

# JIWA1/A2

# Compal ~~confidential~~ Schematic Document

## Mobile Penryn uFCPGA

## Intel Cantiga\_GM/PM+ICH9-M

Saturday, June 06, 2009

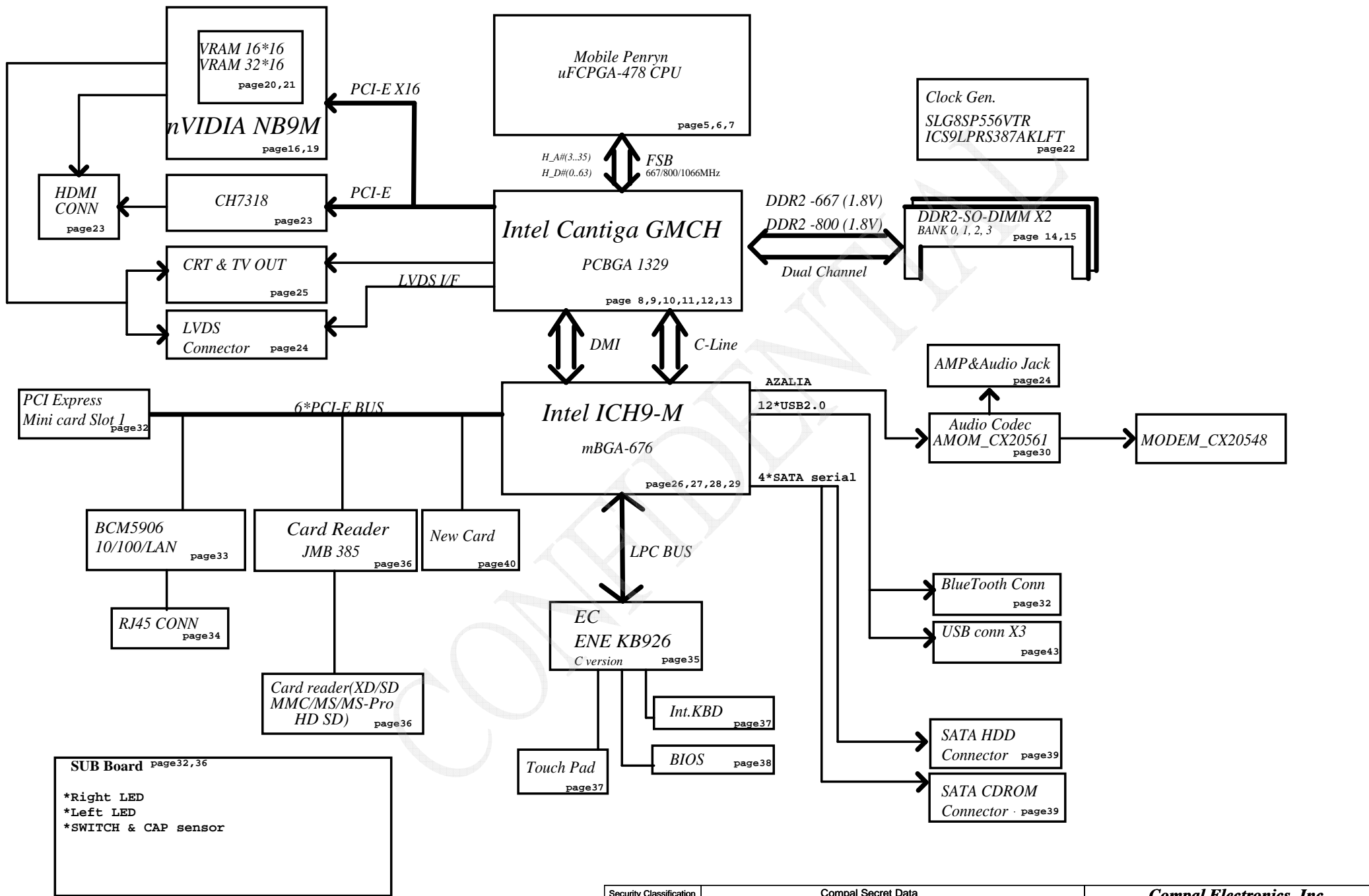
REV: 2.0

Security Classification	Compal Secret Data		Title	<b>Compal Electronics, Inc.</b>	
Issued Date	2007/10/15	Deciphered Date	2008/10/15	SCHEMATIC, M/B LA-4211P	
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	401557	Rev 1
			Date:	Sheet 1 of 53	

**Right LED Board**

**Switch & CAP SENSE LEDs Board**

**Left LED Board**



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.				Document Number	Rev
				401557	1
				Date: Saturday, June 06, 2009	Sheet 2 of 53

## Voltage Rails

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

SMBUS Control Table

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

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

PM@  
GM@  
X76@

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.				Document Number	Rev
				401557	1
				Date: Saturday, June 06, 2009	Sheet 3 of 53

### Voltage Rails

Power Plane	Description	S1	S3	S5
VIN	Adapter power supply (19V)	N/A	N/A	N/A
B+	AC or battery power rail for power circuit.	N/A	N/A	N/A
+VGA_CORE	Core voltage for GPU	ON	OFF	OFF
+1.1VS	1.1V switched power rail	ON	OFF	OFF
+1.8V	1.8V power rail for DDR	ON	ON	OFF
+1.8VS	1.8V switched power rail	ON	OFF	OFF
+3VALW	3.3V always on power rail	ON	ON	ON*
+3VS	3.3V switched power rail	ON	OFF	OFF
+5VALW	5V always on power rail	ON	ON	ON*
+5VS	5V switched power rail	ON	OFF	OFF
+VSB	VSB always on power rail	ON	ON	ON*
+RTCVC	RTC power	ON	ON	ON

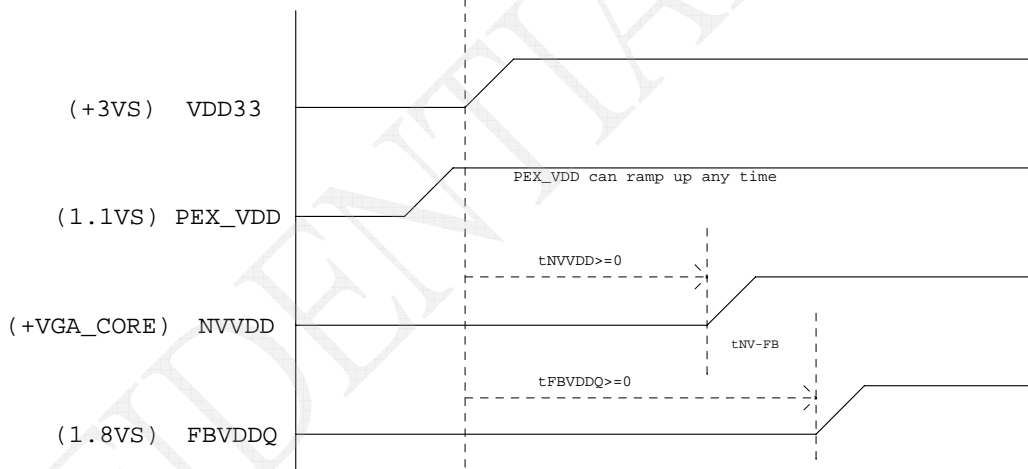
### EDP at Tj = 97C\*

Power Supply Rail		NB9M-GS		NB9M-GE	
	(V)	GDDR3	DDR2	GDDR3	DDR2
NVVDD	Variable	12.68A	11.57A	10.52A	9.59A
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		1400mA		
PEX_PLLVDD	1.1		110mA		
PLLVDD	1.1		65mA		
SP_PLLVDD	1.1		25mA		
VID_PLLVDD	1.1		50mA		
TOTAL	1.1		3.225A		
FBVDD/Q	1.8	3080mA	1720mA	3010mA	1680mA
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	3.6A	2.24A	3.53A	2.2A
DACA_VDD	3.3		130mA		
DACB_VDD	3.3		255mA		
DACC_VDD	3.3		130mA		
MIOA_VDDQ	3.3		10mA		
MIOB_VDDQ	3.3		10mA		
VDD33	3.3		110mA		
TOTAL	3.3		0.645A		

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

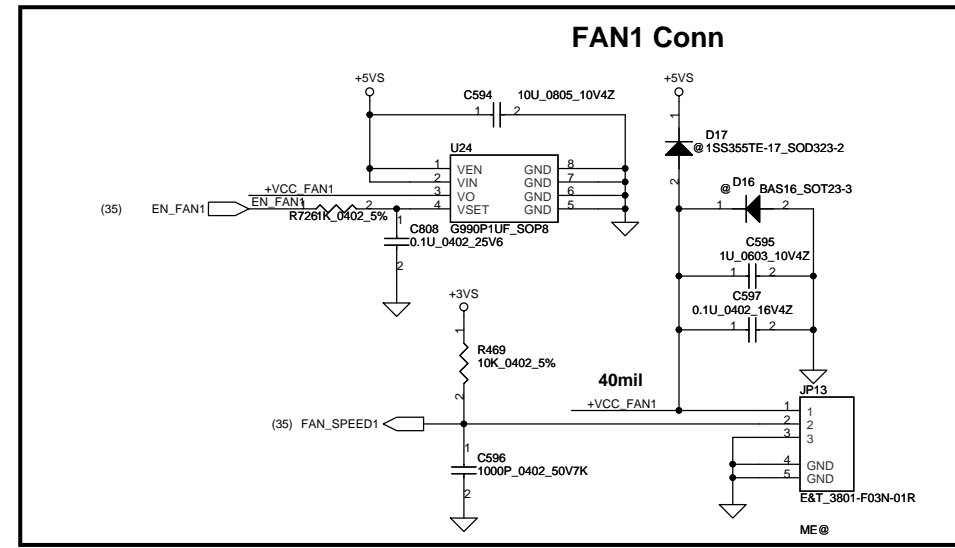
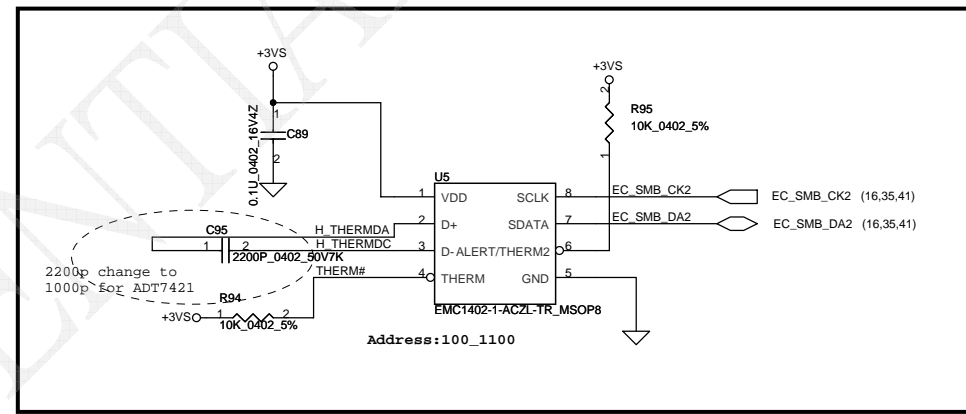
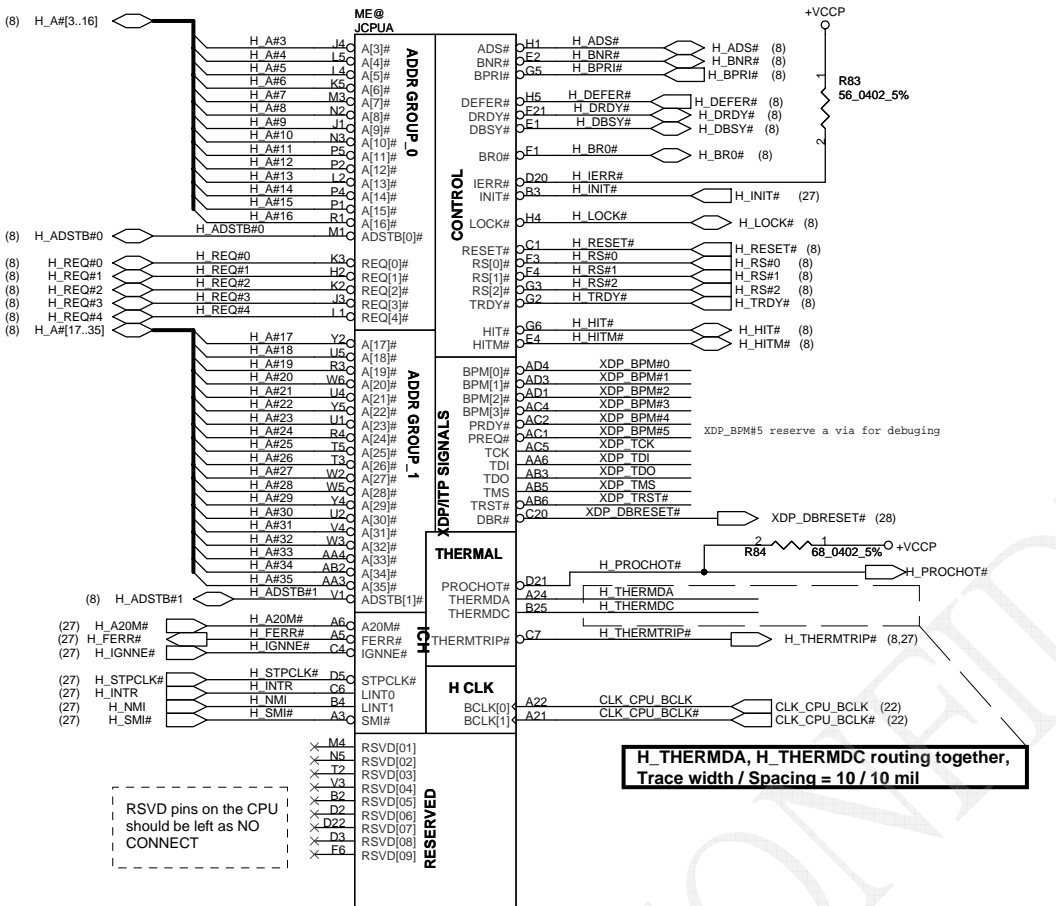
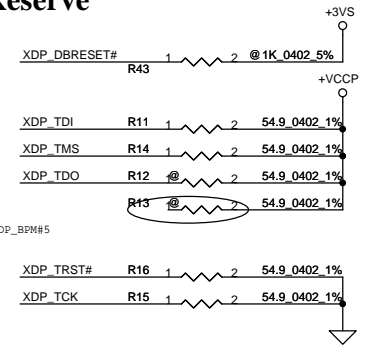
### POWER SEQUENCE

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



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.				Document Number	Rev
				401557	1
				Date: Saturday, June 06, 2009	Sheet 4 of 53

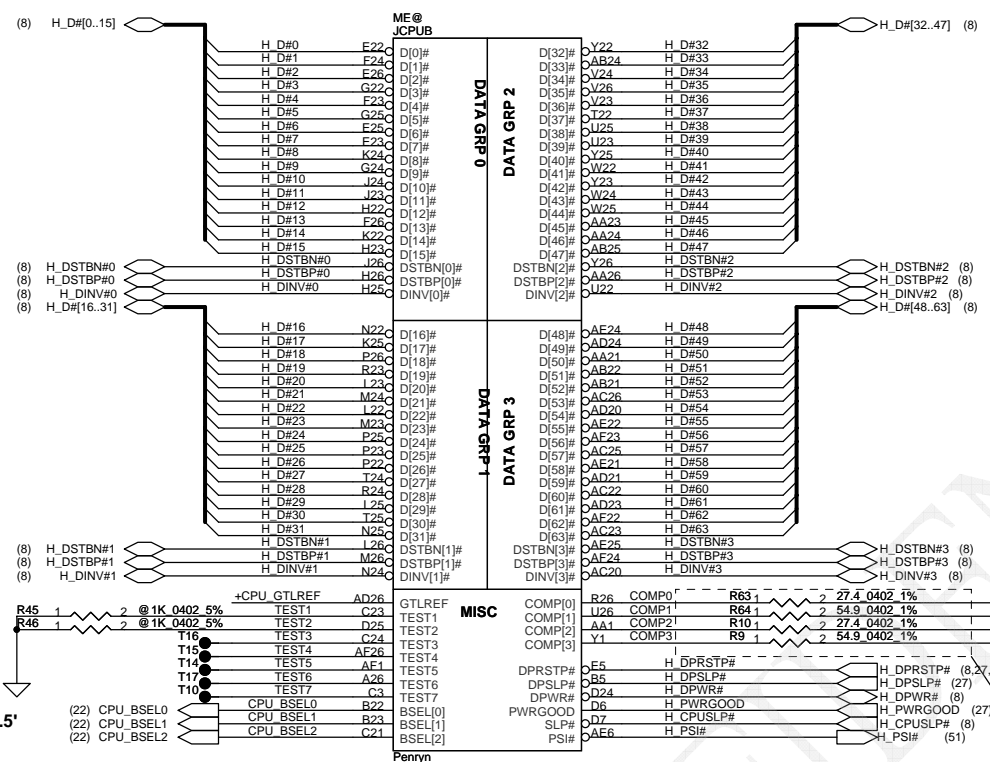
# XDP Reserve



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		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.				Document Number	401557
Date:	Saturday, June 06, 2009	Sheet	5	of	53



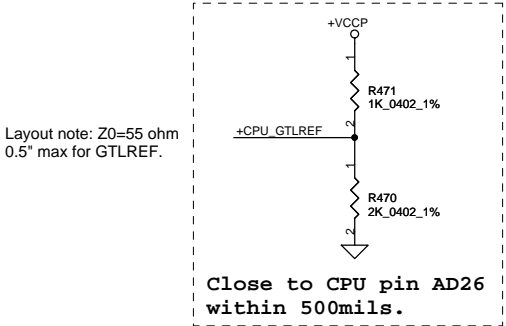
Trace Close CPU < 0.5'

Width=4 mil,  
Spacing: 15mil  
(55Ohm)

TRACE CLOSELY CPU < 0.5'  
COMP0, COMP2 layout : Width 18mils and Space 25mils (27.4Ohms)  
COMP1, COMP3 layout : Width 4mils and Space 25mils (55Ohms)

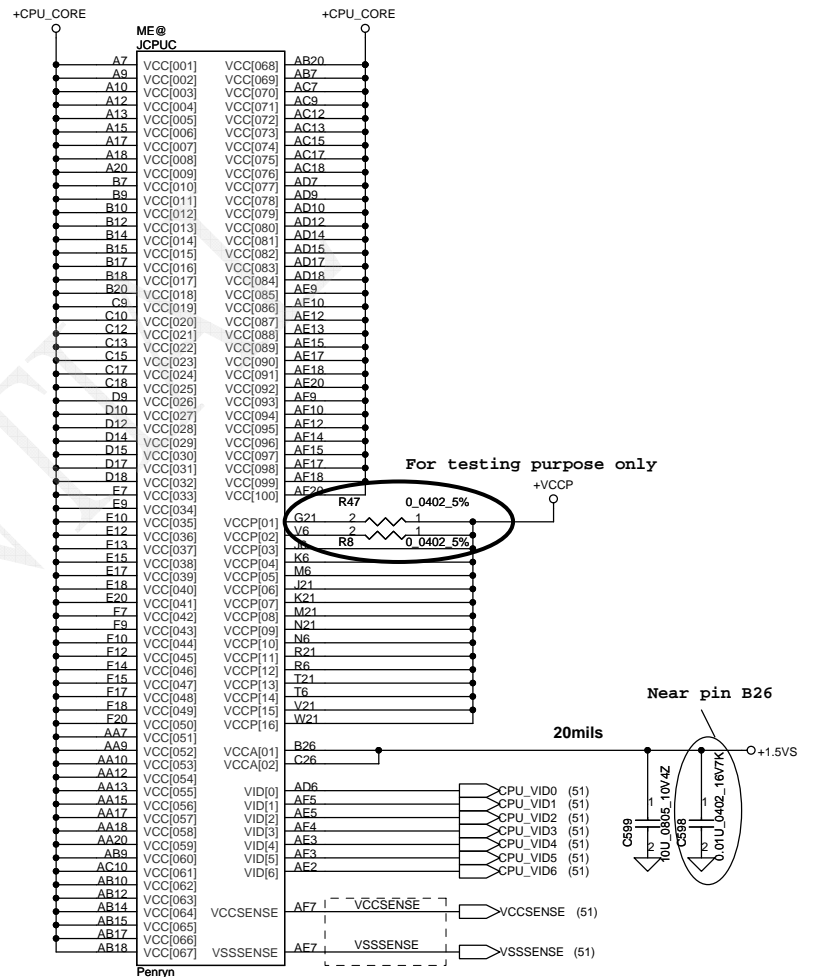
layout note: Route TEST3 & TEST5 traces on ground referenced layer to the TPs

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.

Close to CPU pin AD26  
within 500mils.



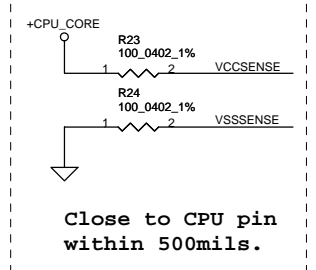
For testing purpose only

Near pin B26

20mils

Length match within 25 mils.  
The trace width/space/other is  
16/7/25.

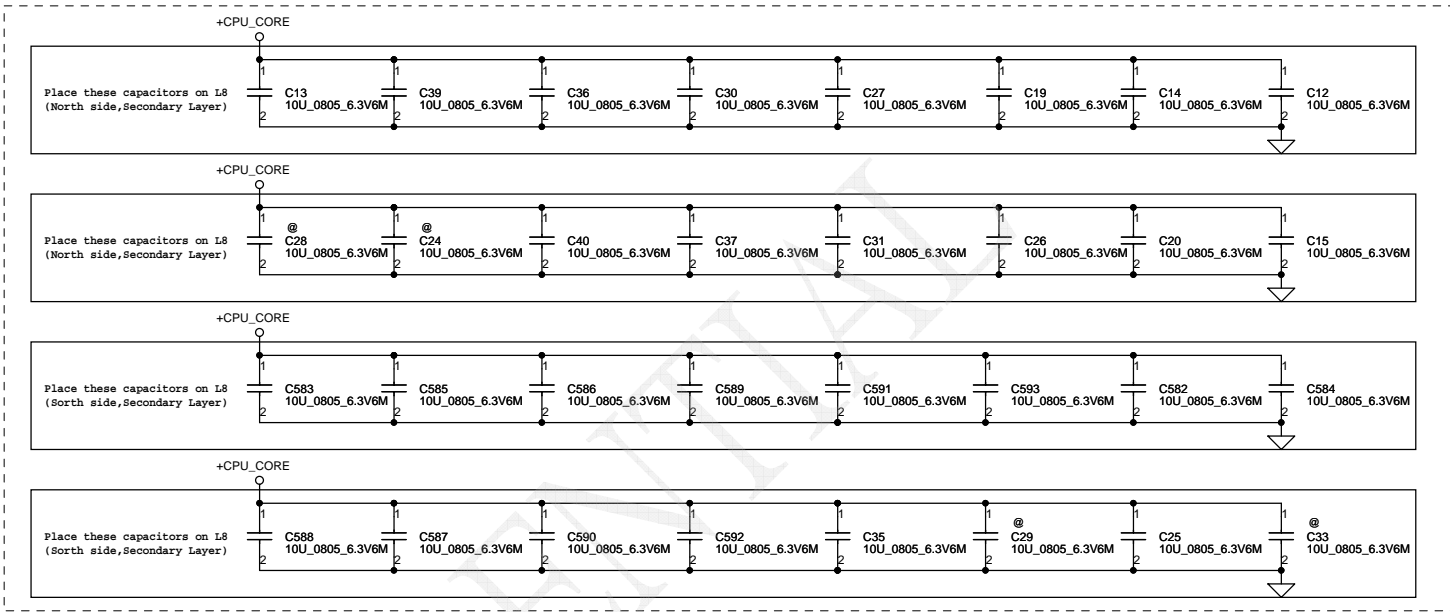
Layout Note:  
Route VCCSENSE and VSSSENSE traces at  
27.4 Ohms with 50 mil spacing.  
Place PU and PD within 1 inch of CPU.  
Length matched to within 25 mils.



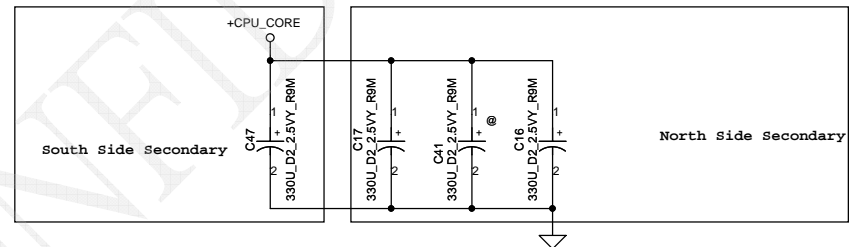
Close to CPU pin  
within 500mils.

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.				Document Number	401557
Date:	Saturday, June 06, 2009	Sheet	6	of	53

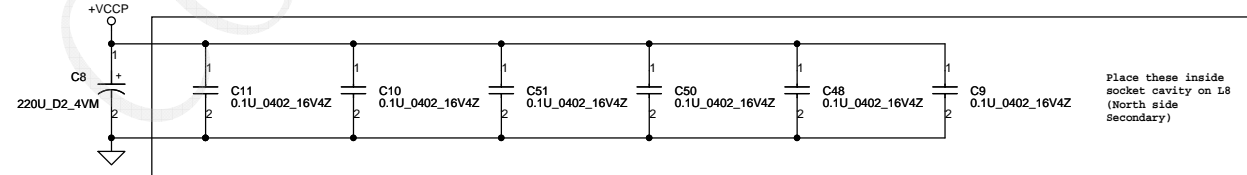
ME@	JCPU	VSS	Pin
A4	VSS[001]	P6	
A8	VSS[002]	P21	
A11	VSS[003]	P24	
A14	VSS[004]	R2	
A16	VSS[005]	R5	
A19	VSS[006]	R22	
A23	VSS[007]	R25	
AF2	VSS[008]	T1	
AF2	VSS[009]	T4	
BB	VSS[010]	T23	
BB	VSS[011]	T26	
B11	VSS[012]	U3	
B13	VSS[013]	U6	
B16	VSS[014]	U21	
B19	VSS[015]	U24	
B21	VSS[016]	V2	
B24	VSS[017]	V5	
C5	VSS[018]	V22	
C8	VSS[019]	V25	
C11	VSS[020]	W1	
C14	VSS[021]	W4	
C16	VSS[022]	W23	
C19	VSS[023]	W26	
C2	VSS[024]	Y3	
C22	VSS[025]	Y6	
C25	VSS[026]	Y21	
D1	VSS[027]	Y24	
D4	VSS[028]	AA2	
D8	VSS[029]	AA5	
D11	VSS[030]	AA8	
D13	VSS[031]	AA11	
D16	VSS[032]	AA14	
D19	VSS[033]	AA16	
D23	VSS[034]	AA19	
D26	VSS[035]	AA22	
E3	VSS[036]	AA25	
E6	VSS[037]	AB1	
F1	VSS[038]	AB4	
F14	VSS[039]	AB8	
F16	VSS[040]	AB11	
F19	VSS[041]	AB13	
F21	VSS[042]	AB16	
F24	VSS[043]	AB19	
F5	VSS[044]	AB23	
F8	VSS[045]	AB26	
F11	VSS[046]	AC3	
F13	VSS[047]	AC6	
F16	VSS[048]	AC8	
F19	VSS[049]	AC11	
F2	VSS[050]	AC14	
F22	VSS[051]	AC16	
F25	VSS[052]	AC19	
G4	VSS[053]	AC21	
G1	VSS[054]	AC24	
G23	VSS[055]	AD2	
H3	VSS[056]	AD5	
H6	VSS[057]	AD8	
H21	VSS[058]	AD11	
H24	VSS[059]	AD13	
J2	VSS[060]	AD16	
J5	VSS[061]	AD19	
J22	VSS[062]	AD22	
J25	VSS[063]	AD25	
K1	VSS[064]	AE1	
K4	VSS[065]	AE4	
K23	VSS[066]	AE8	
K26	VSS[067]	AE11	
L3	VSS[068]	AE14	
L6	VSS[069]	AE16	
L21	VSS[070]	AE19	
L24	VSS[071]	AE23	
M2	VSS[072]	AE26	
M5	VSS[073]	A2	
M22	VSS[074]	AF6	
M25	VSS[075]	AF8	
N1	VSS[076]	AF11	
N4	VSS[077]	AF13	
N23	VSS[078]	AF16	
N26	VSS[079]	AF19	
P3	VSS[080]	AF21	
	VSS[081]	A25	
	VSS[082]	AF25	



Mid Frequency Decoupling

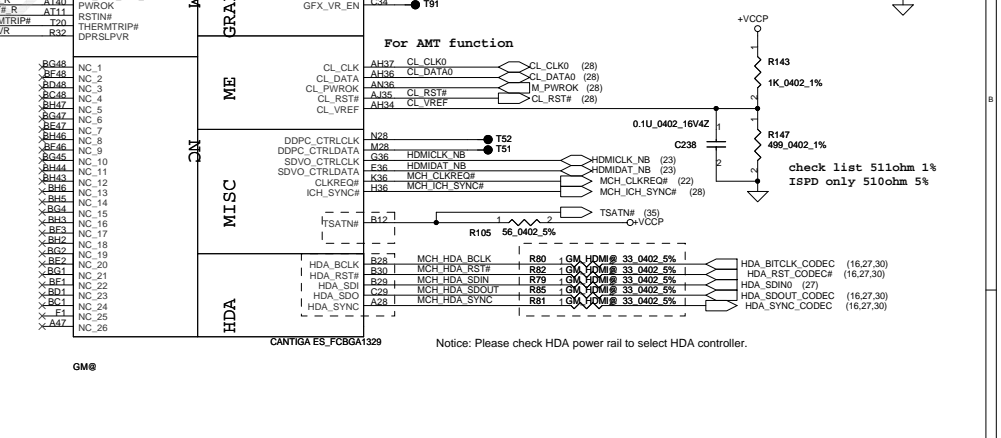
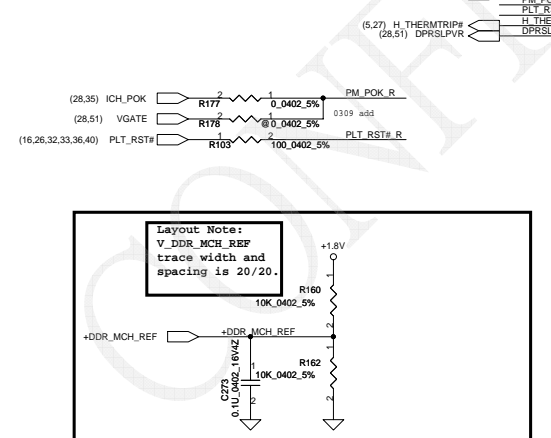
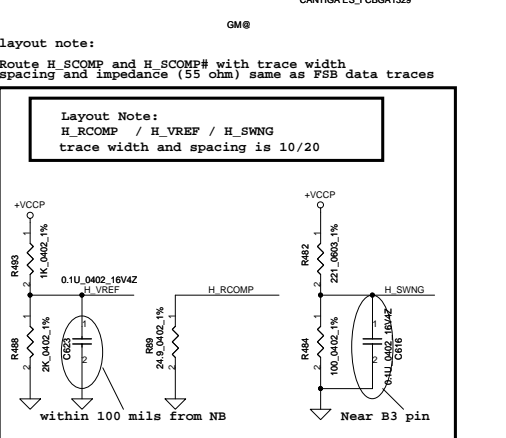
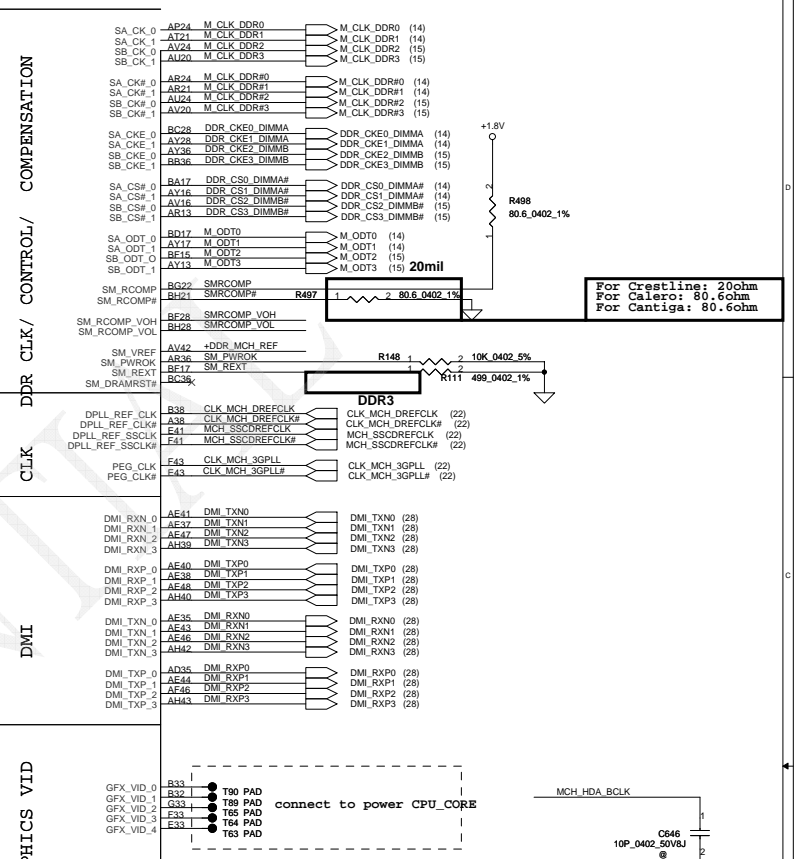
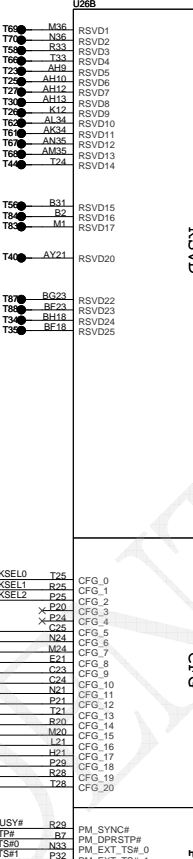
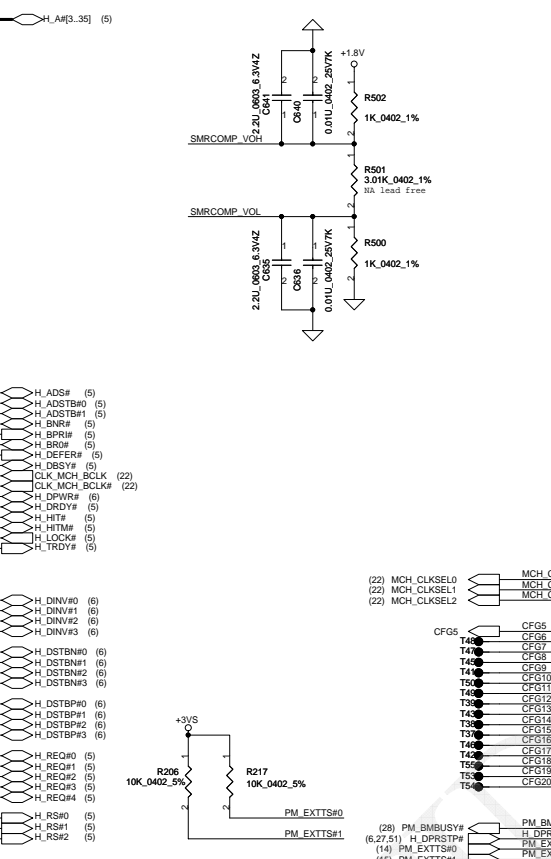
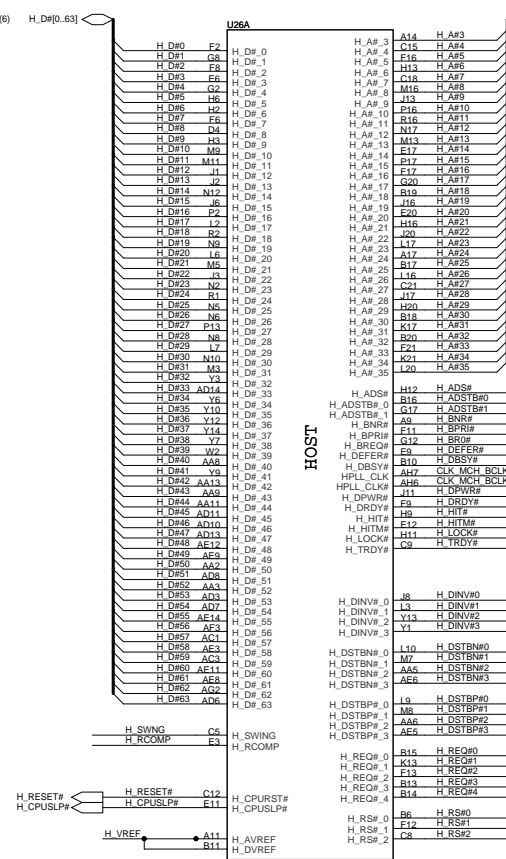


ESR <= 1.5m ohm  
Capacitor > 1980uF



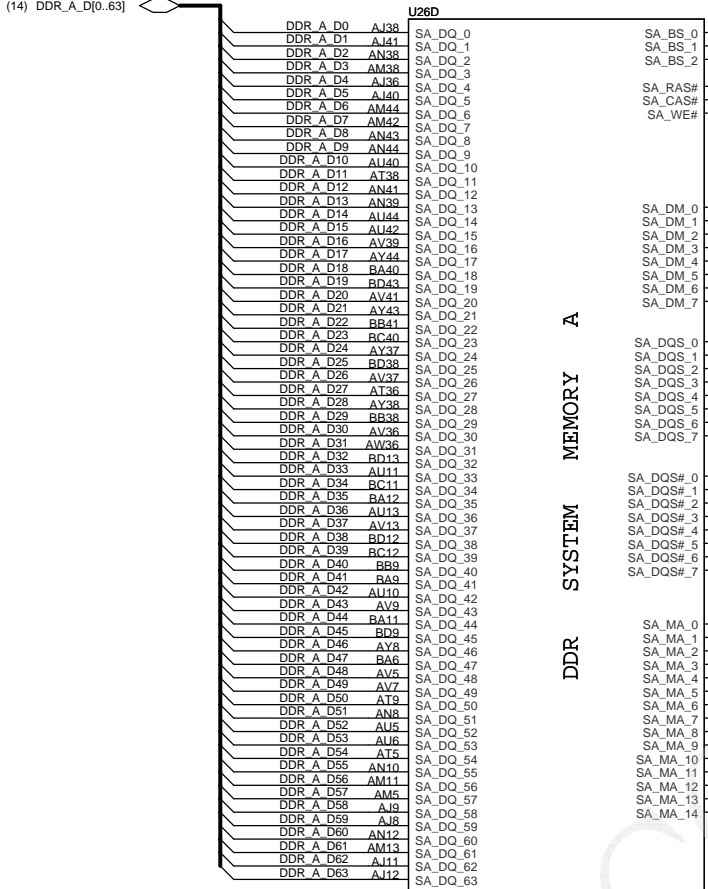
Place these inside socket cavity on L8 (North side Secondary)

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.				Document Number	Rev
				401557	1
Date:	Saturday, June 06, 2009	Sheet	7	of	53





(14) DDR\_A\_D[0..63]

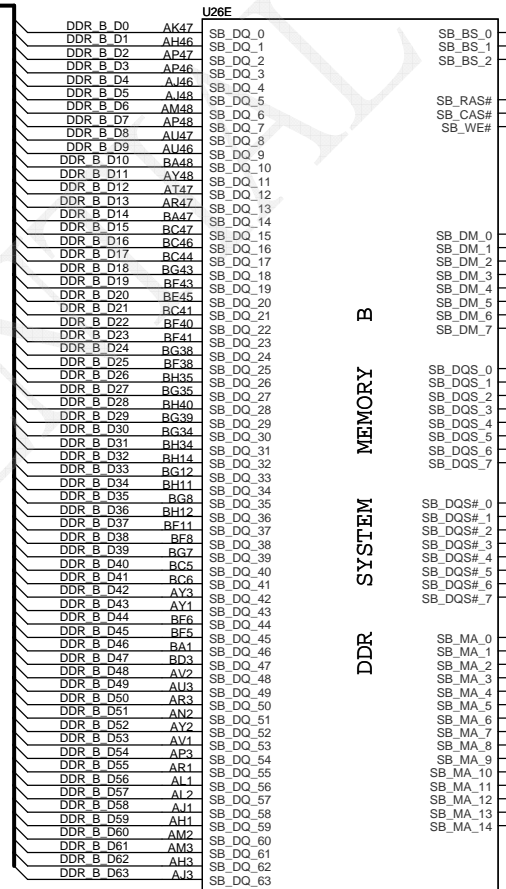


DDR SYSTEM MEMORY A

CANTIGA ES\_FCBGA1329

GM@

(15) DDR\_B\_D[0..63]



DDR SYSTEM MEMORY B

CANTIGA ES\_FCBGA1329

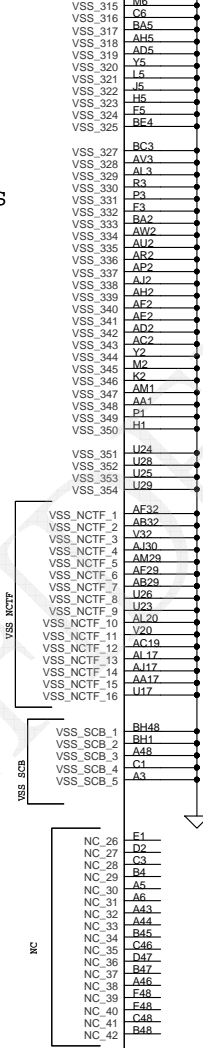
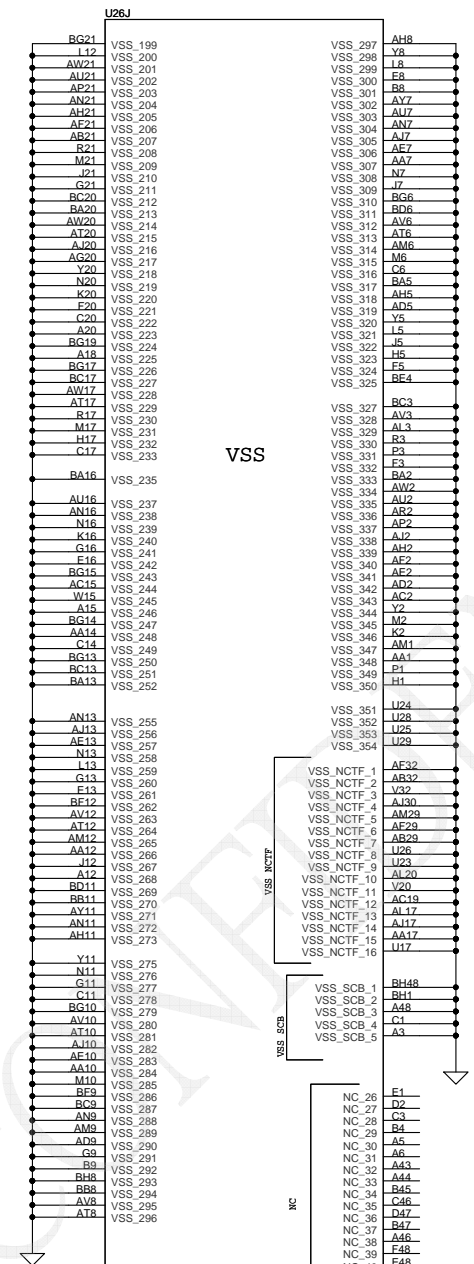
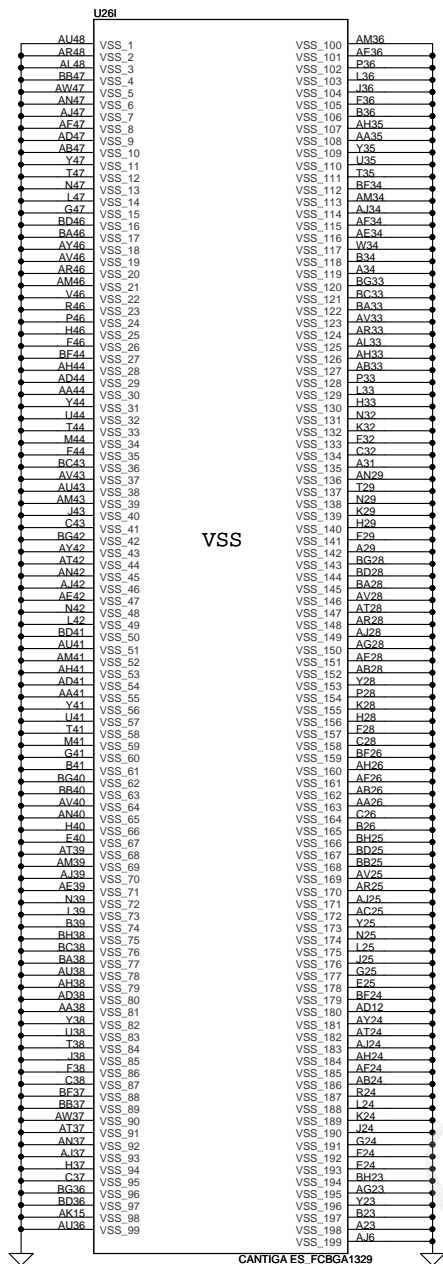
GM@

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.				Document Number	Rev
				401557	1
Date:	Saturday, June 06, 2009	Sheet	9	of	53







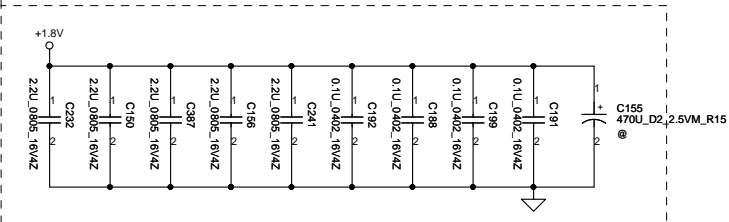


Security Classification	Compal Secret Data		Title	
Issued Date	2007/10/15	Deciphered Date	2008/10/15	Compal Electronics, Inc.
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				<b>SCHEMATIC, M/B LA-4211P</b> Document Number 401557 Date: Saturday, June 06, 2009
				Rev 1
				Sheet 13 of 53

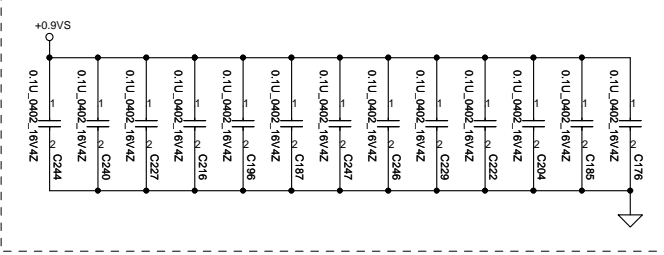


- (9) DDR\_B\_DQS#[0..7]
- (9) DDR\_B\_D[0..63]
- (9) DDR\_B\_DM[0..7]
- (9) DDR\_B\_DQS[0..7]
- (9) DDR\_B\_MA[0..13]

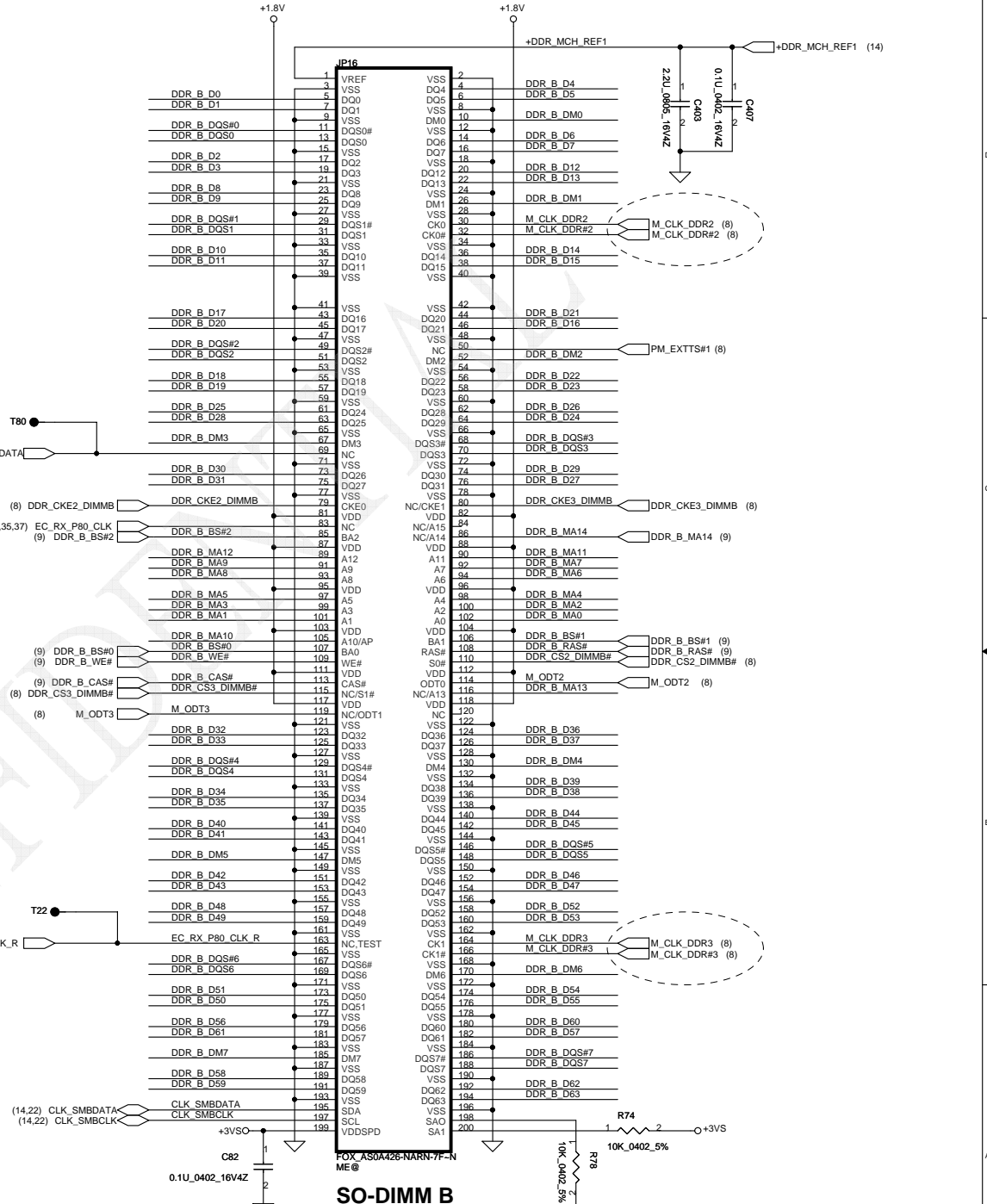
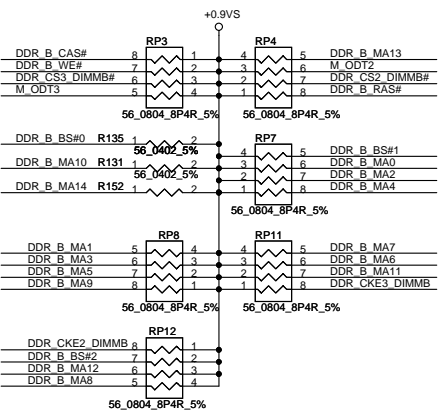
**Layout Note:**  
Place near JP42



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



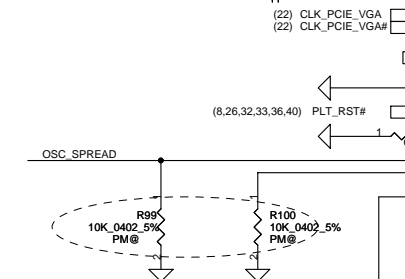
**Layout Note:**  
Place these resistor closely JP42, all trace length Max=1.5"



Security Classification	Compal Secret Data		Title
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.			<b>Compal Electronics, Inc.</b> <b>SCHEMATIC, M/B LA-4211P</b> Document Number: 401557 Date: Saturday, June 06, 2009   Sheet 15 of 53

- (10) PCIE\_MTX\_C\_GRX\_N0[.15] → PCIE\_MTX\_C\_GRX\_N0[.15]
- (10) PCIE\_MTX\_C\_GRX\_P0[.15] → PCIE\_MTX\_C\_GRX\_P0[.15]
- (10) PCIE\_GTX\_C\_MRX\_N0[.15] → PCIE\_GTX\_C\_MRX\_N0[.15]
- (10) PCIE\_GTX\_C\_MRX\_P0[.15] → PCIE\_GTX\_C\_MRX\_P0[.15]

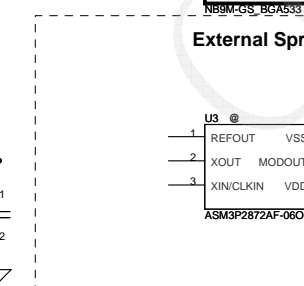
- PCIE\_GTX\_C\_MRX\_P0 C261 PM@ 1 2 0.1U 0402 16V7K
- PCIE\_GTX\_C\_MRX\_N0 C260 PM@ 1 2 0.1U 0402 16V7K
- PCIE\_GTX\_C\_MRX\_P1 C294 PM@ 1 2 0.1U 0402 16V7K
- PCIE\_GTX\_C\_MRX\_N1 C293 PM@ 1 2 0.1U 0402 16V7K
- PCIE\_GTX\_C\_MRX\_P2 C259 PM@ 1 2 0.1U 0402 16V7K
- PCIE\_GTX\_C\_MRX\_N2 C258 PM@ 1 2 0.1U 0402 16V7K
- PCIE\_GTX\_C\_MRX\_P3 C292 PM@ 1 2 0.1U 0402 16V7K
- PCIE\_GTX\_C\_MRX\_N3 C291 PM@ 1 2 0.1U 0402 16V7K
- PCIE\_GTX\_C\_MRX\_P4 C257 PM@ 1 2 0.1U 0402 16V7K
- PCIE\_GTX\_C\_MRX\_N4 C256 PM@ 1 2 0.1U 0402 16V7K
- PCIE\_GTX\_C\_MRX\_P5 C290 PM@ 1 2 0.1U 0402 16V7K
- PCIE\_GTX\_C\_MRX\_N5 C289 PM@ 1 2 0.1U 0402 16V7K
- PCIE\_GTX\_C\_MRX\_P6 C255 PM@ 1 2 0.1U 0402 16V7K
- PCIE\_GTX\_C\_MRX\_N6 C254 PM@ 1 2 0.1U 0402 16V7K
- PCIE\_GTX\_C\_MRX\_P7 C287 PM@ 1 2 0.1U 0402 16V7K
- PCIE\_GTX\_C\_MRX\_N7 C288 PM@ 1 2 0.1U 0402 16V7K
- PCIE\_GTX\_C\_MRX\_P8 C253 PM@ 1 2 0.1U 0402 16V7K
- PCIE\_GTX\_C\_MRX\_N8 C252 PM@ 1 2 0.1U 0402 16V7K
- PCIE\_GTX\_C\_MRX\_P9 C285 PM@ 1 2 0.1U 0402 16V7K
- PCIE\_GTX\_C\_MRX\_N9 C286 PM@ 1 2 0.1U 0402 16V7K
- PCIE\_GTX\_C\_MRX\_P10 C251 PM@ 1 2 0.1U 0402 16V7K
- PCIE\_GTX\_C\_MRX\_N10 C250 PM@ 1 2 0.1U 0402 16V7K
- PCIE\_GTX\_C\_MRX\_P11 C284 PM@ 1 2 0.1U 0402 16V7K
- PCIE\_GTX\_C\_MRX\_N11 C283 PM@ 1 2 0.1U 0402 16V7K
- PCIE\_GTX\_C\_MRX\_P12 C249 PM@ 1 2 0.1U 0402 16V7K
- PCIE\_GTX\_C\_MRX\_N12 C248 PM@ 1 2 0.1U 0402 16V7K
- PCIE\_GTX\_C\_MRX\_P13 C282 PM@ 1 2 0.1U 0402 16V7K
- PCIE\_GTX\_C\_MRX\_N13 C281 PM@ 1 2 0.1U 0402 16V7K
- PCIE\_GTX\_C\_MRX\_P14 C267 PM@ 1 2 0.1U 0402 16V7K
- PCIE\_GTX\_C\_MRX\_N14 C266 PM@ 1 2 0.1U 0402 16V7K
- PCIE\_GTX\_C\_MRX\_P15 C280 PM@ 1 2 0.1U 0402 16V7K
- PCIE\_GTX\_C\_MRX\_N15 C279 PM@ 1 2 0.1U 0402 16V7K



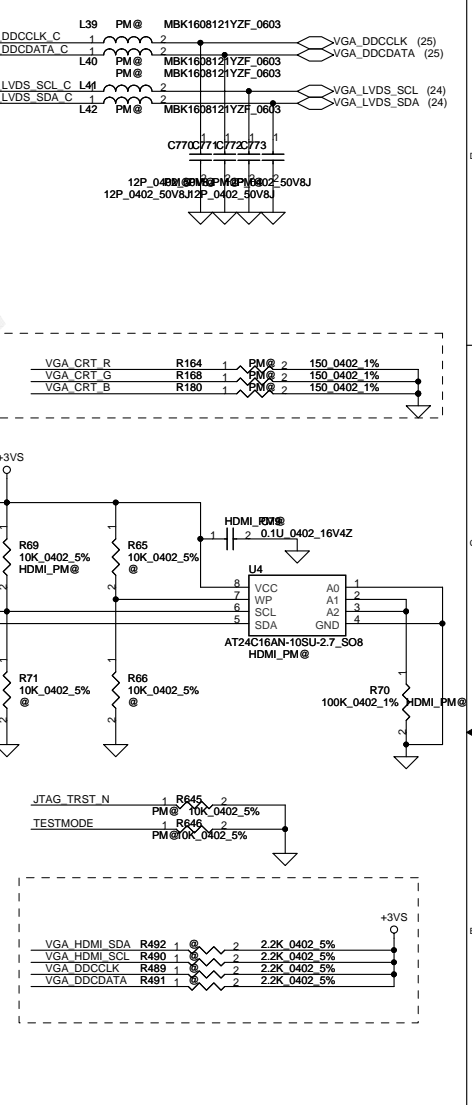
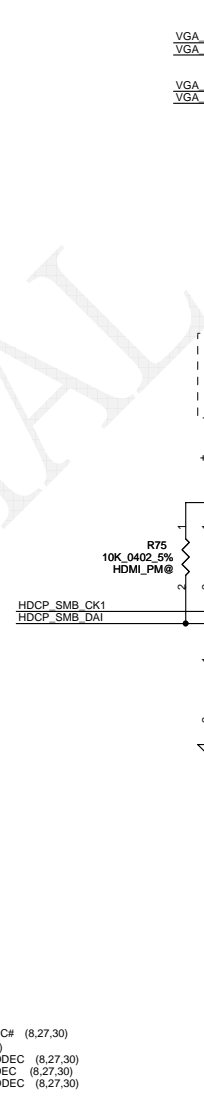
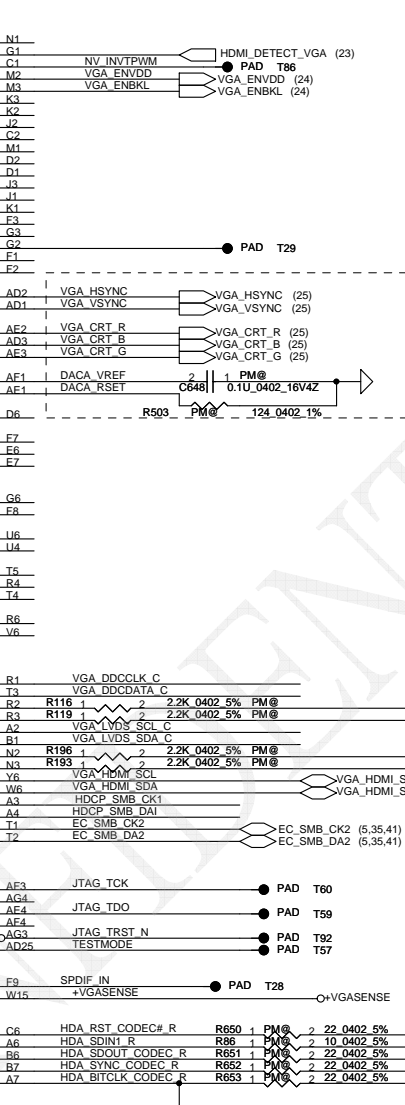
- PCIE\_MTX\_C\_GRX\_P0 AF12
- PCIE\_MTX\_C\_GRX\_N0 AF12
- PCIE\_MTX\_C\_GRX\_P1 AG12
- PCIE\_MTX\_C\_GRX\_N1 AG12
- PCIE\_MTX\_C\_GRX\_P2 AG13
- PCIE\_MTX\_C\_GRX\_N2 AG13
- PCIE\_MTX\_C\_GRX\_P3 AF15
- PCIE\_MTX\_C\_GRX\_N3 AG15
- PCIE\_MTX\_C\_GRX\_P4 AG15
- PCIE\_MTX\_C\_GRX\_N4 AG16
- PCIE\_MTX\_C\_GRX\_P5 AF16
- PCIE\_MTX\_C\_GRX\_N5 AF16
- PCIE\_MTX\_C\_GRX\_P6 AE18
- PCIE\_MTX\_C\_GRX\_N6 AE18
- PCIE\_MTX\_C\_GRX\_P7 AG18
- PCIE\_MTX\_C\_GRX\_N7 AG18
- PCIE\_MTX\_C\_GRX\_P8 AG18
- PCIE\_MTX\_C\_GRX\_N8 AE19
- PCIE\_MTX\_C\_GRX\_P9 AE21
- PCIE\_MTX\_C\_GRX\_N9 AE21
- PCIE\_MTX\_C\_GRX\_P10 AG21
- PCIE\_MTX\_C\_GRX\_N10 AG22
- PCIE\_MTX\_C\_GRX\_P11 AE22
- PCIE\_MTX\_C\_GRX\_N11 AE22
- PCIE\_MTX\_C\_GRX\_P12 AE24
- PCIE\_MTX\_C\_GRX\_N12 AE24
- PCIE\_MTX\_C\_GRX\_P13 AG24
- PCIE\_MTX\_C\_GRX\_N13 AE25
- PCIE\_MTX\_C\_GRX\_P14 AG25
- PCIE\_MTX\_C\_GRX\_N14 AE25
- PCIE\_MTX\_C\_GRX\_P15 AE27
- PCIE\_MTX\_C\_GRX\_N15 AE27

- PCIE\_GTX\_MRX\_P0 AD10
- PCIE\_GTX\_MRX\_N0 AD11
- PCIE\_GTX\_MRX\_P1 AD12
- PCIE\_GTX\_MRX\_N1 AC12
- PCIE\_GTX\_MRX\_P2 AB11
- PCIE\_GTX\_MRX\_N2 AB12
- PCIE\_GTX\_MRX\_P3 AD13
- PCIE\_GTX\_MRX\_N3 AD14
- PCIE\_GTX\_MRX\_P4 AD15
- PCIE\_GTX\_MRX\_N4 AC15
- PCIE\_GTX\_MRX\_P5 AB14
- PCIE\_GTX\_MRX\_N5 AB15
- PCIE\_GTX\_MRX\_P6 AC18
- PCIE\_GTX\_MRX\_N6 AC18
- PCIE\_GTX\_MRX\_P7 AD17
- PCIE\_GTX\_MRX\_N7 AD18
- PCIE\_GTX\_MRX\_P8 AC18
- PCIE\_GTX\_MRX\_N8 AB18
- PCIE\_GTX\_MRX\_P9 AB19
- PCIE\_GTX\_MRX\_N9 AB20
- PCIE\_GTX\_MRX\_P10 AD19
- PCIE\_GTX\_MRX\_N10 AD20
- PCIE\_GTX\_MRX\_P11 AD21
- PCIE\_GTX\_MRX\_N11 AC21
- PCIE\_GTX\_MRX\_P12 AB21
- PCIE\_GTX\_MRX\_N12 AC22
- PCIE\_GTX\_MRX\_P13 AC22
- PCIE\_GTX\_MRX\_N13 AD22
- PCIE\_GTX\_MRX\_P14 AD23
- PCIE\_GTX\_MRX\_N14 AD24
- PCIE\_GTX\_MRX\_P15 AE23
- PCIE\_GTX\_MRX\_N15 AE26

- CLK\_PCIE\_VGA# AB10
- CLK\_PCIE\_VGA# AC19C
- PEX\_REFCLK
- PEX\_REFCLK\_N
- PEX\_TSTCLK\_OUT AE10
- PEX\_TSTCLK\_OUT\_N AE10C
- PEX\_TERM AG10
- PEX\_RST# AD9
- PEX\_RST\_N AD9B
- XTAL\_SIN E10
- XTAL\_OUTBUF E10
- XTAL\_OUT E10
- XTAL\_IN D10

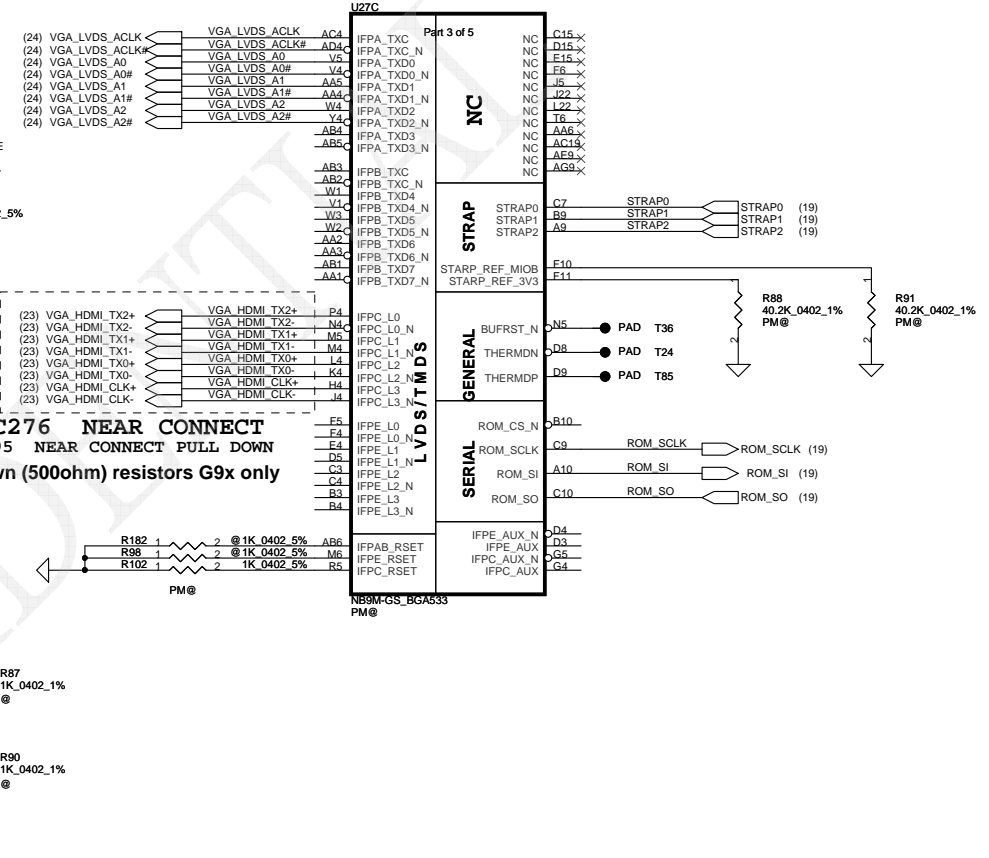
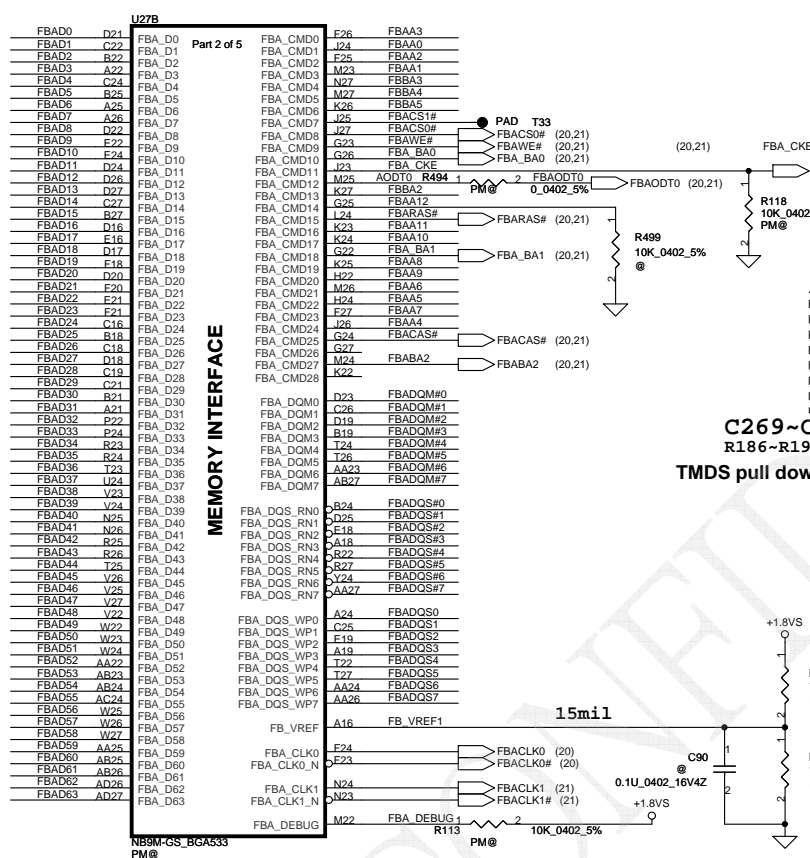
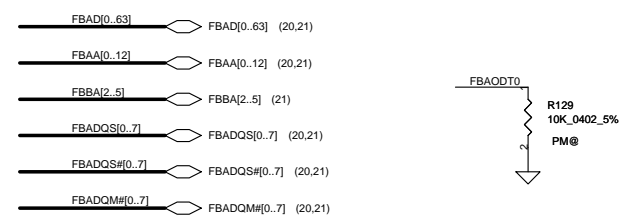


- GPIO: GPIO0, GPIO1, GPIO2, GPIO3, GPIO4, GPIO6, GPIO8, GPIO9, GPIO10, GPIO11, GPIO12, GPIO13, GPIO14, GPIO15, GPIO16, GPIO17, GPIO18, GPIO19
- DACA: DACA\_HSYNC, DACA\_VSYNC, DACA\_RED, DACA\_BLUE, DACA\_GREEN, DACA\_VREF, DACA\_RSET
- DACB: DACB\_RED, DACB\_BLUE, DACB\_GREEN, DACB\_VREF, DACB\_RSET
- DACC: DACC\_HSYNC, DACC\_VSYNC, DACC\_RED, DACC\_BLUE, DACC\_GREEN, DACC\_VREF, DACC\_RSET
- I2C: I2CA\_SCL, I2CA\_SDA, I2CB\_SCL, I2CB\_SDA, I2CC\_SCL, I2CC\_SDA, I2CD\_SCL, I2CD\_SDA, I2CE\_SCL, I2CE\_SDA, I2CH\_SCL, I2CH\_SDA, I2CS\_SCL, I2CS\_SDA
- TEST: JTAG\_TCK, JTAG\_TDI, JTAG\_TDO, JTAG\_TMS, JTAG\_TRST\_N, TESTMODE
- HDA: HDA\_RST\_N, HDA\_SDI, HDA\_SDO, HDA\_SYNC, HDA\_BCLK



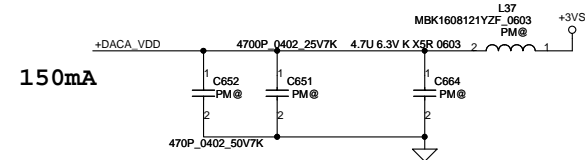
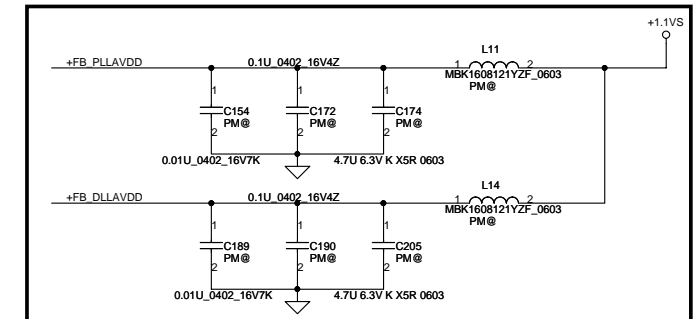
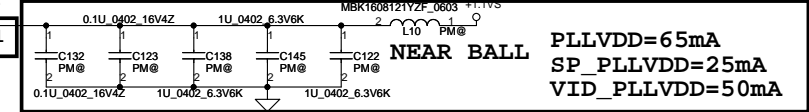
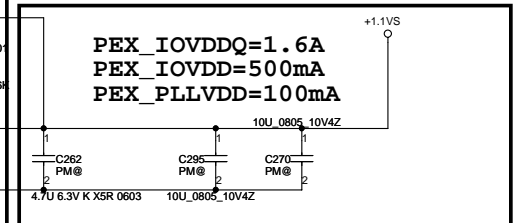
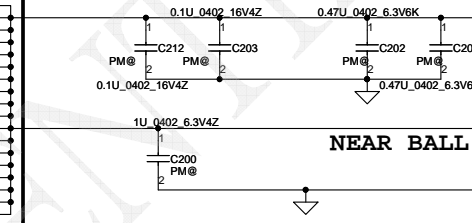
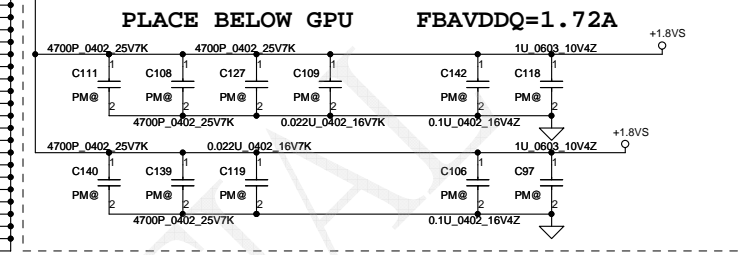
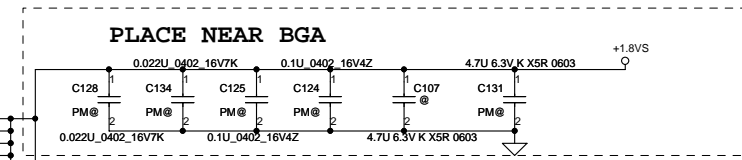
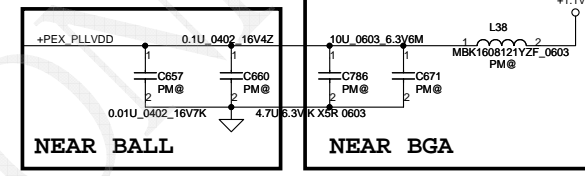
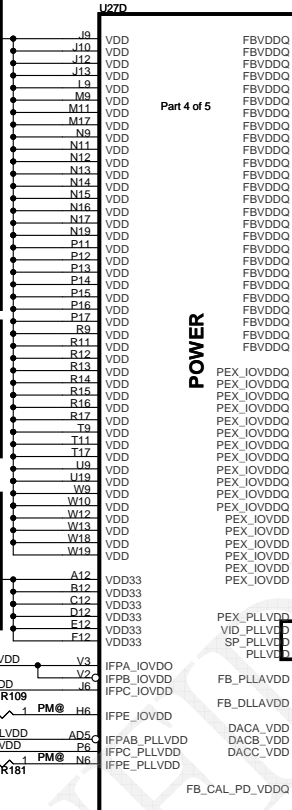
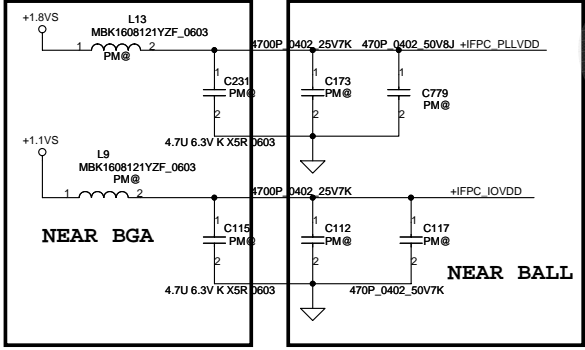
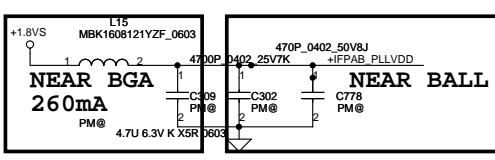
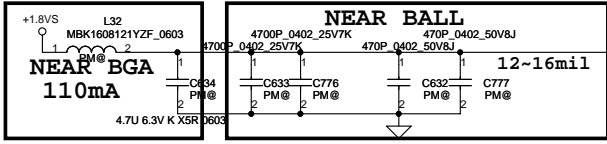
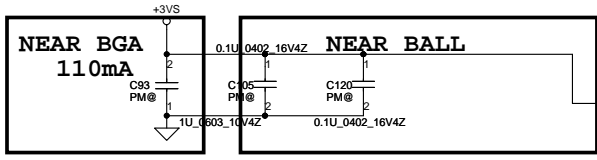
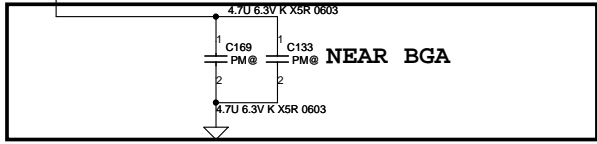
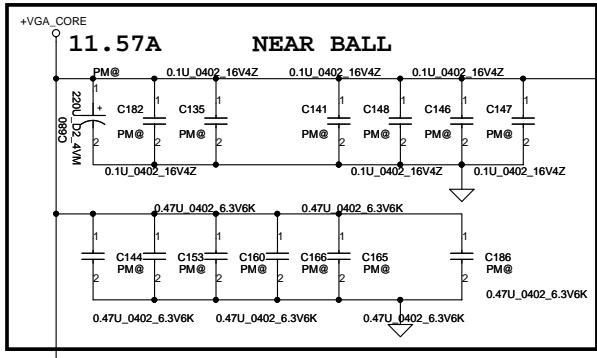
Security Classification	Compal Secret Data		Title	
Issued Date	2007/10/15	Deciphered Date	2008/10/15	Compal Electronics, Inc.
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				
Document Number	401557		Rev	1
Date:	Saturday, June 06, 2009	Sheet	16	of 53





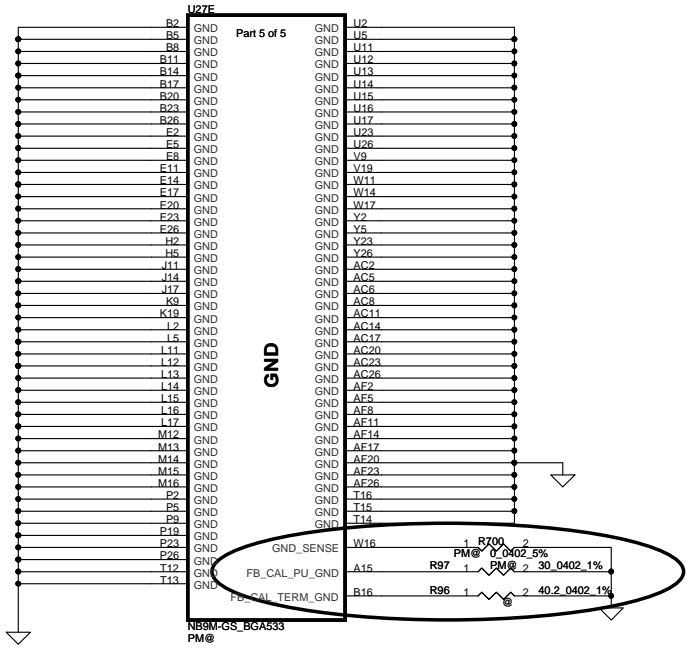
**C269~C276 NEAR CONNECT**  
**R186~R195 NEAR CONNECT PULL DOWN**  
**TMDS pull down (500ohm) resistors G9x only**

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.				Document Number	Rev
				401557	I
				Date: Saturday, June 06, 2009	Sheet 17 of 53

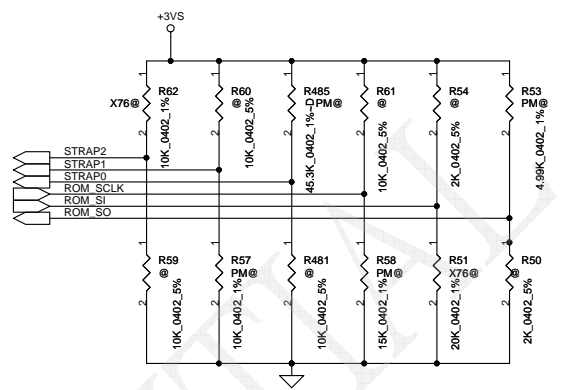


Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2007/10/15	Deciphered Date	2008/10/15	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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
				Customer	401557
				Date:	Saturday, June 06, 2009
				Sheet	18 of 53

A total of 8 signals are required for GB1 strapping this includes  
 2 reference signals  
 6 physical strapping pins  
 4 logical strapping bits  
 A total of 24 logical strapping bits are available



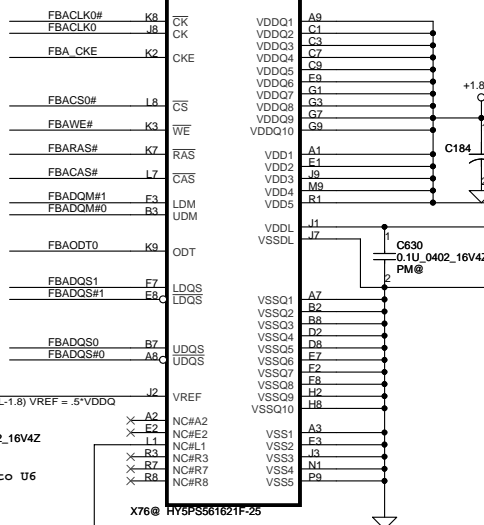
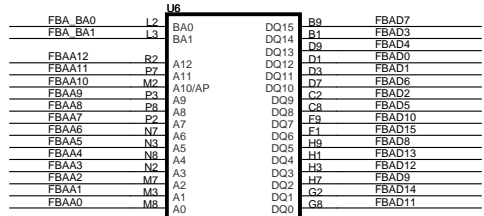
- (17) STRAP2
- (17) STRAP1
- (17) STRAP0
- (17) ROM\_SCLK
- (17) ROM\_SI
- (17) ROM\_SO



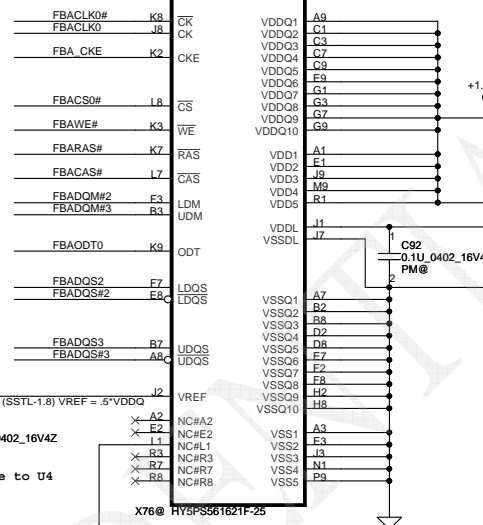
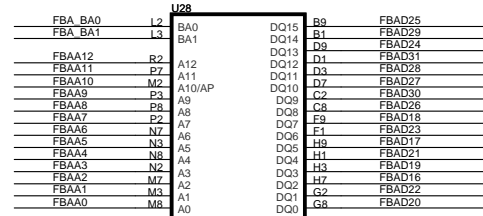
**GB1 Family GPU Strap Options**

GPU	FB Memory	ROM_SO	ROM_SCLK	ROM_SI	STRAP2	STRAP1	STRAP0	
NB9M-GS (0x06E9)	Samsung	16Mx16 (1)	PU 5K	PD 15K	PD 10K	PU 10K	PD 10K	PU 45K
		32Mx16 (5)	PU 5K	PD 15K	PD 30K	PU 10K	PD 10K	PU 45K
	Hynix	16Mx16 (3)	PU 5K	PD 15K	PD 20K	PU 10K	PD 10K	PU 45K
		32Mx16 (7)	PU 5K	PD 15K	PD 45K	PU 10K	PD 10K	PU 45K
	Qimonda	16Mx16 (2)	PU 5K	PD 15K	PD 15K	PU 10K	PD 10K	PU 45K
		32Mx16 (6)	PU 5K	PD 15K	PD 35K	PU 10K	PD 10K	PU 45K
NB9M-GE (0x06E8)	Samsung	16Mx16 (1)	PU 5K	PD 15K	PD 10K	PU 5K	PD 10K	PU 45K
		32Mx16 (5)	PU 5K	PD 15K	PD 30K	PU 5K	PD 10K	PU 45K
	Hynix	16Mx16 (3)	PU 5K	PD 15K	PD 20K	PU 5K	PD 10K	PU 45K
		32Mx16 (7)	PU 5K	PD 15K	PD 45K	PU 5K	PD 10K	PU 45K
	Qimonda	16Mx16 (2)	PU 5K	PD 15K	PD 15K	PU 5K	PD 10K	PU 45K
		32Mx16 (6)	PU 5K	PD 15K	PD 35K	PU 5K	PD 10K	PU 45K

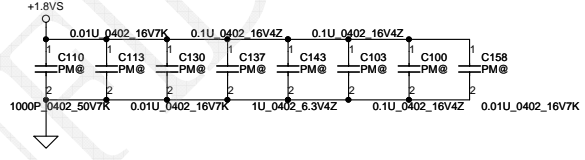
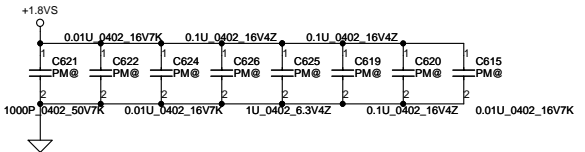
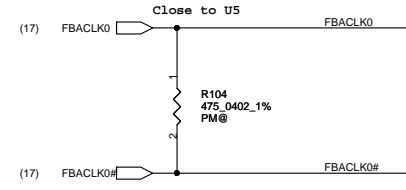
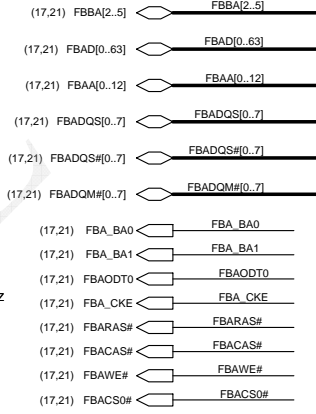
Component	Manufacturer	Compal PN	Compal X76 PN
DDR2 VRAM (16M*16)	Hynix	SA000012G30	X7611338L01
	Qimonda	SA00001YF10	X7611338L02
	Samsung	SA00001KH10	X7611338L03
DDR2 VRAM (32M*16)	Hynix	SA00000FF30	X7611338L04
	Qimonda	SA00000S820	X7611338L05
	Samsung	SA00001VX10	X7611338L06



DDR2 BGA MEMORY

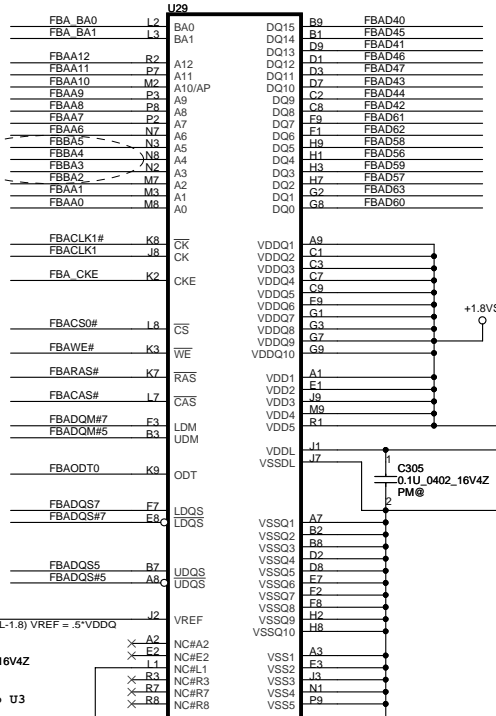


DDR2 BGA MEMORY

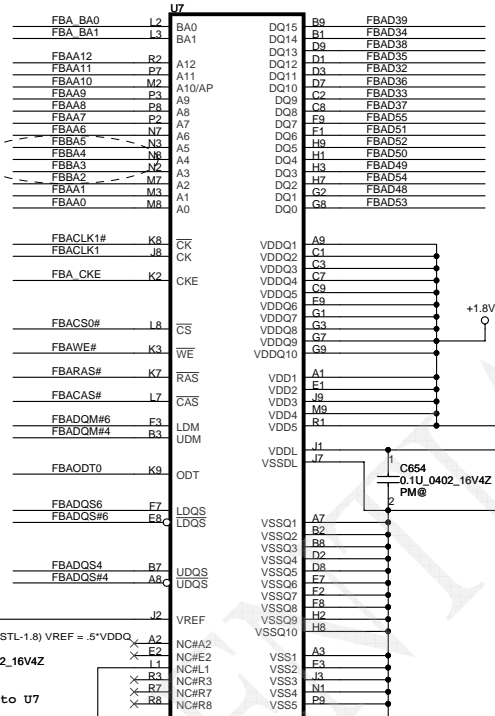


Security Classification	Compal Secret Data		
Issued Date	2007/10/15	Deciphered Date	2008/10/15
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT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

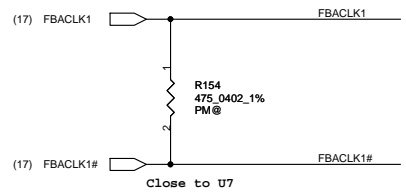
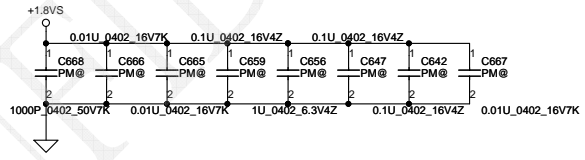
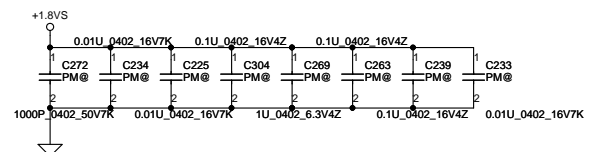
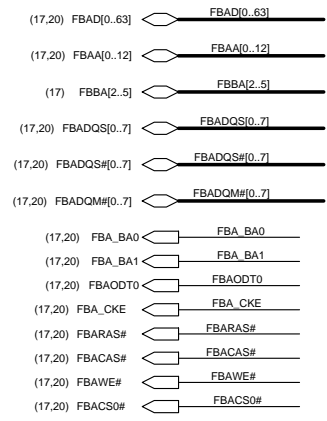
Title		<b>Compal Electronics, Inc.</b>	
Document Number		<b>SCHEMATIC, M/B LA-4211P</b>	
Customer	401557	Rev	1
Date:	Saturday, June 06, 2009	Sheet	20 of 53



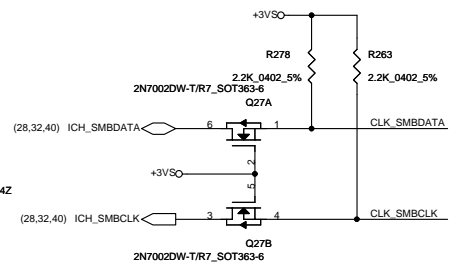
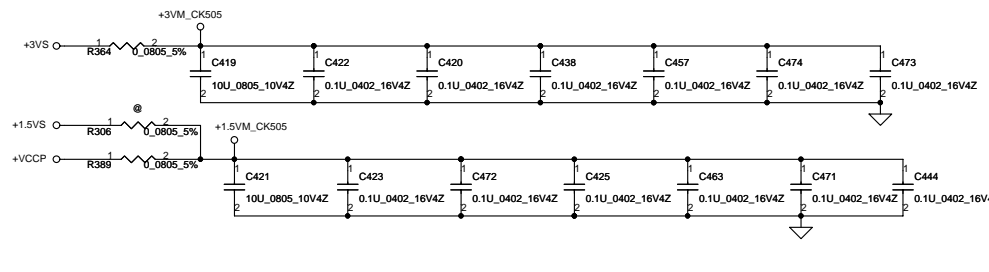
DDR2 BGA MEMORY



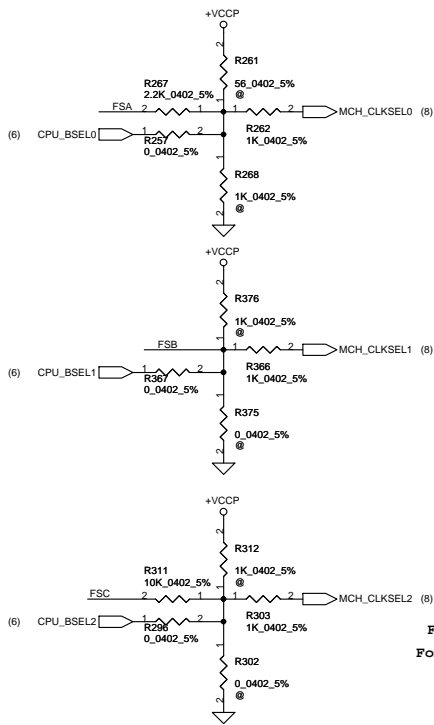
DDR2 BGA MEMORY



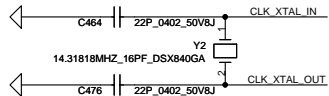
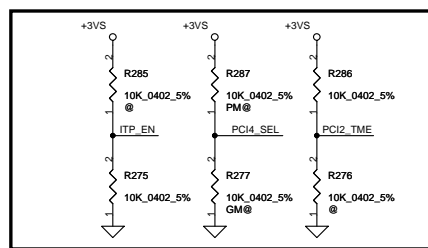
FSC	FSB	FSA	CPU	SRC	PCI	REF	DOT_96	USB
CLKSEL2	CLKSEL1	CLKSEL0	MHz	MHz	MHz	MHz	MHz	MHz
0	0	0	266	100	33.3	14.318	96.0	48.0
0	0	1	133	100	33.3	14.318	96.0	48.0
0	1	0	200	100	33.3	14.318	96.0	48.0
0	1	1	166	100	33.3	14.318	96.0	48.0
1	0	0	333	100	33.3	14.318	96.0	48.0
1	0	1	100	100	33.3	14.318	96.0	48.0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



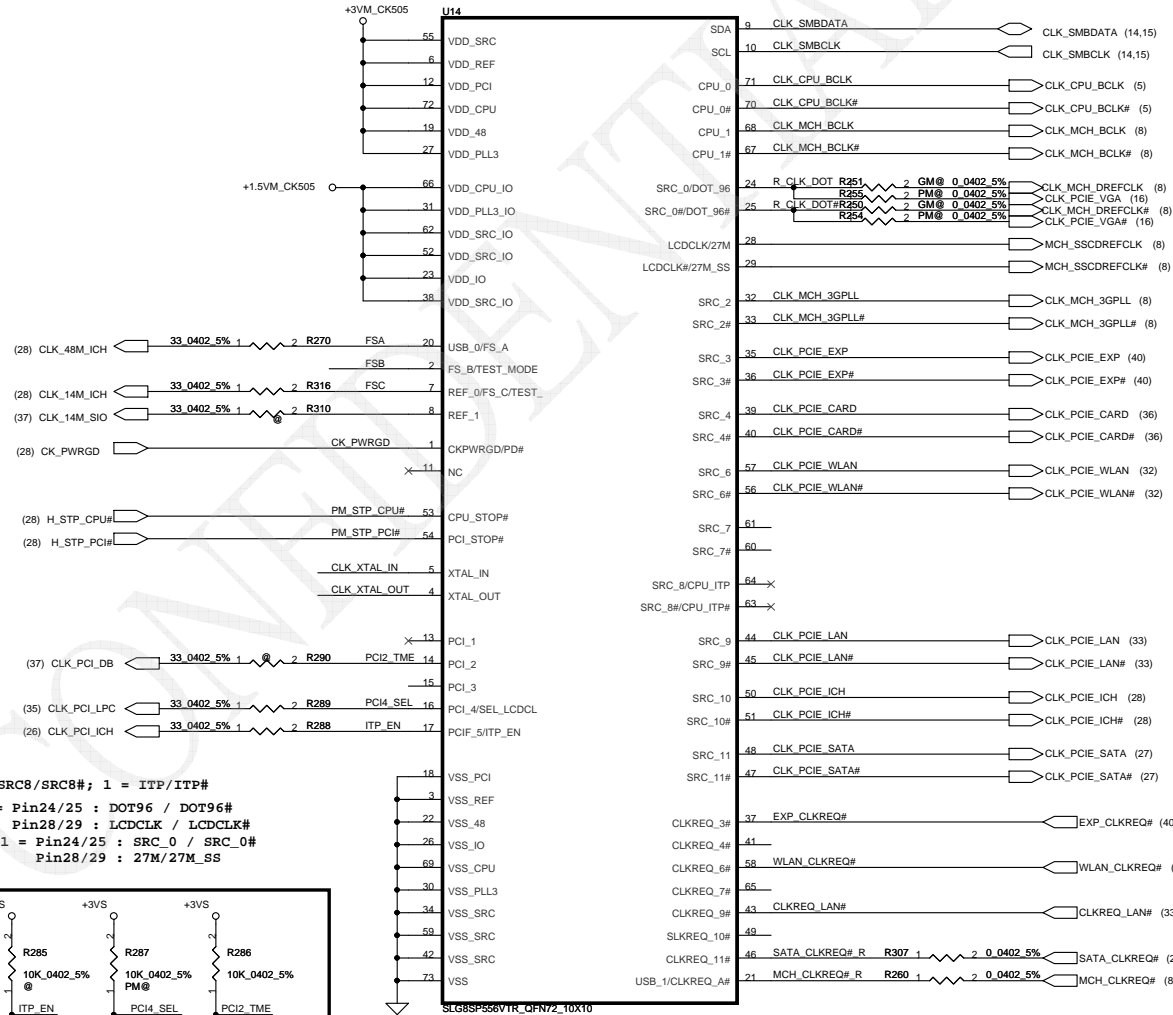
**SA000020K00 (Silego : SLG8SP556VTR )**  
**SA000020H00 (ICS : ICS9LPRS387AKLFT)**



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

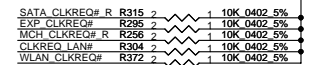


Routing the trace at least 10mil



**SRC PORT LIST**

PORT	DEVICE
SRC0	MCH_DREFCLK
SRC2	MCH_3GPLL
SRC3	PCIE_EXP#
SRC4	
SRC6	PCIE_WLAN
SRC7	PCIE_WLAN1
SRC8	
SRC9	PCIE_LAN
SRC10	PCIE_ICH
SRC11	PCIE_SATA

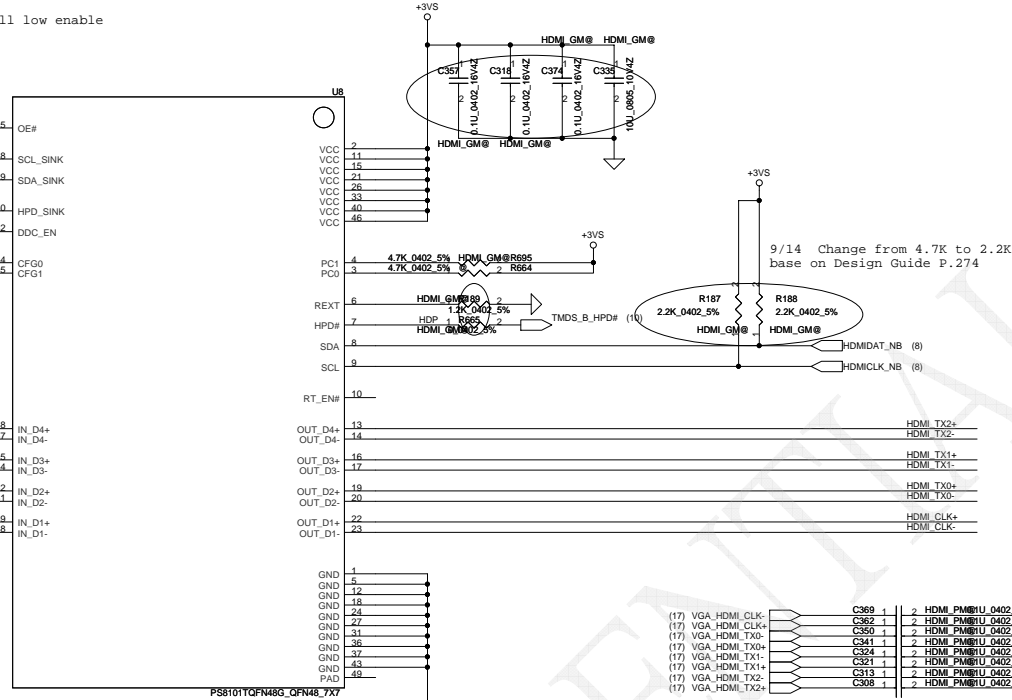
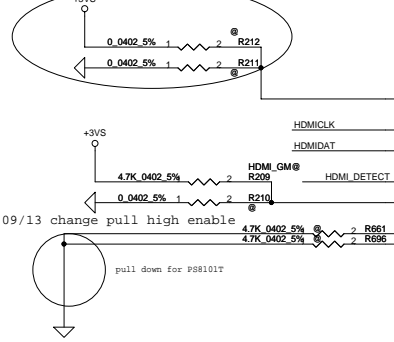


**REQ PORT LIST**

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

Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2007/10/15	Deciphered Date	2008/10/15	Title
				<b>SCHEMATIC, M/B LA-4211P</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 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
				401557
				Rev
				1
Date: Saturday, June 06, 2009				Sheet 22 of 53

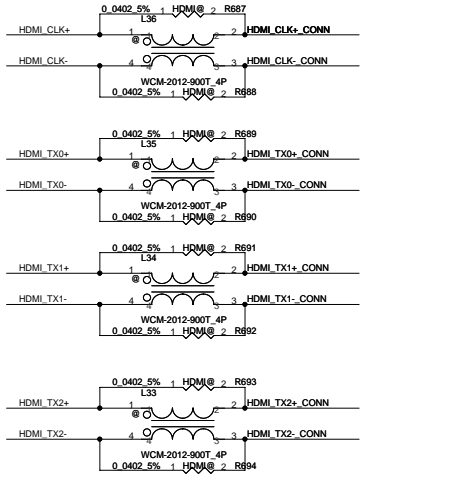
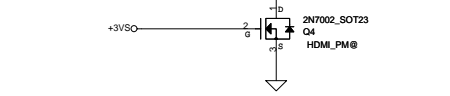
09/13 change pull low enable



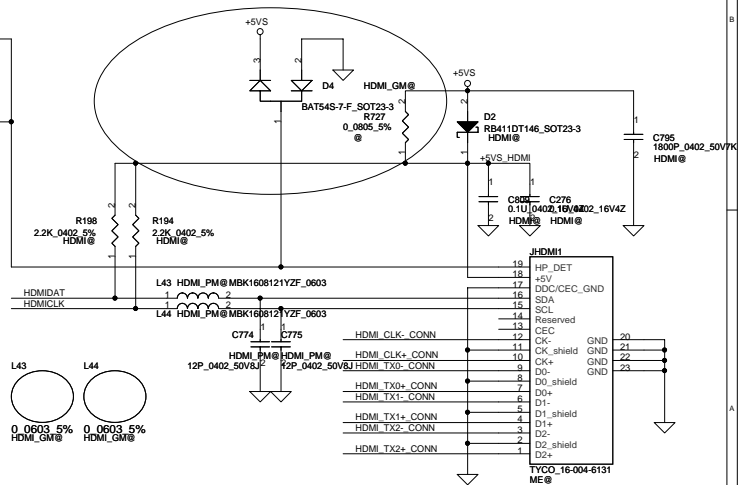
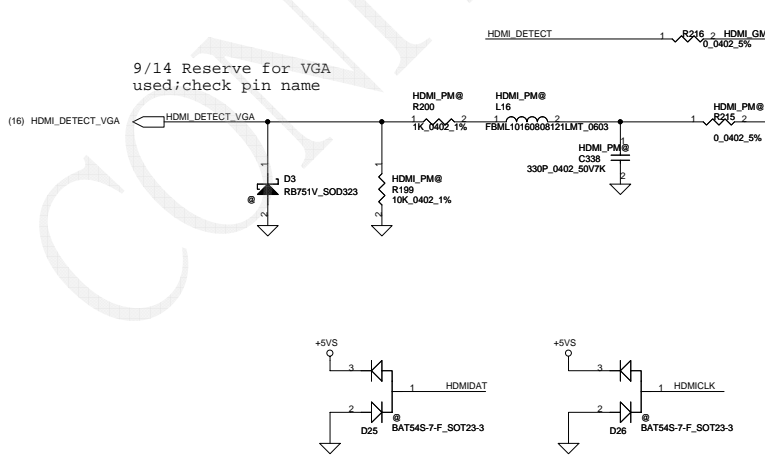
**TMDS pull down (500ohm) resistors G9x only**

- HDMI\_CLK+ CONN R155 1 HDMI\_PM# 499 0402 1%
- HDMI\_CLK- CONN R156 1 HDMI\_PM# 499 0402 1%
- HDMI\_TX0+ CONN R150 1 HDMI\_PM# 499 0402 1%
- HDMI\_TX0- CONN R153 1 HDMI\_PM# 499 0402 1%
- HDMI\_TX1+ CONN R145 1 HDMI\_PM# 499 0402 1%
- HDMI\_TX1- CONN R149 1 HDMI\_PM# 499 0402 1%
- HDMI\_TX2+ CONN R141 1 HDMI\_PM# 499 0402 1%
- HDMI\_TX2- CONN R144 1 HDMI\_PM# 499 0402 1%

**NEAR CONNECT**

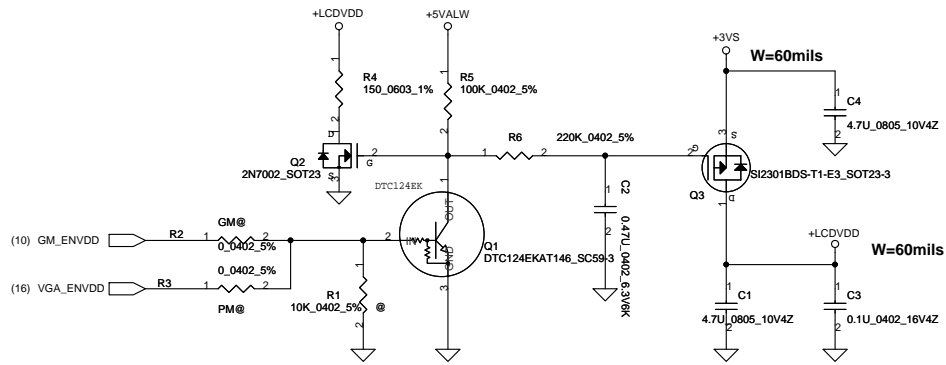


9/14 Reserve for VGA used; check pin name

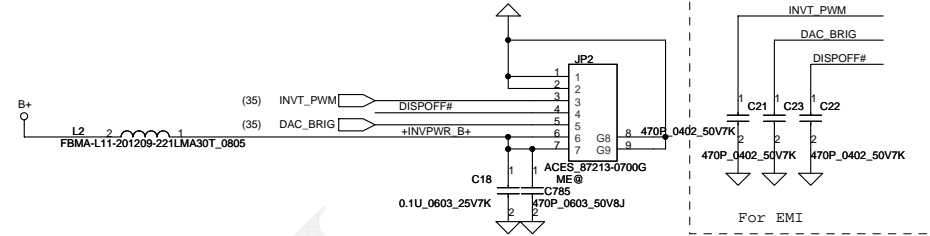


Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2007/10/15	Deciphered Date	2008/10/15	Title
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				SCHEMATIC, M/B LA-4211P
Size	Document Number	401557	Rev	1
Date:	Saturday, June 06, 2008	Sheet	23	of 53

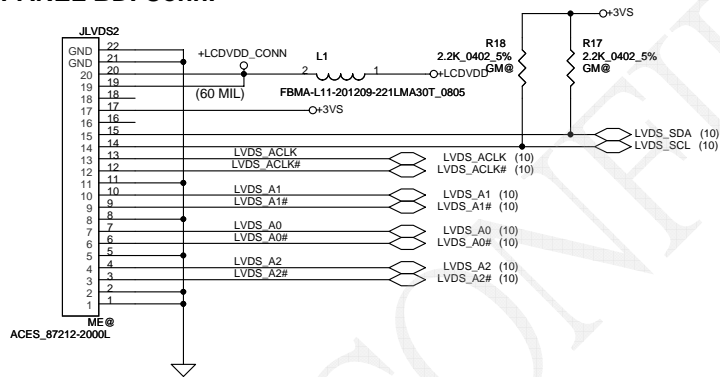
### LCD POWER CIRCUIT



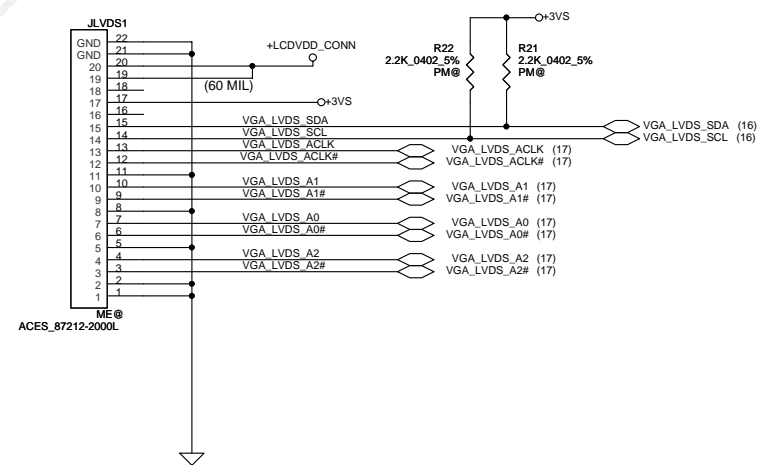
### INVERTER Conn.



### LCD/PANEL BD. Conn.



### LCD/PANEL BD. Conn.

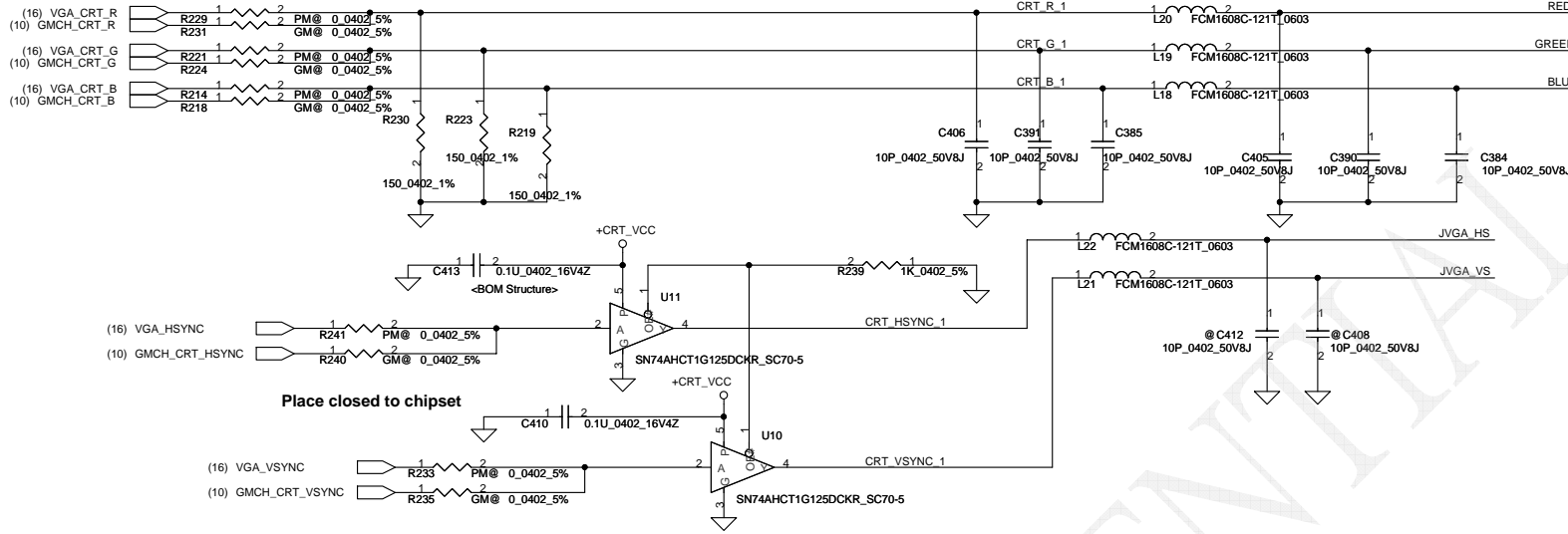


Security Classification	Compal Secret Data			Title	<b>Compal Electronics, Inc.</b>	
Issued Date	2007/10/15	Deciphered Date	2008/10/15	Document Number	<b>SCHEMATIC, M/B LA-4211P</b>	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND 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.				Rev	1	
Date:	Saturday, June 06, 2009	Sheet	24	of	53	

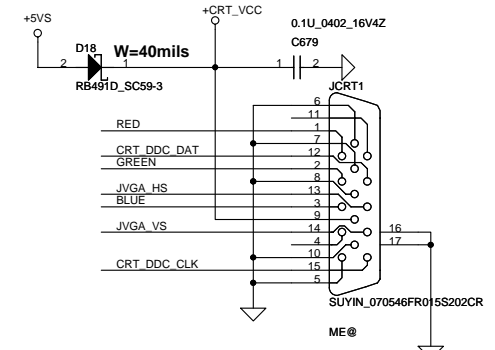
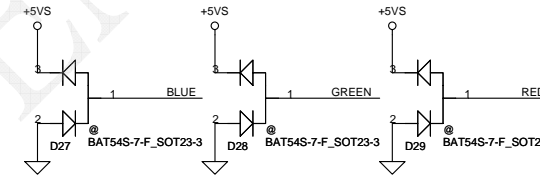
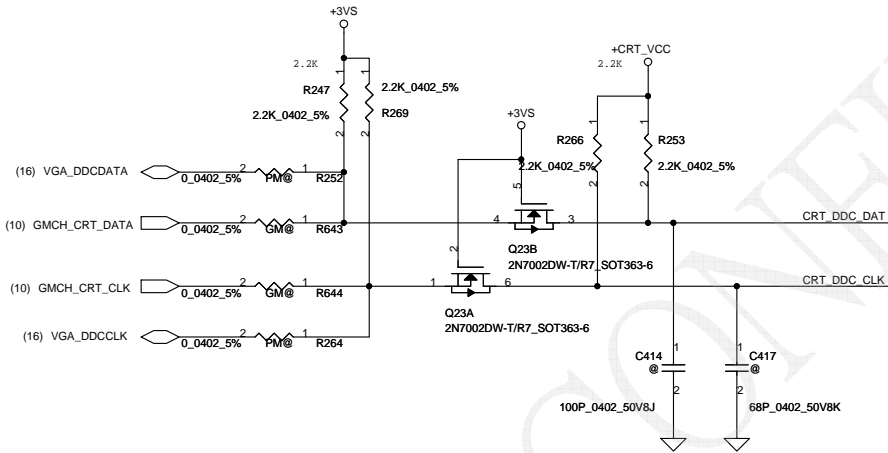


# CRT Connector

Place closed to chipset



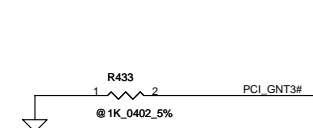
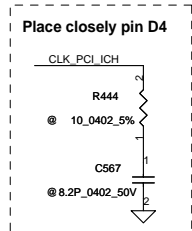
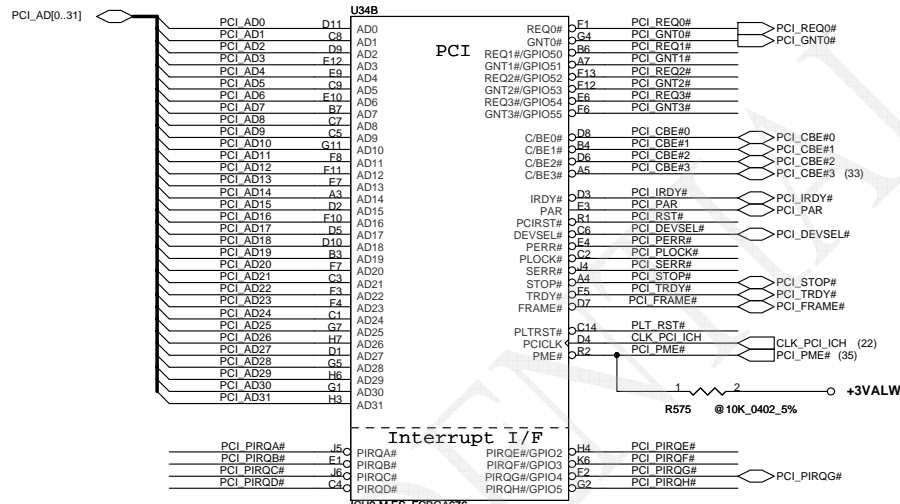
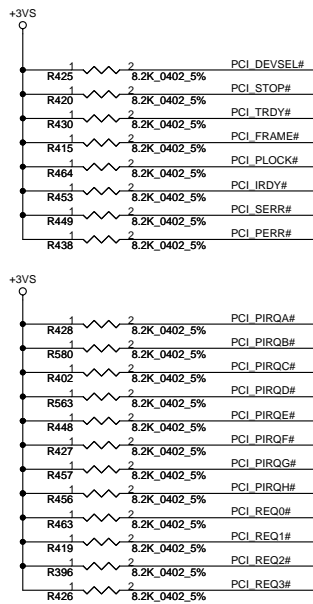
Place closed to chipset



## PIN ASSIGNMENT

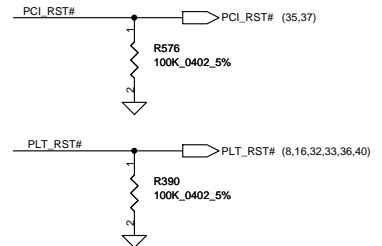
D-SUB	FUNCTION
9	+CRT_VCC
1	RED
6	GND
2	GREEN
7, 5	GND
3	BLUE
8	GND
14	VSYNC
10	GND
13	HSYNC
11	SENSE
12	SM_DAT
15	SM_CLK
4	PIN4

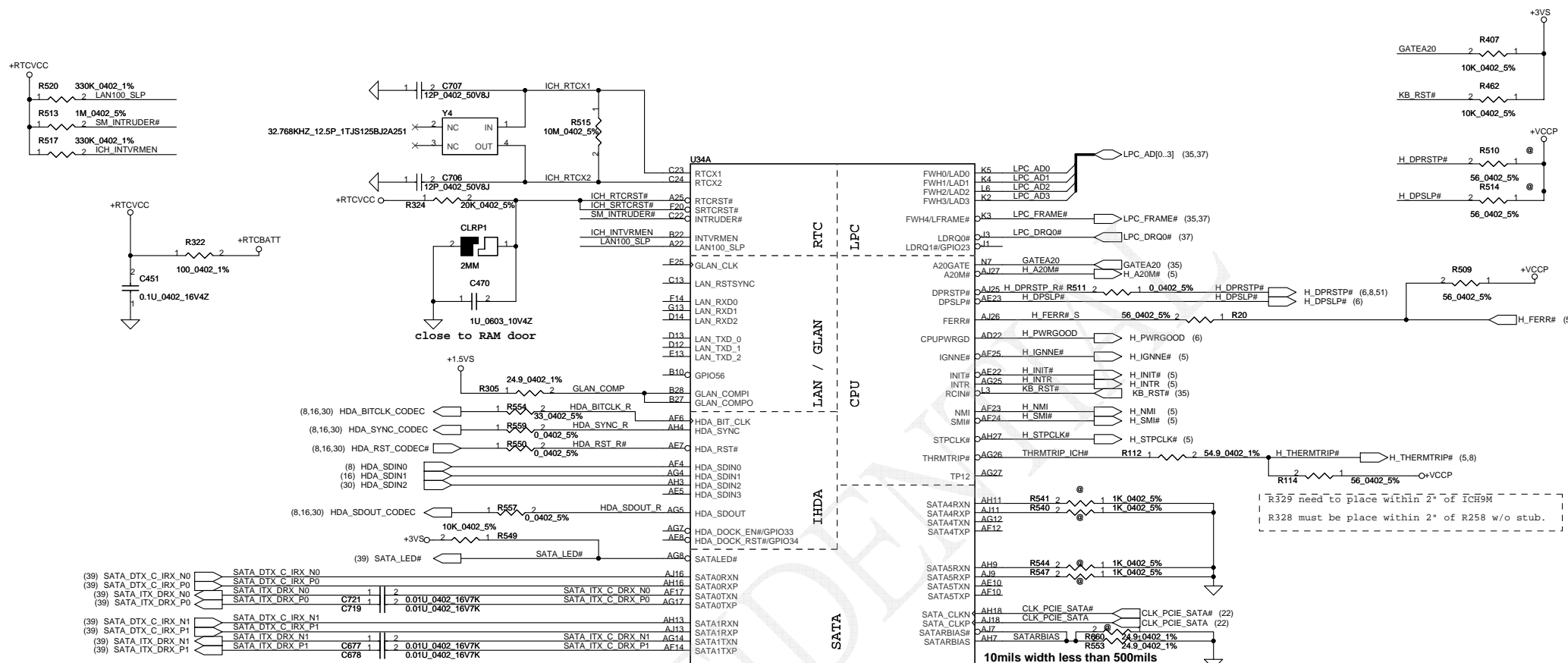
Security Classification	Compal Secret Data		Title	
Issued Date	2007/10/15	Deciphered Date	2008/10/15	Compal Electronics, Inc.
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				Schematic, M/B LA-4211P
Date:	Saturday, June 06, 2009	Sheet	25 of 53	Rev 1



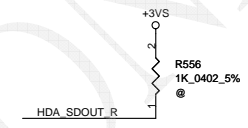
A16 Swap Override Strap	
PCI_GNT#3	Low= A16 swap override Enable High= Default*

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

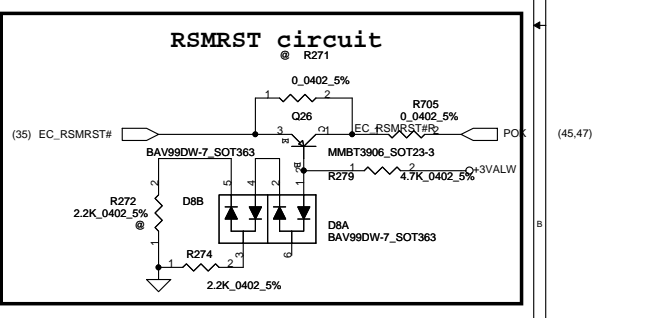
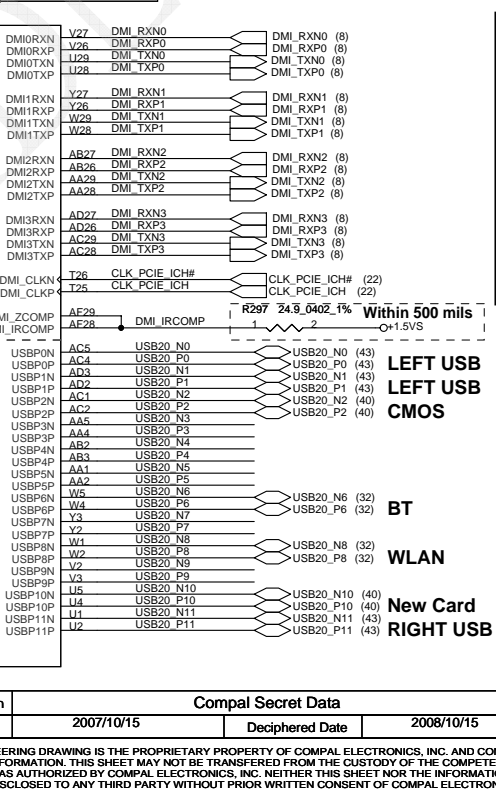
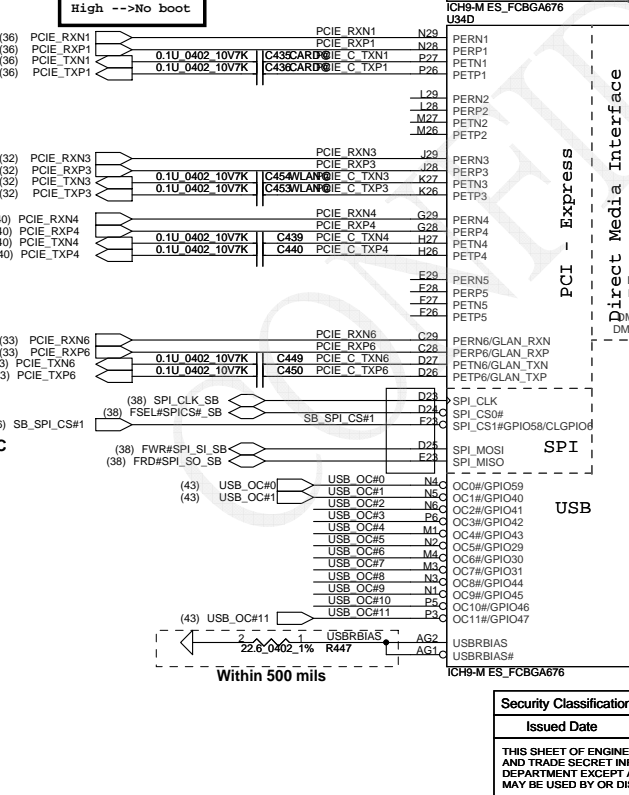
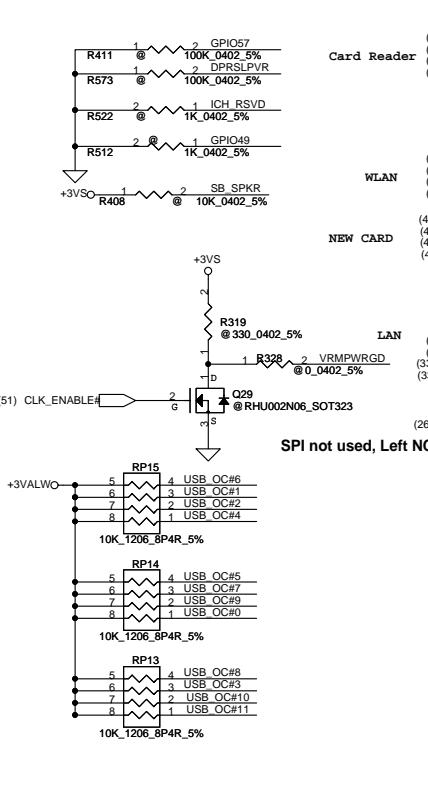
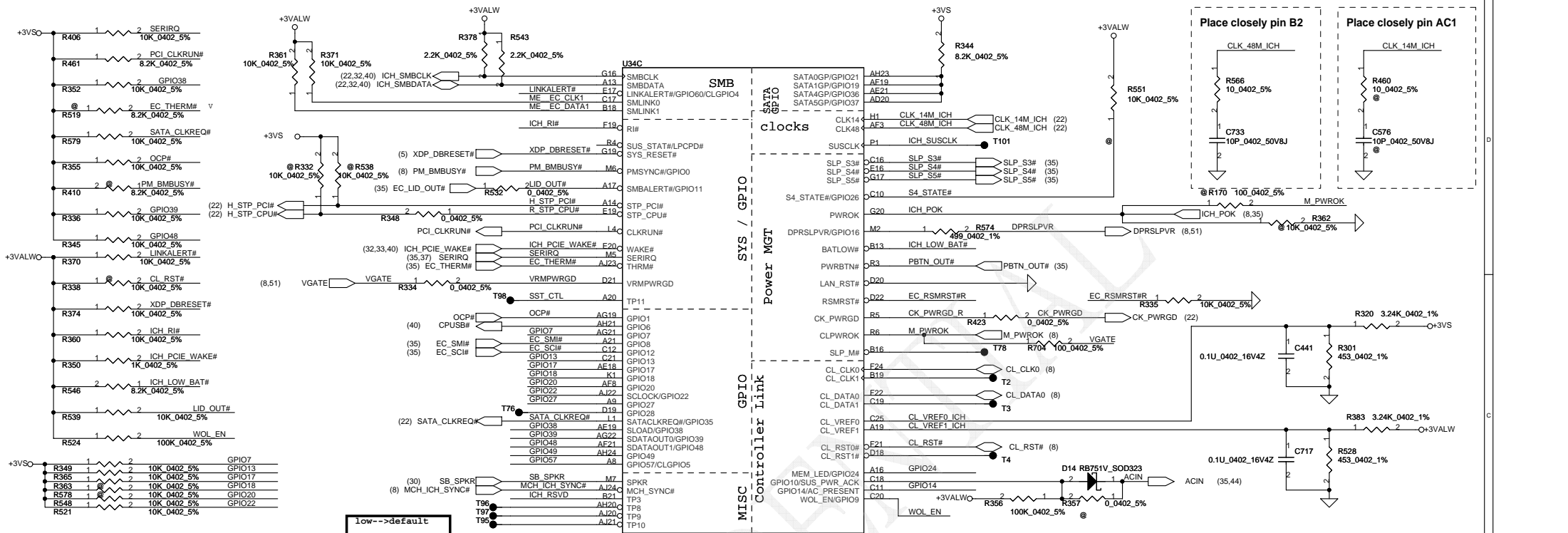




Need check



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

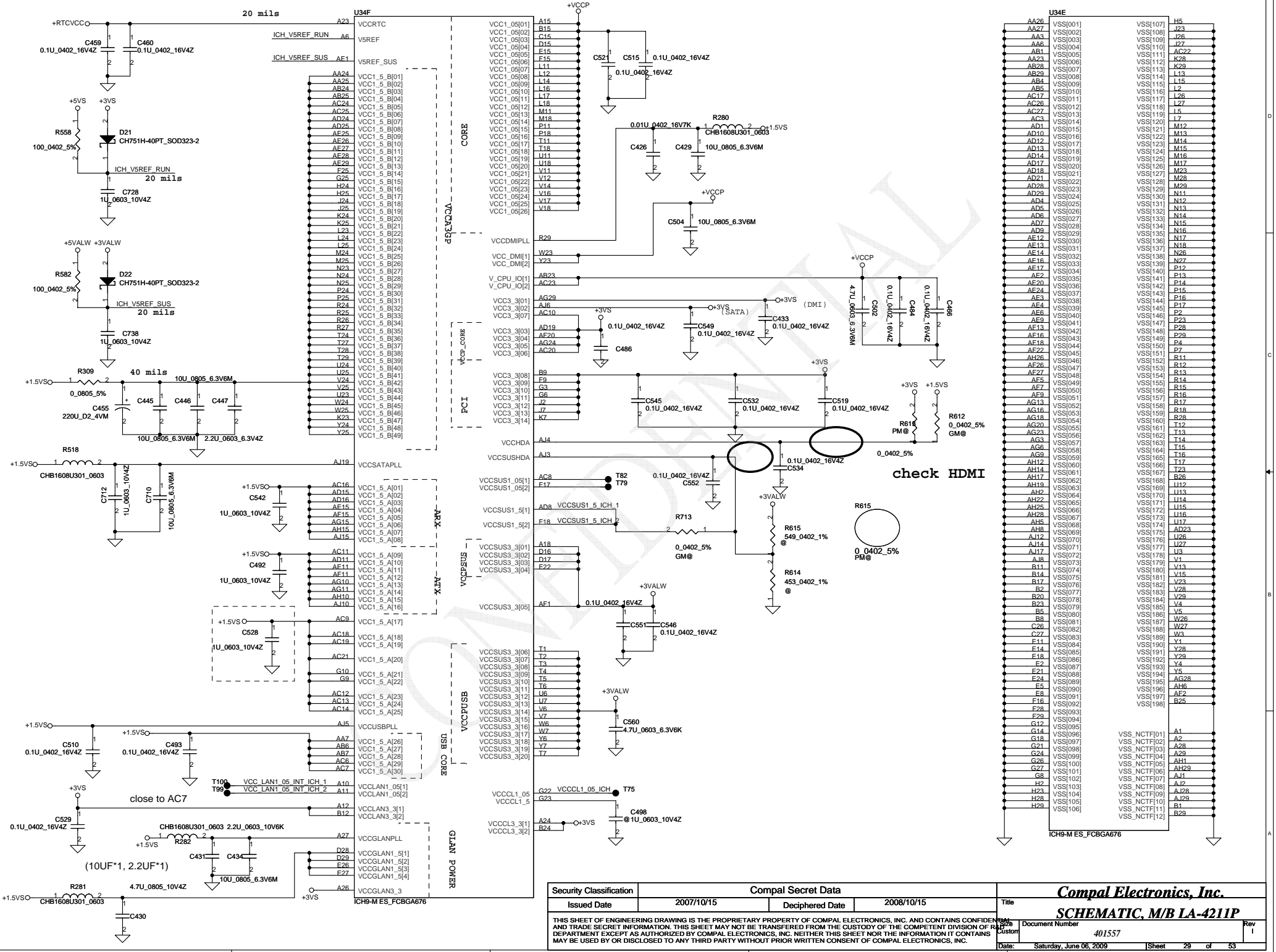


LEFT USB		LEFT USB	
PORT	DEVICE	PORT	DEVICE
0	LEFT SIDE	6	BT
2	CMOS	8	WIRELESS
3	3G	10	NEW CARD
4	RIGHT SIDE	11	RIGHT SIDE

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

Compal Electronics, Inc.		
SCHEMATIC, M/B LA-4211P		
Title	401557	Rev
Document Number	401557	1
Date	Saturday, June 06, 2009	Sheet 28 of 53

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



Security Classification	Compal Secret Data		Title
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.			
Document Number	401557	Rev	1
Date:	Saturday, June 06, 2009	Sheet	29 of 53

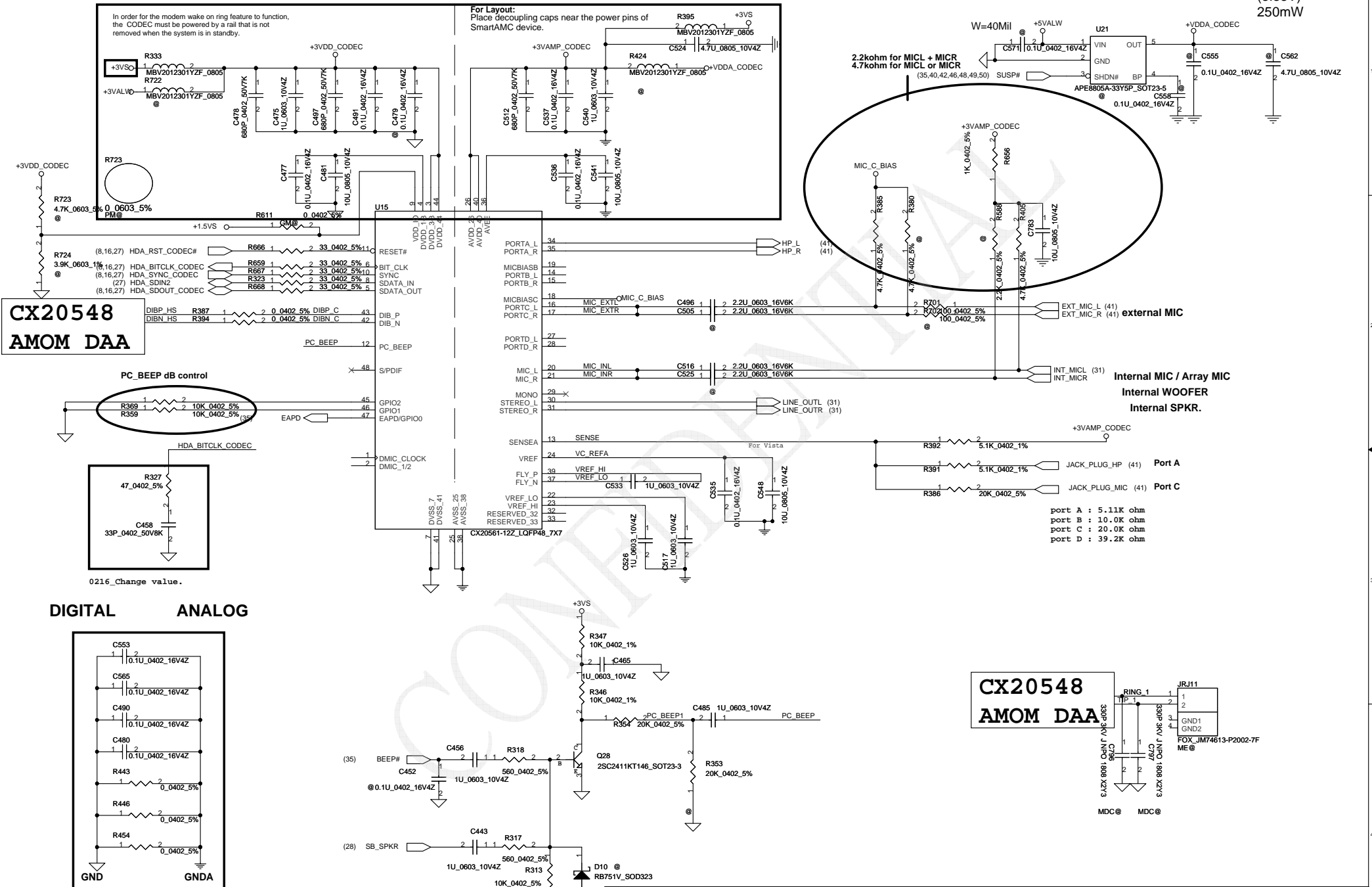
**Compal Electronics, Inc.**  
**SCHEMATIC, M/B LA-4211P**  
 Date: Saturday, June 06, 2009    Sheet 29 of 53

# AUDIO CODEC

0308\_Change R294 and R295 from 0 ohm to bead, C363 from 10uF to 680pF, C365 and C368 from 0.1uF to 680p

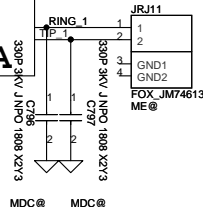
# CODEC POWER

(3.33V)  
250mW



**CX20548**  
**AMOM DAA**

**CX20548**  
**AMOM DAA**

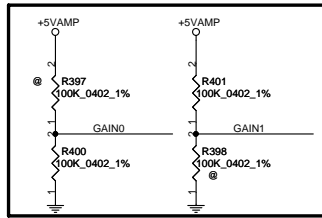


Security Classification	Compal Secret Data		Title	<b>Compal Electronics, Inc.</b>	
Issued Date	2007/10/15	Deciphered Date	2008/10/15	<b>SCHEMATIC, M/B LA-4211P</b>	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D TO ANY OTHER DIVISION OR 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.					
Customer	401557	Rev	1		
Date:	Saturday, June 06, 2009	Sheet	30	of 53	

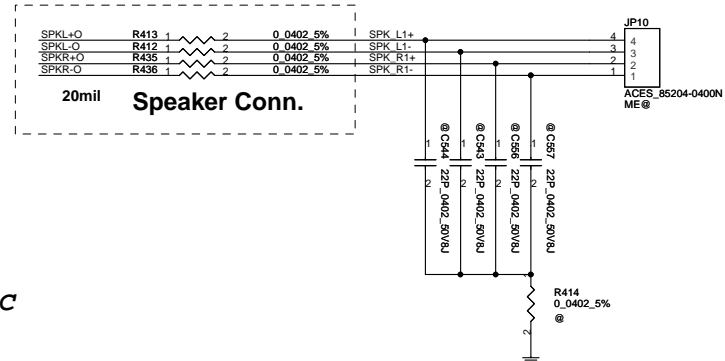
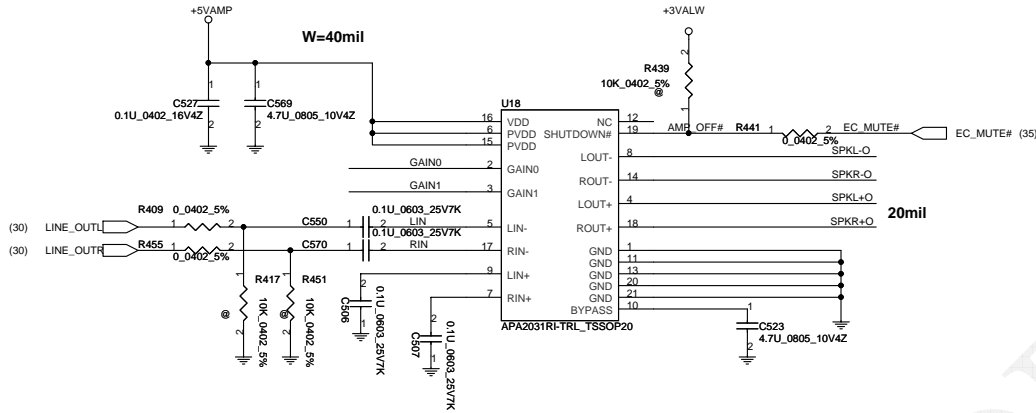
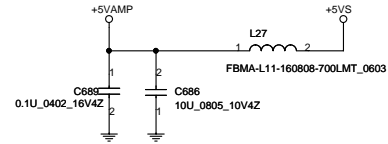
Place these C and R around AGND and DGND, then choose the one which is close to Codec to populate

# Speaker Amplifier

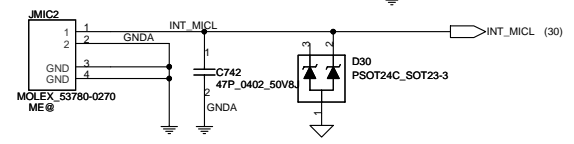
1nd = TPA6017 (SA601720010)  
 2nd = APA2031 (SA00001RZ00)



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



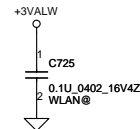
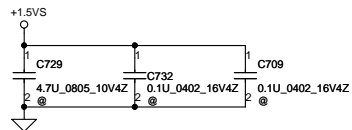
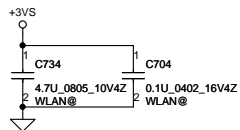
INT MIC



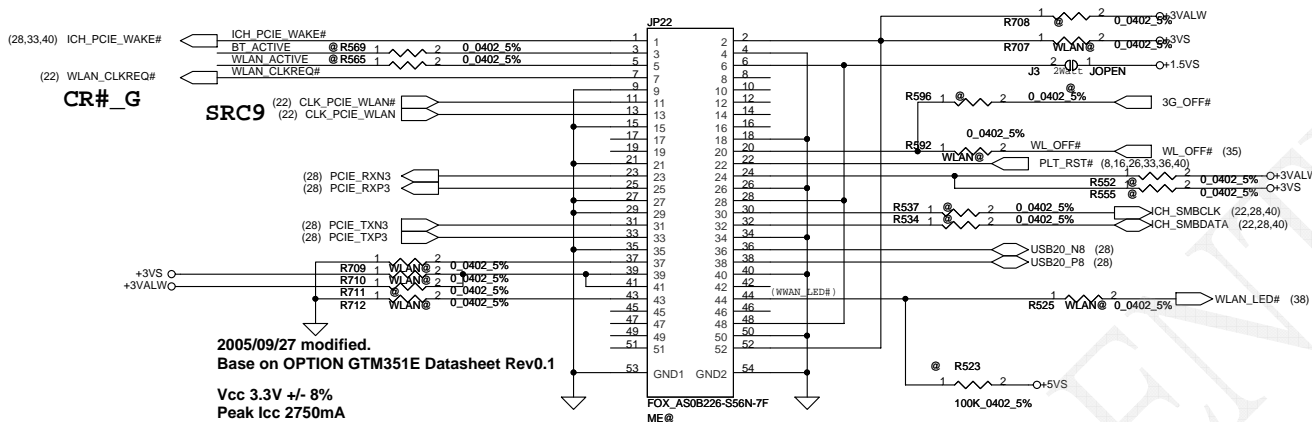
Security Classification	Compal Secret Data		Title	
Issued Date	2007/10/15	Deciphered Date	2008/10/15	Compal Electronics, Inc.
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF RESEARCH AND DEVELOPMENT 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 Custom 401557 Date: Saturday, June 06, 2009 Sheet 31 of 53

# Mini-Express Card for 3G Or TV Tuner

## Mini-Express Card for WLAN



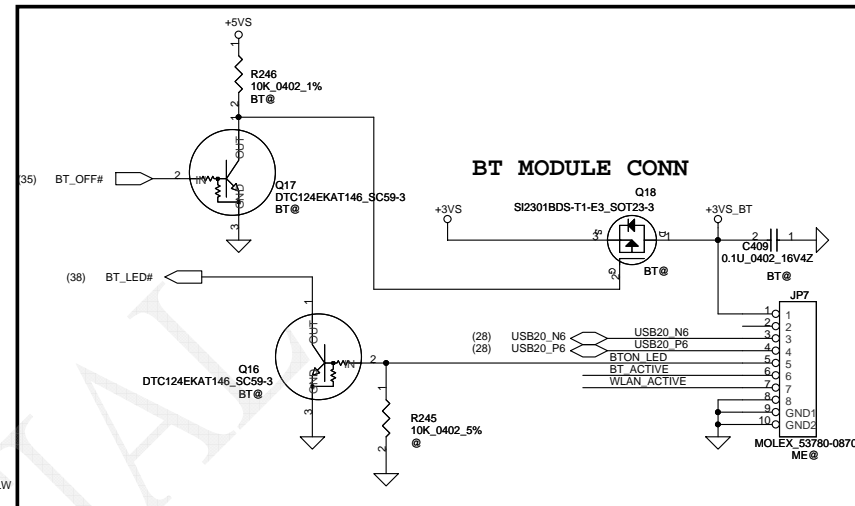
### Mini-Express Card(Slot 1-WLAN)



2005/09/27 modified.  
Base on OPTION GTM351E Datasheet Rev0.1

Vcc 3.3V +/- 8%  
Peak Icc 2750mA  
with max supply droop 50mA  
Average Icc 1000mA

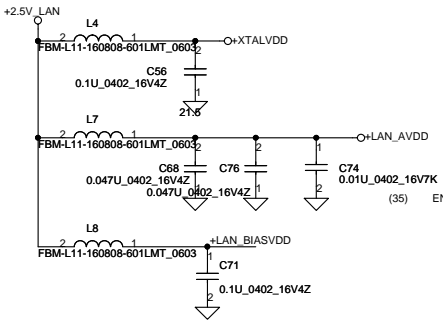
FOX\_AS08226-S56N-7F  
ME@



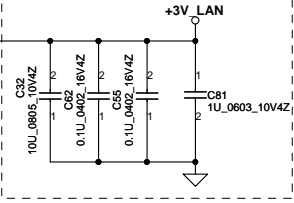
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2007/10/15	Deciphered Date	2008/10/15	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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
				401557	Rev I
Date: Saturday, June 06, 2009				Sheet	32 of 53



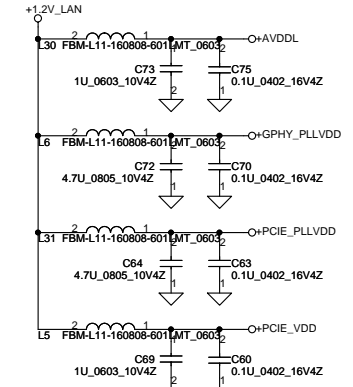
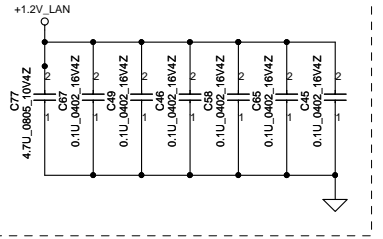
Layout Notice : Filter place as close chip as possible.



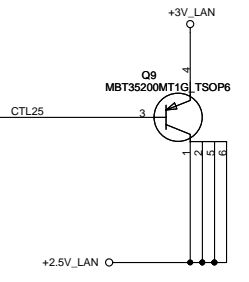
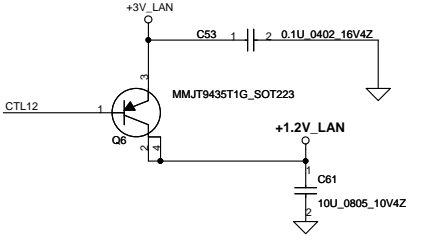
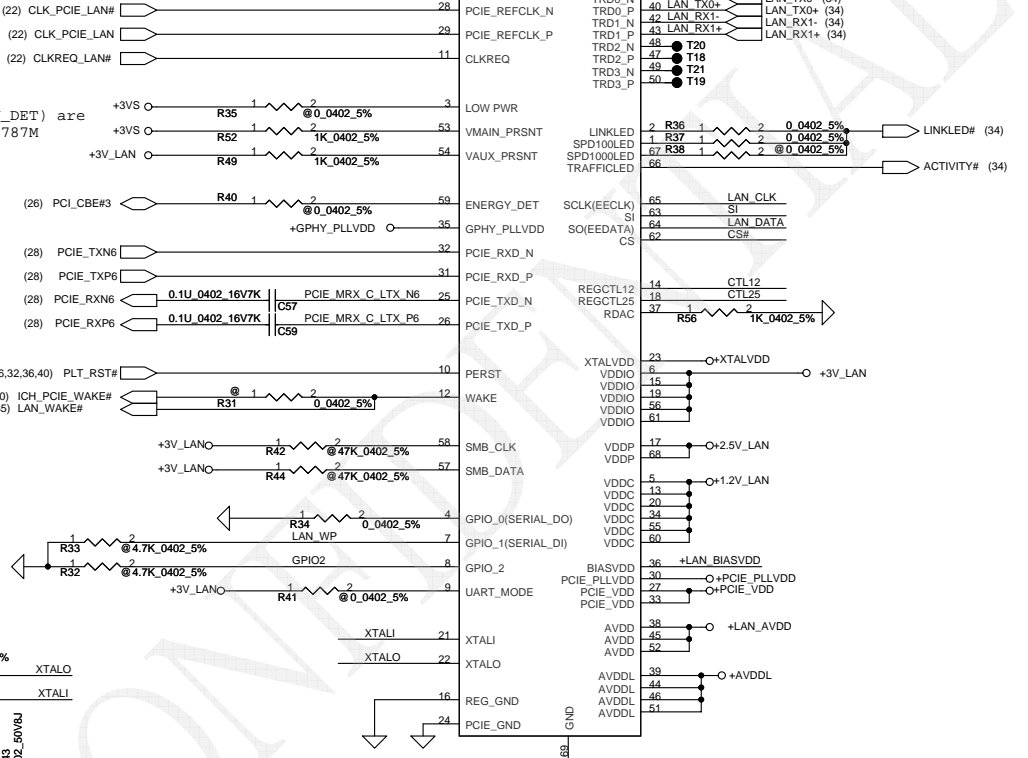
Layout Notice : Place as close chip as possible.



Layout Notice : 1.2V filter. Place as close chip as possible.



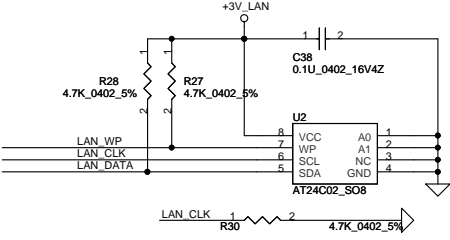
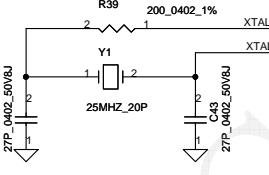
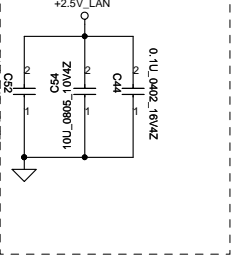
(CLKREQ#) and (ENERGY\_DET) are only supported in BCM5787M



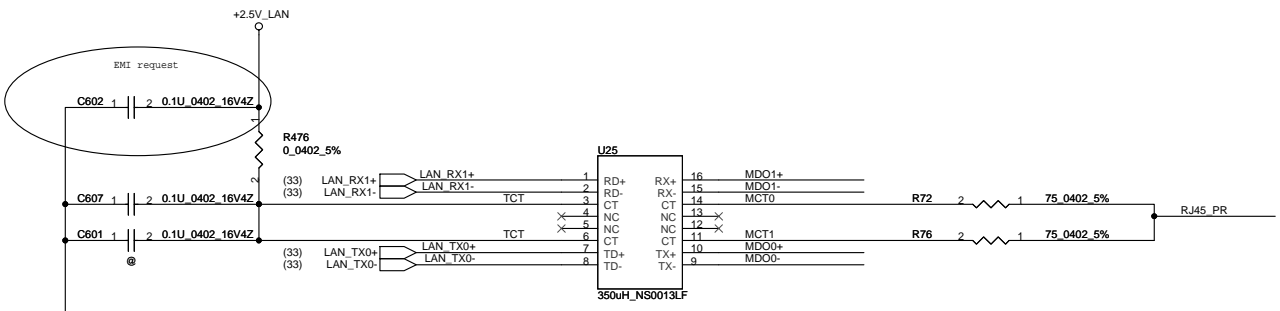
Notice : 4.7u 6.3V capacitor Thickness 1.25mm

Layout Notice : Filter place as close chip as possible.

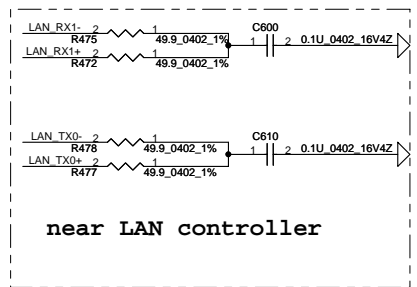
Layout Notice : Place as close chip as possible.



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.				Document Number
				401557
				Rev 1
Date: Saturday, June 06, 2008				Sheet 33 of 53

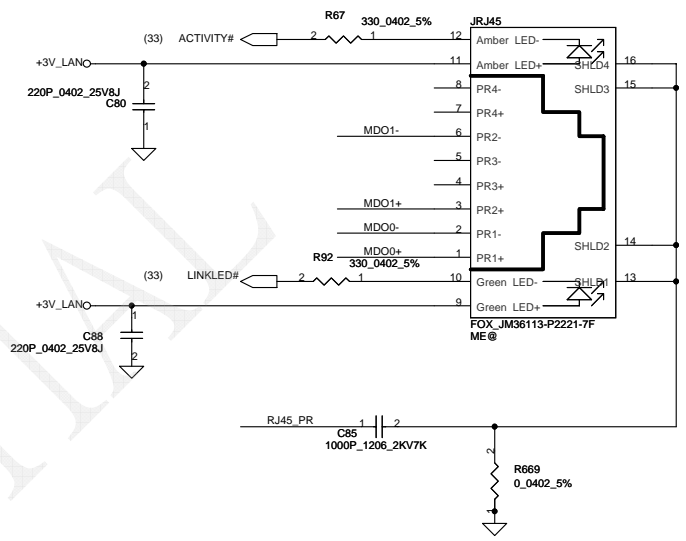


Change C468,C470,C473,C474,C475,C476 from 0.01uF to 0.1uF



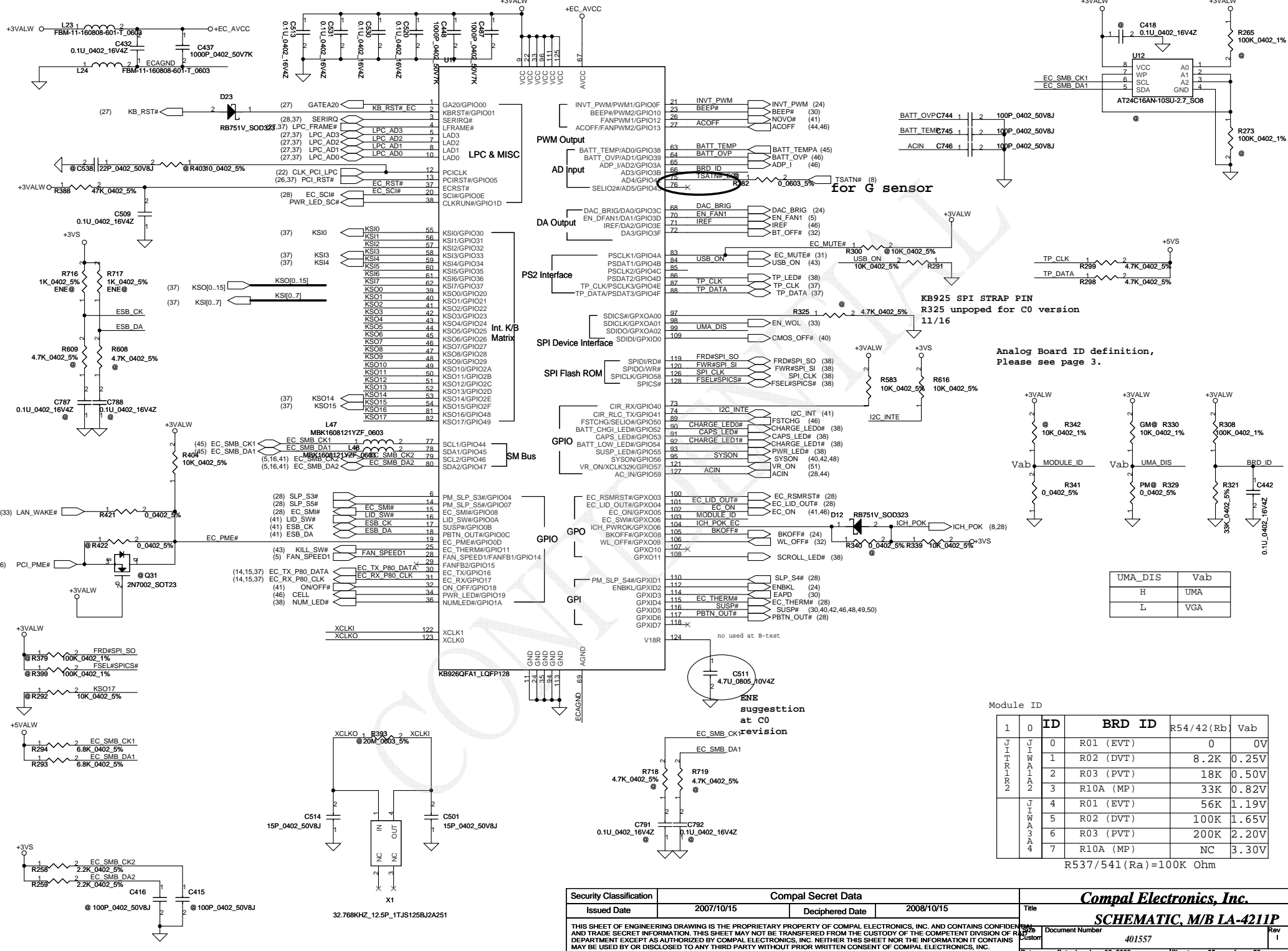
near LAN controller

### RJ45 CONN



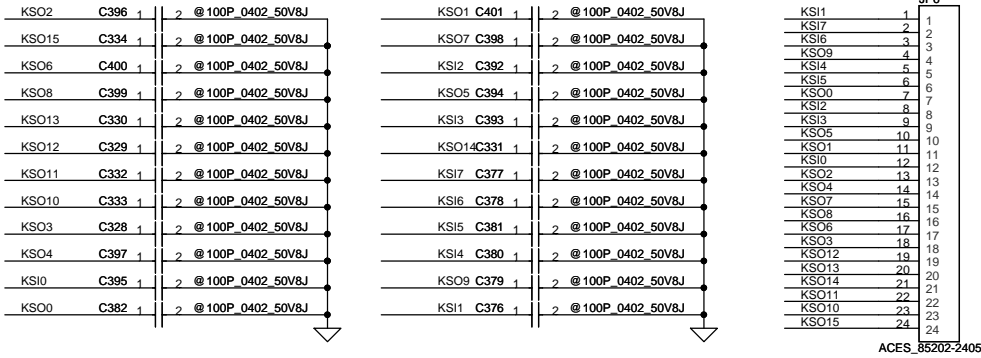
CONFIDENTIAL

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.				Document Number	Rev
				401557	I
Date: Saturday, June 06, 2009				Sheet	34 of 53

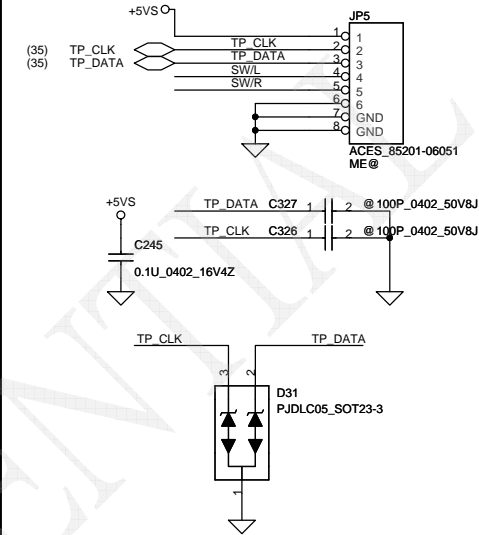




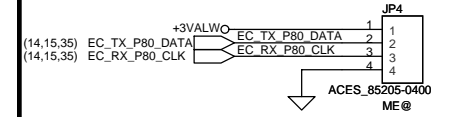
### INT\_KBD Conn.



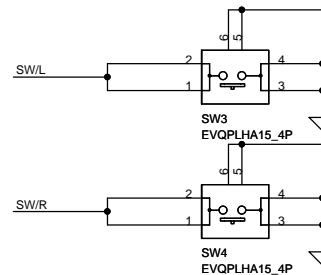
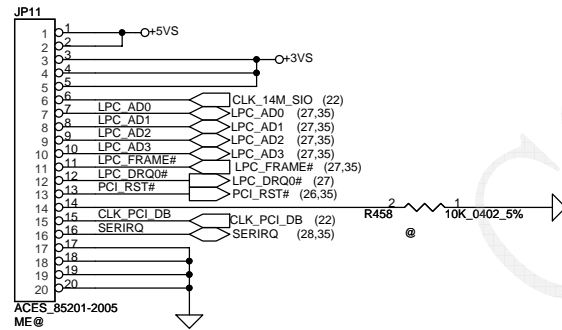
### To TP/B Conn.



### EC DEBUG PORT

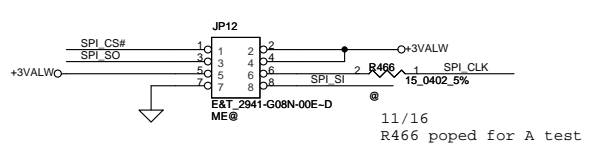
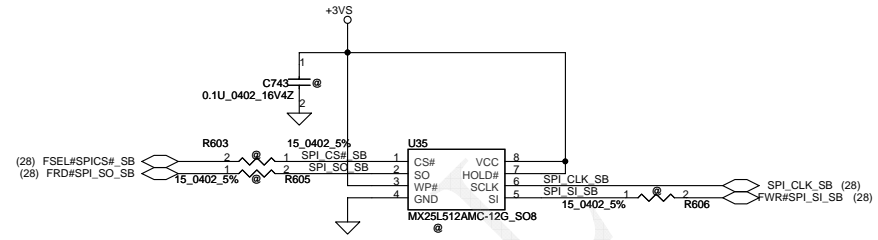
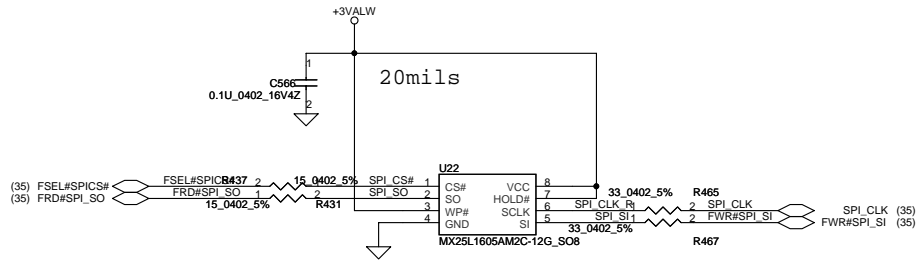


### FOR LPC SIO DEBUG PORT

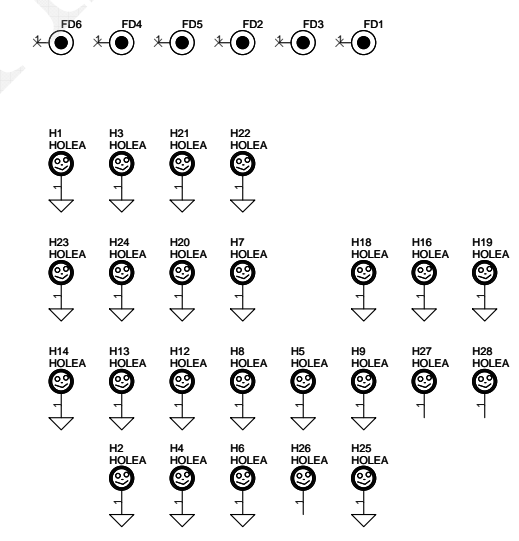
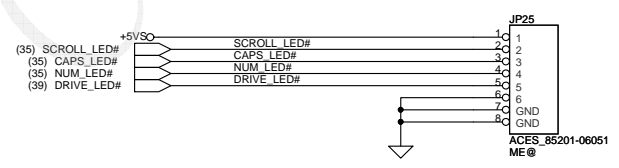
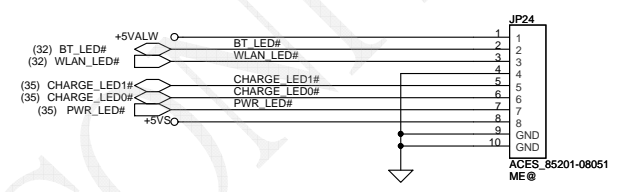
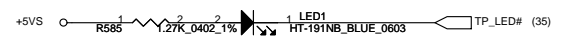


Security Classification		Compal Secret Data		Title	
Issued Date	2007/10/15	Deciphered Date	2008/10/15	Compal Electronics, Inc.	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				Document Number	Rev
				401557	1
Date:	Saturday, June 06, 2009	Sheet	37	of	53

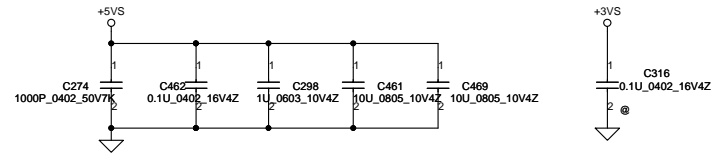
FOR EC 8M SPI ROM



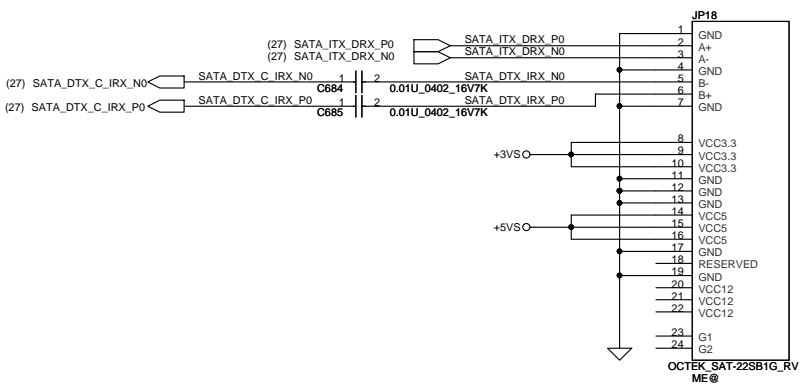
LED



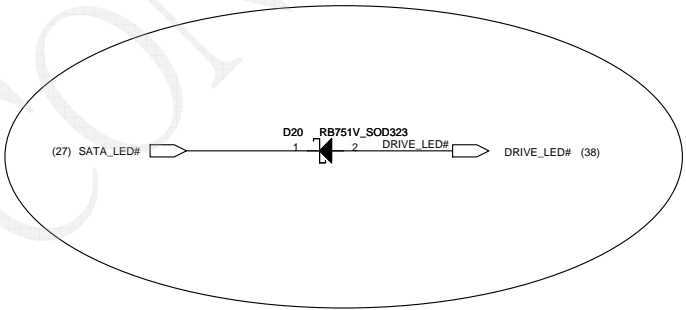
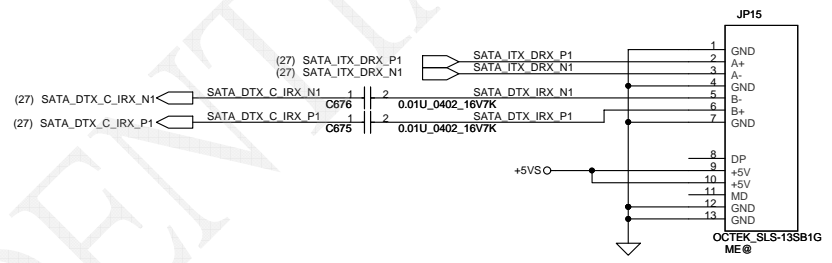
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2007/10/15	Deciphered Date	2008/10/15	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				Document Number	401557
				Date:	Saturday, June 06, 2009
				Sheet	38 of 53



**SATA HDD Conn.**

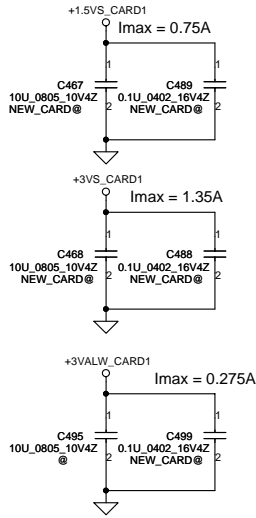
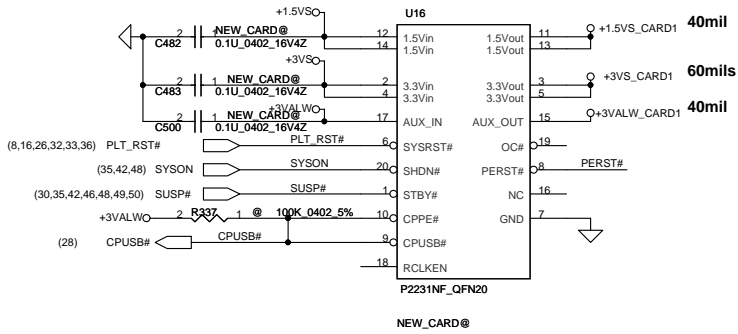


**SATA ODD Conn.**

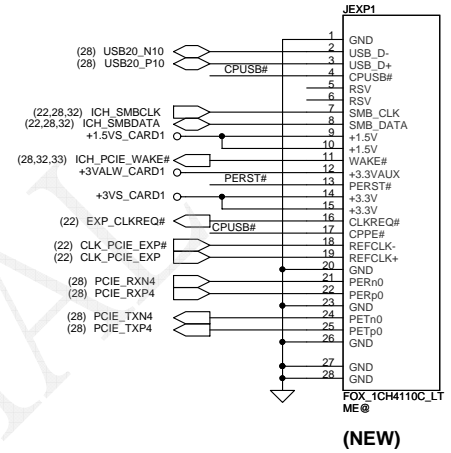


Security Classification	Compal Secret Data			Title	<b>Compal Electronics, Inc.</b>	
Issued Date	2007/10/15	Deciphered Date	2008/10/15	Document Number	<b>SCHEMATIC, M/B LA-4211P</b>	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND 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.				Date:	Saturday, June 06, 2009	Rev I
				Sheet	39	of 53

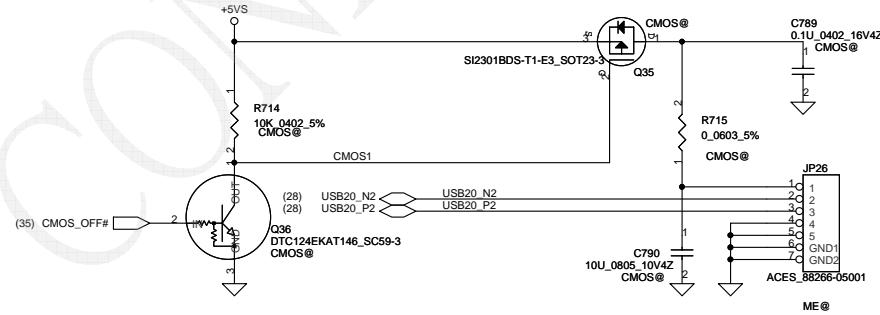
### Express Card Power Switch



### New Card Socket (Left/TOP)



### CMOS Camera Conn

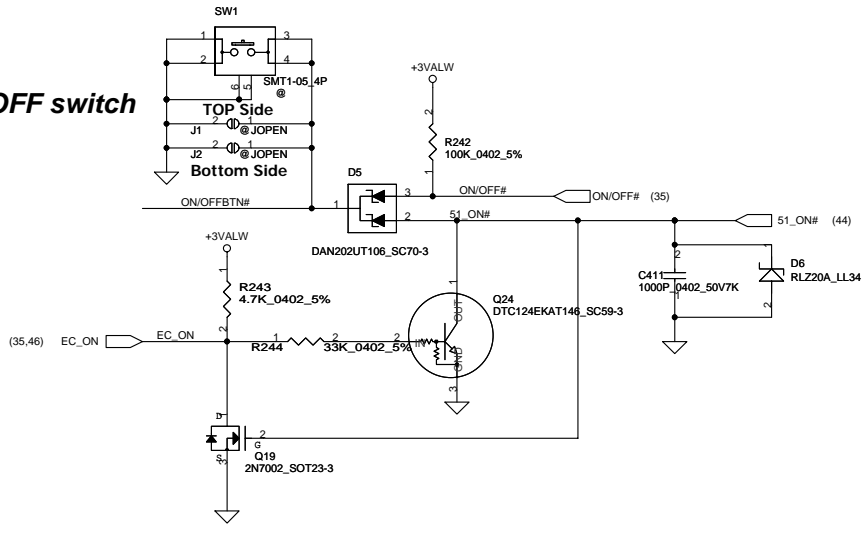


Security Classification	Compal Secret Data			Title	<b>Compal Electronics, Inc.</b>	
Issued Date	2007/10/15	Deciphered Date	2008/10/15	Document Number	<b>SCHEMATIC, M/B LA-4211P</b>	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND 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.				Rev	1	
Date:	Saturday, June 06, 2009	Sheet	40	of	53	

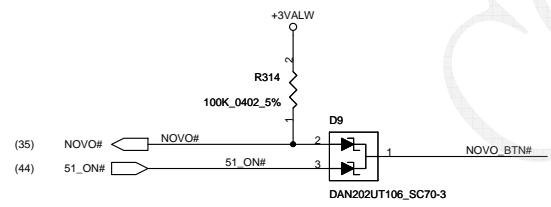
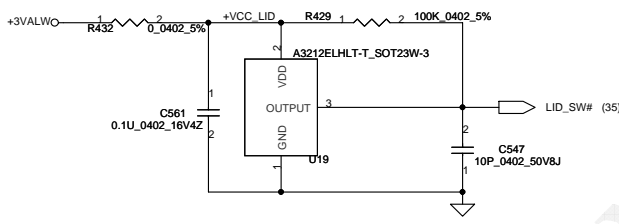


**Power Button**

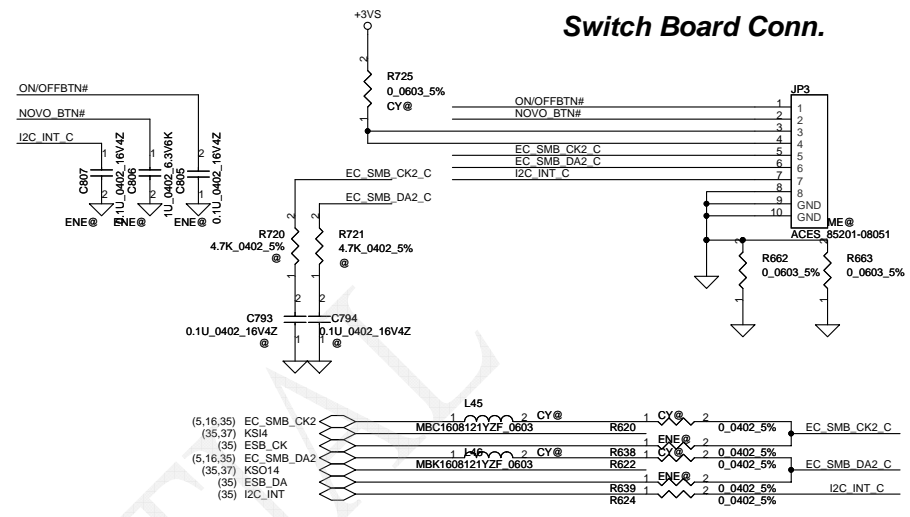
**ON/OFF switch**



**Lid Switch**

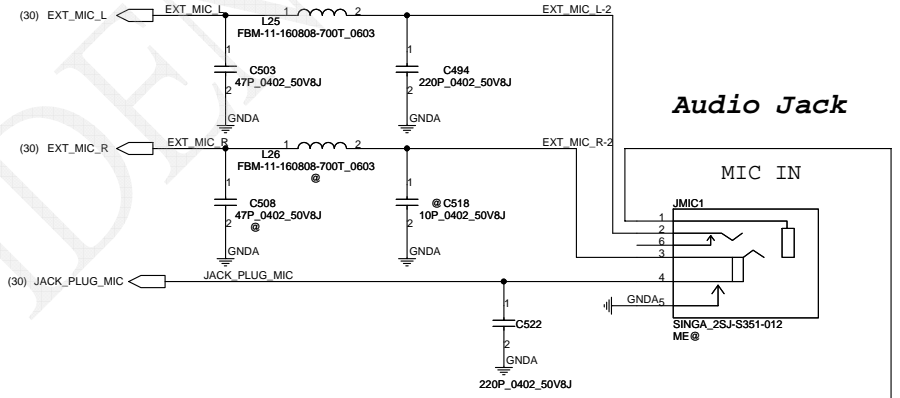


**Switch Board Conn.**

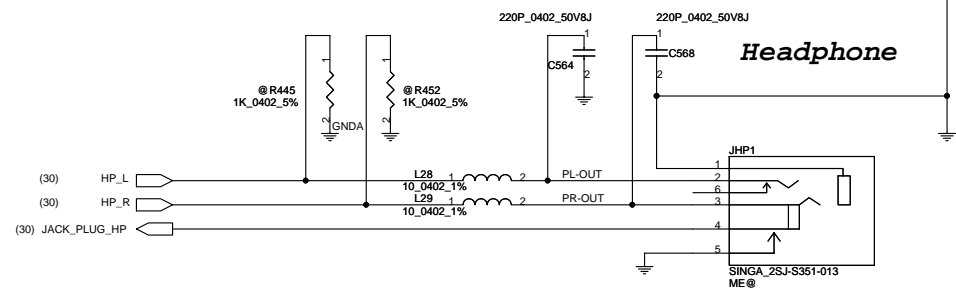


8 mil

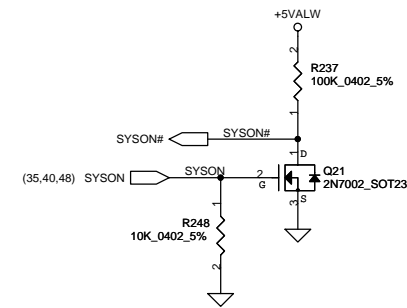
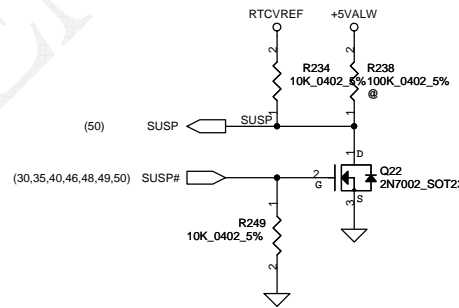
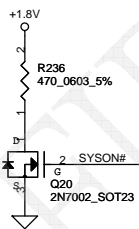
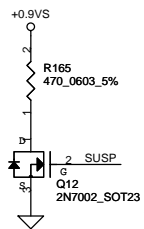
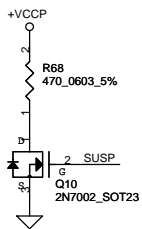
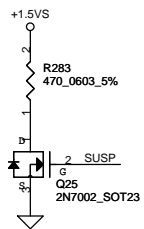
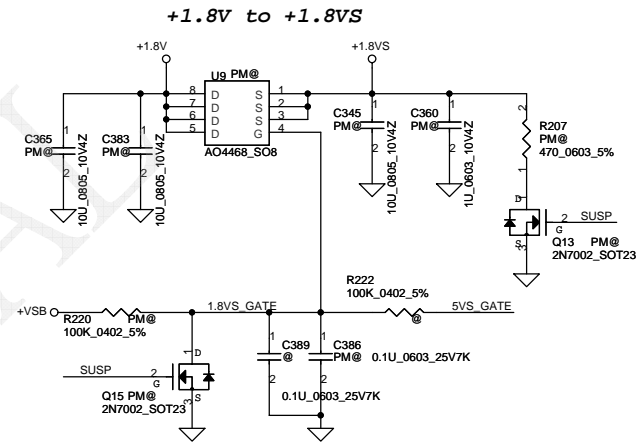
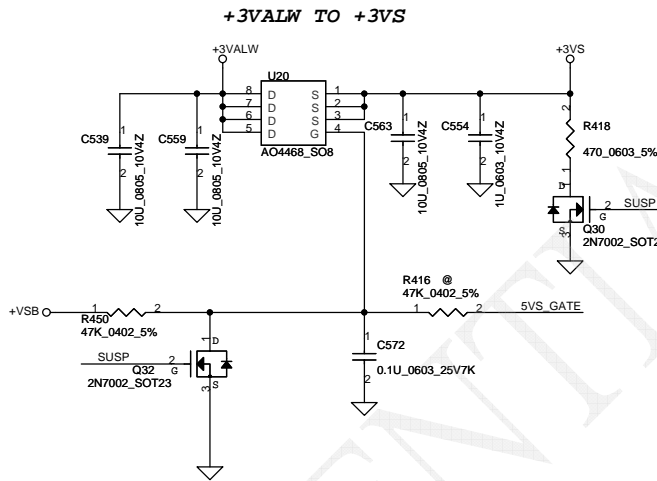
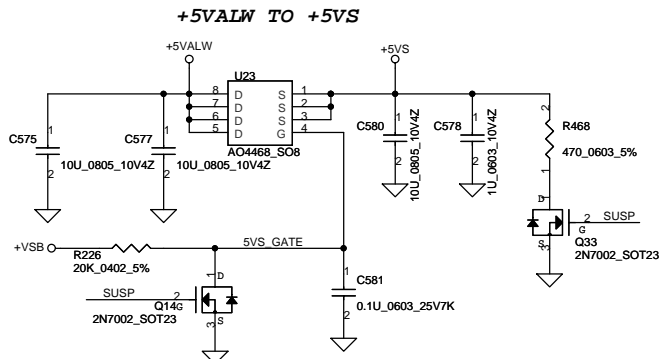
**Audio Jack**



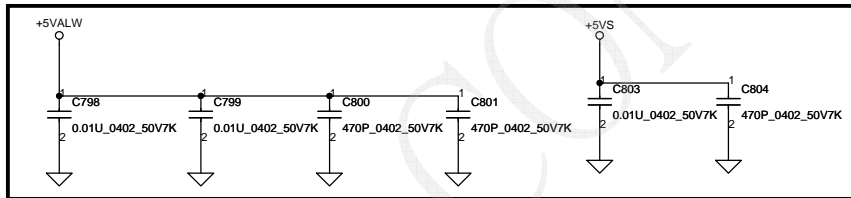
**Headphone**



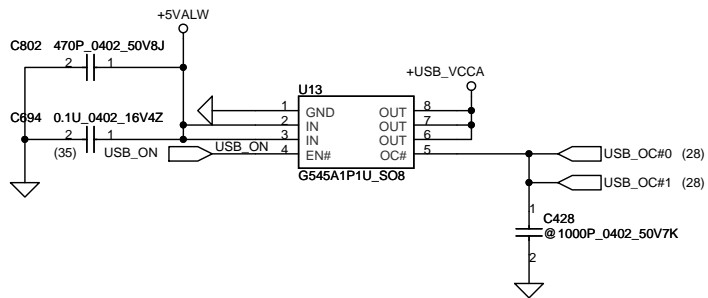
Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2007/10/15	Deciphered Date	2008/10/15	Title
				<b>SCHMATIC, M/B LA-4211P</b>
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. 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.				Document Number 401557
Date:	Saturday, June 06, 2009	Sheet	41 of 53	Rev 1



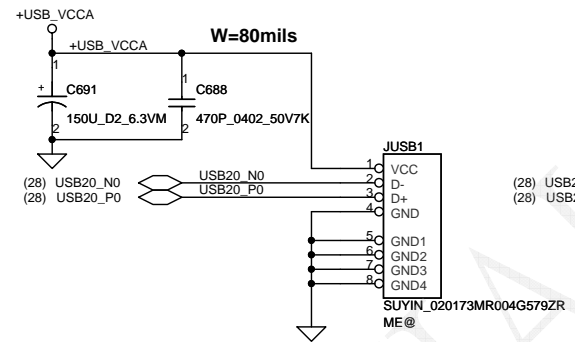
**for EMI**



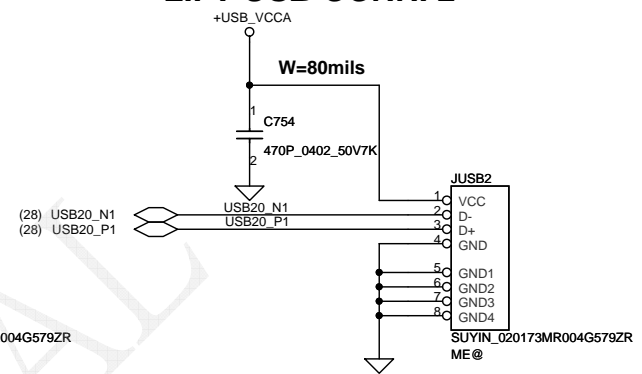
Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2006/08/18	Deciphered Date	2007/8/18	Title
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF RESEARCH AND DEVELOPMENT 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
				401557
				Date: Saturday, June 06, 2009
				Sheet 42 of 53



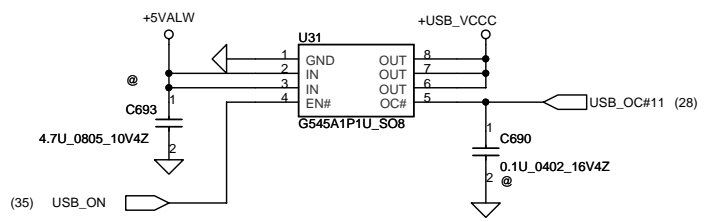
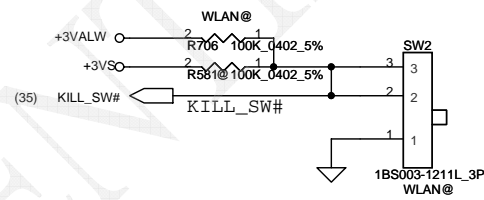
### LIFT USB CONN. 1



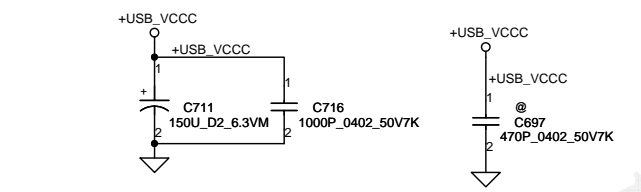
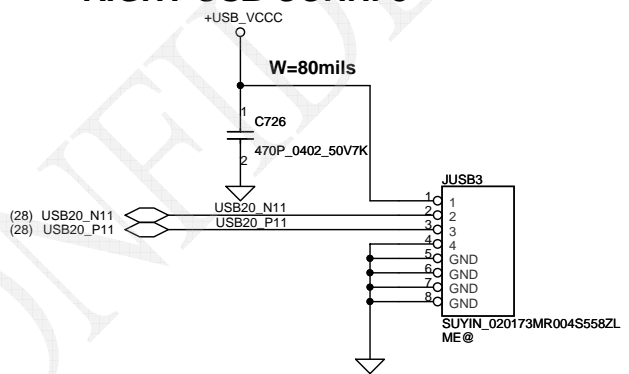
### LIFT USB CONN. 2



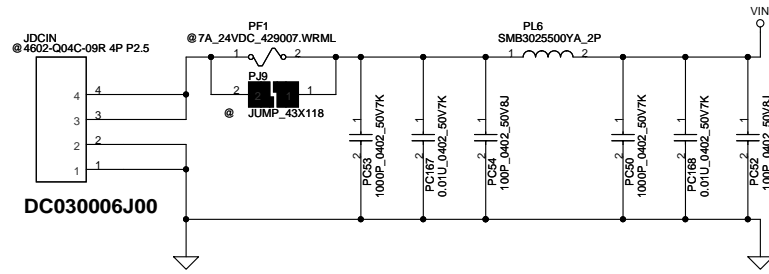
### Kill Switch



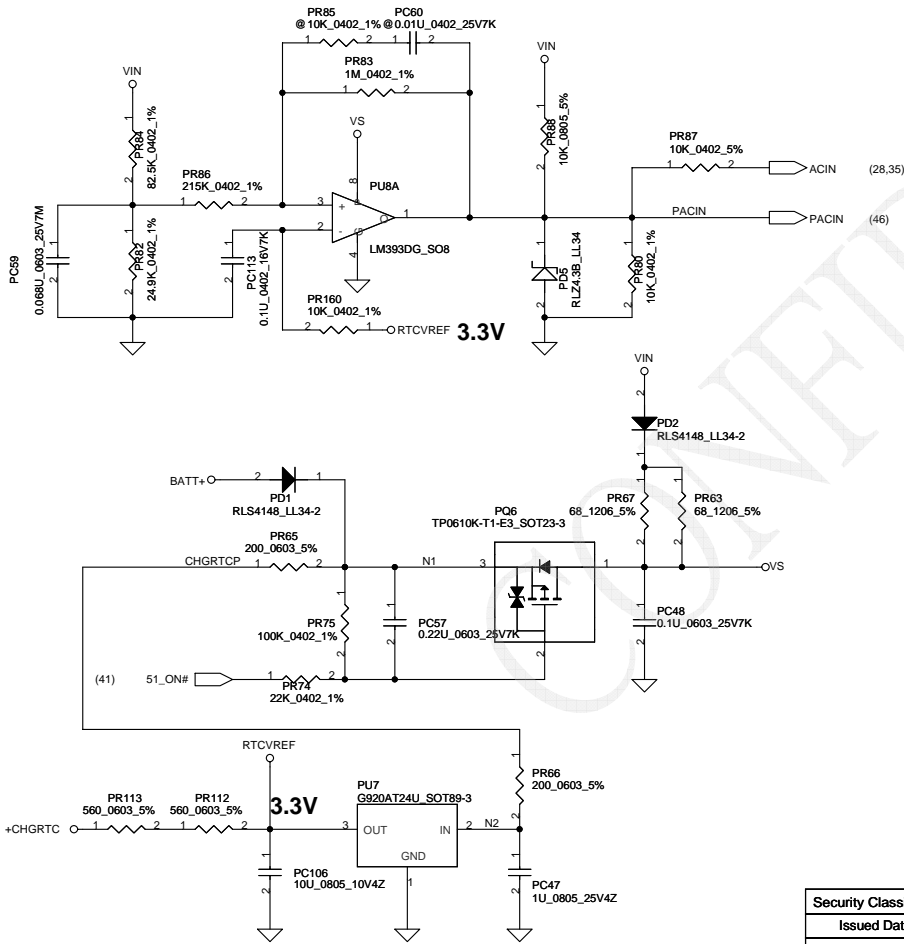
### RIGHT USB CONN. 3



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2006/08/18	Deciphered Date	2007/8/18	Title	SCHEMATIC, M/B LA-4211P
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 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	Rev
				401557	1
				Date: Saturday, June 06, 2009	Sheet 43 of 53

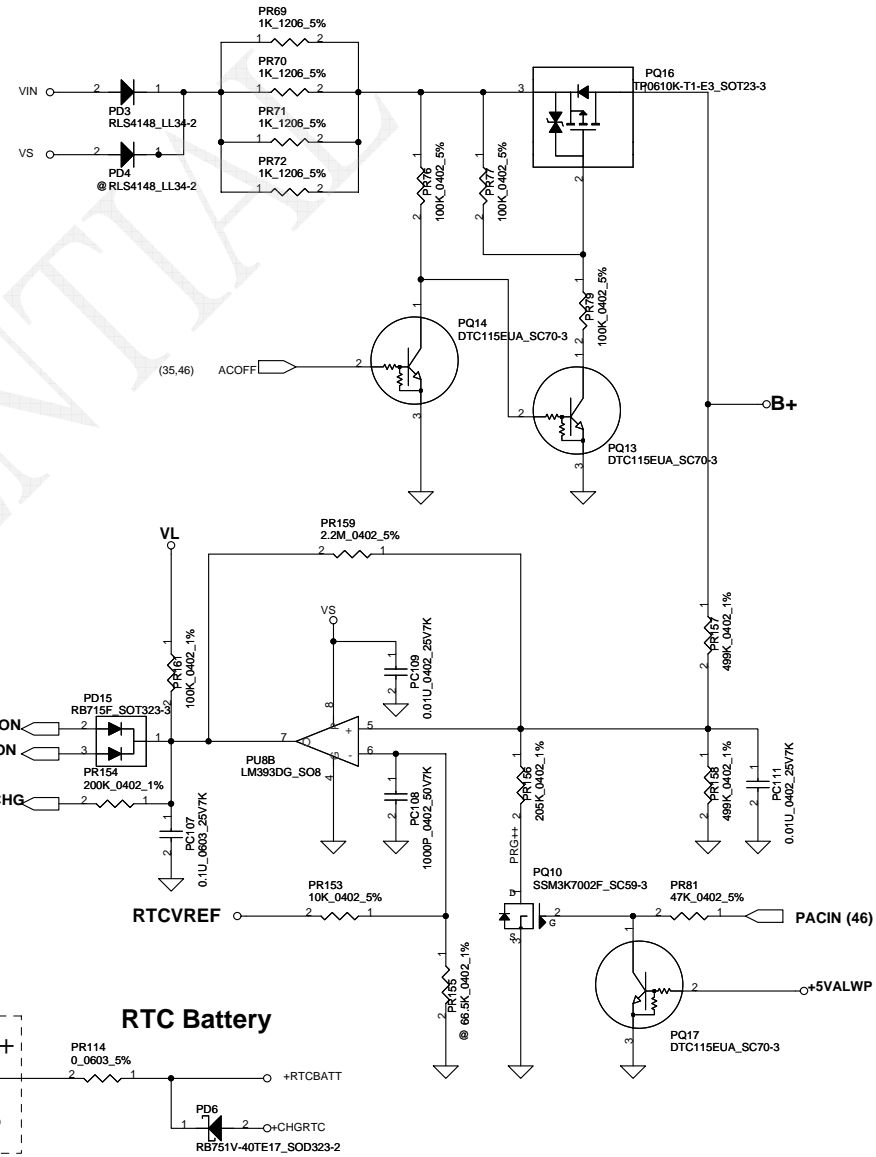


Vin Detector			
High	18.135	17.566	17.01
Low	14.866	14.355	14.063



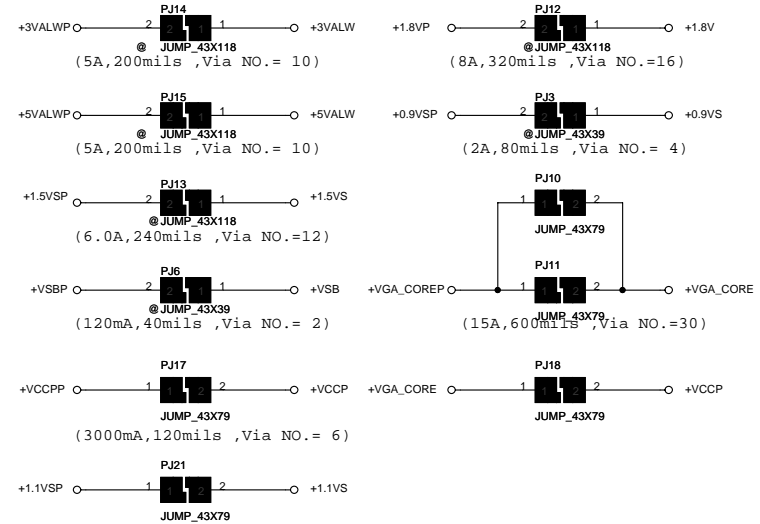
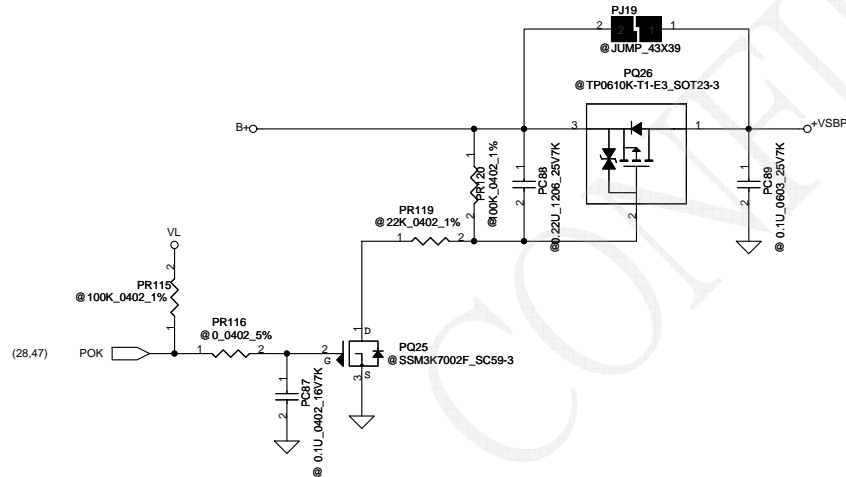
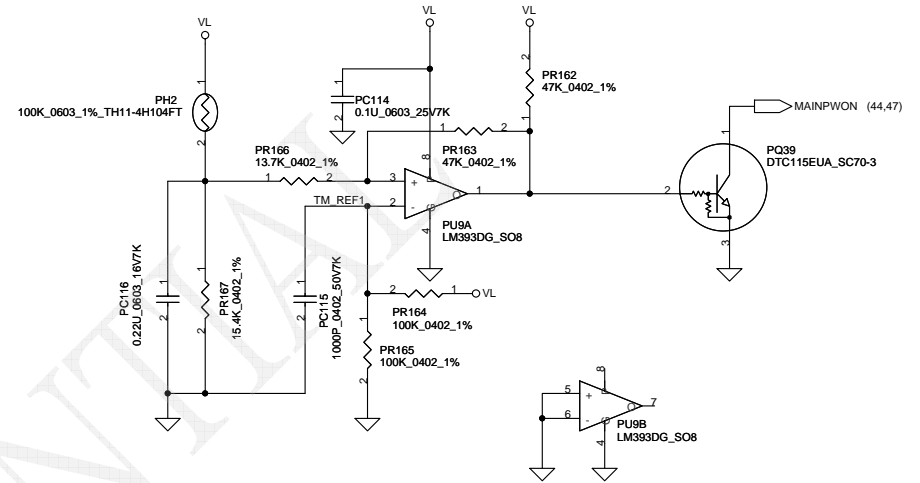
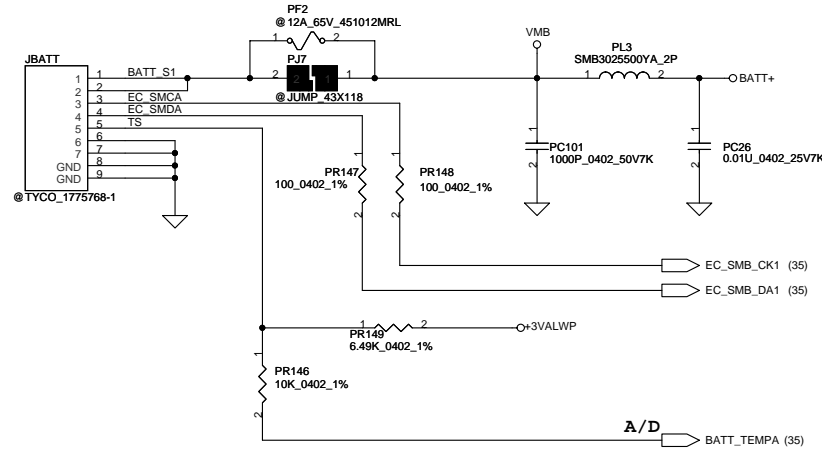
ACIN			
Precharge detector			
	Min.	typ.	Max
H->L	13.843V	14.247V	14.636V
L->H	14.936V	15.381V	15.814V

BATT ONLY			
Precharge detector			
	Min.	typ.	Max
H->L	6.138V	6.214V	6.359V
L->H	7.196V	7.349V	7.505V



Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2007/06/22	Deciphered Date	2008/06/22	Title
				SCHEMATIC, M/B LA-4211P
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 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
				401557
				Rev 1
Date:	Saturday, June 06, 2009	Sheet	44	of 53

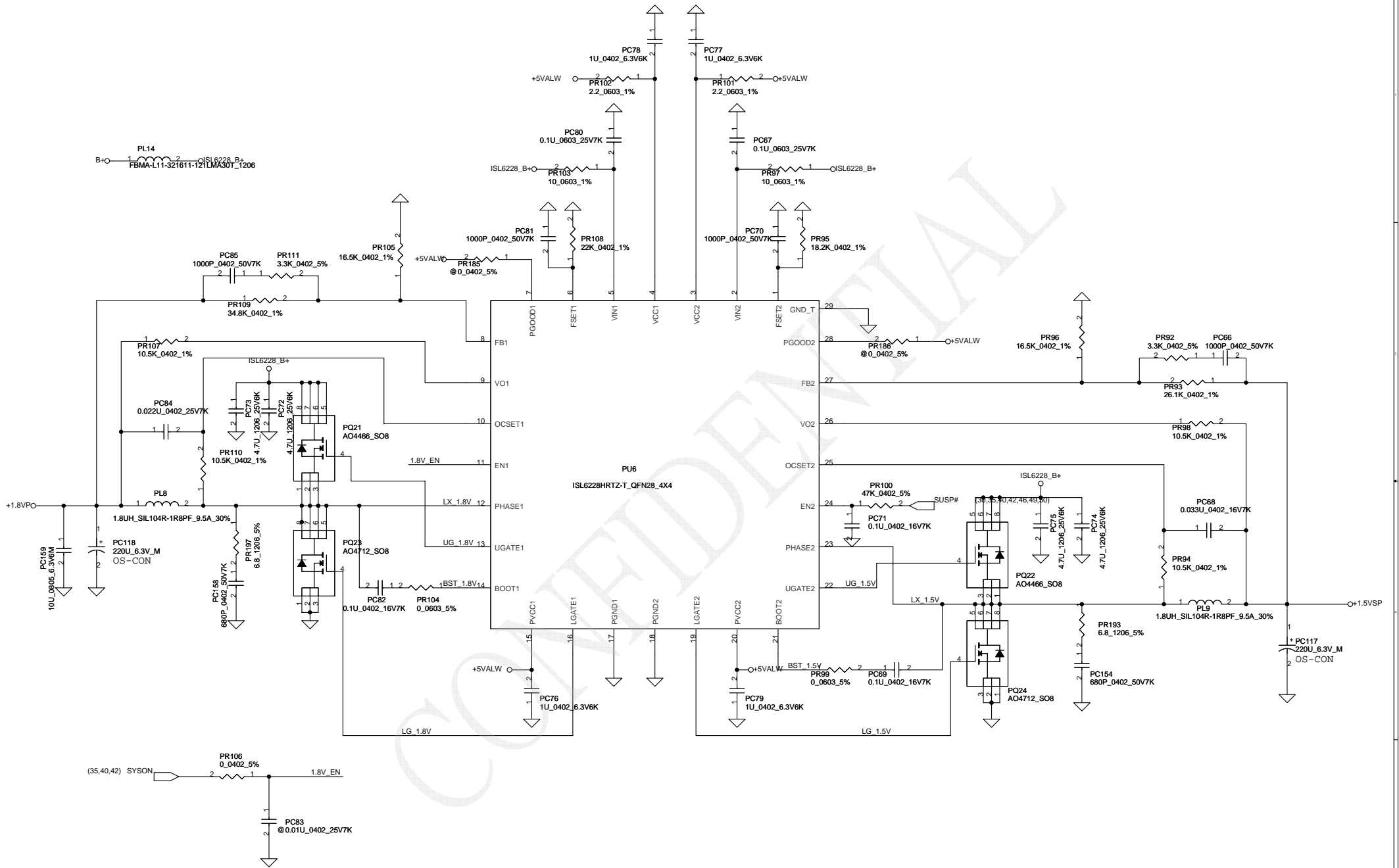
PH1 under CPU bottom side :  
 CPU thermal protection at 92 degree C  
 Recovery at 56 degree C



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2007/6/22	Deciphered Date	2008/6/22	Title	SCHEMATIC, M/B LA-4211P
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	401557			Rev	1
Date:	Saturday, June 06, 2009	Sheet	45	of	53

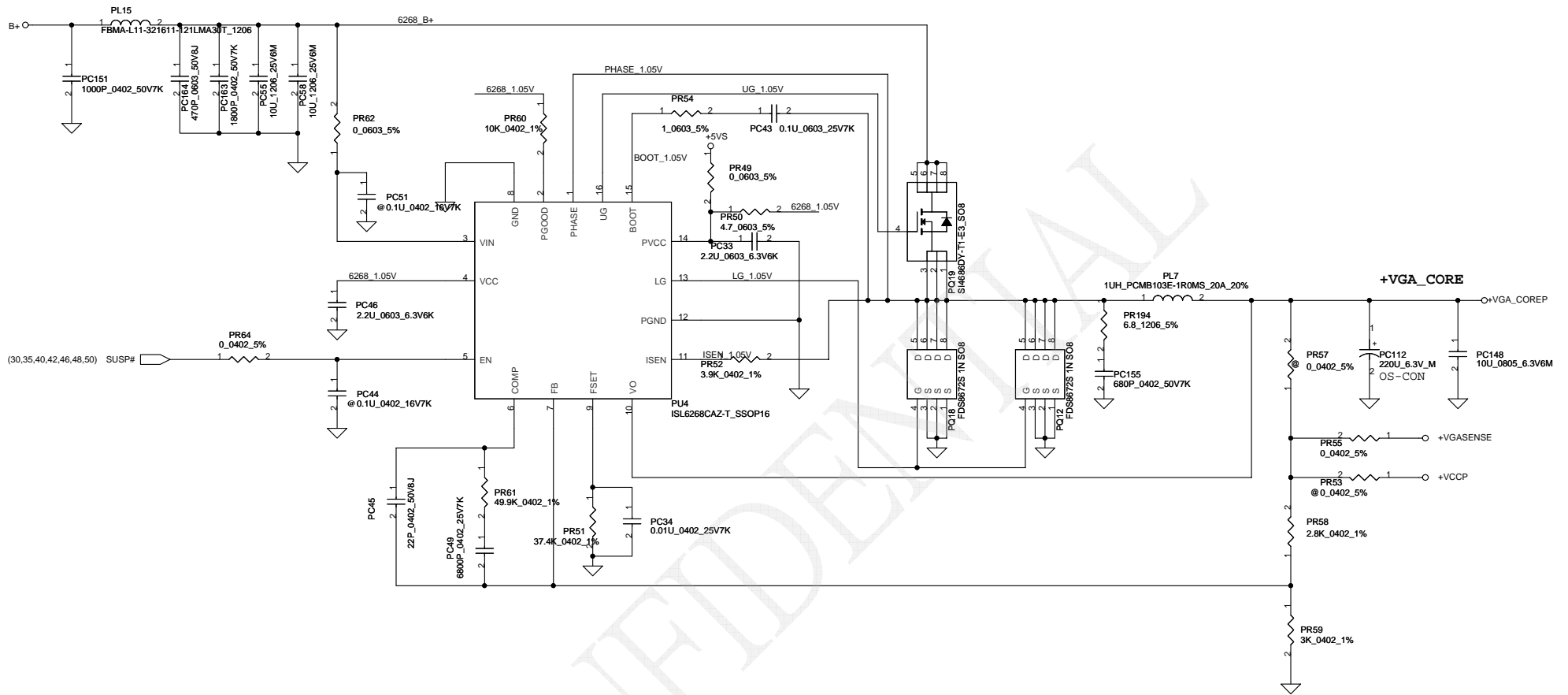




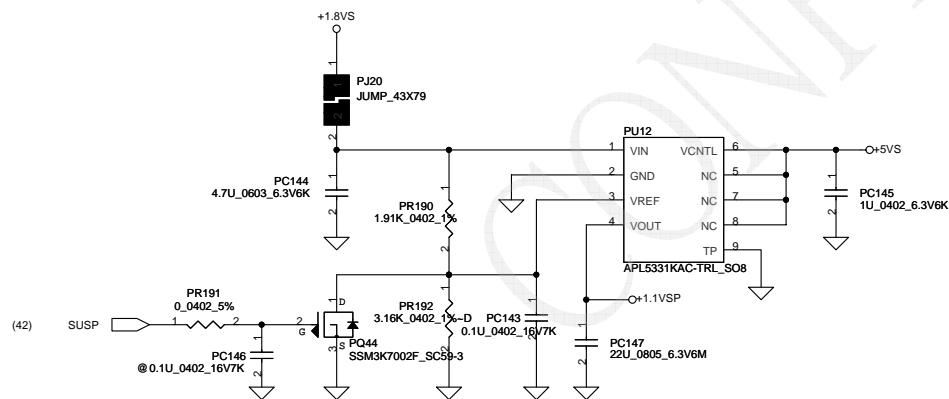
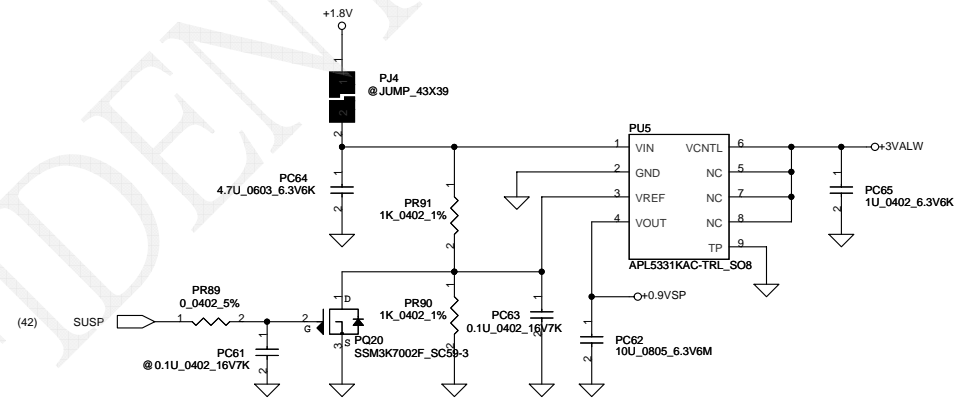
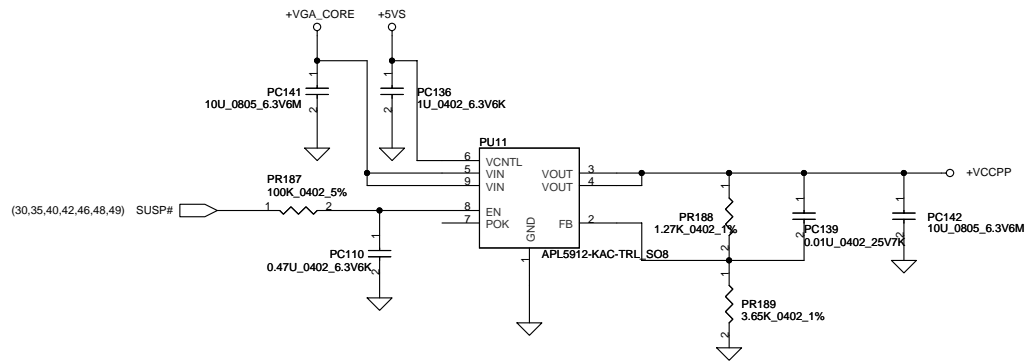


Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2007/06/22	Deciphered Date	2008/06/22	Title	SCHEMATIC, M/B LA-4211P
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS 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	401557
Date:	Saturday, June 06, 2009	Sheet	48	of	53

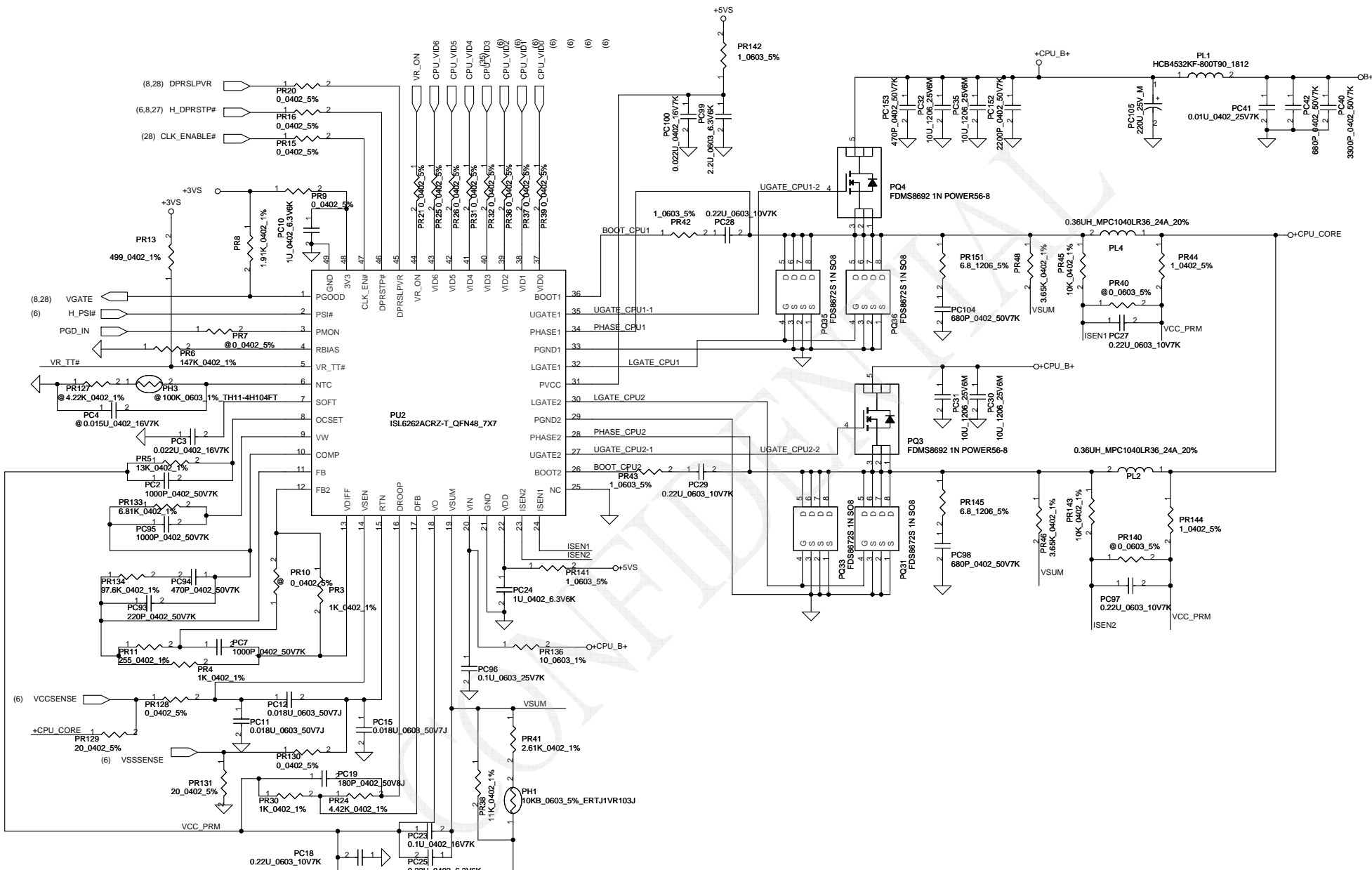




Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2007/6/22	Deciphered Date	2008/6/22	Title	SCHEMATIC, M/B LA-4211P
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET 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	401557
Date:	Saturday, June 06, 2009	Sheet	49	of	53



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2007/6/22	Deciphered Date	2008/6/22	Title	SCHEMATIC, M/B LA-4211P
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	1	Document Number	401557	Date	Saturday, June 06, 2009
Sheet	50	of	53		



Security Classification	Compal Secret Data		Title	
Issued Date	2007/6/22	Deciphered Date	2008/6/22	SCHEMATIC, M/B LA-4211P
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 401557
Date:	Saturday, June 06, 2009	Sheet	51	of 53

NO	DATE	PAGE	MODIFICATION LIST	PURPOSE
10/12		P48	Add PR185, PR186	Reserve for debug use.
10/12		P49	Delete PC110	Because HW reserve enough CAP.
10/17		P49	Add PU11, PC136, PC141, PC142, PC139, PC110, PR187, PR188, PR189	Because need separate +VCCP and +VGA_CORE
10/17		P49	Change PR58 from 2.7k_0402_1% to 2.8k_0402_1% PR59 from 3.24k_0402_1% to 3k_0402_1%.	HW request change VGA_CORE from 1.1V to 1.16V

CONFIDENTIAL

Security Classification		Compal Secret Data		Title	
Issued Date	2005/06/01	Deciphered Date	2006/06/01	Compal Electronics, Inc.	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
				SCHEMATIC, M/B LA-4211P	
Date: Saturday, June 06, 2008				Sheet	52 of 53

NO	DATE	PAGE	MODIFICATION LIST	PURPOSE
1	12/10	P29	C615 change to R615 and BOM Structure change to PM@	Fix DIS Audio issue
2	12/10	P20, P21	R104 & R154 BOM Structure change to PM@	Reduce cost
3	12/10	P16	R86, R645, R646, R650, R651, R652 & R653 BOM Structure change to PM@	Reduce cost
4	12/10	P29	R614 change from 10K to 45.3ohm R615 change from 12K to 54.9ohm	Fix UMA Audio issue
5	12/10	P08	R79 change from 33 to 10ohm R80, R81, R82 & R85 change from 0 to 22 ohm	Fix UMA Audio issue
6	12/10	P30	The C783 links to GND	Fix Internal MIC issue
7	12/10	P41	Add L45 & L46 MBC1608121YZF Bead	Fix F/B issue
8	01/02	P11	Change C126 package	
9	01/02	P28	Add R704 to connect VGATE to M_PWROK	Modify power sequence
10	01/02	P16	Add R699 to connect +VGASENSE	
11	01/02	P16	Remove U3.P1	
12	01/02	P16	Add R700 to connect GND	
13	02/15	P08	Change R147 from 511 ohm 1% to 499 ohm 1%	
14	02/15	P23	Change D4 location	
15	02/15	P23	Add D25 & D26 for ESD	
16	02/15	P25	Add D27, D28 & D29 for ESD	
17	02/15	P29	Add R713 connect to 1.5V	
18	05/08	P05	Add R726 1k ohm & C808 0.1uF to fix issue.	
19	05/08	P16	Remove R48 for EMI request.	
20	05/08	P23	Remove HDMI function.	
21	05/08	P27	Change R554 from 0 ohm to 33 ohm for EMI request.	
22	05/08	P28	Add R566 10 ohm & C733 10pF for EMI request.	
23	05/08	P30	Add R327 47 ohm & C458 33pF for EMI request.	
24	05/08	P35	Change C501 & C514 from 15pF to 12pF	
25	05/08	P37	Add D31 (PJDL05_SOT23-3) for ESD request.	
26	05/08	P41	Add C494, C522, C564 & C568 220pF for EMI request	

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

Compal Electronics, Inc.			
Title		<b>SCHEMATIC, M/B LA-4211P</b>	
Size	Document Number	Rev	
B	401557	I	
Date:	Saturday, June 06, 2009	Sheet	53 of 53