

Compal confidential

HGT30/31 Schematics Document

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

2005-10-12

REV:0.1

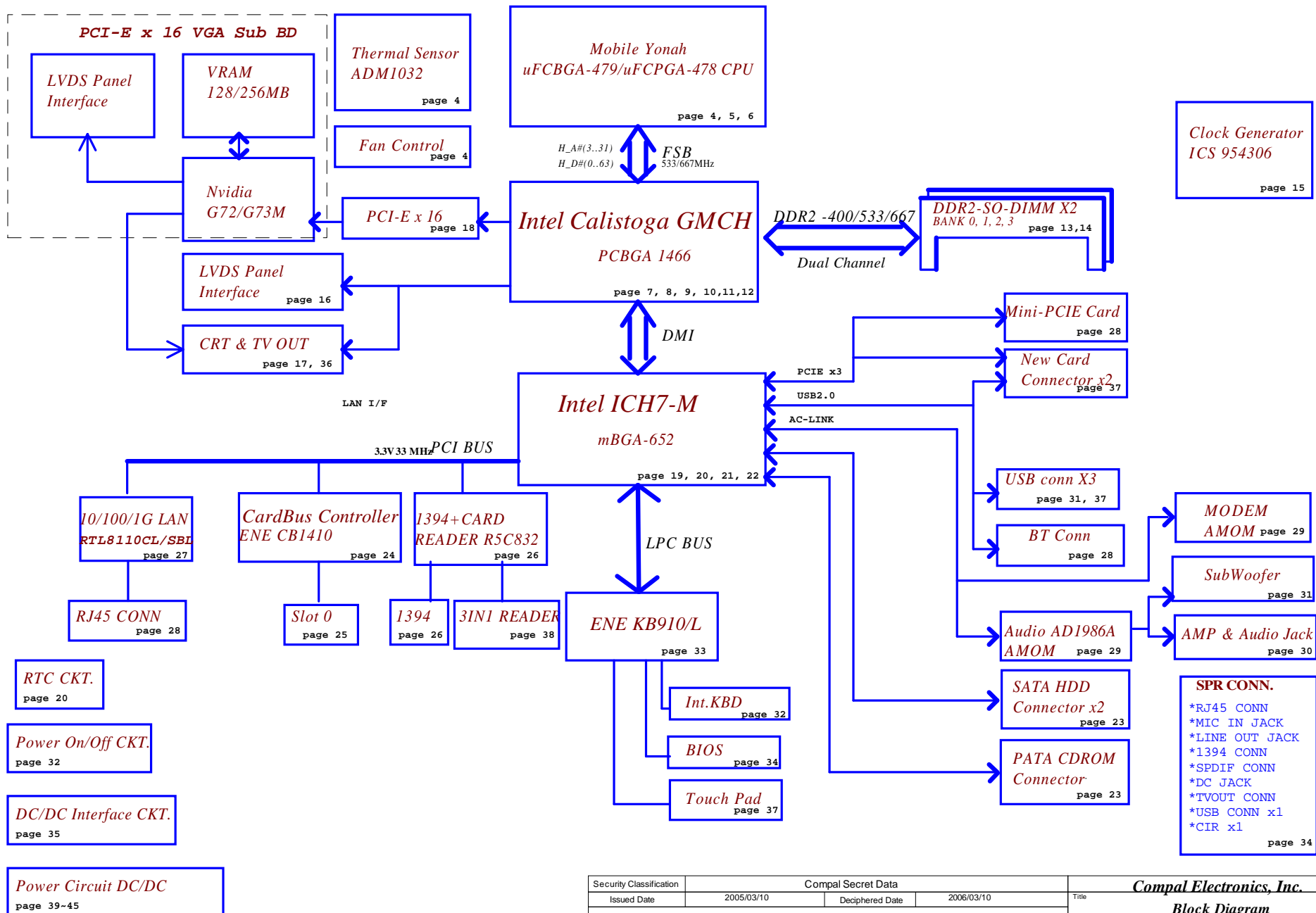
Security Classification	Compal Secret Data			Compal Electronics, Inc.	
Issued Date	2005/03/10	Deciphered Date	2006/03/10	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				Cover Sheet	
				Size	Document Number
				Custom	HGT30/31 LA-3061
				Date:	Monday, November 28, 2005
				Sheet	1 of 44
				Rev	0.1

Compal confidential

File Name : LA-3061

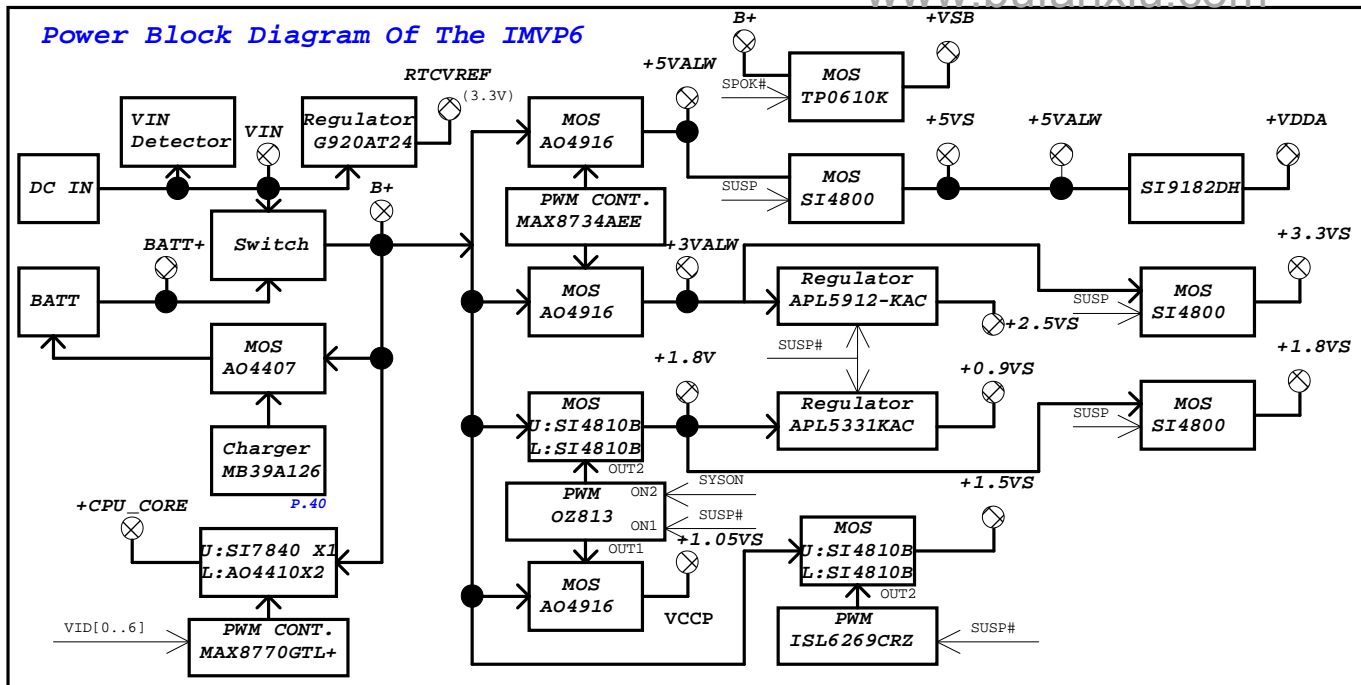
ZZZ1

PCB



Security Classification	Compal Secret Data			<div style="text-align: right;"> Compal Electronics, Inc. Block Diagram </div>		
Issued Date	2005/03/10	Deciphered Date	2006/03/10			
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 TRANSFERRED 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.				Size	Document Number	Rev
				Cust	HGT3031 LA-3061	0
				Date:	Monday, November 28, 2005	Sheet 2 of 44

Power Block Diagram Of The IMVP6



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

I2C / SMB Address

DEVICE	ADDRESS R/W
KB910/L (SM1-Pulled-Up 5V)	
AT24C16AN	A3/A2 H (3.3V)
SMART BATTERY	17/16 H (3.3V)
KB910/L (SM2-Pulled-Up 3.3V)	
ADM1032AR	99/98 H (3.3V)
G7xM (I2CC-Pulled-Up 3.3V)	
G781-1 (RESERVED)	9B/9A (3.3V)
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)

USB

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

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

power plane	+B LDO3 LDO5	+5VALW +3VALW	+1.8V +5V	+5VS +3VS +2.5VS +1.8VS +1.5VS +1.2VS +VGA_CORE +0.9VS +CPU_CORE +VCCP
State				
s0	O	O	O	O
s1	O	O	O	O
s3 : STR	O	O	O	X
s5 S4/AC	O	O	X	X
s5 S4/ Battery only	O	X	X	X
s5 S4/AC & Battery don't exist	X	X	X	X

MB_ID

EC	ICH	P NAME	OV
0	0	HGT-30	0V
7	1	HGT-31	3.3V

S4 : STD S5 : SOFT OFF

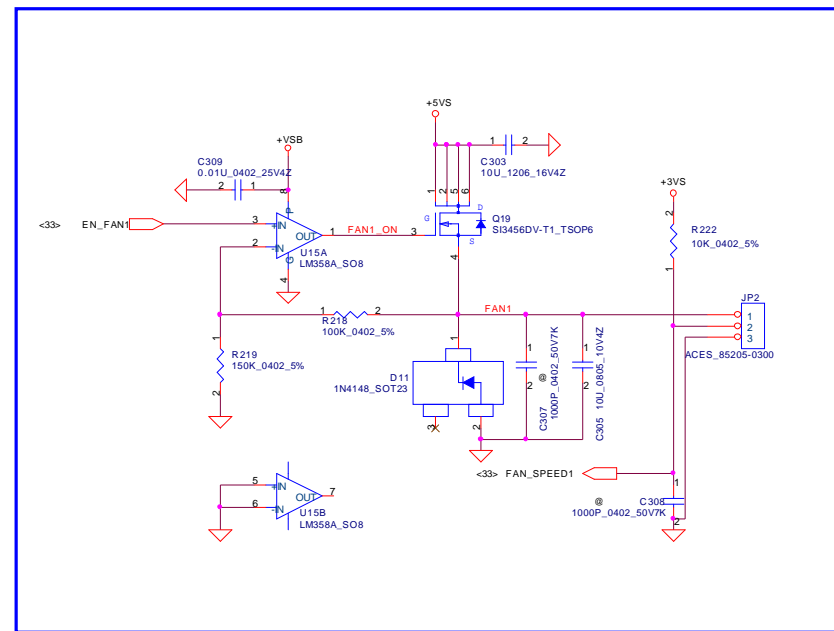
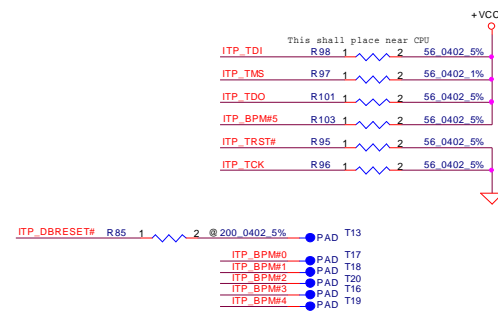
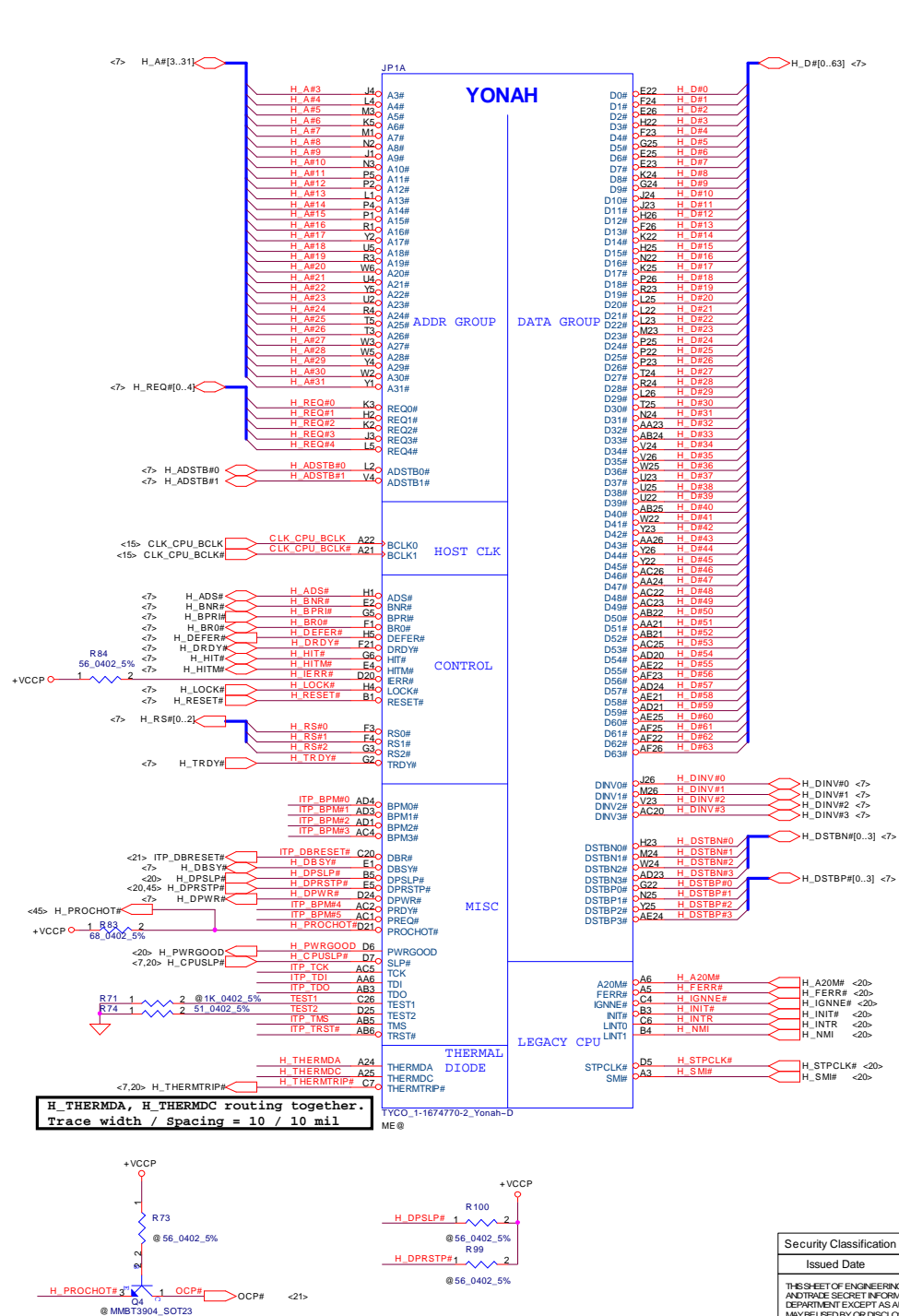
Security Classification	Compal Secret Data
Issued Date	2005/03/10
Deciphered Date	2006/03/10
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT 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.	

+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

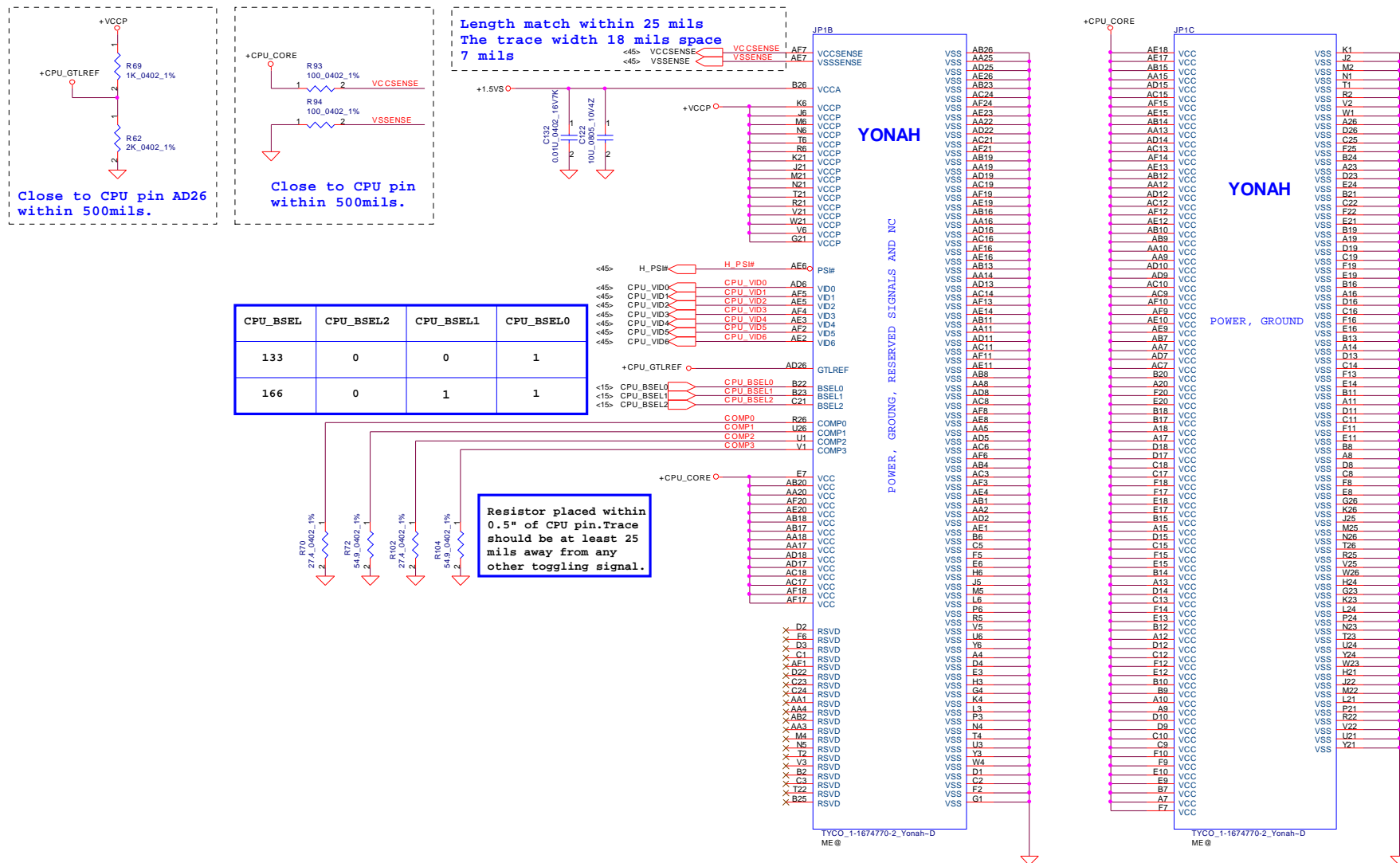
Compal Electronics, Inc.

Notes List

Size	Document Number	Rev
Custom	HGT30/31 LA-3061	0.1
Date:	Monday, November 28, 2005	Sheet 3 of 44

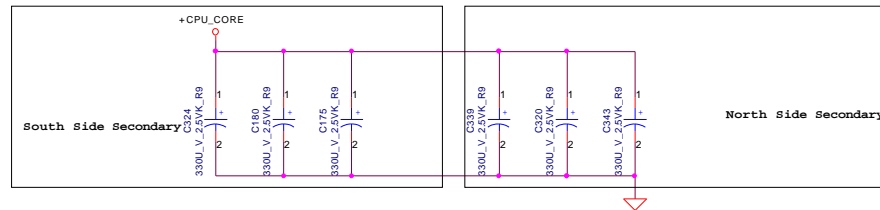
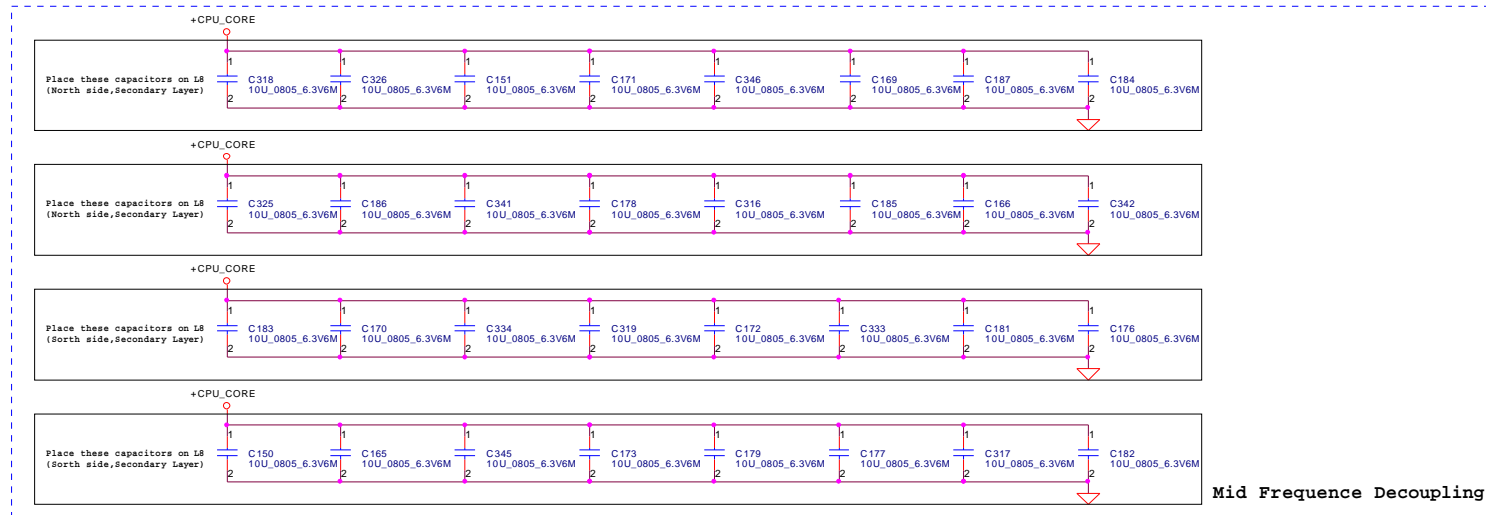


Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2005/10/06	Deciphered Date	2006/10/06	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Yonah CPU in mFCPGA479	
Size	Document Number	Customer		Rev	
	HGT30/31 LA-3061			0.1	
Date	Monday, November 28, 2005	Sheet	4	of 45	

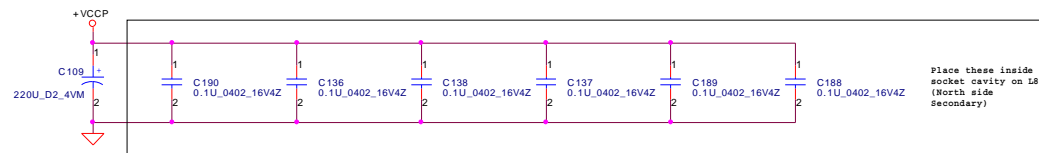


Security Classification	Compal Secret Data		
Issued Date	2005/10/06	Deciphered Date	2006/10/06
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE OBJECTIVITY OF THE 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.			

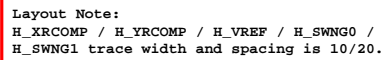
Compal Electronics, Inc.		
Yonah CPU in mFCPGA479		
Size	Document Number	Rev
Custom	HGT30/31 LA-3061	0.1
Date:	Monday, November 28, 2005	Sheet 5 of 45



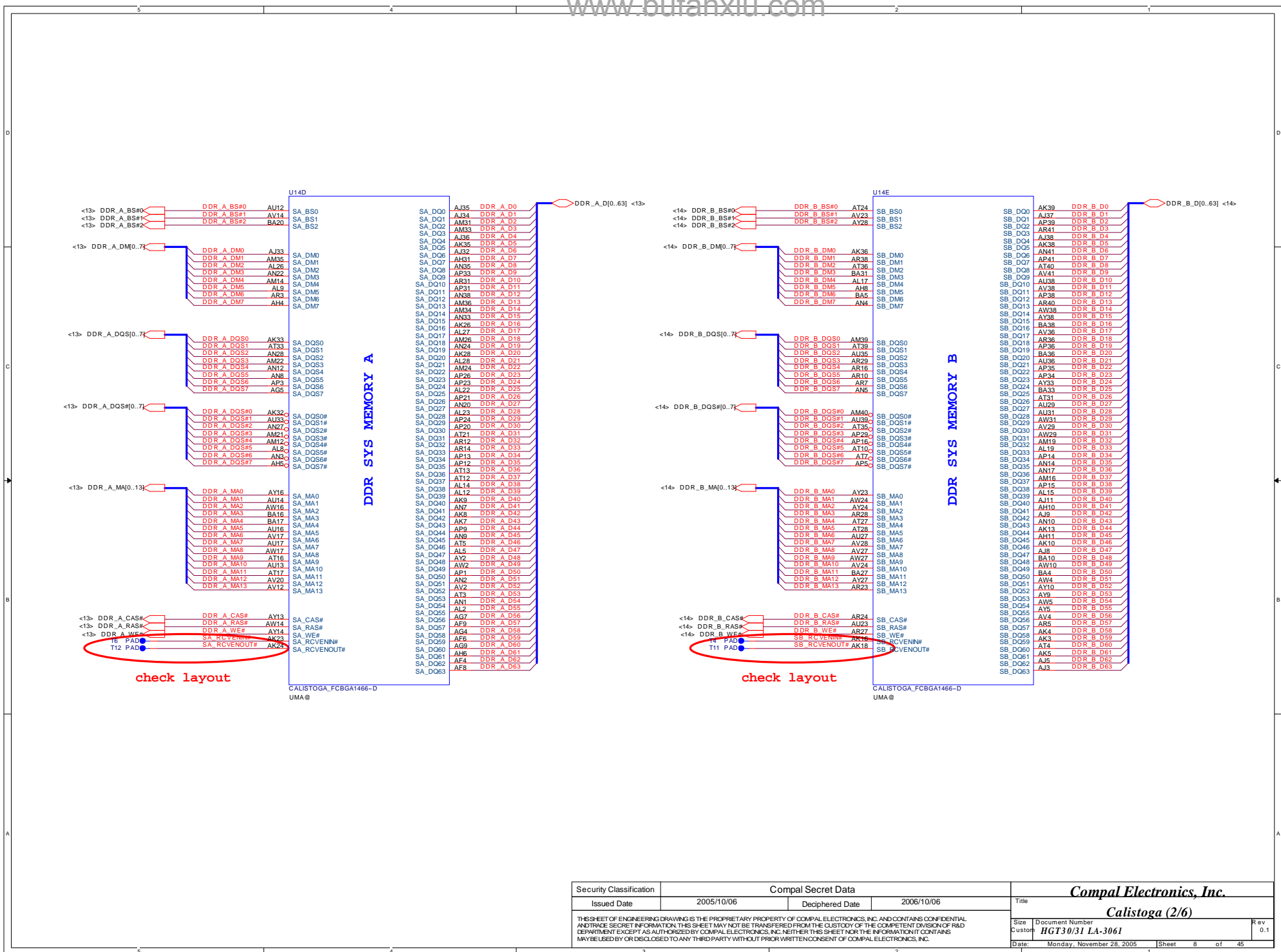
ESR $\leq 1.5m\ \Omega$
Capacitor $> 1980\mu F$



Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2005/10/06	Deciphered Date	2006/10/06	Title
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 TRANSFERRED 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.				Customer
				Document Number
				Rev
				0.1
				Date: Monday, November 28, 2005
				Sheet 6 of 45



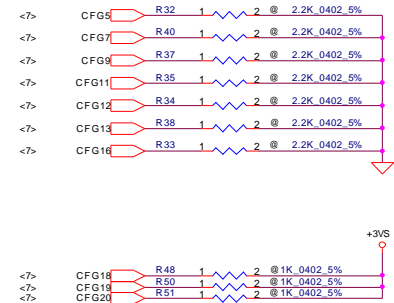
Security Classification	Compal Secret Data			Compal Electronics, Inc. Calistoga (1/6)		
Issued Date	2005/10/06	Deciphered Date	2006/10/06	Title		
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				Size	Document Number	Rev
				Custom	HGT30/31 LA-3061	0
				Date:	Monday, November 28, 2005	Sheet 7 of 45



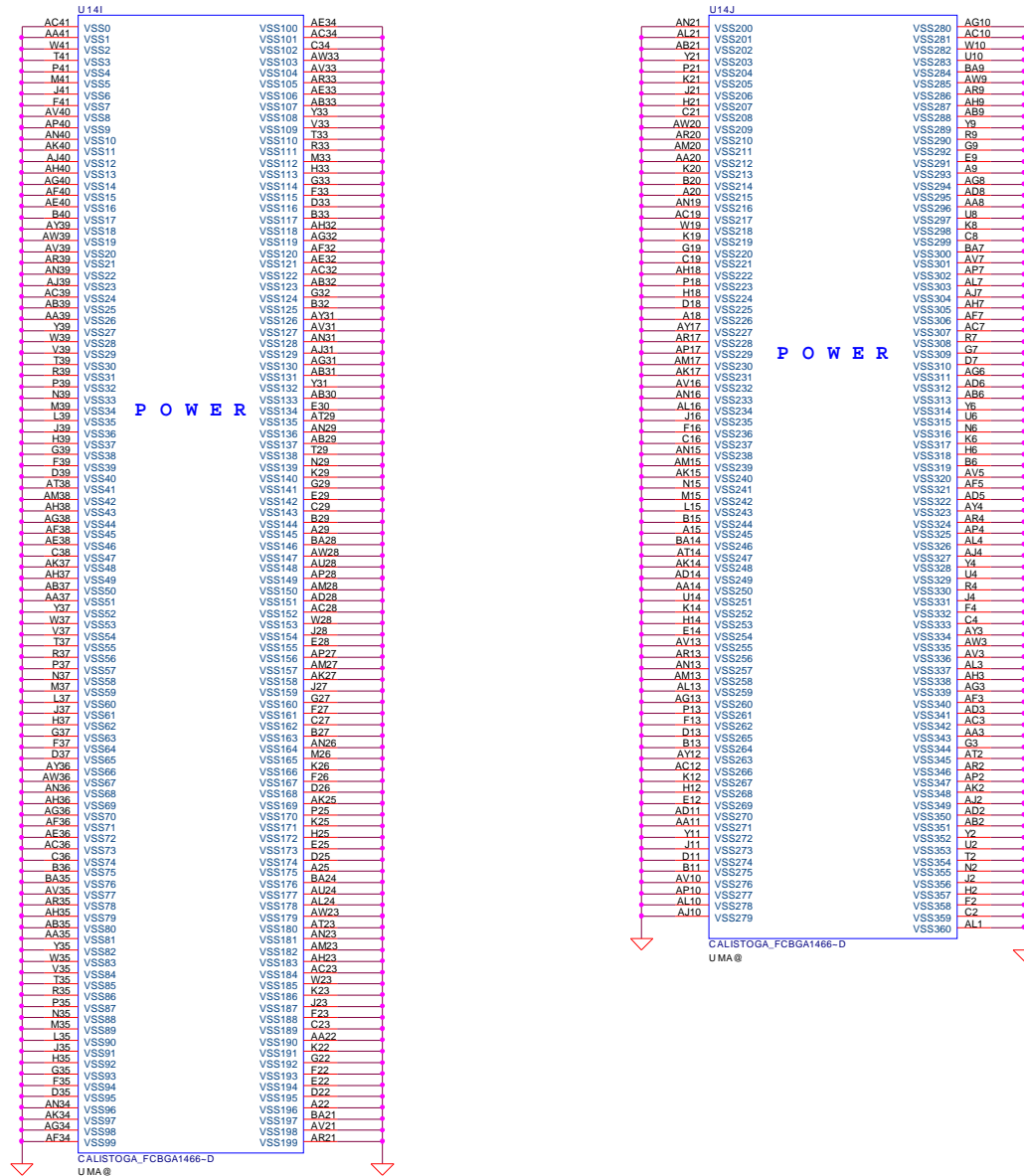




THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS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



Security Classification		Compal Secret Data		Compal Electronics, Inc.			
Issued Date	2005/10/06	Deciphered Date	2006/10/06	Calistoga (5/6)			
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 TRANSFERRED 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			
				Size	Document Number		
				Custom	HGT30/31 LA-3061	Rev 0	
				Date	Monday, November 28, 2005	Sheet	11 of 45



Security Classification	Compal Secret Data		Title	
Issued Date	2005/10/06	Deciphered Date	2006/10/06	Compal Electronics, Inc.
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 TRANSFERRED 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.				Calistoga (6/6)
Size	Document Number	Rev		0.1
Custom	HGT30/31 LA-3061			
Date:	Monday, November 28, 2005	Sheet	12	of 45

<8> DDR_A_DQS#[0..7]

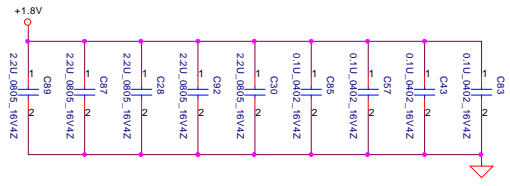
<8> DDR_A_D[0..63]

<8> DDR_A_DM[0..7]

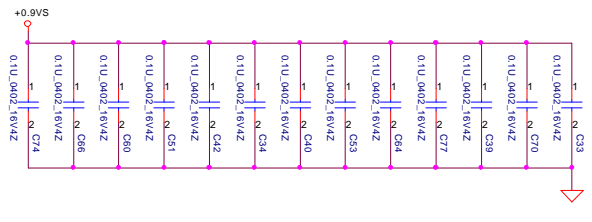
<8> DDR_A_DQS[0..7]

<8> DDR_A_MA[0..13]

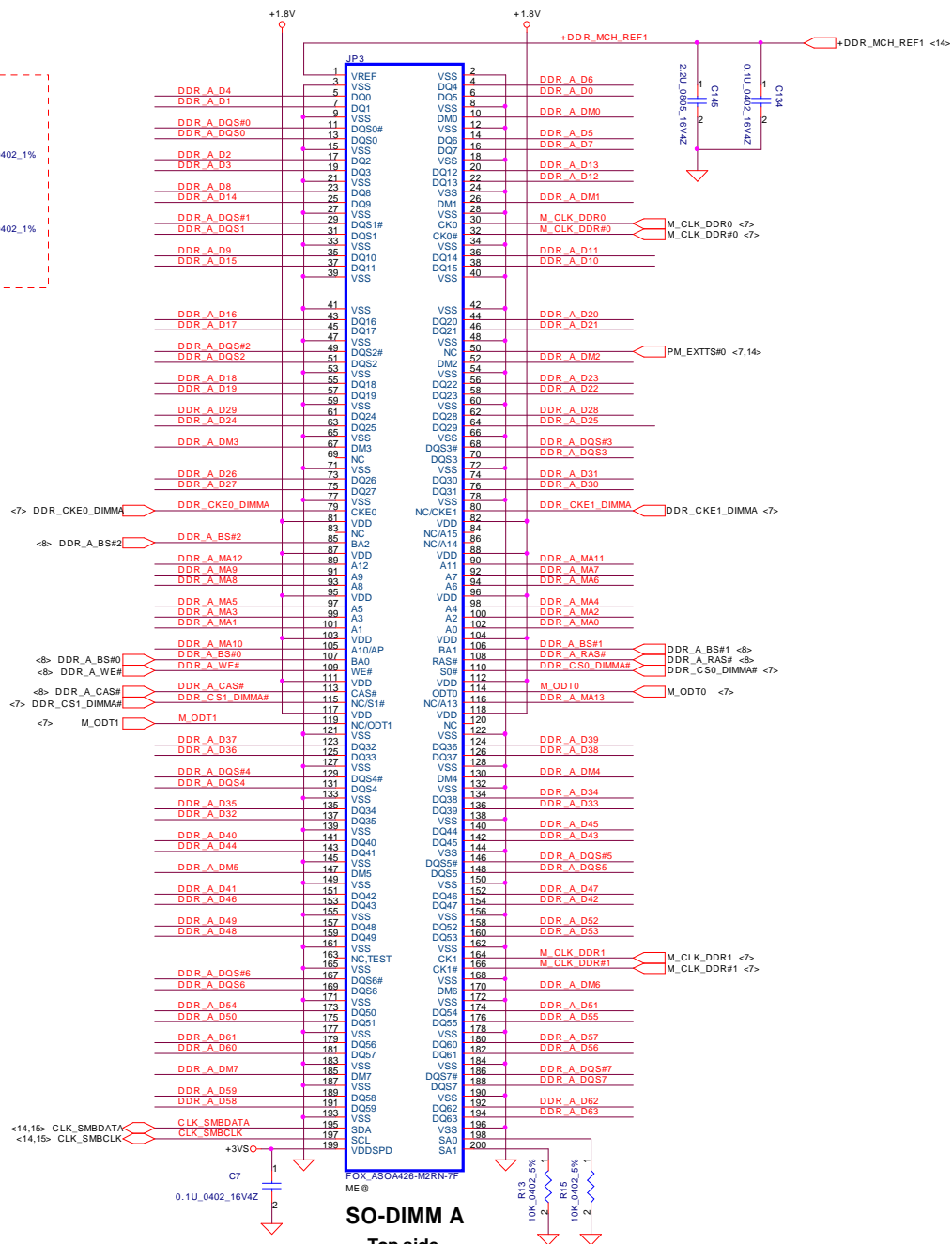
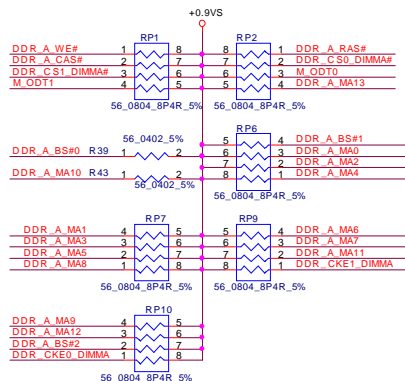
Layout Note:
Place near JP41



Layout Note:
Place one cap close to every 2 pullup resistors terminated to +0.9VS



Layout Note:
Place these resistor
closely JP41,all
trace length Max=1.5"



SO-DIMM A

Top side

Security Classification		Compal Secret Data		<div>Compal Electronics, Inc.</div> <div>DDRII-SODIMM SLOT1</div>		
Issued Date	2005/10/06	Deciphered Date	2006/10/06			
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 TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OR R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number	Rev 0.
				Custm	HGT30/31 LA-3061	
				Date:	Monday, November 28, 2005	Sheet

[illegible]

The diagram illustrates the DDR3 memory controller interface for the i.MX6Q. It shows the connection of four DDR3 memory modules (RP3, RP4, RP5, RP8) to the i.MX6Q pins. The diagram includes pin numbers, signal names, and voltage levels.

RP3 Connections:

- DDR B CAS# (Pin 5) to RP3 Pin 1
- DDR B WE# (Pin 6) to RP3 Pin 2
- DDR CS3 DIMMB# (Pin 6) to RP3 Pin 3
- M_ODT3 (Pin 5) to RP3 Pin 4

RP4 Connections:

- DDR B MA13 (Pin 5) to RP4 Pin 1
- M_ODT2 (Pin 6) to RP4 Pin 2
- DDR CS2 DIMMB# (Pin 6) to RP4 Pin 3
- DDR B RAS# (Pin 8) to RP4 Pin 4

RP5 Connections:

- DDR B BS#1 (Pin 4) to RP5 Pin 1
- DDR B MA0 (Pin 6) to RP5 Pin 2
- DDR B MA2 (Pin 6) to RP5 Pin 3
- DDR B MA4 (Pin 8) to RP5 Pin 4

RP8 Connections:

- DDR B MA1 (Pin 5) to RP8 Pin 1
- DDR B MA3 (Pin 6) to RP8 Pin 2
- DDR B MA5 (Pin 6) to RP8 Pin 3
- DDR B MA9 (Pin 8) to RP8 Pin 4

RP11 Connections:

- DDR B MA7 (Pin 5) to RP11 Pin 1
- DDR B MA11 (Pin 6) to RP11 Pin 2
- DDR B MA6 (Pin 6) to RP11 Pin 3
- DDR CEK3 DIMMB# (Pin 8) to RP11 Pin 4

Resistor Values:

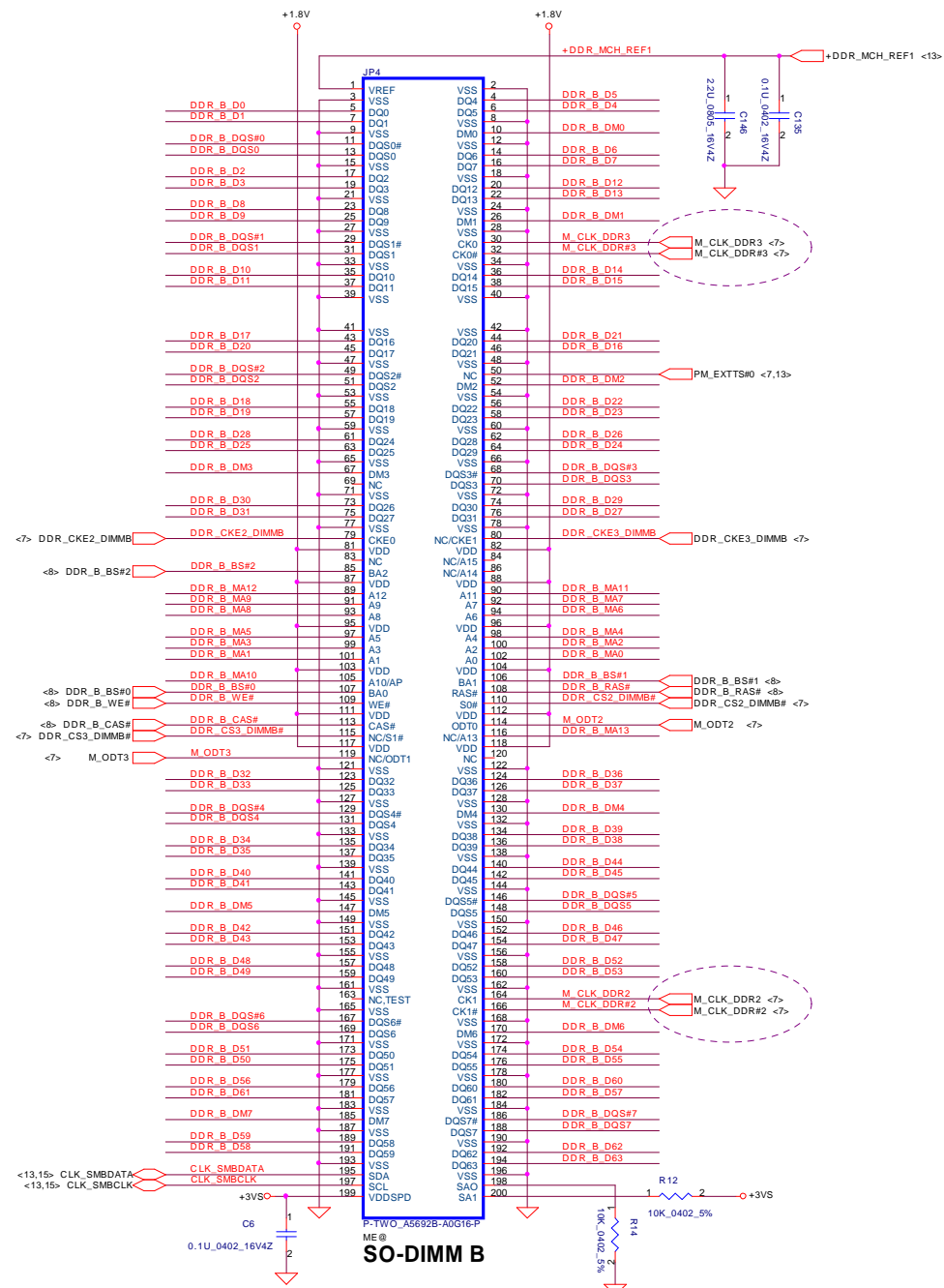
- RP3: 56.0804 8P4R_5%
- RP4: 56.0804 8P4R_5%
- RP5: 56.0804 8P4R_5%
- RP8: 56.0804 8P4R_5%
- RP11: 56.0804 8P4R_5%

Other Components:

- R441: 56.0402 5%
- R411: 56.0402 5%

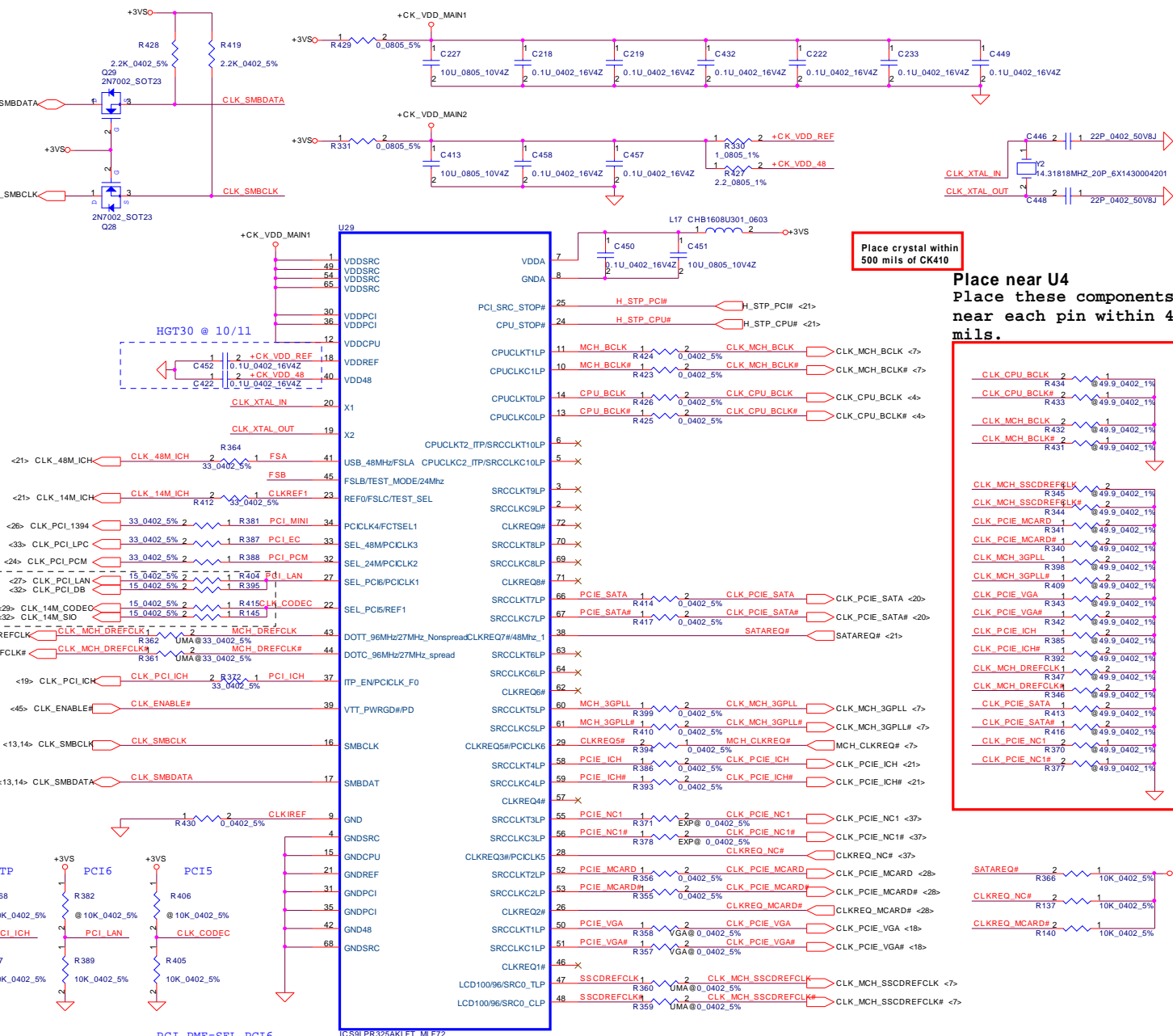
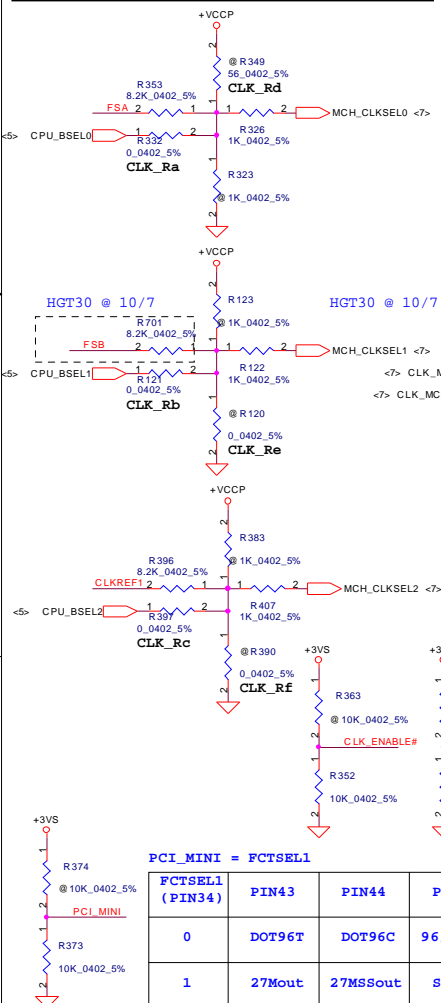
Power Supply:

- +0.9VS



Security Classification		Compal Secret Data		Compal Electronics, Inc. DDRII-SODIMM SLOT2	
Issued Date	2005/10/06	Deciphered Date	2006/10/06	Title	
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 TRANSFERRED 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 LOANED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					HGT30/31 LA-3061
				Date:	Monday, November 28, 2005
				Sheet	14 of 45

CPU Driven	Stuff	CLK_Ra	CLK_Rb	CLK_Rc
* (Default)	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_Re	
	No Stuff	CLK_Ra	CLK_Rb	CLK_Rc



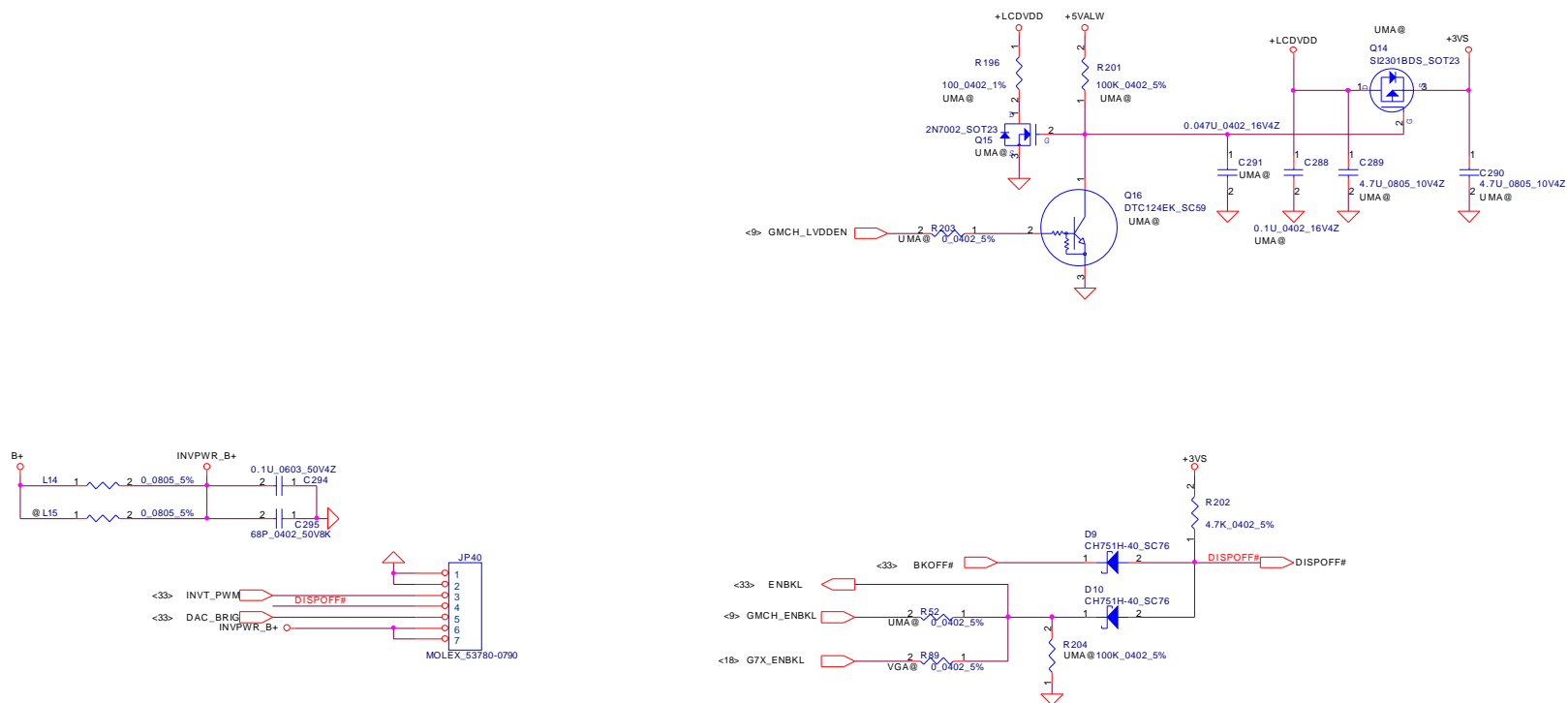
Place near U4
Place these components
near each pin within 40
mils.

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

PCI_LAN	PIN27
0	CLKREQ5
1	PCICLK6

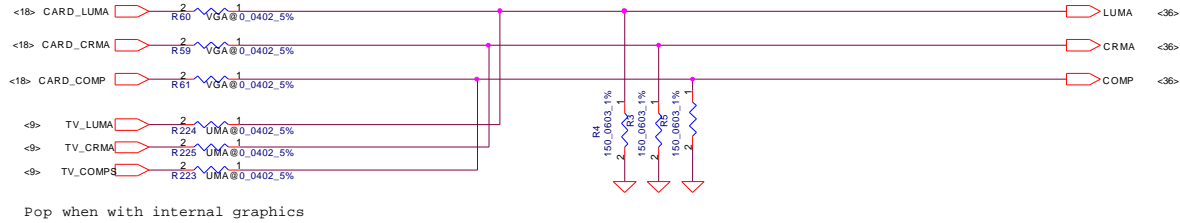
Security Classification	Compal Secret Data		
Issued Date	2005/10/06	Deciphered Date	2006/10/06
THIS SECRET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF THE COMPANY WITHOUT THE WRITTEN CONSENT OF THE COMPANY. THE INFORMATION ON THIS SHEET IS THE INFORMATION THAT IS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION CONTAINED THEREON MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.			

<i>Compal Electronics, Inc.</i>			
Title			
<i>Clock generator</i>			
Size	Document Number		Rev
	<i>HGT30/31 LA3061</i>		<i>0.</i>

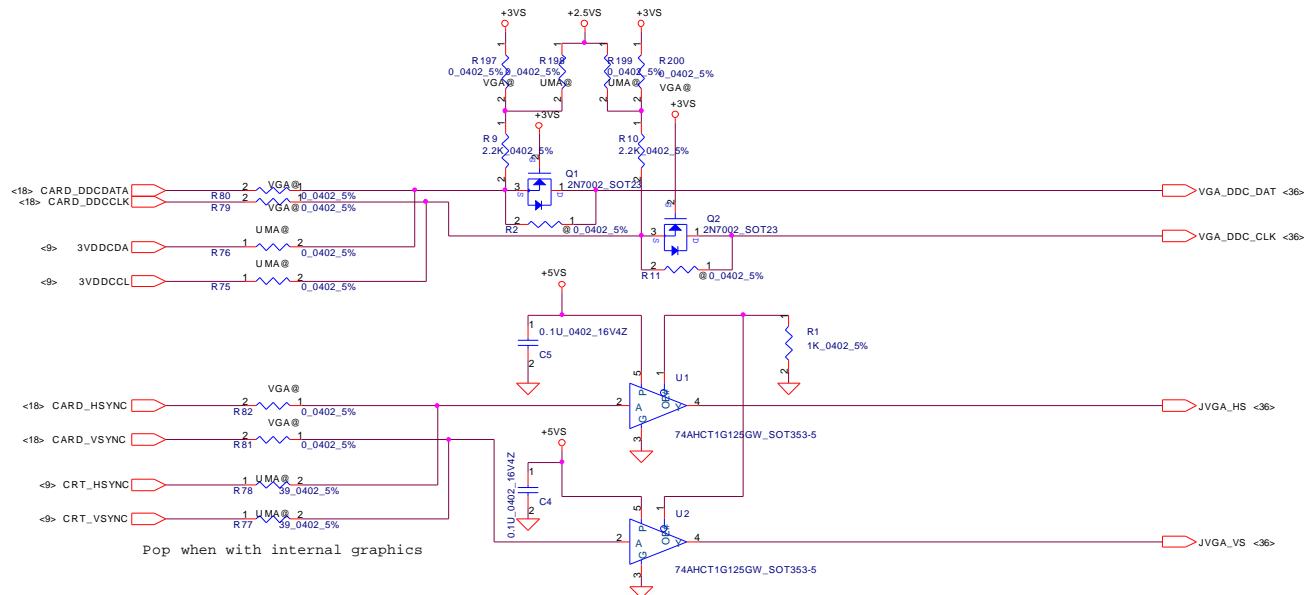
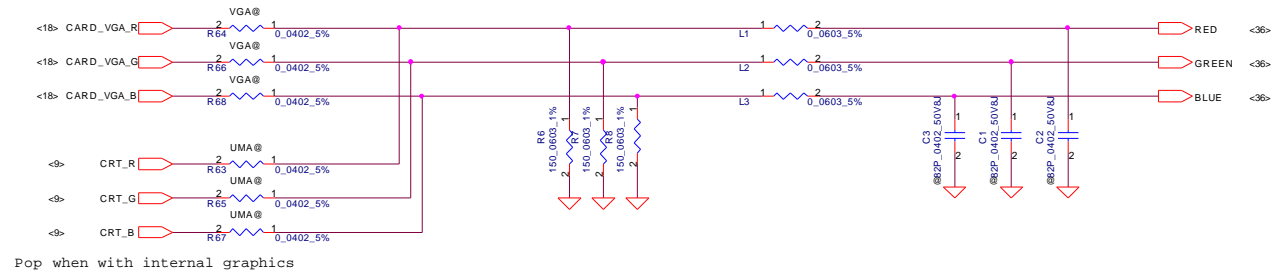


Security Classification		Compal Secret Data		<div>Compal Electronics, Inc.</div>		
Issued Date	2005/10/06	Deciphered Date	2006/10/06			
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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 REPRODUCED OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Title		
				LVDS Connector		
				Size Custom	Document Number HGT30/31 LA3061	
Date:		Monday, November 28, 2005		Sheet	16	of 45

TV-OUT Conn.



CRT Conn.

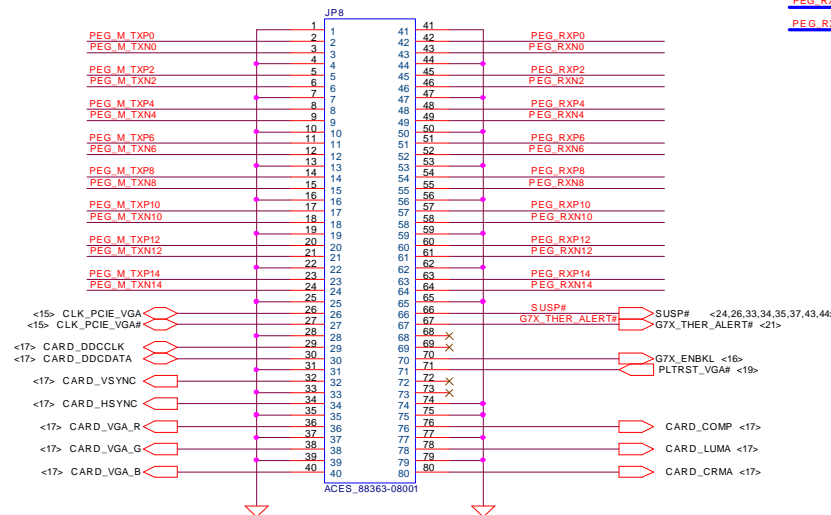
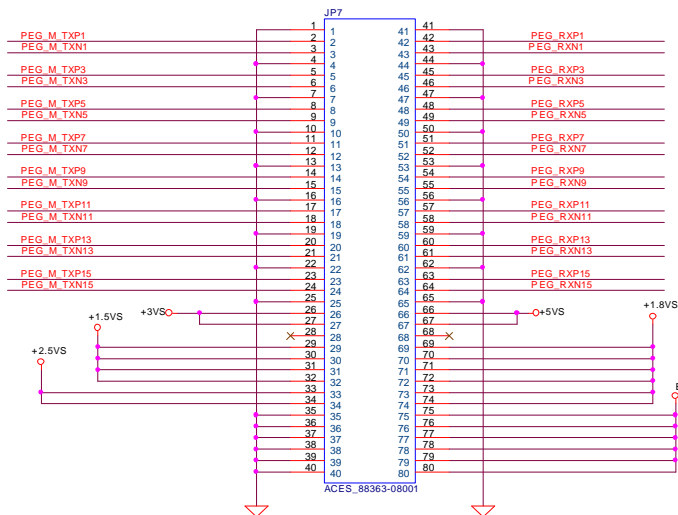


Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2005/10/06	Deciphered Date	2006/10/06	Title
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				CRT & TVout
Size		Document Number		Rev
Custom		HGT30/31 LA3061		0.1
Date:		Monday, November 28, 2005	Sheet	17 of 45

MAX. 4.06A @ 1.8V

MAX. 130mA @ 2.5V

MAX. 655mA @ 3.3V

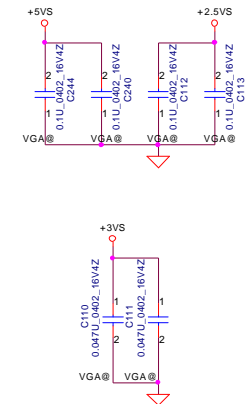


PEG_M_TXP[0..15] PEG_M_TXP[0..15] <9>

PEG_M_TXN[0..15] PEG_M_TXN[0..15] <9>

PEG_RXP[0..15] PEG_RXP[0..15] <9>

PEG_RXN[0..15] PEG_RXN[0..15] <9>

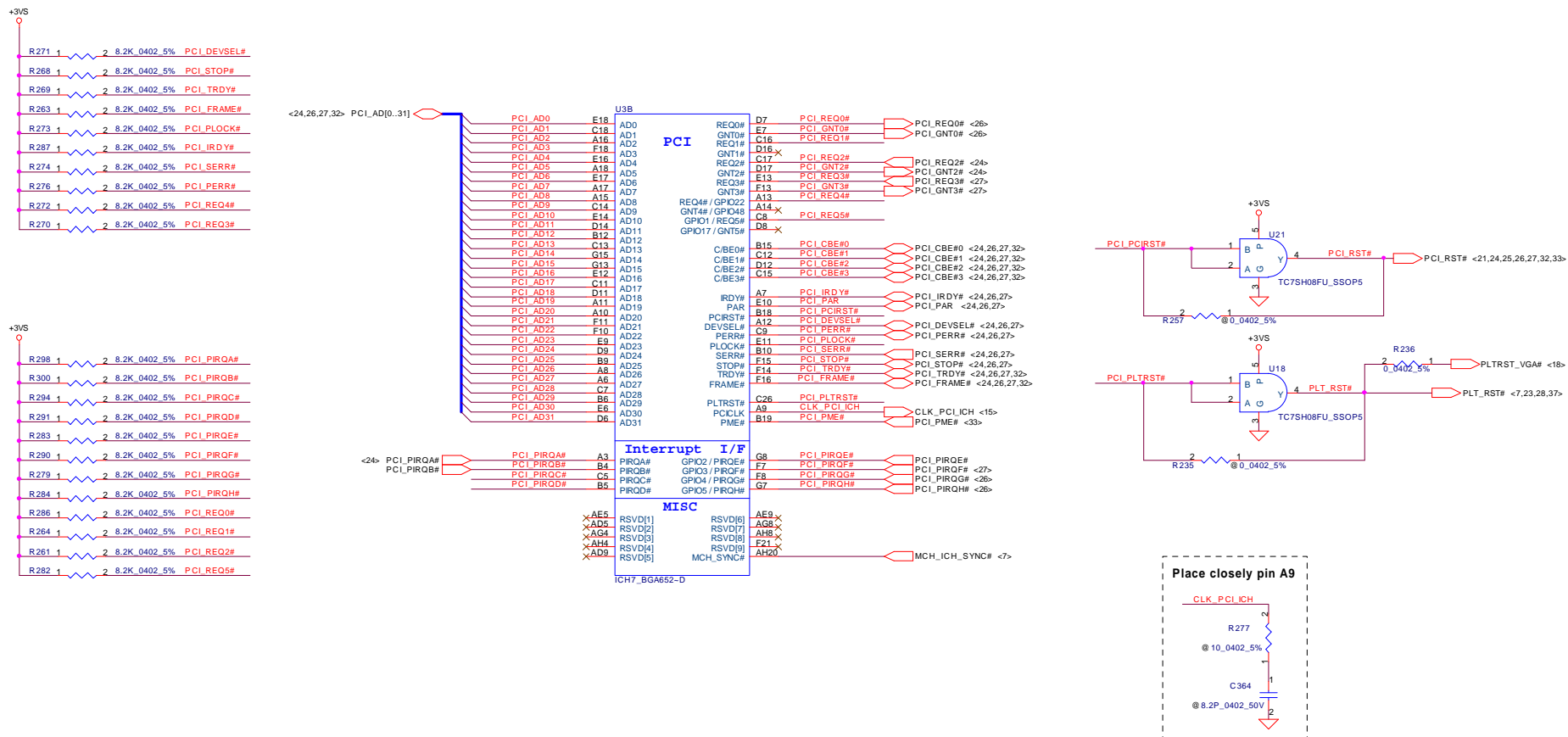


Compal Electronics, Inc.

VGA/B connector

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 TRANSFERRED 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	Document Number	Rev
Size	Customer	0.1
Date	Monday, November 28, 2005	Sheet 18 of 45



Security Classification	Compal Secret Data			Compal Electronics, Inc.	
Issued Date	2005/10/06	Deciphered Date	2006/10/06	Title	
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 TRANSFERRED 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.				Size	Document Number
					HGT30/31 LA3061
				Date	Monday, November 28, 2005
				Sheet	19 of 45
				Rev	0.1

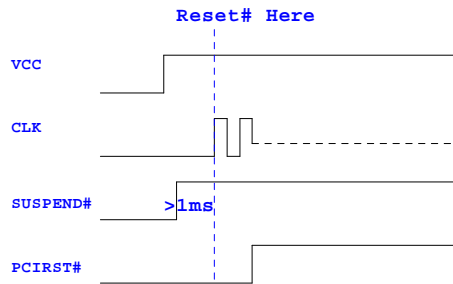


with pdfFactory Pro trial version www.pdffactory.com

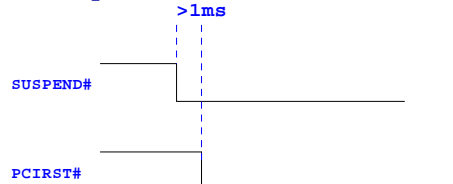


PDF created with pdfFactory Pro trial version www.pdffactory.com

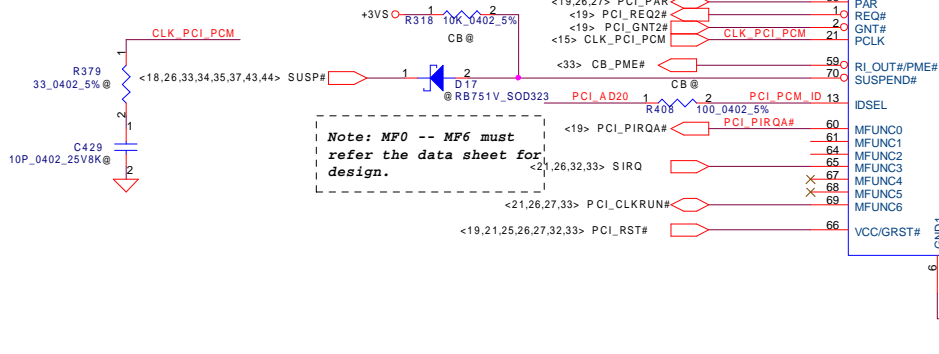
Power on RESET#



Entry S3



SUSPEND# will gate the PCIRST# or GRST#, so need S3 wake up function, SUSPEND# must be LOW ahead the PCIRST# about 1ms.



PQFP 144
22.2 X 22.2 X 1.60

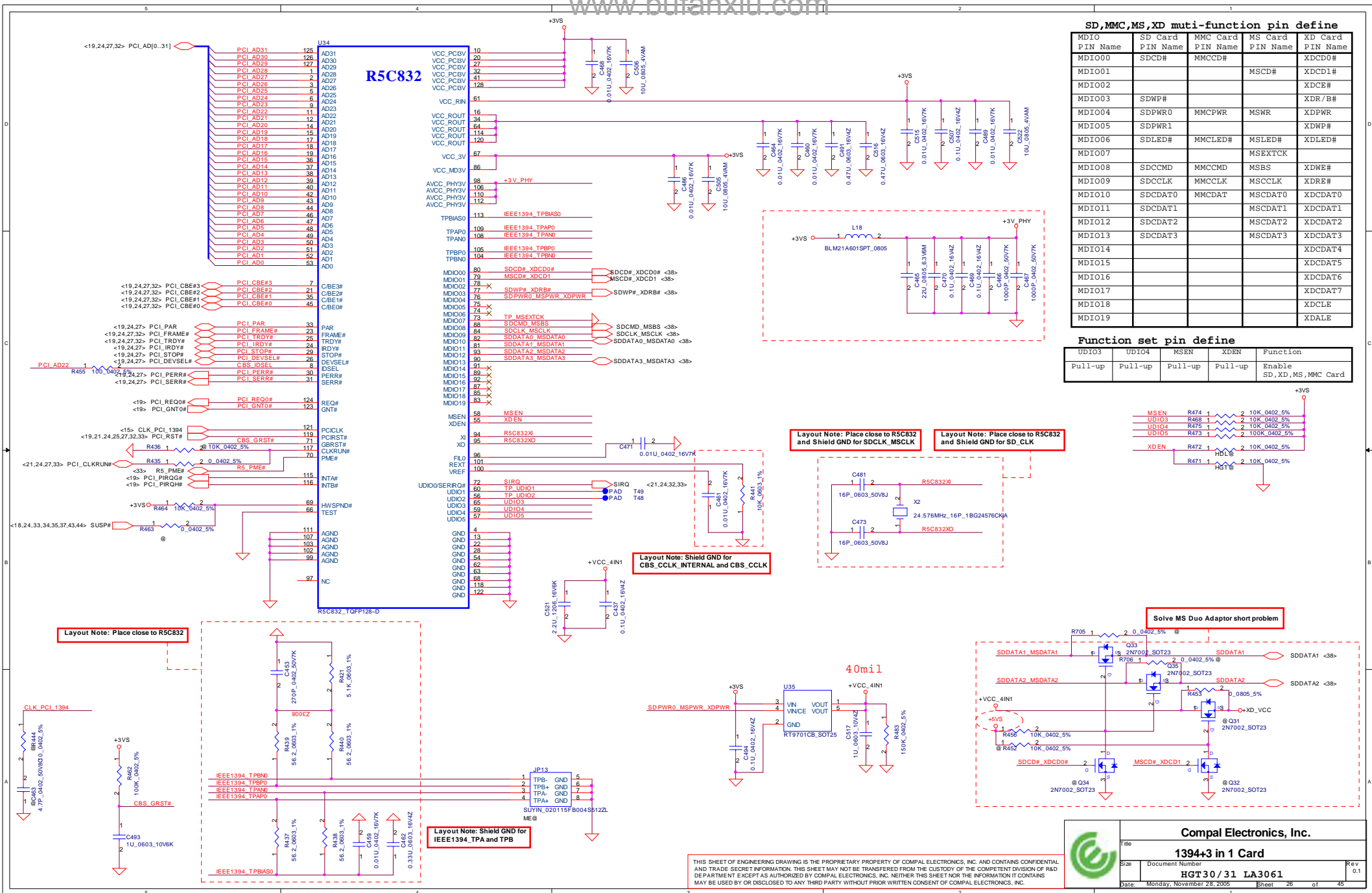
ENE CBI410 just have one vcc plane internal, if want S3 wake-up function(PME#), then at S3 status must keep all Vcc +3V. That is different with TI 1410 and O2-Micro 6912, just keep the VCCI pin +3V, the other vcc can use +3VS.

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2005/10/06	Deciphered Date	2006/10/06	Title	
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 TRANSFERRED 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.		Custom		CB ENE1410(One Solt)	
Size		Document Number		Rev	
Date		Monday, November 28, 2005		HGT30/31 LA3061	
Sheet		24		o f 45	
Rev		0.1			

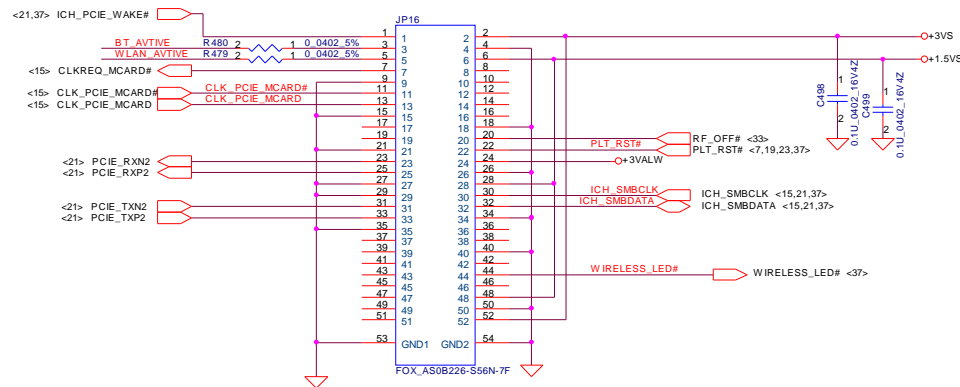
1



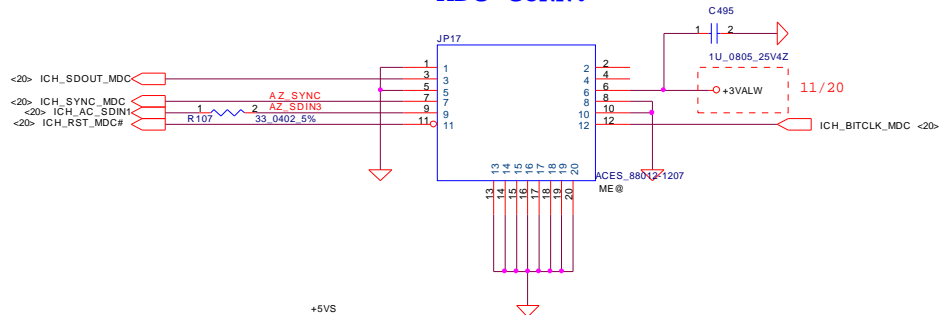
1



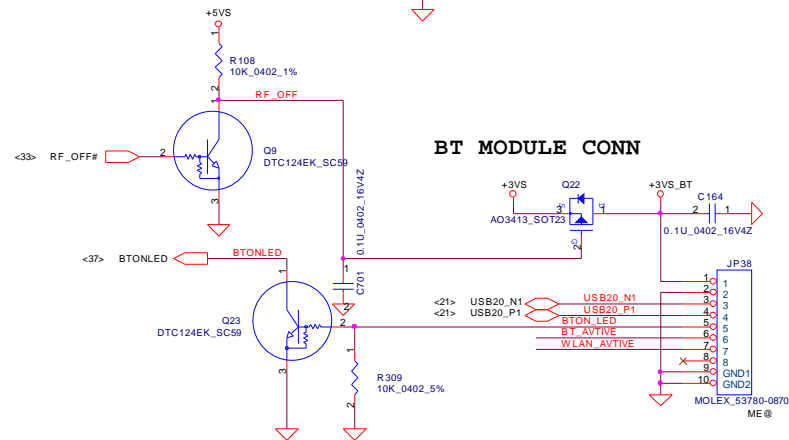
Mini-Express Card(Slot 1-WLAN)



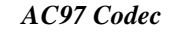
MDC CONN.



BT MODULE CONN



Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2005/10/06	Deciphered Date	2006/10/06	Title
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 TRANSFERRED 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.				Mini Card / MDC CONN
				Size Document Number
				Custom HGT30/31 LA3061
				Rev 0.1
				Date: Monday, November 28, 2005
				Sheet 28 of 45

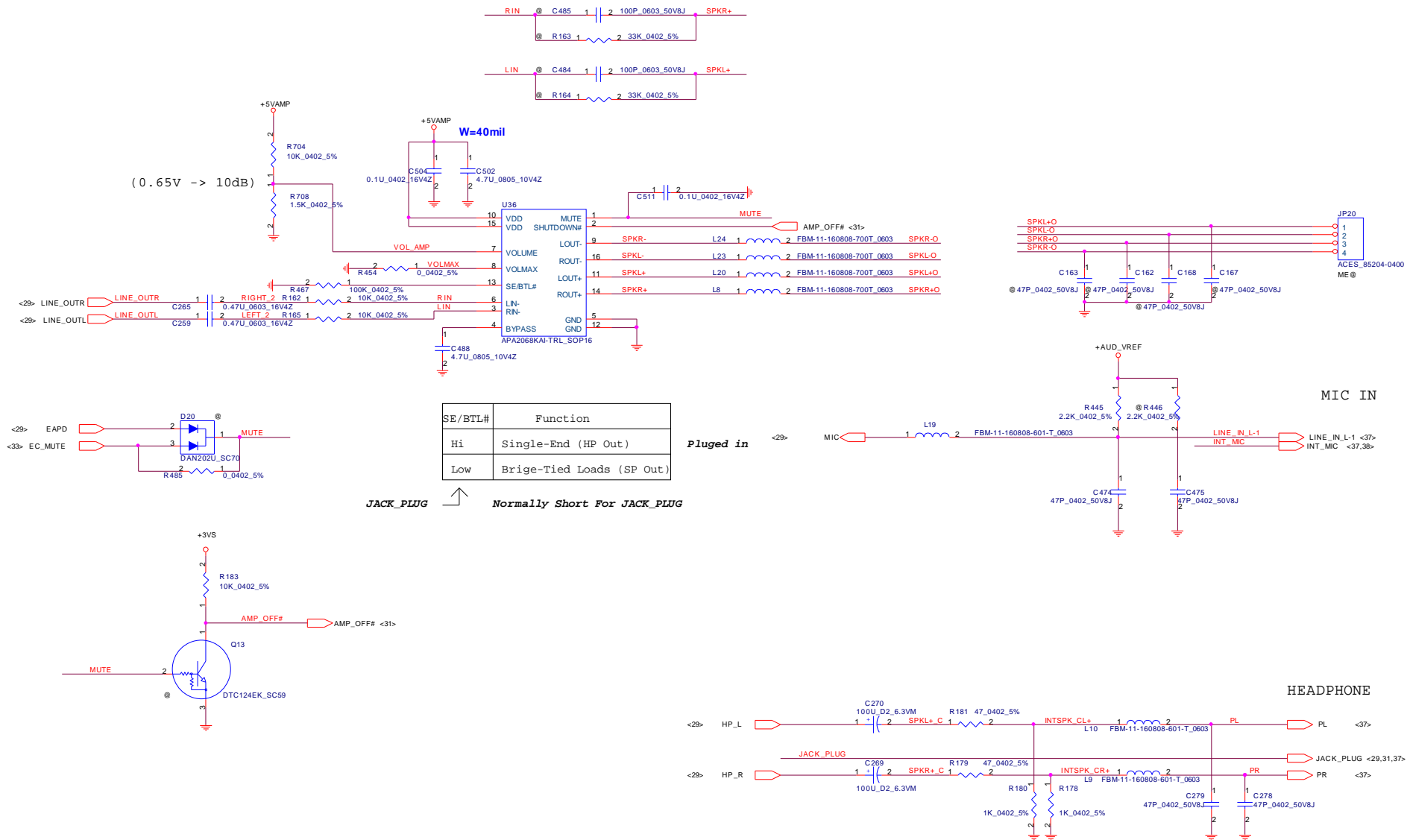


28.7K for Module Design (VDDA = 4.702)

(output = 250 mA)

.85V

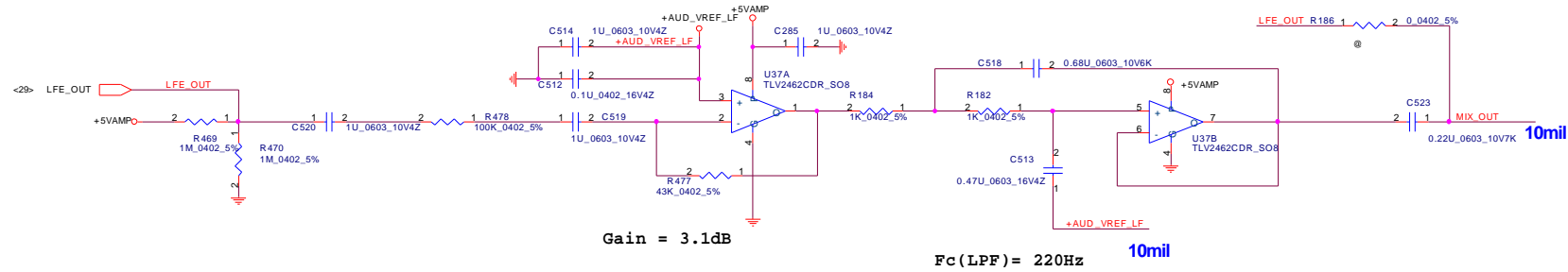
Security Classification	Compal Secret Data			Compal Electronics, Inc.		
Issued Date	2005/10/06	Deciphered Date	2006/10/06	Title	AD1986 Codec	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				Size	Rev	
				Docu	0.1	
				Number	HGT30/31 LA3061	
Date: Monday, November 28, 2005				Sheet	29	of 45



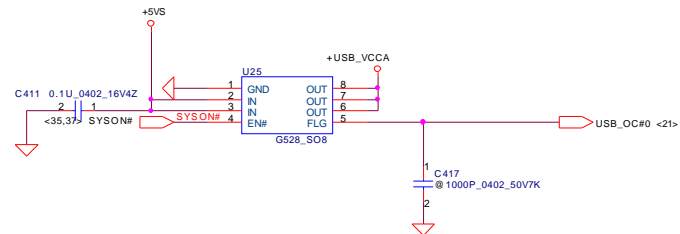
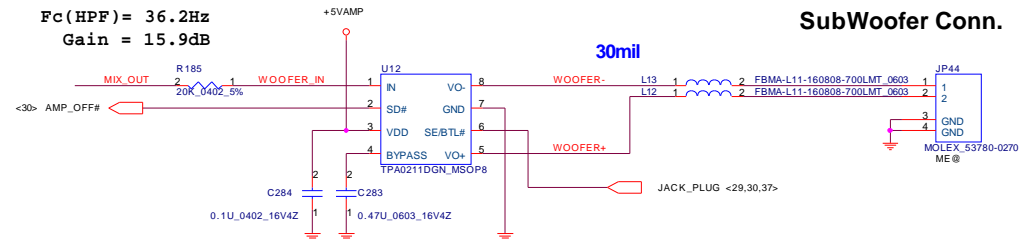
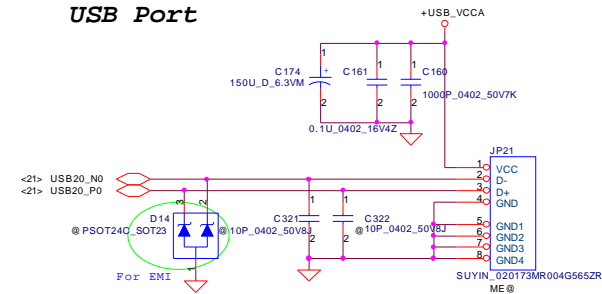
Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2005/10/06	Deciphered Date	2006/10/06	Title
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				AMP & Audio Jack
				Size Document Number
				Custom HGT30/31 LA3061
				Rev 0.1
				Date: Monday, November 28, 2005
				Sheet 30 of 45

SUBWOOFER (Reserved for C38)

WOOFER@

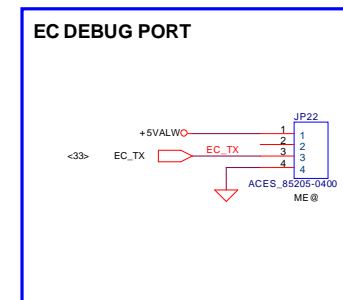
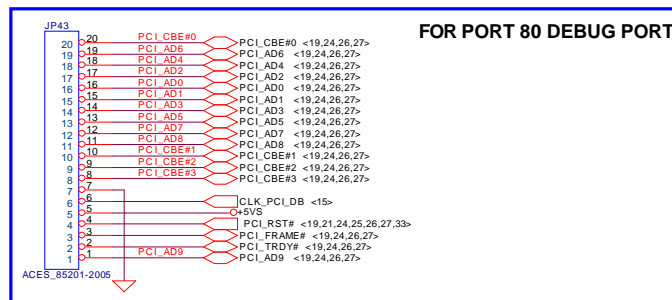
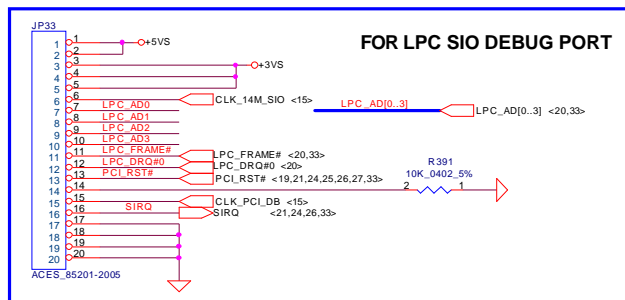
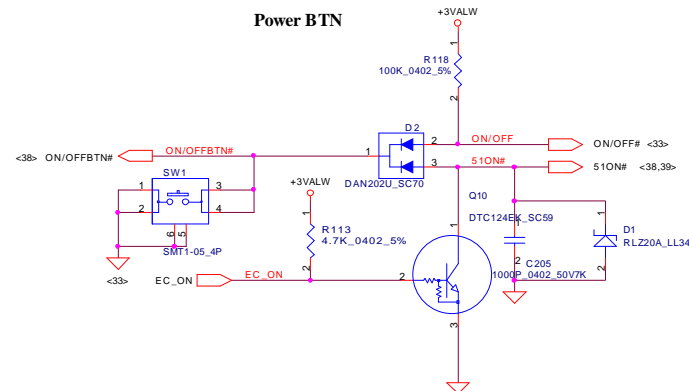
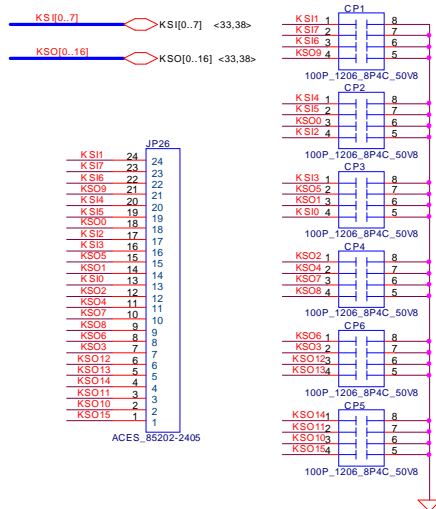


$F_c(\text{HPF}) = 36.2\text{Hz}$
Gain = 15.9dB

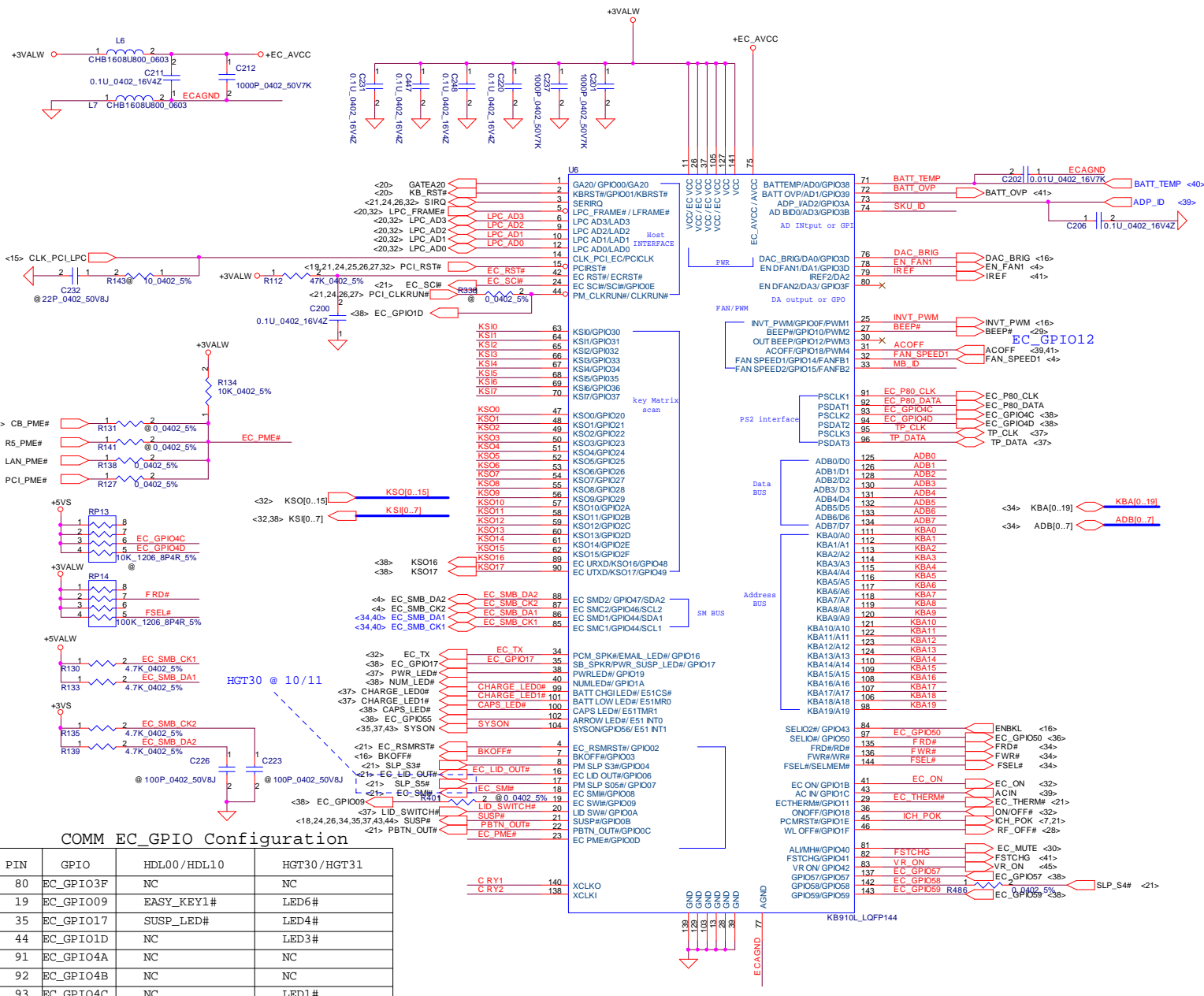
**USB Port**

Security Classification	Compal Secret Data		Title	
Issued Date	2005/10/06	Deciphered Date	2006/10/06	Compal Electronics, Inc.
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 TRANSFERRED 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.				Bluetooth & USB CONN.
Size	Document Number	Rev		
Custom	HGT30/31 LA3061	0.1		
Date:	Monday, November 28, 2005	Sheet	31 of 45	

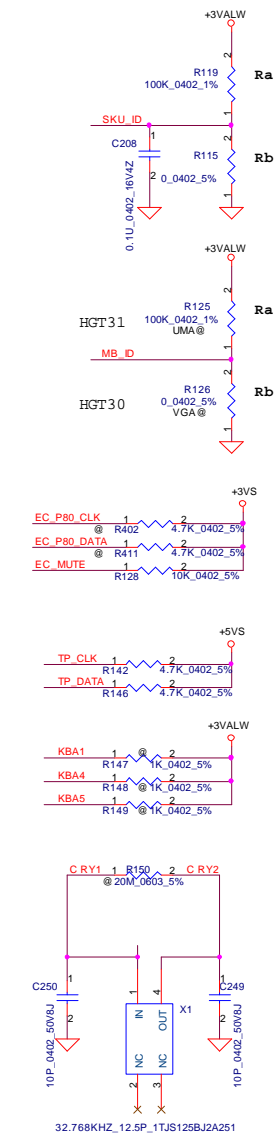
INT_KBD CONN.(TYPE "D" KB)



Security Classification	Compal Secret Data			Compal Electronics, Inc. KBD,ON/OFF,T/P,LED/B,DEBUG		
Issued Date	2005/10/06	Deciphered Date	2006/10/06	Title	KBD,ON/OFF,T/P,LED/B,DEBUG	
THIS-SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND/OR TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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 REPRODUCED OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number	Rev
				Custom	HGT30/31 LA3061	0.
				Date:	Monday, November 28, 2005	Sheet 32 of 45



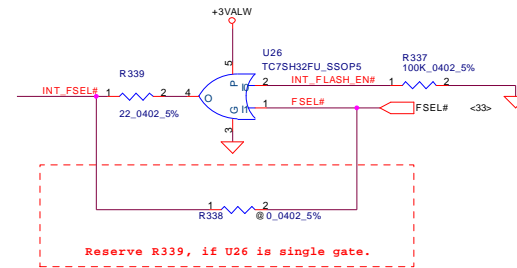
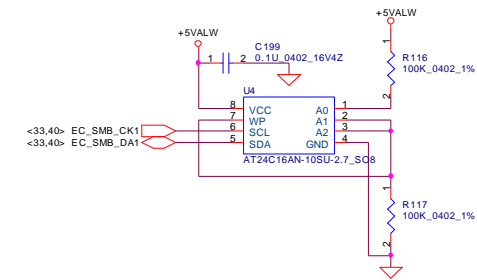
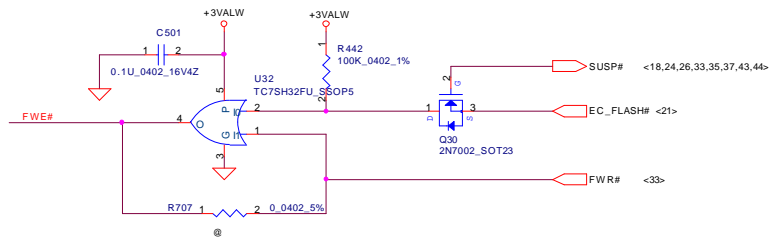
Analog Board ID definition,
Please see page 3.



COMM EC_GPIO Configuration

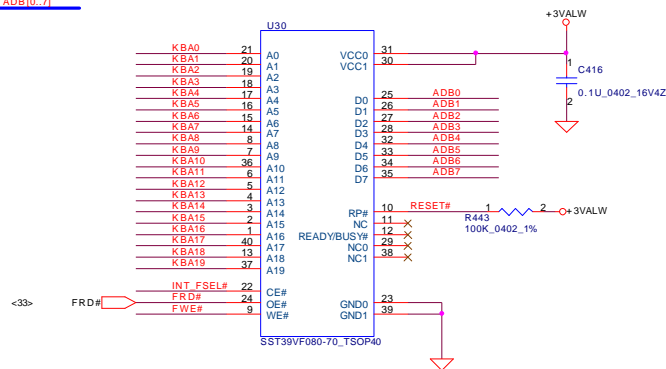
PIN	GPIO	HDL00/HDL10	HGT30/HGT31
80	EC_GPIO3F	NC	NC
19	EC_GPIO09	EASY_KEY1#	LED6#
35	EC_GPIO17	SUSP_LED#	LED4#
44	EC_GPIO1D	NC	LED3#
91	EC_GPIO4A	NC	NC
92	EC_GPIO4B	NC	NC
93	EC_GPIO4C	NC	LED1#
94	EC_GPIO4D	NC	LED2#
102	EC_GPIO55	NC	LED5#
97	EC_GPIO50	MEDIA#	MSENS#
137	EC_GPIO57	VOL_UP#	NOVO_BTN#
142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

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2005/10/06	Deciphered Date	2006/10/06	Title	ENE-KB910L
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 TRANSFERRED 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.				Size	Document Number
				Customer	HGT30/31 LA3061
				Date	Monday, November 28, 2006
				Sheet	33 of 45



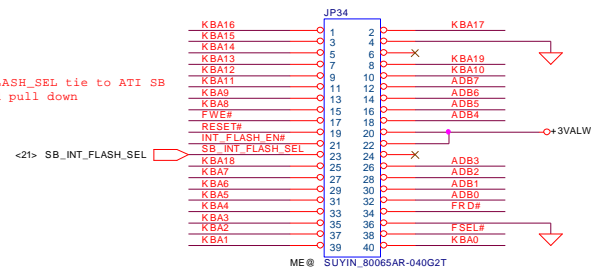
<33> KBA[0..19] KBA[0..19]
<33> ADB[0..7] ADB[0..7]

1MB Flash ROM

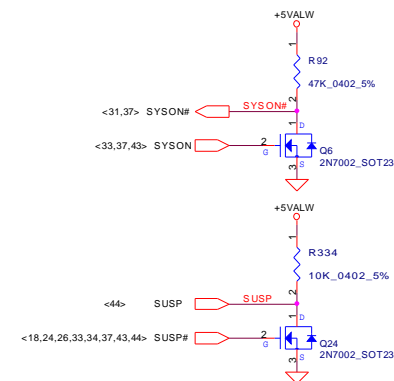
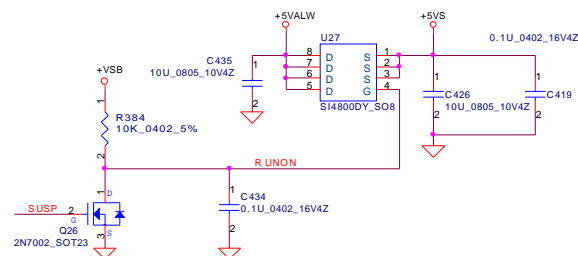
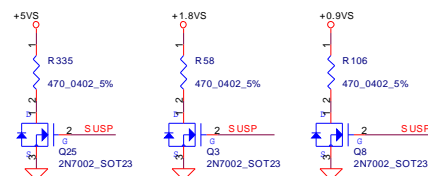
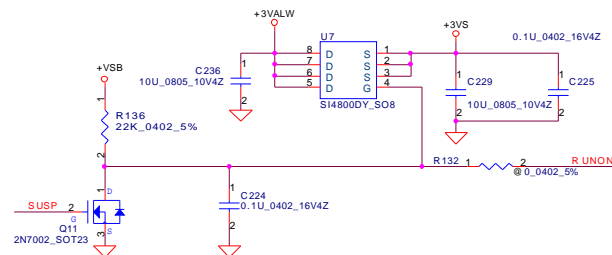
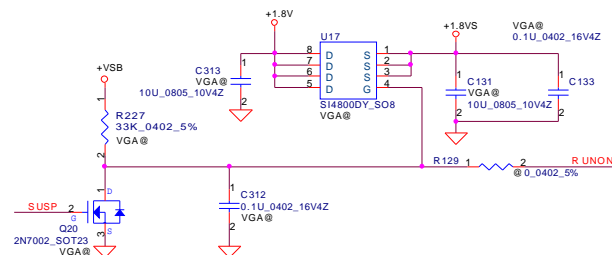


1MB ROM Socket

SB_INT_FLASH_SEL tie to ATI SB
GPIO1 and pull down

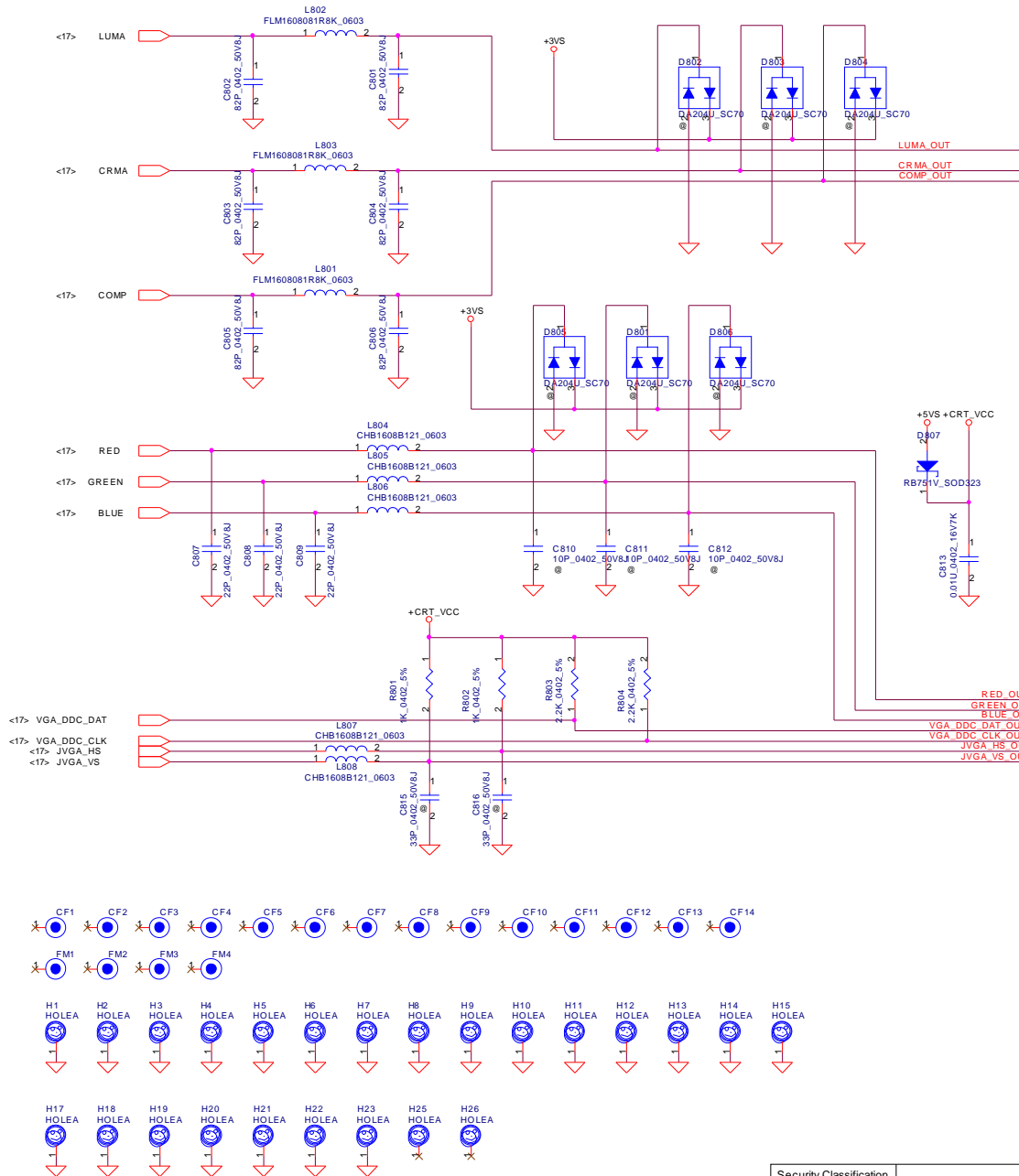


Security Classification	Compal Secret Data		Title	
Issued Date	2005/10/06	Deciphered Date	2006/10/06	Compal Electronics, Inc.
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				BIOS & EC I/O Port
Size Custom				Document Number
Date				HGT30/31 LA3061
Monday, November 28, 2005				Rev 0.1
Sheet 34 of 45				

+5VALW to +5VS Transfer**+3VALW to +3VS Transfer****+1.8V to +1.8VS Transfer**

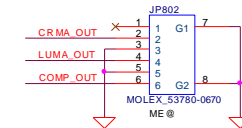
Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2005/10/06	Deciphered Date	2006/10/06	Title
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				DC/DC Circuit
				Size
				Custom
				Date
				Monday, November 28, 2005
				Sheet 35 of 45

CLOSE TO JTVOUT1

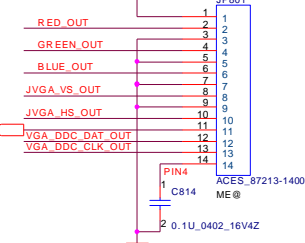


VGA I/O PORT Connector

S-VIDEO



DSUB



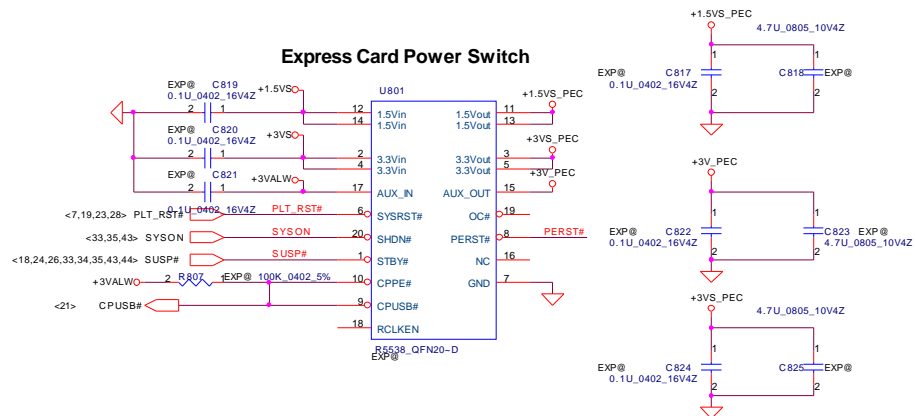
PIN ASSIGNMENT

PIN	D-SUB	FUNCTION	PIN	SVIDEO	FUNCTION
1	9	+CART_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			

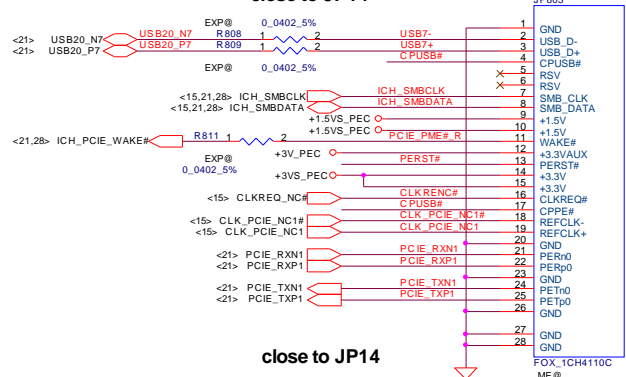
Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2005/03/10	Deciphered Date	2006/03/10	Title
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				CRT & TVout Connector
				Size Document Number
				Custom HGT30/31 LA3061
				Rev 0.1
				Date: Monday, November 28, 2005
				Sheet 36 of 45

NEW CARD FOR C38

Express Card Power Switch

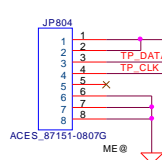


close to JP14

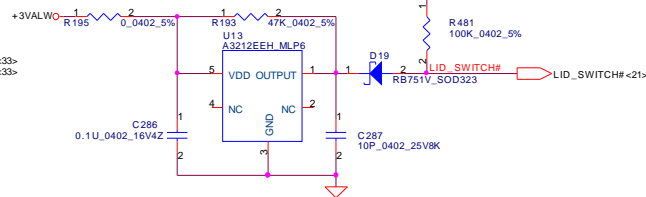


close to JP14

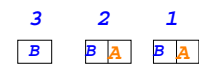
T/P Board



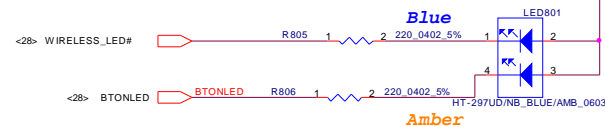
LID Switch



LED Indicator ON M/B



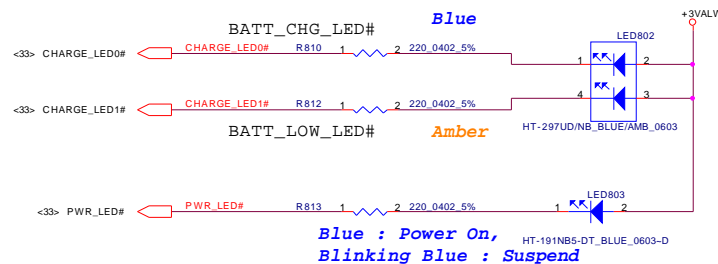
Wireless / Bluetooth LED



STATUS	
AC	BLUE
Chargin	Blinking Blue
Low BATT	Amber

(1)

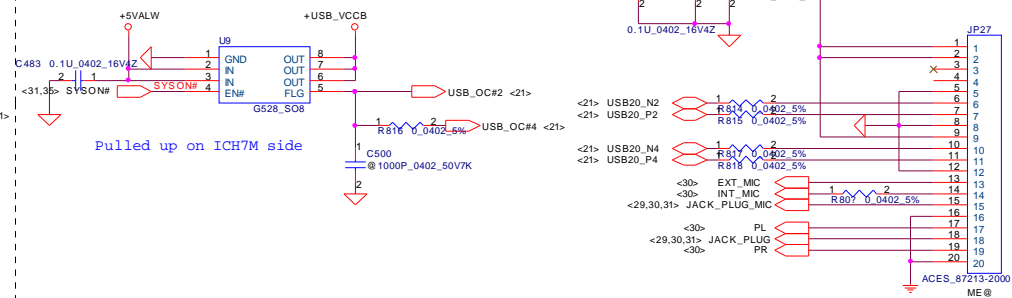
(2)



Blue : Power On,
Blinking Blue : Suspend

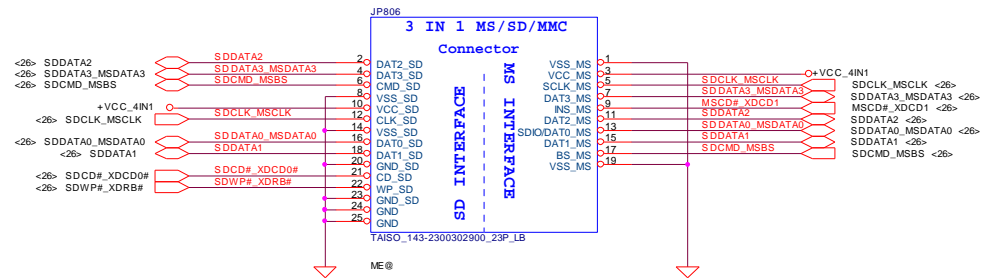
(3)

USB board

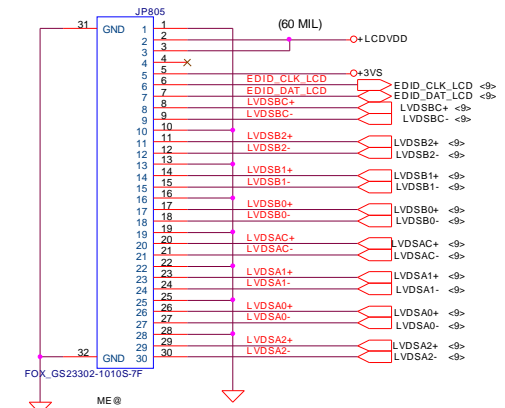


Security Classification	Compal Secret Data	Title	
Issued Date	2005/03/10	Deciphered Date	2006/03/10
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE 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. INDICATE LED Size Document Number Custom HGT30/31 LA3061 Date: Monday, November 28, 2005 Sheet 37 of 45	

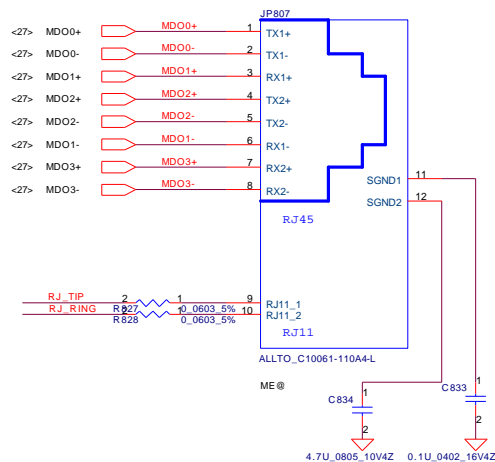
3 IN 1 Card Reader



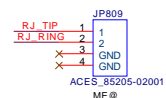
UMA LCD/PANEL Conn.



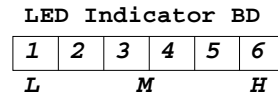
RJ11+RJ45 CONN



MDC CONN



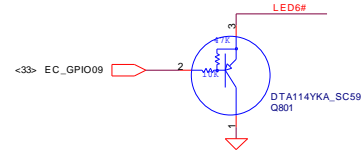
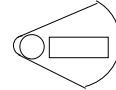
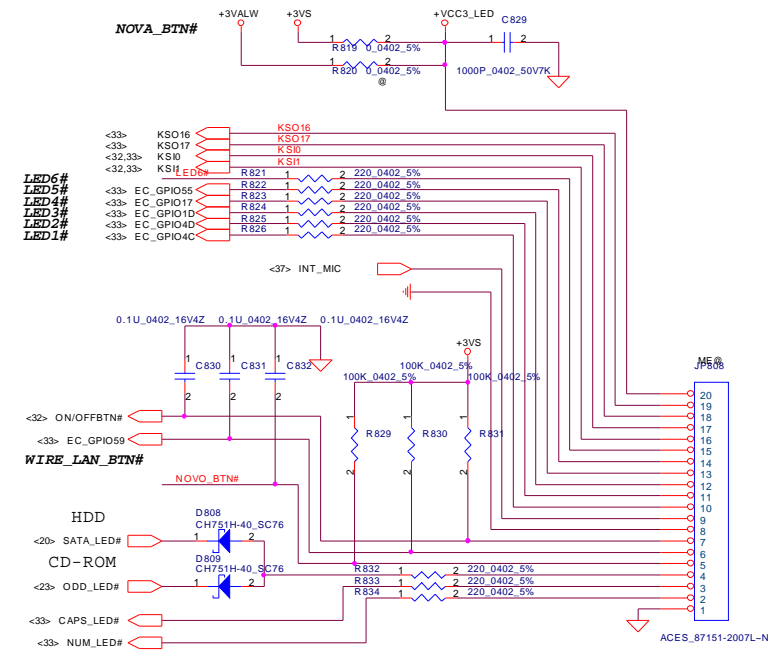
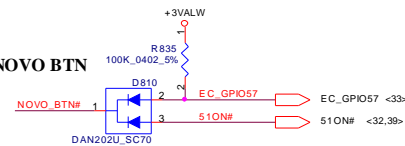
SWITCH BD



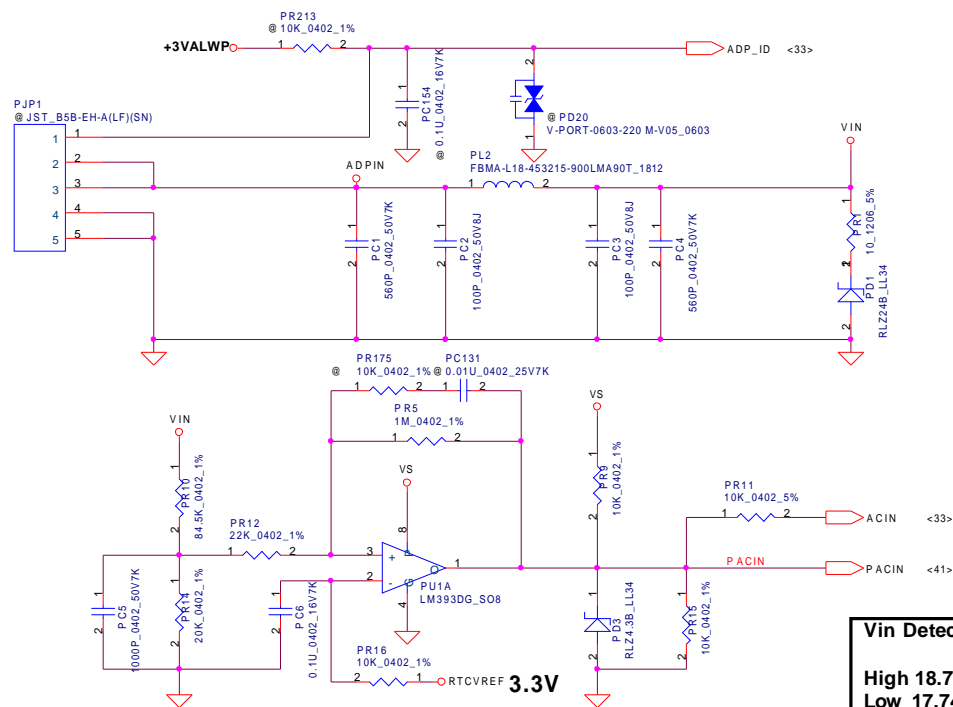
Function

KEY Matrix	K016	K017
KSI0	DW-UP	DW-DOWN
KSI1	DW-ENTER	MUTE

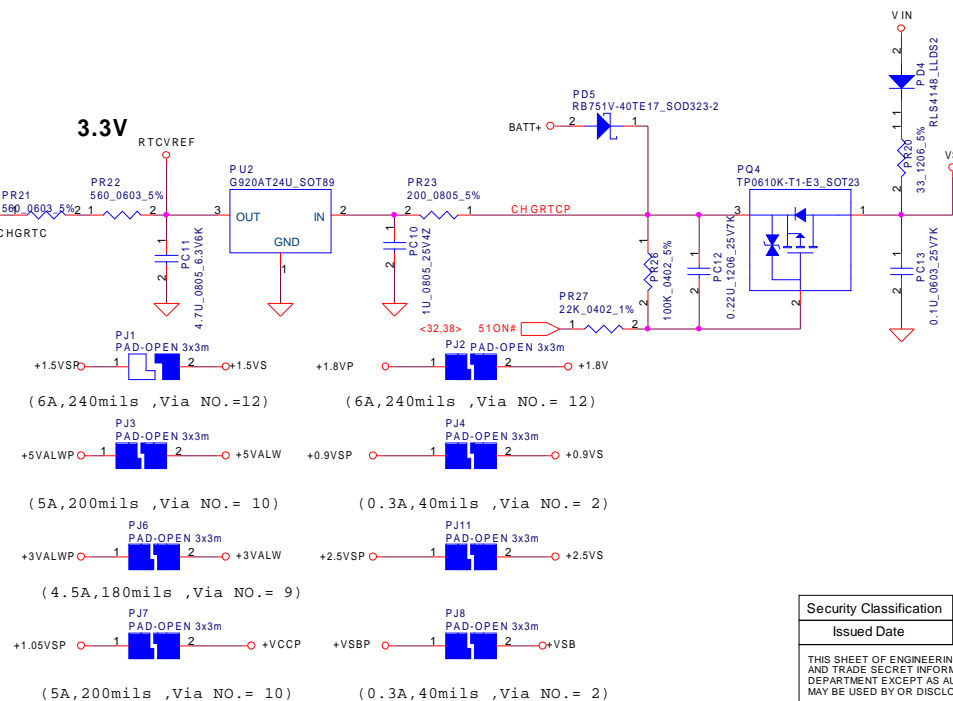
Dial Wheel

**NOVO BTN**

Security Classification		Compal Secret Data		<i>Compal Electronics, Inc.</i>	
Issued Date	2005/03/10	Deciphered Date	2006/03/10	Title	INDICATE LED
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 TRANSFERRED 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.				Size Custom	Document Number HGT30/31 LA3061
Date: Monday, November 28, 2006				Sheet: 30 of 46	Rev: 0.

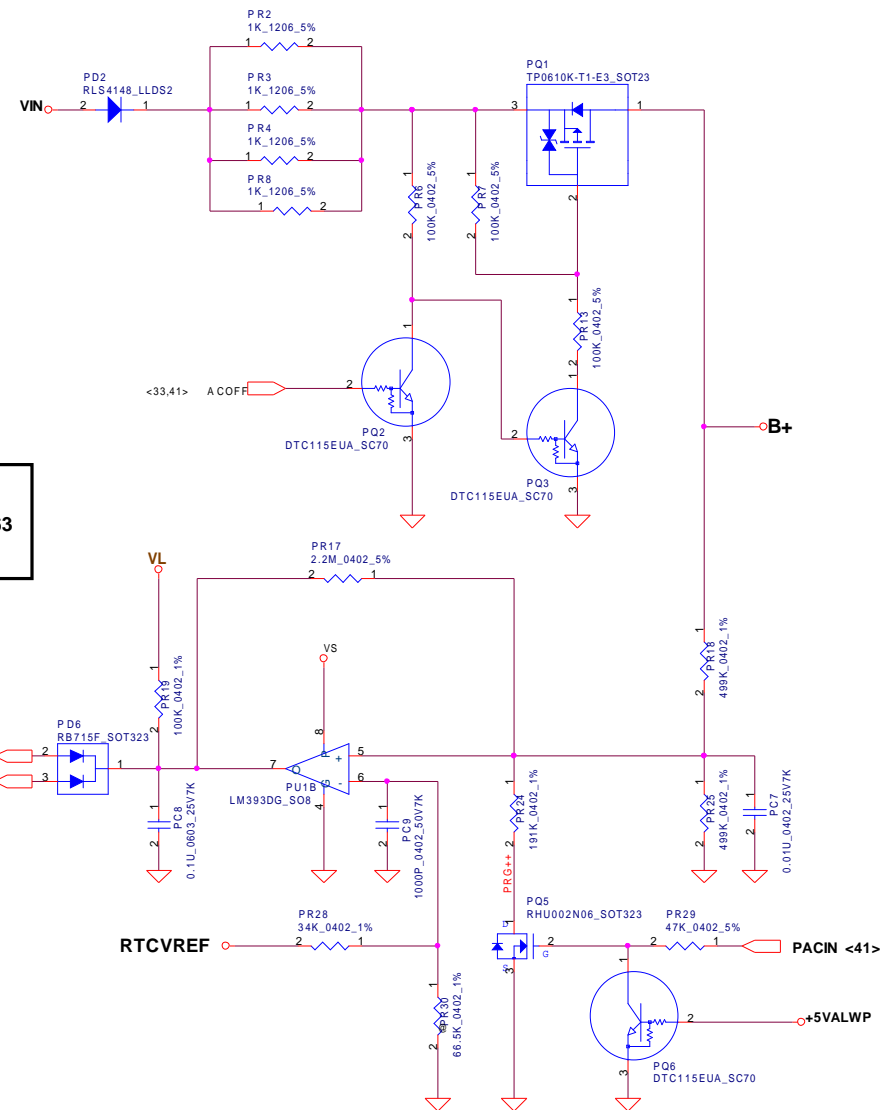


Vin Detector			
High	18.764	17.901	17.063
Low	17.745	16.9	16.03

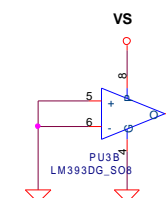
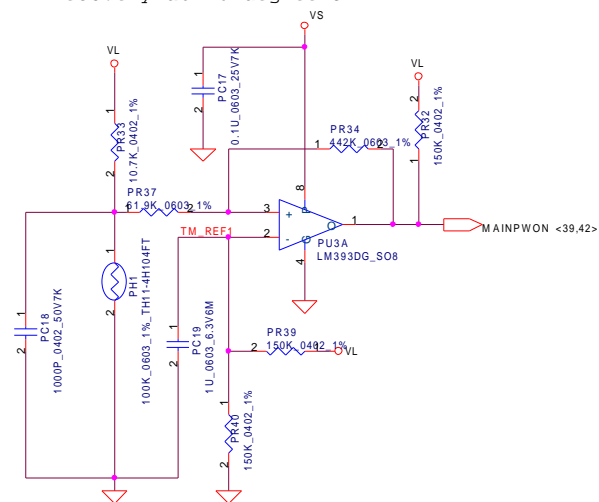
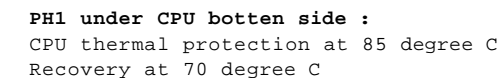
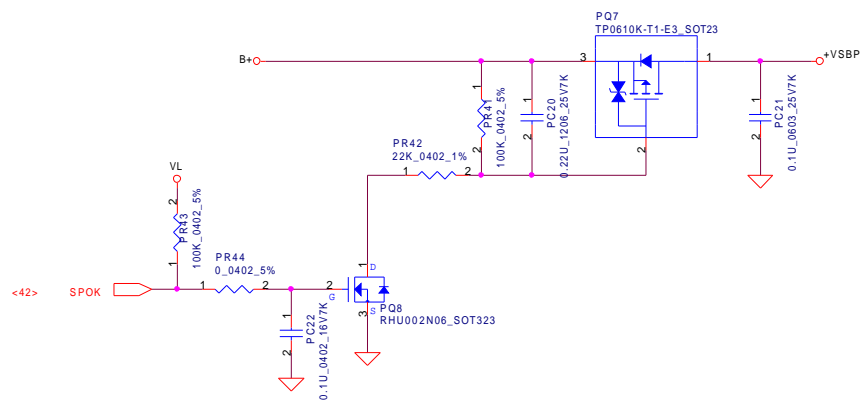
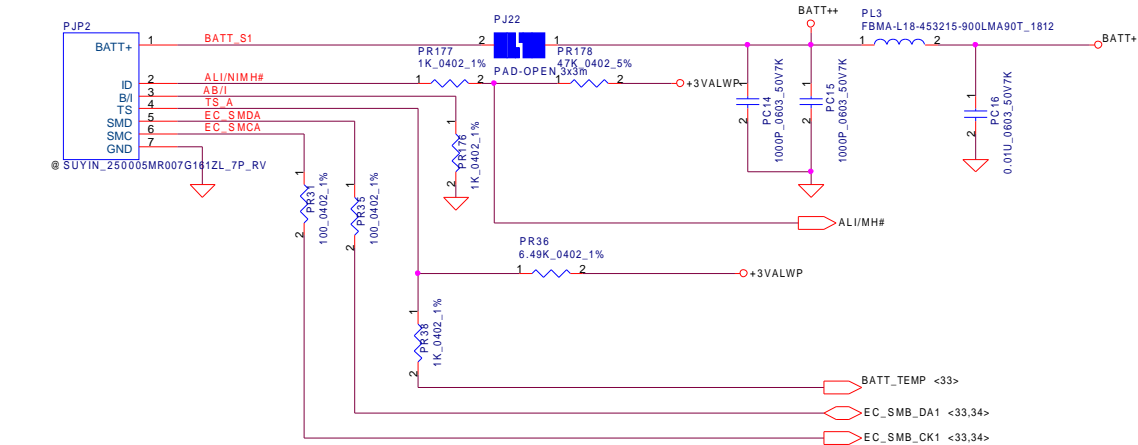


	Precharge detector		
	Min.	typ.	Max.
H-->L	14.589V	14.84V	15.243V
L-->H	15.562V	15.97V	16.388V

BATT ONLY			
	Precharge detector		
	Min.	typ.	Max.
H->L	6.138V	6.214V	6.359V
L->H	7.196V	7.349V	7.505V



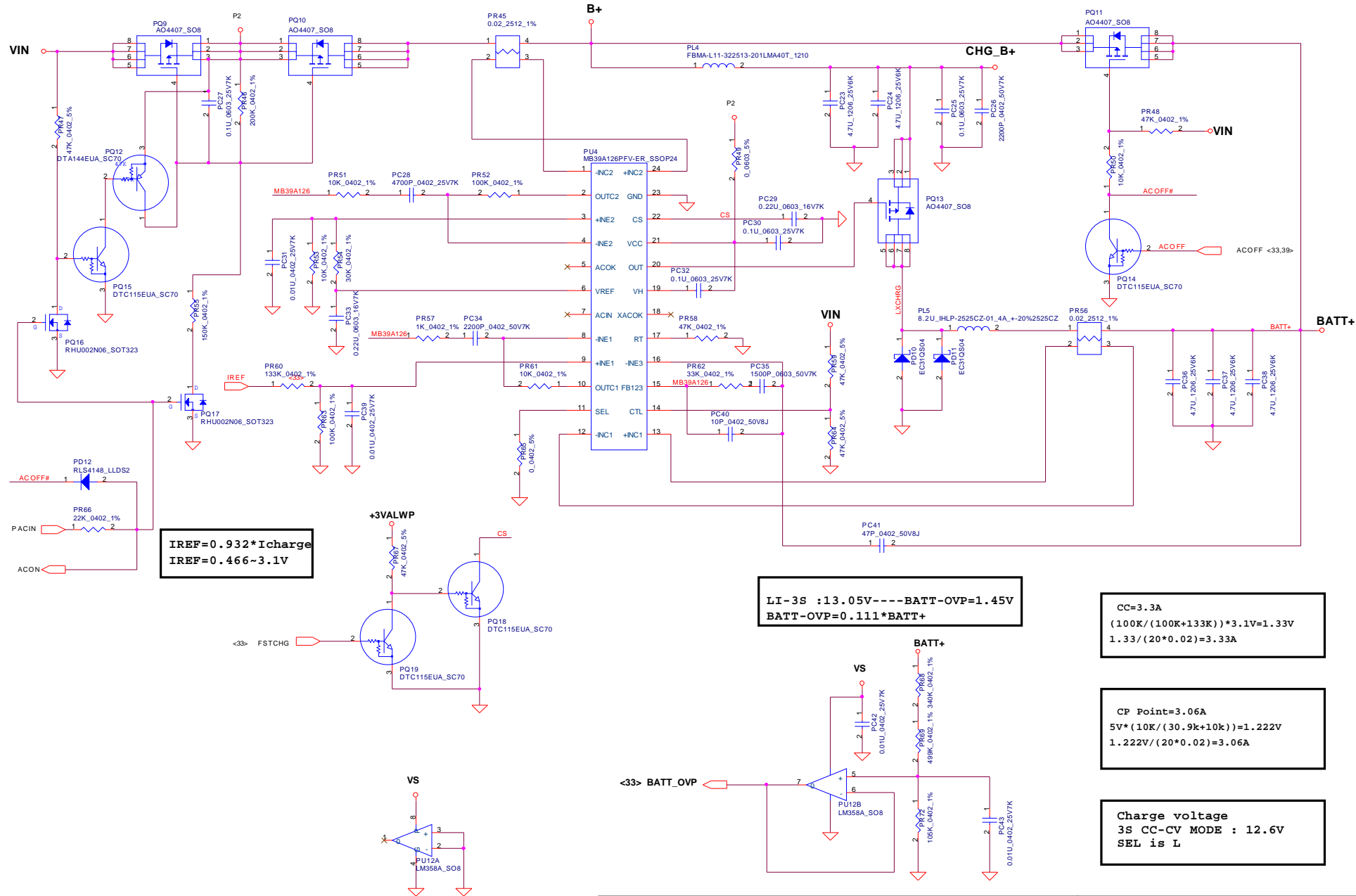
Security Classification		Compal Secret Data		Compal Electronics, Inc.		
Issued Date	2005/08/01	Deciphered Date	2006/08/01	<div> <div>Title</div> <div>DCIN/DECTOR</div> </div>		
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				Size B	Document Number	Rev 0.1
				Date: Monday, November 28, 2005 Sheet 39 of 45		



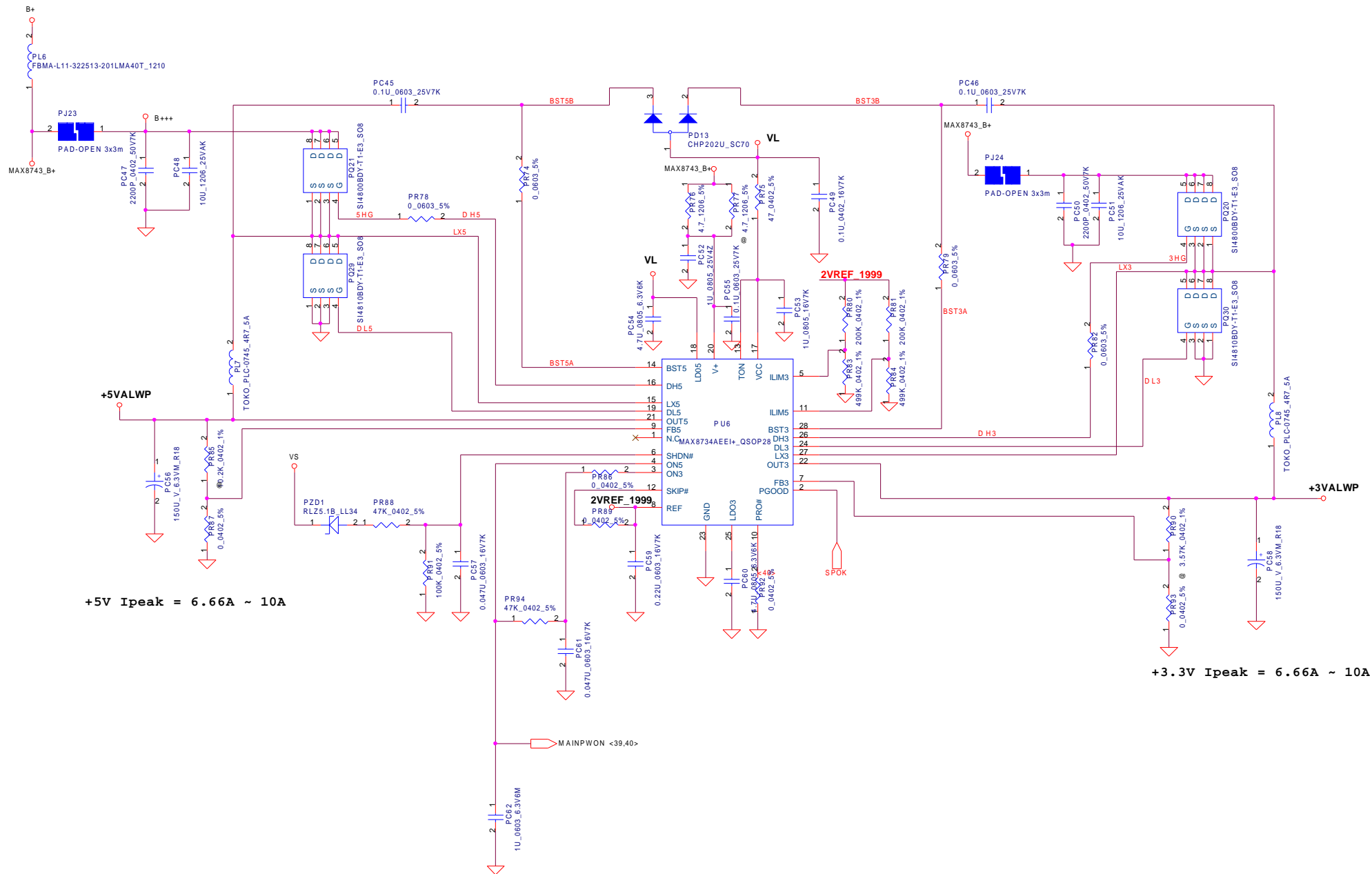
Security Classification		Compal Secret Data		Compal Electronics, Inc.		
Issued Date	2005/08/01	Deciphered Date	2006/08/01	Title		
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				BATTERY CONN. / OTP		
				Size B	Document Number	Rev. 0.1
				Date:	Monday, November 28, 2005	

65W PR45=0.02_2512_1% PR54=30K_0402_1% I_{adp}=0~3.125A
90W PR45=0.15_2512_1% PR54=28.7K_0402_1% I_{adp}=0~4.3A

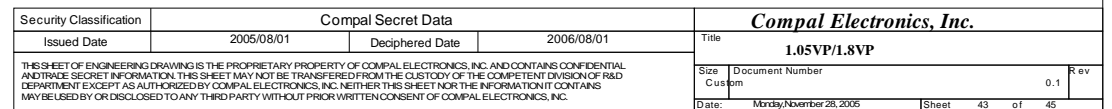
F_{osc}=14100/R_t=14100/47=300KHz



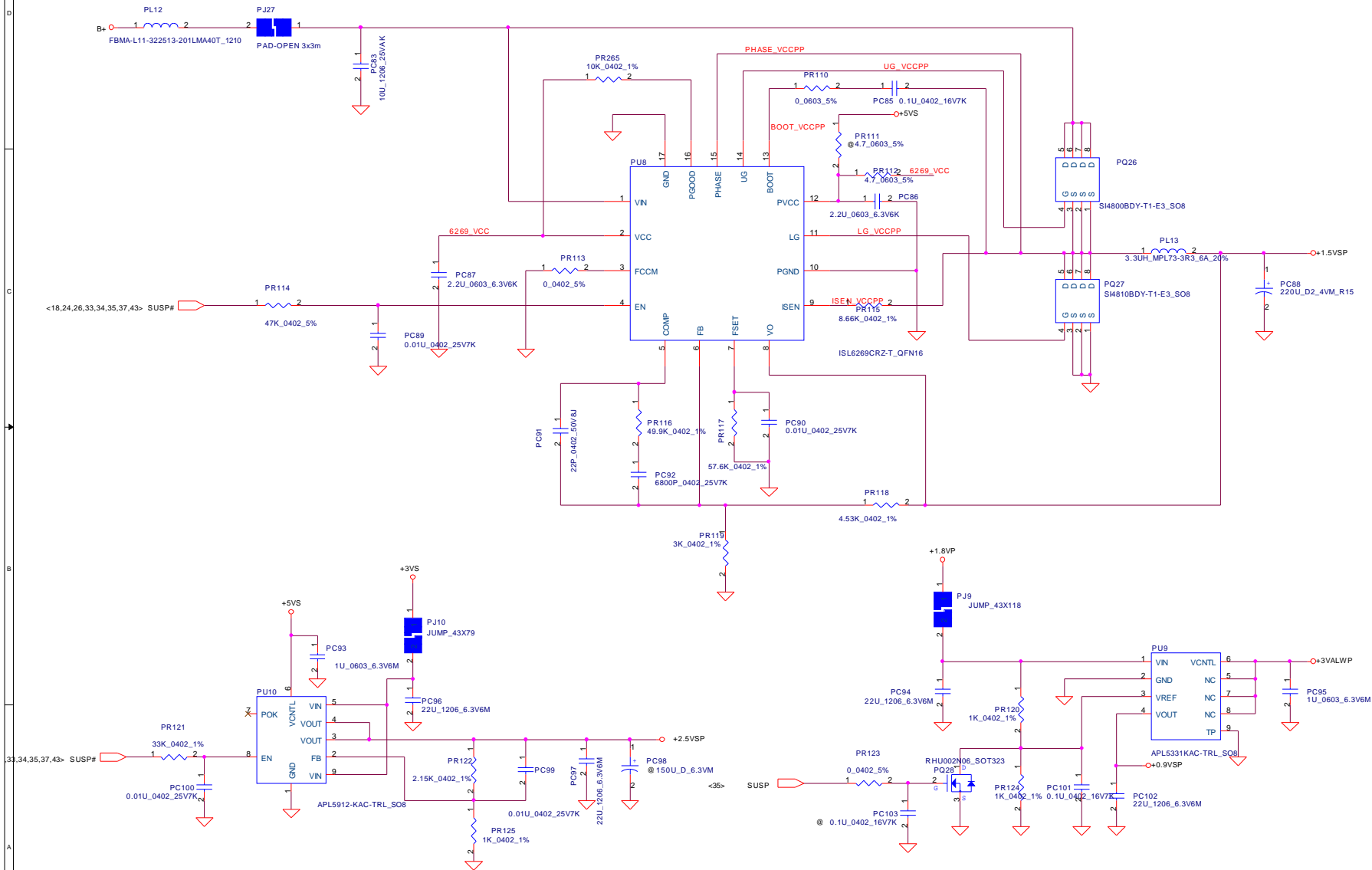
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2005/08/01	Deciphered Date	2006/08/01	Title	PWR-Charger
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				Size	Document Number
				Rev	0.1
				Date:	Monday, November 28, 2005
				Sheet	41 of 45



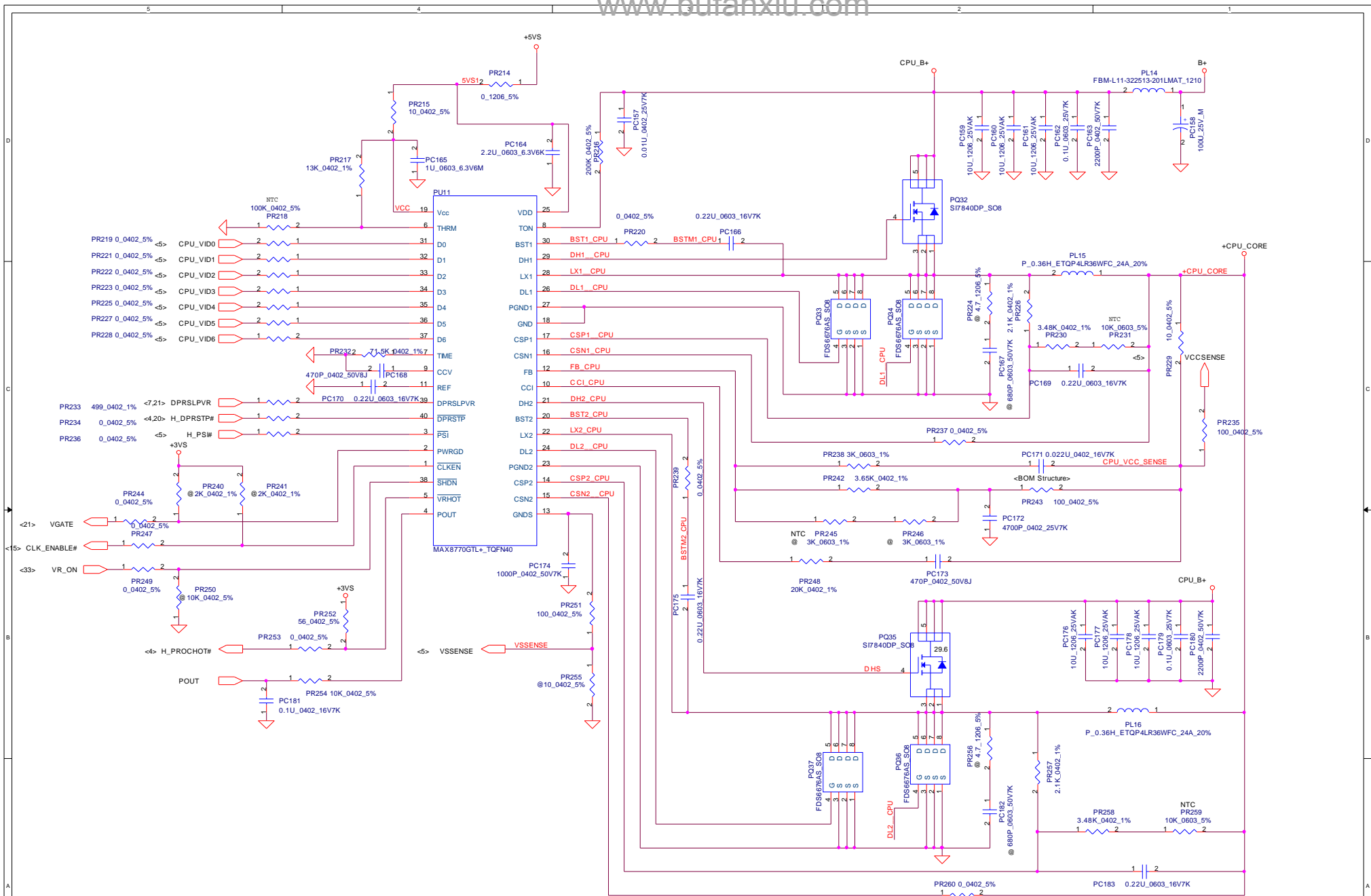
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2005/08/01	Deciphered Date	2006/08/01	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				+5VALWP/+3VALWP	
Size	Document Number	Rev		0.1	
Date:	Monday, November 28, 2005	Sheet	42	of 45	



+1.5VSP Ilimit = 9.38A~12.5A



Security Classification	Compal Secret Data			Compal Electronics, Inc.	
Issued Date	2005/08/01	Deciphered Date	2006/08/01	Title +VCCPP/+2.5VSP/0.9VSP	
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 TRANSFERRED 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.				Size Custom	Document Number 0.1
				Date: Monday, November 28, 2005	Sheet 44 of 45



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2005/06/20	Deciphered Date	2006/06/20	Title	
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 TRANSFERRED 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.				+CPU CORE	
Size	Document Number	Date: Monday, November 28, 2005		Sheet	Rev
Custpm		45 of 45			0.1