

Compal confidential

Schematics Document

Mobile Penryn uFCPGA with Intel
Cantiga_GM+ICH9-M SFF core logic

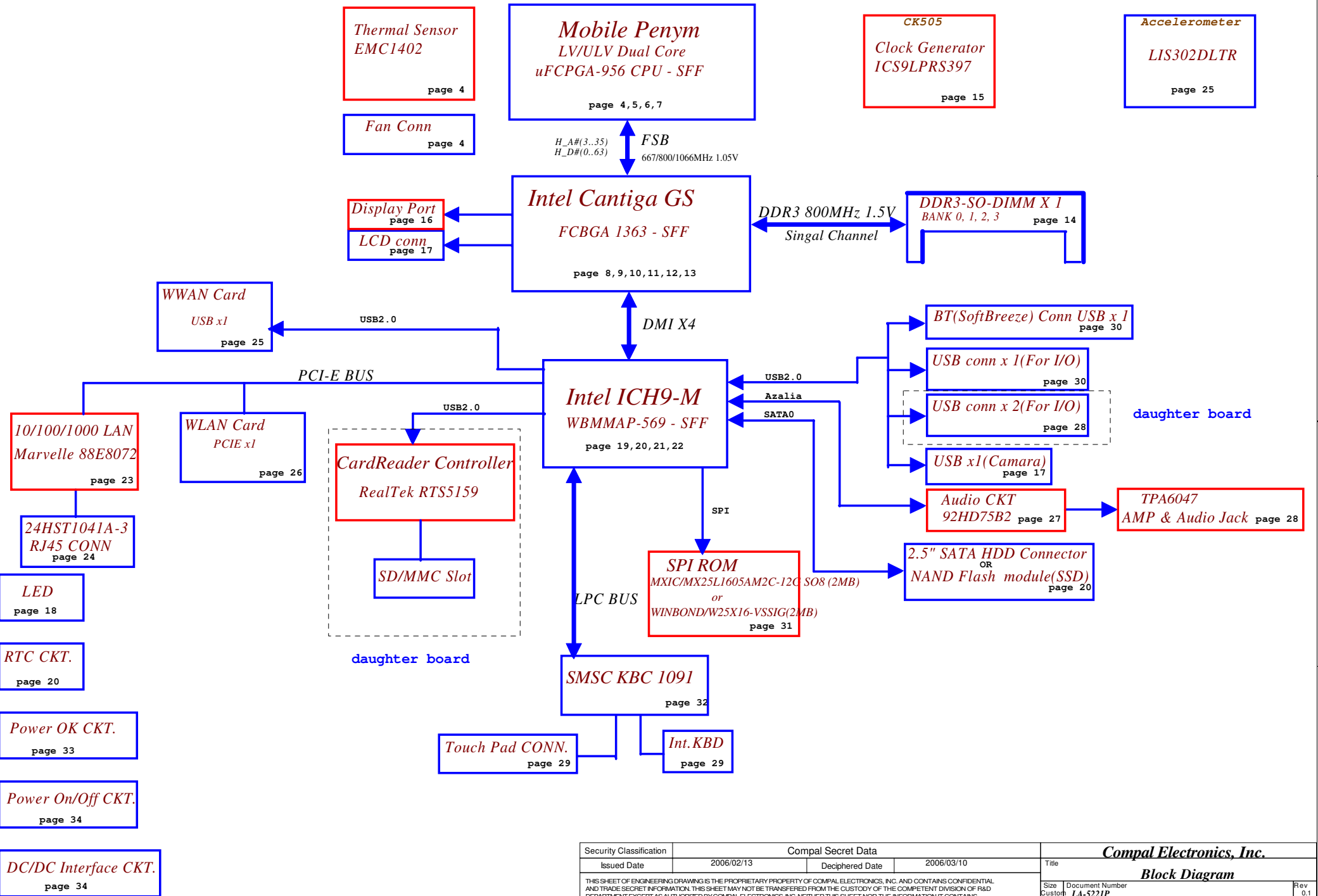
Fossil

2009-02-03



Security Classification	Compal Secret Data			Title Compal Electronics, Inc.		
Issued Date	2006/02/13	Deciphered Date	2006/03/10	Cover Sheet		
<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	Rev
				Custom	LA-522IP	0.1
Date: Tuesday, February 03, 2009				Sheet	1	of 45

Fossil

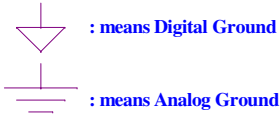


Security Classification	Compal Secret Data			Title		
Issued Date	2006/02/13	Deciphered Date	2006/03/10	Compal Electronics, Inc.		
				Block Diagram		
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS 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	LA-5221P	0.1
				Date:	Tuesday, February 03, 2009	Sheet 2 of 45

Voltage Rails (O MEANS ON X MEANS OFF)

power plane State	+B +3VL	+5VALW +3VALW	+1.8V	+5VS +3VS +1.5VS +0.9V +VCCP +CPU_CORE
	S0	O	O	O
S1	O	O	O	O
S3	O	O	O	X
S5 S4/AC	O	O	X	X
S5 S4/ Battery only	O	X	X	X
S5 S4/AC & Battery don't exist	X	X	X	X

Symbol Note :



@ : means just reserve , no build
 CONN@ : means ME part.
 45@ : means install after SMT.

ULV723@ mean CPU ULV723 (U1) for L01
 SU9300@ mean CPU SU9300 (U1) for L02



I2C / SMBUS ADDRESSING

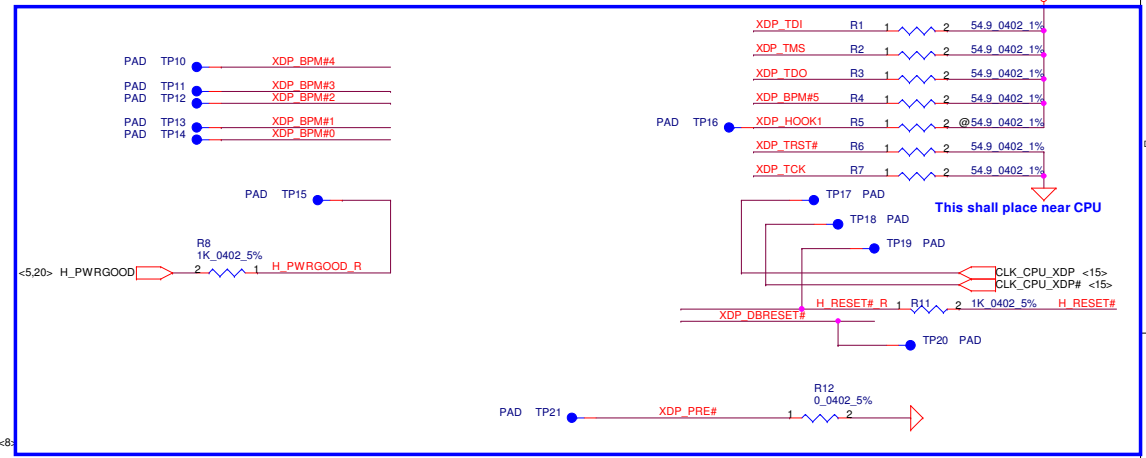
DEVICE	HEX	ADDRESS
DDR SO-DIMM 0	A0	1 0 1 0 0 0 0 0
CLOCK GENERATOR (EXT.)	D2	1 1 0 1 0 0 1 0

SMBUS Control Table

	SOURCE	INVERTER	BATT	SERIAL EEPROM	THERMAL SENSOR (CPU)	SODIMM	CLK CHIP	MINI CARD	LCD
SMB_EC_CK1 SMB_EC_DA1	KB926	X	V	V	X	X	X	X	X
SMB_EC_CK2 SMB_EC_DA2	KB926	X	X	X	V	X	X	X	X
SMB_CK_CLK1 SMB_CK_DAT1	ICH9	X	X	X	X	V	V	V	X
LCD_CLK LCD_DAT	Cantiga	X	X	X	X	X	X	X	V

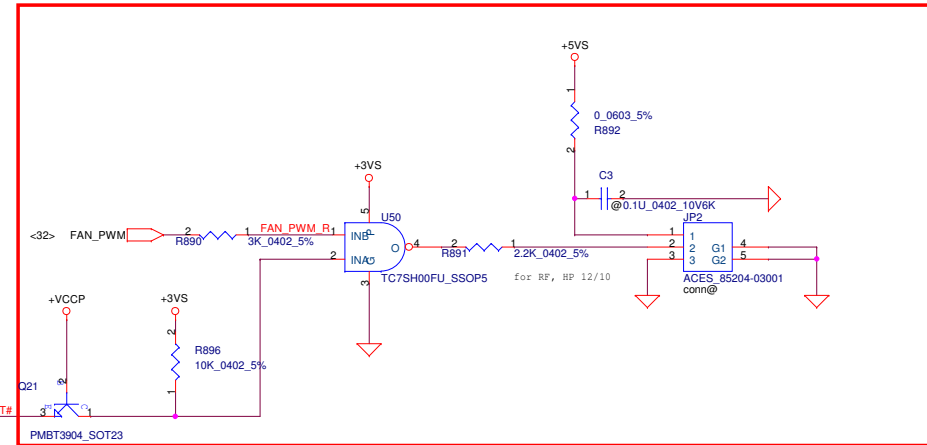
Security Classification	Compal Secret Data		Title		Compal Electronics, Inc.	
Issued Date	2005/03/10	Deciphered Date	2006/03/10	Notes List		
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY 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	LA-5221P	0.1
				Date:	Tuesday, February 03, 2009	Sheet 3 of 45

XDP Connector

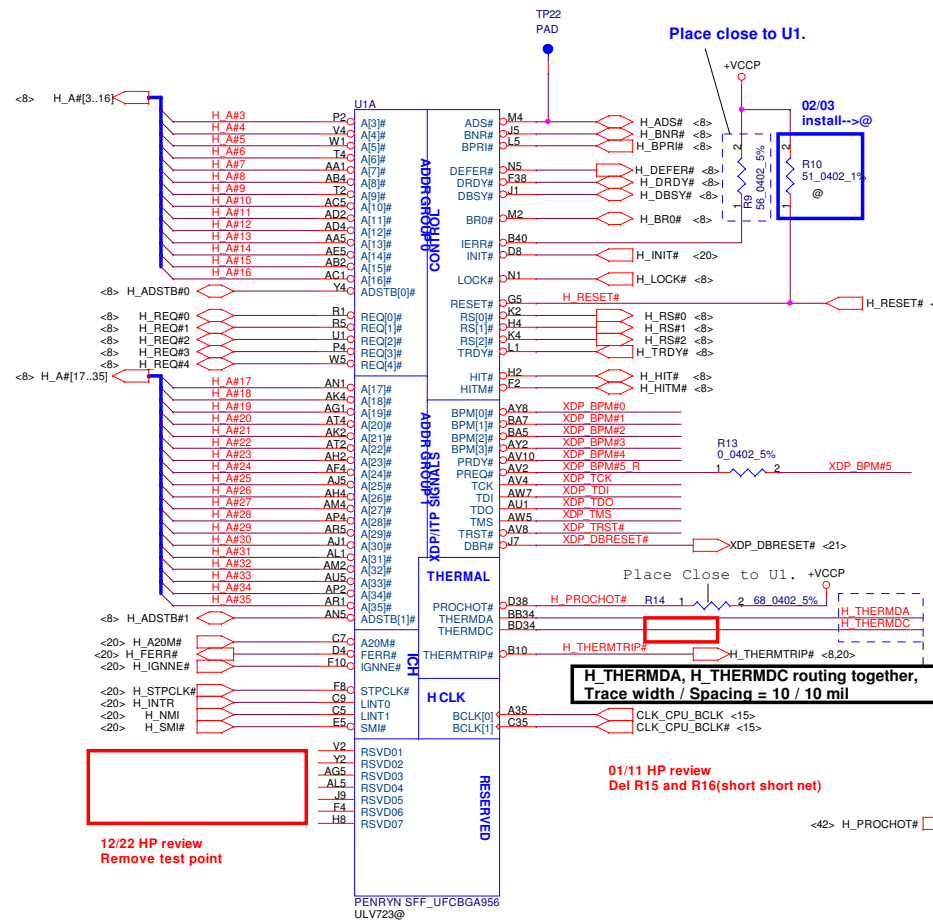
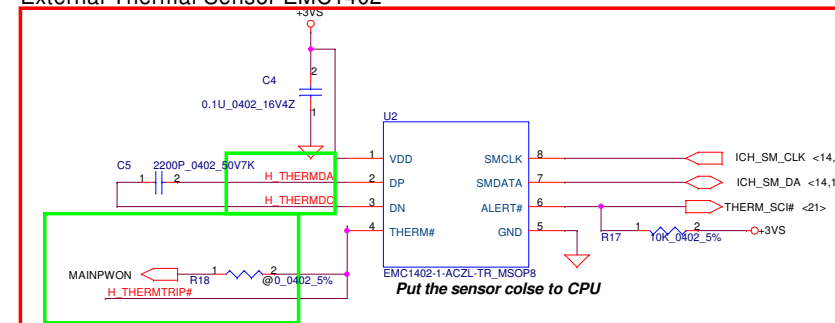


PWM Fan Control circuit

12/22 Follow consumer design

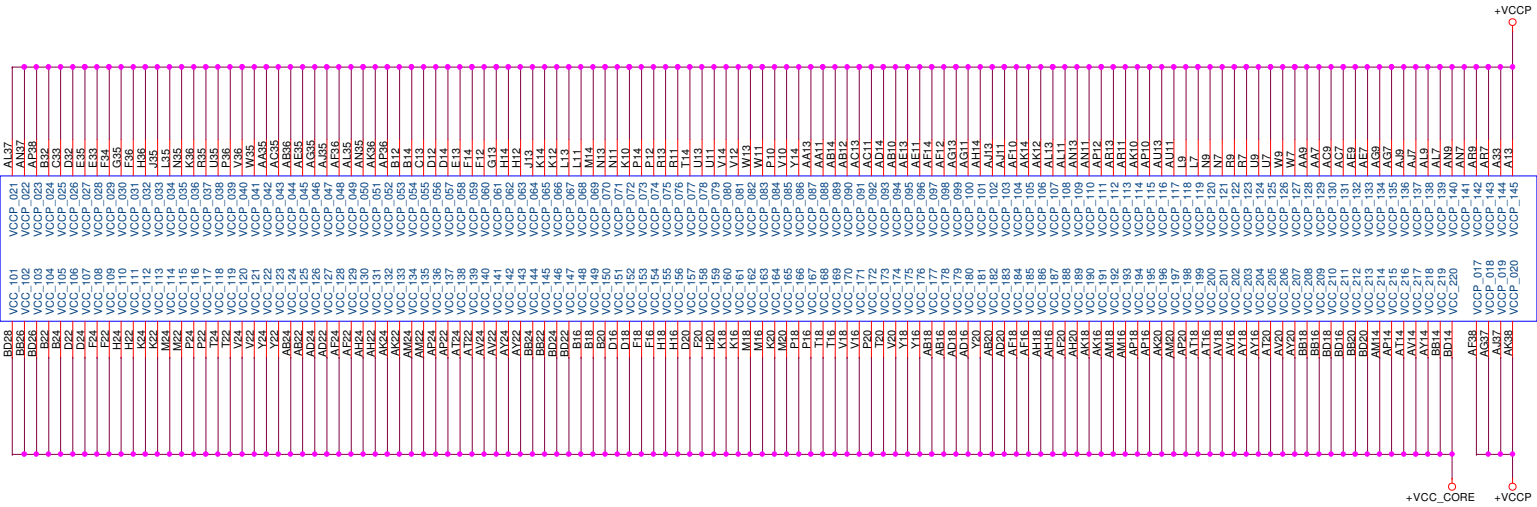


External Thermal Sensor EMC1402



Security Classification	Compal Secret Data		Title	Compal Electronics, Inc.	
Issued Date	2006/02/13	Deciphered Date	2006/03/10	Penryn(1/3)-AGTL+/ITP-XDP	
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	Date	Sheet	of
Custom	LA-5221P	0.1	Tuesday, February 03, 2009	4	45

ULV723@



U1F
PENRYN SFF_UCFBGA956



Security Classification		Compal Secret Data		Title	
Issued Date	2006/02/13	Deciphered Date	2006/03/10	Compal Electronics, Inc. Penryn(3/3)-Power	
<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	Rev
				Document Number	0.1
				Customer	LA-5221P
				Date	Tuesday, February 03, 2009
				Sheet	6 of 45

UID	U1E
B42	G25
F44	G23
V44	G21
D42	J25
V42	J23
F42	J21
H42	L25
K42	L23
M42	L21
N42	N25
P42	N23
T42	N21
V42	Q25
Y42	Q23
Z42	Q21
AA2	R25
AB2	R23
AD42	R21
AE42	U25
AH42	U23
AK42	U21
AM42	W25
AY42	W23
AV44	W21
AX42	AA25
AT42	AA23
AV42	AA21
AY42	L29
BA43	L27
BB42	L25
CA9	L23
C37	L21
G37	AE25
H38	AE23
J39	AE21
L39	AG25
M38	AG23
N39	AG21
R39	AJ25
T38	AJ23
U39	AJ21
W39	AL25
Y38	AL23
AA39	AL21
AC39	AN25
AD38	AN23
AE39	AN21
AG39	AR25
AH38	AR23
AJ39	AR21
AL39	AU25
AM38	AU23
AN39	AU21
AR39	AW25
AR37	AW23
AT38	AW21
AU39	BA25
AW39	BA23
AX39	BA21
AW37	BC25
EA39	BC23
EA37	BC21
BC41	C17
BD40	C19
BD38	C17
H34	C19
D36	G17
K34	G19
M34	G17
P34	L19
T34	L17
V34	L19
Y34	L17
Z34	L19
AA34	L17
AD36	L19
AF34	L17
AH34	L19
AK34	L17
AM34	L19
AP34	L17

PENRYN SFF_UFCBGA956

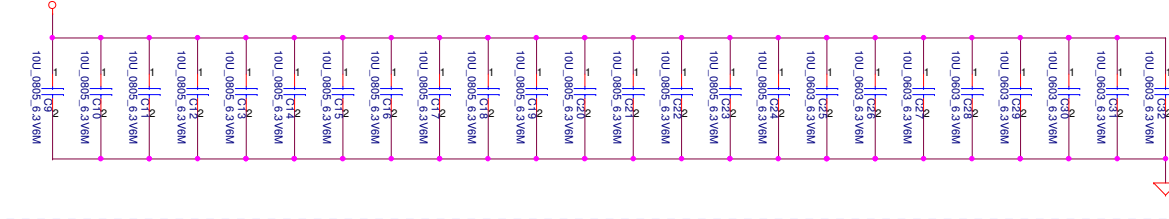
ULV723@

U1E	U1E
G25	VSS_164
G23	VSS_165
G21	VSS_166
J25	VSS_167
J23	VSS_168
J21	VSS_169
L25	VSS_170
L23	VSS_171
L21	VSS_172
N25	VSS_173
N23	VSS_174
N21	VSS_175
Q25	VSS_176
Q23	VSS_177
Q21	VSS_178
R25	VSS_179
R23	VSS_180
R21	VSS_181
U25	VSS_182
U23	VSS_183
U21	VSS_184
W25	VSS_185
W23	VSS_186
W21	VSS_187
AA25	VSS_188
AA23	VSS_189
AA21	VSS_190
L29	VSS_191
L27	VSS_192
L25	VSS_193
L23	VSS_194
L21	VSS_195
AE25	VSS_196
AE23	VSS_197
AE21	VSS_198
AG25	VSS_199
AG23	VSS_200
AG21	VSS_201
AJ25	VSS_202
AJ23	VSS_203
AJ21	VSS_204
AL25	VSS_205
AL23	VSS_206
AL21	VSS_207
AN25	VSS_208
AN23	VSS_209
AN21	VSS_210
AR25	VSS_211
AR23	VSS_212
AR21	VSS_213
AU25	VSS_214
AU23	VSS_215
AU21	VSS_216
AW25	VSS_217
AW23	VSS_218
AW21	VSS_219
BA25	VSS_220
BA23	VSS_221
BA21	VSS_222
BC25	VSS_223
BC23	VSS_224
BC21	VSS_225
C17	VSS_226
C19	VSS_227
C17	VSS_228
E19	VSS_229
E17	VSS_230
E19	VSS_231
G17	VSS_232
G19	VSS_233
G17	VSS_234
J19	VSS_235
J17	VSS_236
L19	VSS_237
L17	VSS_238
L19	VSS_239
N19	VSS_240
N17	VSS_241
N19	VSS_242
R19	VSS_243
R17	VSS_244
U19	VSS_245
U17	VSS_246
W19	VSS_247
W17	VSS_248
AA19	VSS_249
AA17	VSS_250
AA19	VSS_251
AR19	VSS_252
AR17	VSS_253
AR19	VSS_254
AU19	VSS_255
AU17	VSS_256
AW19	VSS_257
AW17	VSS_258
BA19	VSS_259
BA17	VSS_260
BC19	VSS_261
BC17	VSS_262
C11	VSS_263
C15	VSS_264
C15	VSS_265
E15	VSS_266
H10	VSS_267
M12	VSS_268
J15	VSS_269
L15	VSS_270
N15	VSS_271
M10	VSS_272
T12	VSS_273
R15	VSS_274
U15	VSS_275
W15	VSS_276
T10	VSS_277
Y12	VSS_278
AD12	VSS_279

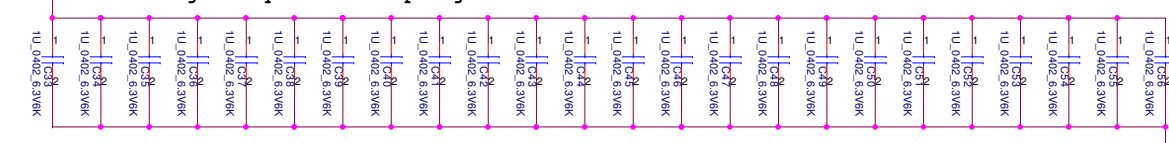
PENRYN SFF_UFCBGA956

ULV723@

Mid Frequency Decoupling

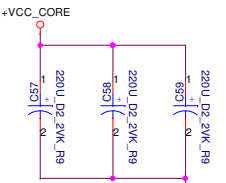


High Frequency Decoupling

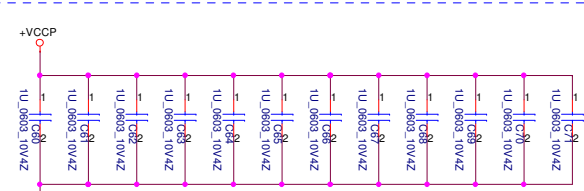


6/14 :Replace 12pcs 10uF_0805 to 24 pcs 1uF_0402 for CPU transient fail issue.

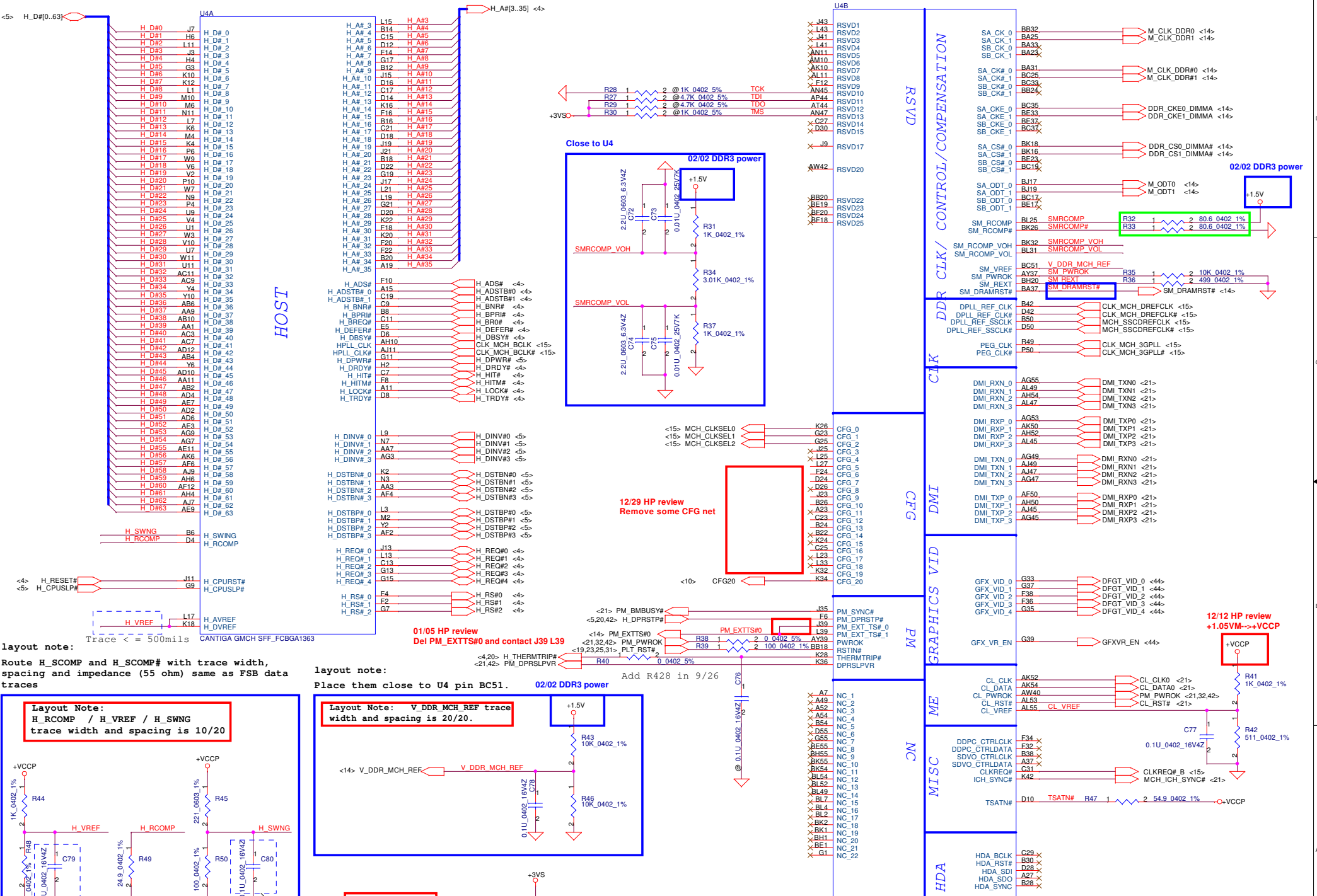
ESR <= 1.5m ohm
Near CPU CORE regulator



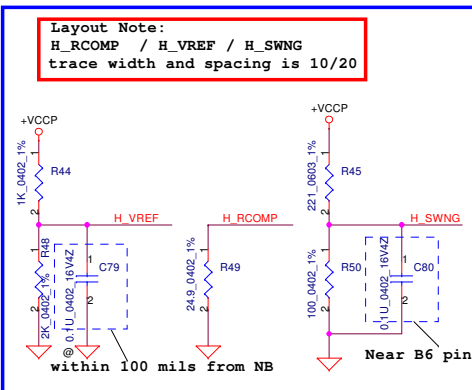
Del C37 to improve power plan. 6/14



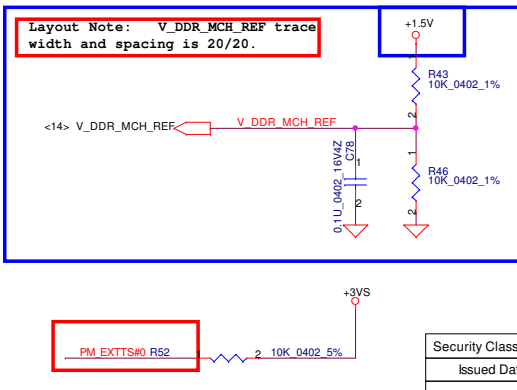
Security Classification	Compal Secret Data			Title	
Issued Date	2006/02/13	Deciphered Date	2006/03/10	Compal Electronics, Inc.	
				Penryn(3/3)-GND/Bypass	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. 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
				LA-5221P	Rev 0.1
Date:	Tuesday, February 03, 2009	Sheet	7	of 45	



layout note:
Route H_SCOMP and H_SCOMP# with trace width, spacing and impedance (55 ohm) same as FSB data traces

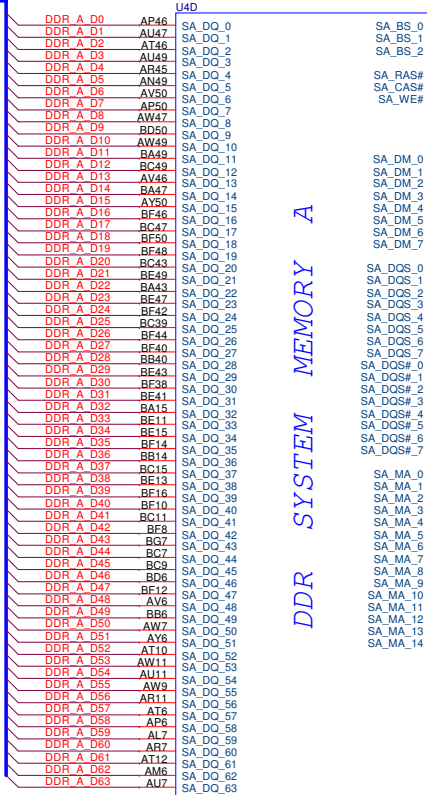


layout note:
Place them close to U4 pin BC51.



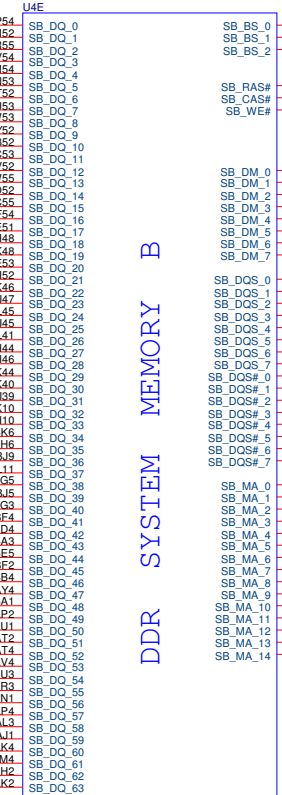
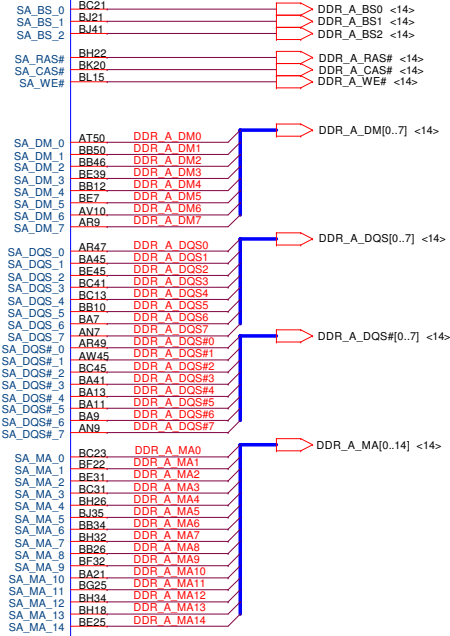
Security Classification	Compal Secret Data		Title
Issued Date	2006/02/13	Deciphered Date	2008/03/10
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.			Compal Electronics, Inc. Cantiga(116)-AGTL/DMI/DDR Size: Document Number Custom: LA-5221P Date: Tuesday, February 03, 2009 Sheet 8 of 45

<14> DDR_A_D[0..63]



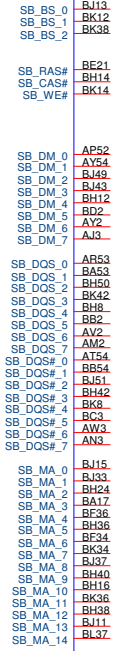
DDR SYSTEM MEMORY A

CANTIGA GMCH SFF_FCBGA1363



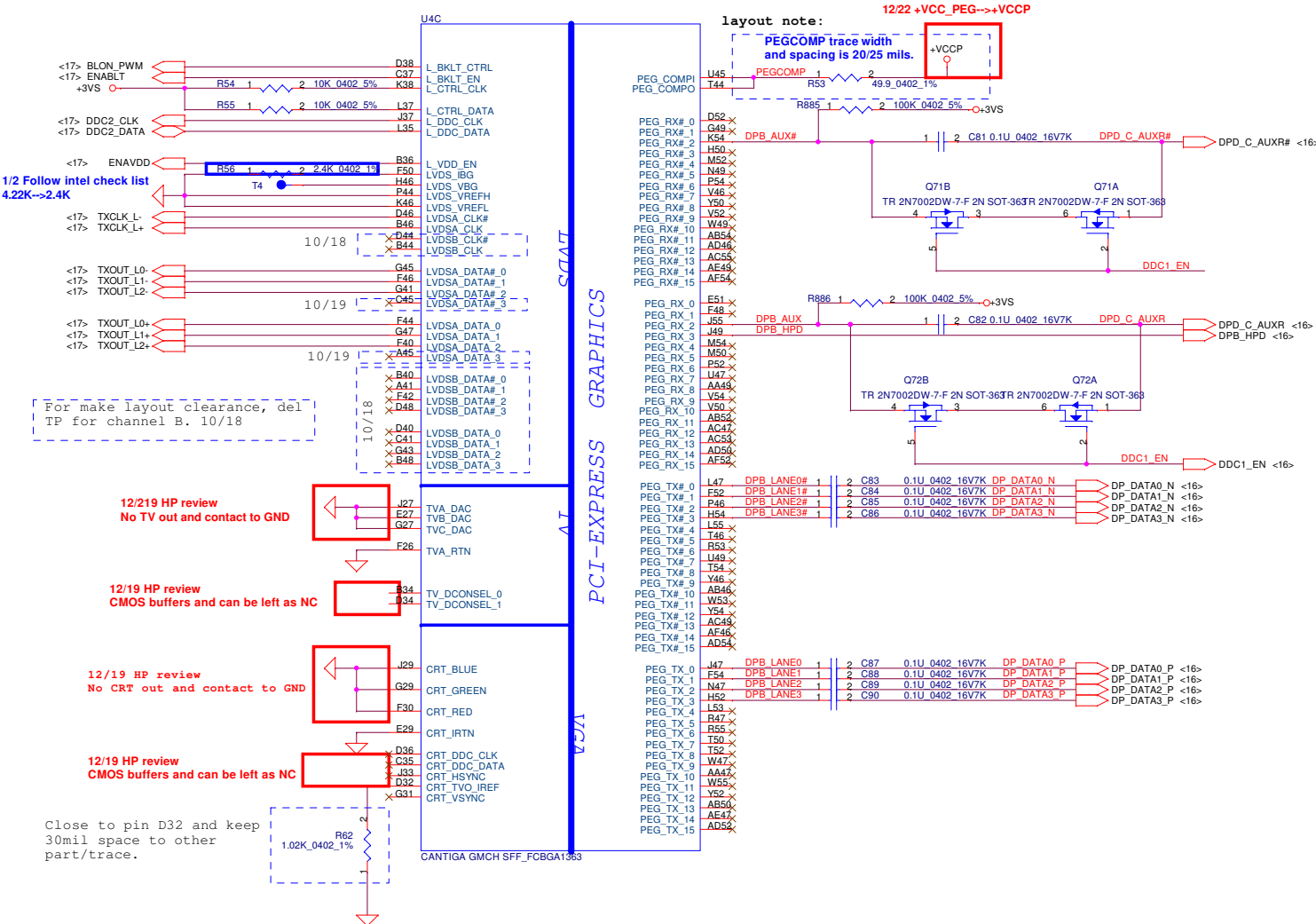
DDR SYSTEM MEMORY B

CANTIGA GMCH SFF_FCBGA1363



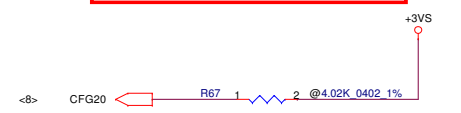
Security Classification		Compal Secret Data		Title	
Issued Date	2006/02/13	Deciphered Date	2006/03/10	Compal Electronics, Inc.	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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	Rev
				Document Number	0.1
				LA-5221P	
Date:	Tuesday, February 03, 2009	Sheet	9	of	45

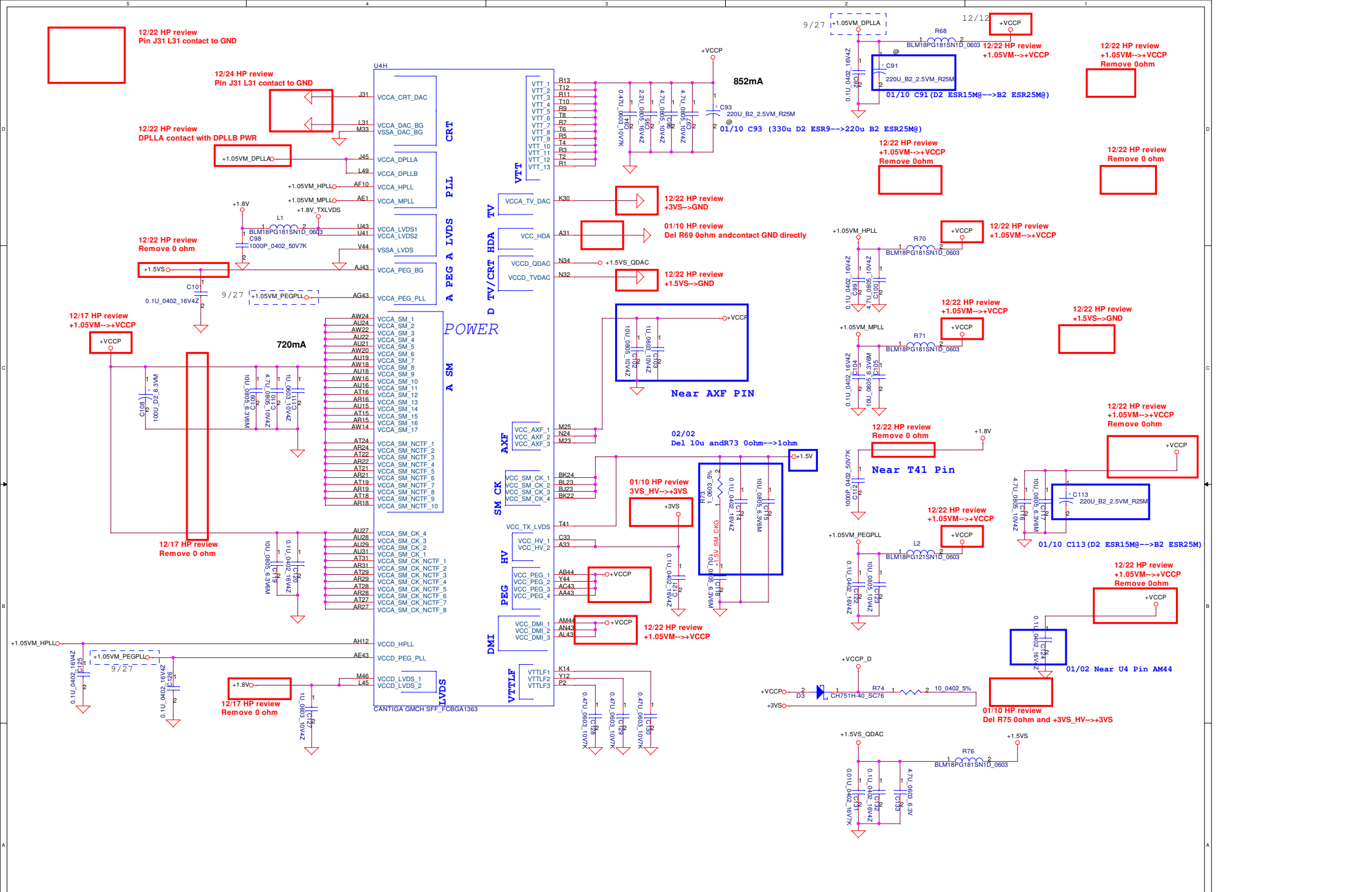
Place R53 <500mils to U4 pin U45&T44.



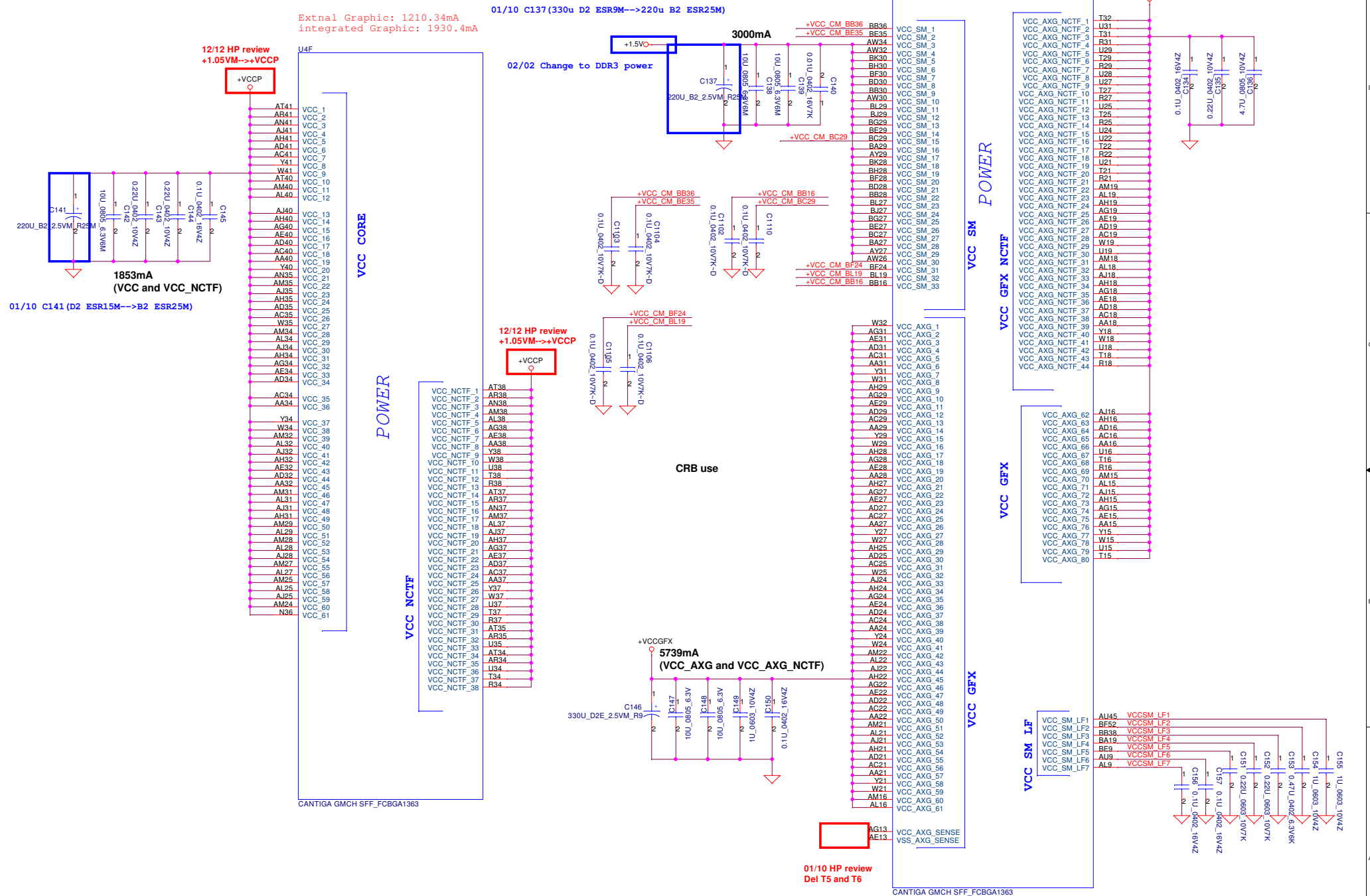
CFG[2:0] FSB Freq select	000 = FSB 1066MHz 010 = FSB 800MHz 011 = FSB 667MHz Others = Reserved
CFG[4:3]	Reserved
CFG5 (DMI select)	0 = DMI x 2 1 = DMI x 4 *
CFG6	0 = The ITPM Host Interface is enable 1 = The ITPM Host Interface is disable *
CFG7 (Intel Management Engine Crypto strap)	0 =(TLS)chiper suite with no confidentiality 1 =(TLS)chiper suite with confidentiality *
CFG8	Reserved
CFG9 (PCIe Graphics Lane Reversal)	0 = Reverse Lane,15->0, 14->1 1 = Normal Operation,Lane Number in order *
CFG10 (PCIe Lookback enable)	0 = Enable 1 = Disable *
CFG11	Reserved
CFG[13:12] (XOR/ALLZ)	00 = Reserved 01 = XOR Mode Enabled 10 = All Z Mode Enabled 11 = Normal Operation(Default) *
CFG[15:14]	Reserved
CFG16 (FSB Dynamic ODT)	0 = Disabled 1 = Enabled *
CFG[18:17]	Reserved
CFG19 (DMI Lane Reversal)	0 = Normal Operation * (Lane number in Order) 1 = Reverse Lane
CFG20 (PCIe/SDVO concurrent)	0 = Only PCIe or SDVO is operational. * 1 = PCIe/SDVO are operating simu.

12/29 HP review
Remove some reserved R for CFG net





Security Classification	Compal Secret Data			Compal Electronics, Inc.	
Issued Date	2006/02/13	Deciphered Date	2006/03/10	Cantiga(4/6)-PWR	
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	LA-5221P	0.1			
Date:	Tuesday, February 03, 2009	Sheet	11	of	45



Extnal Graphic: 1210.34mA
 integrated Graphic: 1930.4mA

01/10 C137 (330u D2 ESR9M-->220u B2 ESR25M)

12/12 HP review
 +1.05VM-->+VCCP

+1.50V

3000mA

1853mA
 (VCC and VCC_NCTF)

01/10 C141 (D2 ESR15M-->B2 ESR25M)

12/12 HP review
 +1.05VM-->+VCCP

CRB use

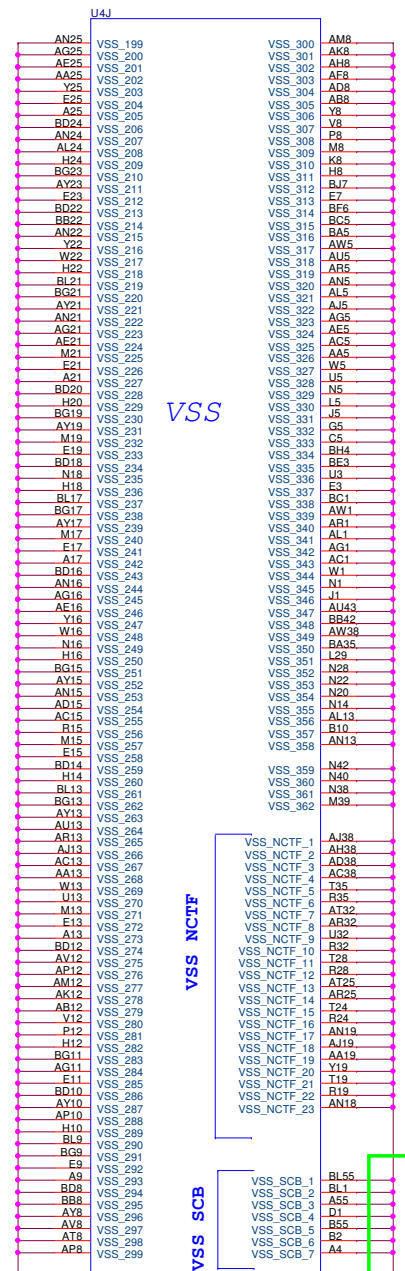
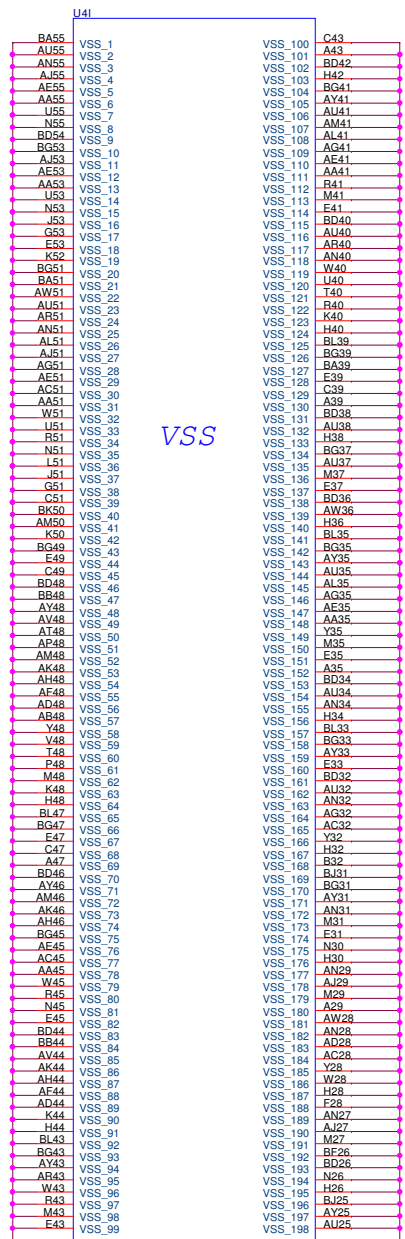
5739mA
 (VCC_AXG and VCC_AXG_NCTF)

01/10 HP review
 Del T5 and T6

Security Classification	Compal Secret Data	
Issued Date	2006/02/13	Deciphered Date
		2006/03/10

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

Compal Electronics, Inc.	
Cantiga(5/6)-PWR/GND	
Title	
Size	Document Number
Custom	LA-5221P
Date	Tuesday, February 03, 2009
Sheet	12 of 45
Rev	0.1



VSS

VSS

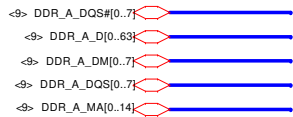
VSS NCIF

VSS SCB

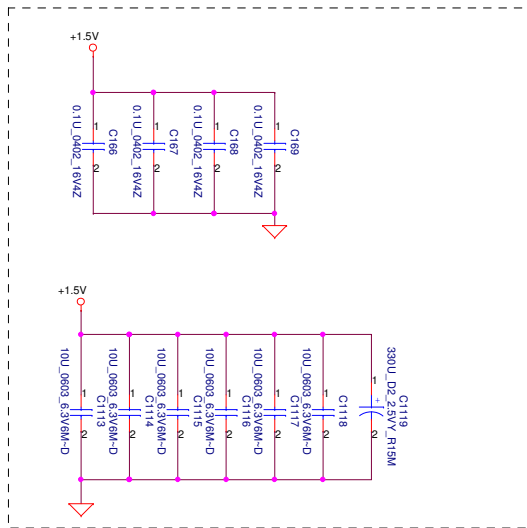
2/12 FOR NO CRACK DETECT FUNCTION

12/12 FOR NO CRACK DETECT FUNCTION

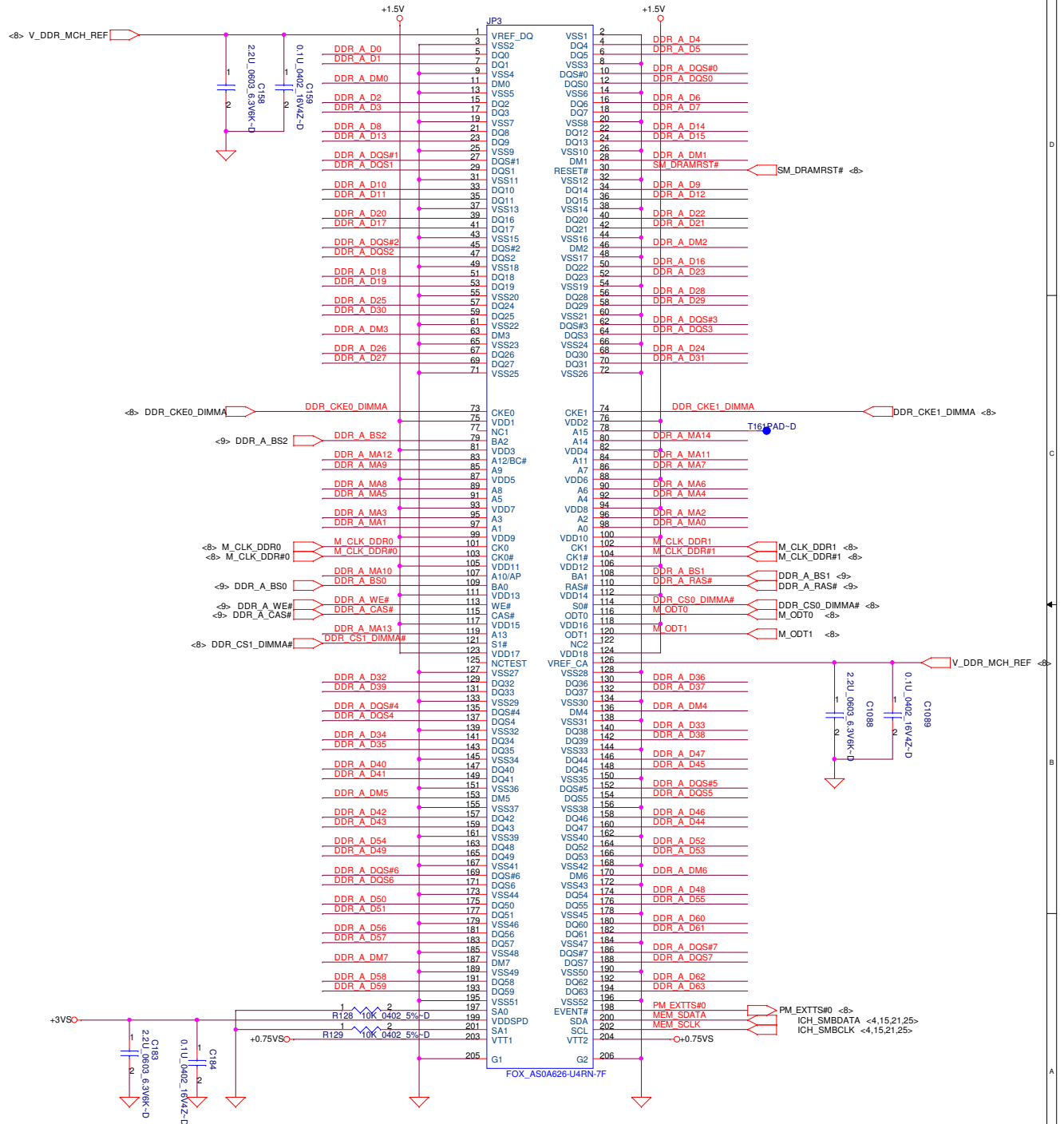
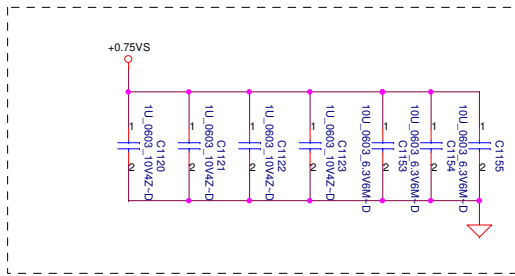
Security Classification	Compal Secret Data			Title	
Issued Date	2006/02/13	Deciphered Date	2006/03/10	Compal Electronics, Inc.	
				Cantiga(6/6)-PWR/GND	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE CONFIDENTIAL 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 LA-5221P
Date:	Tuesday, February 03, 2009	Sheet	13	of	45



Layout Note:
Place near JP3

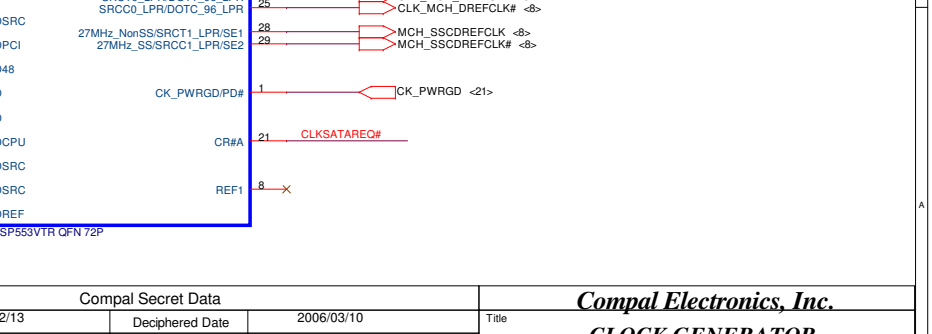
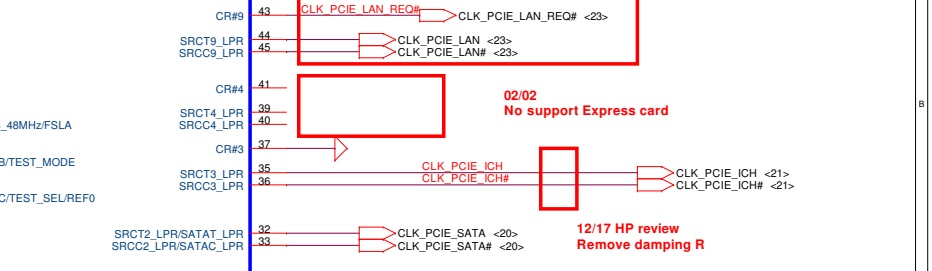
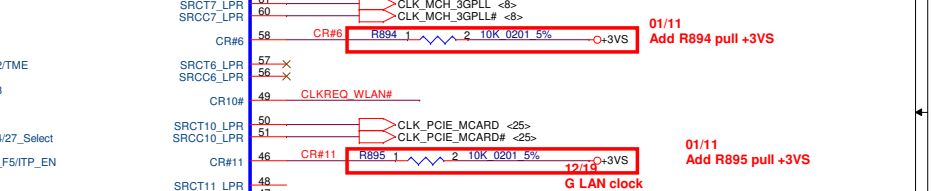
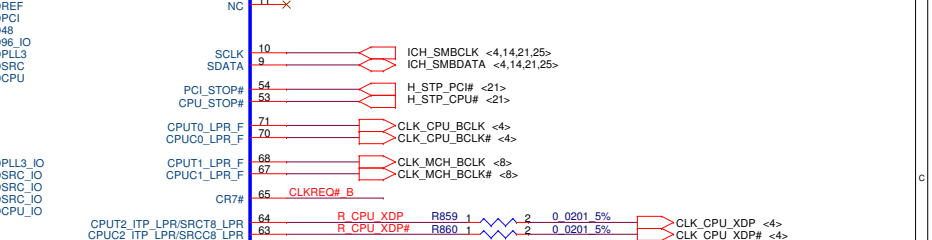
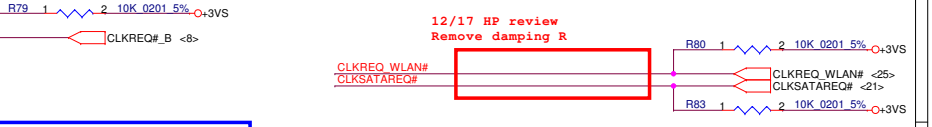
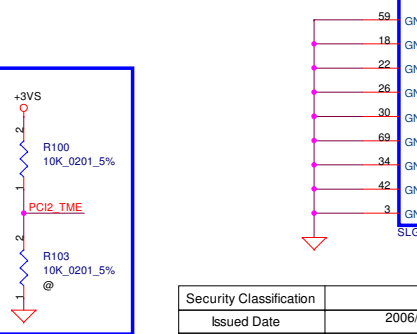
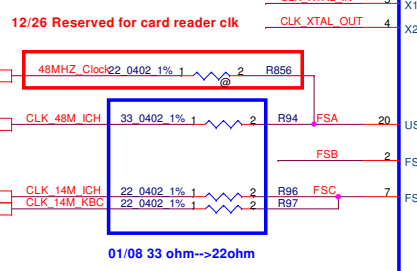
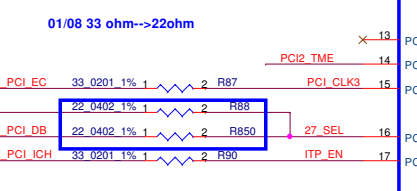
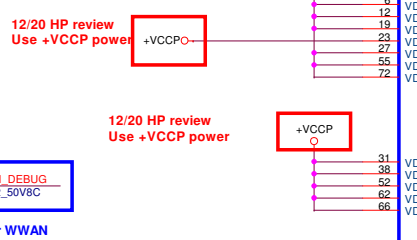
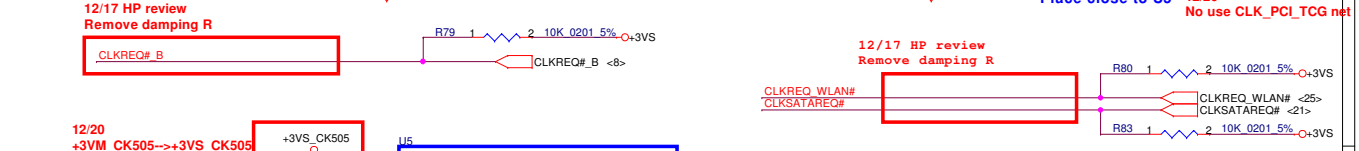
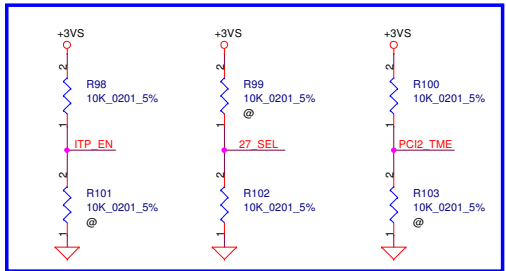
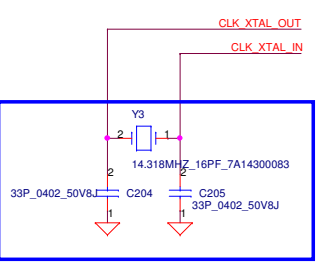
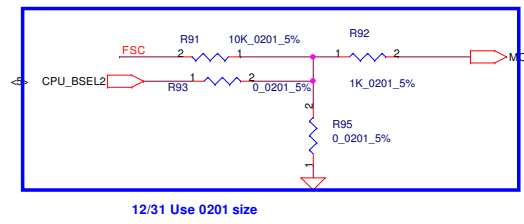
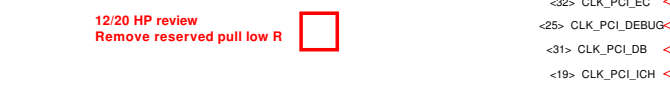
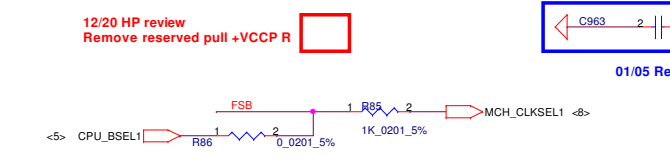
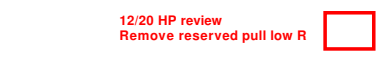
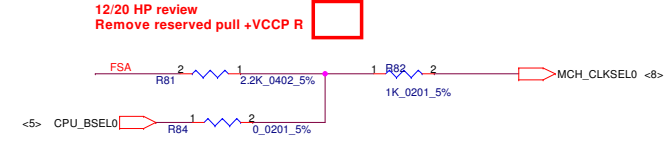
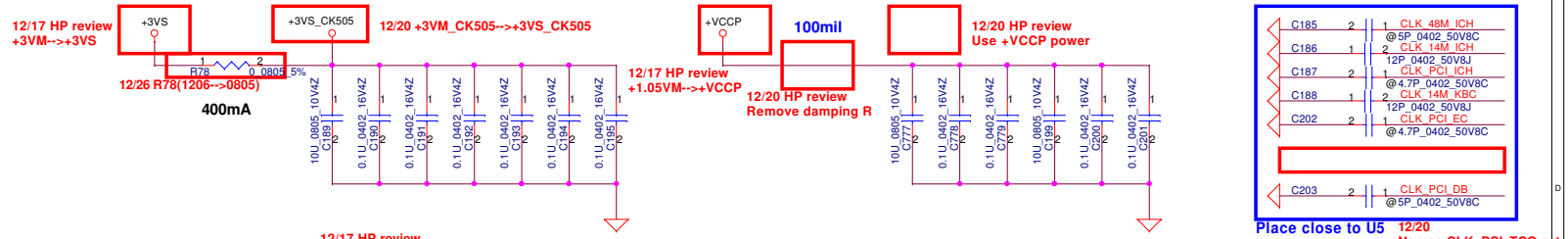


Layout Note:
Place near JP3 203,204



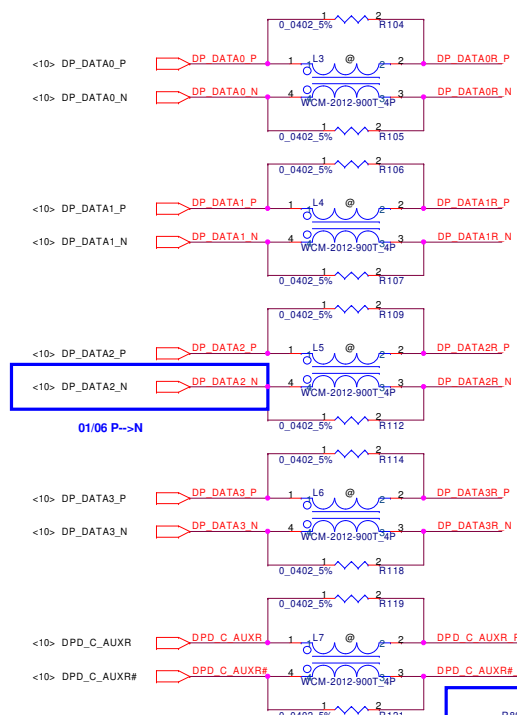
Security Classification	Compal Secret Data		Title	
Issued Date	2006/02/13	Deciphered Date	2006/03/10	Compal Electronics, Inc.
				DDRII-SODIMM SLOT
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET 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 USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.			Size	Document Number LA-522IP
			Date	Tuesday, February 03, 2009
			Sheet	14 of 45

FSLC	FSLB	FSLA	CPU	FSB	SRC	PCI
CLKSEL2	CLKSEL1	CLKSEL0	MHz	MHz	MHz	MHz
0	0	0	266	1066	100	33.3
0	1	0	200	800	100	33.3
0	1	1	166	667	100	33.3

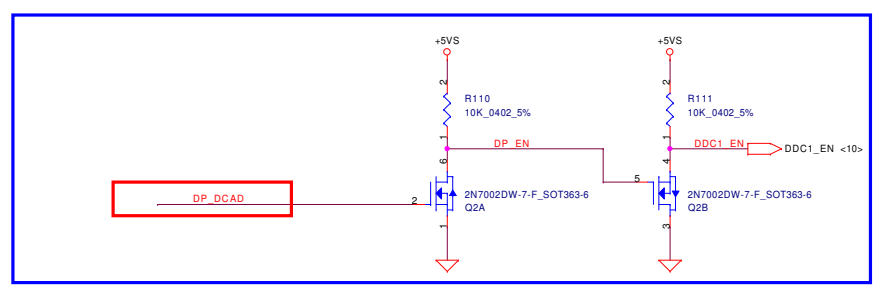


C185	2	1	CLK_48M_ICH	@5P_0402_50V8C
C186	1	2	CLK_14M_ICH	
C187	2	1	CLK_PCI_ICH	@4.7P_0402_50V8C
C188	1	2	CLK_14M_KBC	12P_0402_50V8J
C202	2	1	CLK_PCI_EC	@4.7P_0402_50V8C
C203	2	1	CLK_PCI_DB	@5P_0402_50V8C

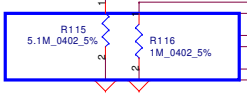
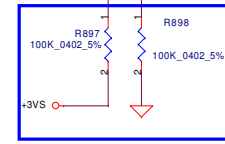
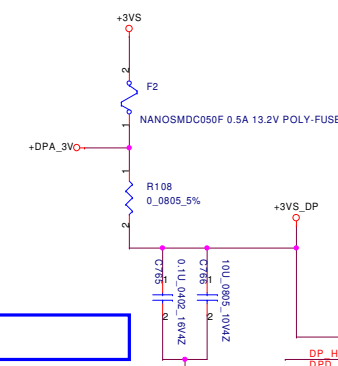
Security Classification	Compal Secret Data		Title	
Issued Date	2006/02/13	Deciphered Date	2006/03/10	Compal Electronics, Inc.
				CLOCK GENERATOR
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET 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 LA-5221P
Date: Tuesday, February 03, 2009				Rev 0.1
Sheet 15 of 45				



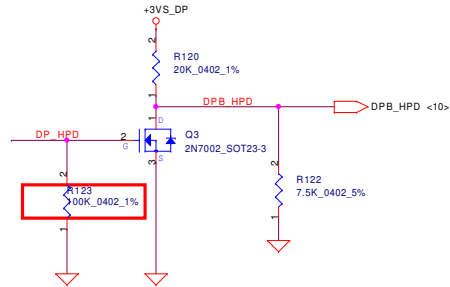
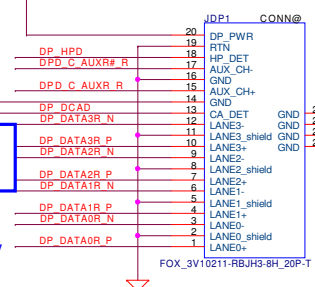
01/12
Del reserved ESD part, because M/B no more space



01/06 P-->N



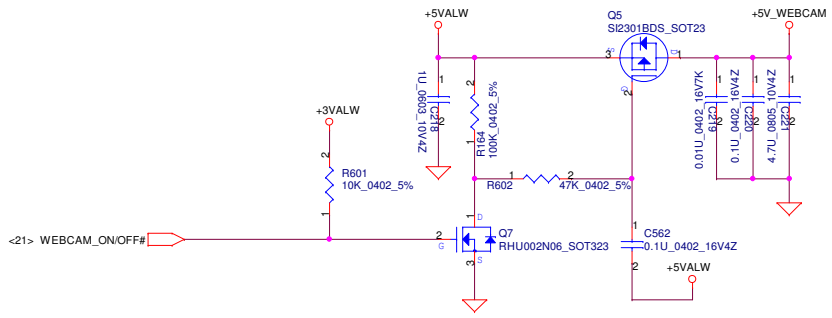
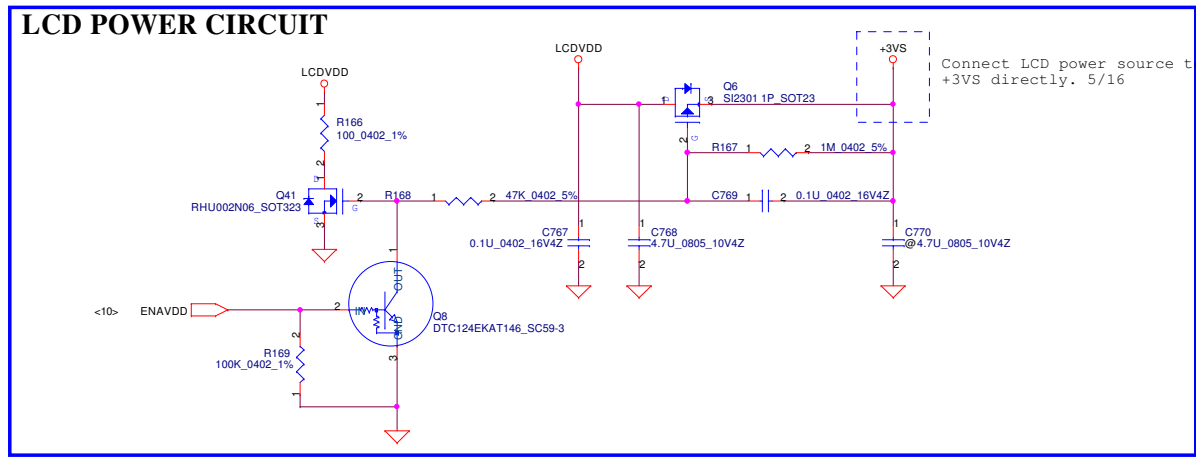
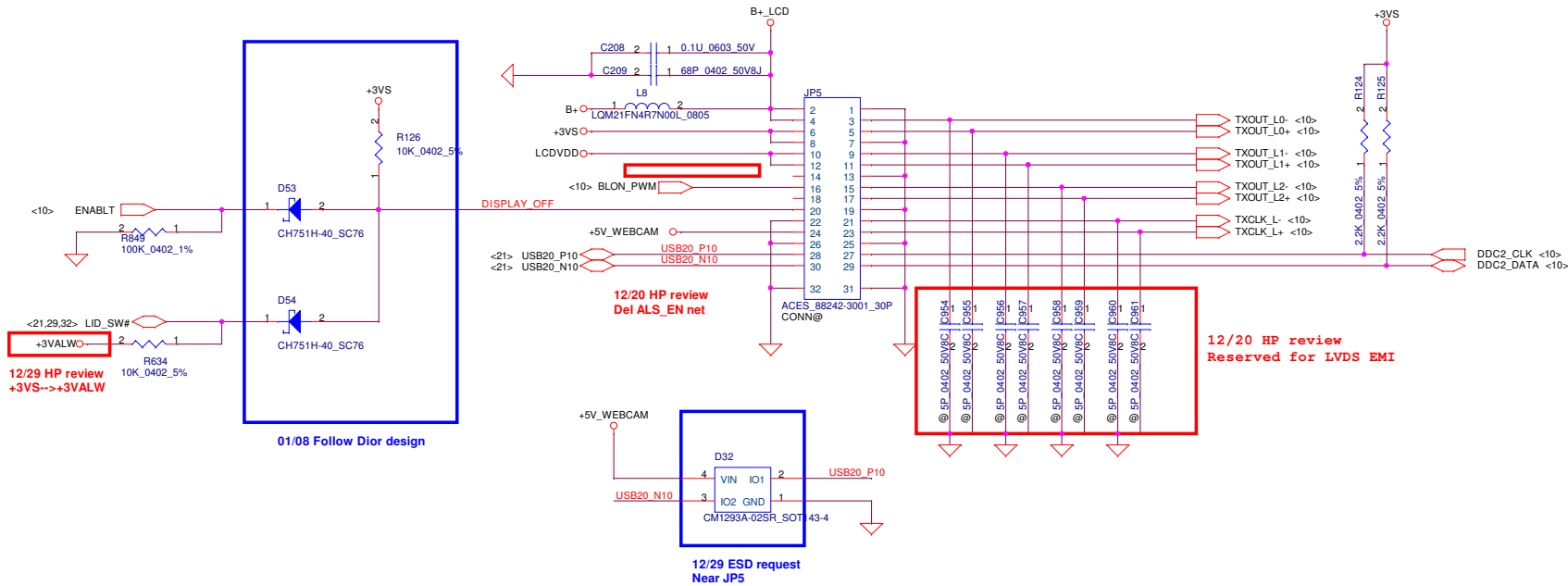
01/06
Del R115, support DP only
R116-->@



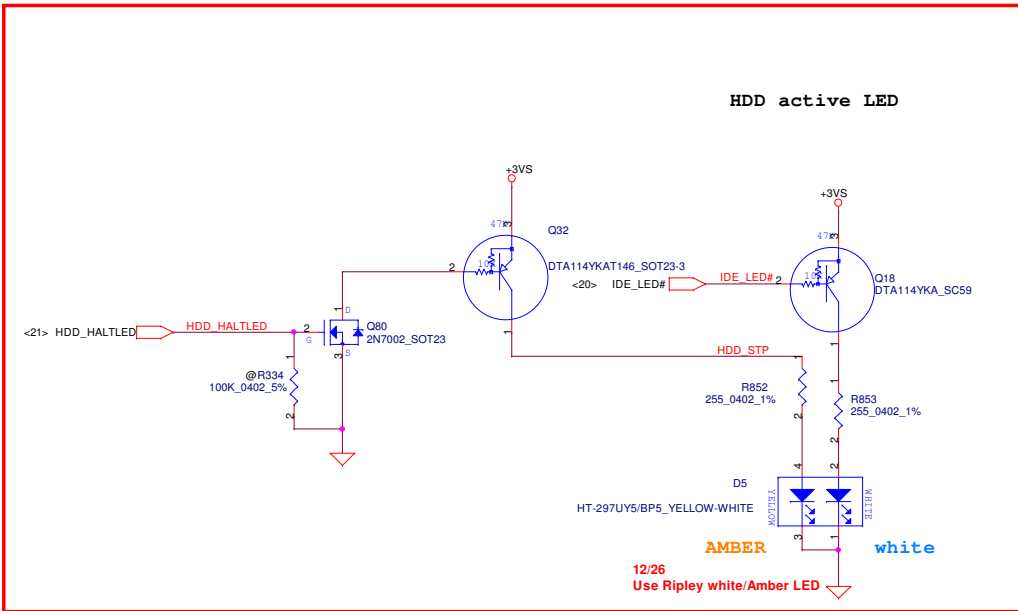
01/12 HP review
Follow intel DG REV2.1(20k-->100K)

Security Classification	Compal Secret Data		Title	Compal Electronics, Inc. Display Port Connector	
Issued Date	2008/09/15	Deciphered Date			
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
	LA-5221P	Tuesday, February 03, 2009		16 of 45	0.1

LED/PANEL BD. CONN.

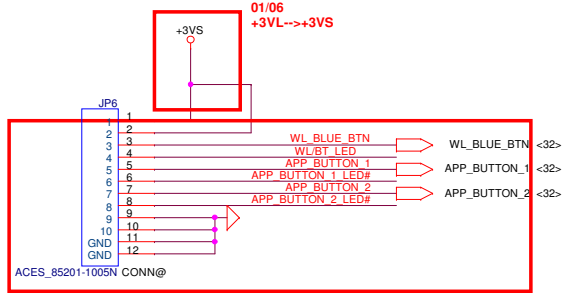


Security Classification	Compal Secret Data		Title	
Issued Date	2005/03/10	Deciphered Date	2006/03/10	Compal Electronics, Inc.
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				LCD CONN & Q-Switch & GPIO Ext. Size Document Number LA-5221P Rev 0.1
Date:	Tuesday, February 03, 2009	Sheet	17	of 45

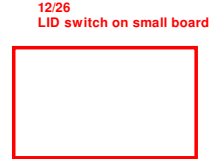
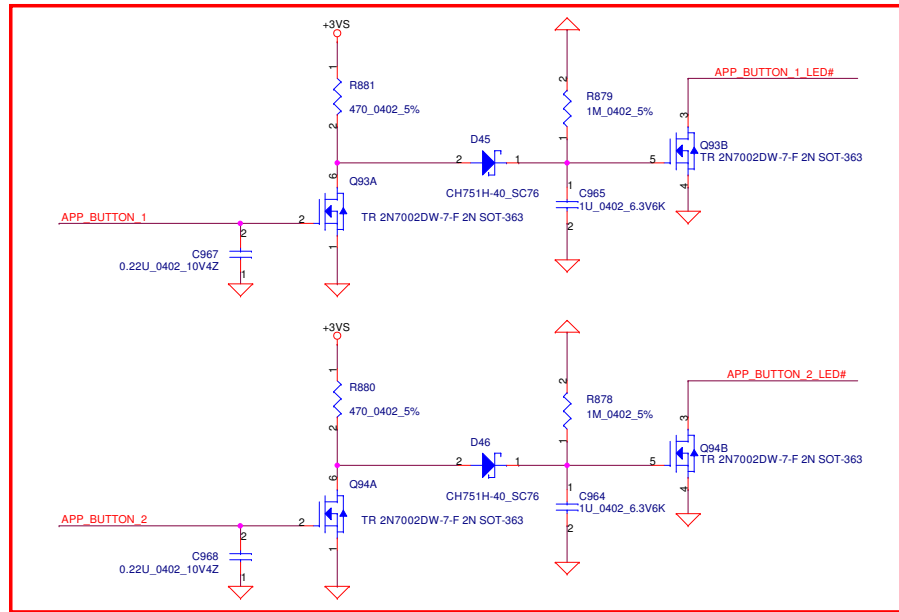
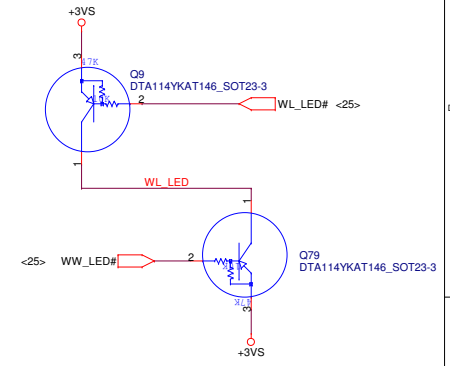
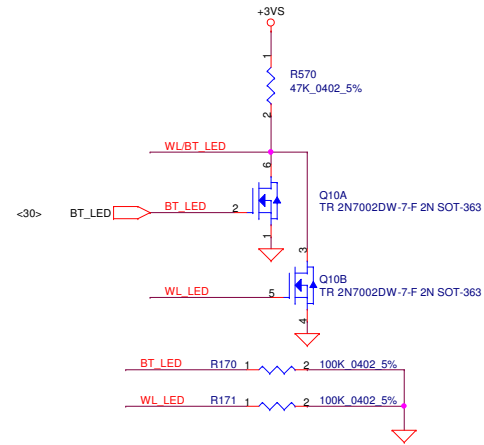


12/26
Modify HD LED control(follow skyy)

To LED small board

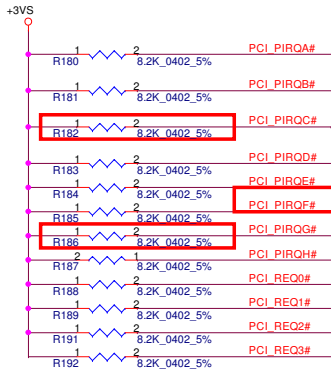
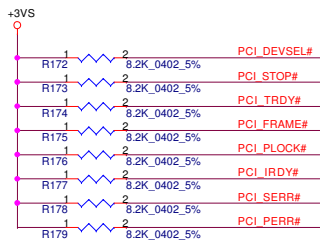


12/26
Power LED on small board



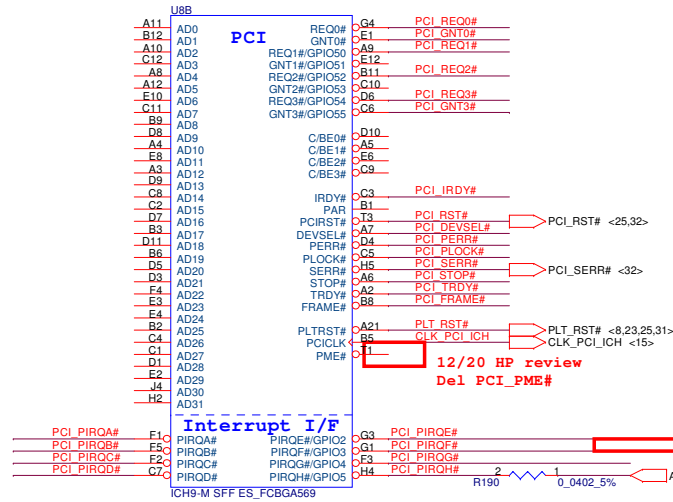
Security Classification	Compal Secret Data		
Issued Date	2006/02/13	Deciphered Date	2006/03/10
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.			

Compal Electronics, Inc.		
Title	LEDS & LID	
Size	Document Number	Rev
Custom	LA-5221P	0.1
Date	Tuesday, February 03, 2009	Sheet 18 of 45



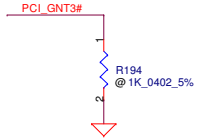
01/13 HP review
Add R182 and R186

12/20 HP review
Update net (No ODD_DET#)

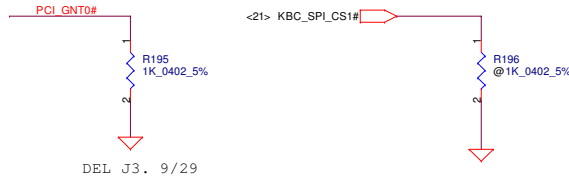


12/20 HP review
Update net (No ODD_DET#)

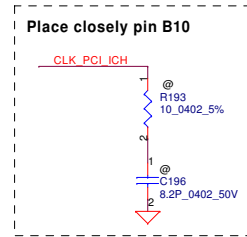
A16 swap override Strap	
PCI_GNT3#	Low= A16 swap override Enble High= Default *



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

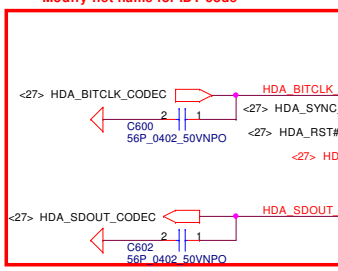
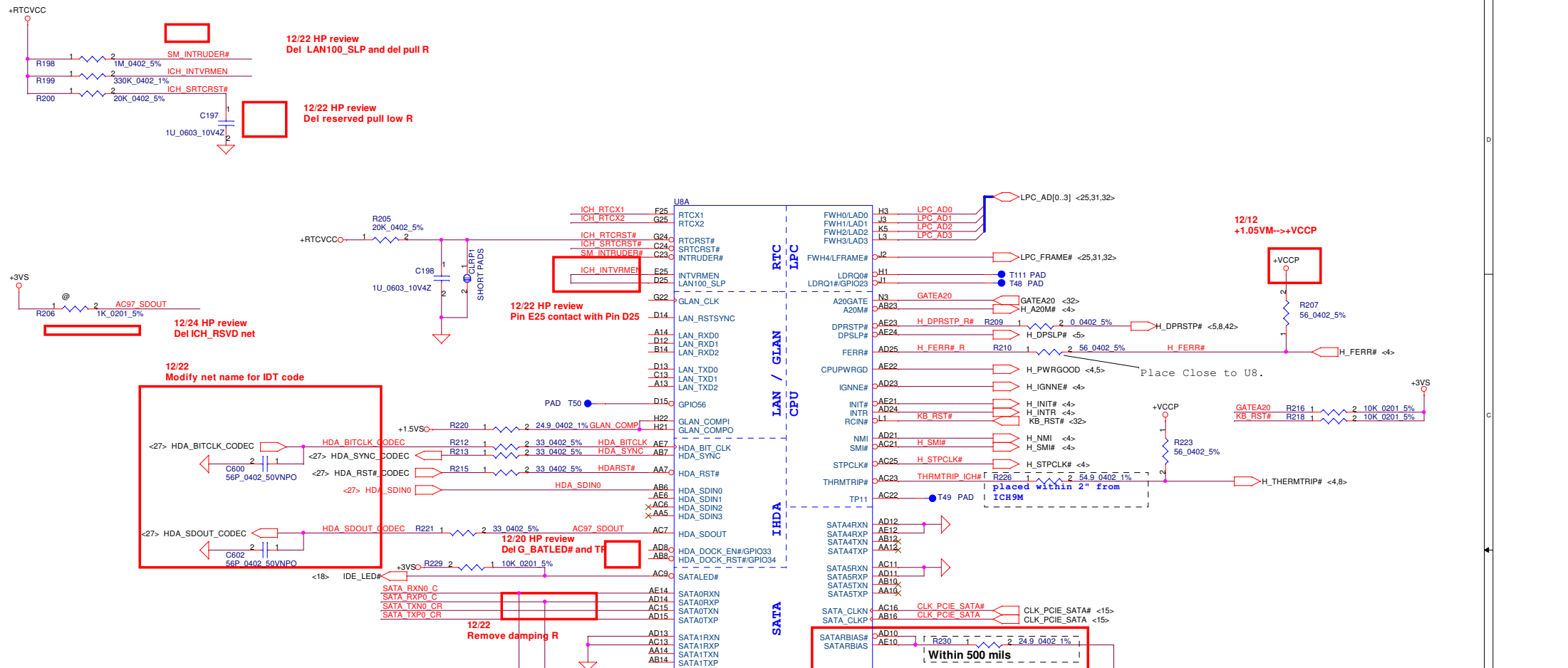


DEL J3. 9/29

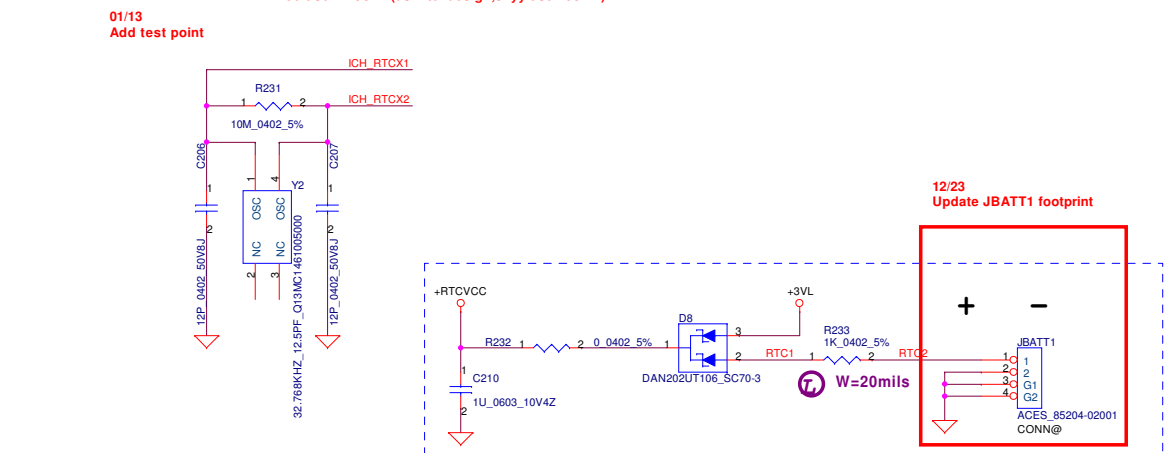
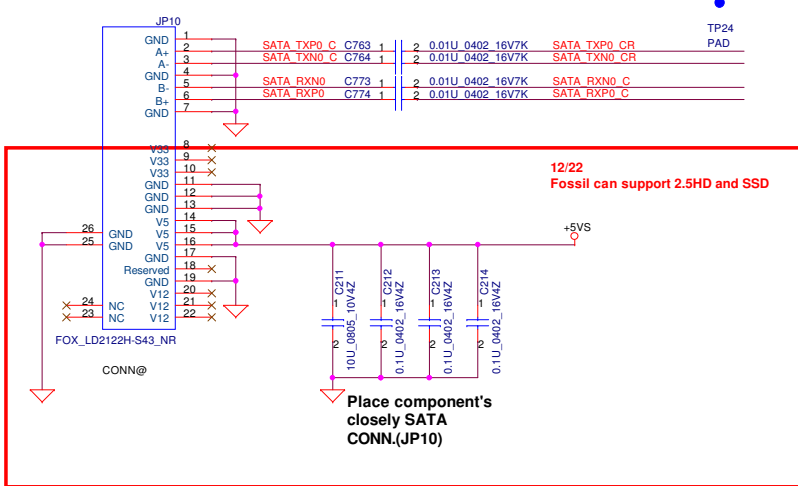


Security Classification	Compal Secret Data	
Issued Date	2006/02/13	Deciphered Date 2006/03/10
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.		

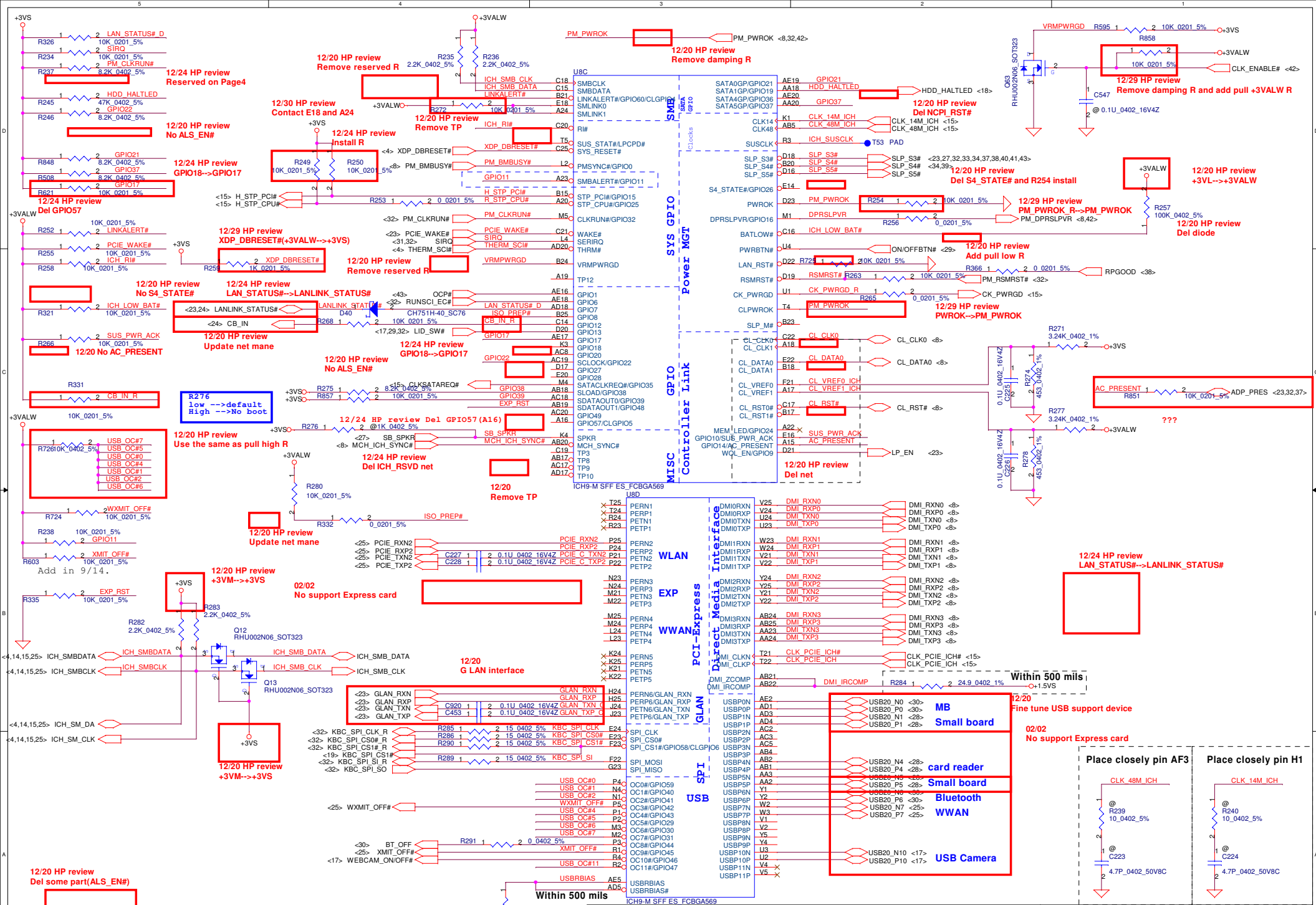
Compal Electronics, Inc.		
Title ICH9(I/4)-PCI/INT		
Size	Document Number LA-5221P	Rev 0.1
Date	Tuesday, February 03, 2009	Sheet 19 of 45



2.5' SATA HDD Connector



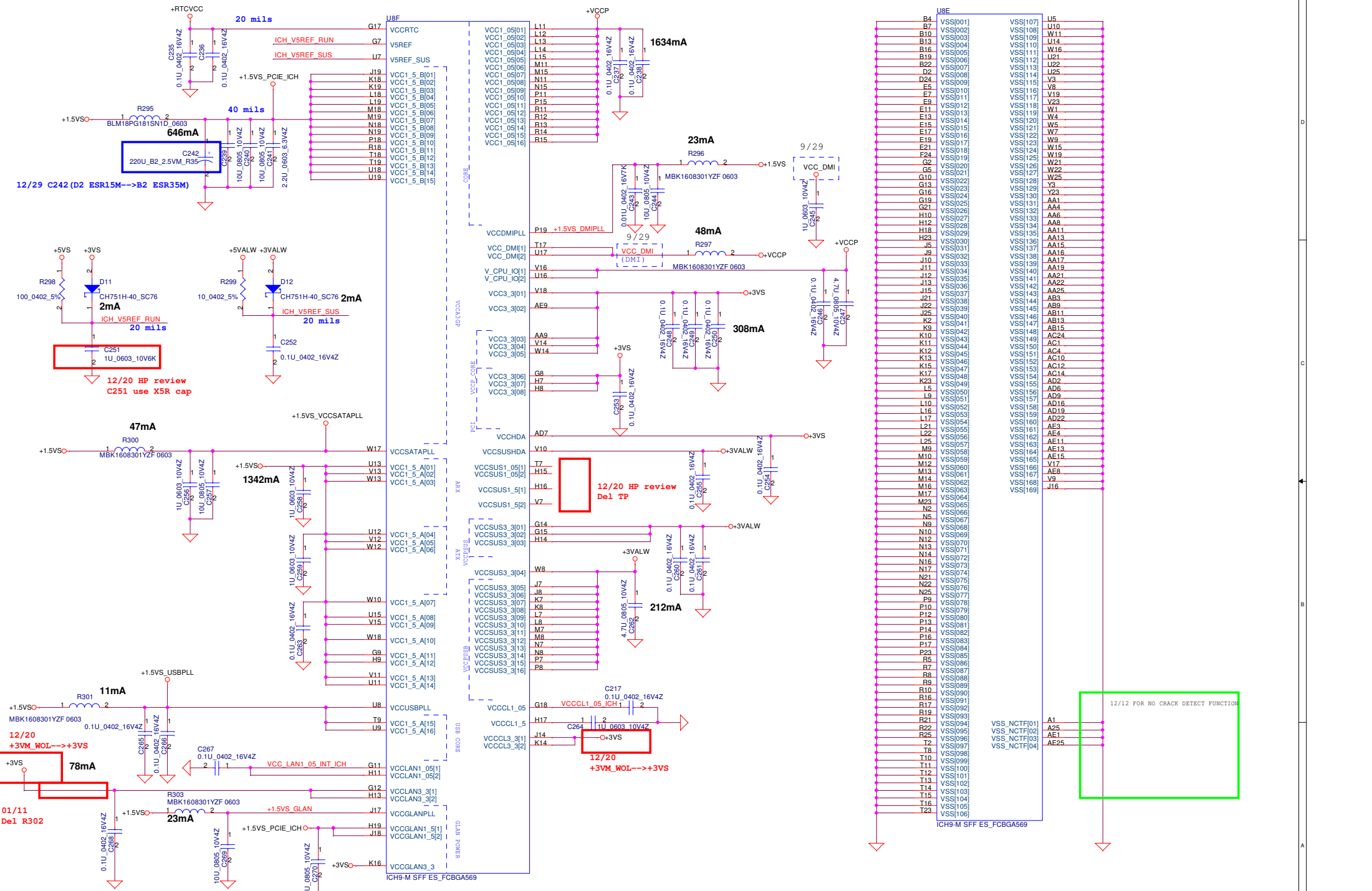
Security Classification	Compal Secret Data		Title	Compal Electronics, Inc.	
Issued Date	2006/02/13	Deciphered Date	2006/03/10	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.			Size	Document Number	Rev
			Custom	LA-5221P	0.1
			Date	Tuesday, February 03, 2009	Sheet 20 of 45



Security Classification	Compal Secret Data	
Issued Date	2006/02/13	Deciphered Date
2006/03/10		

Compal Electronics, Inc.		
ICH9(3/4) DMI,USB,GPIO,PCIE		
Title	LA-5221P	Rev
Size	Document Number	0.1
Custom		
Date	Tuesday, February 03, 2009	Sheet 21 of 45

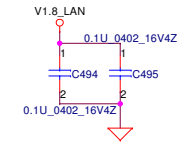
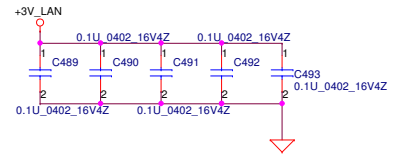
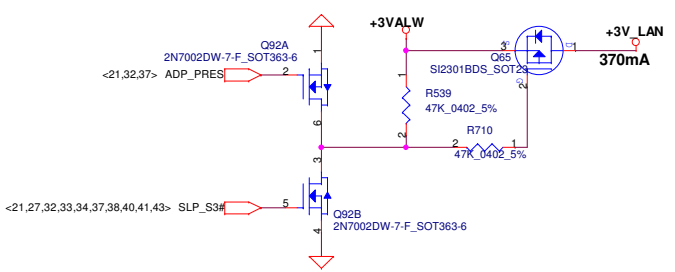
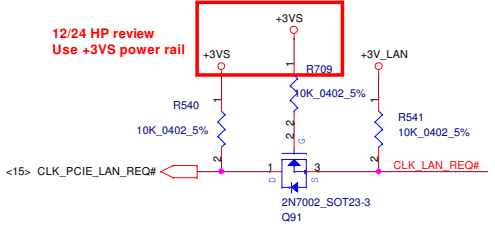
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS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



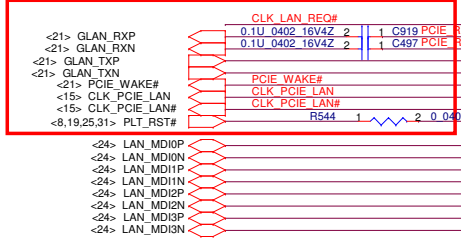
Security Classification	Compal Secret Data	
Issued Date	2006/02/13	Deciphered Date
		2006/03/10

THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPUTER 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.

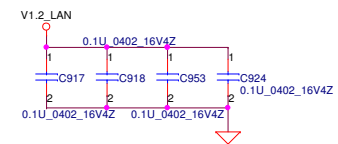
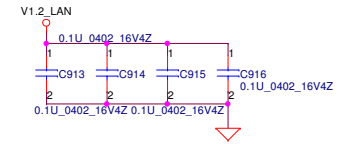
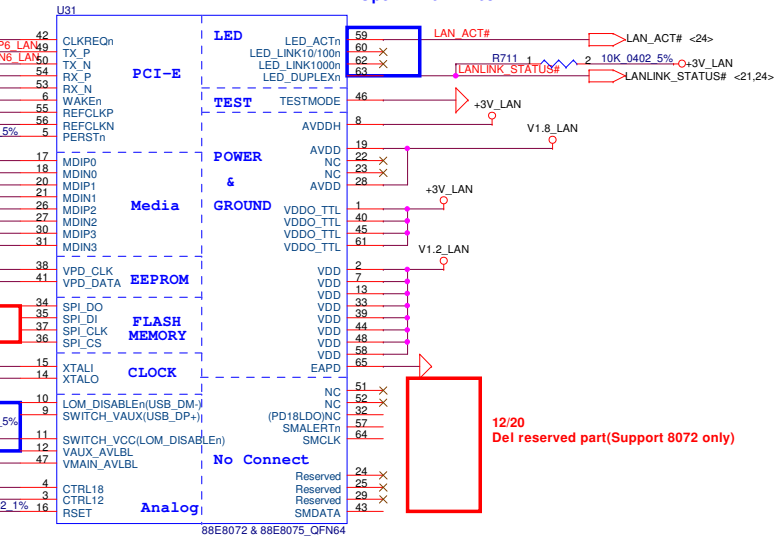
Title		Compal Electronics, Inc.	
		ICH9(4/4) POWER&GND	
Size	Document Number	Date	Rev
Custom	LA-522IP	Tuesday, February 03, 2009	0.1
Date		Sheet	of
		22	45



12/20 Update net



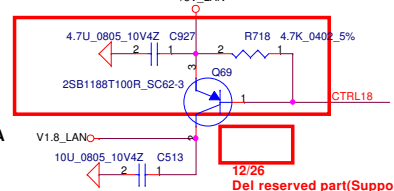
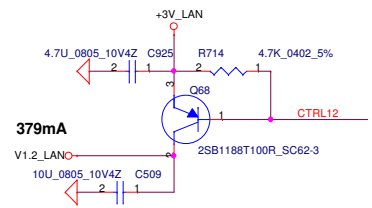
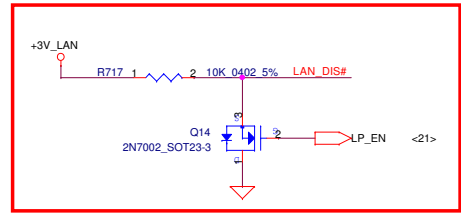
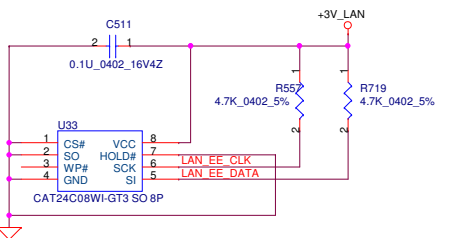
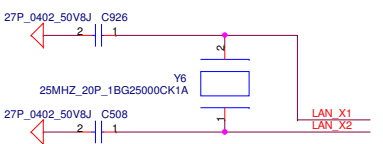
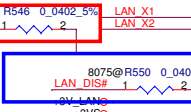
0115 Marvell
Open Pin62 Pin63



12/20 Del reserved SPI net

12/26 8072@-->install LAN_DIS#

01/23 No support 8075



12/20 Del reserved part(Support 8072 only)

12/26 8072@-->install

12/26 Del reserved part(Support 8072 only)

12/22 HP review
Add LP_EN



12/20 Del reserved SPI part

	88E8072	88E8075
Insert	R653	R654
	C533	R655
	R440	U36
	Q28	C694
		R659
		R658
		R656
		R652
		R660

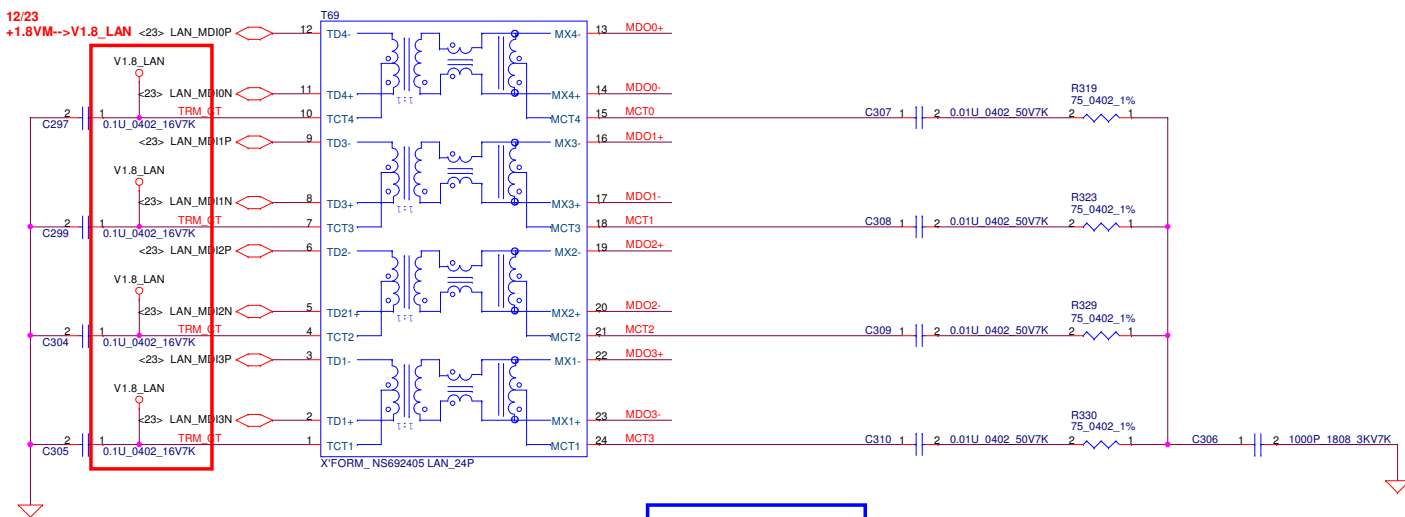
Security Classification	Compal Secret Data	
Issued Date	2008/10/03	Deciphered Date 2009/10/03
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT 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.		
Size	Document Number		Rev	0.1	
Date	Tuesday, February 03, 2009	Sheet	23	of	45

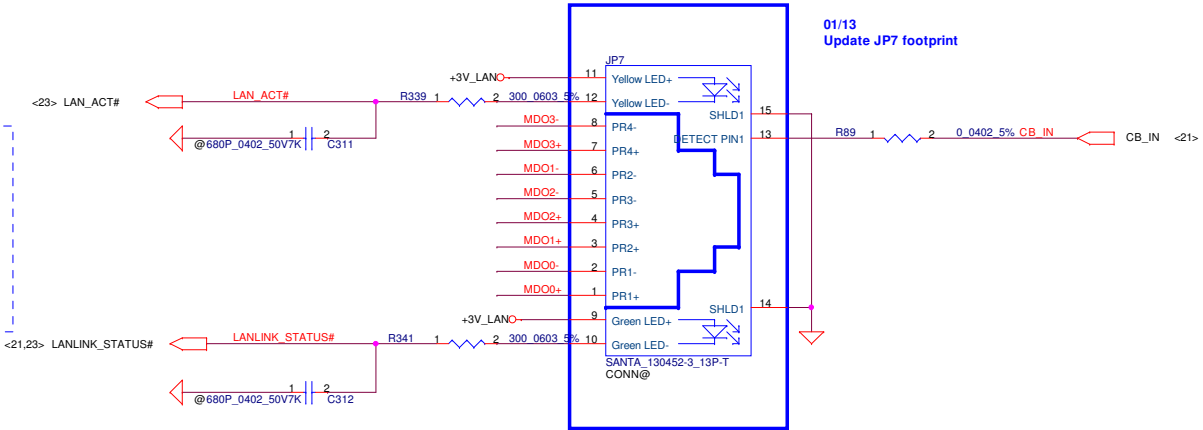
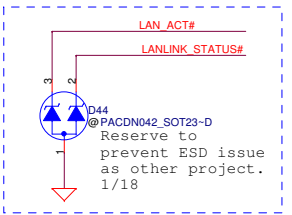


12/15 No support Docking

Delete all termination cause they are already inside BOAZMAN. 9/28



12/29 HP review
Del Q23 Q24



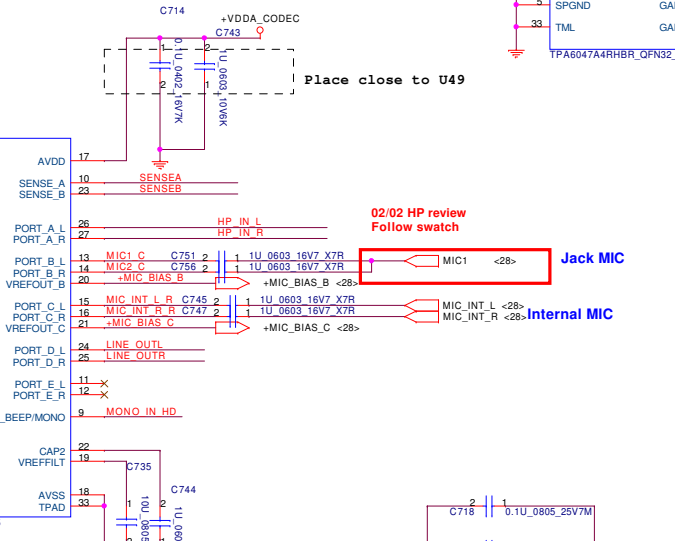
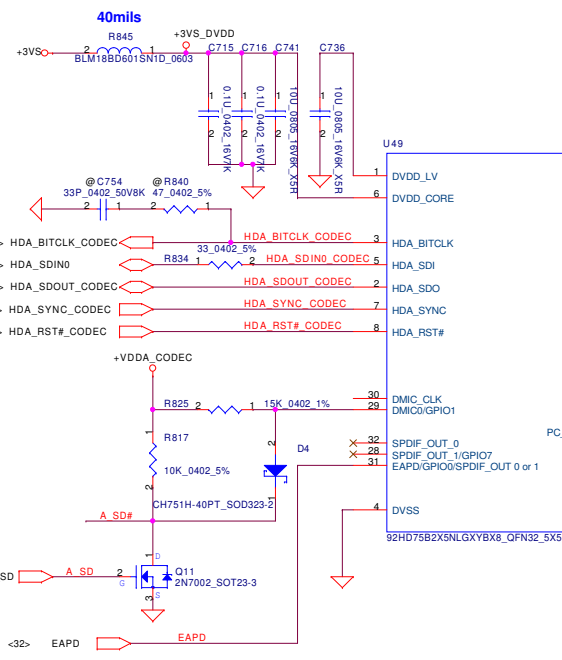
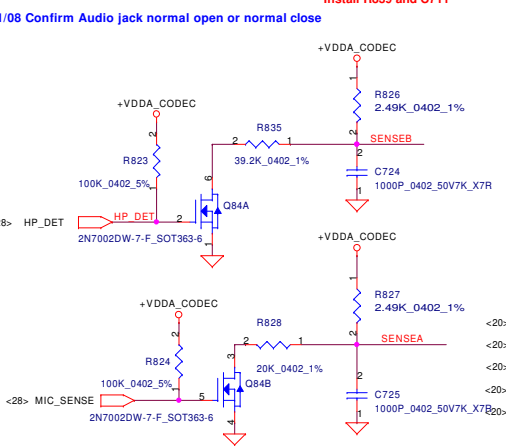
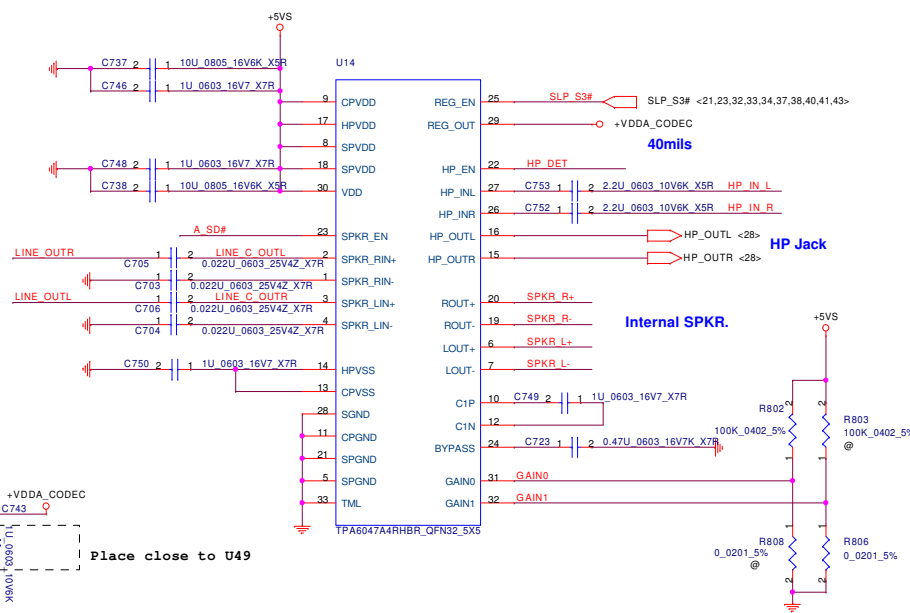
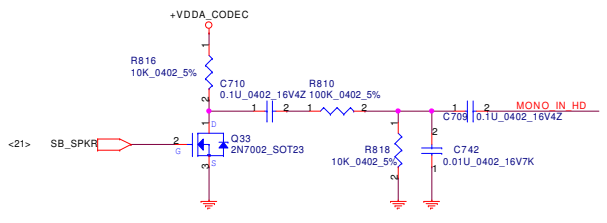
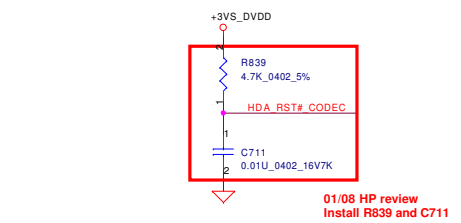
01/13
Update JP7 footprint

Security Classification	Compal Secret Data			Compal Electronics, Inc. Magnetic & RJ45		
Issued Date	2006/02/13	Deciphered Date	2006/07/26			
<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	Rev
					LA-5221P	0.1
Date: Tuesday, February 03, 2009				Sheet	24	of 45

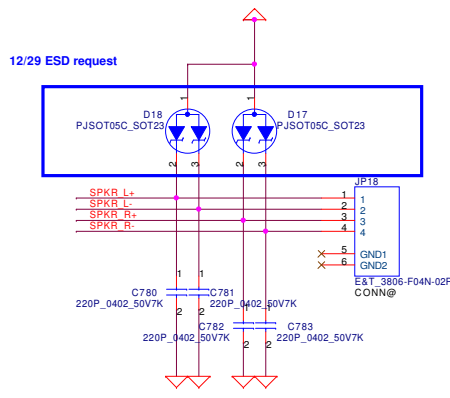
12/17 Remove to small board

Title		
Card reader board		
Size	Document Number	Rev
	LA-5221P	0.1
Date:	Tuesday, February 03, 2009	Sheet 26 of 45

TPA6044 no longer needed. So delete BOM options & co-layout components for TPA6044. SGND and SGND1 nets can also be deleted. Only TPA6041 will be supported. 9/5

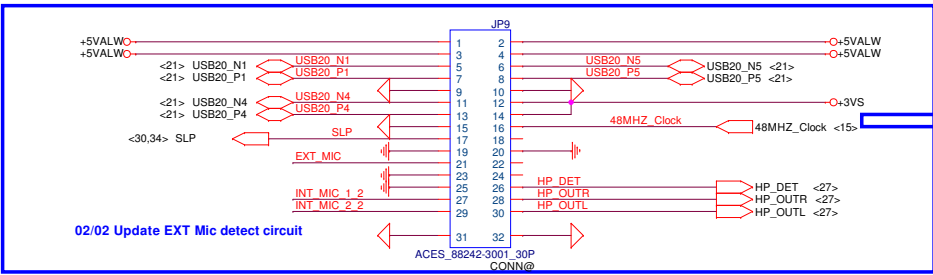


audio ground must be connect to digital ground with an 80m1 copper bridge located directly under codec to prevent ESD latch up.



Security Classification	Compal Secret Data		Title	
Issued Date	2007/05/29	Deciphered Date	2008/05/29	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.				IDT CODEC 92HD75B2
Size	Document Number	Rev	Date	Sheet
LA-5221P		0.1	Tuesday, February 03, 2009	27 of 45

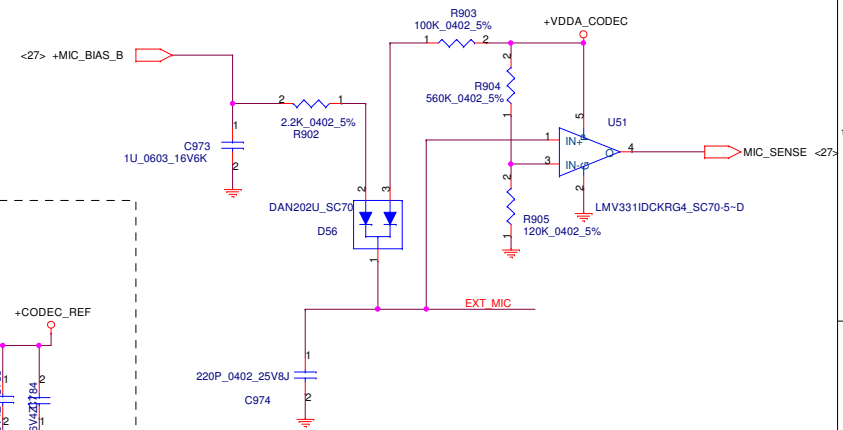
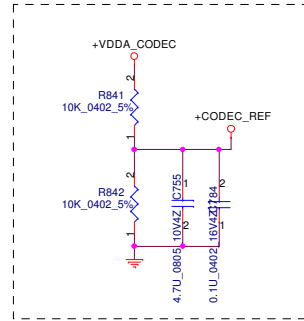
01/10 Fine tune pin define Use the same conn JP9



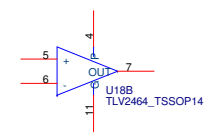
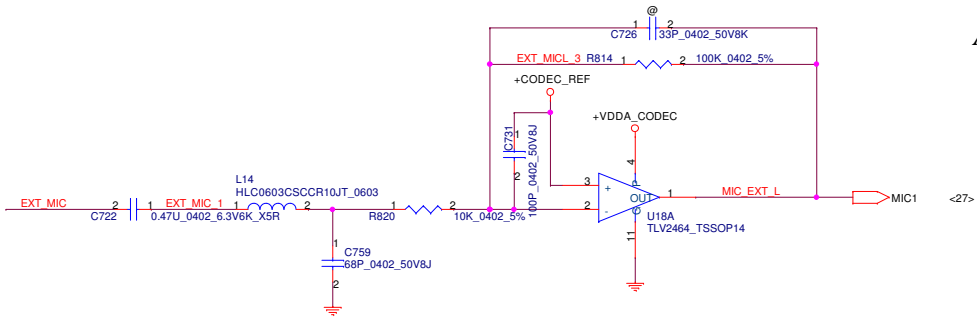
USB I/O connx2 , Audio JACK
Card reader transfer conn

12/26 Reserved for card reader

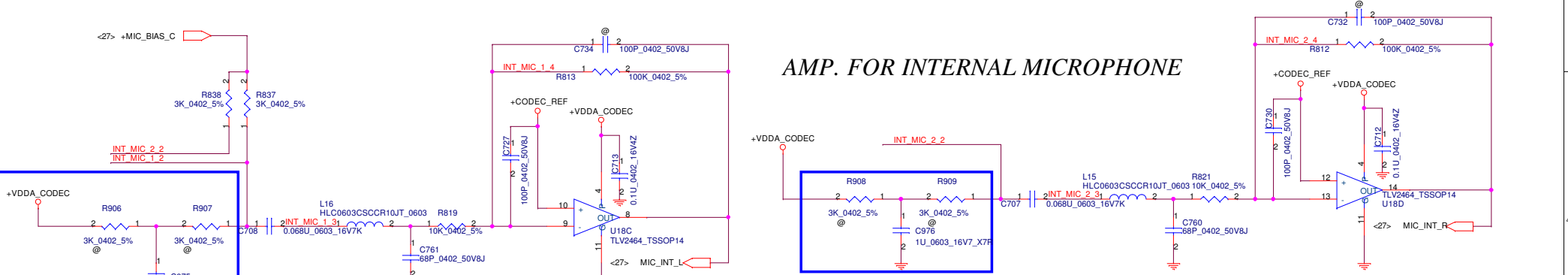
Place close to U18



AMP. FOR EXTERNAL MICROPHONE



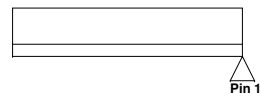
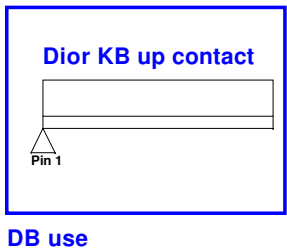
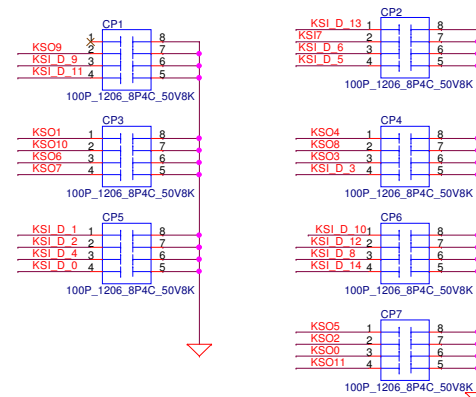
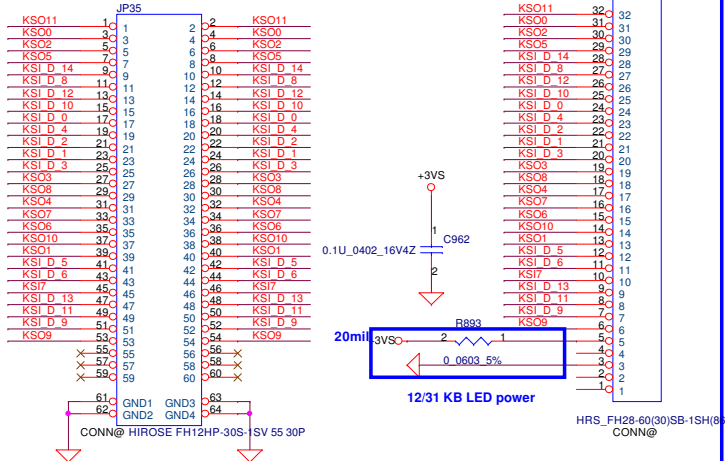
AMP. FOR INTERNAL MICROPHONE



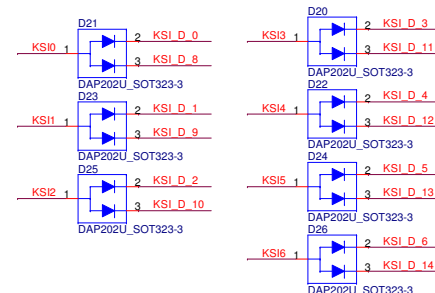
Security Classification	Compal Secret Data		Title	Compal Electronics, Inc.	
Issued Date	2007/05/29	Deciphered Date	2008/05/29	AMP & Audio Jack	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET 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 LA-5221P	Rev 0.1
			Date	Tuesday, February 03, 2009	Sheet 28 of 45

INT_KBD CONN.

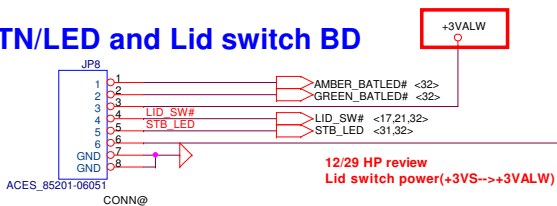
01/09 Co layout for DB phase



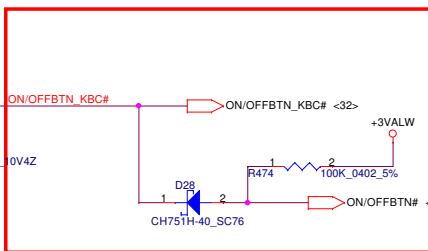
Pin1 reserve , so net name is reserve for Fossil down contact



Power BTN/LED and Lid switch BD

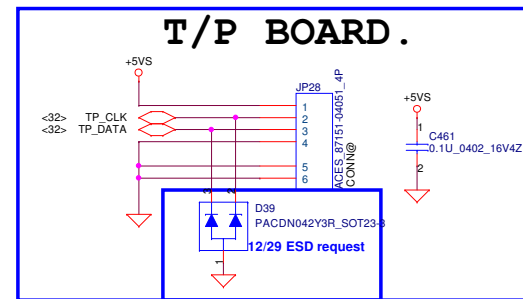


PS:GND use DC in jack GND

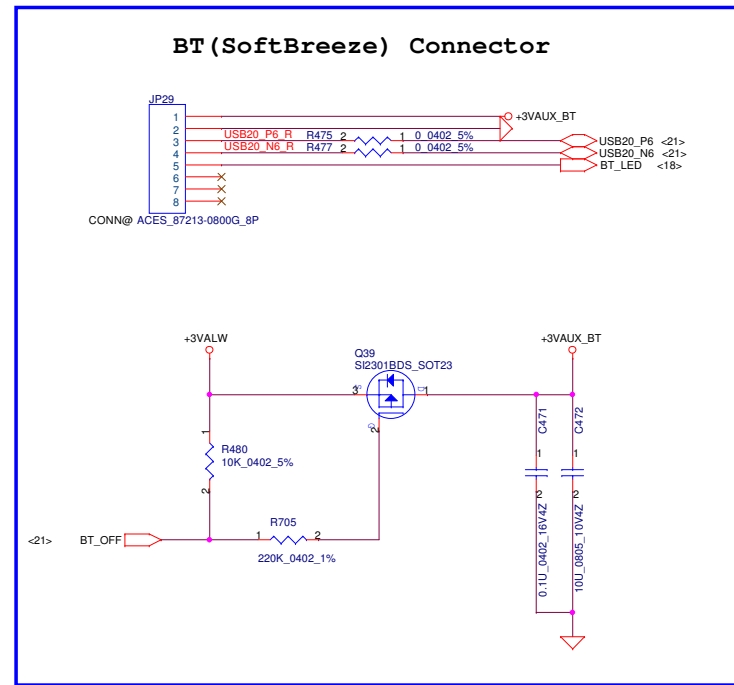
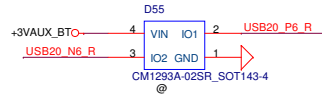


12/20 HP review
Modify ON/OFFBTN# circuit

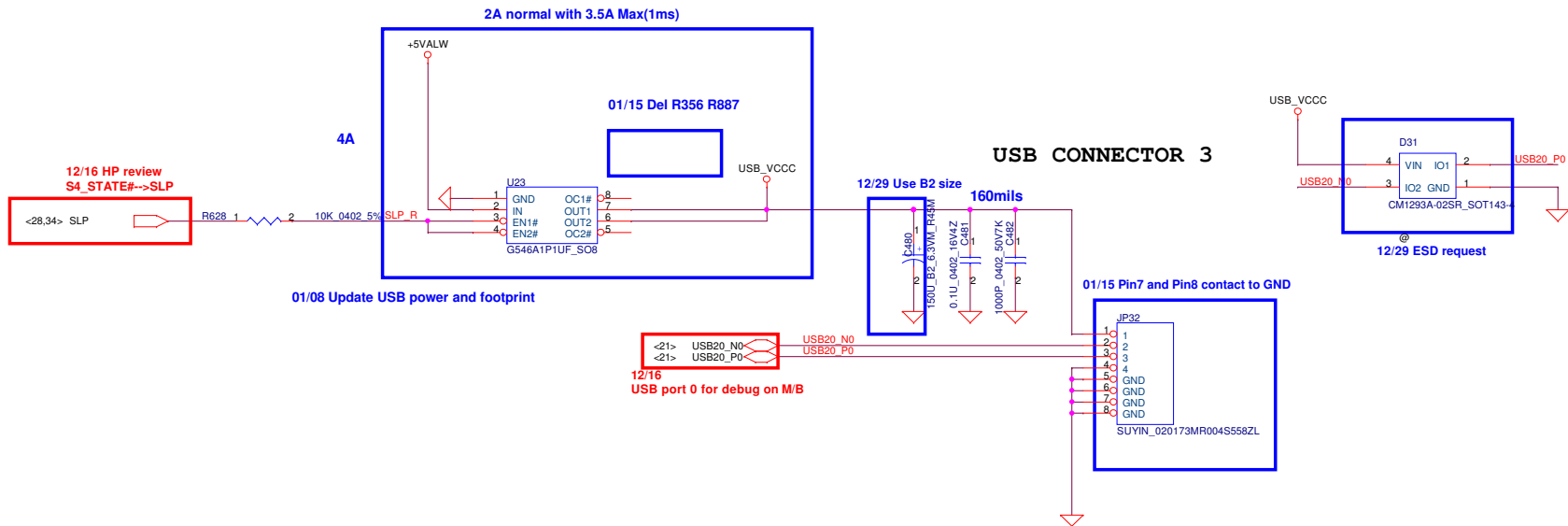
T/P BOARD.



Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2005/03/10	Deciphered Date	2006/03/10	Title
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				MDC/KBD/ON OFF/LID Size Document Number LA-5221P Rev 0.1
Date:	Tuesday, February 03, 2009	Sheet	29	of 45

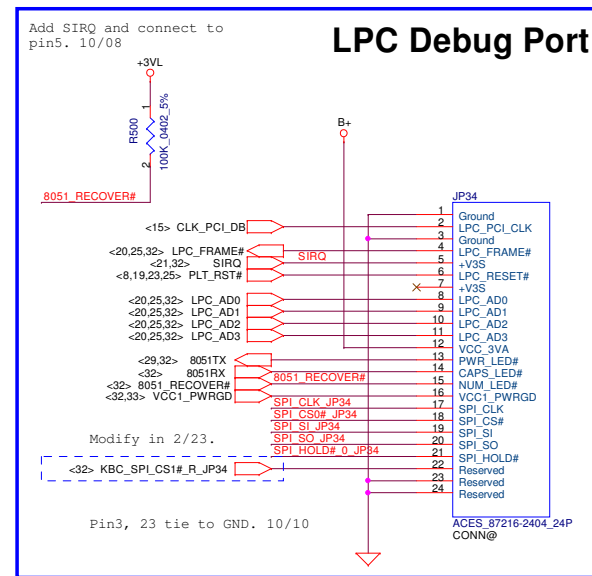
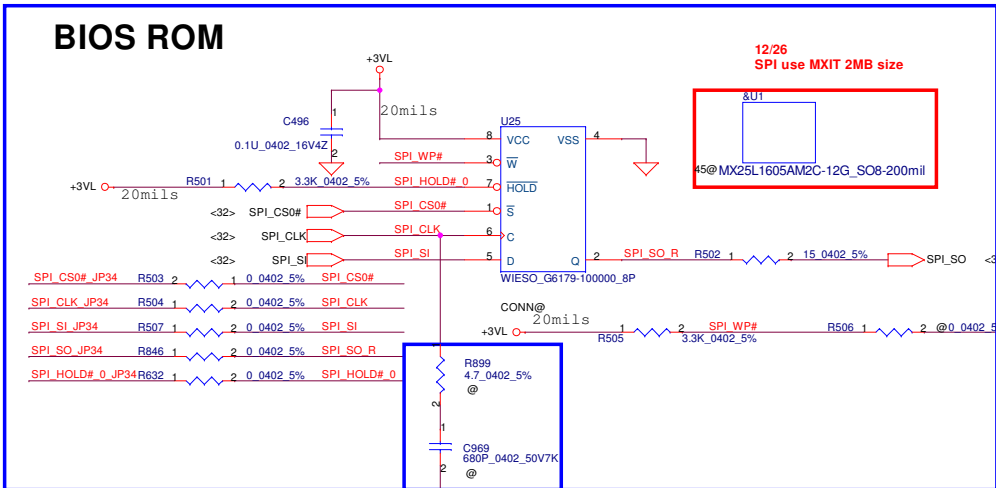


12/16 change to small board



Security Classification	Compal Secret Data			Title		
Issued Date	2006/02/13	Deciphered Date	2006/07/26	Compal Electronics, Inc.		
				USB & BT 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	Rev
					LA-5221P	0.1
				Date:	Tuesday, February 03, 2009	Sheet 30 of 45

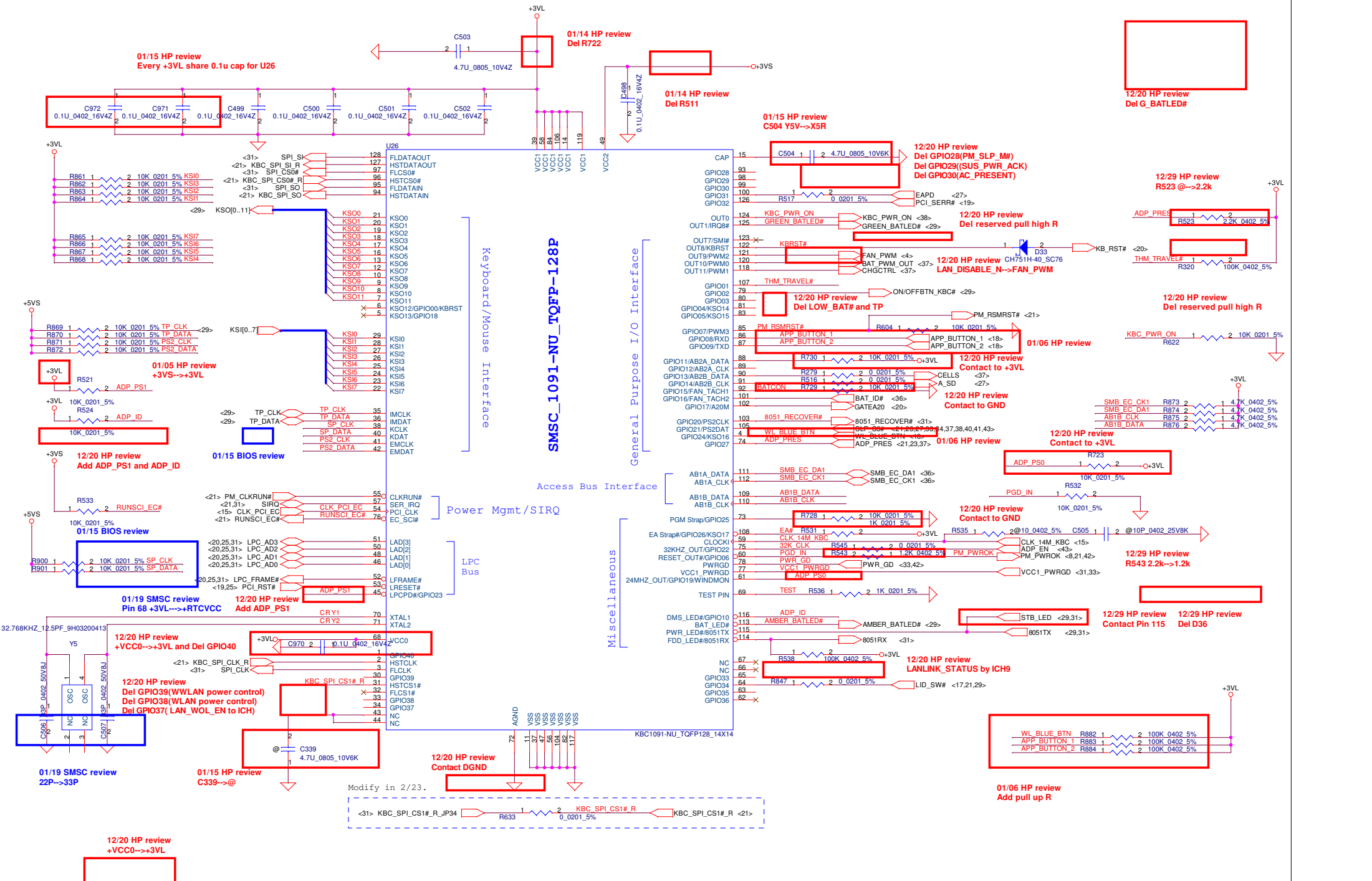
01/23
 U25 is conn
 &U1 is SPI ROM



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

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

Compal Electronics, Inc.		
Title TCG/BIOS ROM/PS2/SW LPC DEBUG		
Size	Document Number LA-522IP	Rev 0.1
Date	Tuesday, February 03, 2009	Sheet 31 of 45



01/15 HP review
Every +3VL share 0.1u cap for U26

01/14 HP review
Del R722

01/14 HP review
Del R511

01/15 HP review
C504 Y5V-->X5R

12/20 HP review
Del GPIO28(PM_SLP_M#)
Del GPIO29(SUS_PWR_ACK)
Del GPIO30(AC_PRESENT)

12/20 HP review
Del G_BATLED#

12/29 HP review
R523 @-->2.2k

12/20 HP review
Del reserved pull high R

12/20 HP review
Contact to +3VL

12/20 HP review
Contact to GND

12/29 HP review
R543 2.2k-->1.2k

12/29 HP review
Contact Pin 115

12/29 HP review
Del D36

12/20 HP review
LAN_LN_STATUS by ICH9

01/06 HP review
Add pull up R

01/05 HP review
+3VS-->+3VL

01/15 BIOS review

01/15 BIOS review

01/19 SMC review
Pin 68 +3VL-->+RTCVCC

12/20 HP review
Add ADP_PS1

12/20 HP review
+VCC0-->+3VL and Del GPIO40

12/20 HP review
Del GPIO39(WLAN power control)
Del GPIO38(WLAN power control)
Del GPIO37(LAN_WOL_EN to ICH)

01/19 SMC review
22P-->33P

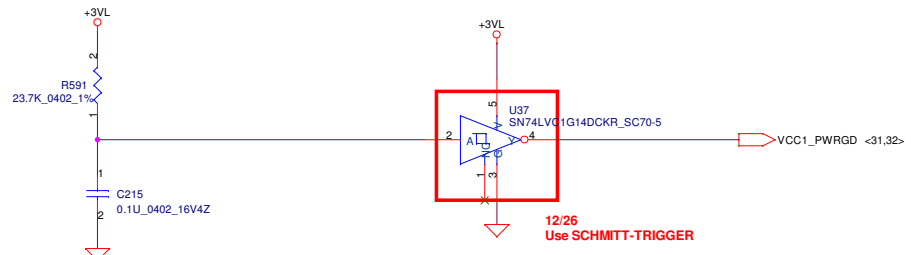
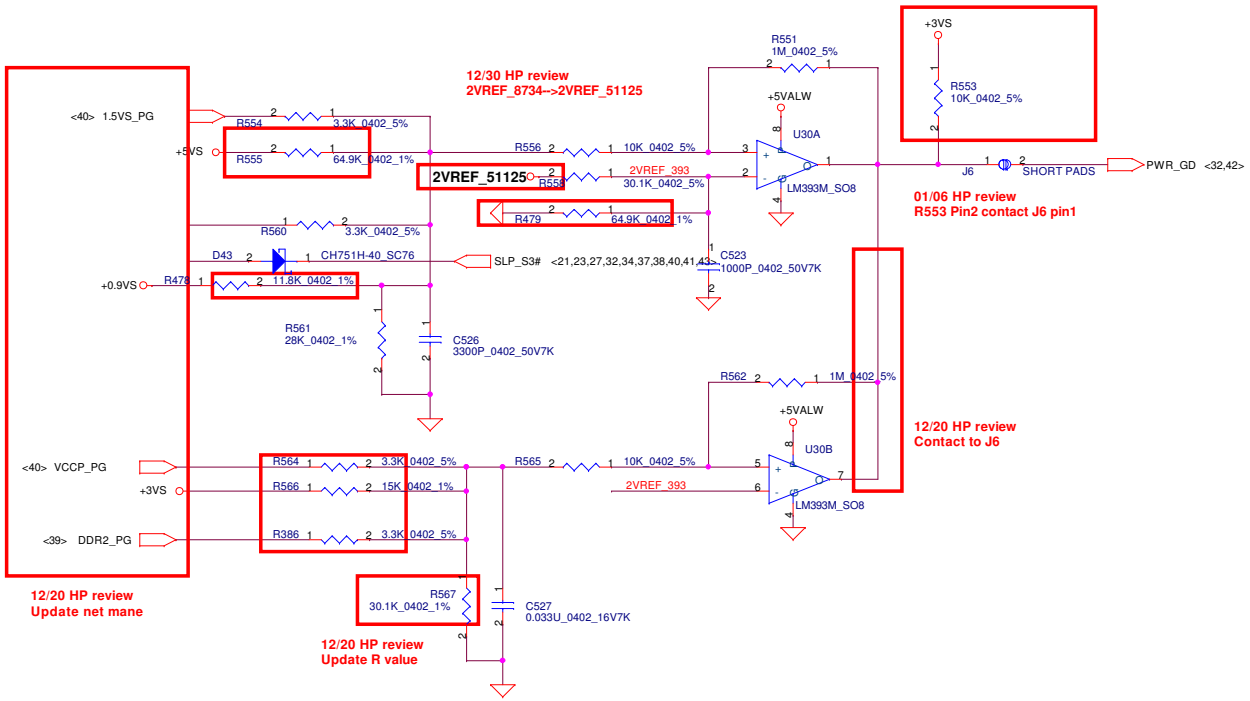
01/15 HP review
C339-->@

12/20 HP review
Contact DGND

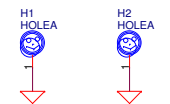
12/20 HP review
No AGND filter

SMSC_1091-NU_TQFP-128P

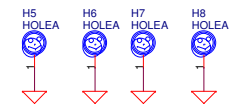
Security Classification		Compal Secret Data		<p style="text-align: center;">Compal Electronics, Inc.</p> <p style="text-align: center;">KBC1091</p>	
Issued Date	2006/02/13	Deciphered Date	2006/07/26		
<p>THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF 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.</p>					
Size	Document Number LA-5221P	Rev	0.1	Date: Tuesday, February 03, 2009 Sheet 32 of 45	



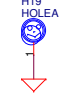
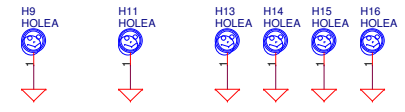
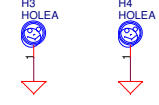
WWAN Card STANDOFF



CPU support



WWLAN Card STANDOFF



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2005/05/26	Deciphered Date	2006/07/26	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.				POK CKT	
				Size	Document Number
Date: Tuesday, February 03, 2009		Sheet	33	of	45

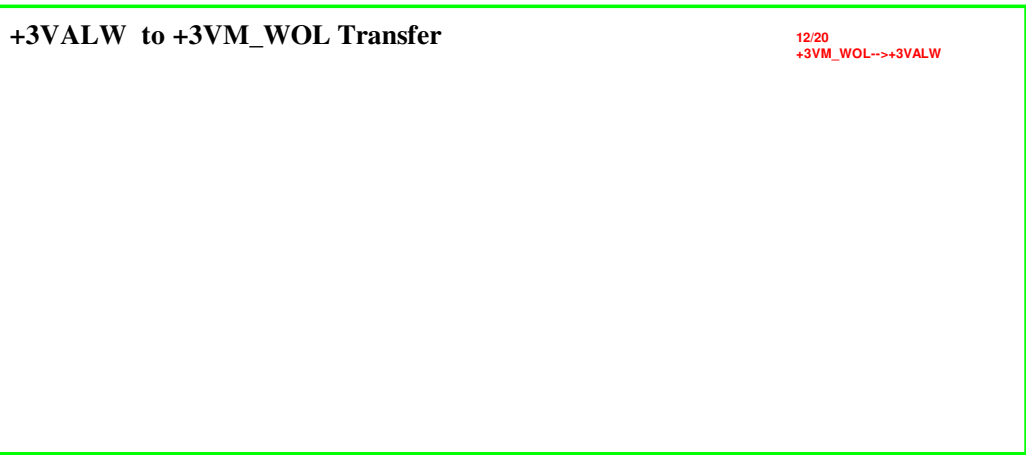
+1.05VM to +VCCP Transfer

12/12
+1.05VN-->+VCCP

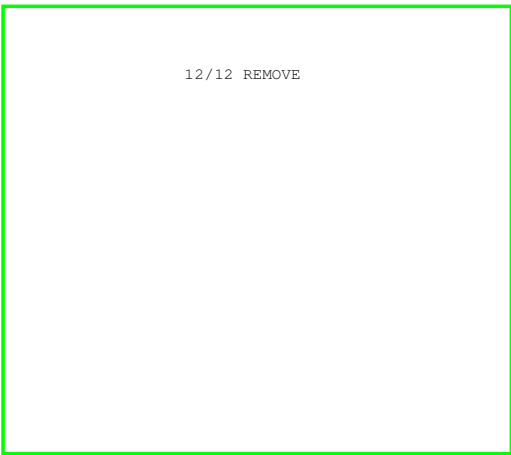


+3VALW to +3VM_WOL Transfer

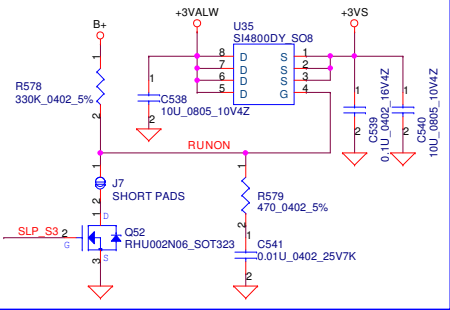
12/20
+3VM_WOL-->+3VALW



12/12 REMOVE



+3VALW to +3VS Transfer

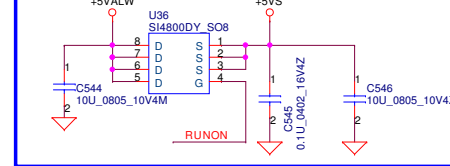


+3VALW to +3VM Transfer

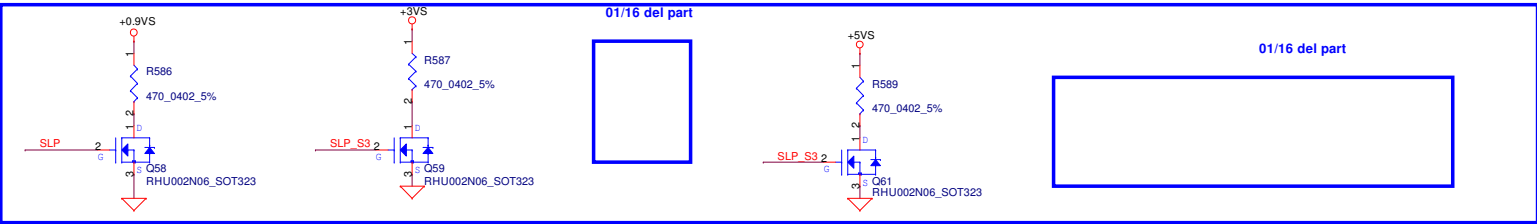
12/20
+3VM-->+3VALW



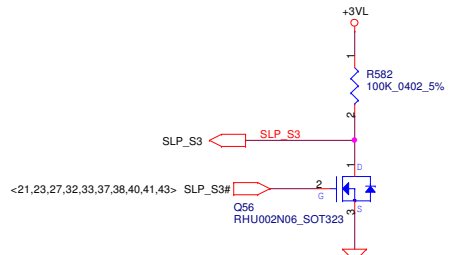
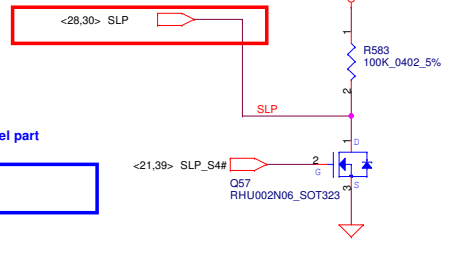
+5VALW to +5VS Transfer



Discharge circuit-1

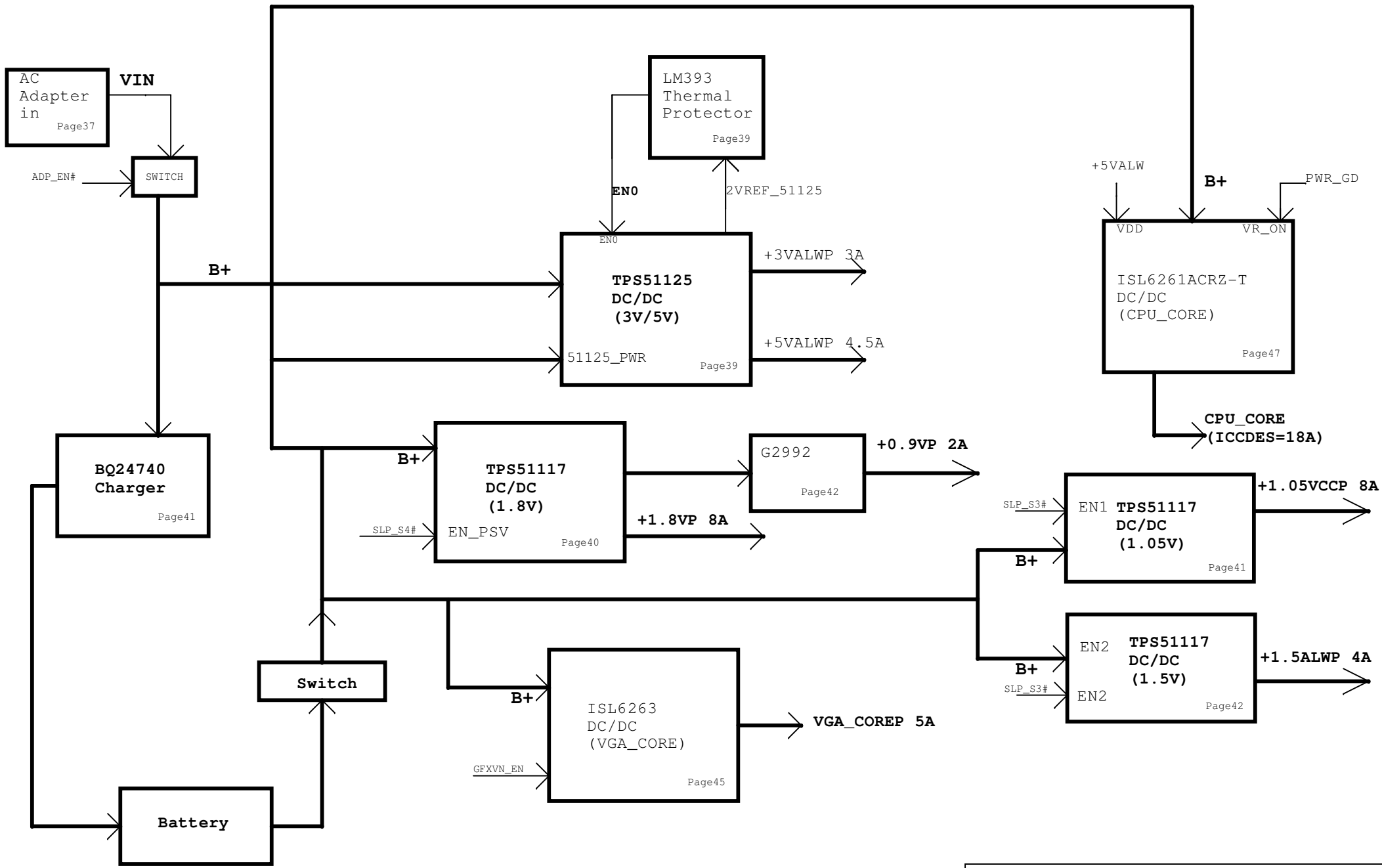


12/20 HP review
SLP control

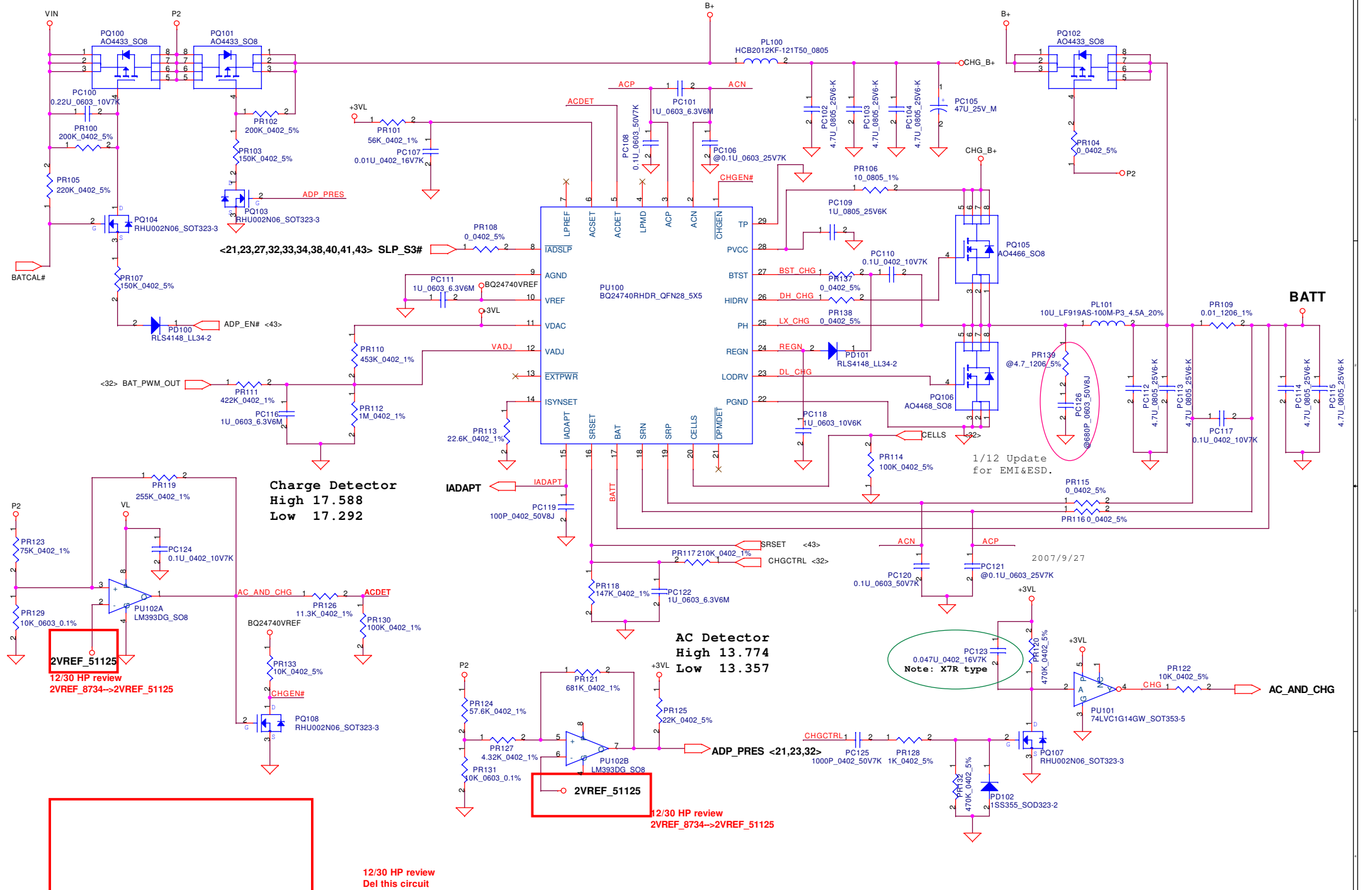


Security Classification	Compal Secret Data		
Issued Date	2006/02/13	Deciphered Date	2006/07/26
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT 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 Circuits	
Size	Document Number	Rev		
	LA-522IP	0.1		
Date:	Tuesday, February 03, 2009	Sheet	34	of 45



Title		
POWER BLOCK DIAGRAM		
Size	Document Number	Rev
Date:	Tuesday, February 03, 2009	Sheet 35 of 45



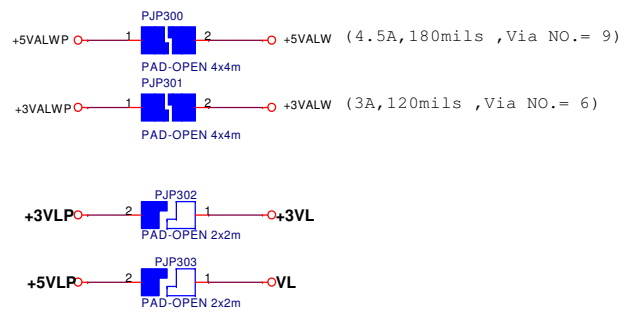
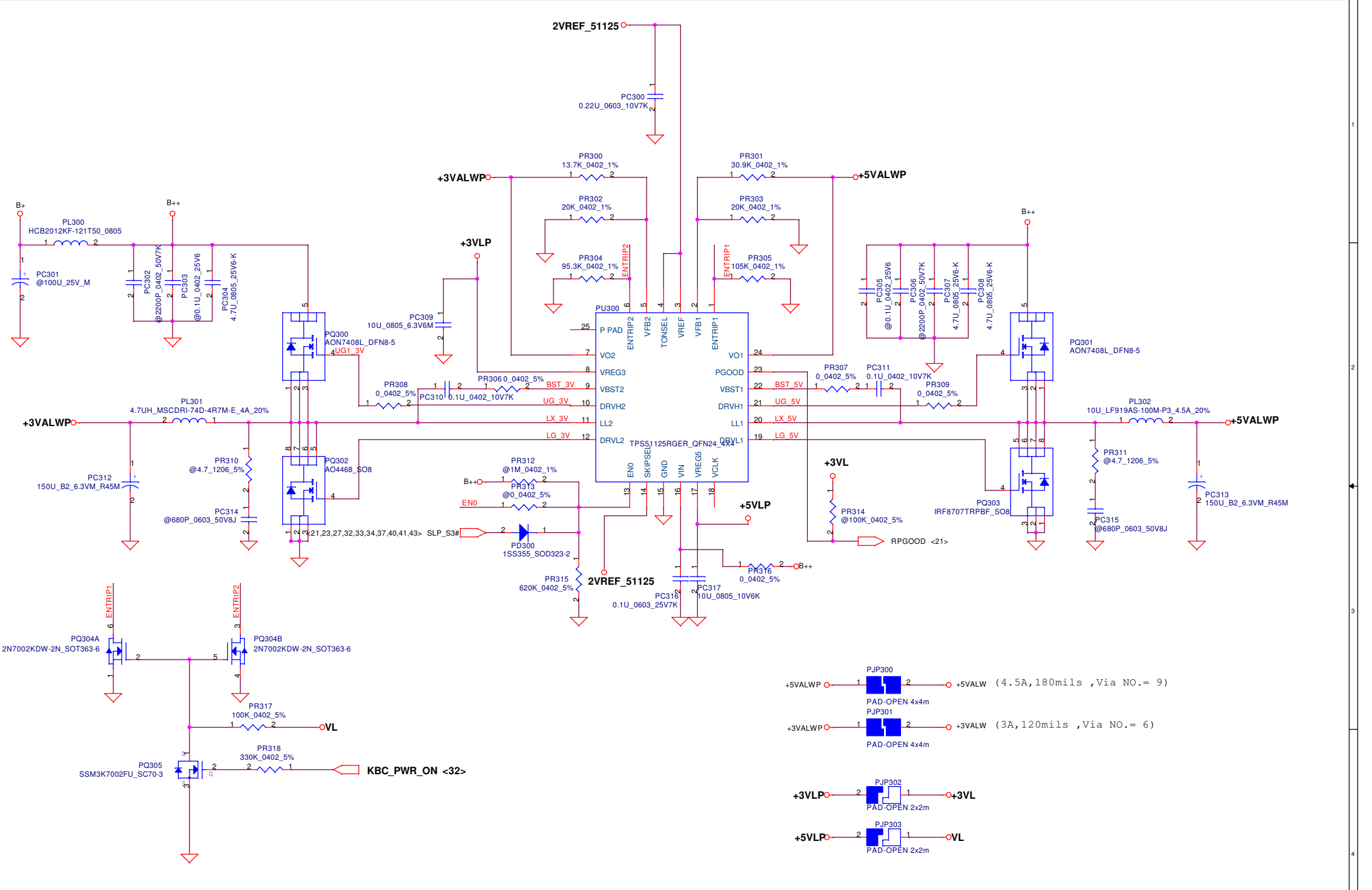
2VREF_51125
12/30 HP review
2VREF_8734-->2VREF_51125

12/30 HP review
Del this circuit

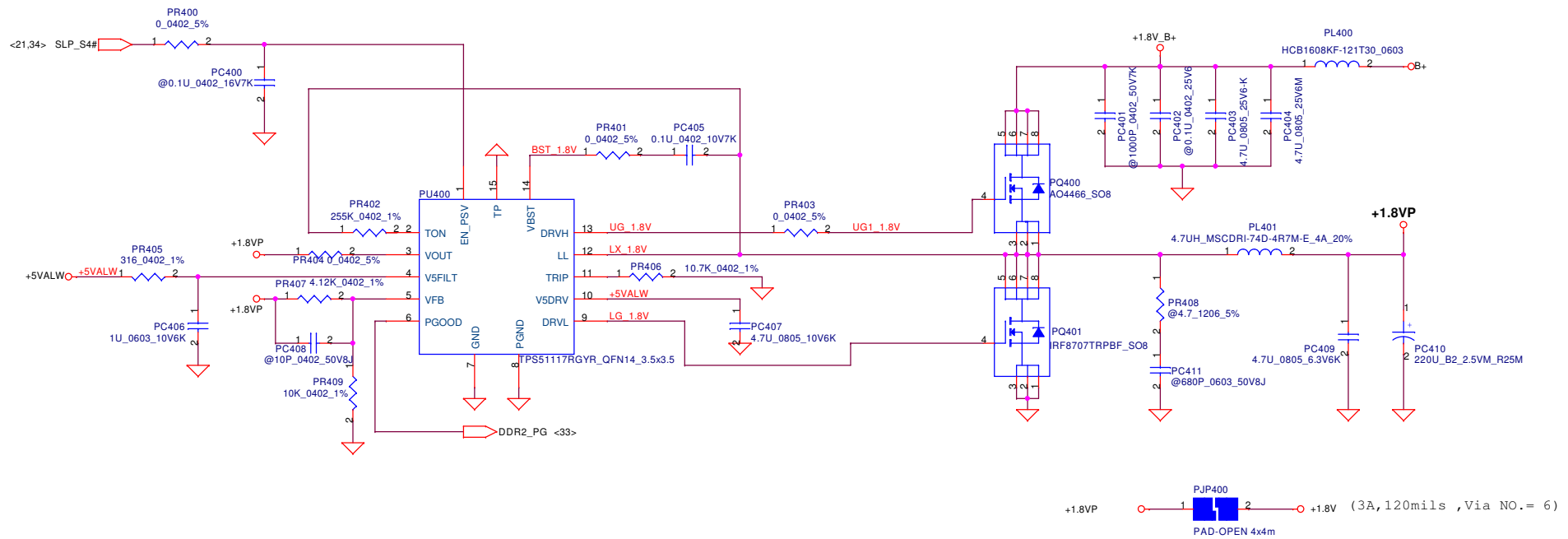
AC Detector
High 13.774
Low 13.357

2VREF_51125
12/30 HP review
2VREF_8734-->2VREF_51125

Security Classification		Compal Secret Data		Title	
Issued Date	2007/05/29	Deciphered Date	2008/05/29	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.				Charger	
Size	Document Number	Date		Sheet	Rev
	LA-3941P	Tuesday, February 03, 2009		37	0.1

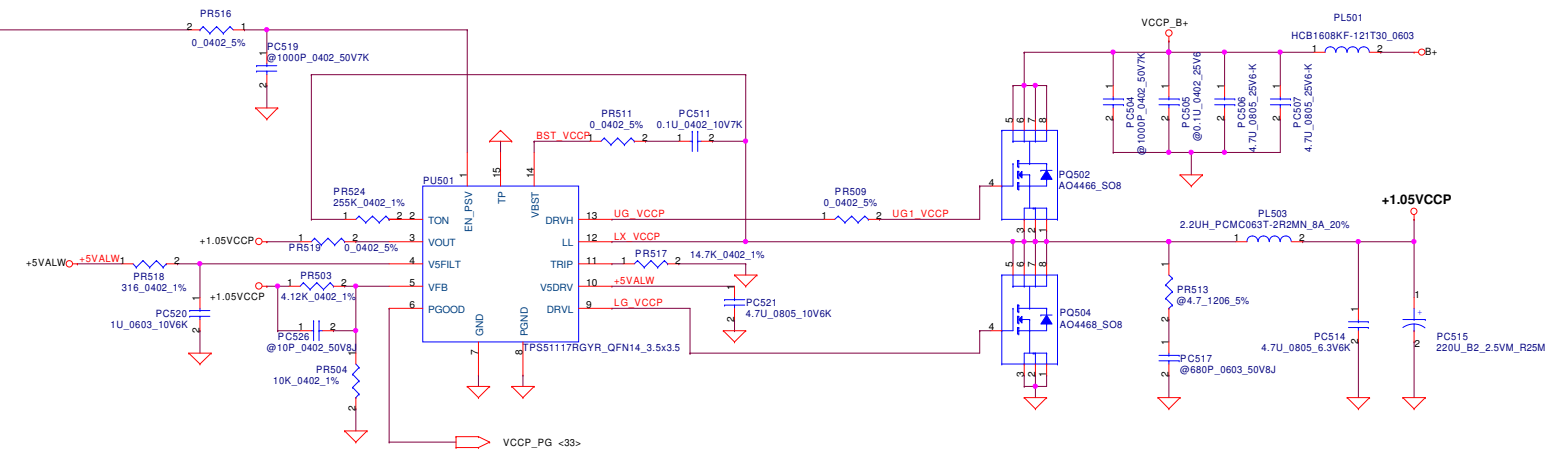


Security Classification		Compal Secret Data		Compal Electronics, Inc. 3.3VALWP/5VALWP			
Issued Date	2008/09/15	Deciphered Date	2009/09/15				
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY 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 3.3VALWP/5VALWP	Size Custom	Document Number LA-4902P	Rev 0.1
Date: Tuesday, February 03, 2009				Sheet	38	of	45

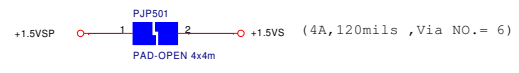
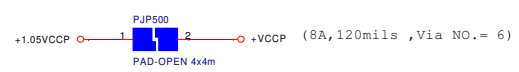
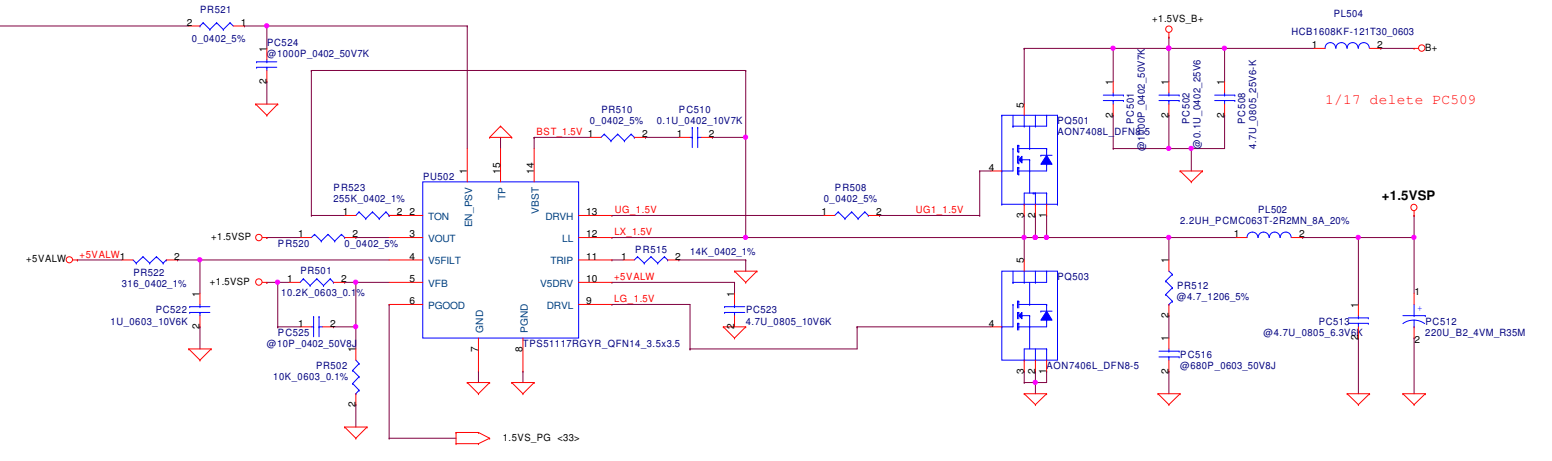


Security Classification	Compal Secret Data			Compal Electronics, Inc.	
Issued Date	2008/10/31	Deciphered Date	2009/10/31	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				1.8VP	
				Size	Document Number
				LA-3942P	
				Date:	Tuesday, February 03, 2009
				Sheet	39 of 45

<21,23,27,32,33,34,37,38,41,43> SLP_S3#



<21,23,27,32,33,34,37,38,41,43> SLP_S3#



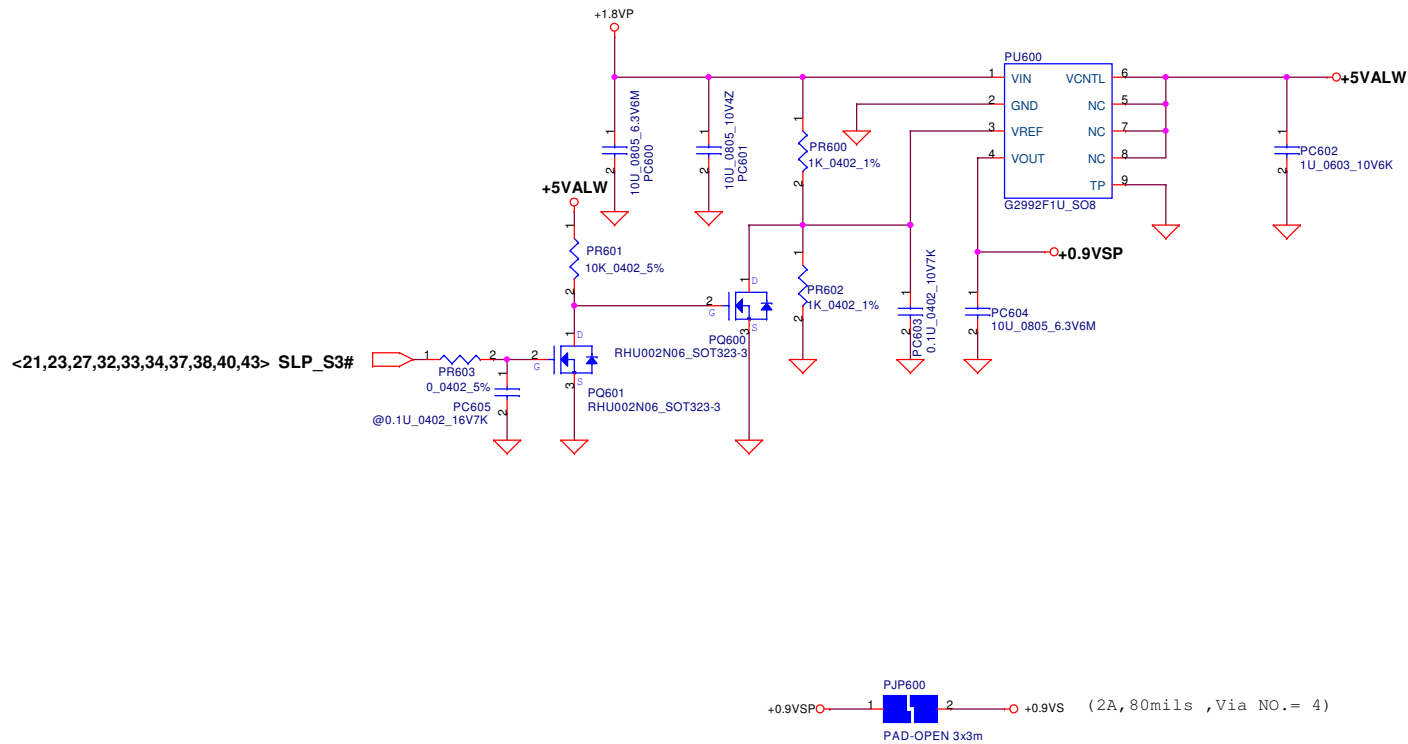
Security Classification	Compal Secret Data		Title	
Issued Date	2006/11/23	Deciphered Date	2007/11/23	1.5VSP/1.05VCCP
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM 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	Date: Tuesday, February 03, 2009	
	LA-3732P	0.2	Sheet	40 of 45

Compal Electronics, Inc.

1.5VSP/1.05VCCP

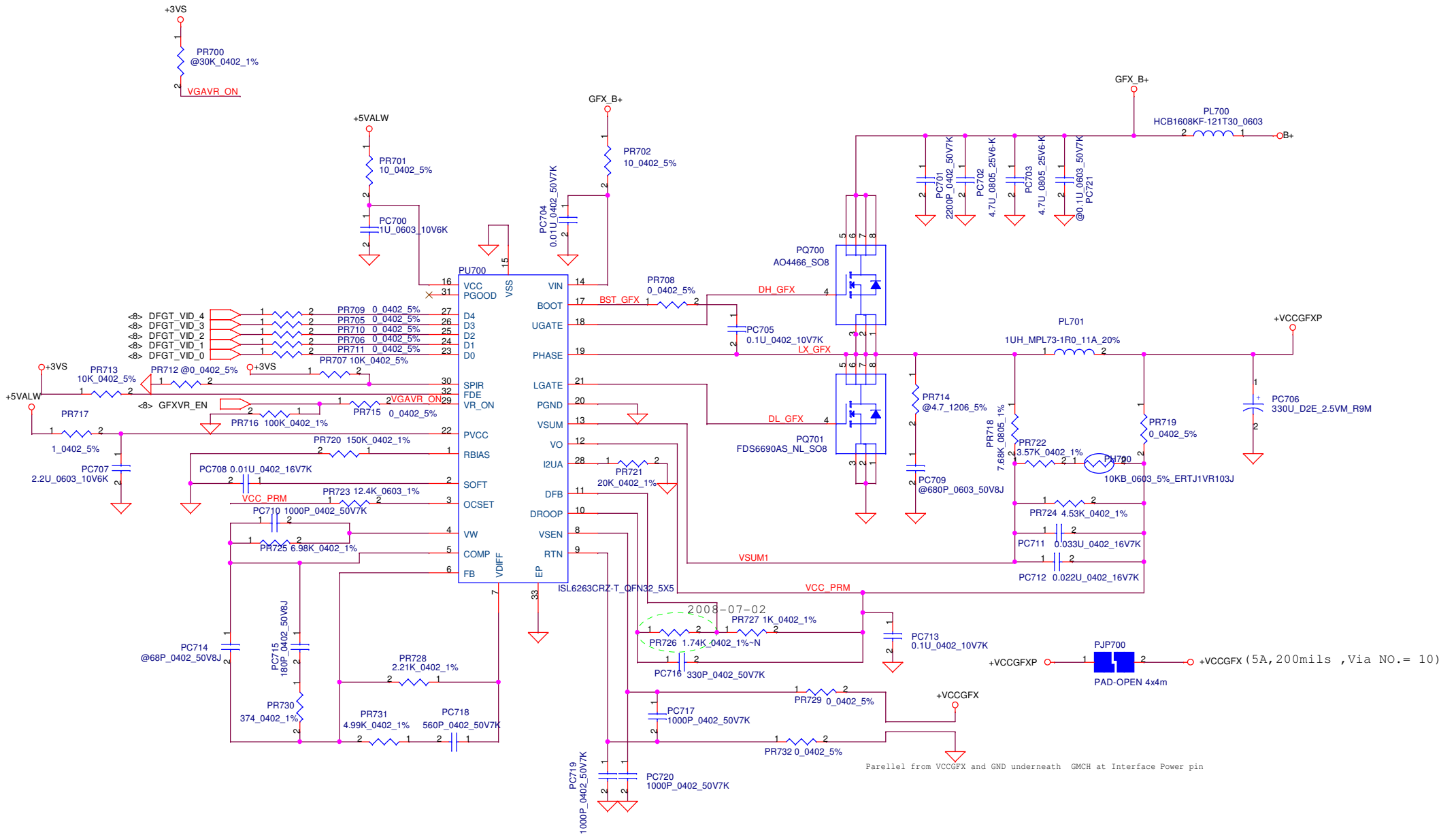
LA-3732P

Date: Tuesday, February 03, 2009 Sheet 40 of 45



<21,23,27,32,33,34,37,38,40,43> SLP_S3#

Security Classification	Compal Secret Data			Compal Electronics, Inc.	
Issued Date	2008/09/15	Deciphered Date	2009/09/15	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.				0.9VSP	
				Size	Document Number
				LA-4902P	
				Date:	Tuesday, February 03, 2009
				Sheet	41 of 45



Security Classification	Compal Secret Data			Compal Electronics, Inc.	
Issued Date	2005/03/10	Deciphered Date	2006/03/10	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				GM VGA CORE	
				Size	Document Number
				LA-326IP UMA	
Date:	Tuesday, February 03, 2009	Sheet	44	of	45

Item	Reason for change	PG#	Modify List	Date	Phase
1		40			
2		42			
3		44			
4		37			
5		41 42			
6		38			
7		39 41 43			
8		42			
9		41 42			
10		38			
11		38			
12		42			
13		43			
14		38			
15		39			
16		38			
17		42			
18		42			
19		43			
20		42			

Security Classification	Control - Secret Data		 Control Electronics Inc. Changelog History Core
Security Classification	20060228	Control - Secret Data	
Issued Date	20060310	Discontinued Date	20060310
3. All information contained herein is the property of Control Electronics Inc. and is confidential. All rights reserved. No part of this document may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without the prior written permission of Control Electronics Inc.			Doc# 20060310 Rev# 1.0 Date 1/25/07
4. THIS DOCUMENT IS UNCLASSIFIED AND IS NOT FOR RELEASE TO THE PUBLIC. IT IS THE PROPERTY OF CONTROL ELECTRONICS INC. AND IS CONFIDENTIAL. IT IS TO BE KEPT SECRET AND NOT TO BE DISCLOSED TO ANY OTHER PERSON OR ENTITY WITHOUT THE WRITTEN PERMISSION OF CONTROL ELECTRONICS INC.			Page 45 of 45 Date 1/25/07

www.s-manuals.com