Compal confidential

ISKAA LA-3481P Schematics Document

Mobile Merom uFCPGA with Intel Crestline_PM+ICH8-M core logic

2007-06-23

REV:2.0A

Security Classification	Compal Secret Data		
Issued Date	2006/08/05	Deciphered Date	2007/08/05

Compal Electronics, Inc.		
Title: Cover Sheet		
Size: D	Document Number: LA-3481P	Rev: 2.0
Date: Saturday, June 23, 2007	Sheet 1 of 47	

Compal confidential

Model : ISKAA

File Name : LA-3481P

Santa Rosa Platform

ISKAA Sub-board
- ATI VGA/B LS-3481P Rev 1.0
- ATI VGA/B LS-3486P Rev 1.0
- SW/B LS-3482P Rev 1.0
- CRT/B LS-3483P Rev 1.0
- USB/B LS-3484P Rev 1.0
- Robson/B LS-3445P Rev 1.0
- Finger Print/B LS-3401P Rev 1.0

Fan Control page 4

Mobile Merom uFCPGA-478 CPU page 4,5,6

Thermal Sensor ADM1032ARMZ page 4

Clock Generator ICS 9LPR365 page 16

H_A#(3..35) H_D#(0..63)

FSB 667/800MHz 1.05V

HDMI Conn page 18

LCD Conn. page 19

CRT & TV-out page 17

Intel Crestline MCH FCBGA 1299 page 7,8,9,10,11,12,13

DDR2 667MHz 1.8V Dual Channel

DDR2-SO-DIMM X2 BANK 0, 1, 2, 3 page 14,15

ATI M72/76 with 256/512 VRAM

VGA/B Conn. page 19

PCI-Express x 16

Mini-Card 3G page 31

USB port 7

New Card socket page 30

3.3V 48MHz

DMI X4

Int. Camera USB x 1 page 33

USB x 2 conn page 33

USB/B conn page 33

USB2.0 Bluetooth Conn page 33

USB port 2

USB port 4, 5

USB port 0, 1

USB port 8

USB

3.3V 480MHz

USB port 9

PCI-E BUS

2.5GHz

Intel ICH8-M mBGA-676 page 20,21,22,23

Azalia

SATA 1.5GHz

PATA

3.3V 24.576MHz/48Mhz

USB port 6

USB1.1 Finger Printer page 33

Tweeter/HP Amplifier & Int-Mic APA2056 page 28

10/100/1000 LAN RTL8111B/RTL8101E page 26

Mini-Card Robson page 31

Mini-Card WLAN page 31

PCI BUS 3.3V 33 MHz

3.3V ATA-100

MDC V1.5 page 30

HD Audio Codec ALC268 page 27

RJ45/11 CONN page 26

LPC BUS 3.3V 33 MHz

CardBus Controller TI PCI8412 page 24,25

SATA 0

SATA HDD Connector page 32

SATA 1

SATA HDD Connector page 32

Audio Jack page 28

LED page 34

RTC CKT. page 21

Slot 0 page 25

1394 port page 24

5in1 Slot page 24

ENE KB926 page 29

Power On/Off CKT. page 34

DC/DC Interface CKT. page 35

PATA Slave

PATA ODD Connector page 32

Touch Pad page 34

Int.KBD page 34

SPI BIOS page 34

CIR page 33

Power Circuit DC/DC Page 36~43

Security Classification	Compal Secret Data		
Issued Date	2006/08/05	Deciphered Date	2007/08/05

Compal Electronics, Inc.

Title: **Block Diagram**

Size | Document Number: LA-3481P | Rev: 2.0

Date: Tuesday, May 22, 2007 | Sheet 2 of 47

Voltage Rails

Power Plane	Description	S0-S1	S3	S5
VIN	Adapter power supply (18.5V)	N/A	N/A	N/A
B+	AC or battery power rail for power circuit	N/A	N/A	N/A
+VCC_CORE	Core voltage for CPU	ON	OFF	OFF
+0.9VS	0.9V switched power rail for DDRII Vtt	ON	OFF	OFF
+1.05VS	1.05V power rail for Processor I/O and MCH/ICH core power	ON	OFF	OFF
+1.25VS	1.25V power rail for MCH/ICH core power	ON	OFF	OFF
+1.5VS	1.5V switched power rail for PCI-E interface	ON	OFF	OFF
+1.8V	1.8V power rail for DDRII	ON	ON	OFF
+1.8VS	1.8V switched power rail	ON	OFF	OFF
+2.5VS	2.5V switched power rail for MCH video PLL	ON	OFF	OFF
+3VALW	3.3V always on power rail	ON	ON	ON*
+3VS	3.3V switched power rail	ON	OFF	OFF
+5VALW	5V always on power rail	ON	ON	ON*
+5VS	5V switched power rail	ON	OFF	OFF
+RTC_VCC	RTC power	ON	ON	ON

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

External PCI Devices

DEVICE	PCI Device ID	IDSEL #	REQ/GNT #	PIRQ
1394	D0	AD20	2	A,B,C,D
CARD BUS	D4	AD20	2	A,B,C,D
5IN1	D4	AD20	2	A,B,C,D

KB926 I2C / SMBUS ADDRESSING

DEVICE	HEX	ADDRESS
SM1 24C16	A0H	1 0 1 0 0 0 0 X b
SM1 SMART BATTERY	16H	0 0 0 1 0 1 1 X b
SM2 ADM0132 CPU THERMAL MONITOR	98H	1 0 0 1 1 0 0 X b

ICH8-M SM Bus address

DEVICE	HEX	ADDRESS
DDR SO-DIMM 0	A0	1 0 1 0 0 0 0 0
DDR SO-DIMM 1	A4	1 0 1 0 0 1 0 0
CLOCK GENERATOR (EXT.)	D2	1 1 0 1 0 0 1 0

Board ID / SKU ID Table for AD channel

Vcc	3.3V +/- 5%
Ra/Rc/Re	100K +/- 1%

Board ID	Rb / Rd / Rf	VAD_BID min	VAD_BID typ	VAD_BID max
0	0	0 V	0 V	0.100 V
1	8.2K +/- 1%	0.216 V	0.250 V	0.289 V
2	18K +/- 1%	0.436 V	0.503 V	0.538 V
3	33K +/- 1%	0.712 V	0.819 V	0.875 V
4	56K +/- 1%	1.036 V	1.185 V	1.264 V
5	100K +/- 1%	1.453 V	1.650 V	1.759 V
6	200K +/- 1%	1.935 V	2.200 V	2.341 V
7	NC	2.500 V	3.300 V	3.300 V

BOARD ID Table

Board ID	PCB Revision
0	0.1
1	0.2
2	0.3
3	0.4
4	1.0
5	2.0
6	2A
7	

SKU ID Table

SKU ID	SKU
0	10
1	10G
2	
3	
4	
5	
6	
7	

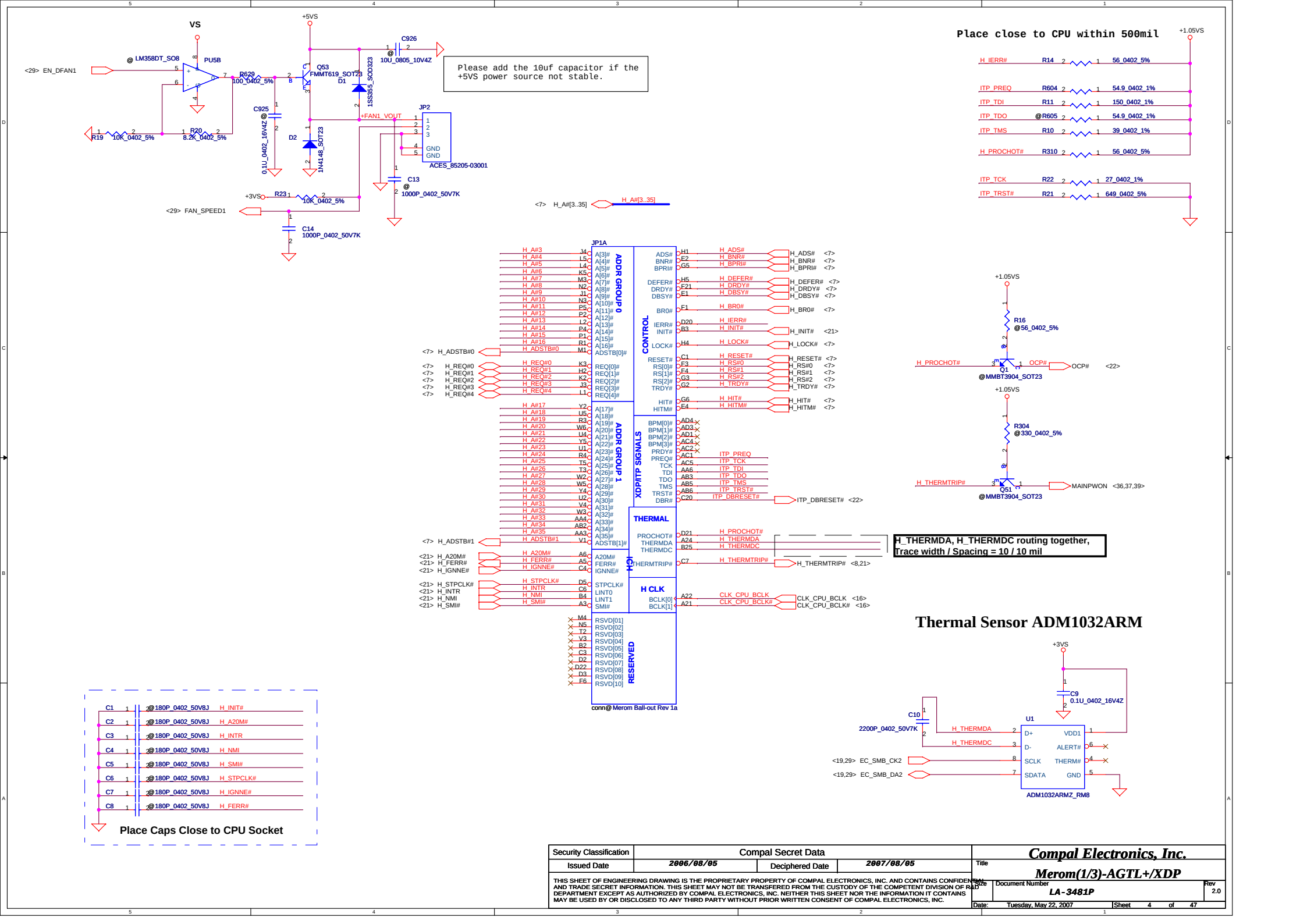
BTO Option Table

BTO Item	BOM Structure
2nd HDD	2HDD@
LAN	100M@ 1000M@
WLAN	WLAN@
NB	GM@ PM@
BT	BT@
MIC	MIC@
CIR	CIR@
FINGER PRINT	FP@
HDMI	HDMI@
Camera	Camera@
Robson	Robson@
Express Card	NEWCARD@
HD-DVD	3G@

USB PORT LIST

PORT	DEVICE
0	RIGHT USB Port (Samll Board)
1	RIGHT USB Port (Samll Board)
2	3G Card
3	N.C.
4	LEFT USB Port
5	LEFT USB Port
6	Fingerprint or Felica
7	Blue Tooth
8	Internal Camera
9	New Card

Security Classification	Compal Secret Data		Compal Electronics, Inc.
Issued Date	2006/08/05	Deciphered Date 2007/08/05	Title: Notes List
			Size: B Document Number: LA-3481P Rev: 2.0
			Date: Tuesday, May 22, 2007 Sheet 3 of 47



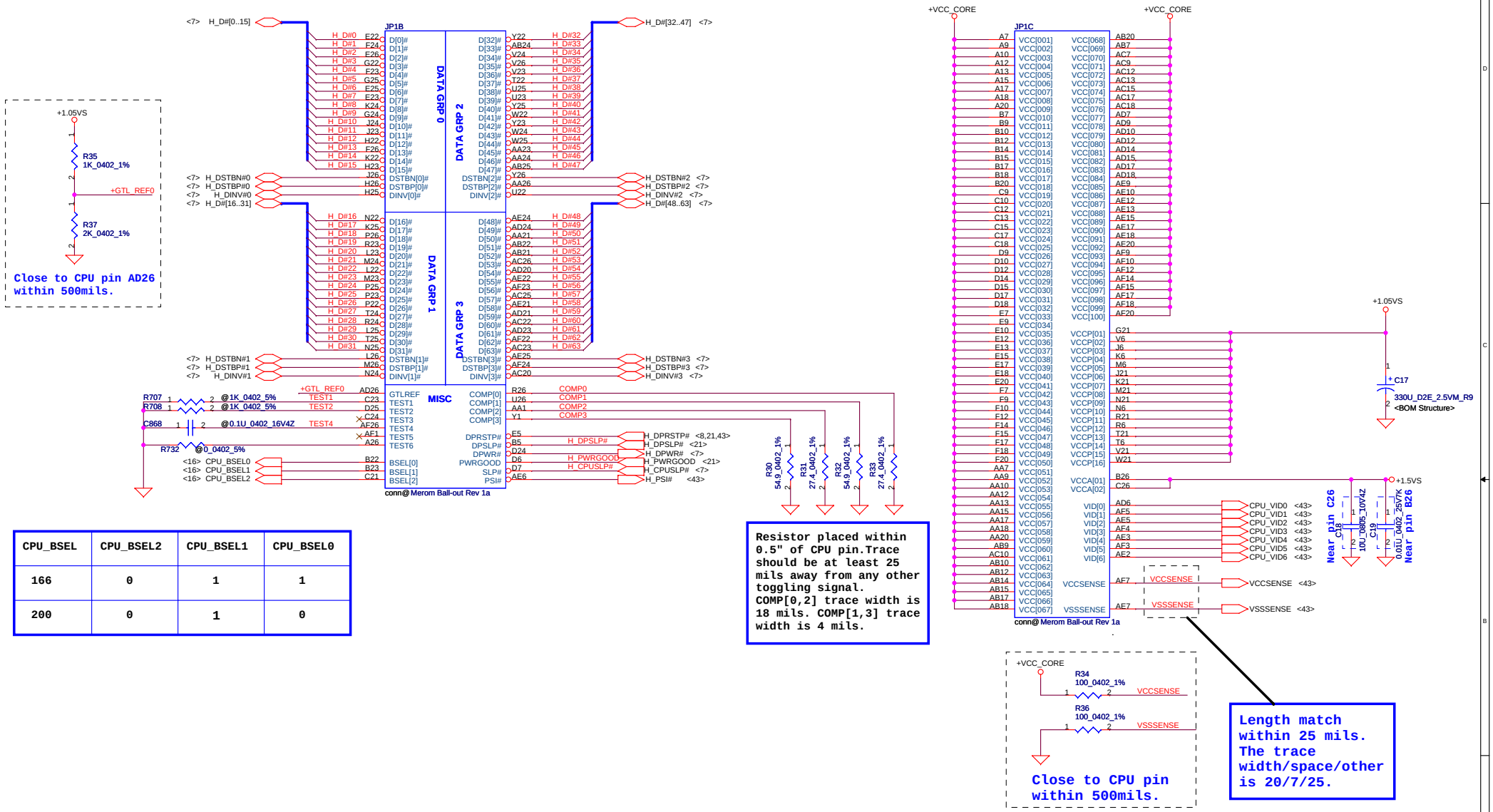
Security Classification	Compal Secret Data		
Issued Date	2006/08/05	Deciphered Date	2007/08/05

Compal Electronics, Inc.

Title: Merom(1/3)-AGTL+/XDP

Size: | Document Number: LA-3481P | Rev: 2.0

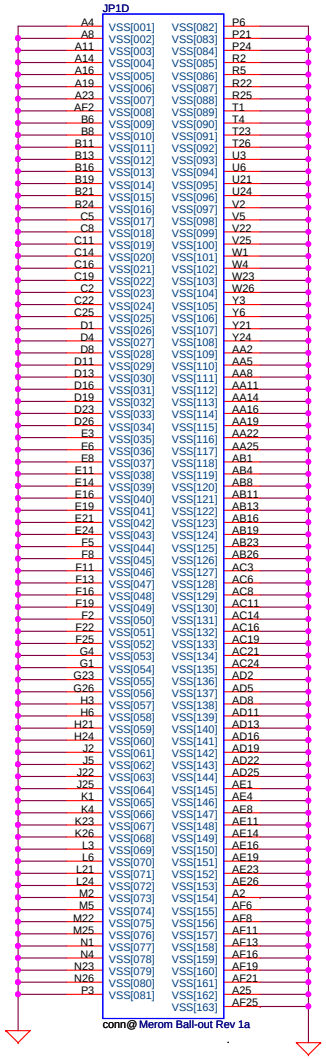
Date: Tuesday, May 22, 2007 | Sheet 4 of 47

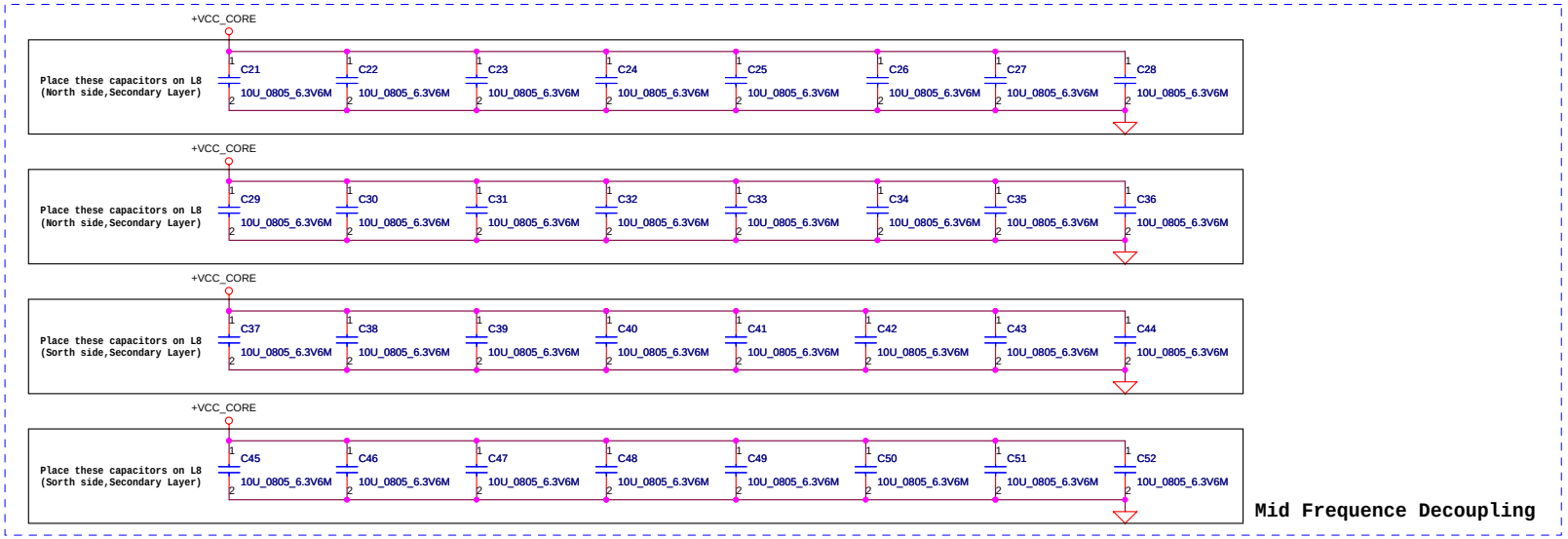


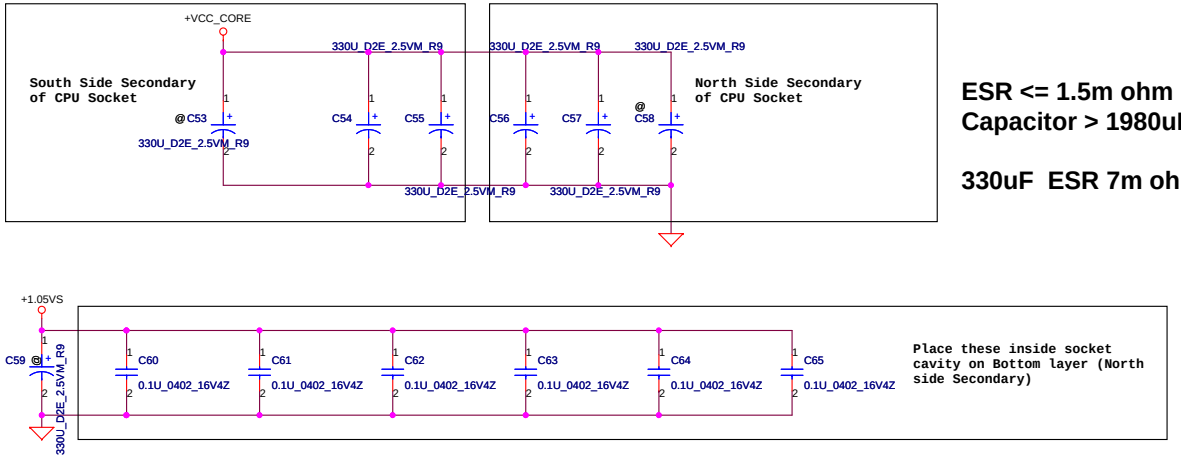
CPU_BSEL	CPU_BSEL2	CPU_BSEL1	CPU_BSEL0
166	0	1	1
200	0	1	0

Security Classification	Compal Secret Data		
Issued Date	2006/08/05	Deciphered Date	2007/08/05

Compal Electronics, Inc.			
Title: Merom(2/3)-AGTL+/PWR			
Size	Document Number: LA-3481P		Rev: 2.0
Date: Tuesday, May 22, 2007	Sheet 5 of 47		

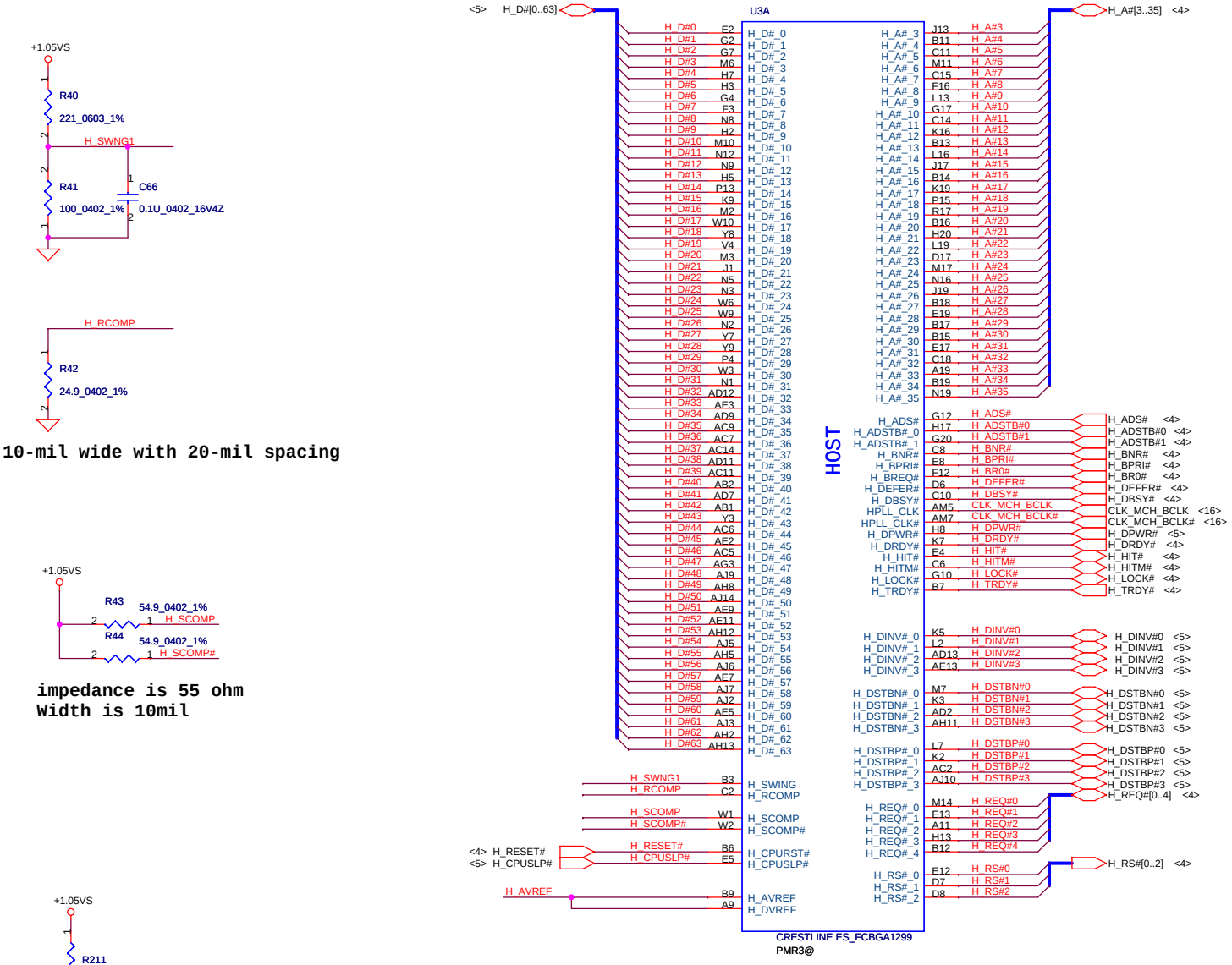






Security Classification	Compal Secret Data		
Issued Date	2006/08/05	Deciphered Date	2007/08/05

Compal Electronics, Inc.			
Title: Merom(3/3)-GND&Bypass			
Size: D	Document Number: LA-3481P		Rev: 2.0
Date: Tuesday, May 22, 2007	Sheet 6 of 47		



Security Classification	Compal Secret Data		
Issued Date	2006/08/05	Deciphered Date	2007/08/05

Compal Electronics, Inc.

Title	Crestline (1/7)		
Size	Document Number LA-3481P		Rev 2.0
Date: Tuesday, May 22, 2007	Sheet 7 of 47		

Strap Pin Table

CFG[2:0]	011 = 667MT/s FSB 010 = 800MT/s FSB
CFG5	0 = DMI x 2 1 = DMI x 4 * (Default)
CFG9	0 = Lane Reversal Enable 1 = Normal Operation * (Default)
CFG[13:12]	00 = Reserved 01 = XOR Mode Enabled 10 = All Z Mode Enabled 11 = Normal Operation * (Default)
CFG16	0 = Dynamic ODT Disabled 1 = Dynamic ODT Enabled * (Default)
CFG19	0 = Normal Operation 1 = DMI Lane Reversal Enable *(Default)
CFG20 (PCIE/SDVO select)	0 = Only PCIE or SDVO is operational. * (Default) 1 = PCIE/SDVO are operating simu.
SDVO_CTRLDATA	0 = No SDVO Device Present * (Default) 1 = SDVO Device Present

MCH_CFG_5 R51 @4.02K_0402_1%
MCH_CFG_9 R53 @4.02K_0402_1%
MCH_CFG_12 R55 @4.02K_0402_1%
MCH_CFG_13 R56 @4.02K_0402_1%
MCH_CFG_16 R57 @4.02K_0402_1%
MCH_CFG_19 R58 4.02K_0402_1% +3VS
MCH_CFG_20 R60 @4.02K_0402_1%

Intel recommend 4.02K_1%

CFG[17:3] have internal pull up

CFG[19:18] have internal pull down

Refer Strap Pin Table

+1.05VS R733 @56_0402_5%

<5,21,43> H_DPRSTP#
<22> PM_BMBUSY# R66 0_0402_5% PM_BMBUSY# R G41
R67 0_0402_5% H_DPRSTP# R L39
PM_EXTTS#0 L36
<14> PM_EXTTS#0 R68 0_0402_5% PM_EXTTS#1 R J36
<15> PM_EXTTS#1
<22,29> PWROK AW49
R70 100_0402_5% MCH_RSTIN# AV20
<20,22,26,30,31> PLT_RST# H_THERMTRIP# N20
<4,21> H_THERMTRIP#
<22,43> DPRSLPVR R71 0_0402_5% PM_DPRSLPVR_R G36

+3VS
R62 10K_0402_5% PM_EXTTS#0
R63 10K_0402_5% PM_EXTTS#1_R
R65 10K_0402_5% MCH_CLKREQ#

U3B

RSVD: P36 RSVD1, P37 RSVD2, R35 RSVD3, N35 RSVD4, AR12 RSVD5, AR13 RSVD6, AM12 RSVD7, AN13 RSVD8, J12 RSVD9, AR37 RSVD10, AM36 RSVD11, AL36 RSVD12, AM37 RSVD13, D20 RSVD14

RSVD MUXING: H10 RSVD20, B51 RSVD21, BJ20 RSVD22, BK22 RSVD23, BF19 RSVD24, BH20 RSVD25, BK18 RSVD26, BJ18 RSVD27, BF23 RSVD28, BG23 RSVD29, BC23 RSVD30, BD24 RSVD31, BJ29 RSVD32, BE24 RSVD33, BH39 RSVD34, AW20 RSVD35, BK20 RSVD36, C48 RSVD37, D47 RSVD38, B44 RSVD39, C44 RSVD40, A35 RSVD41, B37 RSVD42, B36 RSVD43, B34 RSVD44, C34 RSVD45

<14> DDRA_SMA14
<15> DDRB_SMA14
DDRA_SMA14
DDRB_SMA14

DDR:
SM_CK_0 AV29 DDRA_CLK0 <14>
SM_CK_1 BB23 DDRA_CLK1 <14>
SM_CK_3 BA25 DDRB_CLK0 <15>
SM_CK_4 AV23 DDRB_CLK1 <15>
SM_CK#_0 AW30 DDRA_CLK0# <14>
SM_CK#_1 BA23 DDRA_CLK1# <14>
SM_CK#_3 AW25 DDRB_CLK0# <15>
SM_CK#_4 AW23 DDRB_CLK1# <15>
SM_CKE_0 BF29 DDRA_CKE0 <14>
SM_CKE_1 AY32 DDRA_CKE1 <14>
SM_CKE_3 BD39 DDRB_CKE0 <15>
SM_CKE_4 BG37 DDRB_CKE1 <15>
SM_CS#_0 BG20 DDRA_SCS0# <14>
SM_CS#_1 BK16 DDRA_SCS1# <14>
SM_CS#_2 BG16 DDRB_SCS0# <15>
SM_CS#_3 BE13 DDRB_SCS1# <15>
SM_ODT_0 BH18 DDRA_ODT0 <14>
SM_ODT_1 BJ15 DDRA_ODT1 <14>
SM_ODT_2 BJ14 DDRB_ODT0 <15>
SM_ODT_3 BE16 DDRB_ODT1 <15>
SM_RCOMP BL15 SMRCOMPP
SM_RCOMP# BK14 SMRCOMPN
SM_RCOMP_VOH BK31 SM_RCOMP_VOH
SM_RCOMP_VOL BL31 SM_RCOMP_VOL
SM_VREF_0 AR49
SM_VREF_1 AW4 SM_VREF

CLK:
DPLL_REF_CLK B42 CLK_DREF_96M CLK_DREF_96M <16>
DPLL_REF_CLK# C42 CLK_DREF_96M# CLK_DREF_96M# <16>
DPLL_REF_SSCLK H48 CLK_DREF_SSC CLK_DREF_SSC <16>
DPLL_REF_SSCLK# H47 CLK_DREF_SSC# CLK_DREF_SSC# <16>
PEG_CLK K44 CLK_MCH_3GPLL CLK_MCH_3GPLL <16>
PEG_CLK# K45 CLK_MCH_3GPLL# CLK_MCH_3GPLL# <16>

<16> MCH_CLKSEL0
<16> MCH_CLKSEL1
<16> MCH_CLKSEL2
MCH_CLKSEL0 P27
MCH_CLKSEL1 N27
MCH_CLKSEL2 N24

CFG: CFG_0, CFG_1, CFG_2, C21 CFG_3, C23 CFG_4, MCH_CFG_5 F23 CFG_5, N23 CFG_6, G23 CFG_7, J20 CFG_8, MCH_CFG_9 C20 CFG_9, R24 CFG_10, L23 CFG_11, MCH_CFG_12 J23 CFG_12, MCH_CFG_13 F23 CFG_13, E20 CFG_14, K23 CFG_15, MCH_CFG_16 M20 CFG_16, M24 CFG_17, L32 CFG_18, MCH_CFG_19 N33 CFG_19, MCH_CFG_20 L35 CFG_20

DMI:
DMI_RXN_0 AN47 DMI_ITX_MRX_N0 DMI_ITX_MRX_N0 <22>
DMI_RXN_1 AJ38 DMI_ITX_MRX_N1 DMI_ITX_MRX_N1 <22>
DMI_RXN_2 AN42 DMI_ITX_MRX_N2 DMI_ITX_MRX_N2 <22>
DMI_RXN_3 AN46 DMI_ITX_MRX_N3 DMI_ITX_MRX_N3 <22>
DMI_RXP_0 AM47 DMI_ITX_MRX_P0 DMI_ITX_MRX_P0 <22>
DMI_RXP_1 AJ39 DMI_ITX_MRX_P1 DMI_ITX_MRX_P1 <22>
DMI_RXP_2 AN41 DMI_ITX_MRX_P2 DMI_ITX_MRX_P2 <22>
DMI_RXP_3 AN45 DMI_ITX_MRX_P3 DMI_ITX_MRX_P3 <22>
DMI_TXN_0 AJ46 DMI_MTX_IRX_N0 DMI_MTX_IRX_N0 <22>
DMI_TXN_1 AJ41 DMI_MTX_IRX_N1 DMI_MTX_IRX_N1 <22>
DMI_TXN_2 AM40 DMI_MTX_IRX_N2 DMI_MTX_IRX_N2 <22>
DMI_TXN_3 AM44 DMI_MTX_IRX_N3 DMI_MTX_IRX_N3 <22>
DMI_TXP_0 AJ47 DMI_MTX_IRX_P0 DMI_MTX_IRX_P0 <22>
DMI_TXP_1 AJ42 DMI_MTX_IRX_P1 DMI_MTX_IRX_P1 <22>
DMI_TXP_2 AM39 DMI_MTX_IRX_P2 DMI_MTX_IRX_P2 <22>
DMI_TXP_3 AM43 DMI_MTX_IRX_P3 DMI_MTX_IRX_P3 <22>

GRAPHICS VID:
GFX_VID_0 E35 R734 @22K_0402_5%
GFX_VID_1 A39 R735 @22K_0402_5%
GFX_VID_2 C38 R736 @22K_0402_5%
GFX_VID_3 B39 R737 @22K_0402_5% +3VS
GFX_VR_EN E36

PM:
PM_BM_BUSY#
PM_DPRSTP#
PM_EXT_TS#_0
PM_EXT_TS#_1
PWROK
RSTIN#
THERMTRIP#
DPRSLPVR

ME:
CL_CLK AM49 CL_CLK0 <22>
CL_DATA AK50 CL_DATA0 <22>
CL_PWROK AT43 PWROK <22,29>
CL_RST# AN49 CL_RST# <22>
CL_VREF AM50 CL_VREF

NC: BJ51 NC_1, BK51 NC_2, BK50 NC_3, BL50 NC_4, BL49 NC_5, BL3 NC_6, BL2 NC_7, BK1 NC_8, BJ1 NC_9, E1 NC_10, A5 NC_11, C51 NC_12, B50 NC_13, A50 NC_14, A49 NC_15, BK2 NC_16

MISC:
SDVO_CTRL_CLK H35
SDVO_CTRL_DATA K36 SDVO_SDAT
CLK_REQ# G39 MCH_CLKREQ#
ICH_SYNC# G40 MCH_ICH_SYNC# <22>
TEST_1 A37 MCH_TEST_1 R72 0_0402_5%
TEST_2 R32 MCH_TEST_2 R73 20K_0402_5%

CRESTLINE ES_FCBGA1299
PMR3@

+1.8V
R48 1K_0402_1%
SM_RCOMP_VOH
R49 3.01K_0402_1%
C68 2.2U_0603_6.3V6K
C69 0.01U_0402_25V7K
SM_RCOMP_VOL
R50 1K_0402_1%
C70 2.2U_0603_6.3V6K
C71 0.01U_0402_25V7K

+1.8V
SMRCOMPP R52 20_0402_1%
SMRCOMPN R54 20_0402_1%

+1.8V
R59 1K_0402_1%
SM_VREF
C72 0.1U_0402_16V4Z
R61 1K_0402_1%

+1.25VS
R64 1K_0402_1%
CL_VREF
C73 0.1U_0402_16V4Z
R69 392_0402_1%

SDVO_SDAT
PM@ 0_0402_5% R757

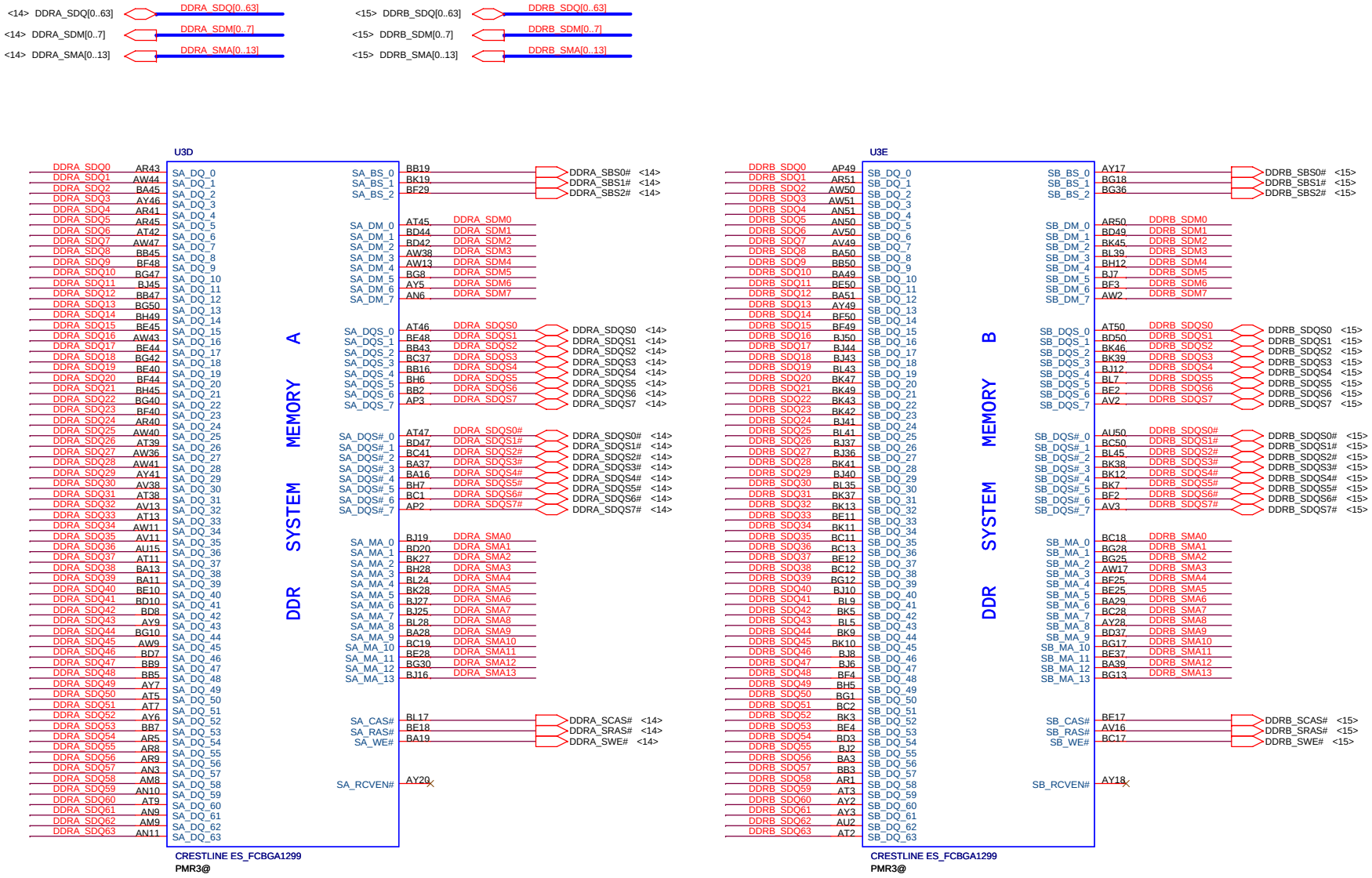
Security Classification	Compal Secret Data		
Issued Date	2006/08/05	Deciphered Date	2007/08/05

Compal Electronics, Inc.

Title: Crestline (2/7)

Size: B | Document Number: LA-3481P | Rev: 2.0

Date: Tuesday, May 22, 2007 | Sheet 8 of 47



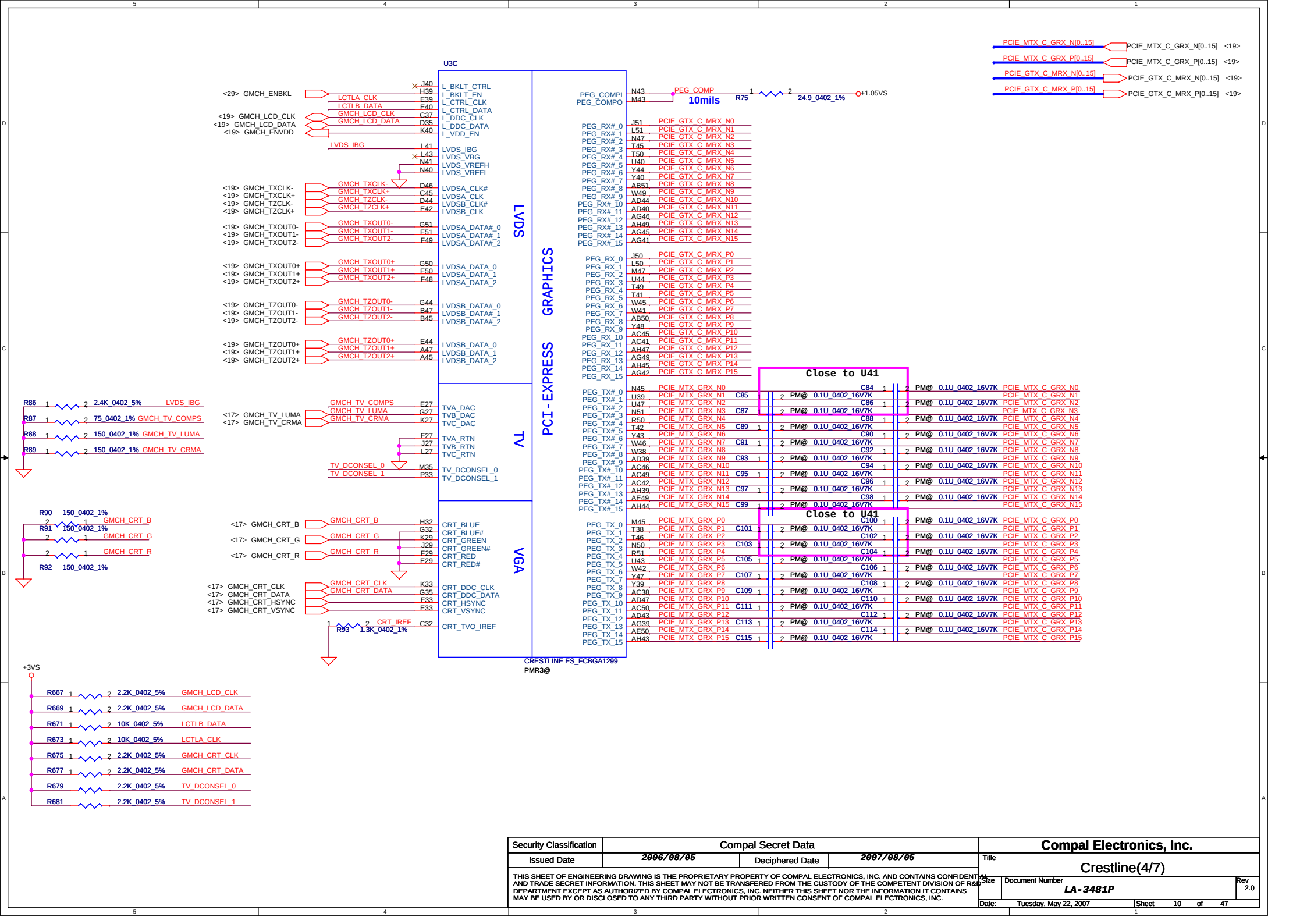
Security Classification	Compal Secret Data		
Issued Date	2006/08/05	Deciphered Date	2007/08/05

Compal Electronics, Inc.

Title: Crestline (3/7)

Size | Document Number: LA-3481P | Rev: 2.0

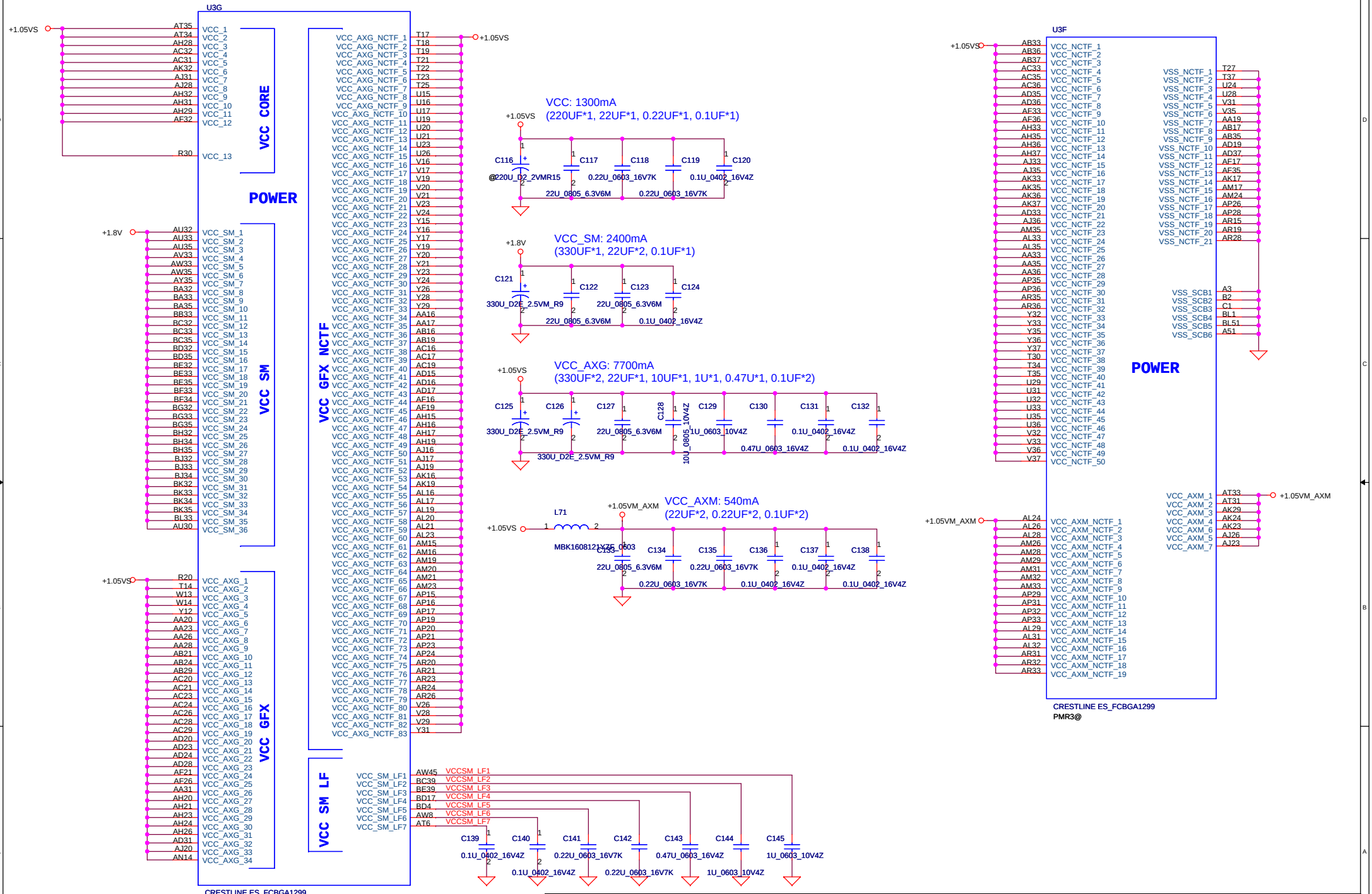
Date: Tuesday, May 22, 2007 | Sheet 9 of 47



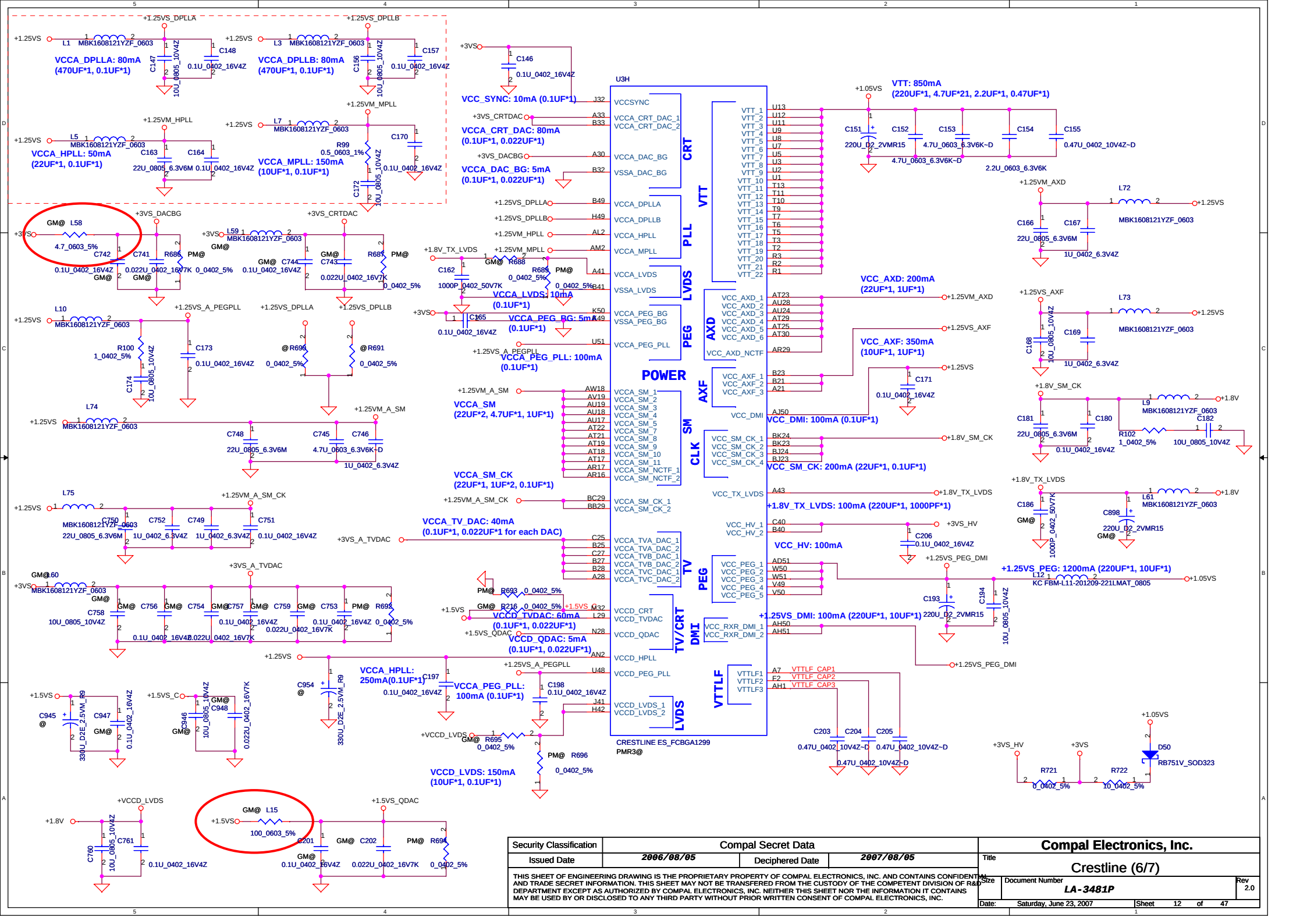
Security Classification	Compal Secret Data		Compal Electronics, Inc.
Issued Date	2006/08/05	Deciphered Date	2007/08/05

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

Title	Crestline(4/7)		
Size	Document Number LA-3481P		Rev 2.0
Date: Tuesday, May 22, 2007	Sheet 10 of 47		



Security Classification	Compal Secret Data		Compal Electronics, Inc.
Issued Date	2006/08/05	Deciphered Date	2007/08/05
Title	Crestline (5/7)		
Size	Document Number		Rev
	LA-3481P		2.0
Date:	Tuesday, May 22, 2007	Sheet	11 of 47



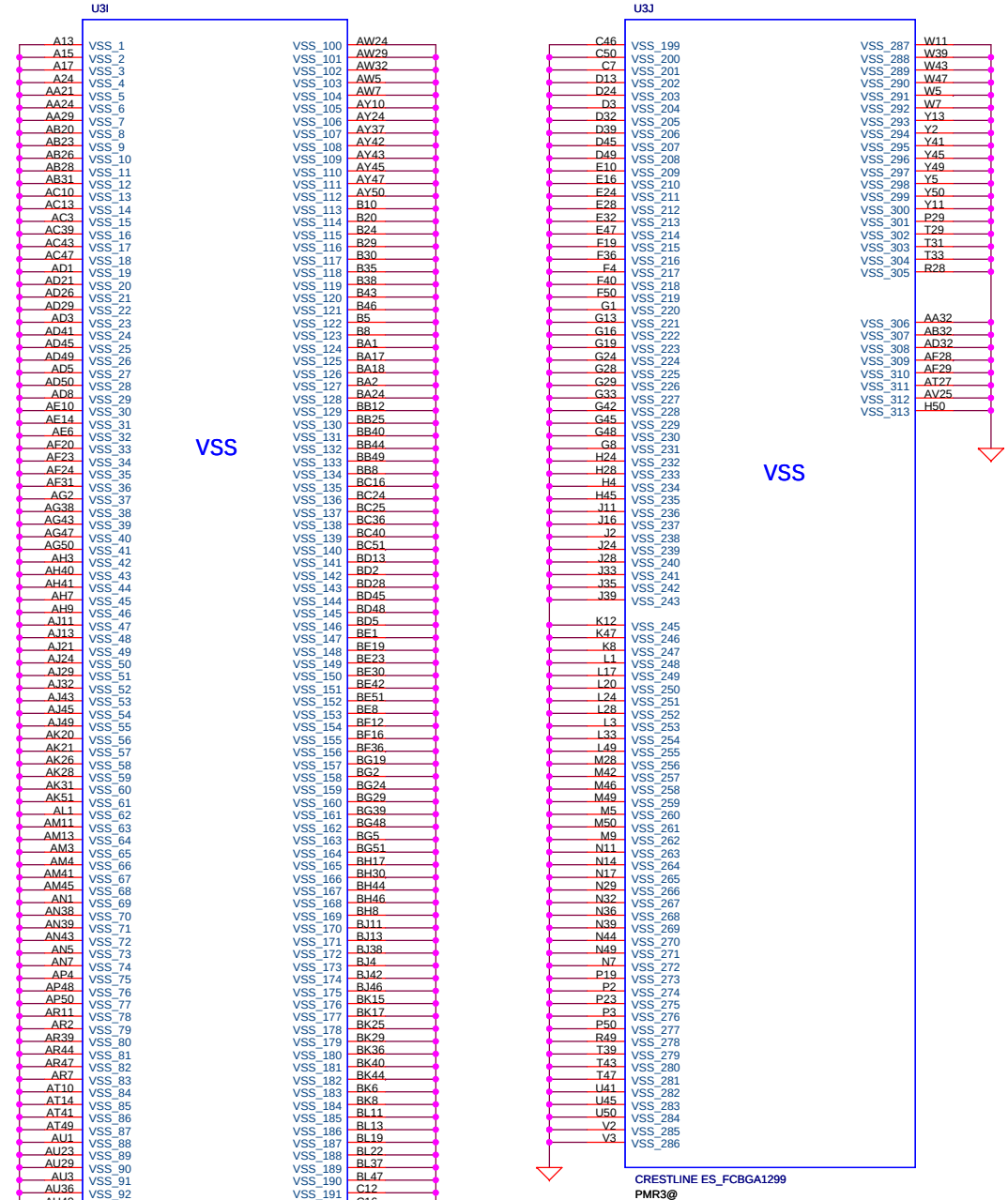
Security Classification	Compal Secret Data		
Issued Date	2006/08/05	Deciphered Date	2007/08/05

Compal Electronics, Inc.

Title: Crestline (6/7)

Size | Document Number: LA-3481P | Rev: 2.0

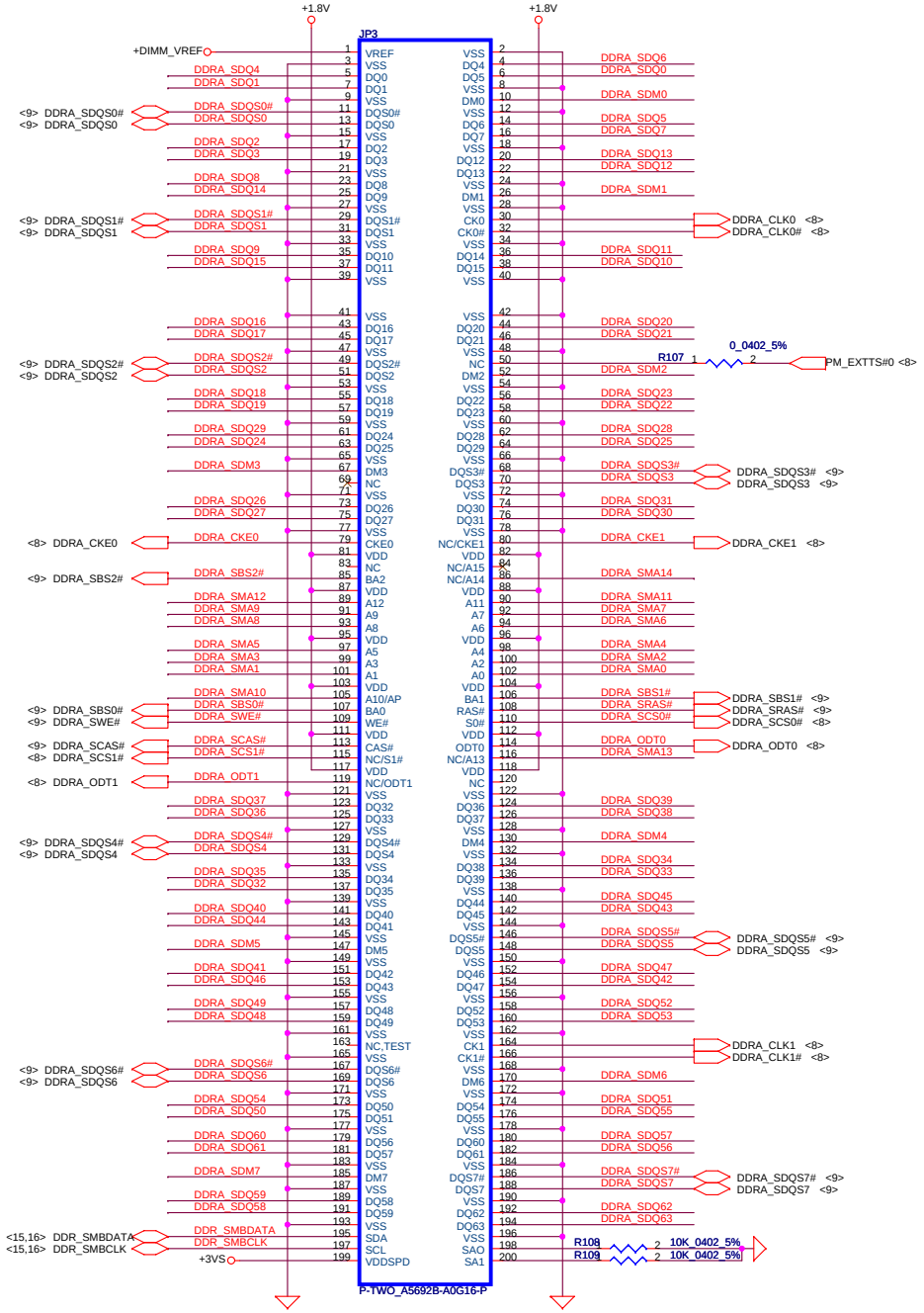
Date: Saturday, June 23, 2007 | Sheet 12 of 47



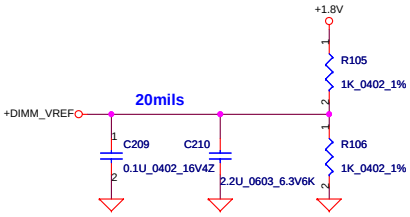
Security Classification	Compal Secret Data		
Issued Date	2006/08/05	Deciphered Date	2007/08/05

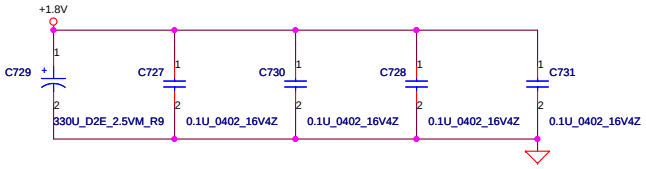
Compal Electronics, Inc.

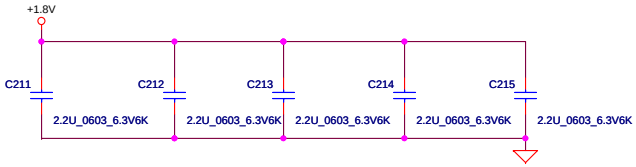
Title	Crestline (7/7)	
Size	Document Number LA-3481P	Rev 2.0
Date: Tuesday, May 22, 2007	Sheet 13 of 47	

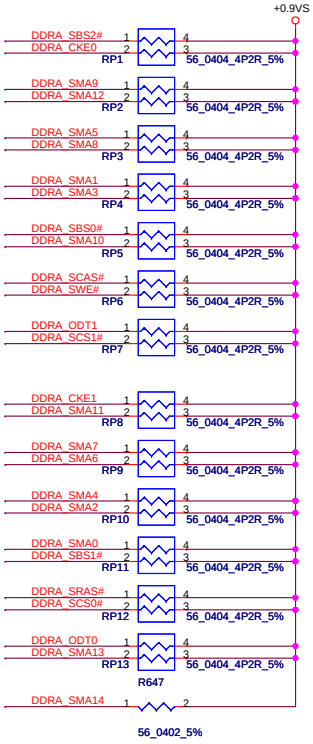


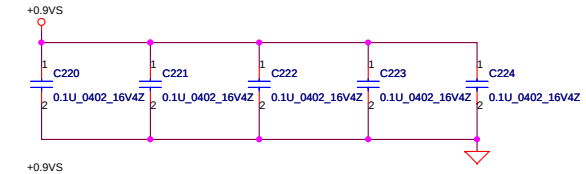
DIMM0 STD H:9.2mm (BOT)

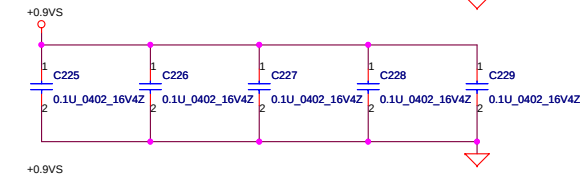


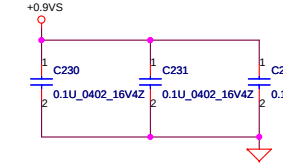






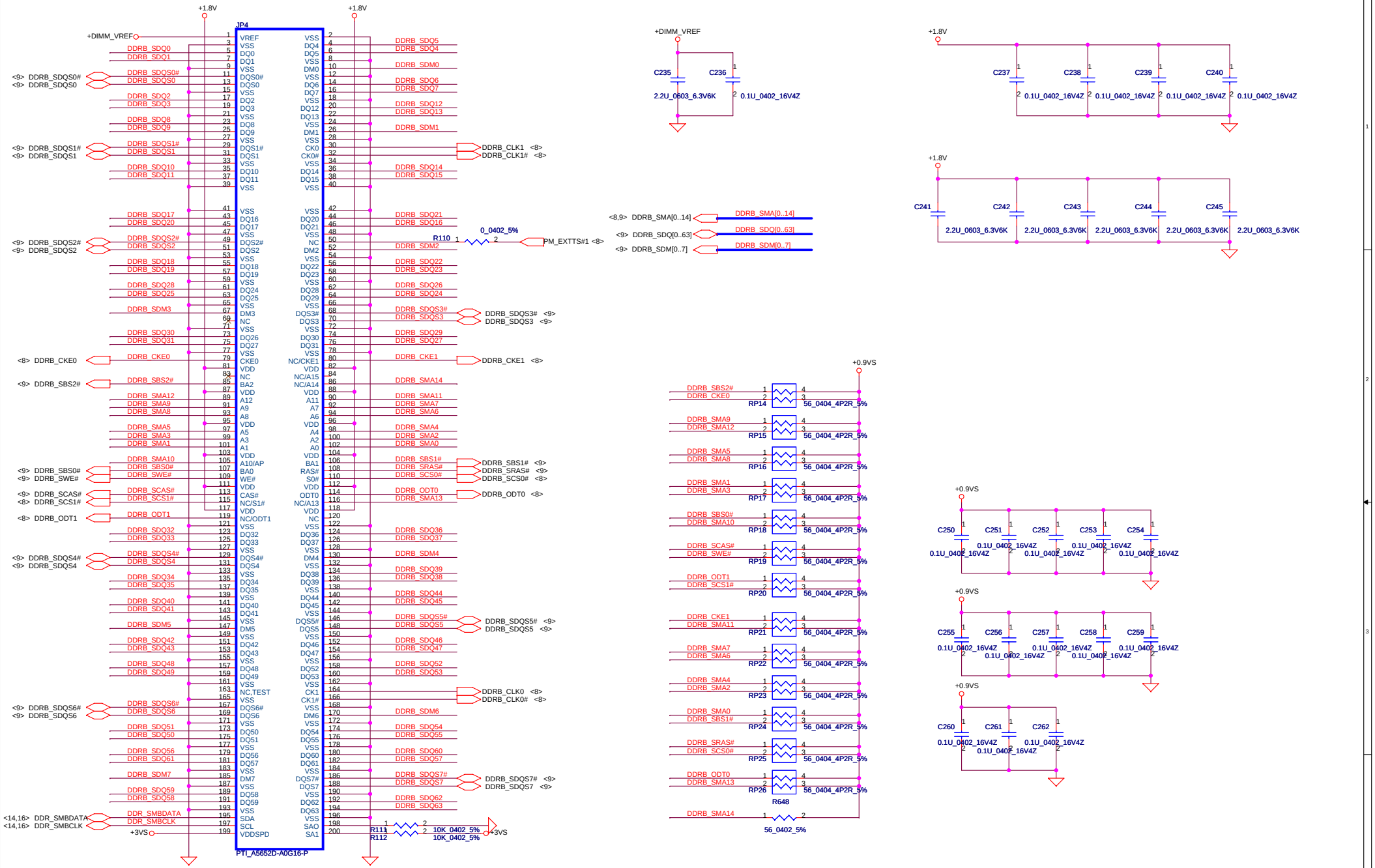






Security Classification	Compal Secret Data		
Issued Date	2006/08/05	Deciphered Date	2007/08/05

Compal Electronics, Inc.	
Title	DDRII-SODIMM0
Size	Document Number: LA-3481P
Rev	2.0
Date: Tuesday, May 22, 2007	Sheet 14 of 47



DIMM1 STD H:5.2mm (BOT)

Security Classification	Compal Secret Data		
Issued Date	2006/08/05	Deciphered Date	2007/08/05

Compal Electronics, Inc.

Title: DDRII-SODIMM1

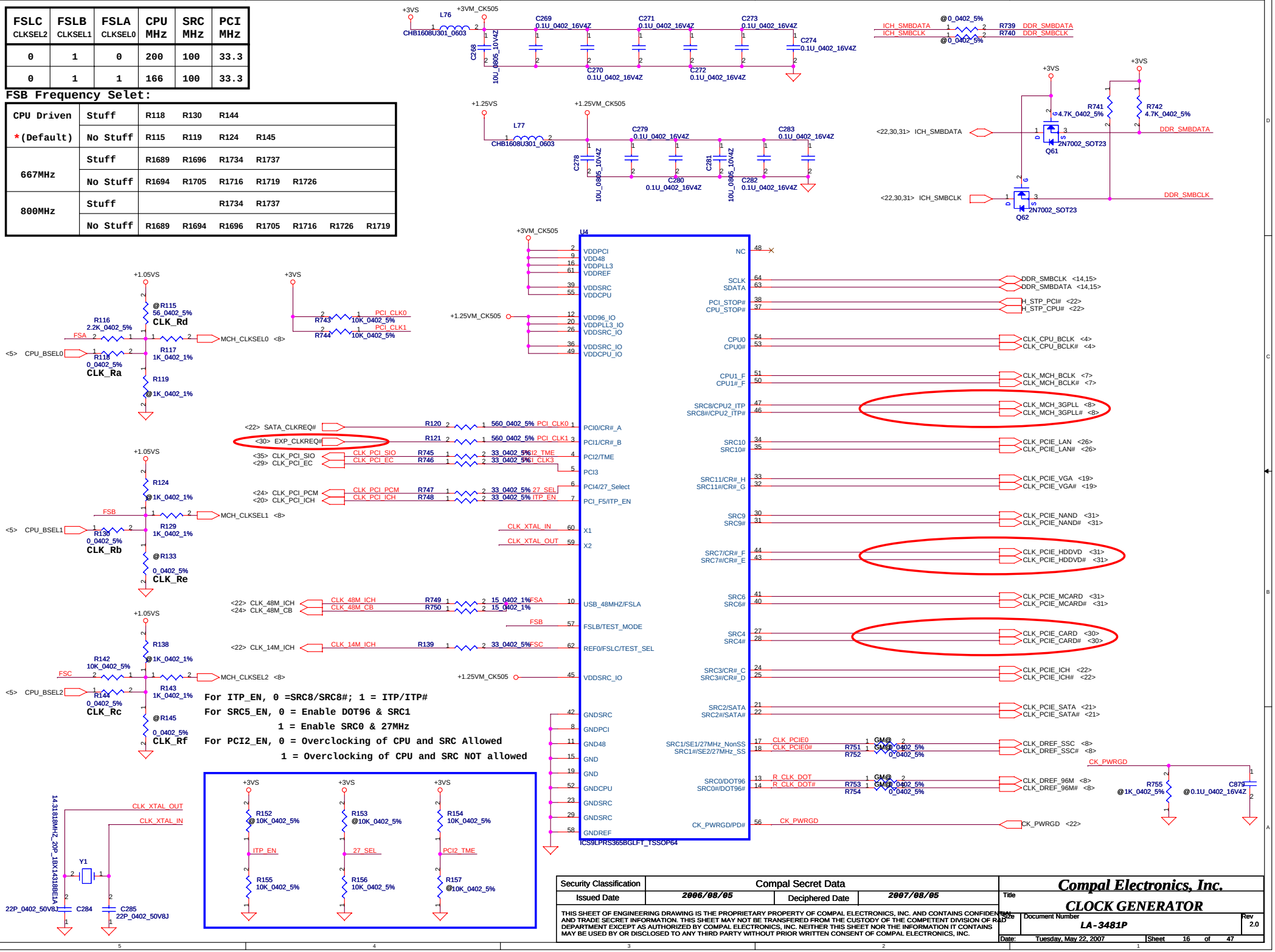
Size | Document Number: LA-3481P | Rev: 2.0

Date: Tuesday, May 22, 2007 | Sheet 15 of 47

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

FSB Frequency Selet:

CPU Driven	Stuff	R118	R130	R144			
*(Default)	No Stuff	R115	R119	R124	R145		
667MHz	Stuff	R1689	R1696	R1734	R1737		
	No Stuff	R1694	R1705	R1716	R1719	R1726	
800MHz	Stuff			R1734	R1737		
	No Stuff	R1689	R1694	R1696	R1705	R1716	R1726 R1719



Security Classification	Compal Secret Data		
Issued Date	2006/08/05	Deciphered Date	2007/08/05

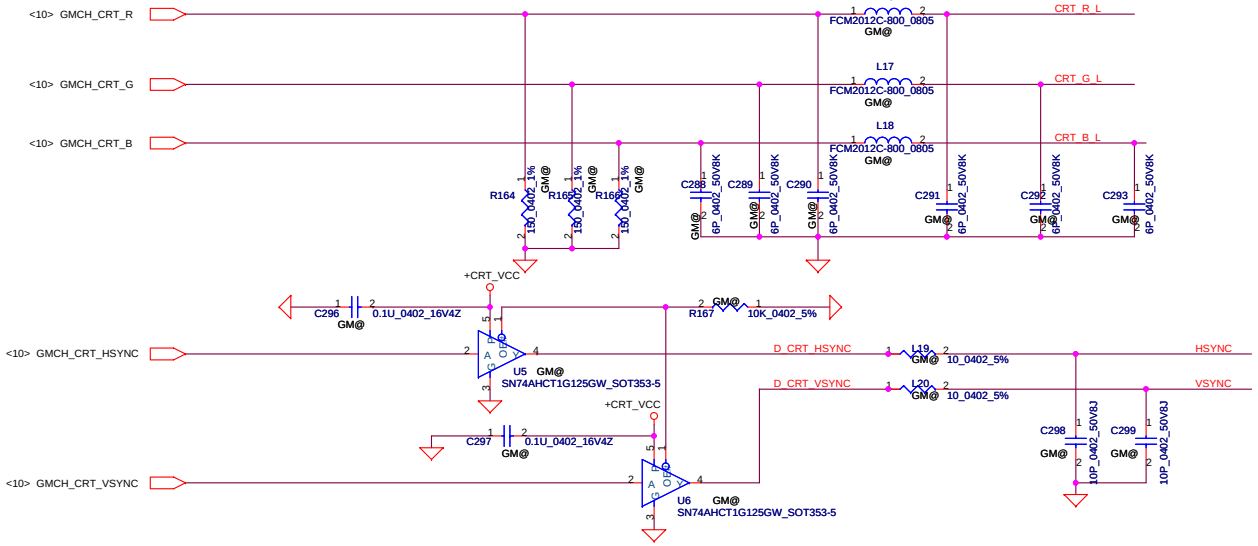
Compal Electronics, Inc.

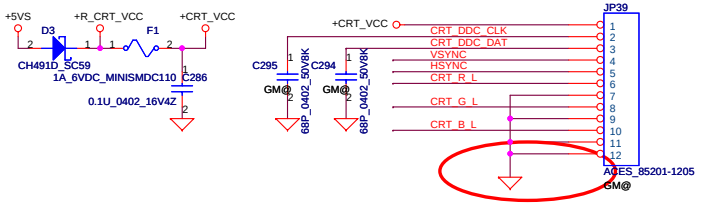
Title: CLOCK GENERATOR

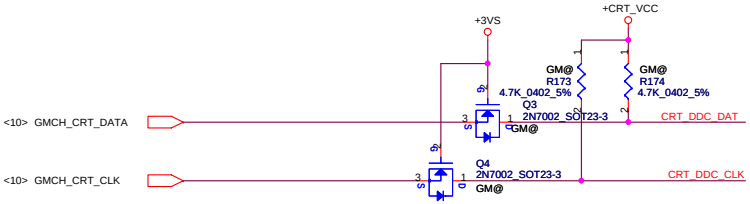
Size: D | Document Number: LA-3481P | Rev: 2.0

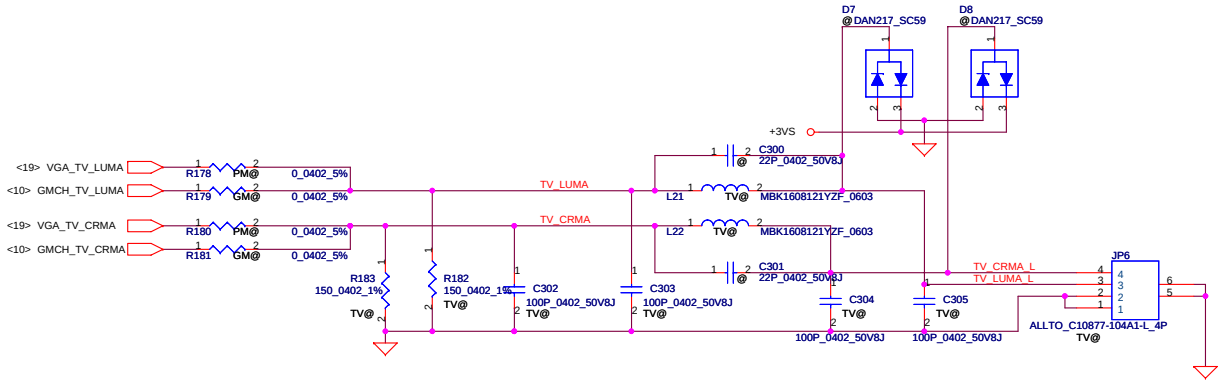
Date: Tuesday, May 22, 2007 | Sheet 16 of 47

CRT CONNECTOR









TV-OUT Conn.

1. Y ground
2. C ground
3. Y (luminance+sync)
4. C (crominance)

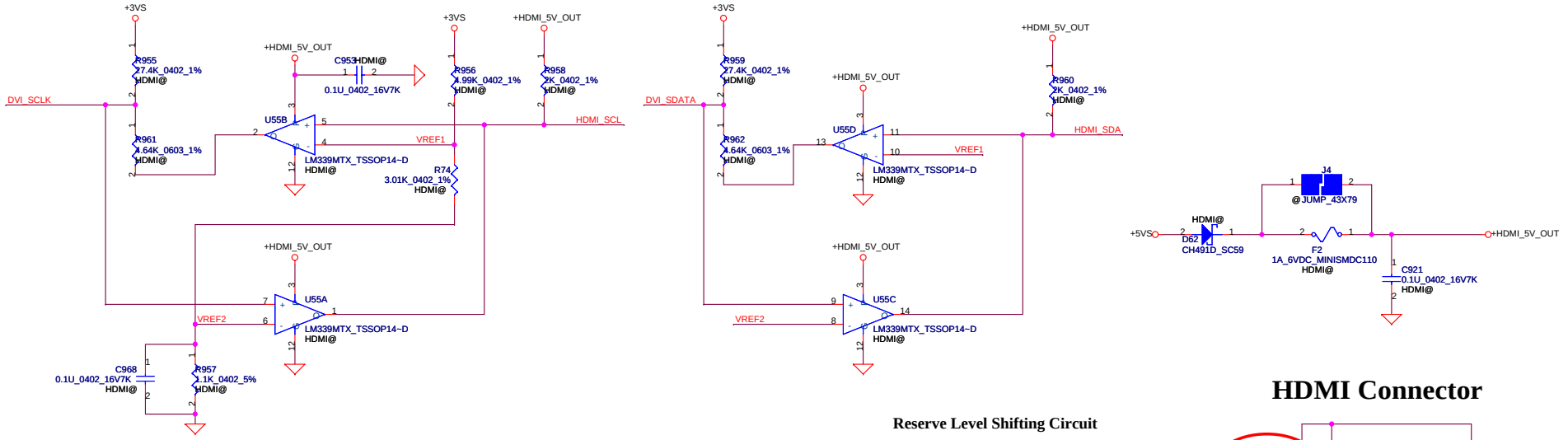
Security Classification	Compal Secret Data		
Issued Date	2006/08/05	Deciphered Date	2007/08/05

Compal Electronics, Inc.

Title: CRT & TVout Connector

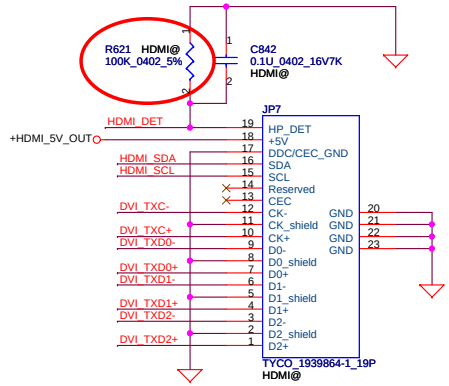
Size	Document Number	Rev
	LA-3481P	2.0

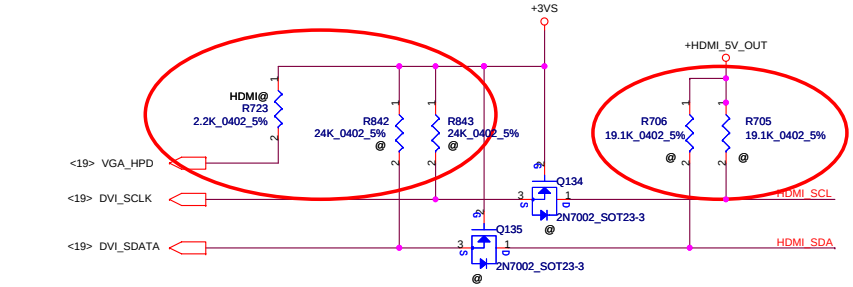
Date: Wednesday, May 23, 2007 | Sheet 17 of 47

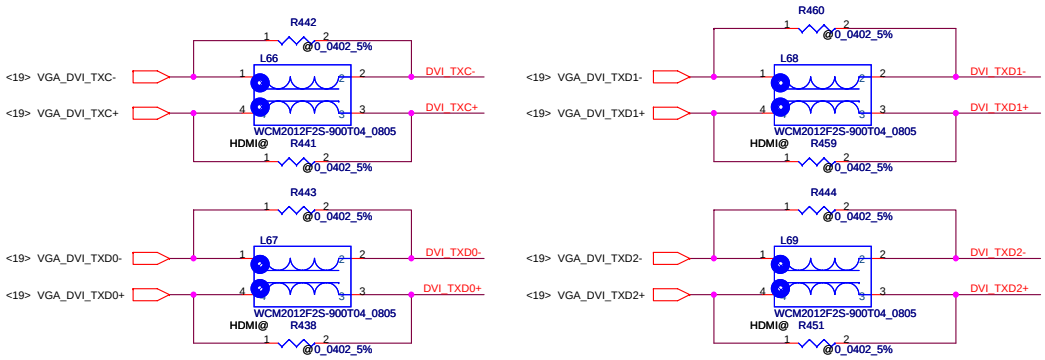


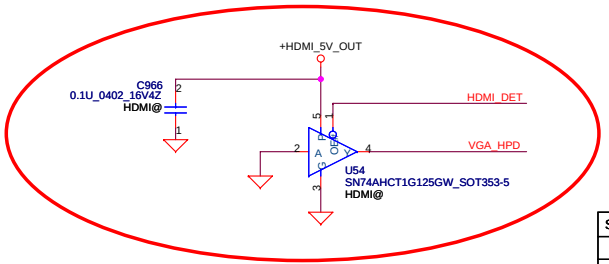
Reserve Level Shifting Circuit

HDMI Connector

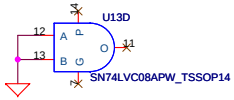








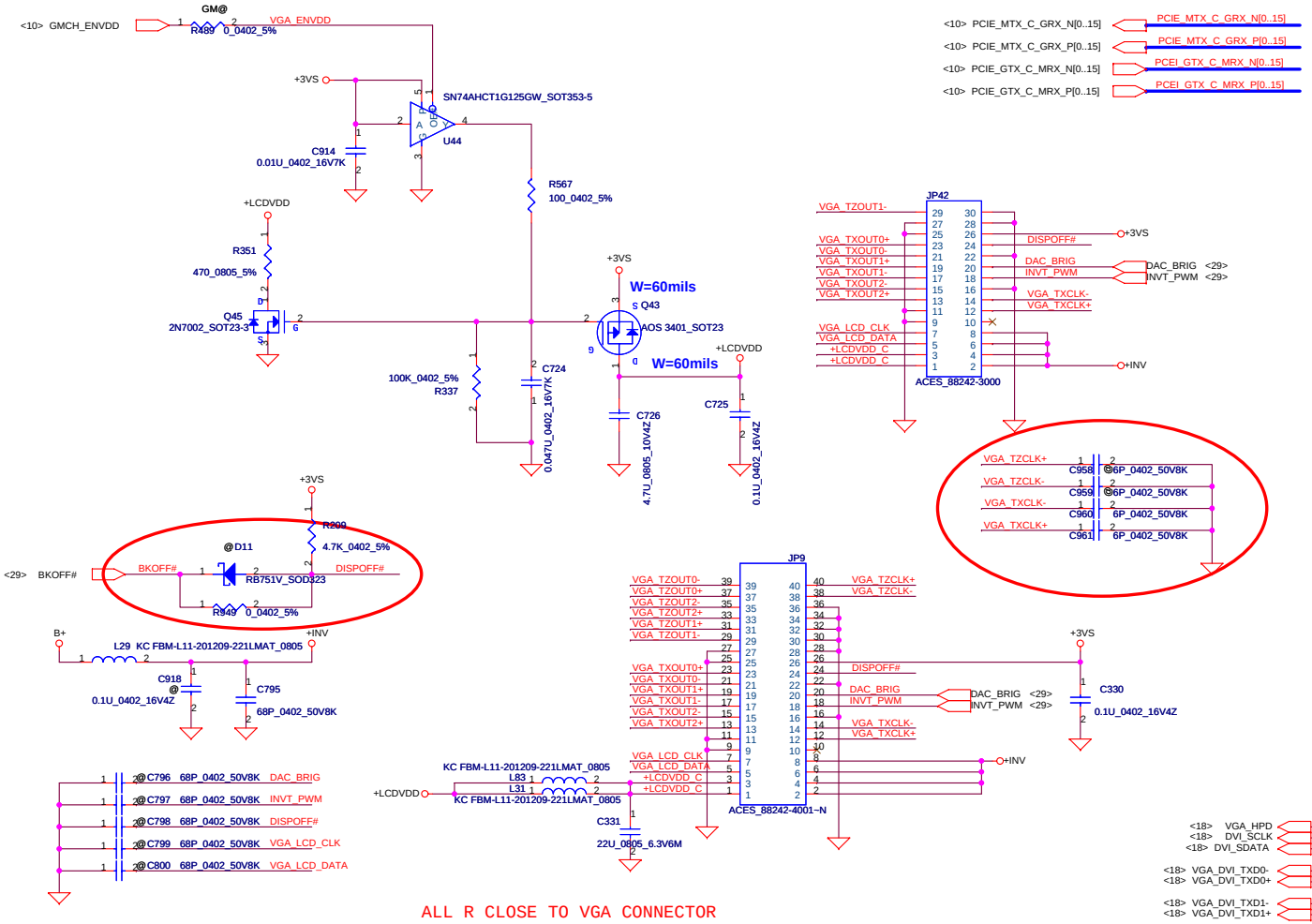
For HDMI Hot Plug Issue



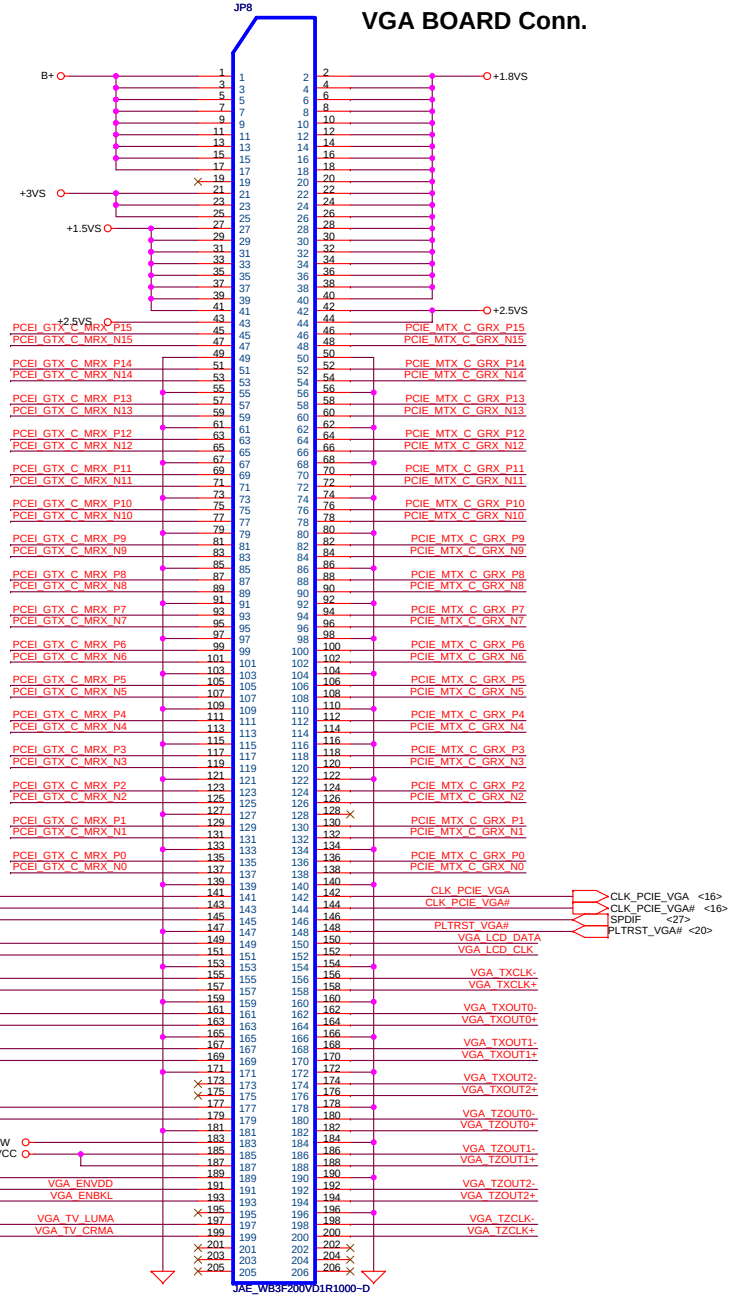
Security Classification	Compal Secret Data		
Issued Date	2006/06/30	Deciphered Date	2007/06/30

Compal Electronics, Inc.			
Title	Sil1392&HDMI Connector		
Size: Custom	Document Number: LA-3481P		Rev: 2.0
Date: Saturday, June 23, 2007	Sheet 18 of 47		

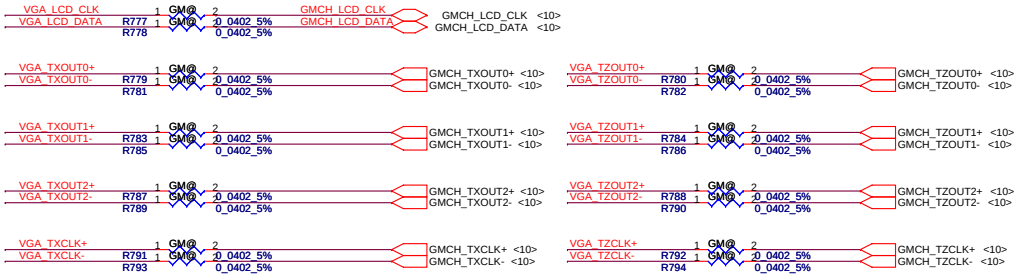
LCD POWER CIRCUIT



VGA BOARD Conn.



ALL R CLOSE TO VGA CONNECTOR

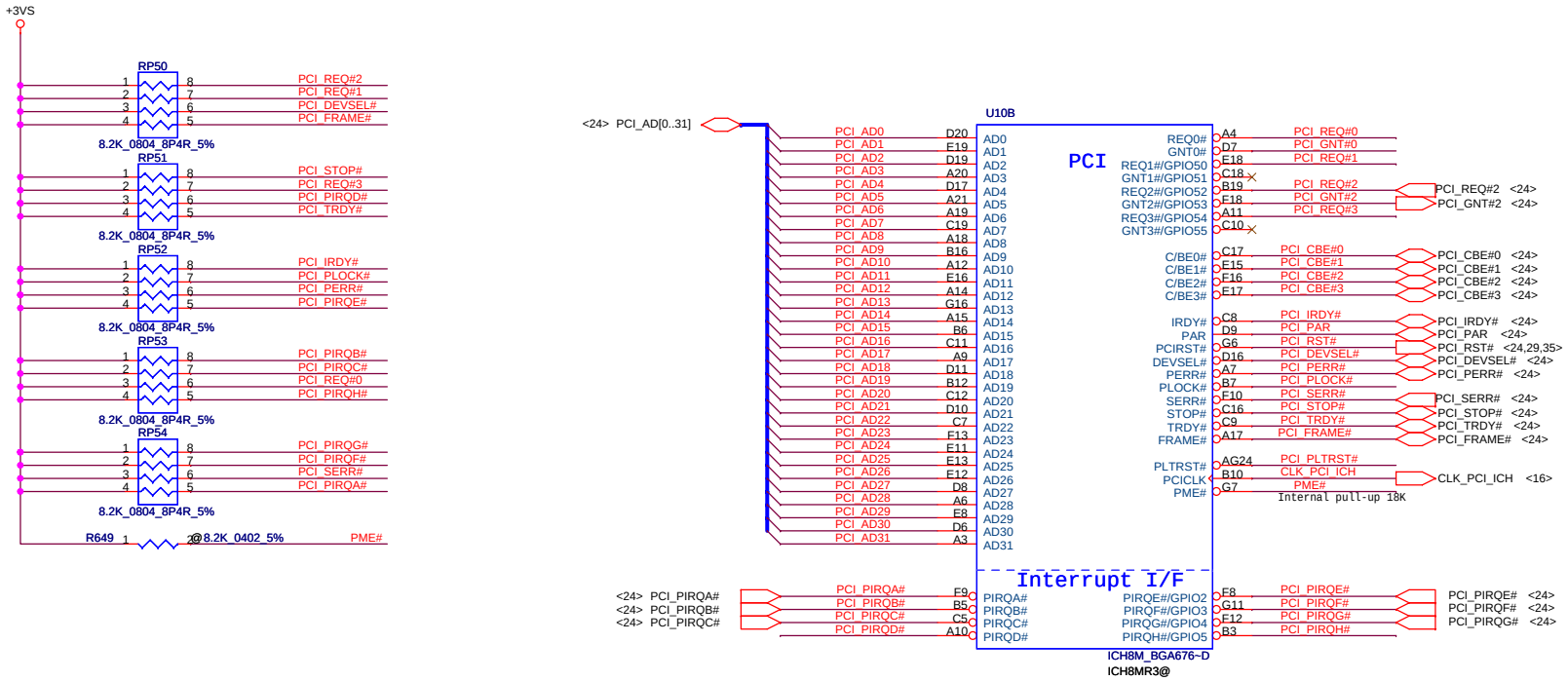


Compal Electronics, Inc.

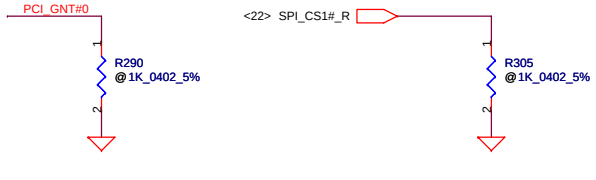
Title: VGA CONN

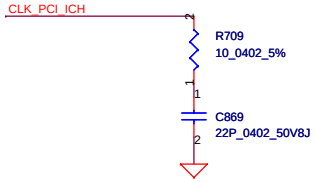
Size | Document Number: LA-3481P | Rev: 2.0

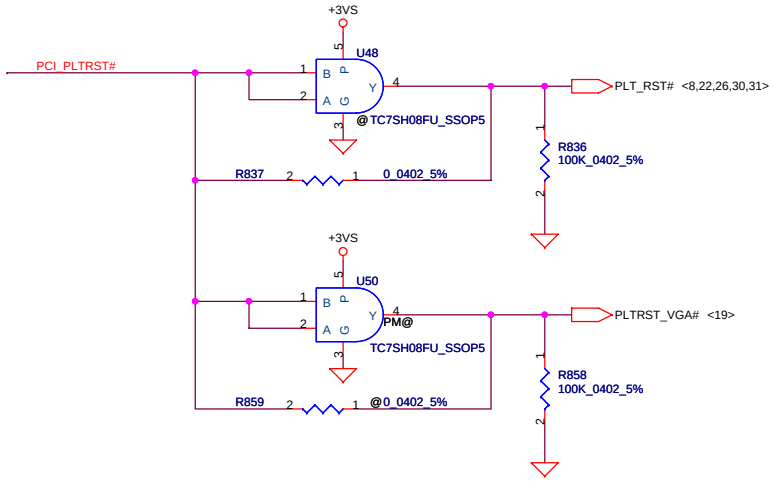
Date: Saturday, June 23, 2007 | Sheet 19 of 47



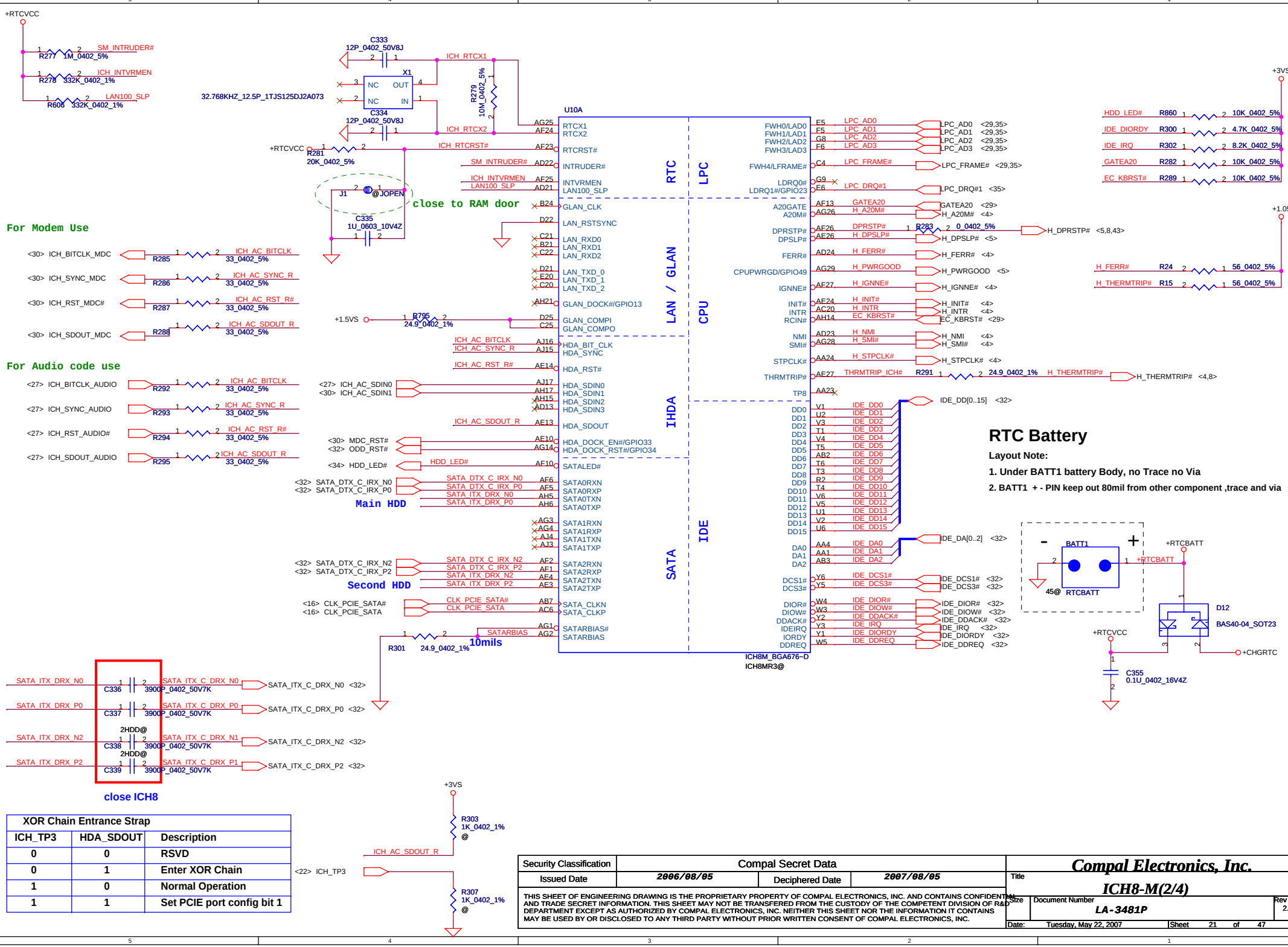
Boot BIOS Strap		
PCI_GNT0#	SPI_CS#0	Boot BIOS Location
0	1	SPI
1	0	PCI
1	1	LPC *







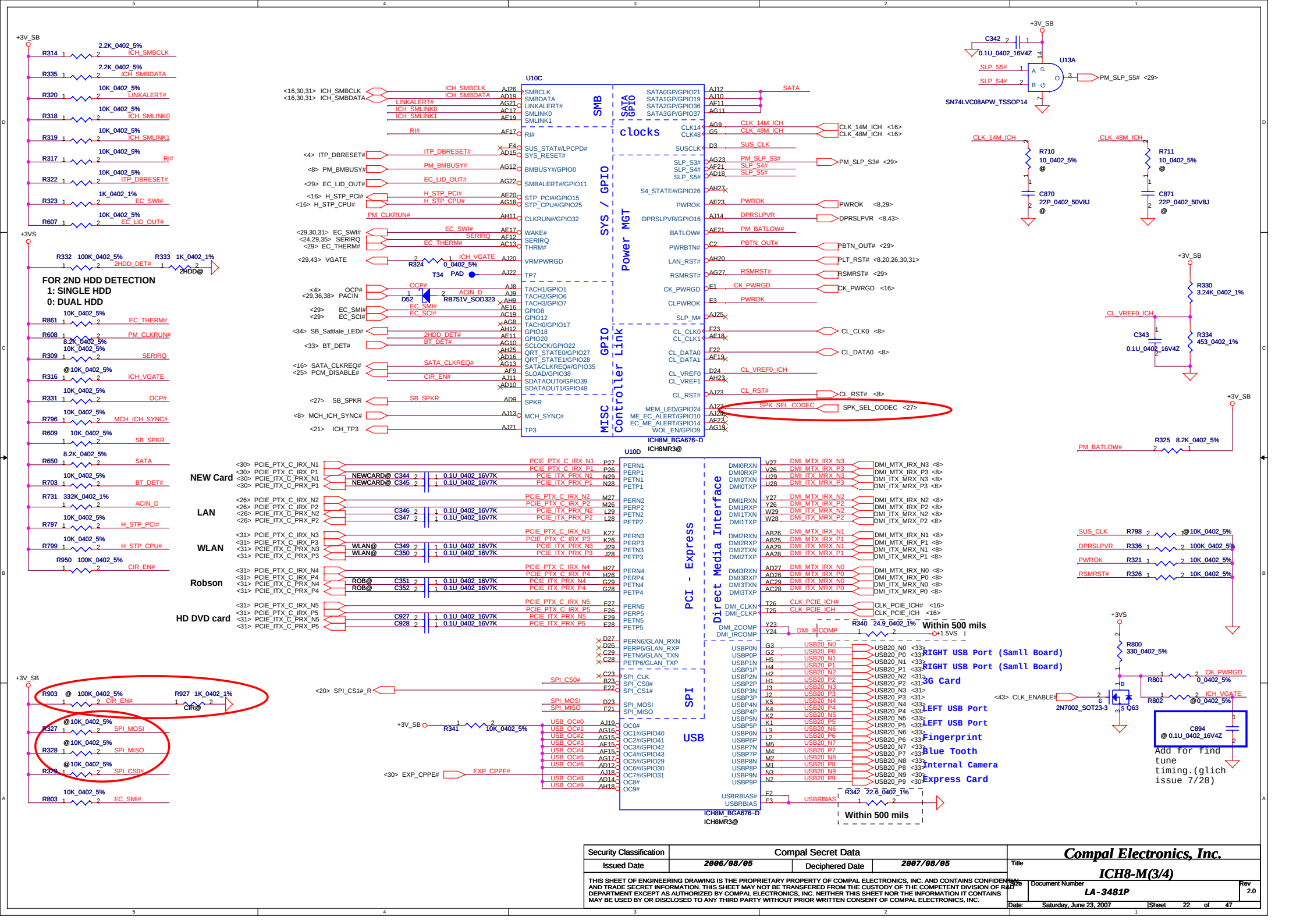
Security Classification	Compal Secret Data		Compal Electronics, Inc.
Issued Date	2006/08/05	Deciphered Date	2007/08/05
Title	ICH8-M(1/4)		
Size	Document Number LA-3481P		Rev 2.0
Date: Tuesday, May 22, 2007	Sheet 20 of 47		



XOR Chain Entrance Strap		
ICH_TP3	HDA_SDOUT	Description
0	0	RSVD
0	1	Enter XOR Chain
1	0	Normal Operation
1	1	Set PCIE port config bit 1

Security Classification	Compal Secret Data		
Issued Date	2006/08/05	Deciphered Date	2007/08/05

Compal Electronics, Inc.			
Title	ICH8-M(2/4)		
Size	Document Number	LA-3481P	Rev 2.0
Date: Tuesday, May 22, 2007	Sheet 21 of 47		



Security Classification	Compal Secret Data		
Issued Date	2006/08/05	Deciphered Date	2007/08/05

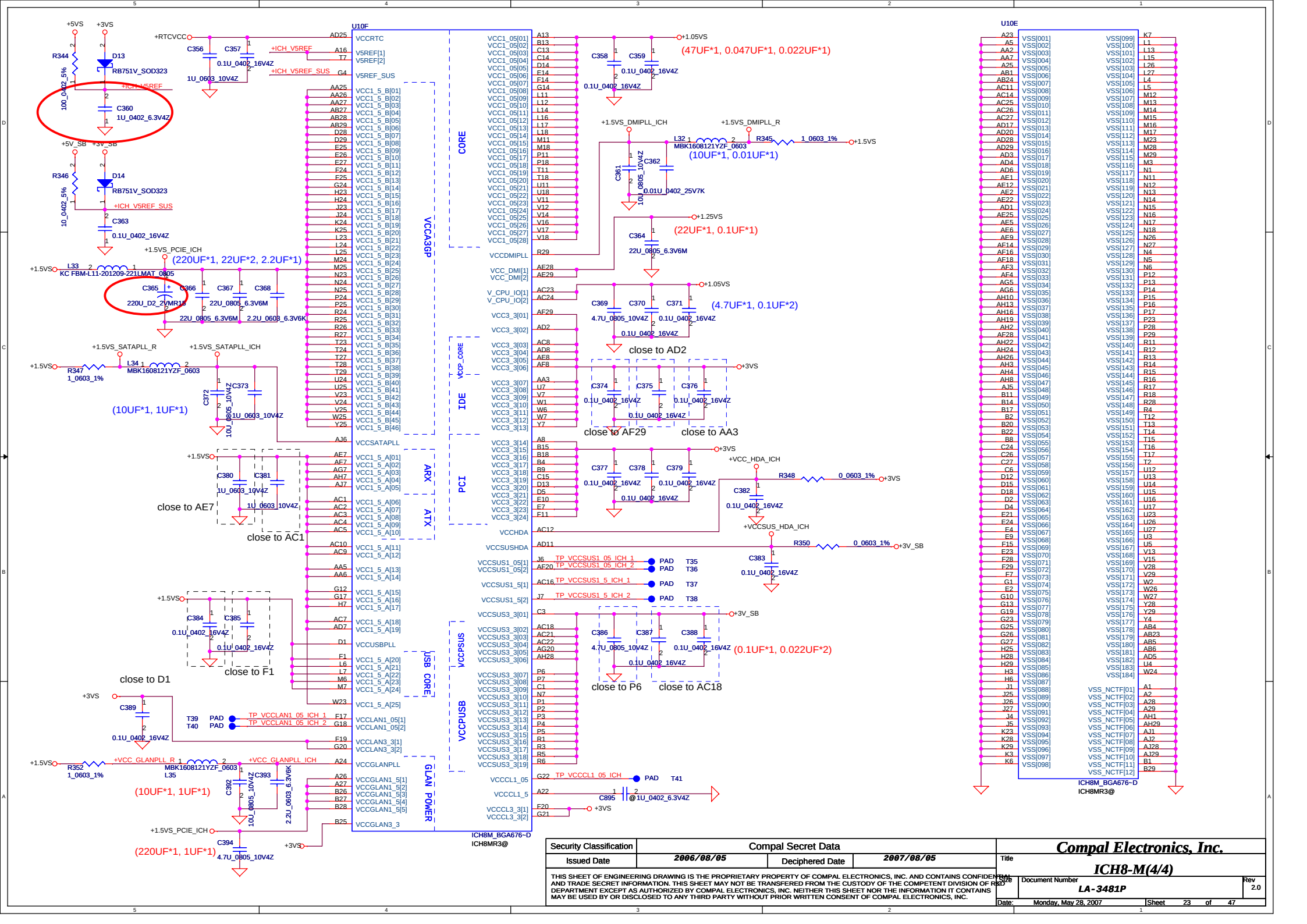
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS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

Compal Electronics, Inc.

Title: **ICH8-M(3/4)**

Size	Document Number	Rev
	LA-3481P	2.0

Date: Saturday, June 23, 2007 | Sheet 22 of 47


U10F
ICH8M_BGA676~D
ICH8MR3@
U10E
ICH8M_BGA676~D
ICH8MR3@
CORE
VCCA3GP
VCCP_CORE
IDE
PCI
ARX
ATX
VCCPSUS
USB CORE
VCCPUSB
GLAN POWER
(47UF*1, 0.047UF*1, 0.022UF*1)
(10UF*1, 0.01UF*1)
(22UF*1, 0.1UF*1)
(4.7UF*1, 0.1UF*2)
(220UF*1, 22UF*2, 2.2UF*1)
(10UF*1, 1UF*1)
(0.1UF*1, 0.022UF*2)
close to AD2
close to AF29
close to AA3
close to AE7
close to AC1
close to D1
close to F1
close to P6
close to AC18
Security Classification
Compal Secret Data
Issued Date
2006/08/05
Deciphered Date
2007/08/05
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.
Compal Electronics, Inc.
Title
ICH8-M(4/4)
Size
Document Number
LA-3481P
Rev
2.0
Date:
Monday, May 28, 2007
Sheet
23
of
47

PCI8412:6IN1 + 1394 + CardBus
PCI8402:6IN1 + 1394

PCI7412

6 IN 1 LED

6 In 1 Card Power Switch

6 in 1 CardReader Conn.

4 IN 1 CONN

For EMI

place near Chip 8412

CLOSE TO CHIP

Bottom Side, Normal Insertion

Security Classification	Compal Secret Data		
Issued Date	2006/08/05	Deciphered Date	2007/08/05

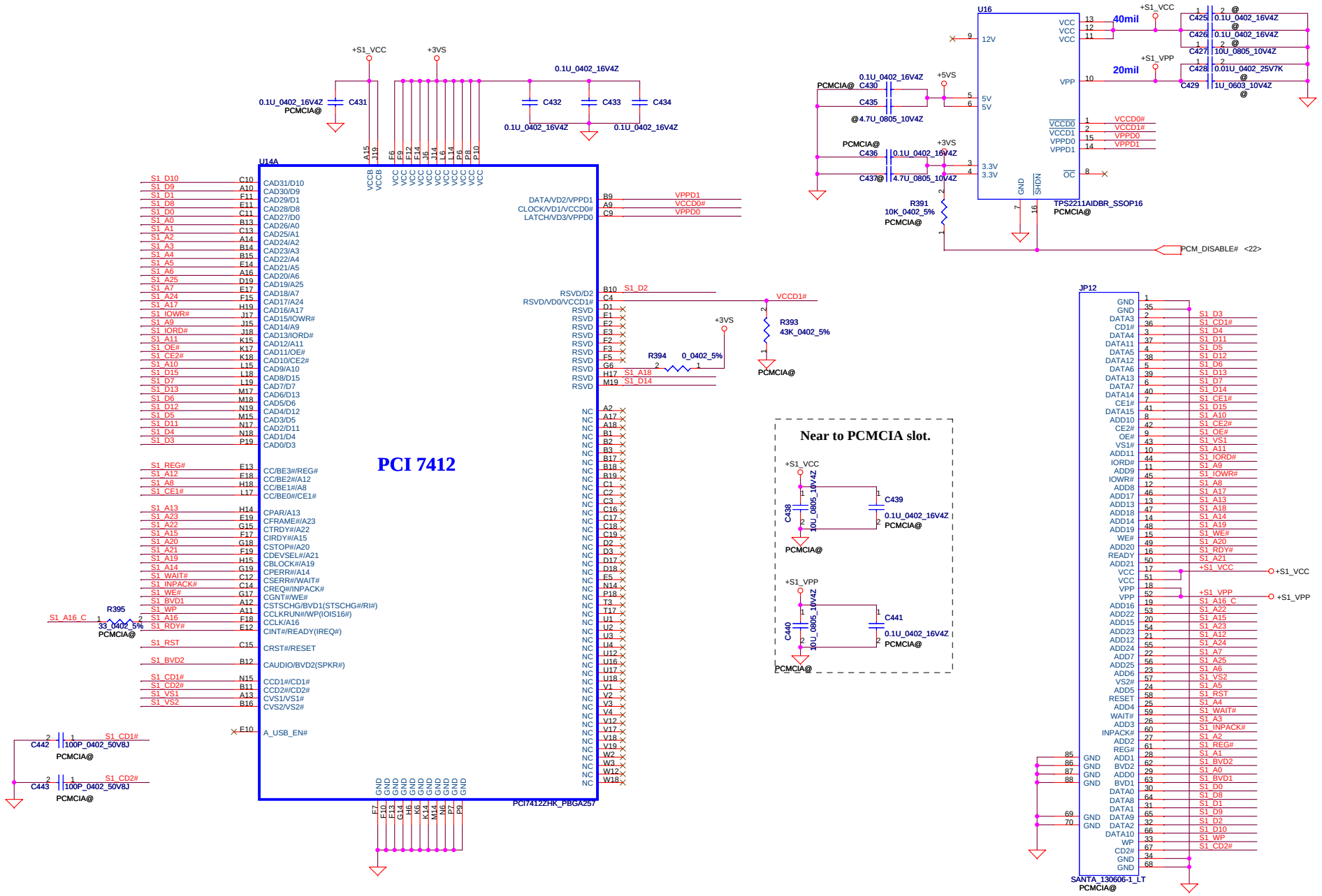
Compal Electronics, Inc.

Title: TI PCI8412 PCI/1394/5IN1

Size: | Document Number: LA-3481P | Rev: 2.0

Date: Tuesday, May 22, 2007 | Sheet 24 of 47

CardBus Power Switch



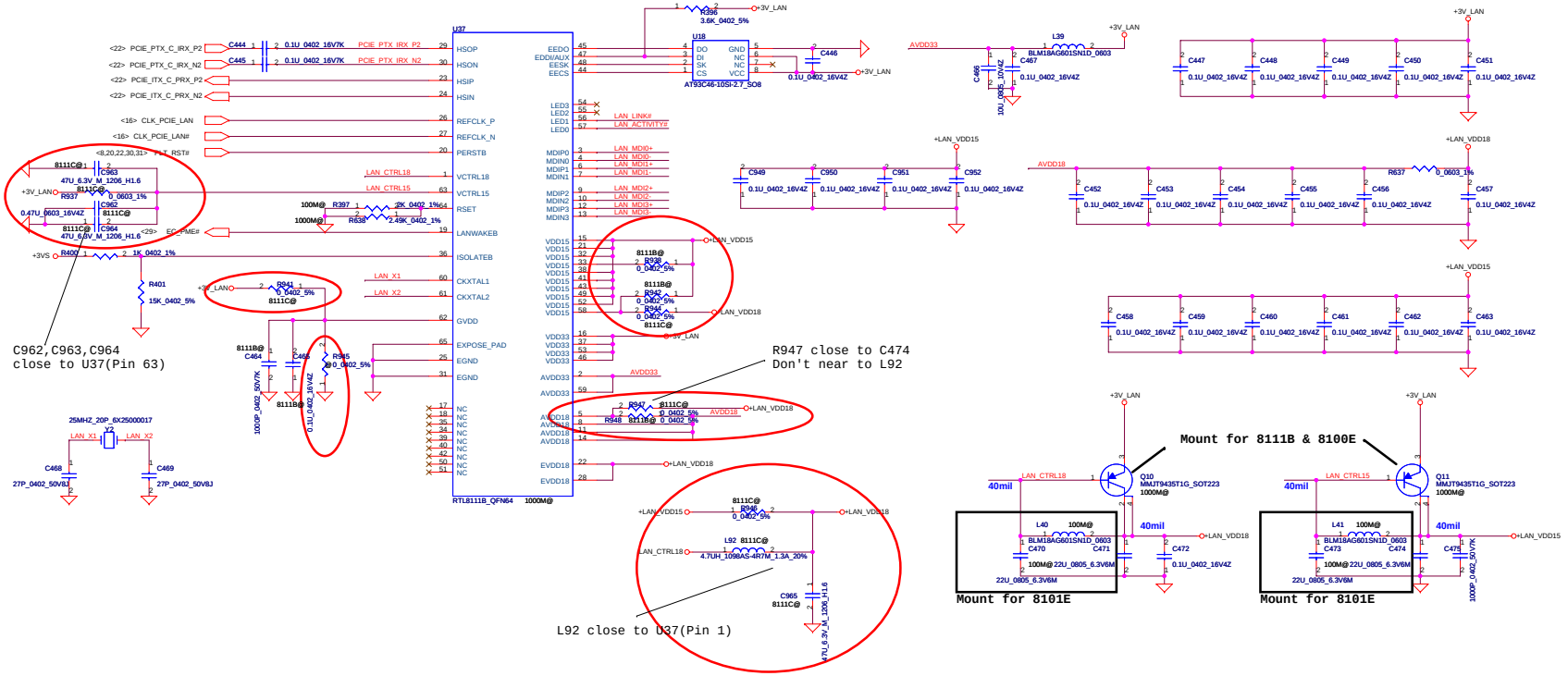
Security Classification	Compal Secret Data		
Issued Date	2006/08/05	Deciphered Date	2007/08/05

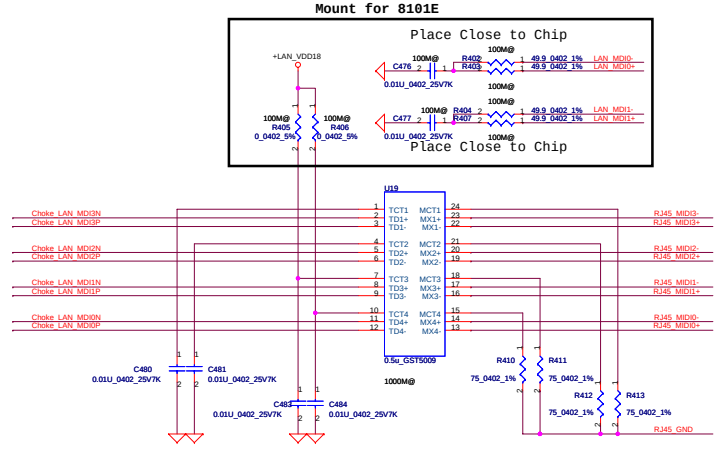
Compal Electronics, Inc.

Title: **TI PCI8412/CB socket**

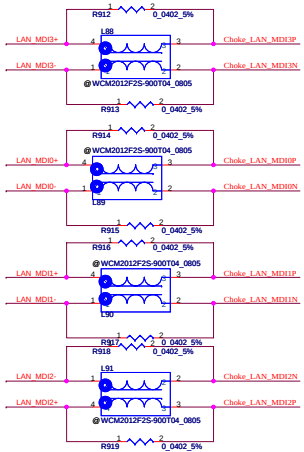
Size: | Document Number: **LA-3481P** | Rev: 2.0

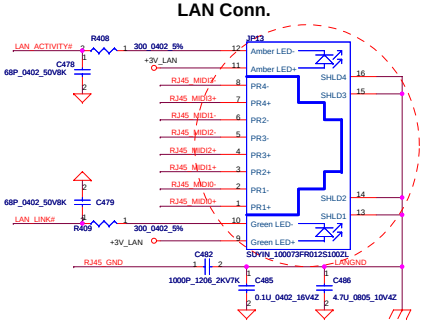
Date: Tuesday, May 22, 2007 | Sheet 25 of 47





GST5009 for GIGA LAN
TST1284 for 10/100 LAN





Security Classification	Compal Secret Data		
Issued Date	2006/08/05	Deciphered Date	2007/08/05

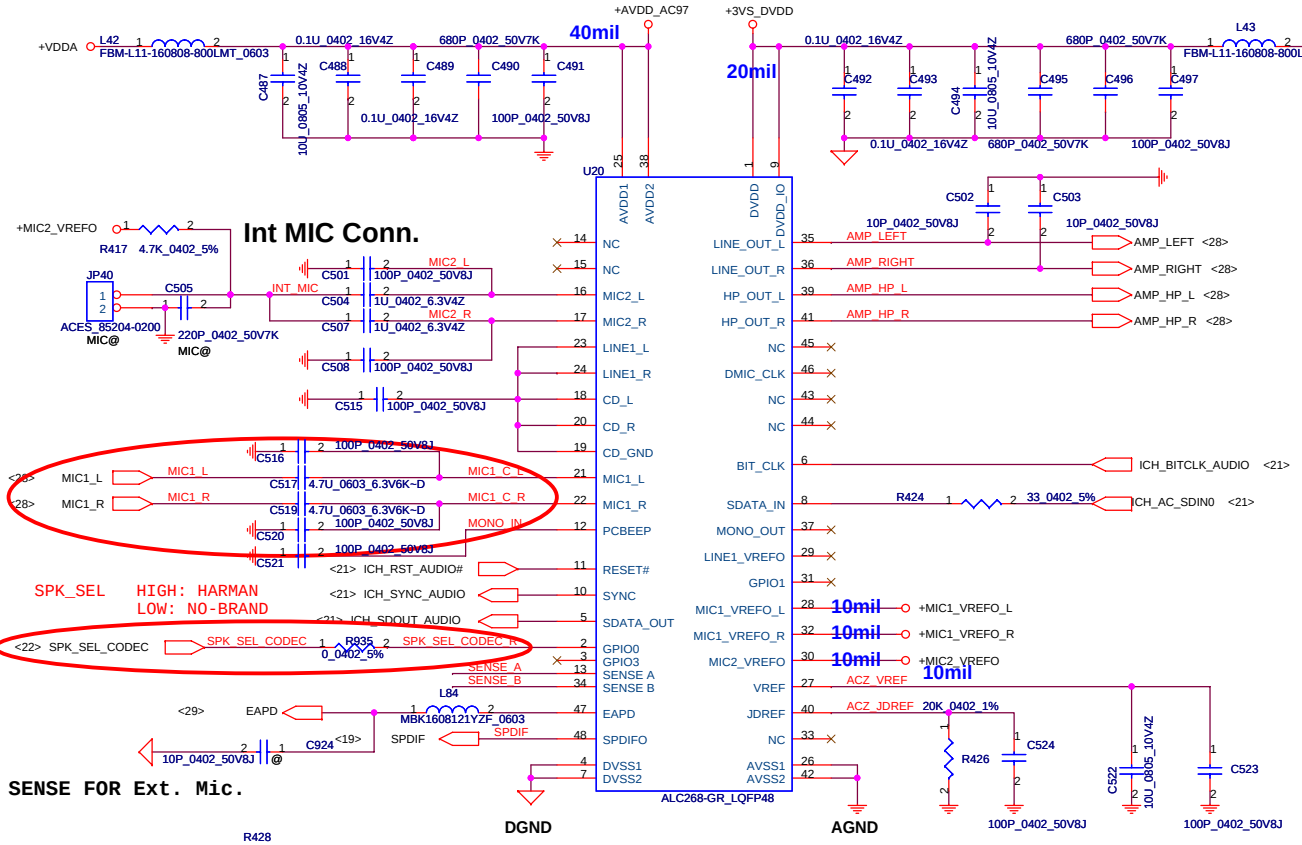
Compal Electronics, Inc.

Title: **RTL8111B/8101E 10/100/1000 LAN**

Size	Document Number	Rev
	LA-3481P	2.0

Date: Tuesday, May 22, 2007 | Sheet 26 of 47

HD Audio Codec

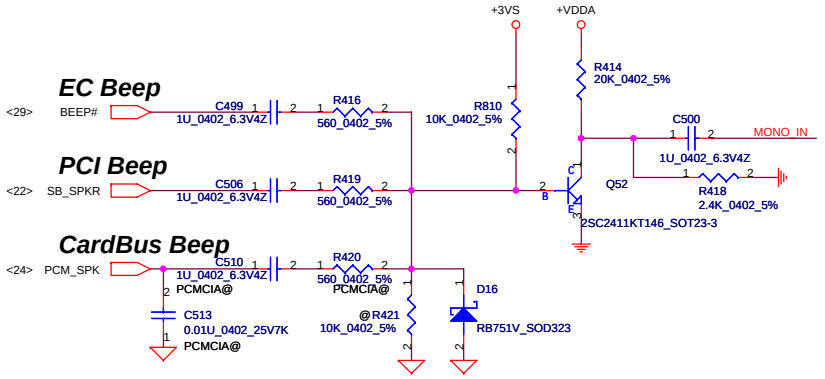


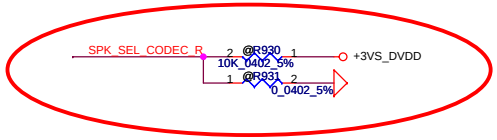
Int MIC Conn.

EC Beep

PCI Beep

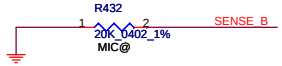
CardBus Beep



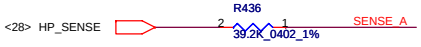


SENSE FOR Ext. Mic.

SENSE FOR Int. Mic.

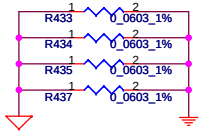


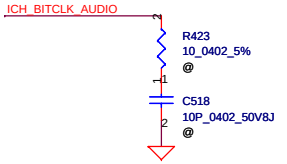
SENSE FOR HP



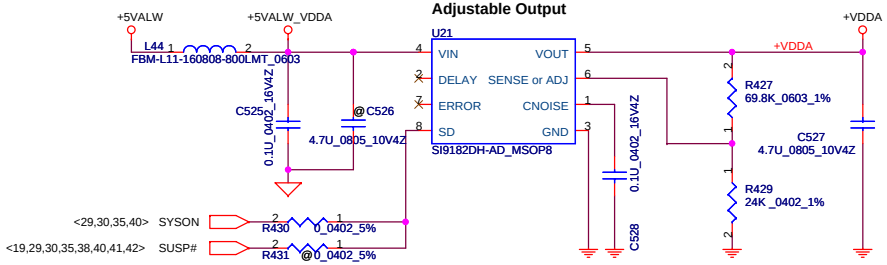
Sense Pin	Impedance	Codec Signals
SENSE A	39.2K	PORT-A (PIN 39, 41)
	20K	PORT-B (PIN 21, 22)
	10K	PORT-C (PIN 23, 24)
	5.1K	PORT-D (PIN 35, 36)
SENSE B	39.2K	PORT-E (PIN 14, 15)
	20K	PORT-F (PIN 16, 17)
	10K	PORT-G (PIN 43, 44)
	5.1K	PORT-H (PIN 45, 46)

Moat Bridge





Regulator for CODEC



Security Classification	Compal Secret Data		
Issued Date	2006/08/05	Deciphered Date	2007/08/05

Compal Electronics, Inc.

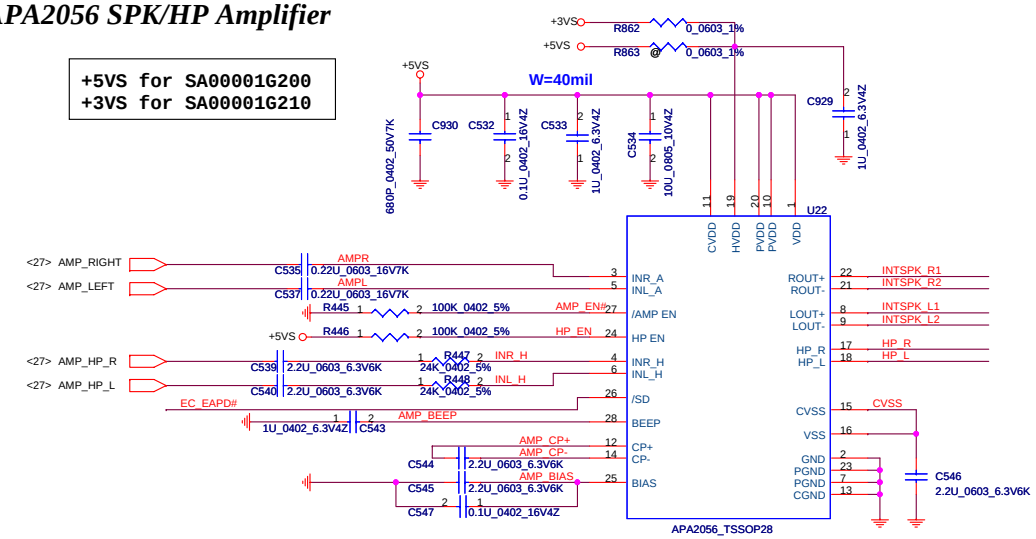
Title: **HD Audio Codec_ALC268**

Size	Document Number	Rev
	LA-3481P	2.0

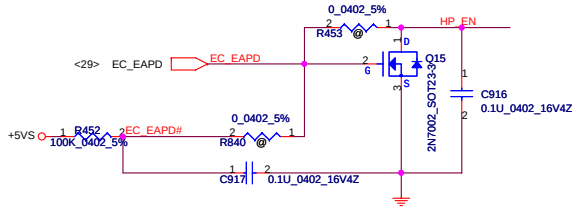
Date: Tuesday, May 22, 2007 | Sheet 27 of 47

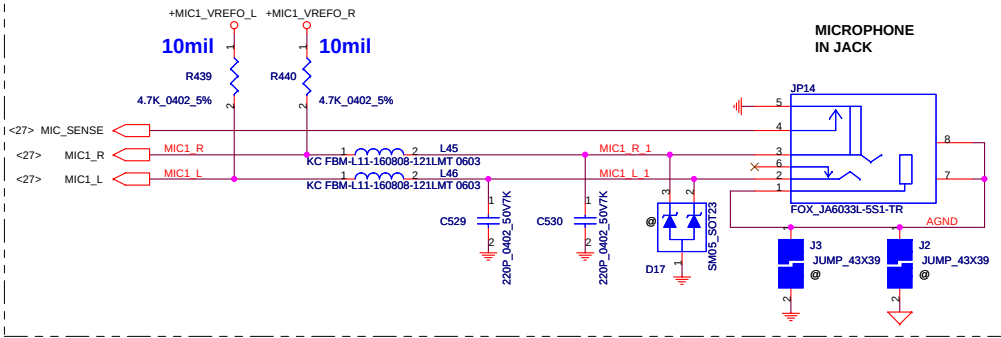
APA2056 SPK/HP Amplifier

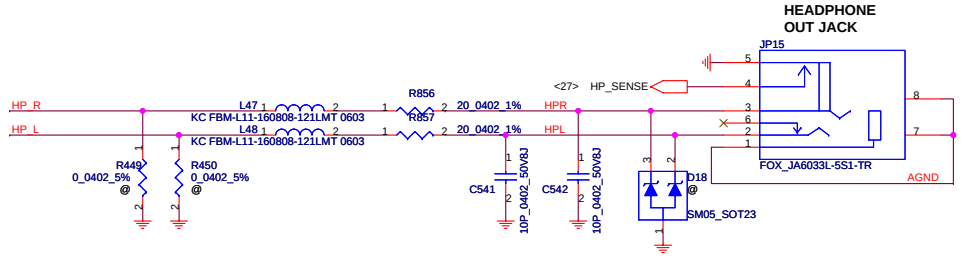
+5VS for SA00001G200
+3VS for SA00001G210



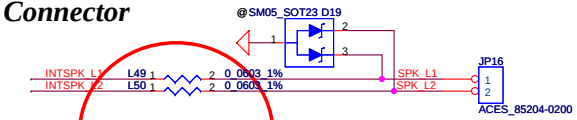
IN_A Gain = 10dB (Internal Speaker)
IN_H Gain = 0dB (Headphone)



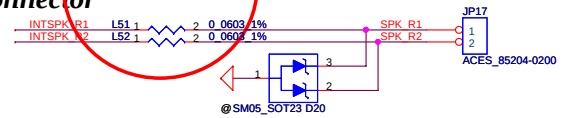




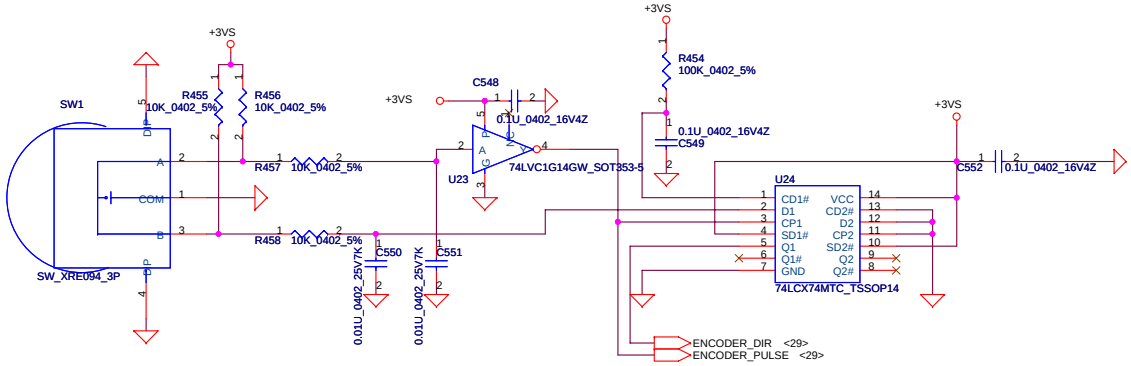
Right Speaker Connector



Left Speaker Connector

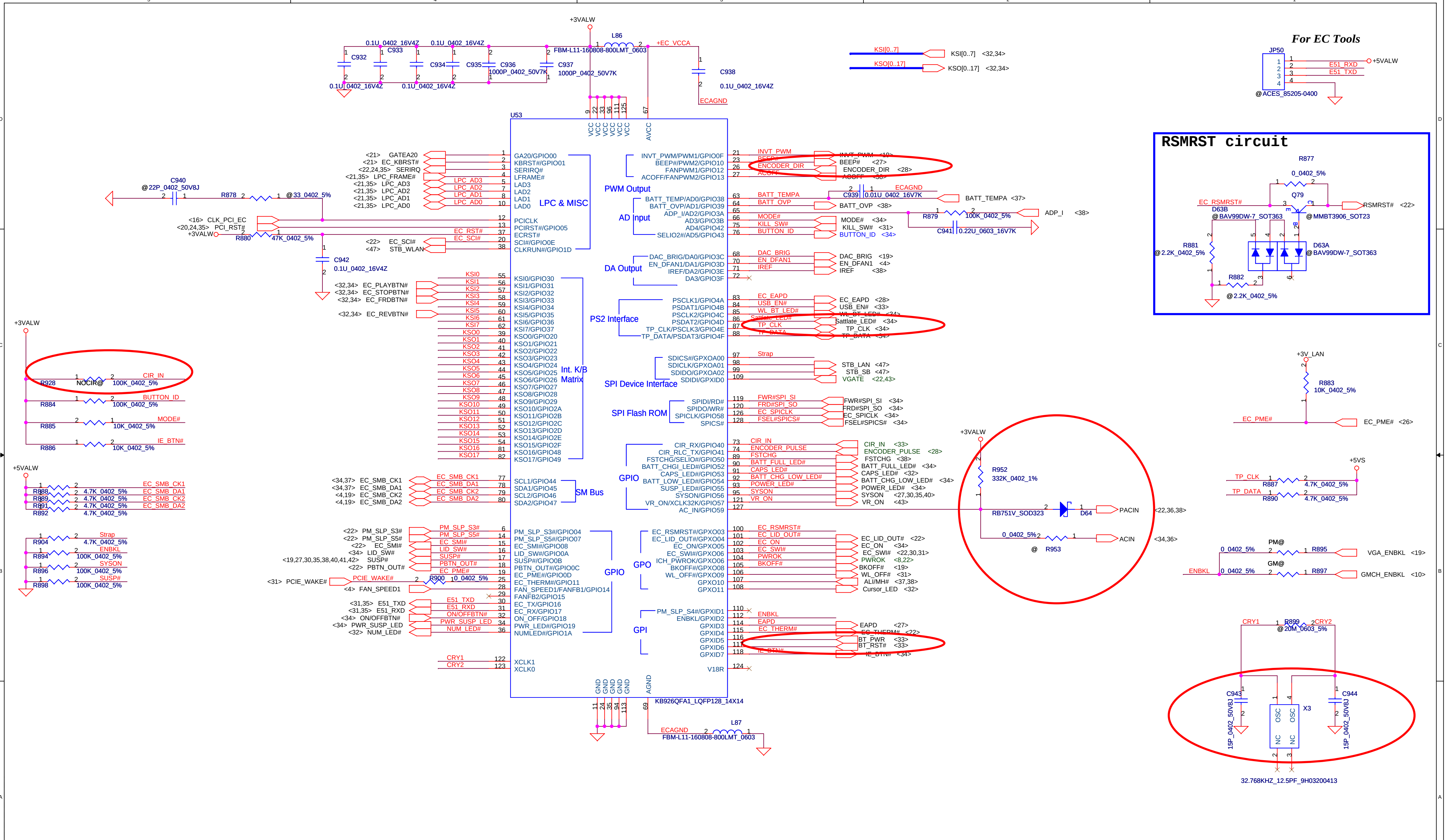


Volume Control



Security Classification	Compal Secret Data		
Issued Date	2006/08/05	Deciphered Date	2007/08/05

Compal Electronics, Inc.	
Title	AMP/VR/Audio Jack
Size	Document Number: LA-3481P
Rev	2.0
Date:	Saturday, June 02, 2007
Sheet	28 of 47



Security Classification	Compal Secret Data		
Issued Date	2006/06/30	Deciphered Date	2007/06/30

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

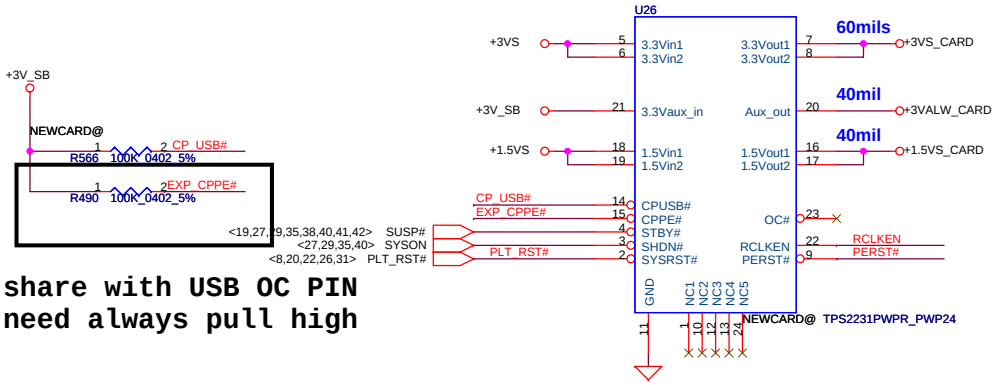
Compal Electronics, Inc.

Title: ENE-KB926

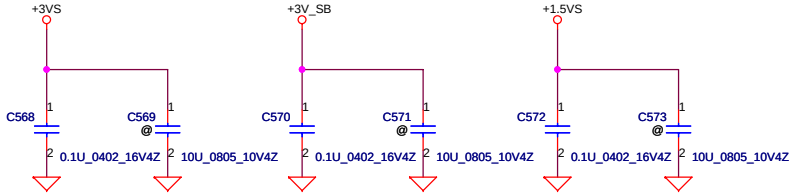
Size | Document Number: LA-3481P | Rev 2.0

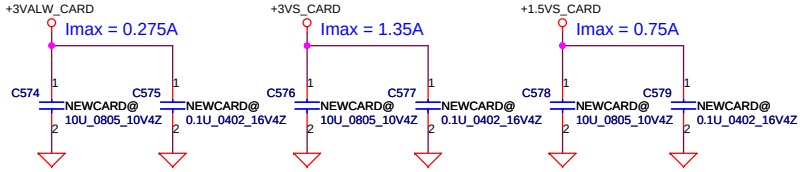
Date: Tuesday, May 22, 2007 | Sheet 29 of 47

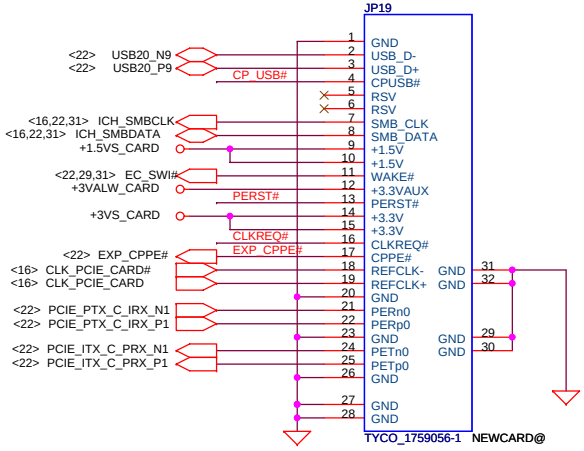
New Card

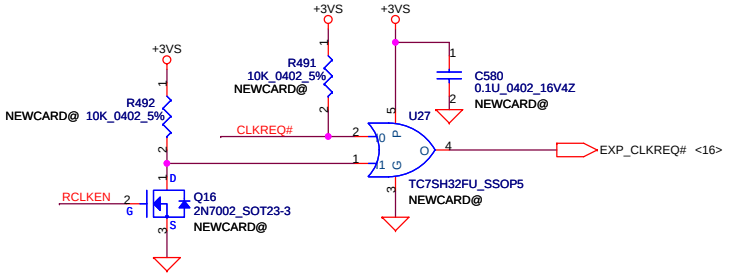


share with USB OC PIN
need always pull high



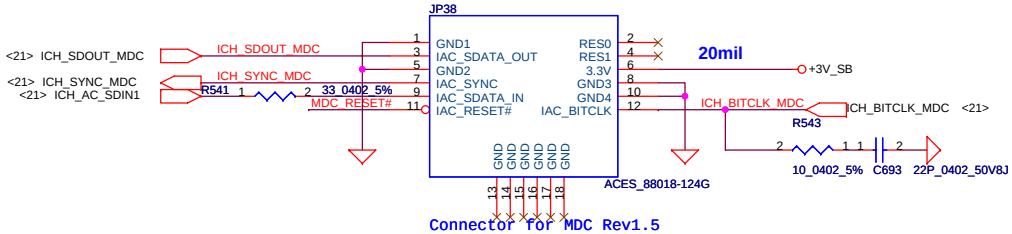


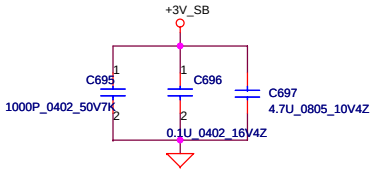


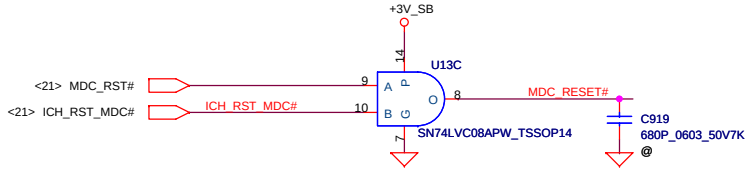


MDC

MDC Conn.







Security Classification	Compal Secret Data		
Issued Date	2006/08/05	Deciphered Date	2007/08/05

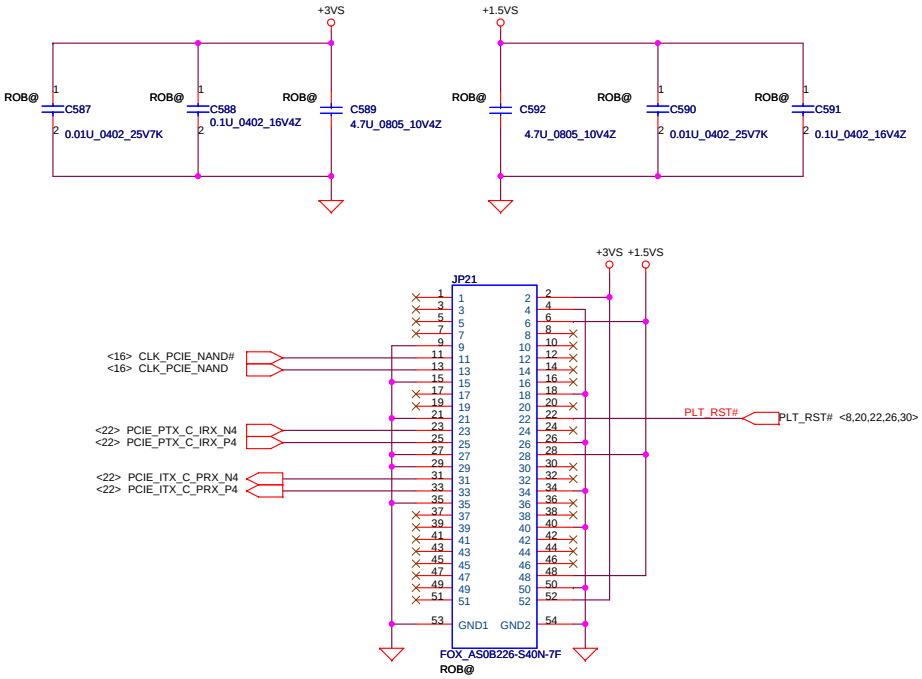
Compal Electronics, Inc.

Title: New Card & MDC

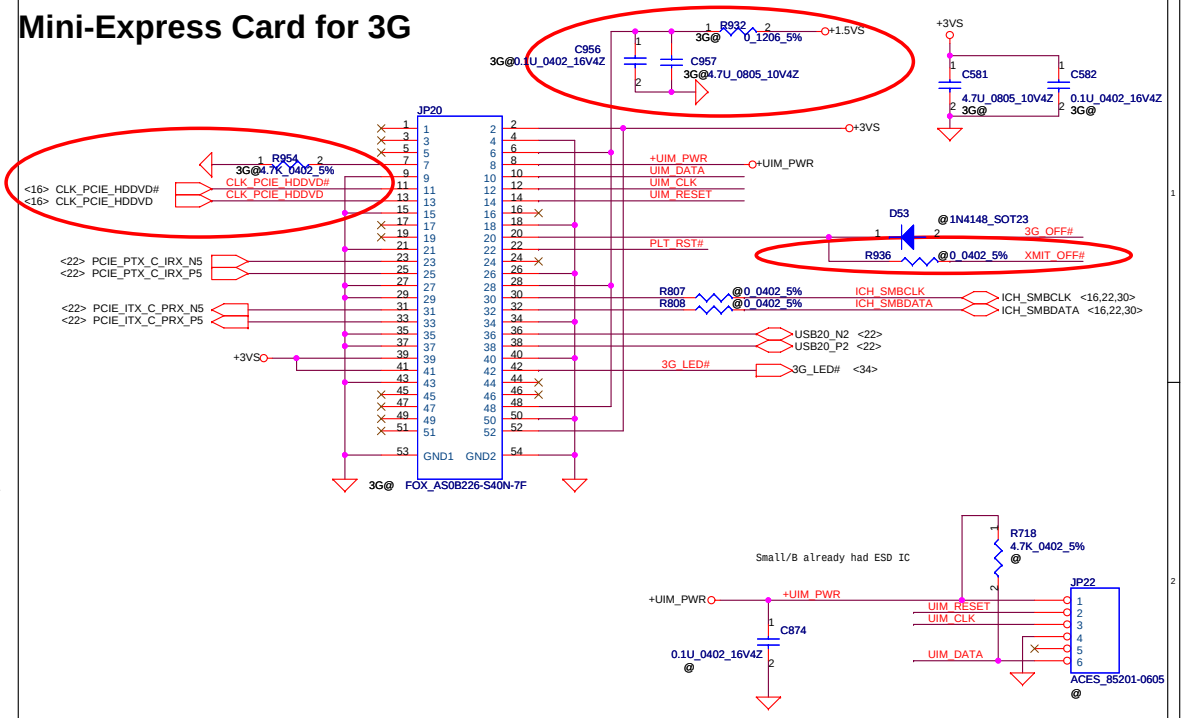
Size: | Document Number: LA-3481P | Rev: 2.0

Date: Tuesday, May 22, 2007 | Sheet 30 of 47

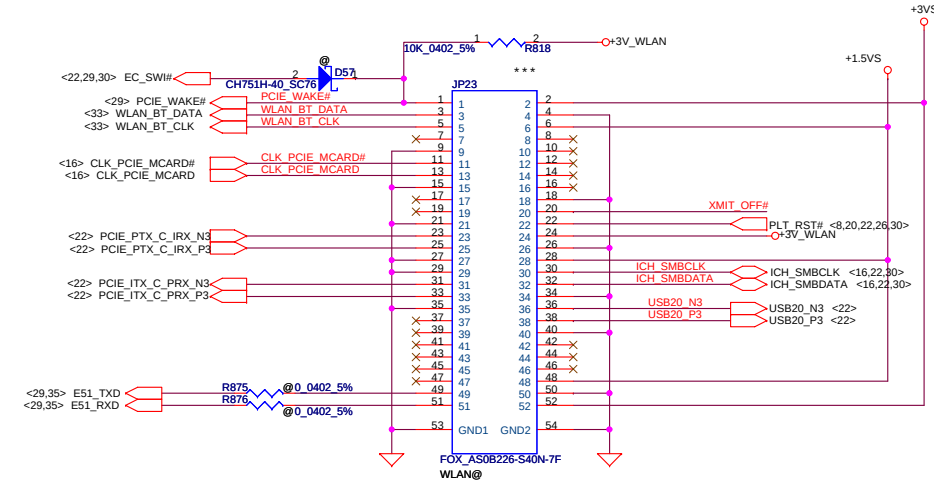
NAND mini Card(Robson support)

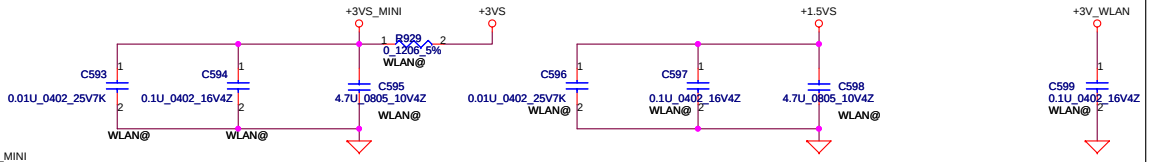


Mini-Express Card for 3G



Mini-Express Card for WLAN





Kill SWITCH

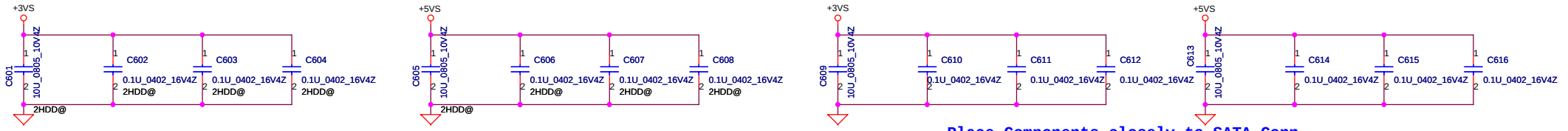
Security Classification	Compal Secret Data		
Issued Date	2006/08/05	Deciphered Date	2007/08/05

Compal Electronics, Inc.

Title: **PCI-E Mini Card I/F**

Size | Document Number: **LA-3481P** | Rev: 2.0

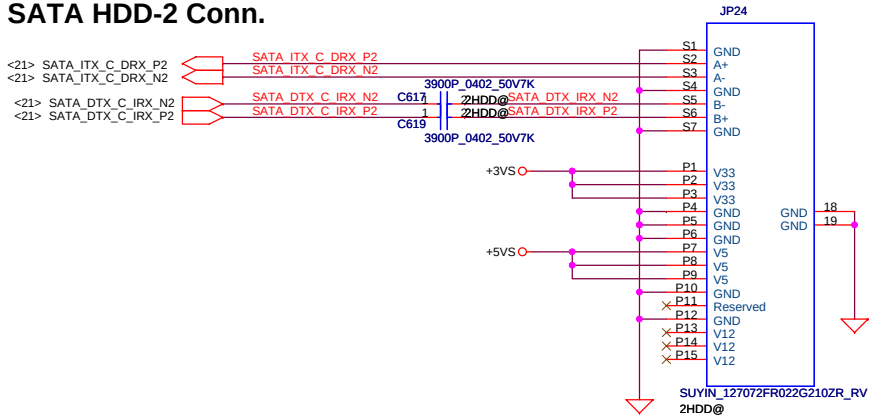
Date: Tuesday, May 22, 2007 | Sheet 31 of 47



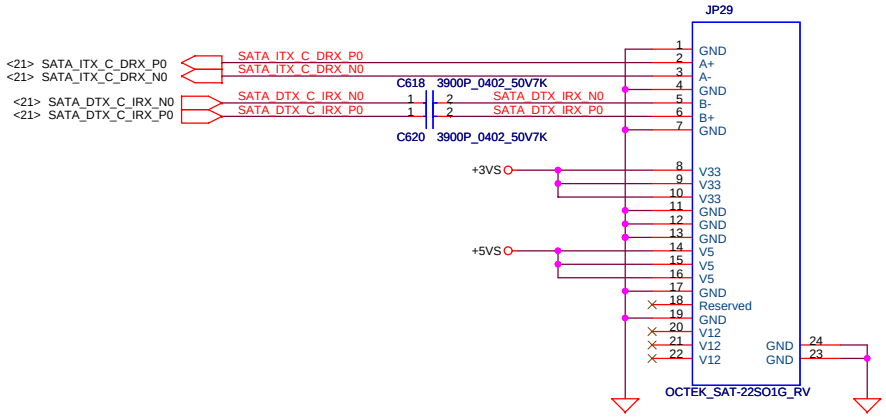
Place Components closely to SATA Conn.

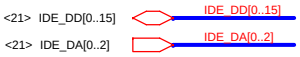
Place Components closely to SATA Conn.

SATA HDD-2 Conn.

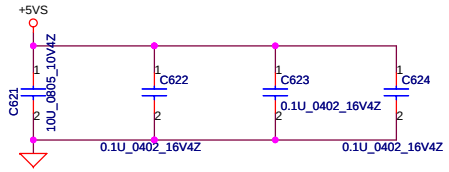


SATA HDD Conn.

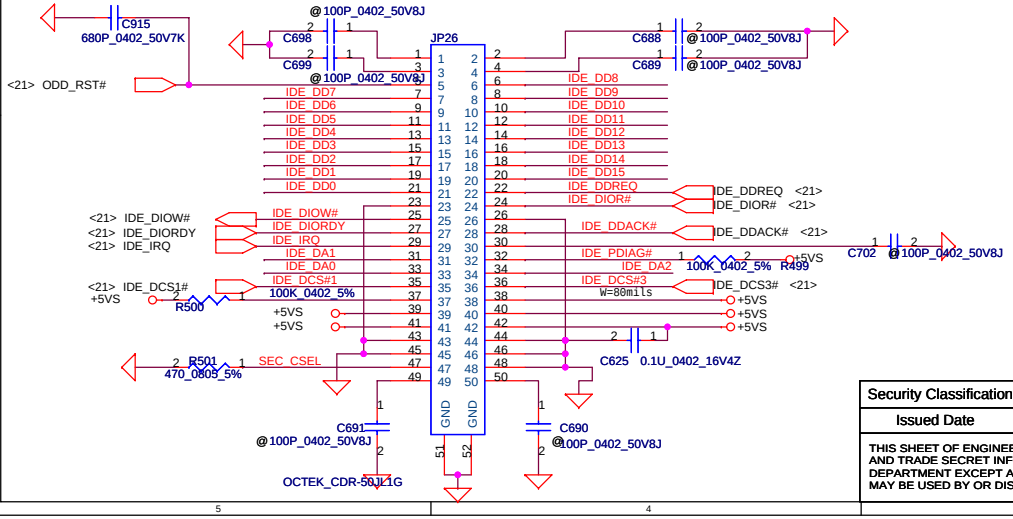




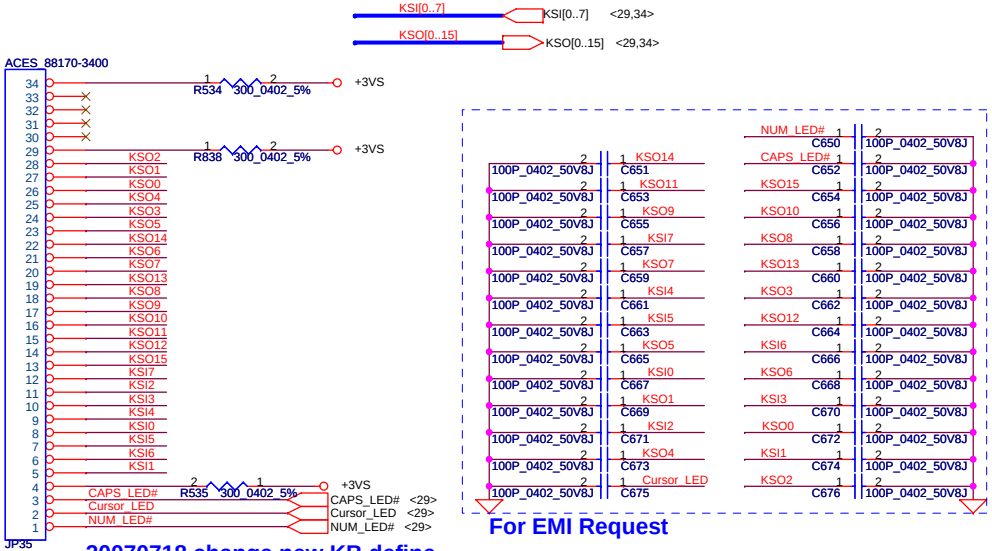
ODD CONN



Place Components closely to ODD Conn.



KEYBOARD CONN.



20070718 change new KB define

For EMI Request

Security Classification	Compal Secret Data		
Issued Date	2006/08/05	Deciphered Date	2007/08/05

Compal Electronics, Inc.			
Title: SATA & ODD			
Size	Document Number: LA-3481P		Rev: 2.0
Date: Tuesday, May 22, 2007	Sheet 32 of 47		

Int. Camera Conn

W=20mils

@ 0_0603_1%
R502
+5VS
+CAM_VDD
+5VALW
R951
Camera@ 0_0603_1%
C626 Camera@
0.1U_0402_16V4Z

JP27
GND1
GND2
ACES_88266-05001
Camera@

USB20_N8 <22>
USB20_P8 <22>

D38
@
SM05_SOT23

Fingerprint Conn

+3VS
C627
0.1U_0402_16V4Z
FP@
FP@
JP28
ACES_85201-0505

<22> USB20_N6
<22> USB20_P6

D24
SM05_SOT23
@

CIR

+5VALW
CIR@
R503
100_0805_5%
U29
GND
VCC
Vout
GND
IRM-V538/TR1_3P
CIR@

<29> CIR_IN

C629
4.7U_0805_10V4Z
CIR@

BlueTooth Interface

+5VS
+3VS
R506
1M_0402_5%
BT@
R507
100K_0402_5%
C630
0.1U_0402_16V4Z
BT@
Q17
BT@AO3413_SOT23
C631
1000P_0402_50V7K
BT@
+BT_VCC

<29> BT_PWR
Q18
2N7002_SOT23-3
BT@

Module ID
Indication for polarity of reset
Reset input High Active --> Low ,
Reset input Low Active --> Open

JP30
ACES_87213-1000
BT@

<22> USB20_P7
<22> USB20_N7
<31> WLAN_BT_CLK
<22> BT_DET#
R730
0_0402_5%

<29> BT_RST#
<31> WLAN_BT_DATA
(MAX=200mA)
+BT_VCC
+3VS
R925
@
4.7K_0402_5%

C931
BT@
0.1U_0402_16V4Z

C635
BT@
BT@
R926
4.7K_0402_5%

C634
BT@
4.7U_0805_10V4Z
0.1U_0402_16V4Z

USB CONN. 1

W=60mils

+USB_VCCC
150U_D_6.3VM
C636
C638
0.1U_0402_16V4Z
C639
1000P_0402_50V7K

JP31
P-TWO_CU304D-A0G1G-P

<22> USB20_N4
<22> USB20_P4
USB20_N4
USB20_P4
D25
PSOT24C_SOT23
@

+5VALW
U30
GND
IN
IN
EN#
OUT
OUT
OUT
FLG
G528_SO8
+USB_VCCC

C637
1U_0805_16V7K

<29> USB_EN#
USB_EN#

USB CONN.2

W=60mils

+USB_VCCC
150U_D_6.3VM
C642
C643
0.1U_0402_16V4Z
C644
1000P_0402_50V7K

JP33
P-TWO_CU304D-A0G1G-P

<22> USB20_N5
<22> USB20_P5
USB20_N5
USB20_P5
D26
PSOT24C_SOT23
@

USB Small Board

+5VALW
U31
GND
IN
IN
EN#
OUT
OUT
OUT
FLG
G528_SO8
+USB_VCCA

C876
1U_0805_16V7K

<29> USB_EN#
USB_EN#

+USB_VCCA
JP32
ACES_85201-1205

<22> USB20_P1
<22> USB20_N1
<22> USB20_P0
<22> USB20_N0

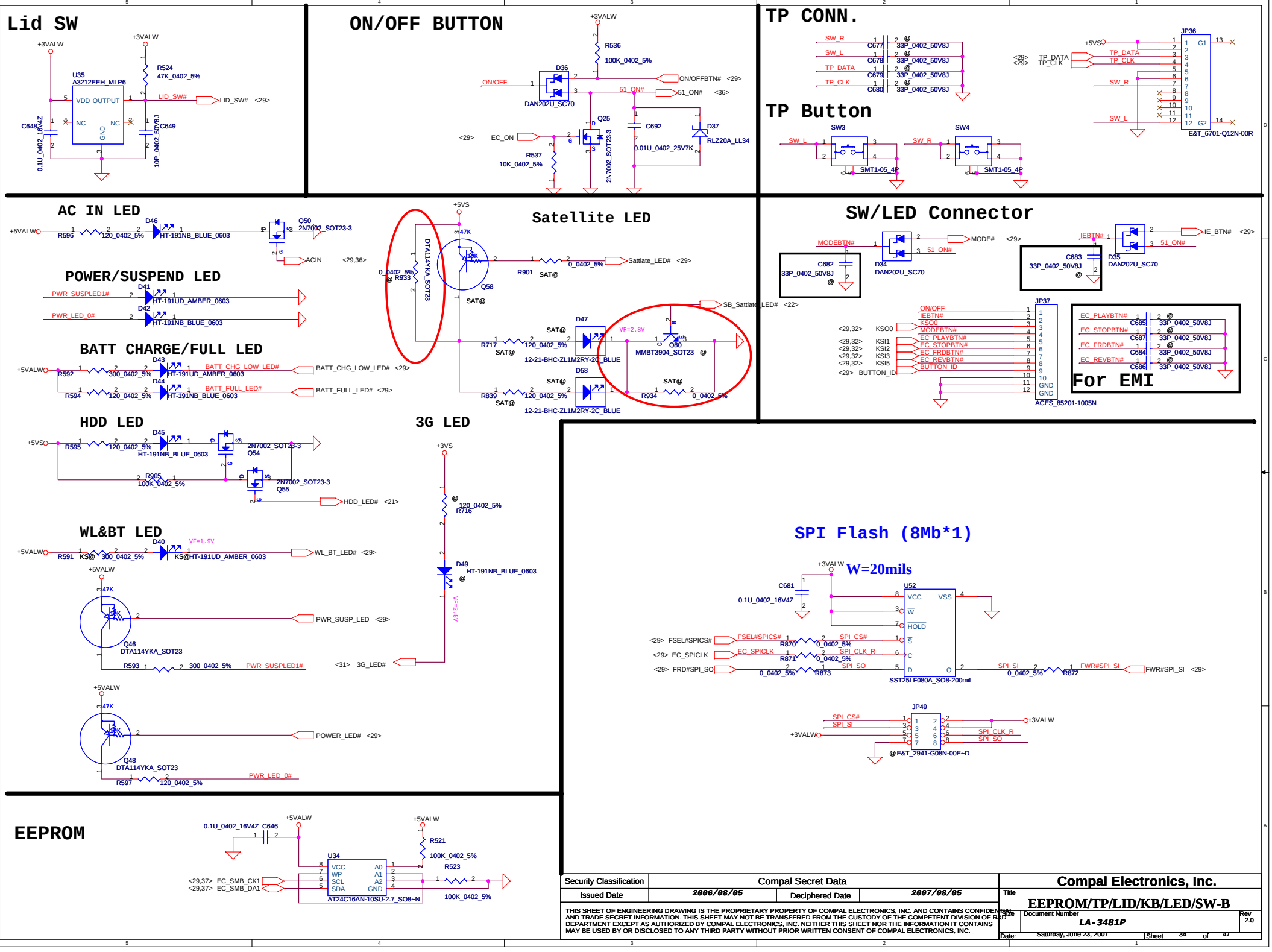
Security Classification	Compal Secret Data		
Issued Date	2006/08/05	Deciphered Date	2007/08/05

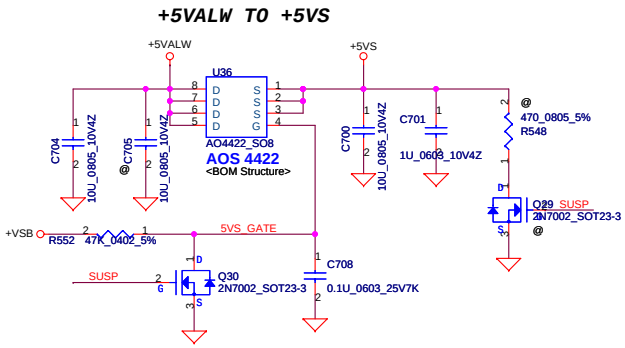
Compal Electronics, Inc.

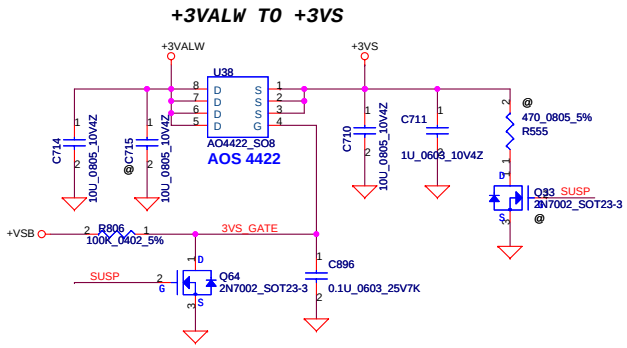
Title: **USB Conn./BT/Camera/CIR**

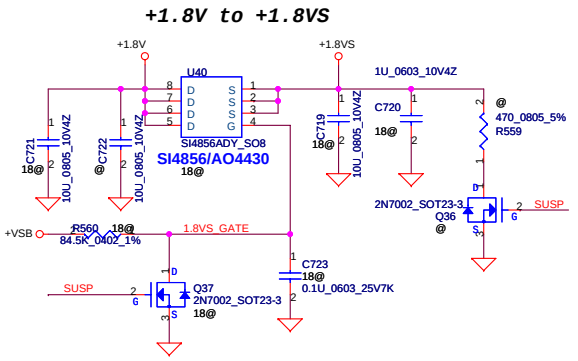
Size	Document Number	Rev
	LA-3481P	2.0

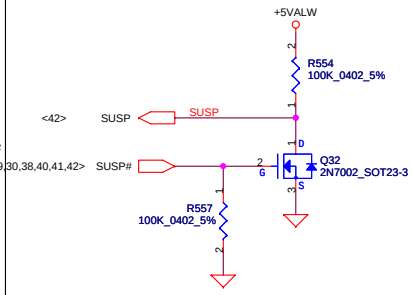
Date: Tuesday, May 22, 2007 | Sheet 33 of 47

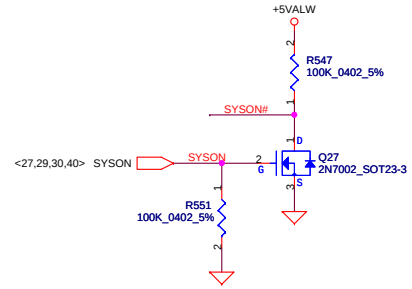

Lid SW
ON/OFF BUTTON
TP CONN.
TP Button
AC IN LED
POWER/SUSPEND LED
BATT CHARGE/FULL LED
HDD LED
WL&BT LED
Satellite LED
3G LED
SW/LED Connector
For EMI
SPI Flash (8Mb*1)
W=20mils
EEPROM
Security Classification
Compal Secret Data
Issued Date
2006/08/05
Deciphered Date
2007/08/05
Compal Electronics, Inc.
EEPROM/TP/LID/KB/LED/SW-B
Document Number
LA-3481P
Rev 2.0
Date: Saturday, June 23, 2007
Sheet 34 of 47

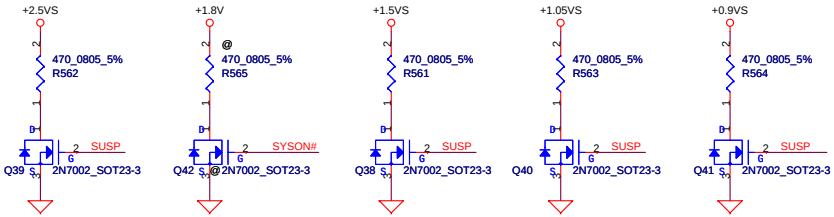






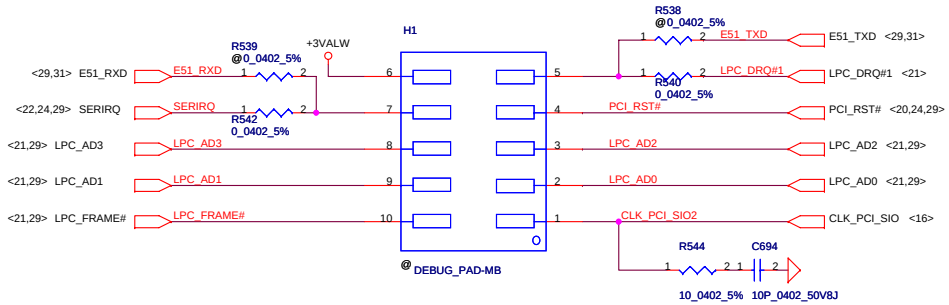


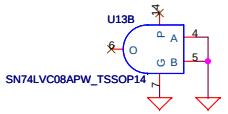




Debug Port

New LPC Debug Pad ---- MB side For EE



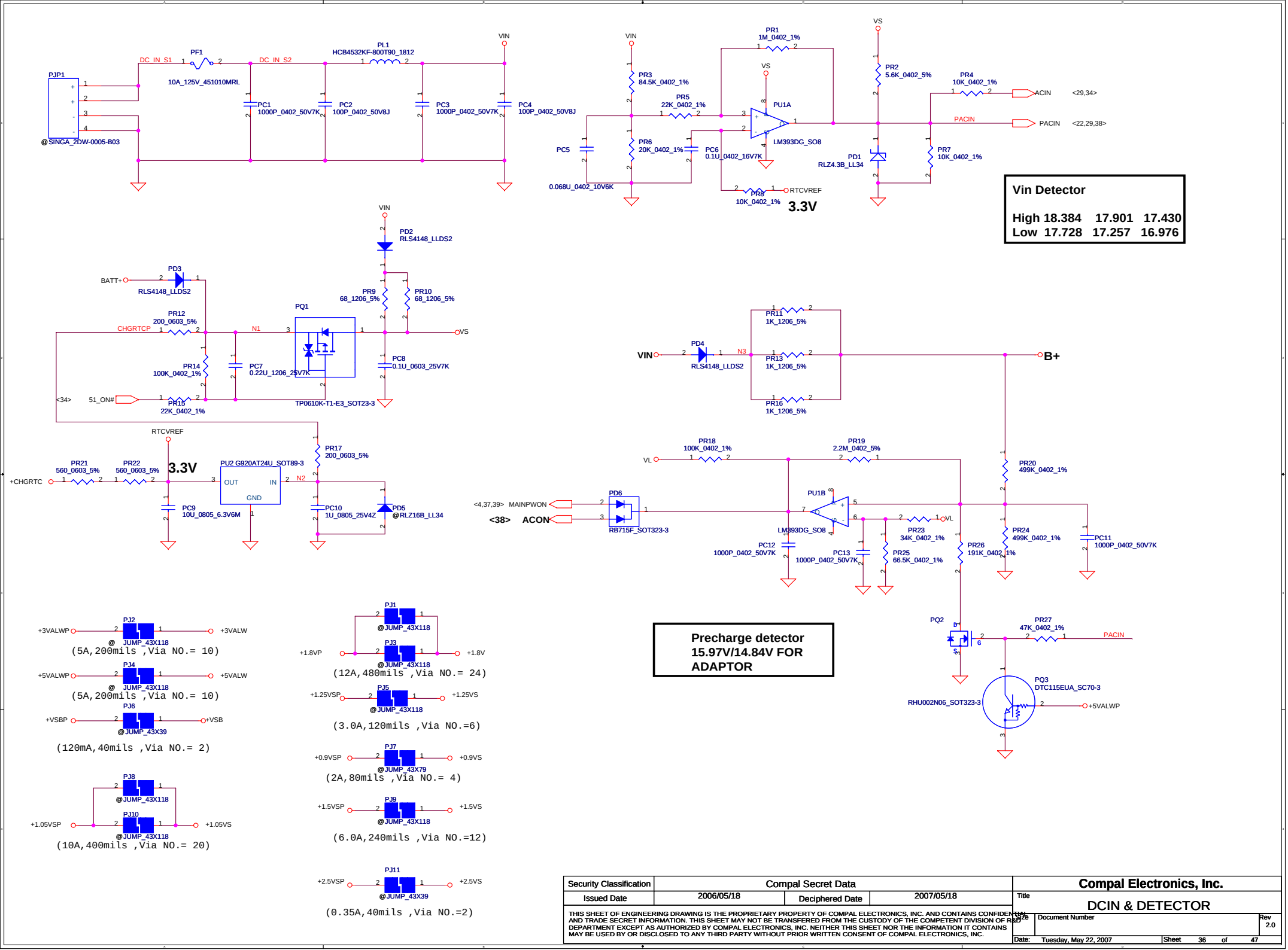


Under DDR ME Assigment Area

Keep Resistor near Debug Pad and in the same side
Reverse Side DIMM ---- Pin 1 keep away DIMM

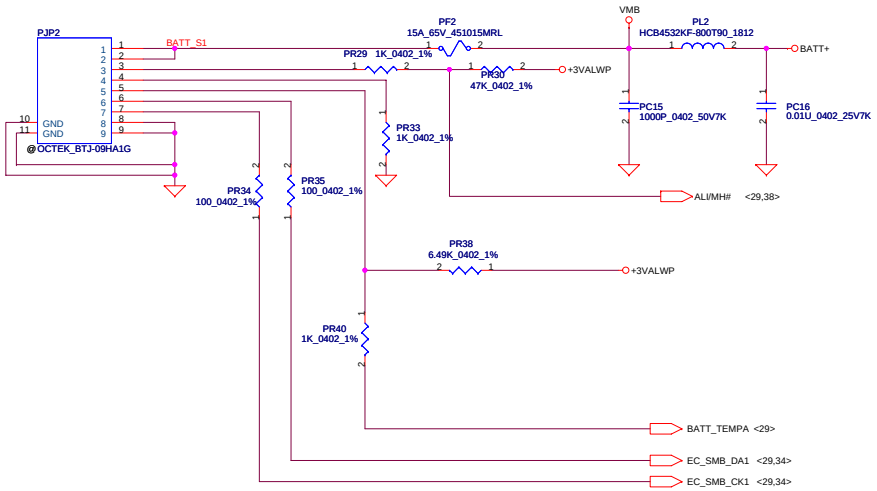
Security Classification	Compal Secret Data		
Issued Date	2006/08/05	Deciphered Date	2007/08/05

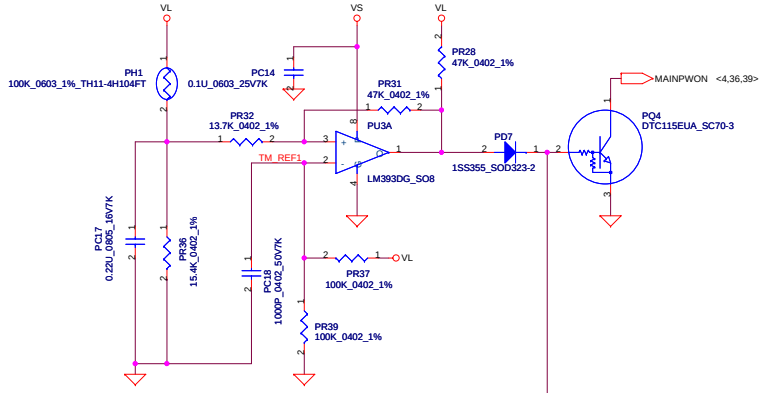
Compal Electronics, Inc.	
Title	DC/DC I/F & Debug Pad
Size	Document Number: LA-3481P
Rev	2.0
Date: Tuesday, May 22, 2007	Sheet 35 of 47



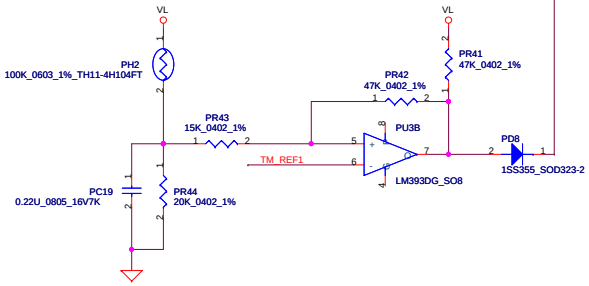
Security Classification	Compal Secret Data		Compal Electronics, Inc.
Issued Date	2006/05/18	Deciphered Date	2007/05/18
Title	DCIN & DETECTOR		
Size	Document Number		Rev 2.0
Date: Tuesday, May 22, 2007	Sheet 36 of 47		

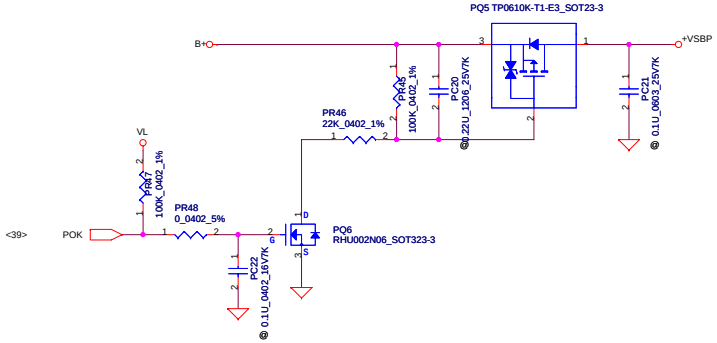
PH1 under CPU botten side :
CPU thermal protection at 92 degree C
Recovery at 56 degree C





PH2 near main Battery CONN :
BAT. thermal protection at 92 degree C
Recovery at 47 degree C





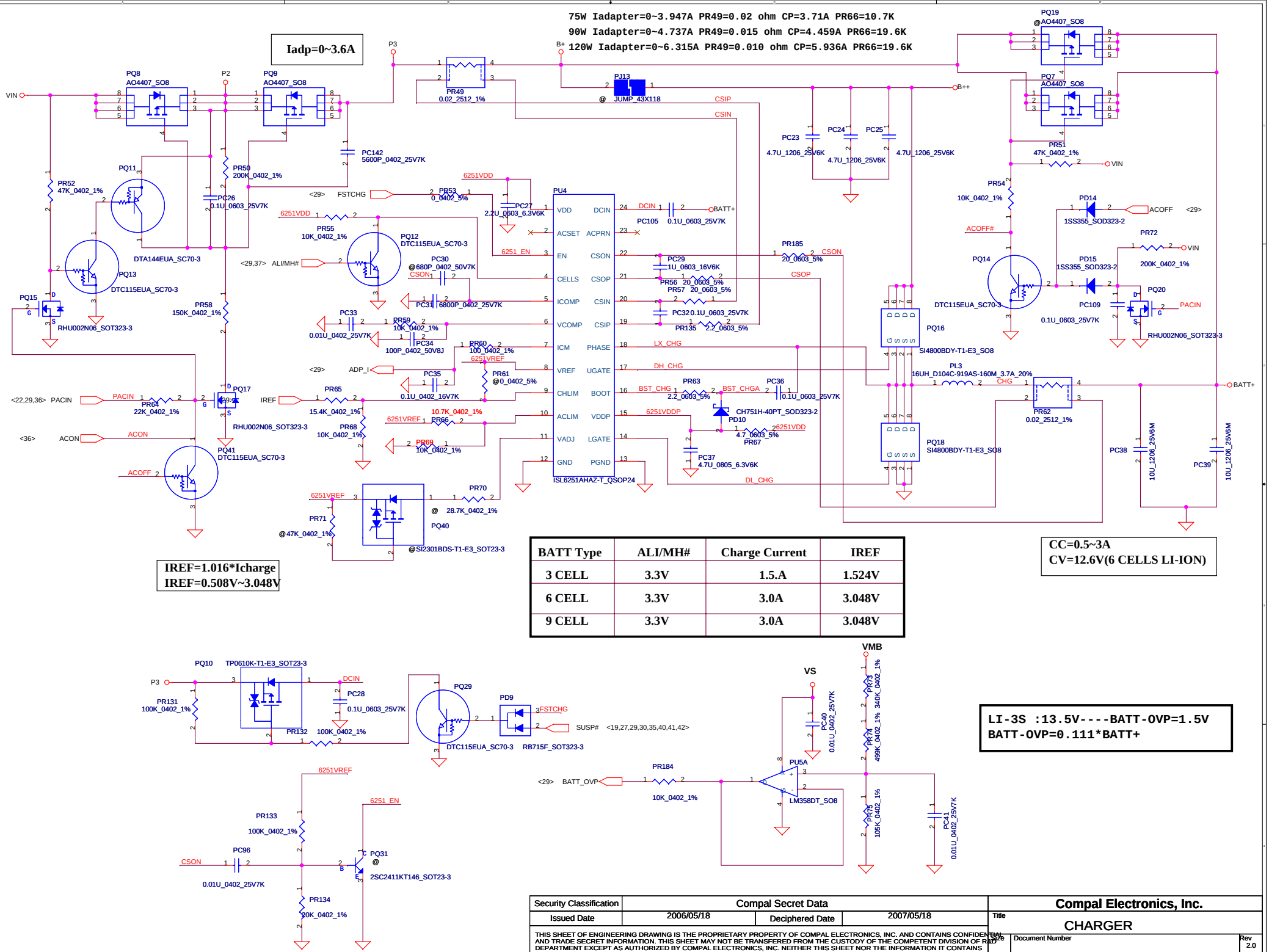
Security Classification	Compal Secret Data		
Issued Date	2006/05/18	Deciphered Date	2007/05/18

Compal Electronics, Inc.

Title: BATTERY CONN / OTP

Size | Document Number | Rev 2.0

Date: Tuesday, May 22, 2007 | Sheet 37 of 47



BATT Type	ALI/MH#	Charge Current	IREF
3 CELL	3.3V	1.5.A	1.524V
6 CELL	3.3V	3.0A	3.048V
9 CELL	3.3V	3.0A	3.048V

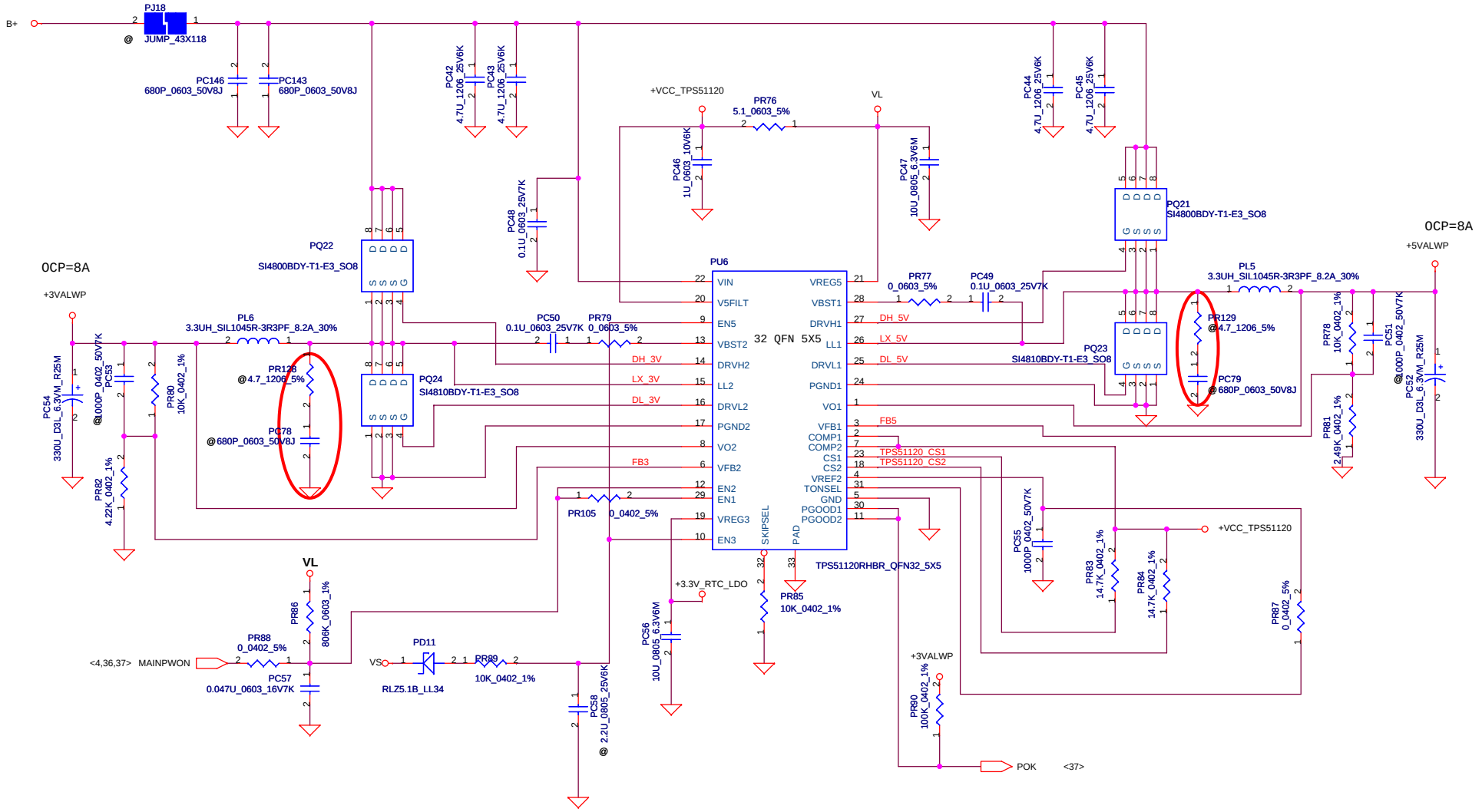
Security Classification	Compal Secret Data		
Issued Date	2006/05/18	Deciphered Date	2007/05/18

Compal Electronics, Inc.

Title: CHARGER

Size | Document Number | Rev 2.0

Date: Tuesday, May 22, 2007 | Sheet 38 of 47



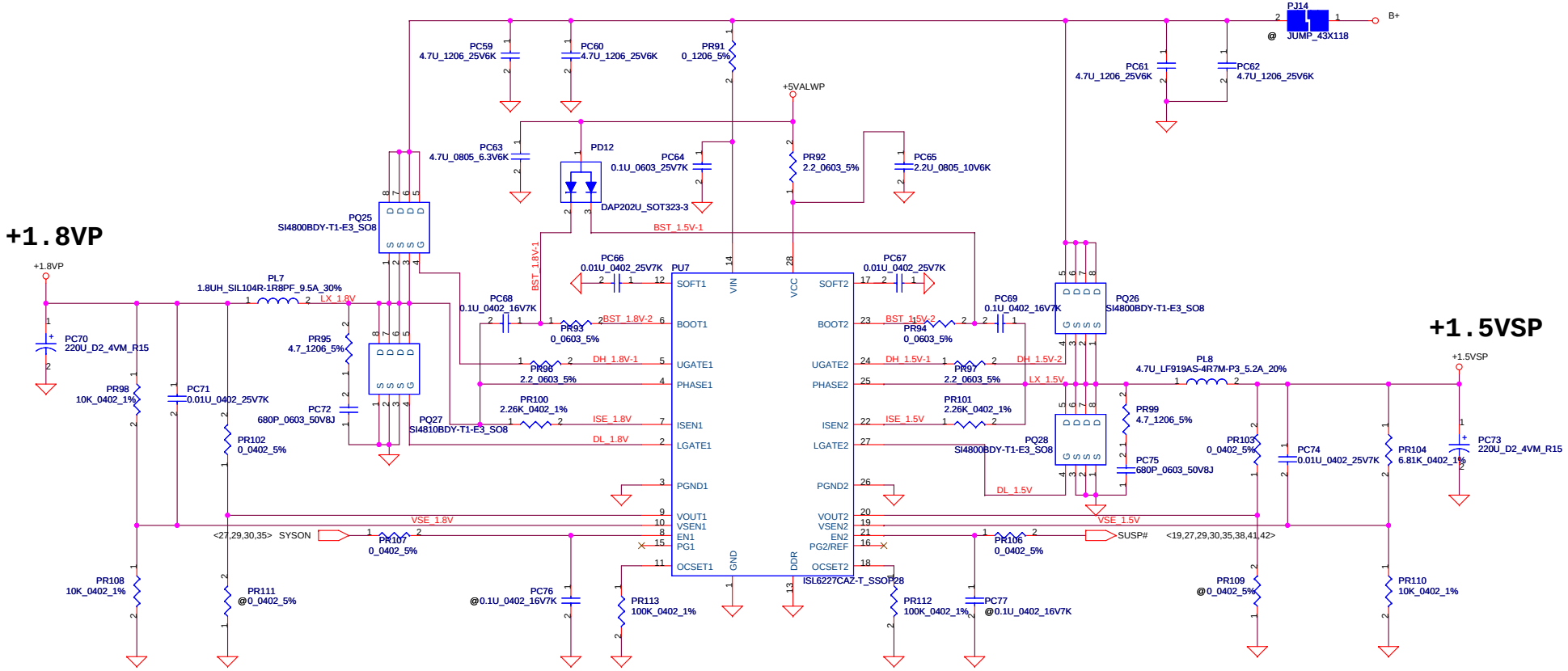
Security Classification	Compal Secret Data		
Issued Date	2006/05/18	Deciphered Date	2007/05/18

Compal Electronics, Inc.

Title: **+5V/+3V**

Size	Document Number	Rev
Custom	LA-3481P	2.0

Date: Tuesday, May 22, 2007 | Sheet 39 of 47



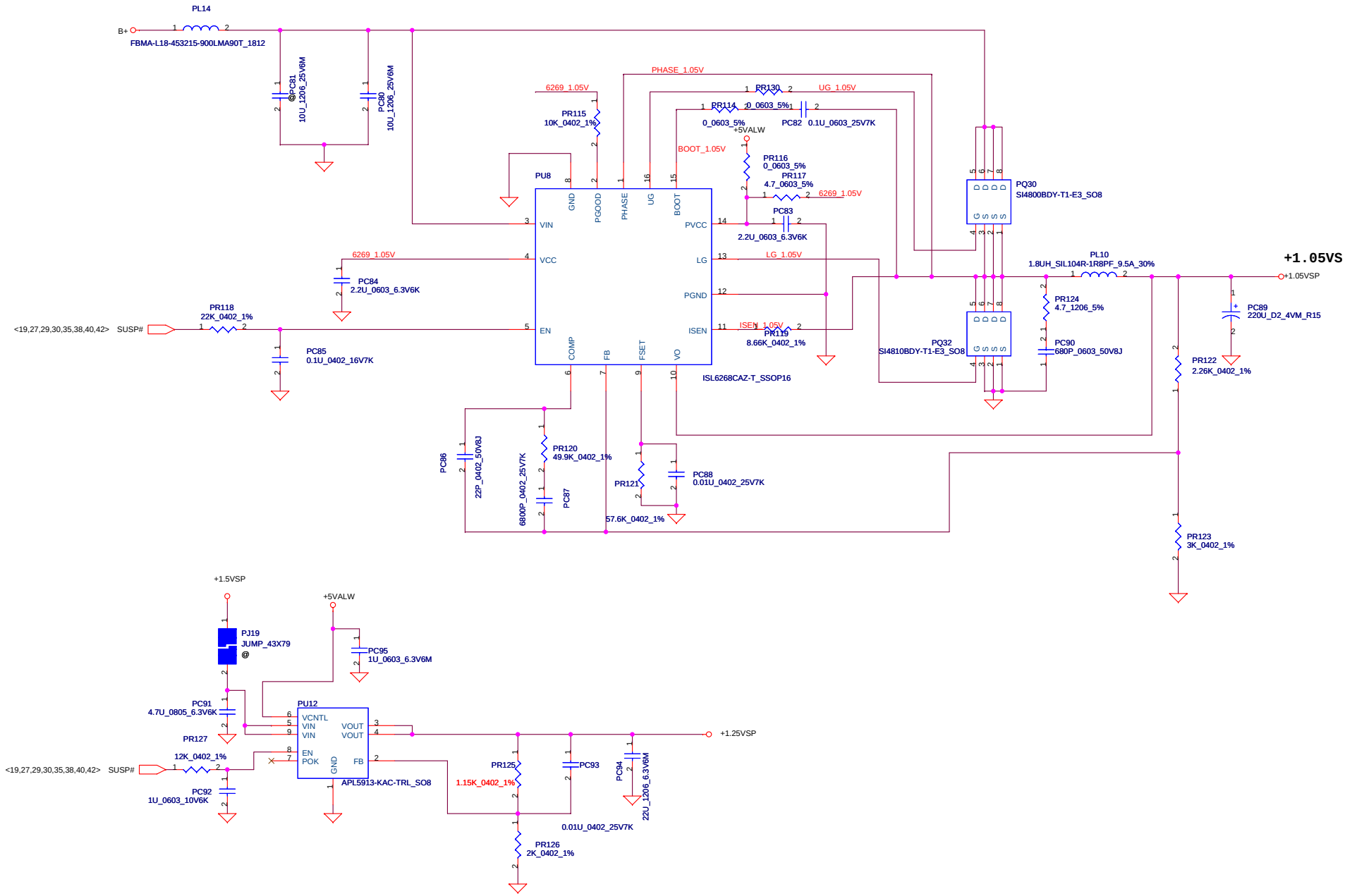
Security Classification	Compal Secret Data		
Issued Date	2006/05/18	Deciphered Date	2007/05/18

Compal Electronics, Inc.

Title: 1.8V / 1.2V

Size: C | Document Number | Rev: 2.0

Date: Tuesday, May 22, 2007 | Sheet 40 of 47



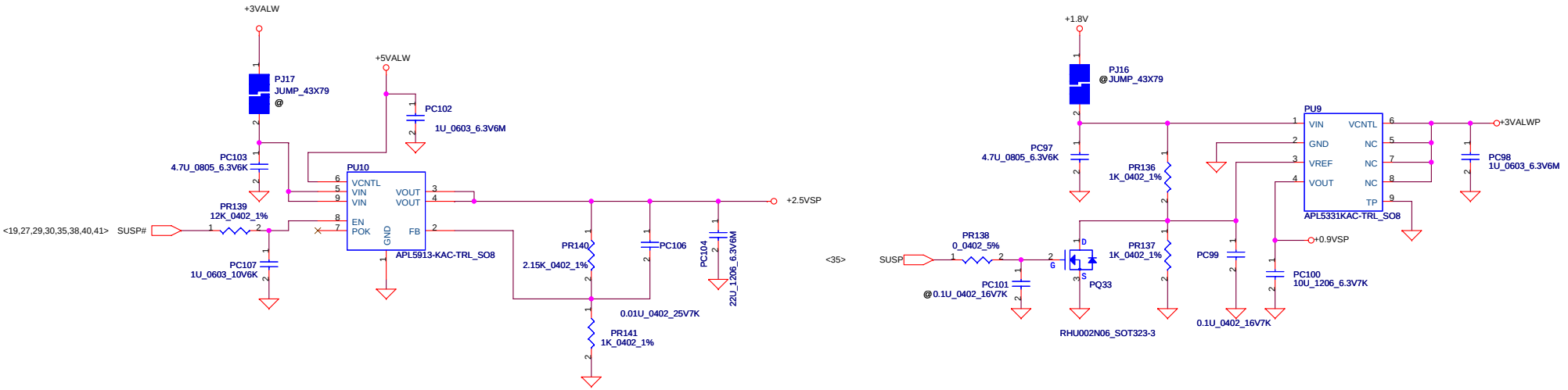
Security Classification	Compal Secret Data		
Issued Date	2006/05/18	Deciphered Date	2007/05/18

Compal Electronics, Inc.

Title: 1.05V / 1.25V

Size | Document Number | Rev 2.0

Date: Tuesday, May 22, 2007 | Sheet 41 of 47



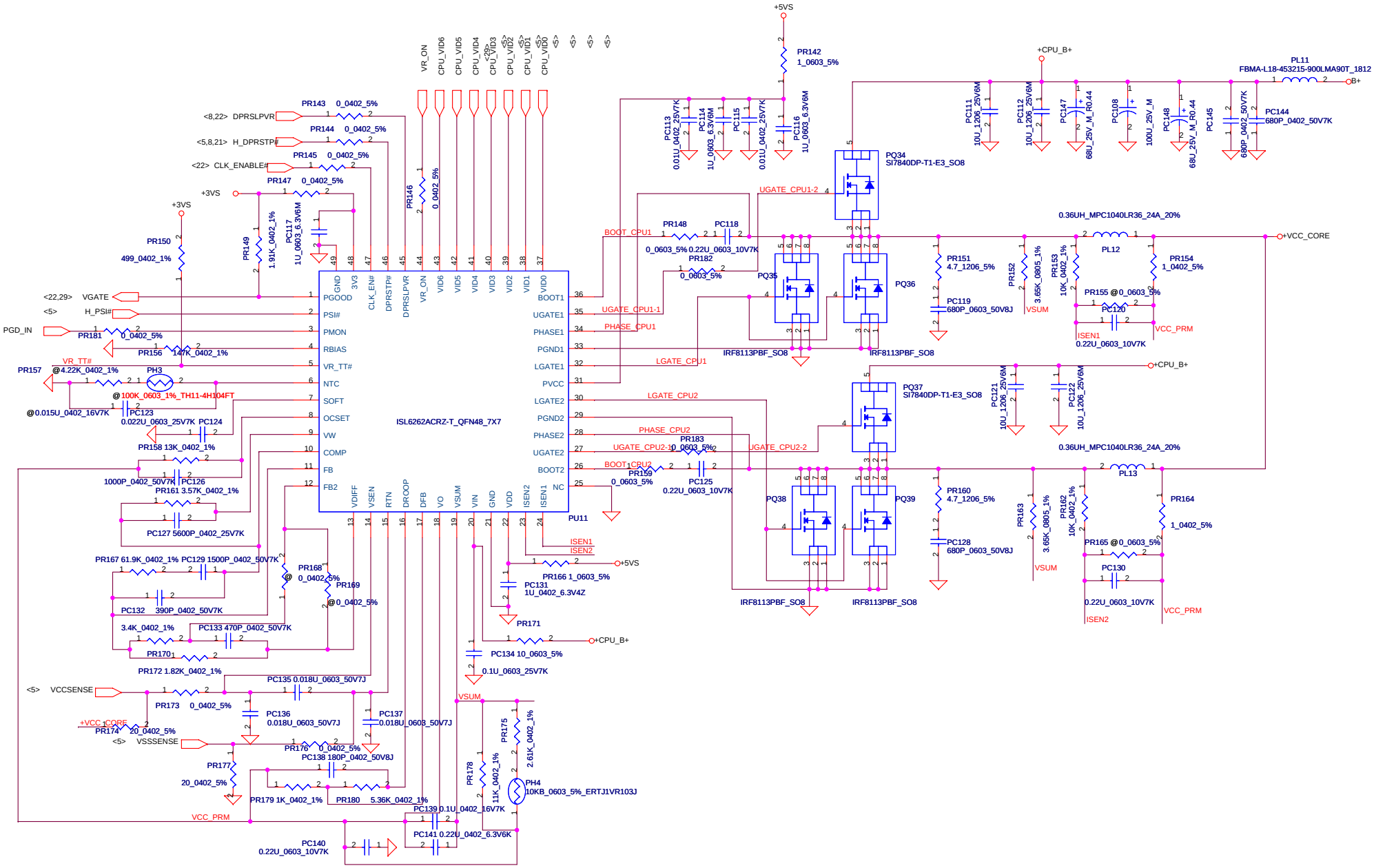
Security Classification	Compal Secret Data		
Issued Date	2006/05/18	Deciphered Date	2007/05/18

Compal Electronics, Inc.

Title: 1.05V / 0.9V / 1.5V

Size | Document Number | Rev 2.0

Date: Tuesday, May 22, 2007 | Sheet 42 of 47



Security Classification	Compal Secret Data		
Issued Date	2005/06/23	Deciphered Date	2006/06/23

Compal Electronics, Inc.

Title: **+CPU_CORE**

Size	Document Number	Rev
Custom	LA-3481P	2.0

Date: Tuesday, May 22, 2007 | Sheet 43 of 47

HW4 Product Improvement Record (P.I.R.)

ISKAA LA-3481P SCHEMATIC CHANGE LIST
REVISION CHANGE: 0.1 TO 2A

Rev 0.1 to 0.2

NO	PAGE	MODIFICATION LIST	PURPOSE
1	17	Add JP39	Add CRT Board
2	22	Change R322 from 150 ohm to 10K ohm	From Intel recommend
3	12	Delete L13, L14, C199, C140	1.25VS_DMI share with 1.25VS_PEG
4	31	Modify PCI-E for WLAN and Robson	Design issue
5	15	Delete C234	Share with C729

Rev 0.2 to 0.3

NO	PAGE	MODIFICATION LIST	PURPOSE
1	11	Remove C116	From Intel recommend
2	16	Change EXP_CLKREQ# from U4.44 to U4.3	Common design with ISRAA
3	16	Change CLK_MCH_3GPLL from U4.27 to U4.47	Common design with ISRAA
4	16	Change CLK_PCIE_CARD from U4.47 to U4.27	Common design with ISRAA
5	19	Add R949 and Remove D11	Design change
6	19	Add JP42	Co-layout 30 pin LVDS connector
7	24	Add R874	Reserve the resister for EMI
8	29	Change EC from KB910 to KB926	Design change
9	34	Change SPI BIOS U52	Design change
10	34	Add Q54, Q55	HDD LED controlled by SB
11	47	Add Energy Star circuit	Design change
12	10	Change C84~C115 from Y5V to X7R	For VGA thermal issue

Rev 0.3 to 0.4

NO	PAGE	MODIFICATION LIST	PURPOSE
1	12	Modify L58 to 4.7 ohm	For TV-out wave line issue
2	12	Change R686 to 2.2uf	For TV-out wave line issue
3	12	Modify L15 to 100 ohm	from Intel recommend for new chip set
4	12	Change R694 to 1uf	from Intel recommend for new chip set
5	26	Reserve L92,R941,R944,R946,R947, C965,C963,R937,C962,C964	Reserve for LAN controller 8111C
6	33	Modify Camera power from +5Vs to +5VALW	Change for Camera can't detect from S3 resume
7	29	Add R928	For CIR issue
7	22	Add R903 and R927	For CIR issue

Rev 0.4 to 1.0

NO	PAGE	MODIFICATION LIST	PURPOSE
		Change PCB 0.4 to 1.0	Modify Revision for MP
1	27	Add R935	Design for speaker select
2	28	Change L49, L50, L51, L52 to 0 ohm	For speaker issue
3	27	Change C517 and C519 from 1uf to 4.7uf	From Realtek recommend for THD+N issue
4	31	Add R954	For HD-DVD function

Rev 1.0 to 2.0

NO	PAGE	MODIFICATION LIST	PURPOSE
1	18	Add U54 and C966	For HDMI hot plug issue
2	18	Remove 1932 circuit	M72 and M76 has internal HDMI
3	18	Remove CMD circuit	For EMI issue
4	18	Add L66, L67, L68, L69	For EMI issue
5	18	Add Q134,Q135 level-shifting circuit	For HDMI level-shifting
6	18	Change R705 and R706 to 19.1K ohm	From ATI recommend
7	24	Reserve R713, R714, R715, C873, C875, C877	For EMI issue
8	32	Reserve C650~C676	For EMI issue
9	34	Reserve C682~C687	For EMI issue
10	18	Change R621 to 100K ohm and R723 to 2.2K ohm	For HDMI level-shifting

Rev 2.0 to 2A

NO	PAGE	MODIFICATION LIST	PURPOSE
1	18	Add U55 level-shifting circuit	For HDMI level-shifting
2	29	Change C943 and C944 from 10pf to 15pf	From ENE recommend for crystal issue
3	23	Change C360 from 0.1uf to 1uf	From Intel recommend for boot-up issue
4	22	Remove R327, R328, R329	For leakage issue

Security Classification	Compal Secret Data		Compal Electronics, Inc.
Issued Date	2006/06/30	Deciphered Date 2008/05/21	Title: P.I.R.
Size	Document Number: LA-3481P		Rev: 2.0
Date: Saturday, June 23, 2007	Sheet 44 of 47		

NB

U3
965GM_R3
GMR3@

U3
965GM_R1
GMR1@

U3
965PM_R1
PMR1@

U3
GL960_R3
GLR3@

ICH8M

U10
ICH8M_R1
ICH8MR1@

LAN

U37
100M
100M@

R694
1U_0402_6.3V4Z
GM@

R686
2.2U_0402_6.3VM
GM@

TRANSFORMER

U19
100M
100M@

PCB

PCBA
LA-3481P_DAZ

CARDBUS

U14
TI8402
8402@

DC-JACK

PJP1
SINGA_2DW-0005-B03
45@

FD4 FD6 FD5 FD2 FD1 FD3

CF5 CF6 CF10 CF3 CF9

CF4 CF8 CF2 CF7 CF1

Screw Hole

H2 H_C276D118
H3 H_C276D118
H4 H_C276D118
H5 H_C276D118
H6 H_C276D118
H7 H_C217D118
H8 H_C217D118
H9 H_C276D118
H10 H_C276D118
H11 H_C236D122
H12 H_C236D122
H13 H_C236D122
H14 H_C236D146
H30 H_C236D122
H15 H_C236D43
H16 H_C236D43
H17 H_C236D43
H31 H_C236D122
H18 H_C315D165
H19 H_C315D165
H20 H_C315D165
H21 H_C315D165
H22 H_C276D158
H23 H_C276D158
H32 H_C276D158
H24 H_C118D118N
H25 H_O118X197D118X197N
H26 H_O197X55D158X16
H27 H_S315D118
H28 H_S315D118
H29 H_S315D118

Security Classification	Compal Secret Data		
Issued Date	2006/08/05	Deciphered Date	2007/08/05

Compal Electronics, Inc.

Title: ISPD & Screw Hole

Size | Document Number: LA-3481P | Rev: 2.0

Date: Tuesday, May 22, 2007 | Sheet 45 of 47

NO	DATE	PAGE	MODIFICATION LIST	PURPOSE
9/14		P.39	Change PACIN to GND	Change to AUTO-SKIP mode
9/14		P.39	Add PR105 0_0402_5%	Reserve control sequence pin
9/14		P.37	Change PF2 to 15A	Increase design margine
10/24		P.36,37,43	Change PL1,PL2,PL11 to Tai-Tech	Buyer request
10/24		P.39,43	Add PC143,PC144,PC145	EMI request
10/24		P.41,43	Add snubber PR124,PC90,PR151,PC119,PR160,PC128	EMI request
10/24		P.41	Change PR119 to 5.49K	Modify 1.05V OCP point
10/24		P.40	Change PC70 to 330U_D2_9m ohm	Reduce the 1.8V ripple

Security Classification	Compal Secret Data		
Issued Date	2005/06/01	Deciphered Date	2006/06/01

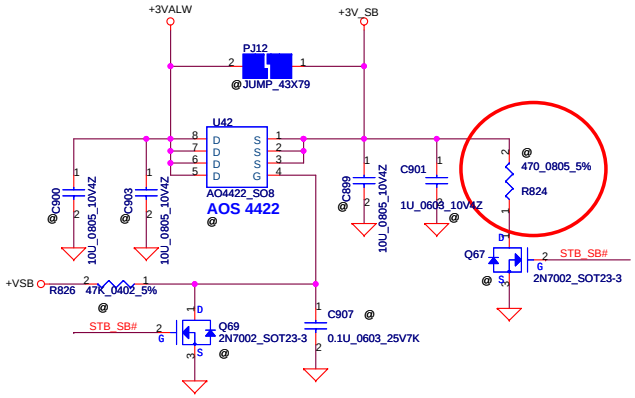
Compal Electronics, Inc.

Title: **Power PIR**

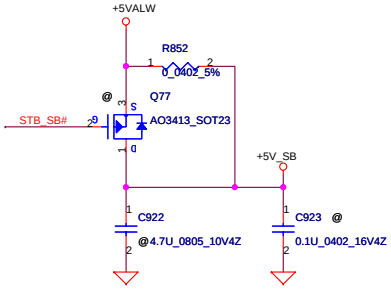
Size	Document Number	Rev
	LA-3481P	2.0

Date: Tuesday, May 22, 2007 | Sheet 46 of 47

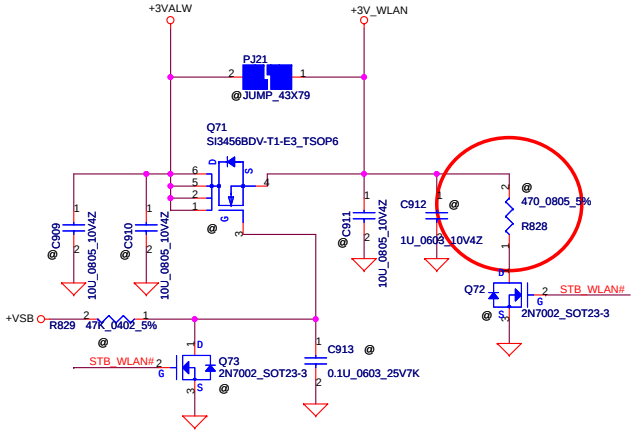
+3VALW TO +3V_SB



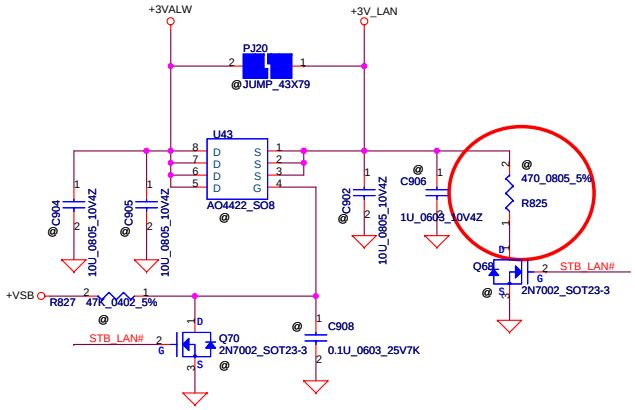
+5VALW TO +5V_SB

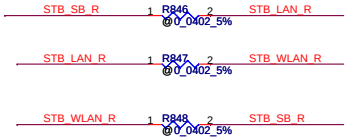


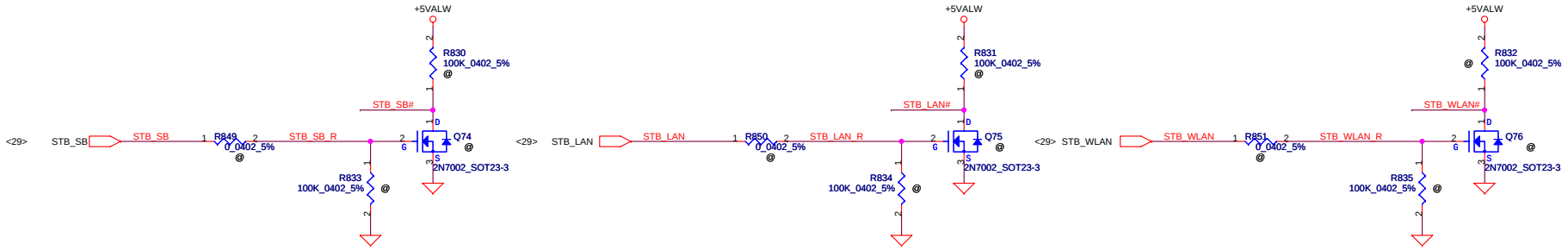
+3VALW TO +3V_WLAN



+3VALW TO +3V_LAN







Security Classification	Compal Secret Data		
Issued Date	2006/06/30	Deciphered Date	2007/06/30

Compal Electronics, Inc.

Title: **DC/DC I/F & Screw**

Size: D | Document Number: **LA-3481P** | Rev: 2.0

Date: Tuesday, May 22, 2007 | Sheet 47 of 47