MODEL NAME : *PALB0*

PCB NO : *LA-6801P (DAB00000410)*

BOM P/N : *46198531L01 -->R3*
46198531L02 -->R1
46198531L03 -->R3
46198531L04 -->R1

Dell/Compal Confidential

Schematic Document

Specter (Huron River)

Sandy Bridge(PGA) + Cougar Point(standard)

DISCRETE VGA N12E-GE-B (optimus)

2011-01-25

Rev: 1.0

Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

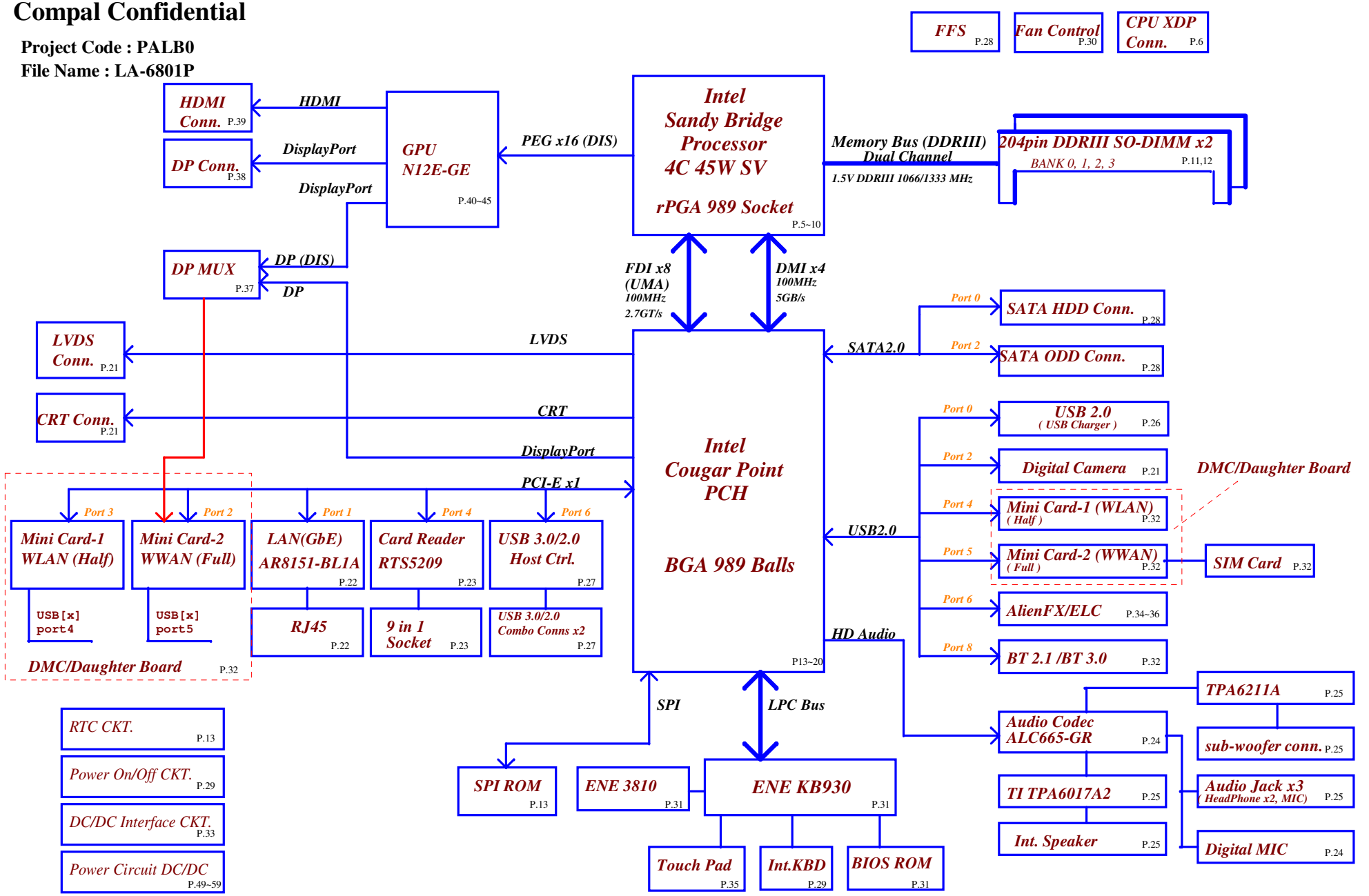
Title: *Cover Page*

Size | Document Number: *LA-6801P* | Rev: 1.0

Date: Tuesday, January 25, 2011 | Sheet 1 of 61

Compal Confidential

Project Code : PALB0
File Name : LA-6801P

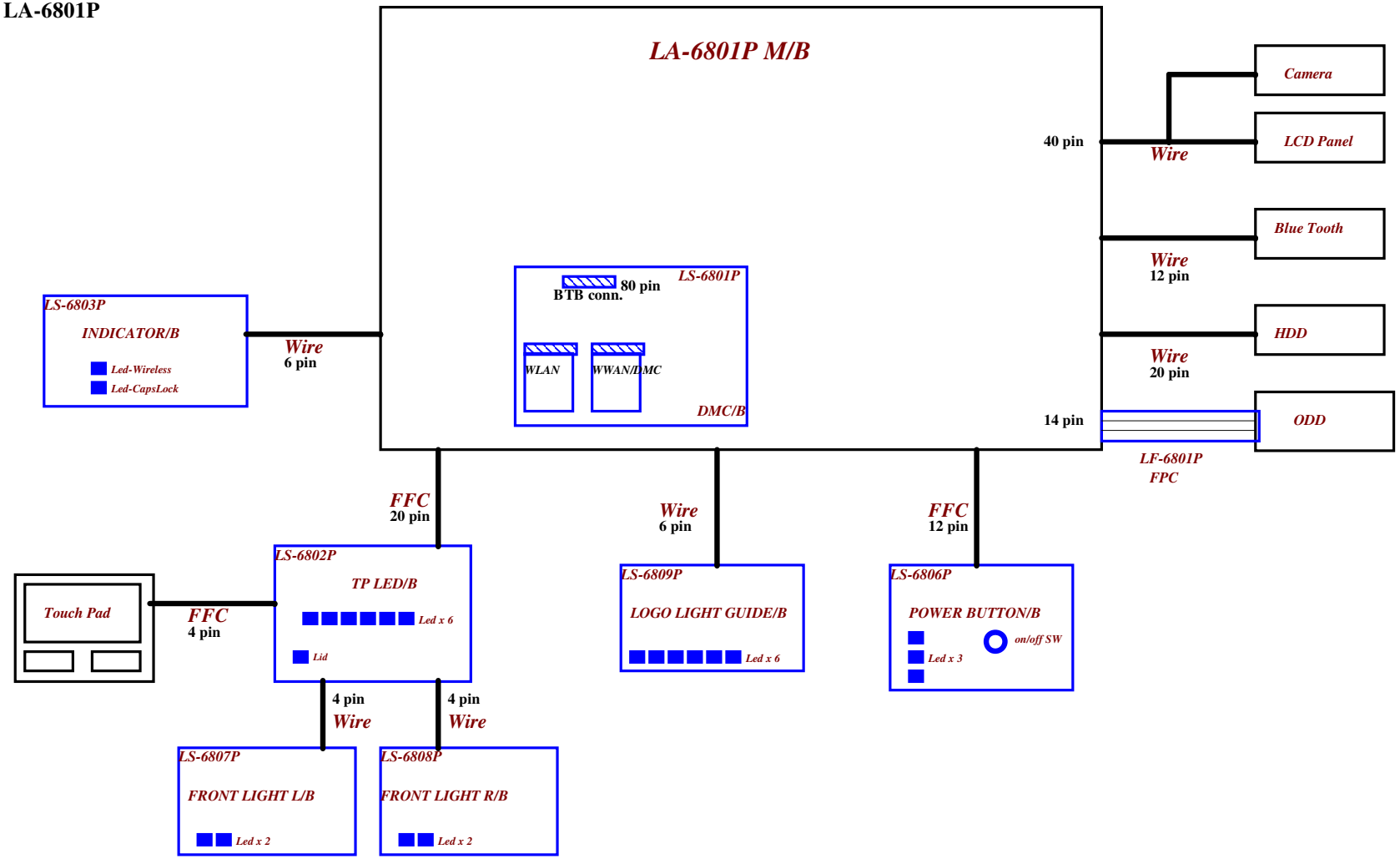


Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.			
Title: Block Diagram			
Size	Document Number: LA-6801P		Rev: 1.0
Date: Tuesday, January 25, 2011	Sheet 2 of 61		

Compal Confidential

Project Code : PALB0
File Name : LA-6801P



Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: **Block Diagram**

Size	Document Number	Rev
		1.0

Date: Tuesday, January 25, 2011 | Sheet 3 of 61

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
1	0.2
2	0.3
3	0.4
4	1.0
5	
6	
7	

SMBUS Control Table

	SOURCE	MINI1	MINI2	BATT	SODIMM	Thermal Sensor 1	Thermal Sensor 2	FFS	VGA Thermal Sensor	VGA	DMC	XDP	Charger
EC_SMB_CK1 EC_SMB_DA1	KB930			V									
EC_SMB_CK2 EC_SMB_DA2	KB930					V	V		V				
PCH_SML0CLK PCH_SML0DATA	PCH												
PCH_SML1CLK PCH_SML1DATA	PCH												V
MEM_SMBCLK MEM_SMBDATA	PCH	V	V		V			V		V	V	V	

Link

PCH	USB PORT#	DESTINATION
	0	None
	1	JUSB1 (2.0 Ext Left Side)
	2	Bluetooth
	3	CAMERA
	4	JMINI1 (WLAN)
	5	JMINI2 (WWAN/DMC)
	6	ELC 8051
	7	None
	8	None
	9	None
	10	None
	11	None
	12	None
	13	None

CLKOUT	DESTINATION
PCI0	PCH_LOOPBACK
PCI1	EC LPC
PCI2	None
PCI3	None
PCI4	None

CLK	DIFFERENTIAL	DESTINATION	FLEX CLOCKS	DESTINATION
	CLKOUT_PCIE0	None	CLKOUTFLEX0	None
	CLKOUT_PCIE1	10/100/1G LAN	CLKOUTFLEX1	None
	CLKOUT_PCIE2	MINI CARD-2 WWAN	CLKOUTFLEX2	None
	CLKOUT_PCIE3	MINI CARD-1 WLAN	CLKOUTFLEX3	None
	CLKOUT_PCIE4	CARD READER		
	CLKOUT_PCIE5	None		
	CLKOUT_PCIE6	USB 3.0		
	CLKOUT_PCIE7	None		
	CLKOUT_PEG_B	None		

SATA	DESTINATION
SATA0	HDD
SATA1	None
SATA2	ODD
SATA3	None
SATA4	None
SATA5	None

PCI EXPRESS	DESTINATION
Lane 1	10/100/1G LAN
Lane 2	MINI CARD-2 WWAN/DMC
Lane 3	MINI CARD-1 WLAN
Lane 4	CARD READER
Lane 5	None
Lane 6	USB 3.0
Lane 7	None
Lane 8	None

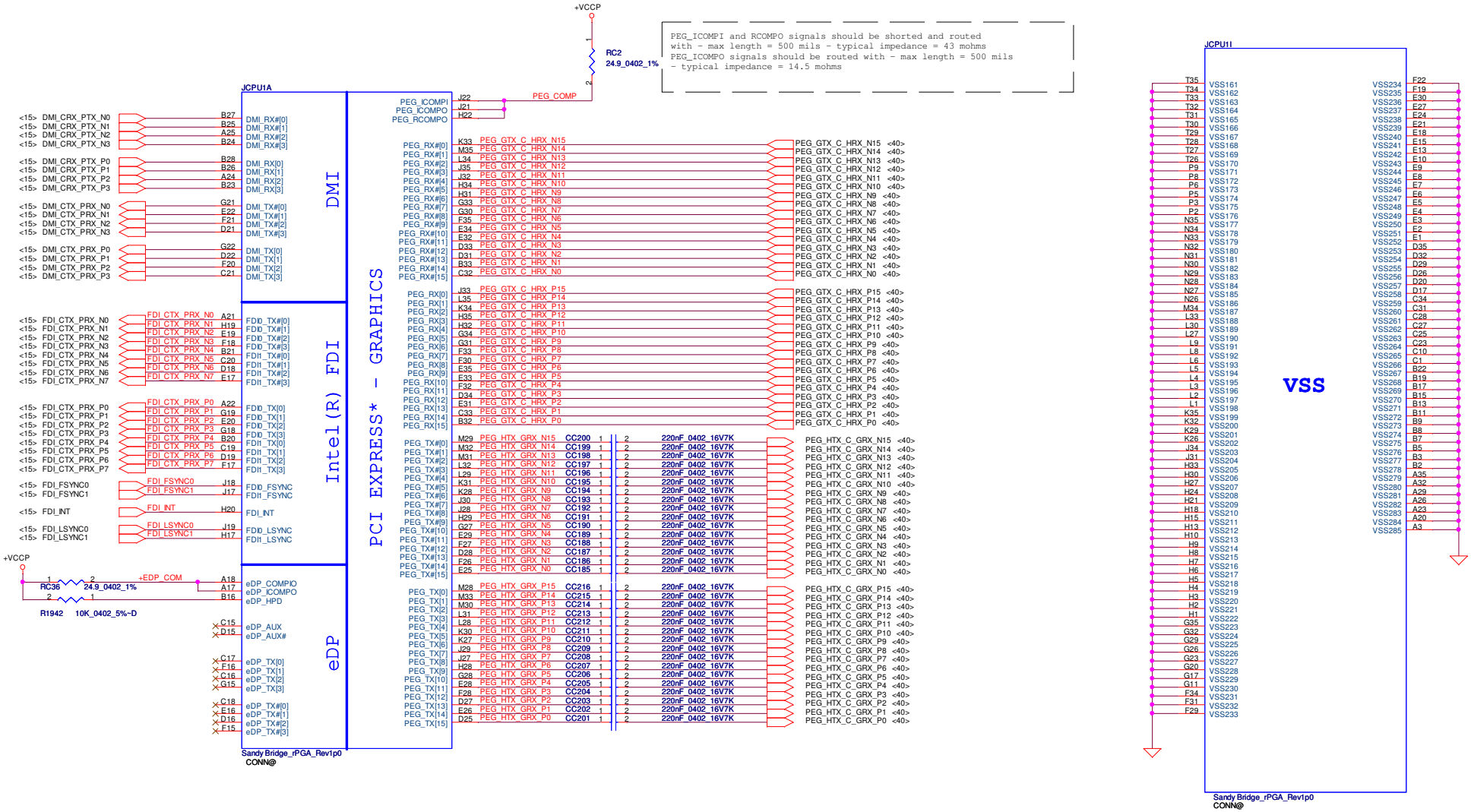
Symbol Note :

: means Digital Ground

: means Analog Ground

Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.
Title: Notes List
Size | Document Number: LA-6801P | Rev: 1.0
Date: Tuesday, January 25, 2011 | Sheet 4 of 61



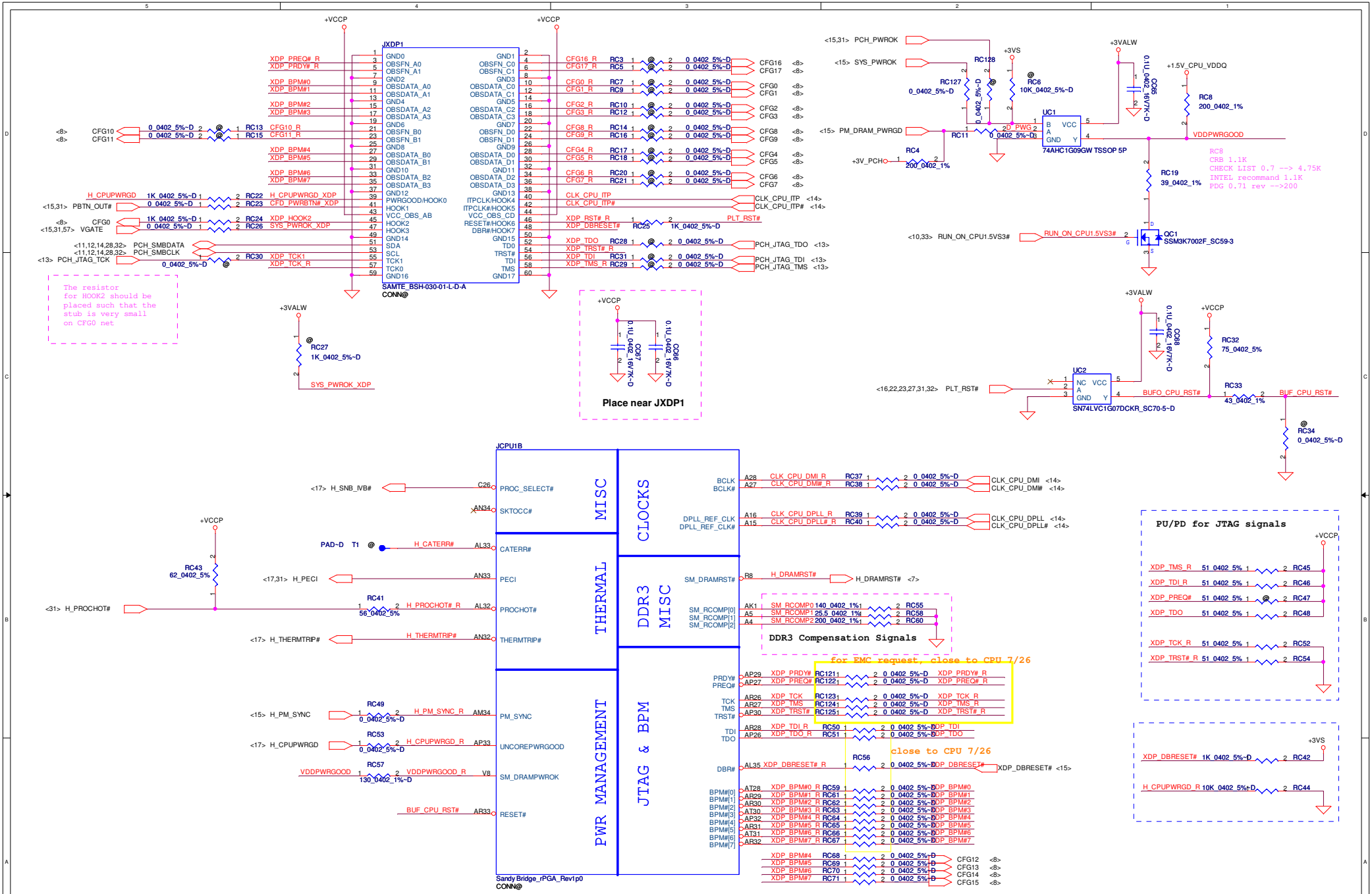
Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: PROCESSOR(1/6) DMI,FDI,PEG

Size	Document Number	Rev
	LA-6801P	1.0

Date: Tuesday, January 25, 2011 Sheet 5 of 61



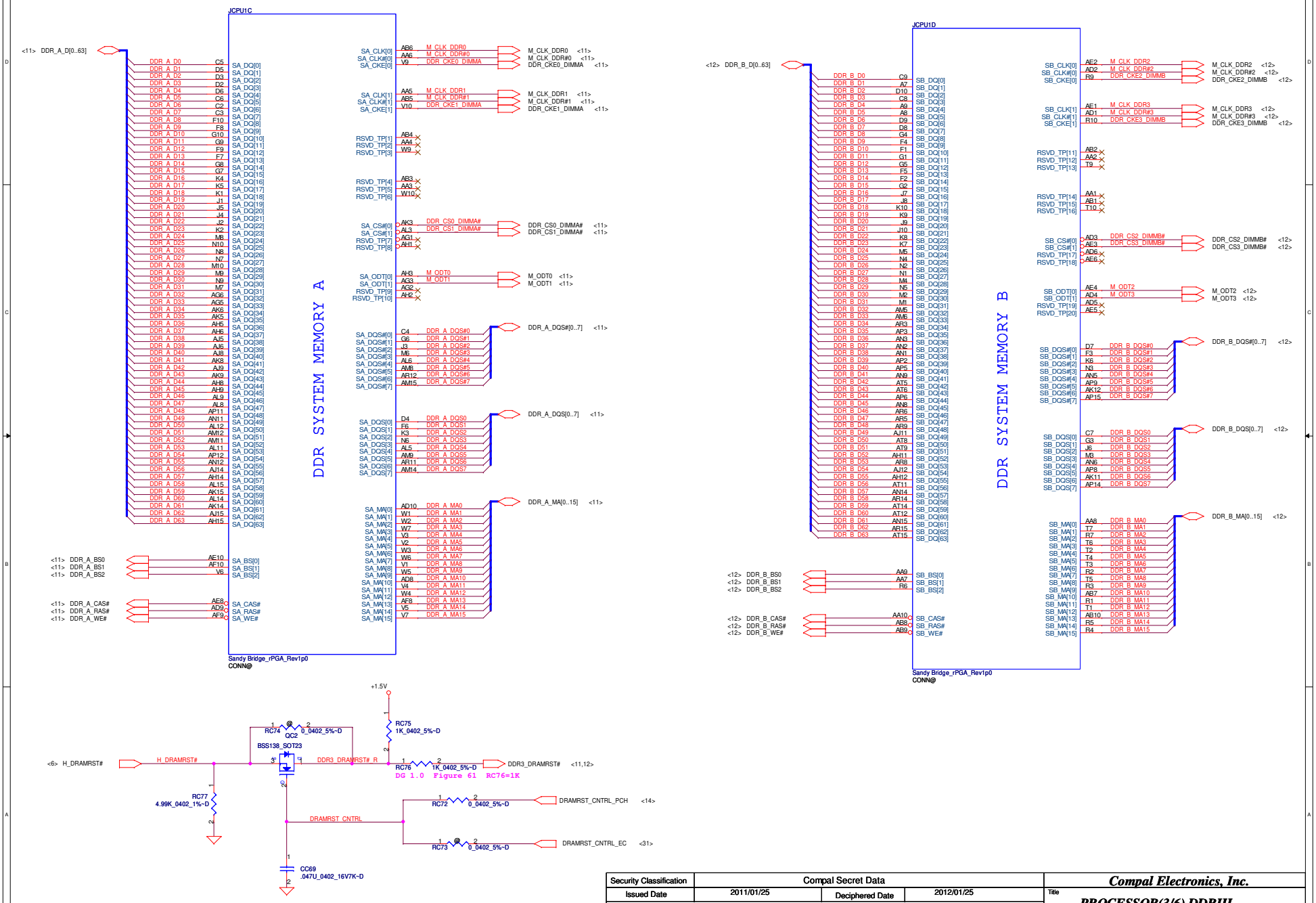
Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: **PROCESSOR(2/6) PM,XDP,CLK**

Size	Document Number	Rev
	LA-6801P	1.0

Date: Tuesday, January 25, 2011 Sheet 6 of 61



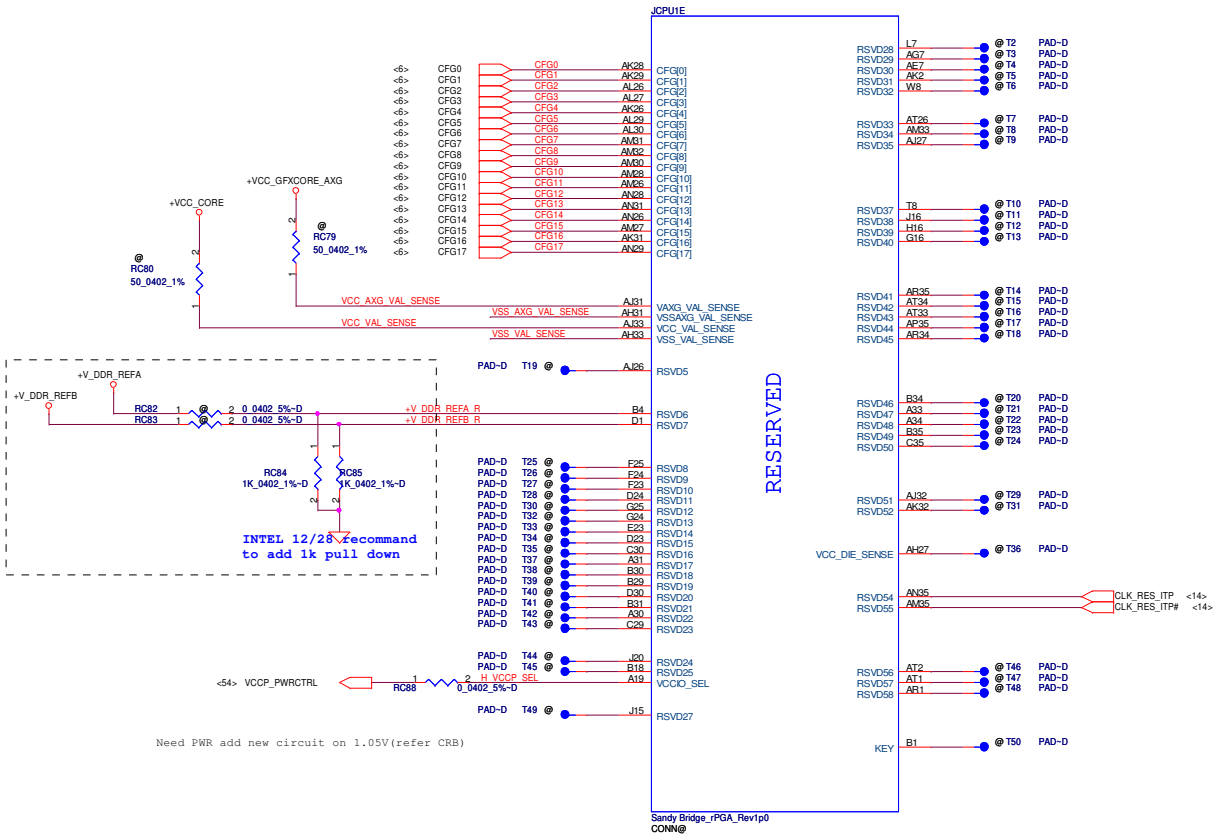
Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

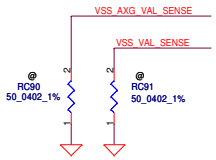
Compal Electronics, Inc.

Title: **PROCESSOR(3/6) DDRIII**

Size	Document Number	Rev
	LA-6801P	1.0

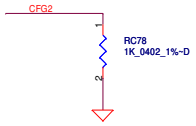
Date: Tuesday, January 25, 2011 Sheet 7 of 61



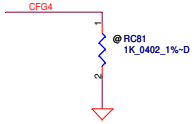


INTEL 12/28 recommand
to add RC120, RC121, RC122, RC123
Please place as close as JCPU1

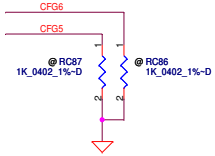
CFG Straps for Processor



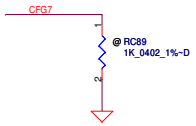
PEG Static Lane Reversal – CFG2 is for the 16x	
CFG2	1:(Default) Normal Operation; Lane # definition matches socket pin map definition *0:Lane Reversed



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	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.			
Title	PROCESSOR(4/6) RSVD,CFG		
Size	Document Number		Rev
	LA-6801P		1.0
Date:	Tuesday, January 25, 2011	Sheet	8 of 61

POWER

JCPU1F

QC=94A
DC=53A

PEG AND DDR

8.5A

PDDG 0.7@P12

+VCCP

VCCIO1 AH13
VCCIO2 AH10
VCCIO3 AG10
VCCIO4 AC10
VCCIO5 Y10
VCCIO6 L10
VCCIO7 P10
VCCIO8 L10
VCCIO9 J14
VCCIO10 J13
VCCIO11 J12
VCCIO12 J11
VCCIO13 H14
VCCIO14 H12
VCCIO15 H11
VCCIO16 G14
VCCIO17 G13
VCCIO18 G12
VCCIO19 F14
VCCIO20 F13
VCCIO21 F12
VCCIO22 F11
VCCIO23 E14
VCCIO24 E12
VCCIO25 E11
VCCIO26 D14
VCCIO27 D13
VCCIO28 D12
VCCIO29 D11
VCCIO30 C14
VCCIO31 C13
VCCIO32 C12
VCCIO33 C11
VCCIO34 B14
VCCIO35 B12
VCCIO36 A14
VCCIO37 A13
VCCIO38 A12
VCCIO39 A11
VCCIO40 J23

CC72 22U_0805_6.3VAM-D
CC73 22U_0805_6.3VAM-D
CC74 22U_0805_6.3VAM-D
CC75 22U_0805_6.3VAM-D
CC76 22U_0805_6.3VAM-D
CC77 22U_0805_6.3VAM-D
CC78 22U_0805_6.3VAM-D
CC79 22U_0805_6.3VAM-D
CC80 22U_0805_6.3VAM-D
CC81 22U_0805_6.3VAM-D
CC82 22U_0805_6.3VAM-D
CC83 22U_0805_6.3VAM-D
CC84 22U_0805_6.3VAM-D
CC85 22U_0805_6.3VAM-D
CC86 22U_0805_6.3VAM-D
CC87 22U_0805_6.3VAM-D
CC88 22U_0805_6.3VAM-D
CC89 22U_0805_6.3VAM-D
CC90 22U_0805_6.3VAM-D
CC91 22U_0805_6.3VAM-D
CC92 22U_0805_6.3VAM-D
CC93 22U_0805_6.3VAM-D
CC94 22U_0805_6.3VAM-D
CC95 22U_0805_6.3VAM-D
CC96 22U_0805_6.3VAM-D
CC97 22U_0805_6.3VAM-D
CC98 22U_0805_6.3VAM-D
CC99 22U_0805_6.3VAM-D
CC100 22U_0805_6.3VAM-D
CC101 22U_0805_6.3VAM-D
CC102 22U_0805_6.3VAM-D
CC103 22U_0805_6.3VAM-D
CC104 22U_0805_6.3VAM-D
CC105 22U_0805_6.3VAM-D
CC106 22U_0805_6.3VAM-D
CC107 22U_0805_6.3VAM-D
CC108 22U_0805_6.3VAM-D
CC109 @ 22U_0805_6.3VAM-D
CC110 330U_D2_2VM_R6M-D
CC111 330U_D2_2VM_R6M-D

+VCC_CORE

CC85 CC70 CC86 CC87 CC71 10U_0805_4VAM-D
CC82 CC89 CC90 CC91 CC83 CC84 10U_0805_4VAM-D

CC113 CC114 CC115 CC116 CC117 22U_0805_6.3VAM-D
CC118 CC119 CC120 CC121 CC122 22U_0805_6.3VAM-D
CC123 CC124 CC125 CC126 CC127 22U_0805_6.3VAM-D
CC128 CC129 CC130 CC131 22U_0805_6.3VAM-D

CC132 CC133 CC134 CC135 470U_D2_2VM_R4.5M-D
CC136 470U_D2_2VM_R4.5M-D

CORE SUPPLY

AG35 VCC1
AG34 VCC2
AG33 VCC3
AG32 VCC4
AG31 VCC5
AG30 VCC6
AG29 VCC7
AG28 VCC8
AG27 VCC9
AG26 VCC10
AF35 VCC11
AF34 VCC12
AF33 VCC13
AF32 VCC14
AF31 VCC15
AF30 VCC16
AF29 VCC17
AF28 VCC18
AF27 VCC19
AF26 VCC20
AD35 VCC21
AD34 VCC22
AD33 VCC23
AD32 VCC24
AD31 VCC25
AD30 VCC26
AD29 VCC27
AD28 VCC28
AD27 VCC29
AD26 VCC30
AC35 VCC31
AC34 VCC32
AC33 VCC33
AC32 VCC34
AC31 VCC35
AC30 VCC36
AC29 VCC37
AC28 VCC38
AC27 VCC39
AC26 VCC40
AA35 VCC41
AA34 VCC42
AA33 VCC43
AA32 VCC44
AA31 VCC45
AA30 VCC46
AA29 VCC47
AA28 VCC48
AA27 VCC49
AA26 VCC50
Y35 VCC51
Y34 VCC52
Y33 VCC53
Y32 VCC54
Y31 VCC55
Y30 VCC56
Y29 VCC57
Y28 VCC58
Y27 VCC59
Y26 VCC60
V35 VCC61
V34 VCC62
V33 VCC63
V32 VCC64
V31 VCC65
V30 VCC66
V29 VCC67
V28 VCC68
V27 VCC69
V26 VCC70
U35 VCC71
U34 VCC72
U33 VCC73
U32 VCC74
U31 VCC75
U30 VCC76
U29 VCC77
U28 VCC78
U27 VCC79
U26 VCC80
R35 VCC81
R34 VCC82
R33 VCC83
R32 VCC84
R31 VCC85
R30 VCC86
R29 VCC87
R28 VCC88
R27 VCC89
R26 VCC90
P35 VCC91
P34 VCC92
P33 VCC93
P32 VCC94
P31 VCC95
P30 VCC96
P29 VCC97
P28 VCC98
P27 VCC99
P26 VCC100

SVID

+VCCP

RC95 130_0402_1%~D
RC95 close to CPU
RC93 75_0402_5%
Place the PU resistors close to CPU

VIDALERT# AJ29 H_CPU_SVIDALRT# RC94 1 2 43_0402_1%
VIDSCLK AJ30 H_CPU_SVIDCLK RC92 1 2 0_0402_5%~D
VIDSOUT AJ28 H_CPU_SVIDDAT RC96 1 2 0_0402_5%~D

VR_SVID_ALRT# <57>
VR_SVID_CLK <57>
VR_SVID_DAT <57>

SENSE LINES

+VCC_CORE

RC97 100_0402_1%~D
RC100 100_0402_1%~D

VCC_SENSE AJ35 VCCSENSE_R RC98 1 2 0_0402_5%~D
VSS_SENSE AJ34 VSSSENSE_R RC99 1 2 0_0402_5%~D

VCCSENSE <57>
VSSSENSE <57>

VCCIO_SENSE B10
VSSIO_SENSE A10

VCCIO_SENSE <54>
VSSIO_SENSE <54>

Sandy Bridge_rPGA_Rev1p0
CONN@

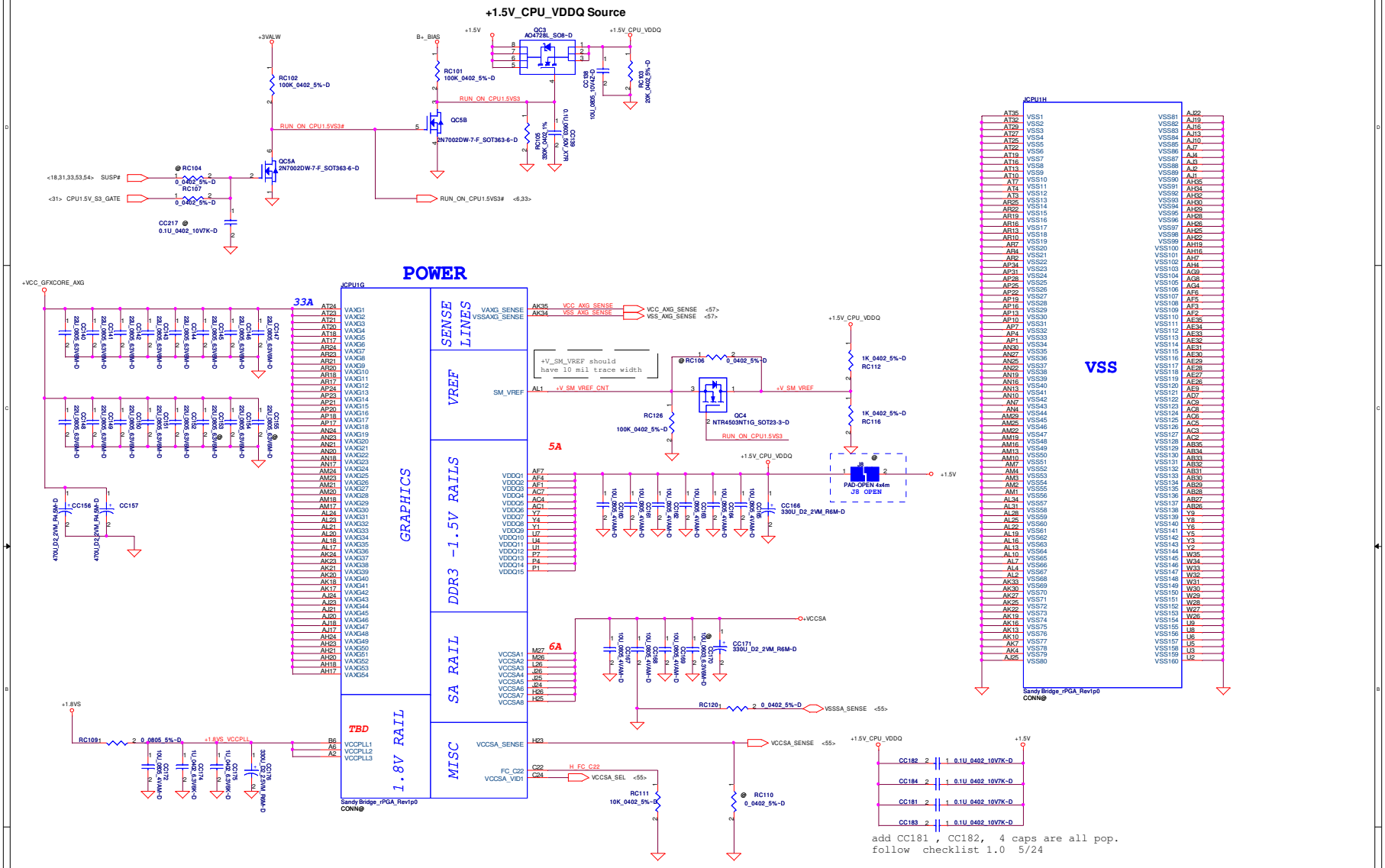
Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: PROCESSOR(5/6) PWR,BYPASS

Size	Document Number	Rev
	LA-6801P	1.0

Date: Tuesday, January 25, 2011 Sheet 9 of 61



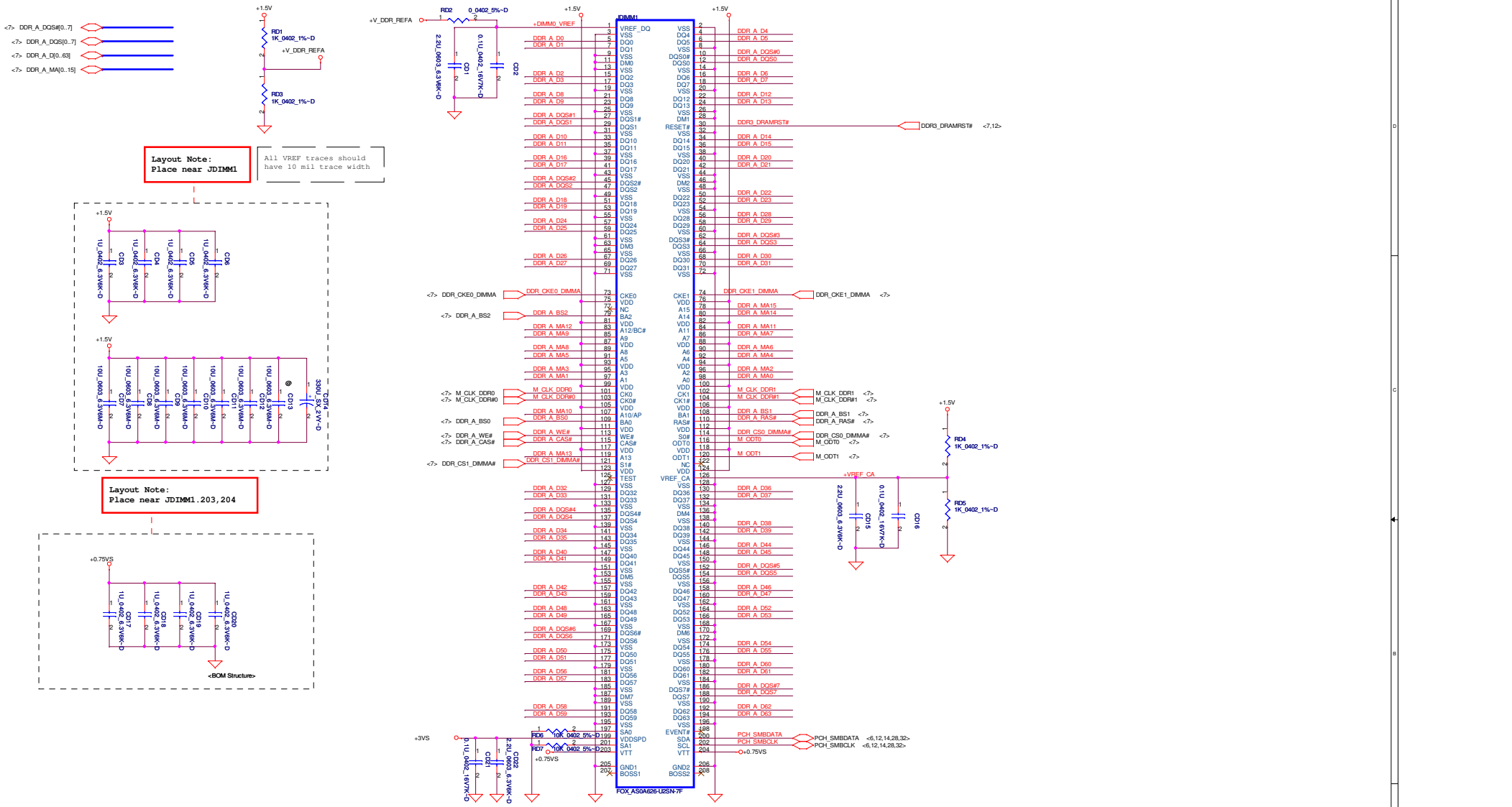
Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: PROCESSOR(6/6) PWR,VSS

Size: | Document Number: LA-6801P | Rev: 1.0

Date: Tuesday, January 25, 2011 | Sheet 10 of 61



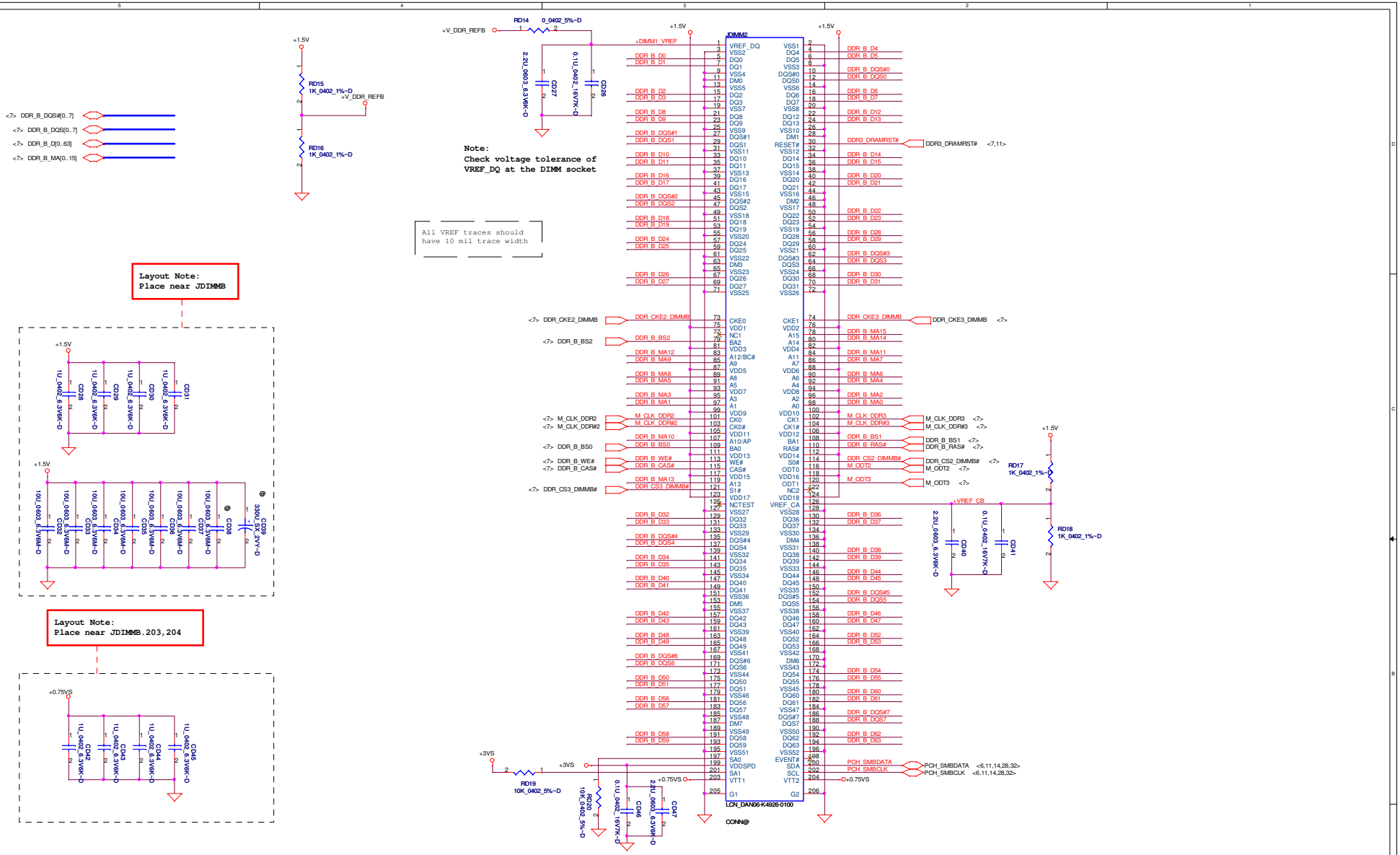
Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: **DDRIII DIMMA**

Size	Document Number	Rev
	LA-6801P	1.0

Date: Tuesday, January 25, 2011 Sheet 11 of 61



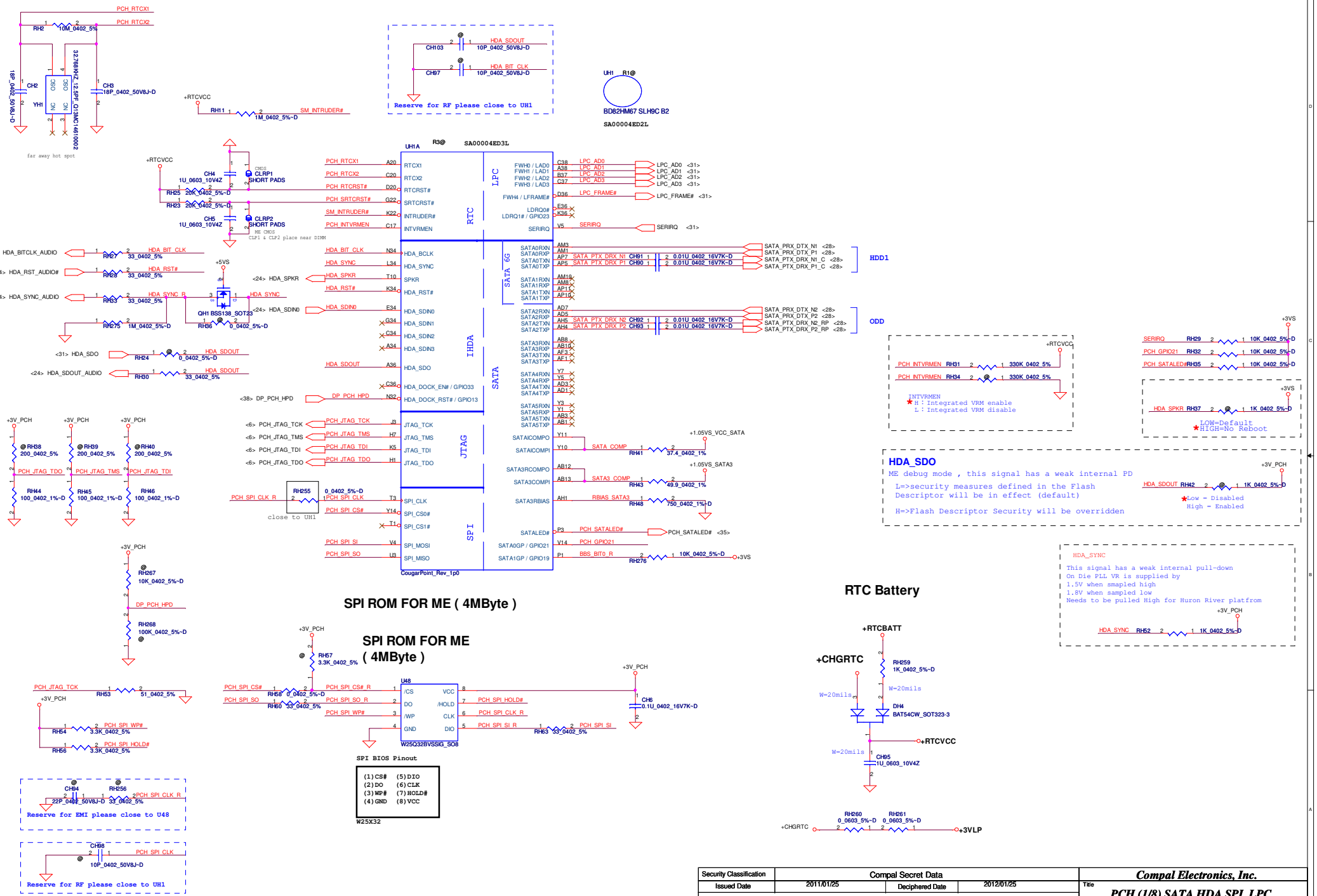
Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: **DDRIII DIMMB**

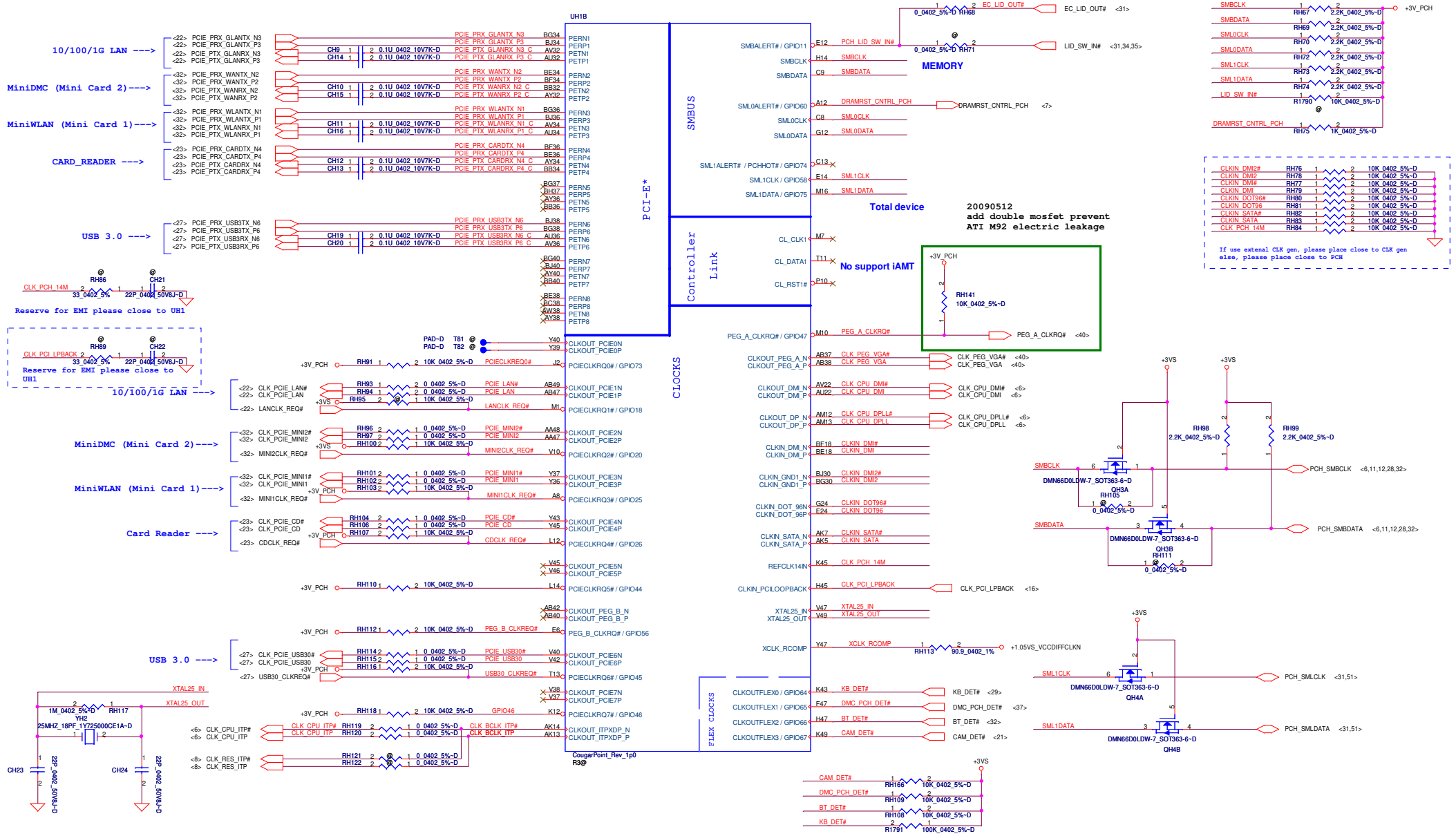
Size	Document Number	Rev
	LA-6801P	1.0

Date: Tuesday, January 25, 2011 Sheet 12 of 61



Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.			
Title: PCH (1/8) SATA,HDA,SPI, LPC			
Size	Document Number: LA-6801P		Rev: 1.0
Date: Tuesday, January 25, 2011	Sheet 13 of 61		



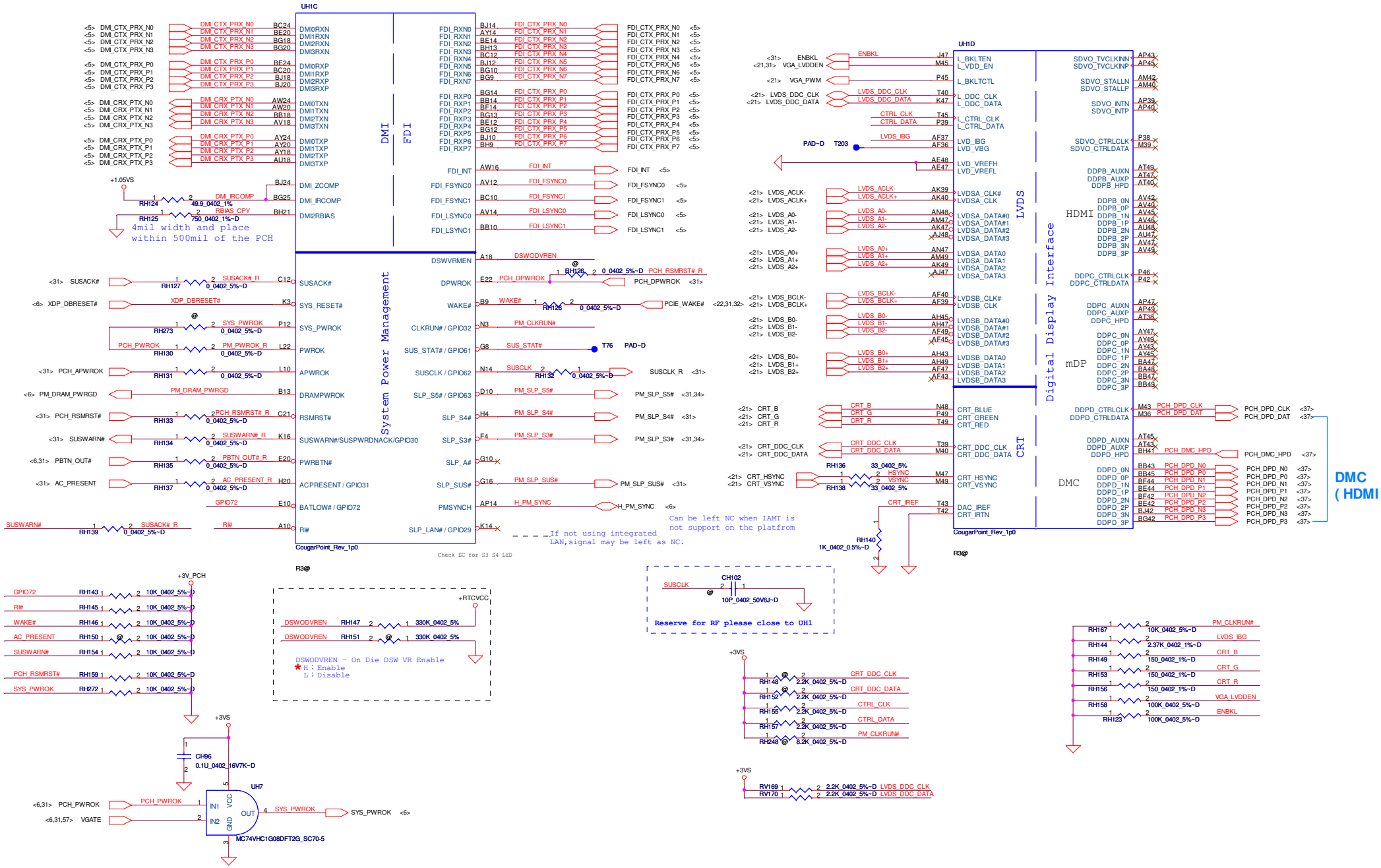
Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

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

Size	Document Number	Rev
	LA-6801P	1.0

Date: Tuesday, January 25, 2011 | Sheet 14 of 61



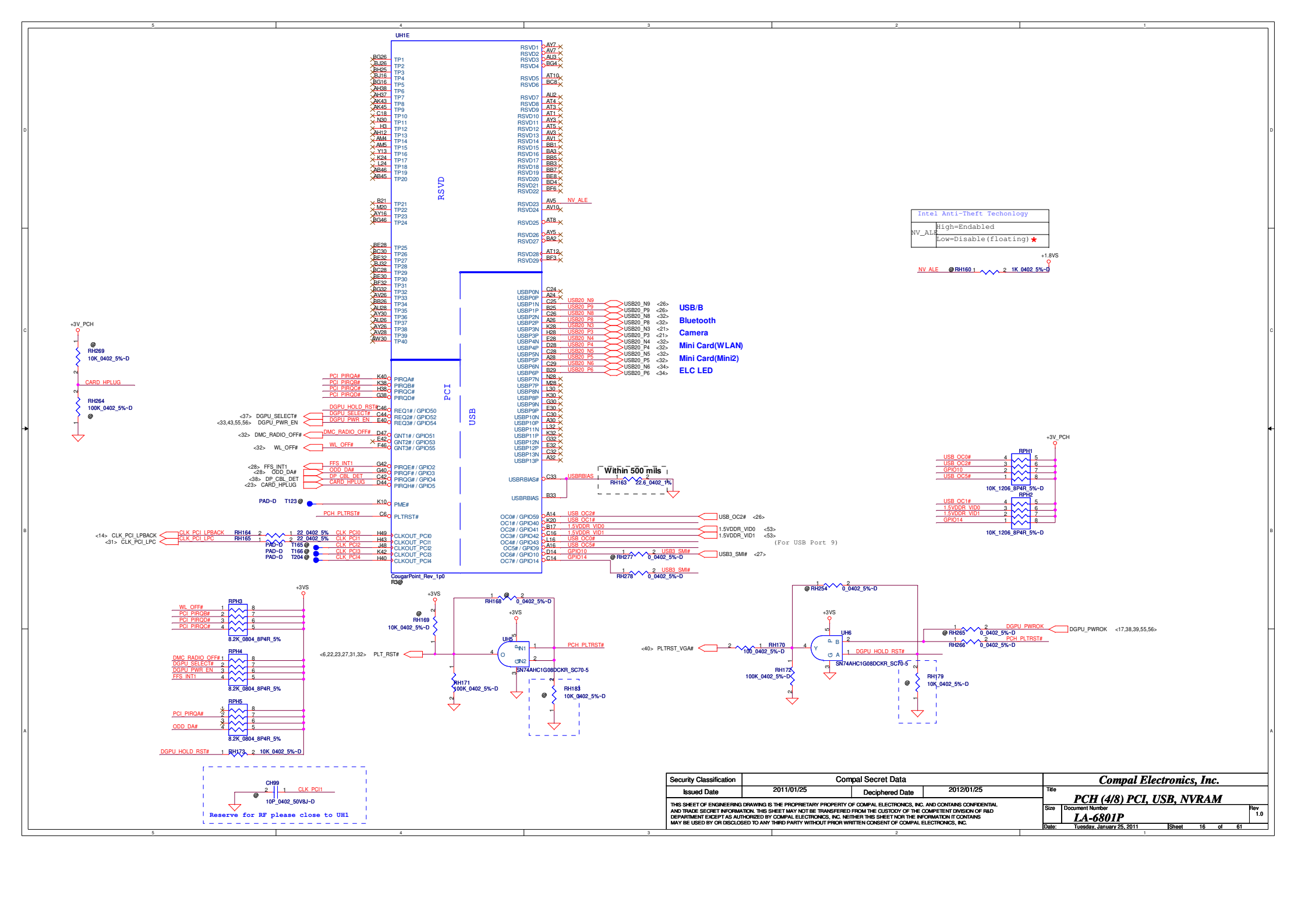
Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: **PCH (3/8) DMI,FDI,PM,GFX,DP**

Size	Document Number	Rev
	LA-6801P	1.0

Date: Tuesday, January 25, 2011 | Sheet 15 of 61


UH1E
RSVD
PCI
USB
USB/B
Bluetooth
Camera
Mini Card(WLAN)
Mini Card(Mini2)
ELC LED
Intel Anti-Theft Techonlogy
NV_ALE
High=Endabled
Low=Disable(floating)
Within 500 mils
(For USB Port 9)
CougarPoint_Rev_1p0
R3@
Reserve for RF please close to UH1
Security Classification
Compal Secret Data
Issued Date
2011/01/25
Deciphered Date
2012/01/25
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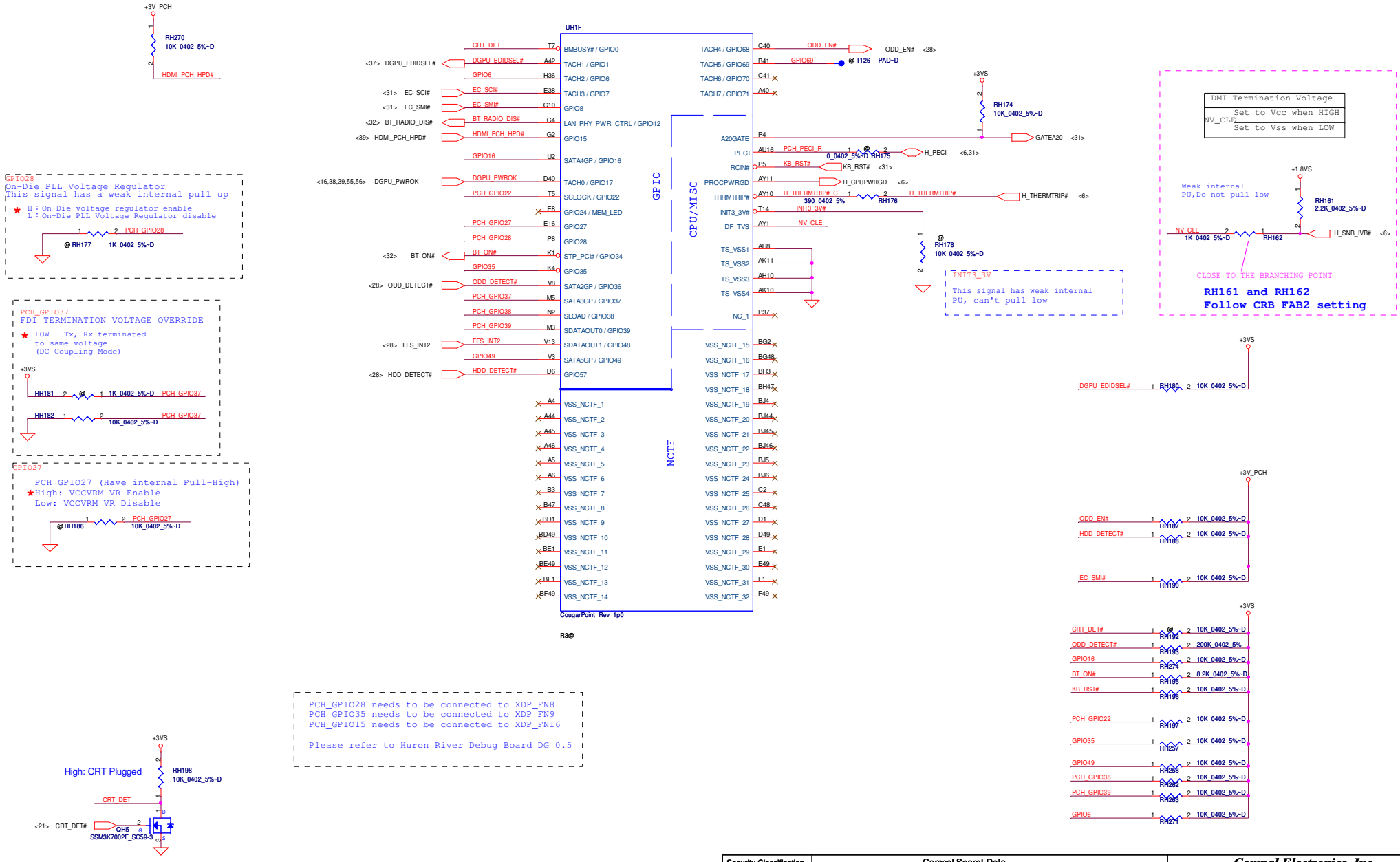
Compal Electronics, Inc.
Title
PCH (4/8) PCI, USB, NVRAM
Size
Document Number
LA-6801P
Rev
1.0
Date: Tuesday, January 25, 2011
Sheet 16 of 61



Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: PCH (5/8) GPIO, CPU, MISC

Size	Document Number	Rev
	LA-6801P	1.0

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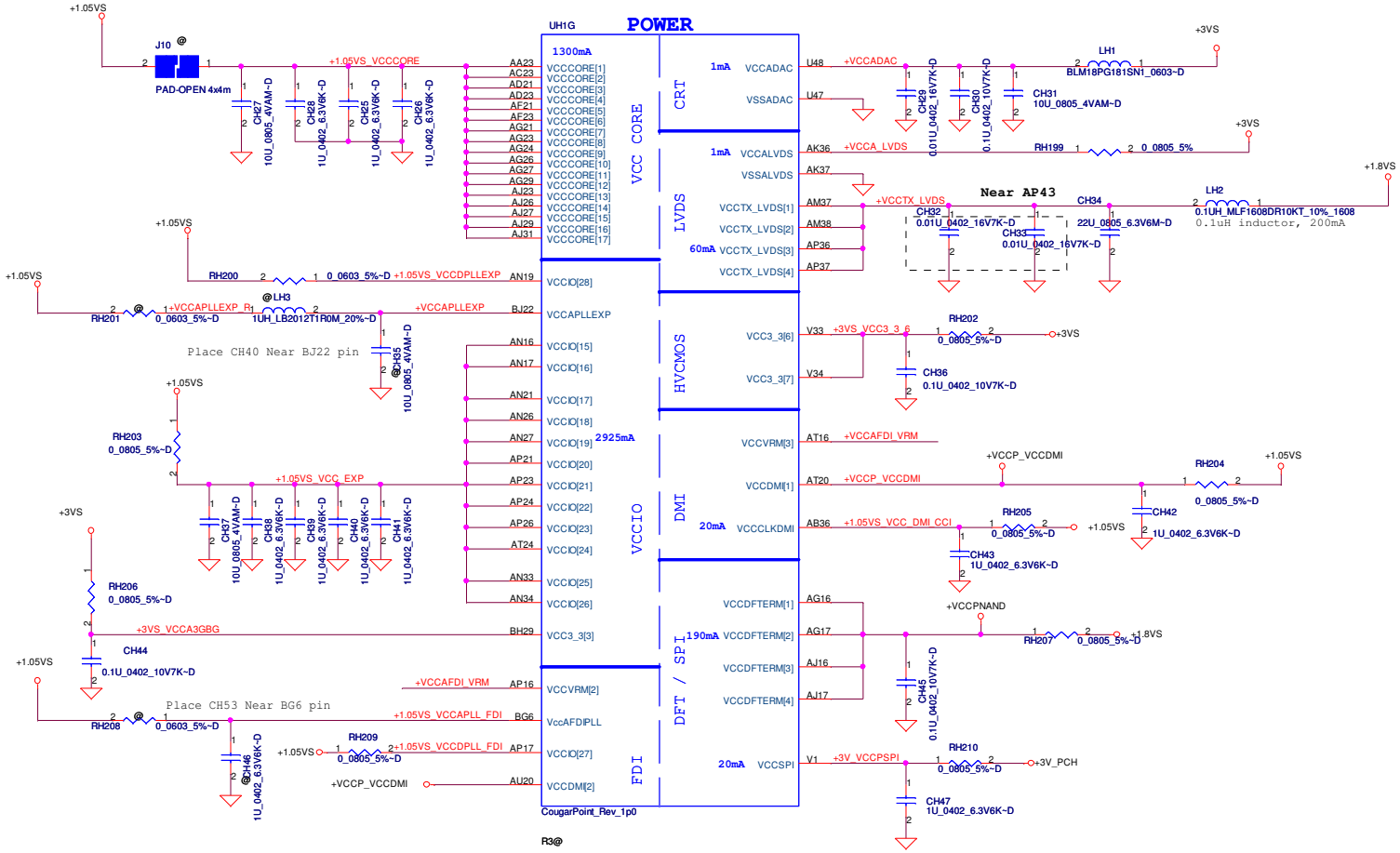

PCH Power Rail Table		
Voltage Rail	Voltage	S0 Iccmax Current (A)
V_PROC_IO	1.05	0.001
V5REF	5	0.001
V5REF_Sus	5	0.001
Vcc3_3	3.3	0.266
VccADAC	3.3	0.001
VccADPLLA	1.05	0.08
VccADPLLB	1.05	0.08
VccCore	1.05	1.3
VccDMI	1.05	0.042
VccIO	1.05	2.925
VccASW	1.05	1.01
VccSPI	3.3	0.02
VccDSW	3.3	0.003
VccpNAND	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	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: PCH (6/8) PWR

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

POWER

UH1J

Clock and Miscellaneous | USB | PCI/GPIO/LPC | SATA | MISC | CPU | RTC | HDA

5/18 delete RH229

Place CH80 Near AK1 pin

If it support 3.3V audio signals
POP:RH228
Depop RH233/RH234

If it support 1.5V audio signals
POP:RH233/RH234
Depop R228

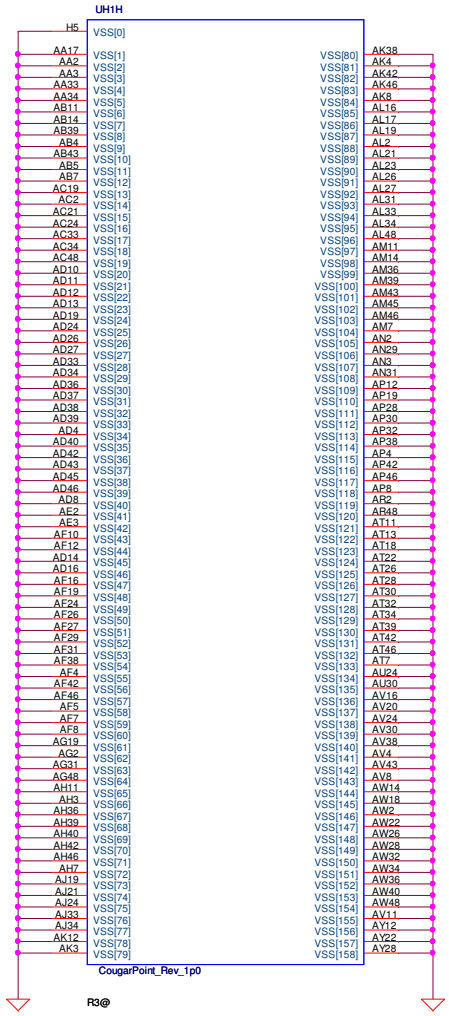
Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

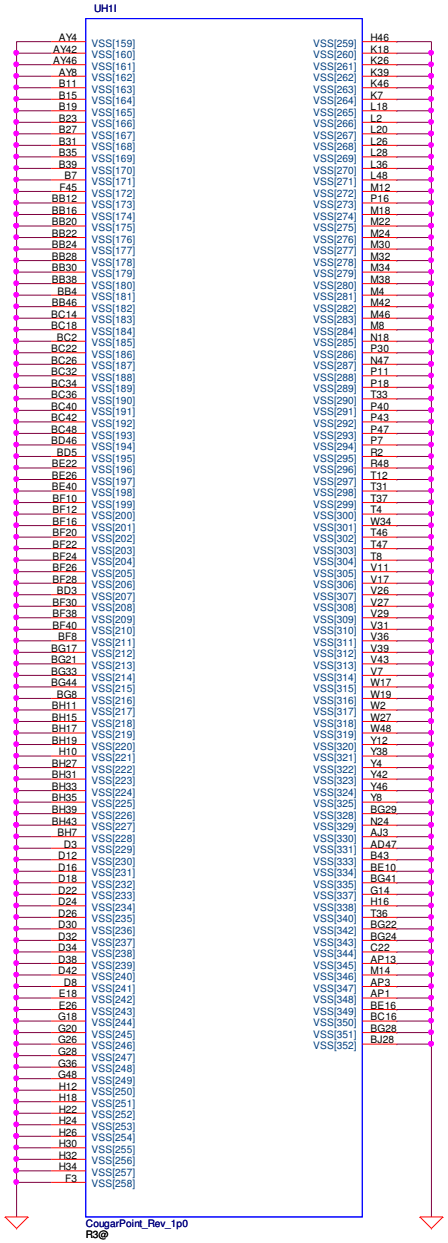
Compal Electronics, Inc.

Title: PCH (7/8) PWR

Size | Document Number: LA-6801P | Rev: 1.0

Date: Tuesday, January 25, 2011 | Sheet 19 of 61





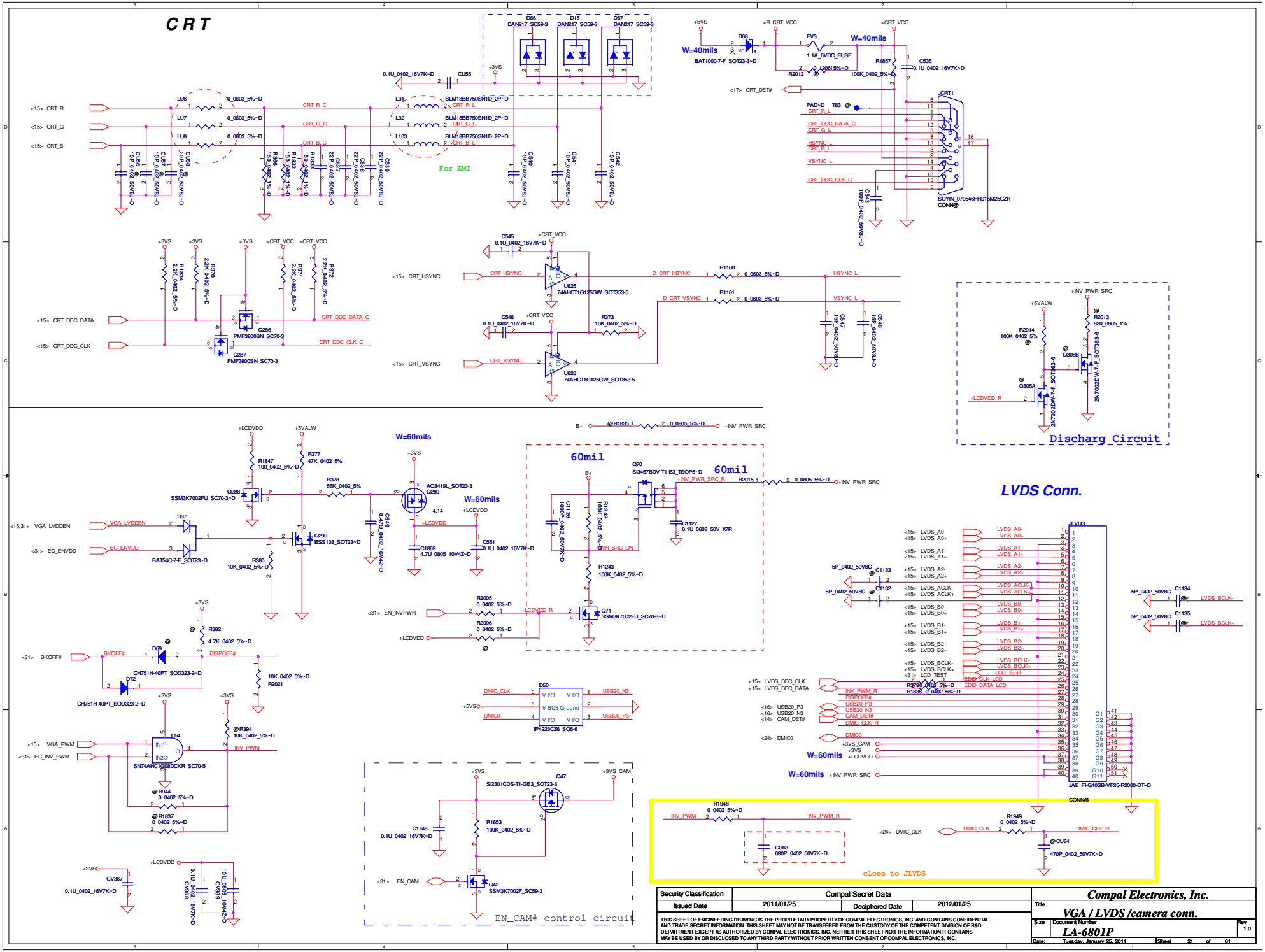
Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: **PCH (8/8) VSS**

Size	Document Number	Rev
	LA-6801P	1.0

Date: Tuesday, January 25, 2011 | Sheet 20 of 61



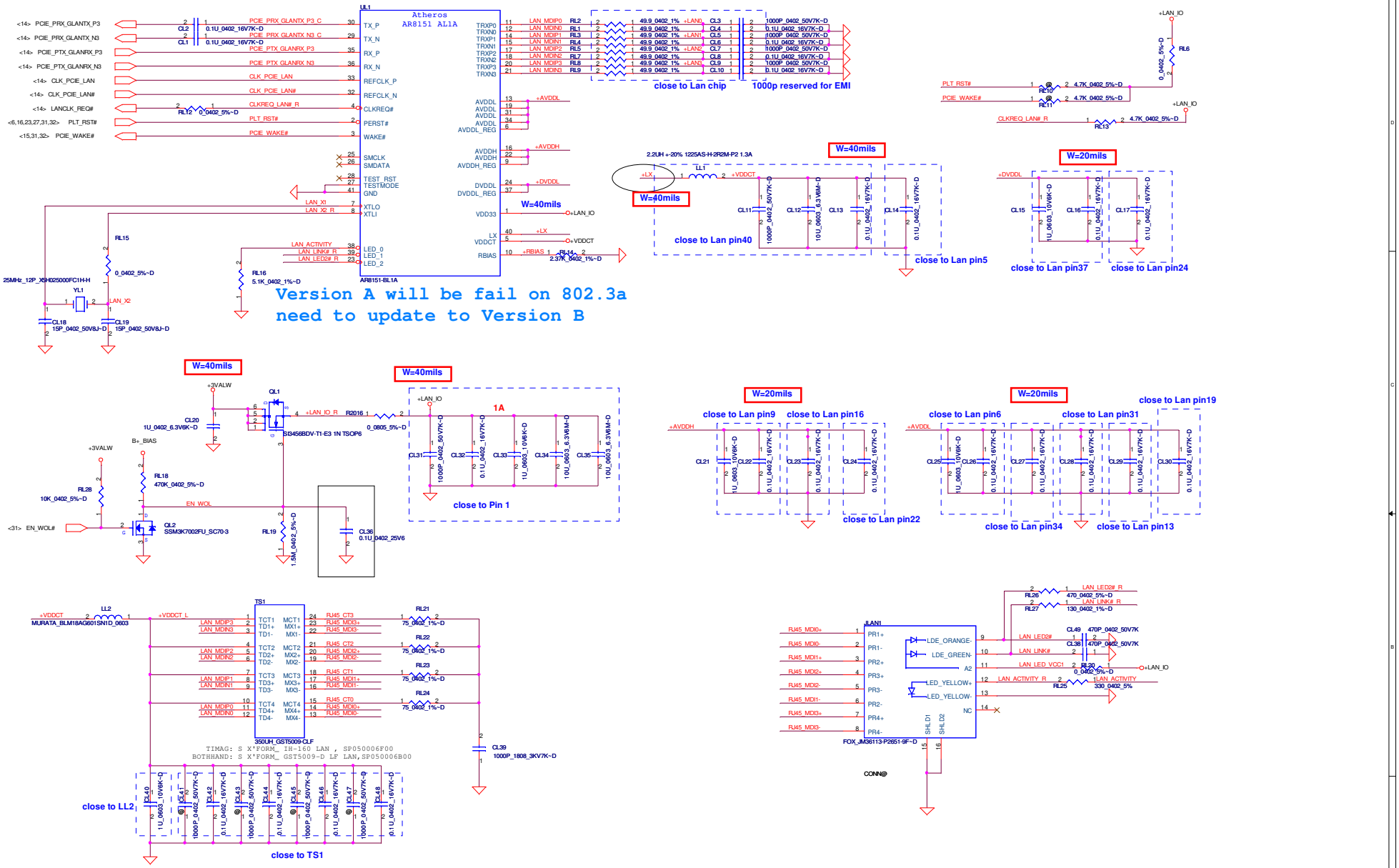
Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: VGA / LVDS /camera conn.

Size: | Document Number: LA-6801P | Rev: 1.0

Date: Tuesday, January 25, 2011 | Sheet 21 of 61



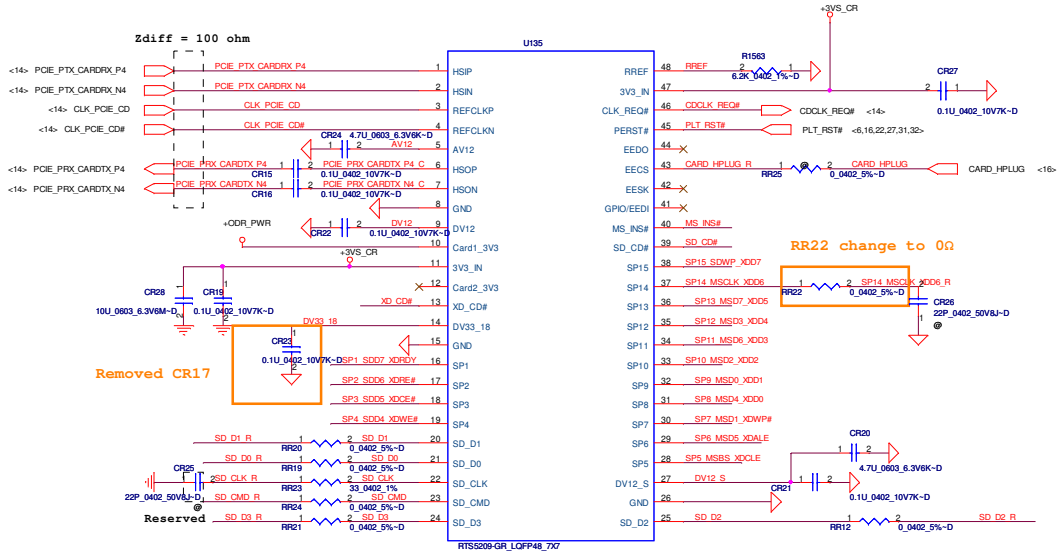
Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

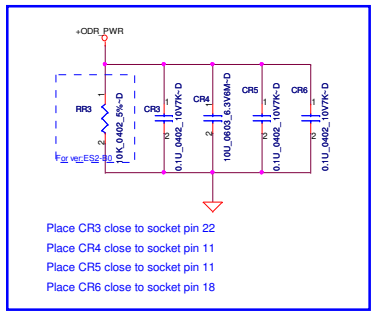
Compal Electronics, Inc.

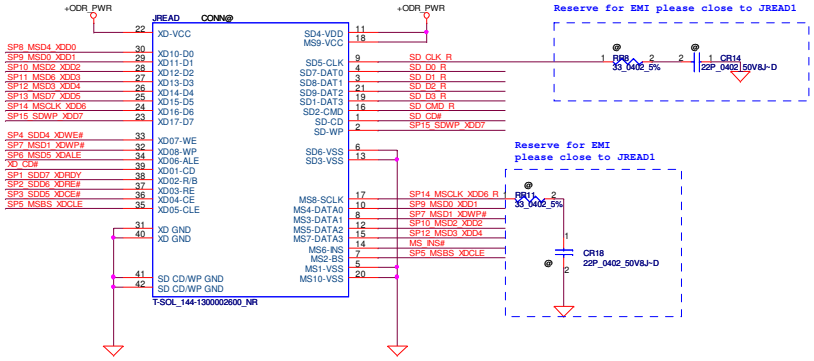
Title: GLAN AR8151 AL1A/ RJ45

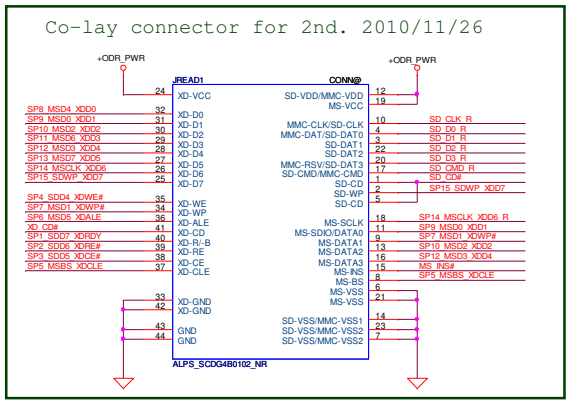
Size: | Document Number: LA-6801P | Rev: 1.0

Date: Tuesday, January 25, 2011 | Sheet 22 of 61









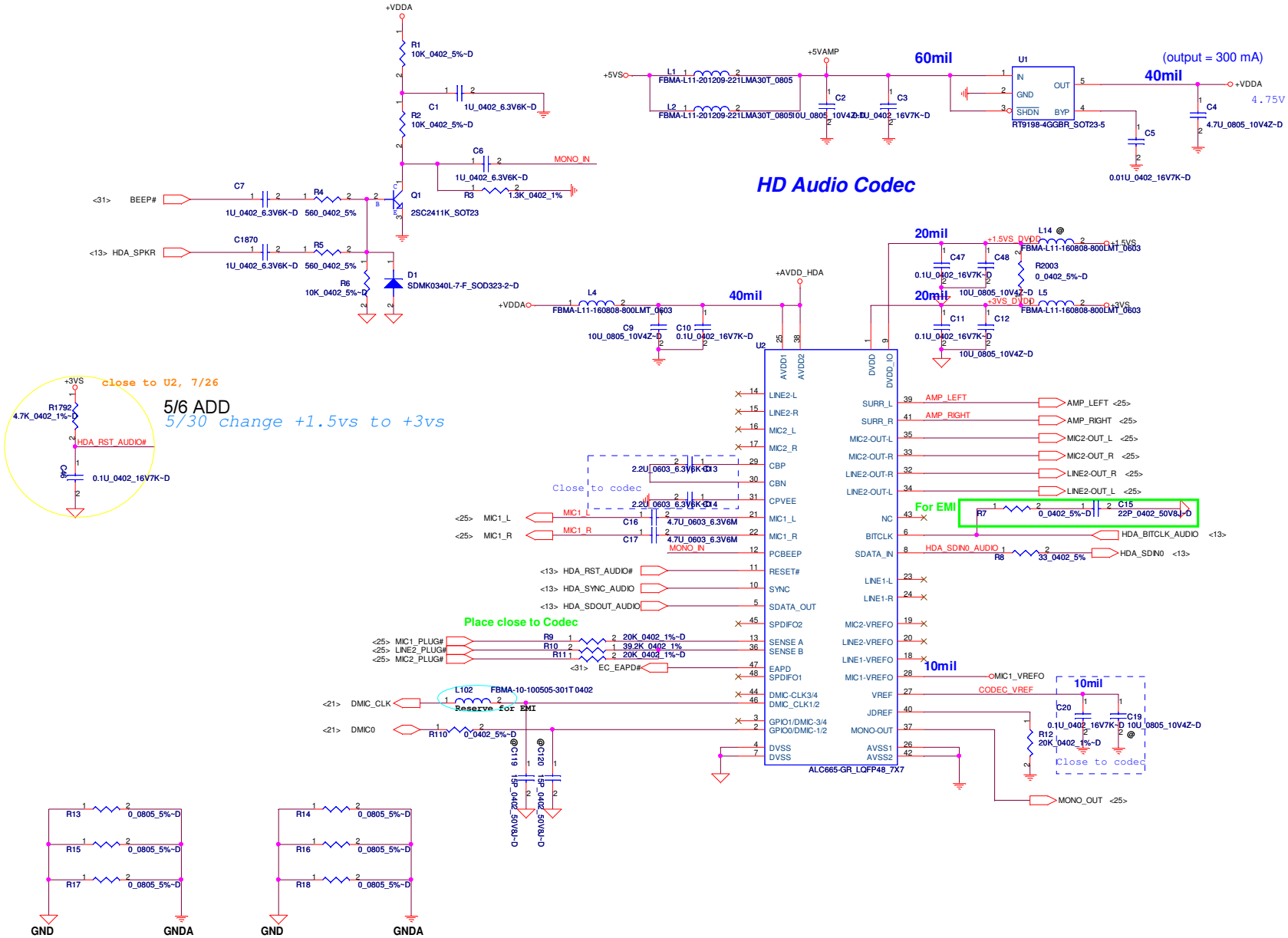
Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: Card Reader RTS5209

Size: | Document Number: LA-6801P | Rev: 1.0

Date: Tuesday, January 25, 2011 | Sheet 23 of 61



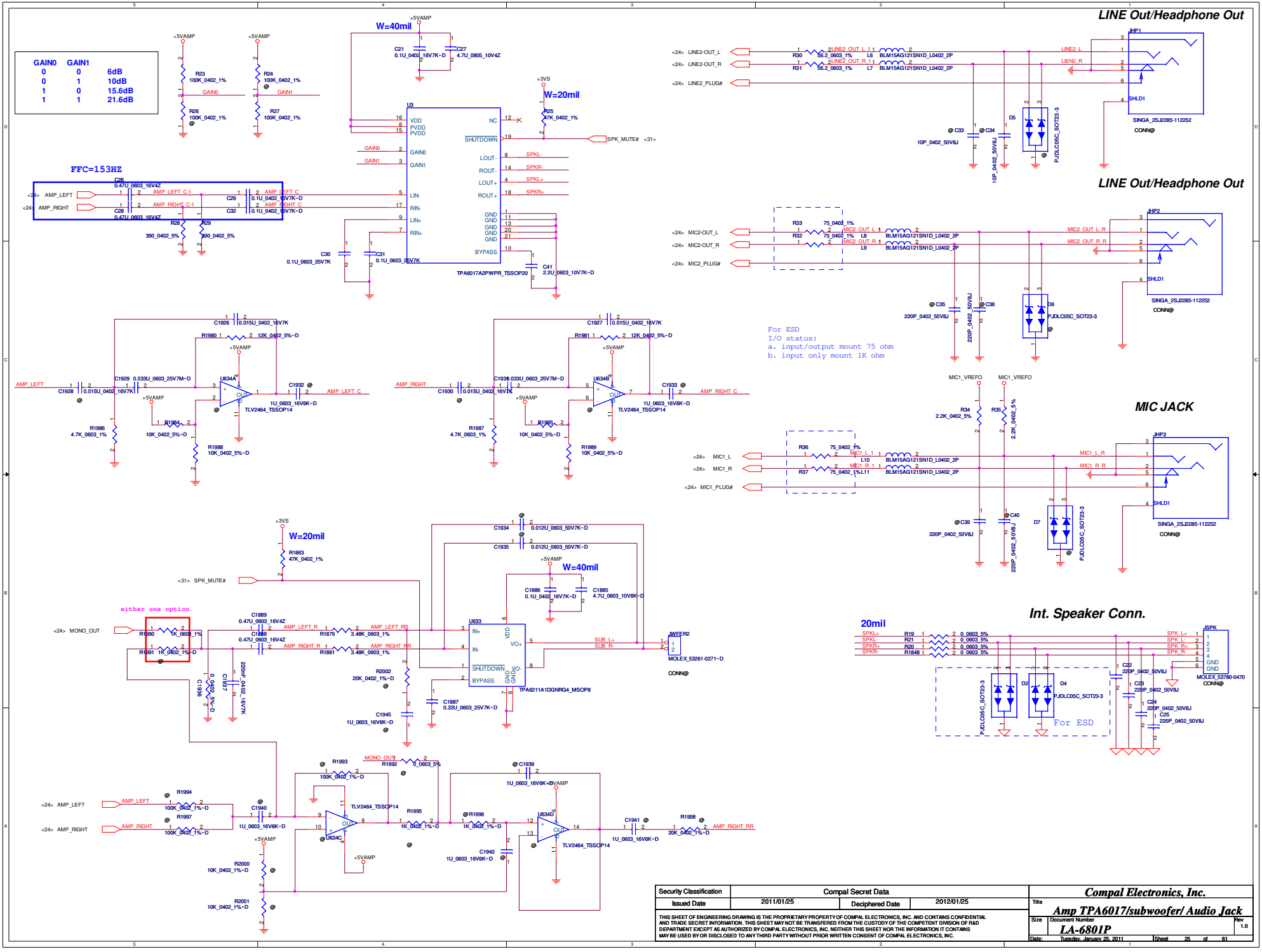
Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: **Codec ALC665**

Size: | Document Number: **LA-6801P** | Rev: 1.0

Date: Tuesday, January 25, 2011 | Sheet 24 of 61



Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

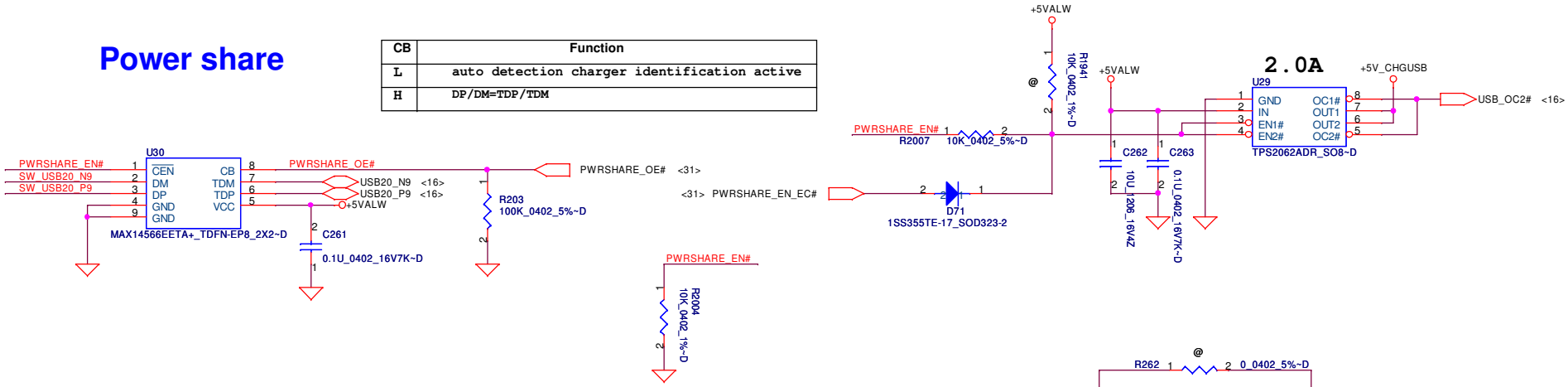
Title: Amp TPA6017/subwoofer/ Audio Jack

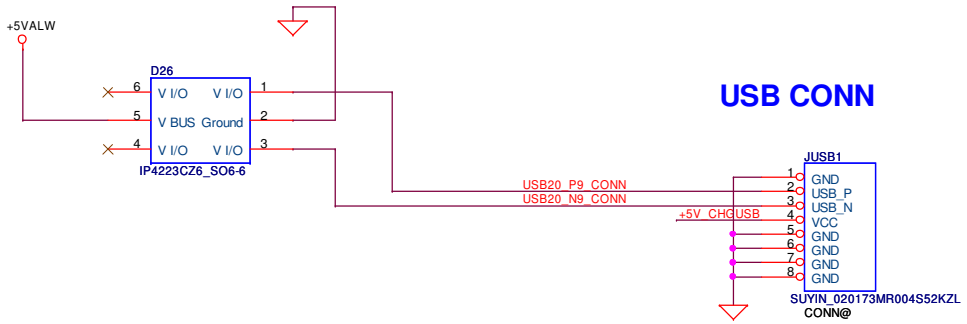
Size: | Document Number: LA-6801P | Rev: 1.0

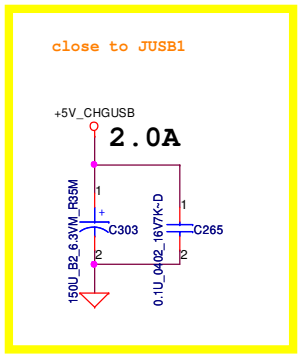
Date: Tuesday, January 25, 2011 | Sheet 25 of 61

Power share

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

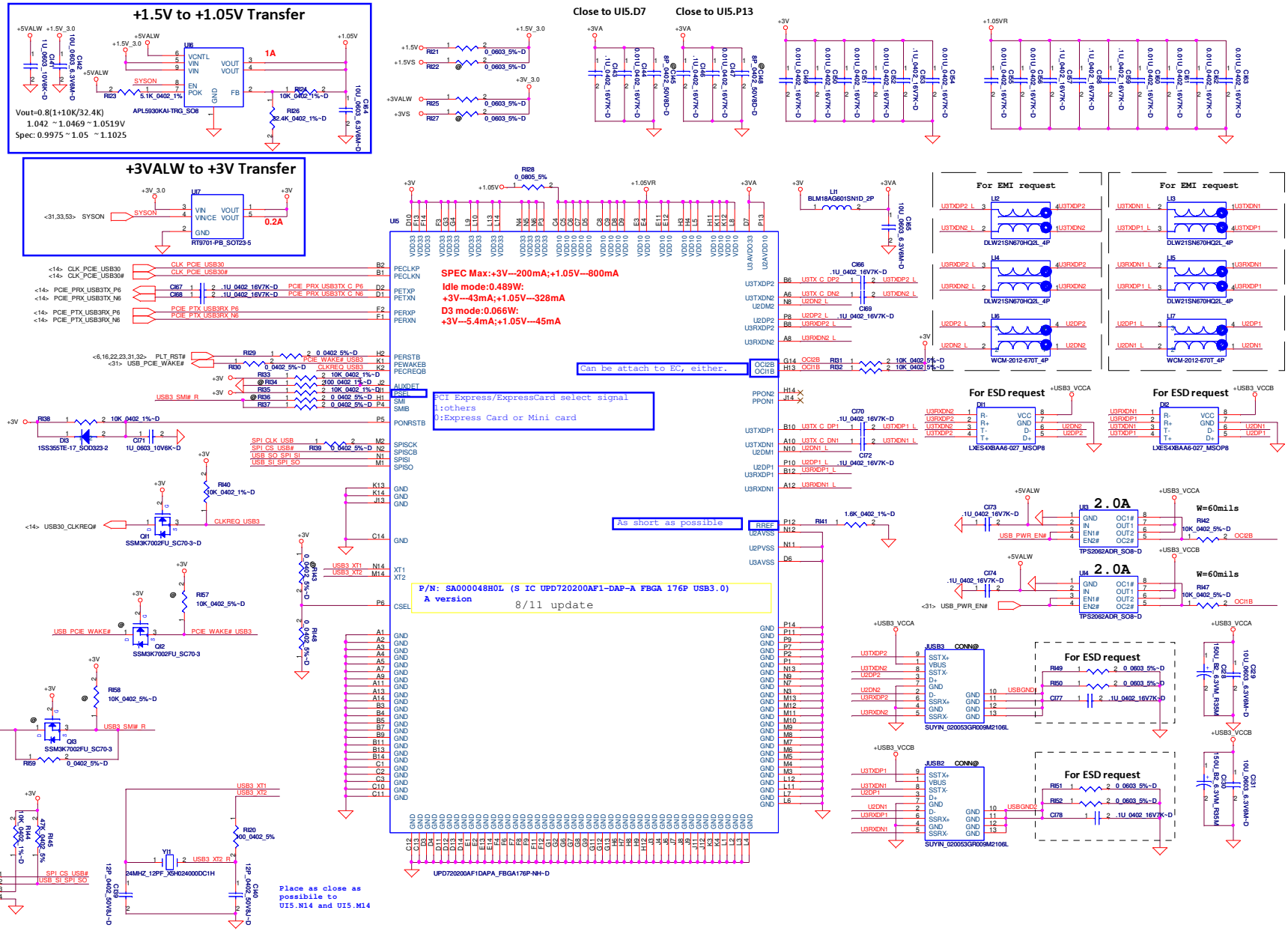






Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.			
Title: USB conn.			
Size	Document Number: LA-6801P		Rev: 1.0
Date: Tuesday, January 25, 2011	Sheet 26 of 61		



Pin compare table for support USB remote wakeup or not

	AUXDET(Pin J2)	CSEL(Pin P6)	CLK
Support USB remote wakeup	pull high 10k to VDD33	Tied to GND	Must use 24MHz crystal: mount Y1,R19,C40,C41
Not support USB remote wakeup	Tied to GND	pull high to VDD33	Can use either 48MHz or 24MHz When use 48MHz clock: mount R22,R25

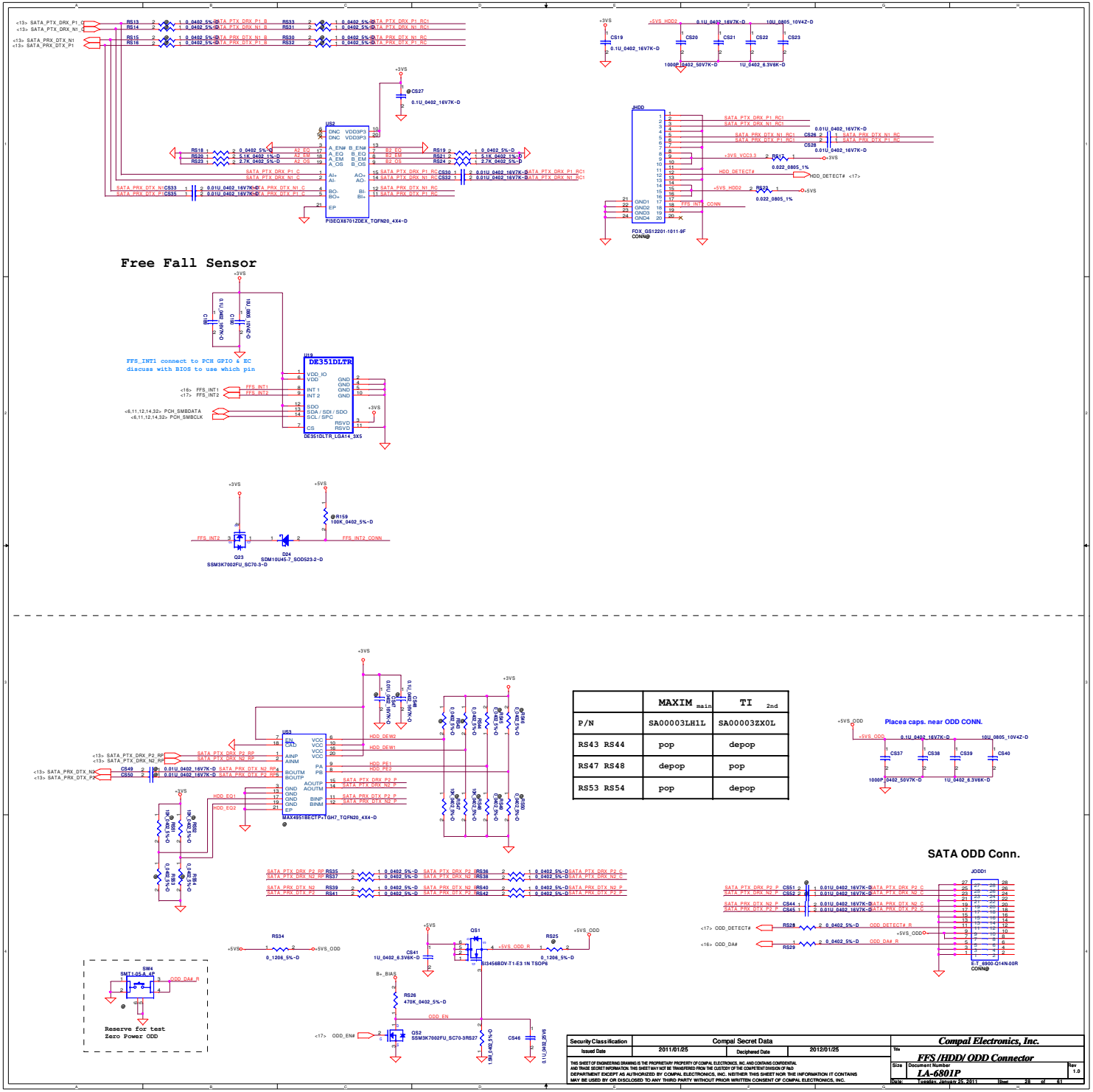
Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: USB conn.

Size: Document Number: LA-6801P Rev: 1.0

Date: Tuesday, January 25, 2011 Sheet 27 of 61



	MAXIM main	TI 2nd
P/N	SA00003LH1L	SA00003ZX0L
RS43 RS44	pop	depop
RS47 RS48	depop	pop
RS53 RS54	pop	depop

Security Classification	Compal Secret Data	
Issued Date	2011/01/25	Deciphered Date 2012/01/25

Compal Electronics, Inc.

FFS /HDD/ ODD Connector

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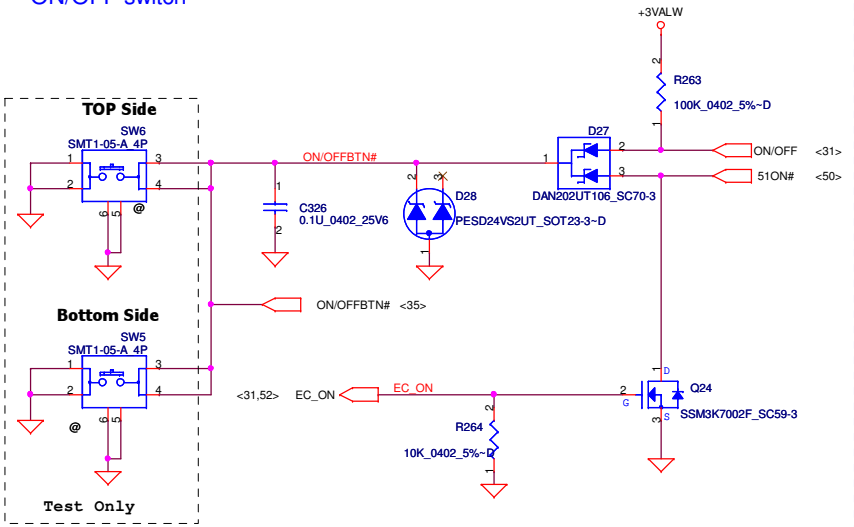
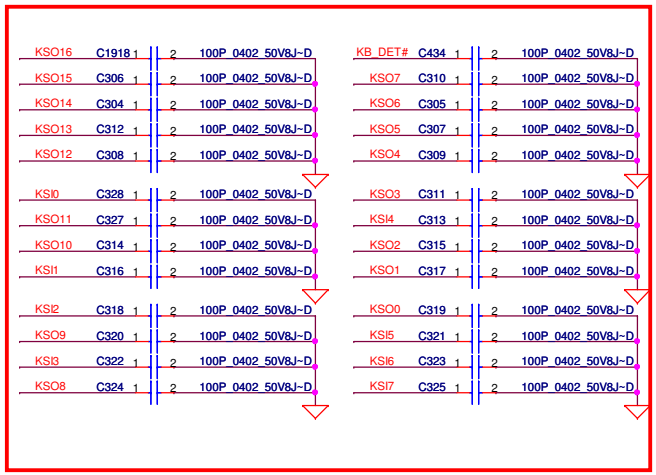
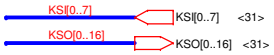
ON/OFF switch

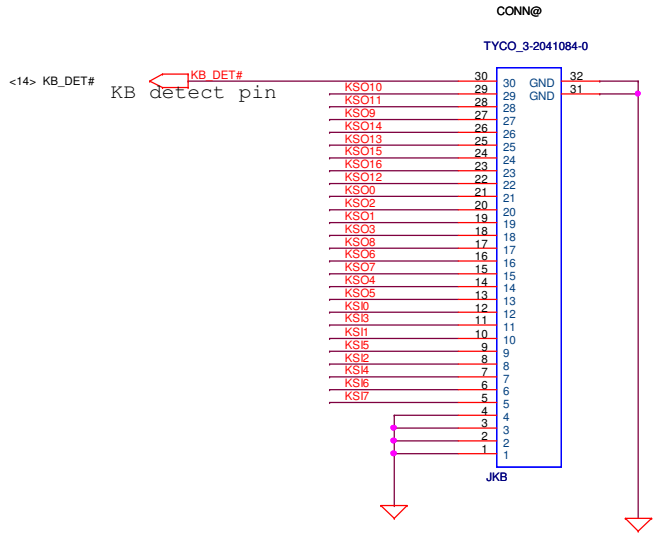
Power Button

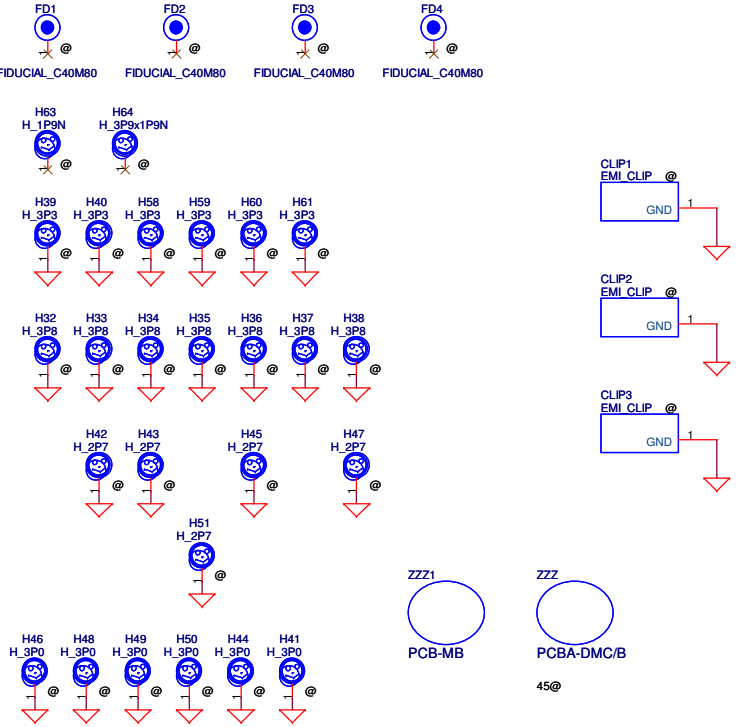






INT_KBD Conn.





Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: PWRBTN/SCREWH/KB

Size: | Document Number: LA-6801P | Rev: 1.0

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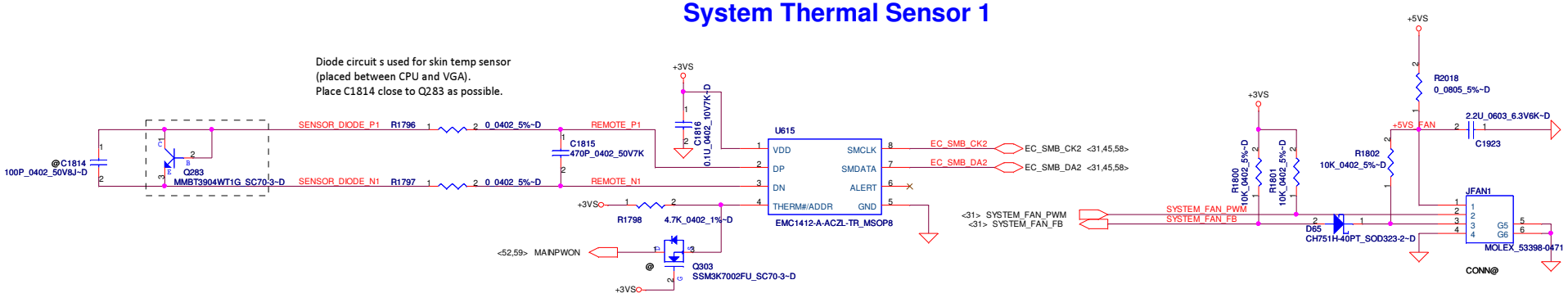
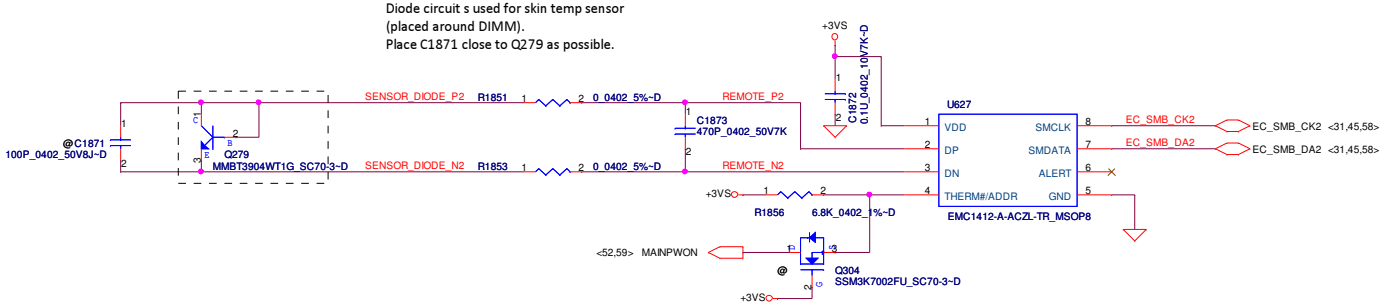
System Thermal Sensor 1

Diode circuit s used for skin temp sensor
(placed between CPU and VGA).
Place C1814 close to Q283 as possible.



System Thermal Sensor 2

Diode circuit s used for skin temp sensor
(placed around DIMM).
Place C1871 close to Q279 as possible.



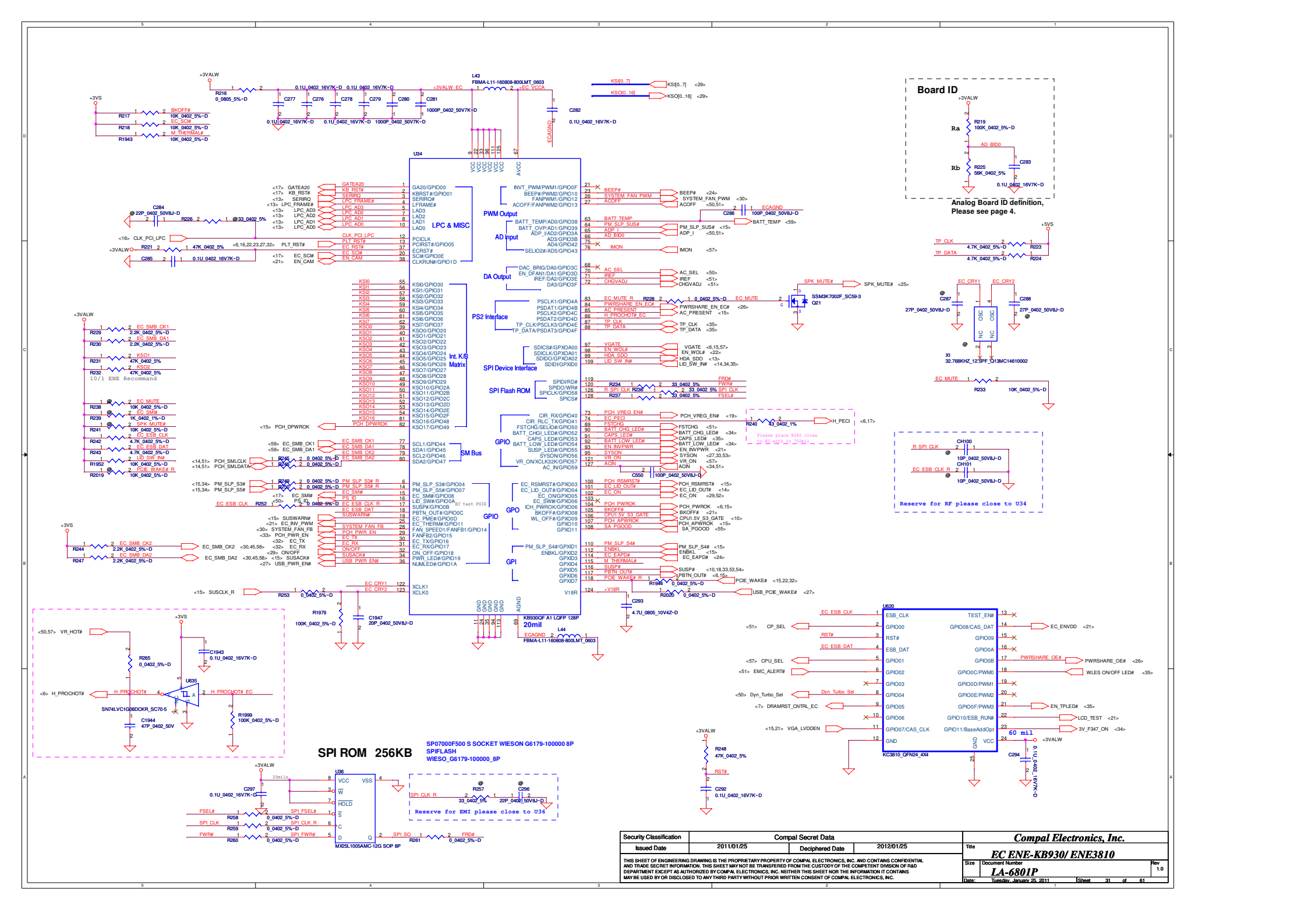
Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: **FAN Controller**

Size | Document Number: **LA-6801P** | Rev: 1.0

Date: Tuesday, January 25, 2011 | Sheet 30 of 61



Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: EC ENE-KB930/ ENE3810

Size	Document Number	Rev
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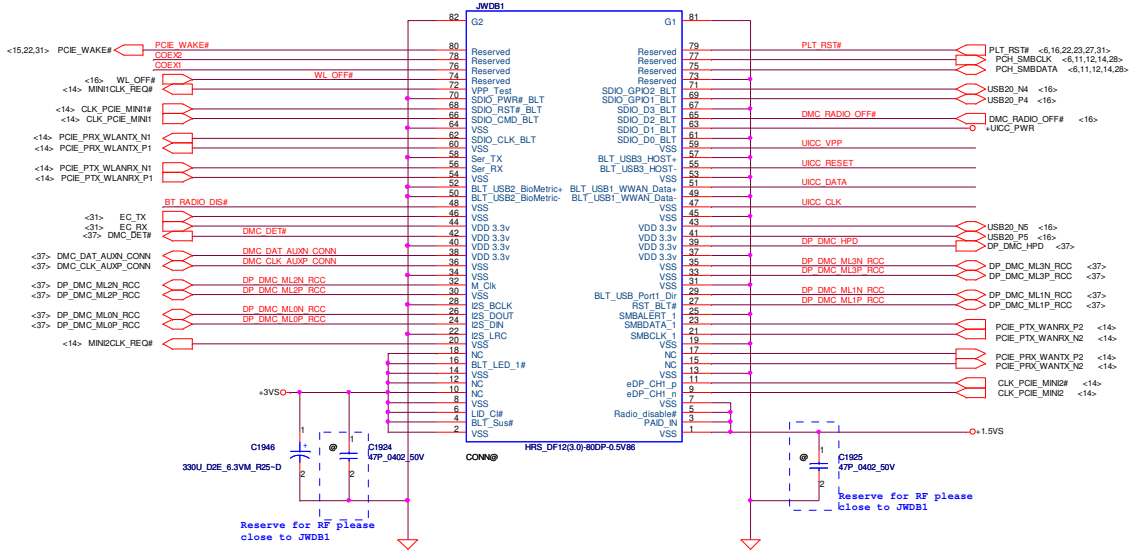
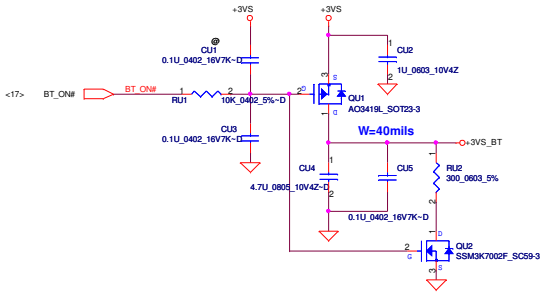
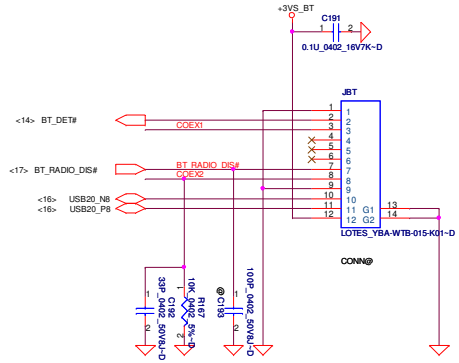
To DMC PCB connector

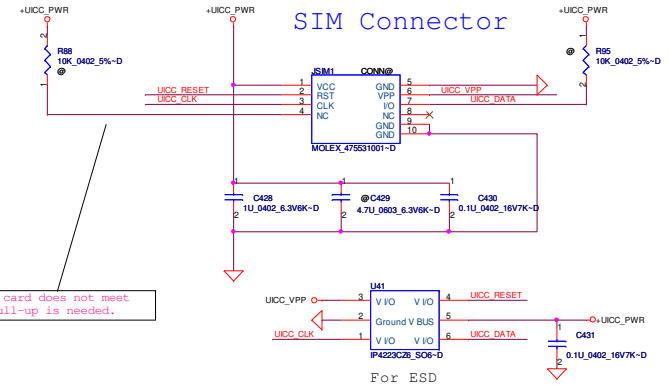


BlueTooth





SIM card board 4.7uF change to 1uF for Tiger detect issue.



Reserve for SIM card does not meet rise time and pull-up is needed.

Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.	
Title	Mini Card -WLAN / DMC / BT
Size	Document Number: LA-6801P
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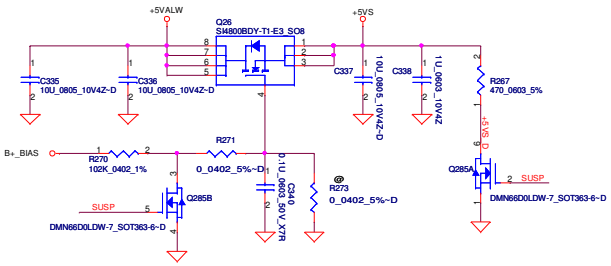
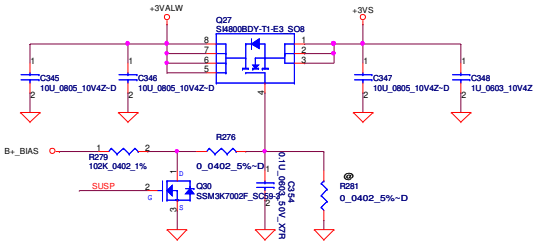
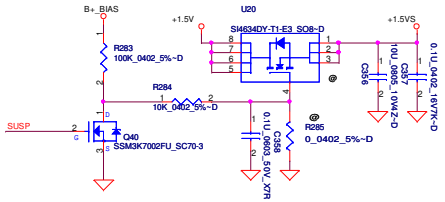
+5VALW to +5VS



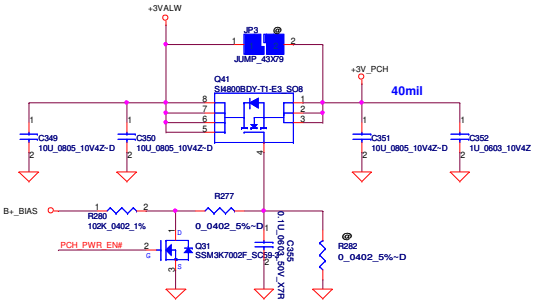
+3VALW to +3VS



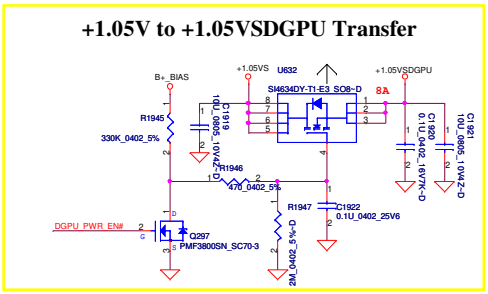
+1.5V To +1.5VS

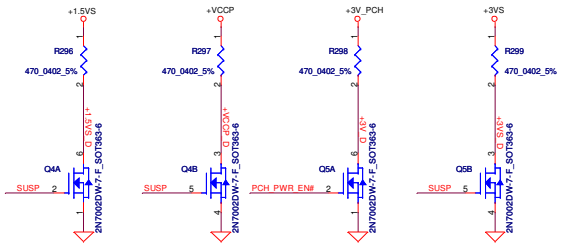


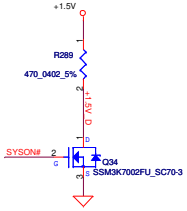
+3VALW to +3V_PCH

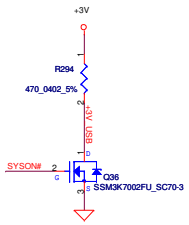


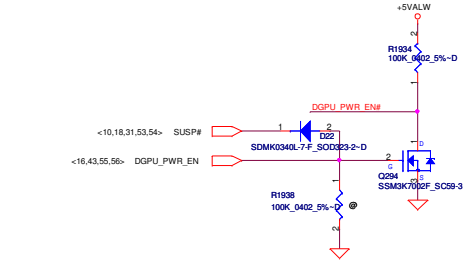
+1.05V to +1.05VSDGPU Transfer

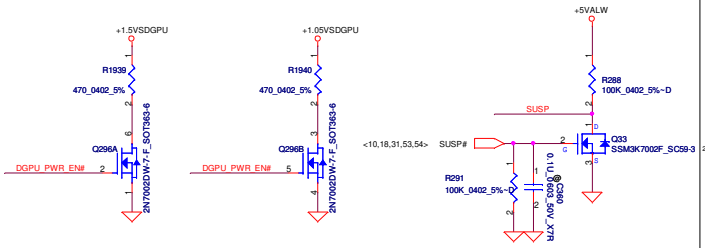


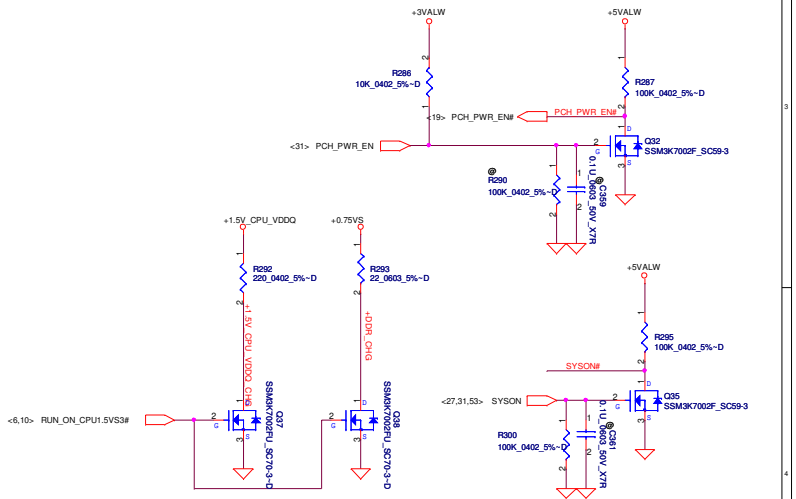












Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: DC/DC Interface

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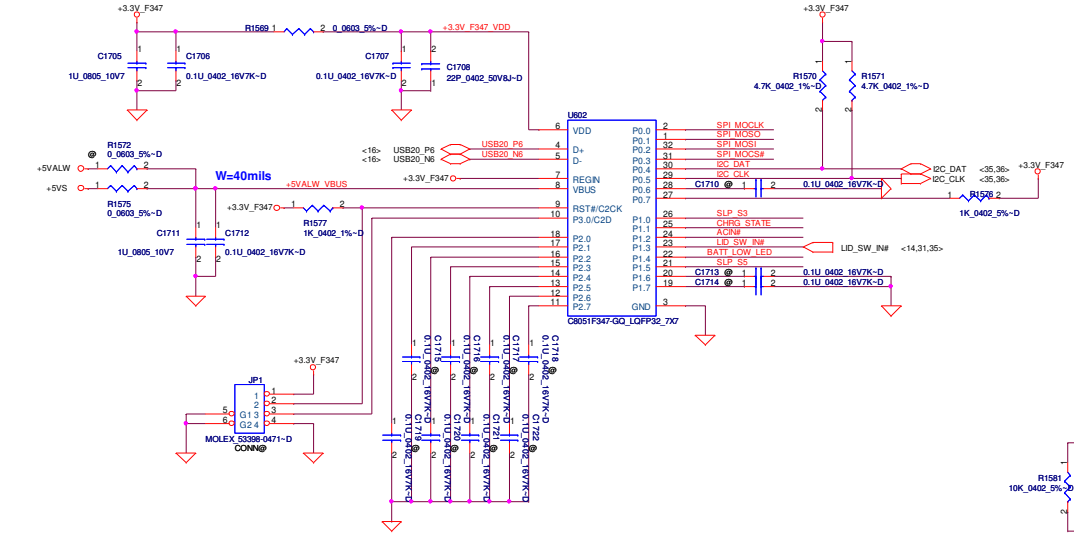

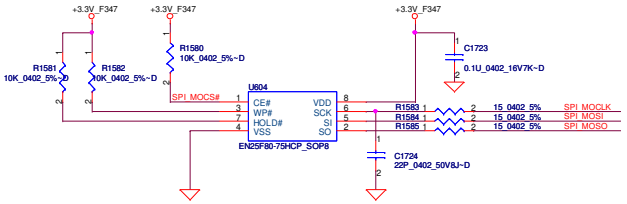

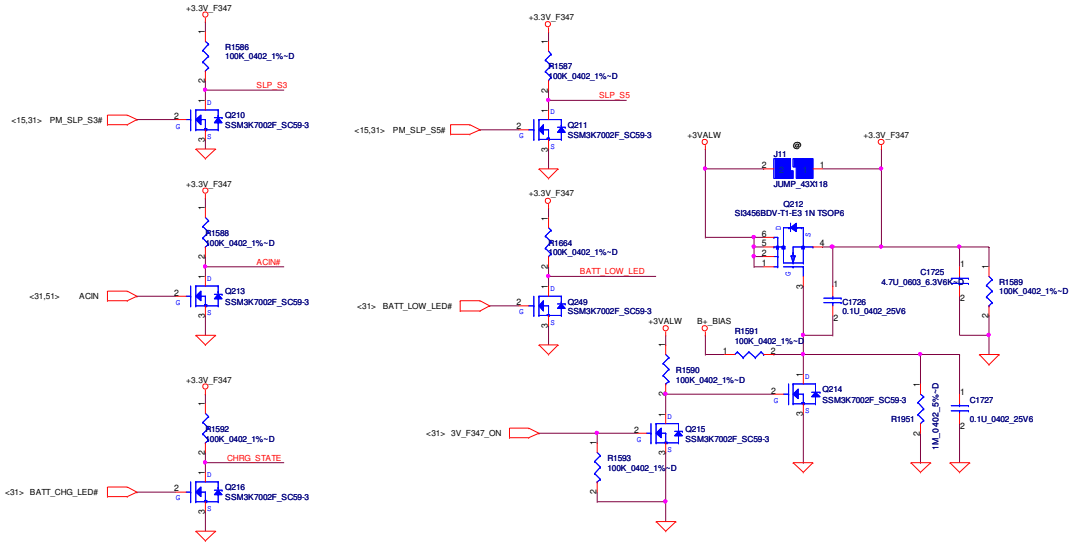

+3.3V_F347 behavior

	STATE			
	S0	S3	S4	S5
AC IN	ON	ON	ON	ON
BAT only	ON	ON	OFF	OFF

AC mode battery full in S5:turn off ELC controller

DEVICE	SMBUS ADDRESS
MAXIM - LED	0100 000b
MAXIM - GPIO	0100 001b
I2C EEPROM	1010 000b

Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: ELC (1)/STATUS CONN

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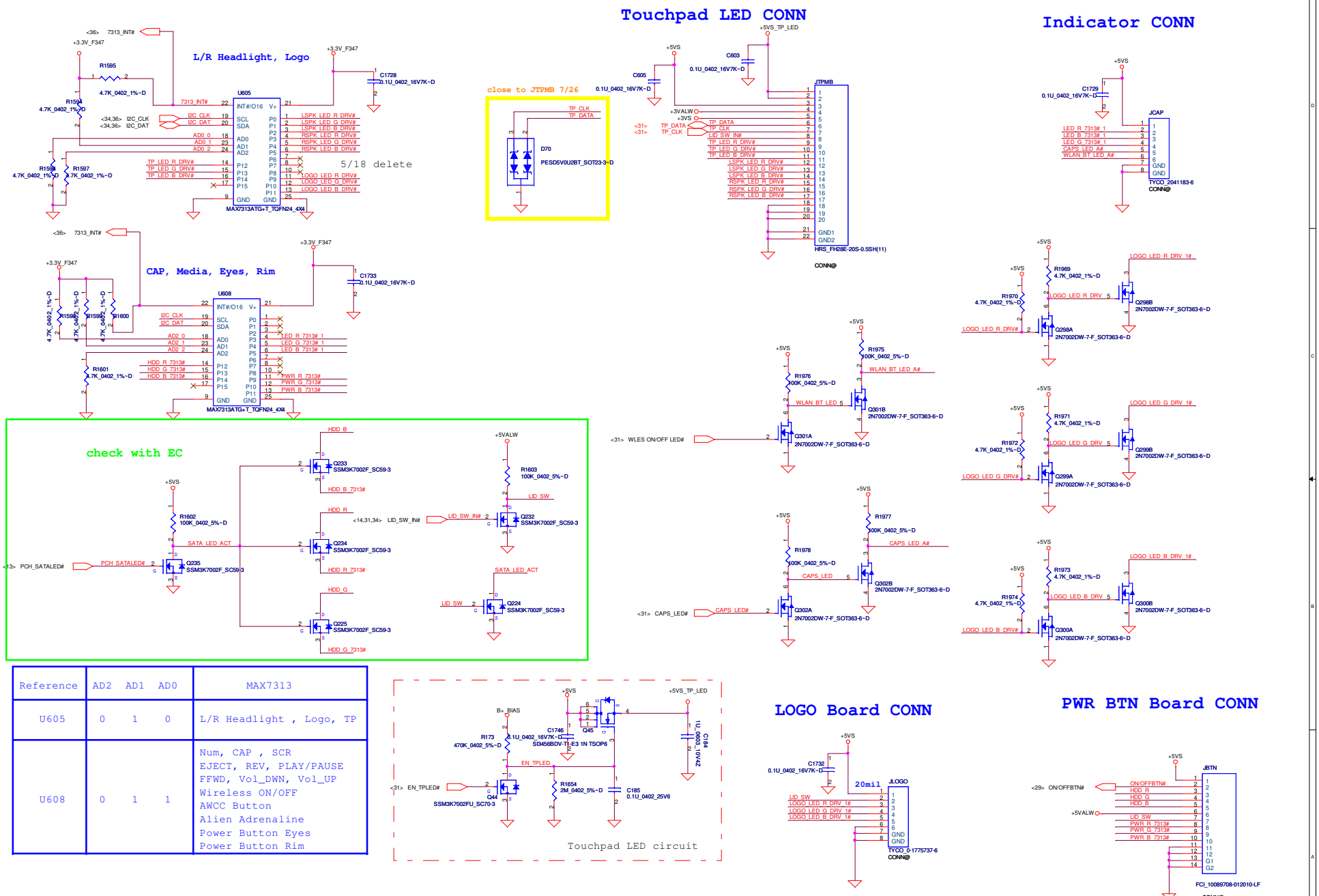


Reference	AD2	AD1	AD0	MAX7313
U605	0	1	0	L/R Headlight , Logo, TP
U608	0	1	1	Num, CAP , SCR EJECT, REV, PLAY/PAUSE FFWD, Vol_DWN, Vol_UP Wireless ON/OFF AWCC Button Alien Adrenaline Power Button Eyes Power Button Rim

Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

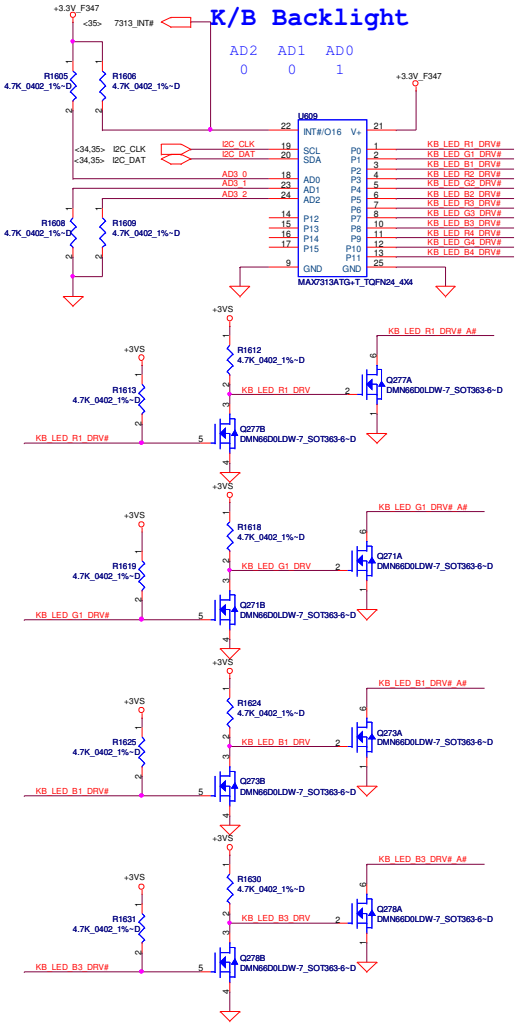
Compal Electronics, Inc.

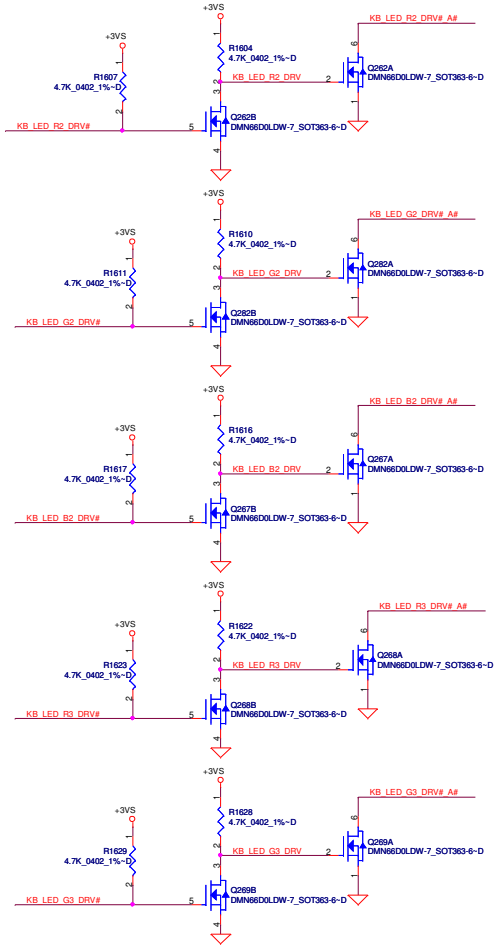
Title: ELC (2)

Size: | Document Number: LA-6801P | Rev: 1.0

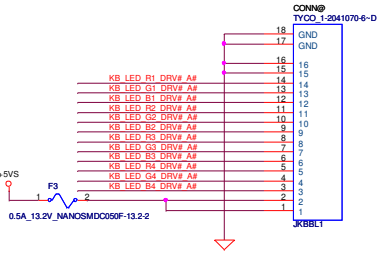
Date: Tuesday, January 25, 2011 | Sheet 35 of 61

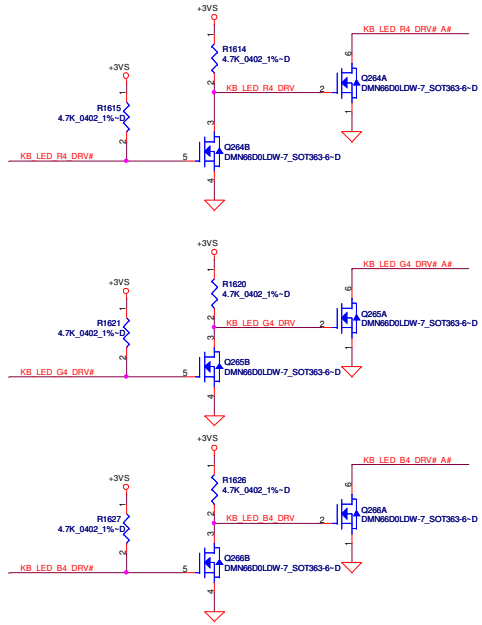
K/B Backlight





K/B Backlight CONN





Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

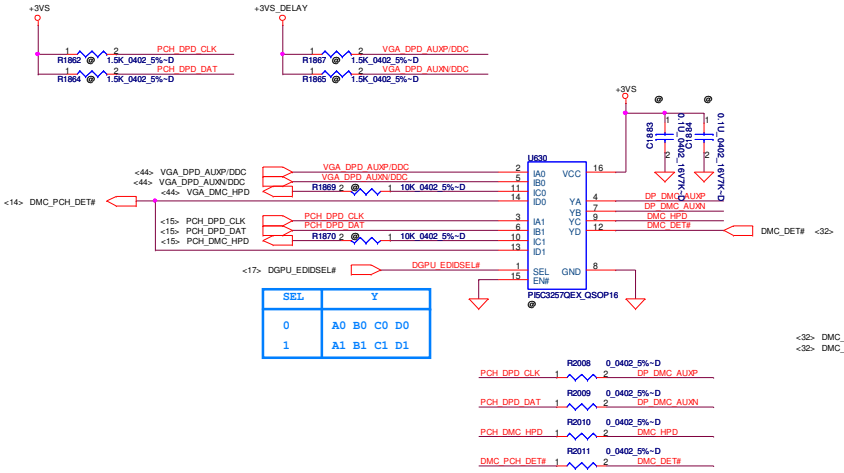
Compal Electronics, Inc.

Title: ELC (3)

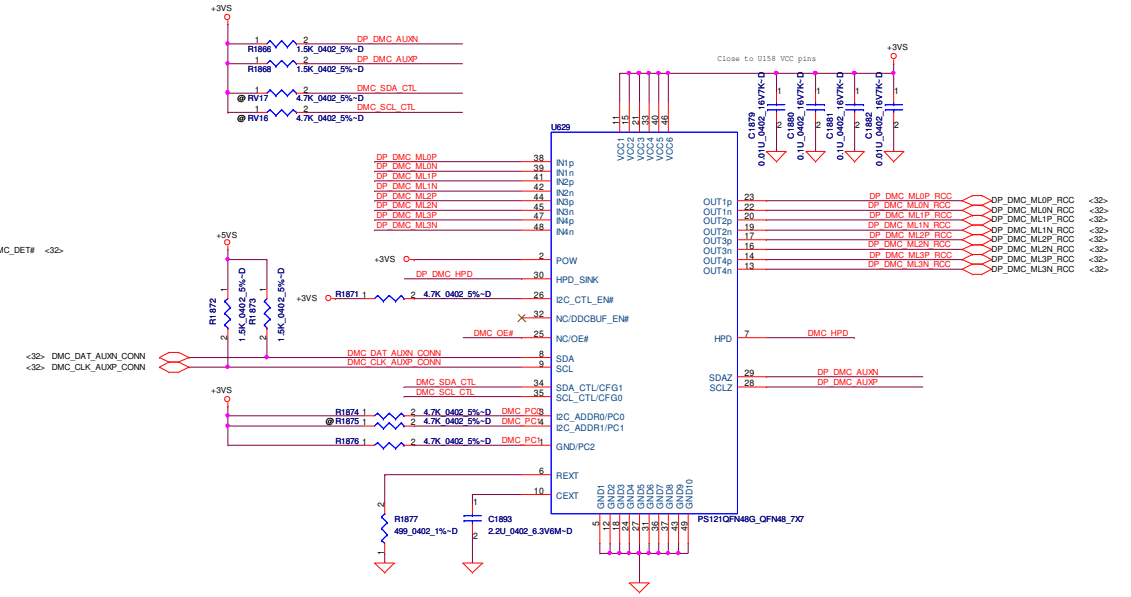
Size: | Document Number: LA-6801P | Rev: 1.0

Date: Tuesday, January 25, 2011 | Sheet 36 of 61

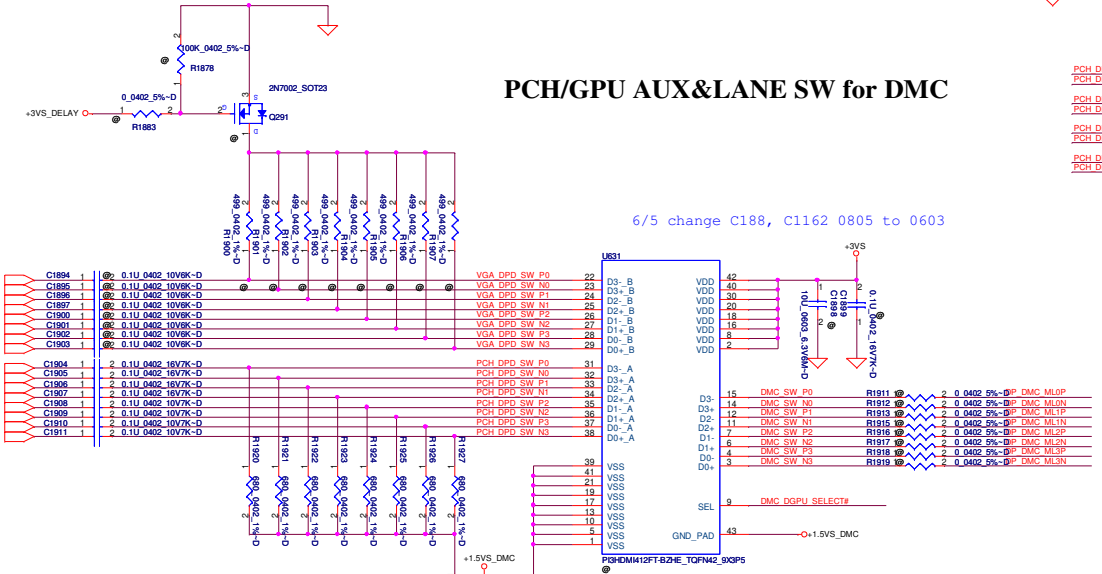
PCH/GPU DDC SW for DMC

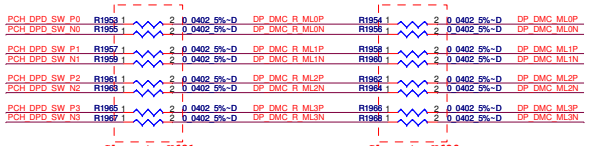


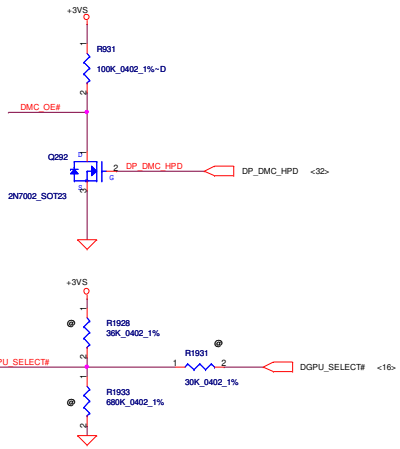
DMC Redriver



PCH/GPU AUX&LANE SW for DMC







AUX_SEL/SEL1&2	Chanel	Source
0	A	GPU
1	B	PCH

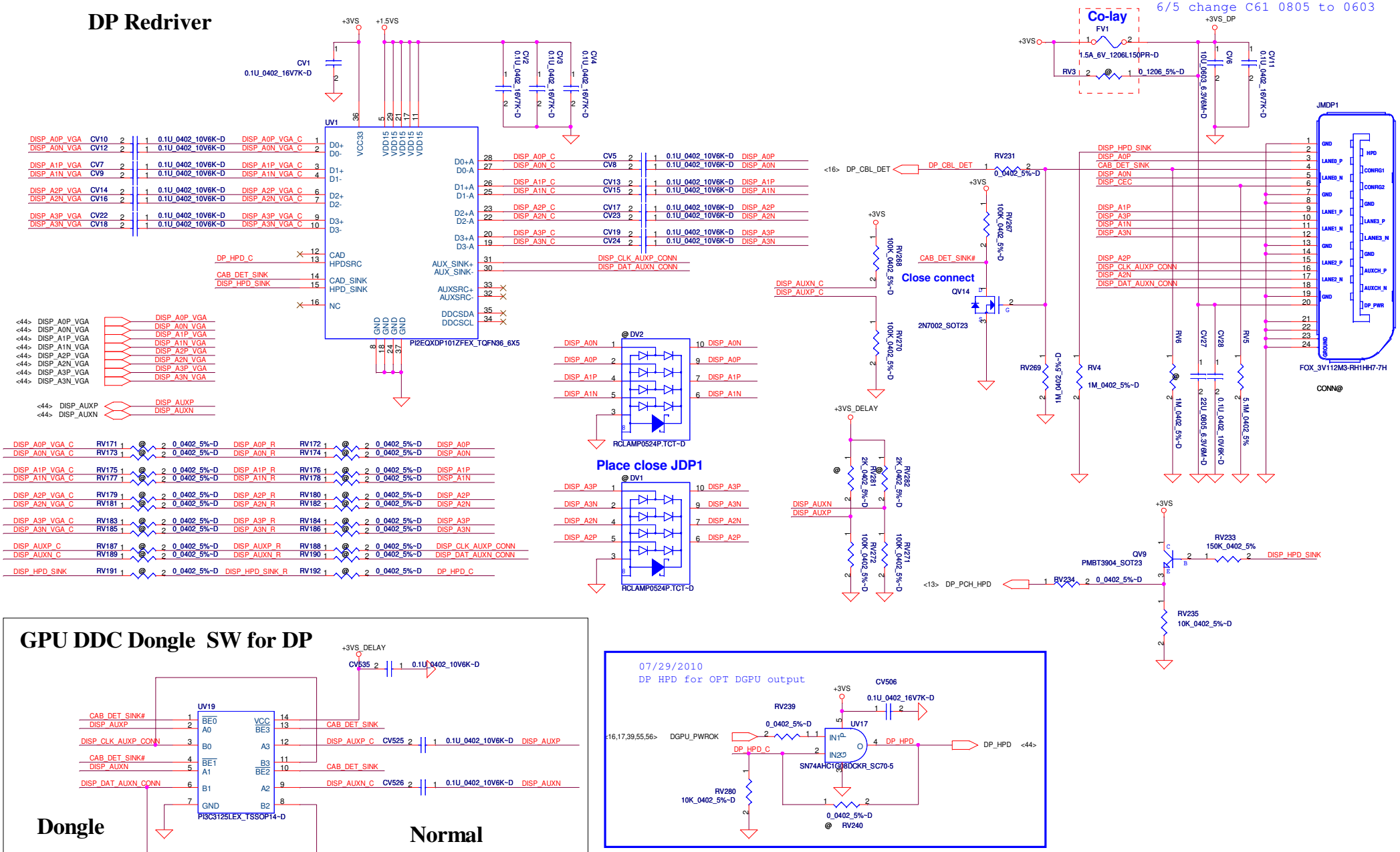
Compal Electronics, Inc.

Title: DMC MUX/Redriver

Size: C | Document Number: LA-6801P | Rev: 1.0

Date: Tuesday, January 25, 2011 | Sheet 37 of 61

DP Redriver



GPU DDC Dongle SW for DP

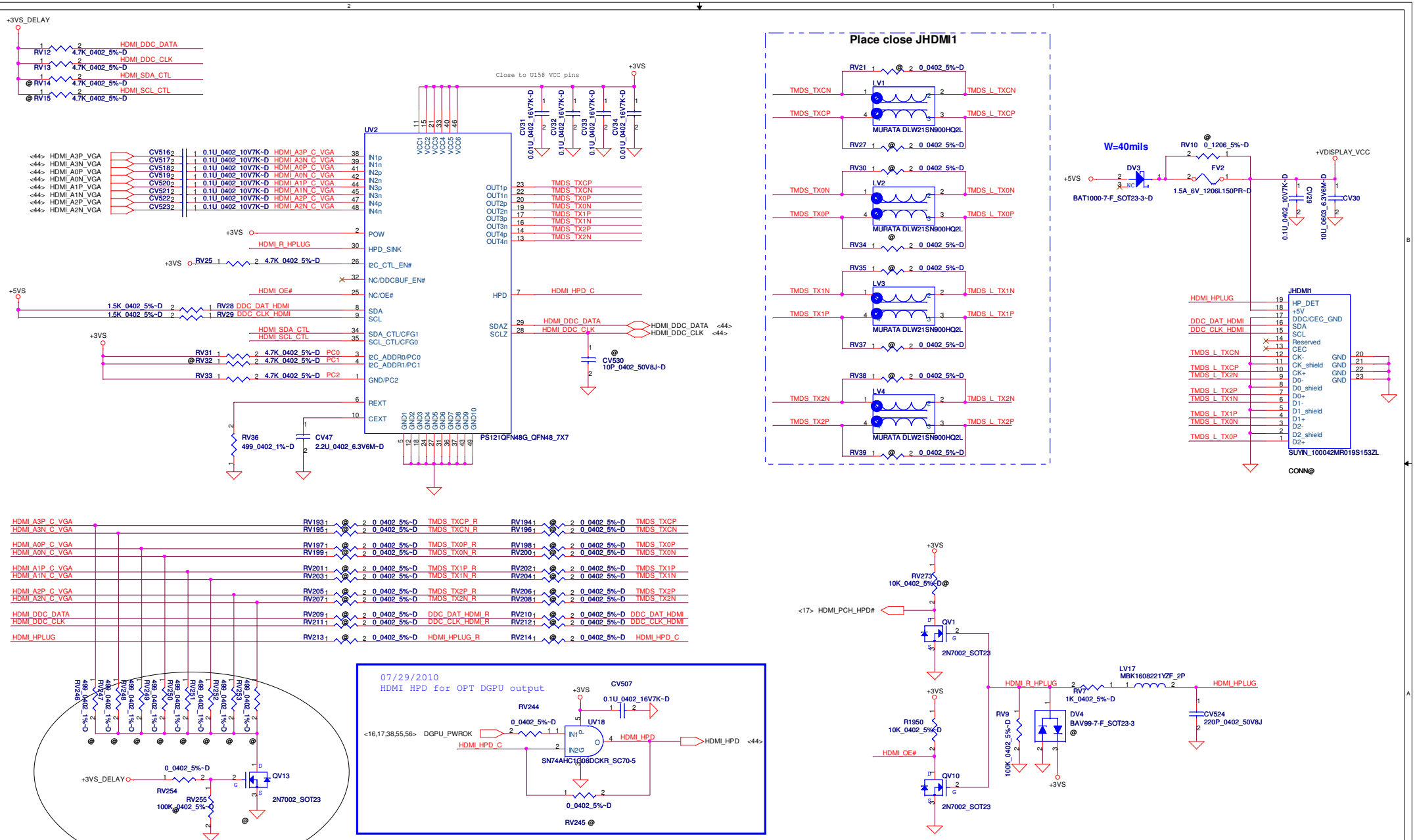
Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: **Mini Display Port**

Size	Document Number	Rev
Custom	LA-6801P	1.0

Date: Tuesday, January 25, 2011 | Sheet 38 of 61



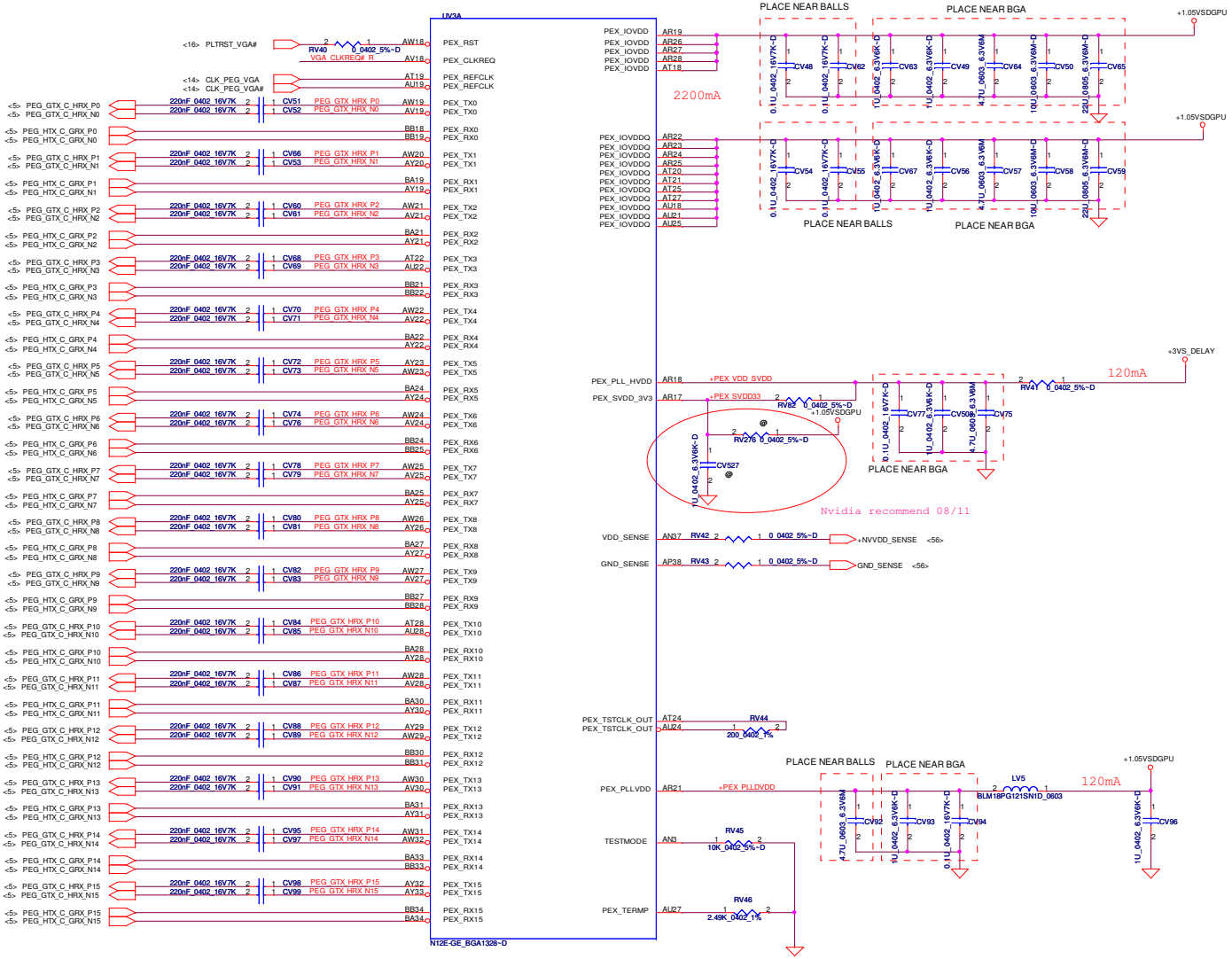
Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: **HDMI**

Size	Document Number	Rev
Custom	LA-6801P	1.0

Date: Tuesday, January 25, 2011 | Sheet 39 of 61



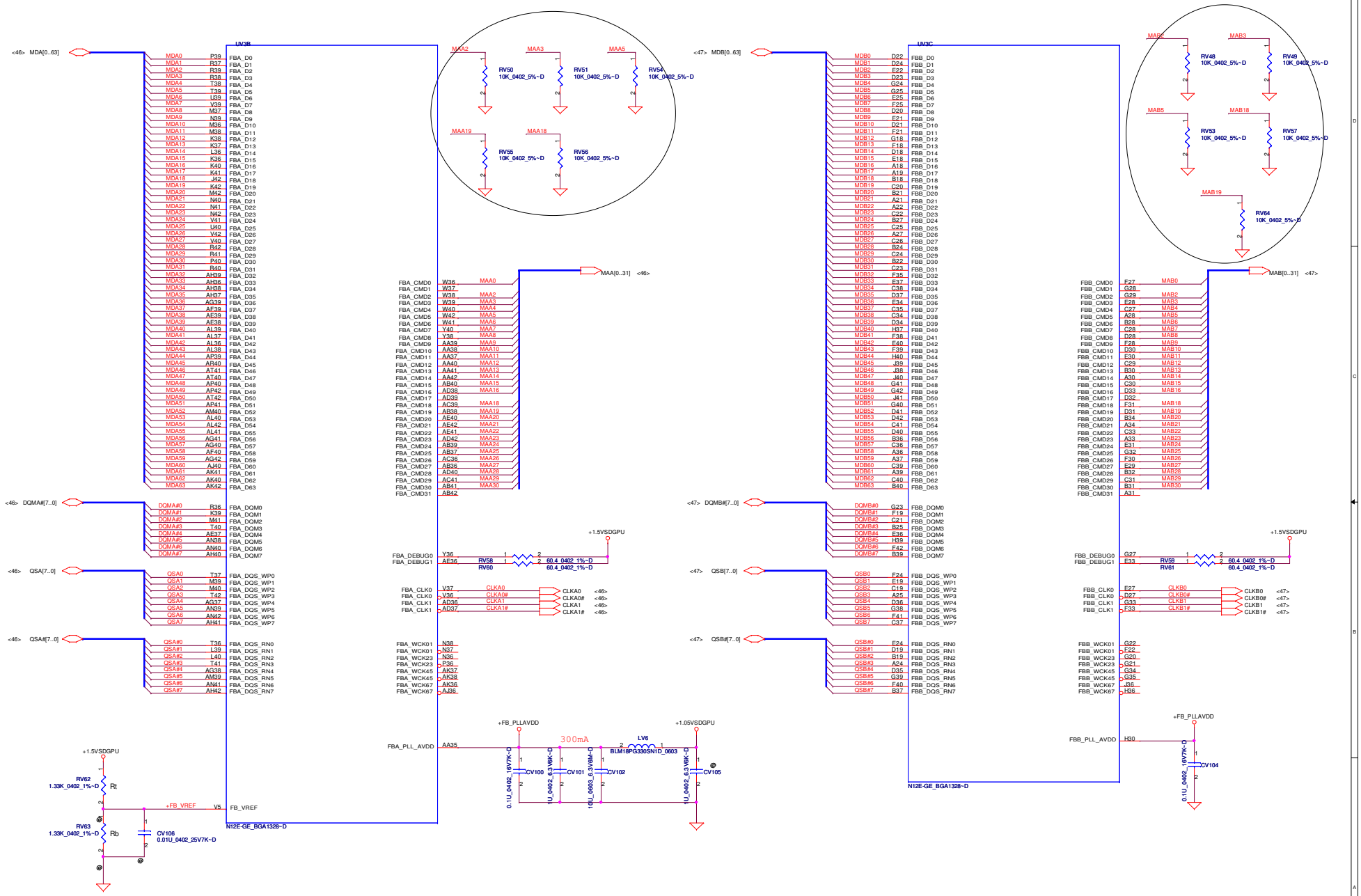
Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: **N12E(1/6)_PCIE**

Size	Document Number	Rev
C	LA-6801P	1.0

Date: Tuesday, January 25, 2011 | Sheet 40 of 61



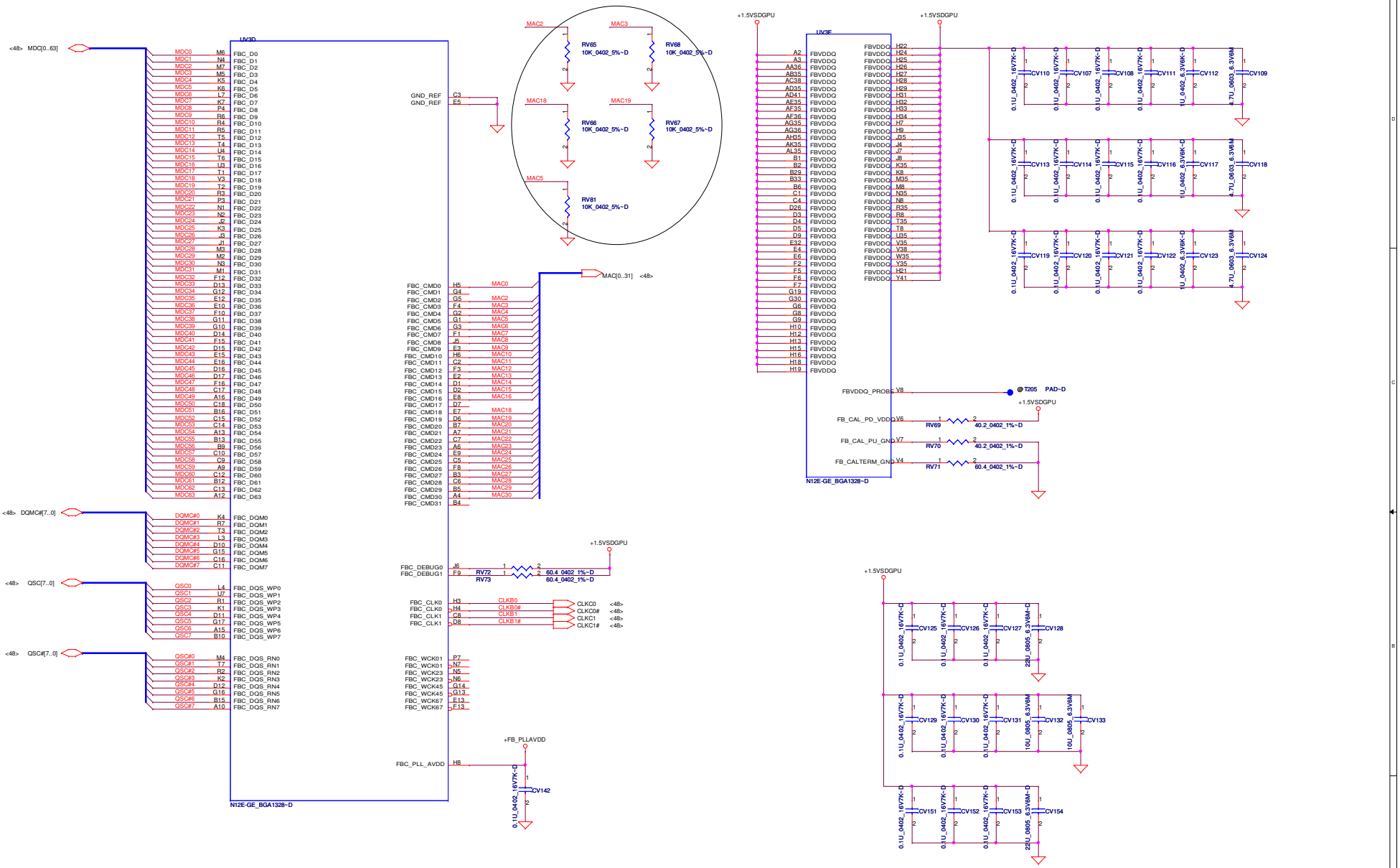
Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: **N12E(2/6)_MemoryA/B**

Size	Document Number	Rev
C	LA-6801P	1.0

Date: Tuesday, January 25, 2011 Sheet 41 of 61



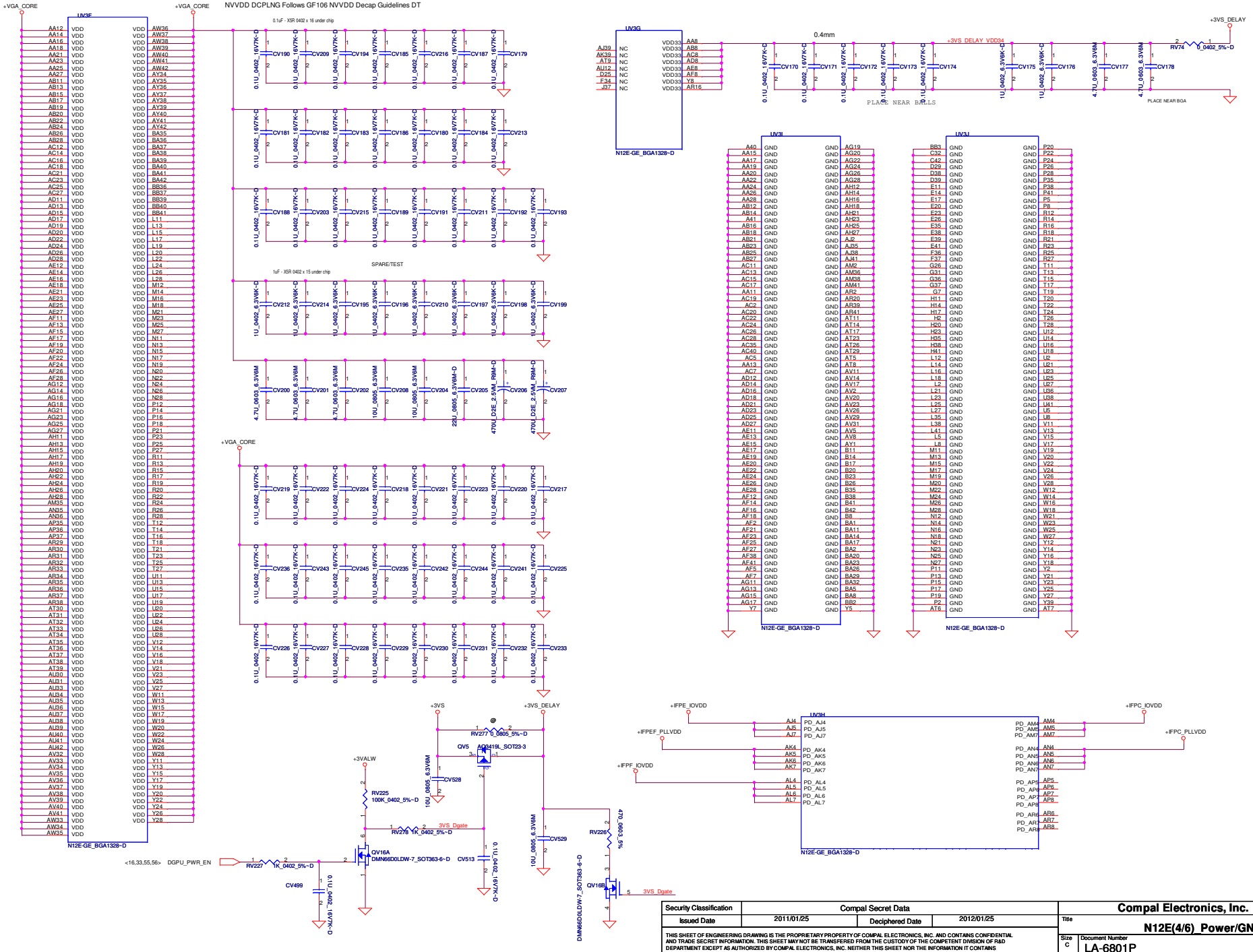
Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: **N12E(3/6)_MemoryC**

Size	Document Number	Rev
C	LA-6801P	1.0

Date: Tuesday, January 25, 2011 Sheet 42 of 61



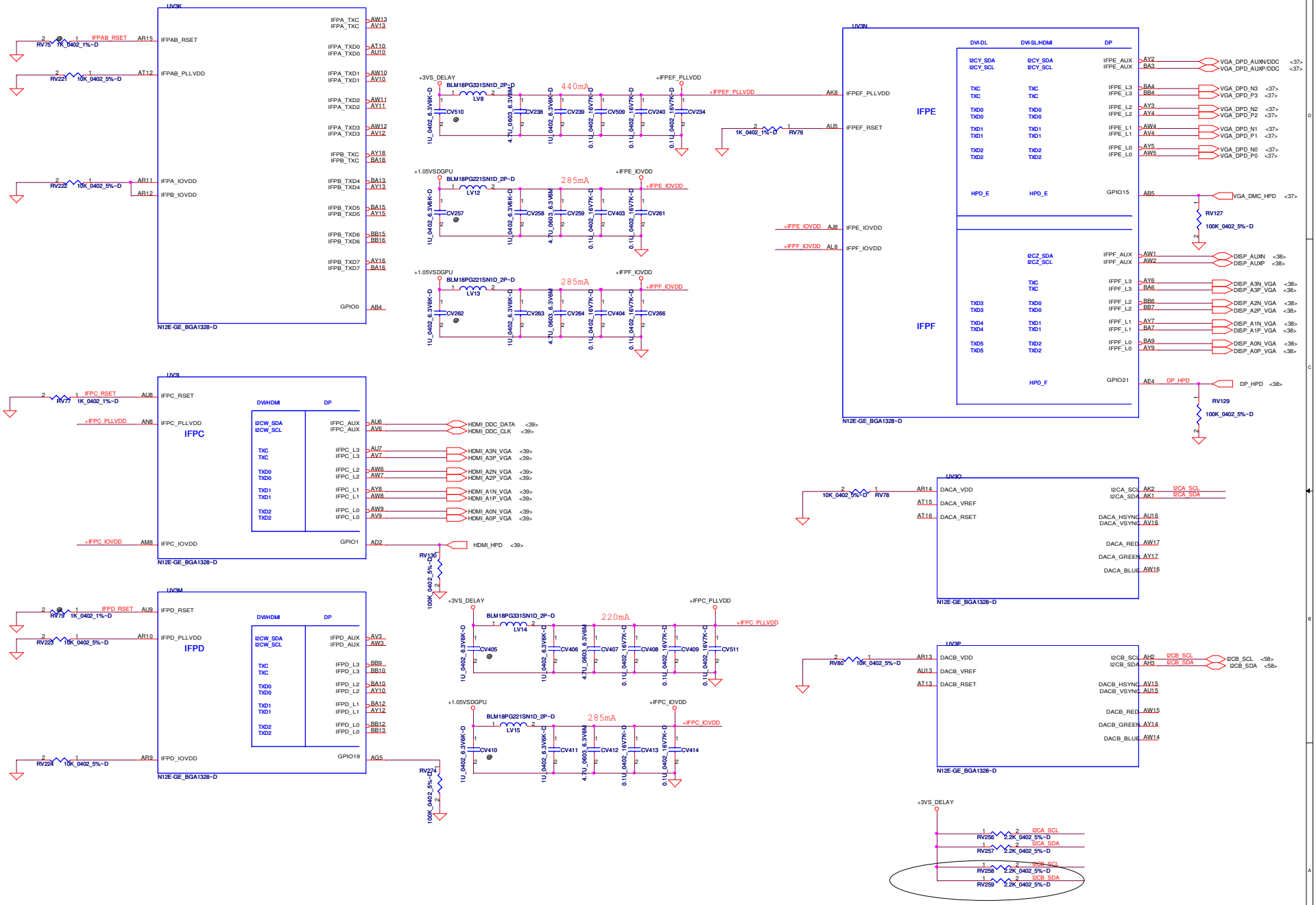
Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: N12E(4/6)_Power/GND

Size	Document Number	Rev
C	LA-6801P	1.0

Date: Tuesday, January 25, 2011 Sheet 43 of 61



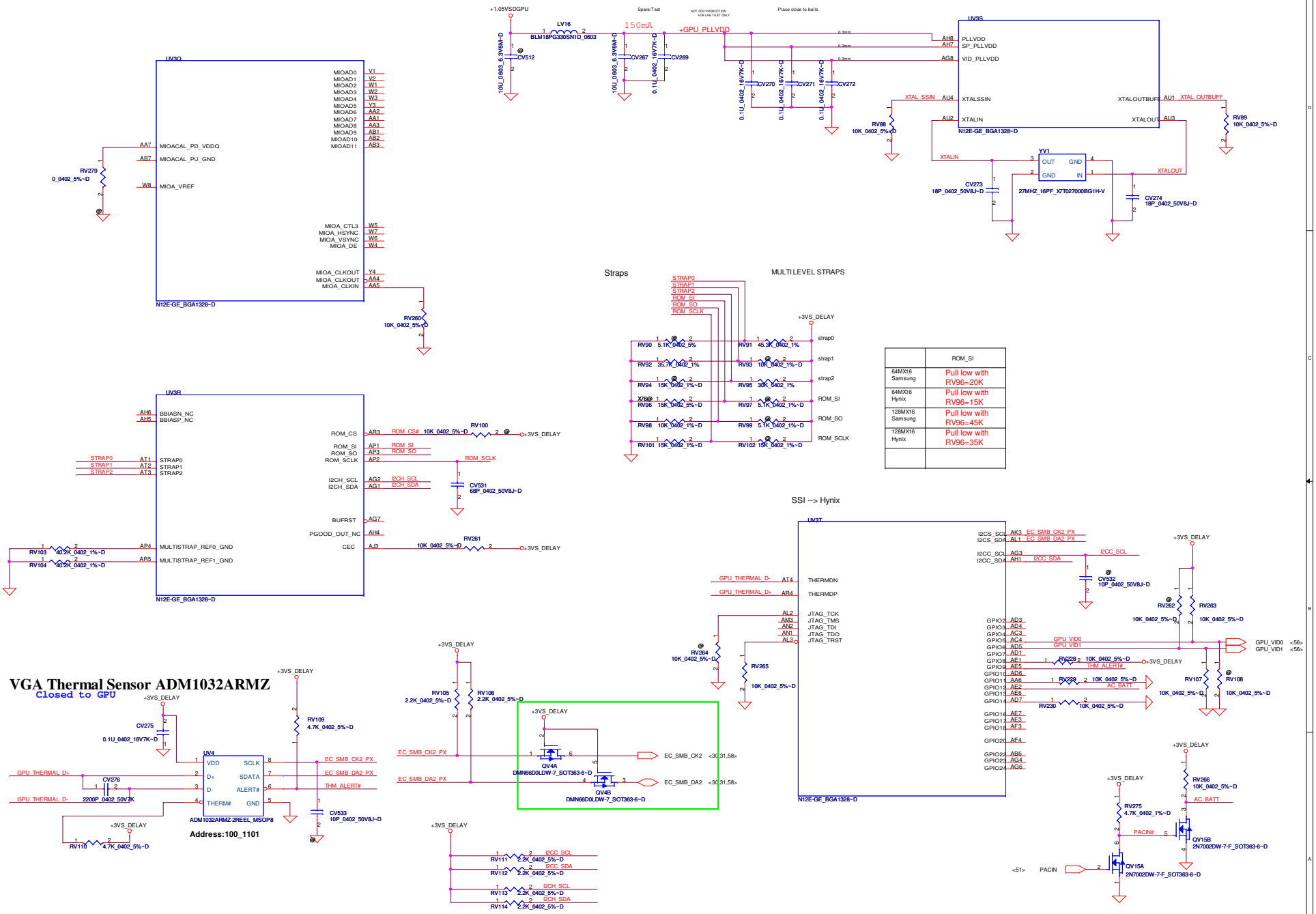
Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: **N12E(5/6)_DP/HDMI**

Size	Document Number	Rev
C	LA-6801P	1.0

Date: Tuesday, January 25, 2011 | Sheet 44 of 61



	ROM_SI
64MX16 Samsung	Pull low with RV96=20K
64MX16 Hynix	Pull low with RV96=15K
128MX16 Samsung	Pull low with RV96=45K
128MX16 Hynix	Pull low with RV96=35K

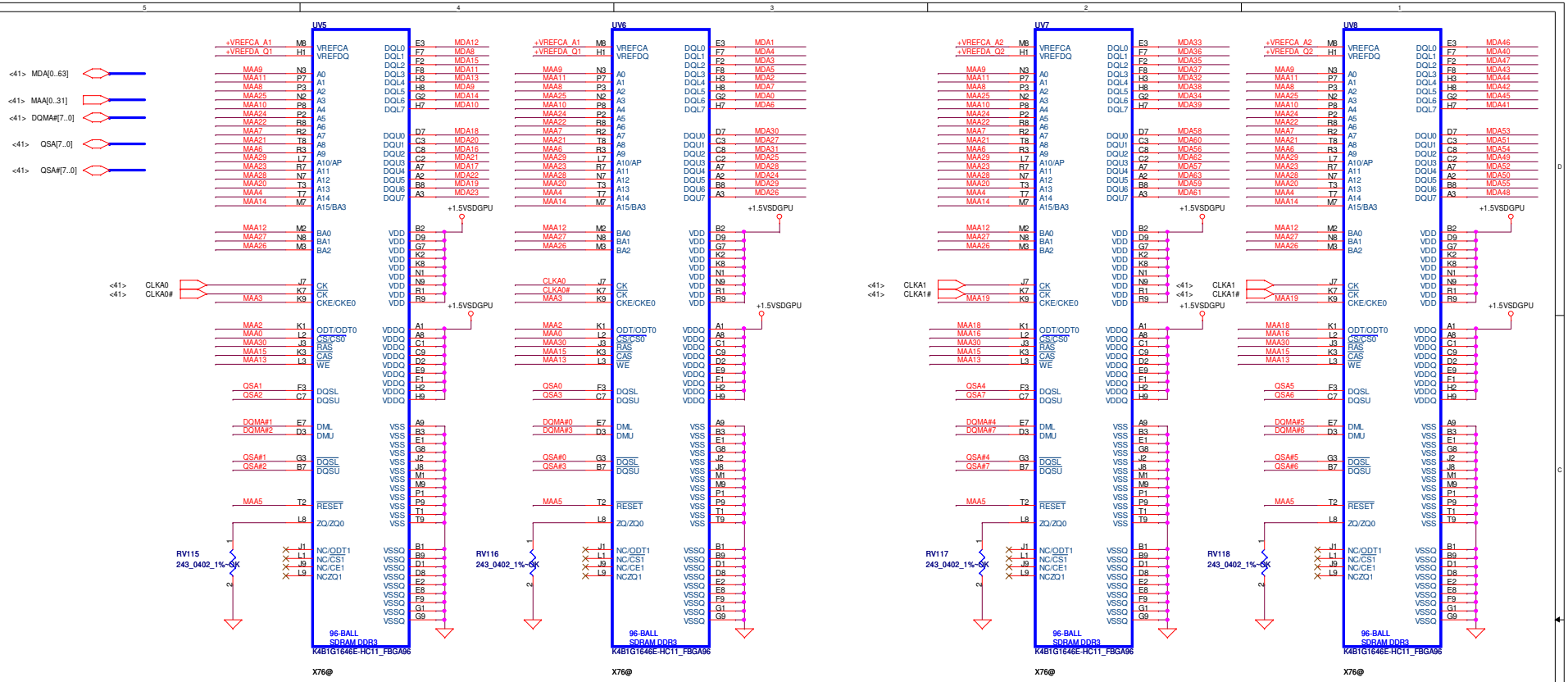
Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: **N12E(6/6)_GPIO**

Size	Document Number	Rev
C	LA-6801P	1.0

Date: Tuesday, January 25, 2011 Sheet 45 of 61



VRAM P/N :
Samsung : SA000041T00 (S IC D3 64MX16 K4W1G1646E-HC11 FBGA 96P)
Hynix : SA000041S20 (S IC D3 64MX16 H5TQ1G63DFR-11C FBGA 96P)

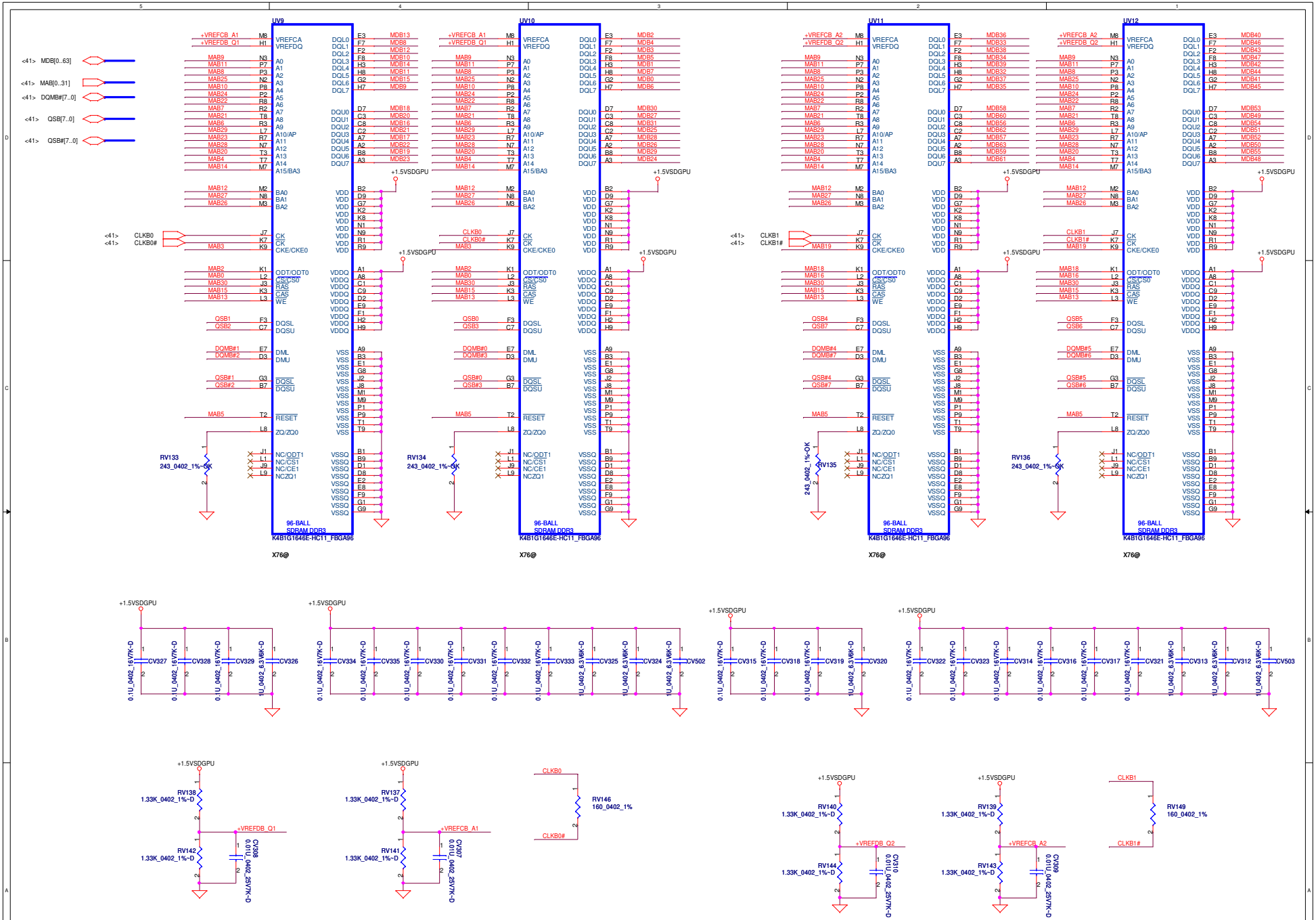
Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: **VRAM_DDR3 / Channel A**

Size	Document Number	Rev
Custom	LA-6801P	1.0

Date: Tuesday, January 25, 2011 Sheet 46 of 61



VRAM P/N :
Samsung : SA000035700 (S IC D3 64MX16 K4W1G1646E-HC12 FBGA 96P)
Hynix : SA000032400 (S IC D3 64MX16 H5TQ1G63BFR-12C FBGA 1.5V)

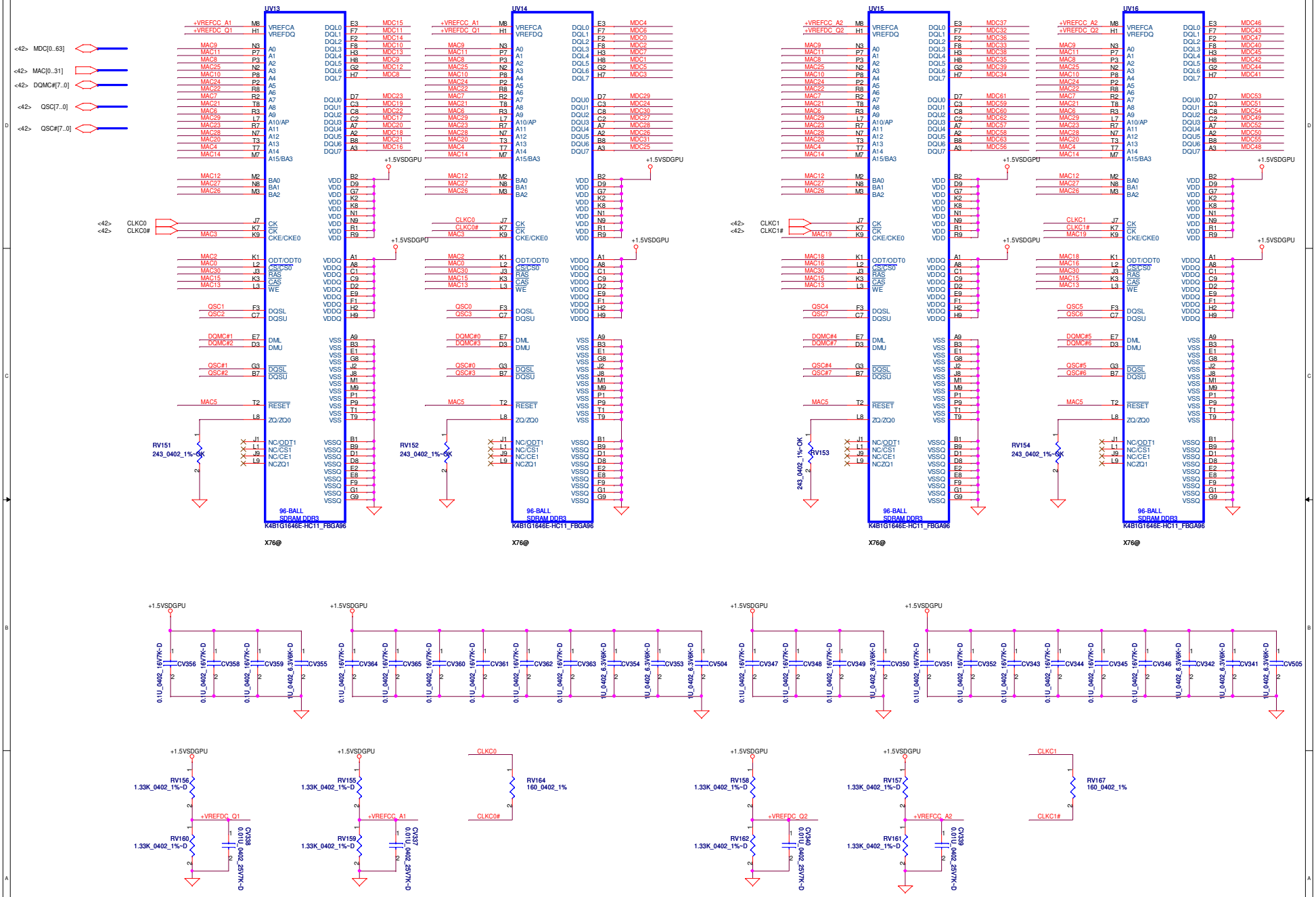
Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: **VRAM_DDR3 / Channel B**

Size	Document Number	Rev
Custom	LA-6801P	1.0

Date: Tuesday, January 25, 2011 | Sheet 47 of 61



VRAM P/N :
Samsung : SA000035700 (S IC D3 64MX16 K4W1G1646E-HC12 FBGA 96P)
Hynix : SA000032400 (S IC D3 64MX16 H5TQ1G63BFR-12C FBGA 1.5V)

Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

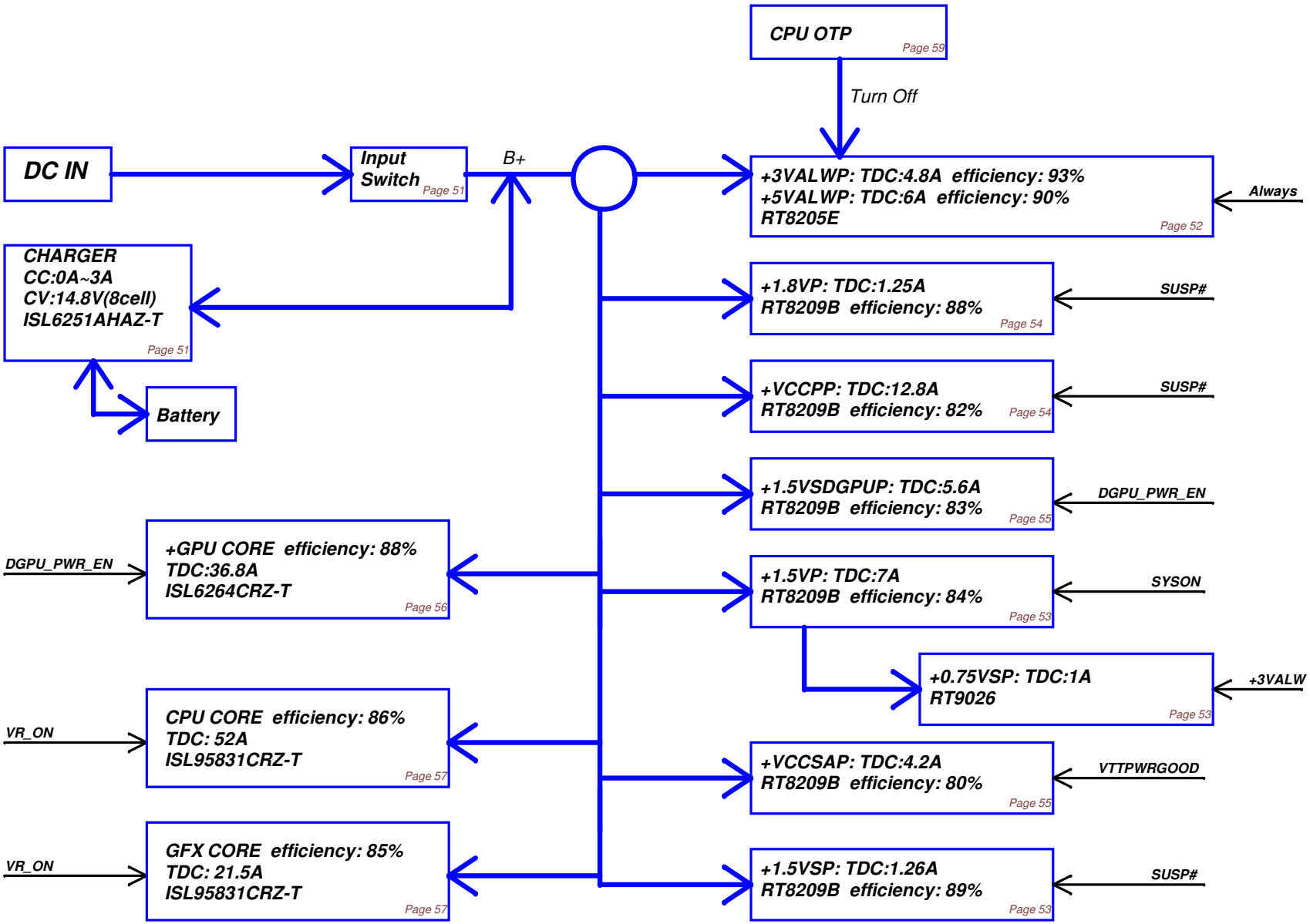
Compal Electronics, Inc.

Title: **VRAM_DDR3 / Channel C**

Size	Document Number	Rev
Custom	LA-6801P	1.0

Date: Tuesday, January 25, 2011 Sheet 48 of 61

Power block



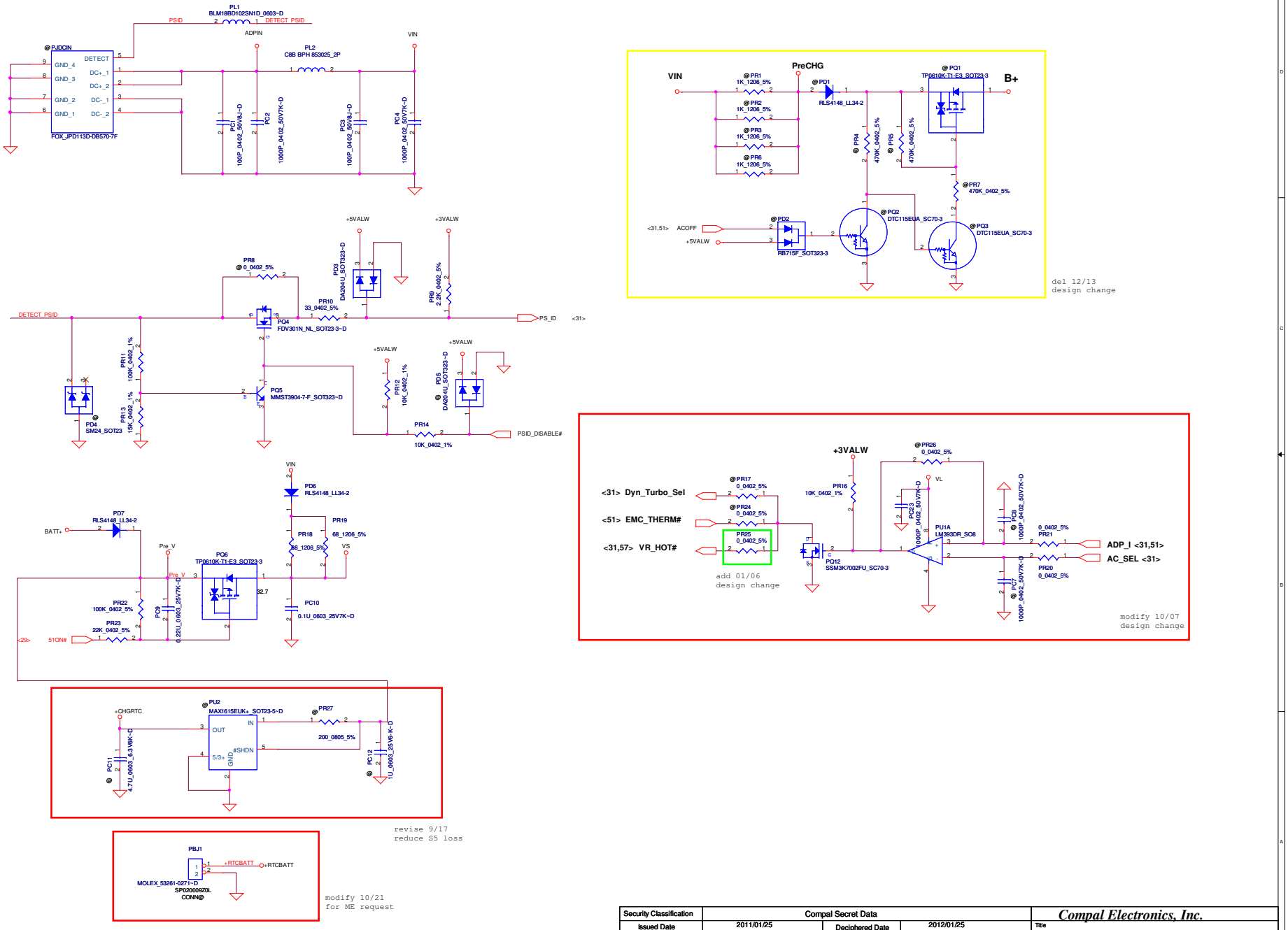
Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: POWER BLOCK DIAGRAM

Size	Document Number	Rev
Custom	LA-6801P	1.0

Date: Tuesday, January 25, 2011 Sheet 49 of 61



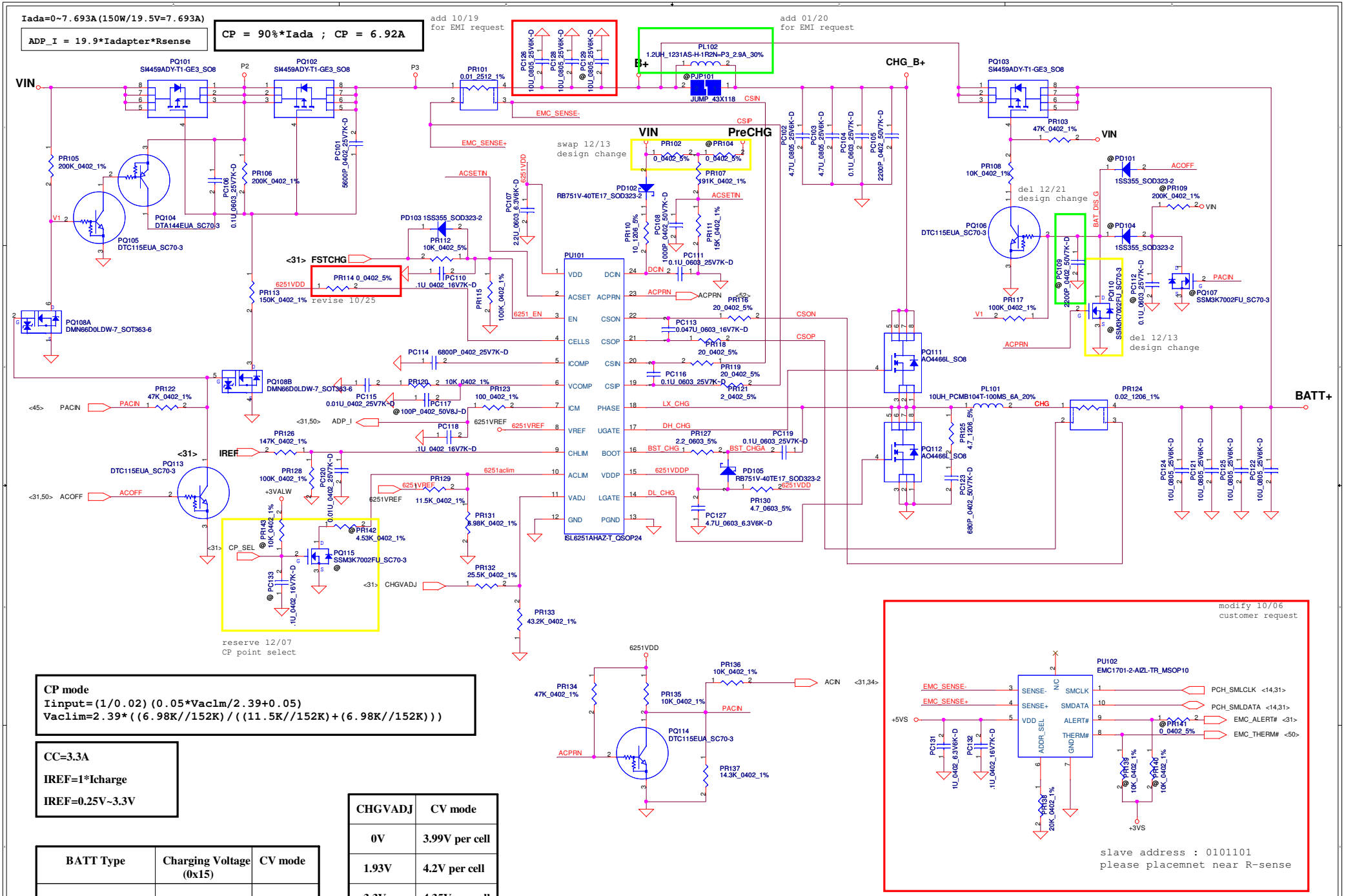
Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: PWR-DCIN / Vin Detector

Size	Document Number	Rev
C	LA-6801P	1.0

Date: Tuesday, January 25, 2011 Sheet 50 of 61

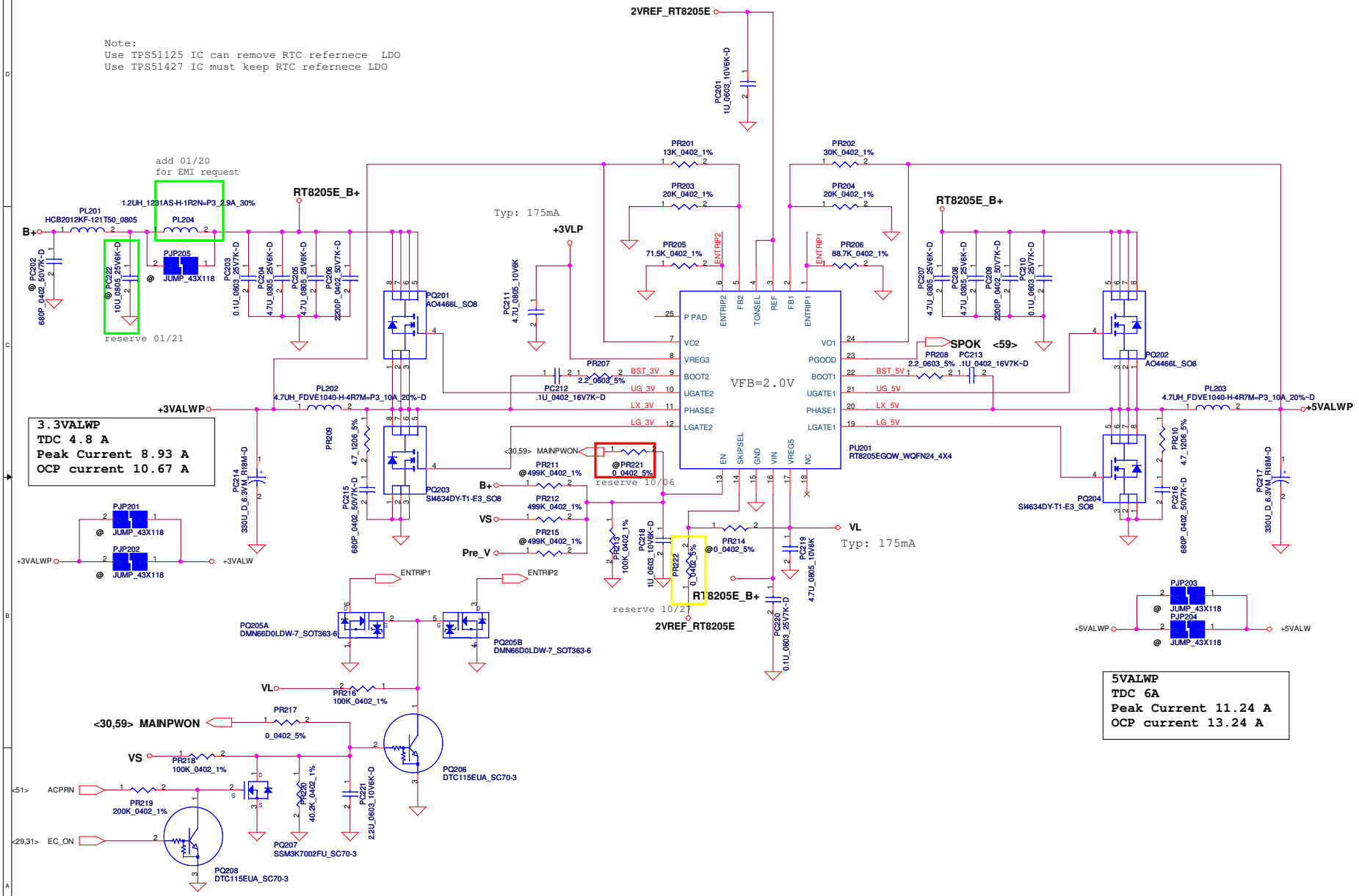


BATT Type	Charging Voltage (0x15)	CV mode
Normal 4S LI-ON Cells	14800mV	14.80V

CHGVADJ	CV mode
0V	3.99V per cell
1.93V	4.2V per cell
3.3V	4.35V per cell

Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.	
Title	PWR-CHARGER
Size: Custom	Document Number: LA-6801P
Rev	1.0
Date: Tuesday, January 25, 2011	Sheet 51 of 61



Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: 3VALWP/5VALWP

Size	Document Number	Rev
Custom	LA-6801P	1.0

Date: Tuesday, January 25, 2011 Sheet 52 of 61

modify 10/20
for EMI request

<27,31,33> SYSON

PL301 1.2UH_1231AS-H-1R2N-P3_2.9A_30%

B+

PJP301 JUMP_43X79

PC302 @ 680P_0402_50V7K-D

PC301 2200P_0402_50V7K-D

PC303 0.1U_0603_25V7K-D

PC304 4.7U_0805_25V6K-D

PC305 4.7U_0805_25V6K-D

PC306 @ 4.7U_0805_25V6K-D

PR301 267K_0402_1%

PR302 0_0402_5%

PC308 .1U_0402_16V7K-D

PU301 RT8209MGQW_WQFN14_3P5X3P5

VFB=0.75V

PR303 2.2_0603_5%

PC307 0.1U_0603_25V7K-D

BST_1.5V

BST_1.5V-1

DH_1.5V

LX_1.5V

DL_1.5V

PR305 6.49K_0402_1%

PC313 4.7U_0805_10V6K

PQ301 SI4172DY-T1-GE3_SO8

PQ302 SI4634DY-T1-E3_SO8

PL302 1UH_PCMB062D-1R0MS_9A_20%

+1.5VP

PR304 4.7_1206_5%

PC314 680P_0402_50V7K-D

PC309 .1U_0402_16V7K-D

PC310 10U_0805_6.3V6M-D

PC311 220U_D2_2V_R15M

PC312 @ 220U_D2_2V_R15M

PJP302 @ JUMP_43X118

PJP303 @ JUMP_43X118

+5VALW

PR306 10_0603_5%

PC316 1U_0603_10V6K-D

PR307 10K_0402_1%

PR308 10K_0402_1%

1.5VP
TDC 7 A
Peak Current 10 A
OCP current 12 A

Low Side MOS RDS(on)=5.5m ohm(Typ),6.7m ohm(Max)

DDR GPIO Output Voltage Selection		
bit2 = 1.5DDR_VID0	bit1 = 1.5DDR_VID1	DDR Vout
0	0	1.65V
0	1	1.6V
1	0	1.55V
1	1	1.5V (Default)

add 12/20
design change

add 12/13
for EE request

<16> 1.5VDDR_VID0

<16> 1.5VDDR_VID1

PR312 75K_0402_1%

PR313 10K_0402_5%

PR314 10K_0402_5%

PR316 10K_0402_5%

PR317 @ 10K_0402_5%

PR318 150K_0402_1%

PR319 10K_0402_5%

PR320 10K_0402_5%

PR321 10K_0402_5%

PR323 @ 10K_0402_5%

PQ303A PQ303B PQ304A PQ304B DMN66D0LDW-7 2N SOT363-6

PR315 10K_0402_5%

PR322 10K_0402_5%

PC326 0.01U_0402_25V7K-D

PC325 0.01U_0402_25V7K-D

PC328 0.01U_0402_25V7K-D

PC327 0.01U_0402_25V7K-D

+3VALW

PR309 1.2K_0402_1%

PR310 1K_0402_1%

PU302 RT9026_MSOP10

PJP304 JUMP_43X79

PC317 4.7U_0805_6.3V6K-D

PC318 @ 4.7U_0805_6.3V6K-D

PC321 4.7U_0805_6.3V6K-D

PC322 @ 4.7U_0805_6.3V6K-D

+1.5VP

+0.75VSP

PC319 1U_0603_10V6K-D

PC320 .1U_0402_16V7K-D

PR311 10K_0402_5%

PC323 .1U_0402_16V7K-D

SUSP# <10,18,31,33,54>

PJP305 @ JUMP_43X79

+0.75VSP +0.75VS

+5VALW

PJP306 @ JUMP_43X79

PC329 10U_0805_10V6K-D

PC330 10U_0805_10V6K-D

1.5VS_PIN

LX_1.5VS

PL303 1UH_PCMC063T-1R0MN_11A_20%

+1.5VSP

PR324 4.7_1206_5%

1.5VS_SNB

PC331 680P_0603_50V7K-D

<10,18,31,33,54> SUSP#

PR325 0_0402_5%

EN_1.5VS

PR326 1M_0402_1%

PC334 @ 1U_0402_6.3V6K-D

PU303 RT8061AZQW_WDFN10_3X3

1.5VS_FB

PR327 15.8K_0402_1%

PR328 10.5K_0402_1%

PC335 68P_0402_50V8J-D

PC332 22U_0805_6.3VAM-D

PC333 22U_0805_6.3VAM-D

+1.5VSP
Imax=1.26A
Ipeak=1.8A
Iocp(minimum)=4A

PJP307 @ JUMP_43X79

Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: PWR-+1.5VP/+0.75VSP/+1.5VP

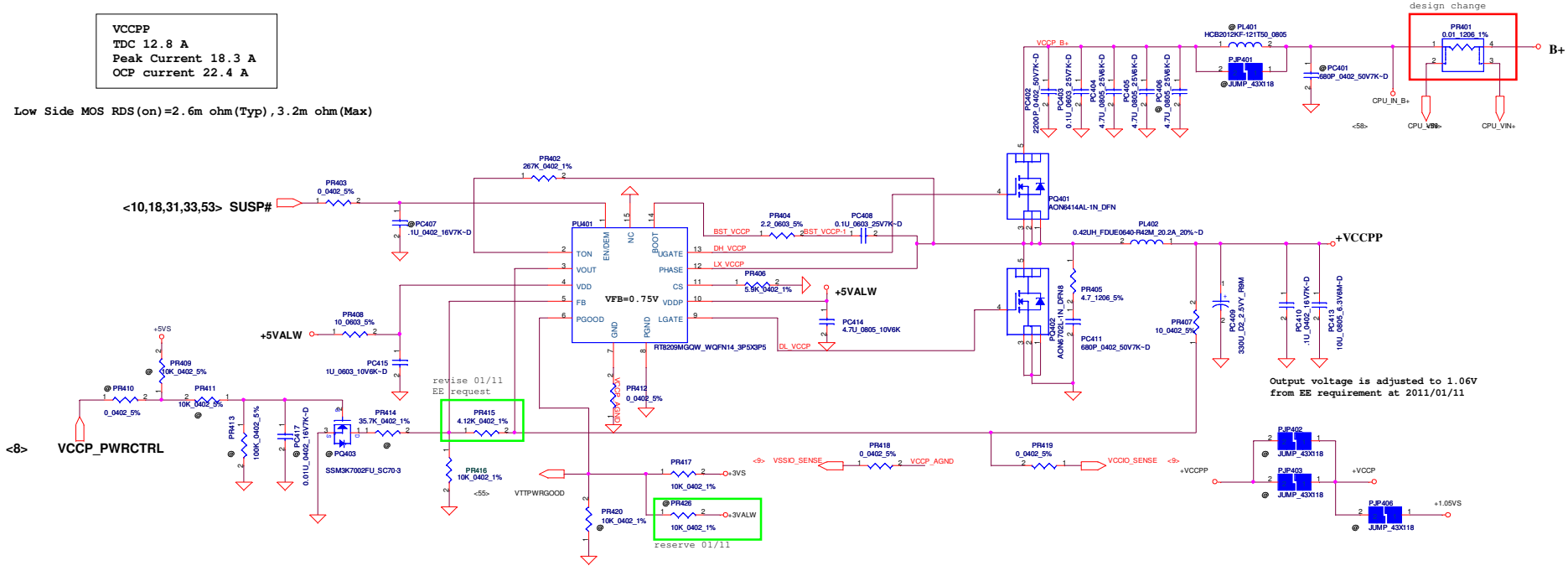
Size: C | Document Number: LA-6801P | Rev: 1.0

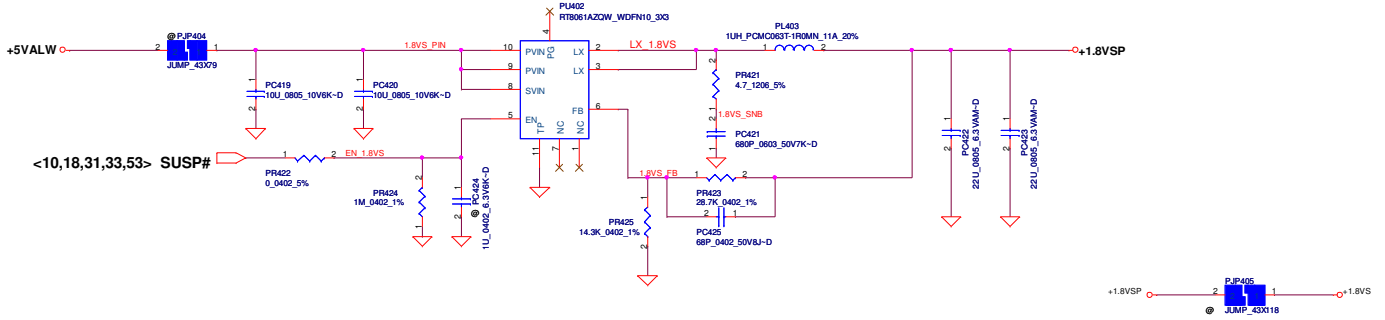
Date: Tuesday, January 25, 2011 | Sheet 53 of 61

VCCPP
TDC 12.8 A
Peak Current 18.3 A
OCP current 22.4 A

Low Side MOS RDS(on)=2.6m ohm(Typ),3.2m ohm(Max)

revise 10/25
design change





1.8VSP
TDC 1.25 A
Peak Current 1.75 A
OCP current 4 A

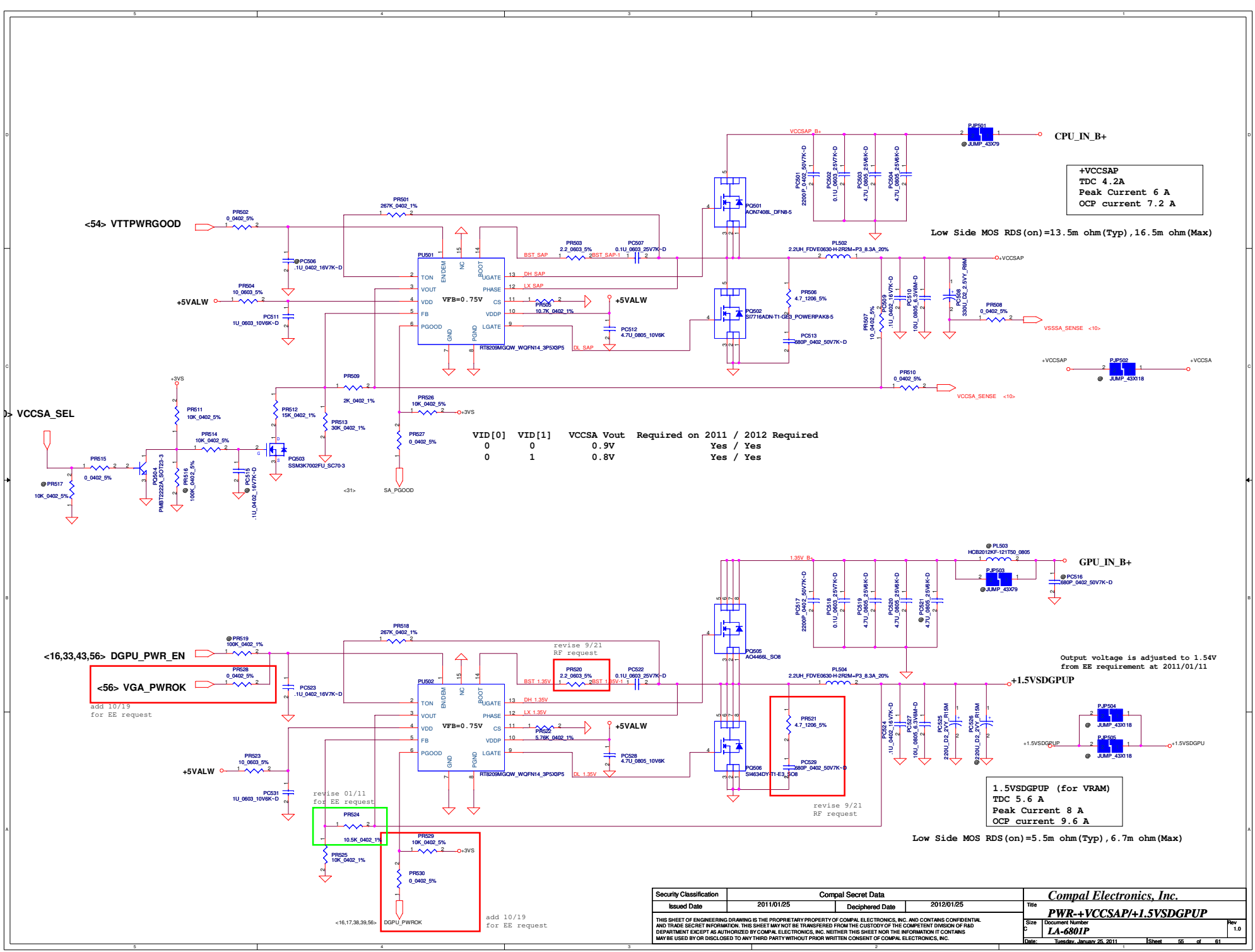
Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: PWR+VCCPP/+1.8VSP

Size: C | Document Number: LA-6801P | Rev: 1.0

Date: Tuesday, January 25, 2011 | Sheet 54 of 61



Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: PWR-+VCCSAP/+1.5VSDGPUP

Size	Document Number	Rev
C	LA-6801P	1.0

Date: Tuesday, January 25, 2011 Sheet 55 of 61

N12E-GE-B
(N11E-GE for SSI)

GPU_VID1	GPU_VID0	VGA_CORE
1	1	0.825V
0	0	0.875V
0	1	0.925V

add 10/19
for EE request

add 10/19
for EE request

modify 8/11

revise 10/25
design change

<16,33,43,55> DGPU_PWR_EN

<55> VGA_PWROK

<16,17,38,39,55> DGPU_PWROK

<40> +NVVDD_SENSE

+VGA_CORE

不行線from output Bulk Cap

<40> GND_SENSE

Close to Phase1 Choke PL18

VGA_CORE
TDC 36.8 A
Peak Current 46 A
OCP current 55 A
Cesr=9 mOHM
DCR=1.48 mOHM+-7%

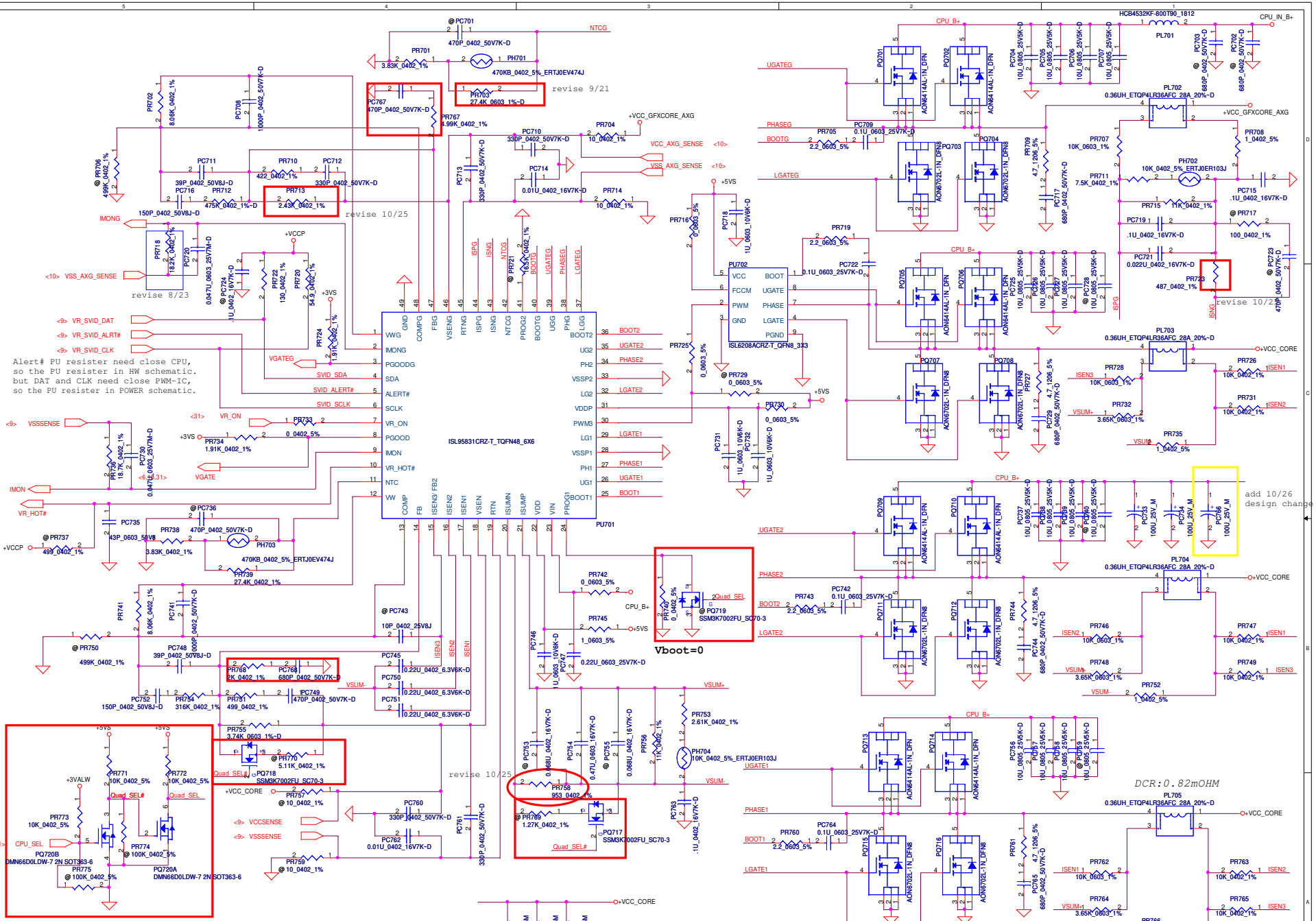
Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: VGA_CORE

Size: C | Document Number: LA-6801P | Rev: 1.0

Date: Tuesday, January 25, 2011 | Sheet 56 of 61


ISL95831CRZ-T_TQFN48_6X6
PU701
ISL6208ACRZ-T_QFN8_3X3
PU702
Alert# PU resister need close CPU,
so the PU resister in HW schematic.
but DAT and CLK need close PWM-IC,
so the PU resister in POWER schematic.
revise 9/21
revise 10/25
revise 8/23
revise 10/25
revise 10/25
add 10/26
design change
Vboot=0
DCR:0.82mOHM
Quad & Dual CORE selection
CORE | CPU_SEL | Quad_SEL | Quad_SEL# | PR758//PR769 | PR755//PR770 | PROG1
Dual | L | L | H | TBD | TBD | 4.32k
Quad (Default) | H | H | L | 953 | 3.74k | 0
Security Classification | Compal Secret Data
Issued Date | 2011/01/25 | Deciphered Date | 2012/01/25
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Title: PWR-CPU_CORE
Size: Custom | Document Number: LA-6801P | Rev: 1.0
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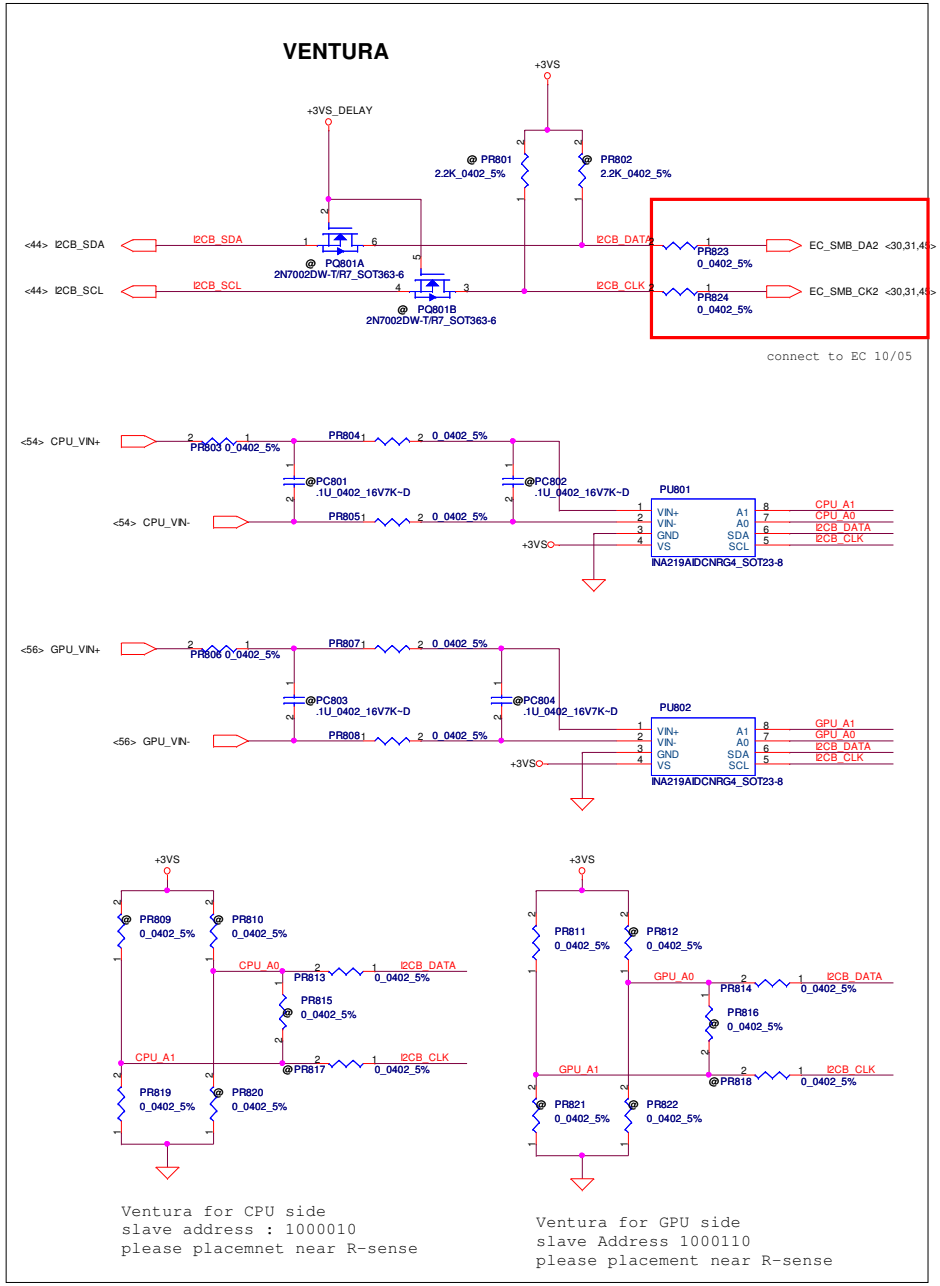

Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

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Title: VENTURA

Size: Custom | Document Number: LA-6801P | Rev: 1.0

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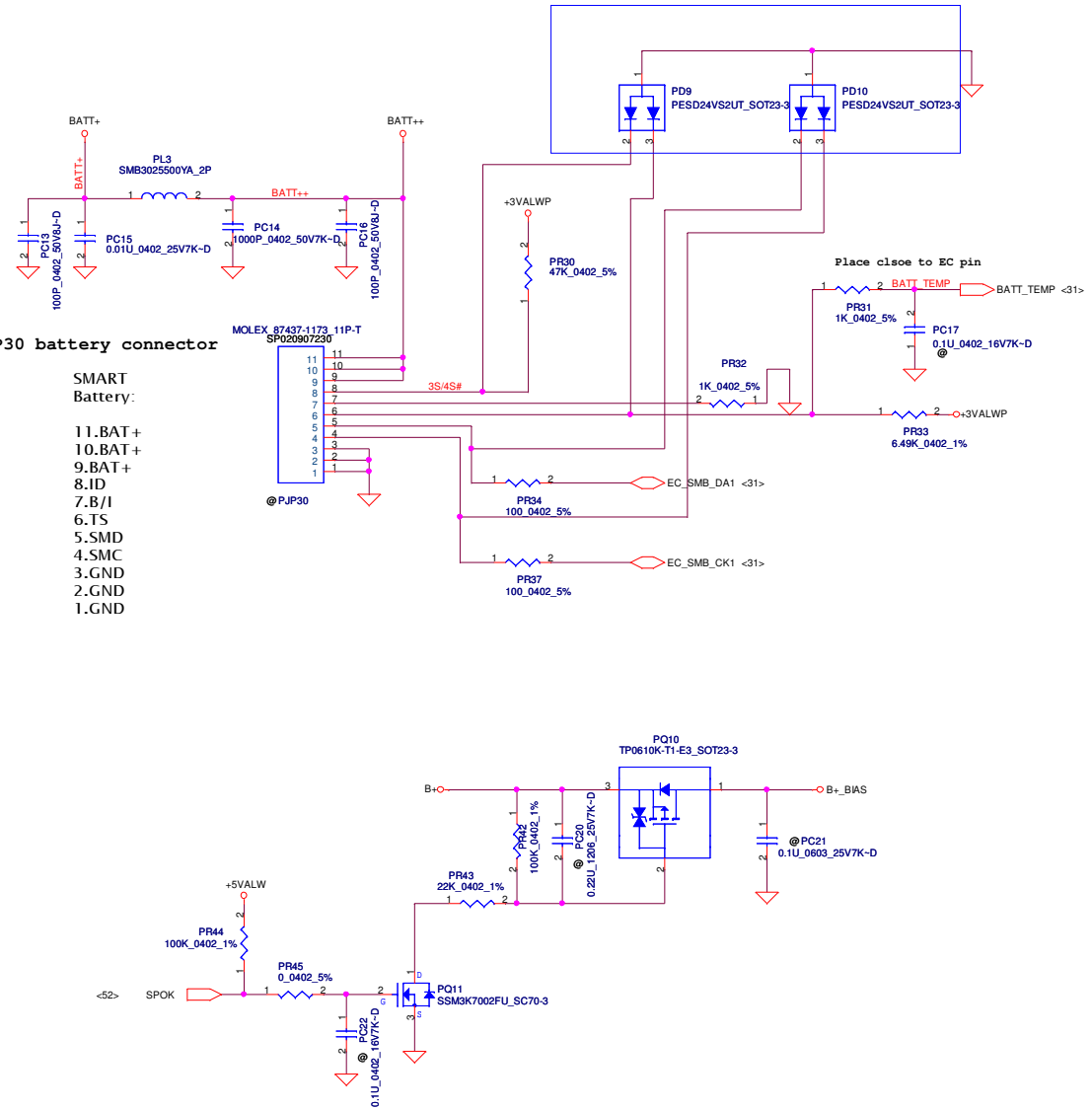
revise 8/09
ESD request



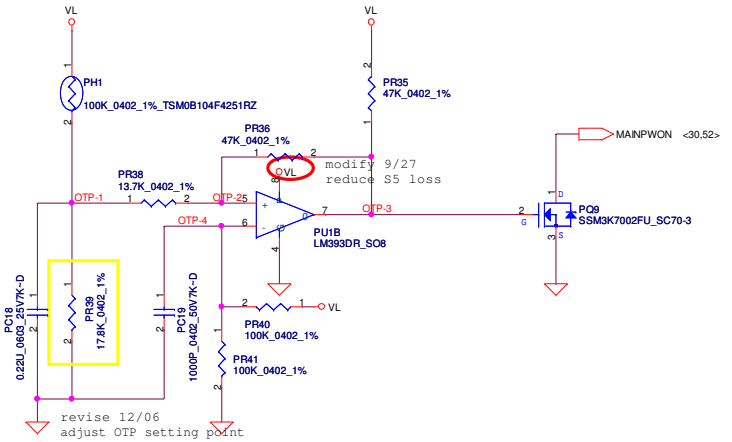
PJP30 battery connector

SMART
Battery:

11.BAT+
10.BAT+
9.BAT+
8.ID
7.B/I
6.TS
5.SMD
4.SMC
3.GND
2.GND
1.GND

Battery Connect/OTP

PH1 under CPU botten side :
CPU thermal protection at 90 degree C
Recovery at 50 degree C



Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: ***PWR-BATTERY CONN***

Size	Document Number	Rev
Custom	*LA-6801P*	1.0

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

Item	Page#	Title	Date	Request Owner	Issue Description	Solution Description	Rev.
1	50	PWR-DCIN / Vin Detector	10/09/17	COMPAL	reduce S5 loss	add PU2;PR27;PC11;PC12	0.2
2	55	+VCCSAP/+1.5VSDGPUP	10/09/21	COMPAL	RF request	add PR521;PC529 change PR520 from 0 to 2.2	0.2
3	57	+CPU_CORE	10/09/21	COMPAL	design change	change PR703 from 0 to 27.4K	0.2
4	51	CHARGER	10/10/06	COMPAL	design change	change PC131 from 0.1u to 1u	0.2
5	50	PWR-DCIN / Vin Detector	10/10/07	COMPAL	design change	add PQ12;PC23	0.2
6	54	+VCCPP/+1.8VSP	10/10/07	COMPAL	design change	modify 1.8VSP solution	0.2
7	51	CHARGER	10/10/19	COMPAL	EMI request	add PC126;PC128	0.2
8	55	+VCCSAP/+1.5VSDGPUP	10/10/19	COMPAL	EE request	add PR528;PR529;PR530 del PR519	0.2
9	56	+VGA_CORE	10/10/19	COMPAL	EE request	add PR647;PR648 del PR603;PR604	0.2
10	51	CHARGER	10/10/25	COMPAL	design change	change PR114 from 47K to 0	0.2
11	54	+VCCPP/+1.8VSP	10/10/25	COMPAL	design change for use ventura curcuit	change PR401 from 0 to 0.01	0.2
12	56	+VGA_CORE	10/10/25	COMPAL	design change for use ventura curcuit	change PR601 from 0 to 0.01	0.2
13	57	+CPU_CORE	10/10/25	COMPAL	change CPU OCP setting	change PR758 from 887 to 953	0.2
14	57	+CPU_CORE	10/10/25	COMPAL	change GFX OCP & LL setting	change PR723 from 442 to 487 change PR713 from 2.61K to 2.43K	0.2
15	57	+CPU_CORE	10/10/25	COMPAL	quad & dual core CPU switch setting design	add PQ717;PQ718;PQ720;PR771;PR772;PR773;PR767;PR768;PC767;PC768	0.2
16	58	VENTURA	10/10/25	COMPAL	add ventura connect to EC	add PU801;PU802;PR803;PR804;PR805;PR806;PR807;PR808	0.2
						;PR811;PR813;PR814;PR819;PR823;PR824	0.2
17	57	+CPU_CORE	10/10/26	COMPAL	design change for solve acoustic issue	add PC766	0.3
18	52	3VALWP/5VALWP	10/10/27	COMPAL	design change for reserve adjust working frequency	add PR222	0.3
19	59	BATTERY CONN	10/12/06	COMPAL	adjust OTP setting point	change PR39 from 16.9K to 17.8K	0.3
20	50	PWR-DCIN / Vin Detector	10/12/13	COMPAL	design change for delete prechange circuit	del PR1;PR2;PR3;PR4;PR5;PR6;PR7;PD1;PD2;PQ1;PQ2;PQ3	0.3
21	51	CHARGER	10/12/13	COMPAL	design change for delete prechange circuit	del PR104;PQ110 add PR102	0.3
22	53	+1.5VP/+0.75VSP/+1.5VSP	10/12/13	COMPAL	EE request for use memory over clocking circuit	add PR312;PR318	0.3
23	53	+1.5VP/+0.75VSP/+1.5VSP	10/12/20	COMPAL	design change for adjust original output voltage	swap PR314;PR317 and PR320;PR323	0.4
24	51	CHARGER	10/12/21	COMPAL	design change for delete prechange circuit	del PC109	0.4
25	50	PWR-DCIN / Vin Detector	11/01/06	COMPAL	design change for add AC peak power function	add PR25	0.4
26	54	+VCCPP/+1.8VSP	11/01/11	COMPAL	EE request for adjust output voltage	change PR415 from 4.02K to 4.12K	0.4
27	55	+VCCSAP/+1.5VSDGPUP	11/01/11	COMPAL	EE request for adjust output voltage	change PR524 from 10K to 10.5K	0.4
28	51	CHARGER	11/01/20	COMPAL	EMI request	add PL102	0.4
29	52	3VALWP/5VALWP	11/01/20	COMPAL	EMI request	add PL204	0.4

Security Classification	Compal Secret Data		
Issued Date	2011/01/25	Deciphered Date	2012/01/25

Compal Electronics, Inc.

Title: PWR-PIR

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

Item	Page#	Title	Date	Request Owner	Issue Description	Solution Description	Rev.
1	23	Card Reader RTS5209	10/11/26	COMPAL	Add a cardreader conn JERAD1 to co-lay for 2nd source ALPS.	The requirement from ME	0.3
2	33	DC/DC Interface	10/11/29	COMPAL	Net name changed from +1.5V_D to +3V_USB	The discharge circuit for power rail +3V of USB3.0	0.3
3	29	PWRBTN/SCREWH/KB	10/12/01	COMPAL	footprints changed from H_2P7 to H_3P0	The requirement from ME	0.3
4	31	EC ENE-KB930/ ENE3810	10/12/06	COMPAL	Add a net CP_SEL link U620.2 to PQ115.2	The requirement from PWR	0.3
5	31	EC ENE-KB930/ ENE3810	10/12/07	COMPAL	Remove the net 3S/4S# from U34.103 to PJP30	to avoid EC damaged by ESD. Fix issue DF434042 (2) [S_PT] Memory Matrix test, system 7 beeps error	0.3
6	31	EC ENE-KB930/ ENE3810	10/12/07	COMPAL	Add a cap. 20p_0402 on XCLK0 of KB930	to follow the suggestion from ENE	0.3
7	16	PCH (4/8) PCI, USB, NVRAM	10/12/07	COMPAL	GPIO10 changed to GPIO14 for USB3_SMI#	for common design with Voyager	0.3
8	10	PROCESSOR(6/6) PWR,VSS	10/10/19	COMPAL	BOM changed for QC4, Maximum derateing changed from 12V to 20V	safe to pass derateing	0.3
9	27	+VGA_CORE	10/10/19	COMPAL	Del RI22,RI27, Add RI21,RI25	power rail changed from +vs to +valw to fix issue can't wake from S3 by port of USB3.0	0.3
10	13	CHARGER	10/10/25	COMPAL	Del RH260,RH261	The requirement from PWR	0.3
11	10	PROCESSOR(6/6) PWR,VSS	10/10/25	COMPAL	BOM changed for CC176, Maximum derateing changed from 2V to 2.5V	safe to pass derateing	0.3
12	21	VGA / LVDS /camera conn.	10/10/25	COMPAL	Add FV3, Del R2012	The requirement from Safty	0.3
13	39	HDMI	10/10/25	COMPAL	Add FV2, Del RV10	The requirement from Safty	0.3
14	38	Mini Display Port	10/10/25	COMPAL	BOM changed for QV9	The requirement from Sourcer.(Fairchild support no good)	0.3
15	31	EC ENE-KB930/ ENE3810	10/10/25	COMPAL	BOM changed for R225	for Board ID changed	0.3
16	22	GLAN AR8151 AL1A/ RJ45	10/10/25	COMPAL	BOM changed for CL39	for shortage	0.3
17	21	VGA / LVDS /camera conn.	10/10/26	COMPAL	BOM changed for L31,L32,L103,C540,C541,C542,C537,C538,C539	The requirement from EMC for CRT	0.3
18	18	PCH (6/8) PWR	10/10/27	COMPAL	Del RH211, Add RH212	+VCCAFDI_VRM come from +1.5VS changed to U47 LDO_VOUT	0.3

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Title: HW-PIR

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