

HBL30 (Sakhir 20C)

LA-2891 Schematics Document

Intel Dothan / AlvisoGM / DDR-II / ICH6-M / Fixed Bay

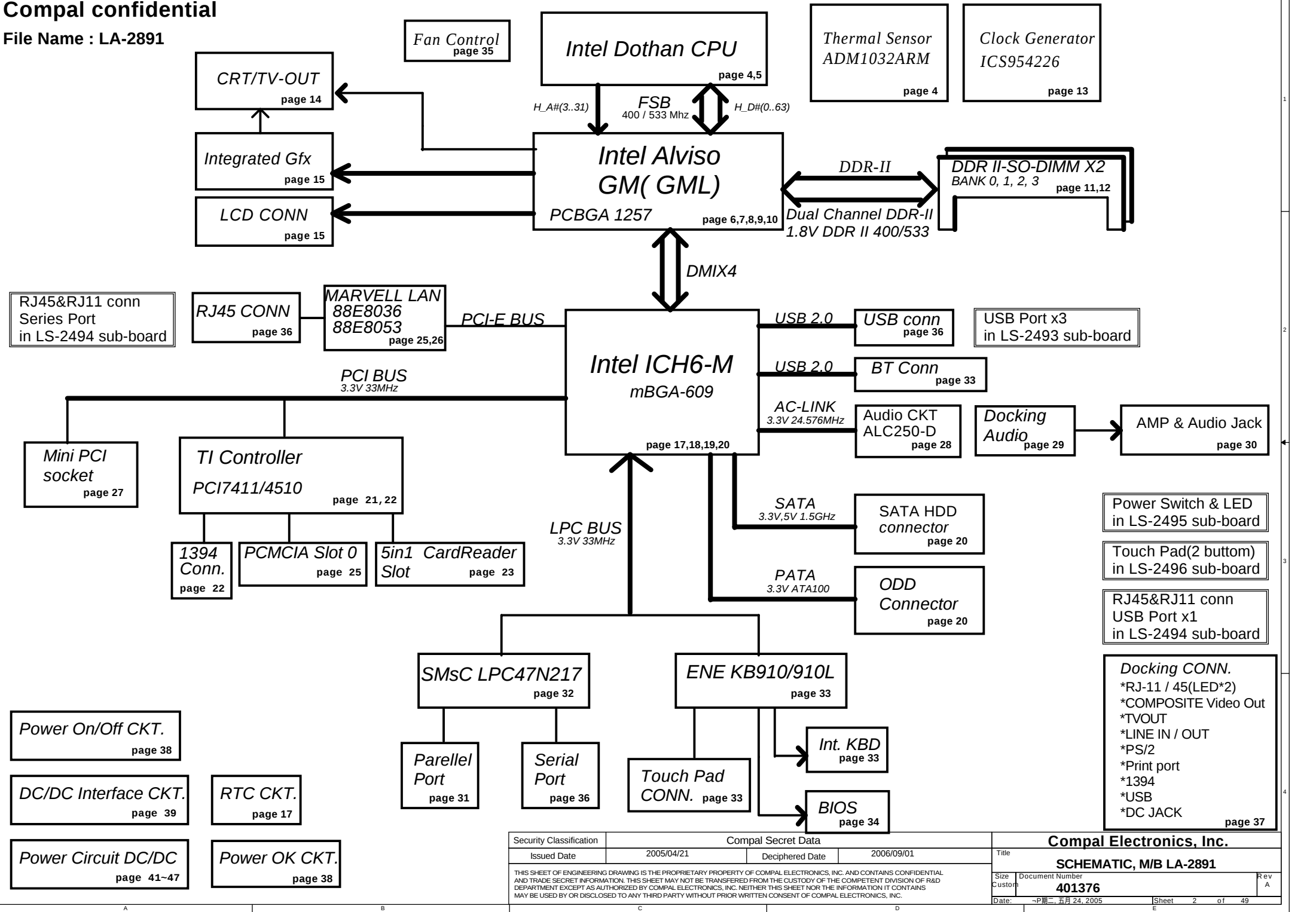
2005 / 05 / 03

Rev:0.1

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date		2005/04/21	Deciphered Date	2006/09/01	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Title	
				SCHEMATIC, M/B LA-2891	
Size		Document Number			Rev
Custom		401376			A
Date:		~P 周二, 五月 24, 2005			Sheet 1 of 49
					E

Compal confidential

File Name : LA-2891



Security Classification		Compal Secret Data				Compal Electronics, Inc.				
Issued Date		2005/04/21		Deciphered Date		2006/09/01		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.						SCHEMATIC, M/B LA-2891				
						Size	Document Number		Rev	
						Custom	401376		A	
						Date:	~P 星期二, 五月 24, 2005		Sheet 2 of 49	

Voltage Rails

Power Plane	Description	S1	S3	S5
VIN	Adapter power supply (15V)	N/A	N/A	N/A
B+	AC or battery power rail for power circuit.	N/A	N/A	N/A
+CPU_CORE	Core voltage for CPU	ON	OFF	OFF
+1.05VS	1.05V switched power rail	ON	OFF	OFF
+DDRVTT	0.9V switched power rail for DDR II terminator	ON	OFF	OFF
+1.5VALW	1.5V always on power rail	ON	ON	ON*
+1.5VS	1.5V switched power rail	ON	OFF	OFF
+1.8VS (No Use)	1.8V switched power rail	ON	OFF	OFF
+DDR/VCC	1.8V power rail for DDR II	ON	ON	OFF
+2.5VS	2.5V switched power rail	ON	OFF	OFF
+3VALW	3.3V always on power rail	ON	ON	ON*
+3V	3.3V power rail	ON	ON	OFF
+3VS	3.3V switched power rail	ON	OFF	OFF
+5VALW	5V always on power rail	ON	ON	ON*
+5VS	5V switched power rail	ON	OFF	OFF
+5VCD	5V switched power rail for Direct CD	ON	OFF	OFF
+5VMOD	5V switched power rail for Module Bay	ON	OFF	OFF
+12VALW	12V always on power rail	ON	ON	ON*
+RTC/VCC	RTC power	ON	ON	ON

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

External PCI Devices

Device	IDSEL#	REQ#/GNT#	Interrupts
CardBus	AD20	2	PIRQA/PIRQB
1394	AD20	2	PIRQA/PIRQB
SD	AD20	2	PIRQA/PIRQB
Mini-PCI	AD18	1	PIRQG/PIRQH

EC SM Bus1 address

Device	Address	Device	Address
Smart Battery	0001 011X b	ADM1032	1001 110X b
EEPROM(24C16/02)	1010 000X b	Codec	1001 011X b
(24C04)	1011 000Xb	Docking	1010 000X b

ICH6M SM Bus address

Device	Address
Clock Generator (ICS 954226)	1101 001Xb
DDR DIMM0	1001 000Xb
DDR DIMM2	1001 010Xb

STATE \ SIGNAL	SLP_S1#	SLP_S3#	SLP_S4#	SLP_S5#	+VALW	+V	+VS	Clock
Full ON	HIGH	HIGH	HIGH	HIGH	ON	ON	ON	ON
S1(Power On Suspend)	LOW	HIGH	HIGH	HIGH	ON	ON	ON	LOW
S3 (Suspend to RAM)	LOW	LOW	HIGH	HIGH	ON	ON	OFF	OFF
S4 (Suspend to Disk)	LOW	LOW	LOW	HIGH	ON	OFF	OFF	OFF
S5 (Soft OFF)	LOW	LOW	LOW	LOW	ON	OFF	OFF	OFF

Board ID / SKU ID Table for AD channel

Vcc	3.3V +/- 5%			
Ra/Rc/Re	100K +/- 5%			
Board ID	Rb / Rd / Rf	VAD_BID min	VAD_BID typ	VAD_BID max
0	0	0 V	0 V	0 V
1	8.2K +/- 5%	0.216 V	0.250 V	0.289 V
2	18K +/- 5%	0.436 V	0.503 V	0.538 V
3	33K +/- 5%	0.712 V	0.819 V	0.875 V
4	56K +/- 5%	1.036 V	1.185 V	1.264 V
5	100K +/- 5%	1.453 V	1.650 V	1.759 V
6	200K +/- 5%	1.935 V	2.200 V	2.341 V
7	NC	2.500 V	3.300 V	3.300 V

BOARD ID Table

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

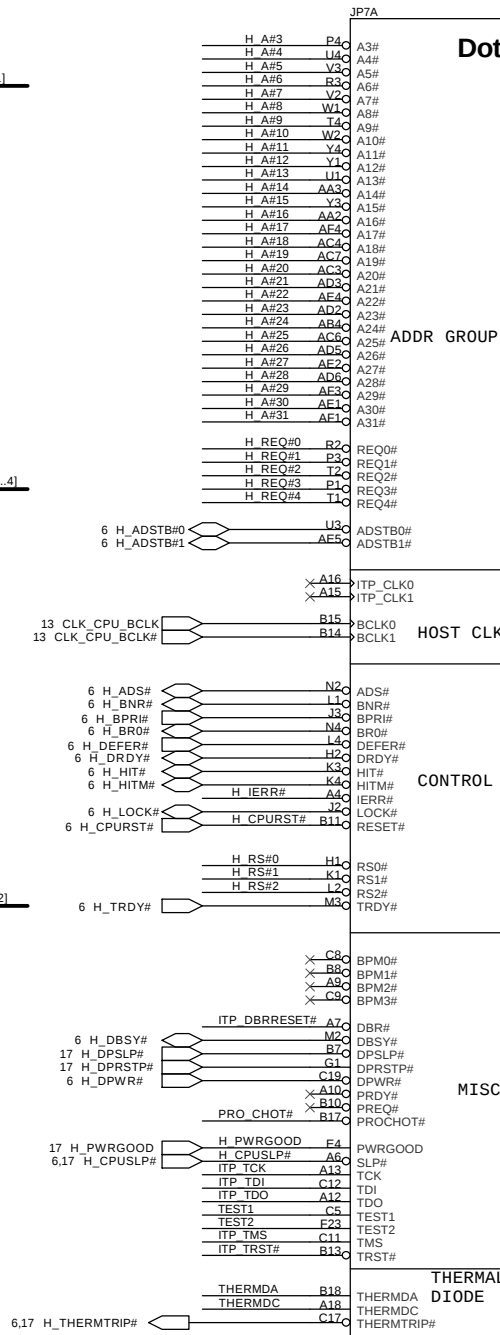
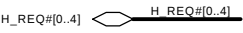
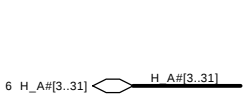
BOM Structure Table

BOM Structure	Function
PM@	915PM(NO USE)
GM@/GML@	915GM / 910GML
WD@ & WOD@	W or WO Docking
SWDJ@	SWDJ(NO USE)
4510@	Cardbus Only
5IN1@	5 in 1 & Cardbus
1000@ & 10@	Giga or 10/100 LAN
WLAN@	Wireless LAN
IMIC@	Internal Microphone
LPT@ & LPT1@	Parallel Port on docking or on MB
PS@ & WOPS@	W or WO Power Sticker
BT@	Bluetooth
FIR@	FIR
45@	45 Level

SKU ID Table

	SKU_ID_CHECK_1	7	6	5
SKU_ID_CHECK_0		1-Button	3-Buttons	7-Buttons
0				
1	20C	3	12	2(No USE)
2				
3				
4				
5				
6				

Security Classification		Compal Secret Data				Compal Electronics, Inc.									
Issued Date		2005/04/21		Deciphered Date		2006/09/01		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.								SCHEMATIC, M/B LA-2891							
								Size	Document Number						Rev
								Custom	401376						A
								Date:	~P 星期二, 五月 24, 2005				Sheet	3	of 49



TYCO_1612365-1_Dothan

DATA GROUP

HOST CLK

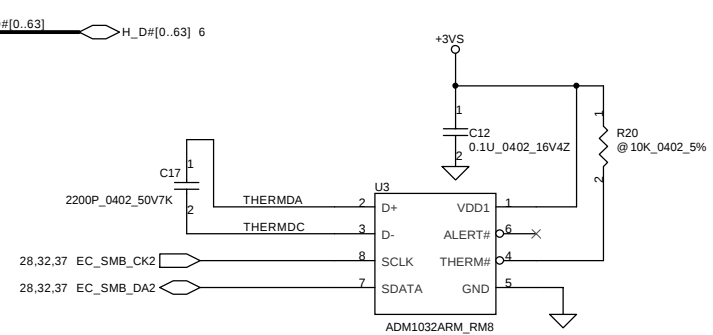
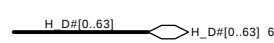
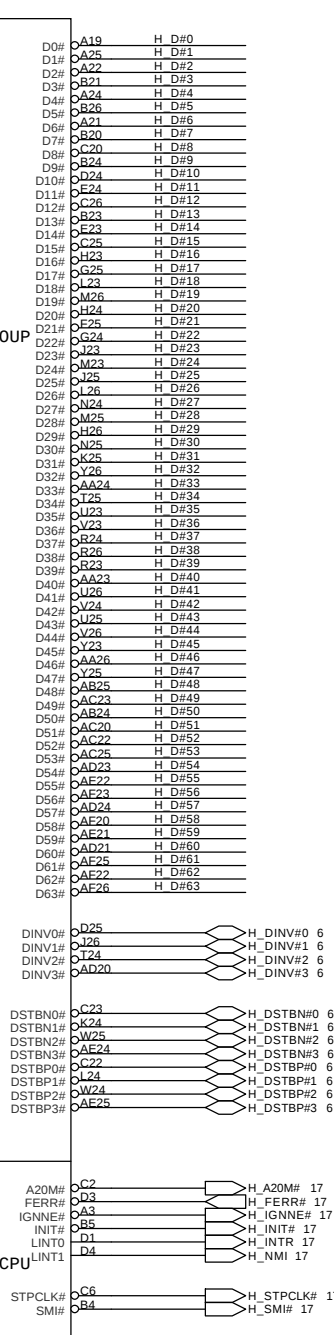
CONTROL GROUP

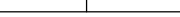
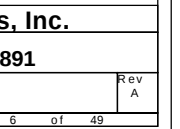
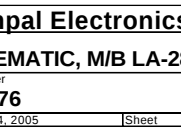
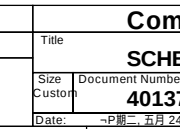
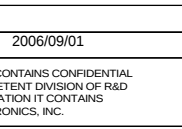
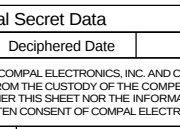
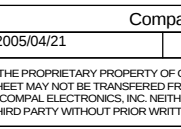
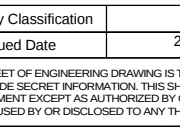
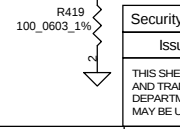
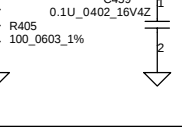
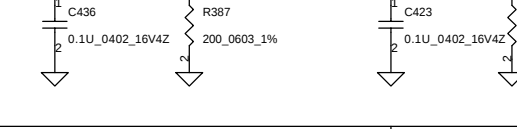
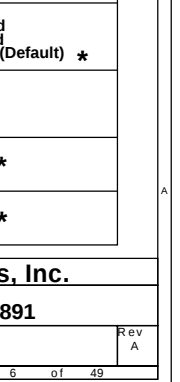
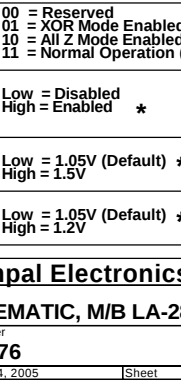
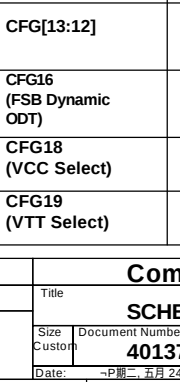
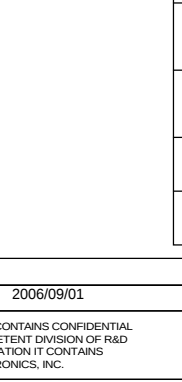
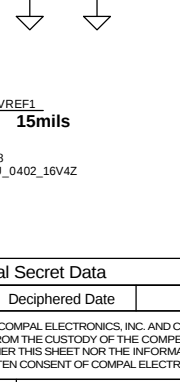
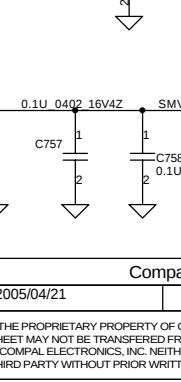
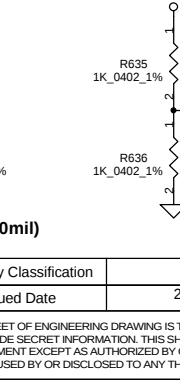
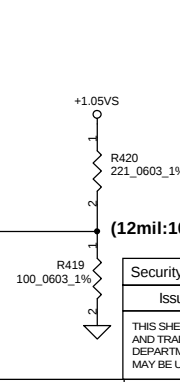
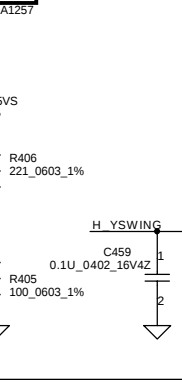
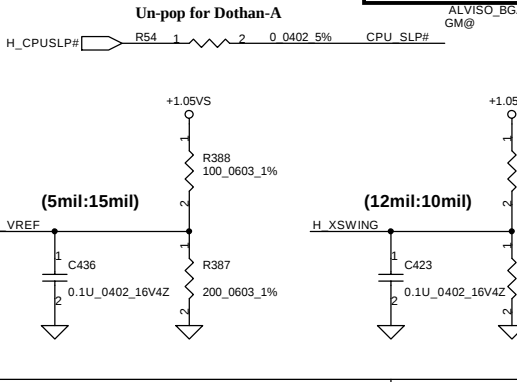
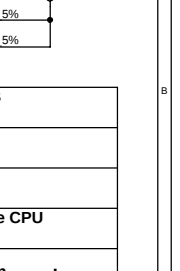
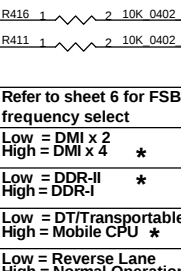
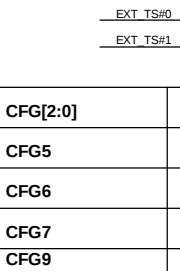
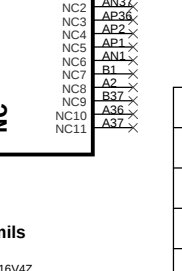
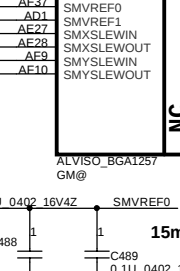
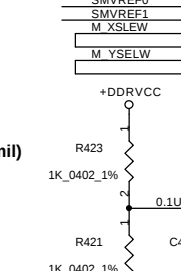
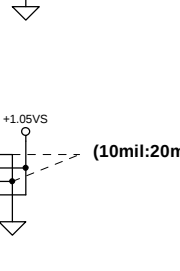
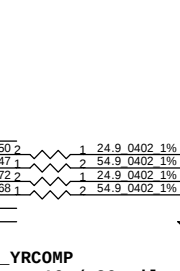
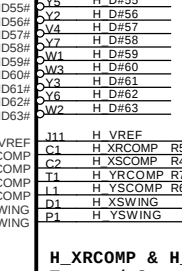
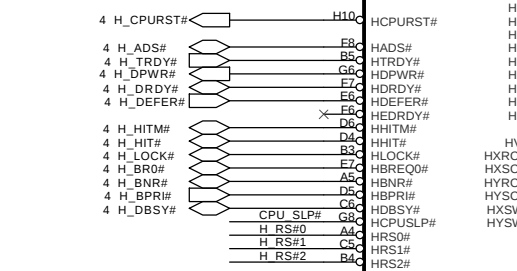
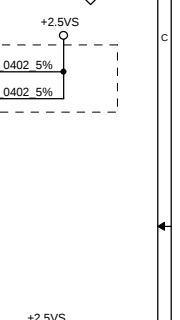
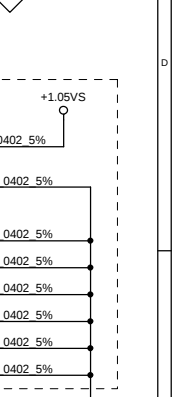
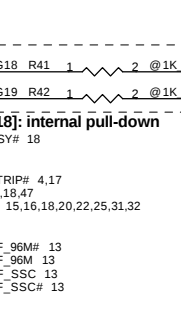
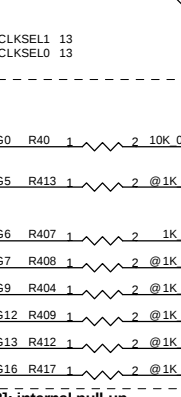
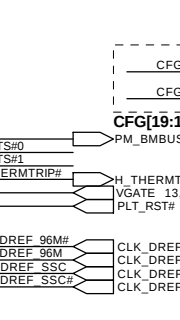
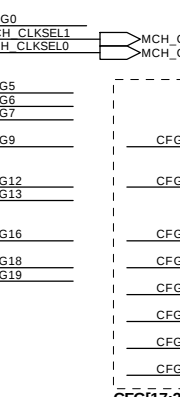
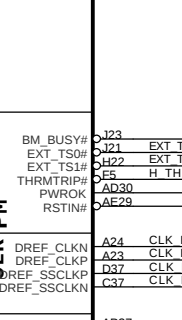
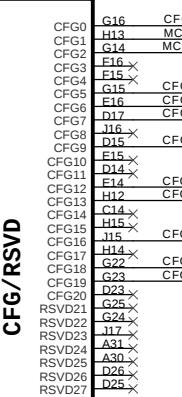
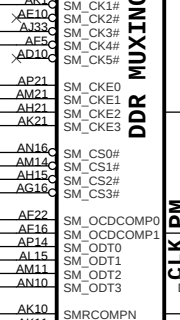
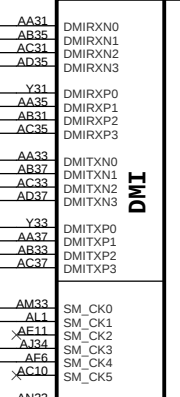
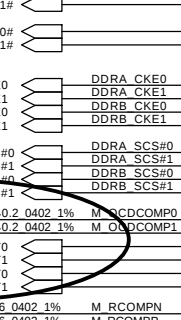
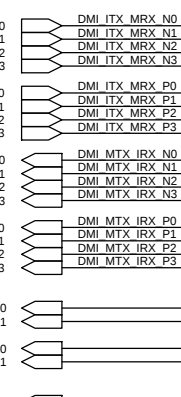
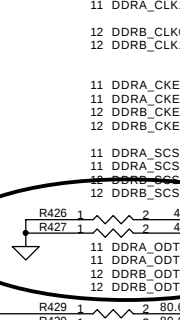
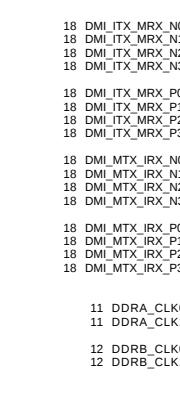
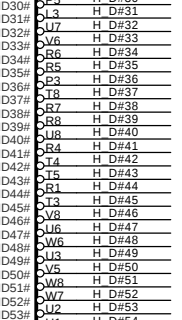
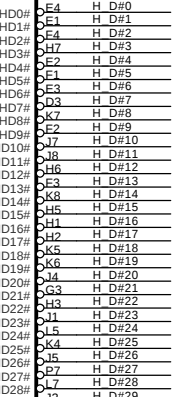
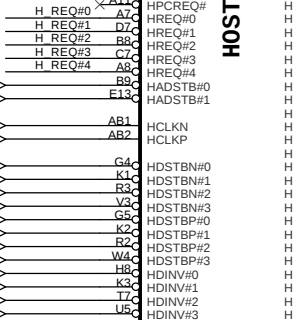
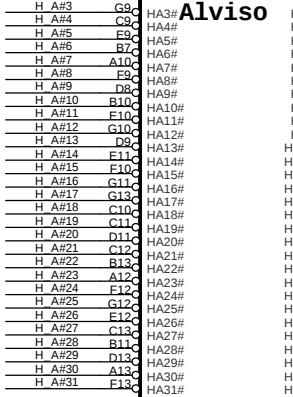
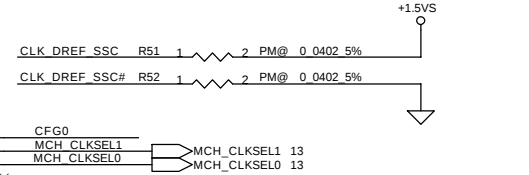
MISC

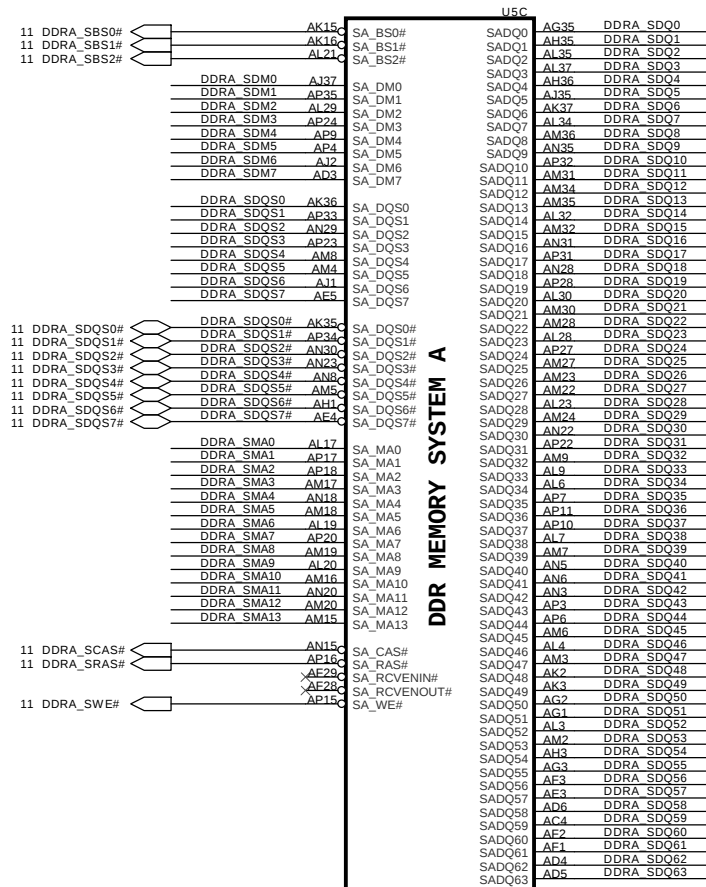
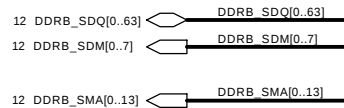
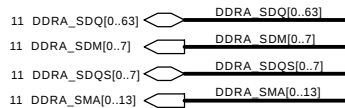
THERMAL DIODE

LEGACY CPU

Dothan

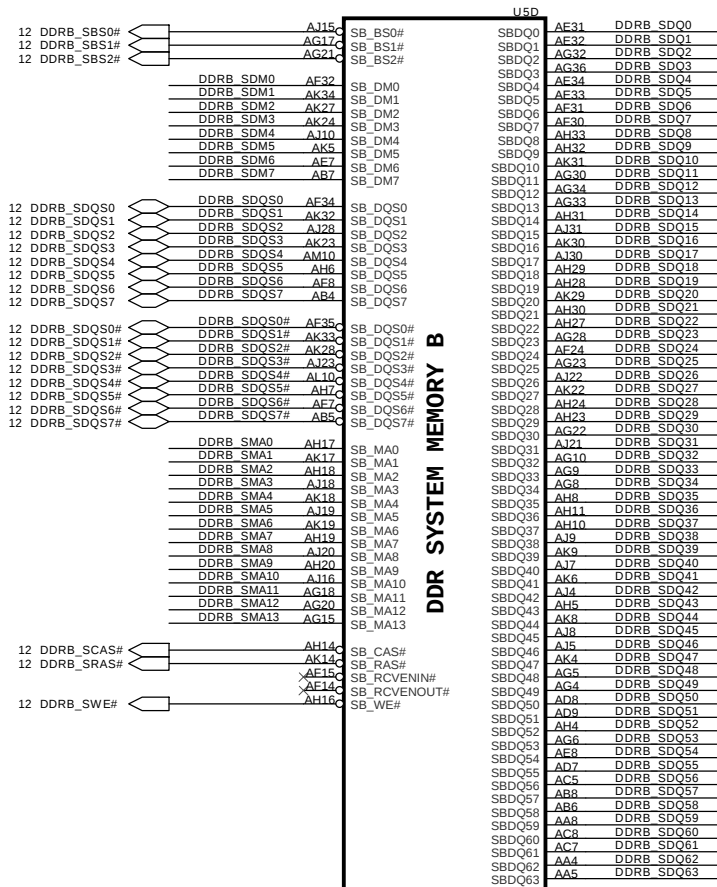






DDR MEMORY SYSTEM A

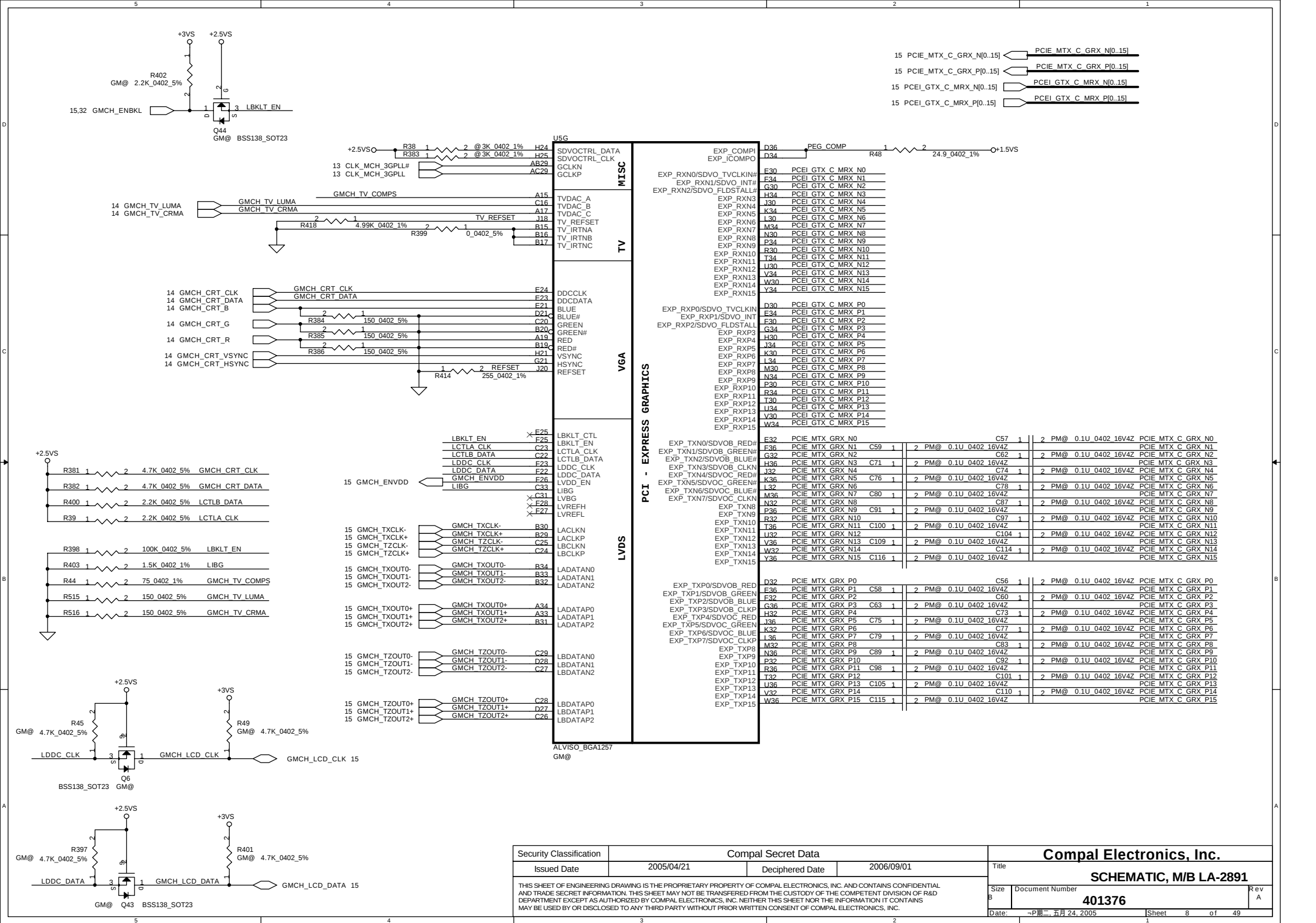
ALVISO_BGA1257
GM@

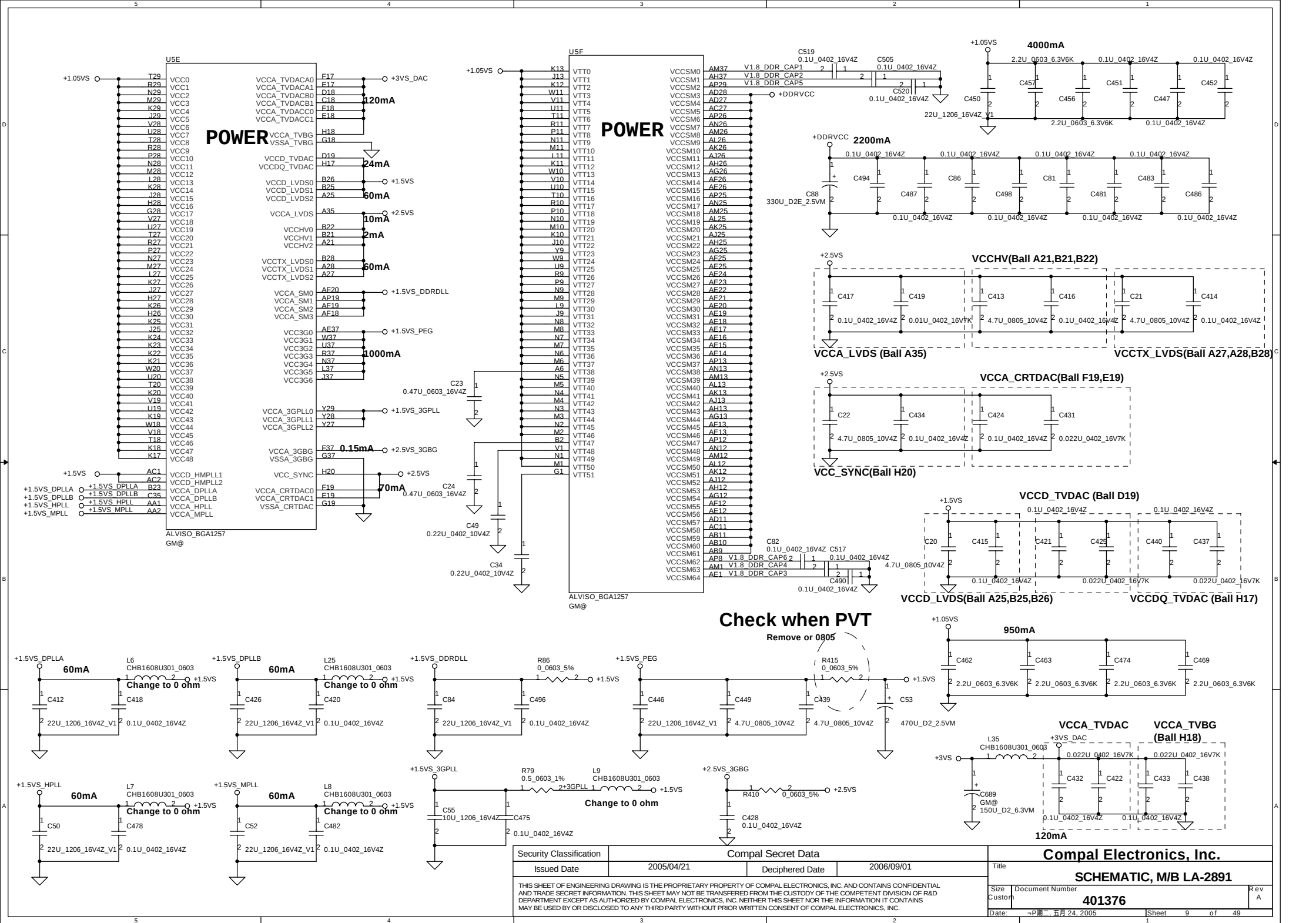


DDR SYSTEM MEMORY B

ALVISO_BGA1257
GM@

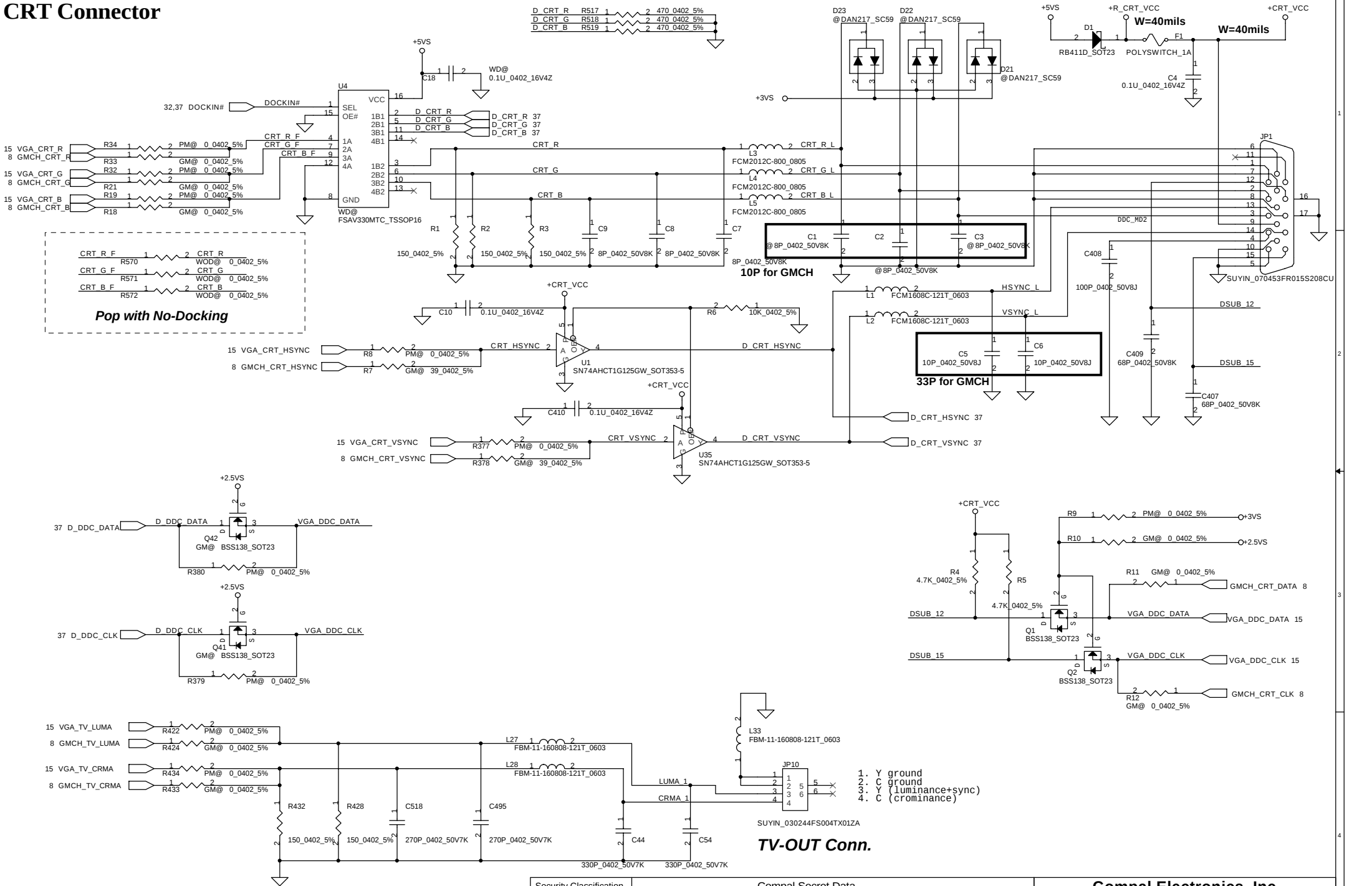
Security Classification		Compal Secret Data		Compal Electronics, Inc.			
Issued Date		2005/04/21	Deciphered Date	2006/09/01	Title		
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.					SCHEMATIC, M/B LA-2891		
					Size	Document Number	Rev
					Custom	401376	A
					Date:	~P 周二, 五月 24, 2005	Sheet 7 of 49





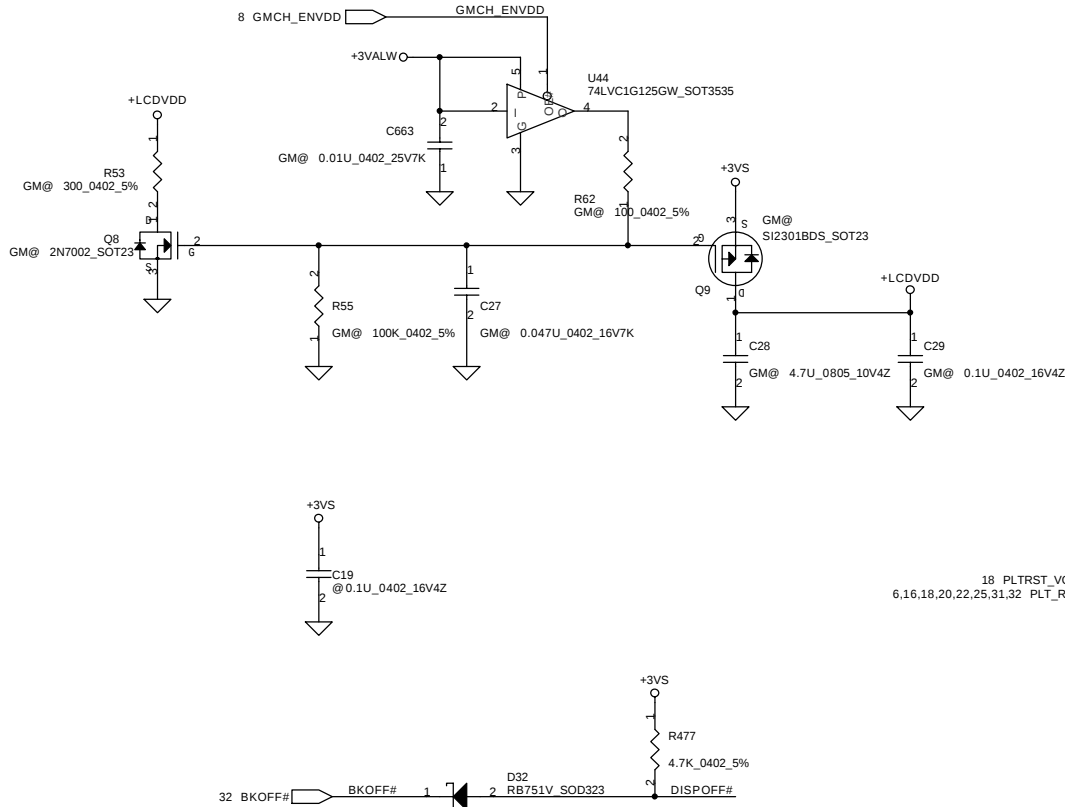
Security Classification		Compal Secret Data		Compal Electronics, Inc. <i>SCHEMATIC, M/B LA-2891</i>	
Issued Date	2005/04/21	Deciphered Date	2006/09/01	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. 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.				Size	Document Number
					401376
				Date:	~P 陽二、五月 24, 2005
				Sheet	12 of 49

CRT Connector

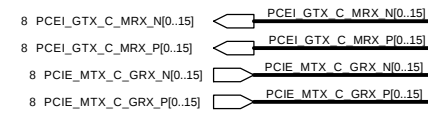
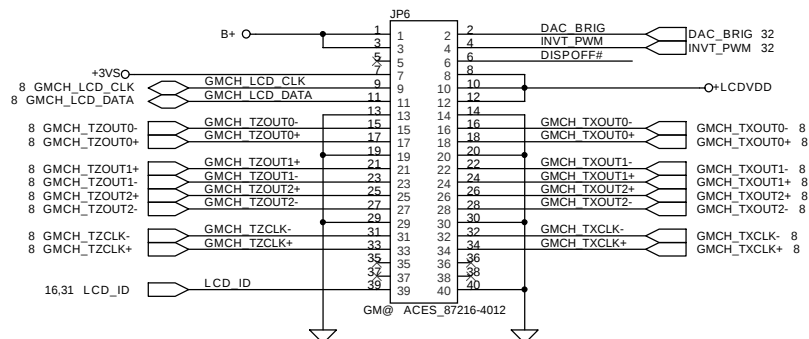


Security Classification		Compal Secret Data				Compal Electronics, Inc.					
Issued Date		2005/04/21		Deciphered Date		2006/09/01		Title			
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY 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.						SCHEMATIC, M/B LA-2891					
						Size		Document Number		Rev	
						Custom		401376		A	
						Date:		~P 聯二 五月 24, 2005		Sheet 14 of 49	

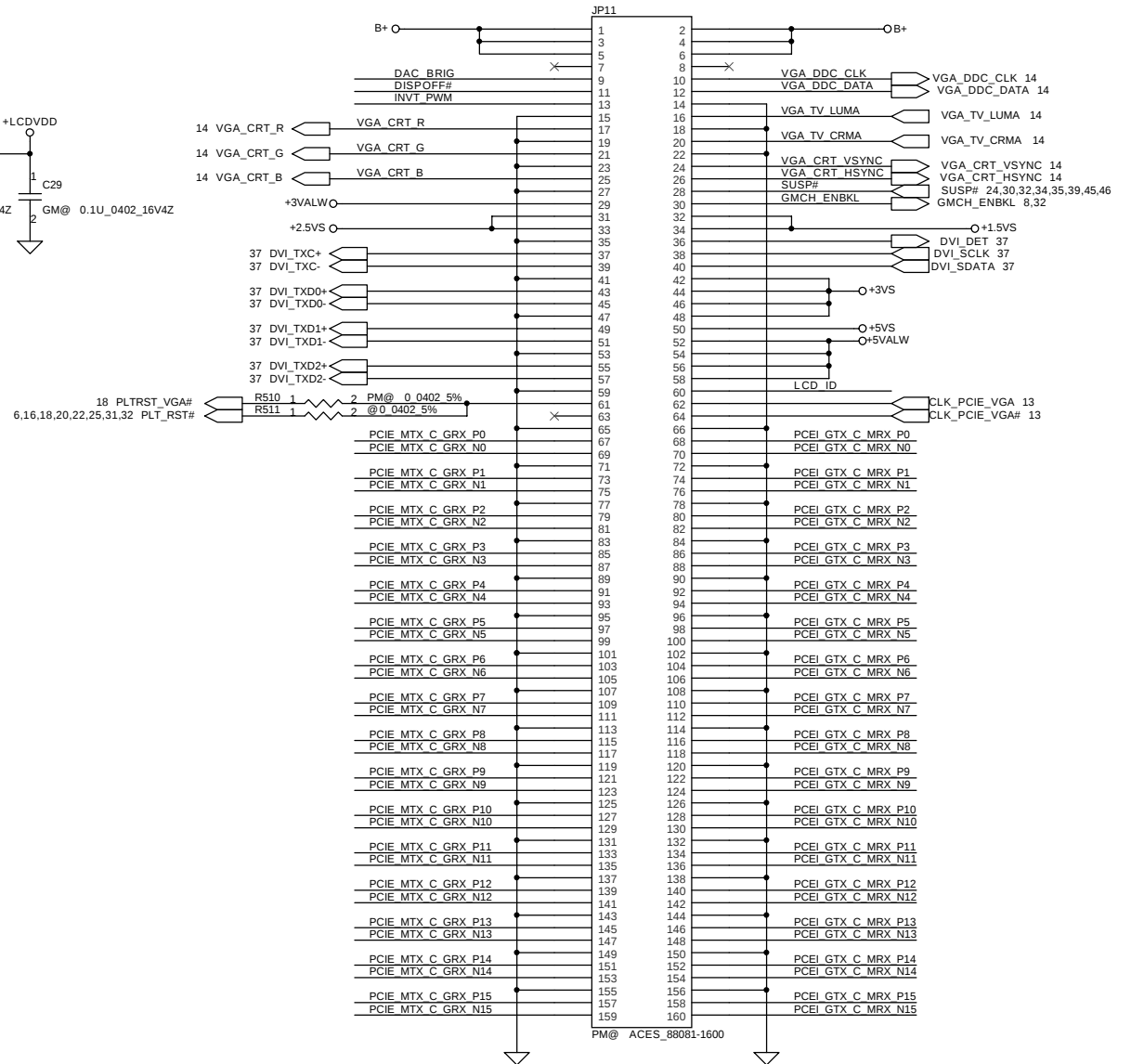
LCD POWER CIRCUIT



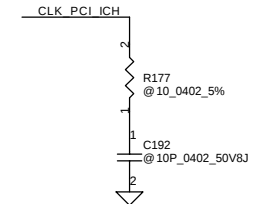
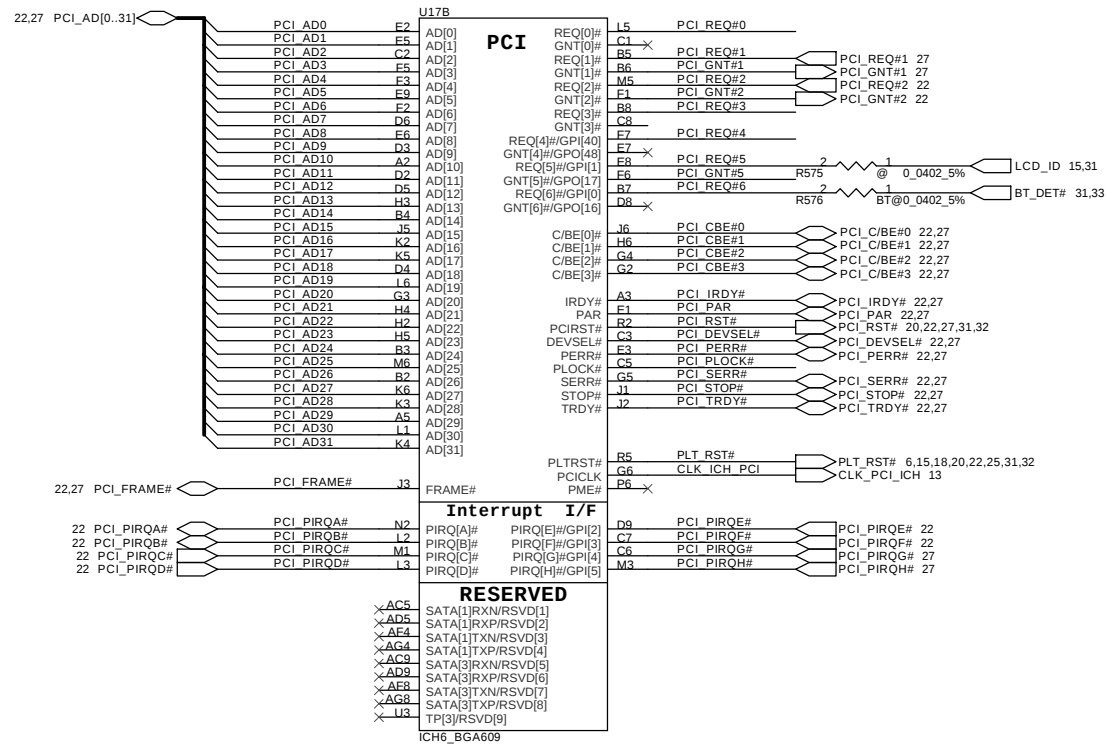
LCD/PANEL BD. Conn.



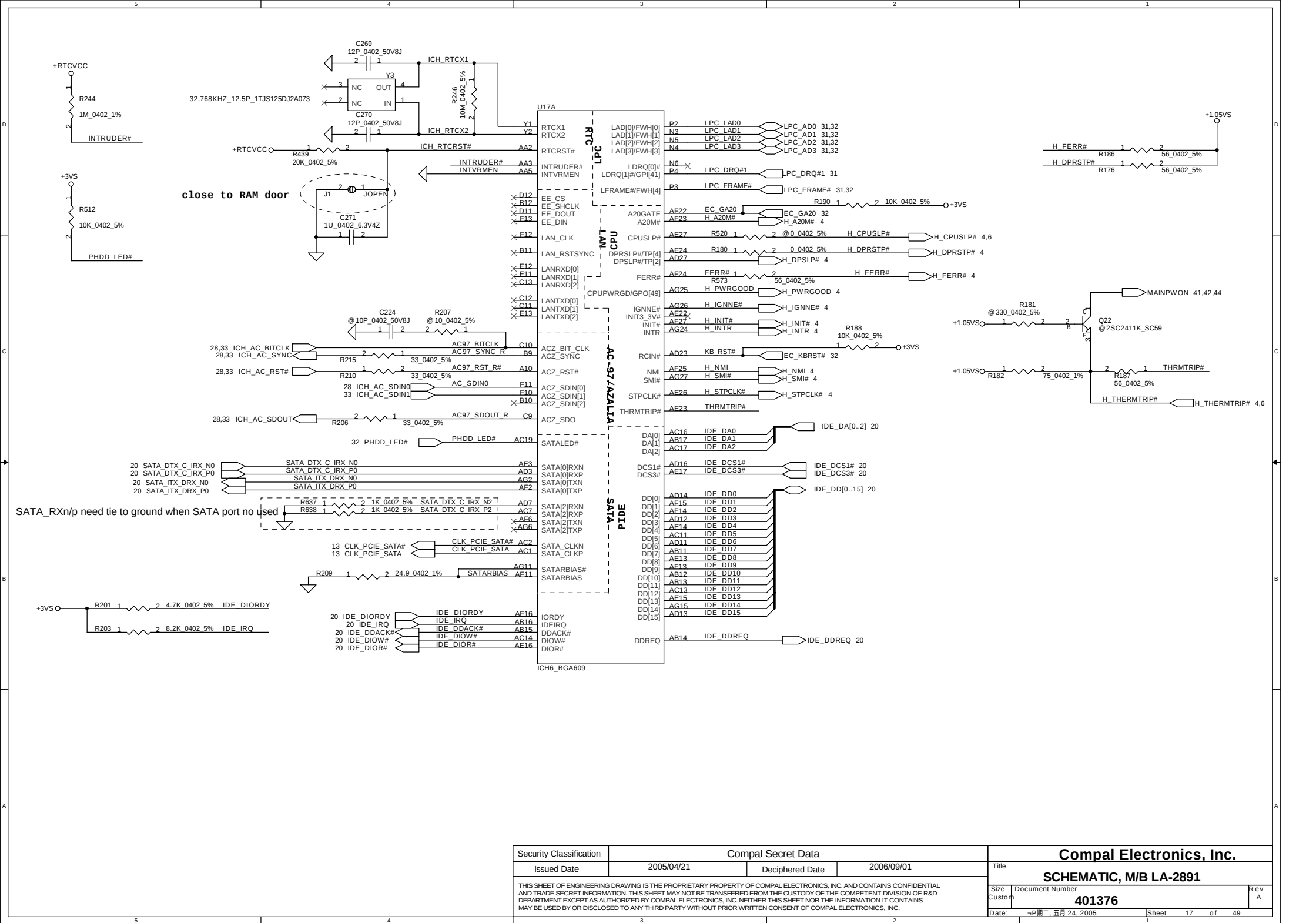
VGA BOARD Conn.

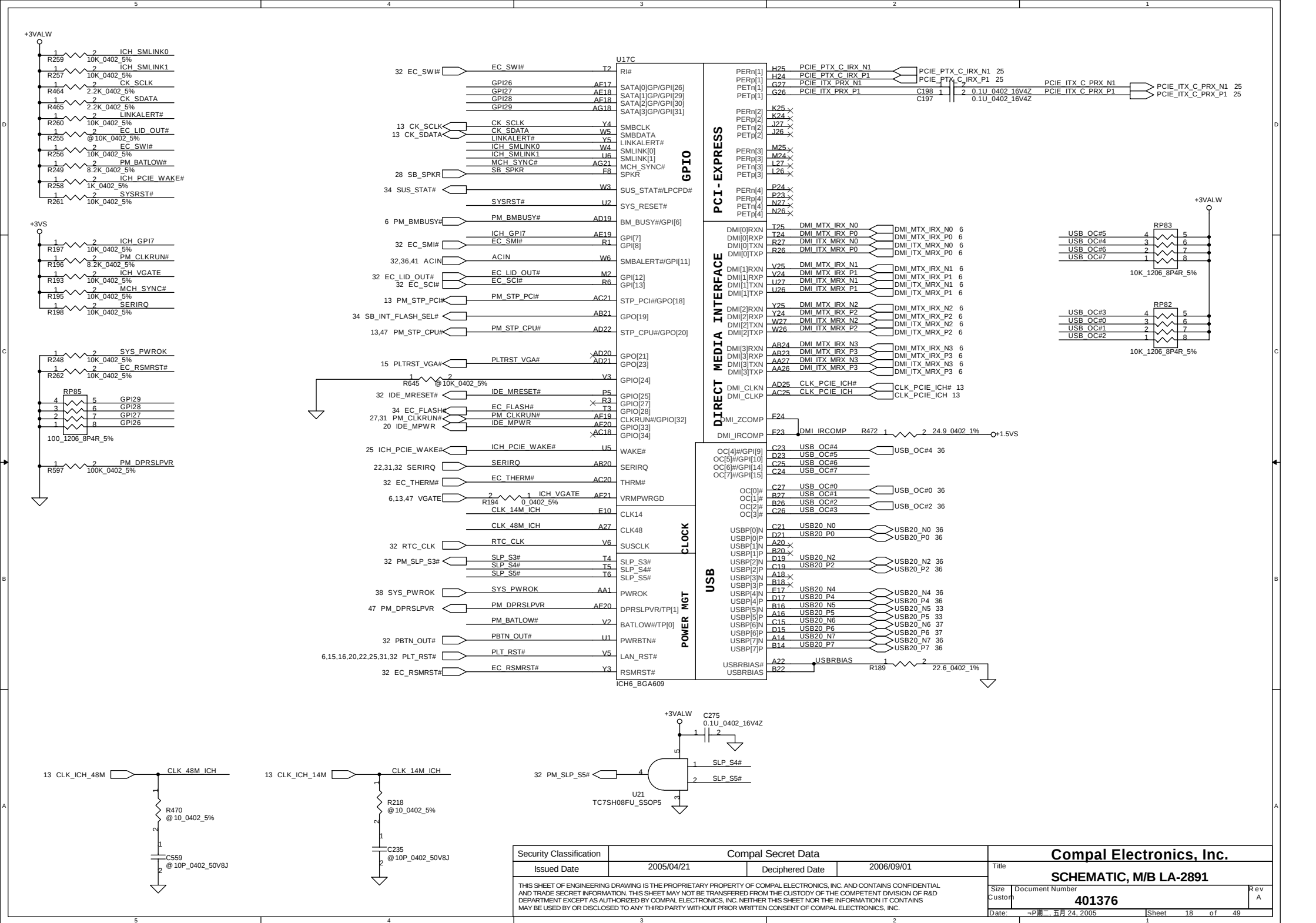


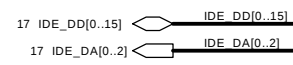
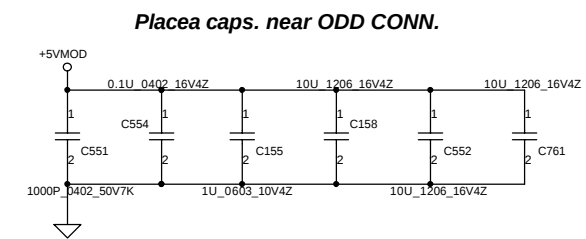
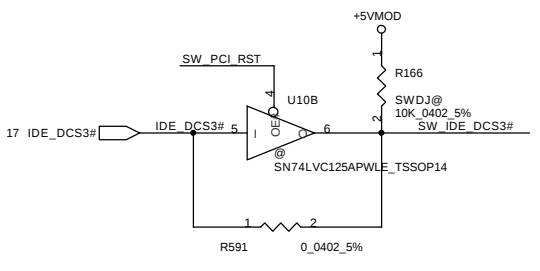
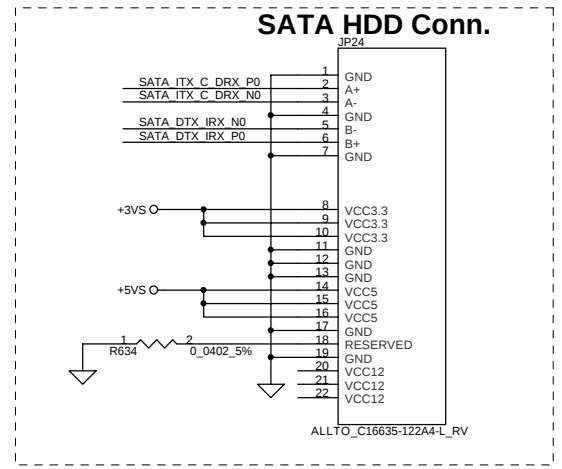
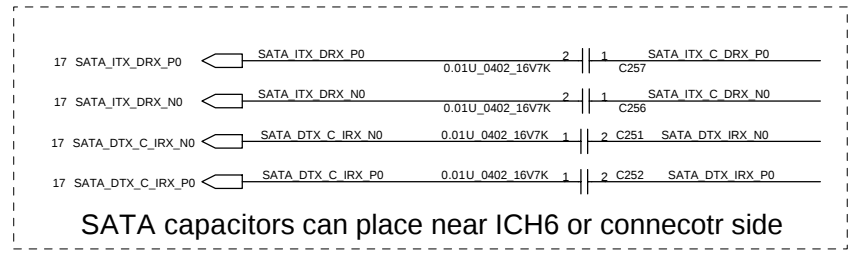
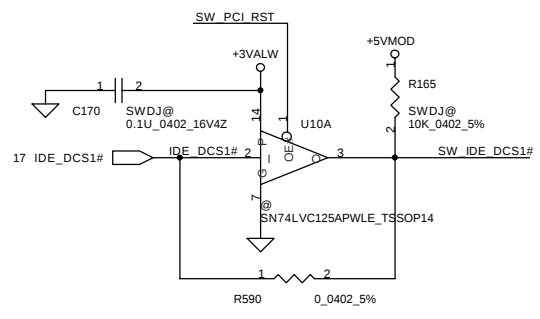
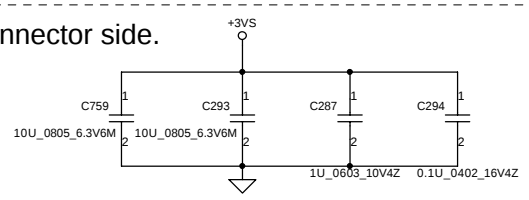
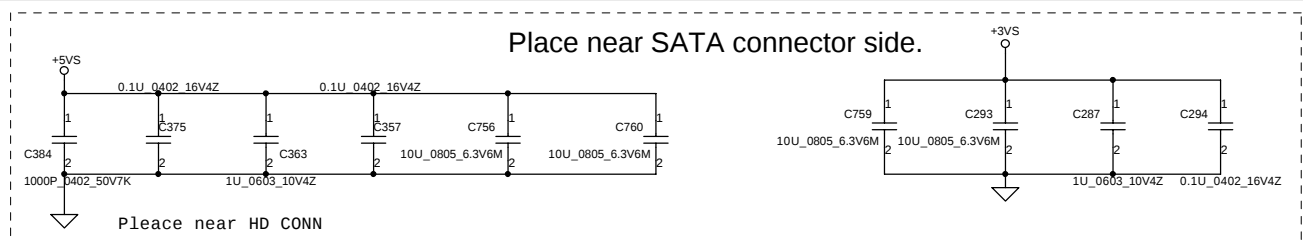
Security Classification		Compal Secret Data				Compal Electronics, Inc.							
Issued Date		2005/04/21		Deciphered Date		2006/09/01		Title					
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET 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.								SCHEMATIC, M/B LA-2891					
								Size		Document Number		Rev	
								Custom		401376		A	
Date:		~P 聯二, 五月 24, 2005				Sheet		15 of 49					



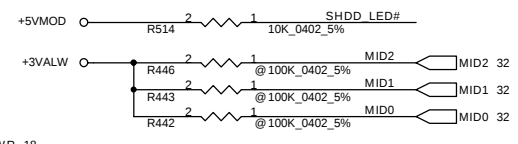
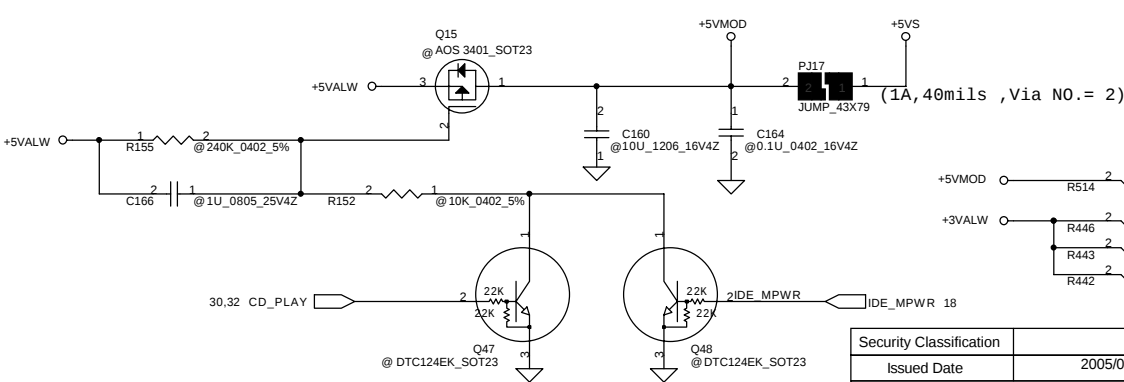
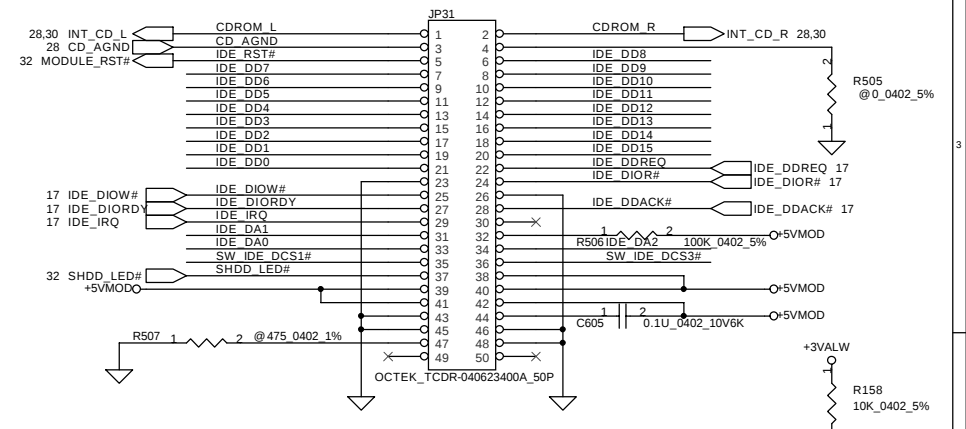
Security Classification		Compal Secret Data		Compal Electronics, Inc.			
Issued Date	2005/04/21	Deciphered Date	2006/09/01	Title			
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				SCHEMATIC, M/B LA-2891			
				Size Custom	Document Number 401376	Rev A	
Date: ~P 星期二, 五月 24, 2005		Sheet 16 of 49					



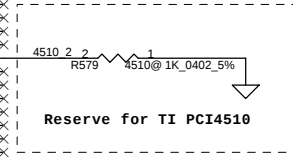
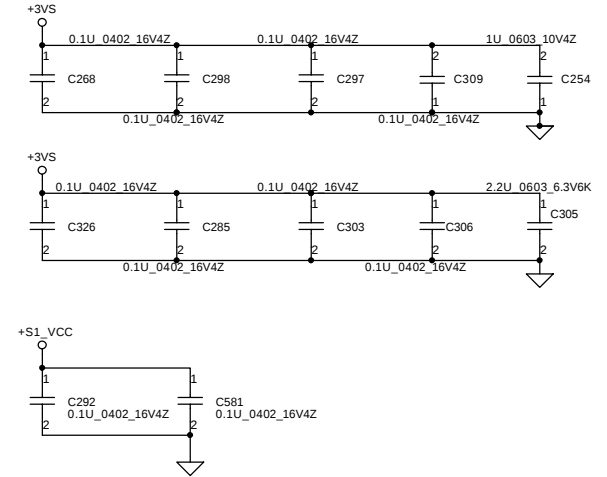
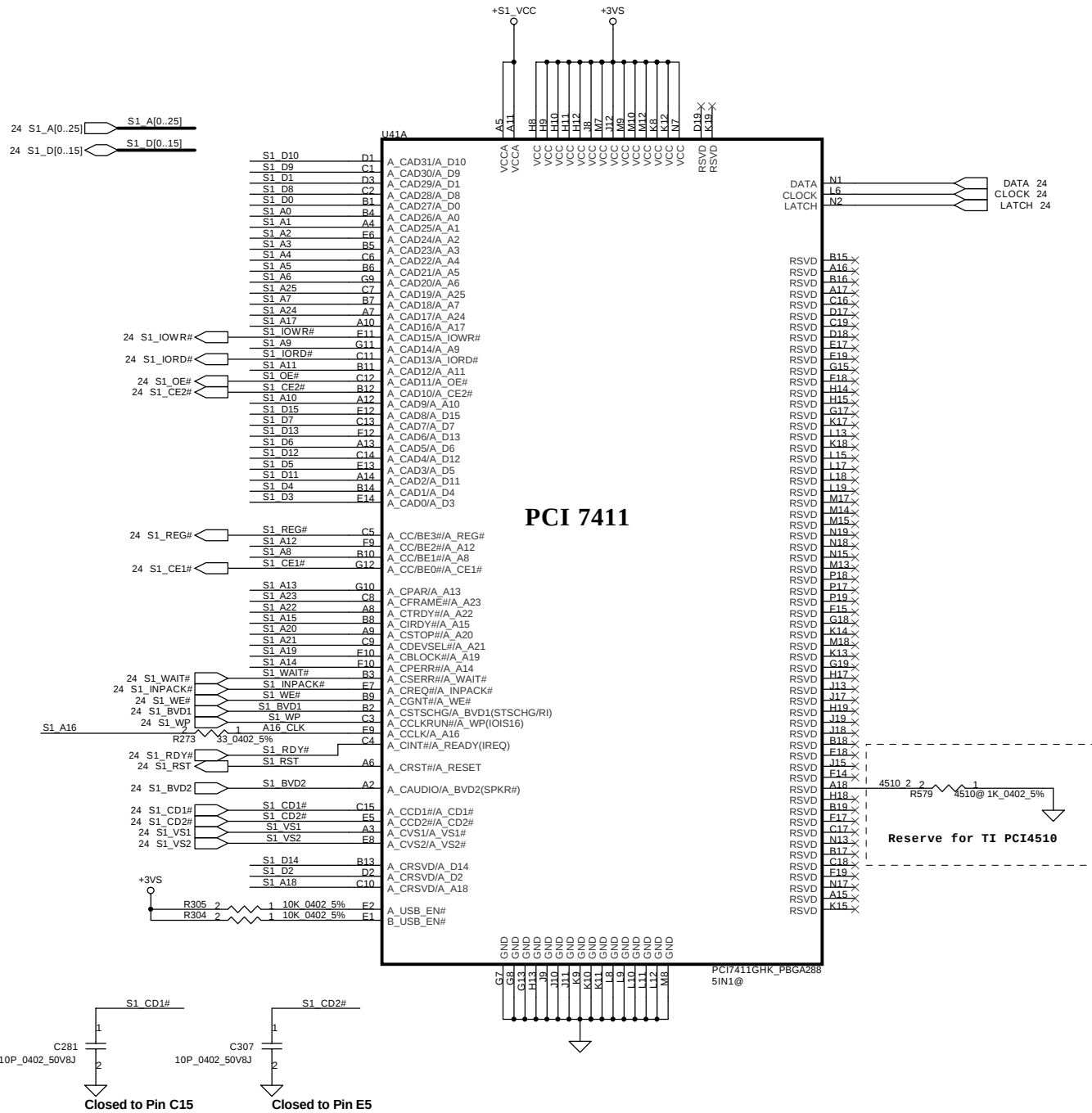




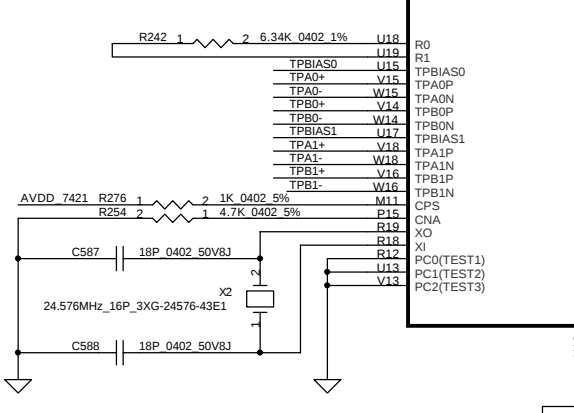
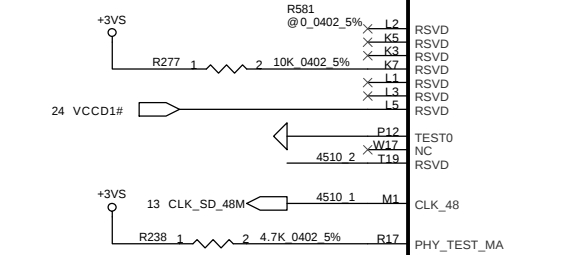
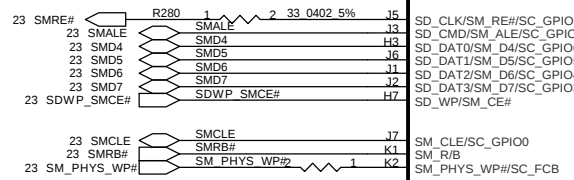
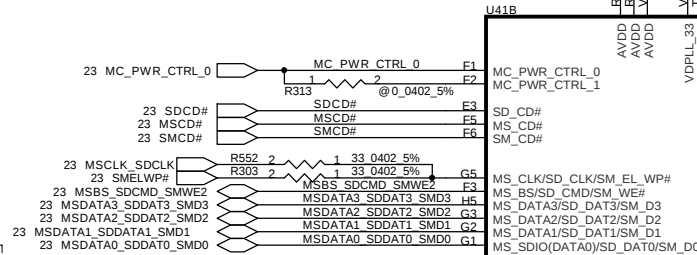
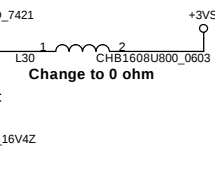
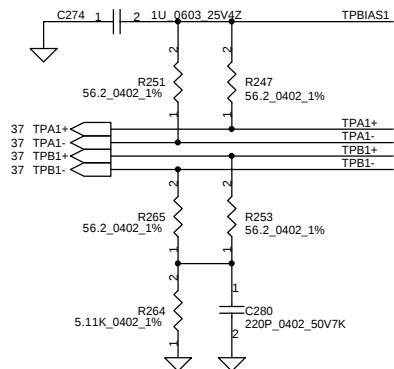
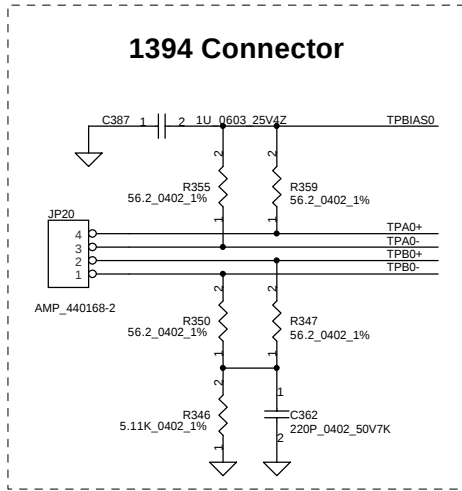
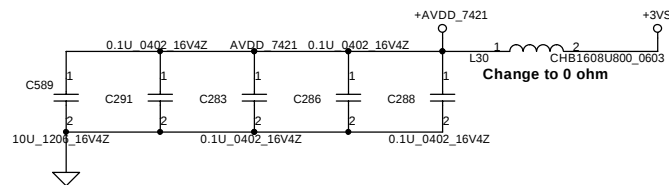
ODD Conn.



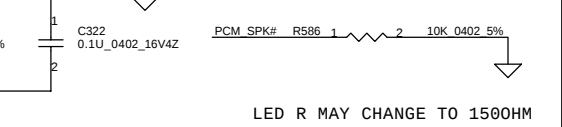
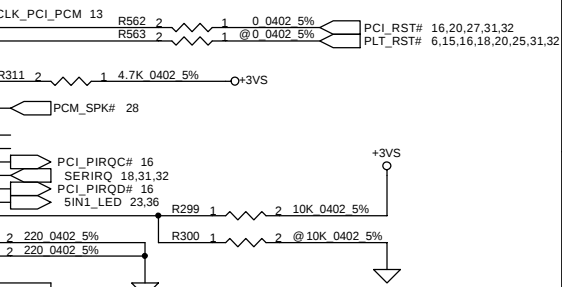
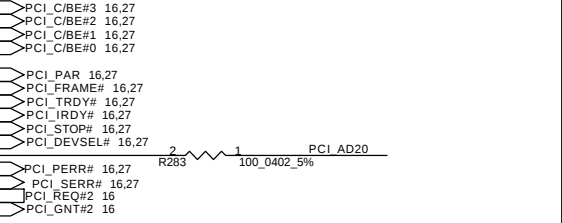
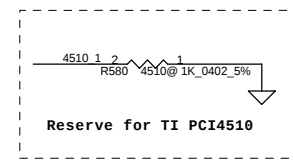
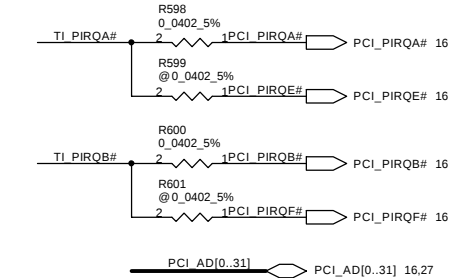
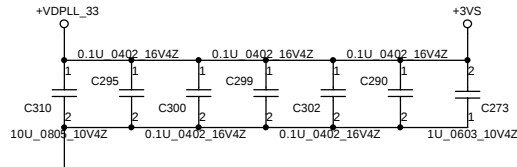
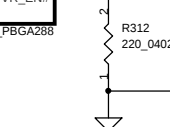
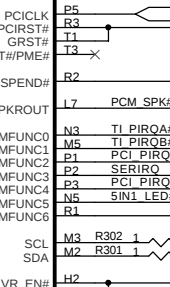
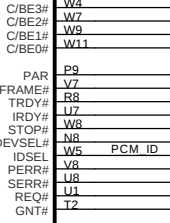
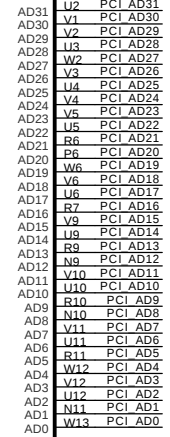
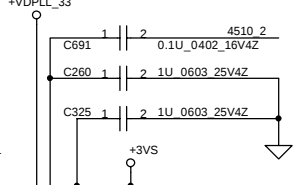
Security Classification		Compal Secret Data				Compal Electronics, Inc.						
Issued Date		2005/04/21		Deciphered Date		2006/09/01		Title				
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY 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.								Size		SCHEMATIC, M/B LA-2891		Rev A
								Custom		401376		
D		E		F		Date: ~P 閏 五月 24, 2005		Sheet 20		of 49		



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2005/04/21	Deciphered Date	2006/09/01	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.				SCHEMATIC, M/B LA-2891	
Size	Document Number	Rev		A	
Custom	401376				
Date:	~P 星期二, 五月 24, 2005	Sheet	21	of	49



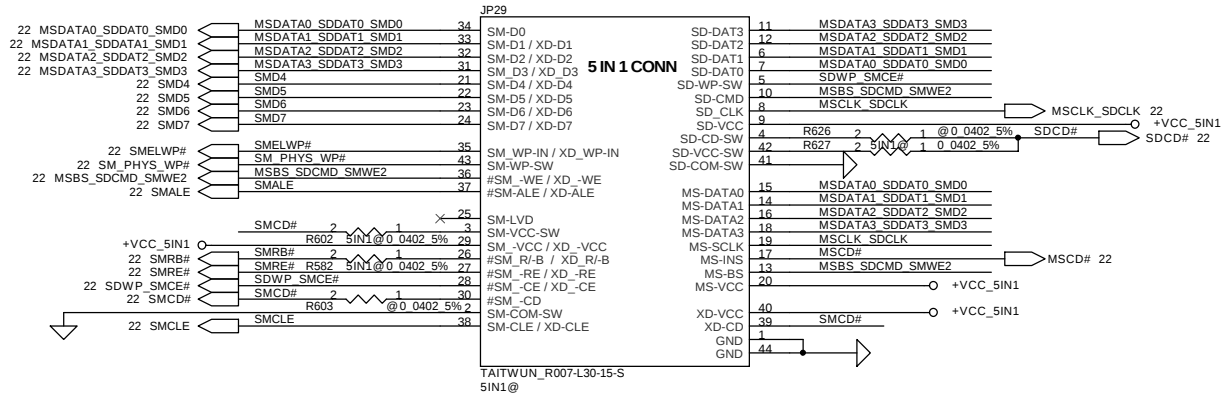
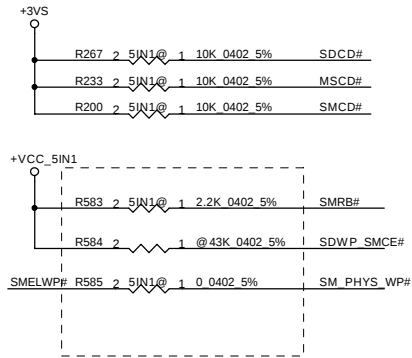
PCI7411



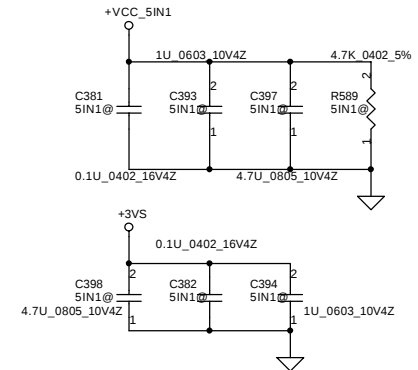
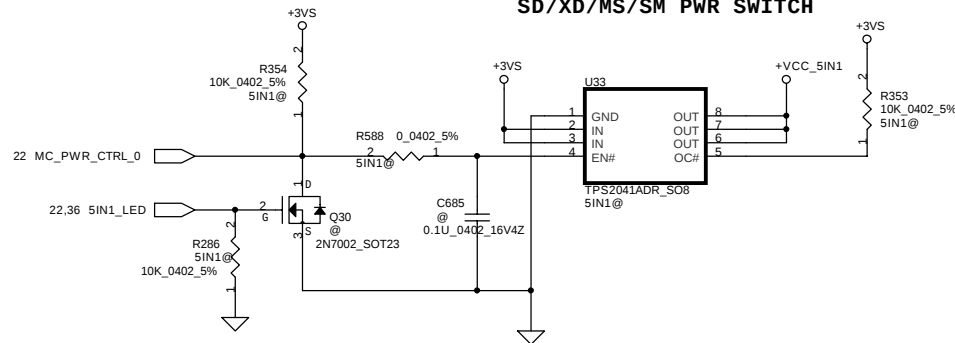
LED R MAY CHANGE TO 1500HM

Security Classification		Compal Secret Data		Title	
Issued Date		Deciphered Date		2006/09/01	
2005/04/21		2006/09/01		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.		Size		Document Number	
		Custom		401376	
Date:		~P 册二, 五月 24, 2005		Sheet 22 of 49	

5 in 1 CardReader Conn.



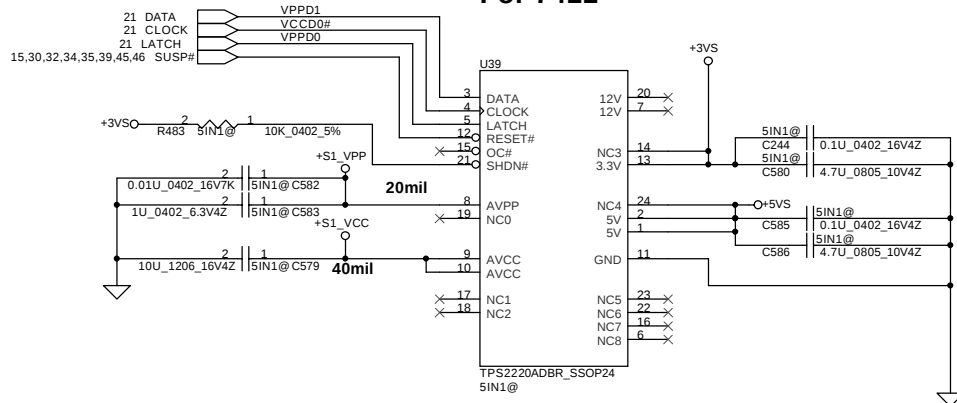
SD/XD/MS/SM PWR SWITCH



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2005/04/21	Deciphered Date	2006/09/01	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.				SCHEMATIC, M/B LA-2891	
Size	Custom	Document Number	401376	Rev	A
Date:	~P 五月 24, 2005		Sheet	23	of 49

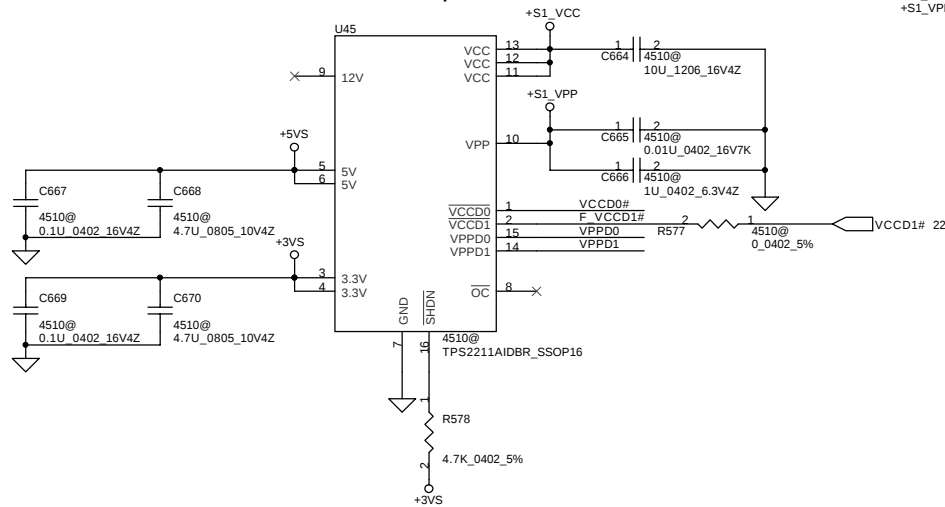
Power Switch for PCMCIA

For 7411

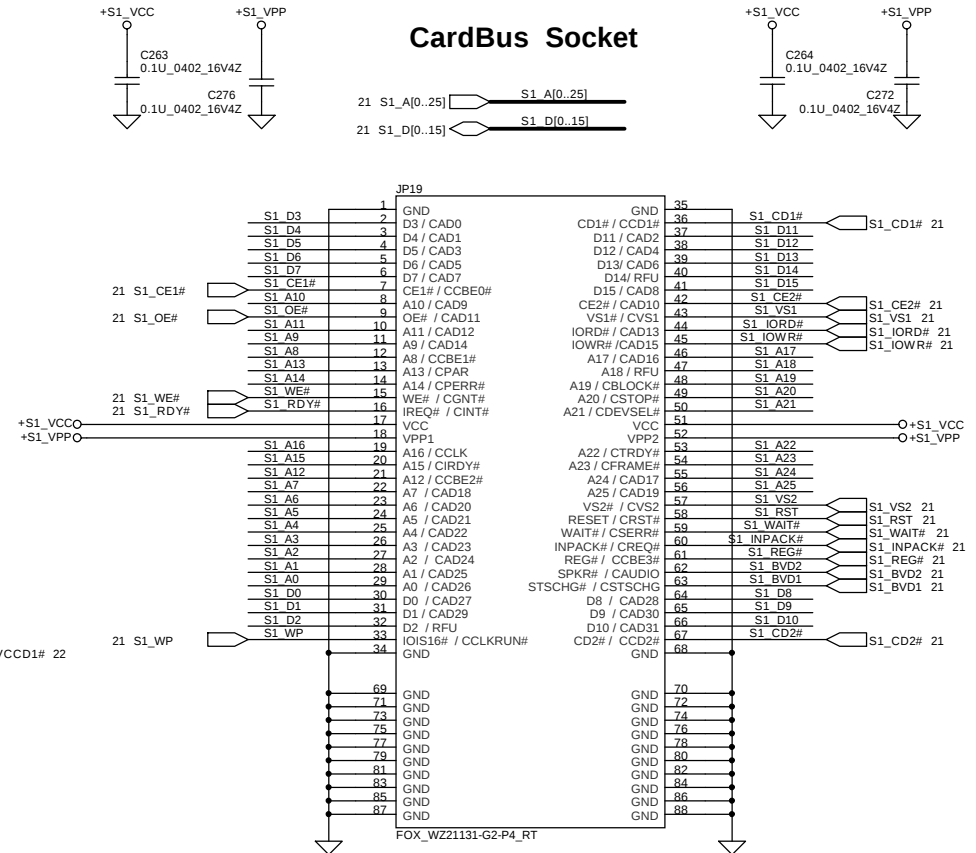


For 4510

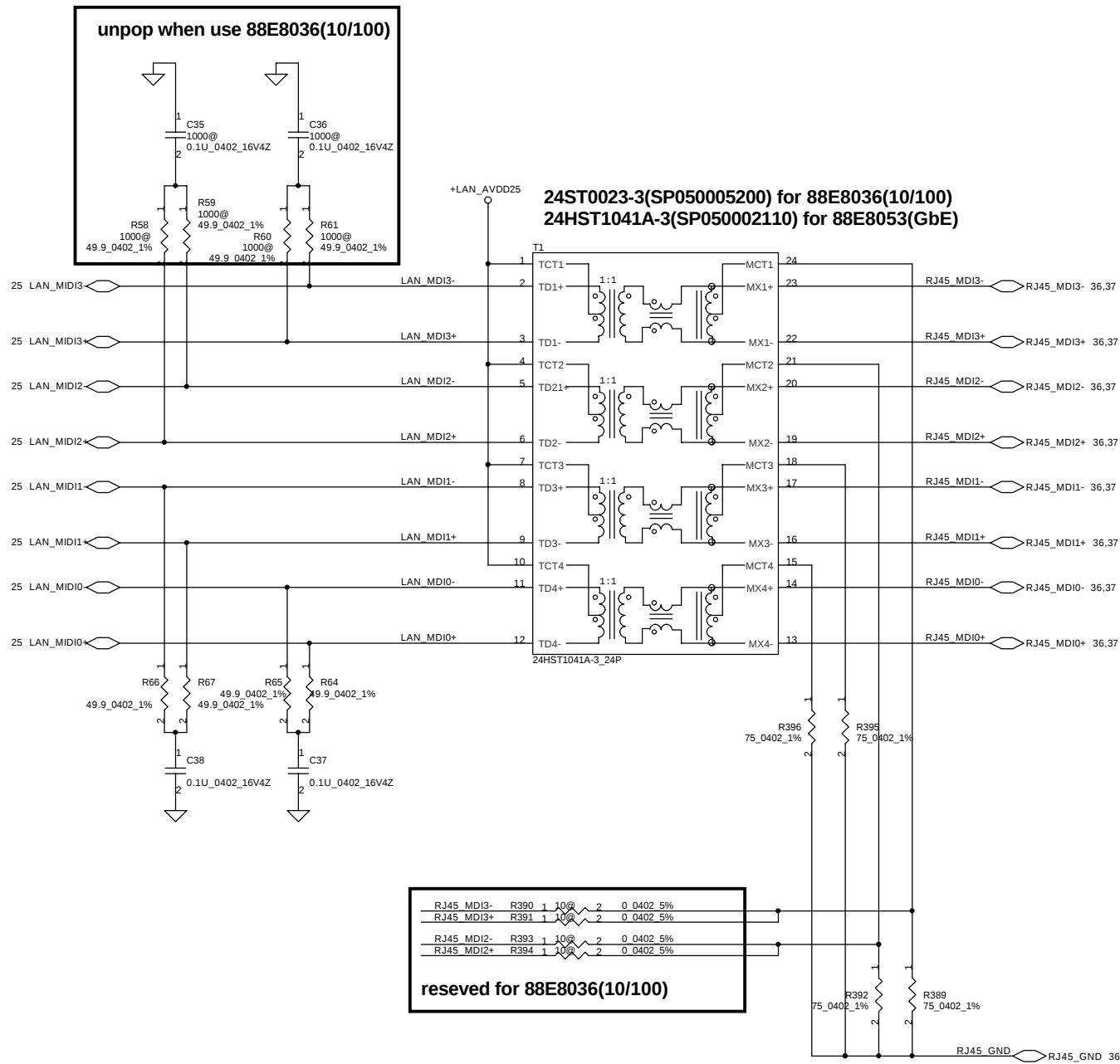
use U4 footprint



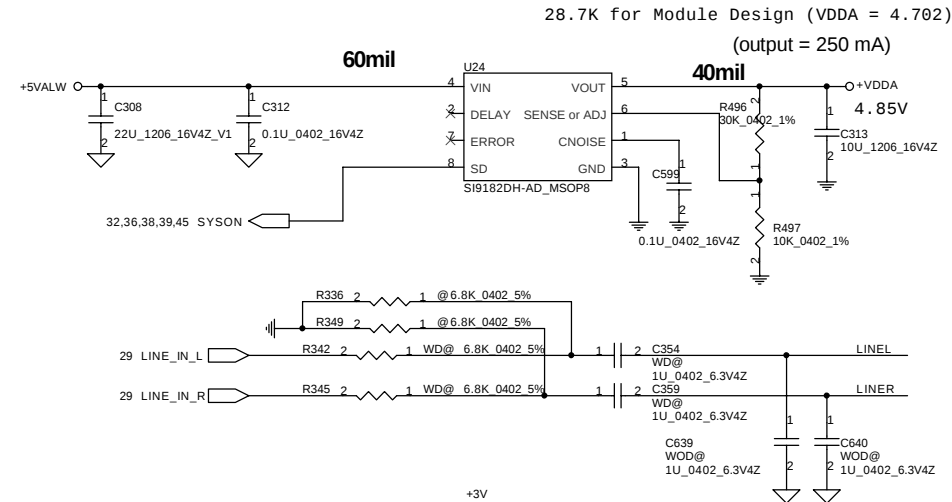
CardBus Socket



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2005/04/21	Deciphered Date	2006/09/01	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.				SCHEMATIC, M/B LA-2891	
Size	Document Number	401376		Rev	
Custom				A	
Date:	~P 聯二, 五月 24, 2005	Sheet	24	of	49

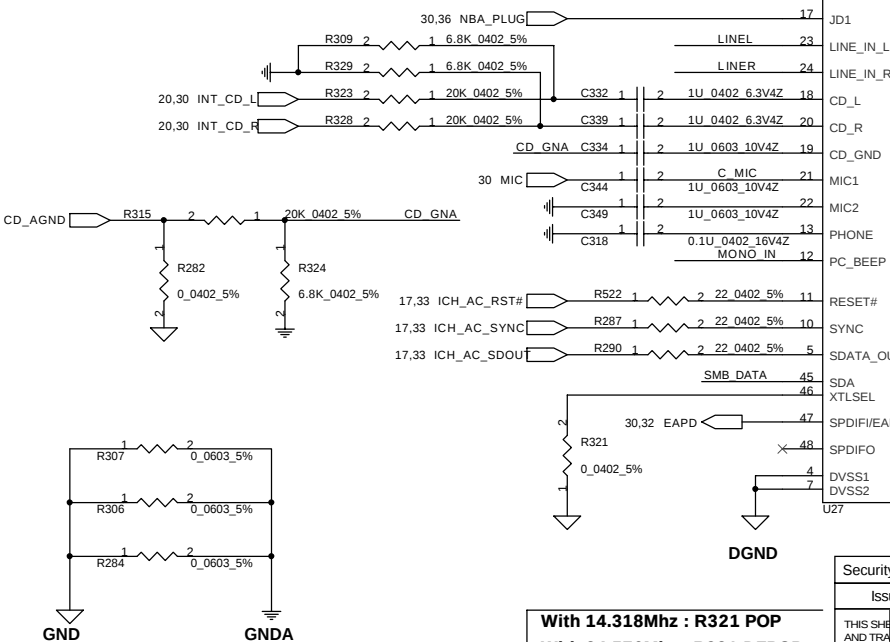


Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2005/04/21	Deciphered Date	2006/09/01	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				SCHEMATIC, M/B LA-2891	
Size	Custom	Document Number	401376	Rev	A
Date:	~P 周二, 五月 24, 2005		Sheet	26	of 49

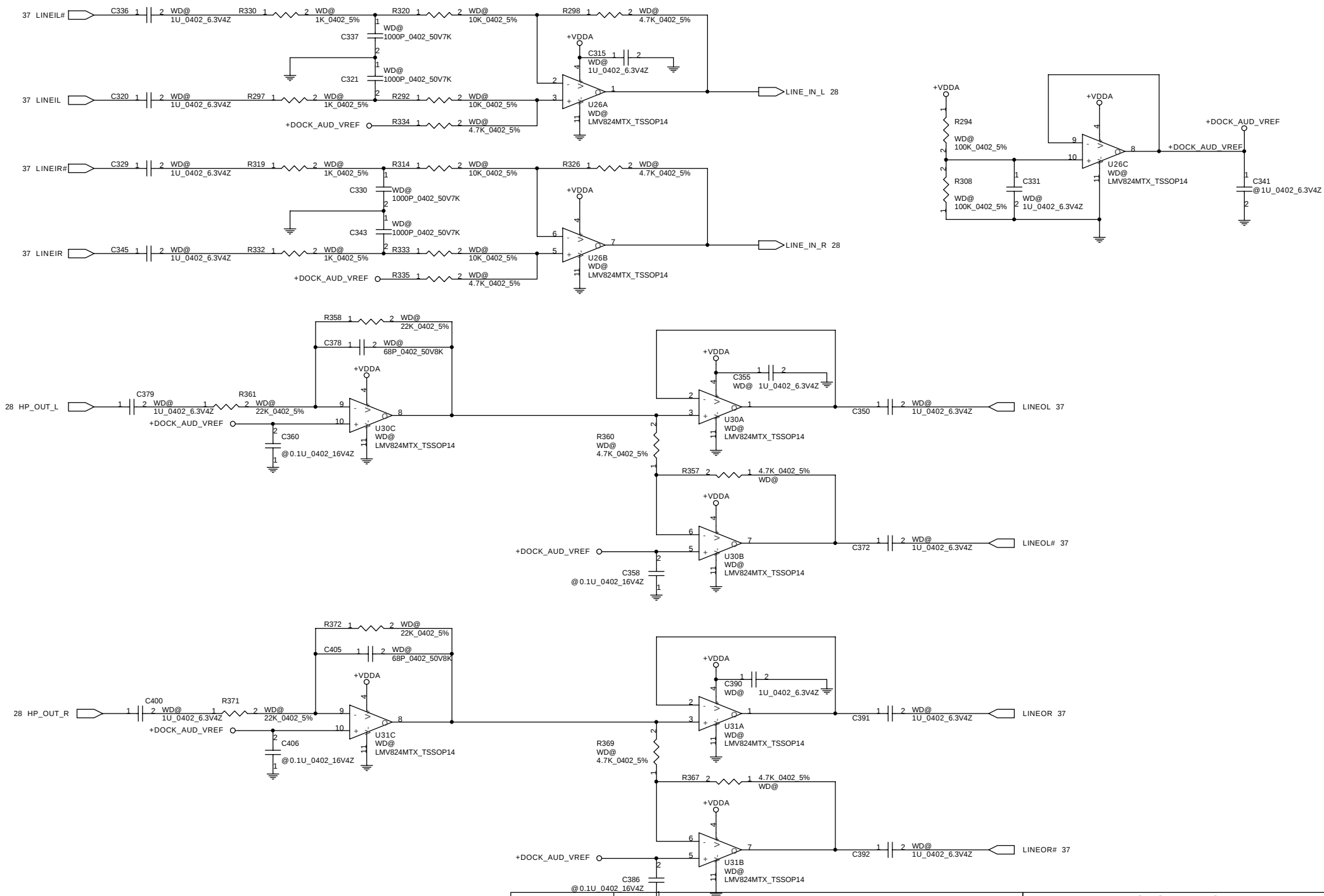


The schematic diagram illustrates the electrical connections for the ALC250-VD_LQFP48 audio codec. The package pins are listed on the left, and their corresponding connections to external components are shown on the right. Key components include:

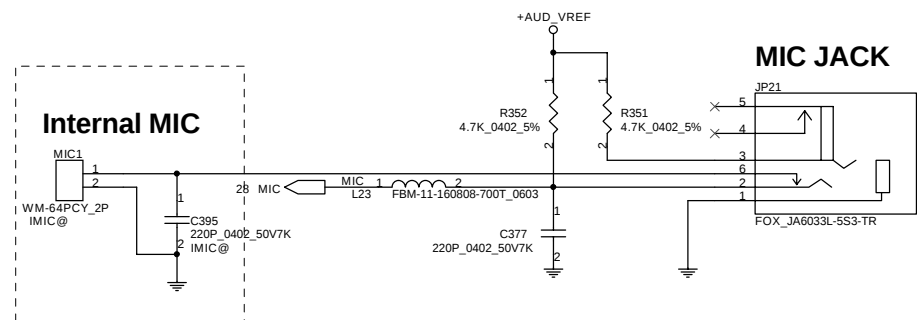
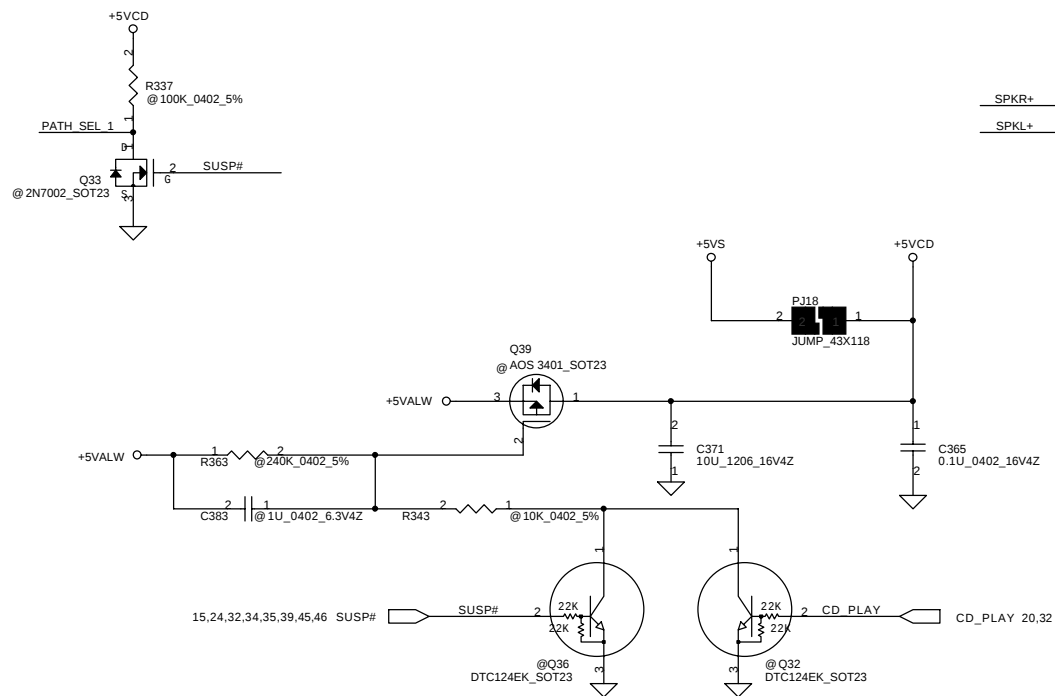
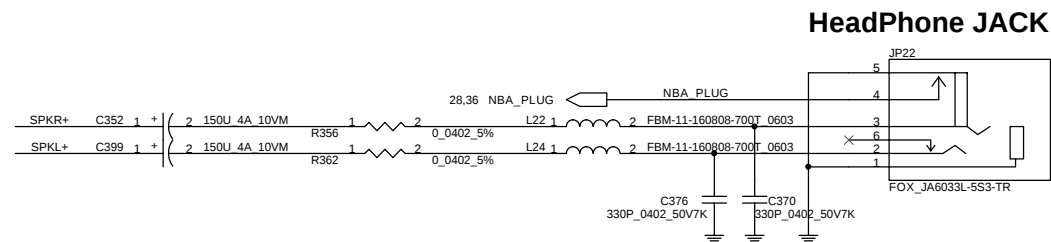
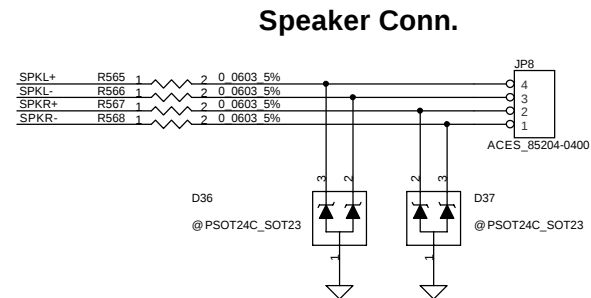
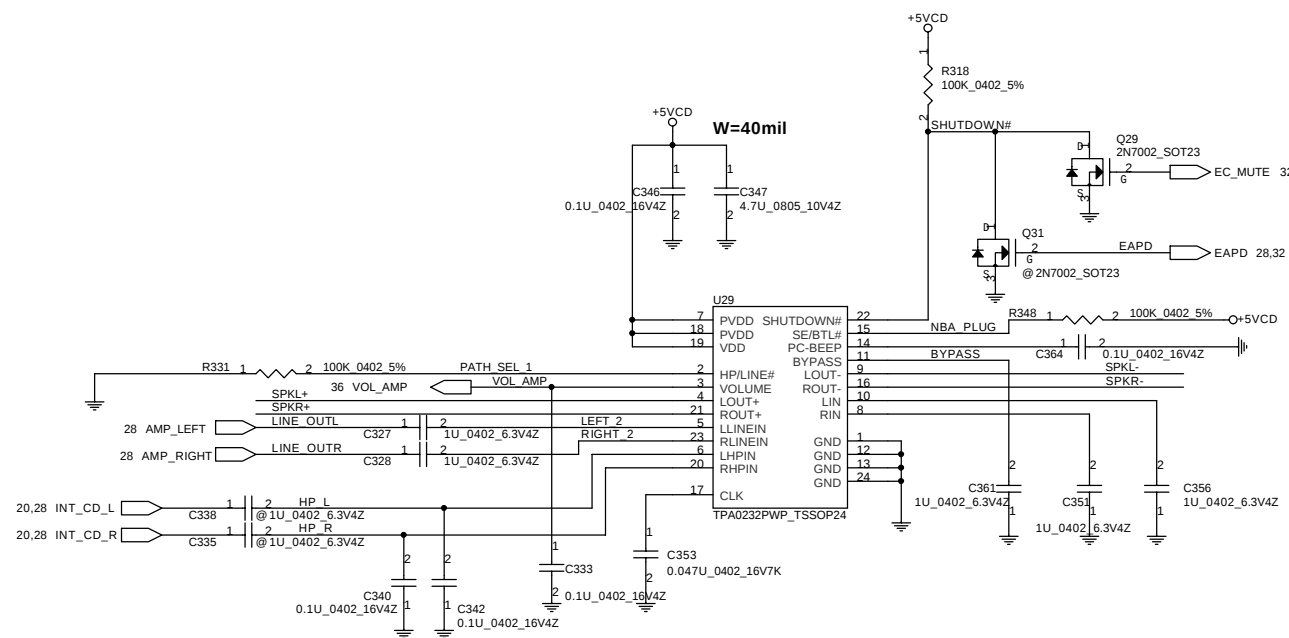
- Power and Ground:** AVDD1, AVDD2, DVDD1, DVDD2, and AGND are connected to the package pins. AVDD1 and AVDD2 are connected to a common AVDD1_AC97 line. DVDD1 and DVDD2 are connected to a common DVDD line. AGND is connected to the package ground.
- Audio Signals:** LINE_OUT_L, LINE_OUT_R, HP_OUT_L, HP_OUT_R, and MIC1 are connected to the package pins. LINE_OUT_L and LINE_OUT_R are connected to AMP_LEFT and AMP_RIGHT. HP_OUT_L and HP_OUT_R are connected to HP_OUT_L and HP_OUT_R. MIC1 is connected to MIC1.
- Control and Data:** BIT_CLK, SDATA_IN, XTL_IN, XTL_OUT, VREF, DCVOL, SDA, XTSEL, SPDIF/EAPD, and SCK are connected to the package pins. BIT_CLK is connected to ICH_AC_BITCLK. SDATA_IN is connected to ICH_AC_SDIN0. XTL_IN is connected to XTL_IN. XTL_OUT is connected to XTL_OUT. VREF is connected to VREF. DCVOL is connected to DCVOL. SDA is connected to SDA. XTSEL is connected to XTSEL. SPDIF/EAPD is connected to SPDIF/EAPD. SCK is connected to SCK.
- External Components:** Various capacitors (C316, C317, C314, C373, C388, C610, C611, C367, C389, C612, C641, R523, R524, R525, R526) and resistors (R289, R288, R521, R539, R540, R542, R526) are used for timing, filtering, and signal conditioning. Transistors Q58 and Q59 are used for level shifting or buffering. A 14MHz clock source (CLK_14M_CODEC) is connected to the XTL_IN pin.



Security Classification		Compal Secret Data		Compal Electronics, Inc. SCHEMATIC, M/B LA-2891	
Issued Date	2005/04/21	Deciphered Date	2006/09/01	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.				Size	Document Number
				Customer	401376
				Date:	~P購二, 五月 24, 2005
				Sheet	28 of 49

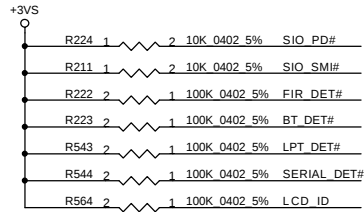


Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2005/04/21	Deciphered Date	2006/09/01	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				SCHEMATIC, M/B LA-2891	
Size	Custom	Document Number	401376	Rev	
Date:		~P 周二, 五月 24, 2005		Sheet	29 of 49

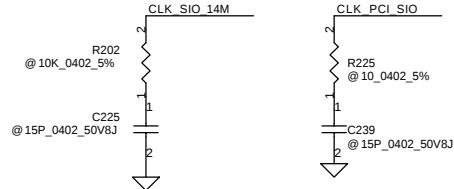
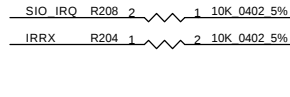


Security Classification		Compal Secret Data		Compal Electronics, Inc. SCHEMATIC, M/B LA-2891	
Issued Date	2005/04/21	Deciphered Date	2006/09/01	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS 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.				Size	Document Number
				B	401376
				Date:	-P 期二, 五月 24, 2005
				Sheet	30 of 49

SUPER I/O SMsC LPC47N217

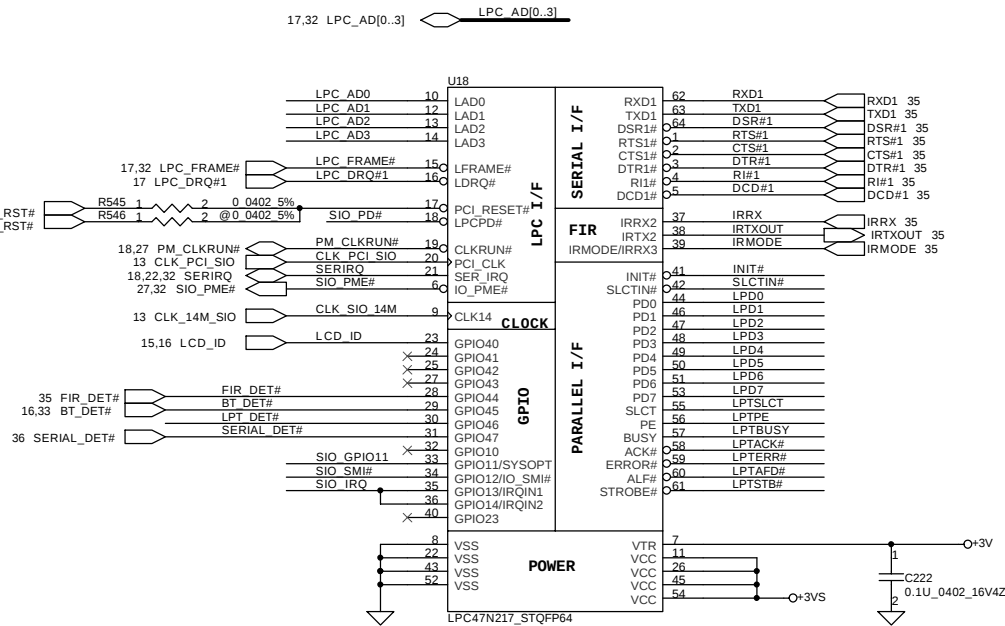
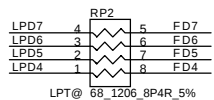
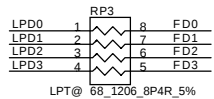
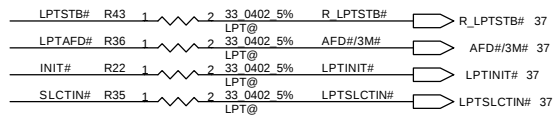


```
LCD ID : High -- EDID
        Low  -- Panel ID
```



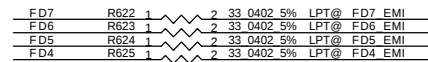
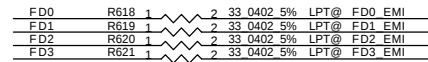
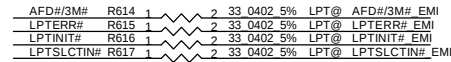
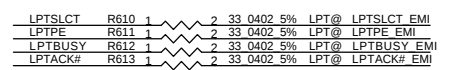
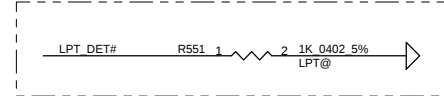
No Docking and Parallel Port ----->Del

Close to Docking

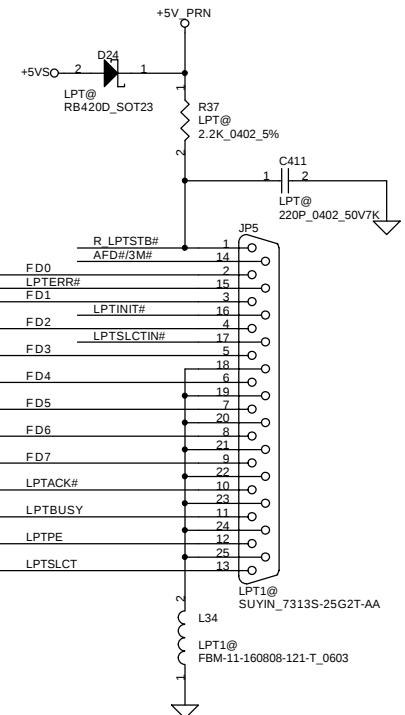
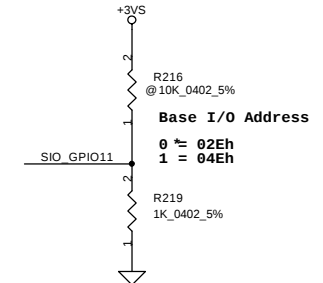
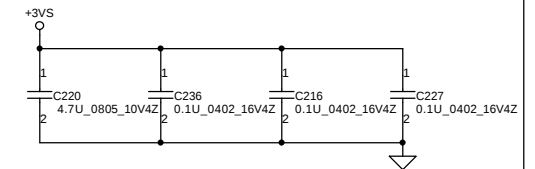
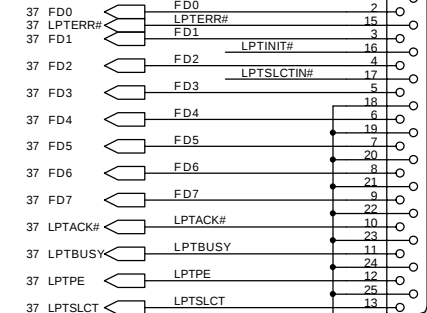
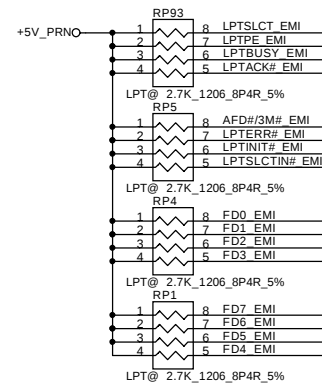


Parallel Port

LPT Module L: R POP LPT Enable
 H: R De-POP LPT Disable



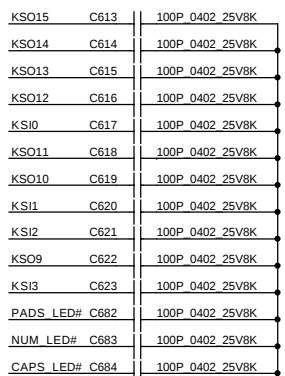
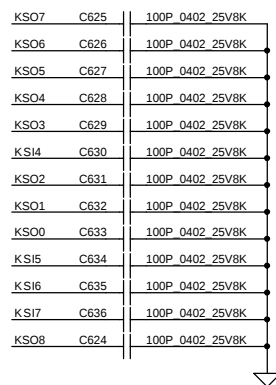
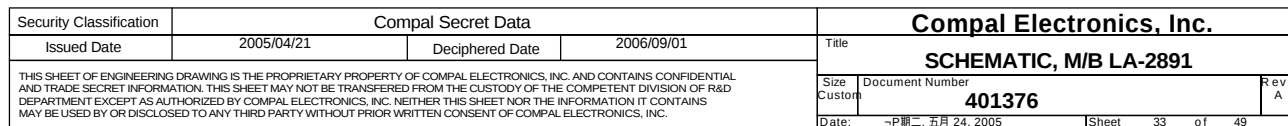
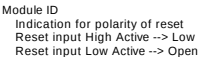
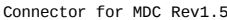
EMI Request for LPT ISSUE



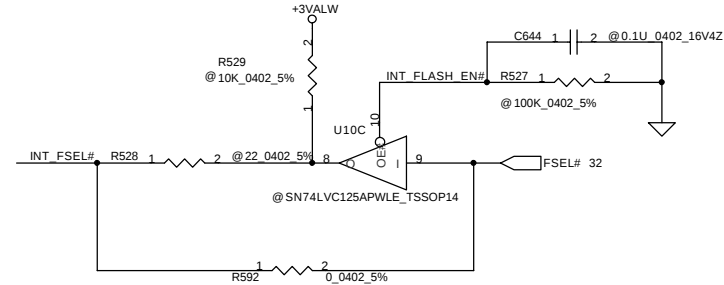
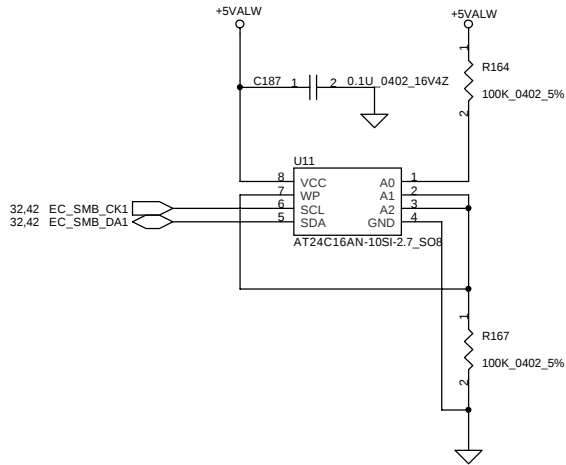
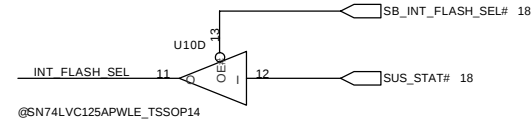
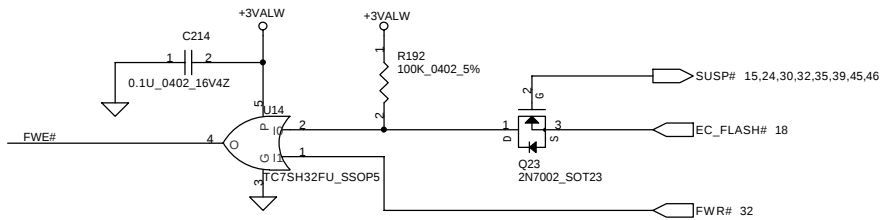
Security Classification		Compal Secret Data		Compal Electronics, Inc.			
Issued Date	2005/04/21	Deciphered Date	2006/09/01	Title SCHEMATIC, M/B LA-2891			
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. 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	401376	A	
				Date:	~P 陽二, 五月 24, 2005	Sheet	31 of 49



MDC CONN.



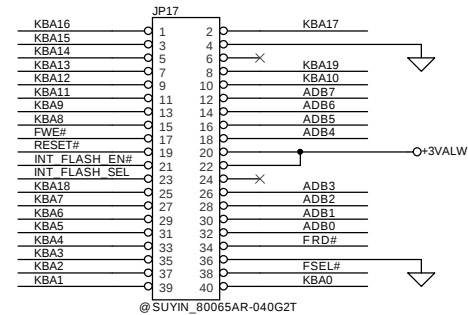
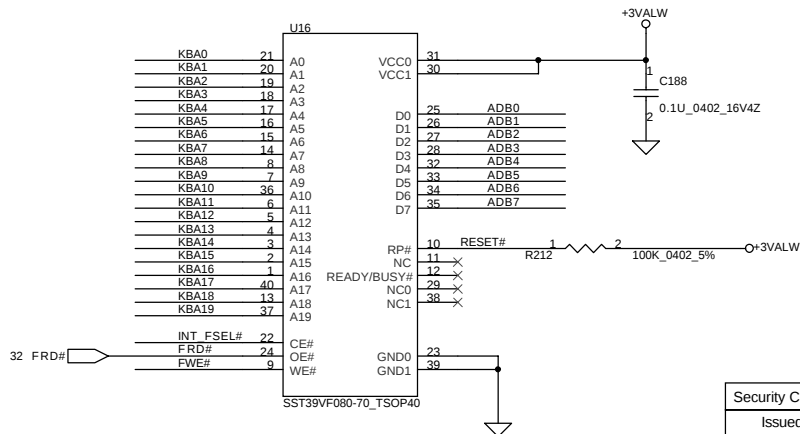
Security Classification		Compal Secret Data		Compal Electronics, Inc.		
Issued Date	2005/04/21	Deciphered Date	2006/09/01	Title		
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				SCHEMATIC, M/B LA-2891		
				Size	Document Number	Rev
				Cust	401376	A
Date:				Date: 二〇〇六年五月二十四日 2005		
				Sheet 33 of 49		



32 KBA[0..19] KBA[0..19]
32 ADB[0..7] ADB[0..7]

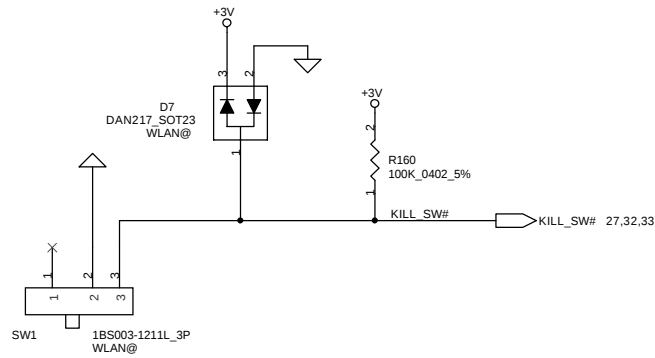
1MB ROM Socket

1MB Flash ROM

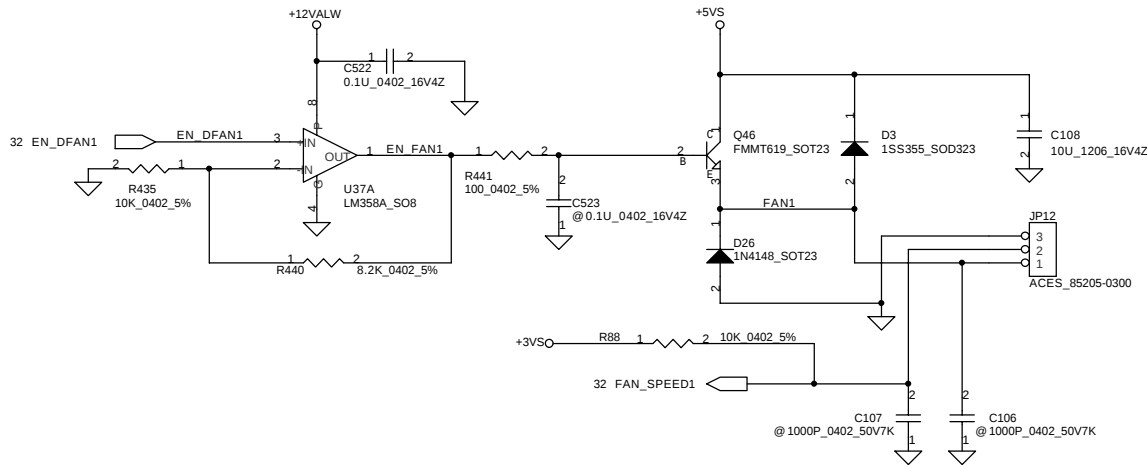


Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2005/04/21	Deciphered Date	2006/09/01	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				SCHEMATIC, M/B LA-2891	
Size	Custom	Document Number	401376	Rev	A
Date:	~P期二, 五月 24, 2005	Sheet	34	of	49

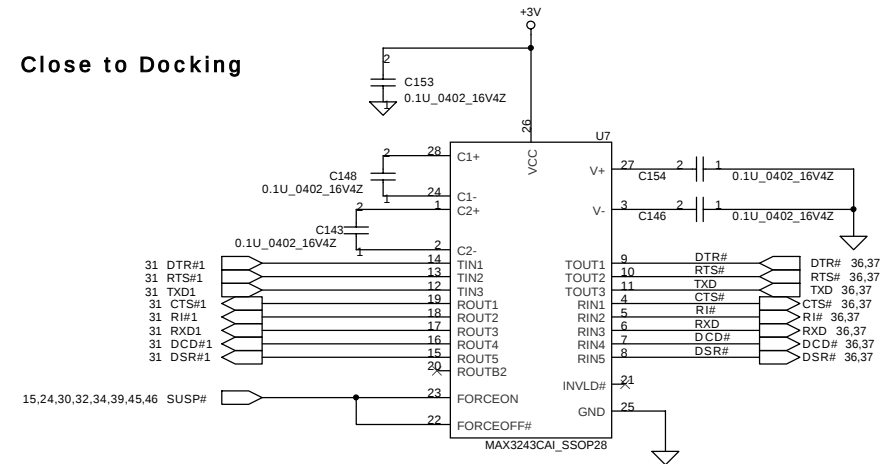
Kill SWITCH



FAN Conn



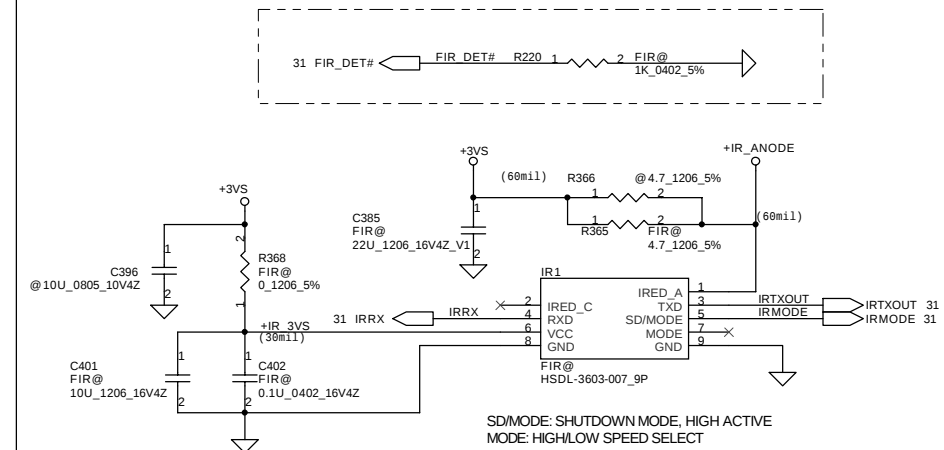
Close to Docking



No Docking and Serial Port -----> Del
But Sakhir 20C has Docking always -----> Keep

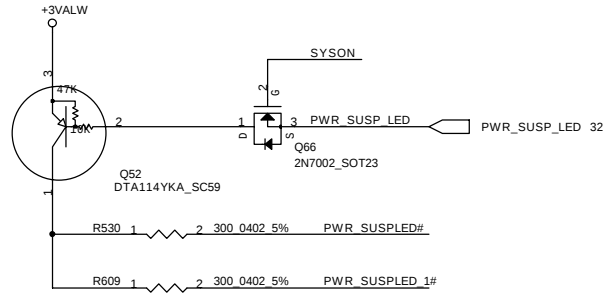
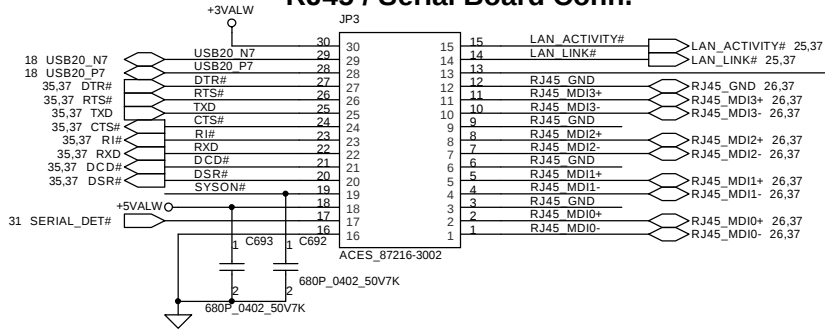
FIR Module

L: R POP; FIR Enable
H: R De-POP; FIR Disable

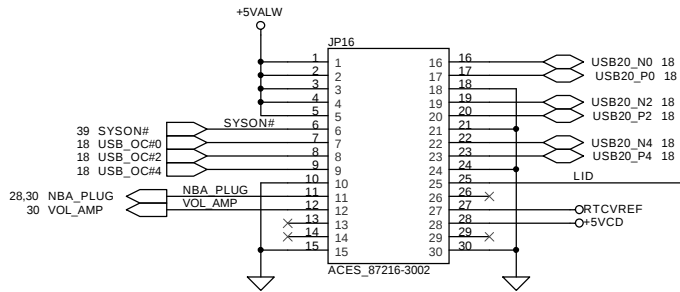


Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2005/04/21	Deciphered Date	2006/09/01	Title
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				SCHEMATIC, M/B LA-2891
Size Custom	Document Number	401376		Rev A
Date:	~P期二, 五月 24, 2005	Sheet	35 of 49	

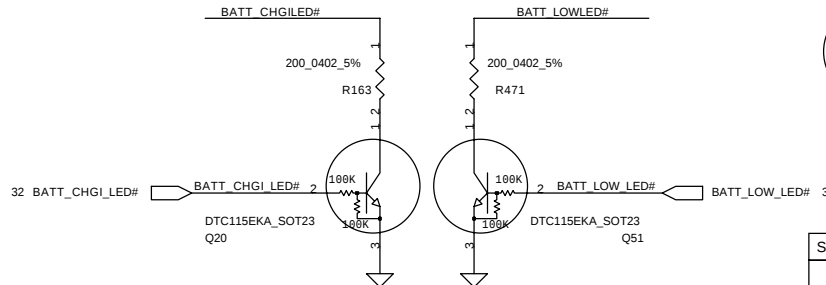
RJ45 / Serial Board Conn.



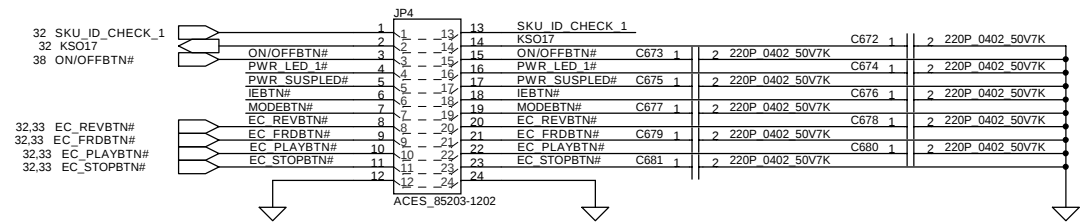
USB Board Conn.



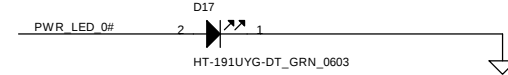
BATTERY CHGI/LOW LED



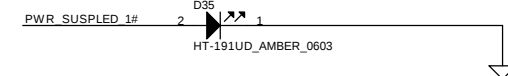
Power / LED Board Conn.



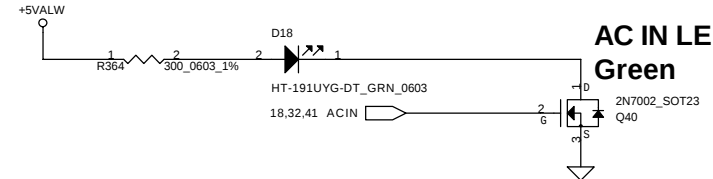
POWER/ON LED
Green



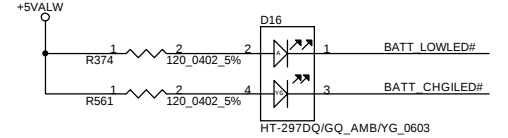
POWER/SUSP LED
Amber



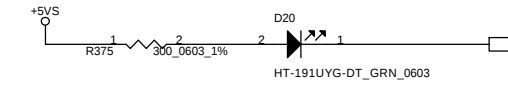
AC IN LED
Green



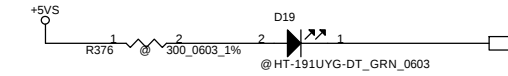
BATTERY CHG
Green
Amber



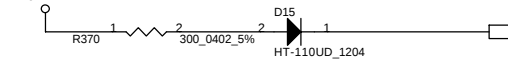
HDD LED
Green



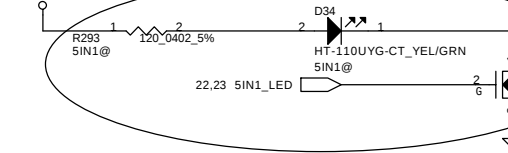
MODE LED
Green



**WL LED
Amber(Side)**

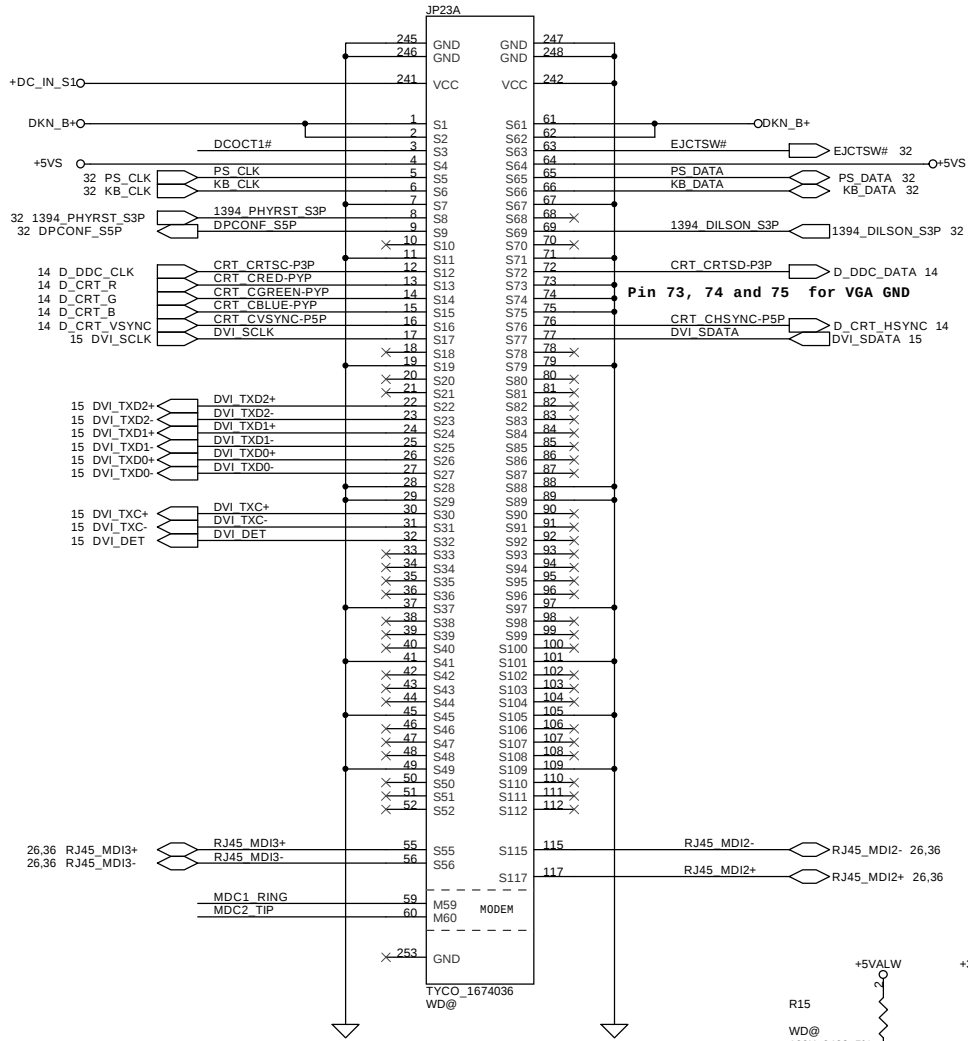


5IN1 LED
Green(Side)

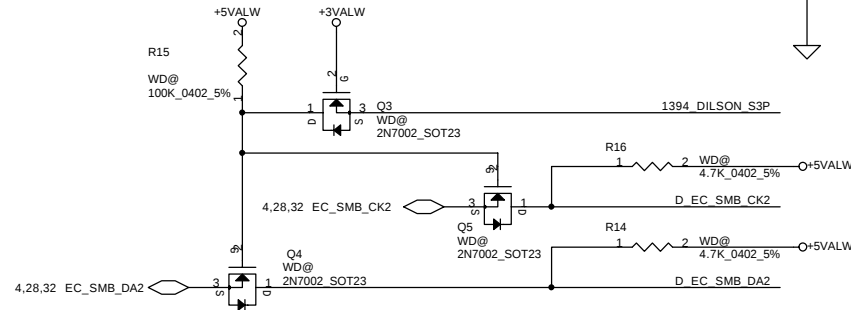
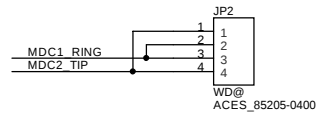


Security Classification		Compal Secret Data				Compal Electronics, Inc.					
Issued Date		2005/04/21		Deciphered Date		2006/09/01		Title			
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY 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.						SCHEMATIC, M/B LA-2891					
						Size		Document Number		Rev	
						Customer		401376		A	
						Date:		二〇〇六年五月二十四日		Sheet 36 of 49	

Docking Conn.

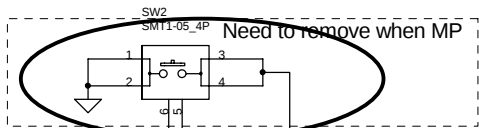


MDC to Docking Conn.



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2005/04/21	Deciphered Date	2006/09/01	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.				SCHEMATIC, M/B LA-2891	
Size	Custom	Document Number	401376	Rev	A
Date:	~P 周二, 五月 24, 2005	Sheet	37	of	49

Power Button

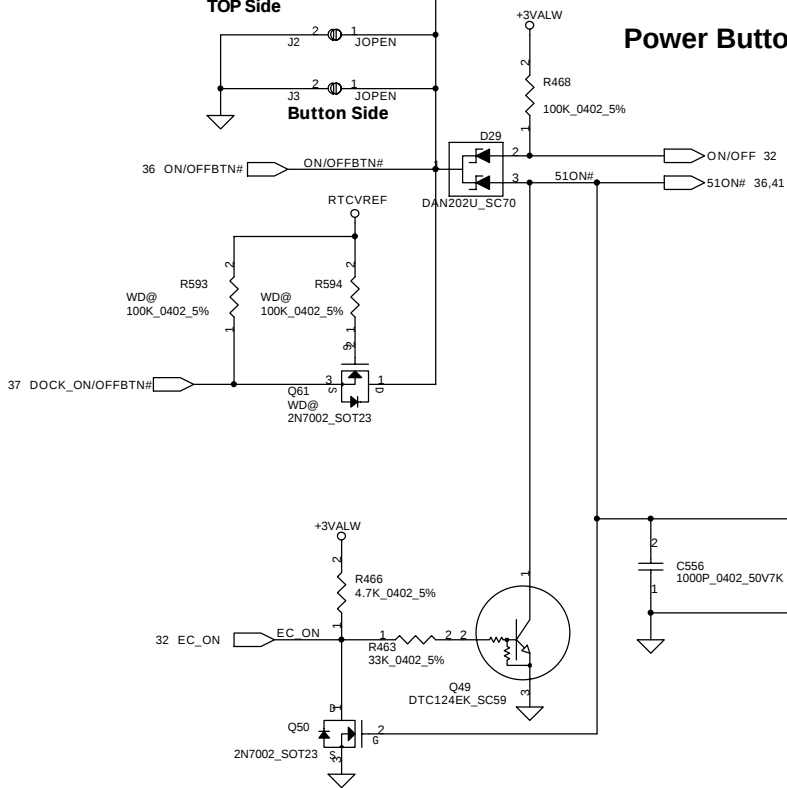
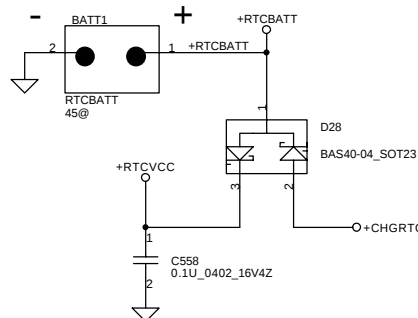


TOP Side

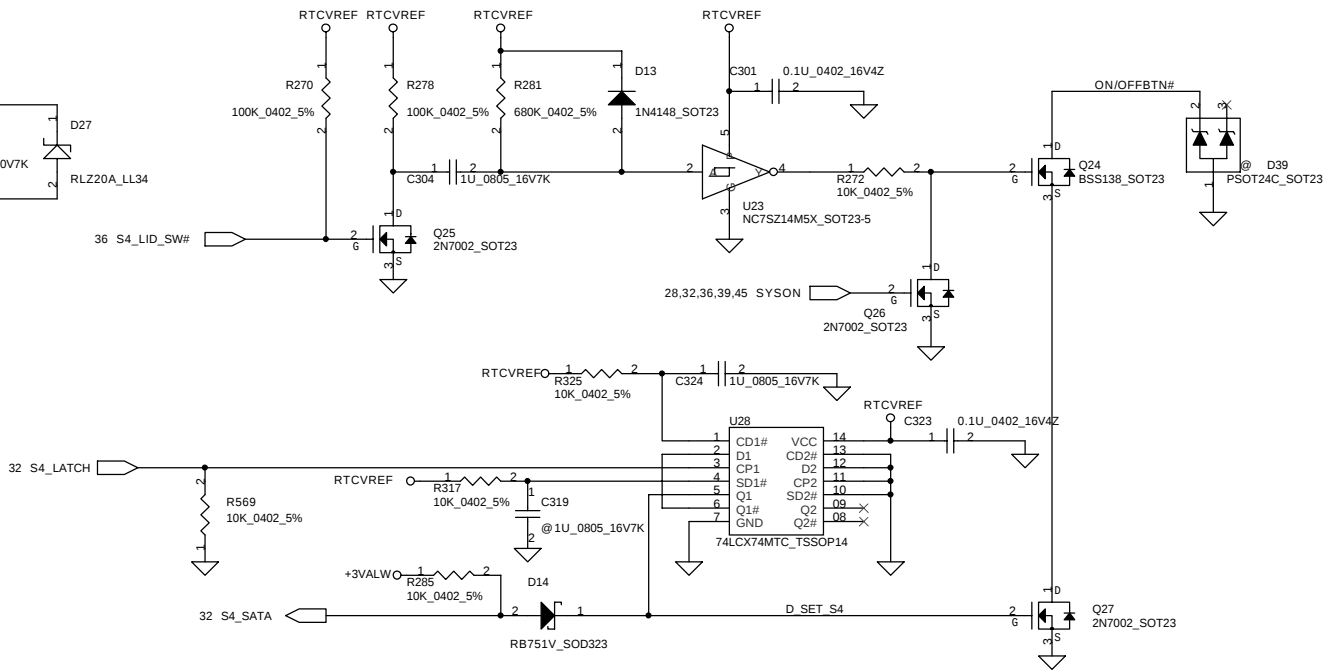
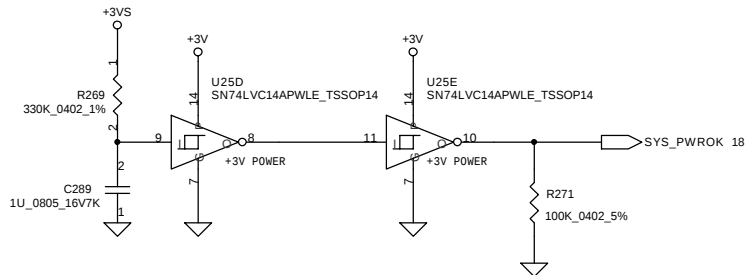
Button Side

Power Button

RTC Battery

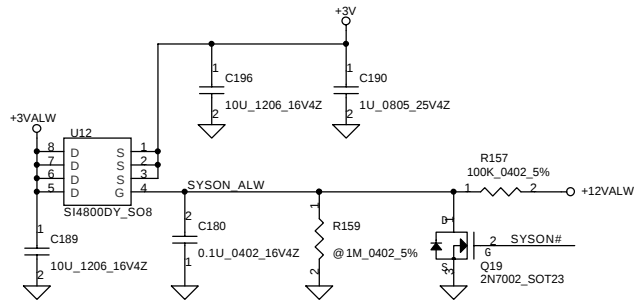


Power ON Circuit

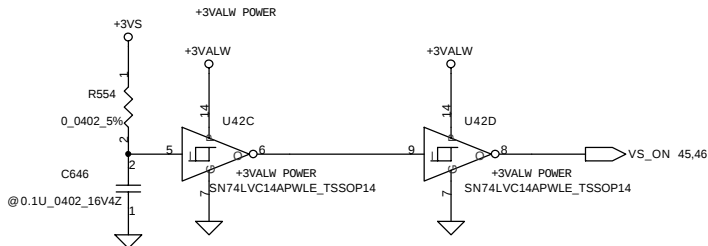
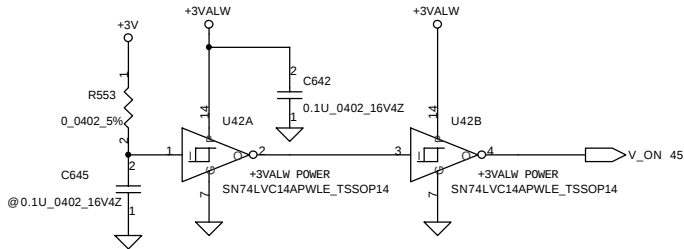
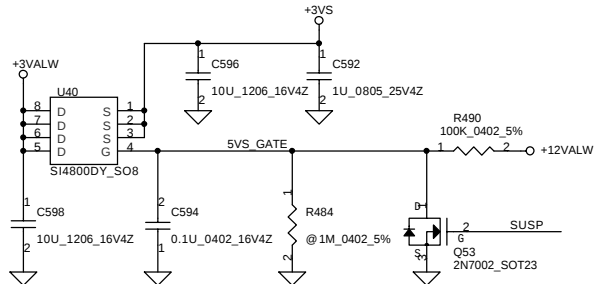


Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2005/04/21	Deciphered Date	2006/09/01	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				Size	Document Number
				B	401376
				Date:	Rev A
				~P 周二, 五月 24, 2005	Sheet 38 of 49

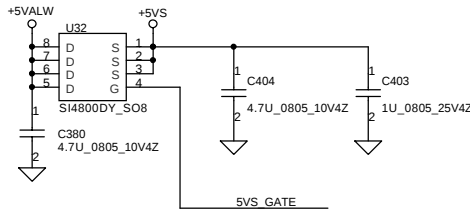
+3VALW TO +3V



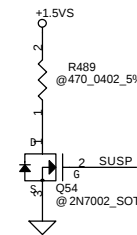
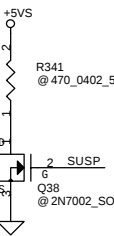
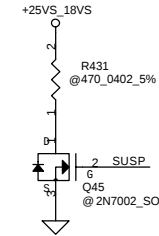
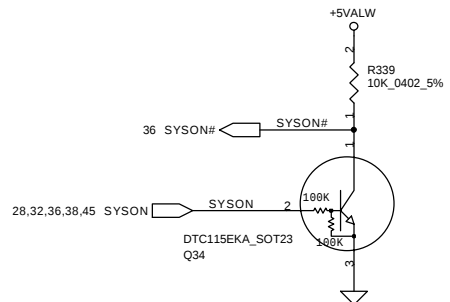
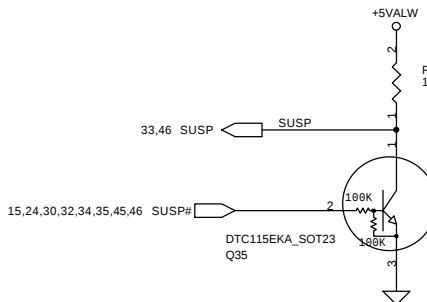
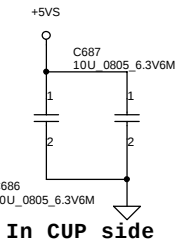
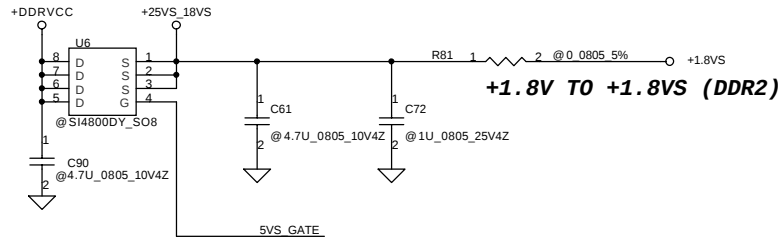
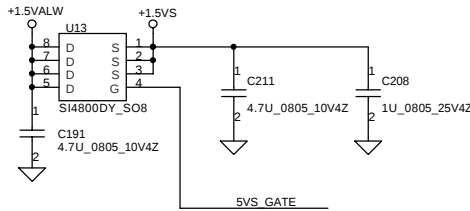
+3VALW TO +3VS



+5VALW TO +5VS

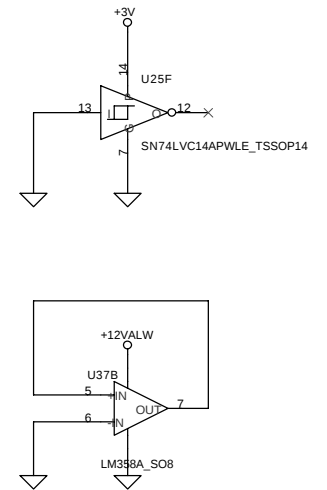
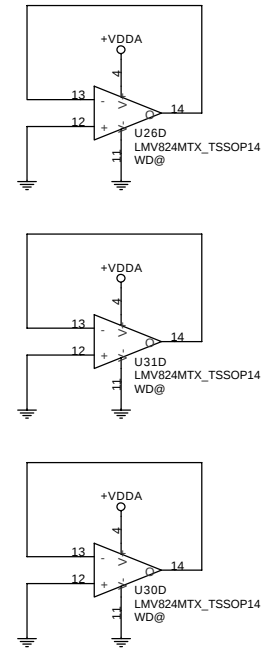
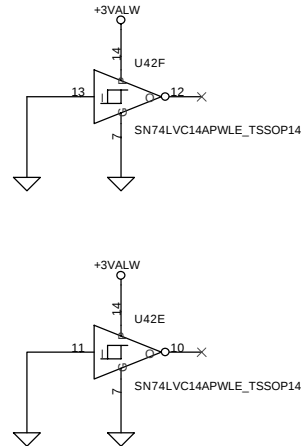
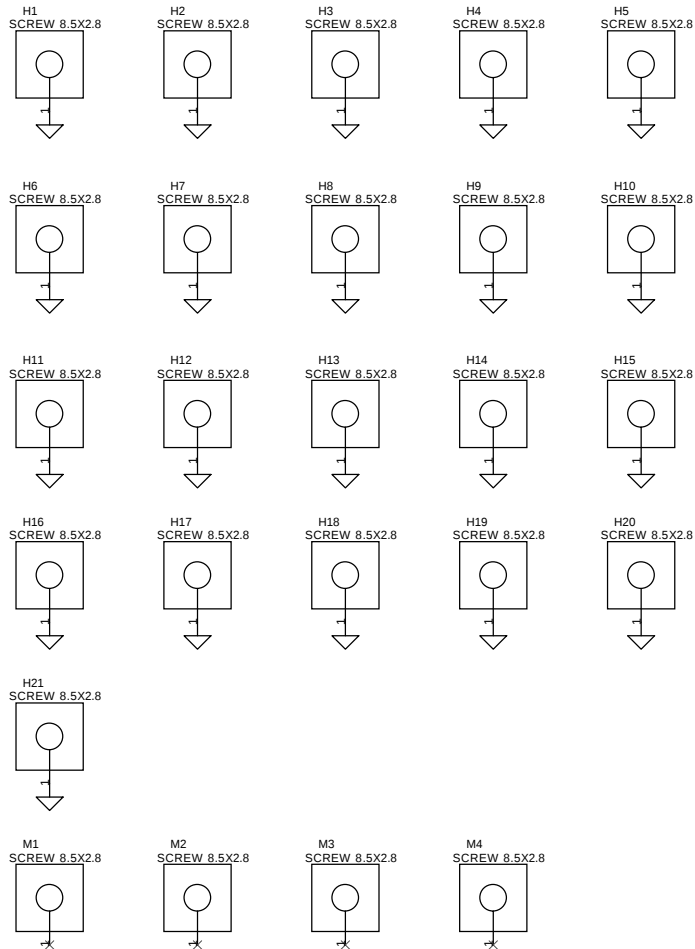
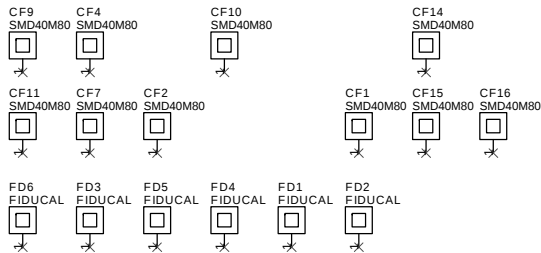


+1.5VALW TO +1.5VS

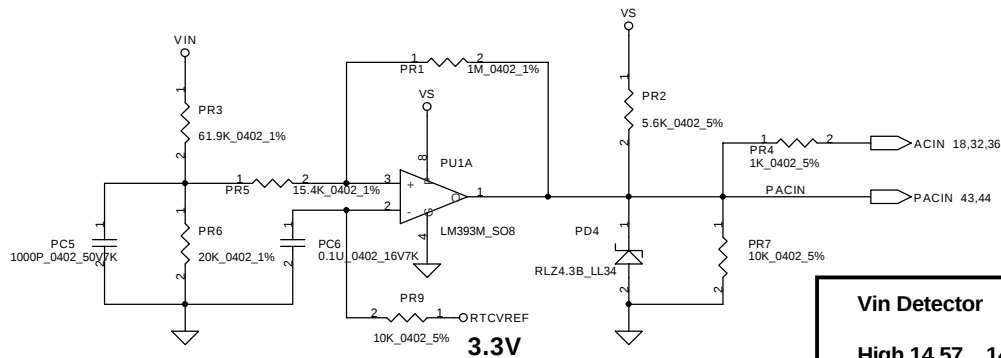
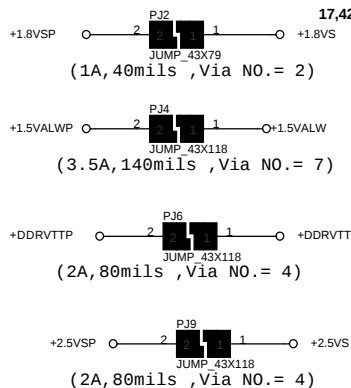
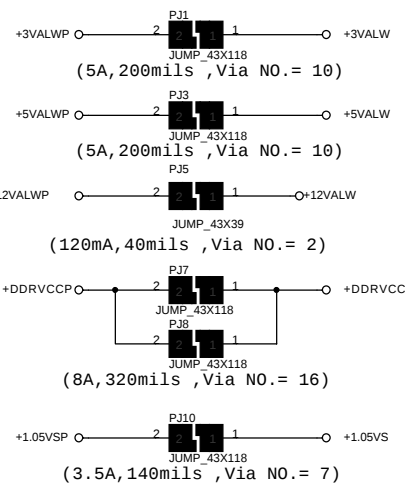
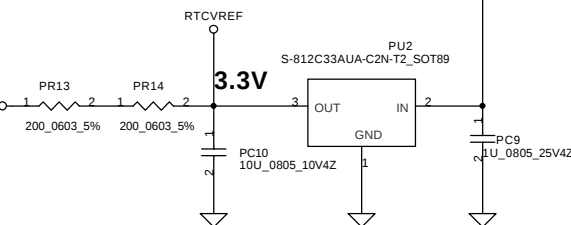
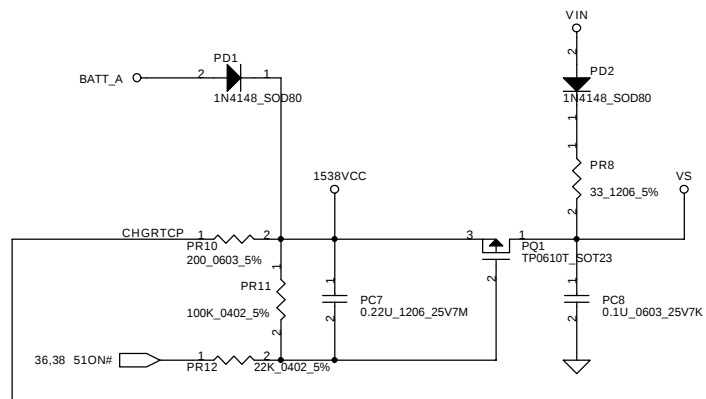
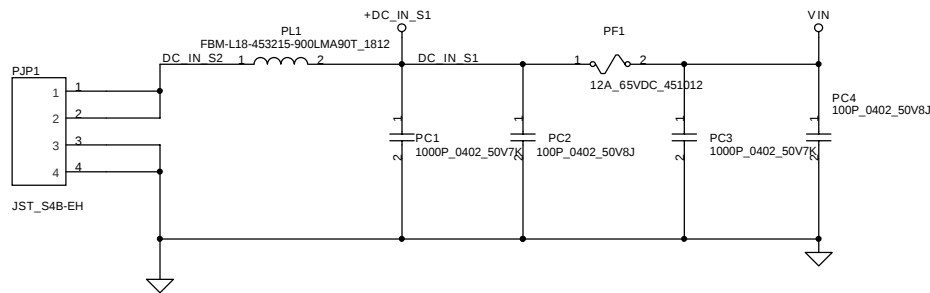


In CUP side

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2005/04/21	Deciphered Date	2006/09/01	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.				SCHEMATIC, M/B LA-2891	
Size	Document Number	401376		Rev	
Date:	~P 周二, 五月 24, 2005	Sheet		39 of 49	

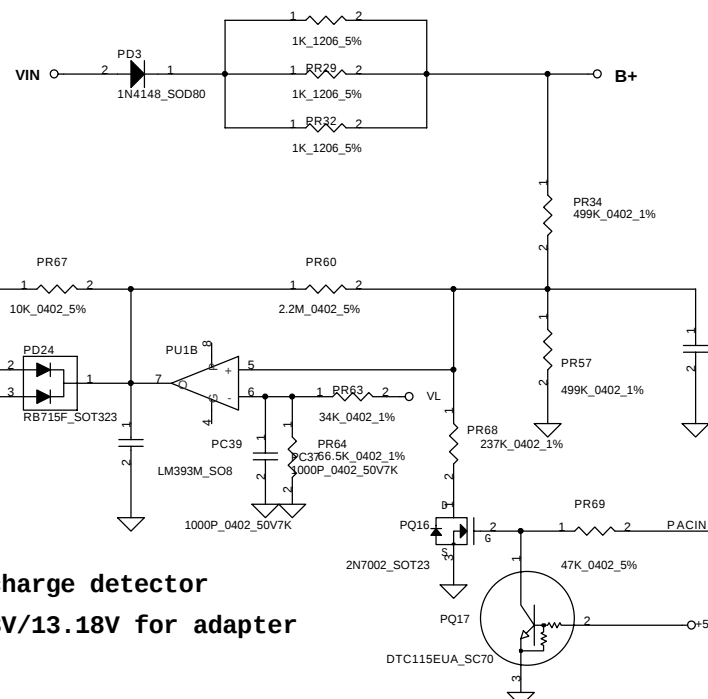


Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2005/04/21	Deciphered Date	2006/09/01	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				SCHEMATIC, M/B LA-2891	
Size	Document Number	Rev		Date	
Custom	401376	A		~P 周二, 五月 24, 2005	
Sheet		40		of 49	



Vin Detector

High 14.57 14.01 13.46
Low 14.06 13.51 12.98

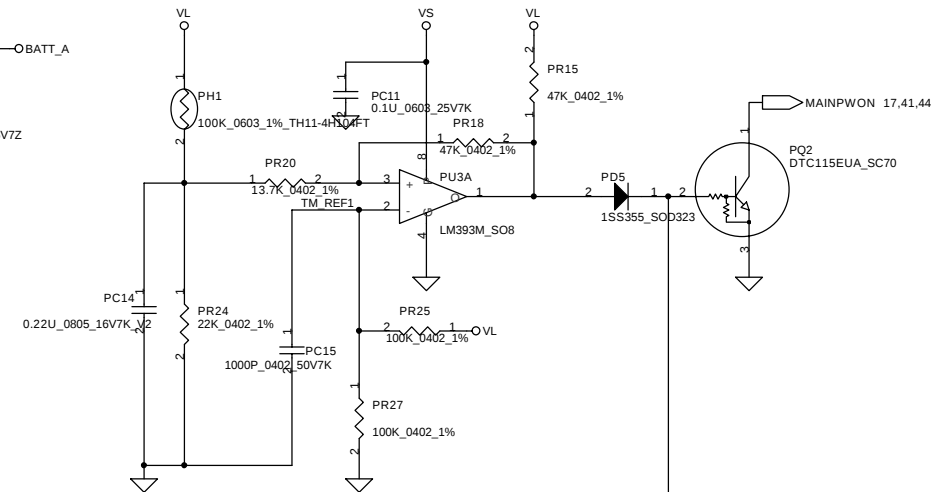
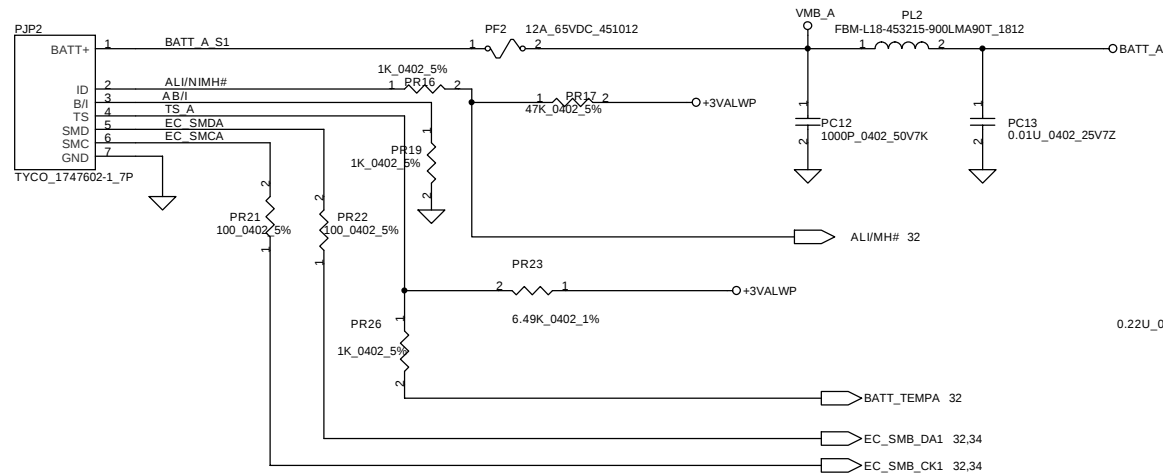


Precharge detector

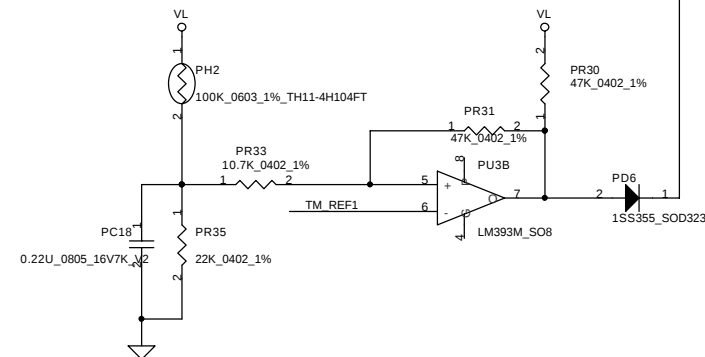
14.3V/13.18V for adapter

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2005/04/21	Deciphered Date	2006/09/01	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.				SCHEMATIC, M/B LA-2891	
Size B	Document Number	401376		A	Rev
Date:	星期二, 五月 24, 2005	Sheet	41	of	49

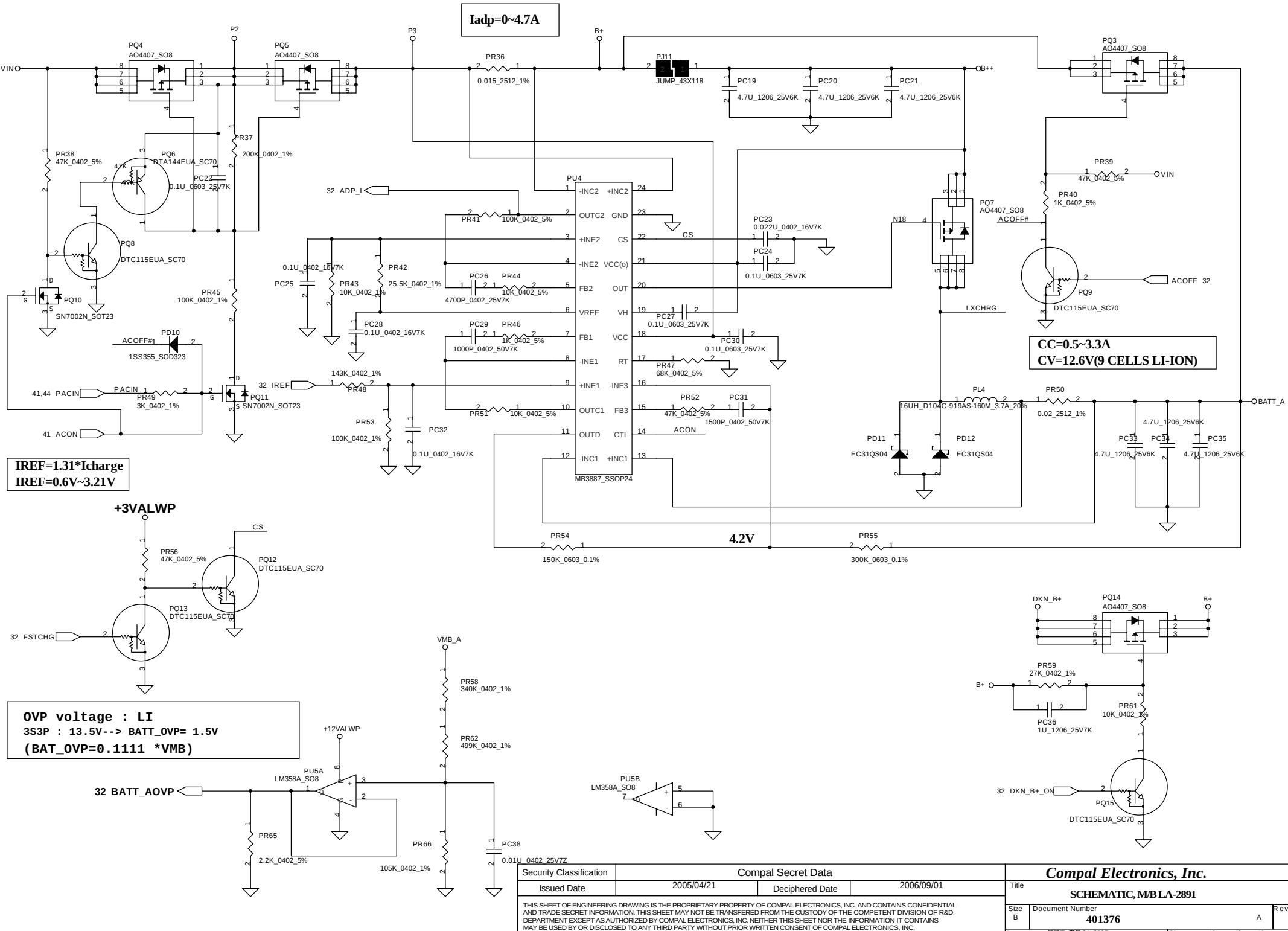
PH1 under CPU botten side :
CPU thermal protection at 84 degree C
Recovery at 45 degree C



PH2 near main Battery CONN :
BAT. thermal protection at 79 degree C
Recovery at 45 degree C



Security Classification		Compal Secret Data				Compal Electronics, Inc.									
Issued Date		2005/04/21		Deciphered Date		2006/09/01		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.								SCHEMATIC, M/B LA-2891							
								Size B	Document Number						Rev
									401376						
								Date:	星期二, 五月 24, 2005				Sheet	42	of



I_{adp}=0~4.7A

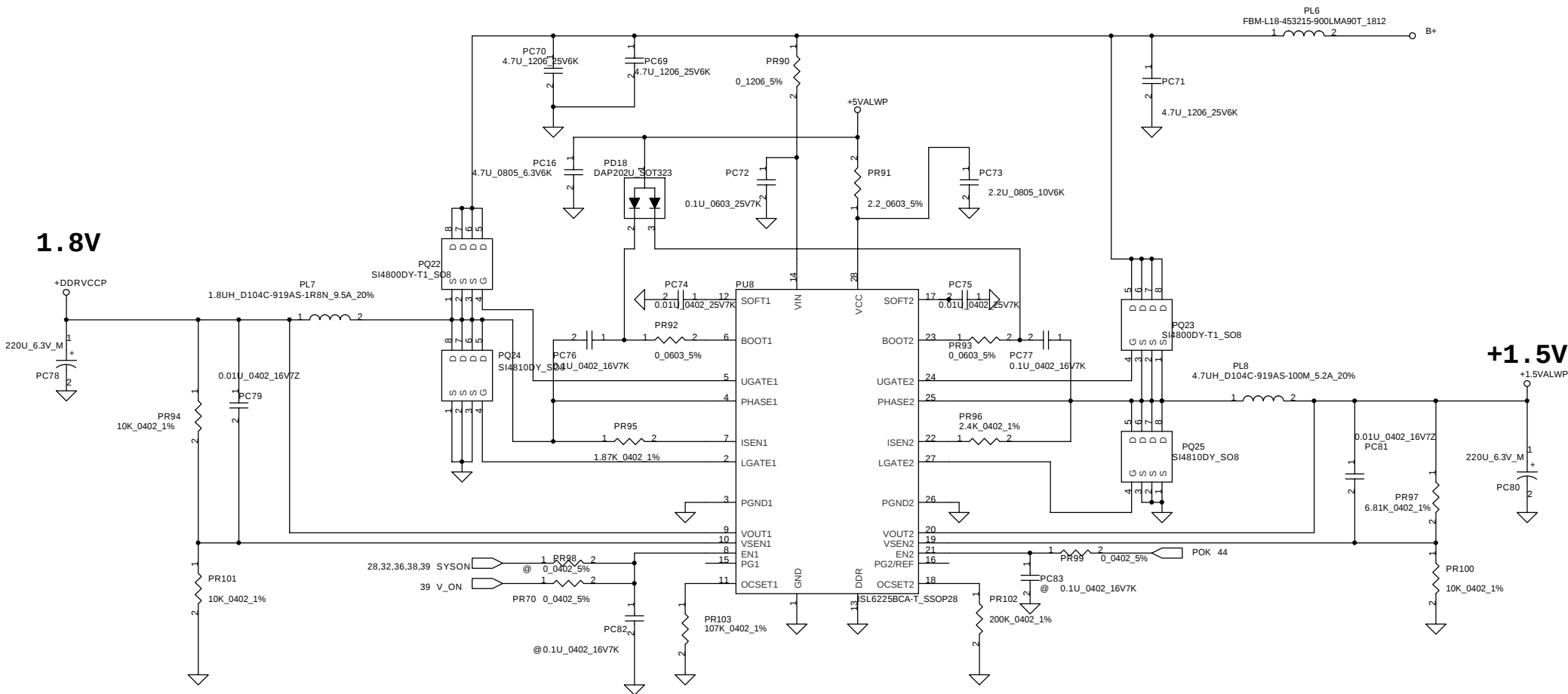
CC=0.5~3.3A
CV=12.6V(9 CELLS LI-ION)

I_{REF}=1.31*I_{charge}
I_{REF}=0.6V~3.21V

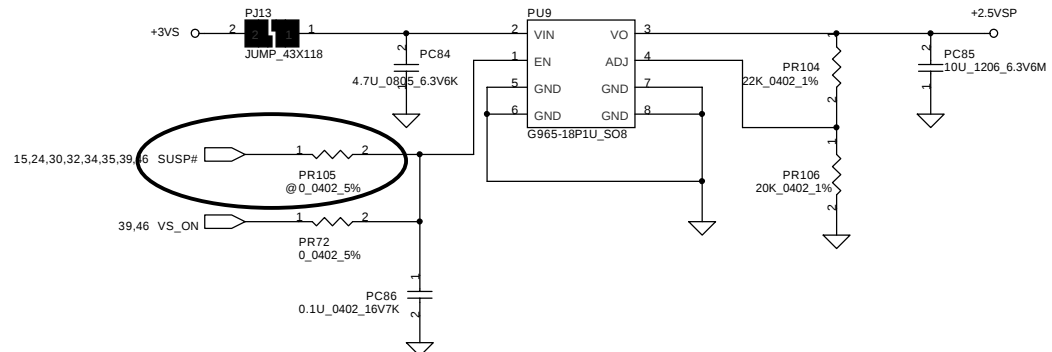
OVP voltage : LI
3S3P : 13.5V--> BATT_OVP= 1.5V
(BATT_OVP=0.1111 *V_{MB})

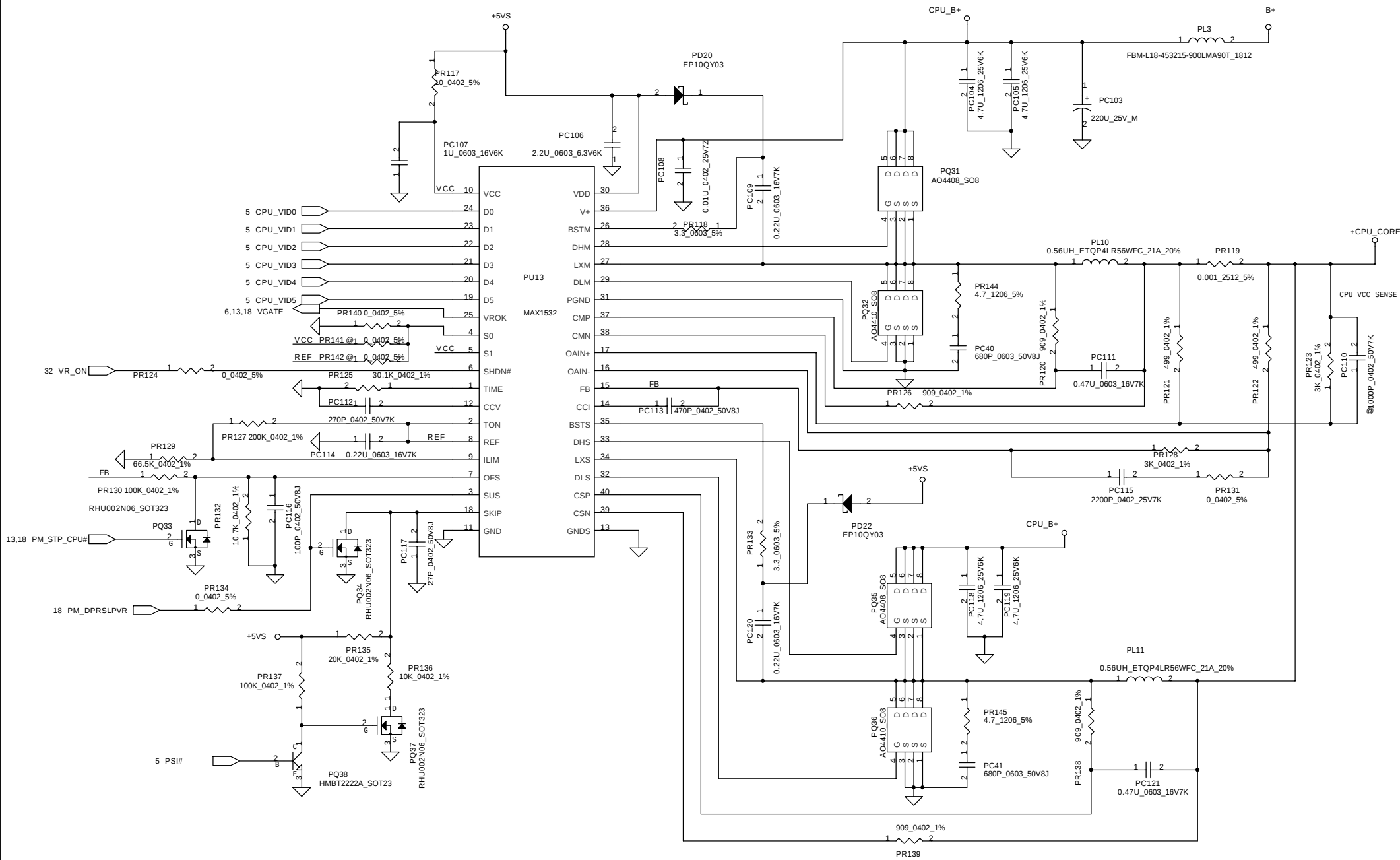
Security Classification		Compal Secret Data	
Issued Date	2005/04/21	Deciphered Date	2006/09/01
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT 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.			
Title SCHEMATIC, M/BLA-2891			
Size B	Document Number 401376	A	Rev
Date: 星期二, 五月 24, 2005	Sheet 43	of	49



	PR94	UNPOP
DDRI	18.2K_0402_1% (2.5V)	PU9, PC84, PR105, PR104, PR106, PC85
DDRII	10K_0402_1% (1.8V)	PU12, PC95, PR114, PC96





Security Classification		Compal Secret Data		Title	
Issued Date		Deciphered Date		SCHEMATIC, M/B LA-2891	
2005/04/21		2006/09/01		Size	
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.		Document Number		A	
		401376		Rev	
Date: 星期二, 五月 24, 2005		Sheet 47 of 49			

ZZZ

LA-2891

U5

ALVISO
GML@

U36

10/100 88E8036
10@

T1

10/100 Transformer
10@

R73

10/100 88E8036 RSET
10@

U41

T1 PCI4510
4510@

Security Classification	Compal Secret Data			Compal Electronics, Inc.		
Issued Date	2005/04/21	Deciphered Date	2006/09/01	Title SCHEMATIC, M/B LA-2891		
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number 401376	Rev A
				Date:	星期二, 五月 24, 2005	Sheet 48 of 49

HBL30 PIR List

***** Rev:0.1 PIR List 2005/05/05 Writer by Young Chou *****

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2005/04/21	Deciphered Date	2006/09/01	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 TRANSFERED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
				401376	
				Date:	Rev A
		~P 周二, 五月 24, 2005		Sheet 49 of 49	1