

Compal Confidential

PEW72/82/92 M/B Schematics Document

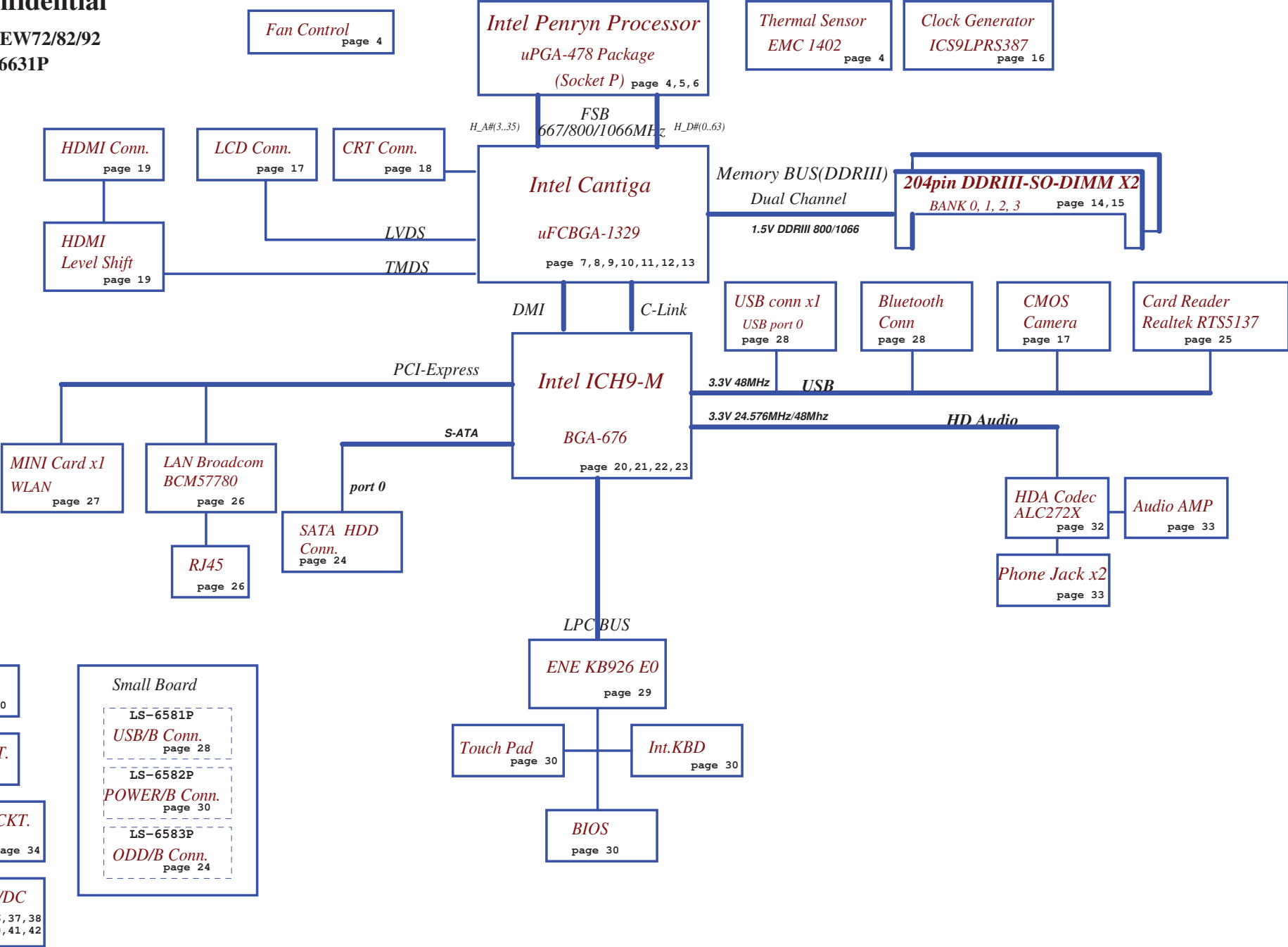
Intel Penryn Processor with Cantiga + DDRIII + ICH9M

2010-07-09
REV: 1.0

Security Classification	Compal Secret Data			Compal Electronics, Inc.	
Issued Date	2010/04/22	Deciphered Date	2011/04/22	Title	Cover Page
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 FIRST 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.				Document Number	Rev
				PEW72/82 M/B LA-6631P Schematic	1.0
				Date: Friday, July 09, 2010	Sheet 1 of 44

Compal Confidential

Model Name : PEW72/82/92
File Name : LA6631P



Security Classification	Compal Secret Data			Compal Electronics, Inc.	
Issued Date	2010/04/22	Deciphered Date	2011/04/22	Title	Block Diagrams
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 PRODUCT DEVELOPMENT 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.				Document Number	PEW72/82 M/B LA-6631P Schematic
				Date	Thursday, July 08, 2010
				Sheet	2 of 44

Voltage Rails

Power Plane	Description	S1	S3	S5
VIN	Adapter power supply (19V)	N/A	N/A	N/A
B+	AC or battery power rail for power circuit.	N/A	N/A	N/A
+CPU_CORE	Core voltage for CPU	ON	OFF	OFF
+0.75VS	0.75V power rail for DDR	ON	OFF	OFF
+1.05VS	1.05V switched power rail	ON	OFF	OFF
+1.5V	1.5V power rail for DDR	ON	ON	OFF
+1.5VS	1.5V switched power rail	ON	OFF	OFF
+1.8V	1.8V power rail for LVDS	ON	ON	OFF
+3VALW	3.3V always on power rail	ON	ON	ON*
+3V	3.3V power rail for SB	ON	ON	OFF
+3V_LAN	3.3V power rail for LAN	ON	ON	ON
+3VS	3.3V switched power rail	ON	OFF	OFF
+5VALW	5V always on power rail	ON	ON	ON*
+5VS	5V switched power rail	ON	OFF	OFF
+VSB	VSb always on power rail	ON	ON	ON*
+RTCVCC	RTC power	ON	ON	ON

Note : ON* means that this power plane is ON only with AC power available, otherwise it is OFF.

External PCI Devices

Device	IDSEL#	REQ#/GNT#	Interrupts
--------	--------	-----------	------------

EC SM Bus1 address

Device	Address	Device	Address
Smart Battery	0001 011X b	SMSC EMC1402	100 1100 b

EC SM Bus2 address

ICH9M SM Bus address

Device	Address
Clock Generator (ICS9LVRS367, RTM890N)	1101 001Xb
DDR DIMM1	1001 000Xb
DDR DIMM2	1001 010Xb

STATE	SIGNAL	SLP_S1#	SLP_S3#	SLP_S4#	SLP_S5#	+VALW	+V	+VS	Clock
Full ON		HIGH	HIGH	HIGH	HIGH	ON	ON	ON	ON
S1 (Power On Suspend)		LOW	HIGH	HIGH	HIGH	ON	ON	ON	LOW
S3 (Suspend to RAM)		LOW	LOW	HIGH	HIGH	ON	ON	OFF	OFF
S4 (Suspend to Disk)		LOW	LOW	LOW	HIGH	ON	OFF	OFF	OFF
S5 (Soft OFF)		LOW	LOW	LOW	LOW	ON	OFF	OFF	OFF

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
0	0	0 V	0 V	0 V
1	8.2K +/- 5%	0.216 V	0.250 V	0.289 V
2	18K +/- 5%	0.436 V	0.503 V	0.538 V
3	33K +/- 5%	0.712 V	0.819 V	0.875 V
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

BOARD ID Table

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

BTO Option Table

BTO Item	BOM Structure
GM45 B3	GM@
GM45 A1	GMA1@
GL40 B3	GL@
GM40 A1	GLA1@
Bluetooth	BT@

PCIE table

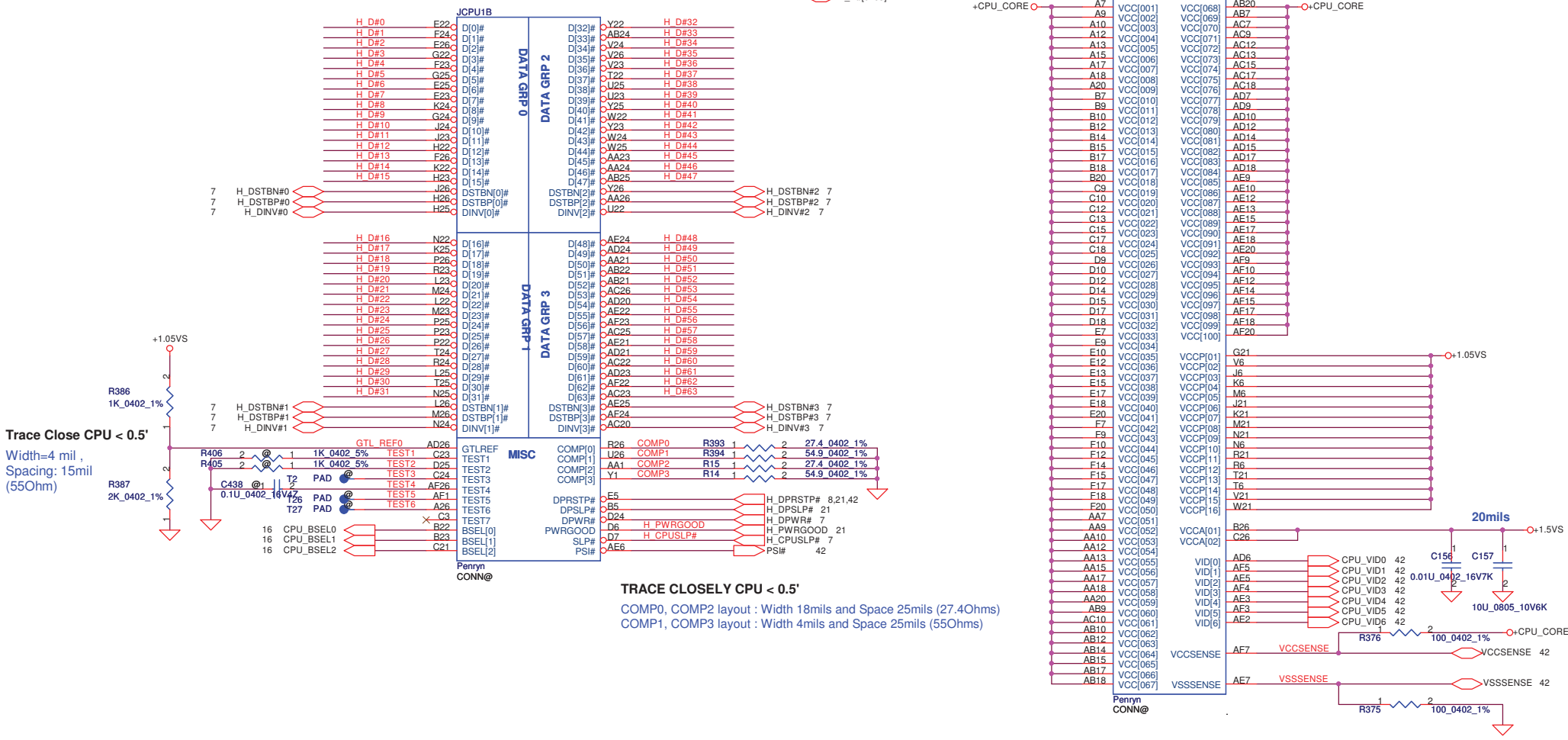
PCIE port1	
PCIE port2	Wireless Card
PCIE port3	PCIE LAN
PCIE port4	
PCIE port5	
PCIE port6	

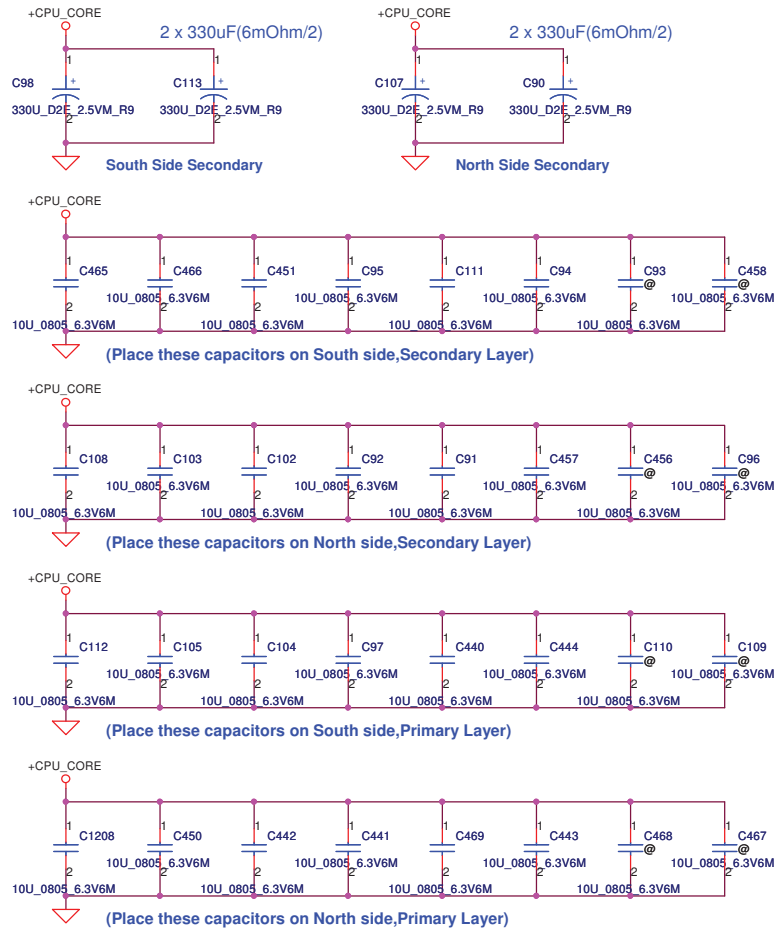
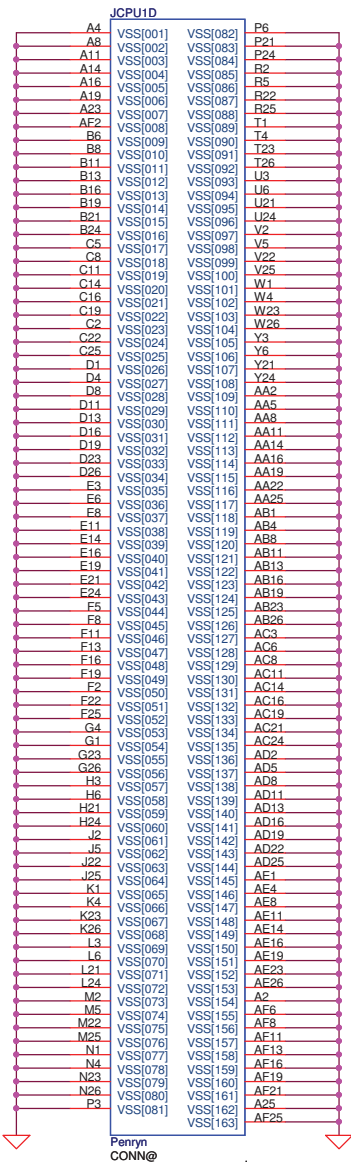
SATA table

SATA port0	HDD
SATA port1	ODD
SATA port2	
SATA port3	
SATA port4	
SATA port5	

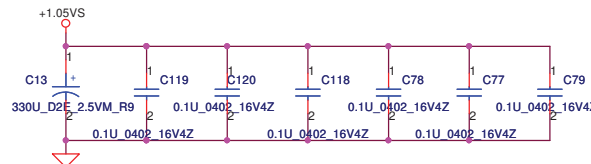
USB table

EHCI1	UHCI1	Port0	MB USB Conn.
		Port1	USB/B Conn.
		Port2	
	UHCI2	Port3	CMOS Camera
		Port4	Card Reader
EHCI2	UHCI3	Port5	
		Port6	USB/B Conn.
	UHCI4	Port7	
		Port8	Blue Tooth
	UHCI5	Port9	
		Port10	Wireless Card
	UHCI6	Port11	

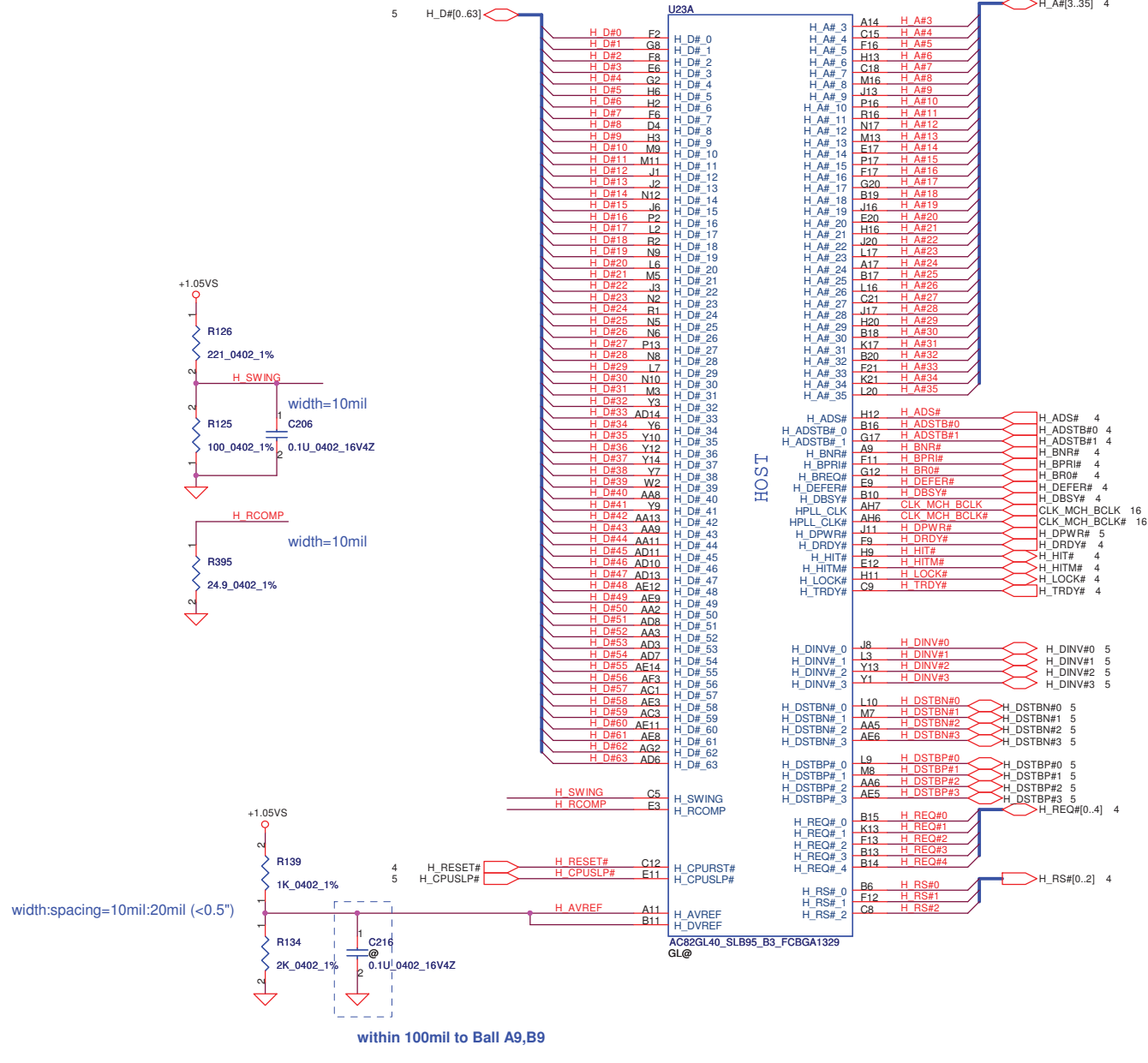




+CPU-CORE Decoupling	C,uF	ESR, mohm	ESL,nH
SPCAP, Polymer	4X330uF	6m ohm/4	1.8nH/6
MLCC 0805 X5R	32X22uF	3m ohm/32	0.6nH/32
	32X10uF	3m ohm/32	0.6nH/32



Security Classification	Compal Secret Data			Compal Electronics, Inc.	
Issued Date	2010/04/22	Deciphered Date	2011/04/22	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.				Penryn (3/3)	
Size B	Document Number	PEW72/82 M/B LA-6631P Schematic			Rev 1.0
Date:	Thursday, July 08, 2010	Sheet	6	of	44

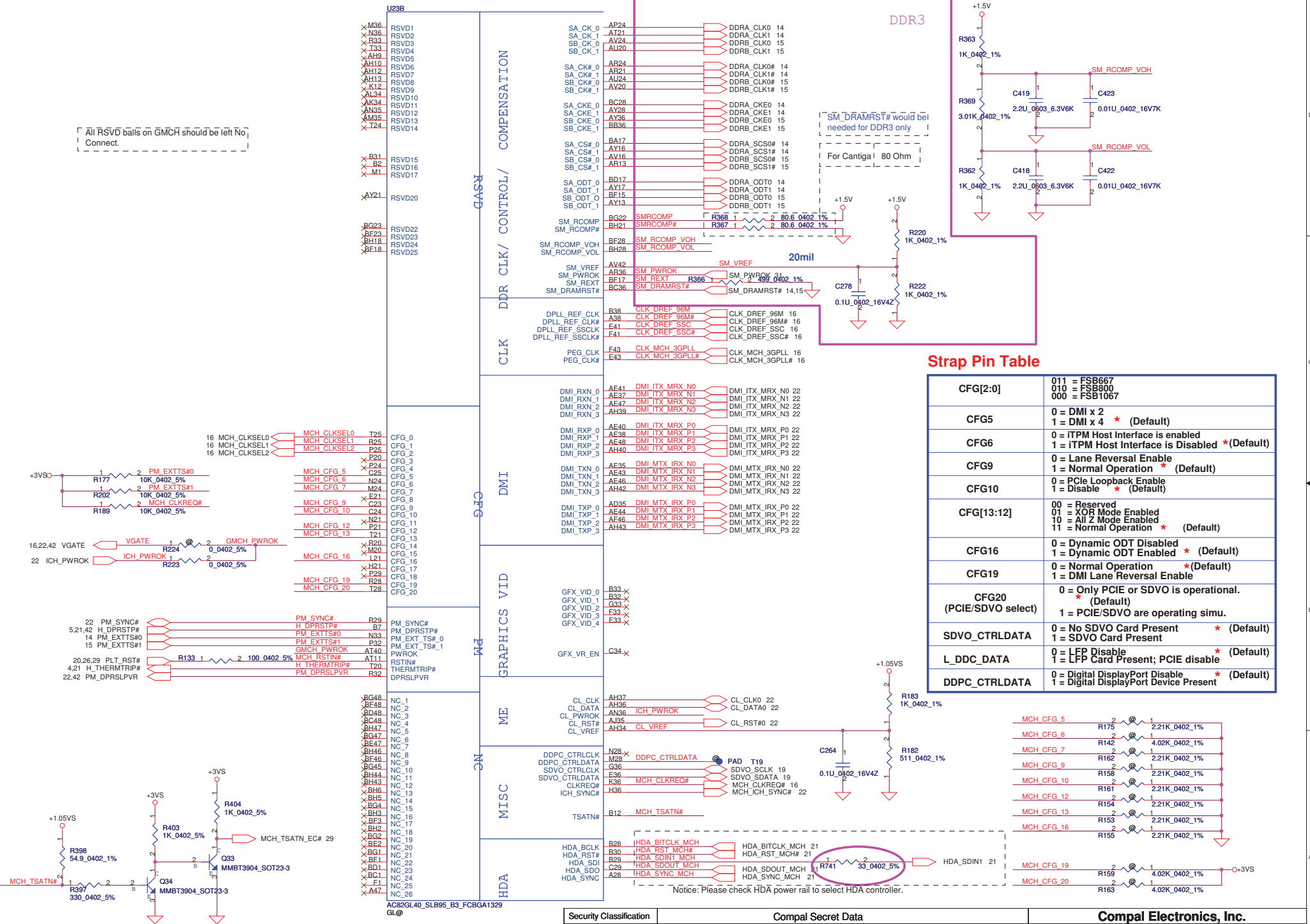


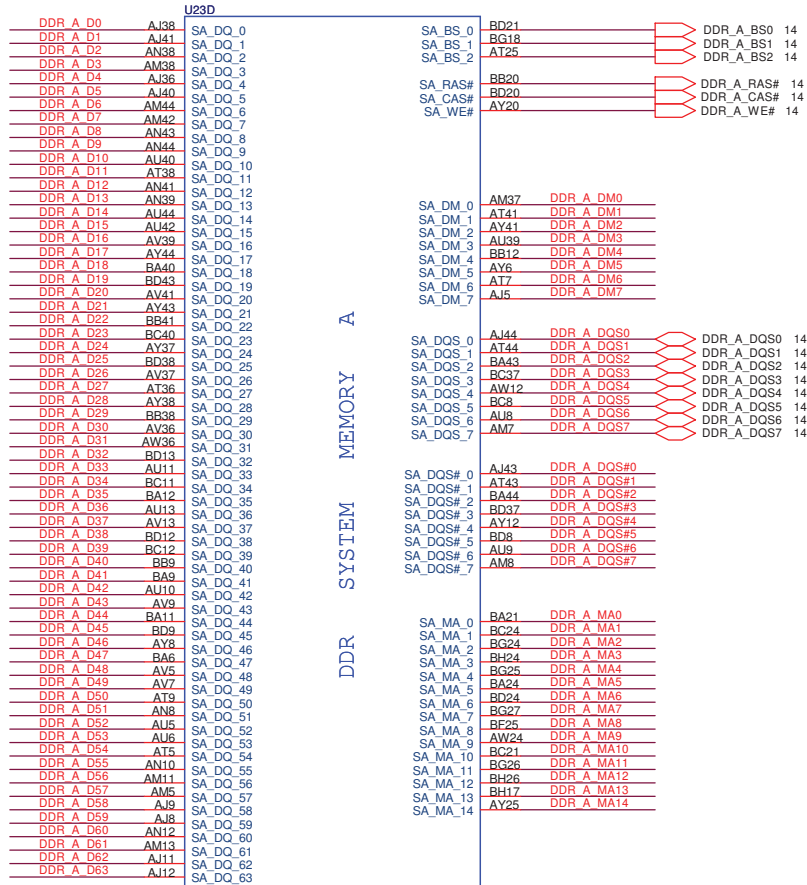
U23
AC82GM45_SLB94_B3_FCBGA1329
GM@

U23
AC82GL40_SLGGM_A1_FCBGA1329
GLA1@

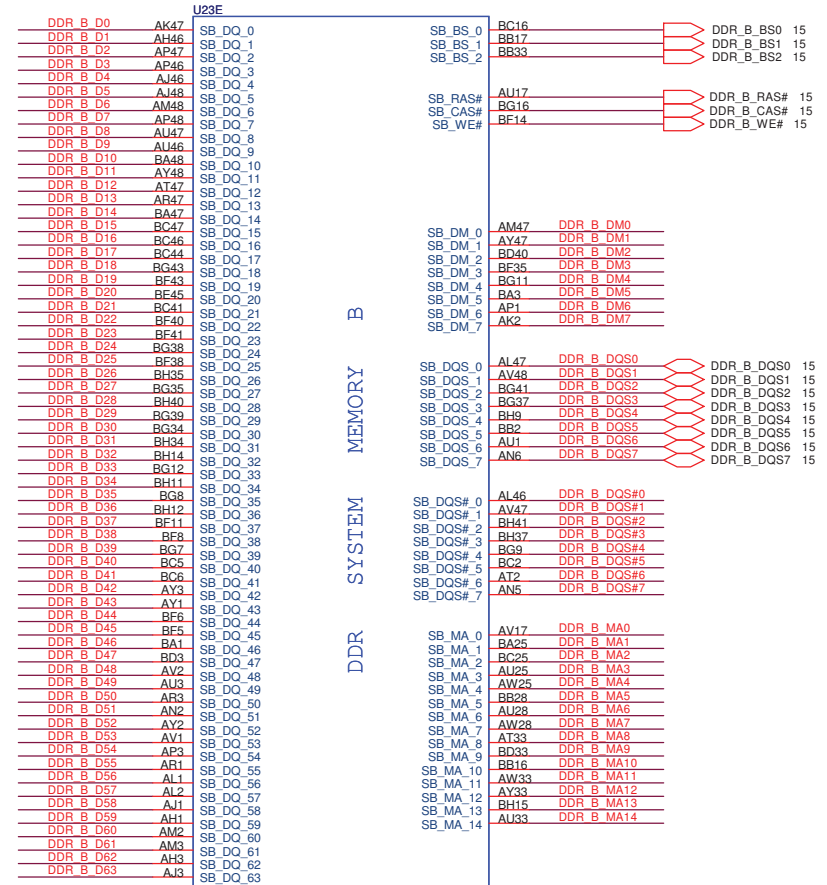
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/04/22	Deciphered Date	2011/04/22	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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 B	Document Number
				Date	Thursday, July 08, 2010
				Sheet	7 of 44
				Rev	1.0

All RSVD balls on GMCH should be left No Connect.





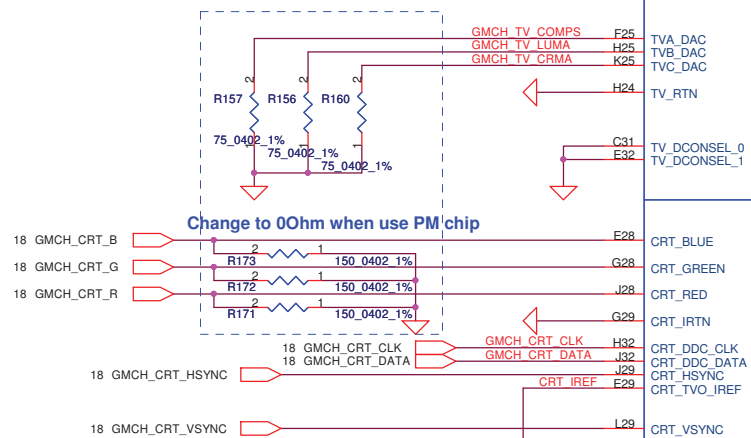
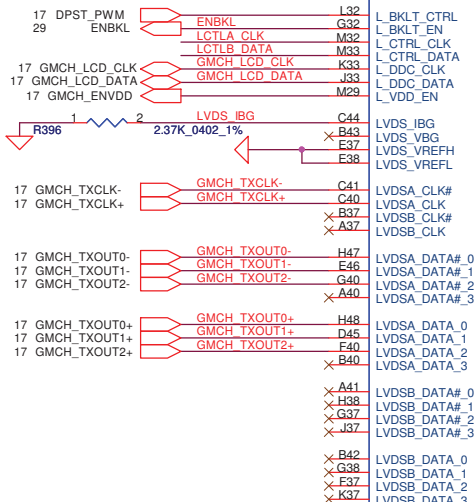
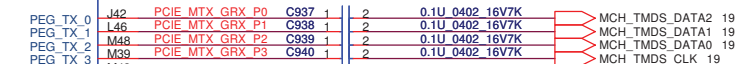
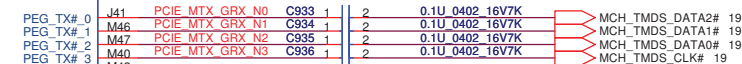
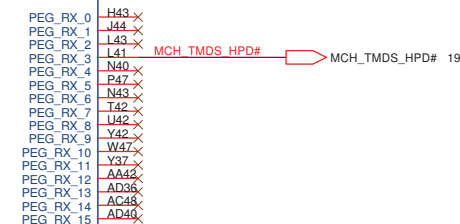
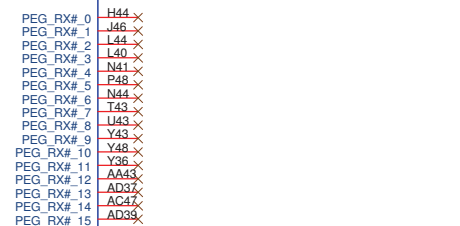
AC82GL40_SLB95_B3_FCBGA1329
GL@



AC82GL40_SLB95_B3_FCBGA1329
GL@

Security Classification		Compal Secret Data				Compal Electronics, Inc.					
Issued Date		2010/04/22		Deciphered Date		2011/04/22		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.						Cantiga GMCH(3/7)-DDR					
						Size B	Document Number			Rev	
						Date:	Thursday, July 08, 2010		Sheet	9	of
						PEW72/82 M/B LA-6631P Schematic				1.0	

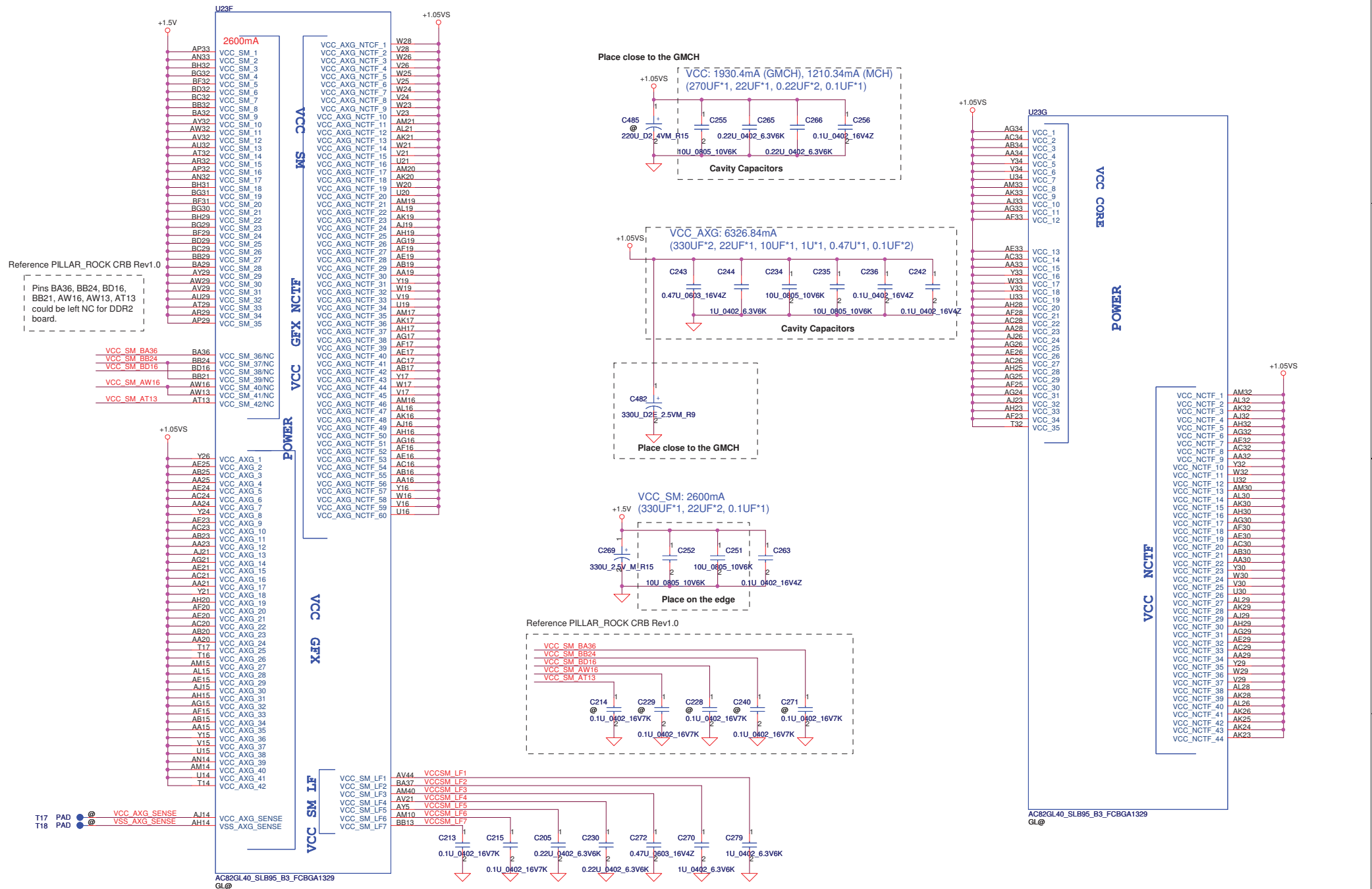
U23C

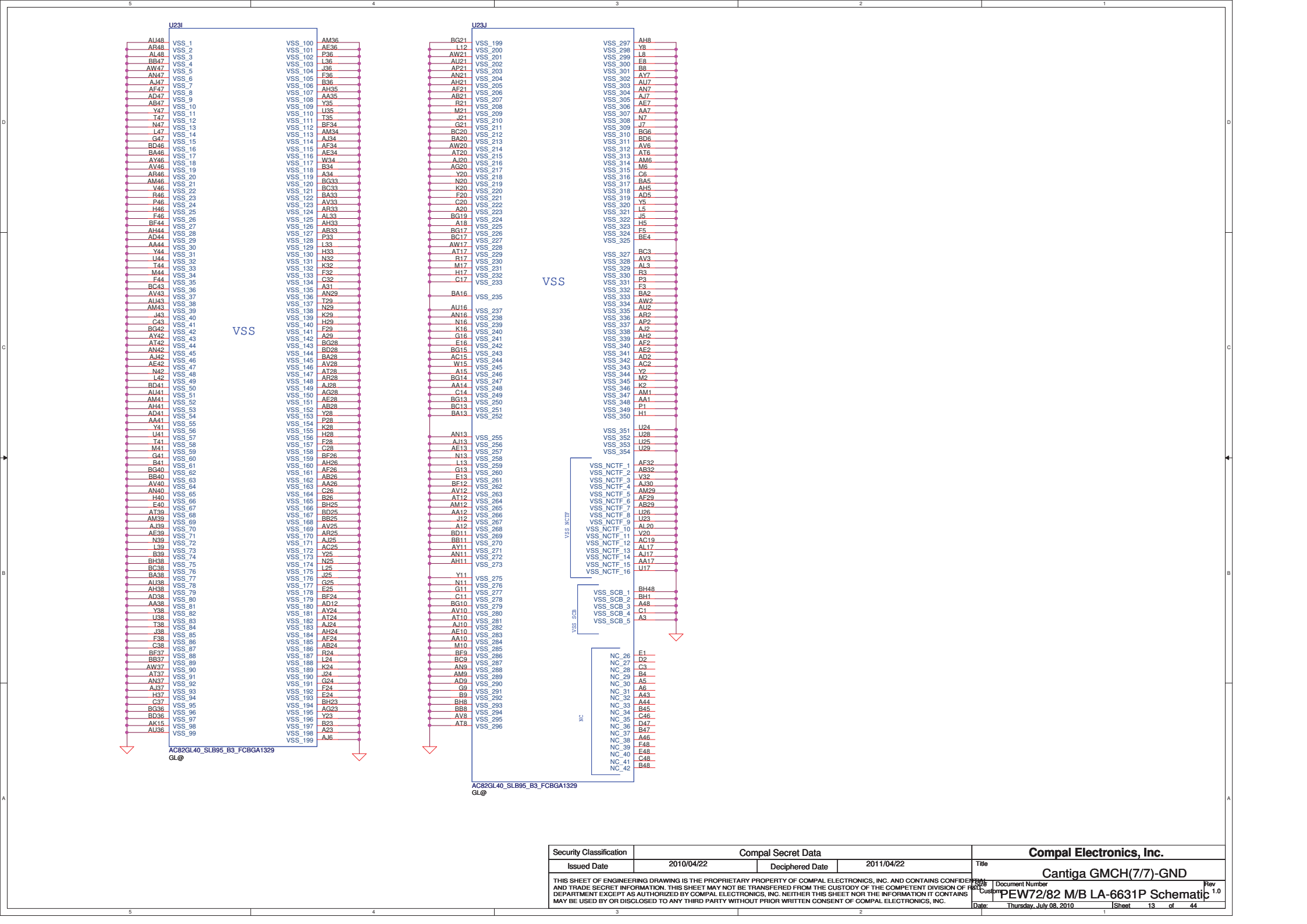
AC82GL40_SLB95_B3_FCBGA1329
GL@

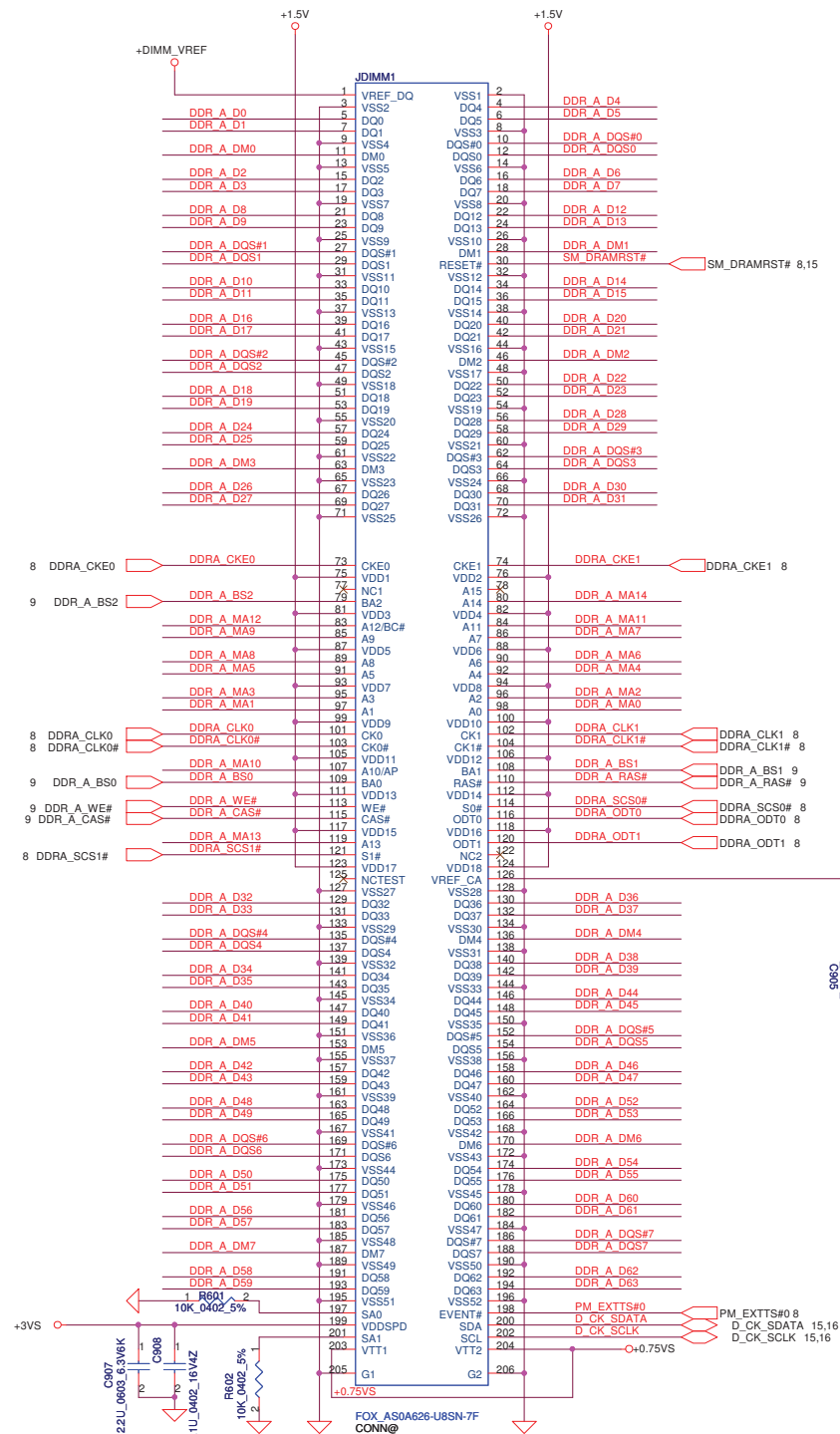
Intel Cantiga TMD5 Pin Definition

TMDS_B_CLK TMDS_B_CLK#	PEG_TXP_3 PEG_TXN_3
TMDS_B_DATA0 TMDS_B_DATA0#	PEG_TXP_2 PEG_TXN_2
TMDS_B_DATA1 TMDS_B_DATA1#	PEG_TXP_1 PEG_TXN_1
TMDS_B_DATA2 TMDS_B_DATA2#	PEG_TXP_0 PEG_TXN_0
TMDS_B_HPD#	PEG_RXP_3

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date		2010/04/22		Deciphered Date	
2010/04/22		2011/04/22		Title	
Cantiga GMCH(4/7)-VGA/LVDS/TV		Cantiga GMCH(4/7)-VGA/LVDS/TV		Size	
Customer		PEW72/82 M/B LA-6631P Schematic		Rev	
Date		Thursday, July 08, 2010		Sheet	
10		of		44	

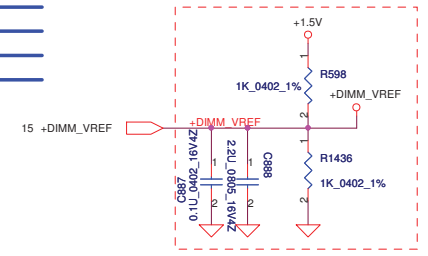






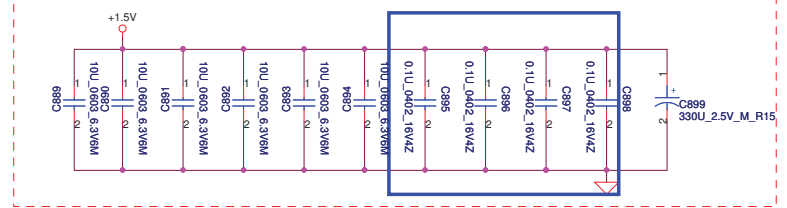
DIMM_A STD H:8mm
 <Address: 00>

- 9 DDR_A_DQS#[0..7]
- 9 DDR_A_D[0..63]
- 9 DDR_A_DM[0..7]
- 9 DDR_A_DQS[0..7]
- 9 DDR_A_MA[0..14]

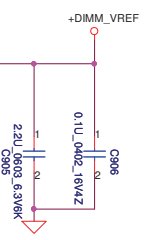
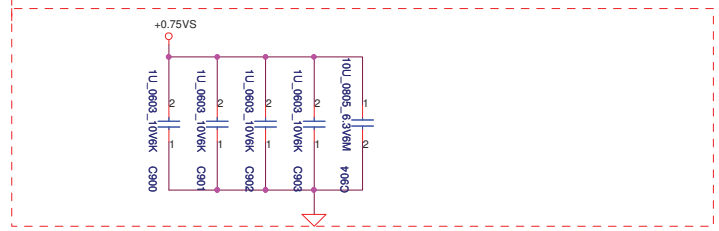


Layout Note:
 Place near JDIMM2

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



Layout Note:
 Place near JDIMM2.203 & JDIMM2.204



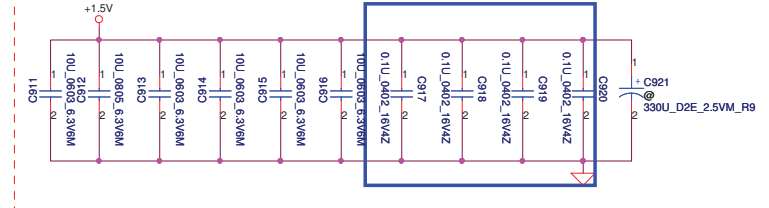
Security Classification		Compal Secret Data				Compal Electronics, Inc.					
Issued Date		2010/04/22		Deciphered Date		2011/04/22		Title			
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY 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					
						Document Number		Rev			
						PEW72/82 M/B LA-6631P Schematic				1.0	
						Date: Thursday, July 08, 2010		Sheet 14 of 44			



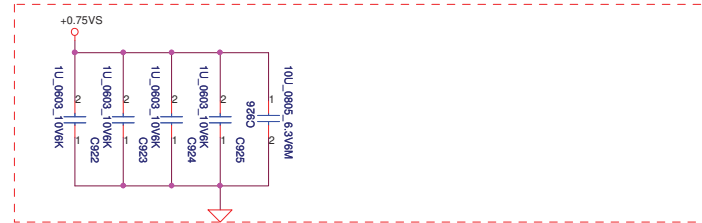
DIMM_B STD H:4mm
 <Address: 01>

Layout Note:
 Place near JDIMM1

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



Layout Note:
 Place near JDIMM1.203 & JDIMM1.204



- 9 DDR_B_DQS#0[0..7]
- 9 DDR_B_D[0..63]
- 9 DDR_B_DM[0..7]
- 9 DDR_B_DQS#0[0..7]
- 9 DDR_B_MA[0..14]

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/04/22	Deciphered Date	2011/04/22	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 PRODUCT DEVELOPMENT DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. WITHOUT 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.				Document Number	Rev
				PEW72/82 M/B LA-6631P Schematic	1.0
				Date: Thursday, July 08, 2010	Sheet 15 of 44

FSLC	FSLB	FSLA	CPU	SRC	PCI
CLKSEL2	CLKSEL1	CLKSEL0	MHz	MHz	MHz
0	0	0	266	100	33.3
0	1	0	200	100	33.3
0	1	1	166	100	33.3

Table : ICS9LPRS387

CLK_REQ#	Control	Free-Run
CR#_10(WLAN)	PCIEX10	PCIEX0
CR#_6(MCH)	PCIEX6	PCIEX1
CR#_4(NEW CARD)	PCIEX4	
CR#_9(MINI CARDII)	PCIEX9	

SRC7(VGA_CLK): Discrete VGA[Enable] UMA[Disable]

+3VS CLK_PCI2=1, Trusted Mode Enable(No overlocking allowed)

CLK_PCI2

mount to Enable ITP_CLK

CLK_PCI5

CLK_PCI4

CLK_PCI4=0, Pin63,64 is SRC_CLK
CLK_PCI5=1, Pin63,64 is ITP_CLK

CK_PWRGD

CLK_ENABLE# 42

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

CLK_PCI_LPC

CLK_PCI_ICH

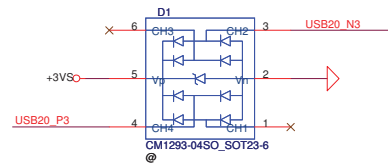
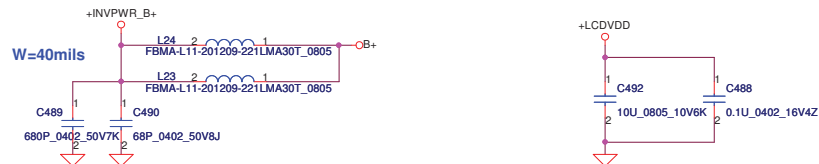
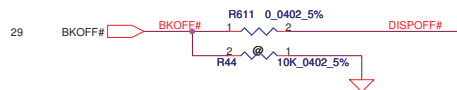
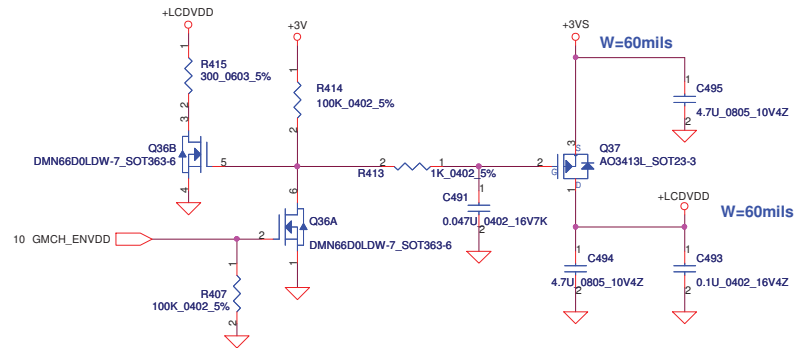
CLK_PCI_LPC

CLK_PCI_ICH

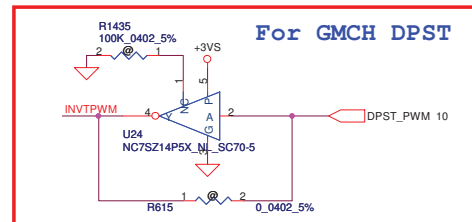
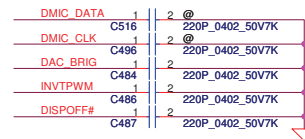
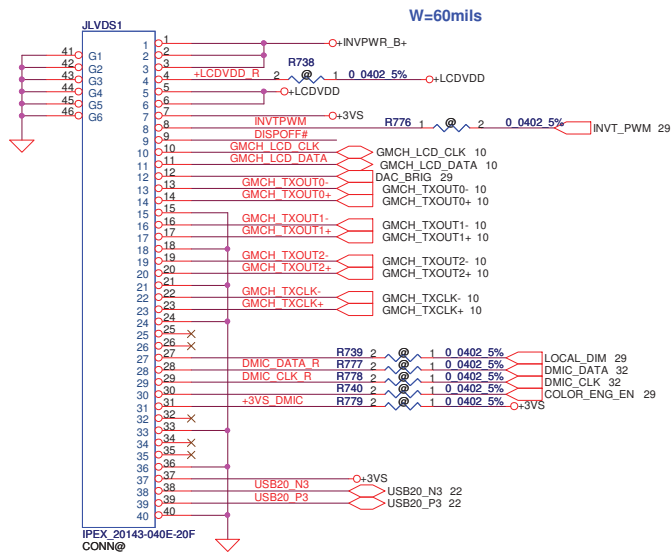
CLK_PCI_LPC

CLK_PCI_ICH

LCD POWER CIRCUIT

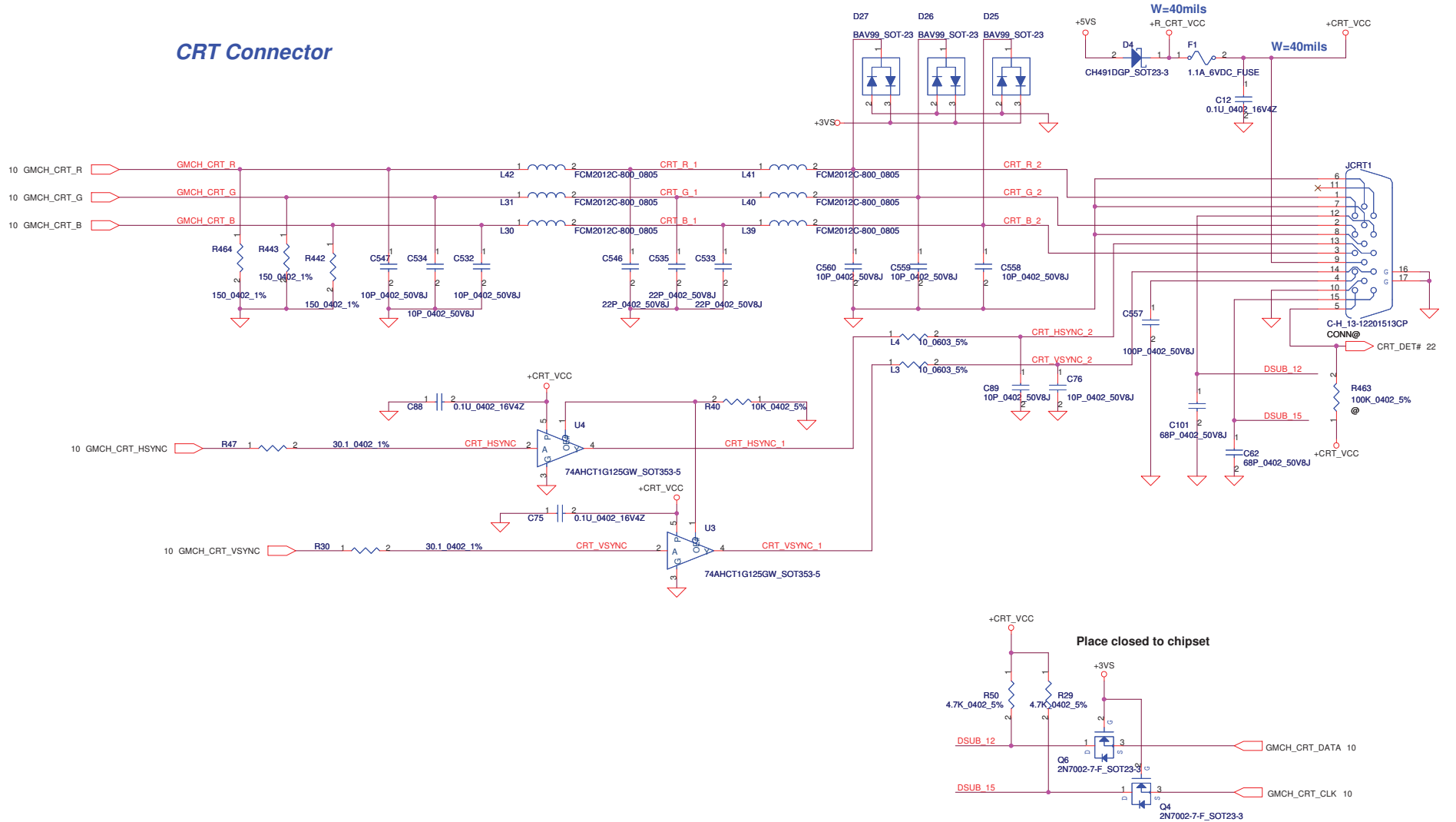


LCD/PANEL BD. Conn.

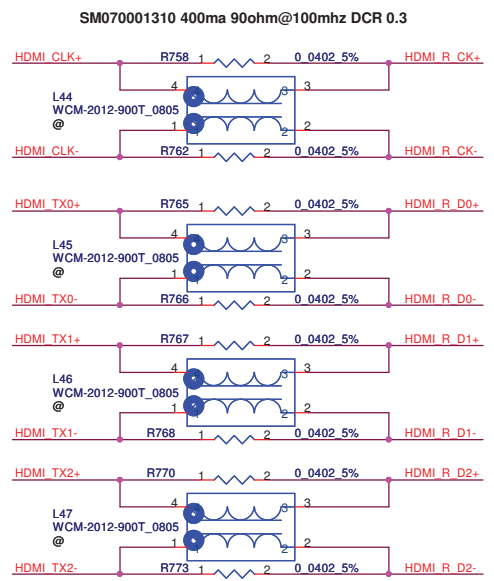
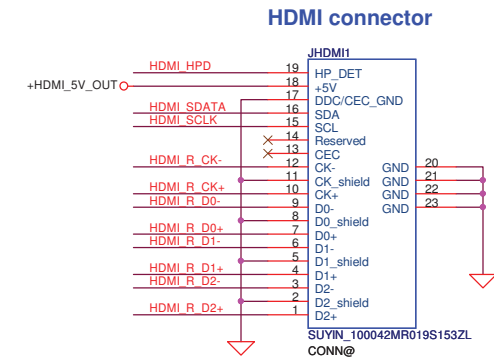
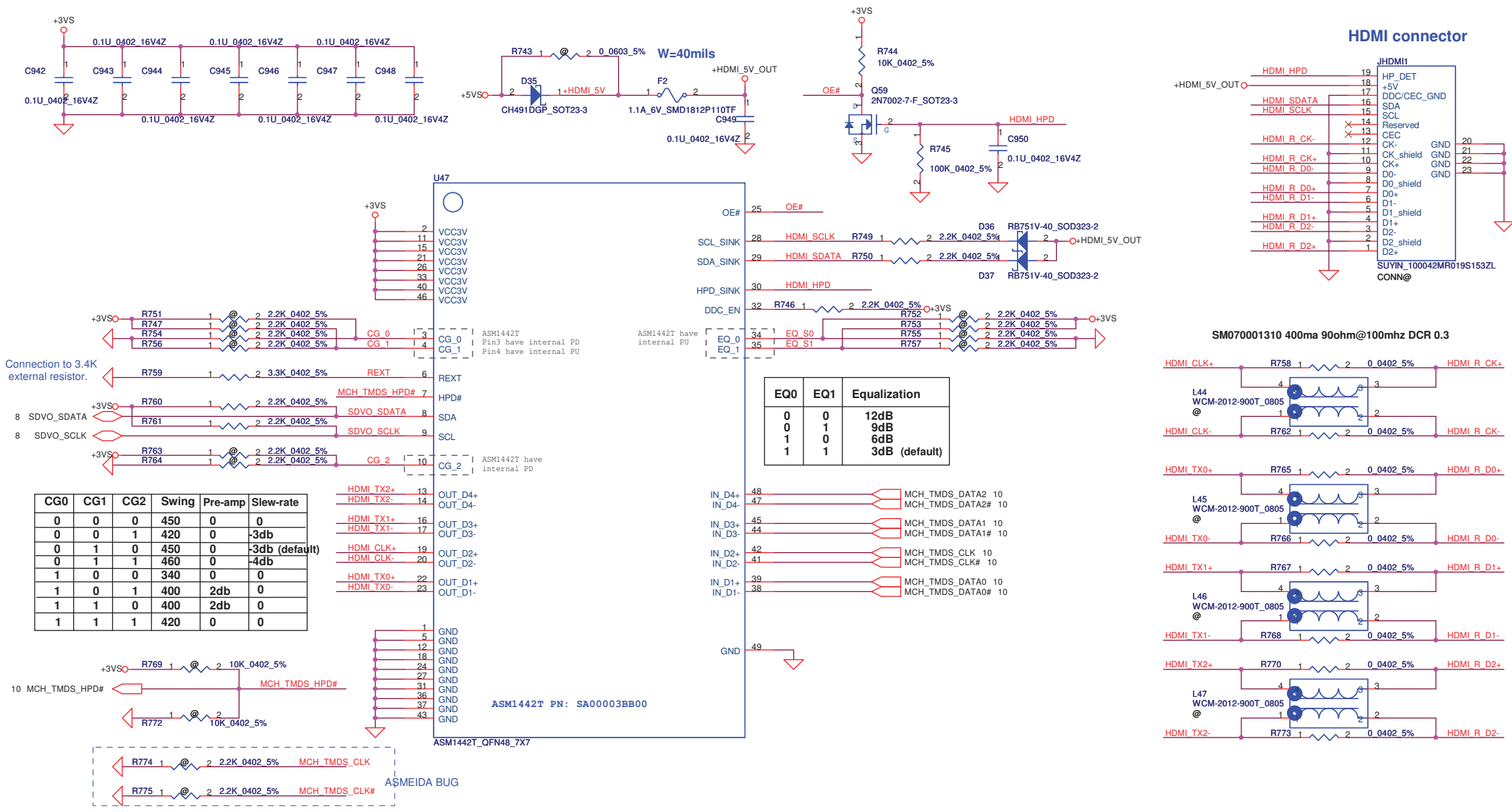


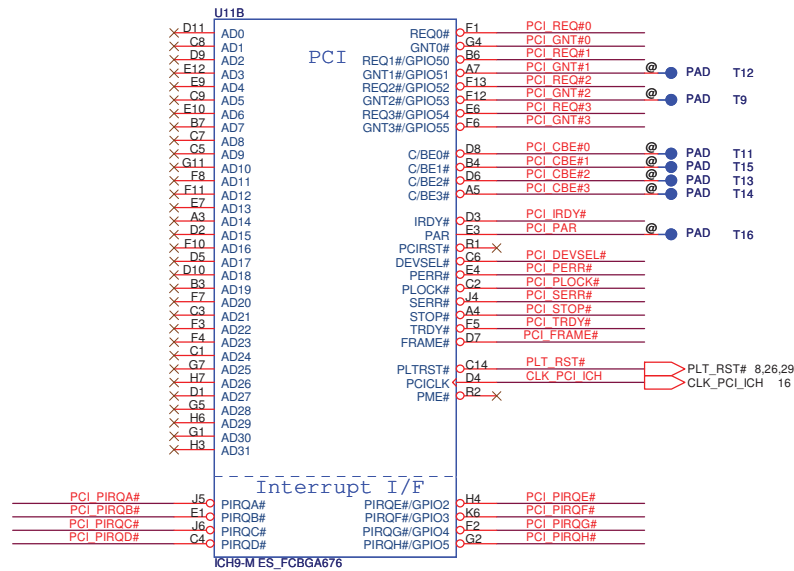
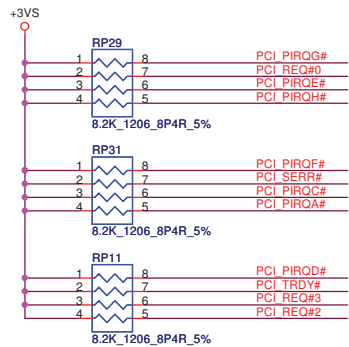
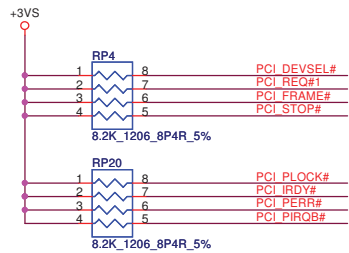
Security Classification		Compal Secret Data		Title		Compal Electronics, Inc.	
Issued Date	2010/04/22	Deciphered Date	2011/04/22	Part Number		LVDS Connector	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF THE 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.				Document Number		Rev	
				Customer Part Number		1.0	
				Date		Thursday, July 08, 2010	
				Sheet		17 of 44	

CRT Connector



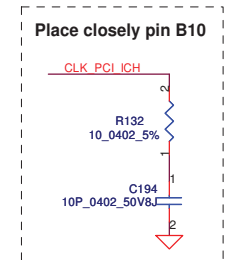
Security Classification		Compal Secret Data				Compal Electronics, Inc.					
Issued Date		2010/04/22		Deciphered Date		2011/04/22		Title			
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF FACTS AND INFORMATION 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			
								Document Number		Rev	
								Date		Sheet	
								PEW72/82 M/B LA-6631P Schematic		1.0	
								Thursday, July 08, 2010		18 of 44	





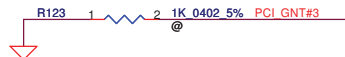
DMI for ESI-compatible operation

PCI_GNT#1	Low= DMI for ESI-compatible operation High= Default* (Internal pull-up)
-----------	--

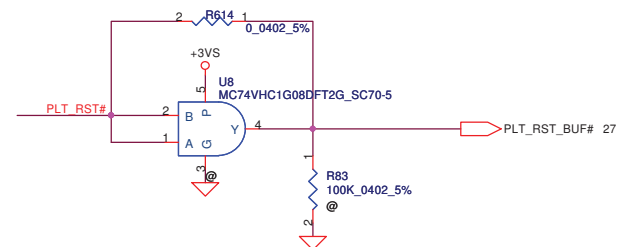
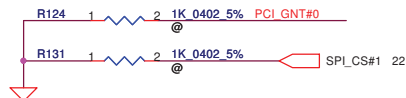


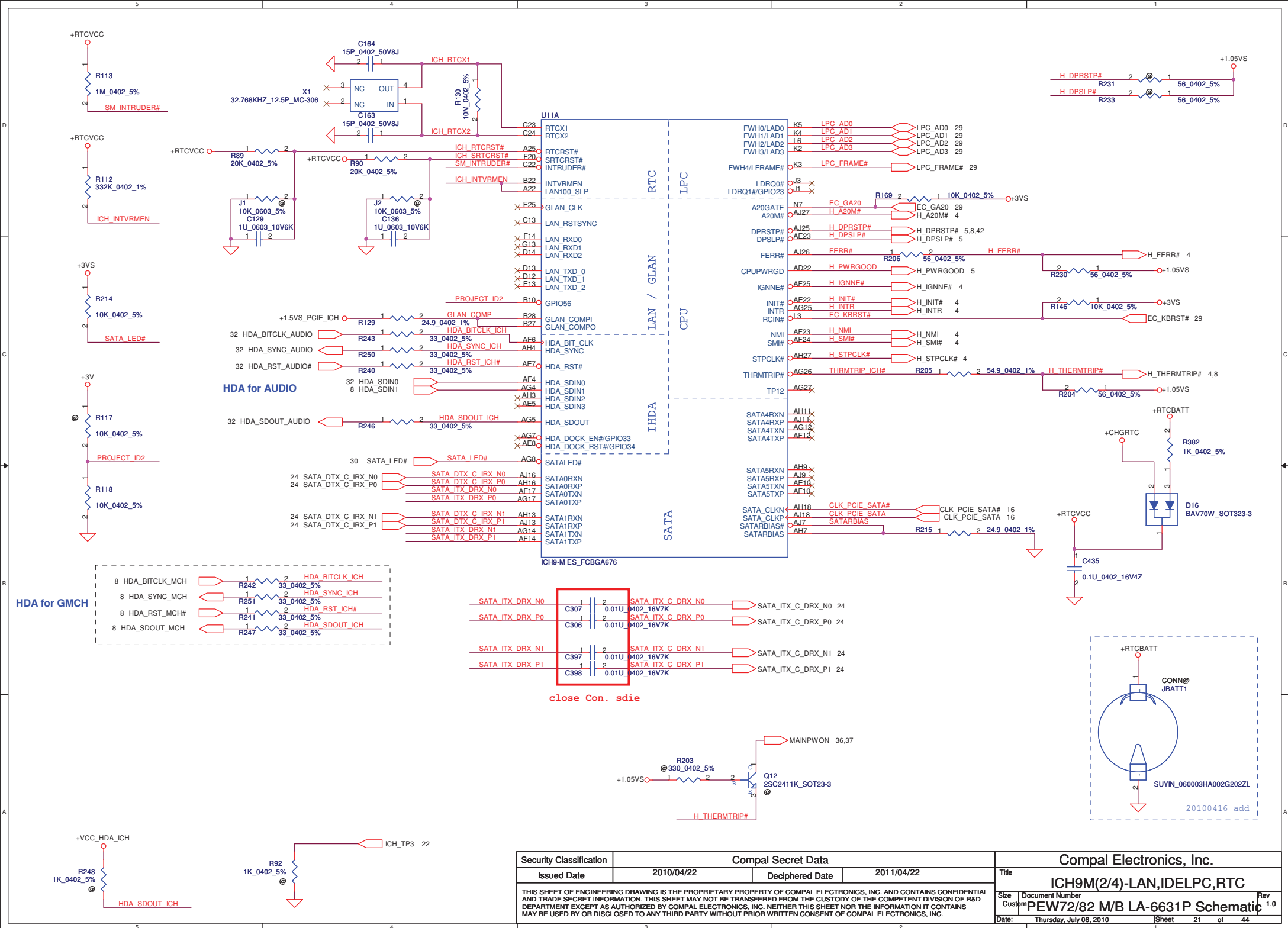
A16 Swap Override Strap

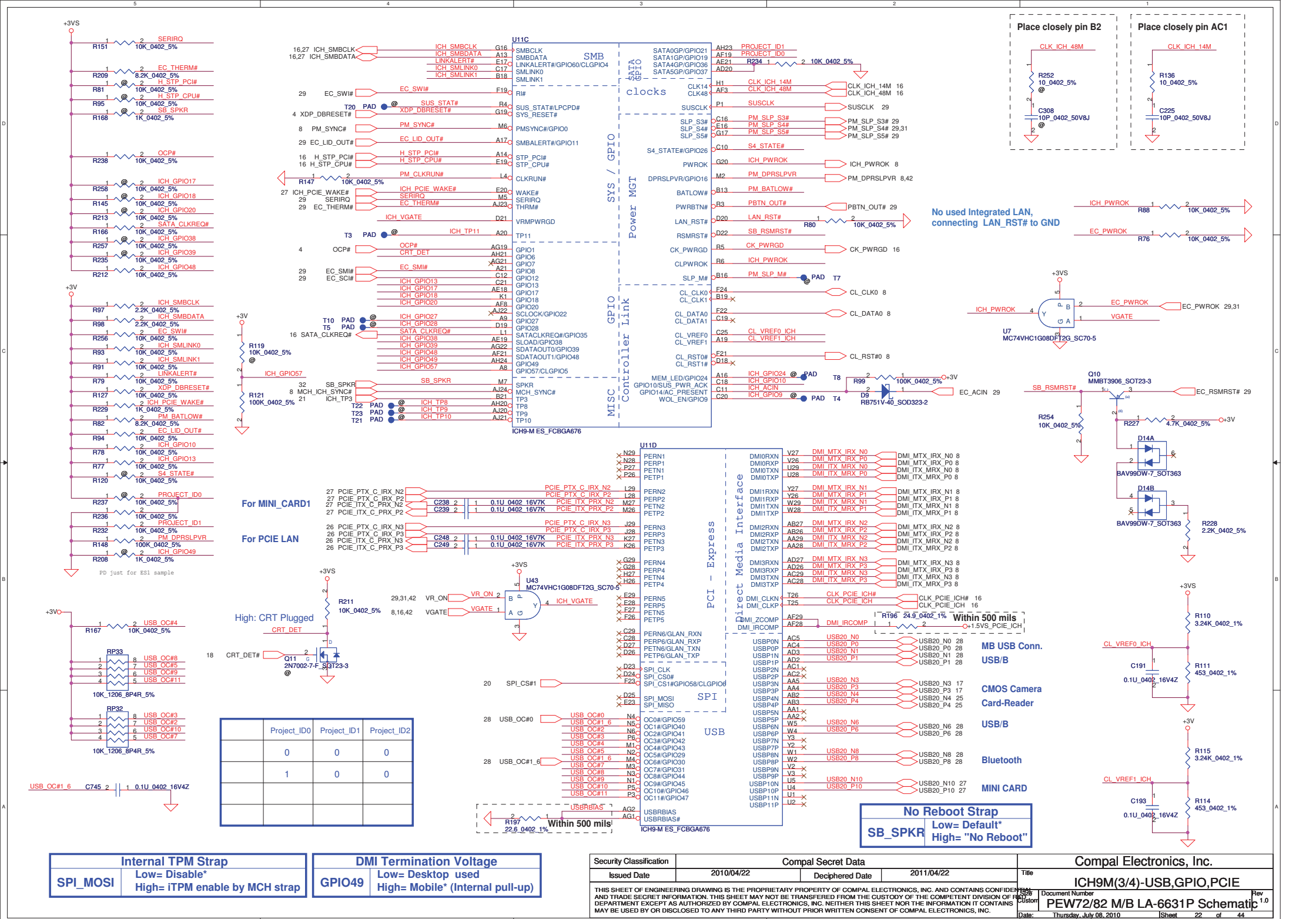
PCI_GNT#3	Low= A16 swap override Enable High= Default*
-----------	---

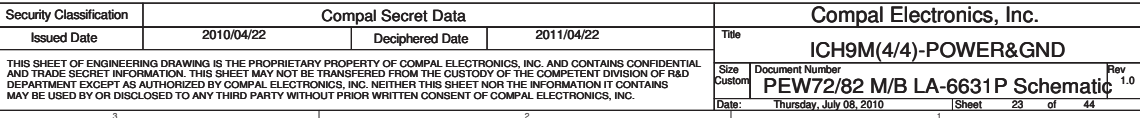


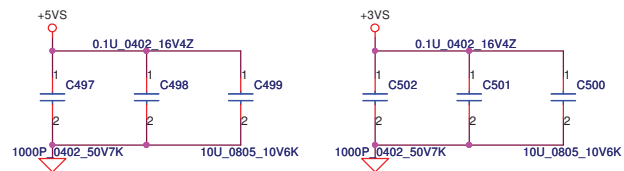
Boot BIOS Strap		
PCI_GNT#0	SPI_CS#1	Boot BIOS Location
0	1	SPI
1	0	PCI
1	1	LPC*



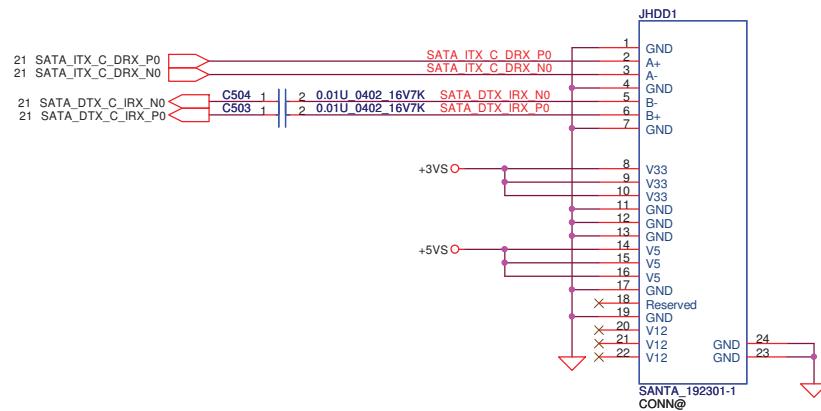




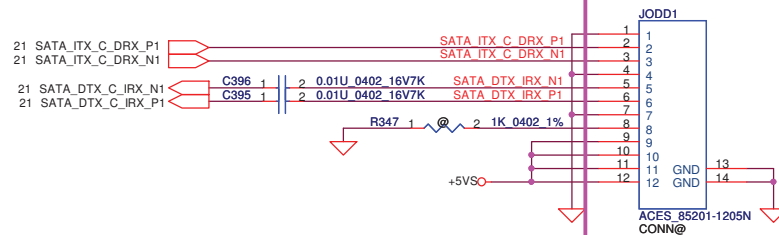




SATA HDD Conn.

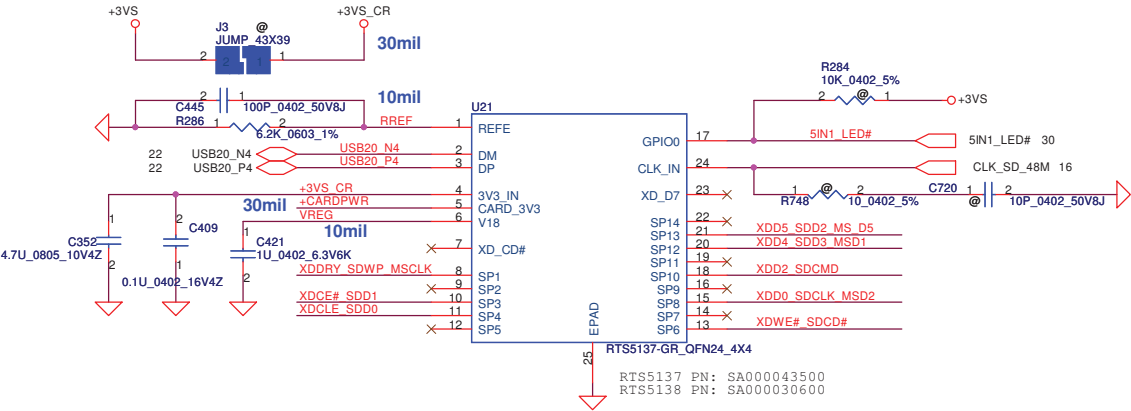


SATA ODD Conn. LS-6583

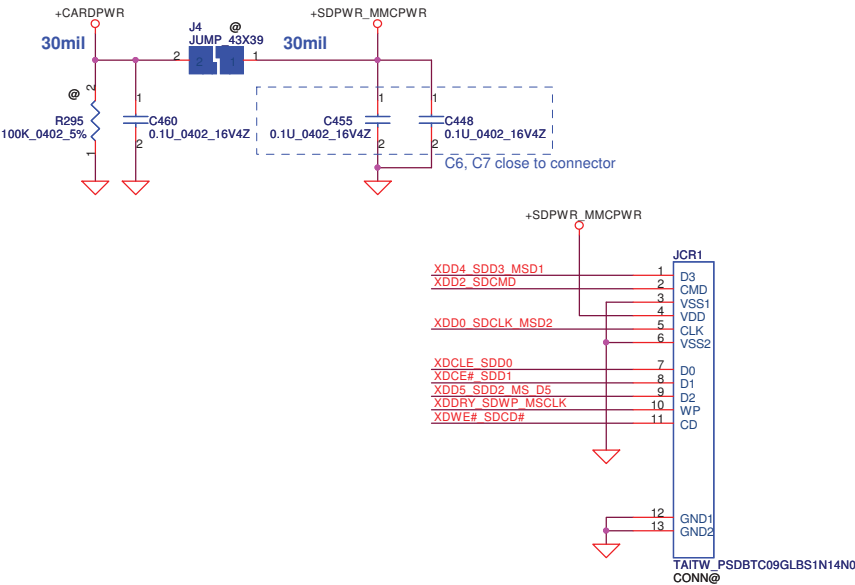


Security Classification				Compal Secret Data				Compal Electronics, Inc.			
Issued Date				2010/04/22		Deciphered Date		2011/04/22		Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY 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		Date	
				Custom		PEW72/82 M/B LA-6631P Schematic		1.0		Thursday, July 08, 2010	
										Sheet 24 of 44	

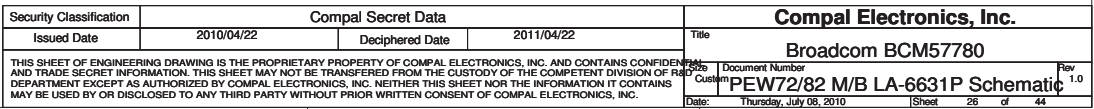
Card Reader RTS5138 / RTS5137
(only SD+MMC function)



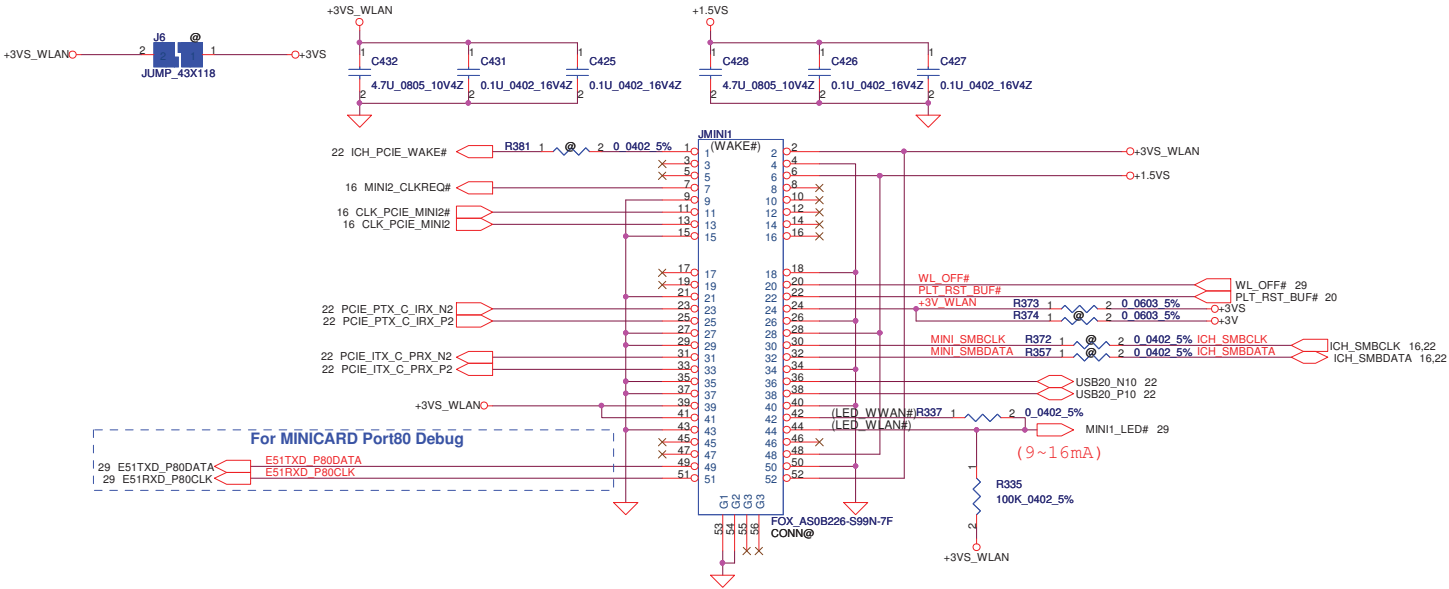
Card Reader Connector



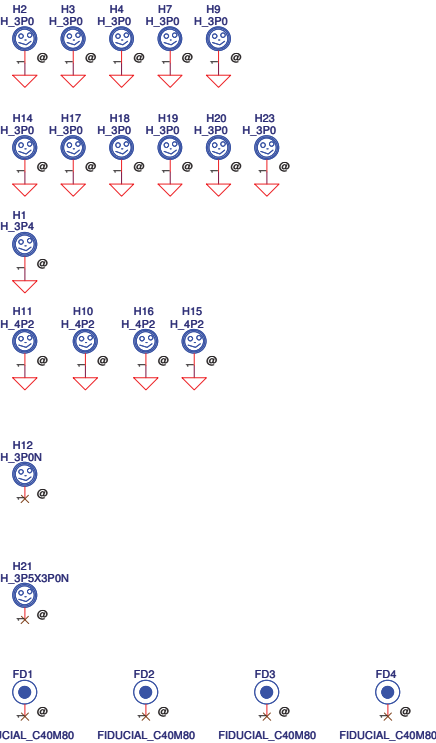
Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/04/22	Deciphered Date	2011/04/22	Title
				CardReader RTS5137
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET 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 PEW72/82 M/B LA-6631P Schematic
				Rev 1.0
Date: Thursday, July 08, 2010		Sheet 25 of 44		

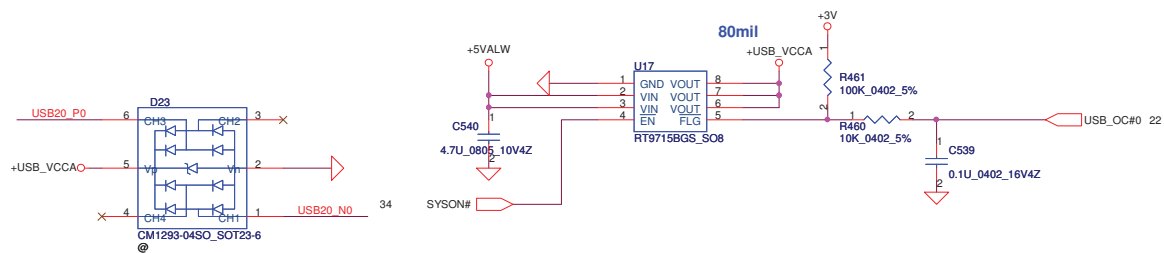


For Wireless LAN

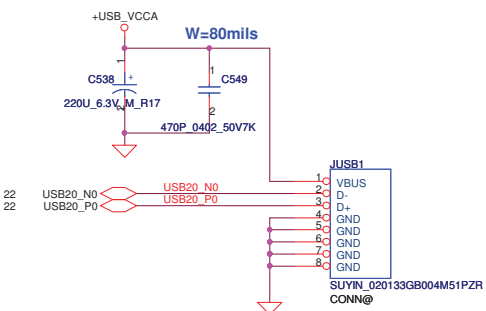


Mini Card Power Rating			
Power	Primary Power (mA)		Auxiliary Power (mA)
	Peak	Normal	Normal
+3VS	1000	750	
+3V	330	250	250 (wake enable)
+1.5VS	500	375	5 (Not wake enable)



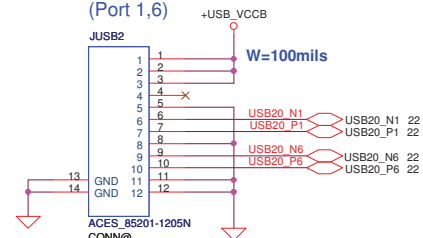


USB Conn. (Port 0)

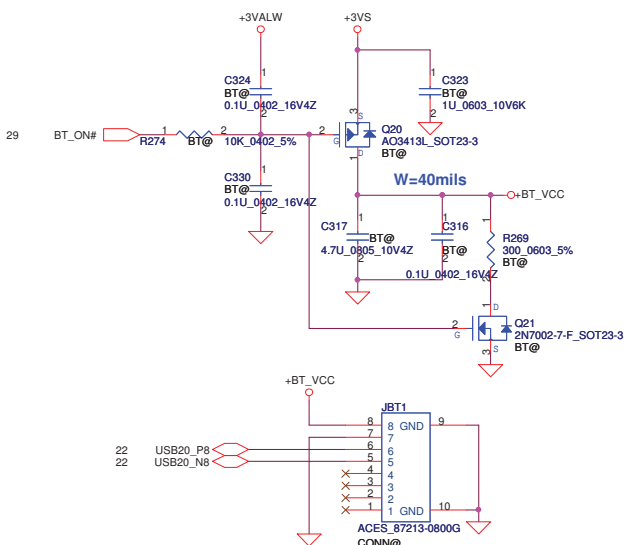


USB/B Conn. LS-6581

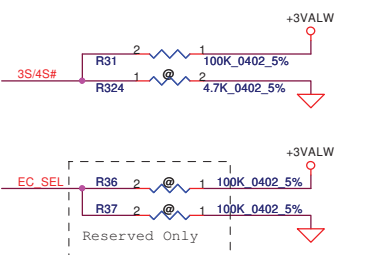
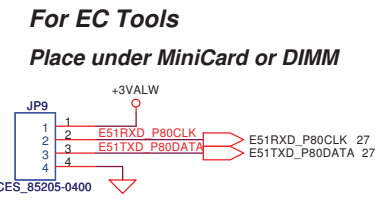
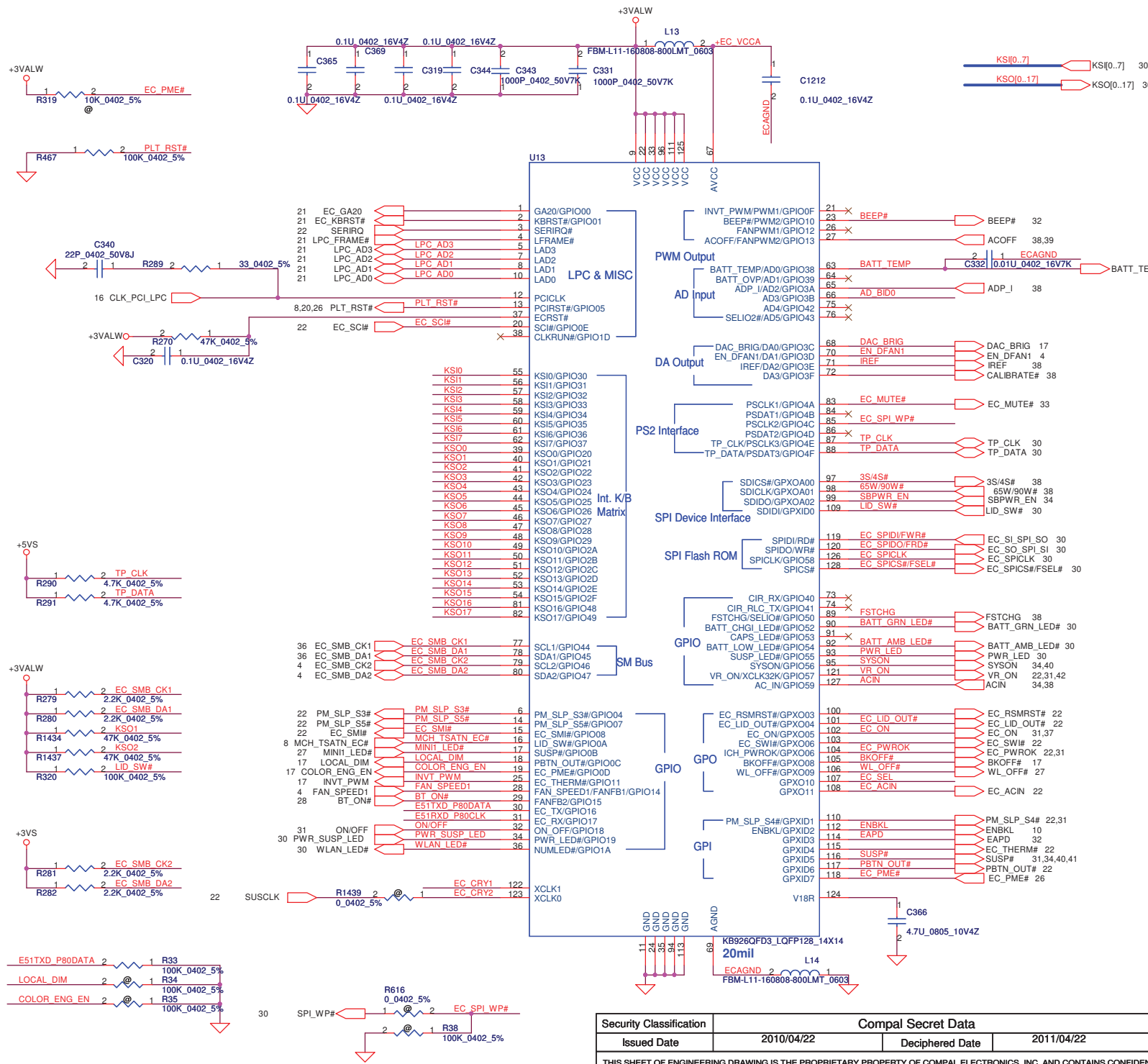
(Port 1,6)



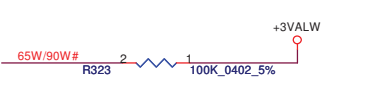
Bluetooth Conn.



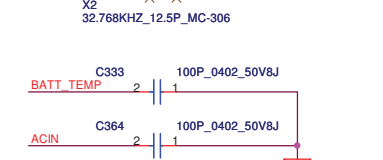
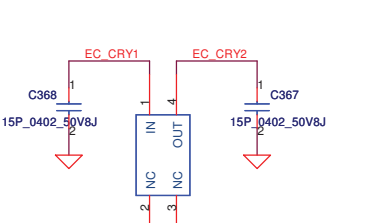
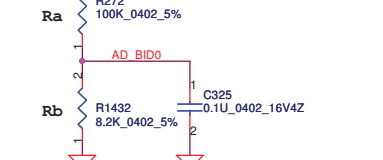
Security Classification				Compal Secret Data				Compal Electronics, Inc.			
Issued Date				2010/04/22				Deciphered Date			
2010/04/22				2011/04/22				Title			
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF FACTS				Document Number				Rev			
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.				PEW72/82 M/B LA-6631P Schematic				1.0			
Date				Thursday, July 08, 2010				Sheet			
				28				of			
				44							



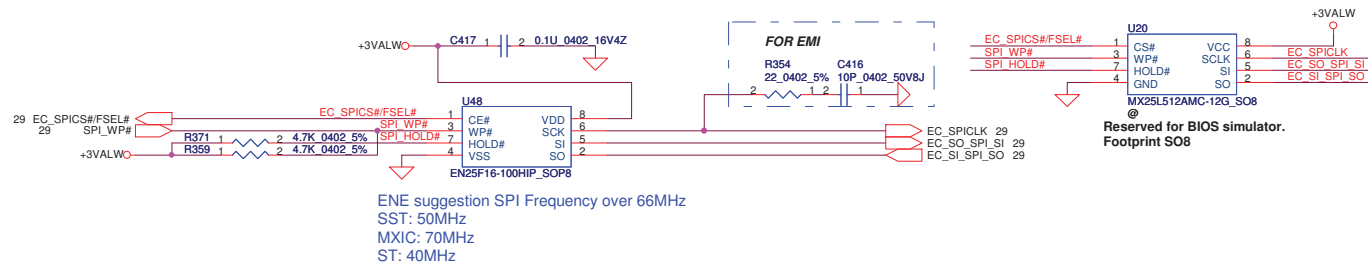
EC_SEL	EC_VERSION
HIGH	KB926D3
LOW	KB926E0



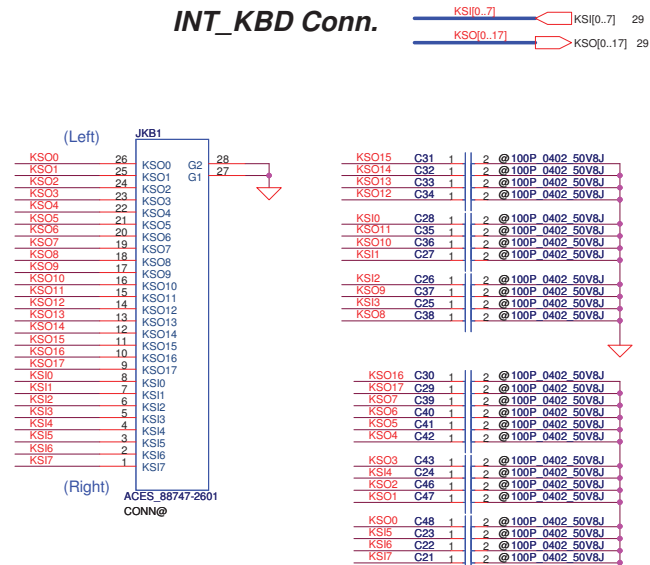
Analog Board ID definition, Please see page 3.



Security Classification		Compal Secret Data				Compal Electronics, Inc.					
Issued Date		2010/04/22		Deciphered Date		2011/04/22		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.						EC ENE KB926					
						Size	Document Number			Rev	
						B	PEW72/82 M/B LA-6631P Schematic			1.0	
						Date:	Thursday, July 08, 2010		Sheet	29 of 44	

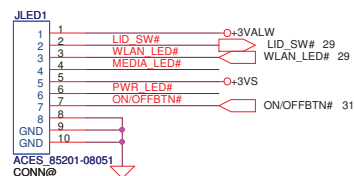


INT_KBD Conn.

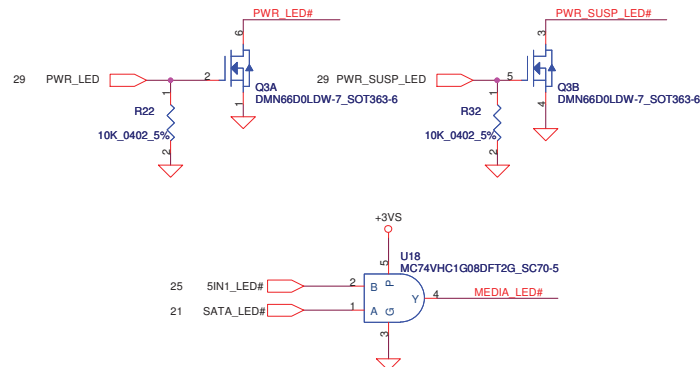
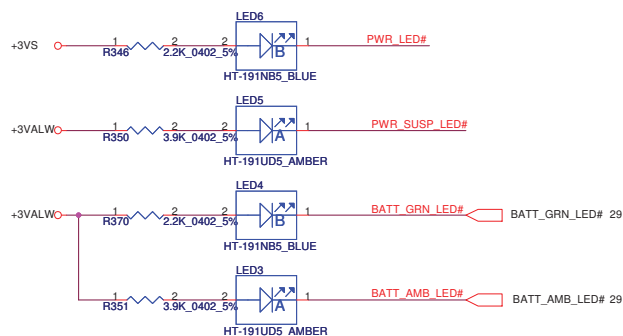
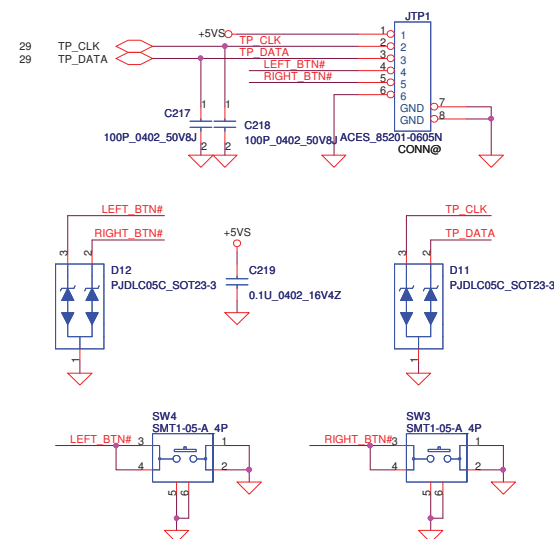


LS-6582

Power/B



To TP/B Conn.

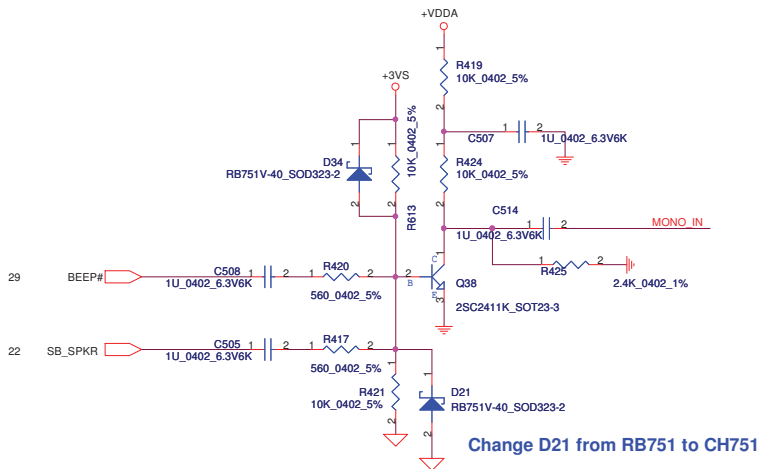


Security Classification		Compal Secret Data		Compal Electronics, Inc.			
Issued Date		2010/04/22		Deciphered Date		2011/04/22	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF RESEARCH AND DEVELOPMENT 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			
				BIOS, I/O Port & K/B Connector			
				Document Number			
				PEW72/82 M/B LA-6631P Schematic			
				Rev 1.0			
Date:		Thursday, July 08, 2010		Sheet		30 of 44	

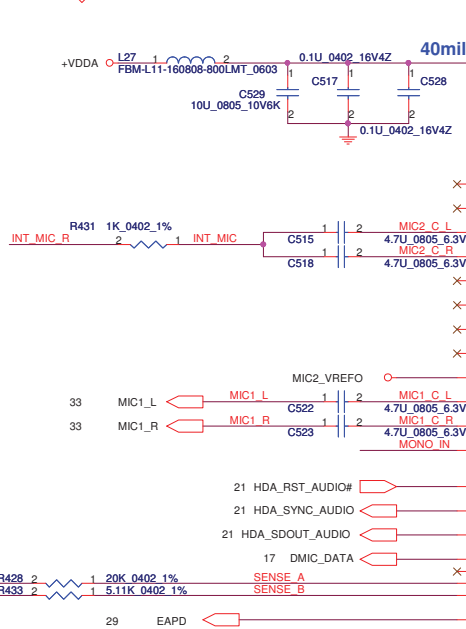
ON/OFF switch



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/04/22	Deciphered Date	2011/04/22	Title	Power OK, Reset
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 FIRST 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.				Document Number	Rev 1.0
				PEW72/82 M/B LA-6631P Schematic	
Date	Thursday, July 08, 2010	Sheet	31	of	44

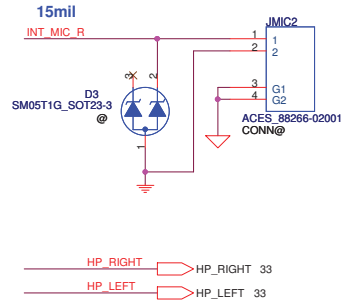
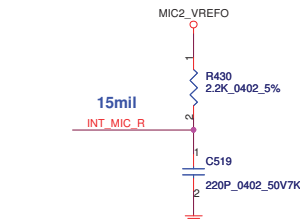
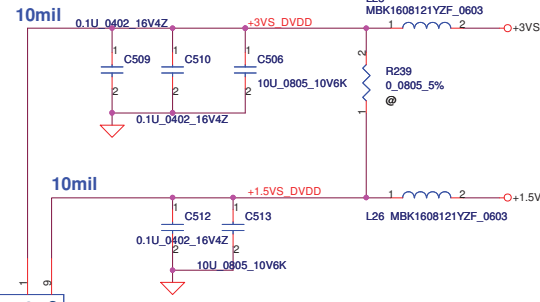
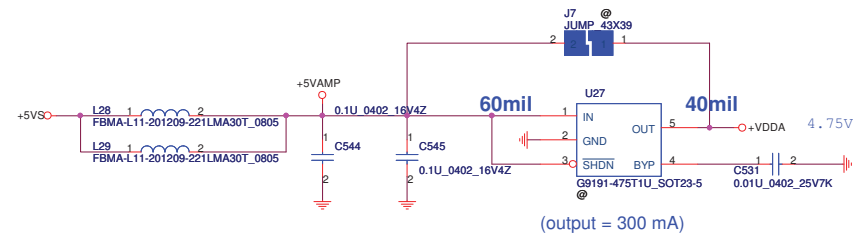


HD Audio Codec

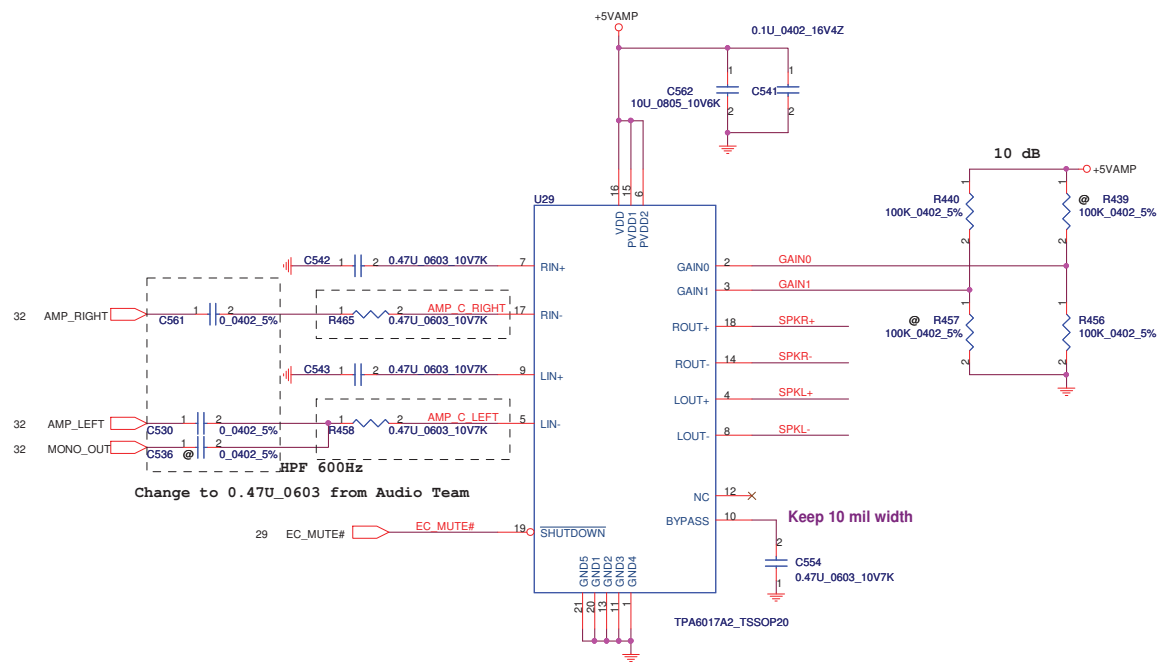


DGND

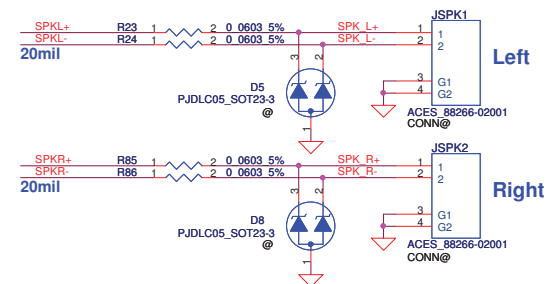
AGND



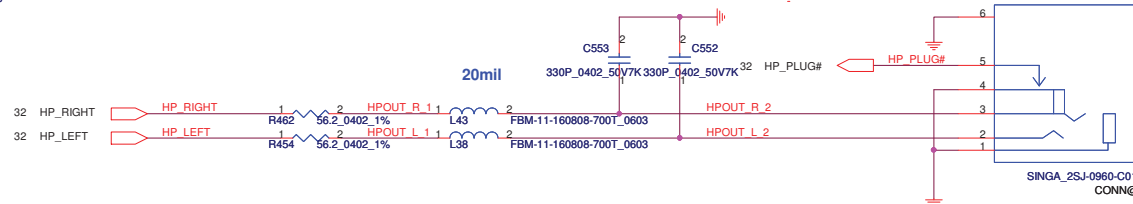
Sense Pin	Impedance	Codec Signals
SENSE A	39.2K	PORT-B (PIN 21, 22)
	20K	
	10K	
	5.1K	
SENSE B	39.2K	PORT-H (PIN 32,33)
	20K	
	10K	
	5.1K	



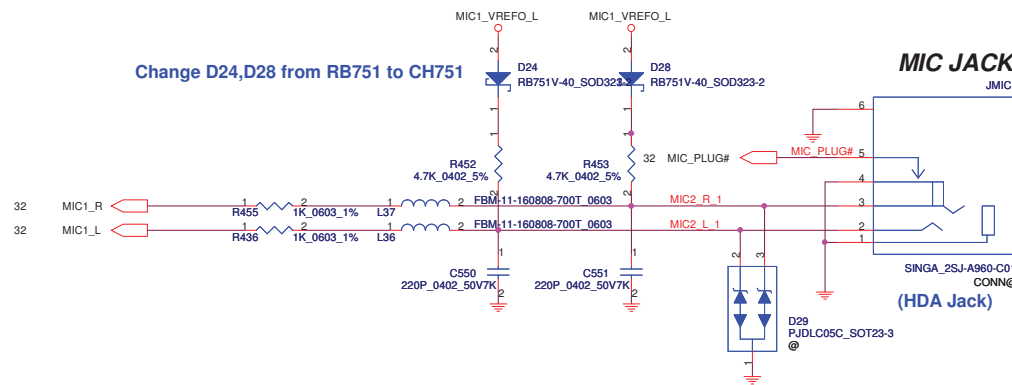
Int. Speaker Conn.



LINE Out/Headphone Out



Change D24,D28 from RB751 to CH751



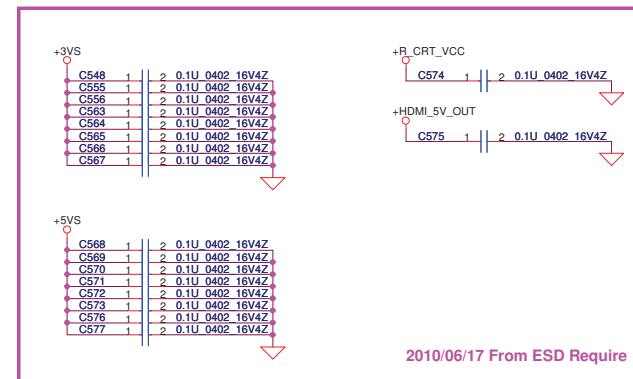
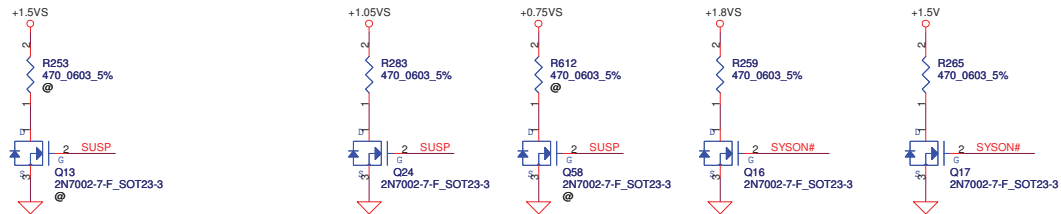
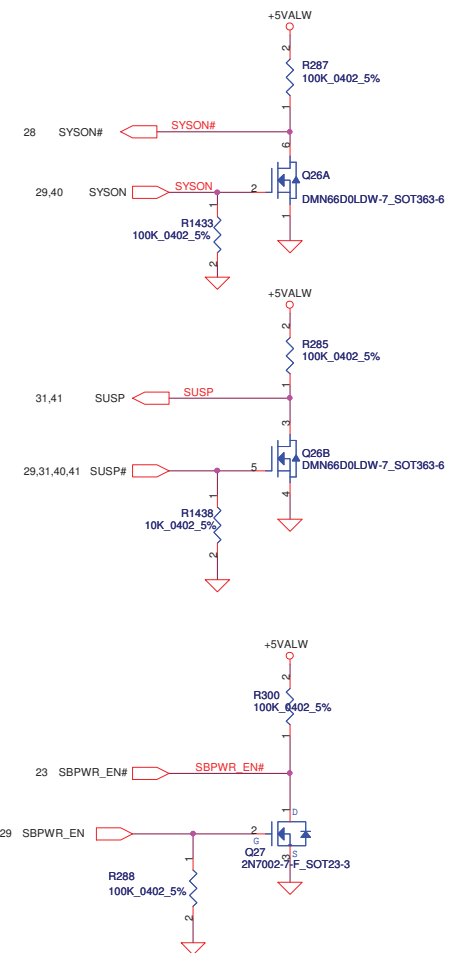
Security Classification				Compal Secret Data				Compal Electronics, Inc.			
Issued Date		2010/04/22		Deciphered Date		2011/04/22		Title		Document Number	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF PRODUCT DEVELOPMENT 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.								PEW72/82 M/B LA-6631P Schematic		Rev	
Date:		Friday, July 09, 2010		Sheet		33		of		44	

[illegible]

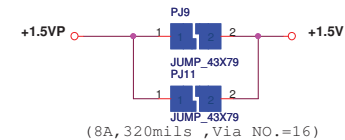
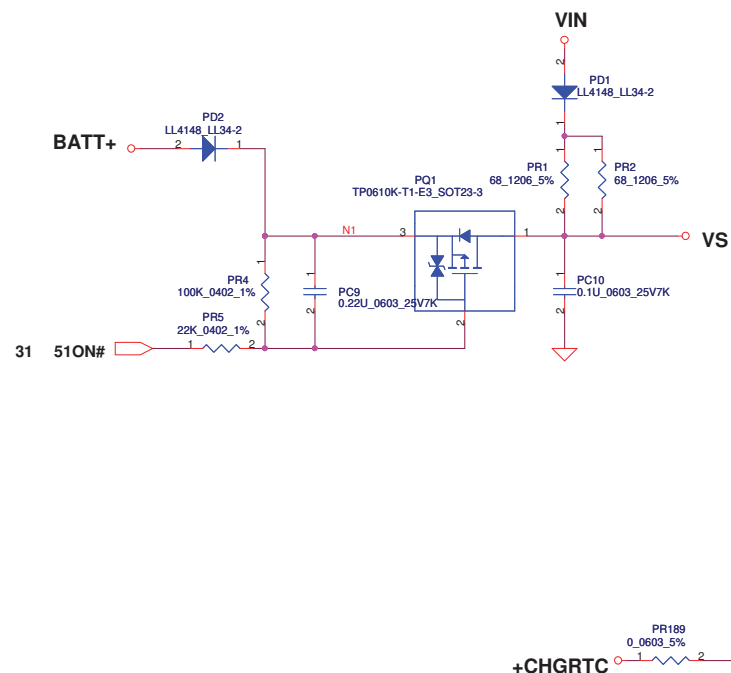
The schematic diagram illustrates the AP4800-SC8 driver circuit. The AP4800-SC8 is a half-bridge driver IC with pins for VDD, GND, S, D, and G. The circuit is powered by a 3V3W supply and a 3V3_GATE signal. The output stage consists of two MOSFETs, Q32A and Q32B, which are DMN66D0LDW-7_SOT363-6. The gate of Q32A is driven by the 3V3_GATE signal through a 270K resistor (R385). The gate of Q32B is driven by the 3V3_GATE signal through a 470 resistor (R386). The drain of Q32A is connected to the drain of Q32B, which is connected to the load. The source of Q32A is connected to ground through a 0.1uF capacitor (C391). The source of Q32B is connected to ground through a 0.1uF capacitor (C391). The circuit also includes several decoupling capacitors: C430 (10uF_0605_10V6K), C429 (10uF_0605_10V6K), C437 (10uF_0605_10V6K), and C436 (1uF_0603_10V6K).

[illegible]

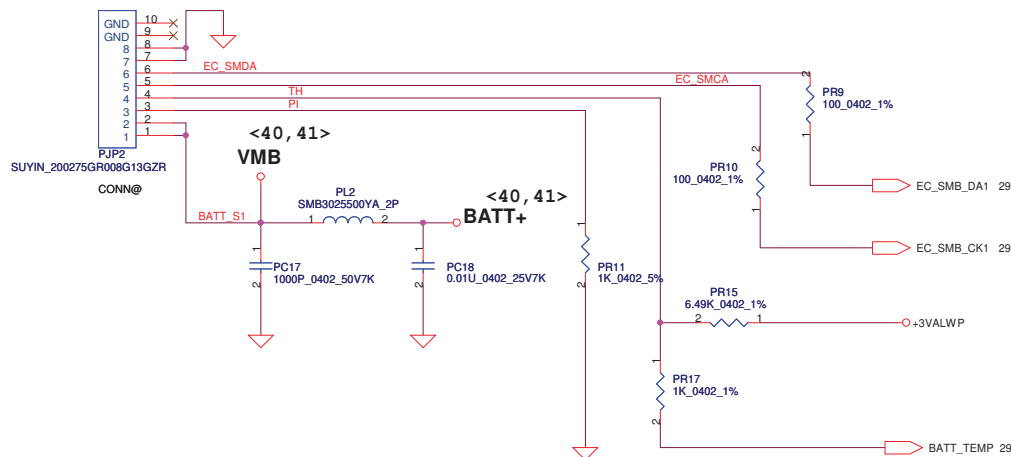
The schematic diagram shows the power supply section of the 2N7002-F-F_SOT23-3. It includes a +1.5V input, a +1.5VS input, and a +VSB input. The circuit features a voltage divider (R244, R267), a MOSFET (Q43A), a MOSFET (Q29), and various capacitors (C309, C313, C315, C310, C314). The output is labeled 29,38 ACIN.



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/04/22	Deciphered Date	2011/04/22	Title	DC Interface
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 THE 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.				Doc Number	Rev
				PEW72/82 M/B LA-6631P Schematic	1.0
Date:	Thursday, July 08, 2010	Sheet	34	of	44

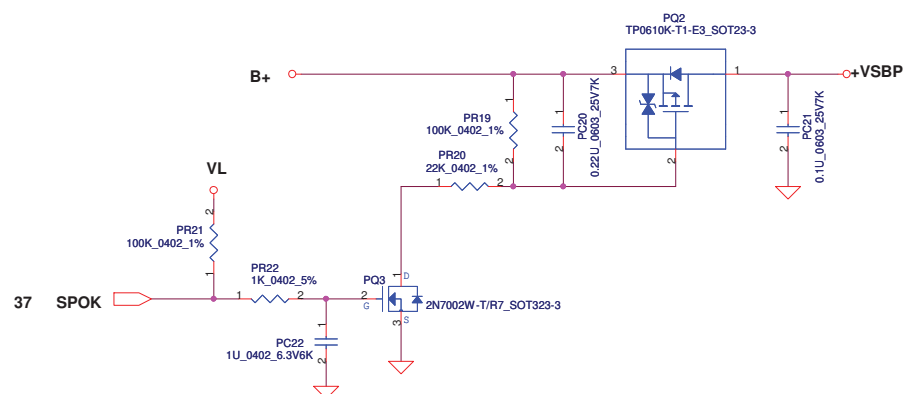
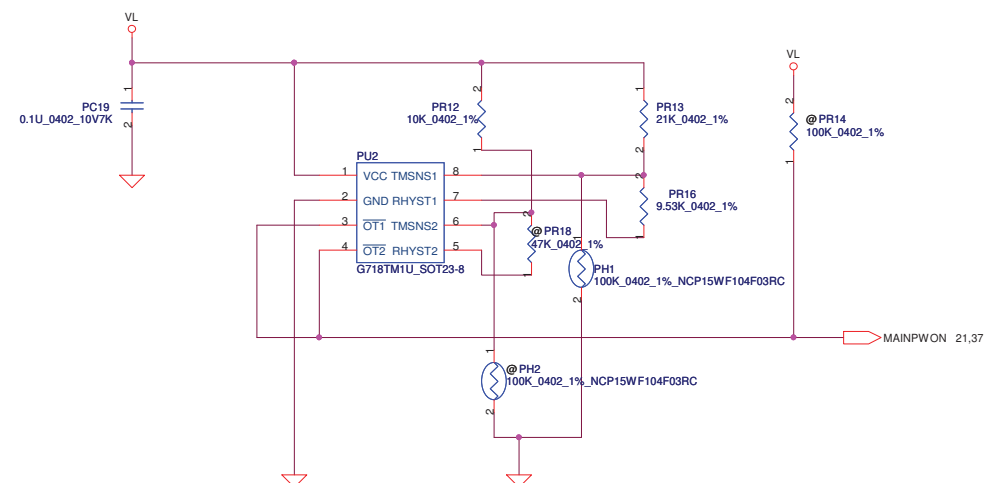


THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS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



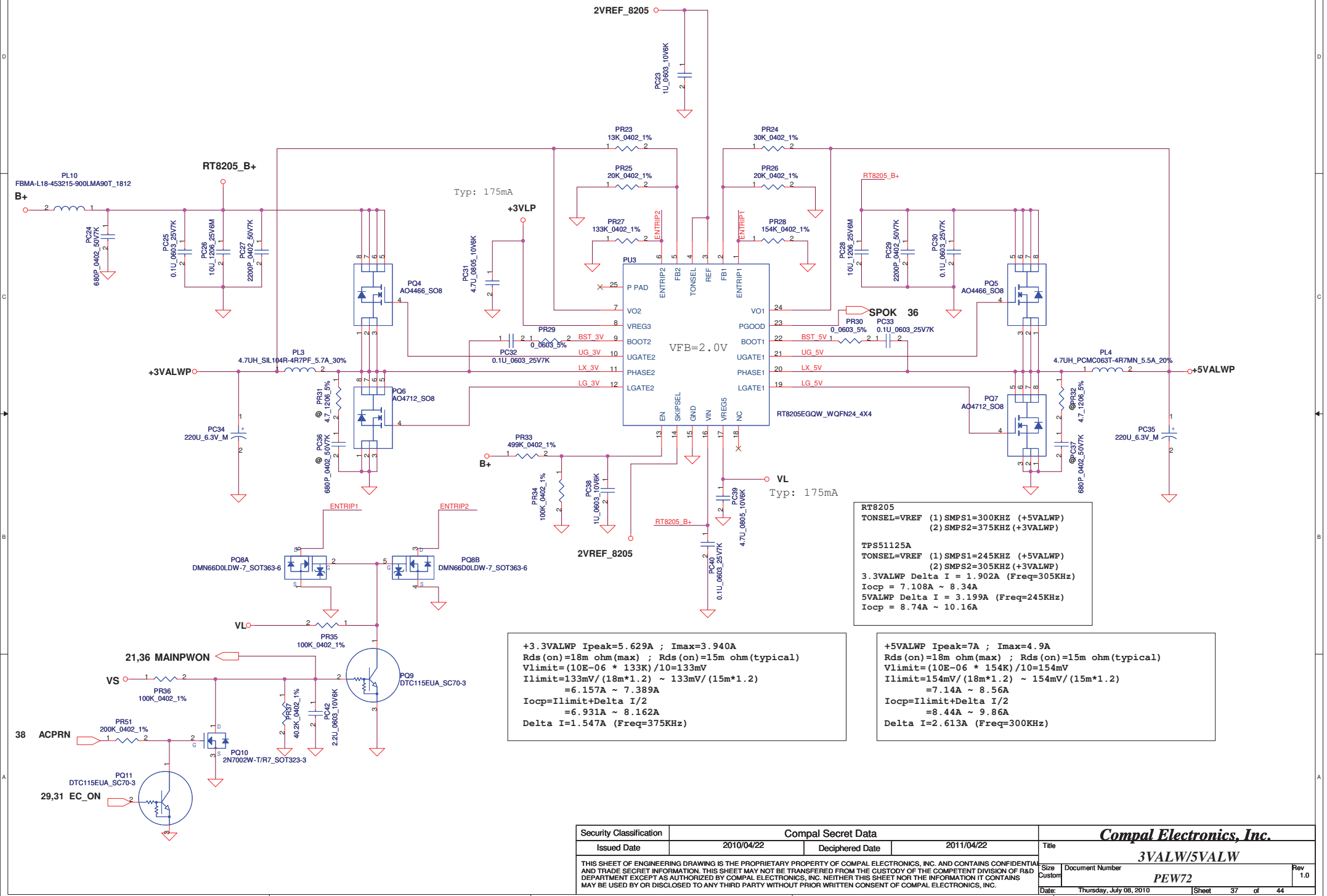
PH1 under CPU botten side :

CPU thermal protection at 92 degree C
Recovery at 56 degree C



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/04/22	Deciphered Date	2011/04/22	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
				Custom	PEW72
				Date:	Thursday, July 08, 2010
				Sheet	36 of 44
				Rev	1.0

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

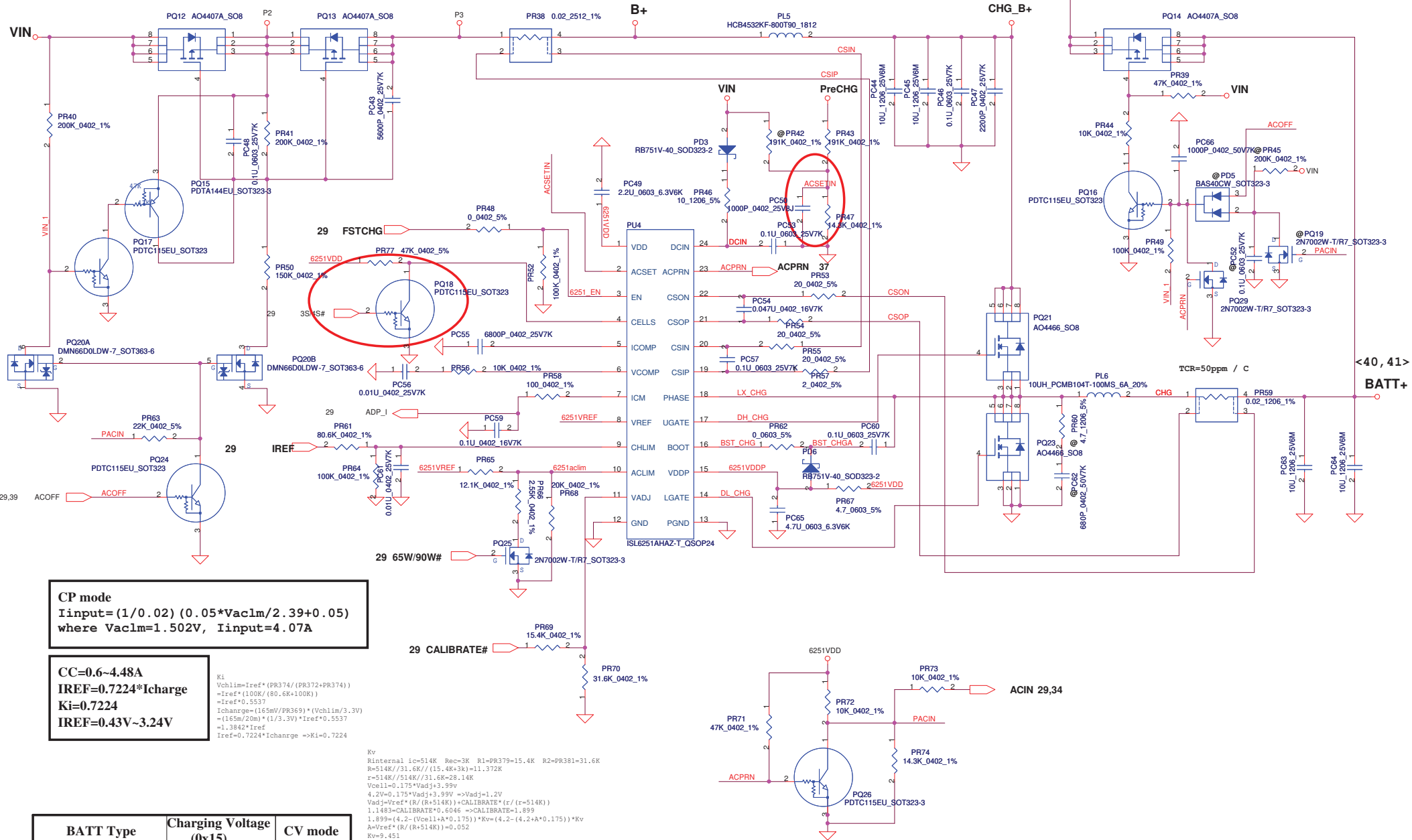


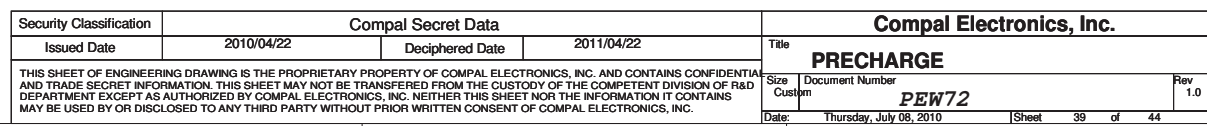
Security Classification		Compal Secret Data		Title	
Issued Date		Deciphered Date		2010/04/22	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT 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.		2011/04/22		Compal Electronics, Inc.	
Size		Document Number		3VALW/5VALW	
Custom		PEW72		Rev 1.0	
Date:		Thursday, July 08, 2010		Sheet 37 of 44	

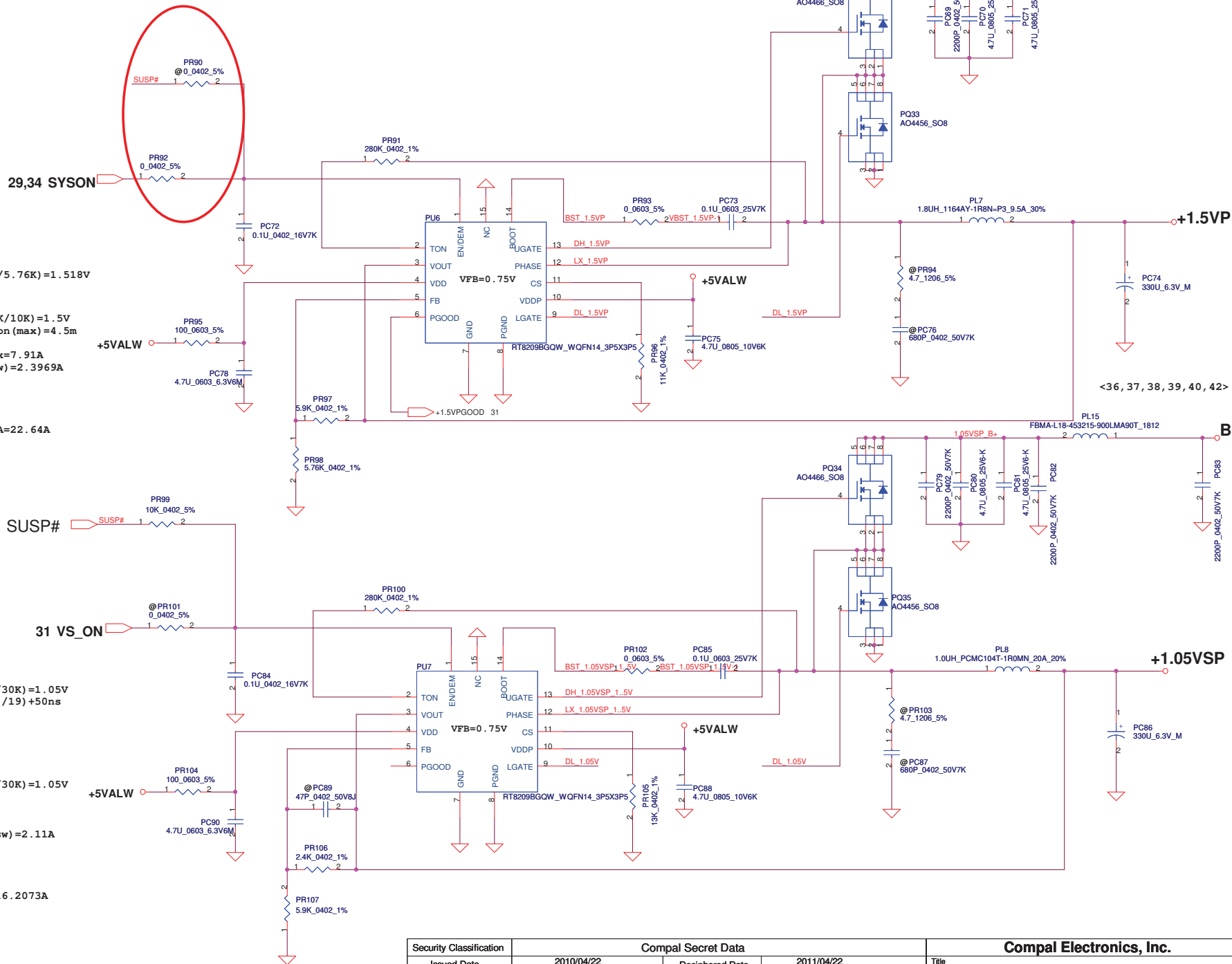
Iada=0~4.74A (90W/19V=4.736A)
Iada=0~3.42A (90W/19V=3.421A)

ADP_I = 19.9*Iadapter*Rsense

CP = 85%*Iada ; CP = 4.07A
CP = 85%*Iada ; CP = 2.91A





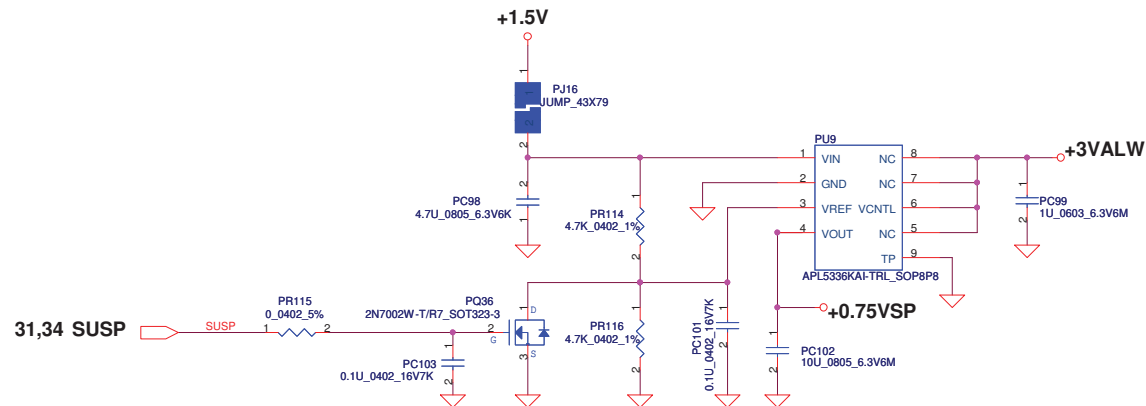
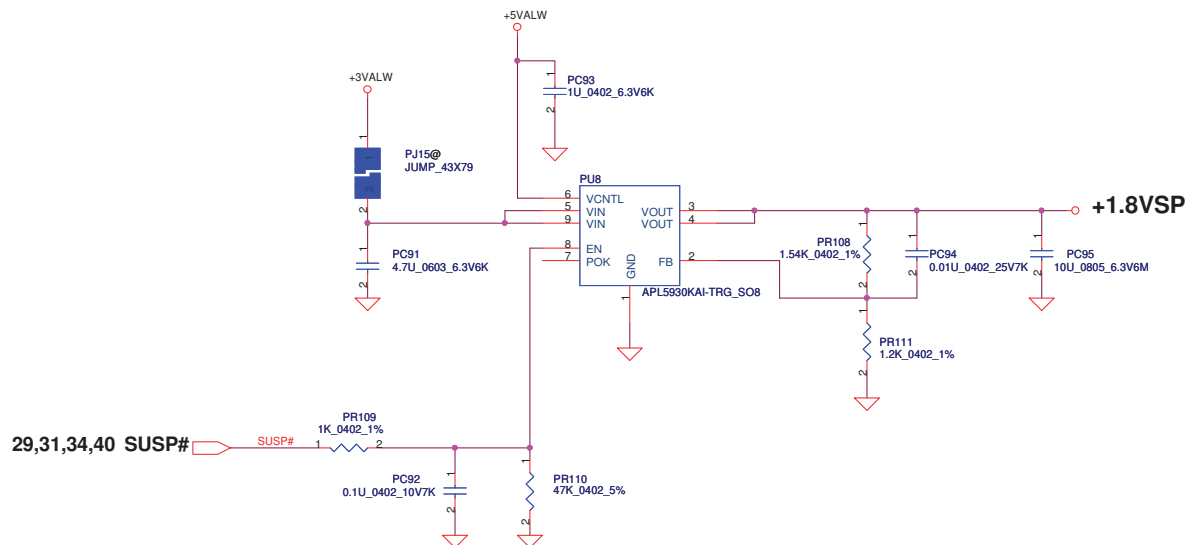


VFB=0.75V
 $V_o = VFB * (1 + PR97/PR98) = 0.75 * (1 + 5.9K/5.76K) = 1.518V$
 $F_{sw} = 282KHz$
 $<V_o = 1.5V>$ VFB=0.75V
 $V_o = VFB * (1 + PR116/PR117) = 0.75 * (1 + 10K/10K) = 1.5V$
 $F_{sw} = 262KHz$ Cout ESR=15m ohm Rdson(max)=4.5m
 Rdson(min)=5.6m
 $I_{peak} = 11.3A$, $1.2I_{peak} = 13.56A$, $I_{max} = 7.91A$
 $\Delta I = ((19 - 1.5) * (1.5/19)) / (L * F_{sw}) = 2.3969A$
 $\Rightarrow 1/2 \Delta I = 1.198A$
 $V_{trip} = R_{trip} * I_{0uA} = 18K * 10uA = 0.18V$
 $I_{ocpmin} = V_{trip} / Rdsonmax * 1.2 + 1.198 = 0.075 / (0.018 * 1.3) + 1.198 = 13.98A$
 $I_{ocpmax} = (0.075 / (0.015 * 1.1)) + 1.198A = 22.64A$
 $I_{ocp} = 13.98 \sim 22.64A$

VFB=0.75V
 $V_o = VFB * (1 + PR108/PR109) = 0.75 * (1 + 12K/30K) = 1.05V$
 $Ton = 19 * e^{-12 * 143000} / ((2/3) * V_o + 100mV) / 19 + 50ns = 2.645e-7 us$
 $\Rightarrow V_o / Vin = D = Ton / Ts \Rightarrow Ts = 3.35us$
 $F_{sw} = 261KHz$ (by calculation tool)

$<V_o = 1.05V>$ VFB=0.75V
 $V_o = VFB * (1 + PR108/PR109) = 0.75 * (1 + 12K/30K) = 1.05V$
 $F_{sw} = 261KHz$ Cout ESR=15m ohm
 Rdson(max.)=11.5m Rdson(min)=9m
 $I_{peak} = 9A$, $I_{max} = I_{peak} * 0.7 = 6.3A$
 $\Delta I = ((19 - 1.05) * (1.05/19)) / (L * F_{sw}) = 2.11A$
 $\Rightarrow 1/2 \Delta I = 1.055A$
 $V_{trip} = R_{trip} * I_{0uA} = 15K * 10uA = 0.15V$
 $I_{ocpmin} = V_{trip} / Rdsonmax * 1.3 + 1.055 = 0.15 / (0.011 * 1.3) + 1.055 = 11.0892A$
 $I_{ocpmax} = (0.15 / (0.009 * 1.1)) + 1.055A = 16.2073A$
 $I_{ocp} = 11.0892A \sim 16.2073A$

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/04/22	Deciphered Date	2011/04/22	Title	1.5VP / 1.05VSP
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
				Custom	PEW72
				Date	Thursday, July 08, 2010
				Sheet	40 of 44
				Rev	1.0



Security Classification	Compal Secret Data			Compal Electronics, Inc.		
Issued Date	2010/04/22	Deciphered Date	2011/04/22	Title	+1.5VP/+1.8VSP/+1.0VSDGPU	
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	PEW72	1.0
				Date:	Thursday, July 08, 2010	Sheet 41 of 44

Item	Fixed Issue	Reason for change	Rev.	PG#	Modify List	Date	Phase
1	add 3S/4S pin function	add 4 cell battery	0.2	45	add PQ18 PUTC115EU_SOT323 (SB301150200) and PR77 47K +-5% 0402 (SD028470280)	2010/06/11	EVT
2	ACSETIN net	ACSETIN net no connect	0.2	45		2010/06/11	EVT
3	1.5V enable	1.5V enable BOM error	0.2	45	add PR92 and delete PR90 0_0402_5% (SD028000080)	2010/06/11	EVT
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
16							
17							

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/04/22	Deciphered Date	2011/04/22	Title PIR (PWR)	
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 PEW72/82 M/B LA-6631P Schematic
				Date: Thursday, July 08, 2010	Rev 1.0
				Sheet 43	of 44

A --> C Change List

- 20100622-----
1. Change U48 to SA00002KI00 (EON EN25F16-100HIP)
2. Populate D11, D12
3. Populate R132, C194, R136, C225, R354, C416
- 20100618-----
1. Page 30, For EMI reuqire populate C31, C32, C33, C34, C28, C35, C36, C27, C30, C29, C39, C40, C41, C42, C43, C24, C46, C47, C48 C23, C22, C21
2. Page 12, Populate C483
- 20100617-----
1. Add T19, T25 for boundary scan (CIT Factory)
2. Page 34, Add 0.1U_0402_16V4Z x 16 for +3VS/+5VS/+R_CRT_VCC/+HDMI_5V_OUT
C548, C555, C556, C563, C564, C565, C566, C567, C568, C569, C570, C571, C572, C573, C574, C575, C576, C577
3. Page 29, Reserved R38, R616 for SPI_WP#
- 20100615-----
1. Page22, Add C745 for USB_OC#1_6 at chipset side.
2. Page28, Change C744 BOM Structure to @
- 20100614-----
1. Page29, Change U13 to KB926QFD3 (SA00001J580)
Change R1432 to 8.2K_0402_5% (SD028820180)
2. Page16, Change U16 to ICS9LPRS387 (SA000020H10)
Change BOM Structure of L33 and R401 to @
Populate L32 and R400
3. Page31, Change BOM Structure of SW1 and SW2 to @
4. Change U7, U8, U43 to MC74VHC1G08DFT2G (SA000000H00)
5. Update Power Schematics

C --> MP Change List

- 20100709-----
1. Page33, Change C561, C530, C536 to 0 ohm (SD028000080)
Change R465, R458 to 0.47U_0603 (SE080474K80)
- 20100708-----
1. Page28, Unpopulate D23 (follow ESD suggestion)
- 20100706-----
1. Page29, Populate R289 and C340.
2. Page30, Unpopulate C21 ~ C43 and C46 ~ C48.

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date		2010/04/22		Deciphered Date	
2010/04/22		2011/04/22		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 TRANSFERED 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		PEW72/82 M/B LA-6631P Schematic		Rev	
Date:		Friday, July 09, 2010		Sheet	
		44		of	
				44	
				1.0	

www.s-manuals.com