MODEL NAME : *QAZA0*

PCB NO : *LA-8821P (DAB00000B00)*

ZZZ
MB_PCB

BOM P/N :

4619J831L01 -> i5, 1.7G, DDR3L-4GB
4619J831L02 -> i5, 1.7G, DDR3L-8GB
4619J831L03 -> i7, 1.9G, DDR3L-4GB
4619J831L04 -> i7, 1.9G, DDR3L-8GB
4619J831L06 -> i5, 1.8G, DDR3L-4GB
4619J831L07 -> i5, 1.8G, DDR3L-8GB
4619J831L08 -> i7, 2.0G, DDR3L-4GB
4619J831L09 -> i7, 2.0G, DDR3L-8GB
4619J831L10 -> i5, 1.8G, DDR3L-4GB-NT
4619J831L11 -> i5, 1.8G, DDR3L-8GB-NT
4619J831L12 -> i7, 2.0G, DDR3L-4GB-NT
4619J831L13 -> i7, 2.0G, DDR3L-8GB-NT
4619J831L14 -> i5, 1.7G, DDR3L-4GB-NT
4619J831L15 -> i5, 1.7G, DDR3L-8GB-NT
4619J831L16 -> i7, 1.9G, DDR3L-4GB-NT
4619J831L17 -> i7, 1.9G, DDR3L-8GB-NT

Dell/Compal Confidential

Schematic Document

Murcielgo (Chief River SFF)

Ivy Bridge(BGA) + Panther Point(SFF, QS77)

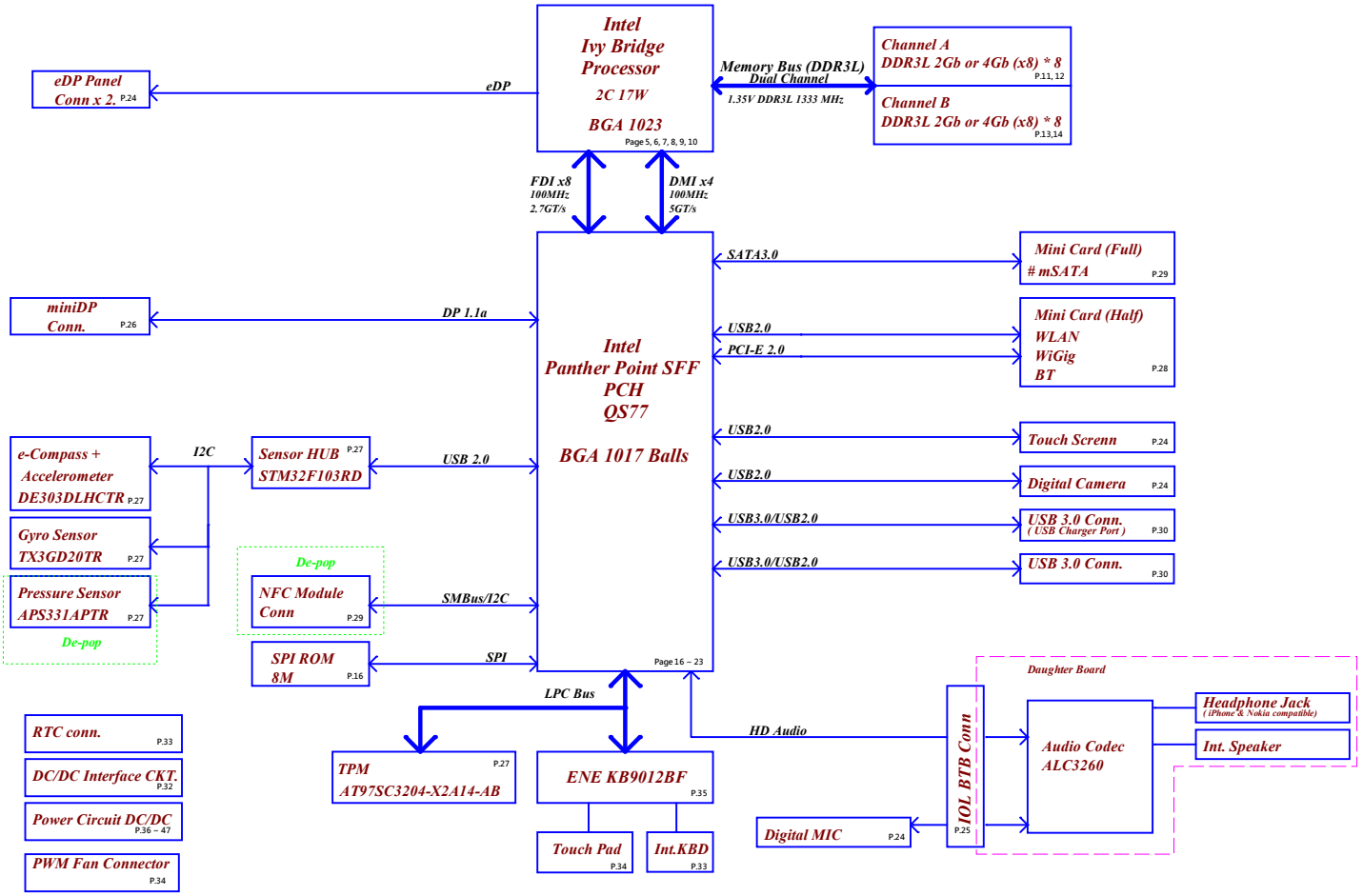
2012-08-21

Rev: 1.0

Highlight the short pad for 0 ohm

Security Classification	Compal Secret Data		
Issued Date	2011/06/02	Deciphered Date	2013/10/28

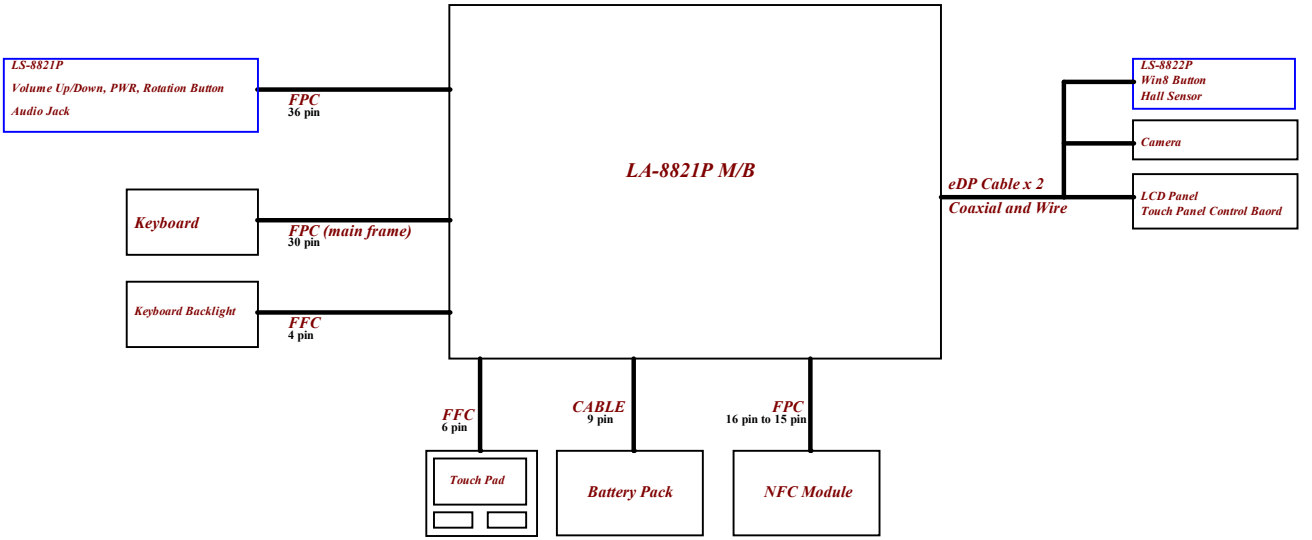
Compal Electronics, Inc.		
Title: P01-Cover Page		
Size	Document Number: LA-8821P	Rev: 1.0
Date: Friday, September 28, 2012	Sheet 1 of 54	



Security Classification	Compal Secret Data		
Issued Date	2011/02/23	Deciphered Date	2013/10/28

Compal Electronics, Inc.			
Title	P02-Block Diagram		
Size	Document Number		Rev
	LA-8821P		1.0
Date:	Friday, September 28, 2012	Sheet	2 of 54

Project Code : QAZA0
File Name : LA-8821P



Security Classification	Compal Secret Data		
Issued Date	2011/06/02	Deciphered Date	2013/10/28

Compal Electronics, Inc.			
Title	P03-DaughterB block diagram		
Size	Document Number		Rev 1.0
Date: Friday, September 28, 2012	Sheet 3 of 54		

Board ID Table for AD channel

Vcc	3.3V +/- 5%
Ra	100K +/- 5%

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

BOARD ID Table

Board ID	PCB Revision
0	0.1 Non Deep S3
1	0.1 Deep S3
2	0.2 (X01)
3	0.4 (X02)
4	1.0 (A00)
5	
6	
7	

SMBUS Control Table

	SOURCE	WLAN	BATT	Charger	NFC	Touch Pad	DDR3 SPD	ALS
EC_SMB_CK1 EC_SMB_DA1	KB930		V	V				
EC_SMB_CK2 EC_SMB_DA2	KB930							V
PCH_SML0CLK PCH_SML0DATA	PCH				V			
PCH_SML1CLK PCH_SML1DATA	PCH							
MEM_SMBCLK MEM_SMBDATA	PCH	V				V	V	

Link

PCH USB Port Mapping

USB PORT#	DESTINATION
0	External USB3
1	External USB3
2	
3	
4	MINI CARD-1 WLAN
5	
6	
7	
8	
9	Touch Panel
10	
11	
12	Camera
13	Sensor HUB

PCH DDI Port Mapping

DDI PORT#	DESTINATION
B	
C	
D	mini-DP

CLK

DIFFERENTIAL	DESTINATION
CLKOUT_PCIE0	
CLKOUT_PCIE1	
CLKOUT_PCIE2	
CLKOUT_PCIE3	MINI CARD-1 WLAN
CLKOUT_PCIE4	
CLKOUT_PCIE5	
CLKOUT_PCIE6	
CLKOUT_PCIE7	
CLKOUT_PEG_B	

FLEX CLOCKS	DESTINATION
CLKOUTFLEX0	TPM
CLKOUTFLEX1	
CLKOUTFLEX2	
CLKOUTFLEX3	
PCI CLKOUT	DESTINATION
PCI0	PCH_LOOPBACK
PCI1	EC LPC
PCI2	
PCI3	
PCI4	

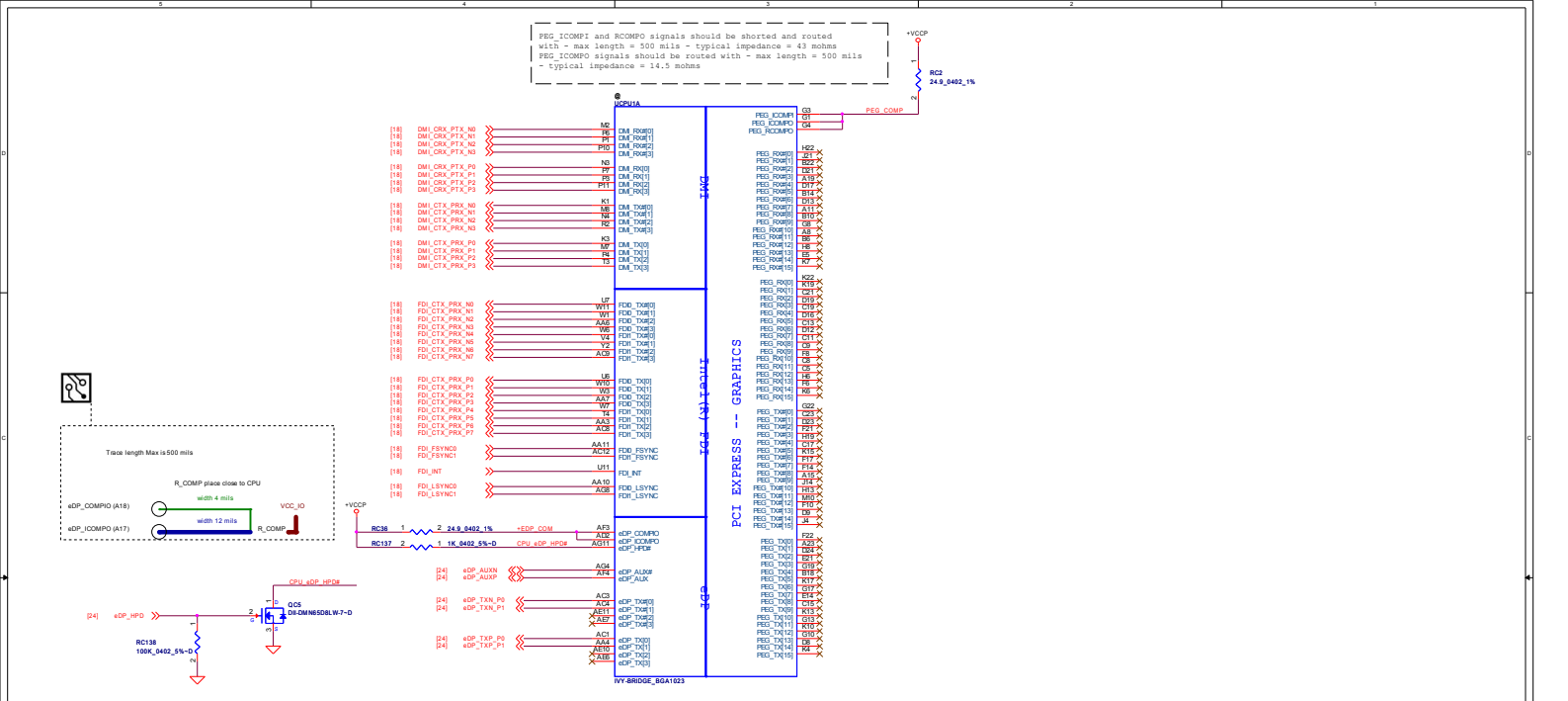
SATA	DESTINATION
SATA0	m-SATA
SATA1	
SATA2	
SATA3	
SATA4	
SATA5	

PCI EXPRESS	DESTINATION
Lane 1	
Lane 2	
Lane 3	MINI CARD-1 WLAN
Lane 4	
Lane 5	
Lane 6	
Lane 7	
Lane 8	

Symbol Note :

: means Digital Ground

: means Analog Ground



Ivy Bridge i5-1.7G — UCPU1 — IVB1.7G — CPU_IVB1.7G@ — SA00005K63L for i5-3317U-1.7G

Ivy Bridge i5-1.8G — UCPU1 — IVB1.8G — CPU_IVB1.8G@ — SA00005L92L for i5-3427U-1.8G

Ivy Bridge i7-1.9G — UCPU1 — IVB1.9G — CPU_IVB1.9G@ — SA00005K53L for i7-3517U-1.9G

Ivy Bridge i7-2.0G — UCPU1 — IVB2.0G — CPU_IVB2.0G@ — SA00005LA2L for i7-3667U-2.0G

X764G — X764G1131L01 — X76_4G@

X768G — X764G1131L04 — X76_8G@

Security Classification	Compal Secret Data		
Issued Date	2011/06/02	Deciphered Date	2013/10/28

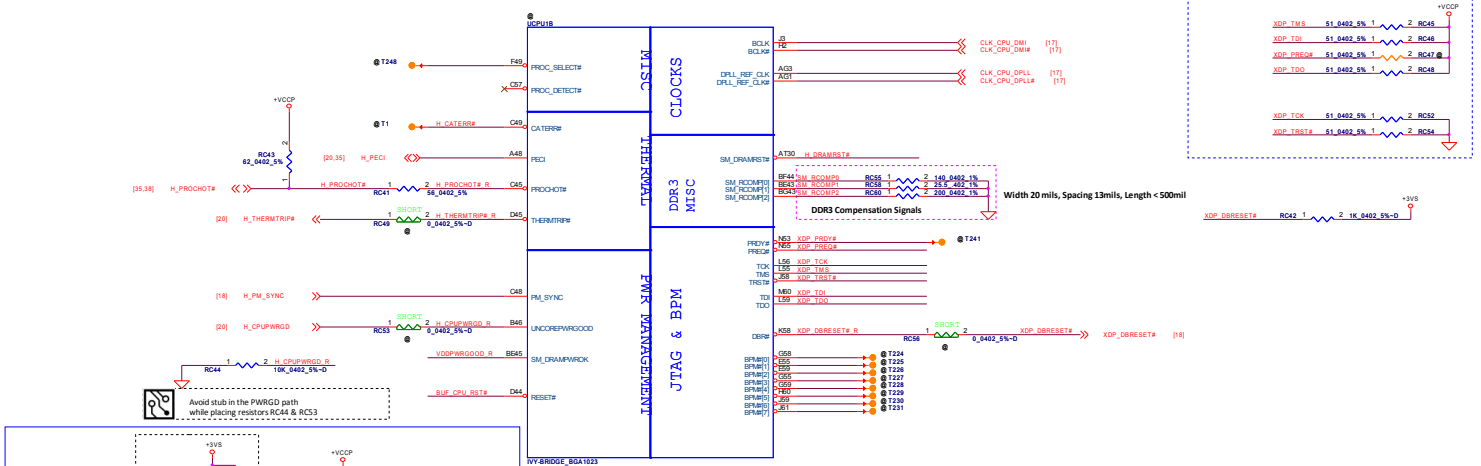
Compal Electronics, Inc.

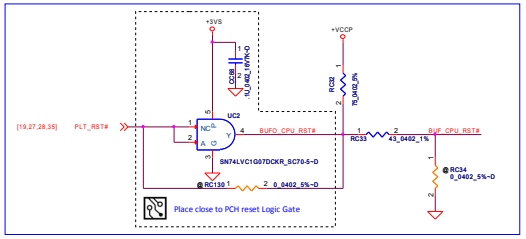
Title: P05-CPU(1/6) DMI,FDI,PEG

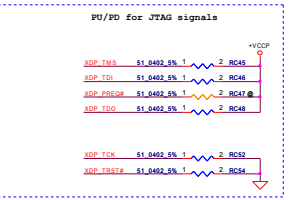
Size: — Document Number: LA-8821P — Rev: 1.0

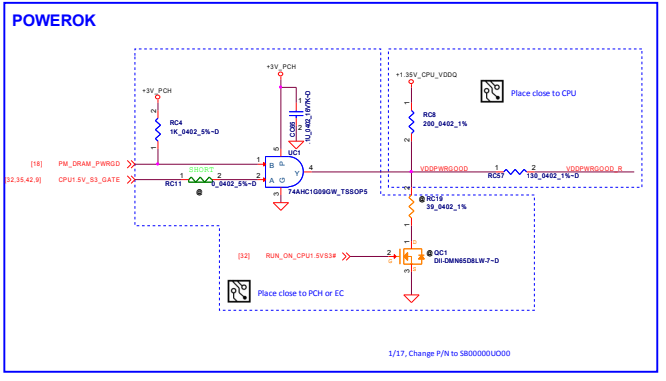
Date: Friday, September 28, 2012 — Sheet 5 of 54

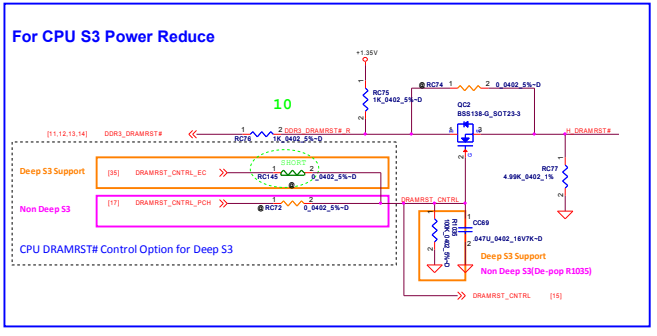
PM, XDP, CLK, S3 Reduce, PLTRST











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Issued Date	2011/06/02	Deciphered Date	2013/10/28

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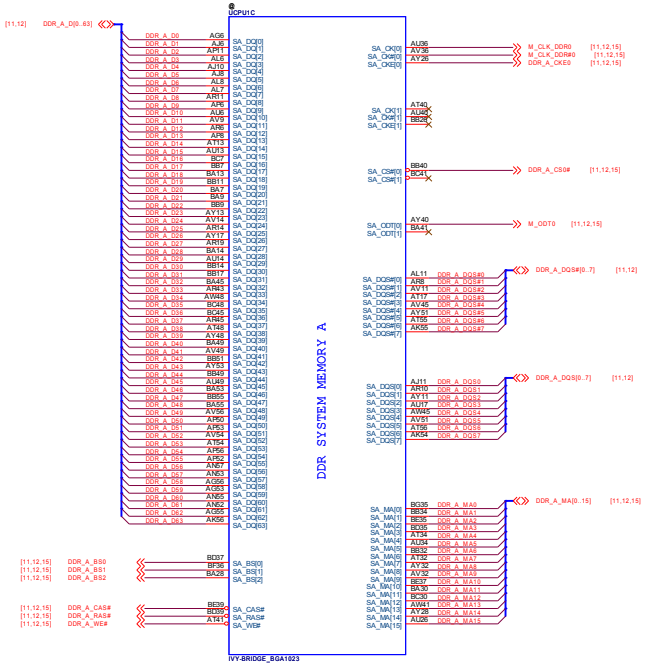
Compal Electronics, Inc.

Title: P06-CPU(2/6) PM,XDP,CLK,S3,PLT

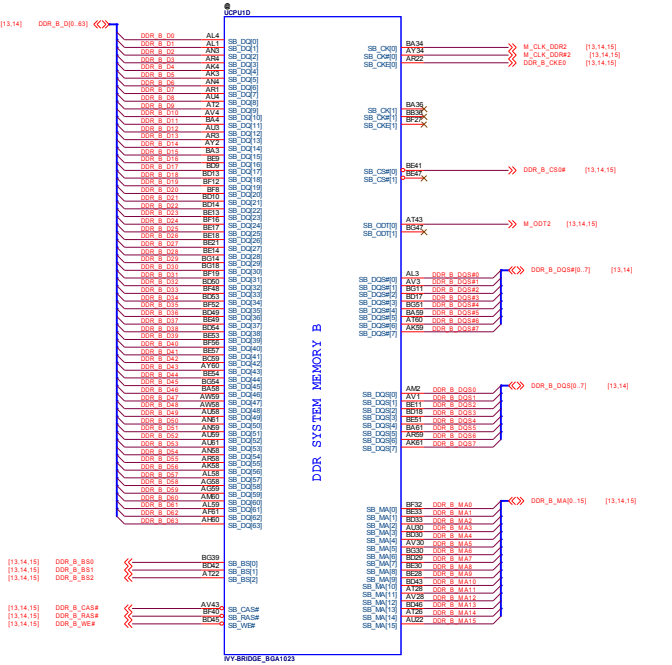
Size: | Document Number: LA-8821P | Rev: 1.0

Date: Friday, September 28, 2012 | Sheet 6 of 54

DDR structure 1R X 8



DDR structure 1R X 8



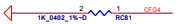
Security Classification	Compal Secret Data		
Issued Date	2011/06/02	Deciphered Date	2013/10/28

Compal Electronics, Inc.			
Title	P07-CPU(3/6) DDRIII		
Size	Document Number		Rev
	LA-8821P		1.0
Date: Friday, September 28, 2012		Sheet 7 of 54	

CFG Straps for Processor

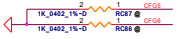
PEG Static Lane Reversal - CFG2 is for the 16x

CFG2	1:(Default) Normal Operation; Lane # definition matches socket pin map definition * 0:Lane Reversed



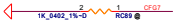
Display Port Presence Strap

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



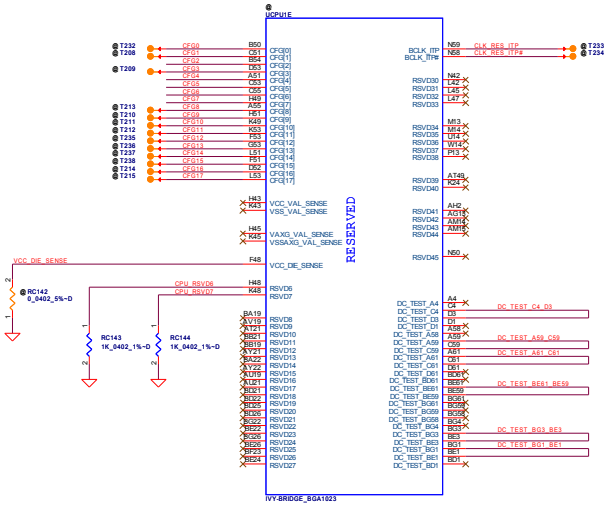
PCIE Port Bifurcation Straps

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



Security Classification	Compal Secret Data		
Issued Date	2011/06/02	Deciphered Date	2013/10/28

Compal Electronics, Inc.	
Title	P08-CPU(4/6) RSVD,CFG
Size	Document Number: LA-8821P
Rev	1.0
Date: Friday, September 28, 2012	Sheet 8 of 54

ULV-DC Icc(max)=33A

POWER

UCPU1F

CORE SUPPLY

PEG IO AND DDR IO

QUIET RAILS

SVID

SENSE LINES

IVY-BRIDGE_BGA1023

8.5A

ULV-DC GT2 29A
ULV-DC GT1 18A

POWER

UCPU1G

VREF

DDR3 - 1.5V RAILS

GRAPHICS

QUIET RAILS

SENSE LINES

1.8V RAIL

SA RAIL

VCCSA VID lines

IVY-BRIDGE_BGA1023

+V_SM_VREF should have 10 mil trace width

5A

1.2A

4A (ULV-DC)

11

Place the PU resistors close to CPU

Close to JCPU1

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Issued Date	2011/06/02	Deciphered Date	2013/10/28

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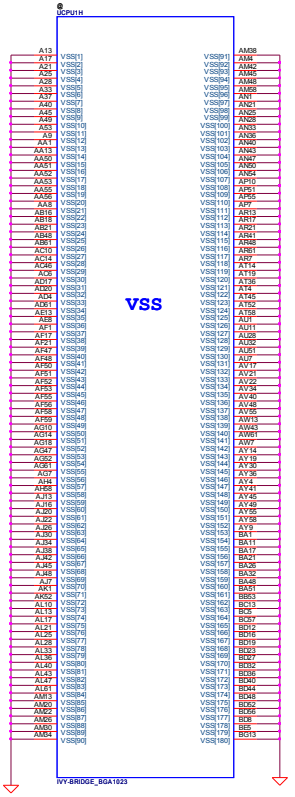
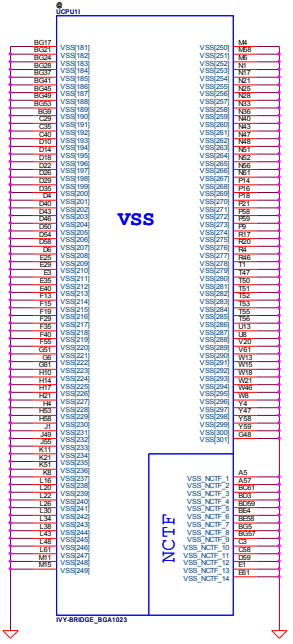
Compal Electronics, Inc.

Title: P09-CPU(5/6) PWR,BYPASS

Size: | Document Number: LA-8821P | Rev: 1.0

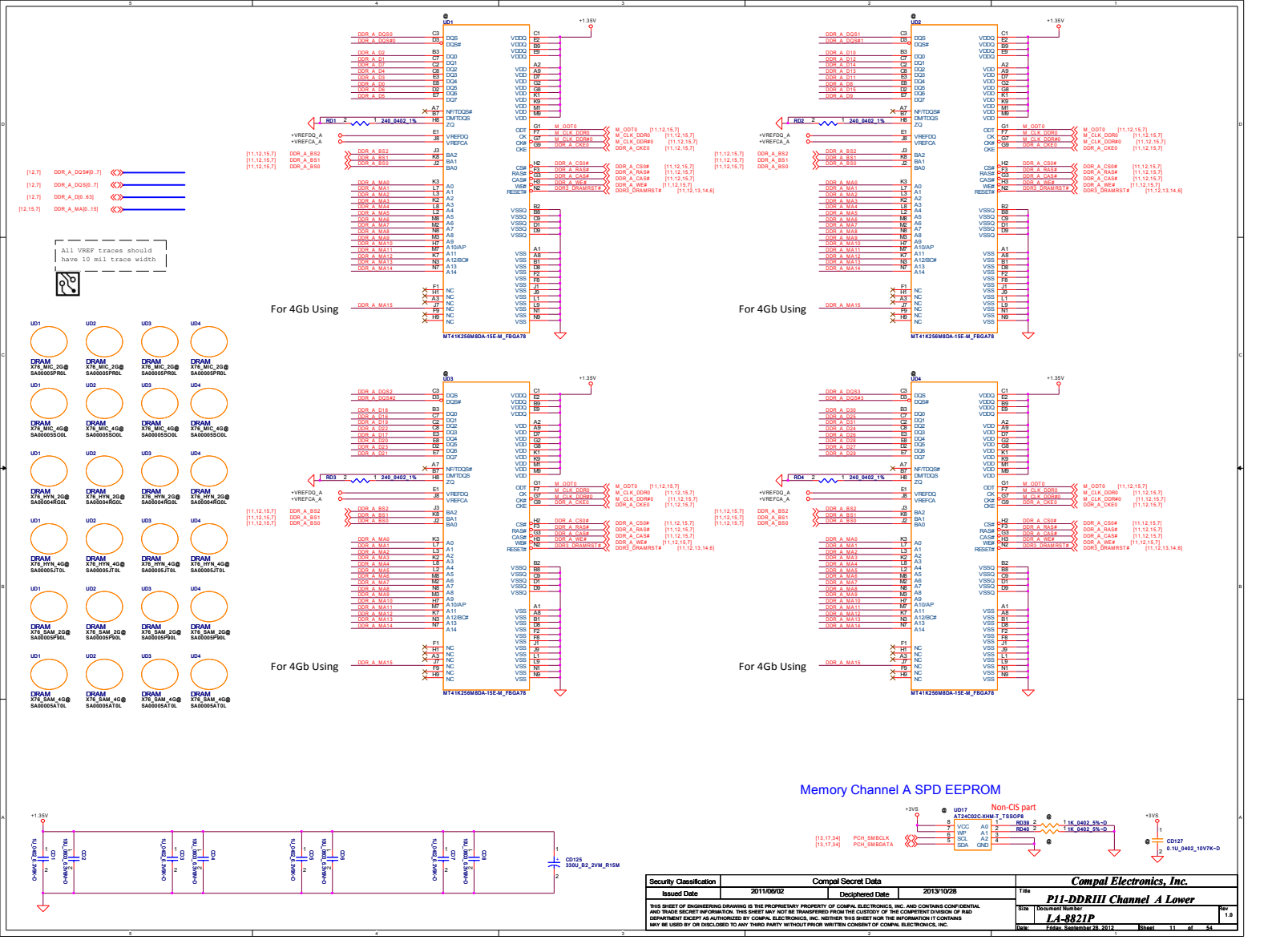
Date: Friday, September 28, 2012 | Sheet 9 of 54





Security Classification	Compal Secret Data		
Issued Date	2011/06/02	Deciphered Date	2013/10/28

Compal Electronics, Inc.			
Title	P10-CPU(6/6) PWR,VSS		
Size	Document Number		Rev
	LA-8821P		1.0
Date: Friday, September 28, 2012		Sheet 10 of 54	



Security Classification	Compal Secret Data		
Issued Date	2011/06/02	Deciphered Date	2013/10/28

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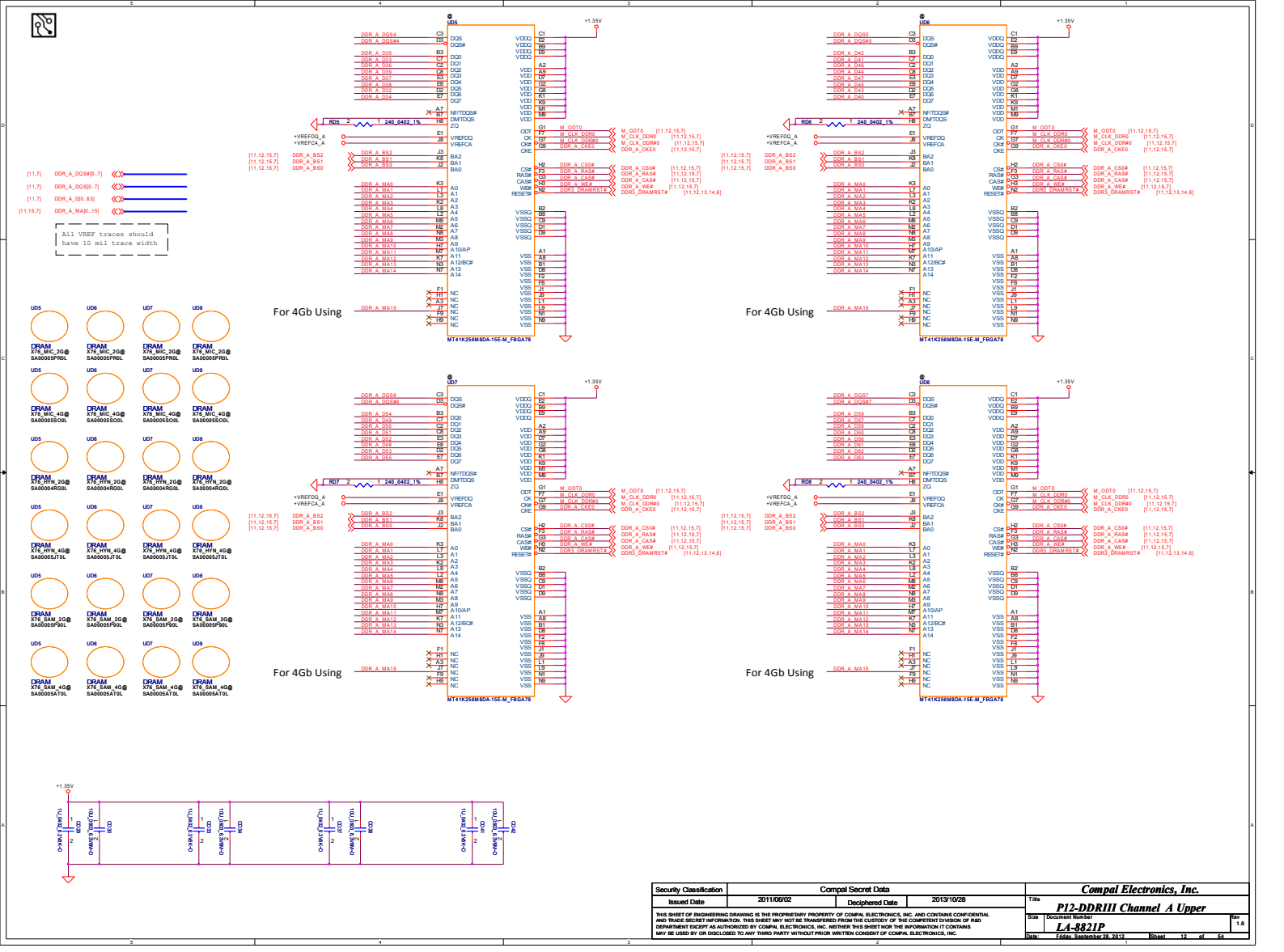
Compal Electronics, Inc.

Title: P11-DDRIII Channel A Lower

Size: A3 | Document Number: LA-8821P | Rev: 1.0

Date: Friday, September 28, 2012 | Sheet 11 of 54



Security Classification	Compal Secret Data		
Issued Date	2011/06/02	Deciphered Date	2013/10/28

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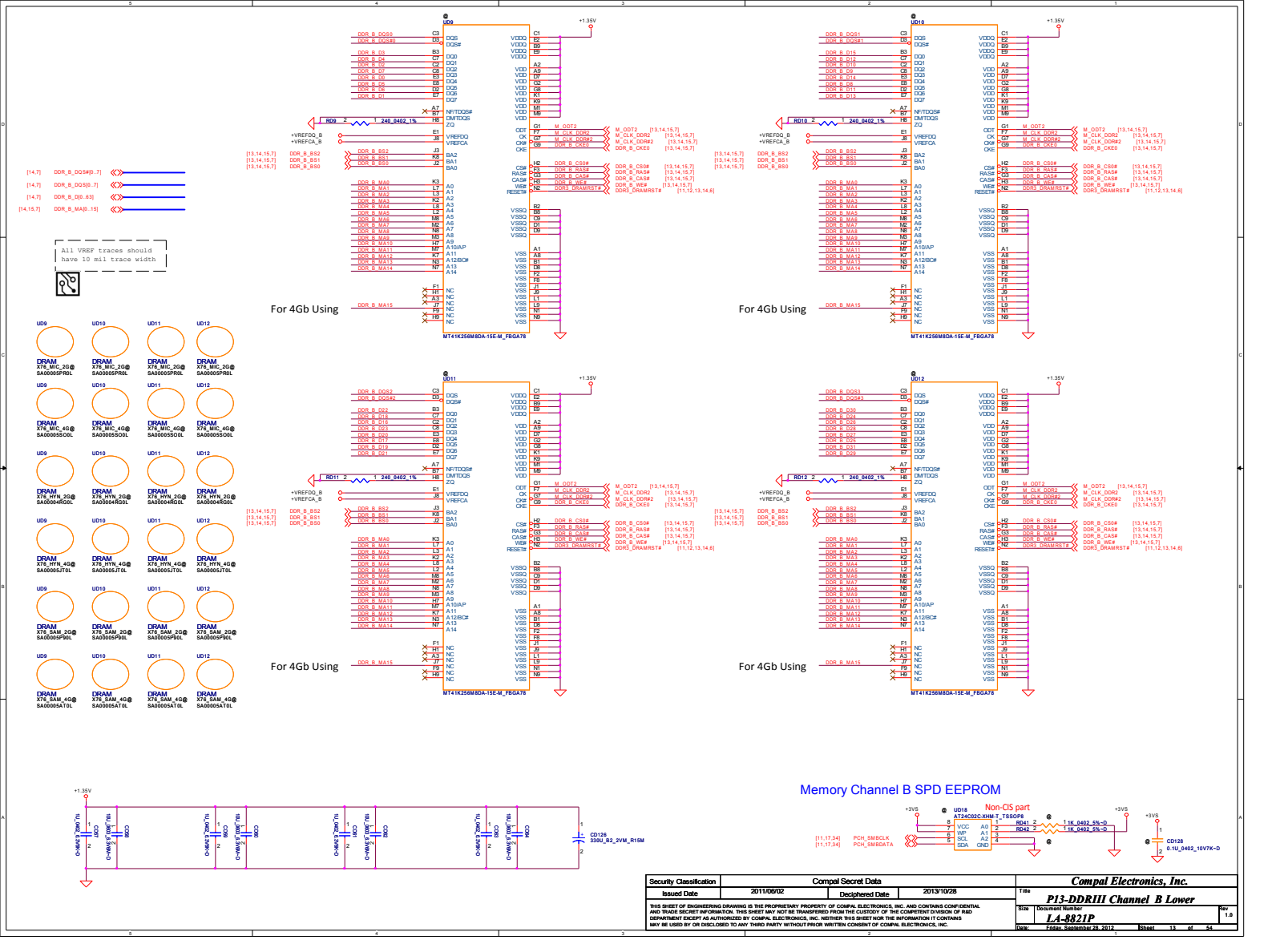
Compal Electronics, Inc.

Title: P12-DDRIII Channel A Upper

Size: | Document Number: LA-8821P | Rev: 1.0

Date: Friday, September 28, 2012 | Sheet 12 of 54



Security Classification	Compal Secret Data		
Issued Date	2011/06/02	Deciphered Date	2013/10/28

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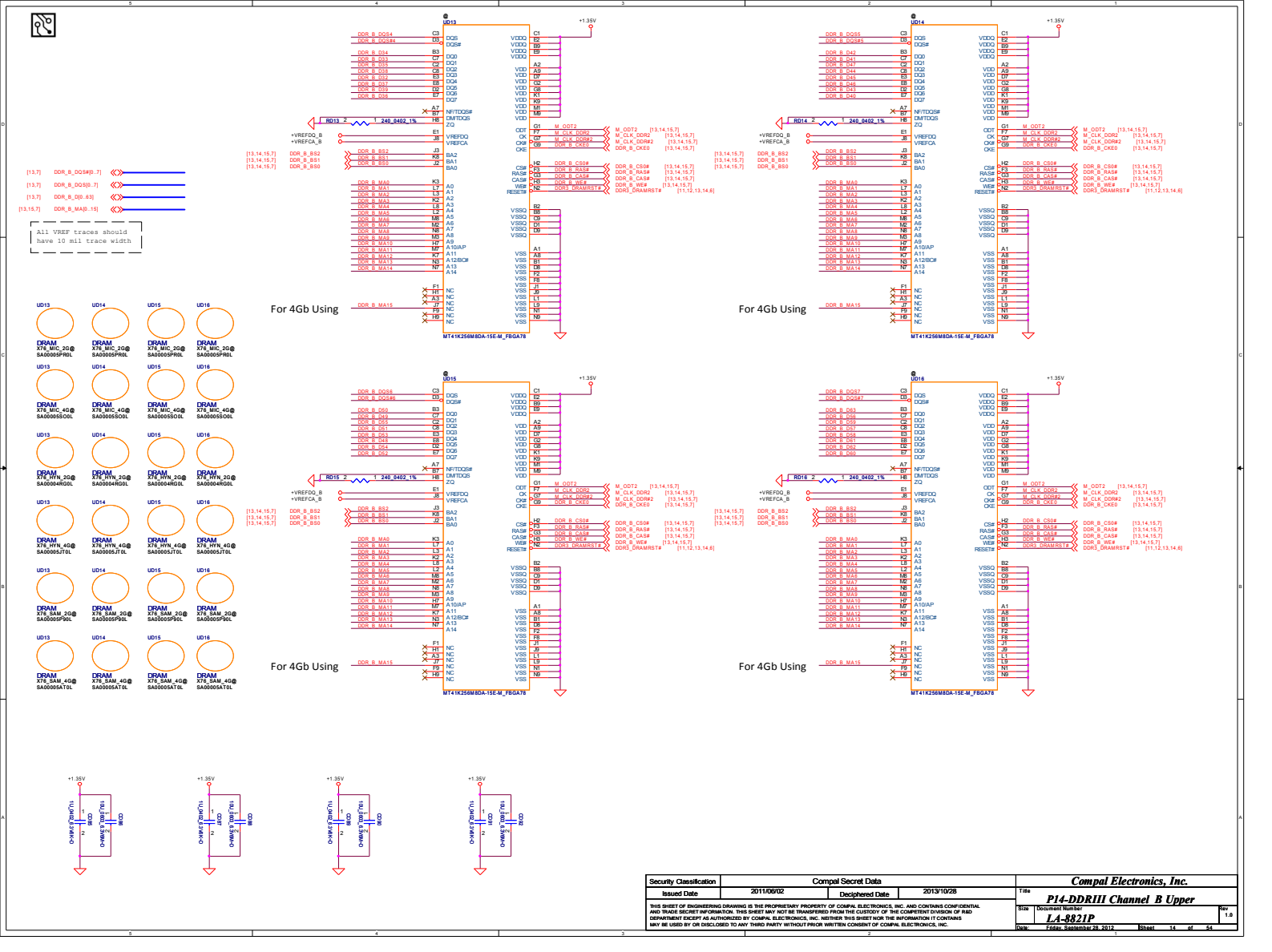
Compal Electronics, Inc.

Title: P13-DDRIII Channel B Lower

Size: | Document Number: LA-8821P | Rev: 1.0

Date: Friday, September 28, 2012 | Sheet 13 of 54



Security Classification	Compal Secret Data		
Issued Date	2011/06/02	Deciphered Date	2013/10/28

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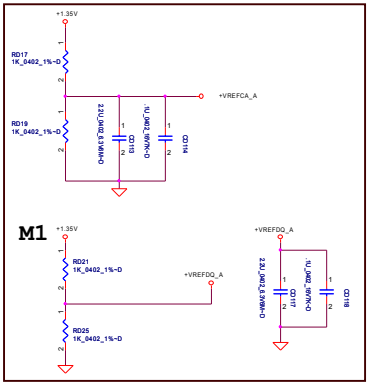
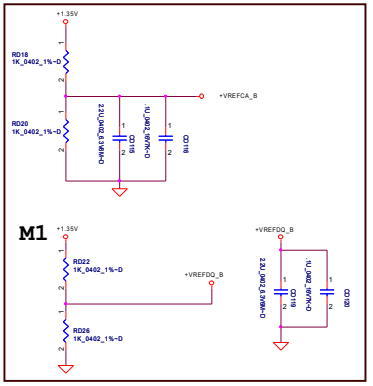
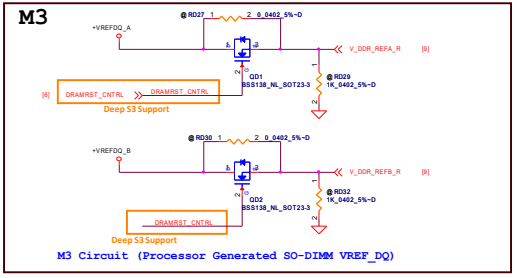
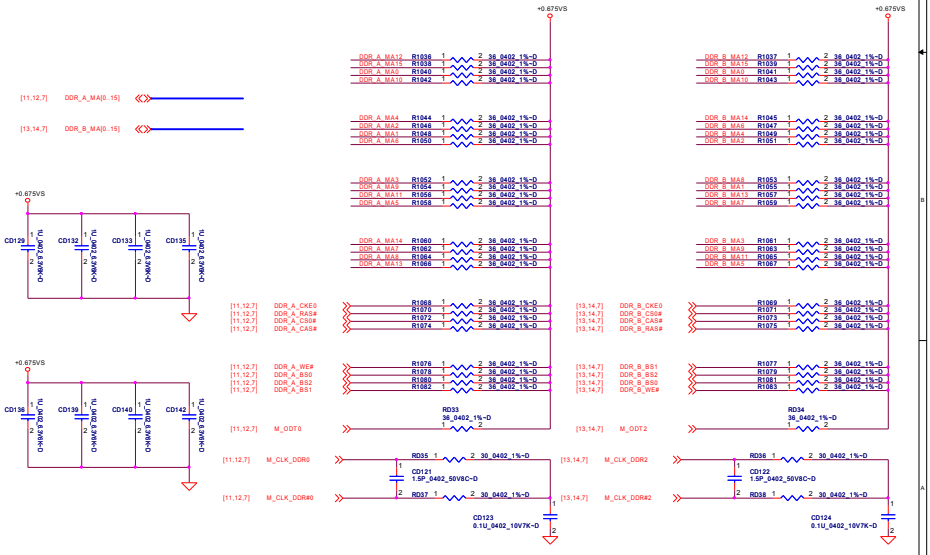
Compal Electronics, Inc.		
Title: P14-DDRIII Channel B Upper		
Size:	Document Number: LA-8821P	Rev: 1.0
Date: Friday, September 28, 2012	Sheet 14 of 54	









Security Classification	Compal Secret Data		
Issued Date	2011/06/02	Deciphered Date	2013/10/28

Compal Electronics, Inc.			
Title	P15-DDRIII Vref & Termination		
Size	Document Number		Rev
	LA-8821P		1.0
Date:	Friday, September 28, 2012	Sheet	15 of 54

2

8/20, Follow DFB suggest, modify YH1 footprint.

HDA_SDO

ME debug mode , this signal has a weak internal PD

L=>security measures defined in the Flash Descriptor will be in effect (default)

H=>Flash Descriptor Security will be overridden

Low = Disabled
High = Enabled

HDA_SYNC

This signal has a weak internal pull-down
is supplied by
apled high
mpled low
ulled High for Huron River platfrom

PCH JTAG

Reserve for RF please close to UH1

Boot BIOS Strap

BBS_BIT[1]	BBS_BIT[0]	Boot BIOS Location
1	1	SPI

SPI ROM FOR ME (8MByte)
ROM is Dual Output IC

SPI BIOS Pinout

(1)CS# (5)I/O_0
(2)I/O_1 (6)CLK
(3)WP# (7)HOLD#
(4)GND (8)VCC

W25Q64

Security Classification	Compal Secret Data		
Issued Date	2011/06/02	Deciphered Date	2013/10/28

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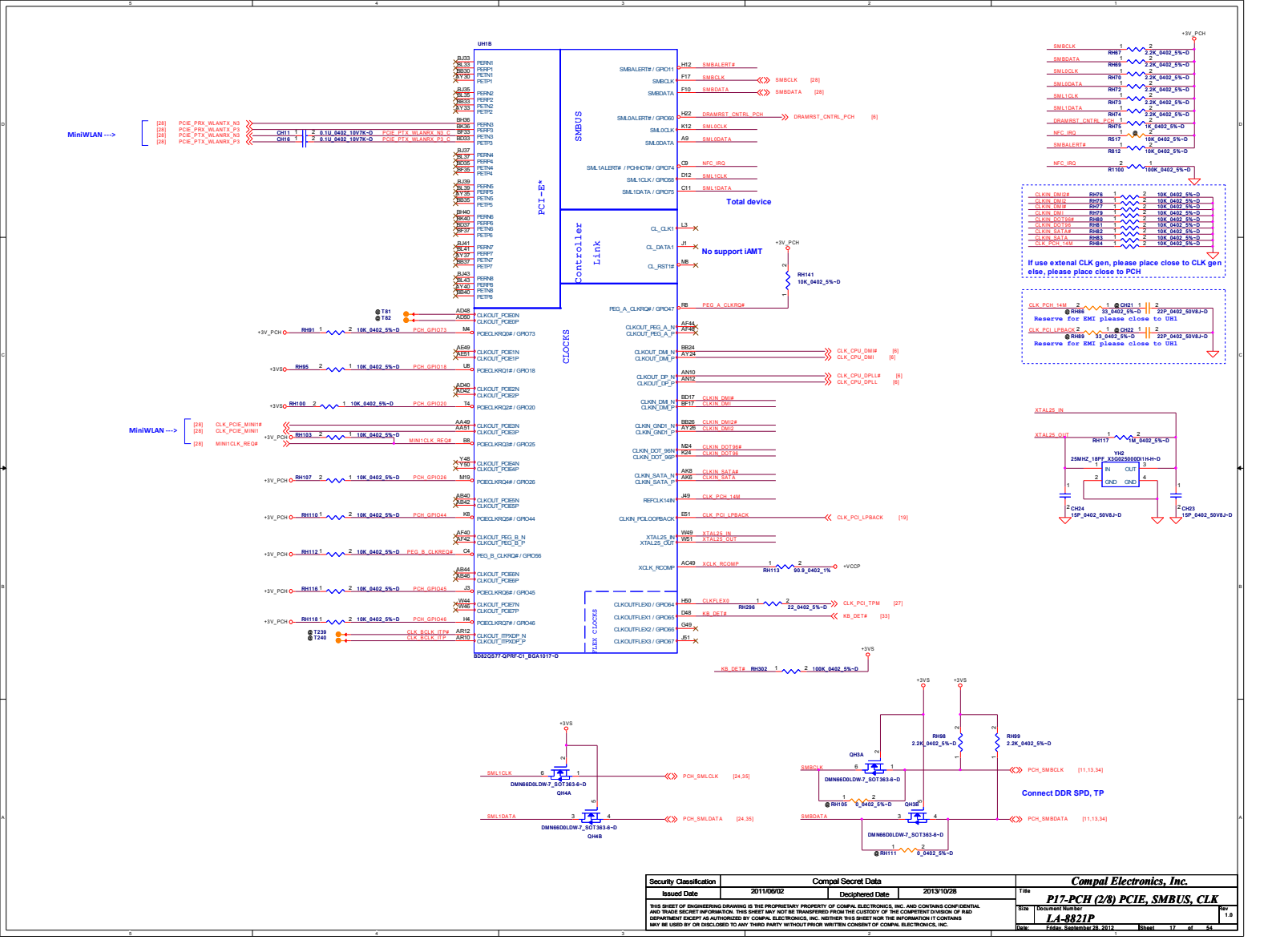
Compal Electronics, Inc.

Title: P16-PCH (1/8) SATA,HDA,SPI, LPC

Size: Document Number: LA-8821P Rev: 1.0

Date: Friday, September 28, 2012 Sheet 16 of 54



Security Classification	Compal Secret Data		
Issued Date	2011/06/02	Deciphered Date	2013/10/28

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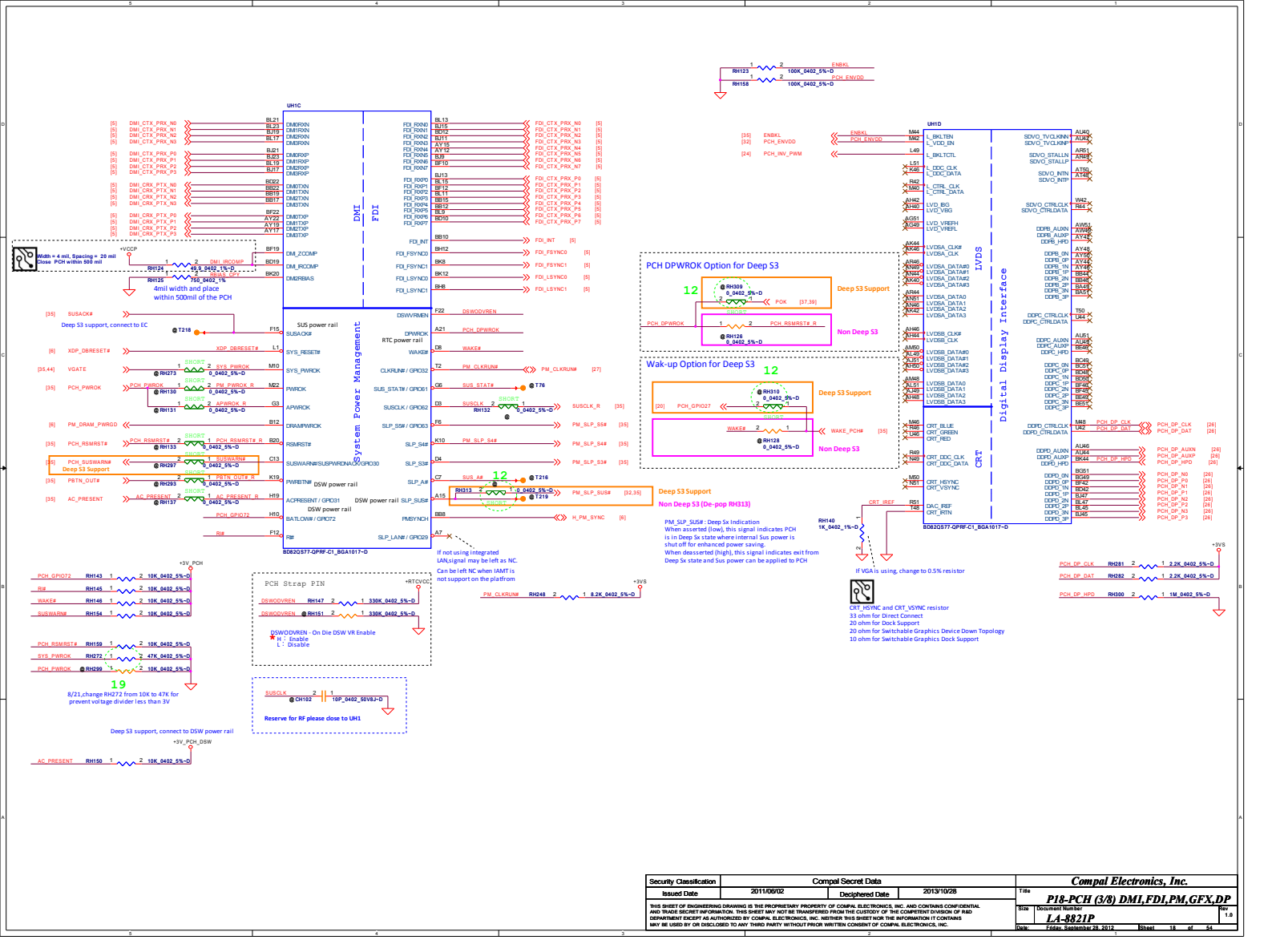
Compal Electronics, Inc.

Title: P17-PCH (2/8) PCIE, SMBUS, CLK

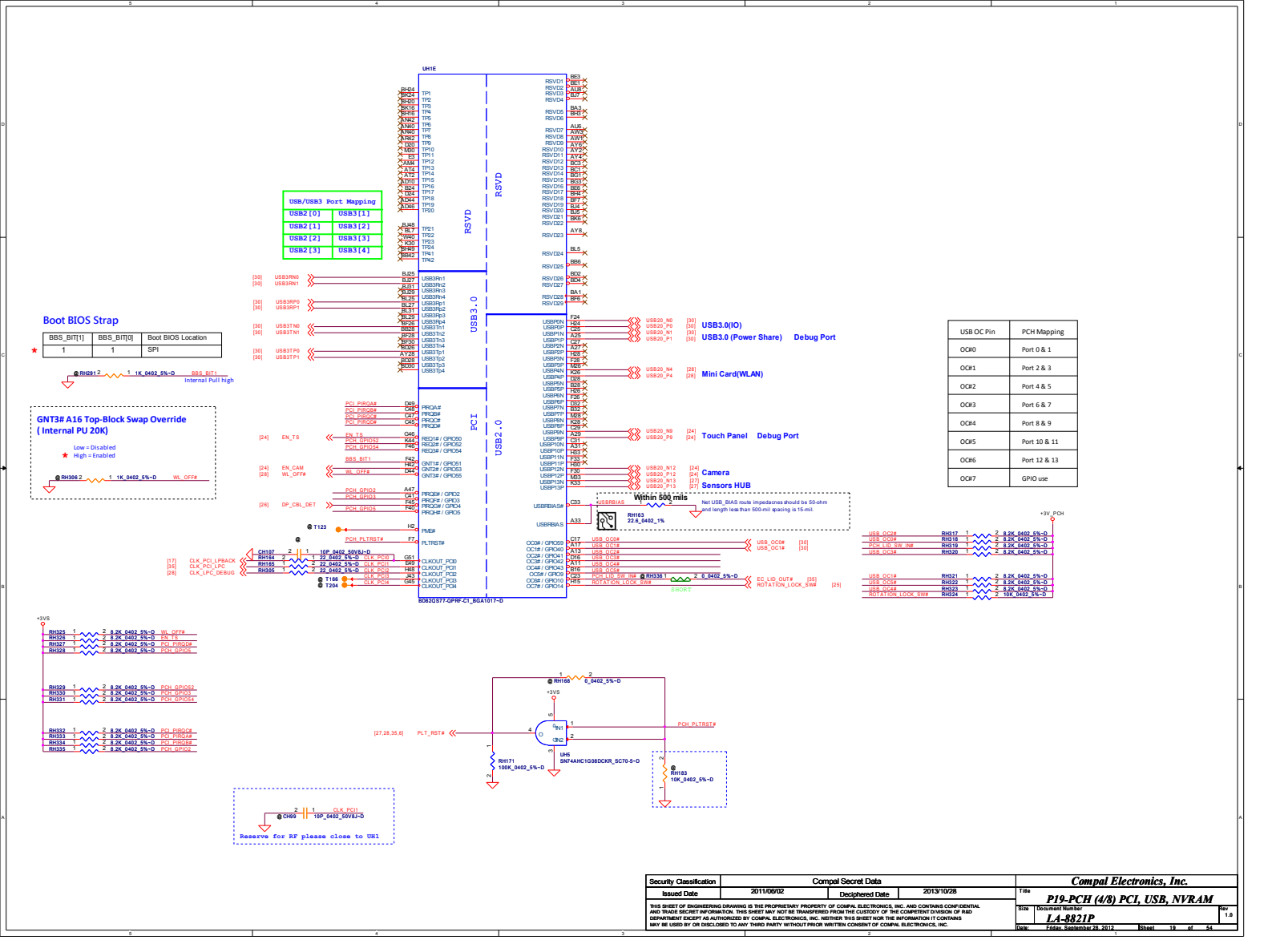
Size	Document Number	Rev
	LA-8821P	1.0

Date: Friday, September 28, 2012 Sheet 17 of 54



Security Classification	Compal Secret Data		
Issued Date	2011/06/02	Deciphered Date	2013/10/28

Compal Electronics, Inc.			
Title	P18-PCH (3/8) DMI,FDI,PM,GFX,DP		
Size	Document Number		Rev
	LA-8821P		1.0
Date:	Friday, September 28, 2012	Sheet	18 of 54


UH1E
RSVD
USB3.0
USB2.0
PCI
BD82QS77-QFRF-C1_BGA1017-D
USB/USB3 Port Mapping
USB2[0] USB3[1]
USB2[1] USB3[2]
USB2[2] USB3[3]
USB2[3] USB3[4]
Boot BIOS Strap
BBS_BIT[1] BBS_BIT[0] Boot BIOS Location
1 1 SPI
RH291 1K_0402_5%~D BBS_BIT1 Internal Pull high
GNT3# A16 Top-Block Swap Override (Internal PU 20K)
Low = Disabled
High = Enabled
RH306 1K_0402_5%~D WL_OFF#
USB3.0(IO)
USB3.0 (Power Share) Debug Port
Mini Card(WLAN)
Touch Panel Debug Port
Camera
Sensors HUB
Within 500 mils
Net USB_BIAS route impedances should be 50-ohm and length less than 500-mil spacing is 15-mil.
RH163 22.6_0402_1%
USB OC Pin PCH Mapping
OC#0 Port 0 & 1
OC#1 Port 2 & 3
OC#2 Port 4 & 5
OC#3 Port 6 & 7
OC#4 Port 8 & 9
OC#5 Port 10 & 11
OC#6 Port 12 & 13
OC#7 GPIO use
+3V_PCH
+3VS
RH168 0_0402_5%~D
UH5 SN74AHC1G08DCKR_SC70-5~D
RH171 100K_0402_5%~D
RH183 10K_0402_5%~D
PLT_RST#
PCH_PLTRST#
Reserve for RF please close to UR1
CH99 10P_0402_50V8J~D
Security Classification Compal Secret Data
Issued Date 2011/06/02 Deciphered Date 2013/10/28
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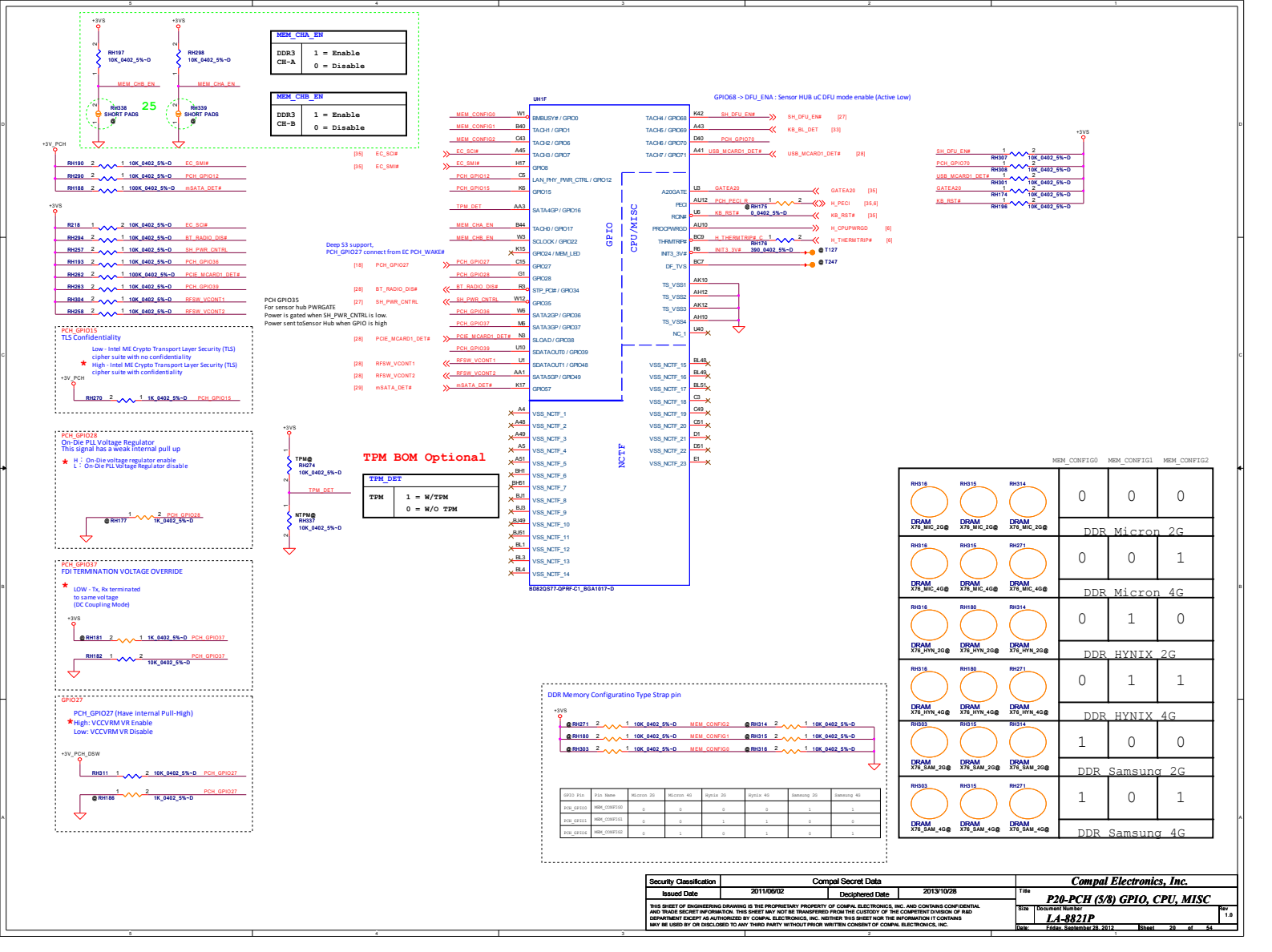
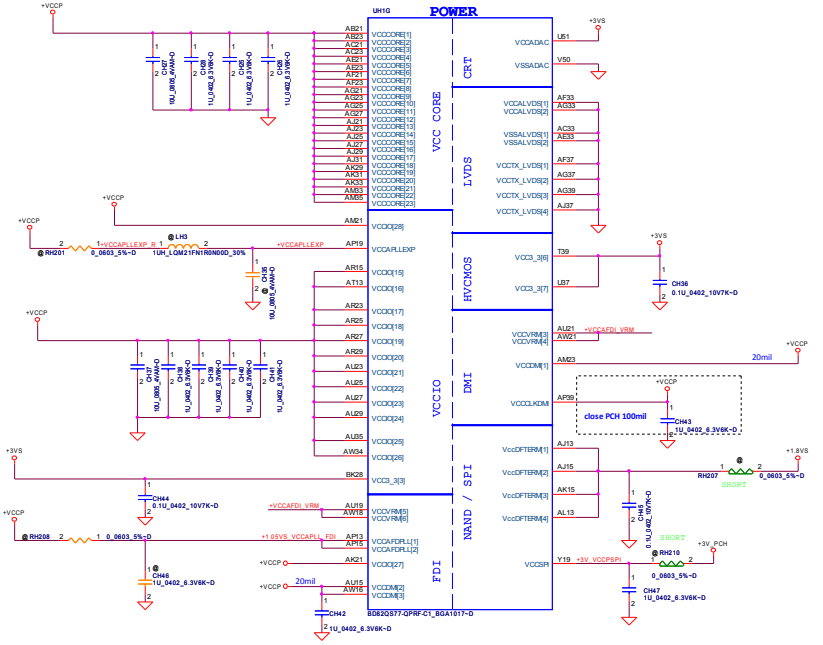
Compal Electronics, Inc.
Title P19-PCH (4/8) PCI, USB, NVRAM
Size Document Number LA-8821P Rev 1.0
Date: Friday, September 28, 2012 Sheet 19 of 54



GPIO Pin	Pin Name	Micron 2G	Micron 4G	Hynix 2G	Hynix 4G	Samsung 2G	Samsung 4G
PCH_GPIO3	MEM_CONFIG0	0	0	0	0	1	1
PCH_GPIO1	MEM_CONFIG1	0	0	1	1	0	0
PCH_GPIO4	MEM_CONFIG2	0	1	0	1	0	1

Security Classification	Compal Secret Data		
Issued Date	2011/06/02	Deciphered Date	2013/10/28

Compal Electronics, Inc.	
Title	P20-PCH (5/8) GPIO, CPU, MISC
Size	Document Number: LA-8821P
Rev	1.0
Date: Friday, September 28, 2012	Sheet 20 of 54



PCH Power Rail Table

Voltage Rail	Voltage	S0 Iccmax Current (A)
V_PROC_IO	1.05	0.001
V5REF	5	0.001
V5REF_Sus	5	0.001
Vcc3_3	3.3	0.266
VccADAC	3.3	0.001
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

VCCVRM = 160mA detal waiting for newest spec

Security Classification	Compal Secret Data		
Issued Date	2011/06/02	Deciphered Date	2013/10/28

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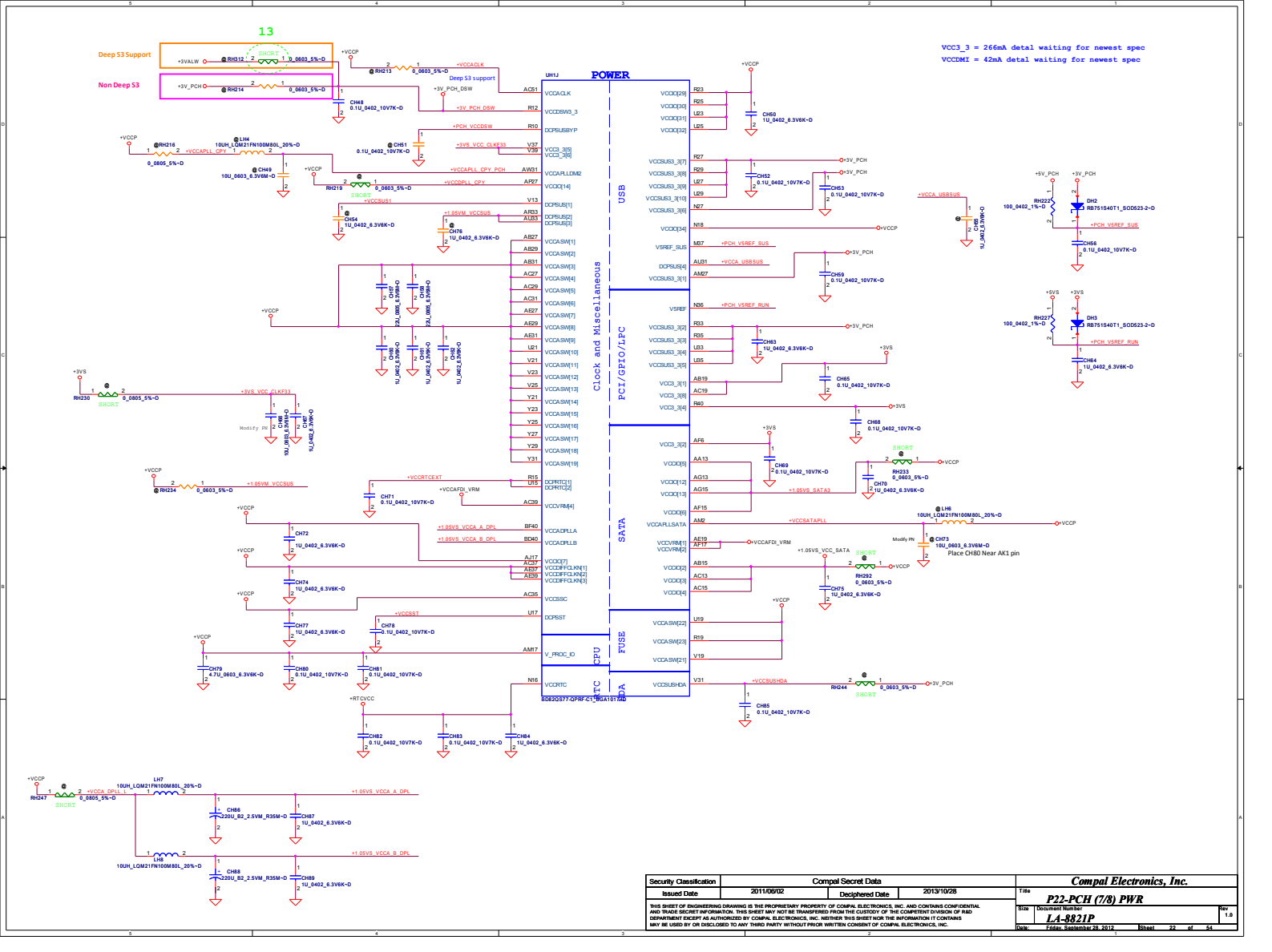
Compal Electronics, Inc.

Title: P21-PCH (6/8) PWR

Size: | Document Number: LA-8821P | Rev: 1.0

Date: Friday, September 28, 2012 | Sheet 21 of 54



Security Classification	Compal Secret Data		
Issued Date	2011/06/02	Deciphered Date	2013/10/28

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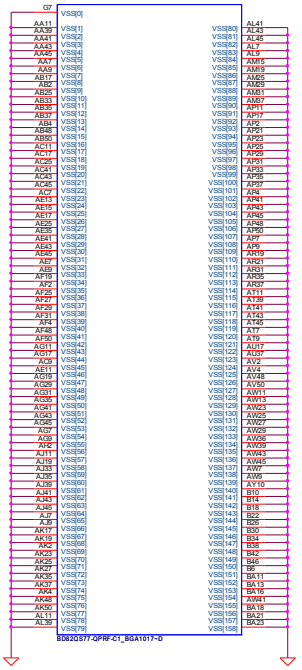
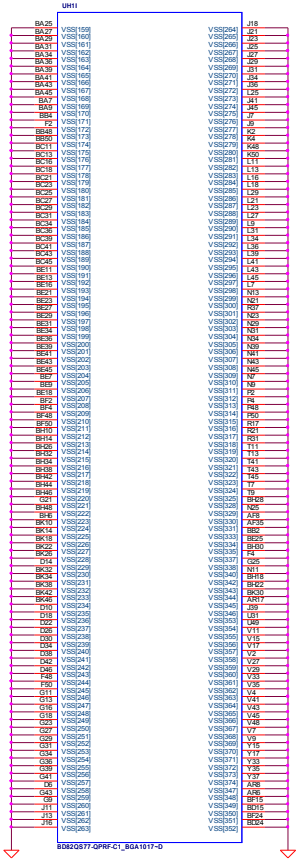
Compal Electronics, Inc.

Title: P22-PCH (7/8) PWR

Size: | Document Number: LA-8821P | Rev: 1.0

Date: Friday, September 28, 2012 | Sheet 22 of 54





Security Classification	Compal Secret Data		
Issued Date	2011/06/02	Deciphered Date	2013/10/28

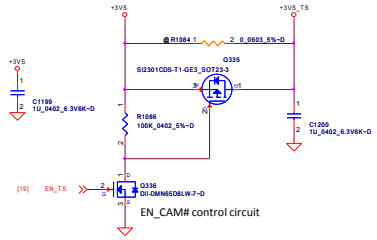
Compal Electronics, Inc.

Title: P23-PCH (8/8) VSS

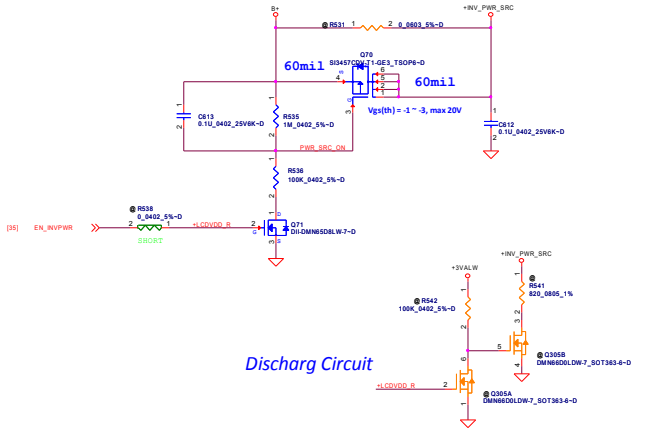
Size: | Document Number: LA-8821P | Rev: 1.0

Date: Friday, September 28, 2012 | Sheet 23 of 54

Touch Screen Power

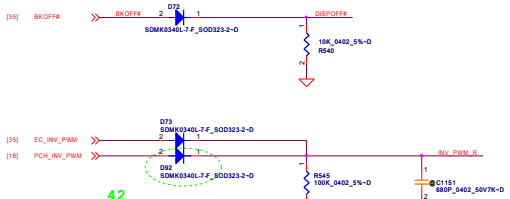


eDP BackLight Power

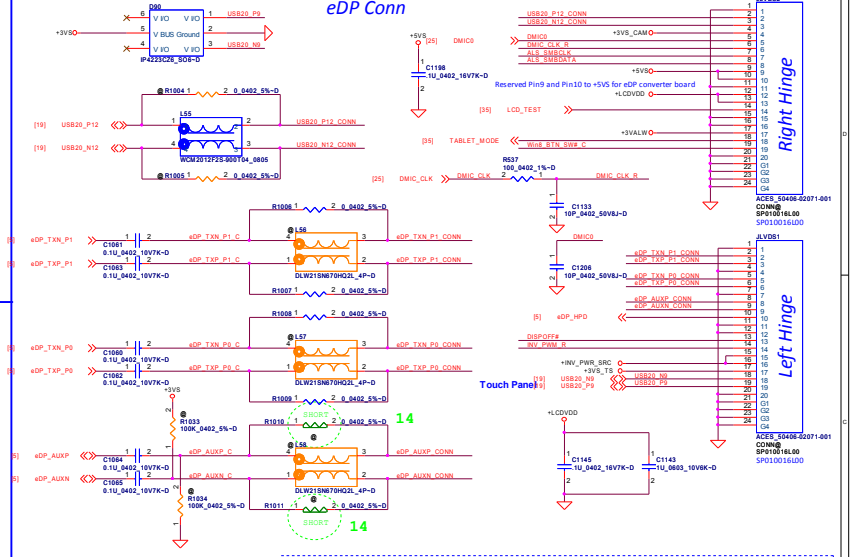


Discharg Circuit

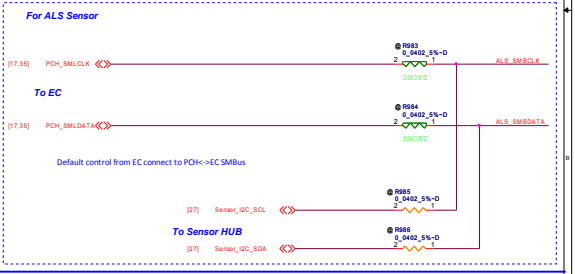
BackLight PWM Control



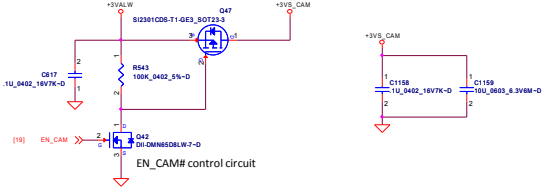
eDP Conn



For ALS Sensor



Camera Power



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Issued Date	2011/06/02	Deciphered Date	2013/10/28

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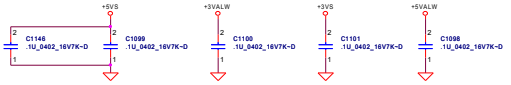
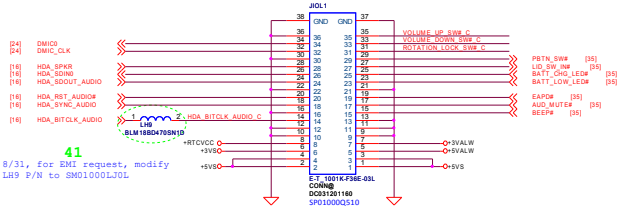
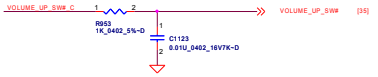
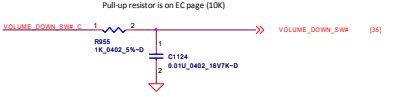
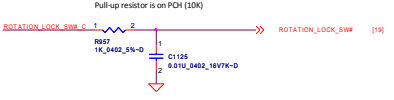
Compal Electronics, Inc.	
Title	P24-eDP/ Camera CONN
Size	Document Number: LA-8821P
Rev	1.0
Date: Friday, September 28, 2012	Sheet 24 of 54





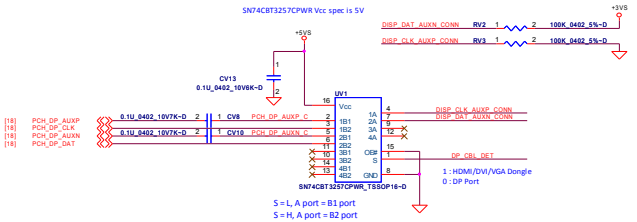


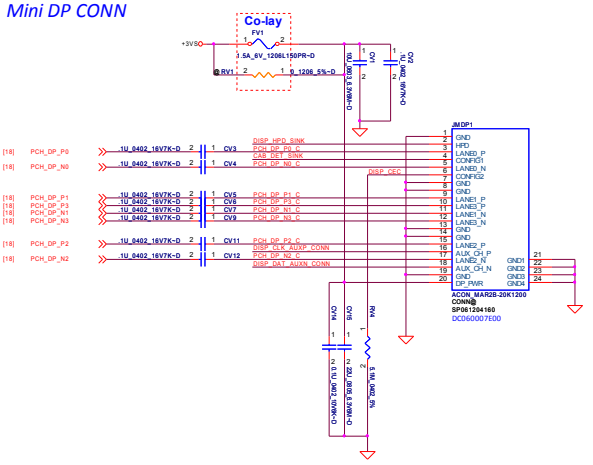


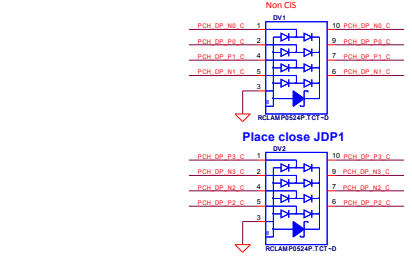


Security Classification	Compal Secret Data		
Issued Date	2011/06/02	Deciphered Date	2013/10/28

Compal Electronics, Inc.			
Title: P25-IOL Conn			
Size	Document Number: LA-8821P		Rev: 1.0
Date: Friday, September 28, 2012	Sheet 25 of 54		







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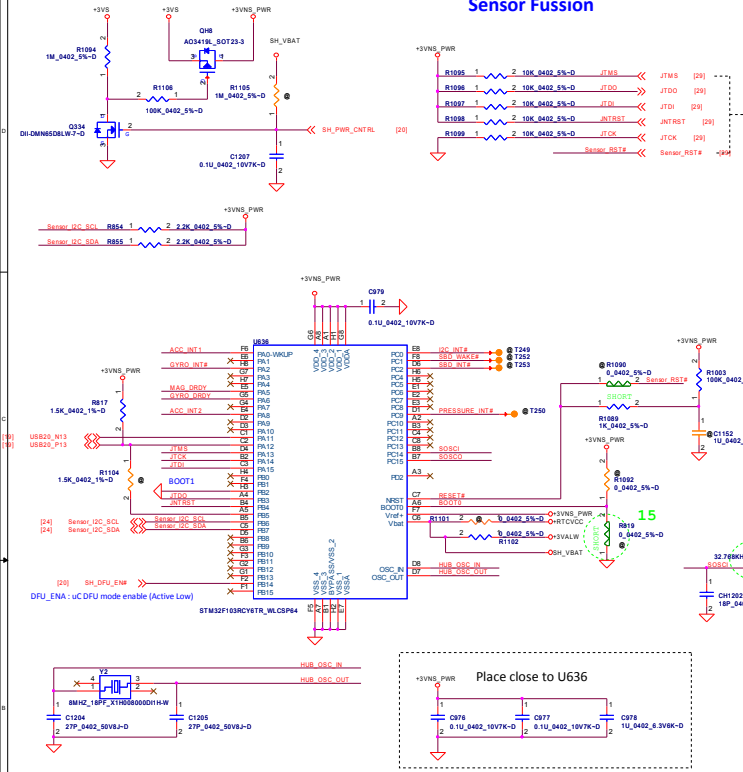
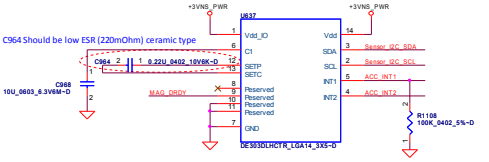
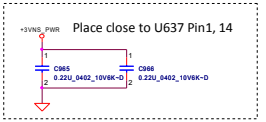
			Size: C; Document Number: LA-8821P; Rev: 1.0
			Date: Friday, September 28, 2012; Sheet 26 of 54

Sensor Fussion

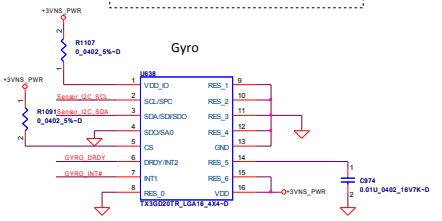


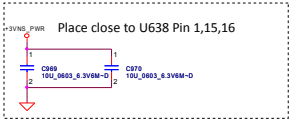
e-Compass + Accelerometer



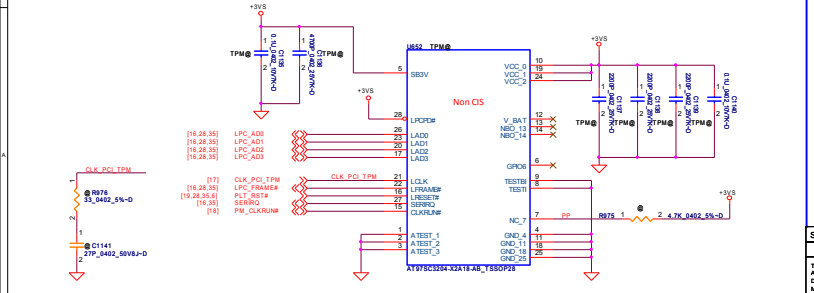


Gyro





ATMEL TPM



Security Classification	Compal Secret Data		
Issued Date	2011/06/02	Deciphered Date	2013/10/28

Compal Electronics, Inc.			
Title	P27-Sensor Fussion / TPM		
Size	Document Number		Rev
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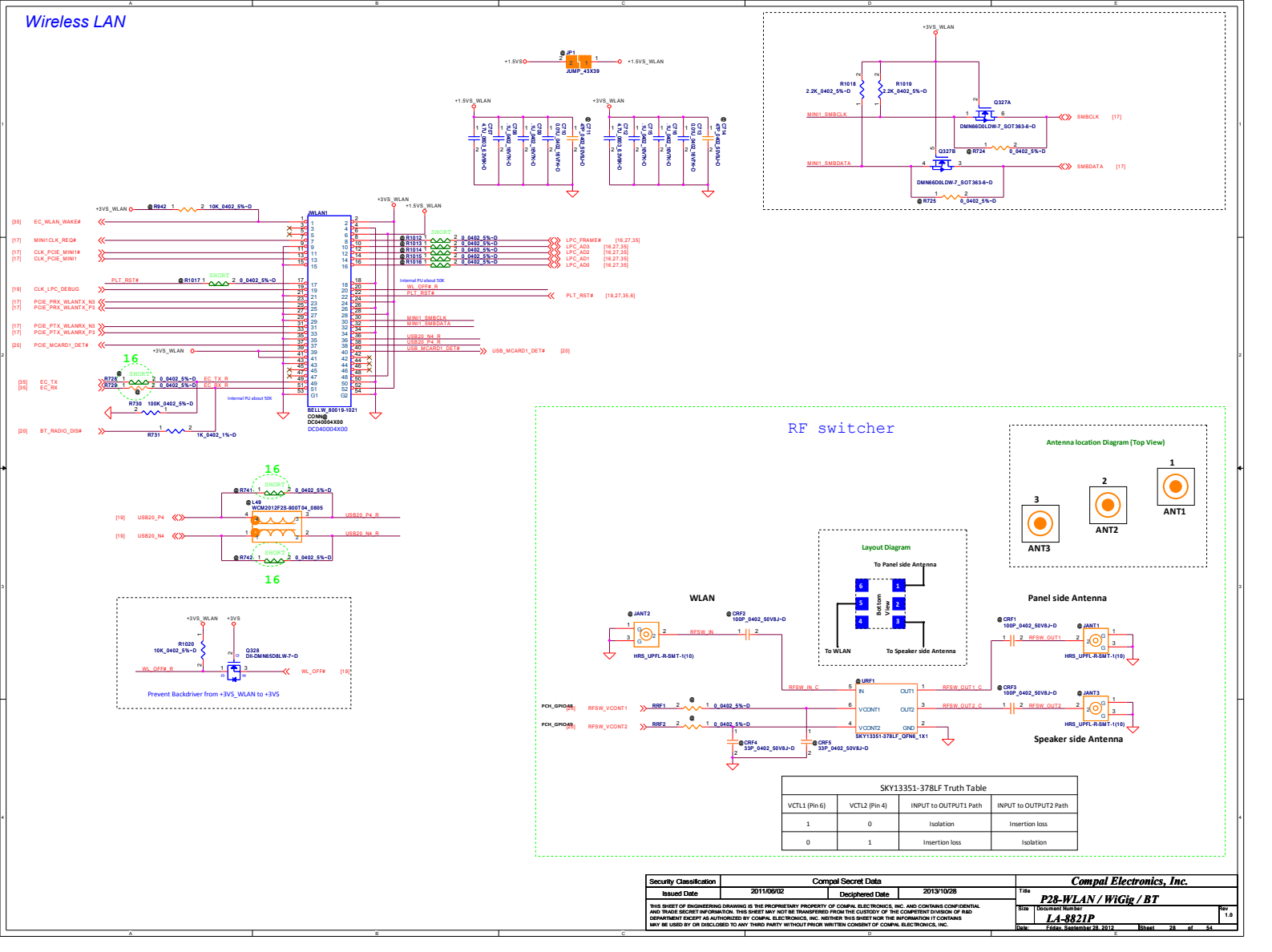
Wireless LAN



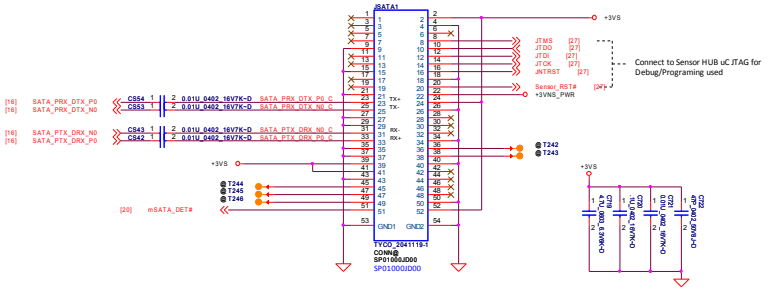
RF switcher

SKY13351-378LF Truth Table			
VCTL1 (Pin 6)	VCTL2 (Pin 4)	INPUT to OUTPUT1 Path	INPUT to OUTPUT2 Path
1	0	Isolation	Insertion loss
0	1	Insertion loss	Isolation

Security Classification	Compal Secret Data		
Issued Date	2011/06/02	Deciphered Date	2013/10/28

Compal Electronics, Inc.	
Title	P28-WLAN / WiGig / BT
Size	Document Number: LA-8821P
Rev	1.0
Date: Friday, September 28, 2012	Sheet 28 of 54

mSATA Card

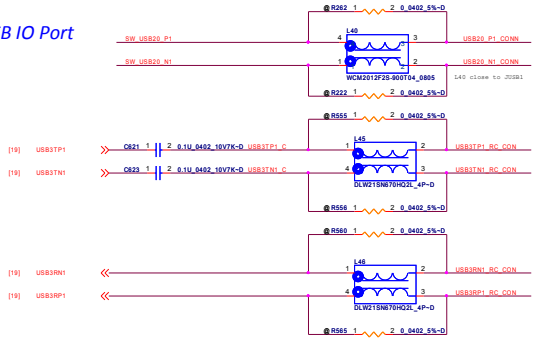


ME Decide using 16 pin conn
MB 16 <-------> 15 pin NFC (Reserved Connection)

Security Classification	Compal Secret Data		
Issued Date	2011/06/02	Deciphered Date	2013/10/28

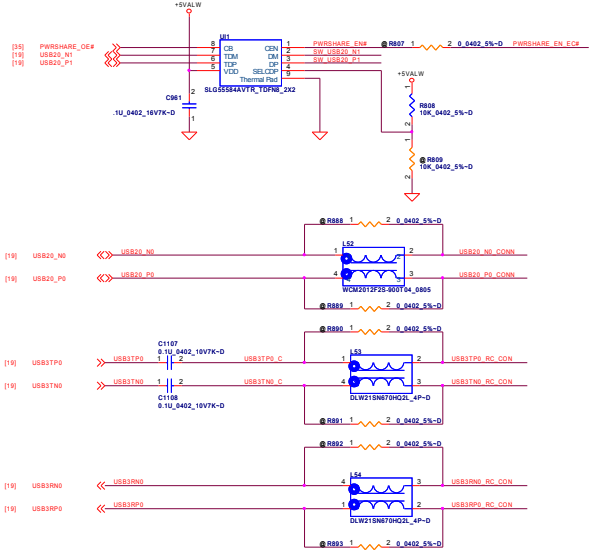
Compal Electronics, Inc.		
Title: P29-mSATA / NFC Conn		
Size: C	Document Number: LA-8821P	Rev: 1.0
Date: Friday, September 28, 2012	Sheet 29 of 54	

USB IO Port

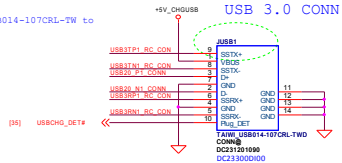


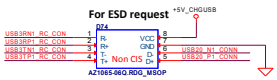
Power share

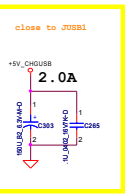
CB	Function
L	auto detection charger identification active
H	DP/DM=TDP/TDM

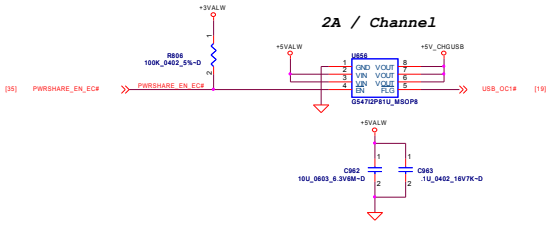


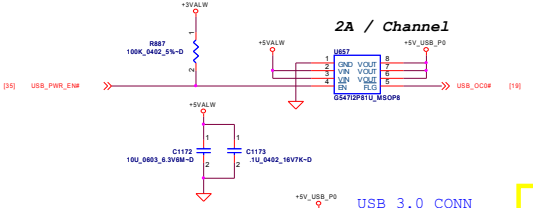
Modify JUSB1 connector mfr. P/N from USB014-107CRL-TW to USB014-107CRL-TWD (remove mayla only)

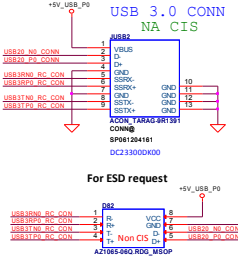


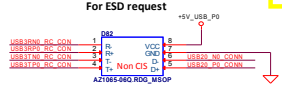


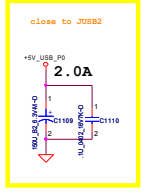












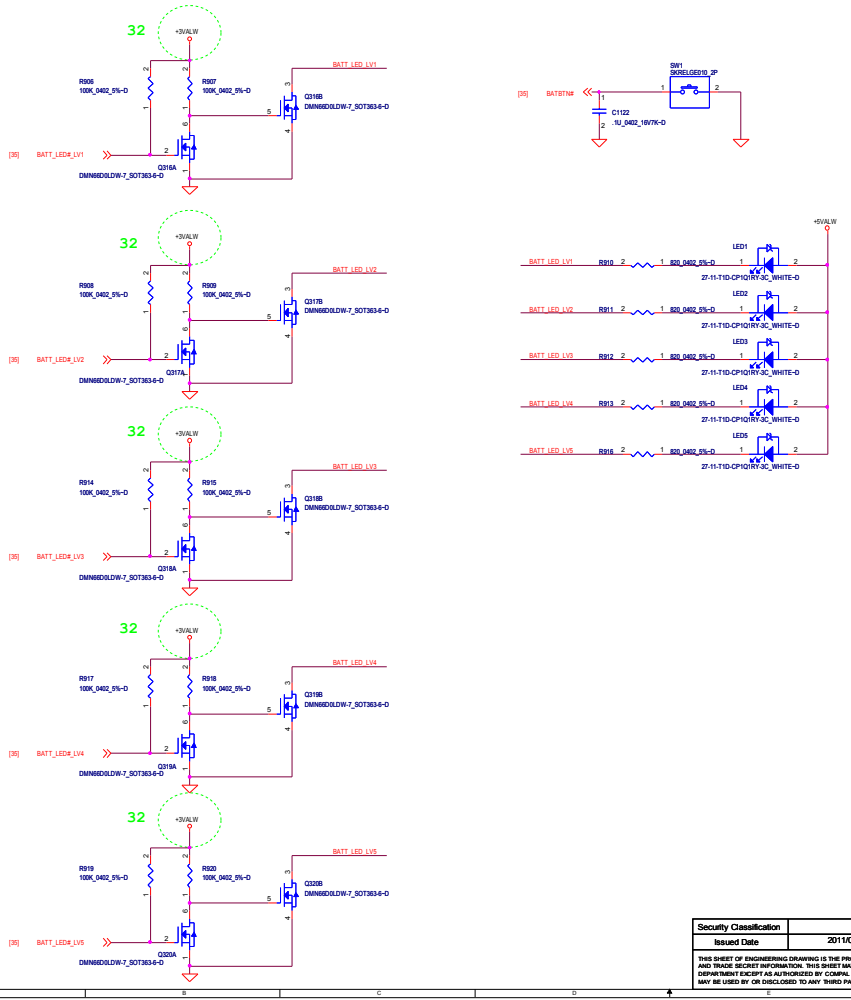
Security Classification	Compal Secret Data		
Issued Date	2011/06/02	Deciphered Date	2013/10/28

Compal Electronics, Inc.

Title: P30-USB 3.0 IO CONN

Size: | Document Number: LA-8821P | Rev: 1.0

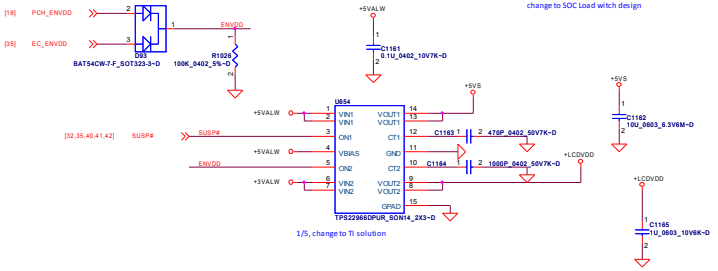
Date: Friday, September 28, 2012 | Sheet 38 of 54

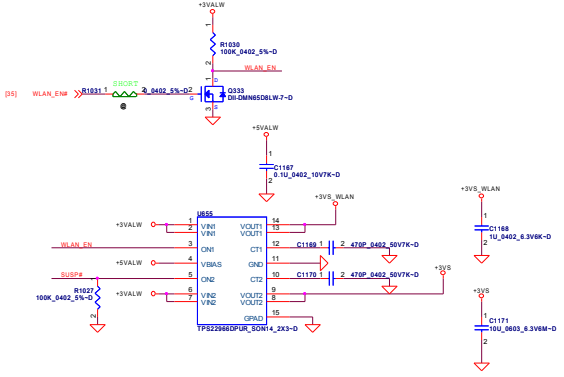


Security Classification	Compal Secret Data		
Issued Date	2011/06/02	Deciphered Date	2013/10/28

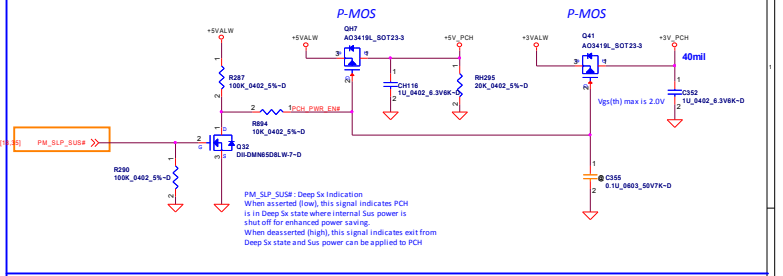
Compal Electronics, Inc.	
Title	P31-BAT LED
Size	Document Number: LA-8821P
Rev	1.0
Date: Friday, September 28, 2012	Sheet 31 of 54

+5VALW to +5VS +3VALW to +3VS

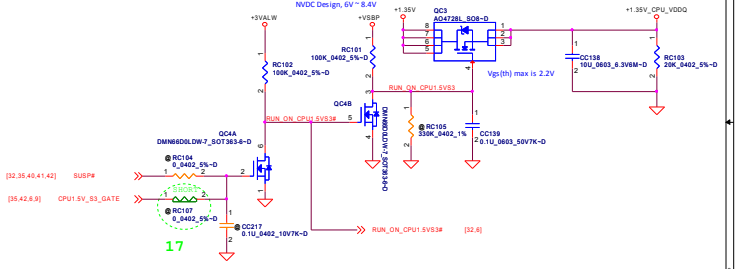




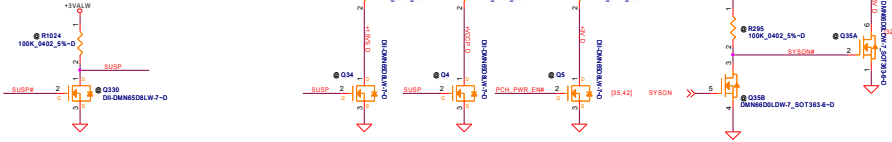
+3VALW to +3V_PCH, +5VALW to +5V_PCH



+1.35V to +1.35V_CPU_VDDQ



Discharge



Security Classification	Compal Secret Data		
Issued Date	2011/06/02	Deciphered Date	2013/10/28

Compal Electronics, Inc.			
Title	P32-DC/DC Interface		
Size	Document Number LA-8821P		Rev 1.0
Date: Friday, September 28, 2012		Sheet 32 of 54	

FD1 FIDUCIAL_C40M80
FD2 FIDUCIAL_C40M80
FD3 FIDUCIAL_C40M80
FD4 FIDUCIAL_C40M80
FD5 FIDUCIAL_C40M80
FD6 FIDUCIAL_C40M80

PCB Screw Hole

H1 H_3P3
H3 H_4P8
H8 H_3P3
H13 H_4P5N
H16 H_2P0X2P5N
H5 H_3P3
H6 H_3P3
H7 H_3P3
H17 H_2P0N

PCB Screw Hole for CPU (NUT)

H9 H_3P3
H10 H_3P2
H11 H_3P3
H12 H_3P2

PCB Screw Hole for K/B (NUT)

H14 NUT H_3P2

EMI Shielding

H18 EMI_Spring
H19 EMI_Spring
H20 EMI_Spring
H21 EMI_Spring

RTC Battery

39

Modify JRTC1 P/N from SP02000920L to SP02000UB00

+RTCBATT
+3VLP
RH259 1K_0402_5%~D
W=20mils
W=20mils
DH4 BAT54CW-7-F_SOT323-3~D
W=20mils
+RTCVCC
CH85 1U_0402_6.3V6K~D

+RTCBATT
JRTC1
ACES_50271-00201-001
CONN@
SP02000UB00

40

8/27,Modify JKB1 connector mfr. P/N from 50699-03041-P01 to 50699-03001-P01 (remove mayla only)

1 : Diagnostic
JKB1
[17] KB_DET#
KSI[0..7] [35]
KSO[0..16] [35]
30 : Diagnostic
ACES_50699-03001-P01
CONN@
DC011112270
SP01001LM00

INT_KBD Conn.

KSO13 C1174 100P_0402_50V8J~D
KSO15 C1175 100P_0402_50V8J~D
KSO16 C1176 100P_0402_50V8J~D
KSO12 C1177 100P_0402_50V8J~D
KSO10 C1178 100P_0402_50V8J~D
KSO11 C1179 100P_0402_50V8J~D
KSO9 C1180 100P_0402_50V8J~D
KSO14 C1181 100P_0402_50V8J~D
KSO8 C1182 100P_0402_50V8J~D
KSO7 C1183 100P_0402_50V8J~D
KSO4 C1184 100P_0402_50V8J~D
KSO5 C1185 100P_0402_50V8J~D
KSI2 C1186 100P_0402_50V8J~D
KSI4 C1187 100P_0402_50V8J~D
KSI6 C1188 100P_0402_50V8J~D
KSI7 C1189 100P_0402_50V8J~D
KSI0 C1190 100P_0402_50V8J~D
KSI3 C1191 100P_0402_50V8J~D
KSI1 C1192 100P_0402_50V8J~D
KSI5 C1193 100P_0402_50V8J~D
KSO2 C1194 100P_0402_50V8J~D
KSO1 C1195 100P_0402_50V8J~D
KSO3 C1196 100P_0402_50V8J~D
KSO8 C1197 100P_0402_50V8J~D
KSO0 C1078 100P_0402_50V8J~D

+3VS +5VS +5VS Q329 AO3419L_SOT23-3
R989 100K_0402_5%~D
[35] CAPS_LED#
DII-DMN65D8LW-7~D Q326
C1160 0.1U_0402_10V7K~D
R943 820_0402_5%~D
CAPS_LED

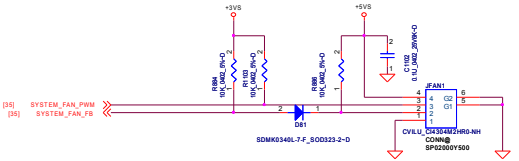
KB_LED_PWM#
[20] KB_BL_DET
R944 47K_0402_5%~D
+5VS_KBL
R945 100K_0402_5%~D
[35] KB_LED_PWM
Q311 DII-DMN65D8LW-7~D
JBL1 HAMBURG_A810420-SBHR22
LED Maximum Current is 300mA
CONN@
SP01001HD00

+5VS 20mil +5VS_KBL
F1 0.75A_24V_1812L075-24DR~OK
C1153 1U_0603_10V6K~D
C1059 10U_0603_6.3V6M~D

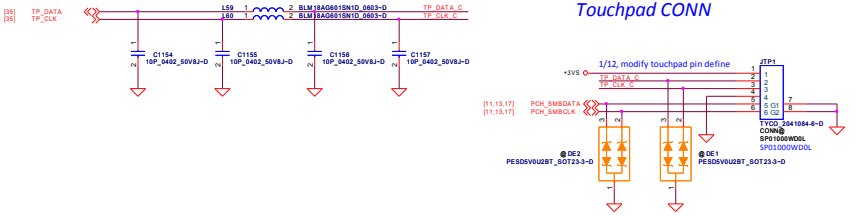
Security Classification	Compal Secret Data		
Issued Date	2011/06/02	Deciphered Date	2013/10/28

Compal Electronics, Inc.
Title: P33-SCREWH/KB/RTC
Size: Document Number: LA-8821P Rev: 1.0
Date: Friday, September 28, 2012 Sheet 33 of 54

FAN CONN

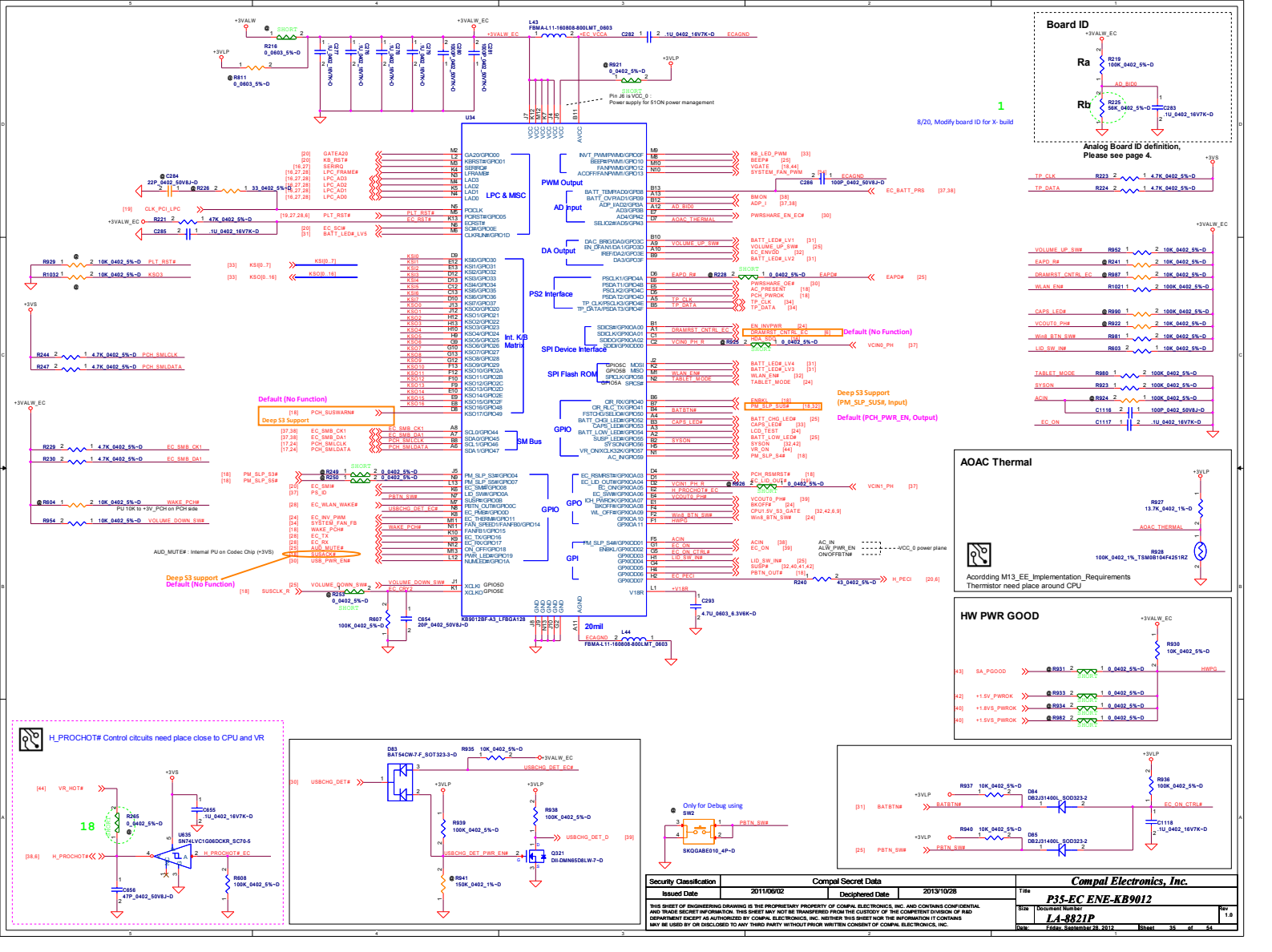


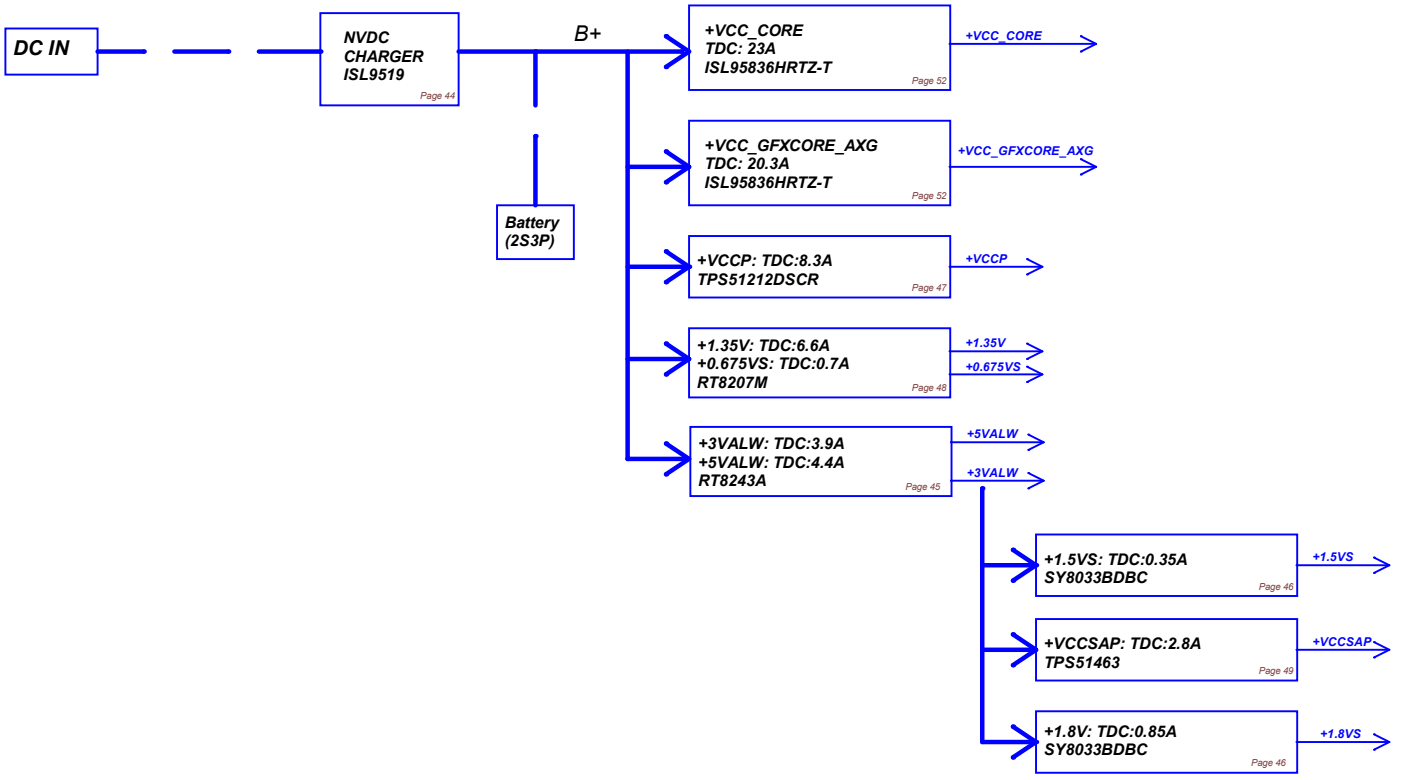
Touchpad CONN



Security Classification	Compal Secret Data		
Issued Date	2011/06/02	Deciphered Date	2013/10/28

Compal Electronics, Inc.			
Title: P34-TP / FAN			
Size	Document Number: LA-8821P		Rev: 1.0
Date: Friday, September 28, 2012	Sheet 34 of 54		


Board ID
Ra
Rb
Analog Board ID definition, Please see page 4.
8/20, Modify board ID for X- build
LPC & MISC
PWM Output
AD Input
DA Output
PS2 Interface
Int. K/B Matrix
SPI Device Interface
SPI Flash ROM
SM Bus
GPIO
GPO
GPI
20mil
Default (No Function)
Deep S3 Support (PM_SLP_SUS#, Input)
Default (PCH_PWR_EN, Output)
AOAC Thermal
HW PWR GOOD
H_PROCHOT# Control citcuits need place close to CPU and VR
Only for Debug using
Security Classification
Compal Secret Data
Issued Date
2011/06/02
Deciphered Date
2013/10/28
Compal Electronics, Inc.
P35-EC ENE-KB9012
LA-8821P
Date: Friday, September 28, 2012
Sheet 35 of 54

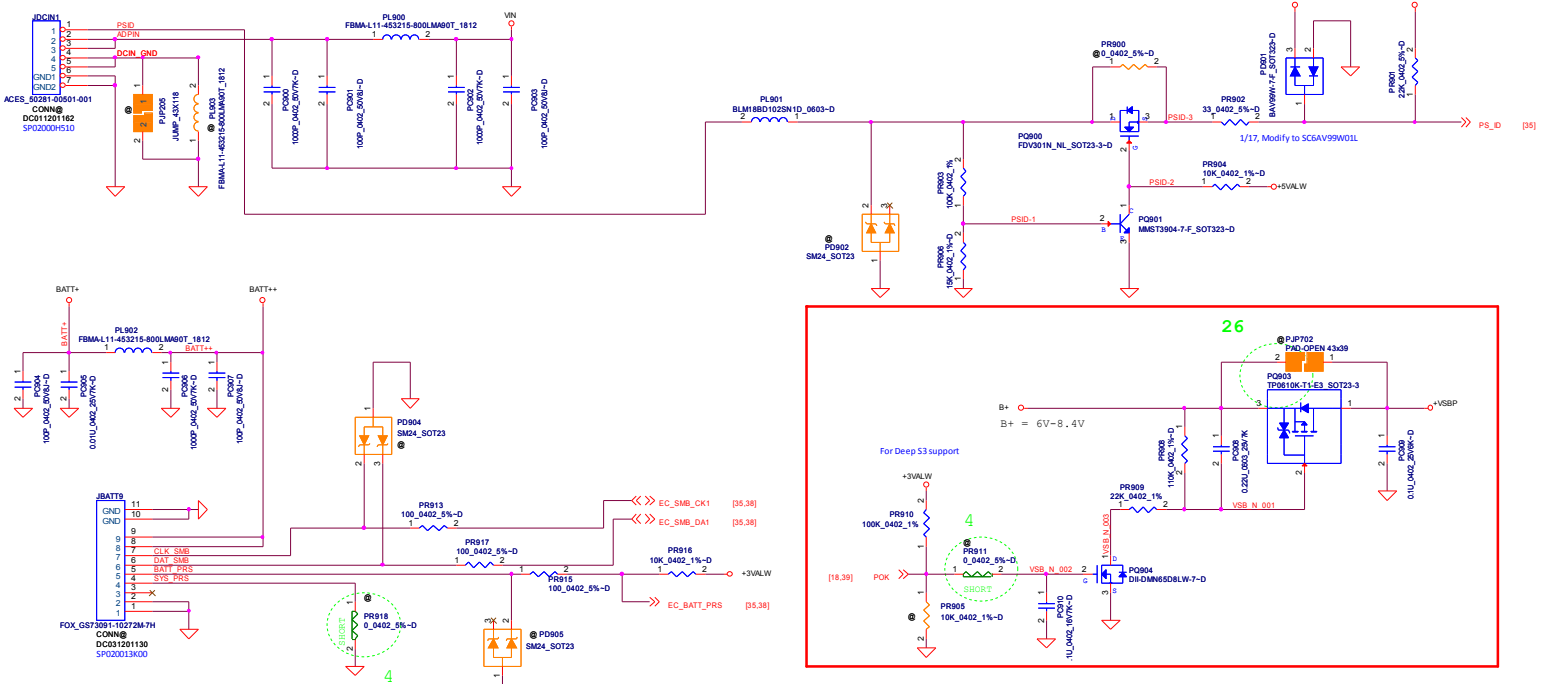


Compal Electronics, Inc.

Title: P36-PWR-POWER BLOCK DIAGRAM

Size: | Document Number: LA-8821P | Rev: 1.0

Date: Friday, September 28, 2012 | Sheet 36 of 54



JBATT battery connector

SMART
Battery:
1.GND
2.GND
3.BAT_ALERT
4.SYS_PRES
5.BATT_PRS
6.DAT_SMB
7.CLK_SMB
8.BATT+
9.BATT+

PH901 under CPU botten side :

CPU thermal protection at 85 degree C
Recovery at 50 degree C

Compal Electronics, Inc.
Title: P37-PWR_DCIN / BATT CONN / OTP
Size: Document Number: LA-8821P
Rev: 1.0
Date: Friday, September 28, 2012
Sheet 37 of 54

(battery = 2S3P -->
2150mAh*3= 6450mAh
---->6450mAh*0.6C=3.9A)
---->6450mAh*0.9C=5.8A)
Design charger current around 6A for worst case
So far battery own by Q and
battery spec didn't release to Compal

Reserve for EMI

B+=6V~8.4V

CHOCK DCR= 8.5mohm

Charger voltage MAX = 8.4V

Charger current MAX = 2A

Reserve Erp Lot 6 solution circuit into ST

Battery Current Sensor - BMON circuits

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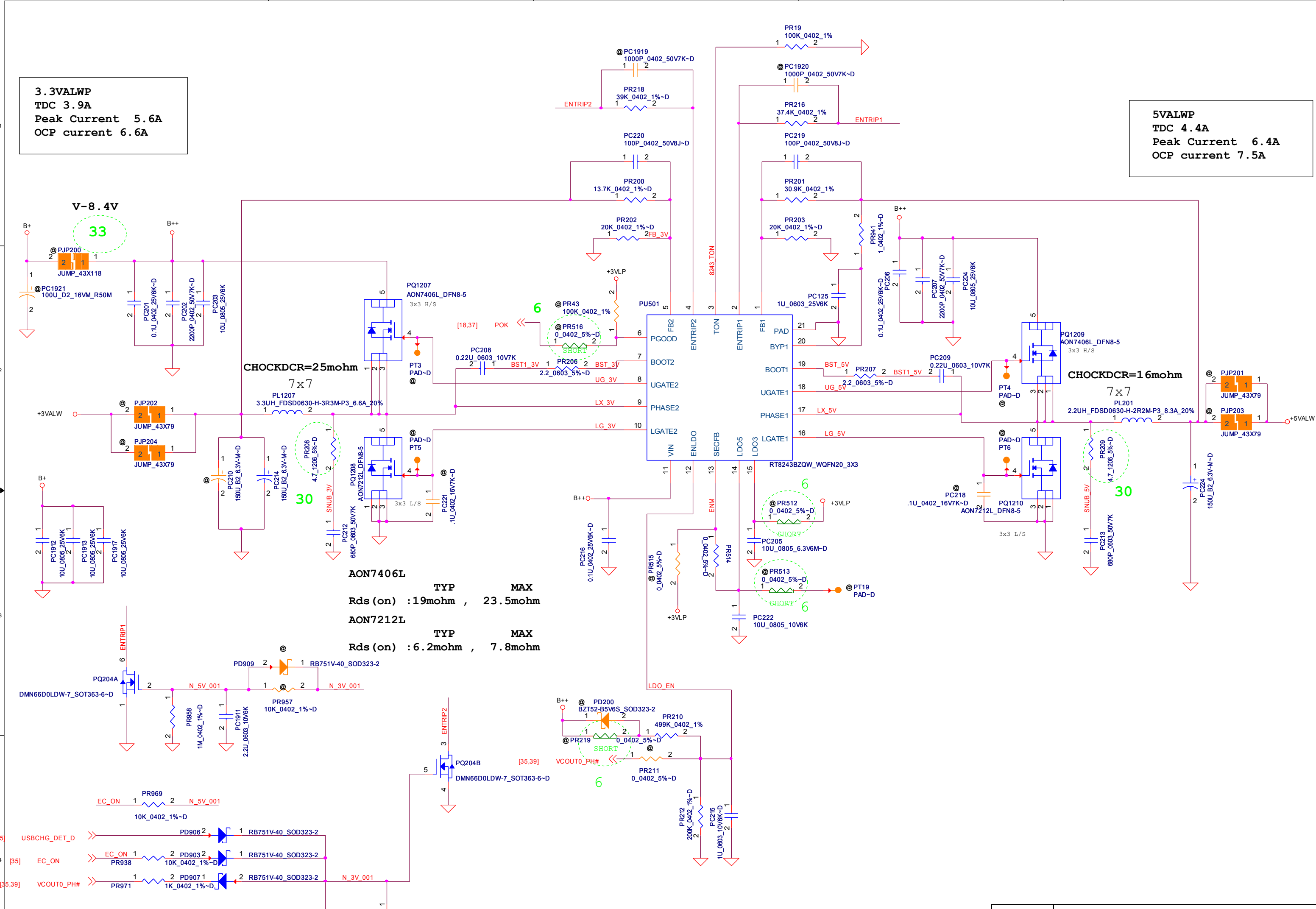
Compal Electronics, Inc.		
Title: P38-PWR_Charger(ISL9519)		
Size:	Document Number: LA-8821P	Rev: 1.0
Date: Friday, September 28, 2012	Sheet 38 of 54	

3.3VALWP
TDC 3.9A
Peak Current 5.6A
OCP current 6.6A

5VALWP
TDC 4.4A
Peak Current 6.4A
OCP current 7.5A



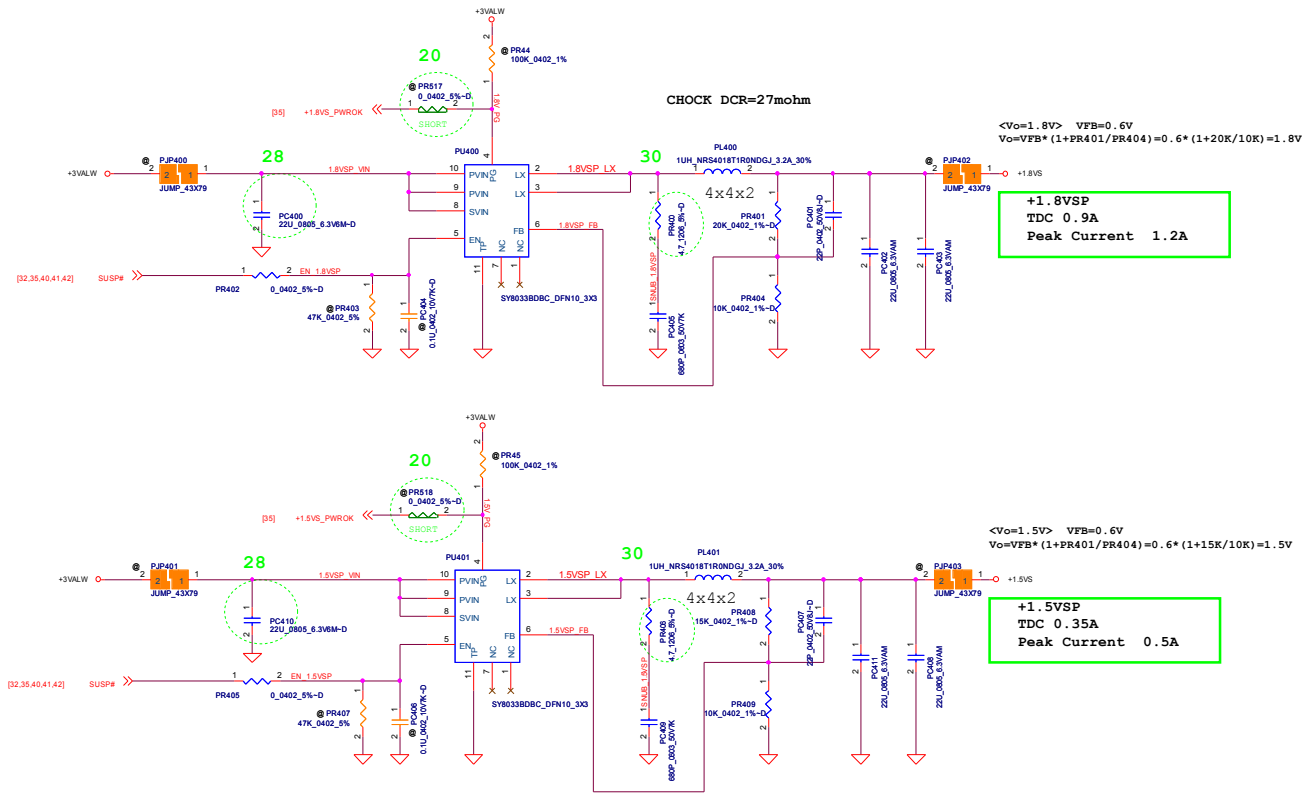
AON7406L

	TYP	MAX
Rds(on) :	19mohm ,	23.5mohm

AON7212L

	TYP	MAX
Rds(on) :	6.2mohm ,	7.8mohm

Compal Electronics, Inc.
Title: P39-PWR_3.3VALWP/5VALWP-8243
Size | Document Number: LA-8821P | Rev 1.0
Date: Friday, September 28, 2012 | Sheet 39 of 54

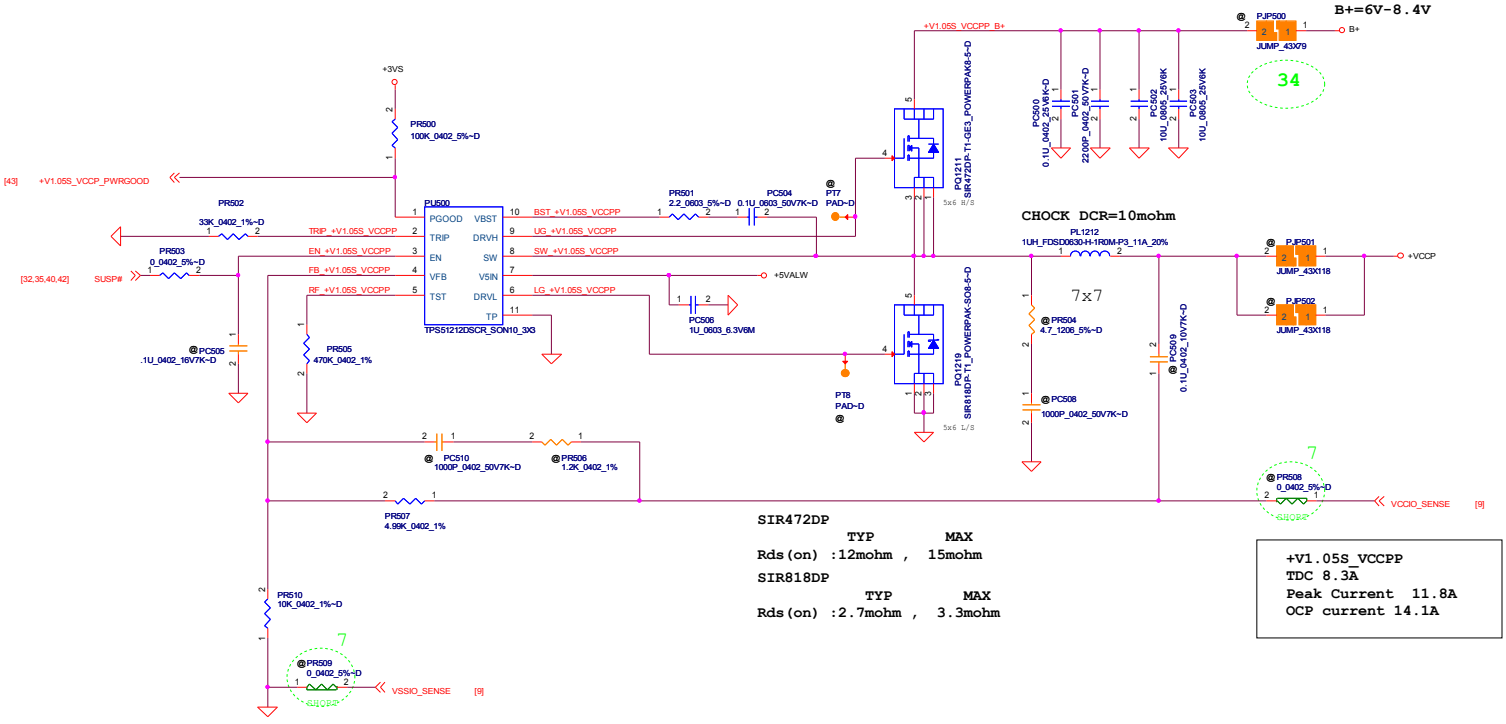


Compal Electronics, Inc.

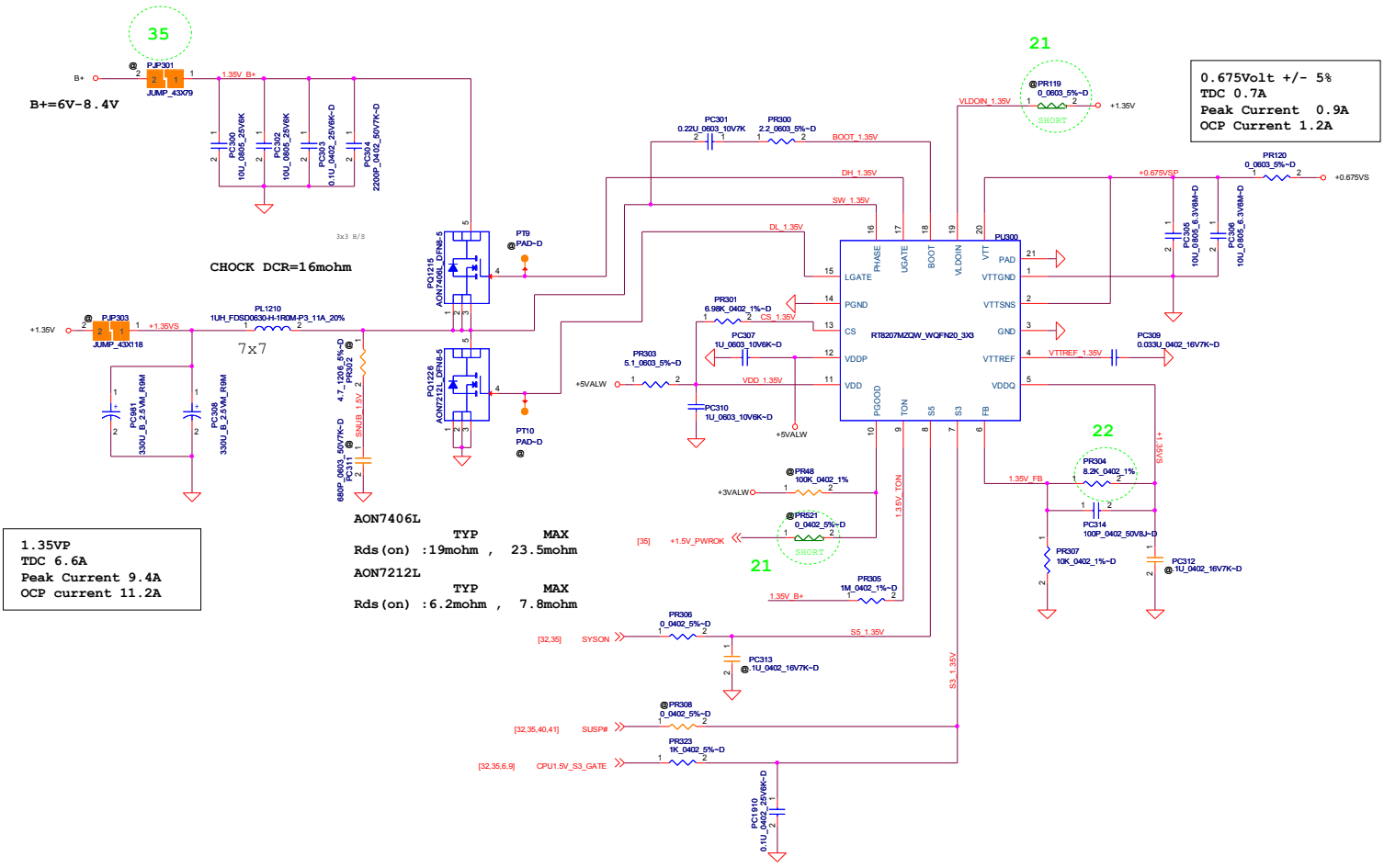
Title: P40-PWR_1.8VSP/1.5VSP

Size: | Document Number: LA-8821P | Rev: 1.0

Date: Friday, September 28, 2012 | Sheet 40 of 54



Compal Electronics, Inc.	
Title	P41-PWR_V1.05S_VCCPP
Size	Document Number: LA-8821P
Rev	1.0
Date:	Friday, September 28, 2012
Sheet	41 of 54



Compal Electronics, Inc.

Title: P42-PWR_+1.35VP/0.675VSP

Size: | Document Number: LA-8821P | Rev: 1.0

Date: Friday, September 28, 2012 | Sheet 42 of 54

12/15 update value

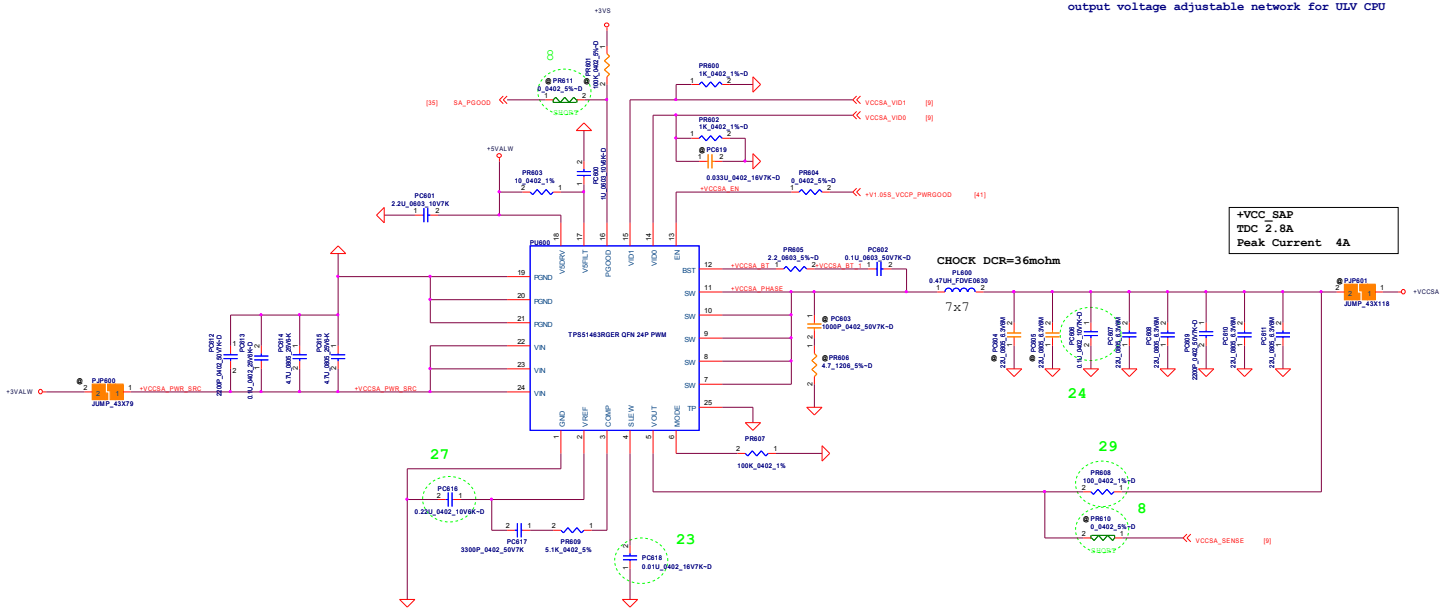
VID [0]	VID[1]	VCCSA Vout
0	0	0.9V
0	1	0.85V
1	0	0.775V
1	1	0.75V

output voltage adjustable network for ULV CPU

The 1k PD on the VCCSA VIDs are empty. These should be stuffed to ensure that VCCSA VID is 00 prior to VCCIO stability.

+VCC_SAP
TDC 2.8A
Peak Current 4A

CHOCK DCR=36mohm

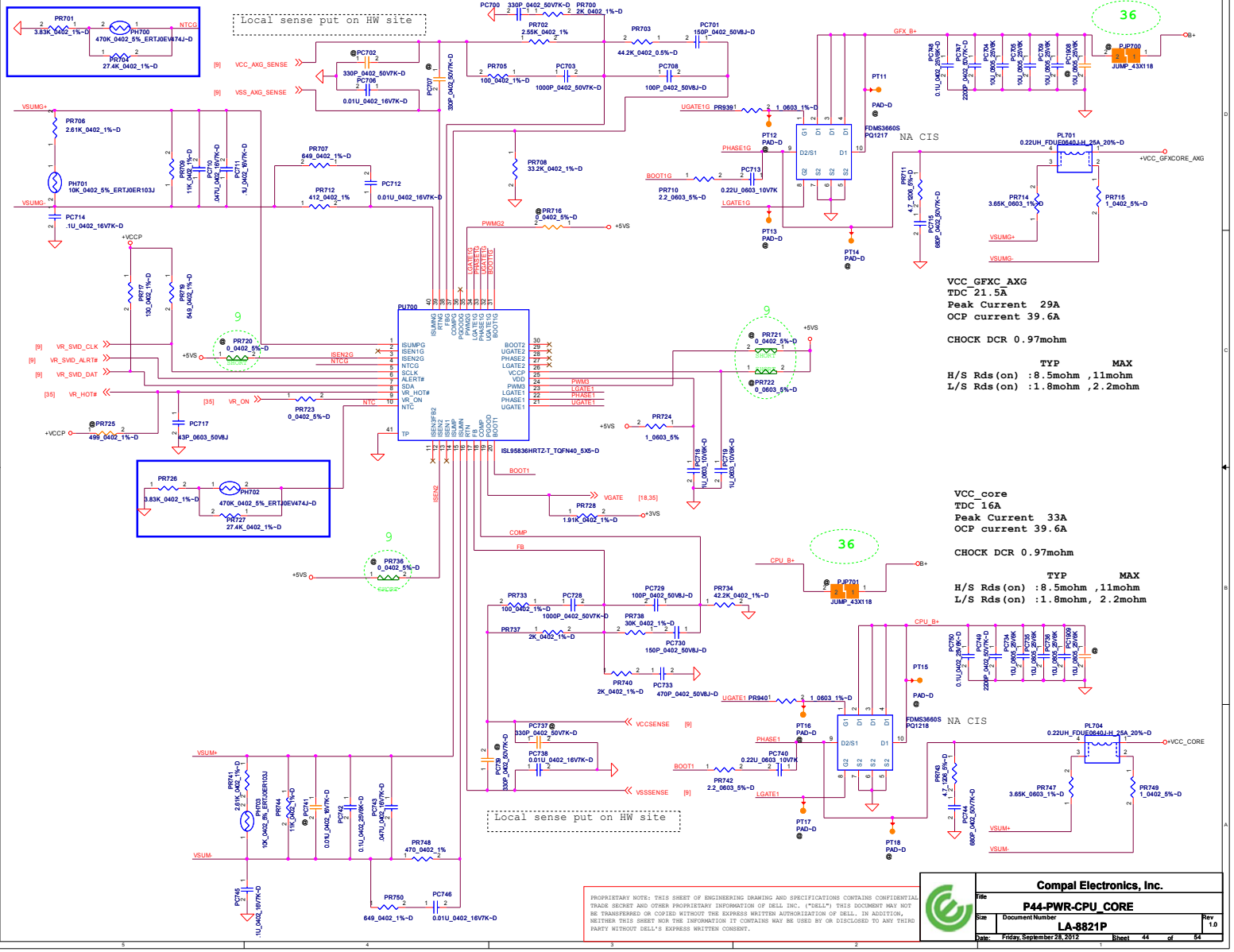


Compal Electronics, Inc.

Title: P43-PWR_+VCCSAP

Size: | Document Number: LA-8821P | Rev: 1.0

Date: Friday, September 28, 2012 | Sheet 43 of 54



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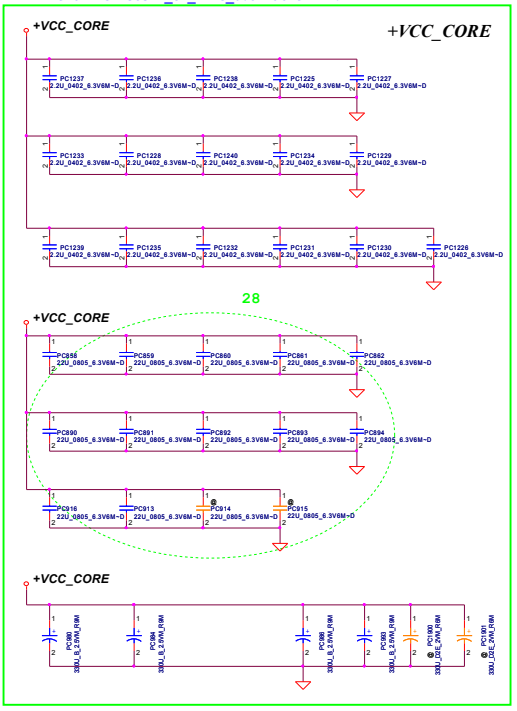
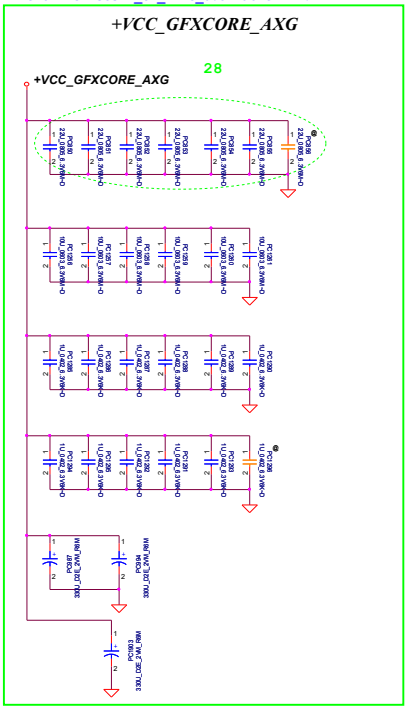
Compal Electronics, Inc.		
Title: P44-PWR-CPU_CORE		
Size	Document Number: LA-8821P	Rev: 1.0
Date: Friday, September 28, 2012	Sheet 44 of 54	

Below is 458544_CR_PDDG_0.8 Table 7-1.



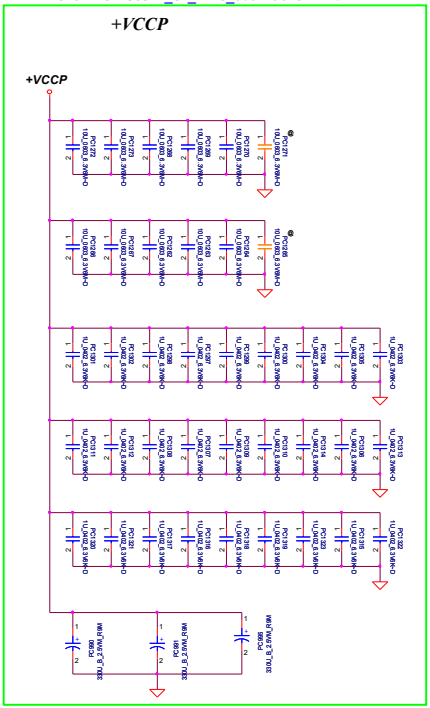
Output Decoupling Recommendations
VCORE
1.330uF_6mohm*3 (near VR)
2.22uF*12 (Between VR&CPU)
3.2.2uF*16 (Bottom of CPU)

Below is 458544_CR_PDDG_0.8 Table 7-4.



Output Decoupling Recommendations
iGFX
1.470uF_4.5mohm*2 (near VR)
2.22uF*6 (Between VR&CPU)
3.10uF*6 (Between VR&CPU, near CPU)
4.1uF*11 (Bottom of CPU)

Below is 458544_CR_PDDG_0.8 Table 7-7.



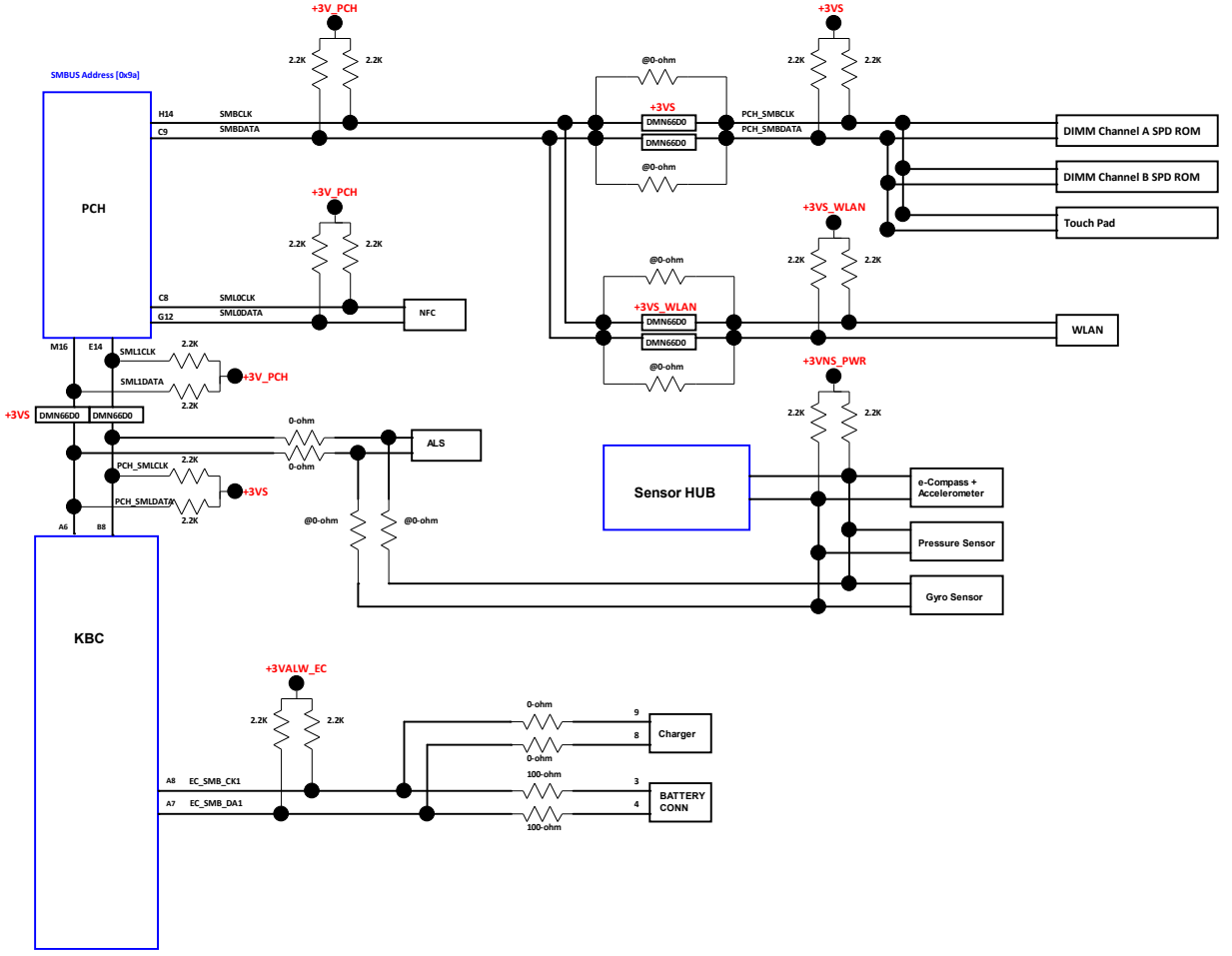
Output Decoupling Recommendations
VCCP_1.05V
1.330uF_6mohm*2 (near VR)
3.10uF*10 (Between VR&CPU)
4.1uF*27 (Bottom of CPU)

Compal Electronics, Inc.

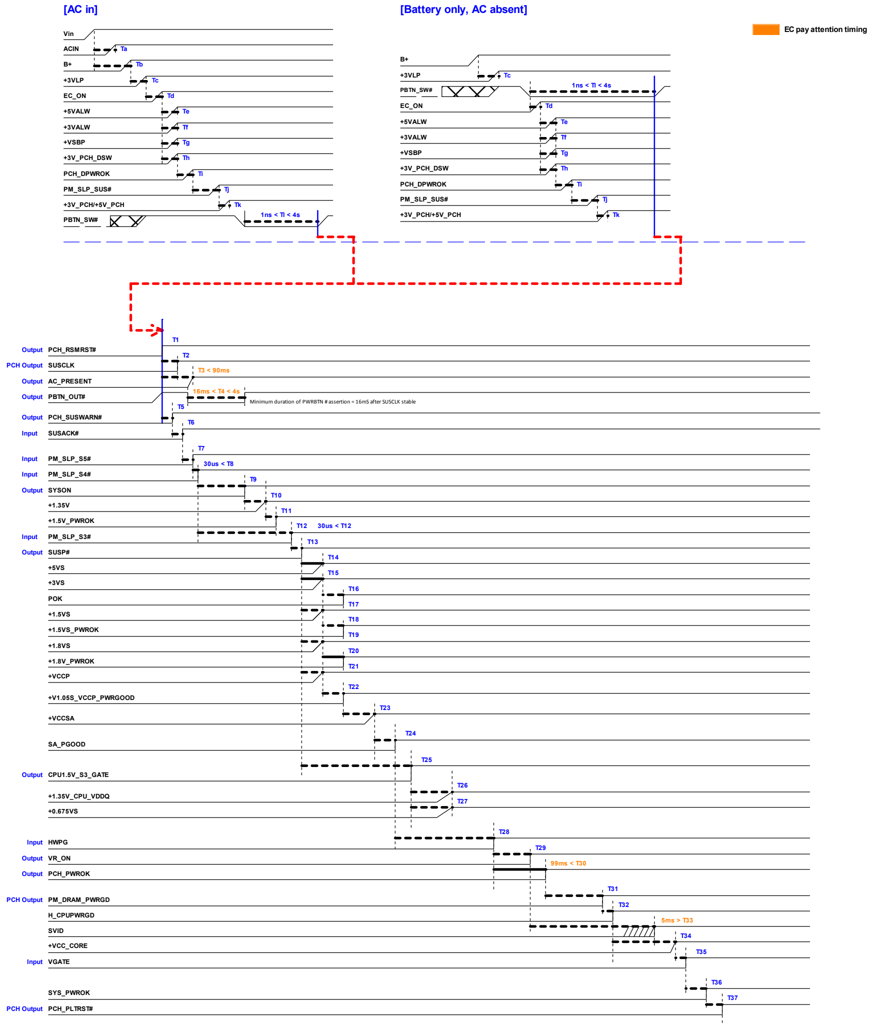
Title: P45-PWR_PROCESSOR DECOUPLING

Size: | Document Number: LA-8821P | Rev: 1.0

Date: Friday, September 28, 2012 | Sheet 45 of 54



Security Classification	Compal Secret Data			Compal Electronics, Inc.
Issued Date	2011/06/02	Deciphered Date	2013/10/28	Title: P46-SMBus Block Diagram
				Size: Document Number: Rev: 1.0
				Date: Friday, September 28, 2012 Sheet 46 of 54



Discrete Power On Sequence

[AC in]

ITEM	Measure Point			Time
Ta	VIN	To	ACIN	
Tb	VIN	To	B+	
Tc	B+	To	+3VLP	
Td	+3VLP	To	EC_ON	
Te	EC_ON	To	+5VALW	
Tf	EC_ON	To	+3VALW	
Tg	EC_ON	To	+VSBP	
Th	EC_ON	To	+3V_PCH_DSW	
Ti	+3V_PCH_DSW	To	PCH_DPWROK	
Tj	PCH_DPWROK	To	PM_SLP_SUS#	
Tk	PM_SLP_SUS#	To	+3V_PCH/+5V_PCH	
Tl	PBTN_SW#		Low pluse width	N/A

[Battery only, AC absent]

ITEM	Measure Point			Time
		To		
		To		
Tc	B+	To	+3VLP	
Tl	PBTN_SW#	To	Low pluse width	N/A
Td	+3VLP	To	EC_ON	
Te	EC_ON	To	+5VALW	
Tf	EC_ON	To	+3VALW	
Tg	EC_ON	To	+VSBP	
Th	EC_ON	To	+3V_PCH_DSW	
Ti	+3V_PCH_DSW		PCH_DPWROK	
Tj	PCH_DPWROK		PM_SLP_SUS#	
Tk	PM_SLP_SUS#		+3V_PCH/+5V_PCH	

ITEM	Measure Point			Time
T1	PBTN_SW#	To	PCH_RSMRST#	
T2	PCH_RSMRST#	To	SUSCLK	
T3	PCH_RSMRST#	To	AC_PRESENT	
T4	PBTN_OUT#	To	Low pluse width	
T5	PCH_RSMRST#	To	PCH_SUSWARN#	
T6	PCH_SUSWARN#	To	SUSACK#	
T7	SUSACK#	To	PM_SLP_S5#	
T8	PM_SLP_S5#	To	PM_SLP_S4#	
T9	PM_SLP_S4#	To	SYSON	
T10	SYSON	To	+1.35V	
T11	+1.35V	To	+1.5V_PWROK	
T12	PM_SLP_S4#	To	PM_SLP_S3#	
T13	PM_SLP_S3#	To	SUSP#	
T14	SUSP#	To	+5VS	
T15	SUSP#	To	+3VS	
T16	+3VS	To	POK	
T17	SUSP#	To	+1.5VS	
T18	+1.5VS	To	+1.5VS_PWROK	
T19	SUSP#	To	+1.8VS	
T20	+1.8VS	To	+1.8V_PWROK	
T21	SUSP#	To	+VCCP	
T22	+VCCP	To	+V1.05S_VCCP_PWRGOOD	
T23	+V1.05S_VCCP_PWRGOOD	To	+VCCSA	
T24	+VCCSA	To	SA_PGOOD	
T25	SUSP#	To	CPU1.5V_S3_GATE	
T26	CPU1.5V_S3_GATE	To	+1.35V_CPU_VDDQ	
T27	CPU1.5V_S3_GATE	To	+0.675VS	
T28	SA_PGOOD	To	HWPG	
T29	HWPG	To	VR_ON	
T30	HWPG	To	PCH_PWROK	
T31	PCH_PWROK	To	PM_DRAM_PWRGD	
T32	PM_DRAM_PWRGD	To	H_CPUPWRGD	
T33	VR_ON	To	SVID	
T34	H_CPUPWRGD	To	+VCC_CORE	
T35	+VCC_CORE	To	VGATE	
T36	VGATE	To	SYS_PWROK	
T37	SYS_PWROK	To	PCH_PLTRST#	

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Item	Page#	Title	Date	Request Owner	Issue Description	Solution Description	Rev.
1	24	eDP/ Camera CONN	2012-03-02	Compal_Vicent	eDP touch sreen's power missing in BBU stage	R1084 BOM structure is "@" (de-pop), change to POP	X01
2	35	EC ENE-KB9012	2012-03-05	Compal_Vicent	Debug power switch un-work, short to GND	SW2 OrCard symbol is different with specification Correct SW2 symbol	X01
3	35	EC ENE-KB9012	2012-03-05	Compal_Vicent	Insert USB device into power share port, the 3V/5V can't power-on automatic in S5/DC mode	R922 need de-pop to avoid become voltage divider with R938 and PD906	X01
4	35	EC ENE-KB9012	2012-03-05	Compal_Vicent	WLAN power will be turn-on a short time while adapter plug in	WLAN_EN# signal PU resistor R1012 need pop to prevent Hi-Z state while EC during initial state	X01
5	27	Sensor Fussion / TPM	2012-03-06	Compal_Vicent	Wrong power rail on Gyro sensor VDD_IO pin	Correct Gyro sensor U638 VDD_IO power from +3VS to +3VNS_PWR	X01
6	27	Sensor Fussion / TPM	2012-03-07	Compal_Vicent	Follow Intel Sensor HUB HWDG v0.5 to modify design	1. Sensor HUB uC (U636) VBAT power change from +RTCVCC to +3VALW power 2. Sensor HUB load switch power rail change from +3VALW to +3VS	X01
7	06 18 22 35	CPU(2/6) PM,XDP,CLK,S3,PLT PCH (3/8) DMI,FDI,PM,GFX,DP PCH (7/8) PWR EC ENE-KB9012	2012-03-09	Compal_Vicent	Change design to support Deep S3	1. De-pop RC72, Pop RC145 and R1035, DRAM_RST# gated by EC 2. Pop RH313, PCH Suspend power rail control by PCH 3. Pop RH310, De-pop RH128, Wake-up event change connect to PCH GPIO27 4. Pop RH309, De-pop RH126, PCH DPWROK change to +3VALW PG 5. Pop RH312, De-pop RH214, PCH VCCDSW change to +3VALW 6. R225 value change to 8.2K, Change Board ID to 1 for identify Deep S3 suuport PCBA	X01
8	27	Sensor Fussion / TPM	2012-03-12	Compal_Vicent	Change e-Compass, Gyro, Pressure sensor to DELL P/N	1. U637 P/N change from SA00004MI00 to SA00004MI0L 2. U638 P/N change from SA00005HQ00 to SA00005HQ0L 3. U653 P/N change from SA00004TT00 to SA00004TT0L	X01
9	27 17	Sensor Fussion / TPM PCH (2/8) PCIE, SMBUS, CLK	2012-03-15	Compal_Vicent	1. Follow Vendor EA result, change 8MHz crystal Capacitor value 2. Follow Vendor EA result, change 25MHz crystal Capacitor value	1. C1204 and C1204 value change from 18pF to 27pF 2. CH23 and CH24 value change from 15pF to 12pF	X01
10	24	eDP/ Camera CONN	2012-03-15	Compal_Vicent	Win8 Button doens't work, Double PU in P24 and P35 on net Win8_BTN_SW#	Page24 R977 de-pop, R978 change from 10K to 1K	X01
11	21 22 25	PCH (6/8) PWR PCH (7/8) PWR IOL Conn	2012-03-20	Compal Procurement	Change all TAIYO bead to MURATA	P21, LH3 P22, LH4, LH6, LH7, LH8 P25, LH9	X01
12	27 29	Sensor Fussion / TPM mSATA / NFC Conn	2012-03-21	Compal_Vicent	Sensor HUB JDG1 is interference to ME design	Connect U636 JTAG interface to mSATA mini-card JSATA1 Pop R1090 0-ohm	X01
13	20 27	PCH (5/8) GPIO, CPU, MISC Sensor Fussion / TPM	2012-03-22	Intel & Compal_Vicent	Follow Intel Sensor HUB design DG0.5, remove SBD_INT# connection to PCH	Remove SBD_INT# connection to Sensor HUB uC and rename to PCH_GPIO15 Add Test poin on SBD_INT# net	X01
14	19 20	PCH (4/8) PCI, USB, NVRAM PCH (5/8) GPIO, CPU, MISC	2012-03-22	Compal_Mandy	Rotation lock can't detect by event trigger method	Rotation Lock signal change connect from PCH GPIO48 to GPIO14	X01
15	17 19	PCH (2/8) PCIE, SMBUS, CLK PCH (4/8) PCI, USB, NVRAM	2012-03-23	Compal_Mandy	Intel DS3 known issue, if GPIO11 drive low in DS3 then re-inserted AC the system will wake-up all way.	Follow BIOS team suggestion, change EC_LID_OUT# connection from GPIO11 to GPIO10	X01
16	5	CPU(1/6) DMI,FDI,PEG	2012-03-28	Compal_Jay	Update CPU to L-1 P/N	Update CPU to L-1 P/N(i5-3317U/i5-3427U/i7-3517U/i7-3667U)	X01
17	17 29	PCH (2/8) PCIE, SMBUS, CLK mSATA / NFC Conn	2012-03-28	Compal_Jay	Follow Intel NFC review result	Page17 R517 de-pop. Page29 1. add R1100 100K PD. 2. de-pop R973. 3. Pop R974 and change from 10K to 0 ohm.	X01
18	20 27	PCH (5/8) GPIO, CPU, MISC Sensor Fussion / TPM	2012-04-02	Compal_Jay	Add TPM BOM Optional (PCH_GPIO16), PU=WTPM/PD=W/O TPM	TPM@=support TPM, NTPM@=without TPM	X01
19	18 35	PCH (3/8) DMI,FDI,PM,GFX,DP EC ENE-KB9012	2012-04-02	Compal_Jay	For meet ErP Lot 6, remove PM_SLP_S4# (PCH side) connection to EC.	1.Remove PM_SLP_S4# connection to EC and add test poin. 2.Rename POK to EC_DPWROK. Rename PM_SLP_S4# to EC_DPWROK.	X01
20	17 29	PCH (2/8) PCIE, SMBUS, CLK mSATA / NFC Conn	2012-04-03	Compal_Jay	Modify net name from NFC_IRQ# to NFC_IRQ.	Modify net name from NFC_IRQ# to NFC_IRQ.	X01

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Item	Page#	Title	Date	Request Owner	Issue Description	Solution Description	Rev.
21	38	PWR_Charger(ISL9519)	2012-04-05	Power_Jeff	Add 0 ohm for EC_SMB_DA1 and EC_SMB_CK1 for charger test.	Add 0 ohm for EC_SMB_DA1 and EC_SMB_CK1 for charge test.	X01
22	44	PWR-CPU_CORE	2012-04-05	Power_Jeff	Follow intersil EA test result,modify PR737 form 1.91K to 2.0K for CPU Load Line.	Modify PR737 form 1.91K to 2.0K for CPU LL	X01
23	44	PWR-CPU_CORE	2012-04-05	Power_Jeff	Modify GFXC_core and CPU_core TDC and OCP current note	VCC_GFXC_AXG TDC from 20.3A -->21.5A OCP current from 34.5A to 39.6A VCC_Core TDC from 23A -->16A OCP current from 39A to 39.6A	X01
24	33	SCREWH/KB/RTC	2012-04-09	Compal_Jay	Follow ME dxf file update	Delete H15 and add H21 EMI_spring	X01
25	18 35	PCH (3/8) DMI,FDI,PM,GFX,DP EC ENE-KB9012	2012-04-09	Compal_Jay	Follow EC suggest modify back PM_SLP_S4# connection to EC.	1. Follow EC suggest modify back PM_SLP_S4# connection to EC.. 2.Modify EC_DPWROK back to POK. Modify C_DPWROK back to PM_SLP_S4#.	X01
26	27	Sensor Fussion / TPM	2012-04-09	Compal_Jay	Follow TXC crystal EA report	Follow TXC EA report modify CH1202/CH1203 from 6.8PF to 18PF	X01
27	16	PCH (1/8) SATA,HDA,SPI, LPC	2012-04-09	Compal_Jay	Follow TXC crystal EA report	Follow TXC EA report modify CH2/CH3 from 18PF to 22PF	X01
28	35	EC ENE-KB9012	2012-04-09	Compal_Jay	Modify board ID to Revision : X01	Modify R225 from 8.2K to 18K	X01
29	38	PWR_Charger(ISL9519)	2012-04-09	Power_Jeff	Follow Charger EA, modify swiching frequence to slow	Change PL1211 form 1uH to 3.3uH	X01
30	44	PWR-CPU_CORE	2012-04-09	Power_Jeff	Follow intersil EA test result, modify CPU OCP Value.	change PR748 from 422 to 442 ohm	X01
31	44	PWR-CPU_CORE	2012-04-09	Power_Jeff	Follow intersil EA test result, modify value for CPU compensator.	Change PC729 from 47p to 100pF	X01
32	44	PWR-CPU_CORE	2012-04-09	Power_Jeff	Follow intersil EA test result, modify value for CPU compensator.	Change PR738 from 267K to 220K ohm	X01
33	44	PWR-CPU_CORE	2012-04-09	Power_Jeff	Follow intersil EA test result, modify GFX OCP value.	change PR712 from 360 to 392 ohm	X01
34	44	PWR-CPU_CORE	2012-04-09	Power_Jeff	Follow intersil EA test result,modify PR737 form 1.91K to 2.0K for GFX Load Line.	Change PR702 from 2.26K to 2.55K ohm	X01
35	44	PWR-CPU_CORE	2012-04-09	Power_Jeff	Follow intersil EA test result, modify value for GFX compensator.	Change PC708 from 47p to 100pF	X01
36	44	PWR-CPU_CORE	2012-04-09	Power_Jeff	Follow intersil EA test result, modify value for GFX compensator.	Change PR703 from 267K to 220K ohm	X01
37	44	PWR-CPU_CORE	2012-04-09	Power_Jeff	Follow intersil suggest, change input caps from 4.7uF to 10uF.	Change PC704,PC705,PC709,PC734,PC735,PC736 form 4.7uF to 10uF Add PC1908, PC1909 to 10uF de-pop	X01
38	39	PWR_3.3VALWP/5VALWP-8243	2012-04-09	Power_Jeff	Modify SECFB connection to LDO3 (DEM)	Change PR514 form 0ohm to NC Change PR515 form NC to 0ohm	X01
39	39	PWR_3.3VALWP/5VALWP-8243	2012-04-09	Power_Jeff	For 3/5V can't turn-off in S5 state while system change form AC to DC mode	Change PC217 form 2.2uf to NC	X01
40	42	PWR_3.3VALWP/5VALWP-8243	2012-04-09	Power_Jeff	Avoid +1.35V output noise affect FB sensor result, modify net name from +1.35V to +1.35VS	Modify net name from +1.35V to +1.35VS	X01
41	11 12 13 14	DDRIII Channel_A Lower DDRIII Channel_A Upper DDRIII Channel_B Lower DDRIII Channel_B Upper	2012-04-10	Compal_Jay	Modify DDR3L P/N for PT build	MICRON 2Gb/1600/42nm :SA00005PR0L MICRON 4Gb/1600/30nm :SA00005SO0L HYNIX 2Gb/1600/38nm :SA00004RG0L HYNIX 4Gb/1600/38nm :SA00005JT0L SAMSUNG 2Gb/1600/35nm :SA00005P90L SAMSUNG 4Gb/1600/35nm :SA00005AT0L	X01
42	16~23	PCH (1/8) SATA,HDA,SPI, LPC	2012-04-10	Compal_Jay	Modify PCH P/N for PT build	SA00005L31L : S IC BD82QS77 SLJ8B C1 BGA 1017 PCH	X01
43	42	PWR_+1.35VP/0.675VSP	2012-04-10	Power_Jeff	Deley +1.35V and +0.675V sequece timing	Change PR323 form 0ohm to 1Kohm add CAP 0.1uF connect PR323 to GND	X01
44	38	PWR_Charger(ISL9519)	2012-04-10	Power_Jeff	Reduce ADP_I slew rate too slow	Change PC38 form 0.1uF to 0.01uF	X01
45	27	Sensor Fussion / TPM	2012-04-11	Compal_Jay	Remove Pressure Sensor function for PT build	De-pop U653,D96,D97,C1148,C1149 and R1093	X01
46	16 27	PCH (1/8) SATA,HDA,SPI, LPC Sensor Fussion / TPM	2012-04-11	Compal_Jay	Follow buyer suggest modify 32.768 crystal CPN	Modify Y1 and YH1 CPN to SJ10000BM00	X01
47	39	PWR_3.3VALWP/5VALWP-8243	2012-04-11	Power_Jeff	Follow buyer suggest modify 10UF CAP CPN	Modify PC222 CPN to SE000004880	X01

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Item	Page#	Title	Date	Request Owner	Issue Description	Solution Description	Rev.
48	42 39	PWR_+1.35VP/0.675VSP PWR_3.3VALWP/5VALWP-8243	2012-04-11	Power_Jeff	Follow buyer suggest, modify 100pf CPN	Modify PC129,PC220 and PC314 P/N to SE071101J8L	X01
49	39	PWR_3.3VALWP/5VALWP-8243	2012-04-11	Power_Jeff	Combine the P/N	Modify PD906,PD907 and PD903 P/N to SCS00000Z00	X01
50	44	PWR-CPU_CORE	2012-04-12	Power_Jeff	Modify P/N to Green part	PC708,PC729 change material form SE071101K8L to SE071101J8L.	X01
51	27	Sensor Fussion / TPM	2012-04-16	Compal_Jay	Option +3VALW and +RTCVCC for Sensor hub Vbat pin and default is +3VALW.	Add R1101 and R1102 for option +3VALW and +RTCVCC.	X01
52	27	Sensor Fussion / TPM	2012-04-16	Compal_Jay	Follow Intel suggest, pin 4 change from floating to GND.	U638 pin 4 change from floating to GND.	X01
53	29	mSATA / NFC Conn	2012-04-17	Compal_Jay	mSATA don't need +5VS power,remove +5VS power rail from JSATA1 connector.	Remove +5VS power rail	X01
54	24	eDP/ Camera CONN	2012-04-18	Compal_Jay	Add soultion for EMI fix DMIC noise issue	R537 change to 100-ohm, C1133 pop 10pF and add C1206 pop 10pF.	X01
55	22	PCH (7/8) PWR	2012-04-18	Compal_Jay	Modify P/N to COMMON part H=1.9	Modify CH86 and CH88 P/N to SGA0000170L	X01
56	37	PWR_DCIN / BATT CONN / OTP	2012-04-19	Power_Jeff	IPCC/ VC_IN function support	De-pop PR937 and PR936 change to 0-ohm	X01
57	30	PWR_DCIN / BATT CONN / OTP	2012-04-19	Compal_Jay	Follow ME new connector list X14, modify JUSB2 P/N	Change JUSB2 P/N to ACON_TARAG-9V1391	X01
58	37	PWR_DCIN / BATT CONN / OTP	2012-04-20	Power_Jeff	For fix EMI LX_3V and LX_5V nets cause the boardband noise	Pop PR208,PR209, PC212,PC213	X01
59	35	EC ENE-KB9012	2012-04-20	Compal_Jay	Change FAN to PWM control Add BMON function	1.Change GPIO13 from ACOFF to SYSTEM_FAN_PWM 2.Remove ACOFF PD R1022 3.Change GPI39 from VOLUME_UP_SW# to BMON 4.Change GPO3D from EN_DFAN1 to VOLUME_UP_SW#	X01
60	34	TP / FAN	2012-04-20	Compal_Jay	Change FAN to PWM control	Follow Thermal team request, change FAN to PWM control circuit.	X01
61	38	PWR_Charger(ISL9519)	2012-04-20	Power_Jeff	Remove ACOFF due to add FAN PWM control and BMON function	Remove ACOFF net and add test PAD	X01
62	39	PWR_3.3VALWP/5VALWP-8243	2012-04-23	Power_Jeff	For B+ drop issue	1. Change PC203,PC204 form 4.7uF to 10uF 2. Add PC1912,PC1913 and PC1917 of X5R 0805 10uF to B+ connect GND 3. De-pop PC210,PC211 4. Add PR957(10Kohm), PR958 (100K ohm) ,PC1911 (2.2uF) and PD909	X01
63	41	PWR_V1.05S_VCCPP	2012-04-23	Power_Jeff	For B+ drop issue	Change PC502,PC503 form 4.7uF to 10uF	X01
64	42	PWR_+1.35VP/0.675VSP	2012-04-23	Power_Jeff	For B+ drop issue	Change PC300,PC302 form 4.7uF to 10uF	X01
65	42	PWR_+1.35VP/0.675VSP	2012-04-23	Power_Jeff	For consider test efficiency	Connect PR119 +1.35VS channge to +1.35V	X01
66	43	PWR_+VCCSAP	2012-04-23	Power_Jeff	For adjustment voltage from 0.8V to 0.85V	Change PR607 form 33K to 100K	X01
67	38	PWR_Charger(ISL9519)	2012-04-23	Power_Jeff	Add Battery Current Sensor function	Add Battery Current Sensor - BMON circuits	X01
68	26	Mini DP CONN	2012-04-23	Compal_Jay	Follow ME new connector list X14, modify JMDP1 P/N	Change JMDP1 P/N to ACON_MAR2B-20K1200	X01
69	31	BAT LED	2012-04-24	Compal_Jay	Follow DELL request, modify SW1 P/N	Change SW1 P/N to SN100006U0L	X01
70	38	PWR_Charger(ISL9519)	2012-04-25	Power_Jeff	Disable Reserved circuit for DT mode charger	Remove reserved circuit for DT mode charger	X01
71	37	PWR_DCIN / BATT CONN / OTP	2012-04-25	Power_Jeff	Follow EMI request, add one bead on DC-IN GND pin	Add PL903 on DC-IN GND pin	X01
72	34	TP / FAN	2012-04-25	Compal_Jay	Follow DELL suggest, modify JFAN1 P/N same with WIN8/B connector	Change JFAN1 P/N to SP02000Y500	X01
73	39	PWR_3.3VALWP/5VALWP-8243	2012-04-25	Power_Jeff	Follow power team schematic review result	De-pop PR958	X01
74	42	PWR_+1.35VP/0.675VSP	2012-04-25	Power_Jeff	because 2nd Footprint is big size then main source,we suggest modify footprint in PT	PQ1226 change Footprint form AON7212L_DFN8-5 to FDMC7672S_MLP8-5	X01
75	30	PWR_DCIN / BATT CONN / OTP	2012-04-25	Compal_Jay	Follow ME new connector list X15, modify JUSB2 P/N	Change JUSB2 P/N from ACON_TARAG-9V1391 to ACON_TARAG-9U1391	X01
76	32	DC/DC Interface	2012-04-26	Compal_Jay	For BBU measurement	Add R894 on +3VALW to +3V_PCH, +5VALW to +5V_PCH	X01
77	29	mSATA / NFC Conn	2012-04-26	Compal_Jay	Follow ME new connector list X15, modify JNFC1 P/N from temp P/N to CPN	Update JNFC1 P/N to SP01001HI00 (CIS part)	X01

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Item	Page#	Title	Date	Request Owner	Issue Description	Solution Description	Rev.
78	37	PWR_DCIN / BATT CONN / OTP	2012-04-26	Compal_Jay	reserved power Jump on DC-IN GND pin	Add PJP205 on DC-IN GND pin	X01
79	29	mSATA / NFC Conn	2012-04-27	Compal_Jay	Remove NFC function	De-pop C1134 and R974	X01
80	38	PWR_Charger(ISL9519)	2012-05-02	Power_Jeff	For fix derating issue	Change PR942 1Kohm to 3.3K ohm	X01
81	45	PWR_PROCESSOR DECOUPLING	2012-05-03	Power_Jeff	Main source(SANYO) can't supply so modify to other supplier	Change PC987,PC994,PC1900,PC1901 and PC1903 form SGA00002U00 to SGA00006A00.	X01
82	27	Sensor Fussion / TPM	2012-06-05	Compal_Jay	Follow Intel reference design	Reserved R1104 10 Kohm between USB_PP and uC PB5	X01.1
1	16	PCH (1/8) SATA,HDA,SPI, LPC	2012-06-21	Compal_Jay	WINBOND SPI ROM have issue on other project, remove WINBOND from schematic.	Change U48 P/N from SA000039A2L to SA000046400 (EON)	X02
2	20	PCH (5/8) GPIO, CPU, MISC	2012-06-21	Compal_Jay	For DDR3L repair request, add strap pin for CH A and CH B Enable/Disable.	Rserved RH338 and RH339 PD	X02
3	39	PWR_3.3VALWP/5VALWP-8243	2012-06-21	Power_Jeff	For 3/5V can't turn-off in S5 state,while system change form AC to DC mode	Change PR958 form de-pop to 1M ohm	X02
4	44	PWR-CPU_CORE	2012-06-21	Power_Jeff	Following FAE test result and modify component	Change the PR738 from 220kOhm to 30kOhm.	X02
5	44	PWR-CPU_CORE	2012-06-21	Power_Jeff	Following FAE test result and modify component	Change the PR733,PR705 from 499 Ohm to 100 Ohm.	X02
6	44	PWR-CPU_CORE	2012-06-21	Power_Jeff	Following FAE test result and modify component	Change the PC728,PC703 from 680pF to 1000pF.	X02
7	44	PWR-CPU_CORE	2012-06-21	Power_Jeff	Following FAE test result and modify component	Change the PR748 from 442 Ohm to 470 Ohm.	X02
8	44	PWR-CPU_CORE	2012-06-21	Power_Jeff	Following FAE test result and modify component	Change the PC743, PC710 from 0.068uF to 0.047uF.	X02
9	44	PWR-CPU_CORE	2012-06-21	Power_Jeff	Following FAE test result and modify component	Change the PR750,PR707 from non-pop to 649 Ohm.	X02
10	44	PWR-CPU_CORE	2012-06-21	Power_Jeff	Following FAE test result and modify component	Change the PC746,PC712 from non-pop to 0.01uF.	X02
11	44	PWR-CPU_CORE	2012-06-21	Power_Jeff	Following FAE test result and modify component	Change the PC741 from 0.01uF to non-pop.	X02
12	44	PWR-CPU_CORE	2012-06-21	Power_Jeff	Following FAE test result and modify component	Change the PR703 from 220kOhm to 44.2k Ohm.	X02
13	44	PWR-CPU_CORE	2012-06-21	Power_Jeff	Following FAE test result and modify component	Change the PR708 from 137kOhm to 33.2kOhm.	X02
14	44	PWR-CPU_CORE	2012-06-21	Power_Jeff	Following FAE test result and modify component	Change the PR712 from 392 Ohm to 412 Ohm.	X02
15	38	PWR_Charger(ISL9519)	2012-06-21	Power_Jeff	Follow Erp 6 spec (low power mode)	Change PR28 51.1Kohm to 68Kohm	X02
16	44	PWR-CPU_CORE	2012-06-22	Power_Jeff	MOS temperature is not meet Dell spec	Change PQ1217,PQ1218 form SB00000V800 to SB00000XE0L	X02
17	42	PWR_+1.35VP/0.675VSP	2012-06-22	Power_Jeff	Because unstable of phase waveform	Change PL1210 form 2.2UH to 1UH	X02
18	27	Sensor Fussion / TPM	2012-06-22	Compal_Jay	Follow Intel DG V080 and double confirm with Intel	Change R1094 to 1M ohm and add R1105,R1106 and C1207	X02
19	27	Sensor Fussion / TPM	2012-06-22	Compal_Jay	Follow Intel DG V080 and double confirm with Intel	Add R1107 on U638 pin 1	X02
20	27	Sensor Fussion / TPM	2012-06-22	Compal_Jay	Follow Intel DG V080 and double confirm with Intel	De-pop R817 and change R1104 to 1.5K ohm (pop)	X02
21	27	Sensor Fussion / TPM	2012-06-22	Compal_Jay	Follow Intel DG V080 and double confirm with Intel	Contect U636.F6 to U637.5 and U636.E4 to U637.4	X02
22	27	Sensor Fussion / TPM	2012-06-22	Compal_Jay	Follow Intel suggest	Change U636 P/N for SA00004TV0 (STM32F103RDY6TR) to SA00005P20(STM32F103RCY6TR)	X02
23	35	EC ENE-KB9012	2012-06-22	Compal_Jay	Follow EC suggest	Follow EC suggest, change TABLET_MODE from PU to PD.	X02
24	31	BAT LED	2012-06-22	Compal_Jay	Follow factory suggest, change LED to ESD protest LED	Change LED P/N form SC500007G00 to SC50000D70L	X02
25	06	CPU(2/6) PM,XDP,CLK,S3,PLT	2012-06-25	Compal_Jay	Change 0 ohm resistors to short PAD type	Change RC49, RC53, RC56, RC11 to short PAD type	X02
26	09	CPU(5/6) PWR,BYPASS	2012-06-25	Compal_Jay	Change 0 ohm resistors to short PAD type	Change RH280, RC92, RC96, RC98, RC99 to short PAD type	X02
27	16	PCH (1/8) SATA,HDA,SPI, LPC	2012-06-25	Compal_Jay	Change 0 ohm resistors to short PAD type	Change RH255 to short PAD type	X02
28	18	PCH (3/8) DMI,FDI,PM,GFX,DP	2012-06-25	Compal_Jay	Change 0 ohm resistors to short PAD type	Change RH273, RH130, RH131, RH133, RH297, RH293,RH137, RH132 to short PAD type	X02
29	19	PCH (4/8) PCI, USB, NVRAM	2012-06-25	Compal_Jay	Change 0 ohm resistors to short PAD type	Change RH336 to short PAD type	X02
30	21	PCH (6/8) PWR	2012-06-25	Compal_Jay	Change 0 ohm resistors to short PAD type	Change RH207, RH210, RH211 to short PAD type	X02

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Item	Page#	Title	Date	Request Owner	Issue Description	Solution Description	Rev.
31	22	PCH (7/8) PWR	2012-06-25	Compal_Jay	Change 0 ohm resistors to short PAD type	Change RH219, RH230, RH247, RH244, RH292, RH233 to short PAD type	X02
32	24	eDP/ Camera CONN	2012-06-25	Compal_Jay	Change 0 ohm resistors to short PAD type	Change R983, R984, R538 to short PAD type	X02
33	26	Mini DP CONN	2012-06-25	Compal_Jay	Change 0 ohm resistors to short PAD type	Change RV8 to short PAD type	X02
34	27	Sensor Fussion / TPM	2012-06-25	Compal_Jay	Change 0 ohm resistors to short PAD type	Change R1090 to short PAD type	X02
35	28	WLAN / WiGig / BT	2012-06-25	Compal_Jay	Change 0 ohm resistors to short PAD type	Change R1017, R1012, R1013, R1014, R1015, R1016 to short PAD type	X02
36	32	DC/DC Interface	2012-06-25	Compal_Jay	Change 0 ohm resistors to short PAD type	Change R1031 to short PAD type	X02
37	35	EC ENE-KB9012	2012-06-25	Compal_Jay	Change 0 ohm resistors to short PAD type	Change R216, R921, R249, R250, R253, R926, R931,R933, R934, R982, R925, R228 to short PAD type	X02
38	39	PWR_3.3VALWP/5VALWP-8243	2012-06-26	Power_Jeff	OCP protection over Dell spce	Change PR218 from 43kohm to 39Kohm and PR216 from 45.3K to 37.4Kohm	X02
39	42	PWR_+1.35VP/0.675VSP	2012-06-26	Power_Jeff	OCP protection over Dell spce	Change PR301 from 7.68Kohm to 6.98Kohm	X02
40	11	DDRIII Channel_A Lower	2012-06-26	Compal_Jay	For cost down soultion, add SPD code into BIOS and remove SPD ROM.	De-pop UD17,RD39,RD40 and CD127	X02
41	13	DDRIII Channel_B Lower	2012-06-26	Compal_Jay	For cost down soultion, add SPD code into BIOS and remove SPD ROM.	De-pop UD18,RD41,RD42 and CD128	X02
42	38	PWR_Charger(ISL9519)	2012-06-27	Power_Jeff	Reserve Erp Lot 6 solution circuit into ST	Reserve PR964,PR965,PR966,PR967,PR968,PC1918 and PQ1228	X02
43	38	PWR_Charger(ISL9519)	2012-06-27	Power_Jeff	Because ISL9519 support, so de-pop component	De-pop component to PQ1227,PQ7,PR942,PR943,PR41	X02
44	20	PCH (5/8) GPIO, CPU, MISC	2012-06-28	Compal_Jay	Modify GPIO name for TPM optional	Modify GPIO PCH_GPIO16 to TPM_DET	X02
45	20	PCH (5/8) GPIO, CPU, MISC	2012-06-28	Compal_Jay	Modify GPIO name for DDR3L strap	Modify GPIO PCH_GPIO17 to MEM_CHA_EN and PCH_GPIO22 to MEM_CHB_EN	X02
46	20 27	PCH (5/8) GPIO, CPU, MISC Sensor Fussion / TPM	2012-06-28	Compal_Jay	Modify GPIO name for sensor hub PWRGATE	Modify GPIO PCH_GPIO35 to SH_PWR_CNTRL	X02
47	20 27	PCH (5/8) GPIO, CPU, MISC Sensor Fussion / TPM	2012-06-28	Compal_Jay	Modify GPIO name for sensor hub uC DFU mode enable	Modify GPIO PCH_GPIO68 to SH_DFU_EN#	X02
48	16	PCH (1/8) SATA,HDA,SPI, LPC	2012-06-28	Compal_Jay	Follow EMI request, modify HDA_BIT_CLK R/C value	Modify RH27 from 33 ohm to 47 ohm and CH117 from 10p to 22p	X02
49	35	EC ENE-KB9012	2012-06-29	Compal_Jay	M/B side power SW interference with cable reoting	De-pop SW2	X02
50	38	PWR_Charger(ISL9519)	2012-06-29	Power_Jeff	For cost down soultion	De-pop BMON circuit	X02
51	37	PWR_DCIN / BATT CONN / OTP	2012-06-29	Compal_Jay	Follow Inter new revision check list suggest	Reserve PR905 10K ohm PD on PCH_DPWROK	X02
52	30	USB 3.0 IO CONN	2012-07-02	Compal_Jay	Follow connector list 2012-06-29	Modify connector Mfr. P/N form TARAG-9U1391 to TARAG-9R1391	X02
53	33	SCREWH/KB/RTC	2012-07-02	Compal_Jay	Follow connector list 2012-06-29	Modify JKB1 Mfr. P/N from 50699-03041-001 to 50699-03041-P01	X02
54	33	SCREWH/KB/RTC	2012-07-02	Compal_Jay	Follow connector list 2012-06-29	Modify JBL1 P/N from LTCX003NB00 to SP01001HD00	X02
55	37	PWR_DCIN / BATT CONN / OTP	2012-07-02	Compal_Jay	Follow connector list 2012-06-29	Modify JBATT9 Mfr. P/N from GS73091-10272-7H to GS73091-10272M-7H	X02
56	27	Sensor Fussion / TPM	2012-07-05	Compal_Jay	Follow HWDG 0.85 update	change R1107 and R1091 to 0 ohm	X02
57	27	Sensor Fussion / TPM	2012-07-05	Compal_Jay	Follow HWDG 0.85 update	De-pop R1104	X02
58	39	PWR_3.3VALWP/5VALWP-8243	2012-07-05	Power_Jeff	For 3/5V turn-off issue	Reserve PC1919 and PC1920 (de-pop)	X02
59	35	EC ENE-KB9012	2012-07-05	Compal_Jay	PLT_RST# double PD	De-pop R929	X02
60	16 27	PCH (1/8) SATA,HDA,SPI, LPC Sensor Fussion / TPM	2012-07-05	Compal_Jay	Follow DFB review suggest	Change Y1/YH1 footprint from Y_CM31532768DZFT_2P to Y_FC-135_2P	X02
61	39	PWR_3.3VALWP/5VALWP-8243	2012-07-06	Power_Jeff	NEC can't support SGA00004H00 this part	Change PC210,PC214,PC211 and PC224 from SGA00004H00 to SGA00002N8L	X02
62	39	PWR_3.3VALWP/5VALWP-8243	2012-07-06	Compal_Jay	For fix OTP issue	Add PR969 link EC_ON and N_5V_001 and pop PC217 (0.1U) and add PR970(1M ohm) PD.	X02
63	27	Sensor Fussion / TPM	2012-07-06	Compal_Jay	Delete PRESSURE sensor schematic for SSD nut space	Re-move Pressure sensor circuit and add test pad	X02

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Item	Page#	Title	Date	Request Owner	Issue Description	Solution Description	Rev.
64	32 24	DC/DC Interface eDP/ Camera CONN	2012-07-06	Compal_Jay	For meet LG panel power sequence	Change C1165 and C1143 from 10uF to 1uF and C1164 form 470P to 1000P	X02
65	28 20	WLAN / WiGig / BT PCH (5/8) GPIO, CPU, MISC	2012-07-06	Compal_Jay	Reserve RF switcher circuit	Reserve RF switcher circuit Modify PCH_GPIO48 to RFSW_VCONT1 and PCH_GPIO49 to RFSW_VCONT2	X02
66	29 17	mSATA / NFC Conn PCH (2/8) PCIE, SMBUS, CLK	2012-07-06	Compal_Jay	Delete NFC schematic for RF switcher layout space	Delete NFC circuit Move R1100 from page 29 to page 17	X02
67	39	PWR_3.3VALWP/5VALWP-8243	2012-07-10	Compal_Jay	For fix OTP issue	Change PC217 to 1UF, PR938 to 10K ohm and add PR971 (1K ohm)	X02
68	17	PCH (2/8) PCIE, SMBUS, CLK	2012-07-11	Compal_Jay	Follow crystal EA test result	Change CH23 and CH24 from 12P to 15P	X02
69	16	PCH (1/8) SATA,HDA,SPI, LPC	2012-07-11	Compal_Jay	Follow crystal EA test result	Change CH2 and CH3 from 22P to 18P	X02
70	24	eDP/ Camera CONN	2012-07-17	Compal_Jay	Prevent Q70 can't turn-off potential issue while battery work in low capacity	Change R536 from 1M ohm to 100K ohm	X02
71	27	Sensor Fussion / TPM	2012-07-17	Compal_Jay	Follow INTEL schematic review result	Pop R817 1.5K ohm	X02
72	27	Sensor Fussion / TPM	2012-07-17	Compal_Jay	Follow ST suggest, change supplier P/N for QAZA0 only	Follow ST suggest, change U636 P/N for SA00005P20L (STM32F103RCY6TR) to SA00005P21L (STM32F103RCY6TRC17)	X02
73	35	EC ENE-KB9012	2012-07-20	Compal_Jay	Modify board ID setting	Modify R225 form 18K ohm to 33K ohm	X02
74	35	EC ENE-KB9012	2012-07-23	Compal_Jay	Modify TABLET_MODE PU and PD valu setting	Modify R980 form 10K ohm to 100K ohm (WIN8/B R1 form 1K ohm to 10K ohm)	X02
1	35	EC ENE-KB9012	2012-08-20	Compal_Jay	Modify board ID setting	Modify R225 form 33K ohm to 56K ohm	A00
2	16	PCH (1/8) SATA,HDA,SPI, LPC	2012-08-20	Compal_Jay	Follow DFB review result	Modify YH1 footprint	A00
3	27	Sensor Fussion / TPM	2012-08-20	Compal_Jay	Follow DFB review result	Modify Y1 footprint	A00
4	37	PWR_DCIN / BATT CONN / OTP	2012-08-20	Power_Jeff	Change 0 ohm resistors to short PAD type	Modify PR911 and PR918 to short PAD	A00
5	38	PWR_Charger(ISL9519)	2012-08-21	Power_Jeff	Change 0 ohm resistors to short PAD type	Modify PR30,PR46,PR954,PR955,PR956 to short PAD	A00
6	39	PWR_3.3VALWP/5VALWP-8243	2012-08-21	Power_Jeff	Change 0 ohm resistors to short PAD type	Modify PR219,PR512,PR513,PR515 to short PAD	A00
7	41	PWR_V1.05S_VCCPP	2012-08-21	Power_Jeff	Change 0 ohm resistors to short PAD type	Modify PR508,PR509 to short PAD	A00
8	43	PWR_+VCCSAP	2012-08-21	Power_Jeff	Change 0 ohm resistors to short PAD type	Modify PR610, PR611 to short PAD	A00
9	44	PWR-CPU_CORE	2012-08-21	Power_Jeff	Change 0 ohm resistors to short PAD type	Modify PR720,PR721,PR736,PR722 to short PAD	A00
10	6	CPU(2/6) PM,XDP,CLK,S3,PLT	2012-08-21	Compal_Jay	Change 0 ohm resistors to short PAD type	Modify RC145 to short PAD	A00
11	9	CPU(5/6) PWR,BYPASS	2012-08-21	Compal_Jay	Change 0 ohm resistors to short PAD type	Modify RC109 to short PAD	A00
12	18	PCH (3/8) DMI,FDI,PM,GFX,DP	2012-08-21	Compal_Jay	Change 0 ohm resistors to short PAD type	Modify RH313, RH309, RH310 to short PAD	A00
13	22	PCH (3/8) DMI,FDI,PM,GFX,DP	2012-08-21	Compal_Jay	Change 0 ohm resistors to short PAD type	Modify RH312 to short PAD	A00
14	24	eDP/ Camera CONN	2012-08-21	Compal_Jay	Change 0 ohm resistors to short PAD type	Modify R1084 , R1010, R1011 to short PAD	A00
15	27	Sensor Fussion / TPM	2012-08-21	Compal_Jay	Change 0 ohm resistors to short PAD type	Modify R819 to short PAD	A00
16	28	WLAN / WiGig / BT	2012-08-21	Compal_Jay	Change 0 ohm resistors to short PAD type	Modify R741, R742, R728 to short PAD and de-pop R729	A00
17	32	DC/DC Interface	2012-08-21	Compal_Jay	Change 0 ohm resistors to short PAD type	Modify RC107 to short PAD	A00
18	35	EC ENE-KB9012	2012-08-21	Compal_Jay	Change 0 ohm resistors to short PAD type	Modify R265 to short PAD	A00
19	18	PCH (3/8) DMI,FDI,PM,GFX,DP	2012-08-21	Compal_Jay	VGATE prevent voltage divider less than 3V	Change RH272 from 10K to 47K	A00
20	40	PWR_1.8VSP/1.5VSP	2012-08-21	Power_Jeff	Change 0 ohm resistors to short PAD type	Modify PR517,PR518 to short PAD	A00
21	42	PWR_+1.35VP/0.675VSP	2012-08-21	Power_Jeff	Change 0 ohm resistors to short PAD type	Modify PR521 and PR119to short PAD	A00

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22	42	PWR_+1.35VP/0.675VSP	2012-08-22	Power_Jeff	Follow Green specificiation change component	Change PR304 form 8.2k 5% to 8.2K 1%	A00
23	38 43	PWR_Charger(ISL9519) PWR_+VCCSAP	2012-08-22	Power_Jeff	Combine P/N for BPM request	Change PC38 from 0.01U_0402_25V7K to 0.01U_0402_16V7K Change PC618 from 0.01U_0402_25V7K to 0.01U_0402_16V7K	A00
24	38 43	PWR_Charger(ISL9519) PWR_+VCCSAP	2012-08-22	Power_Jeff	Combine P/N for BPM request	Change PC37 from SE102104K00 to SE102104K8L Change PC606 from SE102104K00 to SE102104K8L	A00
25	20	PCH (5/8) GPIO, CPU, MISC	2012-08-22	Compal_Jay	For DDR3L chip repair request	Change RH338 and RH339 from 0603 pad to short pad	A00
26	37	PWR_DCIN / BATT CONN / OTP	2012-08-22	Power_Jeff	Follow Green specificiation change component	Change PQ903 form SB906100210 to SB90610021L	A00
27	38 43	PWR_Charger(ISL9519) PWR_+VCCSAP	2012-08-22	Power_Jeff	Combine P/N for BPM request	Change PC22 from SE095224K00 to SE095224K8L Change PC616 from SE095224K00 to SE095224K8L	A00
28	40 45	PWR_1.8VSP/1.5VSP PWR_PROCESSOR DECOUPLING	2012-08-22	Power_Jeff	Combine P/N for BPM request	Change PC400 and PC410 from SE000000I10 to SE00000110L Change PC400,PC410,PC850,PC851,PC852,PC853,PC854,PC855,PC858,PC859,PC860,PC861,PC862 ,PC890,PC891,PC892,PC893,PC894,PC913,PC916 from SE000000I10 to SE00000110L	A00
29	43	PWR_+VCCSAP	2012-08-22	Power_Jeff	Combine P/N for BPM request	Change PR608 from SD034100080 to SD03410008L	A00
30	38 39 40	PWR_Charger(ISL9519) PWR_3.3VALWP/5VALWP-8243 PWR_1.8VSP/1.5VSP	2012-08-22	Power_Jeff	Combine P/N for BPM request	Change PR26 from SD001470B80 to SD011470B8L Change PR208 and PR209 from SD001470B80 to SD011470B8L Change PR400 and PR406 from SD001470B80 to SD011470B8L	A00
31	38	PWR_Charger(ISL9519)	2012-08-22	Power_Jeff	Combine P/N for BPM request	Change PC39 from SE068102J80 to SE074102K8L	A00
32	31	BAT LED	2012-08-23	Compal_Jay	BATT_LED#_LVx PU power rail change to +3VALW because of EC those pin are not 5V tolerance	Change BATT_LED#_LVx PU power rail from +5VALW to +3VALW	A00
33	39	PWR_3.3VALWP/5VALWP-8243	2012-08-23	Power_Jeff	Follow DFB review result	Re-move PL402	A00
34	41	PWR_V1.05S_VCCPP	2012-08-23	Power_Jeff	Follow DFB review result	Re-move PL405	A00
35	42	PWR_+1.35VP/0.675VSP	2012-08-23	Power_Jeff	Follow DFB review result	Re-move PL406	A00
36	44	PWR-CPU_CORE	2012-08-23	Power_Jeff	Follow DFB review result	Re-move PL700 and PL702	A00
37	38	PWR_Charger(ISL9519)	2012-08-23	Power_Jeff	Follow DFB review result	Re-move PL403 and PL404	A00
38	30	USB 3.0 IO CONN	2012-08-27	Compal_Jay	Follow connector list 0810_X15	Modify JUSB1 connector mfr. P/N from USB014-107CRL-TW to USB014-107CRL-TWD (remove mayla only)	A00
39	33	SCREWH/KB/RTC	2012-08-27	Compal_Jay	Follow connector list 0810_X15	Modify JRTC1 P/N from SP020009Z0L to SP02000UB00	A00
40	33	SCREWH/KB/RTC	2012-08-27	Compal_Jay	Follow connector list 0810_X15	Modify JKB1 connector mfr. P/N from 50699-03041-P01 to 50699-03001-P01 (remove mayla only)	A00
41	25	IOL Conn	2012-08-31	Compal_Jay	Follow EMI test request	Modify LH9 P/N to SM01000LJ0L	A00
42	24	eDP/ Camera CONN	2012-09-10	Compal_Jay	For fix panel adjusting on leagcy and UEFI mode	Pop D92 for PCH_INV_PWM control	A00

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