

KIWB3/B4

Schematics Document

Mobile Penryn uFCPGA with Intel
Cantiga_GM/PM+ICH9-M core logic
REV:0.1

Security Classification	Compal Secret Data			<i>Compal Electronics, Ltd.</i>	
Issued Date	2008/03/25	Deciphered Date	2008/04/	Title Cover Sheet	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size B	Document Number KIWB3/B4_LA4551P
				Date: Friday, June 27, 2008	Sheet 1 of 49 Rev 0.1

DDR3 Voltage Rails

power plane State	+B	+5VALW	+1.5V	+5VS
		+3VALW	+1.8V +0.75V	+3VS +1.5VS +1.1VS +VCCP +CPU_CORE +VGA_CORE +1.8VS
S0	○	○	○	○
S1	○	○	○	○
S3	○	○	○	✗
S5 S4/AC	○	○	✗	✗
S5 S4/ Battery only	○	✗	✗	✗
S5 S4/AC & Battery don't exist	✗	✗	✗	✗

PM@ , GM@ , N9@ , N10@

SMBUS, SPI and I2C Control Table

	SOURCE	HDMI	LVDS	CRT	HDCP	SERIAL EEPROM	NEW CARD	CLK GEN	CAP sensor	Mini CARD1	Mini CARD2	BATT	THERMAL SENSOR (VGA)	THERMAL SENSOR (CPU)
EC_SMB_CK1 EC_SMB_DA1	KB926	X	X	X	X	V	X	X	X	X	X	V	X	X
EC_SMB_CK2 EC_SMB_DA2	KB926	X	X	X	X	X	X	X	V	X	X	X	V	V
ICH_SMBCLK ICH_SMBDAT	ICH9	X	X	X	X	X	V	V	X	V	V	X	X	X
LVDS_SCL LVDS_SDA	Cantiga	X	V	X	X	X	X	X	X	X	X	X	X	X
GMCH_CRT_CLK GMCH_CRT_DAT	Cantiga	X	X	V	X	X	X	X	X	X	X	X	X	X
HDMI_CLK_NB HDMI_DAT_NB	Cantiga	V	X	X	X	X	X	X	X	X	X	X	X	X
VGA_DDCCLK VGA_DDCDATA	VGA	X	X	V	X	X	X	X	X	X	X	X	X	X
VGA_LVDS_SCL VGA_LVDS_DAT	VGA	X	V	X	X	X	X	X	X	X	X	X	X	X
VGA_HDMI_SCL VGA_HDMI_DAT	VGA	V	X	X	X	X	X	X	X	X	X	X	X	X
HDCP_SMB_CK1 HDCP_SMB_DA1	VGA	X	X	X	X	V	X	X	X	X	X	X	X	X
FSEL#SPIC#_SB FRD#SPI_SO_SB SPI_CLK_SB FWR#SPI_SI_SB	ICH9	X	X	X	X	V	X	X	X	X	X	X	X	X
FSEL#SPIC#_SO SPI_CLK FWR#SPI_SI	KB926	X	X	X	X	V	X	X	X	X	X	X	X	X

VGA and DDR2 Voltage Rails (NB9M-GS)

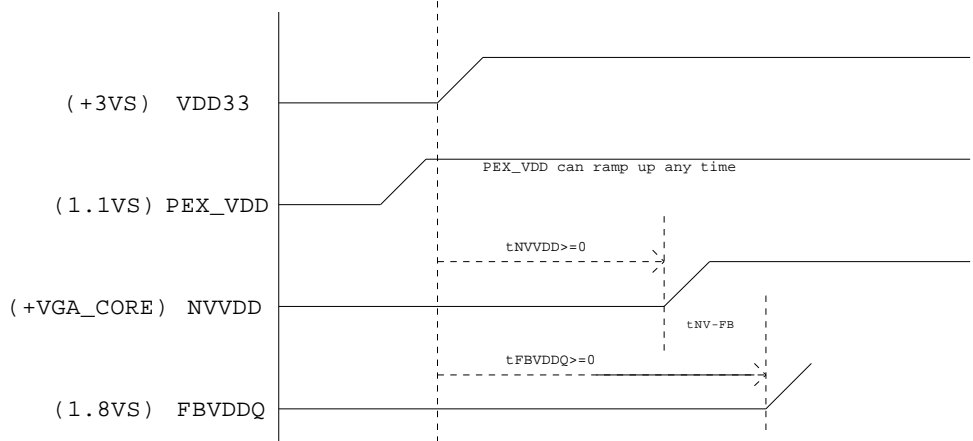
power plane			+1.8V	+3VS +VGA_CORE +1.1VS
State				
S0	○	○	○	○
S1	○	○	○	○
S3	○	○	○	✗
S5 S4/AC	○	○	✗	✗
S5 S4/ Battery only	○	✗	✗	✗
S5 S4/AC & Battery don't exist	✗	✗	✗	✗

EDP at Tj = 97C*

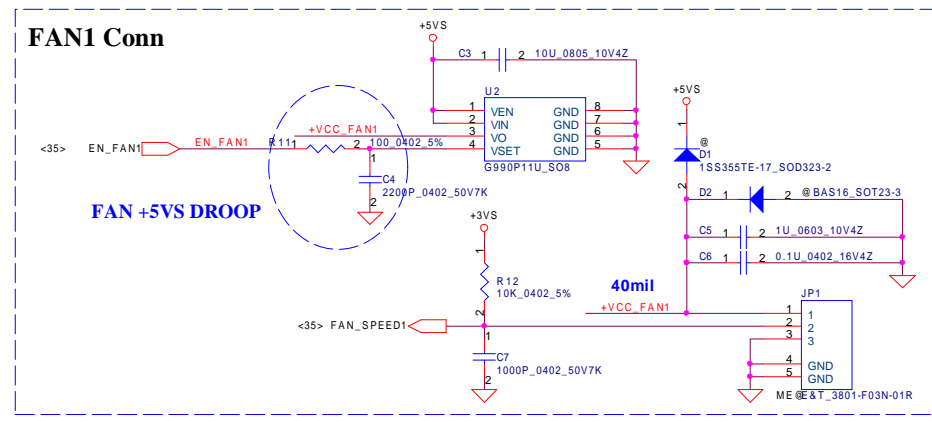
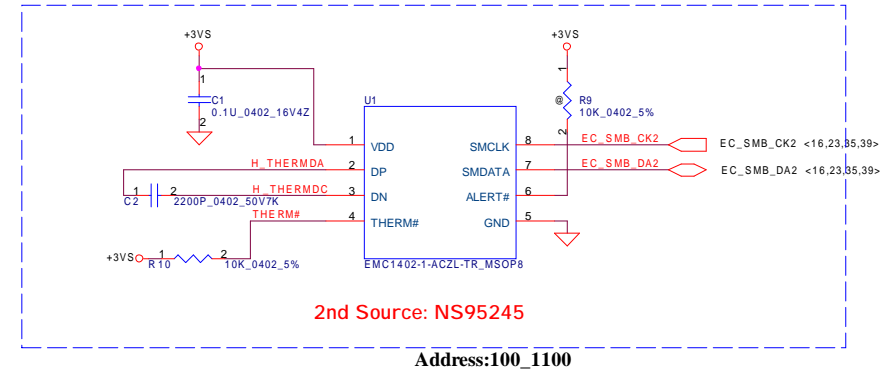
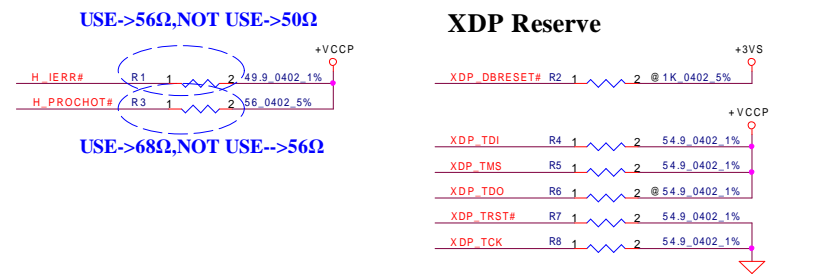
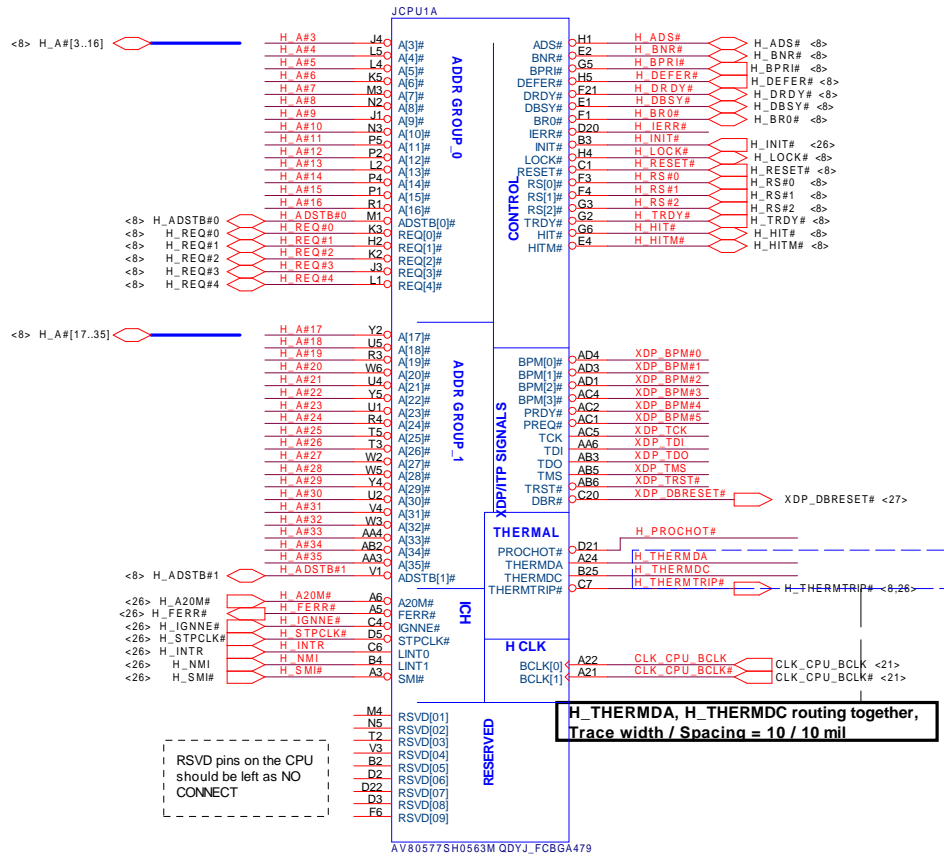
Power Supply Rail	(V)	NB9M-GS		NB9M-GE	
		GDDR3	DDR2	GDDR3	DDR2
NVVD	Variable	11.22A	10.87A	9.2A	8.88A
FB_DLLAVDD	1.1	25mA			
FB_PLLAVDD	1.1	10mA			
IFPC_IOVDD	1.1	385mA			
IFPD_IOVDD	1.1	385mA			
IFPE_IOVDD	1.1	385mA			
IFPF_IOVDD	1.1	385mA			
PEX_IOVDD/Q	1.1	1550mA			
PEX_PLLVDD	1.1	165mA			
PLLVD	1.1	55mA			
SP_PLLVDD	1.1	25mA			
VID_PLLVDD	1.1	50mA			
TOTAL	1.1	3.425A			
FBVDD/Q	1.8	2.24A	1.65A	2.17A	1.63A
IFPA_IOVDD	1.8	50mA			
IFPB_IOVDD	1.8	50mA			
IFPAB_PLLVDD	1.8	100mA			
IFPCD_PLLVDD	1.8	160mA			
IFPEF_PLLVDD	1.8	160mA			
TOTAL	1.8	2.76A	2.17A	2.69A	2.15A
DACA_VDD	3.3	110mA			
DACB_VDD	3.3	125mA			
DACC_VDD	3.3	110mA			
MIOA_VDDQ	3.3	10mA			
MIOB_VDDQ	3.3	10mA			
VDD33	3.3	80mA			
TOTAL	3.3	0.445A			

POWER SQUENCE

The ramp time for any rail must be more than 40us



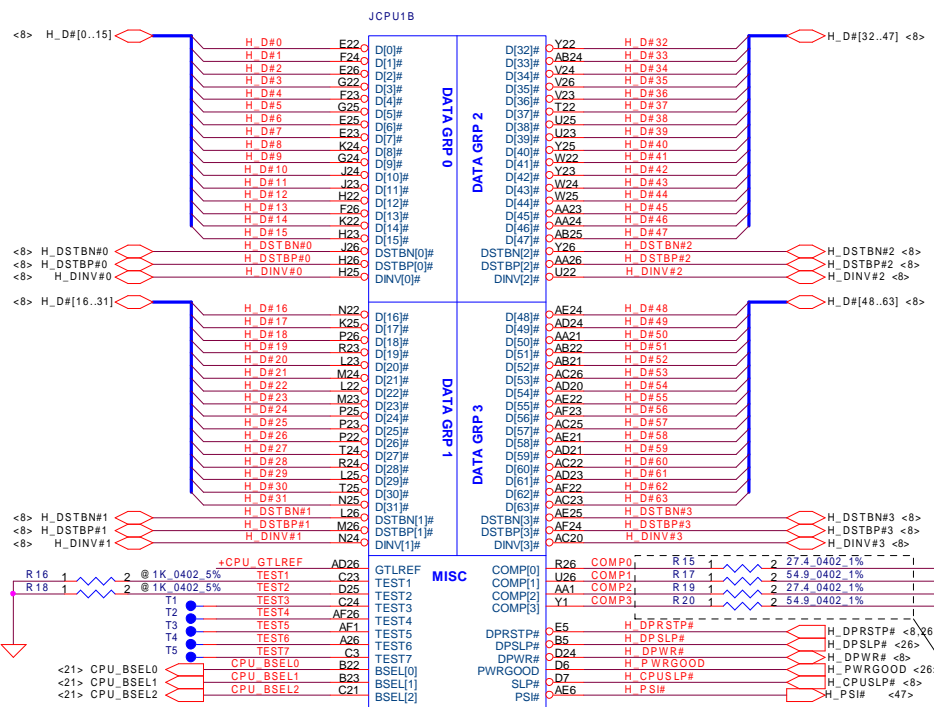
Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2008/03/24	Deciphered Date	2008/04/	Title
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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
				KIWB3/B4_LA4551P
				Rev
				0.1
				Date: Friday, June 27, 2008
				Sheet 4 of 48



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

RSVD pins on the CPU should be left as NO CONNECT

Security Classification	Compal Secret Data		Compal Electronics, Ltd.	
Issued Date	2008/03/25	Deciphered Date	2008/04/	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.				Penryn(1/3)
Size			Document Number	Rev
Custor			KIWB3/B4_LA4551P	0.1
Date	Friday, June 27, 2008	Sheet	5	of 49



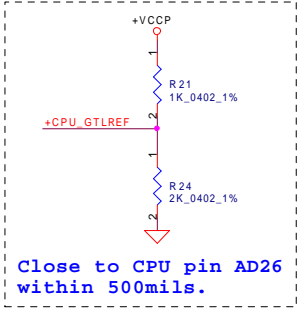
Trace Close CPU < 0.5"

Width=4 mil,
Spacing: 15mil
(550hm)

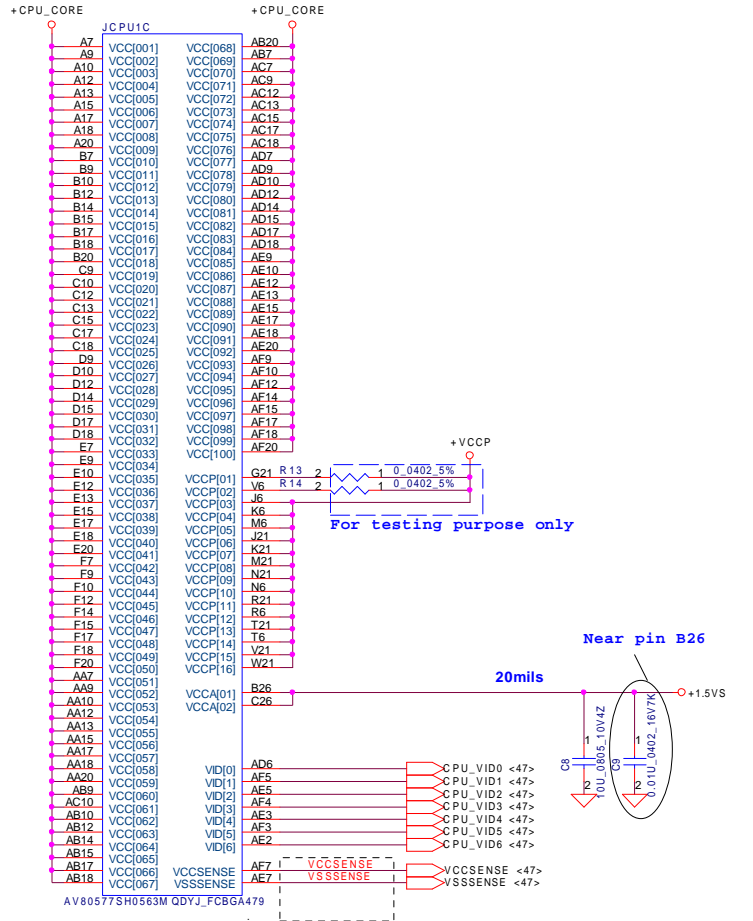
TRACE CLOSELY CPU < 0.5"
COMP0, COMP2 layout : Width 18mils and Space 25mils (27.4Ohms)
COMP1, COMP3 layout : Width 5mils and Space 25mils (550hms)

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

FSB	BCLK	BSEL2	BSEL1	BSEL0
533	133	0	0	1
667	166	0	1	1
800	200	0	1	0
1067	266	0	0	0

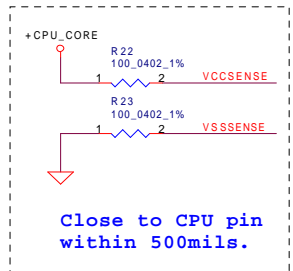


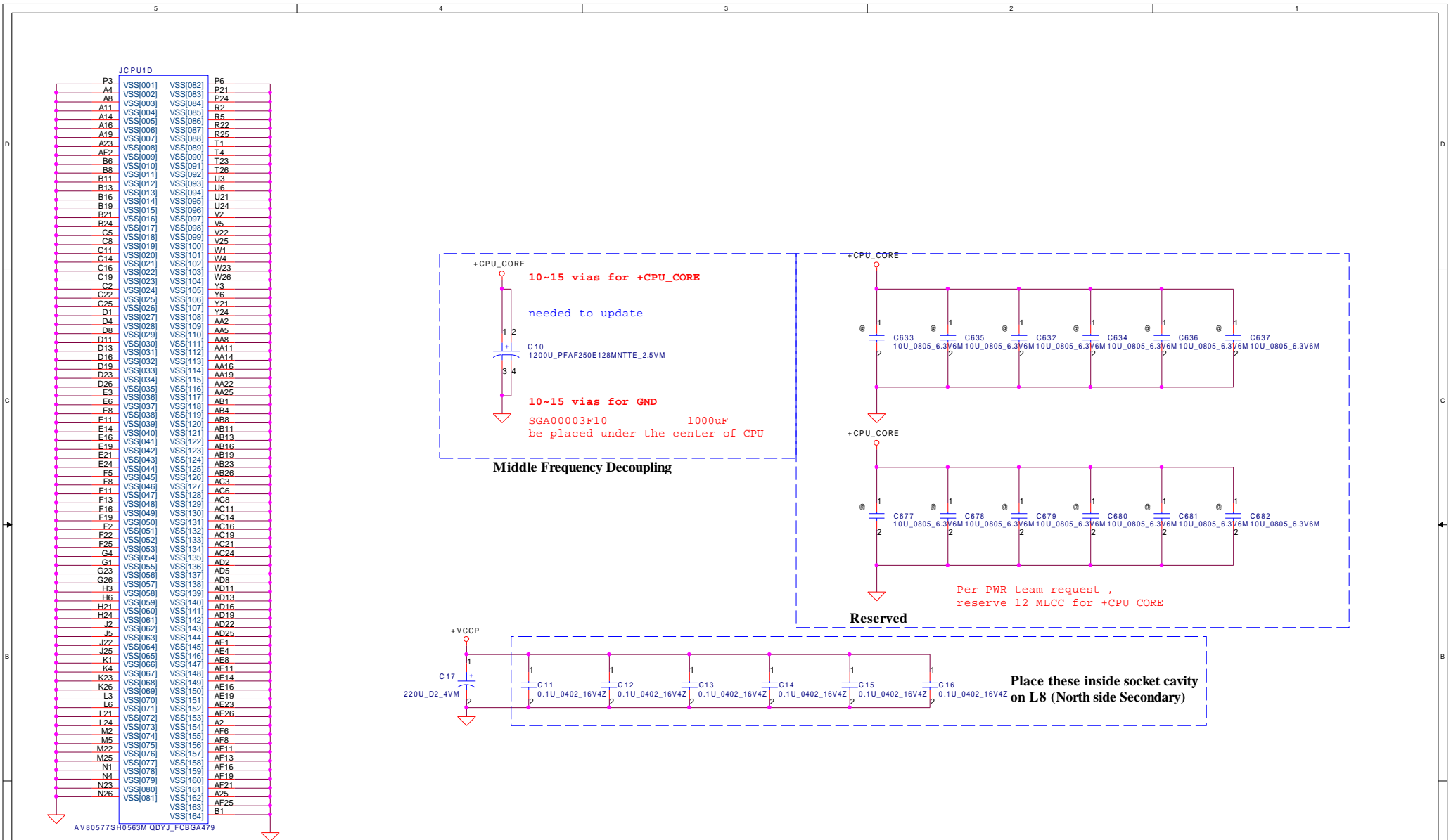
Layout note: Z0=55 ohm
0.5" max for GTLREF.



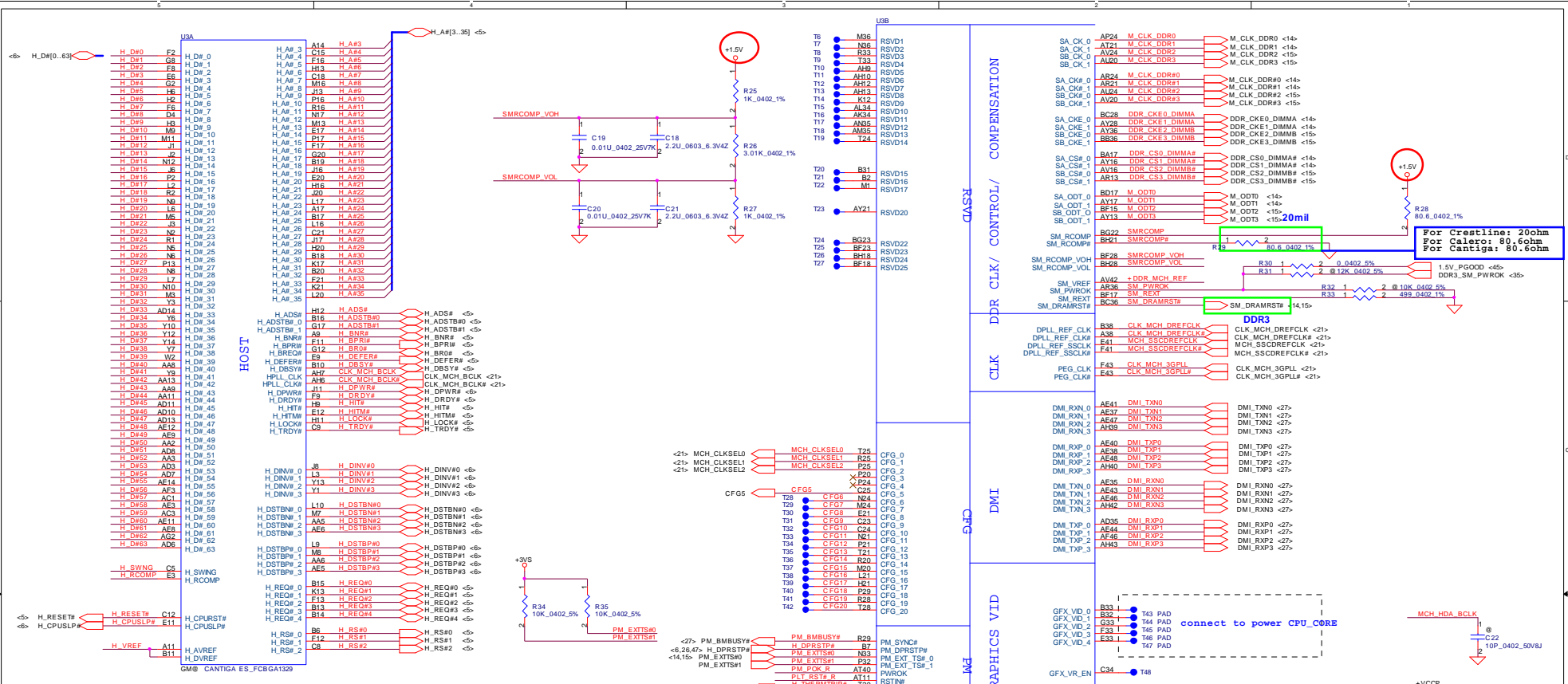
Length match within 25 mils.
The trace width/space/other is 18/7/25.

Layout Note:
Route VCCSENSE and VSSSENSE traces at 27.4 Ohms with 50 mil spacing.
Place PU and PD within 1 inch of CPU.
Length matched to within 25 mils.

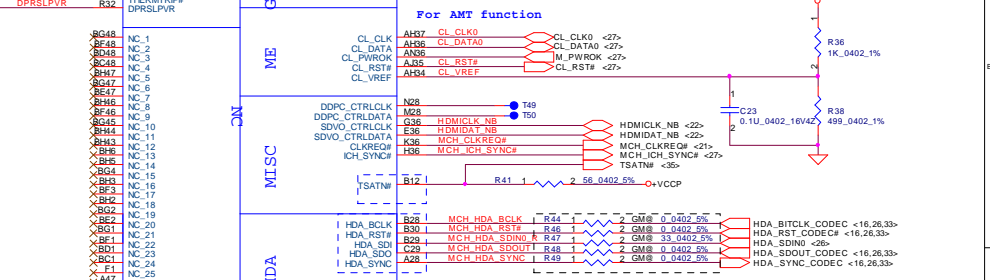
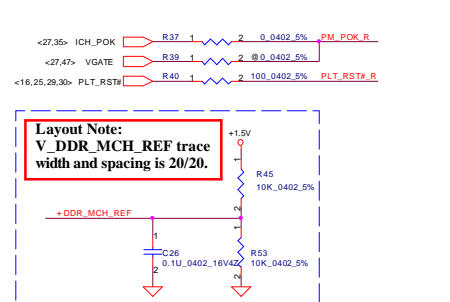
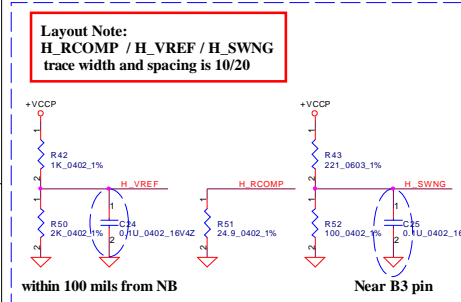




Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2007/10/15	Deciphered Date	2008/10/15	Title
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				Size
Document Number			Rev	
KIWB3/B4_LA455 1P			0.1	
Date:	Friday, June 27, 2008	Sheet	7	of 49



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



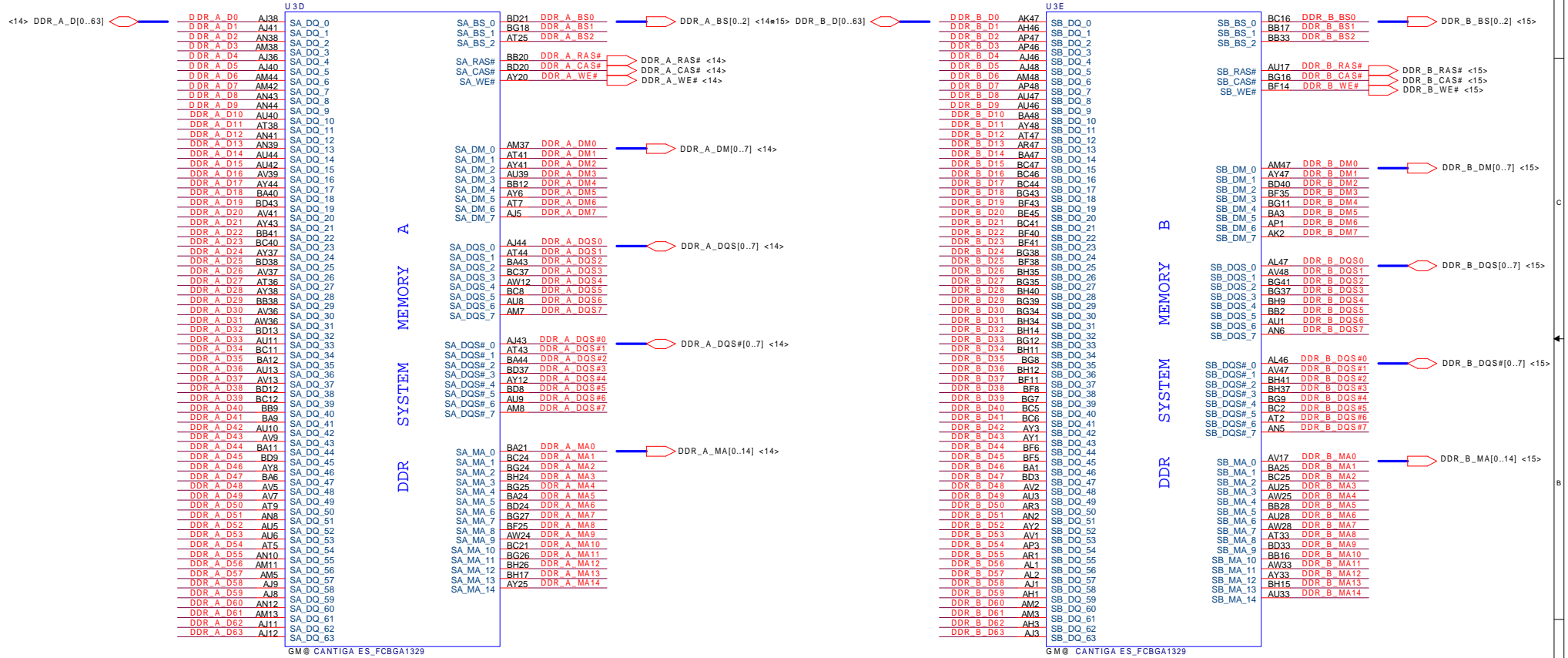
Notice: Please check HDA power rail to select HDA controller.

Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2007/10/15	Deciphered Date	2008/10/15	Title
Document Number	K1WB3/B4_LA4551P		Cantiga GMCH(1/6)-GTL	
Size	8	Sheet	8	Rev
C	1	1	1	0.1
Date:	Friday, June 27, 2008			

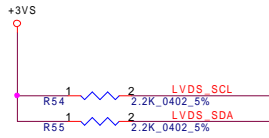
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS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

MEMORY 7-GROUPS

1. Data Bus;
 2. Data Strobe Differential Pairs;
 3. Data Mask Bits;
 4. Address Group;
 5. Bank Select Group;
 6. Command Group;
 7. CLK Group;
- *. Reset Group;

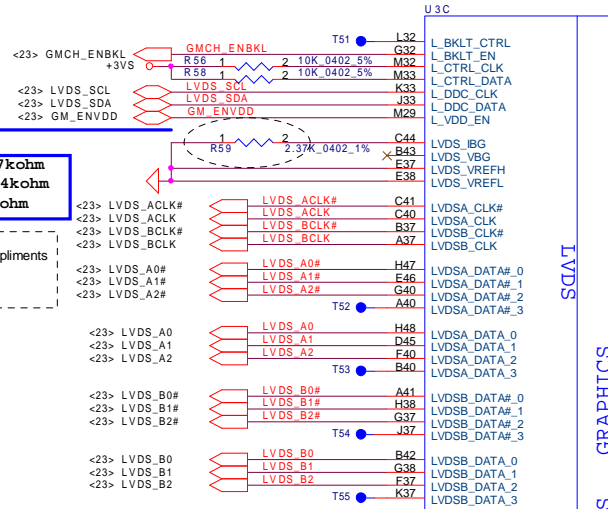


Security Classification		Compal Secret Data		Title	
Issued Date	2007/10/15	Deciphered Date	2008/10/15	Compal Electronics, Inc.	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				Cantiga GMCH (2/6)-DDRII	
Size	B	Document Number	KT1WB3/B4_LA4551P	Rev	0.1
Date:	Friday, June 27, 2008	Sheet	9	of	49

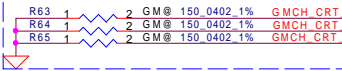


For Cantiga: 2.37kohm
 For Crestline: 2.4kohm
 For Calero: 1.5Kohm

Note: All LVDS data signals and its compliments should be routed Differentially



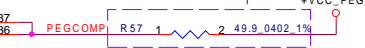
Layout Note: Place 150 Ω termination resistors close to GMCH



change R64,R65 from 33ohm to 30ohm by checklist.2.0 & CRB1.0 05/08/08

For Cantiga: 1.02kohm
 For Crestline: 1.3kohm
 For Calero: 255ohm

Place the resistor within 500mils (1.27mm) of the (G)MCH
 PEGCOMP trace width and spacing is 20/25 mils.



Please check Power source if want support IAMT

Strap Pin Table

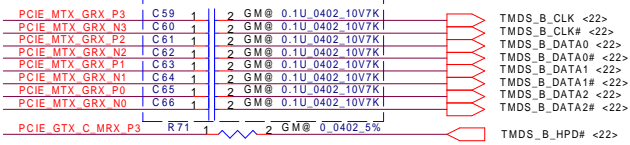
CFG[2:0] FSB Freq select	000 = FSB 1066MHz 010 = FSB 800MHz 011 = FSB 667MHz Others = Reserved
CFG[4:3]	Reserved
CFG5 (DMI select)	0 = DMI x 2 1 = DMI x 4 *
CFG6	0 = The iTPM Host Interface is enable 1 = The iTPM Host Interface is disable *
CFG8	Reserved
CFG9 (PCIe Graphics Lane Reversal)	0 = Reverse 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.

LVDS GRAPHICS

PCI-EXPRESS

VGA

PEG_TX#_0	J41	PCIE MTX GRX N0	C27	1	2	PM@ 0.1U 0402 10V7K	PCIE MTX C GRX N0
PEG_TX#_1	M46	PCIE MTX GRX N1	C28	1	2	PM@ 0.1U 0402 10V7K	PCIE MTX C GRX N1
PEG_TX#_2	M47	PCIE MTX GRX N2	C29	1	2	PM@ 0.1U 0402 10V7K	PCIE MTX C GRX N2
PEG_TX#_3	M40	PCIE MTX GRX N3	C30	1	2	PM@ 0.1U 0402 10V7K	PCIE MTX C GRX N3
PEG_TX#_4	M42	PCIE MTX GRX N4	C31	1	2	PM@ 0.1U 0402 10V7K	PCIE MTX C GRX N4
PEG_TX#_5	R48	PCIE MTX GRX N5	C32	1	2	PM@ 0.1U 0402 10V7K	PCIE MTX C GRX N5
PEG_TX#_6	N38	PCIE MTX GRX N6	C33	1	2	PM@ 0.1U 0402 10V7K	PCIE MTX C GRX N6
PEG_TX#_7	T47	PCIE MTX GRX N7	C34	1	2	PM@ 0.1U 0402 10V7K	PCIE MTX C GRX N7
PEG_TX#_8	U40	PCIE MTX GRX N8	C35	1	2	PM@ 0.1U 0402 10V7K	PCIE MTX C GRX N8
PEG_TX#_9	U40	PCIE MTX GRX N9	C36	1	2	PM@ 0.1U 0402 10V7K	PCIE MTX C GRX N9
PEG_TX#_10	Y40	PCIE MTX GRX N10	C37	1	2	PM@ 0.1U 0402 10V7K	PCIE MTX C GRX N10
PEG_TX#_11	AA46	PCIE MTX GRX N11	C38	1	2	PM@ 0.1U 0402 10V7K	PCIE MTX C GRX N11
PEG_TX#_12	AA40	PCIE MTX GRX N12	C39	1	2	PM@ 0.1U 0402 10V7K	PCIE MTX C GRX N12
PEG_TX#_13	AD43	PCIE MTX GRX N13	C40	1	2	PM@ 0.1U 0402 10V7K	PCIE MTX C GRX N13
PEG_TX#_14	AD43	PCIE MTX GRX N14	C41	1	2	PM@ 0.1U 0402 10V7K	PCIE MTX C GRX N14
PEG_TX#_15	AD46	PCIE MTX GRX N15	C42	1	2	PM@ 0.1U 0402 10V7K	PCIE MTX C GRX N15
PEG_TX_0	J42	PCIE MTX GRX P0	C43	1	2	PM@ 0.1U 0402 10V7K	PCIE MTX C GRX P0
PEG_TX_1	L46	PCIE MTX GRX P1	C44	1	2	PM@ 0.1U 0402 10V7K	PCIE MTX C GRX P1
PEG_TX_2	M48	PCIE MTX GRX P2	C45	1	2	PM@ 0.1U 0402 10V7K	PCIE MTX C GRX P2
PEG_TX_3	M39	PCIE MTX GRX P3	C46	1	2	PM@ 0.1U 0402 10V7K	PCIE MTX C GRX P3
PEG_TX_4	M43	PCIE MTX GRX P4	C47	1	2	PM@ 0.1U 0402 10V7K	PCIE MTX C GRX P4
PEG_TX_5	R47	PCIE MTX GRX P5	C48	1	2	PM@ 0.1U 0402 10V7K	PCIE MTX C GRX P5
PEG_TX_6	N37	PCIE MTX GRX P6	C49	1	2	PM@ 0.1U 0402 10V7K	PCIE MTX C GRX P6
PEG_TX_7	T39	PCIE MTX GRX P7	C50	1	2	PM@ 0.1U 0402 10V7K	PCIE MTX C GRX P7
PEG_TX_8	U36	PCIE MTX GRX P8	C51	1	2	PM@ 0.1U 0402 10V7K	PCIE MTX C GRX P8
PEG_TX_9	U39	PCIE MTX GRX P9	C52	1	2	PM@ 0.1U 0402 10V7K	PCIE MTX C GRX P9
PEG_TX_10	Y39	PCIE MTX GRX P10	C53	1	2	PM@ 0.1U 0402 10V7K	PCIE MTX C GRX P10
PEG_TX_11	Y46	PCIE MTX GRX P11	C54	1	2	PM@ 0.1U 0402 10V7K	PCIE MTX C GRX P11
PEG_TX_12	AA36	PCIE MTX GRX P12	C55	1	2	PM@ 0.1U 0402 10V7K	PCIE MTX C GRX P12
PEG_TX_13	AA39	PCIE MTX GRX P13	C56	1	2	PM@ 0.1U 0402 10V7K	PCIE MTX C GRX P13
PEG_TX_14	AD42	PCIE MTX GRX P14	C57	1	2	PM@ 0.1U 0402 10V7K	PCIE MTX C GRX P14
PEG_TX_15	AD46	PCIE MTX GRX P15	C58	1	2	PM@ 0.1U 0402 10V7K	PCIE MTX C GRX P15



Security Classification	Compal Secret Data	
Issued Date	2008/03/25	Deciphered Date
		2008/04/

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.

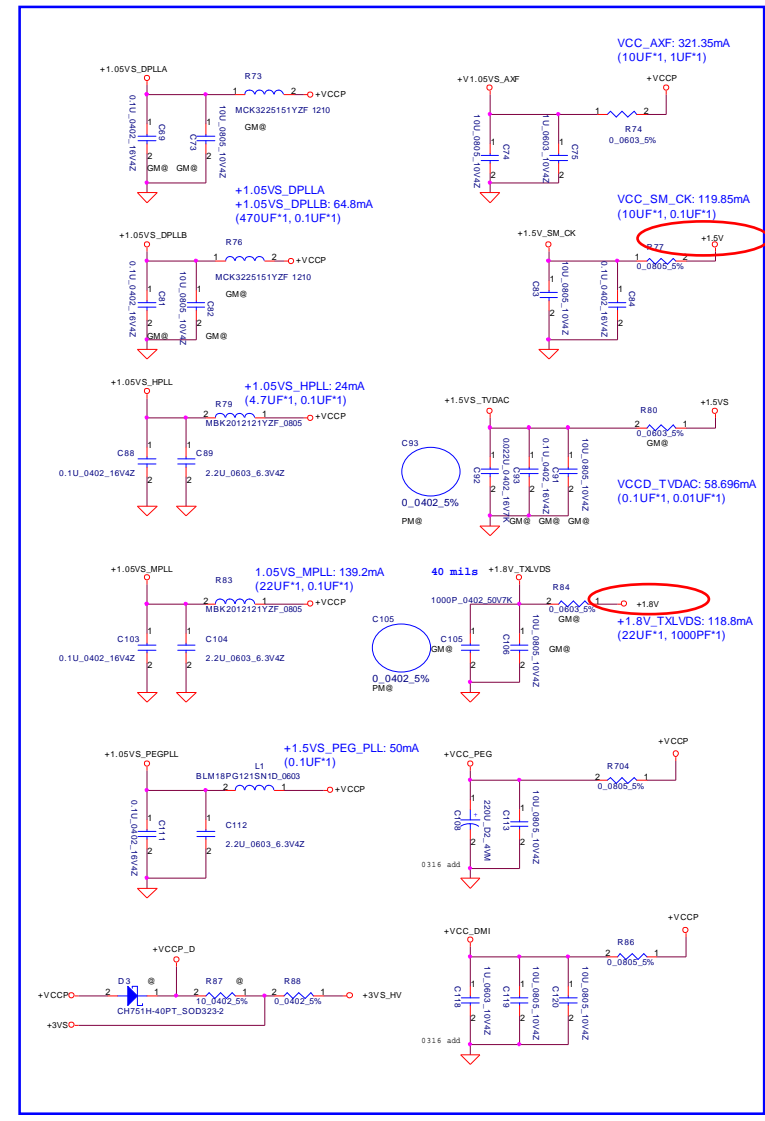
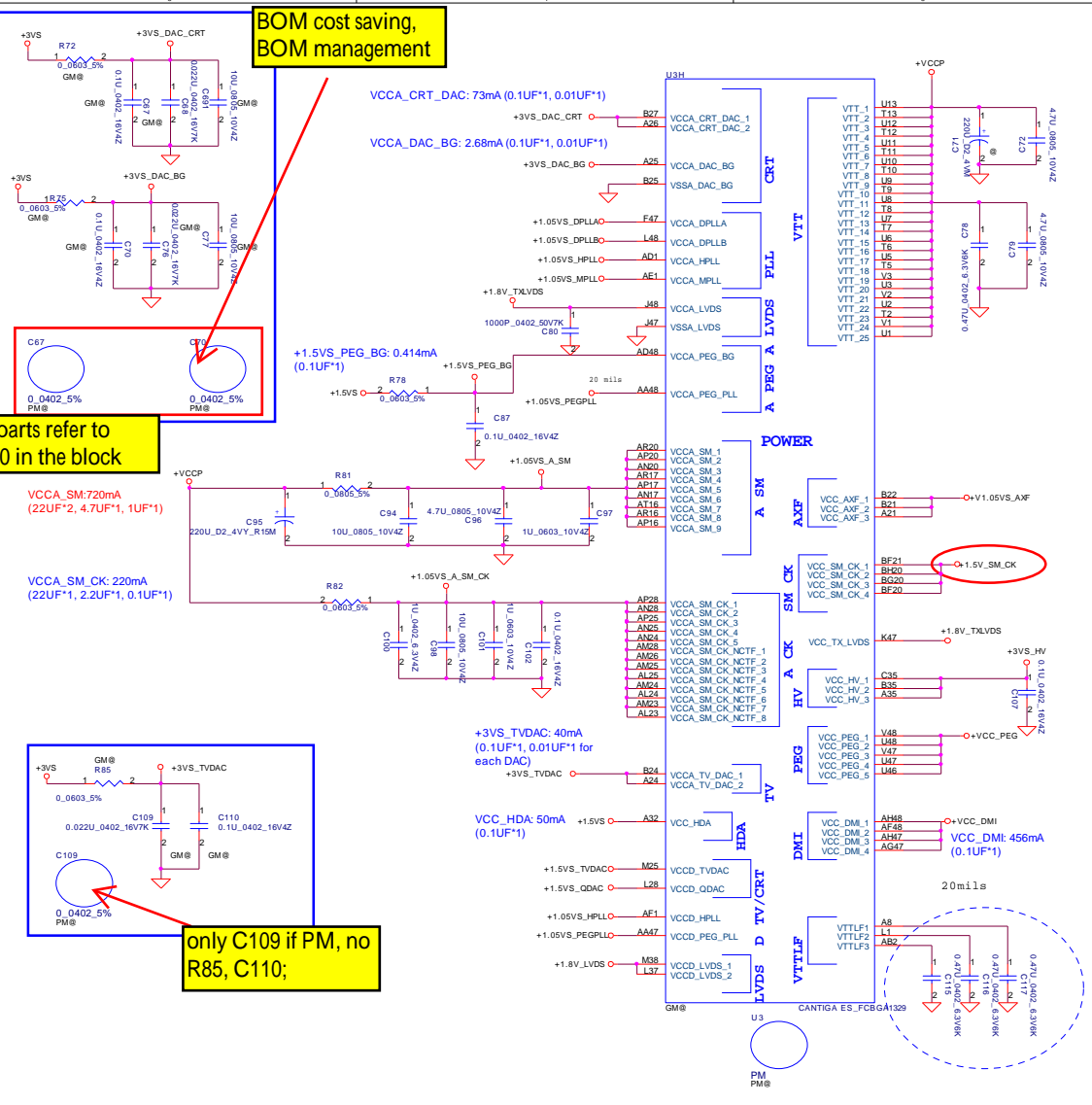
Compal Electronics, Ltd.	
Title Cantiga(3/6)-VGA/LVDS/TV	
Size	Document Number
Customer	KIWB3/B4_LA4551P
Date	Friday, June 27, 2008
Sheet	10 of 49

**BOM cost saving,
BOM management**

**the two parts refer to
C67, C70 in the block**

**only C109 if PM, no
R85, C110;**

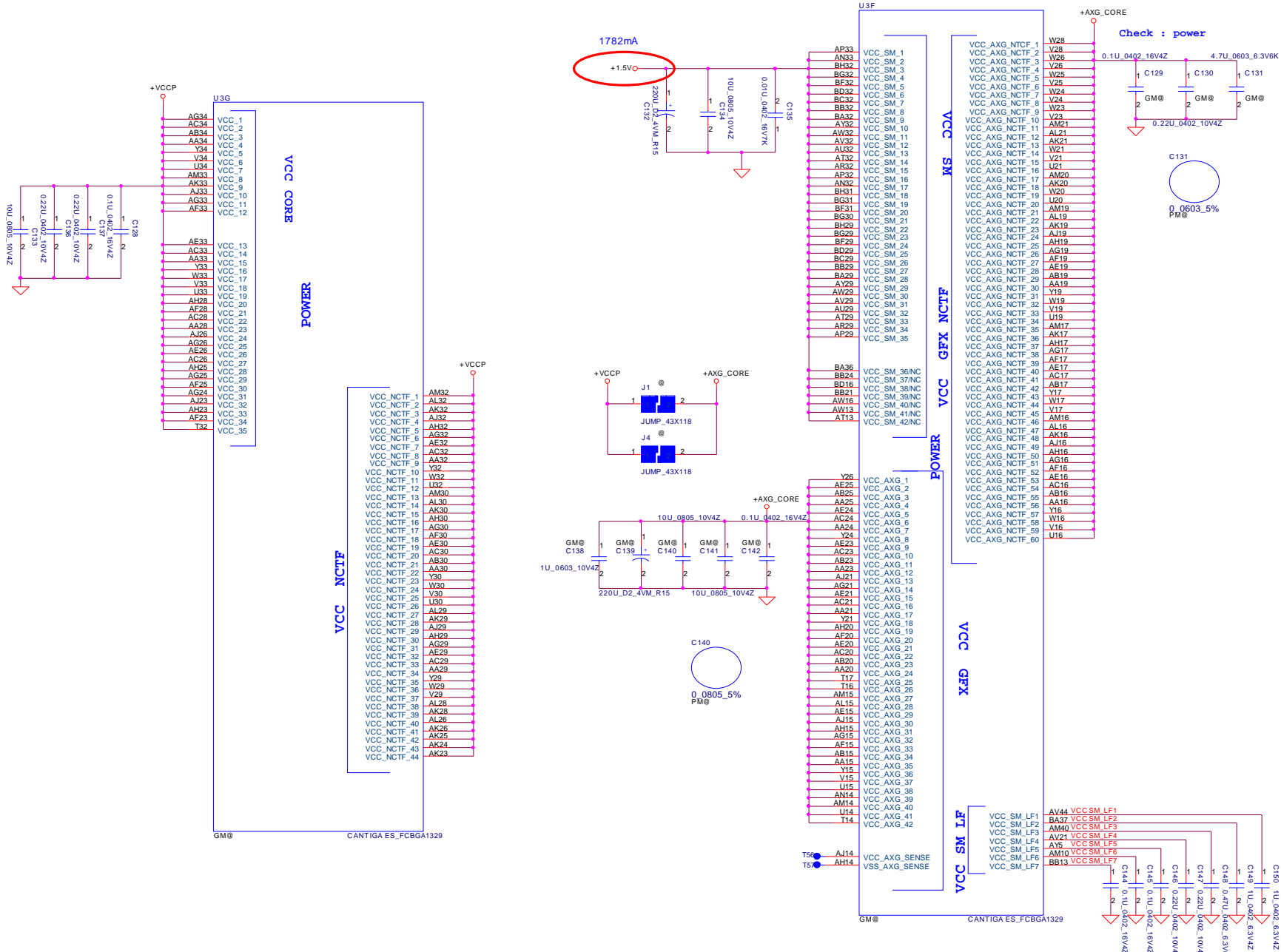
**value of bypass cap. depends on the
maximum switching current and
impedance of the trace;**



Security Classification	Compal Secret Data		Title	
Issued Date	2007/10/15	Deciphered Date	2008/10/15	Custom
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Rev 0.1
Date	Friday, June 27, 2008	Sheet	11	of 49

Compal Electronics, Inc.
Crestline GMCH (4/6)-VCC

Document Number: **KIWB3/B4_LA4551P**



Security Classification	Compal Secret Data		
Issued Date	2007/10/15	Deciphered Date	2008/10/15
<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>			

Compal Electronics, Inc. Crestline GMCH (S/6)-VCC	
Title	Document Number
	KIWB3/B4_LA451P
Size	R ev
Cust om	0.1
Date:	Friday, June 27, 2008
Sheet	12 of 49

U31		U33	
AL48	VSS_1	AM36	VSS_100
AR48	VSS_2	AE36	VSS_101
AL48	VSS_3	P36	VSS_102
BB47	VSS_4	L36	VSS_103
AW47	VSS_5	AF21	VSS_104
AN47	VSS_6	F36	VSS_105
AJ47	VSS_7	B36	VSS_106
AF47	VSS_8	AH55	VSS_107
AD47	VSS_9	AA35	VSS_108
AB47	VSS_10	Y35	VSS_109
Y47	VSS_11	U35	VSS_110
T47	VSS_12	T35	VSS_111
N47	VSS_13	BF34	VSS_112
L47	VSS_14	AM34	VSS_113
G47	VSS_15	BA30	VSS_114
BD46	VSS_16	AF34	VSS_115
BA46	VSS_17	AE34	VSS_116
AY46	VSS_18	W34	VSS_117
AV46	VSS_19	B34	VSS_118
AR46	VSS_20	A34	VSS_119
AM46	VSS_21	BC33	VSS_120
Y46	VSS_22	K20	VSS_121
R46	VSS_23	F20	VSS_122
Pa6	VSS_24	AV33	VSS_123
H46	VSS_25	AR33	VSS_124
F46	VSS_26	AL33	VSS_125
BF44	VSS_27	AH33	VSS_126
AH44	VSS_28	AB33	VSS_127
AD44	VSS_29	BC33	VSS_128
AA44	VSS_30	L33	VSS_129
Y44	VSS_31	H33	VSS_130
U44	VSS_32	N32	VSS_131
T44	VSS_33	K32	VSS_132
M44	VSS_34	F32	VSS_133
F44	VSS_35	C32	VSS_134
BC43	VSS_36	A31	VSS_135
AV43	VSS_37	AN29	VSS_136
AU43	VSS_38	T29	VSS_137
AM43	VSS_39	LN29	VSS_138
K43	VSS_40	K29	VSS_139
C43	VSS_41	N16	VSS_140
BG42	VSS_42	H29	VSS_141
AY42	VSS_43	F29	VSS_142
AT42	VSS_44	G16	VSS_143
AN42	VSS_45	E16	VSS_144
AJ42	VSS_46	BG28	VSS_145
AE42	VSS_47	BD28	VSS_146
N42	VSS_48	W15	VSS_147
L42	VSS_49	AT28	VSS_148
BD41	VSS_50	AR28	VSS_149
AU41	VSS_51	AJ44	VSS_150
AM41	VSS_52	C14	VSS_151
AH41	VSS_53	AE28	VSS_152
AD41	VSS_54	AB28	VSS_153
AA41	VSS_55	Y28	VSS_154
Y41	VSS_56	P28	VSS_155
U41	VSS_57	K28	VSS_156
T41	VSS_58	H28	VSS_157
M41	VSS_59	F28	VSS_158
G41	VSS_60	C28	VSS_159
B41	VSS_61	N13	VSS_160
BG40	VSS_62	L13	VSS_161
BB40	VSS_63	AF26	VSS_162
AV40	VSS_64	AH26	VSS_163
AN40	VSS_65	AB26	VSS_164
H40	VSS_66	AF12	VSS_165
E40	VSS_67	AV12	VSS_166
AT39	VSS_68	AT12	VSS_167
AM39	VSS_69	AM12	VSS_168
AJ39	VSS_70	J12	VSS_169
AE39	VSS_71	A12	VSS_170
N39	VSS_72	BD11	VSS_171
L39	VSS_73	BB11	VSS_172
B39	VSS_74	AY11	VSS_173
BH38	VSS_75	AN11	VSS_174
BC38	VSS_76	AH11	VSS_175
BA38	VSS_77	Y11	VSS_176
AU38	VSS_78	N11	VSS_177
AH38	VSS_79	G11	VSS_178
AD38	VSS_80	C11	VSS_179
AA38	VSS_81	BF24	VSS_180
Y38	VSS_82	AD12	VSS_181
U38	VSS_83	AV10	VSS_182
T38	VSS_84	AT24	VSS_183
J38	VSS_85	AJ24	VSS_184
F38	VSS_86	AH24	VSS_185
C38	VSS_87	AF24	VSS_186
BE37	VSS_88	M10	VSS_187
BB37	VSS_89	BF9	VSS_188
AW37	VSS_90	L24	VSS_189
AT37	VSS_91	AN9	VSS_190
AN37	VSS_92	AM9	VSS_191
AJ37	VSS_93	Q24	VSS_192
H37	VSS_94	G9	VSS_193
C37	VSS_95	B9	VSS_194
BE36	VSS_96	BH9	VSS_195
BD36	VSS_97	BB9	VSS_196
AK15	VSS_98	Y23	VSS_197
AU36	VSS_99	B23	VSS_198
		A23	VSS_199
		A16	VSS_199

GM® CANTIGA ES_FCBGA1329

U31		U33	
AL48	VSS_1	AM36	VSS_100
AR48	VSS_2	AE36	VSS_101
AL48	VSS_3	P36	VSS_102
BB47	VSS_4	L36	VSS_103
AW47	VSS_5	AF21	VSS_104
AN47	VSS_6	F36	VSS_105
AJ47	VSS_7	B36	VSS_106
AF47	VSS_8	AH55	VSS_107
AD47	VSS_9	AA35	VSS_108
AB47	VSS_10	Y35	VSS_109
Y47	VSS_11	U35	VSS_110
T47	VSS_12	T35	VSS_111
N47	VSS_13	BF34	VSS_112
L47	VSS_14	AM34	VSS_113
G47	VSS_15	BA30	VSS_114
BD46	VSS_16	AF34	VSS_115
BA46	VSS_17	AE34	VSS_116
AY46	VSS_18	W34	VSS_117
AV46	VSS_19	B34	VSS_118
AR46	VSS_20	A34	VSS_119
AM46	VSS_21	BC33	VSS_120
Y46	VSS_22	K20	VSS_121
R46	VSS_23	F20	VSS_122
Pa6	VSS_24	AV33	VSS_123
H46	VSS_25	AR33	VSS_124
F46	VSS_26	AL33	VSS_125
BF44	VSS_27	AH33	VSS_126
AH44	VSS_28	AB33	VSS_127
AD44	VSS_29	BC33	VSS_128
AA44	VSS_30	L33	VSS_129
Y44	VSS_31	H33	VSS_130
U44	VSS_32	N32	VSS_131
T44	VSS_33	K32	VSS_132
M44	VSS_34	F32	VSS_133
F44	VSS_35	C32	VSS_134
BC43	VSS_36	A31	VSS_135
AV43	VSS_37	AN29	VSS_136
AU43	VSS_38	T29	VSS_137
AM43	VSS_39	LN29	VSS_138
K43	VSS_40	K29	VSS_139
C43	VSS_41	N16	VSS_140
BG42	VSS_42	H29	VSS_141
AY42	VSS_43	F29	VSS_142
AT42	VSS_44	G16	VSS_143
AN42	VSS_45	E16	VSS_144
AJ42	VSS_46	BG28	VSS_145
AE42	VSS_47	BD28	VSS_146
N42	VSS_48	W15	VSS_147
L42	VSS_49	AT28	VSS_148
BD41	VSS_50	AR28	VSS_149
AU41	VSS_51	AJ44	VSS_150
AM41	VSS_52	C14	VSS_151
AH41	VSS_53	AE28	VSS_152
AD41	VSS_54	AB28	VSS_153
AA41	VSS_55	Y28	VSS_154
Y41	VSS_56	P28	VSS_155
U41	VSS_57	K28	VSS_156
T41	VSS_58	H28	VSS_157
M41	VSS_59	F28	VSS_158
G41	VSS_60	C28	VSS_159
B41	VSS_61	N13	VSS_160
BG40	VSS_62	L13	VSS_161
BB40	VSS_63	AF26	VSS_162
AV40	VSS_64	AH26	VSS_163
AN40	VSS_65	AB26	VSS_164
H40	VSS_66	AF12	VSS_165
E40	VSS_67	AV12	VSS_166
AT39	VSS_68	AT12	VSS_167
AM39	VSS_69	AM12	VSS_168
AJ39	VSS_70	J12	VSS_169
AE39	VSS_71	A12	VSS_170
N39	VSS_72	BD11	VSS_171
L39	VSS_73	BB11	VSS_172
B39	VSS_74	AY11	VSS_173
BH38	VSS_75	AN11	VSS_174
BC38	VSS_76	AH11	VSS_175
BA38	VSS_77	Y11	VSS_176
AU38	VSS_78	N11	VSS_177
AH38	VSS_79	G11	VSS_178
AD38	VSS_80	C11	VSS_179
AA38	VSS_81	BF24	VSS_180
Y38	VSS_82	AD12	VSS_181
U38	VSS_83	AV10	VSS_182
T38	VSS_84	AT24	VSS_183
J38	VSS_85	AJ24	VSS_184
F38	VSS_86	AH24	VSS_185
C38	VSS_87	AF24	VSS_186
BE37	VSS_88	M10	VSS_187
BB37	VSS_89	BF9	VSS_188
AW37	VSS_90	L24	VSS_189
AT37	VSS_91	AN9	VSS_190
AN37	VSS_92	AM9	VSS_191
AJ37	VSS_93	Q24	VSS_192
H37	VSS_94	G9	VSS_193
C37	VSS_95	B9	VSS_194
BE36	VSS_96	BH9	VSS_195
BD36	VSS_97	BB9	VSS_196
AK15	VSS_98	Y23	VSS_197
AU36	VSS_99	B23	VSS_198
		A23	VSS_199
		A16	VSS_199

GM® CANTIGA ES_FCBGA1329

VSS

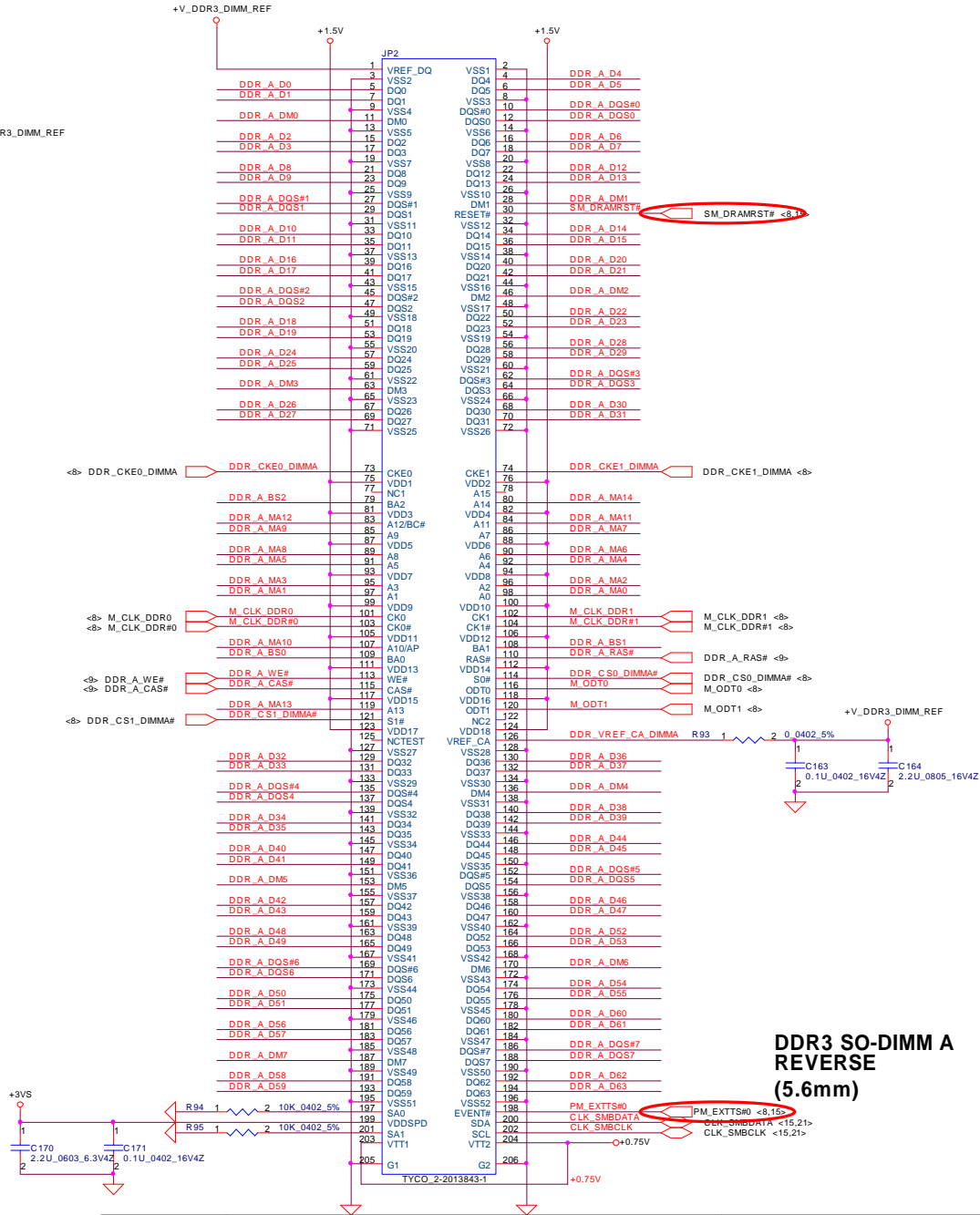
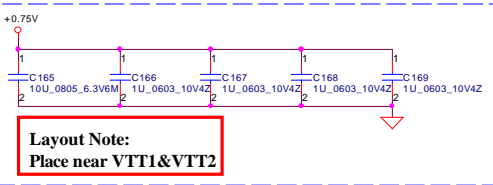
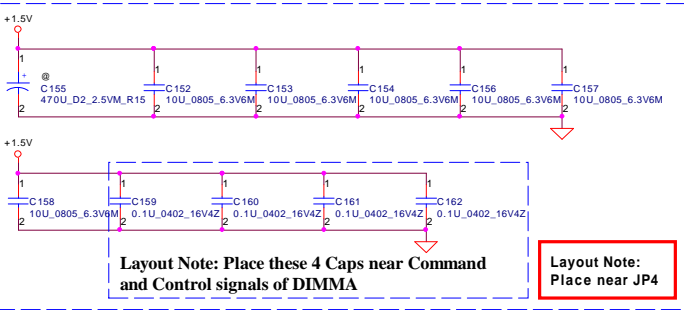
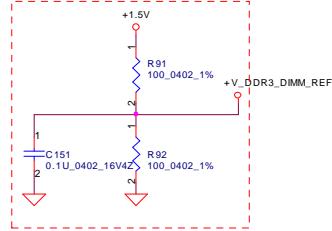
VSS NCTF

VSS SCB

NC

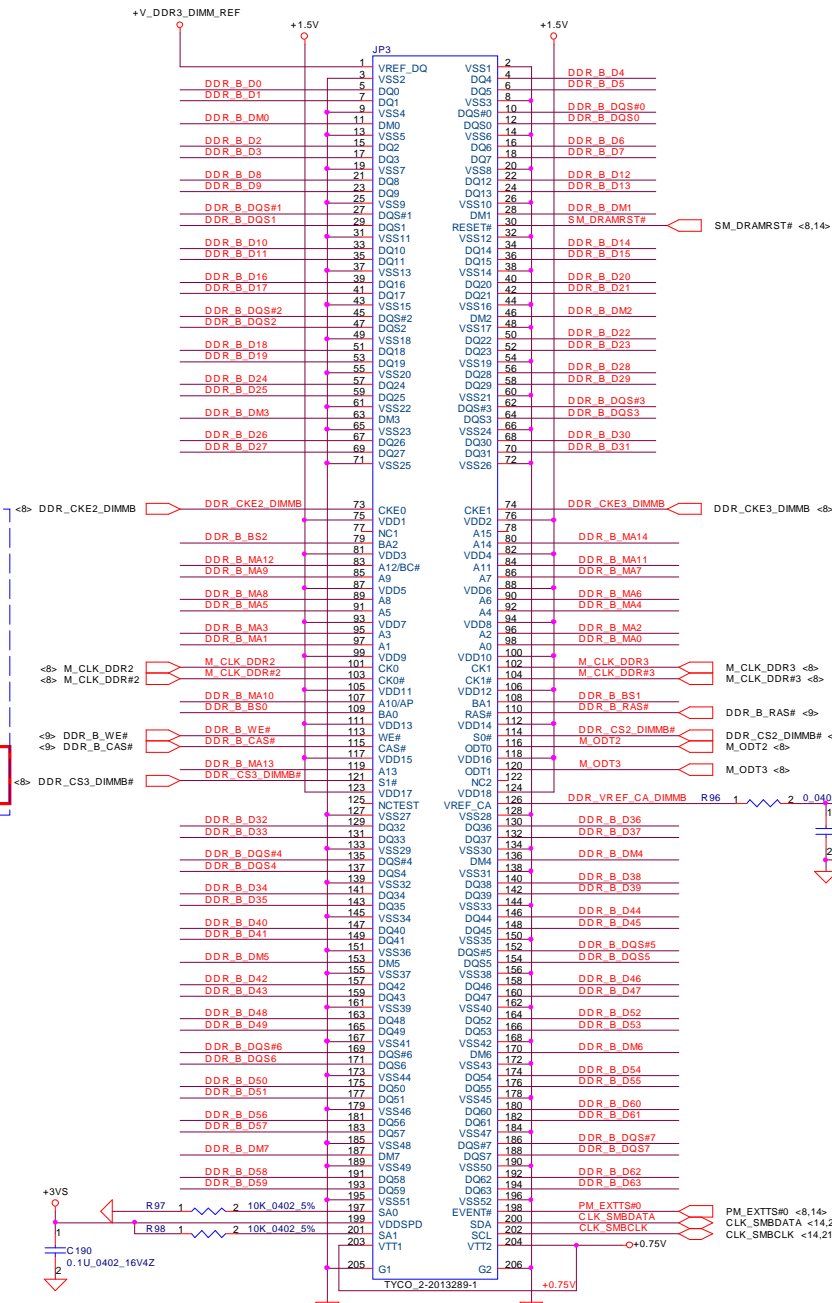
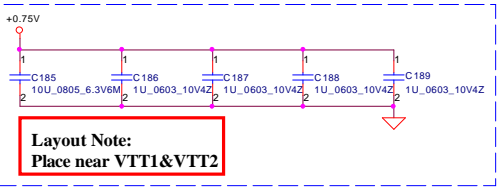
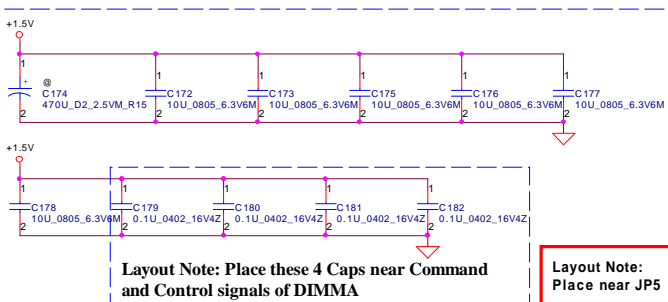
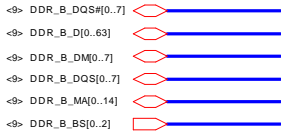
VSS_199	VSS_297	AH8
VSS_200	VSS_298	Y8
VSS_201	VSS_299	L8
VSS_202	VSS_300	ER
VSS_203	VSS_301	BR
VSS_204	VSS_302	AY7
VSS_205	VSS_303	AN7
VSS_206	VSS_304	AJ7
VSS_207	VSS_305	AE7
VSS_208	VSS_306	AA7
VSS_209	VSS_307	N7
VSS_210	VSS_308	J7
VSS_211	VSS_309	U7
VSS_212	VSS_310	BG6
VSS_213	VSS_311	BD6
VSS_214	VSS_312	AV6
VSS_215	VSS_313	AT6
VSS_216	VSS_314	AM6
VSS_217	VSS_315	M6
VSS_218	VSS_316	C6
VSS_219	VSS_317	BA5
VSS_220	VSS_318	AH5
VSS_221	VSS_319	AD5
VSS_222	VSS_320	Y5
VSS_223	VSS_321	U5
VSS_224	VSS_322	L5
VSS_225	VSS_323	ER
VSS_226	VSS_324	BR
VSS_227	VSS_325	AY7
VSS_228	VSS_326	AN7
VSS_229	VSS_327	AJ7
VSS_230	VSS_328	AE7
VSS_231	VSS_329	AA7
VSS_232	VSS_330	N7
VSS_233	VSS_331	J7
VSS_234	VSS_332	U7
VSS_235	VSS_333	BG6
VSS_236	VSS_334	BD6
VSS_237	VSS_335	AV6
VSS_238	VSS_336	AT6
VSS_239	VSS_337	AM6
VSS_240	VSS_338	M6
VSS_241	VSS_339	C6
VSS_242	VSS_340	BA5
VSS_243	VSS_341	AH5
VSS_244	VSS_342	AD5
VSS_245	VSS_343	Y5
VSS_246	VSS_344	U5
VSS_247	VSS_345	L5
VSS_248	VSS_346	ER
VSS_249	VSS_347	BR
VSS_250	VSS_348	AY7
VSS_251	VSS_349	AN7
VSS_252	VSS_350	AJ7
VSS_253	VSS_351	AE7
VSS_254	VSS_352	AA7
VSS_255	VSS_353	N7
VSS_256	VSS_354	J7
VSS_257	VSS_355	U7
VSS_258	VSS_356	BG6
VSS_259	VSS_357	BD6
VSS_260	VSS_358	AV6
VSS_261	VSS_359	AT6
VSS_262	VSS_360	AM6
VSS_263	VSS_361	M6
VSS_264	VSS_362	C6
VSS_265	VSS_363	BA5
VSS_266	VSS_364	AH5
VSS_267	VSS_365	AD5
VSS_268	VSS_366	Y5
VSS_269	VSS_367	U5
VSS_270	VSS_368	L5
VSS_271	VSS_369	ER
VSS_272	VSS_370	BR
VSS_273	VSS_371	AY7
VSS_274	VSS_372	AN7
VSS_275	VSS_373	AJ7
VSS_276	VSS_374	AE7
VSS_277	VSS_375	AA7
VSS_278	VSS_376	N7
VSS_279	VSS_377	J7
VSS_280	VSS_378	U7
VSS_281	VSS_379	BG6
VSS_282	VSS_380	BD6
VSS_283	VSS_381	AV6
VSS_284	VSS_382	AT6
VSS_285	VSS_383	AM6
VSS_286	VSS_384	M6
VSS_287	VSS_385	C6
VSS_288	VSS_386	BA5
VSS_289	VSS_387	AH5
VSS_290	VSS_388	AD5
VSS_291	VSS_389	Y5
VSS_292	VSS_390	U5
VSS_293	VSS_391	L5
VSS_294	VSS_392	ER
VSS_295	VSS_393	BR
VSS_296	VSS_394	AY7
VSS_297	VSS_395	AN7
VSS_298	VSS_396	AJ7
VSS_299	VSS_397	AE7
VSS_300	VSS_398	AA7
VSS_301	VSS_399	N7
VSS_302	VSS_400	J7
VSS_303	VSS_401	U7
VSS_304	VSS_402	BG6
VSS_305	VSS_403	BD6
VSS_306	VSS_404	AV6
VSS_307	VSS_405	AT6
VSS_308	VSS_406	AM6
VSS_309	VSS_407	M6
VSS_310	VSS_408	C6
VSS_311	VSS_409	BA5
VSS_312	VSS_410	AH5
VSS_313	VSS_411	AD5
VSS_314	VSS_412	Y5
VSS_315	VSS_413	U5
VSS_316	VSS_414	L5
VSS_317	VSS_415	ER
VSS_318	VSS_416	BR
VSS_319	VSS_417	AY7
VSS_320	VSS_418	AN7
VSS_321	VSS_419	AJ7
VSS_322	VSS_420	AE7
VSS_323	VSS_421	AA7
VSS_324	VSS_422	N7
VSS_325	VSS_423	J7
VSS_326	VSS_424	U7

- <9> DDR_A_DQS#0[0..7]
- <9> DDR_A_D0[0..63]
- <9> DDR_A_DM0[0..7]
- <9> DDR_A_DQS[0..7]
- <9> DDR_A_MA[0..14]
- <9> DDR_A_BS[0..2]



**DDR3 SO-DIMM A
REVERSE
(5.6mm)**

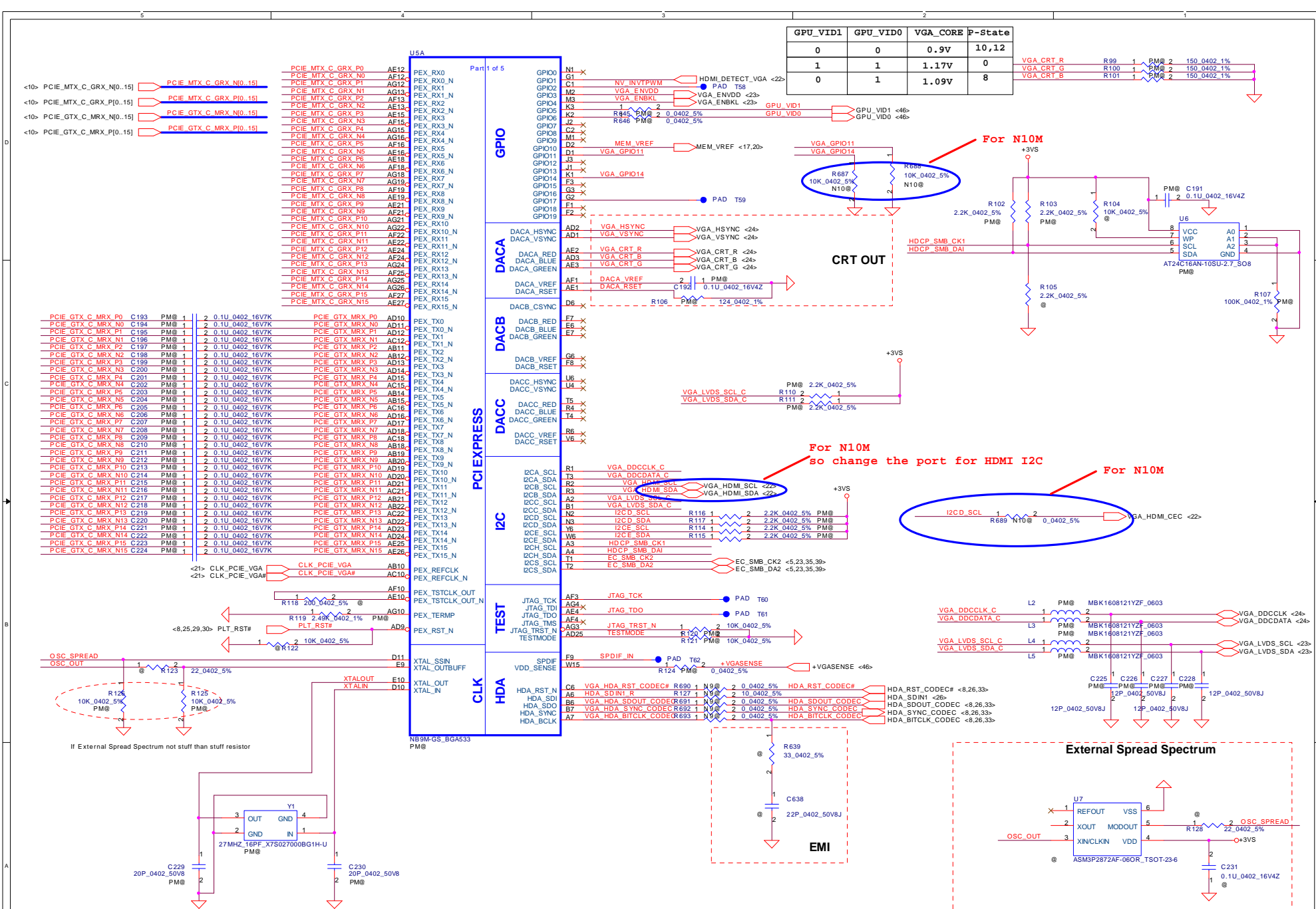
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2007/09/29	Deciphered Date	2007/09/29	Title	DDR3-SODIMM SLOT1
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSMITTED FROM THE CUSTOMER TO ANY OTHER 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	KIWB3/B4_LA4551P	0.1			
Date	Friday, June 27, 2008	Sheet	14	of	49



DDR3 SO-DIMM B STANDARD

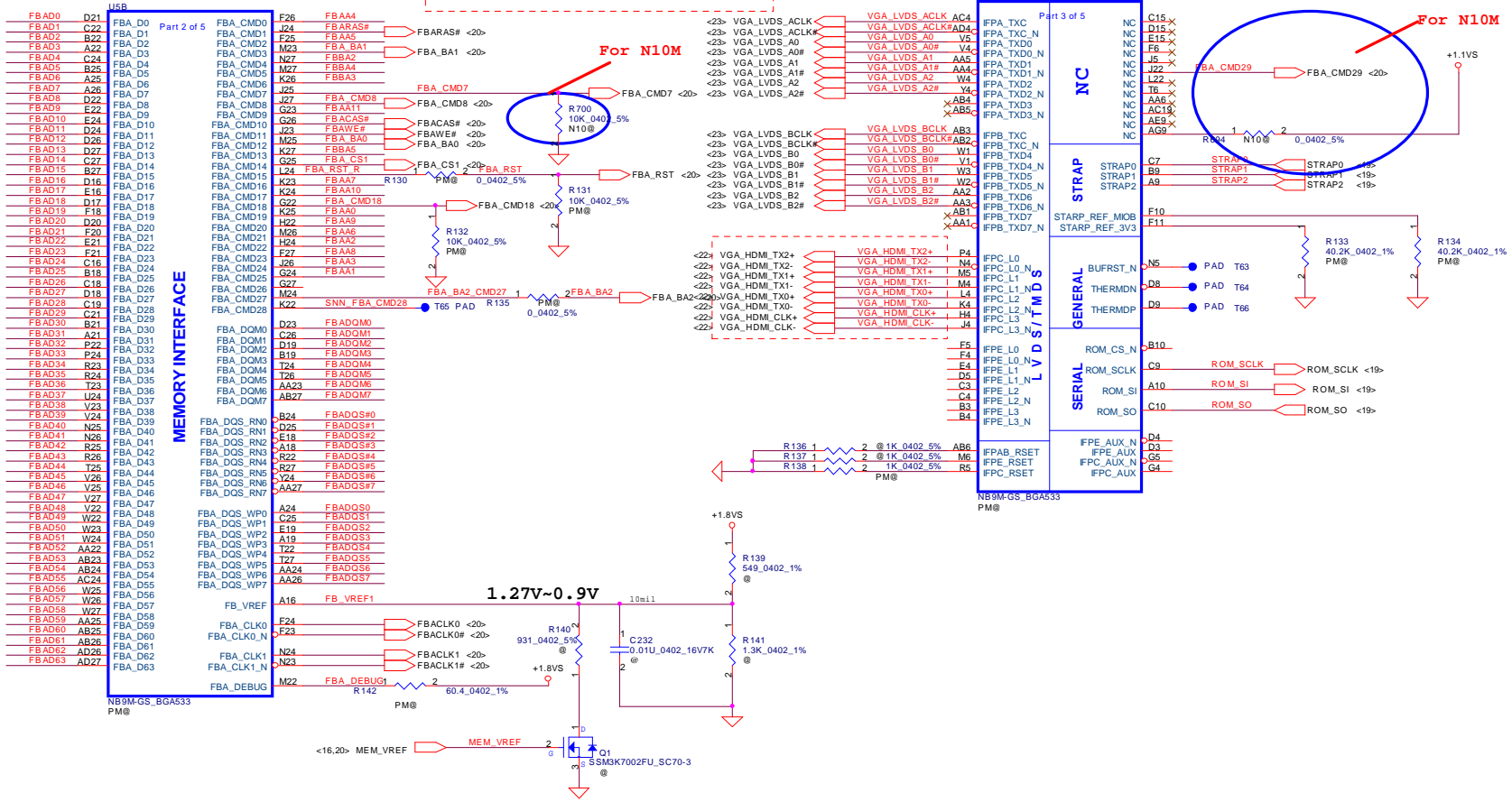
Security Classification		Compal Secret Data		Title	
Issued Date		Deciphered Date		Document Number	
2007/09/29		2007/09/29		KIWB3/B4_LA451P	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY 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: Friday, June 27, 2008	
				Sheet 15 of 49	

Compal Electronics, Inc.
DDR3 SO-DIMM B STANDARD
 Rev 0.1



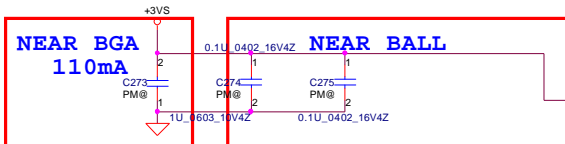
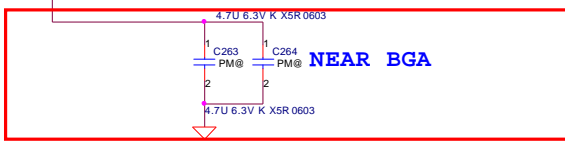
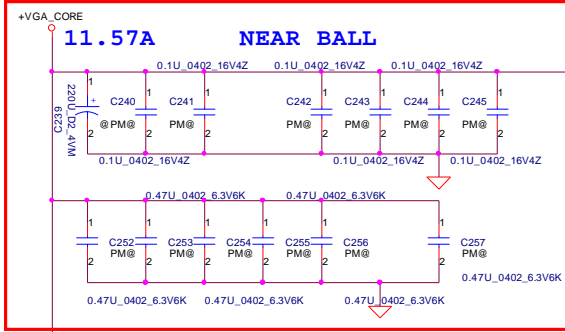
- FBAD[0..63] <20>
- FBA[A0..11] <20>
- FBA[A2..5] <20>
- FBADQM[0..7] <20>
- FBADQS[0..7] <20>
- FBADQS[0..7] <20>

R131 & R132 Pull-down for initialization
CKE & RESET/ODT

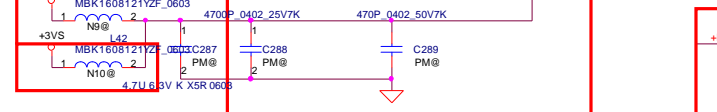
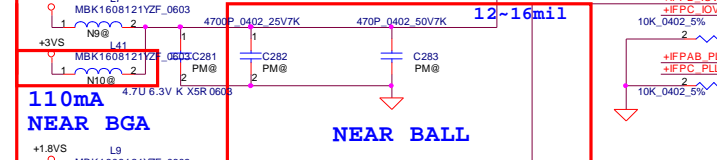


Security Classification		Compal Secret Data		Title Compal Electronics, Inc. NB9M-GS Memory		
Issued Date	2007/10/15	Deciphered Date	2008/10/15			
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET 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.				Size B	Document Number K1WB3/B4_LA-4551P	Rev 0.1
Date:	Friday, June 27, 2008	Sheet	17	of	48	

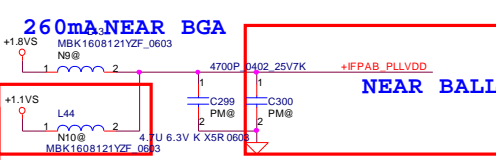
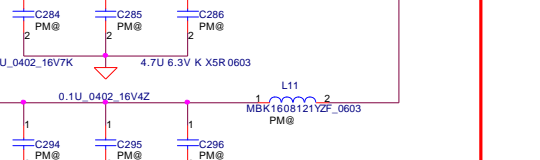
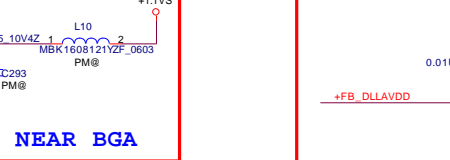
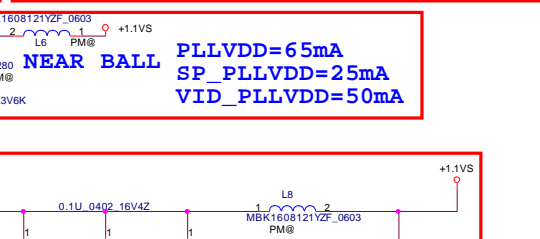
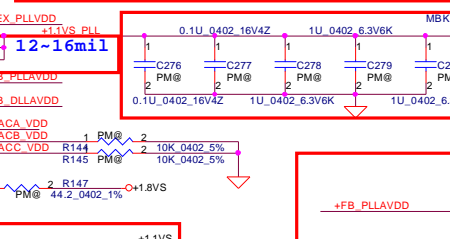
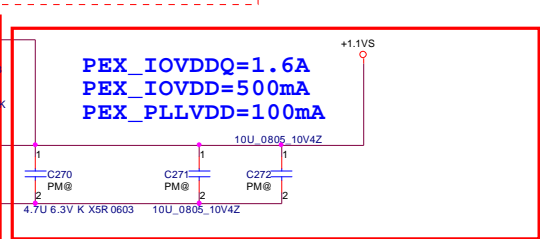
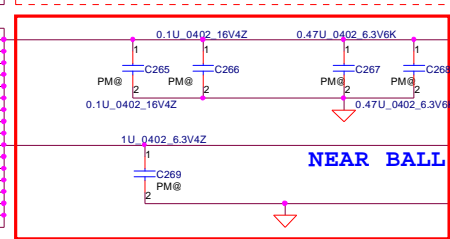
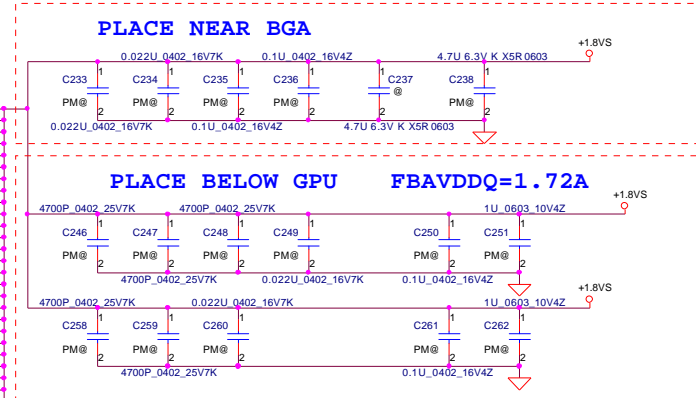
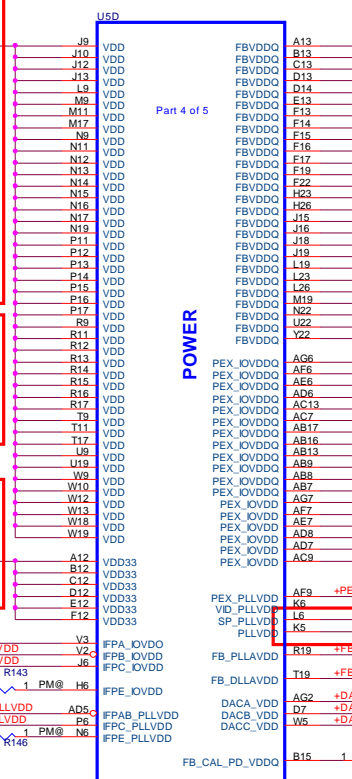
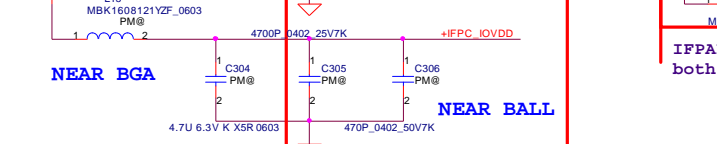
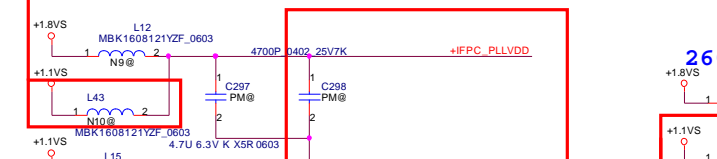
FOR N10M , 1.1VS will changed to 1.05VS



IFPA/B IOVDD: please add option to support both 1.8V(for G9X) and 3.3V(for GT21X)



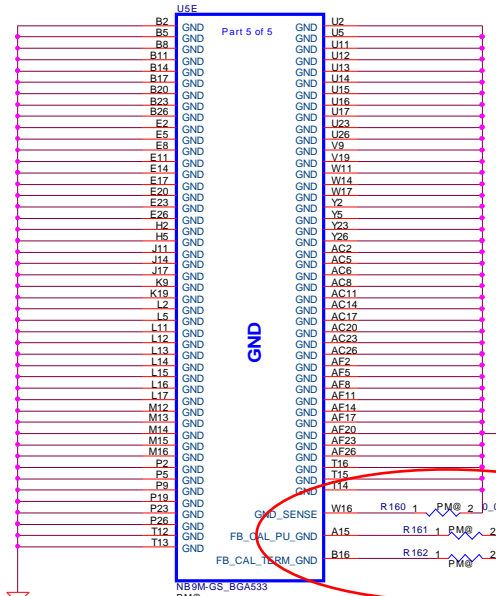
IFPC_PLLVDD: please add option to support both 1.8V (for G9X) and 1.05V(for GT21X)



IFPAB_PLLVDD: please add option to support both 1.8V(for G9X) and 1.05V(for GT21X)

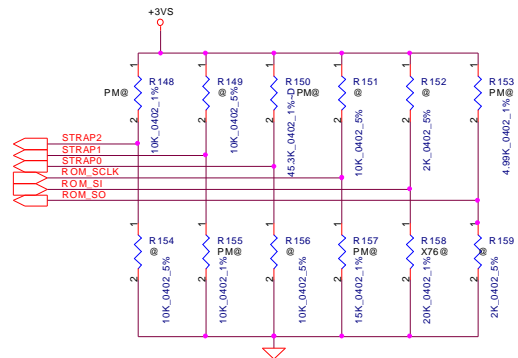
Security Classification	Compal Secret Data		Title	
Issued Date	2007/10/15	Deciphered Date	2008/10/15	Compal Electronics, Inc.
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				NB9M-GS Power KIWB3/B4_LA-455 IP Rev 0.1
Date:	Friday, June 27, 2008	Sheet	1 of 49	

A total of 8 signals are required for GBL strapping this includes
 2 reference signals
 6 physical strapping pins
 4 logical strapping bits
 A total of 24 logical strapping bits are available



Memory/PKG	FBCAL_PU_GND	FBCAL_PD_VDDQ	FBCAL_TERM_GND
DDR2	30.1ohm	30.1ohm	NC
GDDR3	33.2ohm	44.2ohm	40.2ohm

To update for NV PUN-03304-001_V06 (2008/4/01)



GBL Family GPU Strap Options

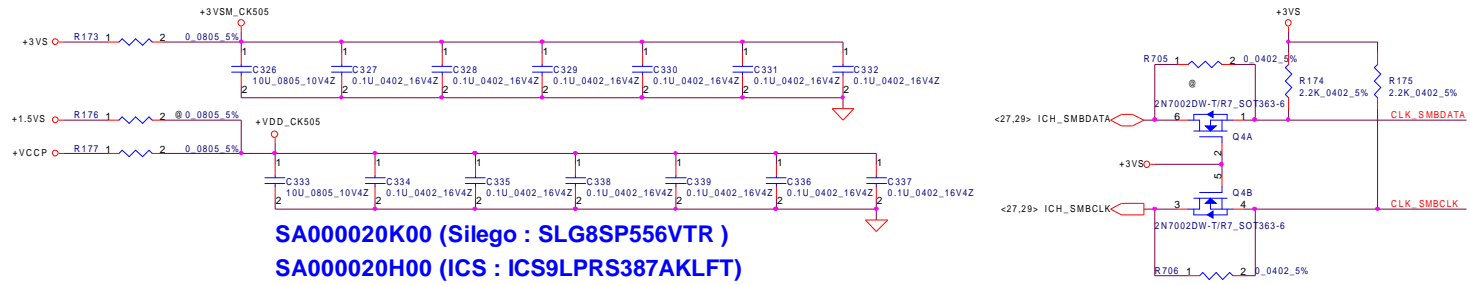
GPU	FB Memory (GDDR3)	ROM_SO	ROM_SCLK	ROM_SI	STRAP2	STRAP1	STRAP0
NB9M-GS (0x06E9)	Samsung 16Mx32	PU 5K	PD 15K	PD 20K	PU 10K	PD 10K	PU 45K
	Samsung 32Mx32	PU 5K	PD 15K	PD 45K	PU 10K	PD 10K	PU 45K
Hynix	16Mx32	PU 5K	PD 15K	PD 15K	PU 10K	PD 10K	PU 45K
	32Mx32	PU 5K	PD 15K	PD 35K	PU 10K	PD 10K	PU 45K
Qimonda	16Mx32	PU 5K	PD 15K	PD 10K	PU 10K	PD 10K	PU 45K
	32Mx32	PU 5K	PD 15K	PD 30K	PU 10K	PD 10K	PU 45K

X76

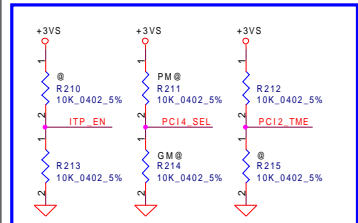
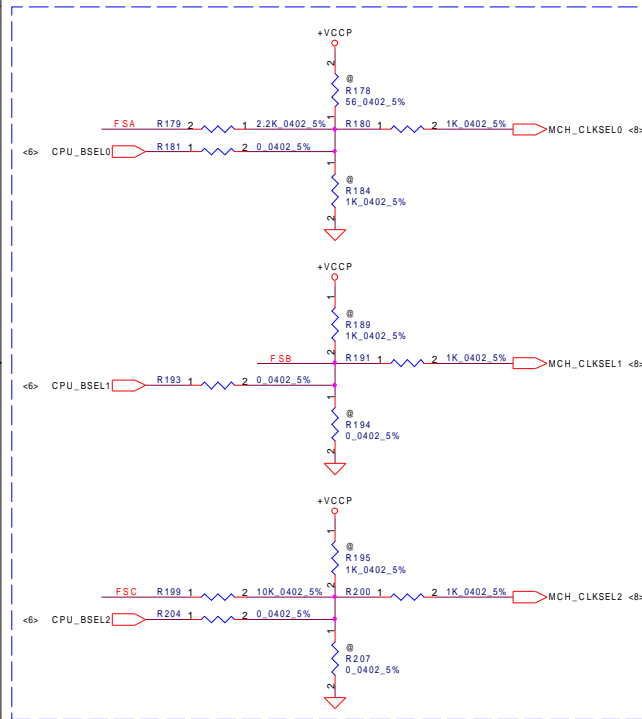
Security Classification	Compal Secret Data	
Issued Date	2007/10/15	Deciphered Date 2008/10/15
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT 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.		

Compal Electronics, Inc.		
NB9M-GE GND & STRAP		
Size B	Document Number KIWB3/B4_LA-451P	Rev 0.1
Date: Friday, June 27, 2008	Sheet 19	of 48

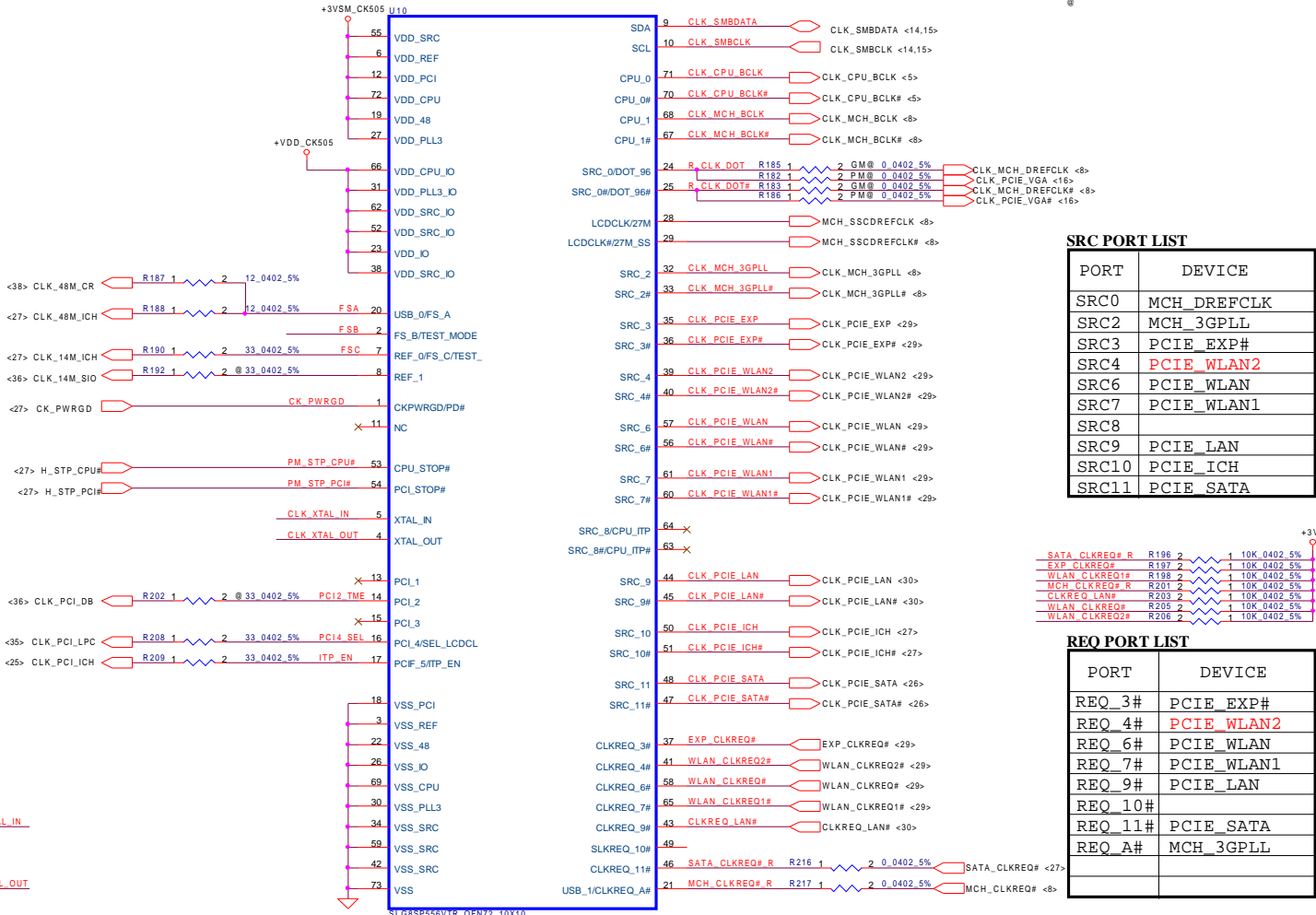
FSC	FSB	FSA	CPU	SRC	PCI	REF	DOT_96	USB	
CLKSEL2	CLKSEL1	CLKSEL0	MHz	MHz	MHz	MHz	MHz	MHz	
0	0	0	266	100	33.3	14.318	96.0	48.0	
0	0	1	133	100	33.3	14.318	96.0	48.0	
0	1	0	200	100	33.3	14.318	96.0	48.0	
0	1	1	166	100	33.3	14.318	96.0	48.0	
1	0	0	333	100	33.3	14.318	96.0	48.0	
1	0	1	100	100	33.3	14.318	96.0	48.0	
1	1	0	400	100	33.3	14.318	96.0	48.0	
1	1	1	Reserved						



SA00020K00 (Silego : SLG8SP556VTR)
SA00020H00 (ICS : ICS9LPRS387AKLFT)



Routing the trace at least 10mil



SRC PORT LIST

PORT	DEVICE
SRC0	MCH_DREFCLK
SRC2	MCH_3GPLL
SRC3	PCIE_EXP#
SRC_3#	PCIE_EXP# <29>
SRC_4	CLK_PCIE_WLAN2
SRC_4#	CLK_PCIE_WLAN2# <29>
SRC_6	CLK_PCIE_WLAN
SRC_6#	CLK_PCIE_WLAN# <29>
SRC_7	CLK_PCIE_WLAN1
SRC_7#	CLK_PCIE_WLAN1# <29>
SRC_9	CLK_PCIE_LAN
SRC_9#	CLK_PCIE_LAN# <30>
SRC_10	CLK_PCIE_ICH
SRC_10#	CLK_PCIE_ICH# <27>
SRC_11	CLK_PCIE_SATA
SRC_11#	CLK_PCIE_SATA# <26>

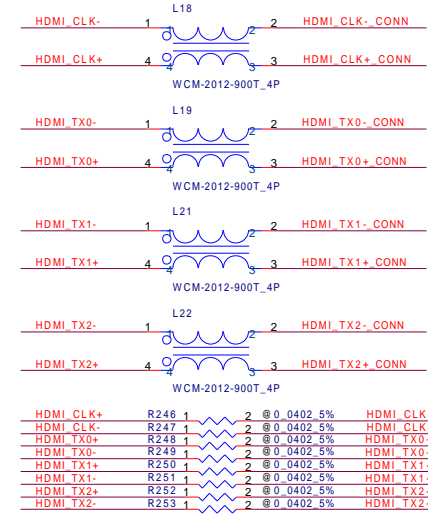
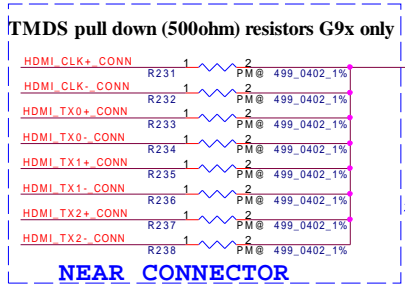
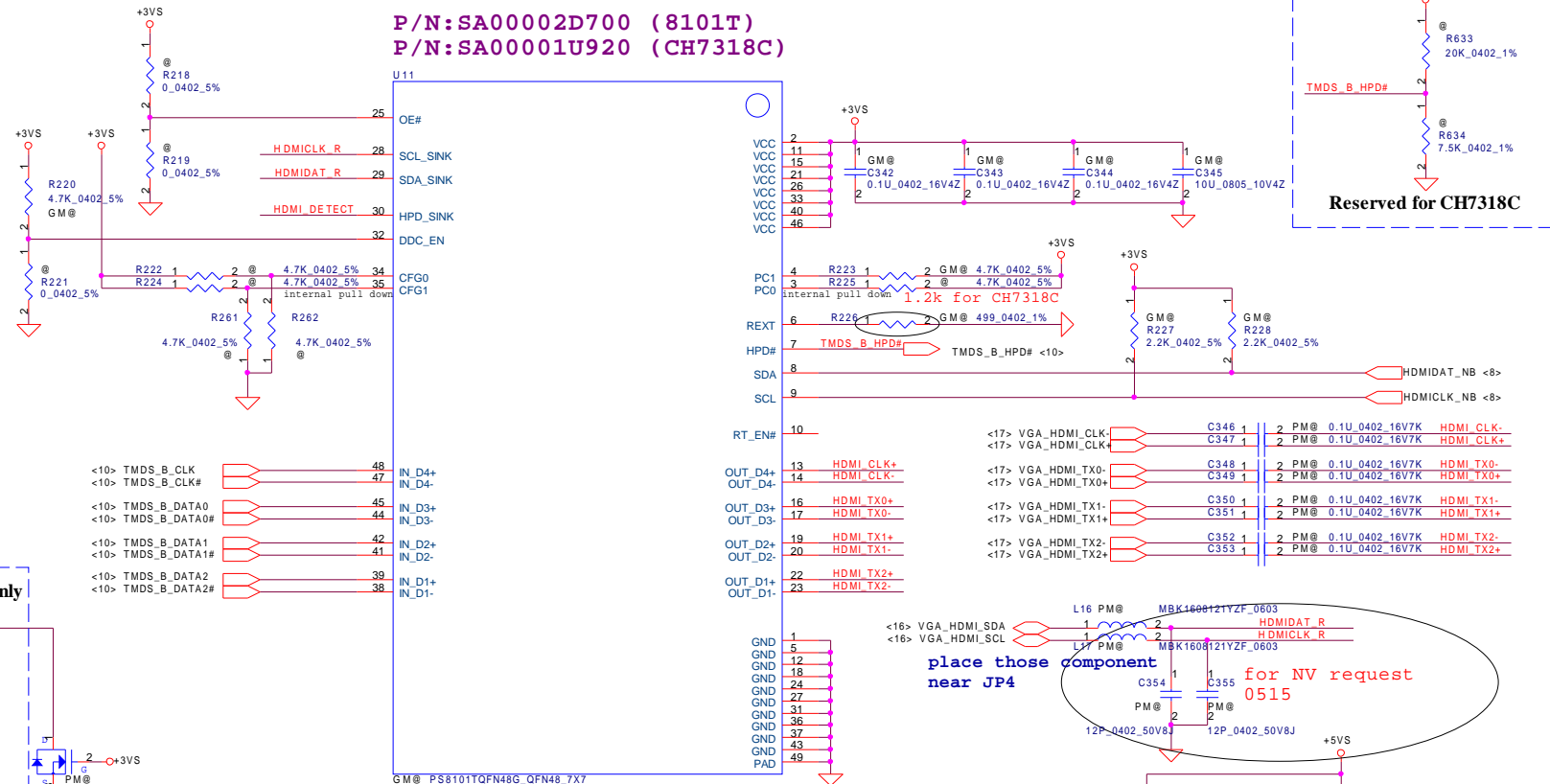
REQ PORT LIST

PORT	DEVICE
REQ_3#	PCIE_EXP#
REQ_4#	PCIE_WLAN2
REQ_6#	PCIE_WLAN
REQ_7#	PCIE_WLAN1
REQ_9#	PCIE_LAN
REQ_10#	
REQ_11#	PCIE_SATA
REQ_A#	MCH_3GPLL

For ITP_EN, 0 = SRC8/SRC8#; 1 = ITP/ITP#
For PCI4_SEL, 0 = pin24/25 : DOT96 / DOT96#
Pin28/29 : LCDCLK / LCDCLK#
1 = Pin24/25 : SRC_0 / SRC_0#
Pin28/29 : 27M/27M_SS

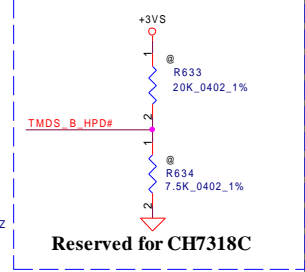
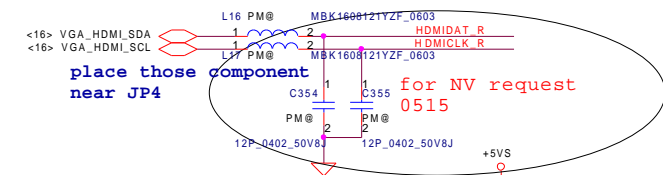
Security Classification		Compal Secret Data		Compal Electronics, Ltd.	
Issued Date	2008/03/25	Deciphered Date	2008/04/	Title	Clock Generator CK505
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET 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			
41st0	KIWB3/B4_LA4551P	0.1			
Date:	Friday, June 27, 2008	Sheet	21	of	49

P/N:SA00002D700 (8101T)
P/N:SA00001U920 (CH7318C)



9/14 Modify for UMA used

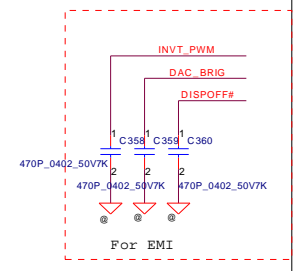
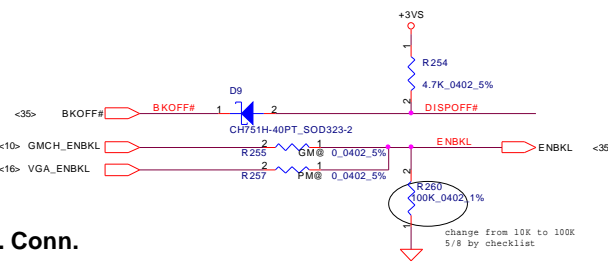
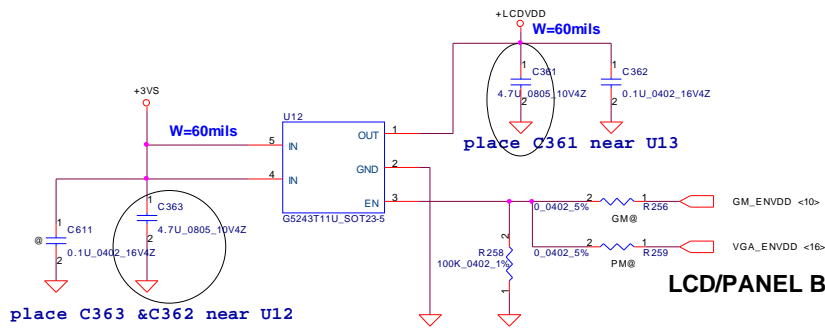
9/14 Reserve for VGA used;check pin name



Security Classification		Compal Secret Data	
Issued Date	2008/03/25	Deciphered Date	2008/04/
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.			

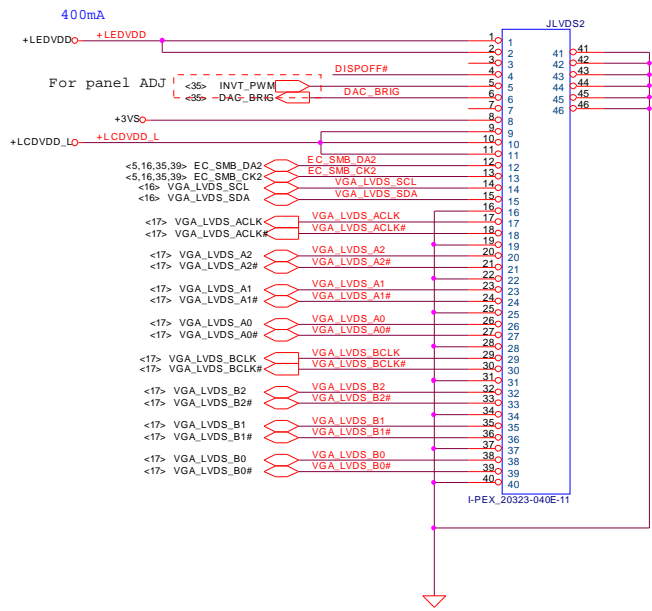
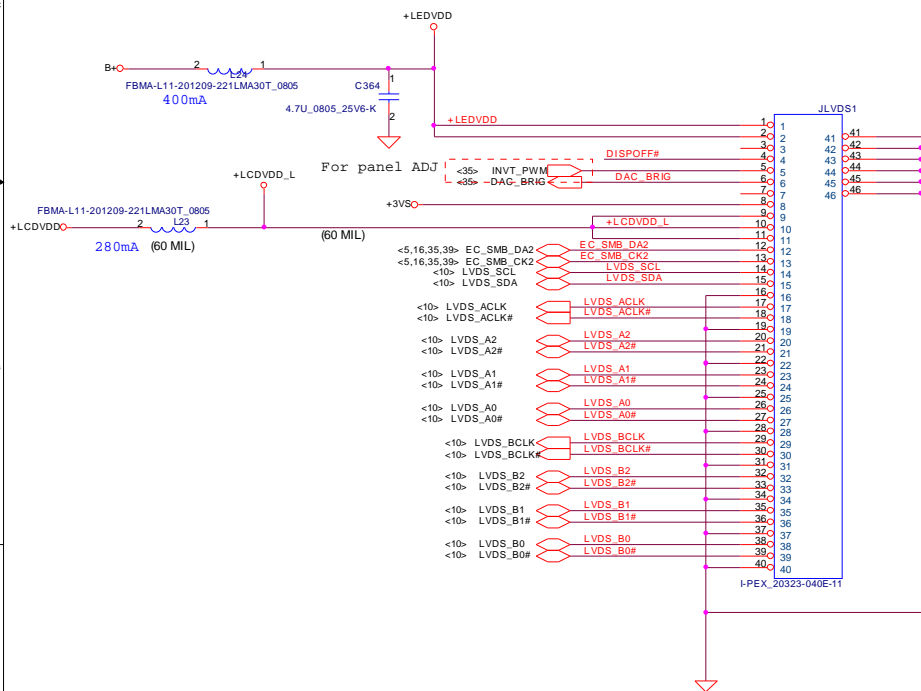
Compal Electronics, Ltd.	
Title	Level Shifter_PS8101T
Size	Document Number
Customer	KIWB3/B4_LA4551P
Date	Friday, June 27, 2008
Sheet	22 of 49
Rev	0.1

LCD POWER CIRCUIT



LCD/PANEL BD. Conn.

LCD/PANEL BD. Conn.



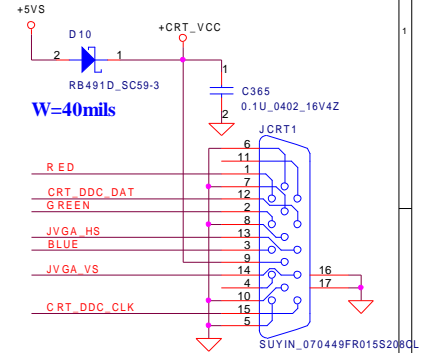
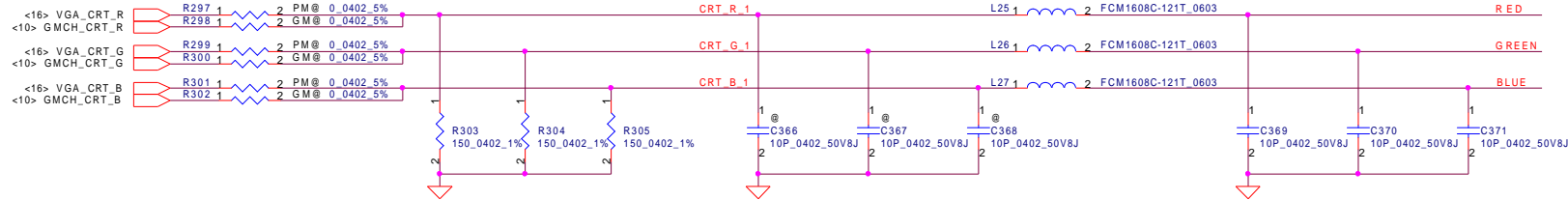
Security Classification		Compal Secret Data		Title	
Issued Date		Deciphered Date		Size	
2007/10/15		2008/10/15		Document Number	
				JITRI_LA-4141P	
				Rev	
				0.1	
				Date	
				Friday, June 27, 2008	
				Sheet	
				23 of 48	

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.

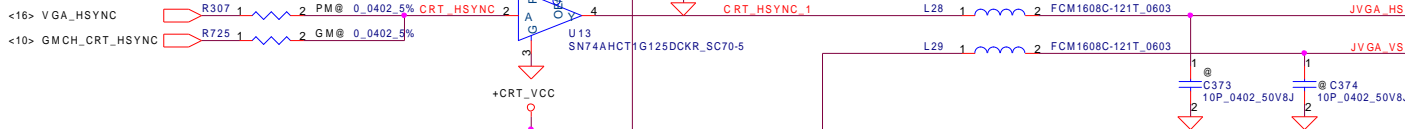
Compal Electronics, Inc.
LVDS & DVI Connector

CRT Connector

CLOSE TO CONN



CLOSE TO CONN



CLOSE TO CONN

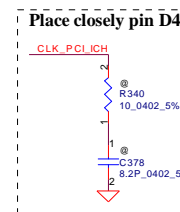
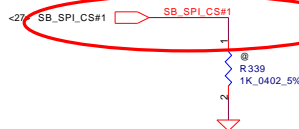
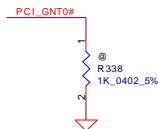
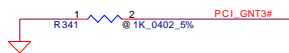
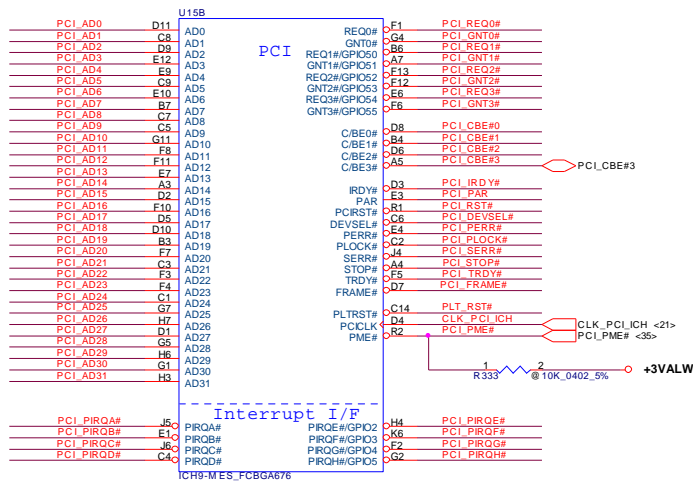
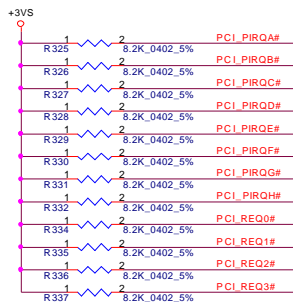
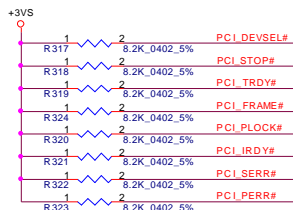


PIN ASSIGNMENT

D-SUB	FUNCTION
9	+CRT_VCC
1	RED
6	GND
2	GREEN
7, 5	GND
3	BLUE
8	GND
14	VSYNC
10	GND
13	HSYNC
11	SENSE
12	SM_DAT
15	SM_CLK
4	PIN4

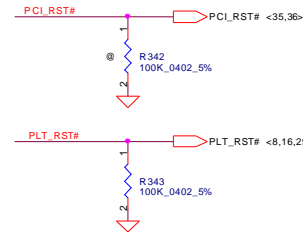
Security Classification	Compal Secret Data	
Issued Date	2007/10/15	Deciphered Date
		2008/10/15
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT 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.		

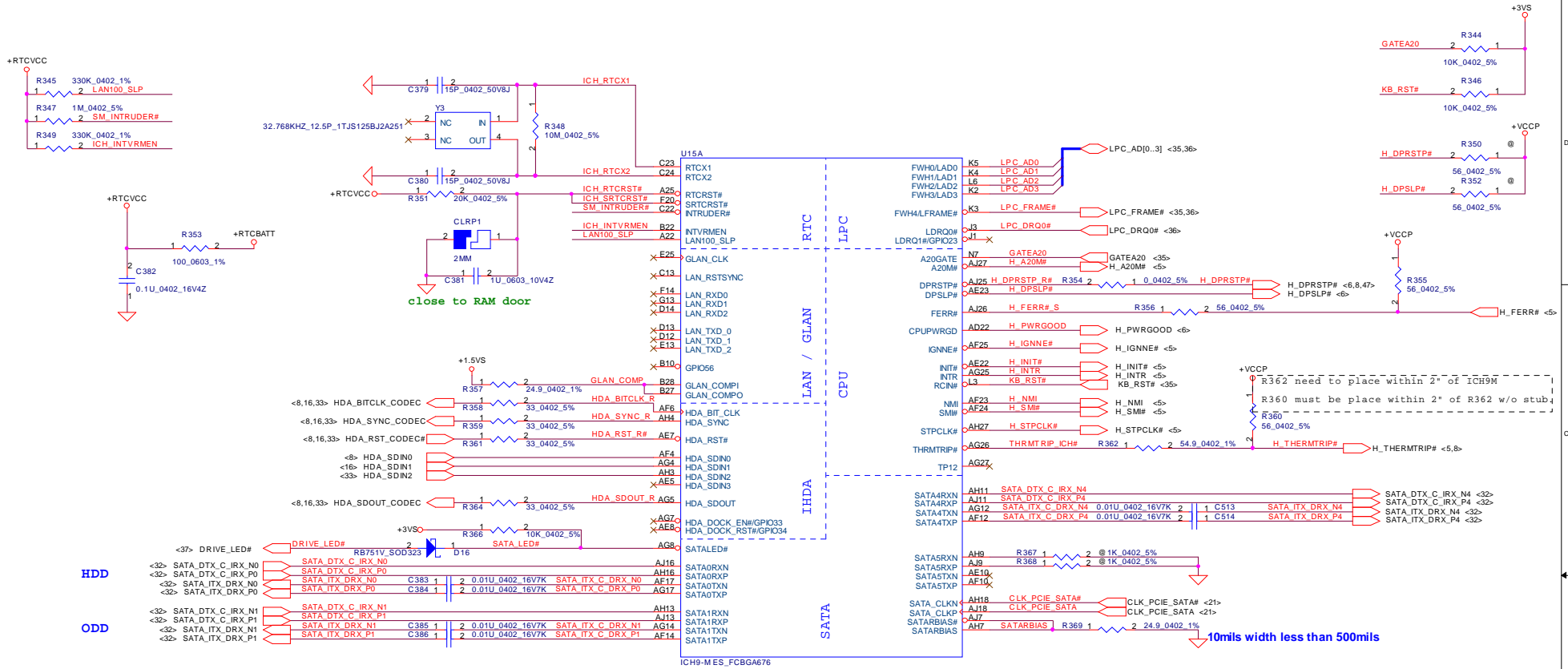
Title		Compal Electronics, Inc.	
Size		Custom	
Document Number		JITR1_LA-4141P	
Date:	Friday, June 27, 2008	Sheet	24 of 49
Rev	0.1		



A16 Swap Override Strap	
PCI_GNT#3	Low= A16 swap override Enable High= Default*

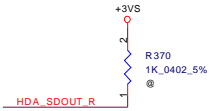
Boot BIOS Strap		
PCI_GNT#0	SPI_CS#1	Boot BIOS Loaction
0	1	SPI
1	0	PCI
1	1	LPC*



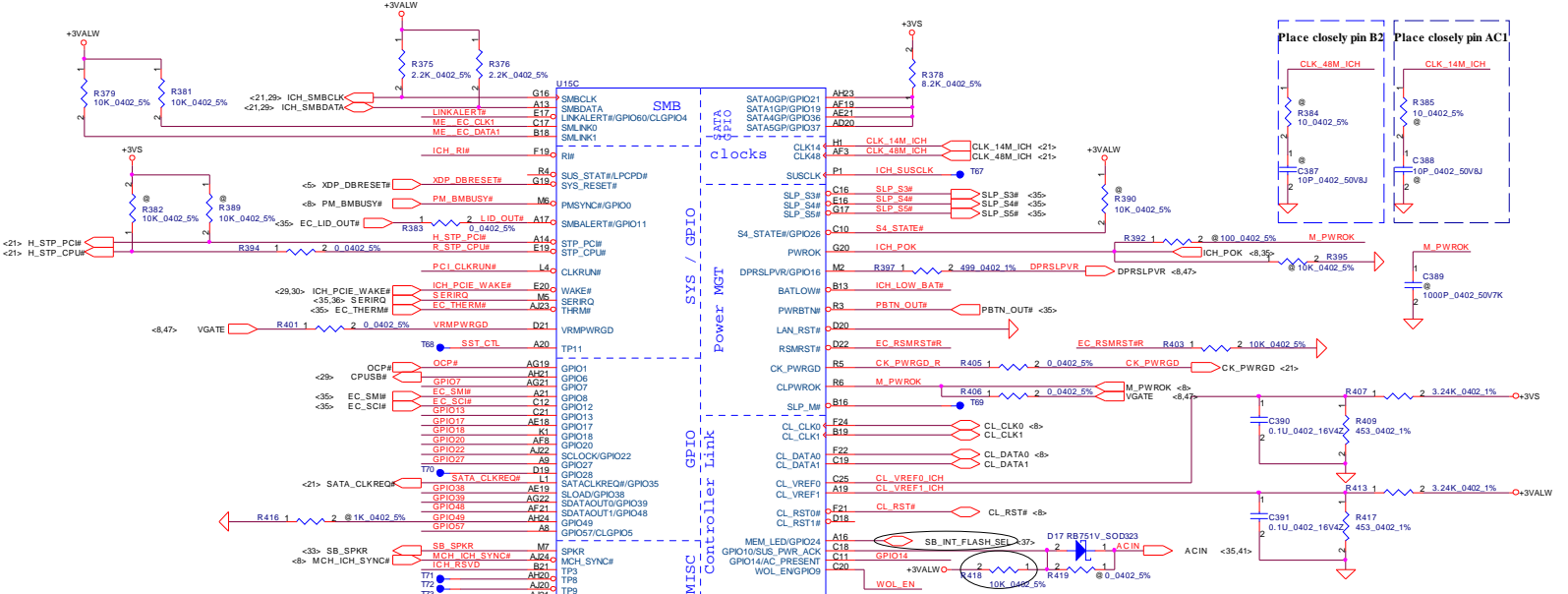
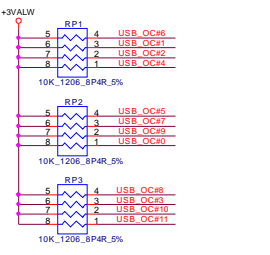
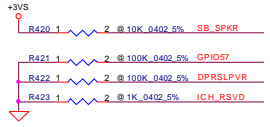
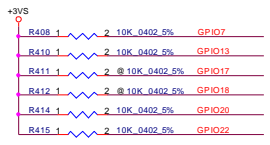
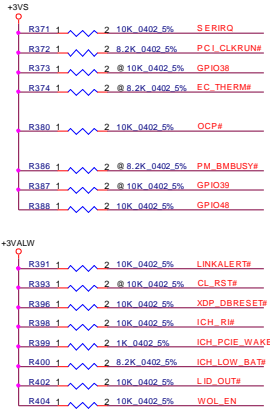


SATA PORT LIST	
PORT	DEVICE
0	HDD
1	
4	ODD
5	E-SATA

Need check

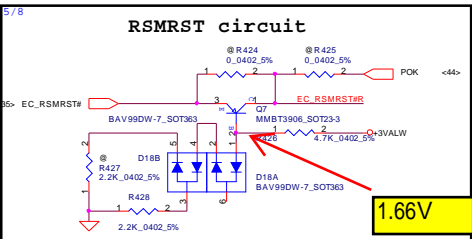
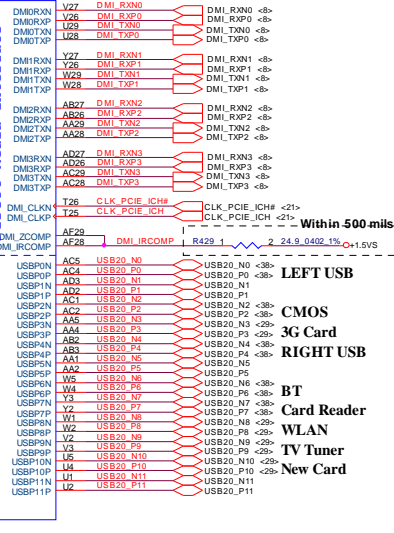
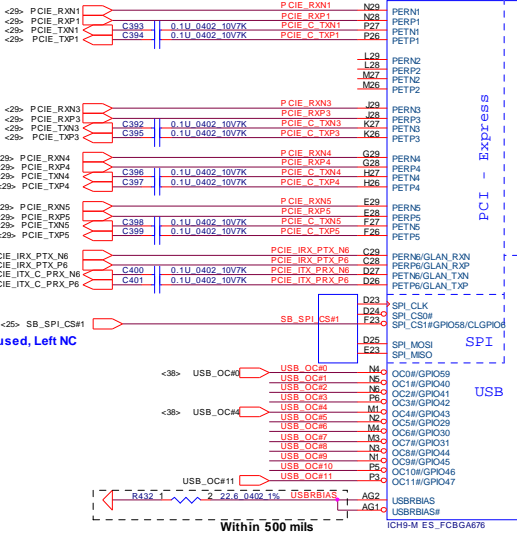


XOR Chain Entrance Strap		
ICH_TP3	HDA_SDOUT	Description
0	0	RSVD
0	1	Enter XOR Chain
1	0	Normal Operation
1	1	Set PCIE port config bit 1



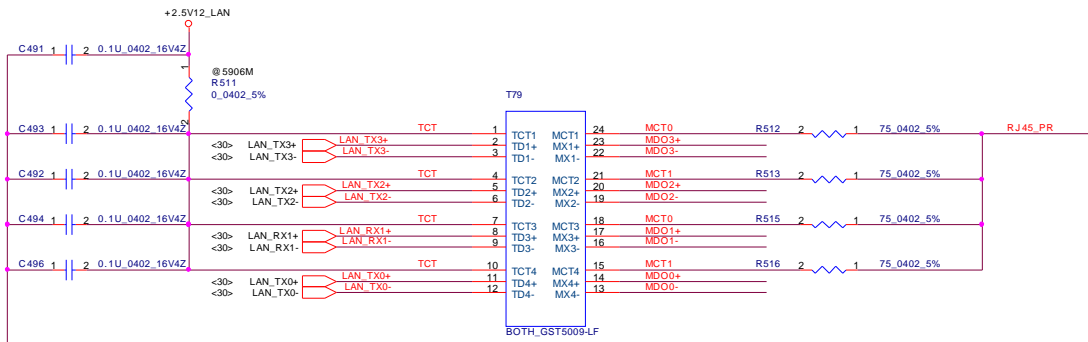
low-->default
High -->no boot

AC decoupling cap range of 75nF to 220nF



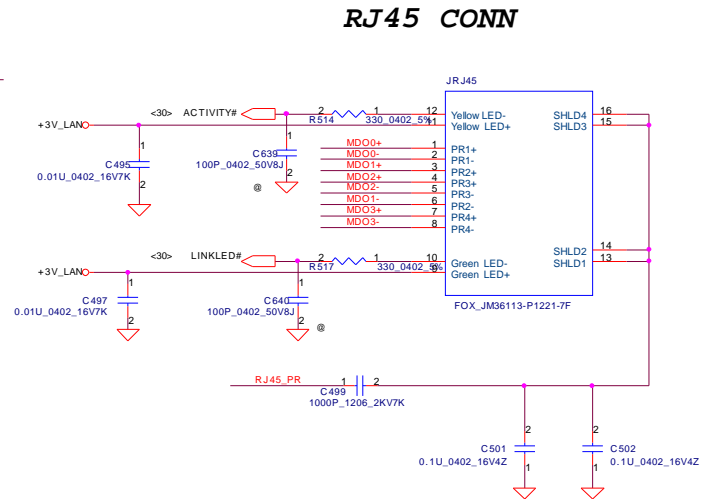
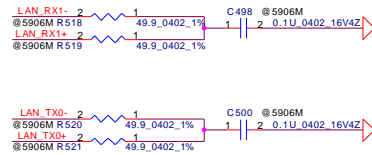
PORT	DEVICE
1	3G
2	
3	WLAN
4	NEW CARD
5	TV TUNNER
6	LAN

PORT	DEVICE
0	LEFT SIDE
1	
2	CMOS
3	3G
4	RIGHT SIDE
5	
6	BT
7	CARD READER
8	WIRELESS
9	TV TUNNER
10	NEW CARD
11	



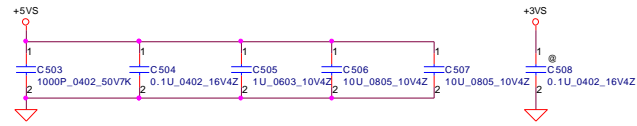
Change C468,C470,C473,C474,C475,C476 from 0.01uF to 0.1uF

near LAN controller

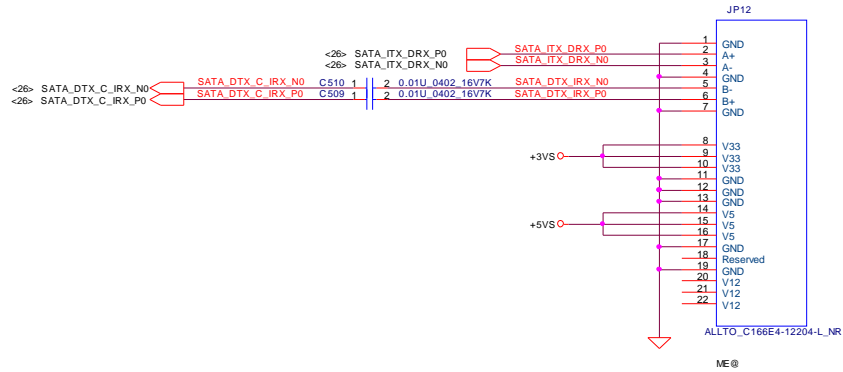


Security Classification		Compal Secret Data		Title	
Issued Date	2007/10/15	Deciphered Date	2008/10/15	LAN CONTROLLER	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
				Custom	JITR1_LA-4141P
				Date:	Friday, June 27, 2008
				Sheet	31 of 48
				Rev	0.1

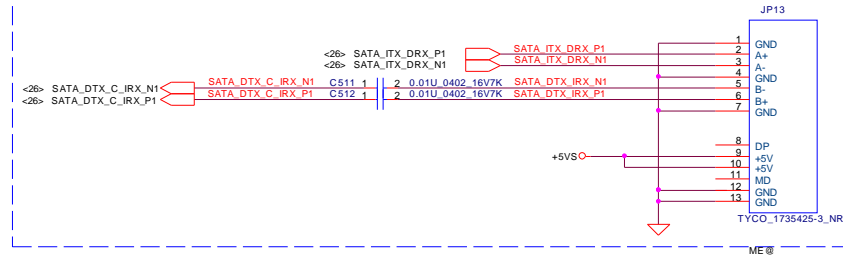
RJ45 CONN



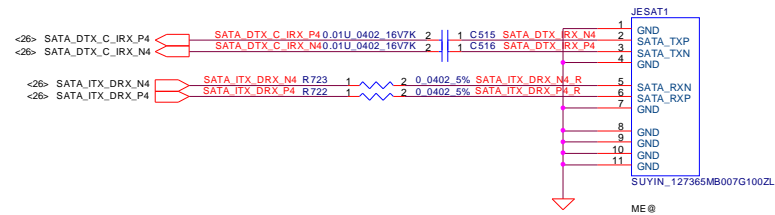
SATA HDD Conn.



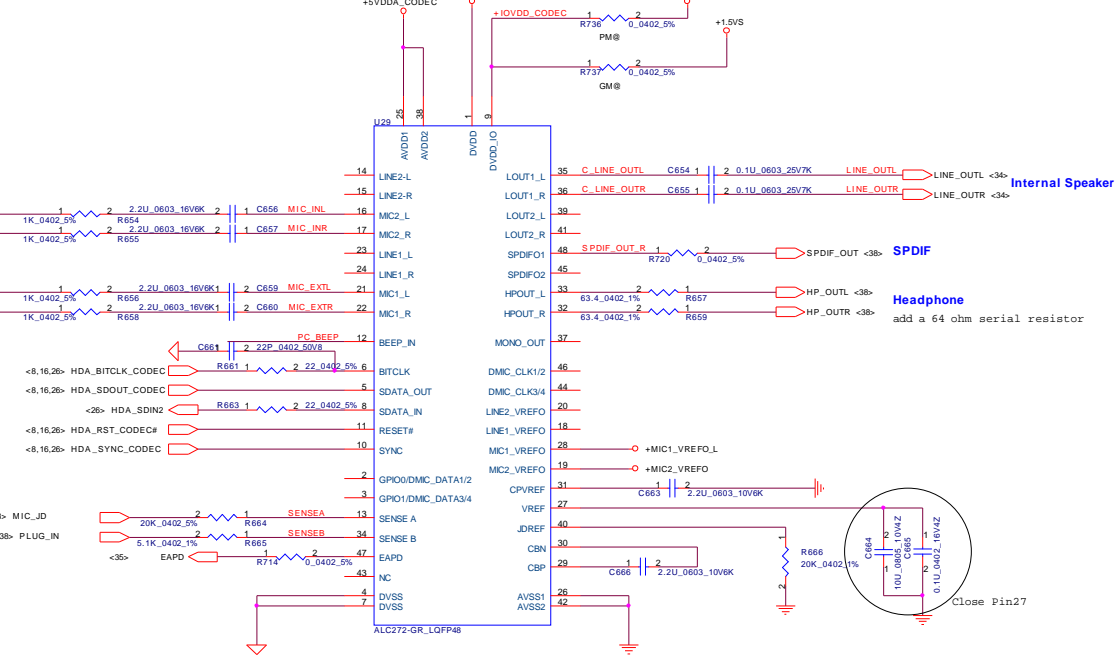
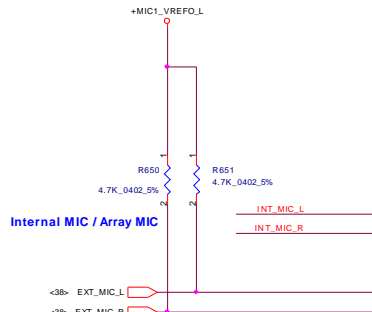
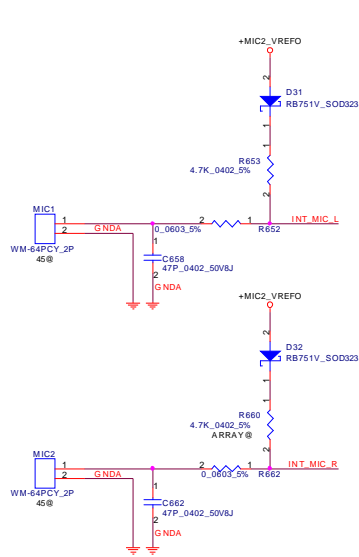
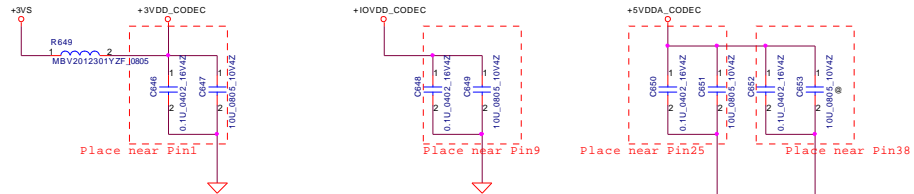
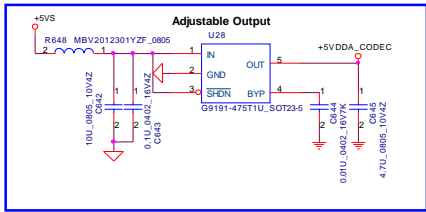
SATA ODD Conn.



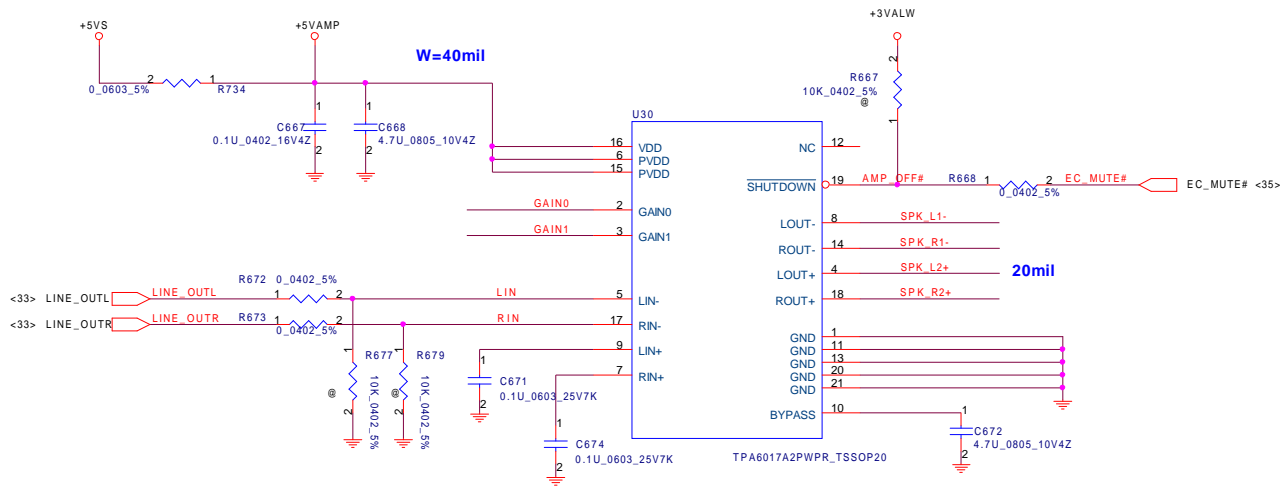
E-SATA Conn. place R722&R723&C515&C516 near JESAT1



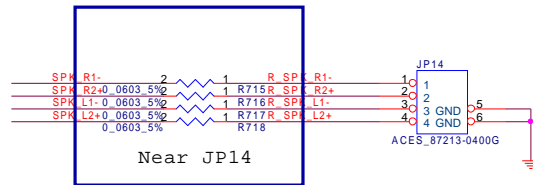
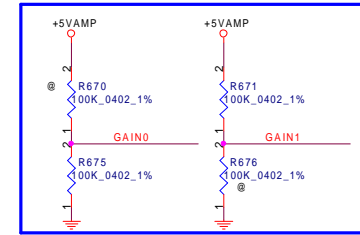
Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2007/10/15	Deciphered Date	2008/10/15	Title
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				Size
				Document Number
				JITRI_LA-4141P
				Rev
				0.1
Date:			Friday, June 27, 2008	Sheet
			32	of
			48	



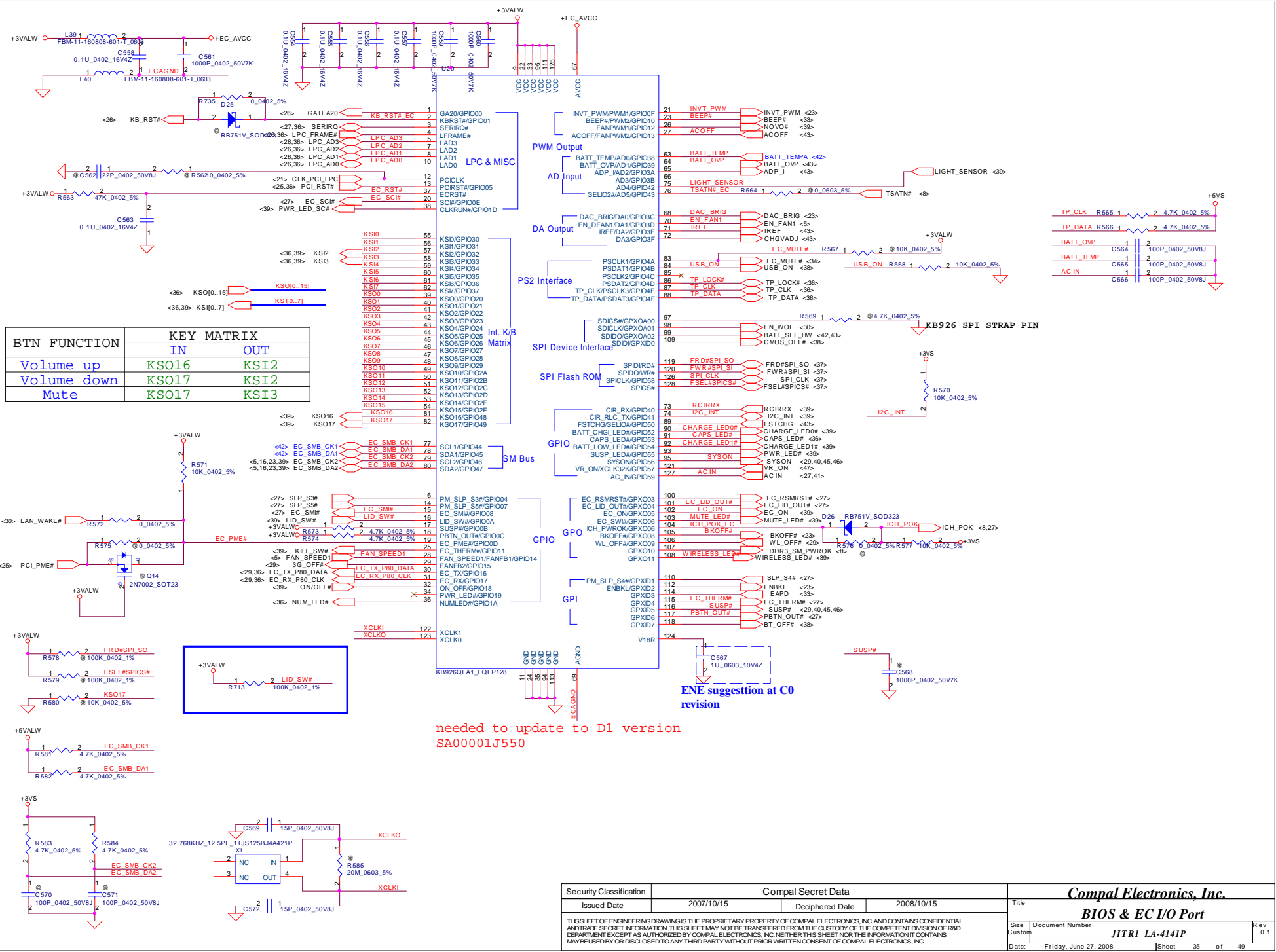
Speaker Connector



GAIN0	GAIN1	Gain
0	0	6dB
0	1	10dB
1	0	15.6dB
1	1	21.6dB



Security Classification		Compal Secret Data		Compal Electronics, Ltd.	
Issued Date	2008/03/25	Deciphered Date	2008/04/	Title AMP, Audio speaker 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
				Customer	KIWB3/B4_LA4551P
Date: Friday, June 27, 2008				Sheet	34 of 49

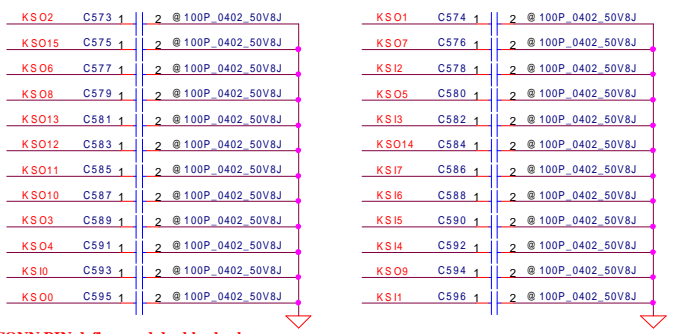
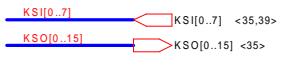


BTN FUNCTION	KEY MATRIX	
	IN	OUT
Volume up	KSO16	KSI2
Volume down	KSO17	KSI2
Mute	KSO17	KSI3

needed to update to D1 version
SA00001J550

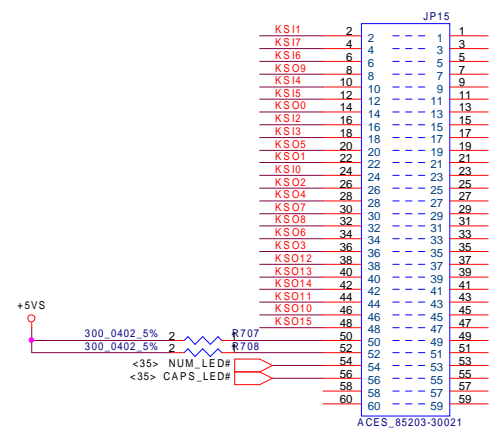
Security Classification	Compal Secret Data		Title
	Issued Date	Deciphered Date	
	2007/10/15	2008/10/15	Compal Electronics, Inc. BIOS & EC I/O Port
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET 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	Rev 0.1
	Date: Friday, June 27, 2008	Sheet 35 of 49	

INT_KBD Conn.

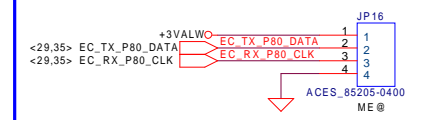


CONN PIN define need double check

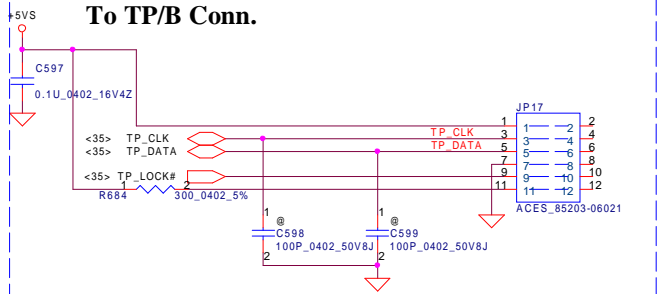
Source:SP01000IE00
2nd source:SP01000IF00
30 pin



EC DEBUG PORT

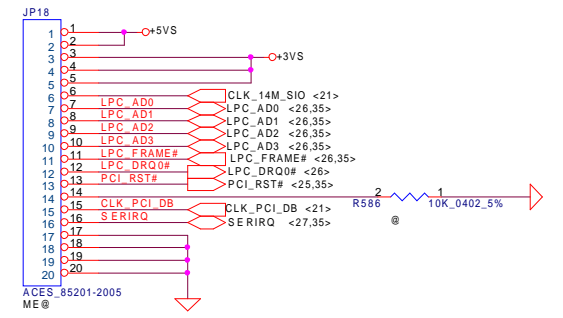


To TP/B Conn.



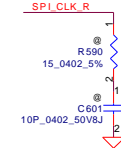
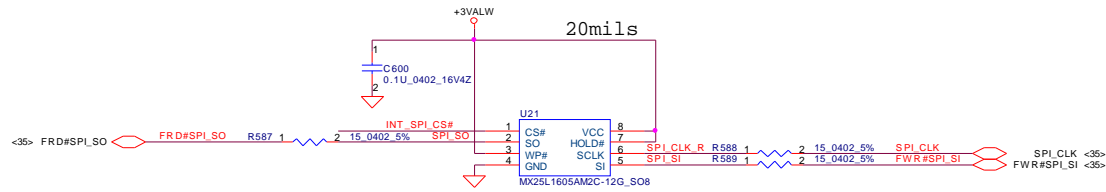
CONN PIN define need double check

FOR LPC SIO DEBUG PORT

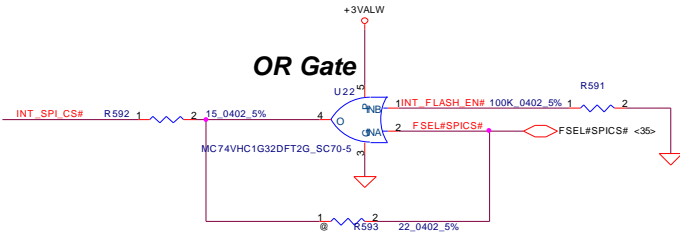


Security Classification		Compal Secret Data		Title	
Issued Date	2007/10/15	Deciphered Date	2008/10/15	Compal Electronics, Inc.	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				KB /SW /LPC Debug Conn.	
Size	Document Number	JITRI_LA-4141P		Rev	0.1
Date:	Friday, June 27, 2008	Sheet	36 of 49		

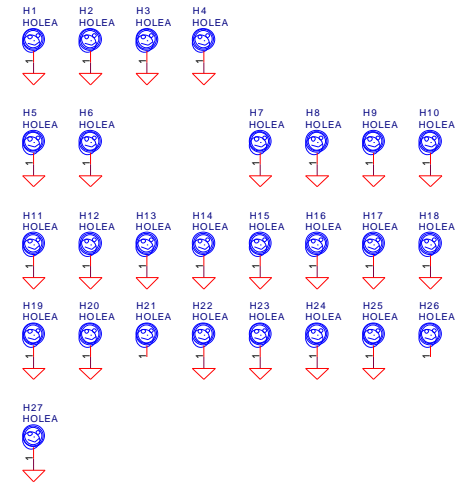
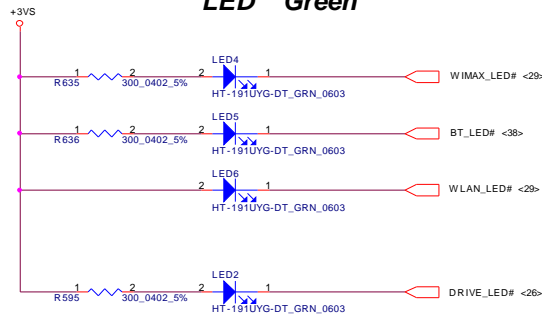
FOR EC 16M SPI ROM



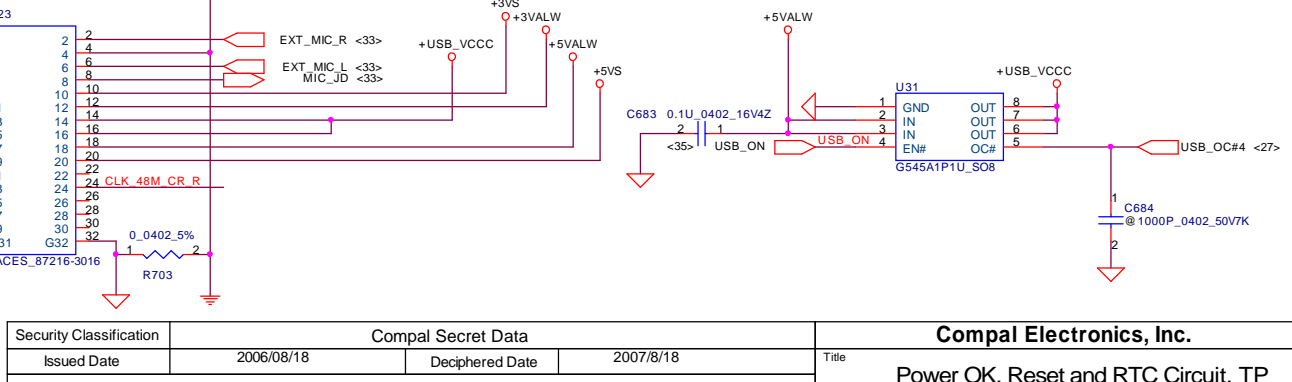
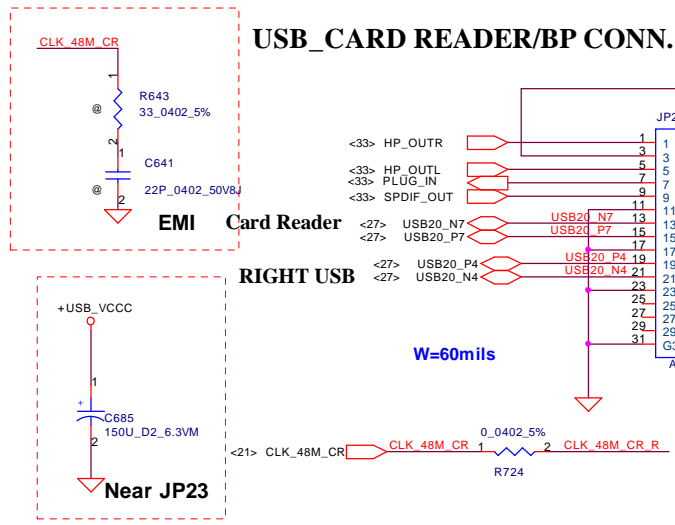
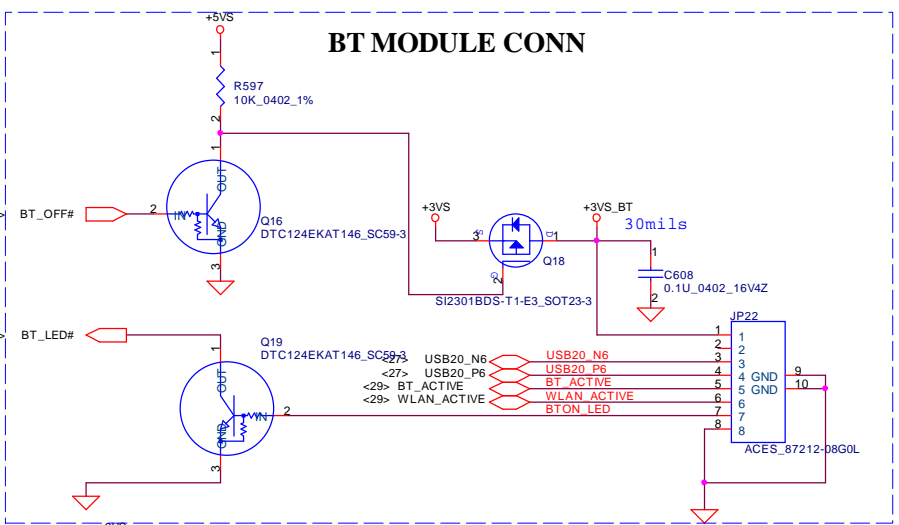
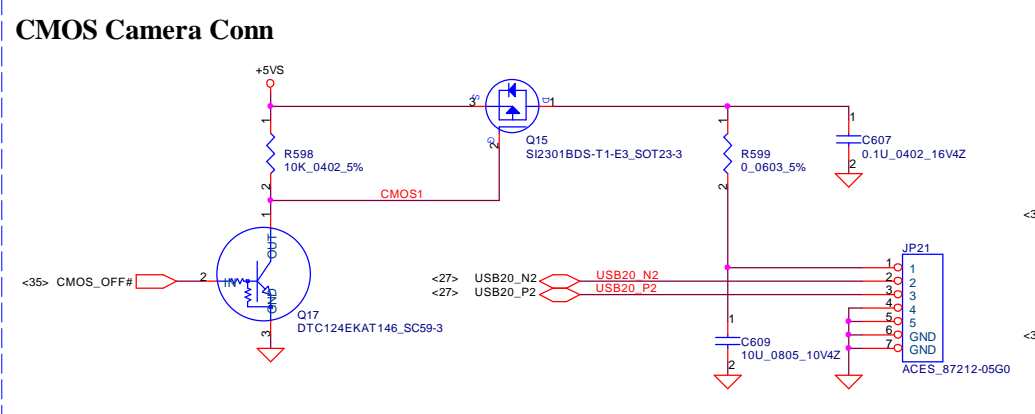
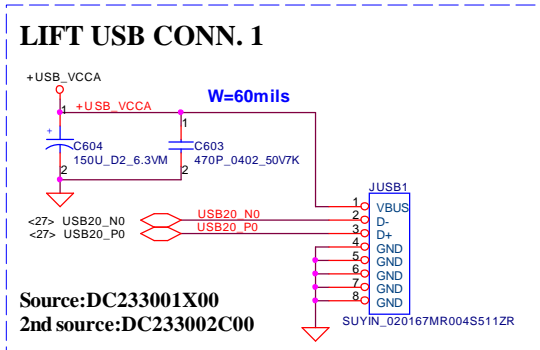
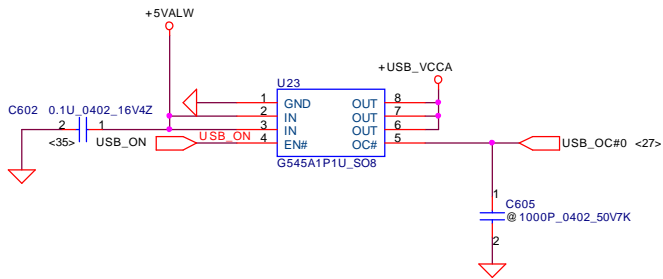
INPUT		OUTPUT
A	B	Y
L	L	L
H	L	H
L	H	H
H	H	H



LED Green

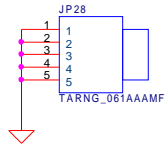


Security Classification	Compal Secret Data		Title		
Issued Date	2007/10/15	Deciphered Date	2008/10/15	Compal Electronics, Inc.	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				LED/EC SPI ROM	
				Size B	Document Number
				JITRI_LA-4141P	
				Date:	Friday, June 27, 2008
				Sheet	37 of 49

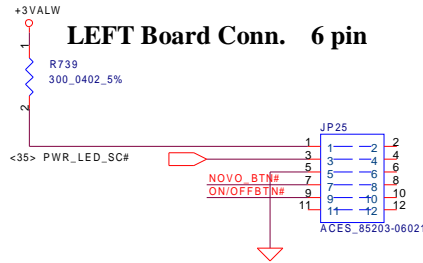


Security Classification	Compal Secret Data		Title Compal Electronics, Inc.
Issued Date	2006/08/18	Deciphered Date	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE 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.			Document Number KIWB3/B4_LA4551P Rev 0.1
Date:	Friday, June 27, 2008	Sheet	

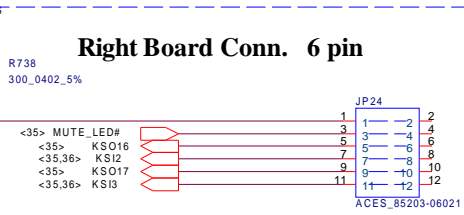
TV ANTENNA



LEFT Board Conn. 6 pin

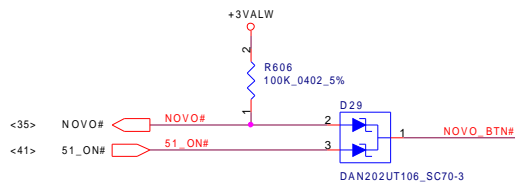
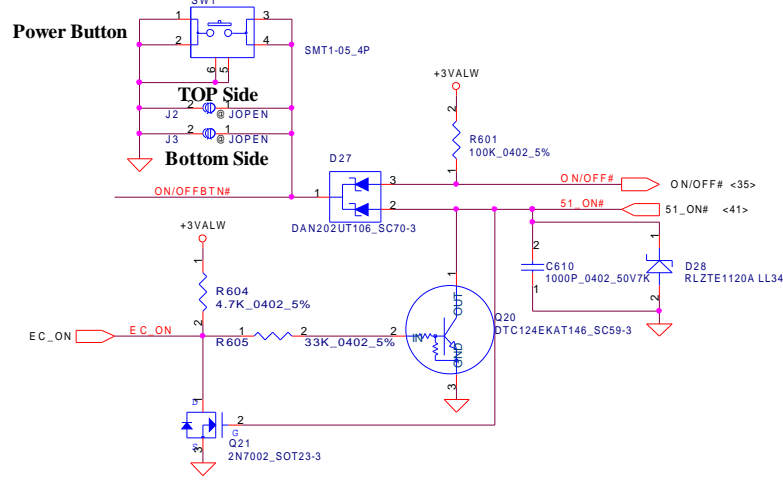


Right Board Conn. 6 pin

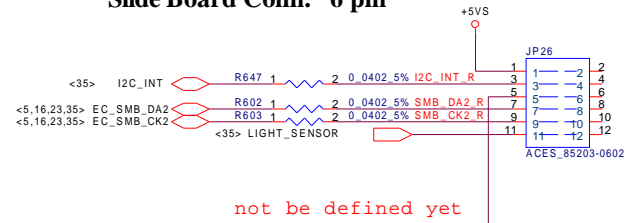


BTN FUNCTION	KEY MATRIX	
	IN	OUT
UP	KSO16	KSI2
DOWN	KSO17	KSI2
MUTE	KSO17	KSI3

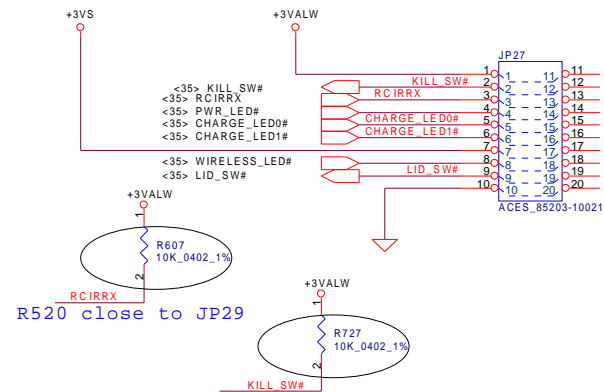
ON/OFF switch



Slide Board Conn. 6 pin

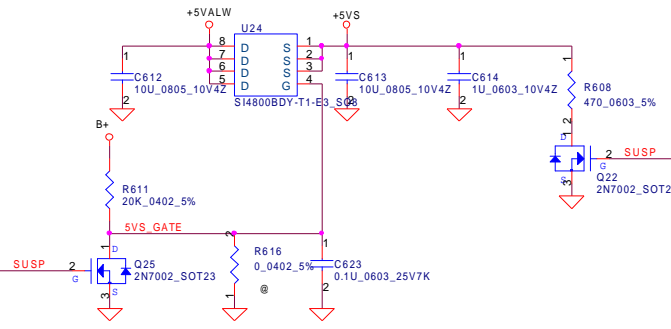


CIRI Board Conn. 14 pin

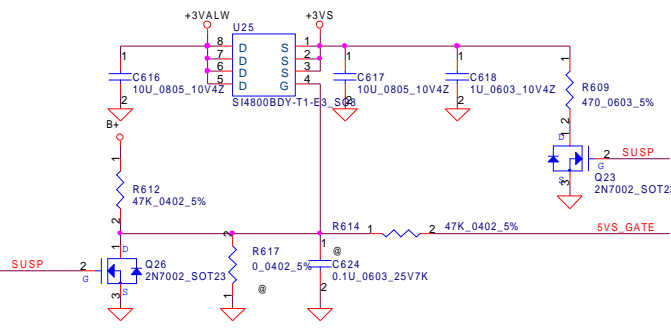


Security Classification	Compal Secret Data		Compal Electronics, Ltd.	
Issued Date	2008/03/25	Deciphered Date	2008/04/	Title
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				Audio Jack & SW connector
Size	Document Number	Rev		
Cust	KIWB3/B4_LA4551P	0.1		
Date:	Friday, June 27, 2008	Sheet	39	of 49

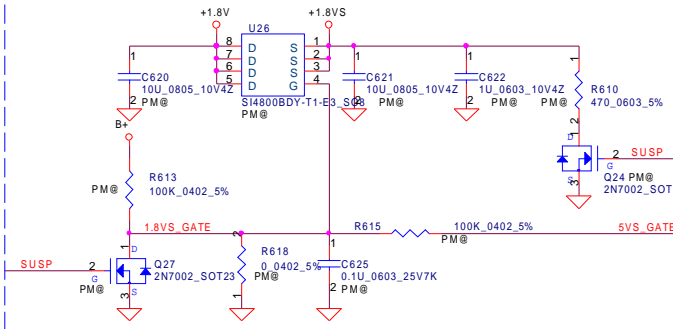
+5VALW TO +5VS



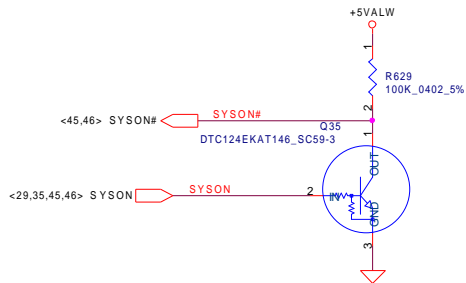
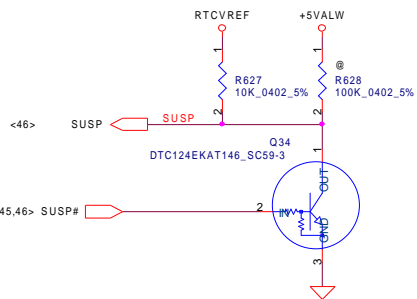
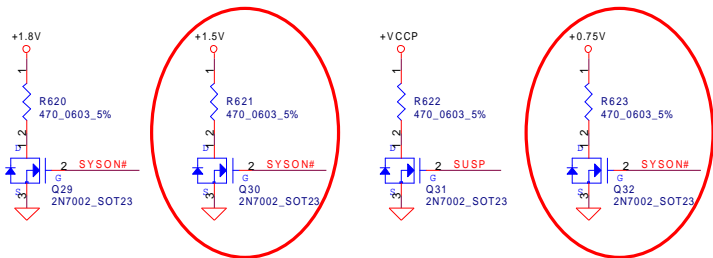
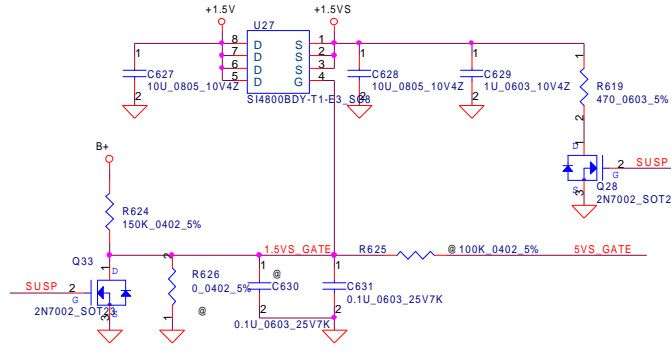
+3VALW TO +3VS



+1.8V to +1.8VS

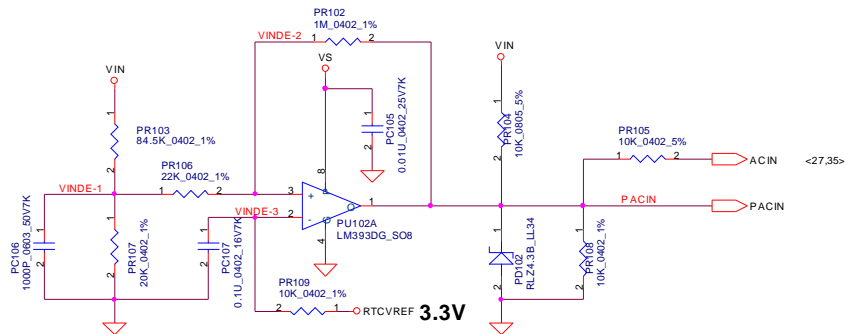
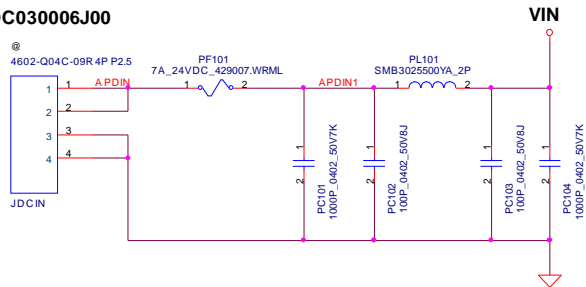


+1.5V to +1.5VS



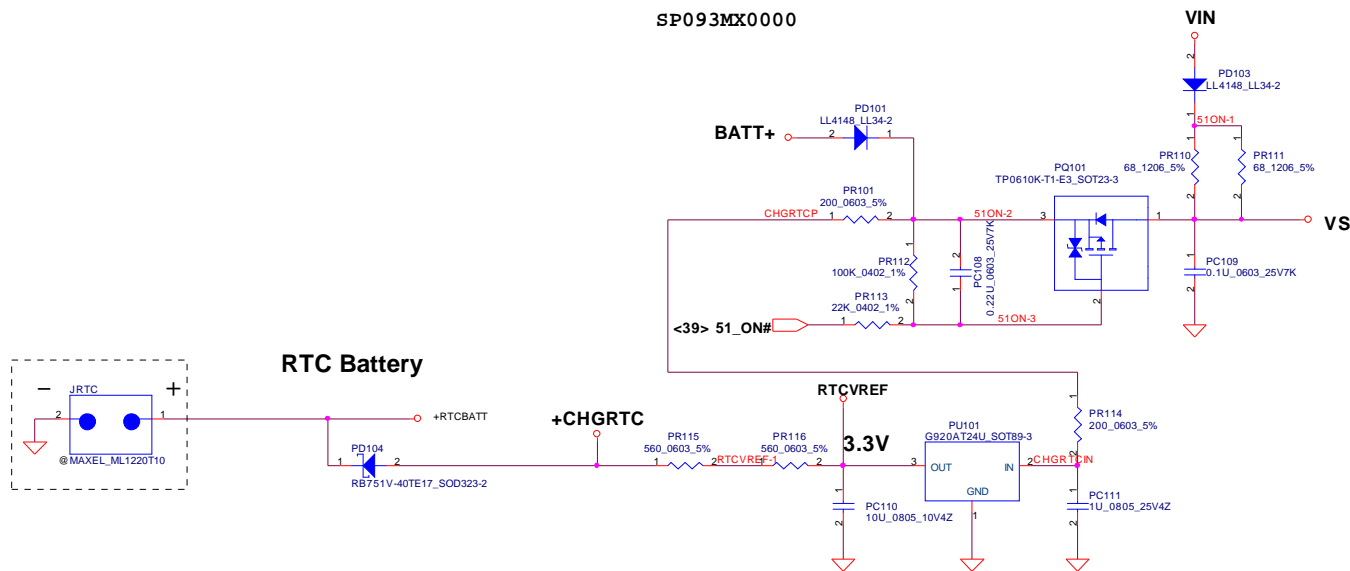
Security Classification	Compal Secret Data			Compal Electronics, Inc.		
Issued Date	2006/08/18	Deciphered Date	2007/8/18	Title		
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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	KIWB3/B4_LA4551P	0.1
				Date	Friday, June 27, 2008	Sheet 40 of 49

DC030006J00

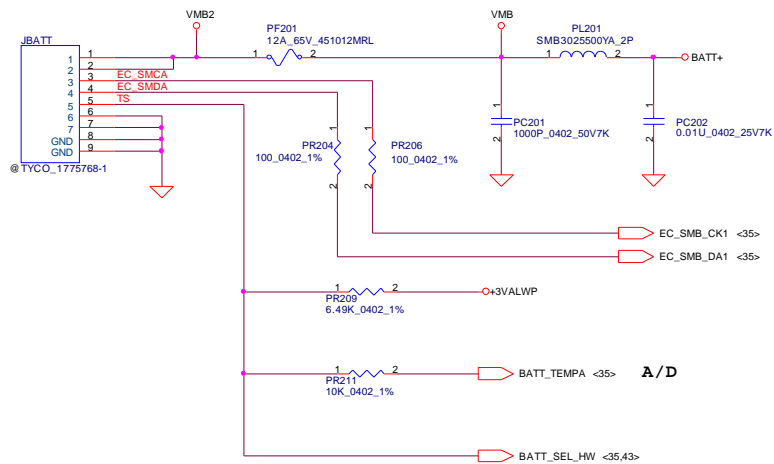


Vin Detector
 High 18.384 17.901 17.430
 Low 17.728 17.257 16.976

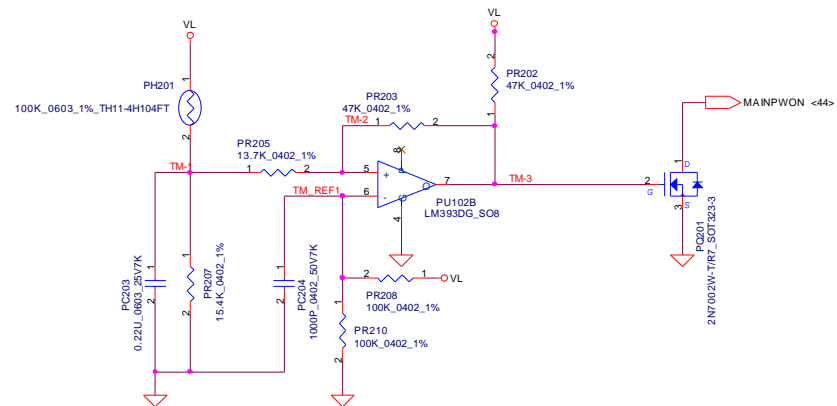
SP093MX0000



Security Classification	Compal Secret Data		Title	
Issued Date	2007/09/20	Deciphered Date	2008/09/20	DCIN & DETECTOR
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Rev 0.1
Date: Friday, June 27, 2008			Sheet	41 of 49



PH1 under CPU bottom side :
 CPU thermal protection at 92 degree C
 Recovery at 56 degree C



Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2007/6/22	Deciphered Date	2008/6/22	Title
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				BATTERY CONN / OTP
Size	Document Number	Date	Friday, June 27, 2008	Rev 0.1
			Sheet	42 of 49

- 1. ACDET
 - ACOV
 - CHG_PVCC
 - ACSET
 - ACOP/IADP
 - ACGOOD#
- 2. BATT_OVP
 - BATT_CELL
 - CHG_VOLT
 - CHG_CURT
 - BATT_LEARN

CP Point Setting
 CP point=ladapter*85%
 $V_{acset}=3.3 \cdot (115K/(75K+115K))=1.99V$
 $CP\ Point=(V_{acset}/V_{dca}) \cdot (0.1/PR302)=4.02A$

65W adapter
 $V_{acset}=3.3 \cdot (115K/(150K+115K))=1.432V$
 $CP\ Point=(V_{acset}/V_{dca}) \cdot (0.1/PR302)=2.89A$

Input OVP : 22.3V
 ACIN detect : 17.26V
 Fsw : 300KHz

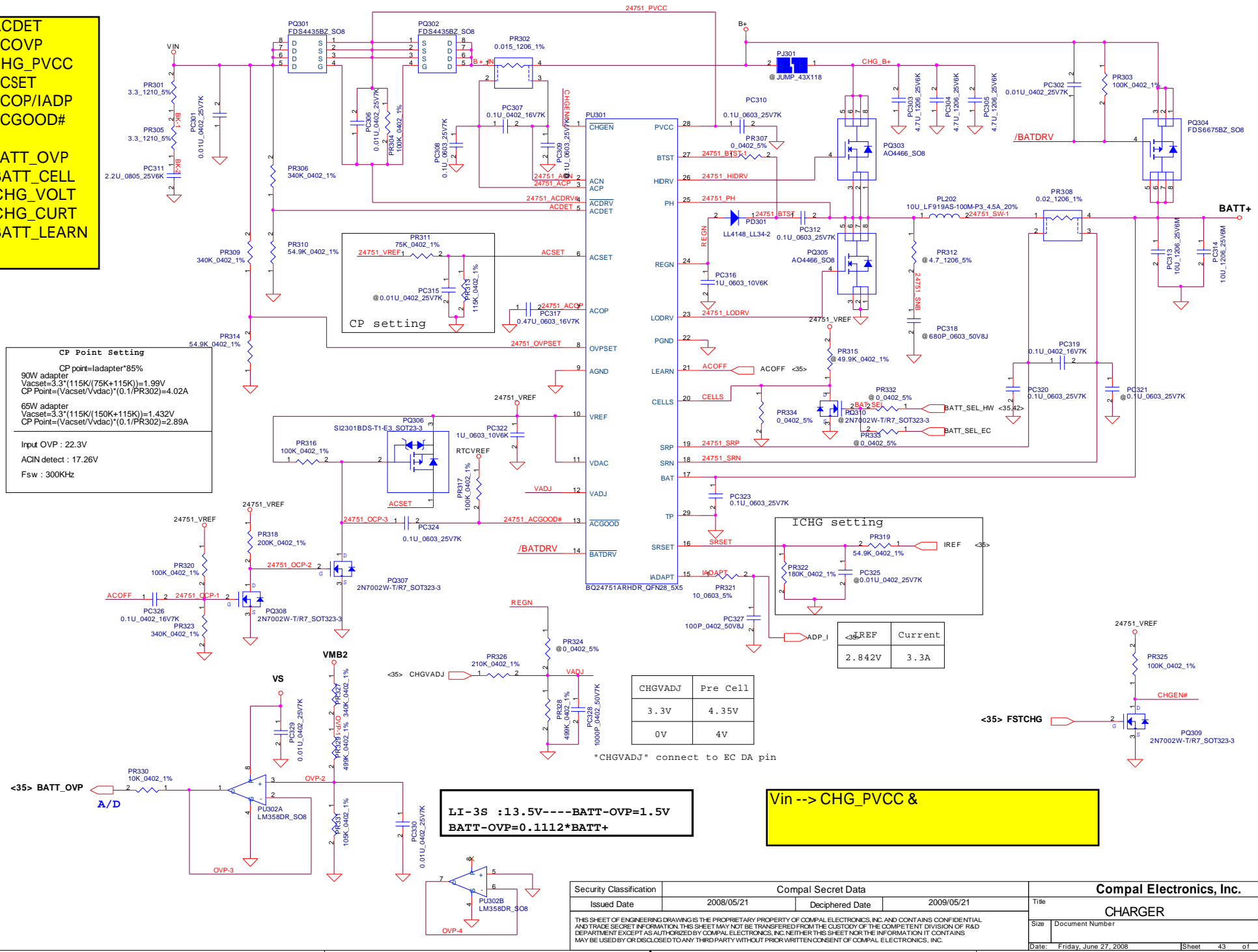
ICHG setting

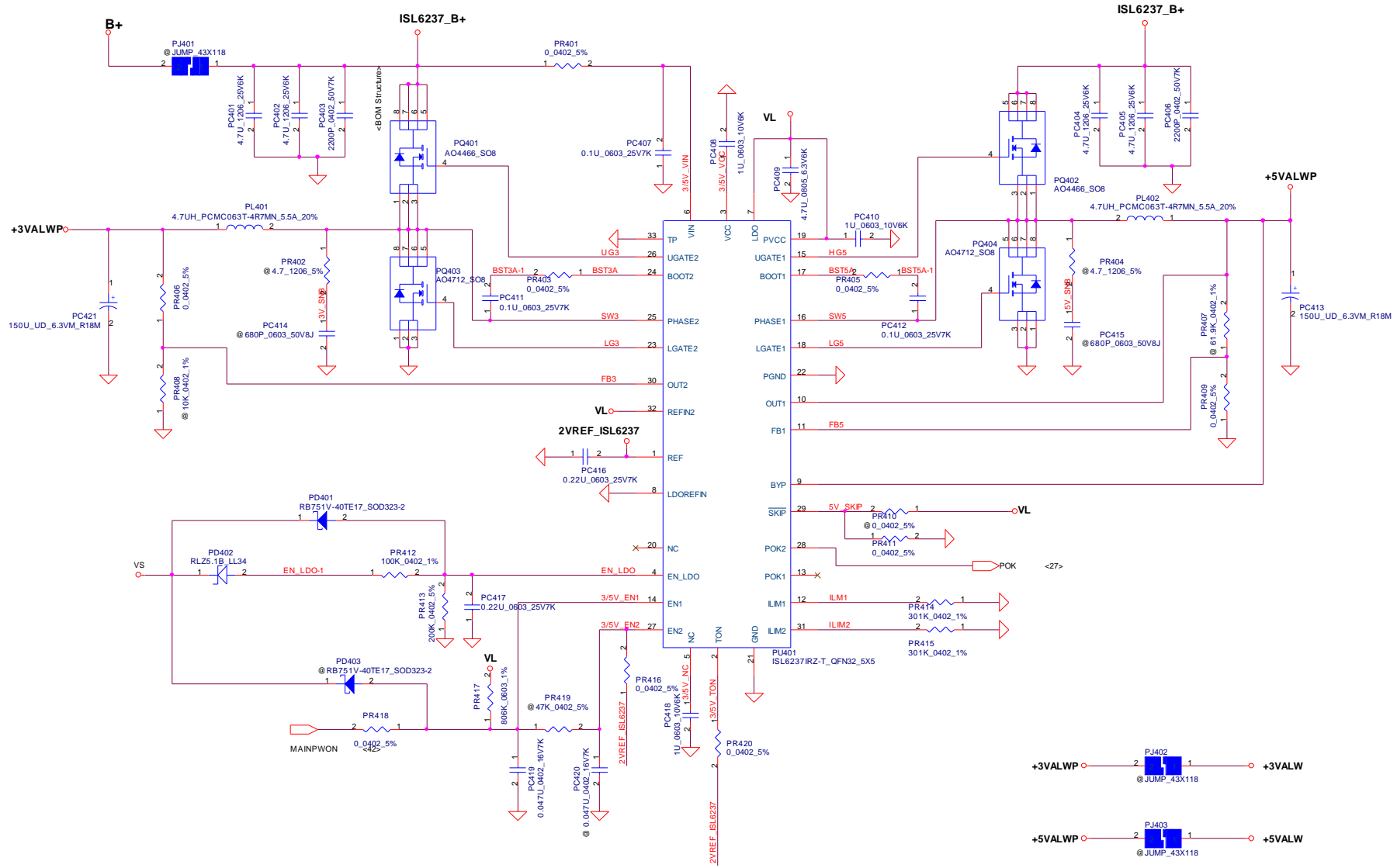
IREF	Current
2.842V	3.3A

CHGVADJ	Pre Cell
3.3V	4.35V
0V	4V

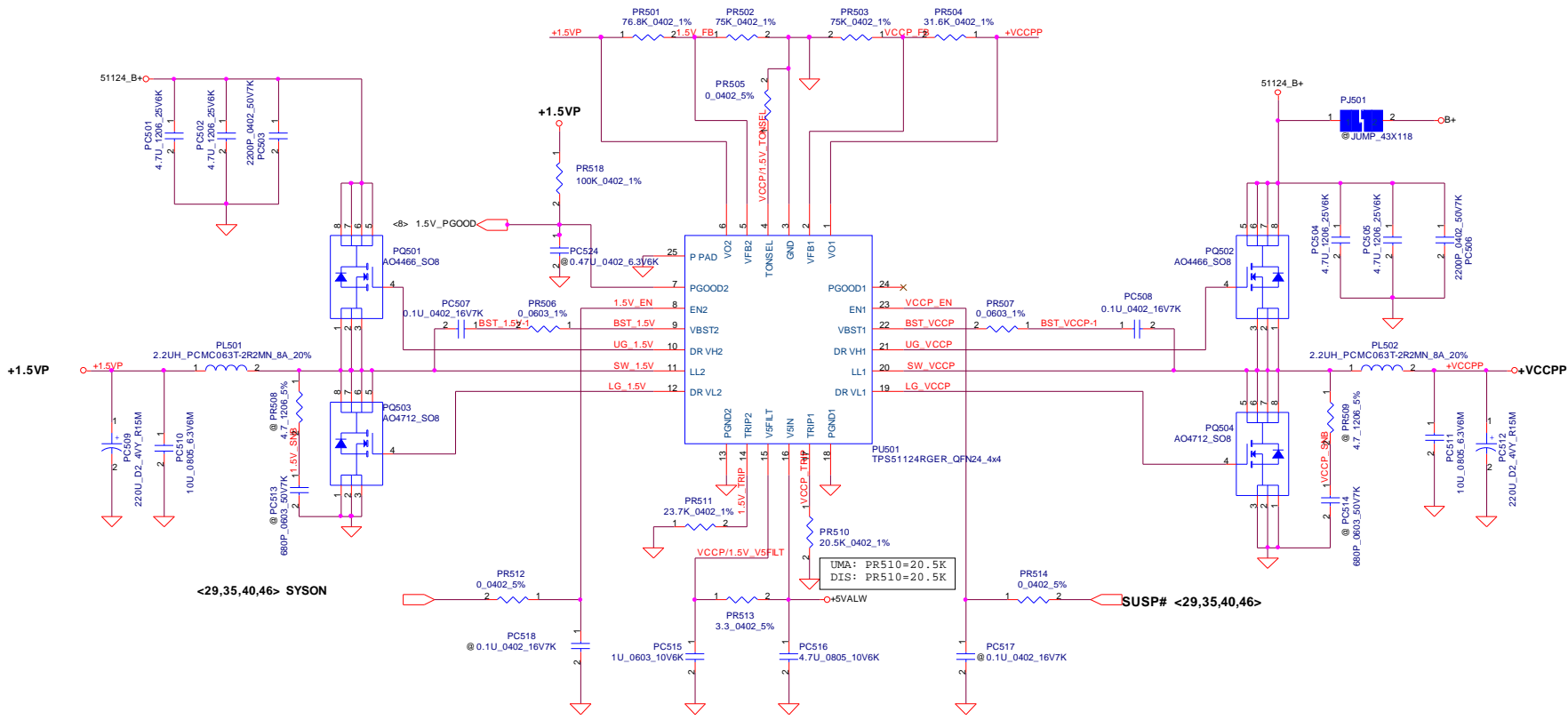
LI-3S : 13.5V --- BATT-OVP=1.5V
BATT-OVP=0.1112*BATT+

Vin --> CHG_PVCC &



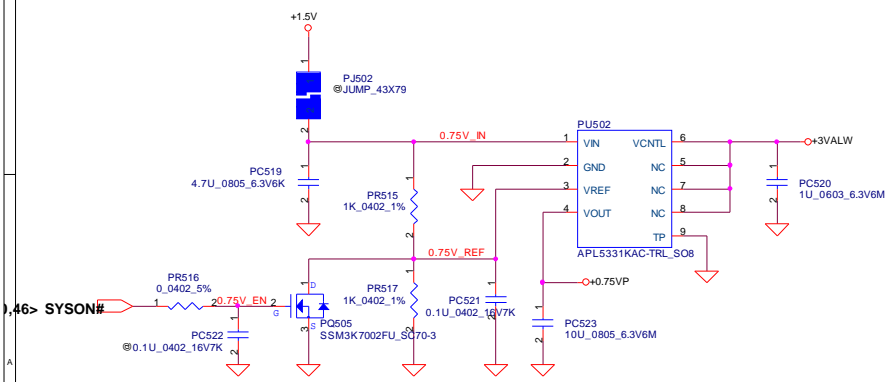


Security Classification	Compal Secret Data		Title	
Issued Date	2007/06/22	Deciphered Date	2008/06/22	3VALW / 5VALW
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE 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
Date: Fri, June 27, 2008				Rev 0.1
			Sheet	44 of 49



<29,35,40,46> SYSON

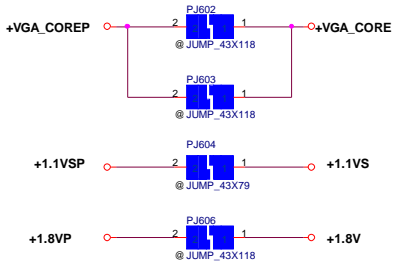
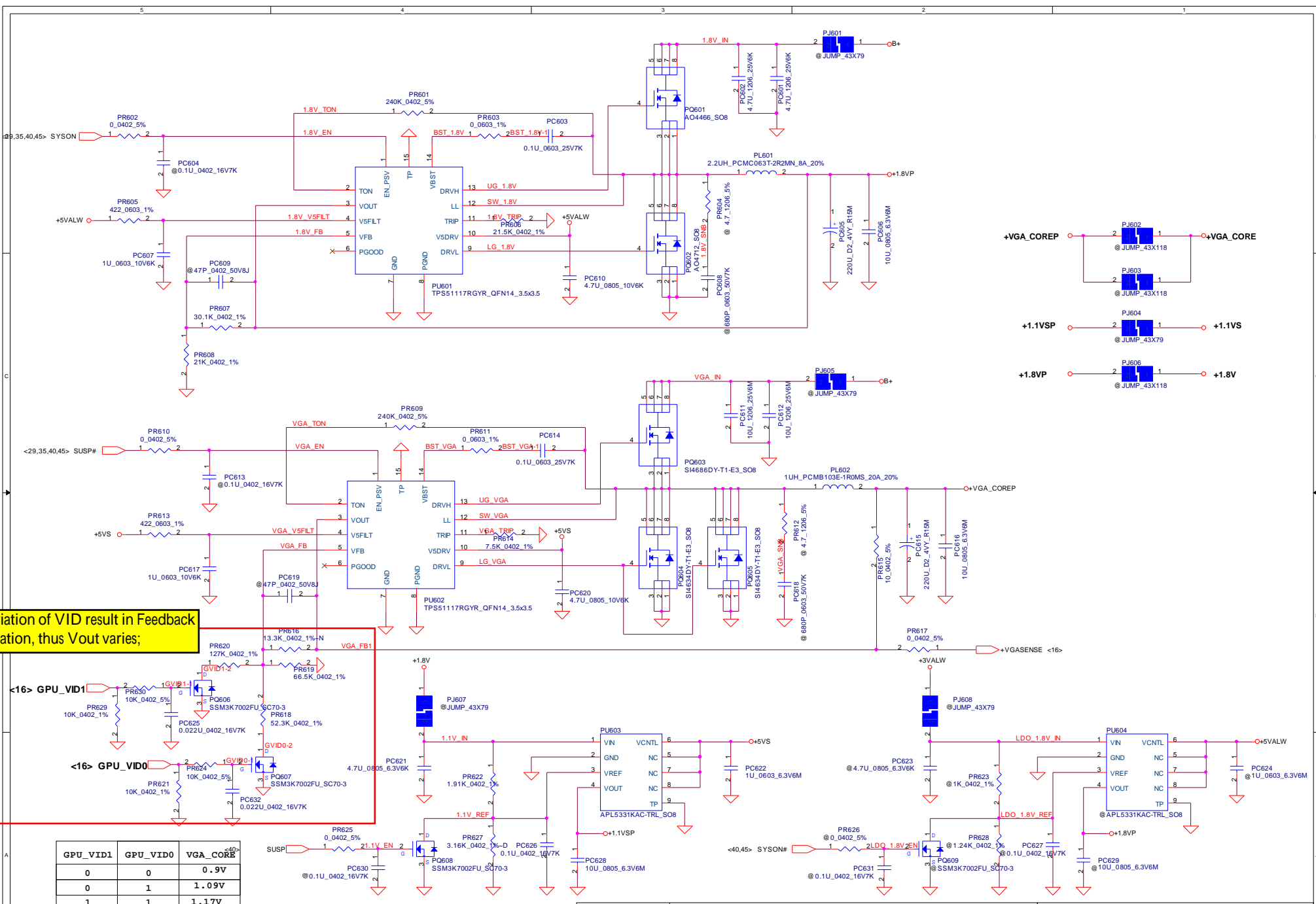
SUSP# <29,35,40,46>



<46> SYSON#

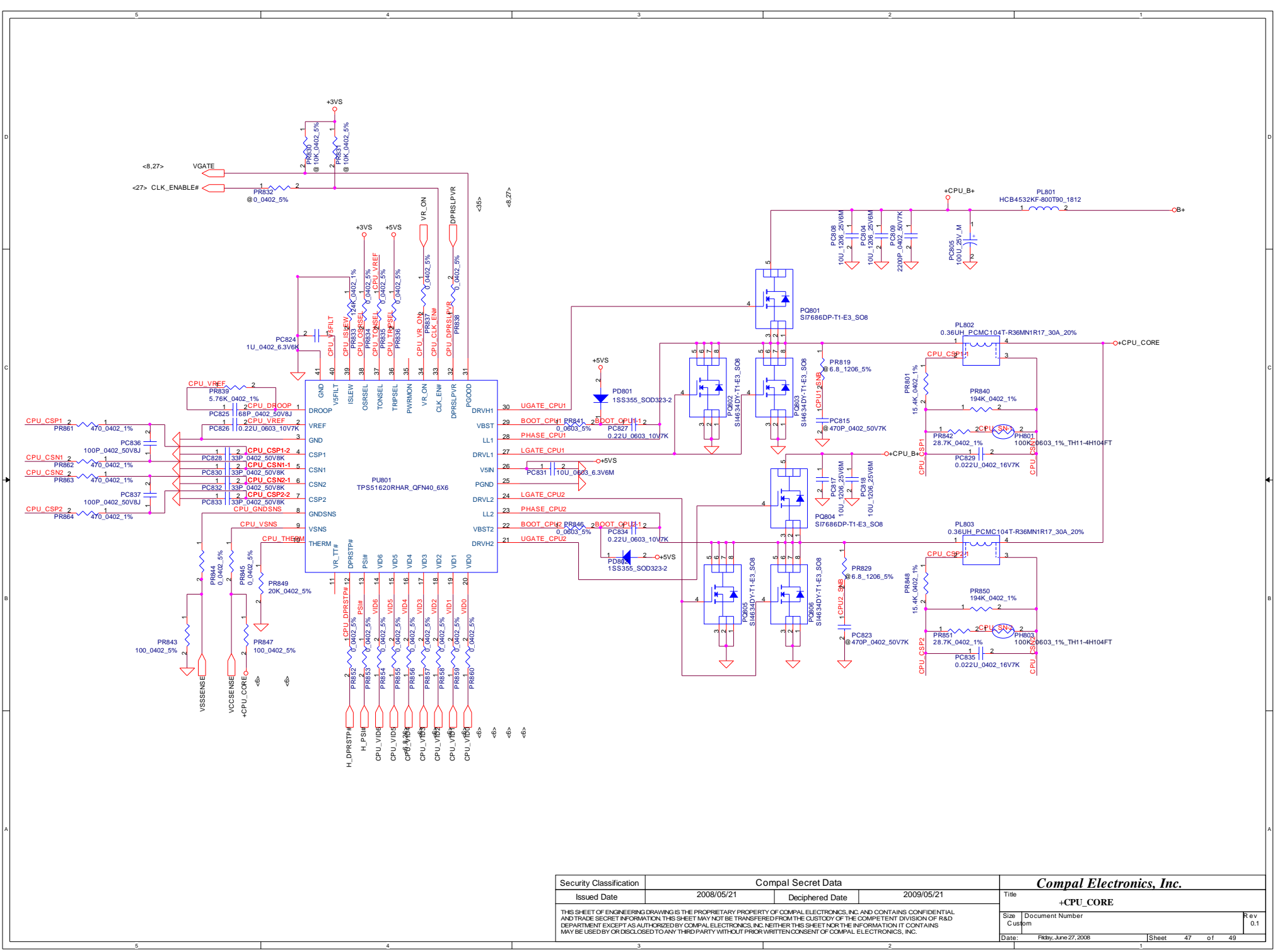
Security Classification	Compal Secret Data	
Issued Date	2007/11/12	Deciphered Date
		2008/11/12
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT 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	1.8V / 0.9V	
Size	Document Number	Rev
		0.1
Date:	Friday, June 27, 2008	Sheet 45 of 49



Variation of VID result in Feedback variation, thus Vout varies;

GPU_VID1	GPU_VID0	VGA_COREP
0	0	0.9V
0	1	1.09V
1	1	1.17V



Security Classification	Compal Secret Data			Compal Electronics, Inc.			
Issued Date	2008/05/21	Deciphered Date	2009/05/21			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
					Customer		0.1
					Date:	Fri, Jun 27, 2008	Sheet 47 of 49

Version change list (P.I.R. List)

Item	Fixed Issue	Reason for change	Rev.	PG#	Modify List	Date	Phase
1		Schematic modify	0.1	41 43 46 47	Add PR334,PR861,PR862,PR863PR864 Cancel PH802 Change PR841,PR846 to 0ohm Change PC831 to 10U Change PR840,PR850 to 194K Change PR801,PR848 to 15.4K Change PR842,PR851 to 28.7K Change PC106 to 1000P Change PC829,PC835 to 0.022U Change PR622 to 1.91K Change PR627 to 3.16K Change PR628 to 1.24K PU401 main source change to TPS51427		EVT
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							

Security Classification		Compal Secret Data		Title		Compal Electronics, Inc.	
Issued Date	2007/09/20	Deciphered Date	2008/09/20	PIR (PWR)		Size	Document Number
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: Friday, June 27, 2008		Sheet	48 of 49
						Rev	0.1
						Custom	<DOC>

5 4 3 2 1
NO DATE PAGE MODIFICATION LIST PURPOSE

D

D

C

C

B

B

A

A

<i>Compal Electronics, Inc.</i>		
Title		
<i>HW PIR</i>		
Size	Document Number	Rev
B	KIWB3/B4_LA4551P	0.1
Date:	Friday, June 27, 2008	Sheet 49 of 49
		1

5

4

3

2

1