

Compal confidential

Brazos-Delhi 10AB

PWWBE LA-6849P Schematics Document

Mobile AMD APU ZACATE-FT1 + FCH Hudson-M1

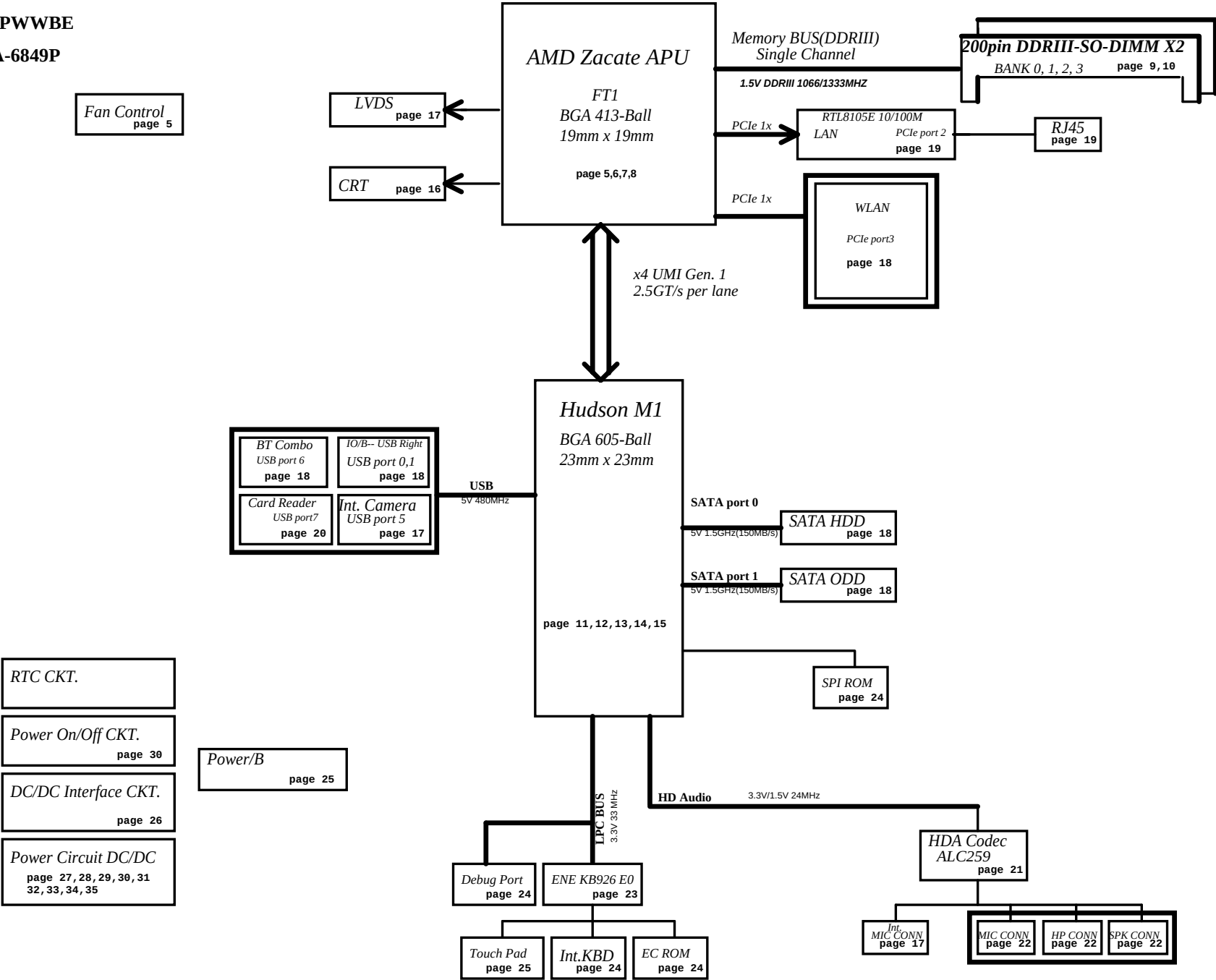
2010-11-22 Rev. 1.0

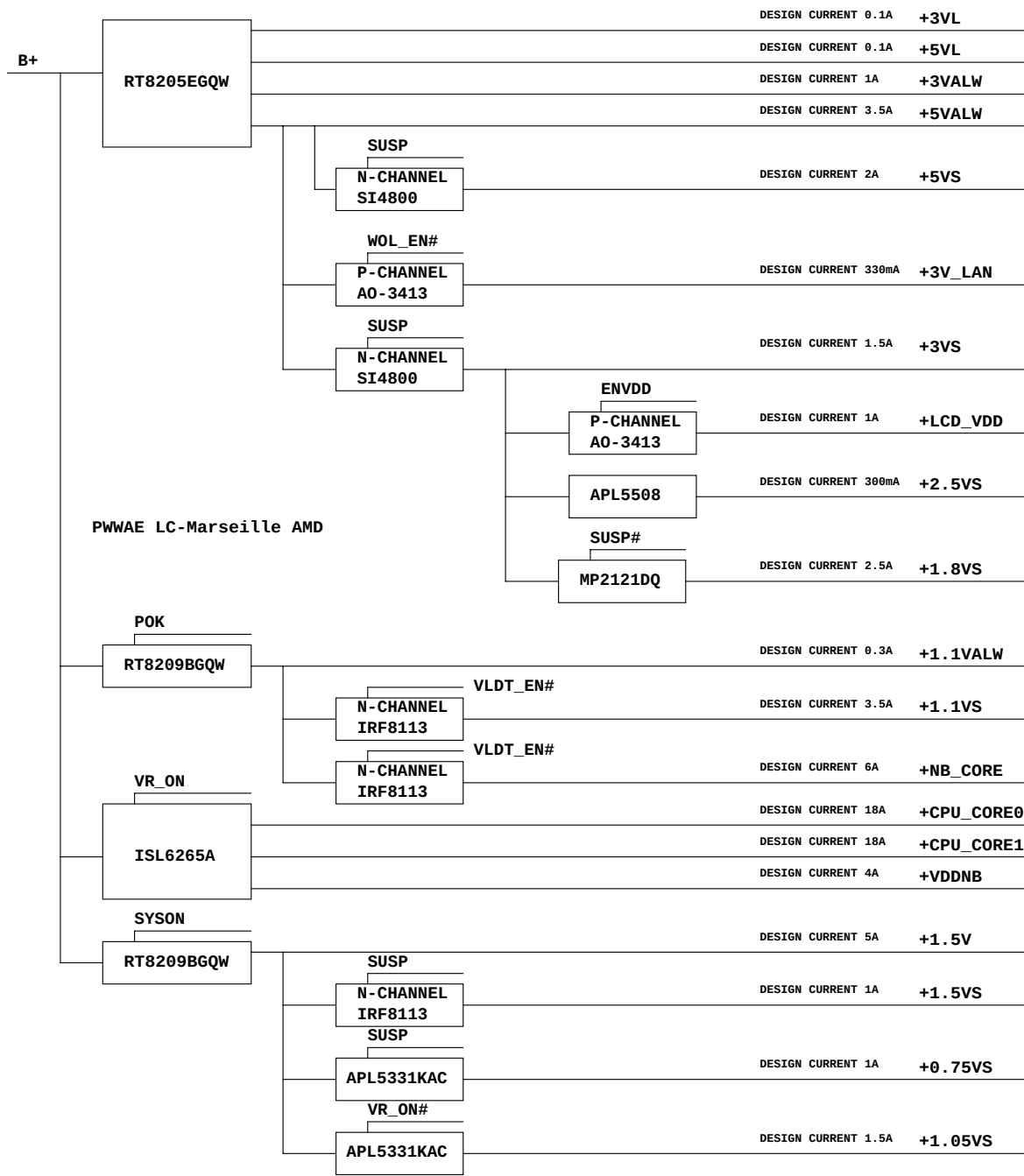
Security Classification		Compal Secret Data		Title	
Issued Date	2010-09-09	Deciphered Date	2010-09-09	SCHEMATICS, MB A6849	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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
				4019BA	B
				Date: Monday, December 06, 2010	Sheet 1 of 38

Compal Confidential

Model Name : PWWBE

File Name : LA-6849P





PWWAE LC-Marseille AMD

Voltage Rails

O : ON
X : OFF

State \ power plane	+B +3VL +5VL +RTCVCC	+5VALW +3VALW +1.1VALW	+1.5V	+5VS +3VS +1.8VS +1.5VS +1.1VS +1.05VS +0.75VS +AGP_CORE +APU_VDDNB
S0	0	0	0	0
S1	0	0	0	0
S3	0	0	0	X
S5 S4/AC	0	0	X	X
S5 S4/ Battery only	0	X	X	X
S5 S4/AC & Battery don't exist	X	X	X	X

Platform	CPU	SB	VGA	EC	Comment
Brazos	APU FT1	FCH M1	NA	KB926	

@ : just reserve , no build
CONN@ : just reserve for Connector only
8105E_VC@: just reserve for 10/100 LAN VC version only
8105E_VB@: just reserve for 10/100 LAN VBversion only
HDT@:just reserve for JHDT connector
E240@ : AMD E240 1.5Ghz CPU only
E350@ : AMD E350 1.6Ghz CPU only

FCH SM Bus0 address

Power	Device	HEX	Address
+3VS	DDR SO-DIMM 0 A0 H	1010 0000 b	
+3VS	DDR SO-DIMM 1 A4 H	1010 0100 b	

EC SM Bus1 address

Power	Device	HEX	Address
+3VL	Smart Battery 16H	0001 011X b	

FCH SM Bus1 address

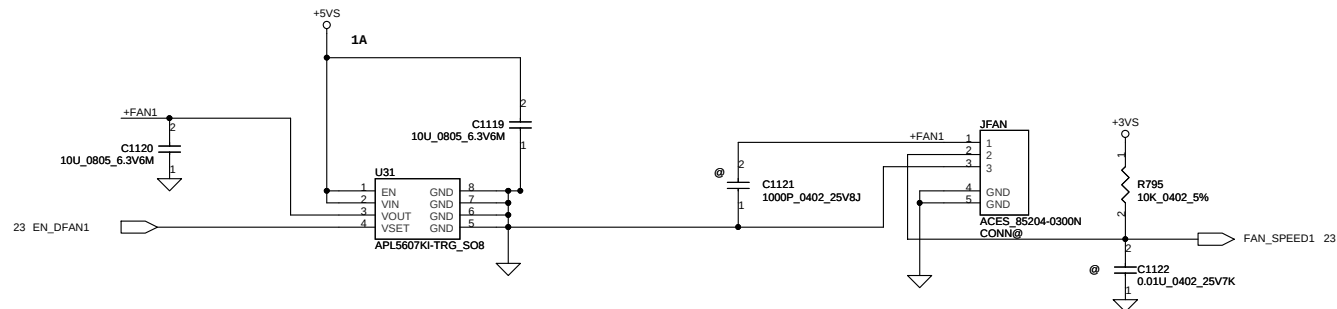
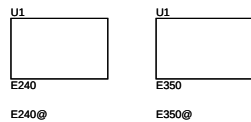
Power	Device	HEX	Address
-------	--------	-----	---------

EC SM Bus2 address

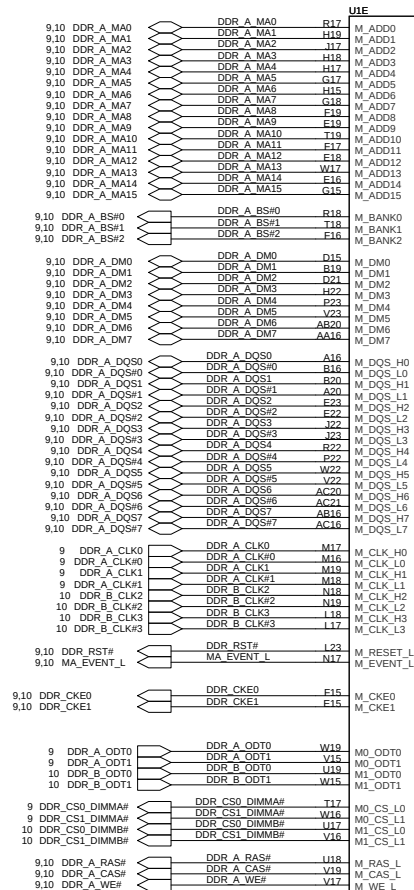
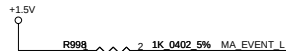
Power	Device	HEX	Address
-------	--------	-----	---------

SMBUS Control Table

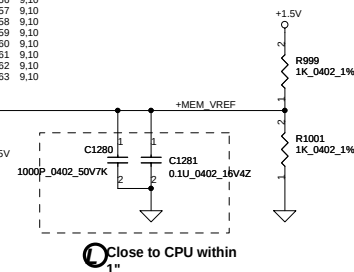
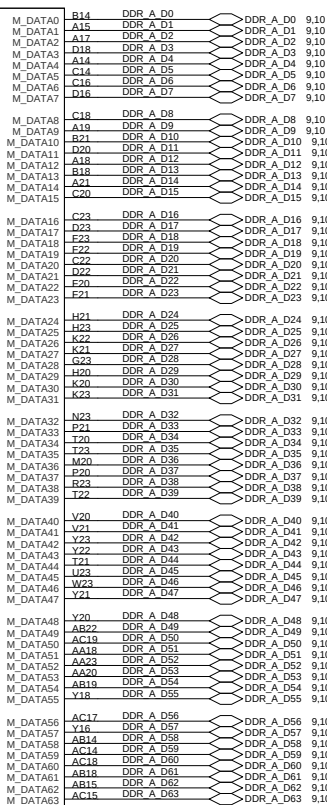
	SOURCE	BATT	SODIMM I / II	CRT DDC ROM	WLAN	LCD DDC ROM	APU
EC_SMB_CK1 EC_SMB_DA1	KB926	V					
EC_SMB_CK2 EC_SMB_DA2	KB926						V
LCD_EDID_CLK LCD_EDID_DATA	APU FT1					V	
D_DDCCLK D_DDCDATA	APU FT1			V			
FCH_SMCLK0 FCH_SMDAT0	FCH M1		V				
FCH_SMCLK1 FCH_SMDAT1	FCH M1				V		

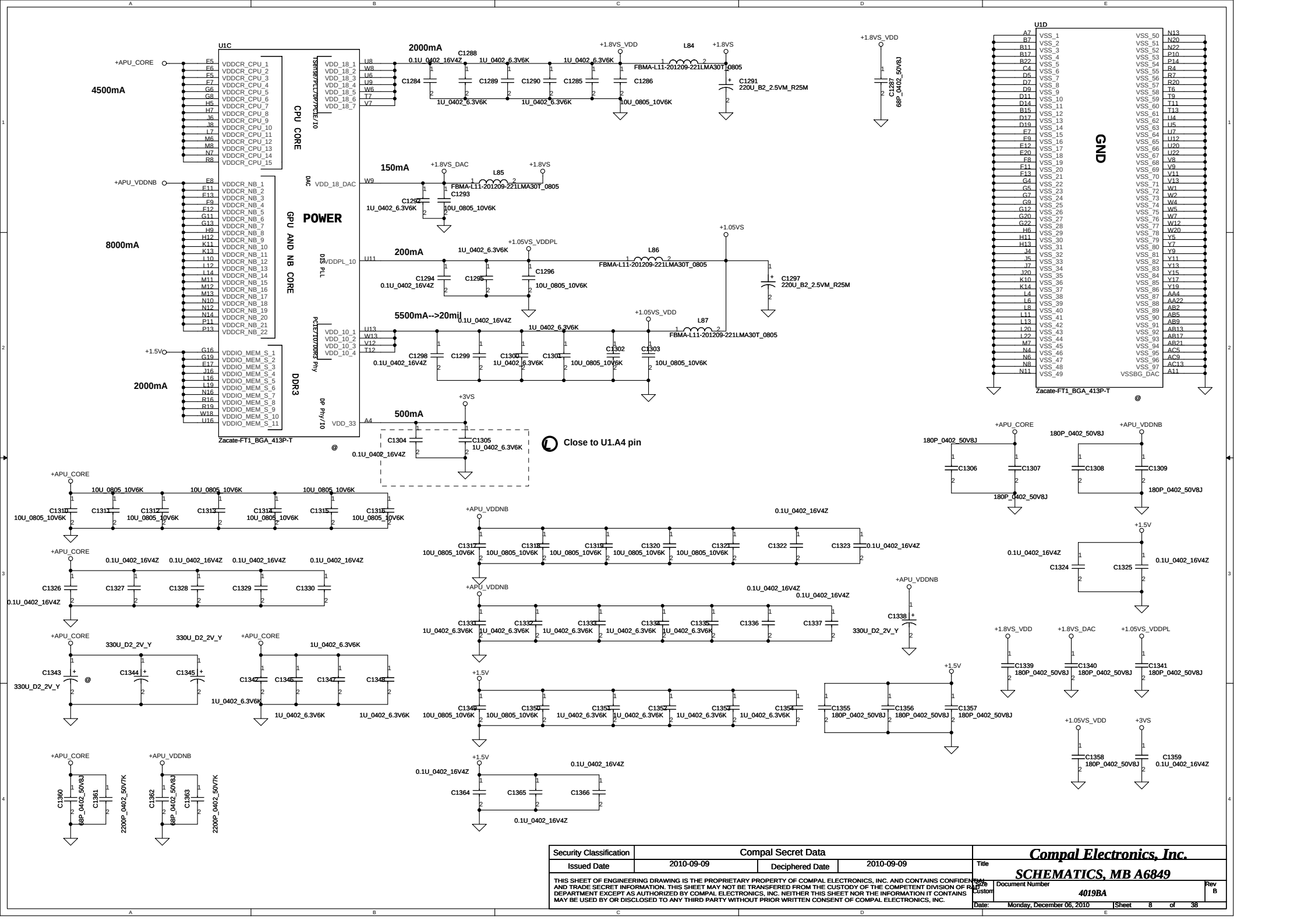


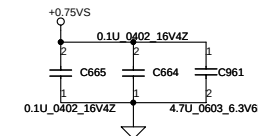
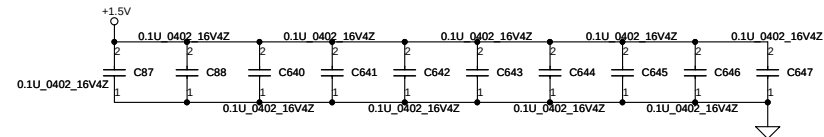
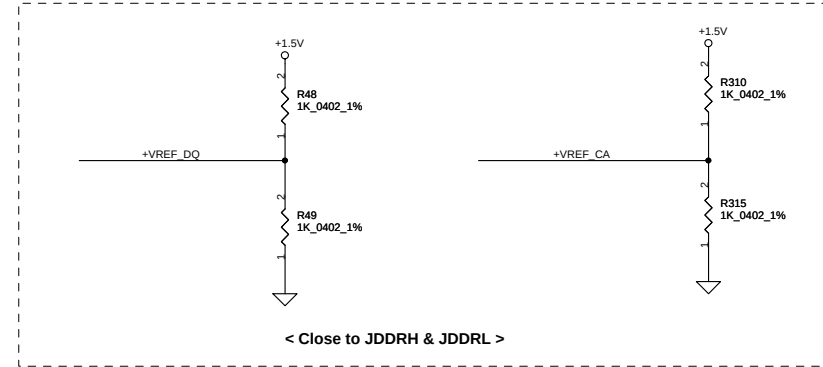
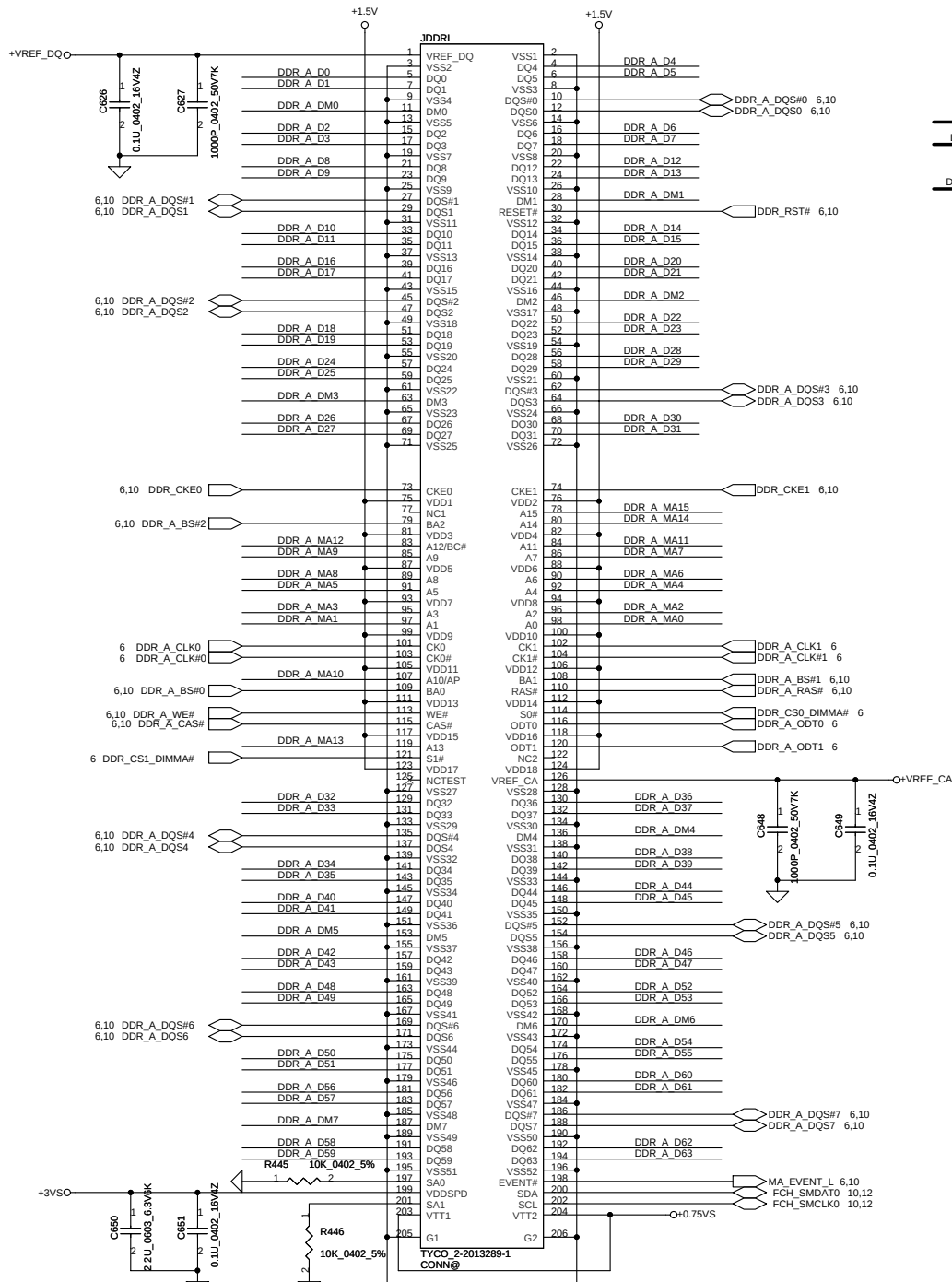
Security Classification		Compal Secret Data		Compal Electronics, Inc. SCHEMATICS, MB A6849	
Issued Date	2010-09-09	Deciphered Date	2010-09-09	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF COMPAL ELECTRONICS, INC. WITHOUT THE WRITTEN CONSENT 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.				Doc. Number	Rev
				Customer	B
				Date: Monday, December 06, 2010	Sheet 5 of 38



DDR SYSTEM MEMORY

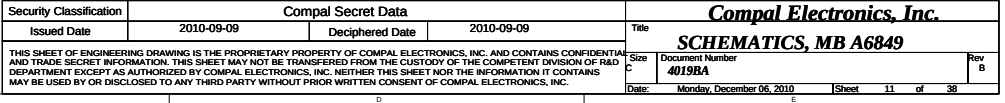


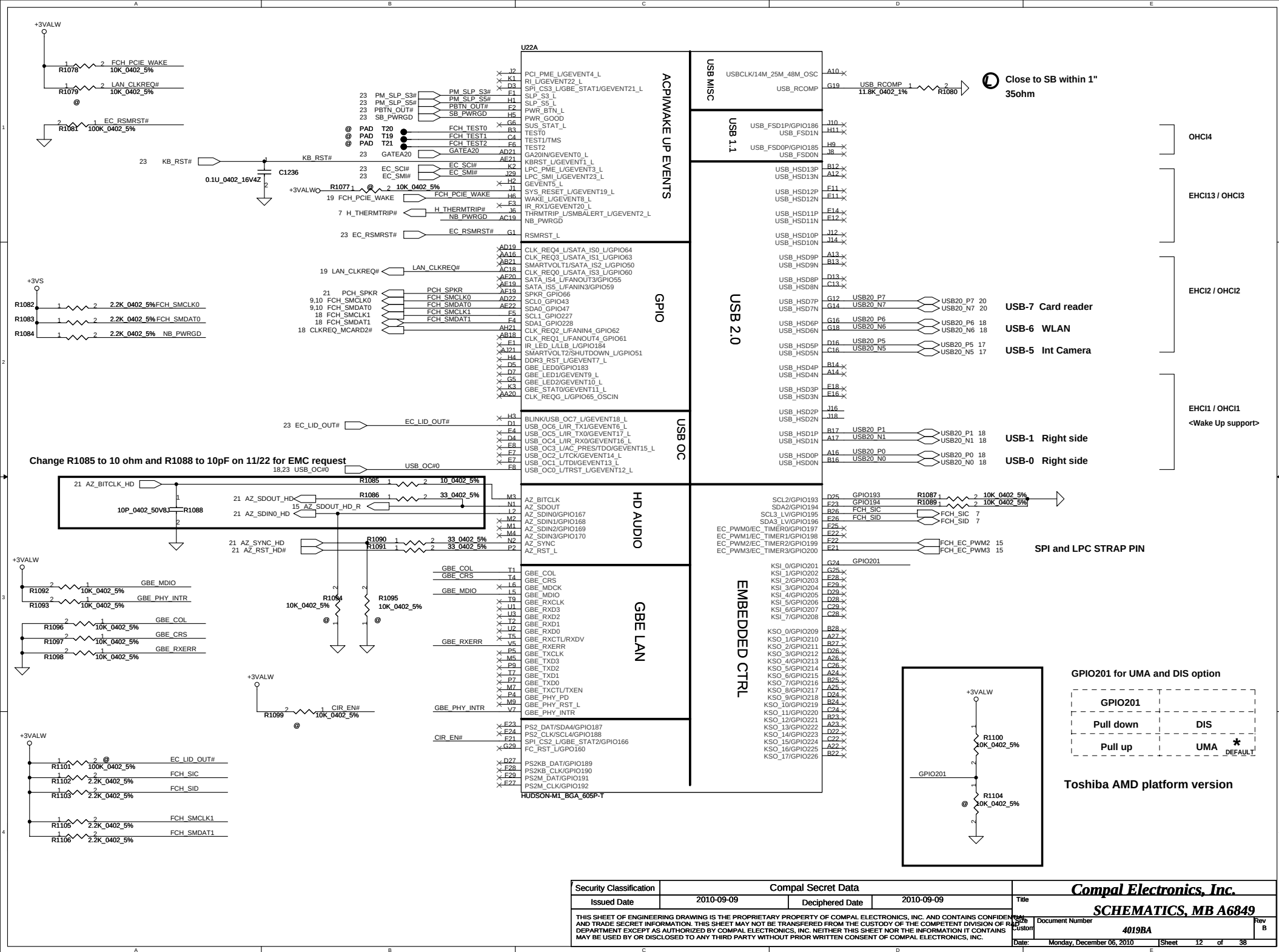


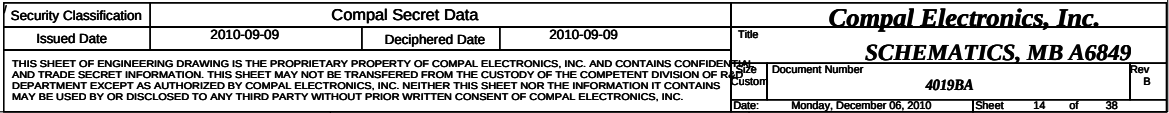


DIMM_A STD H:5.2 mm
<Address: A0 H>

Security Classification		Compal Secret Data				Compal Electronics, Inc.			
Issued Date		2010-09-09		Deciphered Date		2010-09-09		Title	
								SCHEMATICS, MB A6849	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.									
Date:		Monday, December 06, 2010		Sheet		9		of 38	
Rev		B		Document Number		4019BA			





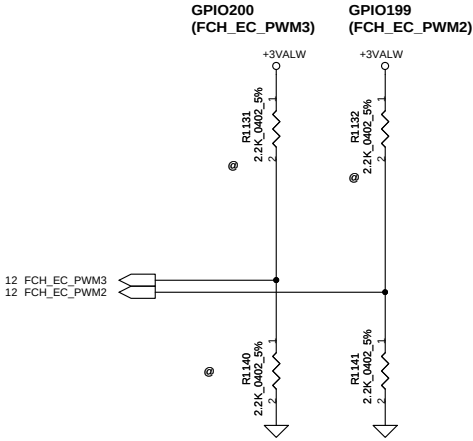
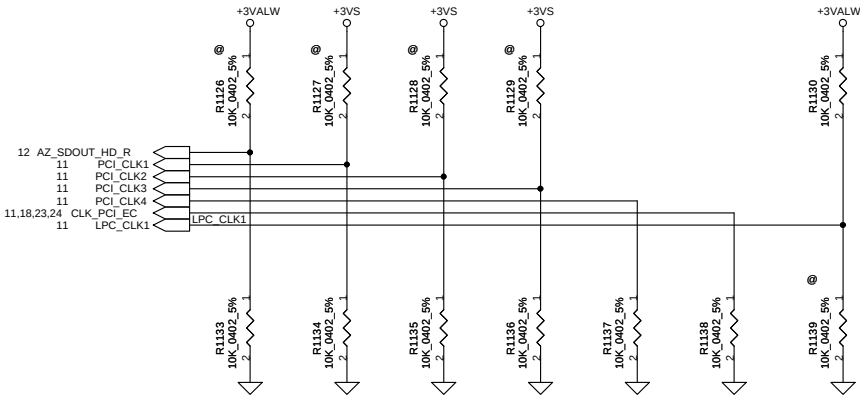


REQUIRED STRAPS

Check Internal PU/PD

	AZ_SDOUT	PCI_CLK1	PCI_CLK2	PCI_CLK3	PCI_CLK4	CLK_PCI_EC	LPC_CLK1	
PULL HIGH	LOW POWER MODE	ALLOW PCIE GEN2	WATCHDOG TIMER ENABLE	USE DEBUG STRAP	Inter CLK Gen Mode Disable	EC ENABLE	CLOCKGEN ENABLE	
PULL LOW	Performance MODE	FORCE PCIE GEN1	WATCHDOG TIMER DISABLE	IGNORE DEBUG STRAP	Inter CLK Gen Mode Enable	EC DISABLE	CLOCKGEN DISABLE	
	* DEFAULT	* DEFAULT	* DEFAULT	* DEFAULT	* DEFAULT	* DEFAULT	* DEFAULT	

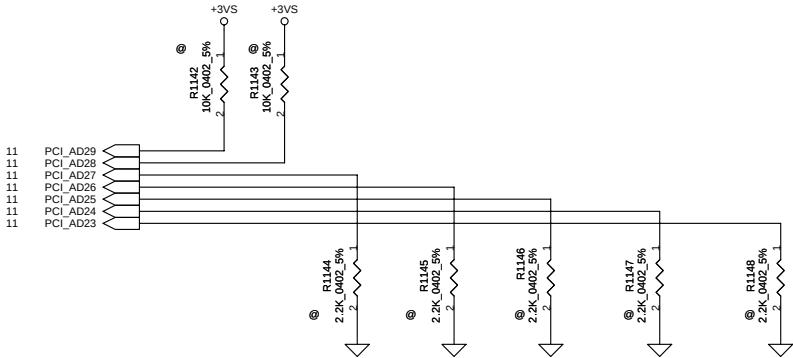
	GPIO200 (FCH_EC_PWM3)	GPIO199 (FCH_EC_PWM2)	
Reserved	2.2k pull down	2.2k pull down	
* SPI	Not contact	2.2k pull down	DEFAULT
LPC	2.2k pull down	Not contact	
Reserved	Not contact	Not contact	



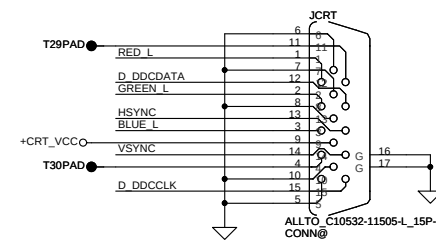
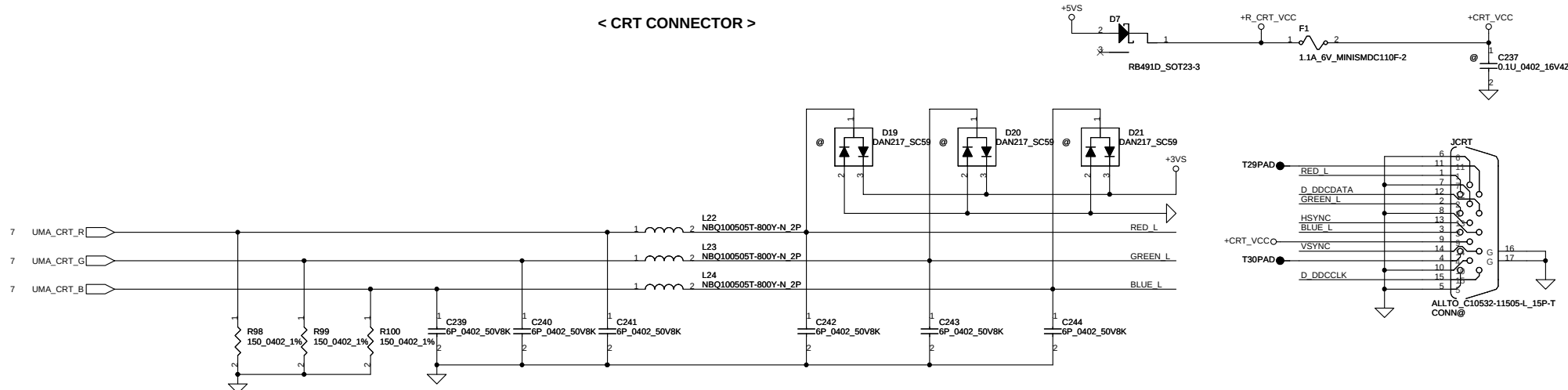
DEBUG STRAPS

M1 HAS 15K INTERNAL PU FOR PCI_AD[27:23]

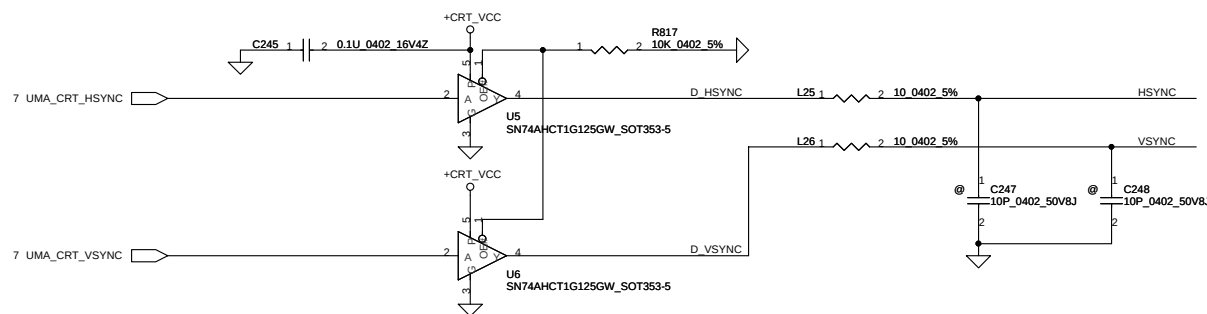
	PCI_AD27	PCI_AD26	PCI_AD25	PCI_AD24	PCI_AD23
PULL HIGH	USE PCI PLL	DISABLE ILA AUTORUN	USE FC PLL	USE DEFAULT PCIE STRAPS	DISABLE PCI MEM BOOT
PULL LOW	DEFAULT	DEFAULT	DEFAULT	DEFAULT	DEFAULT
	BYPASS PCI PLL	ENABLE ILA AUTORUN	BYPASS FC PLL	USE EEPROM PCIE STRAPS	ENABLE PCI MEM BOOT



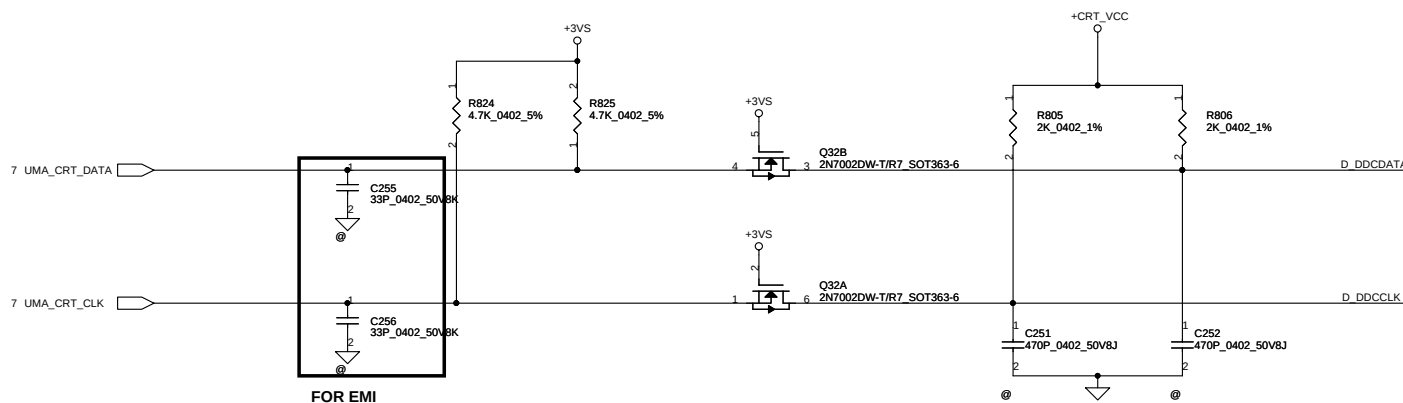
< CRT CONNECTOR >



< SYNC SIGNAL >

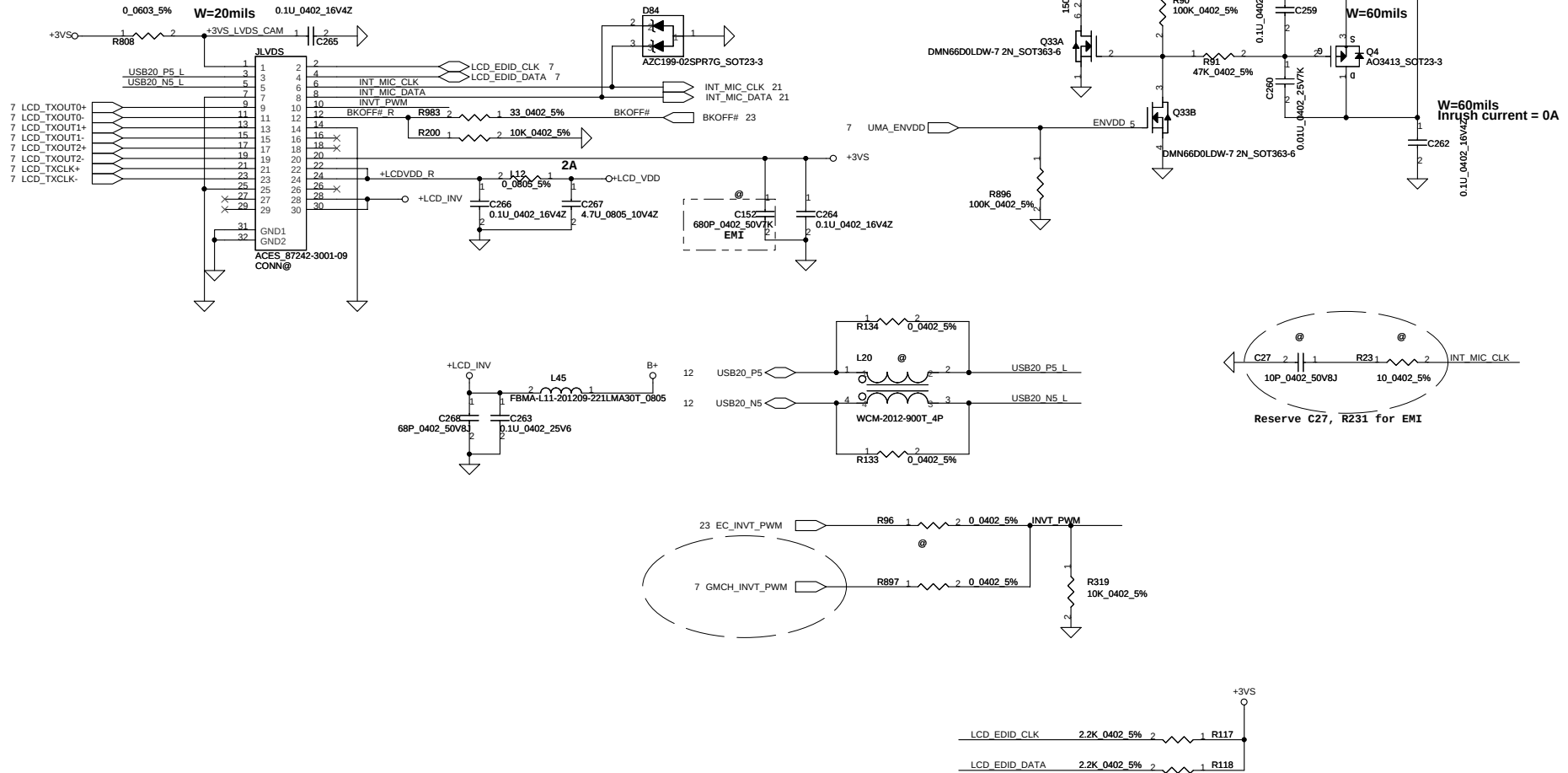


< Display Data Channel >



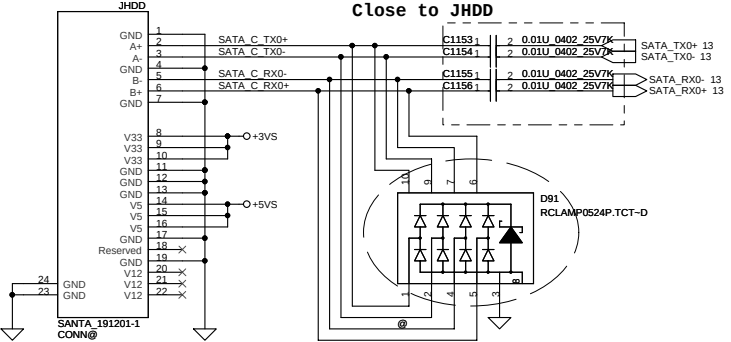
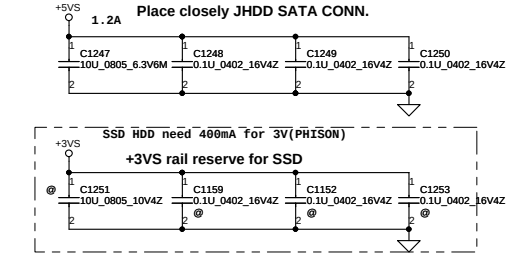
Security Classification	Compal Secret Data			Compal Electronics, Inc.	
Issued Date	2010-09-09	Deciphered Date	2010-09-09	Title	SCHEMATICS, MB A6849
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE 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	4019BA
				Date	Monday, December 06, 2010
				Sheet	16 of 38

LCD/PANEL BD. Conn.

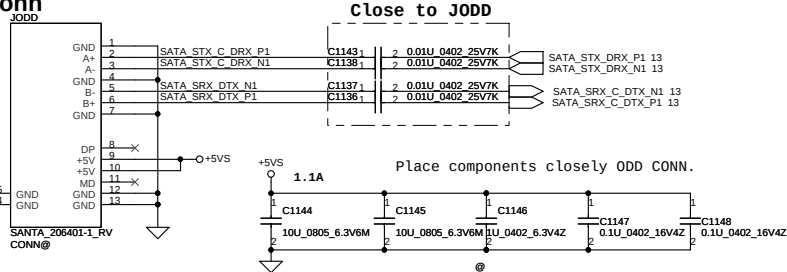


Security Classification	Compal Secret Data			Compal Electronics, Inc.	
Issued Date	2010-09-09	Deciphered Date	2010-09-09	Title	SCHEMATICS, MB A6849
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET 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	4019BA
				Date	Monday, December 06, 2010
				Sheet	17 of 38

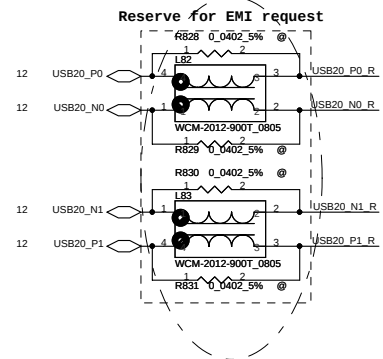
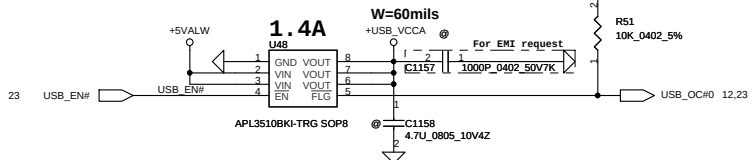
SATA HDD Conn.



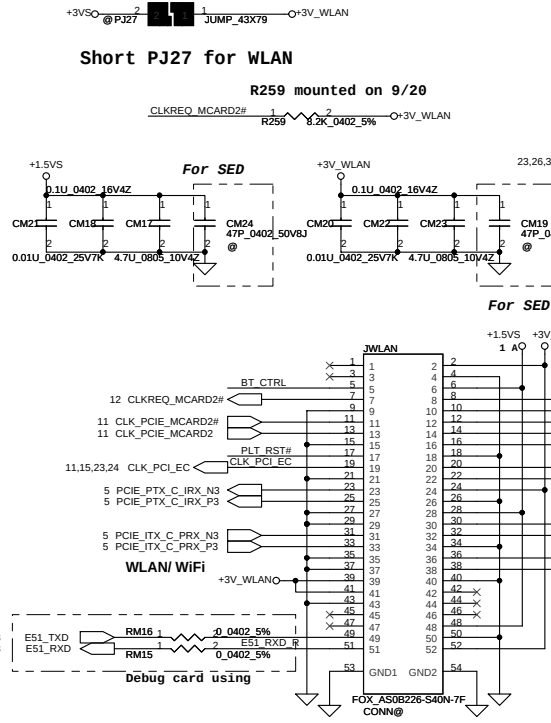
SATA ODD Conn

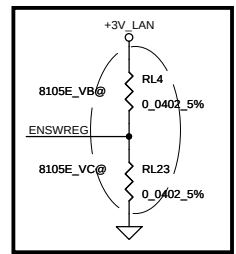
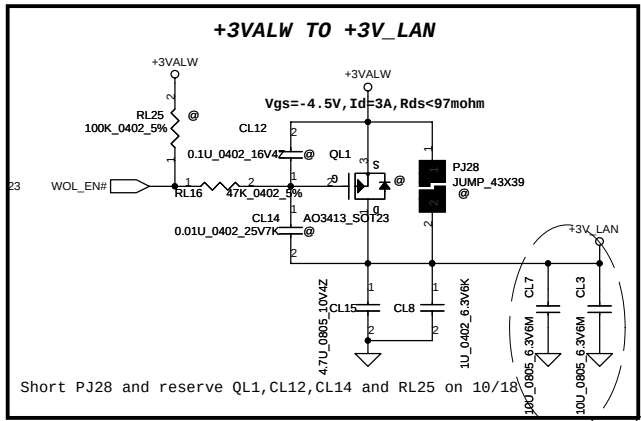
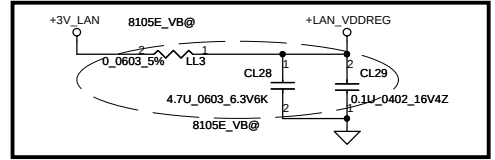
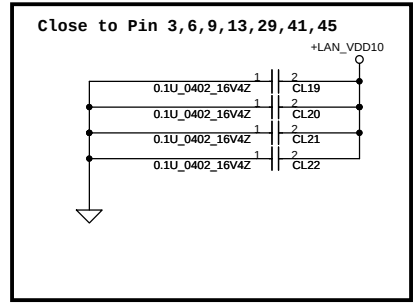
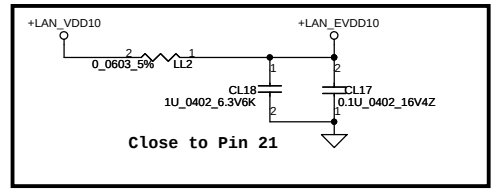
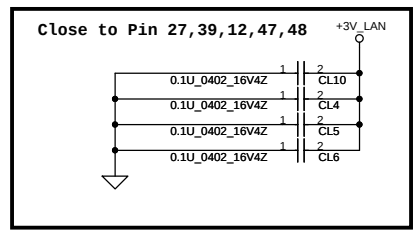
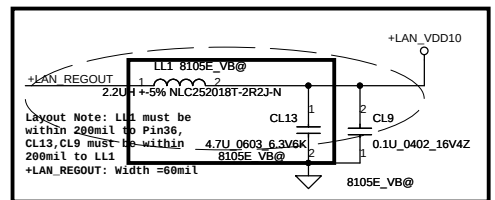
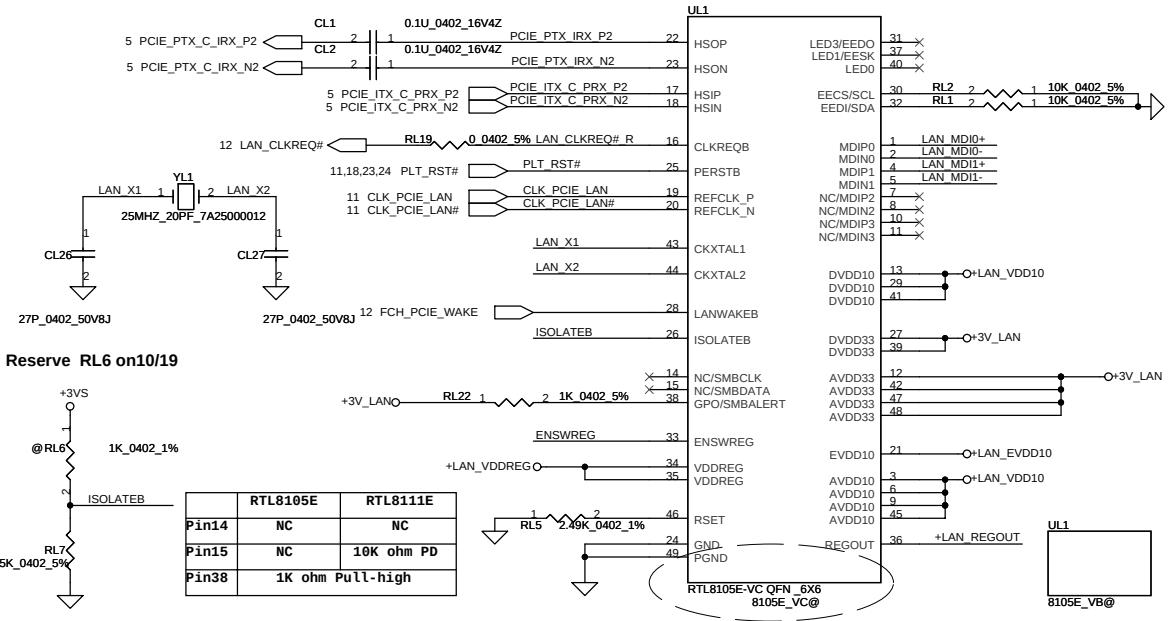


USB Port 0 & Port1

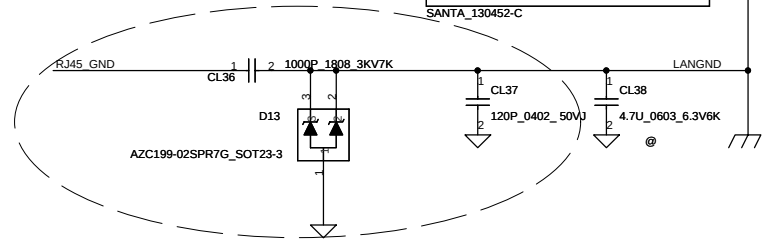
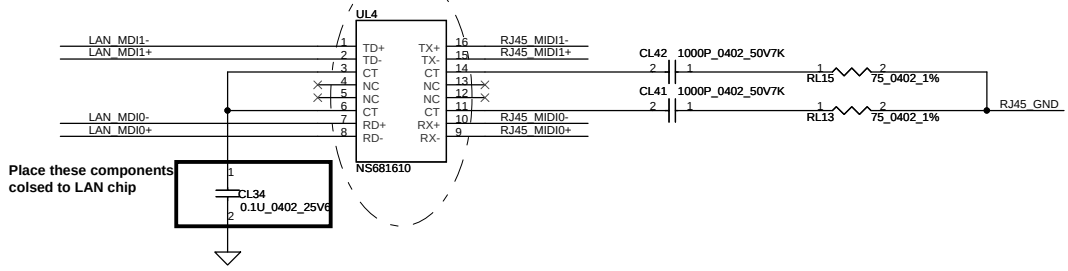
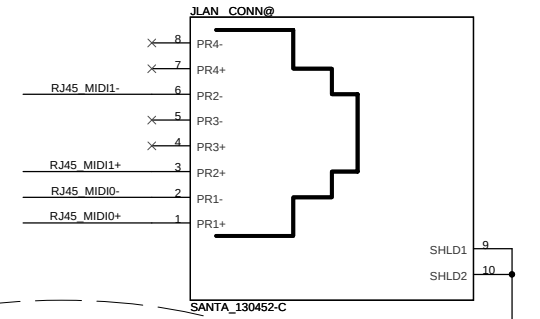
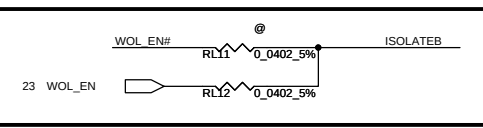


Slot#1 Half PCIe Mini Card-WLAN

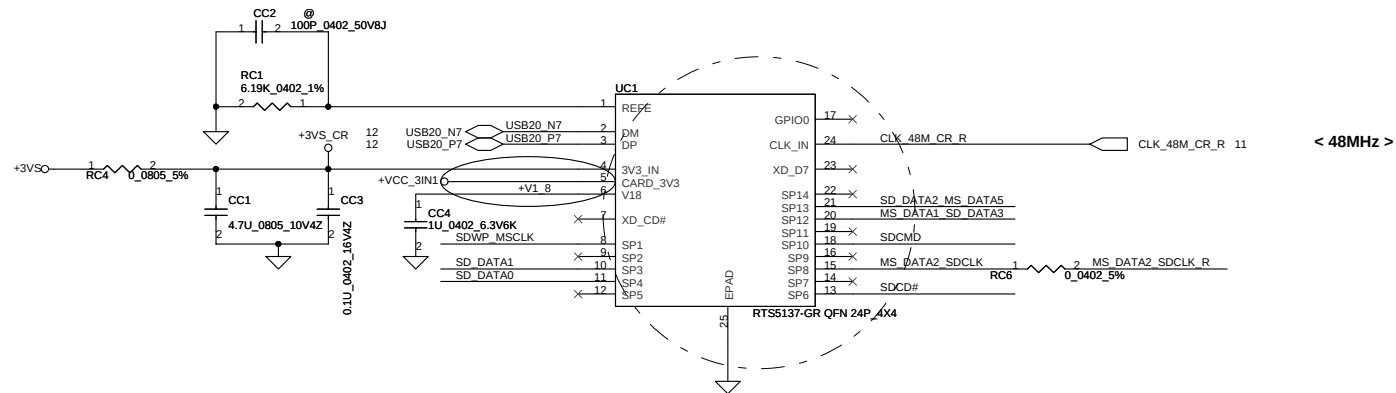




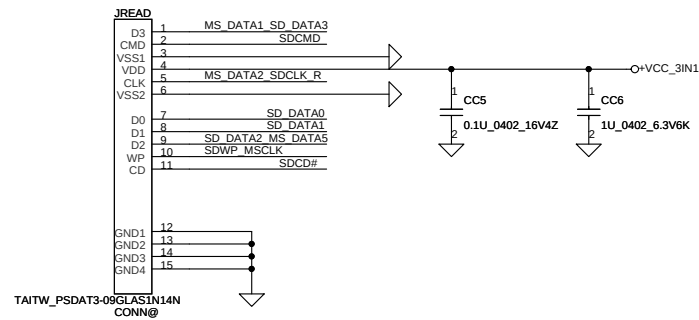
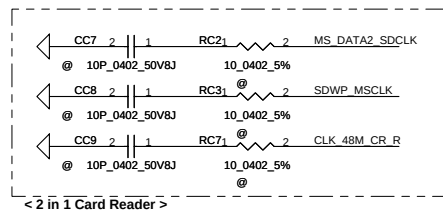
LAN Conn.



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010-09-09	Deciphered Date	2010-09-09	Title	SCHEMATICS, MB A6849
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.				Revision	4019BA
				Date	Monday, December 06, 2010
				Sheet	19 of 38

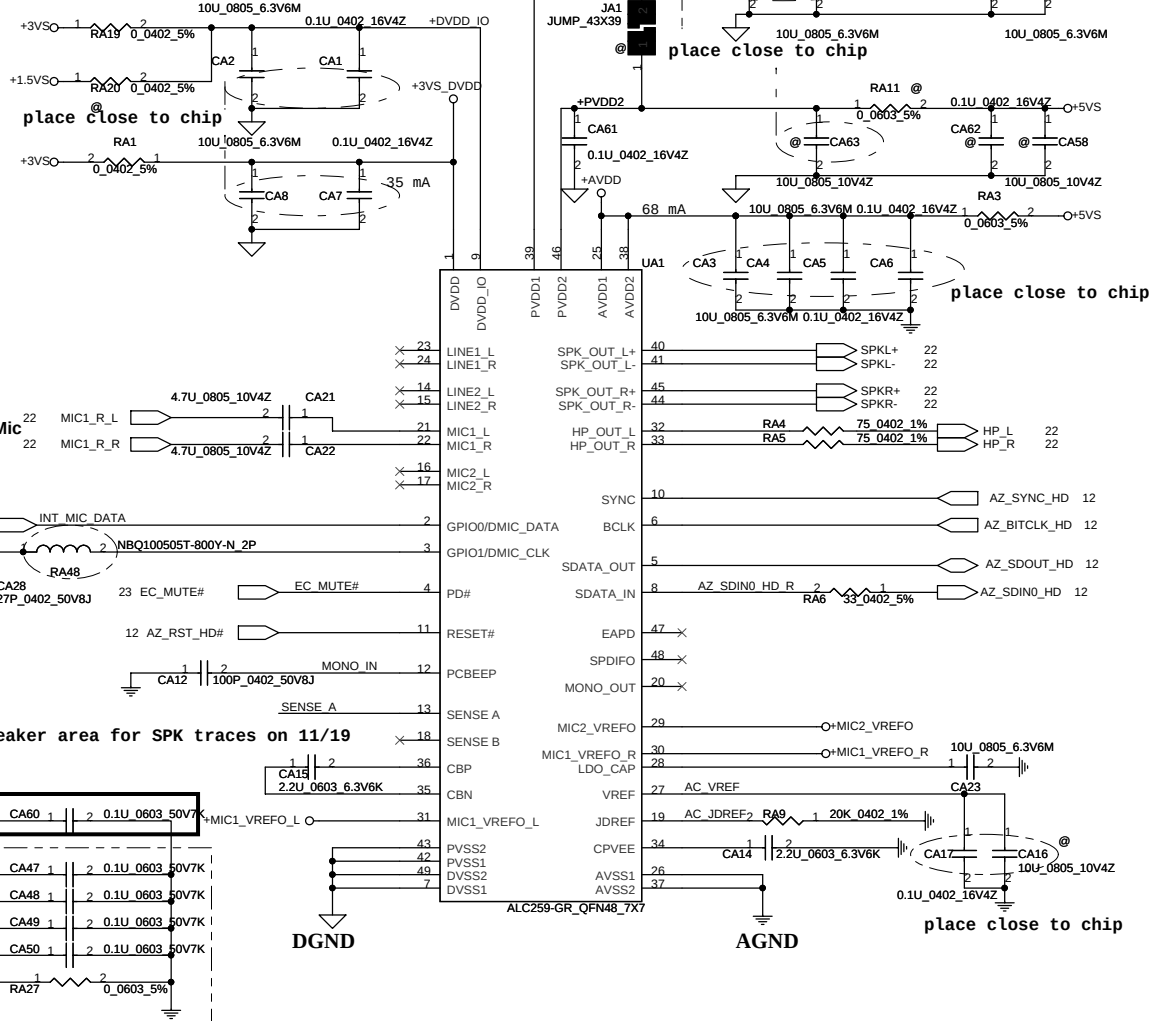


for EMI request

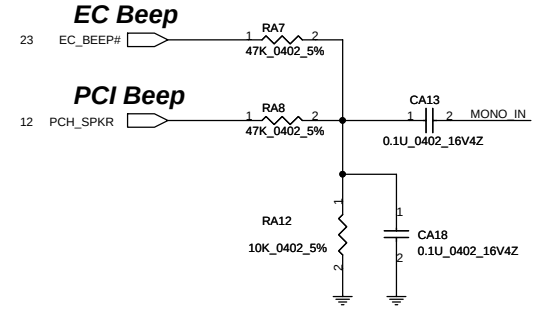


Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010-09-09	Deciphered Date	2010-09-09	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				SCHEMATICS, MB A6849	
Document Number		4019BA		Rev B	
Date		Monday, December 06, 2010		Sheet 20 of 38	

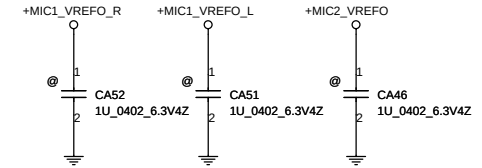
Codec



Beep sound

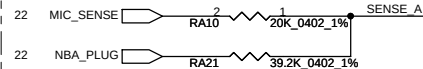


place close to chip



Sense Pin	Impedance	Codec Signals	Function
SENSE A	39.2K	PORT-I (PIN 32, 33)	Headphone out
	20K	PORT-B (PIN 21, 22)	Ext. MIC
	10K	PORT-C (PIN 23, 24)	
	5.1K	(PIN 48)	
SENSE B	39.2K	PORT-E (PIN 14, 15)	
	20K	PORT-F (PIN 16, 17)	
	10K	PORT-H (PIN 20)	

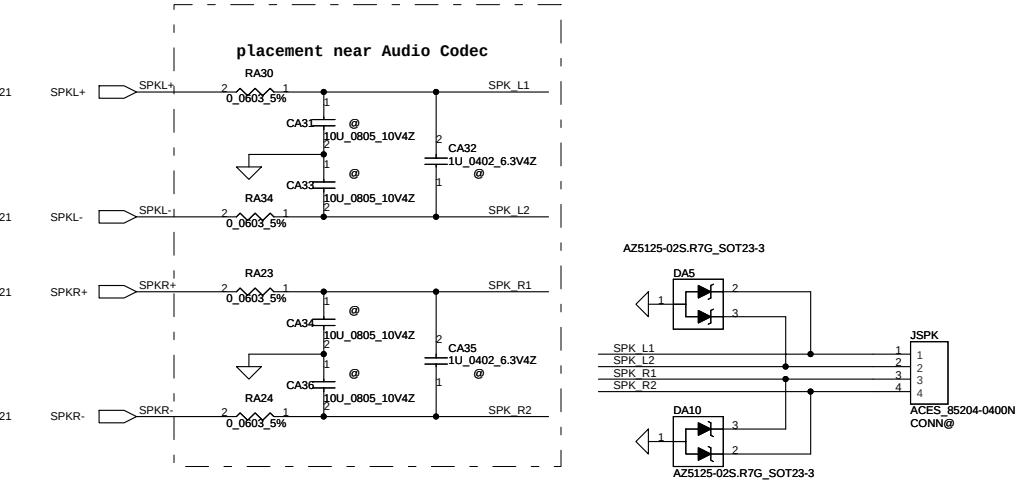
place close to chip



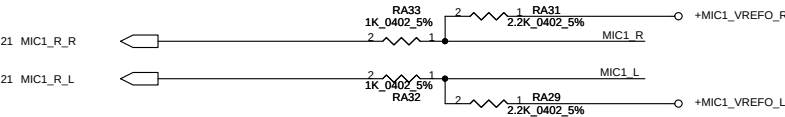
Security Classification				Compal Secret Data				Compal Electronics, Inc.			
Issued Date				2010-09-09				Title			
Deciphered Date				2010-09-09				SCHEMATICS, MB A6849			
Document Number				4019BA				Rev B			
Date				Monday, December 06, 2010				Sheet 21 of 38			

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

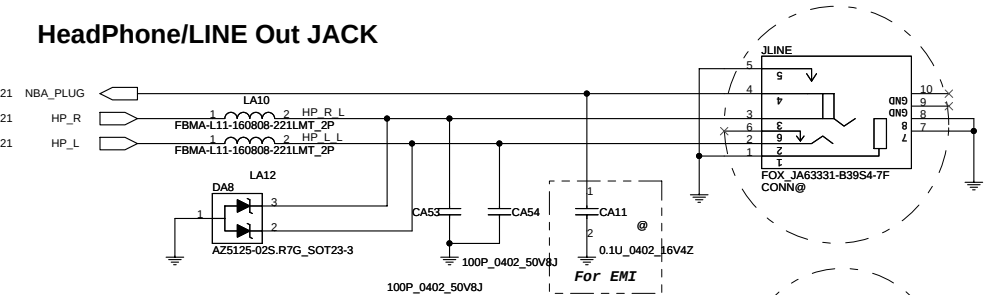
Speaker Connector



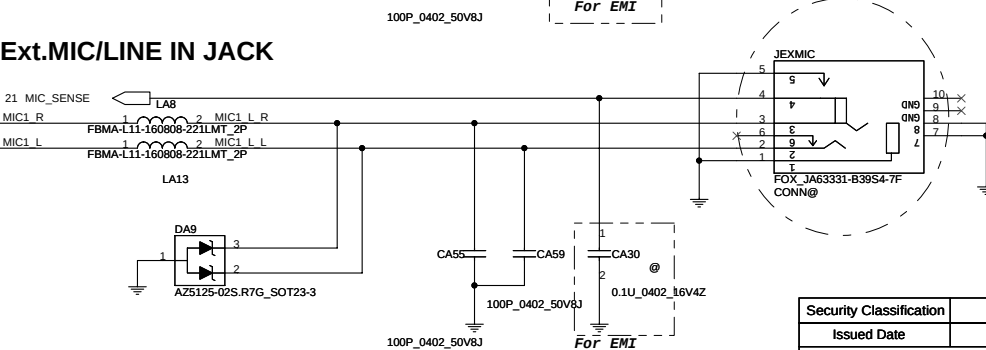
Ext.MIC/LINE IN JACK



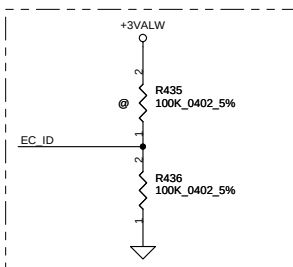
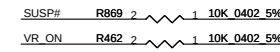
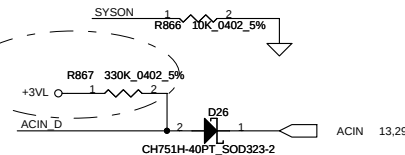
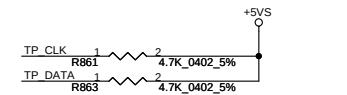
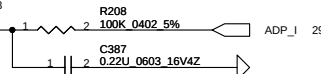
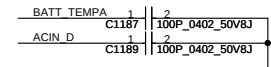
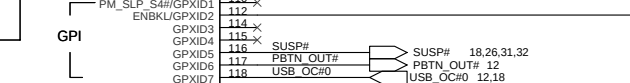
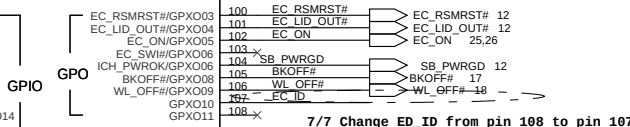
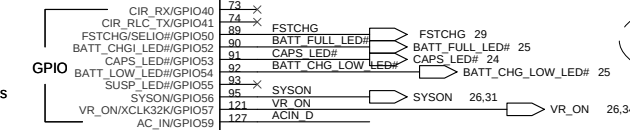
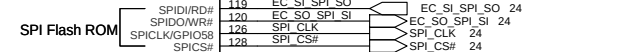
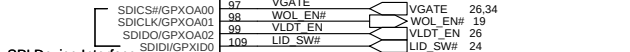
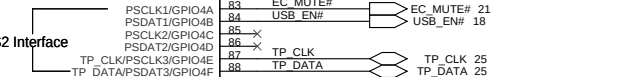
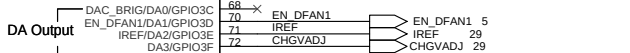
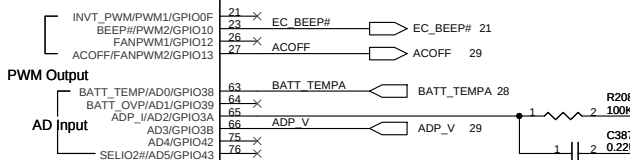
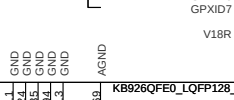
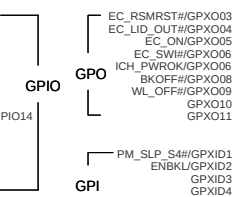
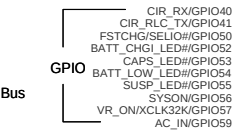
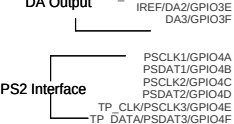
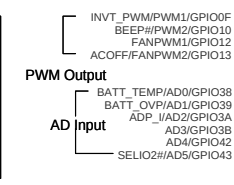
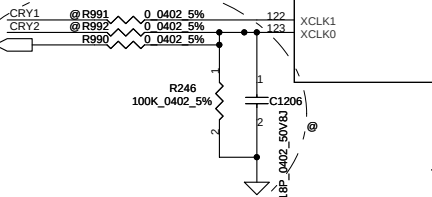
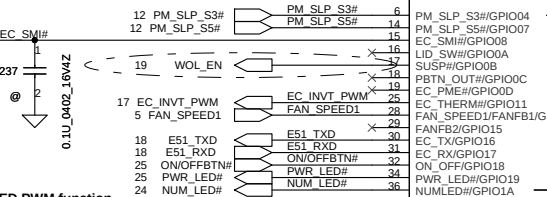
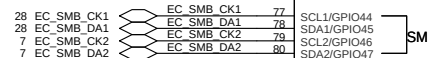
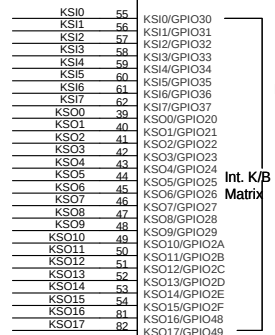
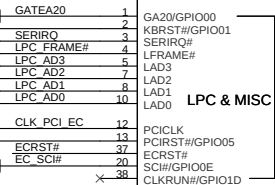
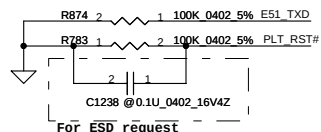
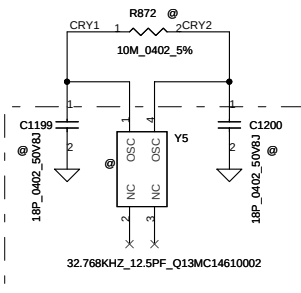
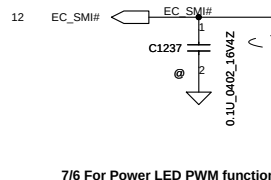
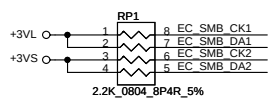
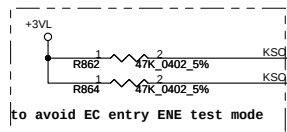
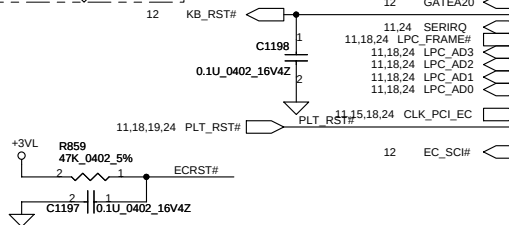
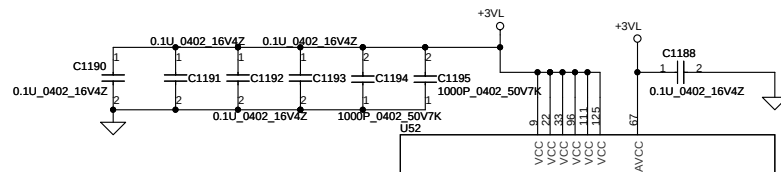
HeadPhone/LINE Out JACK



Ext.MIC/LINE IN JACK



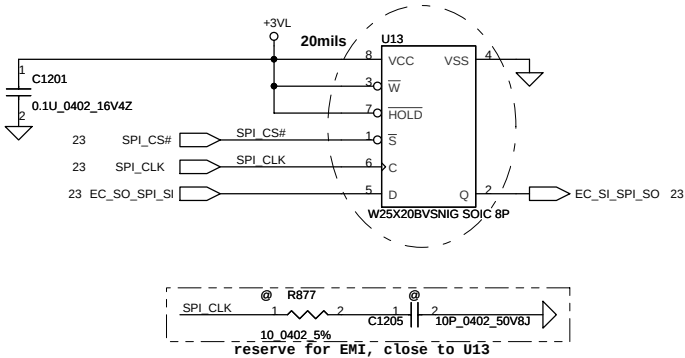
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010-09-09	Deciphered Date	2010-09-09	Title	SCHEMATICS, MB A6849
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET 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	4019BA
				Date:	Monday, December 06, 2010
				Sheet	22 of 38



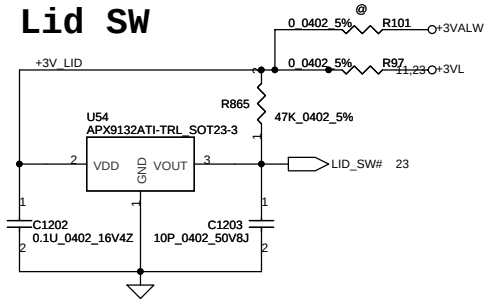
EC_ID	H	L
EC ver.	KB926D3	KB926E

Security Classification		Compal Secret Data		Compal Electronics, Inc. Title SCHEMATICS, MB A6849	
Issued Date	2010-09-09	Deciphered Date	2010-09-09	Doc No	Document Number 4019BA
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	B
				Date:	Monday, December 06, 2010
				Sheet	23 of 38

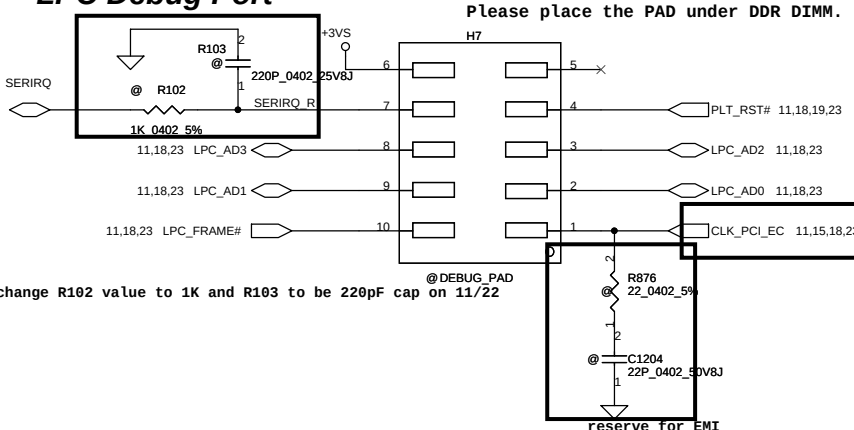
SPI Flash (256KB)



Lid SW

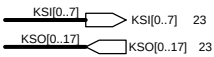


LPC Debug Port



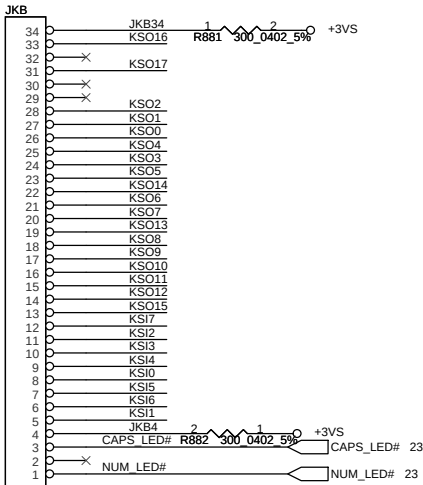
KEYBOARD CONN.

Notice:KB Connector Pin Definition Reversed with KB Membrane Pin Definition



please close to JKB1

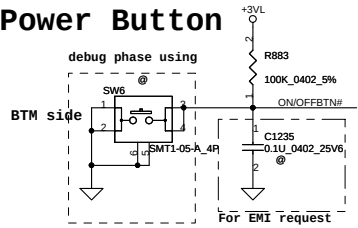
KSO16	1	2	100P_0402_50V8J
KSO17	1	2	100P_0402_50V8J
KSO2	1	2	100P_0402_50V8J
KSO1	1	2	100P_0402_50V8J
KSO0	1	2	100P_0402_50V8J
KSO4	1	2	100P_0402_50V8J
KSO3	1	2	100P_0402_50V8J
KSO5	1	2	100P_0402_50V8J
KSO14	1	2	100P_0402_50V8J
KSO6	1	2	100P_0402_50V8J
KSO7	1	2	100P_0402_50V8J
KSO13	1	2	100P_0402_50V8J
KSO8	1	2	100P_0402_50V8J
KSO9	1	2	100P_0402_50V8J
KSO10	1	2	100P_0402_50V8J
KSO11	1	2	100P_0402_50V8J
KSO12	1	2	100P_0402_50V8J
KSO15	1	2	100P_0402_50V8J
KSI7	1	2	100P_0402_50V8J
KSI2	1	2	100P_0402_50V8J
KSI3	1	2	100P_0402_50V8J
KSI4	1	2	100P_0402_50V8J
KSI5	1	2	100P_0402_50V8J
KSI6	1	2	100P_0402_50V8J
KSI1	1	2	100P_0402_50V8J
CAPS_LED#	1	2	100P_0402_50V8J
NUM_LED#	1	2	100P_0402_50V8J



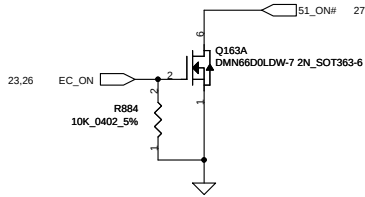
ACES_88170-3400
CONN@

Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010-09-09	Deciphered Date	2010-09-09	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	Rev B
			4019BA	
Date:			Monday, December 06, 2010	Sheet 24 of 38

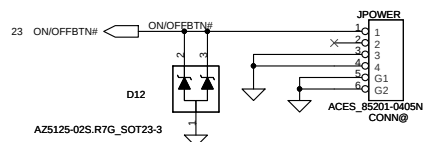
Power Button



Q163A change part number from SB00000AR00 to SB00000DH00 on 9/15

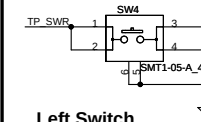


< Power / B Connector >

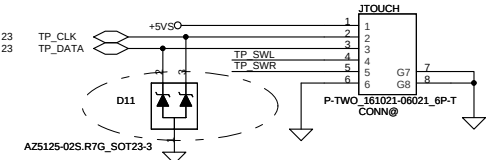
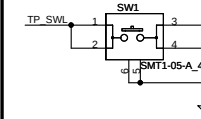


< Touch / B Connector >

Right Switch

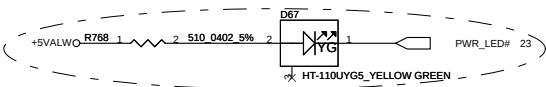


Left Switch



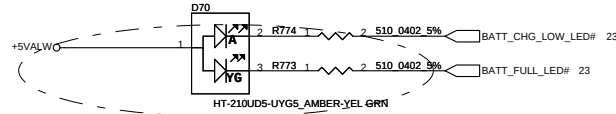
POWER/SUSPEND LED

Vf=1.9V(typ), 2.4V(max)
If=20mA(max)

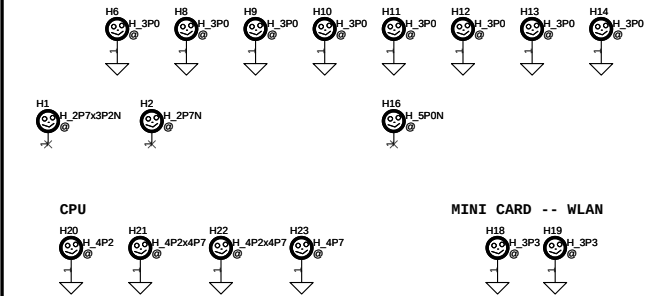


DC IN/ BATT CHARGE

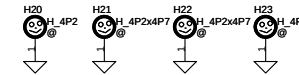
Vf=1.8V(typ), 2.0V(max) for amber
Vf=1.8V(typ), 2.0V(max) for green
If=20mA(max)



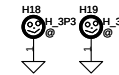
Screw Hole



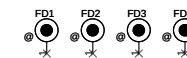
CPU



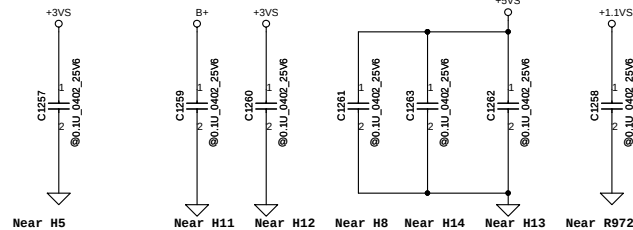
MINI CARD -- WLAN



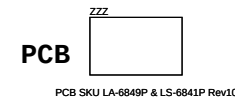
PCB Fedical Mark PAD



ESD reserved

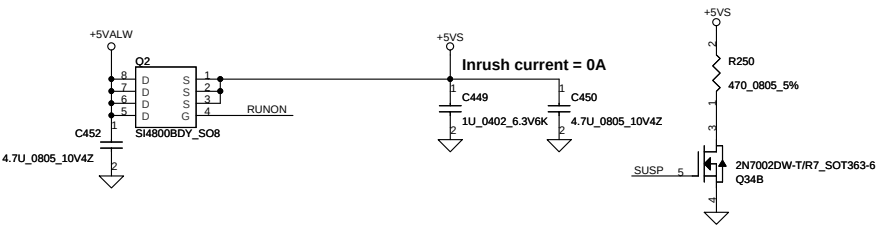


ISPD

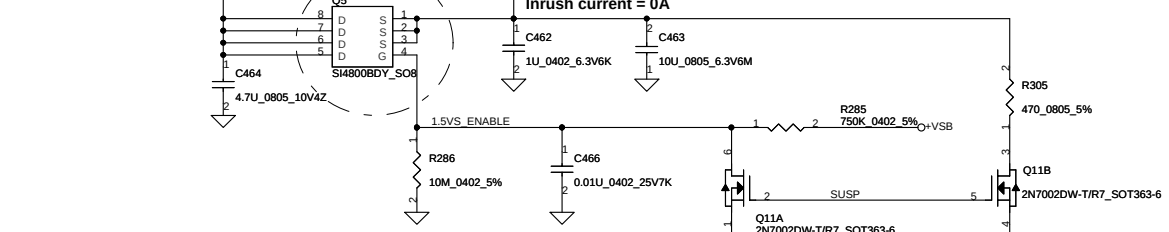


Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010-09-09	Deciphered Date	2010-09-09	Title
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				SCHEMATICS, MB A6849
Size				Document Number
4019BA				Rev B
Date				Monday, December 06, 2010
Sheet				25 of 38

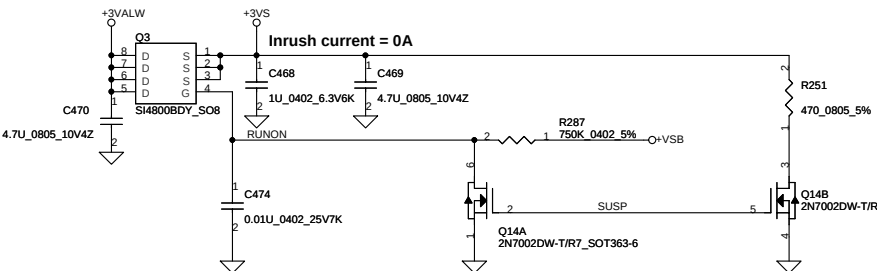
< +5VALW TO +5VS >



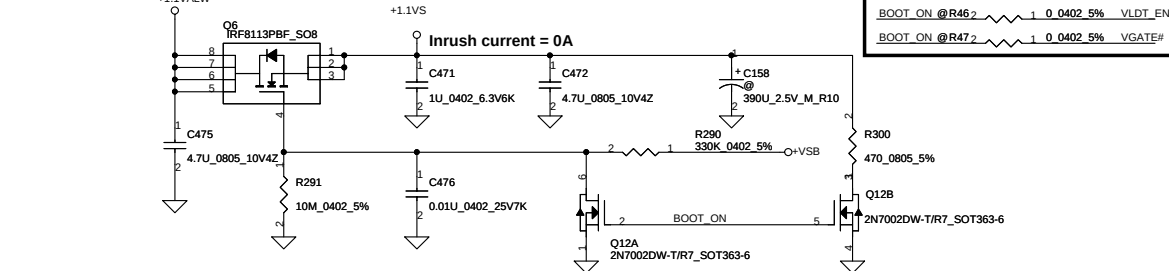
< +1.5V TO +1.5VS >



< +3VALW TO +3VS >

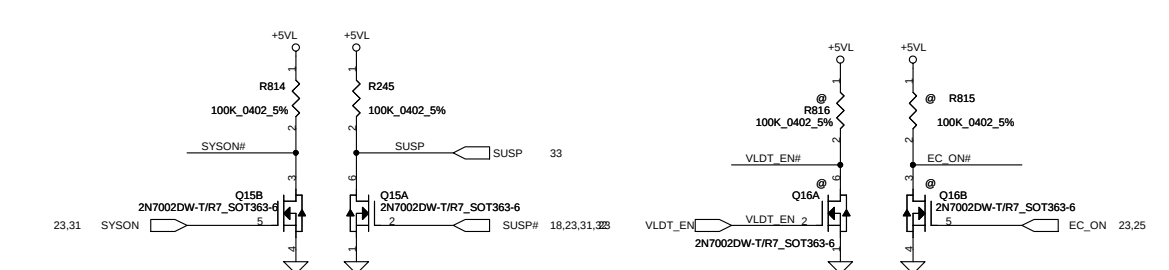


< +1.1VALW TO +1.1VS >

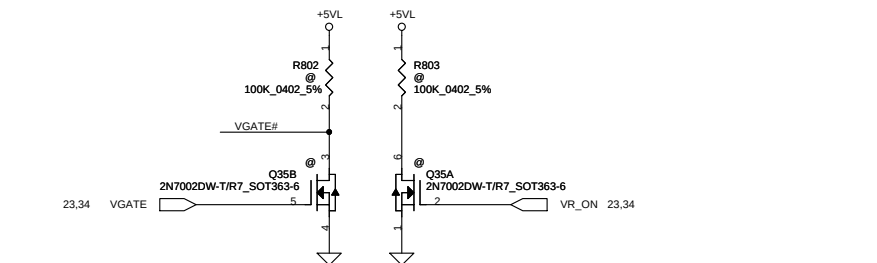
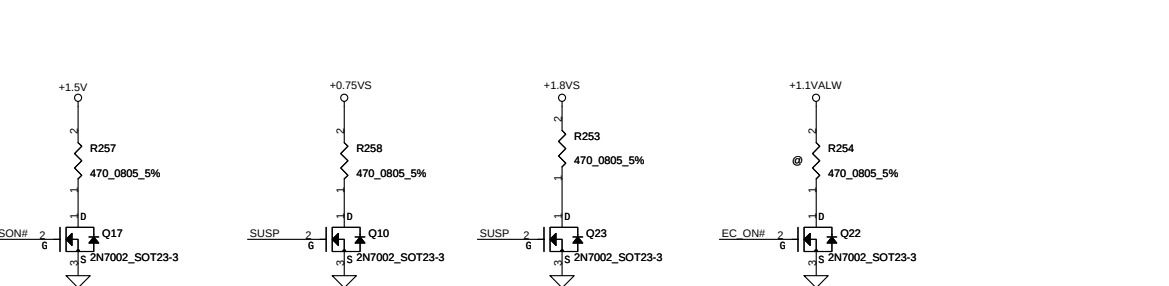


BOOT_ON @R45 2 0 0402 5% SUSP
BOOT_ON @R46 2 0 0402 5% VLDT_EN#
BOOT_ON @R47 2 0 0402 5% VGATE#

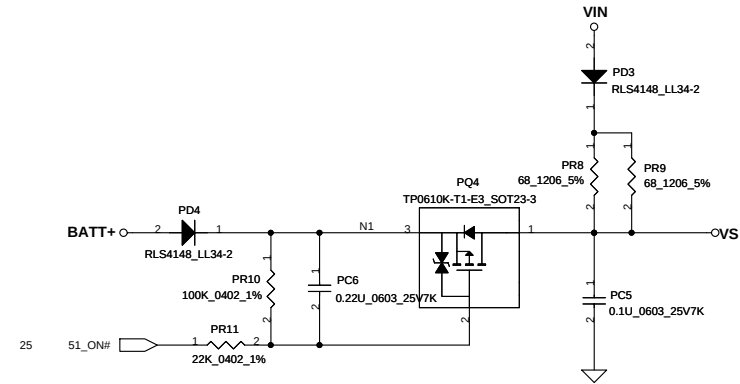
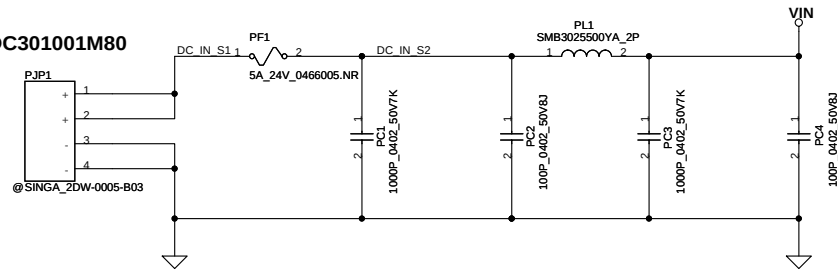
< Inversion of SYSON, SUSP#, VLDT_EN, EC_ON >



< Discharge circuit >



DC301001M80



@ PJ332
JUMP_43X118
(5A, 200mils, Via NO.= 10)
OCP=8.6A

@ PJ2
JUMP_43X39
(120mA, 20mils, Via NO.= 1)

@ PJ112
JUMP_43X118
(10A, 600mils, Via NO.= 10)
OCP=A

@ PJ352
JUMP_43X118
(5A, 200mils, Via NO.= 10)
OCP=7.9A

@ PJ182
JUMP_43X118
(2.15A, 100mils, Via NO.= 5)
OCP=A

@ PJ102
JUMP_43X118
(5.7A, 240mils, Via NO.= 12)
OCP=A

@ PJ3
JUMP_43X39
(100mA, 20mils, Via NO.= 1)

@ PJ152
JUMP_43X118
(5A, 200mils, Via NO.= 10)
OCP=A

@ PJ76
JUMP_43X79
(0.5A, 20mils, Via NO.= 1)

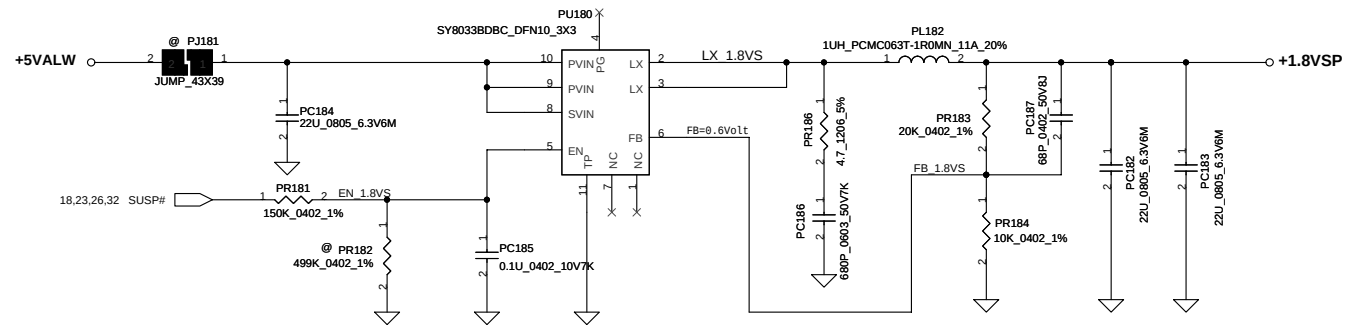
@ PJ4
JUMP_43X39
(100mA, 20mils, Via NO.= 1)

@ PJ5
JUMP_43X118
(10A, 400mils, Via NO.= 20)
OCP=A

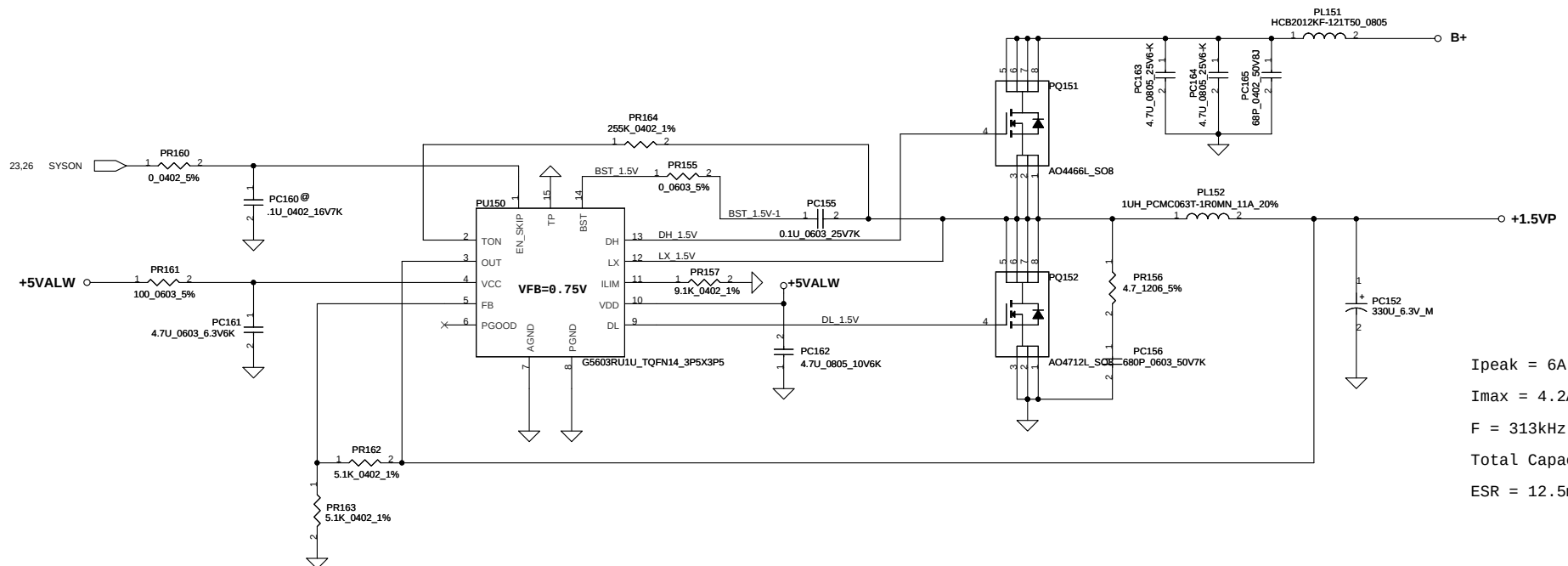
ACIN

Precharge detector		
Min.	typ.	Max
H-->L 14.42V	14.74V	15.23V
L-->H 15.39V	15.88V	16.39V

Security Classification		Compal Secret Data		Title	
Issued Date	2010-09-09	Deciphered Date	2010-09-09	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	Rev B
				4019BA	
				Date: Monday, December 06, 2010	Sheet 27 of 38

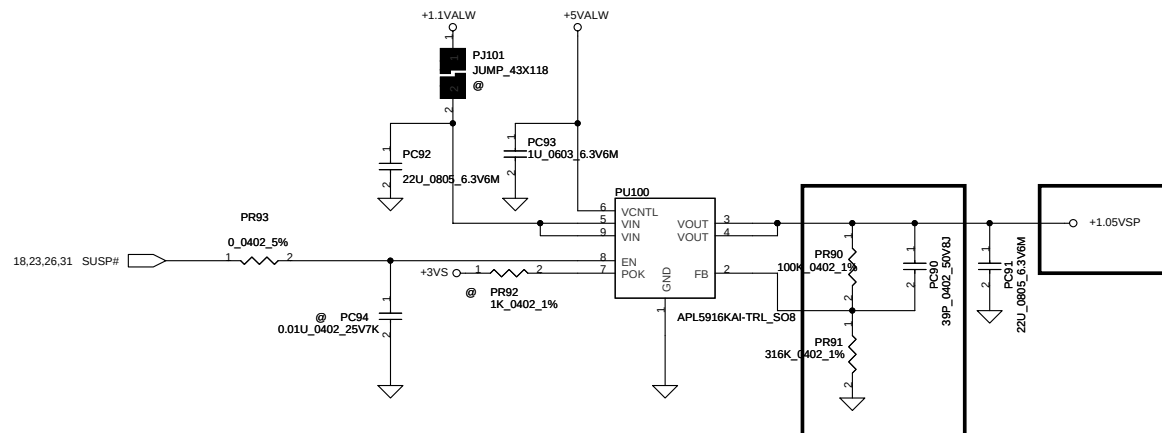
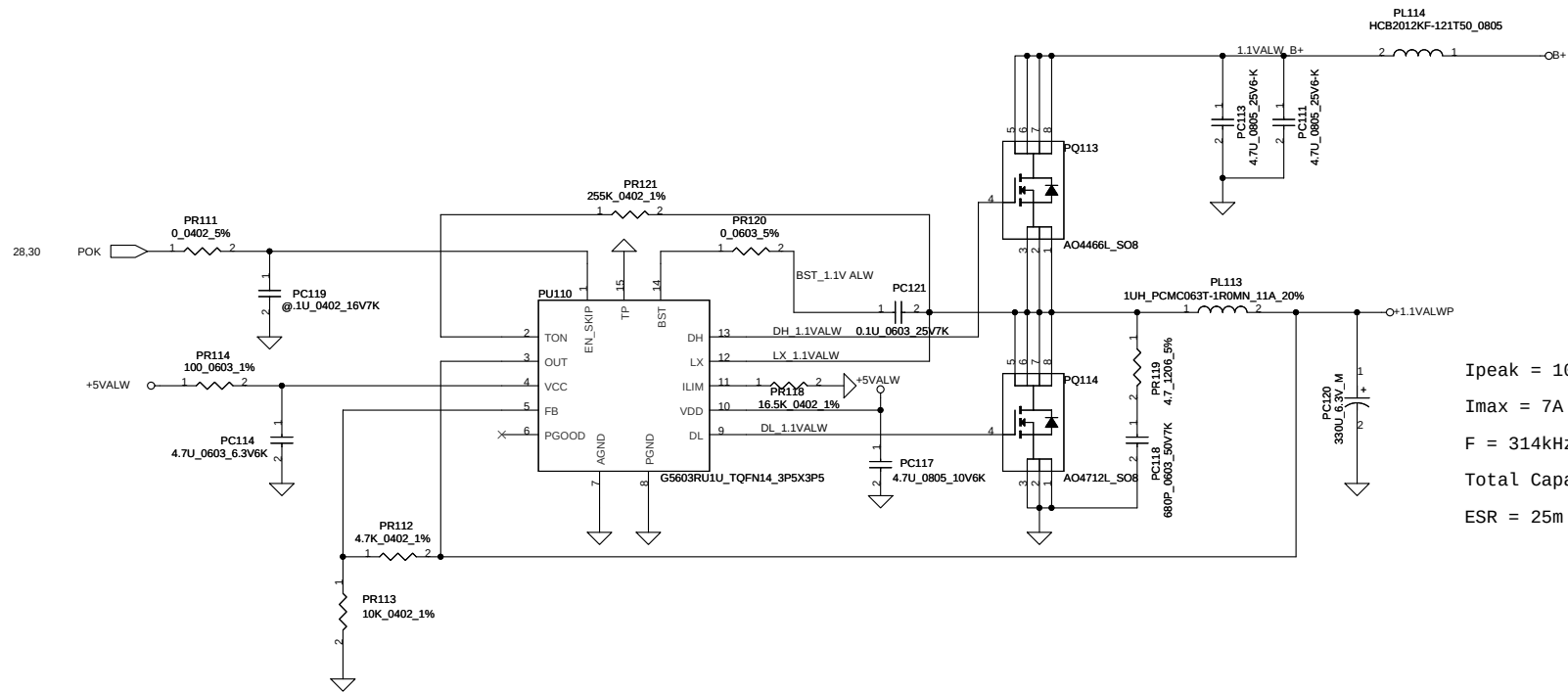


$I_{peak} = 2.15A$
 $I_{max} = 1.505A$
 $ILIM = 4A$
 $F = 1M\ Hz$
 $Total\ Capacitor = 264\ uF$
 $ESR = 2.273m\ Ohm$

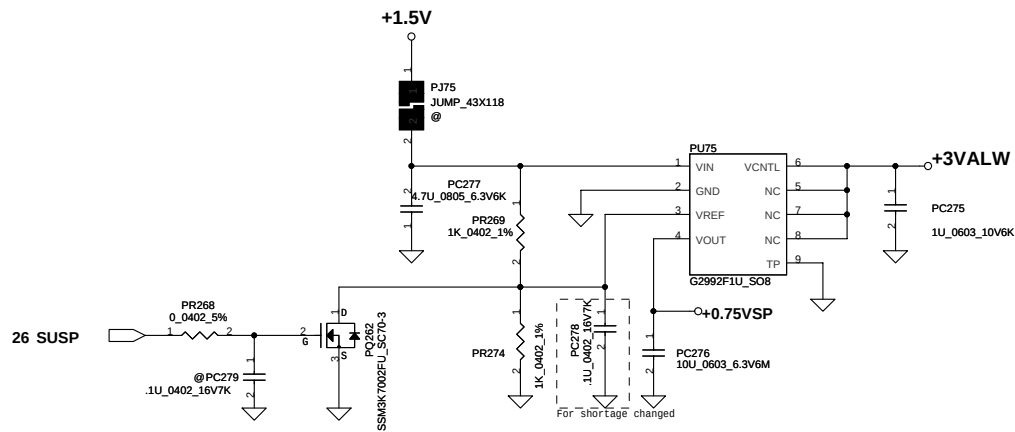


$I_{peak} = 6A$
 $I_{max} = 4.2A$
 $F = 313kHz$
 $Total\ Capacitor = 440\ uF$
 $ESR = 12.5m\ Ohm$

Security Classification			Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010-09-09	Deciphered Date	2010-09-09		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					4019BA	Rev B
Date:					Monday, December 06, 2010	Sheet 31 of 38



Security Classification	Compal Secret Data			Compal Electronics, Inc.	
Issued Date	2010-09-09	Deciphered Date	2010-09-09	Title	SCHEMATICS, MB A6849
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.					Rev B
Document Number	4019BA	Date	Monday, December 06, 2010	Sheet	32 of 38



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010-09-09	Deciphered Date	2010-09-09	Title	SCHEMATICS, MB A6849
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	4019BA
				Date:	Monday, December 06, 2010
				Sheet	33 of 38
				Rev	B

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

Page#	Title	Date	Request Owner	Issue Description	Solution Description
		2010/08/01	POWER		Release
P31	BATTERY CONN / OTP	2010/09/02	POWER	Add PD5,PD6 (For ESD)	DVT
P32	CHARGER	2010/09/02	POWER	Add PR246,PR247,PR248,PC223 (ADP_V)	DVT
P33	3VALWP/5VALWP	2010/09/02	POWER	PR337,PR357 change to 121k	DVT
P33	3VALWP/5VALWP	2010/09/02	POWER	PR365 change to 19.6k	DVT
P34	1.8VSP/1.5VP	2010/09/02	POWER	PR181 change to 150k, PC185 0.1uF	DVT
P35	1.1VALWP/1.0VSP	2010/09/02	POWER	PR91 change to 316k(For 1.05VSP)	DVT
P35	1.1VALWP/1.0VSP	2010/09/02	POWER	PC90 change to 39pF(1.05VSP)	DVT
P37	ACPU_CORE	2010/09/02	POWER	Add PR578 10_0402_5% , PR573 unpop.	DVT
P37	ACPU_CORE	2010/09/02	POWER	PR577 change to 23.7k	DVT
P37	ACPU_CORE	2010/09/02	POWER	PR539 change to 26.1k	DVT
P37	ACPU_CORE	2010/09/02	POWER	PR540 change to 90.9k	DVT
P37	ACPU_CORE	2010/09/02	POWER	PC551 change to 100pF	DVT
P37	ACPU_CORE	2010/09/02	POWER	PR546 change to 0_0402_5%	DVT
P37	ACPU_CORE	2010/09/02	POWER	PR580 change to 6.98k	DVT
P37	ACPU_CORE	2010/09/02	POWER	PR581 change to 1.87k	DVT
P32	CHARGER	2010/09/06	POWER	Add PC207,PC239 10uF (EMI)	DVT

Version change list (P.I.R. List)			H/W section		Page 1 of 1	
Item	Reason for change	P6#	Modify List	Date	Ver#	
1	Change pull up voltage from +5VALW to +5VL	26	Change Q15A, Q15B, Q16A, Q16B, Q35A, Q35B from +5VALW to +5VL	2010/09/15		
2	Net VR_ON# is unused	26	Delete net VR_ON# on 9/15	2010/09/15		
3	Sleep and Charge function unused	13	Delete R1119 & R1120 & net SLP_CHG_M3, & SLP_CHG_M4	2010/09/15		
4	Change power from 1.0V to 1.05V	8	Net +1.0VS_VDDPL --->+1.05VS_VDDPL Net +1.0VS_VDD --->+1.05VS_VDD	2010/09/15		
5	Add debug card port on wlan connector	18	Add LPC_AD0, LPC_AD1, LPC_AD2, LPC_AD3, LPC_FRAME# on wlan	2010/09/15		
6	Change H7 Pin	24	Connect H7 Pin1 from CLK_PCI_SIO to LPC_CLK1	2010/09/15		
7	Add debug card port on Jwlan	18	Pin17 => PLT_RST# and Pin19 => CLK_PCI_EC	2010/09/15		
8	Change Q33A, Q33B, Q8A, Q8B, Q163 Part Number	7, 17, 25	change part number from SB000006AR00 to SB000000DH00	2010/09/15		
9	For EMS request	12, 23	Add C1198, C1236, C1237	2010/09/15		
10	For EMS request	7	Add R1149 to R1158	2010/09/15		
11	H_THERMTRIP# leakage risk	7	Add Q185 and R1864 and Q094 to enable H_THERMTRIP# on 9/18	2010/09/18		
12	Change H7 Pin	24	Connect H7 Pin1 from LPC_CLK1 to CLK_PCI_EC	2010/09/20		
13	Remove 75W_65W net name in UMA platform.	23	Remove 75W_65W net name in UMA platform.	2010/09/20		
14	USB_OC#0 add pull high 10K to +3VALW	18	USB_OC#0 add pull high R51 to +3VALW	2010/09/20		
15	use VLDT_EN# to turn on +1.1VALW to +1.1VS	26	Reserve R46 and stuff R45	2010/09/20		
16	use BT_OFF# to control BT_CTRL	11	Delete net BT_PWR#	2010/09/20		
17	use BT_OFF# to control BT_CTRL	13	Add net BT_OFF# on U22.Y9	2010/09/20		
18	use BT_OFF# to control BT_CTRL	18	Change control net from BT_PWR# to BT_OFF# and add R316 bypass BT_OFF# & BT_CTRL, and reserve Q#1	2010/09/20		
19	For desigh change	26	Reserve Q16A, Q16B, Q35A, Q35B, R802, R803, R825, R826	2010/09/20		
20	For desigh change	18	Put R259	2010/09/20		
21	For desigh change	11	Reserve U56 and put R1872	2010/09/20		
22	HDMI unused	11	TEST35 pull down through R1829	2010/09/20		
23	For desigh change	7	Reserve R1814 and R1866, put R1862, R1864, and R1810	2010/09/20		
24	For desigh change	7	Remove R92, R93, and R94 pull up and down resistor	2010/09/23		
25	For desigh change	13	Pull down GP10178 and GP10188 with R1119 & R1120	2010/09/23		
26	For desigh change	19	Mount RL6 on 10/4	2010/10/04		
27	For desigh change	25	Delete H3 and H5	2010/10/04		
28	Change +3VL_LID power rail from +3VALW to +3VL	24	Add R97 and reserve R181; Add net name +3VL_LID	2010/10/13		
29	Change +3VL_LAN turn on pin from WOL_EN# to +3VALW	19	Short P128 and reserve Q1, CL12, CL14 and RL25	2010/10/18		
30	Use WOL_EN to enable ISOLATEB	19	Reserve RL6 on 10/4	2010/10/19		
31	Change Q164 footprint to SOT23-3	15	Change Q164 P/N to SB570020020	2010/10/19		
32	Add clearing password feature controlled by bios	15	Reserve P129 and add R1159 pull high	2010/10/26		
33	For mechanical desigh change	25	Delete H15	2010/10/27		
34	H7 debug port function unused	25	Add R183 and reserve R182	2010/11/17		
35	H7 debug port function unused	24	Change R182 value to 1K and R183 to be 220pF cap	2010/11/22		
36	For EMS request	21	Change R1085 to 10 ohm and R1088 to 10pF	2010/11/22		
37	Add AGND to speaker area for SPK traces	21	Add CA60 capacitor to short GND and AGND	2010/11/19		

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

NO DATE	PAGE	MODIFICATION LIST	PURPOSE	Rev.
2010 . 06 . 21 Release				
2010 . 07.25 modification list				
	P 33	PC16 change to SE070104Z80	Defore material EOL	PVT
	P 38	PU12 change to SA000022M80	Before material MP schedule will impact PWWAE MP schedule	PVT
	P 33	Remove PD6 , PD8 @	ESD test fail	PVT
	P 34	Add PC132 , remove PC130 , PC131 , PR69 , PC41 @	For EMI fail	PVT
	P 35	Add PC51 , remove PC49 , PC46 , PC57 , PC58 , PR89 , PR90 @	For EMI fail	PVT
	P 36	Add PC79 , PC91 , PC133 , remove PR100 , PR108 , PC68 , PC77 @	For EMI fail	PVT
	P 38	Remove PR125 , PR139 , PR151 , PC106 , PC111 , PC117 @	For EMI fail	PVT
2010 . 08.10 modification list				
	P 37	Change PU9 , PU11 to SA053310110	UP7711 stop using from now on	Pre-MP
	P 38	Add PC218 , PC219 , PC371	For VCORE Ripple	Pre-MP
	P 32	Add PR8	For Precharge rising current	Pre-MP
	P 32 , P 33	PQ1 , PQ2 , PQ6 change to SB900840003	SB906100210 material delivery had problem	Pre-MP
2010 . 08.16 modification list				
	P 35	Change PU5 to SA000020C80	UPI product stop using	Pre-MP
2010 . 08.17 modification list				
	P 34	Change PU4 to SA00001EP80	SA00003TK00 stop using	Pre-MP
	P 38	Remove PR127 @	To solve +1.1VALW noise	Pre-MP
2010 . 08.23 modification list				
	P 34	Remove PR193 , PQ39 @	For PWWAE MP use 25W CPU	Pre-MP

