Compal confidential

Schematics Document

Mobile Merom uFCPGA with Intel Crestline_PM+ICH8-M core logic

IBT00 LA-3261P UMA

2007-03-28 REV:1A (MV2)

機密 等級 硬體二部 產出人員 產出日期 解密日期

Security Classification	Compal Secret Data		
Issued Date	2006/02/13	Deciphered Date	2006/03/10

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Title: *Cover Sheet*

Size: Custom | Document Number: *LA-3261P UMA* | Rev: 0.4

Date: Wednesday, March 28, 2007 | Sheet 1 of 55

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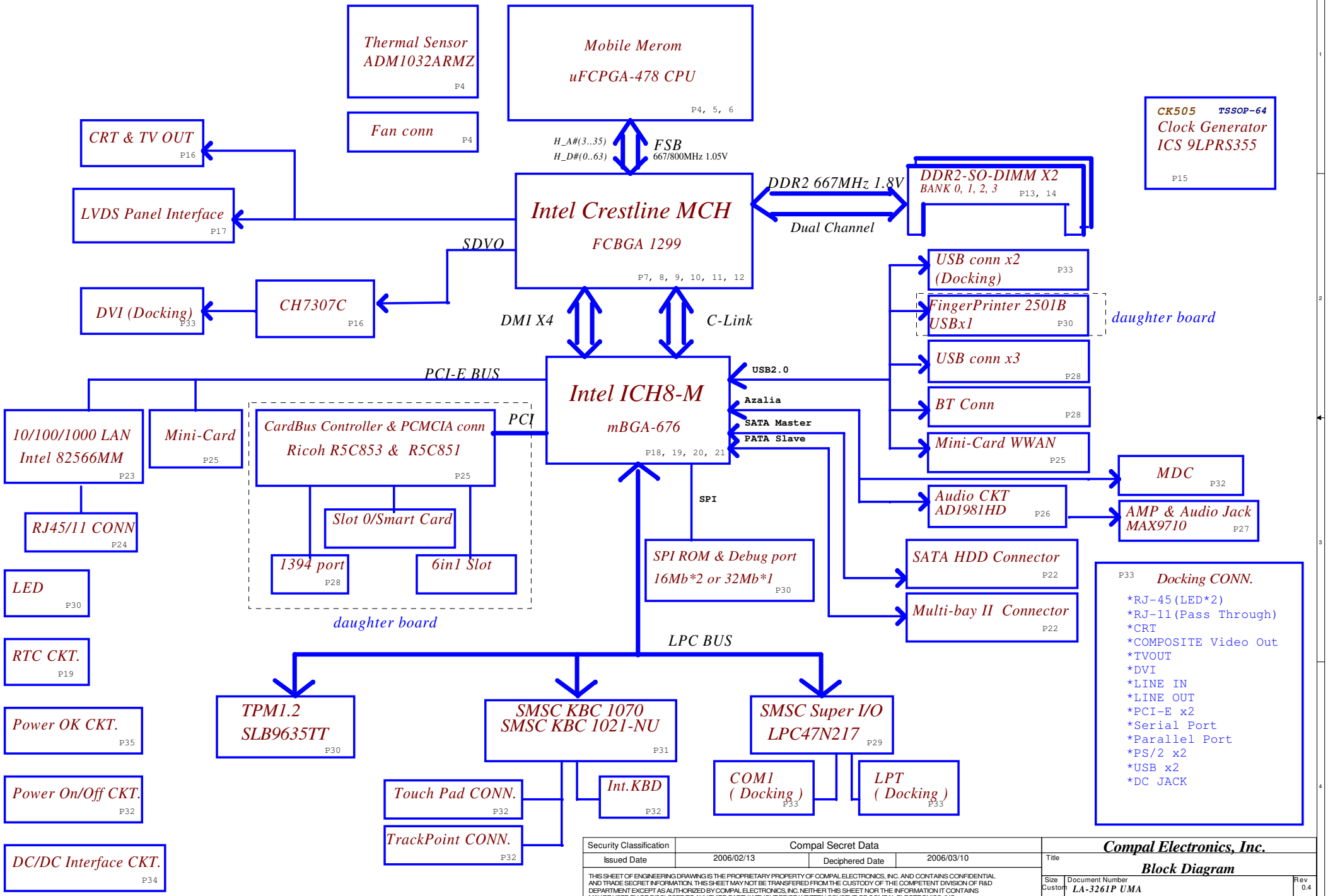
File Name : LA-3261P

Chimay UMA



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Title: Block Diagram

Size	Document Number	Rev
Custom	LA-3261P UMA	0.4

Date: Tuesday, March 27, 2007 Sheet 2 of 55

Voltage Rails

O MEANS ON X MEANS OFF

power plane / State	+B LDO3 LDO5	+5VALW +3VALW	+1.8V +5V +0.9V	+5VS +3VS +2.5VS +1.8VS +1.5VS +1.25VS +VGA_CORE +CPU_CORE +VCCP	+3VM +1.05VM +1.25VM	CLOCK
S0	O	O	O	O	O	O
S3/M1	O	O	O	X	O	O
S3	O	O	O	X	O	O
S5 S4/AC	O	O	X	X	O	O
S5 S4/ Battery only	O	X	X	X	X	X
S5 S4/AC & Battery don't exist	X	X	X	X	X	X

PCI Devices

EXTERNAL	IDSEL#	REQ/GNT#	PIRQ
CARD BUS & 1394	AD22	2	C,D,E,G

DMA Channel	Device
DMA0	MODEM / LAN
DMA1	ECP
DMA2	~~FLOPPY DISK~~
DMA3	AUDIO
DMA4	(Cascade)
DMA5	Unused
DMA6	Unused
DMA7	Unused

USB PORT#	Destination
0	Walk-up0 (Right side)
1	Fingerprint
2	Reserve
3	WWAN
4	Walk-up1 (Left Side)
5	Walk-up2 (Left Side)
6	Bluetooth
7	Reserve
8	Docking
9	Docking

IRQ	Device
0	System Timer
1	Keyboard
2	N/A
3	Serial port (COM2),LAN/Modem
4	Serial port (COM1)
5	Audio/VGA
6	~~Floppy~~
7	Parallel port
8	System CMOS/Real-time clock
9	Microsoft ACPI
10	N/A,Momem,LAN
11	Mass strorage control/ PCI simple communication control
12	synactic PS2 port GlidePAD
13	Numeric Data Process
14	Primary IDE interface,HDD
15	Secondary IDE innterface,CD-ROM
16	Mobile Intel Crestline Express Chipset Family Microsoft UAA Bus Driver for High Definition Audio Intel 82801H (ICH8 Family) PCI Express Root Port -27D0 Broadcom NetXtreme Gigabit Ethernet
17	Intel 82801H (ICH8 Family)PCI Express Root Port - 27D2 Broadcom 802.11b/g WLAN Intel 82801H (ICH8 Family)USB Universal Host Controll
18	Intel 82801H (ICH8 Family)USB Universal Host Controll Ricoh R5C853 Cardbus Control Ricoh R5C853 Integrates FlashMedia Control Ricoh R5C853 Gemcore based SmartCard Control
19	Intel 82801H (ICH8 Family)PCI Express Root Port - 27D6 Intel 82801H (ICH8 Family)USB Universal Host Controll
20	Intel 82801H (ICH8 Family)USB Universal Host Controll Intel 82801H (ICH8 Family)USB2 Enhanced Host Controll
21	Intel 82801H (ICH8 Family)USB Universal Host Controll
22	SDA Standard Compliant SD Host Controller
23	HP Mobile Data Protection Sensor

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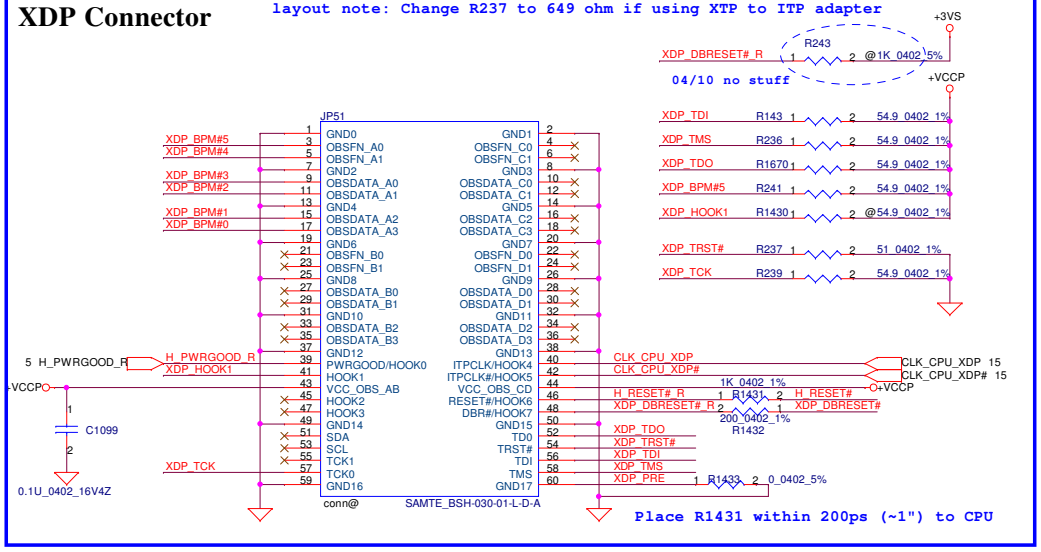
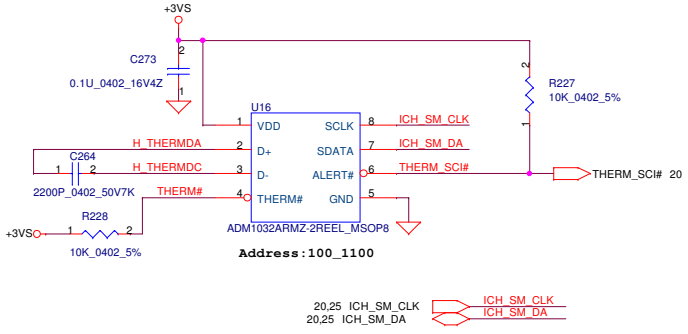
Title	Notes List
Size: Custom	Document Number: LA-3261P UMA
Rev	0.4
Date: Tuesday, March 27, 2007	Sheet 3 of 55

XDP Connector

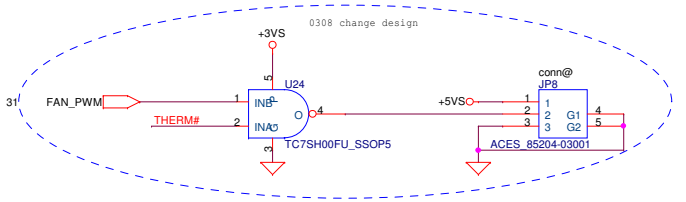
layout note: Change R237 to 649 ohm if using XTP to ITP adapter

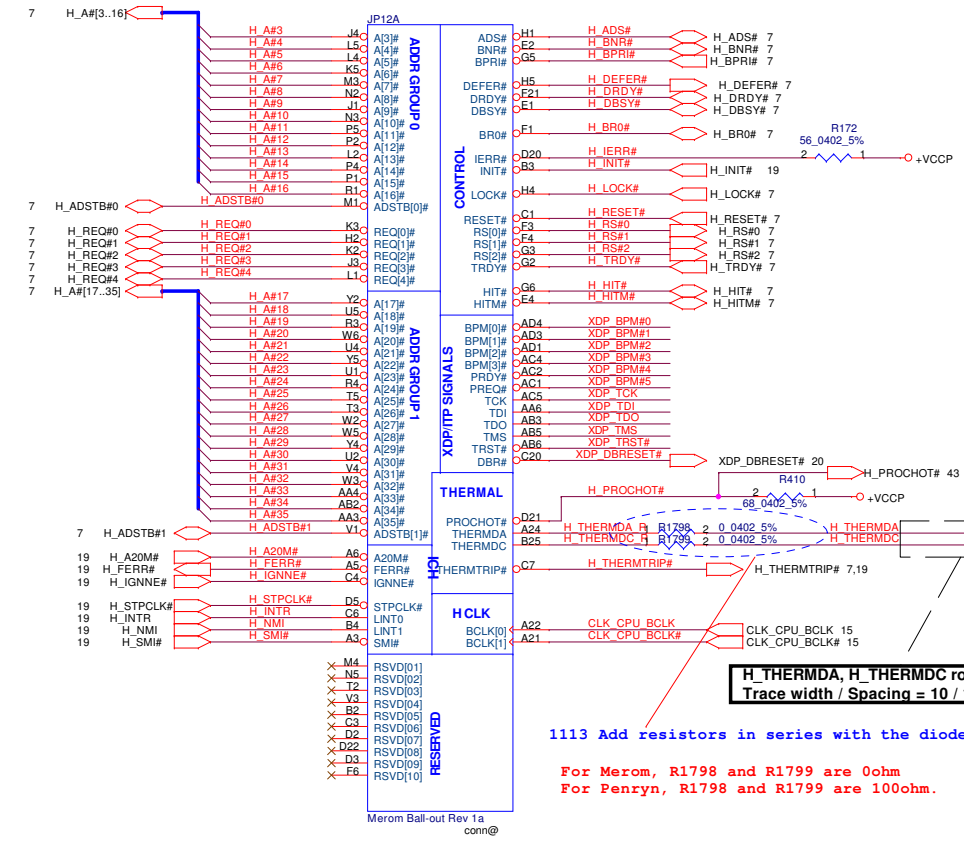


Thermal Sensor ADM1032ARMZ



PWM Fan Control circuit

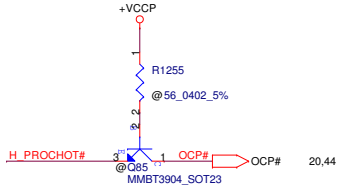




H_THERMDA, H_THERMDC routing together,
Trace width / Spacing = 10 / 10 mil

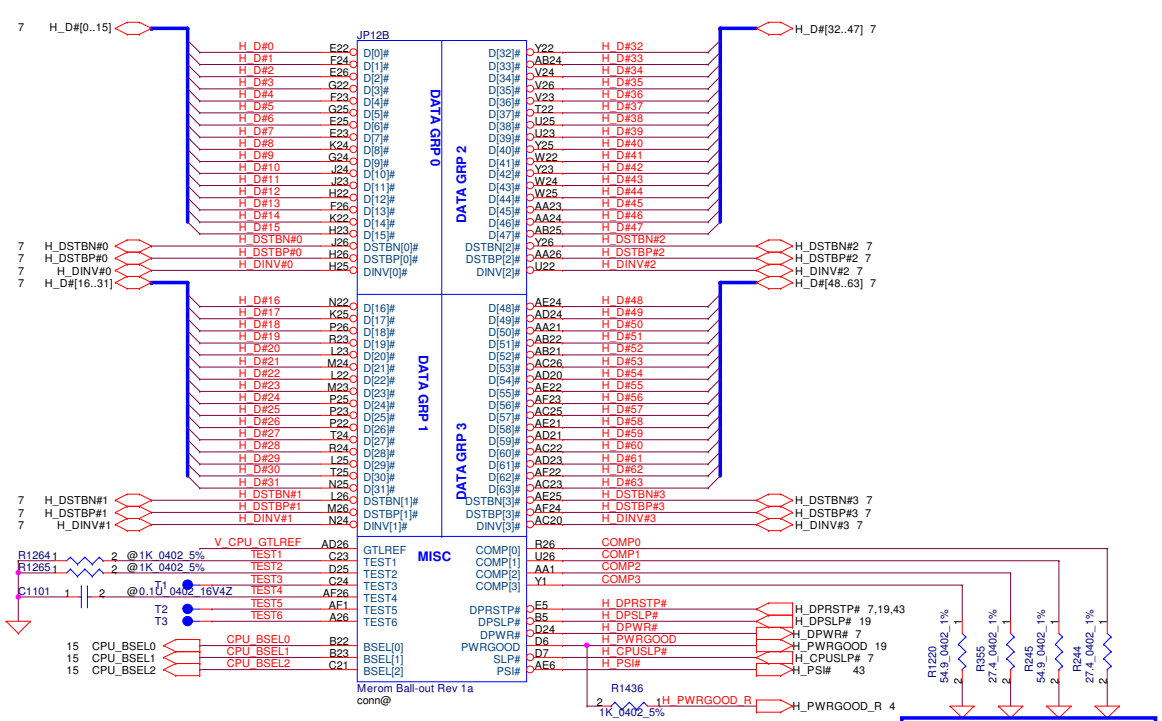
1113 Add resistors in series with the diode signals going to ADM1032.

For Merom, R1798 and R1799 are 0ohm
For Penryn, R1798 and R1799 are 100ohm.



Security Classification	Compal Secret Data		
Issued Date	2006/02/13	Deciphered Date	2006/03/10

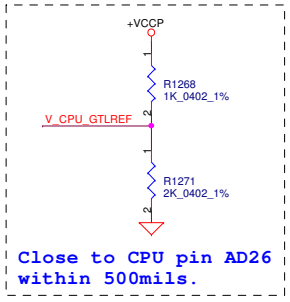
Title	Compal Electronics, Inc.		
	Merom(1/3)-AGTL+/XDP		
Size: Custom	Document Number: LA-3261P UMA		Rev: 0.4
Date: Tuesday, March 27, 2007	Sheet 4 of 55		



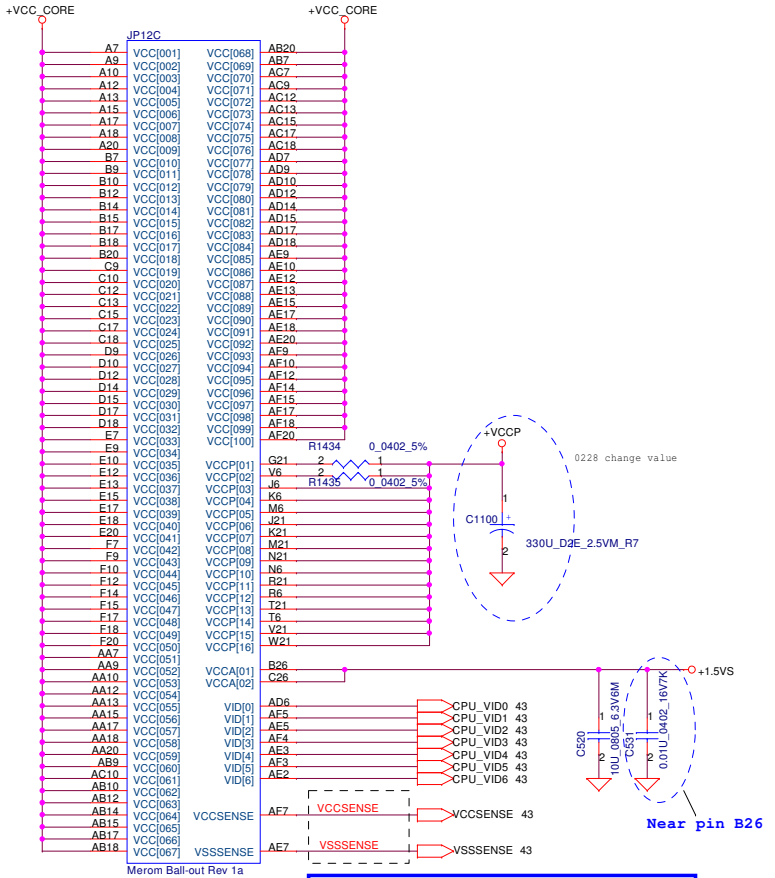
layout note: Route TEST3 & TEST5 traces on ground referenced layer to the TPs

CPU_BSEL	CPU_BSEL2	CPU_BSEL1	CPU_BSEL0
166	0	1	1
200	0	1	0

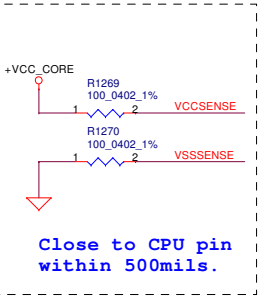
Resistor placed within 0.5" of CPU pin.Trace should be at least 25 mils away from any other toggling signal.
COMP[0,2] trace width is 18 mils. COMP[1,3] trace width is 4 mils.



Close to CPU pin AD26 within 500mils.



Length match within 25 mils. The trace width/space/other is 20/7/25.



Close to CPU pin within 500mils.

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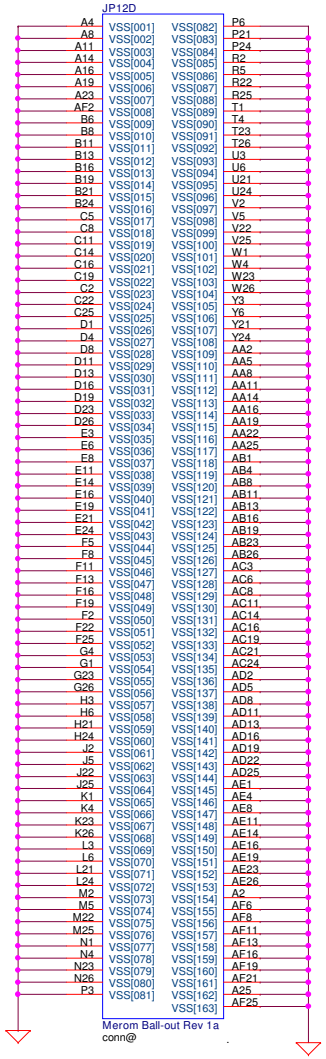
Issued Date	2006/02/13	Deciphered Date	2006/03/10

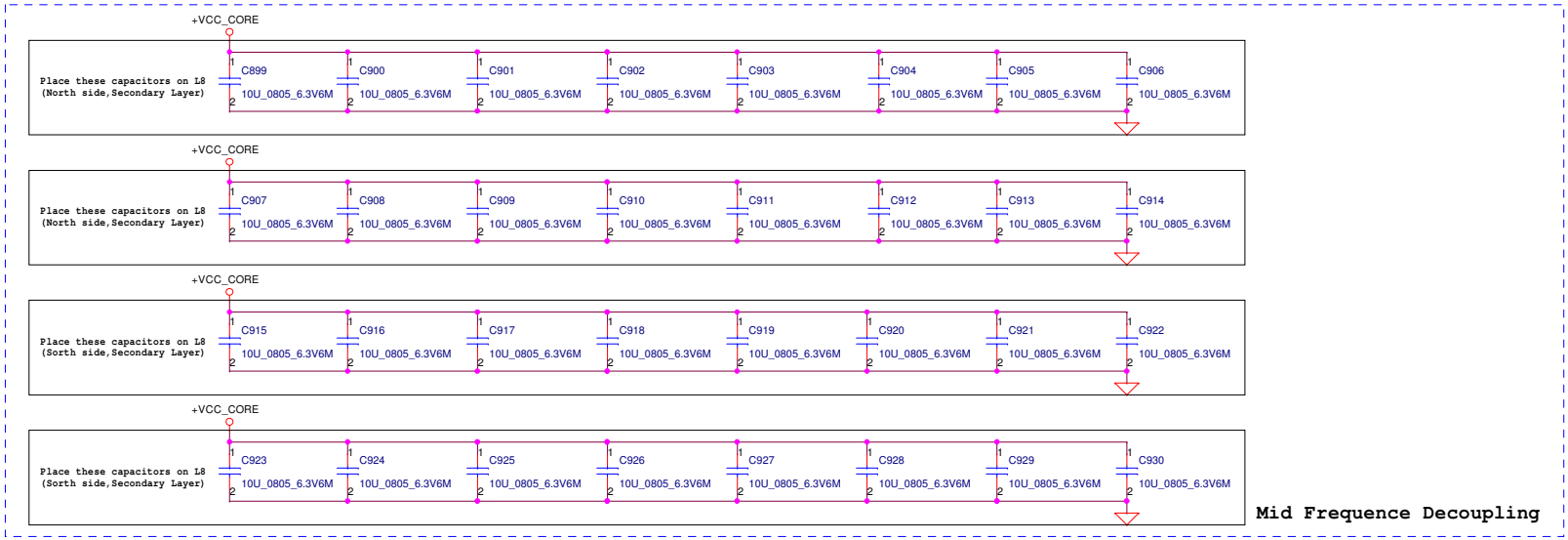
Compal Electronics, Inc.

Title: Merom(2/3)-AGTL+/PWR

Size: Custom | Document Number: LA-3261P UMA | Rev: 0.4

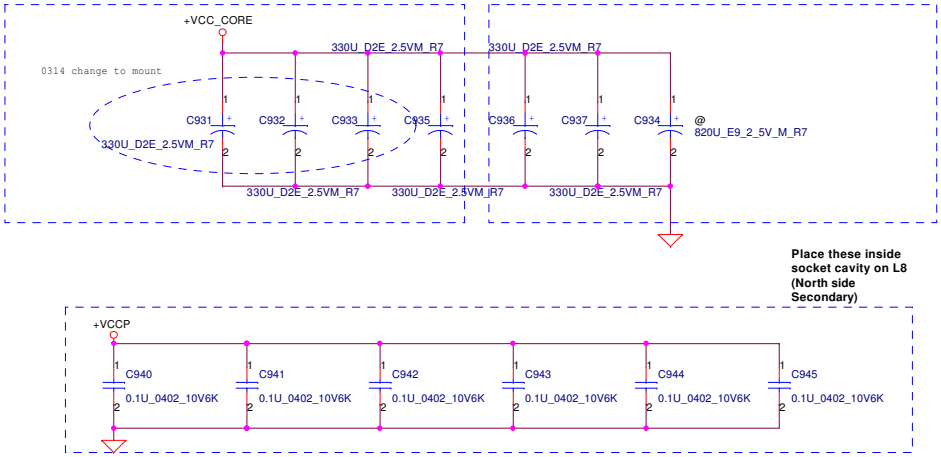
Date: Tuesday, March 27, 2007 | Sheet 5 of 55





Near CPU CORE regulator

ESR <= 1.5m ohm
Capacitor > 1980uF



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

Security Classification	Compal Secret Data		
Issued Date	2006/02/13	Deciphered Date	2006/03/10

Compal Electronics, Inc.		
Title: Merom(3/3)-GND&Bypass		
Size: Custom	Document Number: LA-3261P UMA	Rev: 0.4
Date: Tuesday, March 27, 2007	Sheet 6 of 55	

For Crestline: 20ohm
For Calero: 80.6ohm

layout note:

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

Layout Note:
H_RCOMP / H_VREF / H_SWNG
trace width and spacing is 10/20

within 100 mils from NB

Near B3 pin

Layout Note:
V_DDR_MCH_REF
trace width and
spacing is 20/20.

0612 add

1128 Install R1739

1226 Add C

0621 add CLK and DAT for DVI

04/10 change size

0830 Add pull-up and pull-down resistor.

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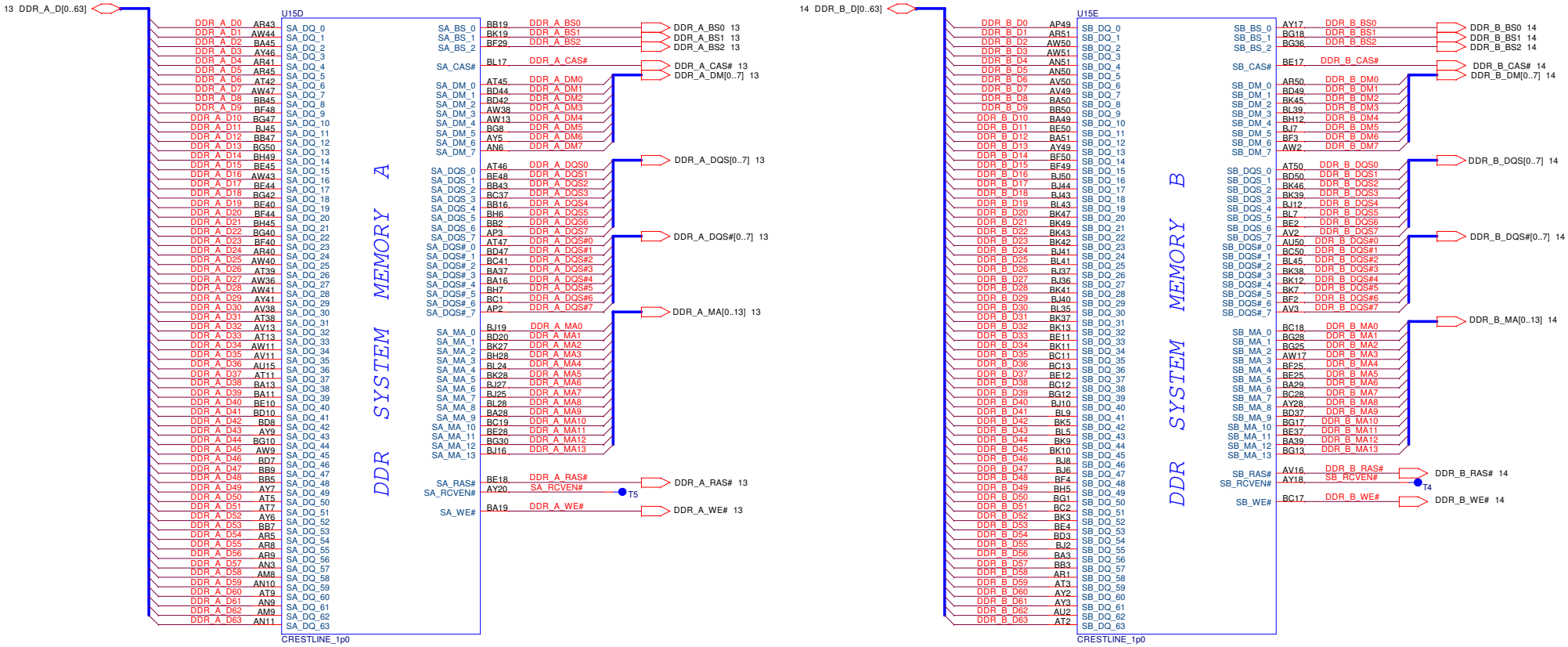
Issued Date	2006/02/13	Deciphered Date	2006/03/10

Compal Electronics, Inc.

Title: CRESTLINE(1/6)-AGTL+/DMI/DDR2

Size: Custom | Document Number: LA-3261P UMA | Rev: 0.4

Date: Tuesday, March 27, 2007 | Sheet 7 of 55



Security Classification	Compal Secret Data		
Issued Date	2006/02/13	Deciphered Date	2006/03/10

Compal Electronics, Inc.

Title: **CRESTLINE((2/6)-DDR2 A/B CH**

Size	Document Number	Rev
Custom	LA-3261P UMA	0.4

Date: Tuesday, March 27, 2007 | Sheet 8 of 55

For Crestline:2.4kohm
For Calero: 1.5Kohm

PEGCOMP trace width
and spacing is 20/25 mils.

Strap Pin Table

CFG[2:0] FSB Freq select	010 = FSB 800MHz 011 = FSB 667MHz Others = Reserved
CFG5 (DMI select)	0 = DMI x 2 1 = DMI x 4 *
CFG6	Reserved
CFG7 (CPU Strap)	0 = Reserved 1 = Mobile CPU *
CFG8 (Low power PCIE)	0 = Normal mode 1 = Low Power mode *
CFG9 (PCIE Graphics Lane Reversal)	0 = Reverse Lane 1 = Normal Operation *
CFG[11:10]	Reserved
CFG[13:12] (XOR/ALLZ)	00 = Reserved 01 = XOR Mode Enabled 10 = All Z Mode Enabled 11 = Normal Operation(Default) *
CFG[15:14]	Reserved
CFG16 (FSB Dynamic ODT)	0 = Disabled 1 = Enabled *
CFG[18:17]	Reserved
SDVO_CTRLDATA	0 = No SDVO Device Present * 1 = SDVO Device Present
CFG19 (DMI Lane Reversal)	0 = Normal Operation * (Lane number in Order) 1 = Reverse Lane
CFG20 (PCIE/SDVO concurrent)	0 = Only PCIE or SDVO is operational. * 1 = PCIE/SDVO are operating simu.

0622 change value

0821
1013 change value

0809 Add MAX9511
1013 Remove MAX9511

For Crestline:1.3kohm
For Calero: 255ohm

CFG[17:3] have internal pull up
CFG[19:18] have internal pull down

TV-Out Termination/EMI Filter

Place close to U15

CRT Termination/EMI Filter

Place Closed to U15

Note: CRT / TV-out should route to JP30 first then to the JP1 & JP2 on system side.

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Issued Date	2006/02/13	Deciphered Date	2006/03/10

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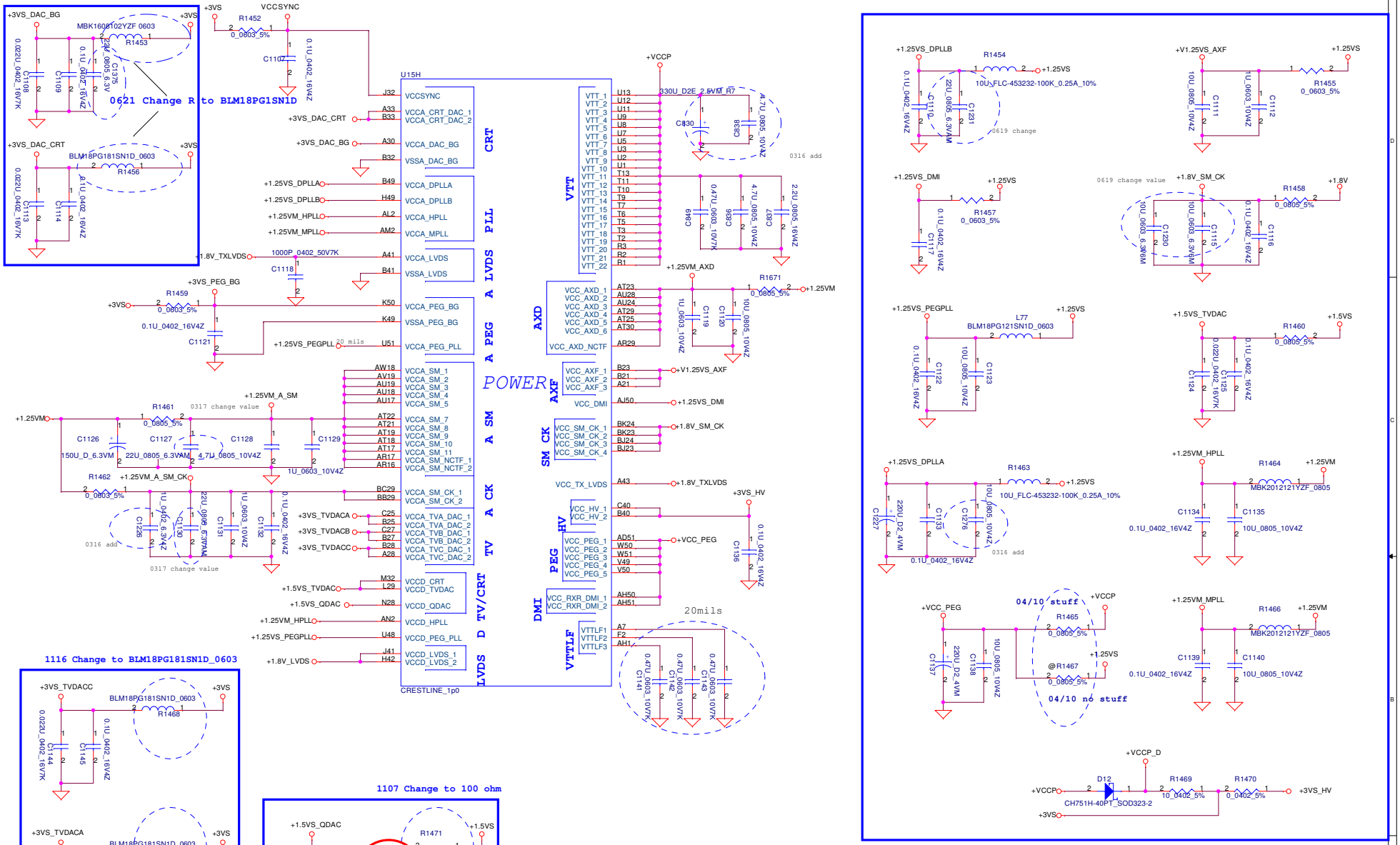
Title: CRESTLINE((3/6)-VGA/LVDS/TV

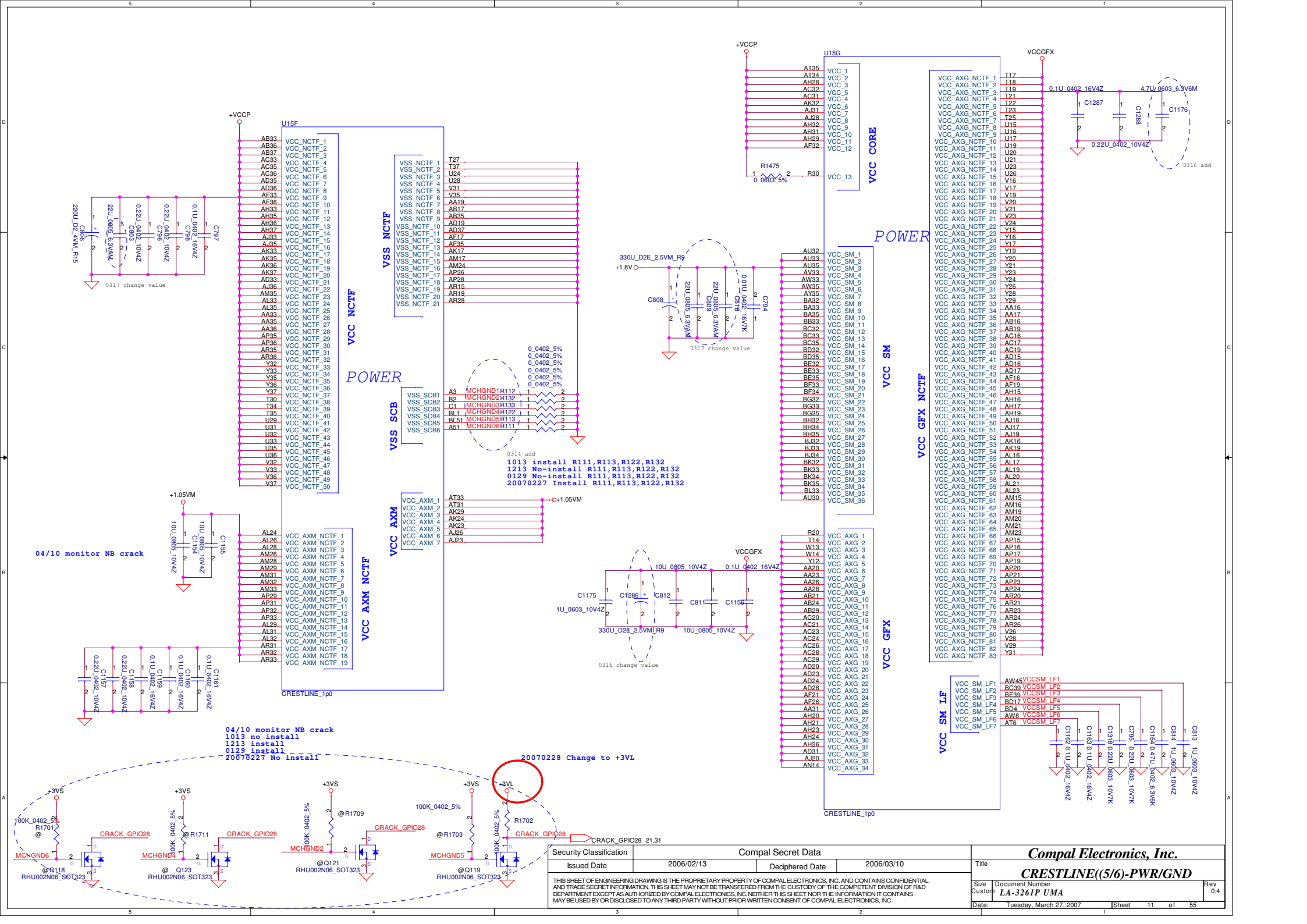
Size: Custom | Document Number: LA-3261P UMA | Rev: 0.4

Date: Tuesday, March 27, 2007 | Sheet 9 of 55



Security Classification	Compal Secret Data		
Issued Date	2006/02/13	Deciphered Date	2006/03/10

Title	Compal Electronics, Inc.
	CRESTLINE(4/6)-PWR
Size: Custom	Document Number: LA-3261P UMA
Rev	0.4
Date:	Tuesday, March 27, 2007
Sheet	10 of 55

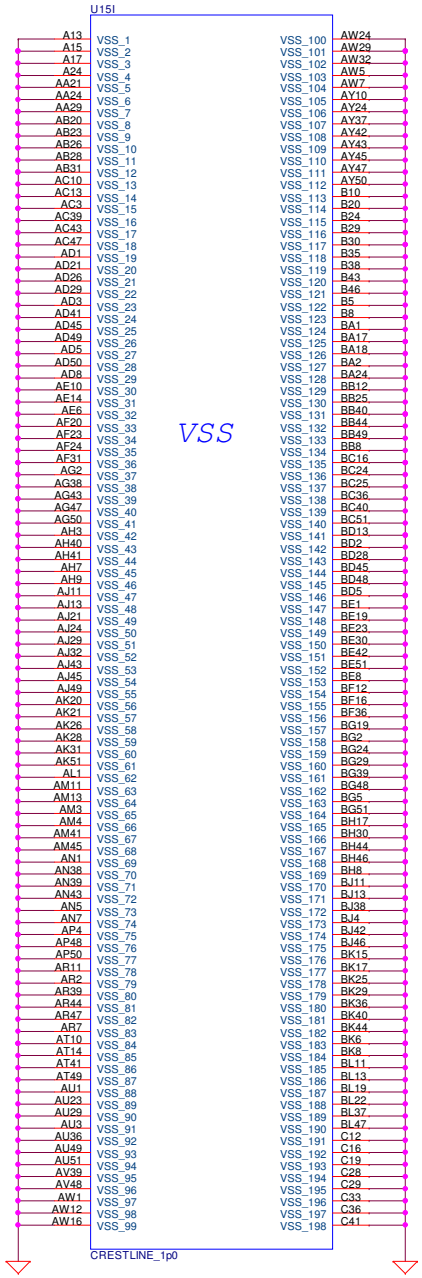


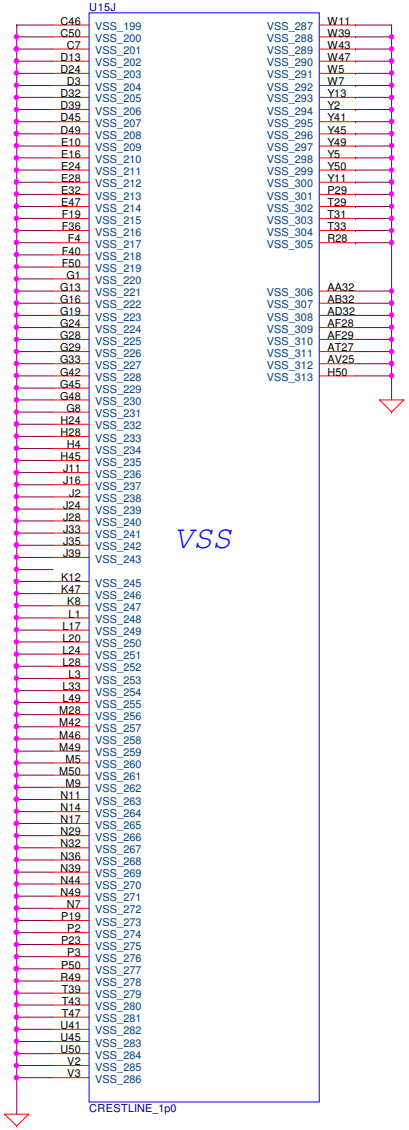
Security Classification	Compal Secret Data		
Issued Date	2006/02/13	Deciphered Date	2006/03/10

Compal Electronics, Inc.

Title: **CRESTLINE((5/6)-PWR/GND**

Size	Document Number	Rev
Custom	LA-3261P UMA	0.4
Date: Tuesday, March 27, 2007	Sheet 11 of 55	





Security Classification	Compal Secret Data		
Issued Date	2006/02/13	Deciphered Date	2006/03/10

Compal Electronics, Inc.

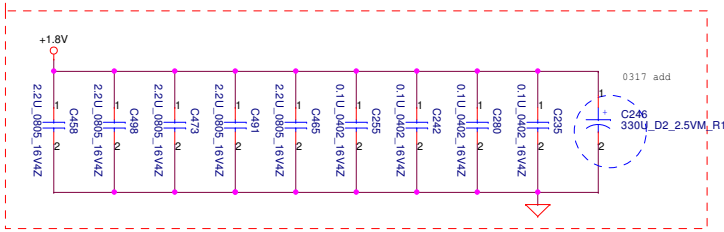
Title: **CRESTLINE((6/6)-PWR/GND**

Size	Document Number	Rev
Custom	LA-3261P UMA	0.4

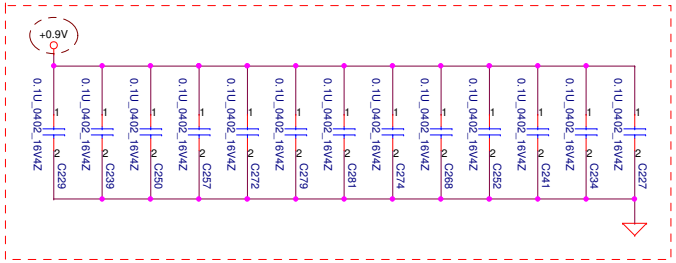
Date: Tuesday, March 27, 2007 Sheet 12 of 55

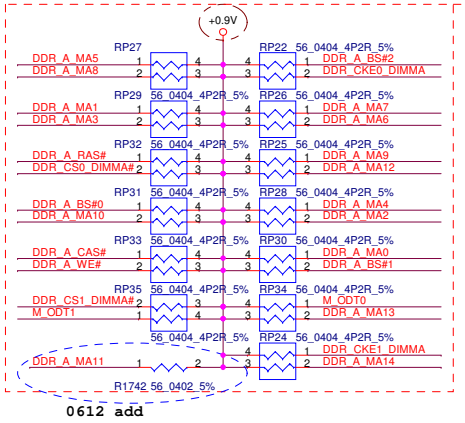
8 DDR_A_DQS#[0..7]
8 DDR_A_D[0..63]
8 DDR_A_DM[0..7]
8 DDR_A_DQS[0..7]
7,8 DDR_A_MA[0..14]

Layout Note:
Place near JP34

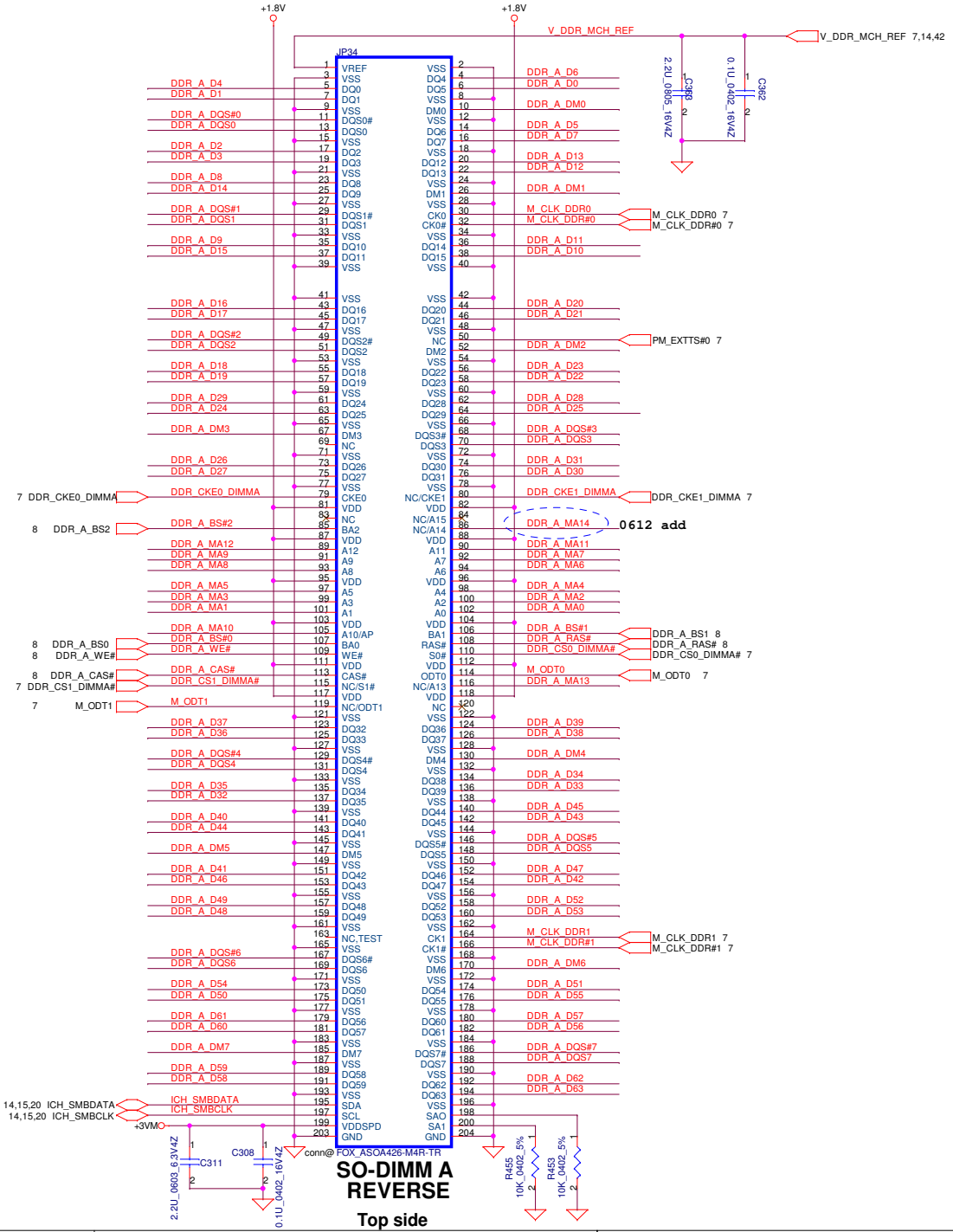


Layout Note:
Place one cap close to every 2 pullup resistors terminated to +0.9VS





Layout Note:
Place these resistor closely JP34,all trace length Max=1.5"



Security Classification	Compal Secret Data		
Issued Date	2006/02/13	Deciphered Date	2006/03/10

Compal Electronics, Inc.

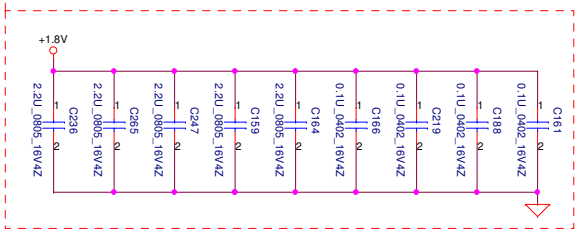
Title: DDRII-SODIMM SLOT1

Size	Document Number	Rev
Custom	LA-3261P UMA	0.4

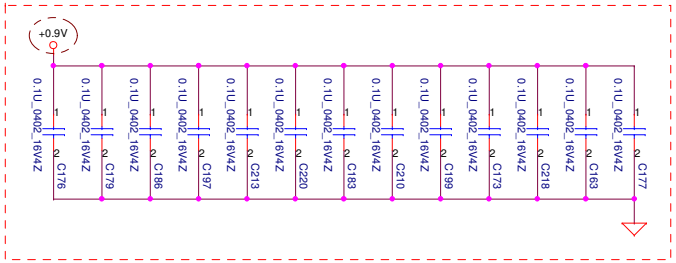
Date: Tuesday, March 27, 2007 | Sheet 13 of 55

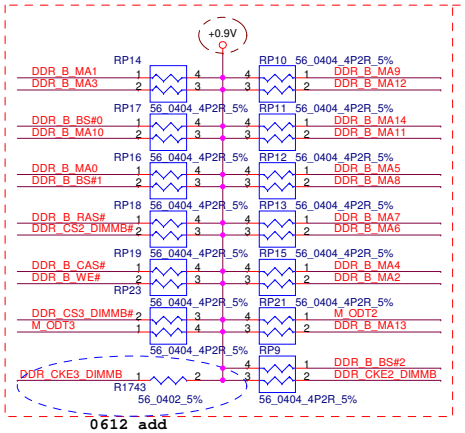
8 DDR_B_DQS#[0..7]
8 DDR_B_D[0..63]
8 DDR_B_DM[0..7]
8 DDR_B_DQS[0..7]
7,8 DDR_B_MA[0..14]

Layout Note:
Place near JP10



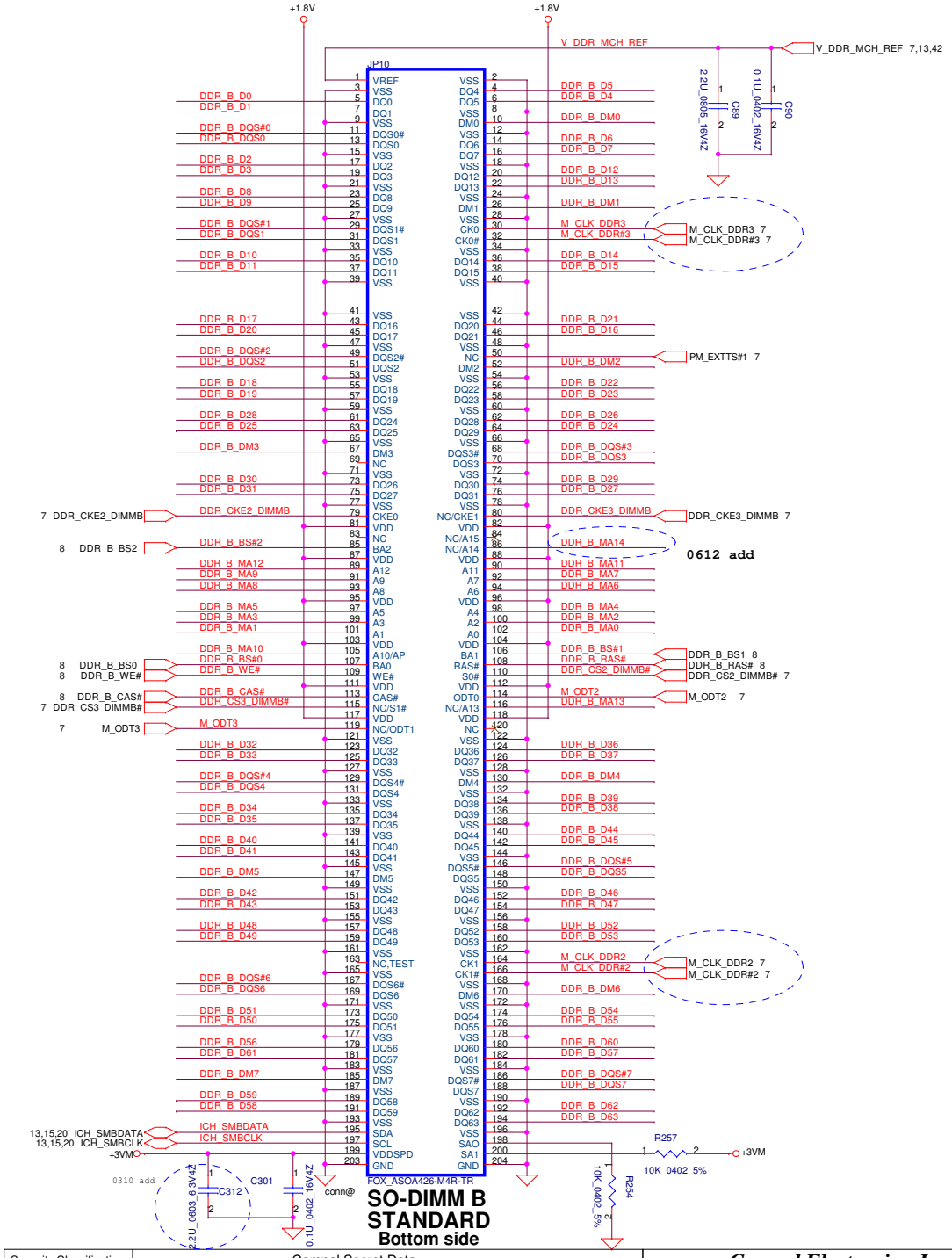
Layout Note:
Place one cap close to every 2 pullup resistors terminated to +0.9VS





0612 add

Layout Note:
Place these resistor closely JP10,all trace length Max=1.5"



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Compal Electronics, Inc.			
Title	DDRII-SODIMM SLOT2		
Size	Document Number	LA-3261P UMA	Rev 0.4
Date: Tuesday, March 27, 2007	Sheet 14 of 55		

FSLC CLKSEL2	FSLB CLKSEL1	FSLA CLKSEL0	CPU MHz	SRC MHz	PCI MHz
0	1	0	200	100	33.3
0	1	1	166	100	33.3

FSB Frequency Selet:

CPU Driven							
	Stuff	R1107	R1135	R1083			
★(Default)	No Stuff	R1074	R1086	R1098	R1113	R1128	R1139
667MHz	Stuff	R1086	R1139	R1135	R1074	R1139	R1135
	No Stuff	R1083 R1113	R1107 R1098	R1128			
800MHz	Stuff	R1135	R1139				
	No Stuff	R1083 R1074	R1086 R1107	R1098 R1113	R1128		

03/02 change

Place close to U7

03/02 change

20070301 Add CAP for WWAN issue

1111 Add CLRP4,CLRP5 for 667/800 FSB select
SHORT CLRP5, NO SHORT CLRP4 -- FSB 800
SHORT CLRP4, NO SHORT CLRP5 -- FSB 667

0216 Delete CLRP4,CLRP5

0612 add for Robson

0612 add for Robson

0529 change power plane

For ITP_EN, 0 =SRC8/SRC8#; 1 = ITP/ITP#
For 27_SEL, 0 = Enable DOT96 & SRC1,
1= Enable SRC0 & 27MHz
For PCI2_EN, 0 = Overclocking of CPU and SRC Allowed
1 = Overclocking of CPU and SRC NOT allowed

Routing the trace at least 10mil

ICS9LPRS355_TSSOP64

* Internal Pull-Up Resistor
** Internal Pull-Down Resistor

Security Classification	Compal Secret Data		
Issued Date	2006/02/13	Deciphered Date	2006/03/10

Compal Electronics, Inc.

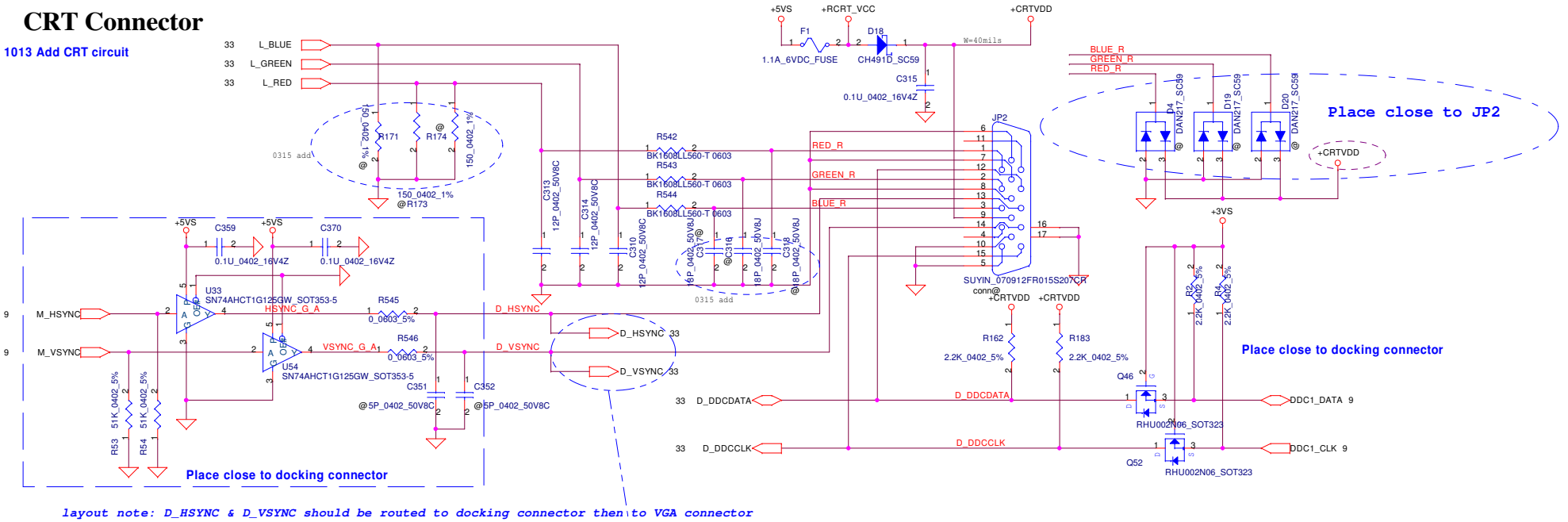
Title: **Clock generator**

Size	Document Number	Rev
	LA-3261P UMA	0.4

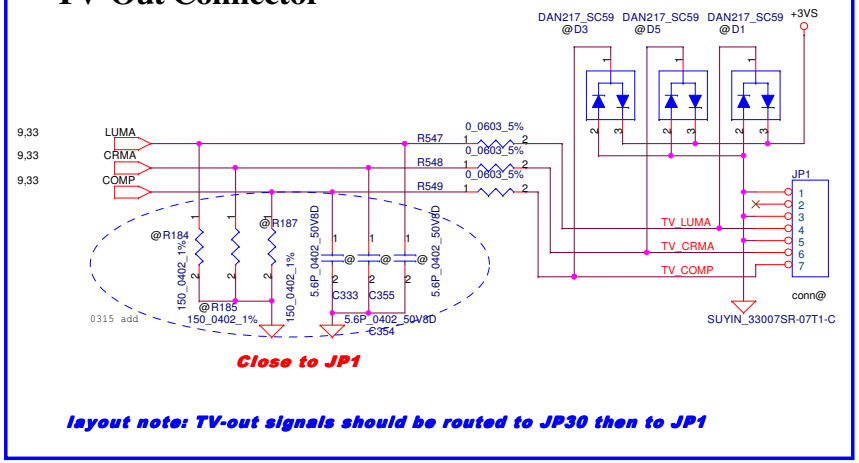
Date: Tuesday, March 27, 2007 Sheet 15 of 55

CRT Connector

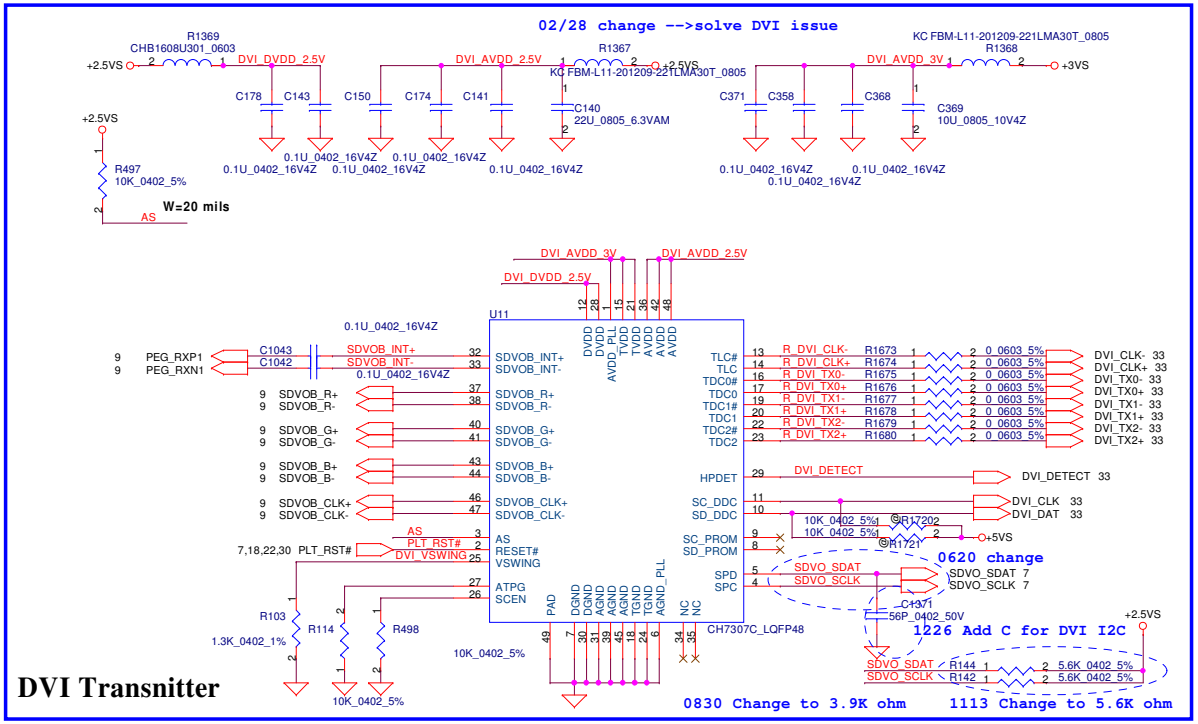
1013 Add CRT circuit



TV-Out Connector



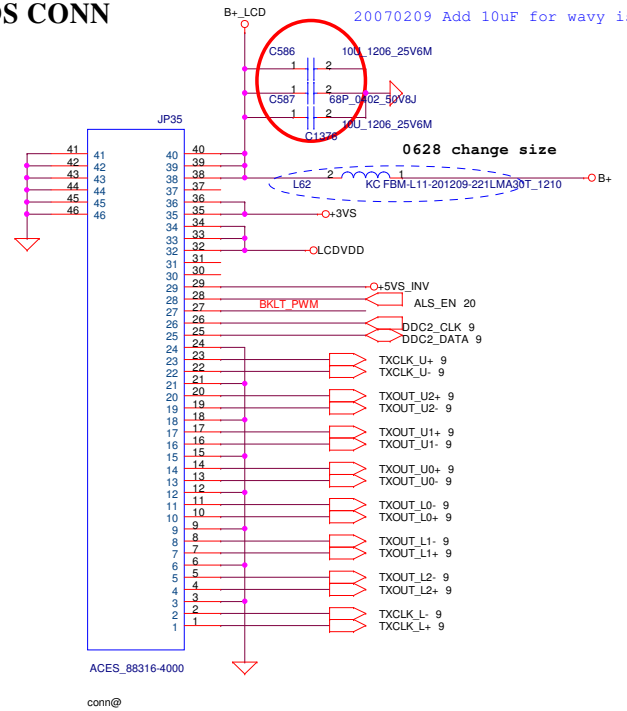
DVI Transnitter



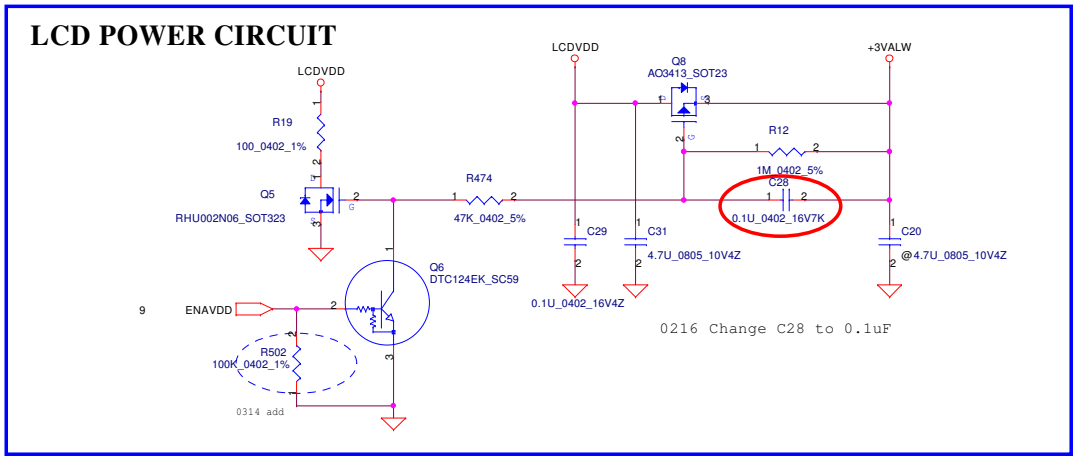
Security Classification	Compal Secret Data		
Issued Date	2006/02/13	Deciphered Date	2006/07/26

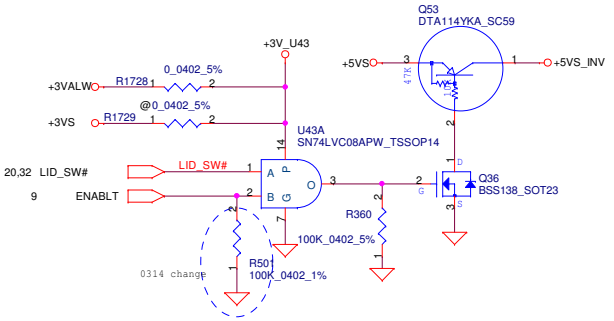
Compal Electronics, Inc.			
Title	CRT & TVout Connector		
Size	Document Number	LA-3261P UMA	Rev 0.4
Date: Tuesday, March 27, 2007	Sheet 16 of 55		

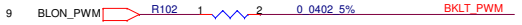
LVDS CONN



LCD POWER CIRCUIT



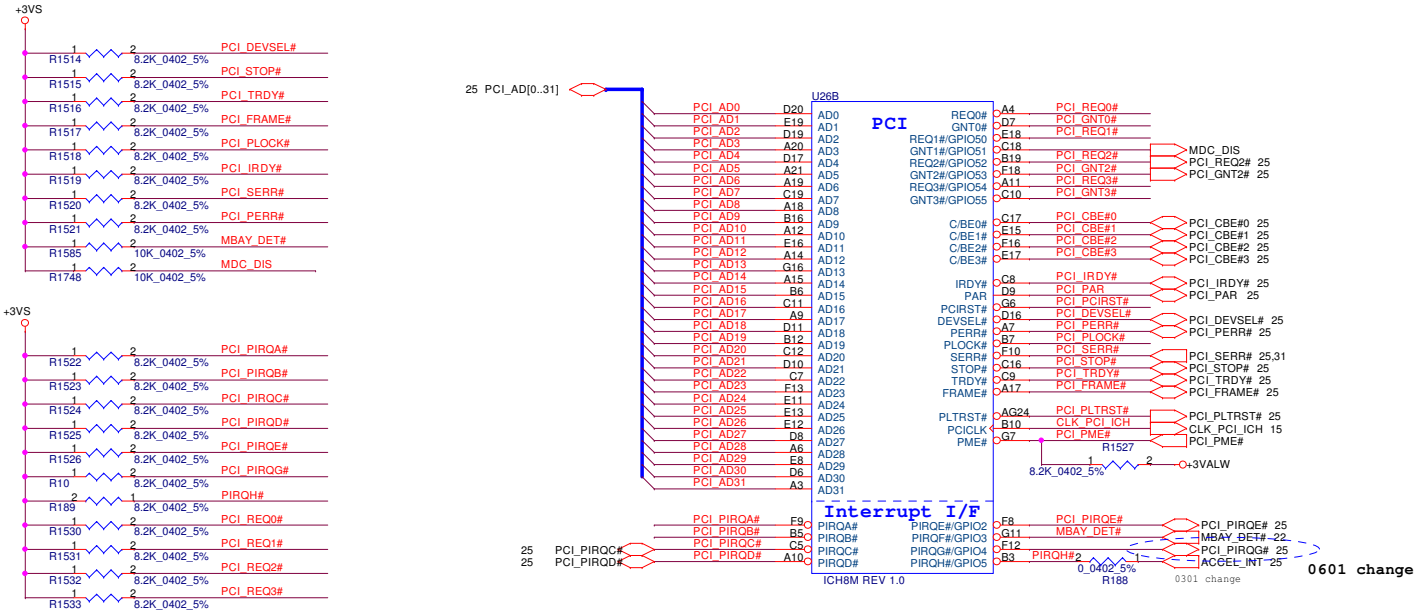


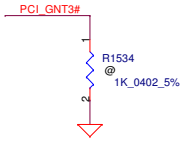


Support 3V inverter

Security Classification	Compal Secret Data		
Issued Date	2006/02/13	Deciphered Date	2006/07/26

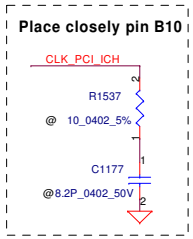
Compal Electronics, Inc.	
Title	LCD CONN.
Size	Document Number: LA-3261P UMA
Rev	0.4
Date:	Tuesday, March 27, 2007
Sheet	17 of 55

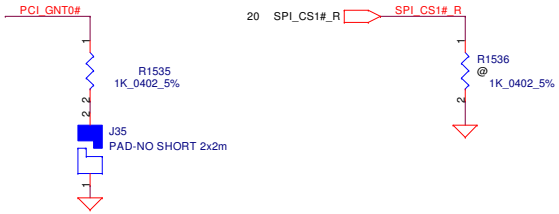


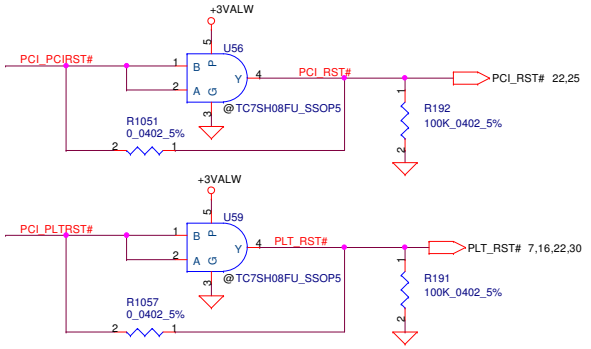


A16 swap override Strap	
PCI_GNT3#	Low= A16 swap override Enble High= Default *

Boot BIOS Strap		
PCI_GNT0#	SPI_CS#1	Boot BIOS Location
0	1	SPI *
1	0	PCI
1	1	LPC

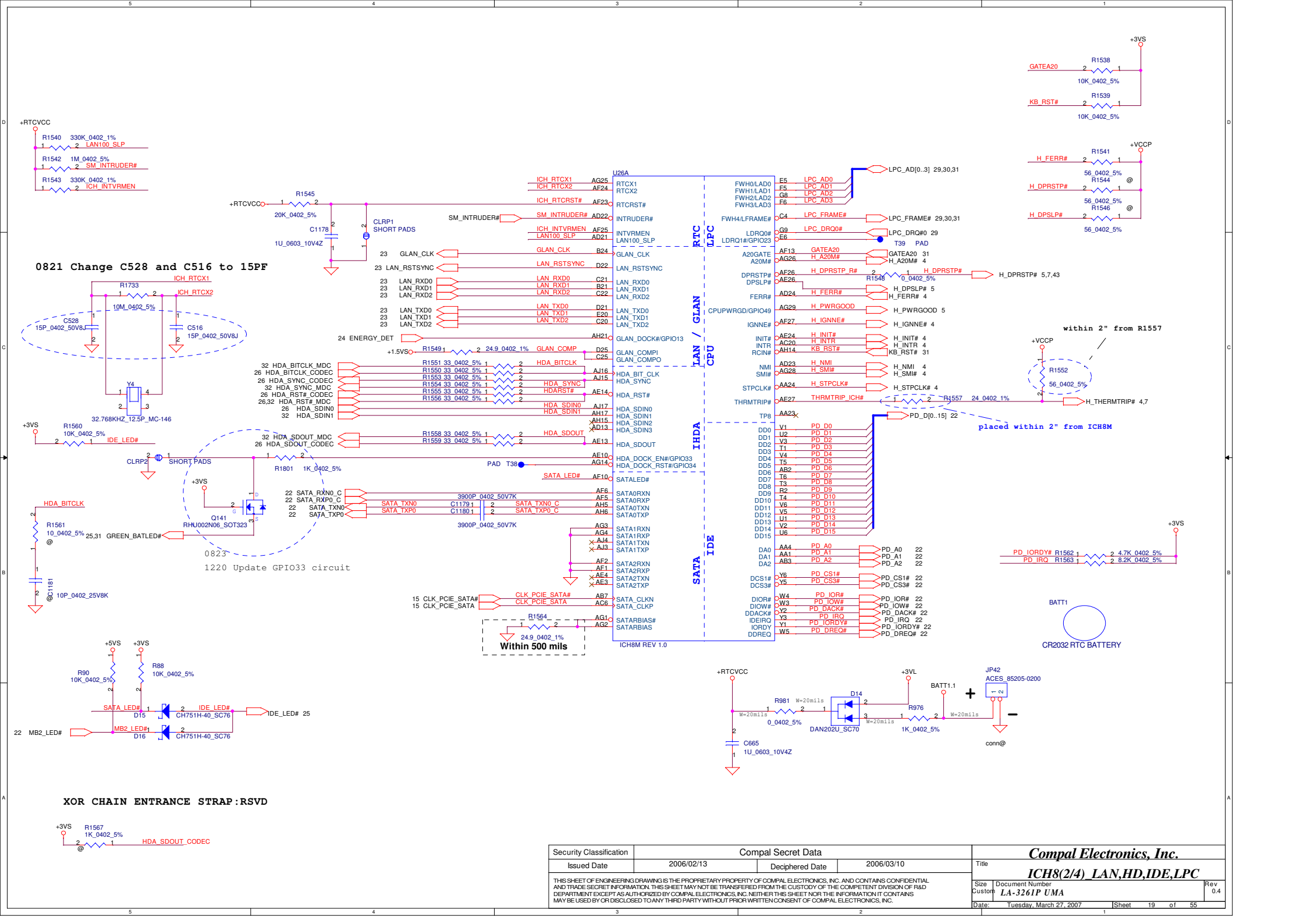






Security Classification	Compal Secret Data		
Issued Date	2006/02/13	Deciphered Date	2006/03/10

Compal Electronics, Inc.			
Title	ICH8(1/4)-PCI/INT		
Size	Document Number		Rev
	LA-3261P UMA		0.4
Date:	Tuesday, March 27, 2007	Sheet	18 of 55



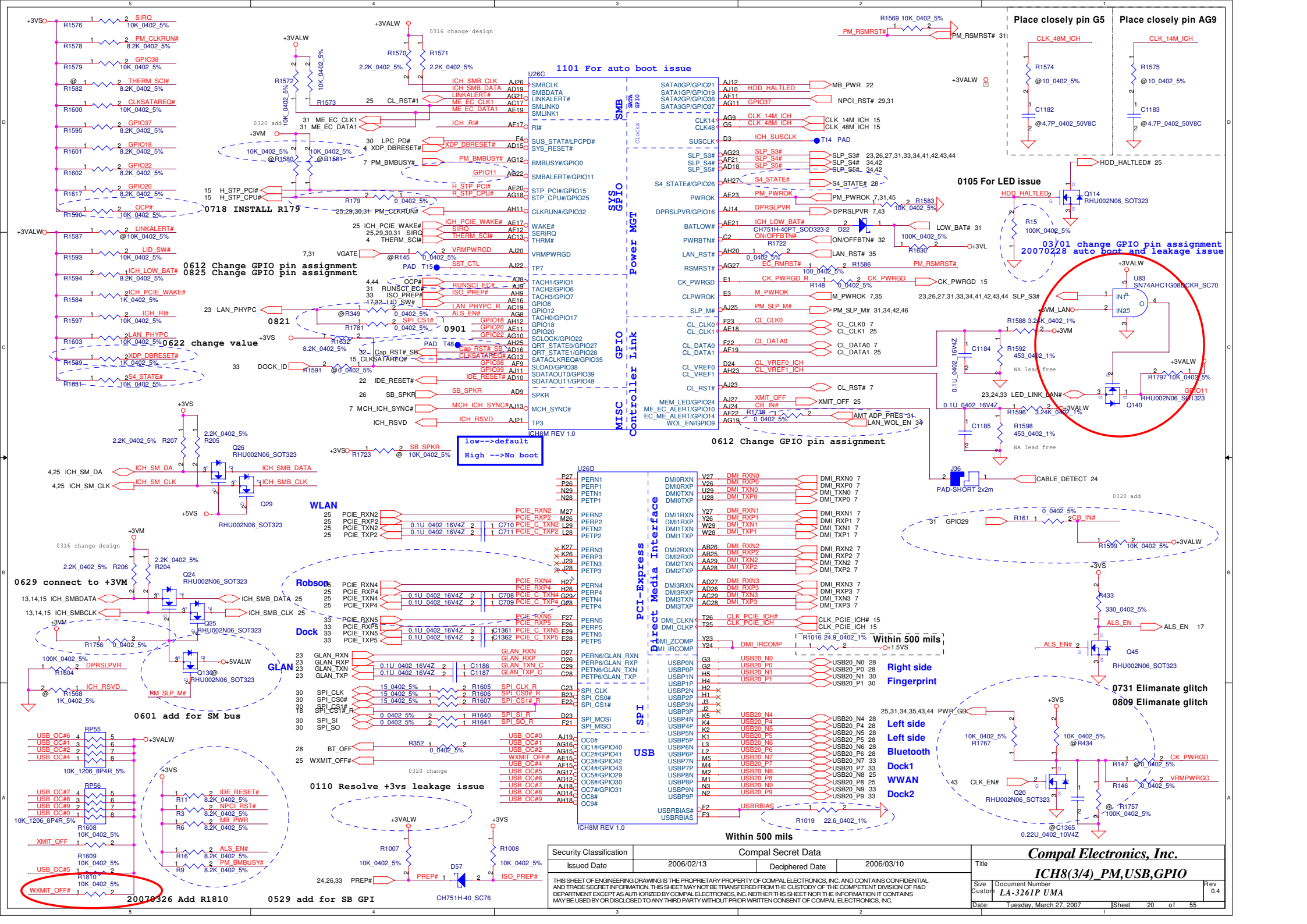
Security Classification	Compal Secret Data		
Issued Date	2006/02/13	Deciphered Date	2006/03/10

Compal Electronics, Inc.

Title: ICH8(2/4)_LAN,HD,IDE,LPC

Size: Custom | Document Number: LA-3261P UMA | Rev: 0.4

Date: Tuesday, March 27, 2007 | Sheet 19 of 55

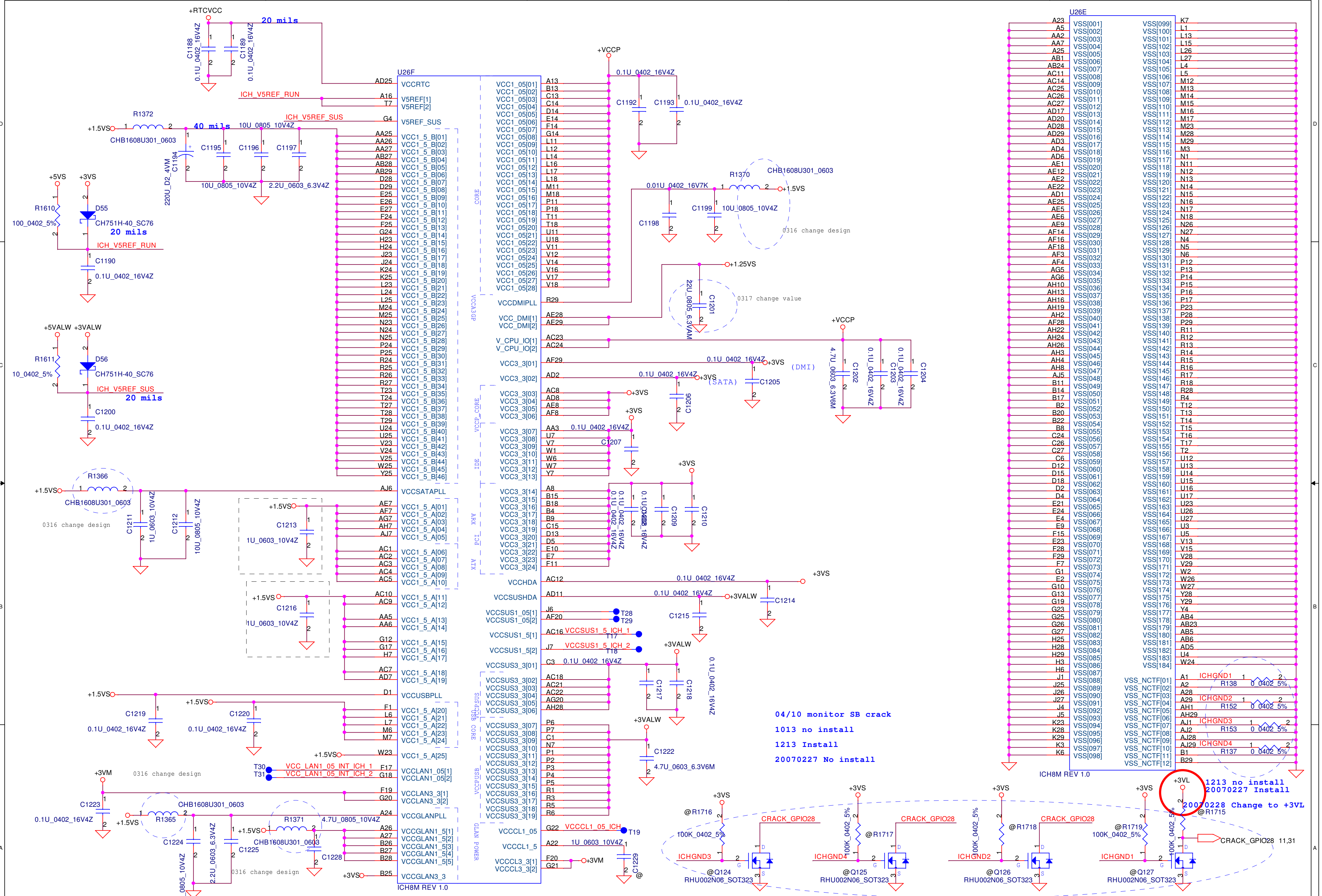


Security Classification	Compal Secret Data		
Issued Date	2006/02/13	Deciphered Date	2006/03/10

Compal Electronics, Inc.

Title: **ICH8(3/4)_PM,USB,GPIO**

Size	Document Number	Rev
Custom	LA-3261P UMA	0.4
Date: Tuesday, March 27, 2007	Sheet 20 of 55	



Security Classification	Compal Secret Data		
Issued Date	2006/02/13	Deciphered Date	2006/03/10

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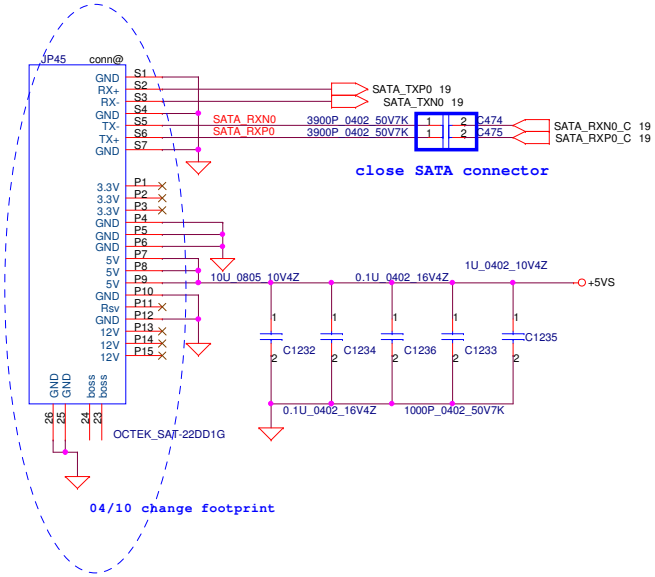
Compal Electronics, Inc.

Title: **ICH8(4/4)_POWER&GND**

Size	Document Number	Rev
Custom	LA-3261P UMA	0.4

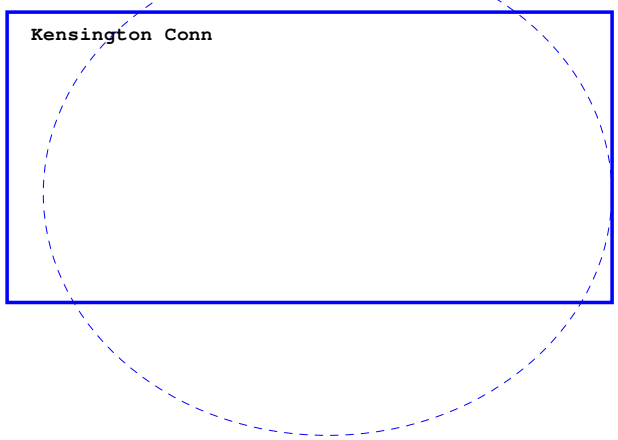
Date: Tuesday, March 27, 2007 | Sheet 21 of 55

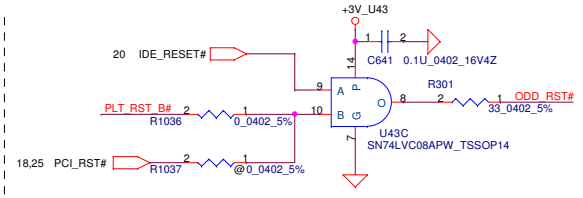
Multi Bay II connector

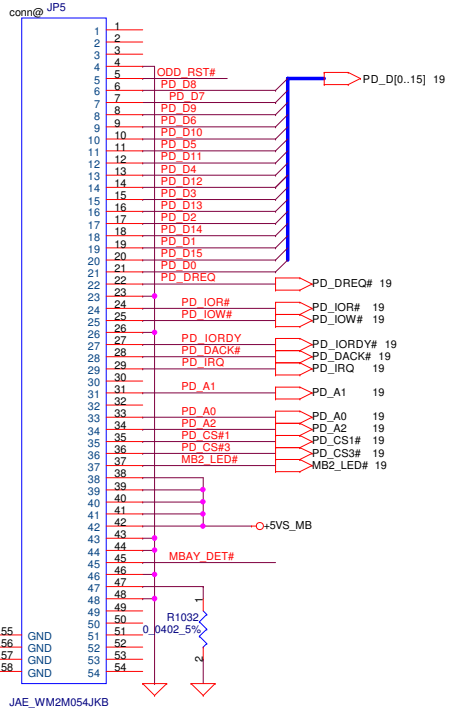


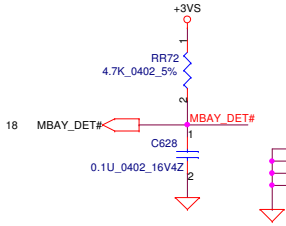
0619 change

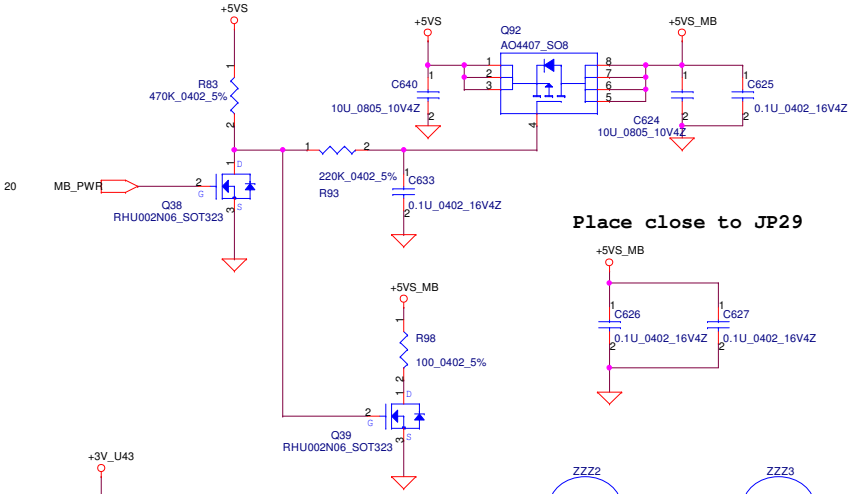
1109 Remove kensington circuit



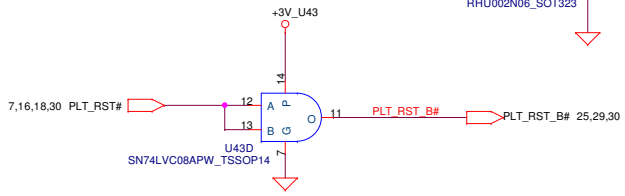








Place close to JP29



ZZZ2
Audio-wire

ZZZ3
PCB-MB

Security Classification	Compal Secret Data		
Issued Date	2006/02/13	Deciphered Date	2006/03/10

Compal Electronics, Inc.

Title: **HDD & CDROM**

Size	Document Number	Rev
Custom	LA-3261P UMA	0.4

Date: Tuesday, March 27, 2007 | Sheet 22 of 55

1128 Install Q102,R1730, no install R1612,Q104,Q105.

@R1612 0_1206_5%
+3VM
1000P_0402_50V7K
SI2301BDS_SOT23
Q102
+3VM_LAN
40 mils
R1613
1M_0402_5%
C1243
C1242
4.7U_0603_6.3V6M
R1614
100K_0402_5%
20 LAN_PHYPC
Q103
BSS138_SOT23
R1730
0_0402_5%
31,38,39,40,44 ADP_PRES
@Q104
RHU002N06_SOT323
20,26,27,31,33,34,41,42,43,44 SLP_S3#
@Q105
RHU002N06_SOT323

near U74

R1615 33_0402_5%
19 GLAN_CLK
GLANCLK
19 LAN_RSTSYNC
19 LAN_TXD0
19 LAN_TXD1
19 LAN_TXD2
19 LAN_RXD0
19 LAN_RXD1
19 LAN_RXD2
C490 0.1U_0402_16V4Z
20 GLAN_RXP
20 GLAN_RXN
C1319 0.1U_0402_16V4Z
20 GLAN_TXP
20 GLAN_TXN
1.4K_0402_1%
R1616
LAN_KBIAS_P
LAN_KBIAS_N
26,24,33 LED_LINK_LAN#
24,33 LED_ACT_LAN#
24 LAN_MDI0P
24 LAN_MDI0N
24 LAN_MDI1P
24 LAN_MDI1N
24 LAN_MDI2P
24 LAN_MDI2N
24 LAN_MDI3P
24 LAN_MDI3N
IEEE_TEST_P
IEEE_TEST_N
R1621 @0_0402_5%
@R1622 649_0402_1%
@R1623 619_0402_1%
closed to E6 pin
R1625 1.4K_0603_1%
R1627 100_0402_5%

U74
JKCLK-JCLK
JRSTSYNC
JTXD0
JTXD1
JTXD2
JRXD0
JRXD1
JRXD2
GLAN_TXP-NC
GLAN_TXN-NC
GLAN_RXP-NC
GLAN_RXN-NC
KBIAS_P-RBIAS100
KBIAS_N-RBIAS10
LED0-LINK_UP_N
LED1-ACT_LED_N
LED2-SPEED_LED_N
MDI_PLUS[0]-TDP
MDI_MINUS[0]-TDN
MDI_PLUS[1]-RDP
MDI_MINUS[1]-RDN
MDI_PLUS[2]-NC
MDI_MINUS[2]-NC
MDI_PLUS[3]-NC
MDI_MINUS[3]-NC
IEEE_TEST_P-NC
IEEE_TEST_N-NC
RSVD_J6-NC
RSVD_J7-NC
RBIAS_P-NC
RBIAS_N-NC
RSVD_B5-NC
RSVD_A6-ADV10/LAN_DIS_N
RSVD_C5-NC
TEST_EN
RU82566DM B0 Q870 BGA 81P
XTAL1
XTAL2
XTAL2-X2
XTAL1-X1
LCI
GLCI
MDI
JTAG
JTAG_TCK/ISOL_TCK
JTAG_TDI/ISOL_TI
JTAG_TDO/TOUT
JTAG_TMS/ISOL_EXEC
VSSA[17]-NC
VSSA[16]-NC
VSSA[15]-VSSA2
VSSA[14]-VSS
VSSA[13]-NC
VSSA[12]-VSS
VSSA[11]-VSS
VSSA[10]-VSS
VSSA[09]-VSS
VSSA[08]-VSS
VSSA[07]-VSS
VSSA[06]-VSS
VSSA[05]-VSS
VSSA[04]-VSS
VSSA[03]-VSSR
VSSA[02]-NC
VSSA[01]-VSS
VSS[04]-VSS
VSS[03]-VSSP
VSS[02]-VSS
VSS[01]-NC
VDD1P0[03]-VCCA
VDD1P0[02]-VCCT
VDD1P0[01]-VCCR
VCCF1P0-VCC
VCCFC1P0-VCC
VCC3P3[02]-VCCP
VCC3P3[01]-VCC
VCC1P8[04]-NC
VCC1P8[03]-NC
VCC1P8[02]-NC
VCC1P8[01]-NC
VCC1P0-VCCA2
VCC[02]
VCC[01]
V1P0_OUT-NC
CTRL_10-NC
CTRL_18-NC
THERM_D_P-NC
THERM_D_N-NC

+V1.0_LAN_M
R1618
0_0603_5%
+V1.0M_LAN
R1619 0_0603_5%
+3.3V_LAN
C1363 1U_0402_6.3V4Z
+3VM_LAN
R1620 0_0603_5%
+1.8VM_LAN
R1734 0_0402_5%
+1.8VM
C1364 1U_0402_6.3V4Z
V1P_OUT
LAN_CTRL_10
LAN_CTRL_18
LAN_THERM_D_P
LAN_THERM_D_N
@R1628 0_0603_5%
@ R1629 200_0402_5%
+3VM_LAN
T68 PAD
T70 PAD
PAD T69
PAD T71
+3VM_LAN
@ R1634 200_0402_5%

Y9
XTAL1
XTAL2_R
XTAL2
C1263 25MHZ_20P_1BG25000CK1A
C1264
27P_0402_50V8J
27P_0402_50V8J
R1804 30_0402_5%
0104 Intel request

20 mils
0.1U_0402_16V4Z
+1.8VM
4.7U_0603_6.3V6M
C1244
C1245
C1246
C1247
470P_0402_50V7K
C1248
0.1U_0402_16V4Z
470P_0402_50V7K

20 mils
4.7U_0603_6.3V6M
0.1U_0402_16V4Z
+V1.0_LAN_M
C1249
C1250
C1251
C1252
470P_0402_50V7K
C1253
0.1U_0402_16V4Z
470P_0402_50V7K

0620 fix to IVRD
+3VM_LAN
Q106
BCP69_SOT223
+1.8VM
0.1U_0402_16V4Z
C1254
C1255
C1258
10N_0603_50V7K
C1256
C1257
10U_0805_10V4Z
4.7U_0603_6.3V6M
0.1U_0402_16V4Z
LAN_CTRL_18
0905

0620 add for POWER ripple, close to chip
+3VM_LAN
Q128
BCP69_SOT223
+1.0M_LAN
0.1U_0402_16V4Z
C1357
C1360
10N_0603_50V7K
C1359
10U_0805_10V4Z
4.7U_0603_6.3V6M
C1356
0.1U_0402_16V4Z
C1358
LAN_CTRL_10
0905

Security Classification	Compal Secret Data		
Issued Date	2006/02/13	Deciphered Date	2006/07/26

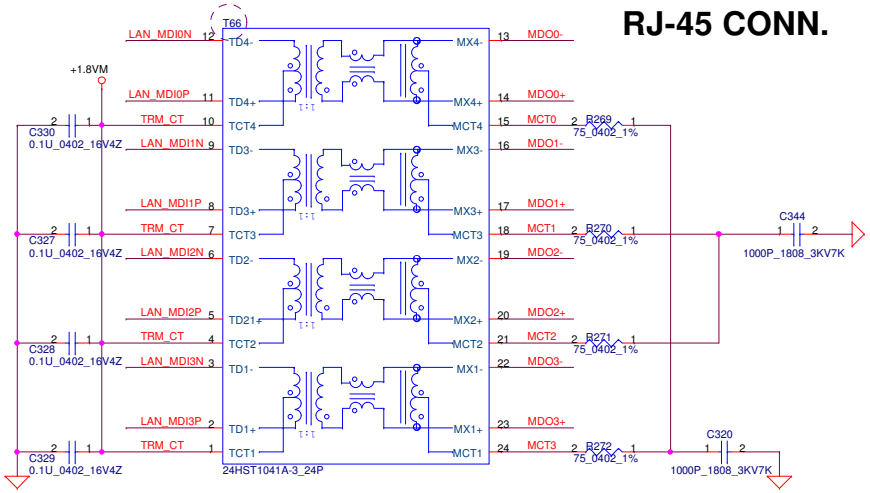
Compal Electronics, Inc.

Title: Intel 82566 Nineveh

Size | Document Number: LA-3261P UMA | Rev: 0.4

Date: Tuesday, March 27, 2007 | Sheet 23 of 55

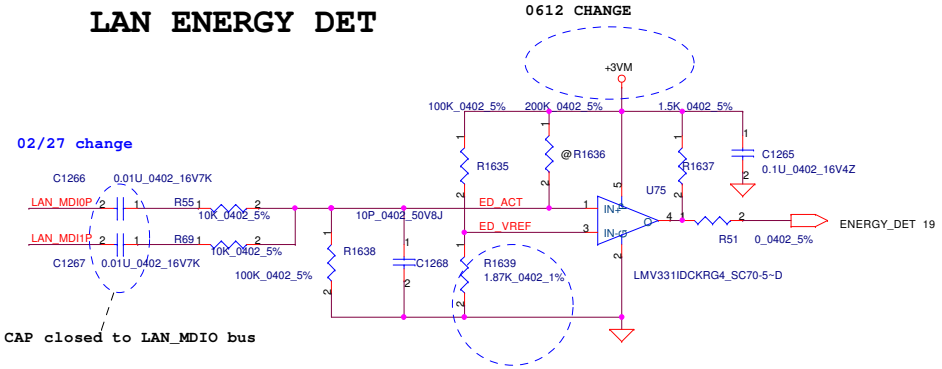
RJ-45 CONN.



LAN ENERGY DET

0612 CHANGE

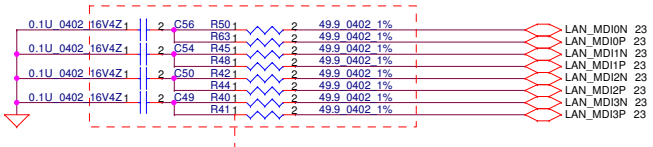
02/27 change



CAP closed to LAN_MDIO bus

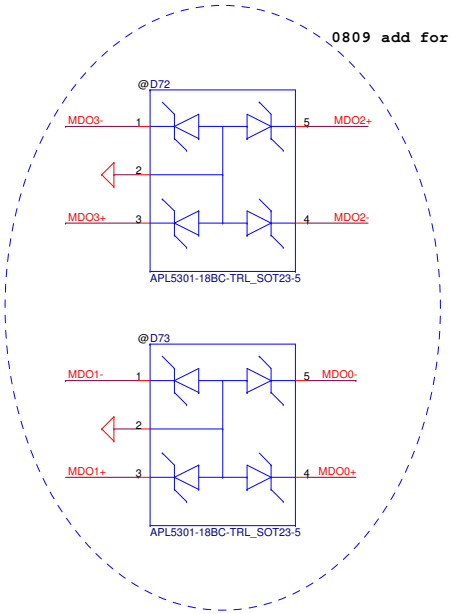
1113 Change R1639 to 1.4K based on Intel WW44

1116 Intel recommend

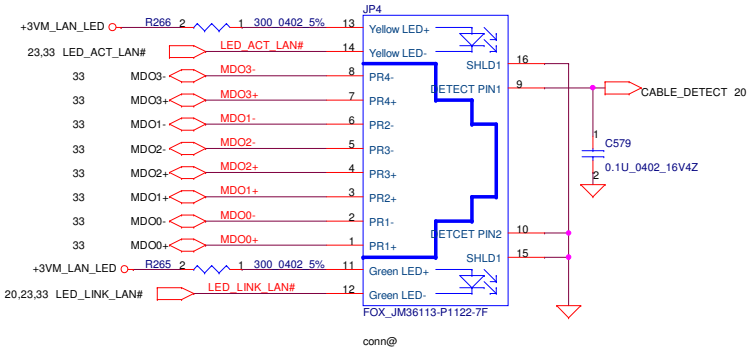


Layout Notice : Place termination as close as Intel 82566 as possible

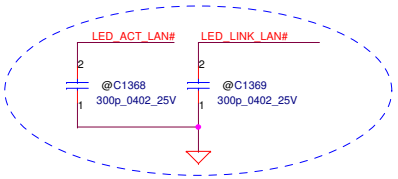
0809 add for EMI request



Note: MDO[3..0]+/- signals should route to JP4 first then to JP30.

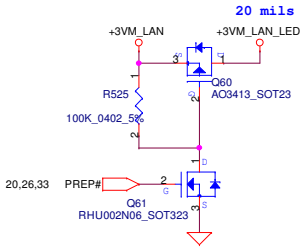


conn@



1115 EMI REQUEST

20 mils

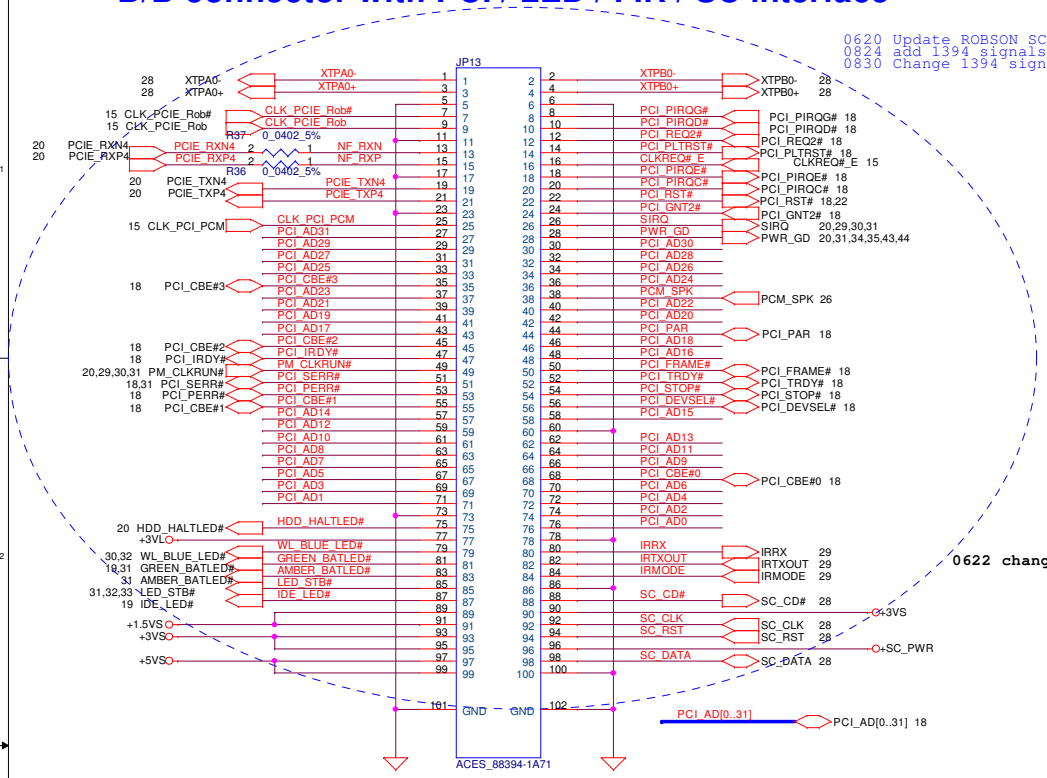


Security Classification	Compal Secret Data		
Issued Date	2006/02/13	Deciphered Date	2006/07/26

Compal Electronics, Inc.			
Title: Magnetic & RJ45/RJ11			
Size	Document Number: LA-3261P UMA		Rev: 0.4
Date: Tuesday, March 27, 2007		Sheet 24 of 55	

B/B connector with PCI / LED / FIR / SC interface

0620 Update ROBSON SCHEMATIC
0824 add 1394 signals
0830 Change 1394 signals

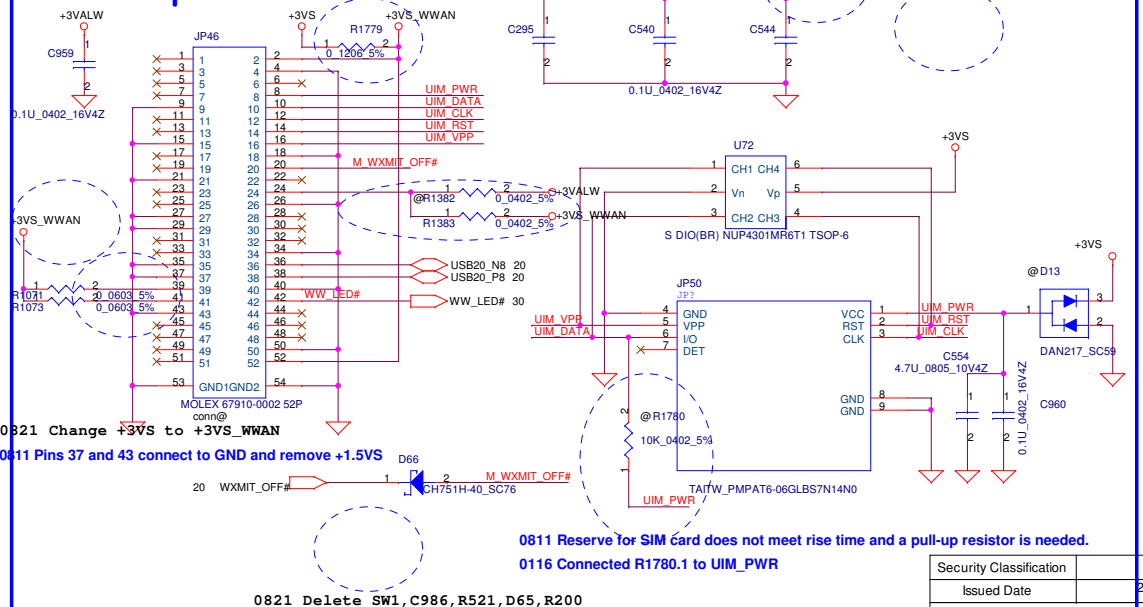


0622 change to support AMT

0731 Install R1383 and no install R1382, do not support wake on WWAN card

0811 Isolate SLOT power from SYSTEM power.

Mini-Express Card--WWAN



0821 Change +3VS to +3VS_WWAN

0811 Pins 37 and 43 connect to GND and remove +1.5VS

0811 Reserve for SIM card does not meet rise time and a pull-up resistor is needed.

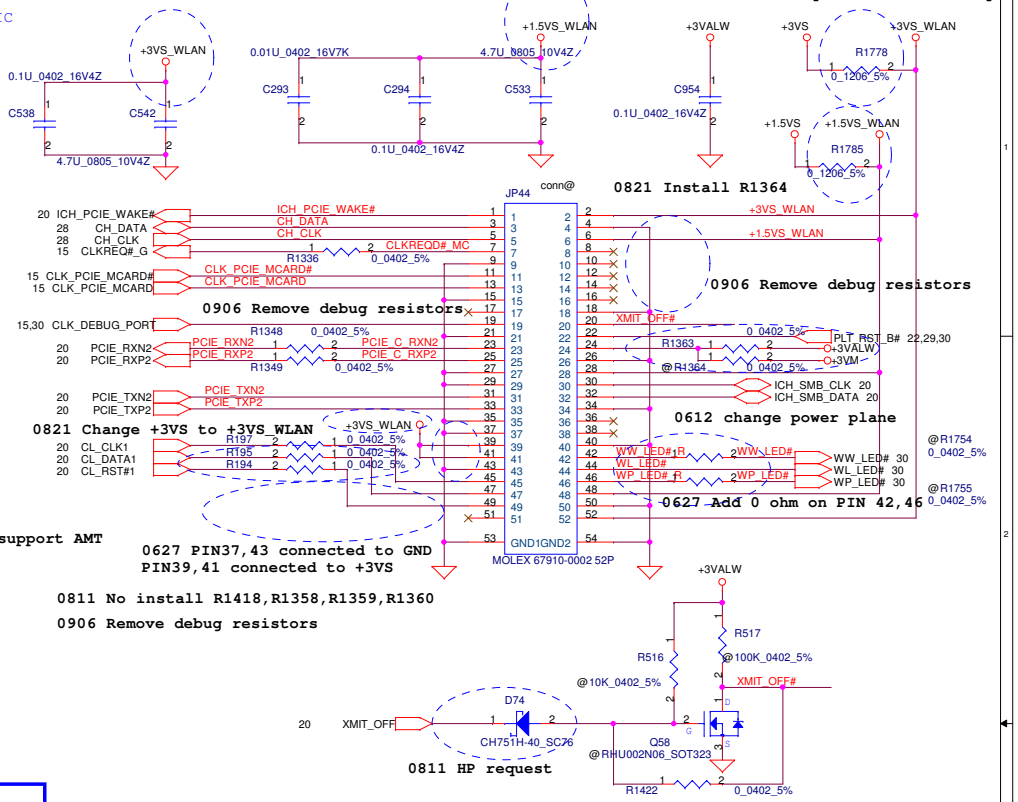
0116 Connected R1780.1 to UIM_PWR

0821 Delete SW1,C986,R521,D65,R200

Mini-Express Card---WLAN

0824 Add +1.5VS_WLAN

0811 Isolate SLOT power from SYSTEM power.



0821 Install R1364

0906 Remove debug resistors

0906 Remove debug resistors

0612 change power plane

0627 Add 0 ohm on PIN 42,46

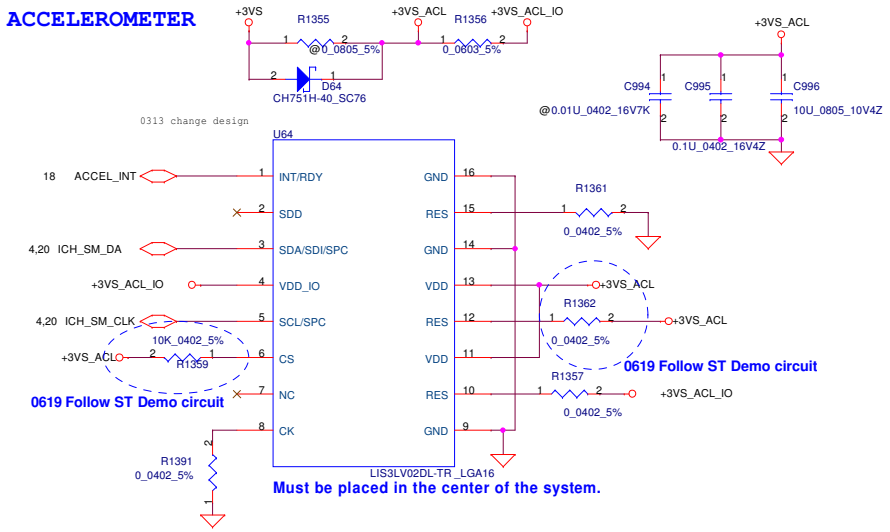
0627 PIN37,43 connected to GND
PIN39,41 connected to +3VS

0811 No install R1418,R1358,R1359,R1360

0906 Remove debug resistors

0811 HP request

ACCELEROMETER



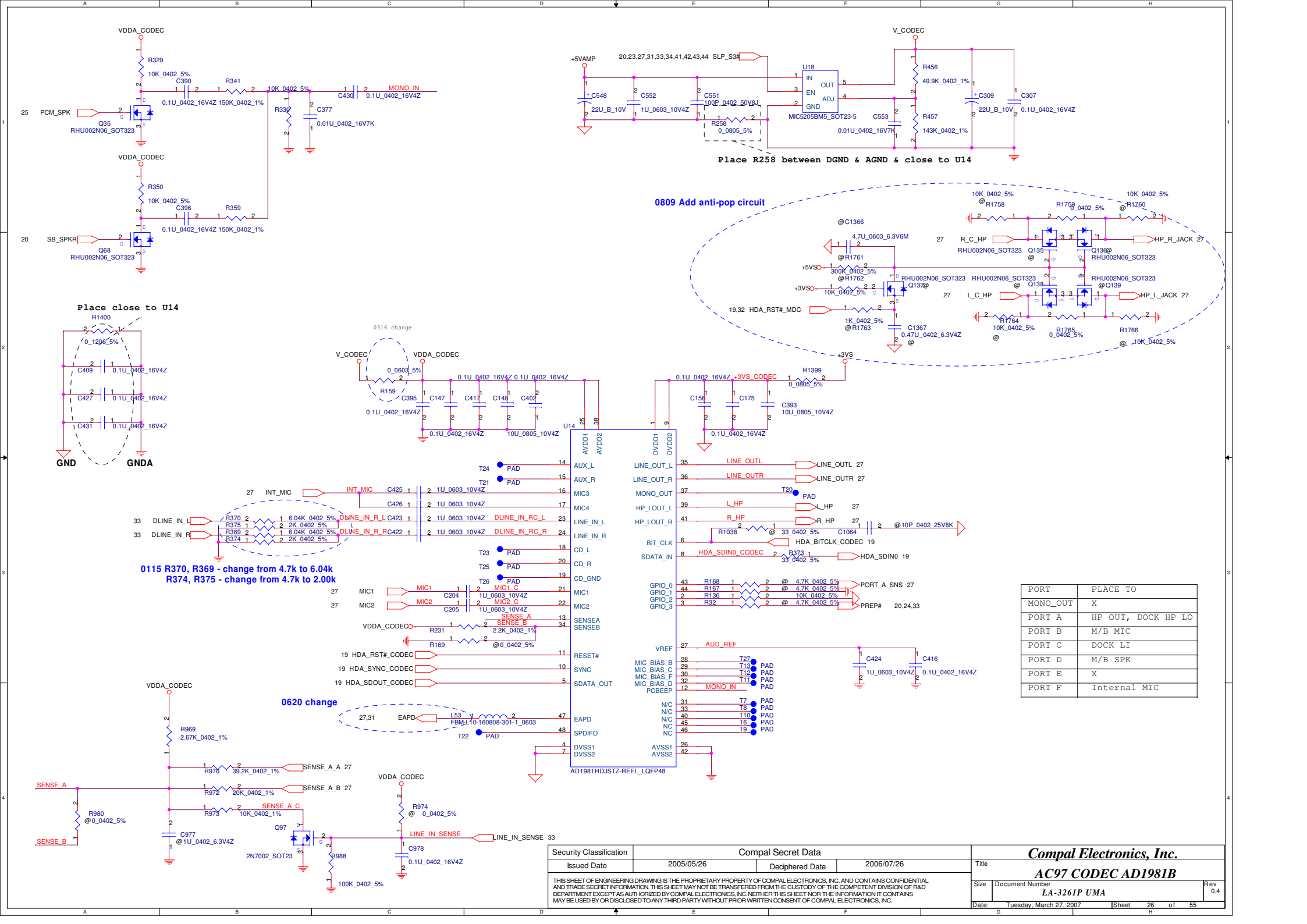
0619 Follow ST Demo circuit

0619 Follow ST Demo circuit

Must be placed in the center of the system.

Security Classification	Compal Secret Data		
Issued Date	2005/05/26	Deciphered Date	2006/07/26

Compal Electronics, Inc.			
Title	Mini-Card/Mini-PCI/Accelerometer		
Size	Document Number	LA-3261P UMA	Rev 0.4
Date:	Tuesday, March 27, 2007	Sheet 25 of 55	



Security Classification	Compal Secret Data		
Issued Date	2005/05/26	Deciphered Date	2006/07/26

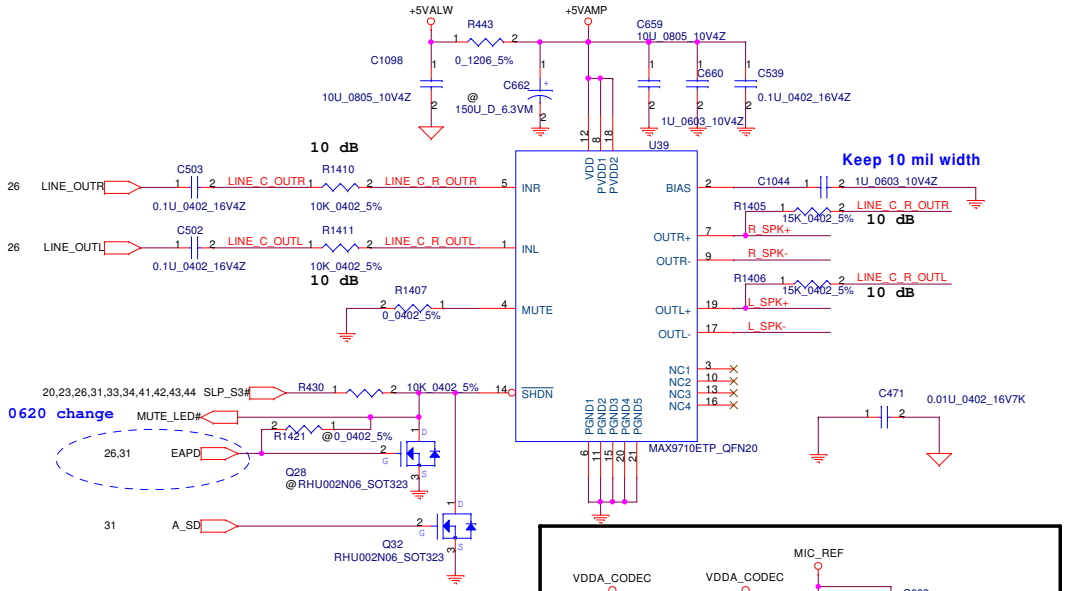
Compal Electronics, Inc.

Title: **AC97 CODEC AD1981B**

Size	Document Number	Rev
	LA-3261P UMA	0.4

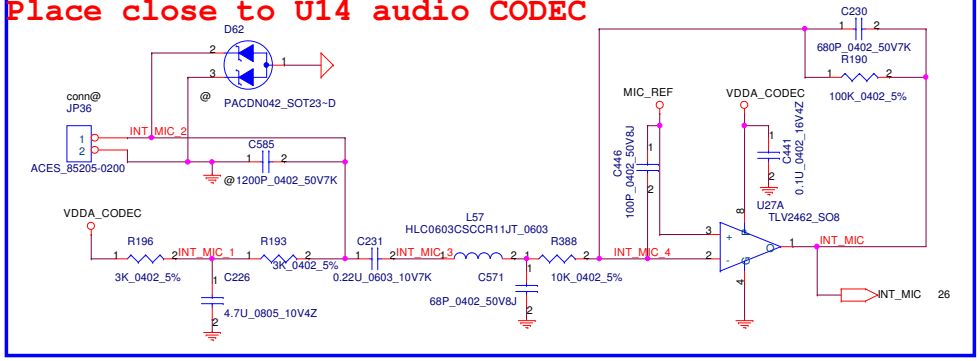
Date: Tuesday, March 27, 2007 | Sheet 26 of 55

AMP. FOR INTERNAL SPEAKER



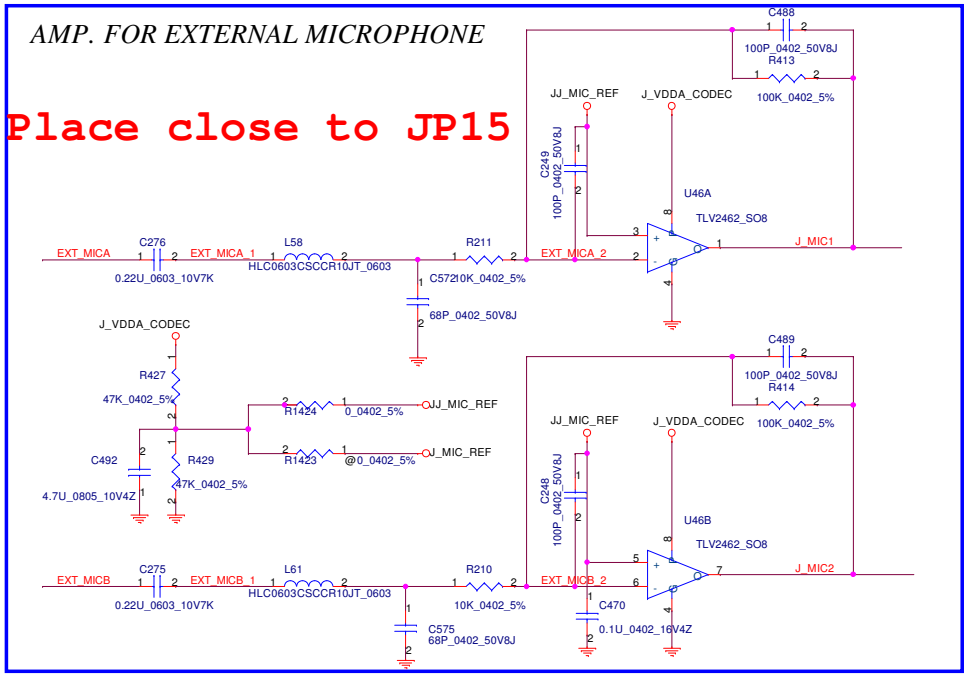
AMP. FOR INTERNAL MICROPHONE

Place close to U14 audio CODEC

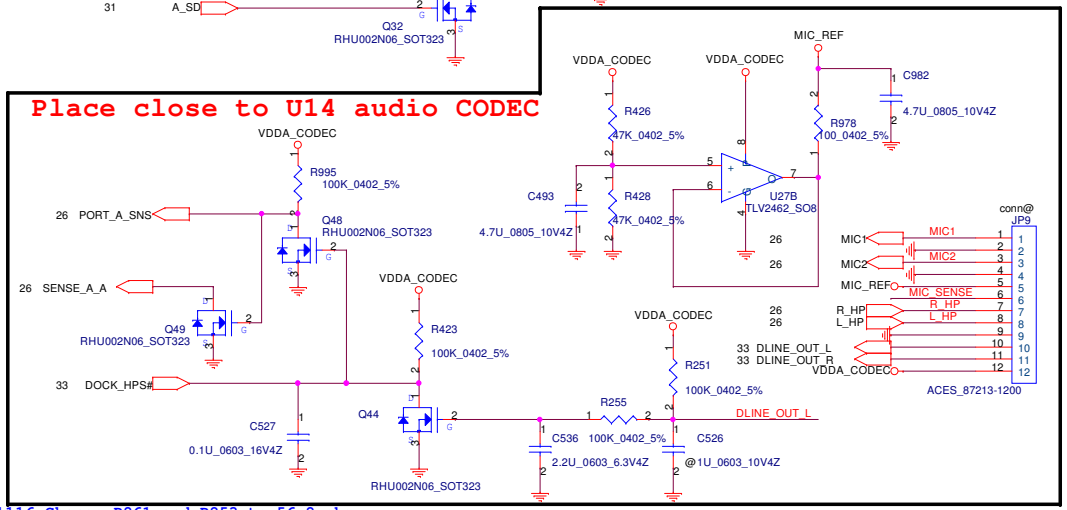


AMP. FOR EXTERNAL MICROPHONE

Place close to JP15

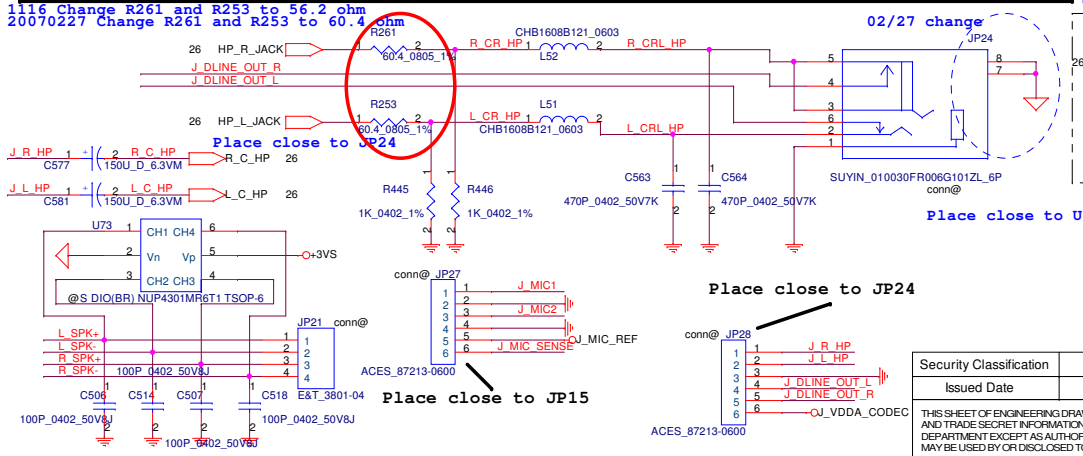


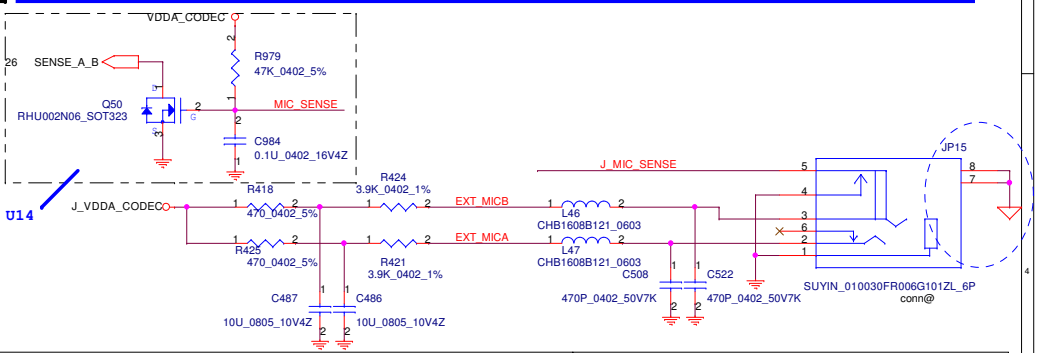
Place close to U14 audio CODEC



1116 Change R261 and R253 to 56.2 ohm
20070227 Change R261 and R253 to 60.4 ohm

02/27 change

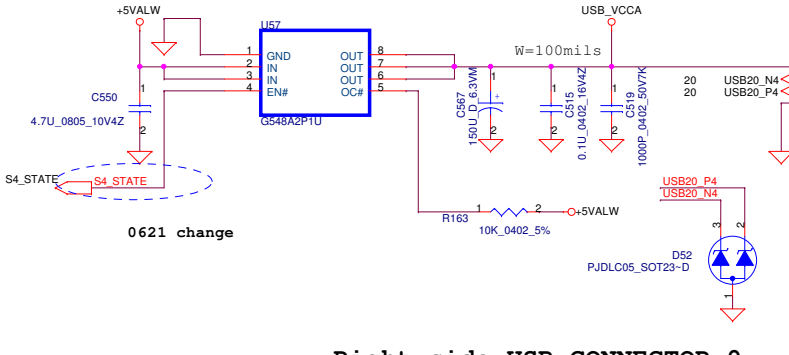




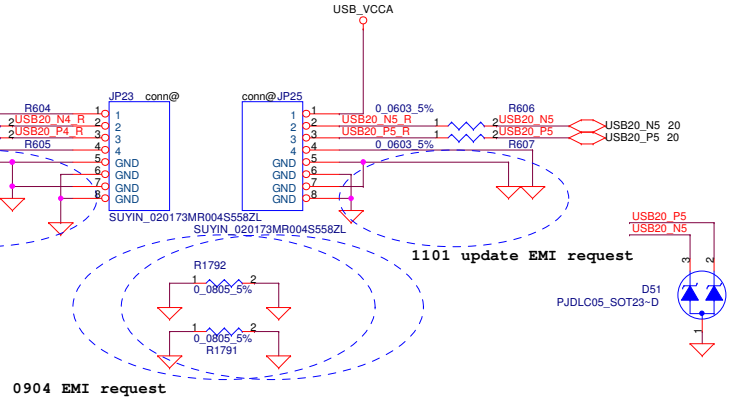
Security Classification	Compal Secret Data		
Issued Date	2005/05/26	Deciphered Date	2006/07/26

Compal Electronics, Inc.			
Title: AMP & Audio Jack			
Size	Document Number: LA-3261P UMA		Rev: 0.4
Date: Tuesday, March 27, 2007		Sheet 27 of 55	

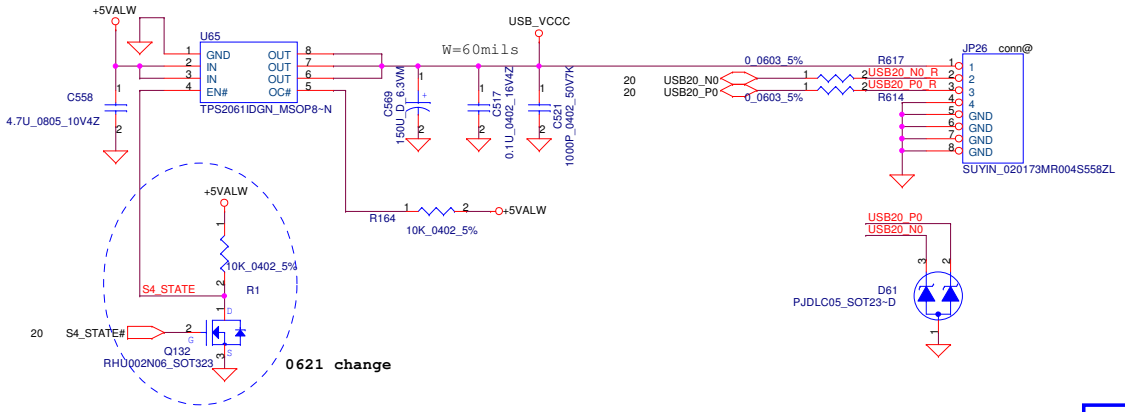
Left side USB CONNECTOR 0



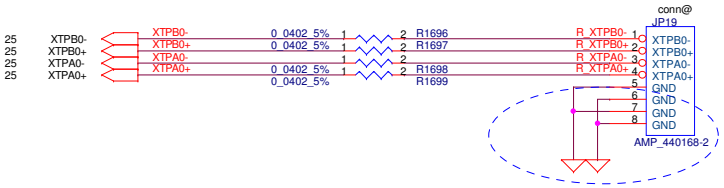
Left side USB CONNECTOR 1



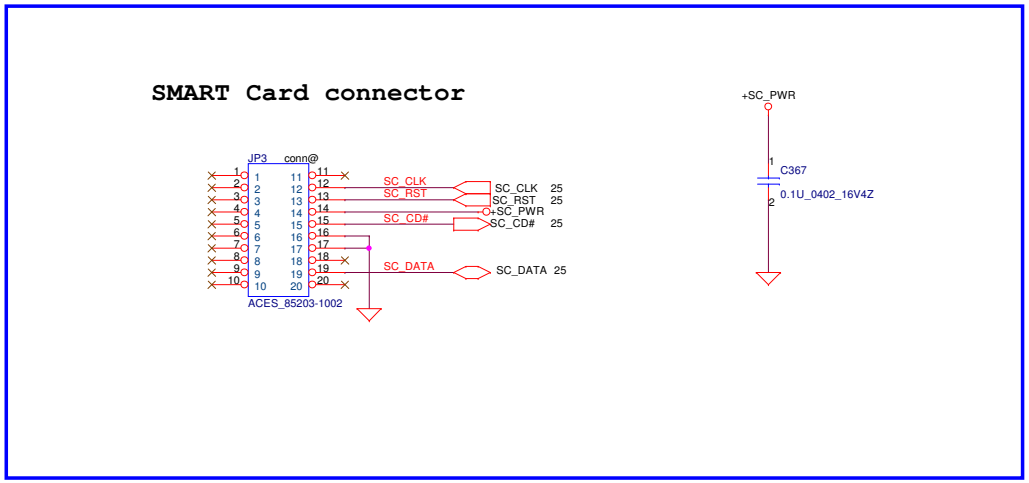
Right side USB CONNECTOR 0



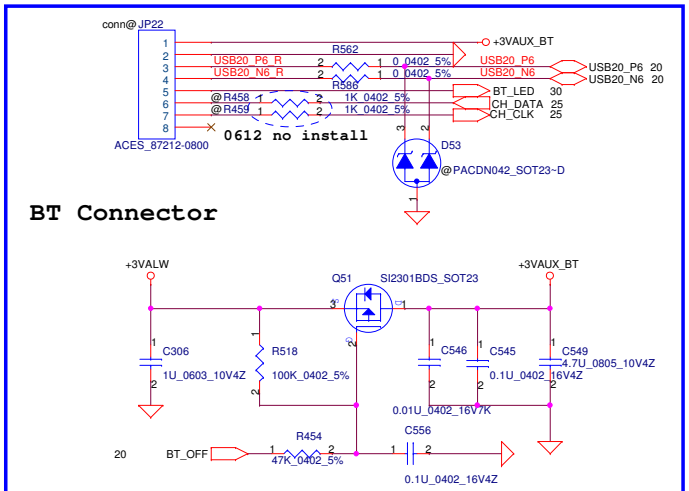
1394 connector



SMART Card connector



BT Connector



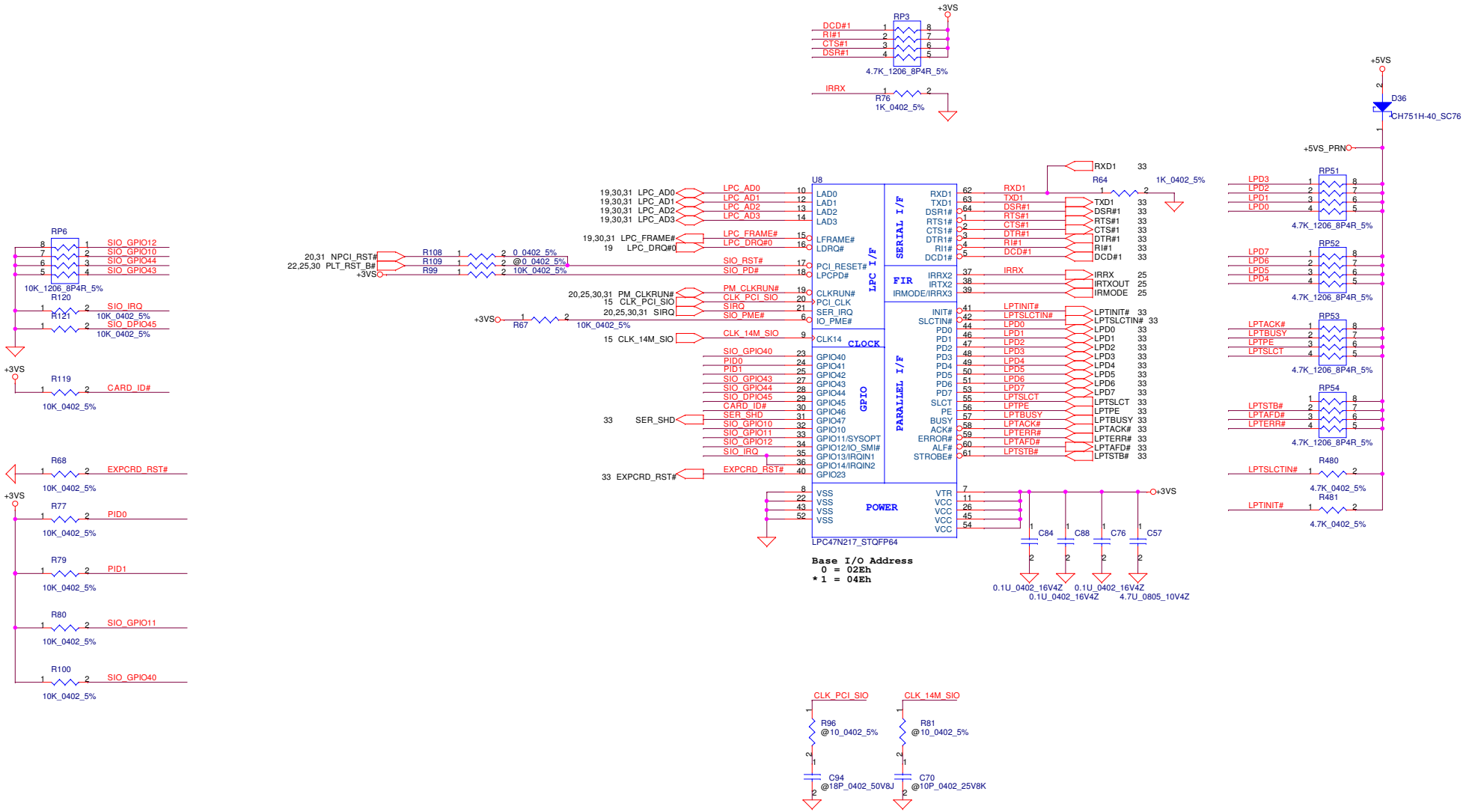
Security Classification	Compal Secret Data		
Issued Date	2006/02/13	Deciphered Date	2006/07/26

Compal Electronics, Inc.

Title: **USB & BT Connector**

Size	Document Number	Rev
	LA-3261P UMA	0.4

Date: Tuesday, March 27, 2007 | Sheet 28 of 55

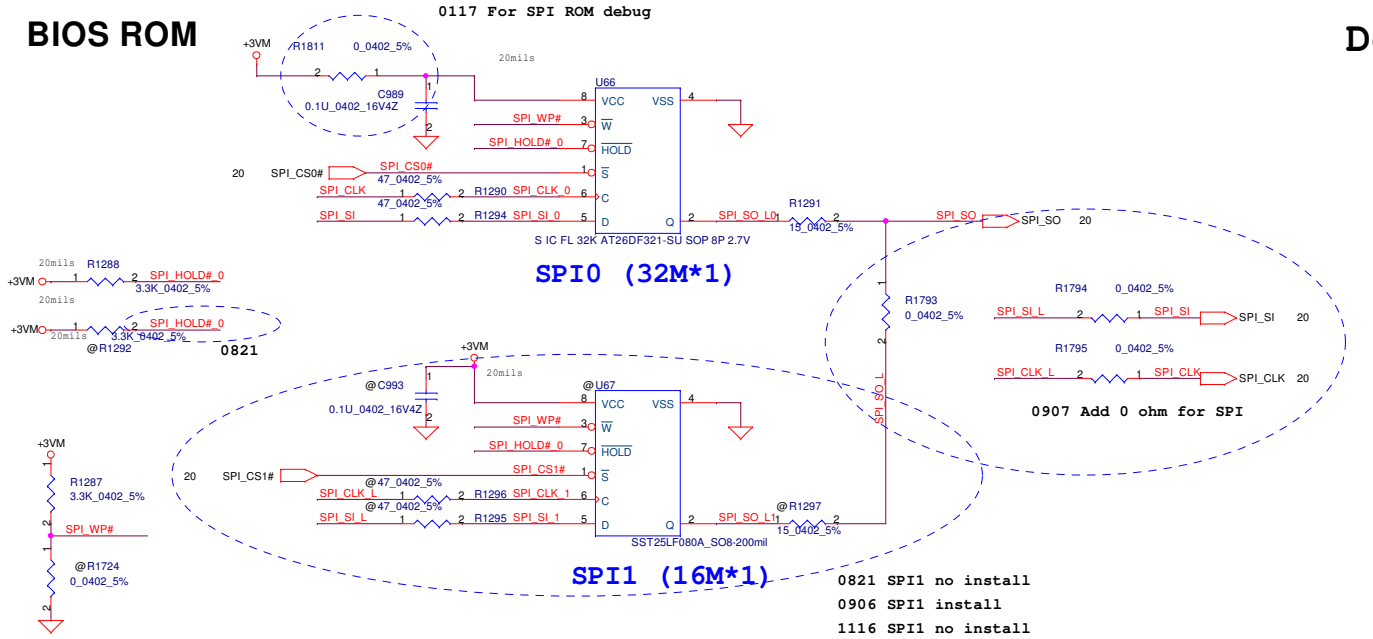


Security Classification	Compal Secret Data		
Issued Date	2005/05/26	Deciphered Date	2006/07/26

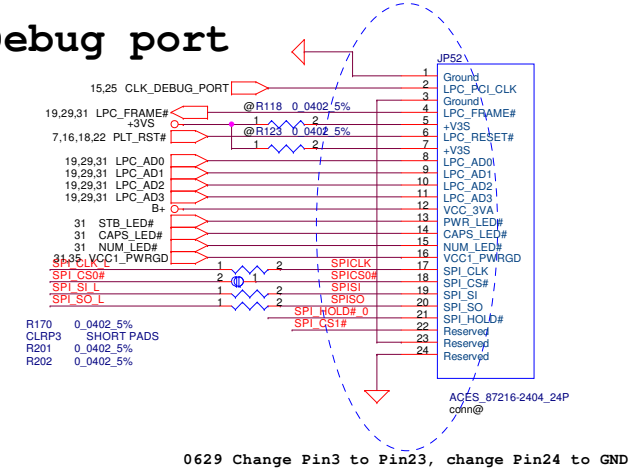
Compal Electronics, Inc.			
Title: SUPER I/O LPC47N217			
Size	Document Number: LA-3261P UMA		Rev: 0.4
Date: Tuesday, March 27, 2007	Sheet 29 of 55		

BIOS ROM

0117 For SPI ROM debug

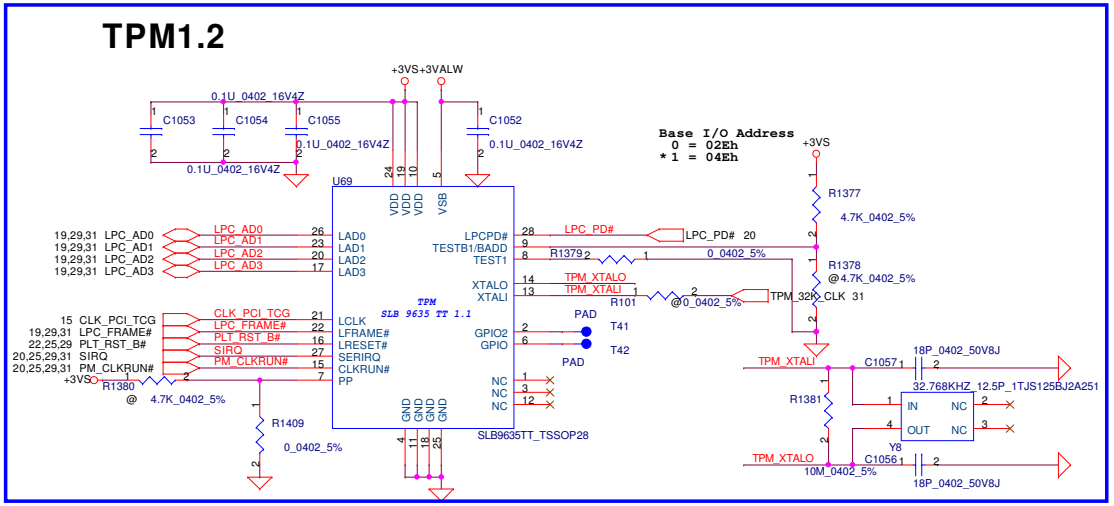


Debug port

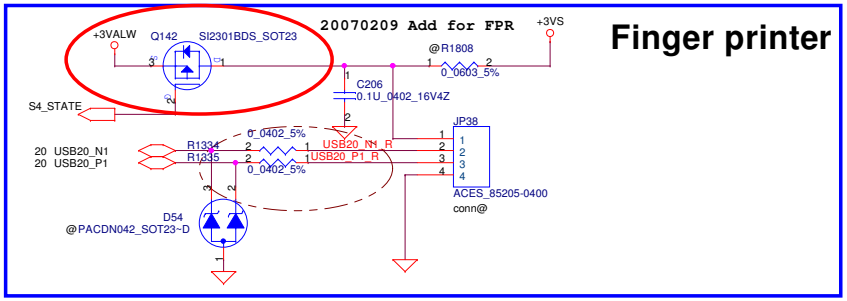


0629 Change Pin3 to Pin23, change Pin24 to GND

TPM1.2

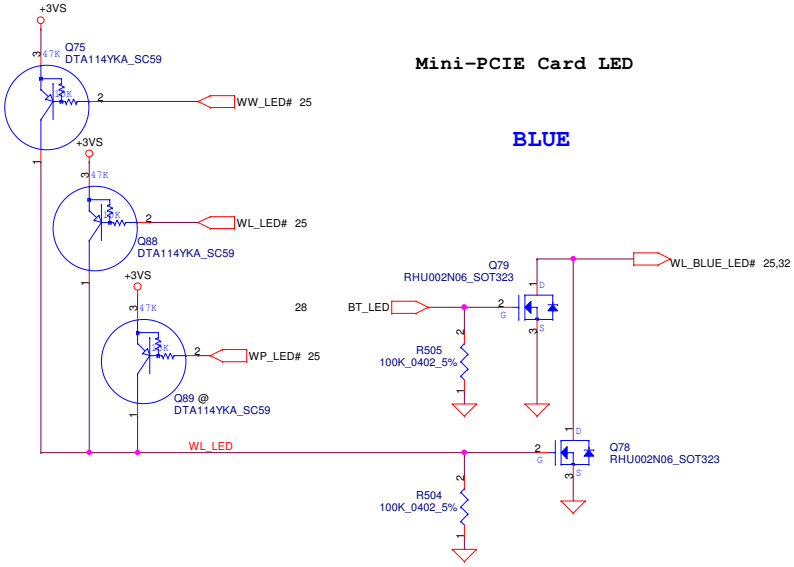


Finger printer



Mini-PCIE Card LED

BLUE



Security Classification	Compal Secret Data		
Issued Date	2006/02/13	Deciphered Date	2006/07/26

Compal Electronics, Inc.			
Title: TCG/BIOS ROM/PS2/LED/SW			
Size	Document Number: LA-3261P UMA		Rev: 0.4
Date: Tuesday, March 27, 2007		Sheet 30 of 55	

1213 Install R1646,C75

0621 Add PM_SLP_M#

1013 no install R1726
1213 Install R1726

BIOS debug port
Place under KB area

For KBC debugging used.

SMSC_1070_TQFP-128P

Keyboard/Mouse Interface

General Purpose I/O Interface

Access Bus Interface

LPC Bus

Power Mgmt/SIRQ

Miscellaneous

KBC1070_VTQFP128

AGND FILTER

0821 Install R29 100K ohm

1107 Install R1784
1128 Install R1783
0110 R1784 connected to +3VL
20070226 Add R1809 to GND

RSMRST circuit

0619 change

1031 Modify circuit

1114 Eliminate glitch

0811 For OTS 214499

Security Classification	Compal Secret Data		
Issued Date	2006/02/13	Deciphered Date	2006/07/26

Compal Electronics, Inc.

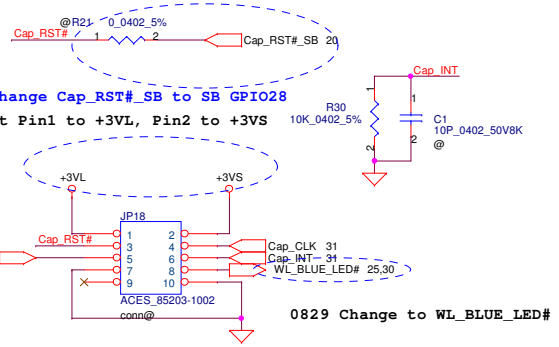
Title: LPC47N1021

Size: | Document Number: LA-3261P UMA | Rev: 0.4

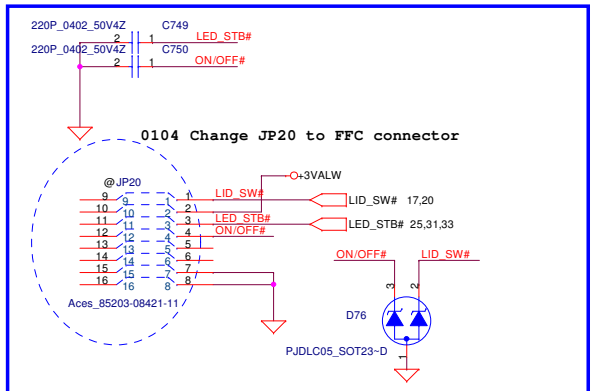
Date: Tuesday, March 27, 2007 | Sheet 31 of 55

SWITCH BOARD.

0622 change

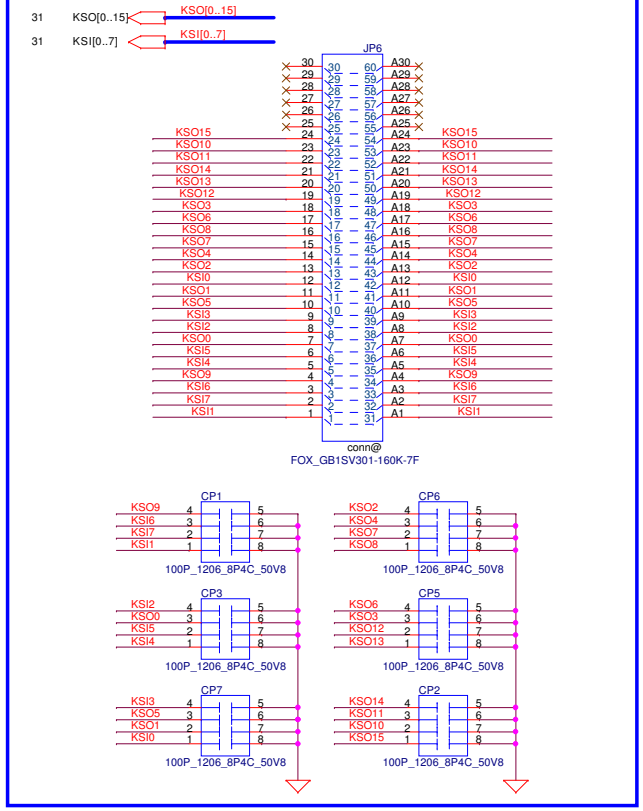


WL,Vol up,Vol down,Mute,Present button

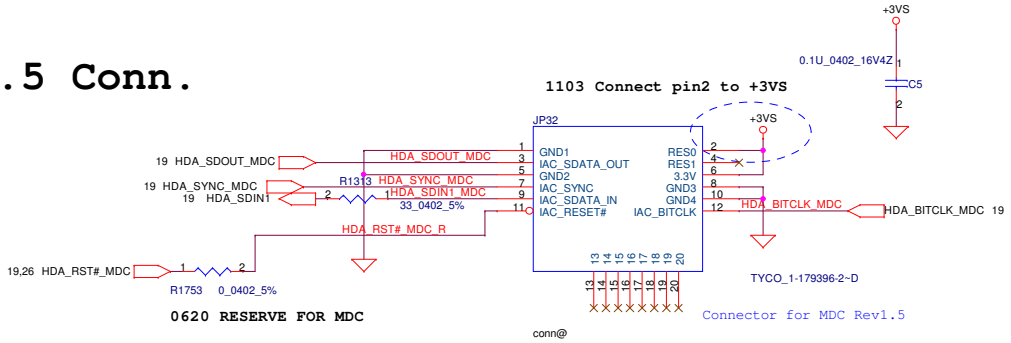


On/off ,information button

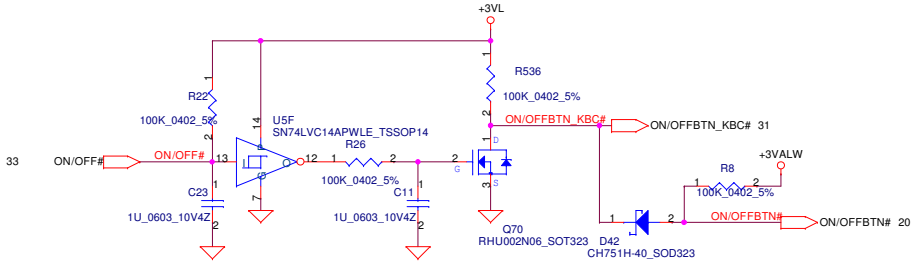
INT_KBD CONN.



MDC 1.5 Conn.

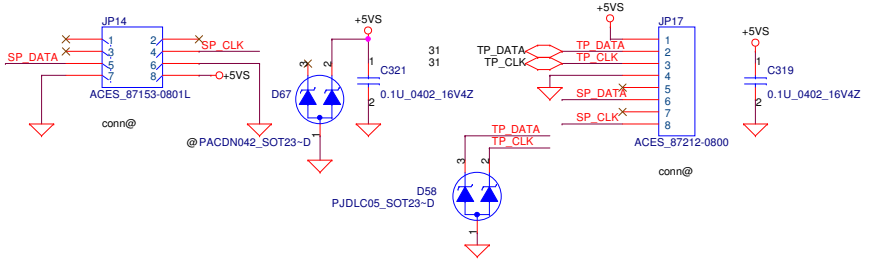


Power button



TrackPoint CONN.

T/P BOARD.



Security Classification	Compal Secret Data		
Issued Date	2006/02/13	Deciphered Date	2006/07/26

Compal Electronics, Inc.

Title: MDC/KBD/ON_OFF/LID

Size	Document Number	Rev
	LA-3261P UMA	0.4

Date: Tuesday, March 27, 2007 Sheet 32 of 55

DOCK CONN. 184PIN

20070226 Change RJ11 connector

Closed to dock JP30

0314 change
1013 change

1013 Add CRT circuit

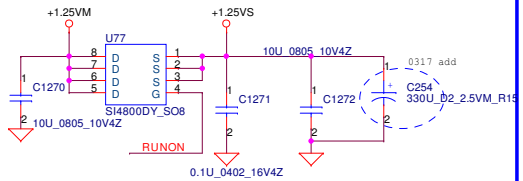
Closed to JP30

0108 EMI request

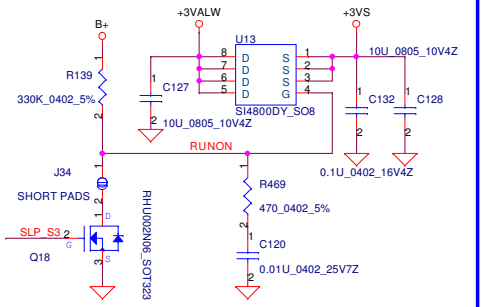
Security Classification	Compal Secret Data		
Issued Date	2006/02/13	Deciphered Date	2006/07/26

Compal Electronics, Inc.			
Title: Docking CONN.			
Size	Document Number: LA-3261P UMA		Rev: 0.4
Date: Tuesday, March 27, 2007	Sheet 33 of 55		

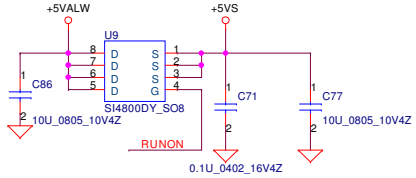
+1.25VM to +1.25VS Transfer



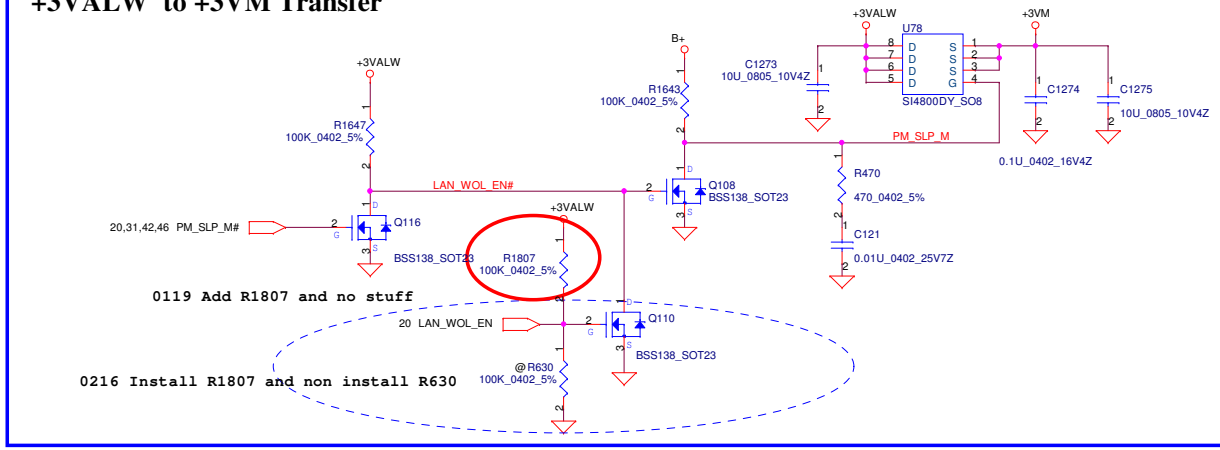
+3VALW to +3VS Transfer



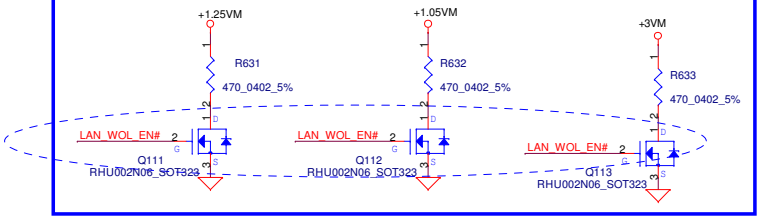
+5VALW to +5VS Transfer



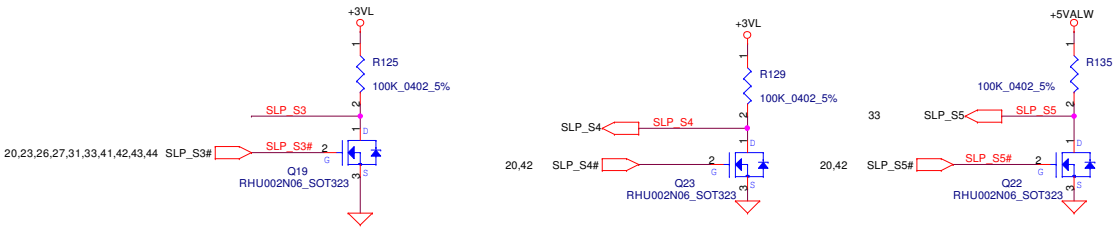
+3VALW to +3VM Transfer



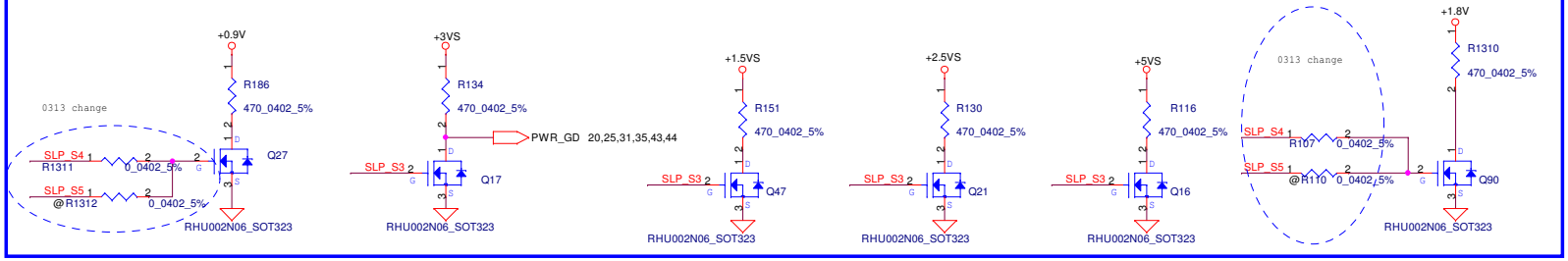
Discharge circuit-2 for V-M

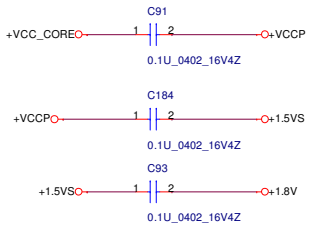


0718 Change net from PM_SLP_M# to LAN_WOL_EN#



Discharge circuit-1

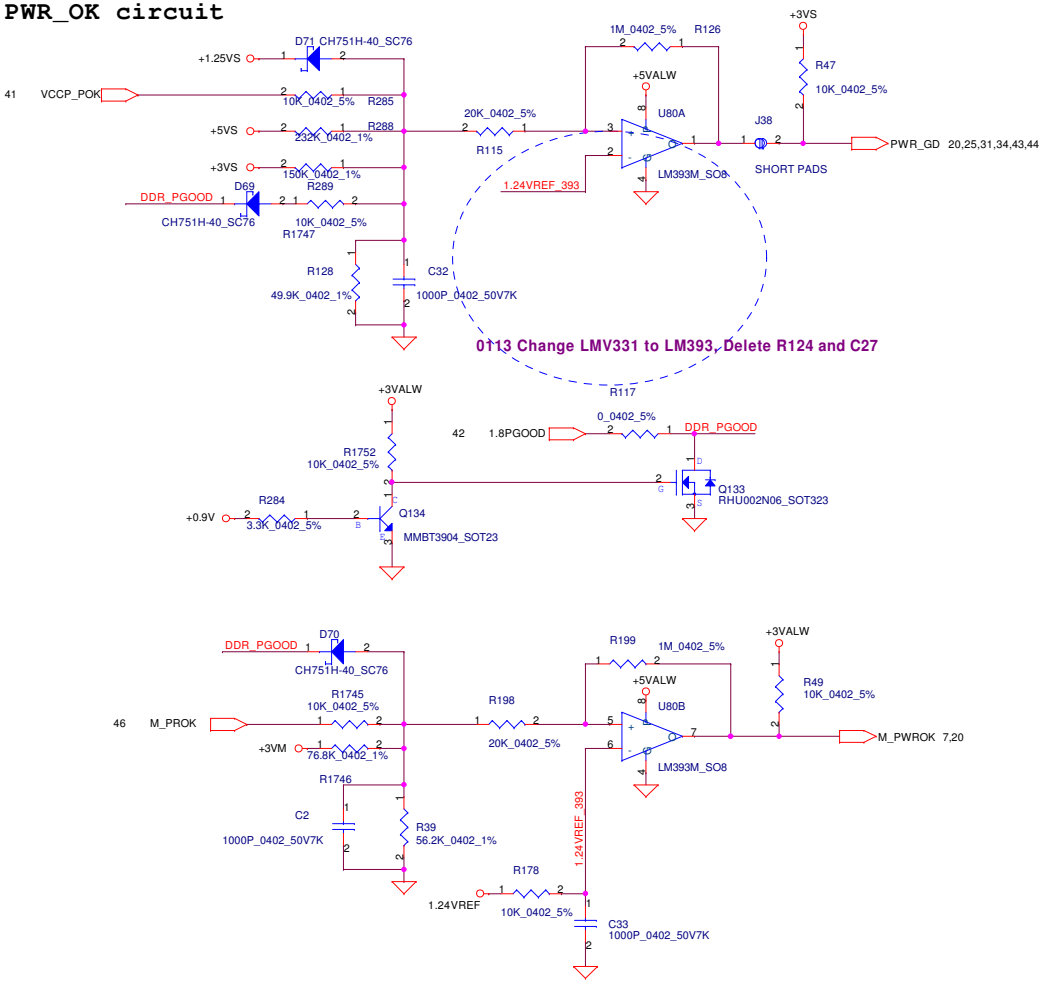




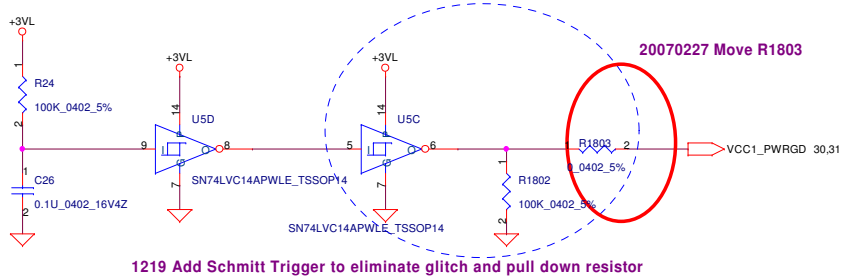
Security Classification	Compal Secret Data		
Issued Date	2006/02/13	Deciphered Date	2006/07/26

Compal Electronics, Inc.			
Title: DC/DC Circuits			
Size	Document Number: LA-3261P UMA		Rev: 0.4
Date: Tuesday, March 27, 2007	Sheet 34 of 55		

PWR_OK circuit

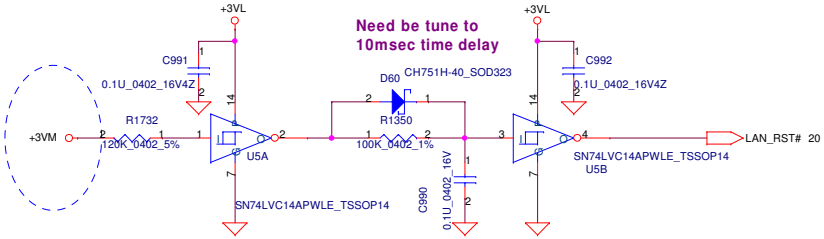


KBC PWR_OK circuit

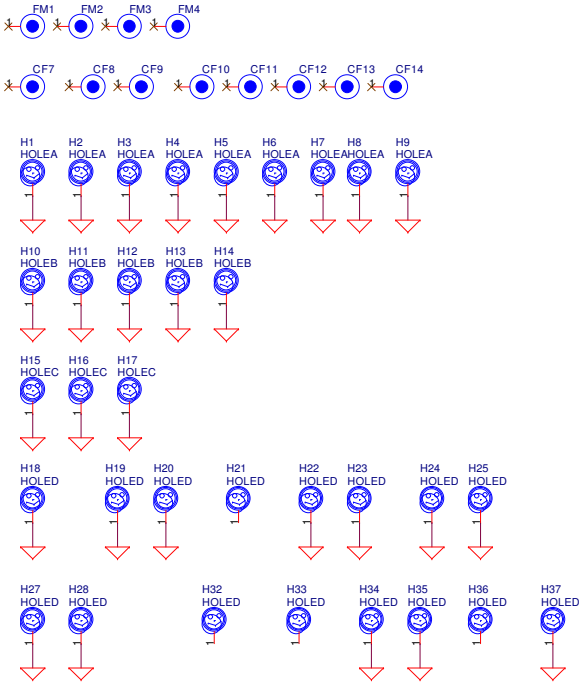


1219 Add Schmitt Trigger to eliminate glitch and pull down resistor

LAN_RST circuit

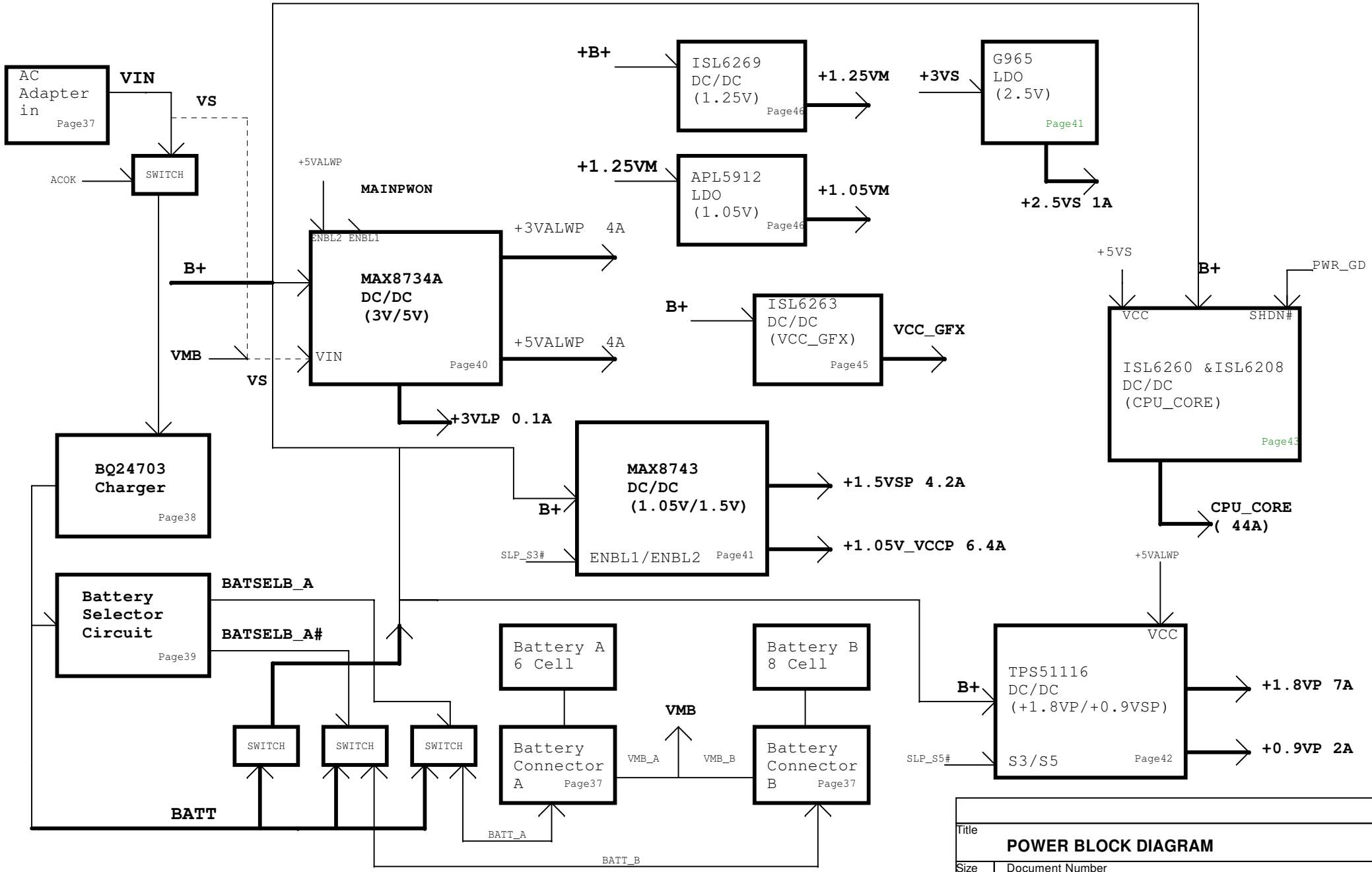


1113 Tie R1732.2 to 3VM instead of 3VM_LAN



Security Classification	Compal Secret Data		
Issued Date	2005/05/26	Deciphered Date	2006/07/26

Compal Electronics, Inc.		
Title: POK CKT		
Size	Document Number: LA-3261P UMA	Rev: 0.4
Date: Tuesday, March 27, 2007	Sheet 35 of 55	

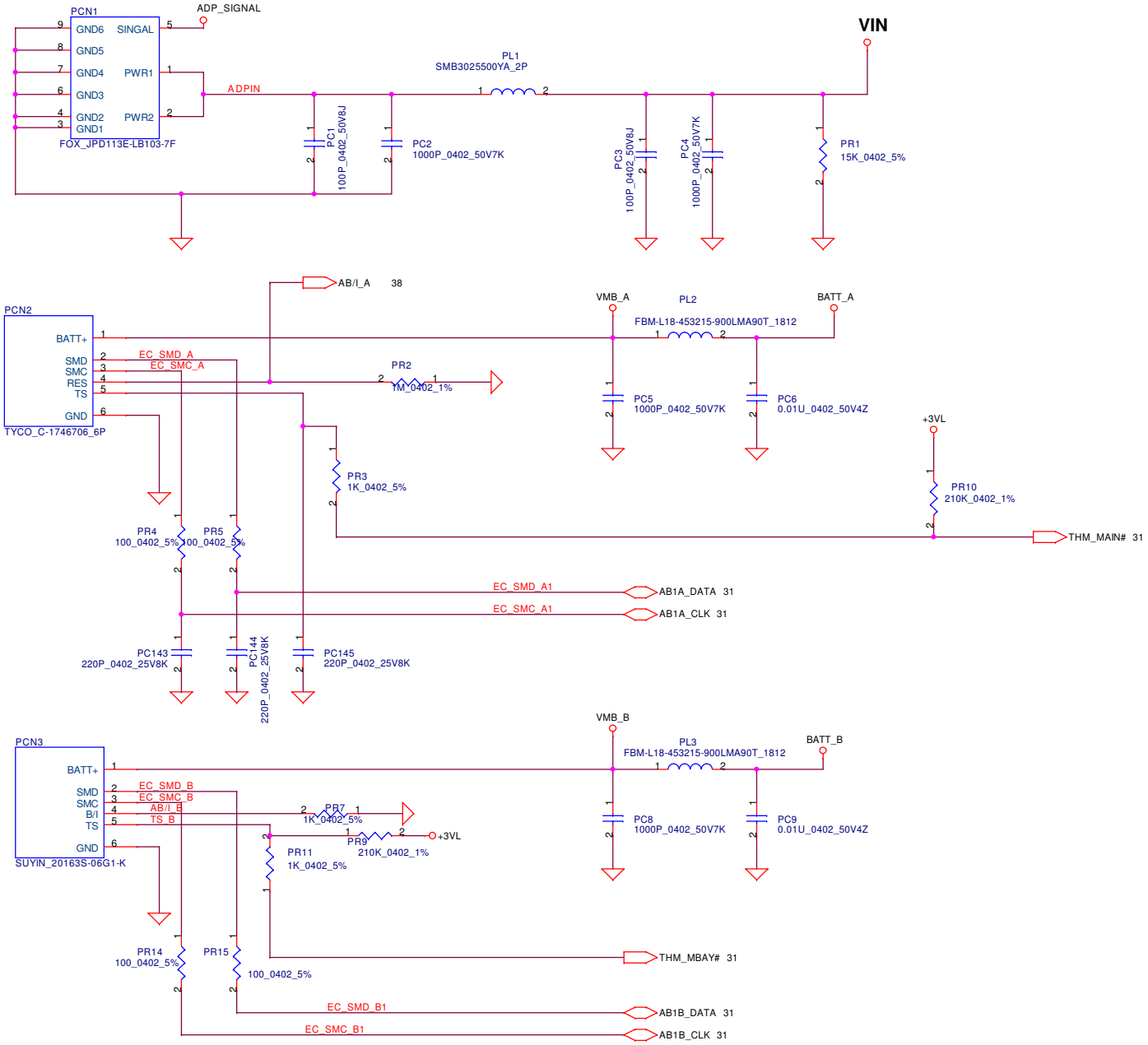


Title

POWER BLOCK DIAGRAM

Size	Document Number	Rev

Date: Tuesday, March 27, 2007 Sheet 36 of 55



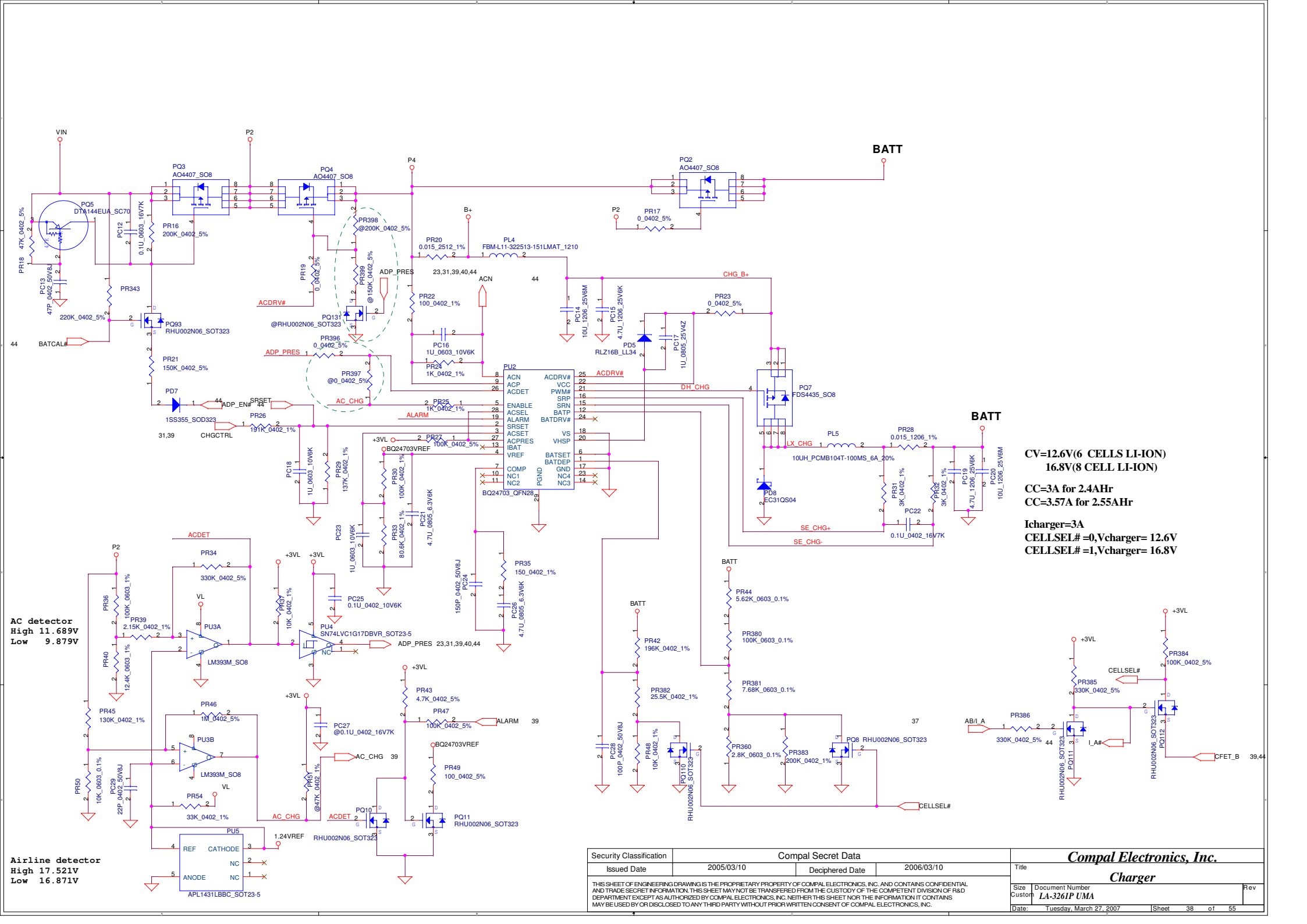
Security Classification	Compal Secret Data		
Issued Date	2005/03/10	Deciphered Date	2006/03/10

Compal Electronics, Inc.

Title: **BATTERY CONN**

Size	Document Number	Rev
Custom	LA-3261P UMA	

Date: Tuesday, March 27, 2007 | Sheet 37 of 55



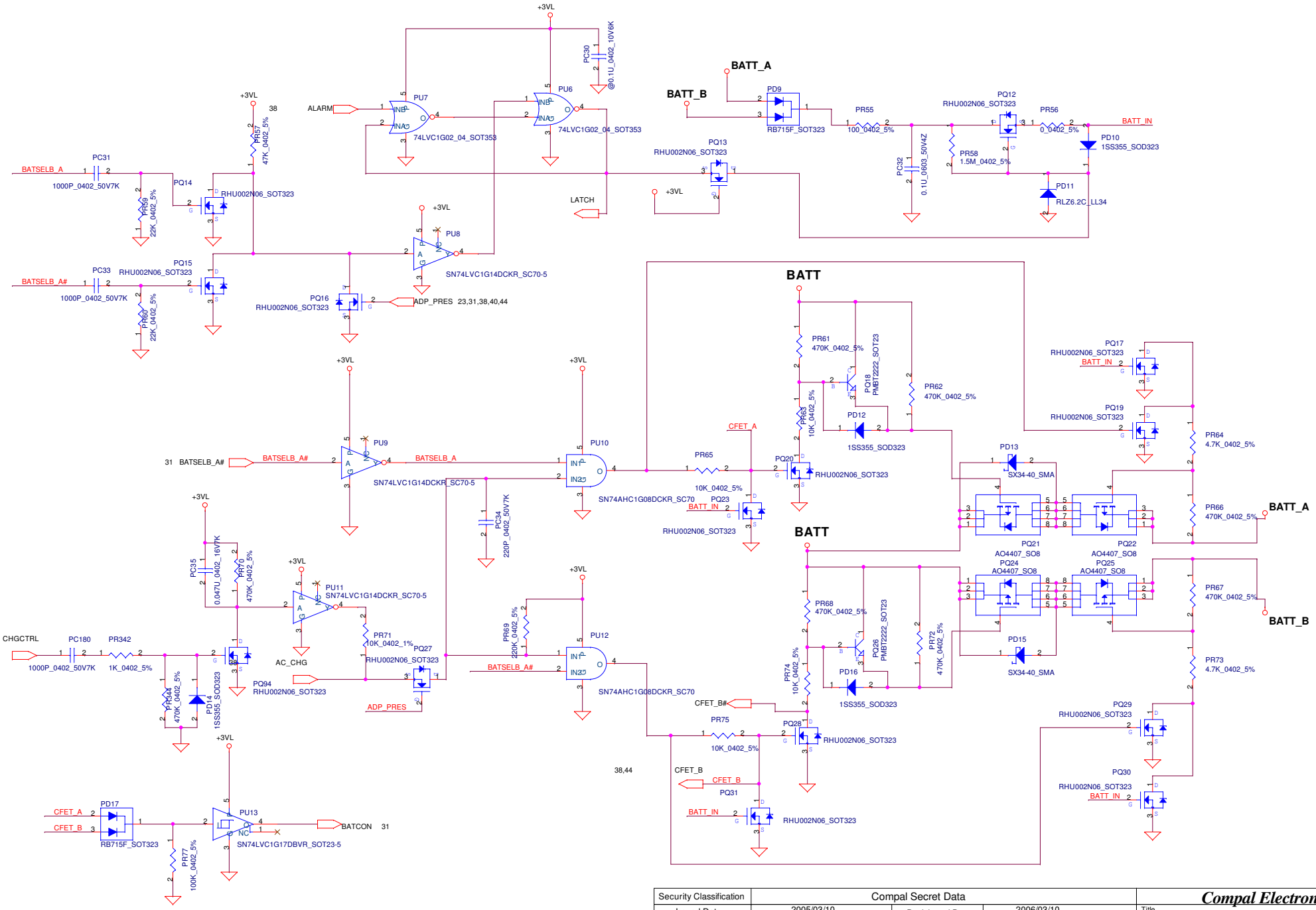
Security Classification	Compal Secret Data		
Issued Date	2005/03/10	Deciphered Date	2006/03/10

Compal Electronics, Inc.

Title: **Charger**

Size	Document Number	Rev
Custom	LA-3261P UMA	

Date: Tuesday, March 27, 2007 Sheet 38 of 55



Security Classification	Compal Secret Data		
Issued Date	2005/03/10	Deciphered Date	2006/03/10

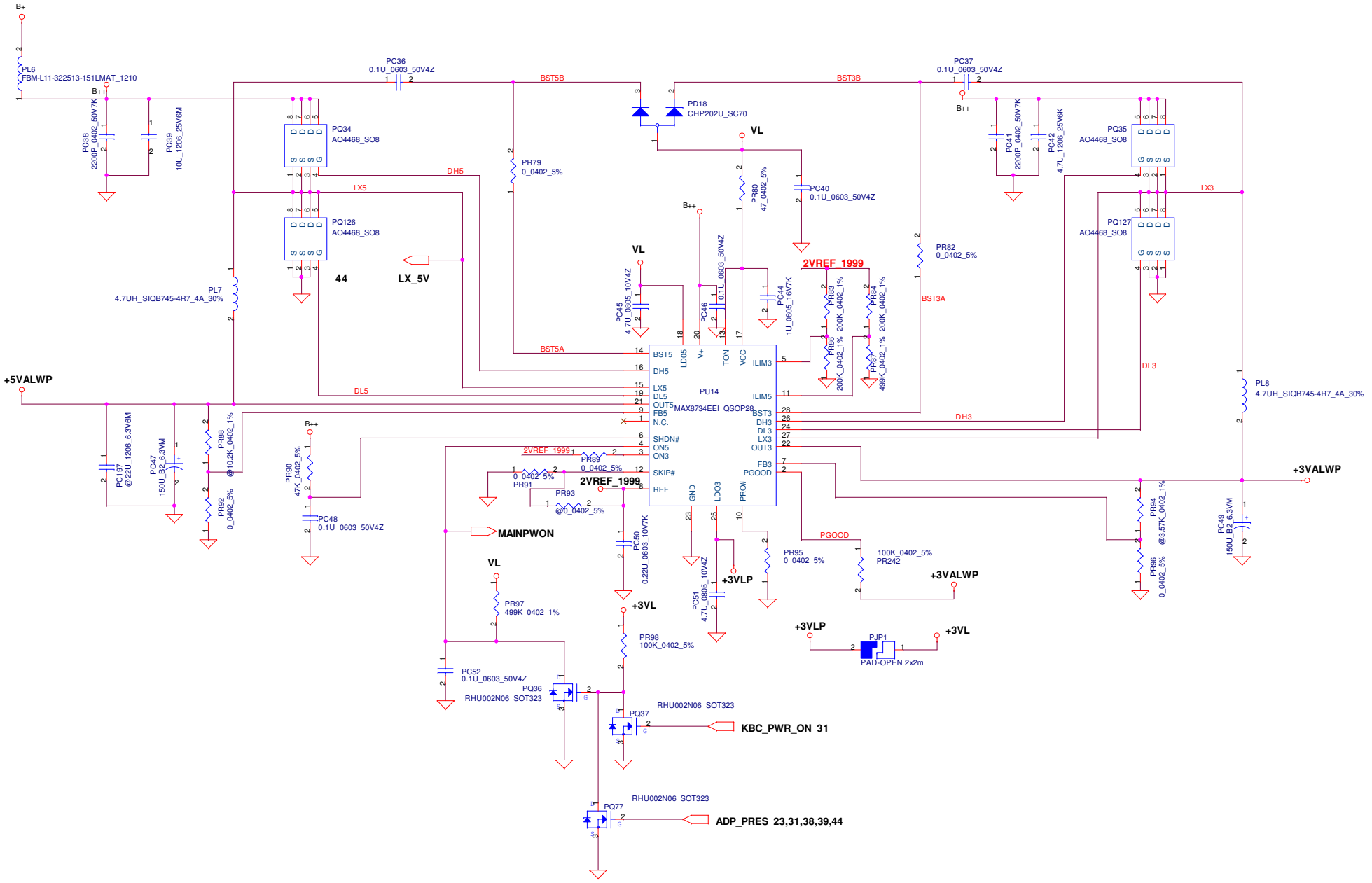
Compal Electronics, Inc.

Title: **Battery selector**

Size: Custom | Document Number: **LA-3261P UMA** | Rev:

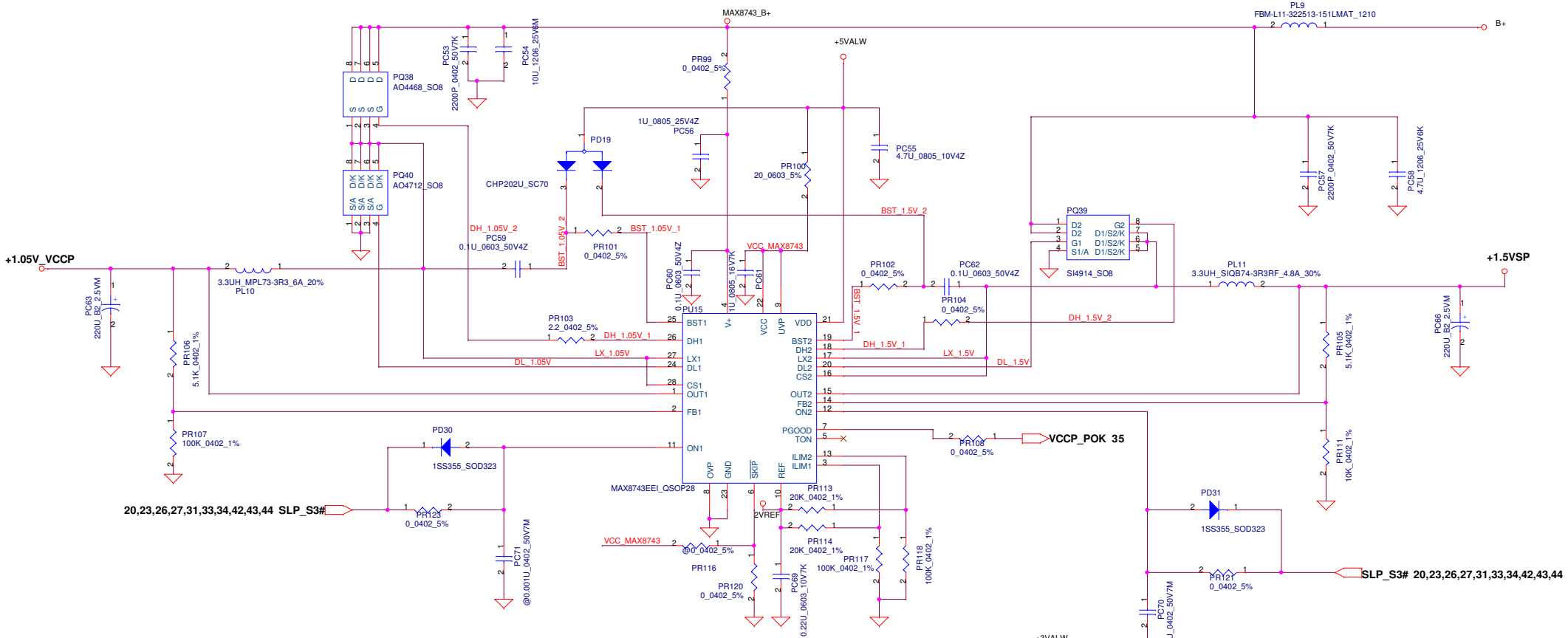
Date: Tuesday, March 27, 2007 | Sheet 39 of 55

+3.3V/+5V



Security Classification	Compal Secret Data		
Issued Date	2005/03/01	Deciphered Date	2006/03/01

Title	3.3V / 5V		
Size B	Document Number LA-3261P UMA		Rev 0.1
Date: Tuesday, March 27, 2007	Sheet 40 of 55		



1.5VSP/ +1.05V_VCCP/+2.5V

PJP2 PAD-OPEN 3x3m: +1.5VSP → +1.5VS (4A,160mils ,Via NO.=8)

PJP6 PAD-OPEN 4x4m: +1.05V_VCCP → +VCCP (6A,240mils ,Via NO.= 12)

PJP8 PAD-OPEN 3x3m: +0.9VP → +0.9V (2A,80mils ,Via NO.= 4)

PJP14 PAD-OPEN 4x4m: VCCGFXP → VCCGFX (8A,240mils ,Via NO.= 16)

PJP15 PAD-OPEN 2x2m: +1.05VMP → +1.05VM (1A,40mils ,Via NO.= 2)

PJP3 PAD-OPEN 4x4m: +5VALWP → +5VALW (4.5A,180mils ,Via NO.= 9)

PJP5 PAD-OPEN 4x4m: +3VALWP → +3VALW (3A,120mils ,Via NO.= 6)

PJP13 PAD-OPEN 4x4m: +1.25VMP → +1.25VM (3A,40mils ,Via NO.= 6)

PJP9 PAD-OPEN 2x2m: +2.5VSP → +2.5VS (1A,40mils ,Via NO.= 2)

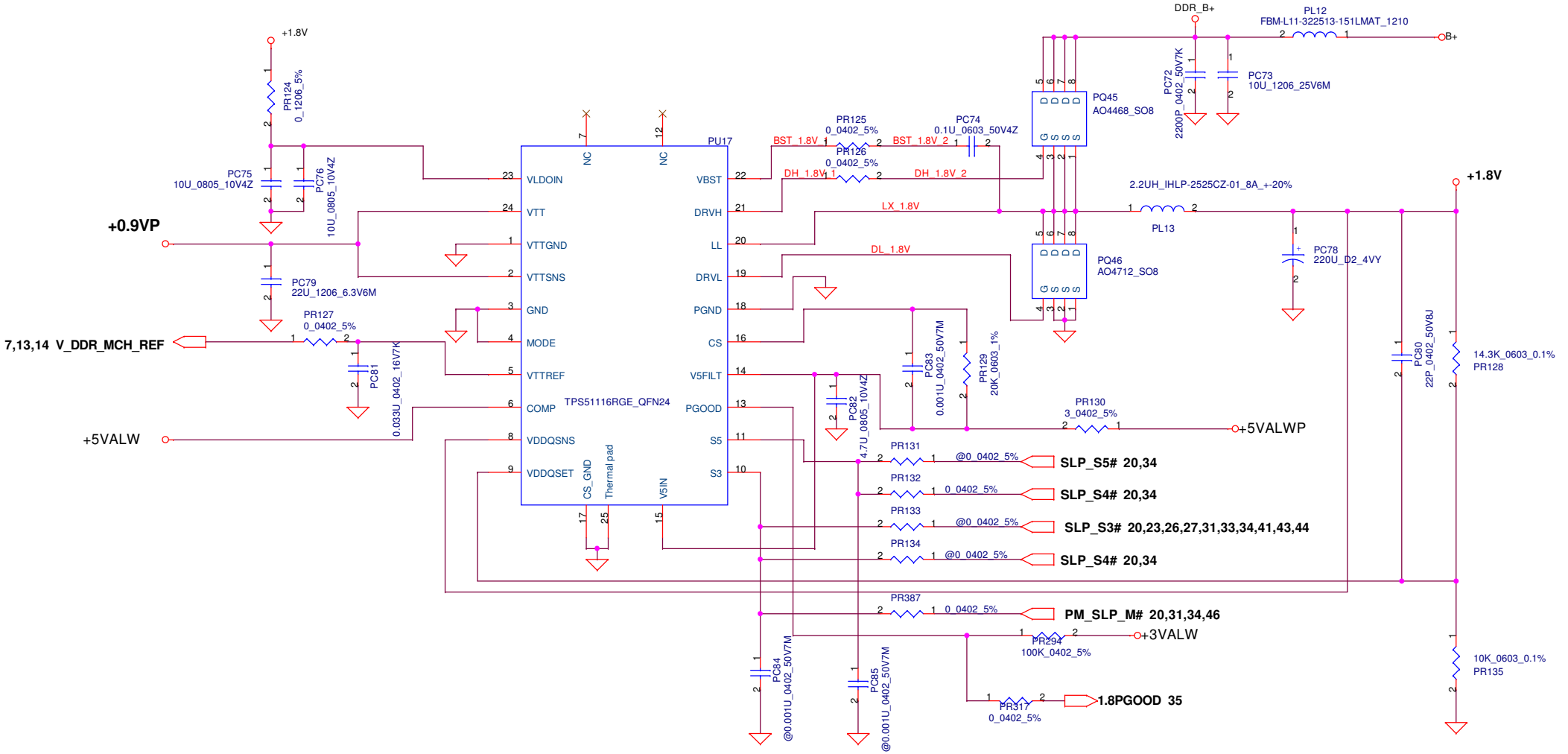
Security Classification	Compal Secret Data		
Issued Date	2005/03/10	Deciphered Date	2006/03/10

Compal Electronics, Inc.

Title: **2.5VALW/1.5VS/1.05VCCP**

Size: Custom | Document Number: *LA-3261P UMA* | Rev:

Date: Tuesday, March 27, 2007 | Sheet 41 of 55



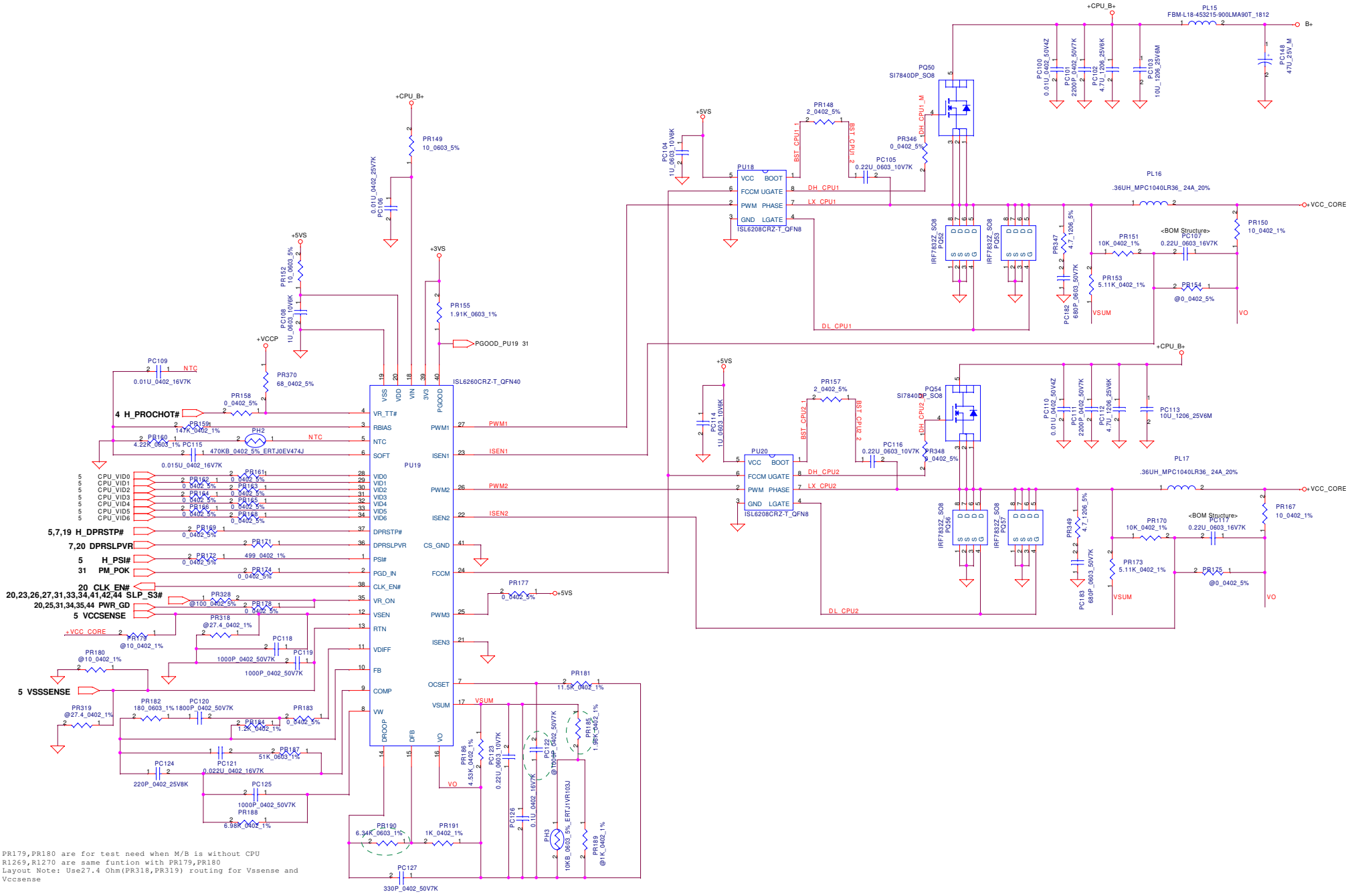
Security Classification	Compal Secret Data		
Issued Date	2005/03/10	Deciphered Date	2006/03/10

Compal Electronics, Inc.

Title: **1.8V/0.9VS**

Size	Document Number	Rev
B	LA-3261P UMA	

Date: Tuesday, March 27, 2007 Sheet 42 of 55



PR179,PR180 are for test need when M/B is without CPU
R1269,R1270 are same funtion with PR179,PR180
Layout Note: Use27.4 Ohm(PR318,PR319) routing for Vssense and Vccsense

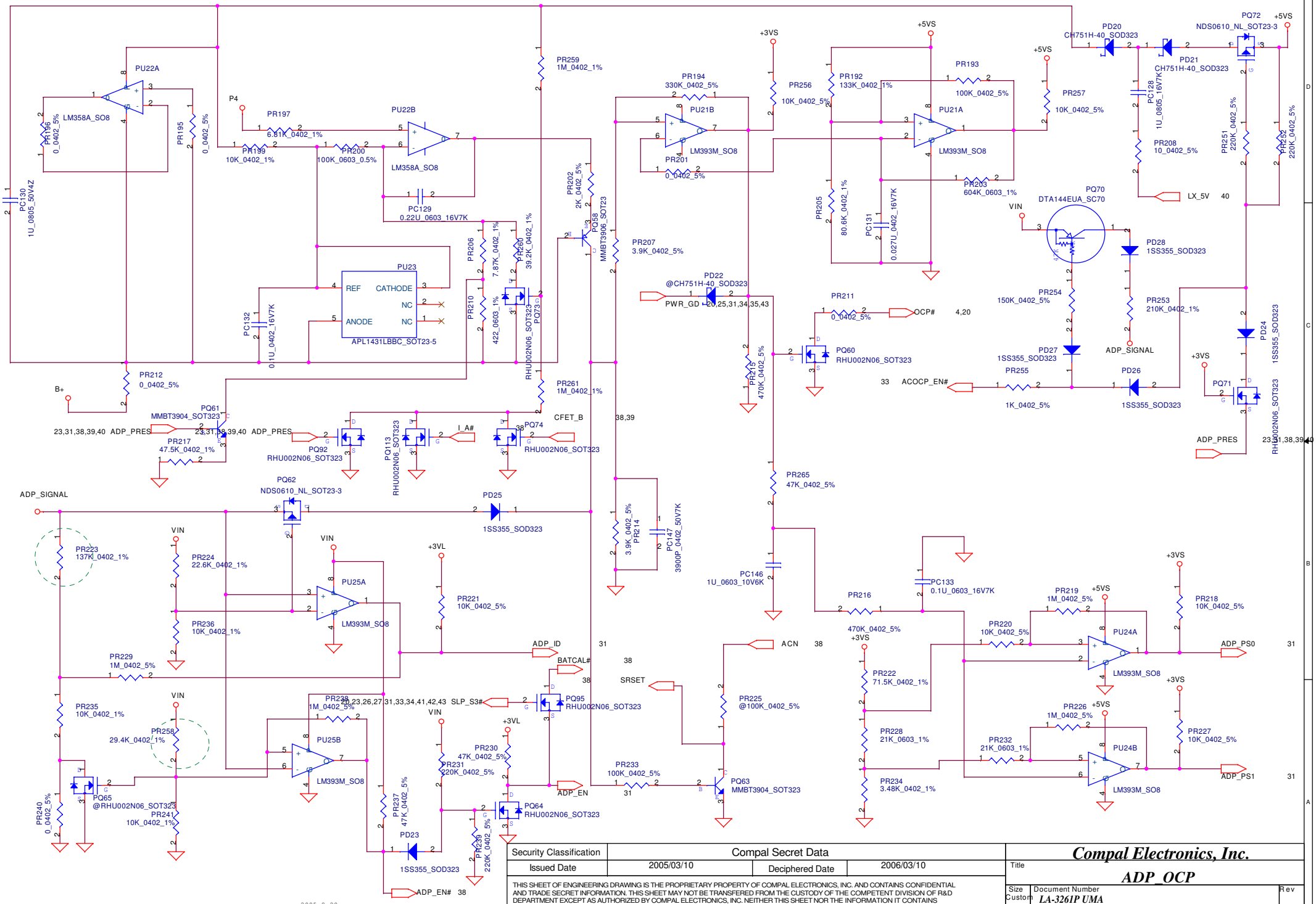
Security Classification	Compal Secret Data		
Issued Date	2005/03/10	Deciphered Date	2006/03/10

Compal Electronics, Inc.

Title: CPU_CORE

Size: C | Document Number: LA-3261P UMA | Rev

Date: Tuesday, March 27, 2007 | Sheet 43 of 55



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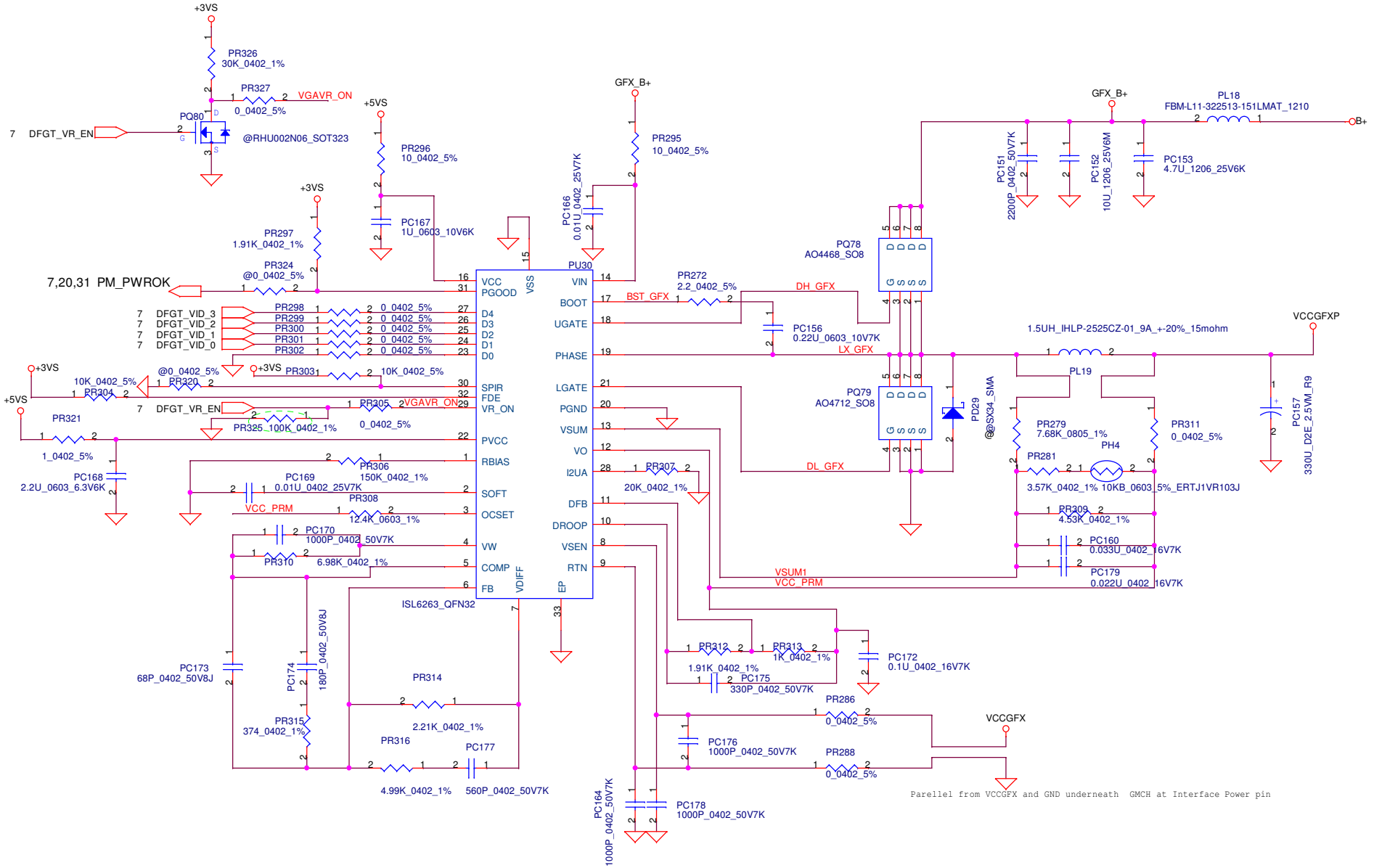
Title: **ADP_OCP**

Size	Document Number	Rev
Custom	LA-3261P UMA	

Date: Tuesday, March 27, 2007 Sheet 44 of 55



Security Classification	Compal Secret Data		
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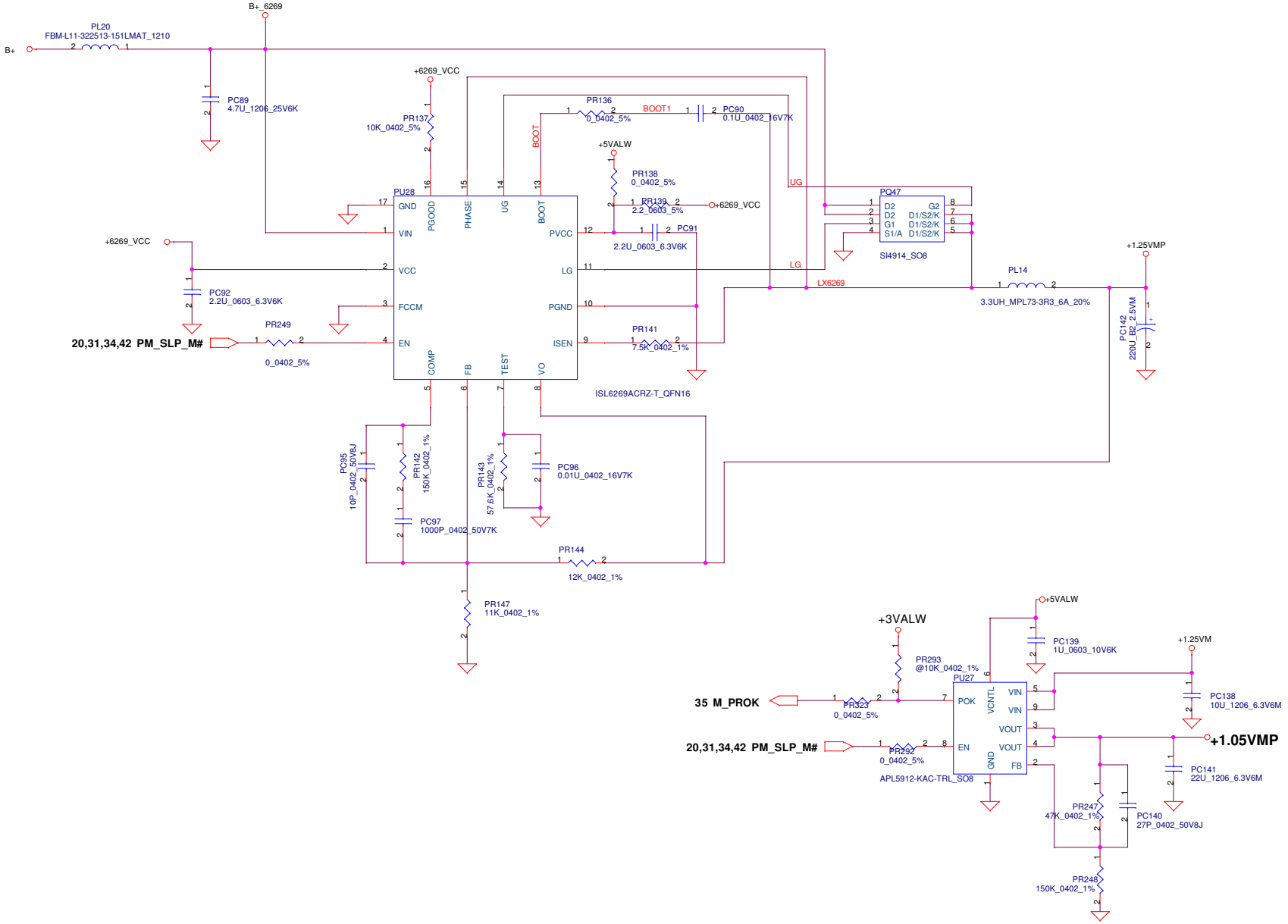
Title: **VCCGFX**

Size	Document Number	Rev
B	LA-3261P UMA	

Date: Tuesday, March 27, 2007 Sheet 45 of 55



Security Classification	Compal Secret Data		
Issued Date	2005/03/10	Deciphered Date	2006/03/10

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Title: **+1.25VMP/+1.05VMP**

Size	Document Number	Rev
Custom	LA-3261P UMA	

Date: Tuesday, March 27, 2007 Sheet 46 of 55

Version Change List (P. I. R. List) for Power Circuit (1)

Item	Page#	Title	Date	Request Owner	Issue Description	Solution Description	Rev.
1	Page42	1.8V/0.9V	3/9/2006	HP RL	Power Sequence	No install PR131 and install PR132 Change SLP_S5# at PR134.1 to SLP_S4# No install PR133 and install PR134 Add a 0 ohm resistor PR317 (no stuff) on M_PWROK	DB
2	Page45	VCCGFX	3/9/2006	Compal	MAX8776 VID table can't meet Intel VID SPEC	Change VCCGFX IC solution from MAX8776 to ISL6263	DB
3	Page43	CPU_CORE	3/10/2006	HP RL		Add 27.4 ohm pull-down (no stuff) on VCCSENSE & VSSSENSE near VR	DB
4	Page46	1.25VM/1.05VM	3/9/2006	HP RL	M_PWROK	Add a 0 ohm resistor PR323 (install) on M_PWROK change PR293 pin1 to +3VL	DB
5	Page46	1.25VM/1.05VM	4/10/2006	Compal	Correct 1.25VM voltage setting	Change PR144 to 12K and PR147 to 11K.	DB1-A
6	Page45	VCCGFX	4/10/2006	Compal	Power Sequence	Add a 0ohm PR324 (no stuff) on PM_PWROK	DB1-A
7	Page45	VCCGFX	4/24/2006	Compal	In S3 state, DFGT_VR_EN will no be actively driven, it is better to have a pull down resistor on DFGT_VR_EN.	Add a 30Kohm PR325	DB1-A
8	Page42	1.8V/0.9V	5/15/2006	HP MJ	Power Sequence	Change 1.5S to 1.8V in page 42 at pin 23 (VLDOIN)	DB1-B
~~9~~	~~Page46~~	~~1.25VM/1.05VM~~	~~5/15/2006~~	~~HP MJ~~	~~Power Good~~	~~Add PU34~~	~~DB2~~
10	Page38	Charge	5/15/2006	compal	For reducing charge temperture.	Change PL5 from 8.2uh MPL73-8R2 to 10UH_PCMB104T-100 Change PR28 from 0.015_2512 to 0.015_1206	DB2
11	Page43	CPU_CORE	6/5/2006	HP MJ	Power Sequence	investigate that SLP_S3# connect VR_ON and PM_POK connect PGD_IN	DB2
~~12~~	~~Page41~~	~~VCCP&1.5VS~~	~~6/5/2006~~	~~compal~~	~~Swap +1.05V_VCCP and +1.5VS location for improving power plane.~~	~~Change PR107 from 100k to 10K,PR111 from 10K to 100K.~~	~~DB2~~
13	Page37,38,44		6/22/2006	HP MJ	Chimay support for new battery cell chemistries	P38 : remove PR52, PR38, PR41,PR53, PQ9 P39 :remove PR262, PR263, PR264, PR76, PQ75, PQ76, PQ32 P37: Add PQ81~PQ91 PR329~PR341,PD32~PD36 P38 :Add PD37 P44 :Add PQ92,PD38,PD39	DB2
14	Page41	2.5VALW/1.5VS /1.05VCCP	8/17/2006	HP MJ	For sequence fine tune	Add PC181 but not be installed	SI
15	Page43	CPU_CORE	8/17/2006	HP RL	Add 68ohm pull up to +VCCP at PU19.4 per Intel DG1.0 sec. 4.4.1.3 Figure 50	Add PR345 as 68ohm between +VCCP and PU19.4	SI
16	Page44	ADP_OCP	11/08/2006	HP RL	Identify 65W adapter as full adapter	Change PR223 from 180K to 182K, PR258 from 29.4K to 22.6K	SI2
17	Page43	CPU_CORE	11/08/2006	compal	For EMI concern, add snabber	Add PR349 and PR347 as 4.7ohm, Add PC183 and PC182 as 680pF Change boost resistor (PR148 and PR157)from 0 to 2 ohm	SI2
18	Page38	Charge	11/08/2006	compal	Base on "Energy STAR" spec, reduce S5 and S3 power consumption (AC mode)	Uninstall PQ11	SI2
19	Page42	1.8V/0.9V	11/13/2006	HP	Add PM_SLP_M# sequence	Add PR387	SI2

Title	PWR PIR Sheet (1)		
Size: Custom	Document Number		Rev
Date: Tuesday, March 27, 2007	Sheet 47 of 55		

Version Change List (P. I. R. List) for Power Circuit (2)

Item	Page #	Title	Date	Request Owner	Issue Description	Solution Description	Rev.
20	Page43	CPU_CORE	2/28/2007	Compal	Fine tune CPU CORE solution	No install PC122 Change PR185 from 3K to 1.96K Change PR190 from 6.19K to 6.34K	MV
21	Page44	ADP_OCP	2/28/2007	HP	System identity	Change PR223 from 182K to 137K Change PR258 from 22.6K to 29.4K	MV
22	Page38	Charger	3/1/2007	Compal	Reserve circuit for testing Energy STAR	Reserve PR397, PR398, PR399 and PQ131 Add PR396 as 0 ohm.	MV

	Item	Fixed Issue	Reason for change	PAGE	Modify List	M.B. Ver.
For DB1-B						
<2006.03.29>	1		Reserve resisters on Debug ports	30	Add R170, R201, R202 and CLRP3 jopen	0.2
	2	SATA footprint is wrong	SATA connector's PCB footprint is wrong	22	change to OCTEK_SAT-22DD1G_22P	0.2
<2006.04.10>	1		follow Intel suggestion for XDP_DBRESET#	4, 20	R243 no install and R1589 install (XDP_DBRESET#)	0.2
	2		Change component' s footprint for supply and layout easy	07	R1443 change from 0603 size to 0402	0.2
	3		+VCC_PEG should be 1.05V instead of 1.25V for Creatline	10	R1465 install and R1467 no install	0.2
	4		Monitor NB cracked pins	11	Add Q118, Q119, Q120, Q121, Q122, Q123, R1700, R1701, R1702 R1703, R1704, R1705, R1706, R1707, R1708, R1709, R1710, R1711	0.2
	5		Monitor SB cracked pins	21	Add Q124, Q125, Q126, Q127, R1716, R1712, R1713, R1717 R1718, R1714, R1719, R1715	0.2
	6	SPI BIOS can not flash.	For SPI BIOS flash issue	23	Delete Q102, R178 and Q115 Q102 pin1 short to pin3-->+3VM connect to +3VM_LAN PLT_RST# connect to PM_LAN_EN	0.2
<2006.04.21>	1		For LAN link status	18	change PCI_PIRQG to LED_LINK_LAN# and add R1727 0 ohm	0.2
	2		For LAN active status	23	Add LED_ACT_LAN# this net	0.2
	3		For ADP_PRES new design	20	add D68 and disconnect LED_LINK_LAN#	0.2
	4		For LAN net name	19	change net name from LAN_RST to LAN_RSTSYNC change net name from LANLINK_STATUS# to LED_LINK_LAN#	0.2
	5		For Compal Fan design	4	change Fan connector pin 1 and pin4	0.2
<2006.04.24>	1		For NIC RST	20 35	change net name from PM_LAN_EN to LAN_RST# Add a Resister R1722(0 ohm), R1732, R1731(no install) change net name from PGD_IN to LAN_RST# Install C991, C990, C992, D60, R1350 Adjust C990 and R1350 value to 0.1uF and 100K ohm.	0.2
For DB1-C						
<2006.05.15>	1	System can not power on	For RTC CLK	19	add R1733	0.3
	2	LAN can not work	For LAN function	23	modify LAN relative schematics	0.3
	3		For PWR OK	35	Change R124 pin2's voltage from 0.9v to 1.24VREF Change R1732 pin2's voltage from 3VM to 3VM_LAN	0.3

Security Classification	Compal Secret Data		
Issued Date	2005/03/01	Deciphered Date	2005/04/06

Title	HW PIR		
Size: Custom	Document Number: LA-3261P UMA		Rev: 0.4
Date: Tuesday, March 27, 2007	Sheet 49 of 55		

	Item	Fixed Issue	Reason for change	PAGE	Modify List	M.B. Ver.
For DB2 <2006.05.29>	1		Add new feature (Kill switch)	22	Add R1736, jp53, R1737 and Q129	0.4
	2		modify CRACK_GPIO28 circuits	11 21	delete R1700, R1707, R1705-->NB delete R1712, R1713, R1714-->SB	0.4
	3		Change pull up for CK505 strapping	15	on R1108, R1690, R1245 from +3.3VM_CK505 to +3VS	0.4
	4		for LAN IVRI thermal protect and limit current.	23	add R1	0.4
	5		Add resisters for GPI pins floating	20	addR3, R6, R9, R11, R15	0.4
	6		Change KBC RST pin	31	change from PLT_RST# to NCPI_RST#	0.4
	7		Change to USB port assignments	28	Move Dock1 from USB8 to USB7 and move WWAN from USB3 to USB8	0.4
<2006.06.12>	1		New PCIE assignments	20	Updated Changes: PCIe - port1 = Free PCIe - port2 = WLAN PCIe - port3 = Free PCIe - port4 = Robson PCIe - port5 = Docking PCIe - port6 = Intel LOM is fixed at this location	
	2		Change SW design to Capsense SW.	32	Change SW Connector JP18 type and relative circuits	
	3		Add new feature (Robson)	15	Add R5, R13 on SRC6 and R14, R17 on CLKREQ_E#	
	4		Change GPIO pins	18 20	change GPIO4(SB) from LED_LINK_LAN# to PCI_PIRQG# change GPIO1(SB) from CB_PE# to LANLINK_STATUS#(i)	
	5		Change HP debug port power source	30	Add R1740, R1741 and connect to +3vs	
	6		Change KBC 1070 GPIO pins	31	CRACK_GPIO28 from GPIO28(KBC) to GPIO8(KBC) add R155, R156, R18, R20 and their signals connect to JP18 Add Cap_INT on GPIO25(KBC)	
	7		change WALN power source	25	change from +3valw to +3vM	
	8		Change U75 power source for LAN function	23	U75 should be powered by V3.3M instead of 1.8VM	
	9		Change USB power switch control pin	28	From S5 to S4_STATE# to control USB power	
	10		For support 2GB DIMMs	7 13, 14	BJ29 pin and BE24 pin (NB)connect to DDR DIMMA, B(A14 pin)	
	11		For Crestline sightings requires	7	add a 0ohm R1759 on pin N20(NB).	
<2006.06.14>	1		Modify PWROK circuits for All power source check	35	Change R1732 pin2's voltage from 3VM to 3VM_LAN	

Security Classification	Compal Secret Data		
Issued Date	2005/03/01	Deciphered Date	2005/04/06

Title	HW PIR		
Size: Custom	Document Number: LA-3261P UMA		Rev: 0.4
Date: Tuesday, March 27, 2007	Sheet 50 of 55		

For DB2

	Item	Fixed Issue	Reason for change	PAGE	Modify List	M.B. Ver.
<2006.06.19>	1		Add Intel RSMRST circuit	31	Add R1749, R1750, R1751 and Q131, D68	0.4
	2		Change resister value meet G-vendor suggestion	25	change R1359, R1362 VALUE	0.4
	3		Kill switch design change	22	change R1736 pin2 contact to +RTCVCC	0.4
<2006.06.20>	1		Change PWR_OK circuit	35	delete R157 and PGD_IN net	0.4
	2		Reserve resister on HDA _RST#_MDC	32	Reserve R1753 0 ohm	0.4
	3		delete two components on Debug part 21	30	delete R1740, R1741	0.4
	4		Control Audio volume when boot	28	add EAPD link to KBC GPIO31	0.4
	5		Add new feature -->Robson	25	Add and change JP13 pin assignment for Robson	
	6		Fix LAN power circuit to IVRD	23	Delete R1 (0.68ohm), R1624, and install R1734	
	7		improve LAN Power ripple	23	Add C1364, C1363 on +3V_LAN and +1.8VM_LAN	
	8		improve DVI issue	16	Add SDVO_CLK/Data net name to NB SDVO_CLK/ Data pins	
<2006.06.21>	1		Change USB control signal	28	Change control signal name to S4_STATE and add Q132	
	2		Isolate power noise for NB	10	change R1453, R1456 from Resister to bead	
<2006.06.22>	1		Hold RESET to modem	32	Install R1753	
	2		Enable WLAN for AMT	25	Install R194, R195 and R197	
	3		Improve TV-out signals and fix TV garbage issue	10	change R175, R176, R177 from150 ohm to 75 ohm	
	4		follow Intel Demo circuit for XDP	28	Change pull up R1589 value for XDP_DBRESET# from 10K to 1K	
<2006.06.23>	1		Chnage Fan Connector pins' count	4	Chnage JP8 from 4pins to 3 pins.	
	2		delete MDC disable reserve part	32	delete U43B	
	3		Implement STB_LED# driver	31	add U43B	
	4		Modify power OK circuit	35	add Q134, Q133, R39, C2 Delete R286, R127, C30, R117, R35, R34, R118, U79	
	5		For Non-link part (INV_PWM from KBC to LCD)	17	delete R131	
	6		Delete Repeated function circuit	11	Delete D21,R520	
<2006.07.18>	1		For C-status	20	Install R179	0.5
	2		For discharge issue	34	Change discharge circuit net from PM_SLP_M# to LAN_WOL_EN#	0.5
	3		HP request	31	Install R155,R156 and un-install R127,R157	0.5
<2006.07.31>	1		Do not support wake on WWAN card	25	Install R1383 and no install R1382	0.5
<2006.08.09>	1		Add anti-pop circuit	26	Add anti-pop circuit	0.5
	2		Eliminate glitch	20	Add R1767, no install R434, C1365, R1757	0.5

Security Classification	Compal Secret Data		
Issued Date	2005/03/01	Deciphered Date	2005/04/06

Title	HW PIR		
Size: Custom	Document Number: LA-3261P UMA		Rev: 0.4
Date: Tuesday, March 27, 2007	Sheet 51 of 55		

	Item	Fixed Issue	Reason for change	PAGE	Modify List	M.B. Ver.
	3		HP request	32	Connect JP18 pin1 to +3VL, pin2 to +3VS	0.5
	4		EMI request	24	Add D72 and D73 for EMI request	0.5
	5		Add MAX9511	9,16,33	Add MAX9511	0.5
<2006.08.11>	1		For OTS 214499	31	Add U82	0.5
	2		HP request	25	No install R1418,R1358,R1359,R1360	0.5
	3		HP request	25	JP44 PIN37,43 connected to GND JP44 PIN39,41 connected to +3VS	0.5
	4		HP request	25	Isolate SLOT power from SYSTEM power.	0.5
	5		HP request	25	Remove 1.5V from WWAN slot	0.5
	6		HP request	25	Install schottkey diode D74	0.5
	7		SIM I/O pull-up footprint is requested.	25	Add R1780 and no install	0.5
<2006.08.21>	1		HP request	25	change +3VS to +3VS_WLAN ,Change +3VS on R1383.2 to +3VS_WWAN Change +3VS on R1071.1 and R1703.1 to +3VS_WWAN	0.5
	2		HP request	9	Changes for MAX9511	0.5
	3		HP request	25	Remove SW1,C986,R521,D65,R200	0.5
	4		HP request	30	Need to connect SPI_HOLD#_0 and SPI_HOLD#_1 together.	0.5
	5		HP request	31	Item 191,192,193	0.5
	6		HP request	25	Install R1363 and NO INSTALL R1364	0.5
<2006.08.23>	1		HP request	19	Move D75 to SB and delete R1782	0.5
	2		HP request	25	Add 1394 signals on M/B	0.5
<2006.08.25>	1		HP request	25	Add a 0 ohm 0805 on 1.5VS to WLAN mini card connector	0.5
	2			20	Swap GPIO01 and GPIO11 connections.	0.5
<2006.08.29>	1		OTS issue	32	Change JP18 pin8 to WL_BLUE_LED#	0.5
<2006.08.30>	1			16	Change R142, R144 to 3.9K ohm	0.5

Security Classification	Compal Secret Data		
Issued Date	2005/03/01	Deciphered Date	2005/04/06

Title	HW PIR		
Size: Custom	Document Number: LA3261P_UMA		Rev: 0.1
Date: Tuesday, March 27, 2007	Sheet 52 of 55		

	Item	Fixed Issue	Reason for change	PAGE	Modify List	M.B. Ver.
	3		Intel update	7	Add R1786,R1787,R1788,R1789	0.5
<2006.09.01>	1		HP request	32	Remove R23 and NPCI_RST# connection Remove PLT_RST# connection to R21.2 and connect GPIO28 from ICH8	0.5
<2006.09.04>	1		EMI request	28	Add R1790,R1791,R1792	0.5
<2006.09.06>	1		HP request	23	Change C1257 and C1359 to 10uF 0805	0.5
	2		HP request	25	Remove R1412,1413,1414,1415,1416,1417	0.5
	3		HP request	25	Remove R1418,1358,1353,1360	0.5
	4		HP request	30	Add 0 ohm for SPI, R1793,1794,1795	0.5
<2006.10.13>	1		HP request (MAX9511 issue)	9,16,33	Remove MAX9511 from CRT circuit	0.6
	2			11,21,31	No install BGA crack circuit	0.6
	3			32	Change KB connector	0.6
<2006.10.31>	1			31	Change RSMRST circuit, add R1796	0.6
<2006.11.01>	1		Auto power on issue	20	Auto power on issue(add Q140, R1797)	0.6
	2		1394 issue	28	Modify EMI request	0.6
<2006.11.03>	1		HP request	32	Connect JP32 pin2 to +3VS	0.6
<2006.11.07>	1		HP request	31	Install R1784, no install R1783	0.6
	2		Intel document	10	Change R1471 to 100 ohm	0.6
<2006.11.09>	1		Layout space	22	Remove kensinton circuit	0.6
<2006.11.11>	1		HP request	15	Add CLRP4 and CLRP5 for FSB 667/800 select	0.6
<2006.11.13>	1		HP request	35	Tie R1732.2 to 3VM instead of 3VM_LAN	0.6
	2		HP request	24	Change R1639 to 1.4K based on Intel WW44	0.6
	3		HP request	4	Add resistors in series with the diode signals going to ADM1032.	0.6
	4		HP request	31	Eliminate glitch circuit, install R1483 and no install R1484	0.6

Security Classification	Compal Secret Data		
Issued Date	2005/03/01	Deciphered Date	2005/04/06

Title	HW PIR		
Size: Custom	Document Number: LA3261P_UMA		Rev: 0.1
Date: Tuesday, March 27, 2007	Sheet 53 of 55		

	Item	Fixed Issue	Reason for change	PAGE	Modify List	M.B. Ver.
<2006.11.16>	1		HP request	10	Change R1468, R1472, R1473 to bead	0.6
	2		HP request	24	Change R1639 to 1.87K ohm	0.6
	3		HP request	27	Change R261 and R253 to 56.2 ohms 1%.	0.6
<2006.11.28>	1		HP request	23	Install Q102,R1730, no install R1612,Q104,Q105.	0.6
	2		HP request	7	Install R1739	0.6
<2006.12.19>	1		HP request	35	Add Schmitt Trigger to eliminate glitch	0.7
	2		HP request	31	Install R1646,C75	0.7
	3		HP request	19	Update GPIO33 circuit	0.7
<2006.12.26>	1		HP request	7	Add C and no install	0.7
	2		Chrontel request	16	Add C for DVI I2C	0.7
<2007.01.02>	1		ME request	25	Change JP50 for rewrok	0.7
<2007.01.04>	1		Intel request	23	Add R1804	0.7
	2		ME request	32	Change JP20 to FFC connector	0.7
<2007.01.08>	1		EMI request	33	Add R1805,R1806 0 ohm, reserve C1372, C1373	0.7
<2007.01.10>	1		HP request	31	R1783 connected to +3VL	0.7
<2007.01.13>	1		Compal request	35	Change LMV331 to LM393, delete R124 and C27	0.7
<2007.01.15>	1		HP request	26	R370, R369 - change from 4.7k to 6.04k R374, R375 - change from 4.7k to 2.00k	0.7
<2007.01.16>	1		HP request	25	Connected R1780.2 to UIM_PWR	0.7
<2007.01.17>	1		HP request	30	Add pad for BIOS debug	0.7
<2007.01.19>	1		HP request	34	Add R1807 and no stuff	0.7
	2		CRT wavy issue	10	Add C1374 for CRT wavy issue	0.7
<2007.02.09>	1		CRT wavy issue	17	Add 10uFX2 for CRT wavy issue(C586, C1376)	0.9

Security Classification	Compal Secret Data		
Issued Date	2005/03/01	Deciphered Date	2005/04/06

Title	HW PIR	
Size: Custom	Document Number: LA3261P_UMA	Rev: 0.1
Date: Tuesday, March 27, 2007	Sheet 54 of 55	

	Item	Fixed Issue	Reason for change	PAGE	Modify List	M.B. Ver.
<2007.02.09>	2		HP request	30	Add Q142 for FPR	0.9
<2007.02.16>	1		+3VM_LAN leakage	20	Add U83 for auto boot and leakage issue	0.9
	2		Compal request	15	Delete CLPR4, CLRP5	0.9
	3		HP request	34	Install R1807 and non install R630	0.9
	4		LVDS sequence issue	17	Change C28 to 0.1uF	0.9
	5		HP request	31	Add R1809 to GND	0.9
<2007.02.26>	1		Safety request	33	Change RJ11 connector	0.9
<2007.02.27>	1		HP request	27	Change R261 and R253 to 60.4 ohm	0.9
	2		HP request	35	Move R1803	0.9
<2007.02.28>	1		HP request	11,21	Change to +3VL	0.9
<2007.03.01>	1		HP request	10	CRT wavy issue -- add C1374	0.9
	2		HP request	15	Add CAP for WWAN issue	0.9

Security Classification	Compal Secret Data		
Issued Date	2005/03/01	Deciphered Date	2005/04/06

Title	HW PIR		
Size: Custom	Document Number: LA3261P_UMA		Rev: 0.1
Date: Tuesday, March 27, 2007	Sheet 55 of 55		