Compal confidential

HGT30/31 Schematics Document

Mobile Yonah uFCPGA with Intel Calistoga_GM/PM+ICH7-M core logic

2006-02-15

REV:0.3

Security Classification	Compal Secret Data		
Issued Date	2005/03/10	Deciphered Date	2006/03/10

Compal Electronics, Inc.		
Title: Cover Sheet		
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File Name : LA-3061

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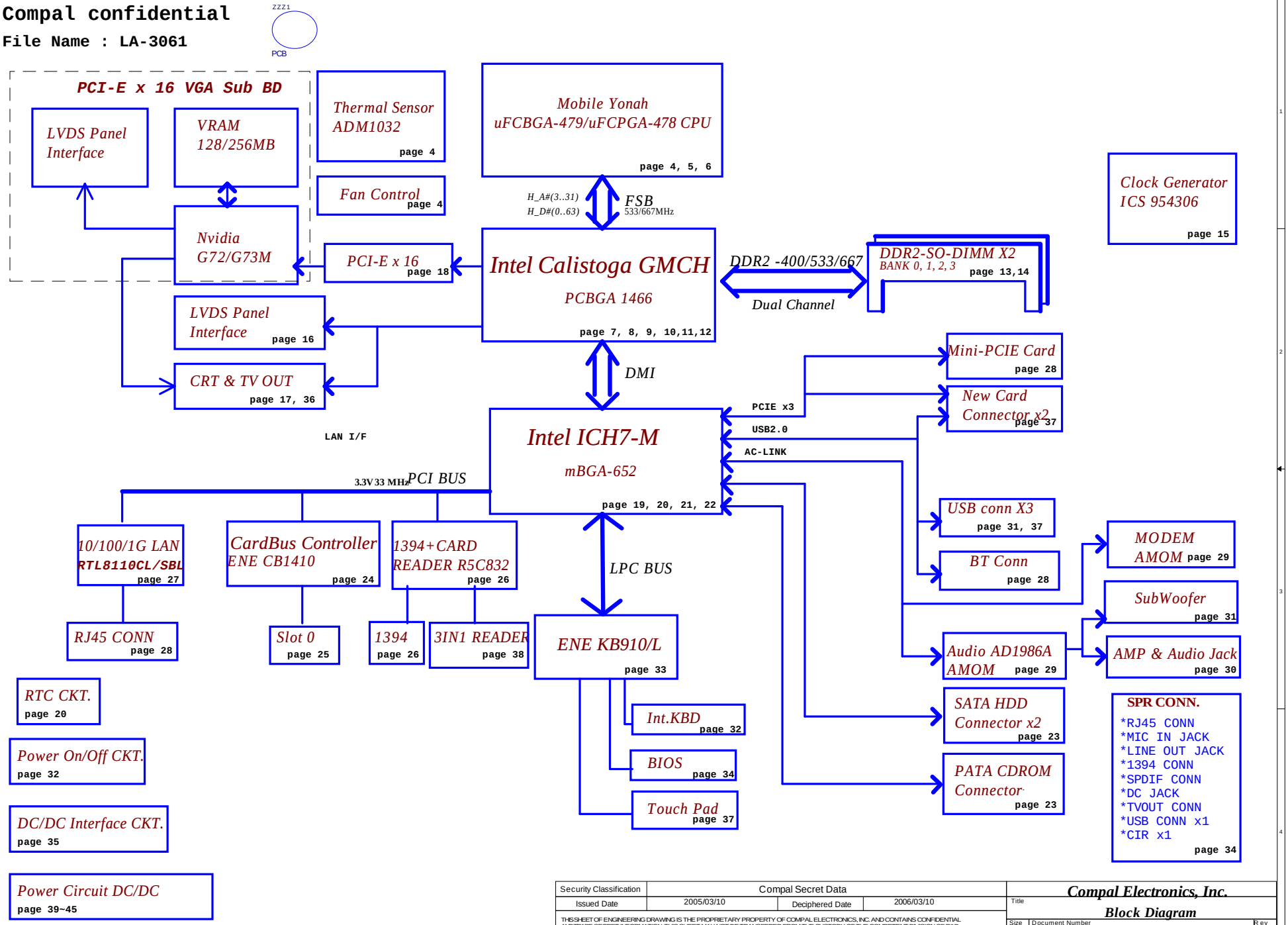
PCB



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Title: **Block Diagram**

Size	Document Number	Rev
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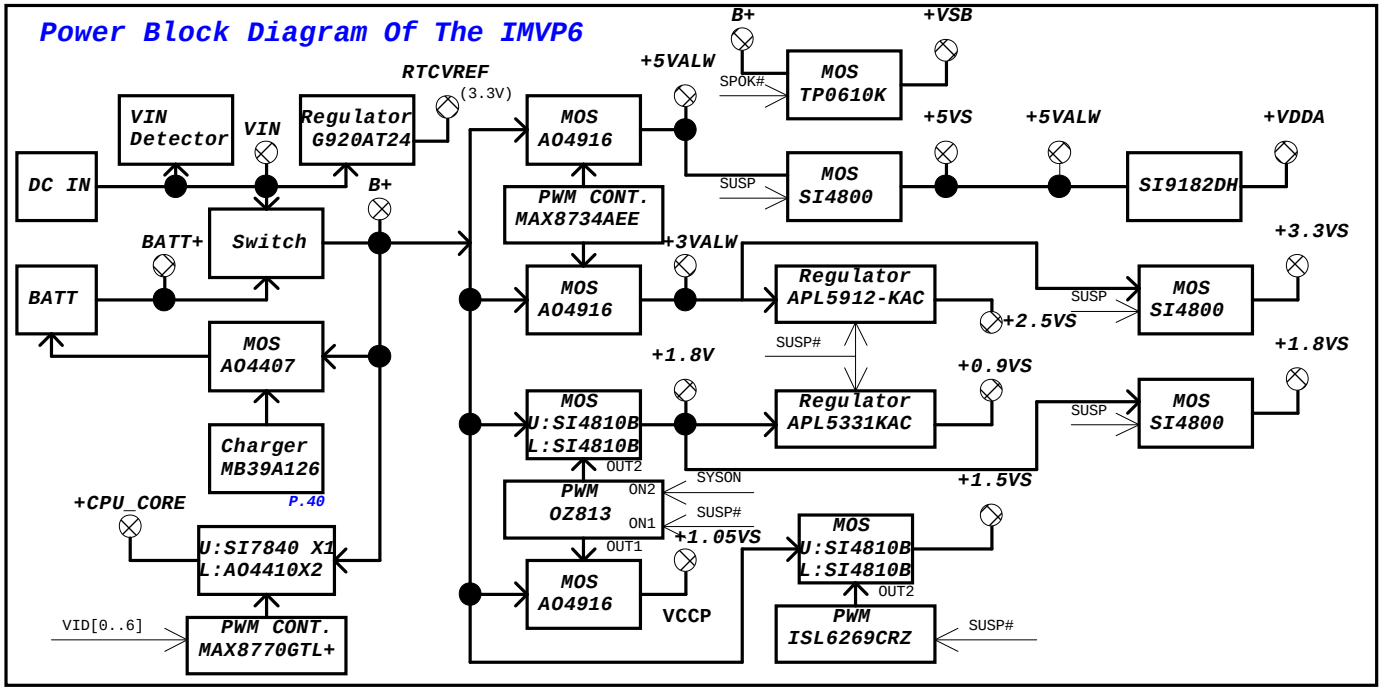
Power Block Diagram Of The IMVP6



+3VALW	KB910L SB RTL8110SBL/CL	mA 160mA
+CPU_CORE	CPU	36A
+VCCP	CPU NB	2.5A 9.8A (14.7A)
+5VS	EXPRESS CARD HDD ODD MDC APA2066 TPA0211 AD1986 USB PORT * 6	1A 1.5A 1.8A 300mA 1A mA 70mA 3A
+3VS	NB EXPRESS CARD CLK_GEN LCDVCC VGA CARD (G7XM) SB R5C832 BIOS ROM KB910L CB1410	480mA 1A 200mA 1A 655mA 680mA mA 15mA 200mA mA
+2.5VS	VGA CARD (G7XM) NB	130mA (143mA)
+1.8V	DDR2_DIMM NB (667Mhz)	8A 3.1A
+1.8VS	GDDR2 VGA CARD (G7XM)	6A 4.06A
+0.9VREF	DDR2_DIMM	10mA
+0.9VS	GDDR2 DDR2_DIMM	1A 2A
+1.5V	SB	40mA
+1.5VS	NB SB MiniCard EXPRESS CARD VGA CARD (G7XM)	8.9A(13.8A) 3.8A 1A 0.65A 2A

PCI DEVICES

EXTERNAL	IDSEL#	REQ/GNT#	PIRQ
CARD BUS CB1410	AD20	2	PCI_PIRQA#
CARD READER & 1394 R5C832	AD22	0	PCI_PIRQG# PCI_PIRQH#
LAN CONTROLLER RTL8110SBL/CL	AD17	3	PCI_PIRQF#

PCIE LANE

LANE	DEVICE
1	Express Card
2	Mini Card

USB

PORT	DEVICE
0	LEFT SIDE
1	BLUE TOOTH
2	RIGHT SIDE
3	NC
4	RIGHT SIDE
5	NC
6	NC

I2C / SMB Address

KB910/L (SM1-Pulled-Up 5V)

DEVICE	ADDRESS R/W	
AT24C16AN	A3/A2 H	
SMART BATTERY	17/16 H	

KB910/L (SM2-Pulled-Up 3.3V)

ADM1032AR	99/98 H	

G7xM (I2CC-Pulled-Up 3.3V)

G781-1 (RESERVED)	9B/9A	

ICH7M SM Bus

ICS9LPR325AKLFT	D3/D2 H	(3.3V)
DDR II DIMM0	A1/A0 H	(3.3V)
DDR II DIMM1	A3/A2 H	(3.3V)
Express Card	NC	(2.5V)
Mini-Express	NC	(2.5V)

BOM Structure

MARK	FUNCTION
@	NC FOR ALL
EXP@	PCIE-NEW CARD
BT@	BLUE TOOTH
UMA@	Internal 945GM
VGA@	External G7xM
SUBWOOFER@	SUBWOOFER
HGT30@	HGT30
CB@	PCMCIA/CARD BUS
GIGA@	8110SBL(SCL)Giga LAN
10/100@	8110CL 10/100Mb LAN

Voltage Rails

O MEANS ON
X MEANS OFF

State (S4 : STD, S5 : SOFT OFF) \ power plane	+B LDO3 LDO5	+5VALW +3VALW	+1.8V +5V	+5VS +3VS +2.5VS +1.8VS +1.5VS +VGA_CORE +1.2VS +0.9VS +CPU_CORE +VCCP
S0	0	0	0	0
S1	0	0	0	0
S3 : STR	0	0	0	X
S5 S4/AC	0	0	X	X
S5 S4/ Battery only	0	X	X	X
S5 S4/AC & Battery don't exist	X	X	X	X

MB_ID

MB ID	P NAME
0	HGT-30
1	HGT-31

BRD_ID R119(Ra)=100K Ohm

ID	MB REV#	R115(Rb)	Vab
0	R01 (EVT)	0	0V
1	R02 (DVT)	8.2K	0.25V
2	R03	18K	0.50V
3	R04	33K	0.82V
4		56K	1.19V
5		100K	1.65V
6		200K	2.20V
7		NC	3.30V

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Title	Notes List		
Size: Custom	Document Number: HGT30/31 LA-3061		Rev: 0.1
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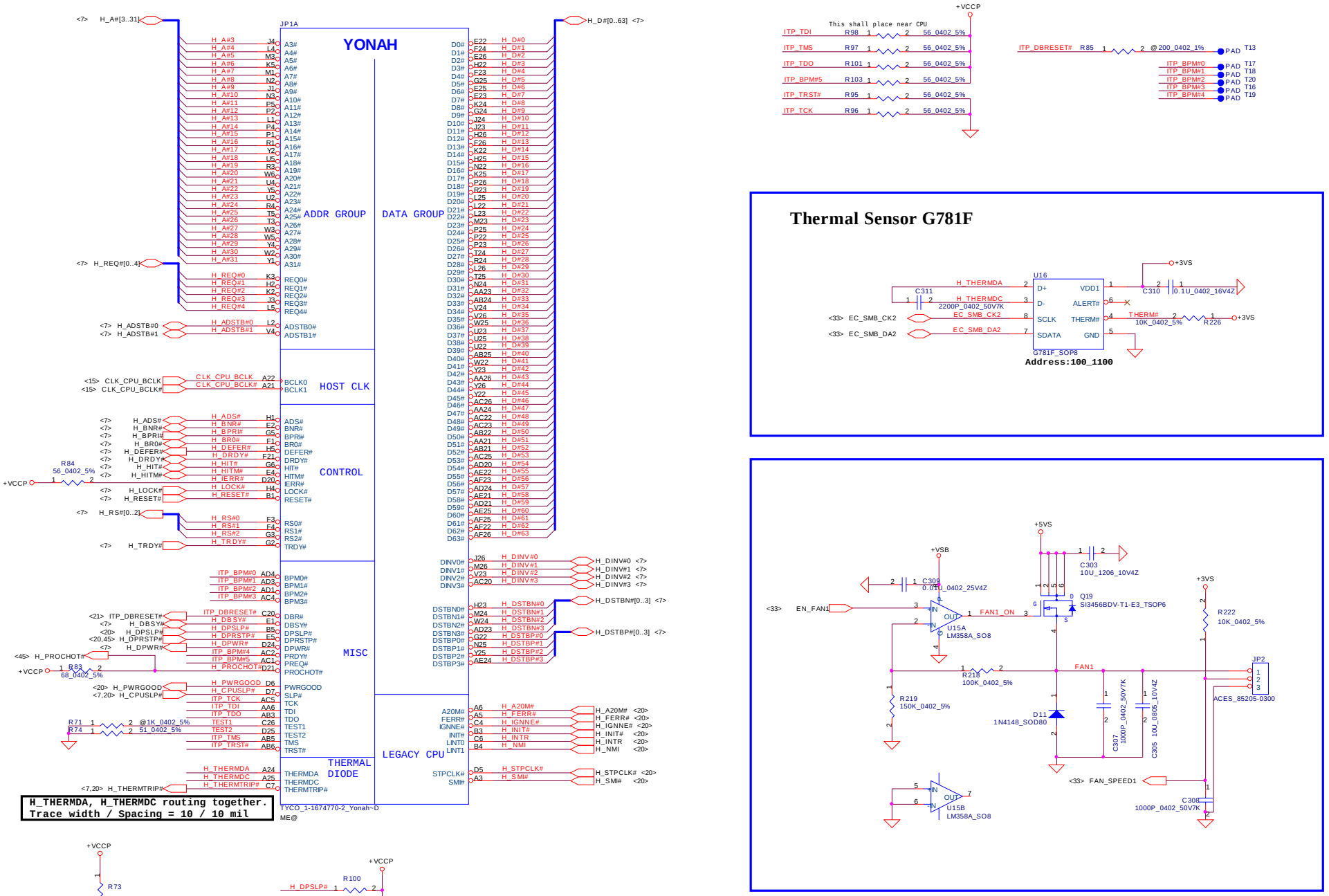
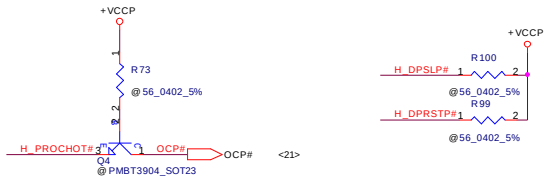




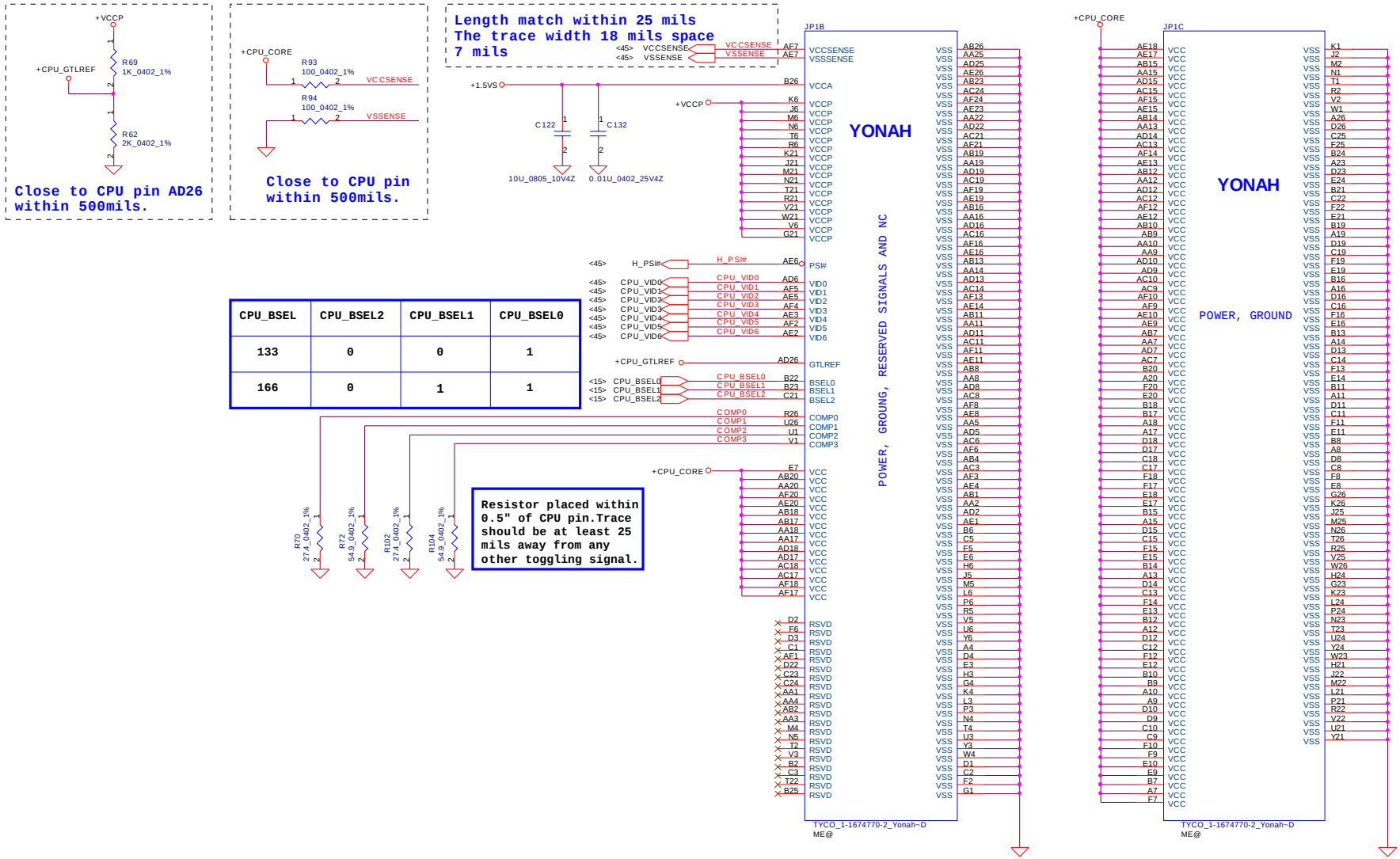
Security Classification	Compal Secret Data		
Issued Date	2005/10/06	Deciphered Date	2006/10/06

Compal Electronics, Inc.

Title: Yonah CPU in mFCPGA479

Size	Document Number	Rev
Custom	HGT30/31 LA-3061	0.1

Date: 星期四, 二月 23, 2006 Sheet 4 of 47



CPU_BSEL	CPU_BSEL2	CPU_BSEL1	CPU_BSEL0
133	0	0	1
166	0	1	1

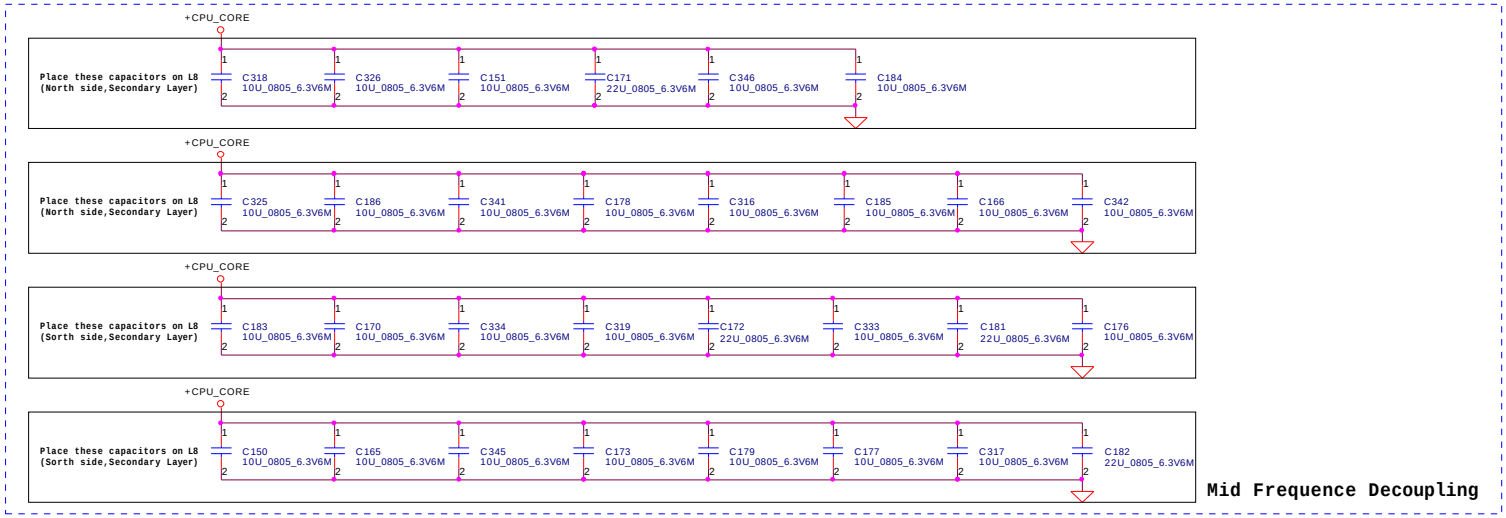
Security Classification	Compal Secret Data		
Issued Date	2005/10/06	Deciphered Date	2006/10/06

Compal Electronics, Inc.

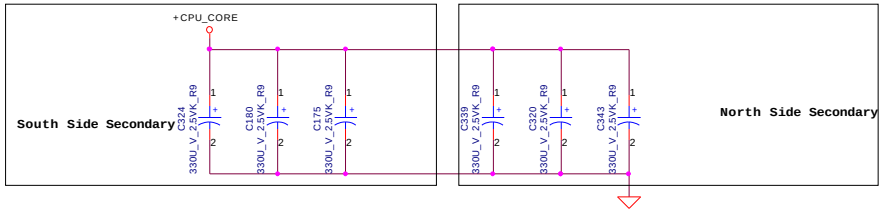
Title: Yonah CPU in mFCPGA479

Size: Custom | Document Number: HGT30/31 LA-3061 | Rev: 0.1

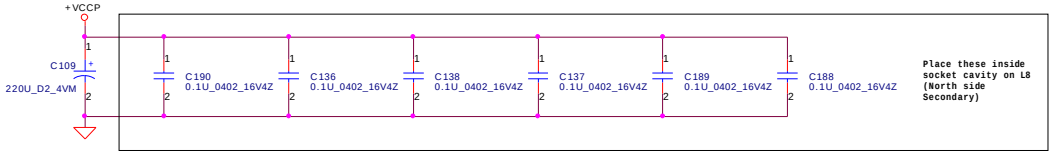
Date: 星期四, 二月 23, 2006 | Sheet 5 of 47



Mid Frequence Decoupling



ESR <= 1.5m ohm
Capacitor > 1980uF



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Issued Date	2005/10/06	Deciphered Date	2006/10/06

Compal Electronics, Inc.

Title: **CPU Bypass capacitors**

Size	Document Number	Rev
Custom	HGT30/31 LA-3061	0.1

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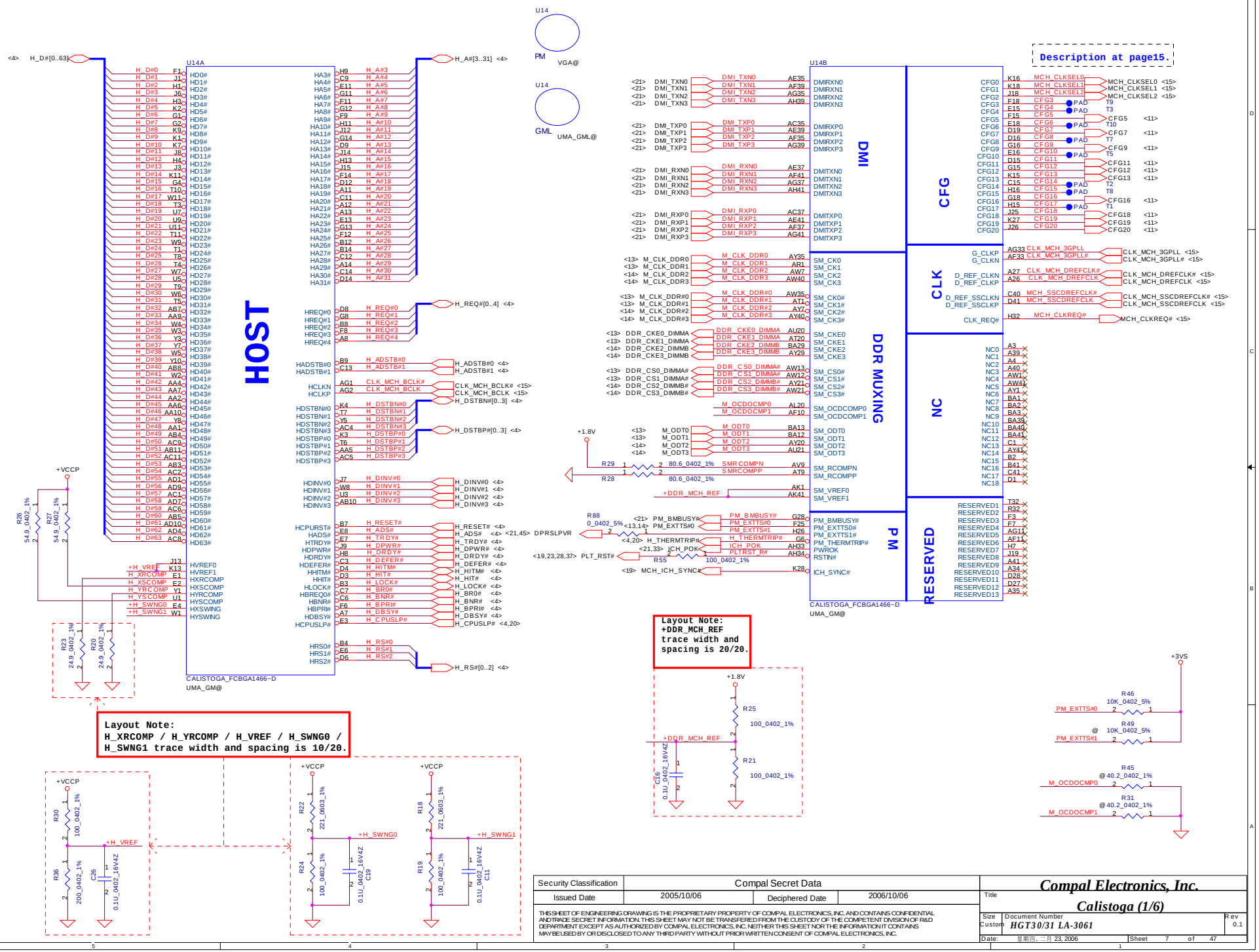

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Compal Electronics, Inc.

Title: **Calistoga (1/6)**

Size	Document Number	Rev
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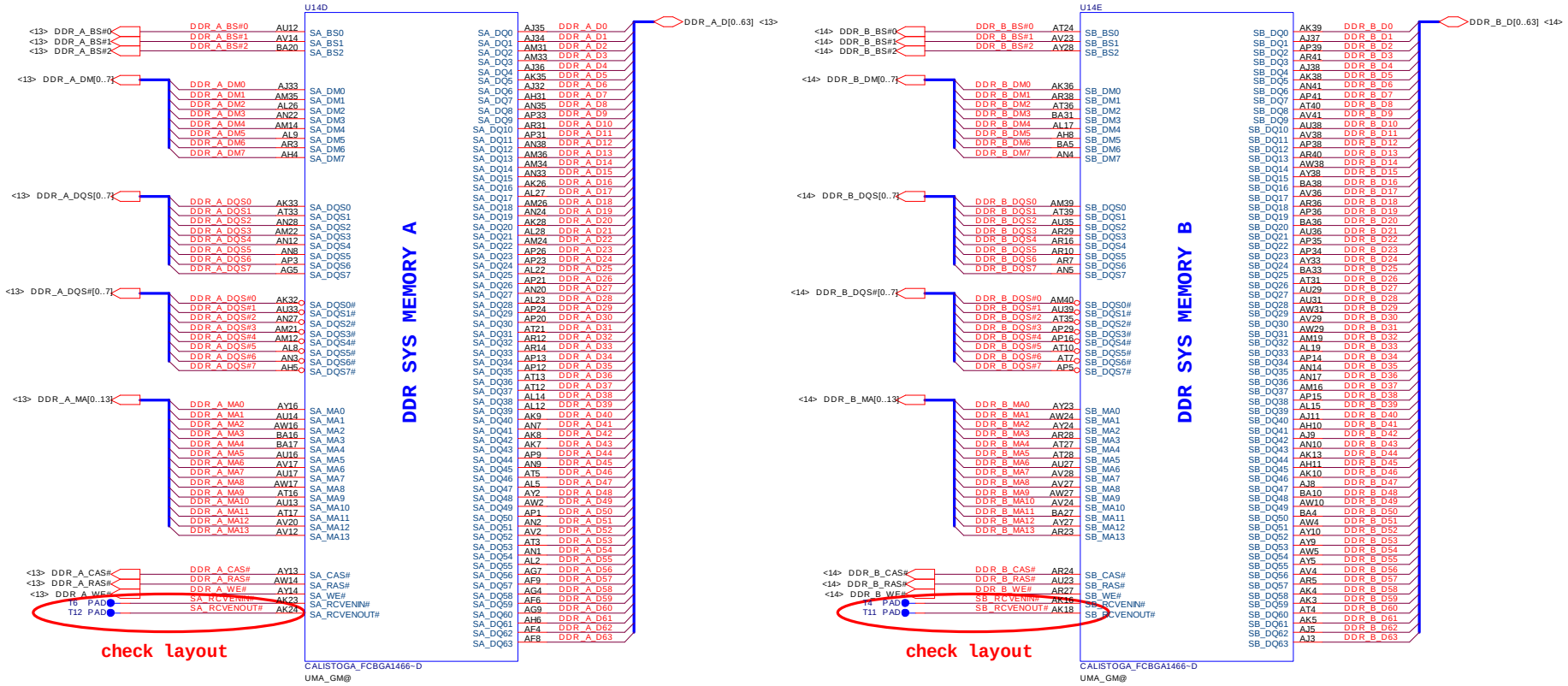

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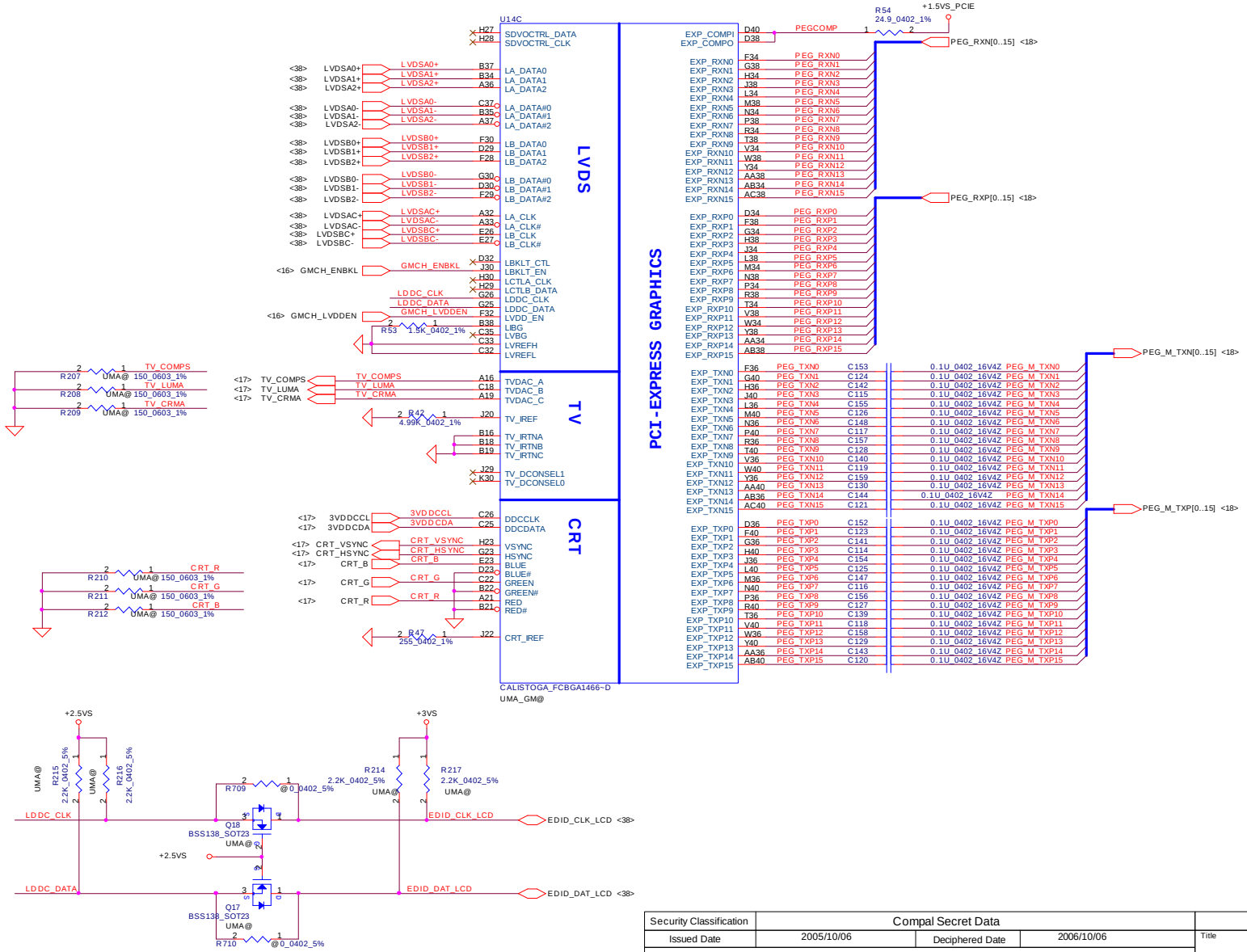
Compal Electronics, Inc.			
Title: Calistoga (2/6)			
Size: Custom	Document Number: HGT30/31 LA-3061		Rev: 0.1
Date: 星期四, 二月 23, 2006	Sheet 8 of 47		



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Compal Electronics, Inc.

Title: **Calistoga (3/6)**

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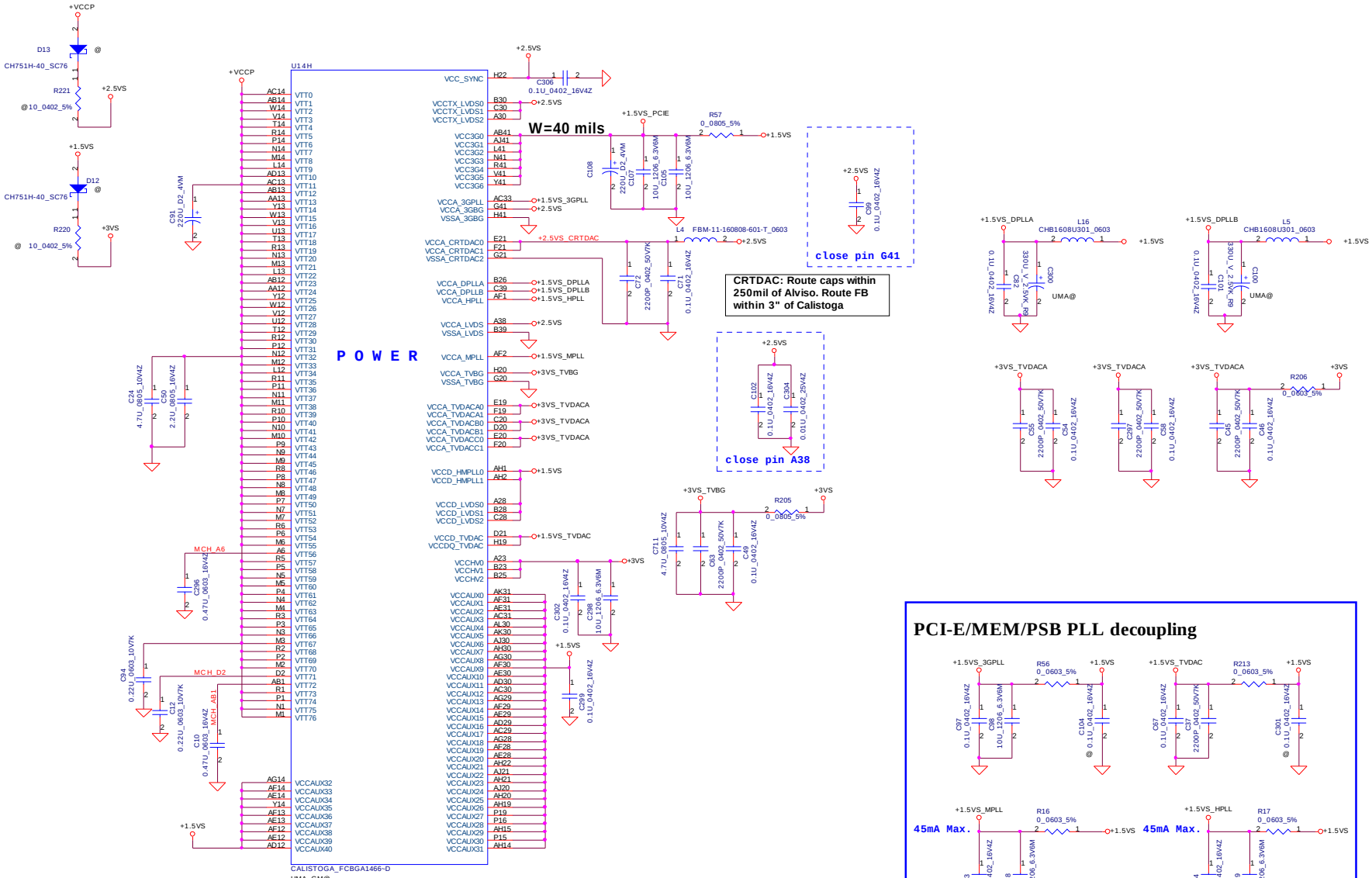

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Compal Electronics, Inc.	
Title	Calistoga (4/6)
Size: Custom	Document Number: HGT30/31 LA-3061
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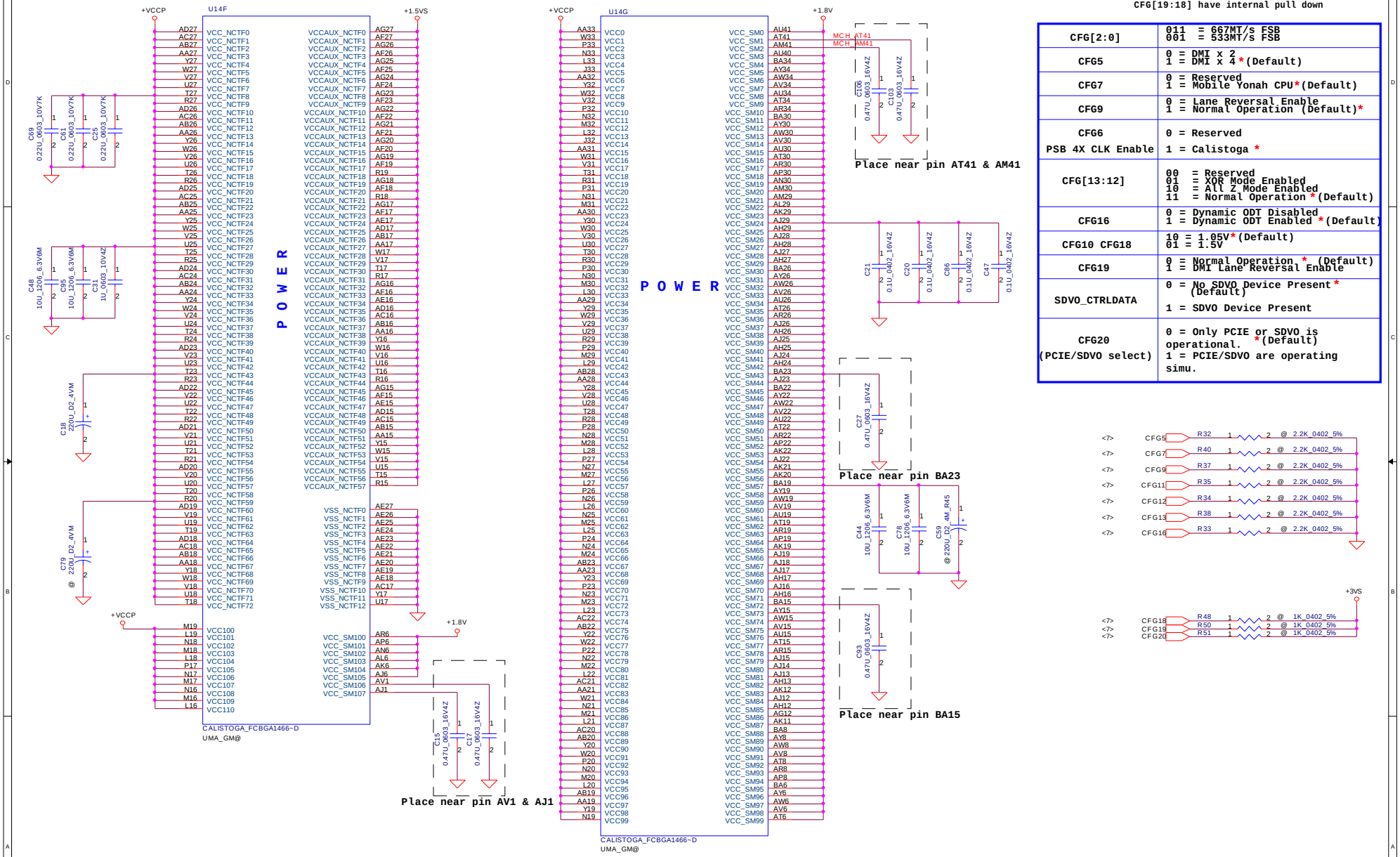

Strap Pin Table

CFG[3:17] have internal pull up

CFG[19:18] have internal pull down

CFG[2:0]	011 = 667MT/s FSB 001 = 533MT/s FSB
CFG5	0 = DMI x 2 1 = DMI x 4 *(Default)
CFG7	0 = Reserved 1 = Mobile Yonah CPU*(Default)
CFG9	0 = Lane Reversal Enable 1 = Normal Operation (Default)*
CFG6 PSB 4X CLK Enable	0 = Reserved 1 = Calistoga *
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)
CFG10 CFG18	10 = 1.05V*(Default) 01 = 1.5V
CFG19	0 = Normal Operation * (Default) 1 = DMI Lane Reversal Enable
SDVO_CTRLDATA	0 = No SDVO Device Present * (Default) 1 = SDVO Device Present
CFG20 (PCIE/SDVO select)	0 = Only PCIE or SDVO is operational. *(Default) 1 = PCIE/SDVO are operating simu.

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Issued Date	2005/10/06	Deciphered Date	2006/10/06

Compal Electronics, Inc.

Title: Calistoga (5/6)

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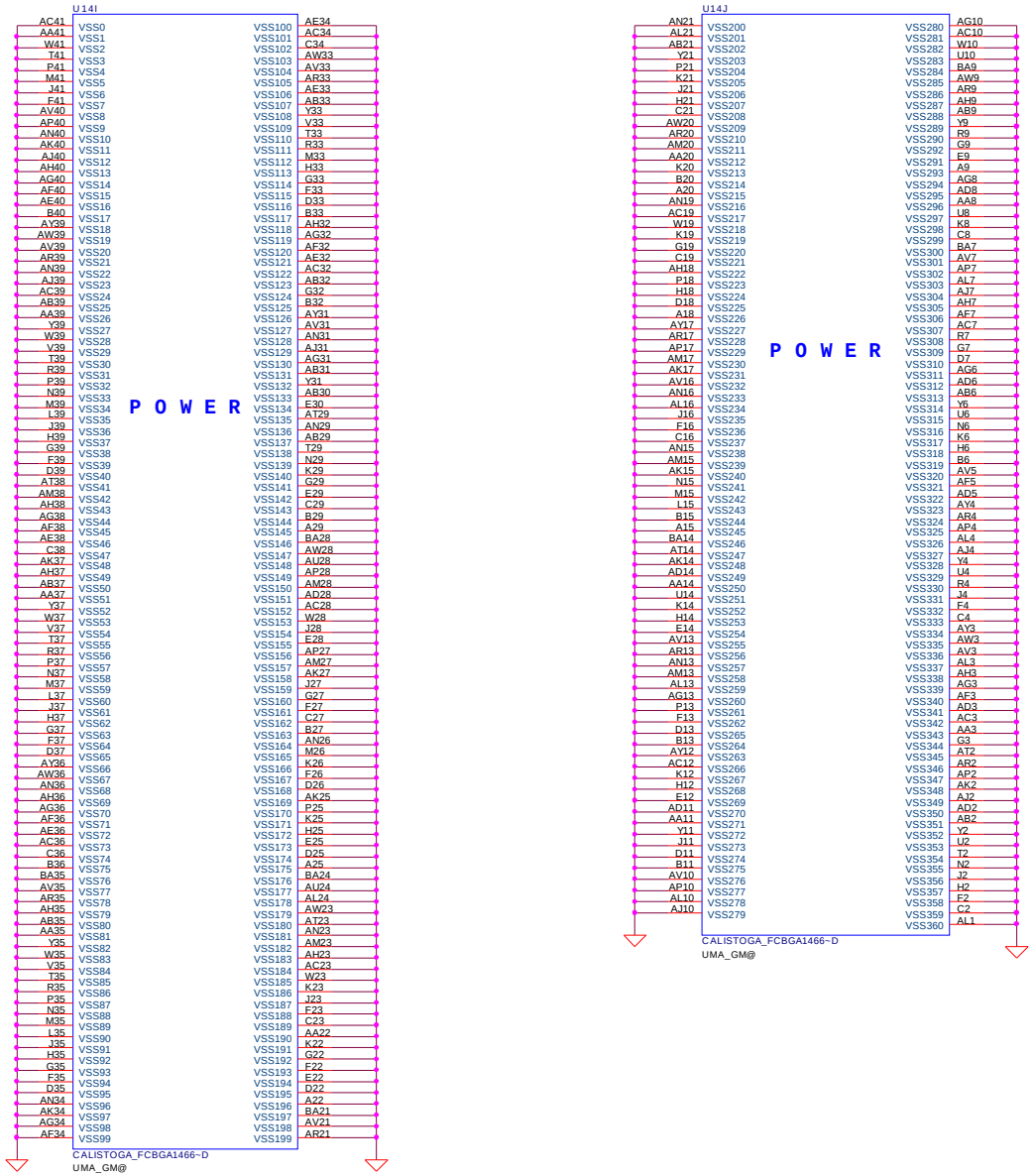

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Compal Electronics, Inc.

Title: **Calistoga (6/6)**

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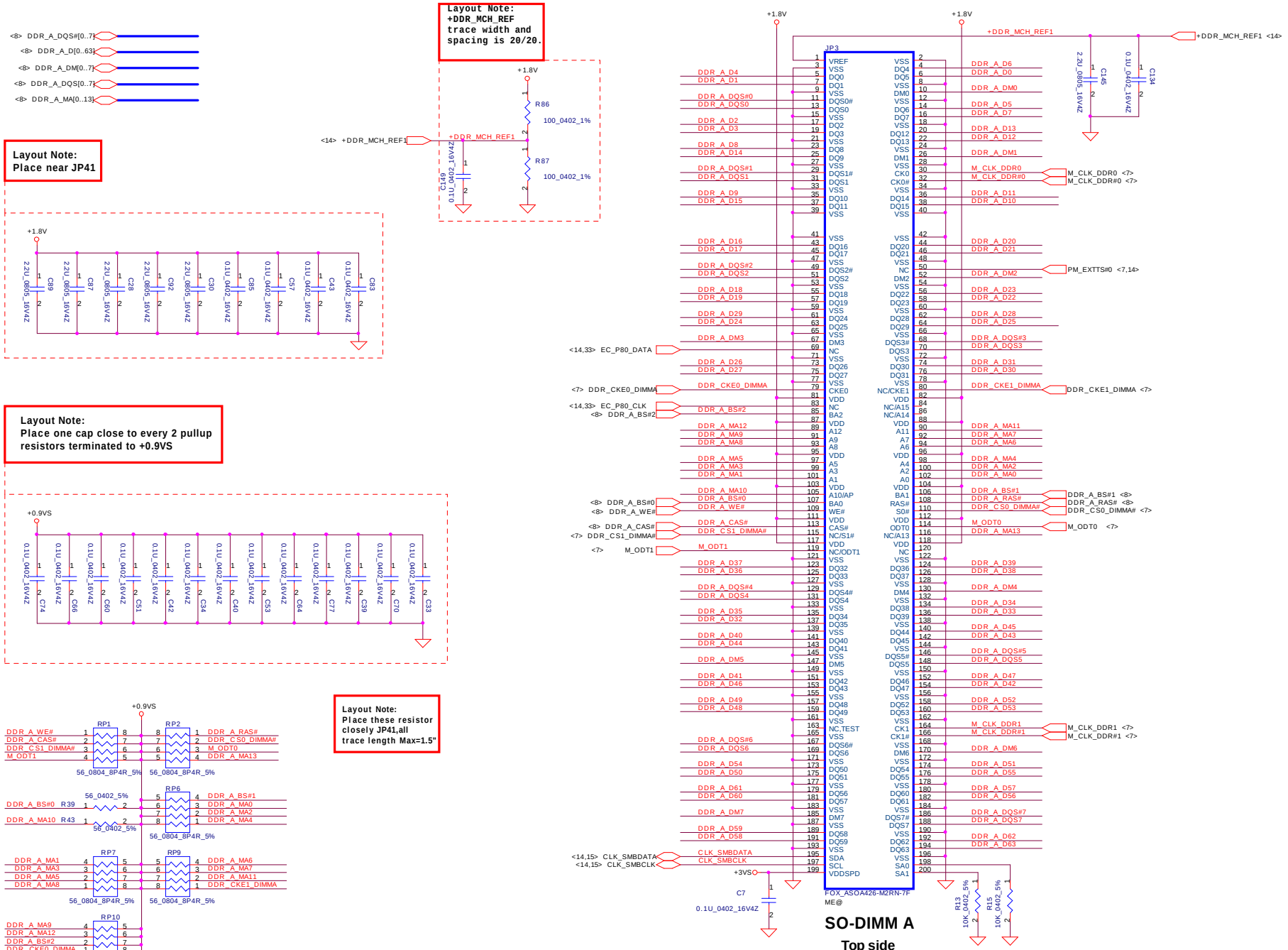

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Issued Date	2005/10/06	Deciphered Date	2006/10/06

Compal Electronics, Inc.

Title: DDRII-SODIMM SLOT1

Size	Document Number	Rev
Custom	HGT30/31 LA-3061	0.1

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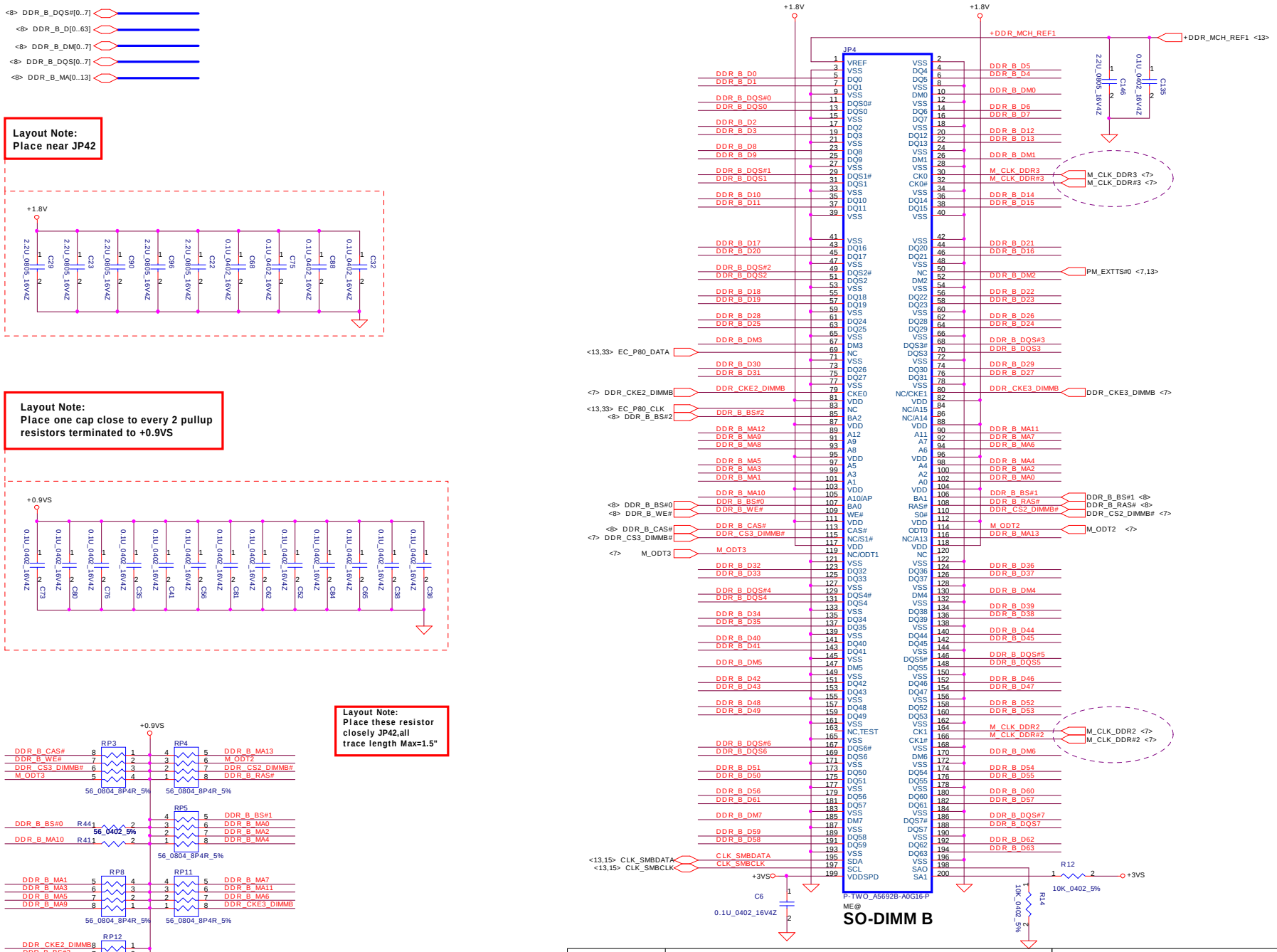

FSLC CLKSEL2	FSLB CLKSEL1	FSLA CLKSEL0	CPU MHz	SRC MHz	PCI MHz
0	0	1	133	100	33.3
0	1	1	166	100	33.3

Table : ICS954306

FSB Frequency Selet:

CPU Driven *(Default)	Stuff	CLK_Ra	CLK_Rb	CLK_Rc
	No Stuff	CLK_Rd	CLK_Re	CLK_Rf
533MHz	Stuff	CLK_Rd	CLK_Re	CLK_Rf
	No Stuff	CLK_Ra	CLK_Rb	CLK_Rc
667MHz	Stuff	CLK_Rd	CLK_Rf	
	No Stuff	CLK_Ra CLK_Re	CLK_Rb	CLK_Rc

Place crystal within 500 mils of CK410

Place near U4
Place these components near each pin within 40 mils.

HGT30 @ 10/11

HGT30 @ 10/7

HGT30 @ 10/7

U29

SLG8LP465VTR_QFN72

PCI_MINI = FCTSEL1

FCTSEL1 (PIN34)	PIN43	PIN44	PIN47	PIN48
0	DOT96T	DOT96C	96/100M_T	96/100M_C
1	27Mout	27MSSout	SRCT0	SRCC0

PCI_PME=SEL_PCI6

PCI_LAN	PIN27
0	CLKREQ5
1	PCICLK6

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Compal Electronics, Inc.

Title: **Clock generator**

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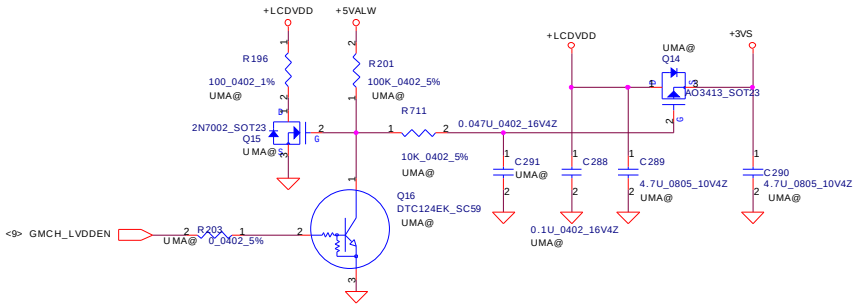

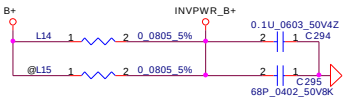

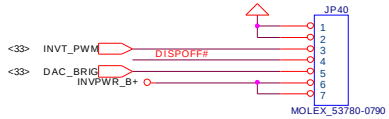

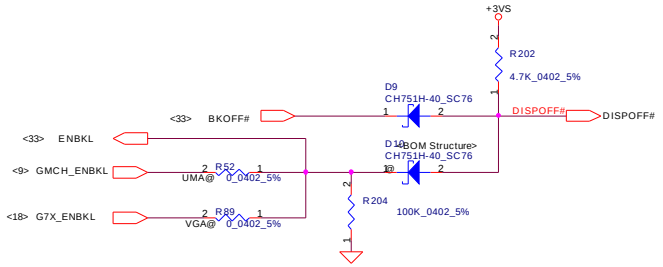

Security Classification	Compal Secret Data		
Issued Date	2005/10/06	Deciphered Date	2006/10/06

Compal Electronics, Inc.

Title: **LVDS Connector**

Size	Document Number	Rev
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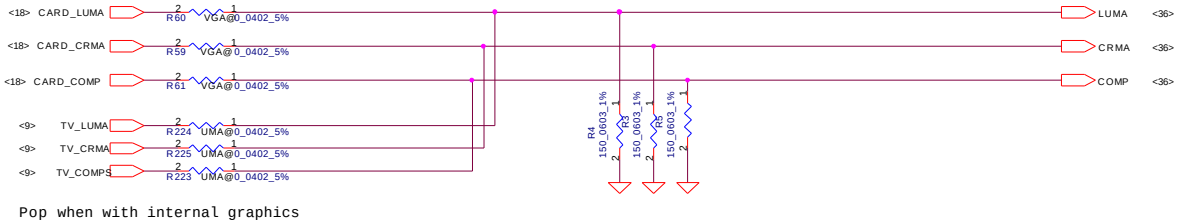
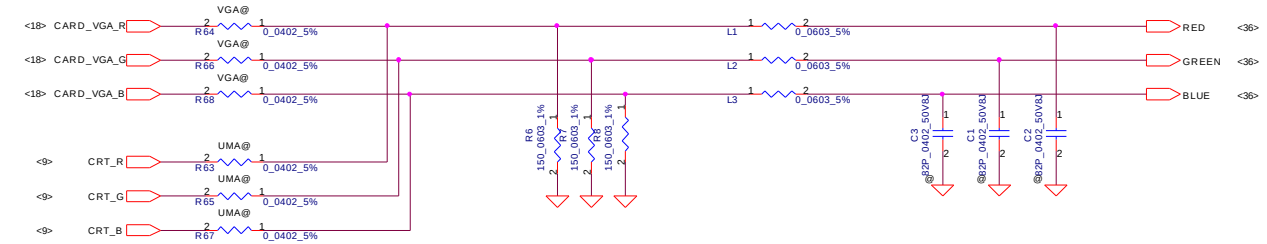
TV-OUT Conn.



Pop when with internal graphics

CRT Conn.



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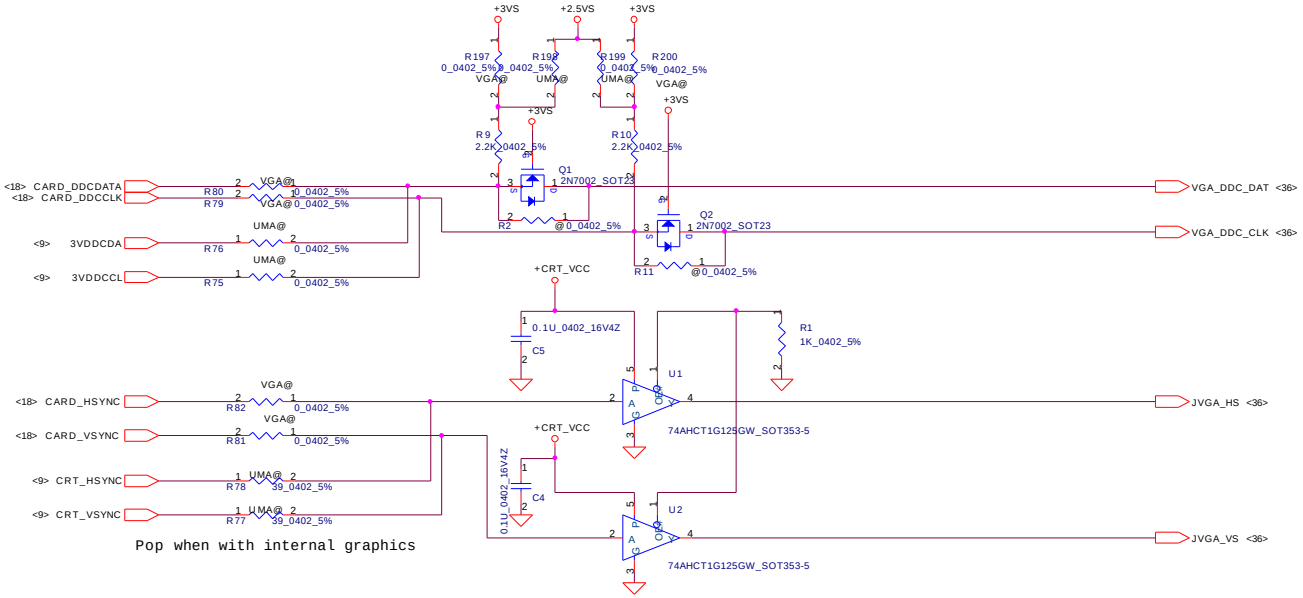

Pop when with internal graphics

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Compal Electronics, Inc.

Title: **CRT & TVout**

Size	Document Number	Rev
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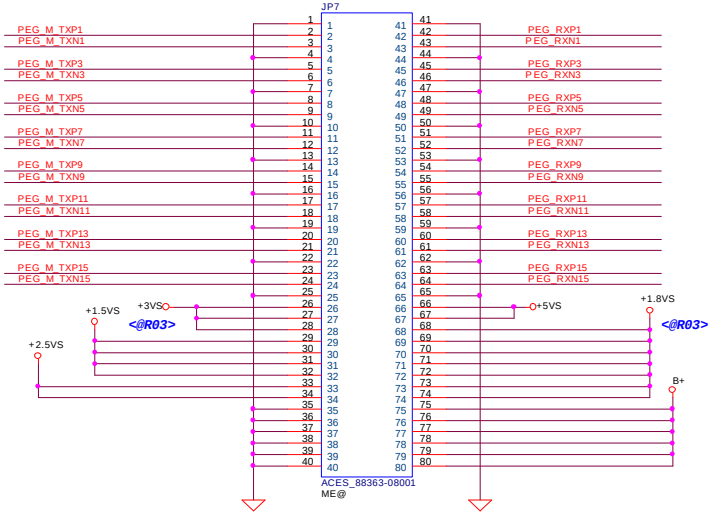
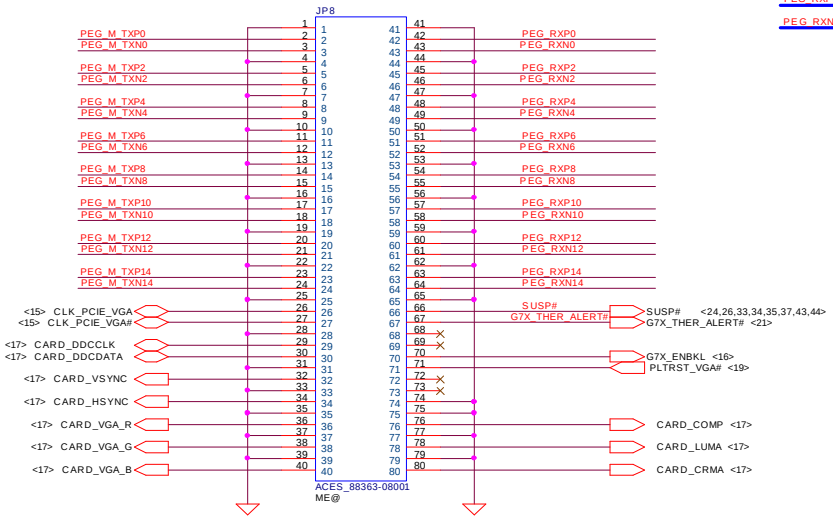
MAX. 4.06A @ 1.8V

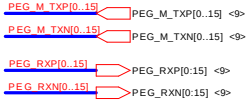
MAX. 130mA @ 2.5V

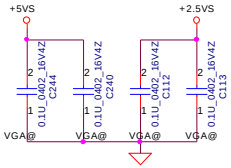
MAX. 655mA @ 3.3V

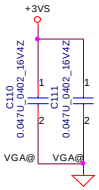


< New Add Pin.28 for +3VS, Pin.68 for +1.8VS @R03 >







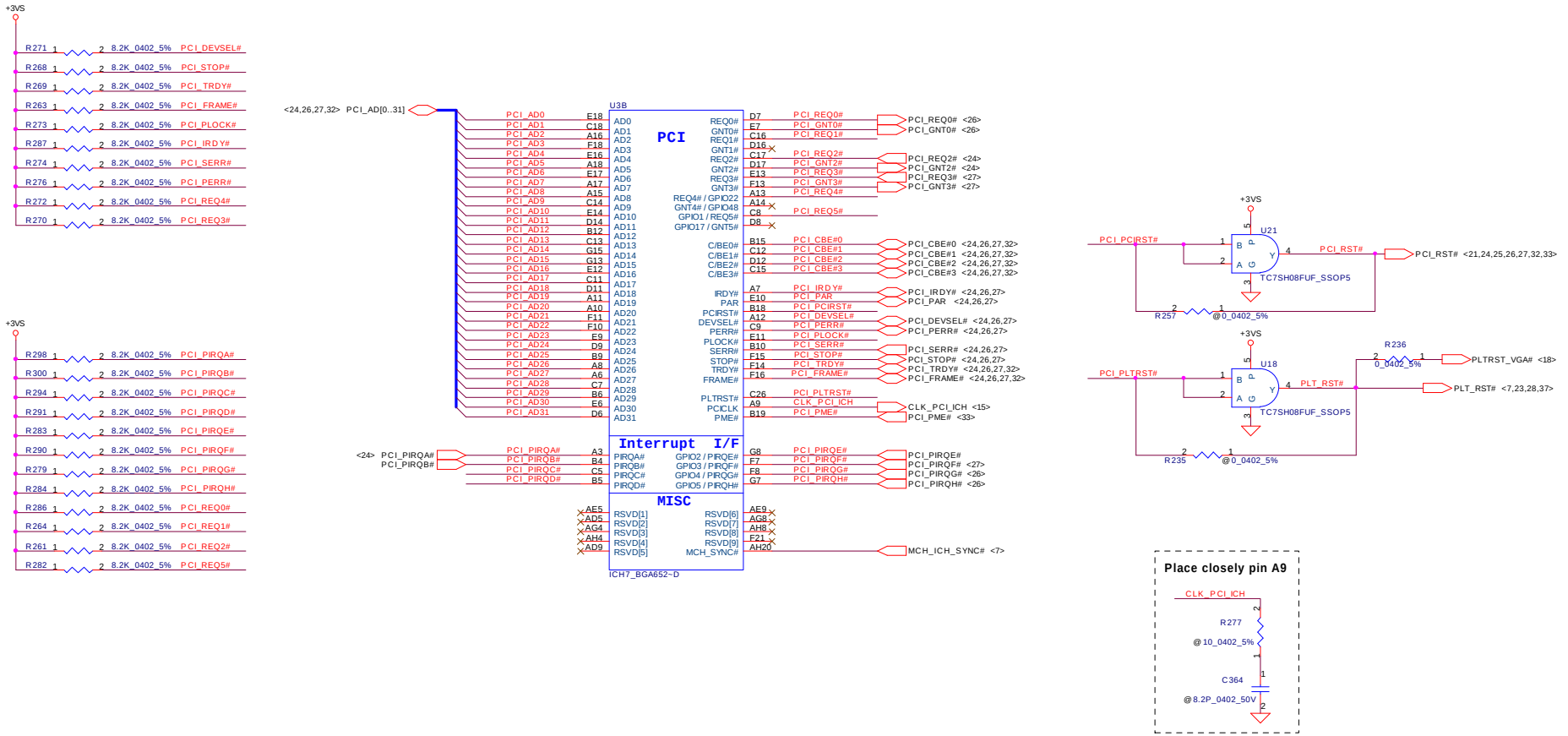


Compal Electronics, Inc.

Title: VGA/B connector

Size: Custom | Document Number: HGT30/31 LA3061 | Rev: 0.1

Date: 星期四, 三月 23, 2006 | Sheet 18 of 47



Security Classification	Compal Secret Data		
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Compal Electronics, Inc.

Title: ICH7-M(1/4)

Size	Document Number	Rev
	HGT30/31 LA3061	0.1

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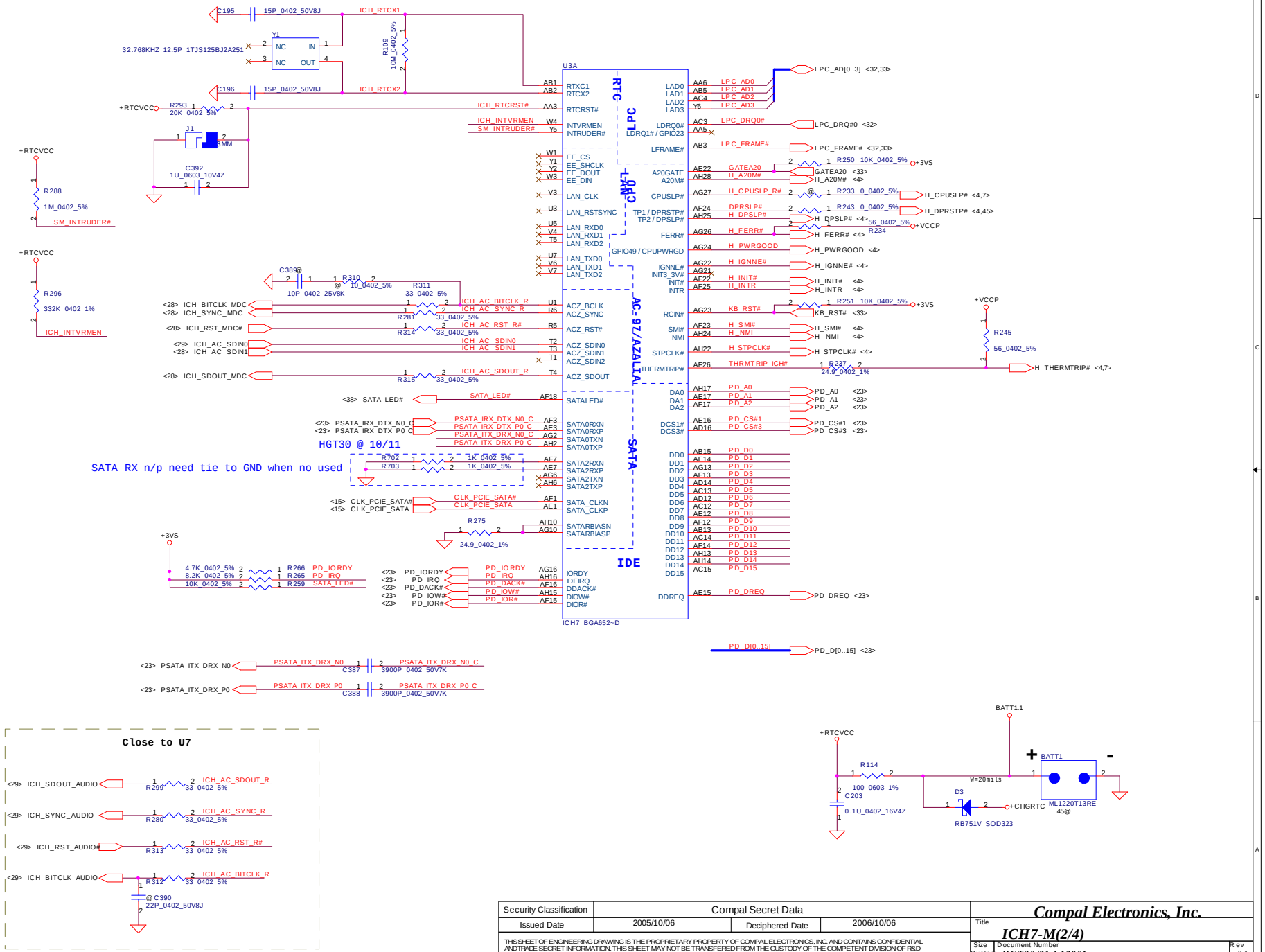

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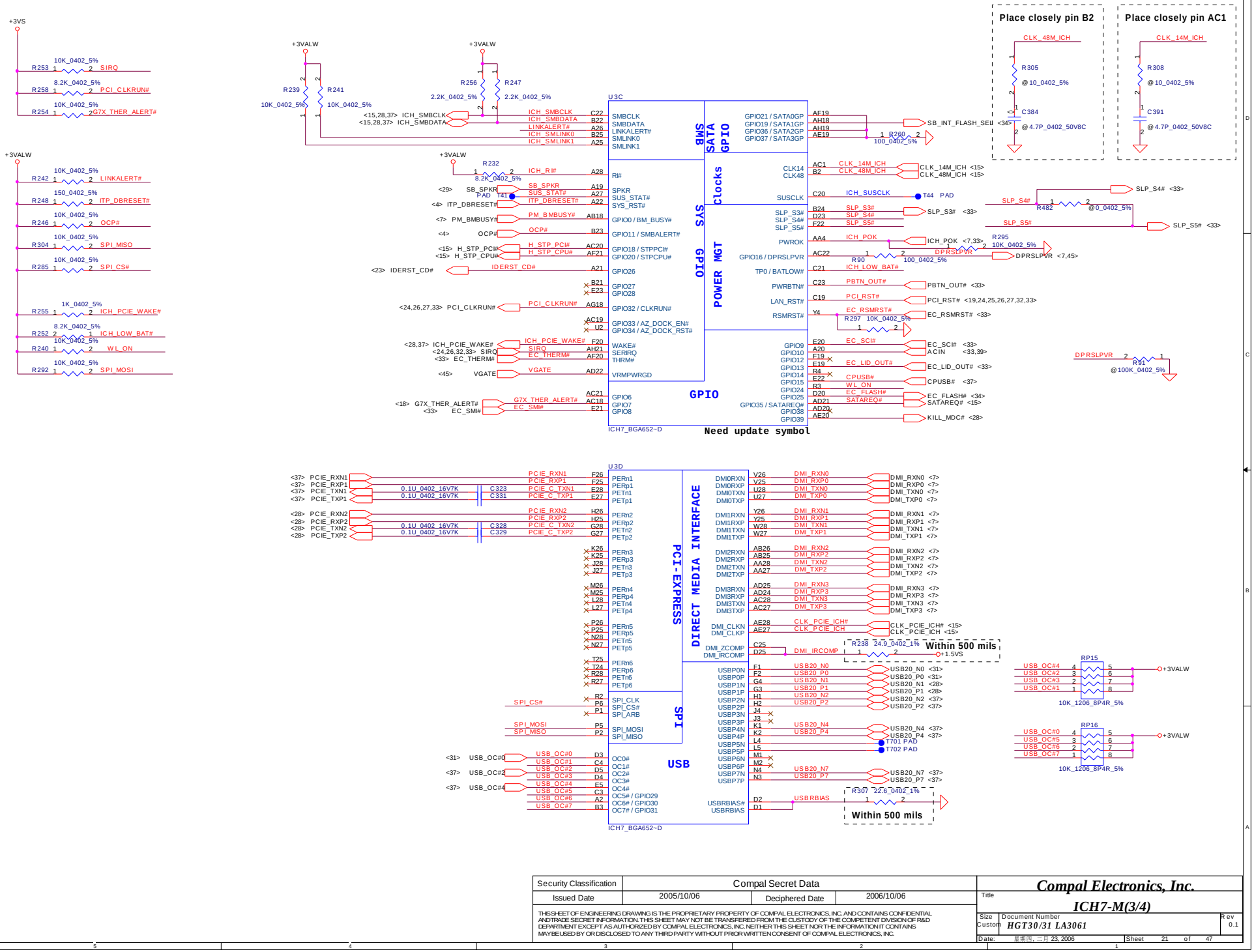
Compal Electronics, Inc.	
Title	ICH7-M(2/4)
Size / Document Number	Custom / HGT30/31 LA3061
Rev	0.1
Date: 星期四, 二月 23, 2006	Sheet 20 of 47



Security Classification	Compal Secret Data		
Issued Date	2005/10/06	Deciphered Date	2006/10/06

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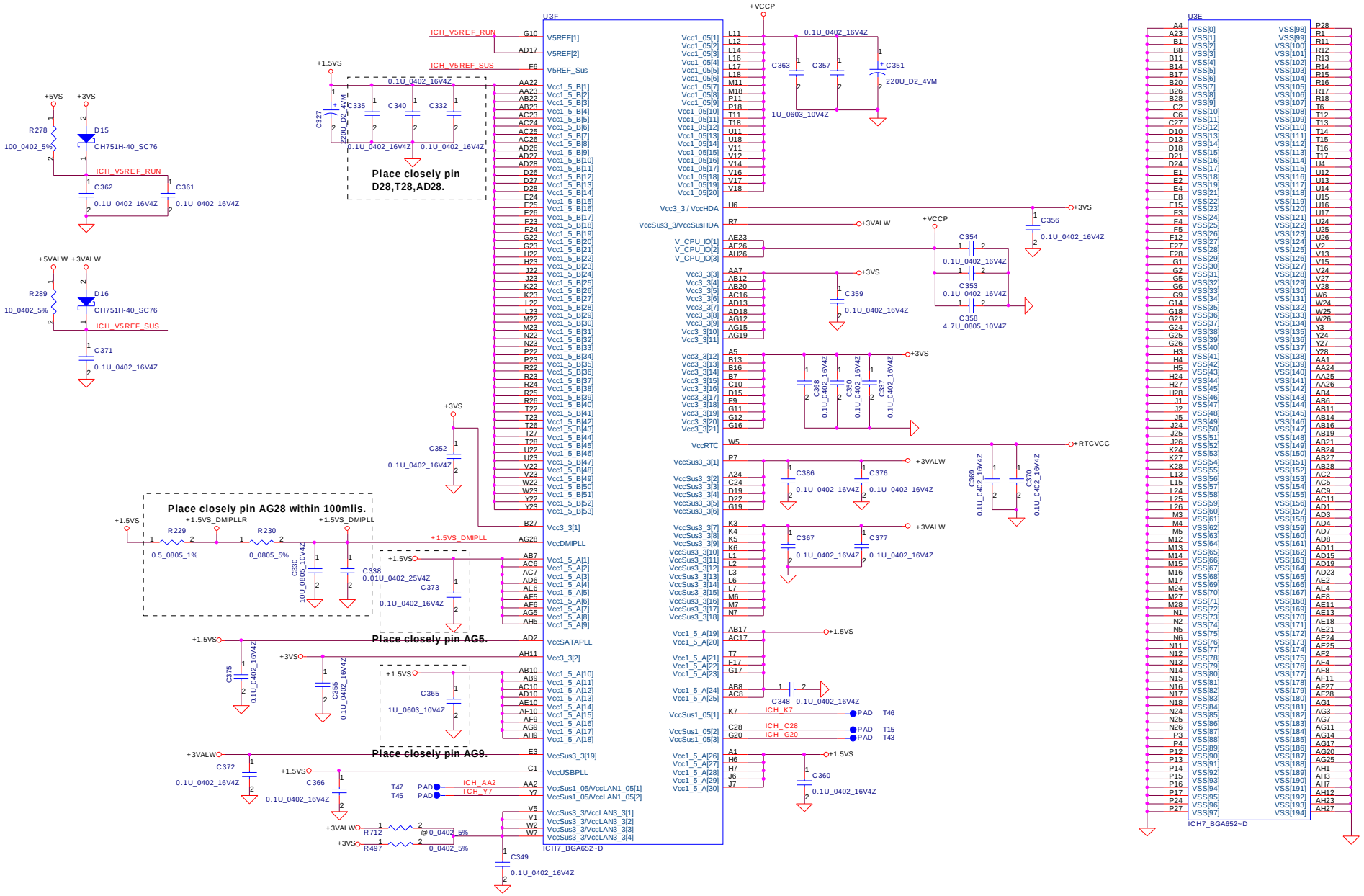
Compal Electronics, Inc.

Title: **ICH7-M(3/4)**

Size	Document Number	Rev
Custom	HGT30/31 LA3061	0.1

Date: 星期四, 二月 23, 2006 | Sheet 21 of 47



Security Classification	Compal Secret Data		
Issued Date	2005/10/06	Deciphered Date	2006/10/06

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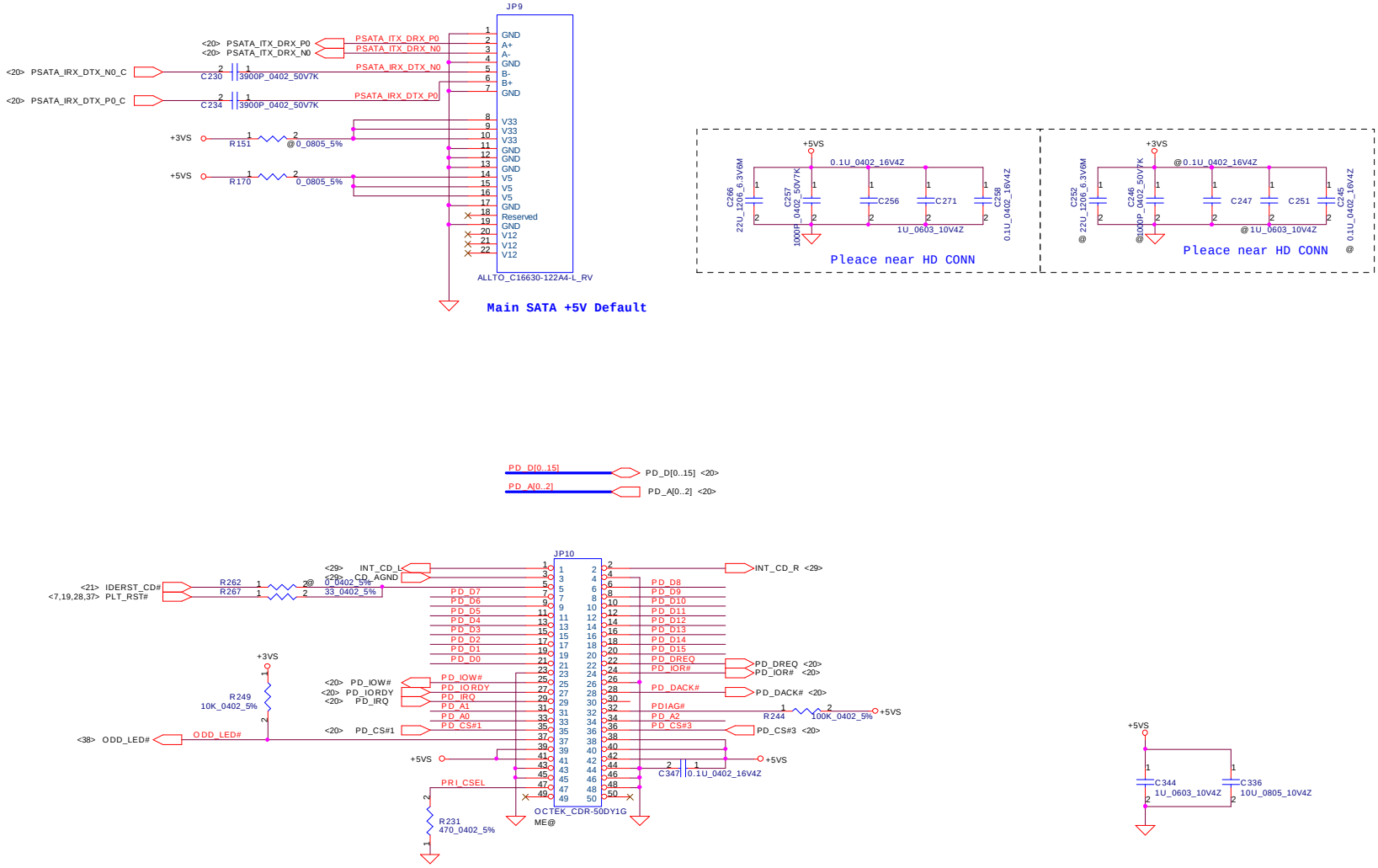
Compal Electronics, Inc.

Title: **ICH7-M(4/4)**

Size	Document Number	Rev
Custom	HGT30/31 LA3061	0.1

Date: 星期四, 二月 23, 2006 | Sheet 22 of 47



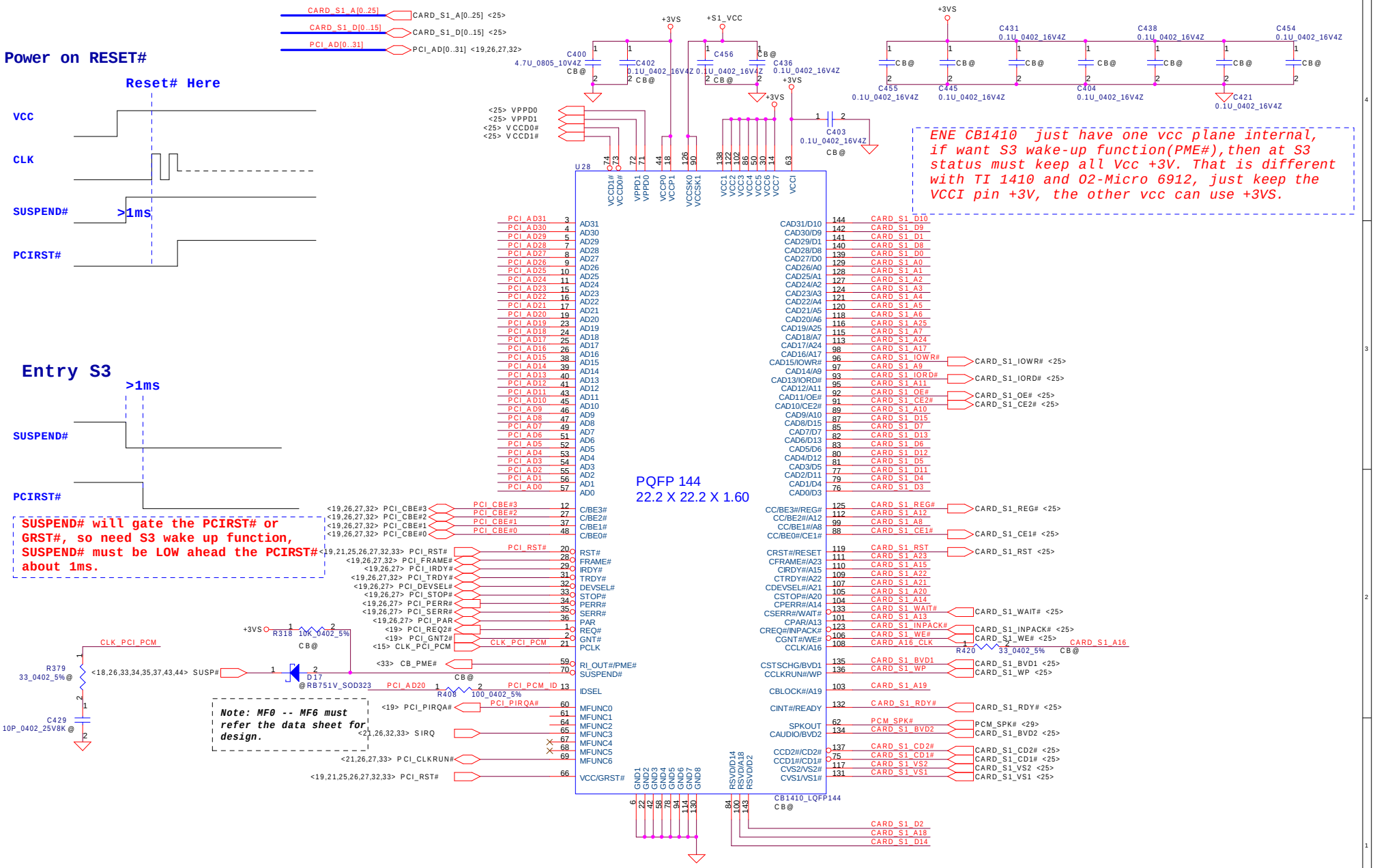
Security Classification	Compal Secret Data		
Issued Date	2005/10/06	Deciphered Date	2006/10/06

Compal Electronics, Inc.

Title: **HDD & CDROM**

Size	Document Number	Rev
Custom	HGT30/31 LA3061	0.1

Date: 星期四, 二月 23, 2006 | Sheet 23 of 47



Security Classification	Compal Secret Data		
Issued Date	2005/10/06	Deciphered Date	2006/10/06

PROPRIETARY NOTE

Compal Electronics, Inc.

Title: **CB ENE1410(One Solt)**

Size	Document Number	Rev
Custom	HGT30/31 LA3061	0.1

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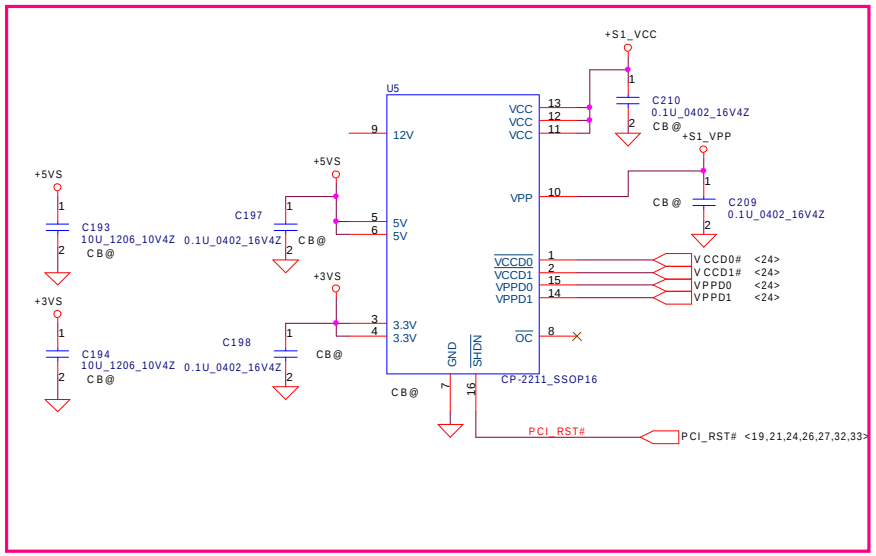
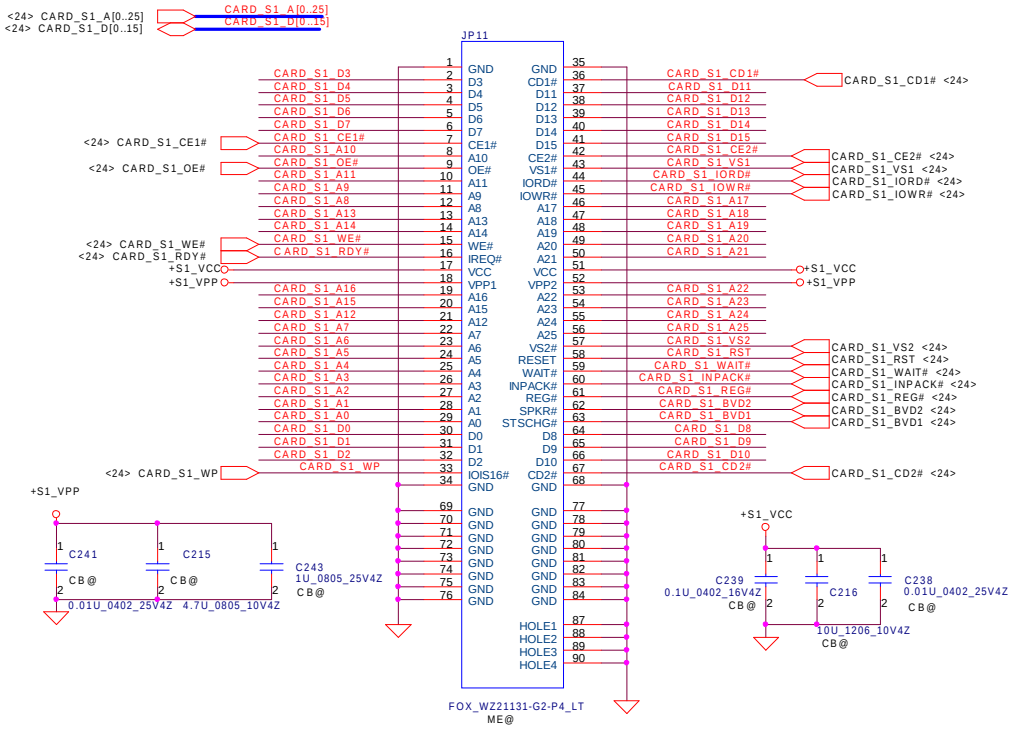
PCMCIA Power Controller





Security Classification	Compal Secret Data		
Issued Date	2005/10/06	Deciphered Date	2006/10/06

Compal Electronics, Inc.

Title: **CardBus Socket**

Size	Document Number	Rev
Custom	HGT30/31 LA3061	0.1

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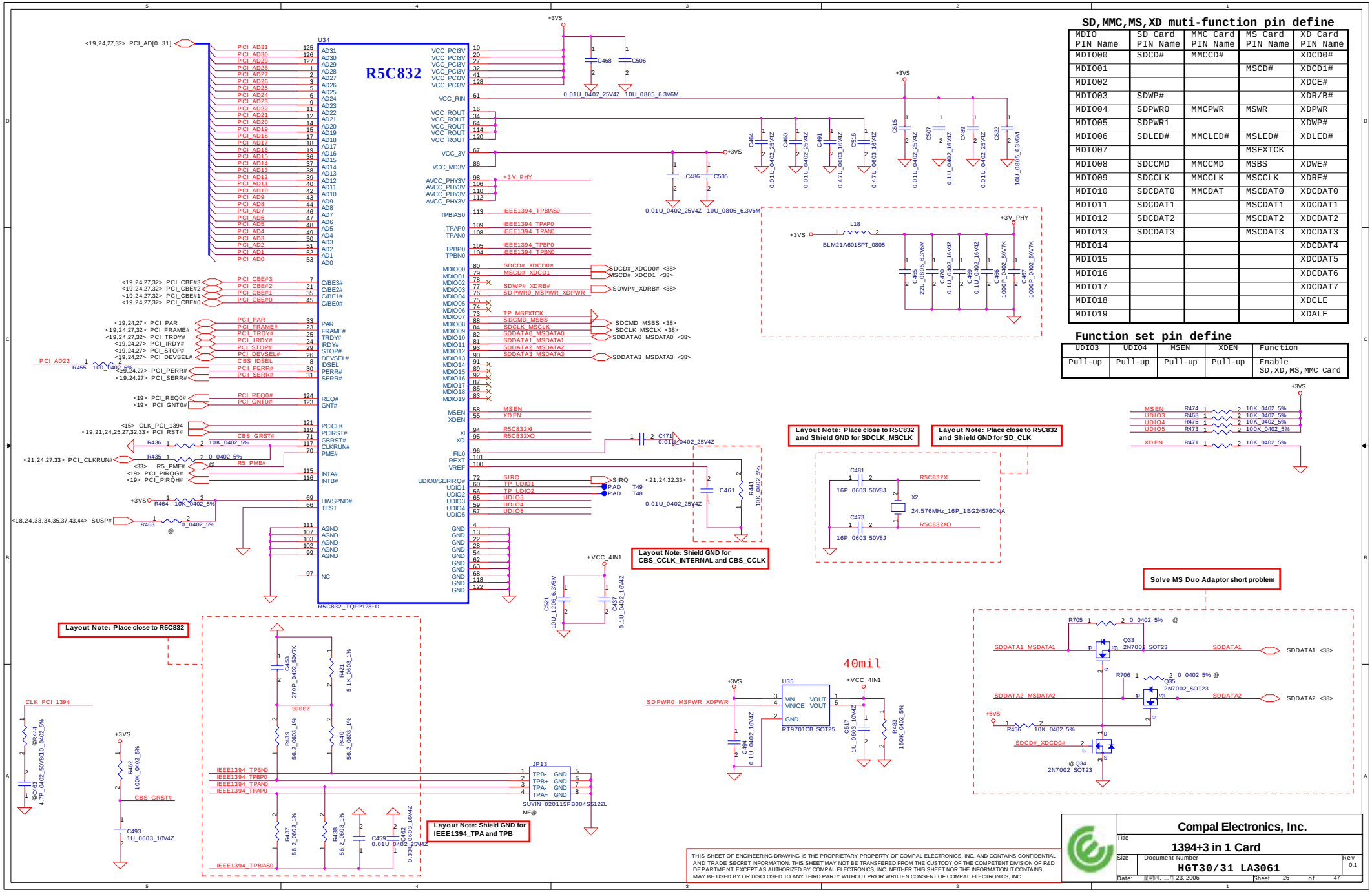
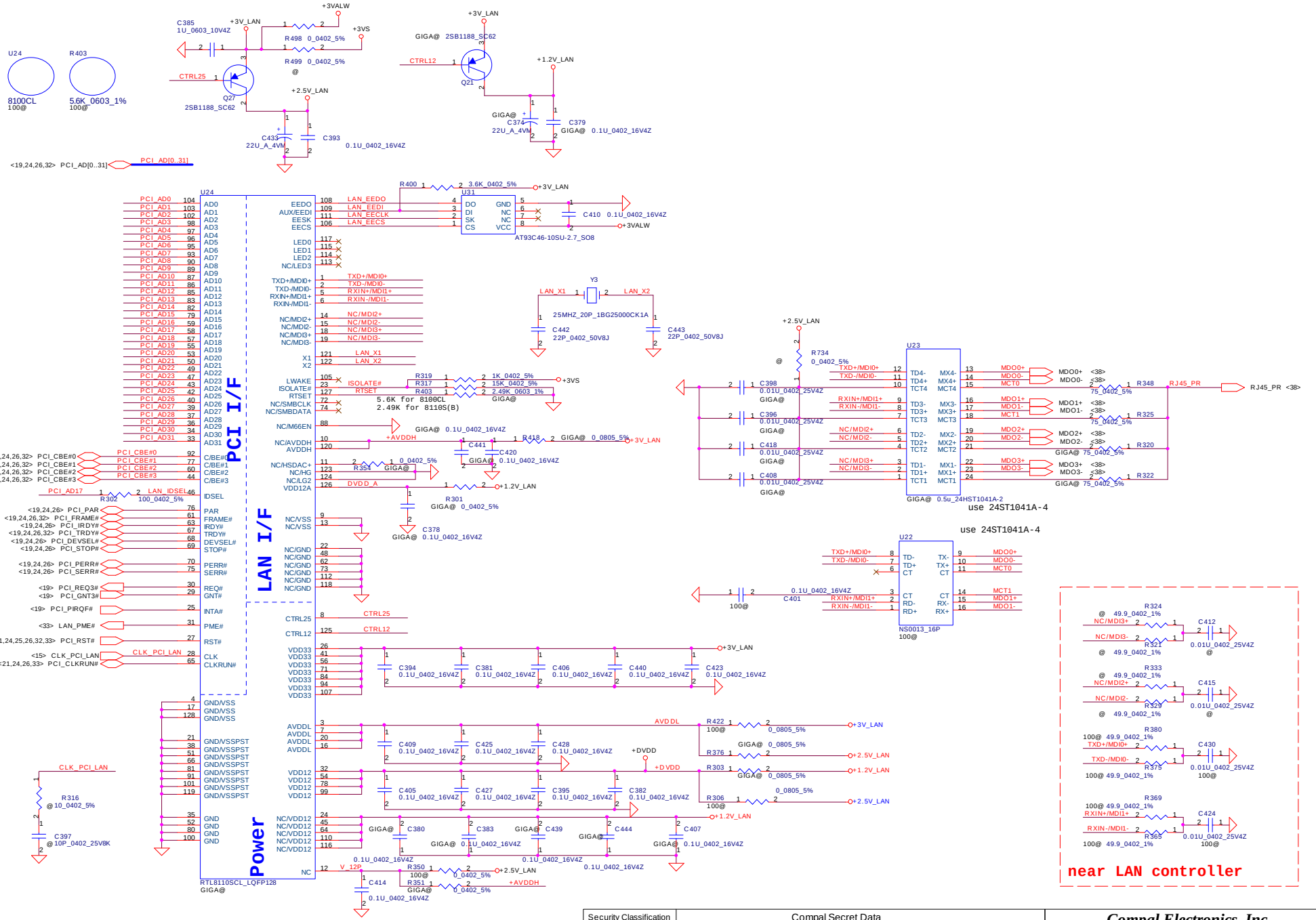
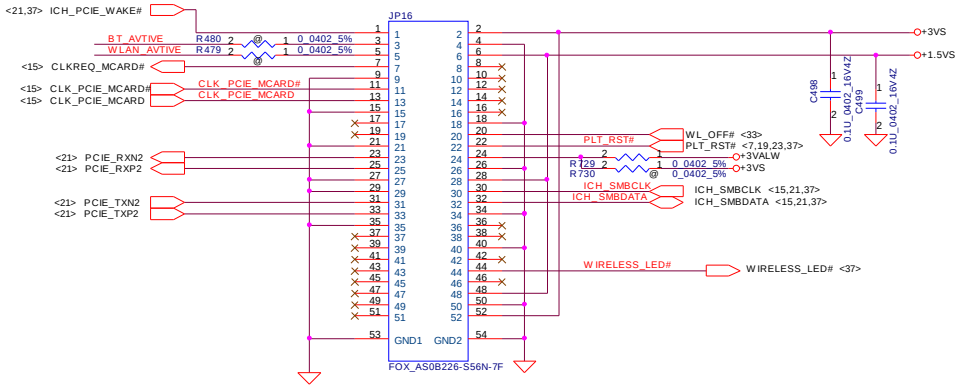
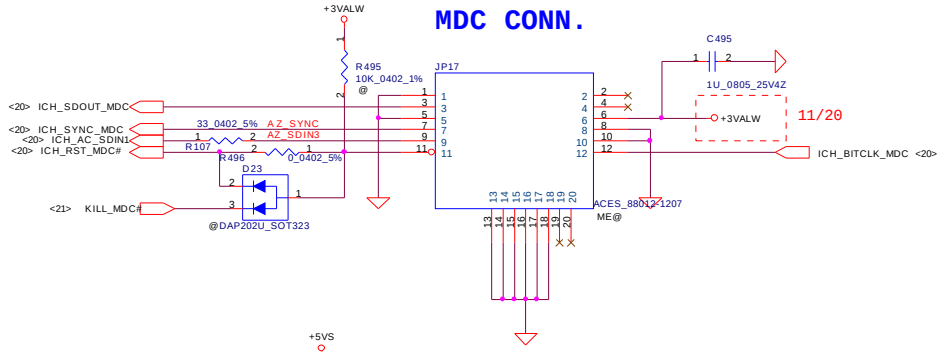




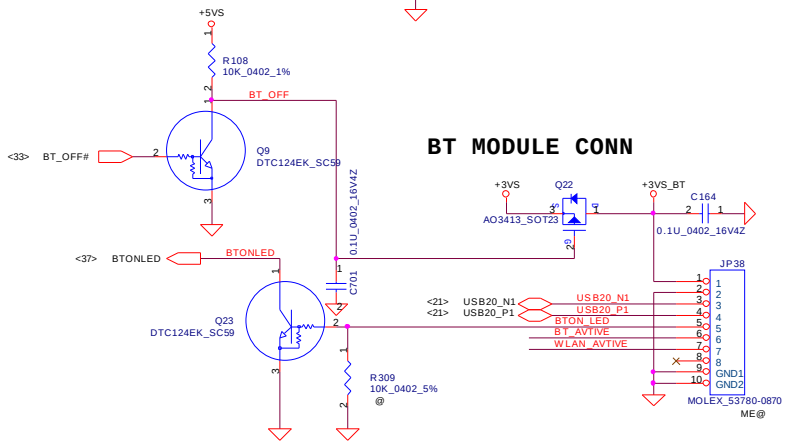
Mini-Express Card(Slot 1-WLAN)



MDC CONN.

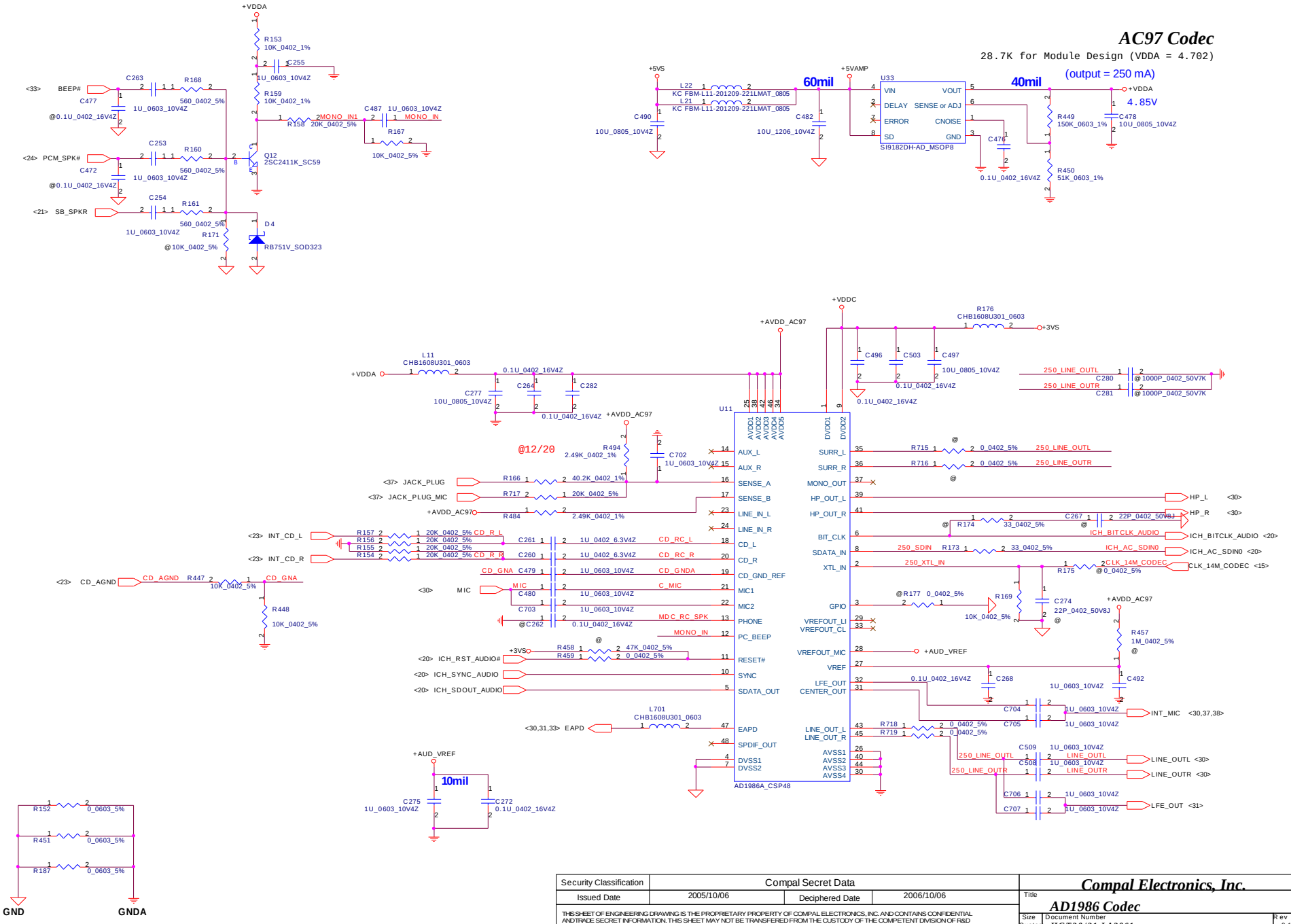


BT MODULE CONN



Security Classification	Compal Secret Data		
Issued Date	2005/10/06	Deciphered Date	2006/10/06

Compal Electronics, Inc.			
Title: Mini Card / MDC CONN			
Size: Custom	Document Number: HGT30/31 LA3061		Rev: 0.1
Date: 星期四, 二月 23, 2006		Sheet 28 of 47	



Security Classification	Compal Secret Data		
Issued Date	2005/10/06	Deciphered Date	2006/10/06

Compal Electronics, Inc.

Title: AD1986 Codec

Size	Document Number	Rev
Custom	HGT30/31 LA3061	0.1

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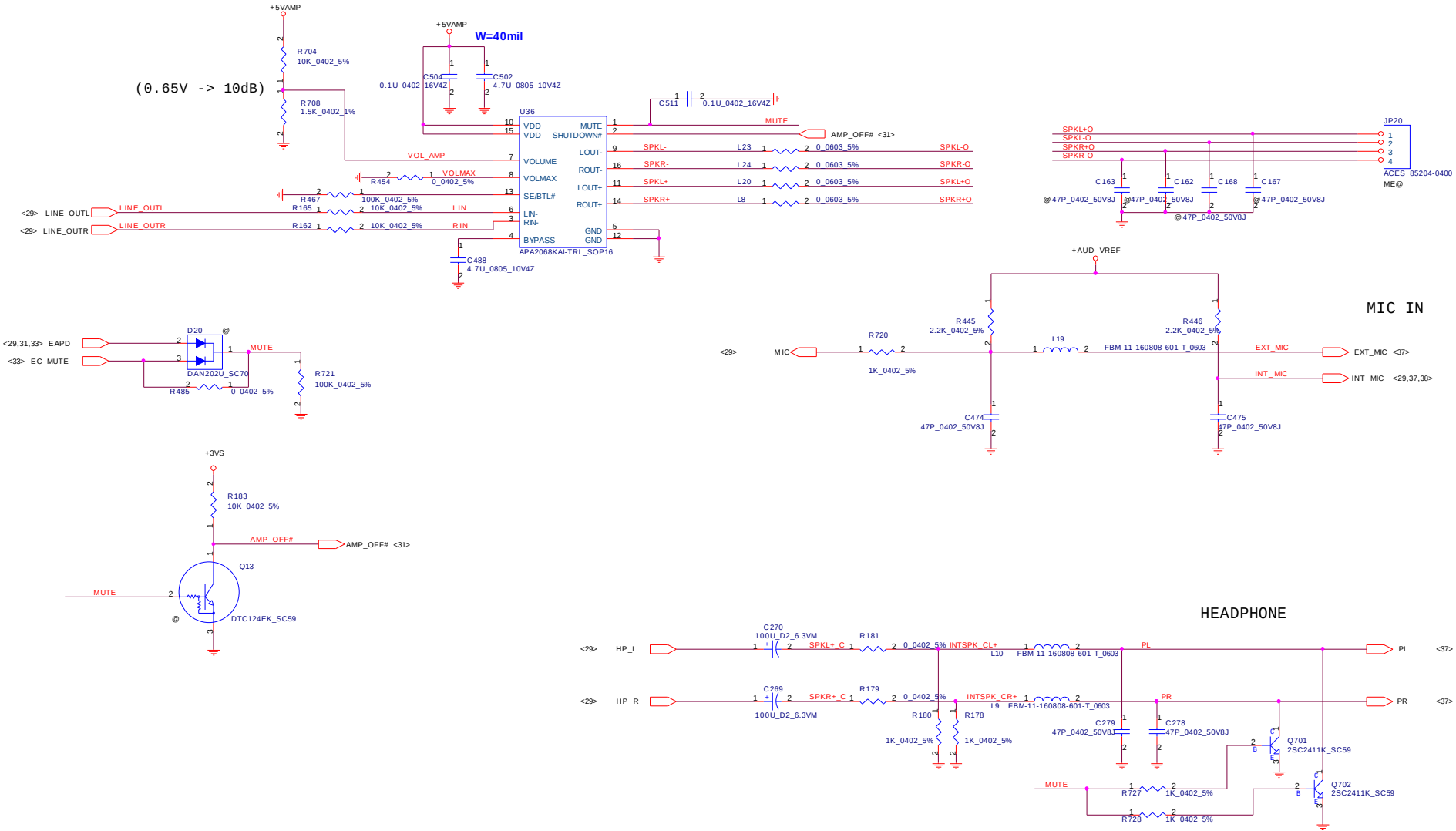

Security Classification	Compal Secret Data		
Issued Date	2005/10/06	Deciphered Date	2006/10/06

Compal Electronics, Inc.

Title: **AMP & Audio Jack**

Size	Document Number	Rev
Custom	HGT30/31 LA3061	0.1

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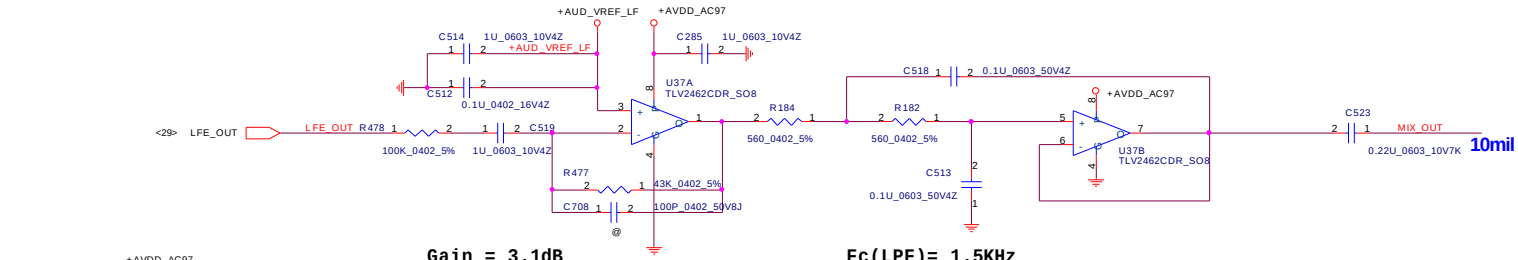
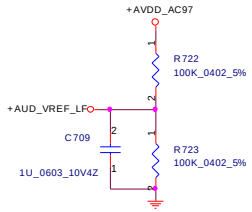
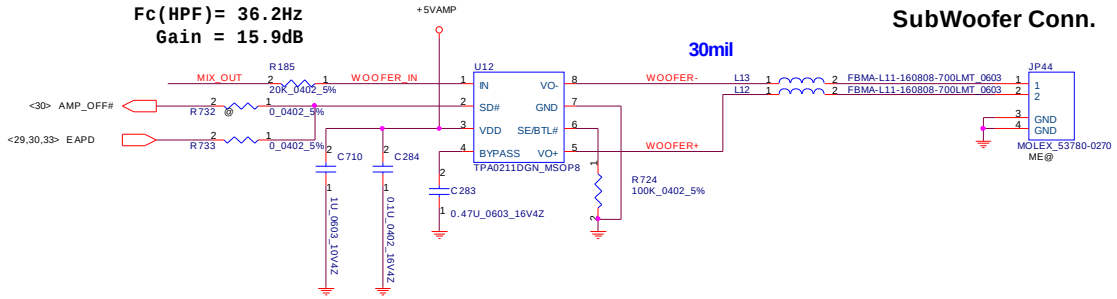
SUBWOOFER (Reserved for C38)

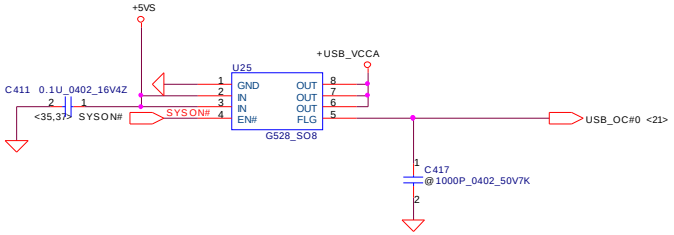
WOOFER@

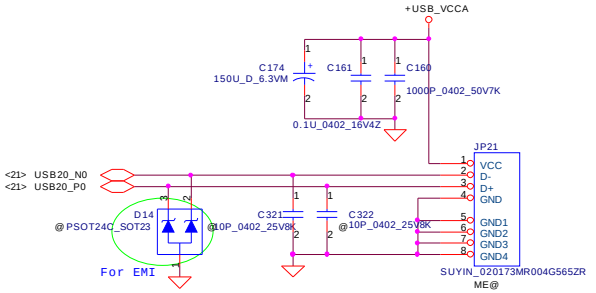






USB Port

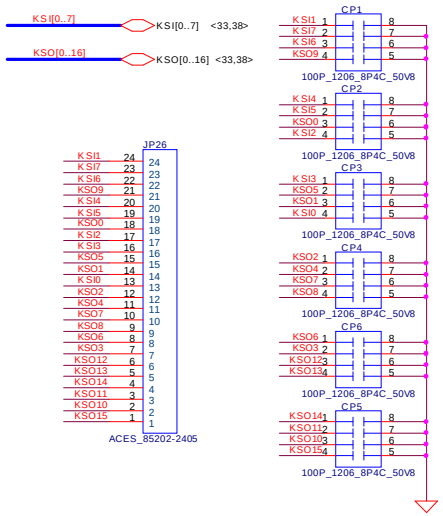




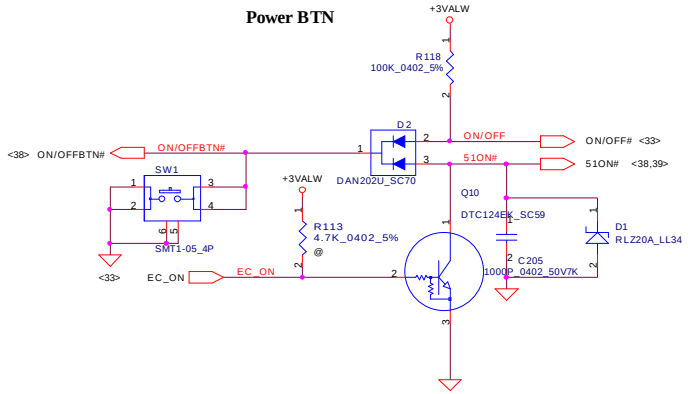
Security Classification	Compal Secret Data		
Issued Date	2005/10/06	Deciphered Date	2006/10/06

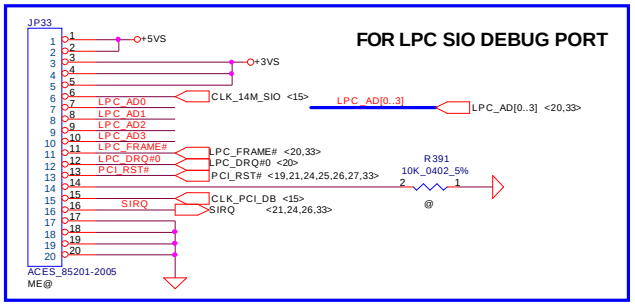
Compal Electronics, Inc.			
Title: Bluetooth & USB CONN.			
Size: Custom	Document Number: HGT30/31 LA3061		Rev: 0.1
Date: 星期四, 二月 23, 2006	Sheet 31 of 47		

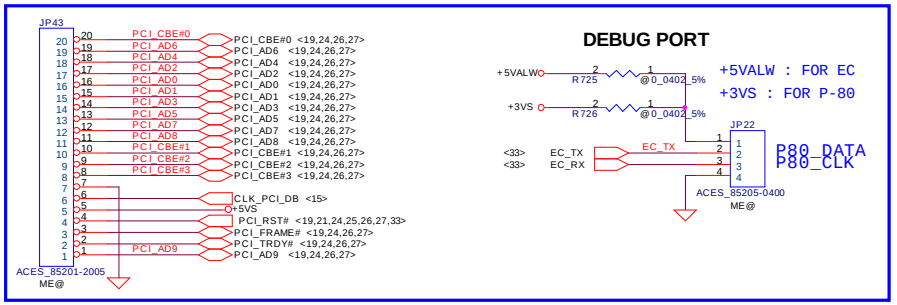
INT_KBD CONN.(TYPE "D" KB)



Power BTN







Security Classification	Compal Secret Data		
Issued Date	2005/10/06	Deciphered Date	2006/10/06

Compal Electronics, Inc.

Title: **KBD,ON/OFF,T/P,LED/B,DEBUG**

Size	Document Number	Rev
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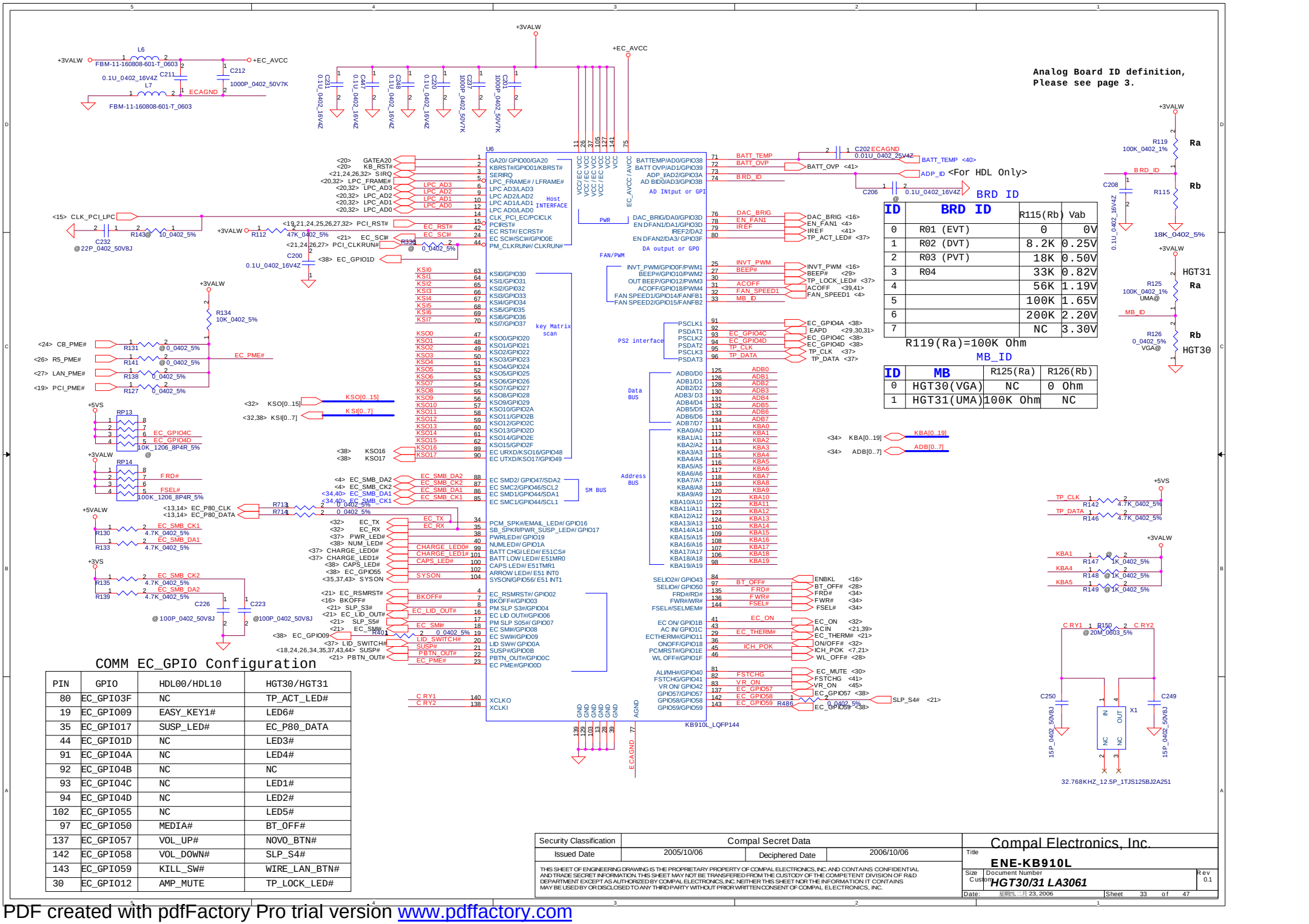
Date: 星期四, 二月 23, 2006 Sheet 32 of 47



ID	BRD ID	R115(Rb)	Vab
0	R01 (EVT)	0	0V
1	R02 (DVT)	8.2K	0.25V
2	R03 (PVT)	18K	0.50V
3	R04	33K	0.82V
4		56K	1.19V
5		100K	1.65V
6		200K	2.20V
7		NC	3.30V

ID	MB	R125(Ra)	R126(Rb)
0	HGT30(VGA)	NC	0 Ohm
1	HGT31(UMA)	100K Ohm	NC

PIN	GPIO	HDL00/HDL10	HGT30/HGT31
80	EC_GPIO3F	NC	TP_ACT_LED#
19	EC_GPIO09	EASY_KEY1#	LED6#
35	EC_GPIO17	SUSP_LED#	EC_P80_DATA
44	EC_GPIO1D	NC	LED3#
91	EC_GPIO4A	NC	LED4#
92	EC_GPIO4B	NC	NC
93	EC_GPIO4C	NC	LED1#
94	EC_GPIO4D	NC	LED2#
102	EC_GPIO55	NC	LED5#
97	EC_GPIO50	MEDIA#	BT_OFF#
137	EC_GPIO57	VOL_UP#	NOVO_BTN#
142	EC_GPIO58	VOL_DOWN#	SLP_S4#
143	EC_GPIO59	KILL_SW#	WIRE_LAN_BTN#
30	EC_GPIO12	AMP_MUTE	TP_LOCK_LED#

Security Classification	Compal Secret Data		
Issued Date	2005/10/06	Deciphered Date	2006/10/06

Compal Electronics, Inc.

Title: **ENE-KB910L**

Size: Custom | Document Number: **HGT30/31 LA3061** | Rev: 0.1

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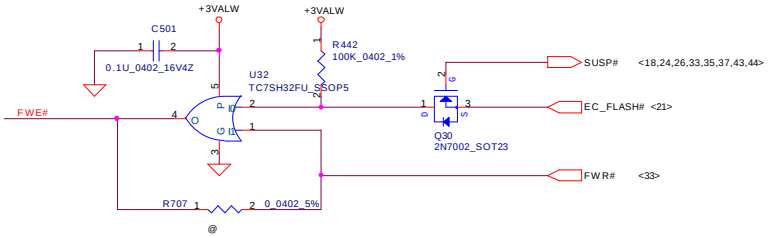
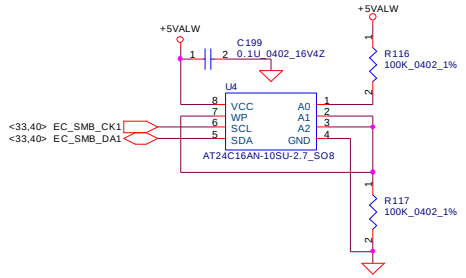
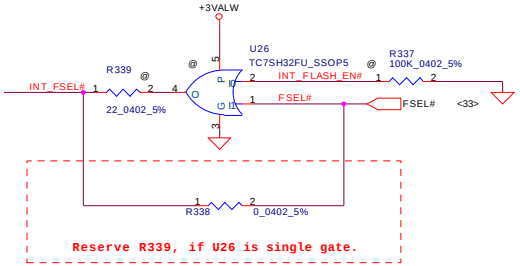
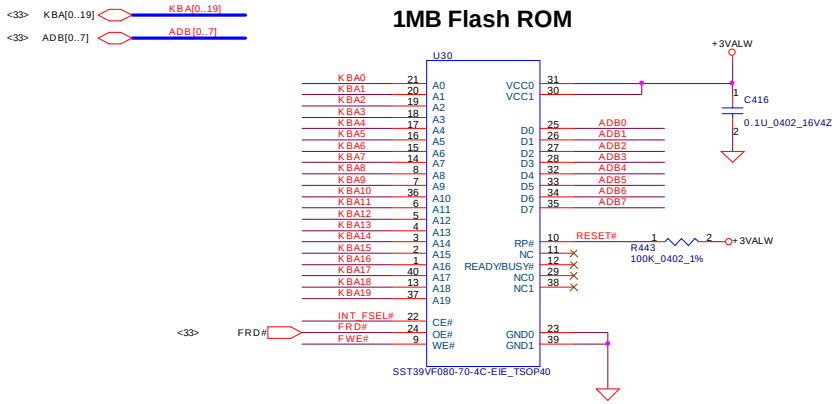




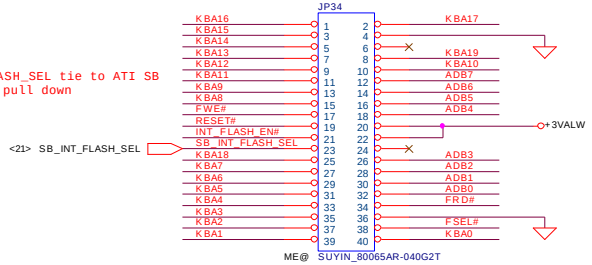


1MB Flash ROM



1MB ROM Socket

SB_INT_FLASH_SEL tie to ATI SB GPIO1 and pull down



Security Classification	Compal Secret Data		
Issued Date	2005/10/06	Deciphered Date	2006/10/06

Compal Electronics, Inc.

Title: BIOS & EC I/O Port

Size: Custom | Document Number: HGT30/31 LA3061 | Rev: 0.1

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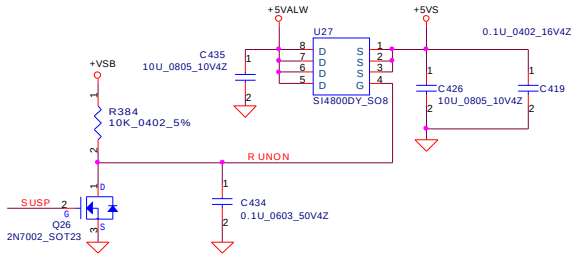
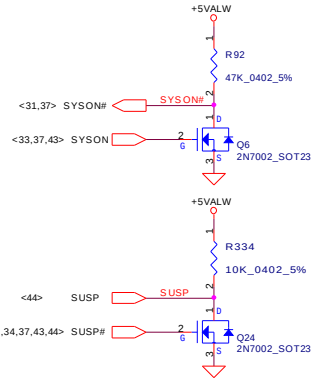
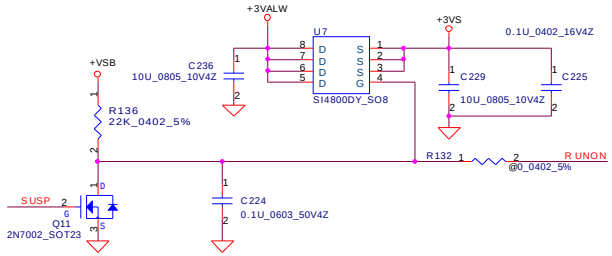
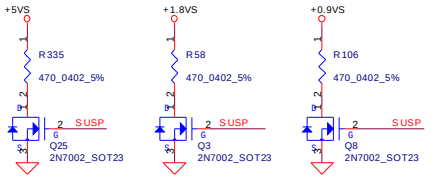
+5VALW to +5VS Transfer



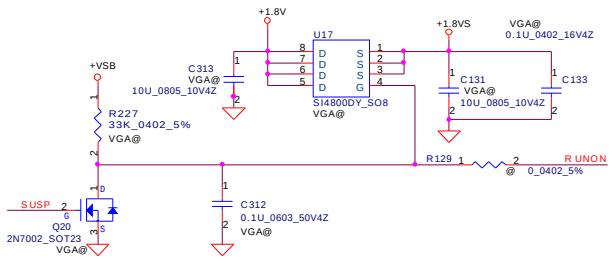


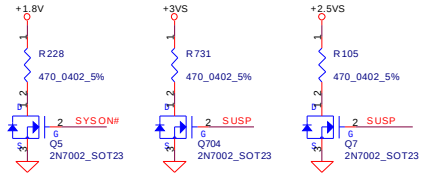
+3VALW to +3VS Transfer





+1.8V to +1.8VS Transfer





Security Classification	Compal Secret Data		
Issued Date	2005/10/06	Deciphered Date	2006/10/06

Compal Electronics, Inc.

Title: **DC/DC Circuit**

Size: Custom | Document Number: **HGT30/31 LA3061** | Rev: 0.1

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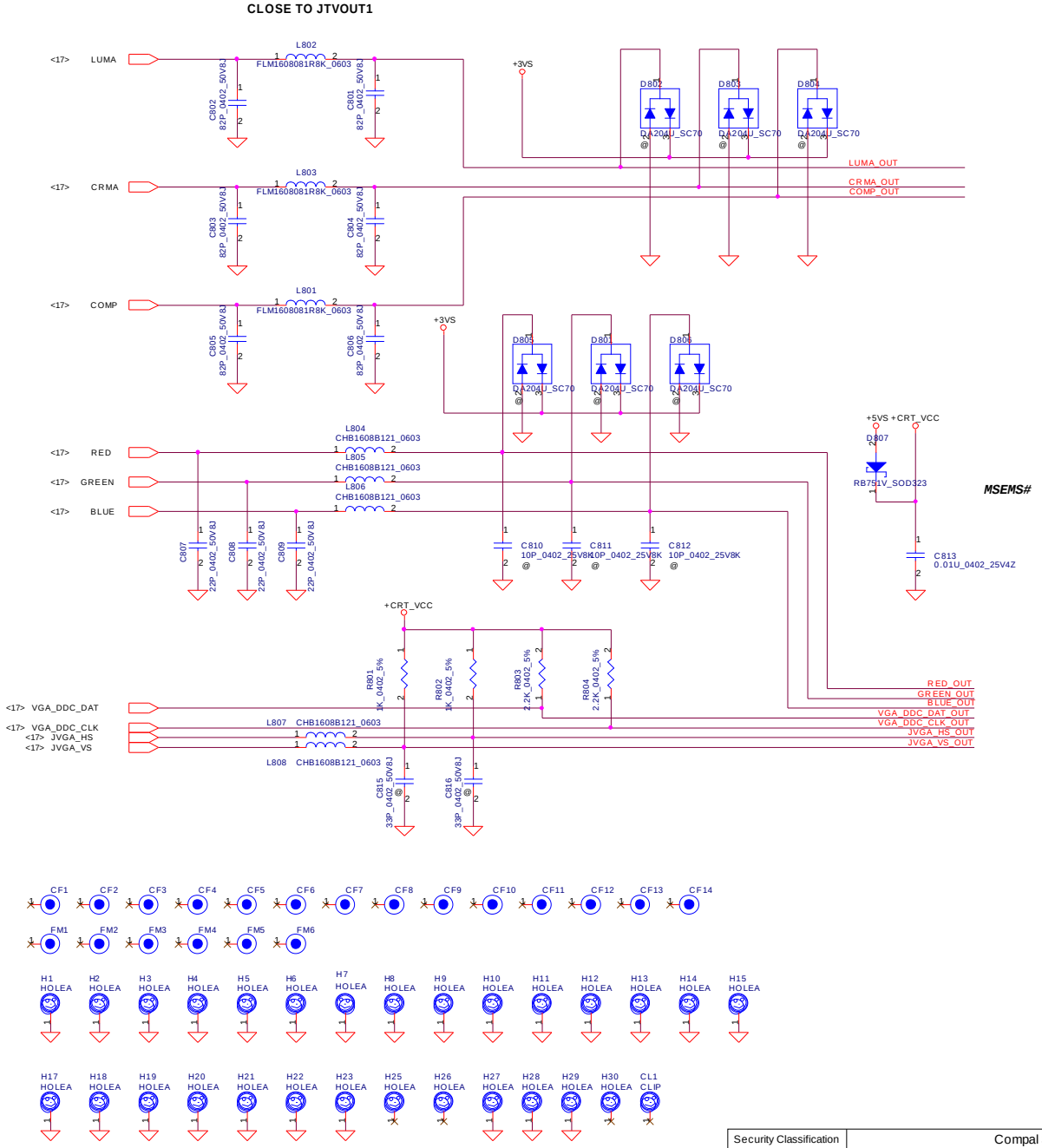
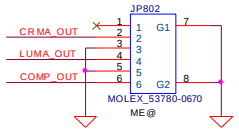
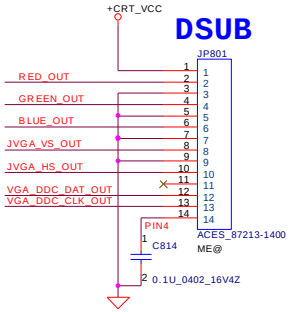
VGA I/O PORT Connector



S-VIDEO



DSUB



PIN ASSIGMENT

PIN	D-SUB	FUNCTION	PIN	SVIDEO	FUNCTION
1	9	+CRT_VCC	1	1	NC
2	1	RED	2	4	CRMA
3	6	GND	3	2	GND
4	2	GREEN	4	3	LUMA
5	7	GND	5	5	GND
6	3	BLUE	6	6	CVBS
7	8	GND			
8	14	VSYNC			
9	10	GND			
10	13	HSYNC			
11	11	SENSE			
12	12	SM_DAT			
13	15	SM_CLK			
14	4	PIN4			

Security Classification	Compal Secret Data		
Issued Date	2005/03/10	Deciphered Date	2006/03/10

Compal Electronics, Inc.

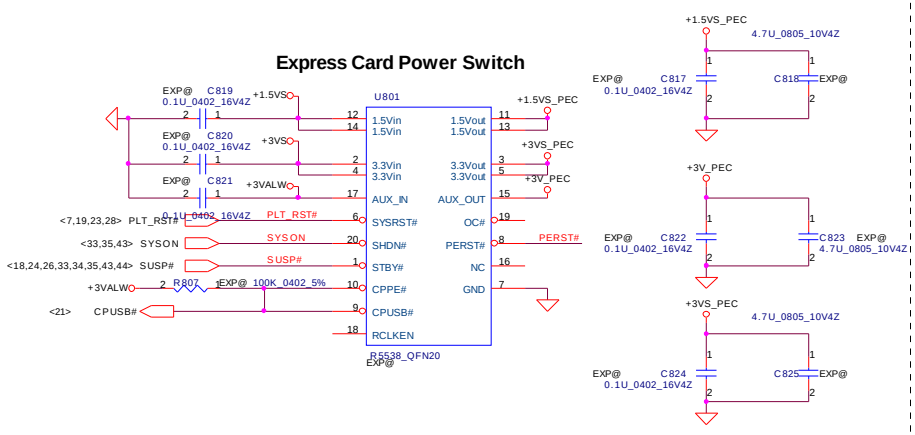
Title: CRT & TVout Connector

Size: Custom | Document Number: HGT30/31 LA3061 | Rev: 0.1

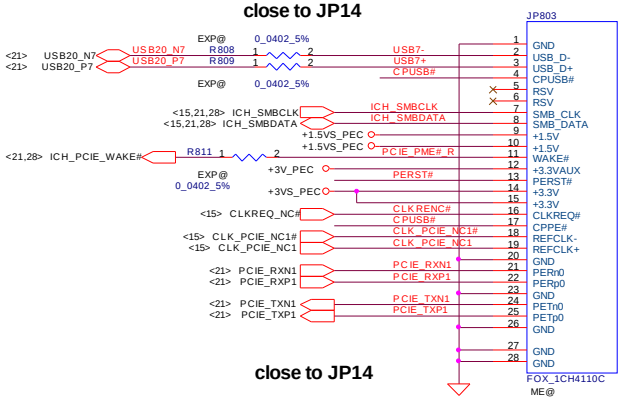
Date: 星期四, 二月 23, 2006 | Sheet 36 of 47

NEW CARD FOR C38

Express Card Power Switch



close to JP14



close to JP14

LED Indicator ON M/B

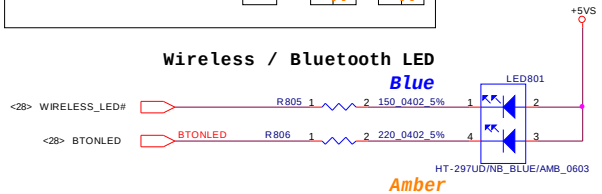
3 2 1

B | B A | B A

Wireless / Bluetooth LED

(1)

Blue



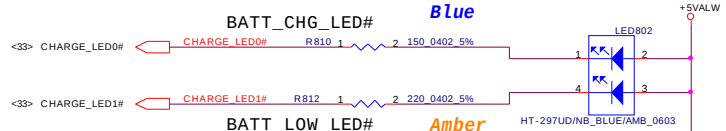
Amber

STATUS	
AC	BLUE
Chargin	Blinking Blue
Low BATT	Amber

(2)

BATT_CHG_LED#

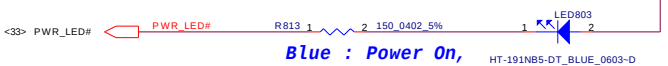
Blue



BATT_LOW_LED#

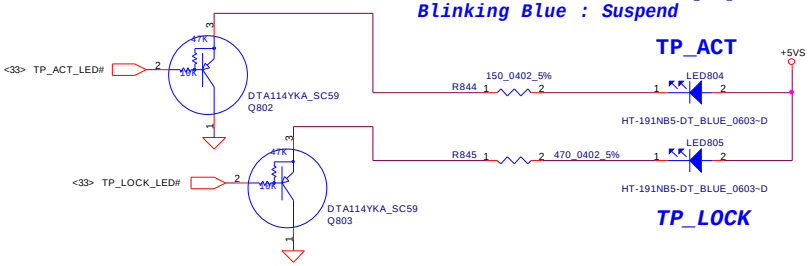
Amber

(3)



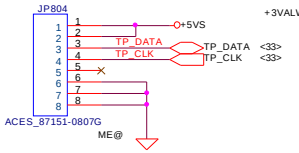
Blue : Power On,
Blinking Blue : Suspend

TP_ACT

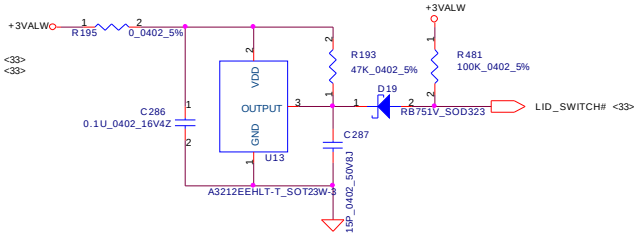


TP_LOCK

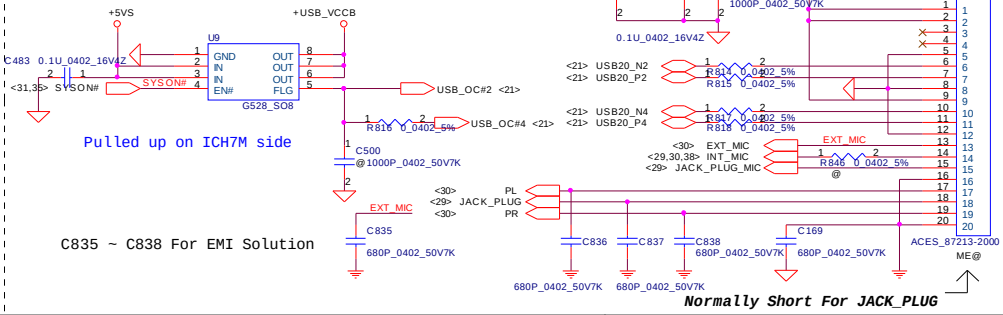
T/P Board



LID Switch



USB board



Pulled up on ICH7M side

C835 ~ C838 For EMI Solution

Normally Short For JACK_PLUG

Security Classification	Compal Secret Data		
Issued Date	2005/03/10	Deciphered Date	2006/03/10

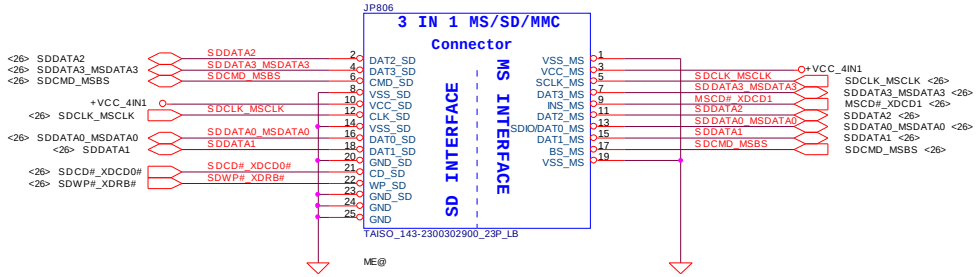
Compal Electronics, Inc.

Title: INDICATE LED

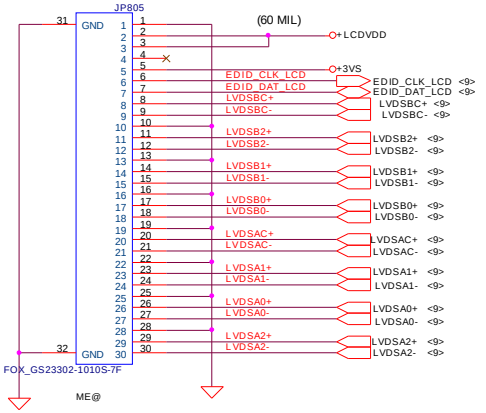
Size: Custom | Document Number: HGT30/31 LA3061 | Rev: 0.1

Date: 星期四, 二月 23, 2006 | Sheet 37 of 47

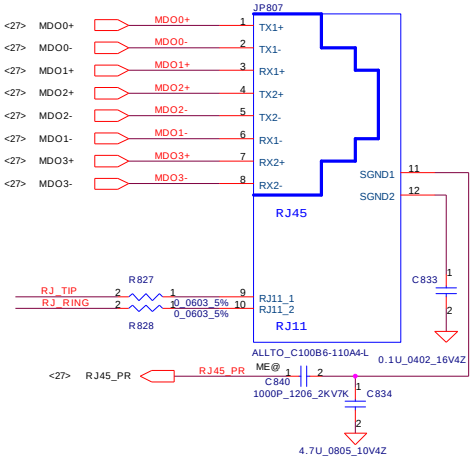
3 IN 1 Card Reader



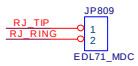
UMA LCD/PANEL Conn.



RJ11+RJ45 CONN



MDC CONN

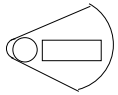


SWITCH BD

LED Indicator BD

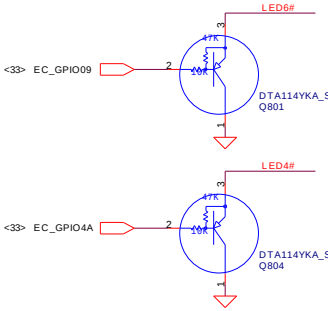
1	2	3	4	5	6
L			M		H

Dial Wheel

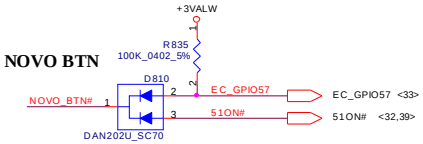


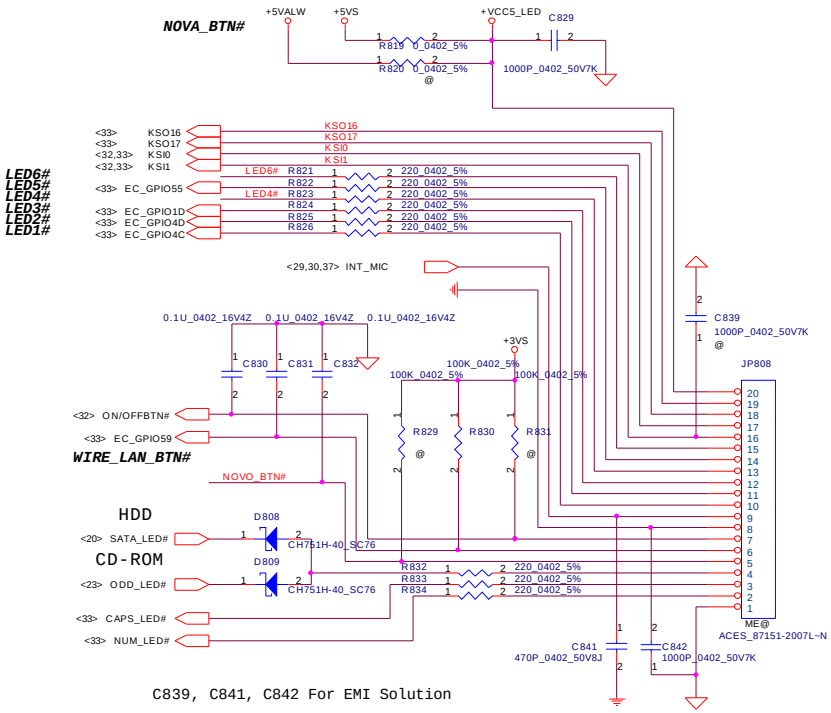
Function

KEY Matrix	KO16	KO17
KSI0	DW-UP	DW-DOWN
KSI1	DW-ENTER	MUTE



NOVO BTN





C839, C841, C842 For EMI Solution

Security Classification	Compal Secret Data		
Issued Date	2005/03/10	Deciphered Date	2006/03/10

Compal Electronics, Inc.

Title: INDICATE LED

Size: Custom | Document Number: HGT30/31 LA3061 | Rev: 0.1

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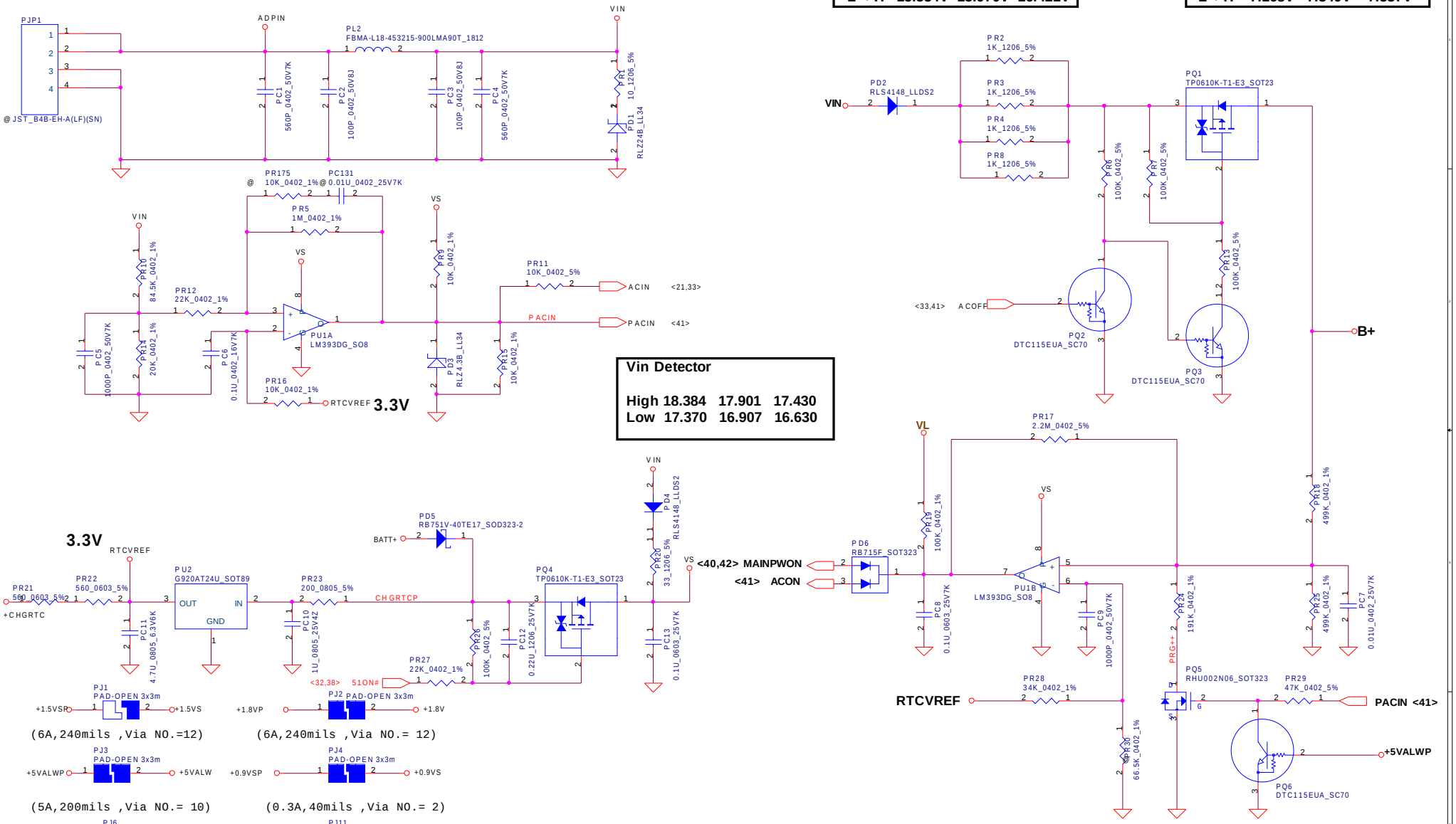
ACIN

Precharge detector	Min.	typ.	Max.
H-->L	14.620V	14.853V	15.245V
L-->H	15.534V	15.970V	16.421V

BATT ONLY

Precharge detector	Min.	typ.	Max.
H-->L	6.169V	6.231V	6.361V
L-->H	7.168V	7.349V	7.537V



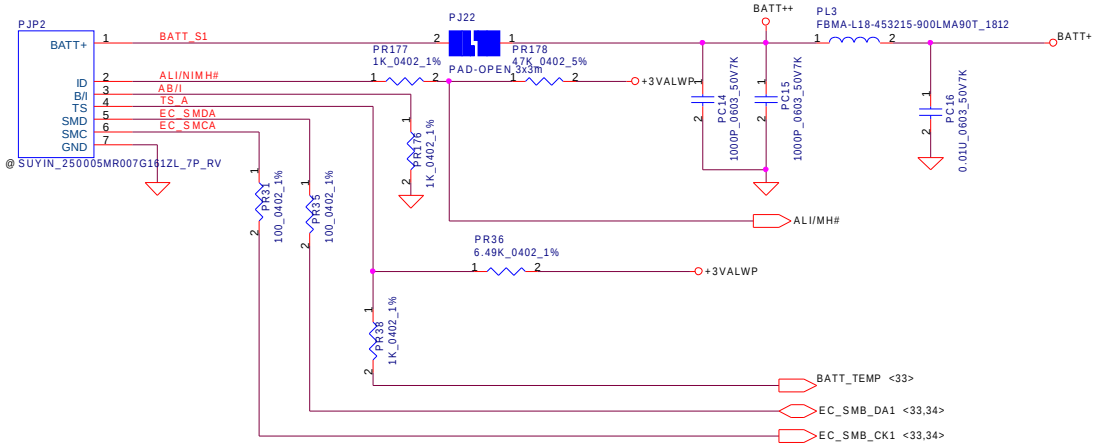
Security Classification	Compal Secret Data		
Issued Date	2005/08/01	Deciphered Date	2006/08/01

Compal Electronics, Inc.

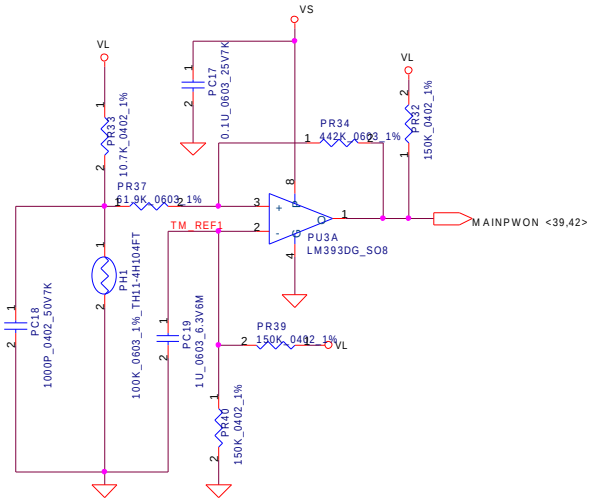
Title: **DCIN/DECTOR**

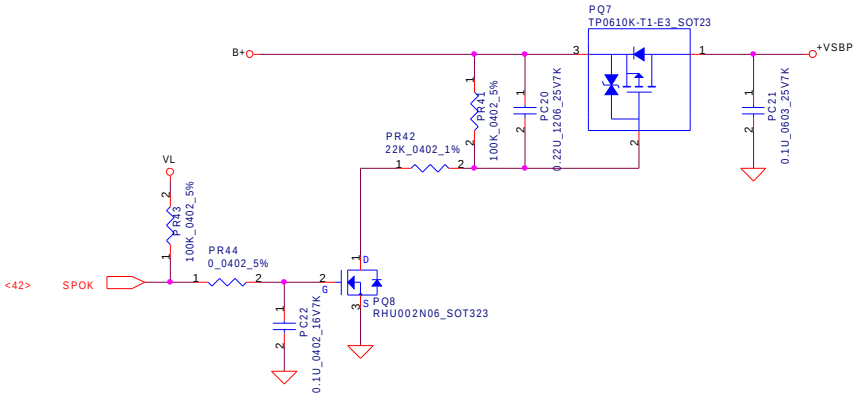
Size: B | Document Number | Rev: 0.1

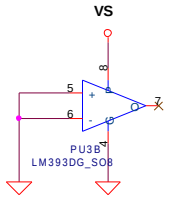
Date: 星期一, 二月 20, 2006 | Sheet 39 of 48



PH1 under CPU botten side :
CPU thermal protection at 85 degree C
Recovery at 70 degree C







Security Classification	Compal Secret Data		
Issued Date	2005/08/01	Deciphered Date	2006/08/01

Compal Electronics, Inc.

Title: **BATTERY CONN. / OTP**

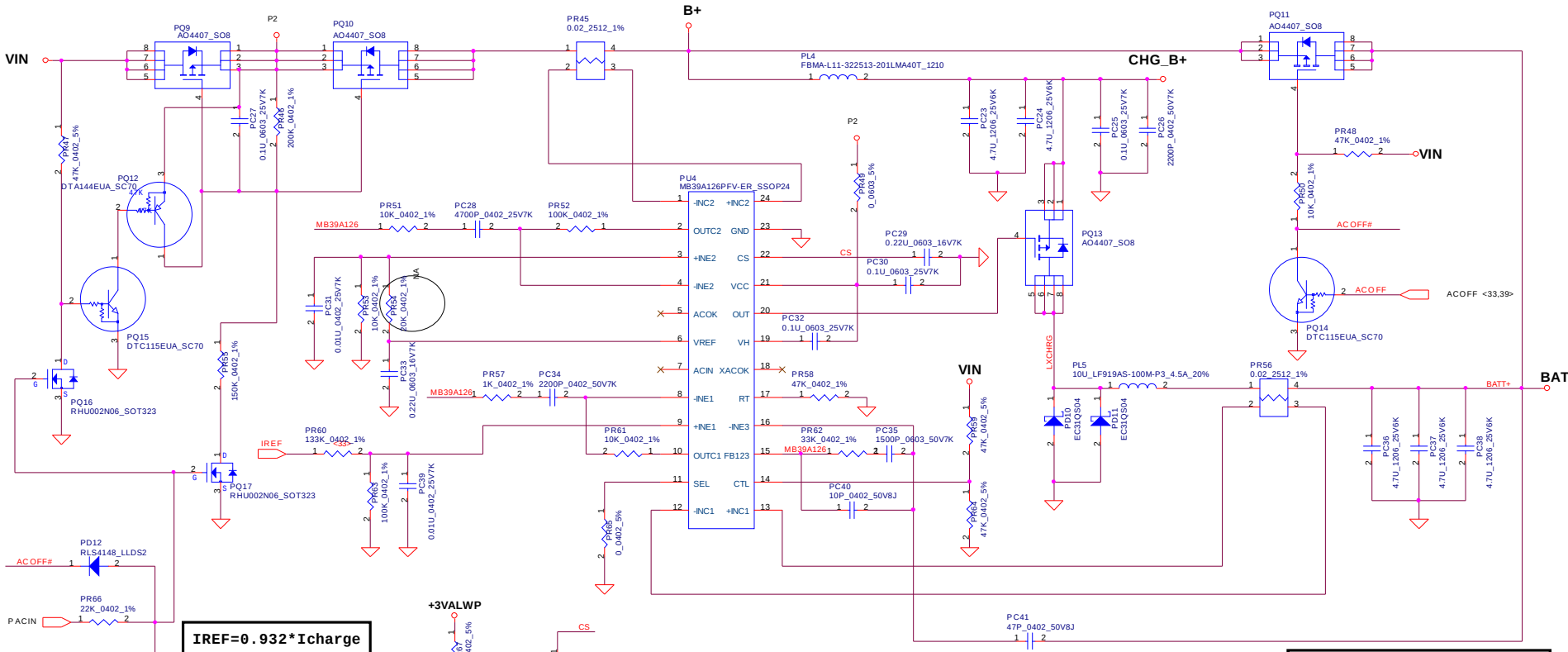
Size	Document Number	Rev
B		0.1

Date: 星期一, 二月 20, 2006 | Sheet 40 of 48

Charger

65W PR45=0.02_2512_1% PR54=30K_0402_1% Iadp=0~3.125A
90W PR45=0.02_2512_1% PR54=20K_0402_1% Iadp=0~4.166A

Fosc=14100/Rt=14100/47=300KHz



IREF=0.932*Icharge
IREF=0.466~2.61V
I fast charge=2.8A

LI-3S :13.05V----BATT-OVP=1.45V
BATT-OVP=0.111*BATT+

CC=2.8A
(100K/(100K+133K))*2.61V=1.12V
1.12/(20*0.02)=2.8A

90W HGT30 CP Point=4.166A
5V*(10K/(30k+10k))=1.666V
1.666V/(20*0.02)=4.166A

65W HGT31 CP Point=3.125A
5V*(10K/(30K+10K))=1.25V
1.25V/(20*0.02)=3.125A

Charge voltage
3S CC-CV MODE : 12.6V
SEL is L

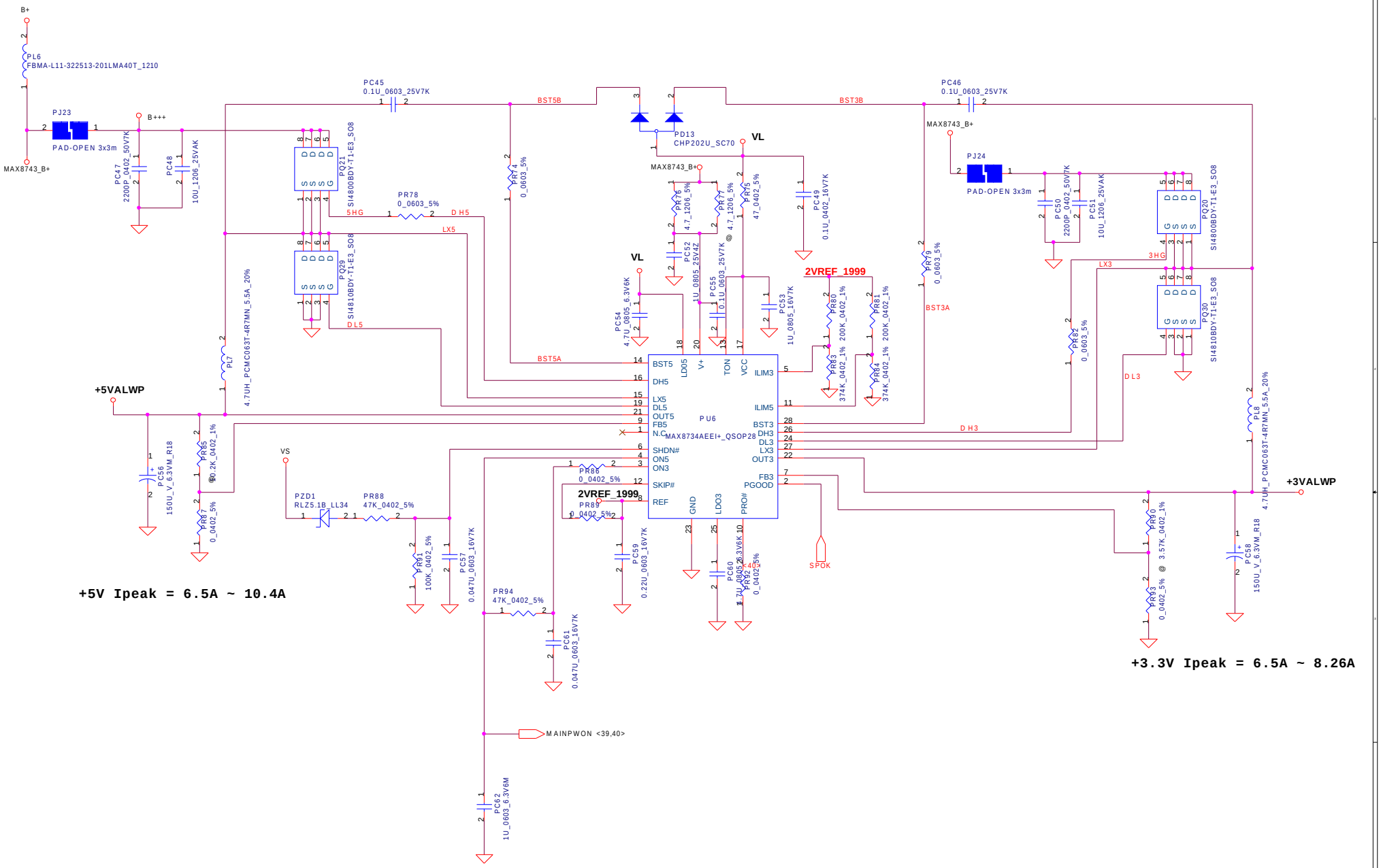
Security Classification	Compal Secret Data		
Issued Date	2005/08/01	Deciphered Date	2006/08/01

Compal Electronics, Inc.

Title: PWR-Charger

Size: B | Document Number | Rev: 0.1

Date: 星期一, 二月 20, 2006 | Sheet 41 of 48



Security Classification	Compal Secret Data		
Issued Date	2005/08/01	Deciphered Date	2006/08/01

Compal Electronics, Inc.

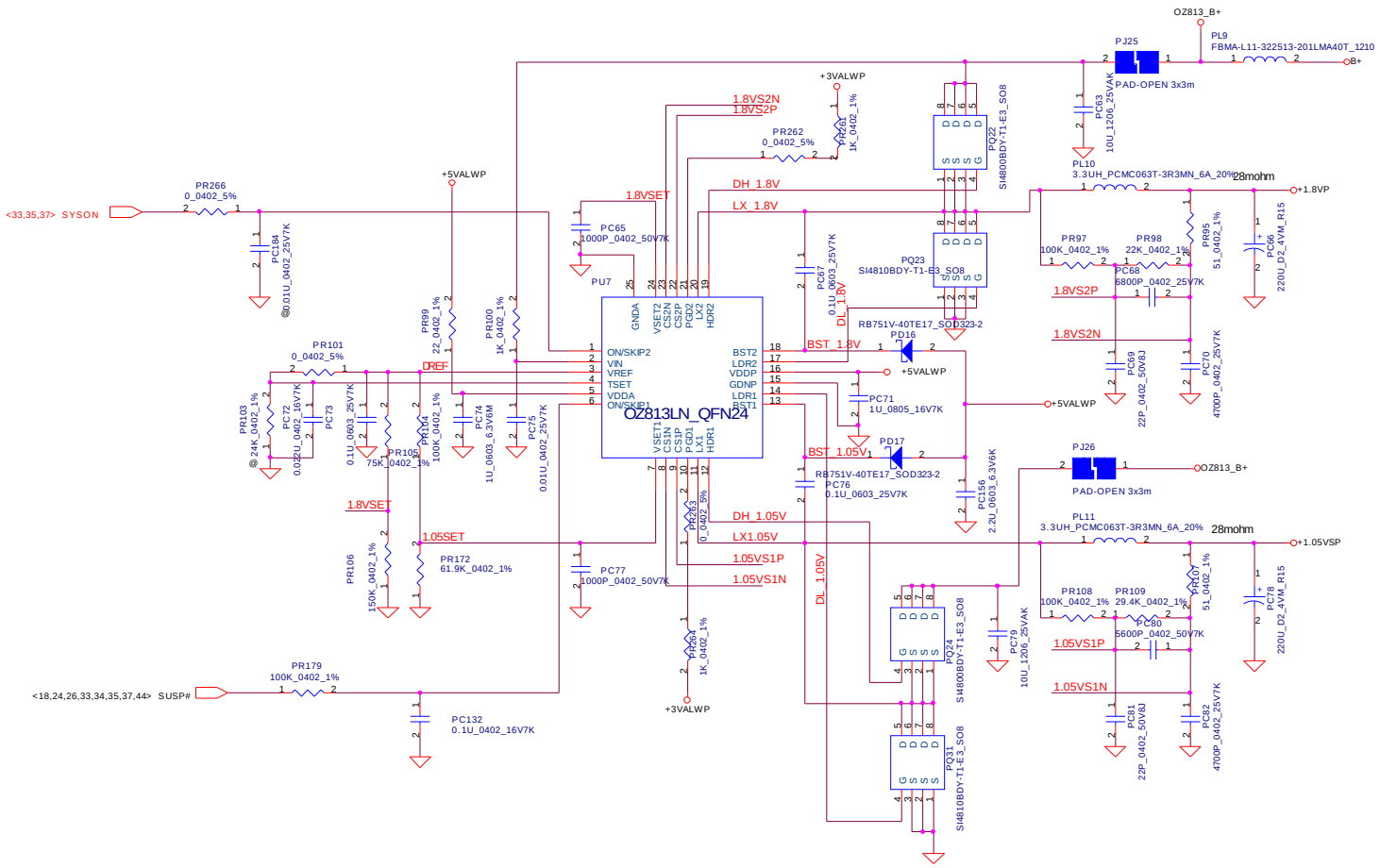
Title: **+5VALWP/+3VALWP**

Size	Document Number	Rev
Custom		0.1

Date: 星期一, 二月 20, 2006 | Sheet 42 of 48

+1.8VP Ilimit = 7.87A~12.5A

+1.05VSP Ilimit=6.33A~10.03A



Security Classification	Compal Secret Data		
Issued Date	2005/08/01	Deciphered Date	2006/08/01

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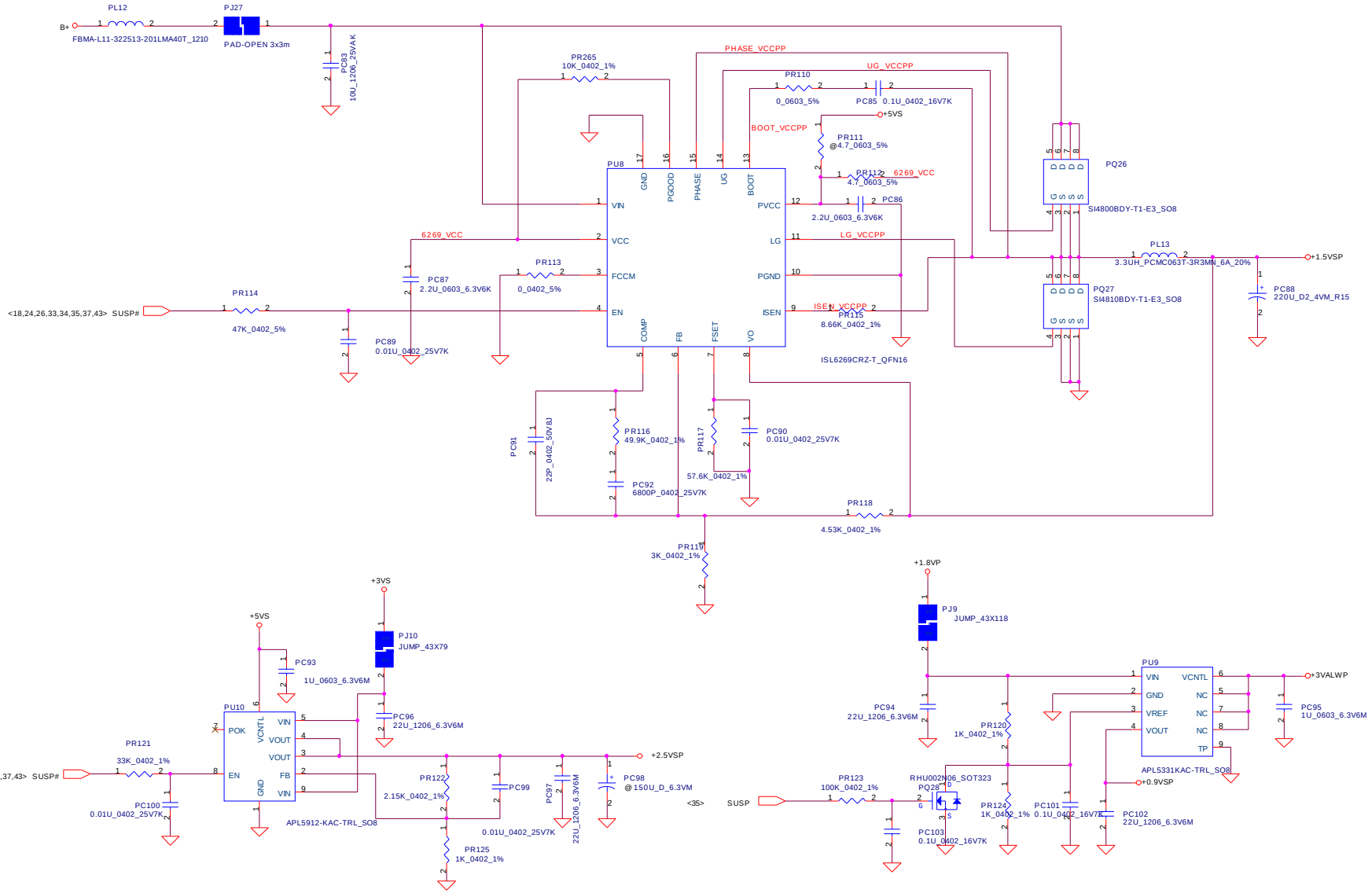
Compal Electronics, Inc.

Title: **1.05VP/1.8VP**

Size	Document Number	Rev
Custom		0.1

Date: 星期一, 二月 20, 2006 | Sheet 43 of 48



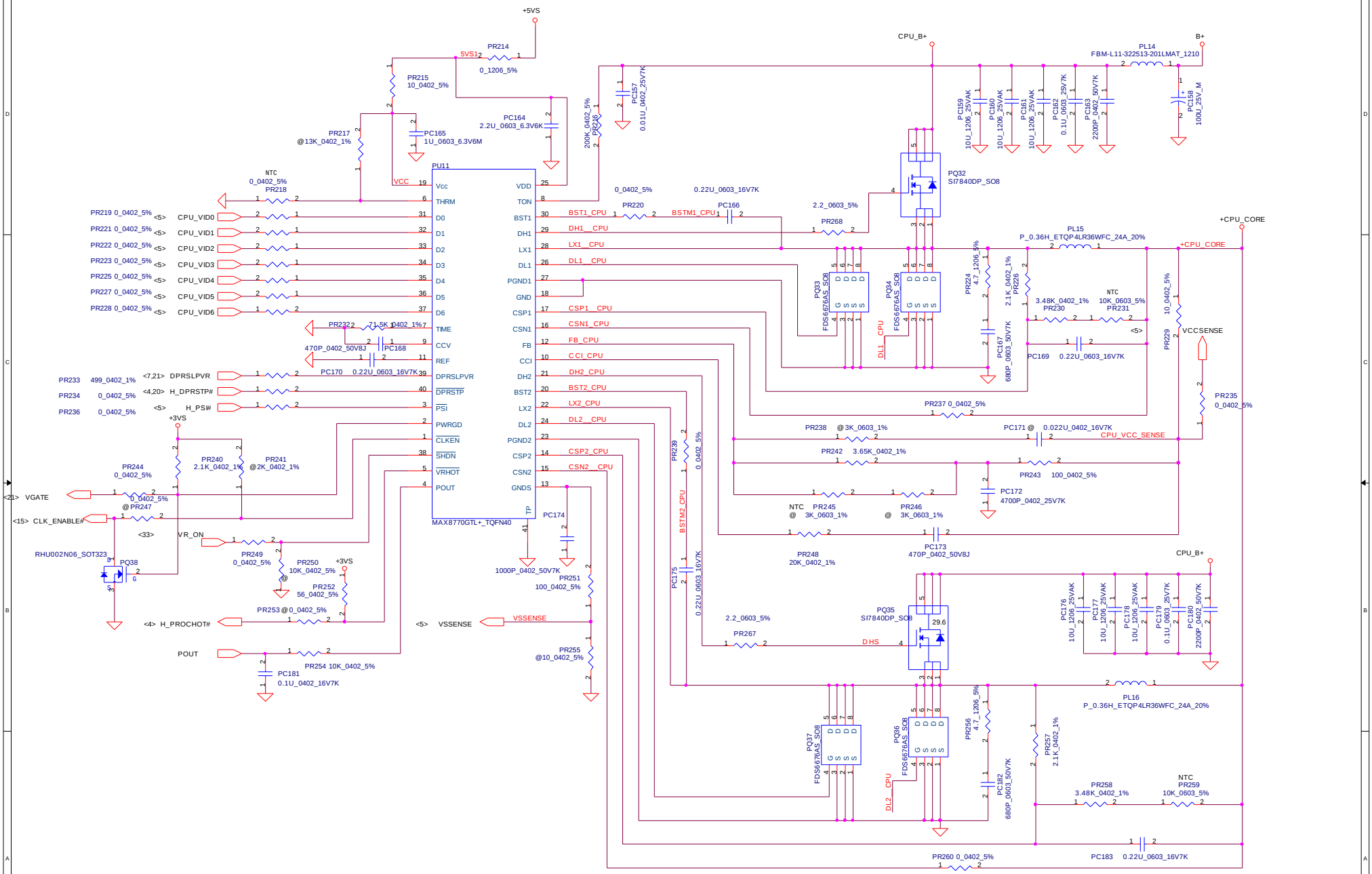
Security Classification	Compal Secret Data		
Issued Date	2005/08/01	Deciphered Date	2006/08/01

Compal Electronics, Inc.

Title: +VCCPP/+2.5VSP/0.9VSP

Size	Document Number	Rev
Custom		0.1

Date: 星期一, 二月 20, 2006 | Sheet 44 of 48



Security Classification	Compal Secret Data		
Issued Date	2005/06/20	Deciphered Date	2006/06/20

Compal Electronics, Inc.

Title: **+CPU_CORE**

Size	Document Number	Rev
Custom		0.1

Date: 星期一, 二 ?20, 2006 | Sheet 45 of 48

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

Item	Fixed Issue	Reason for change	Rev.	PG#	Modify List	VER	Phase
1		MODIFY 3V/5V current limit to 6.5A~8.1A/6.5A to 10.2A		42	MODIFY PR83/PR84 FROM 499K TO 374K		DVT
2		ADD or decrease CPU CORE ring with EMI solution : snubber		45	Reserve PR224//PR256: 4.7 1206 ,add PC167/PC182:680P		DVT
3		Reserve PR267,PR268 seperate in CPU CORE high side gate for EMI require		45	Reserve PR267,PR268:0 0603		DVT
4		change PJP1 from 5 pin to 4 pin		39	change PJP1 from 5 pin to 4 pin		DVT
5		modify sequecce		43	change PR179 to 100k, PC132 =0.1U		DVT
6		modify Vgate		45	add PQ38:RHU002N06,PR240:2K,delete PR247		
7							
8							
9							
10							
11							
8							
9							

Compal Electronics, Inc.		
Title: PIR (PWR)		
Size	Document Number	Rev 0.2
Date: 星期一, 二月 20, 2006	Sheet 46 of 48	

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

Item	Fixed Issue	Rev.	PG#	Modify List	B.Ver#	Phase
1	Add EC_Port80 Signals to DDR2 DIMM1 & DIMM2	0.2	P.13 P.14	1.Connect U6.91 (EC_P80_CLK) through a 0 Ohm R to JP3.83 & JP4.83 2.Connect U6.92 (EC_P80_DATA) through a 0 Ohm R to JP3.69 & JP4.69	0.2	DVT
2	Impedance not match for both CRT & TV Out	0.2	P.17	R3, R4, R5, R6, R7, R8 Change from NC to 150 Ohm	0.2	DVT
3	LCD Panel will flash white frame when power on	0.2	P.16	no stuff D10 (CH751H), stuff R204 (100K)	0.2	DVT
4	ICH7's GPIO configuration modification	0.2	P.21	GPIO10 connect to ACIN GPIO7 connect to G7X_THER_ALERT# GPIO39 connect to KILL_MDC#	0.2	DVT
5	<New Add> MDC supports S4/S5 resuming	0.2	P.28	MDC power connection change to +3VALW from +3VS	0.2	DVT
6	Audio Circuit modification for : 1. Line-Out connection change from Pin.35/Pin.36 to Pin.43/Pin.45 2. Audio-OUT Auto-Switch by HP Pluging In 3. MicPhone Noise Reduction 4. Cleared off BO Sound from both entry of Windows XP & Power Off	0.2	P.29-31	Line-Out connection change from Pin.35/Pin.36 to Pin.43/Pin.45 Connect Pin.32 (LFE_OUT) through 2 1uF Cap to Pin.43/Pin.45 +Audio_VREF_LF connection change to 1/2 +AVDD_AC97 Int.MIC connection changes to Pin31/Pin32 through 1uF for each New Add a JACK_PLUG_MIC signal from MIC JACK EAPD signal connect to EC'sGPIO4B APA2068's 13PIN(SE/BTL#) connect to GND	0.2	DVT
7	EC GPIO configuration modification	0.2	P.33	New add Port80 information OUT from Pin34(CLK), pin35(DATA) LED4 connection changes from GPIO17(35 PIN) to GPIO4A(91 PIN) New Add DAC's EAPD connect to EC's GPIO4B (92PIN). SKU_ID (GPIO3B) Changes to BRD_ID New Add WL_OFF# (GPIO1F, 46PIN) New Add BT_OFF# (GPIO50, 84PIN) New Add TP_ACT_LED# (GPIO3F, 80PIN) New Add TP_LOCK_LED# (GPIO12, 30PN)	0.2	DVT
8	Lid Switch changes from USB BD to M/B	0.2	P.37	Circuit of Lid SW changes from USB BD to M/B (DEL Lid SW on USB BD)	0.2	DVT
9	Blue LED too dark when active due to VF too High on blue LED	0.2	P.37-38	Changes LED power from +3VS(+3VALW) to +5VS(+5VALWS)	0.2	DVT
10	New Add LED Buffer for LED4, TP_LOCK_LED#, TP_ACT_LED#	0.2	P.37 P.38	TP_ACT_LED# connect to Q802.2, and Q802.1 to GND, then connect to LED804 through a 220 Ohm R TP_LOCK_LED# connect to Q803.2, and Q802.1 to GND, then connect to LED805 through a 220 Ohm R EC_GPIO4A connect to Q804.2, and Q804.1 to GND, then connect to R283 (220 Ohm)	0.2	DVT
11	leakage of electricit when System is running S3 mode	0.2		NC For R458, R402, R411, R128, R831, R829	0.2	DVT

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

Item	Fixed Issue	Rev.	PG#	Modify List	B.Ver#	Phase
12	GIGA LAN function failed for both Loopback or PXE on RTL8110SCL solution	0.3	P.27	1. Add a R734 (0 Ohm) resistor between +2.5V_LAN & VTCT for MAC 2. Removed all of the bypass Cap.(C398, C396, C418, C408) for MAC's TCT pins 3. Removed all of pulled down resistors (49.9 Ohm) & Cap.(0.01u)	0.3	PVT
13	Subwoofer still make POP Sound	0.3	P.31	1. Add 0 Ohm resistors, R732 (0 Ohm) connection between AMP_OFF# & U12.2 (SD#) for reserved 2. a 0 Ohm connection between EAPD & U12.2(SD#)	0.3	PVT
14	Mic Switch between Int. & Ext. be Failed	0.3	P.29	1. R717.1 Disconnect from U11.17 2. R717.1 connect to U11.16	0.3	PVT
15	Wrong parts	0.3	P.35	Change package of C434, C224 & C312 from 0402 to 0603	0.3	PVT
16	Add a discharging path of +3.3VS	0.3	P.35	1. Connect +3.3VS to R731.1 2. Connect R731.2 to Q704.1 3. Connect Q704.2 to NET : SUSP signal 4. Connect Q704.3 to GND	0.3	PVT