

Compal confidential

Schematics Document

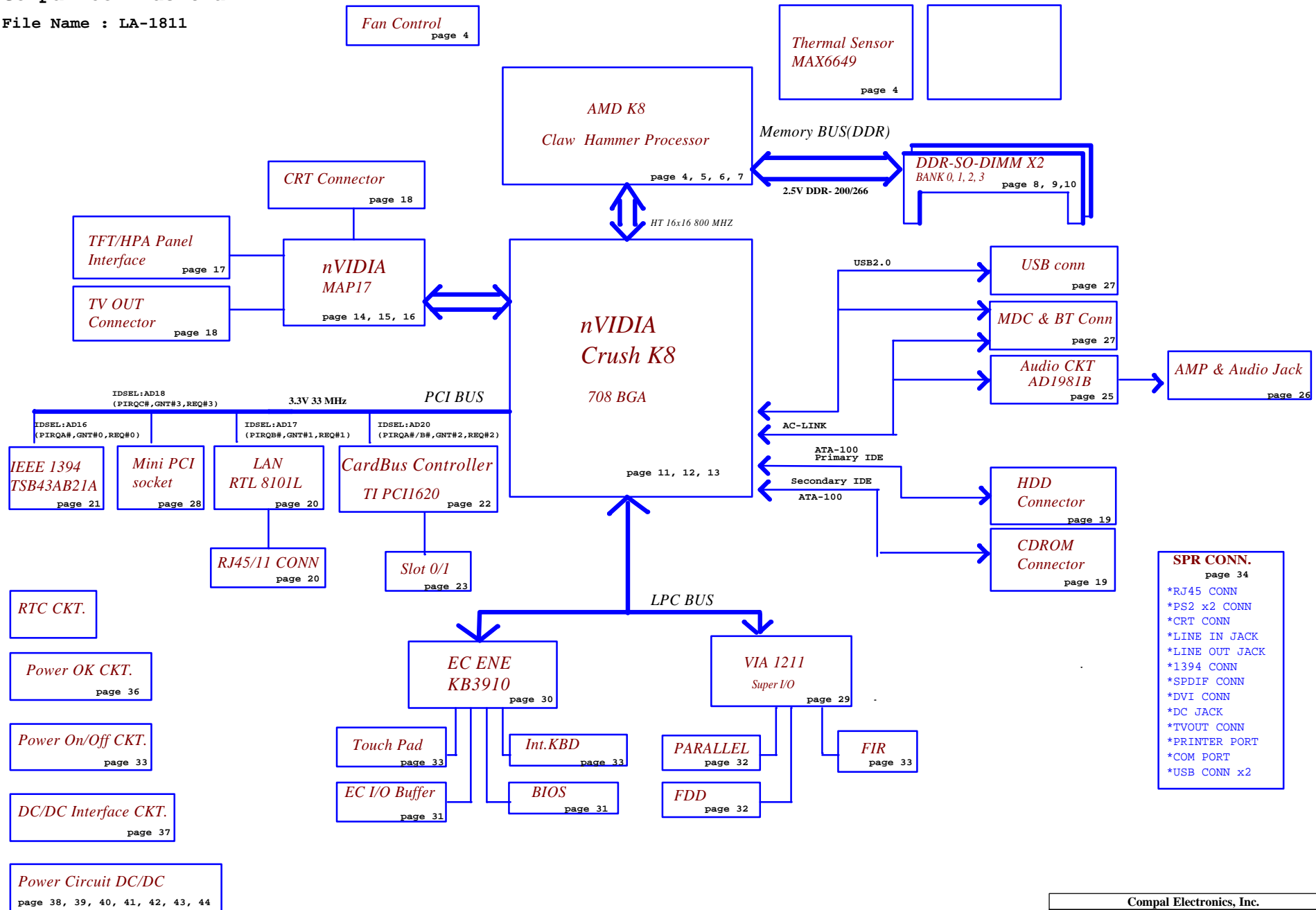
ClawHammer AMD K8 with nVIDIA Chrush K8

2003-10-15

REV:0.5

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.

Compal Electronics, Inc.		
Title		
Cover Sheet		
Doc No	Document Number	Rev
	LA-1851	0.5
Date:	Thursday, October 16, 2003	Sheet 1 of 50



Compal Electronics, Inc.		
Block Diagram		
File	Document Number	Rev
	LA-1851	0.5
Date:	Thursday, October 16, 2003	Sheet 2 of 50

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.

Voltage Rails

power plane / State	+1.2VALW +3VALW +5VALW 12VALW	+1.25V +2.5V +3V +5V	+1.2V_HT +1.2VS +1.5VS +2.5VS +3VS +5VS
S0	O	O	O
S1	O	O	O
S3	O	O	X
S5 S4/AC	O	X	X
S5 S4/AC don't exist	X	X	X

O MEANS ON
X MEANS OFF

PCI Devices

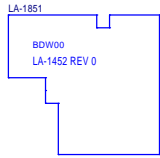
DEVICE	PCI Device ID	IDSEL #	REQ/GNT #	PIRQ
INTERNAL				
USB 2.0	2	AD13	N/A	G
AC97 MODEM	6	AD17	N/A	M
AC97	6	AD17	N/A	L
ATA 100	8	AD20	N/A	
ETHERNET	5	AD16	N/A	K
LPC I/F	1	AD12	N/A	
SMBUS	1	AD12	N/A	F
EXTERNAL				
VGA	0	AD16	N/A	E
1394	0	AD16	0	A
LAN	1	AD17	1	B
CARD BUS	4	AD20	2	A, B
Wireless LAN	2	AD18	3	C
Mini-PCI (no use)	3	AD19	4	D

Compal Electronics, Inc.

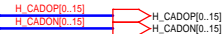
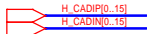
Notes List

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.

File	Document Number	Rev
	LA-1851	0.5
Date:	Thursday, October 16, 2003	Sheet 3 of 50



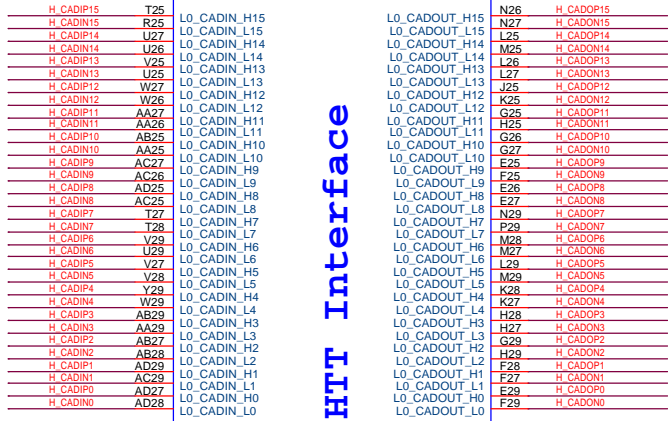
<11> H_CADIP[0..15]
<11> H_CADIN[0..15]



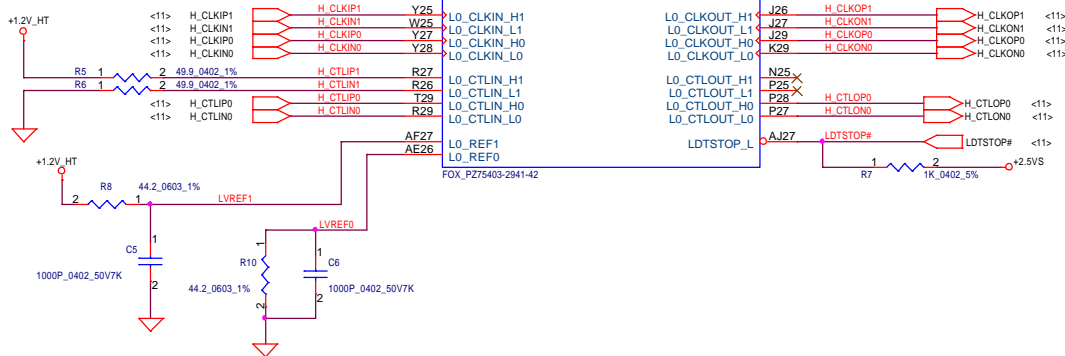
<11>

U1A

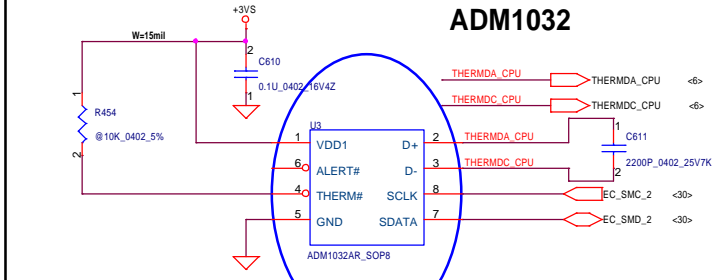
Claw Hammer-DTR



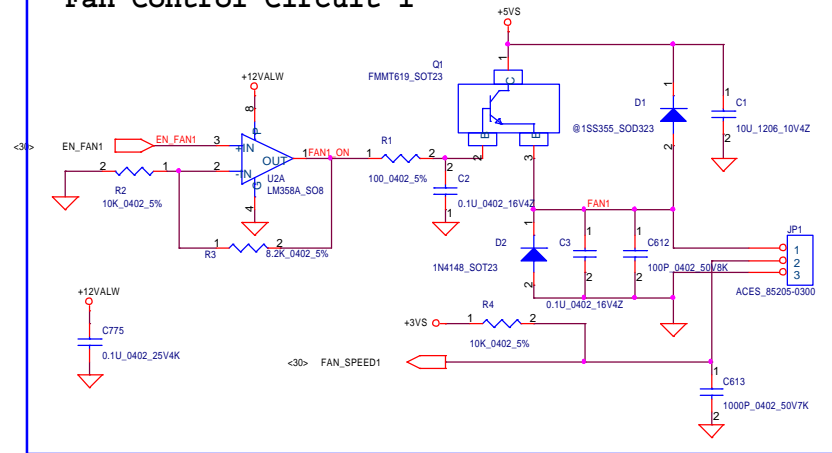
HTT Interface



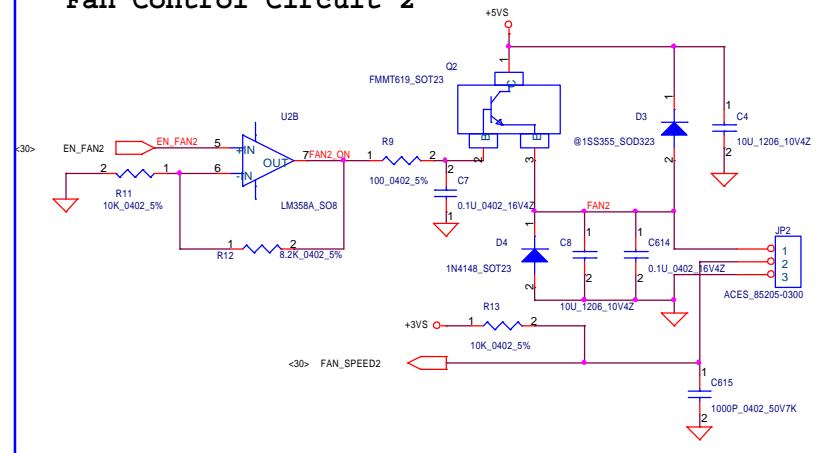
Thermal Sensor ADM1032



Fan Control Circuit 1



Fan Control Circuit 2

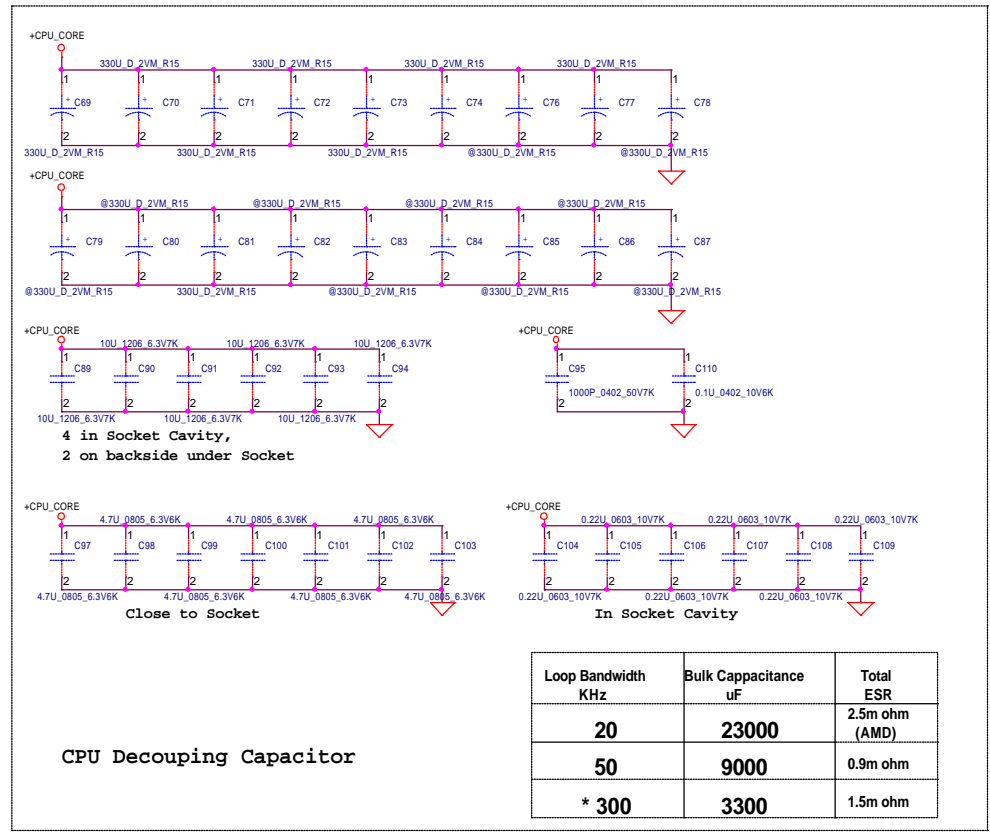
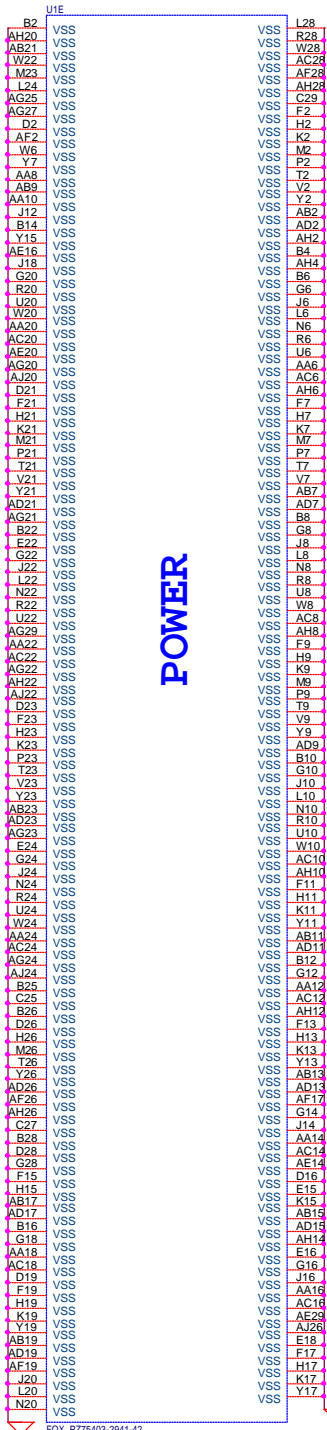
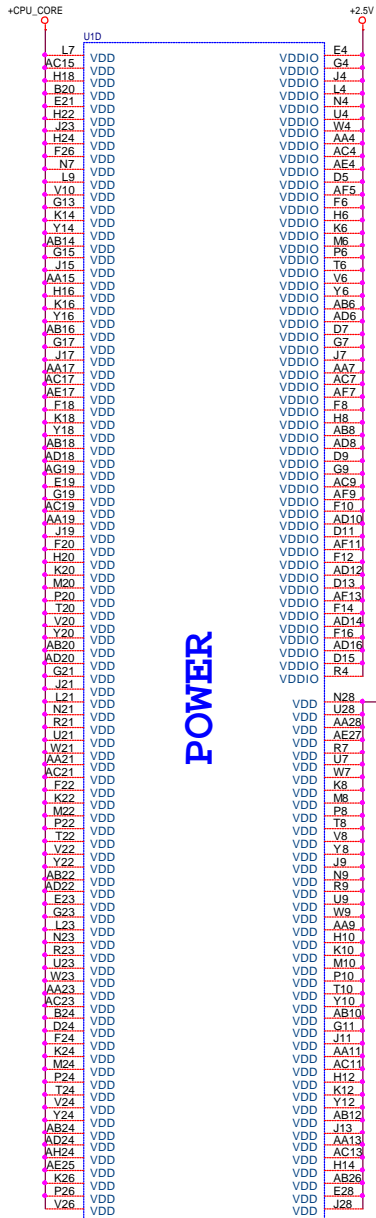


Compal Electronics, Inc.

Claw Hammer CPU (Host Bus)

File	Document Number	Rev
Size	LA-1851	0.5
Custom		
Date:	Thursday, October 16, 2003	Sheet 4 of 50

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.



Loop Bandwidth KHz	Bulk Cappacitance uF	Total ESR
20	23000	2.5m ohm (AMD)
50	9000	0.9m ohm
* 300	3300	1.5m ohm

CPU Decoupling Capacitor

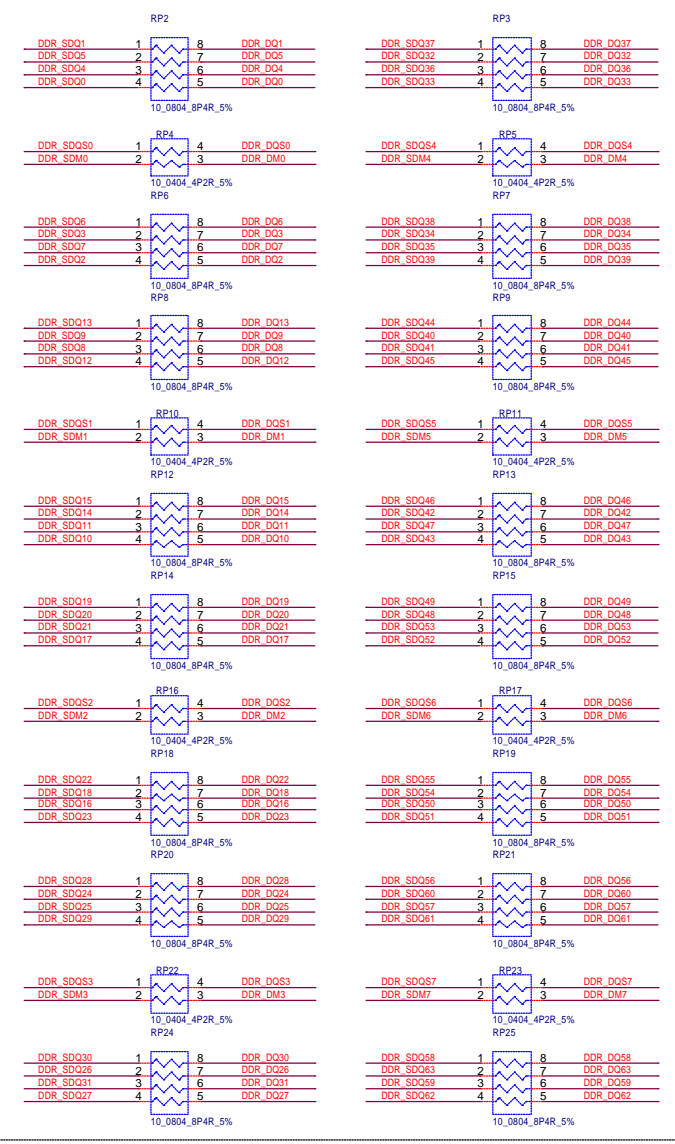
FOX_P275403-2941-42

FOX_P275403-2941-42

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.

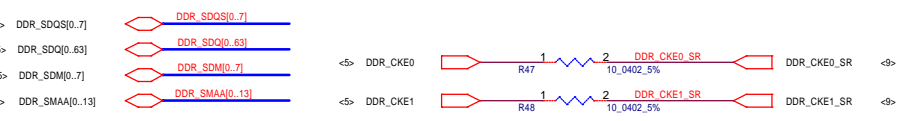
Compal Electronics, Inc.
Claw Hammer (Power & Ground)

File: _____
 Size Custom: _____ Document Number: **LA-1851** Rev: 0.5
 Date: Thursday, October 16, 2003 Sheet 7 of 50



Note:
DDR_SMAA13 Recommend for AMD

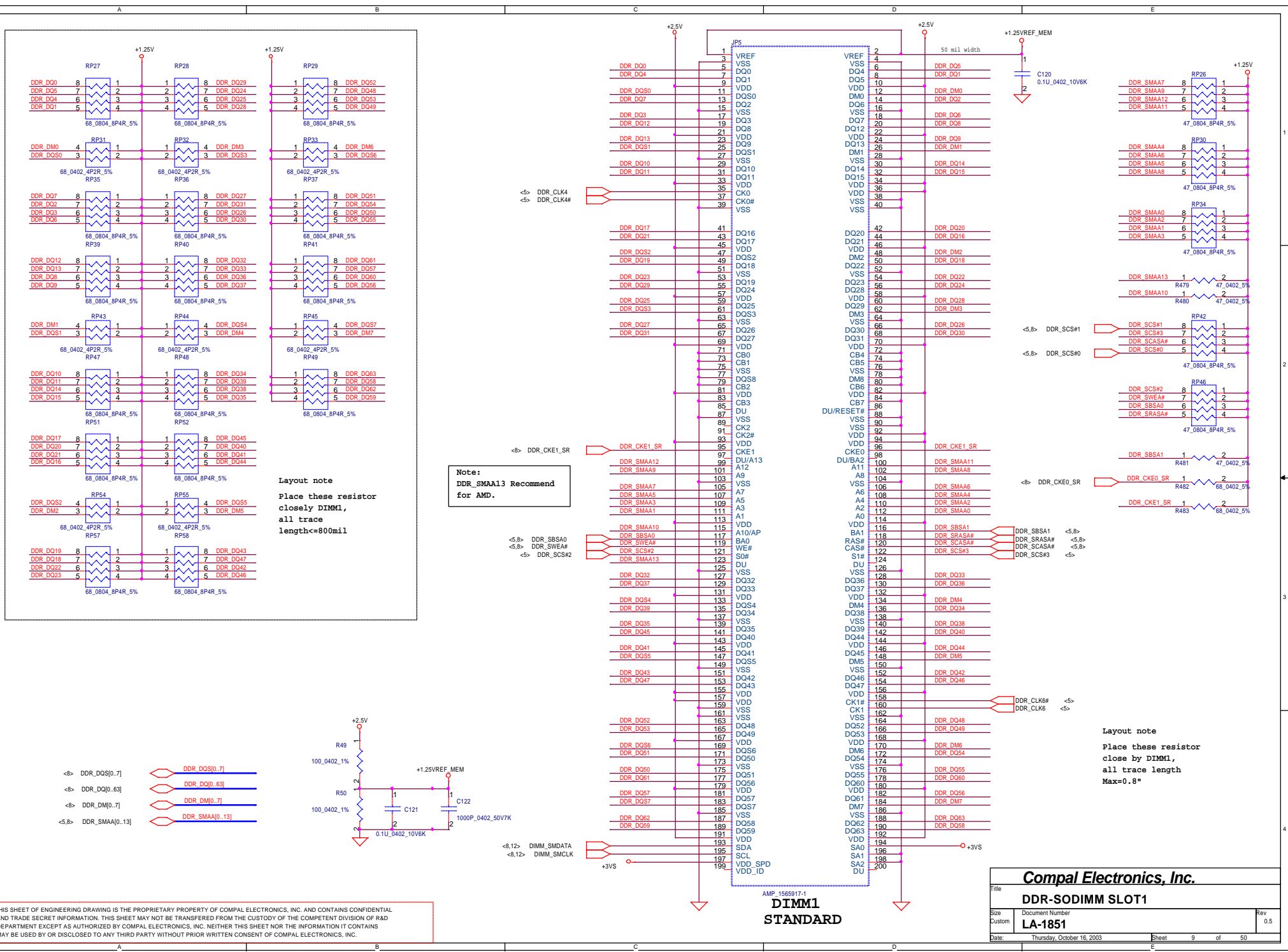
Layout note
Place these resistors
close to DIMM0,
all trace length < 500 mil



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.

Compal Electronics, Inc.		
DDR-SODIMM SLOT0		
File	Document Number	Rev
Size Custom	LA-1851	0.5
Date:	Thursday, October 16, 2003	Sheet 8 of 50

SO-DIMM0
REVERSE

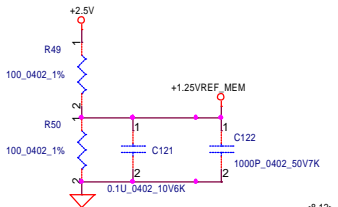


Layout note
Place these resistor
closely DIMM1,
all trace
length<=800mil

Note:
DDR SMAA13 Recommend
for AMD.

Layout note
Place these resistor
close by DIMM1,
all trace length
Max=0.8"

- <5> DDR_DS[0..7] DDR_DS[0..7]
- <5> DDR_DQ[0..63] DDR_DQ[0..63]
- <5> DDR_DM[0..7] DDR_DM[0..7]
- <5,8> DDR_SMAA[0..13] DDR_SMAA[0..13]

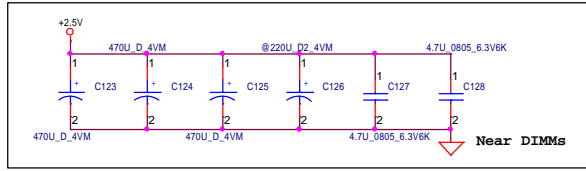


<8,12> DIMM_SMDATA
<8,12> DIMM_SMCLK

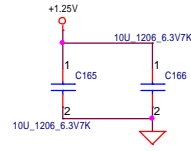
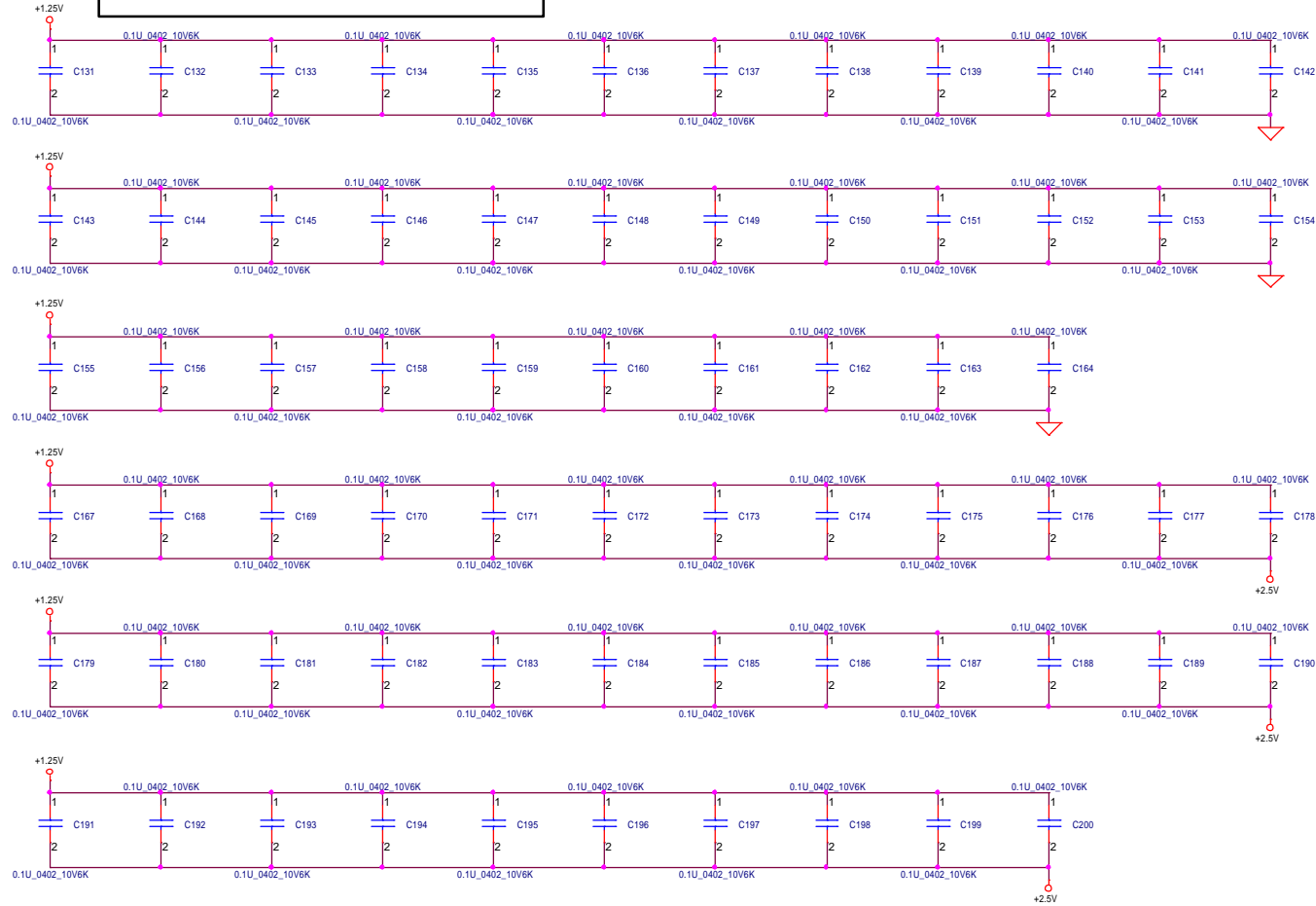
Compal Electronics, Inc.		
DDR-SODIMM SLOT1		
Title	Document Number	Rev
Size	LA-1851	0.5
Custom		
Date:	Thursday, October 16, 2003	Sheet 9 of 50

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.

AMP 1565917-1
**DIMM1
STANDARD**

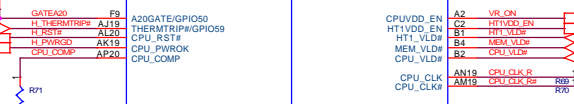
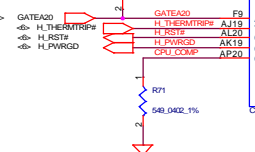
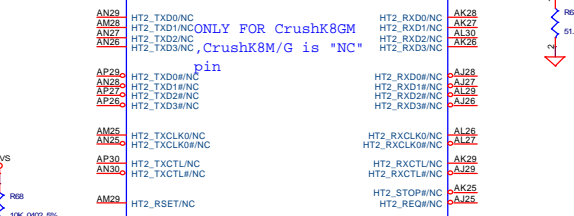
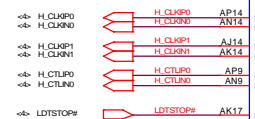
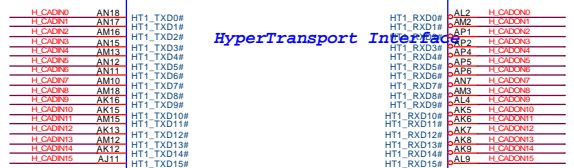
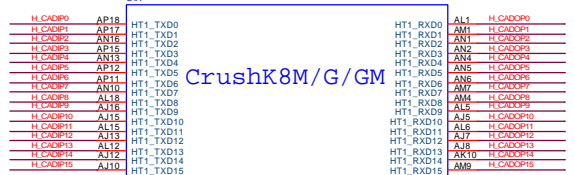


Layout note :
Place one cap close to every 2 pull up resistors termination to +1.25VS

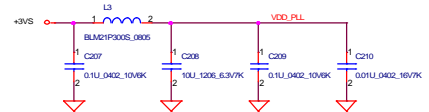
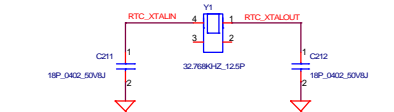
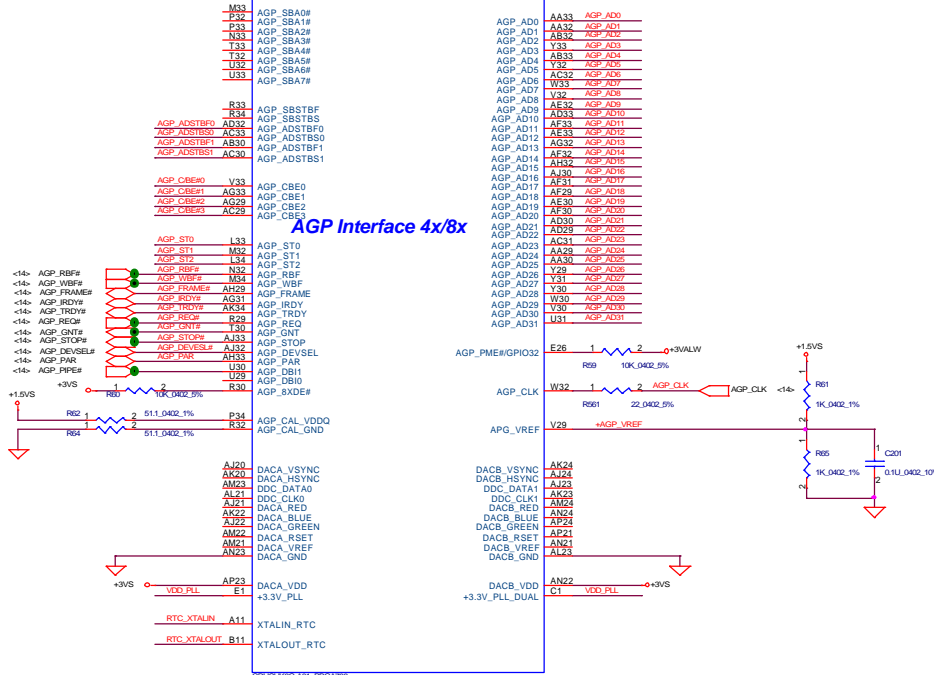


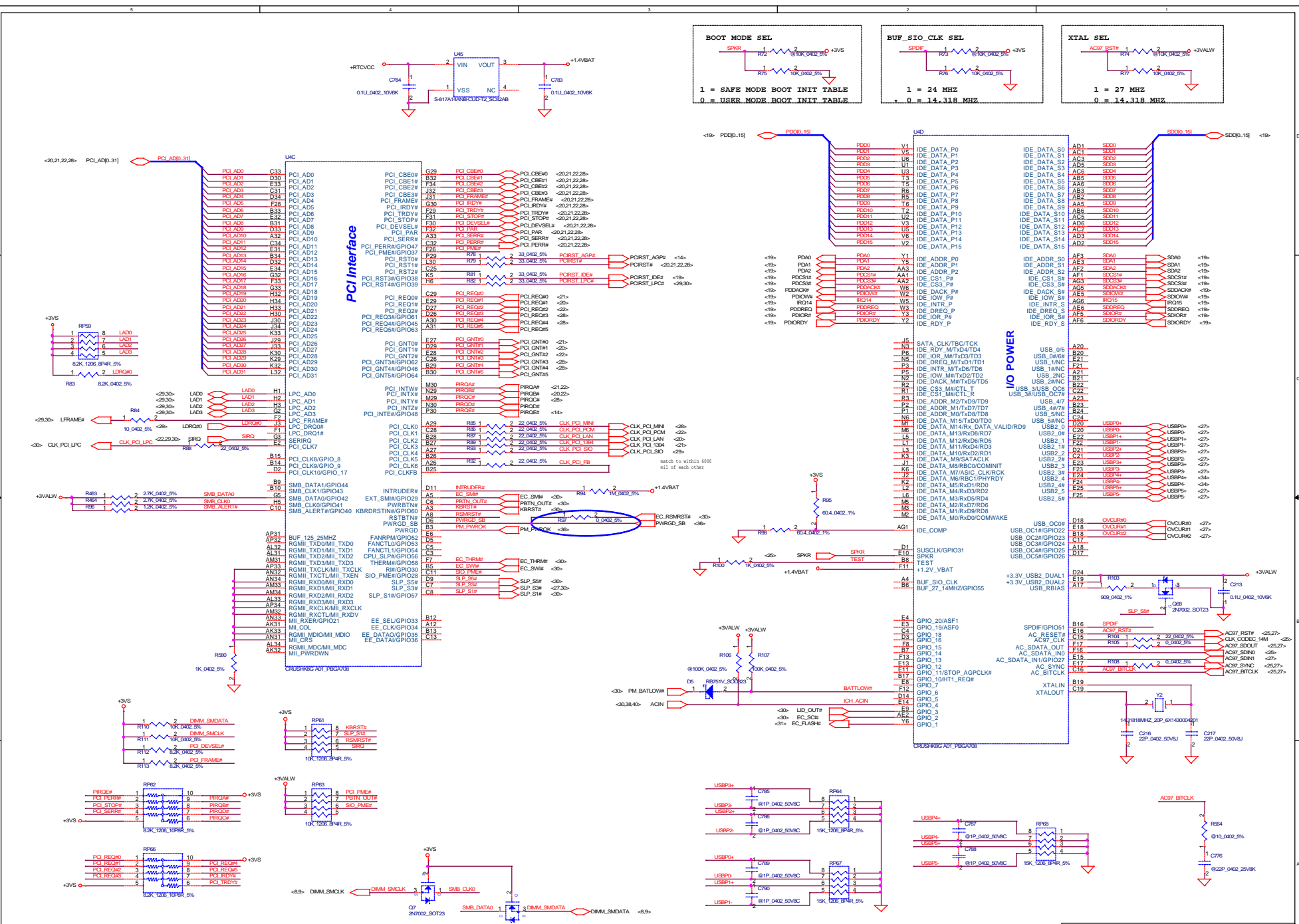
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS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

Compal Electronics, Inc.		
DDR SODIMM Decoupling		
File	Document Number	Rev
Size Custom	LA-1851	0.5
Date:	Thursday, October 16, 2003	Sheet 10 of 50



CrushK8M/G/GM

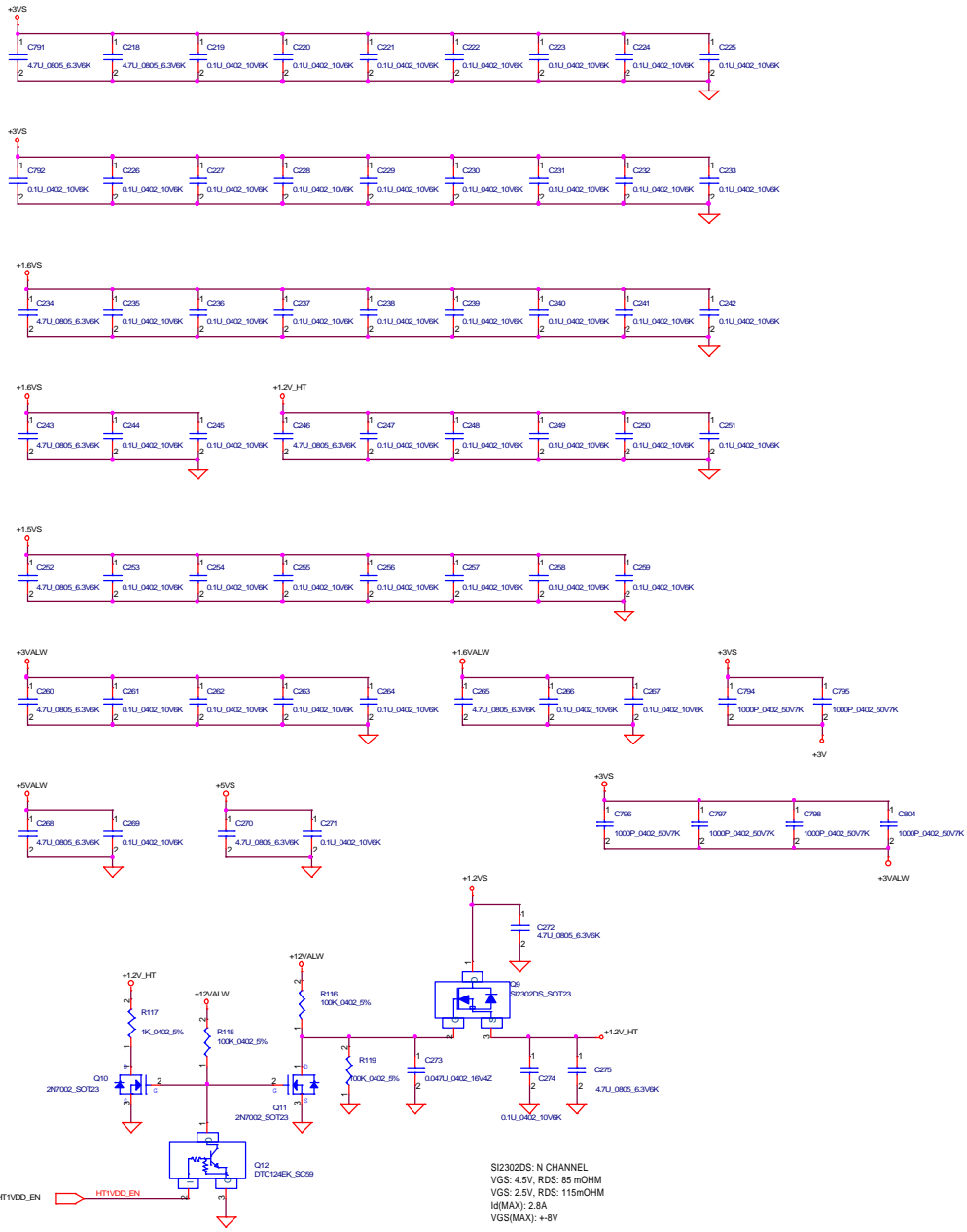
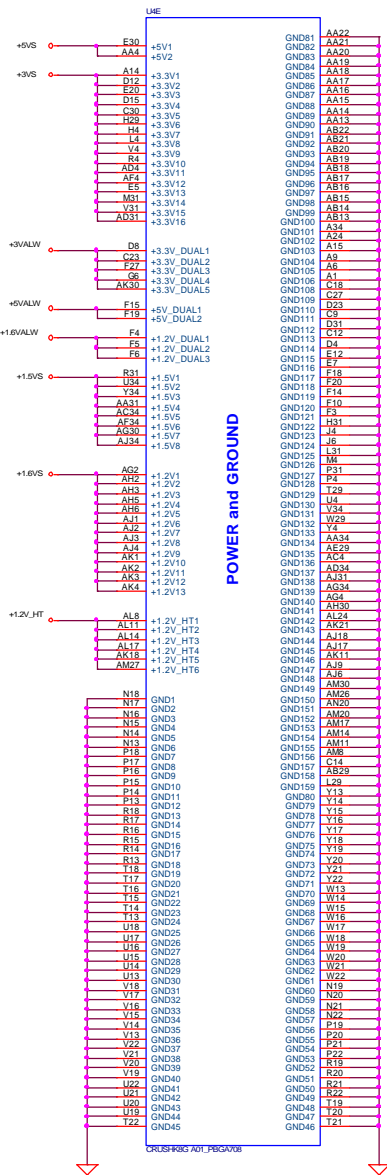


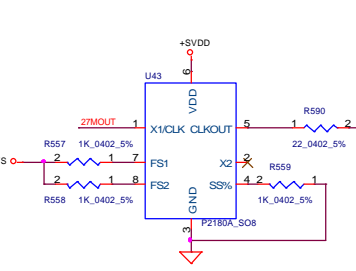
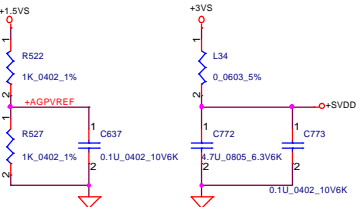
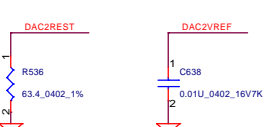
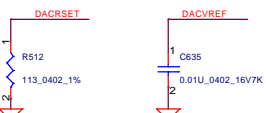
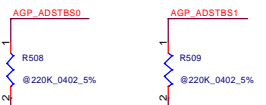
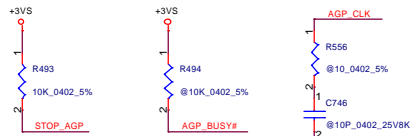


Compal Electronics, Inc.

nVIDIA CrushK8 (PCI & IDE & USB & Misc)
 Document Number: LA-1851
 Date: Thursday, October 16, 2003
 Sheet: 12 of 30

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 COMPANY DIVISIONS OR TO ANY OTHER 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.





SST Ratio selection table for W180

Modulation setting	SST Ratio
0	1.25%
1	3.75%

- AGP_A00 AD00
- AGP_A01 AD01
- AGP_A02 AD02
- AGP_A03 AE29
- AGP_A04 AD03
- AGP_A05 AC30
- AGP_A06 AF28
- AGP_A07 AC29
- AGP_A08 AH30
- AGP_A09 AC28
- AGP_A10 AH29
- AGP_A11 AE28
- AGP_A12 A180
- AGP_A13 AC28
- AGP_A14 AC30
- AGP_A15 AC27
- AGP_A16 AE28
- AGP_A17 A124
- AGP_A18 AH22
- AGP_A19 AK24
- AGP_A20 AH21
- AGP_A21 AF22
- AGP_A22 AH20
- AGP_A23 AK22
- AGP_A24 AK21
- AGP_A25 A119
- AGP_A26 AG18
- AGP_A27 AK19
- AGP_A28 AG19
- AGP_A29 A118
- AGP_A30 AF19
- AGP_A31 AK18

- PCICBE#0 AH28
- AGP_C/BE#1 A127
- AGP_C/BE#2 AK25
- AGP_C/BE#3 AF21
- PCIRST# AH11
- PCIGNT# AK12
- PCIFRAME# AH24
- PCIRDY# AH25
- PCITRDY# AH27
- PCICVSEL# AH26
- PCISTOP# AH27
- PCIPAR PCINTA# AK11
- PCICLK AH12
- AGP_RBF# AJ13
- AGP_WBF# AG15
- AGP_PIPE# AF18
- STOP_AGP AG10
- AGP_VREF AC30

- AGPSBSTB AH16
- AGPSBSTB AH17
- AGPSBA0 AJ15
- AGPSBA1 AF15
- AGPSBA2 AK15
- AGPSBA3 AG16
- AGPSBA4 AK16
- AGPSBA5 AF16
- AGPSBA6 AJ16
- AGPSBA7 AH18

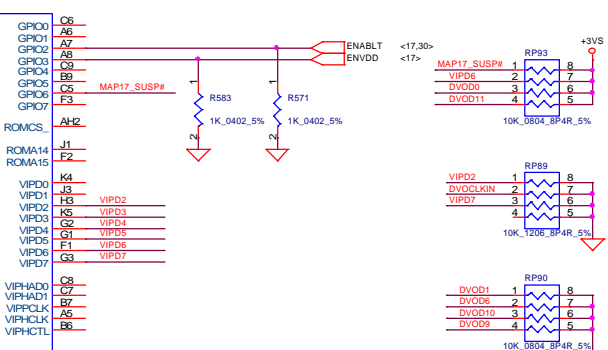
- AGP_ADSTBF1 AK21
- AGP_ADSTBS1 AJ21
- AGP_ADSTBF0 AK28
- AGP_ADSTBS0 AJ28
- AGP_ST0 AF12
- AGP_ST1 AF13
- AGP_ST2 AG13

- DACRED DACGREEN
- DACBLUE DACBLUE
- CRT_HSNC CRT_HSNC
- CRT_VSNC CRT_VSNC
- DACRSET DACRSET
- DACVREF DACVREF

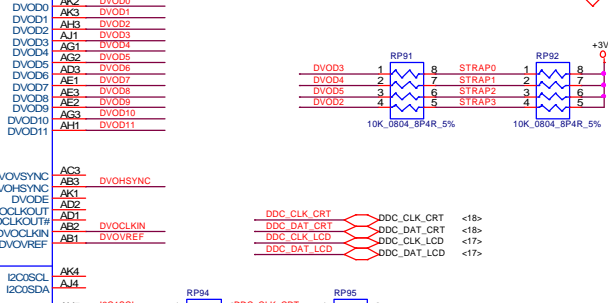
- TV_CRMA Y2
- TV_LUMA AA2
- TV_COMPS V6
- AG3 Y3
- DACRSET V2
- DACVREF Y1

- XTALIN AJ7
- XTALOUT AK7
- XTALSSIN AH7
- XTALSSIN XTALSSINBUFF
- STRAP0 B30
- STRAP1 B29
- STRAP2 A30
- STRAP3 A29
- AG AG
- AG3 AG3
- TESTMODE SA000040300(0304231100)

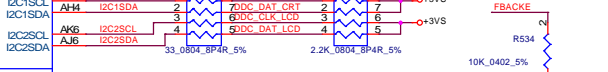
GPIO/VIP Interface



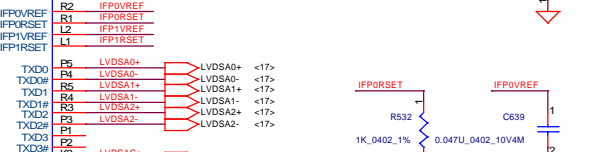
PCI/AGP BUS Interface



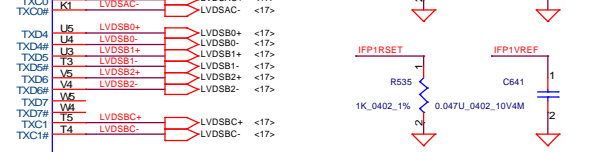
I2C



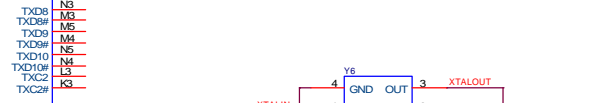
LVDS/TMDS



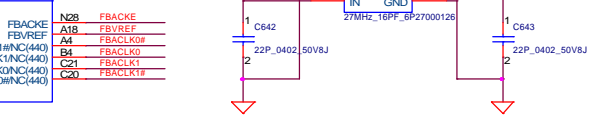
DAC



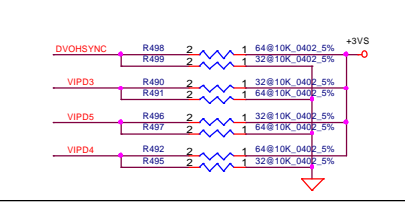
CLOCK



SDRAM

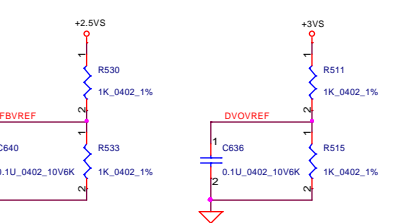
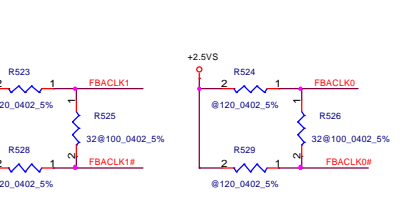
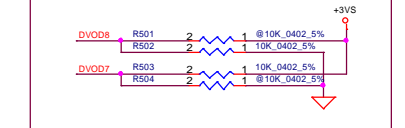


DVOHSYNC	VIPD3	VIPD5	VIPD4	DEVICE
1	1	0	1	MAP17-116 (16MB)
0	1	1	0	* MAP17-232 (32MB)
1	0	0	1	MAP17-464 (64MB)



CRYSTAL

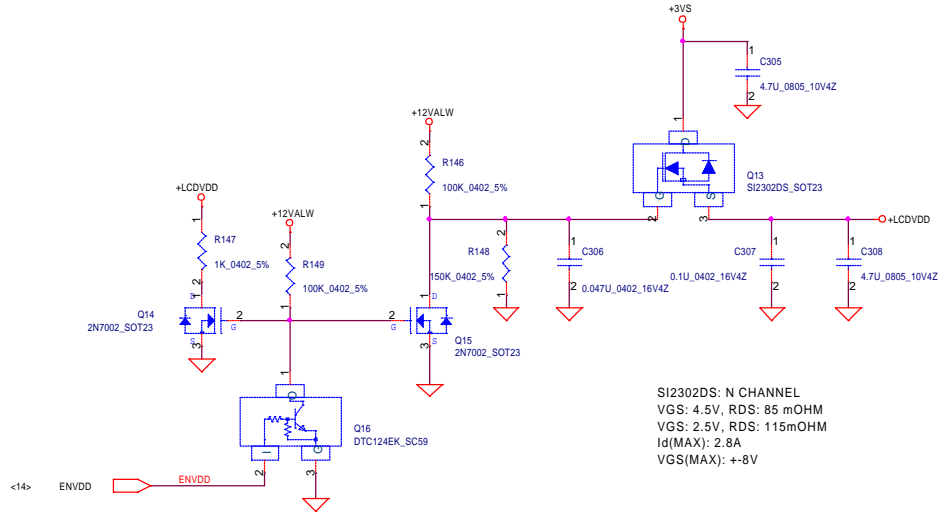
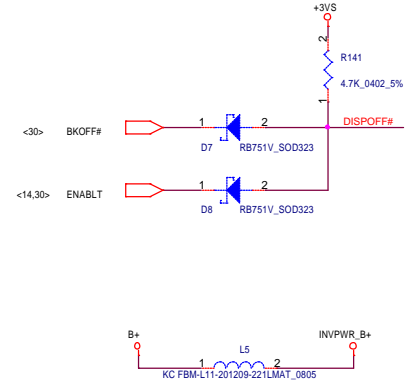
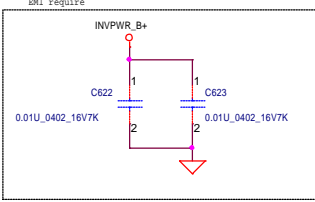
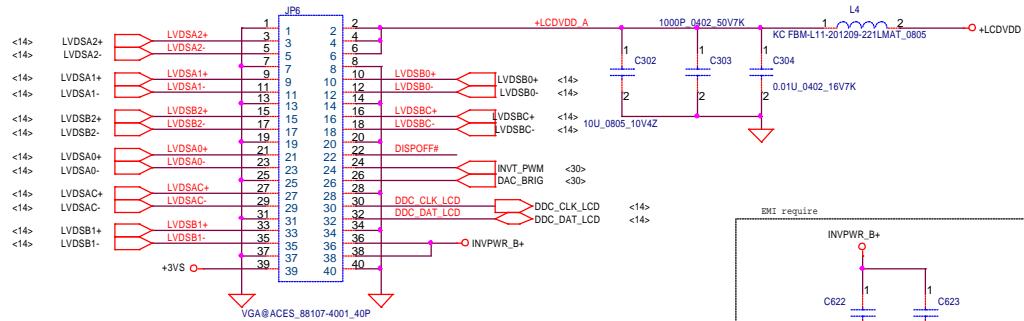
DVOD8	DVOD7	TMODE
0	0	SECAM
0	1	* NTSC
1	0	PAL
1	1	VGA



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.

LCD Panel Connector

The cap.'s colsely to LCD CONN.

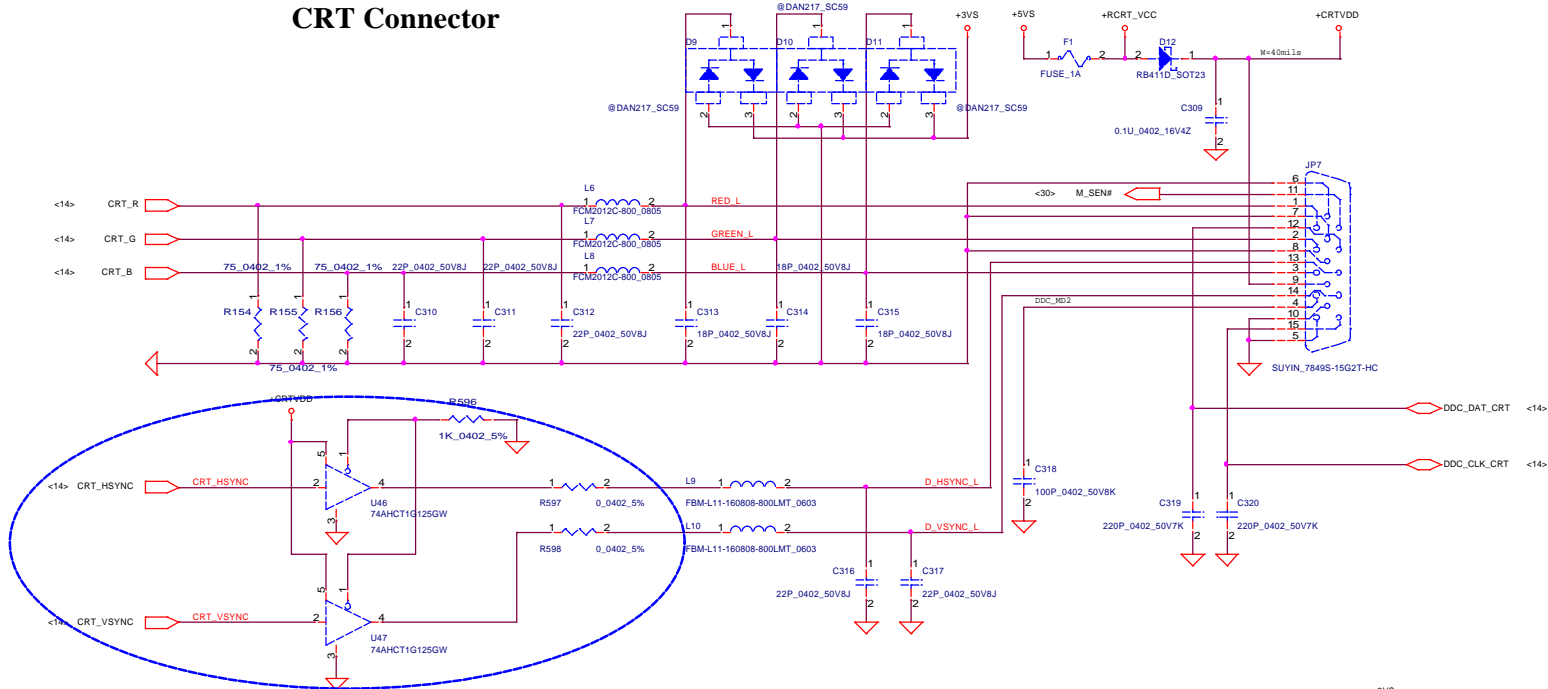


SI2302DS: N CHANNEL
 VGS: 4.5V, RDS: 85 mOHM
 VGS: 2.5V, RDS: 115mOHM
 Id(MAX): 2.8A
 VGS(MAX): +-8V

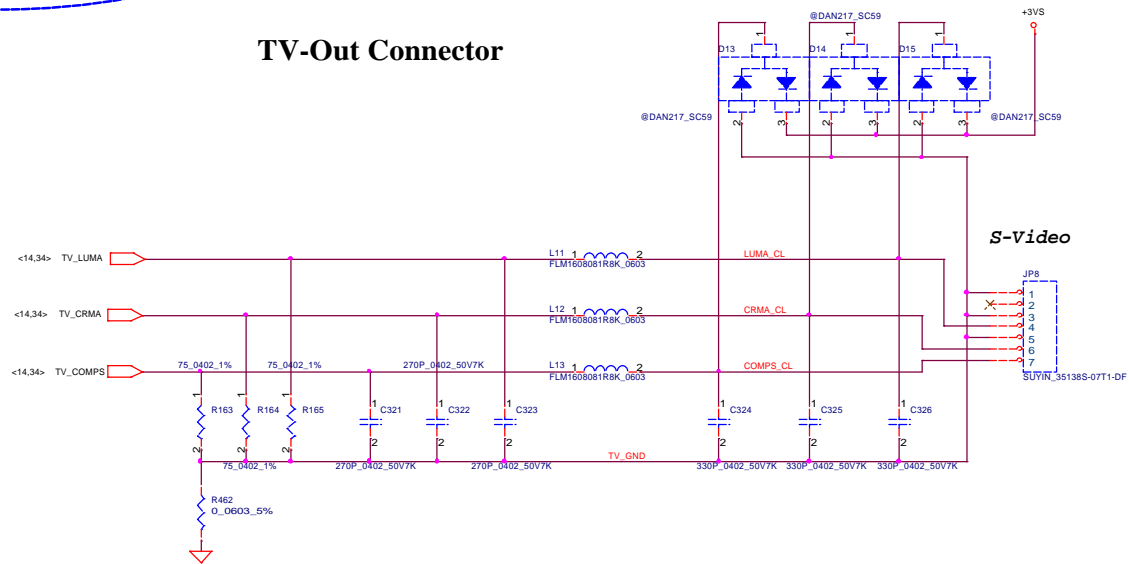
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS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

Compal Electronics, Inc.		
Title: LVDS Connector		
Size: LA-1851	Document Number: LA-1851	Rev: 0.5
Date: Thursday, October 16, 2003	Sheet: 17	of 50

CRT Connector



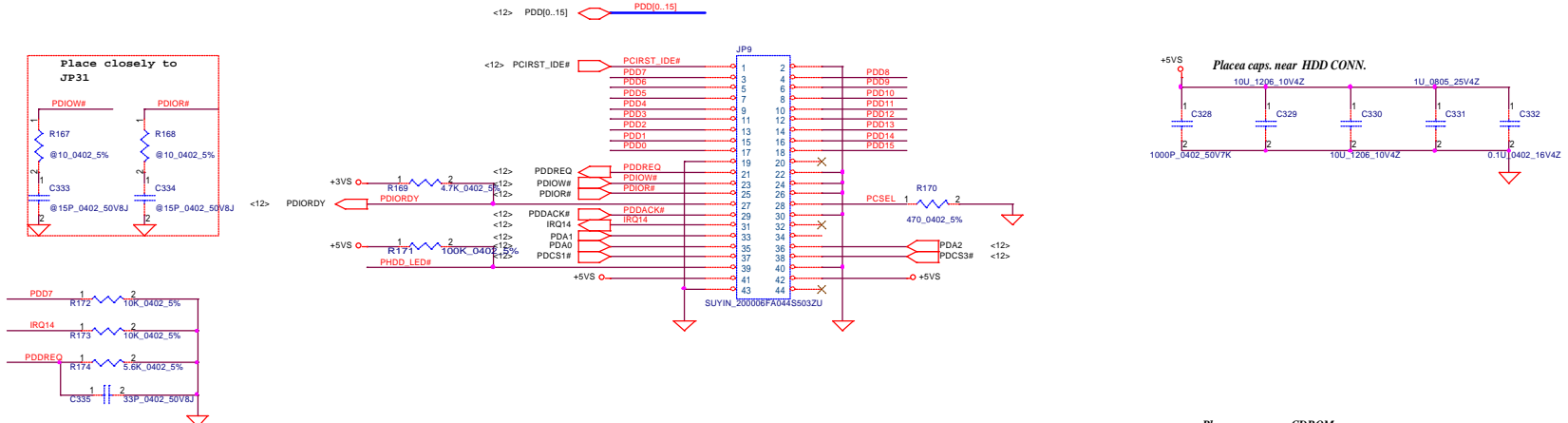
TV-Out Connector



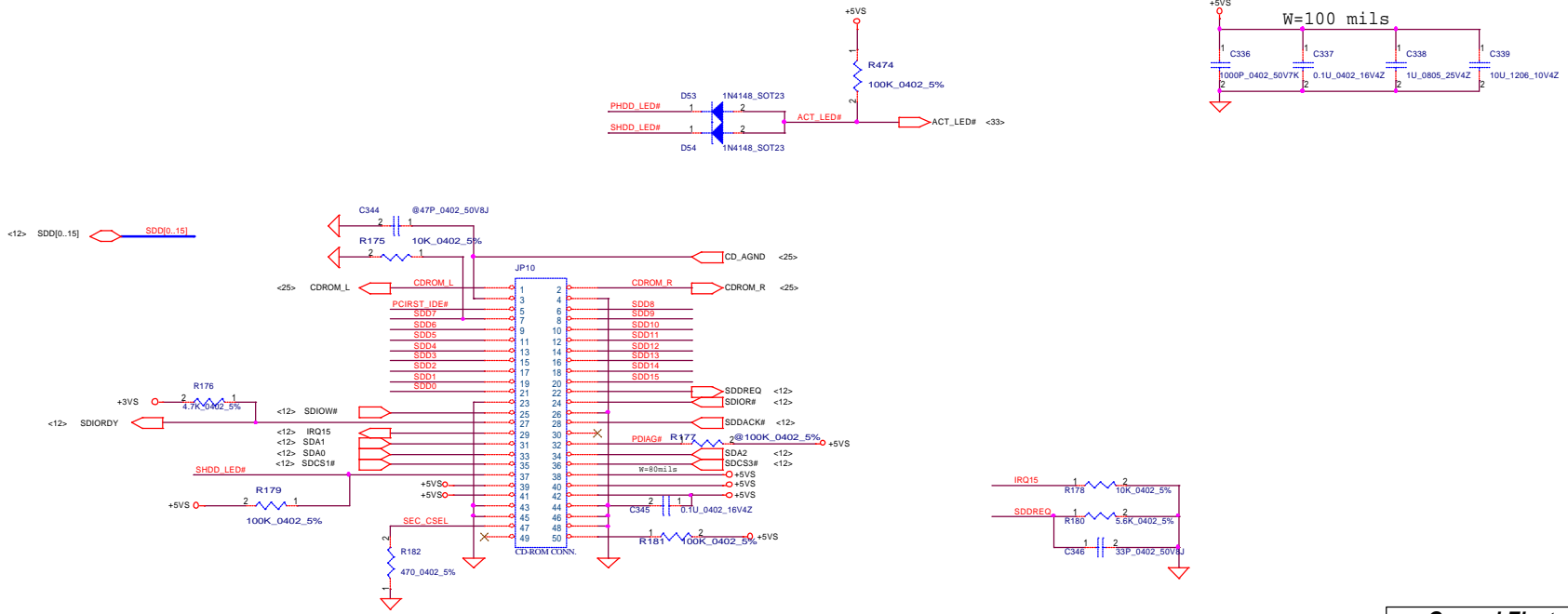
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS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

Compal Electronics, Inc.		
CRT & TVout Connector		
Doc No	Document Number	Rev
	LA-1851	0.5
Date:	Thursday, October 16, 2003	Sheet 18 of 50

HDD Connector



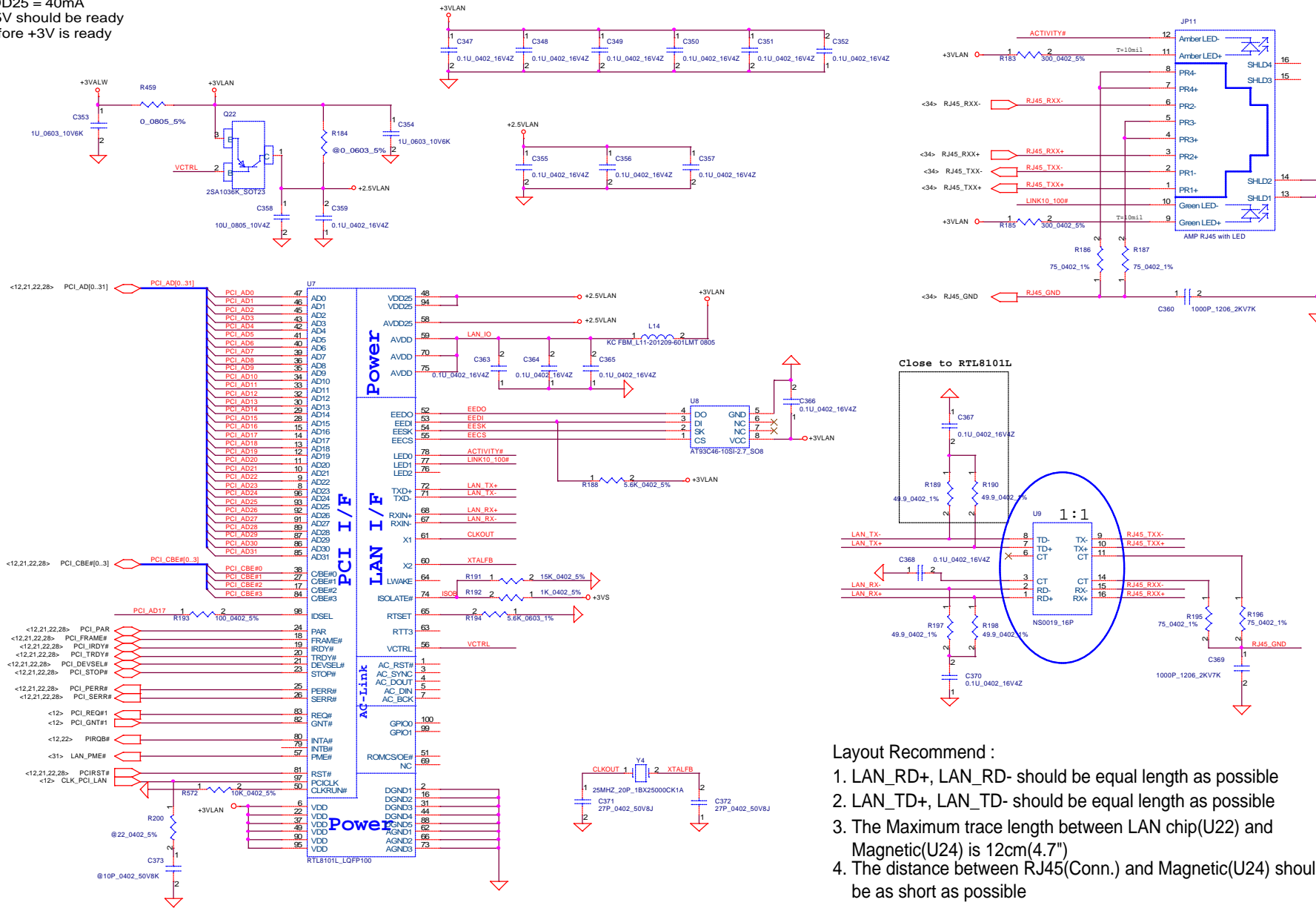
CD-ROM Connector



Compal Electronics, Inc.		
IDE/FDD/CD-ROM Module		
Size	Document Number	Rev
Custom	LA-1851	0.5
Date:	Thursday, October 16, 2003	Sheet 19 of 50

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.

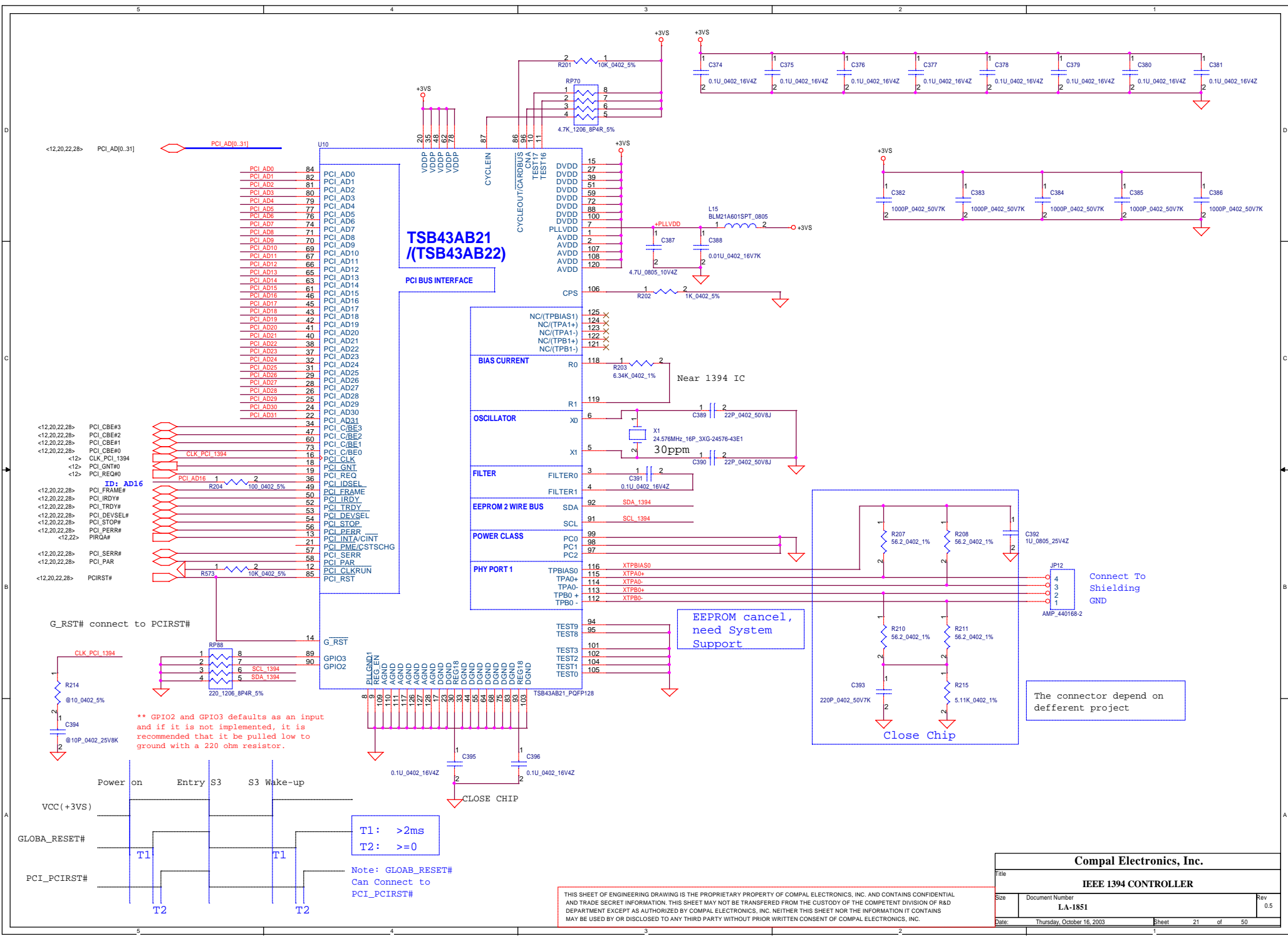
Note : I_{max} for VDD25 = 40mA
2.5V should be ready before +3V is ready



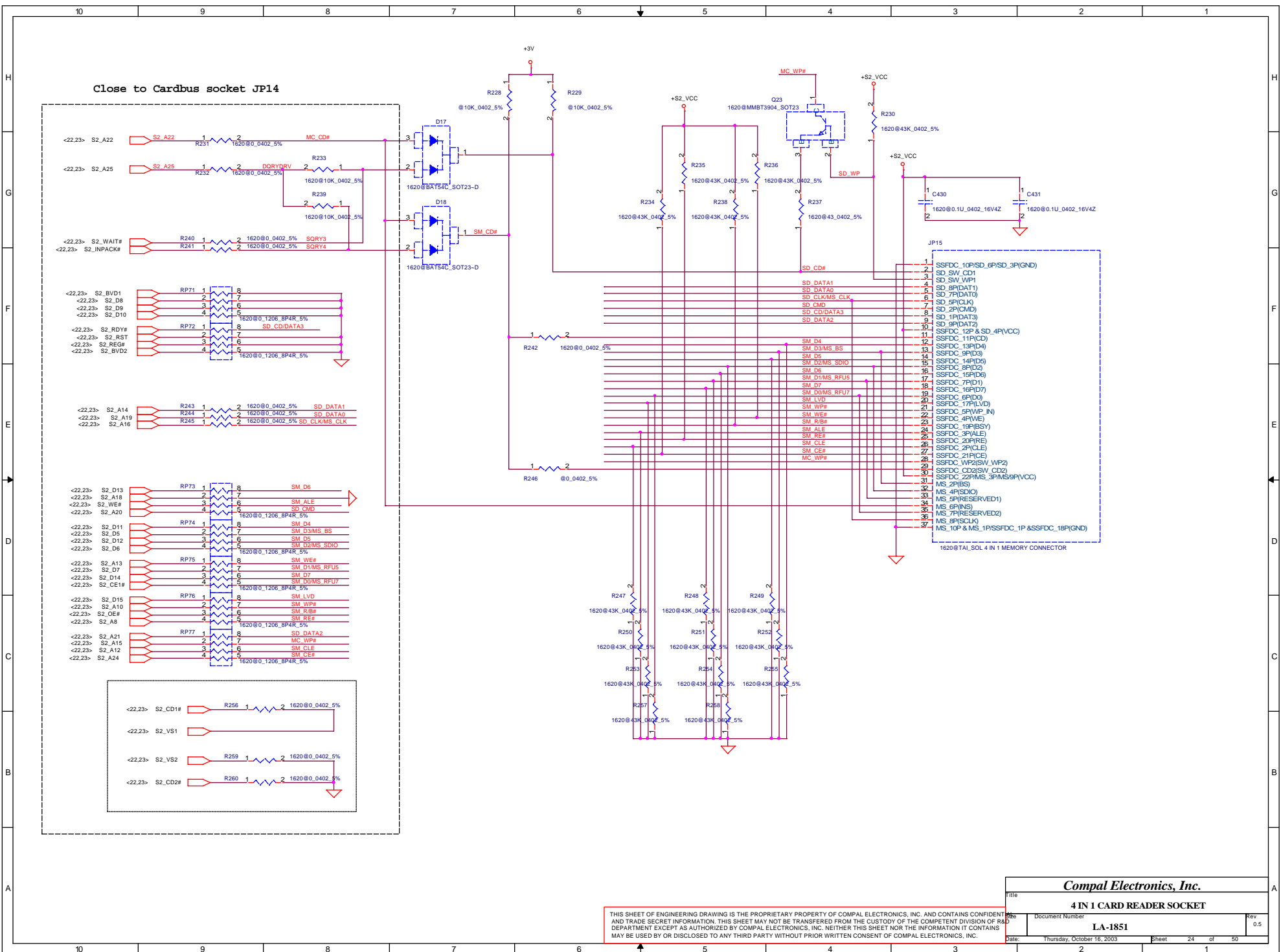
- Layout Recommend :
1. LAN_RD+, LAN_RD- should be equal length as possible
 2. LAN_TD+, LAN_TD- should be equal length as possible
 3. The Maximum trace length between LAN chip(U22) and Magnetic(U24) is 12cm(4.7")
 4. The distance between RJ45(Conn.) and Magnetic(U24) should be as short as possible

Compal Electronics, Inc.		
LAN RealTech8100BL		
Document Number	Rev	0.5
LA-1851		
Date: Thursday, October 16, 2003	Sheet	20 of 50

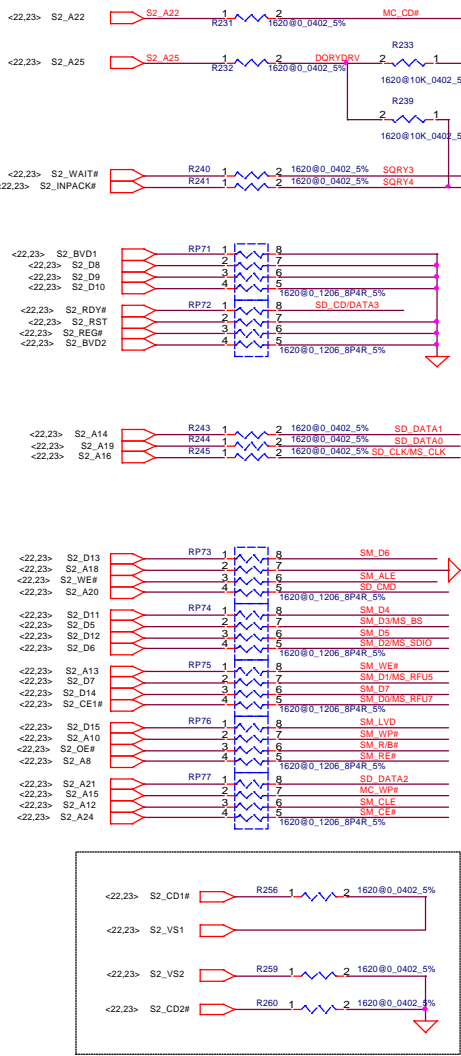
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS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



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.

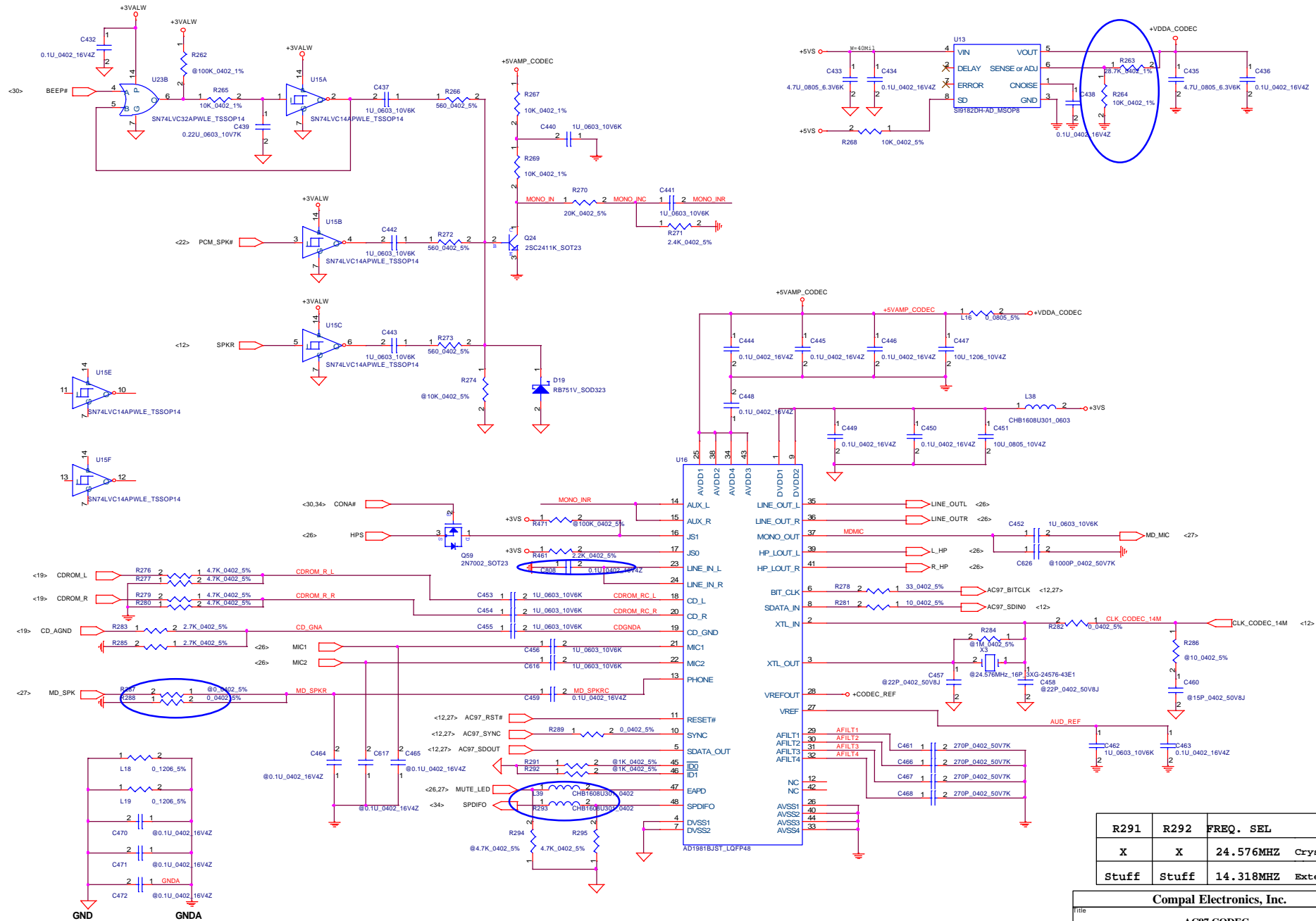


Close to Cardbus socket JP14



Compal Electronics, Inc.		
4 IN 1 CARD READER SOCKET		
File	Document Number	Rev
	LA-1851	0.5
Date	Thursday, October 16, 2003	Sheet 24 of 50

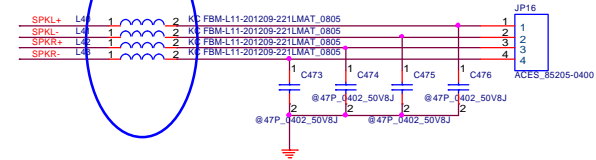
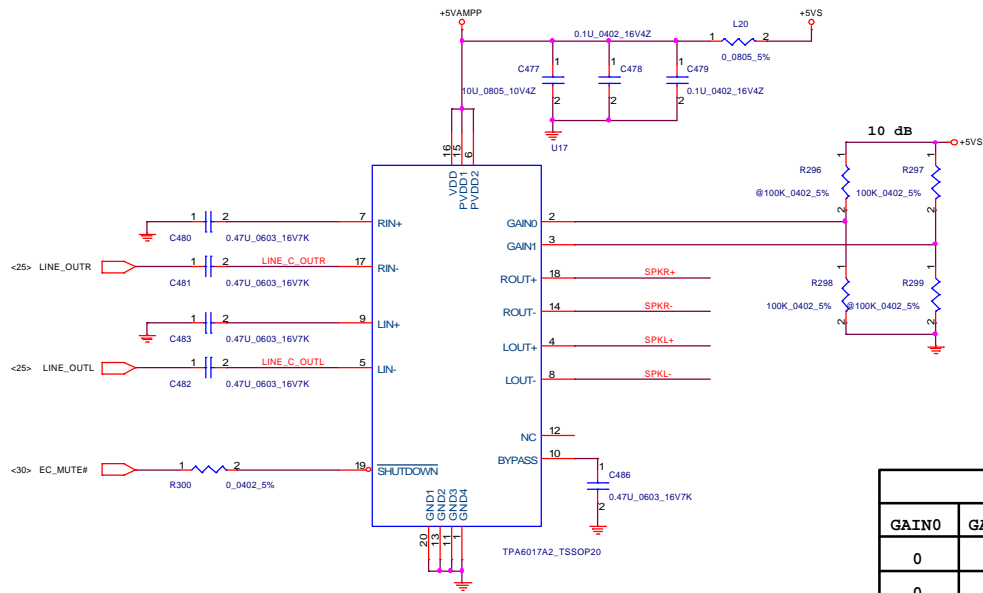
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS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



R291	R292	FREQ. SEL	
X	X	24.576MHZ	Crystal
Stuff	Stuff	14.318MHZ	External

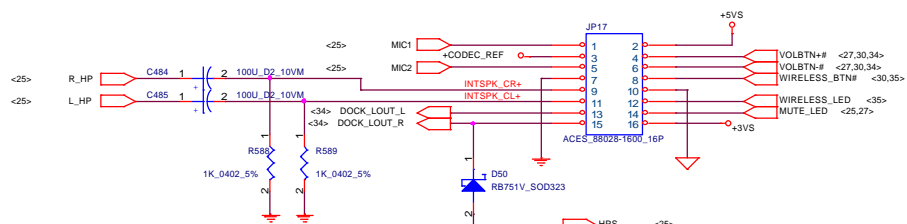
Compal Electronics, Inc.			
AC97 CODEC			
Title	Document Number	Rev	
	LA-1851	0.5	
Date	Thursday, October 16, 2003	Sheet	25 of 50

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.



Gain Settings		
GAIN0	GAIN1	Av(inv)
0	0	6 dB
0	1	10 dB
1	0	15.6 dB
1	1	21.6 dB

AUDIO CONNECTOR



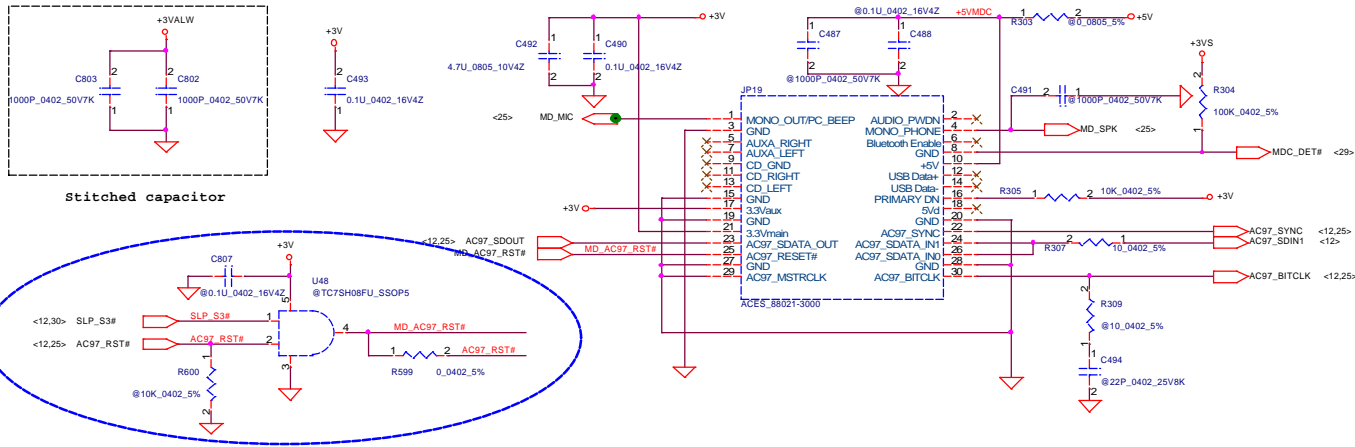
Compal Electronics, Inc.

AMP & Audio Jack

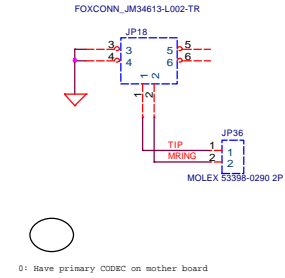
Title	Document Number	Rev
	LA-1851	0.5
Stamp	Thursday, October 16, 2003	Sheet 28 of 50

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

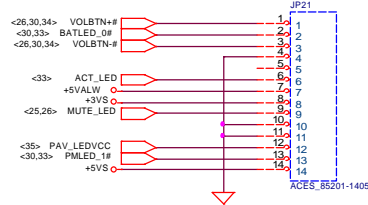
MDC Conn.



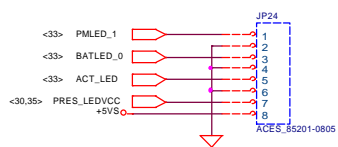
RJ11 CONN.



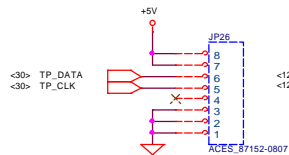
Front Board CONNECTOR Pavilion only



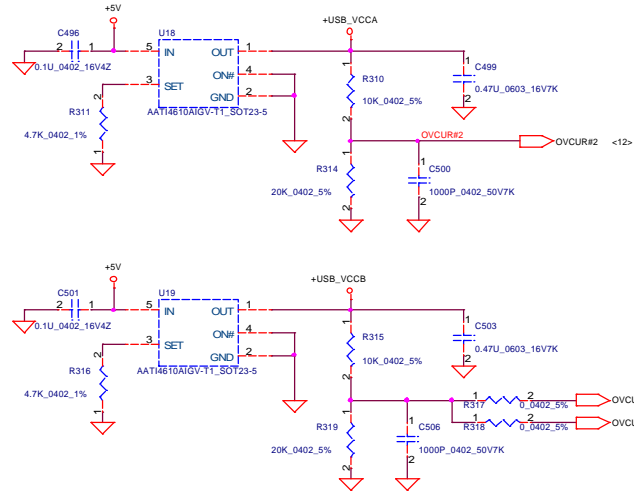
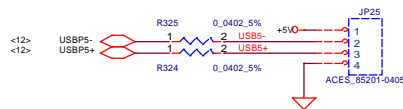
Front Board CONNECTOR PRESARIO only



TP CONNECTOR

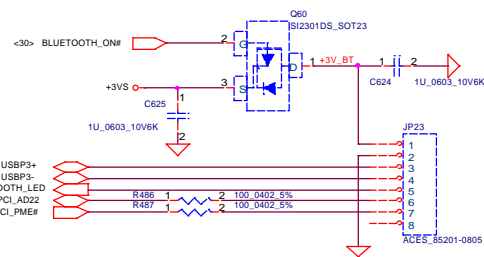


USB KEY

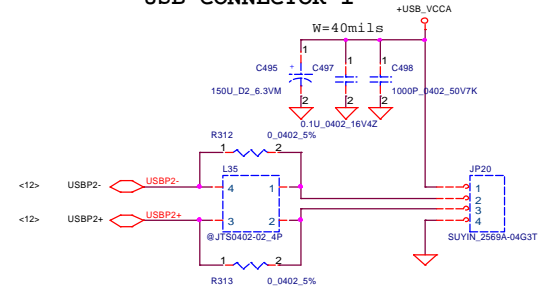


Note: PLACE CLOSE TO EACH USB PORT

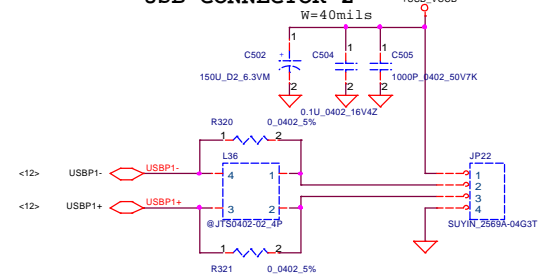
BT CONNECTOR



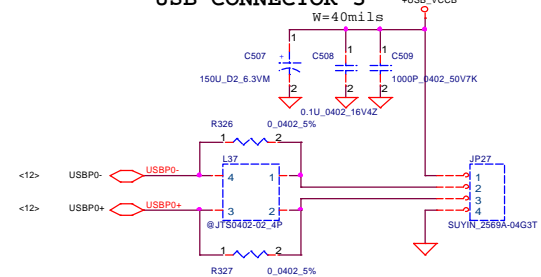
USB CONNECTOR 1



USB CONNECTOR 2

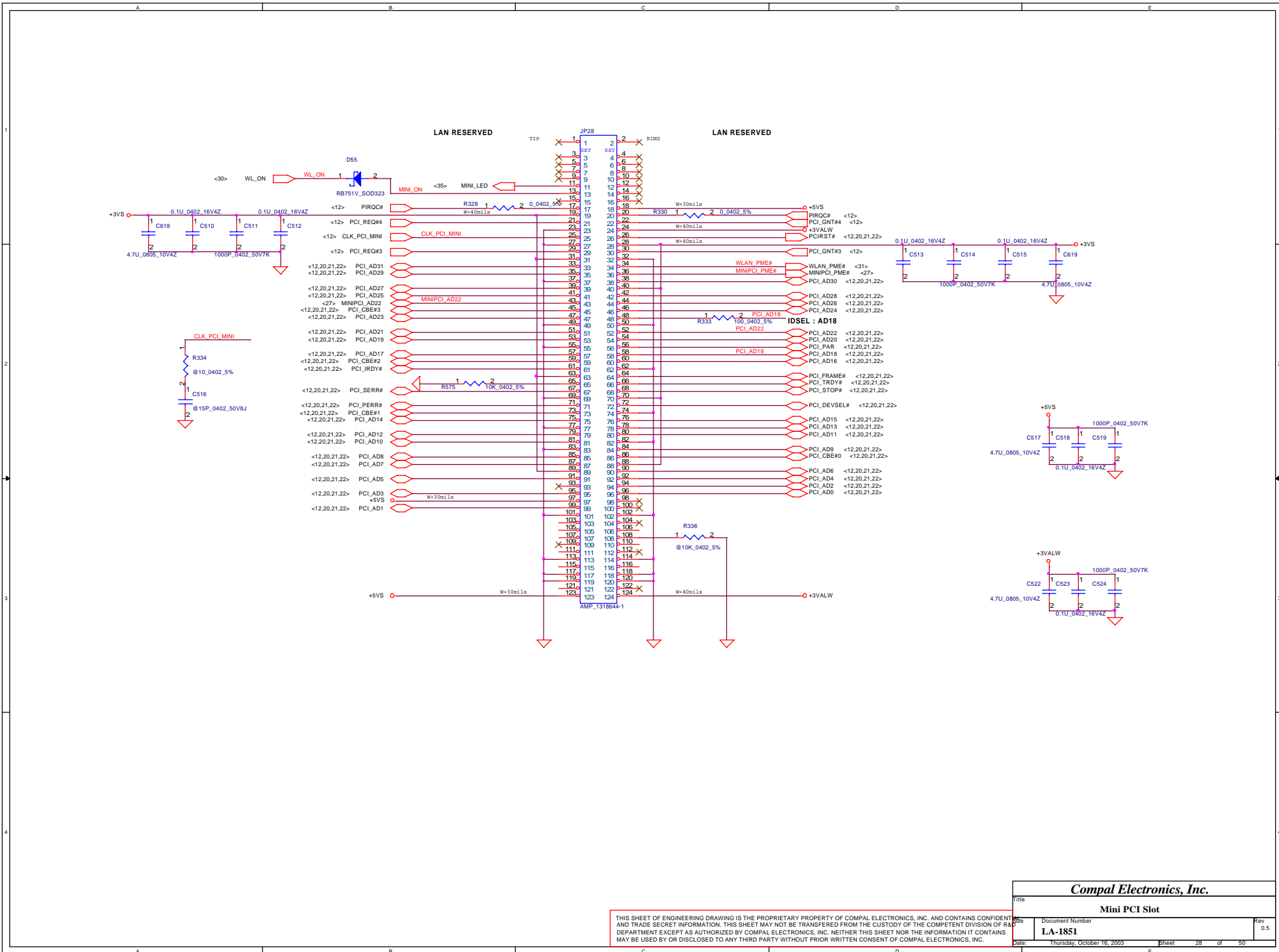


USB CONNECTOR 3



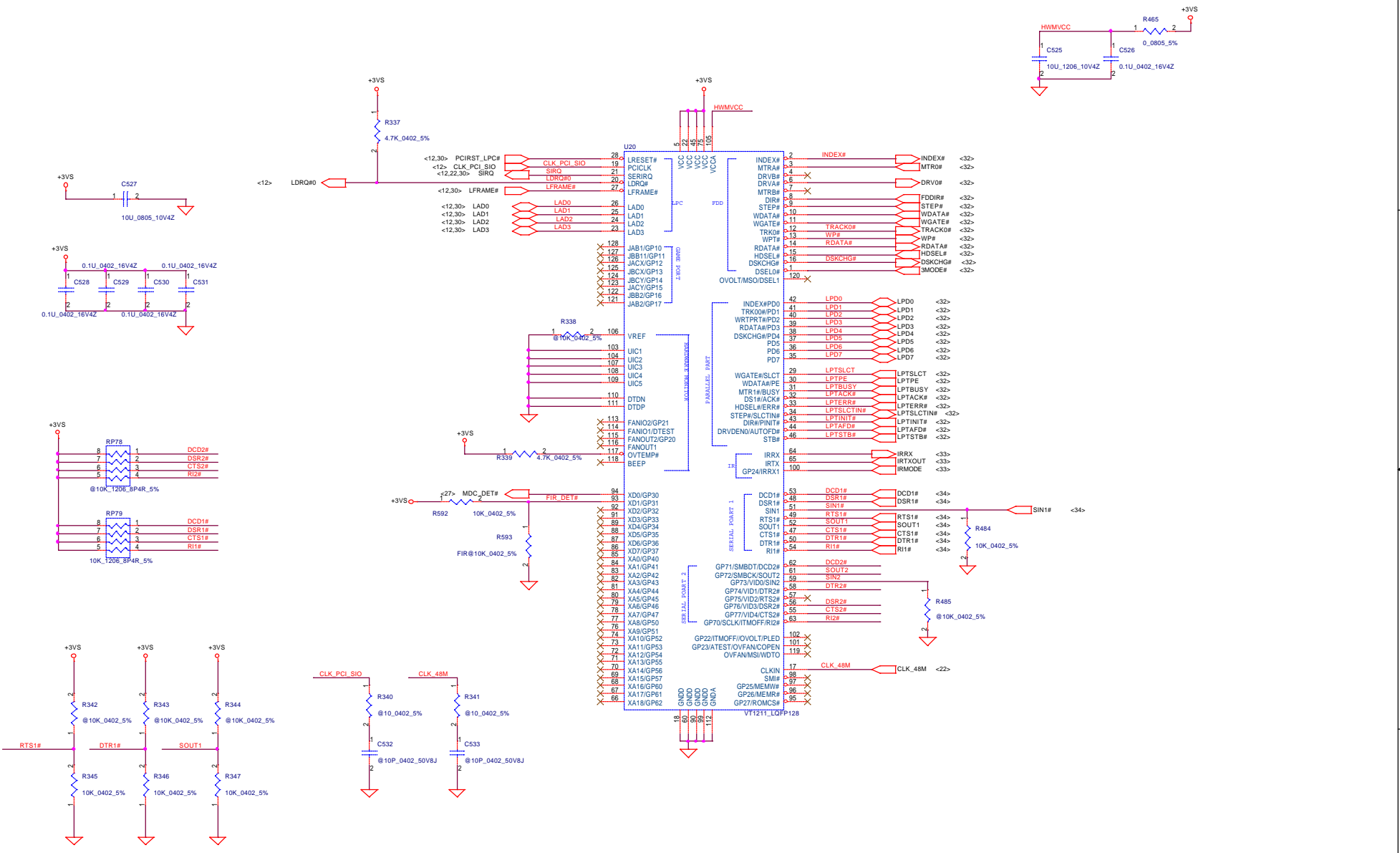
Compal Electronics, Inc.		
MDC , Bluetooth & USB CONN.		
File	Document Number	Rev
	LA-1851	0.5
Date	Friday, October 17, 2003	Sheet 27 of 50

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.



Compal Electronics, Inc.		
Mini PCI Slot		
Document Number	Rev	
LA-1851	0.5	
Date:	Thursday, October 16, 2003	Sheet 28 of 50

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.

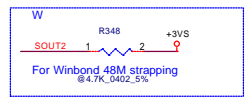


Base address 1:2Kh/3Ph
 Base address 0:4Kh/4Ph

0:Normal operation
 1:Test Mode

0: Enable ROM I/P as GP10
 1:Enable Flash Rom

Super I/O strapping for VT1211

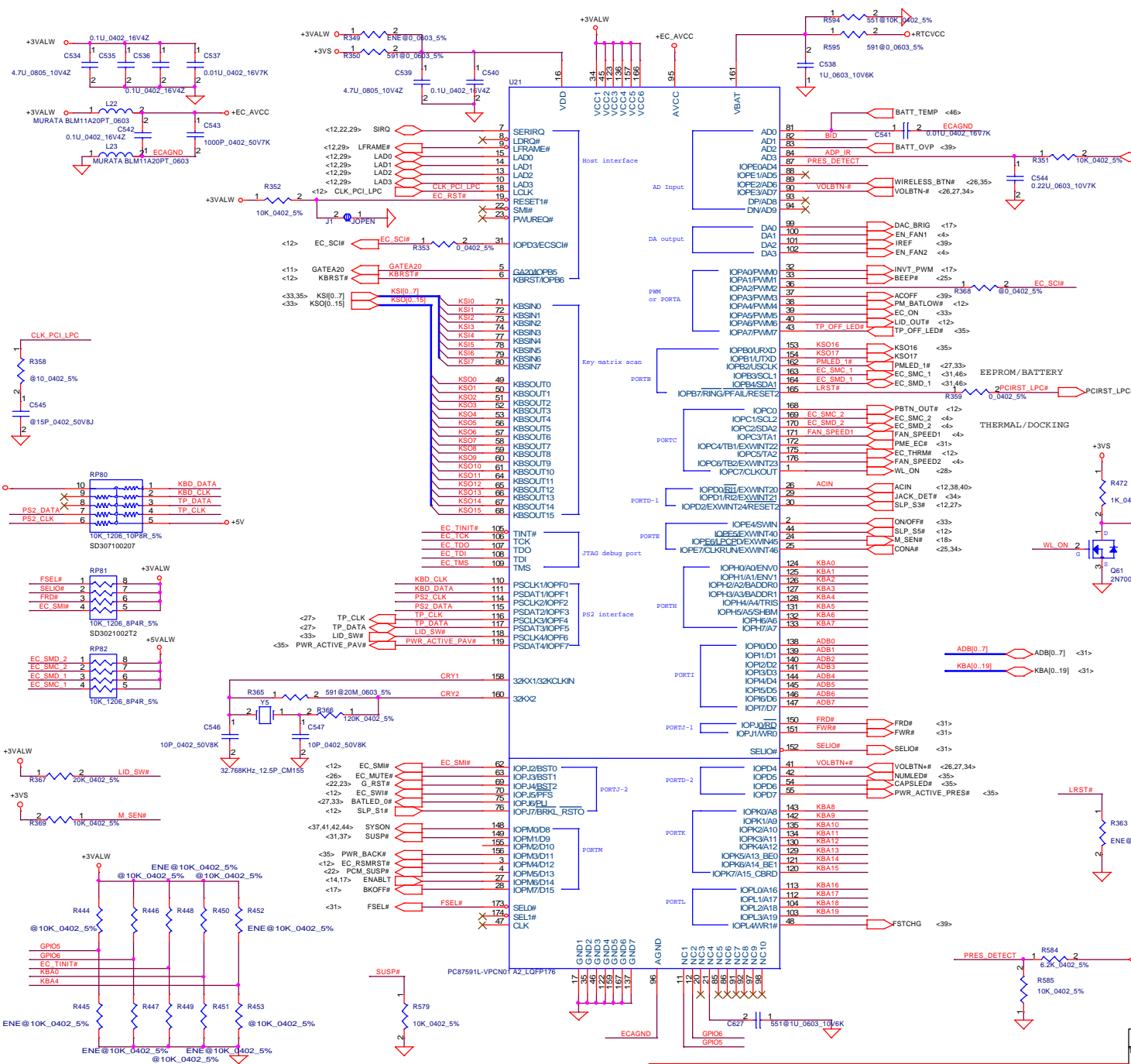


For Winbond 48M strapping
 @4.7K_0402_5%

Compal Electronics, Inc.		
Title: LPC SUPER I/O VIA VT1211		
Size	Document Number	Rev
LA-1851		0.5
Date	Thursday, October 16, 2003	Sheet 29 of 50

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 RAD 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.

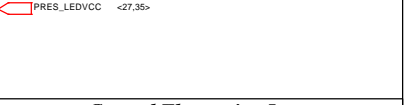
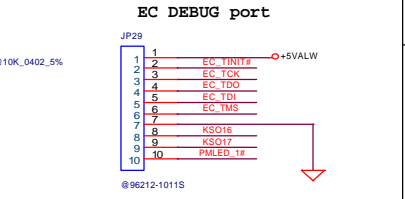
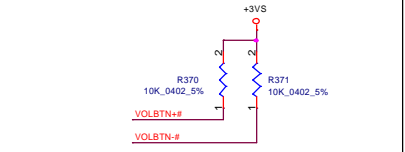
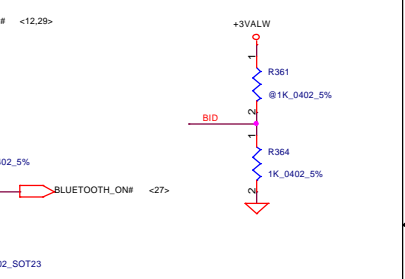
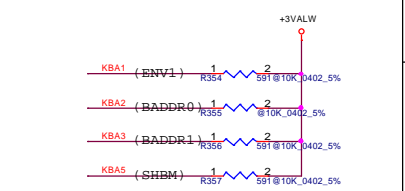
D
C
B
A



I/O Address		
BADDR1_0	Index	Data
0 0	2E	2F
0 1	4E	4F
0 0	(HCFGBAH HCFGBAL)	(HCFGBAH HCFGBAL+1)
1 1	Reserved	

IRE	ENVO	ENV1	TRIS
0	0	0	0
1	0	1	0
0	1	0	0
1	1	1	0

SHBM=1: Enable shared memory with host BIOS
 TRIS=1: While in IRE and OBD, float all the signals for clip-on ISE use



Compal Electronics, Inc.

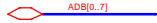
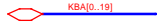
KBD EC CTRL-NS PC87591L

Docu	Document Number	Rev	0.5
Date:	Thursday, October 16, 2003	Sheet	30 of 50

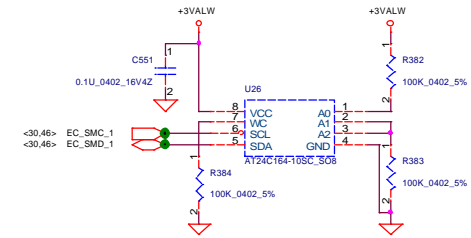
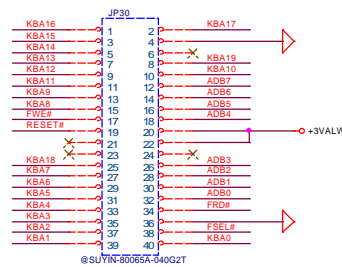
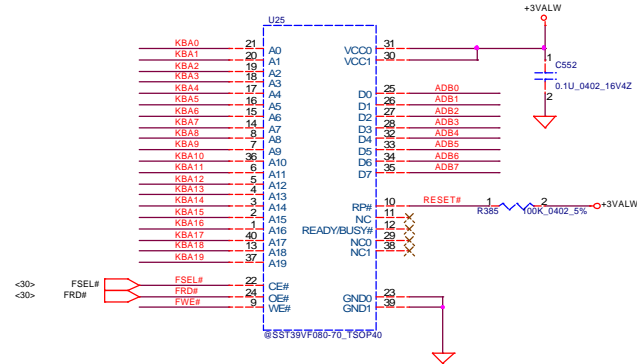
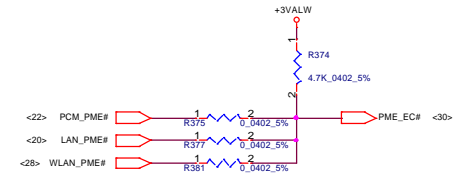
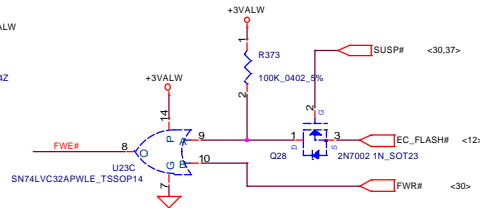
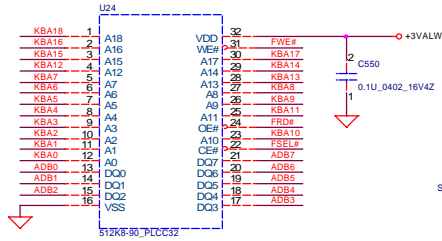
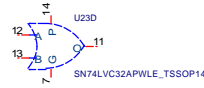
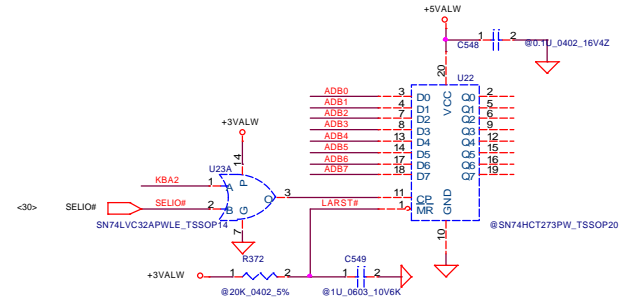
LA-1851

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.

INPUT

<30> ADB[0..7]  ADB[0..7]
 <30> KBA[0..19]  KBA[0..19]

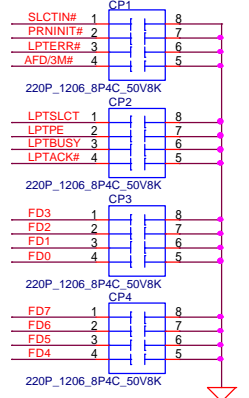
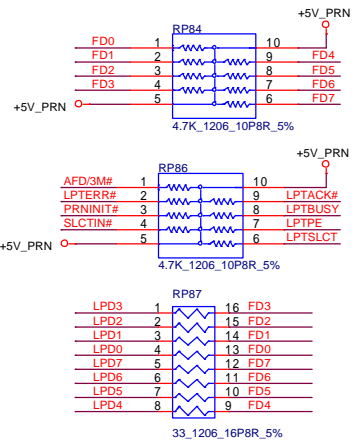
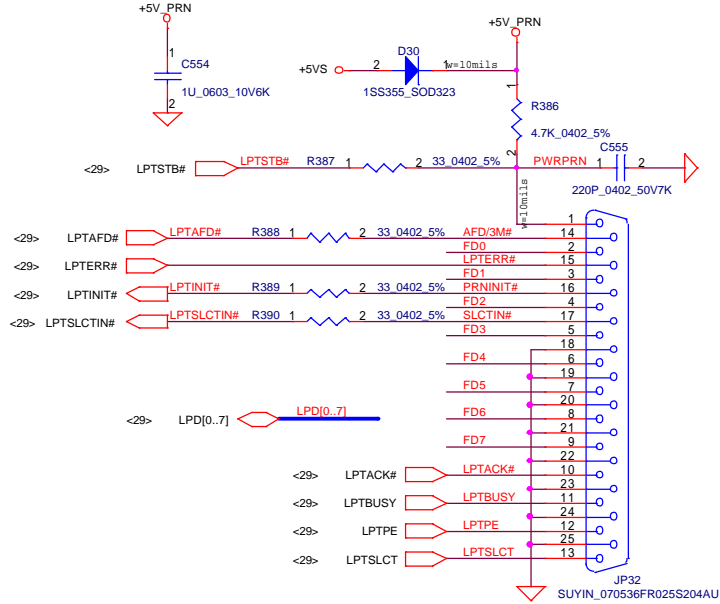
OUTPUT



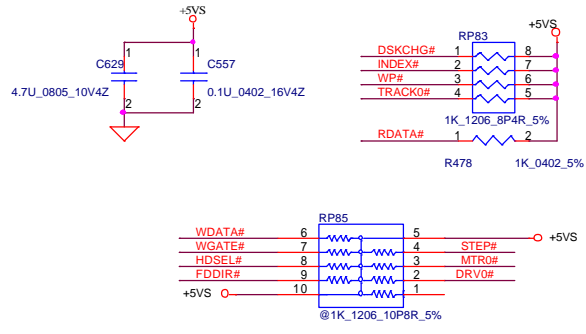
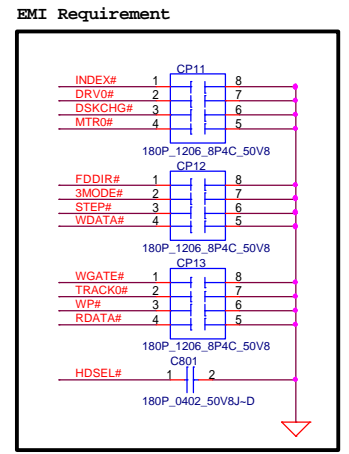
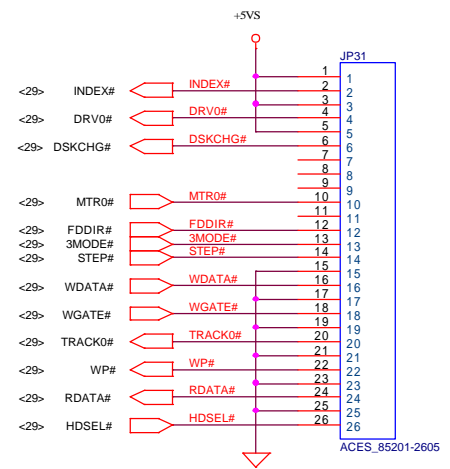
Compal Electronics, Inc.		
BIOS & EC I/O Port		
Part Number	Document Number	Rev
LA-1851		0.5
Date	Thursday, October 16, 2003	Sheet 31 of 50

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.

Parallel Port



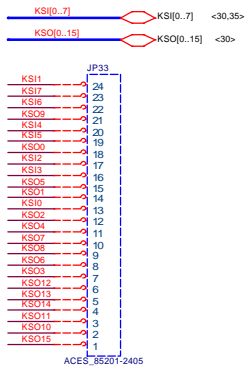
FDD CONN.



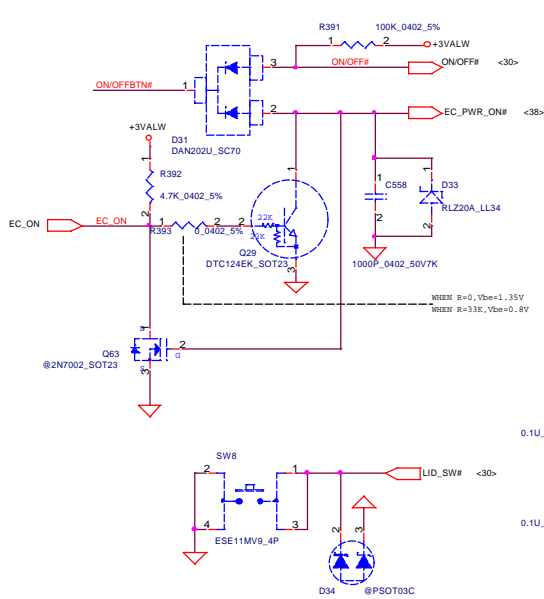
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS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

Title		
Parallel port & FDD Connector		
Size	Document Number	Rev
B	LA-1851	0.5
Date:	Thursday, October 16, 2003	Sheet 32 of 50

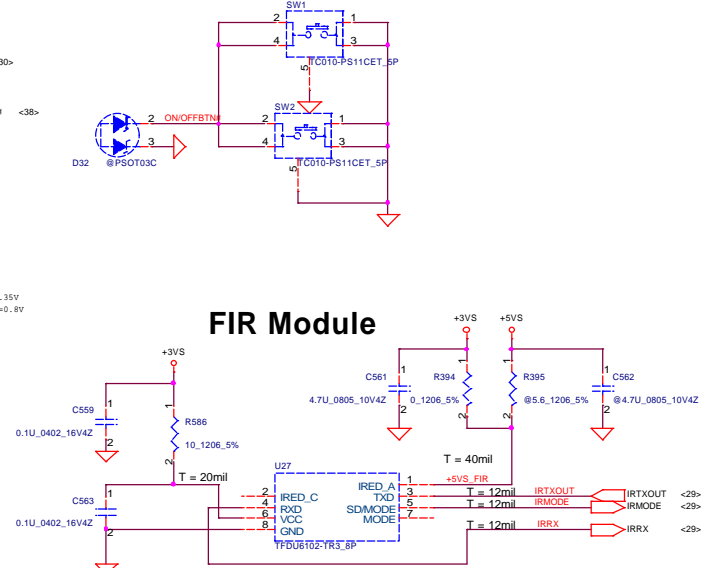
INT_KBD CONN.



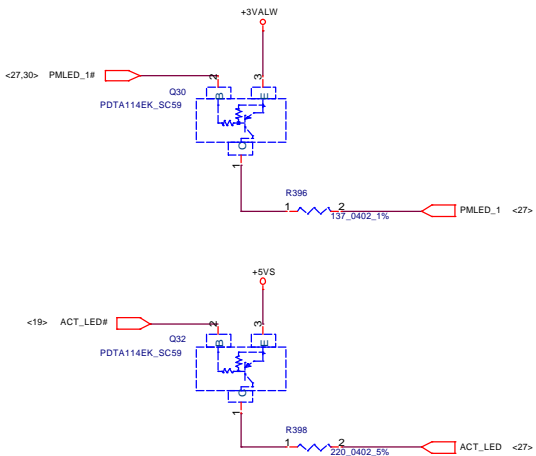
Power BTN



FIR Module

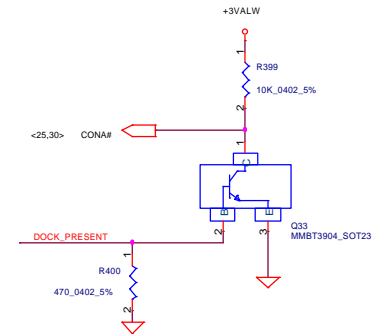
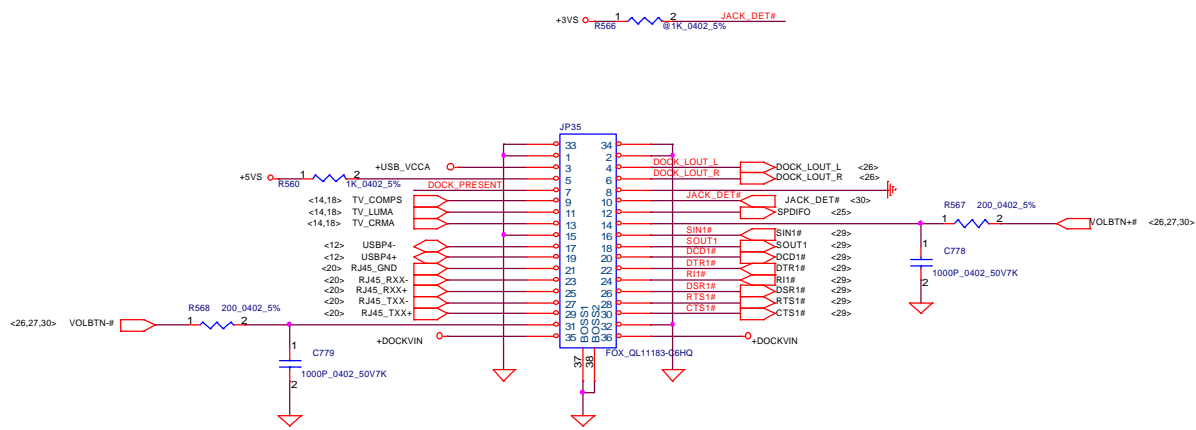


Touch Pad & Status LED Conn.

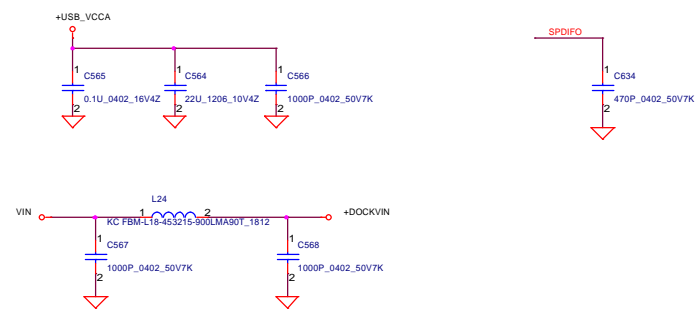
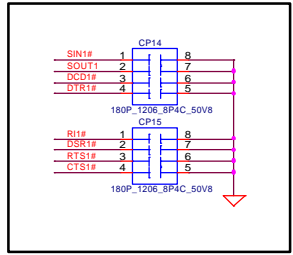


Compal Electronics, Inc.		
KBD,ON/OFF,T/P,LED & FIR		
Doc#	Document Number	Rev
	LA-1851	0.5
Date:	Thursday, October 16, 2003	Sheet 33 of 50

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.

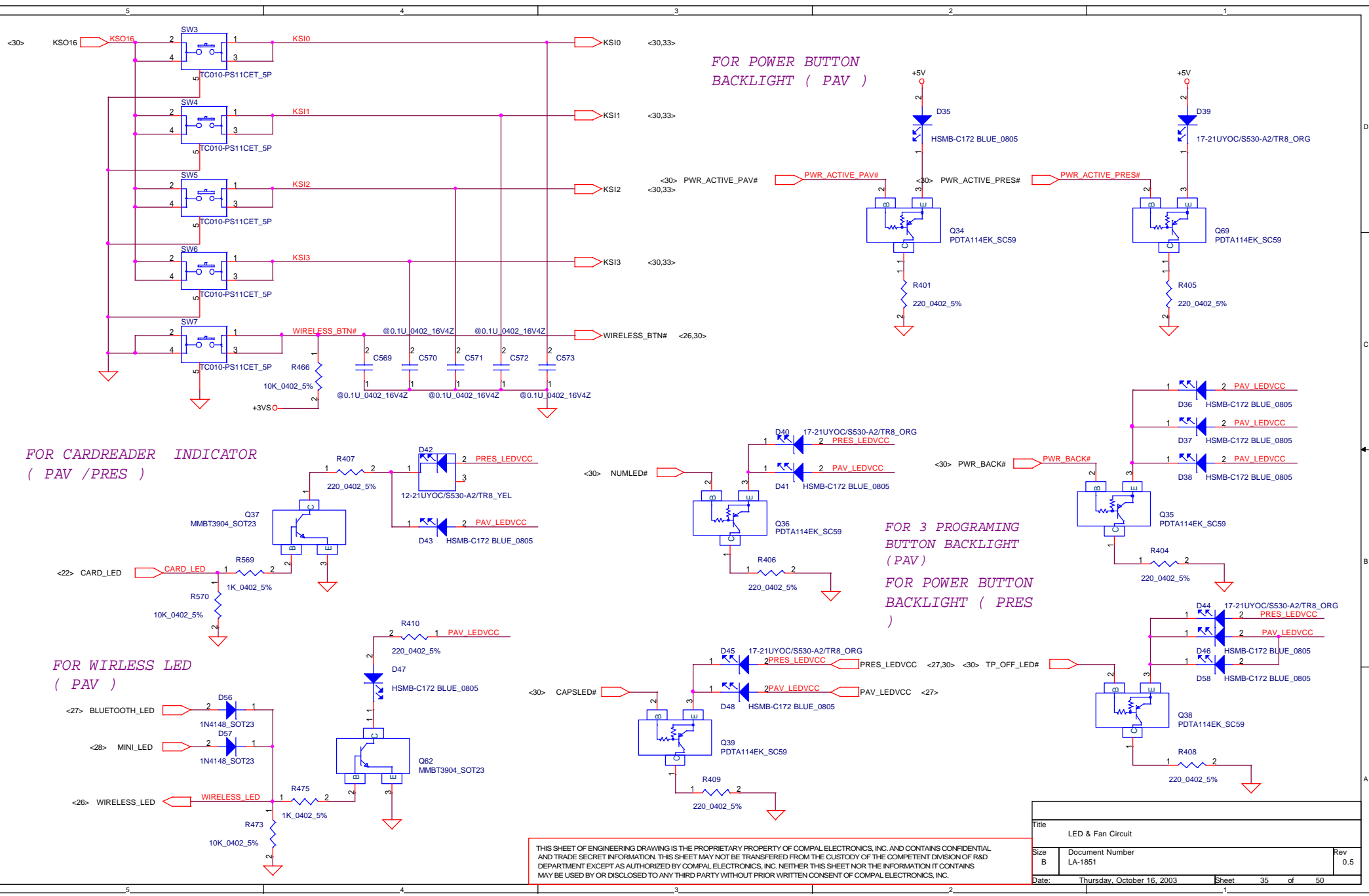


EMI Requirement



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.

Compal Electronics, Inc.		
SPR Connector		
Doc No	Document Number	Rev
	LA-1851	0.5
Date:	Thursday, October 16, 2003	Sheet 34 of 50



FOR POWER BUTTON BACKLIGHT (PAV)

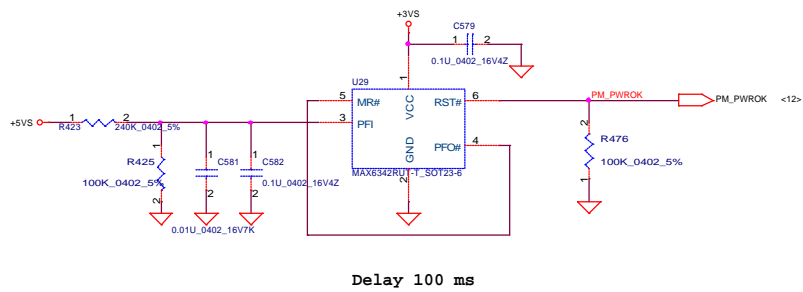
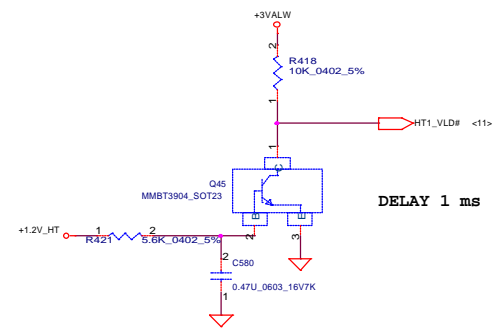
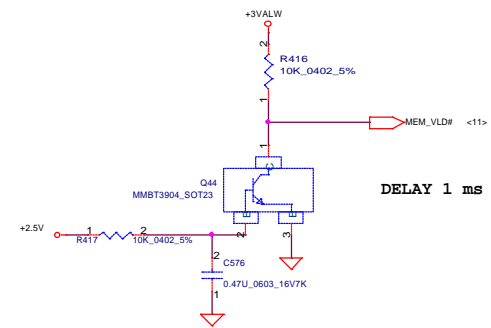
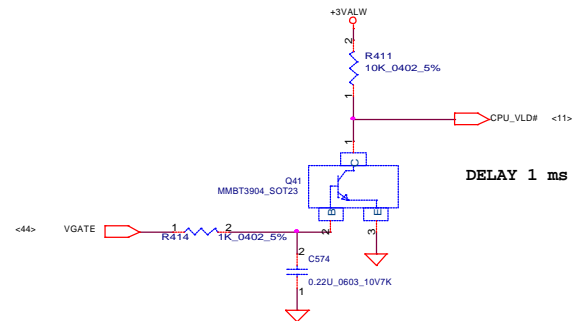
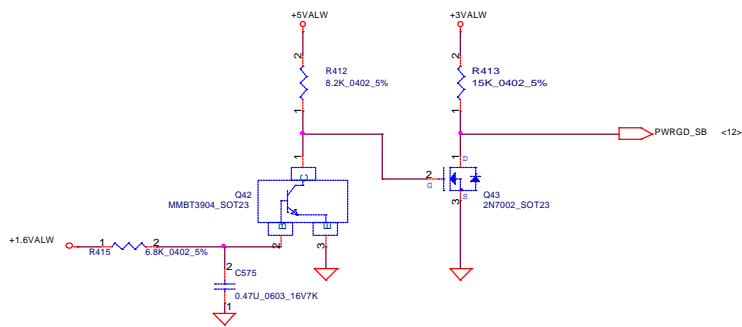
FOR CARDREADER INDICATOR (PAV /PRES)

FOR 3 PROGRAMING BUTTON BACKLIGHT (PAV)
FOR POWER BUTTON BACKLIGHT (PRES)

FOR WIRLESS LED (PAV)

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

Title		
LED & Fan Circuit		
Size	Document Number	Rev
B	LA-1851	0.5
Date:	Thursday, October 16, 2003	Sheet 35 of 50



Delay 100 ms

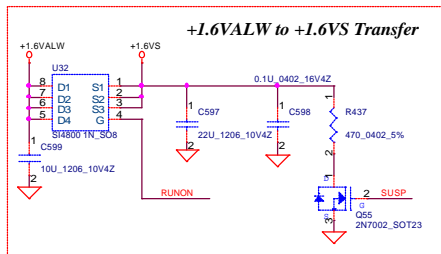
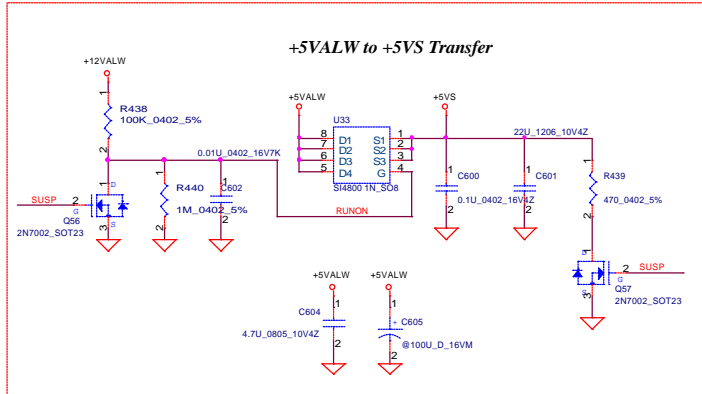
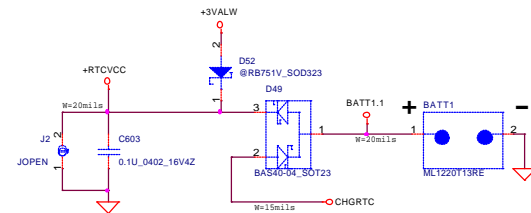
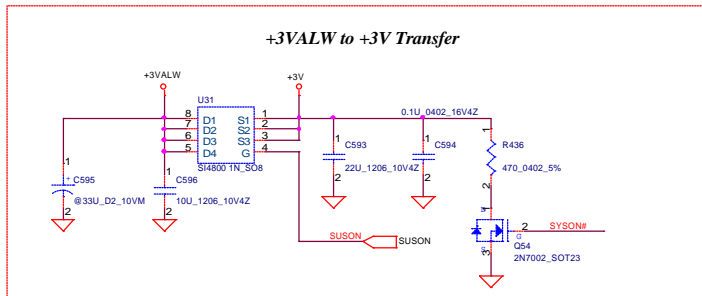
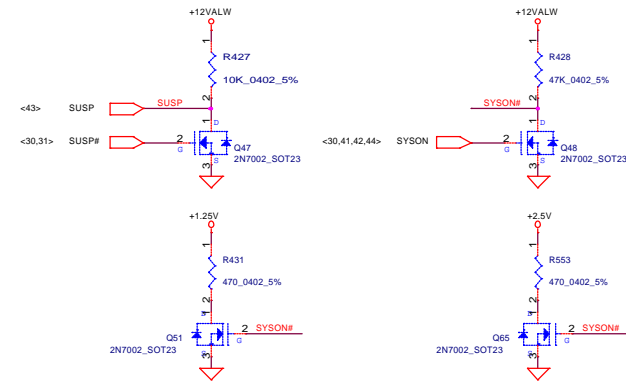
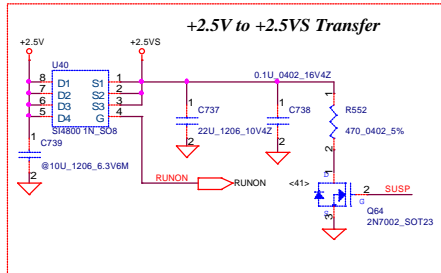
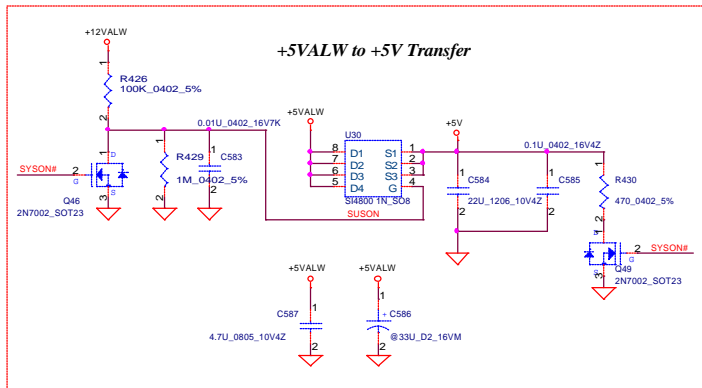
DELAY 1 ms

DELAY 1 ms

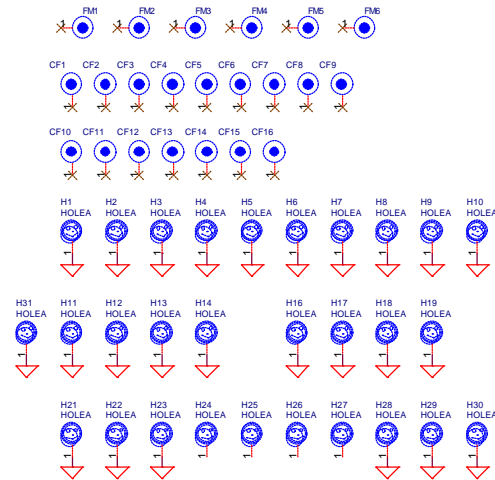
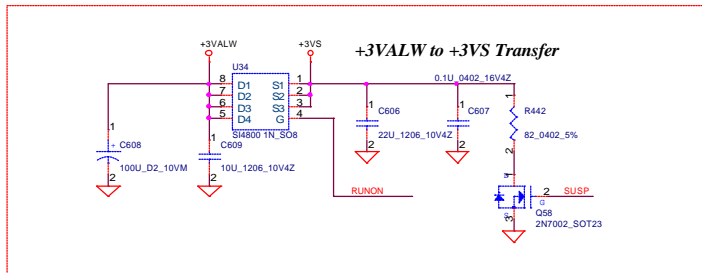
DELAY 1 ms

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.

Compal Electronics, Inc.	
Power OK/Reset Conn.& MUTE Switch	
File	Document Number
Rev	0.5
Custom	LA-1851
Date	Thursday, October 16, 2003
Sheet	36 of 50



For customer request
,they don't wanna
charge RTC

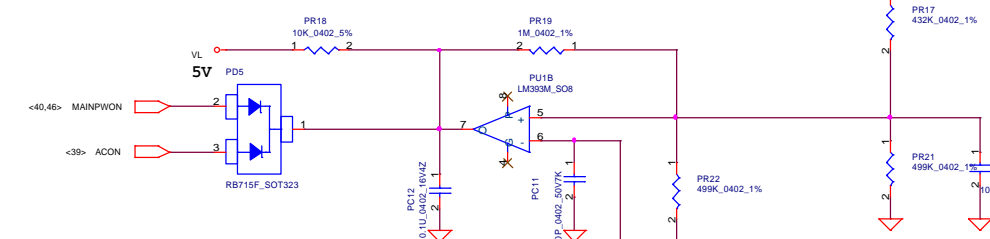
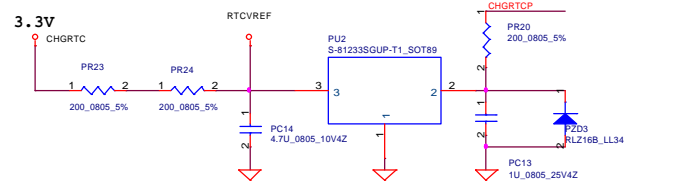
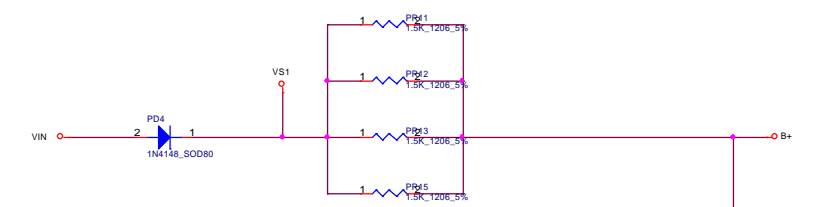
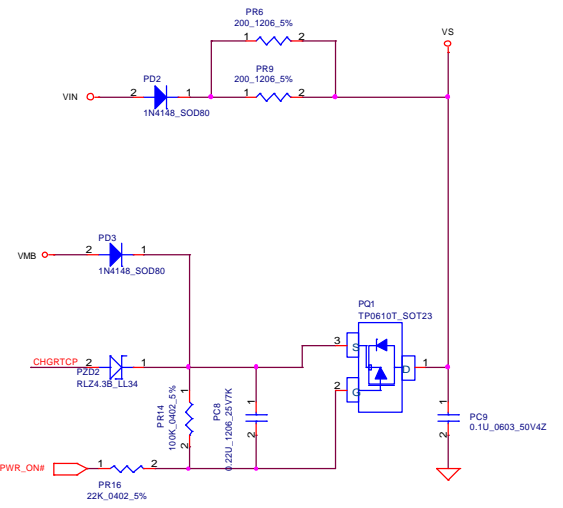
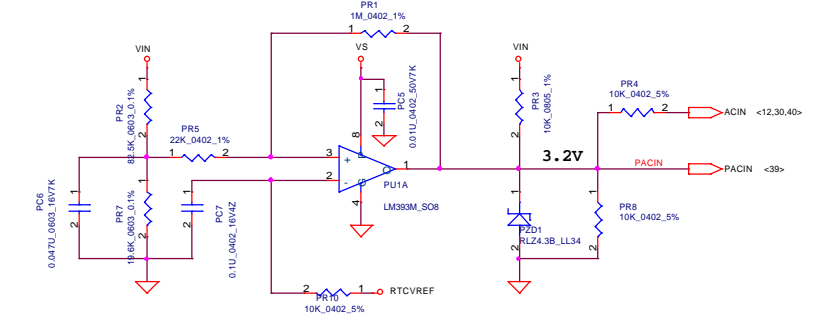
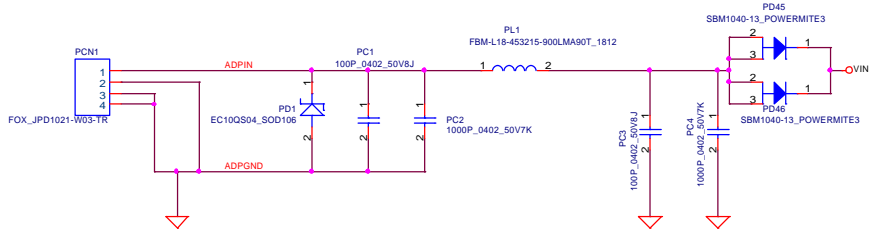


THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS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

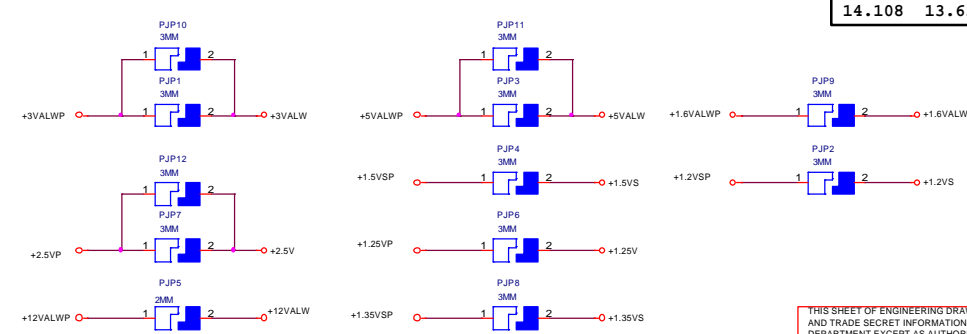
Compal Electronics, Inc.			
DC/DC Circuit			
File	Document Number	Rev	
	LA-1851	0.5	
Date:	Thursday, October 16, 2003	Sheet	37 of 50

Detector

VIN detector
 17.945 17.343 16.757
 17.372 16.782 16.207



ACIN
 Precharge detector
 16.421 15.817 15.229
 14.108 13.657 13.002



Compal Electronics, Inc.		
Title	Detector	
Size	Document Number	Rev
B	LA-1851	0.5
Date:	Thursday, October 16, 2003	Sheet 38 of 50

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.

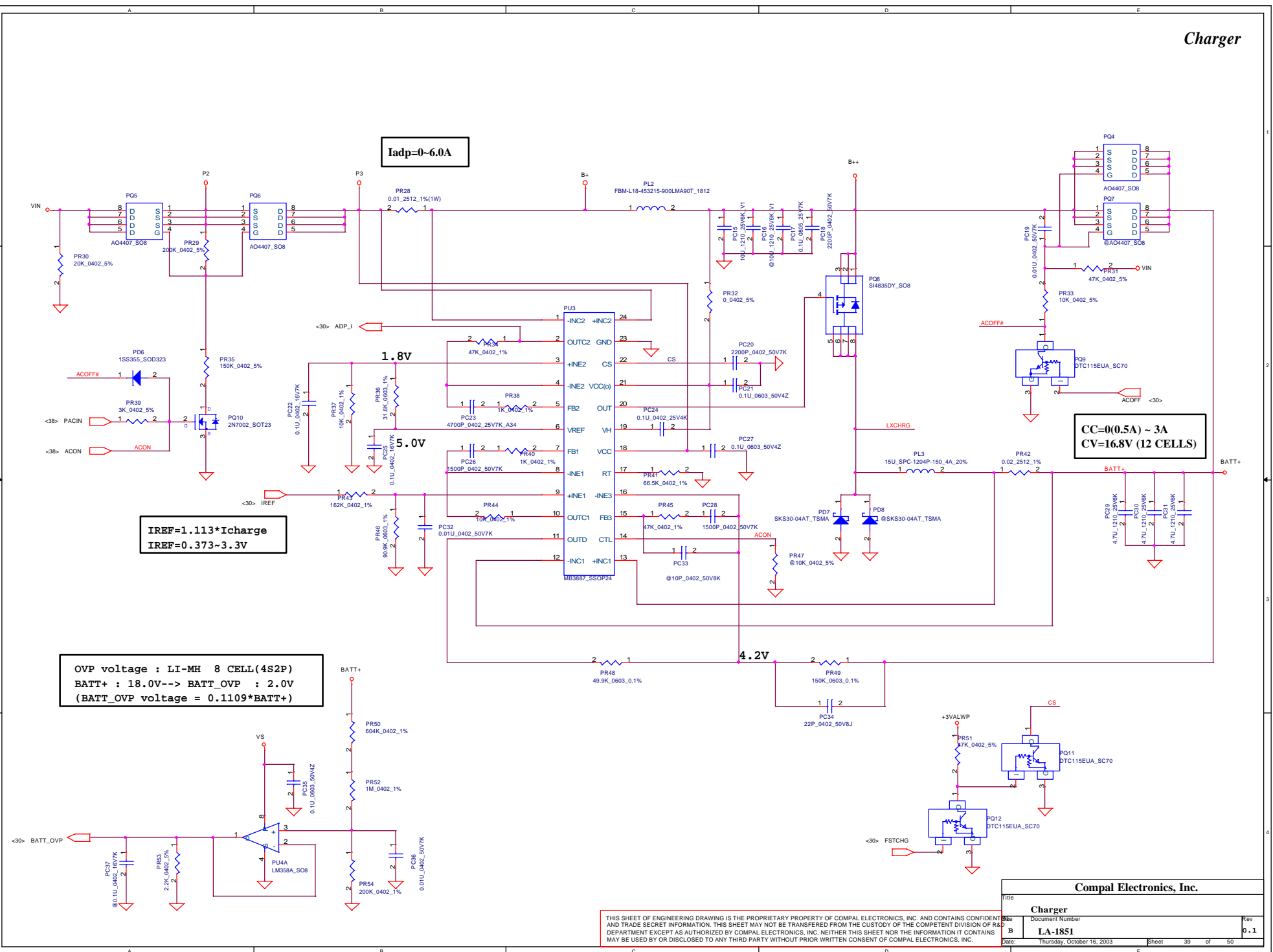
Charger

I_{adp}=0-6.0A

**CC=0(0.5A) ~ 3A
CV=16.8V (12 CELLS)**

**I_{REF}=1.113*I_{charge}
I_{REF}=0.373~3.3V**

**OVP voltage : LI-MH 8 CELL(4S2P)
BATT+ : 18.0V--> BATT_OVP : 2.0V
(BATT_OVP voltage = 0.1109*BATT+)**



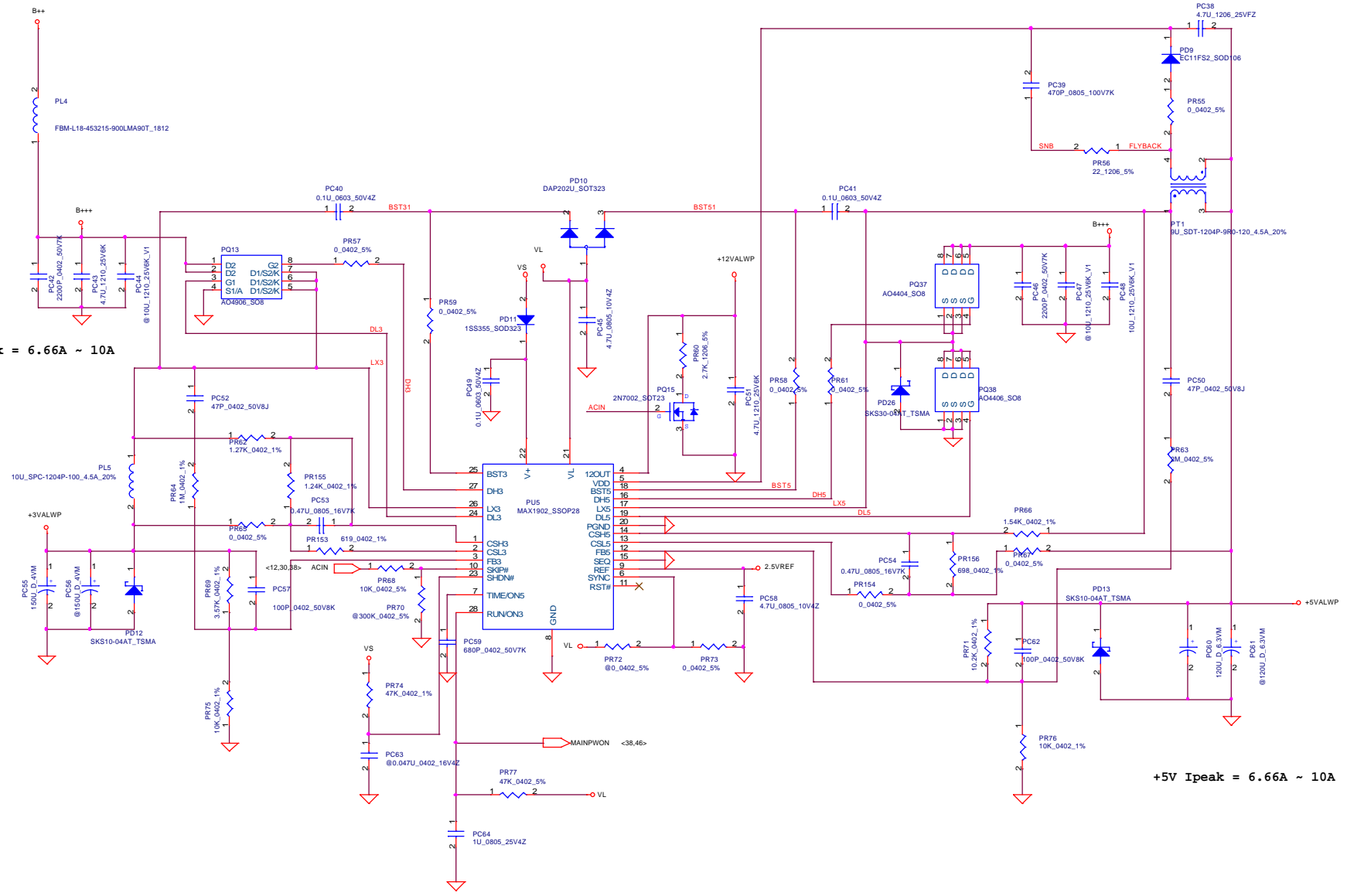
Compal Electronics, Inc.		
Charger		
File	Document Number	Rev
	LA-1851	0.1
Date:	Thursday, October 16, 2003	Sheet 39 of 50

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.

+3.3V/+5V/+12V

+3.3V Ipeak = 6.66A ~ 10A

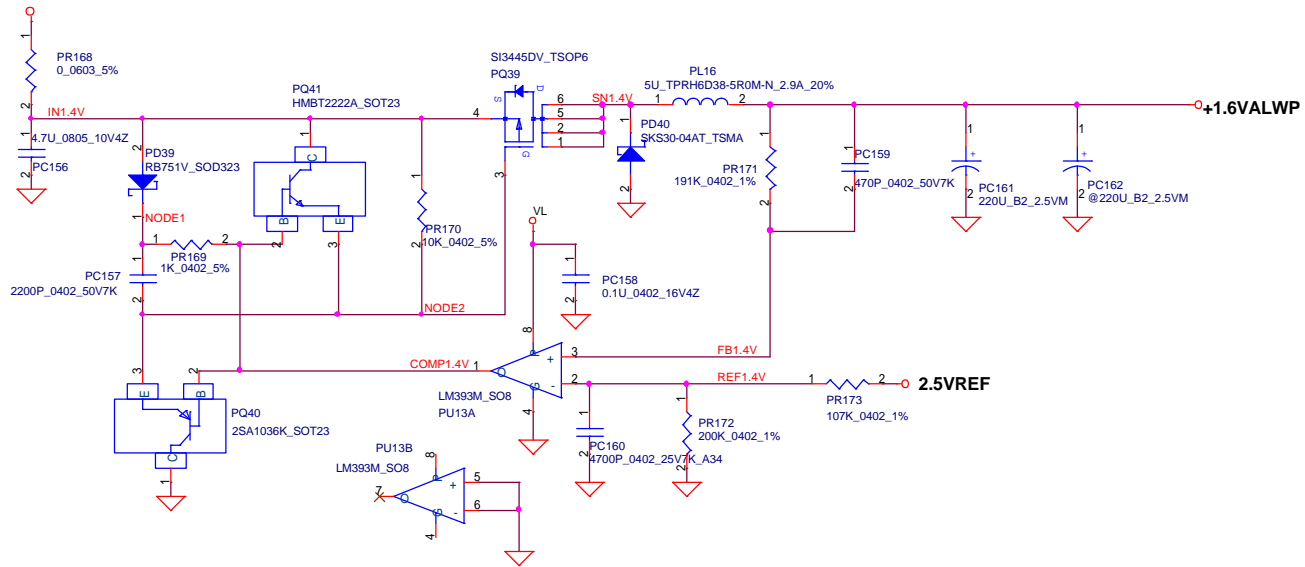
+5V Ipeak = 6.66A ~ 10A



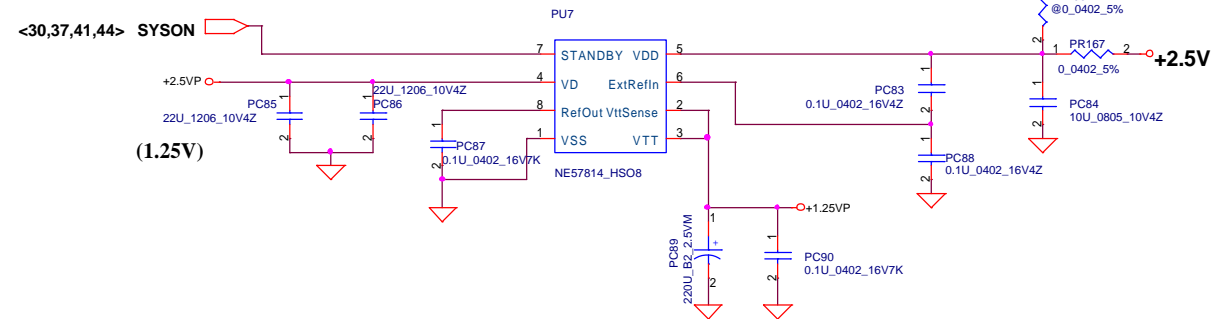
Compal Electronics, Inc.	
Title	3.3V / 5V / 12V
Doc No	Document Number
B	LA-1851
Date	Thursday, October 16, 2003
Sheet	40 of 50

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.

+5VALWP

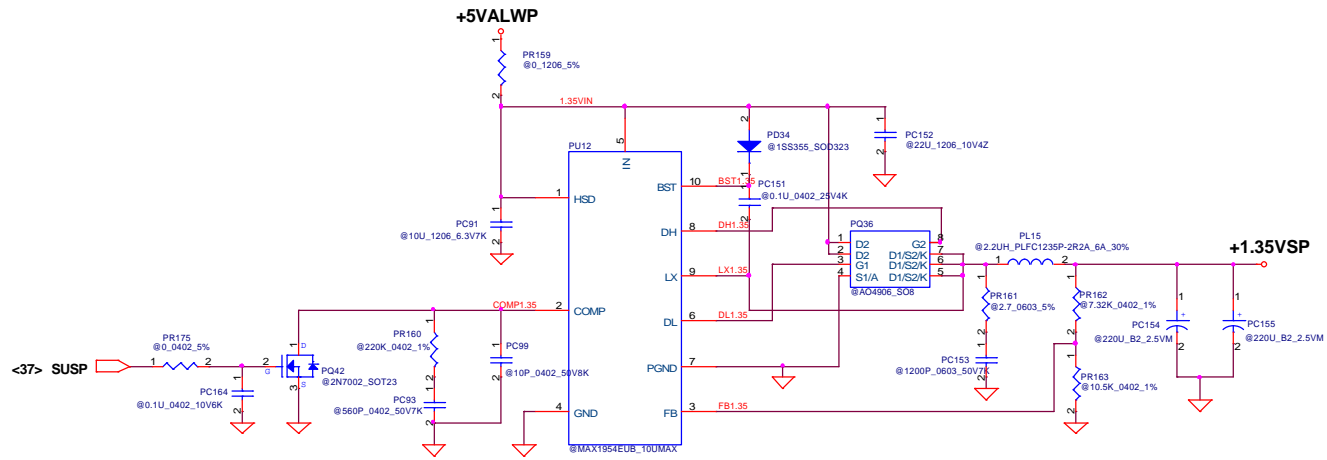
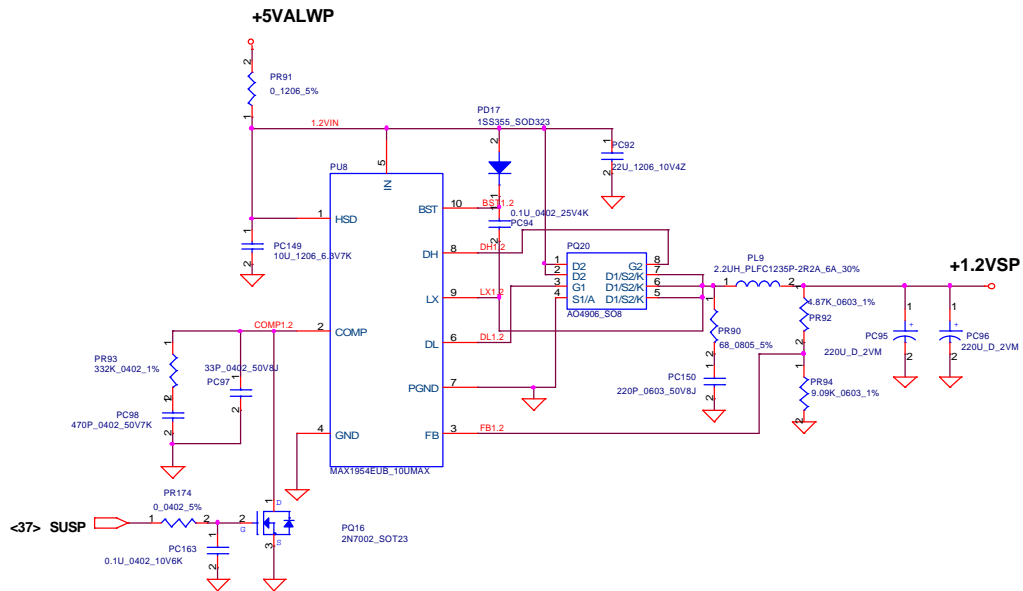


+2.5VP



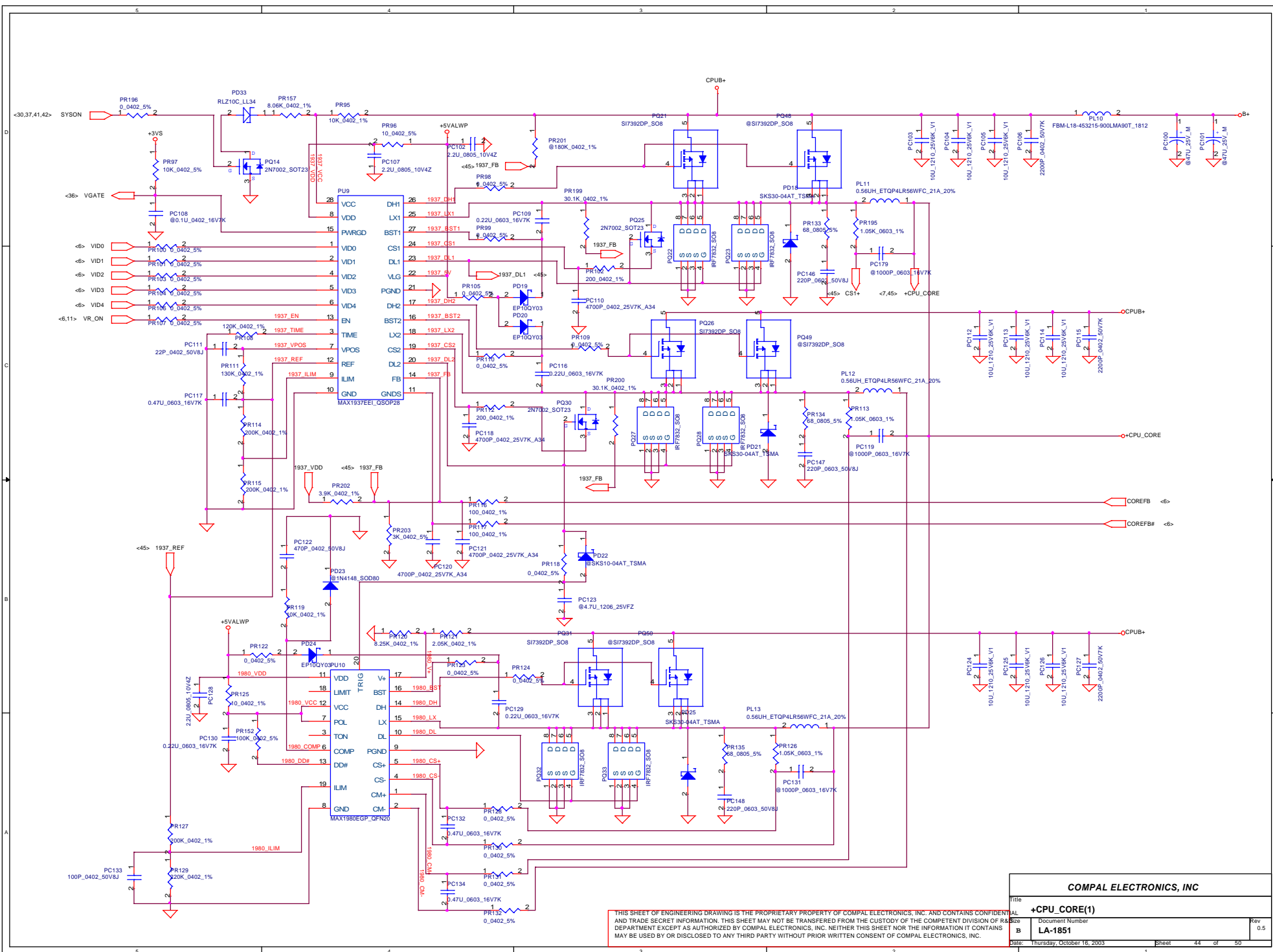
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS

COMPAL ELECTRONICS, INC		
Title		
+1.6VALWP & +1.25VP		
Size	Document Number	Rev
B	LA-1581	0.5
Date:	Thursday, October 16, 2003	Sheet 42 of 50



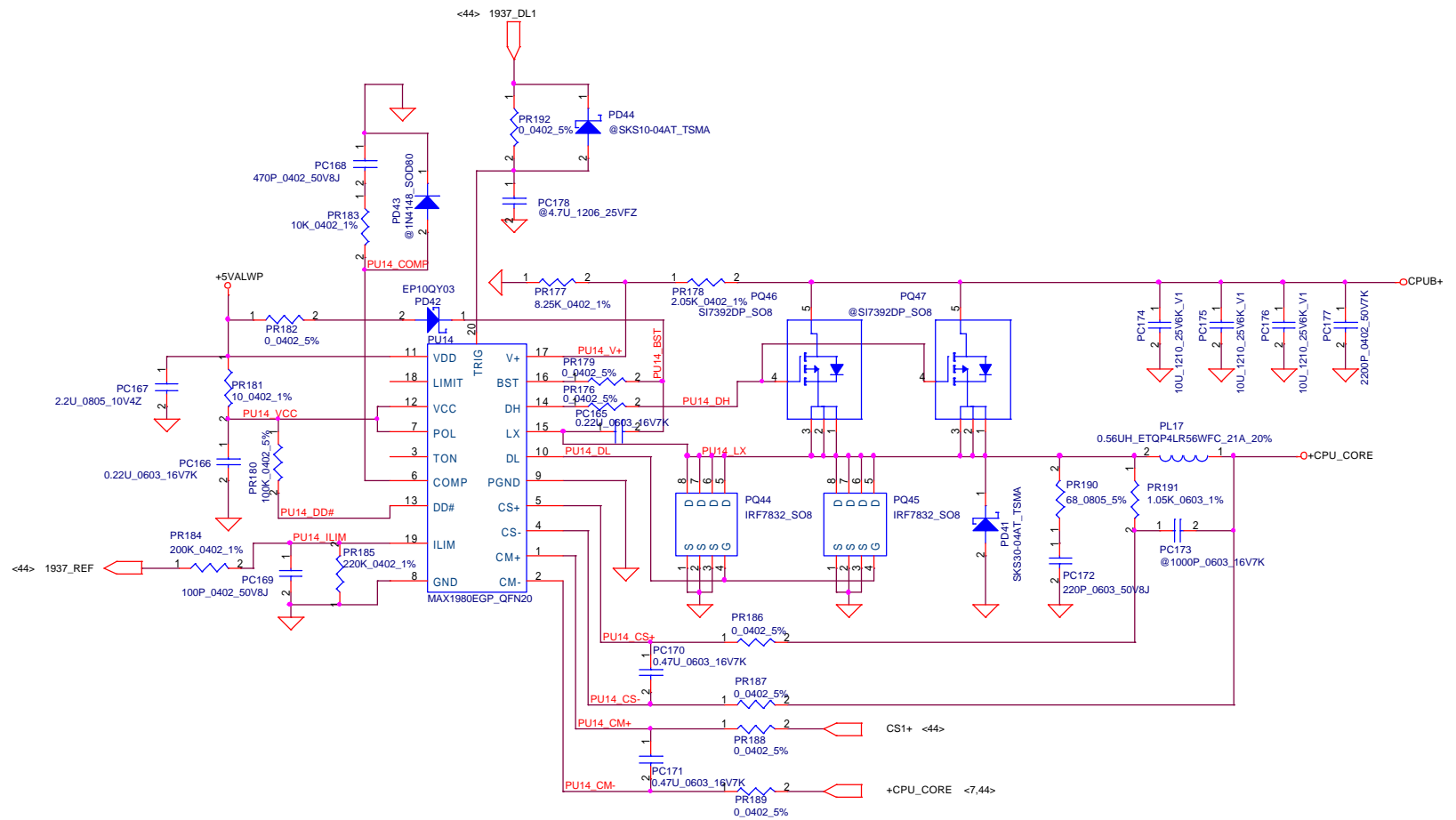
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS

COMPAL ELECTRONICS, INC		
File		
1.25V / VGA_CORE		
Doc	Document Number	Rev
	LA-1851	0.5
Date	Thursday, October 16, 2003	Sheet 43 of 50



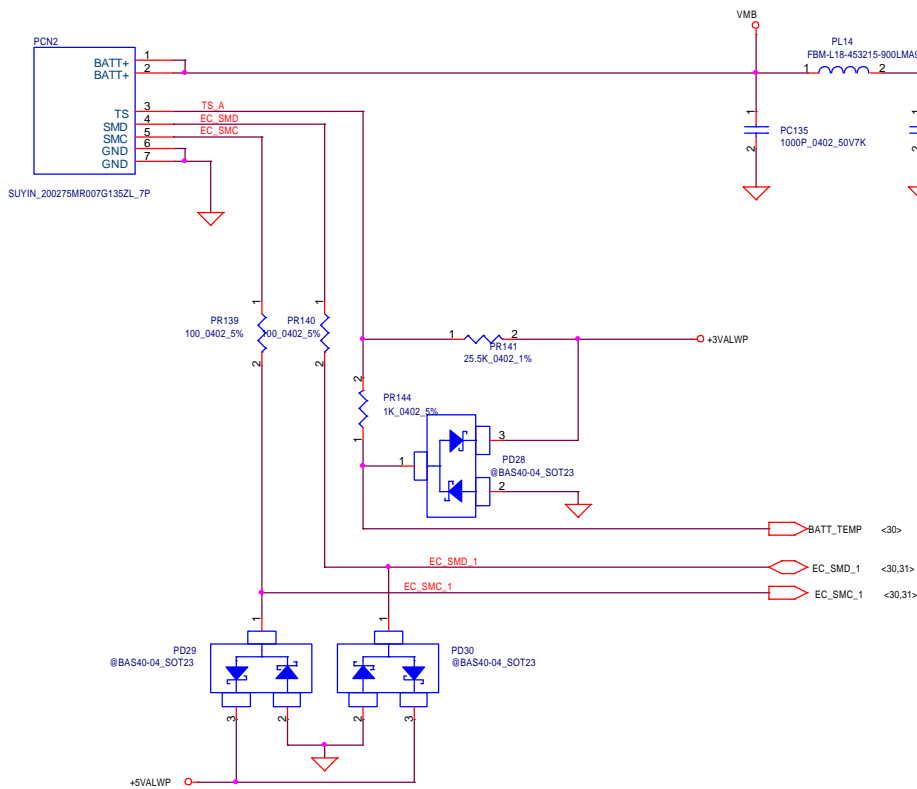
COMPAL ELECTRONICS, INC		
Title: +CPU_CORE(1)		
Document Number: LA-1851		Rev: 0.5
Date: Thursday, October 16, 2003	Sheet: 44	of 50

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&B 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.

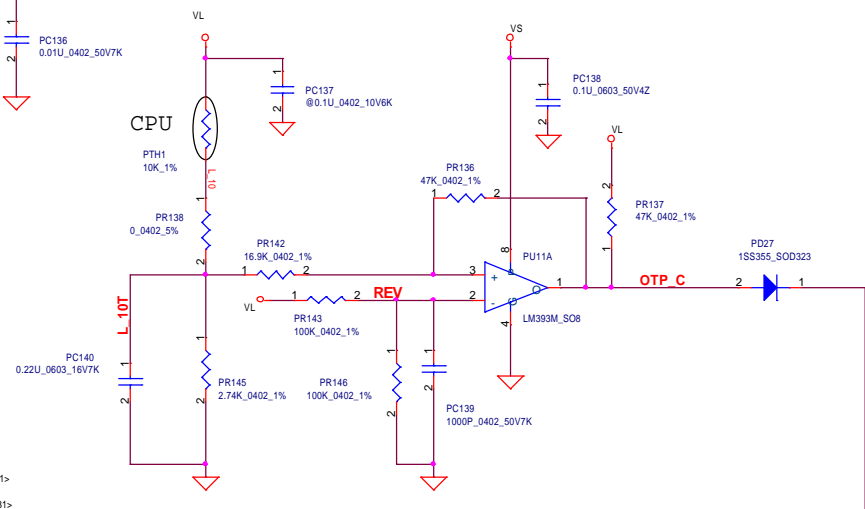


THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS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

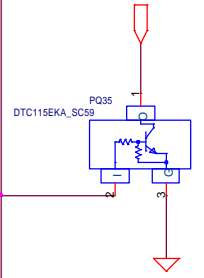
COMPAL ELECTRONICS, INC		
Title		
+CPU_CORE(2)		
Size	Document Number	Rev
	LA-1851	0.5
Date:	Thursday, October 16, 2003	Sheet
		45 of 50



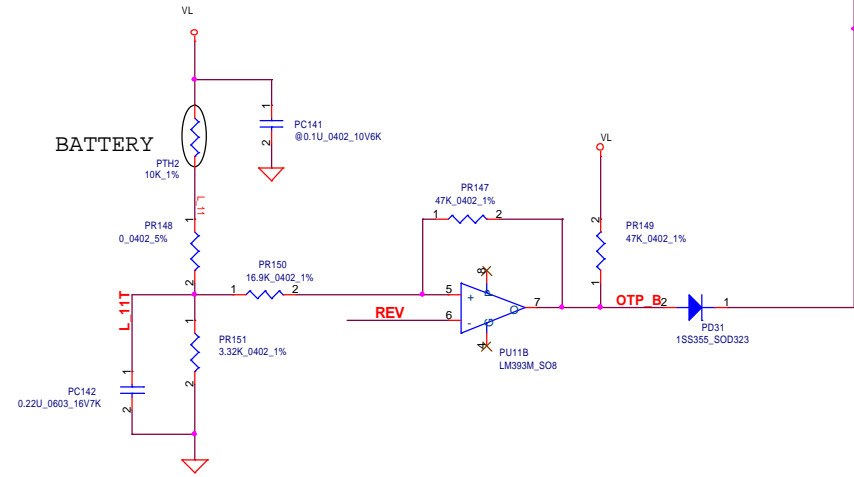
PH1 under CPU botten side :
 CPU thermal protection at 90 +-3 degree C
 Recovery at 50 +-3 degree C



<38,40> MAINPWON



PH2 near main Battery CONN :
 BAT. thermal protection at 84 +-3 degree C
 Recovery at 45 +-3 degree C



COMPAL ELECTRONICS, INC		
Title		
BATTERY CONN / OTP/1.8V		
Size	Document Number	Rev
B	LA-1851	0.1
Date:	Thursday, October 16, 2003	Sheet 46 of 50

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.

POWER PIR LIST

PHASE			
DB2	page	Reason for change	Modify list
	40	Modify 3V / 5V Vout and OCP	Change PR66 from 6.49K_0603_1% to 1.54K_0603_1% Change PR156 from 11.8K_0402_1% to 698_0402_1% Change PR154 from 4.12K_0603_1% to 0_0603_5% Change PC54, PC53 from 0.1U_0805_25V7K to 0.47U_0805_25V4Z Change PR62 from 5.76K_0603_1% to 1.27K_0603_1% Change PR155 from 27K_0603_1% to 1.24K_0603_1% Change PR153 from 4.7K_0402_1% to 619_0402_1%
	44,45	For CPU_CORE thermal issue	Change PQ21, PQ26, PQ31, PQ46 From IRLR7821 to SI7392DP Delete PD23, PD43, SC11N4148T8
	42	For 1.6V voltage accuracy	Change PR173 from 113K_0402_1% to 107K_0402_1%
	42	For layout pad issue	Change PC85, PC86 from 22U_1210_10V4Z to 22U_1206_10V4Z
	41	For power sequence setting	Add PR197, 680K_0603_1% Add PR198, 316K_0603_1%
	38	For solving cable dock shutdown issue	Add PD45, SKS80-04CT
SI	38	For thermal issue	Change PD45 from SKS80-04CT to SBM1040
	38	Change VIN detector sensing point because of DOCK issue	Change PR2 from 174k_0603_1% to 150k_0603_0.1% Change PR7 from 75k_0402_1% to 66.5k_0402_1%
	39	Improvement noise issue	
	41	Modify 2.5V / 1.5V OCP	Change PR87 from 24.9k_0402_1% to 57.6k_0402_1% Change PR88 from 0_0603_1% to 13.7k_0402_1% Add PR89, 100k_0402_1%
	43	VGA with 32M VRAM	Remove 1.35V regulator that is for VGA with 64M VRAM
	44,45	Modify CPU_CORE current balance issue	Change the connection of PC122 and PC168 from 14 pin of PU9 to ground. Remove PD22 and PD44.
PV	38	Improve the VIN detector accuracy.	Change PR1, PR2, PR5, PR7, PC6, and re-connect the reference voltage that is VL connected to PR10 to RTC charger output.
	39	Improve the accuracy of Constant Voltage mode of charger.	Change PR48, PR49
	41	reserve devices for the adjustment of 2.5V	Add PR204, PR205, PR206, PC181, PC182
	44	Improve the transient response	Add PR203, PC111, and remove PR202

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.

COMPAL ELECTRONICS, INC		
Title		
PIR		
Size	Document Number	Rev
	LA-1851	0.5
Date:	Thursday, October 16, 2003	Sheet 47 of 47

Version change list (P.I.R. List)

Item	Fixed Issue	Reason for change	PAGE	Modify List	M.B. Ver.
1		Fixed USB 1.1 rising/falling time error	P12	Delete C785, C786, C787, C788, C789, & C790	0.3
2		Fixed TV-out no display	P14	Swap TV_CRMA and TV_COMPS	0.3
3		Prevent PCI1620 latched up	P22	Reserve G_RST# to pin U37.C11	0.3
4		Design change (solve for HR60 audio issue)	P26	Move two load resistors from sub-board to M/B and swap JP17.2 and JP17.3	0.3
5		Supported wake up from TP	P27	Change TP connector JP26's power pin from +5VS to +5V	0.3
6		EMI required (solve for 48 MHz noise from FDD connector)	P32	Add CP11, CP12, CP13, and C801	0.3
7		Design change (TFDU6102 design guide)	P33	Delete C560 and C562 & add R586 Change C561 from 10uf to 4.7uf	0.3
8		EMI required (solve for 48 MHz noise from serial port)	P34	Add CP14, and CP15	0.3
9		ID required (for Pavillion)	P35	Add D58	0.3
10		EMI required	P25	Add L38, and L39	0.3
11		Add bypass cap. to solve for AC97 link cross a split plane	P27	Add C802, C803, C804, C805, and C806	0.3
12		Design change (reserve space for power placement and no need too many caps.)	P07	Delete C75, and C88	0.3
13		RealTech 8101L design guide	P20	Change R194 to 5.6K +/- 1%	0.3
14		Solve for SPDIF no output	P34	Delete C634	0.3
15		CPU_CLK is current drive from CK8. So, delete damping resistors.	P11	Change R69, and R70 from 15 ohm to 0 ohm	0.3
16		Solve for burst frequency error	P14	Change C642, and C643 from 18 pF to 22 pF	0.3
17		Solve for chrominance and burst level	P18	Change L11, L12, and L13 to 1.8uH	0.3

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.

Compal Electronics, Inc.

P.I.R HISTORY

Document Number	Rev
LA-1851	0.5
Date: Thursday, October 16, 2003	Sheet 48 of 50

Version change list (P.I.R. List)

Item	Fixed Issue	Reason for change	PAGE	Modify List	M.B. Ver.
1		AMD change Tdiode spec up to 127 degree	P4	Change U3 from MAX6649 to ADM1032	0.4
2		Support wake from Lan	P20	Populate R188	0.4
3		To avoid PCI1620 unknow action	P22	Reserve R591	0.4
4		To restrain audio noise	P25	Change R267 pull up to +5VAMP_CODEEC, and delete C626	0.4
5		USB_OC# high should be between 2.5V to 5.5V	P27	Change R310 and R315 to 10K / R314 and R319 to 20K	0.4
6		To detect FIR	P29	Add R592 and R593	0.4
7		TP should be pull up to +5V	P30	RP80 pull up to +5V	0.4
8		In order to compatible with NS97551 -- changing pin87 - 90 to GPIO	P30	BID routed from pin88 to pin82	0.4
9		In order to compatible with NS97551 -- removing +RTCVCC	P30	Add R594 and R595	0.4
10		To prevent noise generated from FAN to +5VS cause audio noise while shut down	P4	Delete D1 and D3 / add C3, C8, C612, and C614	0.4
11		Solve for PCI1620 working abnormal -- fine tune G_RST# timing	P22	Populate R587, delete R225, C410	0.4
12		Double mount issue, already exist at audio board.	P30	Delete D28 and D29	0.4
13		Fast power on for battery only	P33	Change R392 from 100K to 4.7K	0.4
14		Presario LED color should be amber	P35	Change D39, D40, D42, D44, and D45 from XX_GRN to XX_ORG	0.4
15		To develop S19182 max effect	P25	Change C438 from 0.01UF to 0.1UF	0.4
16		For EMI	P26	Add L40, L41, L42, and L43 / delete C473, C474, C475, and C476	0.4
17		For VGA HSYNC/VSYSN average peak to peak issue	P18	Add R159 and R160	0.4
18		For 512MB non-JEDEC module (16 chips)	P9	Change RP42, RP46, and R481 from 68 Ohm to 47 Ohm	0.4

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.

Compal Electronics, Inc.	
P.I.R HISTORY	
Document Number	Rev
LA-1851	0.5
Date	Sheet
Thursday, October 16, 2003	49 of 50

Version change list (P.I.R. List)

Item	Fixed Issue	Reason for change	PAGE	Modify List	M.B. Ver.
1		To use the same source as HR60	P4	Change U3 footprint to SOP8	0.5
2		To reset CK8 while boot up control by EC	P12	Add R97 to link EC_RSMRST# and PWRGD_SB	0.5
3		For EMI	P15	Change C648, C672, C685, C696, C699, C763, and C656 to 1000P Change C651, C673, C686, C697, C700, C764, C654, C733, C710, C730, C706, and C724 to 10P	0.5
4		To solve voltage level of HSYNC and VSYNC is over spec	P18	Add U46 and U47, and R596, R597, and R598 on CRT_HSYNC and CRT_VSYNC	0.5
5		Solve for data lost while transfer data from LAN	P20	Change U9 from NS0013 to NS0019	0.5
6		TI recommendation --- avoid unknow state while initiate	P22	Populate R591	0.5
7		Mechanical restricted area	P25	R263 and R264 change footprint to R_0402	0.5
8		For EMI	P25	L39 and R293 change to CHB1608U301_0402	0.5
9		For EMI	P26	L40, L41, L42, and L43 change to KC FBM-L11-201209-221LMAT_0805	0.5
10		nVIDIA recommendation for WOR	P27	Add U48, C807, R599, and R600	0.5
11		Due to MD_SPK is no longer use, so prevent input pin floating.	P25	Delete R287 and change R288 to 0_0402_5%. Also add C808.	0.5

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.

Compal Electronics, Inc.	
P.I.R HISTORY	
Document Number	Rev
LA-1851	0.5
Date	Sheet
Thursday, October 16, 2003	50 of 50

Вы скачали этот файл с сайта «Сайт радиолюбителей»



Другие разделы сайта

Раздел БИБЛИОТЕКА

Книги для и журналы радиолюбителям

<http://radio-uchebnik.ru/library/>

Раздел РАДИОСХЕМЫ

Различные схемы как для начинающих так и для профессионалов:

Схемы бытовой техники, телевизоров, мониторов, автомагнитол, музыкальных центров, и для самостоятельной сборки

<http://radio-uchebnik.ru/shem/>

Раздел ФАЙЛОВОЕ ХРАНИЛИЩЕ

Различные файлы: Даташиты, схемы, прошивки и так далее

<http://radio-uchebnik.ru/downfiles/>

Раздел РАДИОКОМПАС

Если Вы занимаетесь ремонтом электроники на профессиональном уровне- то Вы можете сообщить о себе.

<http://radio-uchebnik.ru/radiomap/>

Раздел ДОСКА ОБЪЯВЛЕНИЙ

Здесь Вы можете разместить бесплатное объявление сроком до 120 дней (только радиотематика!!)

<http://radio-uchebnik.ru/ads/>

Раздел СПРАВОЧНИК ПО МИКРОСХЕМАМ

Справочные данные на микросхемы импортного и отечественного производства

<http://radio-uchebnik.ru/microbase/>

Раздел СТАТЬИ

Различные статьи радиолюбительской (и не только) тематики: секреты телемастера, практическая электроника, альтернативная энергия, расчеты по электронике, электронные устройства и так далее

<http://radio-uchebnik.ru/txt/>

ФОРУМ НАШЕГО САЙТА

<http://radio-uchebnik.ru/forum/>