

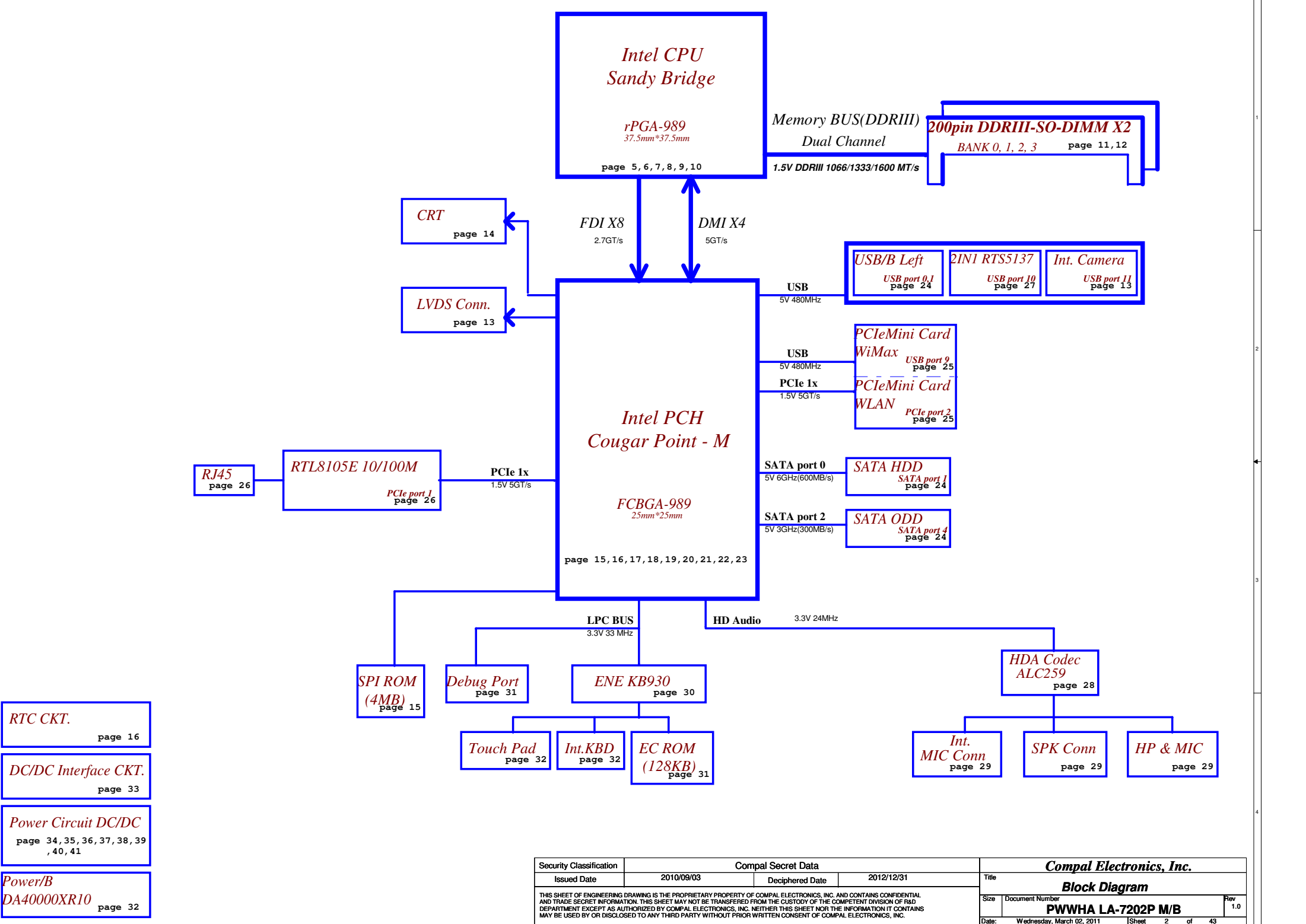
PWWHA

Delhi 10R

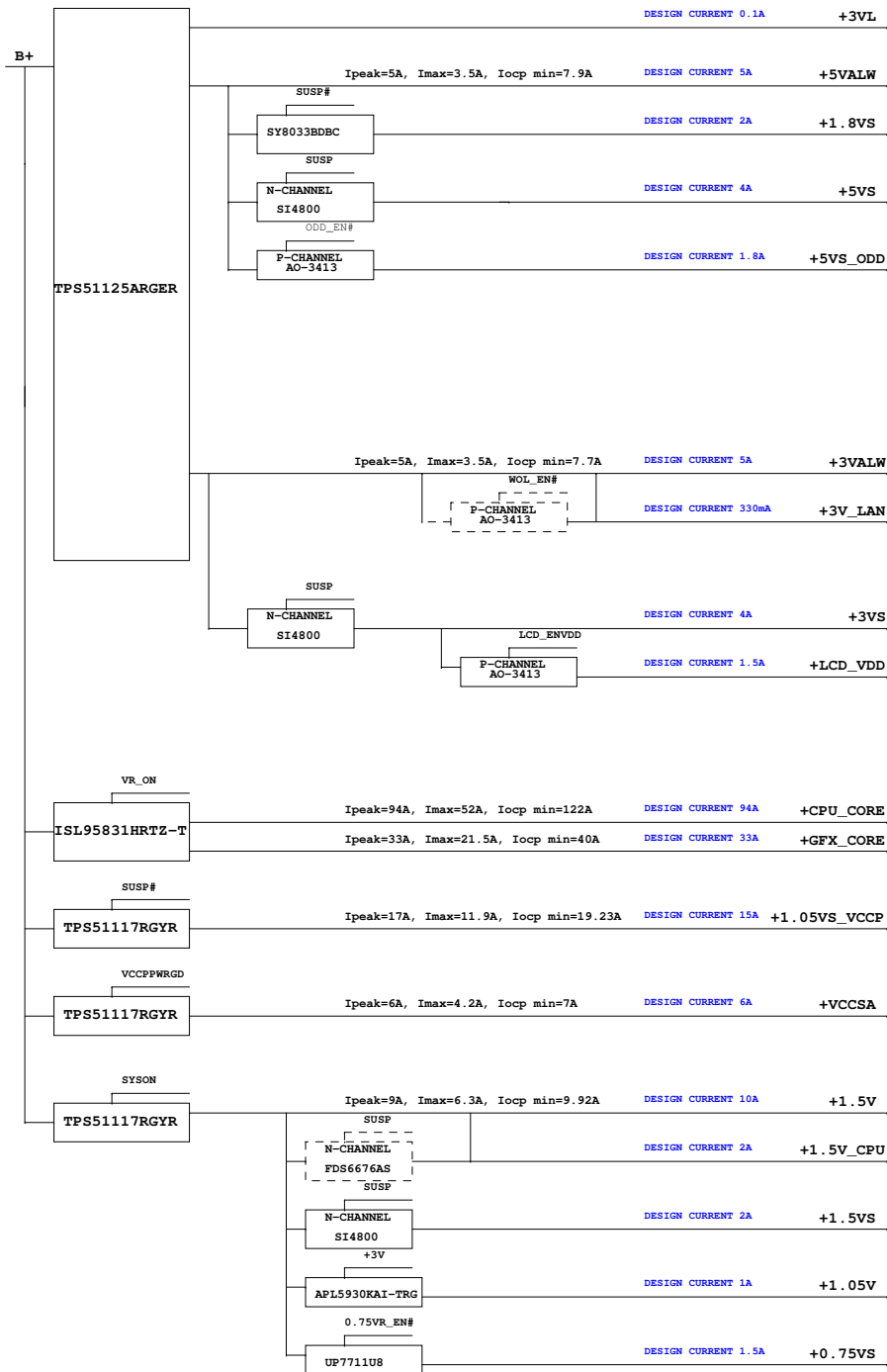
LA-7202P REV 1.0 Schematic

Intel Processor (Sandy Bridge) / PCH (Cougar Point)
2011-02-08 Rev 1.0

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/09/03	Deciphered Date	2012/12/31	Title	
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.				Cover Page	
				Size B	Document Number PWWHA LA-7202P M/B
				Date: Friday, February 25, 2011	Rev 1.0
				Sheet 1	of 43



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/09/03	Deciphered Date	2012/12/31	Title	
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.				Size	Document Number
				PWWHA LA-7202P M/B	
				Date:	Rev
				Wednesday, March 02, 2011	1.0
				Sheet	of
				2	43



Security Classification		Compal Secret Data		Compal Electronics, Inc.		
Issued Date	2010/09/03	Deciphered Date	2012/12/31	Title	Power Tree	
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.				Size	Document Number	Rev
					PWWHA LA-7202P M/B	1.0
				Date:	Friday, February 25, 2011	Sheet 3 of 43

Voltage Rails (O MEANS ON X MEANS OFF)

<div>power plane</div> <div>State</div>	+RTCVCC	B+	+3VL	+5VALW +3VALW +VSB	+1.5V	+5VS +3VS +1.8VS +1.5VS +1.05VS +0.75VS +CPU_CORE +GFX_CORE
S0	O	O	O	O	O	O
S1	O	O	O	O	O	O
S3	O	O	O	O	O	X
S5 S4/AC	O	O	O	O	X	X
S5 S4/ Battery only	O	O	O	X	X	X
S5 S4/AC & Battery don't exist	O	X	X	X	X	X

PCH SM Bus Address

Power	Device	HEX	Address
+3VS	DDR SO-DIMM 0	A0 H	1010 0000 b
+3VS	DDR SO-DIMM 1	A4 H	1010 0100 b
+3VS	Clock Generator	D2 H	1101 0010 b
+3VS	WLAN/WIMAX		

EC SM Bus1 Address

Power	Device	HEX	Address
+3VL	Smart Battery	16 H	0001 0110 b

EC SM Bus2 Address

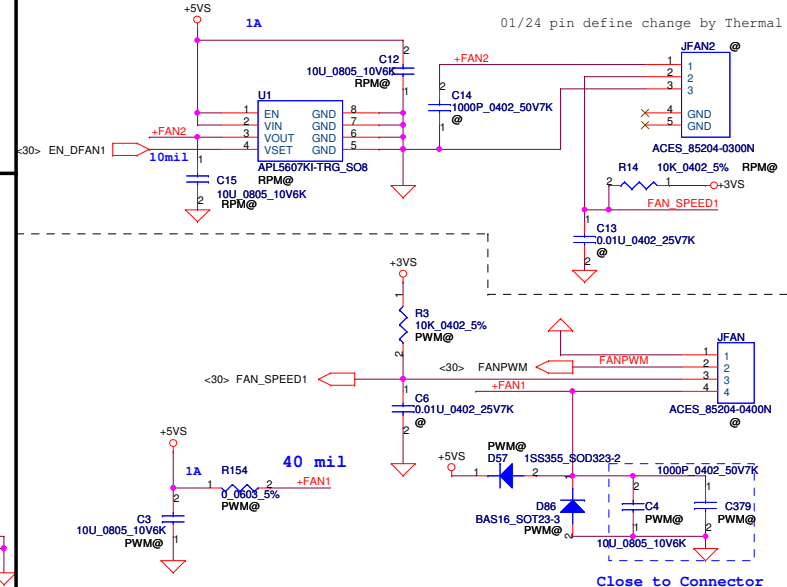
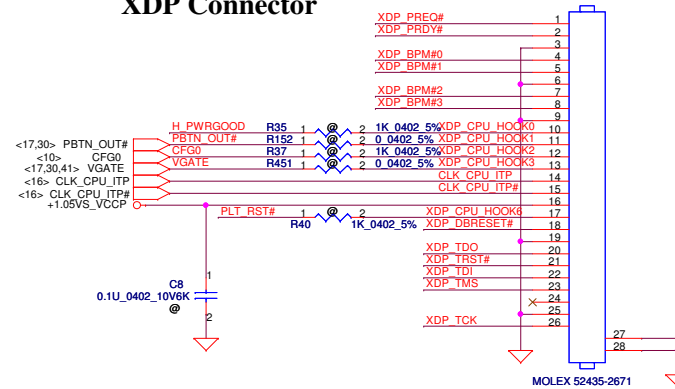
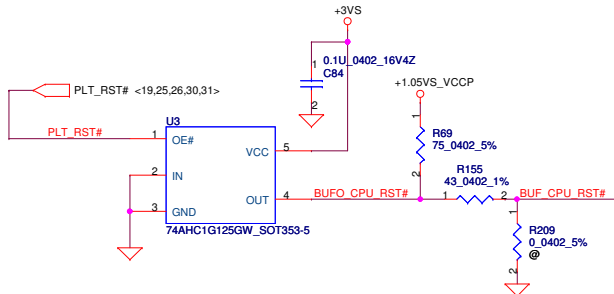
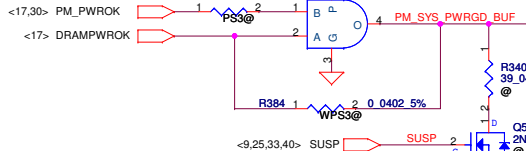
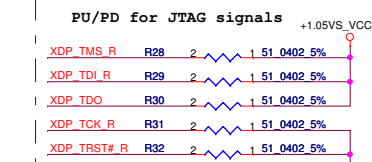
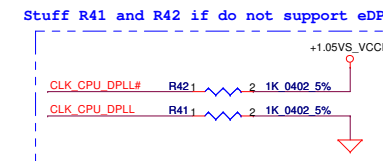
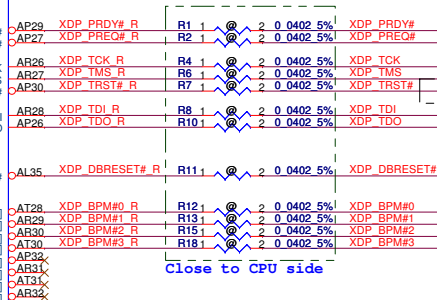
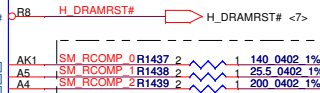
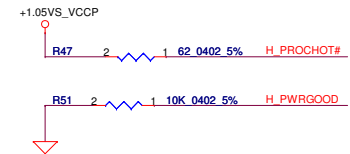
Power	Device	HEX	Address
+3VS	PCH	96 H	1001 0110 b

BTO Option Table

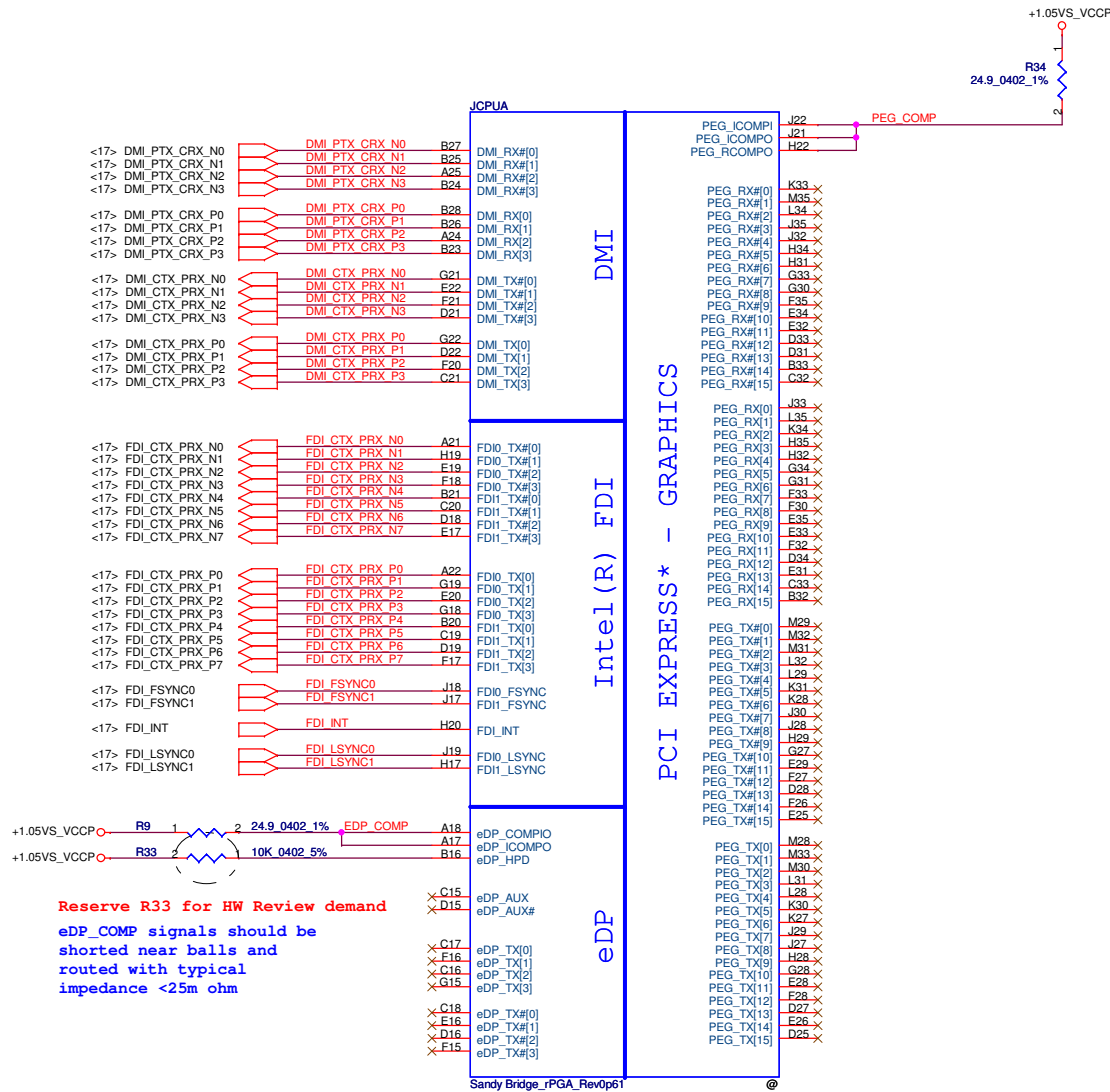
Function	MINI PCI-E SLOT	LAN		Camera & Mic	FAN		S3 Power Saving		Load Power Switch	
description	SLOT1	LAN		Camera & Mic	FAN		S3 Power Saving		Load Power Switch	
explain	WIMAX	10/100M	Giga	Camera & Mic	PWM	RPM	1.5V	1.5VS	Old Sch.	New Sch.
BTO	WIMAX@	8105E@	8111E@	CAM@	PWM@	RPM@	WPS3@	PS3@	OLS@	NLS@

<div>STATE</div> <div>SIGNAL</div>	SLP_S3#	SLP_S4#	SLP_S5#
Full ON	HIGH	HIGH	HIGH
S1 (Power On Suspend)	HIGH	HIGH	HIGH
S3 (Suspend to RAM)	LOW	HIGH	HIGH
S4 (Suspend to Disk)	LOW	LOW	HIGH
S5 (Soft OFF)	LOW	LOW	LOW
G3	LOW	LOW	LOW

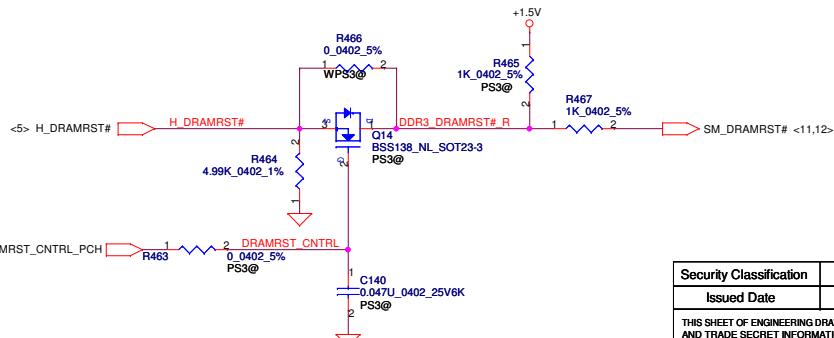
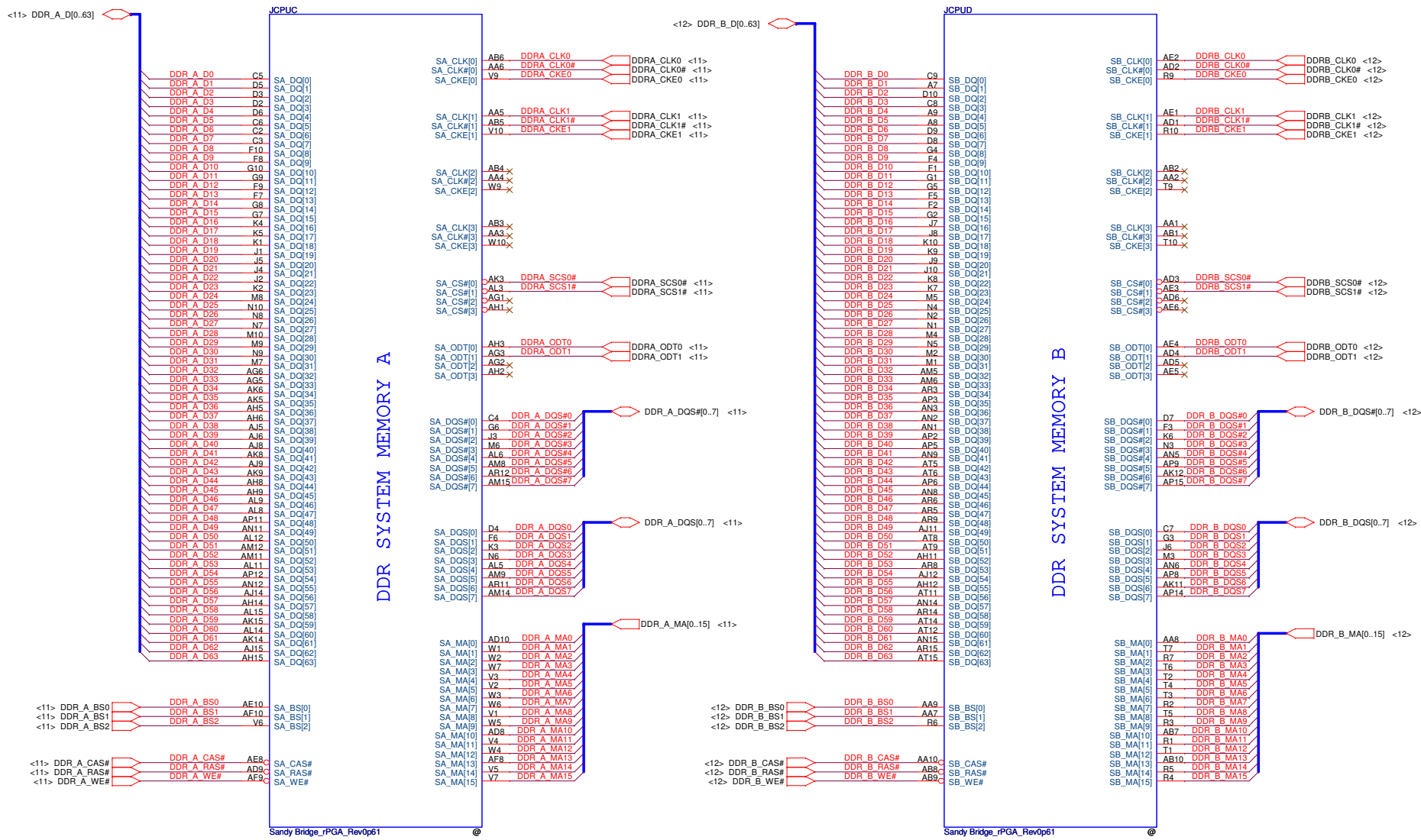
Security Classification		Compal Secret Data				Compal Electronics, Inc.					
Issued Date		2010/09/03		Deciphered Date		2012/12/31		Title			
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY 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.						Notes List					
						Size		Document Number		Rev	
						Custom		PWWHA LA-7202P M/B		1.0	
						Date:		Friday, February 25, 2011		Sheet 4 of 43	



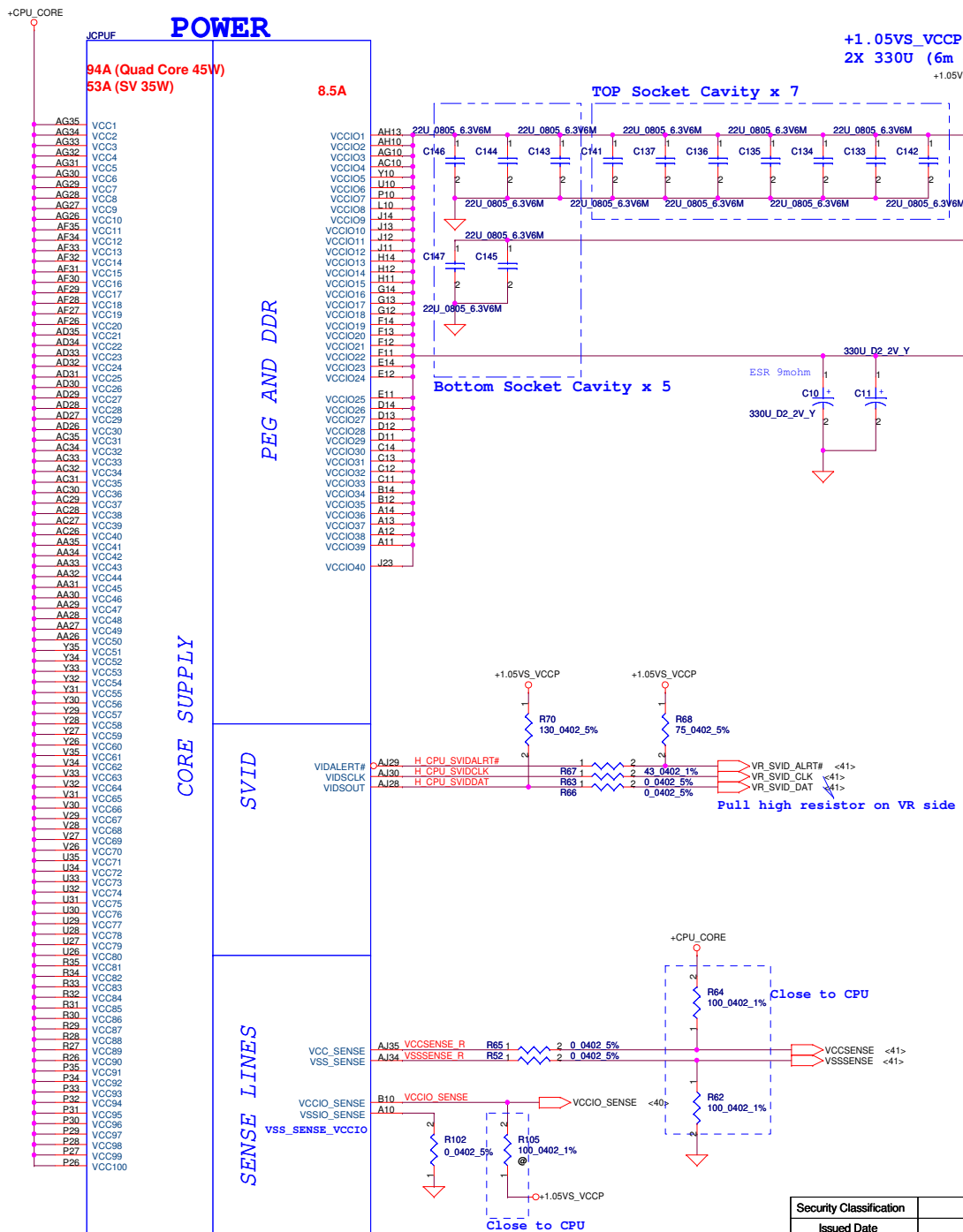
Security Classification	Compal Secret Data			Compal Electronics, Inc.		
Issued Date	2010/09/03	Deciphered Date	2012/12/31	Title Sandy Bridge_JTAG/XDP/FAN		
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. 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.				Size	Document Number	Rev
				Custom	PWWHA LA-7202P M/B	1.0
				Date:	Friday, February 25, 2011	Sheet 5 of 43



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/09/03	Deciphered Date	2012/12/31	Title	
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.				Sandy Bridge_DMI/PEG/FDI	
Size	Custom	Document Number	PWWHA LA-7202P M/B	Rev	1.0
Date:	Friday, February 25, 2011	Sheet	6	of	43

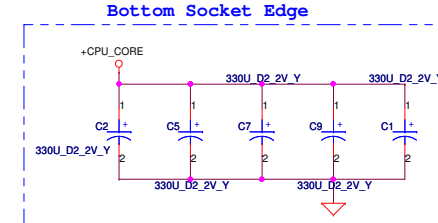
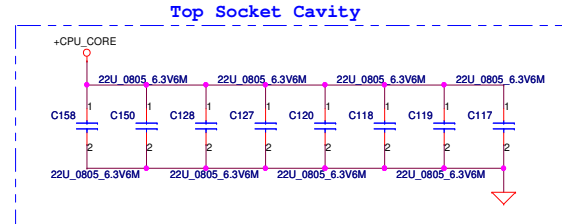
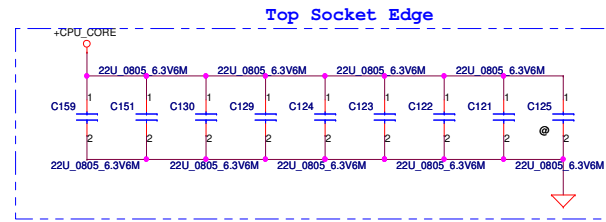
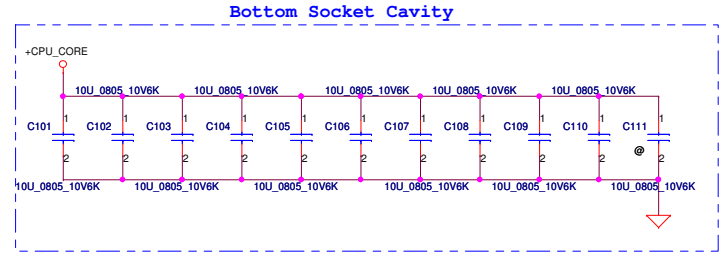


Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/09/03	Deciphered Date	2012/12/31	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				Sandy Bridge_DDR3	
Size		Document Number		PWWHA LA-7202P M/B	
Date		Friday, February 25, 2011		Sheet 7 of 43	



+1.05VS_VCCP Decoupling:
2X 330U (6m ohm), 12X 22U

+CPU_CORE Decoupling:
4X 470U (4m ohm), 16X 22U, 10X 10U



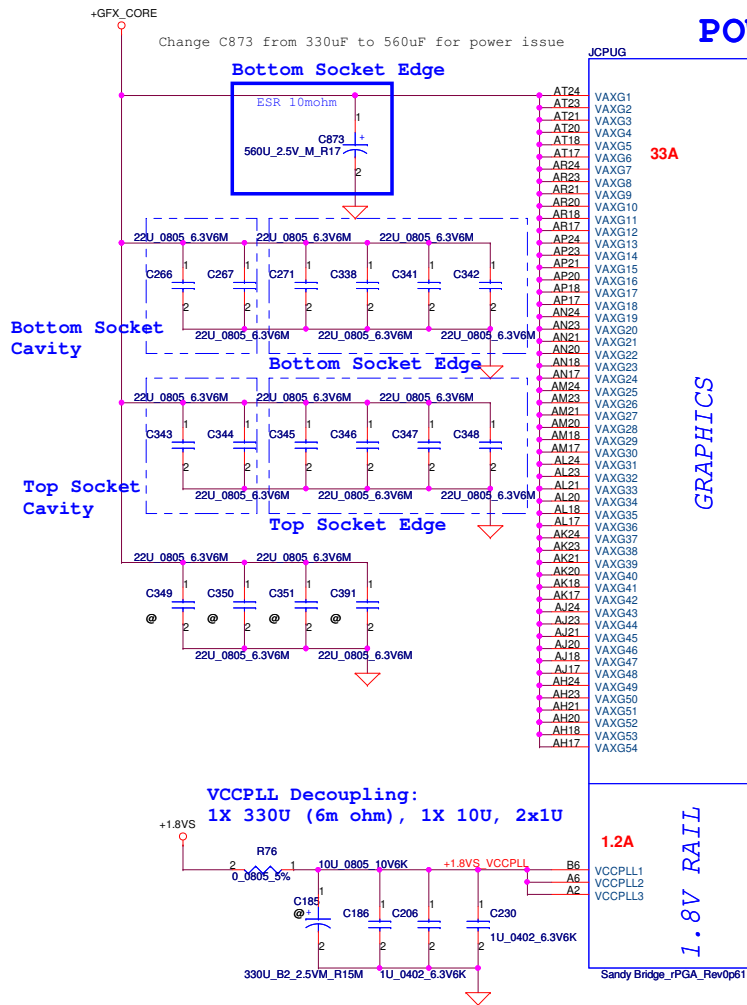
Pull high resistor on VR side

Close to CPU

Close to CPU

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/09/03	Deciphered Date	2012/12/31	Title	
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.				Sandy Bridge_POWER-1	
Size		Document Number		PWWHA LA-7202P M/B	
Date		Friday, February 25, 2011		Rev 1.0	
Sheet		8		of 43	

+GFX_CORE Decoupling:
1X 560U (10m ohm), 12X 22U



POWER

SENSE LINES

VAXG1
VAXG2
VAXG3
VAXG4
VAXG5
VAXG6
VAXG7
VAXG8
VAXG9
VAXG10
VAXG11
VAXG12
VAXG13
VAXG14
VAXG15
VAXG16
VAXG17
VAXG18
VAXG19
VAXG20
VAXG21
VAXG22
VAXG23
VAXG24
VAXG25
VAXG26
VAXG27
VAXG28
VAXG29
VAXG30
VAXG31
VAXG32
VAXG33
VAXG34
VAXG35
VAXG36
VAXG37
VAXG38
VAXG39
VAXG40
VAXG41
VAXG42
VAXG43
VAXG44
VAXG45
VAXG46
VAXG47
VAXG48
VAXG49
VAXG50
VAXG51
VAXG52
VAXG53
VAXG54

VREF

SM_VREF

GRAPHICS

DDR3 -1.5V RAILS

SA RAIL

VCCSA1
VCCSA2
VCCSA3
VCCSA4
VCCSA5
VCCSA6
VCCSA7
VCCSA8

MISC

VCCSA_SENSE
VCCSA_VID0
VCCSA_VID1

AK35 VCC AXG SENSE
AK34 VSS AXG SENSE

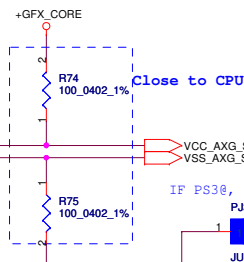
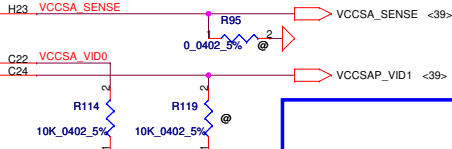
+V_SM_VREF should
have 20 mil trace width

AP2302GN-HF_SOT23-3
RUN ON CPU1.5VS3

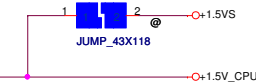
+VCCSA Decoupling:
1X 330U (17m ohm), 4X 10U

Bottom Socket Cavity

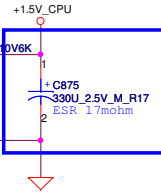
Bottom Socket Edge



IF PS3@, short PJ32.

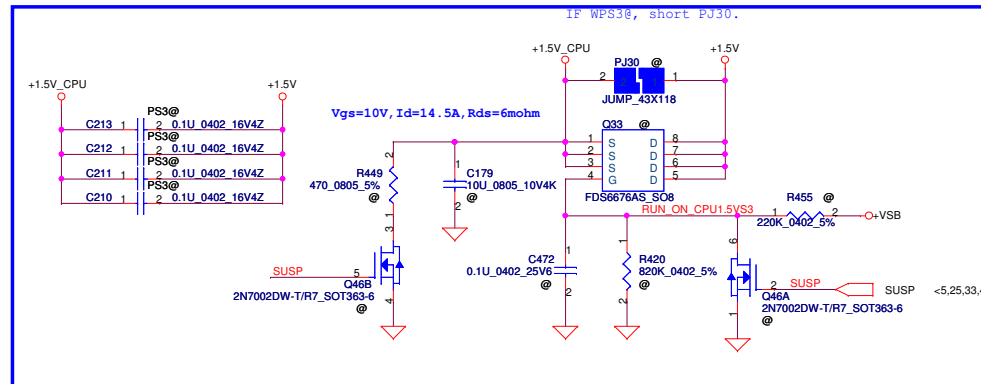


+1.5V_CPU Decoupling:
1X 330U (17m ohm), 6X 10U

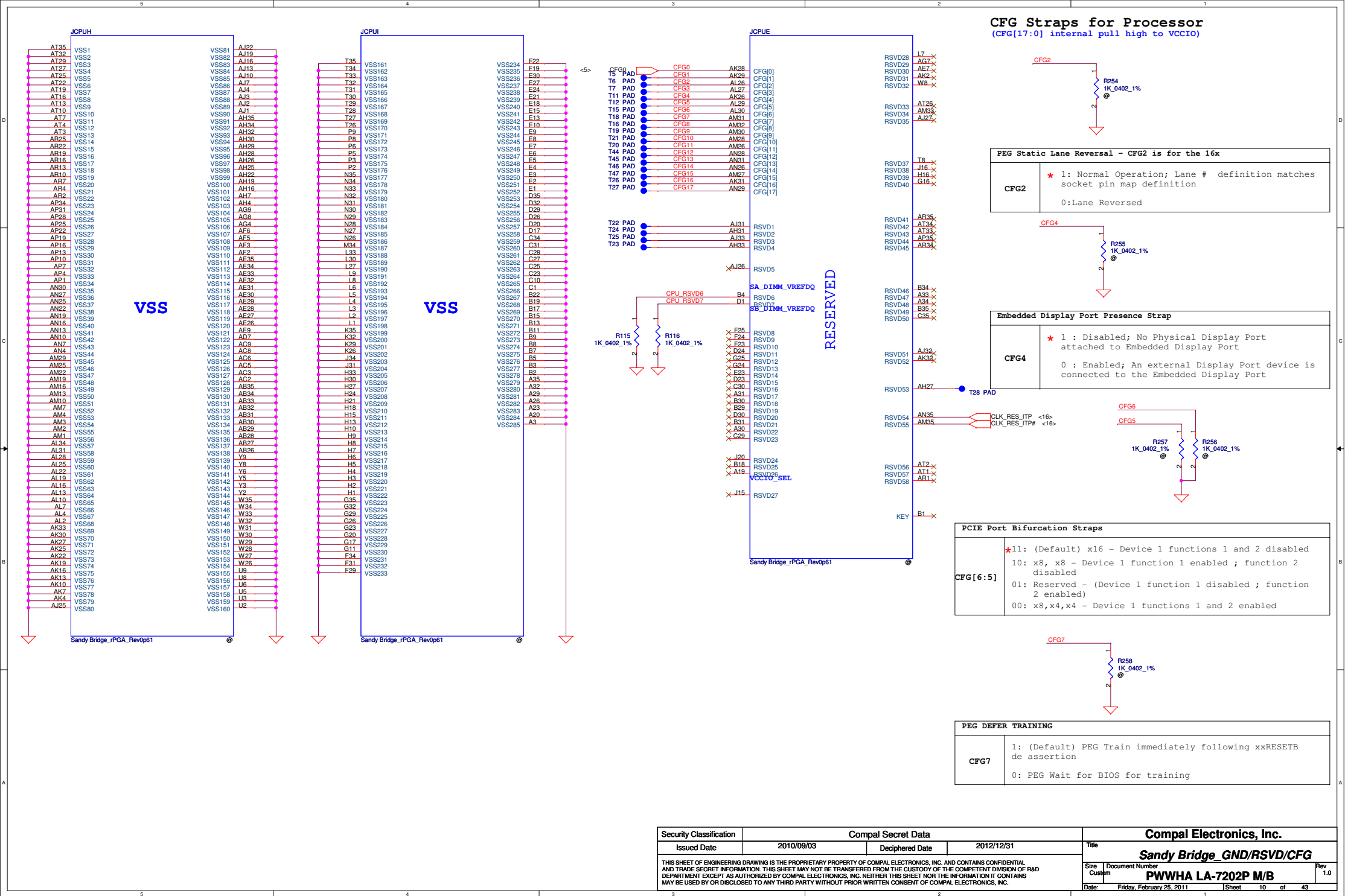


VCCSA_VID0	VCCSA_VID1	+VCCSA
0	0	0.90 V
0	1	0.80 V
1	0	0.75 V
1	1	0.65 V

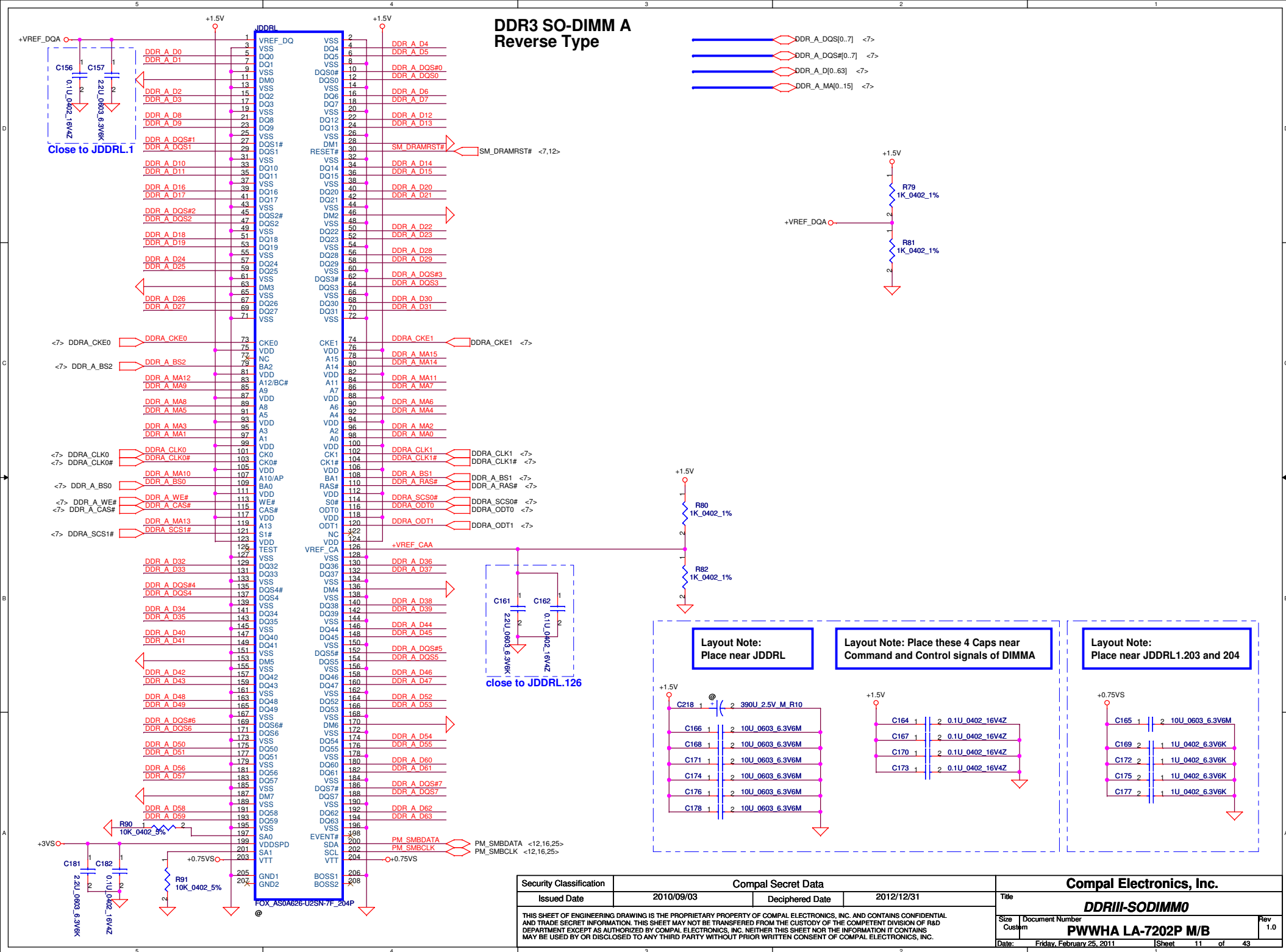
For Sandy Bridge



Security Classification	Compal Secret Data	Title	
Issued Date	2010/09/03	Deciphered Date	2012/12/31
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.			
Compal Electronics, Inc.		Sandy Bridge_POWER-2	
Size	Document Number	Rev	
Custom	PWWHA LA-7202P M/B	1.0	
Date:	Friday, February 25, 2011	Sheet	9 of 43

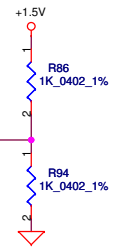
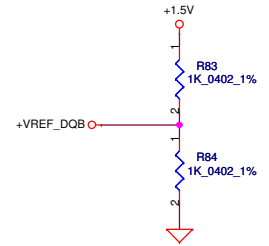
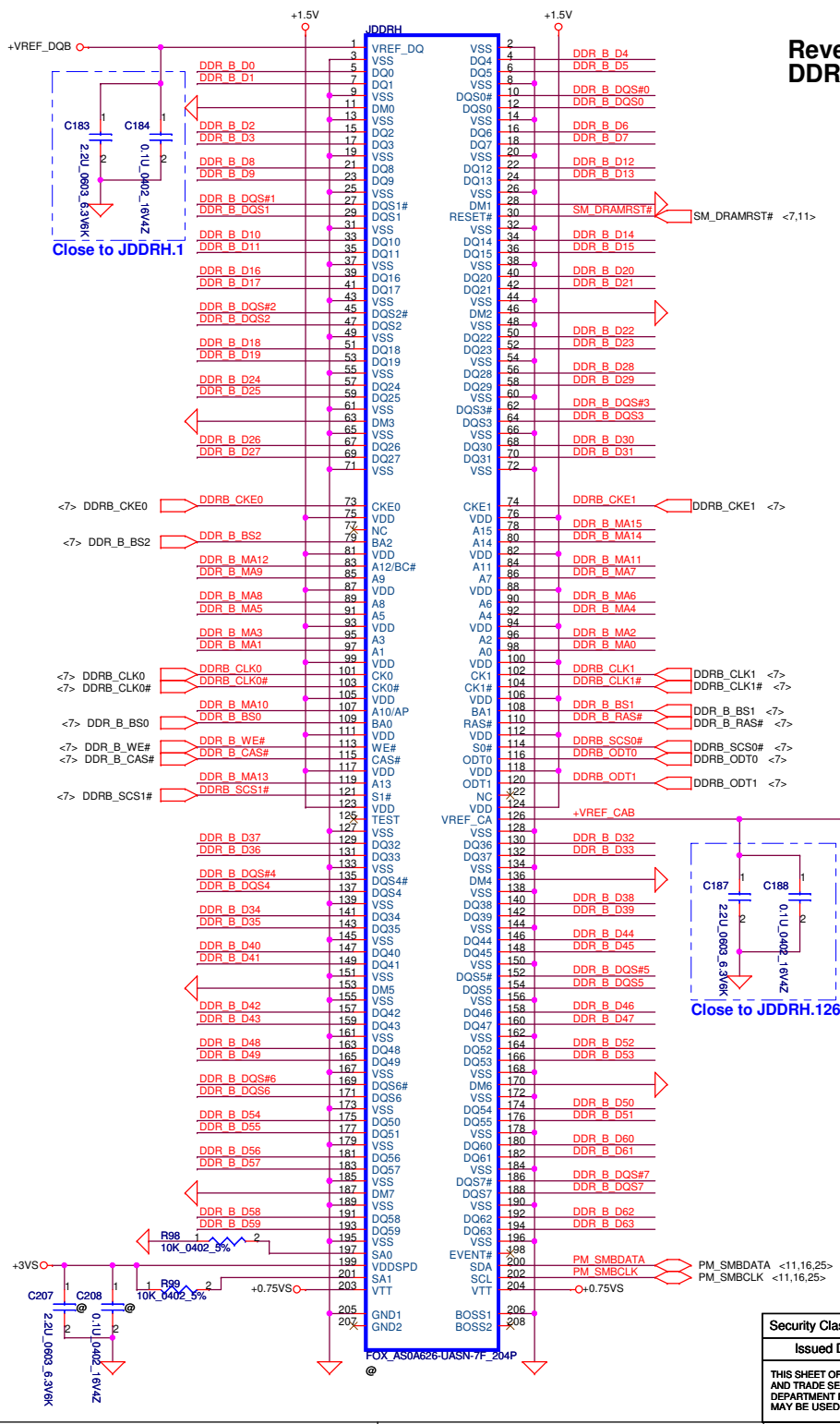


Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date		2010/09/03	Deciphered Date	2012/12/31	Title
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.		Sandy Bridge_GND/RSVD/CFG			
		Size Document Number		Rev	
		Custom		1.	
Date: Friday, February 25, 2011		Sheet		10 of 43	
				PWWHA LA-7202P M/B	



Security Classification		Compal Secret Data		Compal Electronics, Inc.		
Issued Date	2010/09/03	Deciphered Date	2012/12/31	Title		
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.				DDRIII-SODIMMO		
				Size	Document Number	Rev
				Custm	PWWHA LA-7202P M/B	1.0
Date:				Friday, February 25, 2011	Sheet	11 of 43

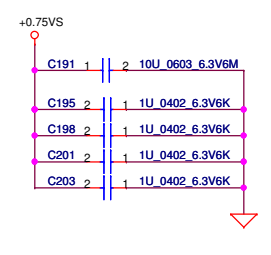
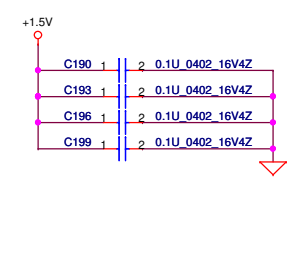
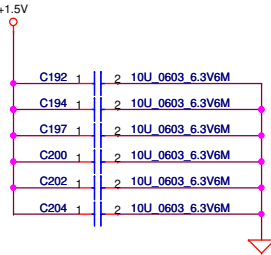
Reverse Type DDR3 SO-DIMM B



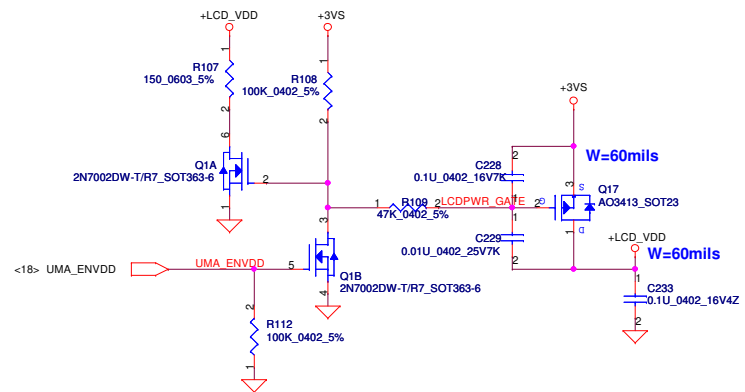
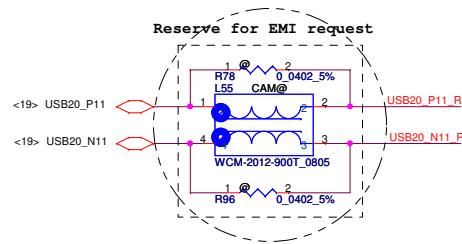
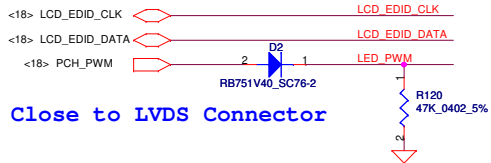
Layout Note:
Place near JDDR.H

Layout Note: Place these 4 Caps near
Command and Control signals of DIMMB

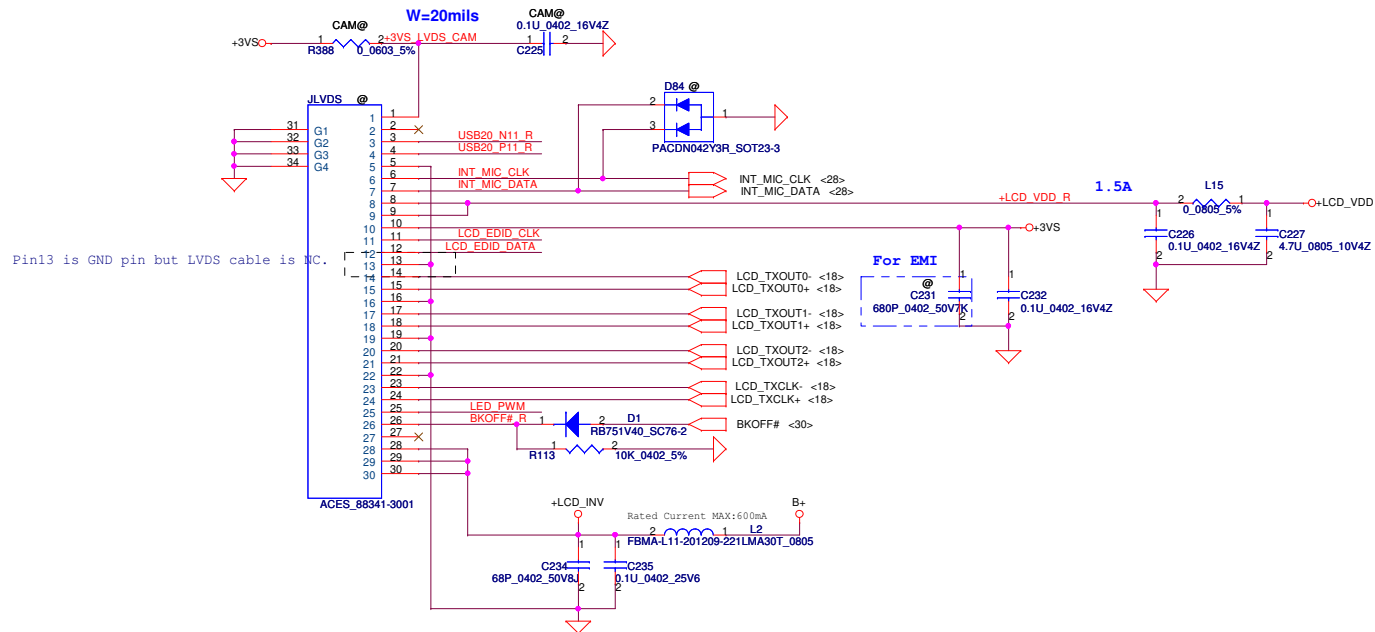
Layout Note:
Place near JDDR.H.203 and 204



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/09/03	Deciphered Date	2012/12/31	Title	
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 THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				DDR.III-SODIMM1	
Size	Document Number	Rev		PWWHA LA-7202P M/B	
Custom				Date: Friday, February 25, 2011	
		Sheet		12 of 43	

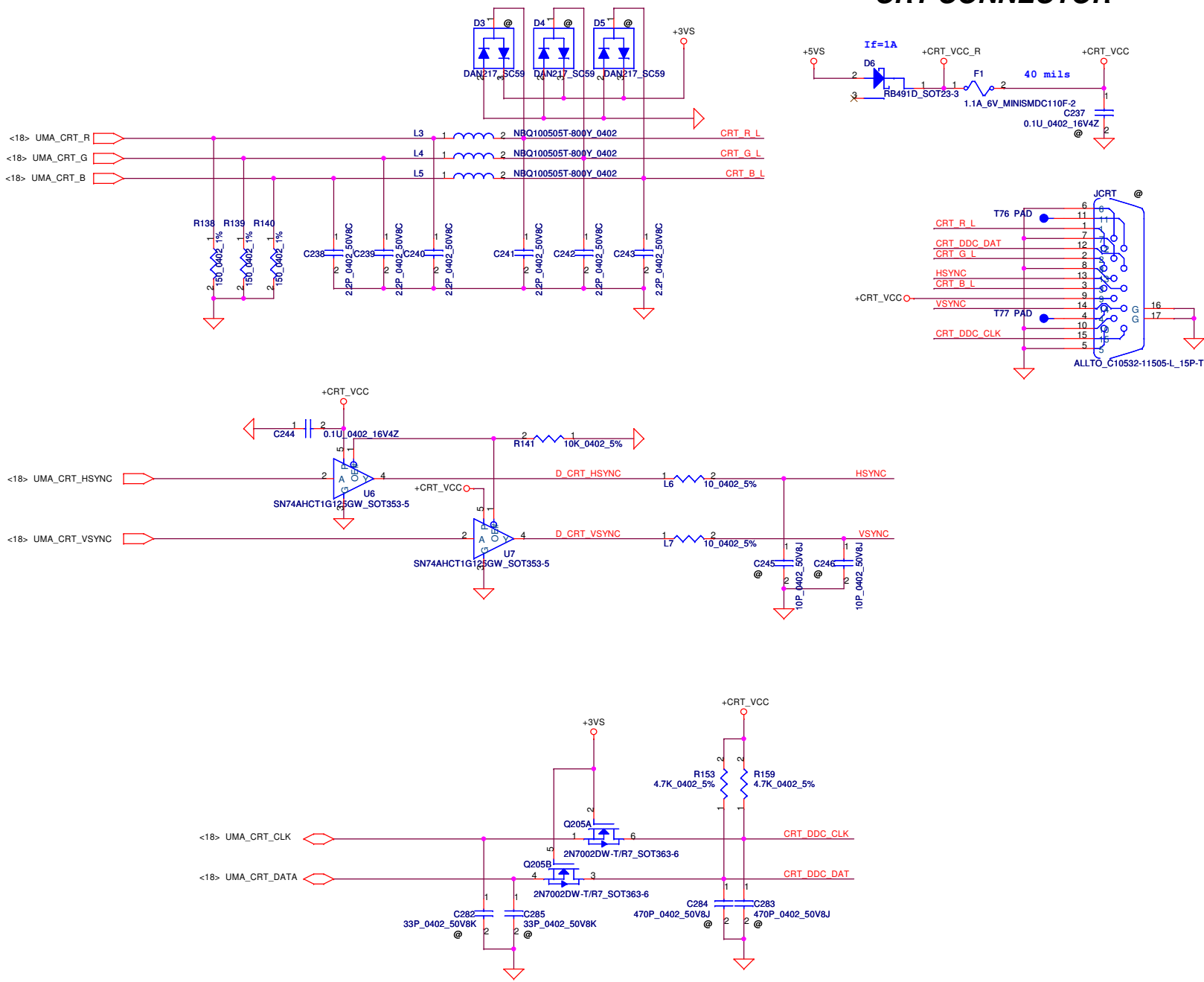


LCD/PANEL BD. Conn.

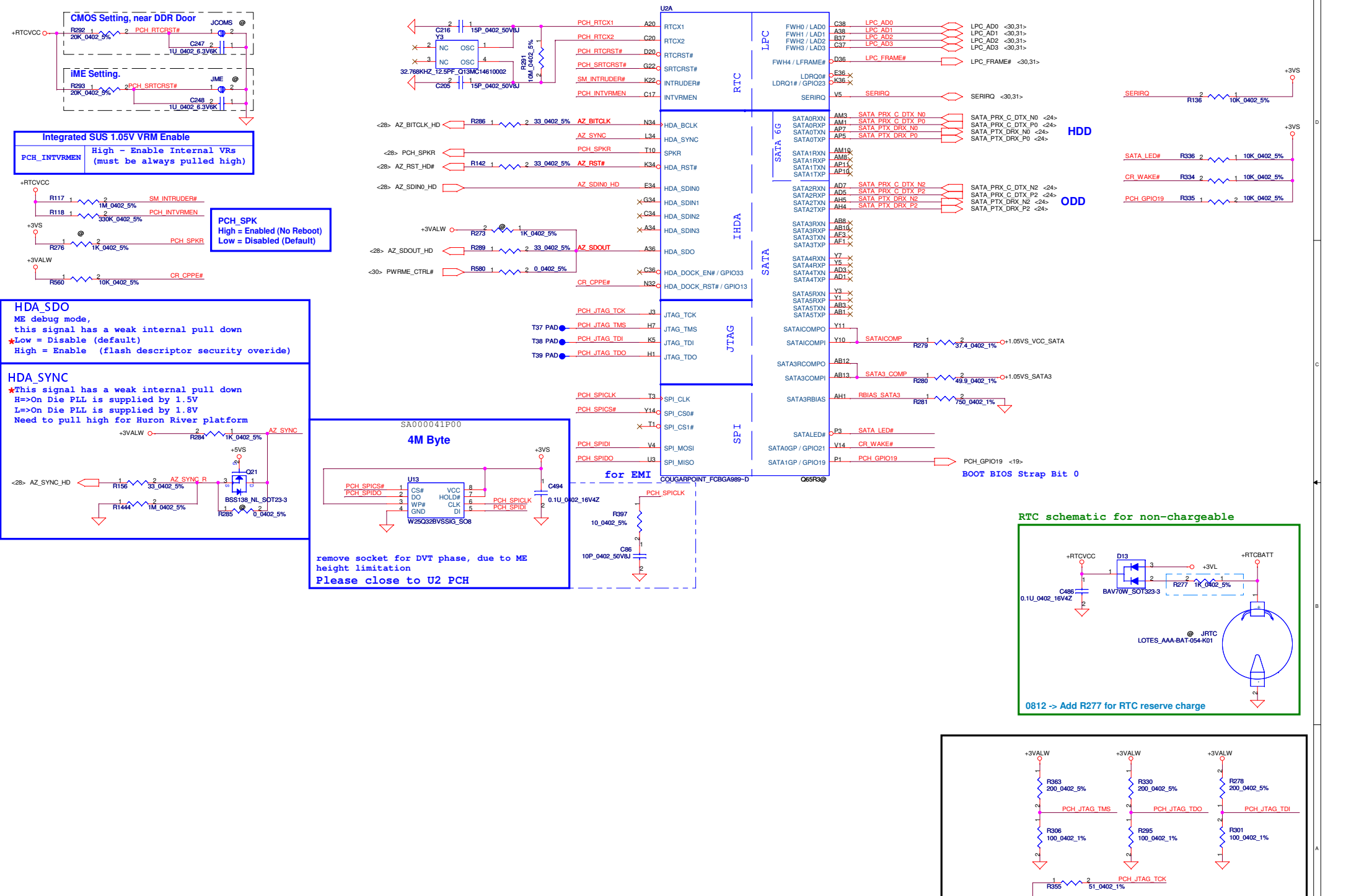


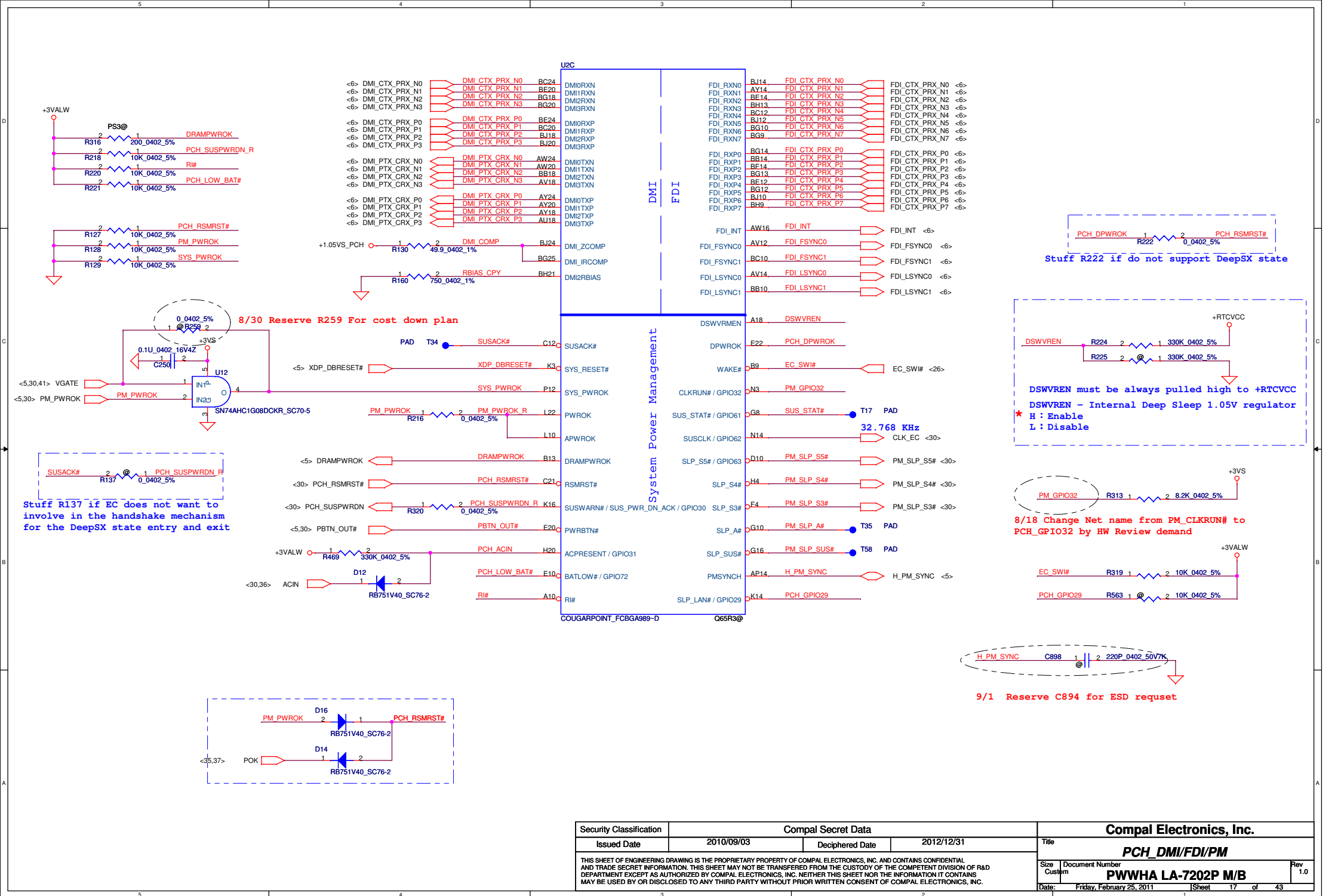
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/09/03	Deciphered Date	2012/12/31	Title	LVDS
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				Size	Custom
				Document Number	PWWHA LA-7202P M/B
				Date:	Friday, February 25, 2011
				Sheet	13 of 43
				Rev	1.0

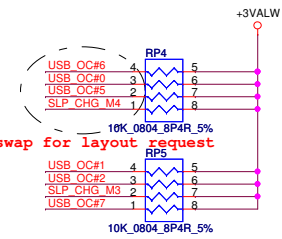
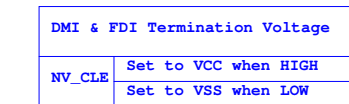
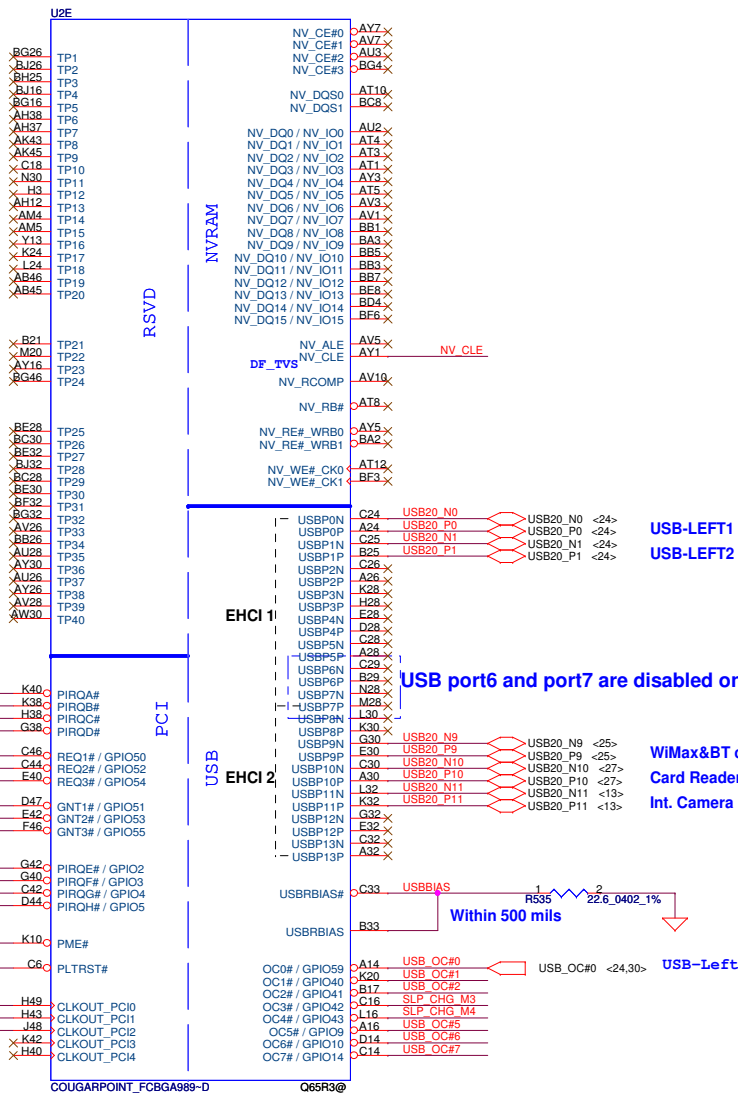
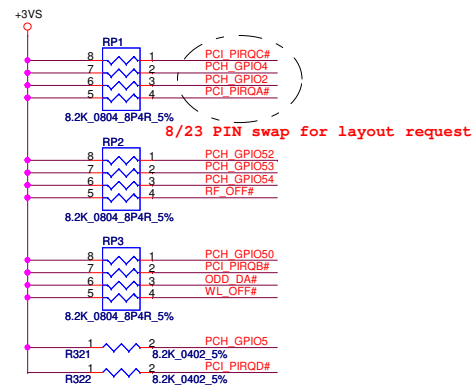
CRT CONNECTOR



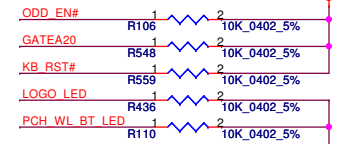
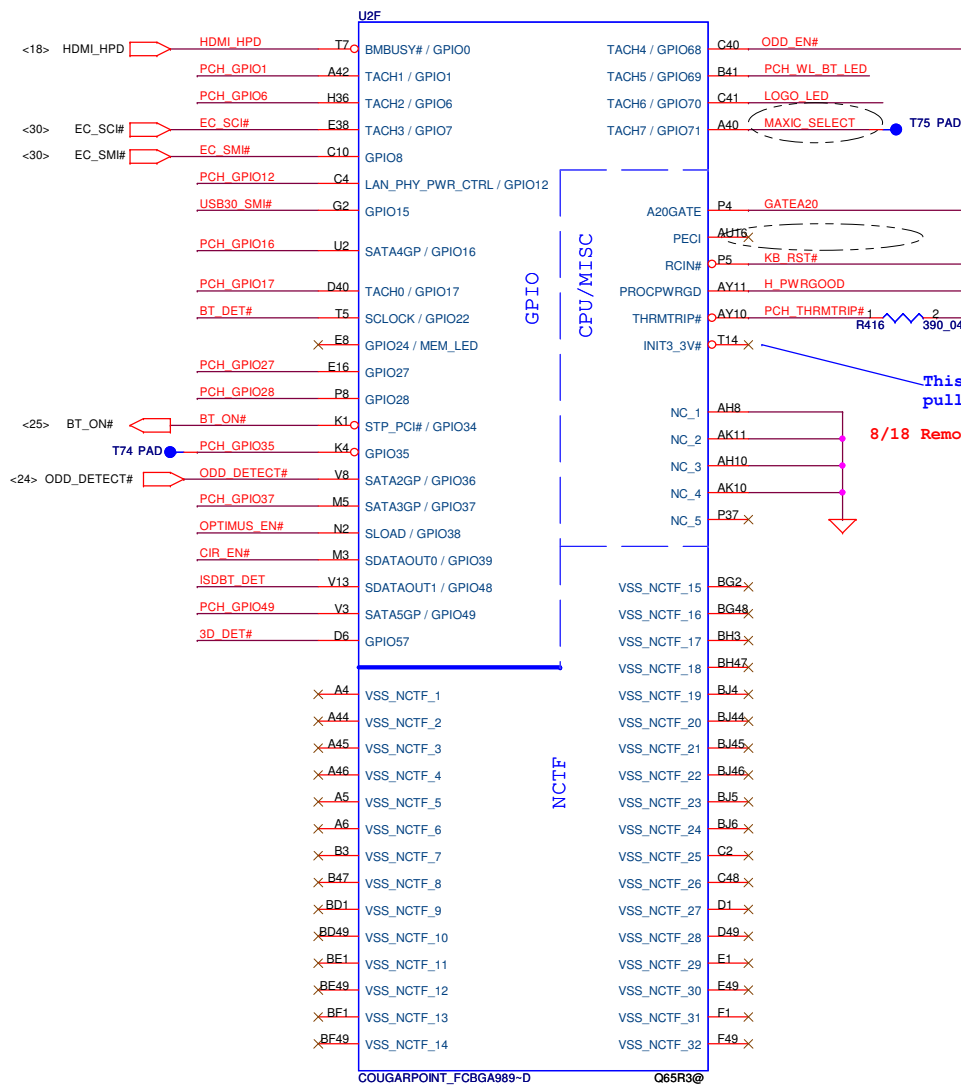
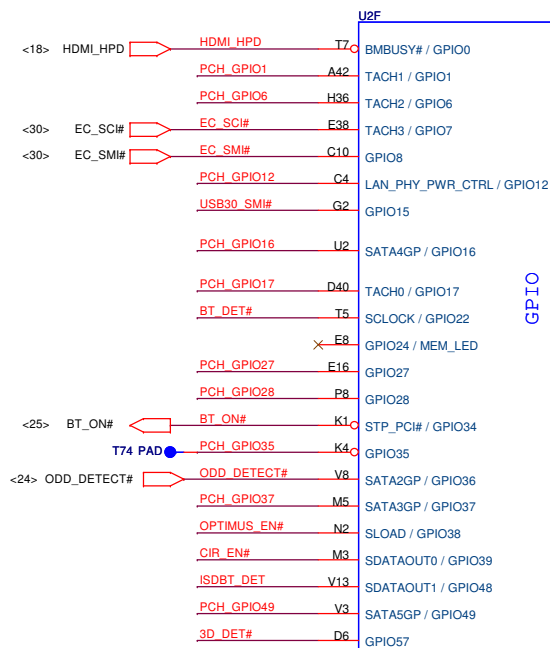
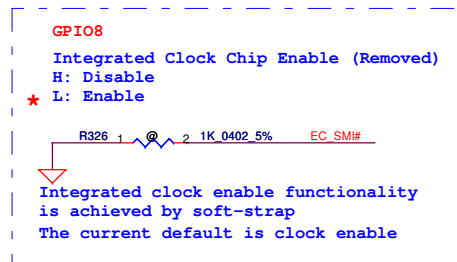
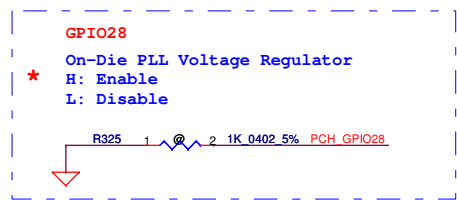
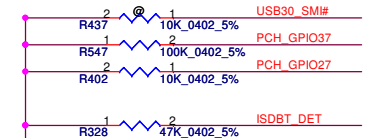
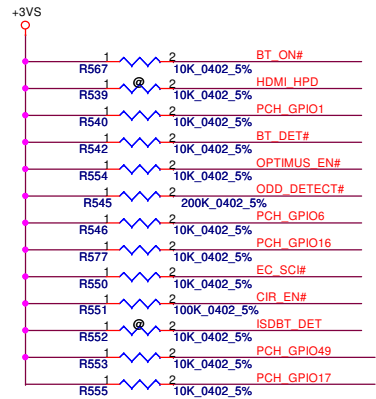
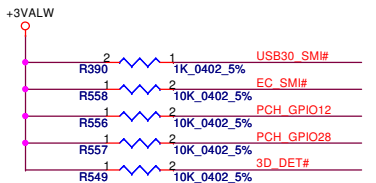
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/09/03	Deciphered Date	2012/12/31	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				Size	Document Number
				PWWHA LA-7202P M/B	
				Date	Friday, February 25, 2011
				Sheet	14 of 43
				Rev	1.0



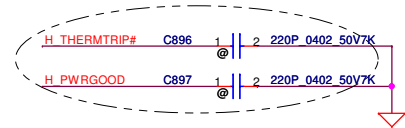




Boot BIOS Strap		
RF_OFF#	PCH_GPIO19	Boot BIOS Location
0	0	LPC
0	1	Reserved
1	0	PCI
1	1	SPI ★

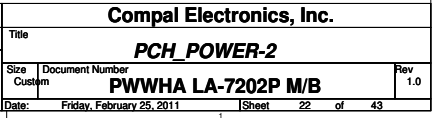


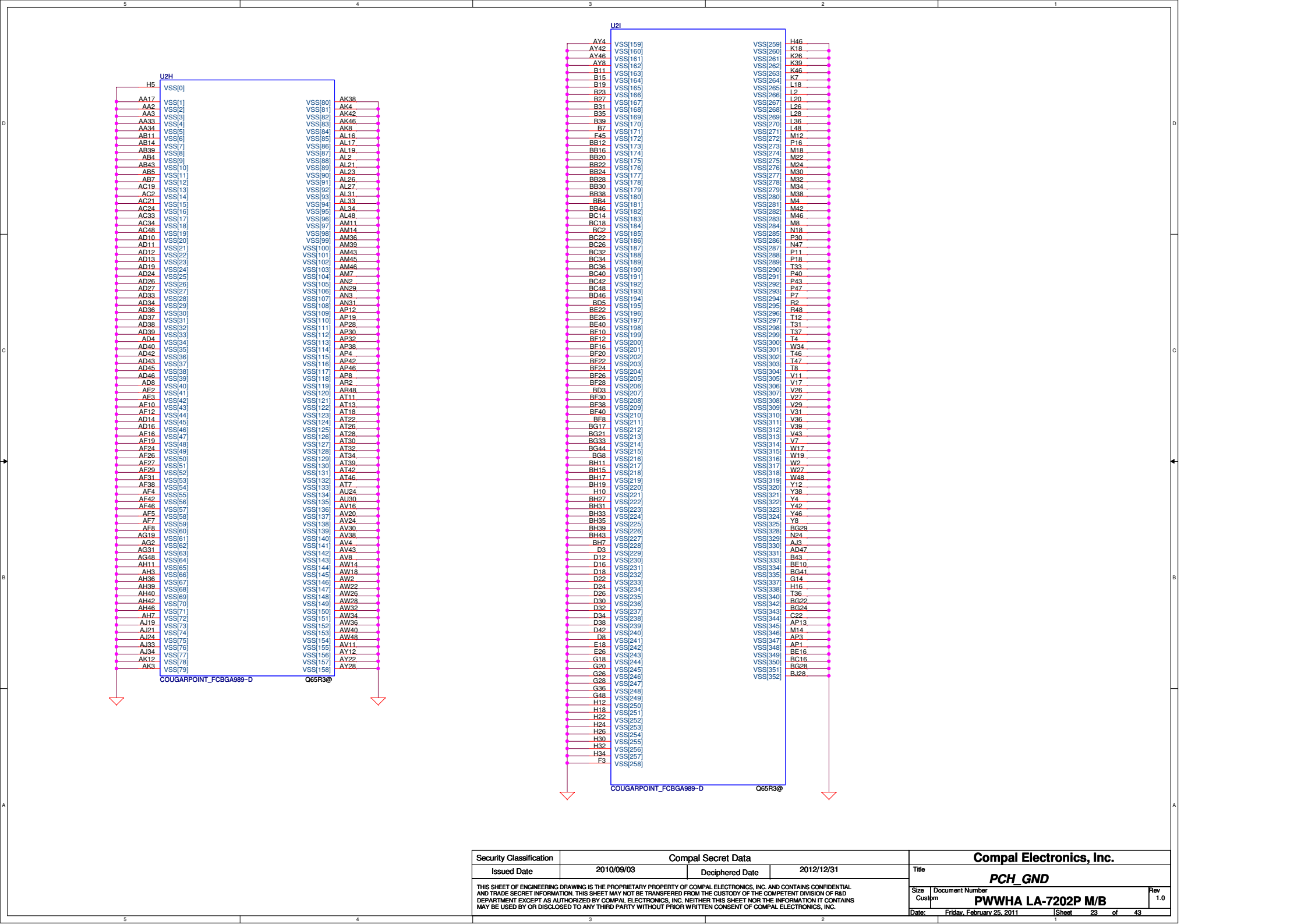
This signal has weak internal pull-up, can't be pulled low
8/18 Remove PCH Peci by HW Review demand



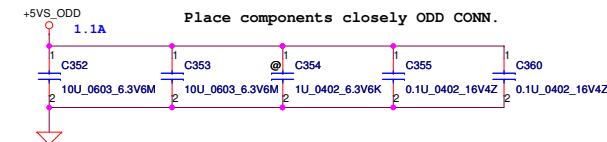
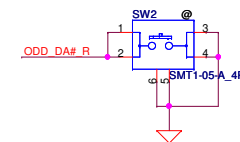
9/1 Reserve C896, C897 for ESD request

Security Classification		Compal Secret Data				Compal Electronics, Inc.				
Issued Date		2010/09/03		Deciphered Date		2012/12/31		Title		
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.								PCH_CPU/GPIO		
								Size	Document Number	Rev
								B	PWWHA LA-7202P M/B	1.0
								Date:	Friday, February 25, 2011	Sheet

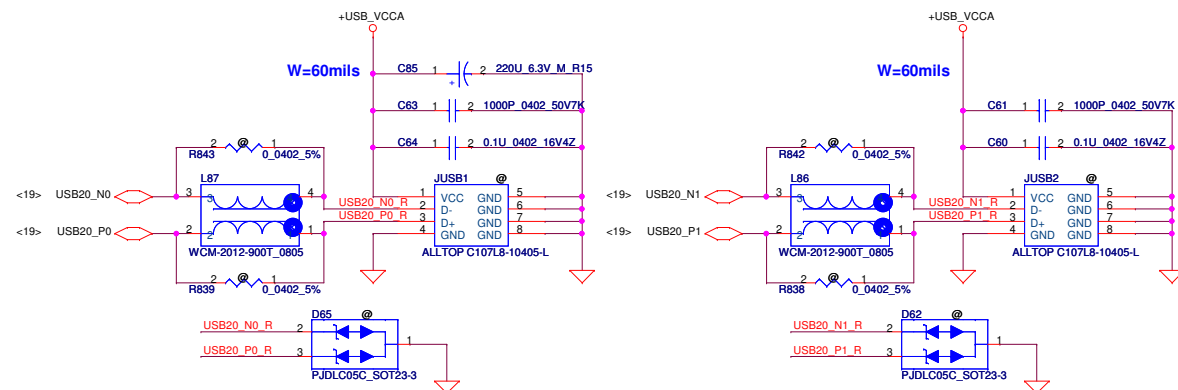
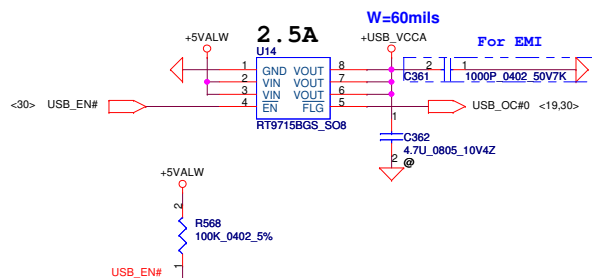




Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/09/03	Deciphered Date	2012/12/31	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				PCH_GND	
Size		Document Number		Rev	
Custom		PWWHA LA-7202P M/B		1.0	
Date:		Friday, February 25, 2011		Sheet 23 of 43	

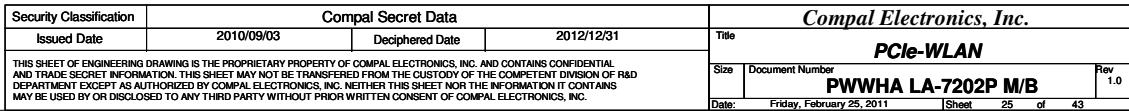
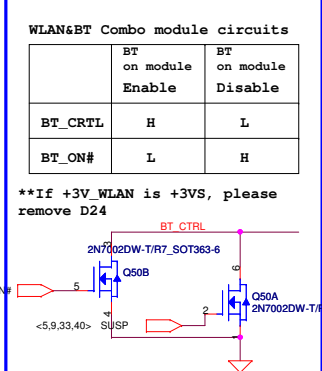


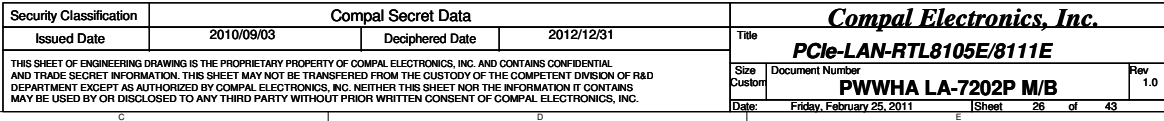
USB Conn. Left Side

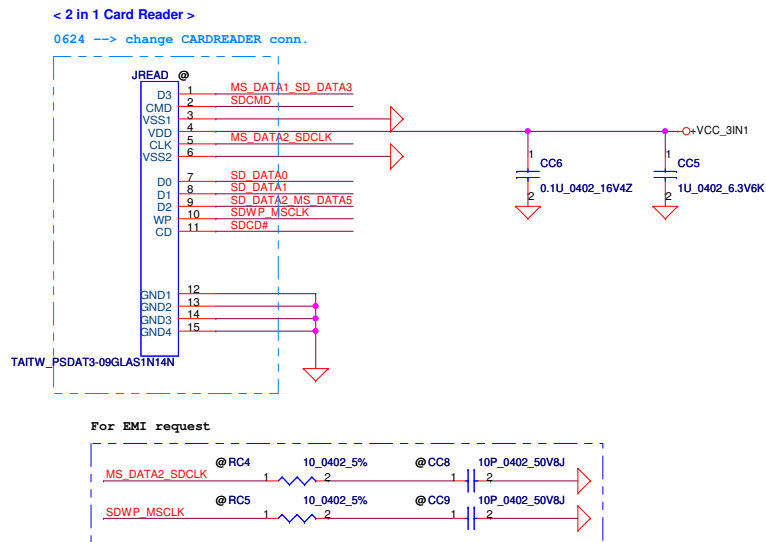
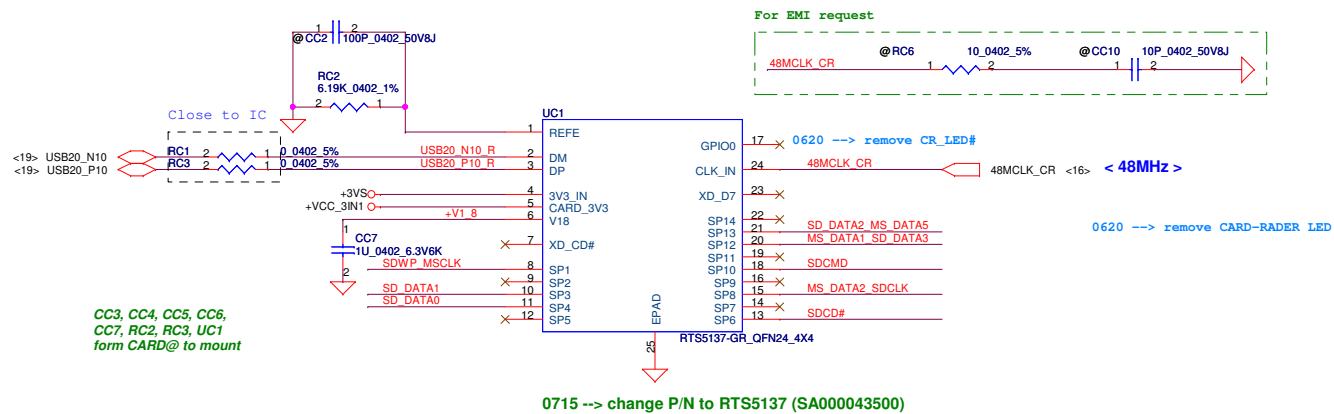


Security Classification	Compal Secret Data			Compal Electronics, Inc.		
Issued Date	2010/09/03	Deciphered Date	2012/12/31	Title SATA-HDD/ODD/USB		
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET 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.				Size	Document Number	Rev
					PWWHA LA-7202P M/B	1.0
Date: Friday, February 25, 2011				Sheet	24	of 43

Short PJ27 for Wimax
Short PJ26 for WLAN

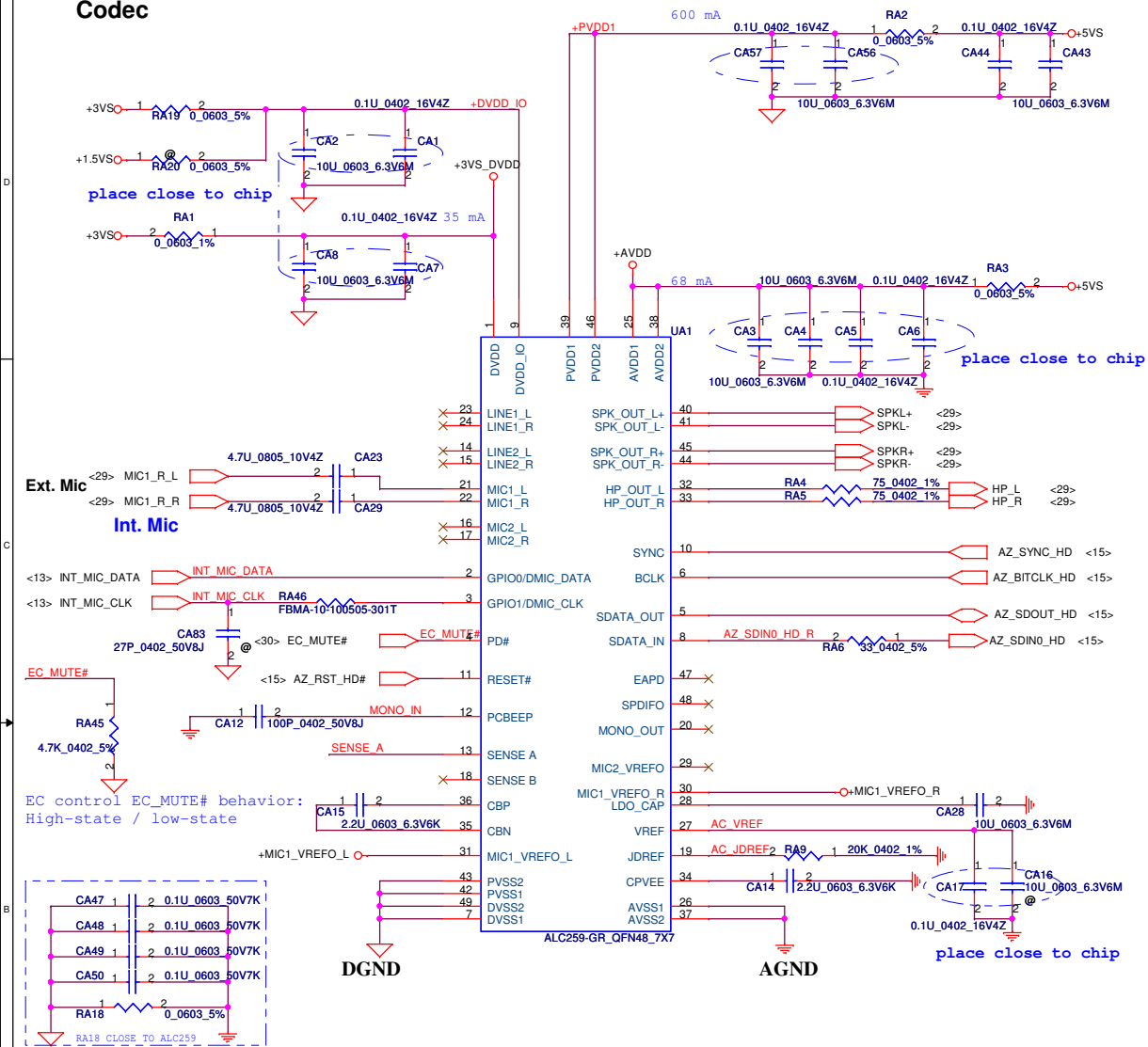




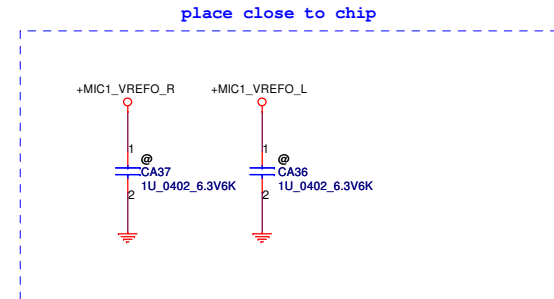
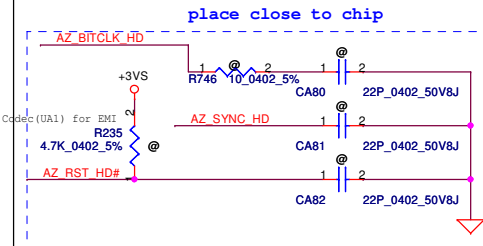
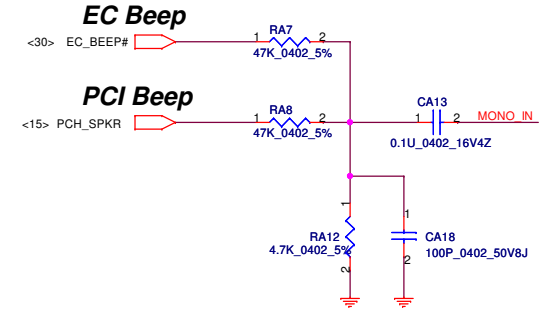


Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/09/03	Deciphered Date	2012/12/31	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				PCle-CardReader RTS5137	
Size	Custom	Document Number	PWWHA LA-7202P M/B	Rev	1.0
Date:	Friday, February 25, 2011	Sheet	27	of	43

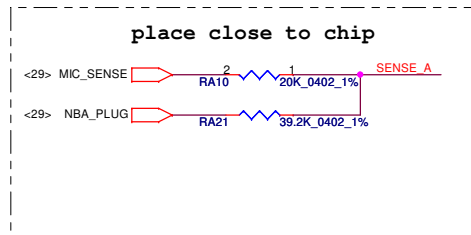
Codec



Beep sound

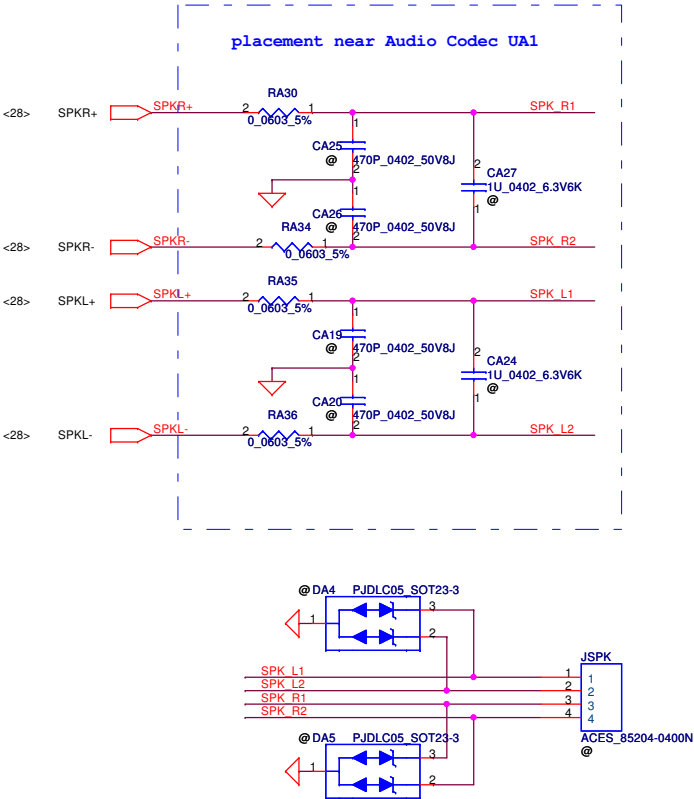


Sense Pin	Impedance	Codec Signals	Function
SENSE A	39.2K	PORT-I (PIN 32, 33)	Headphone out
	20K	PORT-B (PIN 21, 22)	Ext. MIC
	10K	PORT-C (PIN 23, 24)	
SENSE B	5.1K	(PIN 48)	
	39.2K	PORT-E (PIN 14, 15)	
	20K	PORT-F (PIN 16, 17)	Int. MIC
	10K	PORT-H (PIN 20)	

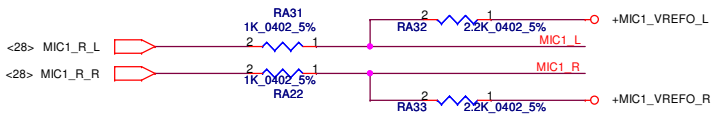


Security Classification				Compal Secret Data				Compal Electronics, Inc.			
Issued Date				2010/09/03				Title			
Deciphered Date				2012/12/31				HDA-ALC259			
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. 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.				Size				PWWHA LA-7202P M/B			
Date:				Friday, February 25, 2011				Sheet 28 of 43			

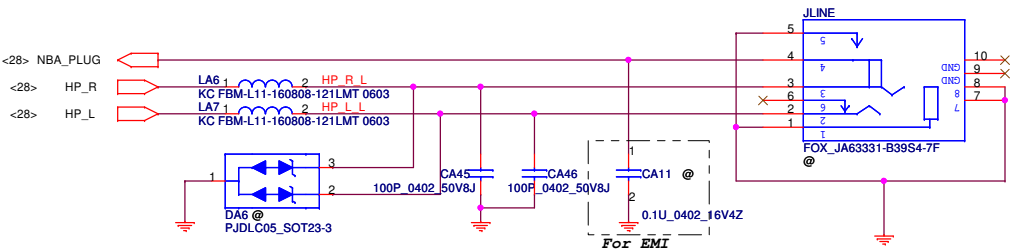
Speaker Connector



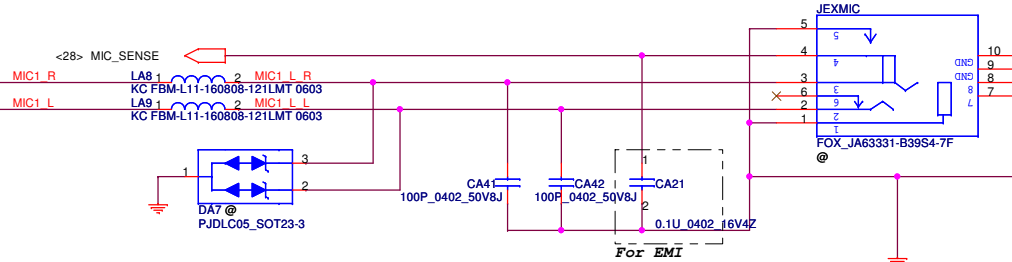
Ext. Mic



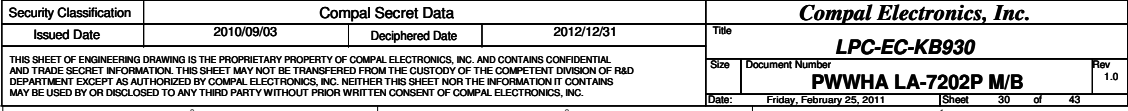
HeadPhone/LINE Out JACK



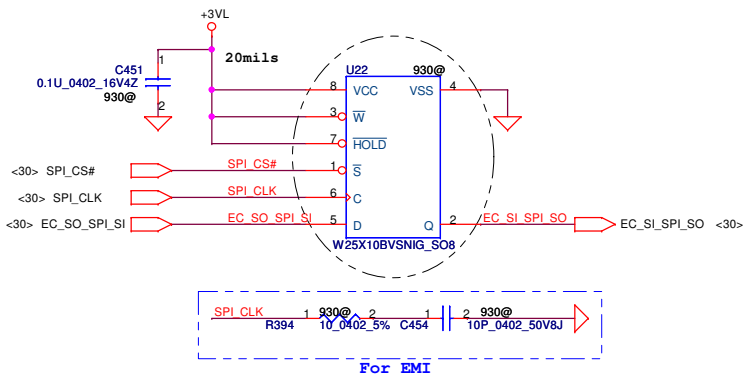
Ext.MIC/LINE IN JACK



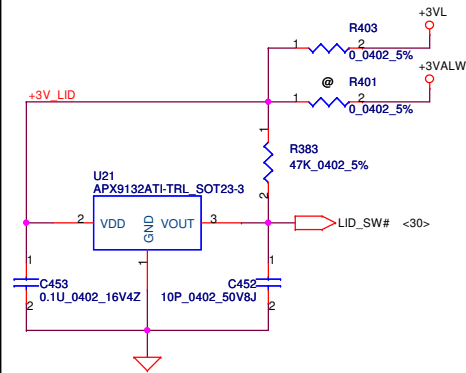
Security Classification	Compal Secret Data			Compal Electronics, Inc.		
Issued Date	2010/09/03	Deciphered Date	2012/12/31	Title		
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				Size	Document Number	Rev
					PWWHA LA-7202P M/B	1.0
				Date:	Friday, February 25, 2011	Sheet 29 of 43



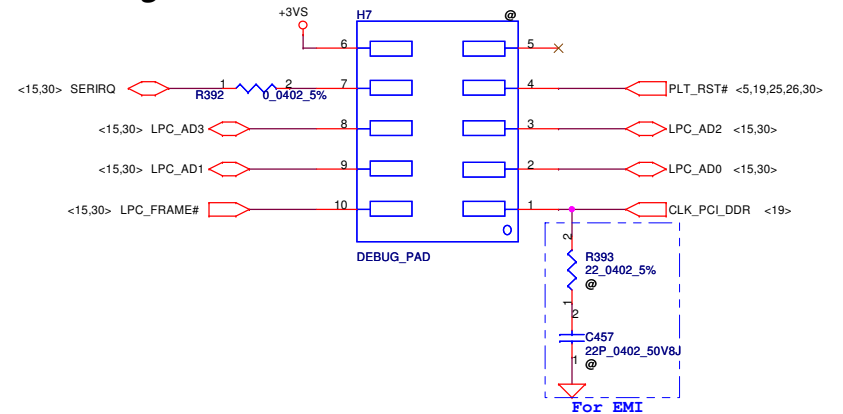
SPI Flash (256KB)



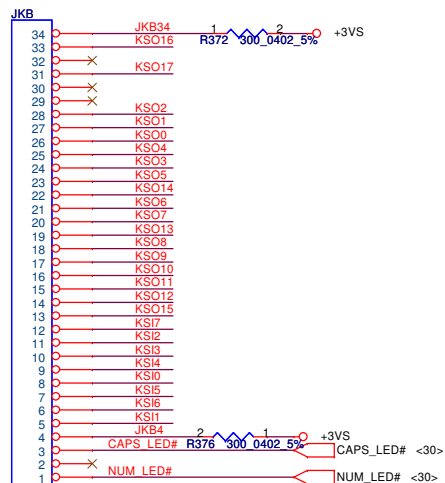
Lid SW



LPC Debug Port

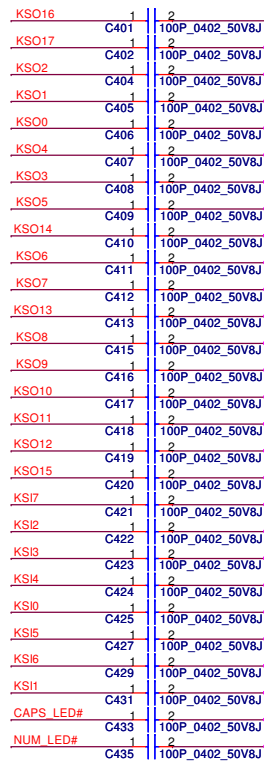


KEYBOARD CONN.



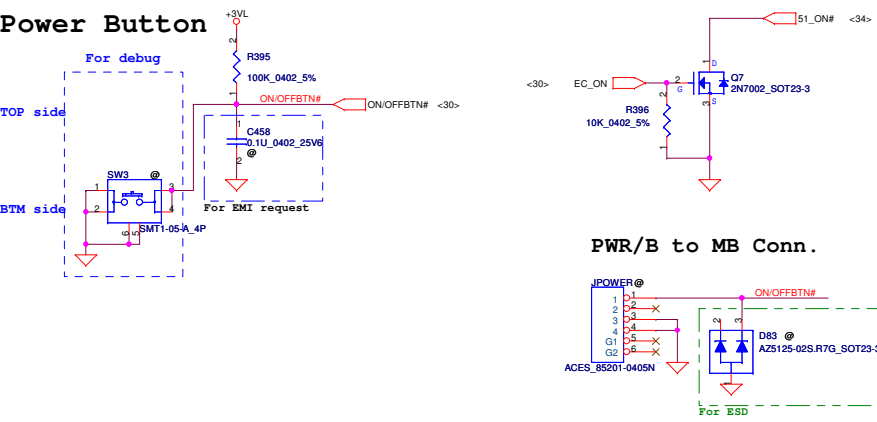
For EMI

Close to JKB

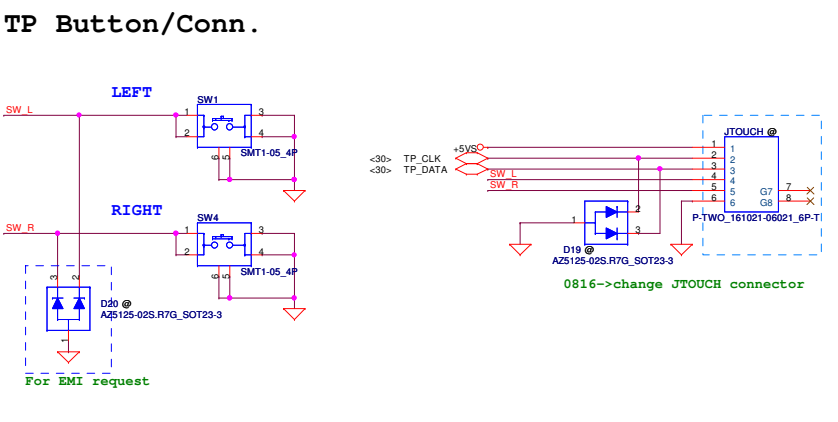


Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/09/03	Deciphered Date	2012/12/31	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				SPI ROM/LID/Debug/KB	
Size		Document Number		Rev	
Date:		Friday, February 25, 2011		Sheet 31 of 43	
PWWHA LA-7202P M/B		1.0			

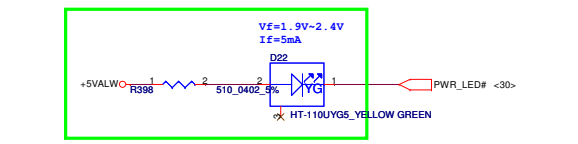
Power Button



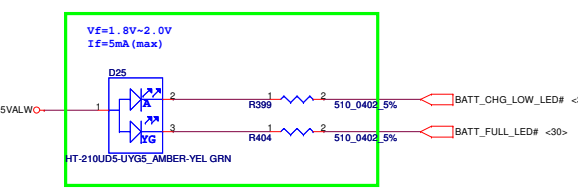
TP Button/Conn.



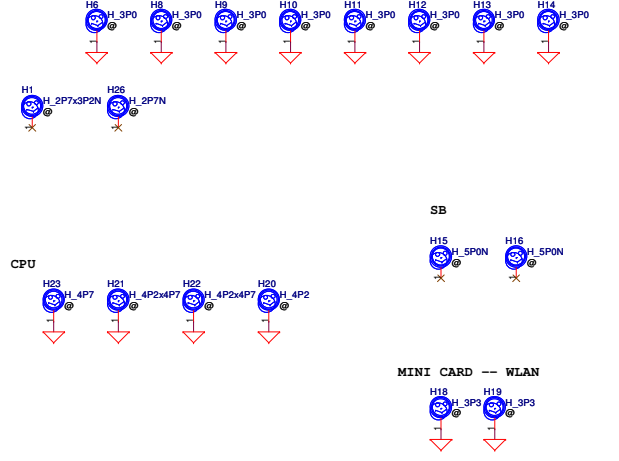
POWER/SUSPEND LED



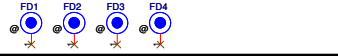
BATT CHARGE/FULL LED



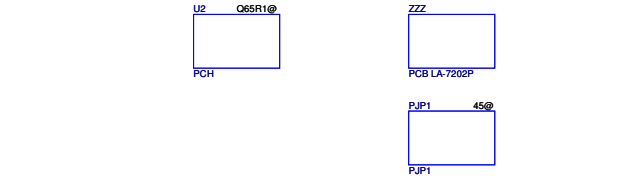
Screw Hole



PCB Fedical Mark PAD

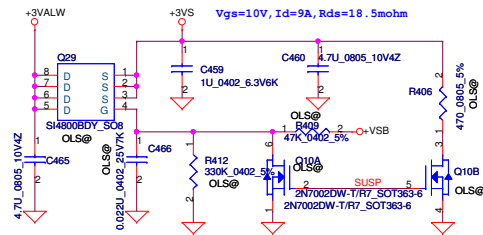


ISPD

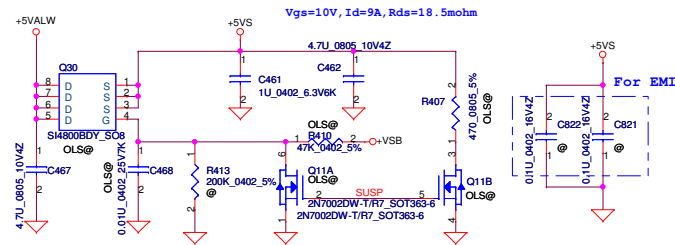


Security Classification		Compal Secret Data				Compal Electronics, Inc.							
Issued Date		2010/09/03		Deciphered Date		2012/12/31		Title					
<p>THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET 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.</p>								PWR&TP CON/LED/ISPD					
								Size		Document Number		Rev	
								PWWHA LA-7202P M/B		1.0			
								Date:		Friday, February 25, 2011		Sheet 32 of 43	

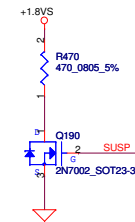
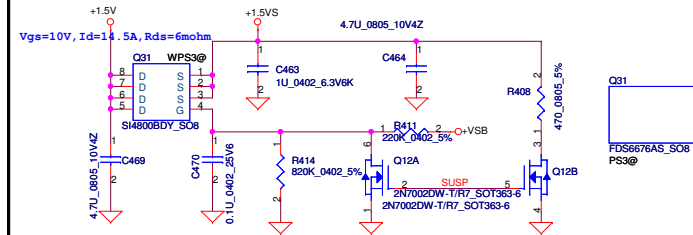
+3VALW TO +3VS



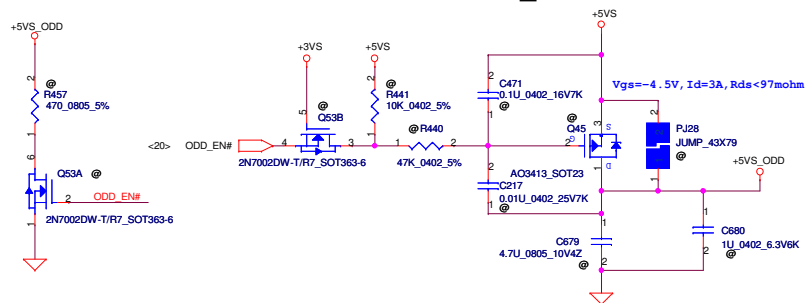
+5VALW TO +5VS



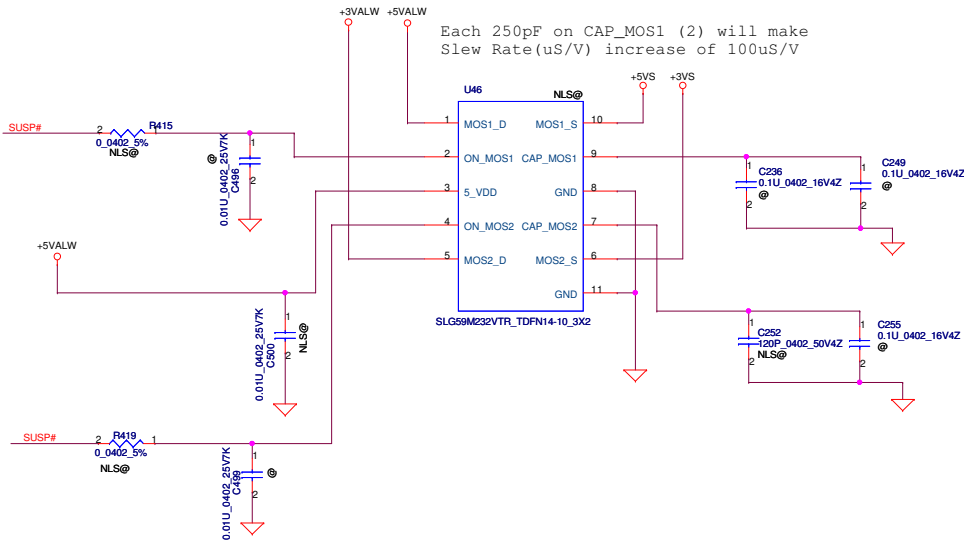
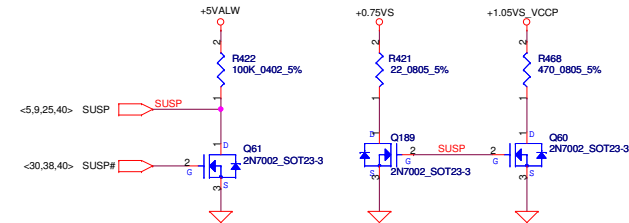
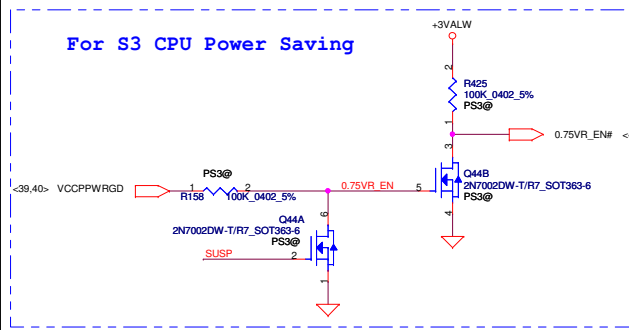
+1.5V to +1.5VS



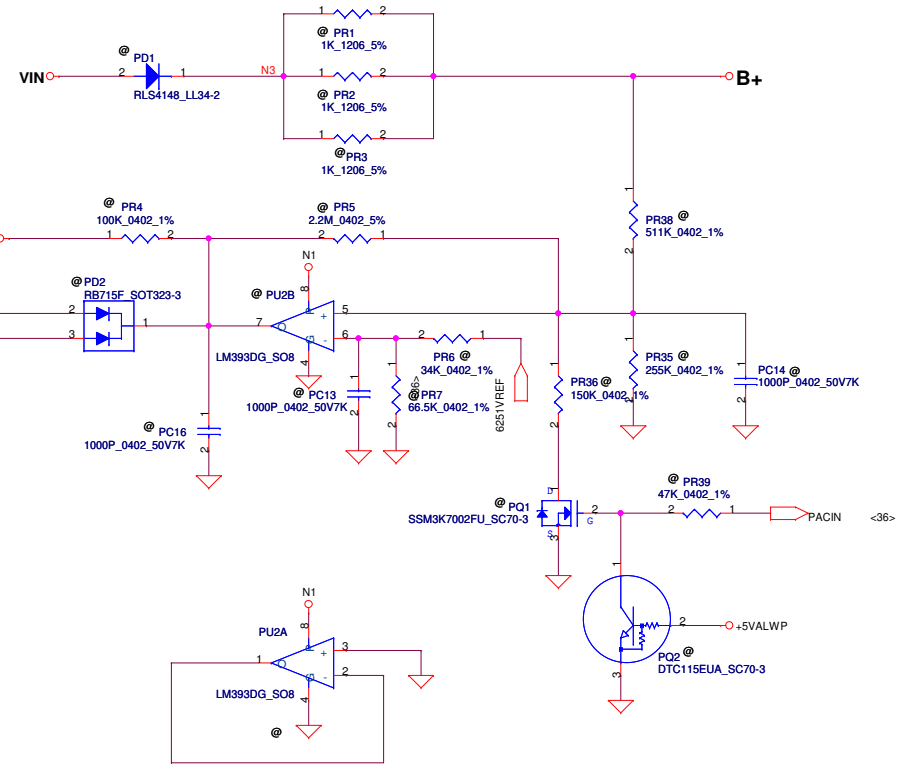
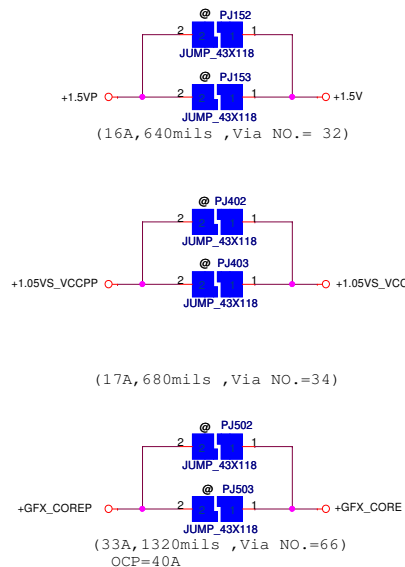
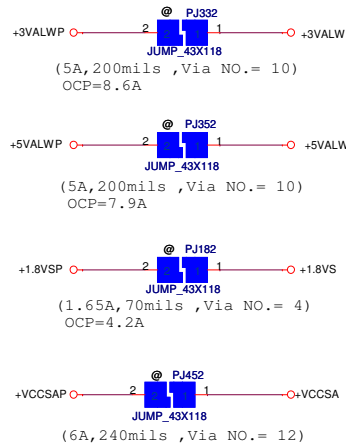
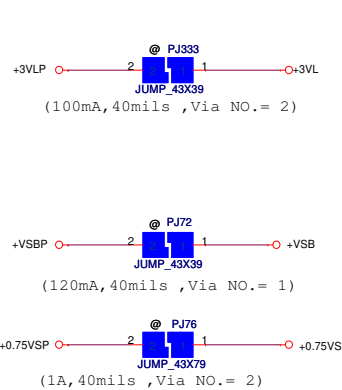
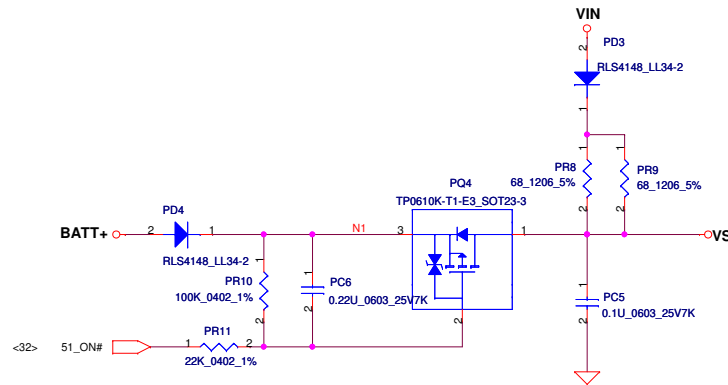
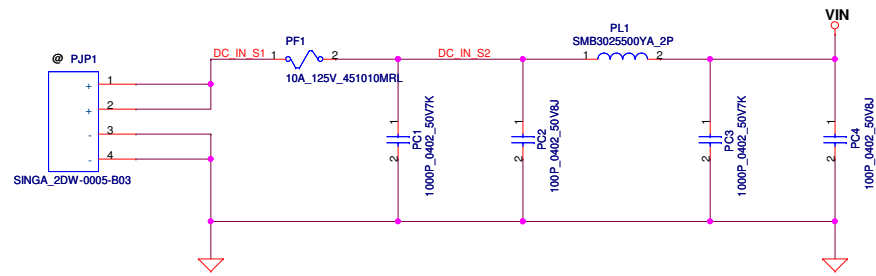
+5VS TO +5VS_ODD



For S3 CPU Power Saving



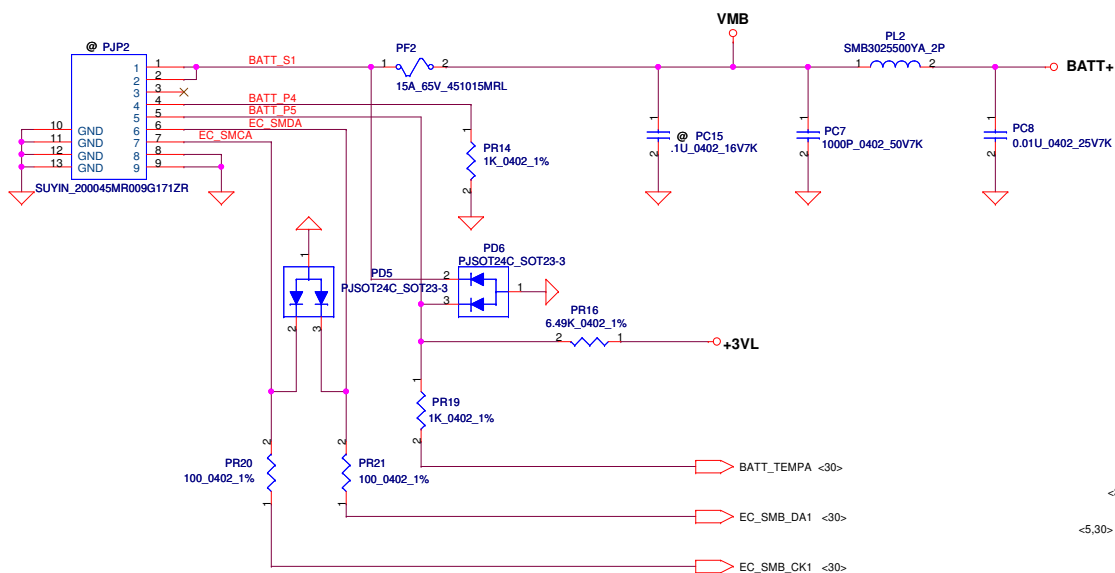
Security Classification	Compal Secret Data			Compal Electronics, Inc.	
Issued Date	2010/09/03	Deciphered Date	2012/12/31	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				DC-DC INTERFACE	
				Size	Document Number
				PWWHA LA-7202P M/B	
				Date	Friday, February 25, 2011
				Sheet	33 of 43
				Rev	1.0



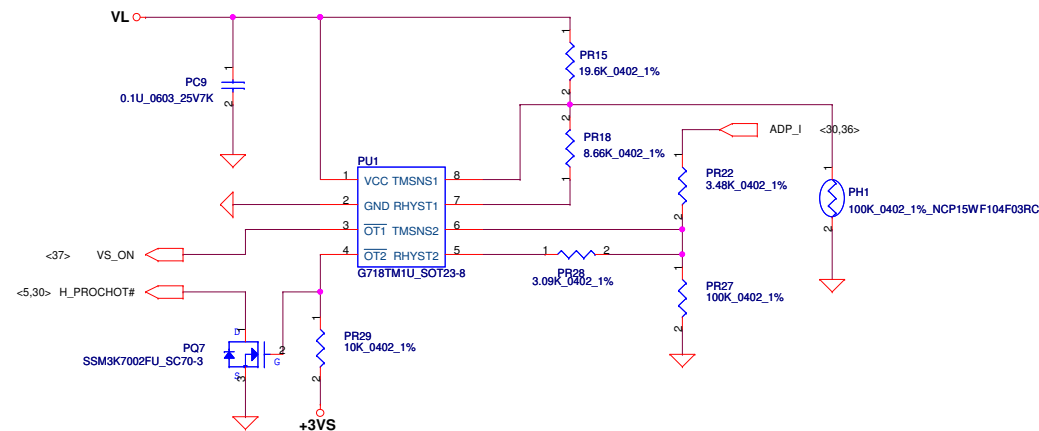
ACIN			
	Precharge detector		
	Min.	typ.	Max.
H-->L	14.42V	14.74V	15.23V
L-->H	15.39V	15.88V	16.39V

Security Classification				Compal Secret Data				Compal Electronics, Inc.			
Issued Date				2010/09/03				Title			
Deciphered Date				2012/12/31				DCIN/VIN DETECTOR			
Size				Document Number				PWWHA LA-7202 M/B			
Date				Friday, February 25, 2011				Sheet 34 of 43			
Rev				1.0							

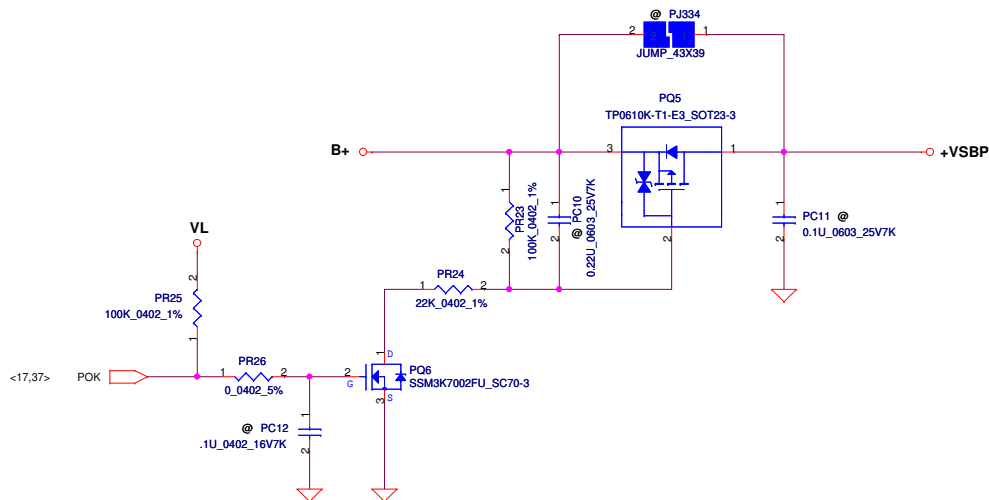
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS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



PH1 under CPU botten side :
CPU thermal protection at 95 degree C
Recovery at 56 degree C

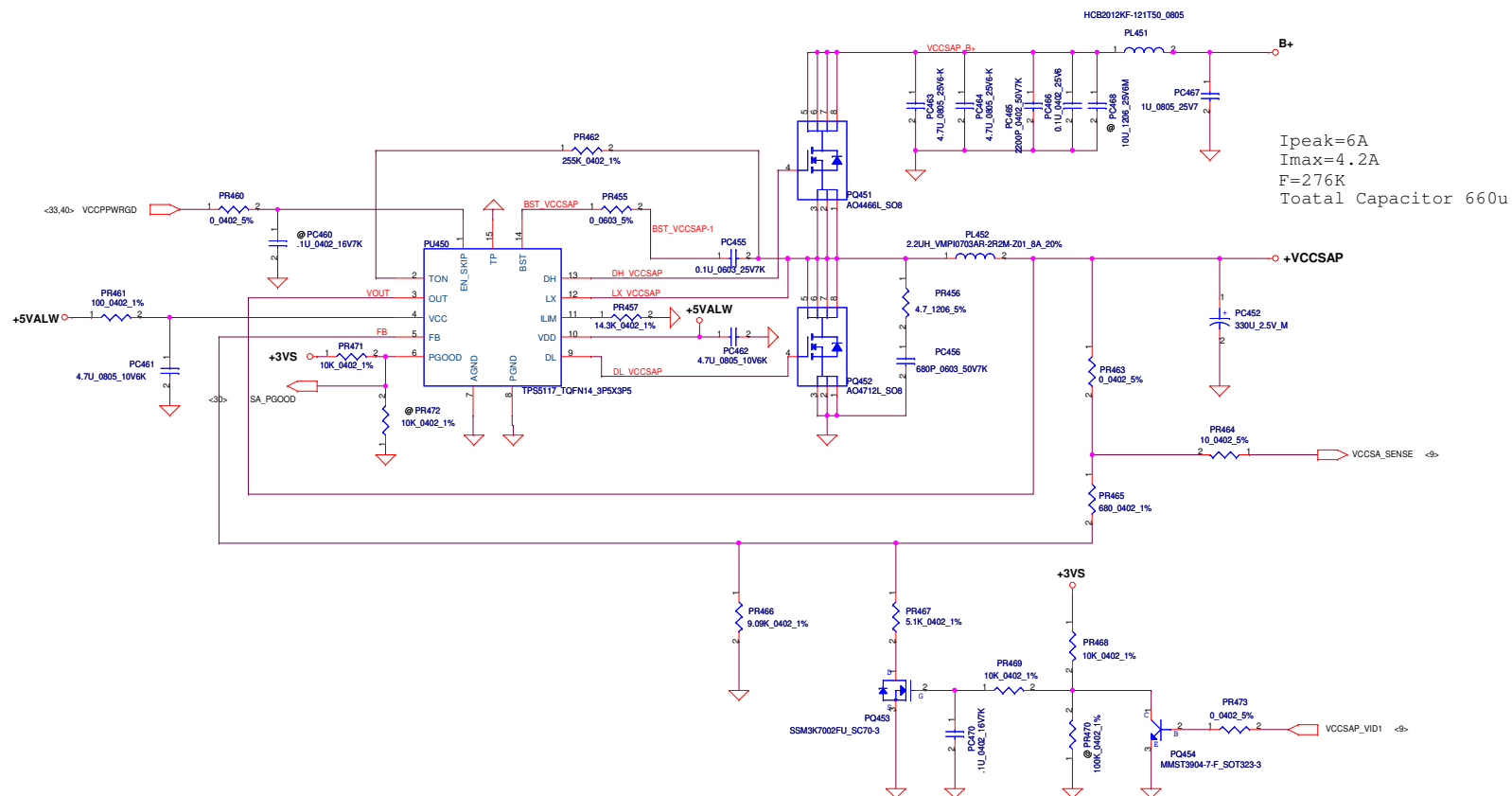


Adapter	Throttle Watt	Recovery Watt	Throttle Point	Recovery Point
65W_UMA	71.25W	62.4W	1.48V	1.308V
75W_DIS	85.5W	72W	1.78V	1.5V
75W_QCore	85.5W	72W	1.78V	1.5V

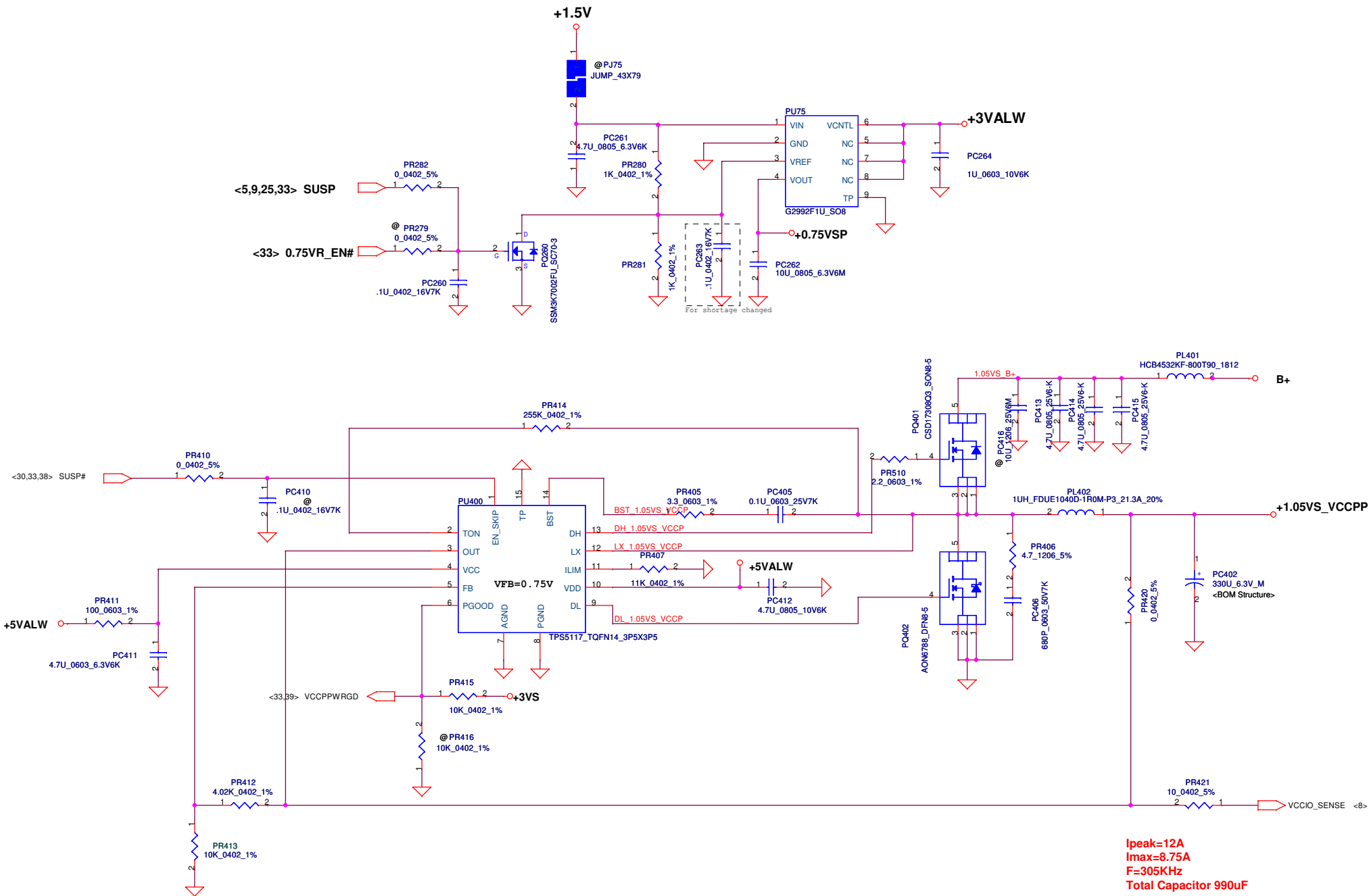




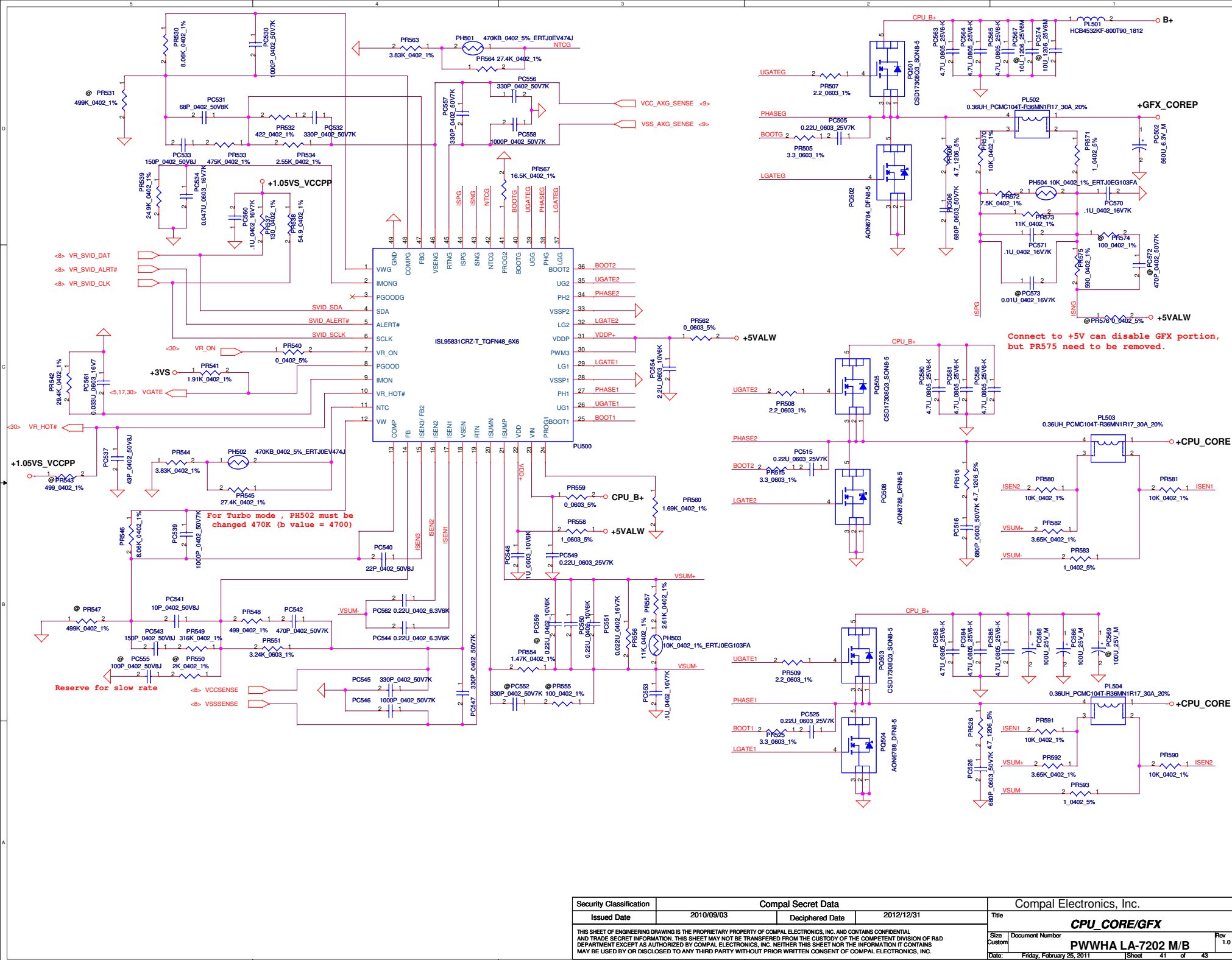
CP mode		
Iada=0~3.42A (65W)	CP= 92%Iada; CP=3.147A	
Vaclim=1.08V(65W)	PR222=75k PR223=20k PR215=0.02	
Iada=0~3.947A(75W)	CP= 92%Iada; CP=3.63A	
Vaclim=0.736V(75W)	PR222=24k PR223=20k PR215=0.02	



VID1	+VCCSAP
1	0.8V
0	0.9V



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/09/03	Deciphered Date	2012/12/31	Title	
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.				+1.05VS_VCCP/+0.75VSP	
Size	Custom	Document Number	PWWHA LA-7202 M/B		Rev
Date:	Friday, February 25, 2011	Sheet	40	of	43



PAGE	MODIFICATION LIST	PURPOSE
2010/12/31 (PVT) P36 Charger	Change PQ203,PQ208 to AO4435L	Cost down
2010/12/31 (PVT) P36 Charger	add PQ207,PQ208,PQ209 10u	EMI command
2010/12/31 (PVT) P36 Charger	add snubber PR206,PC206	EMI command
2010/12/31 (PVT) P36 Charger	change boost to 2.2 ohm PR205	EMI command
2010/12/31 (PVT) P35 +3VALW/+5VALW	add snubber PR336,PC336,PR356,PC336	EMI command
2010/12/31 (PVT) P37 +1.5VP/+1.8VSP	add snubber PR156,PC156	EMI command
2010/12/31 (PVT) P37 +1.5VP/+1.8VSP	add PC165 for MEI	EMI command
2010/12/31 (PVT) P37 +VCCSA	add snubber PR456,PC456	EMI command
2010/12/31 (PVT) P37 +VCCSA	change output capacitor PC452 to OS-con	cost down
2010/12/31 (PVT) P37 +VCCSA	change choke PL452 to molding	cost down
2010/12/31 (PVT) P38 +1.05VS/+0.75	add snubber PC406 PR406	EMI command
2010/12/31 (PVT) P38 +1.05VS/+0.75	change 0.75V enable PR279 tp PR282	HW command
2010/12/31 (PVT) P39 +CPU_CORE	change PC549,PC515,PC525,PC 505 to correct rating	design change
2010/12/31 (PVT) P39 +CPU_CORE	change PL502,PL503,PL504 to DCR 5%	design change
2010/12/31 (PVT) P39 +CPU_CORE	change PC568 PC 566 to 5.8mmm capacitor	design change
2010/12/31 (PVT) P39 +CPU_CORE	change PL551 for load line adjust	design change
2010/12/31 (PVT) P39 +CPU_CORE	change PR560 for program temperture	design change
2010/12/31 (PVT) P39 +CPU_CORE	change PC502,PC531,PC532 for burn-in shun down	design change

Title <Title>		
Size A	Document Number PWVHA LA-7202P M/B	Rev 1.0
Date:	Friday, February 25, 2011	Sheet 42 of 43

HW PIR (Product Improve Record)

PWWHA LA-7202P SCHEMATIC CHANGE LIST

REVISION CHANGE: 1.0

GERBER-OUT DATE: 2011/02/18

NO	DATE	PAGE	MODIFICATION LIST	PURPOSE
1)	01/24	05	modify FAN with BTO item PWM and RPM	For HW BTO item
2)	01/24	05	modify RPM FAN connector pin define	Request from thermal team
3)	02/14	30	co-lay KB9012	For BTO item
4)	02/15	24	Add C450	For ESD request

