

Compal Confidential

Cougar

LA-6851P Schematics Document

Intel Pine View Processor/ Tiger point

2010-10-10

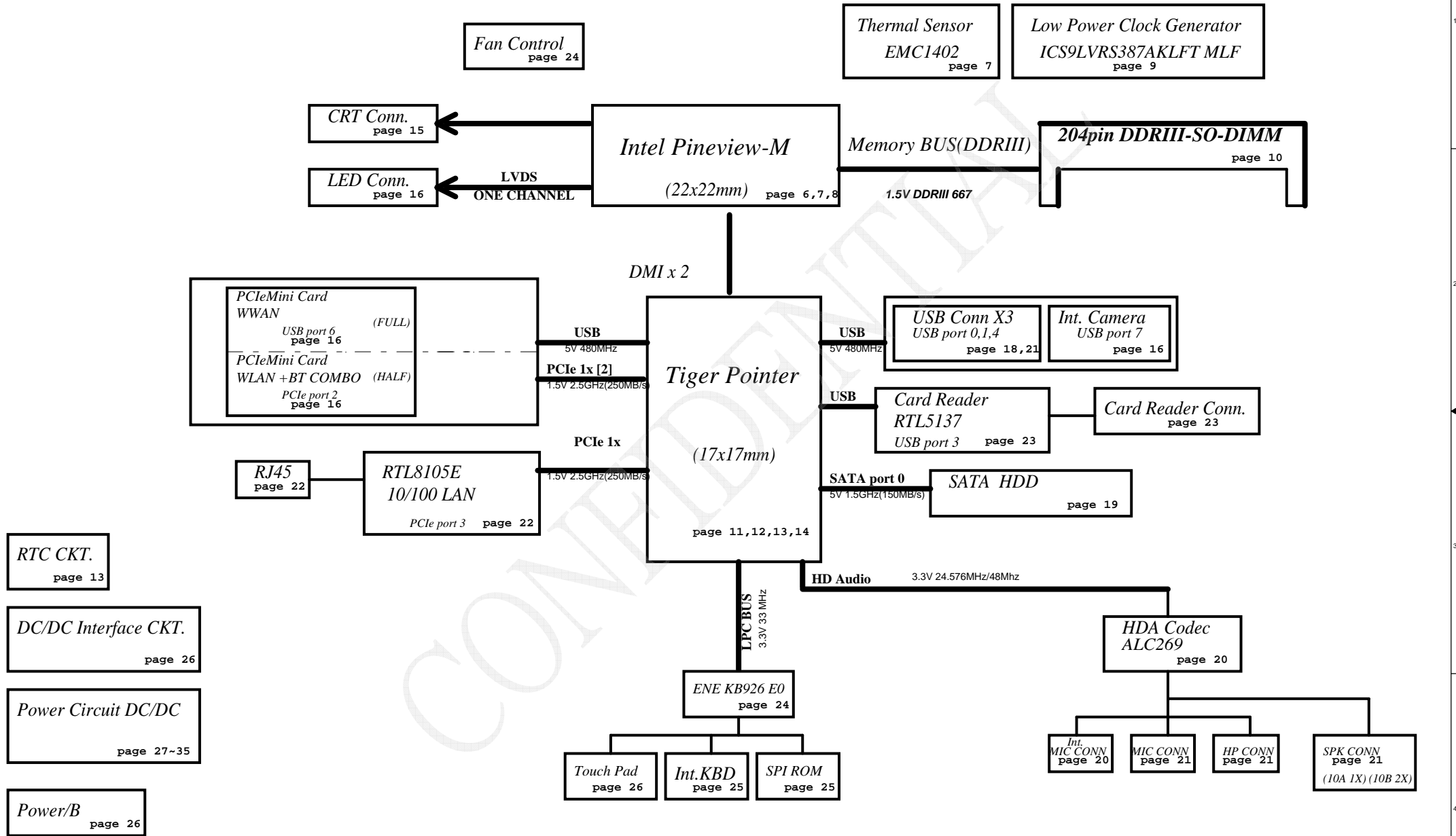
REV: 1.0

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/06/27	Deciphered Date	2011/6/27	Title	SCHMATIC MB A6851
<small>THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.</small>				Document Number 401986	Rev D
Date: Friday, September 02, 2011				Sheet	1 of 36

Compal Confidential

Model Name : PBU00

File Name : LA-6851P



- RTC CKT. page 13
- DC/DC Interface CKT. page 26
- Power Circuit DC/DC page 27~35
- Power/B page 26

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/06/27	Deciphered Date	2011/6/27	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 D
				401986	
Date: Friday, September 02, 2011				Sheet	2 of 36

Voltage Rails

Power Plane	Description	S1	S3	S5	G3
VIN	Adapter power supply (19V)	ON	ON	ON	OFF
B+	AC or battery power rail for power circuit.	ON	ON	ON	ON
+CPU_CORE	Core voltage for CPU	ON	OFF	OFF	OFF
+0.89VS	0.89VS GFX support voltage	ON	OFF	OFF	OFF
+0.75VS	0.75V switched power rail for DDR terminator	ON	OFF	OFF	OFF
+1.05VS	VCCP switched power rail	ON	OFF	OFF	OFF
+1.5VS	1.5V switched power rail	ON	OFF	OFF	OFF
+1.5V	1.5V power rail for DDR	ON	ON	OFF	OFF
+1.8VS	1.8VS switched power rail	ON	OFF	OFF	OFF
+3VALW	3.3V always on power rail	ON	ON	ON	OFF
+3V_LAN	3.3V power rail for LAN	ON	ON	OFF	OFF
+3V_WLAN	3.3V power rail for LAN	ON	ON	OFF	OFF
+3VS	3.3V switched power rail	ON	ON	OFF	OFF
+5VALW	5V always on power rail	ON	OFF	ON	OFF
+5VS	5V switched power rail	ON	OFF	OFF	OFF
+VSB	VSB always on power rail	ON	ON	ON	OFF
+RTCVCC	RTC power	ON	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

BTO Option Table

Function	Mini PCI-E SLOT				CAMERA & MIC		BLUE TOOTH	Clock gen	
description									
explain	Wi-Fi	WiMax	3GGPS	3G	CAMERA	MIC	BLUE TOOTH	Tpye	
BTO	WLAN@	WIMAX@	3GGPS@	3G@	CAM@	MIC@	BT@	low@	normal@

Function			
description			
explain			
BTO			

EC SM Bus1 address

EC SM Bus2 address

Device	Address	Device	Address
Smart Battery	0001 011X b	EMC1402	1001 010X b

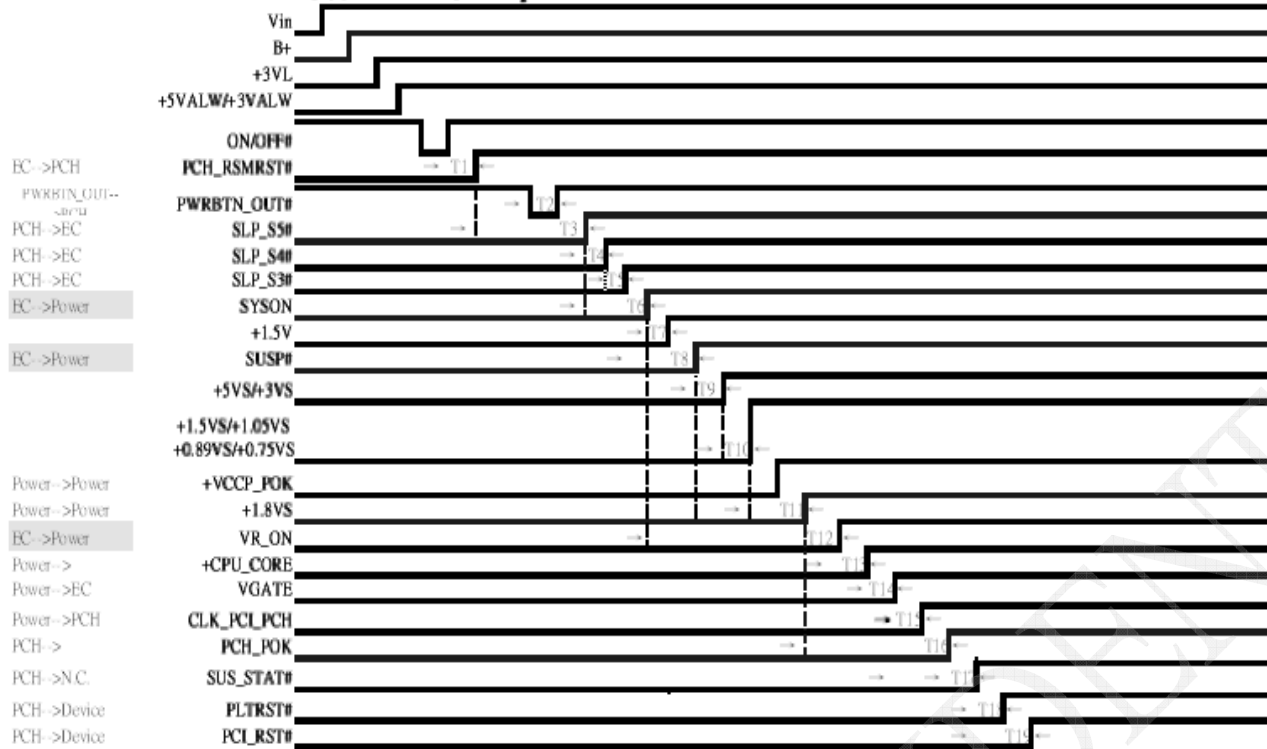
ICH7M SM Bus address

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

Security Classification	Compal Secret Data			Compal Electronics, Inc.		
Issued Date	2010/06/27	Deciphered Date	2011/6/27	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	401986	Rev D
				Date:	Friday, September 02, 2011	Sheet 3 of 36

PBU00 Power ON sequence

2010/7/2



Power-on Sequence		
Time	Description	Expected
T1	Power Button active to PCH_RSMRST# inactive	> 105ms
T2	Power Button active to PBTN_OUT# inactive	< T1
T3	PCH_RSMRST# inactive to PM_SLP_S5# inactive	< 110ms
T4	PM_SLP_S5# inactive to PM_SLP_S4# inactive	28.992us ~ 64.088us
T5	PM_SLP_S4# inactive to PM_SLP_S3# inactive	28.992us ~ 64.088us
T6	PM_SLP_S5# inactive to SYSON active	> 10ms
T7	SYSON active to +1.5V active	> 0
T8	PM_SLP_S3# inactive to SUSP# inactive	> 10ms
T9	SUSP# inactive to +5VS active	> 0
T9	SUSP# inactive to +3VS active	> 0
T10	SUSP# inactive to +1.5VS active	> 0
T10	SUSP# inactive to +0.89VS active	> 0
T10	SUSP# inactive to +0.75VS active	> 0
T11	+1.05VS inactive to +1.8VS active	> 0
T12	SUSP# inactive to VR_ON active	> 10ms
T13	VR_ON active to +CPU_CORE active	> 0
T14	+CPU_CORE active to VGATE	< 10ms
T15	VGATE active to CLK_PCL_PCH stable	< 1.8ms
T16	+1.5VS power active to ICH_PWROK active	> 99ms
T17	ICH_PWROK active to SUS_STAT# inactive	0.928ms ~ 1.218ms
T18	SUS_STAT# inactive to PLT_RST# inactive	57.984us ~ 96.132us
T23	SUS_STAT# inactive to PCI_RST# inactive	57.984us ~ 96.132us

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/06/27	Deciphered Date	2011/6/27	Title	SCHMATIC MB A6851
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	401986
Date:	Friday, September 02, 2011	Sheet	4	of	36

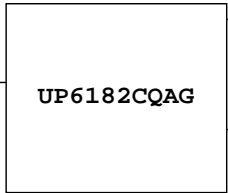
Cougar Power Map

B+ DESIGN CURRENT 250mA

Ipeak=6.97A, Imax=4.88A

DESIGN CURRENT 522mA

+3VALWP +-5%



** The SW just is reserved.
The power passes by jump or
0-ohm resistor.

WOL_EN#

** P-CHANNEL
AO3413

DESIGN CURRENT 300mA

+3V_LAN

Ipeak=3.98A, Imax=2.8A

DESIGN CURRENT 3010mA

+5VALWP +-5%

SUSP

N-CHANNEL
SI4800BDY

DESIGN CURRENT 2286mA

+5VS

SUSP

N-CHANNEL
SI4800BDY

DESIGN CURRENT 5586mA

+3VS

ENVDD

P-CHANNEL
AO3413

DESIGN CURRENT 2000mA

+LCD_VDD

SUSP#

SY8033BDBC

DESIGN CURRENT 2640mA

+0.89VSP

SUSP#

SY8033BDBC

Ipeak=1.308A, Imax=4A

DESIGN CURRENT 3489mA

+1.05VSP +-5%

VR_ON

ADP3211AMNR2G

Imax=3.5A

DESIGN CURRENT 6000mA

+CPU_CORE

SYSON

G5603RU1U

Ipeak=19.6A, Imax=13.72A

DESIGN CURRENT 2000mA

+1.5VP +-5%

SUSP#

IRF8113PBF

DESIGN CURRENT 2112mA

+1.5VSP

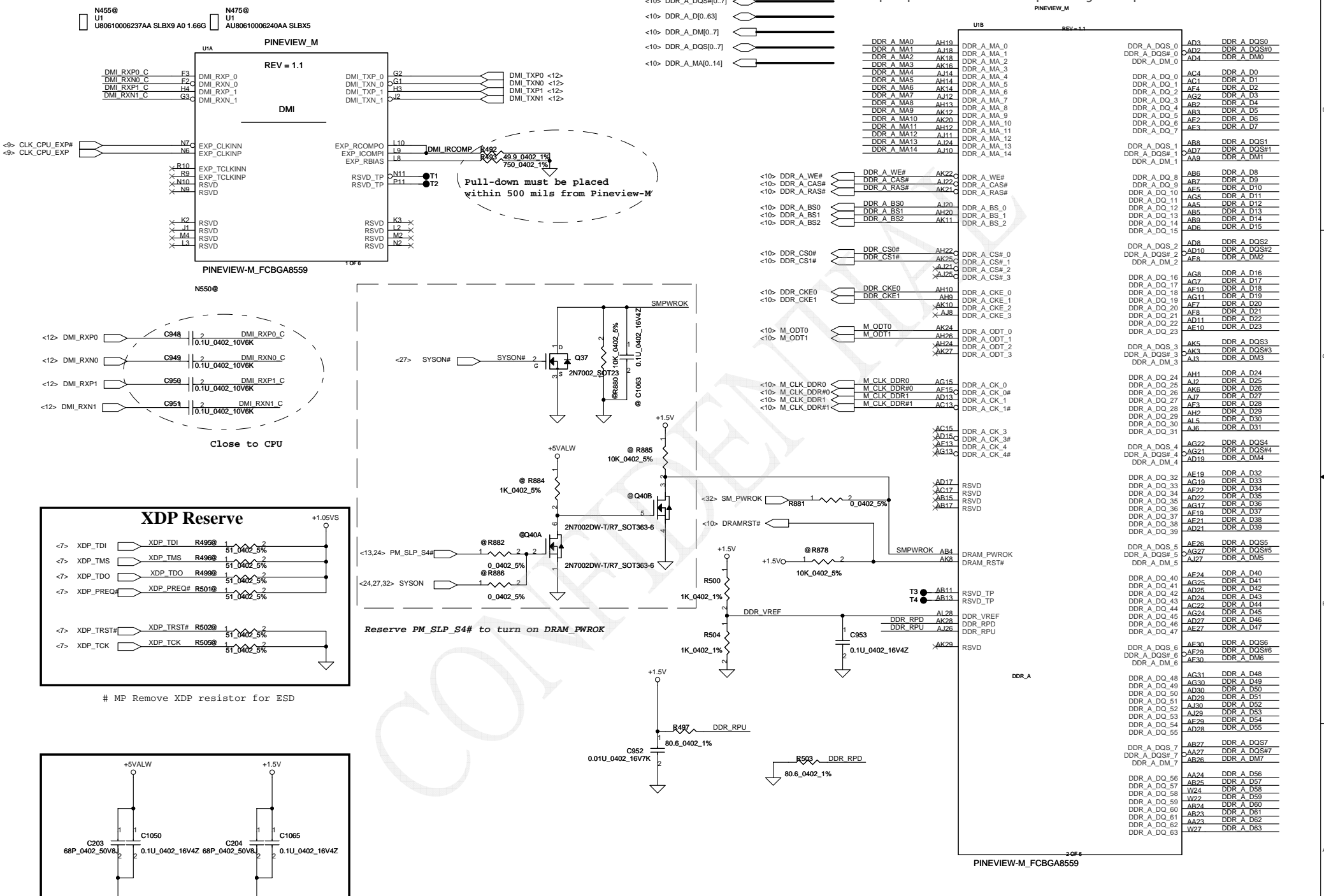
SUSP

UP7711U8

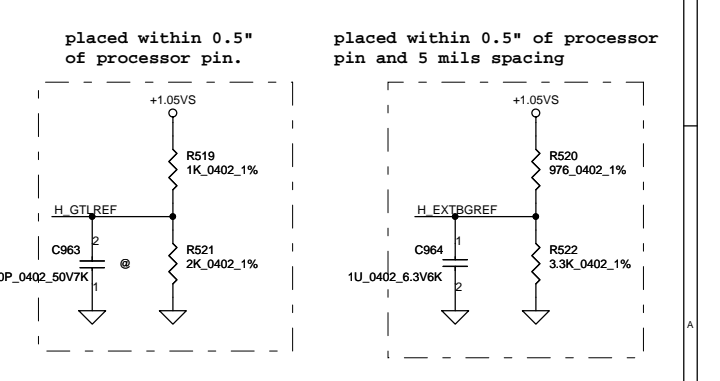
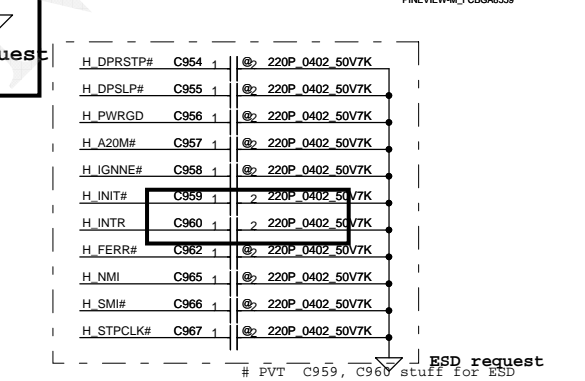
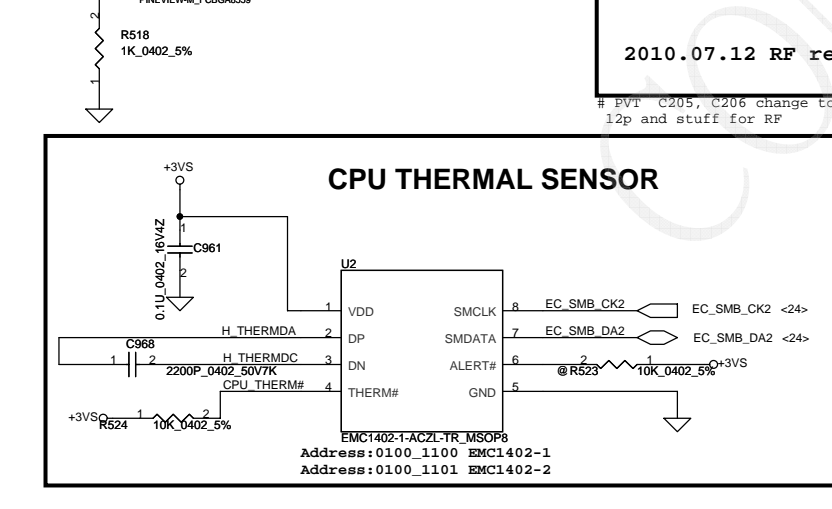
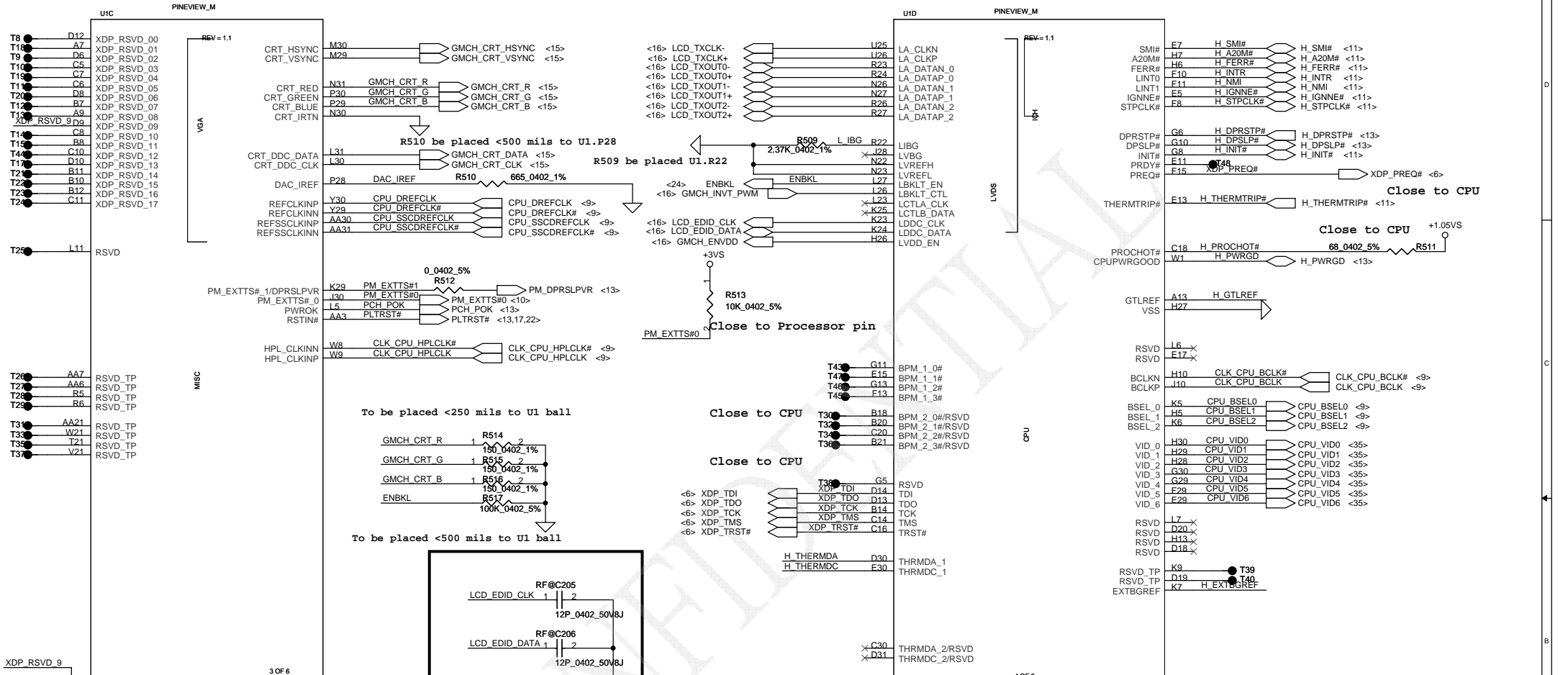
DESIGN CURRENT 500mA

+0.75VSP

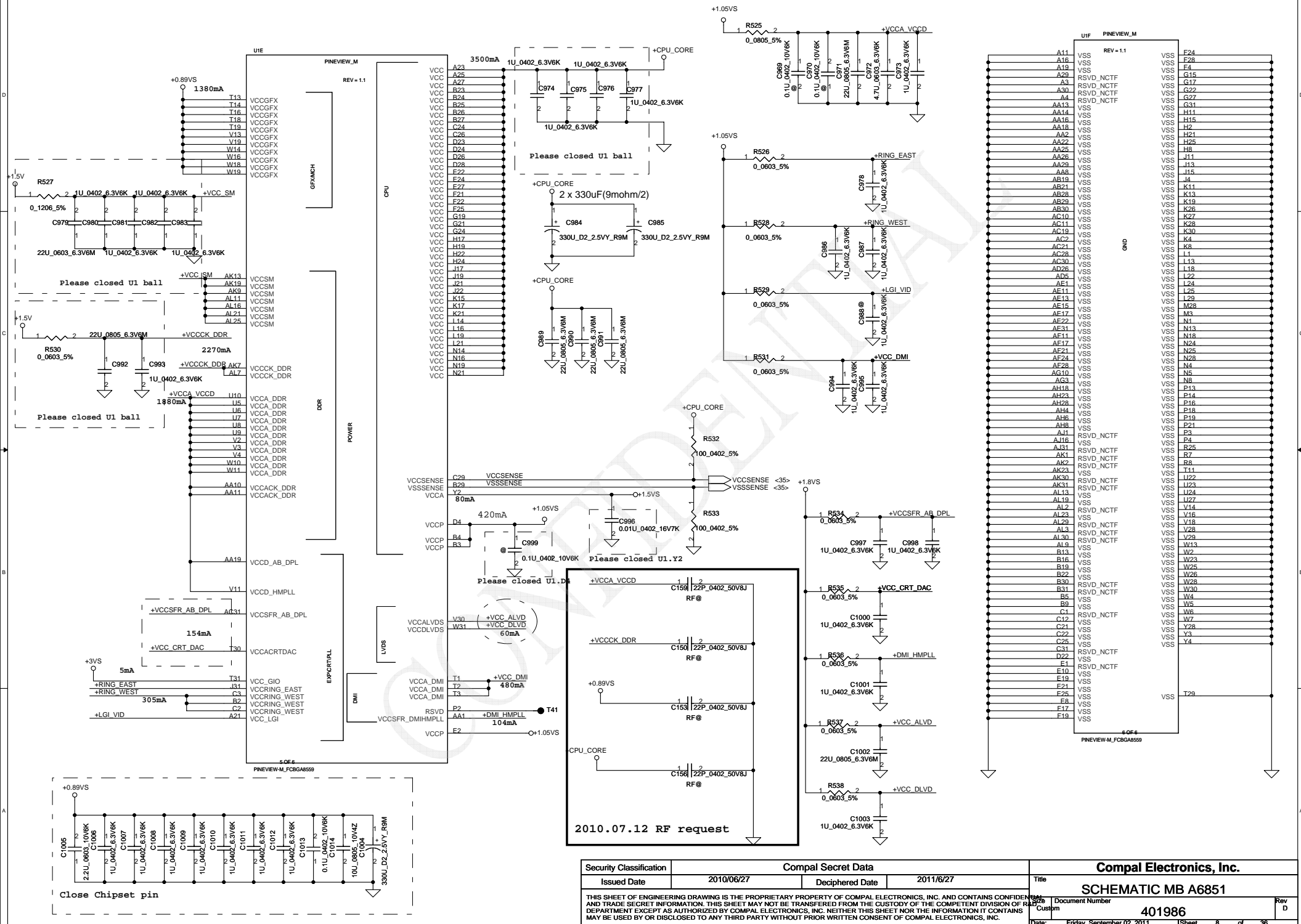
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/06/27	Deciphered Date	2011/6/27	Title	SCHEMATIC MB A6851
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET 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.				Part Number	401986
Date:	Friday, September 02, 2011	Sheet	5 of 36	Rev	D



Security Classification	Compal Secret Data		Title	Compal Electronics, Inc.	
Issued Date	2010/06/27	Deciphered Date	2011/6/27	SCHEMATIC MB A6851	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.					
Date: Friday, September 02, 2011			Document Number	401986	Rev D
			Sheet	6	of 36



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/06/27	Deciphered Date	2011/6/27	Title	SCHEMATIC MB A6851
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.					
Size	B	Document Number	401986	Rev	D
Date:	Friday, September 02, 2011	Sheet	7	of	36

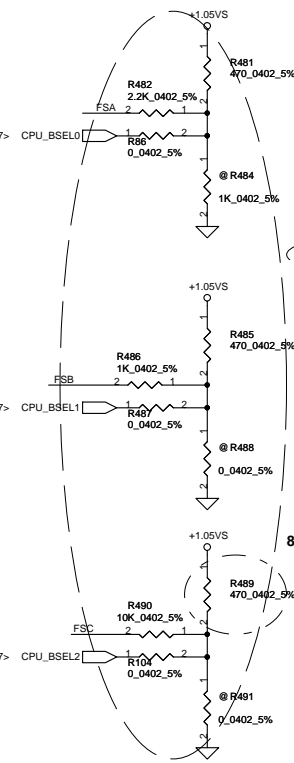


2010.07.12 RF request

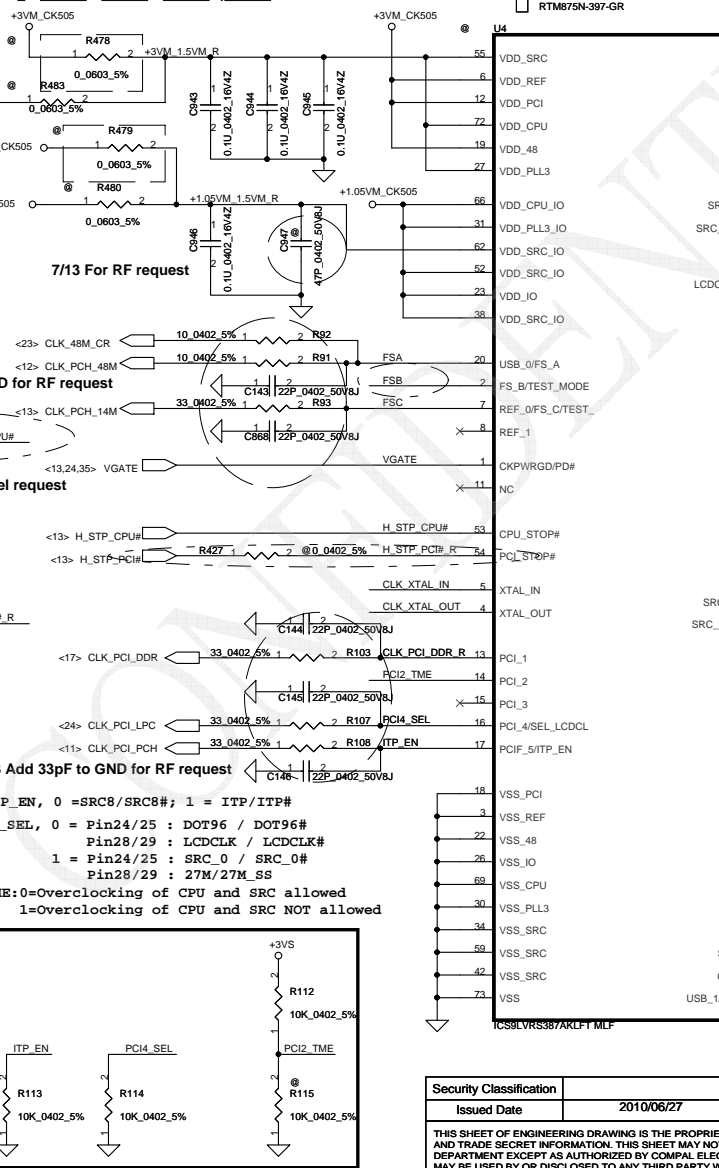
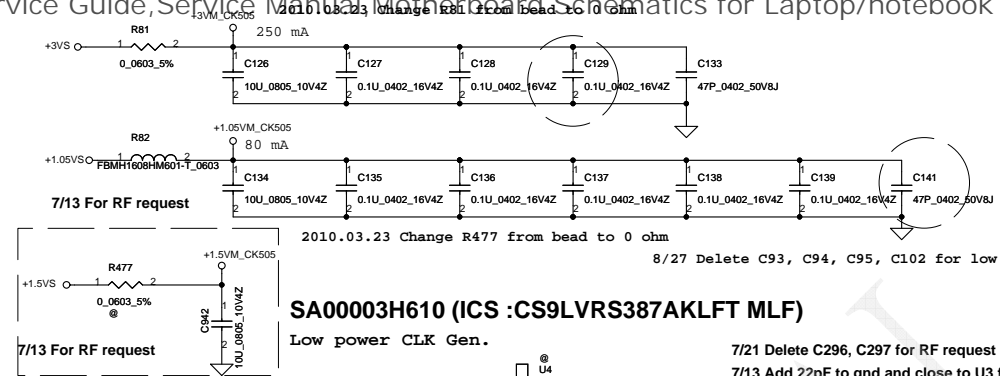
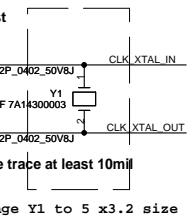
Security Classification	Compal Secret Data		Title
Issued Date	2010/06/27	Deciphered Date	2011/6/27
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE 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.			<p>Compal Electronics, Inc.</p> <p>SCHEMATIC MB A6851</p> <p>Rev D</p> <p>401986</p>
Date:	Friday, September 02, 2011	Sheet	8 of 36

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								

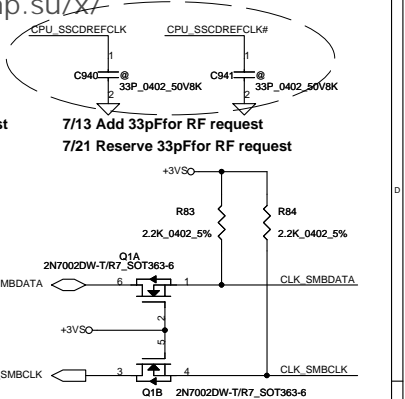
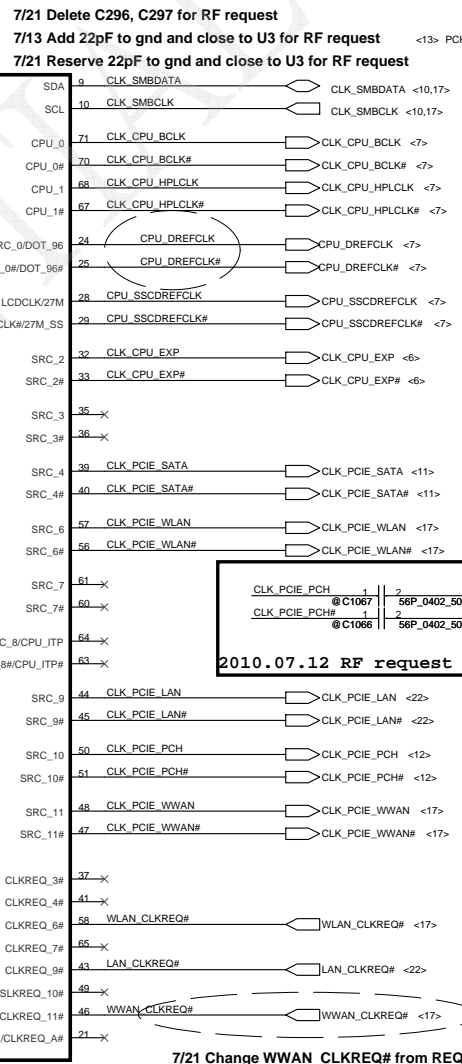
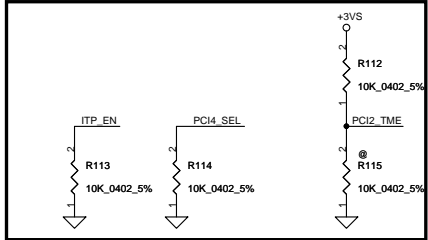
	Normal Power	Low Power
R477	@	Stuff
R478	Stuff	@
R479	Stuff	@
R480	@	Stuff
R483	@	Stuff



8/24 Change net name to FSB for U3.2
 7/13 Add 33pF to GND for RF request
 7/21 Reserve 33pF to GND for RF request
 8/27 C303, C324, C325, C326, C327 to GND for RF request
 7/22 Add R241 pull up to +3VS for RF Intel request
 8/14 Add R250 pull up for Intel request
 7/13 Add 33pF to GND for RF request



For ITP_EN, 0 =SRC8/SRC8#; 1 = ITP/ITP#
 For PCI4_SEL, 0 = Pin24/25 : DOT96 / DOT96#
 Pin28/29 : LCDCCLK / LCDCCLK#
 1 = Pin24/25 : SRC_0 / SRC_0#
 Pin28/29 : 27M/27M_SS
 For PCI2_TME:0=Overclocking of CPU and SRC allowed
 (ICS only) 1=Overclocking of CPU and SRC NOT allowed

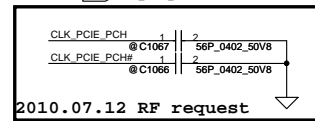


SRC PORT LIST

PORT	DEVICE
SRC0	CPU_DREFCLK
SRC2	CPU_EXP
SRC3	
SRC4	PCIE_SATA
SRC6	PCIE_WLAN
SRC7	
SRC8	
SRC9	PCIE_LAN
SRC10	PCIE_PCH
SRC11	PCIE_WWAN

REQ PORT LIST

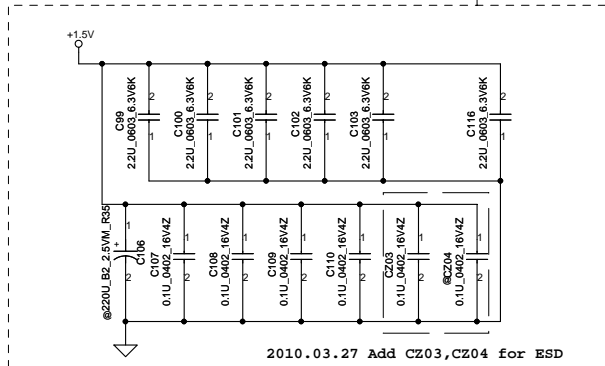
PORT	DEVICE
REQ_3#	
REQ_4#	
REQ_6#	PEIC_WLAN
REQ_7#	
REQ_9#	PCIE_LAN
REQ_10#	
REQ_11#	PEIC_WWAN
REQ_A#	



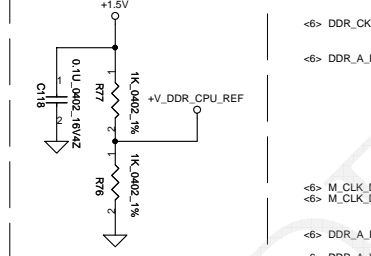
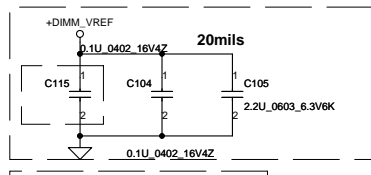
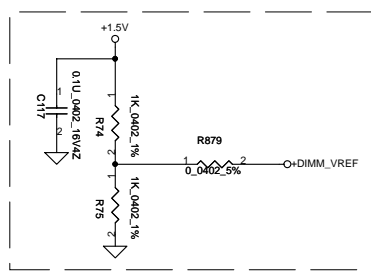
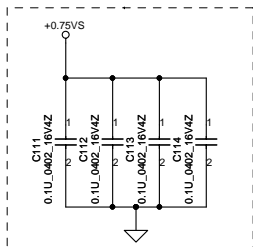
7/21 Change WWAN_CLKREQ# from REQ4 to REQ11

- <6> DDR_A_DQS#[0..7]
- <6> DDR_A_D[0..63]
- <6> DDR_A_DM[0..7]
- <6> DDR_A_DQS[0..7]
- <6> DDR_A_MA[0..14]

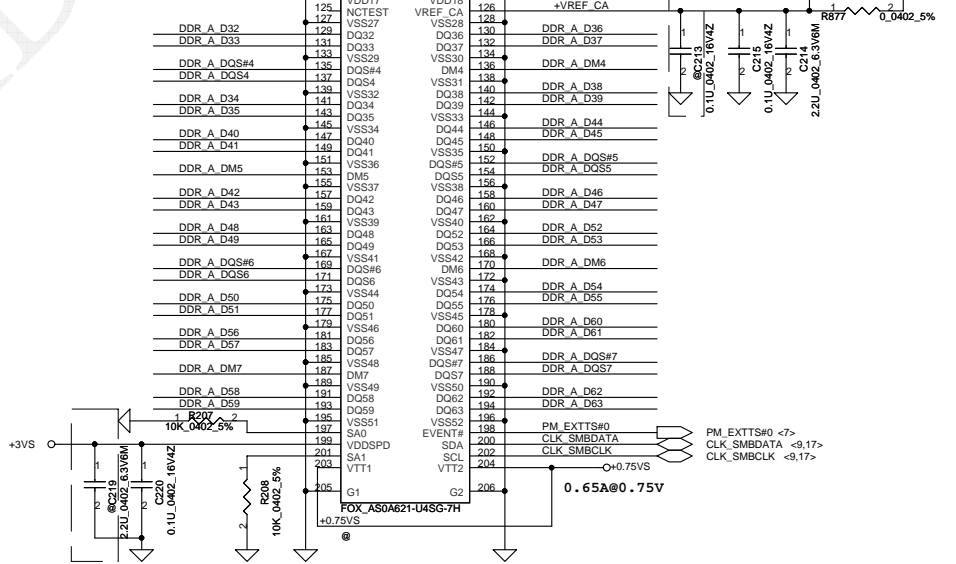
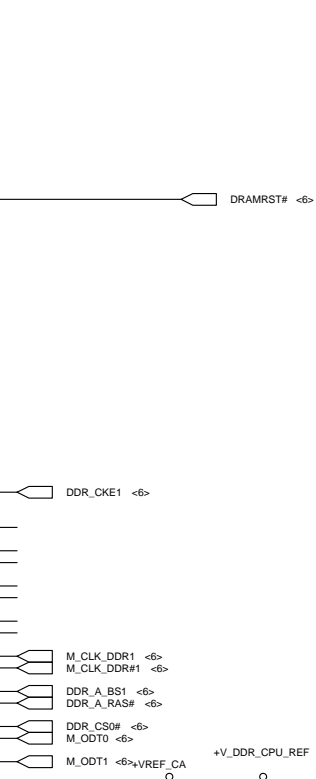
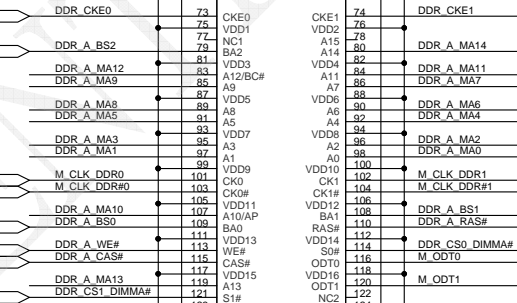
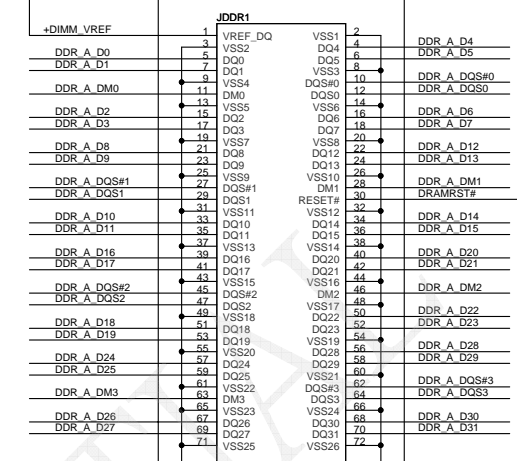
Layout Note:
Place near JDDR1



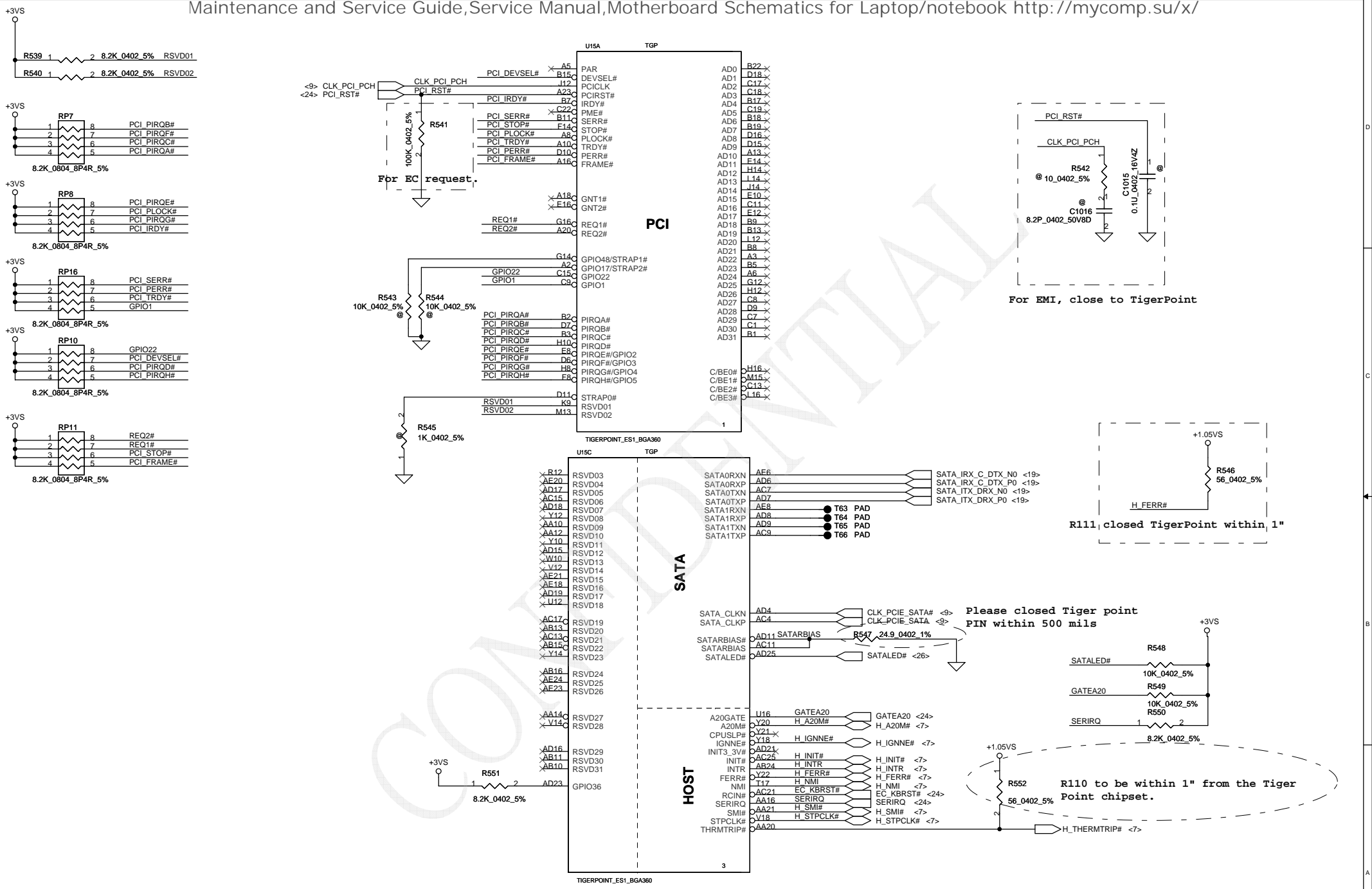
Layout Note:
Place one cap close to every 2 pullup resistors terminated to +0.75VS



- <6> DDR_CKE0
- <6> DDR_A_BS2
- <6> M_CLK_DDR0
- <6> M_CLK_DDR#0
- <6> DDR_A_BS0
- <6> DDR_A_WE#
- <6> DDR_A_CAS#
- <6> DDR_CS1#



Security Classification		Compal Secret Data		Title	
Issued Date	2010/06/27	Deciphered Date	2011/6/27	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 RA 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 D
				401986	
				Date: Friday, September 02, 2011	Sheet 10 of 38

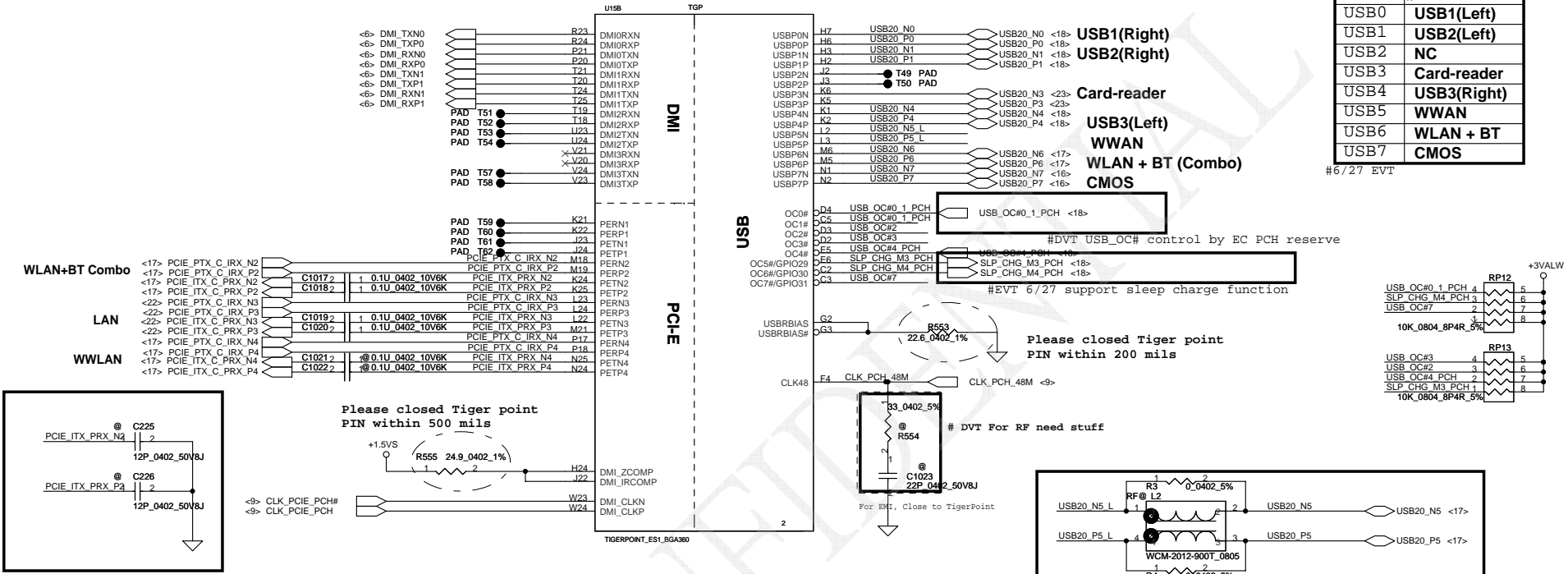


Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/06/27	Deciphered Date	2011/6/27	Title	SCHEMATIC MB A6851
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET 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	401986		Rev	D
Date:	Friday, September 02, 2011	Sheet	11	of	36

USB PORT LIST

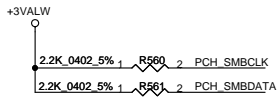
PORT	#EVT DEVICE
USB0	USB1(Left)
USB1	USB2(Left)
USB2	NC
USB3	Card-reader
USB4	USB3(Right)
USB5	WWAN
USB6	WLAN + BT
USB7	CMOS

#6/27 EVT

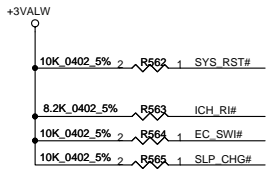
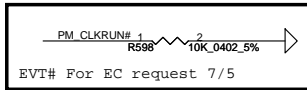
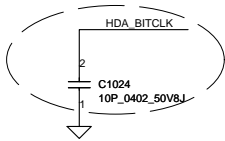


PVT C225, C226 add
12p to GND for RF

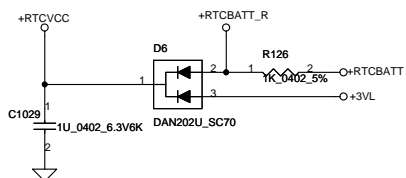
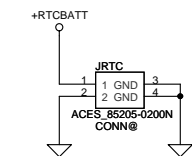
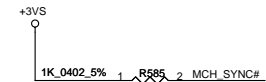
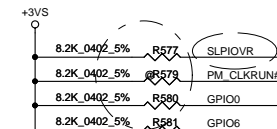
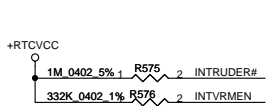
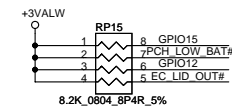
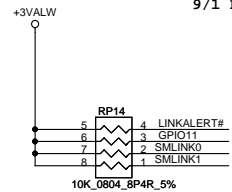
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/06/27	Deciphered Date	2011/6/27	Title	Schematic MB A6851
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET 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	401986			Rev	D
Date:	Friday, September 02, 2011	Sheet	12	of	36



7/2 For EMI, Close to TigerPoint
9/1 C207 change to SE071100J80 for EMI request

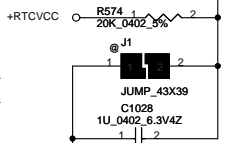
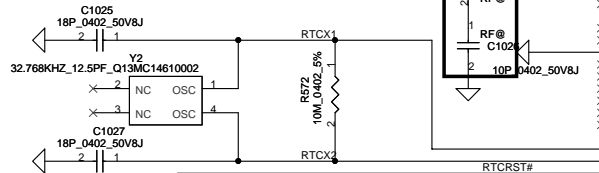


12/17 Add Pull high Resistor for GPIO14
9/1 R125 change to SM01027780 for EMI request

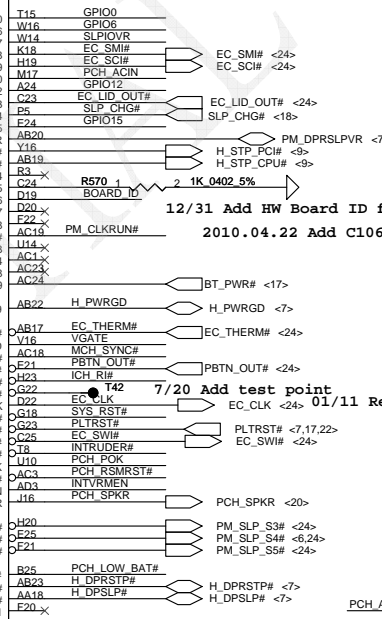
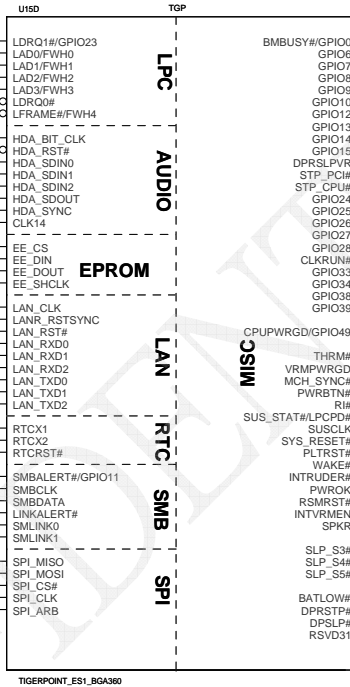
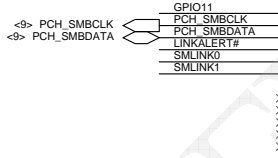


<20> HDA_BITCLK
<20> HDA_RST#
<20> HDA_SDIN0
<20> HDA_SDOUT
<20> HDA_SYNC
<9> CLK_PCH_14M

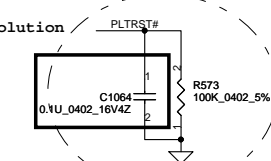
MP C1026 4.7P change to 10p for RF request



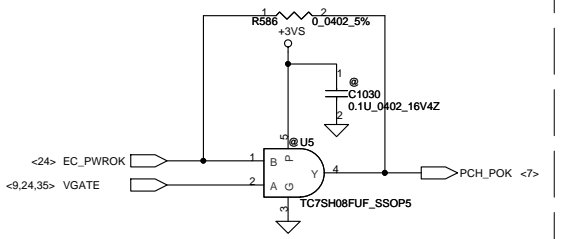
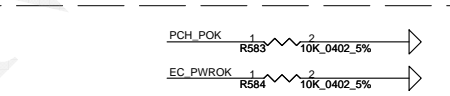
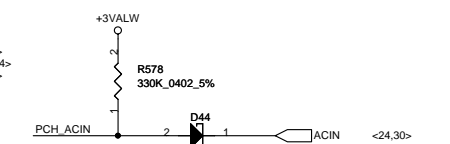
7/20 Add SLPIOVR pull up 8.2k to +3vs
9/23 Change RP17 to R256, R257, R258 for layout request



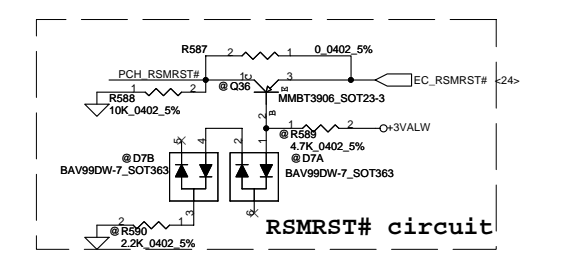
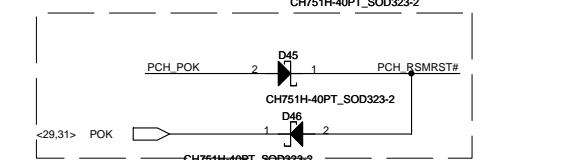
12/31 Add HW Board ID function
2010.04.22 Add C1064 for ESD solution



8/24 Add R254 pull down for EC request

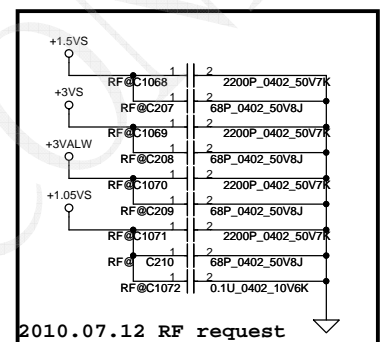
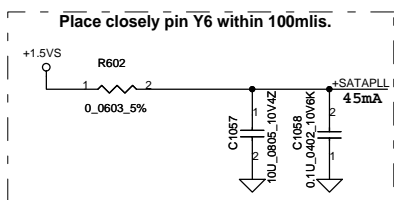
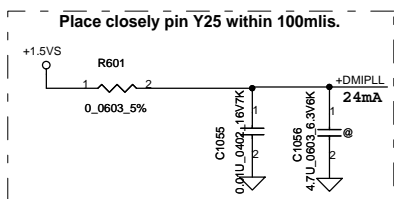
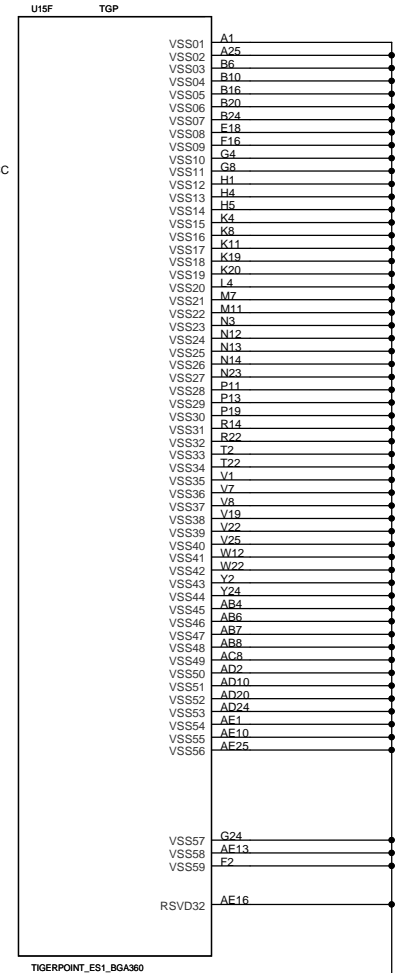
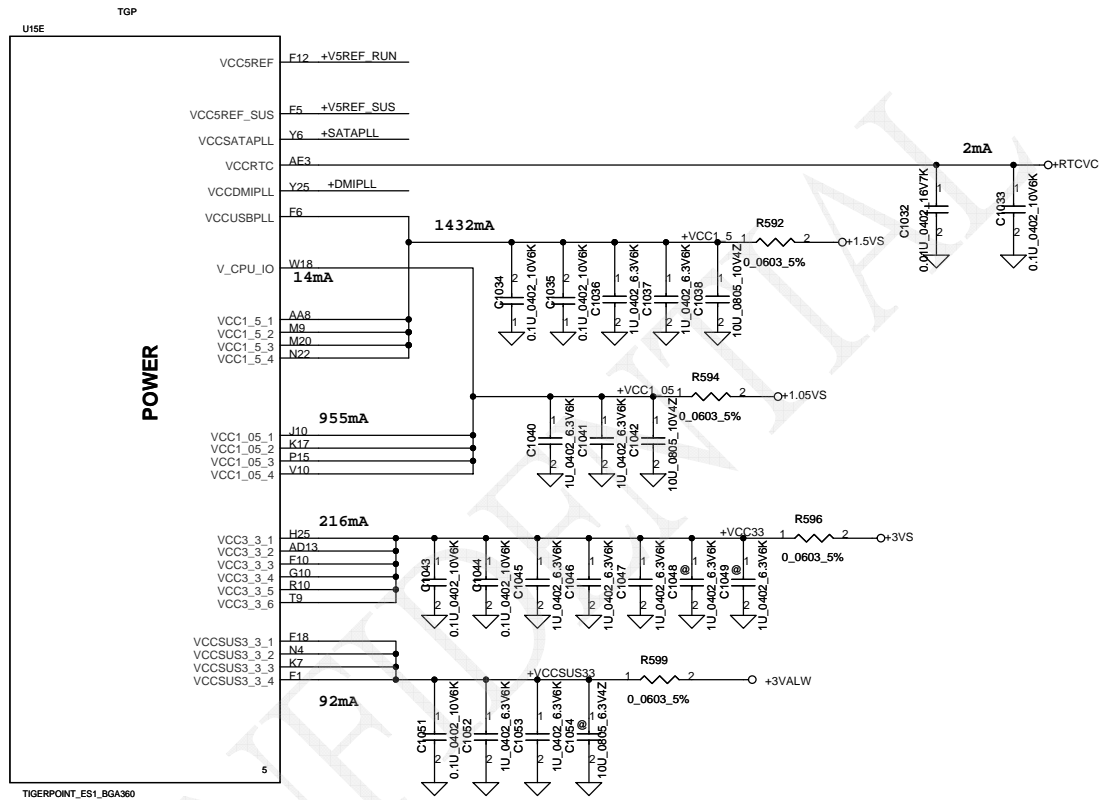
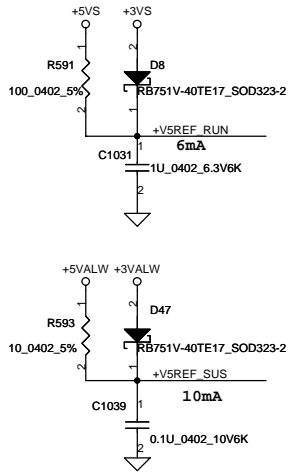


2010.03.22 Un-stuff U5 and C1030



2010.03.22 Un-stuff RSMRST# circuit and use 0 ohm bypass

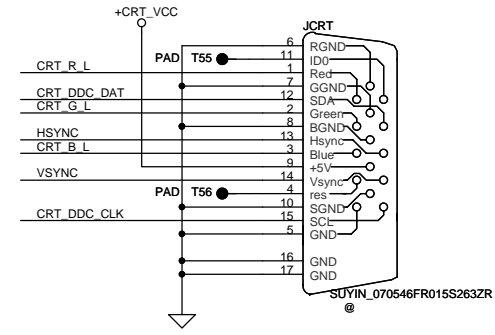
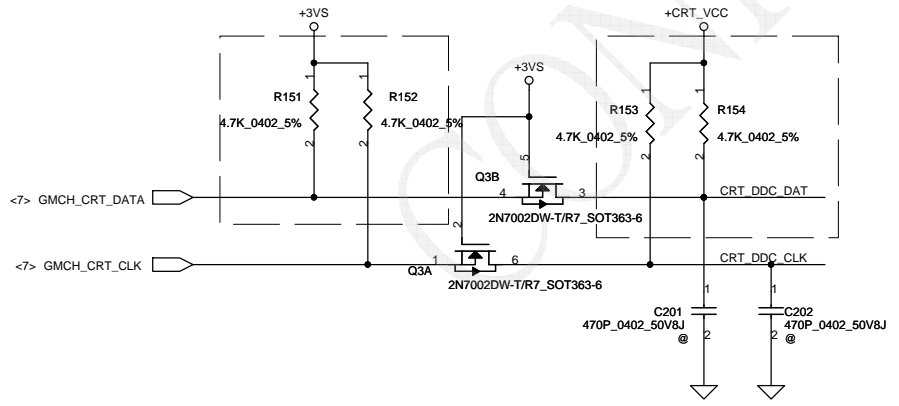
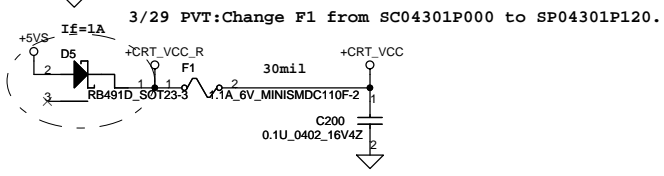
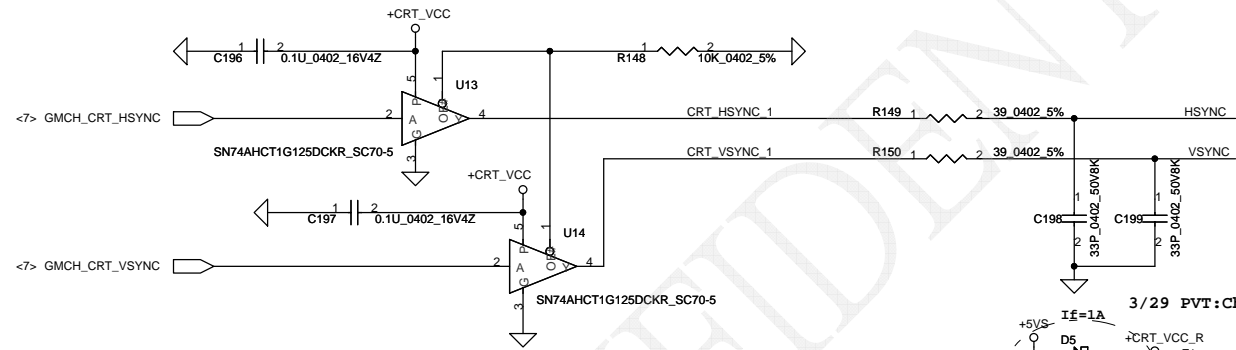
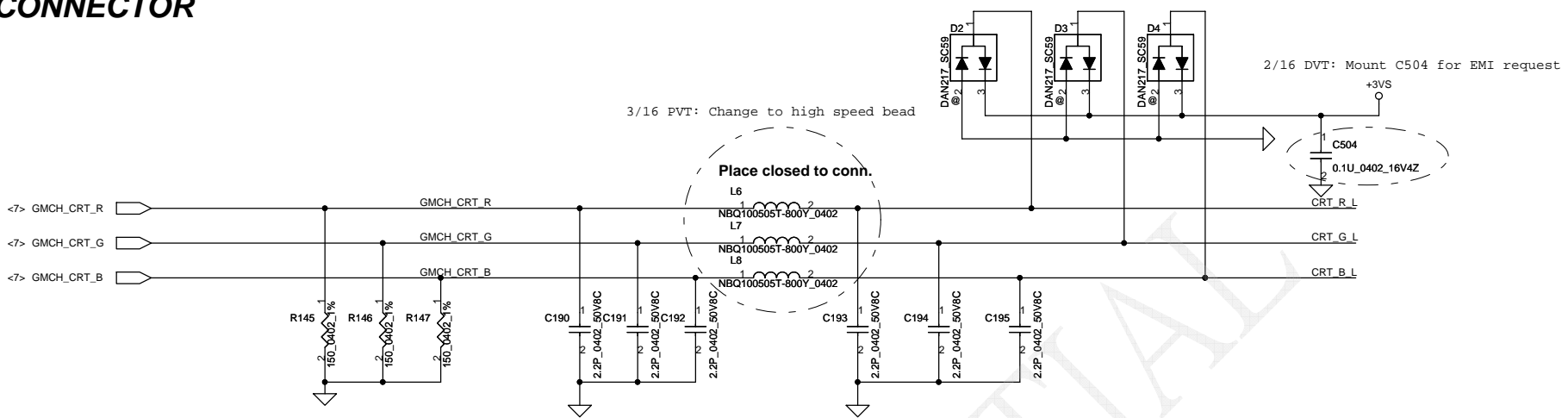
Security Classification	Compal Secret Data	Title
Issued Date	2010/06/27	Deciphered Date
		2011/6/27
Compal Electronics, Inc.		
SCHEMATIC MB A6851		
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET 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.		
Customer	Document Number	Rev
	401986	D
Date:	Friday, September 02, 2011	Sheet 13 of 36



Security Classification	Compal Secret Data		Title	
Issued Date	2010/06/27	Deciphered Date	2011/6/27	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 MB A6851
Document Number			401986	Rev D
Date:			Friday, September 02, 2011	Sheet 14 of 36

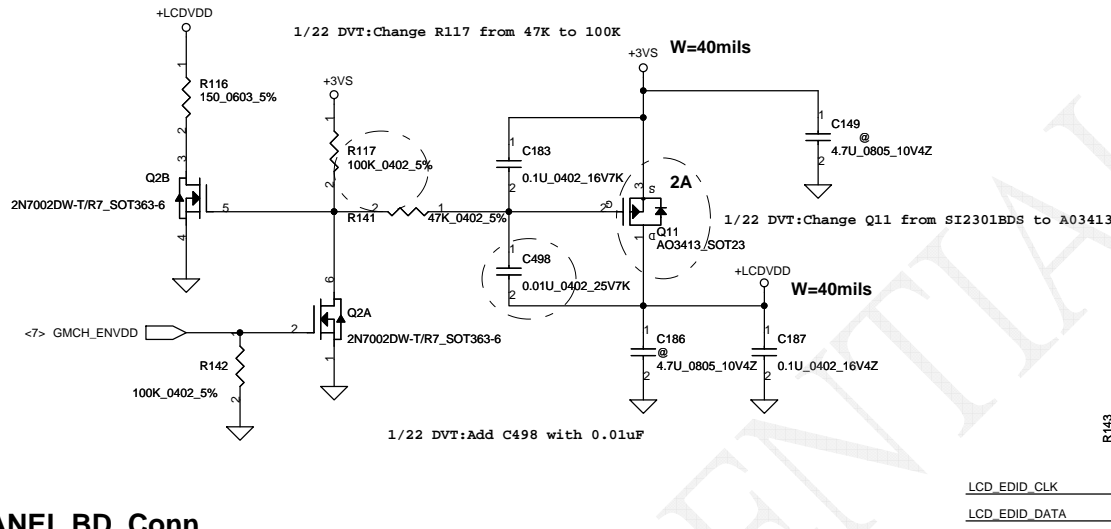
CRT CONNECTOR

Place closed to conn.

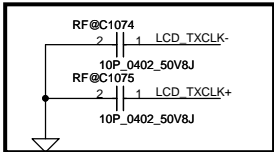
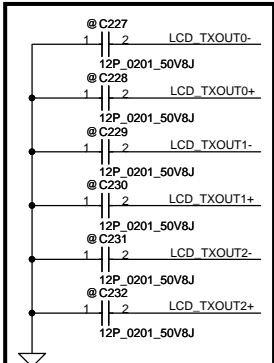


Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/06/27	Deciphered Date	2011/6/27	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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 D
				401986	
Date: Friday, September 02, 2011				Sheet	15 of 36

LCD POWER CIRCUIT

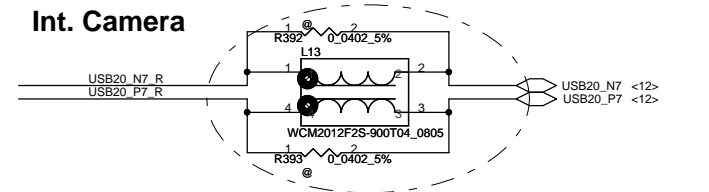
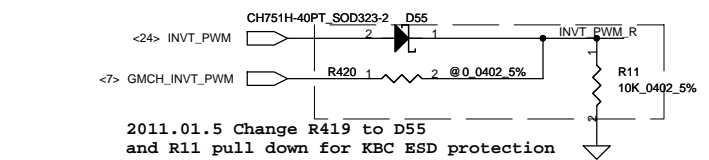
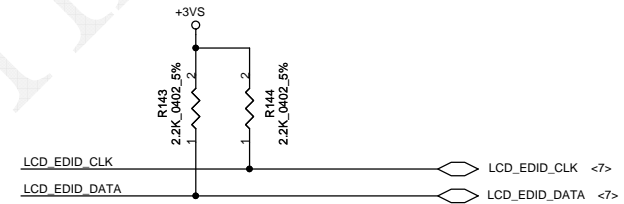
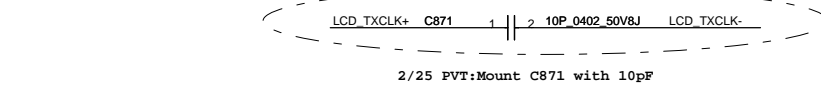
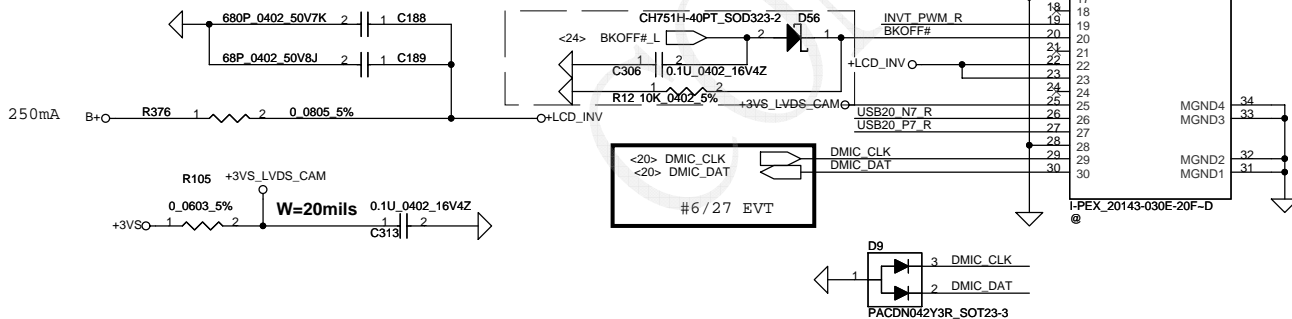


LED/PANEL BD. Conn.



PVT Add C1074, C1075
10p and stuff for RF

2011.01.5 Change R421 to D56
and R12 pull down for KBC ESD protection

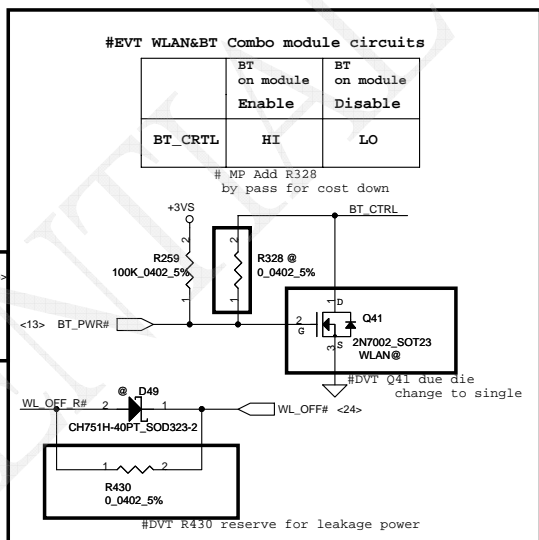
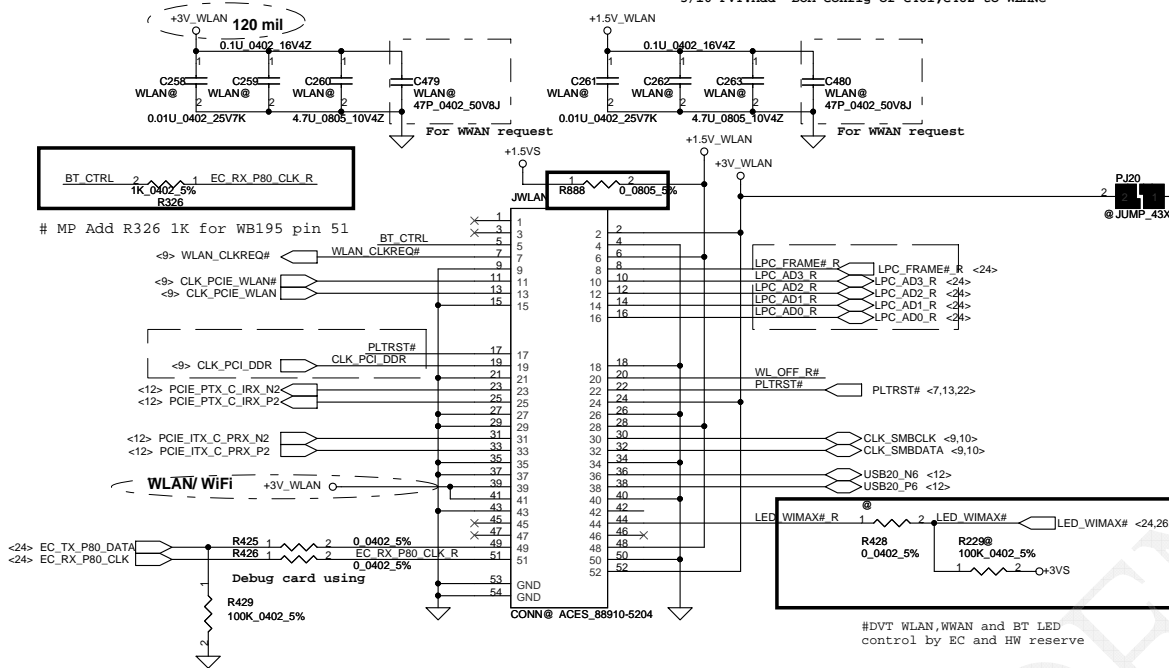


For EMI request

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/06/27	Deciphered Date	2011/6/27	Title	SCHMATIC MB A6851
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	401986		Rev	D	
Date:	Friday, September 02, 2011	Sheet	16	of	36

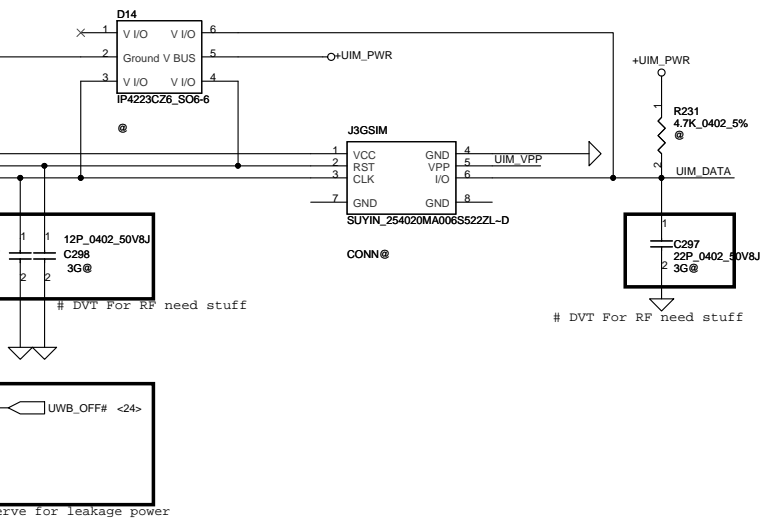
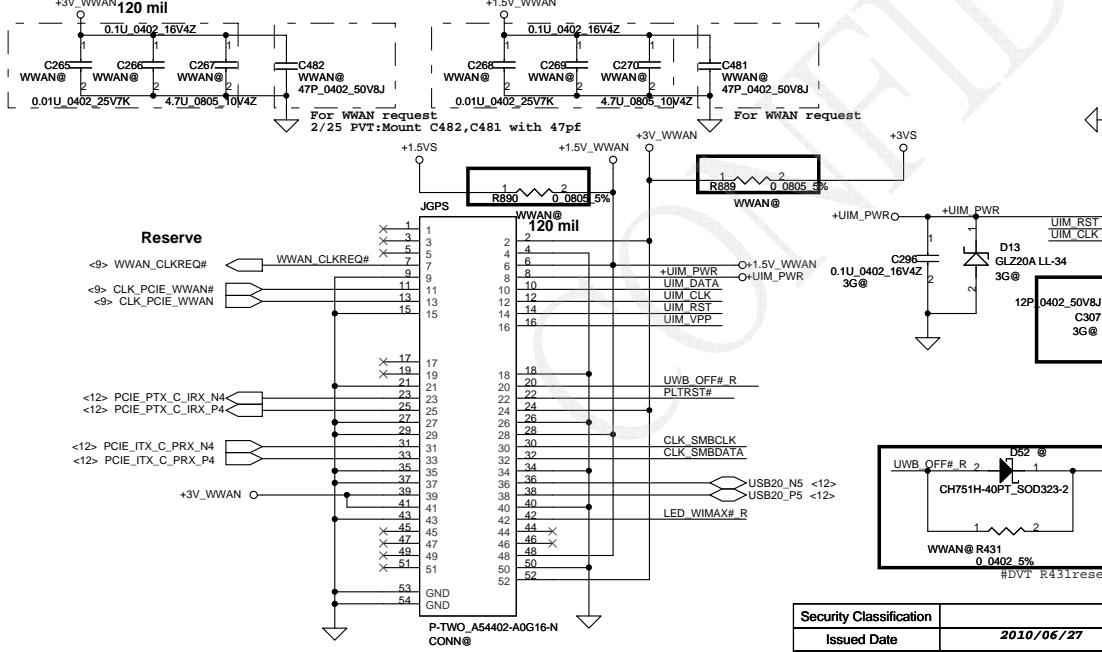
Mini-Express Card for WLAN/WiMax

2/25 PVT:Mount C479,C480 with 47pf
3/16 PVT:Add BOM Config of C481,C482 to WLAN@



Mini-Express Card for 3G/GPS

3G current need to 2750mA
3/16 PVT:Add BOM Config of C481,C482 to 3GGPS@

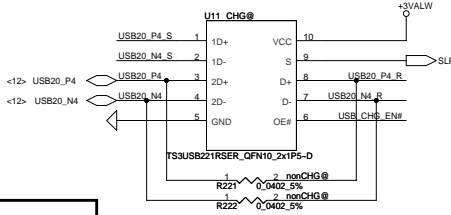
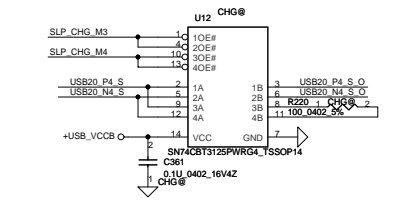
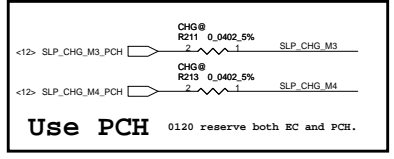


Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/06/27	Deciphered Date	2011/6/27	Title
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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
				401986
				Rev D
Date: Friday, September 02, 2011				Sheet 17 of 36

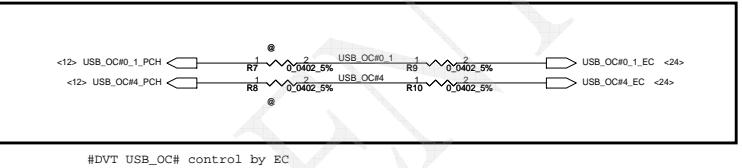
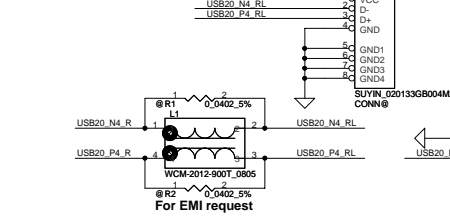
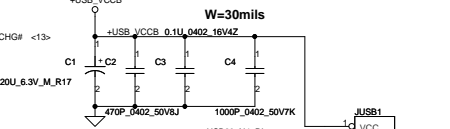
USB CONN - Left

	SLP_CHG_M3	SLP_CHG_M4
Mode 3	HIGH	LOW
Mode 4	LOW	HIGH

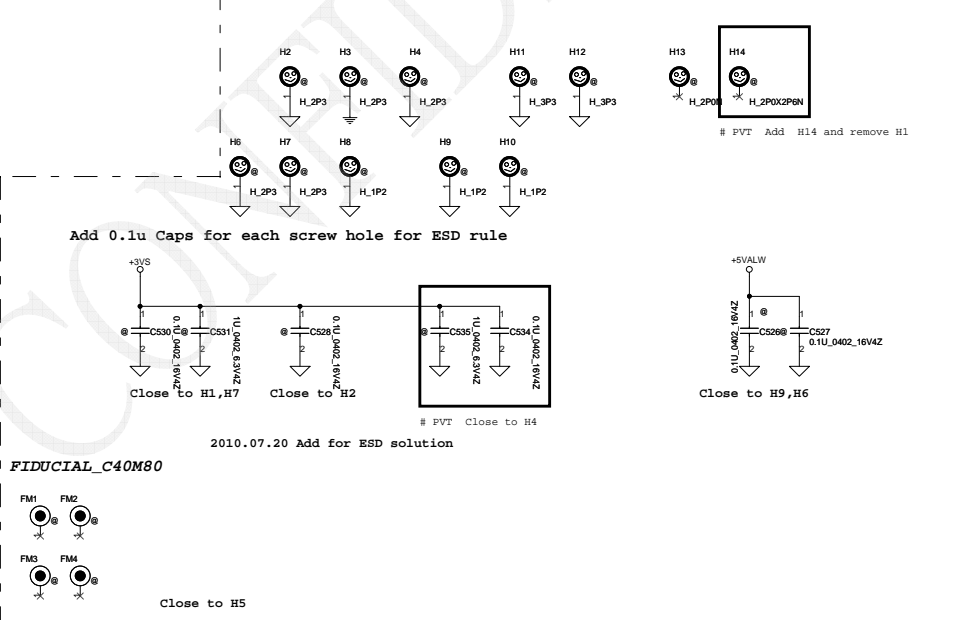
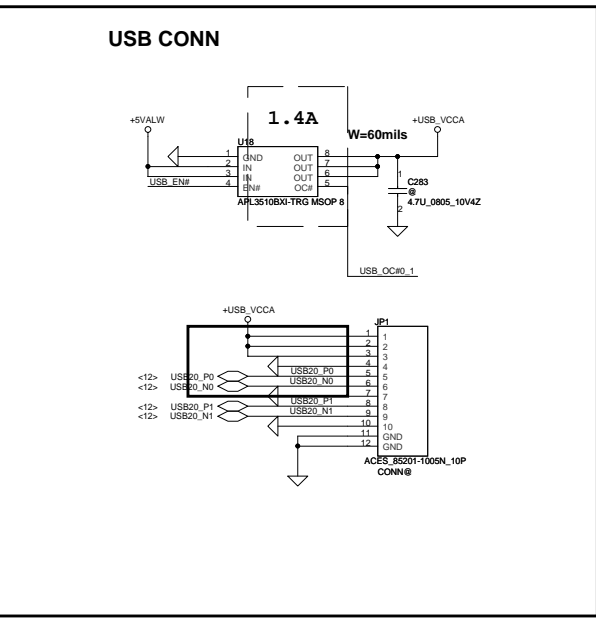
SLP_CHG	FUNCTION
LOW	D=1D
HIGH	D=2D



#PVT R88 CHG@ change to always stiff for OC protect actioc same

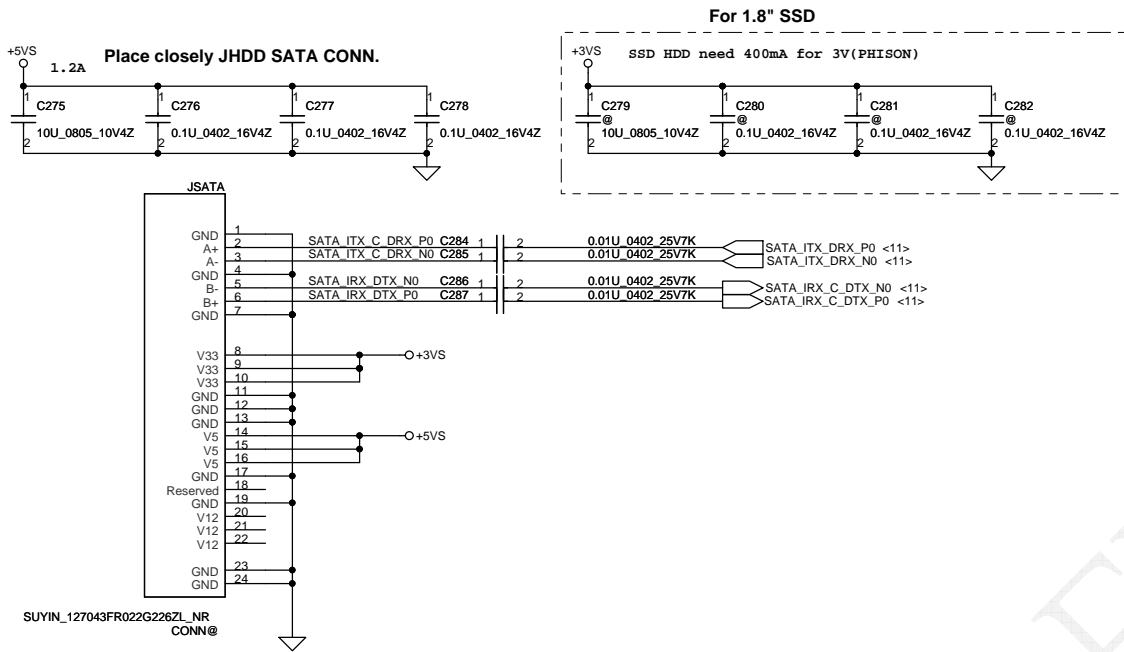


For EMI request # PVT: Change D38, D37 from PRTR5V0U2X_SOT143-4 to CM1293A-04SO_SOT23-6



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/06/27	Deciphered Date	2011/6/27	Title	SCHMATIC MB A6851
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	Date	Friday, September 02, 2011	Sheet	18 of 36
	401986				

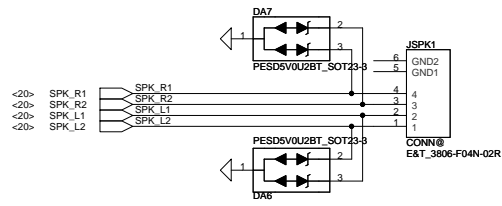
SATA Conn.



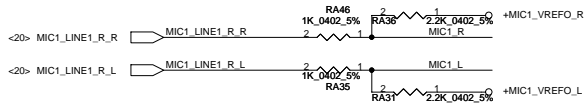
CONFIDENTIAL

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/06/27	Deciphered Date	2011/6/27	Title	
				SCHEMATIC MB A6851	
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
				401986	D
				Date: Friday, September 02, 2011	Sheet 19 of 36

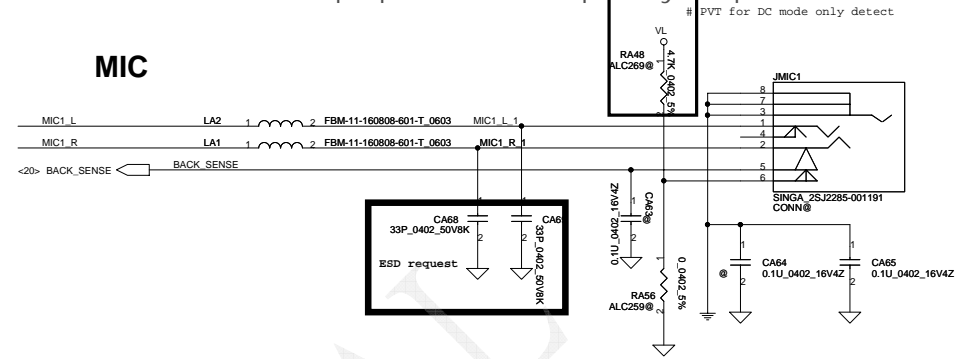
SPEAKER



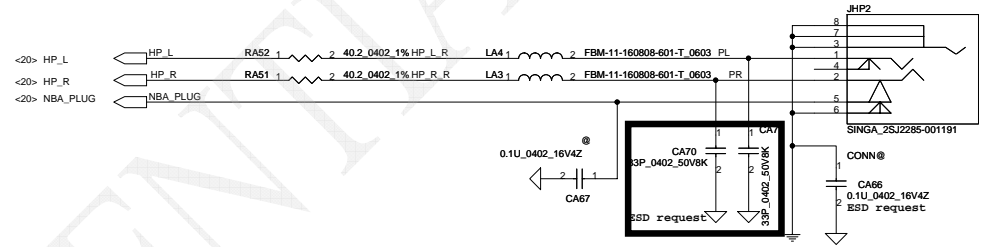
Ext.MIC/LINE IN JACK



MIC

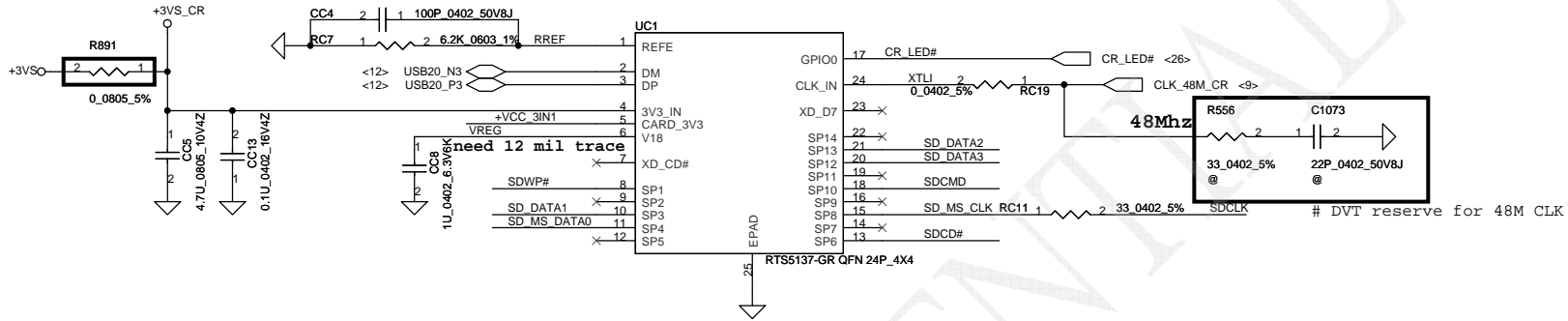


Head phone

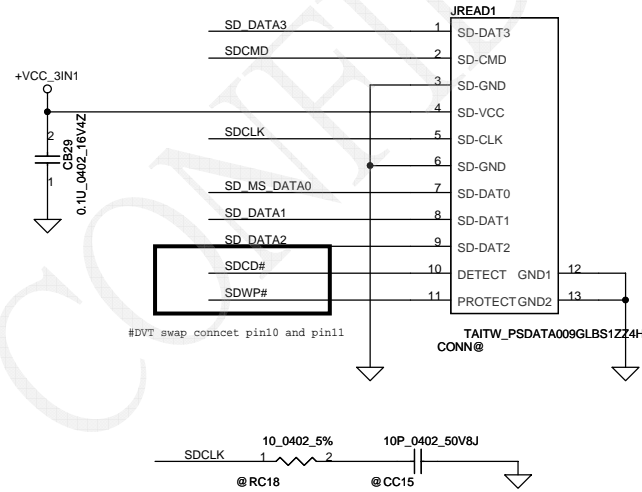


Security Classification	Compal Secret Data			Title	
Issued Date	2010/06/27	Deciphered Date	2011/6/27	Compal Electronics, Inc.	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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
				401986	D
Date:	Friday, September 02, 2011	Sheet	21	of	36

	XD_CD#		
SP1	XD_RDY	SD_WP	MS_CLK
SP2	XD_RE#		MS_INS#
SP3	XD_C#	SD_D1	
SP4	XD_C#	SD_D0	MS_D7
SP5	XD_AL#	SD_D7	MS_D3
SP6	XD_WE#	SD_CD#	
SP7	XD_WP	SD_D6	MS_D6
SP8	XD_D0	SD_CLK	MS_D2
SP9	XD_D1	SD_D5	MS_D0
SP10	XD_D2	SD_CMD	
SP11	XD_D3	SD_D4	MS_D4
SP12	XD_D4	SD_D3	MS_D1
SP13	XD_D5	SD_D2	MS_D5
SP14	XD_D6		MS_BS
	XD_D7		

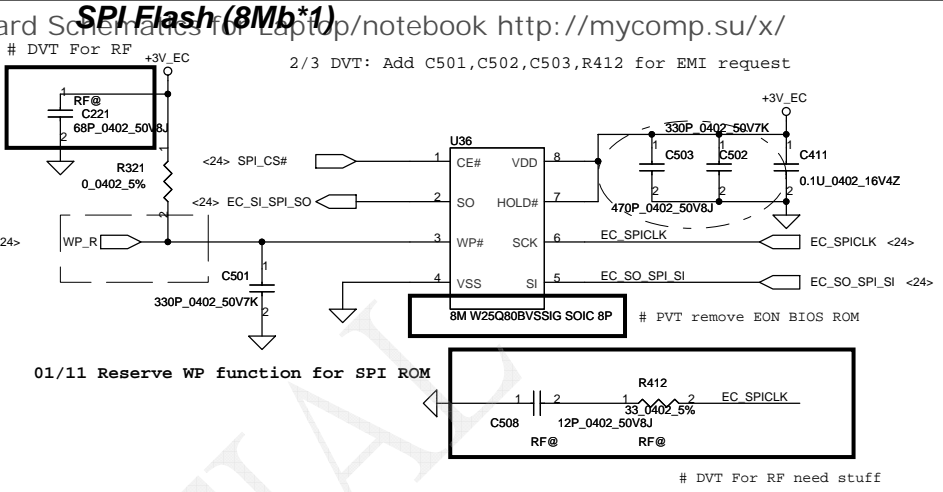
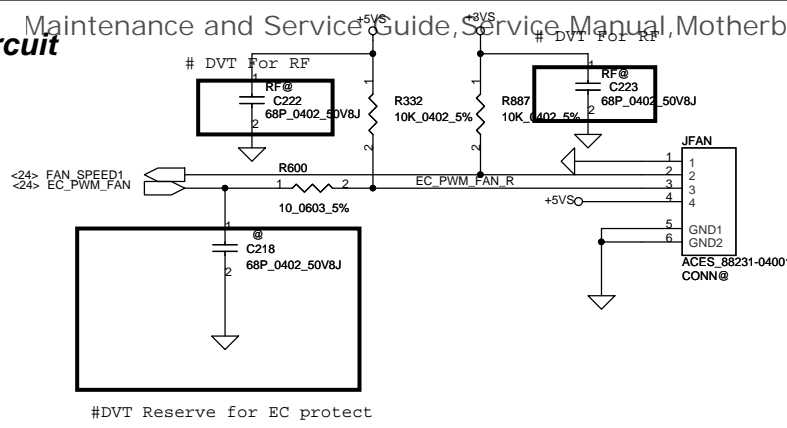


2 in 1 Card Reader



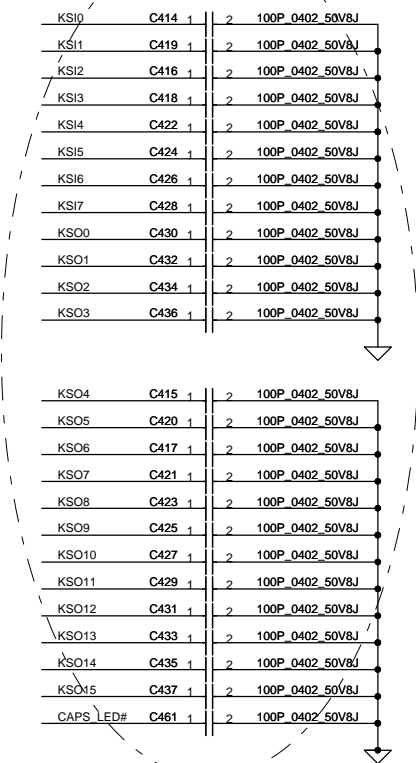
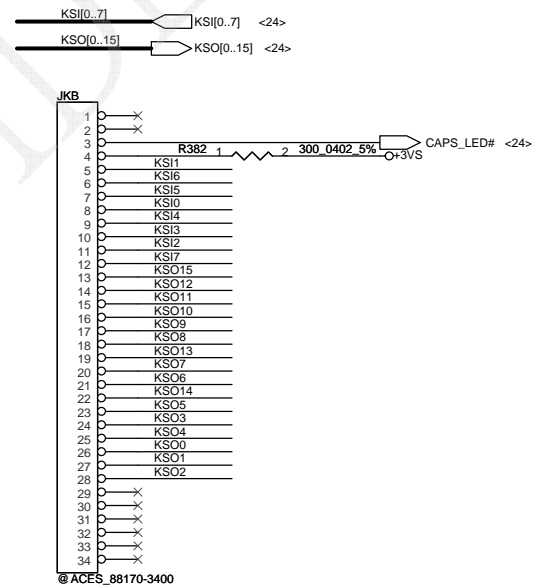
Security Classification		Compal Secret Data		Title	
Issued Date	2010/06/27	Deciphered Date	2011/6/27	Compal Electronics, Inc.	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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 D
				401986	
Date:				Friday, September 02, 2011	Sheet 23 of 36

FAN Control Circuit



LPC Debug Port

KEYBOARD CONN.

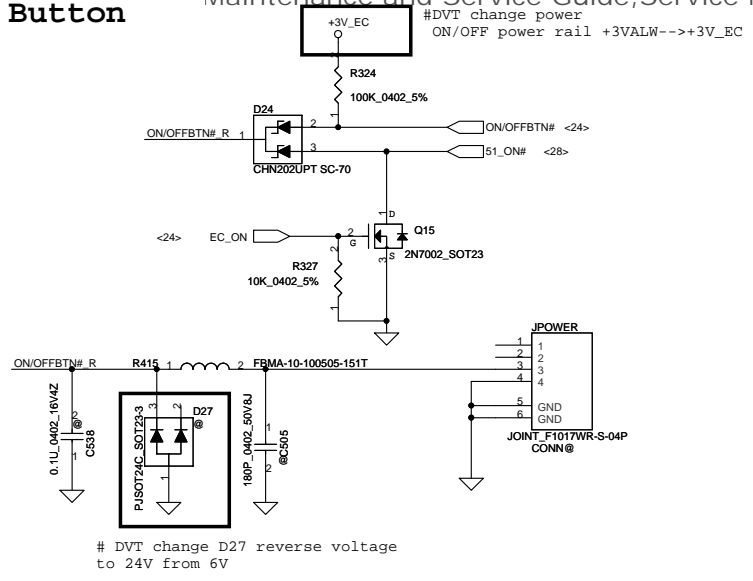


12/18 Follow KB Matrix the same to KSKAA

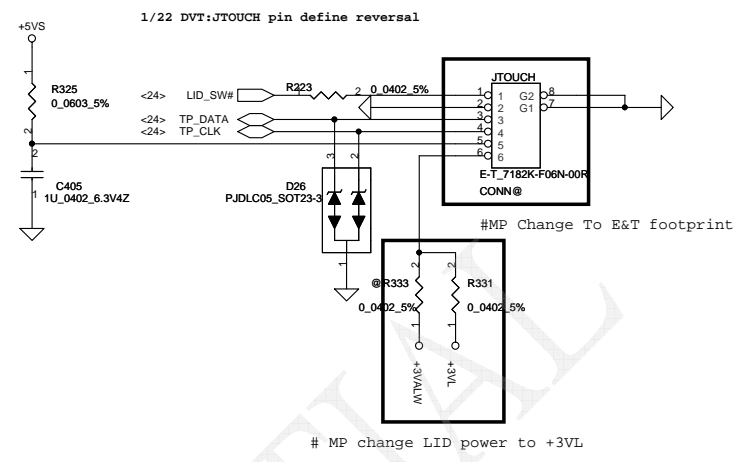
3/4 PVT:Mount C414-C437,C461 for EMI request

Security Classification	Compal Secret Data		Compal Electronics, Inc	
Issued Date	2010/06/27	Deciphered Date	2011/6/27	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 MB A6851 Document Number 401986 Date: Friday, September 02, 2011 Sheet 25 of 36

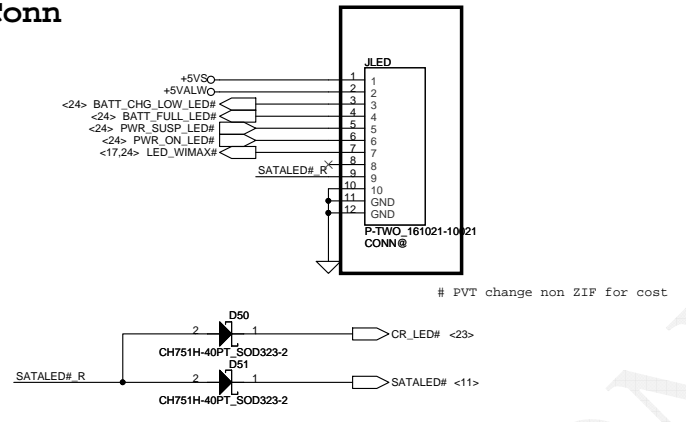
Power Button



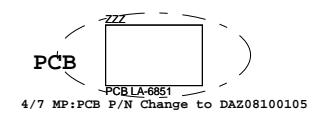
Touch/B Connector



LED Conn

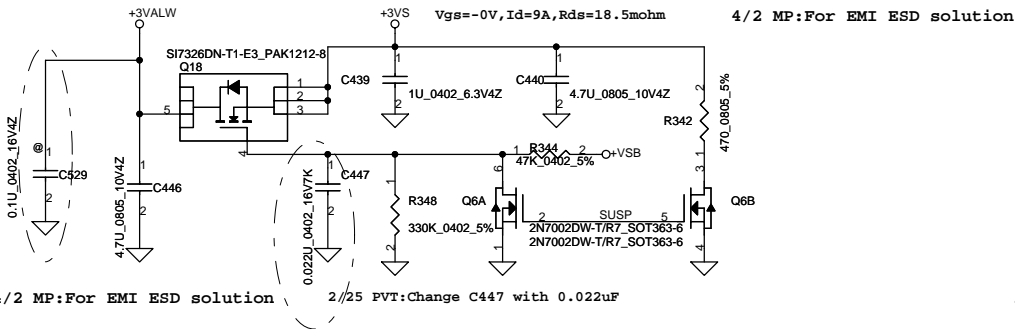


ISPD

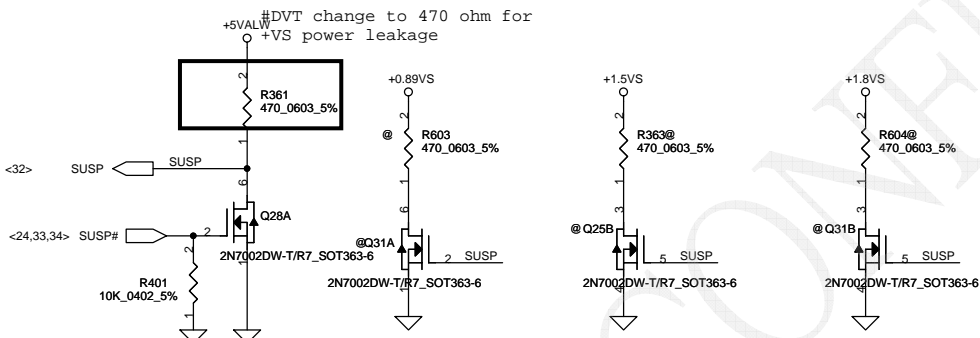
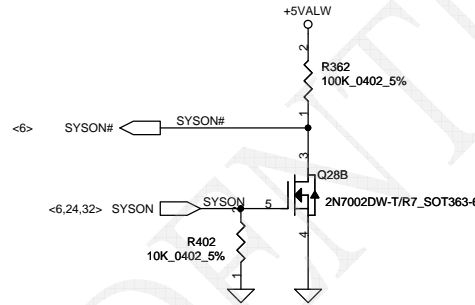
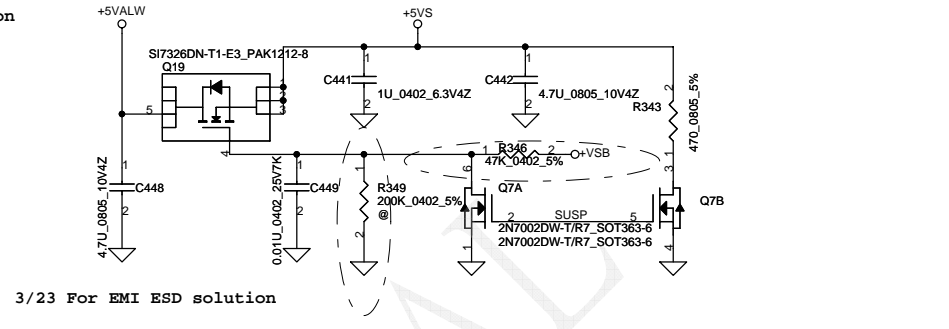


Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/06/27	Deciphered Date	2011/6/27	Title	SCHMATIC MB A6851
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET 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	401986
				Date	Friday, September 02, 2011
				Sheet	26 of 36

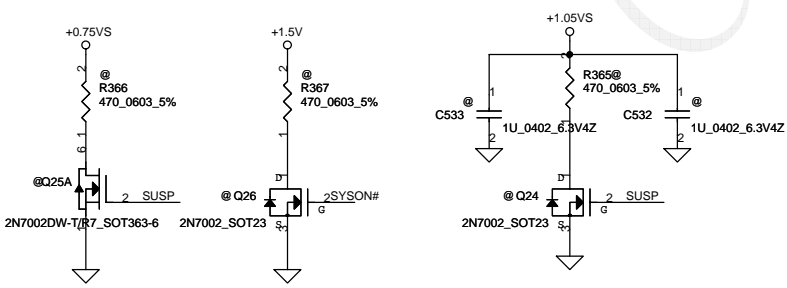
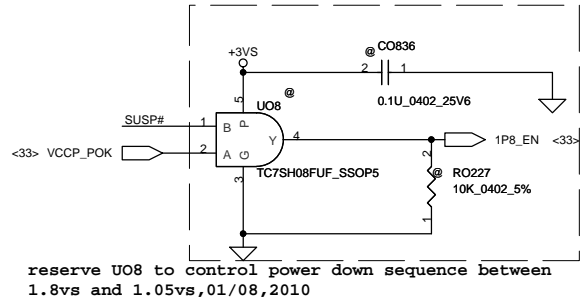
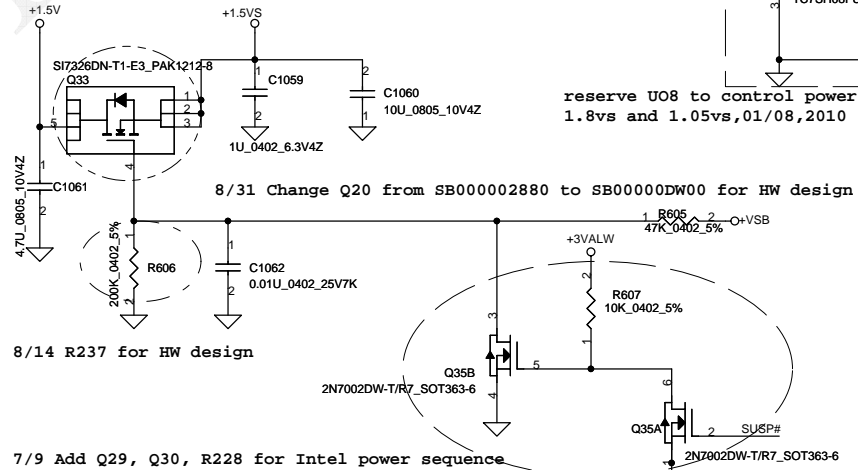
+3VALW TO +3VS



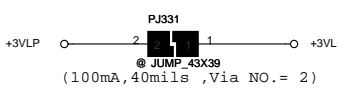
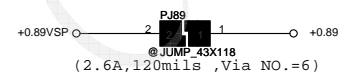
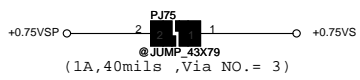
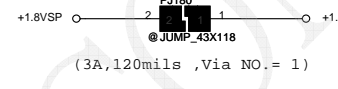
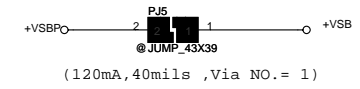
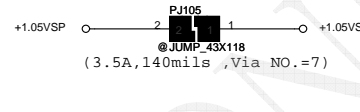
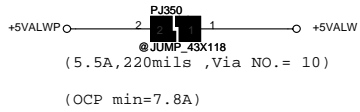
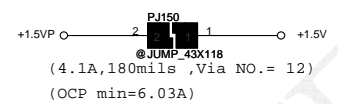
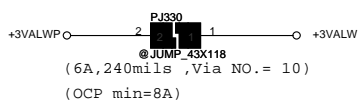
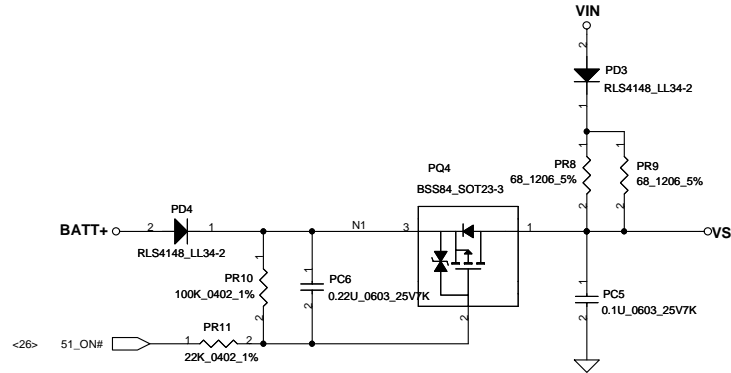
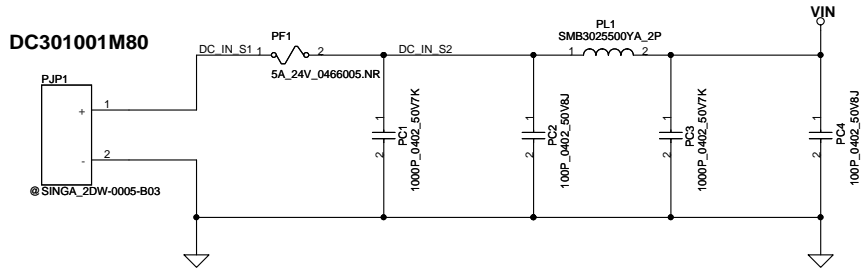
+5VALW TO +5VS



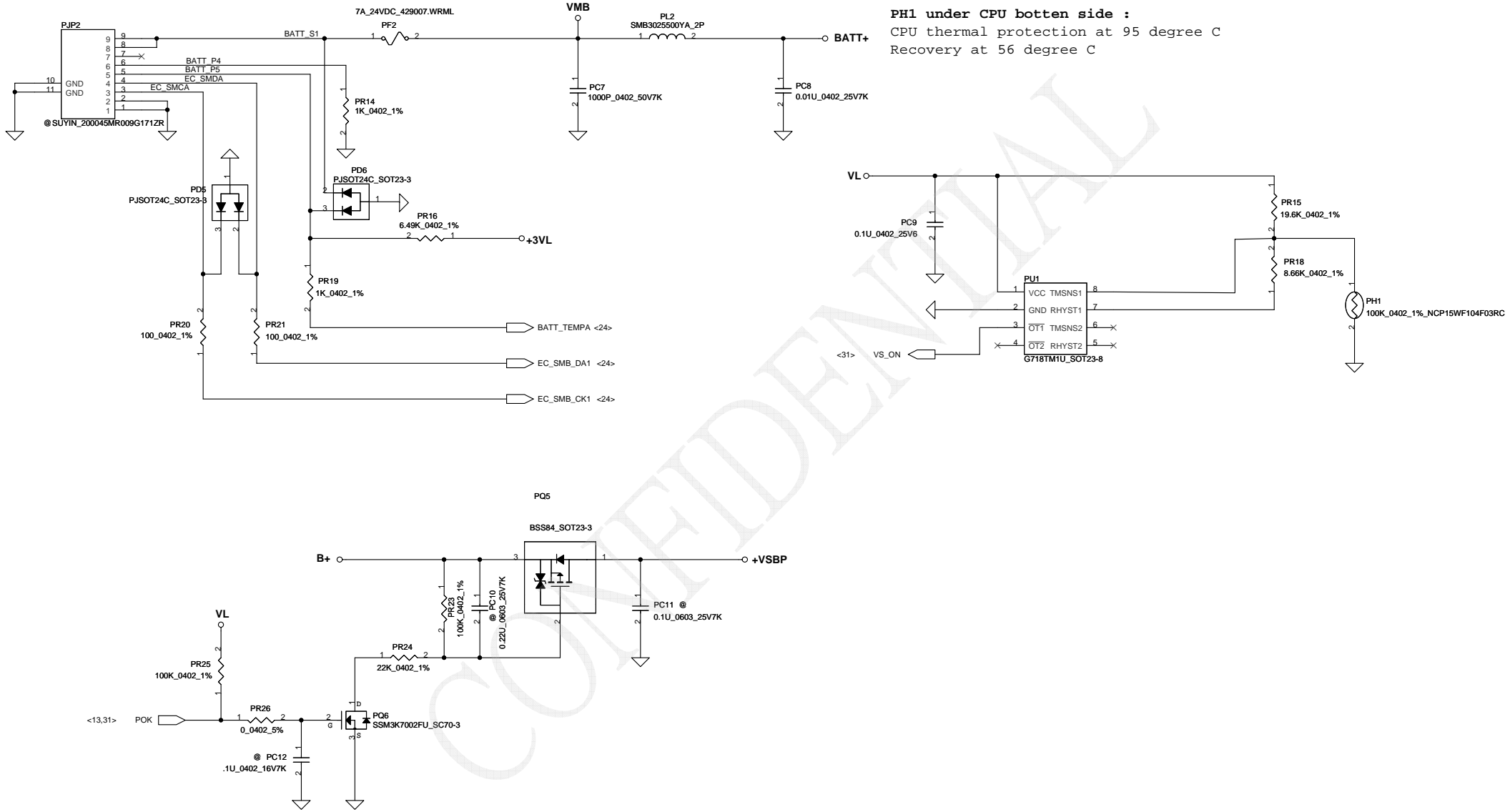
+1.5V TO +1.5VS



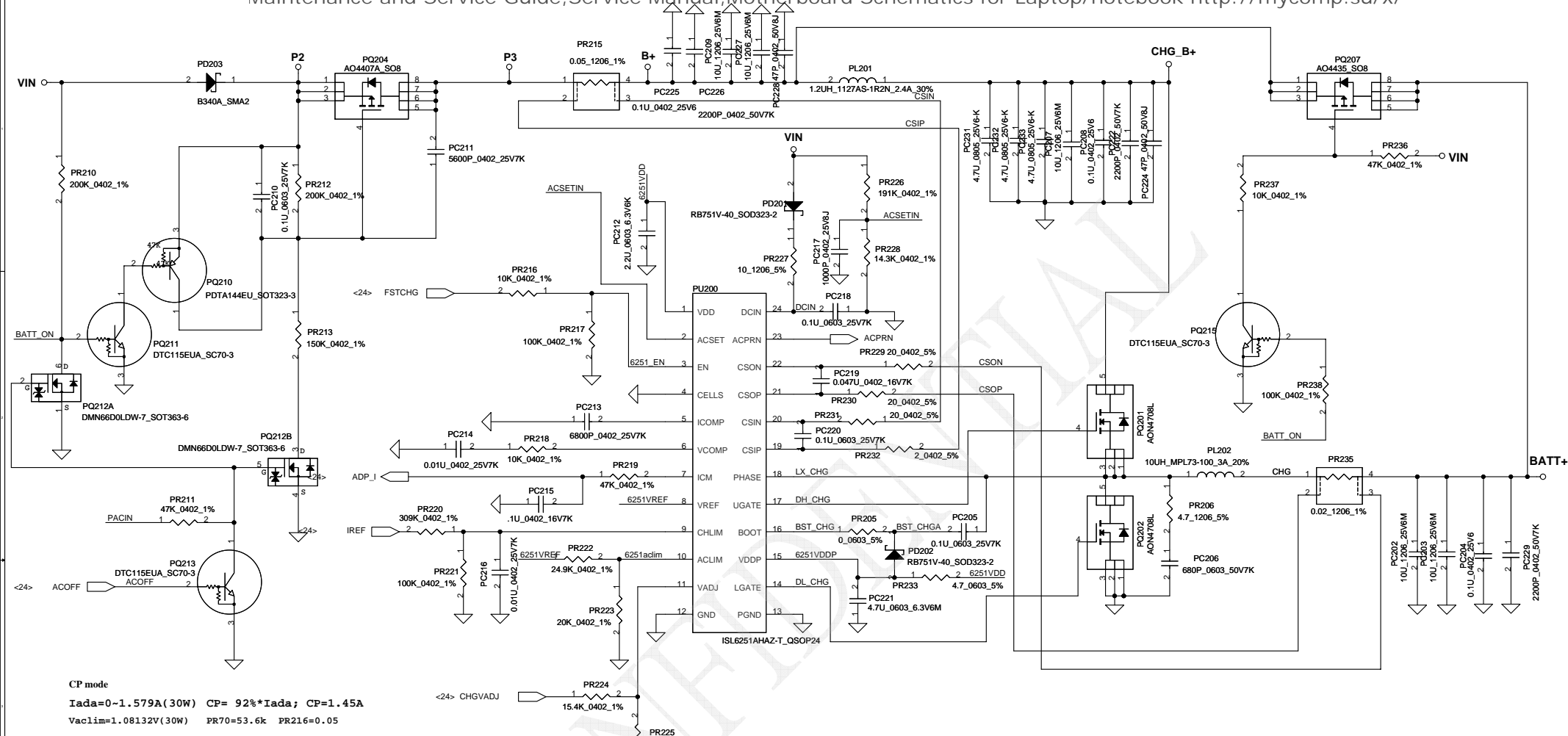
Security Classification		Compal Secret Data		Title	
Issued Date		Deciphered Date		Compal Electronics, Inc.	
2009/04/07		2012/10/21		SCHEMATIC MB A6851	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.					
Size	Document Number	Rev		D	
Custom	401986				
Date:	Friday, September 02, 2011	Sheet	27	of 36	



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2009/06/12	Deciphered Date	2010/06/12	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 MB A6851	
Date: Friday, September 02, 2011				Document Number	Rev D
				401986	
				Sheet	28 of 36



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2009/11/13	Deciphered Date	2009/04/28	Title	SCHEMATIC MB A6851
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	401986
				Date:	Friday, September 02, 2011
				Sheet	29 of 36



CP mode
 $I_{ada} = 0 \sim 1.579A(30W)$ $CP = 92\% \cdot I_{ada}$; $CP = 1.45A$
 $V_{aclim} = 1.08132V(30W)$ $PR70 = 53.6k$ $PR216 = 0.05$

CC=0.25A-2A
IREF=1.636*Icharge
IREF=0.409V-3.272V
VCHLIM need over 95mV

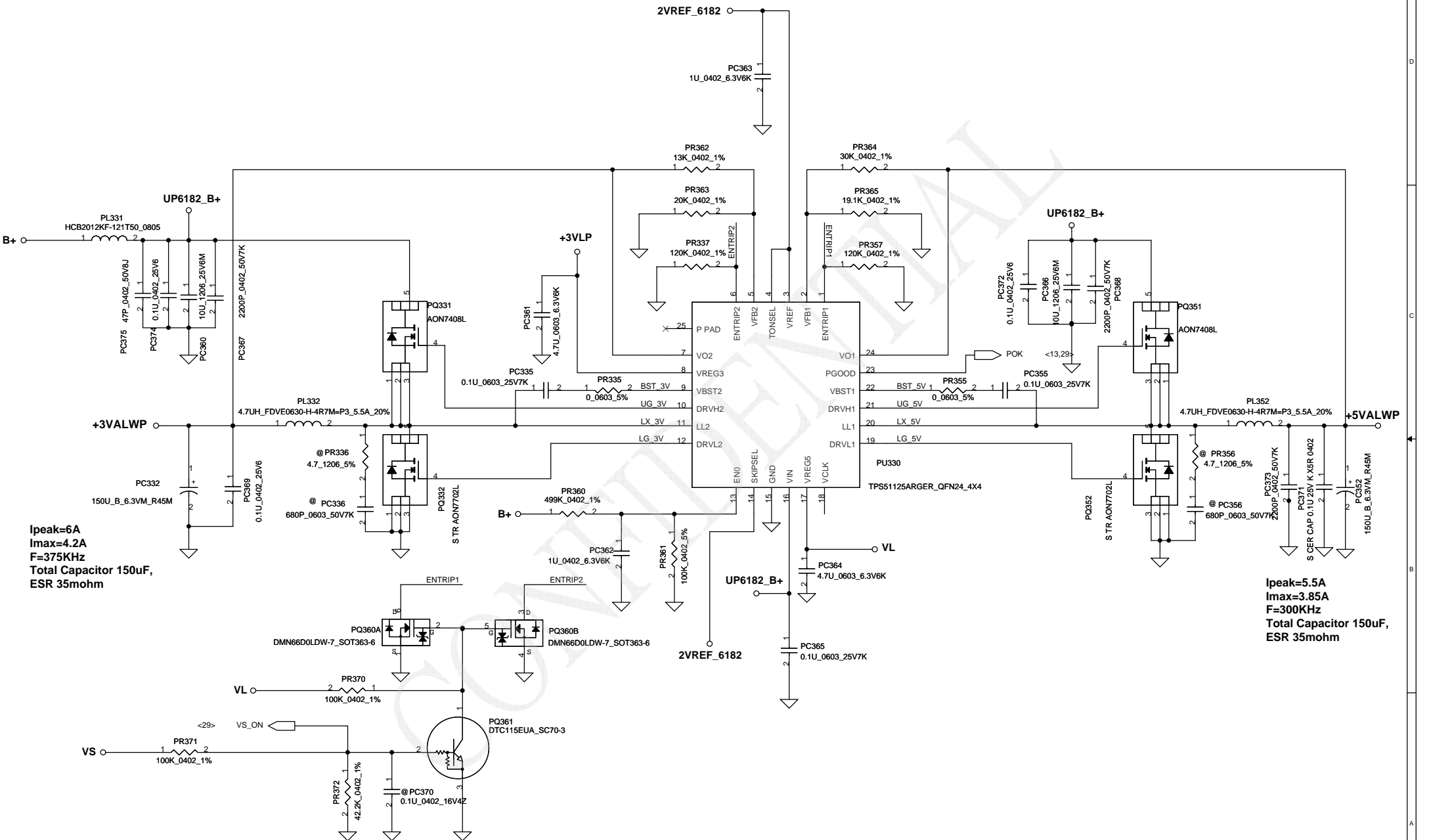
CHGVADJ=(Vcell-4)*9.455	
Vcell	CHGVADJ
4V	0V
4.2V	1.898V
4.35V	3.309V

Ki
 $V_{chlim} = I_{ref} \cdot (PR221 / (PR220 + PR221))$
 $= I_{ref} \cdot (100K / (309K + 100K))$
 $= I_{ref} \cdot 0.2444$
 $I_{charge} = (165mV / PR235) \cdot (V_{chlim} / 3.3V)$
 $= (165m / 20m) \cdot (1 / 3.3V) \cdot I_{ref} \cdot 0.5537$
 $= 0.611 \cdot I_{ref}$
 $I_{ref} = 1.636 \cdot I_{charge} \Rightarrow Ki = 1.636$

Kv
 $R_{internal} = 514K$ $R_{ec} = 3K$ $R_1 = PR224 = 15.4K$ $R_2 = PR225 = 31.6K$
 $R = 514K // 31.6K // (15.4K + 3k) = 11.372K$
 $r = 514K // 514K // 31.6K = 28.14K$
 $V_{cell} = 0.175 \cdot V_{adj} + 3.99V$
 $4.2V = 0.175 \cdot V_{adj} + 3.99V \Rightarrow V_{adj} = 1.2V$
 $V_{adj} = V_{ref} \cdot (R / (R + 514K)) + CALIBRATE \cdot (r / (r + 514K))$
 $1.1483 = CALIBRATE \cdot 0.6046 \Rightarrow CALIBRATE = 1.899$
 $1.899 = (4.2 - (V_{cell} + A \cdot 0.175)) \cdot Kv \Rightarrow Kv = (4.2 - (4.2 + A \cdot 0.175)) \cdot Kv$
 $A = V_{ref} \cdot (R / (R + 514K)) = 0.052$
 $Kv = 9.455$

Vin Detector
High 18.089V
Low 17.44V

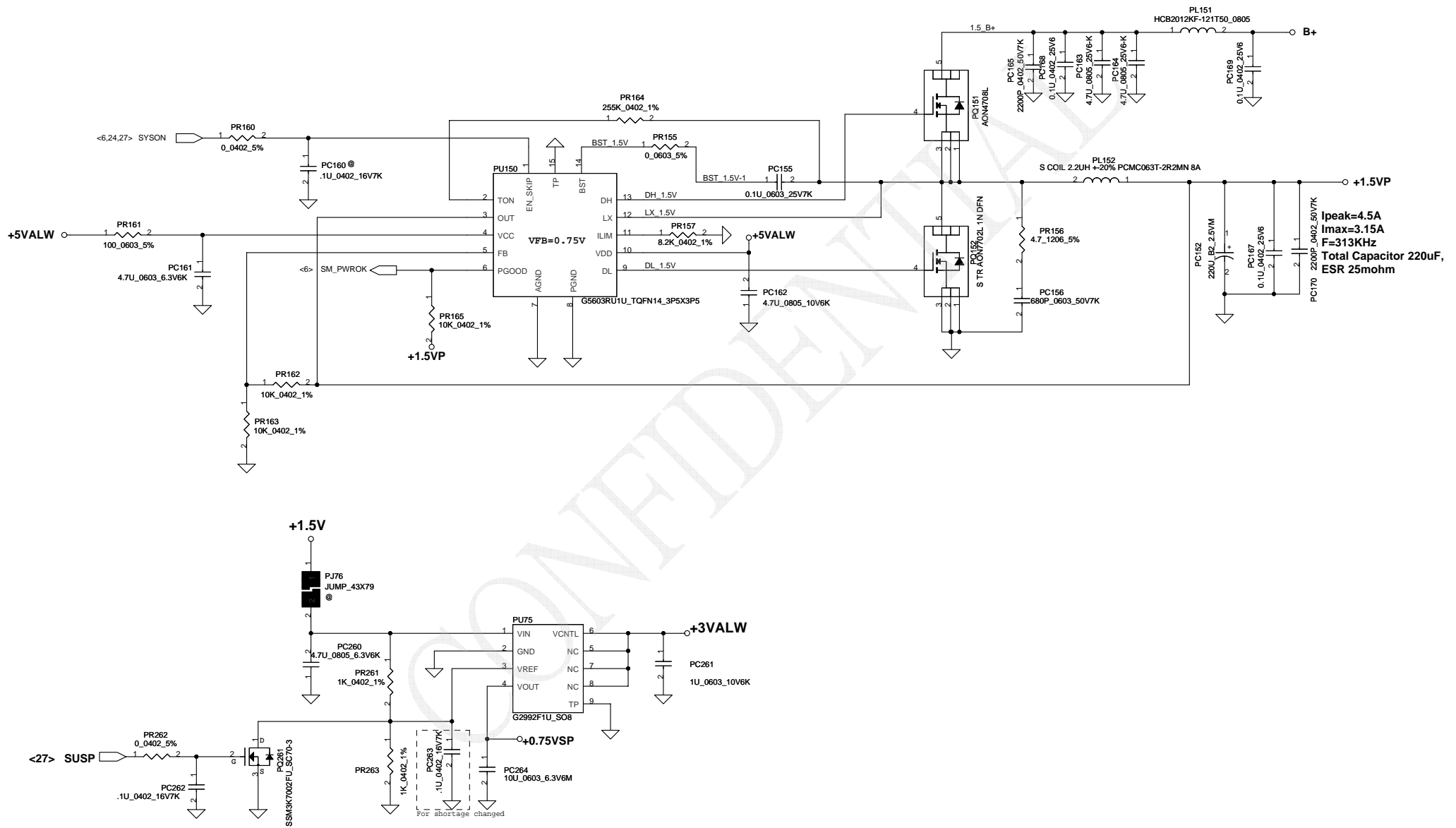
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/01/25	Deciphered Date	2009/04/28	Title	SCHEMATIC MB A6851
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET 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	401986	Rev	D	Date:	Friday, September 02, 2011
Sheet	30	of	36		



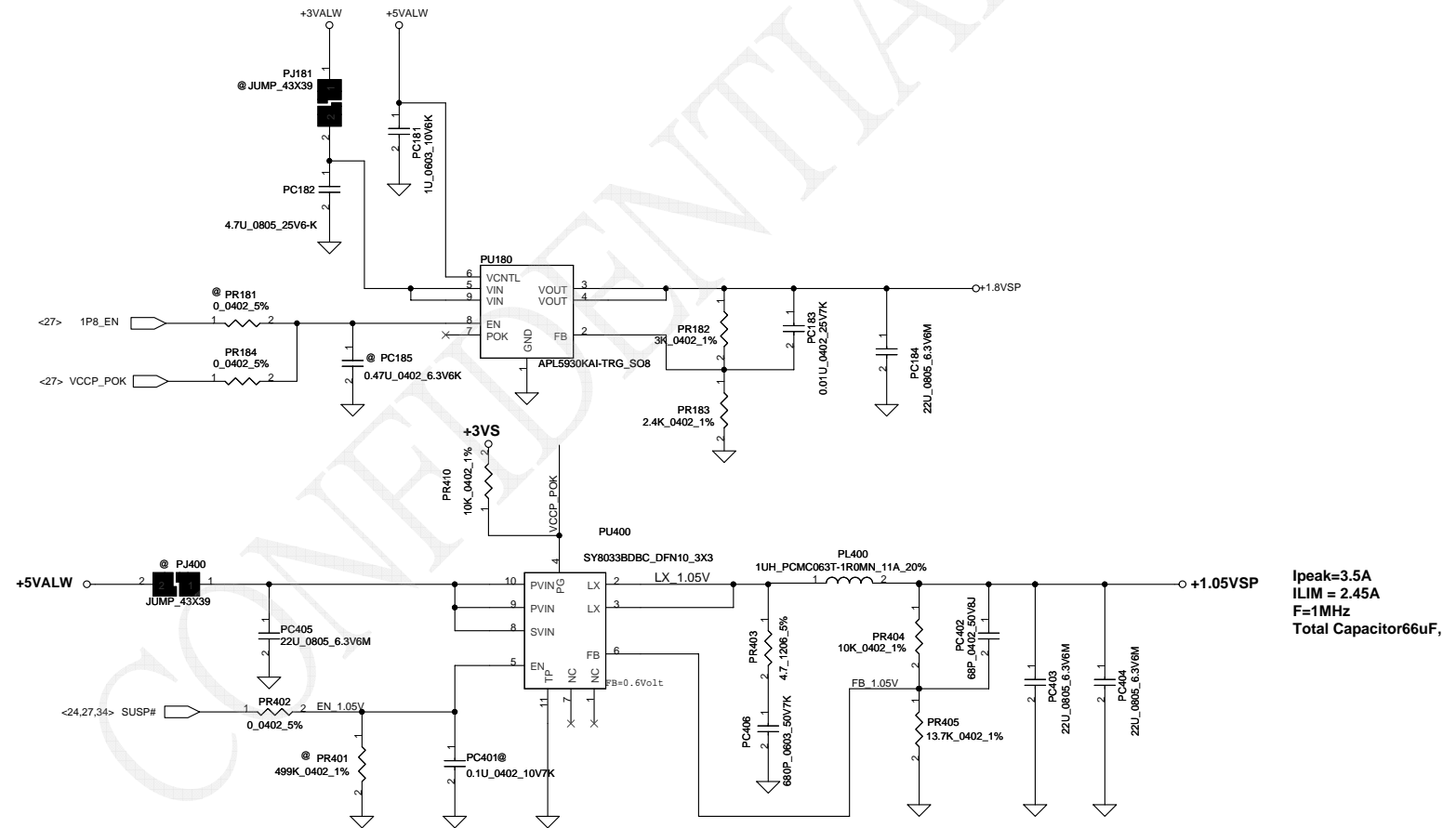
Ipeak=6A
I_{max}=4.2A
F=375KHz
Total Capacitor 150uF,
ESR 35mohm

Ipeak=5.5A
I_{max}=3.85A
F=300KHz
Total Capacitor 150uF,
ESR 35mohm

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2009/11/13	Deciphered Date	2009/04/28	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 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 D
				401986	
Date:	Friday, September 02, 2011	Sheet	31	of	36

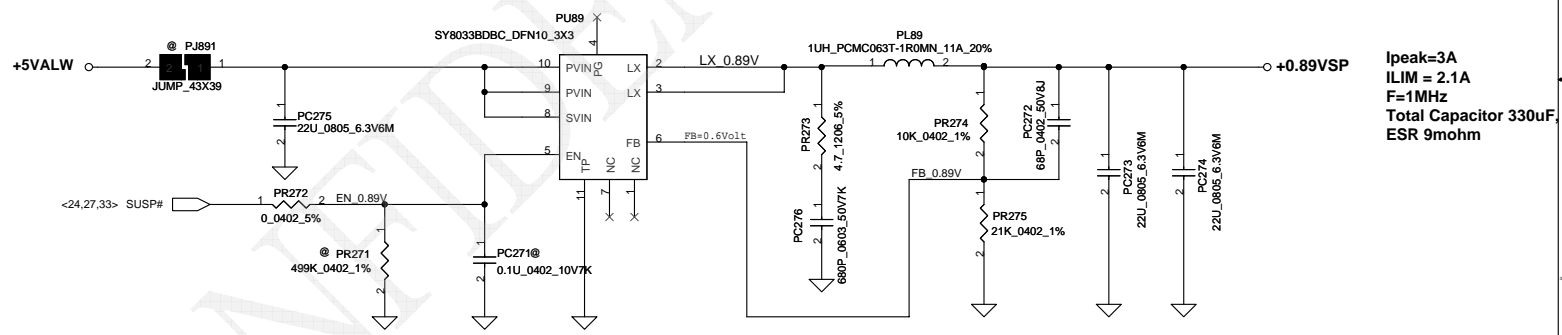


Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/01/25	Deciphered Date	2009/04/28	Title	SCHEMATIC MB A6851
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET 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.					
Customer	Document Number	401986	Rev	D	
Date:	Friday, September 02, 2011	Sheet	32	of	36



Pin 1 define same with Pin 2 & Pin 3 that just for SY8035 ,
 SY8035 is for 5A loading , let LX shape can bigger!!

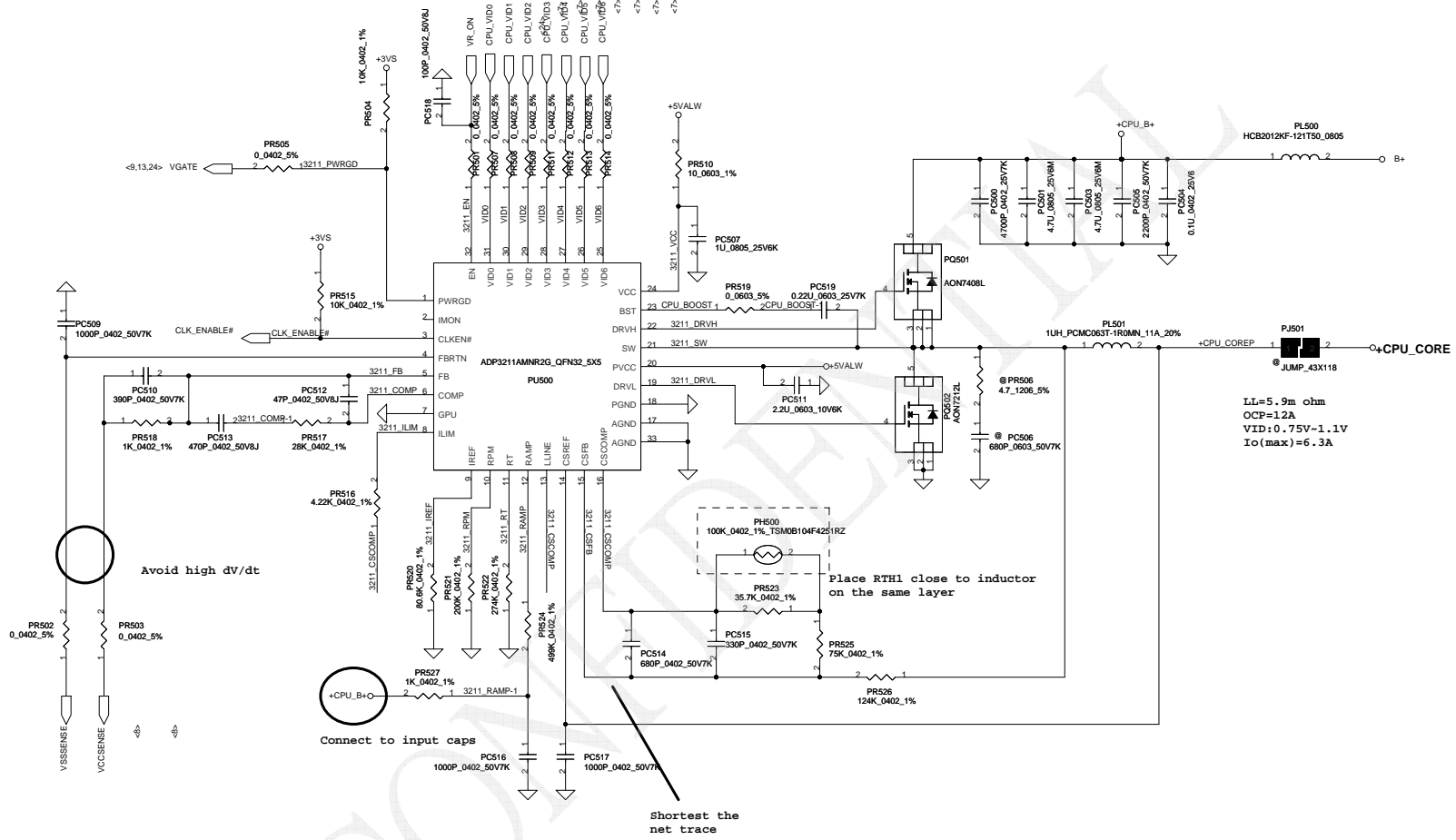
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2010/01/25	Deciphered Date	2009/04/28	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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 MB A6851	
Customer	Document Number	Rev	D		
	401986				
Date:	Friday, September 02, 2011	Sheet	33	of	36



Ipeak=3A
ILIM = 2.1A
F=1MHz
Total Capacitor 330uF,
ESR 9mohm

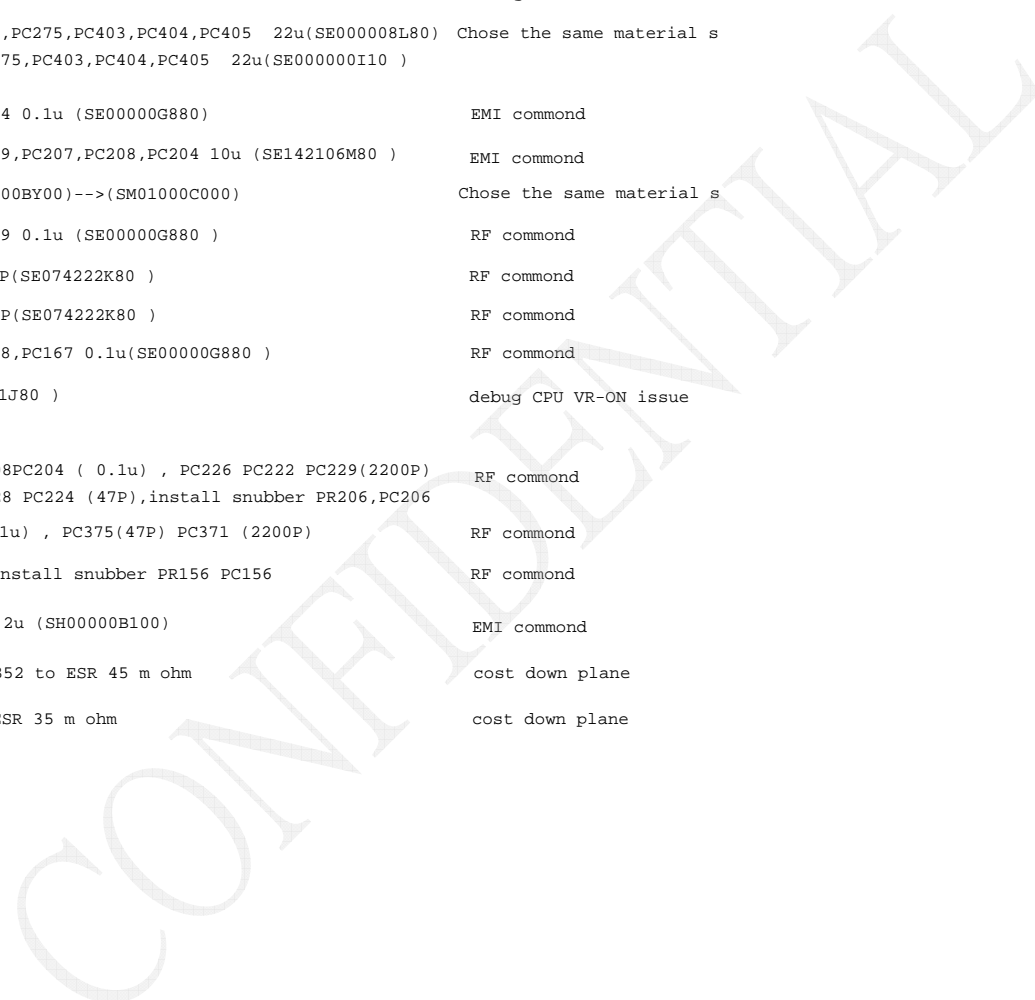
Pin 1 define same with Pin 2 & Pin 3 that just for SY8035 ,
SY8035 is for 5A loading , let LX shape can bigger!!

Security Classification	Compal Secret Data			Compal Electronics, Inc.	
Issued Date	2010/01/25	Deciphered Date	2009/04/28	Title	SCHMATIC MB A6851
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	Document Number	Date			Rev D
	401986	Friday, September 02, 2011			36



Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2009/12/25	Deciphered Date	2012/12/25	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 MB A6851
Size	Document Number	401986	Rev	D
Date:	Friday, September 02, 2011	Sheet	35	of 36

2010/8/23(DVT)	P32 +1.5VP/+0.75VSP	Change PU75 UP7711(SA00003XI00) -->G2992(SA00000VE80)	UPI had patent issue
2010/8/23(DVT)	P30 Charger	Change PU200 G5209(SA00003TK00) -->ISL6251(SA00001EP80)	G5209 had leakage issue
2010/8/23(DVT)	P31 +5VALWP/+3VALWP	Change PU330 UP6182(SA000043H00) -->TI51125A(SA000020C80)	UPI had patent issue
2010/8/23(DVT)	P30 Charger	add PR247(SD034100280) PC223(SE076104K80) PR246(SD034309380) PR248(SD034470280)	Support SA ECO unit
2010/8/23(DVT)	P35 CPU_CORE	Change PR526 174K (SD034174380) -->124K(SD034124380)	debug CPU load issue
2010/8/23(DVT)	All snuber	Change PC273,PC274,PC275,PC403,PC404,PC405 22u(SE000008L80) -->PC273,PC274,PC275,PC403,PC404,PC405 22u(SE000000I10)	Chose the same material s
2010/8/23(DVT)	P30 Charger	Install PC222 PC224 0.1u (SE00000G880)	EMI commond
2010/8/23(DVT)	P30 Charger	Install PC227,PC209,PC207,PC208,PC204 10u (SE142106M80)	EMI commond
2010/8/23(DVT)	P35 CPU_CORE	Change PL500(SM01000BY00)-->(SM01000C000)	Chose the same material s
2010/8/23(DVT)	P31 +5VALWP/+3VALWP	Install PC371,PC369 0.1u (SE00000G880)	RF commond
2010/8/23(DVT)	P31 +5VALWP/+3VALWP	Install PC367 2200P(SE074222K80)	RF commond
2010/8/23(DVT)	P32 +1.5VP	Install PC165 2200P(SE074222K80)	RF commond
2010/8/23(DVT)	P32 +1.5VP	Install PC169,PC168,PC167 0.1u(SE00000G880)	RF commond
2010/8/23(DVT)	P35 CPU_CORE	add PC518 (SE071101J80)	debug CPU VR-ON issue
2010/9/21(PVT)	P30 Charger	Install PC225 PC208PC204 (0.1u) , PC226 PC222 PC229(2200P) Add PC208 add PC228 PC224 (47P),install snubber PR206,PC206	RF commond
2010/9/21(PVT)	P31 +5VALWP/+3VALWP	Add PC372 PC374(0.1u) , PC375(47P) PC371 (2200P)	RF commond
2010/9/21(PVT)	P32 +1.5VP	Add PC170(2200P) install snubber PR156 PC156	RF commond
2010/10/8(pre-MP)	P30 Charger	Change PL210 to 1.2u (SH00000B100)	EMI commond
2010/10/08(Pre-MP)	P31 +5VALWP/+3VALWP	Change PC332 & PC352 to ESR 45 m ohm	cost down plane
2010/10/08(Pre-MP)	P32 +1.5VP	Change PC152 to ESR 35 m ohm	cost down plane



Security Classification		Compal Secret Data		Title	
Issued Date	2009/10/02	Deciphered Date	2010/10/02	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 D
				401986	
Date:	Friday, September 02, 2011	Sheet	44	of	36