



Compal Confidential

IAKAA LA-3401P Schematics Document

Intel Yonah/Merom with 945PM/GM + DDRII + ICH7M
(+VGA/B NVidia NB7P-GS&NB7M-SE)

2006-10-03

REV: 0.3

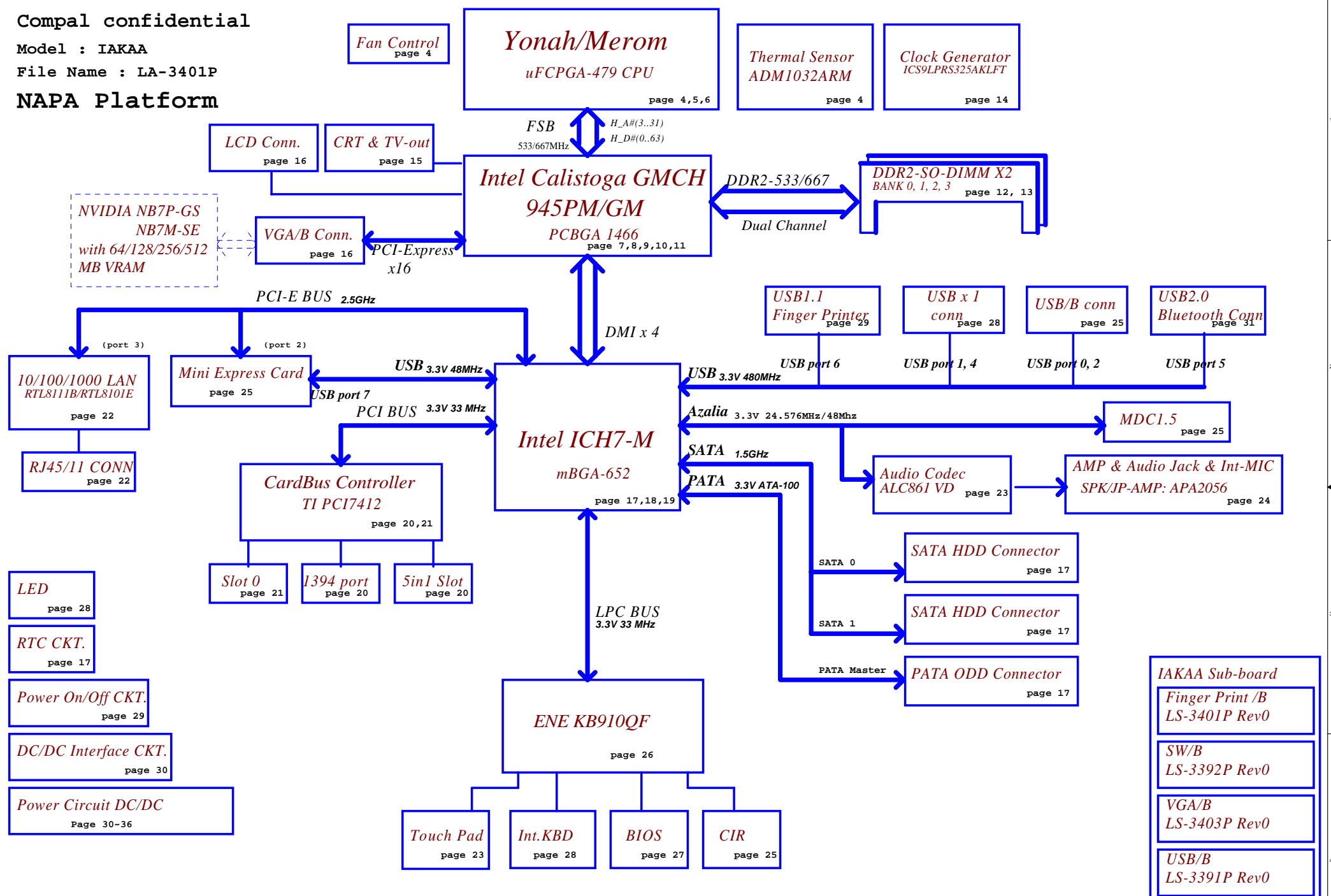
Security Classification	Compal Secret Data			Compal Electronics, Inc.		
Issued Date	2006/10/03	Deciphered Date	2009/10/03	Title		
<small>THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT 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.</small>				Cover Sheet		
				Size	Document Number	Rev
			IAKAA MB LA-3401P	0.3	Sheet 1 of 38	

Compal confidential

Model : IAKAA

File Name : LA-3401P

NAPA Platform



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2006/10/03	Deciphered Date	2009/10/03	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.				Block Diagram	
Size	Document Number	IAKAA MB LA-3401P		Rev	0.3
Date:	Thursday, October 05, 2006	Sheet	2	of 38	

Voltage Rails

Power Plane	Description	S1	S3	S5
VIN	Adapter power supply (19V)	NA	NA	NA
B+	AC or battery power rail for power circuit.	NA	NA	NA
+CPU_CORE	Core voltage for CPU	ON	OFF	OFF
+0.9VS	0.9V switched power rail for DDR terminator	ON	OFF	OFF
+VCCP	1.05V switched power rail	ON	OFF	OFF
+1.5VS	1.5V switched power rail	ON	OFF	OFF
+1.8V	1.8V power rail for DDR	ON	ON	OFF
+1.8VS	1.8V switched power rail	ON	OFF	OFF
+2.5VS	2.5V switched power rail	ON	OFF	OFF
+3VALW	3.3V always on power rail	ON	ON	ON*
+3VS	3.3V switched power rail	ON	OFF	OFF
+5VALW	5V always on power rail	ON	ON	ON*
+5VS	5V switched power rail	ON	OFF	OFF
+VSB	+VSB always on power rail	ON	ON	ON*
+RTCVCC	RTC power	ON	ON	ON

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

External PCI Devices

DEVICE	PCI Device ID	IDSEL #	REQ/GNT #	PIRQ
1394	D0	AD20	2	A,B,C,D
CARD BUS	D4	AD20	2	A,B,C,D
SIN1	D4	AD20	2	A,B,C,D

KB910 I2C / SMBUS ADDRESSING

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

ICH7-M SM Bus address

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

Board ID / SKU ID Table for AD channel

Vcc	3.3V +/- 5%			
Ra	100K +/- 5%			
Board ID	Rb	V _{AD_BID min}	V _{AD_BID typ}	V _{AD_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	
4	
5	
6	
7	

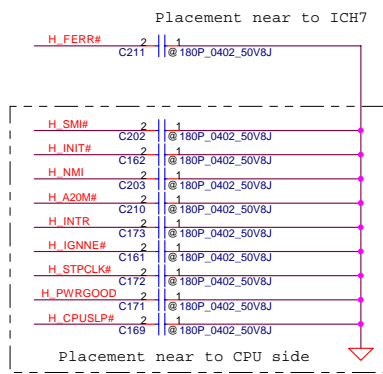
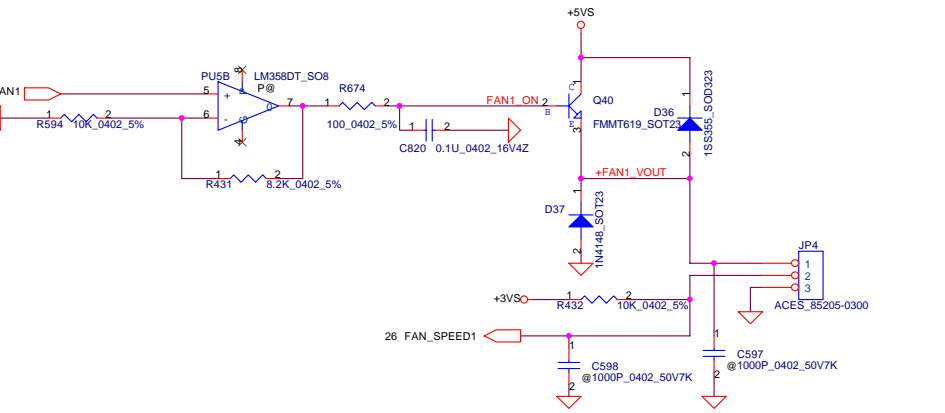
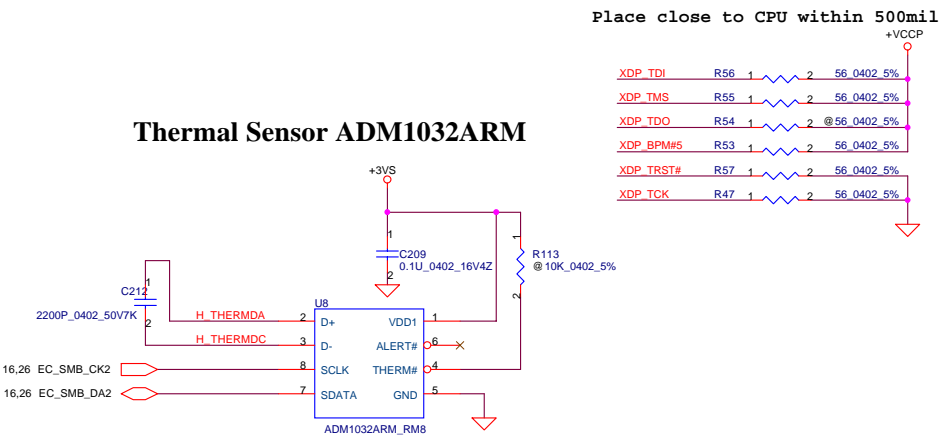
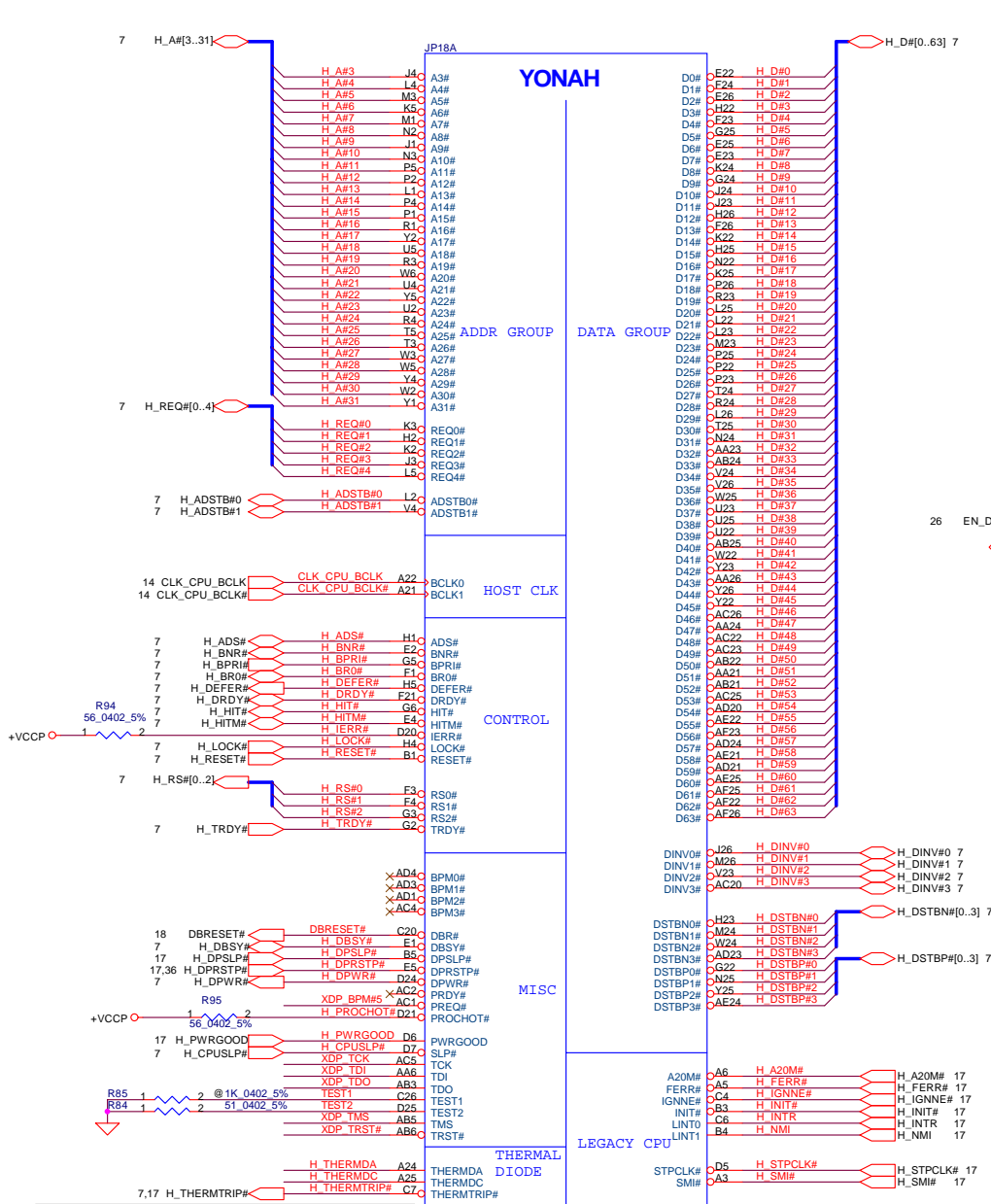
BTO Option Table

BTO Item	BOM Structure
2ND HDD	2HDD@
LAN	100M@ 1000M@
WLAN	KS@
NB	GM@ PM@
BT	BT@
MIC	MIC@
CIR	CIR@
FINGER PRINT	
SIN1	7412@

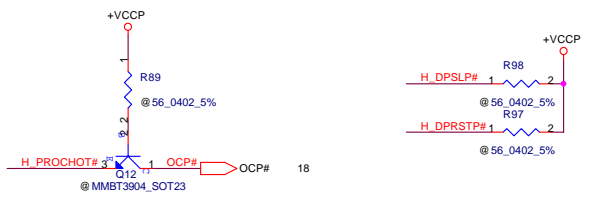
SKU ID Table

SKU ID	SKU
0	10 (10E)
1	10C
2	10G
3	10GC
4	10J (10EJ)
5	10CJ
6	10GJ
7	10GCJ

Security Classification		Compal Secret Data		Compal Electronics, Inc.		
Issued Date	2006/10/03	Deciphered Date	2009/10/03	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.				Notes		
				Size	Document Number	Rev
				IAKAA MB LA-3401P		
				Date:	Thursday, October 05, 2006	Sheet 3 of 38

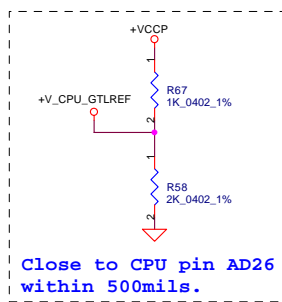


H_THERMDA, H_THERMDC routing together.
Trace width / Spacing = 10 / 10 mil

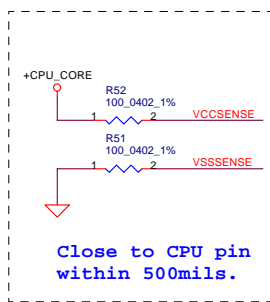


Security Classification		Compal Secret Data	
Issued Date	2006/10/03	Deciphered Date	2009/10/03
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT 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 Yonah CPU in mFCPGA479			
Size	Document Number	Rev	
	IAKAA M/B LA-340IP	0.3	
Date:	Thursday, October 05, 2006	Sheet	4 of 38

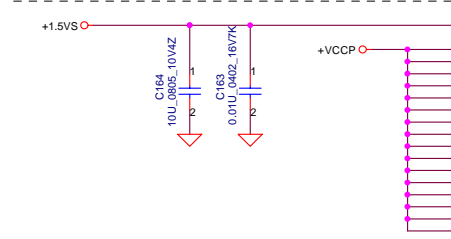


Close to CPU pin AD26 within 500mils.



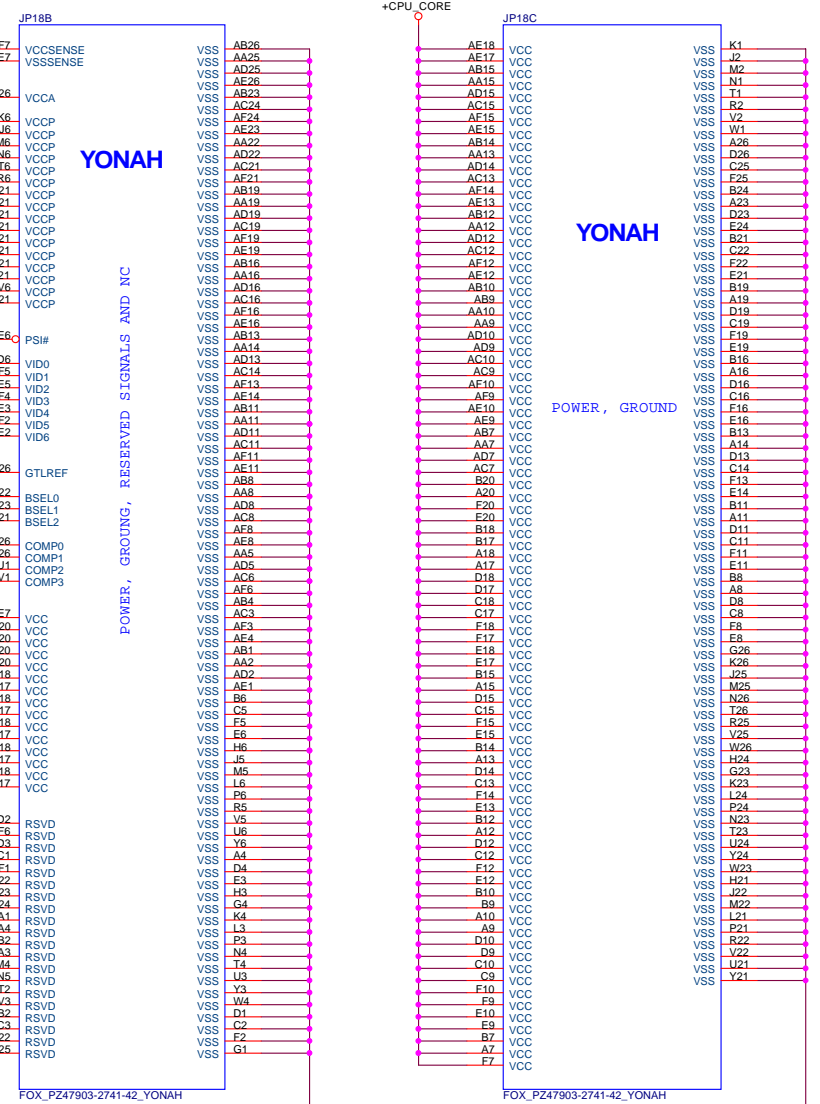
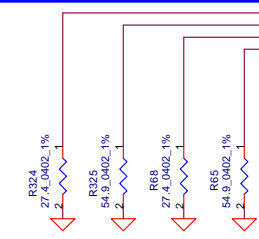
Close to CPU pin within 500mils.

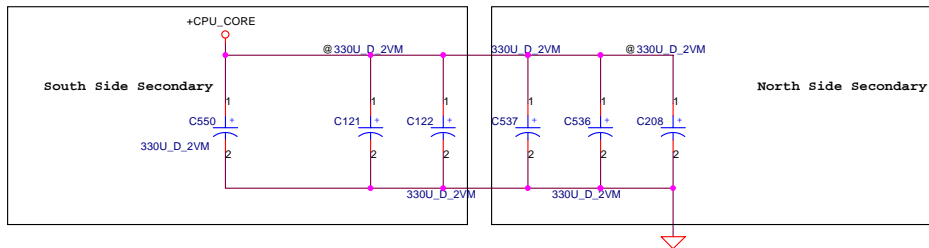
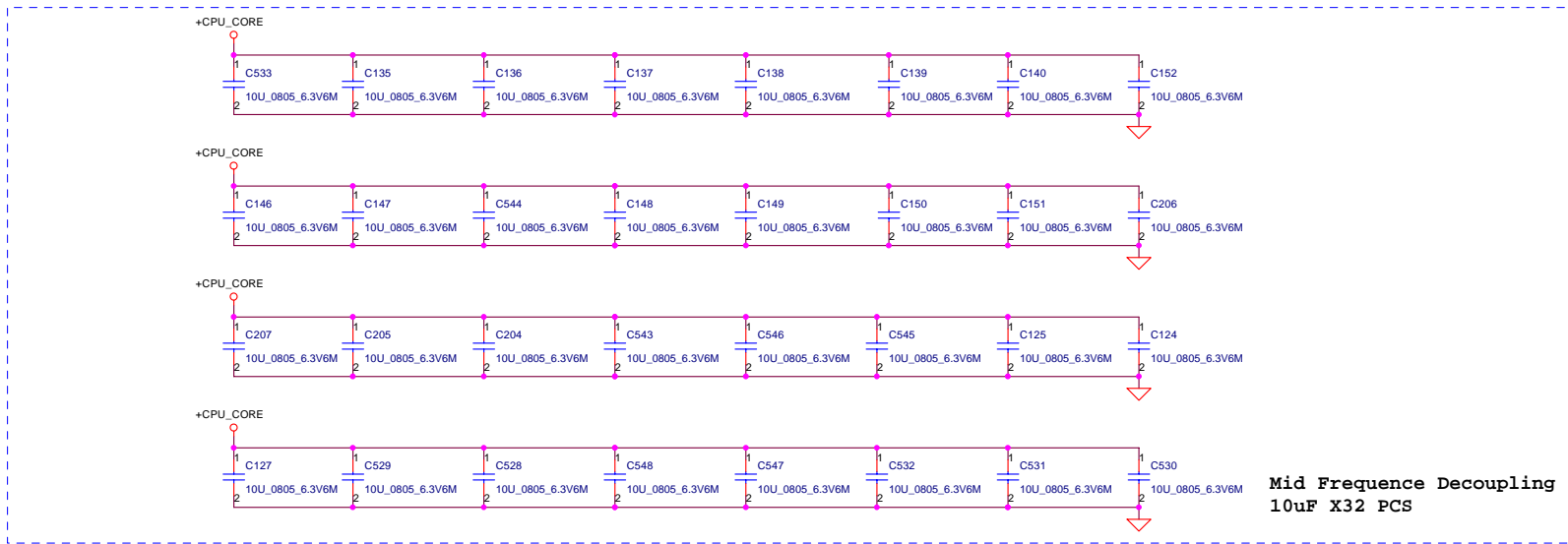
Length match within 25 mils
The trace width 18 mils space
7 mils



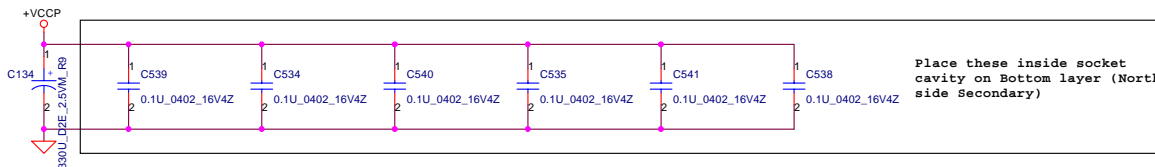
CPU_BSEL	CPU_BSEL2	CPU_BSEL1	CPU_BSEL0
133	0	0	1
166	0	1	1

Resistor placed within 0.5" of CPU pin. Trace should be at least 25 mils away from any other toggling signal.

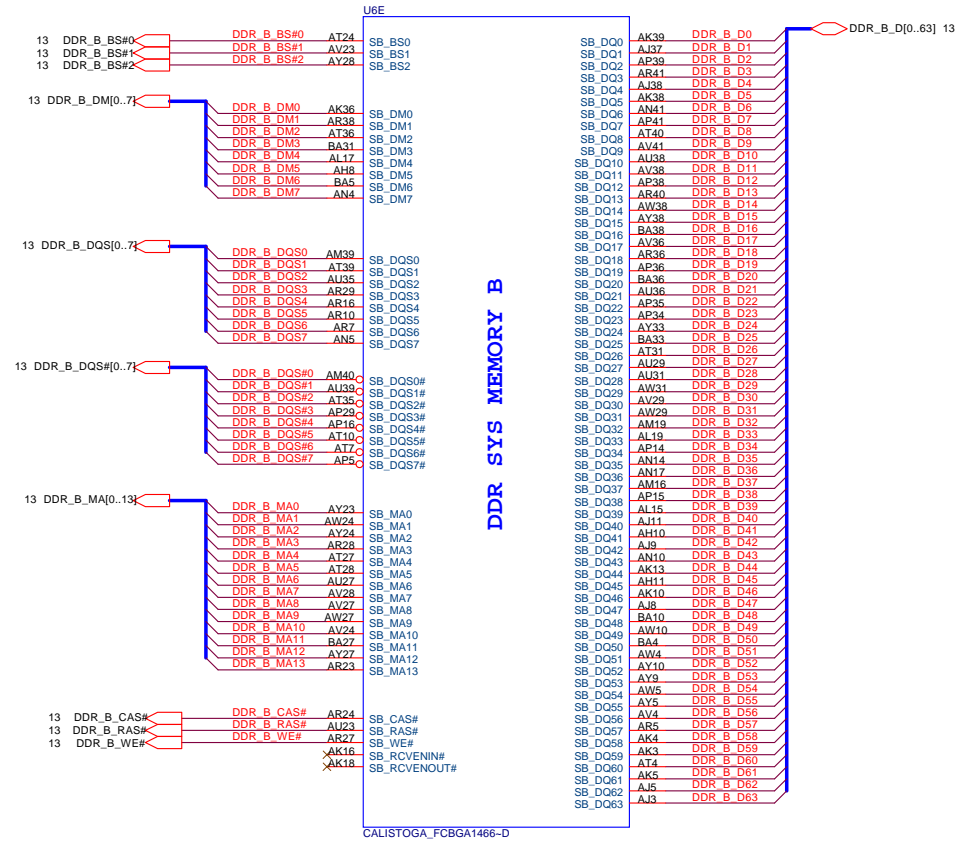
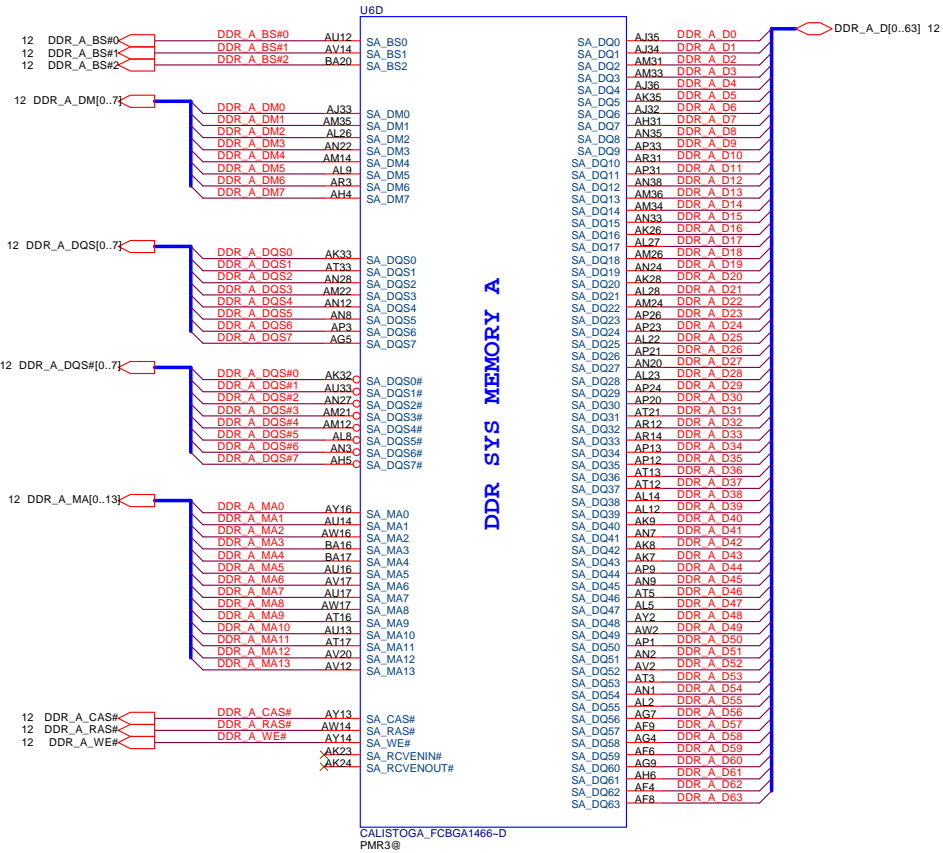




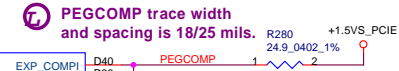
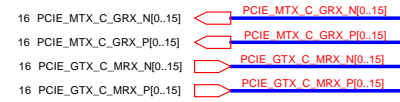
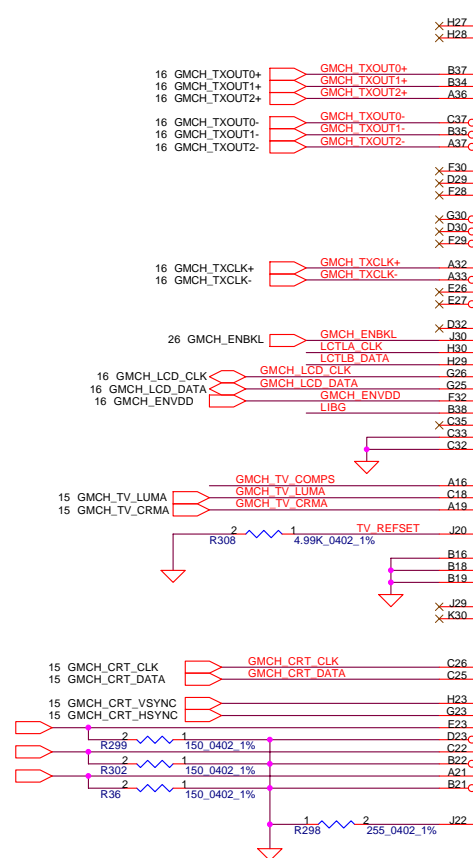
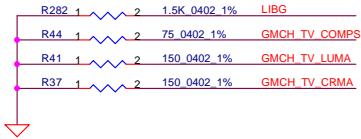
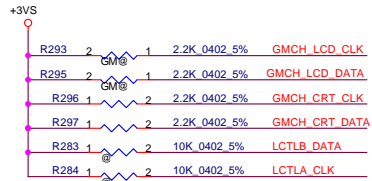
**ESR <= 1.5m ohm
Capacitor > 1980uF
330uF ESR 7m ohm X 6 PCS**



Security Classification		Compal Secret Data		Title	
Issued Date	2006/10/03	Deciphered Date	2009/10/03	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
				IAKAA M/B LA-340IP	
				Rev	0.3
Date: Thursday, October 05, 2006				Sheet	6 of 38



Security Classification	Compal Secret Data		Title	Compal Electronics, Inc.	
Issued Date	2006/10/03	Deciphered Date	2009/10/03	Calistoga (2/5)	
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	Date		Rev	
	IAXAA M/B LA-3401P	Thursday, October 05, 2006		0.3	
		Sheet	8	of	38

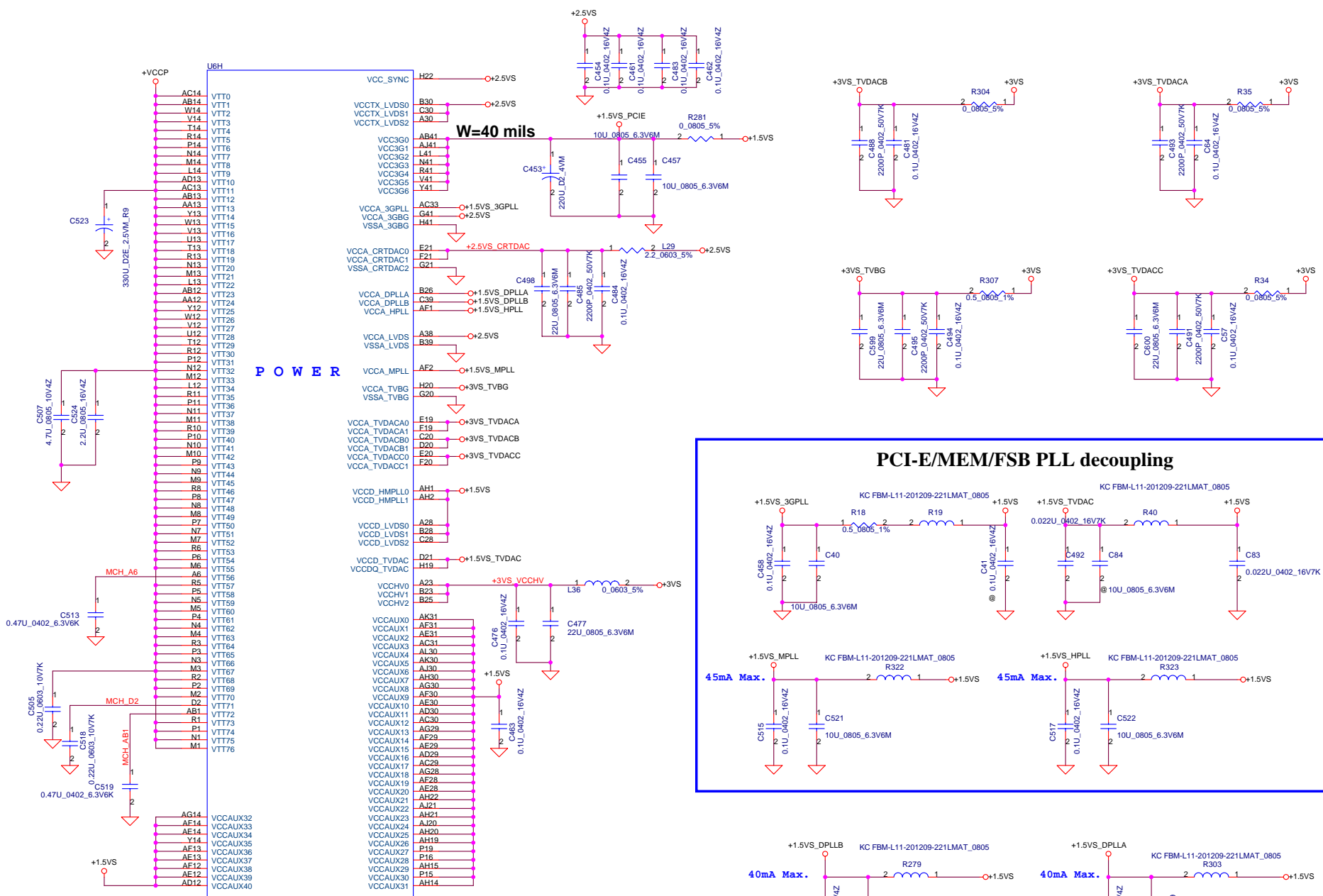


EXP_RXN0	F34	PCIE GTX C MRX N0
EXP_RXN1	G38	PCIE GTX C MRX N1
EXP_RXN2	H34	PCIE GTX C MRX N2
EXP_RXN3	J38	PCIE GTX C MRX N3
EXP_RXN4	L34	PCIE GTX C MRX N4
EXP_RXN5	M38	PCIE GTX C MRX N5
EXP_RXN6	N34	PCIE GTX C MRX N6
EXP_RXN7	P38	PCIE GTX C MRX N7
EXP_RXN8	R34	PCIE GTX C MRX N8
EXP_RXN9	T38	PCIE GTX C MRX N9
EXP_RXN10	V34	PCIE GTX C MRX N10
EXP_RXN11	W38	PCIE GTX C MRX N11
EXP_RXN12	Y34	PCIE GTX C MRX N12
EXP_RXN13	AB38	PCIE GTX C MRX N13
EXP_RXN14	AB34	PCIE GTX C MRX N14
EXP_RXN15	AC38	PCIE GTX C MRX N15
EXP_RXP0	D34	PCIE GTX C MRX P0
EXP_RXP1	F38	PCIE GTX C MRX P1
EXP_RXP2	G34	PCIE GTX C MRX P2
EXP_RXP3	H38	PCIE GTX C MRX P3
EXP_RXP4	J34	PCIE GTX C MRX P4
EXP_RXP5	L38	PCIE GTX C MRX P5
EXP_RXP6	M34	PCIE GTX C MRX P6
EXP_RXP7	N38	PCIE GTX C MRX P7
EXP_RXP8	P34	PCIE GTX C MRX P8
EXP_RXP9	R38	PCIE GTX C MRX P9
EXP_RXP10	T34	PCIE GTX C MRX P10
EXP_RXP11	V38	PCIE GTX C MRX P11
EXP_RXP12	W34	PCIE GTX C MRX P12
EXP_RXP13	Y38	PCIE GTX C MRX P13
EXP_RXP14	AA34	PCIE GTX C MRX P14
EXP_RXP15	AB38	PCIE GTX C MRX P15

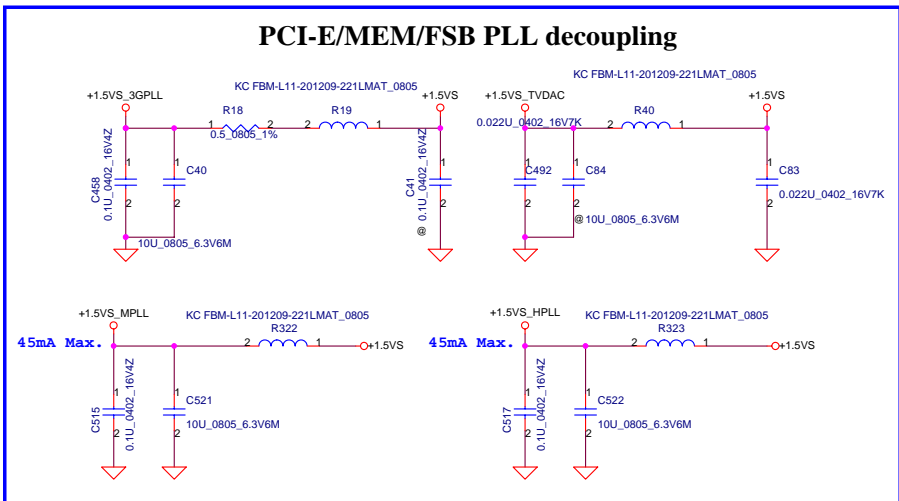
EXP_TXN0	F36	PCIE MTX GRX N0	C449	PM@ 0.1U 0402 16V7K	PCIE MTX C GRX N0
EXP_TXN1	G40	PCIE MTX GRX N1	C433	PM@ 0.1U 0402 16V7K	PCIE MTX C GRX N1
EXP_TXN2	H36	PCIE MTX GRX N2	C447	PM@ 0.1U 0402 16V7K	PCIE MTX C GRX N2
EXP_TXN3	J40	PCIE MTX GRX N3	C431	PM@ 0.1U 0402 16V7K	PCIE MTX C GRX N3
EXP_TXN4	L36	PCIE MTX GRX N4	C445	PM@ 0.1U 0402 16V7K	PCIE MTX C GRX N4
EXP_TXN5	M40	PCIE MTX GRX N5	C429	PM@ 0.1U 0402 16V7K	PCIE MTX C GRX N5
EXP_TXN6	N36	PCIE MTX GRX N6	C443	PM@ 0.1U 0402 16V7K	PCIE MTX C GRX N6
EXP_TXN7	P40	PCIE MTX GRX N7	C427	PM@ 0.1U 0402 16V7K	PCIE MTX C GRX N7
EXP_TXN8	R36	PCIE MTX GRX N8	C441	PM@ 0.1U 0402 16V7K	PCIE MTX C GRX N8
EXP_TXN9	T40	PCIE MTX GRX N9	C425	PM@ 0.1U 0402 16V7K	PCIE MTX C GRX N9
EXP_TXN10	V36	PCIE MTX GRX N10	C439	PM@ 0.1U 0402 16V7K	PCIE MTX C GRX N10
EXP_TXN11	W40	PCIE MTX GRX N11	C423	PM@ 0.1U 0402 16V7K	PCIE MTX C GRX N11
EXP_TXN12	Y36	PCIE MTX GRX N12	C437	PM@ 0.1U 0402 16V7K	PCIE MTX C GRX N12
EXP_TXN13	AB40	PCIE MTX GRX N13	C421	PM@ 0.1U 0402 16V7K	PCIE MTX C GRX N13
EXP_TXN14	AB36	PCIE MTX GRX N14	C435	PM@ 0.1U 0402 16V7K	PCIE MTX C GRX N14
EXP_TXN15	AC40	PCIE MTX GRX N15	C419	PM@ 0.1U 0402 16V7K	PCIE MTX C GRX N15
EXP_TXP0	D36	PCIE MTX GRX P0	C450	PM@ 0.1U 0402 16V7K	PCIE MTX C GRX P0
EXP_TXP1	F40	PCIE MTX GRX P1	C434	PM@ 0.1U 0402 16V7K	PCIE MTX C GRX P1
EXP_TXP2	G36	PCIE MTX GRX P2	C448	PM@ 0.1U 0402 16V7K	PCIE MTX C GRX P2
EXP_TXP3	H40	PCIE MTX GRX P3	C432	PM@ 0.1U 0402 16V7K	PCIE MTX C GRX P3
EXP_TXP4	J36	PCIE MTX GRX P4	C446	PM@ 0.1U 0402 16V7K	PCIE MTX C GRX P4
EXP_TXP5	L40	PCIE MTX GRX P5	C430	PM@ 0.1U 0402 16V7K	PCIE MTX C GRX P5
EXP_TXP6	M36	PCIE MTX GRX P6	C444	PM@ 0.1U 0402 16V7K	PCIE MTX C GRX P6
EXP_TXP7	N40	PCIE MTX GRX P7	C428	PM@ 0.1U 0402 16V7K	PCIE MTX C GRX P7
EXP_TXP8	P36	PCIE MTX GRX P8	C442	PM@ 0.1U 0402 16V7K	PCIE MTX C GRX P8
EXP_TXP9	R40	PCIE MTX GRX P9	C426	PM@ 0.1U 0402 16V7K	PCIE MTX C GRX P9
EXP_TXP10	T36	PCIE MTX GRX P10	C440	PM@ 0.1U 0402 16V7K	PCIE MTX C GRX P10
EXP_TXP11	V40	PCIE MTX GRX P11	C424	PM@ 0.1U 0402 16V7K	PCIE MTX C GRX P11
EXP_TXP12	W36	PCIE MTX GRX P12	C438	PM@ 0.1U 0402 16V7K	PCIE MTX C GRX P12
EXP_TXP13	Y40	PCIE MTX GRX P13	C422	PM@ 0.1U 0402 16V7K	PCIE MTX C GRX P13
EXP_TXP14	AA36	PCIE MTX GRX P14	C436	PM@ 0.1U 0402 16V7K	PCIE MTX C GRX P14
EXP_TXP15	AB40	PCIE MTX GRX P15	C420	PM@ 0.1U 0402 16V7K	PCIE MTX C GRX P15

CALISTOGA_FCBGA1466-D
PMR3@

Security Classification	Compal Secret Data			Title	
Issued Date	2006/10/03	Deciphered Date	2009/10/03	Compal Electronics, Inc.	
				Calistoga (3/5)	
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
					IAKAA M/B LA-3401P
				Date:	Thursday, October 05, 2006
				Sheet	9 of 38
				Rev	0.3



P O W E R

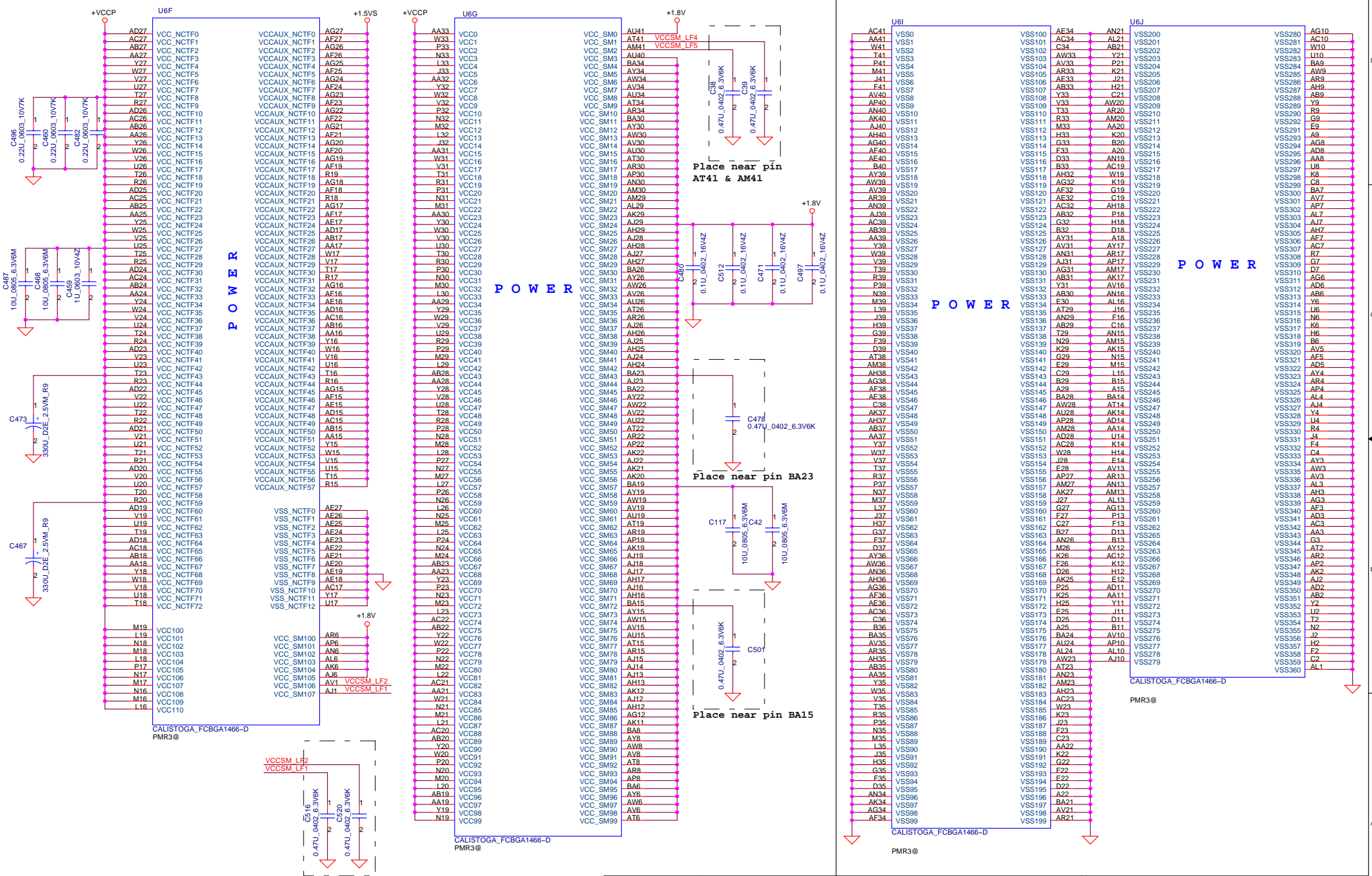


Security Classification	Compal Secret Data			Title	Compal Electronics, Inc.		
Issued Date	2006/10/03	Deciphered Date	2009/10/03	Size	Document Number		Rev
				IAKA M/B LA-3401P			0.3
				Date:	Thursday, October 05, 2006		Sheet 10 of 38

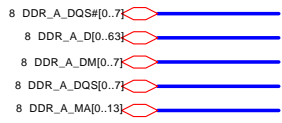
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS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

POWER

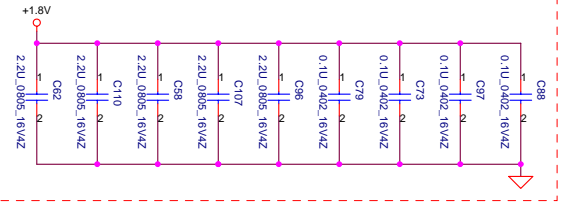
GND



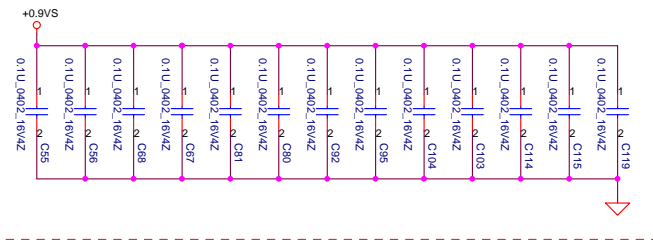
Security Classification	Compal Secret Data		Title	
Issued Date	2006/10/03	Deciphered Date	2009/10/03	Calistoga (5/5)
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM 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	Date		Rev
	IAXAA M/B LA-340IP	Thursday, October 05, 2006		0.3
Date:				Sheet 11 of 38



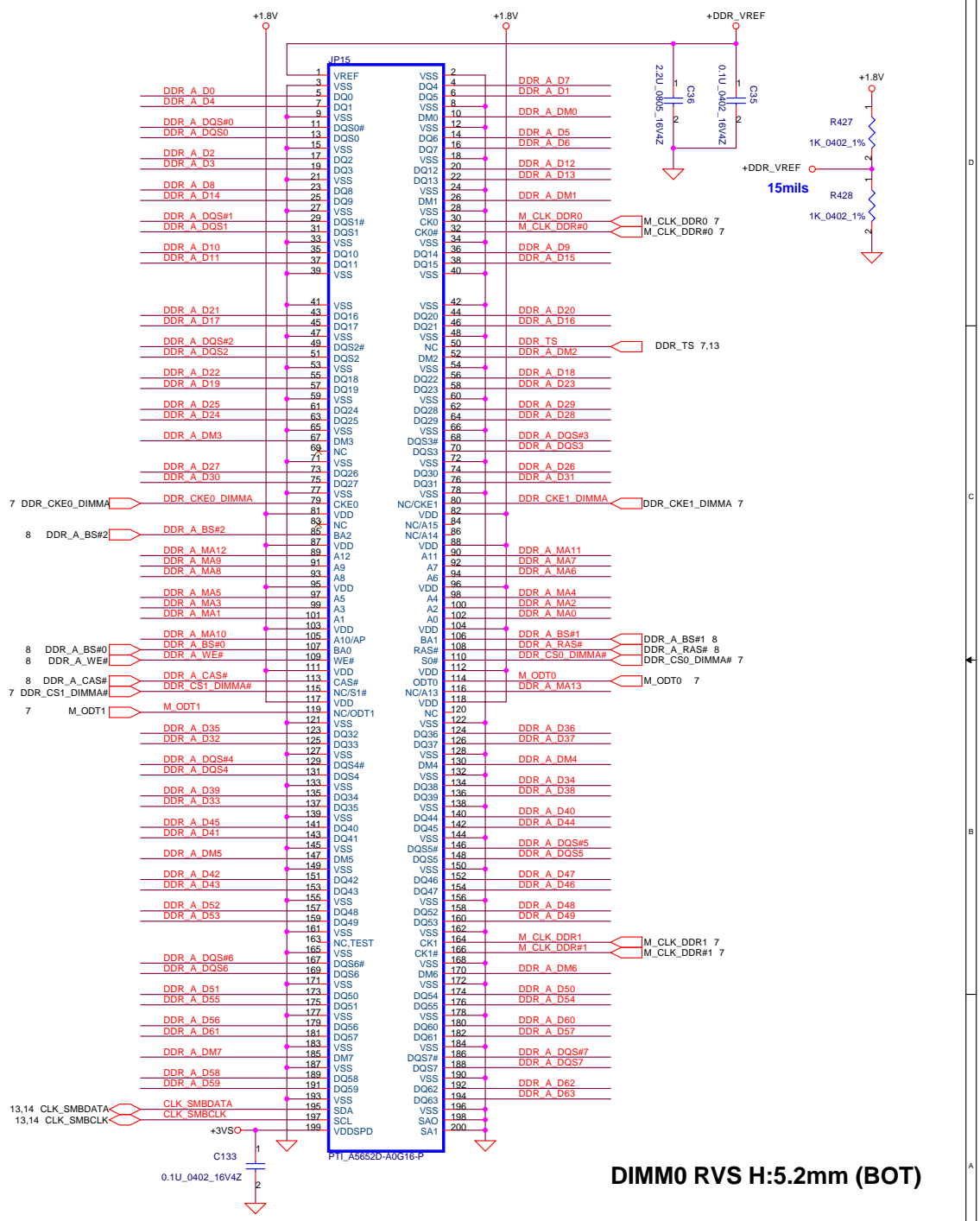
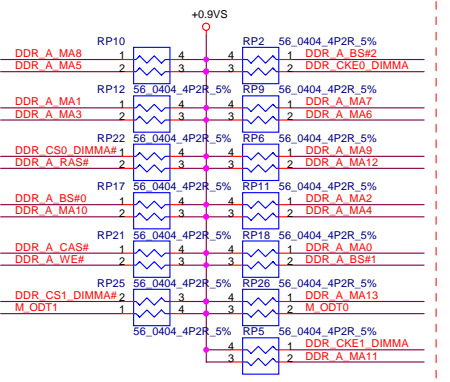
Layout Note:
Place near JP27



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



Layout Note:
Place these resistor closely JP27, all trace length Max=1.5"

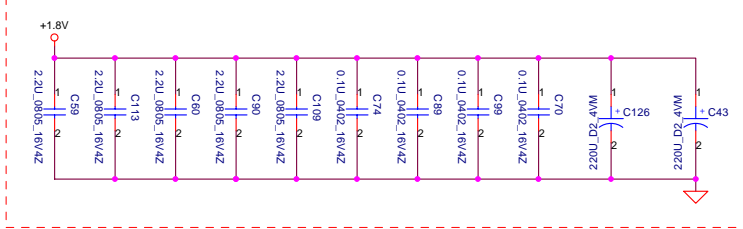


DIMM0 RVS H:5.2mm (BOT)

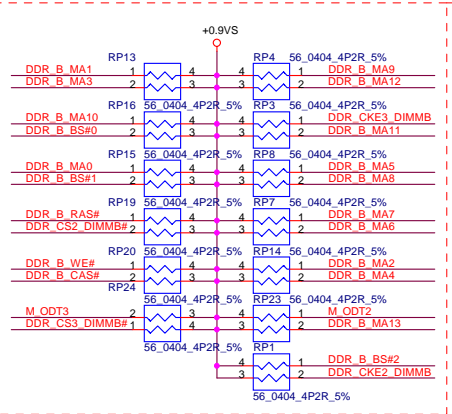
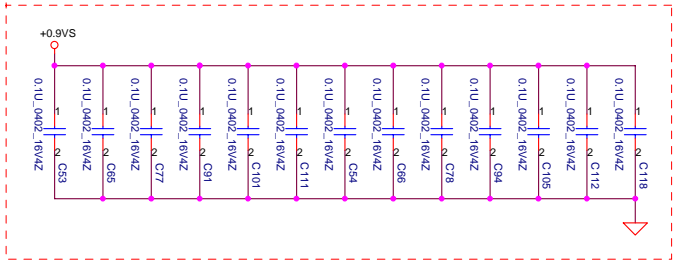
Security Classification	Compal Secret Data		Title	
Issued Date	2006/10/03	Deciphered Date	2009/10/03	Compal Electronics, Inc.
				DDRII-SODIMM SLOT1
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET 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 IAKAA MB/LA-340IP Rev: 0.3
Date:	Thursday, October 05, 2006	Sheet	12	of 38



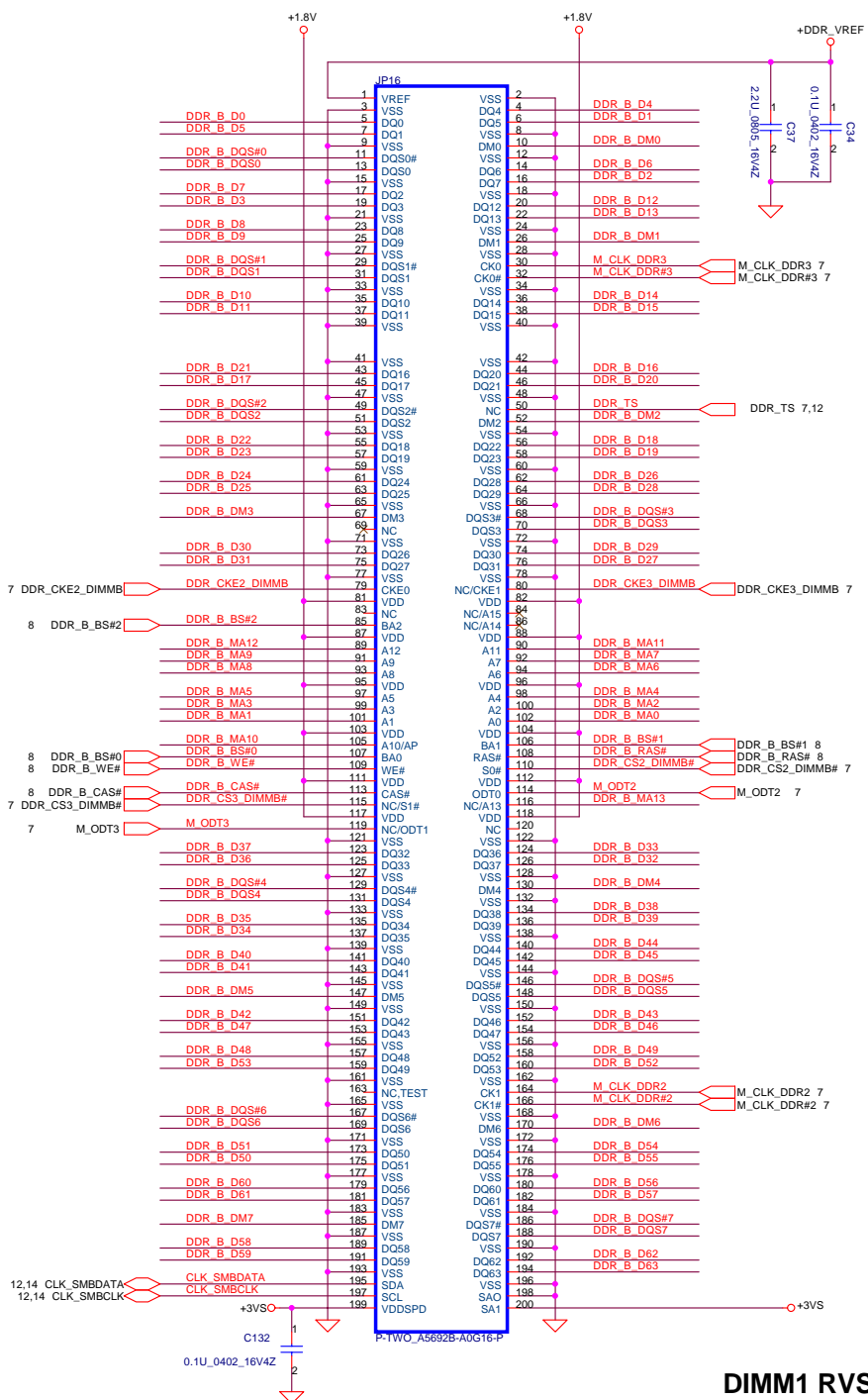
Layout Note:
Place near JP26



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

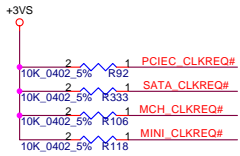


Layout Note:
Place these resistor closely JP26, all trace length Max=1.5"



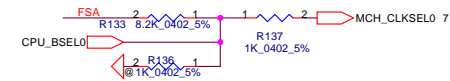
DIMM1 RVS H:9.2mm (BOT)

Security Classification		Compal Secret Data		Title	
Issued Date	2006/10/03	Deciphered Date	2009/10/03	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.				DRII-SODIMM SLOT2	
Size	Document Number	Date		Rev	
	IAKAA MB/LA-340IP	Thursday, October 05, 2006		0.3	
				Sheet 13 of 38	

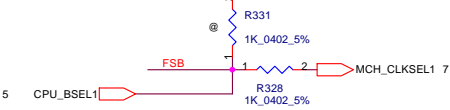


FSLC CLKSEL2	FSLB CLKSEL1	FSLA CLKSEL0	CPU MHz	SRC MHz	PCI MHz
0	0	1	133	100	33.3
0	1	1	166	100	33.3

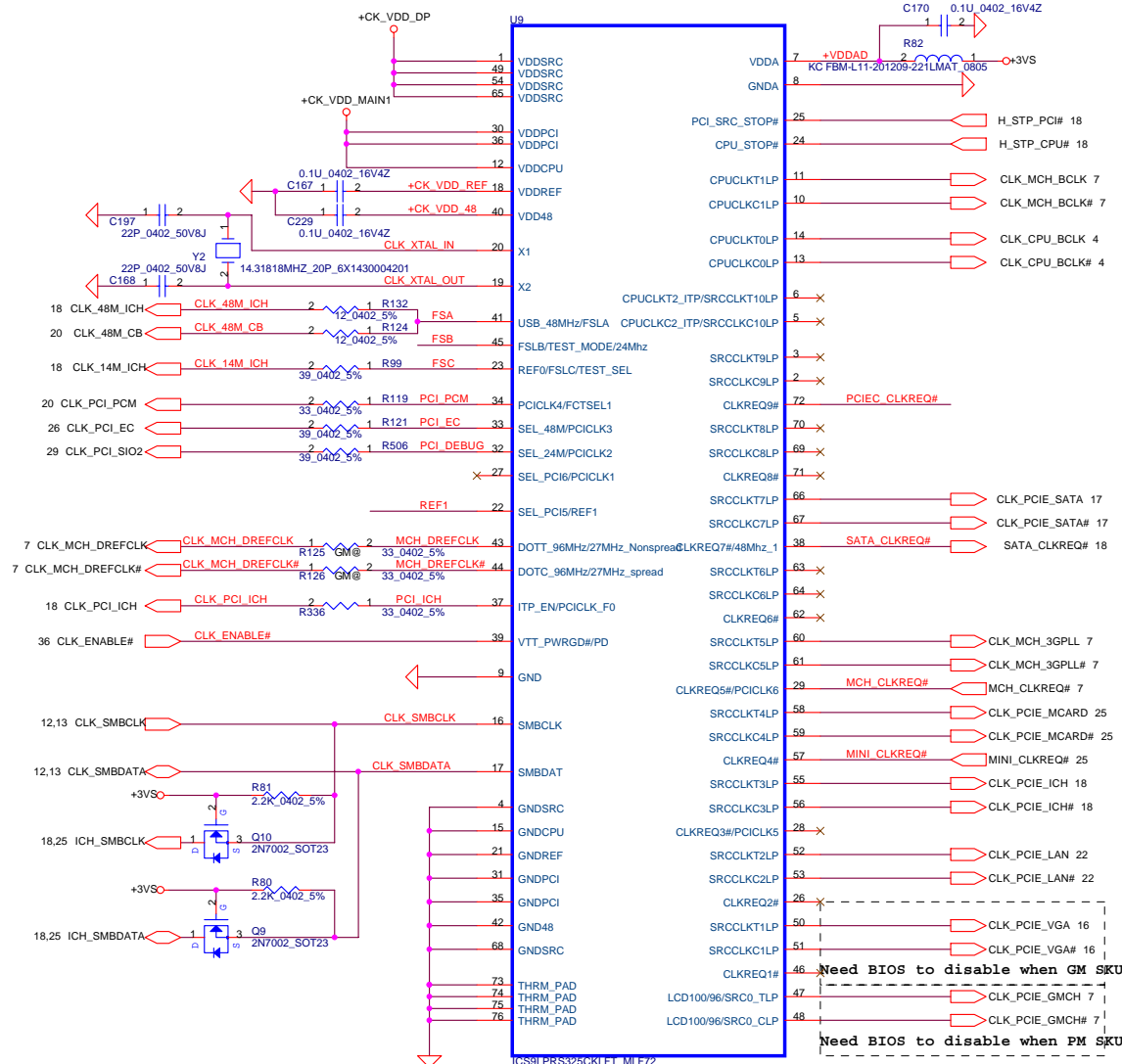
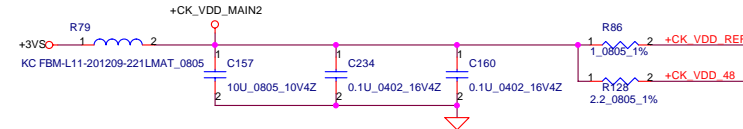
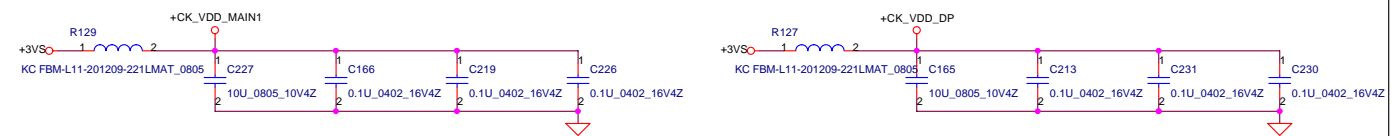
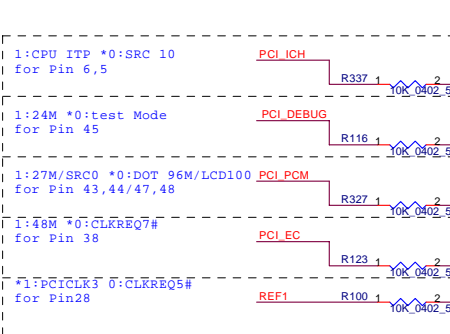
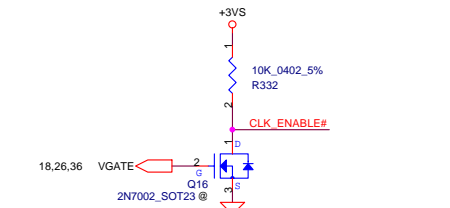
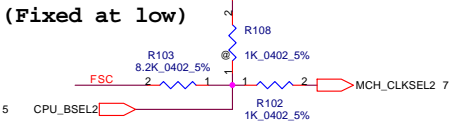
FSA



FSB



FSC



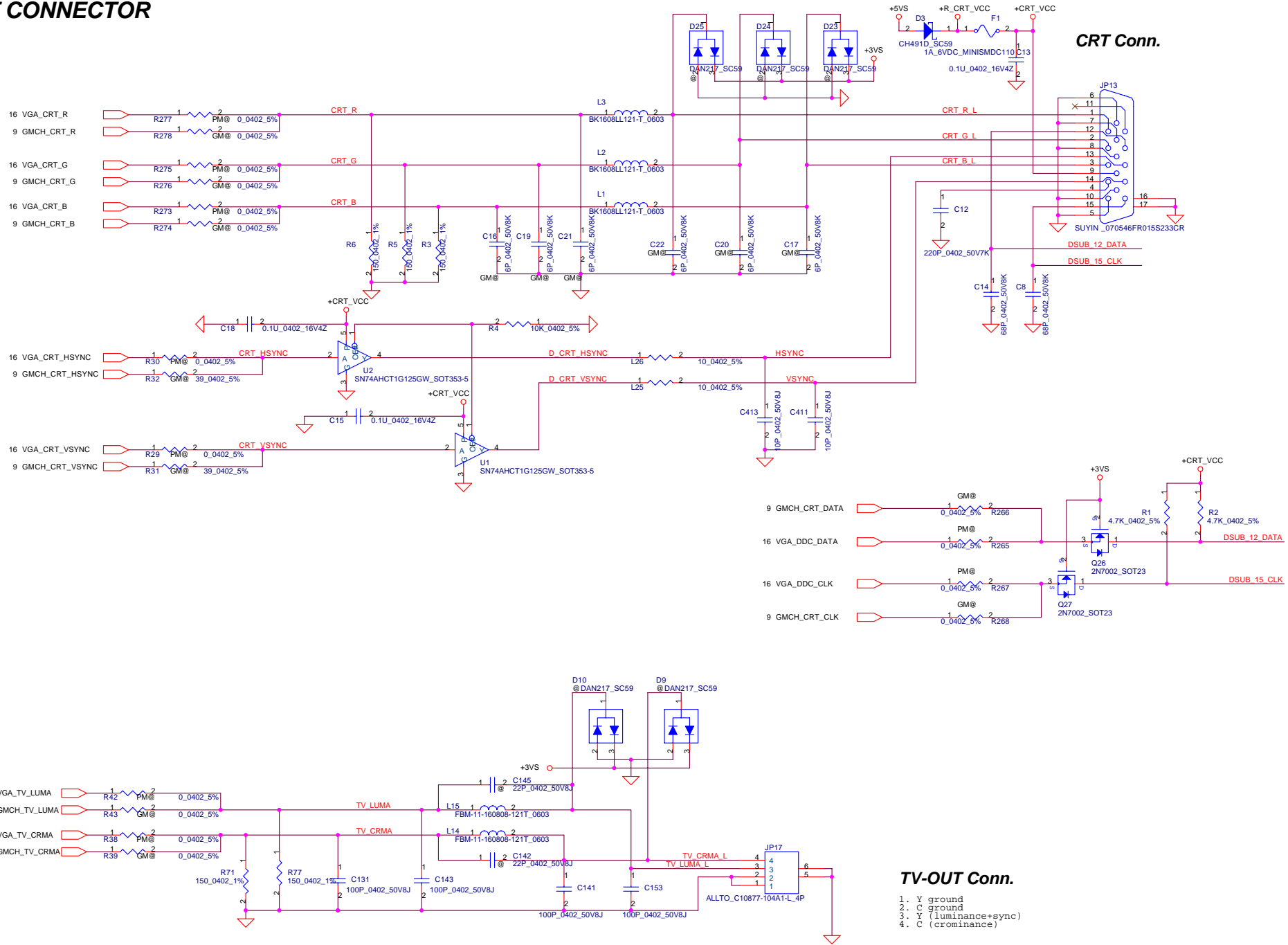
Security Classification	Compal Secret Data	
Issued Date	2006/10/03	Deciphered Date
		2009/10/03

Compal Electronics, Inc.		
Clock generator		
Size	Document Number	Rev
	IAKAA M/B LA-3401P	0.3
Date:	Thursday, October 05, 2006	Sheet 14 of 38

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 CONNECTOR

Near to JP13



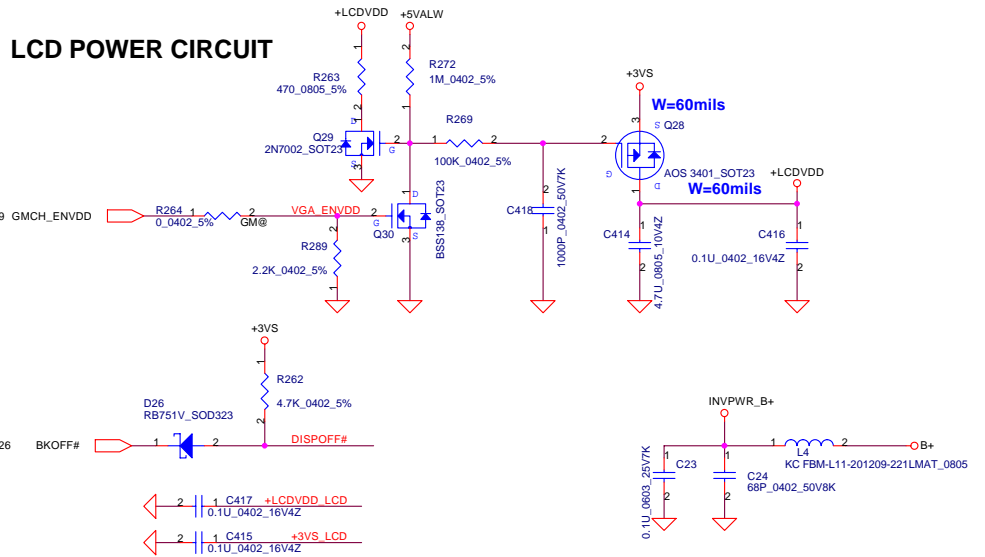
CRT Conn.

TV-OUT Conn.

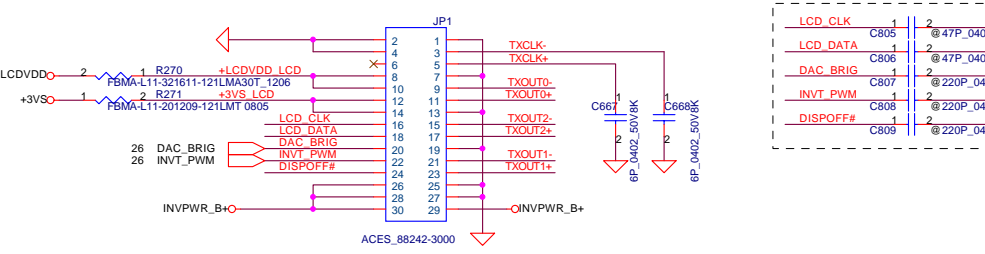
1. Y ground
2. C ground
3. Y (luminance+sync)
4. C (chrominance)

Security Classification		Compal Secret Data		Title	
Issued Date	2006/10/03	Deciphered Date	2009/10/03	CRT & TVout 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.				Size	Document Number
				IAKAA M/B LA-3401P	
				Date:	Thursday, October 05, 2006
				Sheet	15 of 38

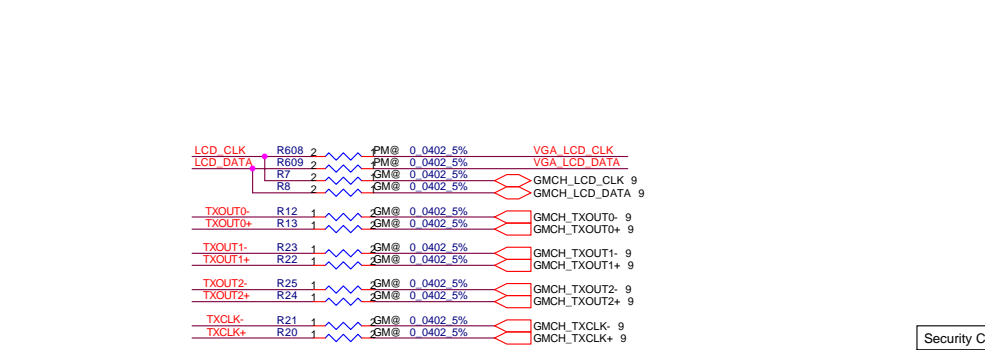
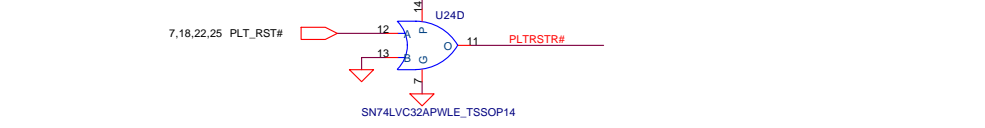
LCD POWER CIRCUIT



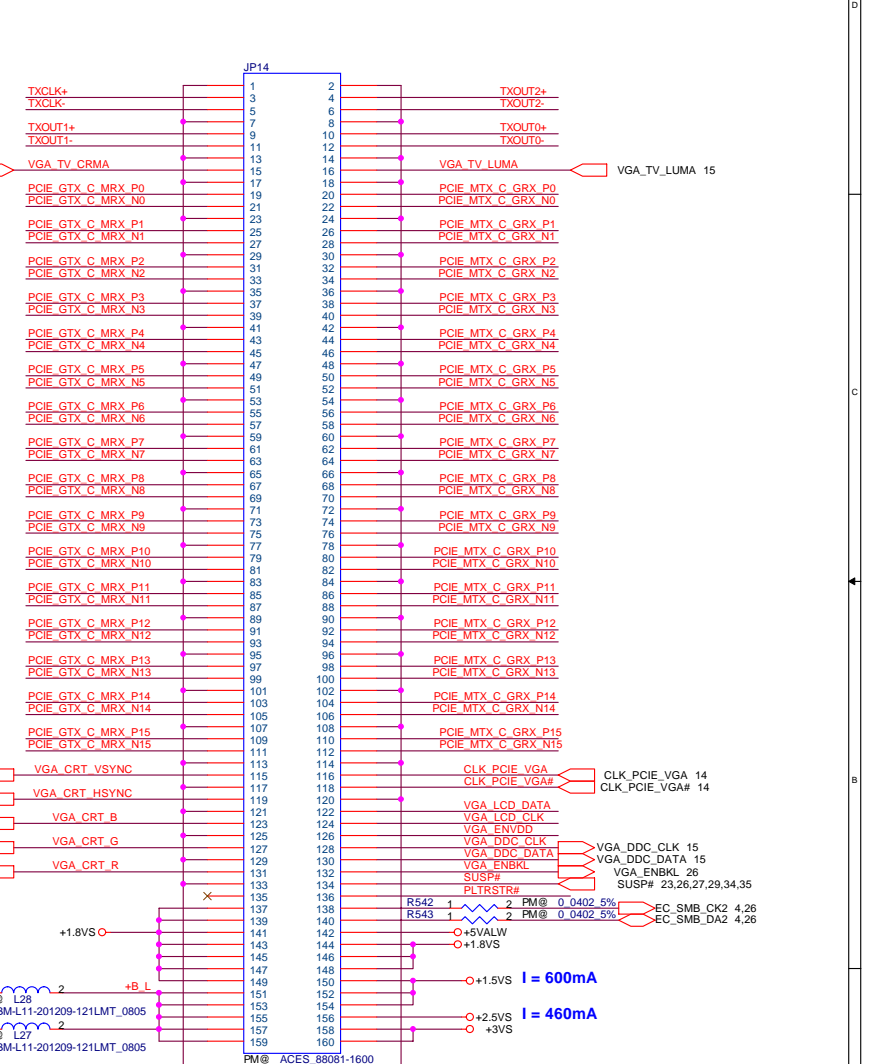
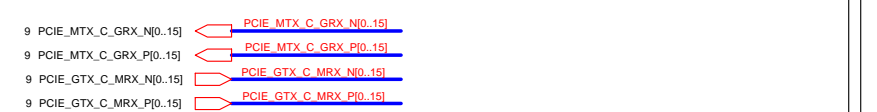
LCD/PANEL BD. Conn.



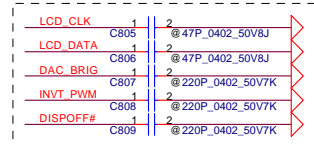
LCD/PANEL BD. Conn. (continued)



VGA BOARD Conn.

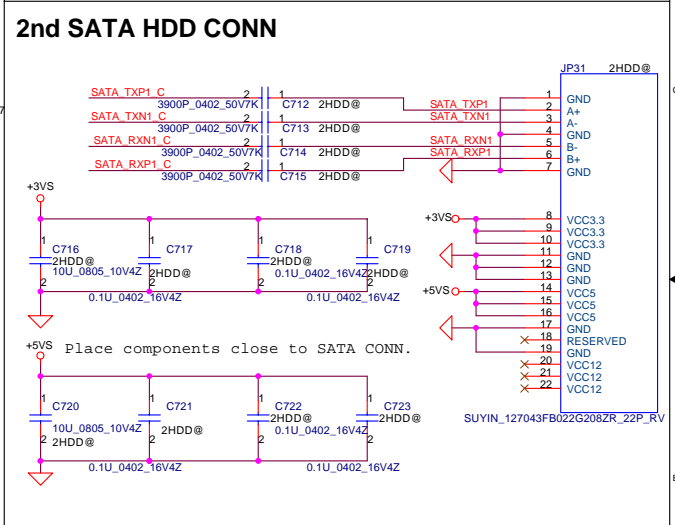
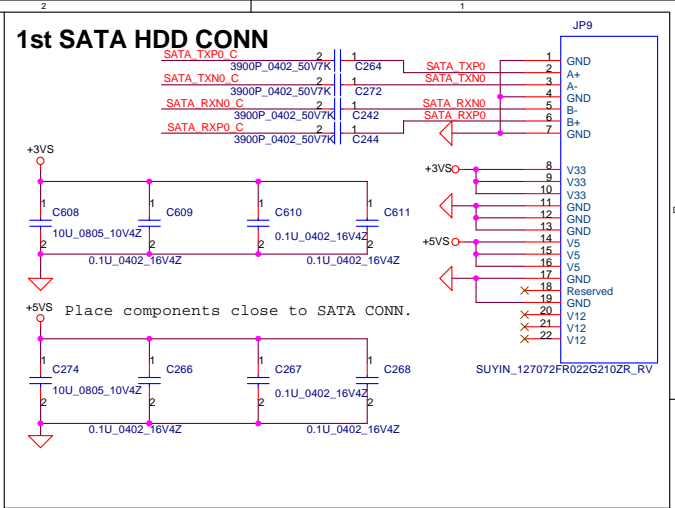
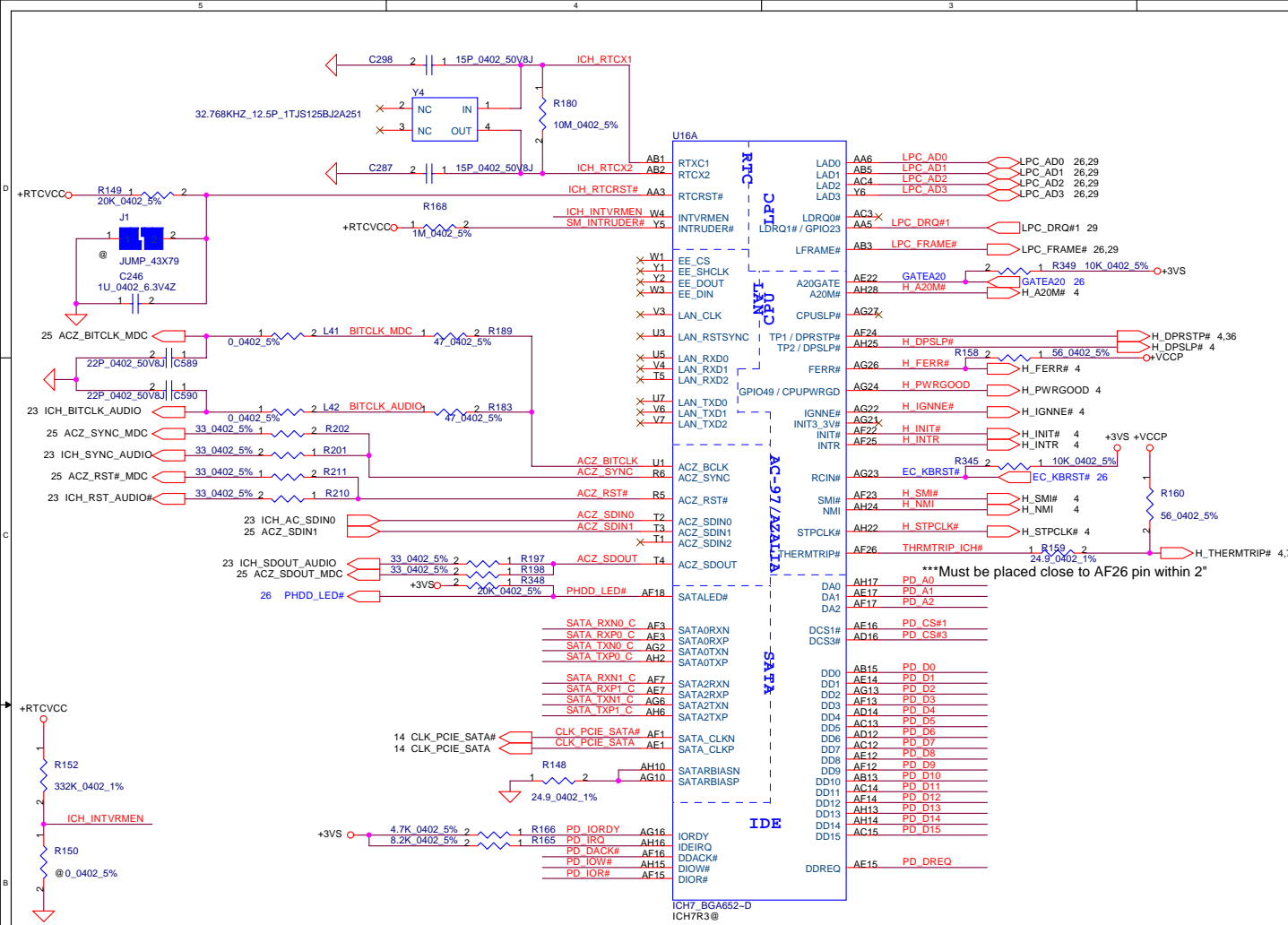


For EMI Request

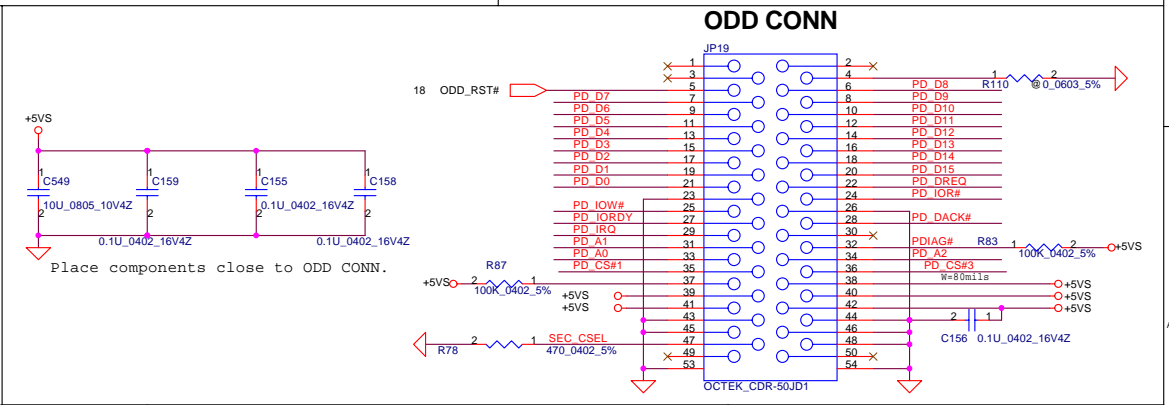
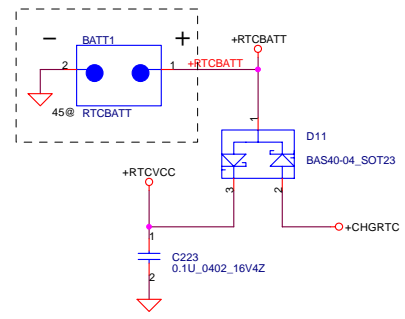


Security Classification	Compal Secret Data		Title
Issued Date	2006/10/03	Deciphered Date	2009/10/03
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE 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.			

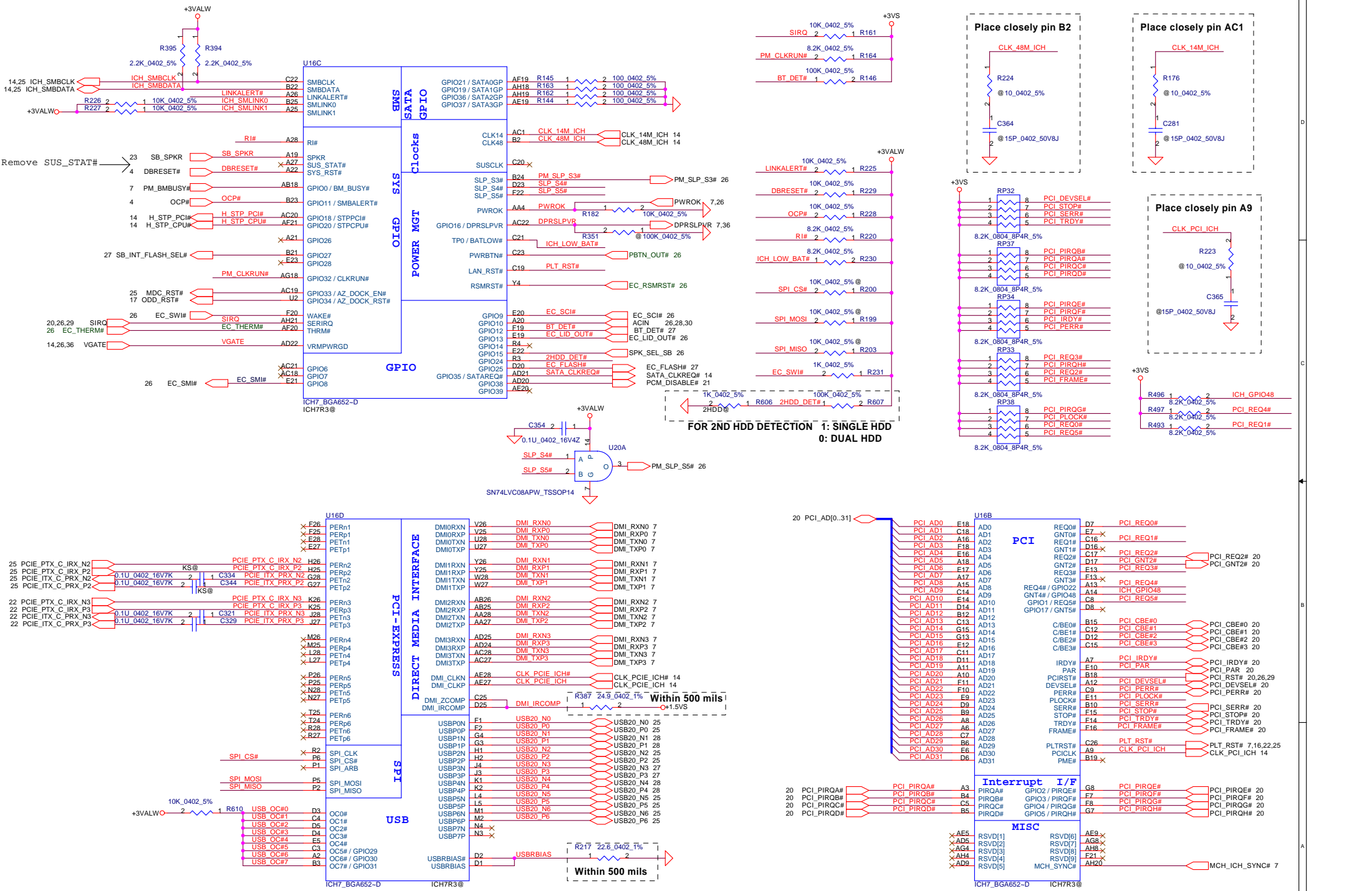
Compal Electronics, Inc.			
VGA / LCD CONN.			
Size	Document Number	Rev	
	IAKAA M/B LA-3401P	0.3	
Date:	Thursday, October 05, 2006	Sheet	16 of 38



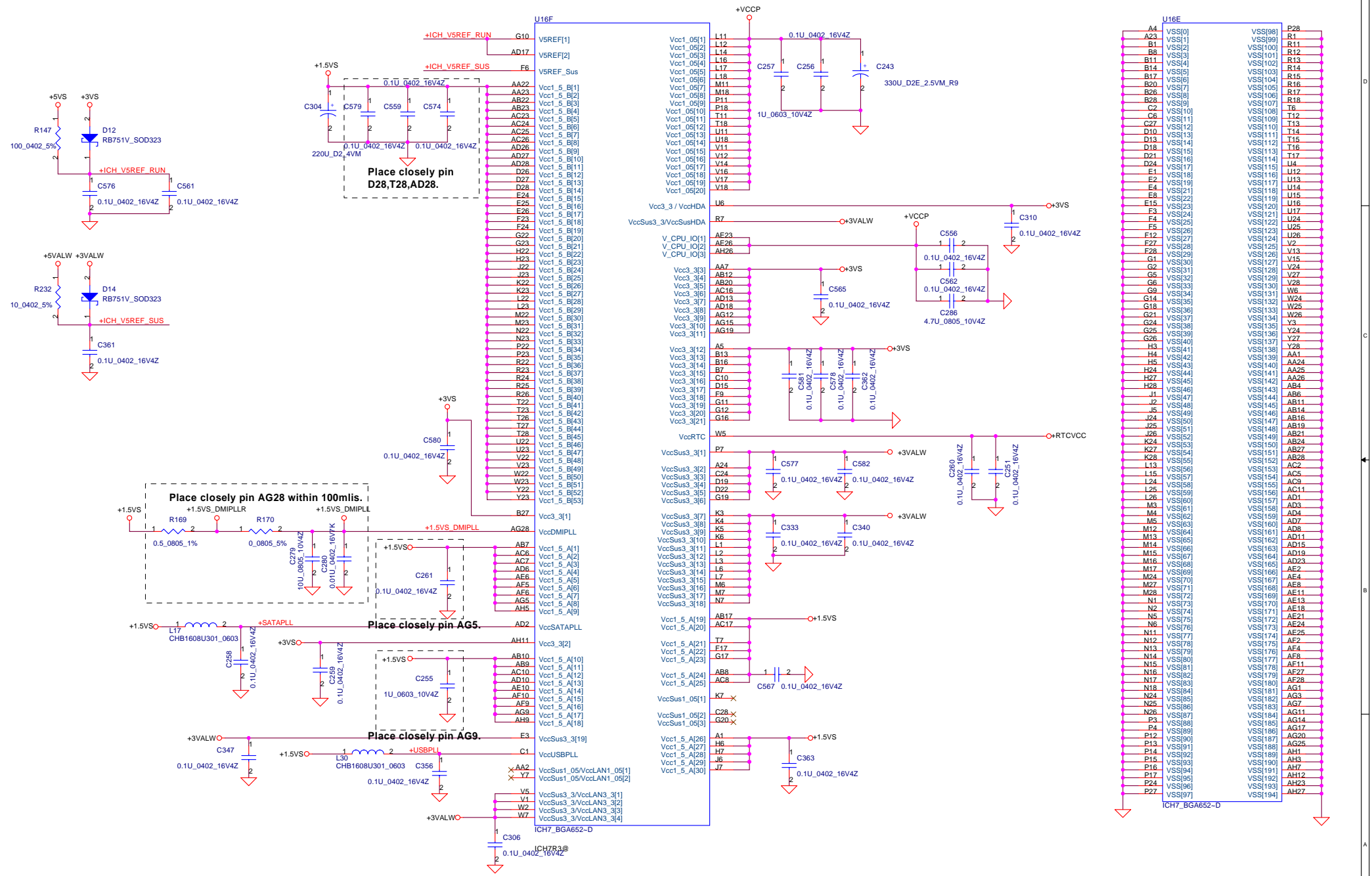
Layout Note:
1. Under BATT1 battery Body, no Trace no Via
2. BATT1 +- PIN keep out 80mil from other component ,trace and via



Security Classification	Compal Secret Data		Title
Issued Date	2006/10/03	Deciphered Date	2009/10/03
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
	IAKAA M/B LA-3401P		0.3
Date:	Thursday, October 05, 2006	Sheet	17 of 38



Security Classification		Compal Secret Data		Title	
Issued Date	2006/10/03	Deciphered Date	2009/10/03	ICH7-M(2/3)	
<small>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.</small>					
Size	Document Number	Date		Sheet	Rev
	IAKAA M/B LA-3401P	Thursday, October 05, 2006		18	0.3
				of	38

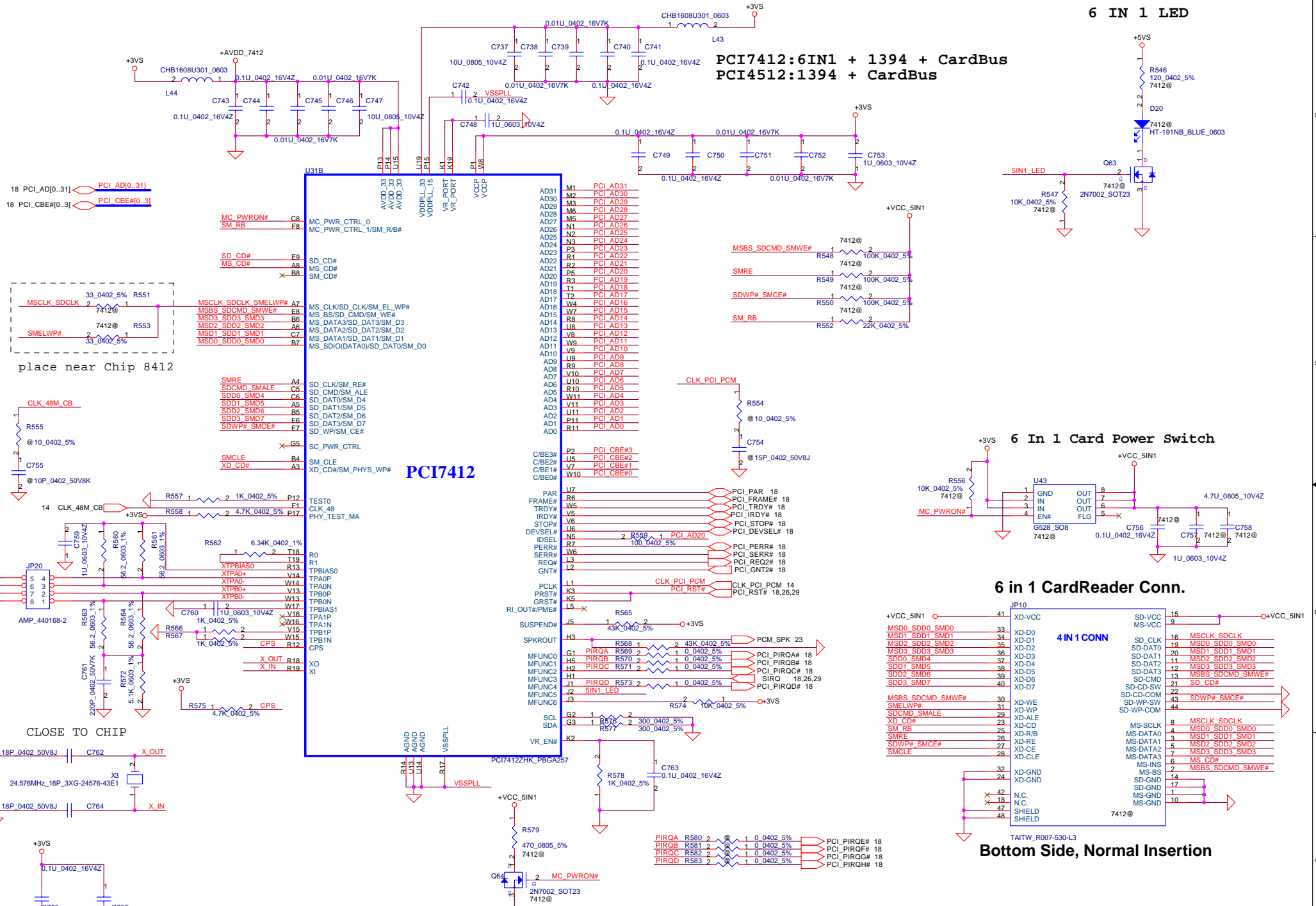


Security Classification		Compal Secret Data	
Issued Date	2006/10/03	Deciphered Date	2009/10/03
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT 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			
Compal Electronics, Inc.			
ICH7-M(3/3)			
Size	Document Number	Rev	
	IAKAA M/B LA-340IP	0.3	
Date:	Thursday, October 05, 2006	Sheet	19 of 38

6 IN 1 LED

PCI7412:6IN1 + 1394 + CardBus
PCI4512:1394 + CardBus



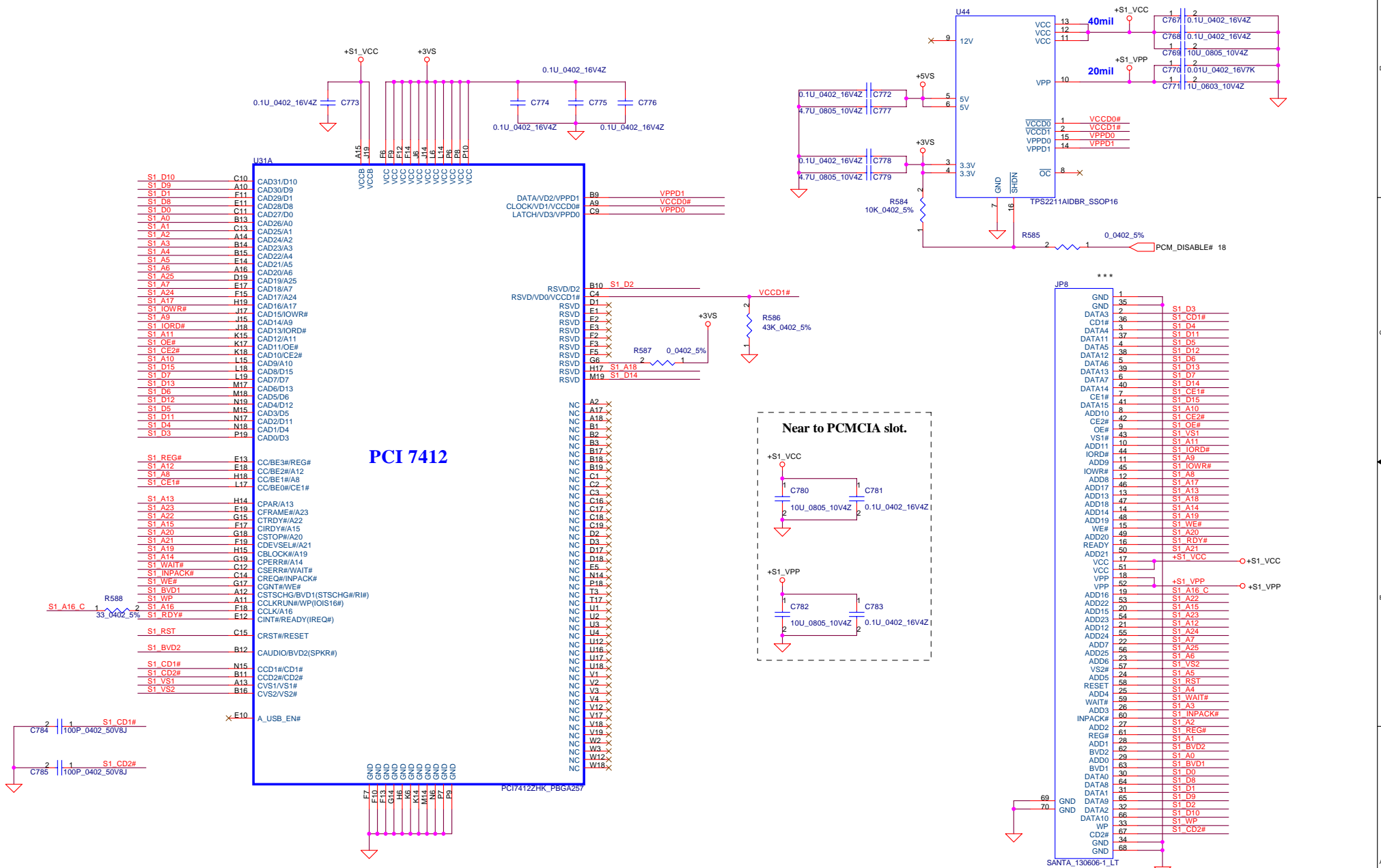
6 In 1 Card Power Switch

6 in 1 CardReader Conn.

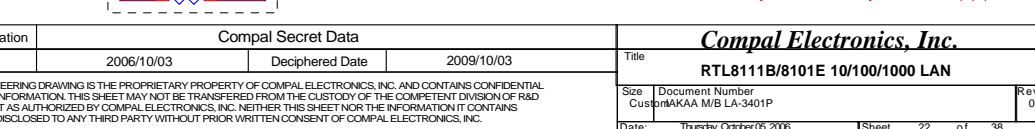
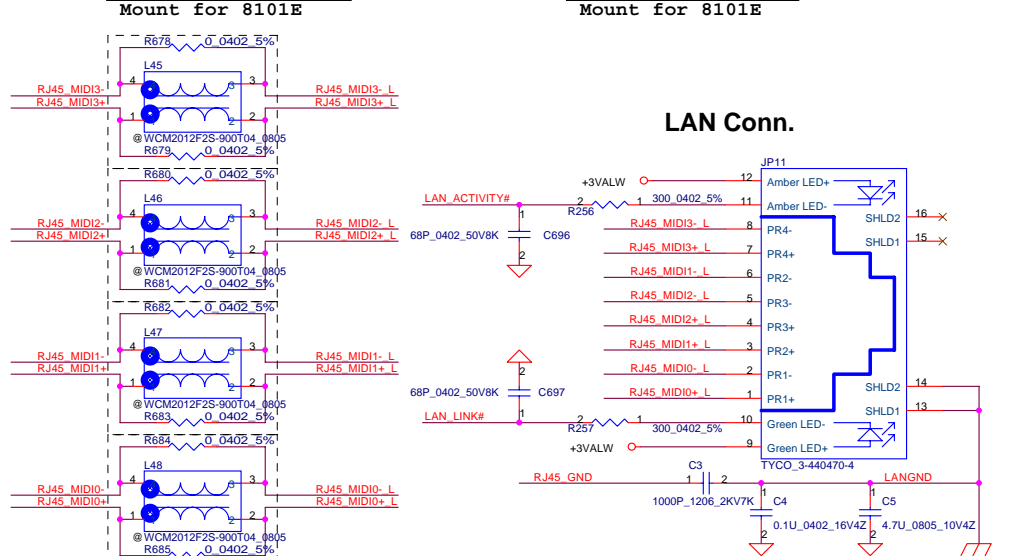
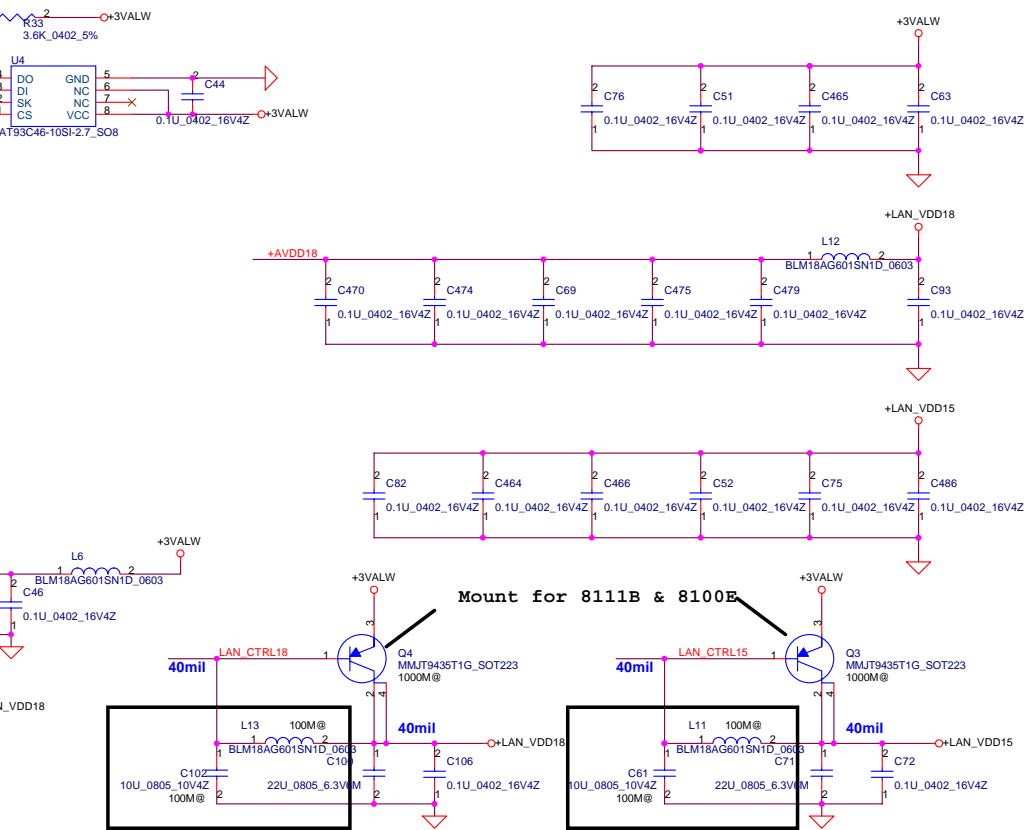
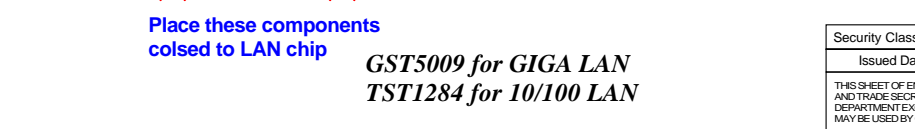
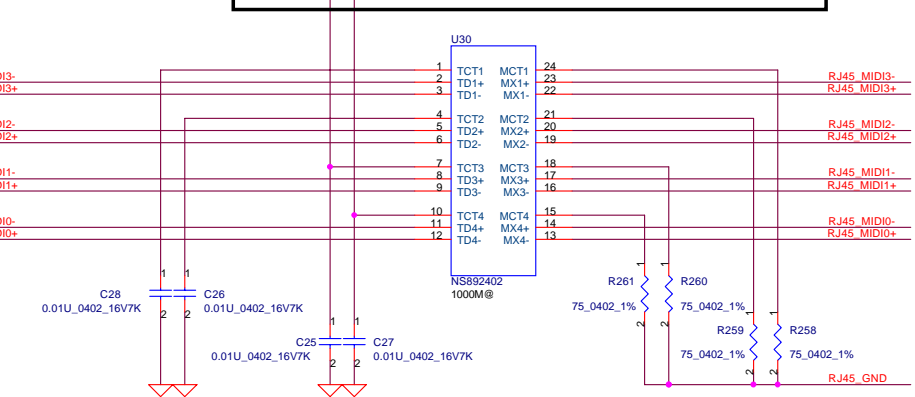
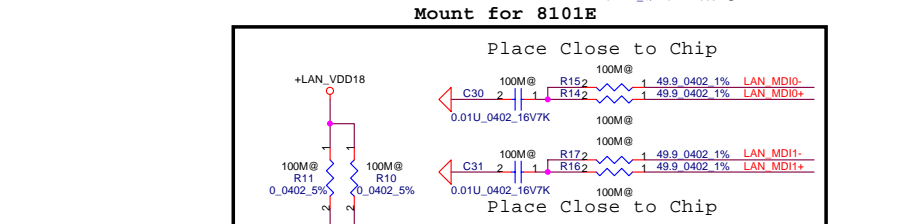
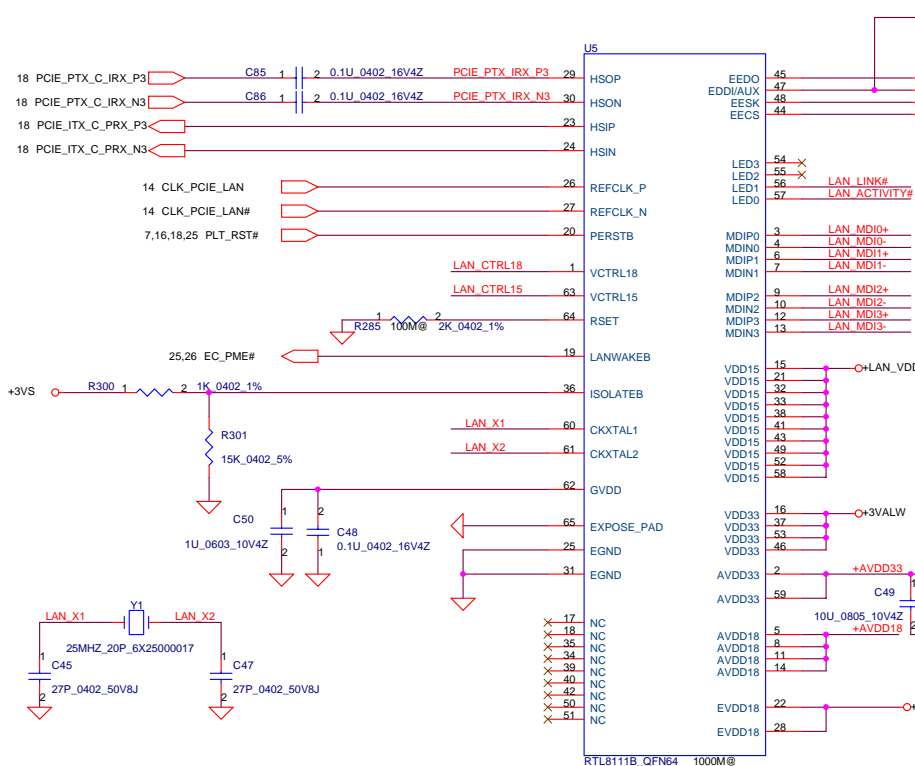
Bottom Side, Normal Insertion

Security Classification	Compal Secret Data		Title	
Issued Date	2006/10/03	Deciphered Date	2009/10/03	PCI7412/PCI1394 CONN/CARD SLOT
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 DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Compal Electronics, Inc. Rev 0.3 Thursday, October 05, 2006

CardBus Power Switch

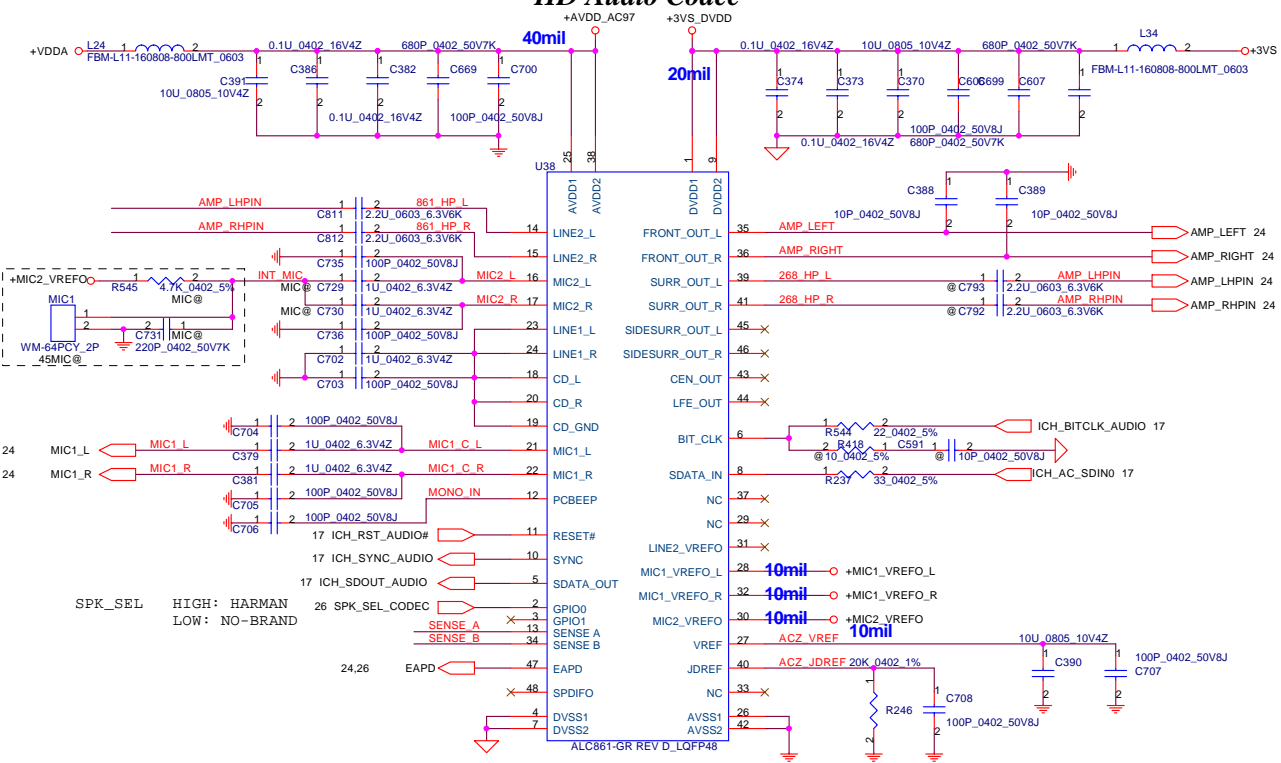


Security Classification	Compal Secret Data		Title	Compal Electronics, Inc.	
Issued Date	2006/10/03	Deciphered Date	2009/10/03	PCI7412/CB/CB SLOT	
<small>THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS 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.</small>				Size	Document Number
				Custom	LA-3171P
				Date:	Thursday, October 05, 2006
				Sheet	21 of 38



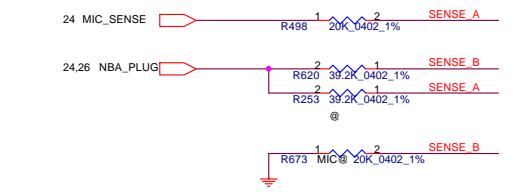
Security Classification		Compal Secret Data		Title	
Issued Date	2006/10/03	Deciphered Date	2009/10/03	RTL8111B/8101E 10/100/1000 LAN	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE 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	Date		Sheet	Rev
Customer	AKAA M/B LA-3401P	Thursday, October 05, 2006		22	0.3
				of	38

HD Audio Codec



DGND

AGND Change R246 from 5.1K to 20K_0402_1%



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

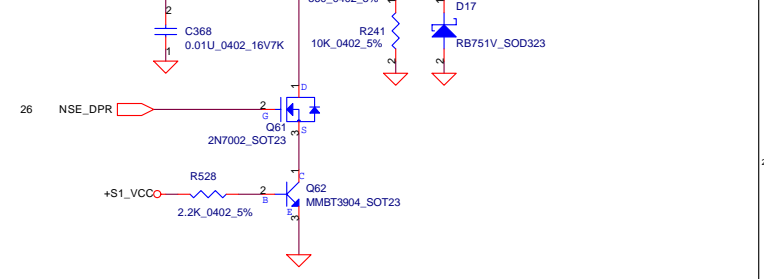
EC Bleep



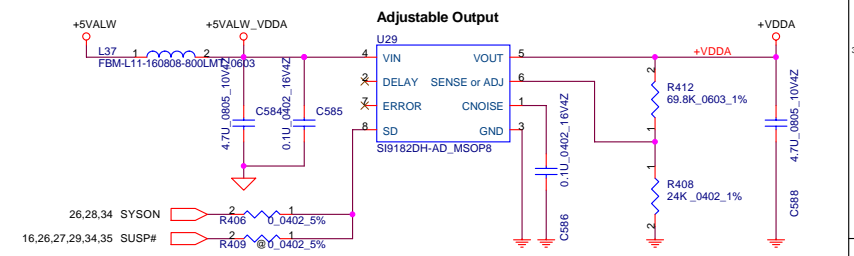
PCI Bleep



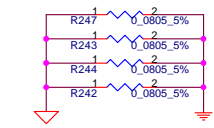
CardBus Bleep



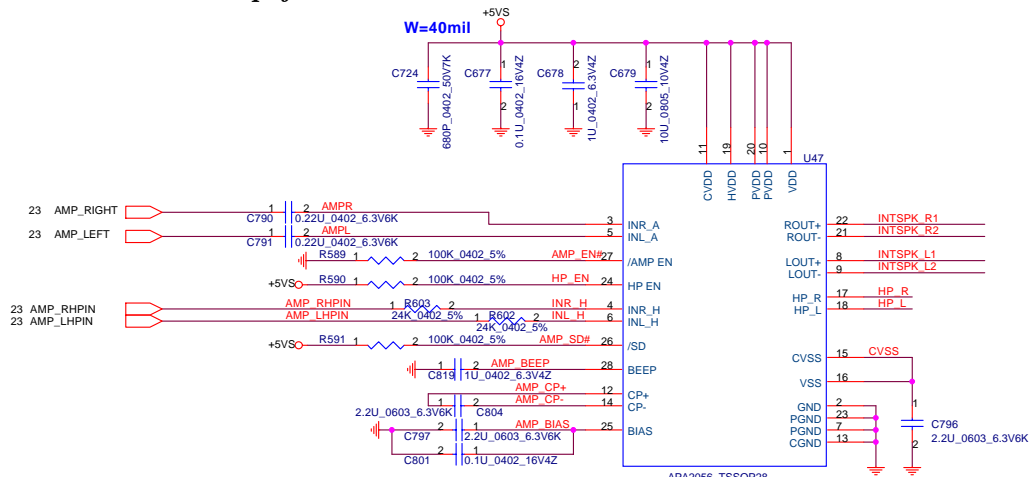
Regulator for CODEC



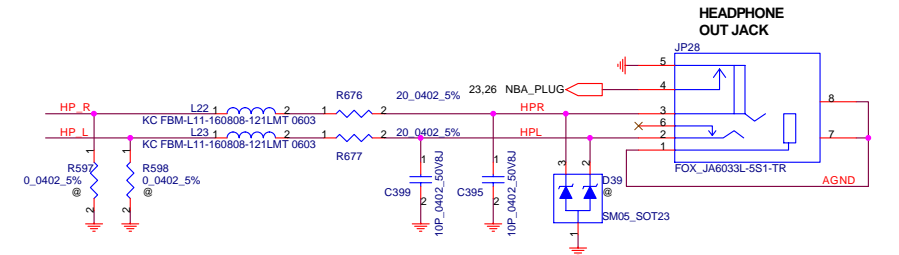
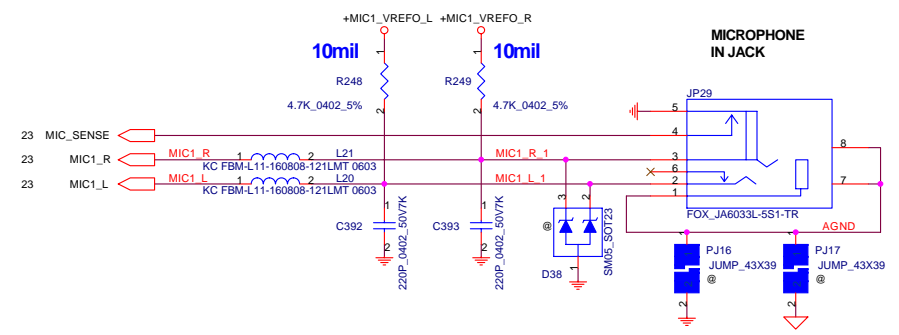
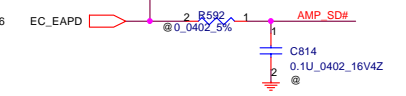
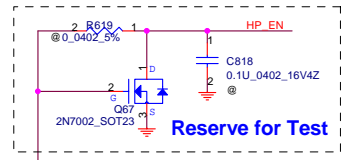
Mot Bridge



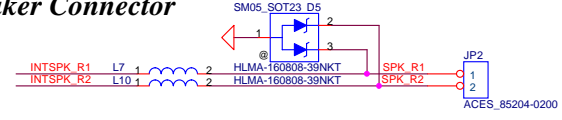
APA2056 SPK/HP Amplifier



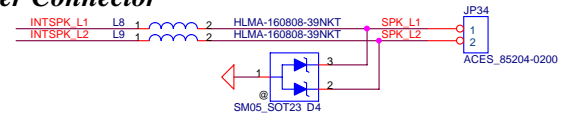
IN_A Gain = 10dB (Internal Speaker)
IN_H Gain = 0dB (Headphone)



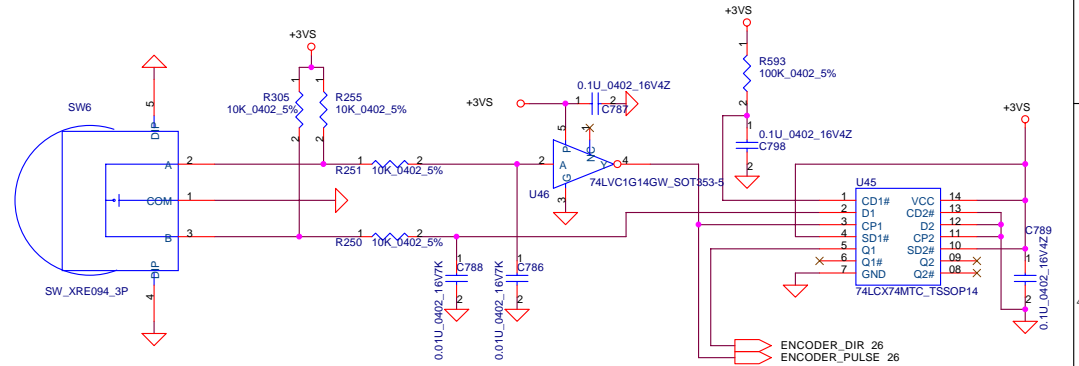
Right Speaker Connector



Left Speaker Connector

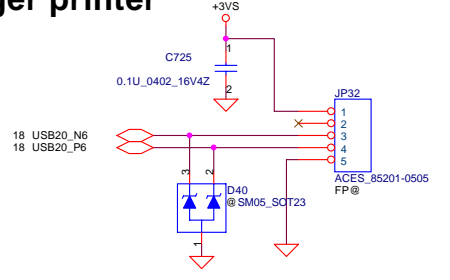


Volume Control

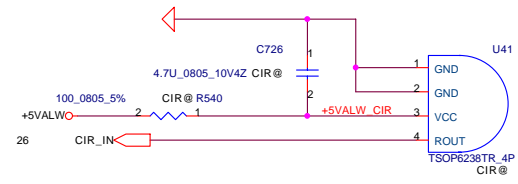


Security Classification	Compal Secret Data		Title	
Issued Date	2006/10/03	Deciphered Date	2009/10/03	AMP/V/R/Audio Jack/MIC
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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	Date		Rev
Custom	IAKAA MB LA-3401P	Thursday, October 05, 2006		0.3
Date			Sheet	of
			24	38

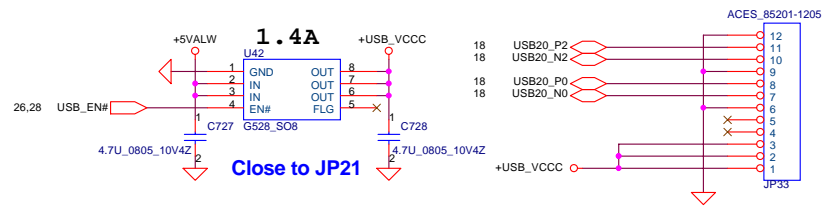
Finger printer



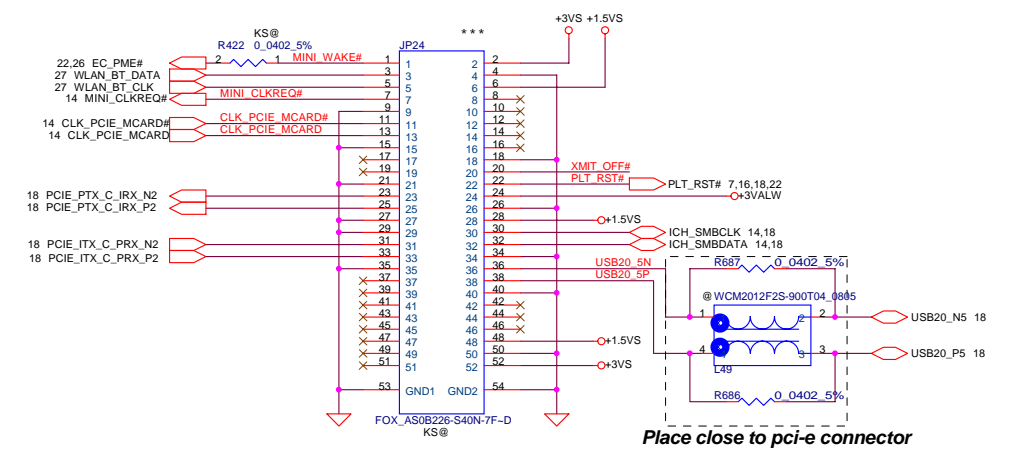
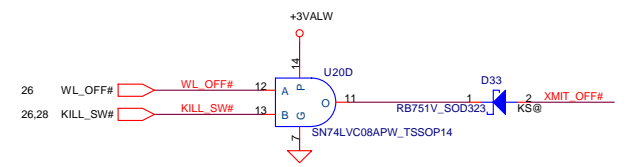
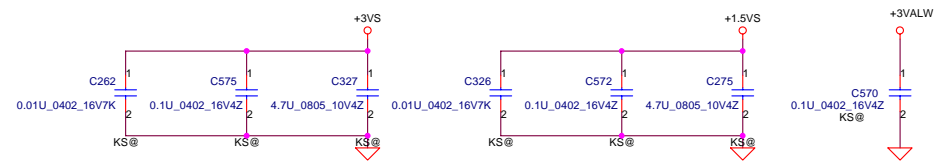
CIR



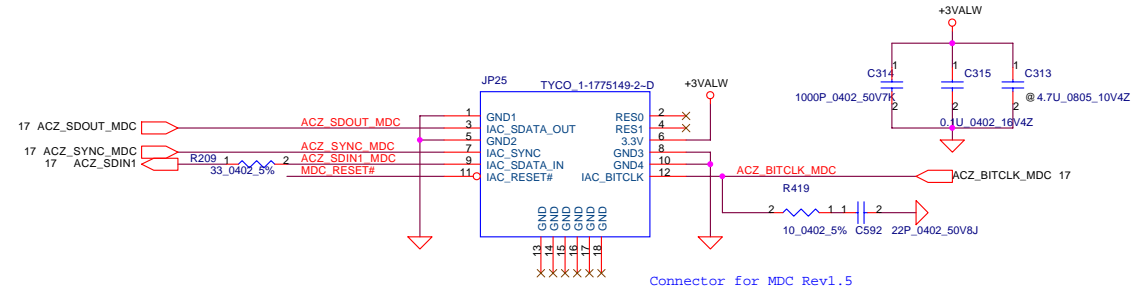
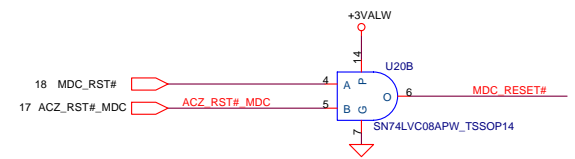
USB Board



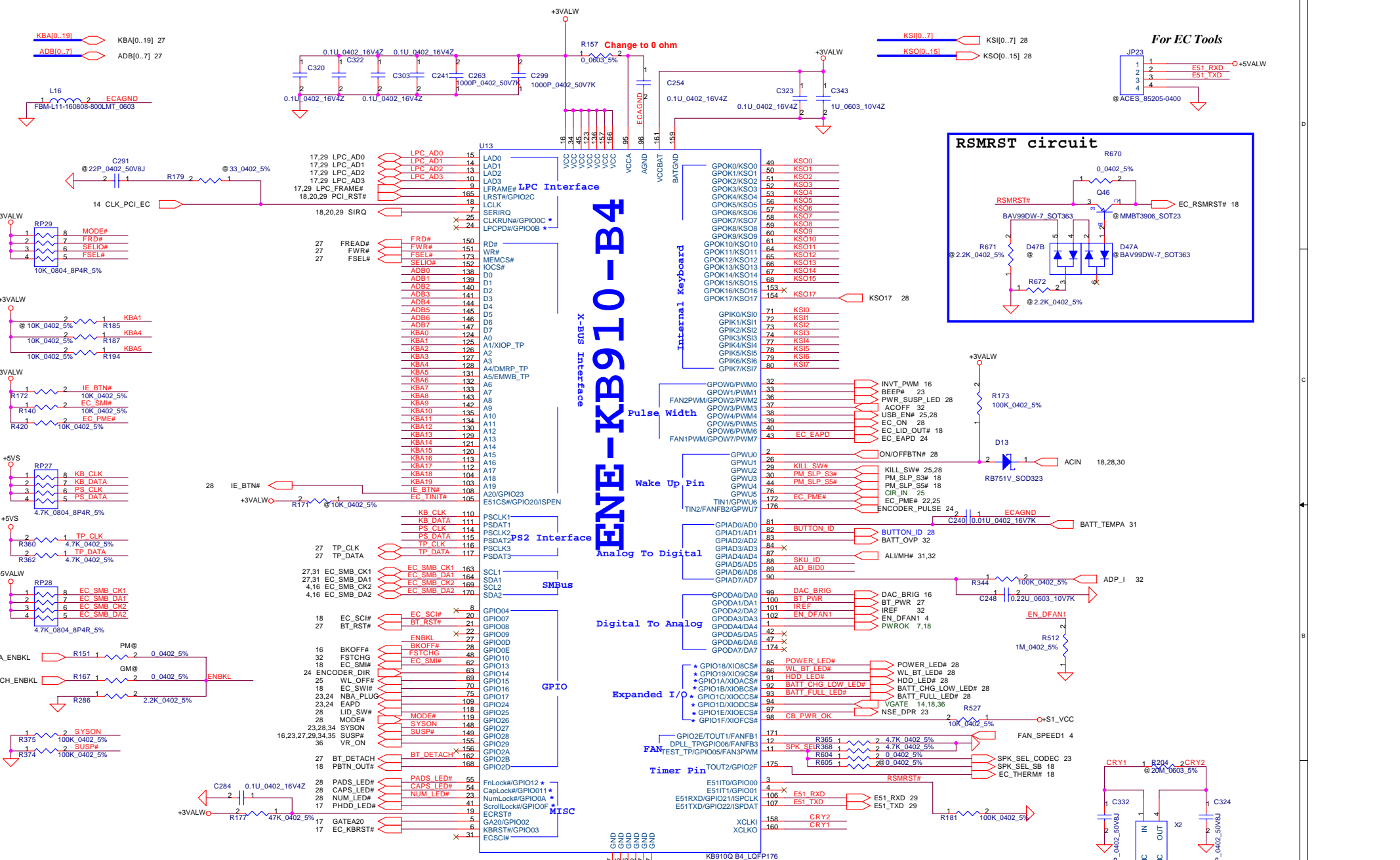
Mini-Express Card



MDC 1.5 Conn.



Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2006/10/03	Deciphered Date	2009/10/03	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.				Document Number
				IAKAA M/B LA-3401P
Date: Thursday, October 05, 2006				Sheet 25 of 38



SKU_ID 0:10 (10E)	4:10J (10EJ)
1:10C	5:10CJ
2:10G	6:10GJ
3:10GC	7:10GCJ

BUTTON_ID ID0:0	BUTTON
ID2:2	BUTTON
ID4:6	BUTTON

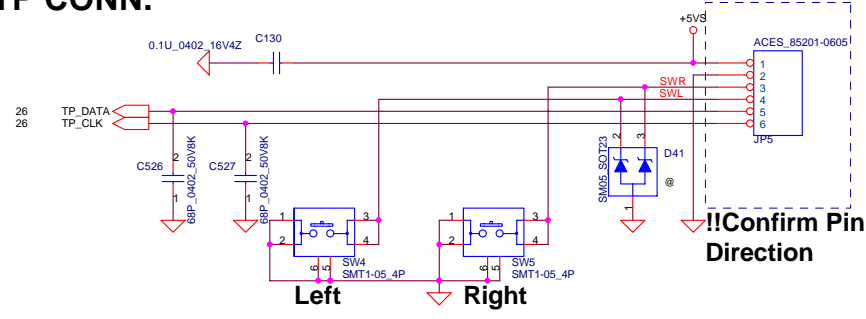
AD_BID0: Board ID
ID = 1 (PCB REV 0.2)

Security Classification	Compal Secret Data
Issued Date	Deciphered Date
2006/10/03	2009/10/03

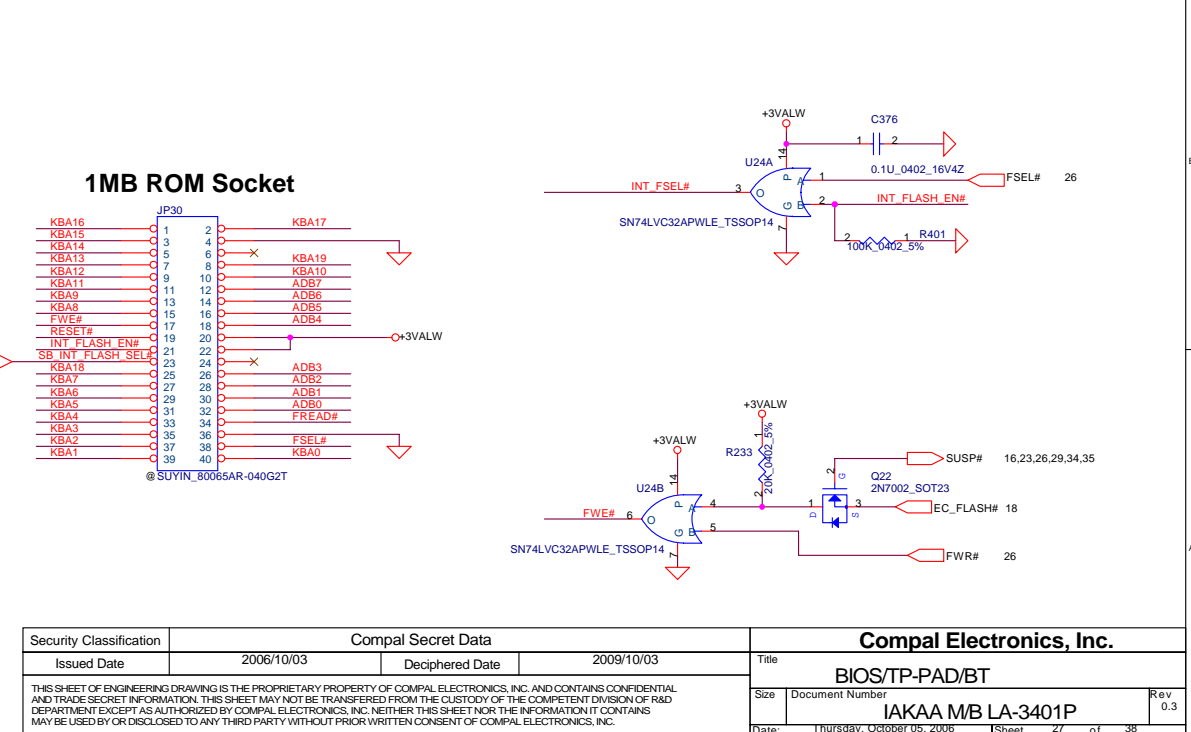
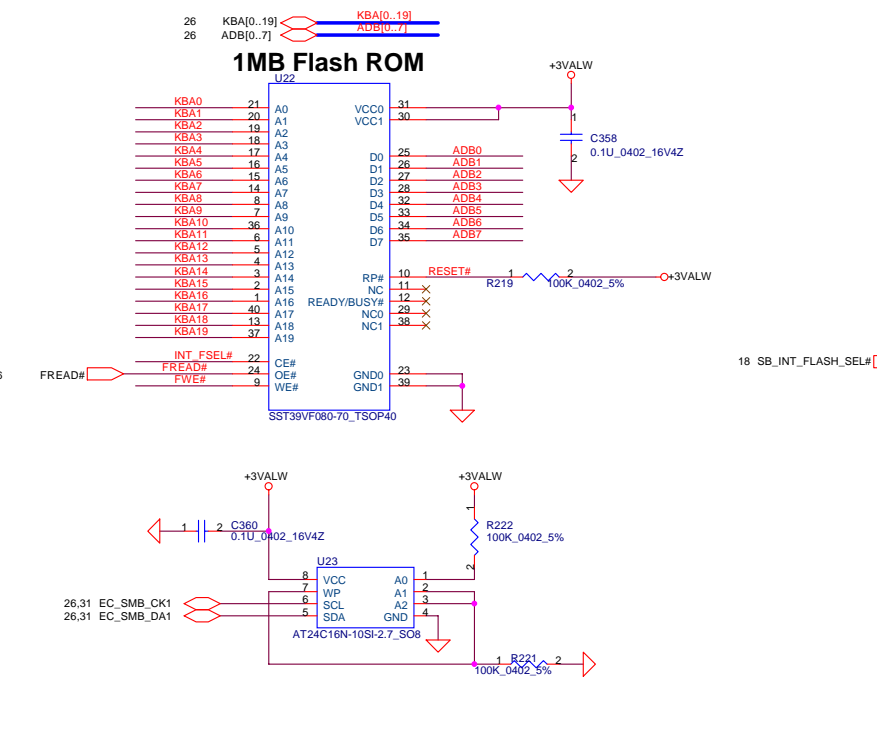
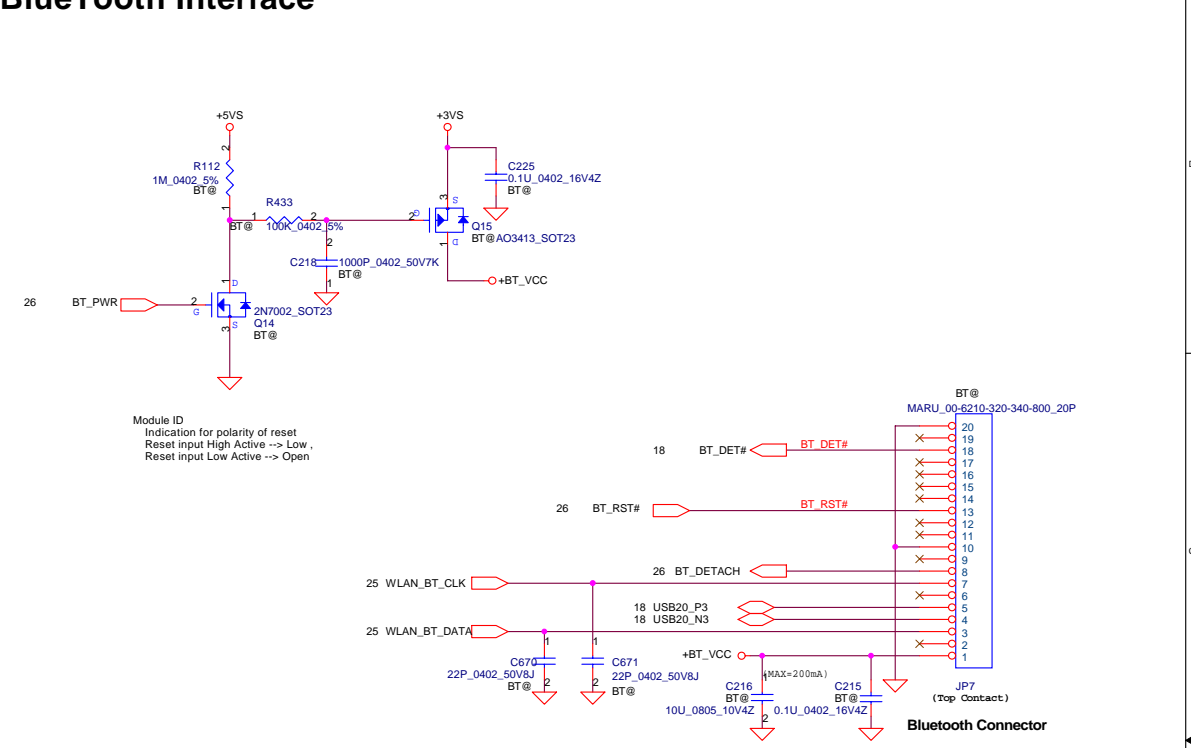
Compal Electronics, Inc.	
ENE-KB910	
Size	Document Number
	IAKAA M/B LA-3401P
Date:	Thursday, October 05, 2006
Sheet	26 of 38

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.

TP CONN.

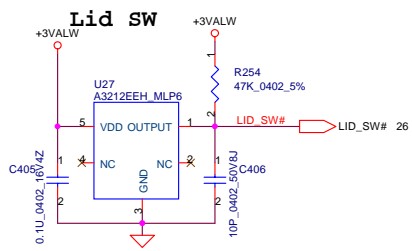


BlueTooth Interface

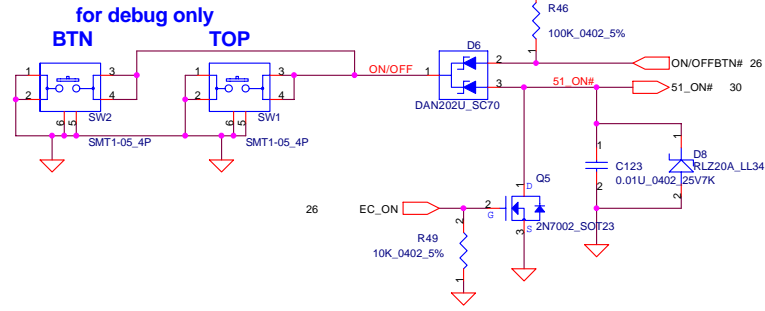


Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2006/10/03	Deciphered Date	2009/10/03	Title	
				BIOS/TP-PAD/BT	
				Size	
				Document Number	
				IAKAA/MB LA-3401P	
				Rev	
				0.3	
				Date:	
				Thursday, October 05, 2006	
				Sheet 27 of 38	

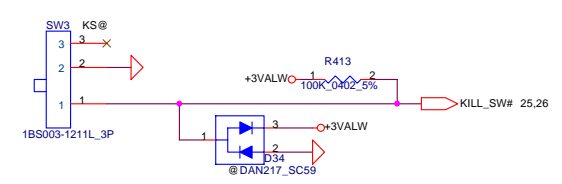
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS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



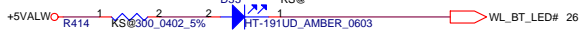
ON/OFF BUTTON



Kill SWITCH



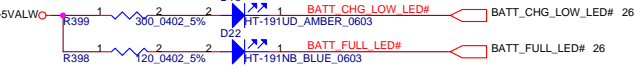
WL&BT LED



POWER/SUSPEND LED



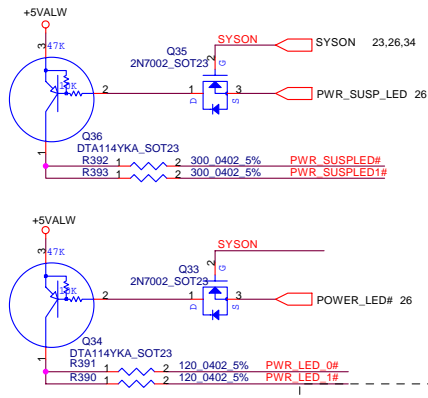
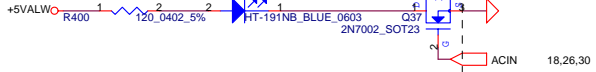
BATT CHARGE/FULL LED



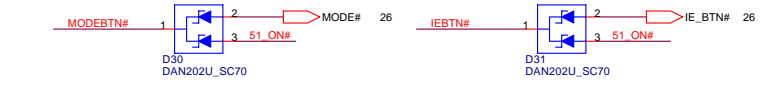
HDD LED



AC IN LED



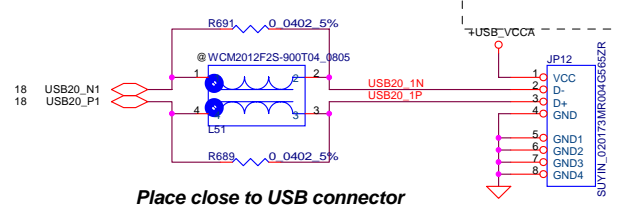
SW/LED Connector



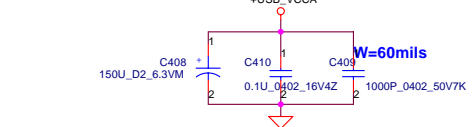
Pin	Signal	Component	Value
1	PWR_LED_1#	C508	220P 0402 50V7K
2	PWR_SUSP_LED#	C506	220P 0402 50V7K
3	ON/OFF	C510	220P 0402 50V7K
4	PWR_LED_1#	C510	220P 0402 50V7K
5	ON/OFF	C509	220P 0402 50V7K
6	IEBTN#	C504	220P 0402 50V7K
7	MODEBTN#	C502	220P 0402 50V7K
8	EC_STOPBTN#	C489	220P 0402 50V7K
9	EC_FRDBTN#	C490	220P 0402 50V7K
10	EC_PLAYBTN#	C500	220P 0402 50V7K
11	EC_STOPBTN#	C499	220P 0402 50V7K
12	EC_PLAYBTN#	C500	220P 0402 50V7K
13	EC_FRDBTN#	C499	220P 0402 50V7K
14	EC_STOPBTN#	C499	220P 0402 50V7K
15	EC_PLAYBTN#	C500	220P 0402 50V7K
16	EC_FRDBTN#	C499	220P 0402 50V7K
17	EC_STOPBTN#	C499	220P 0402 50V7K
18	EC_PLAYBTN#	C500	220P 0402 50V7K
19	EC_FRDBTN#	C499	220P 0402 50V7K
20	EC_STOPBTN#	C499	220P 0402 50V7K
21	EC_PLAYBTN#	C500	220P 0402 50V7K
22	EC_FRDBTN#	C499	220P 0402 50V7K
23	EC_STOPBTN#	C499	220P 0402 50V7K
24	EC_PLAYBTN#	C500	220P 0402 50V7K
25	EC_FRDBTN#	C499	220P 0402 50V7K
26	EC_STOPBTN#	C499	220P 0402 50V7K
27	EC_PLAYBTN#	C500	220P 0402 50V7K
28	EC_FRDBTN#	C499	220P 0402 50V7K
29	EC_STOPBTN#	C499	220P 0402 50V7K
30	EC_PLAYBTN#	C500	220P 0402 50V7K
31	EC_FRDBTN#	C499	220P 0402 50V7K
32	EC_STOPBTN#	C499	220P 0402 50V7K
33	EC_PLAYBTN#	C500	220P 0402 50V7K
34	EC_FRDBTN#	C499	220P 0402 50V7K
35	EC_STOPBTN#	C499	220P 0402 50V7K
36	EC_PLAYBTN#	C500	220P 0402 50V7K
37	EC_FRDBTN#	C499	220P 0402 50V7K
38	EC_STOPBTN#	C499	220P 0402 50V7K
39	EC_PLAYBTN#	C500	220P 0402 50V7K
40	EC_FRDBTN#	C499	220P 0402 50V7K
41	EC_STOPBTN#	C499	220P 0402 50V7K
42	EC_PLAYBTN#	C500	220P 0402 50V7K
43	EC_FRDBTN#	C499	220P 0402 50V7K
44	EC_STOPBTN#	C499	220P 0402 50V7K
45	EC_PLAYBTN#	C500	220P 0402 50V7K
46	EC_FRDBTN#	C499	220P 0402 50V7K
47	EC_STOPBTN#	C499	220P 0402 50V7K
48	EC_PLAYBTN#	C500	220P 0402 50V7K
49	EC_FRDBTN#	C499	220P 0402 50V7K
50	EC_STOPBTN#	C499	220P 0402 50V7K
51	EC_PLAYBTN#	C500	220P 0402 50V7K
52	EC_FRDBTN#	C499	220P 0402 50V7K
53	EC_STOPBTN#	C499	220P 0402 50V7K
54	EC_PLAYBTN#	C500	220P 0402 50V7K
55	EC_FRDBTN#	C499	220P 0402 50V7K
56	EC_STOPBTN#	C499	220P 0402 50V7K
57	EC_PLAYBTN#	C500	220P 0402 50V7K
58	EC_FRDBTN#	C499	220P 0402 50V7K
59	EC_STOPBTN#	C499	220P 0402 50V7K
60	EC_PLAYBTN#	C500	220P 0402 50V7K
61	EC_FRDBTN#	C499	220P 0402 50V7K
62	EC_STOPBTN#	C499	220P 0402 50V7K
63	EC_PLAYBTN#	C500	220P 0402 50V7K
64	EC_FRDBTN#	C499	220P 0402 50V7K
65	EC_STOPBTN#	C499	220P 0402 50V7K
66	EC_PLAYBTN#	C500	220P 0402 50V7K
67	EC_FRDBTN#	C499	220P 0402 50V7K
68	EC_STOPBTN#	C499	220P 0402 50V7K
69	EC_PLAYBTN#	C500	220P 0402 50V7K
70	EC_FRDBTN#	C499	220P 0402 50V7K
71	EC_STOPBTN#	C499	220P 0402 50V7K
72	EC_PLAYBTN#	C500	220P 0402 50V7K
73	EC_FRDBTN#	C499	220P 0402 50V7K
74	EC_STOPBTN#	C499	220P 0402 50V7K
75	EC_PLAYBTN#	C500	220P 0402 50V7K
76	EC_FRDBTN#	C499	220P 0402 50V7K
77	EC_STOPBTN#	C499	220P 0402 50V7K
78	EC_PLAYBTN#	C500	220P 0402 50V7K
79	EC_FRDBTN#	C499	220P 0402 50V7K
80	EC_STOPBTN#	C499	220P 0402 50V7K
81	EC_PLAYBTN#	C500	220P 0402 50V7K
82	EC_FRDBTN#	C499	220P 0402 50V7K
83	EC_STOPBTN#	C499	220P 0402 50V7K
84	EC_PLAYBTN#	C500	220P 0402 50V7K
85	EC_FRDBTN#	C499	220P 0402 50V7K
86	EC_STOPBTN#	C499	220P 0402 50V7K
87	EC_PLAYBTN#	C500	220P 0402 50V7K
88	EC_FRDBTN#	C499	220P 0402 50V7K
89	EC_STOPBTN#	C499	220P 0402 50V7K
90	EC_PLAYBTN#	C500	220P 0402 50V7K
91	EC_FRDBTN#	C499	220P 0402 50V7K
92	EC_STOPBTN#	C499	220P 0402 50V7K
93	EC_PLAYBTN#	C500	220P 0402 50V7K
94	EC_FRDBTN#	C499	220P 0402 50V7K
95	EC_STOPBTN#	C499	220P 0402 50V7K
96	EC_PLAYBTN#	C500	220P 0402 50V7K
97	EC_FRDBTN#	C499	220P 0402 50V7K
98	EC_STOPBTN#	C499	220P 0402 50V7K
99	EC_PLAYBTN#	C500	220P 0402 50V7K
100	EC_FRDBTN#	C499	220P 0402 50V7K
101	EC_STOPBTN#	C499	220P 0402 50V7K
102	EC_PLAYBTN#	C500	220P 0402 50V7K
103	EC_FRDBTN#	C499	220P 0402 50V7K
104	EC_STOPBTN#	C499	220P 0402 50V7K
105	EC_PLAYBTN#	C500	220P 0402 50V7K
106	EC_FRDBTN#	C499	220P 0402 50V7K
107	EC_STOPBTN#	C499	220P 0402 50V7K
108	EC_PLAYBTN#	C500	220P 0402 50V7K
109	EC_FRDBTN#	C499	220P 0402 50V7K
110	EC_STOPBTN#	C499	220P 0402 50V7K
111	EC_PLAYBTN#	C500	220P 0402 50V7K
112	EC_FRDBTN#	C499	220P 0402 50V7K
113	EC_STOPBTN#	C499	220P 0402 50V7K
114	EC_PLAYBTN#	C500	220P 0402 50V7K
115	EC_FRDBTN#	C499	220P 0402 50V7K
116	EC_STOPBTN#	C499	220P 0402 50V7K
117	EC_PLAYBTN#	C500	220P 0402 50V7K
118	EC_FRDBTN#	C499	220P 0402 50V7K
119	EC_STOPBTN#	C499	220P 0402 50V7K
120	EC_PLAYBTN#	C500	220P 0402 50V7K

For EMI Request

USB CONN. 1 (In Back Side)



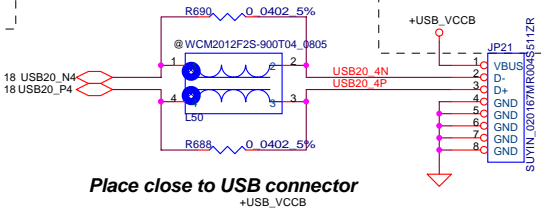
Place close to USB connector



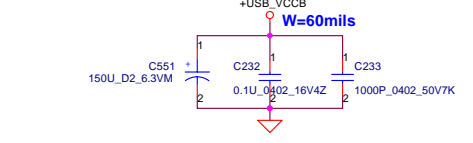
1.4A

Close to JP12

USB CONN. 2 (In Left Side)



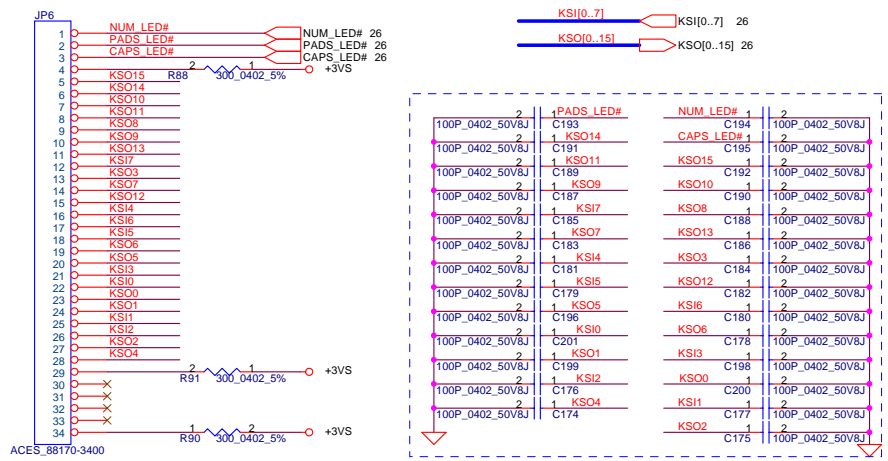
Place close to USB connector



1.4A

Close to JP21

KEYBOARD CONN.

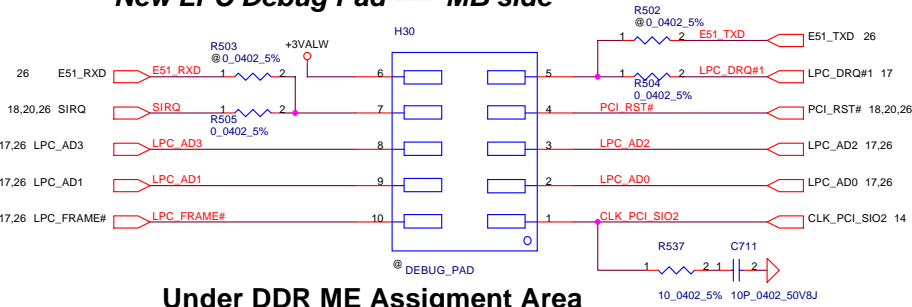


For EMI Request

For EMI Request

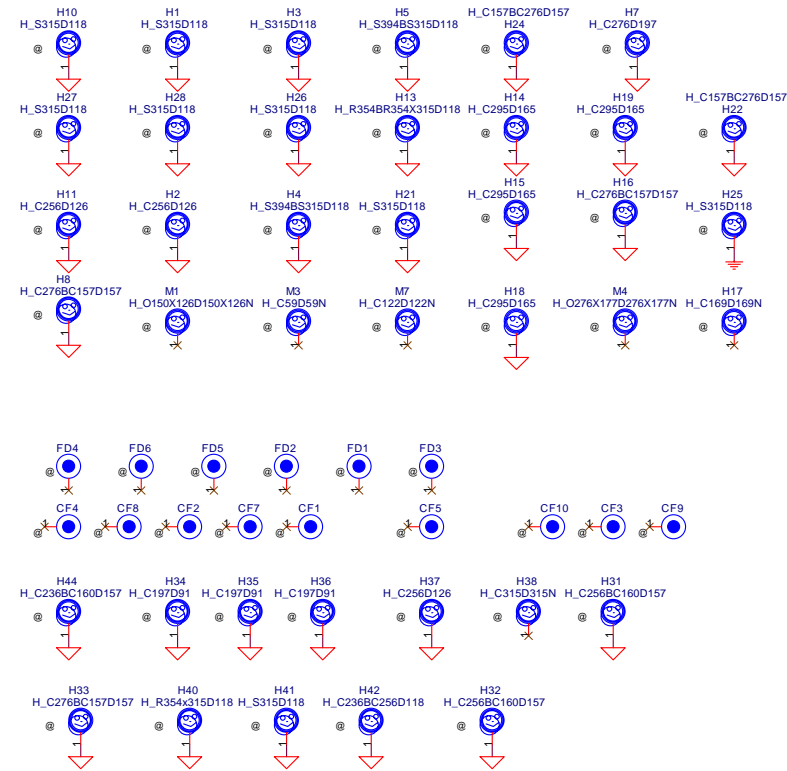
Security Classification	Compal Secret Data		Title
Issued Date	2006/10/03	Deciphered Date	2009/10/03
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE 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.			
USB/LID/KS/KB/LED/SW-B Conn			
Size	Document Number	Rev	
	IAKAA MB LA-3401P	0.3	
Date:	Thursday, October 05, 2006	Sheet	28 of 38

New LPC Debug Pad ---- MB side

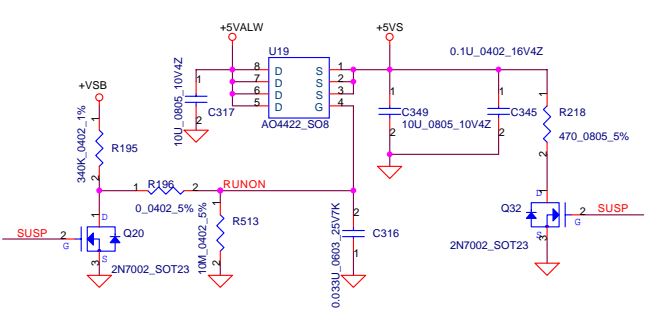


Under DDR ME Assignment Area

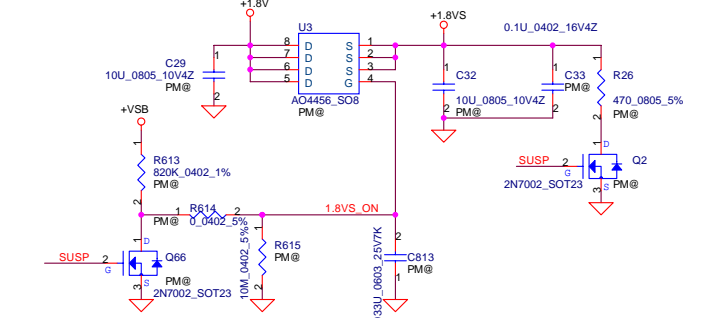
Keep Resistor near Debug Pad and in the same side
Reverse side DIMM ---- Pin 1 keep away DIMM



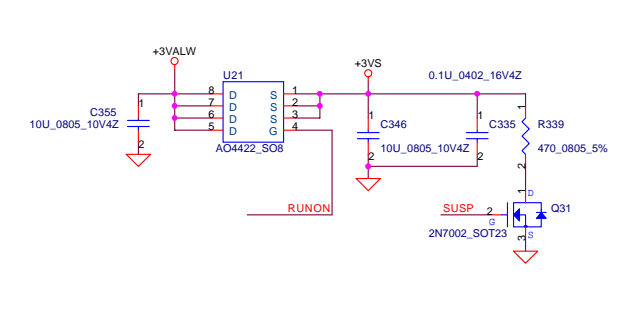
+5VALW to +5VS Transfer



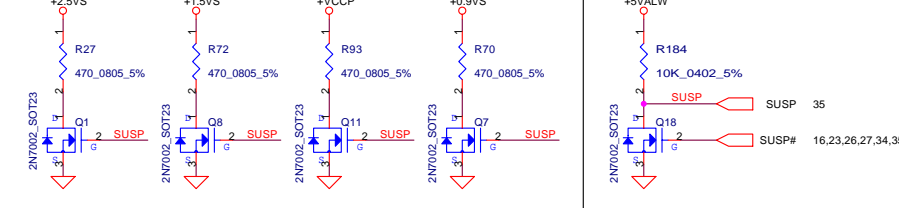
+1.8V to +1.8VS Transfer (Place close to VGA-Connector)



+3VALW to +3VS Transfer



Discharge Circuit

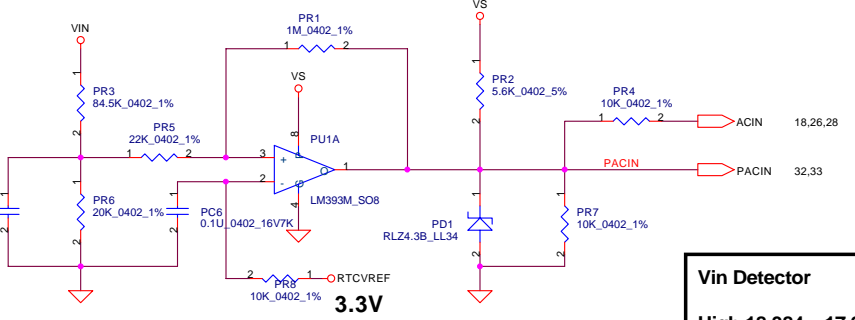
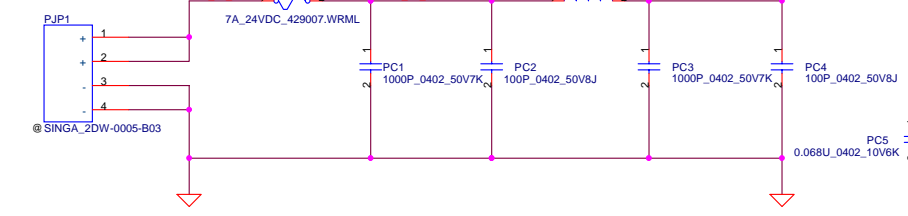


Security Classification	Compal Secret Data	
Issued Date	2006/10/03	Deciphered Date
		2009/10/03

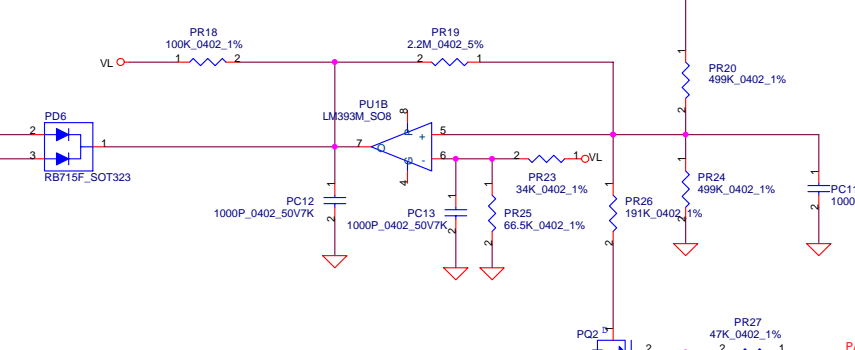
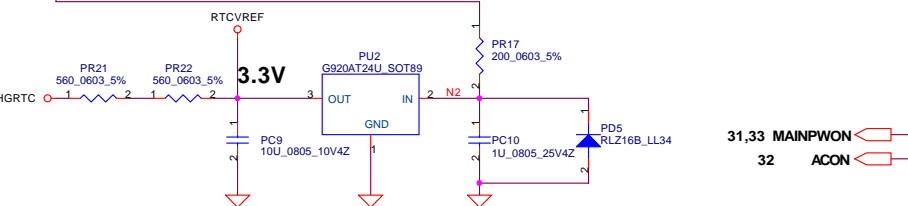
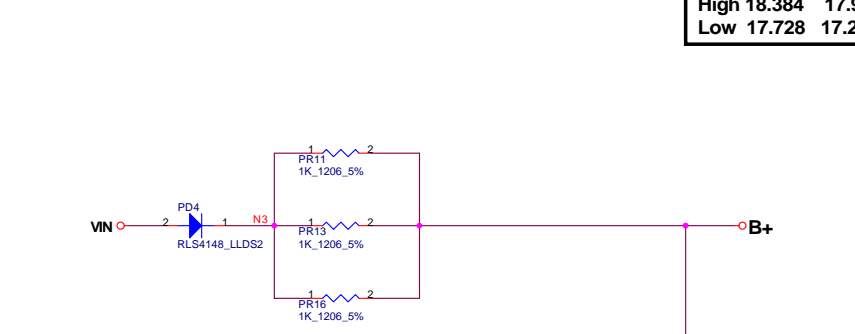
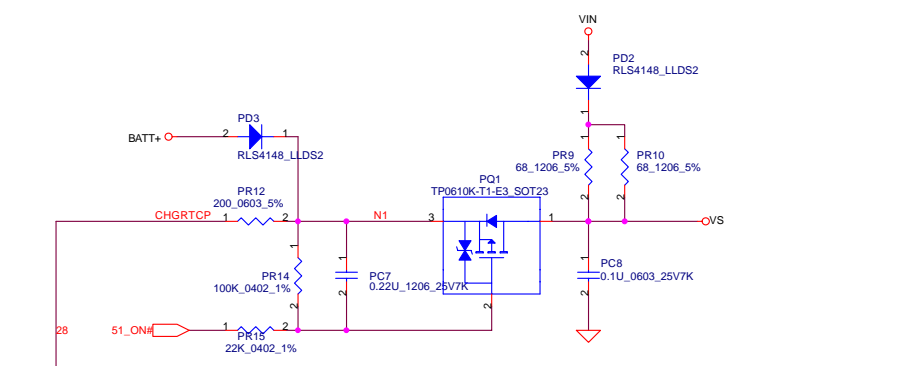
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS 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		
Compal Electronics, Inc.		
DC/DC I/F Debug I/F Screw		
Size	Document Number	Rev
	IAKAA M/B LA-340IP	0.3
Date:	Thursday, October 05, 2006	Sheet 29 of 38

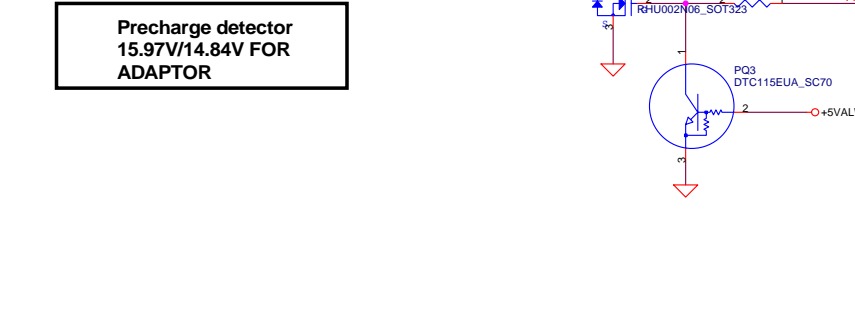
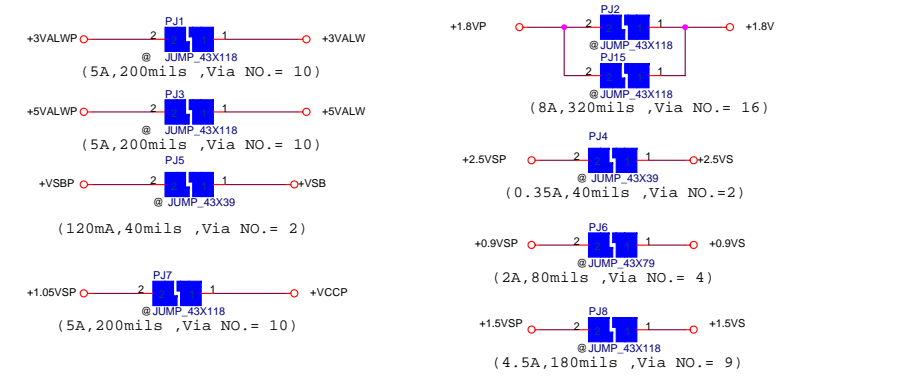
DC301001M80



Vin Detector
 High 18.384 17.901 17.430
 Low 17.728 17.257 16.976

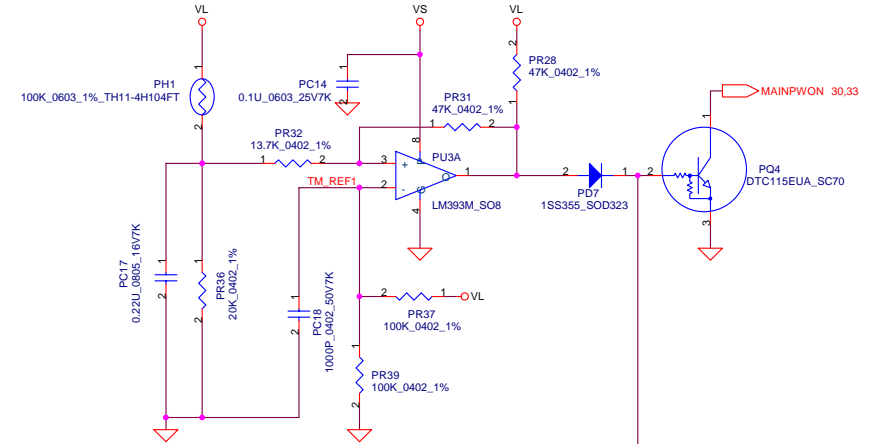
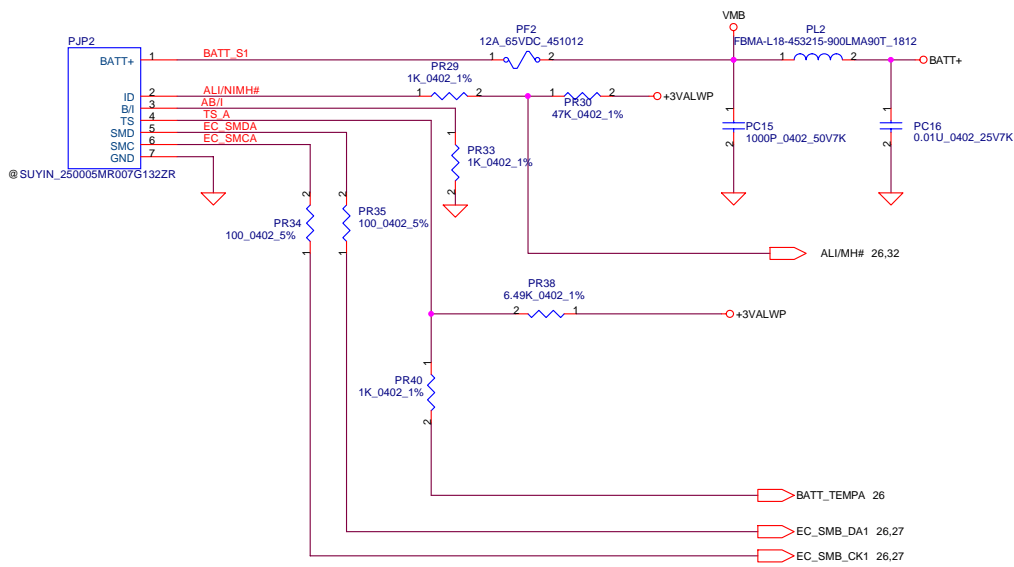


Precharge detector
 15.97V/14.84V FOR ADAPTOR

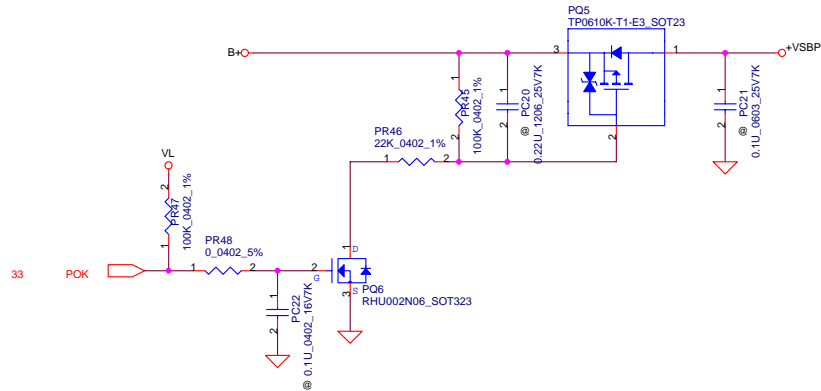
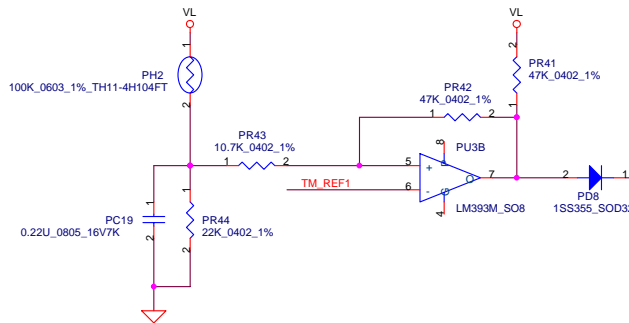


Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2006/10/03	Deciphered Date	2009/10/03	Title
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				DCIN & DETECTOR
Size	Document Number	Sheet	30	of 38
Date:	Thursday, October 05, 2006	Rev	0.3	

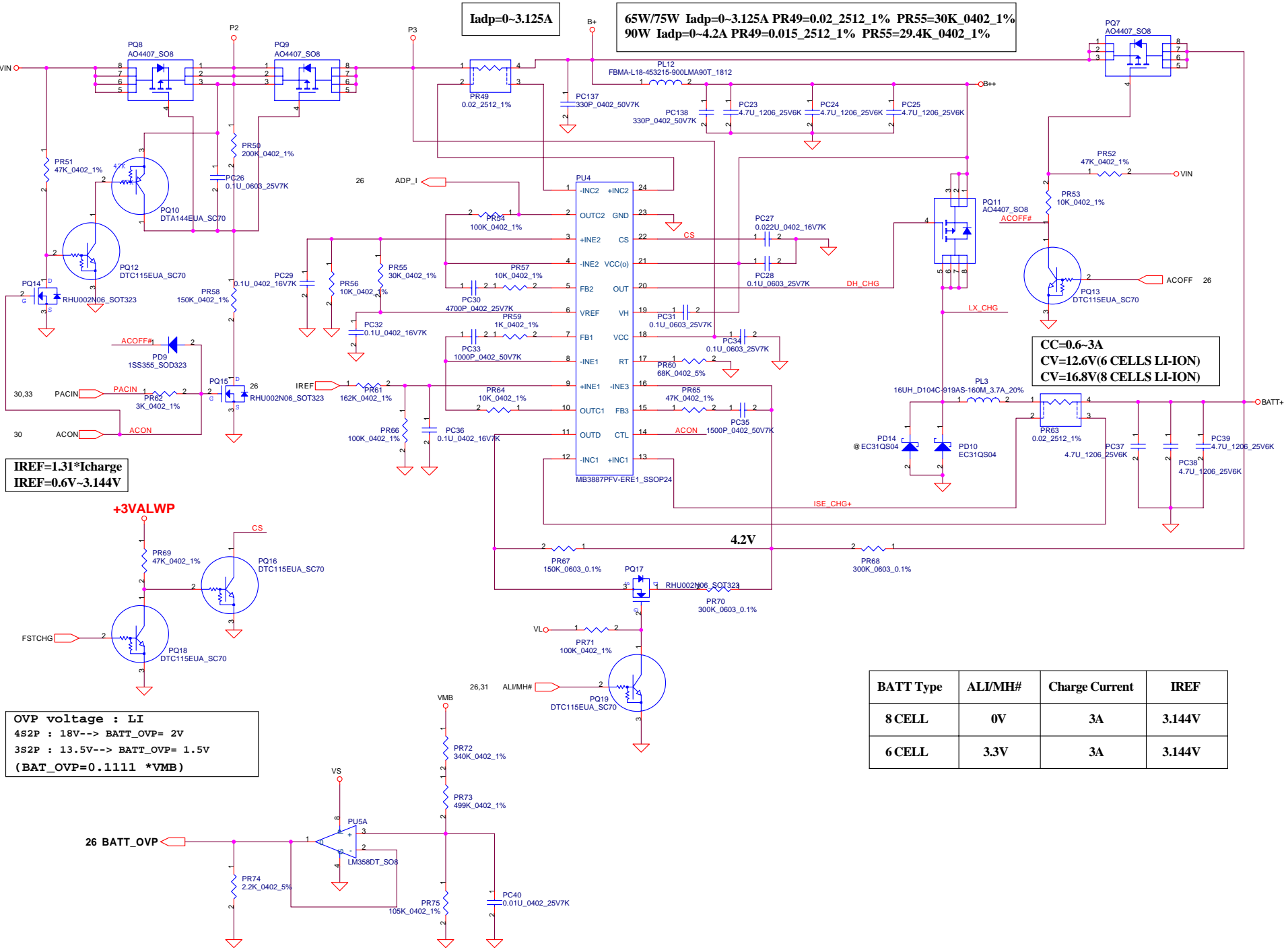
PH1 under CPU botten side :
 CPU thermal protection at 87(86) degree C
 Recovery at 48(47) degree C



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	2006/10/03	Deciphered Date	2009/10/03	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	Document Number	Sheet	31	of
Date:	Thursday, October 05, 2006	Rev	0.3	38



Iadp=0~3.125A

65W/75W Iadp=0~3.125A PR49=0.02_2512_1% PR55=30K_0402_1%
 90W Iadp=0~4.2A PR49=0.015_2512_1% PR55=29.4K_0402_1%

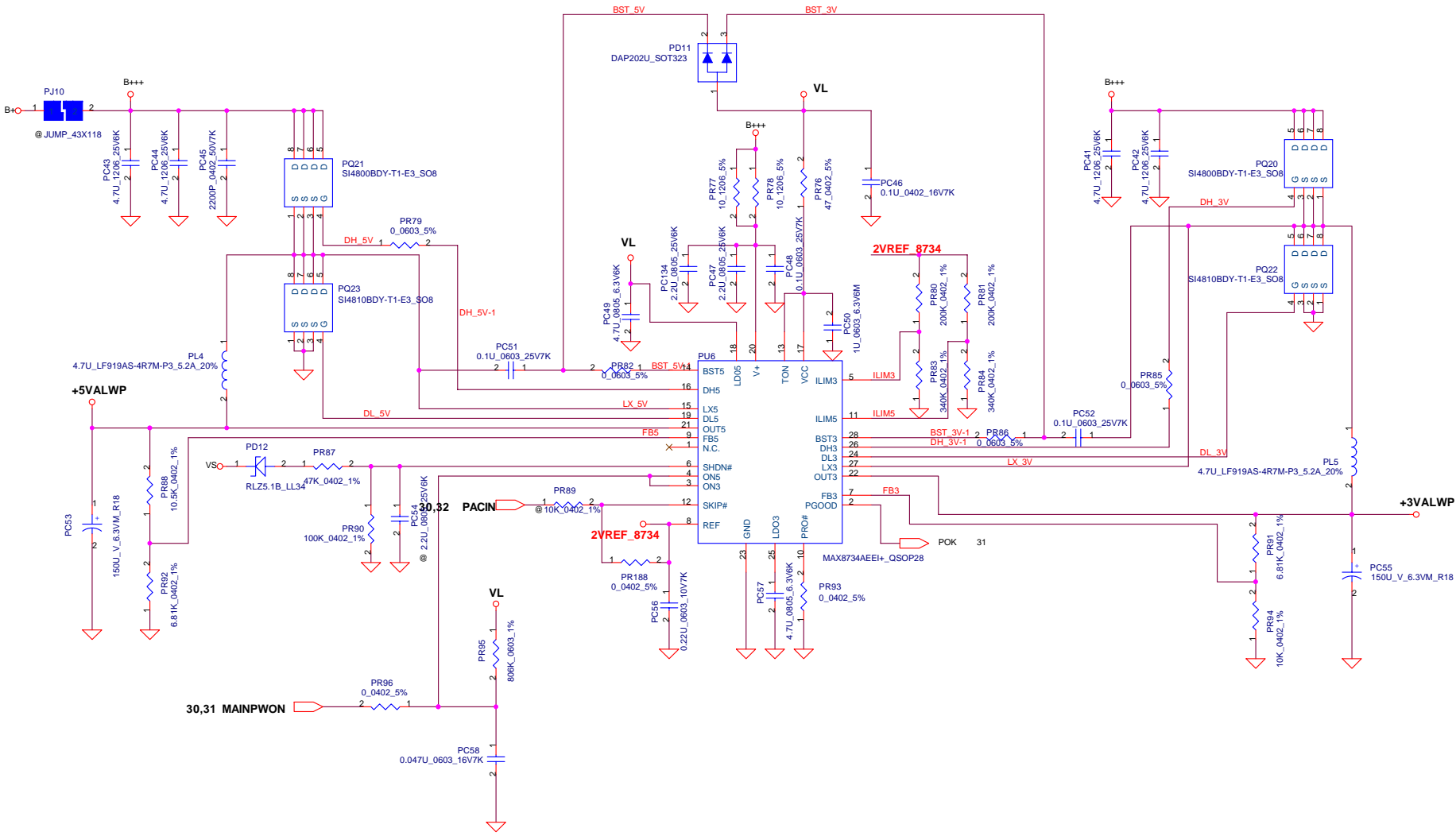
CC=0.6-3A
 CV=12.6V(6 CELLS LI-ION)
 CV=16.8V(8 CELLS LI-ION)

$I_{REF} = 1.31 \cdot I_{charge}$
 $I_{REF} = 0.6V \sim 3.144V$

OVP voltage : LI
 4S2P : 18V--> BATT_OVP= 2V
 3S2P : 13.5V--> BATT_OVP= 1.5V
 (BATT_OVP=0.1111 *VMB)

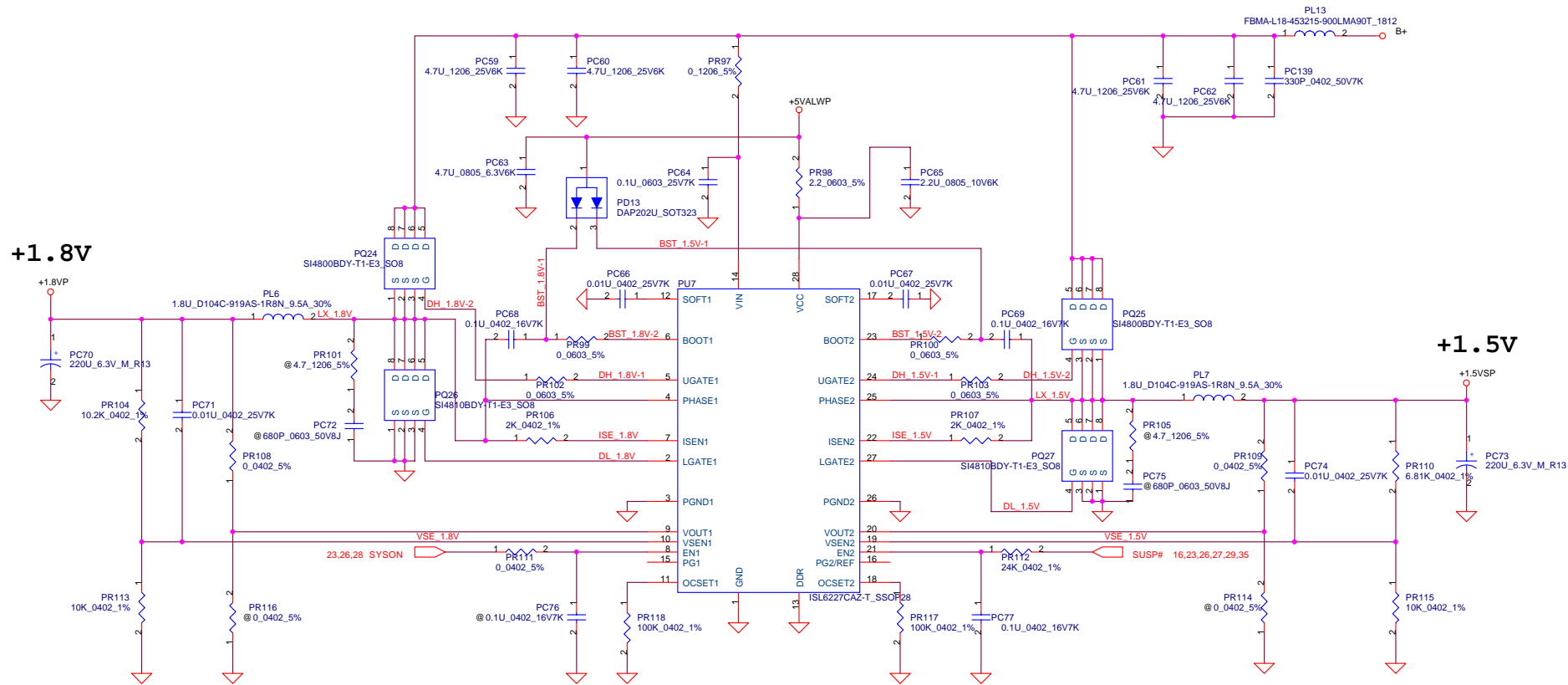
BATT Type	ALI/MH#	Charge Current	IREF
8 CELL	0V	3A	3.144V
6 CELL	3.3V	3A	3.144V

+3.3VALWP/+5VALWP

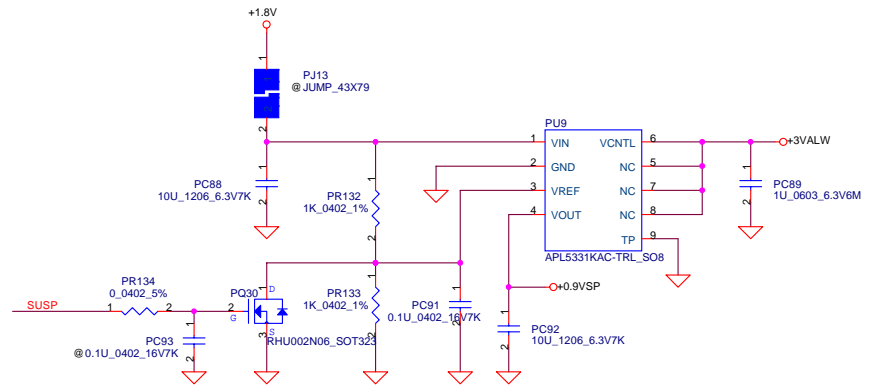
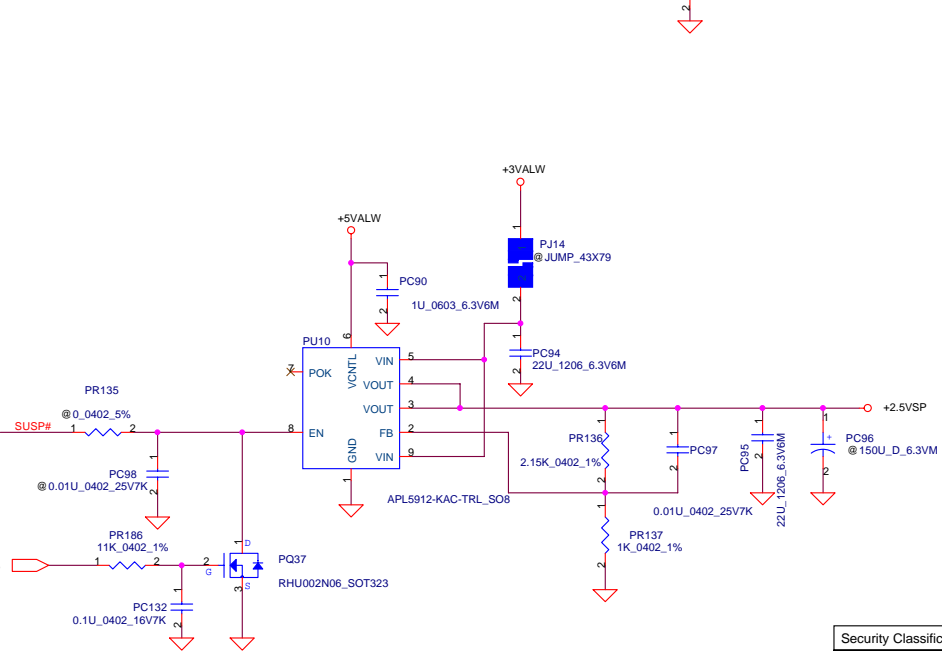
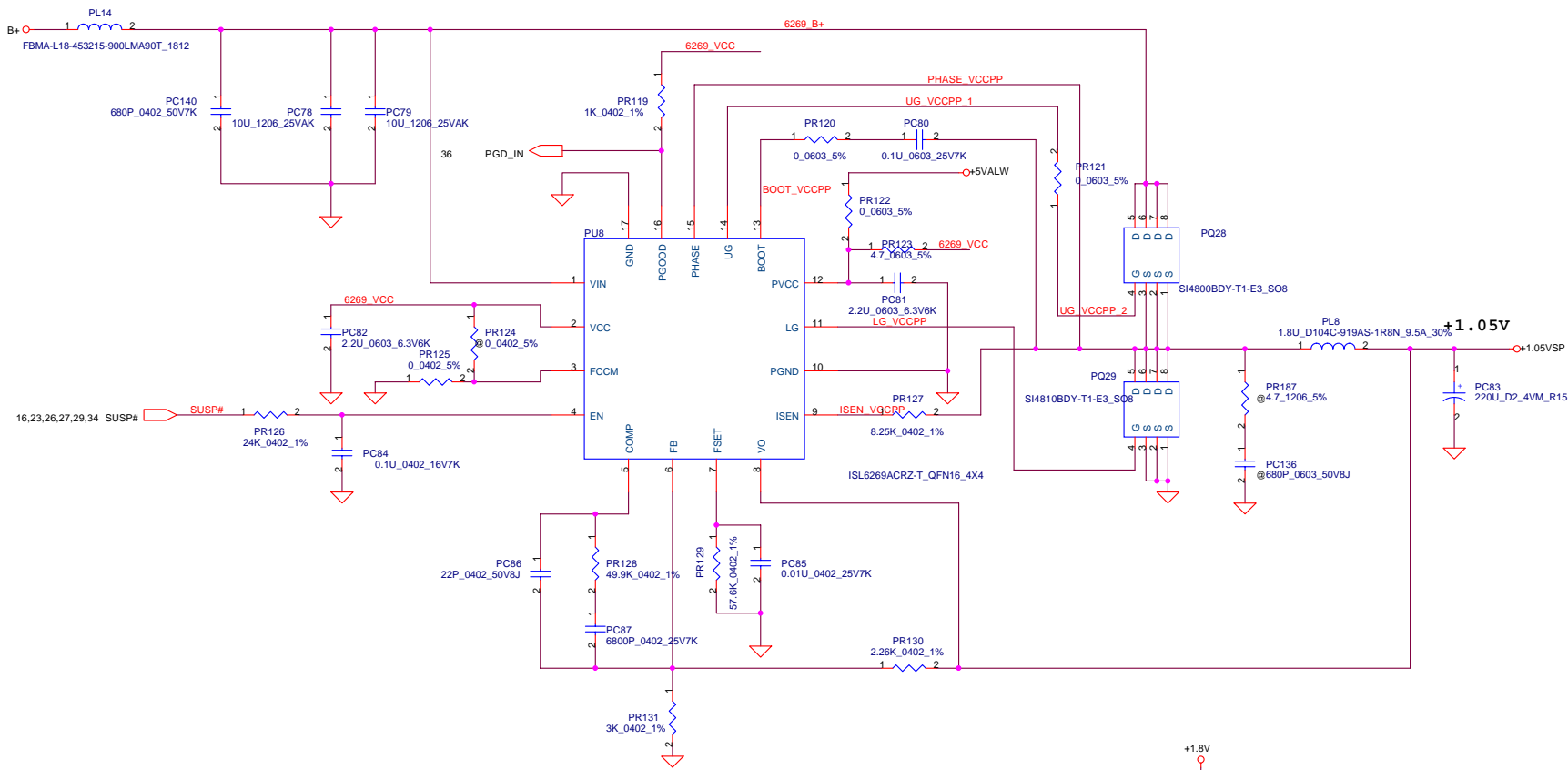


Security Classification	Compal Secret Data	
Issued Date	2006/10/03	Deciphered Date
		2009/10/03
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT 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.		

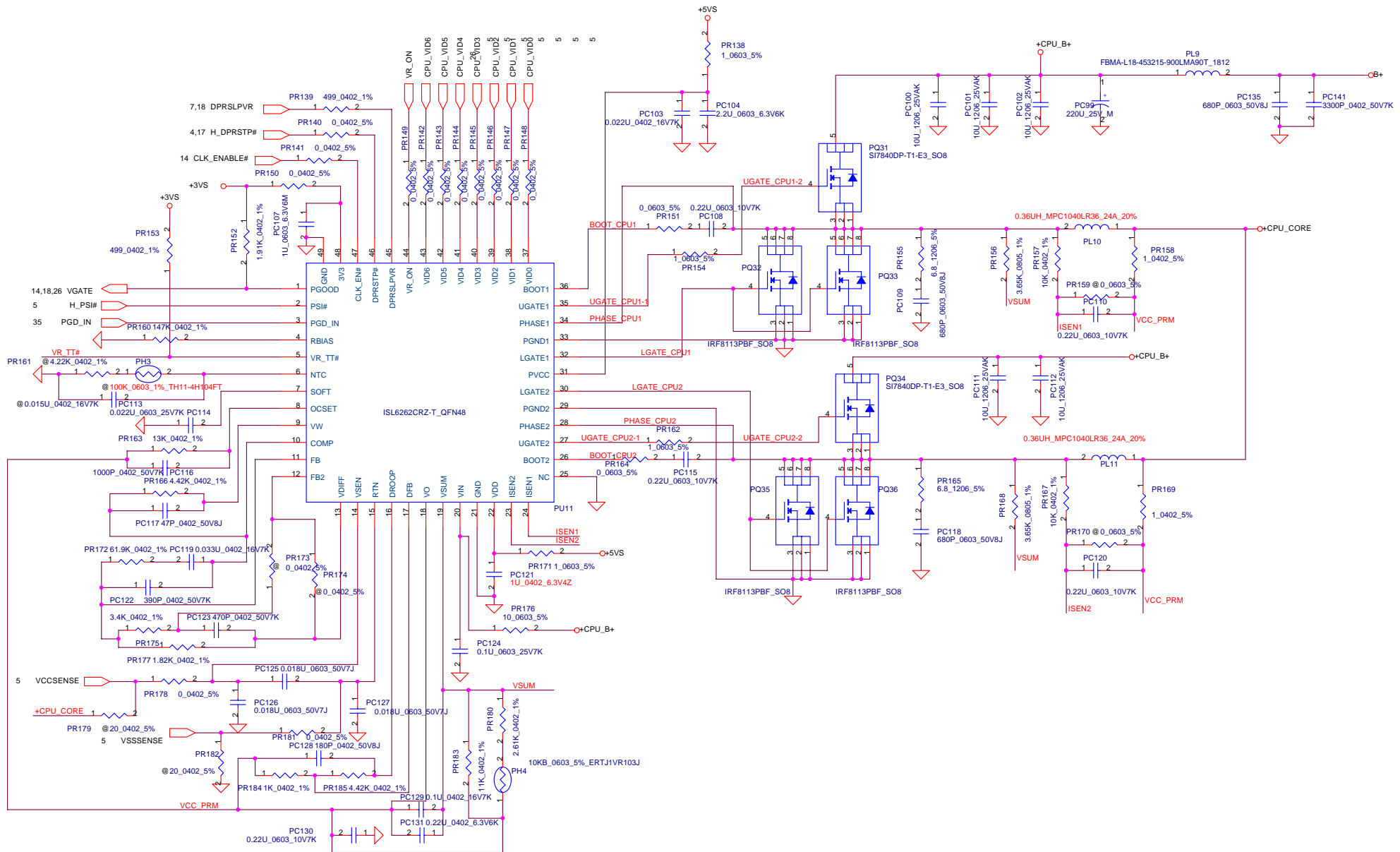
Compal Electronics, Inc.		
Title		
+5V/+3V		
Size	Document Number	Rev
Custom	IAKAA M/BLA-3401P	0.3
Date:	Thursday, October 05, 2006	Sheet 33 of 38



Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2006/10/03	Deciphered Date	2009/10/03	
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	1.8V / 1.5V
Size	Document Number			Rev
Date:	Thursday, October 05, 2006	Sheet	34	of 38



Security Classification	Compal Secret Data		Title	
Issued Date	2006/10/03	Deciphered Date	2009/10/03	2.5V / 0.9V / 1.05V
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.				Rev 0.3
Date:	Thursday, October 05, 2006	Sheet	35 of 38	



Security Classification	Compal Secret Data			Compal Electronics, Inc.		
Issued Date	2006/10/03	Deciphered Date	2009/10/03	Title		
				+CPU_CORE		
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.						
Date:	Thursday, October 05, 2006	Sheet	36	of	38	Rev
						0.2

PIR (Product Improve Record)

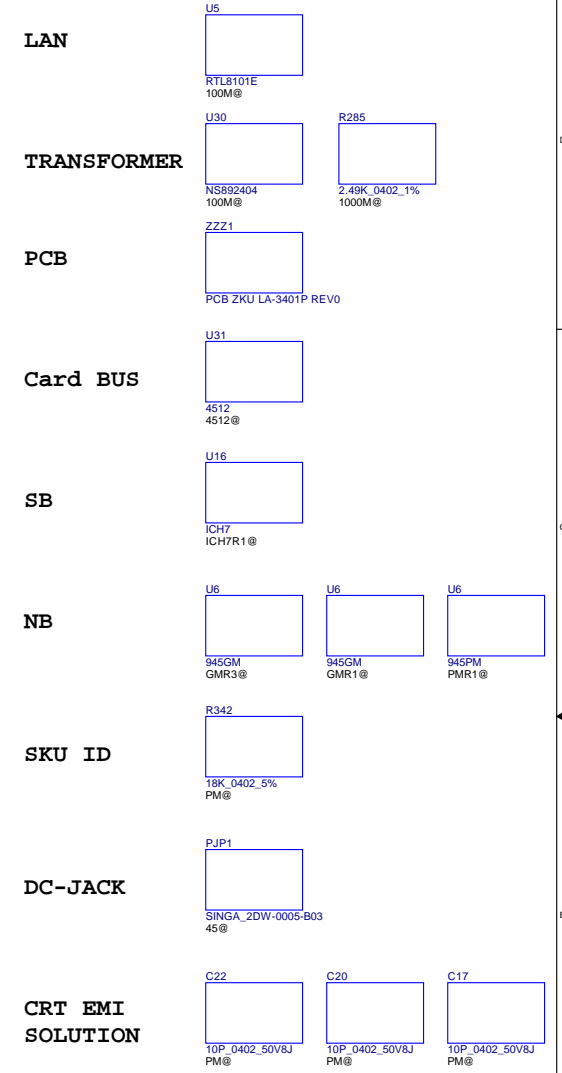
IAKAA LA-3401P SCHEMATIC CHANGE LIST
 REVISION CHANGE: 0.1 TO 0.2

NO	DATE	PAGE	MODIFICATION LIST	PURPOSE
1	0803	23	CHANGE Q25,Q44,R252,R499 TO RESERVED CHANGE R611,R612 TO POP	TO COMPATIBLE WITH NORMAL OPEN AUDIO JACK
2	0810	23	CHANGE C792,C793 TO RESERVE AND MOVE TO PAGE 23 ADD C811 BETWEEN AMP_LHPIN AND 861_HP_L ADD C812 BETWEEN AMP_RHPIN AND 861_HP_R	TO RESERVE HP PATH FOR ALC268 TO CHANGE HP PATH FOR ALC861
3	0814	23 24	ADD R618_1K_0402 BETWEEN Q23.2 AND R240.2 ADD CONNECTION BEEP_MIX FROM Q23.2 TO Q67.2 ADD CONNECTION EAPD TO Q67.3 CONNECT Q67.1,R616.1,C815.1 TOGETHER PULL HIGH R616_20K_0402 TO +VDDA CONNECT C815.2, R599.2 TOGETHER REMOVE Q65 RESERVE C814 BETWEEN AMP_SD# & GND	TO BYPASS BEEP SOUND BEFORE CODEC INITIAL
4	0816	14	CHANGE R121,R506,R99 TO 39_0402	FOR EMI REQUEST
5	0816	15	CHANGE L1,L2,L3 TO 1200HM BEAD	FOR EMI REQUEST
6	0816	28 25	CHANGE U12,U28 FROM G528 TO G548 CHANGE U42 FROM G528 TO G548	FOR INCREASE USB PORT CURRENT RATING

IAKAA LA-3401P SCHEMATIC CHANGE LIST
 REVISION CHANGE: 0.2 TO 0.3

NO	DATE	PAGE	MODIFICATION LIST	PURPOSE
1	0919	16	CONNECT INVPWR_B+ TO JP1.26	INCREASE 1 MORE B+ PIN FOR SUPPORT 2 LAMP LCD
2	0919	23	CONNECT R673_20K_0402 PULL DOWN ON SENSE_B	TO SENSE INTERNAL MIC EXIST OR NOT
3	0919	04	CHANGE U48 TO PU5	TO COST DOWN 1 OP AMP
4	0919	26	RESERVE Q46,D47,R671 FOR RSMRST# SIGNAL	TO MEET INTEL REQUIREMENT
5	0919	23	CHANGE R253 TO RESERVE CONNECT R620 BETWEEN Q25.1,SENSE_B	TO CHANGE HEADPHONE SENSE PIN FROM SENSE_A TO SENSE_B
6	0919	23	ADD R676,R677 TO 200HM	FIX MONO HEADPHONE NOISE ISSUE
7	0926	23	CHANGE C811,C812,C792,C793 TO 2.2uF	IMPROVE HP FREQUENCE RESPONSE
8	0926	24	DEL R520,R521,C681,C683 CHANGE C790,C791 TO 0.22uF	CHNAGE SPEAKER HIGHPASS -3dB POINT TO 100HZ
9	0926	24	CHANGE C804 TO 2.2uF	IMPROVE CHARGE PUMP QUALITY
10	0926	24	DEL R616,R617,R599,C815 ADD C819	NOT TO USE AMP BEEP FUNCTION
11	0926	24	ADD Q67	IMPROVE BOOT BO SOUND
12	0926	24	CHANGE C596 TO 22uF	IMPROVE FAN NOISE
13	0926	24	ADD D48	IMPROVE ESD
14	1003	22	ADD R678,R679,RESERVE L45 ADD R680,R681,RESERVE L46 ADD R682,R683,RESERVE L47 ADD R684,R685,RESERVE L48 ADD NET RJ45_MID10+_L,RJ45_MID10-_L BETWEEN L45,JP11 RJ45_MID11+_L,RJ45_MID11-_L BETWEEN L46,JP11 RJ45_MID12+_L,RJ45_MID12-_L BETWEEN L47,JP11 RJ45_MID13+_L,RJ45_MID13-_L BETWEEN L48,JP11	FOR EMI REQUIREMENT
25			ADD R686,R687,RESERVE L49	FOR EMI REQUIREMENT
28			ADD NET USB20_5P,USB20_5N BETWEEN L49,JP24 ADD R688,R690,RESERVE L50 ADD R689,R691,RESERVE L51 ADD NET USB20_1N,USB20_1P BETWEEN L51,JP12 USB20_4N,USB20_4P BETWEEN L50,JP21	RESERVE FOR USB EMI SOLUTION

FOR ISPD



Security Classification	Compal Secret Data			Title		
Issued Date	2006/10/03	Deciphered Date	2009/10/03	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.				ISPD		
				Size	Document Number	Rev
				IAKAA M/B LA-3401P		
Date: Thursday, October 05, 2006				Sheet	37	of 38

POWER PIR LIST

page Reason for change

Modify list

DVT

35	Change +1.05V IC	Change P08 to ISL6269A(SA00000GU80), add PR122 (0ohm, SD013000080)
36	For EMI team request to add snubber and gate resistor Modify the CUP CORE load line and compensation	Add snuber PR155,PR165(6.8ohm_SD011680B80), PC109,PC118(680p_SE024681J80) and gate resistor PR154,PR162(1ohm_SD013100B80) Change PC103 to 0.022u(SE076223K80), PC104 to 2.2u(SE107225K80), PR185 to 4.42K(SD000004J80), PC129 to 0.1u(SE076104K80, add PC126 (0.0180_SE025183J80), delete PC105 and PC106
31	Modify the CPU OTP point from 84 degC to 87 degC for thermal team request	Change PR36 from 22K to 20K(SD034200280)

PVT

32,34, 35,36	For EMI team request to add bead to reduce board band	Add PL12,PL13,PL14(SM010020720);PC137,PC138,PC139(330p_SE074331K80);PC140(680p_SE074681K80);PC141(3300p_SE074332K80)
33	Reduce the power consumption on S3/S4	Add PR188(0_0402_5%) and unpop PR89
36	Solve the high frequency noise.	Change PC99 from 100U to 220U(SF22004M210)

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2006/10/03	Deciphered Date	2009/10/03	Title +CPU_CORE	
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 HAWAA(LA3141)
				Date:	Thursday, October 05, 2006
				Sheet	38 of 38

s-manuals.com