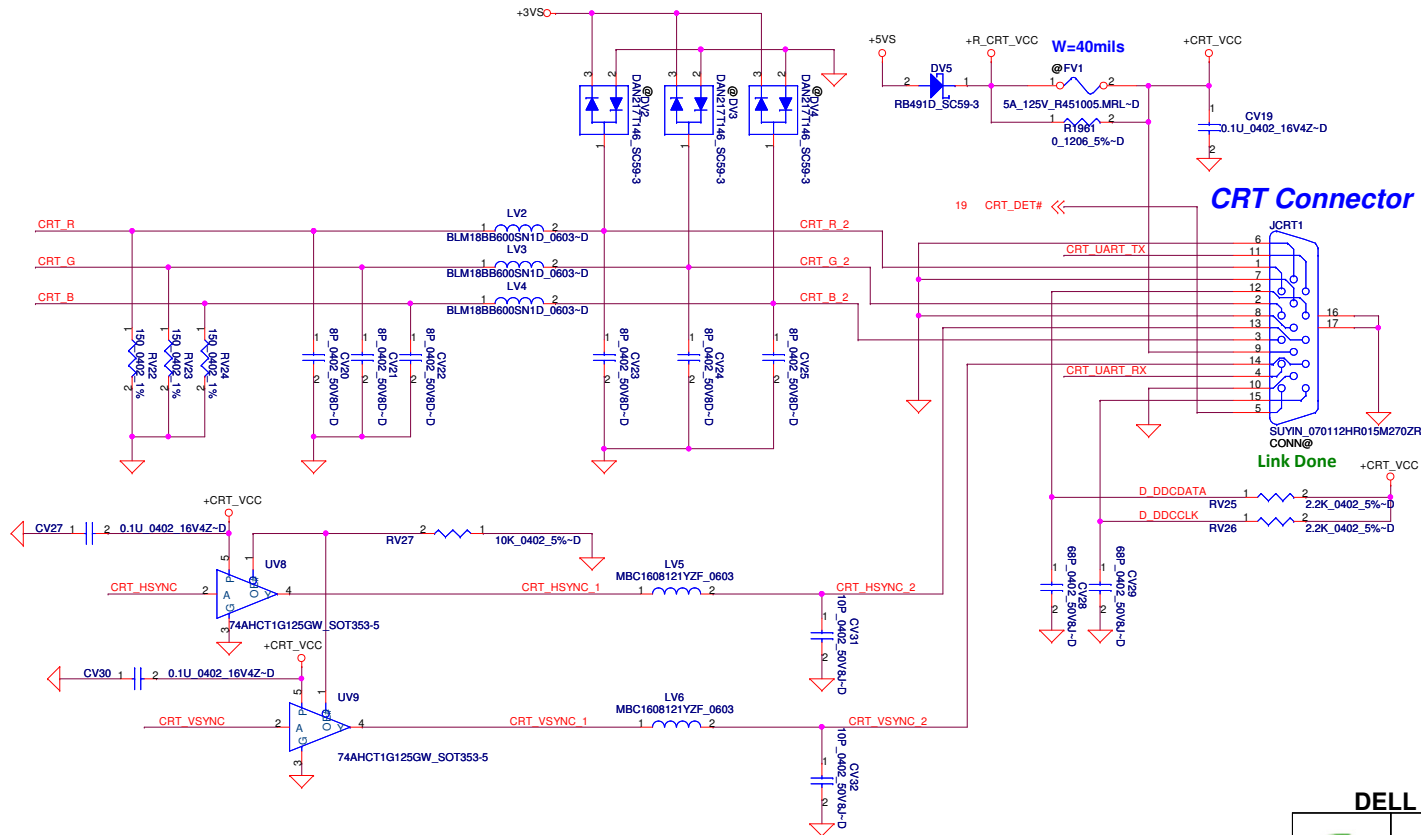
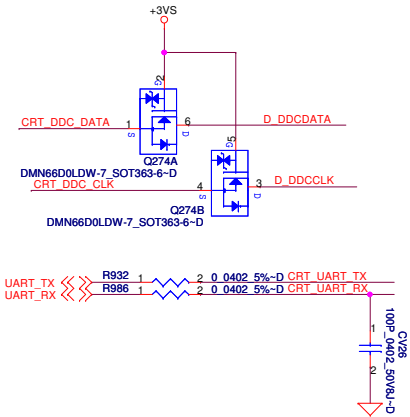
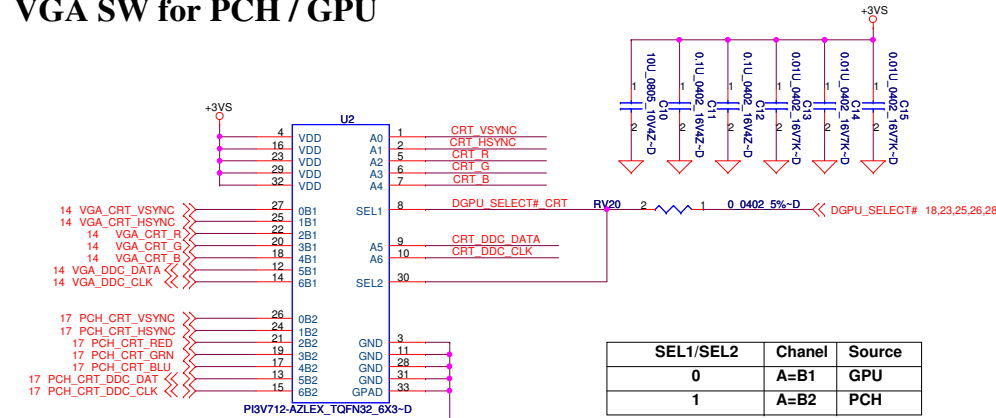
LVDS SW- 6038/SYSTEM & CONN

LA-6601 P

1.0

Date: Tuesday, November 30, 2010 Sheet 26 of 63

VGA SW for PCH / GPU



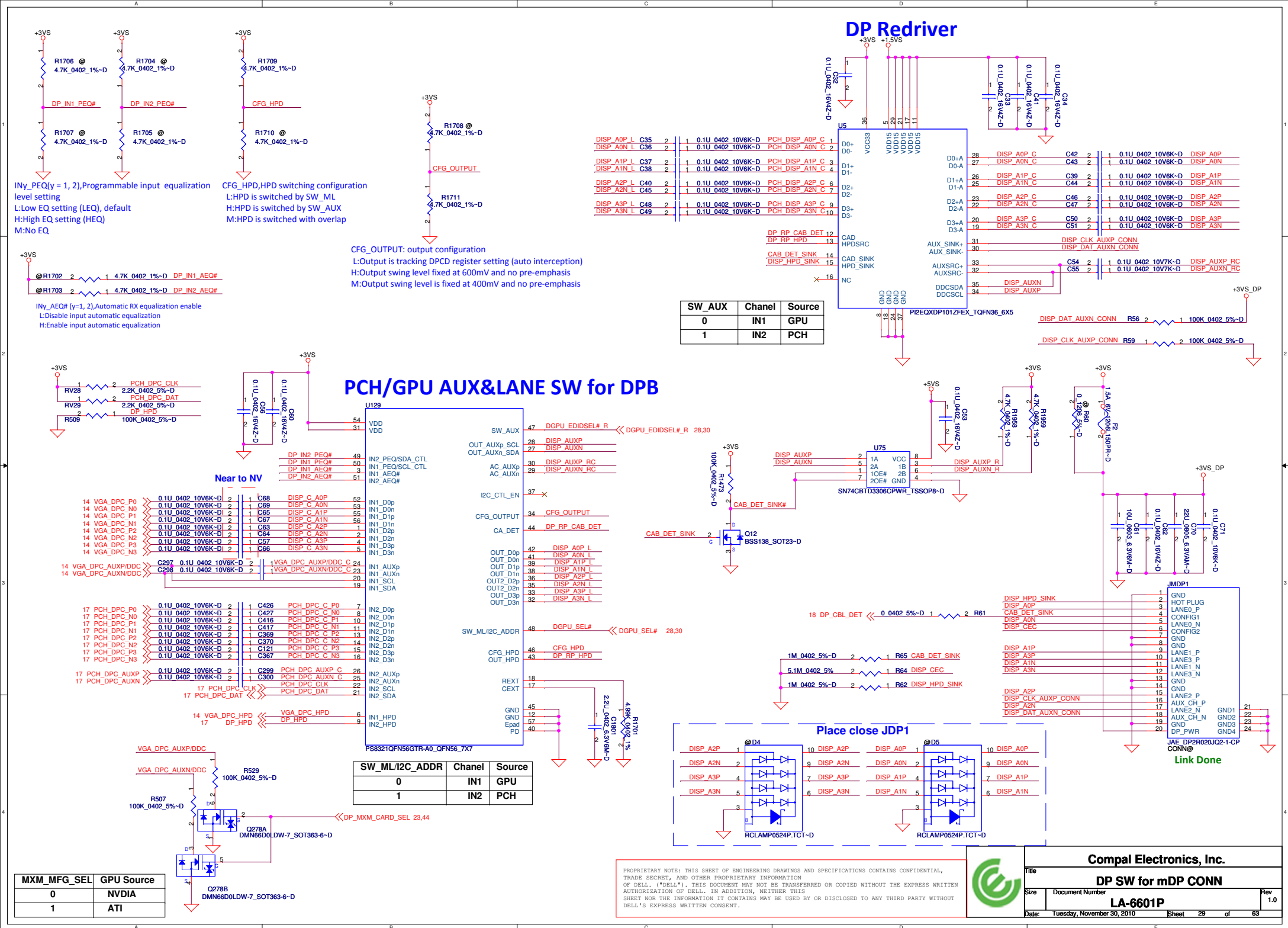
DELL CONFIDENTIAL/PROPRIETARY

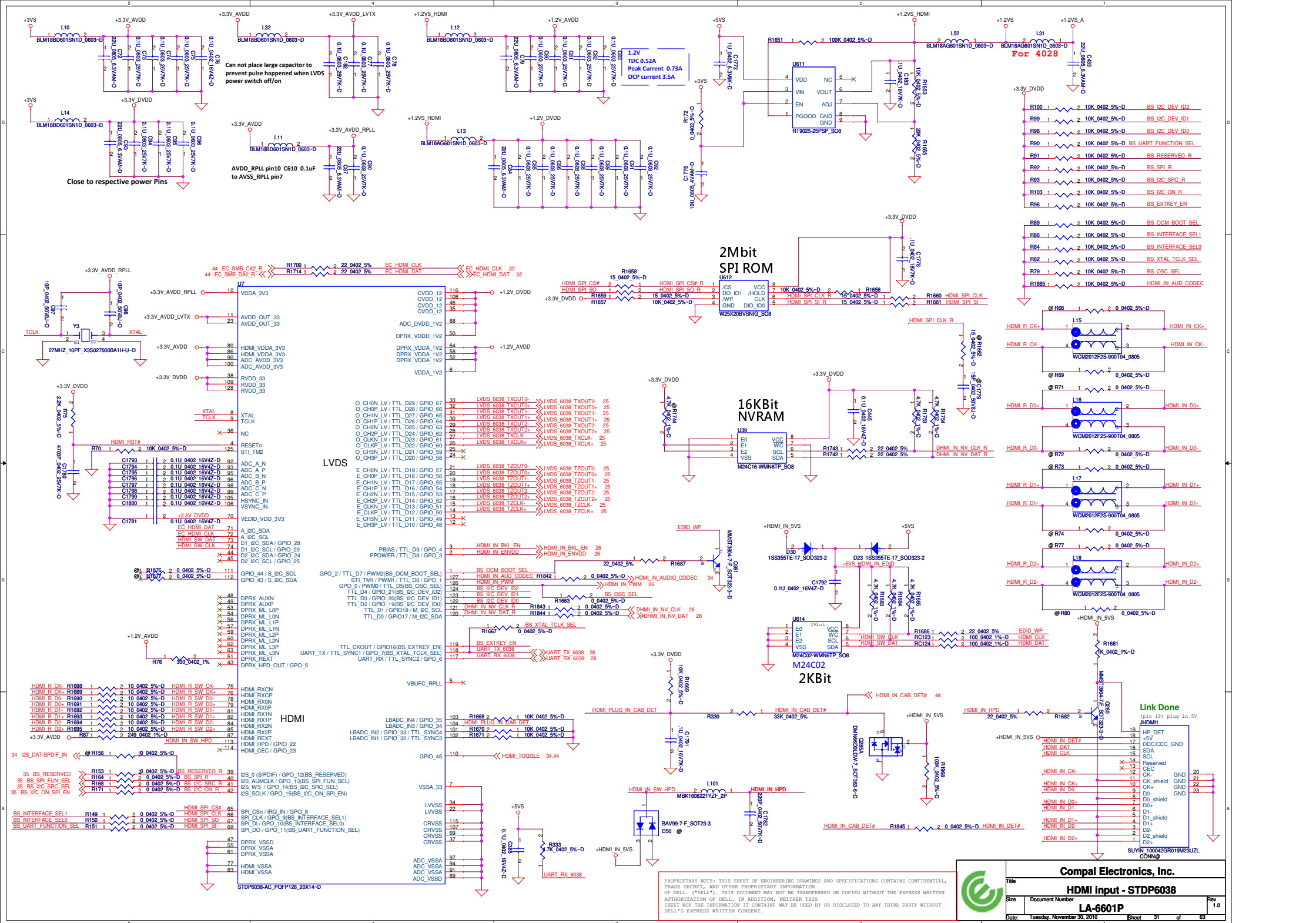
Compal Electronics, Inc.

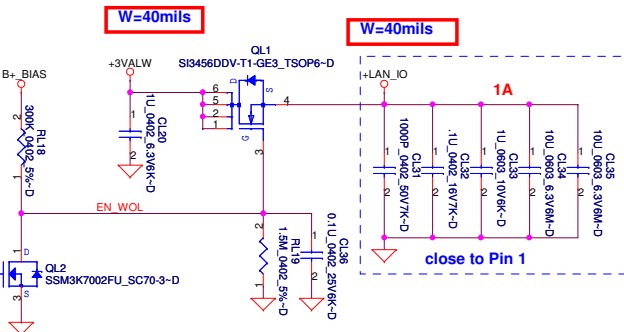
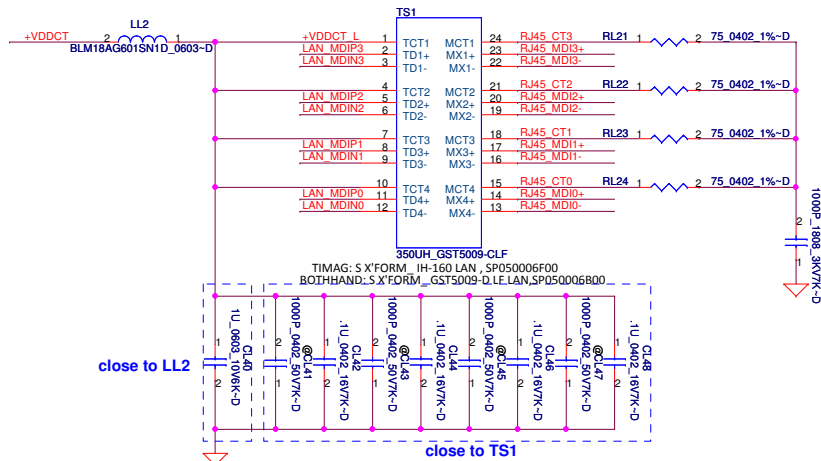
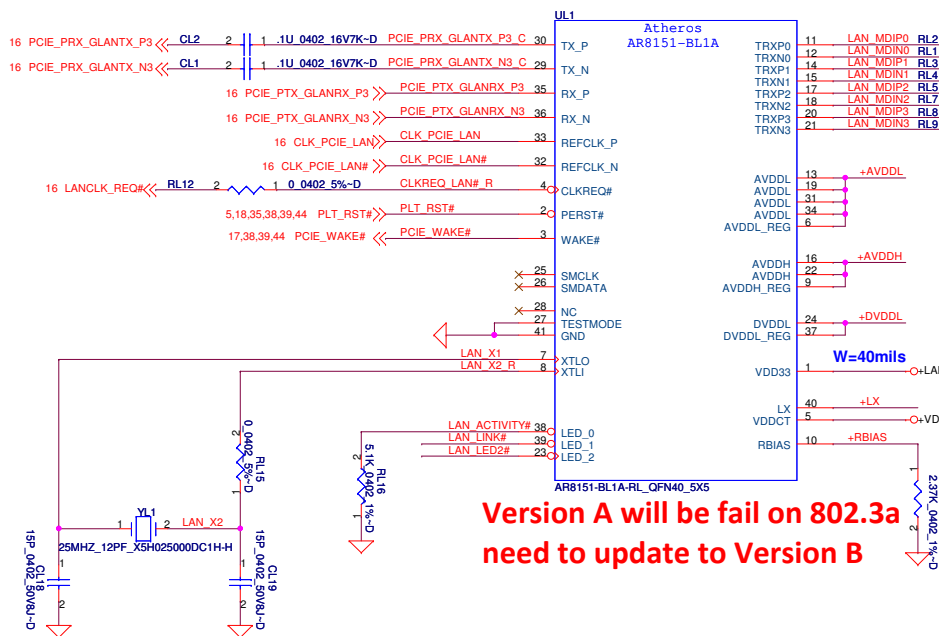


Title			LA-6601P
Size	Document Number	Rev	1.0
Date:	Tuesday, November 30, 2010	Sheet	27 of 63

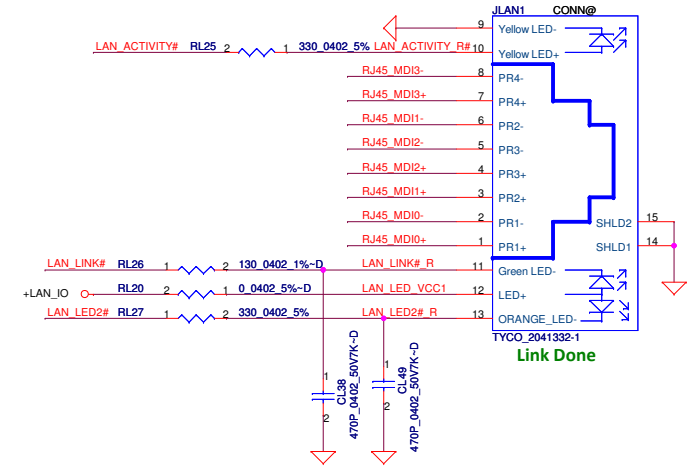
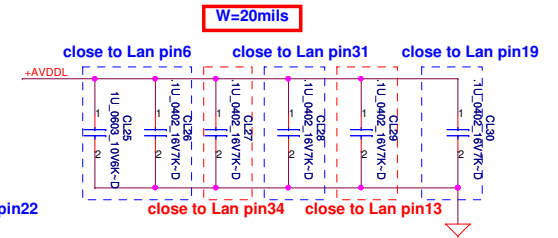
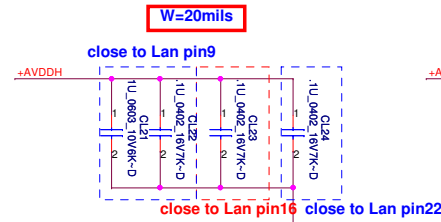
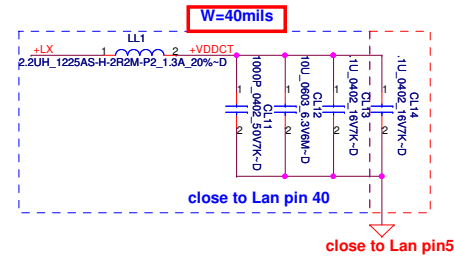
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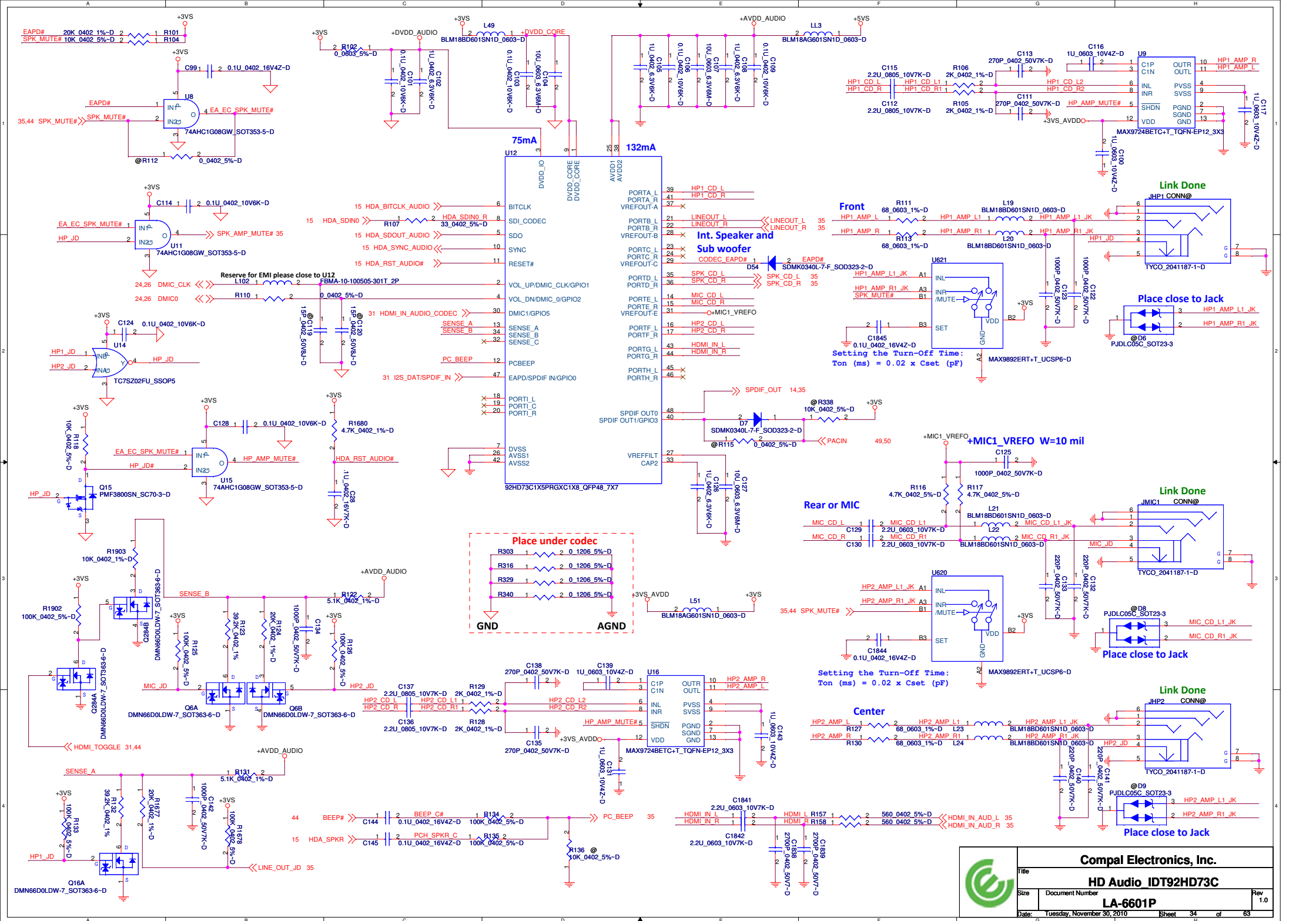
close to Lan chip 1000p reserved for EMI

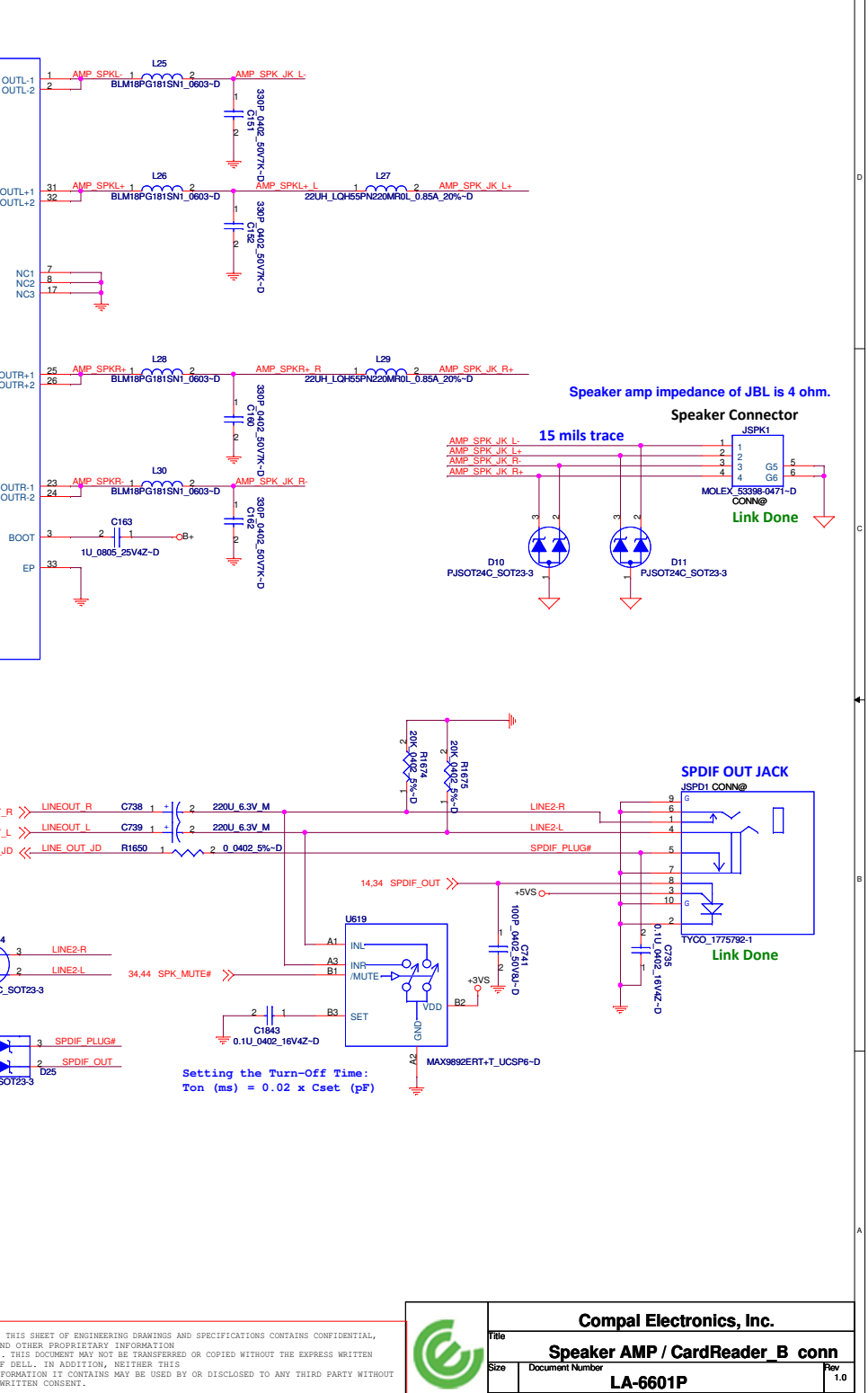
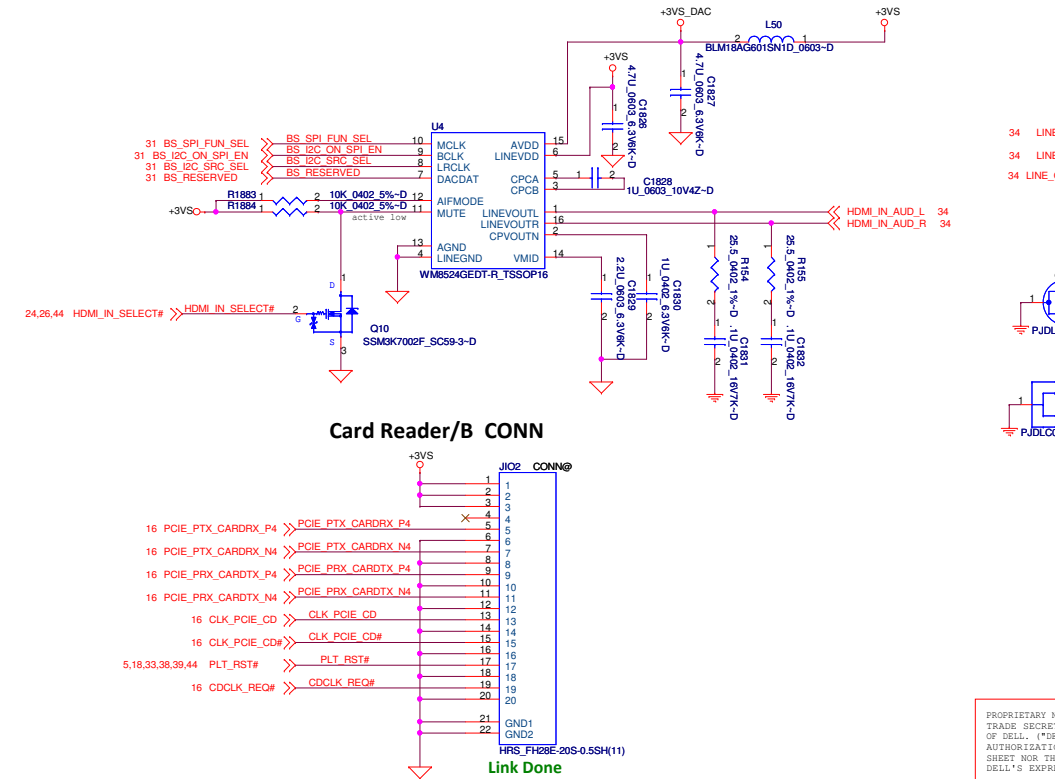
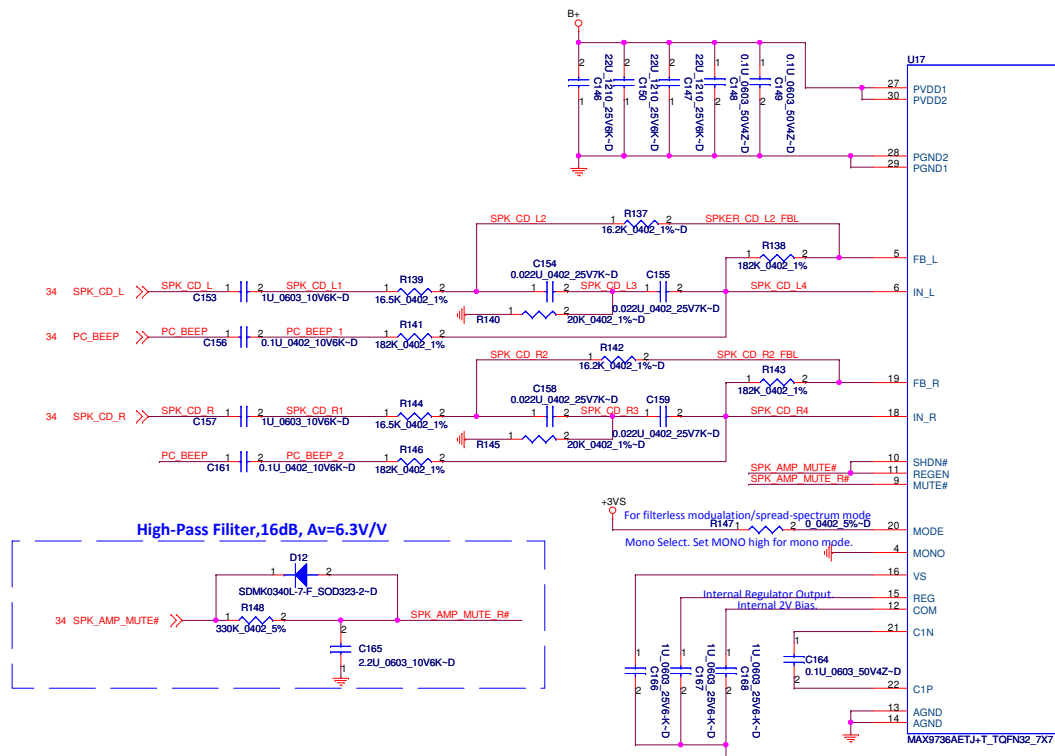


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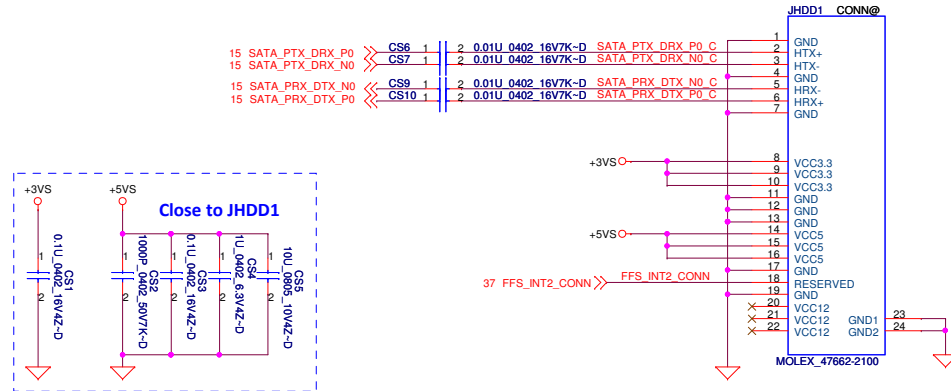
Compal Electronics, Inc.			
GLAN AR8151 AL1A			
Size	Document Number	Rev	
	LA-6601P	1.0	
Date:	Tuesday, November 30, 2010	Sheet	33 of 63

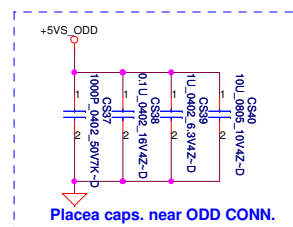
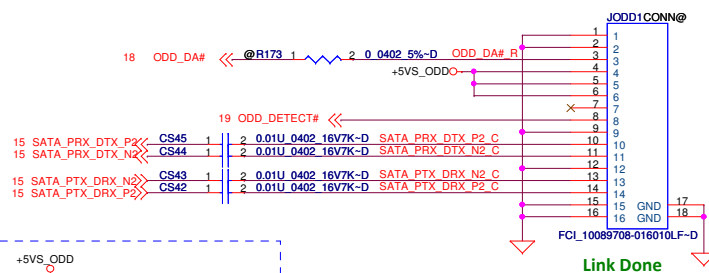
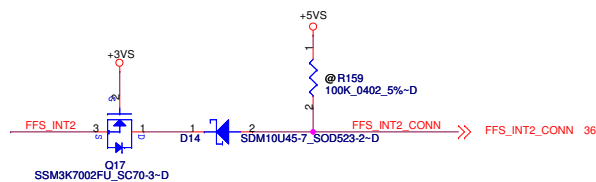
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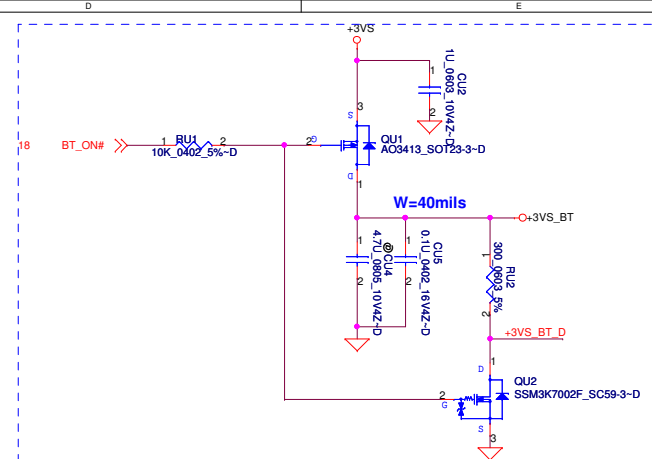
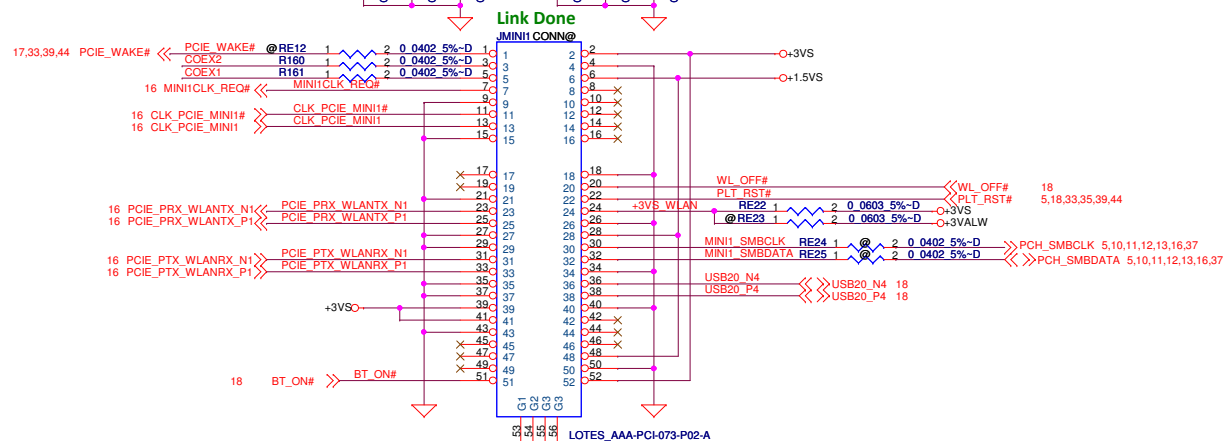


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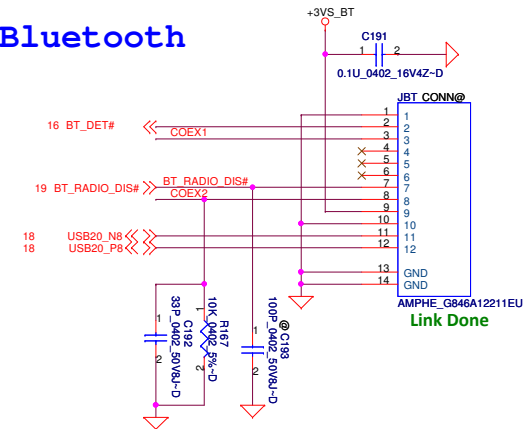
Compal Electronics, Inc.

Title			
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Size	Document Number		Rev
	LA-6601P		1.0
Date:	Tuesday, November 30, 2010	Sheet 37 of 63	

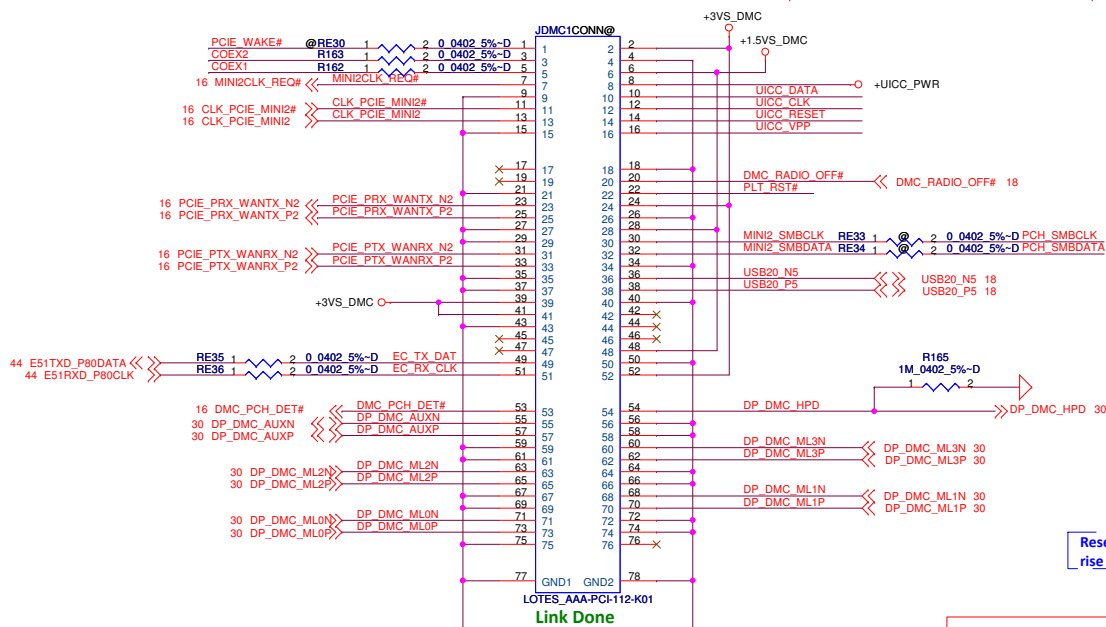
WLAN



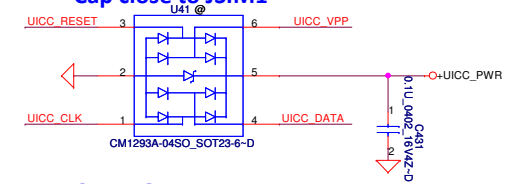
Bluetooth



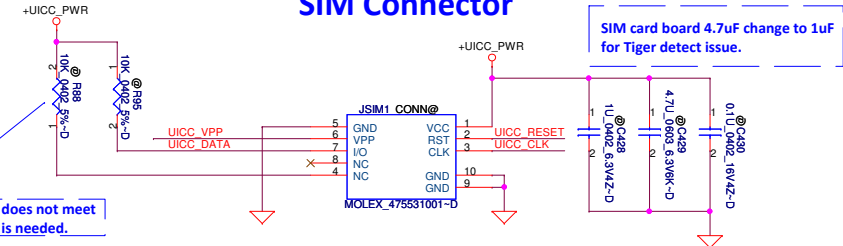
Display Mini Card (DMC)



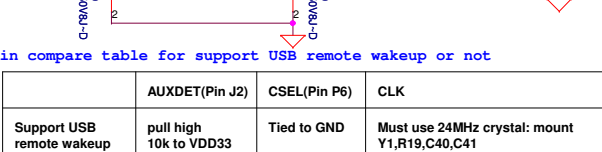
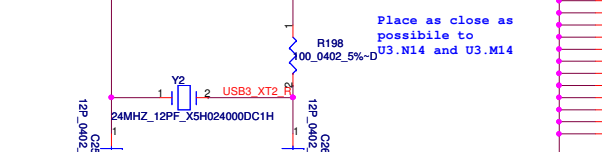
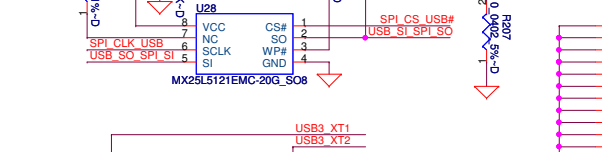
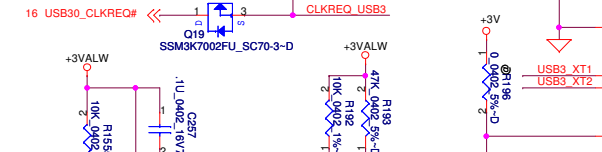
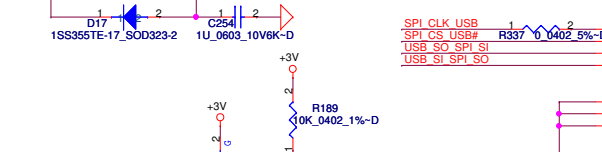
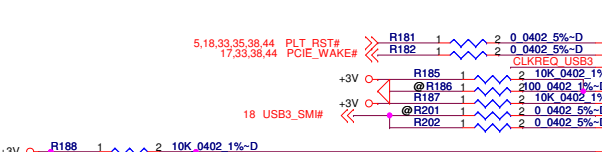
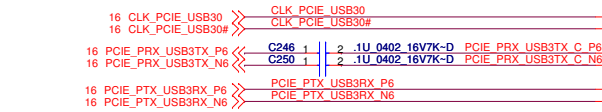
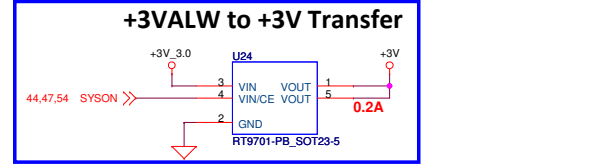
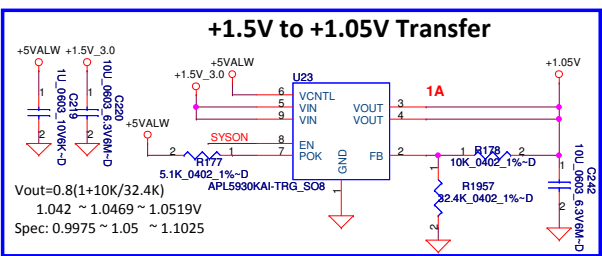
For ESD
Cap close to JSIM1



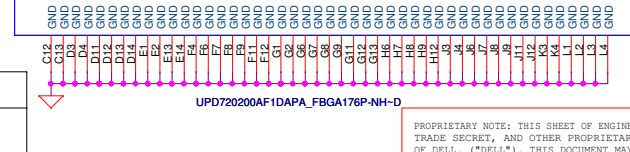
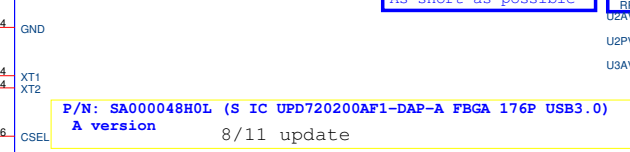
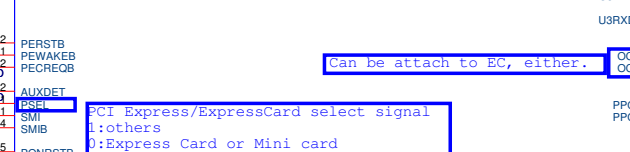
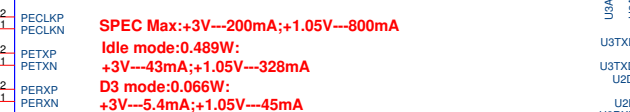
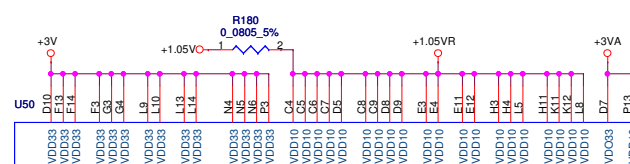
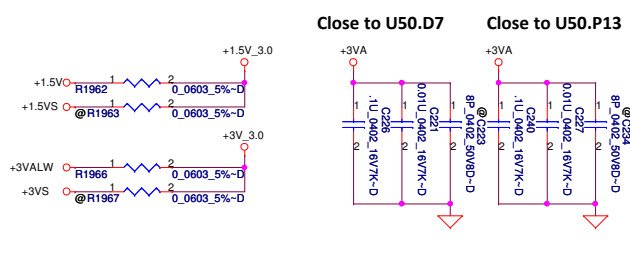
SIM Connector



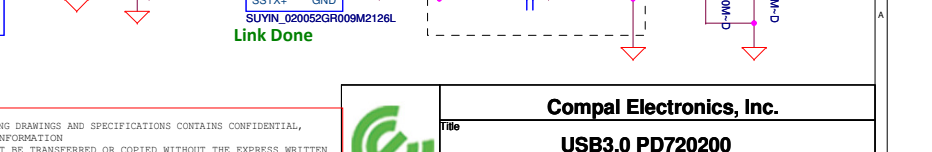
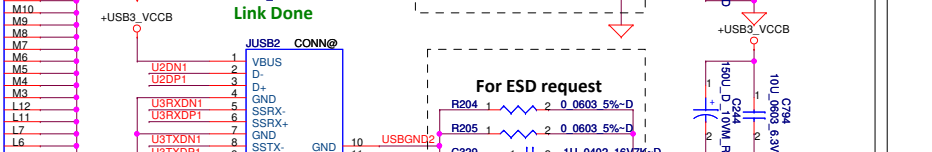
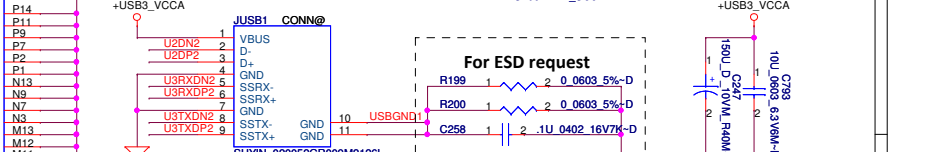
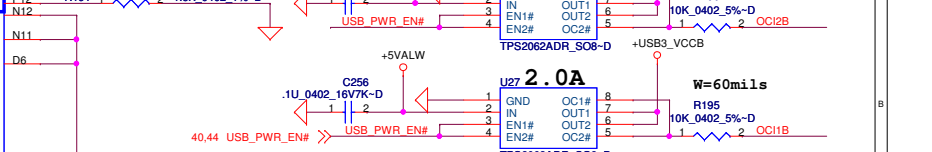
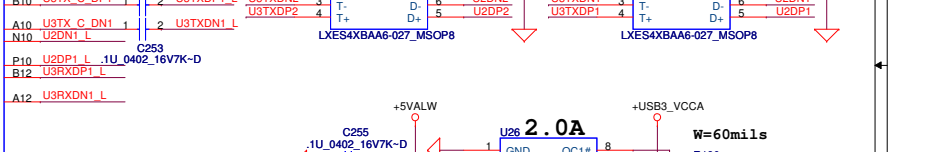
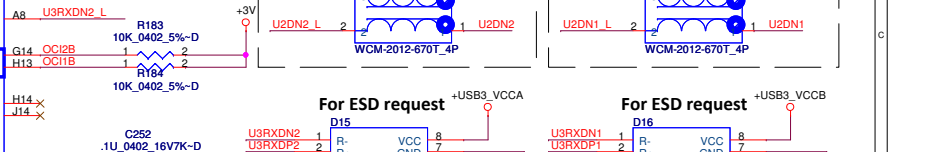
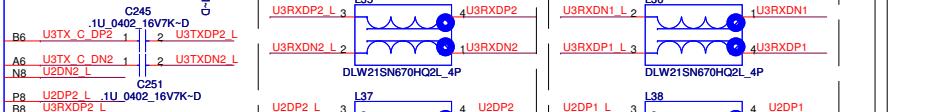
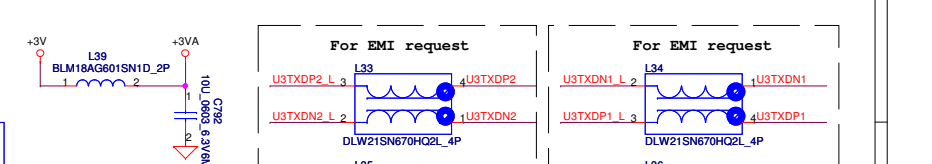
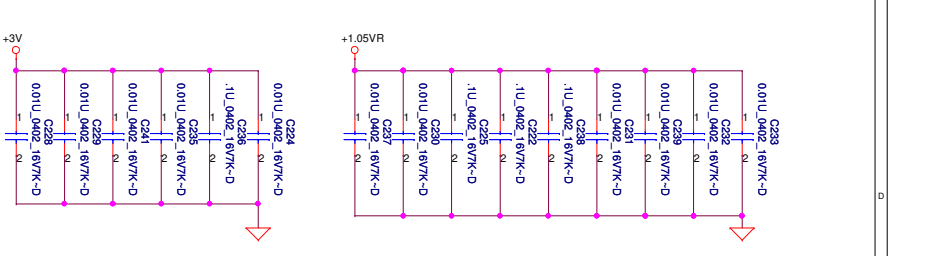
Reserve for SIM card does not meet
rise time and pull-up is needed.



	AUXDET(Pin J2)	CSEL(Pin P6)	CLK
Support USB remote wakeup	pull high 10k to VDD33	Tied to GND	Must use 24MHz crystal: mount Y1,R19,C40,C41
Not support USB remote wakeup	Tied to GND	pull high to VDD33	Can use either 48MHz or 24MHz When use 48MHz clock: mount R22,R25



	AUXDET(Pin J2)	CSEL(Pin P6)	CLK
Support USB remote wakeup	pull high 10k to VDD33	Tied to GND	Must use 24MHz crystal: mount Y1,R19,C40,C41
Not support USB remote wakeup	Tied to GND	pull high to VDD33	Can use either 48MHz or 24MHz When use 48MHz clock: mount R22,R25



	AUXDET(Pin J2)	CSEL(Pin P6)	CLK
Support USB remote wakeup	pull high 10k to VDD33	Tied to GND	Must use 24MHz crystal: mount Y1,R19,C40,C41
Not support USB remote wakeup	Tied to GND	pull high to VDD33	Can use either 48MHz or 24MHz When use 48MHz clock: mount R22,R25

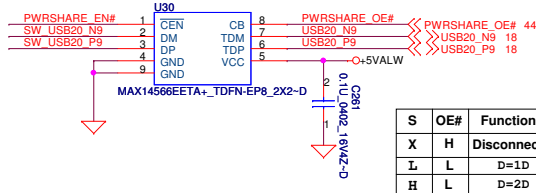
Compal Electronics, Inc.

USB3.0 PD720200

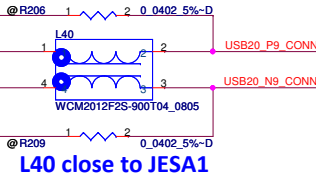
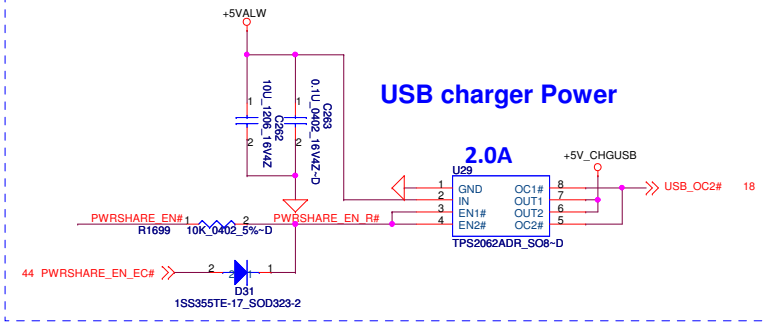
LA-6601P

Date: Tuesday, November 30, 2010 Sheet 39 of 63

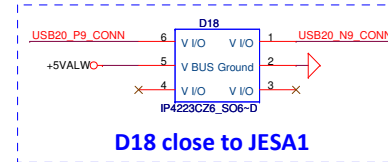
Power share



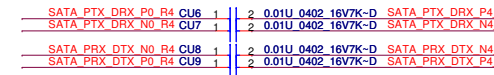
USB charger Power



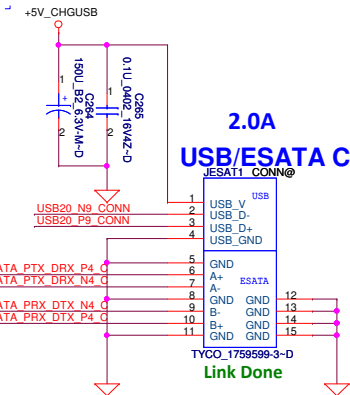
L40 close to JESA1



D18 close to JESA1

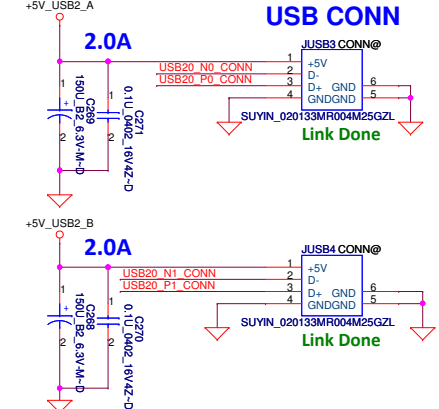


2.0A USB/ESATA CONN



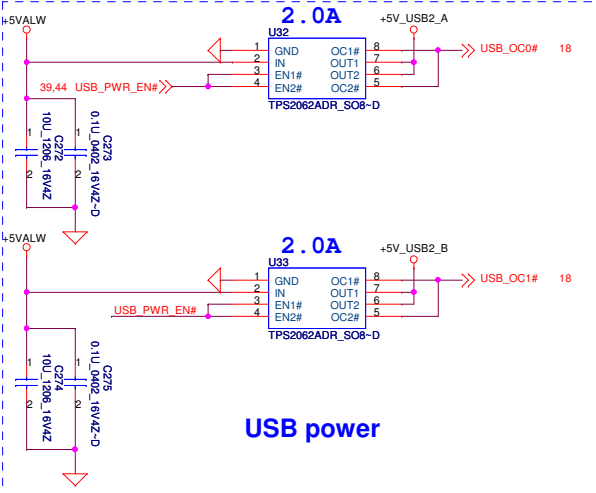
Link Done

USB CONN

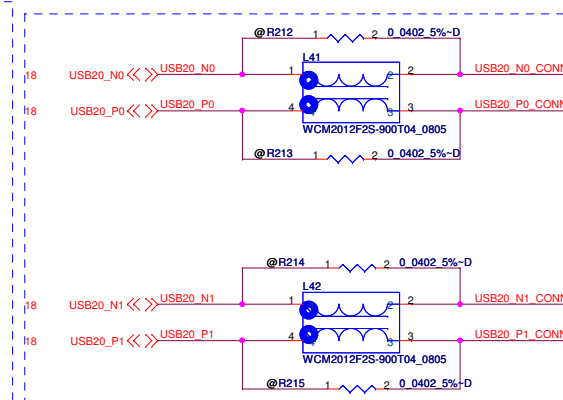


Link Done

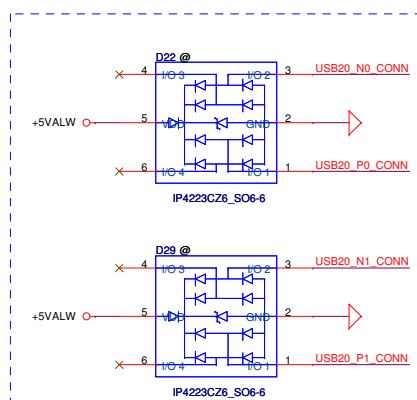
USB power



L41, L42 close to JUSB3, JUSB4



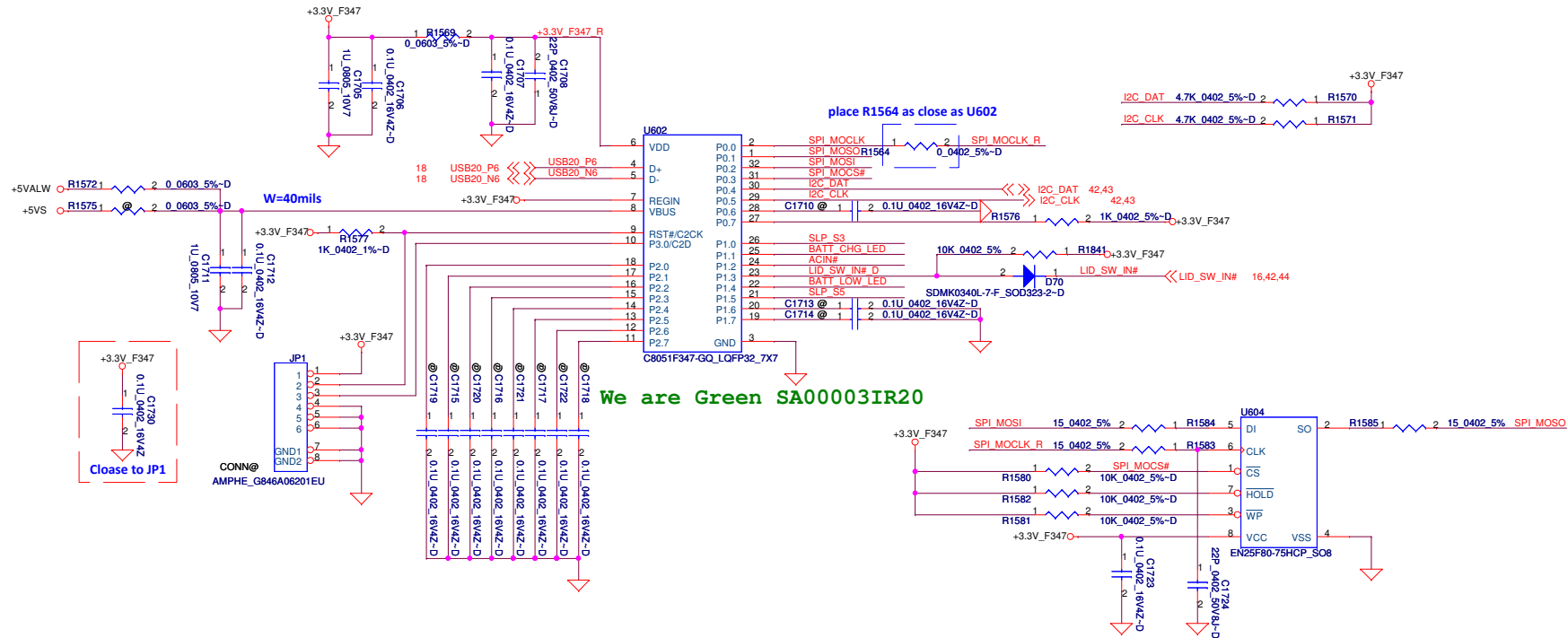
Place near USB connector



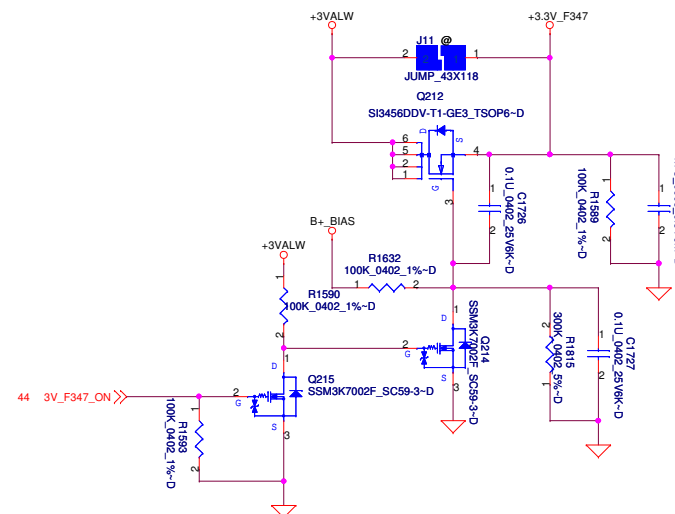
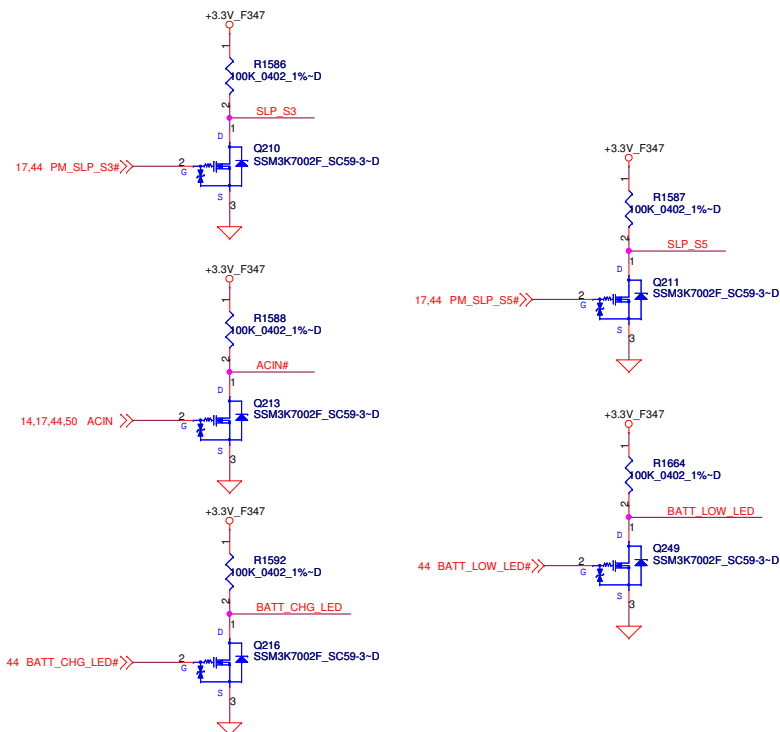
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Compal Electronics, Inc.			
USB/ESATA TS3USB221R SER			
Size	Document Number	Rev	
	LA-6601P	1.0	
Date:	Tuesday, November 30, 2010	Sheet	40 of 63

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DEVICE	SMBUS ADDRESS
MAXIM - LED	0100 000b
MAXIM - GPIO	0100 001b
I2C EEPROM	1010 000b



+3.3V_F347 behavior

	STATE				
	S0	S3	S4	S5	
AC IN	ON	ON	ON	ON	
BAT only	ON	ON	OFF	OFF	

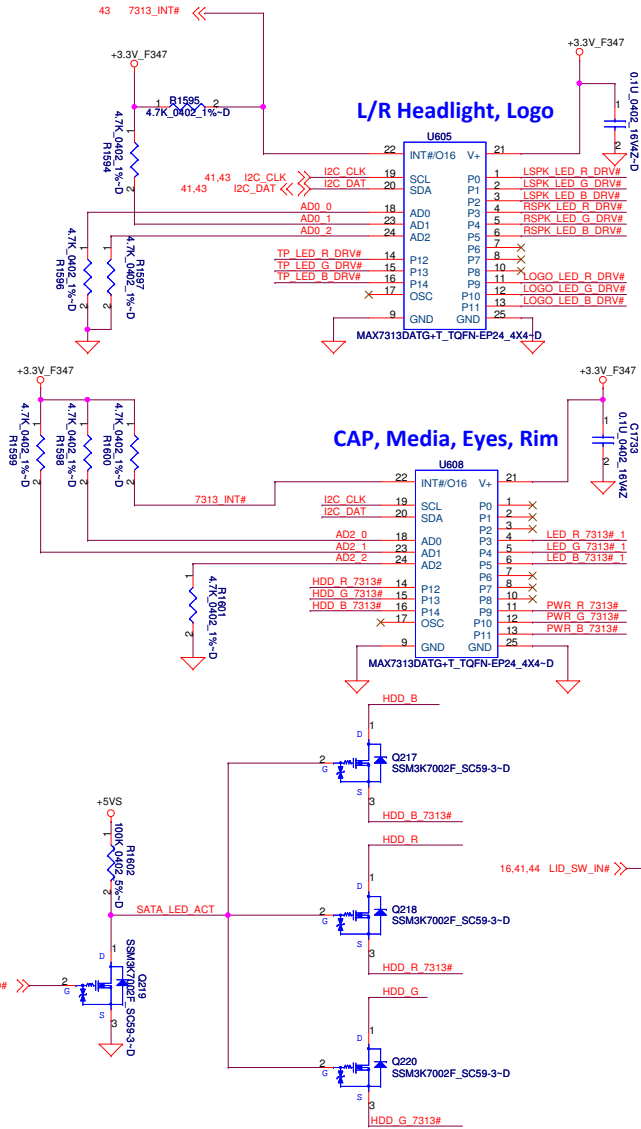
AC mode battery full in S5: turn off ELC controller

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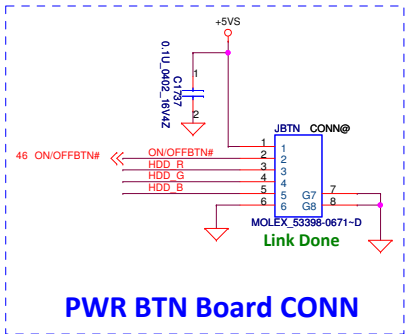
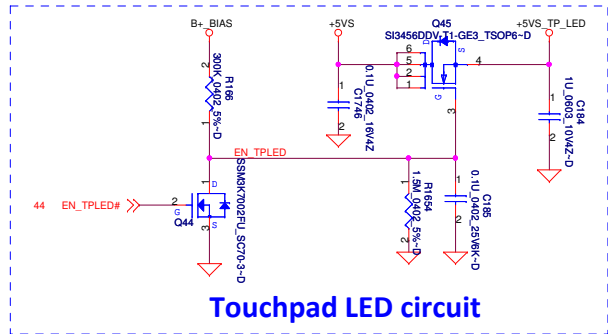
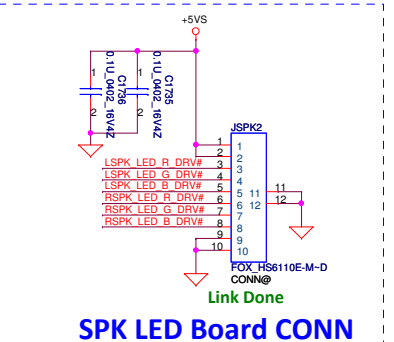
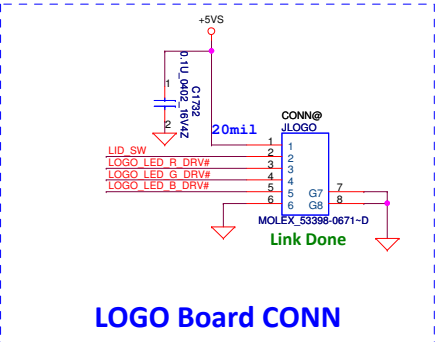
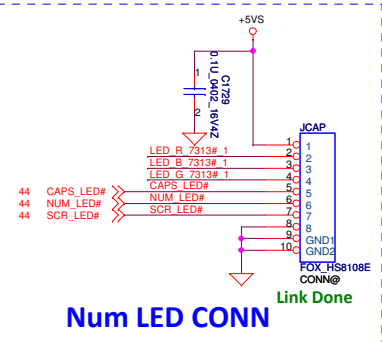
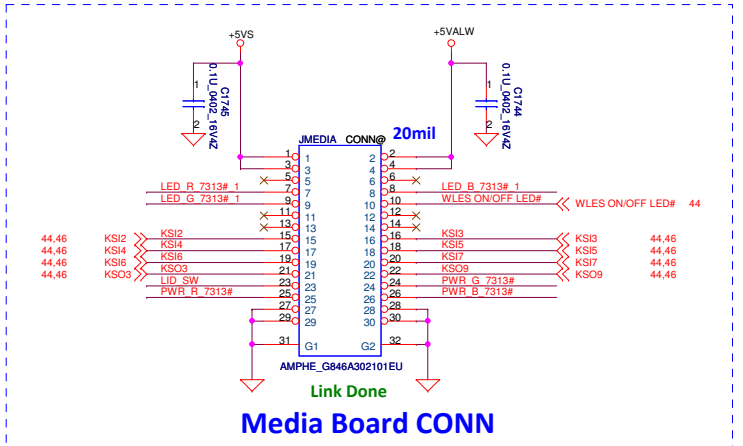
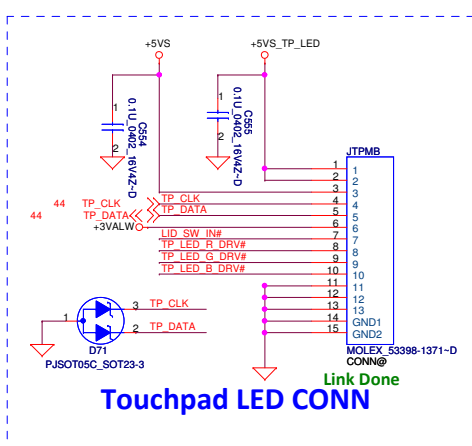
Compal Electronics, Inc.

Title		ELC (1)	
Size	Document Number	LA-6601P	
Date:	Tuesday, November 30, 2010	Sheet	41 of 63

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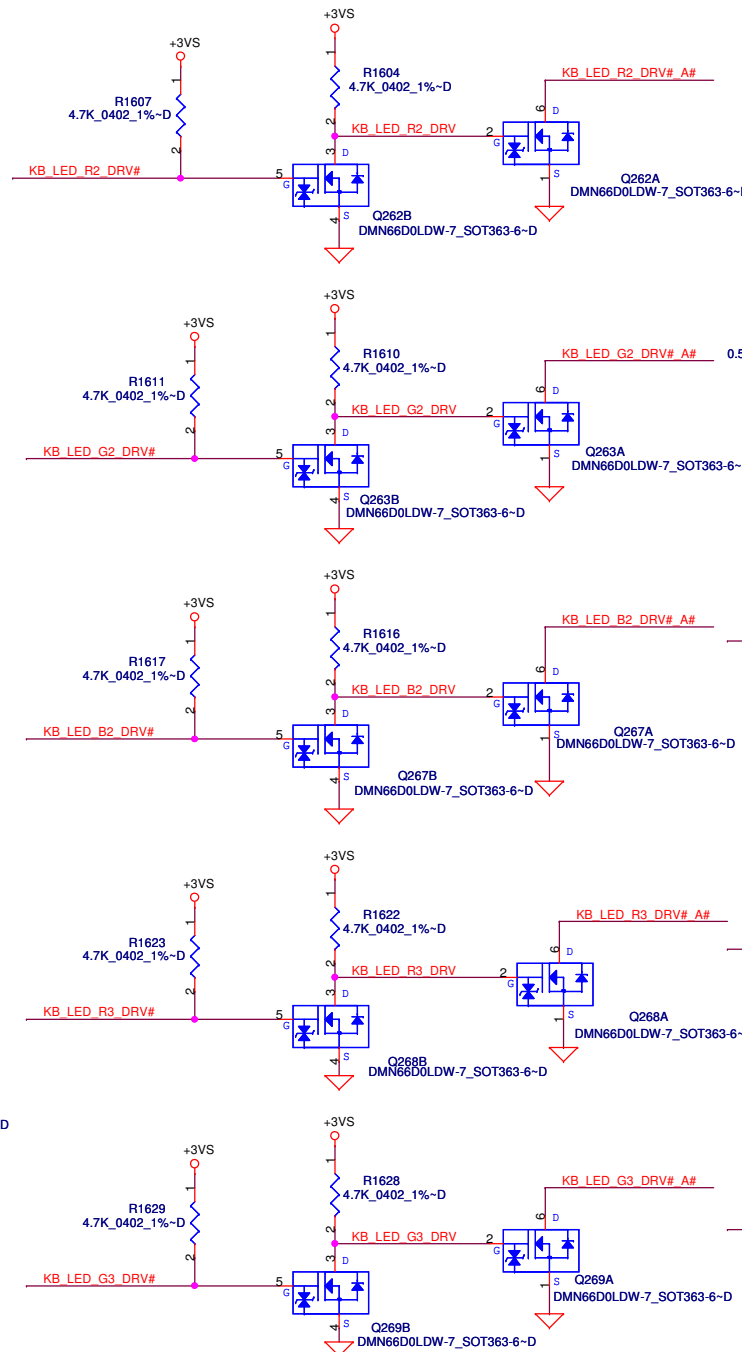
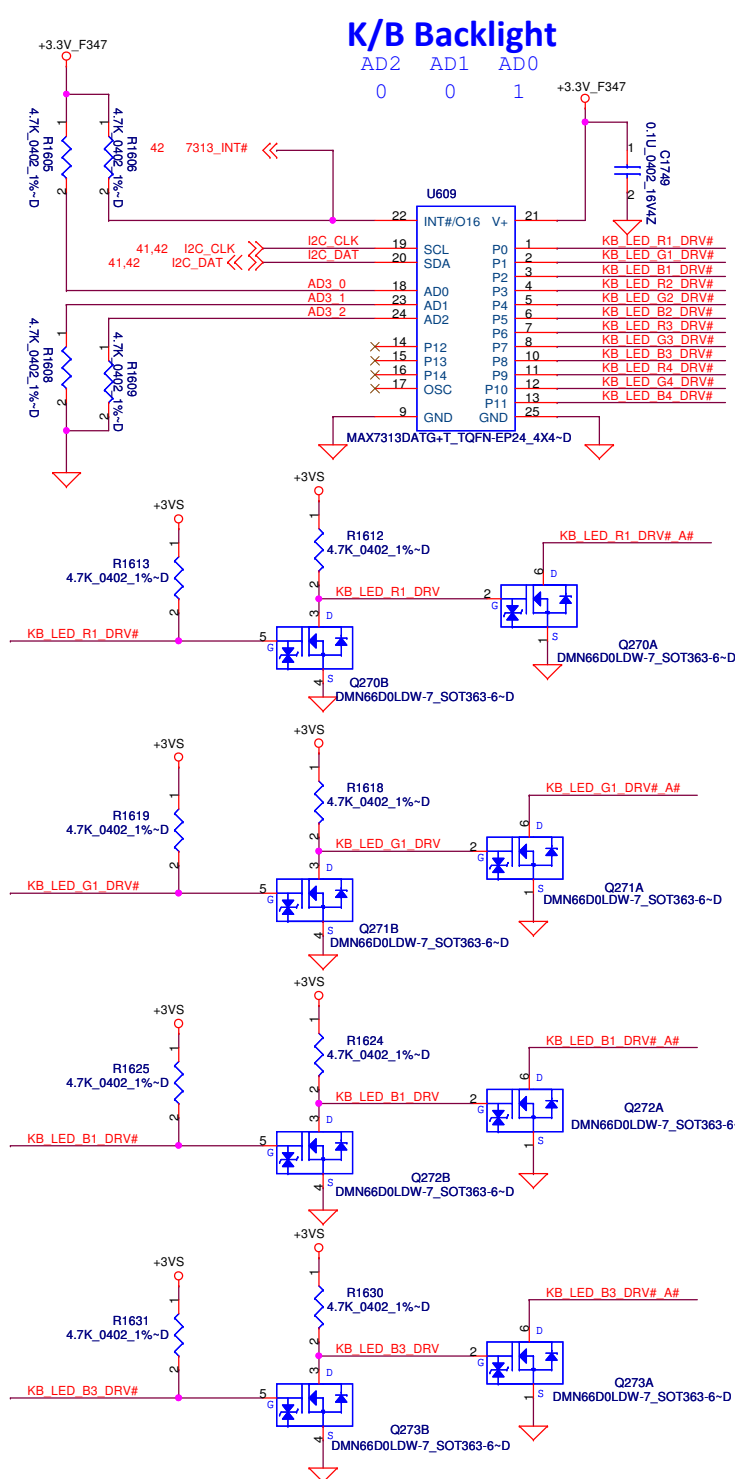
Reference	AD2	AD1	AD0	MAX7313
U605	0	1	0	L/R Headlight , Logo, TP
U608	0	1	1	Num, CAP , SCR EJECT, REV, PLAY/PAUSE FFWD, Vol_DWN, Vol_UP Wireless ON/OFF AWCC Button Alien Adrenaline Power Button Eyes Power Button Rim



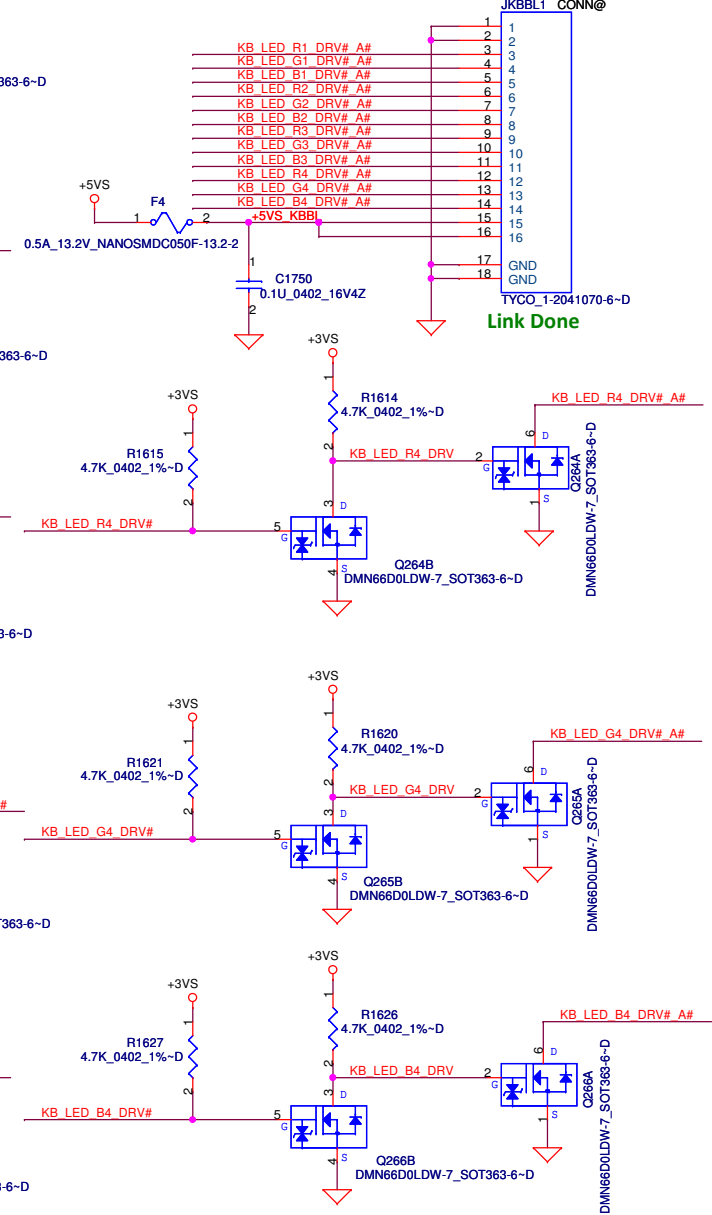
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K/B Backlight

AD2 AD1 AD0
0 0 1



K/B Backlight CONN



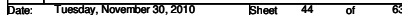
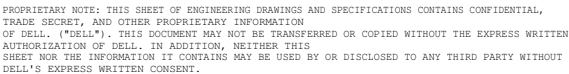
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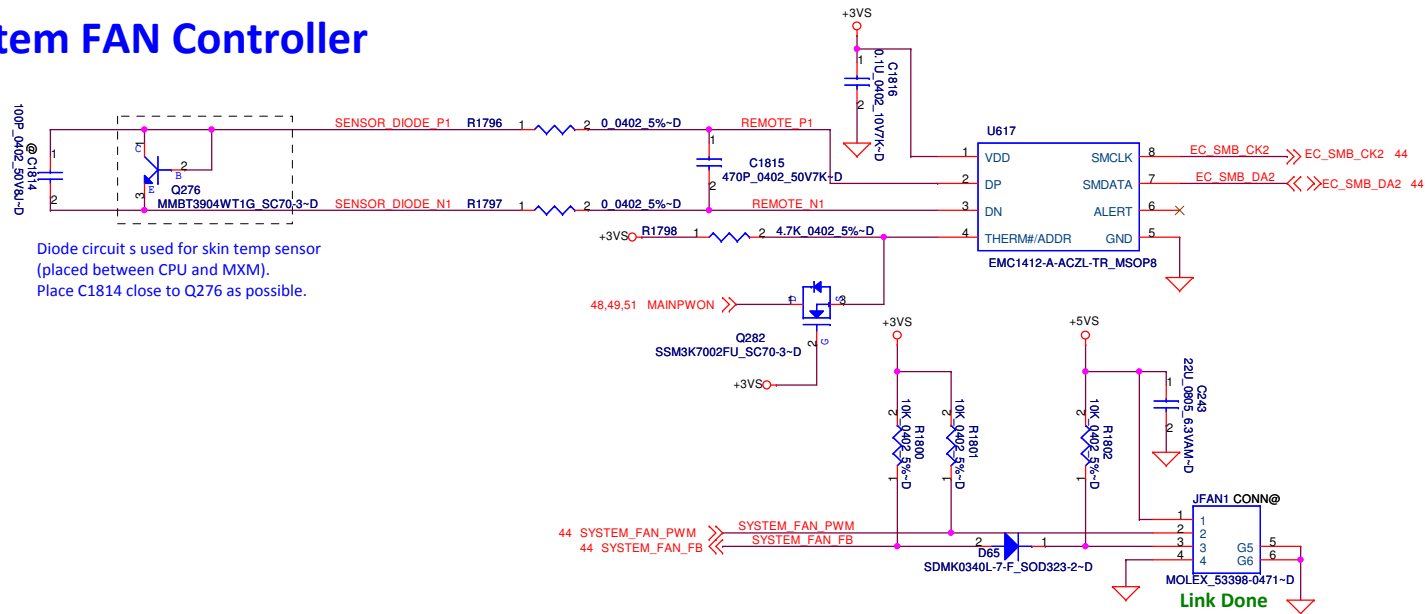


Compal Electronics, Inc.			
Title	ELC (3)		
Size	Document Number	LA-6601P	
Date	Tuesday, November 30, 2010	Sheet	43 of 63

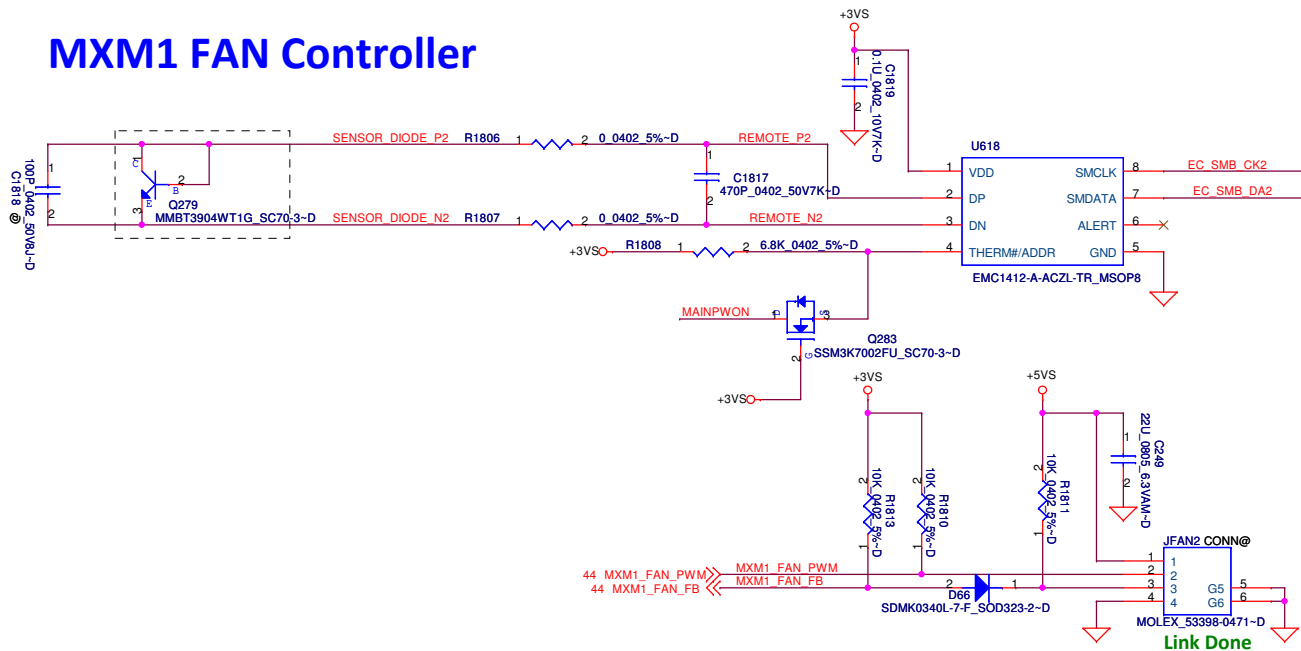
Rev 1.0



System FAN Controller



MXM1 FAN Controller



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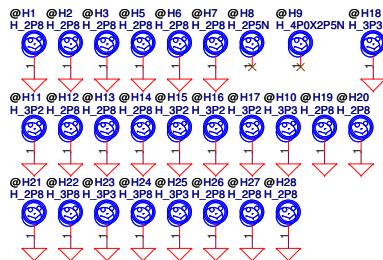
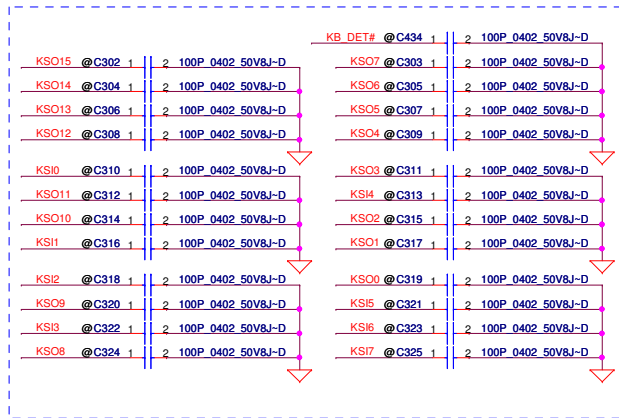
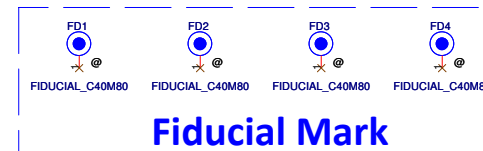
DELL CONFIDENTIAL/PROPRIETARY

Compal Electronics, Inc.

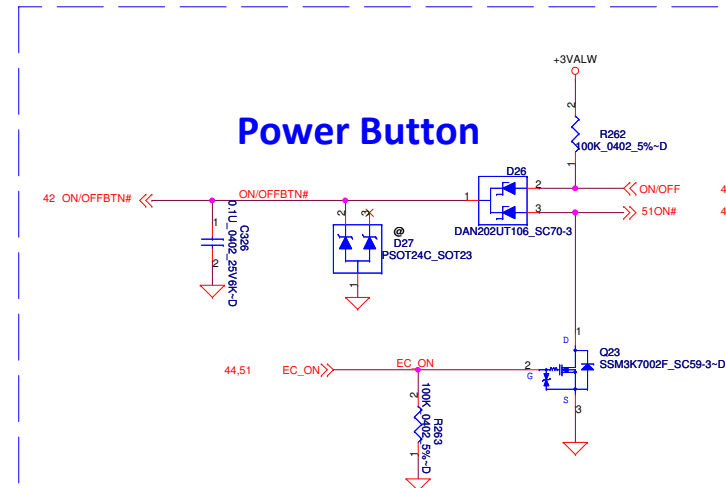
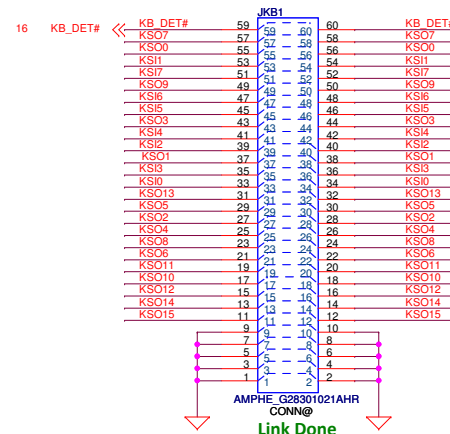
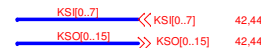
Thermal Sensor & FAN

LA-6601P

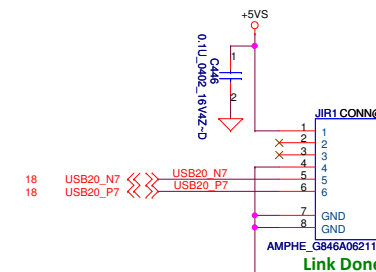
Date: Tuesday, November 30, 2010 Sheet 45 of 63



INT_KBD Conn.



IR SENSOR connector



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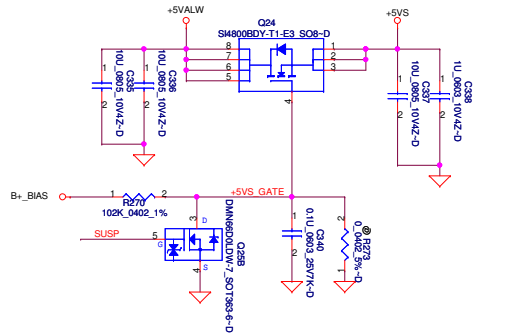


Compal Electronics, Inc.			
KB & Power Button & IR			
LA-6601P	Rev 1.0		
Date: Tuesday, November 30, 2010	Sheet 46	of 63	

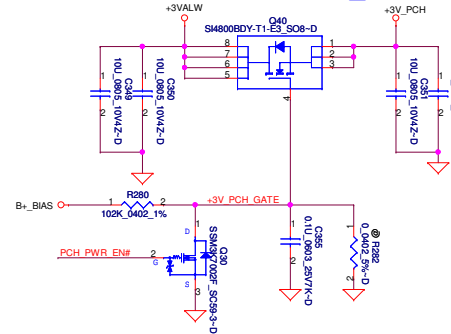
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DC to DC

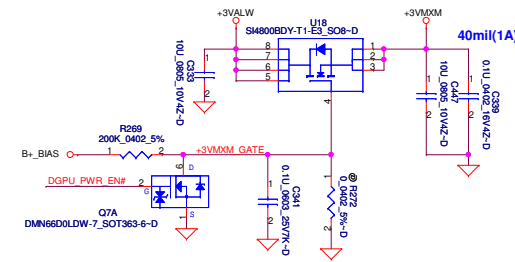
+5VALW to +5VS



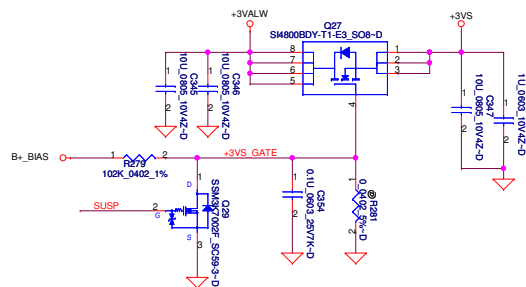
+3VALW to +3V_PCH



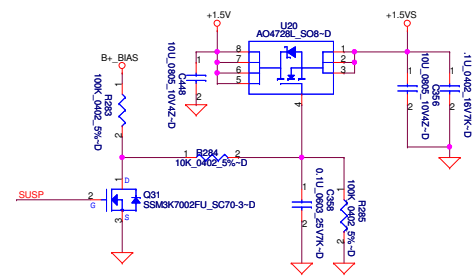
+3VALW to +3VMXM Transfer



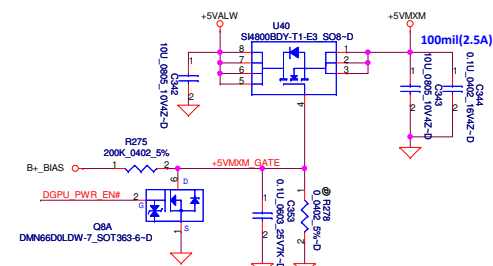
+3VALW to +3VS



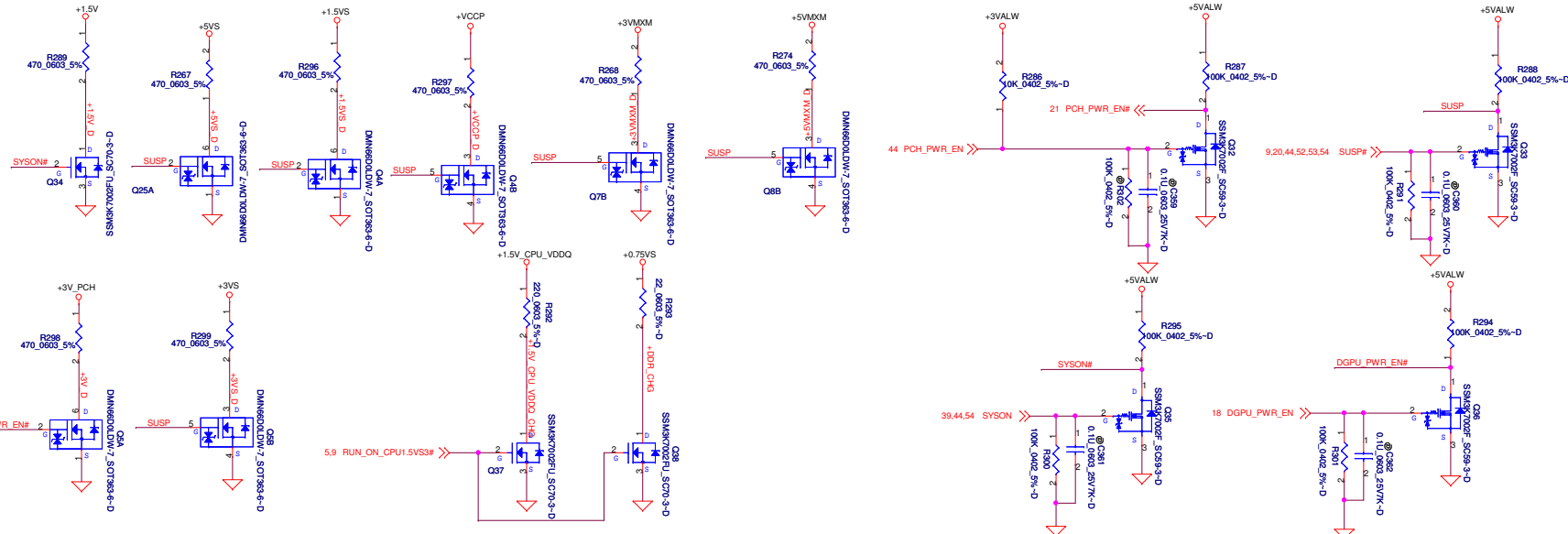
+1.5V To +1.5VS



+5VALW to +5VMXM



Discharge Circuit



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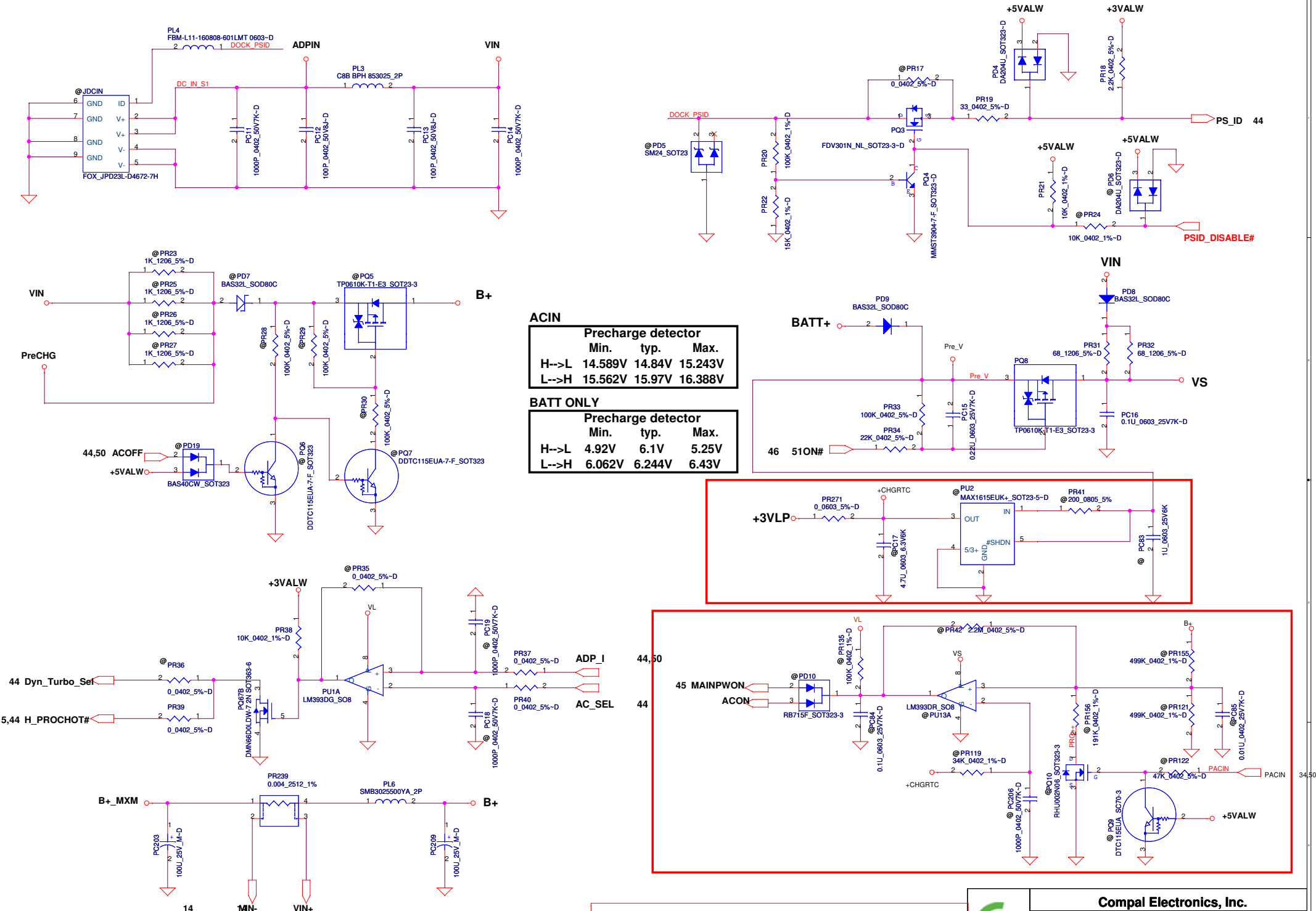


Compal Electronics, Inc.

DC/DC Interface

LA-6601P

Rev
1.0



ACIN			
Precharge detector			
	Min.	typ.	Max.
H-->L	14.589V	14.84V	15.243V
L-->H	15.562V	15.97V	16.388V

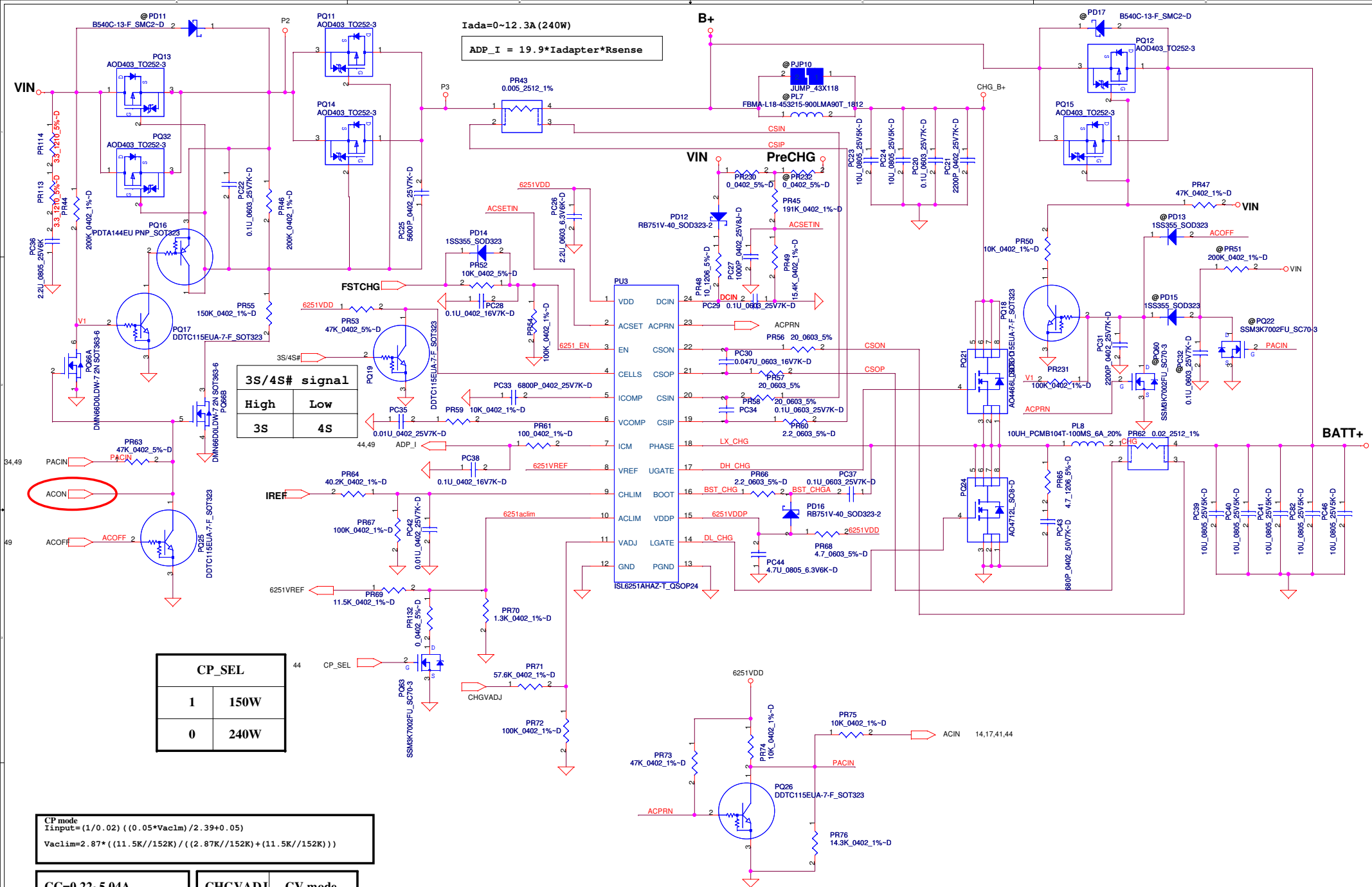
BATT ONLY			
Precharge detector			
	Min.	typ.	Max.
H-->L	4.92V	6.1V	5.25V
L-->H	6.062V	6.244V	6.43V

Add MXM power net for HW request.

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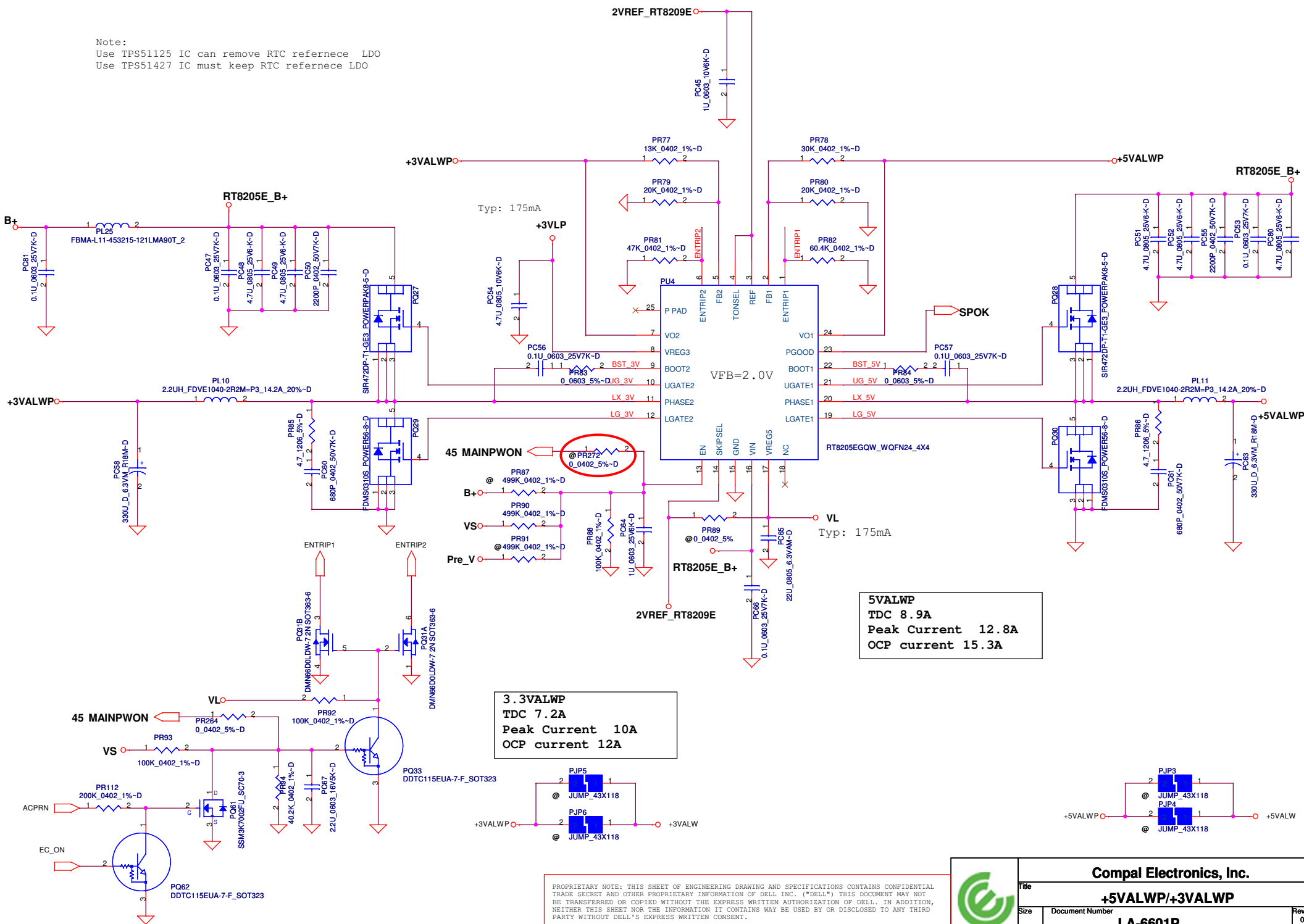


Compal Electronics, Inc.			
Title			
DCIN & DETECTOR			
Size	Document Number	Rev	
	LA-6601P	0.3	
Date:	Tuesday, November 30, 2010	Sheet	49 of 63



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Note:
 Use TPS51125 IC can remove RTC refernece LDO
 Use TPS51427 IC must keep RTC refernece LDO



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Compal Electronics, Inc.			
Title		+5VALWP/+3VALWP	
Size		Document Number	
Date		Tuesday, November 30, 2010	
Sheet		51 of 63	
Rev		0.3	

39,47 SYSON

+5VALW

+3VALW

1.5VDDR_VID0

1.5VDDR_VID1

+3VALW

+1.5VP

+0.75VSP

RT9026_MSOP10

0.75VSP

TDC 1.4A
Peak Current 2A
OCP current 3A

267K_0402_1%-D

300K_0402_5%-D

10K_0402_5%-D

150K_0402_1%-D

10K_0402_1%-D

10K_0402_5%-D

10K_0402_5%-D

10K_0402_5%-D

10K_0402_5%-D

10K_0402_5%-D

10K_0402_5%-D

10K_0402_5%-D

10K_0402_5%-D

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10K_0402_5%-D

10K_0402_5%-D

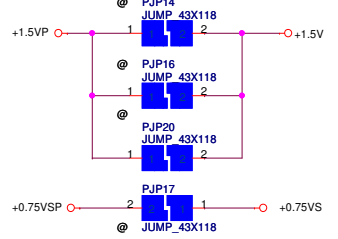
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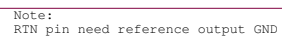


Compal Electronics, Inc.			
Title			
+1.5VSP/0.75VSP			
Size	Document Number	Rev	
	LA-6601P	0.3	
Date:	Tuesday, November 30, 2010	Sheet	54 of 63

1.5VP
TDC 10.3A
Peak Current 14.7A
OCP current 17.8A

DDR GPIO Output Voltage Selection		
bit2 = 1.5DDR_VID0	bit1 = 1.5DDR_VID1	DDR Vout
0	0	1.65V
0	1	1.6V
1	0	1.55V
1	1	1.5V (Default)





```
+VCCSAP
TDC 4.2A
Peak Current 6A
OCP current 7.2A
```



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

Page 1

Item	Page#	Title	Date	Request Owner	Issue Description	Solution Description	Rev.
1	56	CPU_CORE	10*06/17	Compal_Alvin	Improve thermal compensation.	Change PR164 from 0ohm to 27.4Kohm.	X00
2	51-57	all DC-DC schematic	10*06/17	Compal_Alvin	Improve dc to dc power efficiency.	Delete all snuber for all dc-dc. Delete PR85, PR86, PR98, PR115, PR129, PR148, PR169, PR188, PR206, PR223. Delete PC60, PC61, PC78, PC86, PC108, PC123, PC148, PC159, PC178, PC197.	X00
3	50	Charger	10*07/22	Compal_Alvin	Voltage rating enhancement.	Change PR49 form 14.3K to 15K.	X01
4	50	Charger	10*07/22	Compal_Alvin	Output capacitor rating enhancement.	Add PC46 10uF 0805 to output.	X01
5	51	+5VALWP/+3VALWP	10*07/22	Compal_Alvin	Enhance Input capacitor rating and switch waveform.	Add PC80 4.7uF 0805 to input and change low side to FDMS0310S.	X01
6	56	CPU_CORE	10*07/22	Compal_Alvin	Improve EMC solution.	Add PC97, PC124, PC128, PC129, PC130, PC131 0.1uF 0603.	X01
7	51	+5VALWP/+3VALWP	10*07/22	Compal_Alvin	Improve EMC solution.	Add PC80 0.1uF 0603.	X01
8	54	+1.5VP/0.75VSP	10*07/22	Compal_Alvin	Improve EMC solution.	Add PC168 0.1uF 0603.	X01
9	55	VCCSAP	10*07/22	Compal_Alvin	Improve EMC solution.	Add PL24 120ohm bead, and PC194 1000pF 0402.	X01
10	53	+1.8VSP	10*07/22	Compal_Alvin	Improve low side switching waveform.	Change PQ59 from A04466 to A04712L	X01
11	49	DCIN/DECTOR	10*08/03	Compal_Alvin	Add dynmatic trubo function to control trubo.	Add dynamatic trubo function.	X01
12	52	+VCCPP	10*08/10	Compal_Alvin	For met Intel SPEC.	Change VCCPP output CAP to 470uF.	X01
13	56	CPU_CORE	10*08/10	Compal_Alvin	Adjust the CPU loadline and transient to met Intel SPEC.	PC167 and PC186. PR216, PR219, PR202, PR180, PR176, PR179, PR182, PR167, PR186.	X01
14	56	CPU_CORE	10*09/28	Compal_Alvin	Improve CPUCore PWRGOOD signal.	Change VDD power rail from 5VS to 5VALW and add PR220 and PC202.	X02
15	55	VCCSAP	10*09/28	Compal_Alvin	Improve VCCSA PWRGOOD signal.	Change VCC power rail from 5VS to 5VALW.	X02
16	49/50	DCIN/DECTOR BATTERY CONN/OTP	10*09/28	Compal_Alvin	Saving S4/S5 power consumption.	Change PU1 Pin8 from Pre_V to VL.	X02
17	51/52/54	+5VALWP/+3VALWP +VCCPP +1.5VP/0.75VSP	10*10/12	Compal_Alvin	For EMI solution.	Add PL25, PL26, PL27 P/N:SM01000DJ00 (S SUPPRE_FBMA-L11-453215-121LMA90T 1812) Add 10uF PC205 and change PC23, PC24 to 10uF. Pop PC133 and PC134.	X02

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Title		
PWR-PIR		
Size	Document Number	Rev
	LA-6601P	0.3
Date: Tuesday, November 30, 2010		
Sheet	57	of 63

Page 1

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Compal Electronics, Inc.			
Title			
PWR-PIR			
Size	Document Number	Rev	
	LA-6601P	0.3	
Date:	Tuesday, November 30, 2010	Sheet	58 of 63

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

Page 1

Item	Page#	Title	Date	Request Owner	Issue Description	Solution Description	Rev.
1	29	DP SW for mDP CONN	10'07/22	Compal_Yungmao	Mini DP no function	Modified JMDP1 pin define	X00
2	39	USB 3.0 PD720200	10'08/10	Compal_Yungmao	USB3.0 transfer speed is too low	L33 swap pin3 with pin4, net U3TXDN2_L, U3TXDN2 L34 swap pin3 with pin4, net U3TXDP1_L, U3TXDP1 L35 swap pin3 with pin4, net U3RXDN2_L, U3RXDN2 L36 swap pin3 with pin4, net U3RXDP1_L, U3RXDP1	X00
3	31	HDMI input - STDP6038	10'07/22	Compal_Yungmao	HDMI-IN no function	Change U7 pin111, 112 to U7 pin72,pin71	X00
4	34-35	HD Audio_IDT92HD73C	10'08/3	Compal_Yungmao	S/PDIF jack no function	net LINE_OUT_JD connect to R1677 pin2 delete R721, R722, C740	X00
5	38	Mini Card -WLAN / DMC / BT	10'08/11	Compal_Yungmao	Install Bluetooth module might be cause system can't bootable	remove net name BT_ACTIVE	X00
6	33	GLAN AR8151 AL1A	10'08/9	Compal_Yungmao	LOM can't work in 1000Mbps speed and no LED is on	swap JLAN1 pin11 with pin13, net LAN_LINK#, LAN_LED2#	X00
7	34	HD Audio_IDT92HD73C	10'08/10	Compal_Yungmao	Audio left and right channel reverse	swap U9, U16 pin6 with pin8	X00
8	40	USB/ESATA TS3USB221RSER	10'08/3	Compal_Yungmao	USB charging Device can't be charging in S4/S5 with" AC and Battery " mode	change D18 from +5VS to +5VALW	X00
9	14	MXMIII Connector A	10'07/22	Compal_Yungmao	-9% of 3.3V (3.003) will cause no display when system power on	add R1817, R1816, Q281	X00
10	5	PROCESSOR(2/6) PM,XDP,CLK	10'07/15	Compal_Yungmao	for EMI/EDS requirement	add RC121,RC125,RC126,RC127,RC128	X00
11	10-13	DDRIII DIMMA ~ DDRIII DIMMD	10'07/15	Compal_Yungmao	for DDR3 module can select serial address	add RD35,RD36,RD37,RD38,RD39,RD47,RD49	X00
12	14	MXMIII Connector A	10'08/4	Compal_Yungmao	for MXM3.0 module power saving	add R1818, R1819 pull high	X00
13	25	LVDS SW- 1 to 2 & GPU/PCH	10'07/13	Compal_Yungmao	STDP6038 chipset vendor require to add for debug used	add R313, R314	X00
14	04	PROCESSOR(6/6)	10'09/20	Compal_Ray	derating fail	QC4 change to SB000000090L	X02
15	14	MXMIII Connector	10'09/20	Compal_Ray	battery can't charge	R1818, R1819 depop, change connection EC_SMB_DA1 to VGA_SMB_DA1	X02
16	17	PCH (3/8)	10'09/20	Compal_Ray	can't boot when plug bluetooth module.	pop RH95	X02
17	26	LVDS SW & CONN	10'09/20	Compal_Ray	Web CAM can't work.	Change CAM power to 3VS	X02

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Title		EE PIR(1)	
Size	Document Number	LA-6601P	
Date	Tuesday, November 30, 2010	Sheet	59 of 63
		Rev	1.0

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

Page 2

Item	Page#	Title	Date	Request Owner	Issue Description	Solution Description	Rev.
17	28	HDMI SW	10'09/20	Compal_Ray	Follow A18 +HDMI_5V_OUT circuit	remove QV5,CV40,RV35,QV6,RV34,Add R1896	X02
18	28	HDMI SW	10'09/20	Compal_Ray	HDMI can't work	Change UV2 HPD connection	X02
19	30	HDMI SW for DMC	10'09/20	Compal_Ray	DP can't work	pop R1865 add R1958,R1959, remove C52,C53	X02
20	40	USB/ESATA	10'09/20	Compal_Ray	eSATA can't work	remove RS12	X02
21	40	USB/ESATA	10'09/20	Compal_Ray	update for eSATA power share function	PWRSHARE_EN# GPIO assign to EC pin 86 Add R97 for PWRSHARE_EN# pull down add R1699,D31	X02
22	15	PCH (1/8)	10'09/20	Compal_Ray	ME position redifned for HDD.	Swap HDD1(Port 1) ,HDD2(Port 0)	X02
23	39	USB3.0 PD720200	10'09/27	Compal_Ray	USB3.0 can't work	depop R201, pop R202 0 ohm	X02
24	17	PCH (3/8)	10'09/27	Compal_Ray	AV17 doesn't support deep sleep mode	pop RH126, add RH159 and depop it depop RH139 ,RH134	X02
25	15	PCH (1/8)	10'09/27	Compal_Ray	Add HDA BUS ON/OFF control circuit,	add CH17,UH9,RH30,RH50,QH10,RH267	X02
26	15	PCH (1/8)	10'09/27	Compal_Ray	follow Design guide	Add RH47 for BBS_BIT0_R	X02
27	17	PCH (3/8)	10'09/27	Compal_Ray	follow Design guide	Add R1687 for PCH_RSMRST# pull down	X02
28	17	PCH (3/8)	10'09/27	Compal_Ray	Change ACIN connection	Remove RH150 ,RH137,Add R1900,R1899,QH11	X02
29	35	Speaker AMP	10'09/27	Compal_Ray	To solve po noise when HDMI IN toggling	add Q10	X02
30	04	PROCESSOR(6/6)	10'09/27	Compal_Ray	derating fail	QC4 change to SB00000090L	X02
31	34	HD Audio	10'09/27	Compal_Ray	Add HDMI IN audio sense circuit.	add Q284 R1902,R1903	X02
32	34	HD Audio	10'09/27	Compal_Ray	to solve backdrive issue on +3VS	add D54	X02
33	15	PCH (1/8)	10'09/27	Compal_Ray	follow DG1.5 recommand	Add R1960	X02

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Title		EE PIR(2)	
Size	Document Number	LA-6601P	Rev 1.0
Date:	Tuesday, November 30, 2010	Sheet 60	of 63

Item	Page#	Title	Date	Request Owner	Issue Description	Solution Description	Rev.
34	16	PCH (4/8)	10'09/27	Compal_Ray	PLTREST_VGA issue	Add R28 D13 and change RH170 to 0 ohm	X02
35	28	HDMI SW	10'10/01	Compal_Ray	Addd R58 for HMI_SW_DETECT bypass direct due to it's desn't need level shift to 5V	Add R58	X02
36	35	Speaker AMP	10'10/01	Compal_Ray	add mute siwtch to solve po noise issue	Add U619 ,C1843	X02
37	33	GLAN AR8151 AL1A	10'10/01	Compal_Ray	Change CL39 to 3KV spec for Hi-port test	change CL39 to 1000P_1808_3KV7K~D	X02
38	15	PCH	10'10/07	Compal_Ray	Rename location	Change CLIP1 to COMS1 and CLIP2 to ME1	X02
39	39	USB 3.0	10'10/07	Compal_Ray	Add power option	Add R1964,R1965,R1966,R1967 for U37 power option	X02
40	31	HDMI	10'10/07	Compal_Ray	For double pull high	Remove R81,R83	X02
41	15	PCH	10'10/07	Compal_Ray	Change RTC circuit	Change RTC circuit and change DH1 to CHN202UPT,Reomve RH250	X02
42	33	GLAN AR8151 AL1A	10'10/07	Compal_Ray	Crystal EA result	Change CL18,CL19 to 15pF by crystal EA result	X02
43	9,10,11	CPU	10'10/07	Compal_Ray	Remove XDP 0 ohm resistor	CPU XDP depop, Remove:RC68~RC71, Change to depop RC59,RC61~RC67,RC121,RC121,RC125~RC128,RC50,RC51 Add T51~T54	X02
44	16	PCH	10'10/07	Compal_Ray	Crystal EA result	Change YH2 to X5H025000DC1H-H, CH23,CH24 to 12pF by crystal EA result	X02
45	5	CPU	10'10/07	Compal_Ray	Follow Design guide 1.5	Add RC113 to reserve PCH_PWROK for VDDPWGOOD	X02
46	31	ST6038	10'10/07	Compal_Ray	Derating issue	Change L13 to BLM18AG601SN1D for derating issue	X02
47	9	CPU	10'10/07	Compal_Ray	S3 issue	Reserve CC178 for CPU1.5V_S3_GATE timing delay	X02
48	31	ST6038	10'10/07	Compal_Ray	By vendor review	Follow vendor to depop R1744	X02
49	32	ST4028	10'10/07	Compal_Ray	By vendor review	Change U607 to M25PE20	X02
50	31	ST6038	10'10/08	Compal_Ray	Timing issue	Add R172 for LDO timing enable timing delay	X02

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Title		EE PIR(2)	
Size	Document Number	LA-6601P	
Date	Tuesday, November 30, 2010	Sheet	61 of 63
Rev	1.0		

Item	Page#	Title	Date	Request Owner	Issue Description	Solution Description	Rev.
51	16	Codec	2010/10/8	Compal_Ray	Mute issue	Add U620,C1844,U621,C1845 for mute	X02
52	28	MXM	2010/10/8	Compal_Ray	Follow A18	Change AC_BATT# to EC_AC_BAT# , and remove R1817,D72, add U622,C1823	X02
53	35	USB3.0	2010/10/8	Compal_Ray	EMI issue	Change L33~L38 to DLW21SN670HQ2L	X02
54	26	LVDS SW	2010/10/8	Compal_Ray	Remove resistor for double pull high	Remove R323 ,R326	X02
55	35	Audio	2010/10/12	Compal_Ray	By Maxim review result	Change C154,C158 to .022uF and R140,R145 to 20K	X02
56	15	PCH	2010/10/12	Compal_Ray	Reserve 0 ohm for HDA_SDOUT	Add RH51	X02
57	44	ENE	2010/10/12	Compal_Ray	Change GPIO	Change GPIO46 to VGA_ON and depop RH118	X02
58	24, 44	ENE	2010/10/12	Compal_Ray	Change GPIO, and add backlight control circuit	Change VGA_ON to LCD_BKL_EN, and add backlight control circuit, add Q39,C332,R422,R423,Q28,C331	X02
59	29	DP	2010/10/12	Compal_Ray	DP dual mode can't display	Remove C301,C308	X02
60	35	Audio	2010/10/12	Compal_Ray	To reach 16dB	Change R137,R142 to 16.2K	X02
61	15	PCH	2010/10/22	Compal_Ray	Pop RH50 for ME lock issue	Pop RH50	A00
62	37	ODD	2010/10/22	Compal_Ray	Re define ODD pin	For ODD power require, add one more power pin	A00
63	37	ODD	2010/10/22	Compal_Ray	Remove zero power ODD switch.	Remove SW1 and add R173 0 ohm for ODD_DA#	A00
64	46	power switch	2010/10/22	Compal_Ray	Remove reserve power switch	Remove SW4,SW5	A00
65	24, 44	LCD	2010/10/22	Compal_Ray	Correct net name	Rename LCD_BKL_EN# to LCD_BKL_EN	A00
66	44	BID	2010/10/22	Compal_Ray	Change BID	Change BID, R225 to 56K	A00
67	34	BID	2010/10/22	Compal_Ray	HDMI in audio issue.	change HDMI_IN_SELECT# to HDMI_TOGGLE	A00

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Title		EE PIR(2)	
Size	Document Number	LA-6601P	Rev 1.0
Date: Tuesday, November 30, 2010		Sheet 62	of 63

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Title			
EE PIR(2)			
Size	Document Number		Rev
	LA-6601P		1.0
Date:	Tuesday, November 30, 2010	Sheet 63 of 63	

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