

# Compal confidential

## Schematics Document

### Mobile Merom uFCPGA with Satna Rosa Platform

2007-08-02

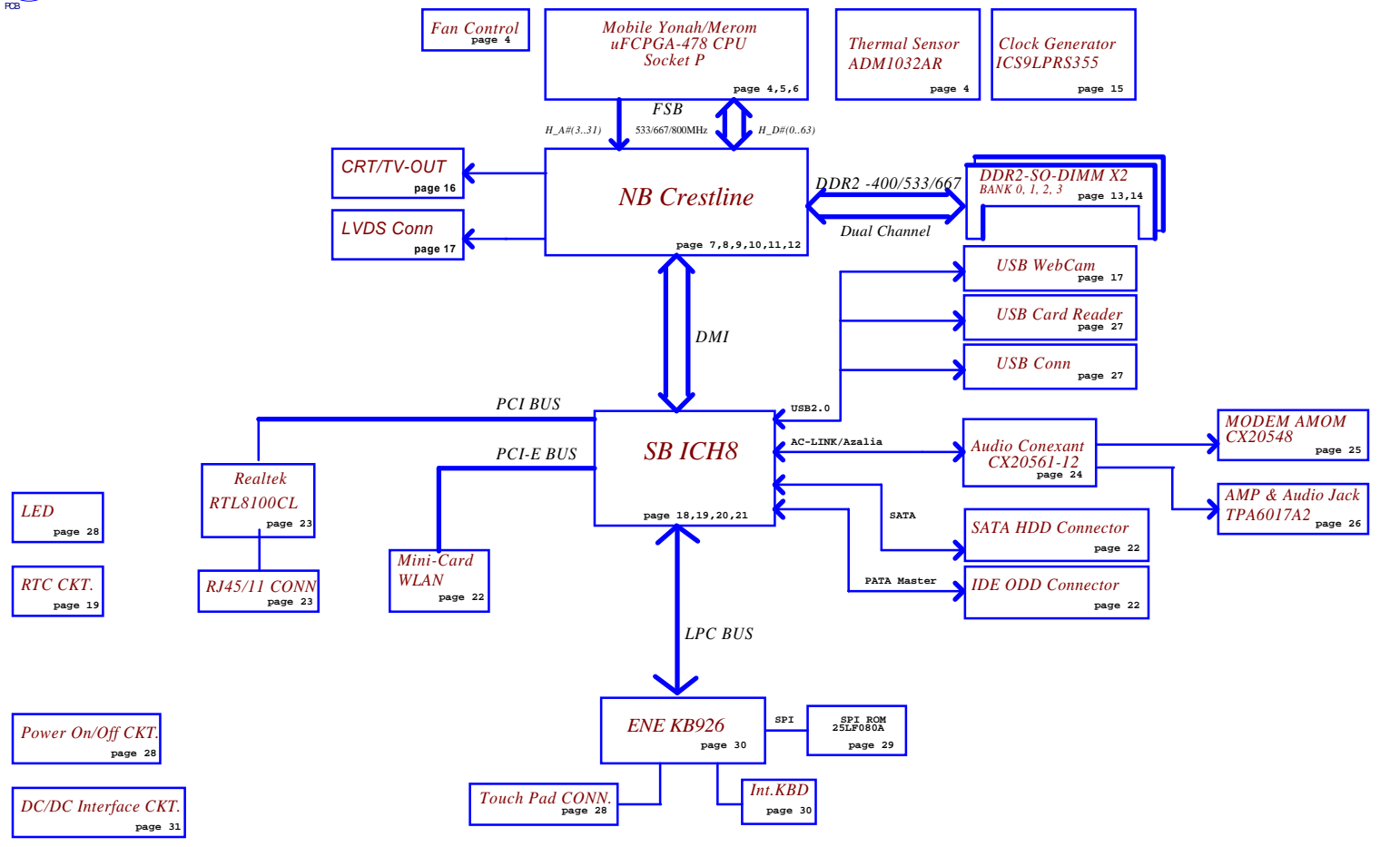
REV: 0.2

Security Classification	Compal Secret Data		Title	<i>Compal Electronics, Inc.</i>
Issued Date	2007/03/26	Deciphered Date	2006/07/26	<i>Cover Sheet</i>
<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&amp;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
			Customer	<i>LA-3981P</i>
			Date	Monday, October 22, 2007
			Sheet	1 of 42
			Rev	0.3

# LEON 1.0 (Merom +Crestline+ICH8)



PCB



Security Classification	Compal Secret Data		Title	
Issued Date	2007/03/26	Deciphered Date	2006/07/26	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.				Block Diagram
Size	Document Number	Rev		
Customer	LA-3981P	0.3		
Date	Monday, October 22, 2007	Sheet	2	of 42

### Voltage Rails

power plane State	+B	+5VALW +3VALW	+1.8V	+5VS +3VS +1.5VS +1.25VS +0.9V +VCCP +CPU_CORE
S0	O	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 Digital Ground

 : means Analog Ground

@ : means just reserve , no build

DEBUG@ : means just reserve for debug.

### External PCI Devices

DEVICE	IDSEL #	REQ/GNT #	PIRQ
LAN	AD22	0	A

### I2C / SMBUS ADDRESSING

DEVICE	HEX	ADDRESS
DDR SO-DIMM 0	A0	10100000
DDR SO-DIMM 1	A4	10100100
CLOCK GENERATOR (EXT.)	D2	11010010

SMBUS Control Table

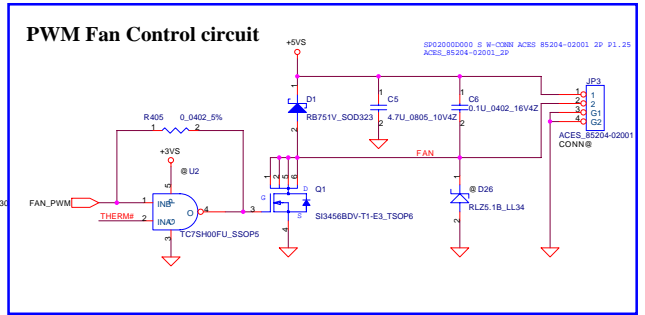
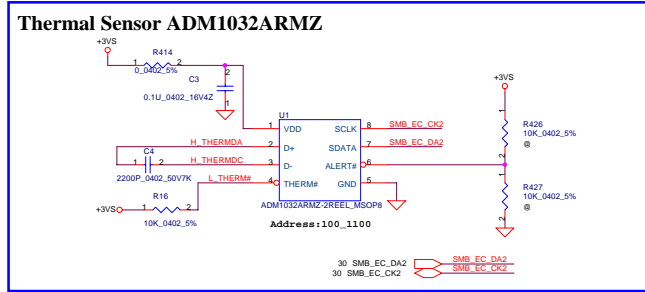
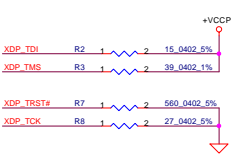
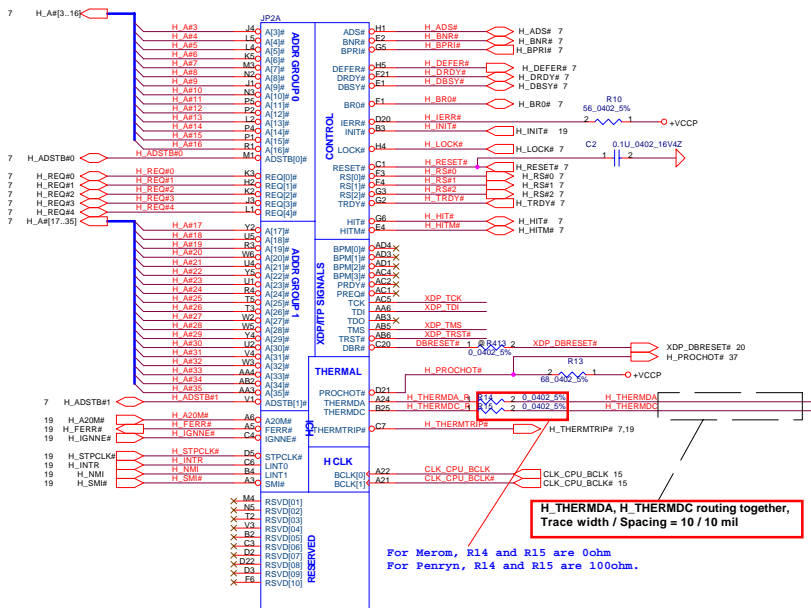
	SOURCE	INVERTER	BATT	SERIAL EEPROM	THERMAL SENSOR (CPU) ADM1032	SODIMM	CLK CHIP	MINI CARD	LCD
SMB_EC_CK1 SMB_EC_DA1	KB925	X	V	V	X	X	X	X	X
SMB_EC_CK2 SMB_EC_DA2	KB925	X	X	X	V	X	X	X	X
SMB_CK_CLK1 SMB_CR_DAT1	ICH8	X	X	X	X	V	V	V	X
LCD_CLK LCD_DAT	Crestline	X	X	X	X	X	X	X	V

BOM: 43151732L01(965GM) & 443151732L02(960GML) with card reader

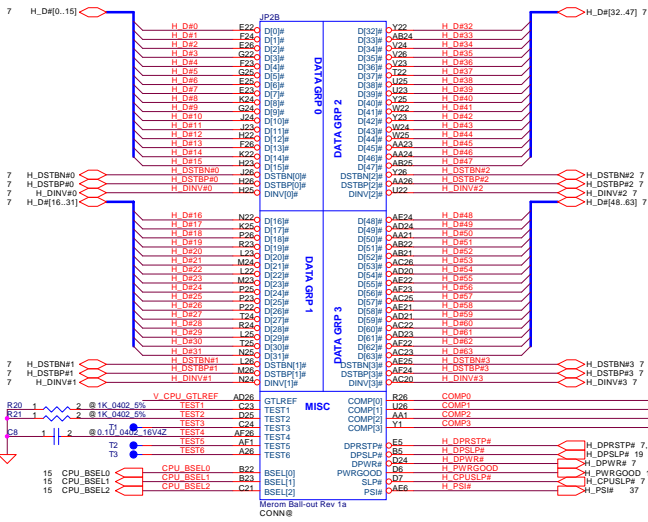
BOM: 43151732L03(965GM) & 43151732L04(960GML) without card reader

Jump-Short: PJP?

Security Classification	Compal Secret Data		Title	
Issued Date	2007/03/26	Deciphered Date	2006/07/26	Compal Electronics, Inc.
<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&amp;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>				Notes List
				Size
			LA-398IP	0.3
Date	Monday, October 22, 2007	Sheet	3	of 42

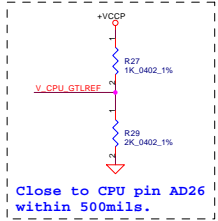


Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2007/03/26	Deciphered Date	2006/03/10	Title
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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 REPRODUCED OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size
				Customer
				Document Number
				LA-3981P
				Rev
				0.3
				Date
				Monday, October 22, 2007
				Sheet
				4 of 42



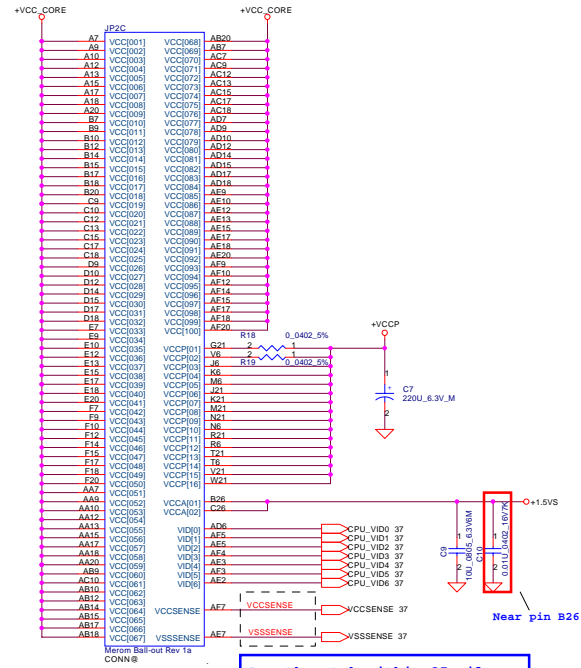
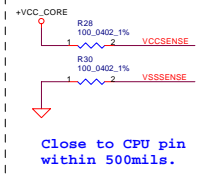
layout note: Route TEST3 & TEST5 traces on ground referenced layer to the TPs

CPU_BSEL	CPU_BSEL2	CPU_BSEL1	CPU_BSEL0
166	0	1	1
200	0	1	0



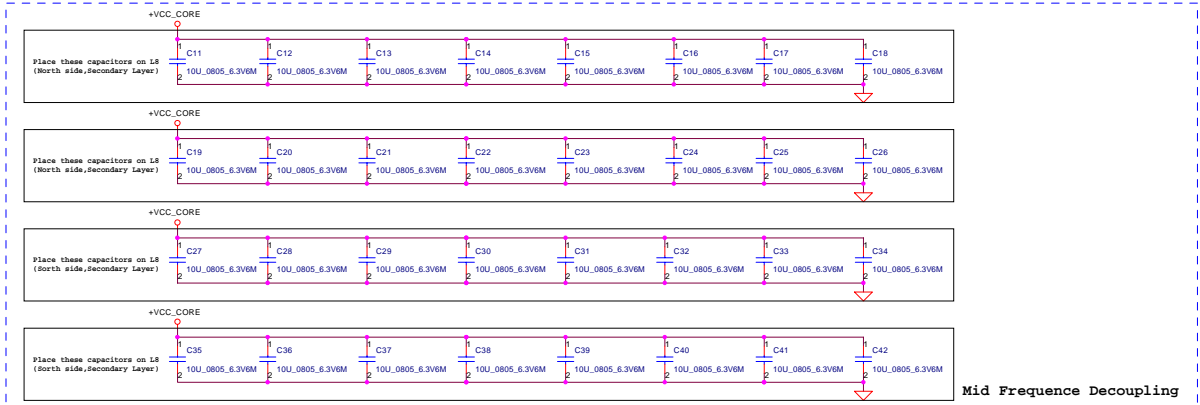
Resistor placed within 0.5" of CPU pin. Trace should be at least 25 mils away from any other toggling signal.  
COMP[0, 2] trace width is 18 mils. COMP[1,3] trace width is 4 mils.

Length match within 25 mils. The trace width/space/other is 20/7/25.



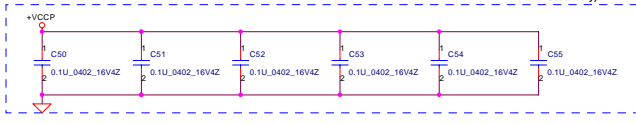
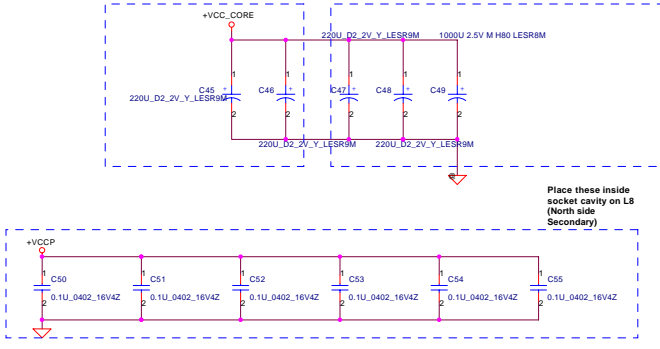
Security Classification	Compal Secret Data		Date	Title
Issued Date	2007/03/26	Deciphered Date	2006/03/10	Merom(2/3)-AGTL+/PWR
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF SA&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	Sheet	
Customer	LA-3981P	0.3	5 of 42	
Date	Monday, October 22, 2007			

JP2D			
A4	VSS1001	VSS1080	P6
A5	VSS1002	VSS1083	P21
A6	VSS1003	VSS1084	P22
A11	VSS1004	VSS1085	B2
A14	VSS1005	VSS1086	B22
A16	VSS1006	VSS1087	B22
A19	VSS1007	VSS1088	T1
A22	VSS1008	VSS1089	T1
AF2	VSS1009	VSS1090	T4
BB	VSS1010	VSS1091	T7
B11	VSS1011	VSS1092	T26
B13	VSS1012	VSS1093	T17
B18	VSS1013	VSS1094	U6
B19	VSS1014	VSS1095	U2
B21	VSS1015	VSS1096	U24
C2	VSS1016	VSS1097	U5
C4	VSS1017	VSS1098	U2
C8	VSS1018	VSS1099	U22
C11	VSS1019	VSS1100	U25
C14	VSS1020	VSS1101	W1
C16	VSS1021	VSS1102	W4
C19	VSS1022	VSS1103	W22
C2	VSS1023	VSS1104	W2
C22	VSS1024	VSS1105	X3
C25	VSS1025	VSS1106	X6
D1	VSS1026	VSS1107	X2
D4	VSS1027	VSS1108	X24
D8	VSS1028	VSS1109	Y2
D11	VSS1029	VSS1110	Y24
D13	VSS1030	VSS1111	Y8
D18	VSS1031	VSS1112	AA1
D19	VSS1032	VSS1113	AA4
D23	VSS1033	VSS1114	AA16
D28	VSS1034	VSS1115	AA19
E3	VSS1035	VSS1116	AA22
E8	VSS1036	VSS1117	AA25
E9	VSS1037	VSS1118	AB1
E11	VSS1038	VSS1119	AB4
E16	VSS1039	VSS1120	AB8
E18	VSS1040	VSS1121	AB11
E19	VSS1041	VSS1122	AB13
E21	VSS1042	VSS1123	AB16
E24	VSS1043	VSS1124	AB19
F4	VSS1044	VSS1125	AB23
F8	VSS1045	VSS1126	AB26
F11	VSS1046	VSS1127	AC2
F16	VSS1047	VSS1128	AC6
F19	VSS1048	VSS1129	AC11
F22	VSS1049	VSS1130	AC14
F2	VSS1050	VSS1131	AC16
F22	VSS1051	VSS1132	AC19
F25	VSS1052	VSS1133	AC21
G4	VSS1053	VSS1134	AC24
G8	VSS1054	VSS1135	AD2
G28	VSS1055	VSS1136	AD5
H8	VSS1056	VSS1137	AD8
H8	VSS1057	VSS1138	AD11
H21	VSS1058	VSS1139	AD13
H24	VSS1059	VSS1140	AD16
J2	VSS1060	VSS1141	AD19
J2	VSS1061	VSS1142	AD22
J22	VSS1062	VSS1143	AD25
K5	VSS1063	VSS1144	AE1
K1	VSS1064	VSS1145	AE4
K4	VSS1065	VSS1146	AE8
K4	VSS1066	VSS1147	AE8
K29	VSS1067	VSS1148	AE11
K28	VSS1068	VSS1149	AE14
L3	VSS1069	VSS1150	AE16
L6	VSS1070	VSS1151	AE19
L21	VSS1071	VSS1152	AE23
L24	VSS1072	VSS1153	AE26
M2	VSS1073	VSS1154	AF2
M2	VSS1074	VSS1155	AF5
M22	VSS1075	VSS1156	AF8
M28	VSS1076	VSS1157	AF11
N1	VSS1077	VSS1158	AF13
N4	VSS1078	VSS1159	AF16
N23	VSS1079	VSS1160	AF19
N28	VSS1080	VSS1161	AF21
P1	VSS1081	VSS1162	AZ2
		VSS1163	AZ5

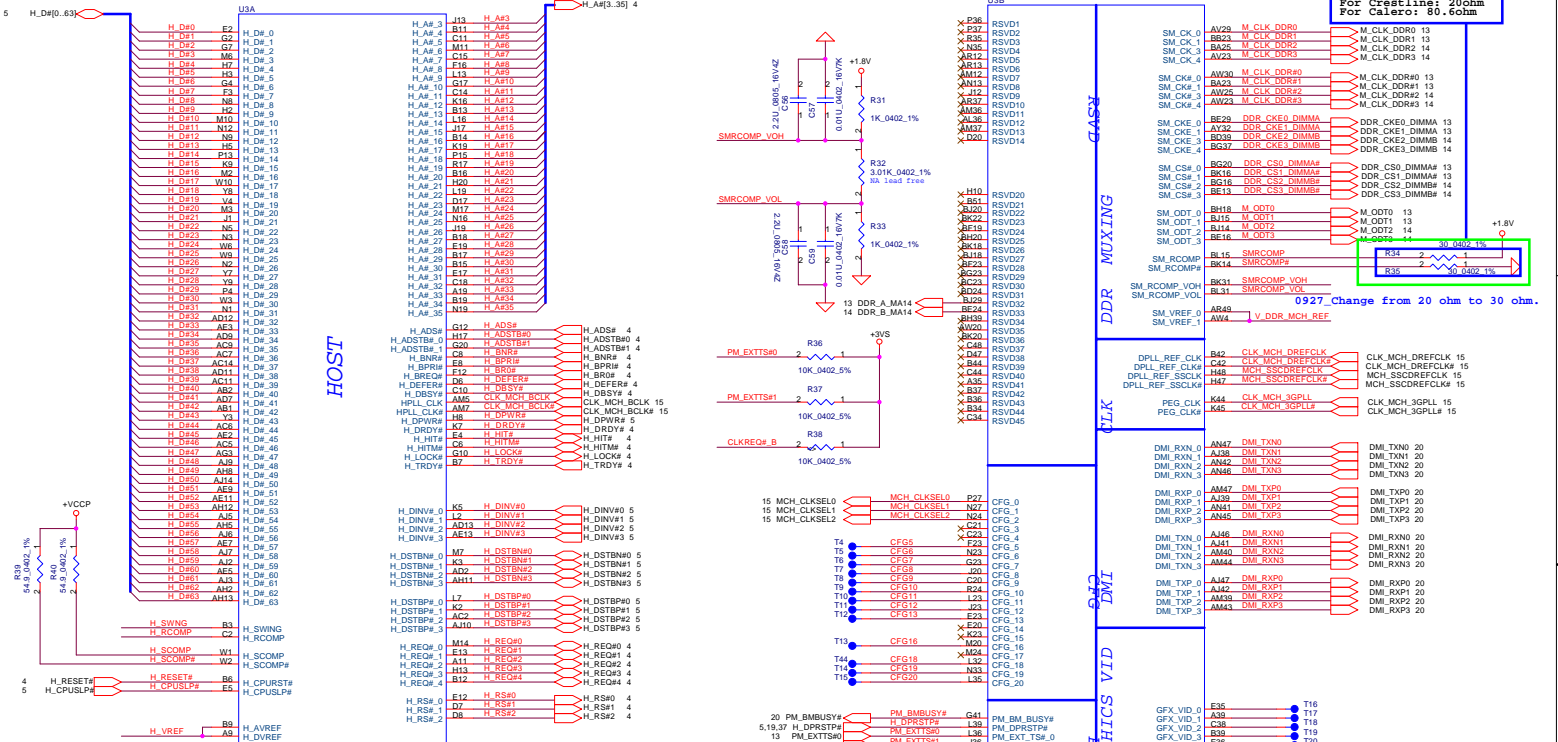


Mid Frequency Decoupling

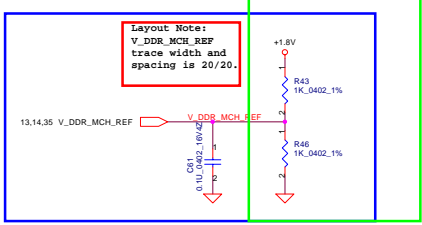
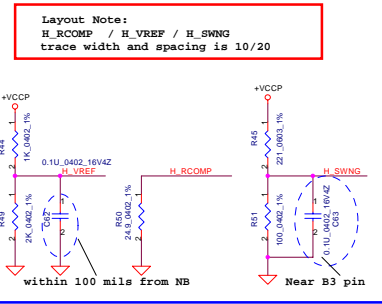
Near CPU CORE regulator ESR <= 1.5m ohm Capacitor > 1980uF



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2007/03/26	Deciphered Date	2006/03/10	Title	Merom(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	Customer	Rev	Date	Sheet
	LA-3981P		0.3	Monday, October 22, 2007	6 of 42

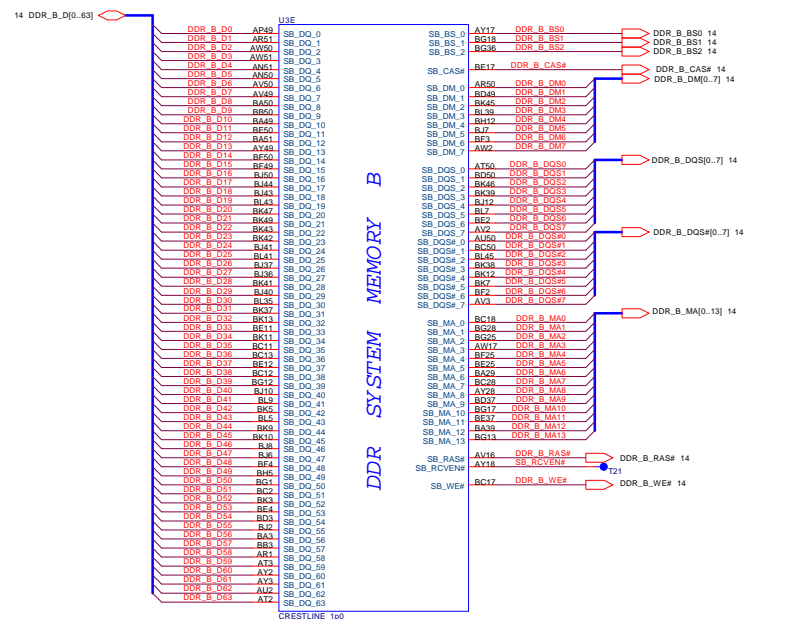
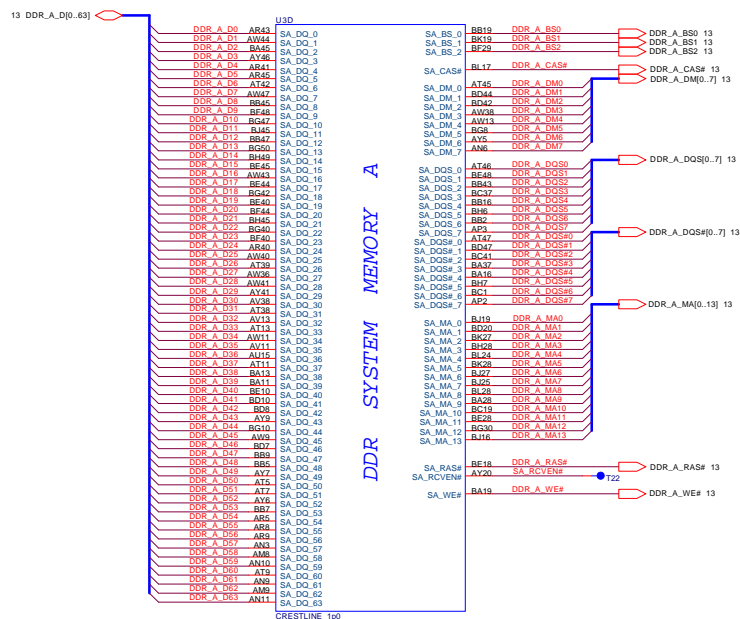


**layout note:**  
Route H\_SCOMP and H\_SCOMP# with trace width, spacing and impedance (55 ohm) same as #8 data traces



0925\_Stuff R43 and R46.

Security Classification	Compal Secret Data	Deciphered Date	2006/03/10	Title
Issued Date	2007/03/26	Deciphered Date	2006/03/10	CRESTLINE(1/6)-AGTL+DMU/DDR2
<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&amp;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>				Rev 0.3 Date: Monday, October 22, 2007 Sheet 7 of 42



CRESTLINE\_1p0

CRESTLINE\_1p0

Security Classification	Compal Secret Data		Title	
Issued Date	2007/03/26	Deciphered Date	2006/03/10	Customer
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 HEAD 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><b>Compal Electronics, Inc.</b></p> <p><b>CRESTLINE((2/6)-DDR2 A/B CH</b></p> <p>Document Number: <b>LA-3901P</b></p> <p>Monday, October 22, 2007</p>
				Rev: 0.3
				Sheet: 8 of 42

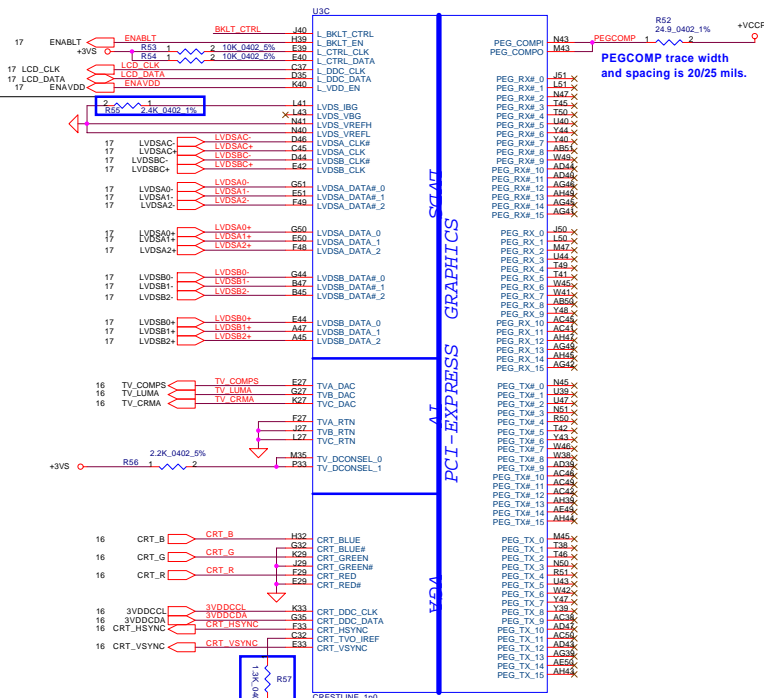


Strap Pin Table

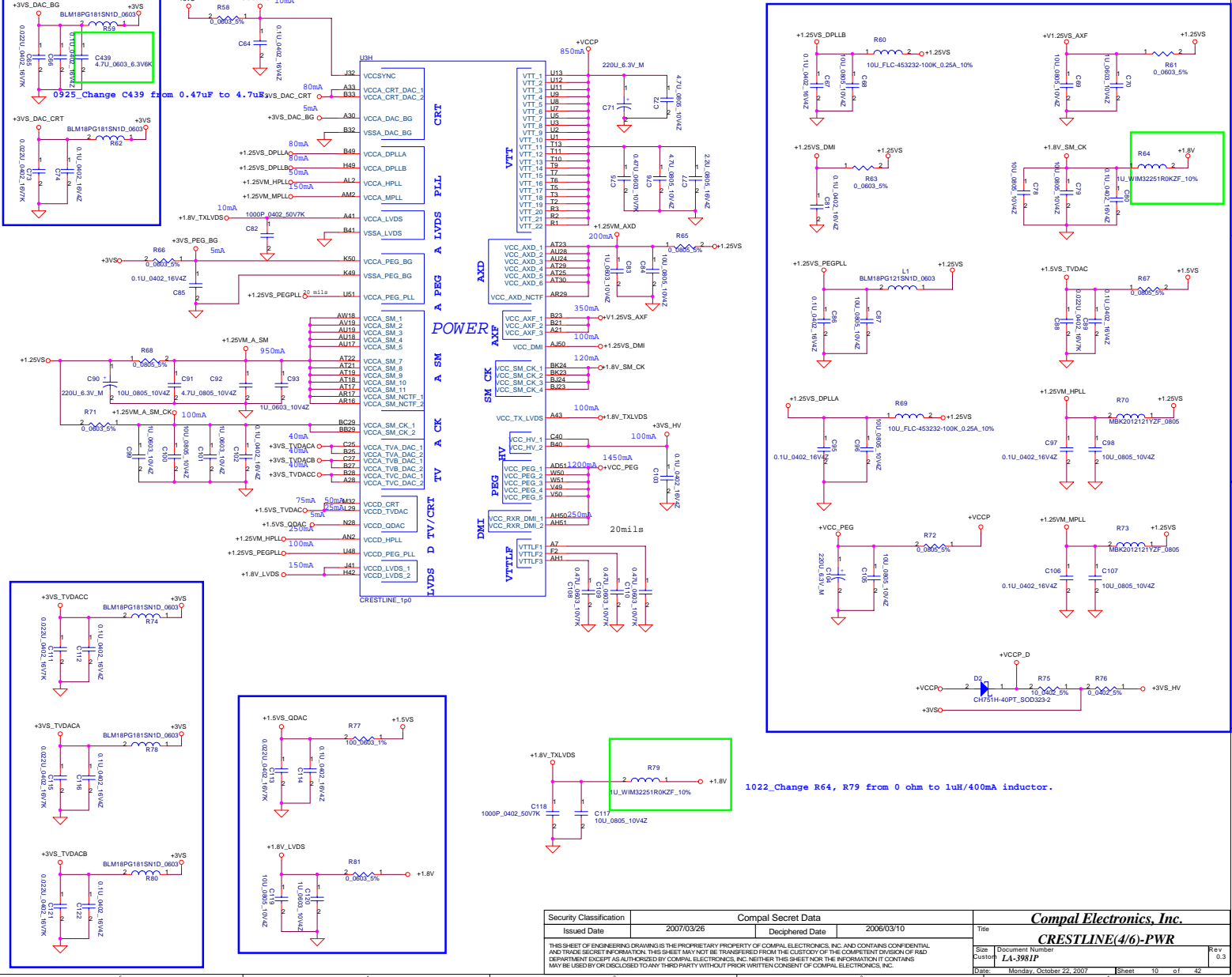
CFG[2:0] FSB Freq select	010 = FSB 800MHz 011 = FSB 667MHz Others = Reserved
CFG5 (DMI select)	0 = DMI x 2 1 = DMI x 4 *
CFG6	Reserved
CFG7 (CPU Strap)	0 = Reserved 1 = Mobile CPU *
CFG8 (Low power PCIe)	0 = Normal mode 1 = Low Power mode *
CFG9 (PCIe Graphics Lane Reversal)	0 = Reverse Lane 1 = Normal Operation *
CFG[11:10]	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
SDVO_CTRLDATA	0 = No SDVO Device Present * 1 = SDVO Device Present
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.

CFG[17:13] have internal pull up  
CFG[19:18] have internal pull down

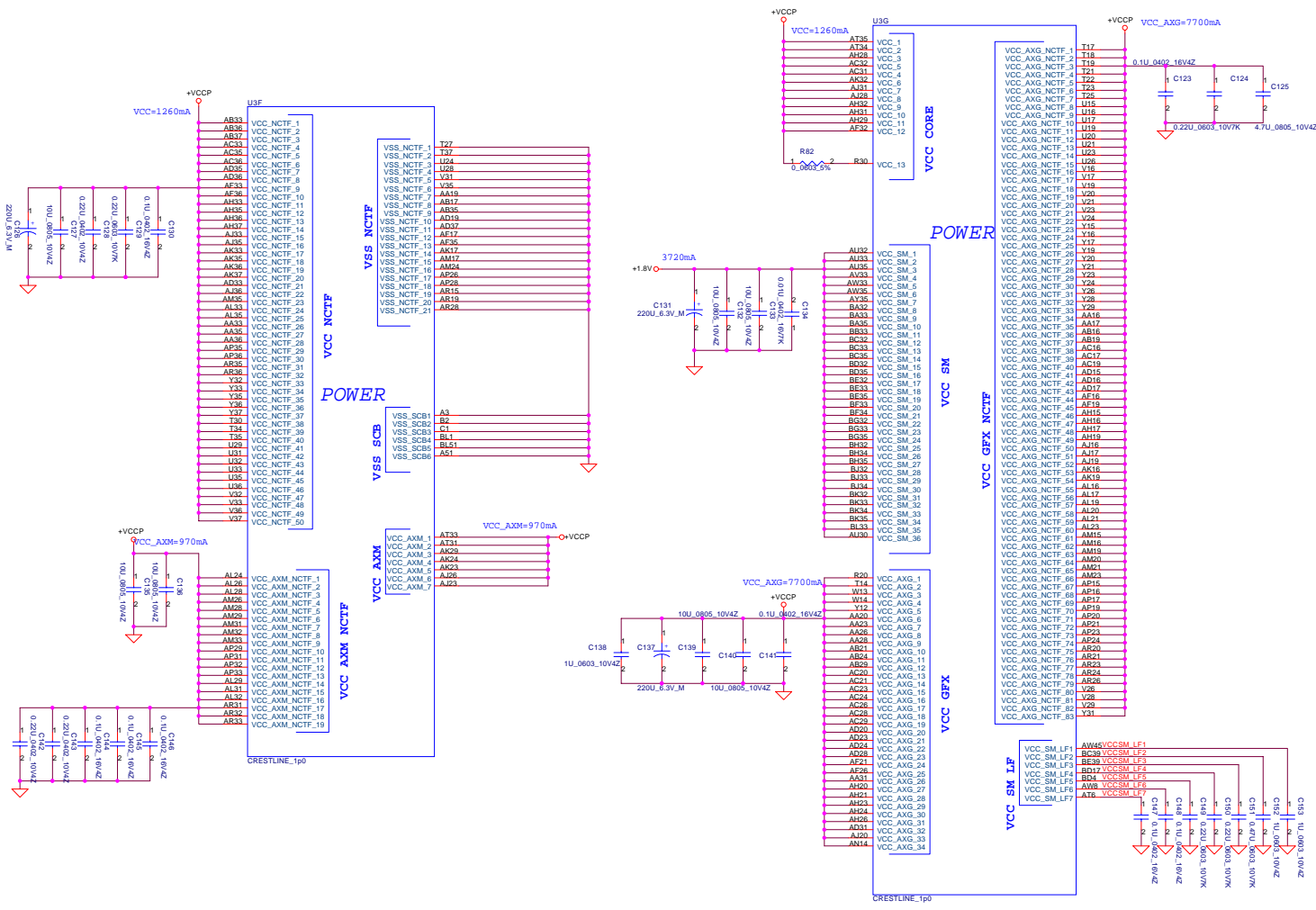
For Crestline: 2.4kohm  
For Calero: 1.5kohm



Security Classification		Compal Secret Data		Title	
Issued Date	2007/03/26	Deciphered Date	2006/03/10	CRESTLINE(3/6)-VGA/LVDS/TV	
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 IN OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
				Customer	LA-390IP
				Date	Monday, October 22, 2007
				Sheet	9 of 42
				Rev	0.3



Security Classification	Compal Secret Data		
Issued Date	2007/03/26	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.			Title <b>CRESTLINE(4/6)-PWR</b> Size Document Number Revision LA-3981P Date Monday, October 22, 2007 Sheet 10 of 42



Security Classification	Compal Secret Data		Title	<b>Compal Electronics, Inc.</b>	
Issued Date	2007/03/26	Deciphered Date	2006/03/10	CRESTLINE((5/6)-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 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			
Customer	LA-3901P	0.3			
Date	Monday, October 22, 2007	Sheet	11	of	42

U31

A13	VSS_1	AW24
A15	VSS_2	AW23
A17	VSS_3	AW22
A2	VSS_4	AW21
AA21	VSS_5	AW20
AA24	VSS_6	AW19
AA25	VSS_7	AW18
AB20	VSS_8	AW17
AB23	VSS_9	AW16
AB26	VSS_10	AW15
AB28	VSS_11	AW14
AB31	VSS_12	AW13
AC10	VSS_13	AW12
AC13	VSS_14	AW11
AC1	VSS_15	AW10
AC2	VSS_16	AW9
AC43	VSS_17	AW8
AD1	VSS_18	AW7
AD21	VSS_19	AW6
AD26	VSS_20	AW5
AD29	VSS_21	AW4
AD3	VSS_22	AW3
AD41	VSS_23	AW2
AD49	VSS_24	AW1
AD5	VSS_25	
AD5	VSS_26	
AD50	VSS_27	
AE10	VSS_28	
AE14	VSS_29	
AE1	VSS_30	
AE1	VSS_31	
AE1	VSS_32	
AF23	VSS_33	
AF24	VSS_34	
AF24	VSS_35	
AF31	VSS_36	
AG2	VSS_37	
AG38	VSS_38	
AG43	VSS_39	
AG47	VSS_40	
AH3	VSS_41	
AH9	VSS_42	
AH41	VSS_43	
AH7	VSS_44	
AI9	VSS_45	
AI11	VSS_46	
AI13	VSS_47	
AI21	VSS_48	
AI24	VSS_49	
AJ23	VSS_50	
AJ32	VSS_51	
AJ32	VSS_52	
AJ45	VSS_53	
AJ45	VSS_54	
AJ45	VSS_55	
AK20	VSS_56	
AK21	VSS_57	
AK28	VSS_58	
AK28	VSS_59	
AK31	VSS_60	
AK51	VSS_61	
AL1	VSS_62	
AM11	VSS_63	
AM13	VSS_64	
AM3	VSS_65	
AM4	VSS_66	
AM41	VSS_67	
AN5	VSS_68	
AN1	VSS_69	
AN38	VSS_70	
AN38	VSS_71	
AN43	VSS_72	
AN7	VSS_73	
AN7	VSS_74	
AP48	VSS_75	
AP48	VSS_76	
AP50	VSS_77	
AR11	VSS_78	
AR2	VSS_79	
AR2	VSS_80	
AR44	VSS_81	
AR7	VSS_82	
AR7	VSS_83	
AT10	VSS_84	
AT14	VSS_85	
AT41	VSS_86	
AT66	VSS_87	
AU1	VSS_88	
AU23	VSS_89	
AU23	VSS_90	
AU36	VSS_91	
AU36	VSS_92	
AU49	VSS_93	
AU4	VSS_94	
AV38	VSS_95	
AV48	VSS_96	
AW1	VSS_97	
AW12	VSS_98	
AW16	VSS_99	

VSS

CRESTLINE\_1p0

J31

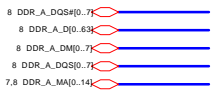
C46	VSS_199	W11
C50	VSS_200	W39
C7	VSS_201	W43
D13	VSS_202	W47
D24	VSS_203	W5
D3	VSS_204	W7
D32	VSS_205	W13
D39	VSS_206	W2
D45	VSS_207	W41
D49	VSS_208	W46
E10	VSS_209	W49
E14	VSS_210	W5
E24	VSS_211	W50
E28	VSS_212	W51
E32	VSS_213	W52
E47	VSS_214	W53
F19	VSS_215	W54
F36	VSS_216	W55
F4	VSS_217	W56
F40	VSS_218	W57
F50	VSS_219	W58
G1	VSS_220	W59
G13	VSS_221	W60
G16	VSS_222	W61
G19	VSS_223	W62
G24	VSS_224	W63
G28	VSS_225	W64
G28	VSS_226	W65
G30	VSS_227	W66
G42	VSS_228	W67
G46	VSS_229	W68
G48	VSS_230	W69
G4	VSS_231	W70
H24	VSS_232	W71
H28	VSS_233	W72
H4	VSS_234	W73
H45	VSS_235	W74
H11	VSS_236	W75
J16	VSS_237	W76
J2	VSS_238	W77
J24	VSS_239	W78
J33	VSS_240	W79
J36	VSS_241	W80
J39	VSS_242	W81
J43	VSS_243	W82
K12	VSS_245	W83
K47	VSS_246	W84
L1	VSS_247	W85
L17	VSS_248	W86
L20	VSS_249	W87
L24	VSS_250	W88
L28	VSS_251	W89
L3	VSS_252	W90
L33	VSS_253	W91
L48	VSS_254	W92
M08	VSS_255	W93
M2	VSS_256	W94
M42	VSS_257	W95
M48	VSS_258	W96
M49	VSS_259	W97
M5	VSS_260	W98
M50	VSS_261	W99
M9	VSS_262	W100
N14	VSS_263	W101
N17	VSS_264	W102
N26	VSS_265	W103
N32	VSS_266	W104
N33	VSS_267	W105
N39	VSS_268	W106
N44	VSS_269	W107
N49	VSS_270	W108
N7	VSS_271	W109
P13	VSS_272	W110
P2	VSS_273	W111
P23	VSS_274	W112
P30	VSS_275	W113
P3	VSS_276	W114
P39	VSS_277	W115
P49	VSS_278	W116
P59	VSS_279	W117
P67	VSS_280	W118
P41	VSS_281	W119
P42	VSS_282	W120
P45	VSS_283	W121
P50	VSS_284	W122
P2	VSS_285	W123
V3	VSS_286	W124

VSS

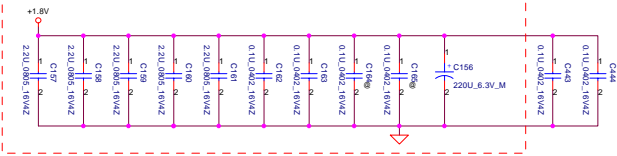
CRESTLINE\_1p0

Security Classification	Compal Secret Data		Title	
Issued Date	2007/03/26	Deciphered Date	2006/03/10	Customer
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
Date: Monday, October 22, 2007				Sheet 12 of 42

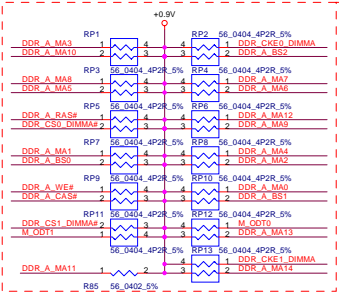
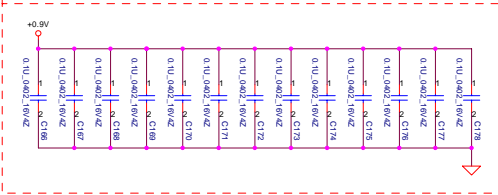
**Compal Electronics, Inc.**  
**CRESTLINE((6/6)-PWR/GND**



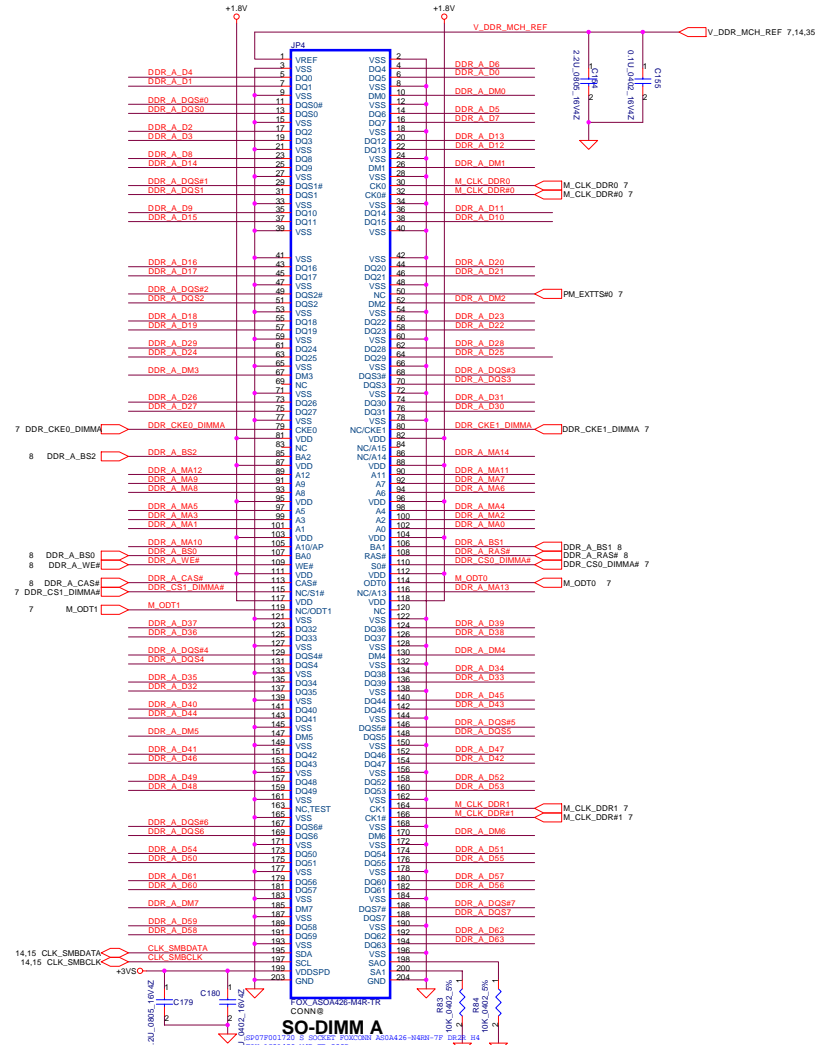
Layout Note:  
Place near JP34



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



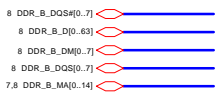
Layout Note:  
Place these resistor closely JP34, all trace length Max=1.5"



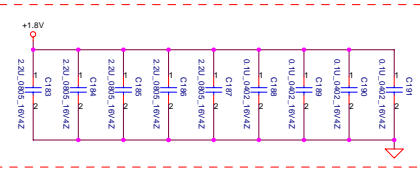
Security Classification	Compal Secret Data		Title
Issued Date	2007/03/26	Deciphered Date	2006/03/10
<small>THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&amp;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>			
Customer	LA-3901P	Size	Document Number
Date	Monday, October 22, 2007	Sheet	13 of 42

Compal Electronics, Inc.  
DDRII-SODIMM SLOT1

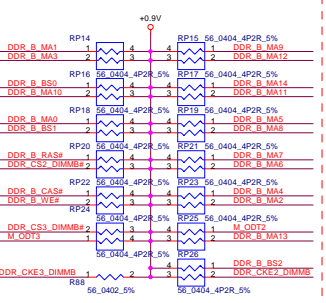
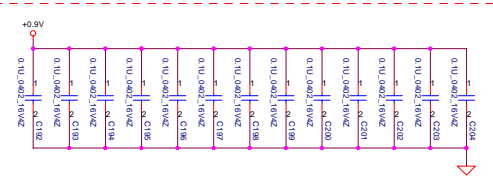
Rev 0.3



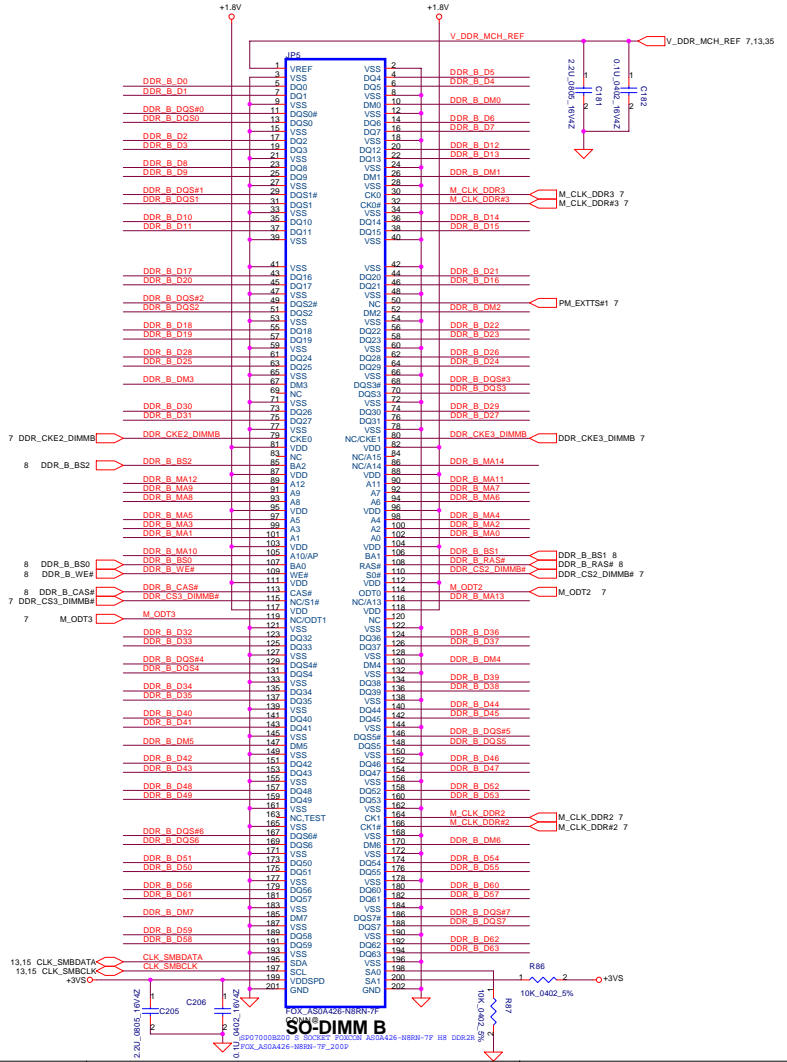
Layout Note:  
Place near JP10



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



Layout Note:  
Place these resistor closely JP10, all trace length Max=1.5"



Security Classification	Compal Secret Data		Title
Issued Date	2007/03/26	Deciphered Date	2006/03/10
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.			
Size	Document Number	Rev	0.3
Date	Monday, October 22, 2007	Sheet	14 of 42

Compal Electronics, Inc.  
DDR1-SODIMM SLOT2

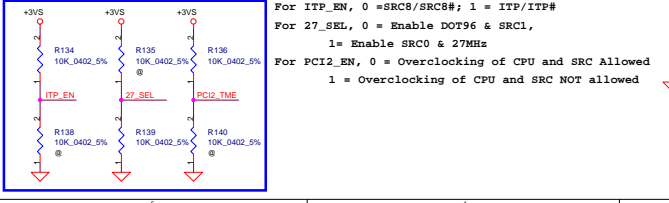
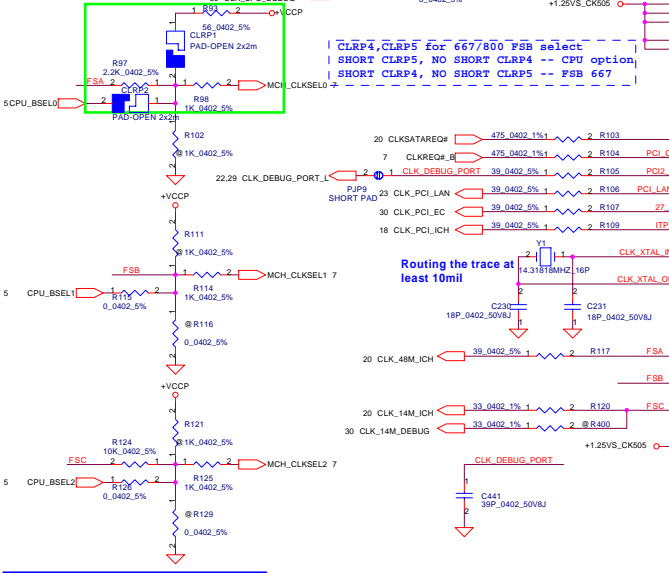
LA-3981P

FSLC CLKSEL2	FSLB CLKSEL1	FSLA CLKSEL0	CPU MHz	SRC MHz	PCI MHz
0	0	1	133	100	33.3
0	1	0	200	100	33.3
0	1	1	166	100	33.3

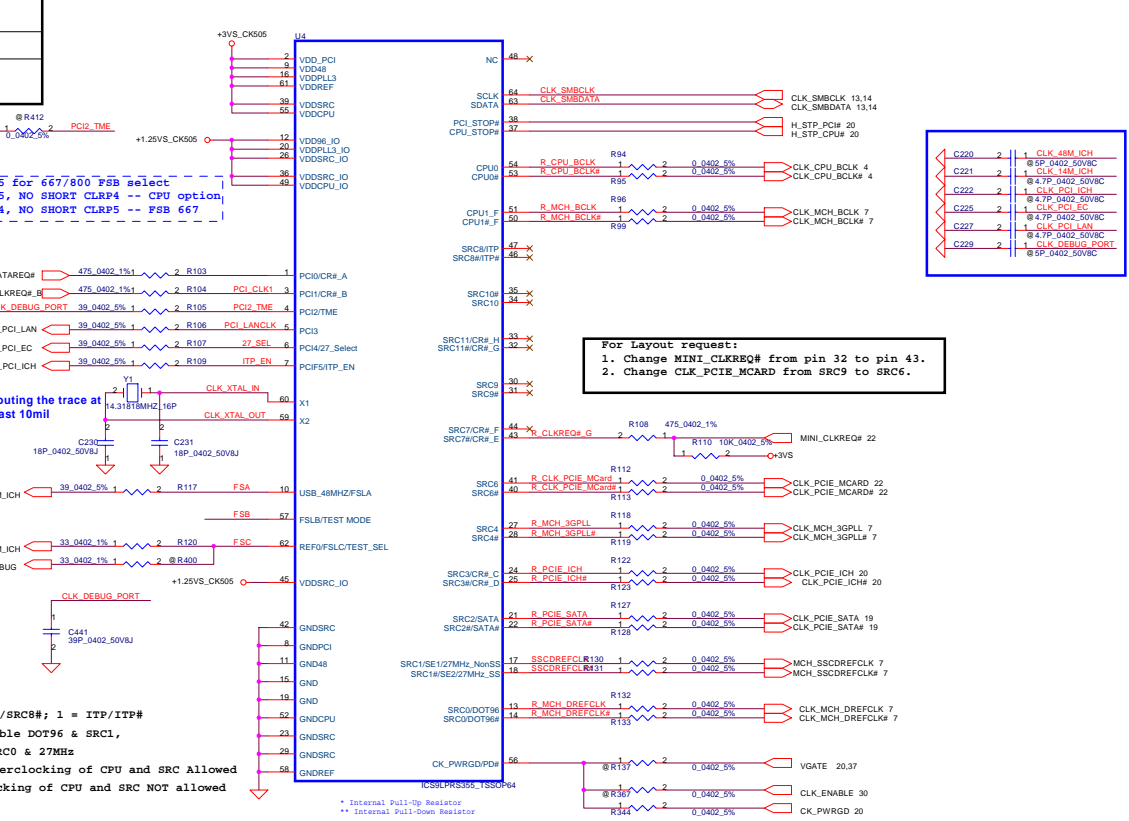
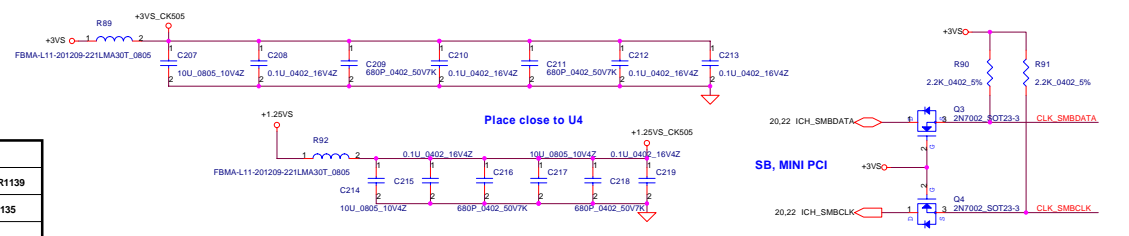
**FSB Frequency Set:**

CPU Driven	Stuff	R107	R1135	R1083
*(Default)	No Stuff	R1074	R1086	R1098 R1113 R1128 R1139
	Stuff	R1086	R1139	R1135 R1074 R1139 R1135
	No Stuff	R1083	R1107	R1128 R1113 R1098
667MHz	Stuff	R1135	R1139	
	No Stuff	R1083	R1086	R1098 R1128
	Stuff	R1074	R1107	R1113
800MHz	Stuff	R1135	R1139	
	No Stuff	R1083	R1086	R1098 R1128
	Stuff	R1074	R1107	R1113

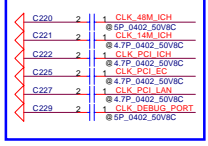
1019\_Change CLR1 and CLR2 type like the same as PJP4.



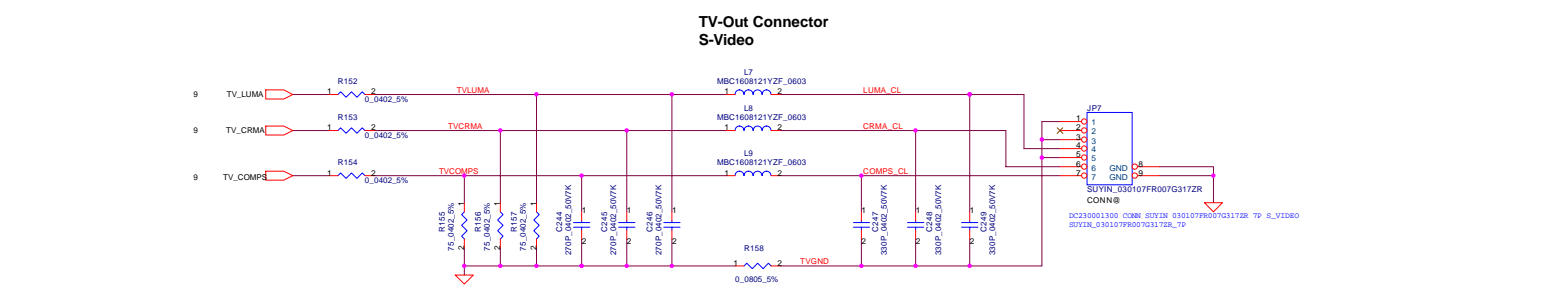
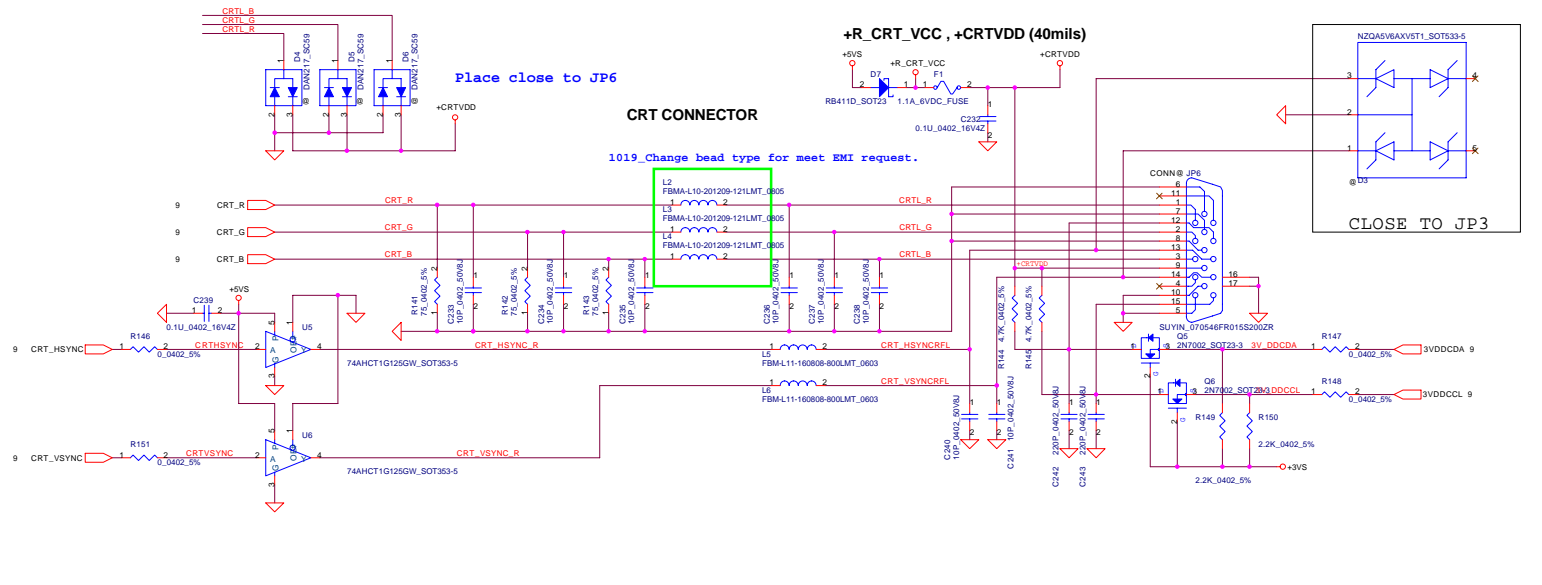
For ITP\_EN, 0 = SRC8/SRC#; 1 = ITP/ITP#  
 For 27\_SEL, 0 = Enable DOT96 & SRC1,  
 1 = Enable SRC0 & 27MHz  
 For PCI2\_EN, 0 = Overclocking of CPU and SRC Allowed  
 1 = Overclocking of CPU and SRC NOT allowed



**For Layout request:**  
 1. Change MINI\_CLKREQ# from pin 32 to pin 43.  
 2. Change CLK\_PCIE\_MCARD from SRC9 to SRC6.

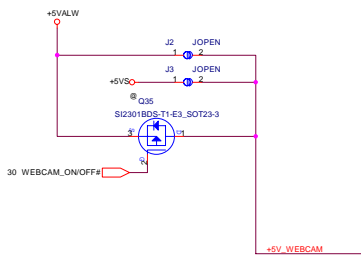


Security Classification	Compal Secret Data	Deciphered Date	2006/03/10	Title	Compal Electronics, Inc.
Issued Date	2007/03/26	Deciphered Date	2006/03/10		
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.					
Size	Document Number	LA-3981P	Rev	0.3	
Date	Monday, October 22, 2007	Sheet	16	of	42

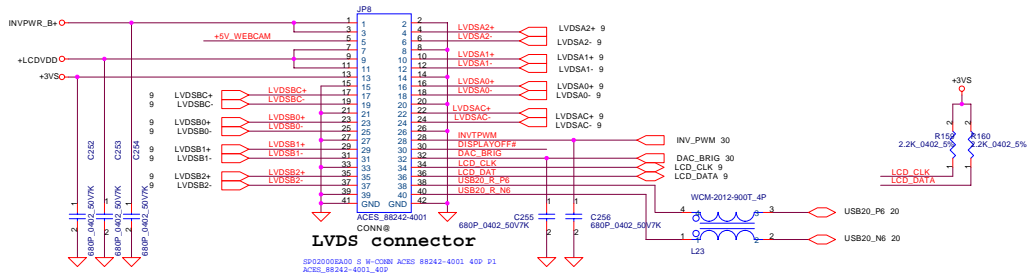
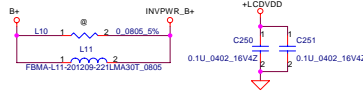


Security Classification	Compal Secret Data		
Issued Date	2007/03/26	Deciphered Date	2006/07/26
<small>THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&amp;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>			
<b>Compal Electronics, Inc.</b> <b>CRT &amp; TVout Connector</b>			Title <b>CRT &amp; TVout Connector</b>
Size Document Number <b>LA-3981P</b>			Rev <b>0.3</b>
Date: Monday, October 22, 2007			Sheet 16 of 42



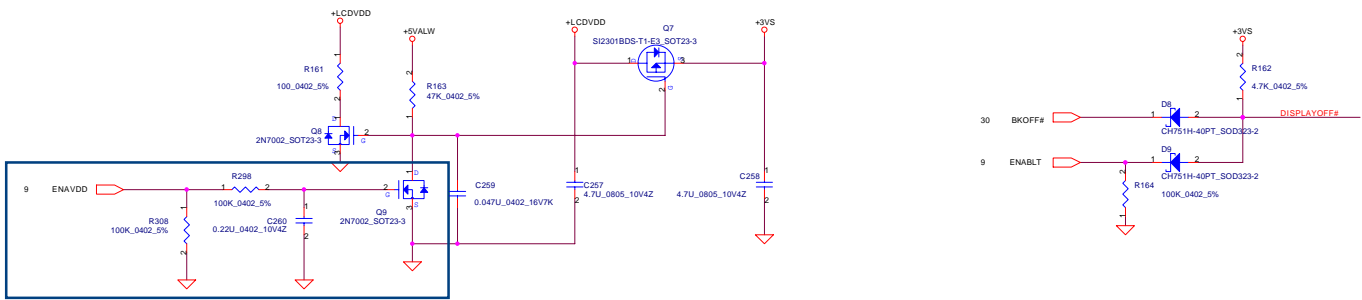


**LVDS CONN**



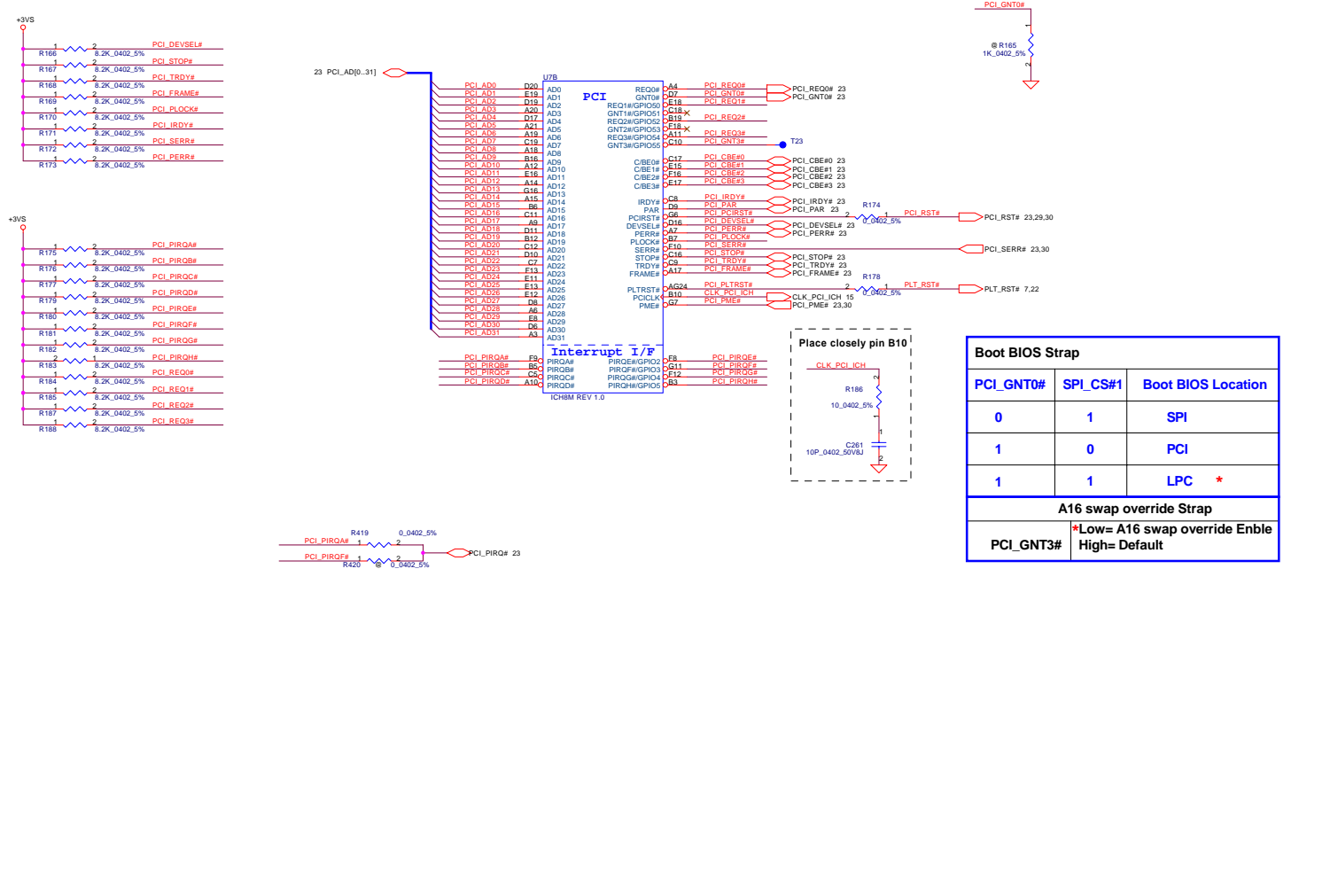
**LVDS connector**

ACES\_86242-4001  
CONN#B  
880P\_0402\_50V7K  
C255  
680P\_0402\_50V7K  
L23

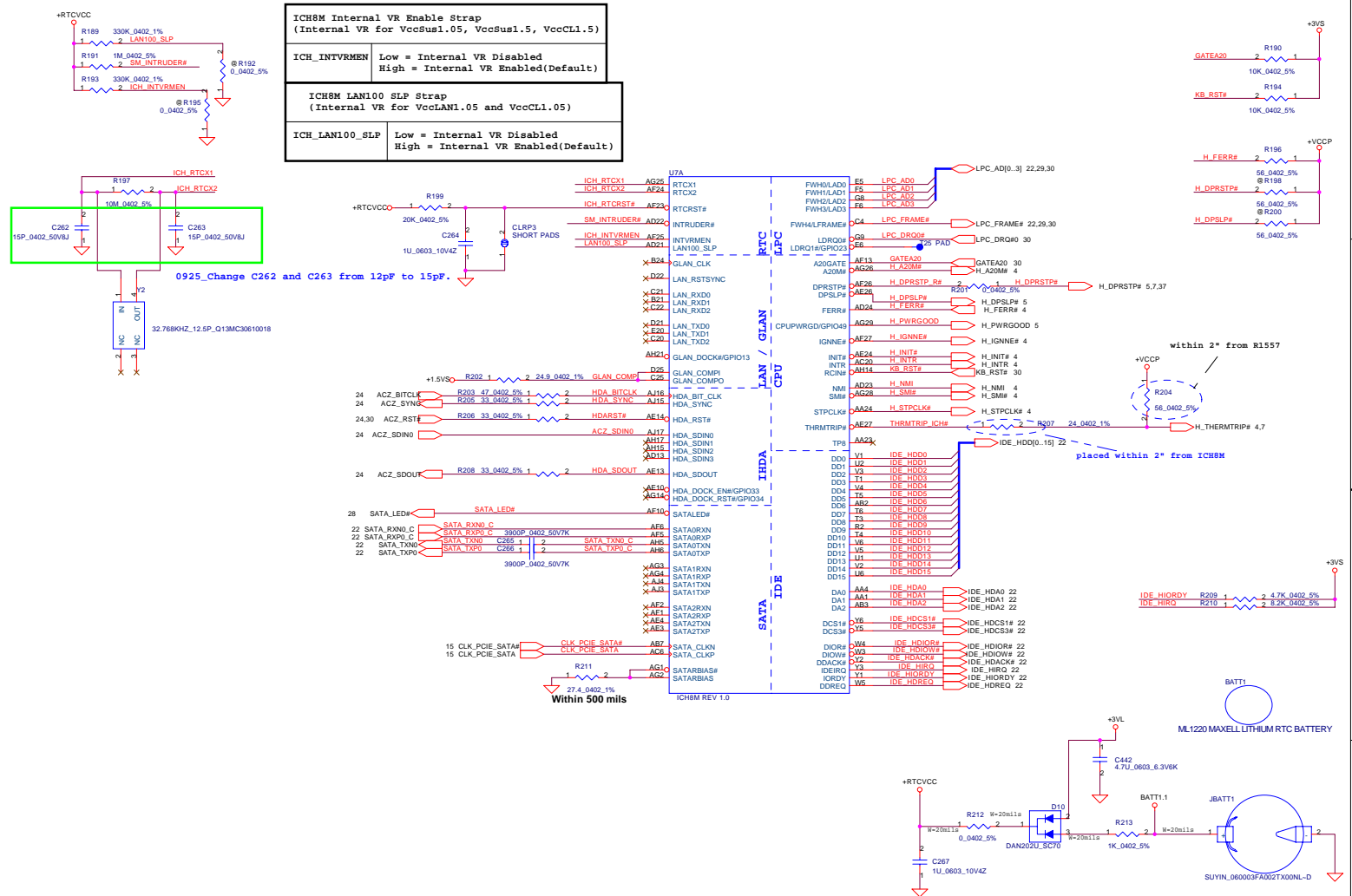


Avoid Panel display garbage after power on.

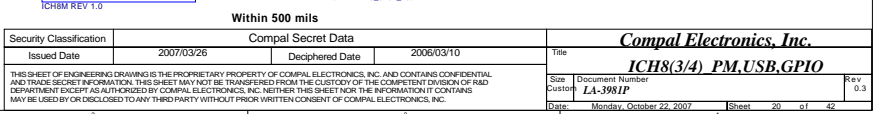
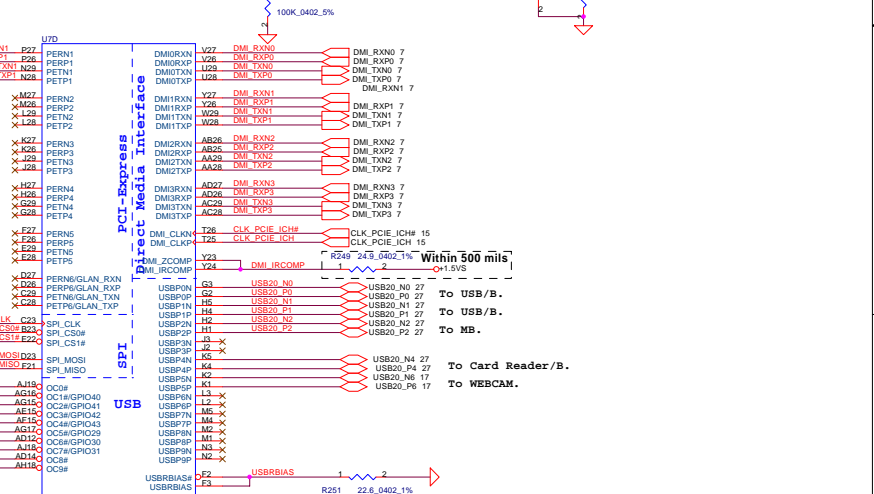
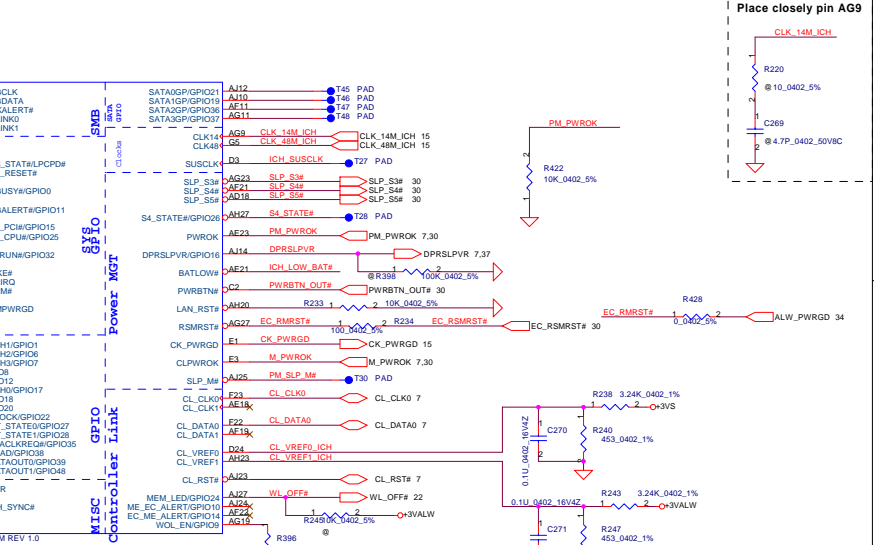
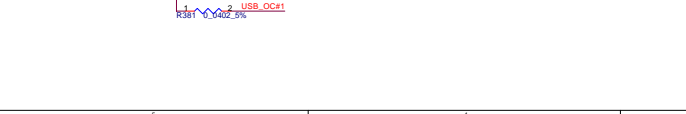
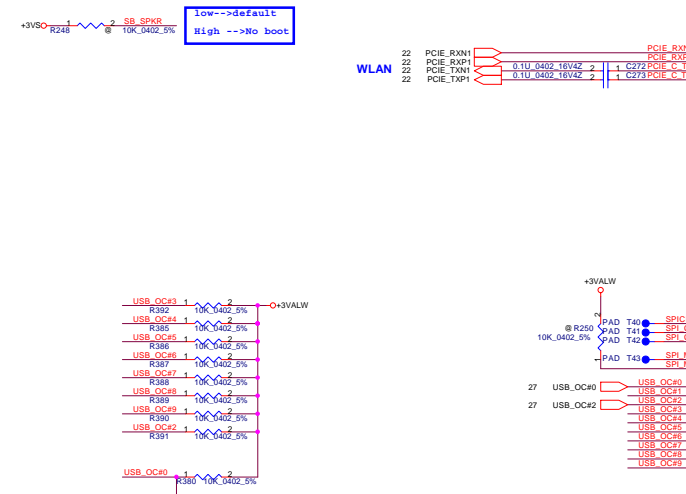
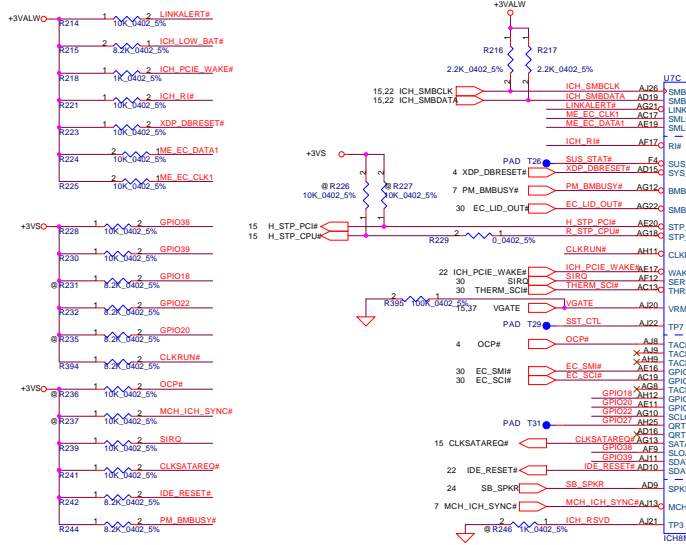
Security Classification		Compal Secret Data		Title	
Issued Date	2007/03/26	Deciphered Date	2006/07/26	LCD CONN.	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE 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	
	LA-398IP	0.3		Monday, October 22, 2007	
		Sheet	17	of 42	



Security Classification		Compal Secret Data		Title	
Issued Date	2007/03/26	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	Document Number
				LA-3981P	Rev 0.3
				Date	Monday, October 22, 2007
				Sheet	18 of 42

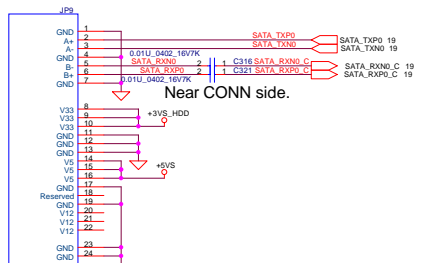
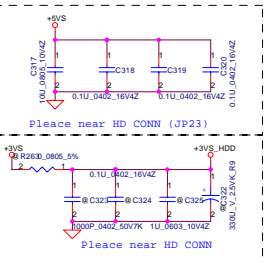


Security Classification		Compal Secret Data		Title	
Issued Date	2007/03/26	Deciphered Date	2006/03/10	Customer	LA-3981P
<small>THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&amp;D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE REPRODUCED OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.</small>					
Date	Monday, October 22, 2007	Sheet	18	of	42



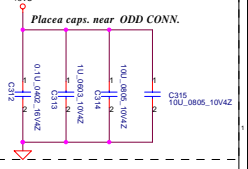
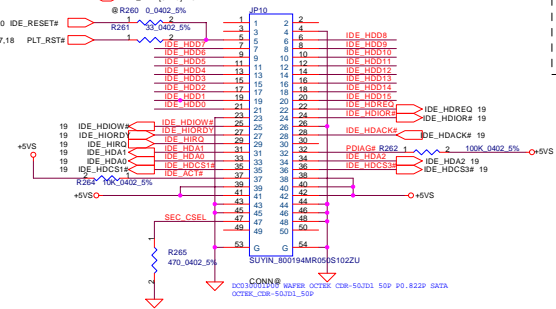


### HDD Connector

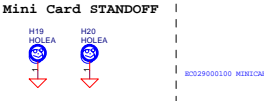
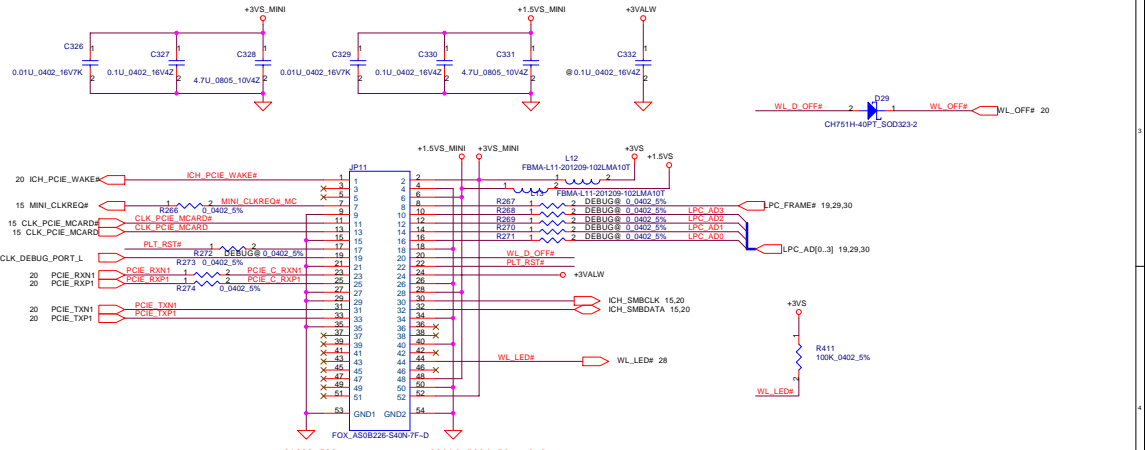


Near CONN side.  
 CONN B  
 SVIN\_127045FR022G204L\_NR  
 D00110003600 R0002840 SVIN\_127045FR022G204L\_22P SATA  
 SVIN\_127045FR022G204L\_22P\_36

### CD-ROM Connector



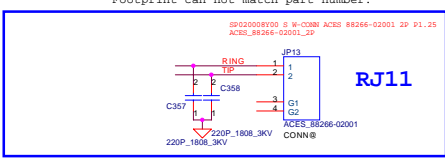
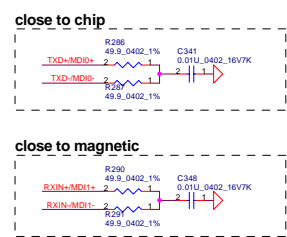
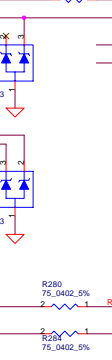
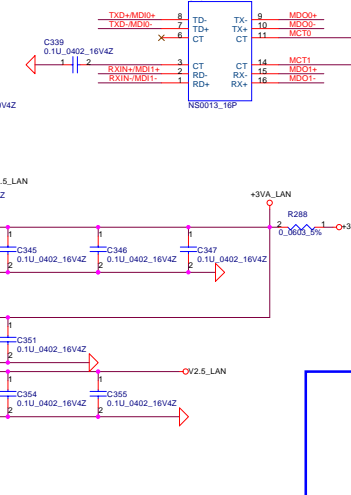
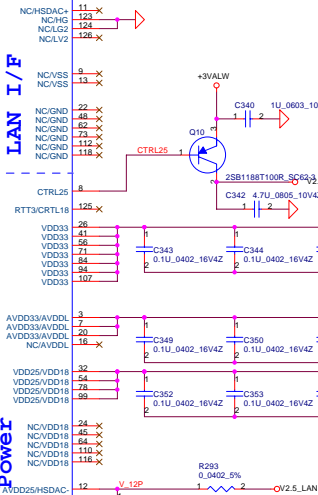
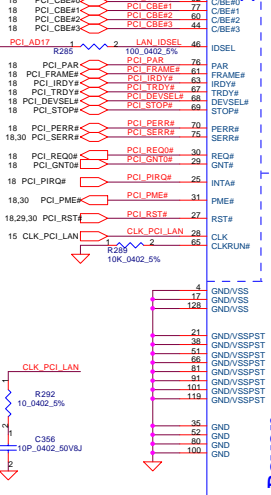
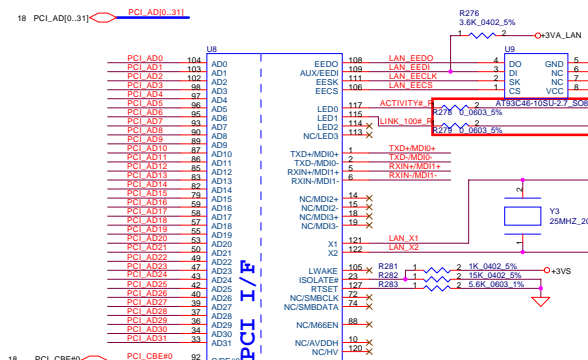
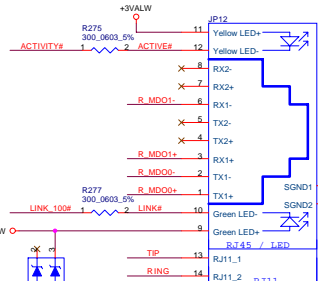
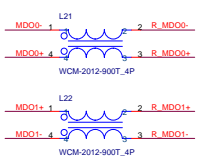
### Mini-Express Card---WLAN



SP01000P700 S H-CONN ACES 88914-5204 52P P0.8

Security Classification	Compal Secret Data	
Issued Date	2007/03/26	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.		Title <b>HDD/ODD/Mini Card CONN.</b> Size Document Number LA-3981P Date Monday, October 22, 2007 Sheet 22 of 42

Close to JP12.



Footprint can not match part number.

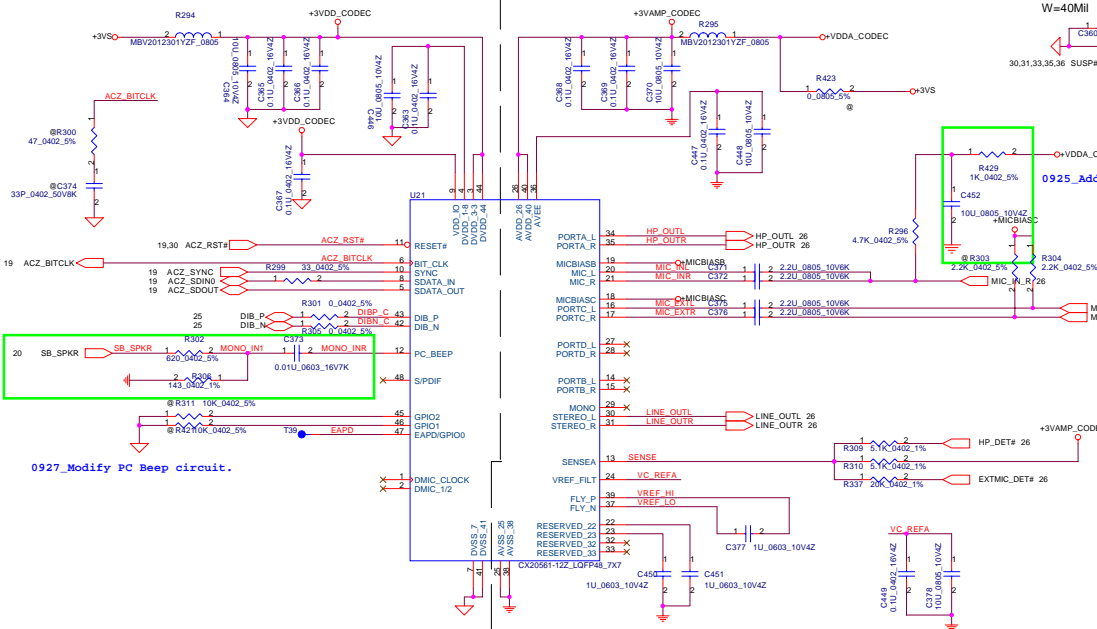
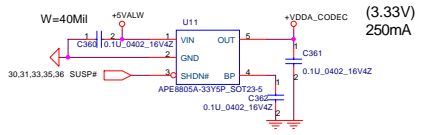
Security Classification		Compal Secret Data		Title	
Issued Date	2007/03/26	Deciphered Date	2007/08/29	LAN-8100CL	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE REPRODUCED OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
				LA-398IP	Rev 0.3
		Date		Monday, October 22, 2007	Sheet 23 of 42

In order for the modem wake on ring feature to function, the CODEC must be powered by a rail that is not removed when the system is in standby.

### AUDIO CODEC

For Layout: Place decoupling caps near the power pins of SmartAMC device.

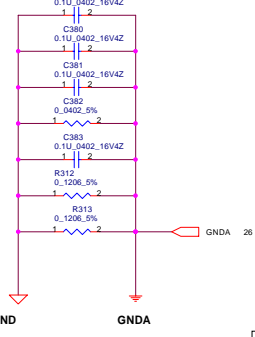
### CODEC POWER



0925\_Add LPF to reduce INT. MIC noise.

0927\_Modify PC BEEP circuit.

### DIGITAL ANALOG

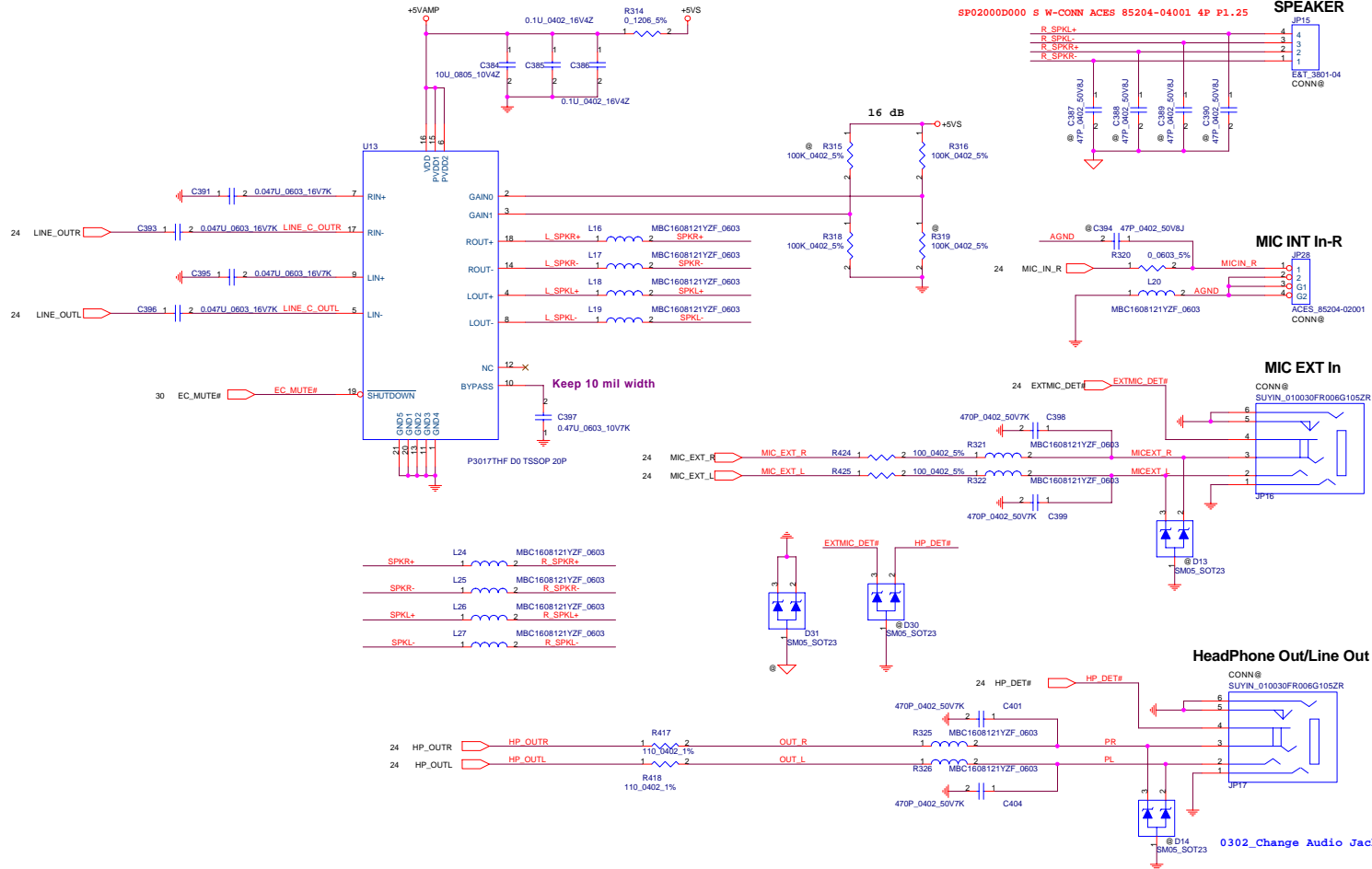


HP_DET#	MIC_DET	LINEOUT	PORT-A <Earphone OUT>	MIC	EQ
0 (LOW)	0 (LOW)	OFF	ON	ON	Disable
0 (LOW)	NC	OFF	ON	OFF	Disable
NC	0 (LOW)	ON	OFF	ON	Enable
NC	NC	ON	OFF	OFF	Enable

Security Classification		Compal Secret Data		Title	
Issued Date	2007/03/26	Deciphered Date	2006/03/10	AMOM codec	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
				LA-3981P	Rev 0.3
				Date	Monday, October 22, 2007
				Sheet	24 of 42

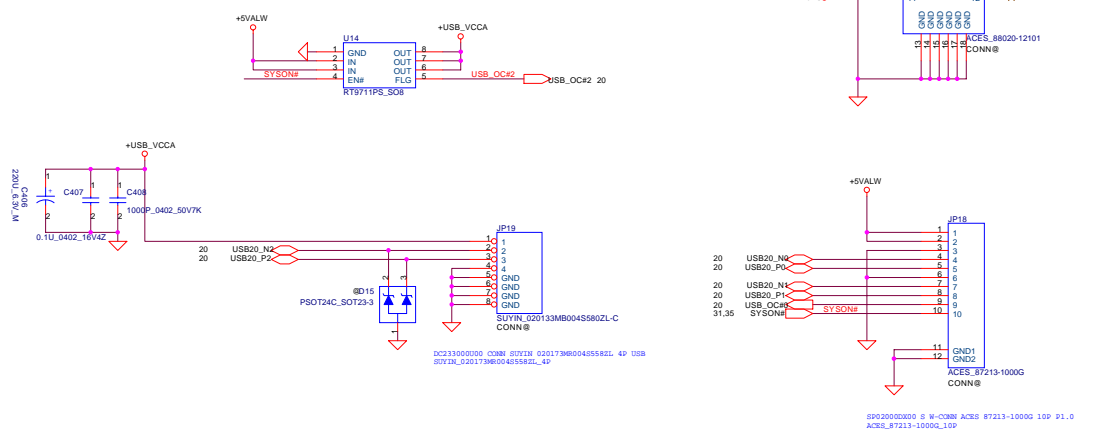




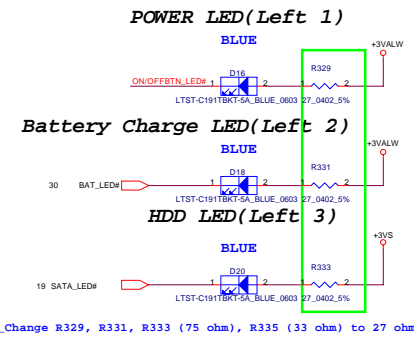
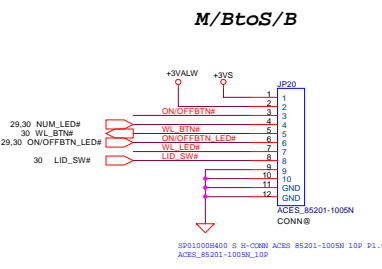
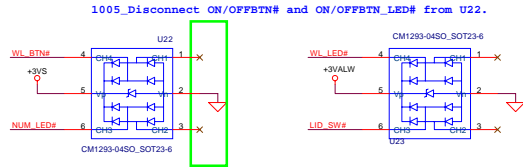


Security Classification	Compal Secret Data		Title	
Issued Date	2007/03/26	Deciphered Date	2007/08/29	AMP & Audio Jack
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM 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-398IP	Rev	0.3
Date	Monday, October 22, 2007	Sheet	26	of 42

### USB Port

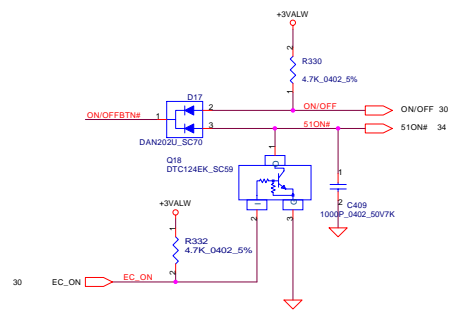


Security Classification	Compal Secret Data		Title	<b>Compal Electronics, Inc.</b>	
Issued Date	2007/03/26	Deciphered Date	2006/07/26	<b>USB CONN.</b>	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS 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: Monday, October 22, 2007 Sheet 27 of 42		
	<b>LA-398IP</b>	0.3			

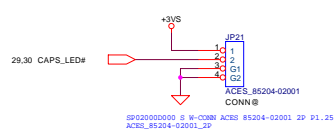


0927\_Change R329, R331, R333 (75 ohm), R335 (33 ohm) to 27 ohm.

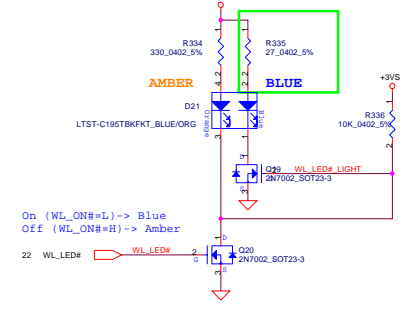
Power ON/OFF



M/B to SB(Caps Lock LED)

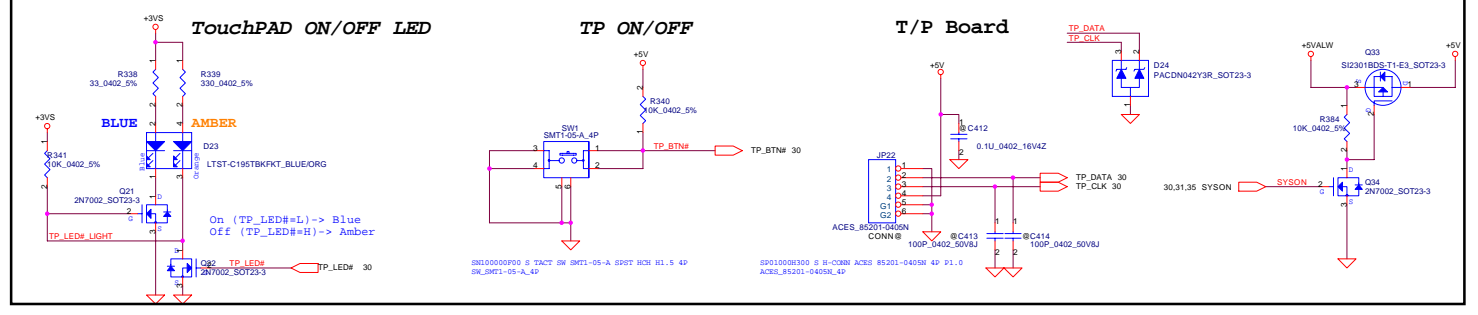


Wireless ON/OFF LED(Left 4)

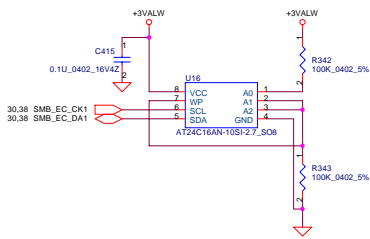


On (WL\_ON#=L) -> Blue  
Off (WL\_ON#=H) -> Amber

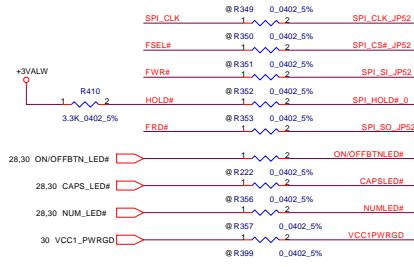
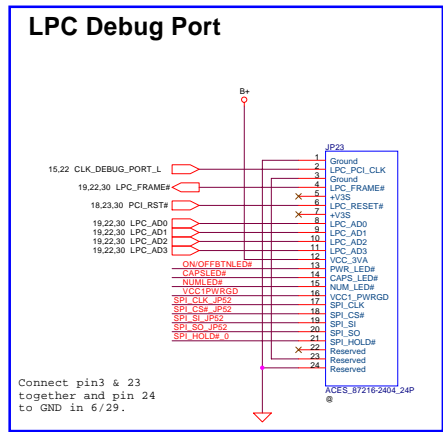
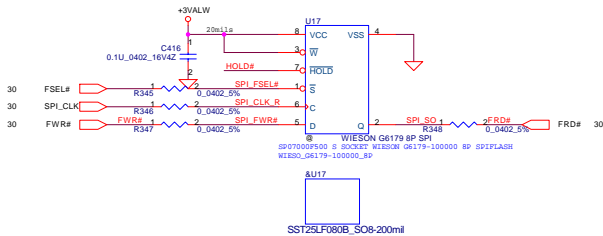
D21, D25, D23 Footprint can not match part number.



Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2007/03/26	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.				LED/SW
Size	Document Number	LA-3981P	Rev	0.3
Date	Monday, October 22, 2007	Sheet	28	of 42

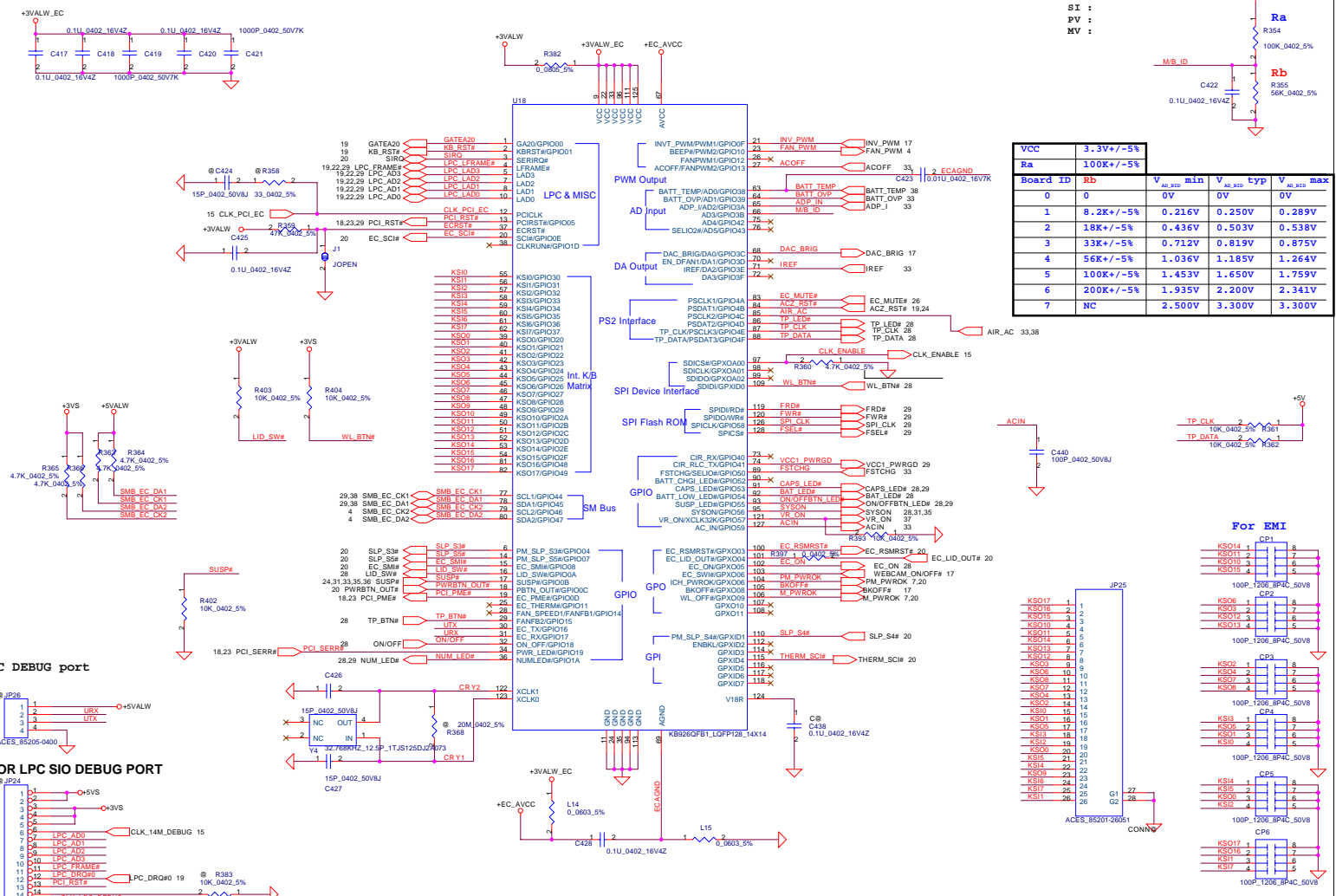


**SPI ROM**



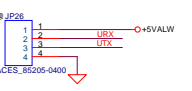
Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2007/03/26	Deciphered Date	2006/07/26	Title
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				BIOS ROM LA-3981P Rev 0.3
Date	Monday, October 22, 2007	Sheet	29	of 42

Board ID : DB : 4  
 SI :  
 PV :  
 MV :  
 +3VALW\_EC  
 Ra  
 R354  
 100K\_0402\_5%

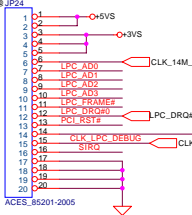


Board ID	Ra	Rb	V <sub>min</sub>	V <sub>AD</sub>	typ	V <sub>max</sub>
0	0	0	0V	0V	0V	0V
1	8.2K+/-5%	0	0.216V	0.250V	0.289V	
2	1.8K+/-5%	0	0.436V	0.503V	0.538V	
3	33K+/-5%	0	0.712V	0.819V	0.875V	
4	56K+/-5%	0	1.036V	1.185V	1.264V	
5	100K+/-5%	0	1.453V	1.650V	1.759V	
6	200K+/-5%	0	1.935V	2.200V	2.341V	
7	NC	NC	2.500V	3.300V	3.300V	

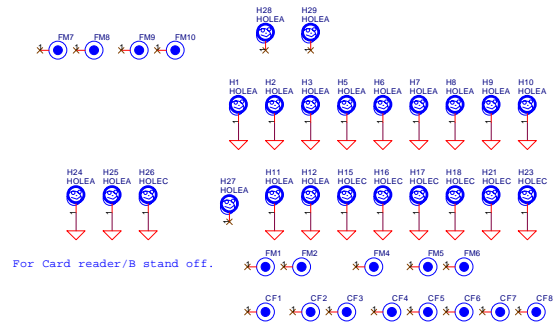
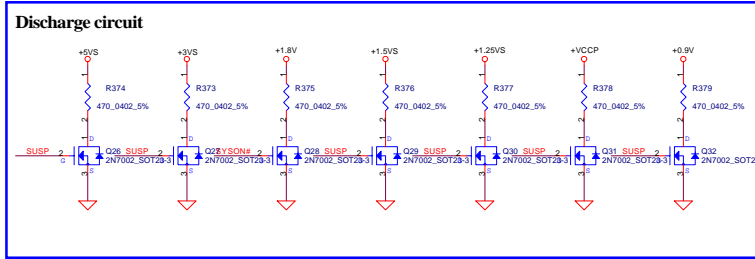
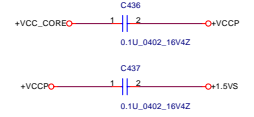
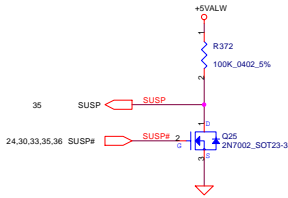
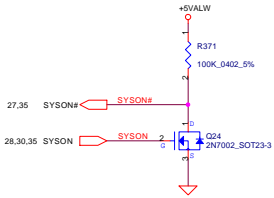
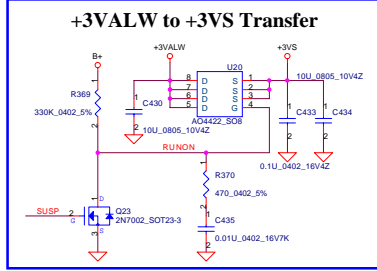
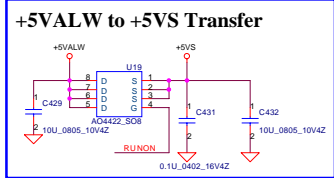
EC DEBUG port



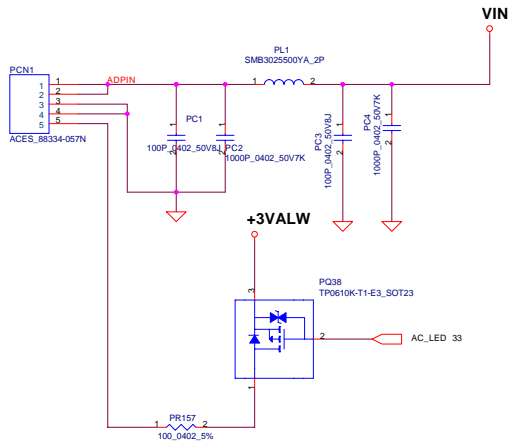
FOR LPC SIO DEBUG PORT



Security Classification	Compal Secret Data		Title	
Issued Date	2007/03/26	Deciphered Date	2006/07/26	EC KB926/KB con
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 RAD 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	Sheet	30	01
Date	Monday, October 22, 2007	Rev	0.3	

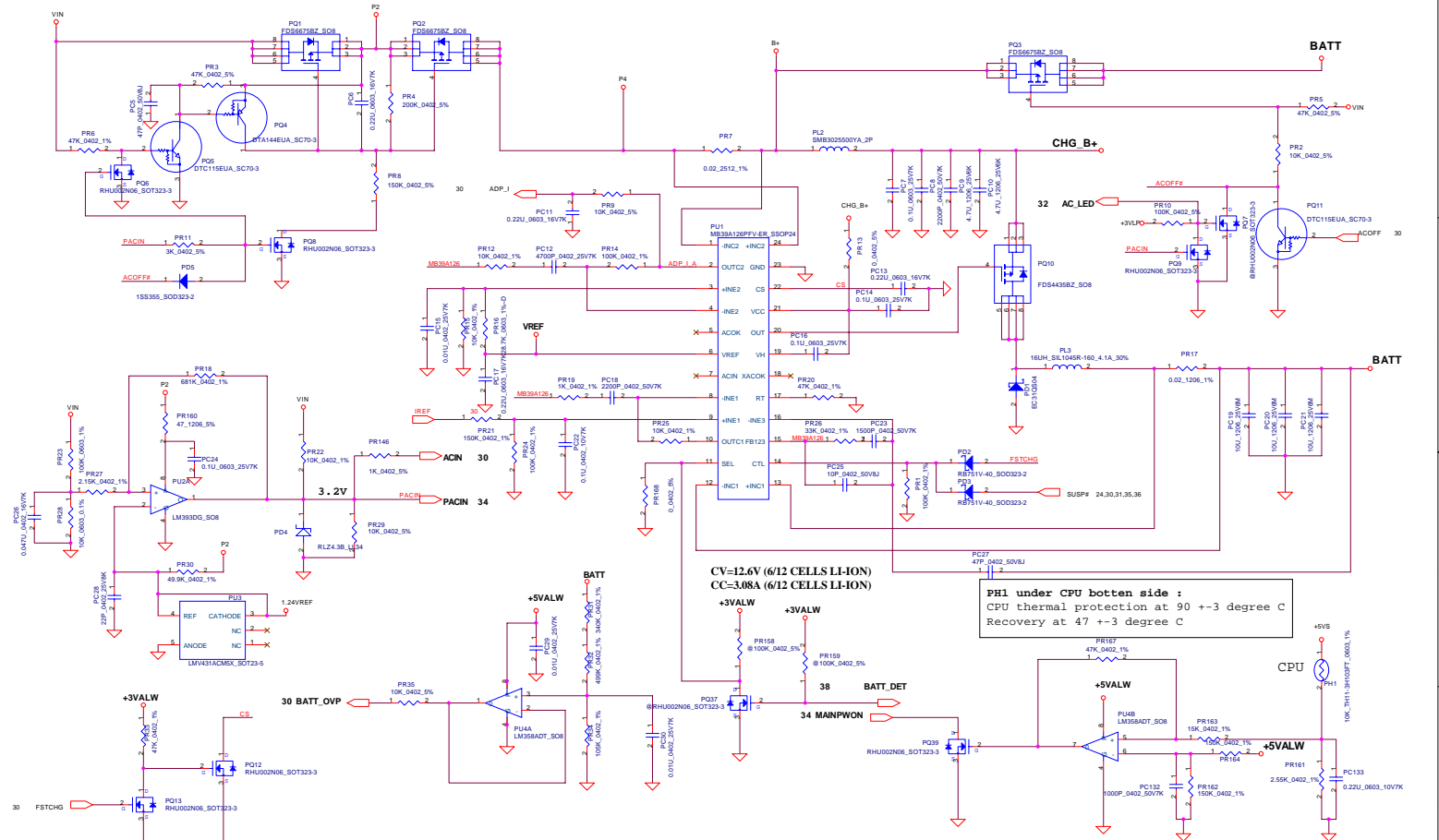


Security Classification	Compal Secret Data		Title	<b>Compal Electronics, Inc.</b>	
Issued Date	2007/03/26	Deciphered Date	2006/07/26	DC/DC Interface	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS 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-3981P		Rev	0.3
Date	Monday, October 22, 2007	Sheet	31	of	42



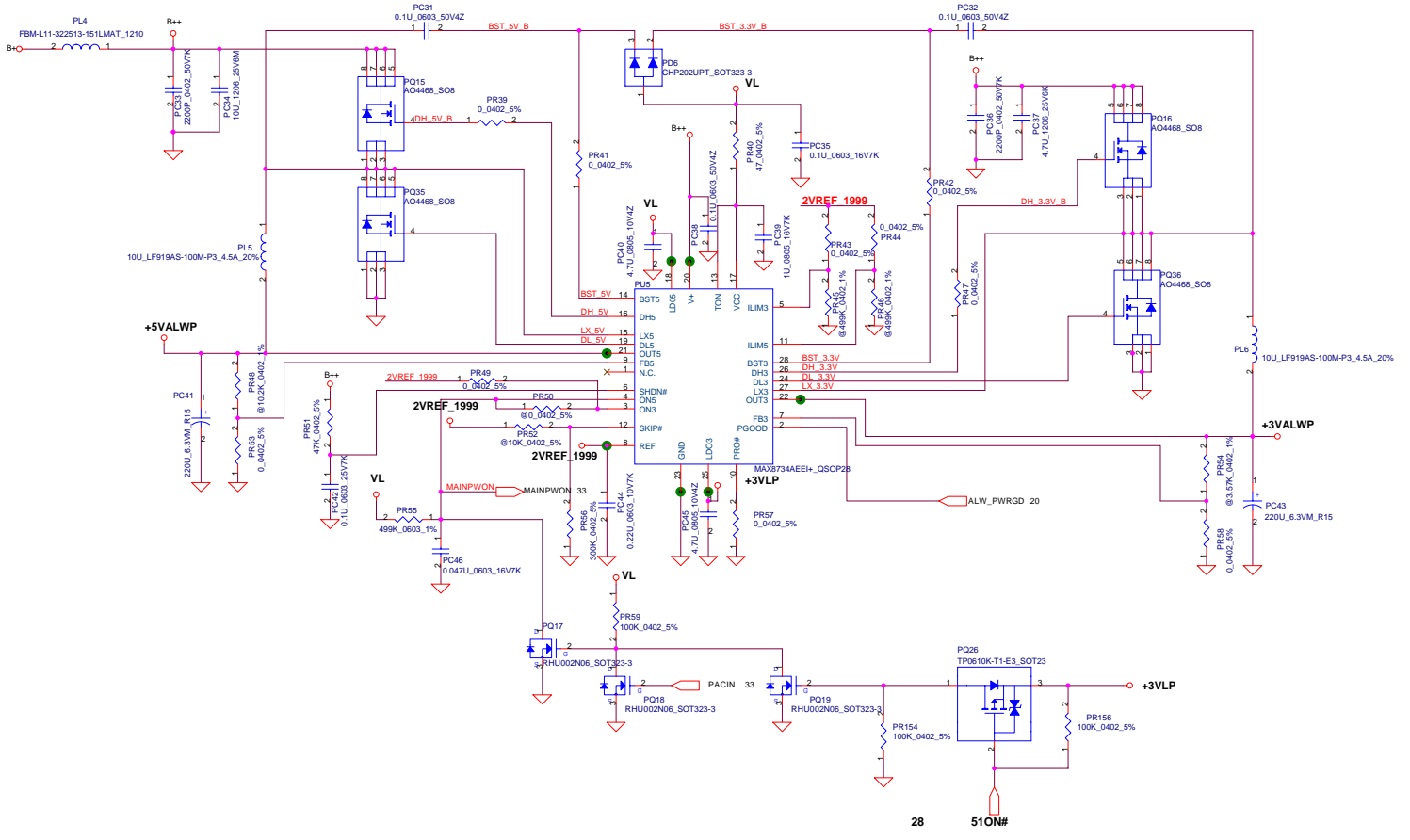
Security Classification	Compal Secret Data			Title
Issued Date	<issued_Date>	Deciphered Date	<Deciphered_Date>	<b>DC CONN</b>
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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: <b>LA-3981P</b> Date: Monday, October 22, 2007
				Rev: Sheet 32 of 42



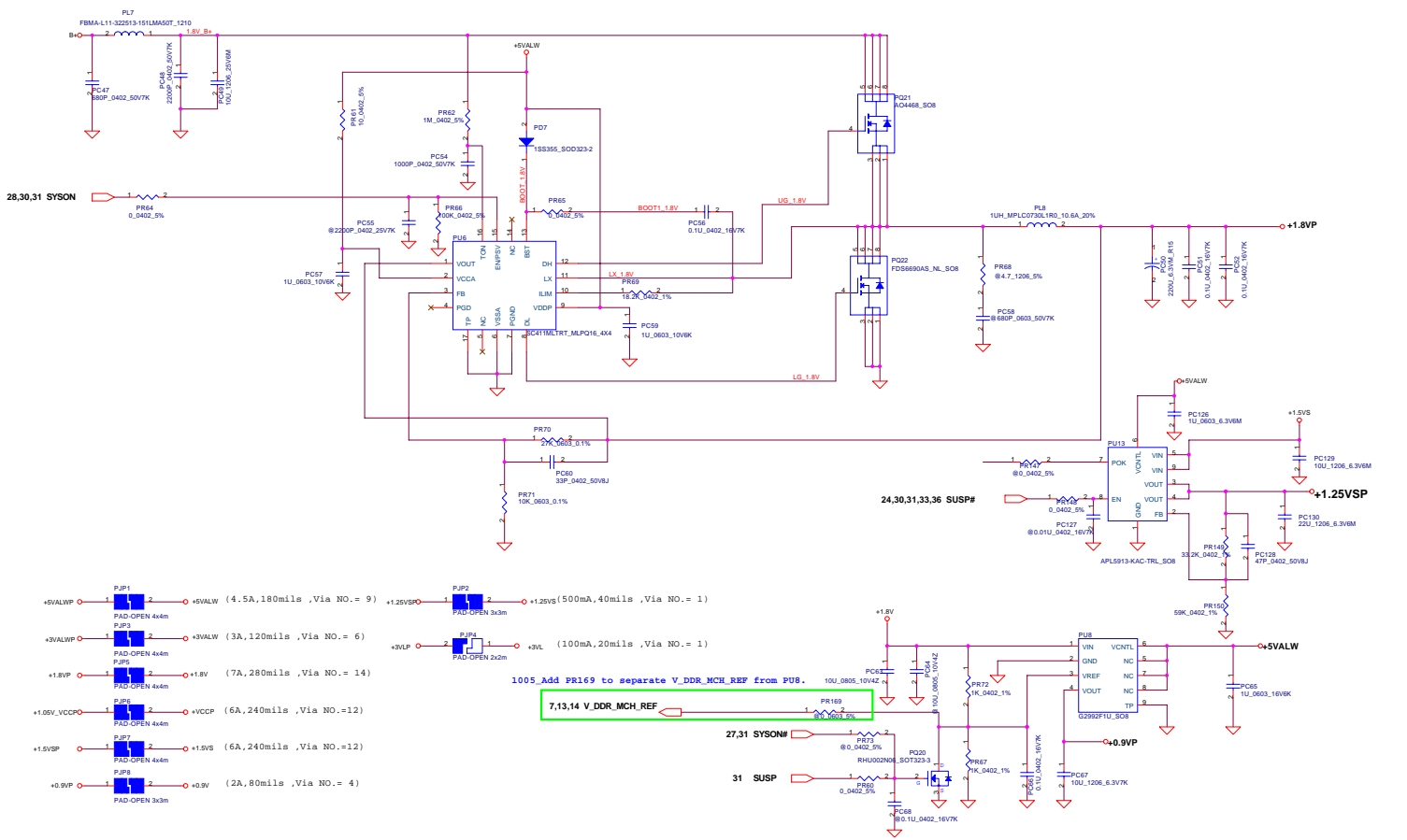


P11 under CPU bottom side :  
 CPU thermal protection at 90 +/-3 degree C  
 Recovery at 47 +/-3 degree C

Security Classification	Compal Secret Data		Compal Electronics, Inc.
Issued Date	Deciphered Date		Charger
<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 TRANSMITTED FROM THE CUSTODY OF THE COMMITTED DIVISION OF R&amp;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>			<small>Rev: _____</small> <small>Doc: _____</small> <small>Proj: _____</small>



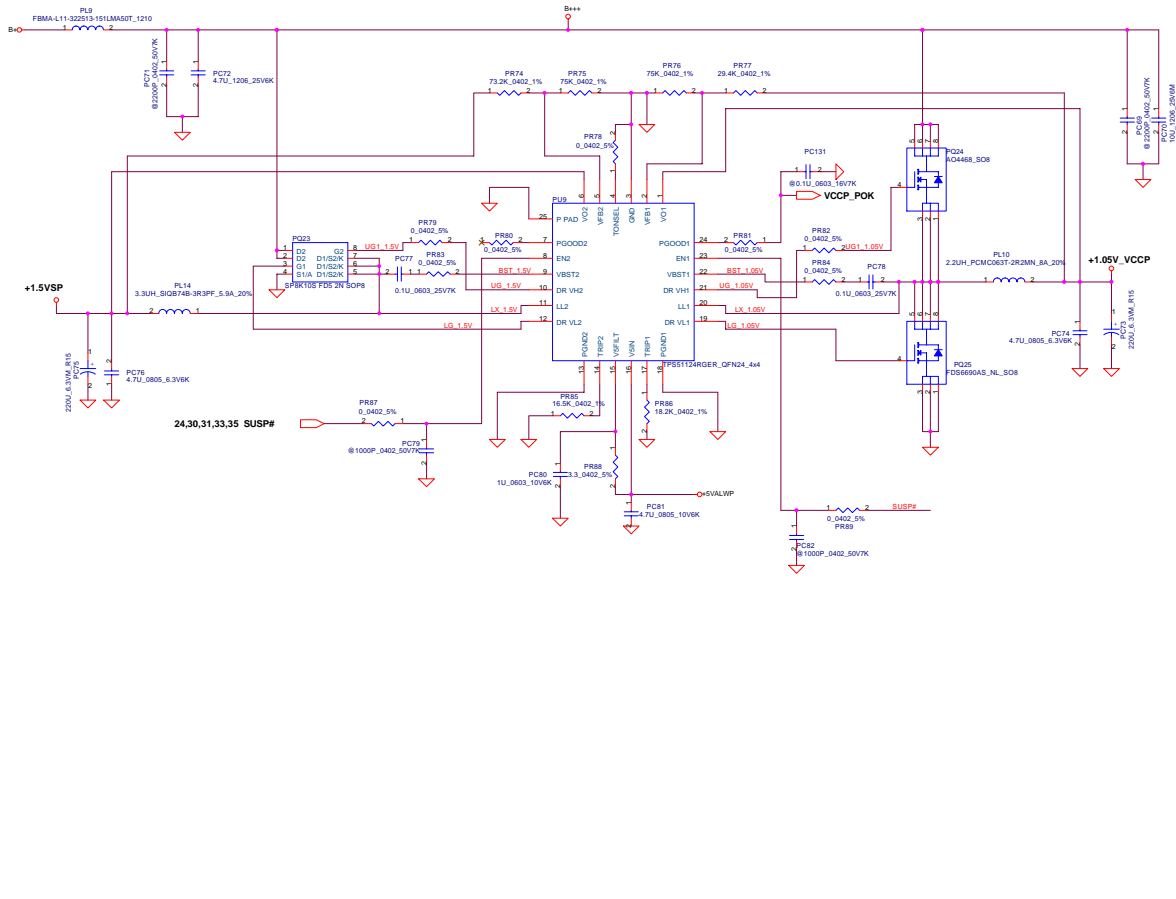
Security Classification	Compal Secret Data		Title	
Issued Date	<Issued_Date>	Deciphered Date	<Deciphered_Date>	3.3VALWP / 5VALWP
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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:	Monday, October 22, 2007	Sheet:	34	of 42



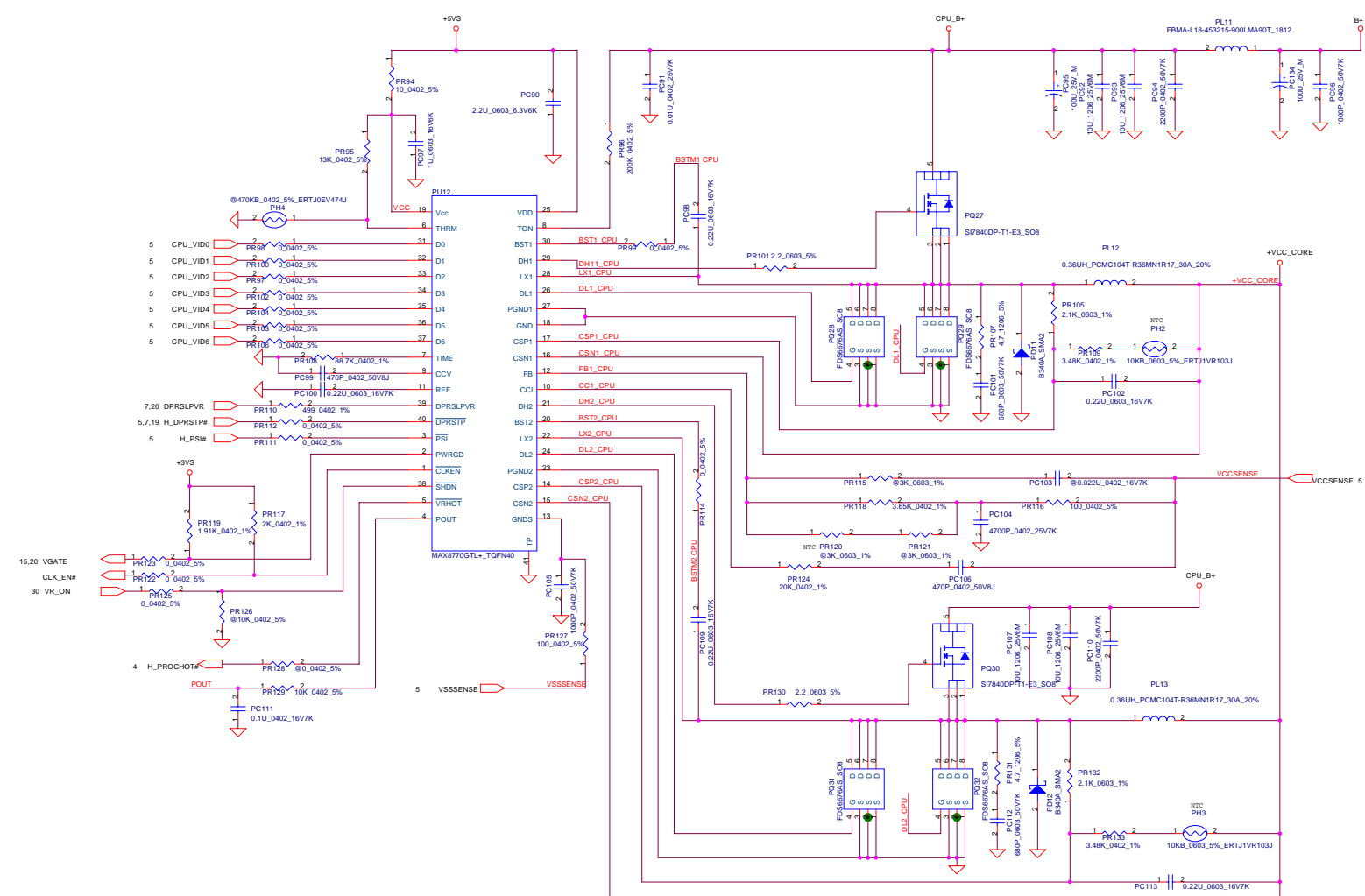
- +SVALWP → PJP1 2 → +SVALW (4.5A, 180mils, Via NO.= 9)
- +SVALWP → PJP2 2 → +SVALW (3A, 120mils, Via NO.= 6)
- +1.8VP → PJP3 2 → +1.8V (7A, 280mils, Via NO.= 14)
- +1.05V\_VCCP → PJP6 2 → +VCCP (6A, 240mils, Via NO.= 12)
- +1.5VSP → PJP7 2 → +1.5VS (6A, 240mils, Via NO.= 12)
- +0.9VP → PJP8 2 → +0.9V (2A, 80mils, Via NO.= 4)
- +1.25VSP → PJP2 2 → +1.25VS (500mA, 40mils, Via NO.= 1)
- +9VP → PJP2 1 → +9V (100mA, 20mils, Via NO.= 1)

1005\_Add FR169 to separate V\_DDR\_MCH\_REF from PUS.  
 7,13,14 V\_DDR\_MCH\_REF

Security Classification	Compal Secret Data			Compal Electronics, Inc.	
Issued Date	<Issued_Date>	Deciphered Date	<Deciphered_Date>	Title	1.8VP/0.9VSP/2.5VSP
THIS SHEET OF ENGINEERING DRAWINGS IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSMITTED 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-3981P Rev 03
Date: Monday, October 25, 2009					Sheet: 35 of 49

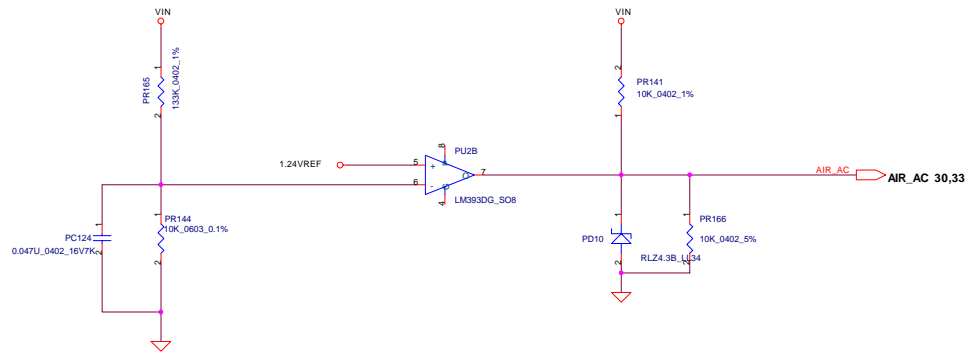
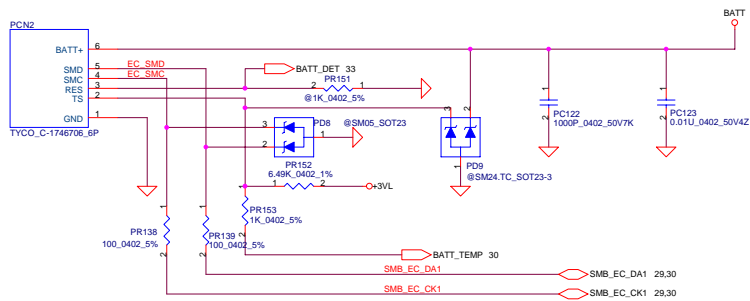


Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2006/11/23	Deciphered Date	2007/11/23	Title
THIS SHEET OF ENGINEERING DRAWINGS IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSMITTED 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 THE WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				1.2V VP/1.5VSP/1.05V
Size	Document Number			Rev
	LA-3981P			03
Date	Monday, October 22, 2007	Sheet	36	of
			42	



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

<b>Compal Electronics, Inc.</b>		
File:	<b>+CPU CORE</b>	
Site:	Document Number:	Rev:
Client:		0.9
Date:	Monday, October 22, 2007	Sheet 37 of 42



Security Classification	Compal Secret Data		Title	
Issued Date	<Issued_Date>	Deciphered Date	<Deciphered_Date>	<b>Compal Electronics, Inc.</b>
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.				<b>BATTERY CONN</b>
				Size Custom
Date: Monday, October 22, 2007		Sheet 42 of 38		

Item	Reason for change	PG#	Modify List	Date	Phase
1			1009_FL8 change to 1uH.		
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

Security Classification	Compal Secret Data		Title	
Issued Date	2006/02/28	Deciphered Date	2007/02/28	<b>Compal Electronics, Inc.</b>
<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 TRANSMITTED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&amp;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>				Document Number <b>LA-3981P</b>
				Date: Monday, October 22, 2007
			Sheet 39 of 42	

Version Change List ( P. I. R. List ) for HW Circuit

Item	Change Item	Page	Date	Phase
1	Change C262 and C263 from 15pF to 12pF	19	7/16	DB --> SI
2	Reserved R245 and Add R422	20	7/16	DB --> SI
3	Add D29 prevent leakage issue	22	7/16	DB --> SI
4	Reserved diode D30 D31 for ESD	26	7/16	DB --> SI
5	Reserved R423 for coat down plan	24	7/24	DB --> SI
6	Remove Q12-Q17, R323 R324 R327 R328 R417 R418	26	7/30	DB --> SI
7	Change EXT MIC port B to port C	24	7/31	DB --> SI
8				DB --> SI
9				DB --> SI
10				DB --> SI
11				DB --> SI
12				DB --> SI
13				DB --> SI
14				DB --> SI
15				DB --> SI
16				DB --> SI
17				DB --> SI
18				DB --> SI
19				DB --> SI
20				DB --> SI
21				DB --> SI
22				DB --> SI
23				DB --> SI
24				DB --> SI
25				DB --> SI
26				DB --> SI
27				DB --> SI
28				DB --> SI
29				DB --> SI

Security Classification	Compal Secret Data		Title	
Issued Date	2007/03/26	Deciphered Date	2007/02/28	<b>Compal Electronics, Inc.</b>
<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&amp;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>				Document Number
				LA-3981P
Date:	Monday, October 22, 2007	Sheet	40	of 42

5

4

3

2

1

Rev

0.3



Version Change List ( P. I. R. List ) for HW Circuit

Item	Change Item	Page	Date	Phase	
1	Change R296 R337 R value	24	Follow conexant new design rule	8/6	SI --> FV
2	Add R424 R425 100ohm on MIC_EXT_R and MIC_EXT_L	26	Follow conexant new design rule	8/6	SI --> FV
3	Change PIRQ from F to A	18	Choose R419 then control PIRQ A	8/14	SI --> FV
4	Connect PCI_SERR# to EC GPIO pin.	18	Connect PCI_SERR# to EC GPIO pin.	8/31	SI --> FV
5	Modify PC BEEP circuit.	20	Modify PC BEEP circuit.	8/31	SI --> FV
6	For support Intel Penryn CPU.	04	Reserve R426 and R427 for support Intel Penryn CPU.	9/3	SI --> FV
7	For ESD request.	28	Add U22 and U23 for ESD request.	9/3	SI --> FV
8	For EMI request.	26	Add L24-L27	9/5	SI --> FV
9	Change C391, C393, C395, C396 from 0.47uF to 0.047uF.	26	Change C391, C393, C395, C396 from 0.47uF to 0.047uF	9/7	SI --> FV
10	Add R417 and R418 to fine-tune Vp-p.	26	Add R417 and R418 to fine-tune Vp-p.	9/7	SI --> FV
11	For ESD request.	20	Add U22 and U23 for ESD request.	9/7	SI --> FV
12					SI --> FV
13					SI --> FV
14					SI --> FV
15					SI --> FV
16					SI --> FV
17					SI --> FV
18					SI --> FV
19					SI --> FV
20					SI --> FV
21					SI --> FV
22					SI --> FV
23					SI --> FV
24					SI --> FV
25					SI --> FV
26					SI --> FV
27					SI --> FV
28					SI --> FV
29					SI --> FV
30					SI --> FV
31					SI --> FV
32					SI --> FV
33					SI --> FV
34					SI --> FV
35					SI --> FV
36					SI --> FV
37					SI --> FV
38					SI --> FV

Security Classification	Compal Secret Data		Title	
Issued Date	2007/03/26	Deciphered Date	2007/02/28	<b>Compal Electronics, Inc.</b> <b>HW Changed-List History-1</b>
<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 TRANSMITTED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&amp;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
	LA-3981P	Monday, October 22, 2007	41	0.3
			of	
			42	



Вы скачали этот файл с сайта «Сайт радиолюбителей»



## Другие разделы сайта

### Раздел БИБЛИОТЕКА

Книги для и журналы радиолюбителям

<http://radio-uchebnik.ru/library/>

### Раздел РАДИОСХЕМЫ

Различные схемы как для начинающих так и для профессионалов:

Схемы бытовой техники, телевизоров, мониторов, автомагнитол, музыкальных центров, и для самостоятельной сборки

<http://radio-uchebnik.ru/shem/>

### Раздел ФАЙЛОВОЕ ХРАНИЛИЩЕ

Различные файлы: Даташиты, схемы, прошивки и так далее

<http://radio-uchebnik.ru/downfiles/>

### Раздел РАДИОКОМПАС

Если Вы занимаетесь ремонтом электроники на профессиональном уровне- то Вы можете сообщить о себе.

<http://radio-uchebnik.ru/radiomap/>

### Раздел ДОСКА ОБЪЯВЛЕНИЙ

Здесь Вы можете разместить бесплатное объявление сроком до 120 дней (только радиотематика!!)

<http://radio-uchebnik.ru/ads/>

### Раздел СПРАВОЧНИК ПО МИКРОСХЕМАМ

Справочные данные на микросхемы импортного и отечественного производства

<http://radio-uchebnik.ru/microbase/>

### Раздел СТАТЬИ

Различные статьи радиолюбительской (и не только) тематики: секреты телемастера, практическая электроника, альтернативная энергия, расчеты по электронике, электронные устройства и так далее

<http://radio-uchebnik.ru/txt/>

### ФОРУМ НАШЕГО САЙТА

<http://radio-uchebnik.ru/forum/>