

Compal Confidential

Tablet 10" M/B Schematics Document
Intel Pineview-M Processor with DDRIII + Tigerpoint

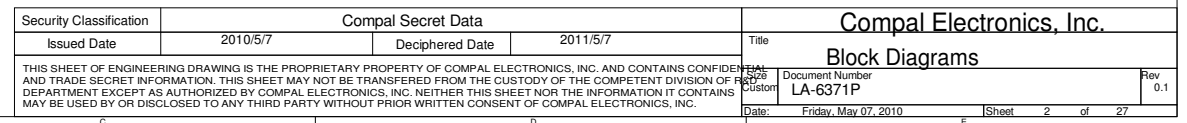
www.aitech1.ru

2010-05-07

REV : 0 . 1

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/5/7	Deciphered Date	2011/5/7	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	
				LA-6371P	
Date: Friday, May 07, 2010				Sheet	1 of 27
				Rev	0.1

Model Name : PAU00
File Name : LA-6371P



Voltage Rails

Power Plane	Description	S1	S3	S5
VIN	Adapter power supply (19V)	ON	ON	ON
B+	AC or battery power rail for power circuit.	ON	ON	ON
+CPU_CORE	Core voltage for CPU	ON	OFF	OFF
+0.9VS	0.9V switched power rail for DDR terminator	ON	OFF	OFF
+VCCP	VCCP 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
+0.89V	Graphic core 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

Note : ON* means that this power plane is ON only with AC power available, otherwise it is OFF.

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

External PCI Devices

DEVICE	IDSEL #	REQ/GNT #	PIRQ
--------	---------	-----------	------

No PCI Device

EC SM Bus1 address

Device	Address	Device	Address
Smart Battery	0001 011X b	EMC1402	100_1100

EC SM Bus2 address

Tiger Point SM Bus address

Device	Address
Clock Generator (SLG8SP556VTR)	1101 001Xb
DDR DIMMA	1010 000Xb

USB table

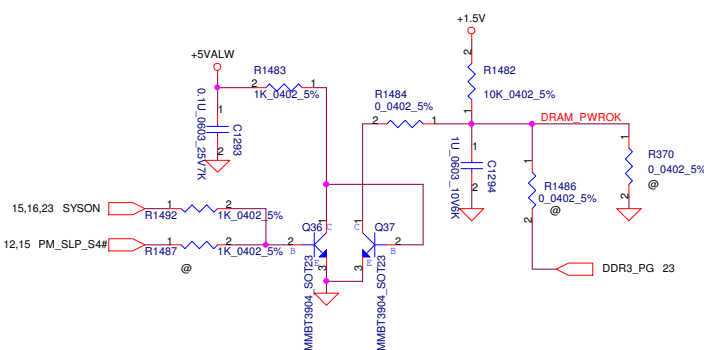
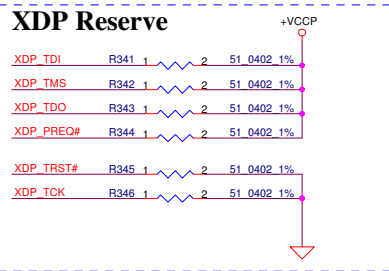
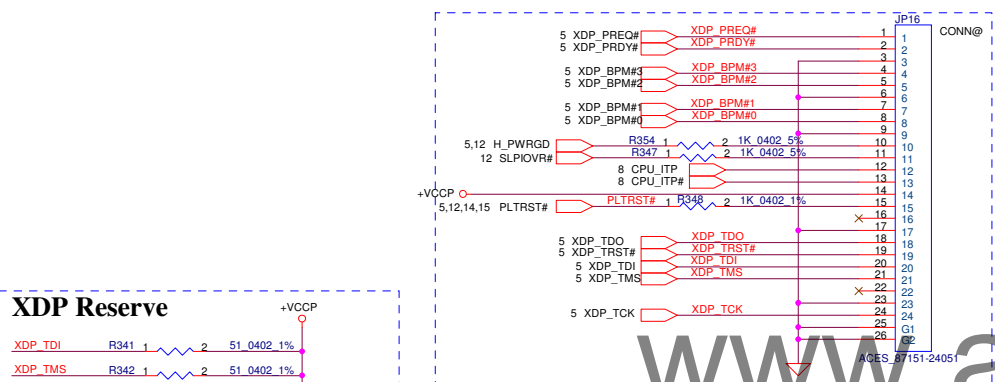
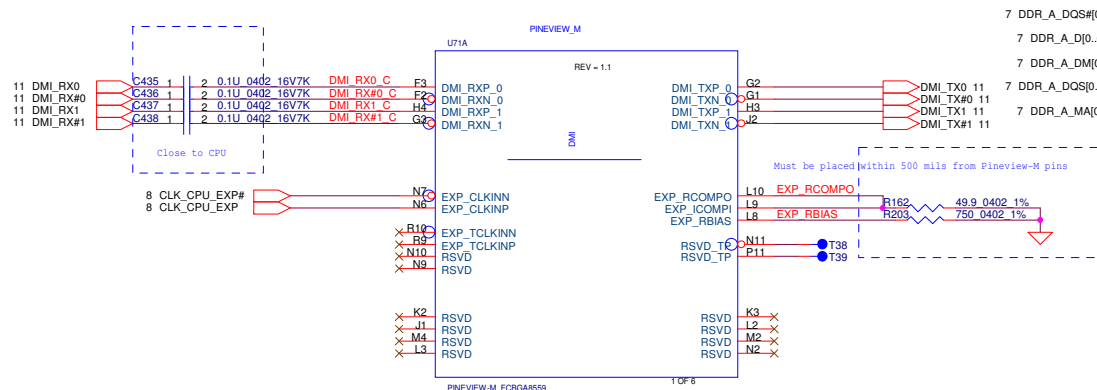
EHCI1	UHCI1	Port0	Ext USB Conn.
	UHCI2	Port1	Touch Screen
	UHCI3	Port2	
EHCI2	UHCI4	Port3	Camera
	UHCI5	Port4	WWAN
	UHCI6	Port5	
	UHCI7	Port6	
	UHCI8	Port7	WLAN
	UHCI9	Port8	
		Port9	
		Port10	
		Port11	

PCIE table

PCIE port1	
PCIE port2	WLAN
PCIE port3	
PCIE port4	
PCIE port5	
PCIE port6	

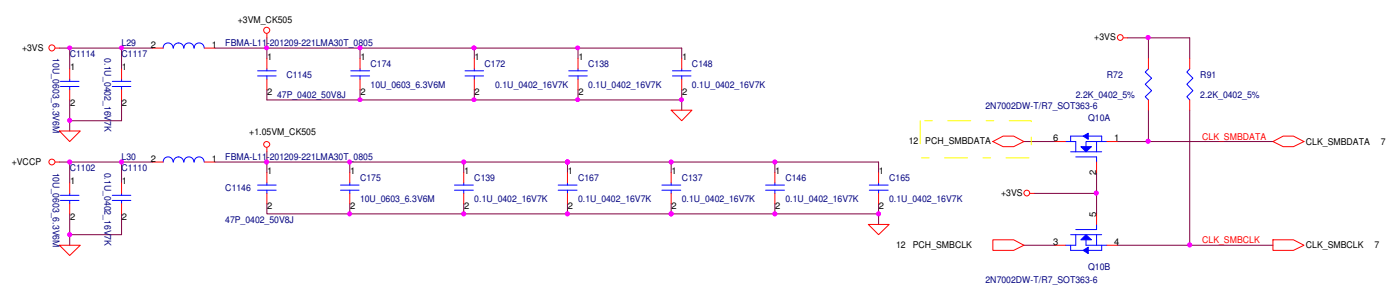
SATA table

SATA port0	SSD
SATA port1	
SATA port2	
SATA port3	
SATA port4	
SATA port5	

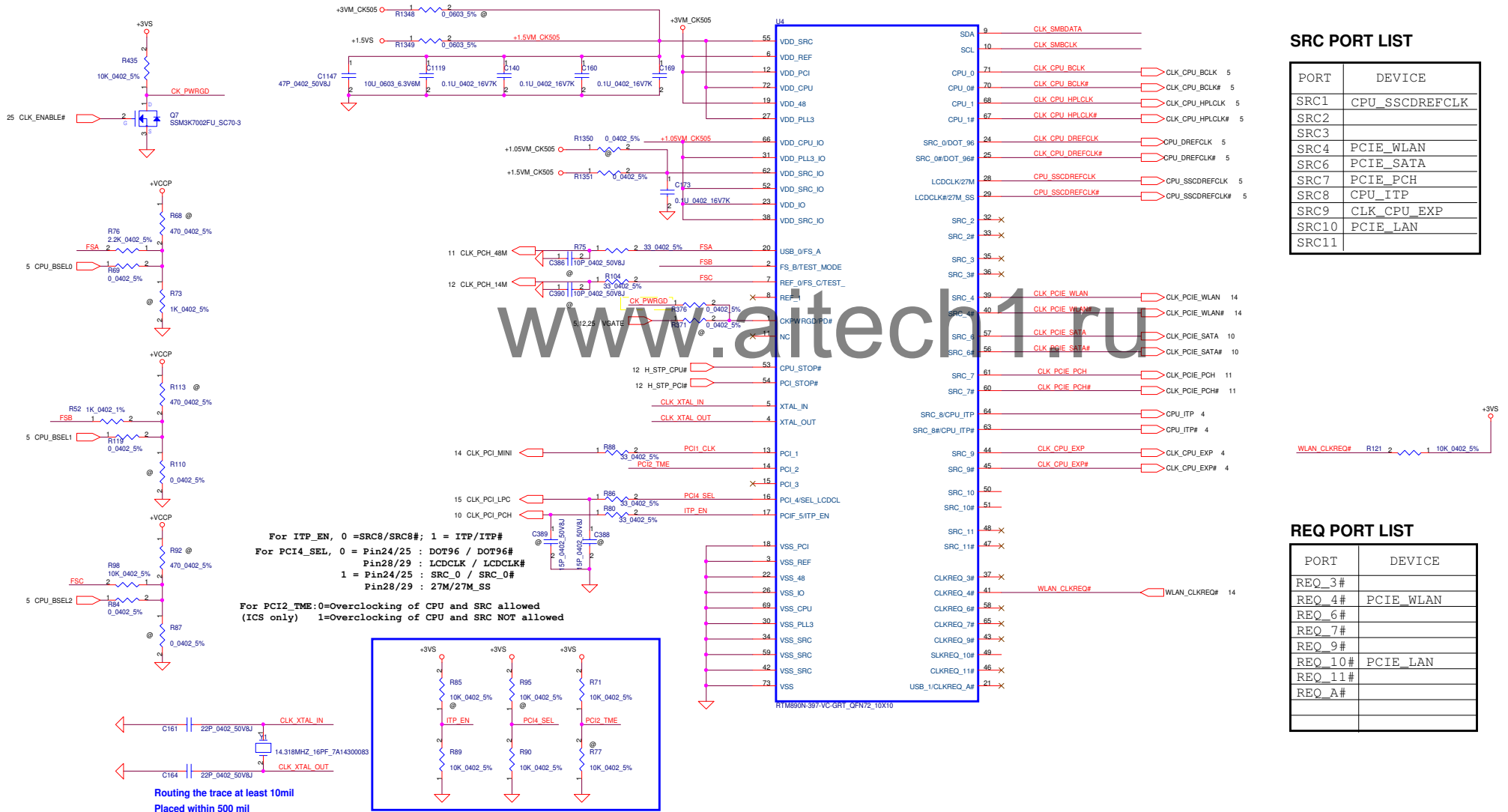


Security Classification	Compal Secret Data			Compal Electronics, Inc.		
Issued Date	2010/5/7	Deciphered Date	2011/5/7	Title	Pineview(1/3)-DMI,DDR	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET 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.				File No.	Document Number	Rev
				Customer	LA-637P1	0.1
				Date:	Friday, May 07, 2010	Sheet 4 of 27

FSC CLKSEL2	FSB CLKSEL1	FSA CLKSEL0	CPU MHz	SRC MHz	PCI MHz	REF MHz	DOT_96 MHz	USB 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					



SA00003H730 (Realtek :RTM890N-397-VC-GRT)



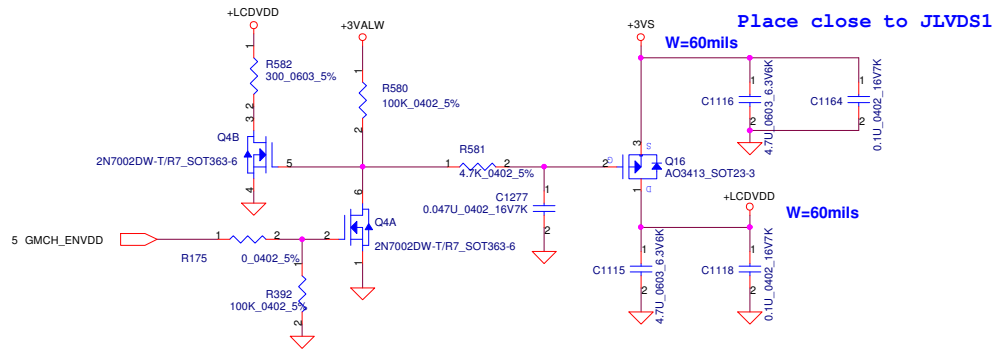
SRC PORT LIST

PORT	DEVICE
SRC1	CPU_SSCDREFCLK
SRC2	
SRC3	
SRC4	PCIE_WLAN
SRC6	PCIE_SATA
SRC7	PCIE_PCH
SRC8	CPU_ITP
SRC9	CLK_CPU_EXP
SRC10	PCIE_LAN
SRC11	

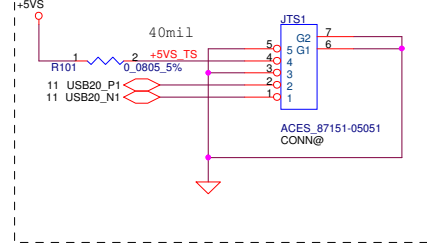
REQ PORT LIST

PORT	DEVICE
REQ_3#	
REQ_4#	PCIE_WLAN
REQ_6#	
REQ_7#	
REQ_9#	
REQ_10#	PCIE_LAN
REQ_11#	
REQ_A#	

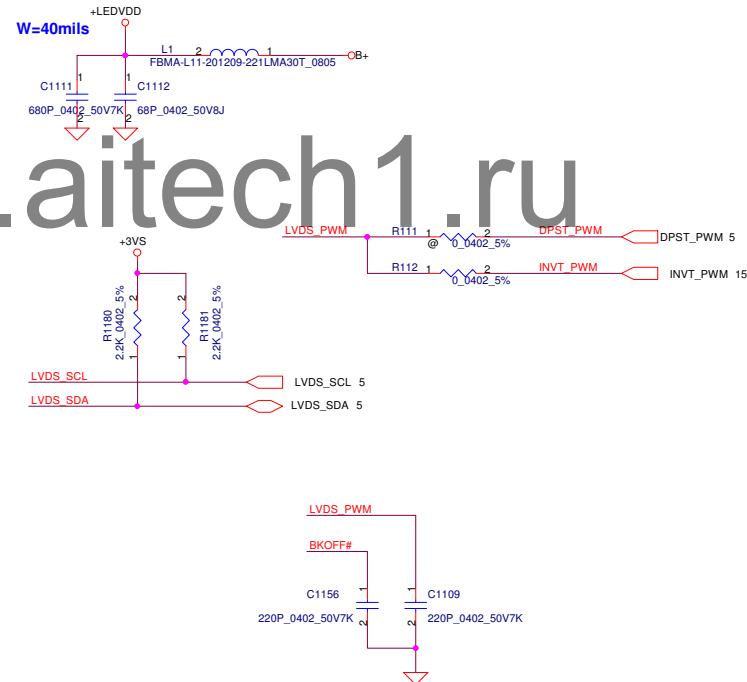
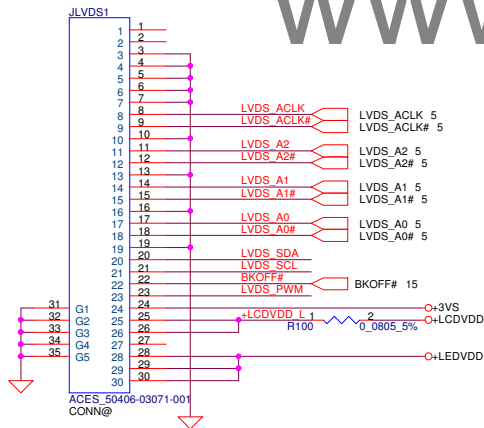
LCD POWER CIRCUIT



Touch Screen Conn.

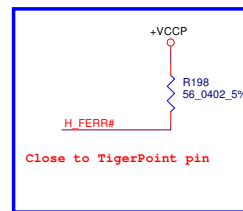
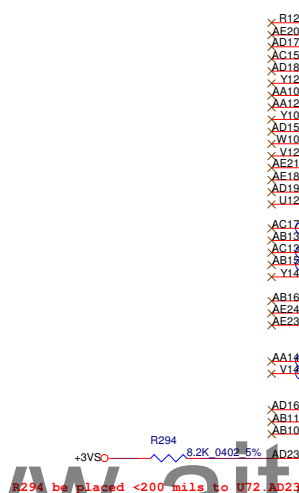
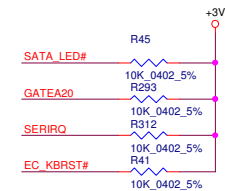


LCD/PANEL Conn.



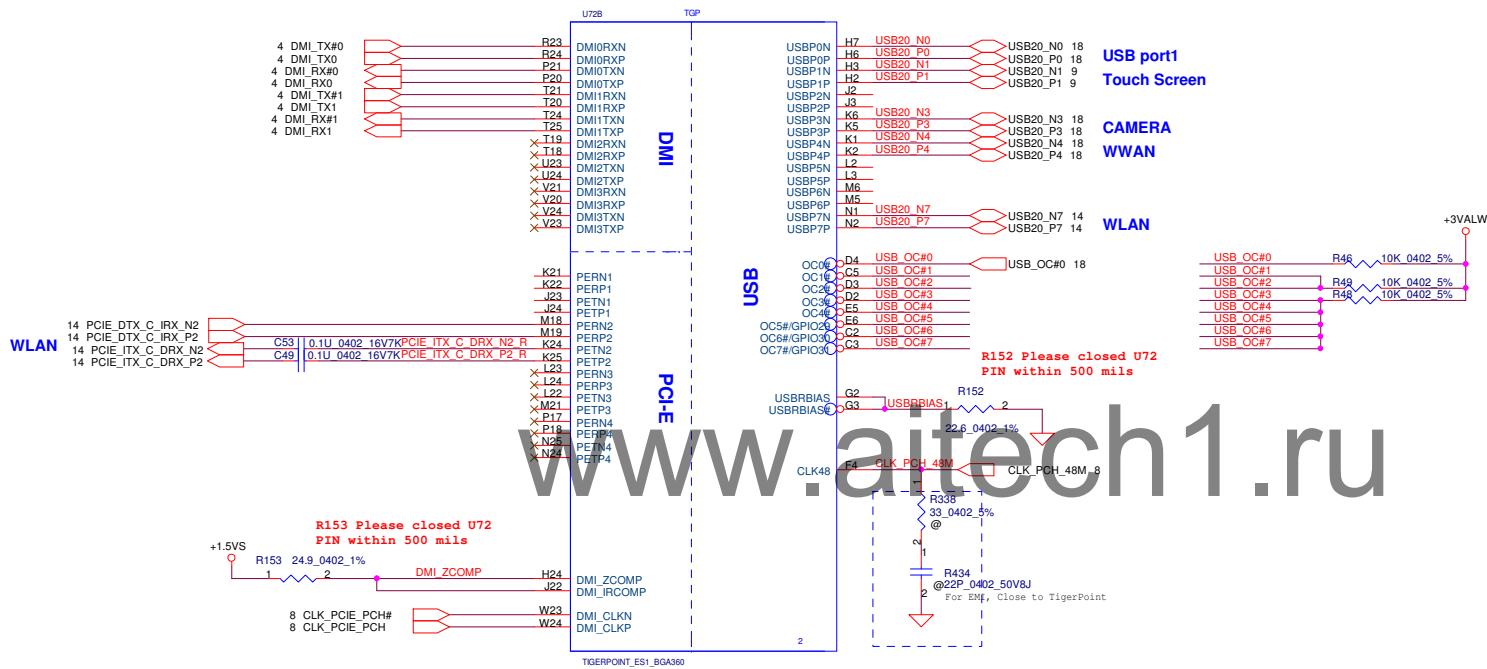
www.aitech1.ru

Security Classification		Compal Secret Data		Title	
Issued Date	2010/5/7	Deciphered Date	2011/5/7	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 HONG KONG CUSTOMS AND BORDER PROTECTION. IT IS THE PROPERTY 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
				LA-6371P	0.1
				Date: Friday, May 07, 2010	Sheet 9 of 27

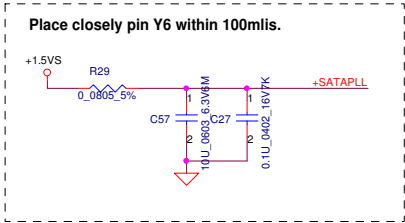
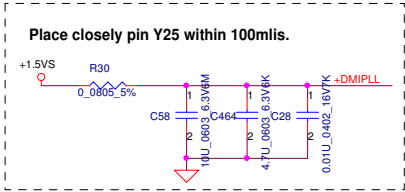
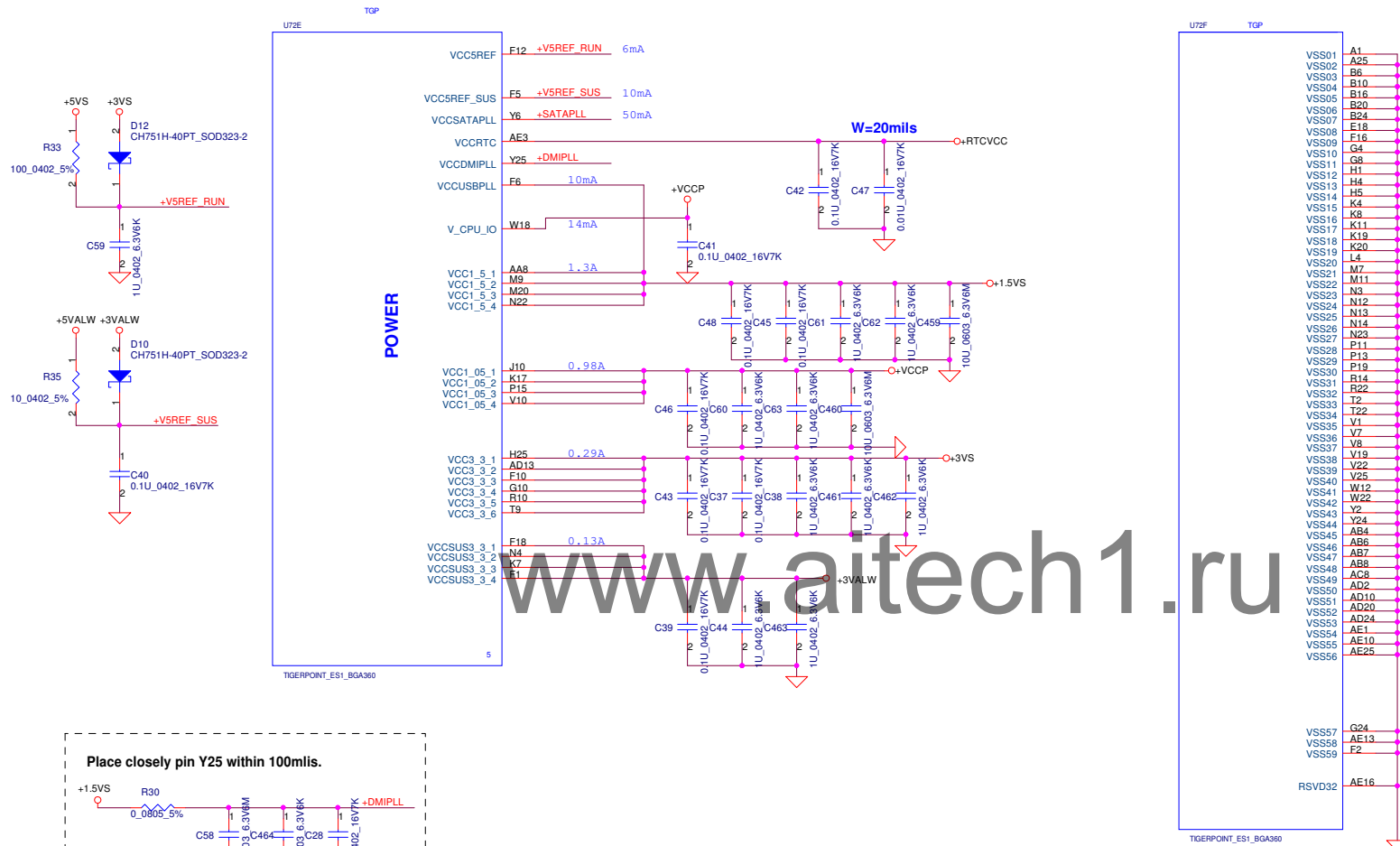


ESD request

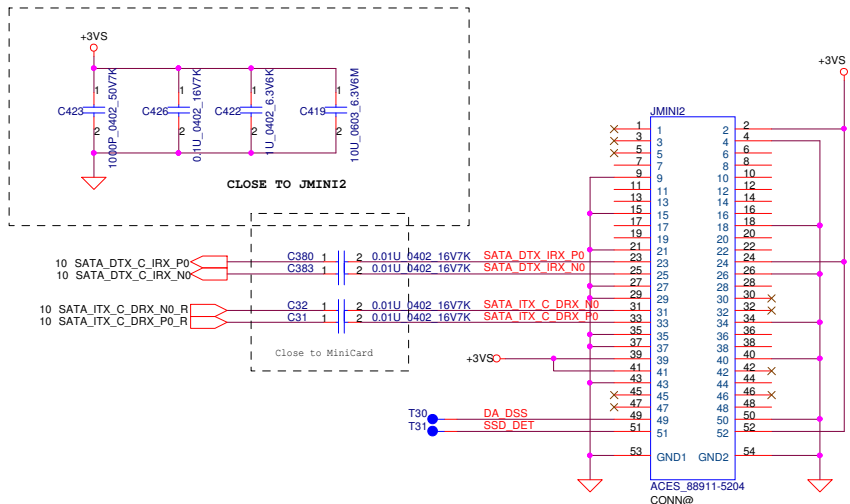
H_A20M#	C450	2	100P_0402_50VB/J
H_IGNNE#	C451	2	100P_0402_50VB/J
H_INIT#	C452	2	100P_0402_50VB/J
H_INTR	C453	2	100P_0402_50VB/J
H_FERR#	C454	2	100P_0402_50VB/J
H_NMI	C455	2	100P_0402_50VB/J
H_SM#	C456	2	100P_0402_50VB/J
H_STPCLK#	C457	2	100P_0402_50VB/J



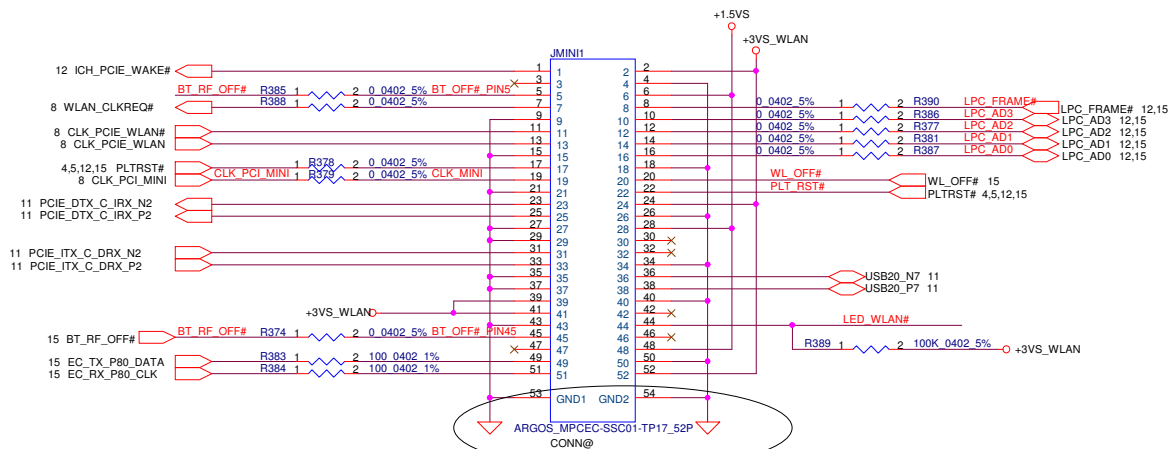
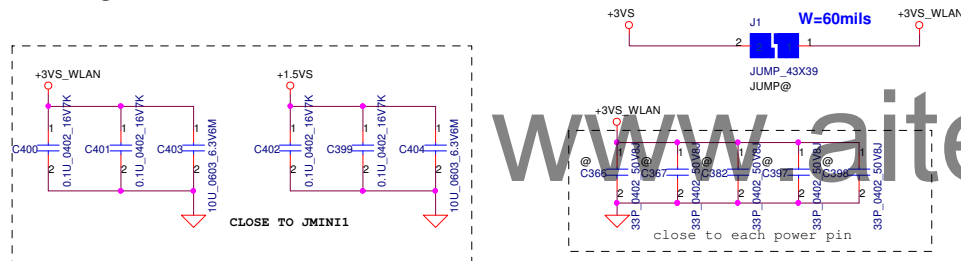
Security Classification		Compal Secret Data		Tigerpoint(2/4)-DMI,PCI-E	
Issued Date	2010/5/7	Deciphered Date	2011/5/7	Title	Document Number
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				LA-6371P	Rev 0.1
				Date: Friday, May 07, 2010	Sheet 11 of 27



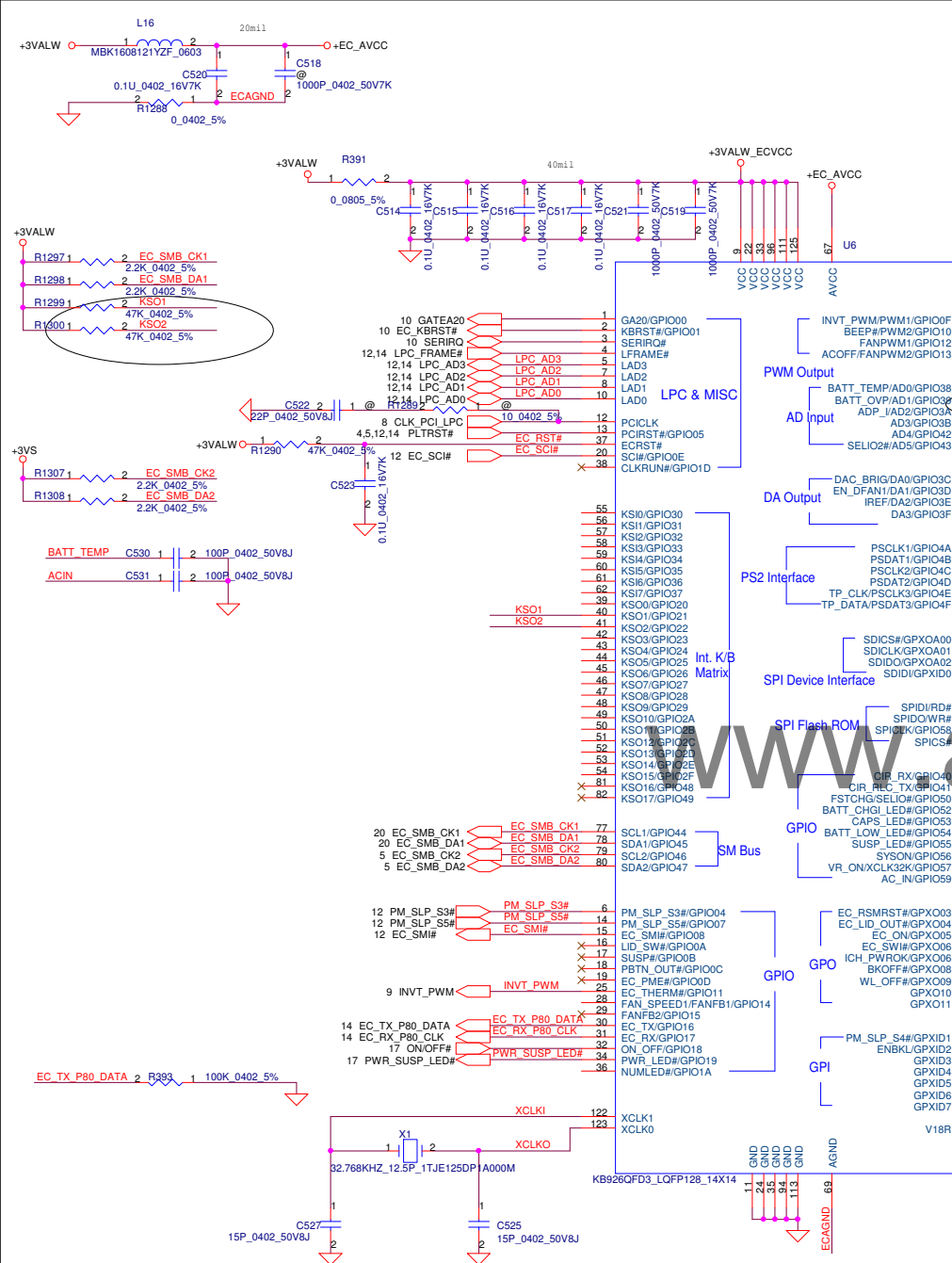
MINI-CARD - SSD



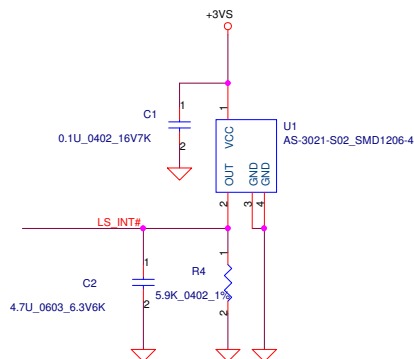
MINI-CARD - WLAN



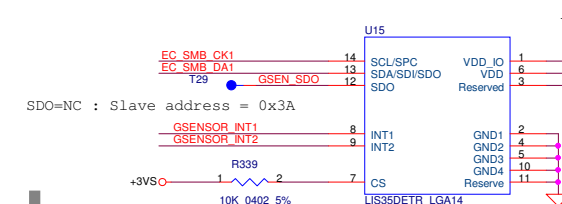
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/5/7	Deciphered Date	2011/5/7	Title	MiniCard (WLAN/ SSD)
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF COMPAL ELECTRONICS, INC. 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.				Doc No	Rev
				Document Number LA-6371P	0.1
Date	Friday, May 07, 2010		Sheet	14	of 27



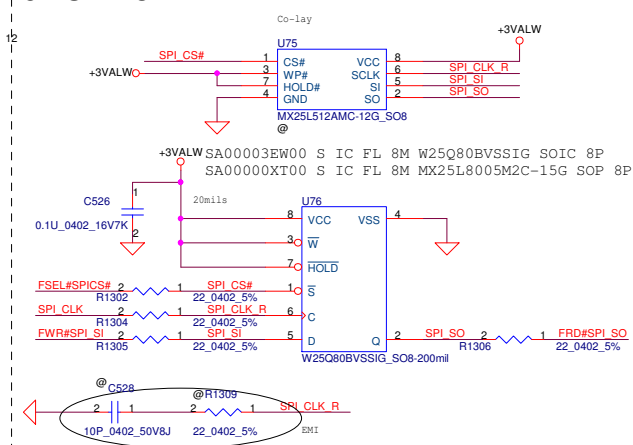
Light Sensor



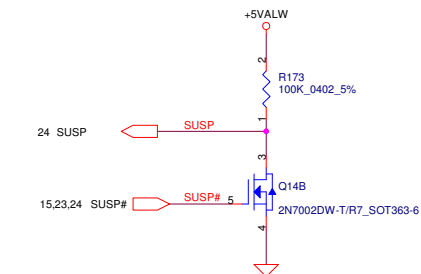
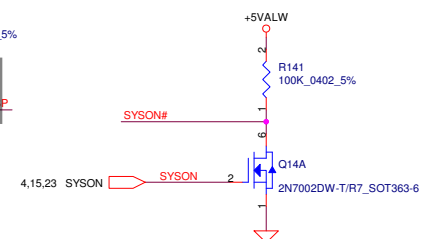
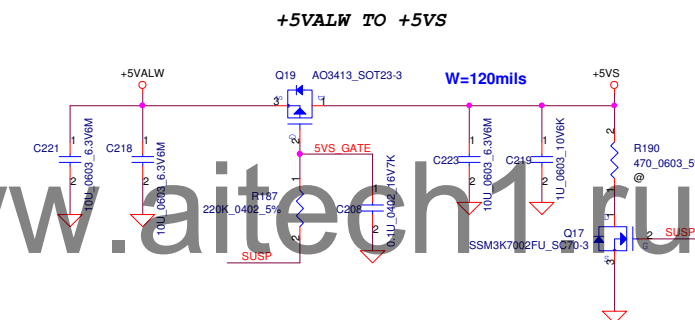
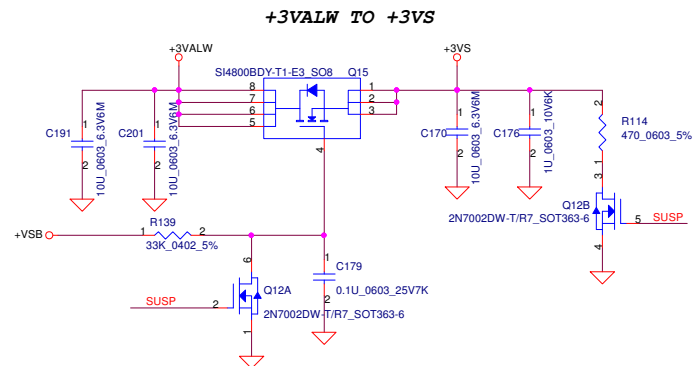
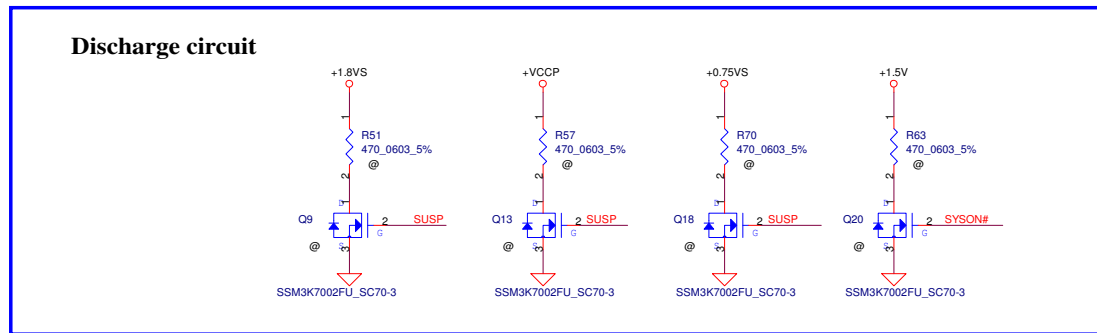
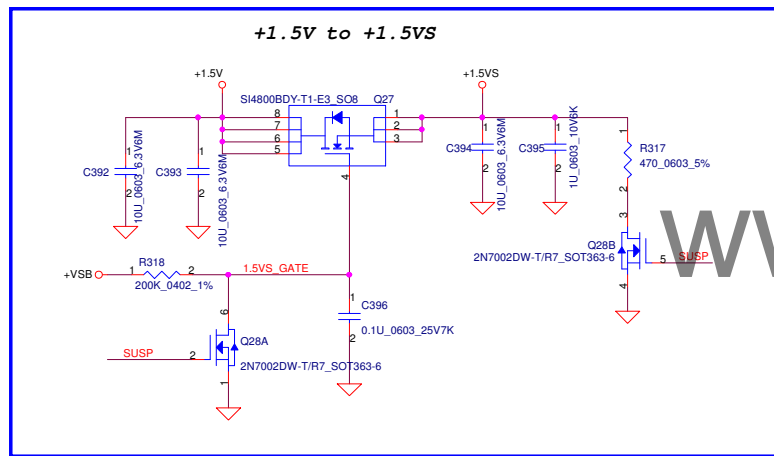
APS G-Sensor



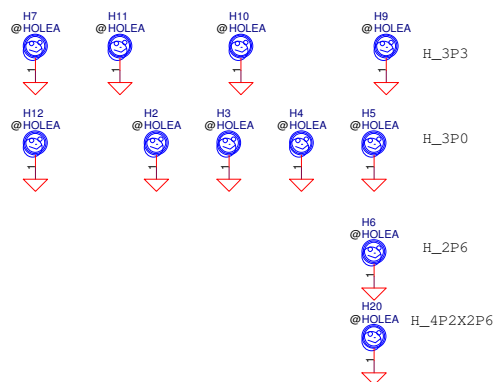
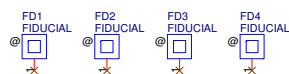
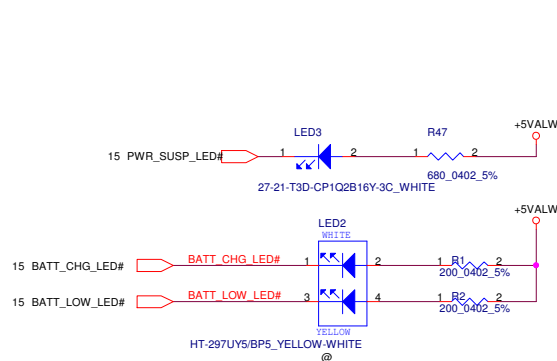
8M SPI ROM



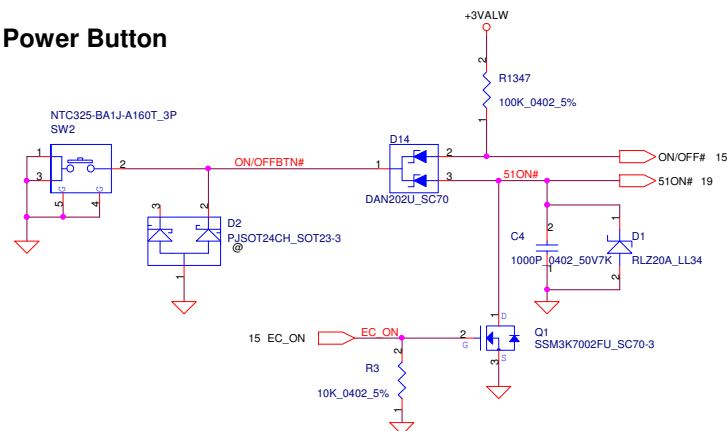
Security Classification				Compal Secret Data				Compal Electronics, Inc.			
Issued Date				2010/5/7				EC ENE-KB926/ ROM			
Deciphered Date				2011/5/7				LA-6371P			
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Rev 0.1				Date: Friday, May 07, 2010			
Sheet				15				of 27			



Security Classification	Compal Secret Data			Title	
Issued Date	2010/5/7	Deciphered Date	2011/5/7	Document Number	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF 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.				LA-6371P	Rev 0.1
				Date: Friday, May 07, 2010	Sheet 16 of 27



Power Button

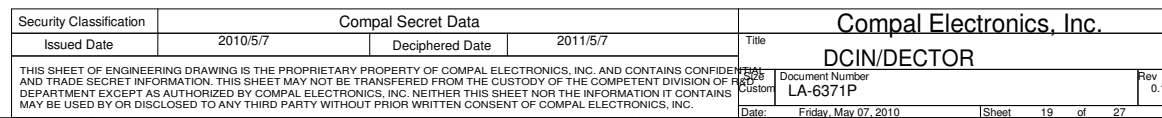
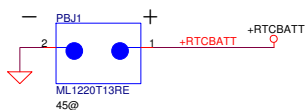


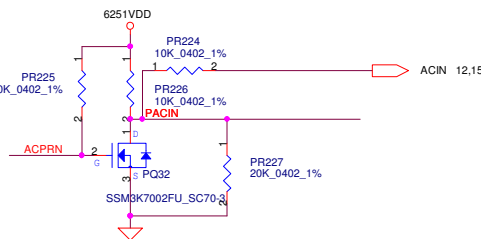
www.aitech1.ru

Security Classification	Compal Secret Data			Compal Electronics, Inc.	
Issued Date	2010/5/7	Deciphered Date	2011/5/7	Title	PWR-BTN/ LED/ Screw/ FD
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	LA-6371P
				Date	Friday, May 07, 2010
				Sheet	17 of 27
				Rev	0.1



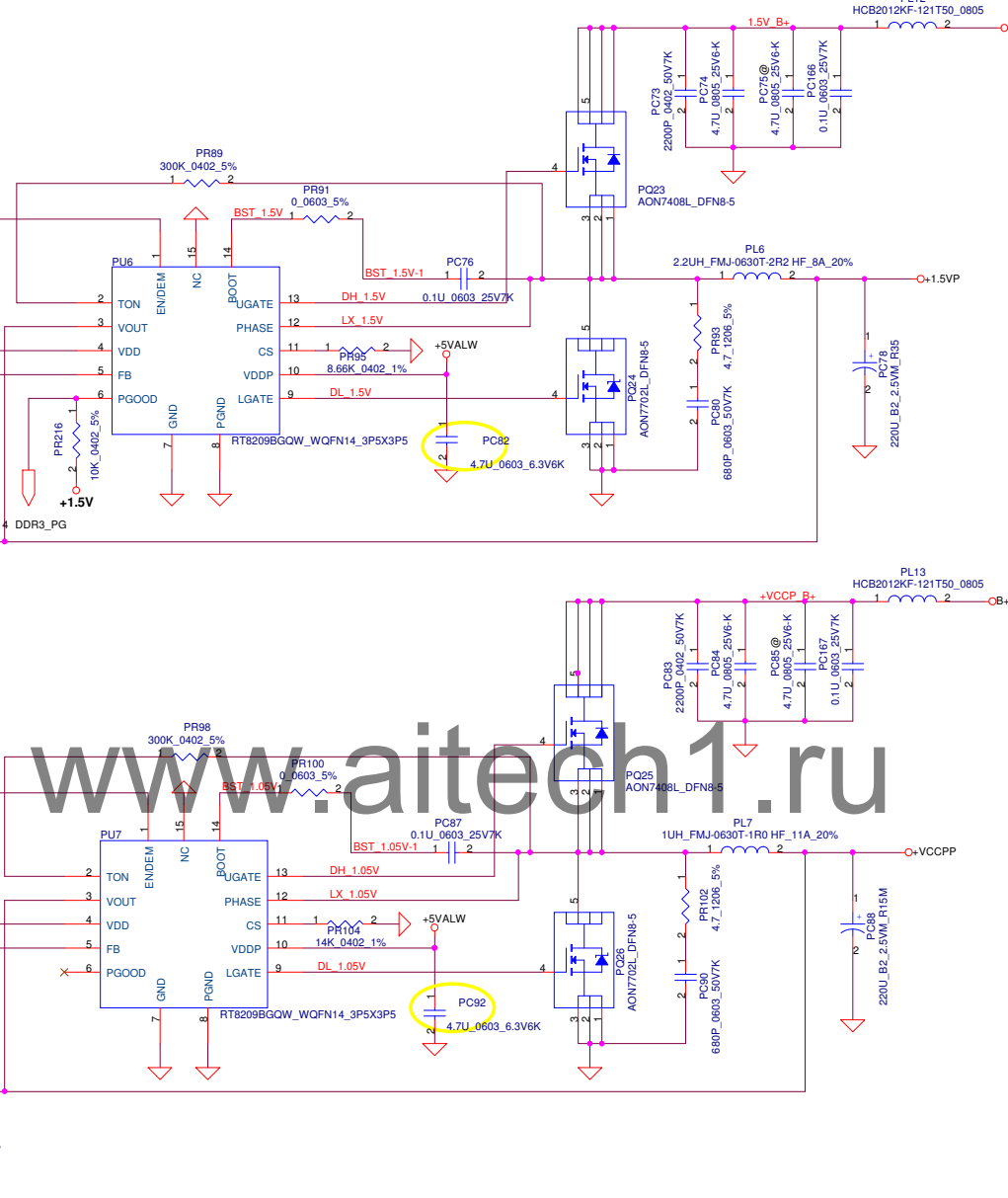
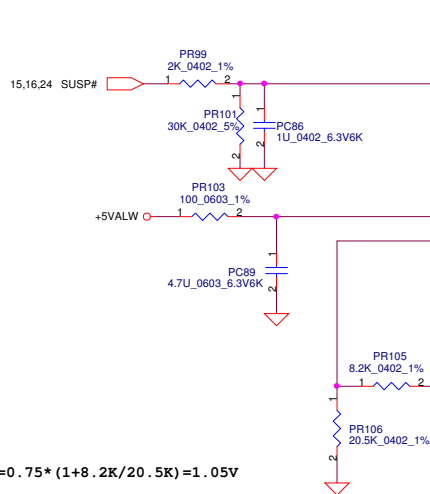
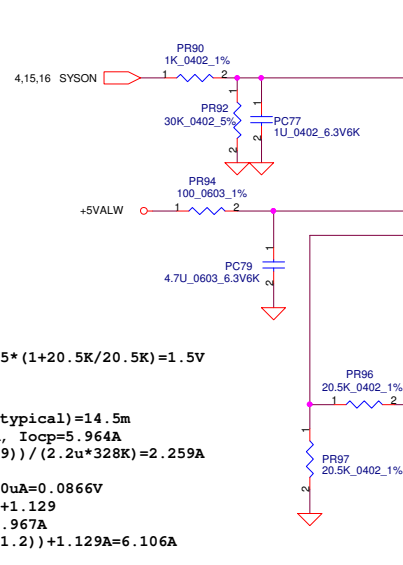
Security Classification		Compal Secret Data		Compal Electronics, Inc.		
Issued Date	2010/5/7	Deciphered Date	2011/5/7	Title	Brd to Brd Connector	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF THE 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.				Docu- ment Number	Rev	
				LA-6371P	0.1	
				Date	Friday, May 07, 2010	Sheet



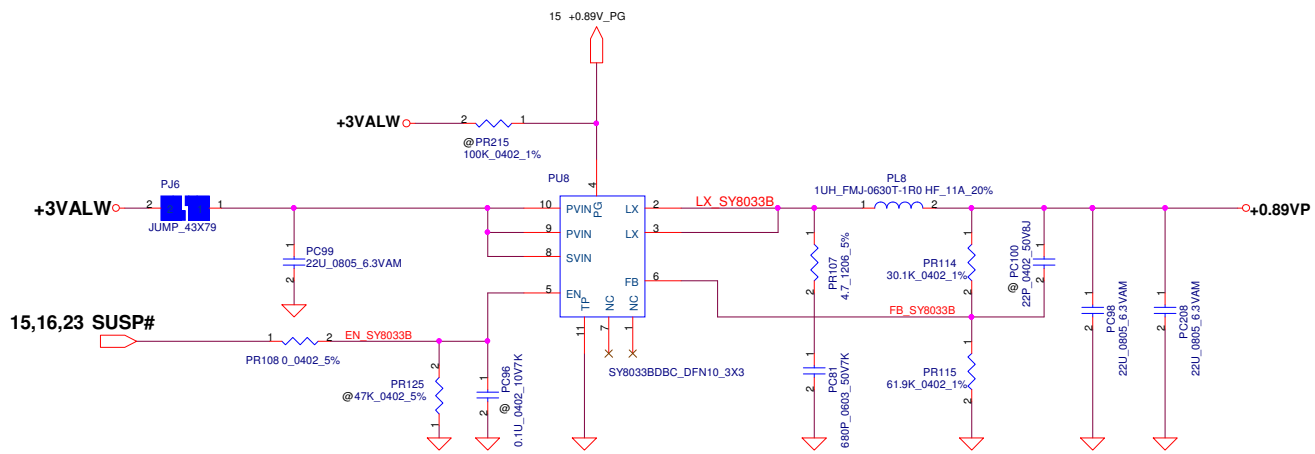


```
VADJ-->VREF-->4.41V
VADJ--->Ground--->3.99V
Vcell=(0.175*VADJ+3.99)
```

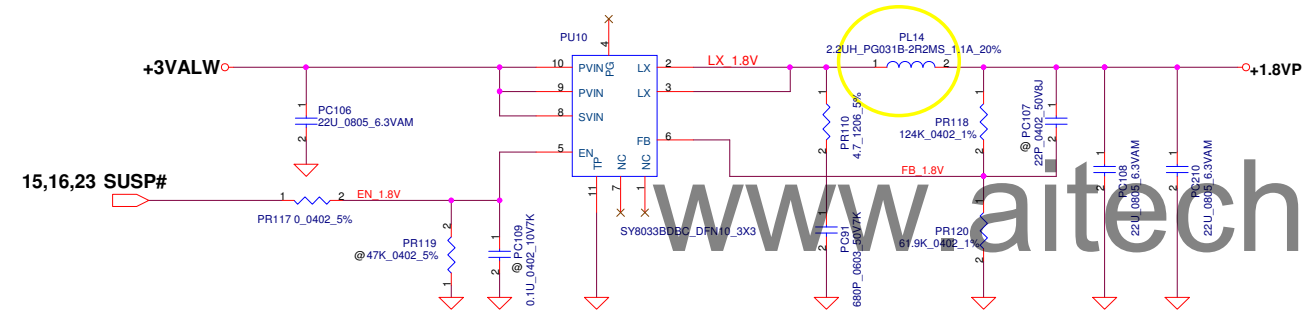
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/5/7	Deciphered Date	2011/5/7	Title	CHARGER
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF RESEARCH 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
				LA-6371P	0.1
Date	Friday, May 07, 2010		Sheet	21	of 27



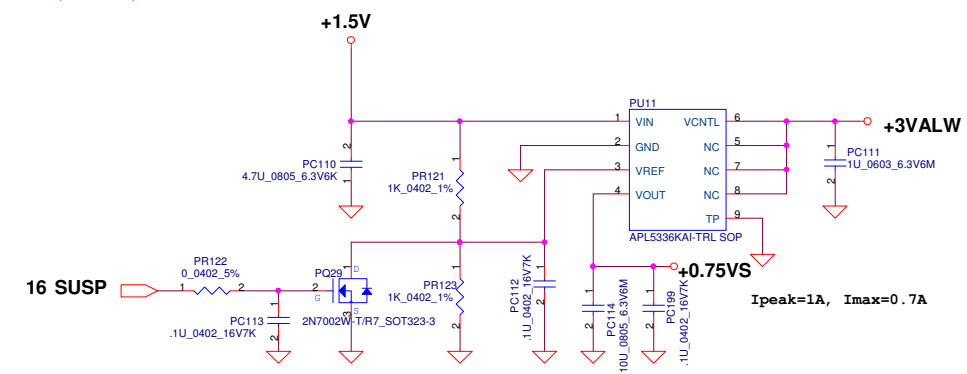
Security Classification	Compal Secret Data			Compal Electronics, Inc.		
Issued Date	2010/5/7	Deciphered Date	2011/5/7	Title	VCCPP/1.5VP	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT 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.				Doc No.	Document Number	Rev.
				Customer	LA-6371P	0.
				Date:	Friday, May 07, 2010	Sheet 23 of 27



<Vo=0.89V> VFB=0.6V
 $V_o = V_{FB} * (1 + PR114 / PR115) = 0.6 * (1 + 30.1K / 61.9K) = 0.89V$
 $I_{peak} = 2.64A, I_{max} = 1.848A$



<Vo=1.8V> VFB=0.6V
 $V_o = V_{FB} * (1 + PR118 / PR120) = 0.6 * (1 + 124K / 61.9K) = 1.8V$
 $I_{peak} = 0.318A, I_{max} = 0.223A$



$I_{peak} = 1A, I_{max} = 0.7A$

Item	Fixed Issue	Reason for change	Rev.	PG#	Modify List	Date	Phase
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							

www.aitech1.ru

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/5/7	Deciphered Date	2011/5/7	Title	PIR-HW
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	LA-6371P
Date: Friday, May 07, 2010				Rev	0.1
Sheet 26 of 27					

Item	Fixed Issue	Reason for change	Rev.	PG#	Modify List	Date	Phase
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							

www.aitech1.ru

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/5/7	Deciphered Date	2011/5/7	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	
				LA-6371P	Rev 0.1
Date: Friday, May 07, 2010				Sheet 27 of 27	