

Compal Confidential

G470/G570 UMA M/B Schematics Document

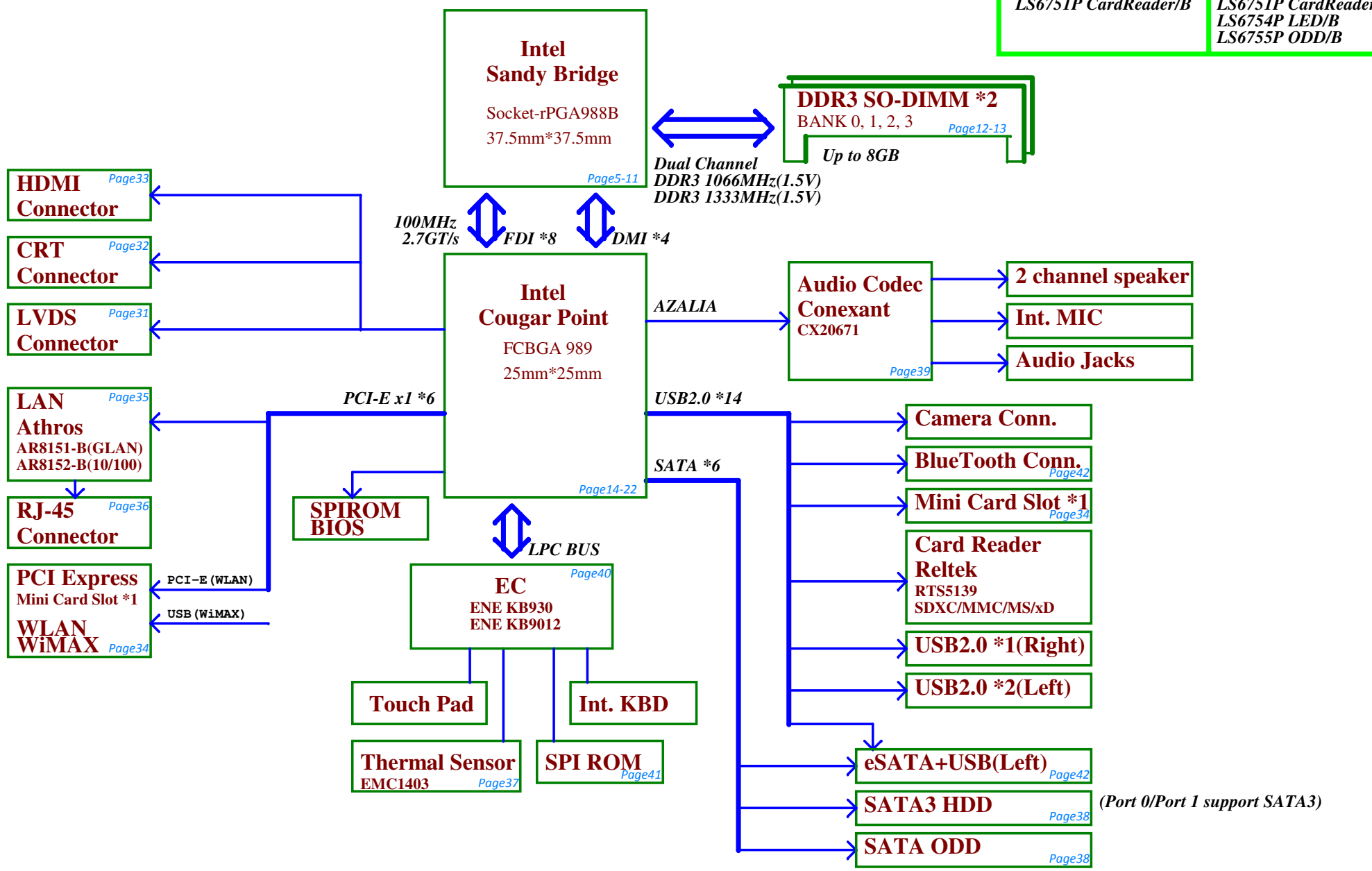
Intel Sandy Bridge Processor with DDRIII + Cougar Point PCH

2010-10-22
 LA-6752P / LA-6754P
 REV: 0.2

Security Classification	Compal Secret Data			Compal Electronics, Inc.		
Issued Date	2010/07/12	Deciphered Date	2012/07/11	Title	Cover Page	
<small>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.</small>				Size	Document Number	Rev
				Custom	LA-6752P	0.2
				Date:	Friday, November 26, 2010	Sheet 1 of 50

For 14"(Page 4x)
 LS6753P PWR/B
 LS6751P CardReader/B

For 15"(Page 4x+1)
 LS6753P PWR/B
 LS6751P CardReader/B
 LS6754P LED/B
 LS6755P ODD/B



Security Classification	Compal Secret Data			Compal Electronics, Inc.		
Issued Date	2010/07/12	Deciphered Date	2012/07/11	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.				Block Diagram		
Size	Document Number	Rev				
Custom	LA-6752P	0.2				
Date:	Friday, November 26, 2010	Sheet	2	of 50		

Voltage Rails

power plane	+B	+5VALW	+1.5V	+5VS
		+3VALW		+3VS
State				+1.5VS
				+VCCP
				+CPU_CORE
				+VGA_CORE
				+GFX_CORE
				+1.8VS
				+0.75VS
				+1.05VS
S0	○	○	○	○
S3	○	○	○	✗
S5 S4/AC	○	○	✗	✗
S5 S4/ Battery only	○	✗	✗	✗
S5 S4/AC & Battery don't exist	✗	✗	✗	✗

- +5VS
- +3VS
- +1.5VS
- +VCCP
- +CPU_CORE
- +VGA_CORE
- +GFX_CORE
- +1.8VS
- +0.75VS
- +1.05VS

BOARD ID Table

Board ID	PCB Revision
0	0.1
1	
2	
3	
4	
5	
6	
7	

Board ID / SKU ID Table for AD channel

Vcc	3.3V +/- 5%				
Ra/Rc/Re	100K +/- 5%				
Board ID	Rb / Rd / Rf	VAD_BID min	VAD_BID typ	VAD_BID max	EVT
0	0	0 V	0 V	0 V	EVT
1	8.2K +/- 5%	0.216 V	0.250 V	0.289 V	DVT
2	18K +/- 5%	0.436 V	0.503 V	0.538 V	PVT
3	33K +/- 5%	0.712 V	0.819 V	0.875 V	MP
4	56K +/- 5%	1.036 V	1.185 V	1.264 V	
5	100K +/- 5%	1.453 V	1.650 V	1.759 V	
6	200K +/- 5%	1.935 V	2.200 V	2.341 V	
7	NC	2.500 V	3.300 V	3.300 V	

EC SM Bus address

Device	Address	Device	Address
Smart Battery	0001 011X b	Thermal Sensor EMC1403-2	1001_101xb

PCH SM Bus address

Device	Address
DDR DIMM0	1001 000Xb
DDR DIMM2	1001 010Xb

USB Port Table

USB 2.0	USB 1.1	Port	3 External USB Port
EHCI1	UHCI0	0	USB/B (Right Side)
		1	USB Port (Left Side)
		2	USB Port (Left Side)
	UHCI1	3	USB Port (Left Side)
		4	
		5	Camera
		6	
EHCI2	UHCI3	7	
		8	Mini Card(WLAN)
	UHCI4	9	
		10	
	UHCI5	11	Card Reader
		12	
UHCI6	13	Blue Tooth	

BOM Structure Table

BTO Item	BOM Structure
CAMERA DEVICE	CMOS@
Blue Tooth	BT@
eSATA	ESATA@
COMMON HDMI	HDMI@
Connector	ME@
45 LEVEL	45@
10/100 LAN	8152@
GIGA LAN	GIGA@
Unpop	@

SMBUS Control Table

	SOURCE	VGA	BATT	KE930	SODIMM	WLAN WWAN	Thermal Sensor	PCH
SMB_EC_CK1	KB930	X	V	X	X	X	X	X
SMB_EC_DA1	+3VALW		+3VALW					
SMB_EC_CK2	KB930	X	X	X	X	X	X	V
SMB_EC_DA2	+3VALW							+3VS
SMBCLK	PCH	X	X	X	V	V	X	X
SMBDATA	+3VALW				+3VS	+3VS		
SML0CLK	PCH	X	X	X	X	X	X	X
SML0DATA	+3VALW							
SML1CLK	PCH	V	X	V	X	X	V	X
SML1DATA	+3VALW	+3VS		+3VS			+3VS	

Security Classification	Compal Secret Data			Title	
Issued Date	2010/07/12	Deciphered Date	2012/07/11	Notes List	
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 B	Document Number LA-6752P
				Date: Friday, November 26, 2010	Rev 0.2
				Sheet 3 of 50	

Power-Up/Down Sequence

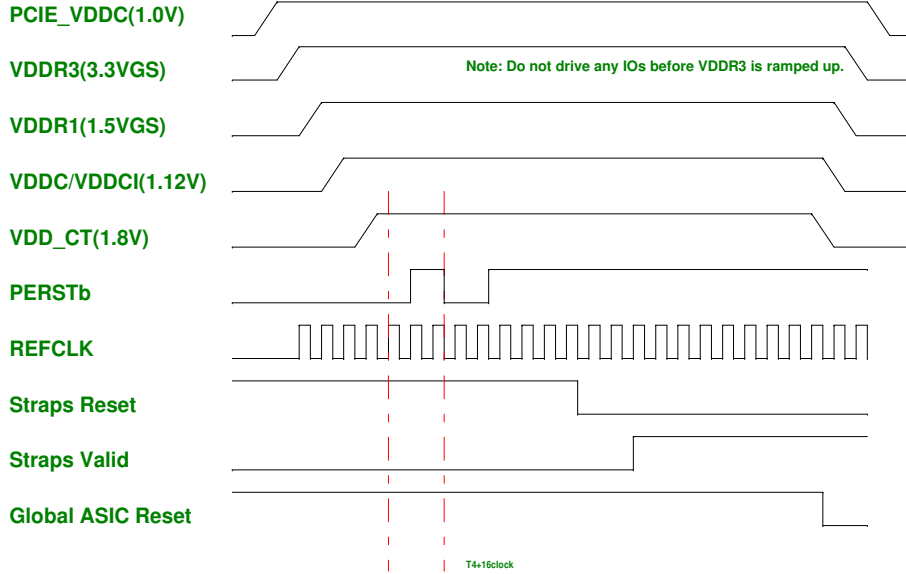
All the ASIC supplies must fully reach their respective nominal voltages within 20 ms of the start of the ramp-up sequence, though a shorter ramp-up duration is preferred.

VDDR3 should ramp-up before or simultaneously with VDDC.

For LVDS, DPx_VDD10 should ramp-up before DPx_VDD18 and the PCIe Reference clock should begin before DPx_VDD18. For power-down, DPx_VDD18 should ramp-down before DPx_VDD10.

The external pull-ups on the DDC/AUX signals (if applicable) should ramp-up before or after both VDDC and VDD_CT have ramped up.

VDDC and VDD_CT should not ramp-up simultaneously. (e.g., VDDC should reach 90% before VDD_CT starts to ramp-up (or vice versa).)



Without BACO option :

PE_GPIO0 : Low -> Reset dGPU ; High -> Normal operation

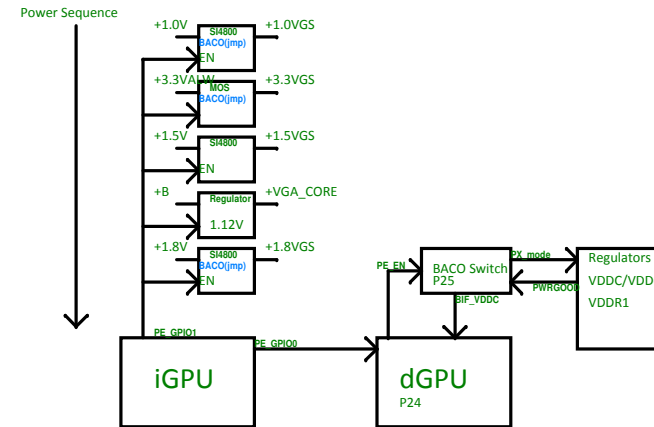
PE_GPIO1 : Low -> dGPU Power OFF ; High -> dGPU Power ON

BACO option :

PE_GPIO0 : High -> Normal operation (dGPU is not reset on BACO mode)

PE_GPIO1 : Low -> dGPU Power OFF ; High -> dGPU Power ON (always High)

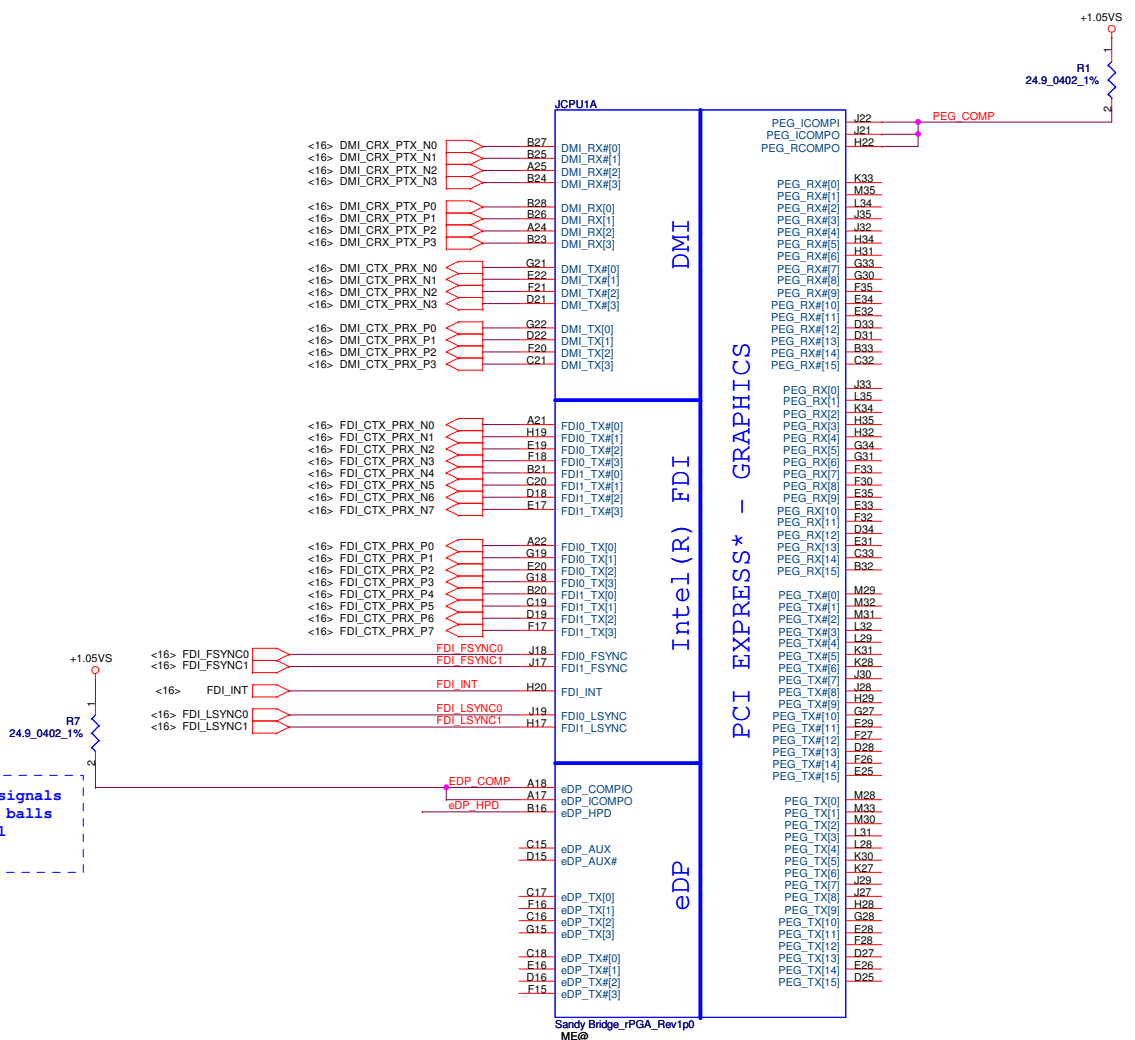
dGPU Power Pins	Voltage	PX 3.0	BACO Mode	Max current
PCIe_PVDD, PCIe_VDDR, TSVDD, VDDR4, VDD_CT, DPE_PVDD, DP[F:E]_VDD18, DP[D:A]_PVDD, DP[D:A]_VDD18, AVDD, VDD1DI, A2VDDQ, VDD2DI, DLL_PVDD, MPV18, and SPV18	1.8V	OFF	ON	1679mA
DP[F:E]_VDD10, DP[D:A]_VDD10, DLL_VDDC, and SPV10	1.0V	OFF	ON	575mA
PCIe_VDDC	1.0V	OFF	ON	2A
VDDR3, and A2VDD	3.3V	OFF	ON	190mA
BIF_VDDC (current consumption = 55mA@1.0V, in BACO mode)	Same as VDDC	OFF	ON Same as PCIe_VDDC	70mA
VDDR1	1.5V	OFF	OFF	2.8A
VDDC/VDDCI	1.12V	OFF	OFF	12.9A



Security Classification	Compal Secret Data		Title	
Issued Date	2010/07/12	Deciphered Date	2012/07/11	CLOCK GENERATOR
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.				Rev 0.2
Date:	Friday, November 26, 2010	Sheet	4	of 50

EDP_COMPIO and ICOMPO signals should be shorted near balls and routed with typical impedance <25 mohms

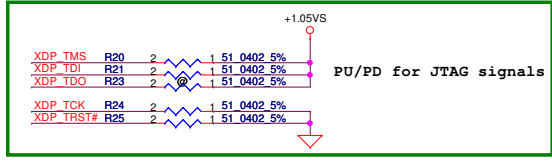
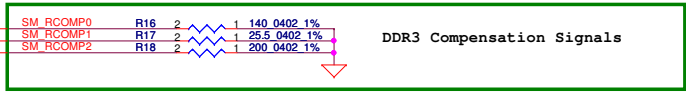
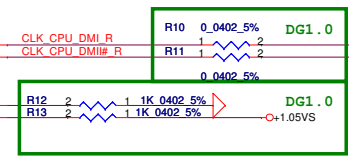
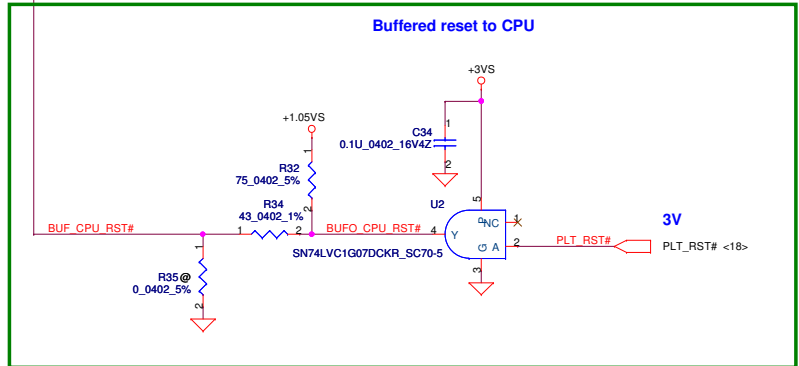
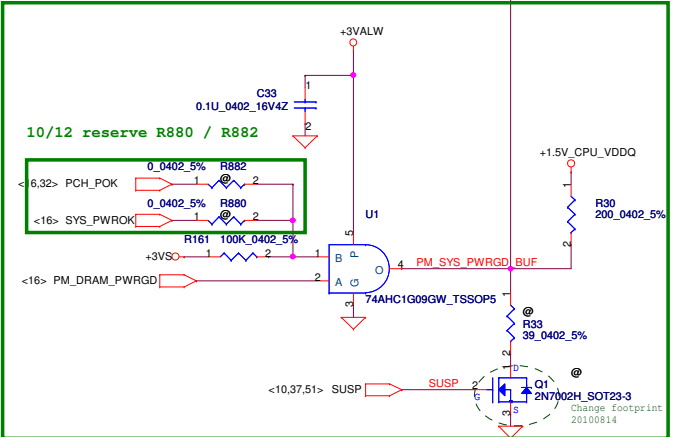
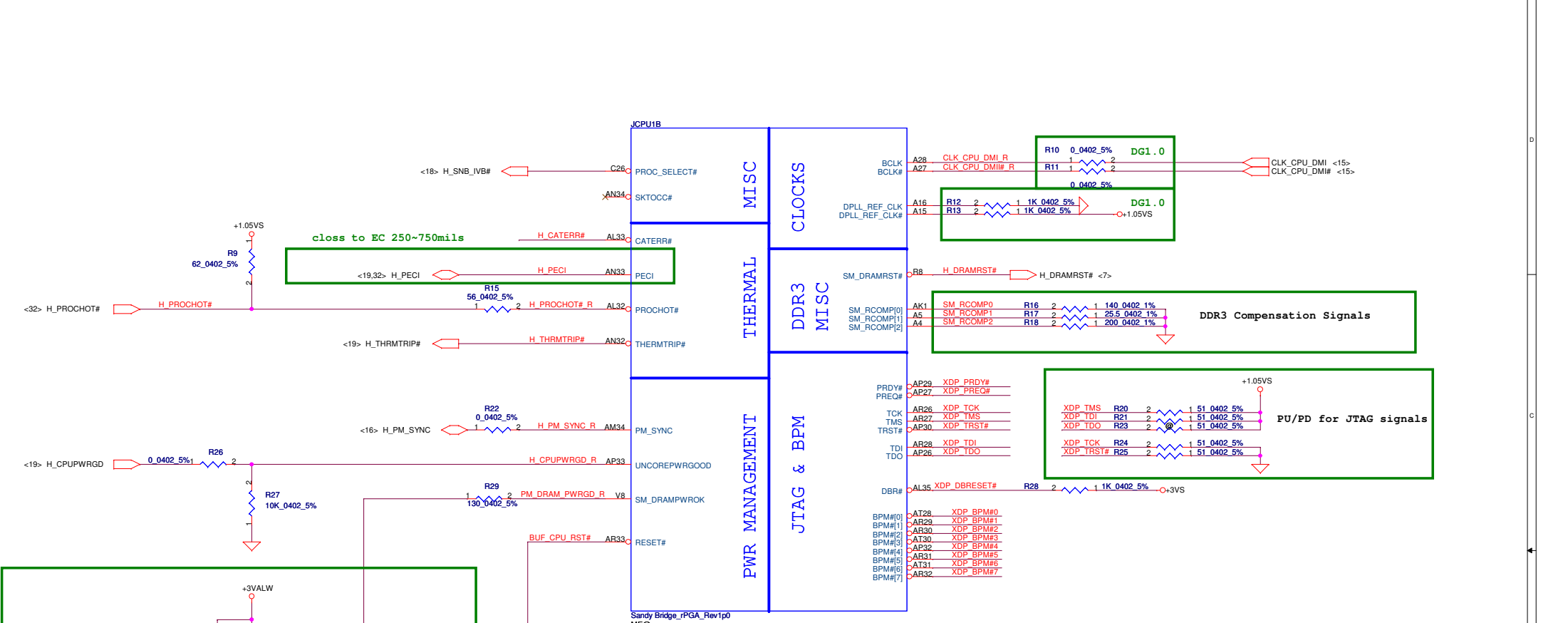
PEG_ICOMPI and RCOMPO signals should be shorted and routed with - max length = 500 mils - typical impedance = 43 mohms
 PEG_ICOMPO signals should be routed with - max length = 500 mils - typical impedance = 14.5 mohms



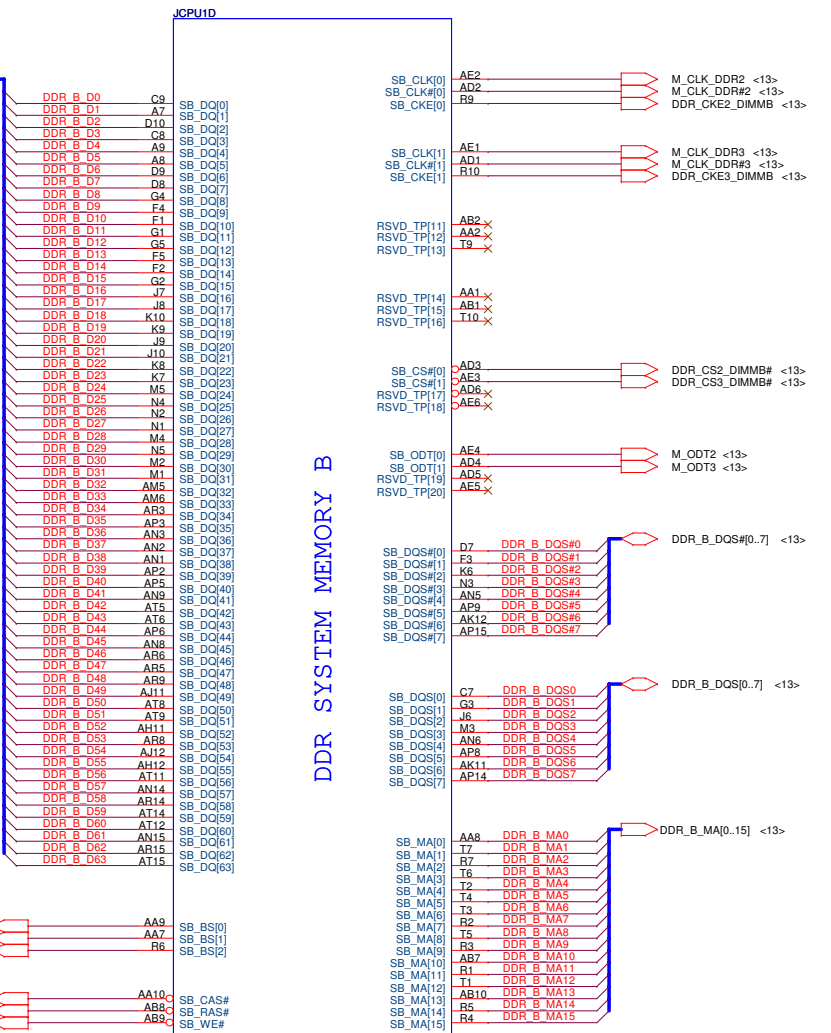
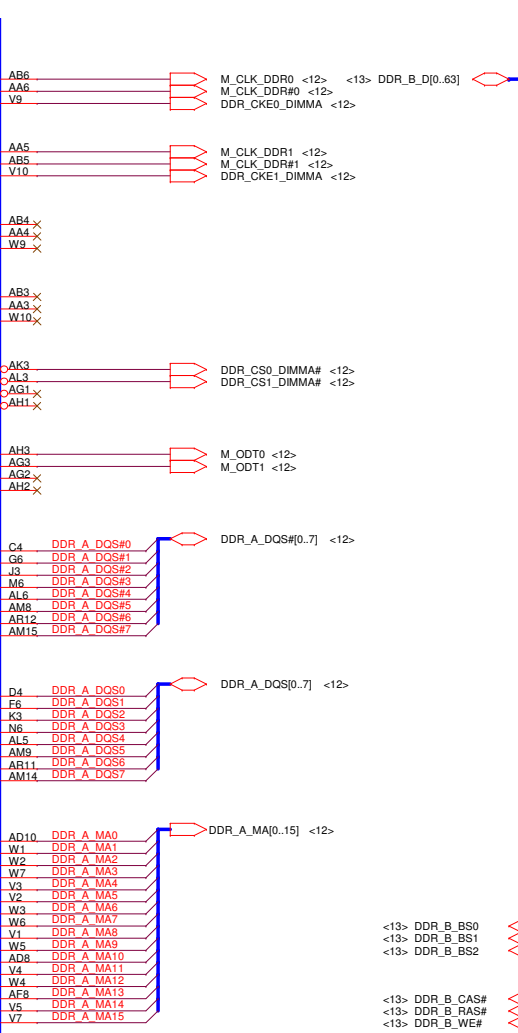
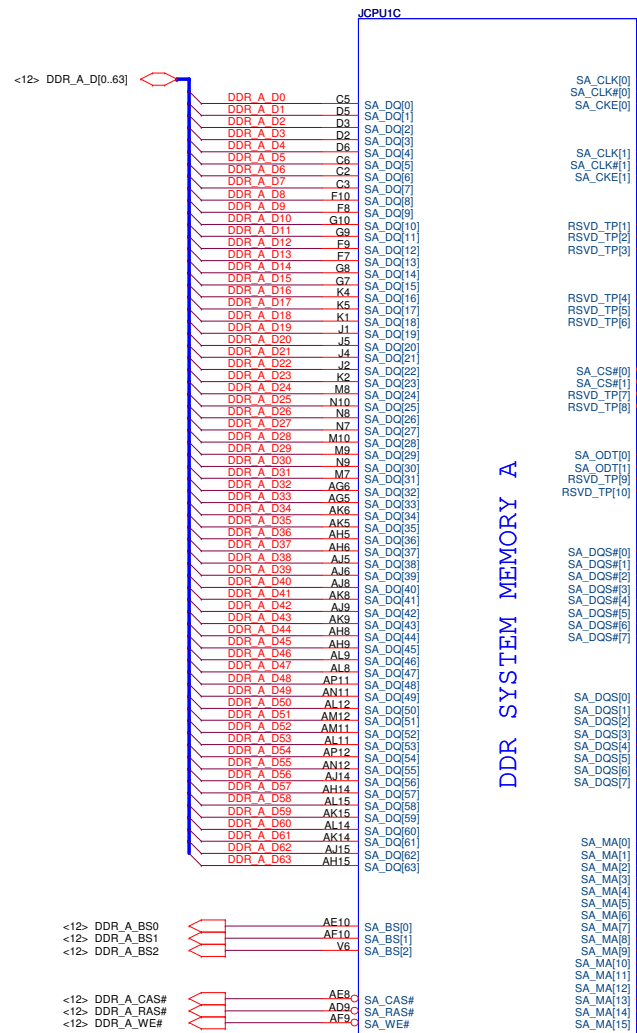
Security Classification	Compal Secret Data	
Issued Date	2010/07/12	Deciphered Date 2012/07/11

Title		
Compal Electronics, Inc.		
PROCESSOR(I/7) DMI,FDI,PEG		
Size	Document Number	Rev
Custom	LA-6752P	0.2
Date:	Friday, November 26, 2010	Sheet 5 of 50

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.



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2009/12/01	Deciphered Date	2010/12/31	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.				PROCESSOR(2/7) PM,XDP,CLK	
Size	Custom	Document Number	LA-6752P	Rev	0.2
Date:	Friday, November 26, 2010	Sheet	6	of	50

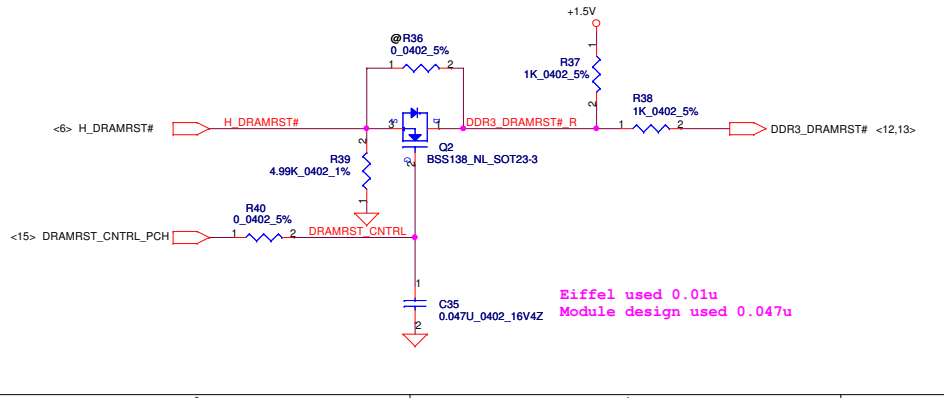


DDR SYSTEM MEMORY A

DDR SYSTEM MEMORY B

Sandy Bridge_rPGA_Rev1p0
ME@

Sandy Bridge_rPGA_Rev1p0
ME@

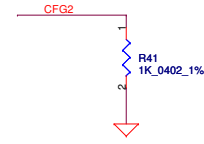
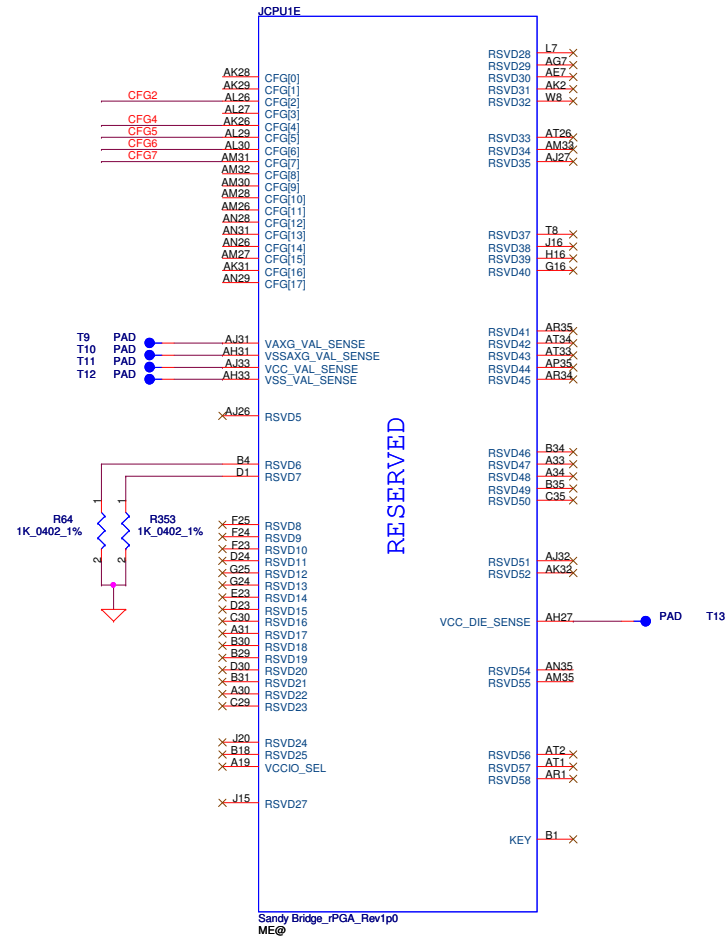


Eiffel used 0.01u
Module design used 0.047u

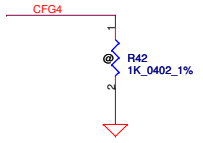
Security Classification		Compal Secret Data	
Issued Date	2010/07/12	Deciphered Date	2012/07/11
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT 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.		
Title PROCESSOR(3/7) DDRIII		
Size	Document Number	Rev
Customer	LA-6752P	0.2
Date:	Friday, November 26, 2010	Sheet 7 of 50

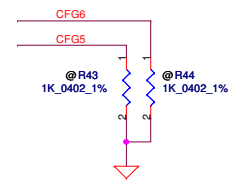
CFG Straps for Processor



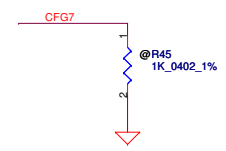
PEG Static Lane Reversal - CFG2 is for the 16x	
CFG2	1: Normal Operation; Lane # definition matches socket pin map definition * 0: Lane Reversed



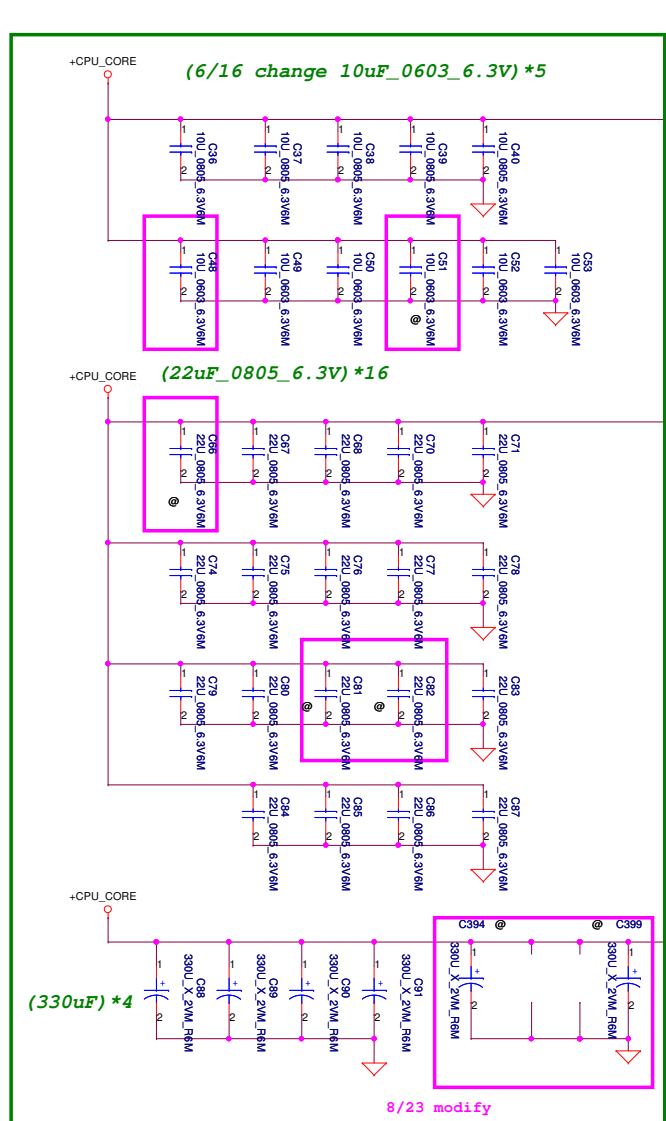
Display Port Presence Strap	
CFG4	* 1 : Disabled; No Physical Display Port attached to Embedded Display Port 0 : Enabled; An external Display Port device is connected to the Embedded Display Port



PCIe Port Bifurcation Straps	
CFG[6:5]	* 11: (Default) x16 - Device 1 functions 1 and 2 disabled 10: x8, x8 - Device 1 function 1 enabled ; function 2 disabled 01: Reserved - (Device 1 function 1 disabled ; function 2 enabled) 00: x8,x4,x4 - Device 1 functions 1 and 2 enabled



PEG DEFER TRAINING	
CFG7	1: (Default) PEG Train immediately following xxRESETB de assertion 0: PEG Wait for BIOS for training



JCPU1F

QC=94A
DC=53A

AG35	VCC1
AG34	VCC2
AG33	VCC3
AG32	VCC4
AG31	VCC5
AG30	VCC6
AG29	VCC7
AG28	VCC8
AG27	VCC9
AG26	VCC10
AF35	VCC11
AF34	VCC12
AF33	VCC13
AF32	VCC14
AF31	VCC15
AF30	VCC16
AF29	VCC17
AF28	VCC18
AF27	VCC19
AF26	VCC20
AD35	VCC21
AD34	VCC22
AD33	VCC23
AD32	VCC24
AD31	VCC25
AD30	VCC26
AD29	VCC27
AD28	VCC28
AD27	VCC29
AD26	VCC30
AC35	VCC31
AC34	VCC32
AC33	VCC33
AC32	VCC34
AC31	VCC35
AC30	VCC36
AC29	VCC37
AC28	VCC38
AC27	VCC39
AC26	VCC40
AA35	VCC41
AA34	VCC42
AA33	VCC43
AA32	VCC44
AA31	VCC45
AA30	VCC46
AA29	VCC47
AA28	VCC48
AA27	VCC49
AA26	VCC50
Y35	VCC51
Y34	VCC52
Y33	VCC53
Y32	VCC54
Y31	VCC55
Y30	VCC56
Y29	VCC57
Y28	VCC58
Y27	VCC59
Y26	VCC60
Y25	VCC61
Y24	VCC62
Y23	VCC63
V32	VCC64
V31	VCC65
V30	VCC66
V29	VCC67
V28	VCC68
V27	VCC69
V26	VCC70
U35	VCC71
U34	VCC72
U33	VCC73
U32	VCC74
U31	VCC75
U30	VCC76
U29	VCC77
U28	VCC78
U27	VCC79
U26	VCC80
R31	VCC81
R30	VCC82
R29	VCC83
R28	VCC84
R27	VCC85
R26	VCC86
R25	VCC87
R24	VCC88
R23	VCC89
P33	VCC90
P32	VCC91
P31	VCC92
P30	VCC93
P29	VCC94
P28	VCC95
P27	VCC96
P26	VCC97
P25	VCC98
P24	VCC99
P23	VCC100

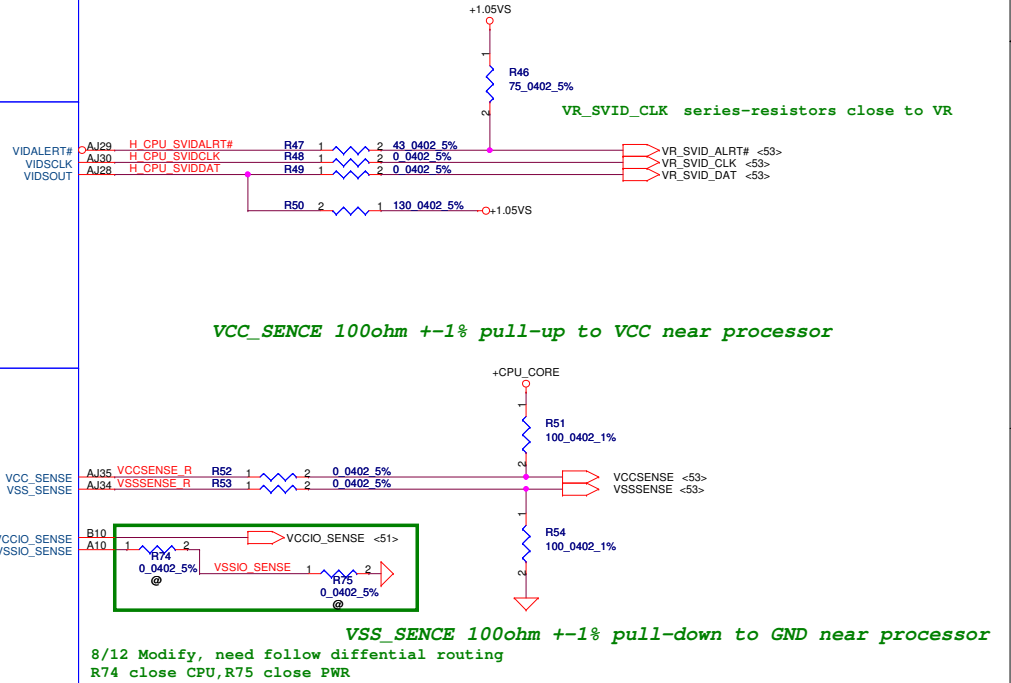
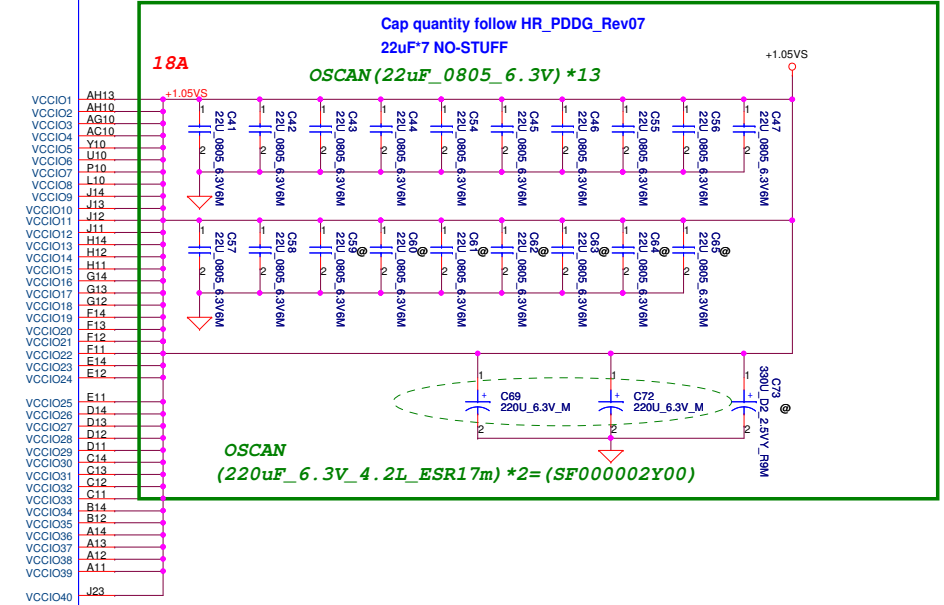
POWER

PEG AND DDR

CORE SUPPLY

SVID

SENSE LINES

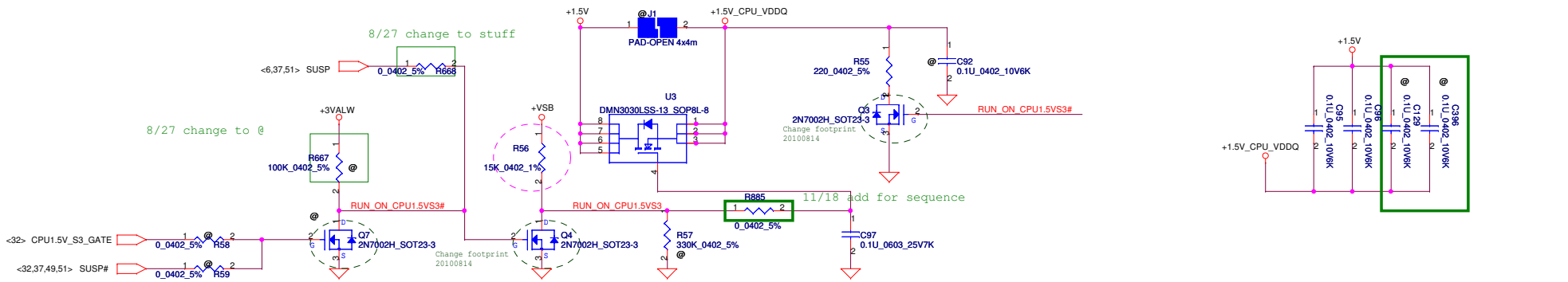


Sandy Bridge_PGM Rev1.0
ME@

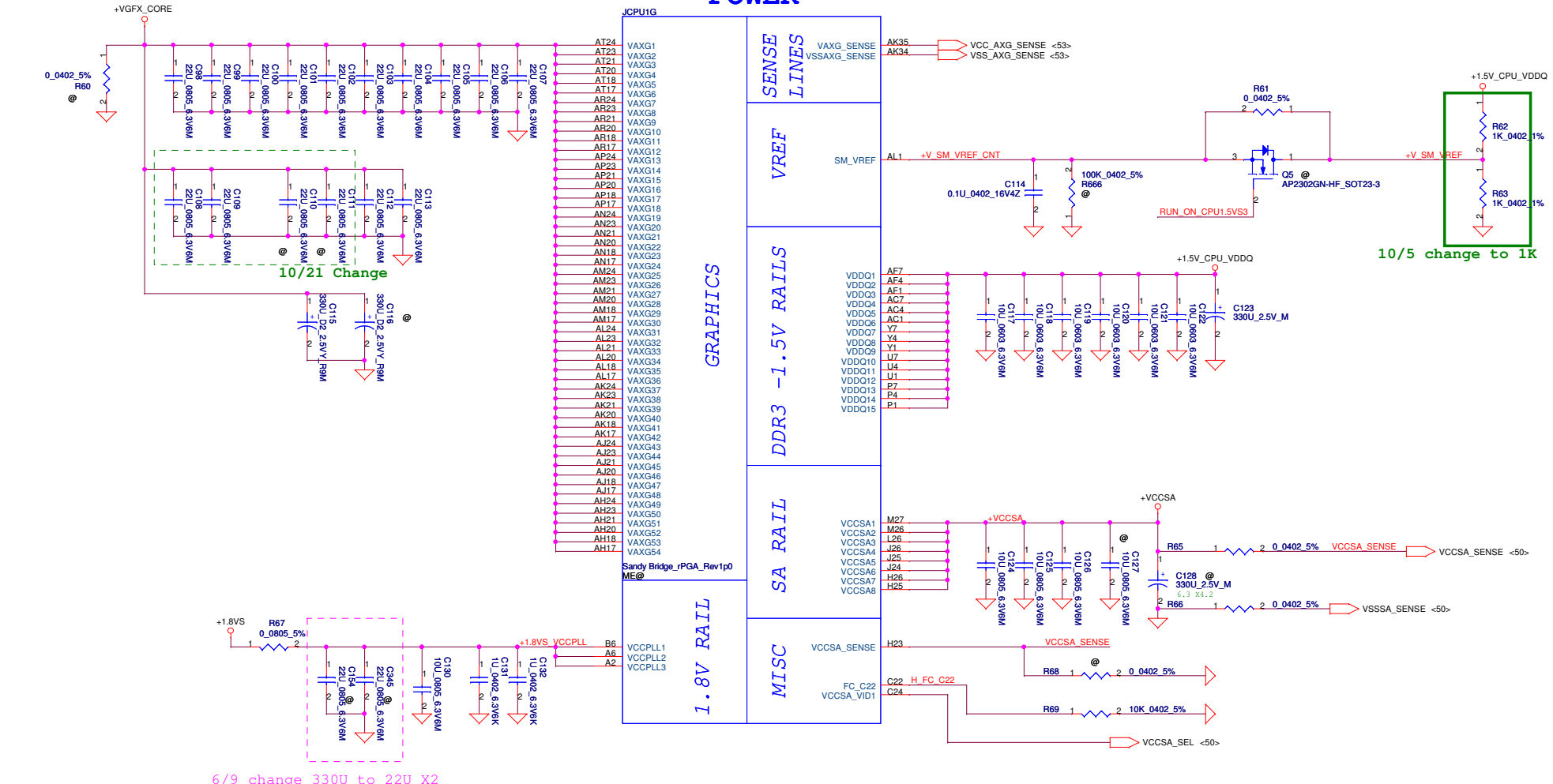
Security Classification	Compal Secret Data	
Issued Date	2010/07/12	Deciphered Date
		2012/07/11

THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. IT 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.

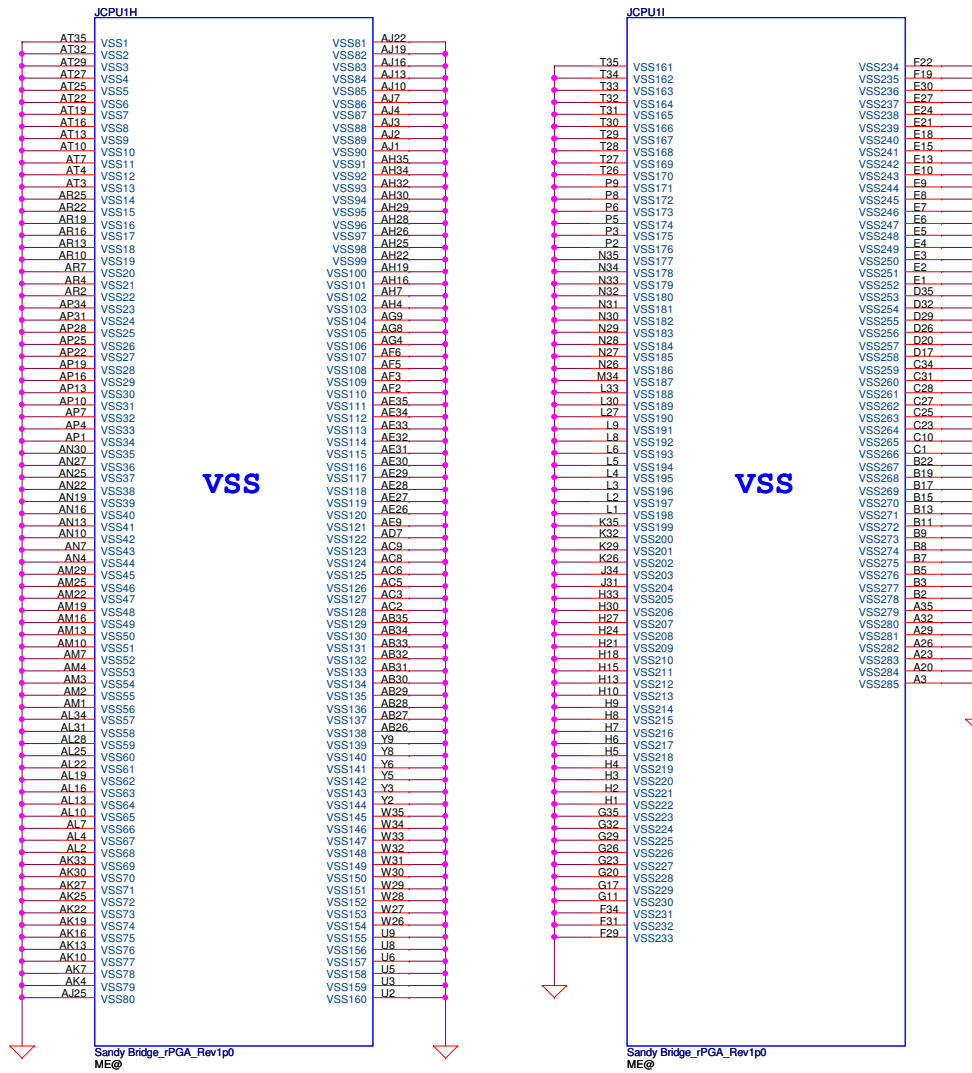
Compal Electronics, Inc.		
PROCESSOR(S/7) PWR,BYPASS		
Size	Document Number	Rev
Custom	LA-6752P	0.2
Date:	Friday, November 26, 2010	Sheet 9 of 50



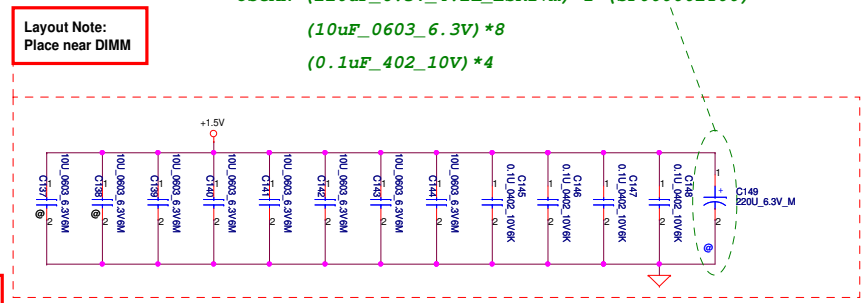
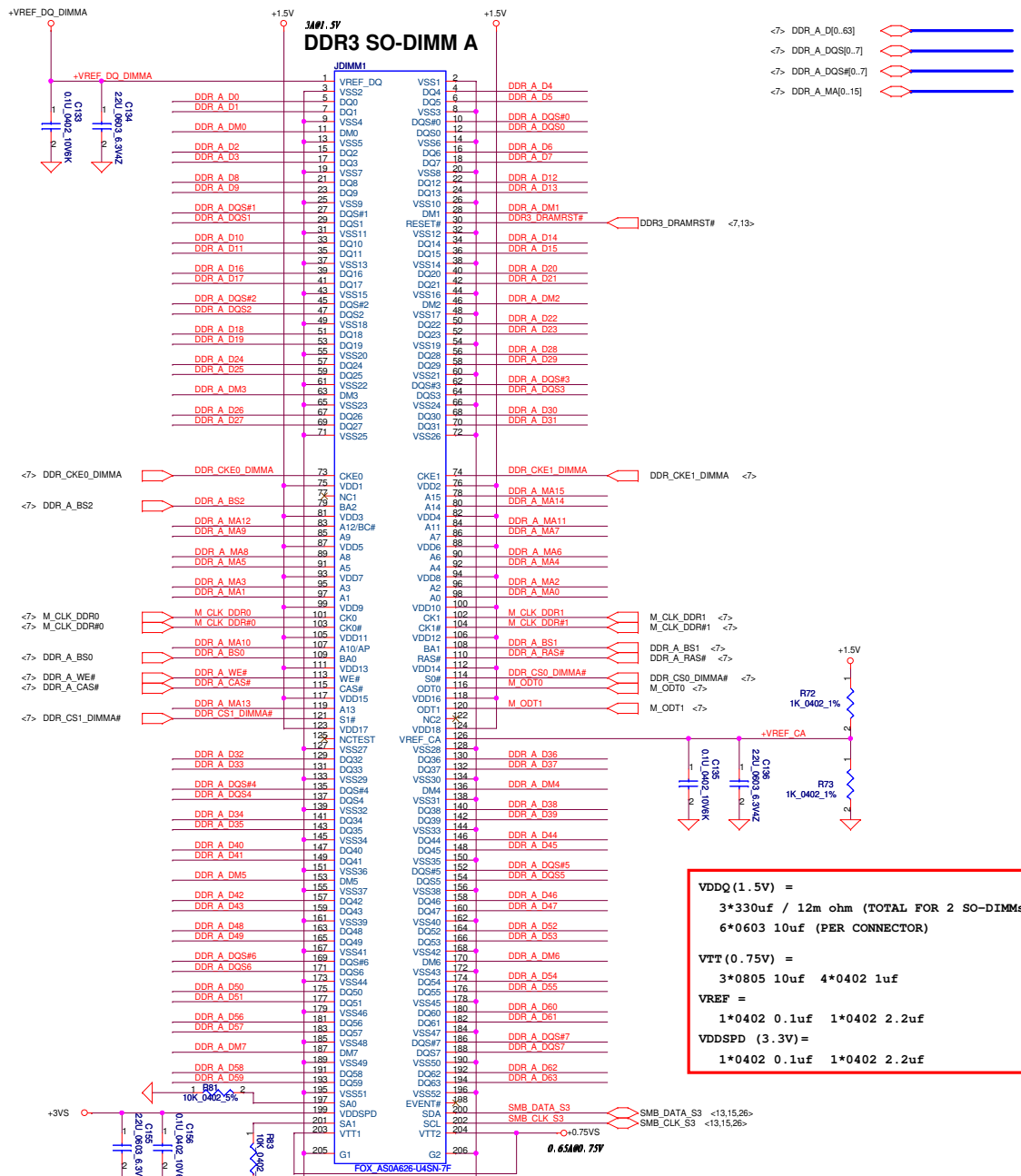
POWER



Security Classification	Compal Secret Data			Title PROCESSOR(6/7) PWR
Issued Date	2010/07/12	Deciphered Date	2012/07/11	
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 LA-6752P Rev 0.2
Date:	Friday, November 26, 2010	Sheet	10 of 50	



Security Classification	Compal Secret Data		Title	
Issued Date	2010/07/12	Deciphered Date	2012/07/11	Compal Electronics, Inc.
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 COMPETETION 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.				PROCESSOR(7/7) VSS
Size	Document Number	Rev		
Custom	LA-6752P	0.2		
Date:	Friday, November 26, 2010	Sheet	11	of 50

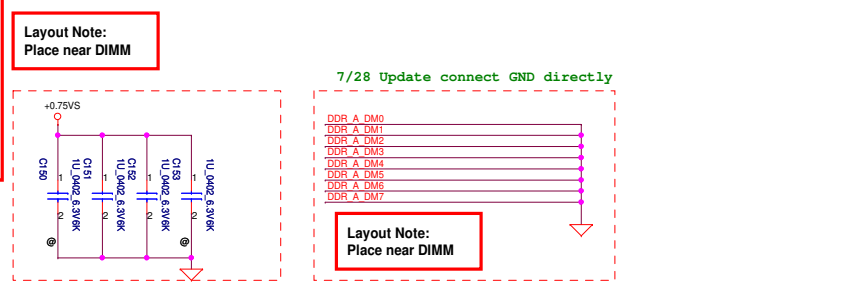


VDDQ (1.5V) =
 3*330uF / 12m ohm (TOTAL FOR 2 SO-DIMMs)
 6*0603 10uF (PER CONNECTOR)

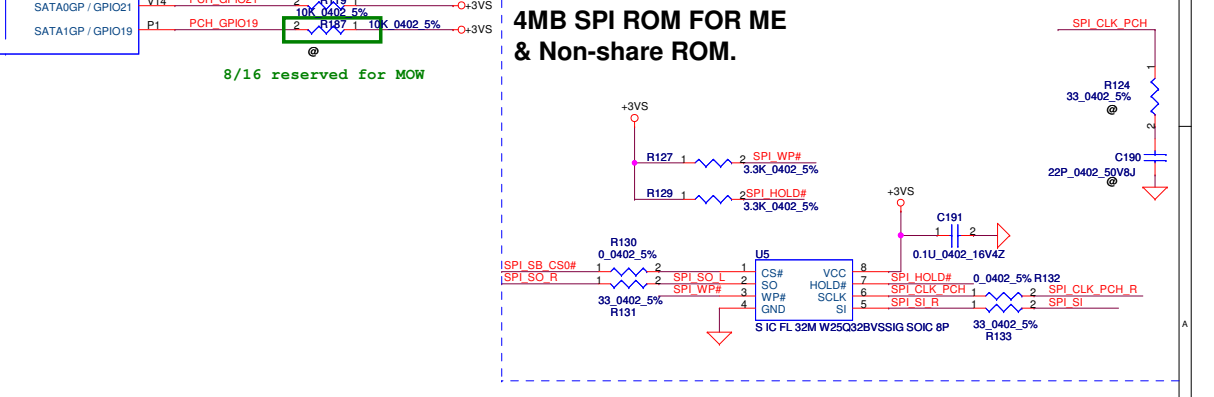
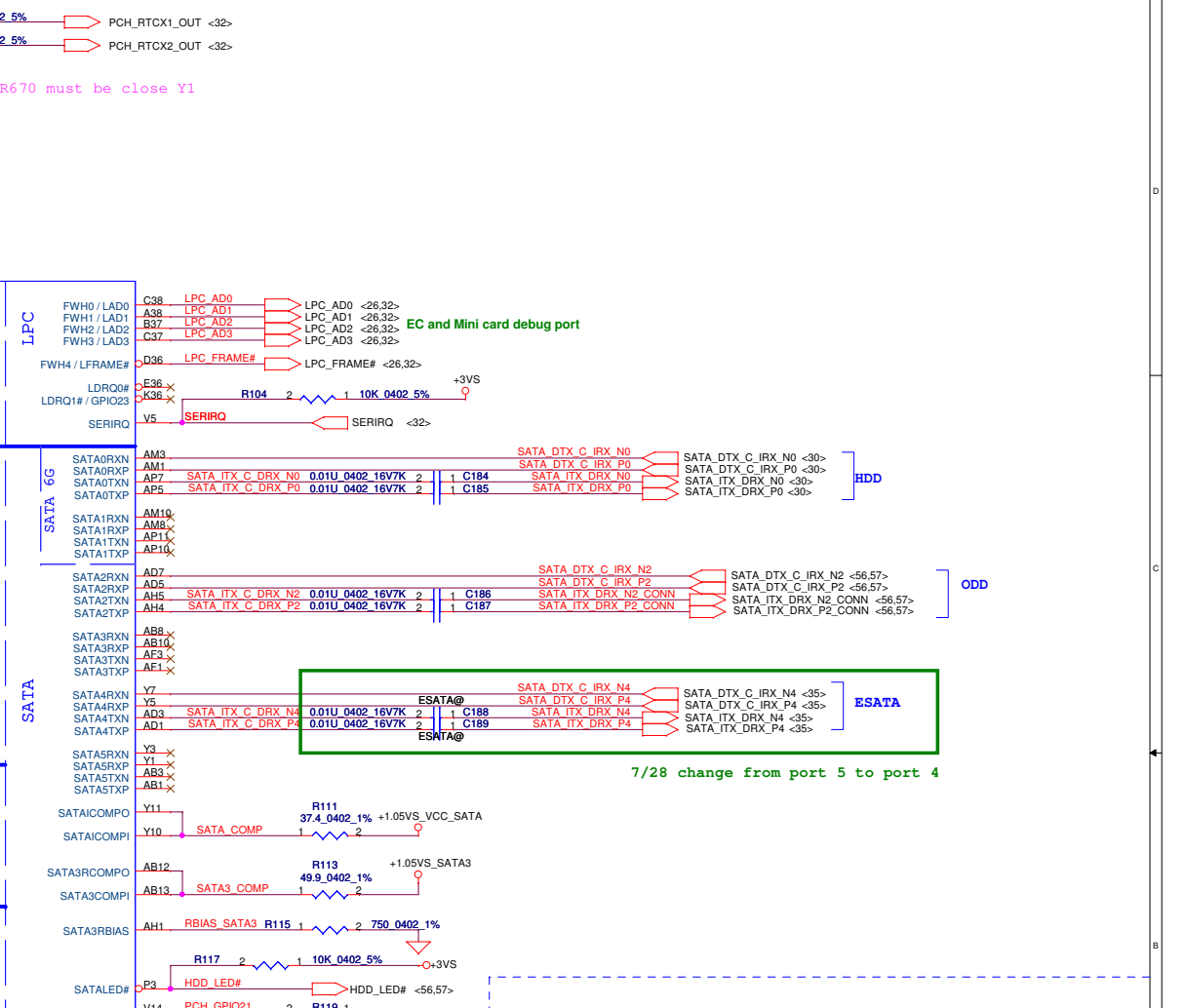
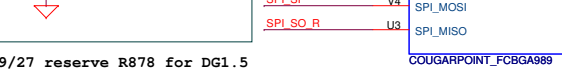
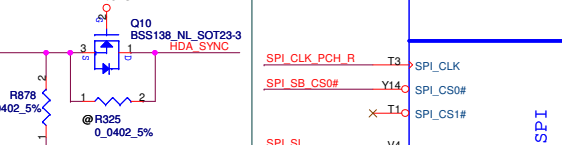
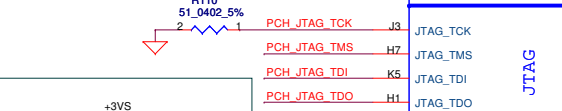
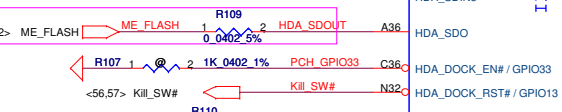
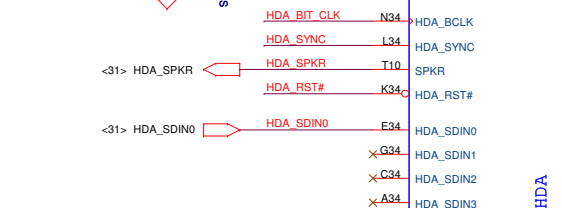
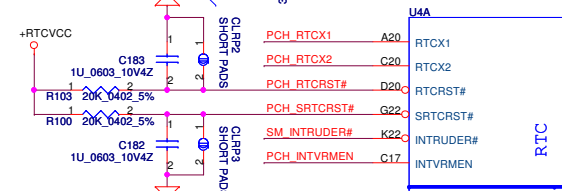
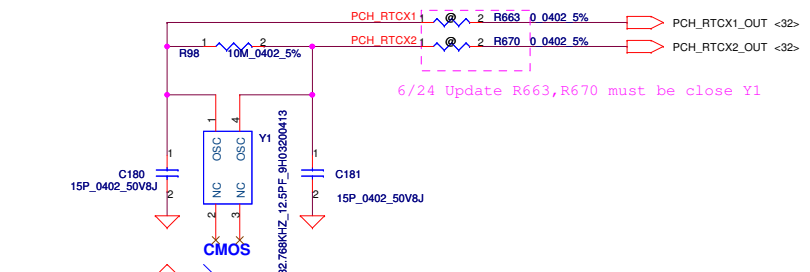
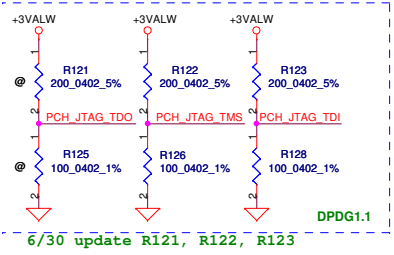
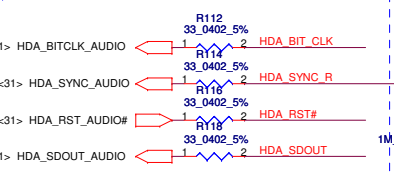
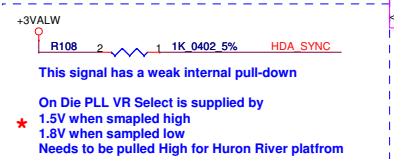
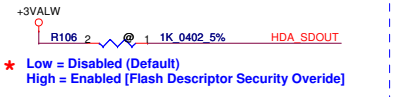
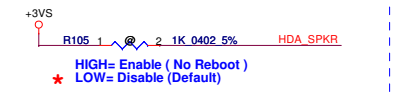
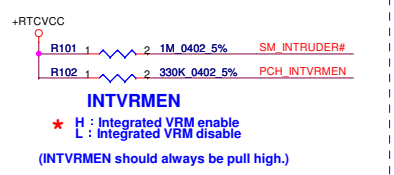
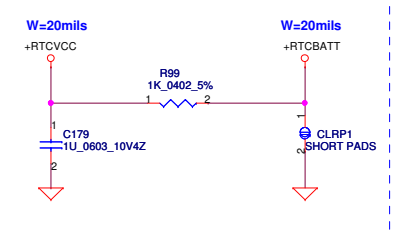
VTT (0.75V) =
 3*0805 10uF 4*0402 1uF

VREF =
 1*0402 0.1uF 1*0402 2.2uF

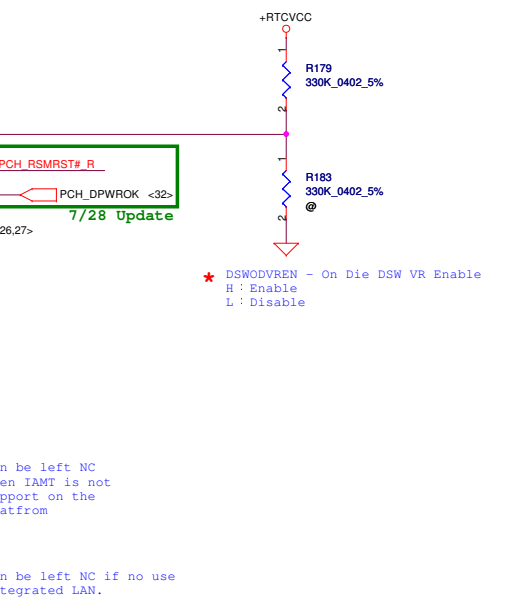
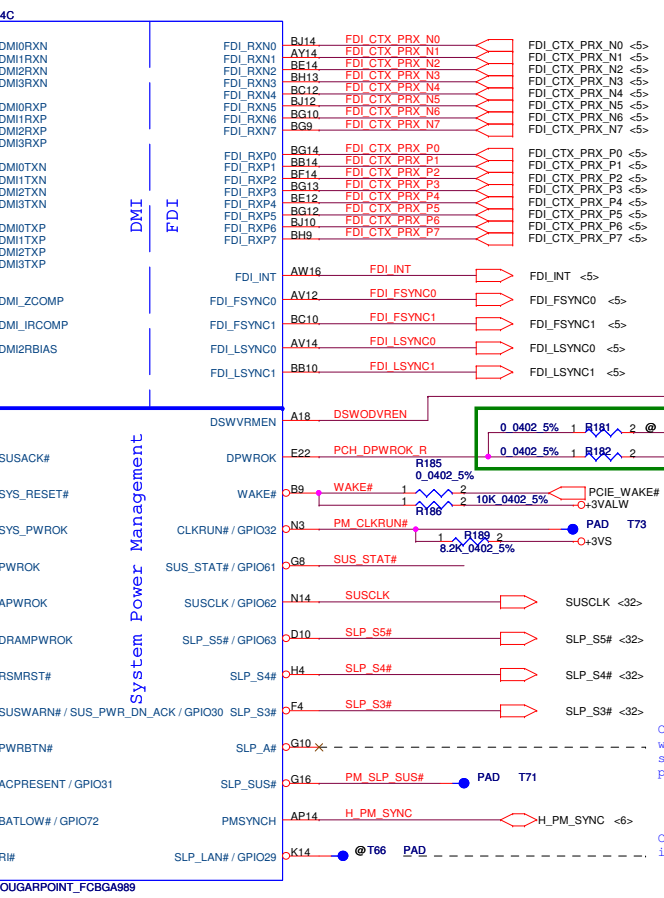
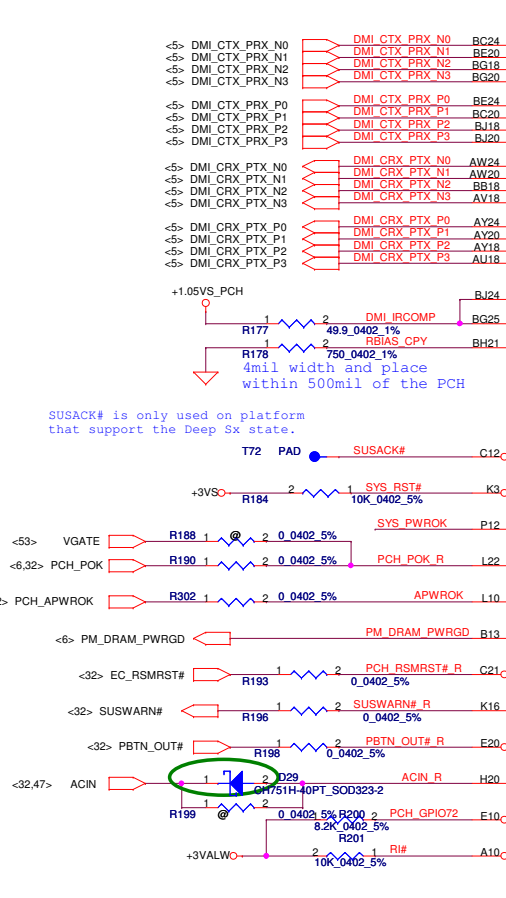
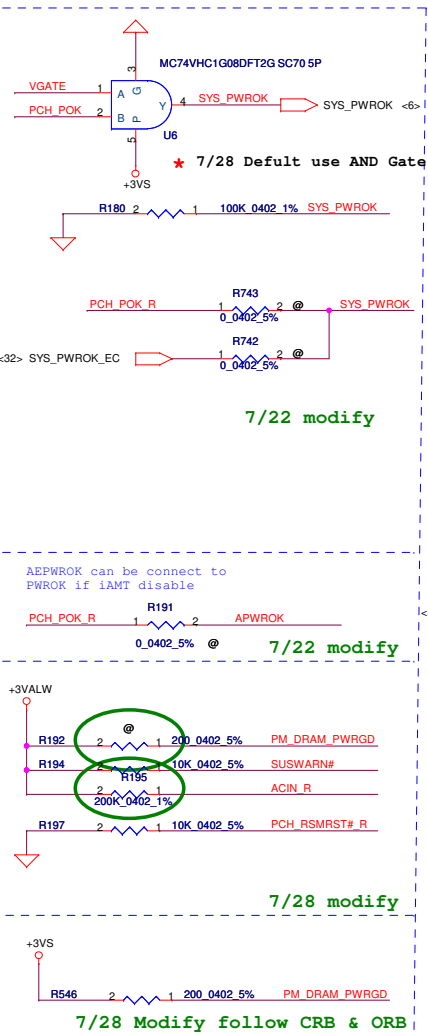
VDDSPD (3.3V) =
 1*0402 0.1uF 1*0402 2.2uF



Security Classification	Compal Secret Data		Title	Compal Electronics, Inc.	
Issued Date	2010/07/12	Deciphered Date	2012/07/11	DDR3-SODIMM SLOT1	
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.			Rev	0.2	
			Part Number	LA-6752P	
Date:	Friday, November 26, 2010	ISheet	12	of 50	



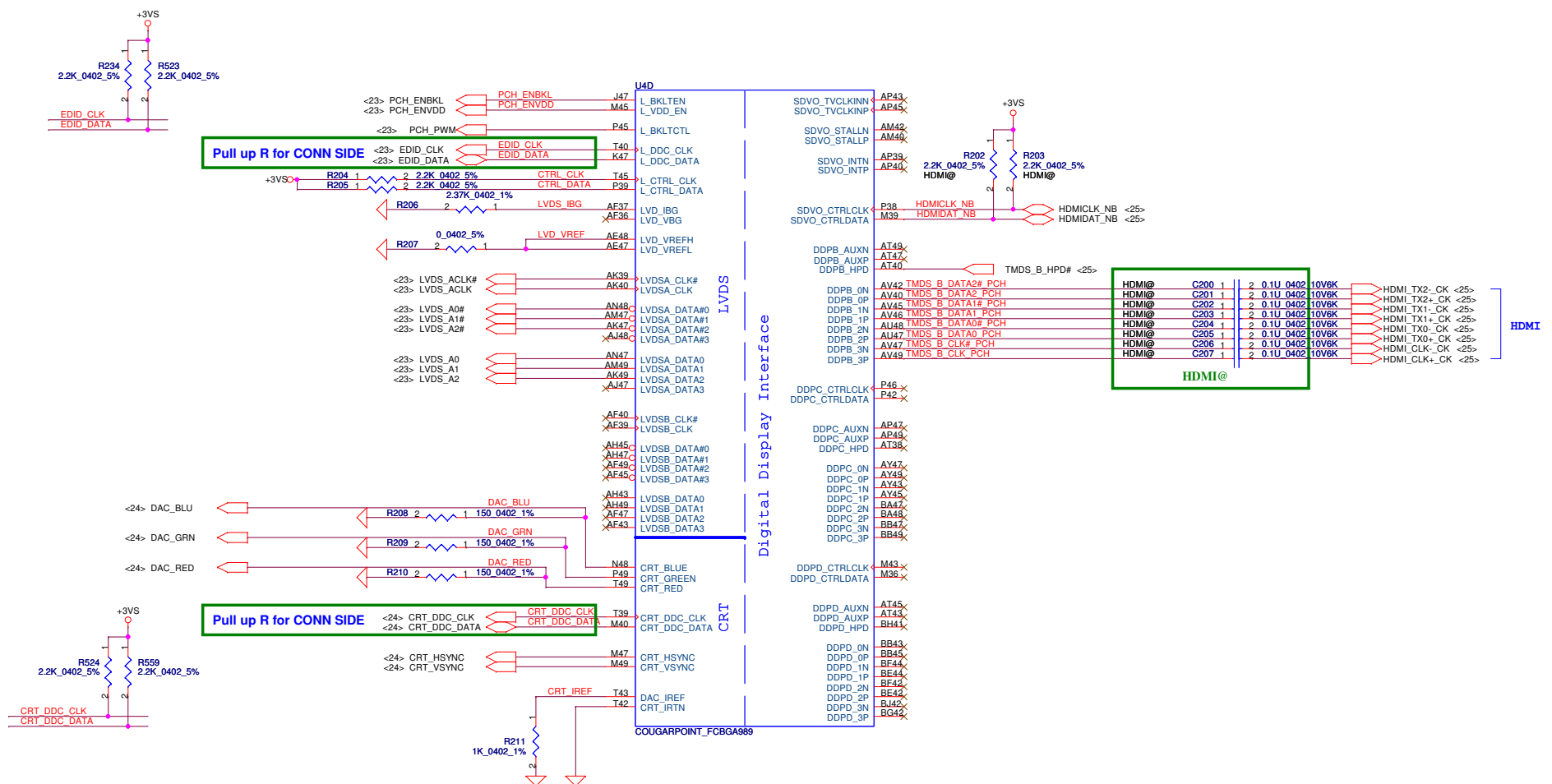
Security Classification	Compal Secret Data			Title	
Issued Date	2010/07/12	Deciphered Date	2012/07/11	PCH (1/8) SATA,HDA,SPI, LPC, XDP	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT 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	Customer	LA-6751P	Rev	0.2
Date:	Friday, November 26, 2010	Sheet	14	of	50



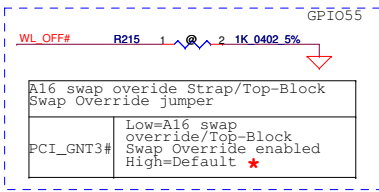
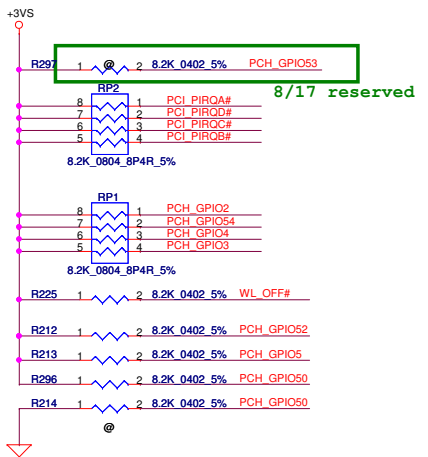
Security Classification	Compal Secret Data	
Issued Date	2010/07/12	Deciphered Date
		2012/07/11

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.

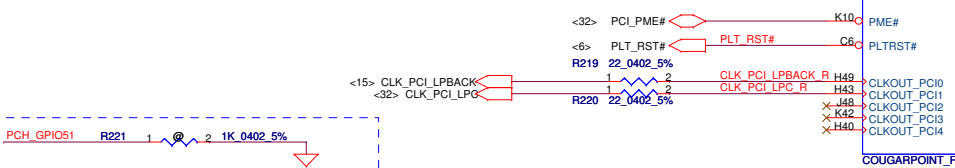
Compal Electronics, Inc.	
PCH (3/8) DMI,FDI,PM,	
Document Number	Rev
LA-6752P	0.2
Date: Friday, November 26, 2010	Sheet 16 of 50



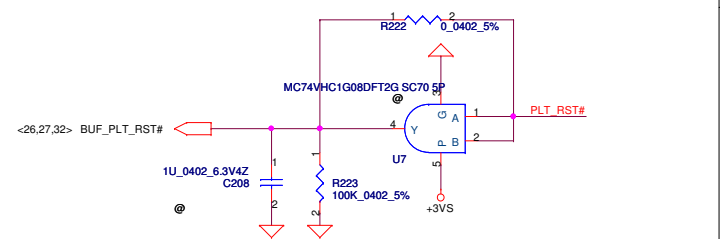
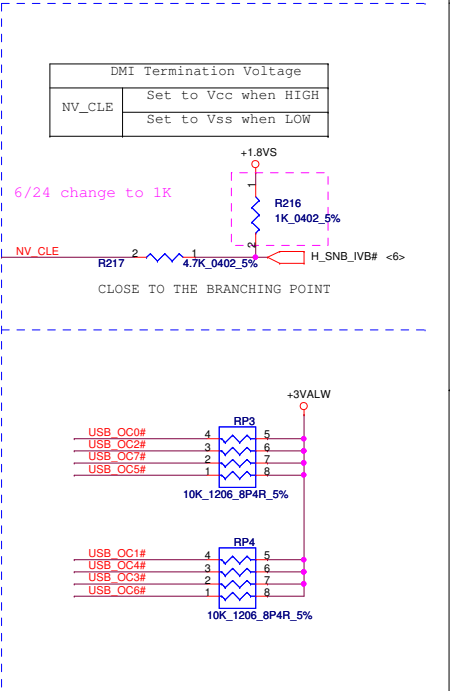
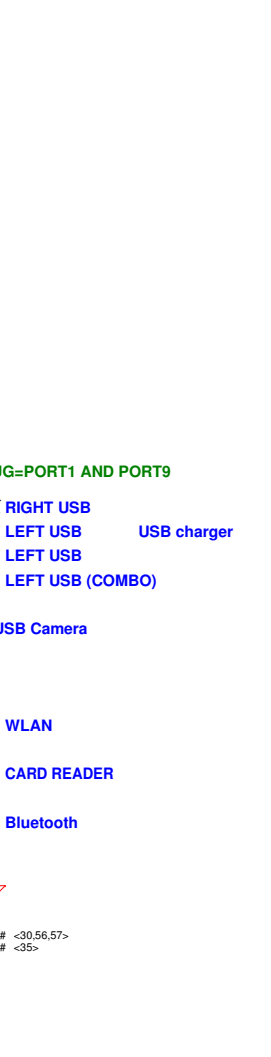
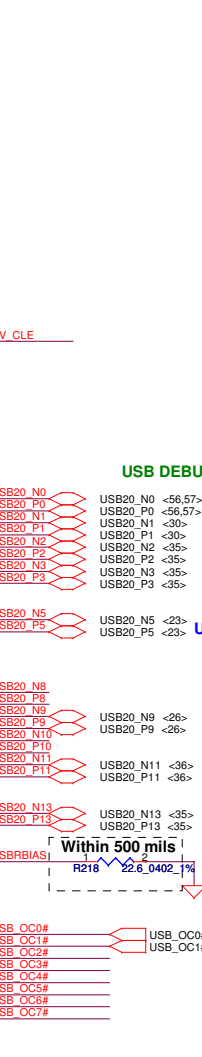
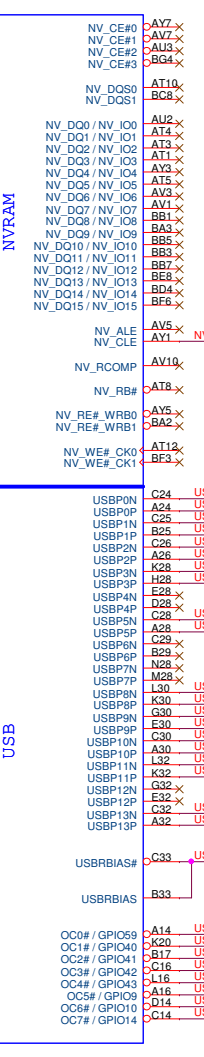
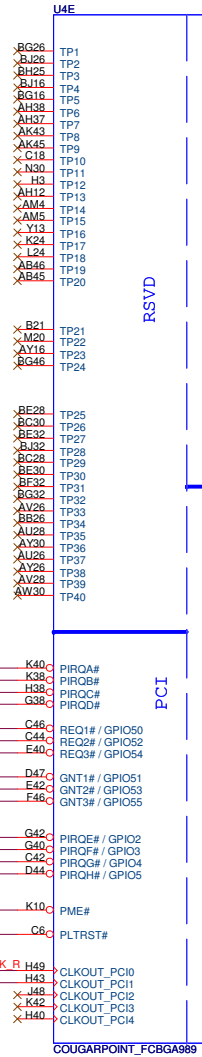
Security Classification	Compal Secret Data			Title	
Issued Date	2010/07/12	Deciphered Date	2012/07/11	Compal Electronics, Inc.	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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
				Customer	LA-6752P
				Date	Friday, November 26, 2010
				Sheet	17 of 50
				Rev	0.2



GPIO53=This Signal has a weak internal pull-up.
NOTE: The internal pull-up is disabled after PLTRST# deasserts.



Boot BIOS Strap bit1 BBS1			
	Bit11	Bit10	Boot BIOS Destination
	0	1	Reserved
GNT1#/ GPIO51	1	0	Reserved
	1	1	* SPI (Default)
	0	0	LPC



Security Classification	Compal Secret Data	
Issued Date	2010/07/12	Deciphered Date 2012/07/11
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.		
Title PCH (5/9) PCI, USB		
Size	Document Number	Rev
Custom	LA-6752P	0.2
Date:	Friday, November 26, 2010	Sheet 18 of 50

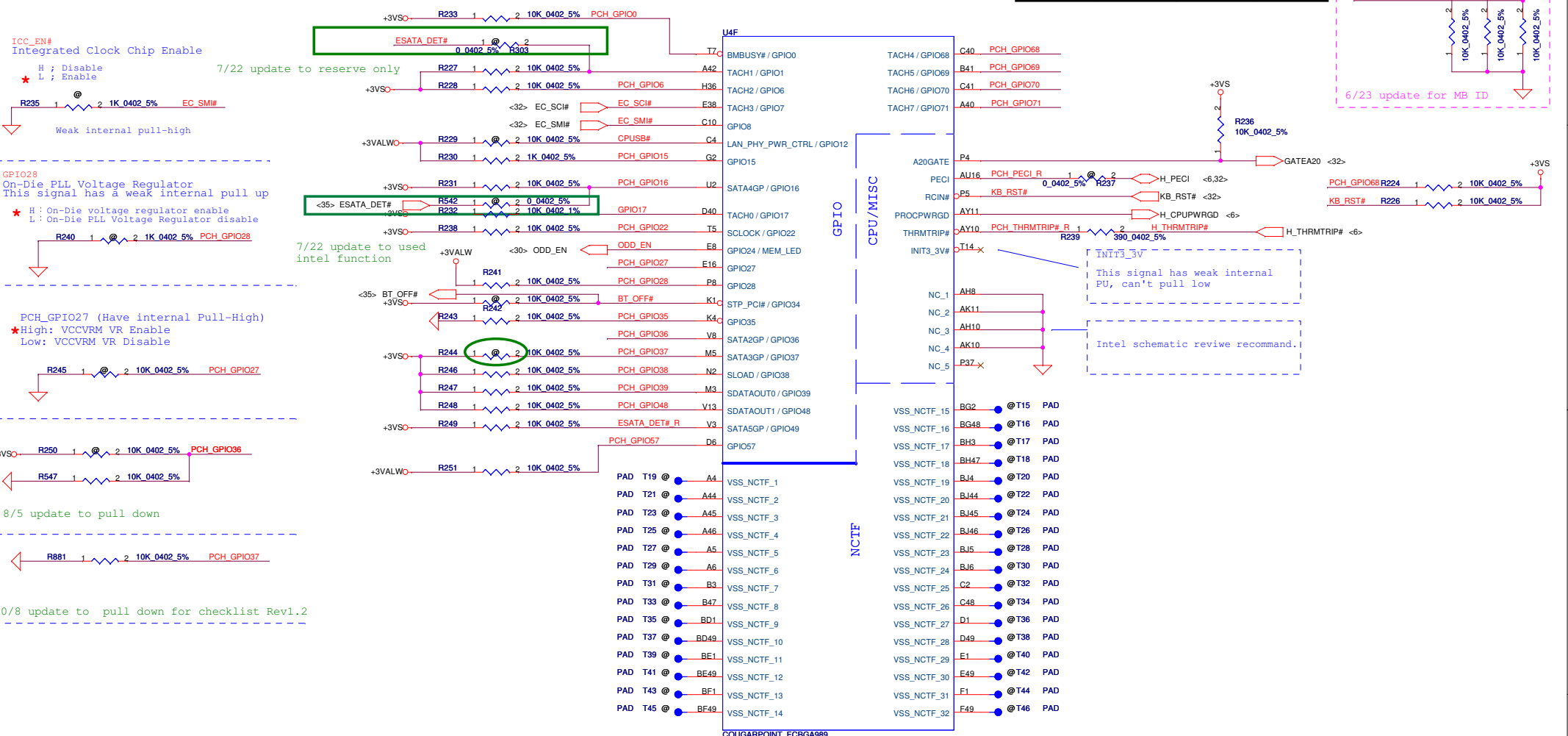
ICC_EN#
Integrated Clock Chip Enable
H ; Disable
★ L ; Enable
Weak internal pull-high

GPIO28
On-Die PLL Voltage Regulator
This signal has a weak internal pull up
★ H : On-Die voltage regulator enable
★ L : On-Die PLL Voltage Regulator disable

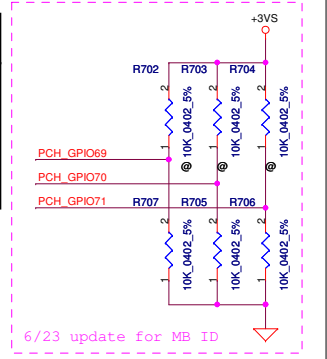
PCH_GPIO27 (Have internal Pull-High)
★ High: VCCVRM VR Enable
Low: VCCVRM VR Disable

8/5 update to pull down

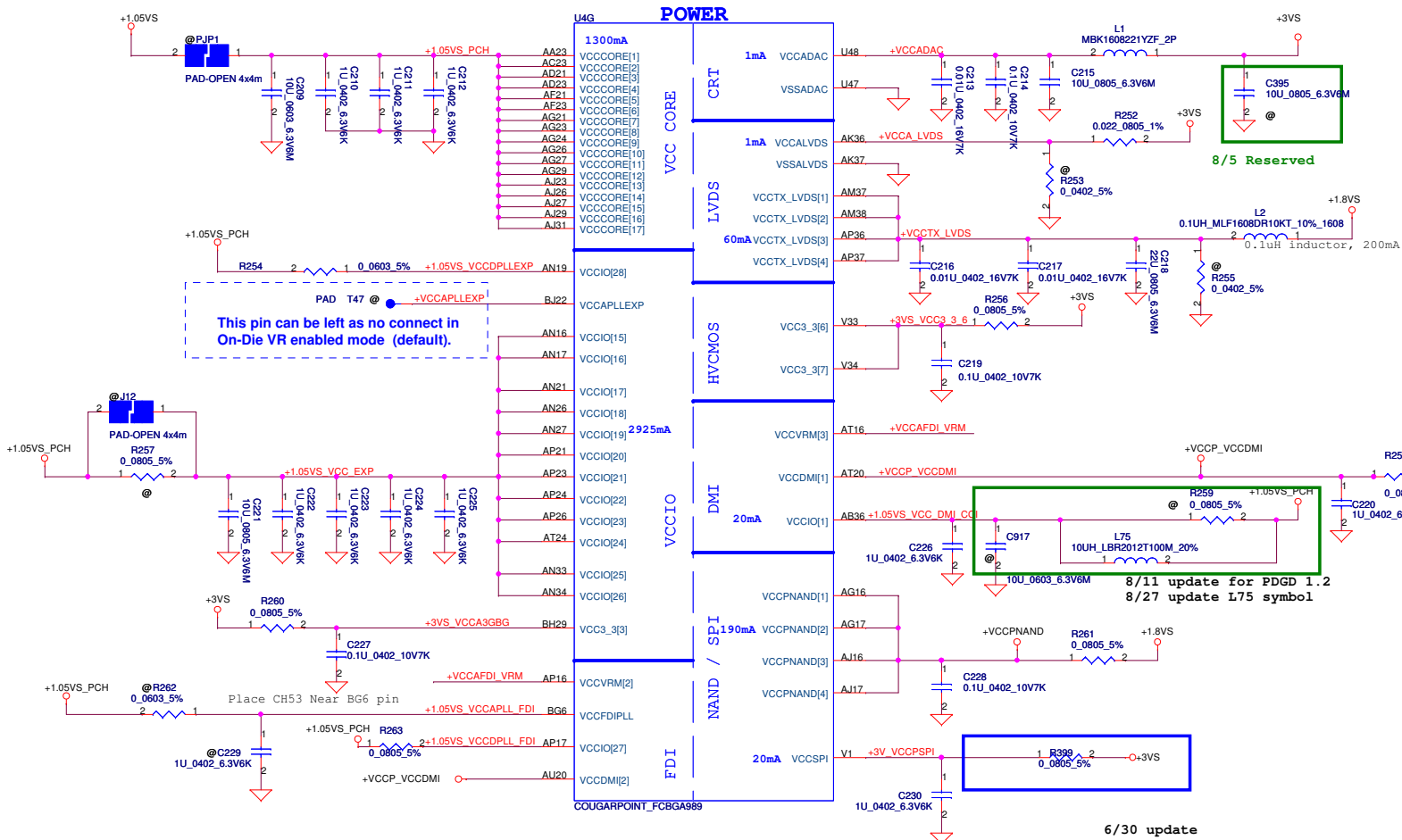
10/8 update to pull down for checklist Rev1.2



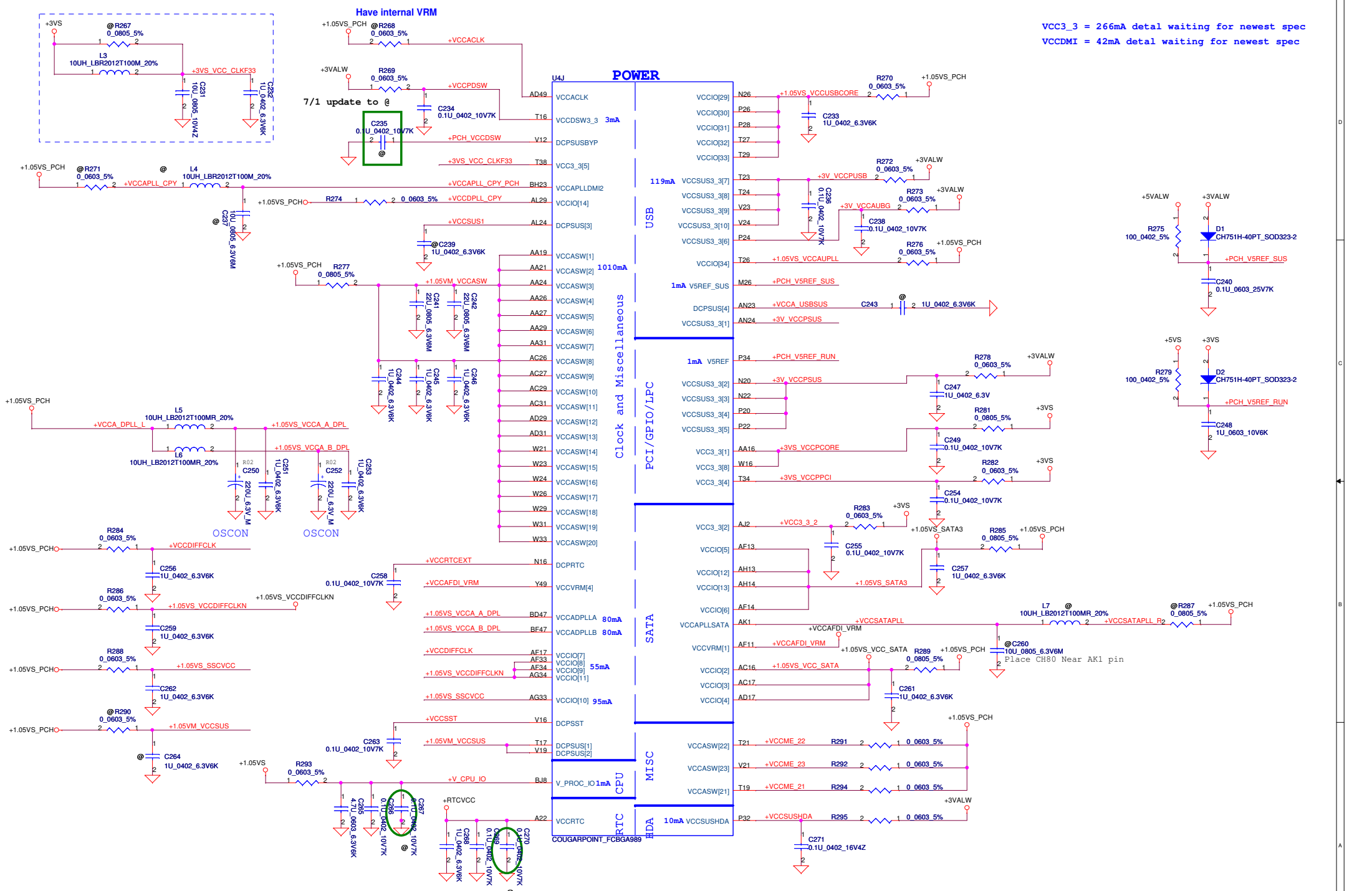
PCH_GPIO69	PCH_GPIO70	PCH_GPIO71	Function
0	0	0	UMA ★
1	0	0	DIS
0	1	0	PX3.0
1	1	0	PX4.0



This signal has weak internal PU, can't pull low
Intel schematic review recommend.



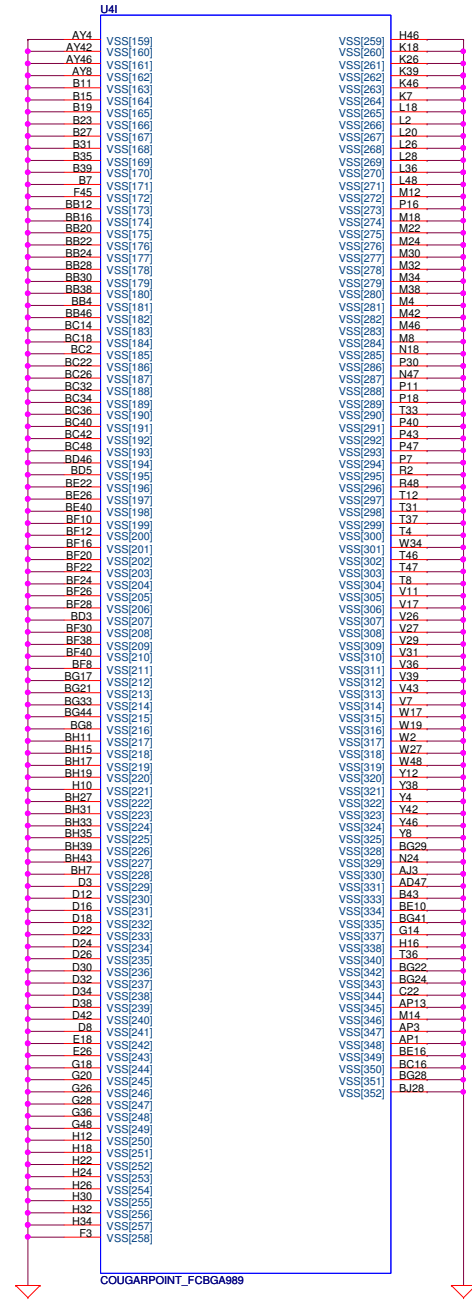
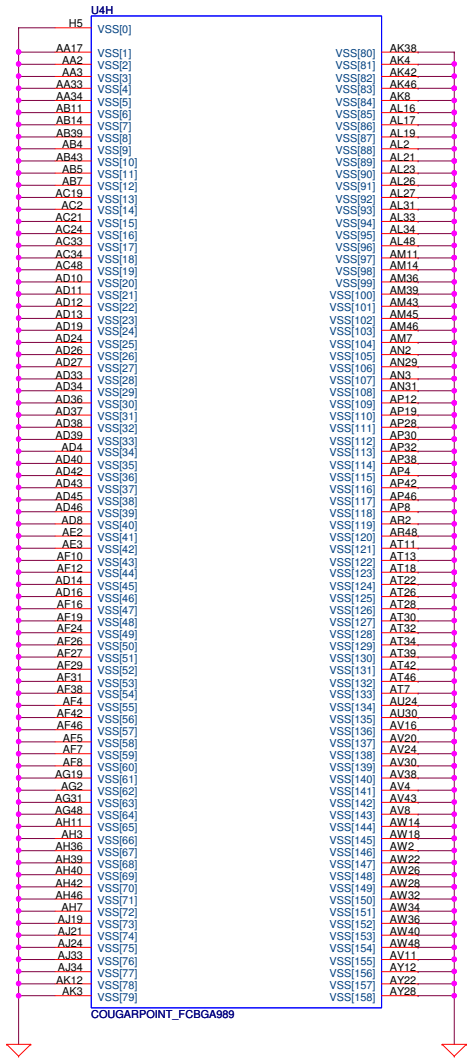
PCH Power Rail Table		
Voltage Rail	Voltage	SO Iccmax Current (A)
V_PROC_IO	1.05	0.001
V5REF	5	0.001
V5REF_Sus	5	0.001
Vcc3_3	3.3	0.266
VccADAC	3.3	0.001
VccADPLLA	1.05	0.08
VccADPLLB	1.05	0.08
VccCore	1.05	1.3
VccDMI	1.05	0.042
VccIO	1.05	2.925
VccASW	1.05	1.01
VccSPI	3.3	0.02
VccDSW	3.3	0.003
VccpNAND	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



VCC3_3 = 266mA detail waiting for newest spec
 VCCDMI = 42mA detail waiting for newest spec

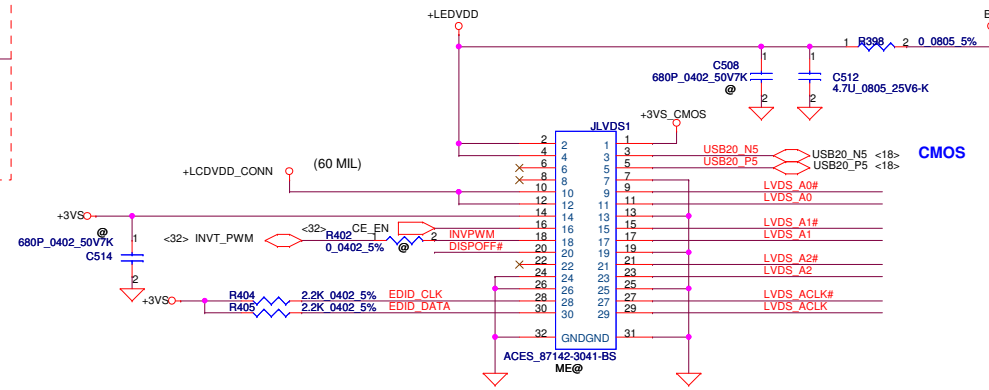
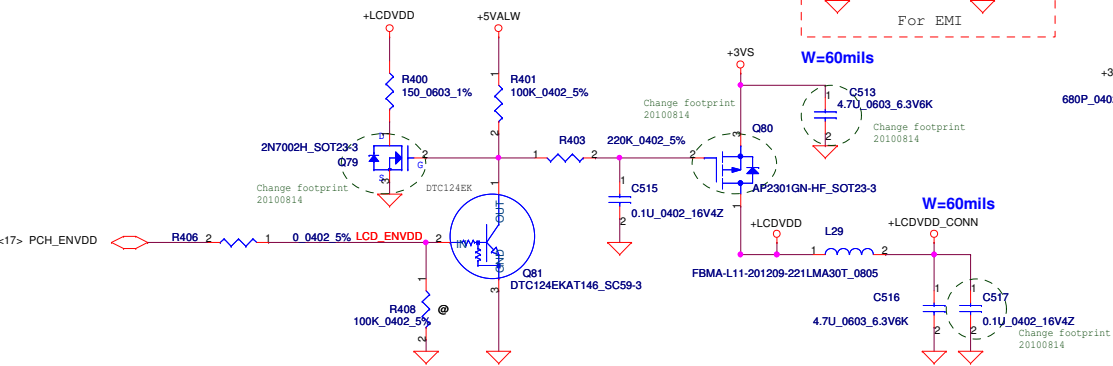
Security Classification	Compal Secret Data		
Issued Date	2010/07/12	Deciphered Date	2012/07/11
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT 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. PCH (8/9) PWR		
Title PCH (8/9) PWR	Size LA-6752P	Rev 0.2
Date Friday, November 26, 2010	Sheet 21 of 50	

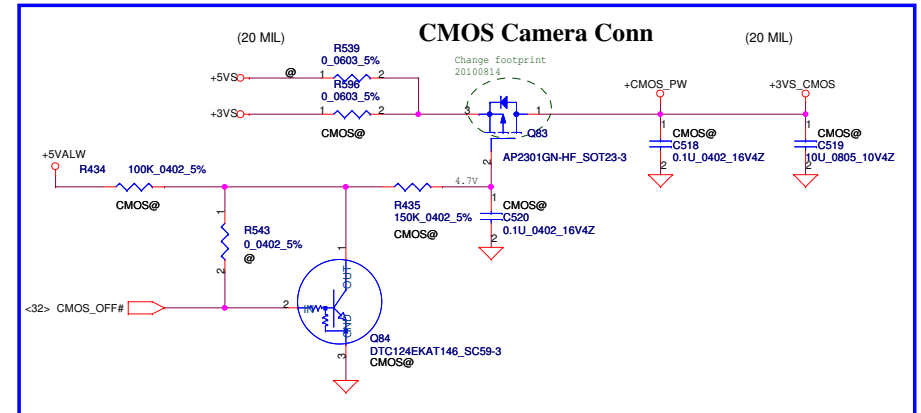
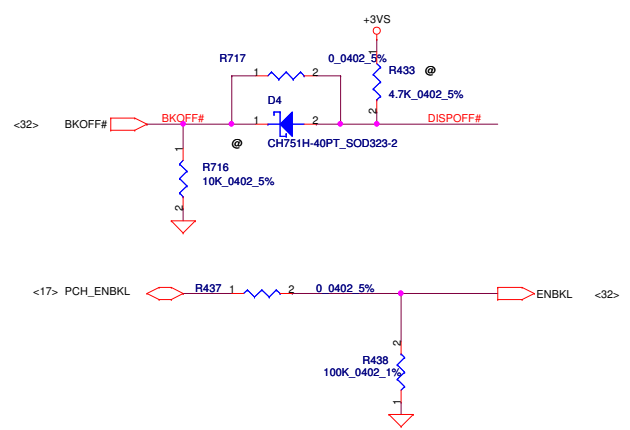
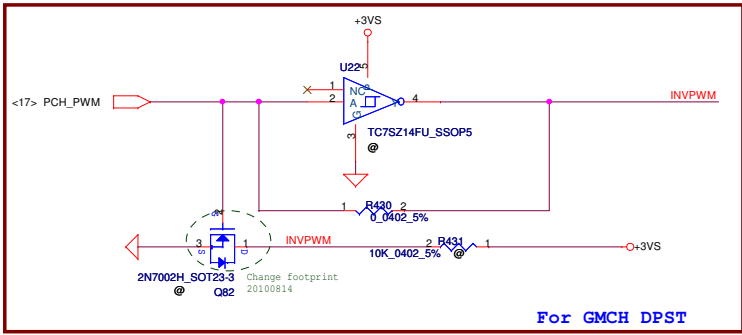


Security Classification	Compal Secret Data			Compal Electronics, Inc.	
Issued Date	2010/07/12	Deciphered Date	2012/07/11	Title PCH (9/9) VSS	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET IS NOT TO 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 Customer	Document Number LA-6752P
				Date:	Friday, November 26, 2010
				Sheet	22 of 50
				Rev	0.2

LCD POWER CIRCUIT

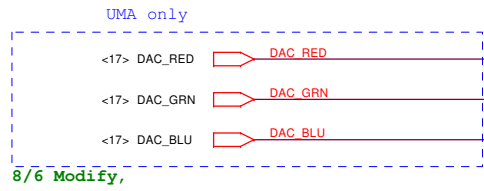


- <17> EDID_CLK EDID_CLK
- <17> EDID_DATA EDID_DATA
- <17> LVDS_A0 LVDS_A0#
- <17> LVDS_A0# LVDS_A0#
- <17> LVDS_A1 LVDS_A1#
- <17> LVDS_A1# LVDS_A1#
- <17> LVDS_A2 LVDS_A2#
- <17> LVDS_A2# LVDS_A2#
- <17> LVDS_ACLK LVDS_ACLK#
- <17> LVDS_ACLK# LVDS_ACLK#

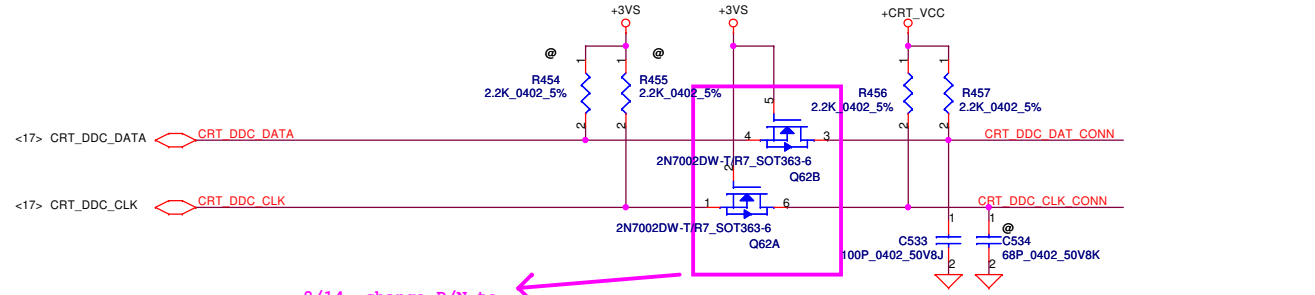
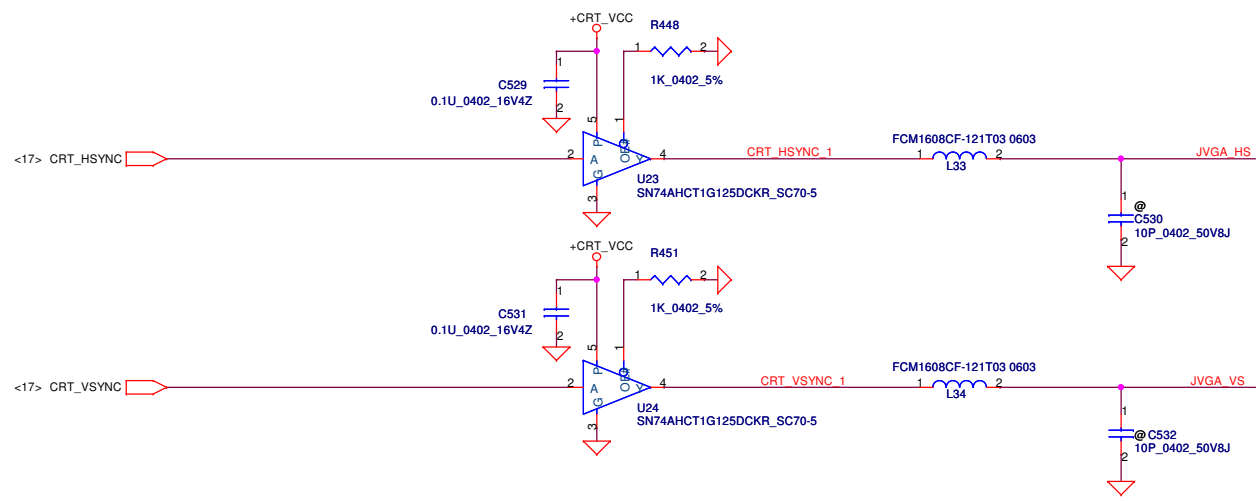
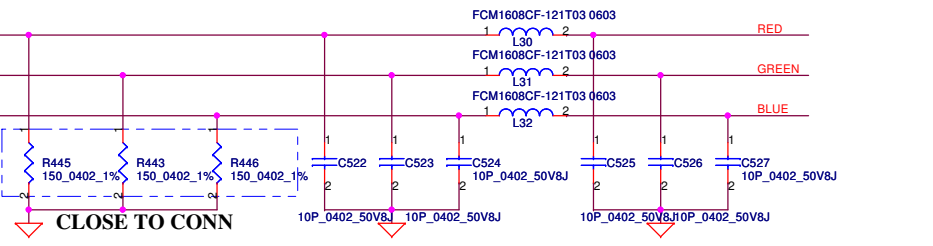
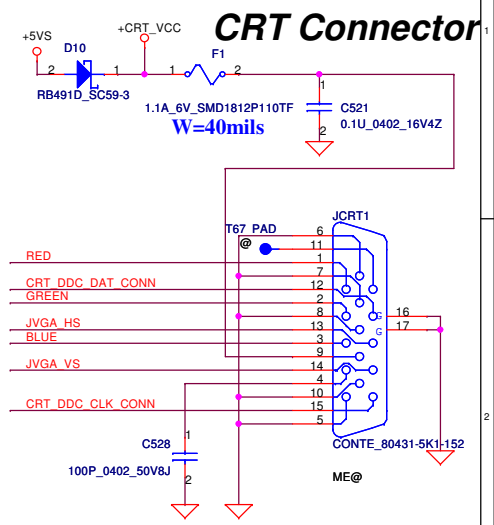
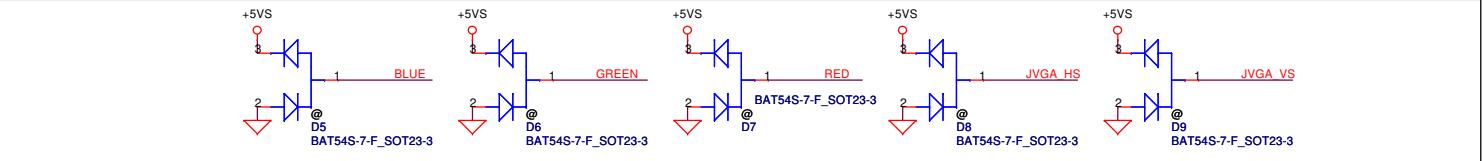


Security Classification		Compal Secret Data		Title	
Issued Date	2010/07/12	Deciphered Date	2012/07/11	Compal Electronics, Inc.	
				LVDS/CAMERA	
Size	Document Number	Rev		Date	
B	LA-6752P	0.2		Friday, November 26, 2010	
				1 Sheet 23 of 50	

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.

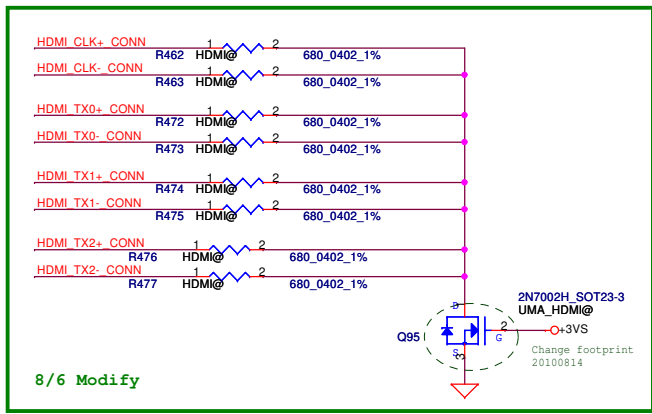


8/6 Modify,

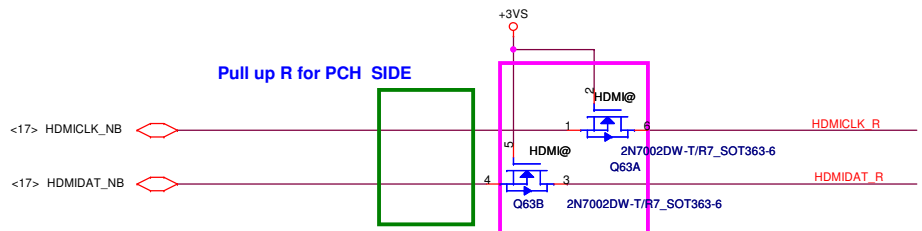
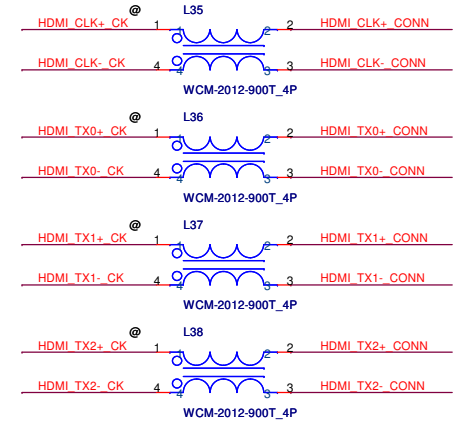


8/14 change P/N to DMN66D0LDW-7_SOT363-6 (SB00000DH00)

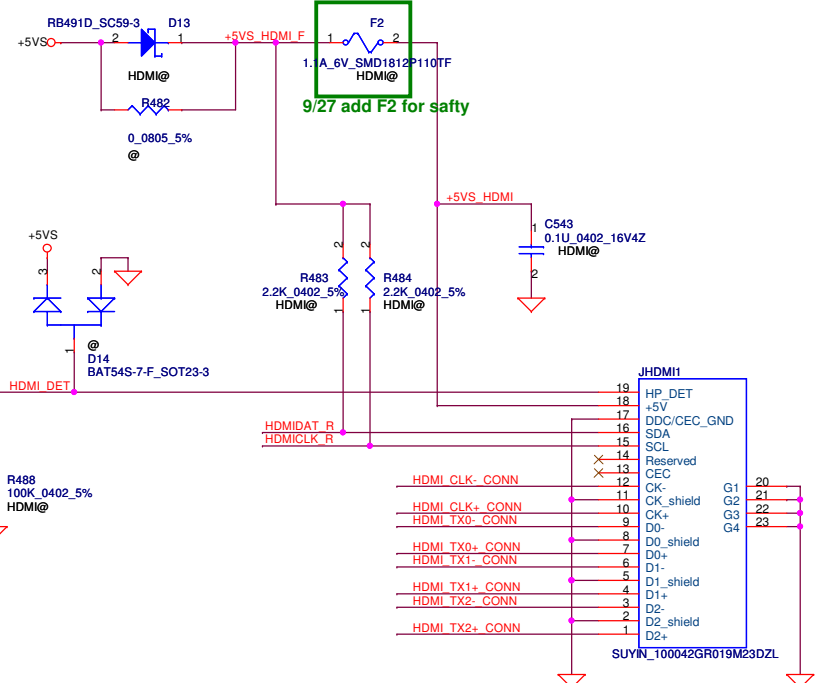
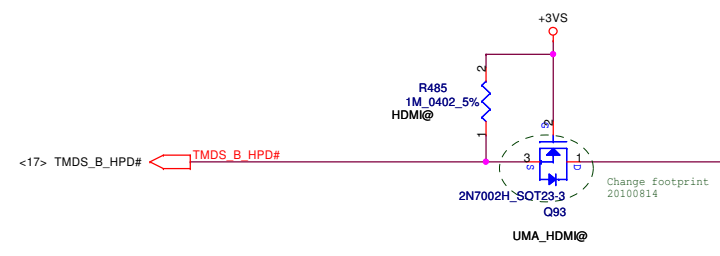
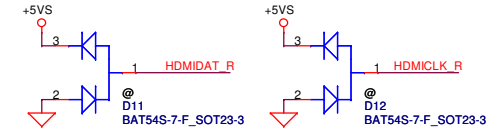
Security Classification		Compal Secret Data		Title	
Issued Date	2010/07/12	Deciphered Date	2012/07/11	Compal Electronics, Inc.	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				CRT Connector	
Size	Document Number	Rev		0.2	
Custom	LA-6752P				
Date:	Friday, November 26, 2010	Sheet	24	of	50



<17>	HDMI_CLK+_CK	HDMI@	R464	1	2	0_0402_5%	HDMI_CLK+_CONN
<17>	HDMI_CLK-_CK	HDMI@	R465	1	2	0_0402_5%	HDMI_CLK-_CONN
<17>	HDMI_TX0+_CK	HDMI@	R466	1	2	0_0402_5%	HDMI_TX0+_CONN
<17>	HDMI_TX0-_CK	HDMI@	R467	1	2	0_0402_5%	HDMI_TX0-_CONN
<17>	HDMI_TX1+_CK	HDMI@	R468	1	2	0_0402_5%	HDMI_TX1+_CONN
<17>	HDMI_TX1-_CK	HDMI@	R469	1	2	0_0402_5%	HDMI_TX1-_CONN
<17>	HDMI_TX2+_CK	HDMI@	R470	1	2	0_0402_5%	HDMI_TX2+_CONN
<17>	HDMI_TX2-_CK	HDMI@	R471	1	2	0_0402_5%	HDMI_TX2-_CONN

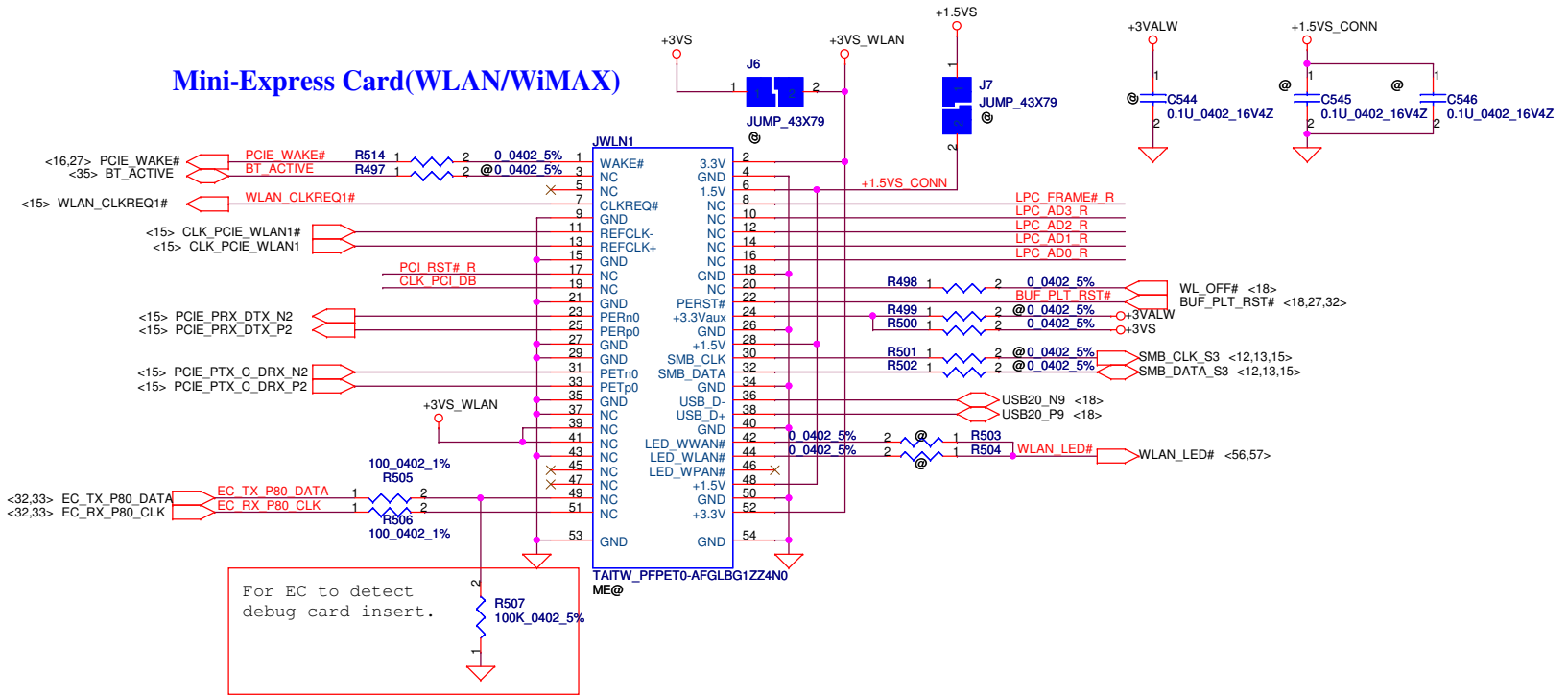


8/14 change P/N to
DMN66D0LDW-7_SOT363-6
(SB00000DH00)



Security Classification		Compal Secret Data		Compal Electronics, Ltd.	
Issued Date	2010/07/12	Deciphered Date	2012/07/11	Title	HDMI CONN
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	LA-6752P		Rev	0.2
Date	Friday, November 26, 2010	Sheet	25	of	50

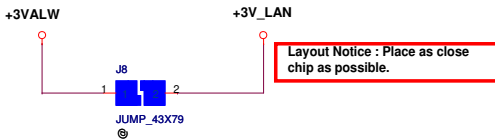
Mini-Express Card for WLAN/WiMAX(Half)



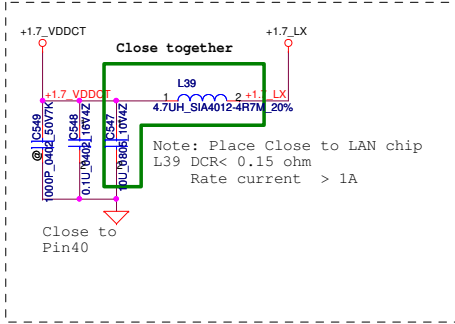
Reserve for SW mini-pcie debug card.
Series resistors closed to KBC side.

LPC_FRAME# R	R508	1	@	2	0.0402 5%	LPC_FRAME#	LPC_FRAME#	<14,32>
LPC_AD3 R	R509	1	@	2	0.0402 5%	LPC_AD3	LPC_AD3	<14,32>
LPC_AD2 R	R510	1	@	2	0.0402 5%	LPC_AD2	LPC_AD2	<14,32>
LPC_AD1 R	R511	1	@	2	0.0402 5%	LPC_AD1	LPC_AD1	<14,32>
LPC_AD0 R	R512	1	@	2	0.0402 5%	LPC_AD0	LPC_AD0	<14,32>
PCI_RST# R	R513	1	@	2	0.0402 5%	PCI_RST#	PCI_RST#	<14,32>
CLK_PCIE_DB						CLK_PCIE_DB	CLK_PCIE_DB	<15>

Security Classification	Compal Secret Data			Compal Electronics, Inc. Mini-Card/NEW Card/SIM	
Issued Date	2010/07/12	Deciphered Date	2012/07/11		
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.					Title LA-6752P Rev 0.2
Date: Friday, November 26, 2010				Sheet 26	of 50



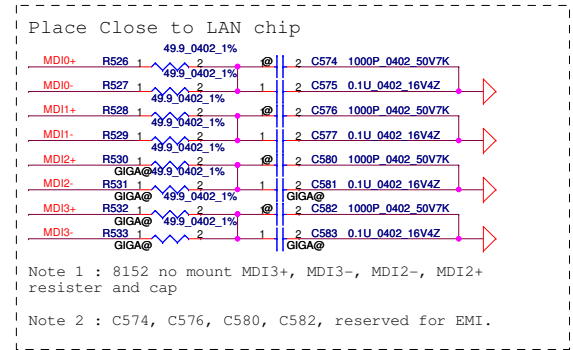
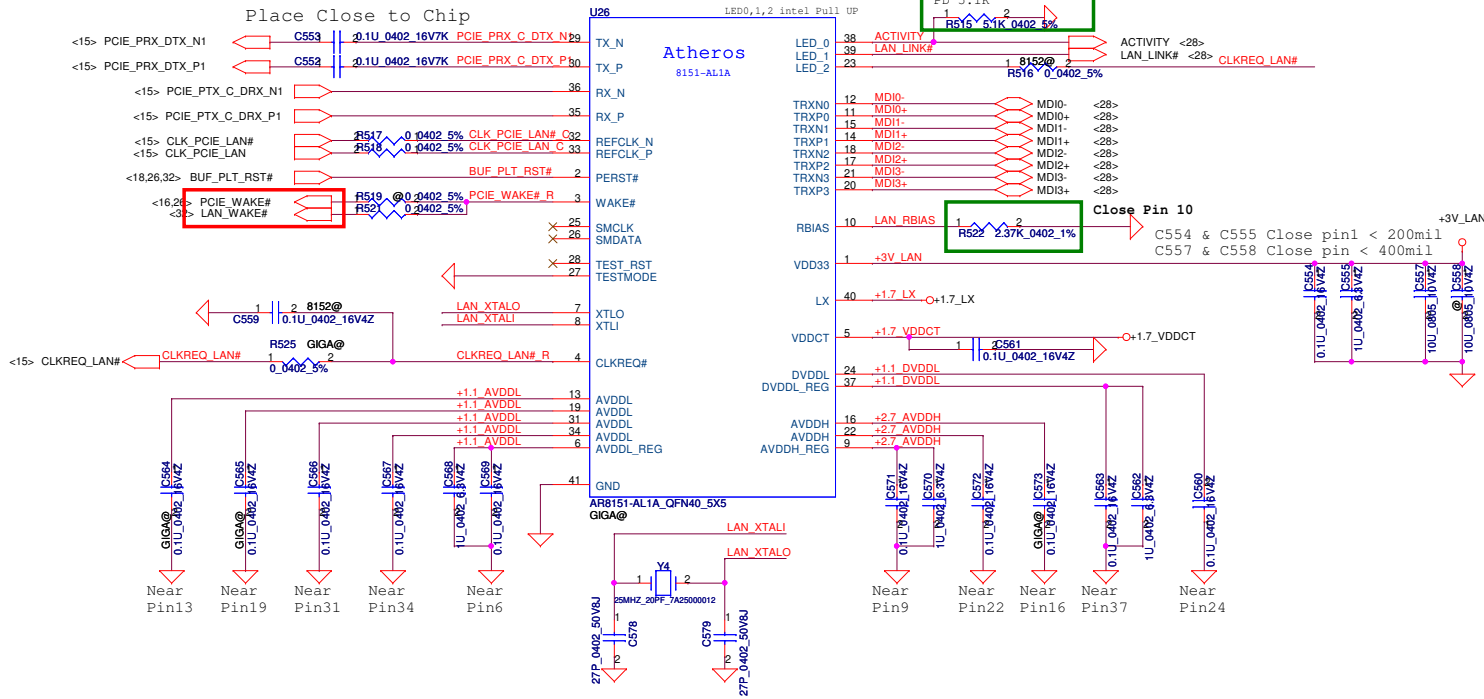
Atheros request can't disable LAN power



Power On strapping

Pin	Description	Chip Default
LED0	H:Over Clock Enable L:Over Clock Disable *	H
LED2	H:SWR Switch mode regulator Select * AR8151 Pin23=LED2. AR8152, Pin23 is CLKREQ	--

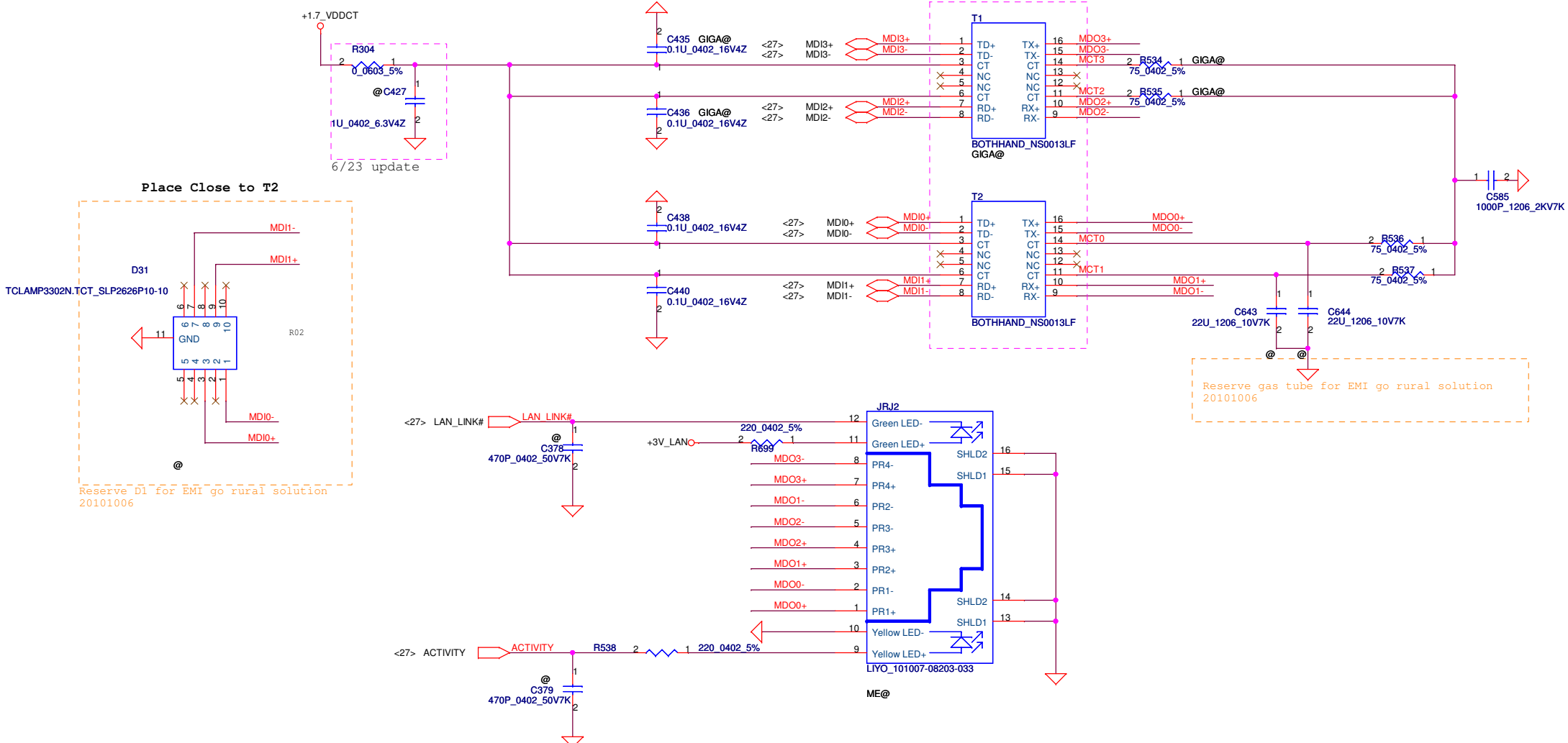
U26 8152@
S IC AR8152-AL1E QFN 40P E-LAN CTRL



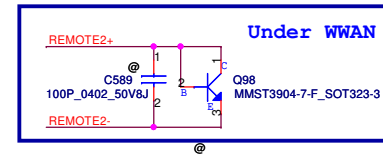
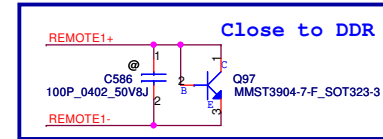
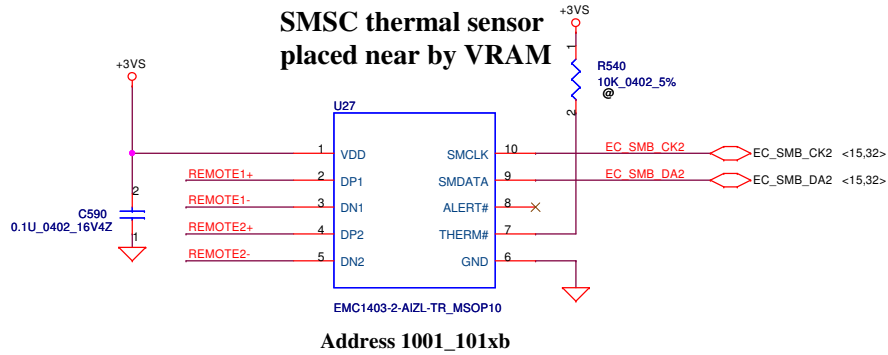
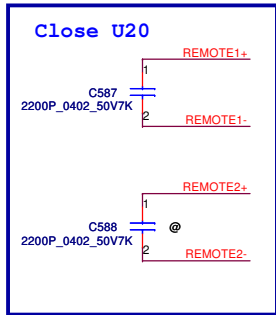
	Pin4	Configure		Pin23	Configure
		R525	C559		
AR8152	VDDCT_REG		*	CLKREQn	*
AR8151	CLKREQn	*		LED [2]	

Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/07/12	Deciphered Date	2012/07/11	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.				LAN-AR8151/8152
Size Custom	Document Number	Rev		
	LA-6752P	0.2		
Date:	Friday, November 26, 2010	Sheet	27	of 50

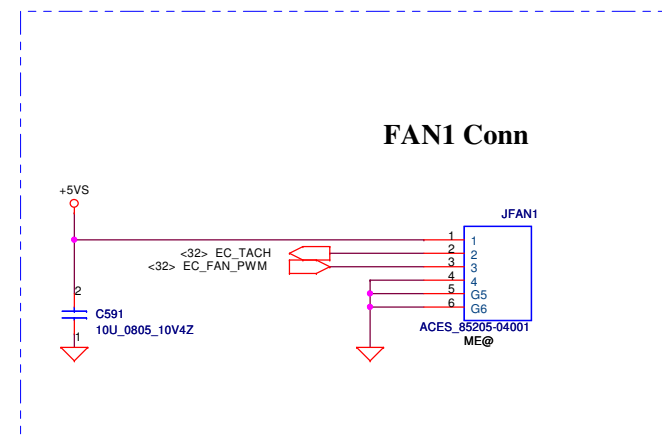
8/23 Change T1,T2 P/N to SP050006E00



Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/07/12	Deciphered Date	2012/07/11	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.				LAN_Transformer
Size	Document Number			Rev
B	LA-6752P			0.2
Date:	Friday, November 26, 2010		Sheet	28 of 50

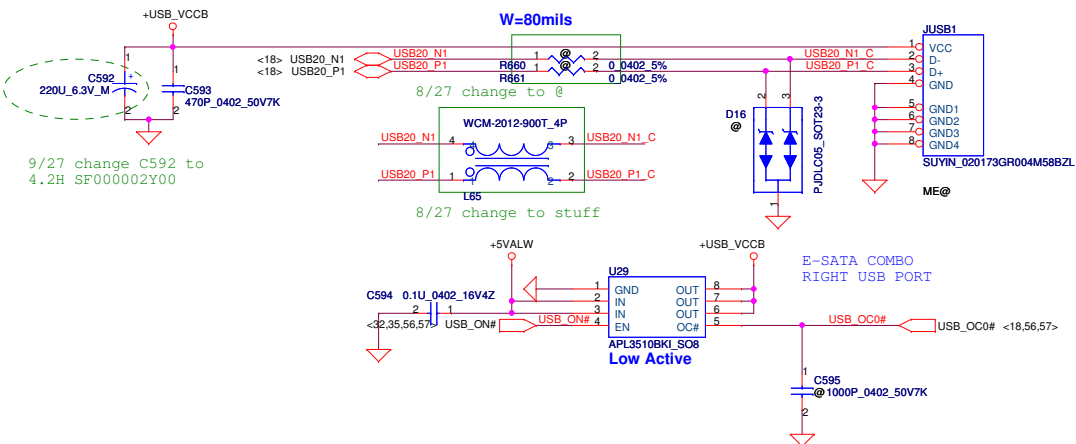


REMOTE1, 2+/-:
Trace width/space: 10/10 mil
Trace length: <8"

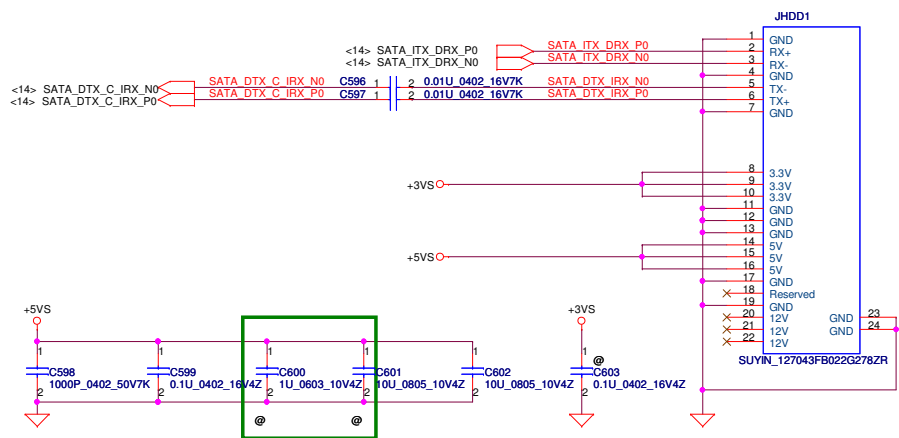


Security Classification		Compal Secret Data		Compal Electronics, Ltd.	
Issued Date	2010/07/12	Deciphered Date	2012/07/11	Title	EMC1403 Thermal sensor/FAN
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS 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 Custom	Document Number LA-6752P
				Date: Friday, November 26, 2010	Rev 0.2 Sheet 29 of 50

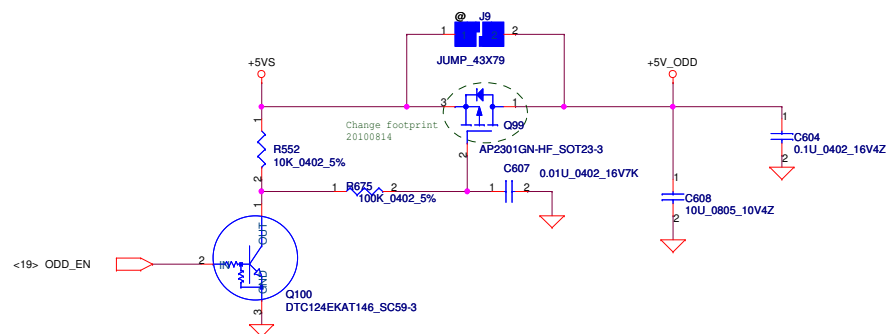
Left USB Conn.



SATA HDD Conn.



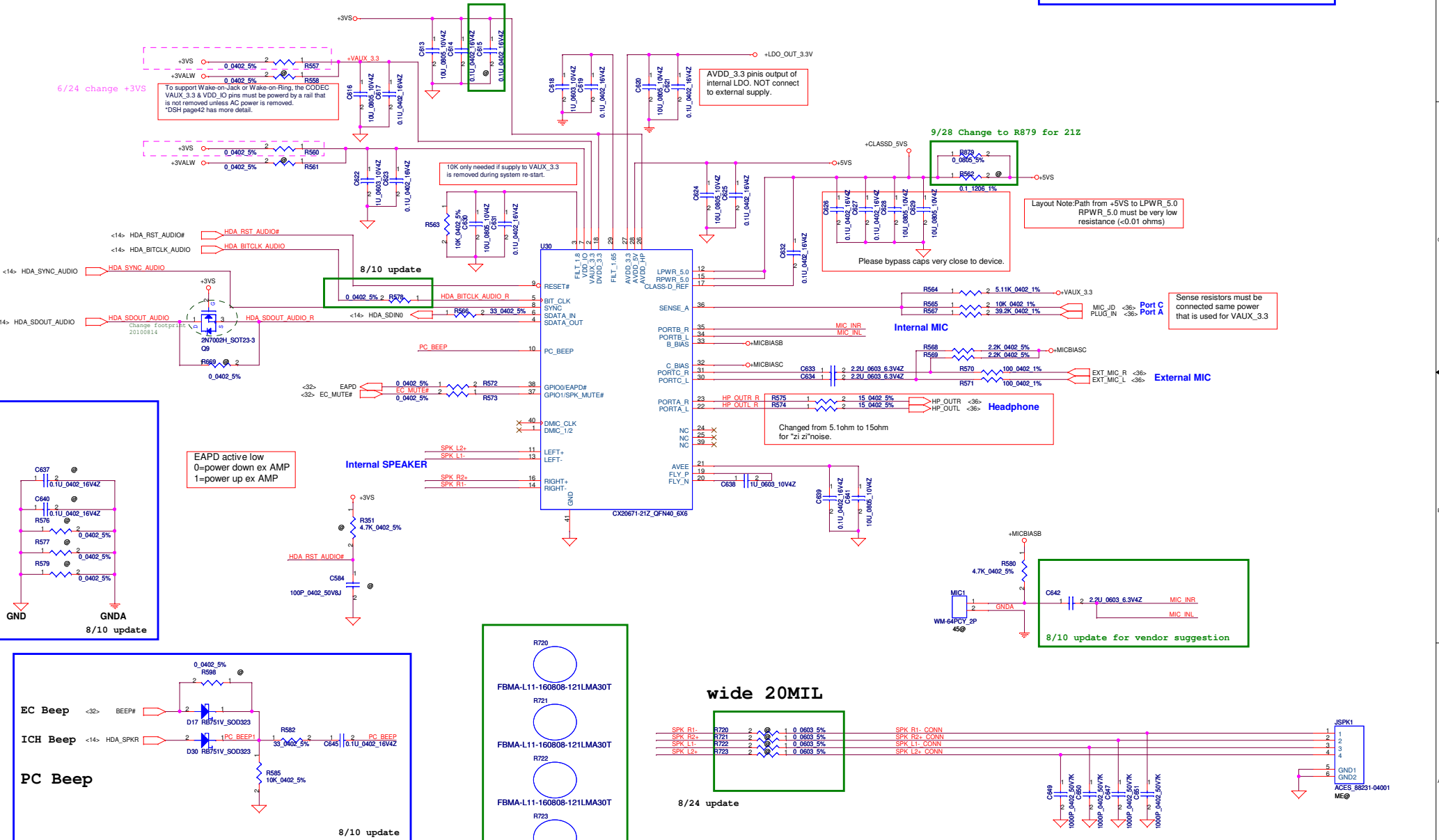
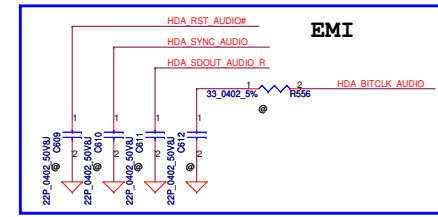
ODD Power Control



Security Classification		Compal Secret Data		Title	
Issued Date	2010/07/12	Deciphered Date	2012/07/11	Compal Electronics, Inc.	
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.				HDD/ODD Connector	
Size B	Document Number	Date: Friday, November 26, 2010		Rev	0.2
			LA-6752P		
			Sheet 30 of 50		

CX20671
High Definition Audio Codec SoC
With Integrated Class-D Stereo
Amplifier.
An integrated 5 V to 3.3 V Low-dropout
voltage regulator (LDO).
An integrated 3.3 V to 1.8V Low-dropout
voltage regulator (LDO).

9/27 Update U30 P/N to SA00003K410



9/28 Change to R879 for 212

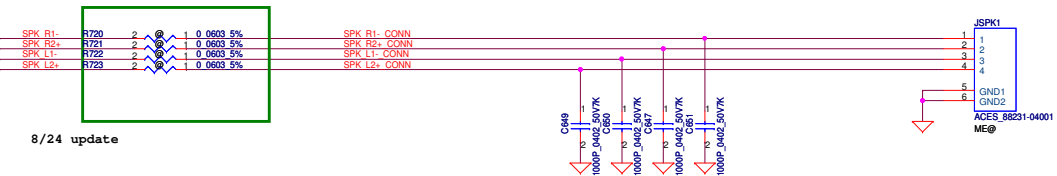
Layout Note: Path from +5VS to LPWR_5.0 RPWR_5.0 must be very low resistance (<0.01 ohms)

Sense resistors must be connected same power that is used for VALUX_3.3

Changed from 5.1ohm to 15ohm for "zi" noise.

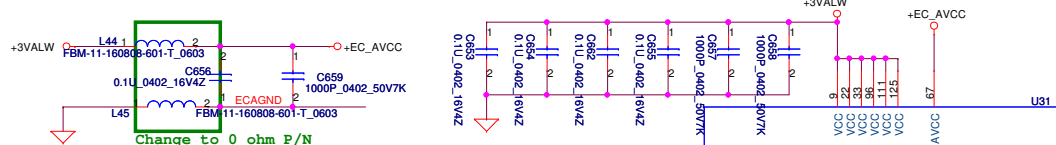
8/10 update for vendor suggestion

wide 20MIL

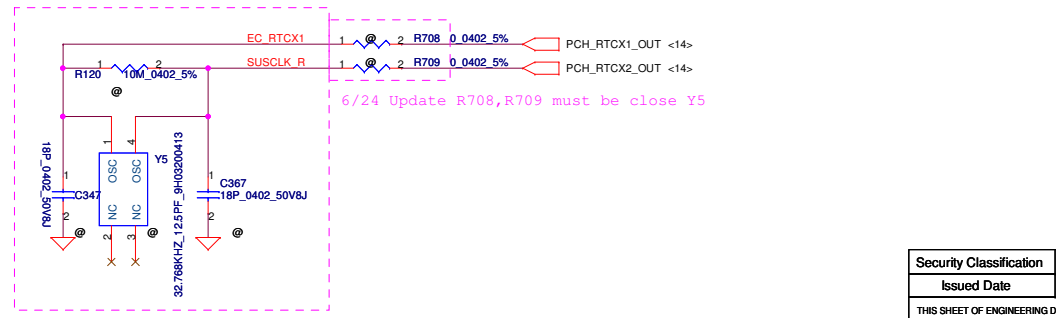
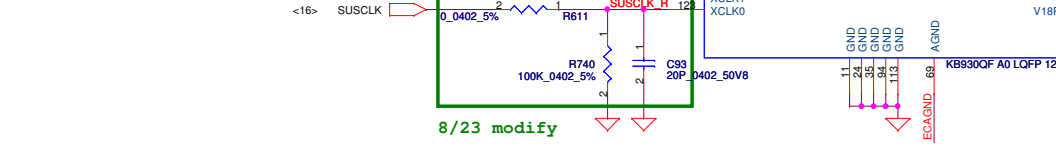
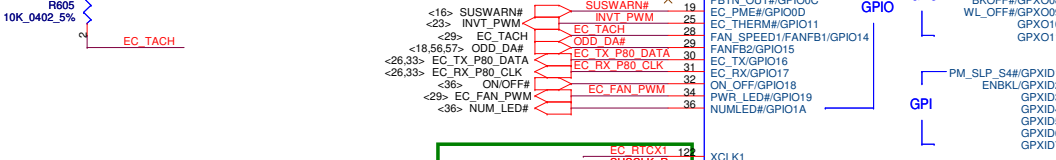
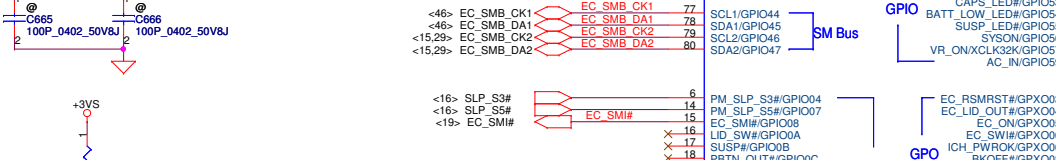
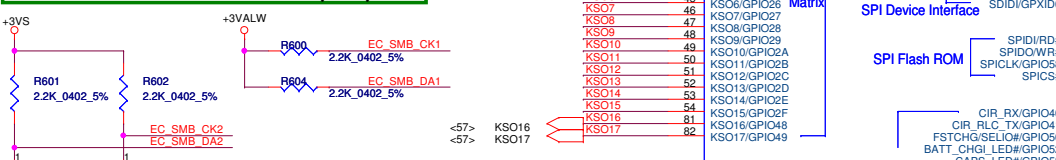
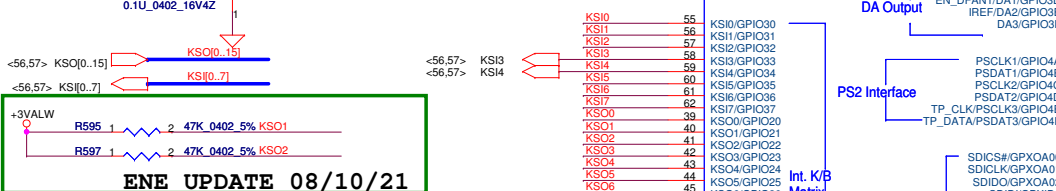
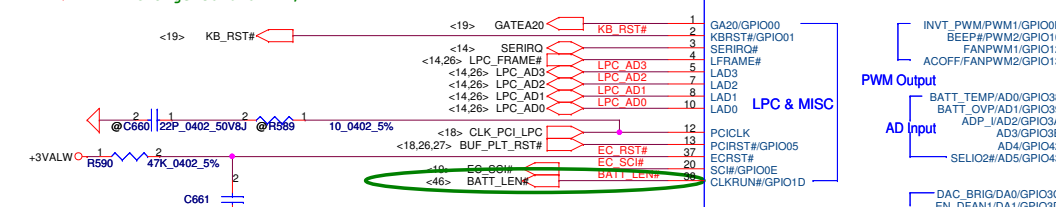


8/24 update

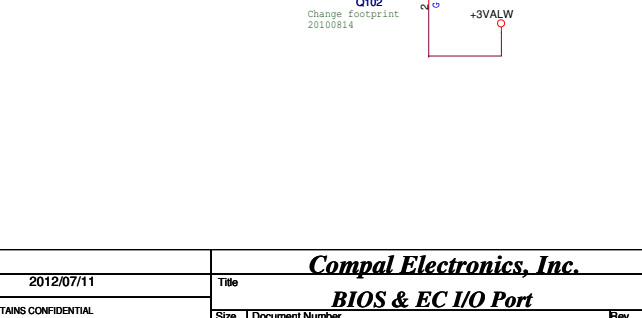
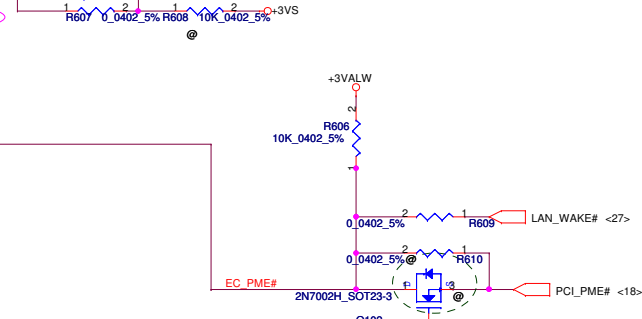
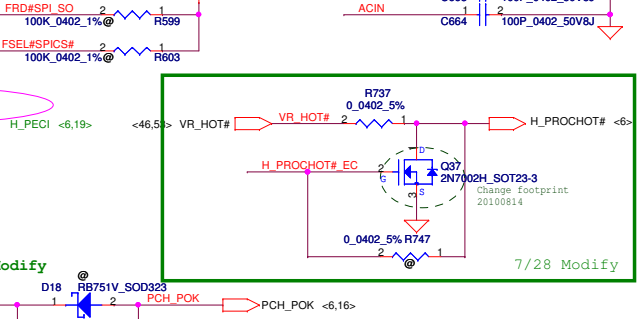
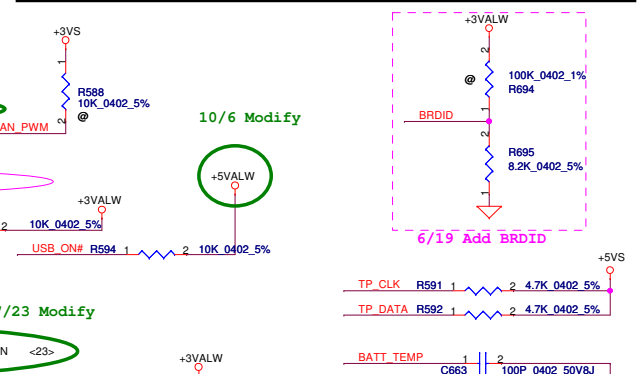
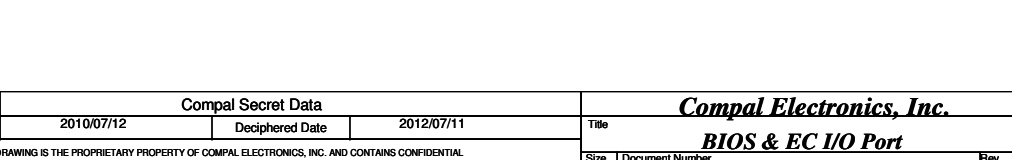
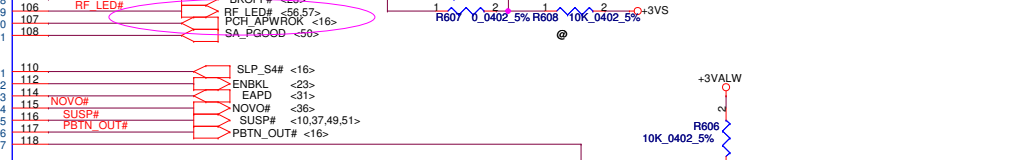
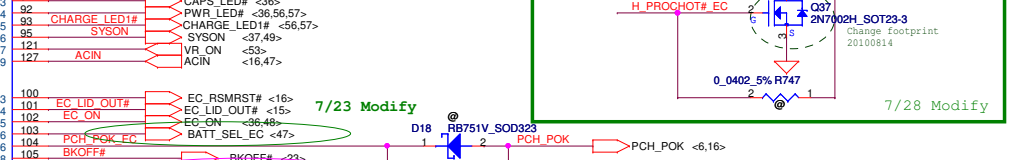
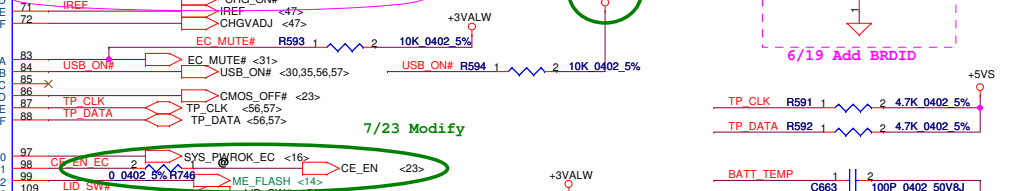
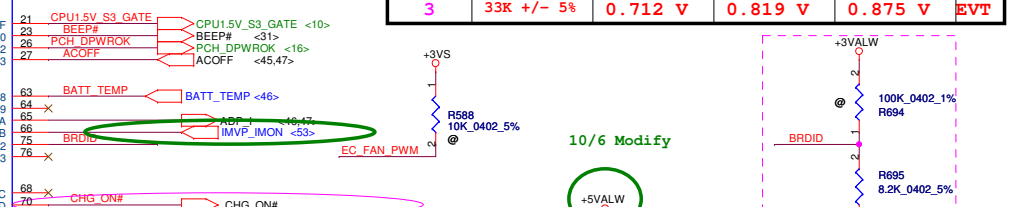
Security Classification	Compal Secret Data		Title		
Issued Date	2010/07/12	Deciphered Date	2012/07/11	CX20671 Codec	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM 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 C	Document Number LA-6752P
				Rev 0.1	
				Date: Friday, November 26, 2010	
				Sheet 31 of 50	



Vcc	3.3V +/- 5%				
R694	100K +/- 5%				
Board ID	R695	V _{AD_BID} min	V _{AD_BID} typ	V _{AD_BID} max	MP
0	0	0 V	0 V	0 V	MP
1	8.2K +/- 5%	0.216 V	0.250 V	0.289 V	PVT
2	18K +/- 5%	0.436 V	0.503 V	0.538 V	DVT
3	33K +/- 5%	0.712 V	0.819 V	0.875 V	EVT



8/23 change to reserved



Security Classification	Compal Secret Data		Title	
Issued Date	2010/07/12	Deciphered Date	2012/07/11	BIOS & EC I/O Port
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	Date	
Customer	LA-6752P	0.2	Friday, November 26, 2010	
Date	Sheet	32	of 50	

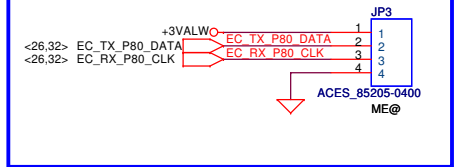
Compal Electronics, Inc.

BIOS & EC I/O Port

LA-6752P

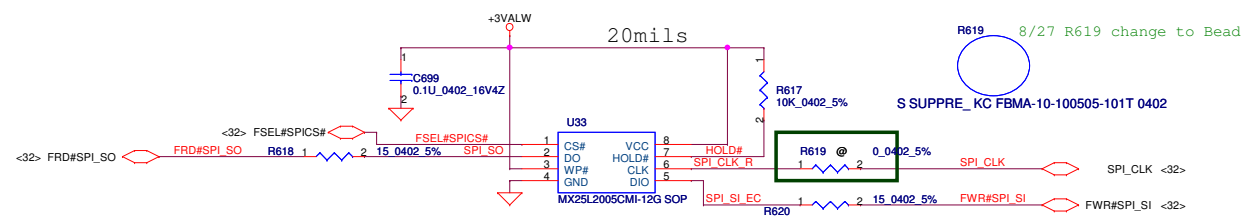
Friday, November 26, 2010 Sheet 32 of 50

EC DEBUG PORT

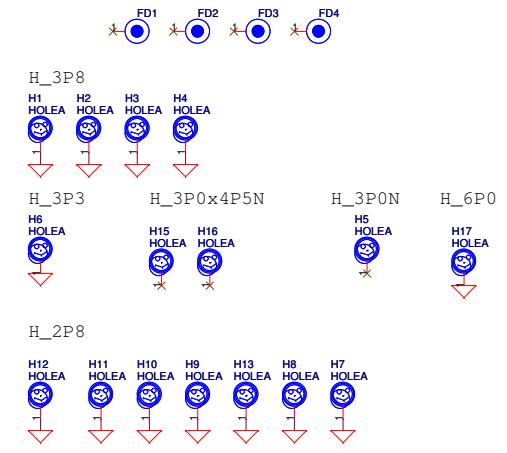
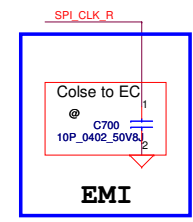


Security Classification		Compal Secret Data		Title	
Issued Date	2010/07/12	Deciphered Date	2012/07/11	Compal Electronics, Inc. KB /SW /LPC Debug Conn.	
<small>THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. 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.</small>				Size	Rev
				B	0.2
				Date:	Friday, November 26, 2010
				Sheet	33 of 50

FOR EC 128KB SPI ROM
 (150mil PACKAGE)
 SA00003FL10
 SA00003JD00



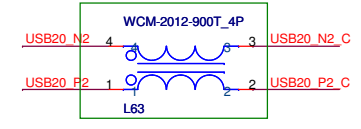
8/27 R619 change to Bead



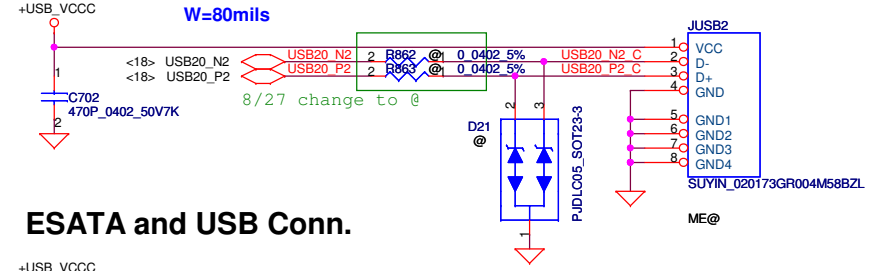
Security Classification	Compal Secret Data		Title LED/EC SPI ROM	
Issued Date	2010/07/12	Deciphered Date		
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY 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 B	Document Number LA-6752P			Rev 0.2
Date:	Friday, November 26, 2010	Sheet	34	of 50

(220uF_6.3V_5.9L_ESR17m) *2= (SF000001500)

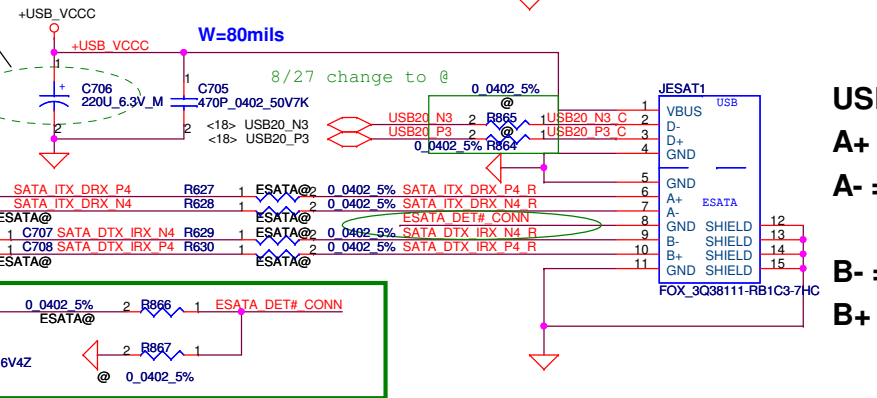
8/27 change to stuff



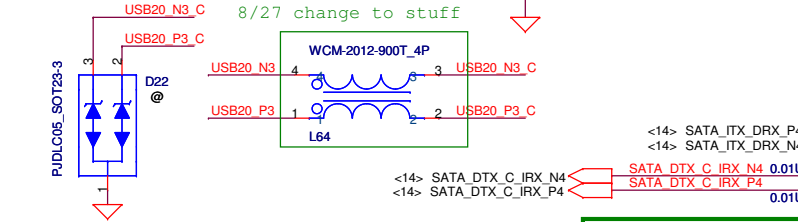
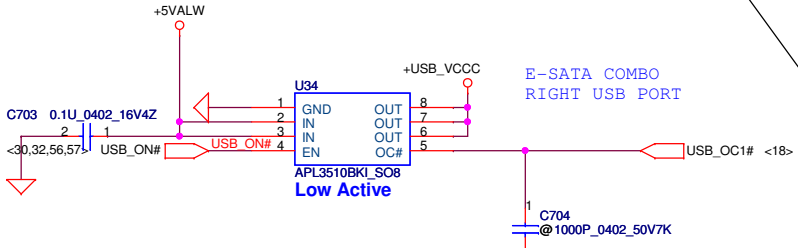
Left USB Conn.



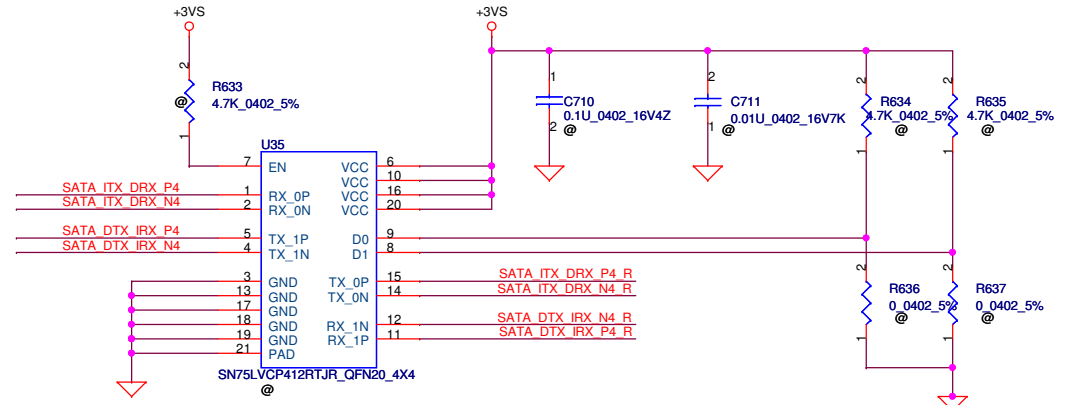
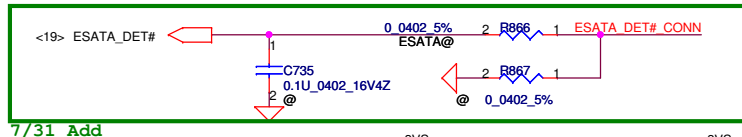
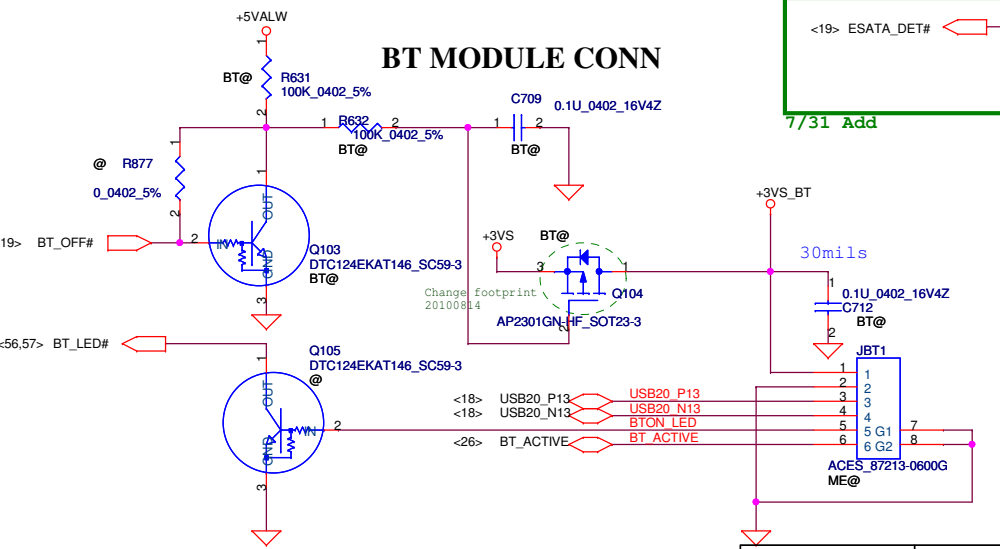
ESATA and USB Conn.



USB
A+ = RXP
A- = RXN
B- = TXN
B+ = TXP

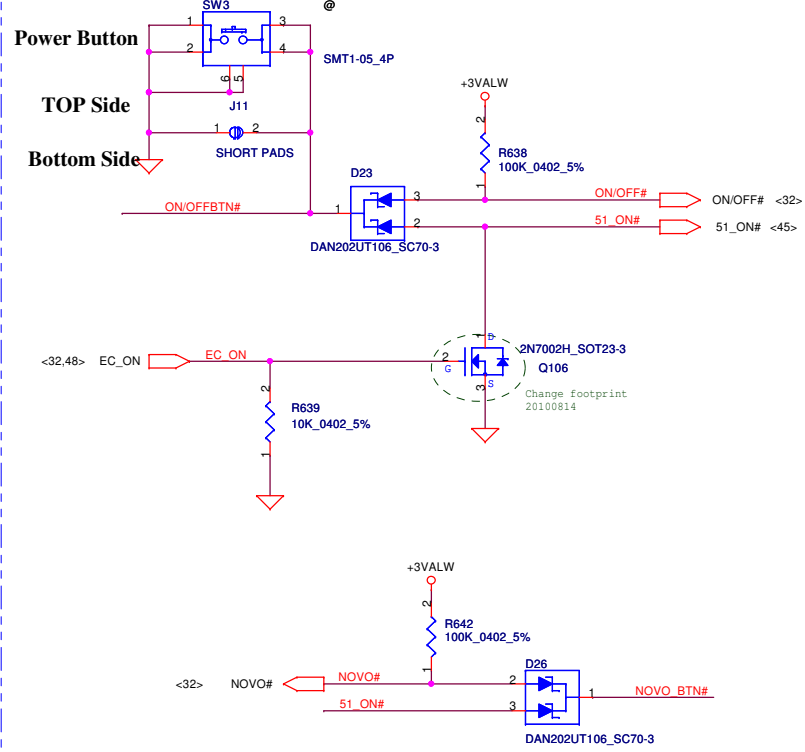


BT MODULE CONN

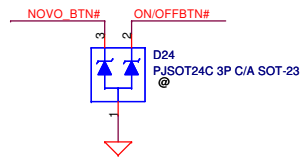
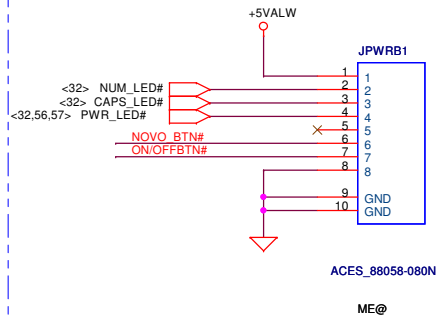


Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/07/12	Deciphered Date	2012/07/11	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				USB ports/BT/E-SATA	
Size		Document Number		Rev	
Custom		LA-6752P		0.2	
Date:		Friday, November 26, 2010		Sheet 35 of 50	

ON/OFF switch

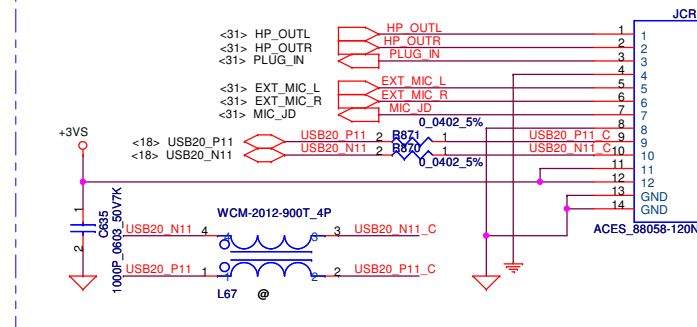


Power Bottom Board Conn. 8pin

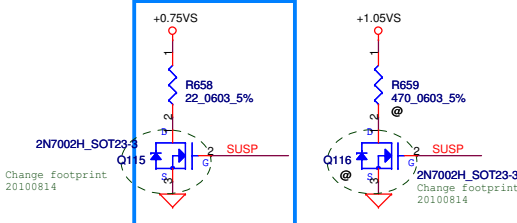
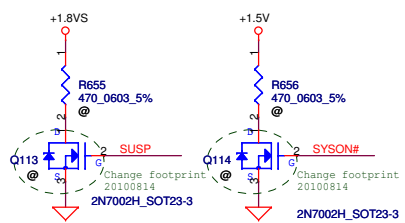
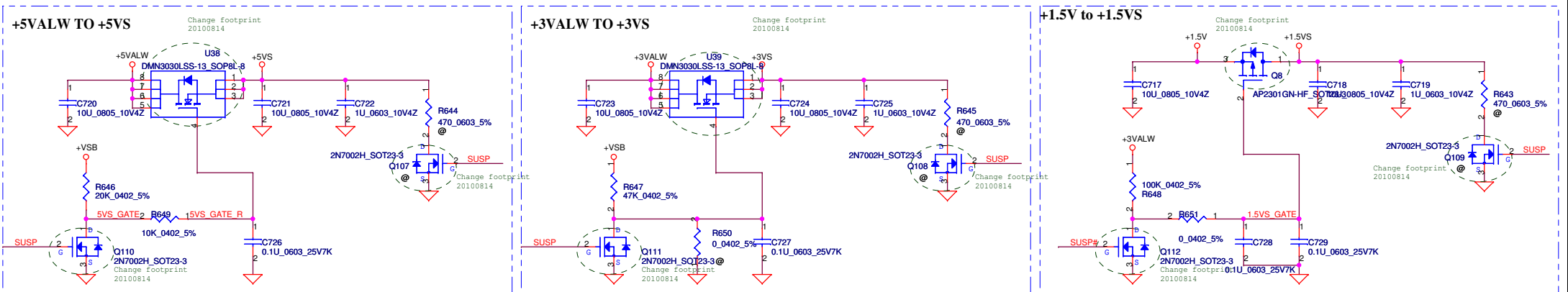


EMI REQUEST 1ST = SCA00000E00
2ST = SCA00000R00

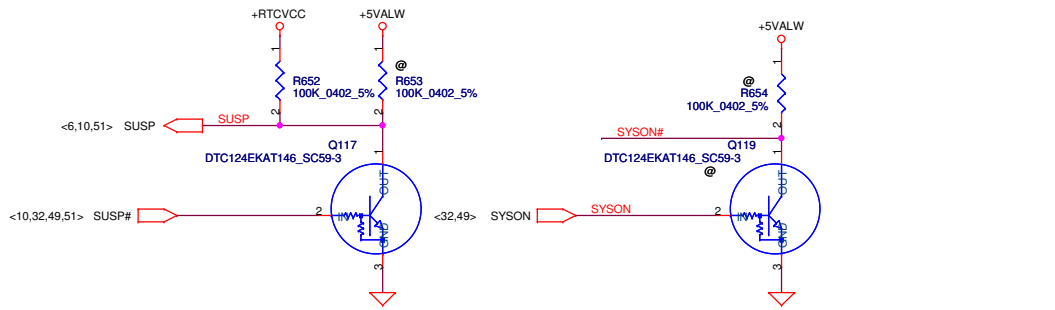
Card Reader/Audio Jack SB CONN



Security Classification	Compal Secret Data		Compal Electronics, Ltd.	
Issued Date	2010/07/12	Deciphered Date	2012/07/11	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.				other IO connector
Size Custom	Document Number	LA-6751P		Rev 0.2
Date: Friday, November 26, 2010	Sheet	36	of	50

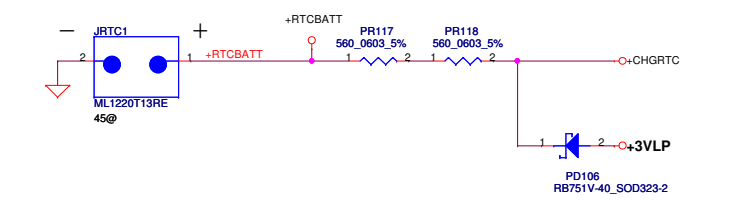
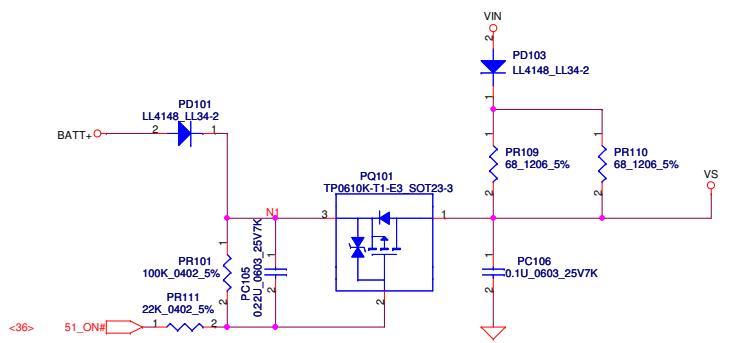
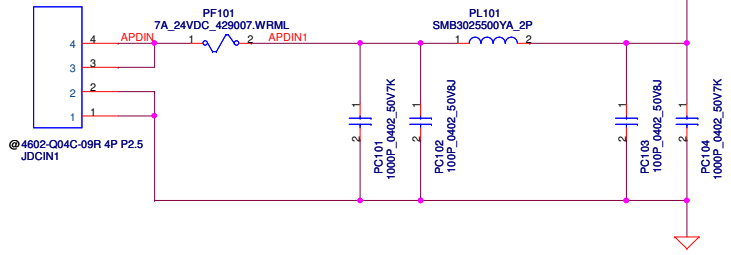


For Intel S3 Power Reduction.

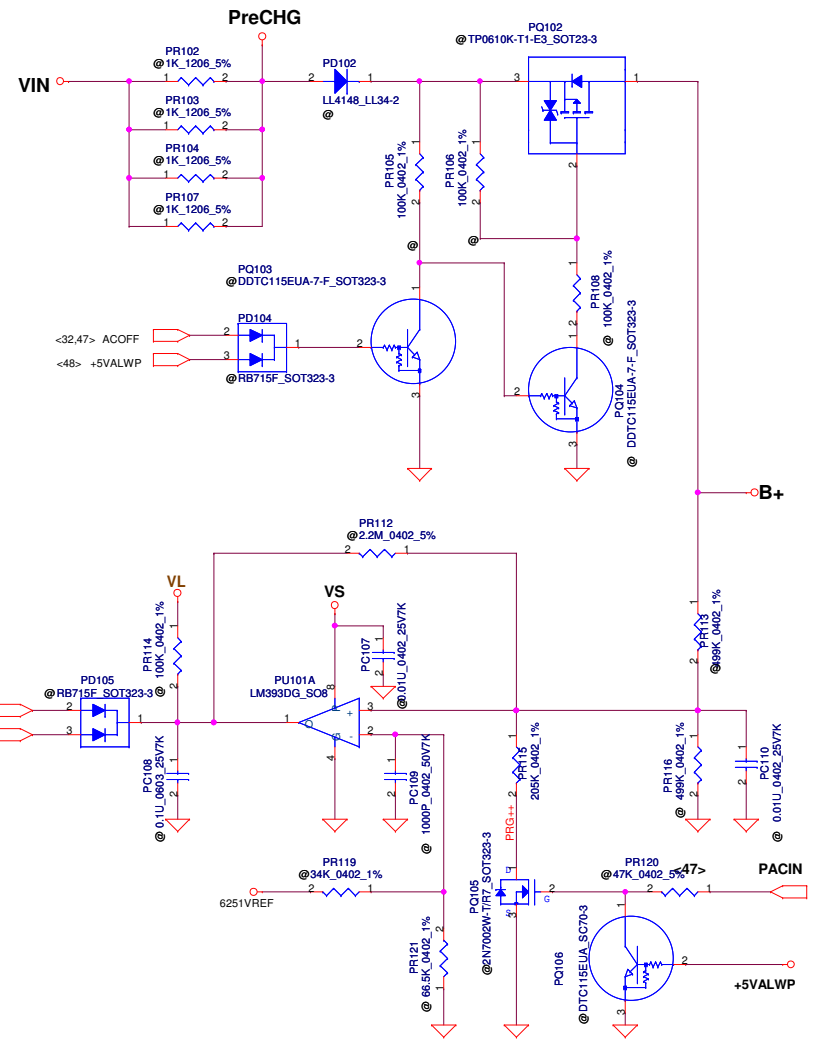


Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/07/12	Deciphered Date	2012/07/11	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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 Interface	
Size	Document Number	Rev		Date	
Custom	LA-6752P	0.2		Friday, November 26, 2010	
				Sheet	37 of 50

DC030006J00



Precharge detector
15.97V/14.84V FOR
ADAPTOR



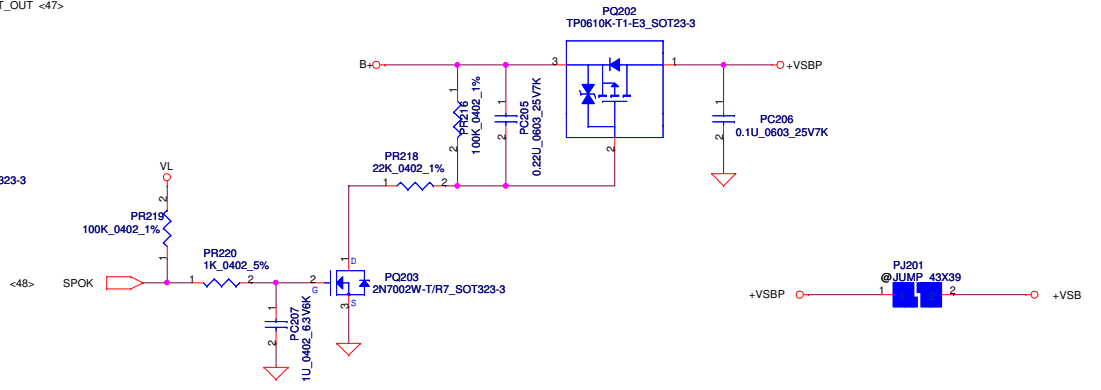
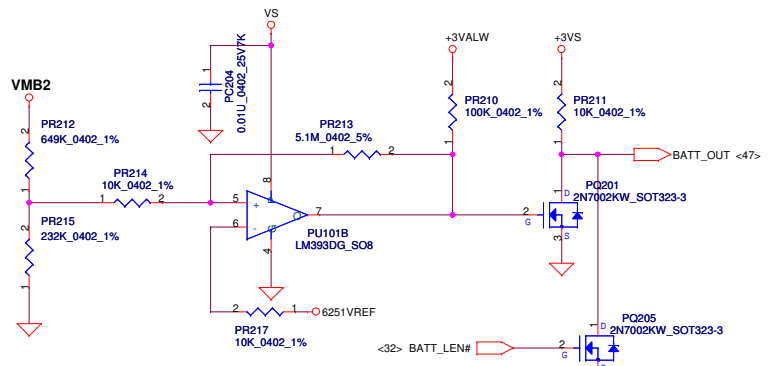
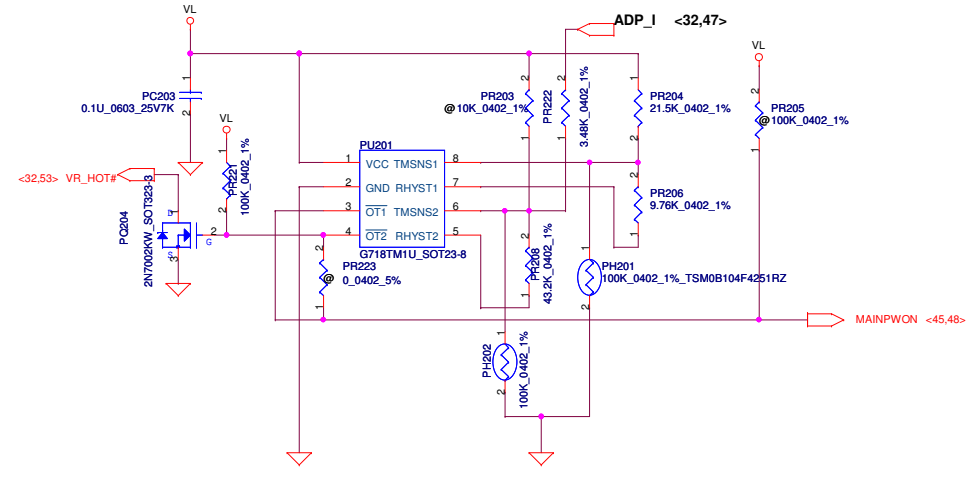
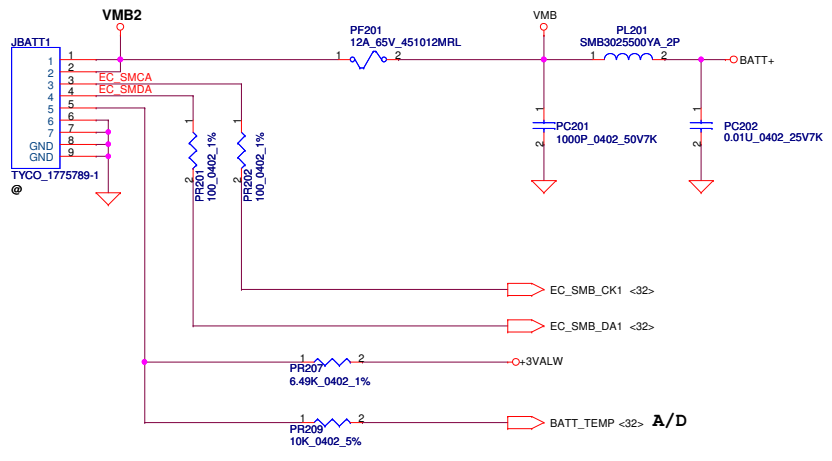
ACIN

Precharge detector			
	Min.	typ.	Max.
L-->H	14.991V	15.381V	15.782V
H-->L	13.860V	14.247V	14.621V

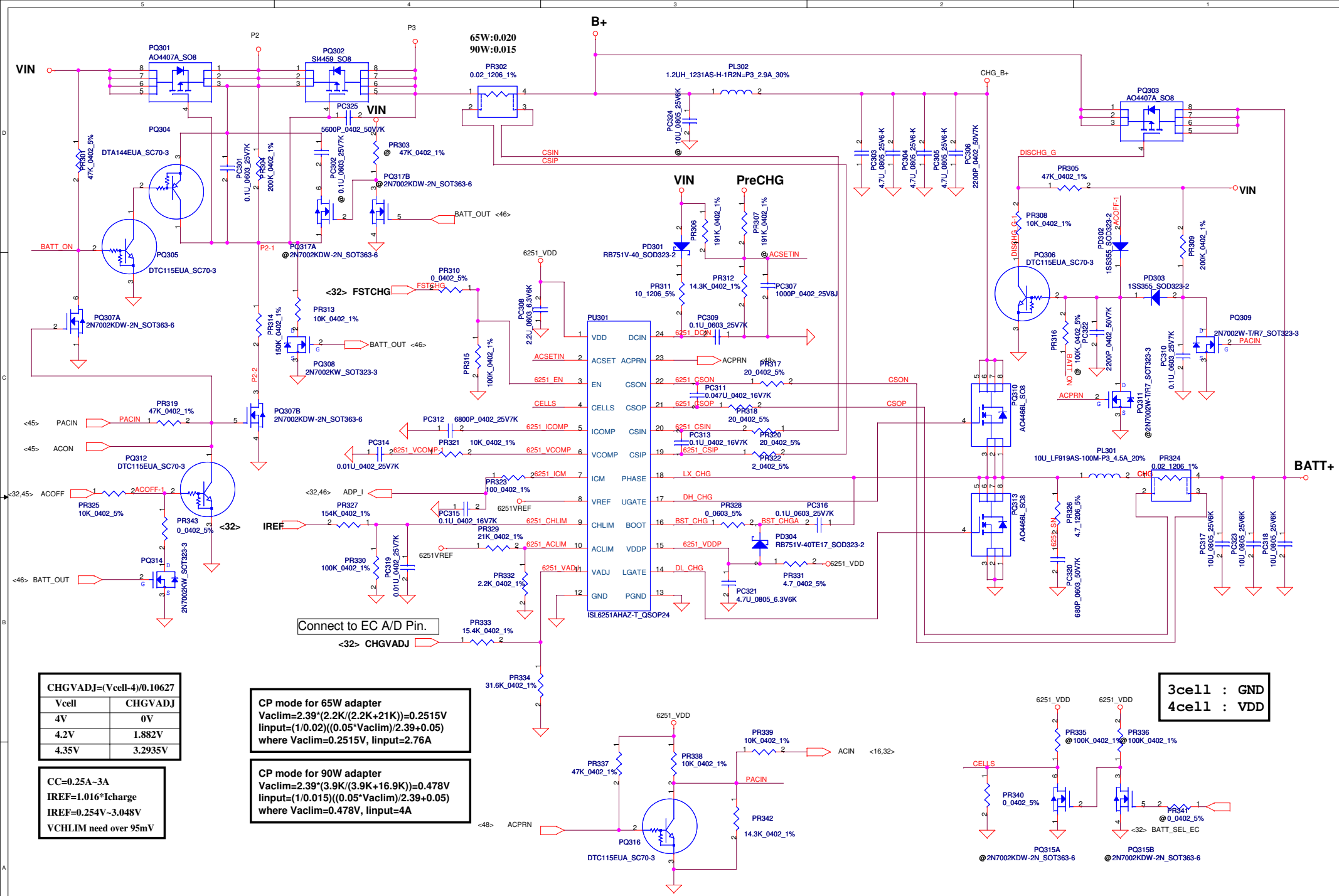
BATT ONLY

Precharge detector			
	Min.	typ.	Max.
L-->H	7.196V	7.349V	7.505V
H-->L	6.138V	6.214V	6.056V

PH201 under CPU botten side :
 CPU thermal protection at 92 degree C
 Recovery at 56 degree C



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/01/25	Deciphered Date	2010/12/31	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.				PWR-BATTERY CONN/OTP	
Size	Customer	Document Number	Rev	Date	
		PIWG1/G2(LA-6759P/LA-675AP)	0.1	Friday, November 26, 2010	
				Sheet	46 of 54



CHGVADJ=(Vcell-4)/0.10627	
Vcell	CHGVADJ
4V	0V
4.2V	1.882V
4.35V	3.2935V

CC=0.25A-3A
 IREF=1.016*Icharge
 IREF=0.254V-3.048V
 VCHLIM need over 95mV

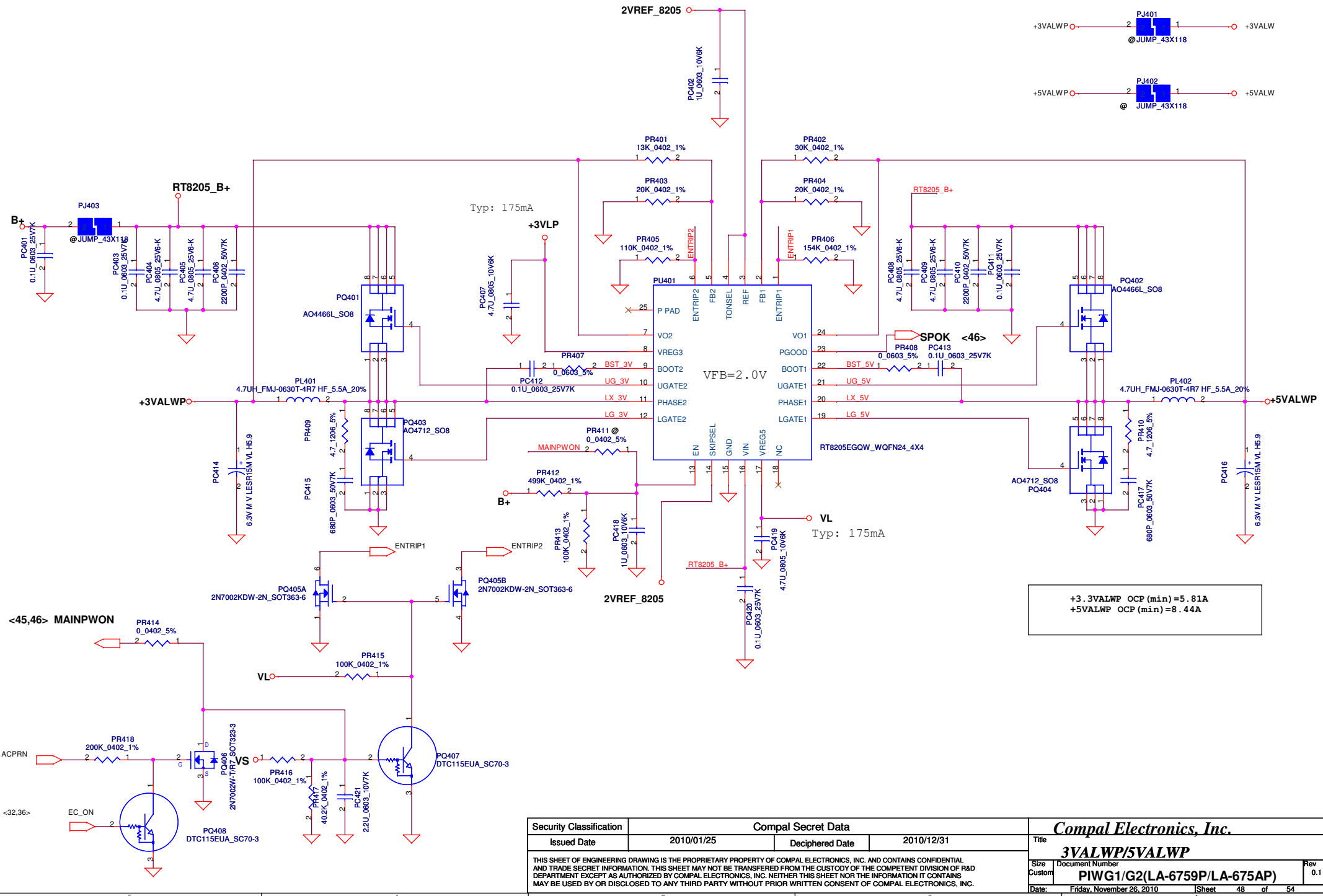
CP mode for 65W adapter
 $V_{acliim}=2.39 \cdot (2.2K / (2.2K + 21K)) = 0.2515V$
 $I_{input} = (1/0.02) \cdot ((0.05 \cdot V_{acliim}) / (2.39 + 0.05))$
 where $V_{acliim} = 0.2515V$, $I_{input} = 2.76A$

CP mode for 90W adapter
 $V_{acliim} = 2.39 \cdot (3.9K / (3.9K + 16.9K)) = 0.478V$
 $I_{input} = (1/0.015) \cdot ((0.05 \cdot V_{acliim}) / (2.39 + 0.05))$
 where $V_{acliim} = 0.478V$, $I_{input} = 4A$

3cell : GND
 4cell : VDD

Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/01/13	Deciphered Date	2011/01/13	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
				PIWG1/G2(LA-6759P/LA-675AP)
				Rev
				0.2
				Date: Friday, November 26, 2010
				Sheet 47 of 54

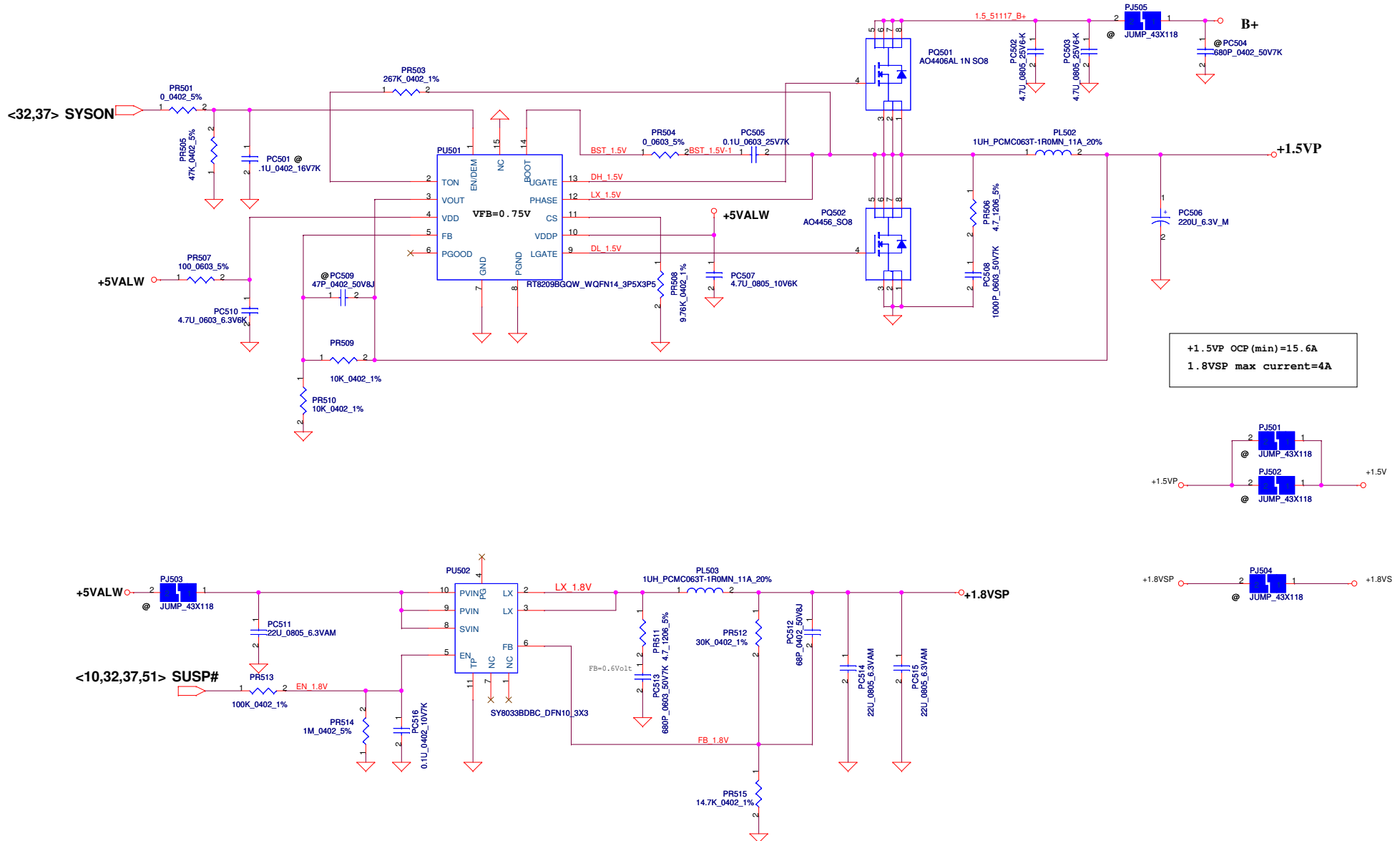
Note:
 Use TPS51125 IC can remove RTC referenece LDO
 Use TPS51427 IC must keep RTC referenece LDO



+3.3VALWP OCP (min)=5.81A
 +5VALWP OCP (min)=8.44A

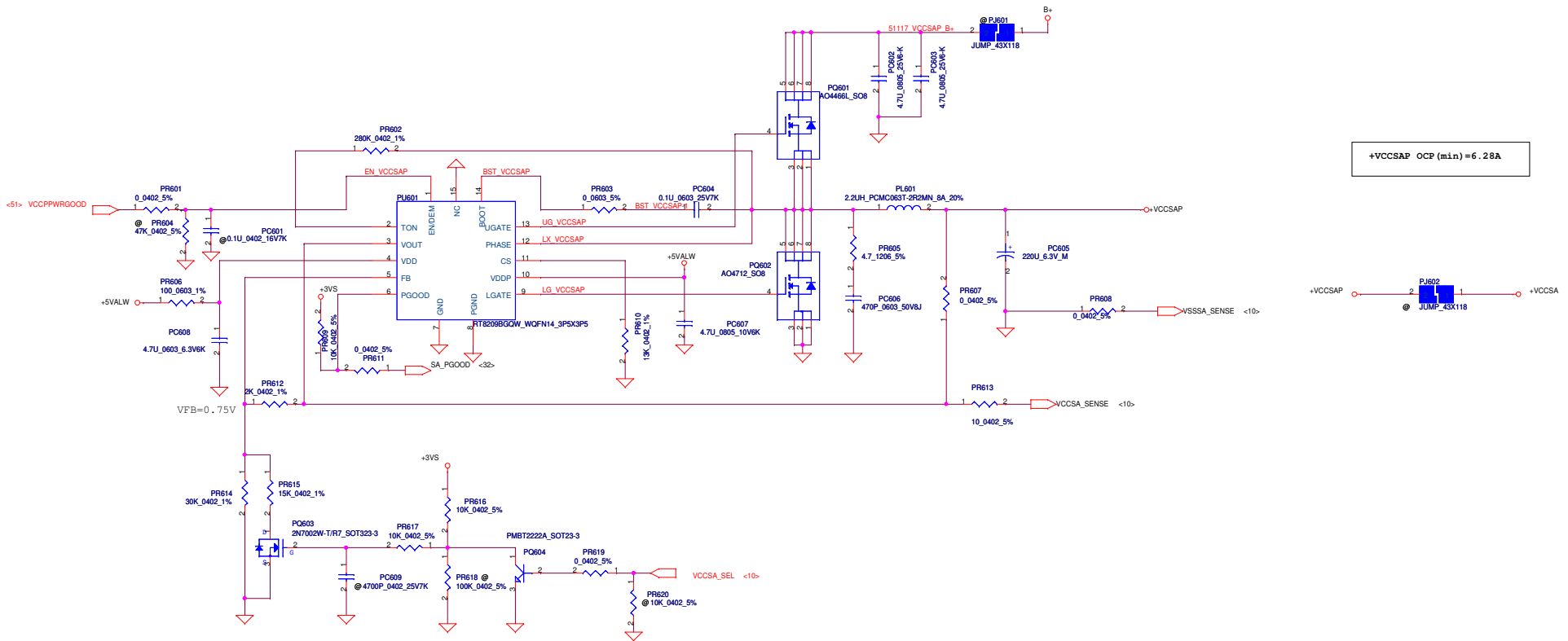
Security Classification		Compal Secret Data	
Issued Date	2010/01/25	Deciphered Date	2010/12/31
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT 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.		
Title	3VALWP/5VALWP	
Size	Document Number	Rev
Custom	PIWG1/G2(LA-6759P/LA-675AP)	0.1
Date:	Friday, November 26, 2010	Sheet 48 of 54



+1.5VP OCP (min)=15.6A
1.8VSP max current=4A

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/01/25	Deciphered Date	2010/12/31	Title	PWR-+1.5VP/+1.8VSP
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			0.1
Custom	PIWG1/G2(LA-6759P/LA-675AP)				
Date:	Friday, November 26, 2010	Sheet	49	of	54

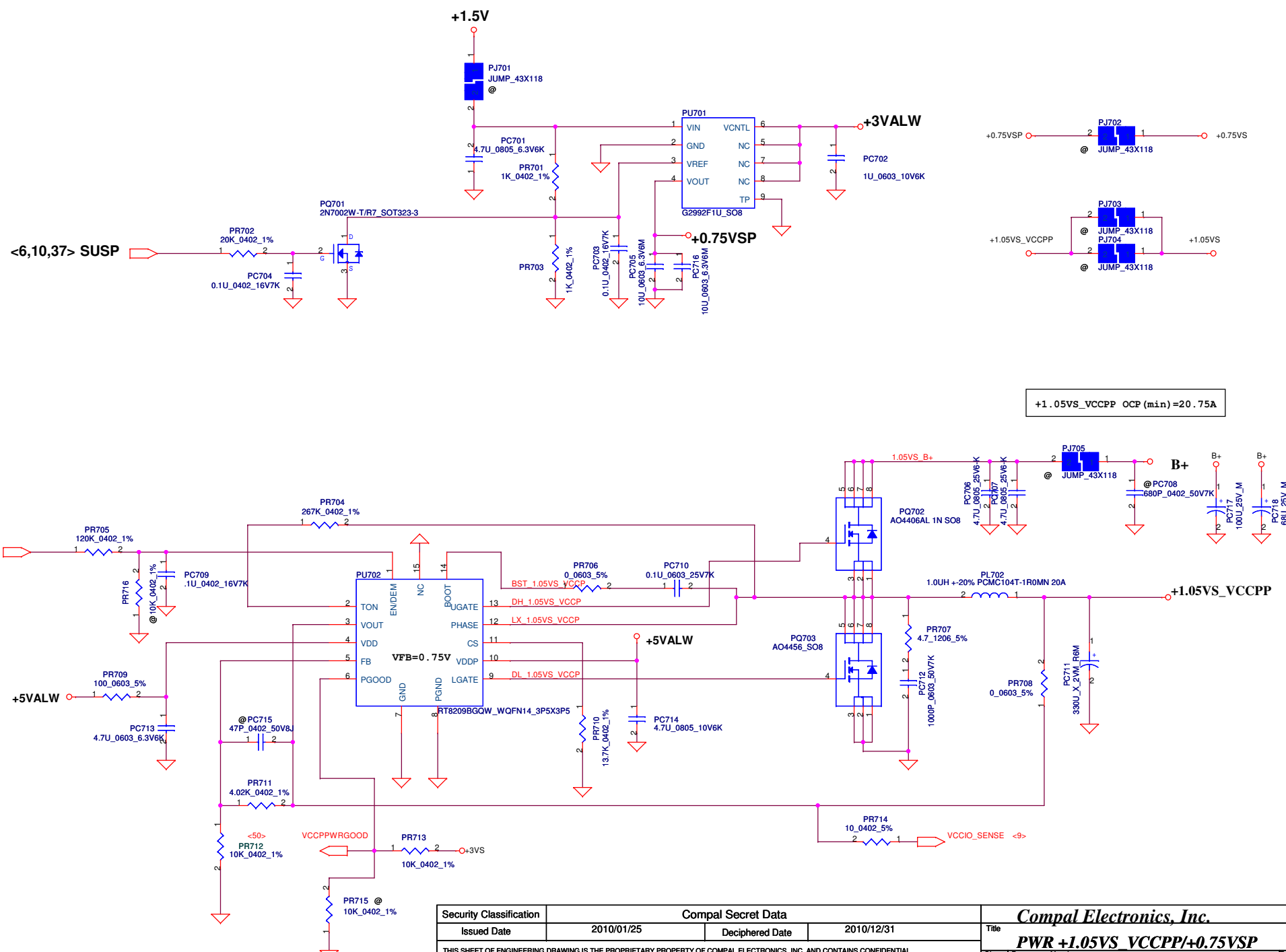


+VCCSAP OCP (min)=6.28A

+VCCSAP @ JUMP_43X118

VID[0]	VID[1]	VCCSA Vout	Require on 2011/ 2012	Required
0	0	0.9 V	Yes/Yes	Yes/Yes
0	1	0.8 V	Yes/Yes	Yes/Yes
1	1	0.725V	No/Yes	No/Yes
1	1	0.675V	No/Yes	No/Yes

Note: Use VCCSA_SEL to switch High & Low Level for VID[1]
(i.e. VCCSA_SEL) due to the VID[0] is don't care for this setting.

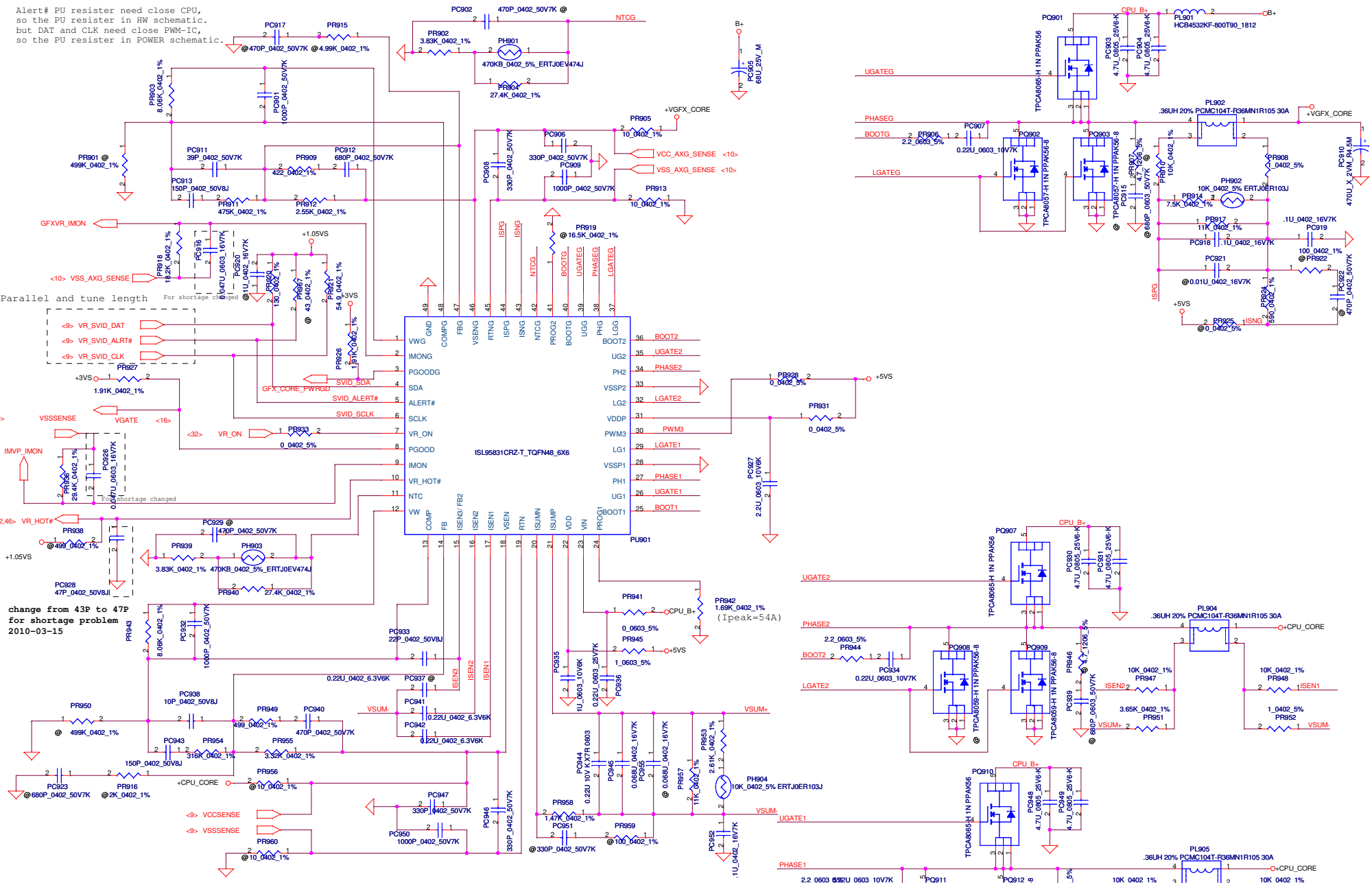


<6,10,37> SUSP

<10,32,37,49> SUSP#

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/01/25	Deciphered Date	2010/12/31	Title	PWR +1.05VS_VCCPP/+0.75VSP
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 PIWG1/G2(LA-6759P/LA-675AP)
Date:	Friday, November 26, 2010	Sheet	51	of	54

Alert# PU resistor need close CPU,
so the PU resistor in HW schematic.
but DAT and CLK need close PWM-IC,
so the PU resistor in POWER schematic.



Parallel and tune length
For shortage changed

- <-> VR_SVID_DAT
- <-> VR_SVID_ALERT#
- <-> VR_SVID_CLK

change from 43P to 47P
for shortage problem
2010-03-15

*Iccmax in Turbo Mode for SV (35W) is 53A

+CPU_CORE	
Icc-max=53A	
Rdson=3.6-4.5m ohm	
DCR=1.1m ohm	
HW output cap:	
(1) 10U_0805_4V *10	
(2) 22U_0805_6.3V *15	
(3) 470U_D2_2V *4 (ESR=4.5m ohm)	

*OCP setting value=71.5A

+VGFX_COREP	
Ipeak=26A, Imax=18.2A, 1.2Ipeak=31.2A	
Rdson=3.6-4.5m ohm	
DCR=1.1m ohm	
HW output cap:	
(1) 22U_0805_6.3V *12	
(2) 470U_D2_2V *2 (ESR=4.5m ohm)	

*OCP setting value=37A

Security Classification	Compal Secret Data		
Issued Date	2010/01/25	Deciphered Date	2010/12/31

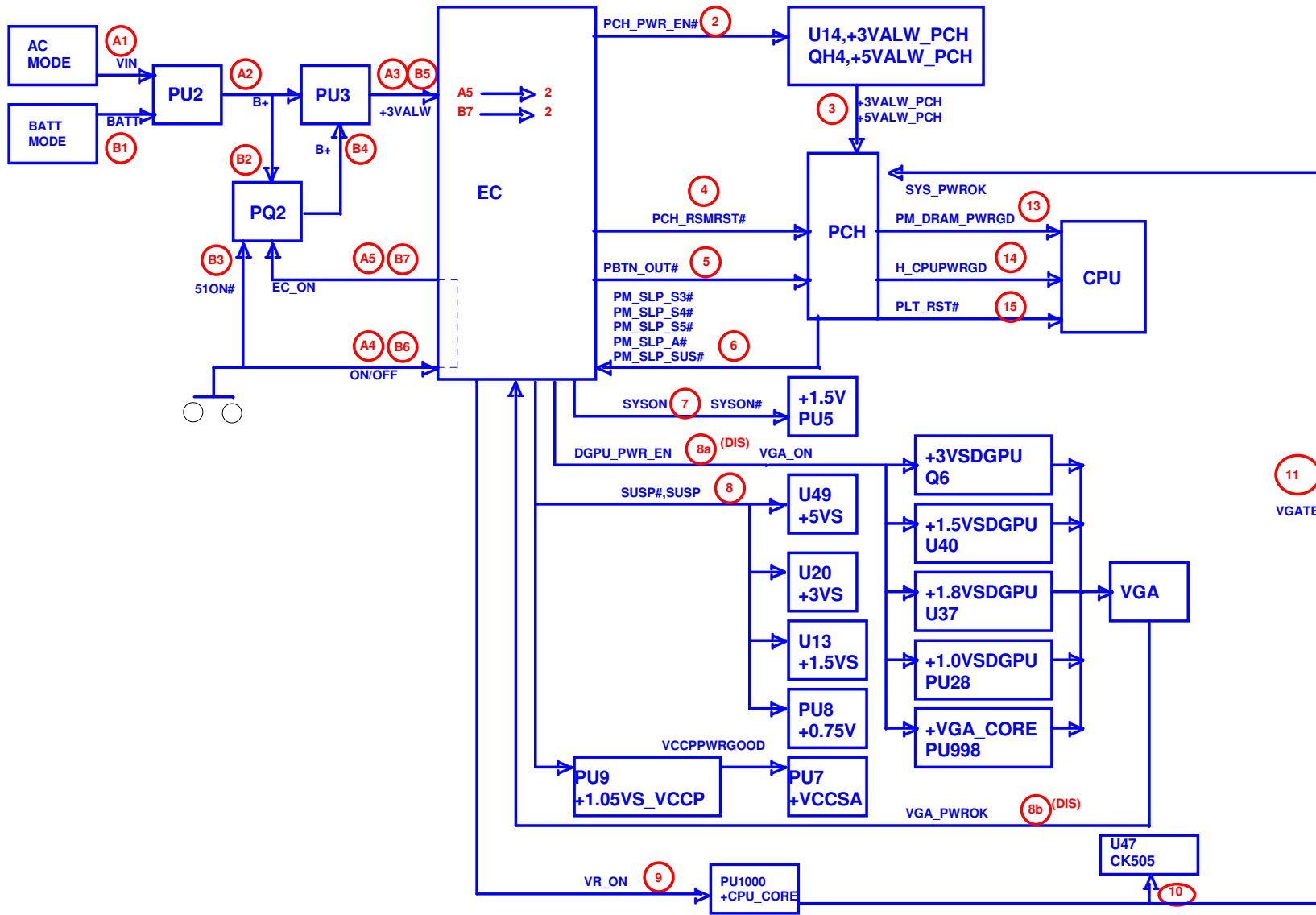
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS 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.	
Title	
PWR +CPU_CORE/+VGFX_CORE	
Size	Document Number
Custom	PIWG1/G2(LA-6759P/LA-675AP)
Date	Rev
Friday, November 26, 2010	0.1
[Sheet 53 of 54]	

Version change list (P.I.R. List)

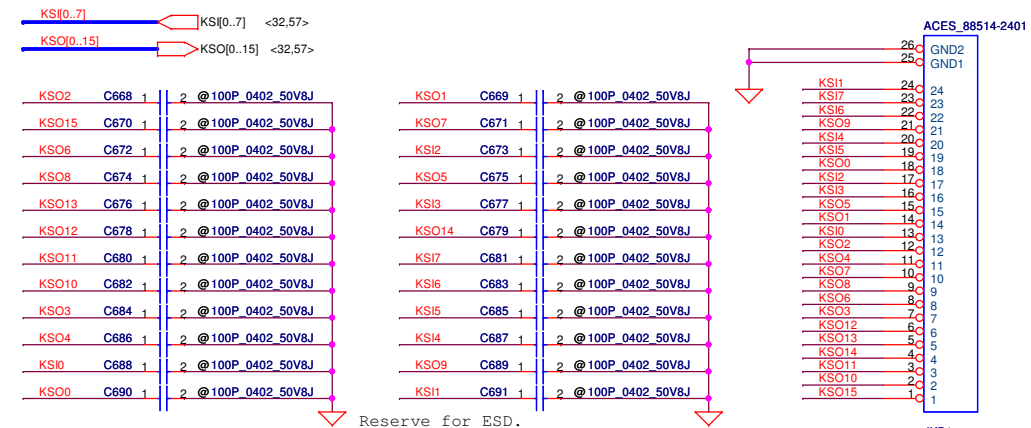
Item	Reason for change	PG#	Modify List	Date	Phase
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					

Security Classification		Compal Secret Data		Title	
Issued Date	2009/01/06	Deciphered Date	2009/01/06	PIR (PWR)	
<small>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.</small>				Size Custom	Rev 0.1
Date: Friday, November 26, 2010				Sheet	54 of 54

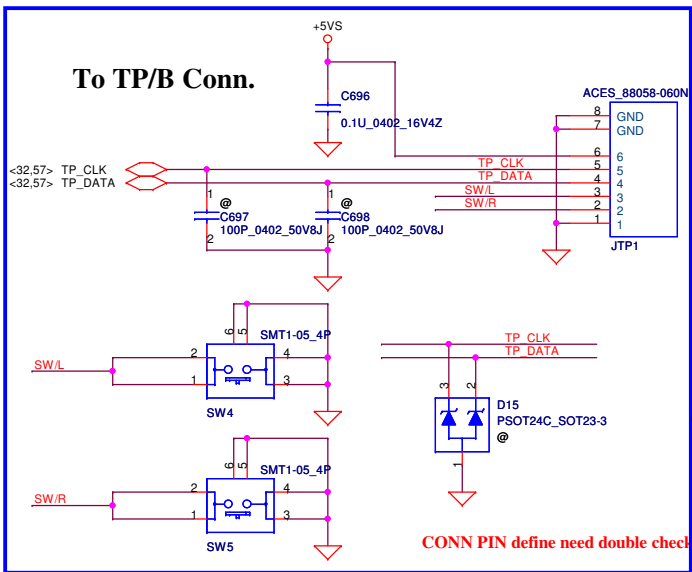


Security Classification	Compal Secret Data		Title	
Issued Date	2010/07/12	Deciphered Date	2012/07/11	Compal Electronics, Inc.
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				Power sequence
Size	Document Number	Rev		
Custom	LA-6752P	0.2		
Date:	Friday, November 26, 2010	Sheet	55	of 60

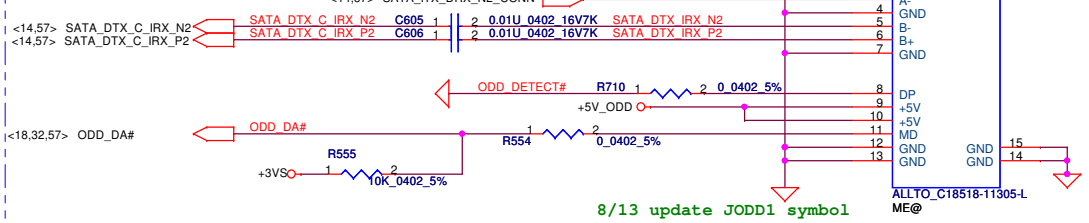
INT_KBD Conn.



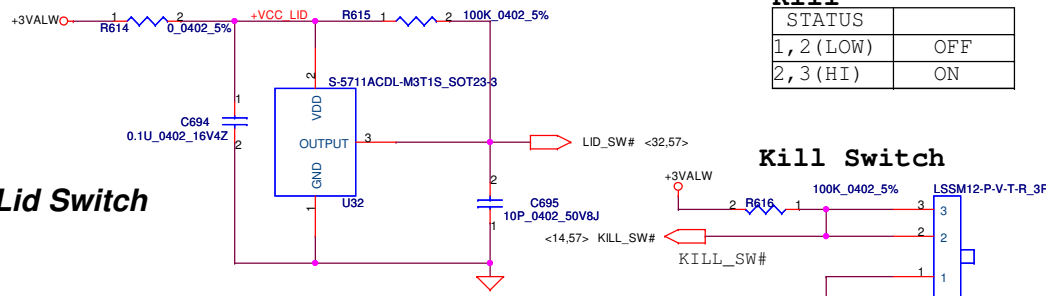
CONN PIN define need double check



SATA ODD Conn.

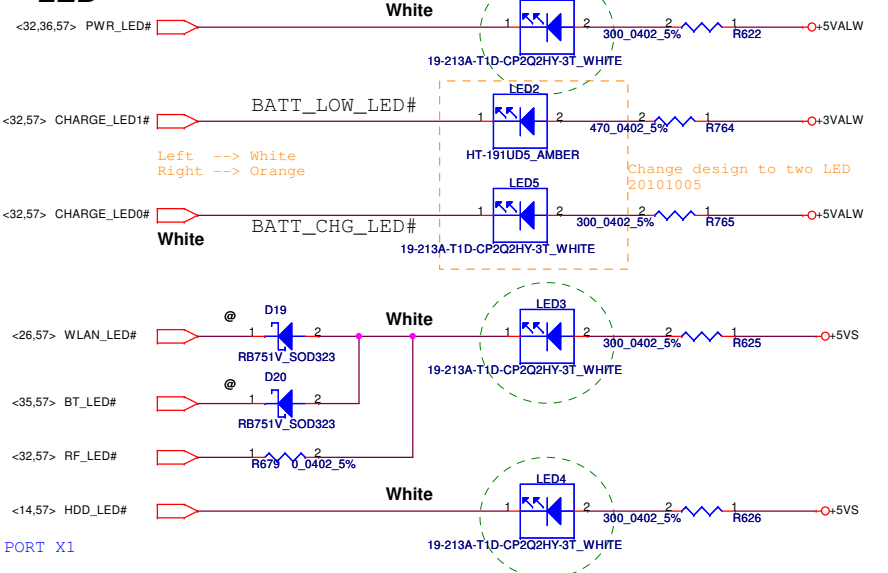


Lid Switch

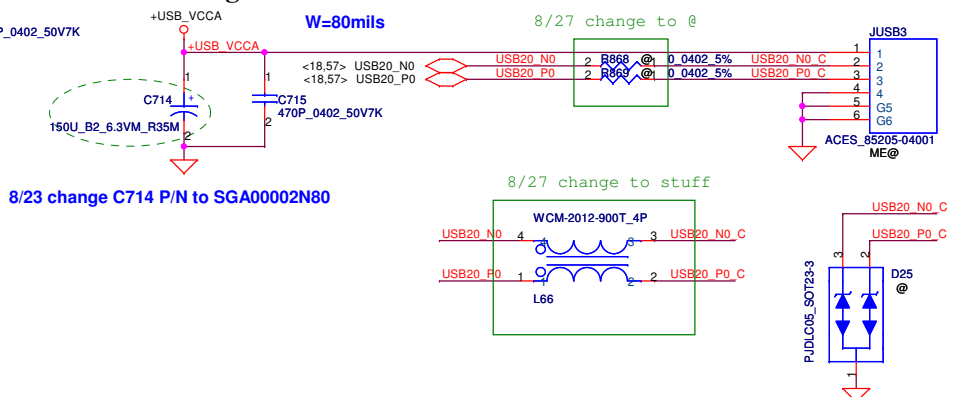


8/23 Change LED1/LED3/LED4 P/N to SC50000A300

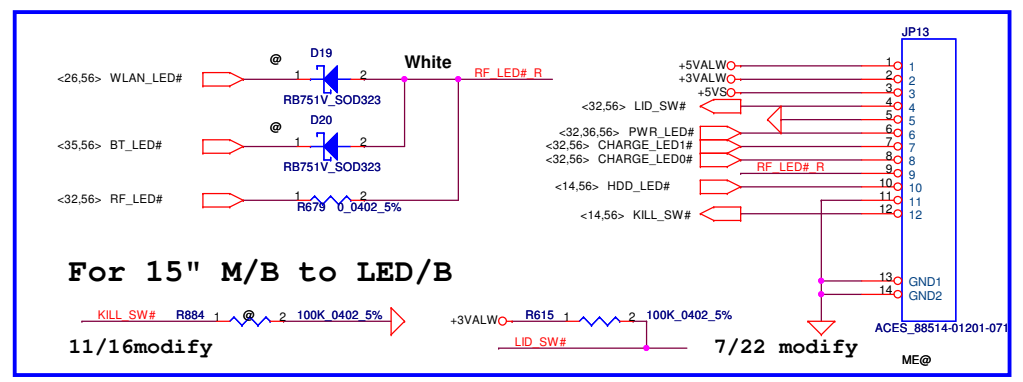
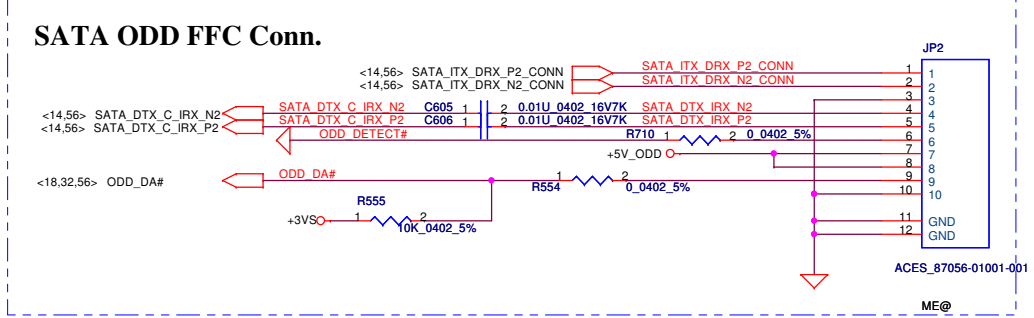
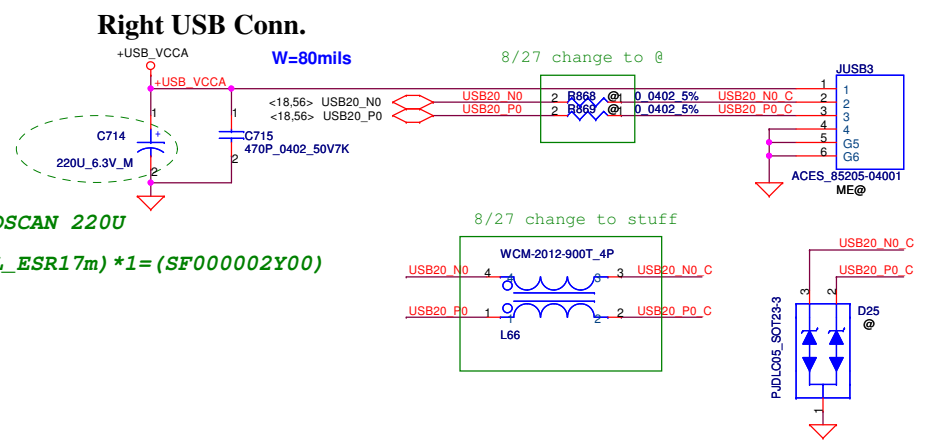
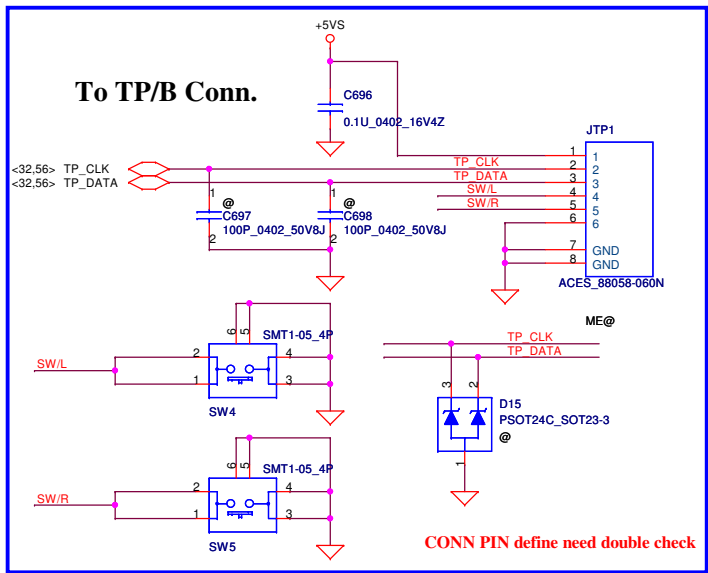
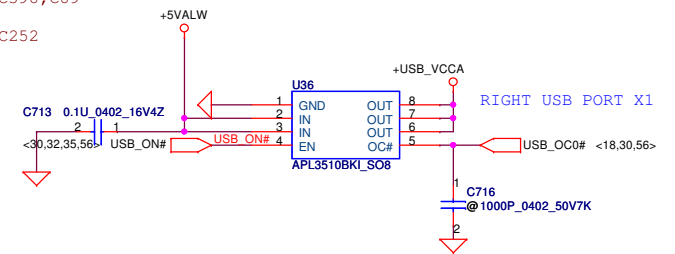
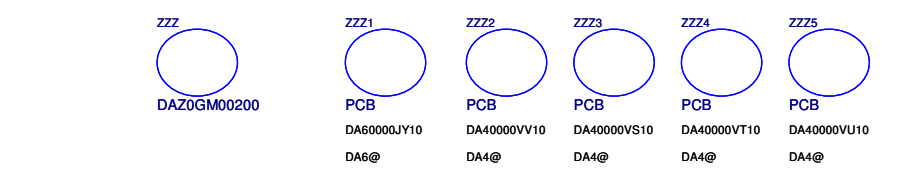
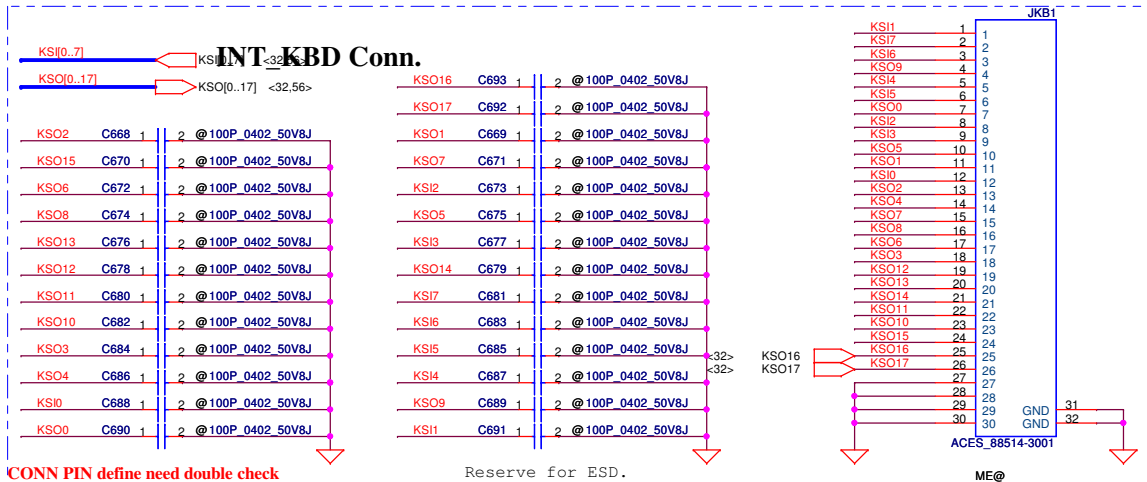
LED



Right USB Conn.



Security Classification		Compal Secret Data		Title	
Issued Date	2010/07/12	Deciphered Date	2012/07/11	Compal Electronics, Inc.	
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.				KB /SW/ LPC Debug Conn.	
Size B	Document Number	LA-6751P		Rev 0.2	
Date:	Friday, November 26, 2010	Sheet	56	of	60



Security Classification		Compal Secret Data		Title	
Issued Date	2010/07/12	Deciphered Date	2012/07/11	Compal Electronics, Inc.	
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.				KB /SW/ LPC Debug Conn.	
Size	Document Number	Rev		0.2	
B	LA-6751P	Date:		Friday, November 26, 2010	
Sheet		57		of 59	

PHASE	PAGE	Modification list	PURPOSE
0.2	P31	Change CRT Symbol	For CRT footprint issue
0.2	P31	Del C510	For Non-used part
0.2	P39	change C610 pin 1 net name	change C610 pin 1 net name to correct
0.2	P35	U25 change to U26	For co-lay 10/100 and GIGA
0.2	P40	Add R740, C93	For EC request
0.2	P18	Change R215 pin1 net name	Change R215 pin1 net name to correct
0.2	P16	Add R742, R743	For PCH power sequence
0.2	P38	Del U28, R542-R551, J12	Del USB charger circuit
0.2	P40	Add EC pin 97,98,103	Add EC pin 97 for SYS_PWROK_EC, pin 98 for CE_EN, pin 103 for BATT_SEL_EC
0.2	P39	Change J10 footprint and Add J13	Change J10 footprint by DFx request and Add J13 by vendor suggestion
0.2	P39	Change PC_Beep circuit	Change PC_Beep circuit
0.2	P6	Add R161,	Follow ORB circuit
0.2	P58/59	Add R615 in 15" and 17" page	Pull high LID_SW# at M/B side
0.2	P31	Add Q83 pin 1 power net name +CMOS_PW	For power trace net
0.2	P56/57/58	Change JF21 to JKBL	Change connector to standard name
0.2	P56/57/58	Change JF4 to JTP1	Change connector to standard name
0.2	P43/60	Change JF6 to JPWRB1	Change connector to standard name
0.2	P34	Change JP1 to JWLN1	Change connector to standard name
0.2	P42	Change JP5 to JBT1	Change connector to standard name
0.2	P43/60	Change JP7 to JCRI	Change connector to standard name
0.2	P19	Add R542	For ESATA detect function
0.2	P42	Add R866, R886, C735	For ESATA detect function
0.2	P31	Add R543	For reserve EC control directly
0.2	P39	Change J10 footprint, Del C635, C636	Change J10 for DFx and Del component for layout
0.2	P42	Add R877	For reserve EC control directly
0.2	P42	SW3 BOM structure change to @	For ME ASSY concern
0.2	P42	Change ESATA from port 5 to port 4	For intel risk
0.2	P15	Add R544,R545	For Pull high SMBus
0.2	P12/13	Del R74-R80,R82 R88-R94,R96	For DDR3 DM Bus to GND
0.2	P16	Add R182,R546	Add 186 for reserve sequence, Add R546 for follow CRB & ORB
0.2	P20	Del Add J12, R257 change to @	For voltage drop
0.2	P6	R161 change to 100K	Follow CRB
0.2	P19	Add R547, R250 change to @	Follow Module and CRB
0.2	P18	WLAN USB port for port8 to port9	For debug port
0.2	P39	Del J13	For layout space
0.2	P20,39,42	Add C395, R581, R583, R584, R586, R587	For customer request reserved
0.2	P20	Add C129, C396, Del R264	For reserved
0.2	P40	Add PIN 66, R740,C93 change to @	Add IMVP_IMON
0.2	P9	Add R74	For VCCIO_SENSE / VSSIO_SENSE differential routing
0.2	P30	Del R419-425, R427-R429	Del 0 ohm for UMA only
0.2	P31	Del R439, R440, R441	Del 0 ohm for UMA only
0.2	P32	Del RQ51 ~ Q54 Add Q95	For DIS HDMI
0.2	P38	Del J10, C637,C640,R576,R577,R579 change to @, L40-L43 change to R720-R723 Del C643, R578, MIC_INR connect MIC_INL, Add R578	For Vendor suggestion and EMI Del C653, R578 connect MIC_INR/L for vendor suggestion, Add R578 for EMI
0.2	P20	Add L75, R264, C917, R259 C226 change to @	For intel PDDG update
0.2	P43	C714 change to OSCON CAP	C714 change to OSCON CAP
0.2	P9	Add C394, C397, C398, C399, Add R75	For CPU_CORE power reserved at Bottom side, Add R75 for reserved at cpu side and pwr side
0.2	P42	Change C706 P7N to 3F000001500	Change to H=6 OSCAN
0.2	P10	Change C128 to @	For Reserved
0.2	P56	Update JODDI symbol	For ME update drawing

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/07/12	Deciphered Date	2012/07/11	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.				PIR	
				Size B	Document Number
Date:				Friday, November 26, 2010	Sheet 58 of 60

PHASE PAGE Modification list

PURPOSE

0.2	P16	D29 change to @	For AC detect issue
0.2	P24	R548,R549 change to DIS@	For AC detect issue
0.2	P10	C128 change to stuff	For test on DVT
0.2	P44	del Q118, R657	For not need
0.2		Change R513, R516 ,R667 P/N and from 0805 to 0603	For common part
0.2		Change C633, C634 , C642	For common part
0.2		Change D3, D29 P/N and symbol	For common part
0.2		Change U3,U11,U13,U14,U38,U39 P/N and symbol	For common part
0.2		Change U3,U11,U13,U14,U38,U39 P/N and symbol	For common part
0.2		Change Q8,Q65,Q80,Q83,Q99,Q104 P/N and symbol	For common part
0.2		Change Q1,Q37,Q93 P/N and symbol	For common part
0.2		Change Q94, Q95 P/N and symbol	For common part
0.2		Change Q3,Q4,Q7,Q9,Q66,Q67,Q68,Q73,Q74,Q75,Q76,Q77,Q78, Q79,Q82,Q85,Q86,Q87,Q102,Q106,Q107,Q108,Q109,Q110,Q111,Q112,Q113,Q114,Q115,Q116 P/N and symbol	For common part
0.2		Change C635 part and change to @	For EMI
0.2	P18	Reserved R297	Reserved
0.2	P9	Change C53,C85,C86,C87 ,C397,C398,C399 to stuff and change ,C48,C80,C81,C82, C90,C91 to @ Del C89	For CPU_CORE
0.2	P10	Change C110,C111,C112,C113 to stuff	For VGFY_CORE
0.2	P56	Change LED1/LED3/LED4 P/N to SC50000A300	Change P/N
0.2	P36	Change T1,T2 P/N to SP050003N00	For test pass part
0.2	P40	Change R611,R740,C93 to stuff and change Y5,C347,C367 to @ Change R695 to 18K, Q37 change to @, R747 change to stuff,	For SUS_CLK R695 for Board ID, Q37, R747 for VR_HOT
0.2	P40	Change U33 P/N to SA00003FL10	For BIOS ROM
0.2		Change C509,C511,C635 to stuff	For EMI
0.2	P56	Change I4" C7I4 P/N to SGA00002N80	For Sourcer request
0.2	P39	Change R720,R721,R722,R723 P/N to SM01000BZ00(Bead), and Change C647,C649,C650,C651 to Stuff	For EMI request
0.2	P19	Change R303 to Stuff, and change R542 to @	For BIOS ESATA detect function
0.2	P56	Change U32 P/N to SA000031C00	For common part
0.2	P36	Change T1,T2 P/N to SP050006E00	For correct part
0.2	P10	R688 change to stuff , R687 ,Q7 change to @	For S3 power reduction
0.2		Change R660,R661,R862,R863,R864,R865,R868,R869 to @ , change L63,L64,L65,L66 to stuff , change R619 to Bead (SM01000DI00)	For EMI
0.2	P20	Change L75 symbol	For common part
0.2	P30	Change R402 to @	For DPST
0.3	P10	Update Q5 symbol	For update symbol
0.3	P33	Add F2	For safty request
0.3	P39	Update U30 P/N to SA00003K410 and Add R879	For Audio update to 21Z
0.3	P10	Change C128 to D2 size and @	Change size for M/E issue
0.3	P14	Add reserve R878	For Intel DG 1.5
0.3	P37	C592 change P/N to SF000001500 (H=6)	For ME Z high ok
0.3	P29	R369 P/N change to SD034100A80	For GP part
0.3	P6	Reserved R880 to SYS_PWR0K	Follow ORB
0.3	P10	R62,R63 change to 1K	Follow CRB
0.3	P33	R483,R484 change connect to +5V_HDMI_F	For Add F2
0.3	P37	Change U27 P/N to SA000046C00	For Fintek
0.3	P40	Change R594 pull high to +5VALW	For leakage issue

Security Classification		Compal Secret Data		Compal Electronics, Inc. HW-PIR	
Issued Date	2010/07/12	Deciphered Date	2012/07/11		
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.				Title LA-6751P	Rev 0.2
Size	Document Number			Date: Friday, November 26, 2010	
			Sheet 59 of 60		

PHASE	PAGE	Modification list	PURPOSE
0.3	P19	R881 change to Dstuff, R244 change to @	For intel MRC Rev0.9
0.3	P14	R878 change to stuff	For intel DG 1.5
0.3	P31	Del R432	For non-used part
0.3	P36	Reserved D31 , C643 , C644	For reserved EMI parts
0.3	P37	Del R581	For non-used part
0.3	P38	Del R550	For non-used part
0.3	P38	Change C592 P/N to SF000002Y00	For M/E Z high limlt
0.3	P39	Del R584, R586 , R587	For non-used part
0.3	P40	Change R600, R604 to 2.2K Change R695 to 8.2k	Change R600, R604 for Battery SMBus, R695 for Board ID
0.3	P42	Del R583	For non-used part
0.3	P31	Del R449, R452, R458, R460 (UMA change only)	For non-used part
0.3	P32	Del R478, R480, R486 (UMA change only)	For non-used part
0.3	P6	Reserved R882 connect to PCH_PWR0K	Reserved for intel
0.3	P56	R765 change to 300 ohm	For LED

Security Classification		Compal Secret Data		Compal Electronics, Inc.			
Issued Date	2010/07/12	Deciphered Date	2012/07/11	Title			
<small>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.</small>				PIR			
				Size	Document Number	Rev	
				B	LA-6752P	0.2	
Date:	Friday, November 26, 2010	Sheet	60	of	60		

www.s-manuals.com