Model Name : Z5W1M
File Name : LA-B511P

Compal Confidential

EA52_BM UMA M/B Schematics Document

Intel Bay Trail M

2014-03-13

REV:1.0

PCB@
DAX PCB 12R LA-B211P REV0 M/B

Part Number	Description
DA60016I000	PCB 12R LA-B511P REV0 M/B

Security Classification	Compal Secret Data		
Issued Date	2013/04/12	Deciphered Date	2014/04/12

Compal Electronics, Inc.

Title: *Cover Page*

Size: Custom | Document Number: *Bay Trail M LA-B511P* | Rev: 0.3

Date: Thursday, March 13, 2014 | Sheet 1 of 39

Memory BUS
One Channel
1.35V DDR3L 1066/1333
Max speed of DDR3L to 1333MT/s for M sku. -- EDS
204pin DDR3L-SO-DIMM X1
P.13

port 0
port 1
port 1
EDP
HDMI
P.16
HDMI Conn.
LCD Conn. P.15
eDP/LVDS
LVDS-Translator RTD2132N P.14
LVDS
DDI x2

USB 3.0 Conn
P.21
Touch Panel Conn.
P.15
CMOS Camera
P.15
USB3.0 x1
port 0
port 1
port 2
port 3
USB2.0 x4
USB HUB GL850G P.21
HUB port1
HUB port2
HUB port3
HUB port4

PCIe 2.0 x4
port 0
port 1
LAN(GbE) RTL8111GUS P.17
RJ45 conn. P.17
WLAN MINI CARD P.18

VALLEYVIEW-M
SOC
FCBGA 1170 Pin
page 05~12

SATA II x2
port 0
port 1
SATA HDD Conn. P.20
SATA ODD Conn. P.20

LPC BUS
SPI
EC ENE KB9022 P.22
SPI ROM 1.8V (8MB) P.08

HD Audio
HDA Codec ALC283 P.19
Int. Speaker P.19
Int. Analog MIC P.19
Universal Jack P.19

BT MINI CARD P.20
USB 2.0 Conn P.21
USB 2.0 Conn
Card Reader RTS5170 SD only

Touch Pad P.23
Int.KBD P.23
TPM NPCT650 P.18

RTC CKT. P.08
DC/DC Interface CKT. P.24
Power Circuit DC/DC P.25~P.35
LED/Power On/Off P.23

Sub Board
LS-B471P
Card Reader RTS5170 2 in 1 (SD)
USB 2.0 conn x1
USB port 2
P.21

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Issued Date	2013/04/12	Deciphered Date	2014/04/12

Compal Electronics, Inc.
Title: Block Diagrams
Size: Custom
Document Number: Bay Trail M LA-B511P
Rev: 1.0
Date: Thursday, March 13, 2014
Sheet 2 of 39

Voltage Rails

Power Plane	Description	S0	S3	S4/S5
VIN	19V Adapter power supply	ON	ON	ON
BATT+	12V Battery power supply	ON	ON	ON
B+	AC or battery power rail for power circuit. (19V/12V)	ON	ON	ON
+RTCVCC	RTC Battery Power	ON	ON	ON
+1.0VALW	+1.0v Always power rail	ON	ON	ON
+1.8VALW	+1.8v Always power rail	ON	ON	ON
+3VALW	+3.3v Always power rail	ON	ON	ON
+5VALW	+5.0v Always power rail	ON	ON	ON
+1.35V	+1.35V power rail for DDR3L	ON	ON	OFF
+SOC_VCC	Core voltage for SOC	ON	OFF	OFF
+SOC_VNN	GFX voltage for SOC	ON	OFF	OFF
+0.675VS	+0.675V power rail for DDR3L Terminator	ON	OFF	OFF
+1.0VS	+1.0v system power rail	ON	OFF	OFF
+1.05VS	+1.05v system power rail	ON	OFF	OFF
+1.35VS	+1.35v system power rail	ON	OFF	OFF
+1.5VS	+1.5v system power rail	ON	OFF	OFF
+1.8VS	+1.8v system power rail	ON	OFF	OFF
+3VS	+3.3v system power rail	ON	OFF	OFF
+5VS	+5.0v system power rail	ON	OFF	OFF

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

Board ID / SKU ID Table for AD channel

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

Board ID	Rb / Rd / Rf	V_{AD_BID} min	V_{AD_BID} typ	V_{AD_BID} max
0	0	0 V	0 V	0 V
1	12K +/- 5%	0.347 V	0.354 V	0.360 V
2	15K +/- 5%	0.423 V	0.430 V	0.438 V
3	20K +/- 5%	0.541 V	0.550 V	0.559 V
4	27K +/- 5%	0.691 V	0.702 V	0.713 V
5	33K +/- 5%	0.807 V	0.819 V	0.831 V
6	43K +/- 5%	0.978 V	0.992 V	1.006 V
7	56K +/- 5%	1.169 V	1.185 V	1.200 V
8	75K +/- 5%	1.398 V	1.414 V	1.430 V
9	100K +/- 5%	1.634 V	1.650 V	1.667 V
10	130K +/- 5%	1.849 V	1.865 V	1.881 V
11	160K +/- 5%	2.015 V	2.031 V	2.046 V
12	200K +/- 5%	2.185 V	2.200 V	2.215 V
13	240K +/- 5%	2.316 V	2.329 V	2.343 V

BOARD ID Table

Board ID	PCB Revision
0	EVT
1	DVT
2	PVT
3	Pre-MP & MP
4	
5	
6	

43 level BOM table

43 Level	Description	BOM Structure
4319TDBOL01	SMT MB AB511 Z5W1M UMA 2.17G	N3520@/EMC@/AMIC@/EDP@/DBG@/TPM@/PCB@/TS@
4319TDBOL02	SMT MB AB511 Z5W1M UMA 1.86G	N2920@/EMC@/AMIC@/LVDS@/DBG@/TPM@/PCB@/TS@
4319TDBOL03	SMT MB AB511 Z5W1M UMA 1.86G EPD HDMI	N2920@/EMC@/AMIC@/EDP@/DBG@/TPM@/PCB@/TS@
4319TDBOL04	SMT MB AB511 Z5W1M UMA 2.17G LVDS HDMI	N3520@/EMC@/AMIC@/LVDS@/DBG@/TPM@/PCB@/TS@
4319TDBOL05	SMT MB AB511 Z5W1M UMA 2.13G EPD HDMI	N2820@/EMC@/AMIC@/EDP@/DBG@/TPM@/PCB@/TS@
4319TDBOL06	SMT MB AB511 Z5W1M UMA 2.13G LVDS HDMI	N2820@/EMC@/AMIC@/LVDS@/DBG@/TPM@/PCB@/TS@
435MNVBOL01	SMT IO/B SB471 Z5W1M	EMC@

BOM Option Table

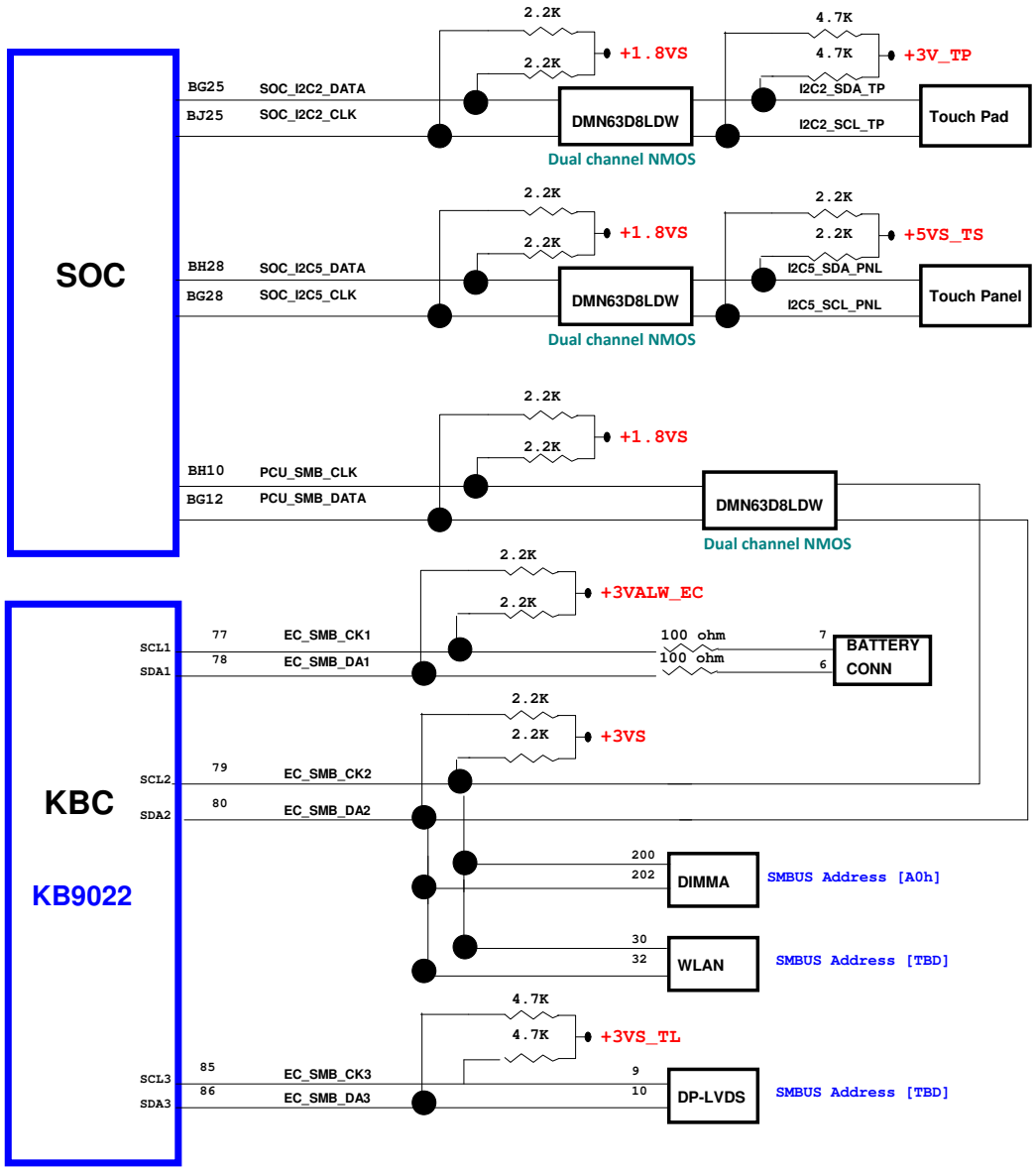
Item	BOM Structure
Unpop	@
Connector	CONN@
EMC requirement	EMC@
EMC requirement unpop	@EMC@
IOAC support	AC@
Choose Analog MIC pop	AMIC@
Backlight Keyboard	BL@
EDP panel select	EDP@
LVDS panel select	LVDS@
Power Switch on board	DBG@
Jump for transfer power	JP@

BOM Option Table

Item	BOM Structure
CPU for N2920 pop	N2920@
CPU for N3520 pop	N3520@
TPM support	TPM@
No supoort TPM	NTPM@
PCB PN	PCB@
CLEAN CMOS JUMP	SP@
Touch Screen function	TS@
EDP + Touch Screen	ETS@

Security Classification	Compal Secret Data		Compal Electronics, Inc.
Issued Date	2013/04/12	Deciphered Date 2014/04/12	Title: Notes List

Size: Custom	Document Number: Bay Trail M LA-B511P		Rev: 1.0
Date: Thursday, March 13, 2014	Sheet 3 of 39		



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Compal Electronics, Inc.

Title: SMB/I2C

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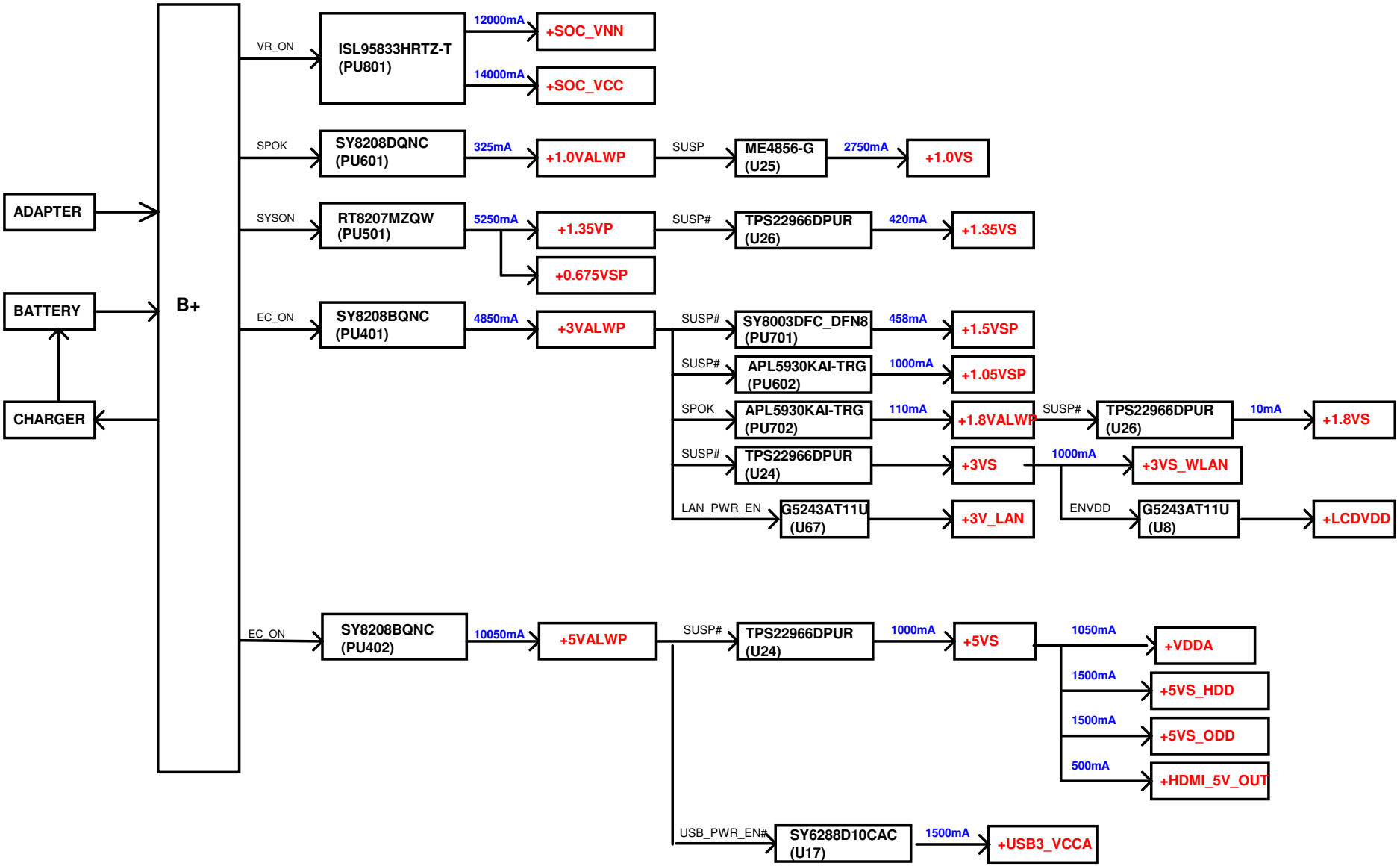
Date: Thursday, March 13, 2014 | Sheet 4 of 39



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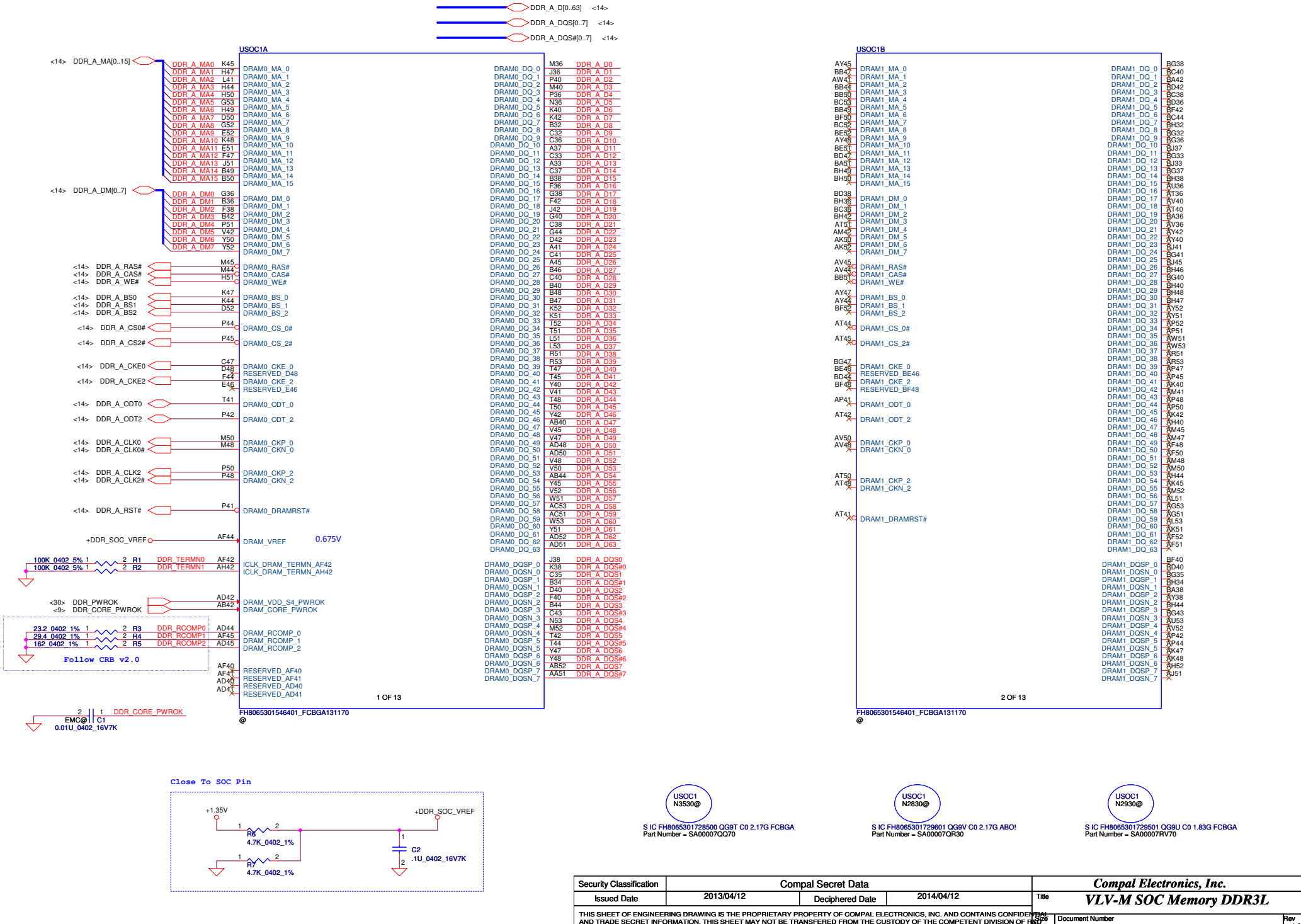
Issued Date	2013/04/12	Deciphered Date	2014/04/12

Compal Electronics, Inc.			
Title: Power Rail			
Size: Custom	Document Number: Bay Trail M LA-B511P		Rev: 1.0
Date: Thursday, March 13, 2014	Sheet 5 of 39		



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Compal Electronics, Inc.

Title: VLV-M SOC Memory DDR3L

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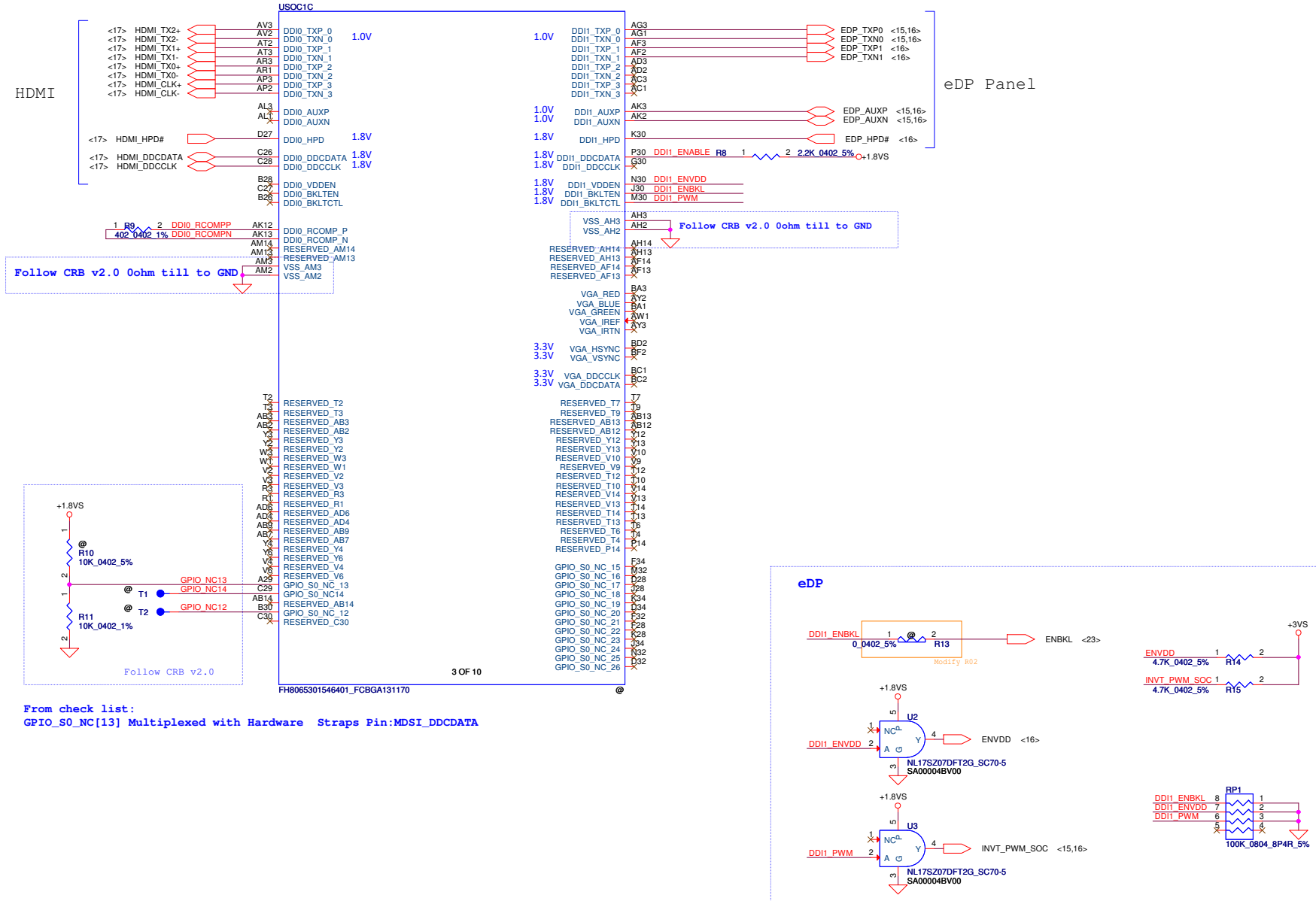
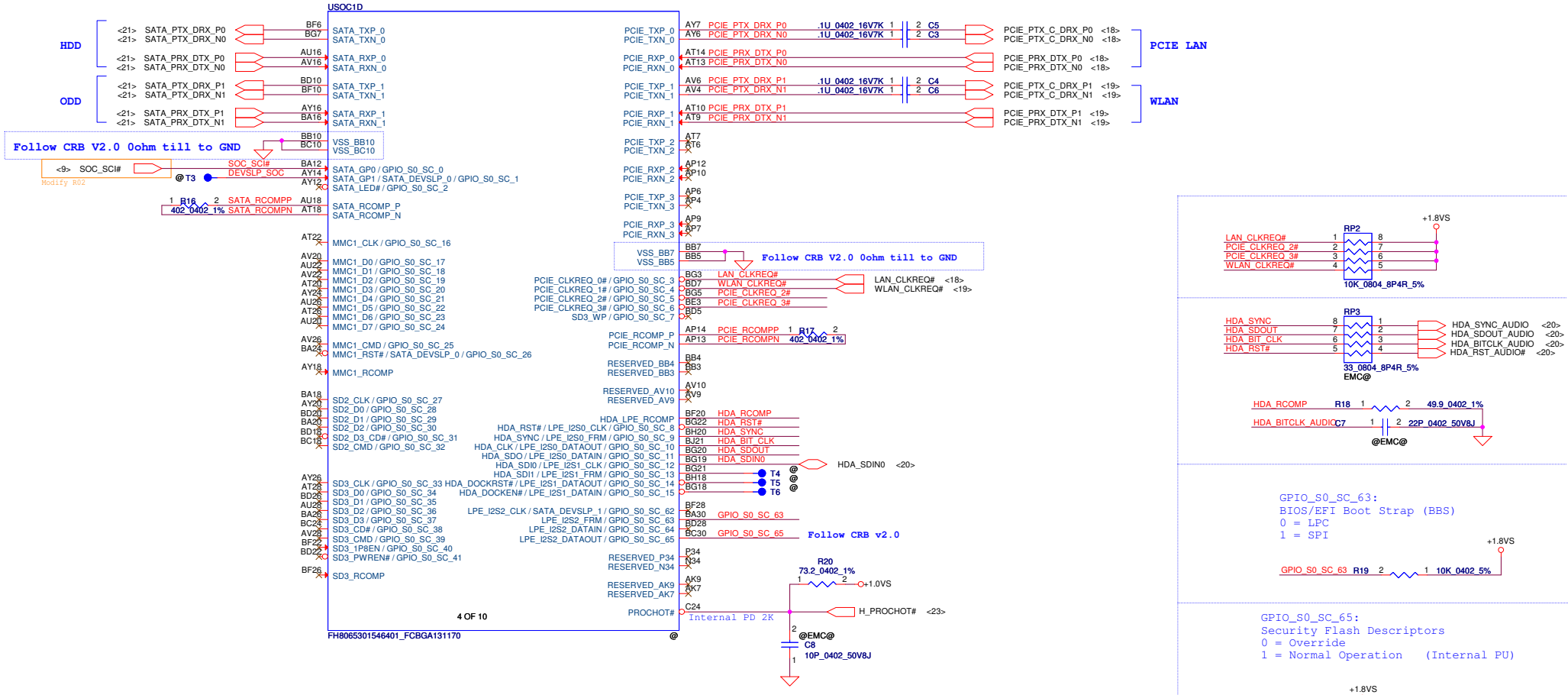
Date: Thursday, March 13, 2014 | Sheet 6 of 39



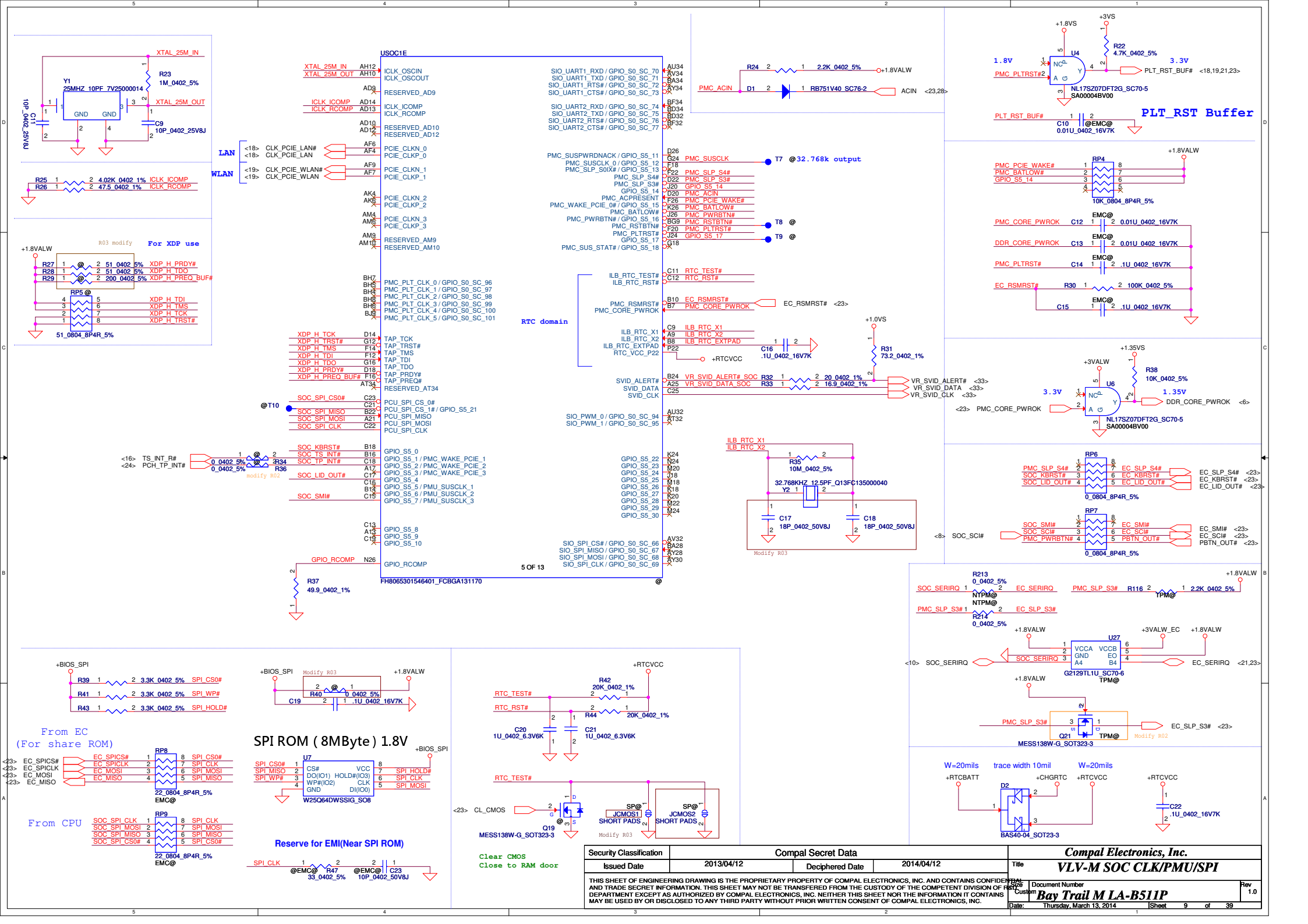
Security Classification	Compal Secret Data		Compal Electronics, Inc.
Issued Date	2013/04/12	Deciphered Date 2014/04/12	Title VLV-M SOC Display

Size Custom	Document Number Bay Trail M LA-B511P		Rev 1.0
Date: Thursday, March 13, 2014	Sheet 7	of 39	



Security Classification	Compal Secret Data		
Issued Date	2013/04/12	Deciphered Date	2014/04/12

Compal Electronics, Inc.			
Title	VLV-M SOC SATA/PCI-E/HDA		
Size	Custom	Document Number	Bay Trail M LA-B511P
Rev	1.0		
Date:	Thursday, March 13, 2014	Sheet	8 of 39


USOC1E
5 OF 13
FH8065301546401_FCBGA131170
RTC domain
PLT_RST Buffer
SPI ROM (8MByte) 1.8V
From EC
(For share ROM)
From CPU
Reserve for EMI(Near SPI ROM)
Clear CMOS
Close to RAM door
For XDP use
W=20mils
trace width 10mil
W=20mils
Compal Secret Data
Security Classification
Issued Date
2013/04/12
Deciphered Date
2014/04/12
Compal Electronics, Inc.
VLV-M SOC CLK/PMU/SPI
Bay Trail M LA-B511P
Rev 1.0
Thursday, March 13, 2014
Sheet 9 of 39

BIOS/EFI Top Swap

While updating the BIOS/EFI boot sector in flash, unexpected system power loss can cause an incomplete write resulting in a corrupt boot sector.

Reference EDS v1.5 Page2294

USOC1F

USB3.0 Connector
USB Hub
Touch Panel
Camera

USB3 Port 0

NOTE: Ref checklist rev1.2 p.24
USB_PLL_MON is a single ended signal and should follow single ended signal routing requirements.

NOTE: Ref checklist rev1.2 p.25
USB_HSIC_RCOMP must NOT float if they are not being used.

Pull High at EC side

ILB_LPC_CLK_0 : Output of 25MHz, Need Check with EC

ILB_LPC_CLK_1 is for CLK_0 feedback.(Input) Set to Outpot for Normal Usage

6 OF 13

FH8065301546401_FCBGA131170

PDA (Platform Debug Assistant) Test Points

BIOS/EFI Top Swap

BIOS/EFI Top Swap	
GPIO_S0_SC_56	*1: DISABLED 0: ENABLED

For Touch Screen

For Touch Pad

CPU Thermal sensor

ADM1032ARMZ-2REEL_MSOP8

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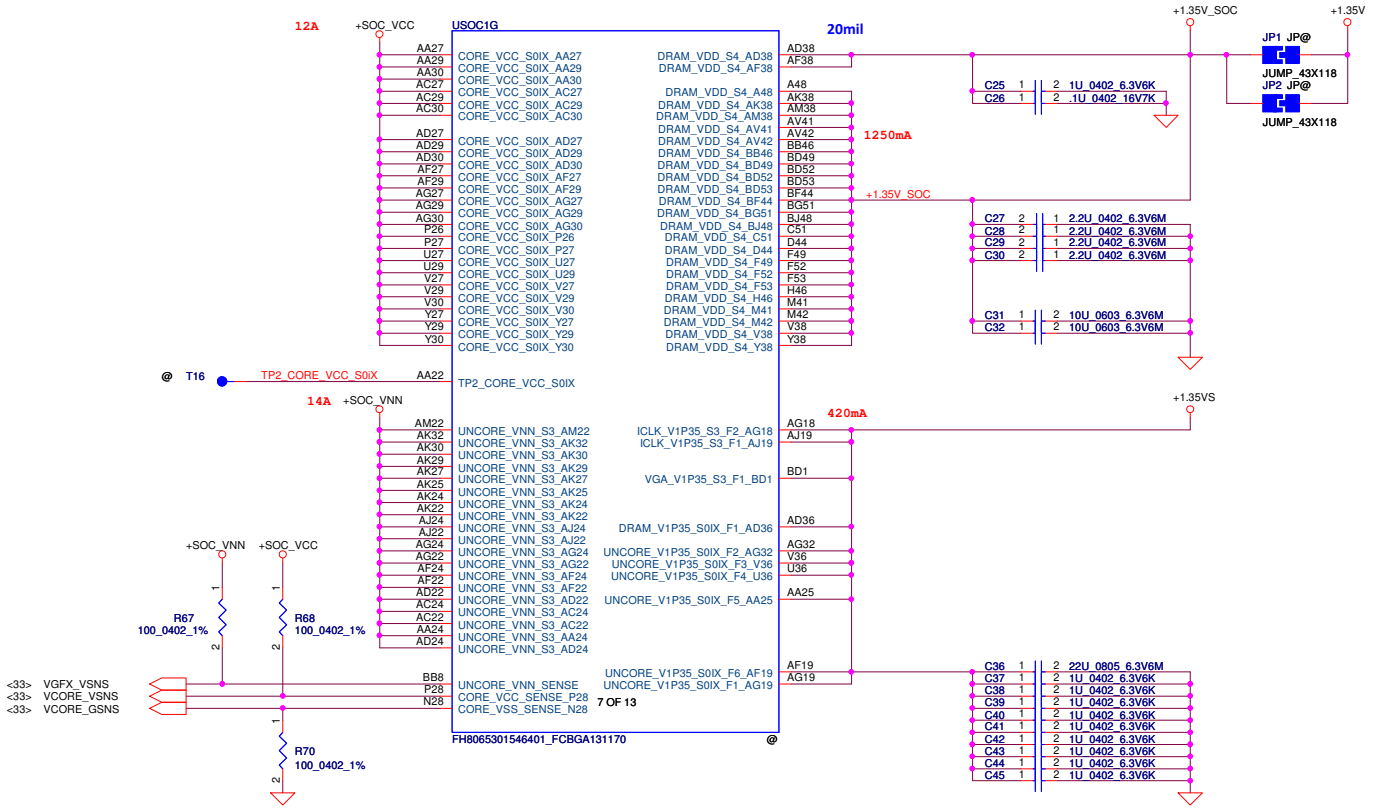
Title: VLV-M SOC USB/LPC/SMBus

Size: Custom | Document Number: Bay Trail M LA-B511P | Rev: 1.0

Date: Thursday, March 13, 2014 | Sheet 10 of 39



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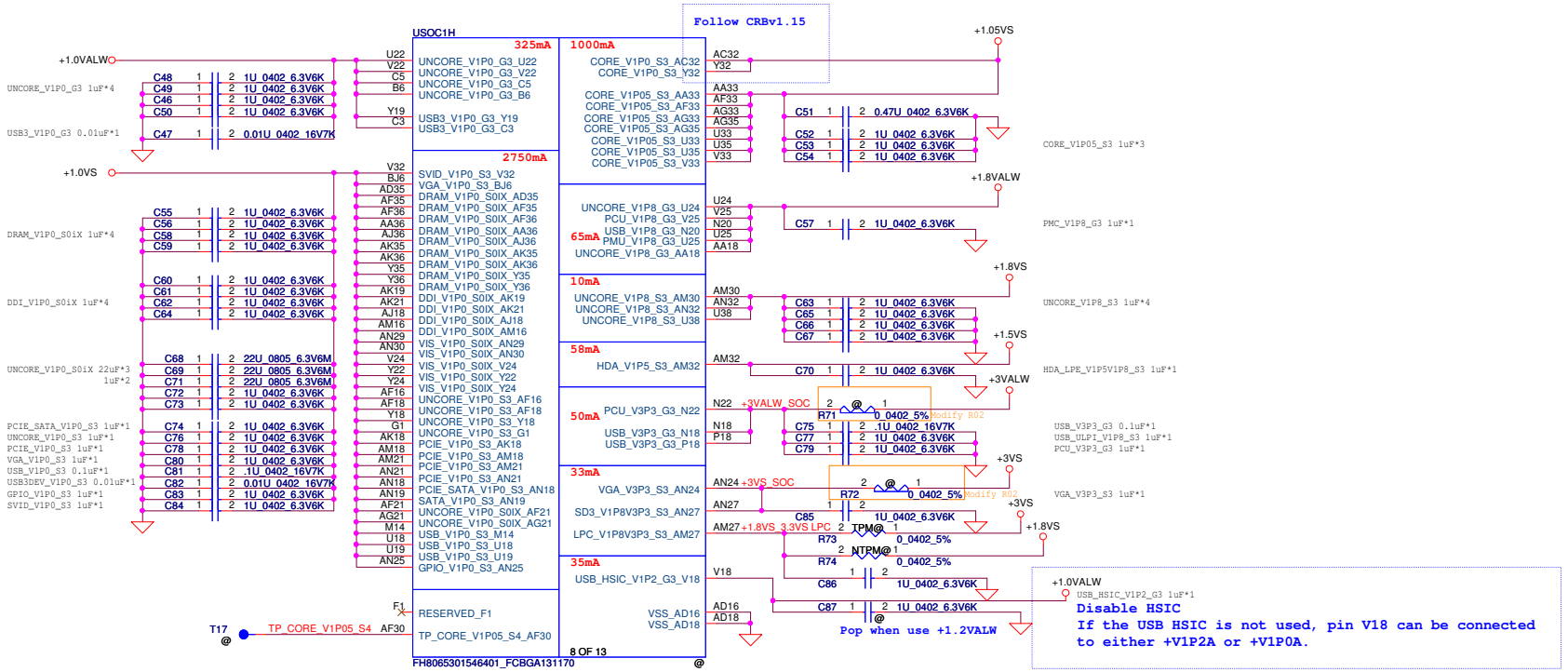
Issued Date	2013/04/12	Deciphered Date	2014/04/12

Compal Electronics, Inc.			
Title	VLV-M SOC Power		
Size	Custom	Document Number	Bay Trail M LA-B511P
Rev	1.0		
Date:	Thursday, March 13, 2014	Sheet	11 of 39



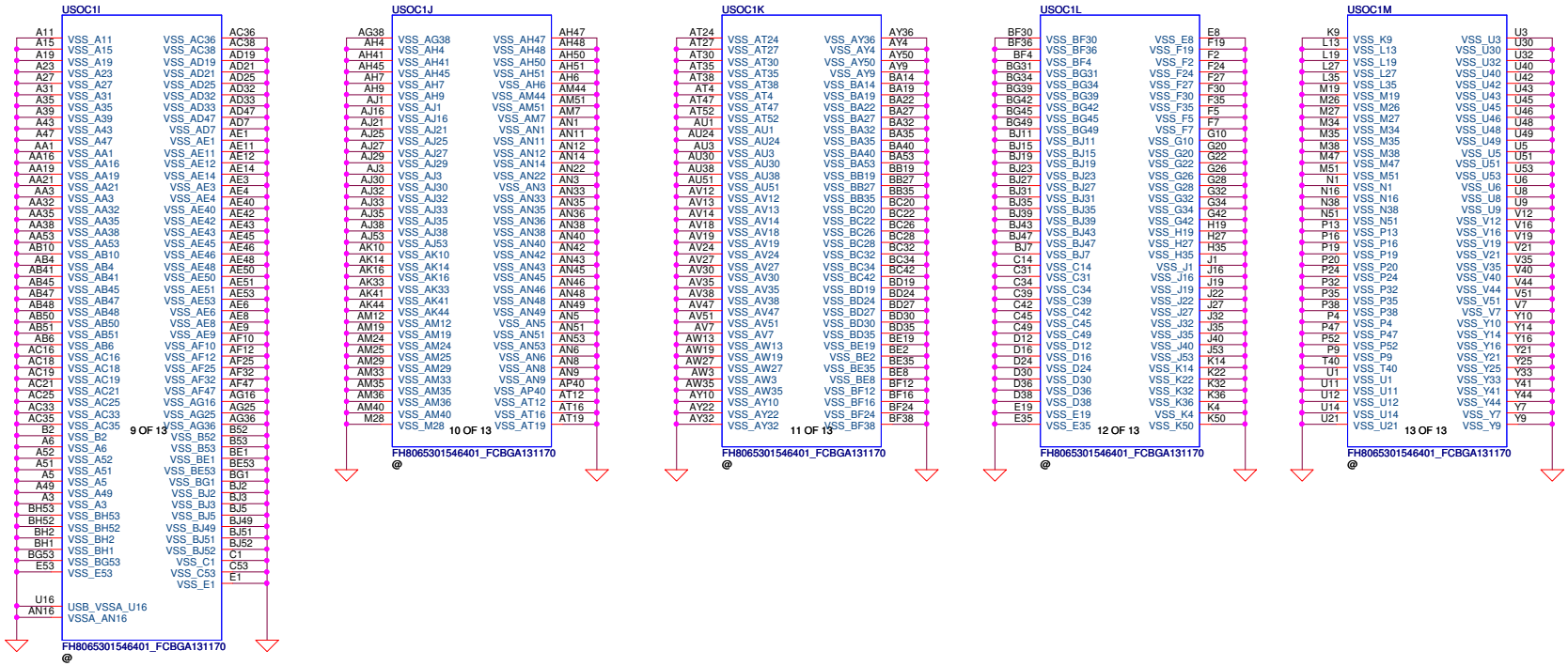
Security Classification	Compal Secret Data		
Issued Date	2013/04/12	Deciphered Date	2014/04/12

Compal Electronics, Inc.

Title: VLV-M SOC Power

Size: Custom | Document Number: Bay Trail M LA-B511P | Rev: 1.0

Date: Thursday, March 13, 2014 | Sheet 12 of 39



Security Classification	Compal Secret Data		
Issued Date	2013/04/12	Deciphered Date	2014/04/12

Compal Electronics, Inc.

Title: VLV-M SOC GND

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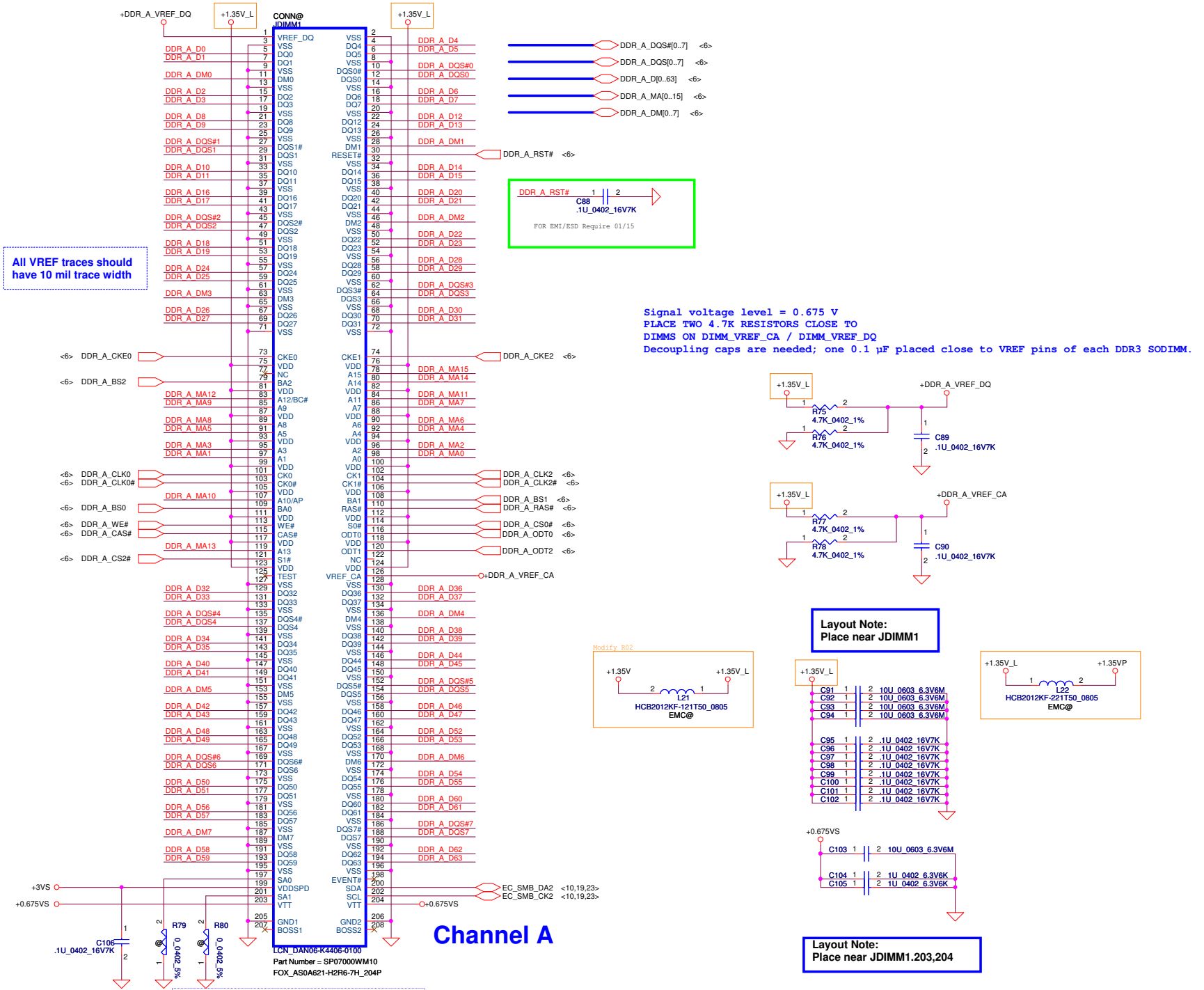
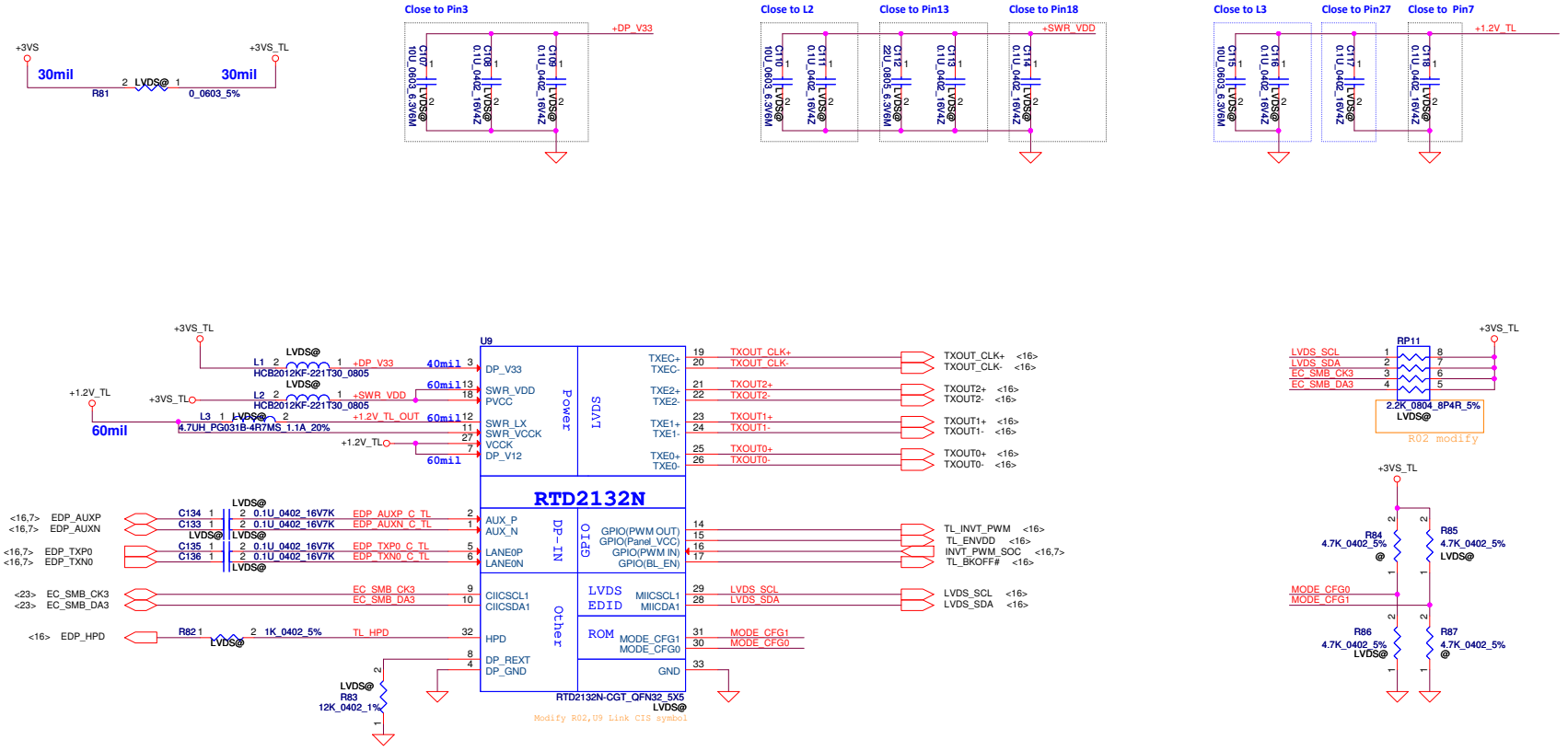
Date: Thursday, March 13, 2014 | Sheet 13 of 39



Security Classification	Compal Secret Data		
Issued Date	2013/04/12	Deciphered Date	2014/04/12

Compal Electronics, Inc.			
Title	DDR3L DIMMA		
Size: Custom	Document Number: Bay Trail M LA-B511P		Rev: 1.0
Date: Thursday, March 13, 2014	Sheet 14 of 39		

LVDS Translator - RTD2132N

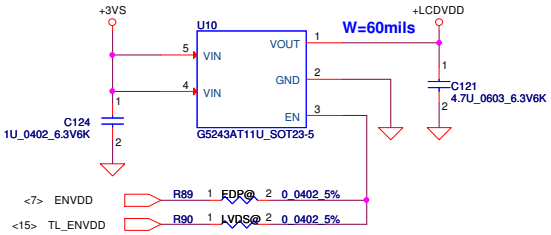


		MODE_CFG0(PIN30)	
		0	1
MODE_CFG1(PIN31)	0	X	EP MODE
	1	ROM ONLY MODE*	EEPROM MODE

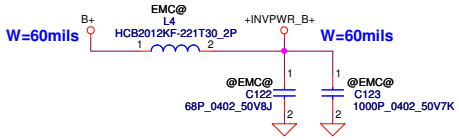
Security Classification	Compal Secret Data		
Issued Date	2013/10/28	Deciphered Date	2014/10/28

Title	LVDS Translator - RTD2132N		
Size	Document Number		Rev
Custom	Bay Trail M LA-B511P		1.0
Date:	Thursday, March 13, 2014	Sheet	15 of 39

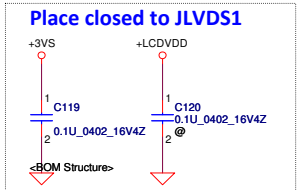
LCD POWER CIRCUIT



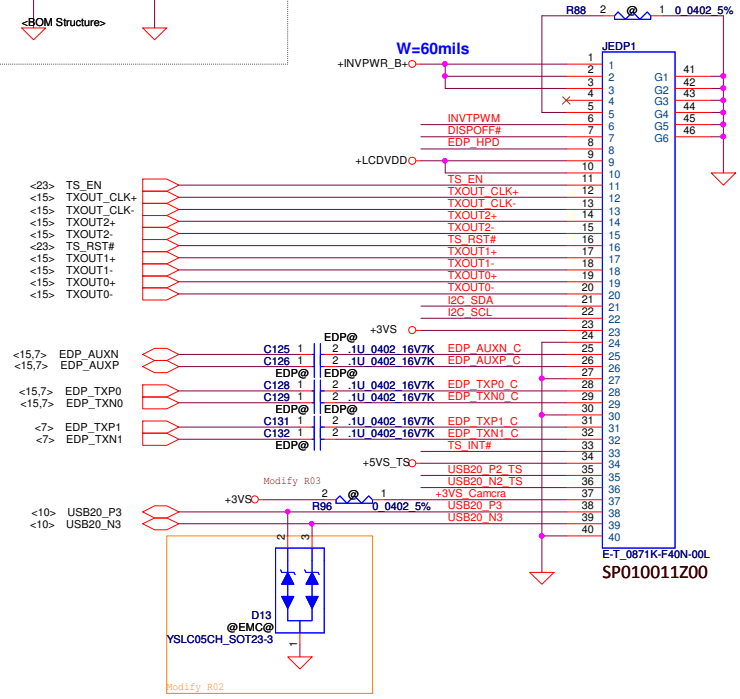
SM010014520 3000ma
220ohm@100mhz
DCR 0.04



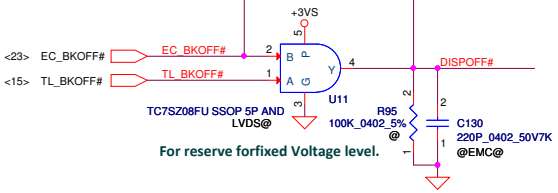
Place closed to JLVDS1



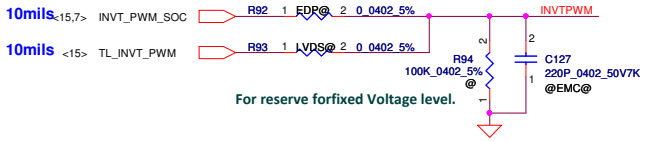
LCD/ LED PANEL Conn.

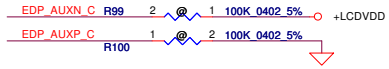


R97 1 EDP@ 2 0_0402_5%

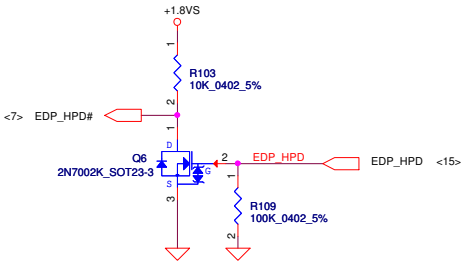


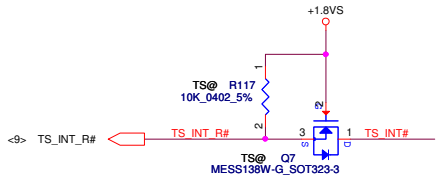
PU to +3VS at CPU side 10mils



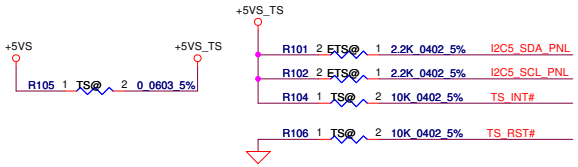


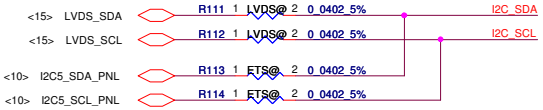
Intel recommends having a pull-up resistor of 100 kΩ for AUXN and a pull-down resistor of 100 kΩ for AUXP between the AC capacitor and the connector, to assist source detection by the sink device.
All reverse on before project.



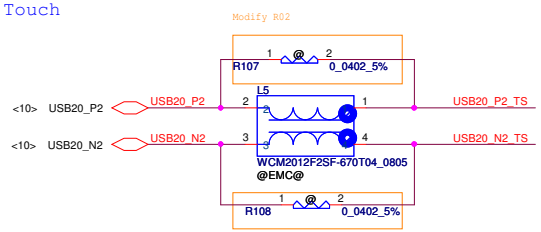


For Select LVDS EDID or EDP I2C touch





Touch



Solution	Panel	Touch	BOM option
Cable 1	eDP	I2C,USB	EDP@,TS@
Cable 2	LVDS	USB	LVDS@

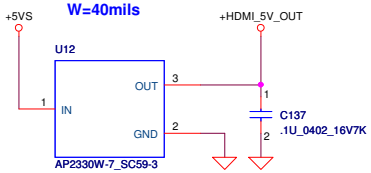
Security Classification	Compal Secret Data		
Issued Date	2013/04/12	Deciphered Date	2014/04/12

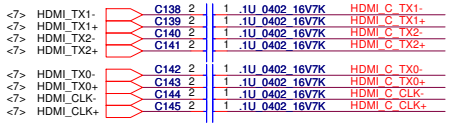
Compal Electronics, Inc.

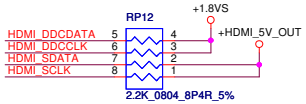
Title: eDP CONN.

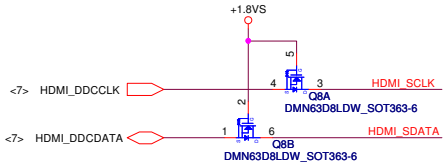
Size: Custom | Document Number: Bay Trail M LA-B511P | Rev: 1.0

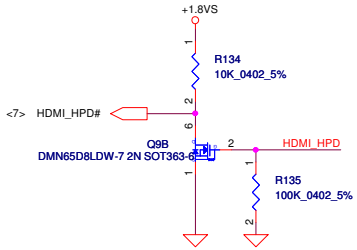
Date: Thursday, March 13, 2014 | Sheet 16 of 39







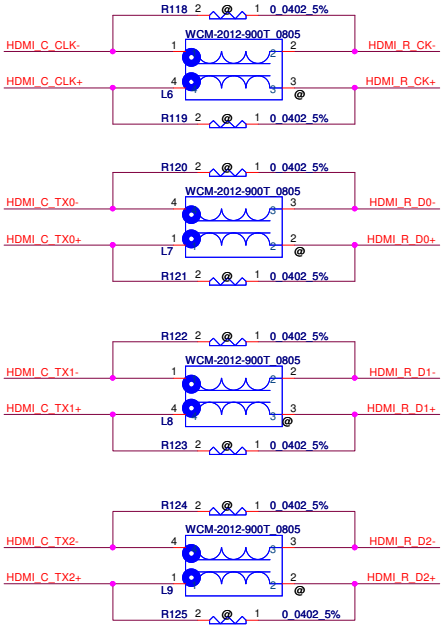


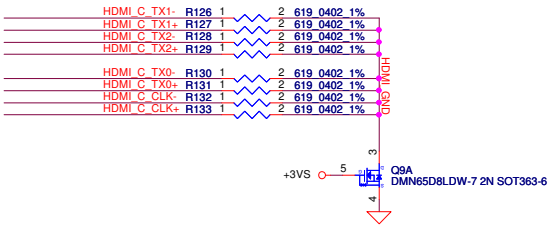


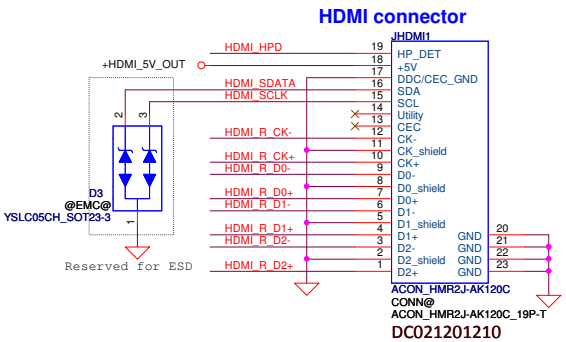
ZZZ

HDMI_ROYALTY
ROYALTY HDMI W/LOGO+HDCP
RO0000003HM
45@

Modify R02,R-SHORT R118~R125







DC021201210 symbol,
pop DC232003E00

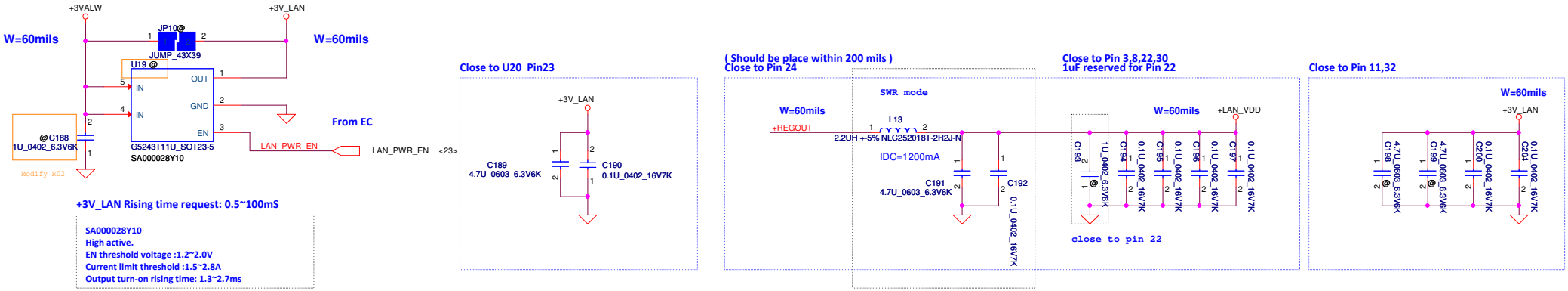
Security Classification	Compal Secret Data		
Issued Date	2013/04/12	Deciphered Date	2014/04/12

Compal Electronics, Inc.

Title: HDMI CONN.

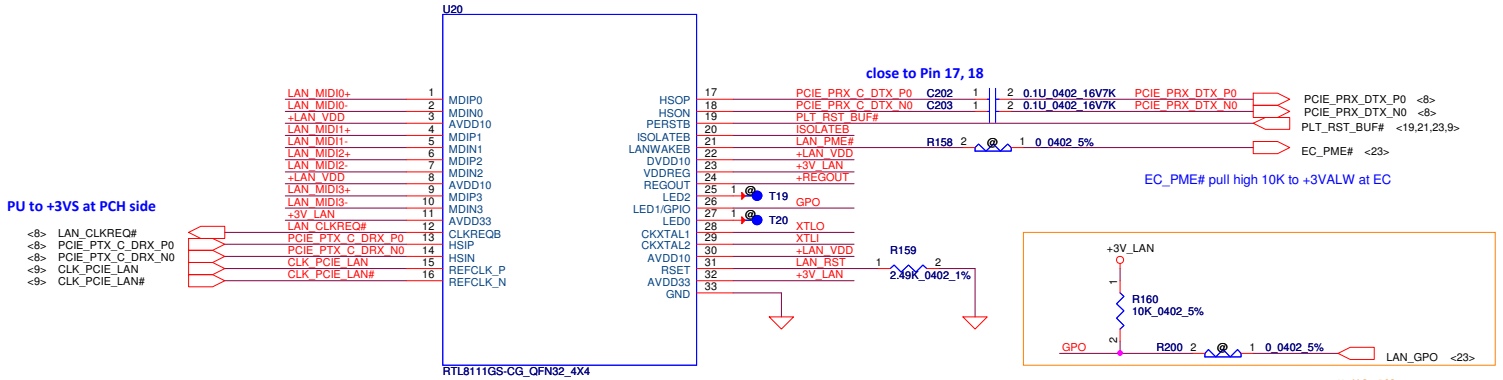
Size: Custom | Document Number: Bay Trail M LA-B511P | Rev: 1.0

Date: Thursday, March 13, 2014 | Sheet 17 of 39



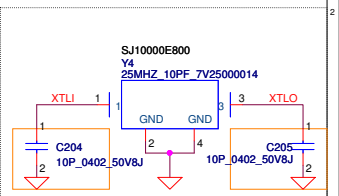
+3V_LAN Rising time request: 0.5~100mS

SA000028Y10
High active.
EN threshold voltage :1.2~2.0V
Current limit threshold :1.5~2.8A
Output turn-on rising time: 1.3~2.7ms

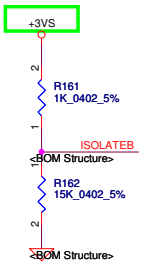


PU to +3VS at PCH side

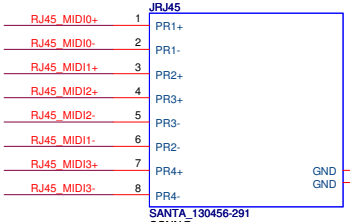
<8> LAN_CLKREQ#
<8> PCIE_PTX_C_DRX_P0
<8> PCIE_PTX_C_DRX_N0
<9> CLK_PCIE_LAN
<9> CLK_PCIE_LAN#

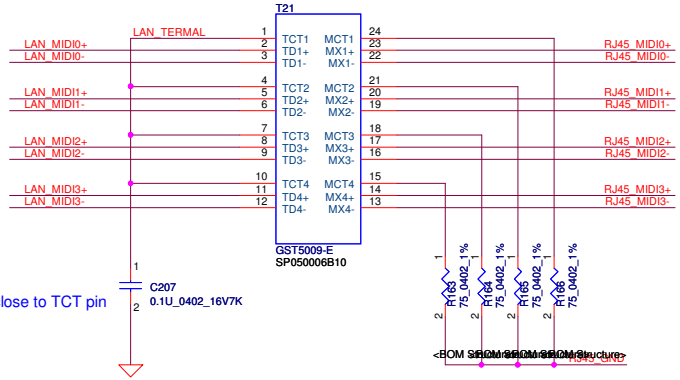


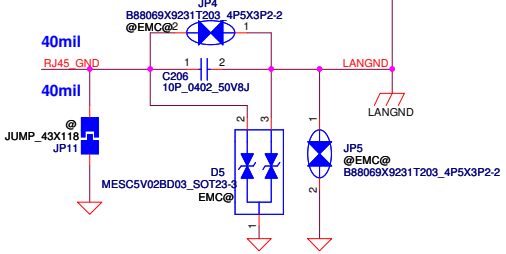
Consider VCC33 may be connected to Main Power or chipset/bios's GPO, the pull-low resistor R14 can be NC only when Main Power or chipset/bios's GPO can ensure to drive the ISOLATEB pin to a voltage level < 0.8V at the system state S3~S5.



LAN Connector







Security Classification	Compal Secret Data		
Issued Date	2013/10/28	Deciphered Date	2014/10/28

Compal Electronics, Inc.

Title: LAN_RTL8111GUS-CG

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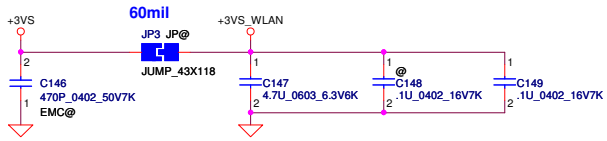
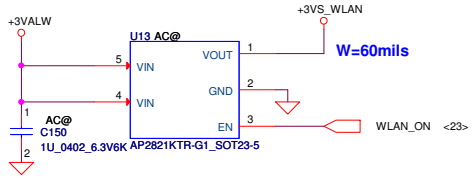
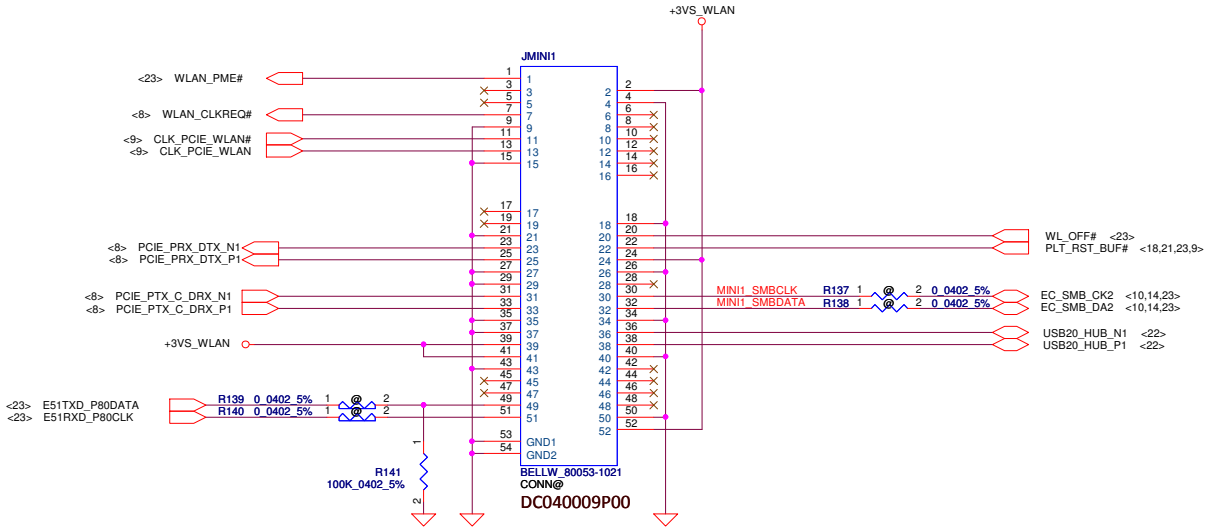
Date: Thursday, March 13, 2014 | Sheet 18 of 39

For Wireless LAN

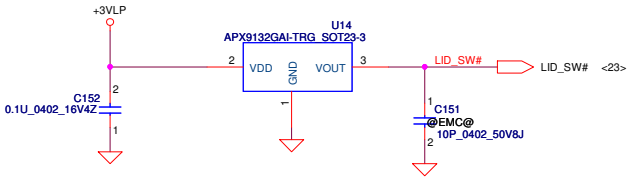






Hall sensor

Lid Switch
(Hall Effect Switch)



Modify R02,U14 Link CIS symbol

Security Classification	Compal Secret Data		
Issued Date	2013/04/12	Deciphered Date	2014/04/12

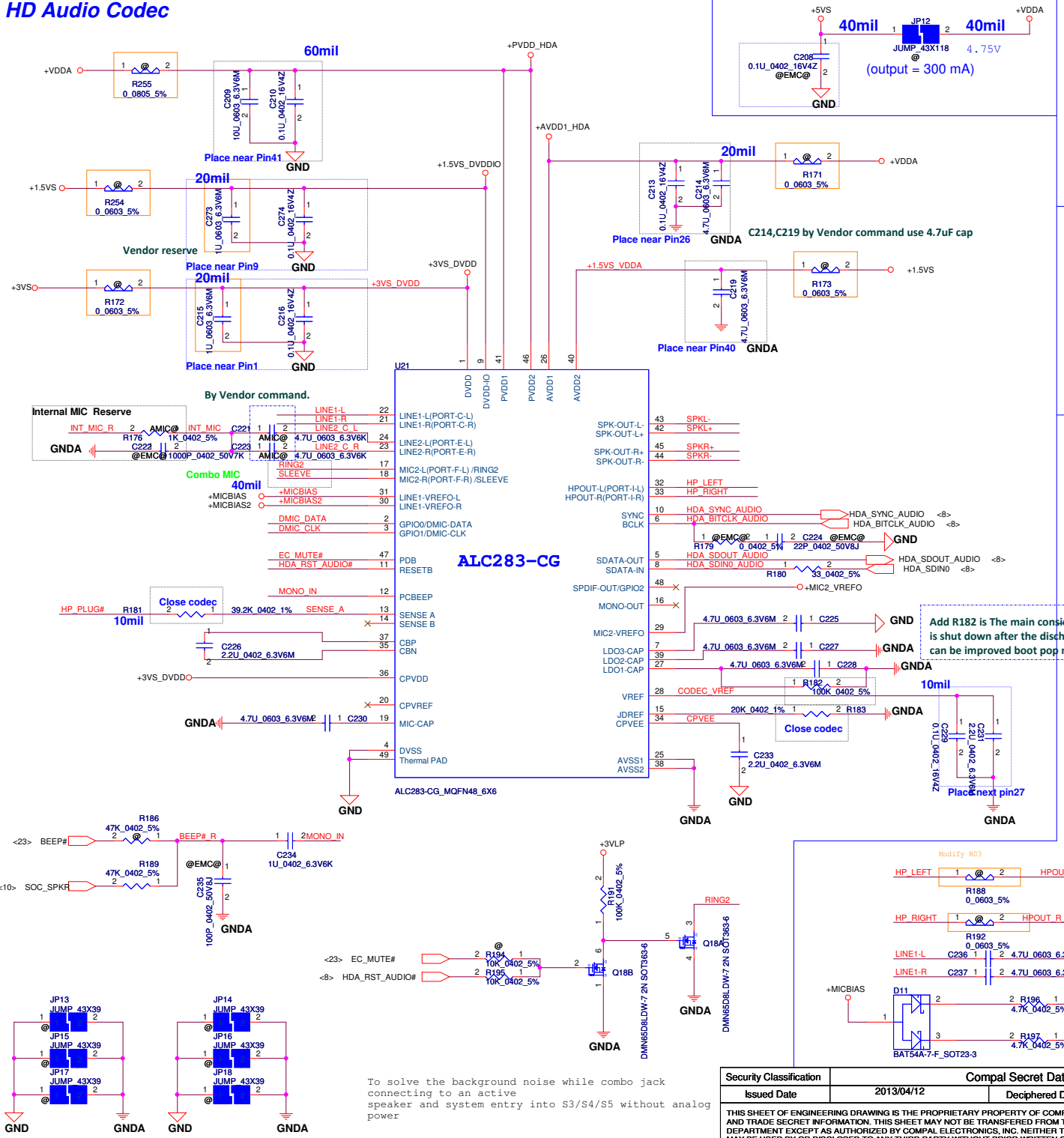
Compal Electronics, Inc.

Title: Mini PCIE(WLAN)

Size: Custom | Document Number: Bay Trail M LA-B511P | Rev: 1.0

Date: Thursday, March 13, 2014 | Sheet 19 of 39

HD Audio Codec



Security Classification	Compal Secret Data		
Issued Date	2013/04/12	Deciphered Date	2014/04/12

Compal Electronics, Inc.

Title: HD Audio Codec_ALC283-CG

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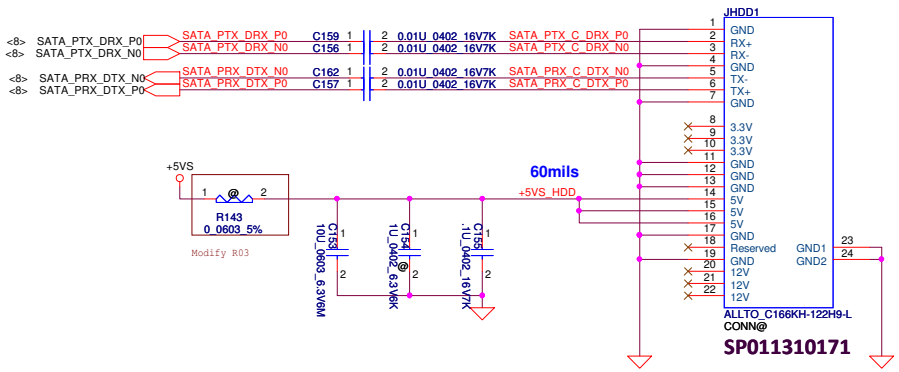
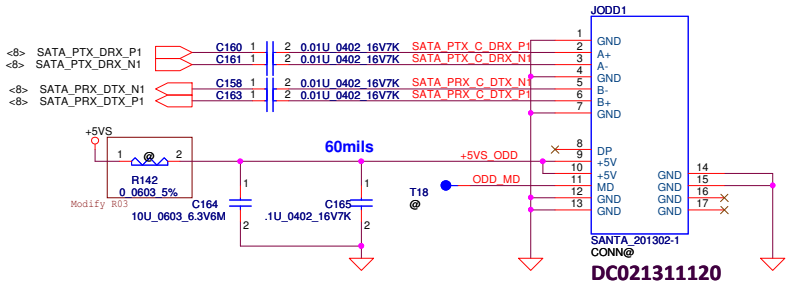
Date: Thursday, March 13, 2014 | Sheet 20 of 39

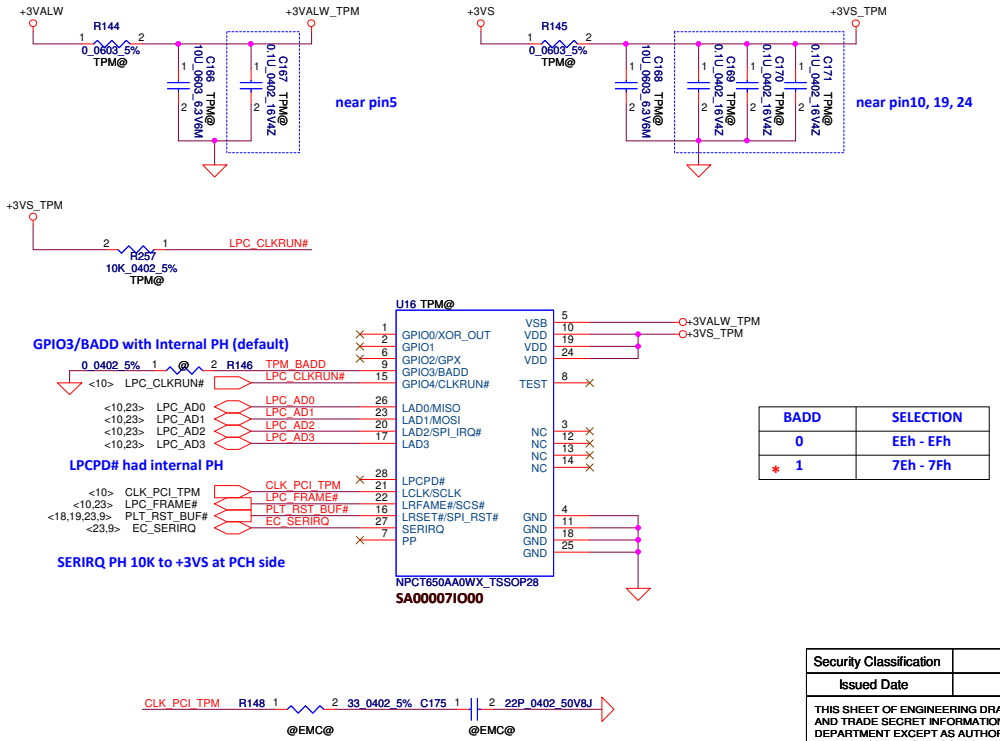
SATA HDD1 Conn.



SATA ODD Conn.

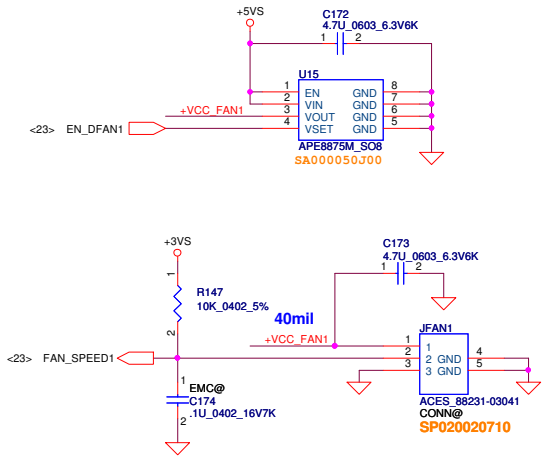


TPM



BADD	SELECTION
0	EEh - EFh
* 1	7Eh - 7Fh

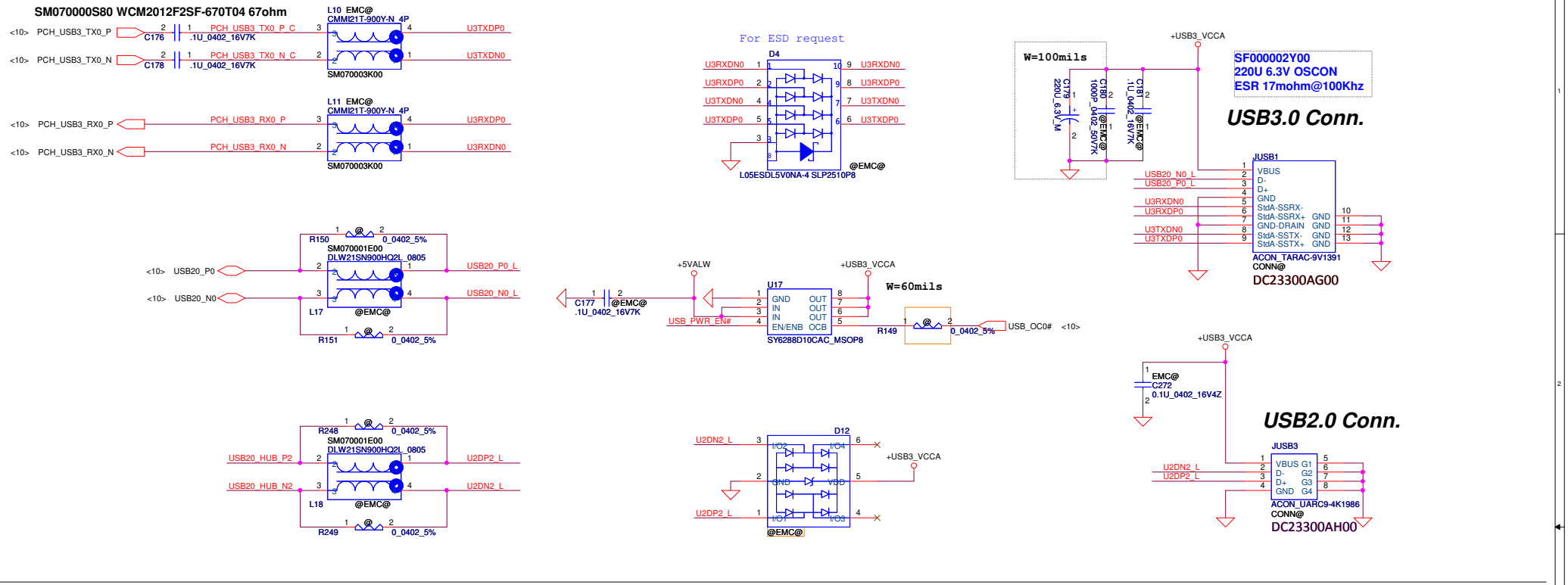
FAN1 Conn



Security Classification	Compal Secret Data		
Issued Date	2013/04/12	Deciphered Date	2014/04/12

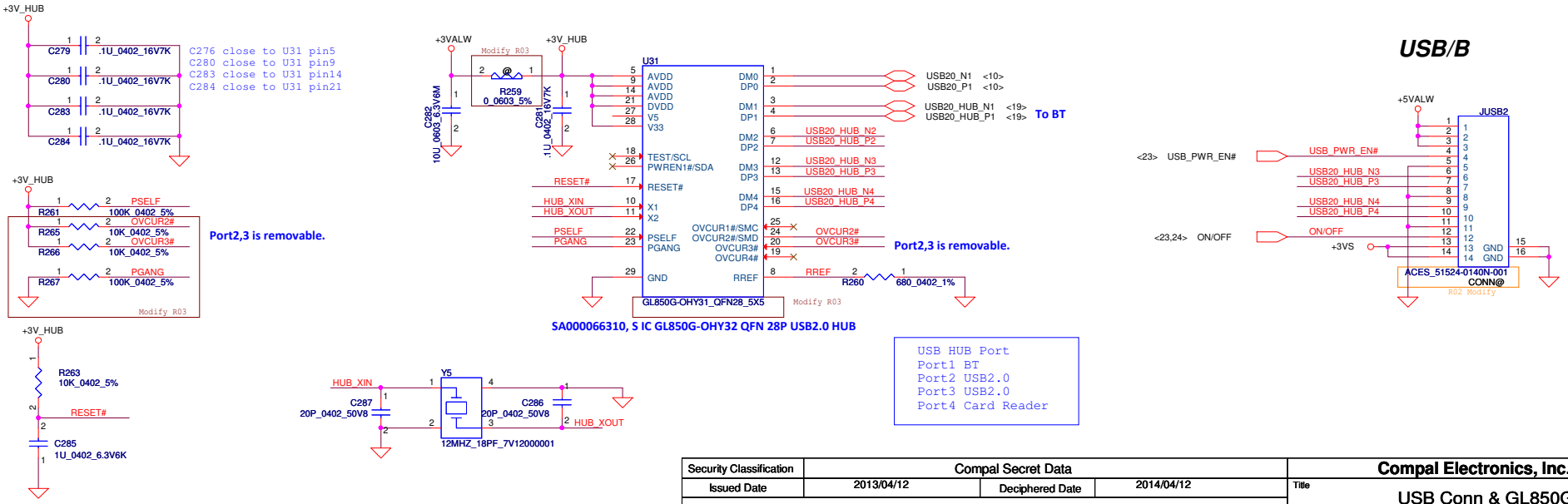
Compal Electronics, Inc.			
Title	HDD/ODD/TPM/FAN		
Size: Custom	Document Number: Bay Trail M LA-B511P		Rev: 1.0
Date: Thursday, March 13, 2014	Sheet 21 of 39		

USB3.0 (Port 0)



USB_HUB

Modify R02



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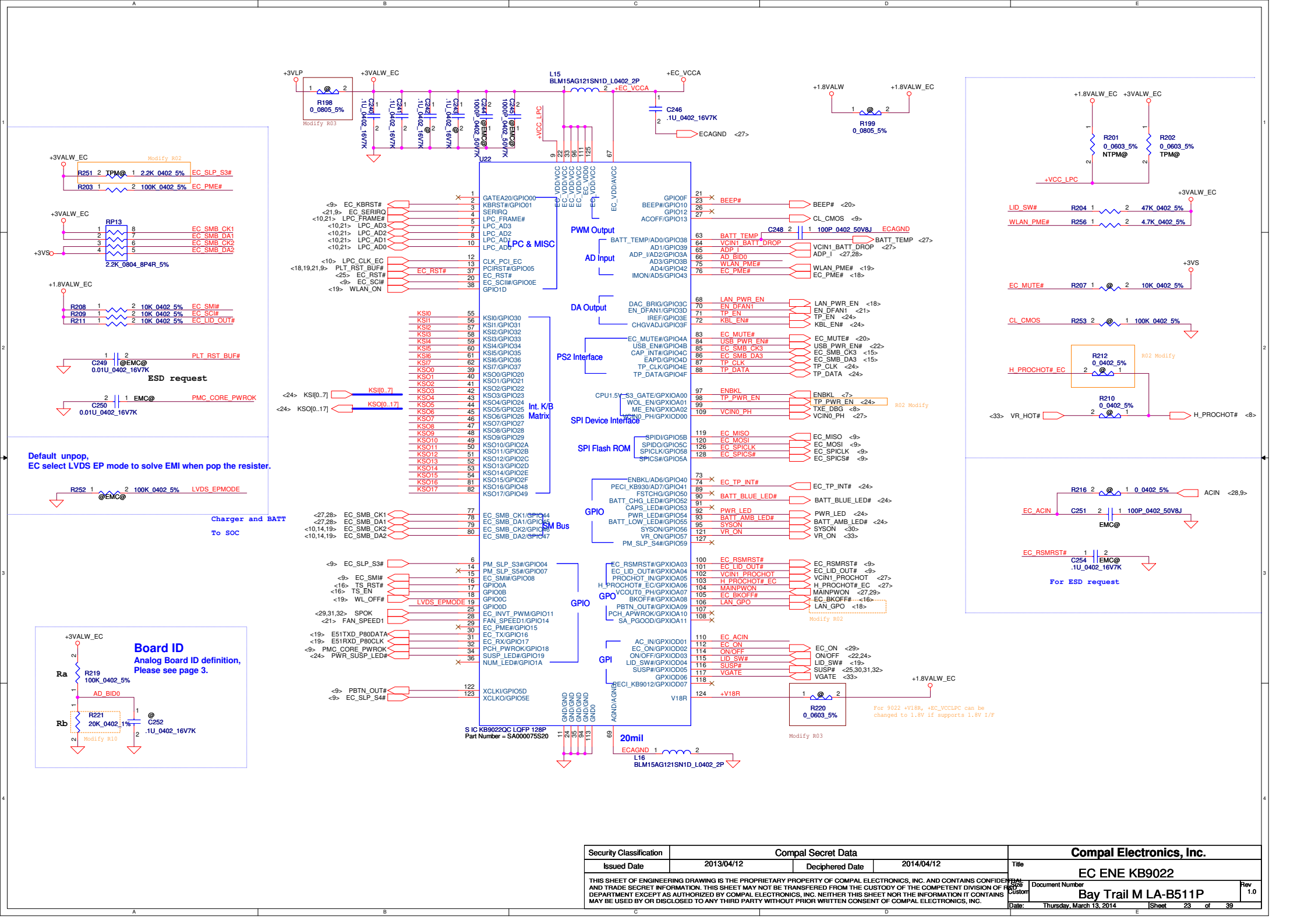
Issued Date	2013/04/12	Deciphered Date	2014/04/12

Compal Electronics, Inc.

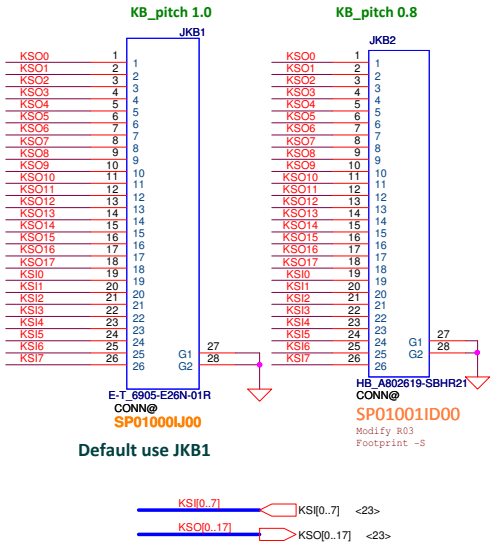
Title: USB Conn & GL850G-OHY32

Size: Custom | Document Number: Bay Trail M LA-B511P | Rev: 1.0

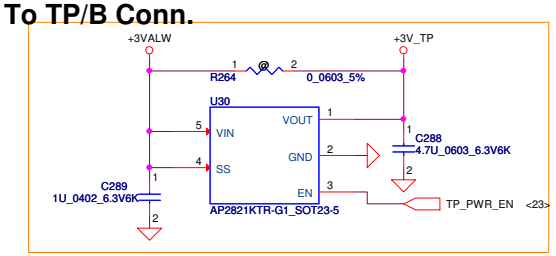
Date: Thursday, March 13, 2014 | Sheet 22 of 39

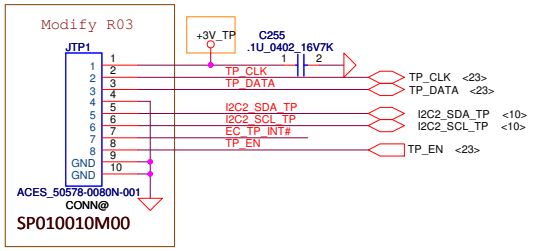

U22
S IC KB9022QC LQFP 128P
Part Number = SA000075S20
PWM Output
AD Input
DA Output
PS2 Interface
SPI Device Interface
SPI Flash ROM
GPIO
GPO
GPI
LPC & MISC
Int. K/B Matrix
SM Bus
Default unpop,
EC select LVDS EP mode to solve EMI when pop the resister.
ESD request
Charger and BATT
To SOC
Board ID
Analog Board ID definition,
Please see page 3.
20mil
For ESD request
Security Classification
Compal Secret Data
Issued Date
2013/04/12
Deciphered Date
2014/04/12
Compal Electronics, Inc.
EC ENE KB9022
Bay Trail M LA-B511P
Rev 1.0
Thursday, March 13, 2014
Sheet 23 of 39

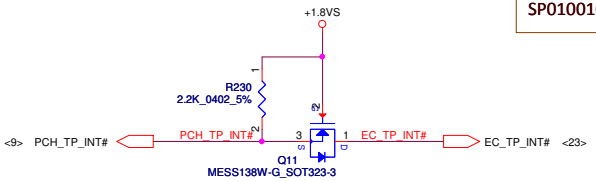
KB Conn.

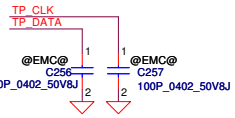


To TP/B Conn.

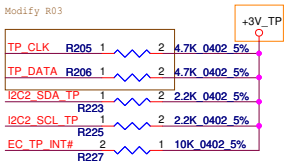


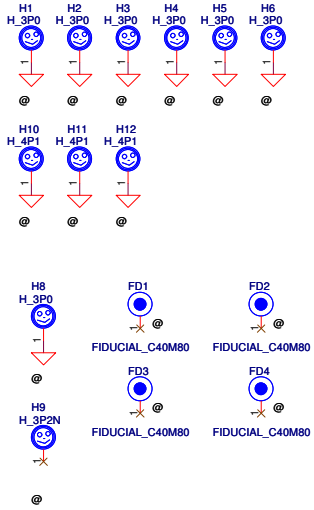




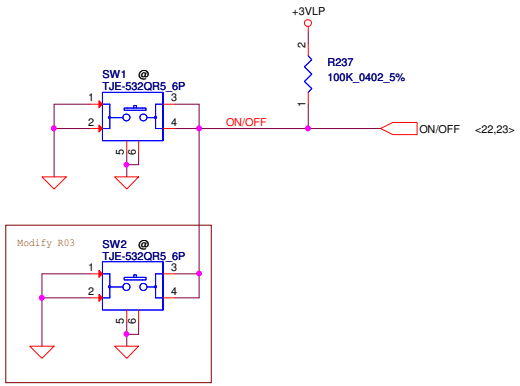


Event	PCH_TP_INT#	EC_TP_INT#
S0	Interrupt	X
S3	X	Wake
1. Clamshell closed or Lid closed 2. Tablet mode for Convertible design 3. Disable TP function by hot-key	X	X

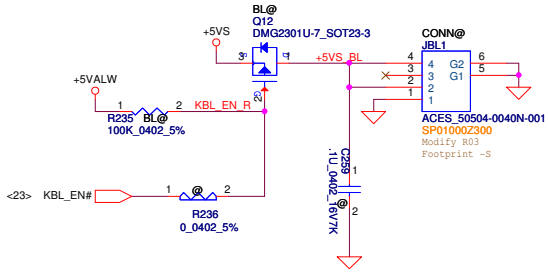




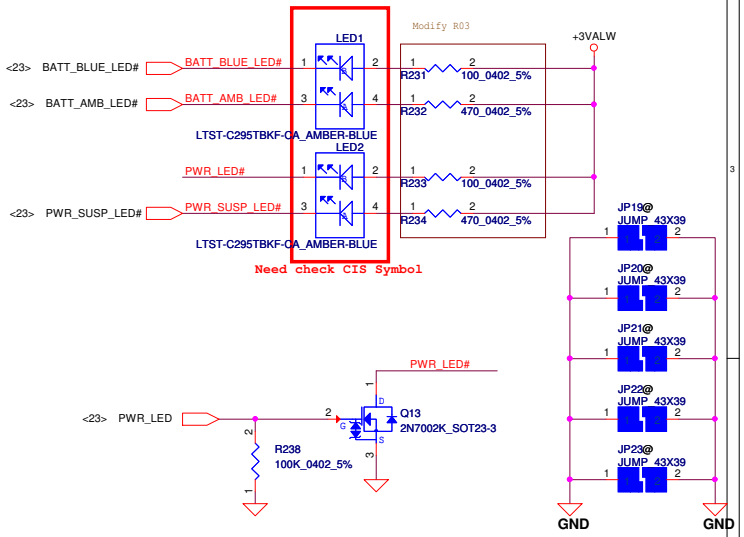
ON/OFF BTN



KB BackLight Conn.



LED



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Issued Date	2013/04/12	Deciphered Date	2014/04/12

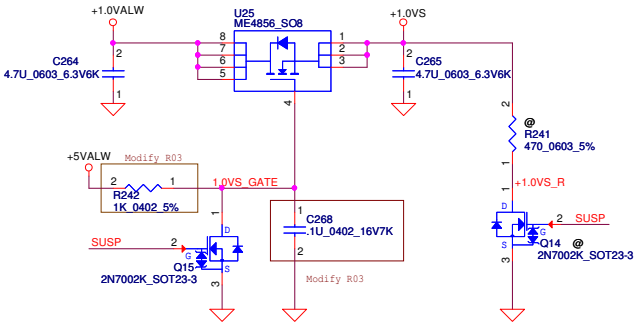
Compal Electronics, Inc.

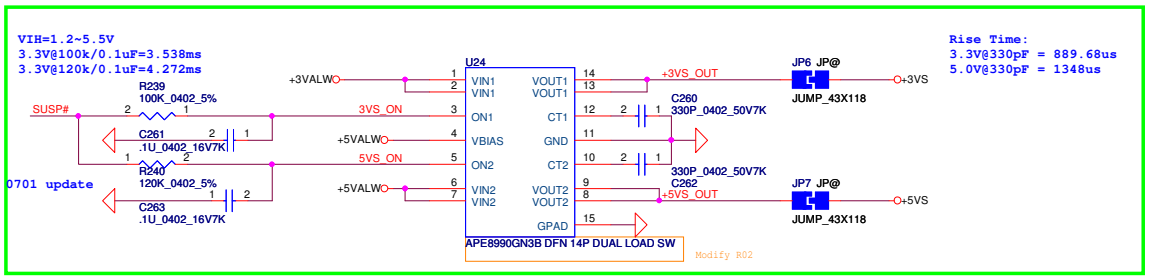
Title: KB/TP/LED/Screw Hole

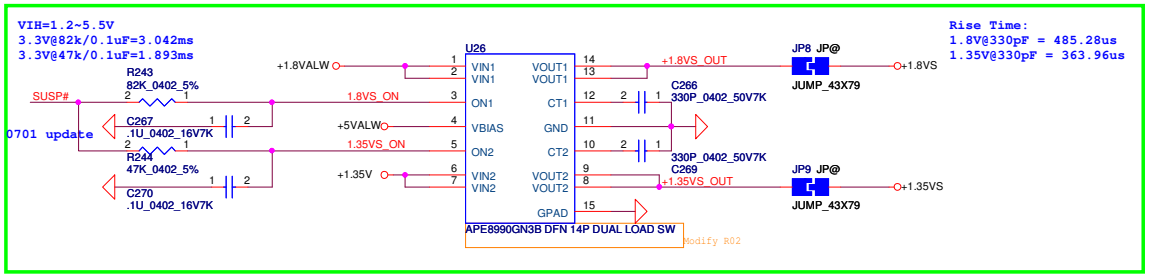
Size: Custom | Document Number: Bay Trail M LA-B511P | Rev: 1.0

Date: Thursday, March 13, 2014 | Sheet 24 of 39

+1.0VALW TO +1.0VS

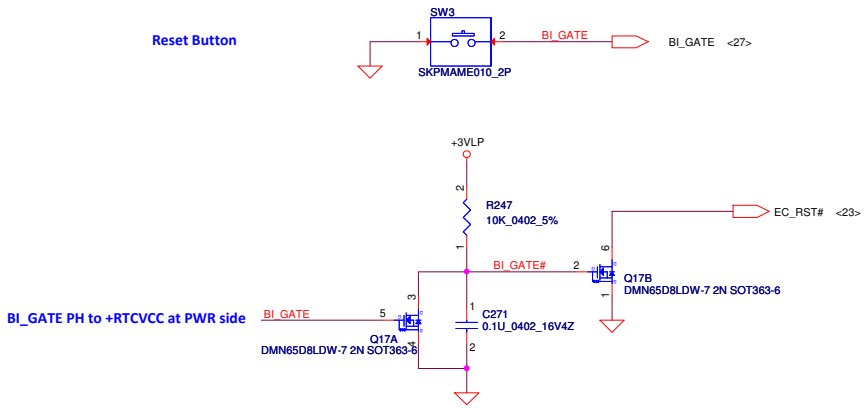


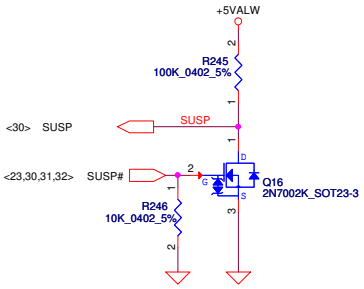




Reset Button / Battery discharge screw hole

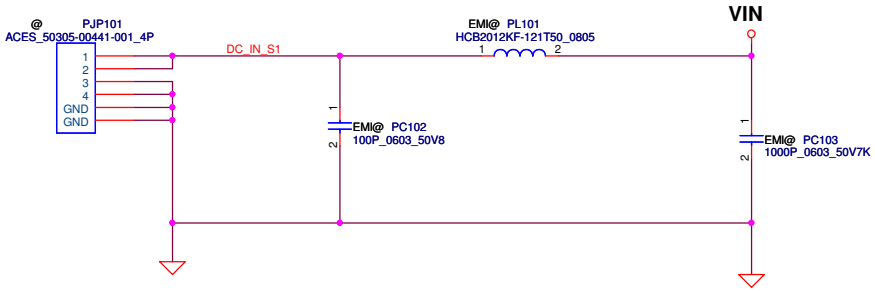
Follow VA52_HB design

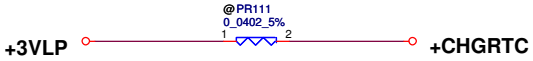


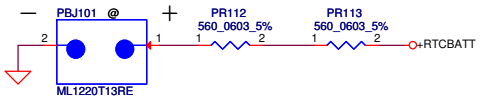


Security Classification	Compal Secret Data		Compal Electronics, Inc.
Issued Date	2013/04/12	Deciphered Date 2014/04/12	Title: DC INTERFACE

Size: Custom	Document Number: Bay Trail M LA-B511P		Rev: 1.0
Date: Thursday, March 13, 2014	Sheet 25 of 39		







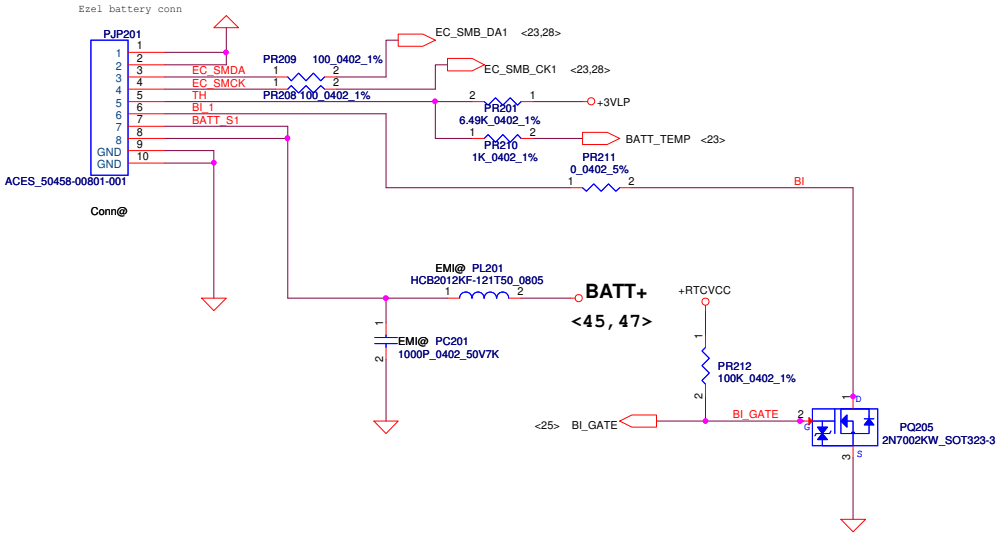
Security Classification	Compal Secret Data		
Issued Date	2013/9/25	Deciphered Date	2014/09/25

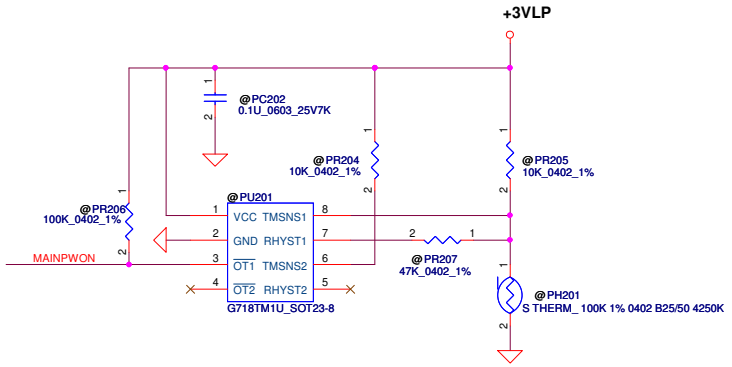
Compal Electronics, Inc.

Title: *DCIN / RTC*

Size: Custom | Document Number: ***Bay Trail M LA-B511P*** | Rev: 1.0

Date: Thursday, March 13, 2014 | Sheet 26 of 39

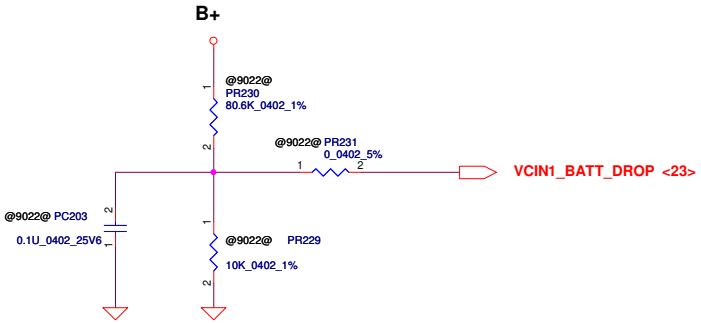


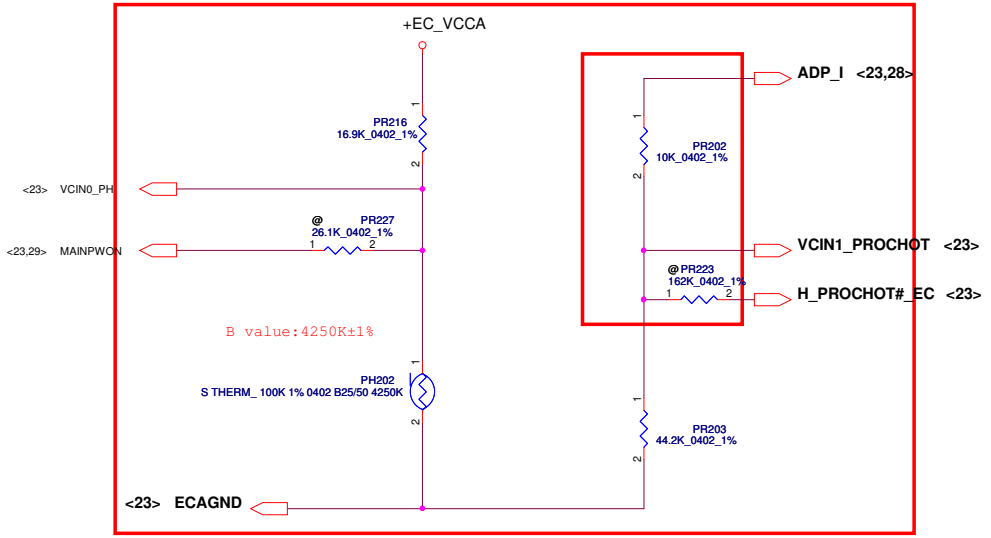


	For KB9012 OTP	For KB9022 OTP
92℃	1.2V	1.0V
56℃	1.2V	1.0V
PR216	22.6K ohm	32.4K ohm
PR227	26.1K ohm	30.9K ohm

Need confirm the setting

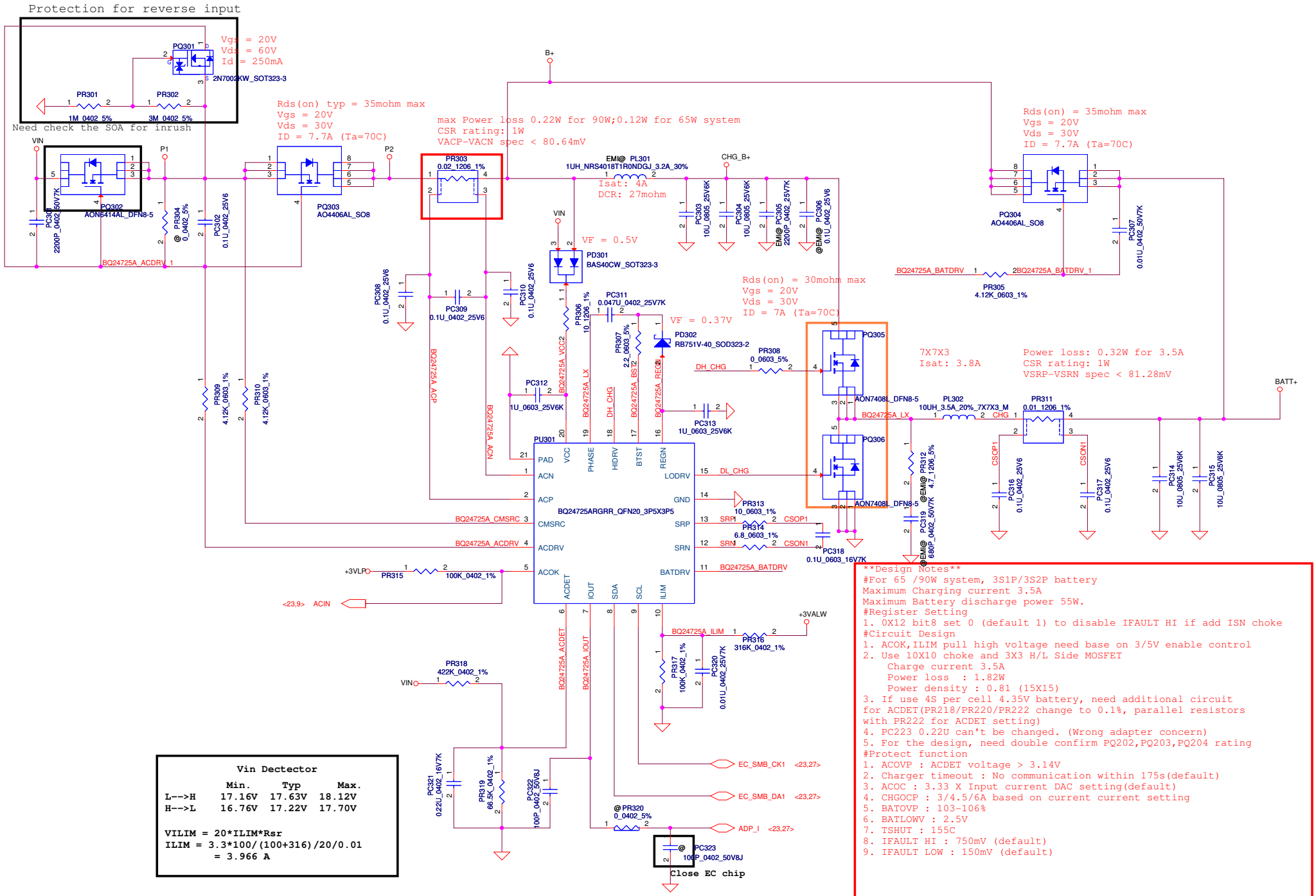
For KB9022 sense 20mΩ	Active	Recovery
40W	42.8W,0.43V	34.4W,0.43V





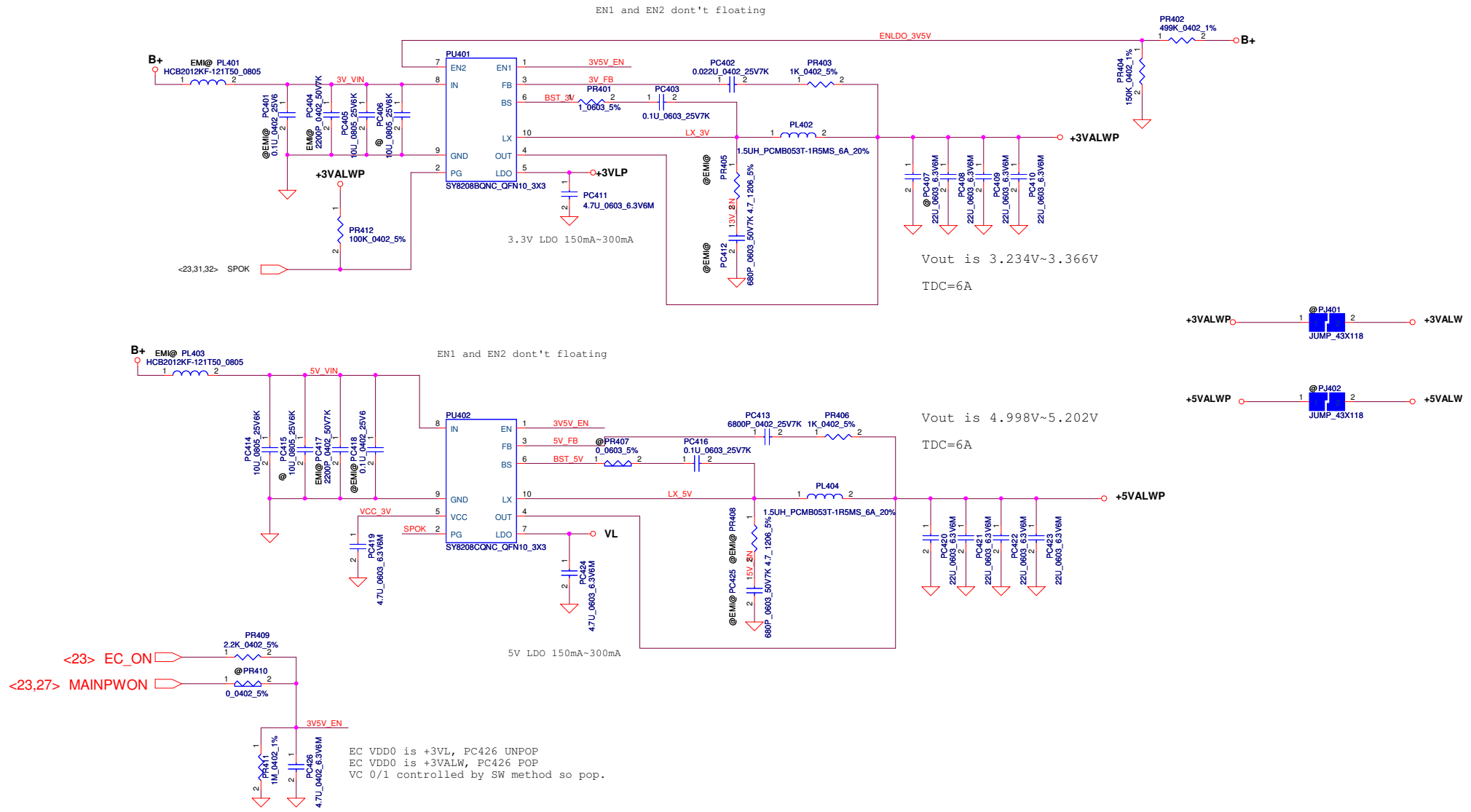
Security Classification	Compal Secret Data		
Issued Date	2013/9/25	Deciphered Date	2014/09/25

Compal Electronics, Inc.			
Title	BATTERY CONN / OTP		
Size: Custom	Document Number: Bay Trail M LA-B511P		Rev: 1.0
Date: Thursday, March 13, 2014	Sheet 27 of 39		



Security Classification	Compal Secret Data		
Issued Date	2013/9/25	Deciphered Date	2014/09/25

Compal Electronics, Inc.			
Title: Charger			
Size: Custom	Document Number: Bay Trail M LA-B511P		Rev: 1.0
Date: Thursday, March 13, 2014	Sheet 28 of 39		



Security Classification	Compal Secret Data			Compal Electronics, Inc.	
Issued Date	2013/9/25	Deciphered Date	2014/09/25	Title	3VALW/5VALW
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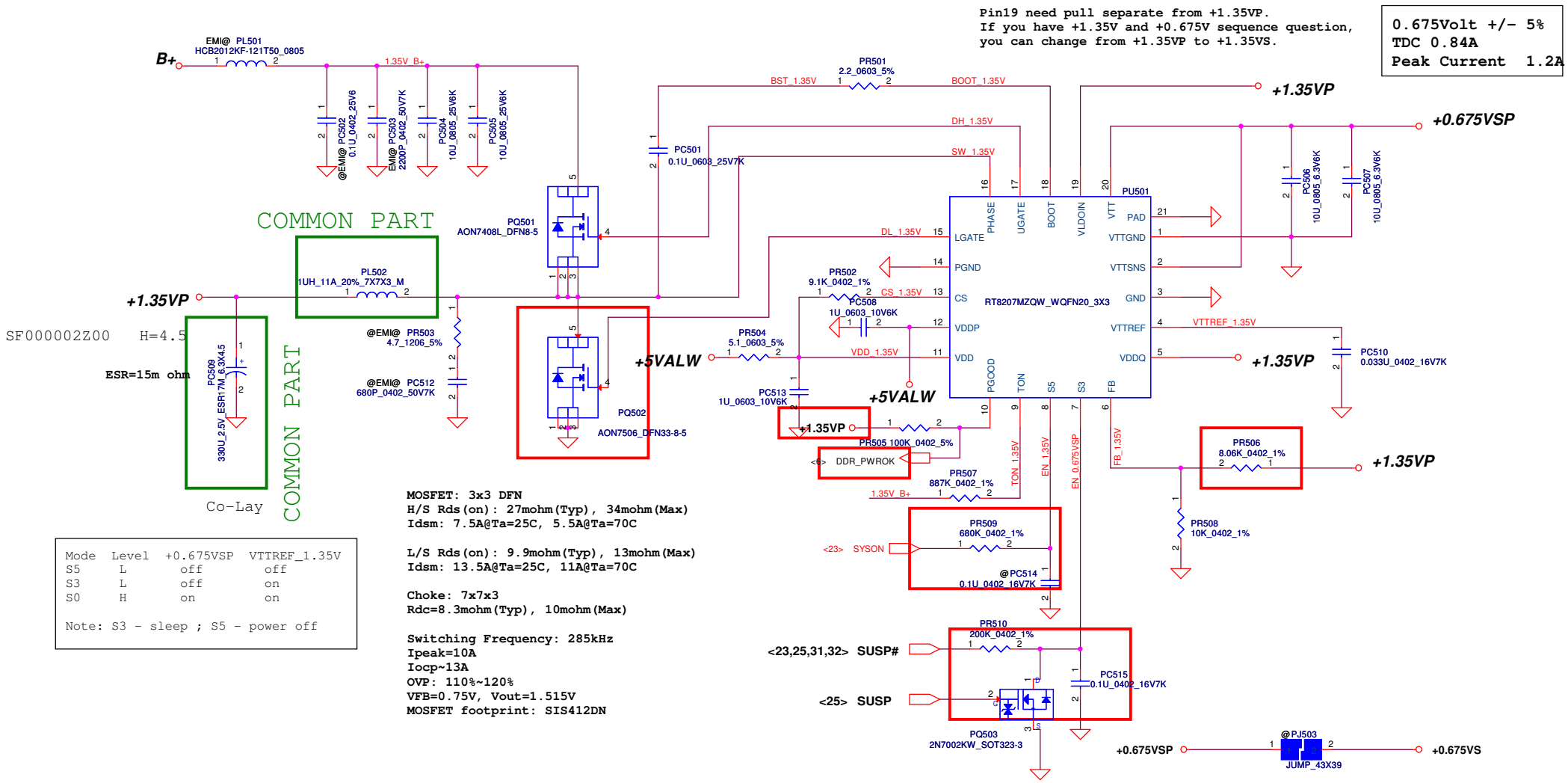
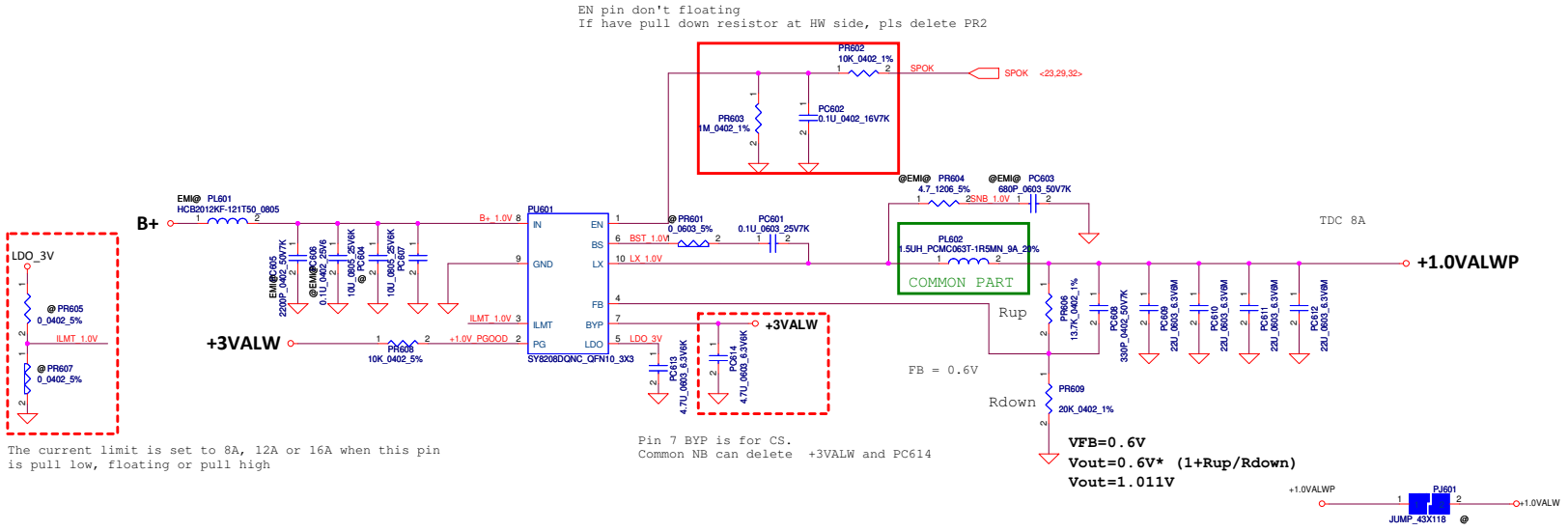
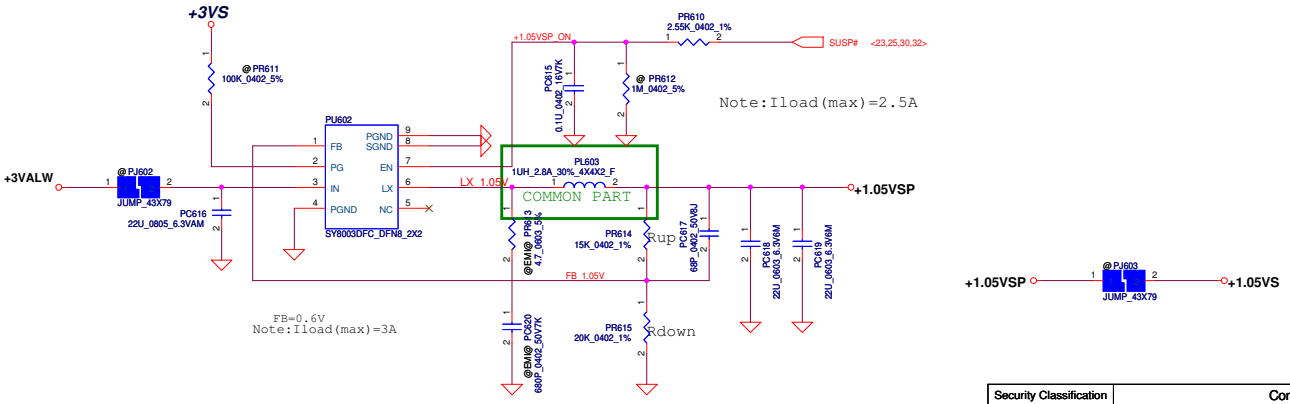
				Date: Thursday, March 13, 2014	Sheet 29 of 39



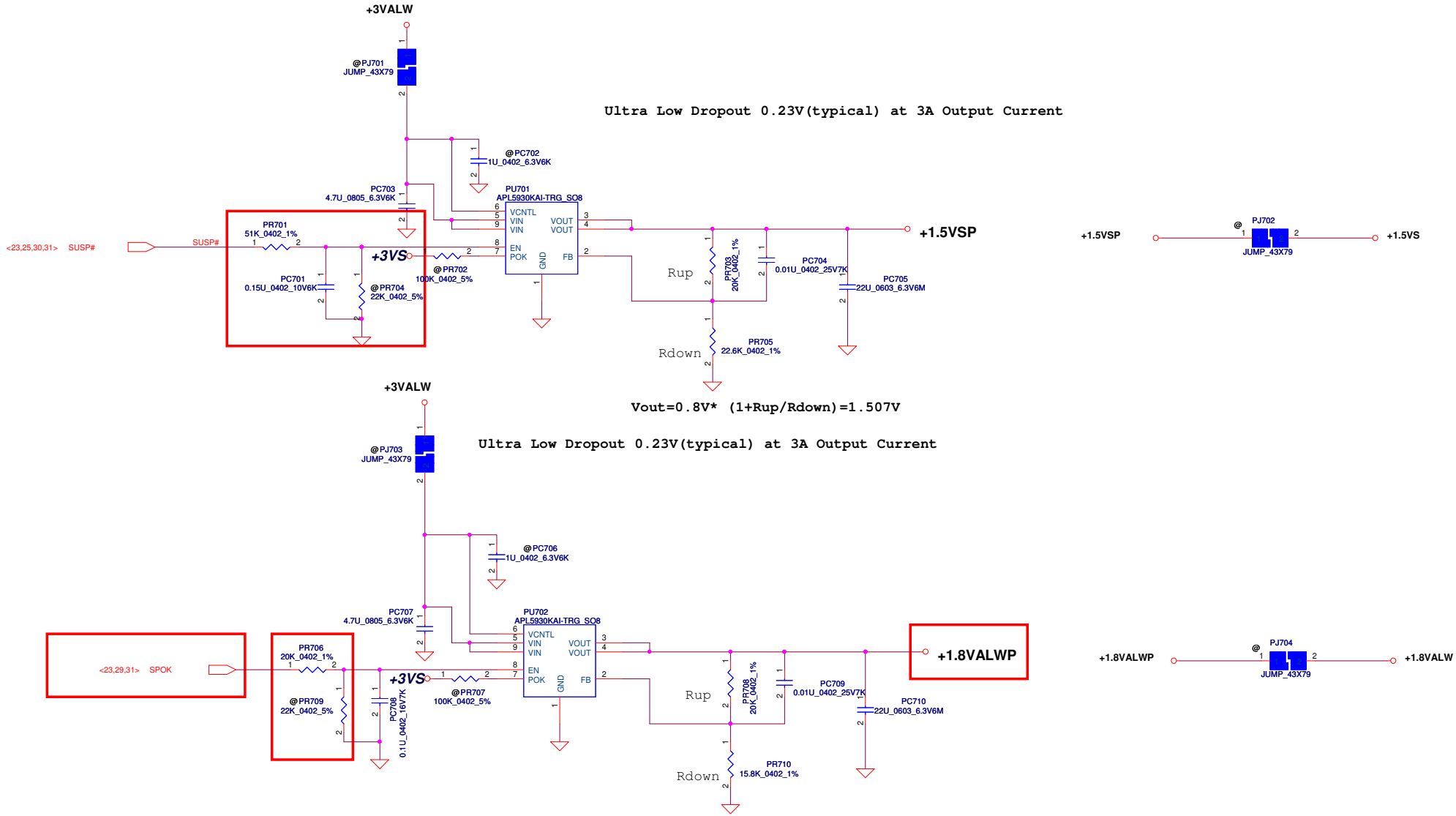
Compal Electronics, Inc.			
Title: 1.35VP/0.675VSP			
Size: Custom	Document Number: Bay Trail M LA-B511P		Rev: 1.0
Date: Thursday, March 13, 2014	Sheet 30 of 39		





Security Classification	Compal Secret Data		
Issued Date	2013/9/25	Deciphered Date	2014/09/25

Compal Electronics, Inc.			
Title	1.05VS/1.0VALW		
Size C	Document Number Bay Trail M LA-B511P		Rev 1.0
Date: Thursday, March 13, 2014	Sheet 31 of 39		



Security Classification	Compal Secret Data		
Issued Date	2013/9/25	Deciphered Date	2014/09/25

Compal Electronics, Inc.			
Title	1.5VSP/1.8VALWP		
Size: Custom	Document Number: Bay Trail M LA-B511P		Rev: 1.0
Date: Thursday, March 13, 2014	Sheet 32 of 39		

Design Note
This circuit is for ULV 1+1 17W.
CPU: IccMax=33A, TDC=16A(TDP NOM)
Loadline: -2.9 m V/A
Output Cap. follow Intel PDDG
330uF/9m*3, 22uF_0805*12, 2.2uF_0402*16
GFX(GT2): IccMax=33A, TDC=21.5A
Loadline: -3.9 m V/A
Output Cap. follow Intel PDDG
330uF/9m*2, 22uF_0805*6, 10uF_0603*6 , 1uF_0402*11

Close GFX choke
COMMON PART
Close GFX L/S MOS
Close CPU L/S MOS
Close CPU choke
ISL95833BHRTZ-T_TQFN32_4X4
+3VALWP
+5VALW
+1.0VS
+1.8VALW
+CPU_B+
+SOC_VNN
+SOC_VCC

Layout Note
Reduce Acoustic Noise
1. The AL bulk capacitor of B+ should be very close to CPU_CORE MOSFET.
2. Input ceramic caps must place on symmetry same location on top side and bottom side.

OCP setting=21A
0.36uH DCR= 1.4+-5% m ohm, Idc~Isat= 16.8~24A
Rds=13.5mΩ(Typ)
16.5mΩ(Max)

PR817 and PR826
27.4K ohm for 100 degree
61.9K ohm for 110 degree

Height 8 mm
100u_SF000000I80
Height 6 mm
68u_SF000000W00

OCP setting=18A
0.36uH DCR= 1.4+-5% m ohm, Idc~Isat= 16.8~24A
Rds=13.5mΩ(Typ)
16.5mΩ(Max)

For VR_HOT#, already pull high at power side.

VDD source use +5VS and PGOOD source use +3VS
Please confirm power on and down sequence, make sure VGATE after CPU_CORE on.

Layout Note
SVID routing
1. Alert# signal must be routed between the Clock and Date lines to reduce the cross talk between them. Signal order arrangement: mobile order is Clock-Alert-Date.
2. SVID spacing requirement is 18mils(0.475mm).
3. Maximum total microstrip routing length of each SVID signal must not exceed 6000mils(152.4mm).
4. The SVID bus must be ground reference, It cannot be referenced to input (Vbat or 12V) power plans as they can couple noise into the SVID bus as power states change.
5. Avoid routing under noisy circuit, e.g. switch node , Gate driver, B+, Vin, high speed signal.
6. When SVID signal changes Layer, GND return path may be changed also. We need add GND via for GND reference.

Cn = L/((Rntcnet*Rsum)/(Rntcnet+Rsum))*DCR)
If Cn is correctly selected, when the load current has a square change, the output voltage also has a square response.

Security Classification	Compal Secret Data		
Issued Date	2013/9/25	Deciphered Date	2014/09/25

Compal Electronics, Inc.	
Title	CPU_CORE/GFX_CORE
Size: Custom	Document Number: Bay Trail M LA-B511P
Rev	1.0
Date: Thursday, March 13, 2014	Sheet 33 of 39

PWR Rule
需確認最新SPEC.
Modify 8/6.

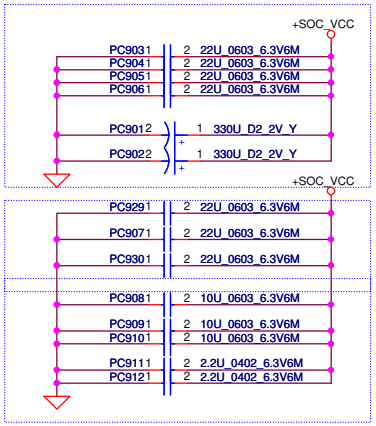
3 X 330u/9m(47W)
2 X 330u/9m(37W)
24 pcs 22uF and reserve 4 pcs
2013/08/16

+SOC_VCC =+CPU_CORE

Output Cap
(330uF*2+22uF*4)

Package Edge Cap
(22uF*3)

Back Side Cap
(10uF*1+4.7uF*2+2.2uF*2)

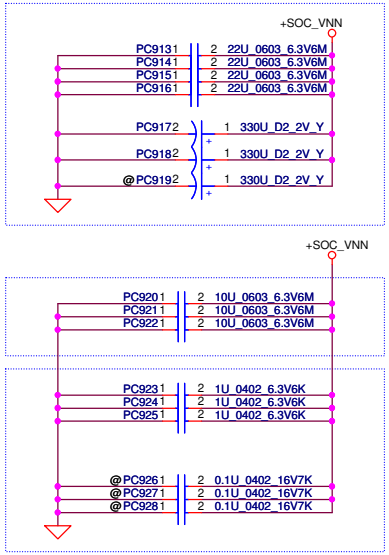


+SOC_VNN =+VGFX_CORE

Output Cap
(330uF*3+22uF*4)

Package Edge Cap
(22uF*3)

Back Side Cap
(1uF*3)

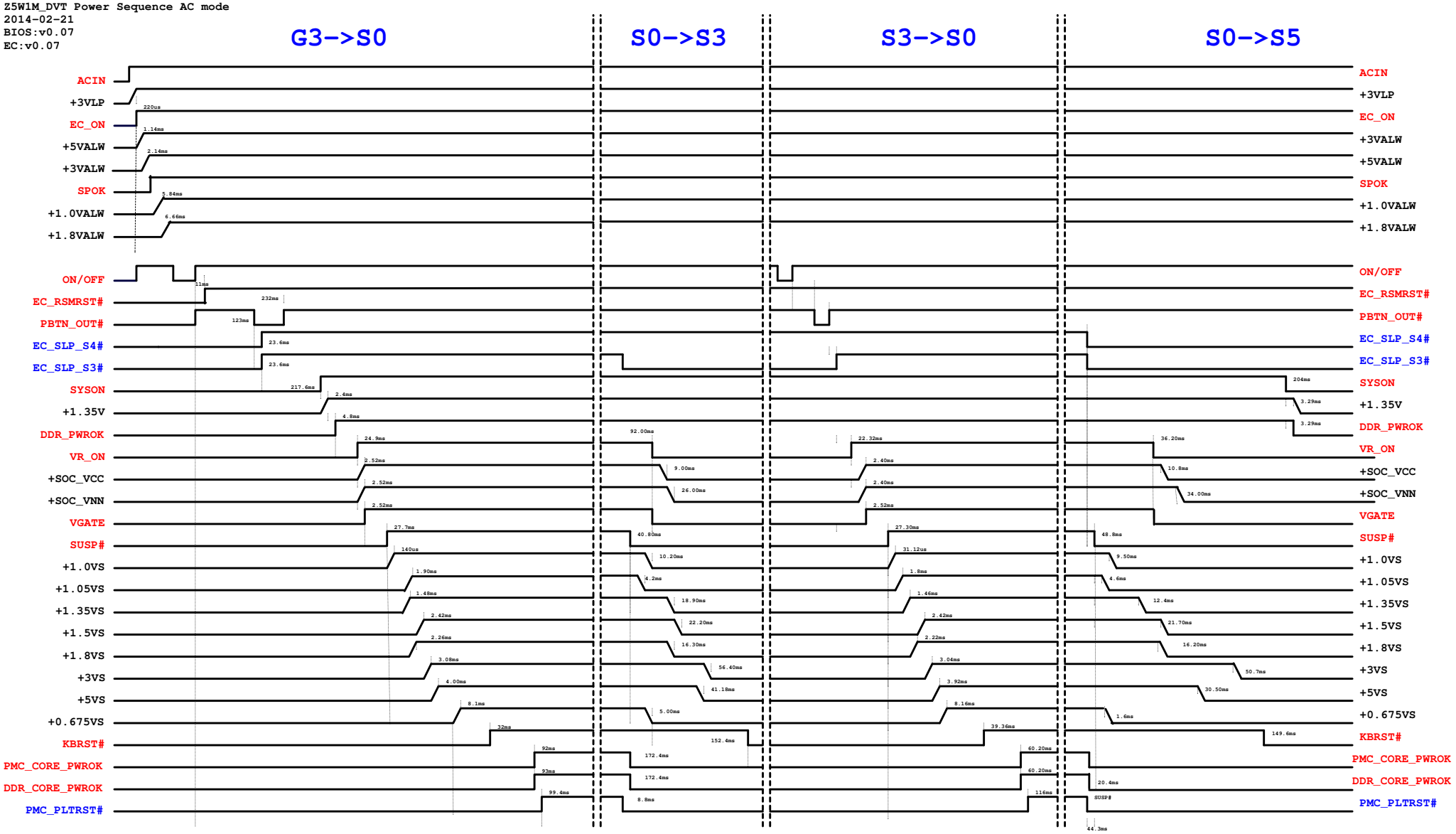


Security Classification	Compal Secret Data		Compal Electronics, Inc.
Issued Date	2013/9/25	Deciphered Date 2014/09/25	Title: CPU/GFX capacitor
Size: Custom	Document Number: Bay Trail M LA-B511P		Rev: 1.0
Date: Thursday, March 13, 2014	Sheet 34 of 39		

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

Item	Fixed Issue	Reason for change	Rev.	PG#	Modify List	Date	Phase
1		Improve ripple voltage		30	Change PL602 from SH00000YE00 to SH000008800	12/30	DVT
2		Improve part rating		33	Change PC901,PC902,PC917,PC918 from SGA000026800 to SGA20331E10	12/31	DVT
3	HW request	Use bead(L22) individ		29	Delete PJ501, PJ502	01/07	DVT
4		Unify VC0/VC1 setting		26	Change PR202, PR203, PR216	01/08	DVT
5		Raise part rating		32	Change PR814, PR832 size from 0402 to 0603	01/10	DVT
6		Prevent burn issue		27	Change PQ303, PQ304 from AO4466L to AO4406AL	01/10	DVT
7	Customer request			26	Change PR211 from 100 to 0	01/29	PVT
8		VC 0/1 controlled by sw method		28	Pop PC426	01/29	PVT
9		Meet EC request		32	Change +1.8VALW for VGATE pull high	02/18	PVT
10							
11							
12							
13							
14							
15							
12							
13							
14							
15							
16							
17							

Z5W1M_DVT Power Sequence AC mode
2014-02-21
BIOS:v0.07
EC:v0.07



Security Classification	Compal Secret Data		
Issued Date	2013/9/25	Deciphered Date	2014/09/25

Compal Electronics, Inc.			
Title	Power Sequence		
Size: C	Document Number: Bay Trail M LA-B511P		Rev: 1.0
Date: Thursday, March 13, 2014		Sheet 36 of 39	

Version Change List (P. I. R. List) Page 1

Item	Page #	Title	Date	Request Owner	Issue Description	Solution Description	Rev.
1	P.08		12/17	HW	SLP_S3# leak voltage	Change Q21 direction	0.2
2	P.09		12/17	HW	GPIO_S0_SC_56 pull down no vedio. Touch screen and touch pad SMbus net fail	Pop R53, unpop R55 Change Q2.1 to SOC_I2C5_CLK Change Q3.1 to SOC_I2C2_CLK	0.2
					NO support CPU Thermal sensor	Unpop U28	
3	P.14		1/6	HW	U9 DP to LVDS chip old symbol	Link CIS for SA00007A300	0.2
4	P.18		1/6	HW	U14 Lid switch old symbol	Link CIS for SA000079D00	0.2
5	P.19		1/6	HW	Vendor request to meet Acer spec	Change R188,R192 from 47ohm to 60.4ohm	0.2
				ESD	ESD test Fail	Add C277,C278,L19,L20 for RING2 & SLEEVE Change D9 pin2.3 name to RING2_L & SLEEVE_L	
6	P.6,8,11,15,16,17,19,22		1/6	HW	0 ohm R-short	R13,R71,R72,R118,R119,R120,R121,R122,R123,R124,R125,R34,R36,R200,R254,R255,R172,R187,R193,R167,R168,R169,R170,R187,R193,R107,R108,R212	0.2
7	P.17		1/6	HW	Change LAN power	Unpop U19,C188 Pop R160,R200 change R200.2 from LAN_PWR_EN to LAN_GPO Change C204,C205 from 12pF to 10pF	0.2
8	P.22		1/6	HW	Add EC GPIO Board ID	Add LAN_GPO for U22.pin106 Change R211 to 12K	0.2
9	P.15		1/6	ESD		Add D13	0.2
10	P.21		1/6	HW	Change USB HUB to GL850S	Delete U18,R152~R157,C182~C187,Y3 Add U29,R259~R263,C279~C287,Y5	0.2
11	P.19		1/6	HW	BOM	Change C215,C273 from SE107105ML0 to SE080105K80	0.2
12	P.8		1/6	HW		Change R34.2 from TS_INT#_CPU to SOC_TS_INT# Change R36.2 from TP_INT#_CPU to SOC_TP_INT#	0.2
13	P.13		1/7	EMI		Add L21,L22 for EMI Change net name to +1.35V_L C91~C102,R77,R75,(JDIMM1 pin75,76,81,82,87,88,93,94,99,100,105,106,111,112,117,118,123,124)	0.2
14	P.23		1/7	HW		Add U30,C288,C289,R264 for +3V_TP Change JTP1.8,R233.2,R225.2,R227.2 to +3V_TP	0.2

Security Classification	Compal Secret Data		
Issued Date	2011/08/31	Deciphered Date	2012/08/31

Compal Electronics, Inc.

Title: EE P.I.R (1)

Size: Custom | Document Number: Bay Trail M LA-B511P | Rev: 1.0

Date: Thursday, March 13, 2014 | Sheet 37 of 39

Version Change List (P. I. R. List) Page 2

Item	Page #	Title	Date	Request Owner	Issue Description	Solution Description	Rev.
15	P.24		01/07	HW	BOM	Change U24,U26 to SA00006FD00	0.2
16	P.9,23		01/08	HW	BOM	Delete TP@ BOM structure ==> C255,Q11,R223,R225,R227,R230,R63,R64,Q3	0.2
17	P.8,15,17 19,22		01/08	HW	BOM	R-short==>R34,R36,R200,R254,R255,R172,R187, R193,R167,R168,R169,R170,R187,R193,R107,R108, R212,R150,R151,R248,R249	0.2
18	P.23 P.08		01/08	HW	BOM	Pop U30,C288,C289 Unpop R264 Pop U30,C288,C289 Unpop R264	0.2
19	P.23 P.22		01/08	HW		Change U30.3 from SYSON to TP_PWR_EN Add U22.98 TP_PWR_EN	0.2
20	P.21		01/08	ME		JUSB2 Link CIS symbol ==> ACES_51524-0140N-001	0.2
21	P.21		01/13	HW		USB2.0 port0 USB3.0 conn. USB2.0 port1 USB HUB	0.2
22	P.9,14		01/14	HW		Change RP10,RP11 to 2.2K_0804_8P4R	0.2
23	P.15		01/14	HW	BOM	ETS@ BOM structure ==> R101,R102,R113,R114	0.2
24	P.21		01/16	HW	BOM	BOM structure==>Add U16,R257 to TPM@	0.2
25	P.09		02/18	HW	BOM	For +1.8VS abnormal voltage Pop R28	0.3
26	P.20		02/18	HW		For HP pop noise Change R188,R192 to 0ohm Change R187,R193 to 60.4ohm	0.3
27	P.24		02/18	HW		For TP Change R205,R206 to +3V_TP Change JTP1 pin define	0.3
28	P.23		02/18	HW		For Board ID Pop R219 Change R221 to 15K	0.3
29	P.25		02/18	HW		For +1.0 VS Pop C268, Change R242 to 1K	0.3
30	P.24		02/18	HW		unpop SW2	0.3

Compal Electronics, Inc.

Title: EE P.I.R (2)

Size: Custom | Document Number: Bay Trail M LA-B511P | Rev: 1.0

Date: Thursday, March 13, 2014 | Sheet 38 of 39

Version Change List (P. I. R. List) Page 2

Item	Page #	Title	Date	Request Owner	Issue Description	Solution Description	Rev.
31	P.20,24		02/21	ME		JKB2,JBL1,JDMIC1 蓋綠漆. Change footprint to XXXX-S	0.3
32	P.9,21,22,23		02/21	HW		R-short R40,R96,R143,R142,R259,R198,R199,R220	0.3
32	P.9		02/21	HW		Add JCMOS2	0.3
33	P.24		02/21	ME		測光 Chang R231,R233 to 100 ohm Change R232,R234 to 470 ohm	0.3
34	P.22		02/24	HW		Change USB HUB to GL850G Add U31,R265,R266,R267 Delete U29,R262	0.3
35	P.09		02/25	HW		32.768KHz Change C17,C18 to 18pF	0.3
36	P.17,20,25		02/26	HW		Change Q9,Q17,Q18 from SB00000DH00 to SB00000ZU00	0.3
37	P.16		03/12	HW		R-short R88	1.0
38	P.23		03/13	HW		For Board ID Change R221 from 15K to 20K	1.0
39	P.24		03/13	HW		Change SW1 from DBG@ to @	1.0

Compal Electronics, Inc.

Title: EE P.I.R (2)

Size: Custom | Document Number: Bay Trail M LA-B511P | Rev: 1.0

Date: Thursday, March 13, 2014 | Sheet 39 of 39