

Compal confidential

Schematics Document

Mobile P4 uFCBGA/uFCPGA with INTEL MONTARA-GML/ICH4-M core logic

2002-02-10

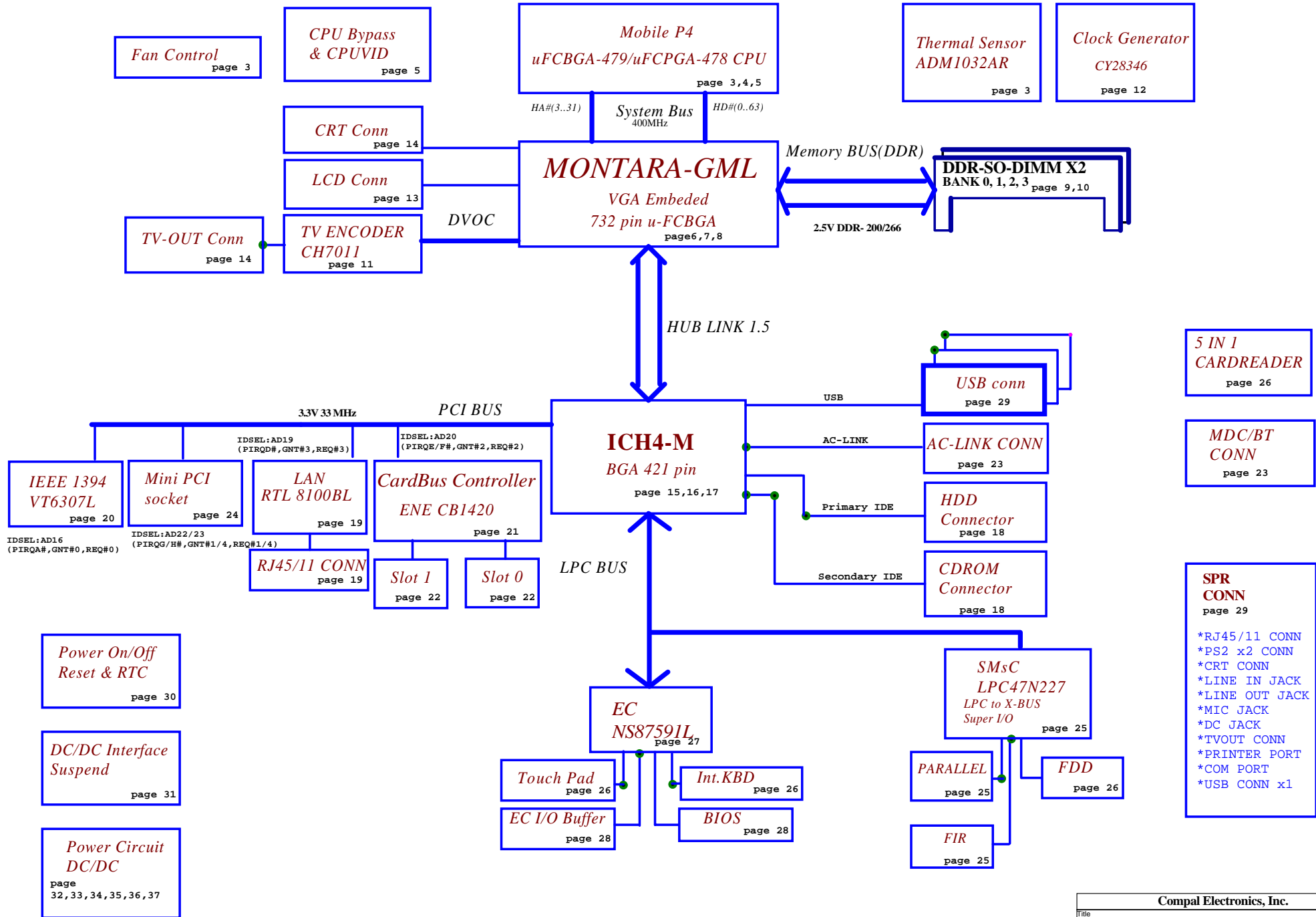
REV:1.0

Compal Electronics, Inc.

Title		
SCHEMATIC M/B LA-1571		
Size	Document Number	Rev
	401238	3B
Date:	星期一, 六月 21, 2004	Sheet 1 of 38

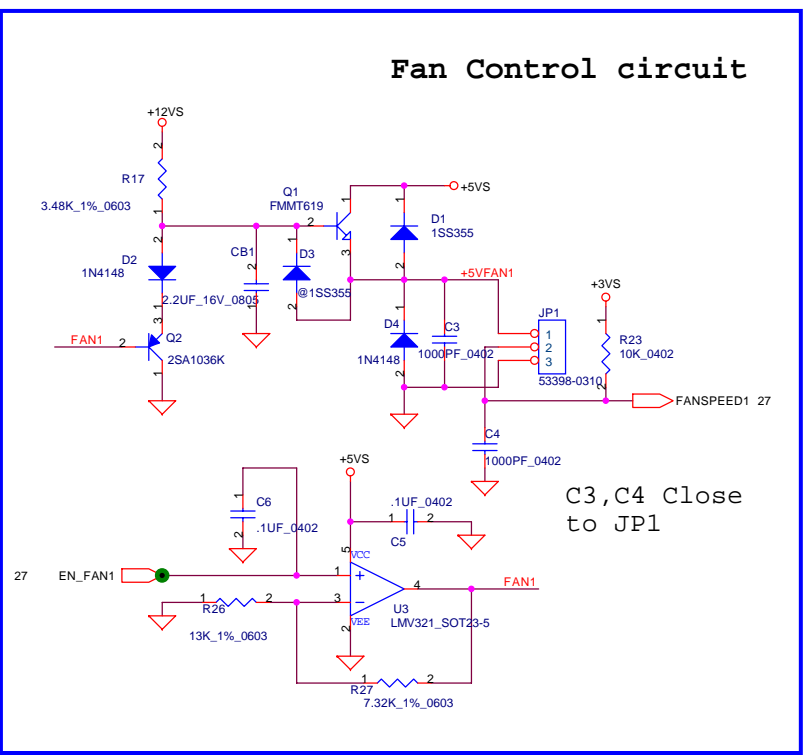
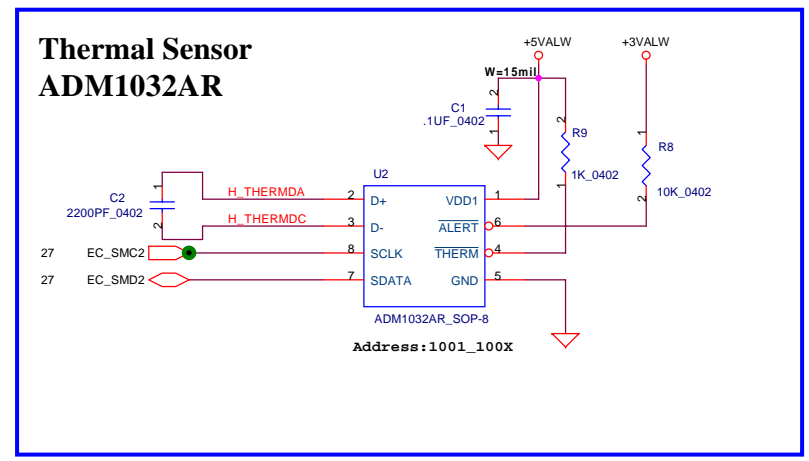
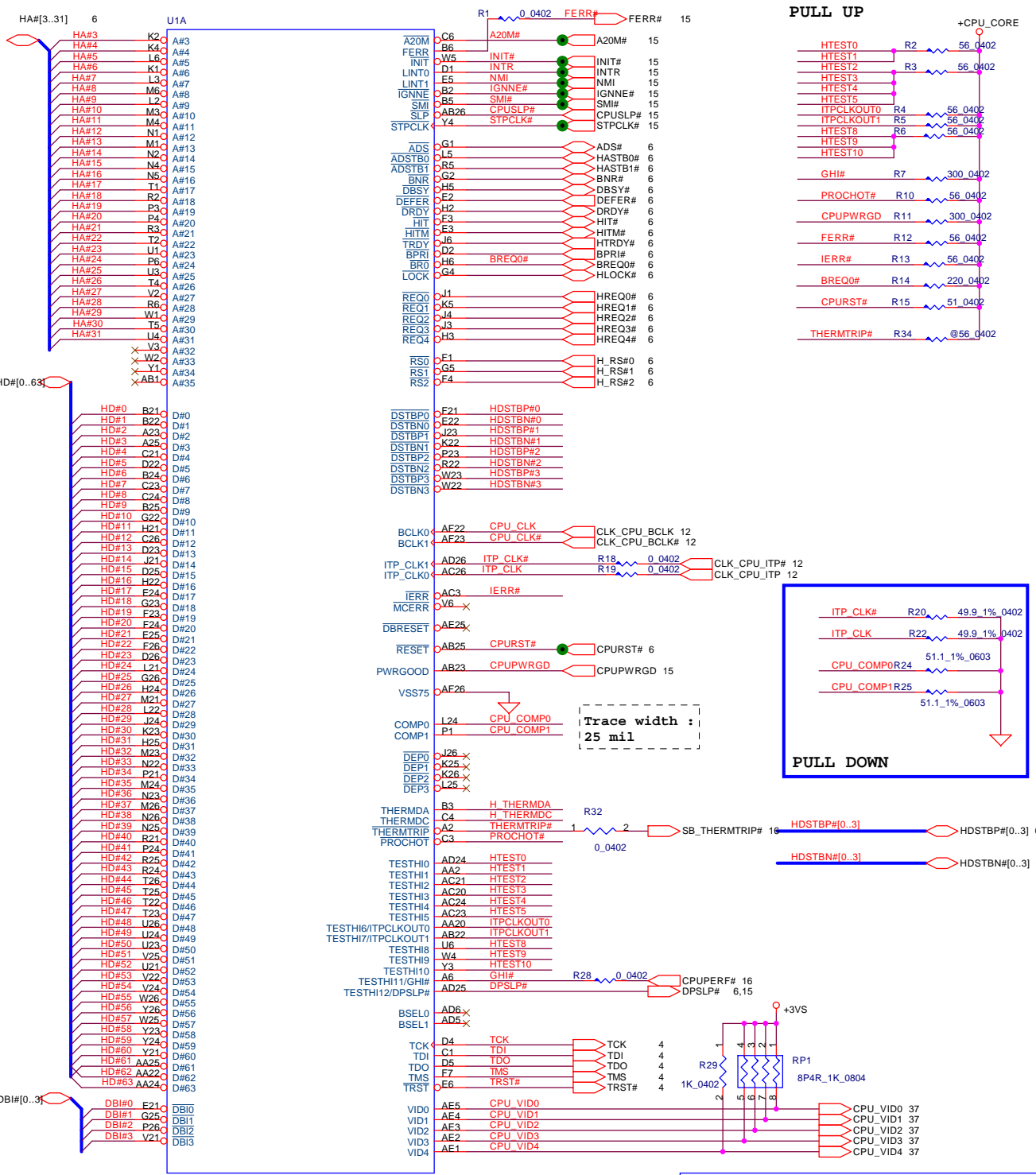
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE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

File Name : LA-1571



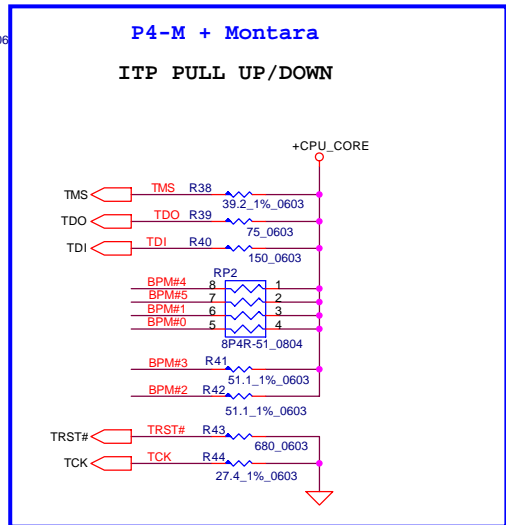
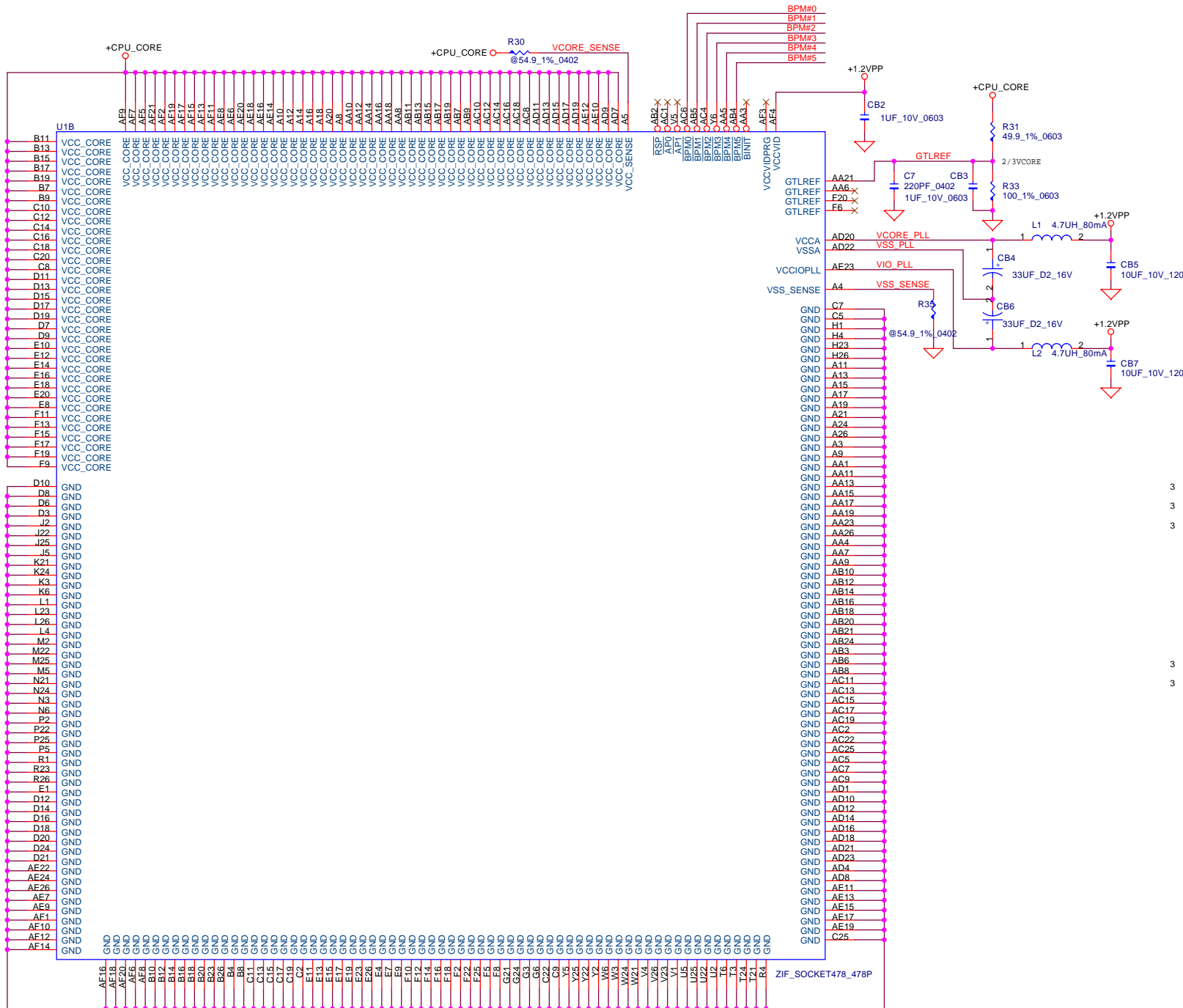
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE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

Compal Electronics, Inc.		
Title		
SCHEMATIC/M/B LA-1571		
Size	Document Number	Rev
	401238	1.0
Date:	星期一, 六月 21, 2004	Sheet 2 of 38



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

Compal Electronics, Inc.		
Title SCHEMATIC M/B LA-1571		
Size	Document Number 401238	Rev 3B
Date:	星期一, 六月 21, 2004	Sheet 3 of 38



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

Compal Electronics, Inc.		
Title SCHEMATIC/MB LA-1571		
Size	Document Number 401238	Rev 3B
Date:	星期一, 六月 21, 2004	Sheet 4 of 38

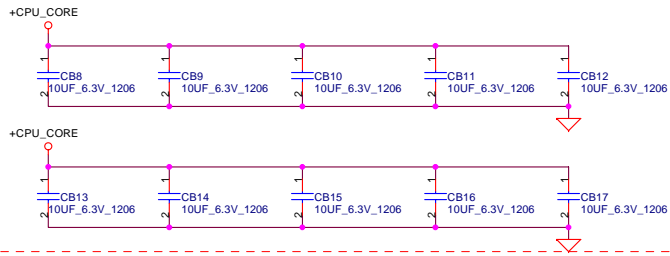
Layout note :

Place close to CPU, Use 2-3 vias per PAD.
 Place 22uF caps underneath balls on solder side.
 Place 10uF caps on the peripheral near balls.
 Use 2-3 vias per PAD.

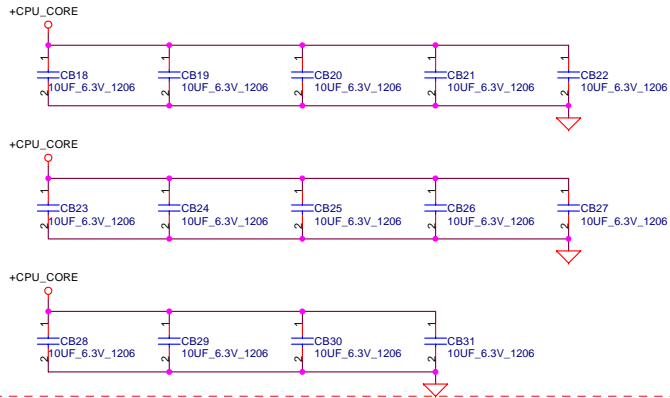
Layout note :

Place close to CPU power and ground pin as possible (<1inch)

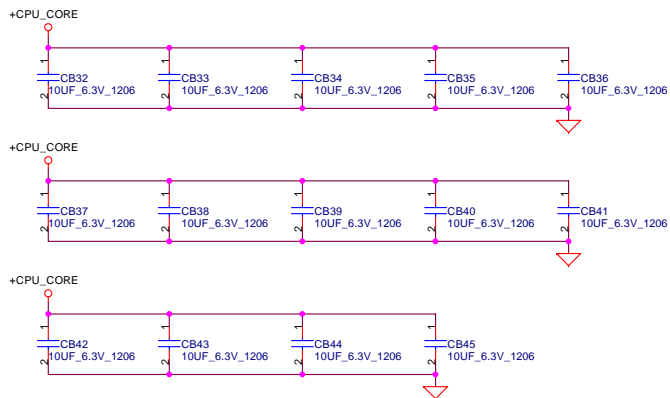
Please place these cap in the socket cavity area



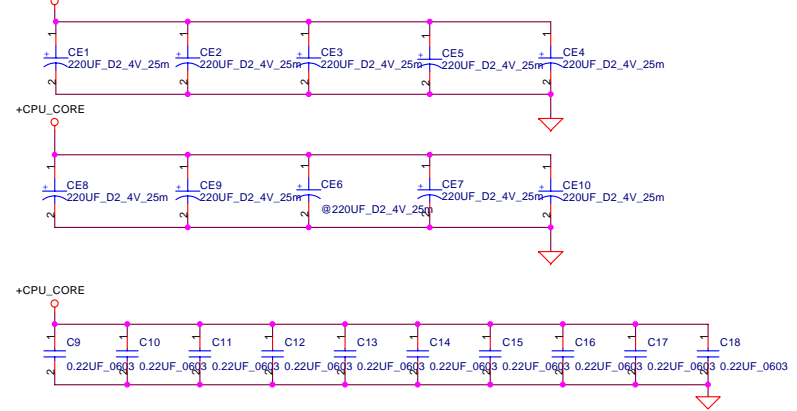
Please place these cap on the socket north side



Please place these cap on the socket south side

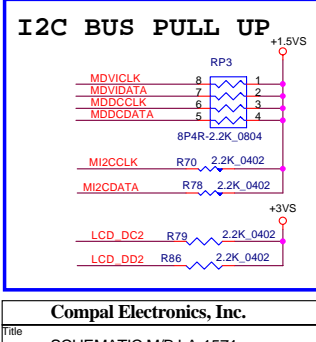
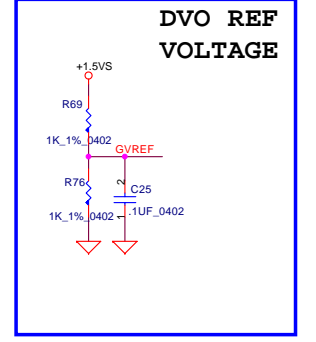
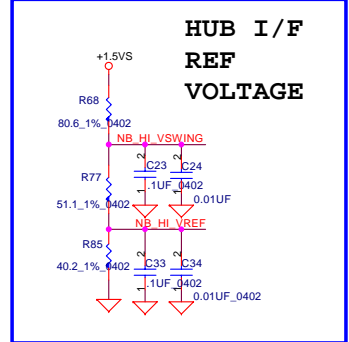
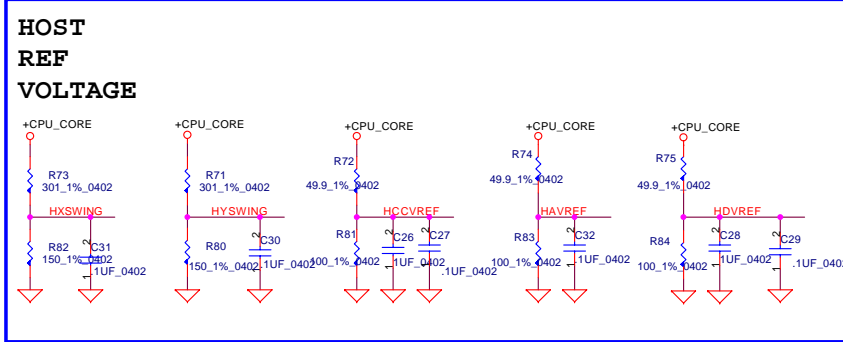
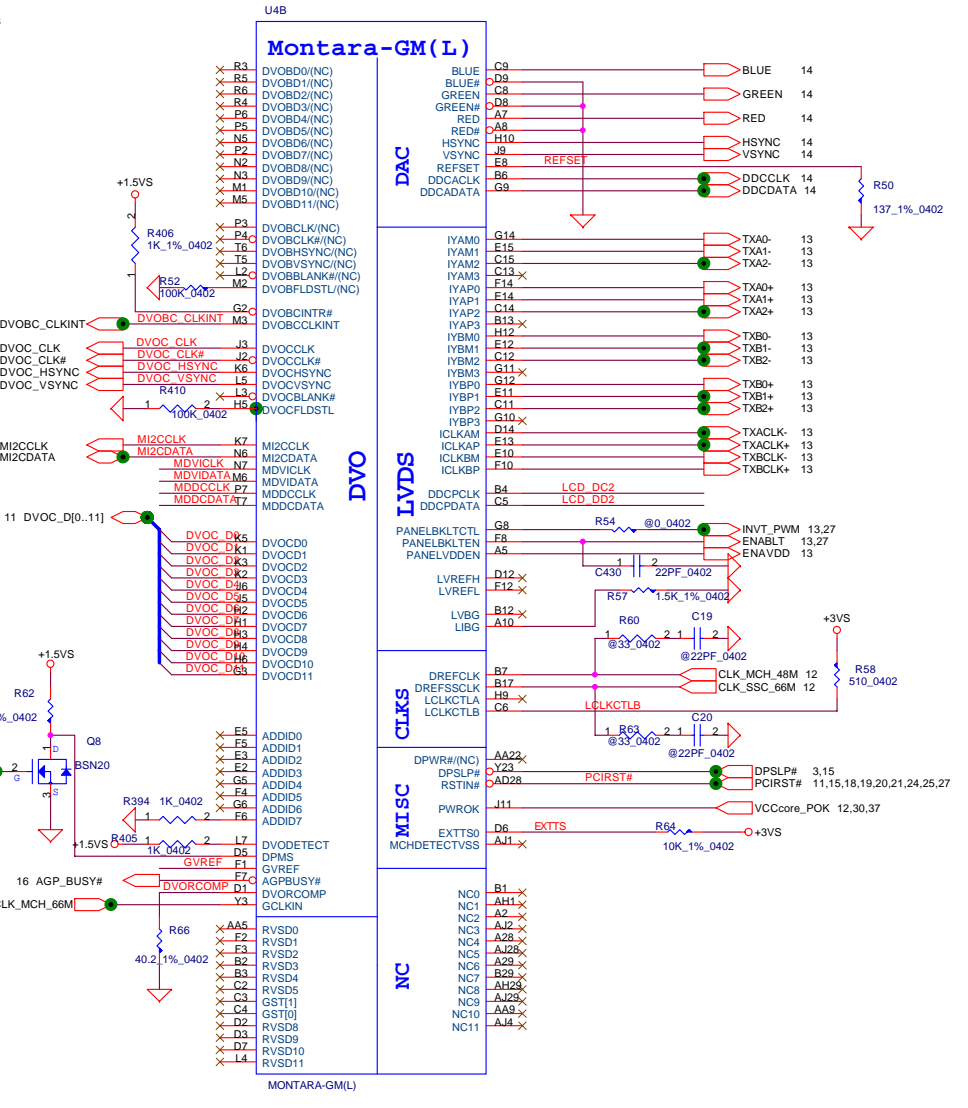
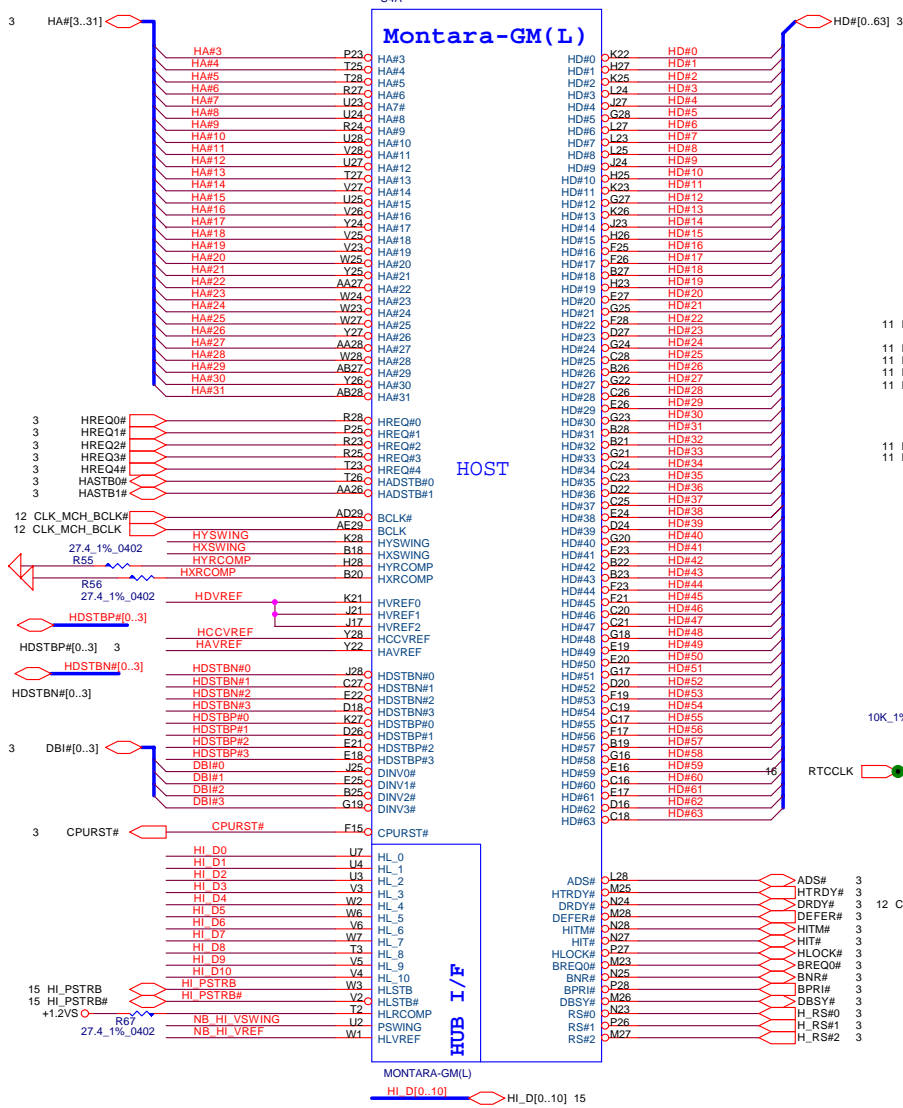


Used ESR 25m ohm cap total ESR=2.5m ohm



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

Compal Electronics, Inc.		
Title SCHEMATIC M/B LA-1571		
Size	Document Number 401238	Rev 3B
Date: 星期一, 六月 21, 2004	Sheet 5	of 38



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

Montara-GM(L)

DDR_SMA0	AC18C	SMA0
DDR_SMA1	AD14C	SMA1
DDR_SMA2	AD13C	SMA2
DDR_SMA3	AD17C	SMA3
DDR_SMA4	AD11C	SMA4
DDR_SMA5	AC12C	SMA5
DDR_SMA6	AD8C	SMA6
DDR_SMA7	AD7C	SMA7
DDR_SMA8	AC6C	SMA8
DDR_SMA9	AC5C	SMA9
DDR_SMA10	AC19	SMA10
DDR_SMA11	AD5C	SMA11
DDR_SMA12	AB8C	SMA12

DDR_SDO59	AC2	SDQ59
DDR_SDO51	AH6	SDQ51
DDR_SDO52	AH8	SDQ52
DDR_SDO53	AI2	SDQ53
DDR_SDO54	AH17	SDQ54
DDR_SDO55	AE21	SDQ55
DDR_SDO56	AH24	SDQ56
DDR_SDO57	AH27	SDQ57
DDR_SDO58	AD15	SDQ58

DDR_SWE#	AD25	SWE#
DDR_SRAS#	AC21	SRAS#
DDR_SCAS#	AC24	SCAS#

9	DDR_CLK0	AB2	SCK0
9	DDR_CLK0#	AA2	SCK0#
9	DDR_CLK1	AC2C	SCK1
9	DDR_CLK1#	AB25	SCK1#
		AC3	SCK2
		AC2	SCK2#
9	DDR_CLK3	AD2	SCK3
9	DDR_CLK3#	AB23	SCK3#
9	DDR_CLK4	AB24	SCK4
9	DDR_CLK4#	AA3	SCK4#
		AB4C	SCK5#

9,10	DDR_CKE0	AC7	SCKE0
9,10	DDR_CKE1	AB7	SCKE1
9,10	DDR_CKE2	AC9	SCKE2
9,10	DDR_CKE3	AC10	SCKE3
9,10	DDR_SCS#0	AD23	SCS#0
9,10	DDR_SCS#1	AD28	SCS#1
9,10	DDR_SCS#2	AC22	SCS#2
9,10	DDR_SCS#3	AC25	SCS#3

DDR_SBS0	AD22	SBA0
DDR_SBS1	AD20	SBA1

DDR_SDM0	AE8	SDM0
DDR_SDM1	AE9	SDM1
DDR_SDM2	AE9	SDM2
DDR_SDM3	AH12	SDM3
DDR_SDM4	AD19	SDM4
DDR_SDM5	AD21	SDM5
DDR_SDM6	AD24	SDM6
DDR_SDM7	AH28	SDM7
	AH15	SDM8

DDR_SMA_B1	AD16	SMA_B1
DDR_SMA_B2	AC12	SMA_B2
DDR_SMA_B4	AF11	SMA_B4
DDR_SMA_B5	AD10	SMA_B5

AC15C	RCVENOUT#	SMVREF0
AC16C	RCVENIN#	
MRCOMP	AB1	SMRCOMP
MVSWINGL	AJ22	SMVSWINGL
MVSWINGH	AJ19C	SMVSWINGH

MONTARA-GM(L)

SMVREF0

AJ24

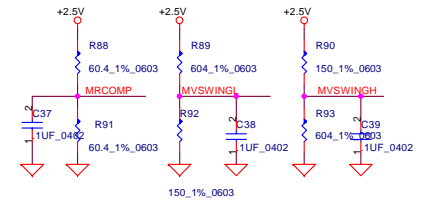
SDREF

C36

1UF_0402

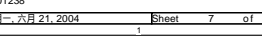
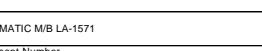
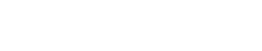
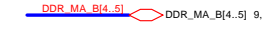
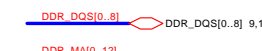
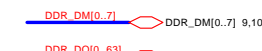
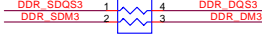
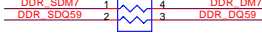
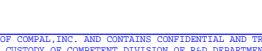
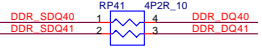
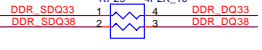
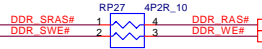
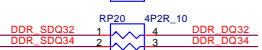
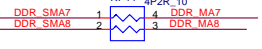
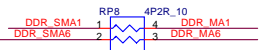
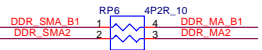
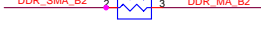
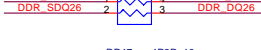
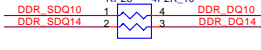
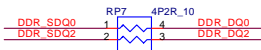
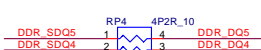
↓

DDR REF & SWING VOLTAGE



Layout note

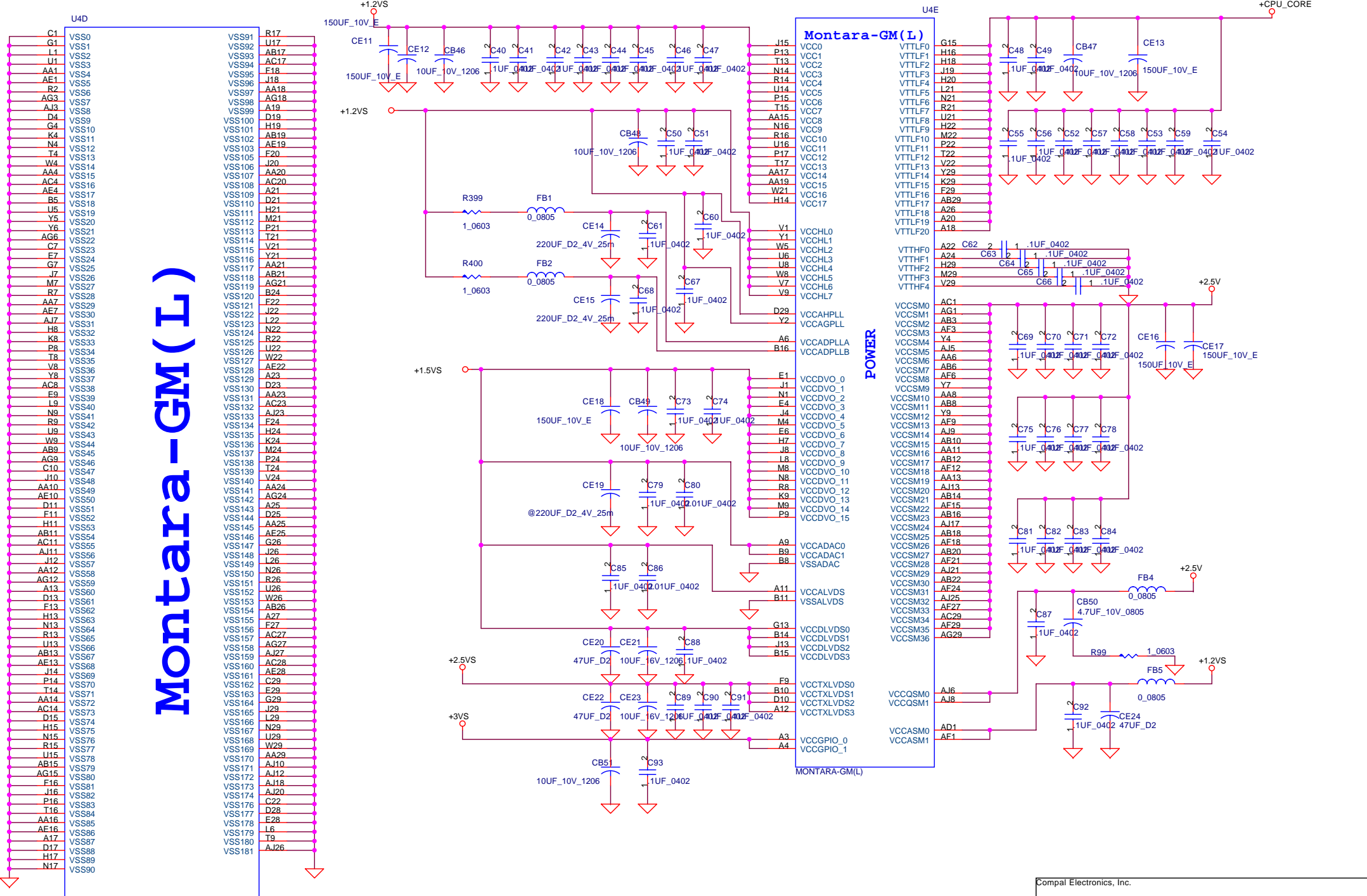
Place these resistor
closely DIMM0,
all trace length
Max=0.75"



Compal Electronics, Inc.			
Title			
SCHEMATIC M/B LA-1571			
Size	Document Number	Rev	
Custom	401238	38	
Date:	星期一, 六月 21, 2004	Sheet	7 of 38

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

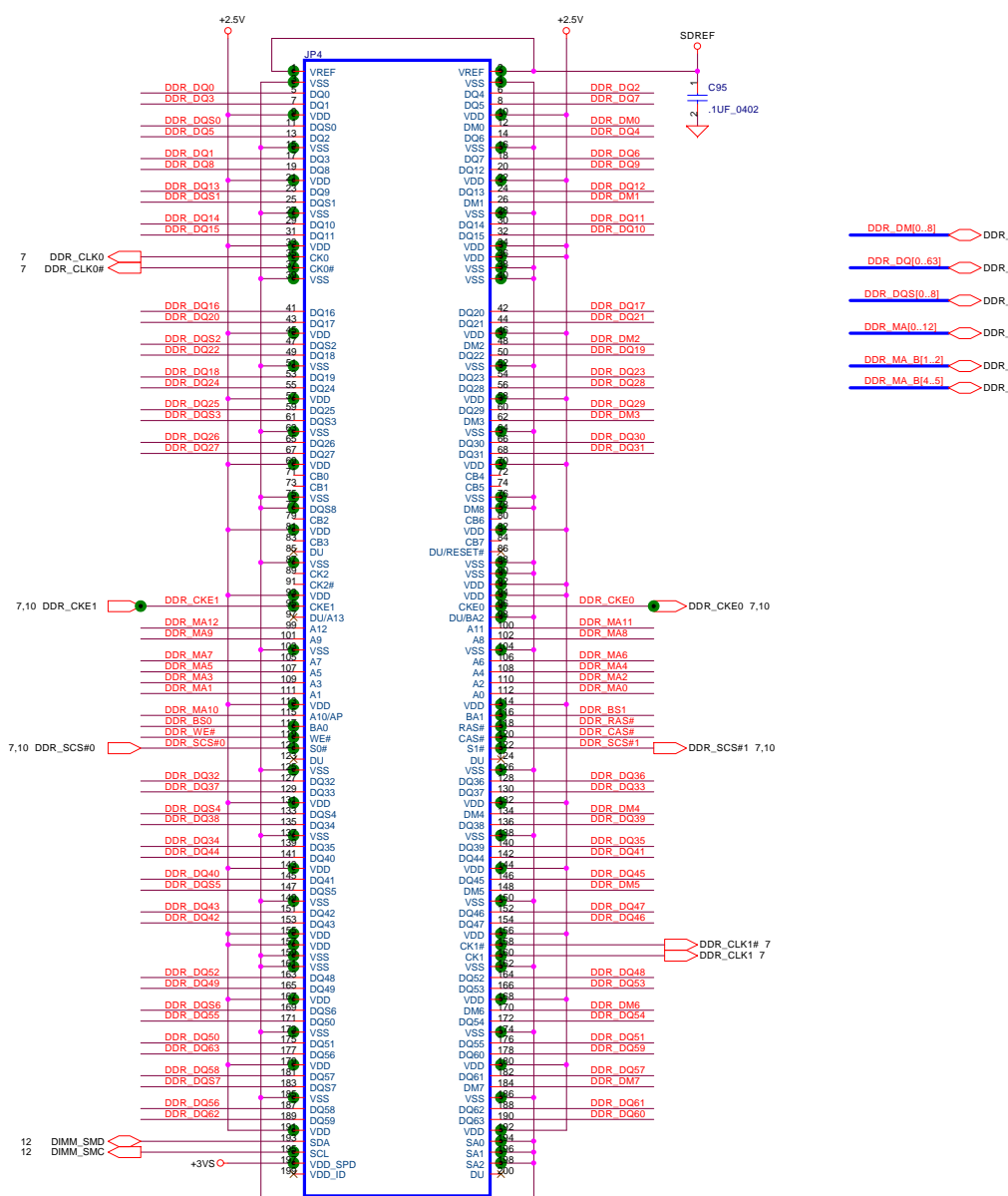
Montara-GM(L)



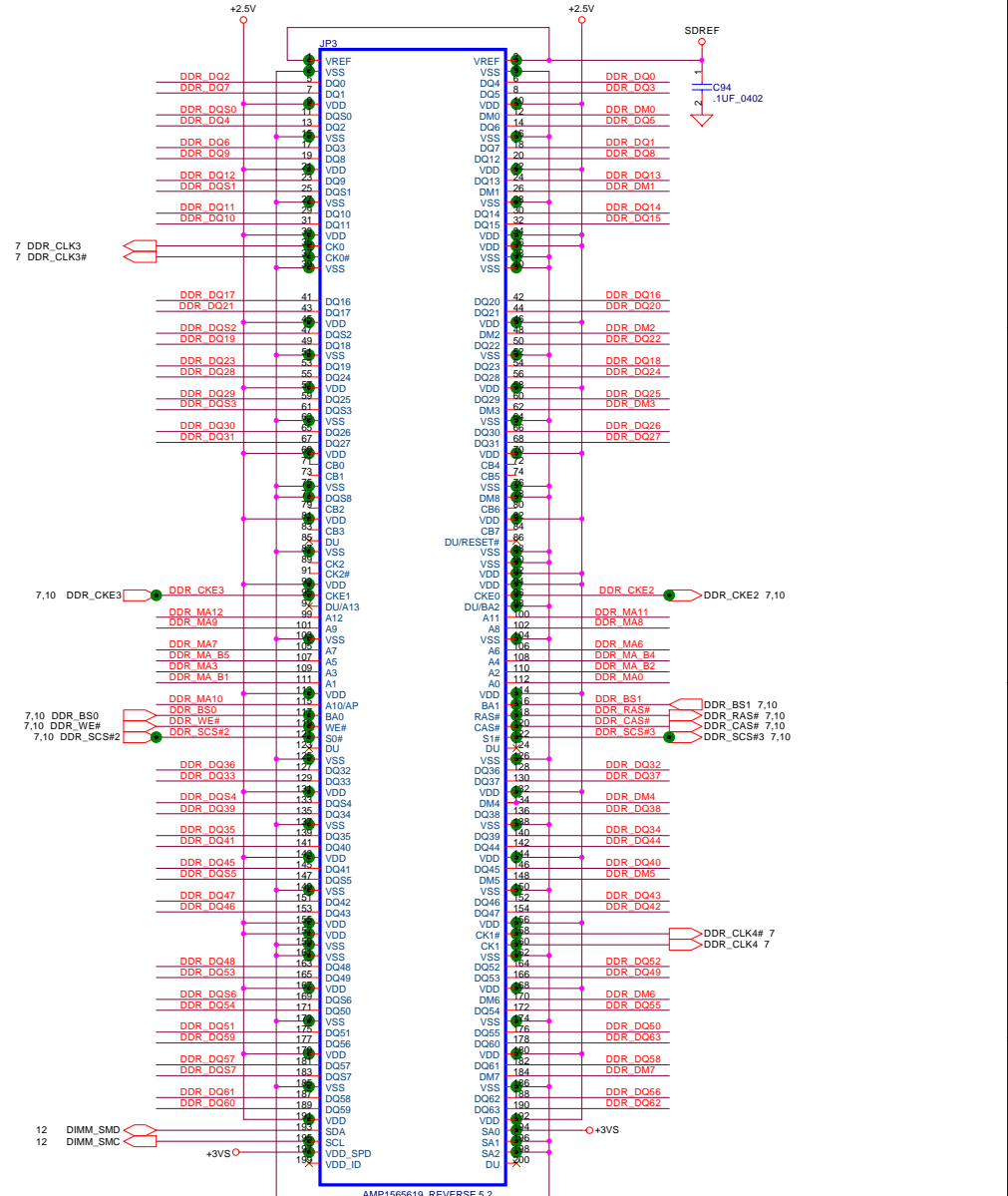
MONTARA-GM(L)

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

Compal Electronics, Inc.			
Title			
SCHEMATIC M/B LA-1571			
Size	Document Number	Rev	
Custom	401238	3B	
Date:	星期一, 六月 21, 2004	Sheet	8 of 38



DIMMO
TOP SIDE

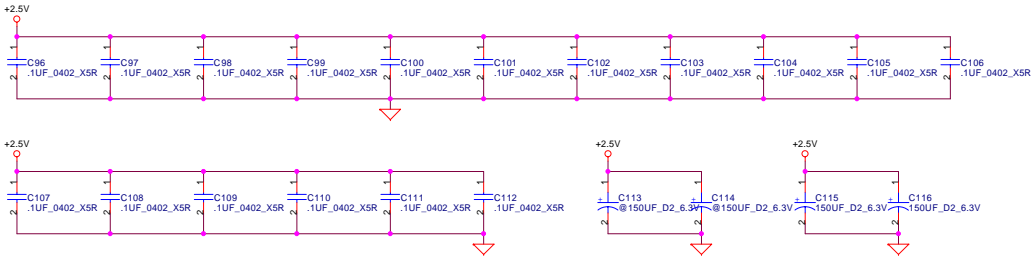


DIMM1
BOTTOM SIDE

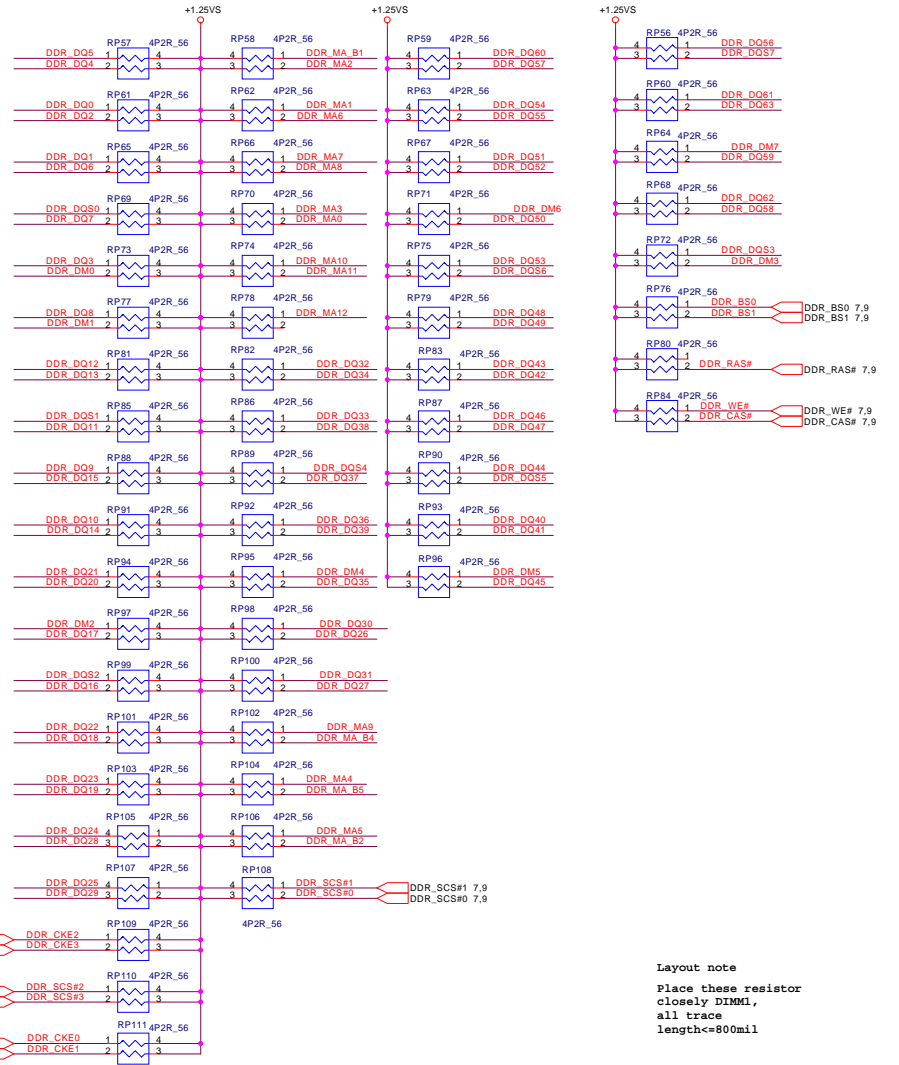
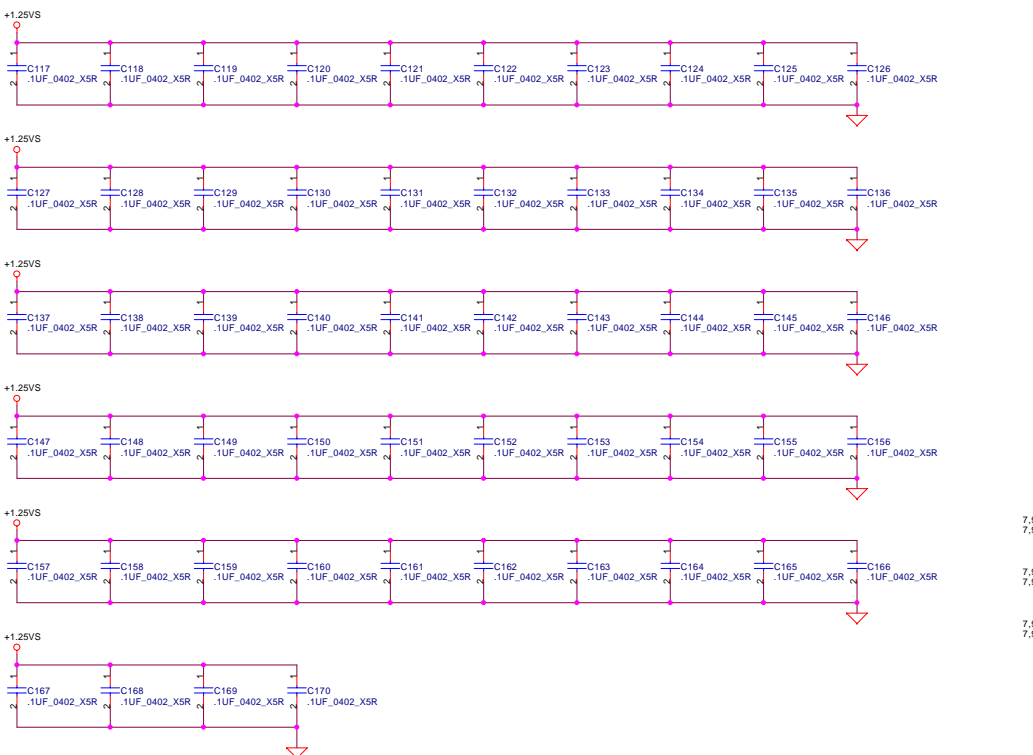
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF COMPETENT DIVISION OF HAD DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE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

Compal Electronics, Inc.		
File: SCHEMATIC M/B LA-1571		
Size	Document Number	Rev
Cust#01238		3B
Date:	2004年六月21日	Sheet 9 of 38

Layout note :
Distribute as close as possible to DDR-SODIMM.



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

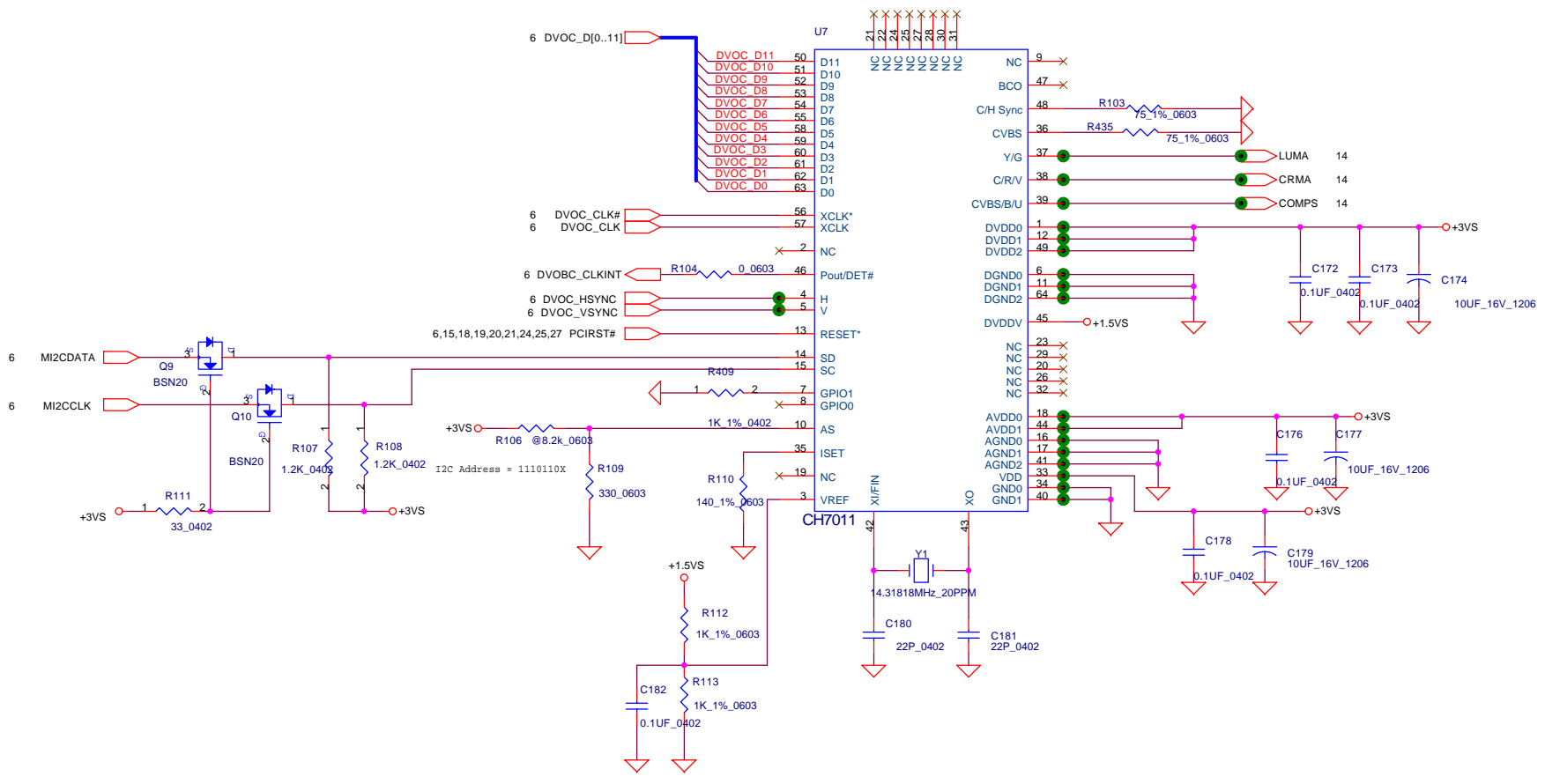


Layout note
Place these resistor closely DIMM1, all trace length<=800mil

- DDR_DM[0..8] \rightarrow DDR_DM[0..8] 7.9
- DDR_DQ[0..63] \rightarrow DDR_DQ[0..63] 7.9
- DDR_DQS[0..8] \rightarrow DDR_DQS[0..8] 7.9
- DDR_MA[0..12] \rightarrow DDR_MA[0..12] 7.9
- DDR_MA_B[1..2] \rightarrow DDR_MA_B[1..2] 7.9
- DDR_MA_B[4..5] \rightarrow DDR_MA_B[4..5] 7.9

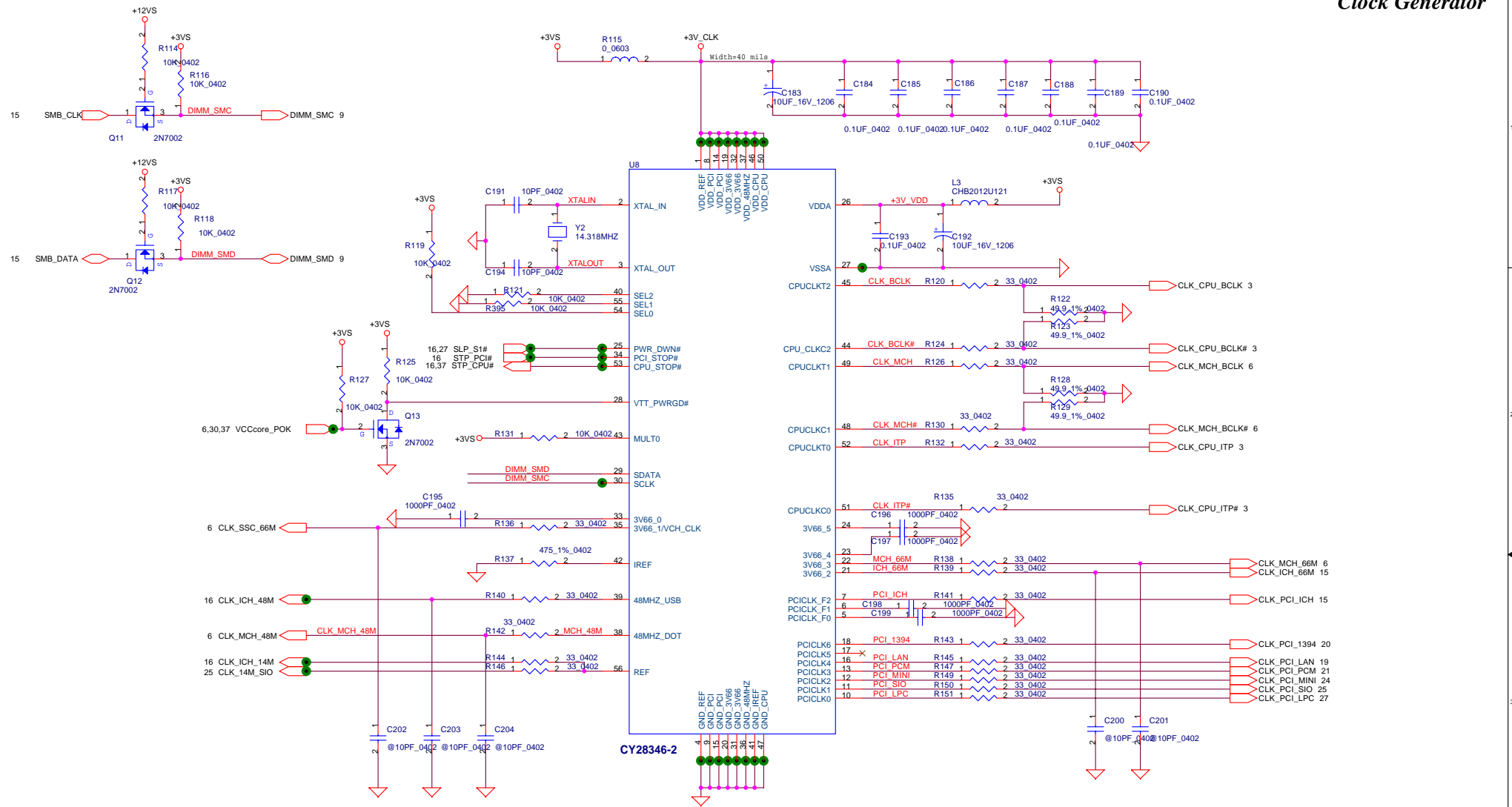
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE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

Compal Electronics, Inc.			
Title SCHEMATIC M/B LA-1571			
Size C	Document Number 401238	Rev 3B	
Date: 星期一, 六月 21, 2004	Sheet 10	of 38	



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

Compal Electronics, Inc.		
Title		
SCHEMATIC M/B LA-1571		
Size	Document Number	Rev
A3	401238	3B
Date:	星期一, 六月 21, 2004	Sheet 11 of 38



SSEL2	SSEL1	SSEL0	CPUCLK[0..2]	CPUCLK[0..2]
0	0	0	166.67	166.67
0	0	1	100.00	100.00
0	1	0	200.00	200.00
0	1	1	133.33	133.33

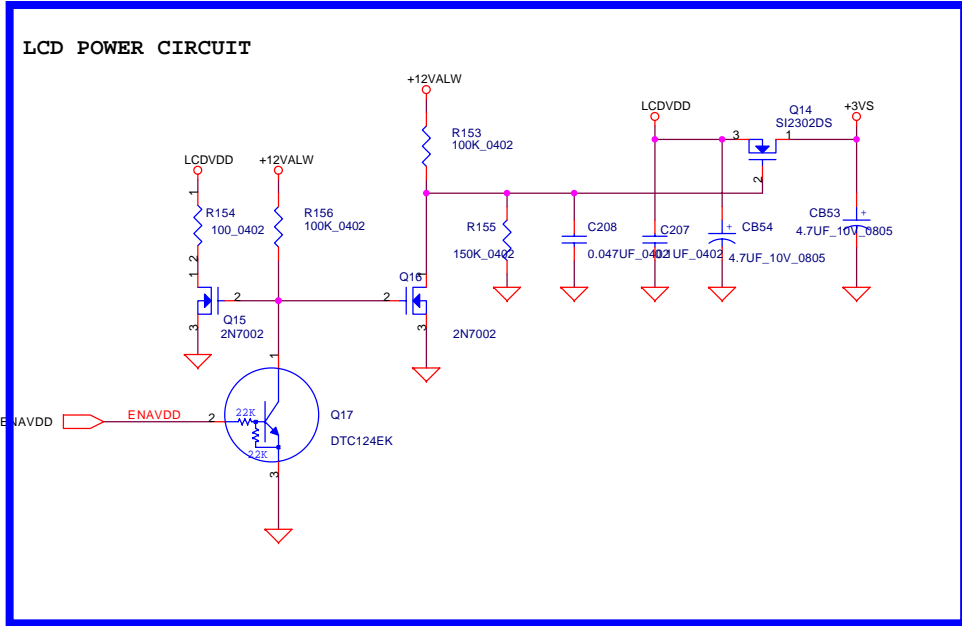
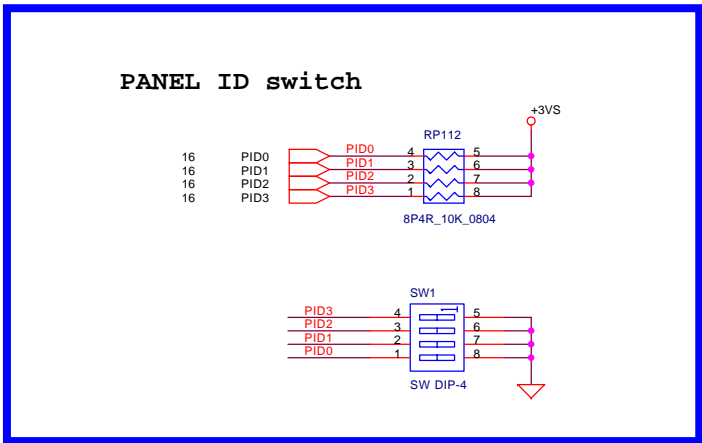
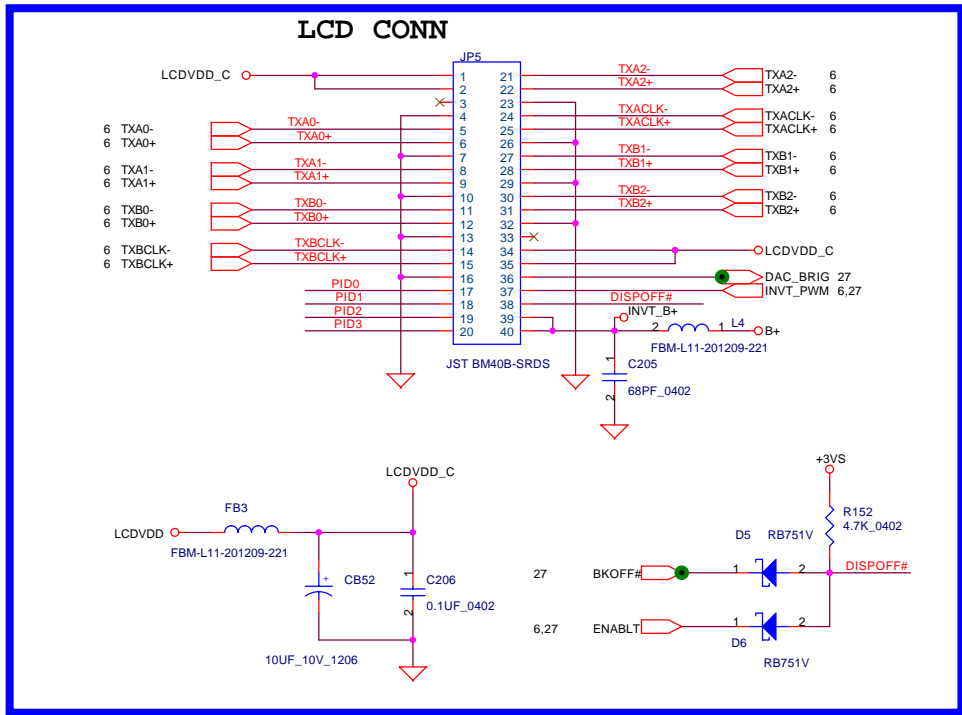
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS 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: SCHEMATIC M/B LA-1571

Size B Document Number 401238 Rev 3B

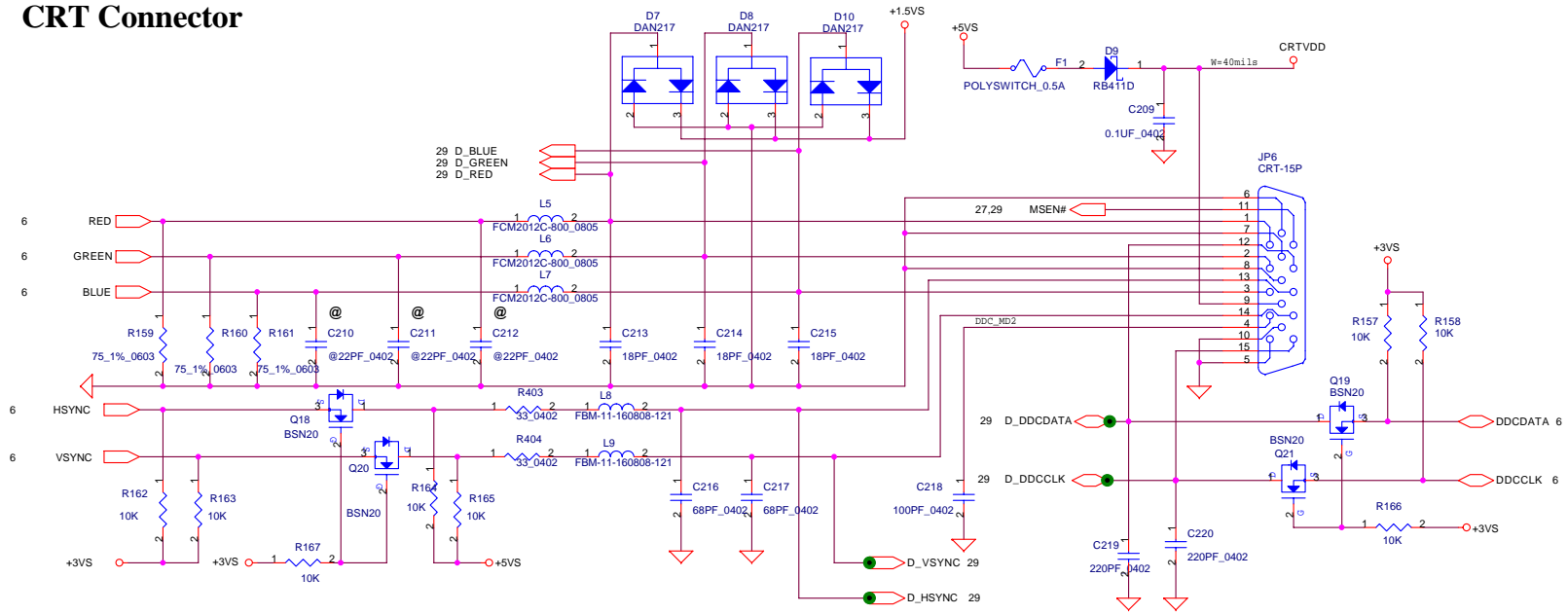
Date: 星期一, 六月 21, 2004 Sheet 12 of 38



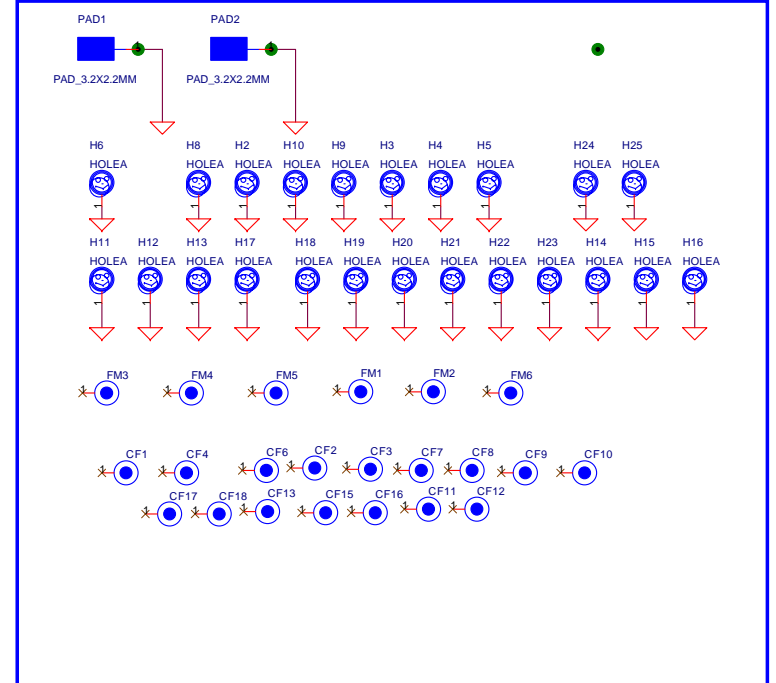
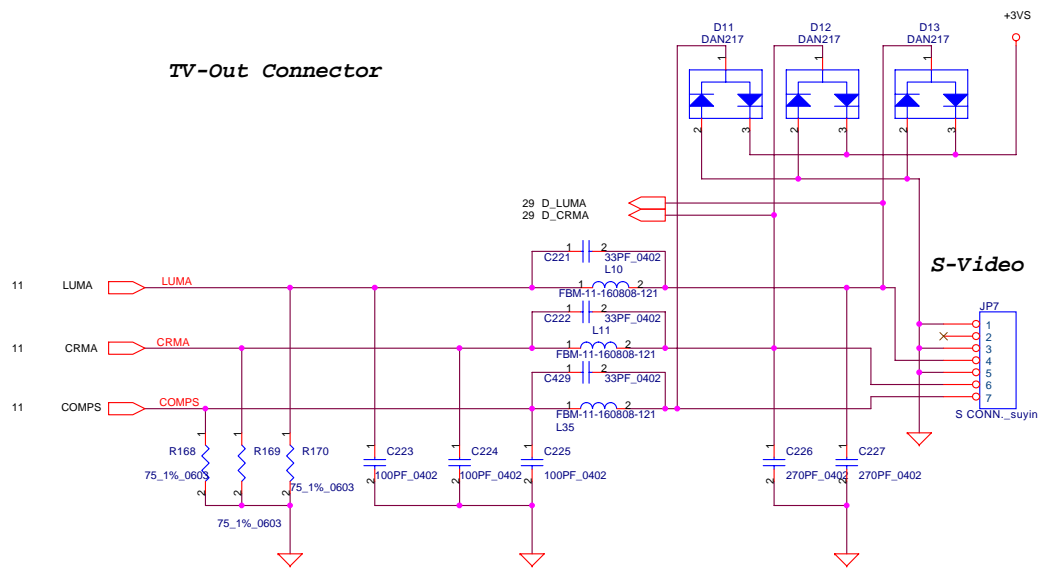
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE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

Compal Electronics, Inc.		
Title SCHEMATIC M/B LA-1571		
Size A3	Document Number 401238	Rev 3B
Date: 星期一, 六月 21, 2004	Sheet 13	of 38

CRT Connector

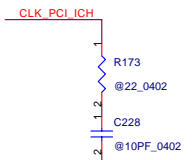


TV-Out Connector

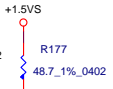
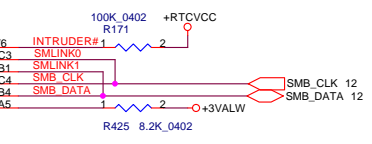
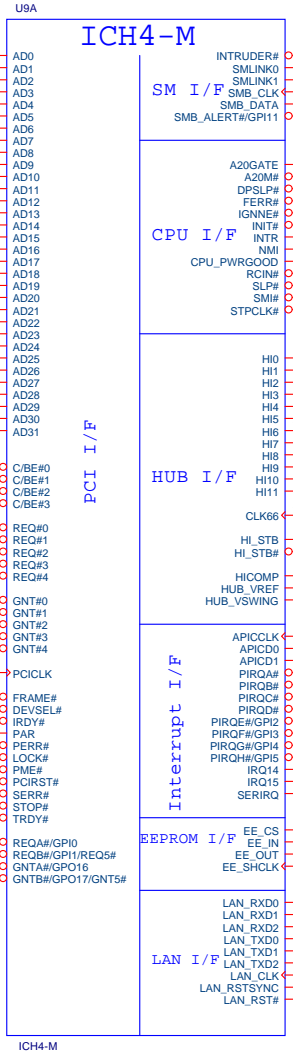
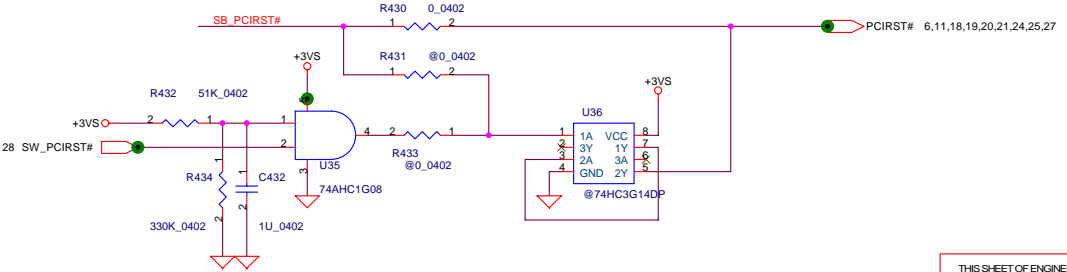
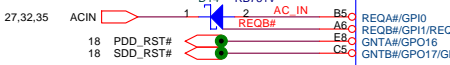
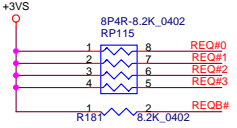
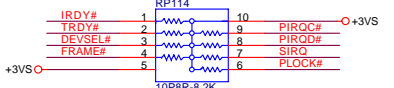
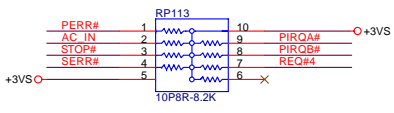


THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE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

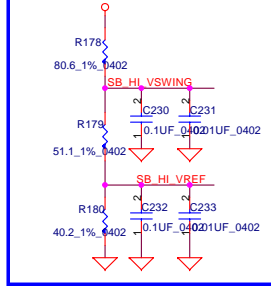
Compal Electronics, Inc.		
Title SCHEMATIC M/B LA-1571		
Size	Document Number 401238	Rev 3B
Date: 星期一, 六月 21, 2004	Sheet 14	of 38



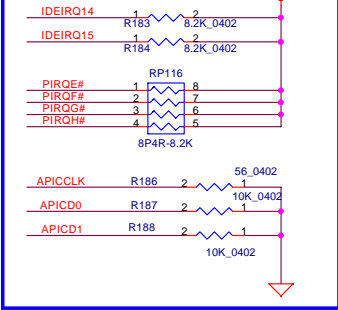
PCI Pullups



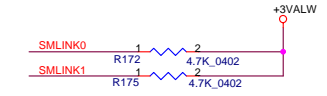
HL REF & SWING VOLTAGE



INT I/F

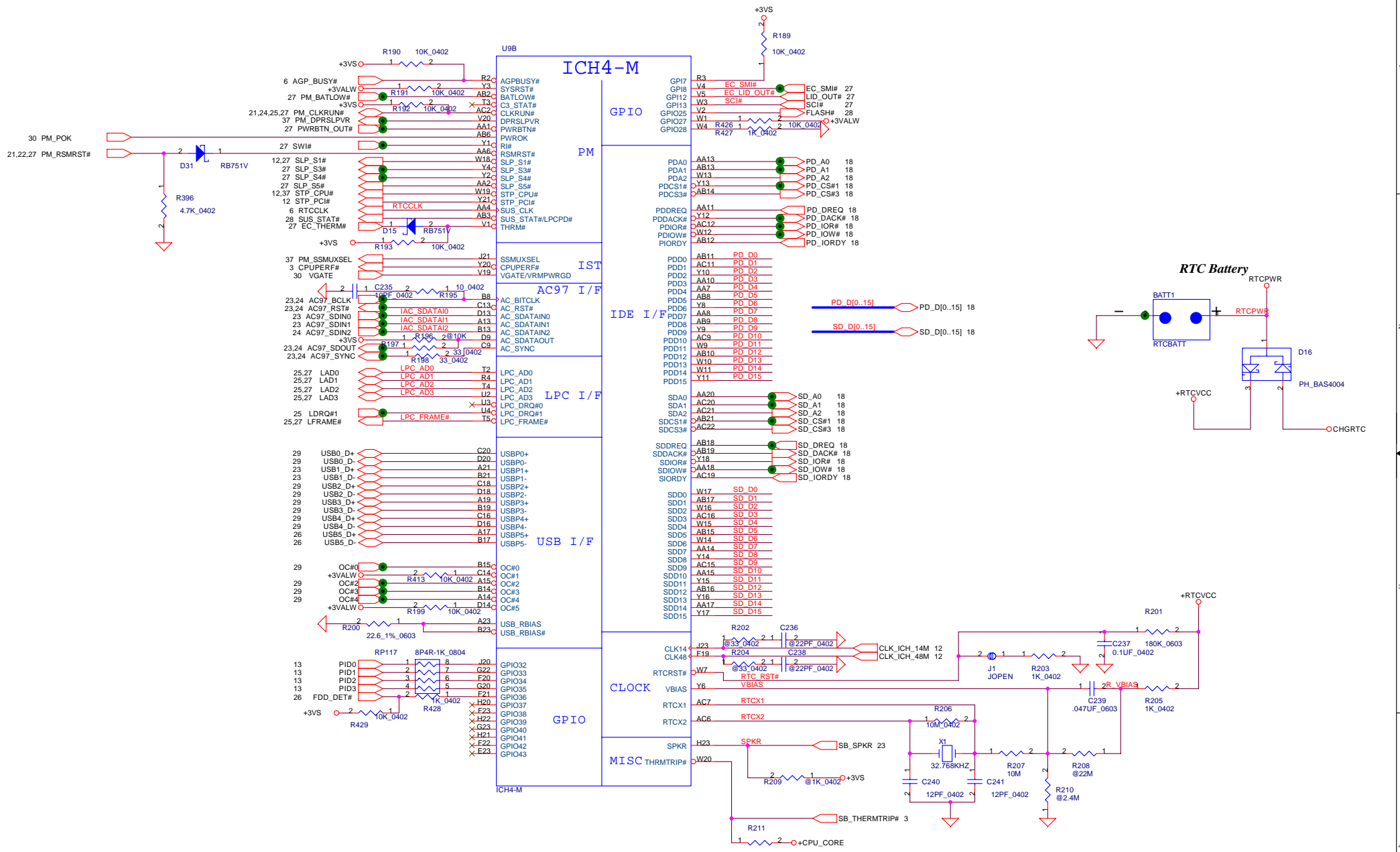


SM BUS



Compal Electronics, Inc.		
Title		
SCHEMATIC M/BLA-1571		
Size	Document Number	Rev
	401238	3B
Date:	星期一, 六月 21, 2004	Sheet 15 of 38

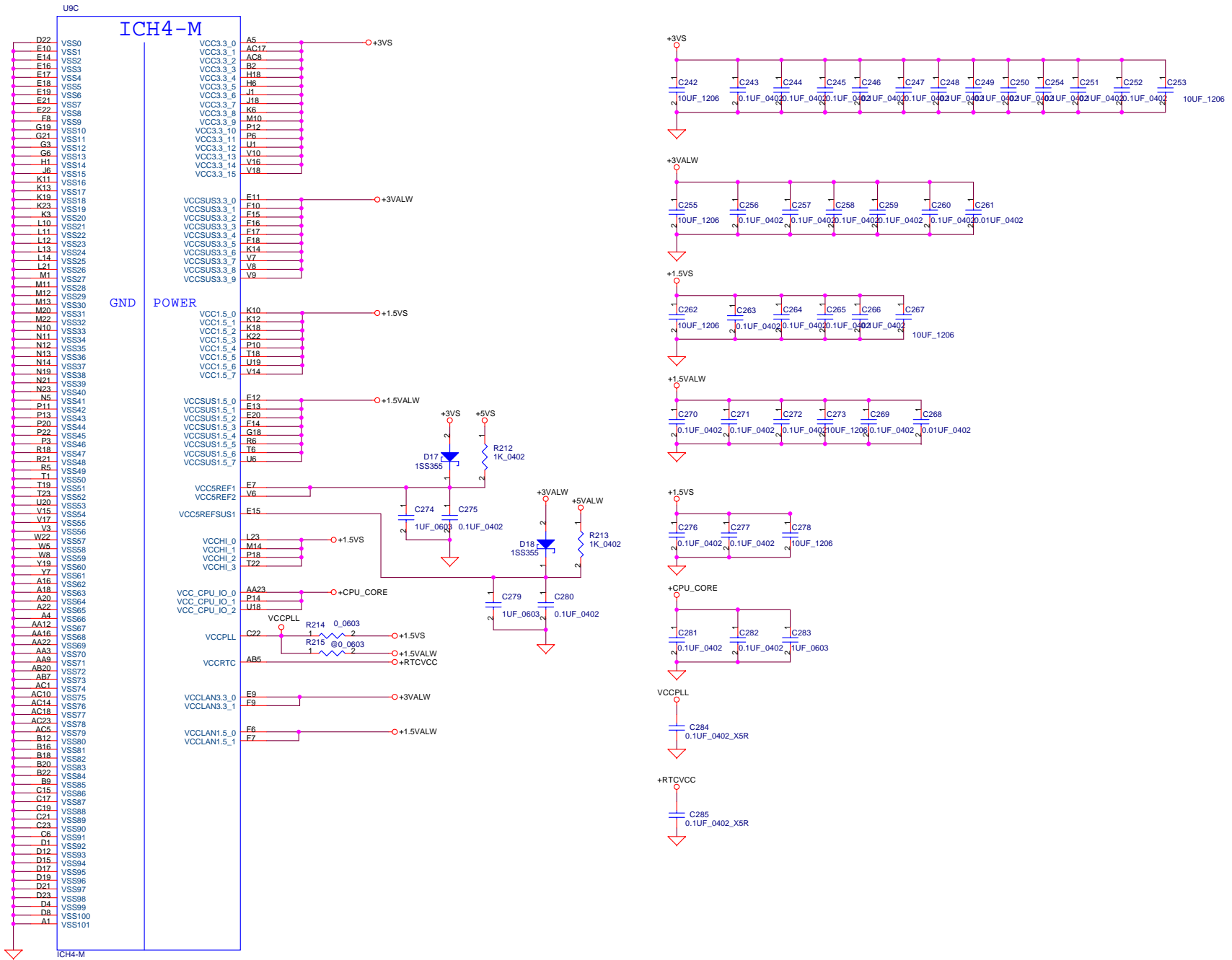
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS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



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 SCHEMATIC M/B LA-1571		
Size	Document Number 401238	Rev 3B
Date:	日期: 六月 21, 2004	Sheet 16 of 38

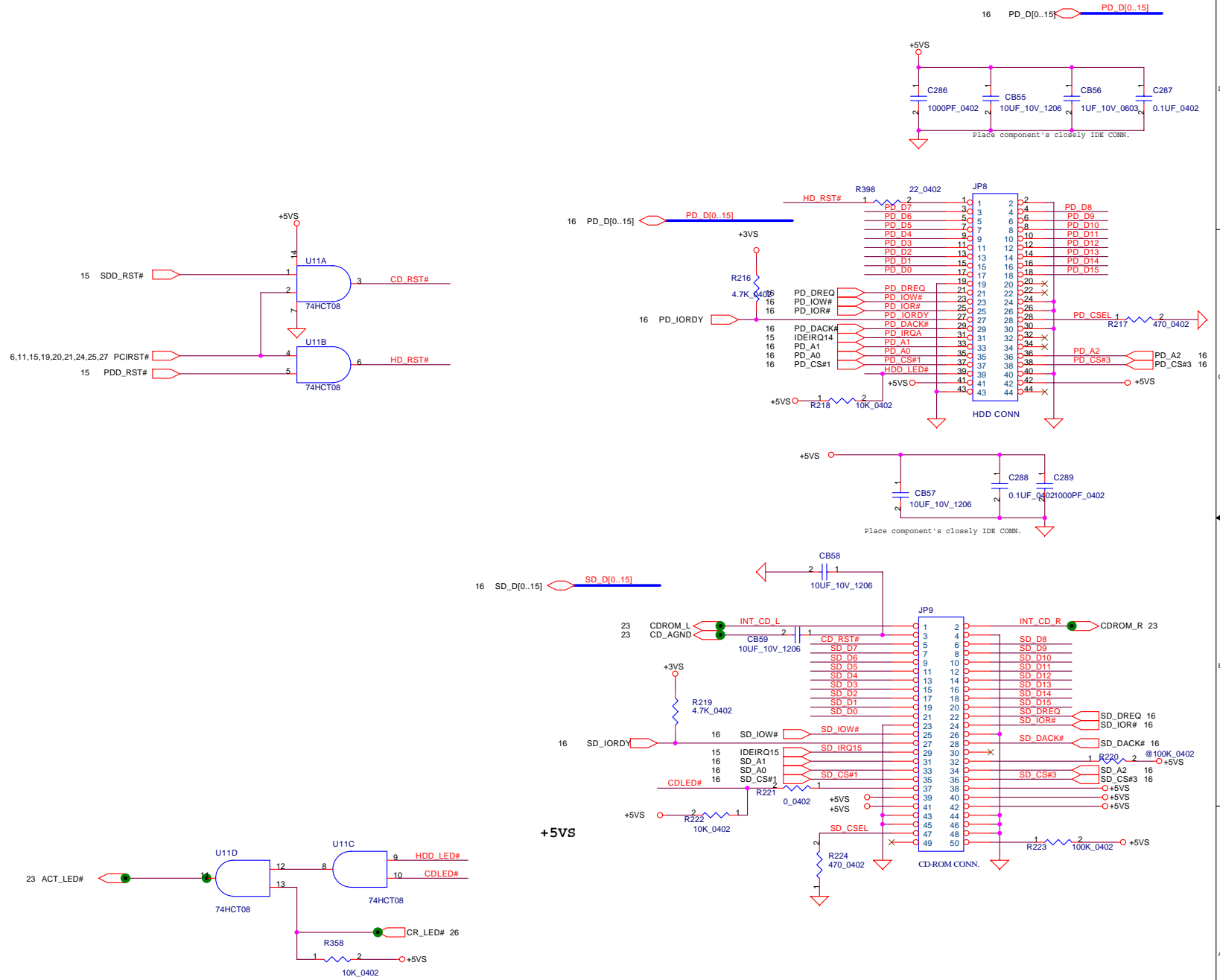
56_0402



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.

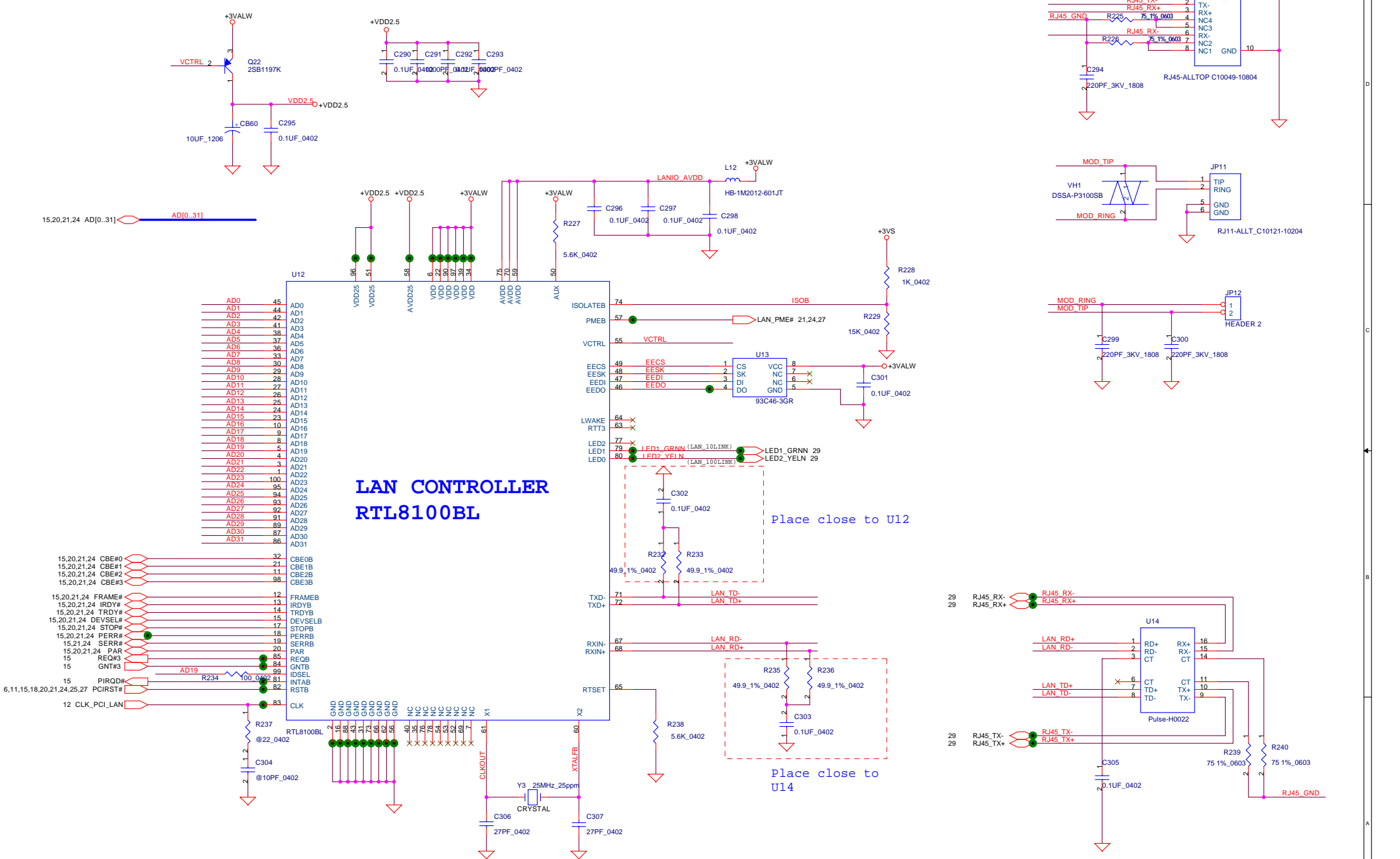
Compal Electronics, Inc.		
Title SCHEMATIC M/B LA-1571		
Size	Document Number 401238	Rev 3B
Date:	日期: 六月 21, 2004	Sheet 17 of 38

HDD/CD-ROM Module



Compal Electronics, Inc.		
Title SCHEMATIC M/B LA-1571		
Size	Document Number 401238	Rev 3B
Date:	星期一, 六月 21, 2004	Sheet 18 of 38

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



**LAN CONTROLLER
RTL8100BL**

Place close to U12

Place close to U14

15,20,21,24 AD[0..31]

15,20,21,24 CBE#0
15,20,21,24 CBE#1
15,20,21,24 CBE#2
15,20,21,24 CBE#3

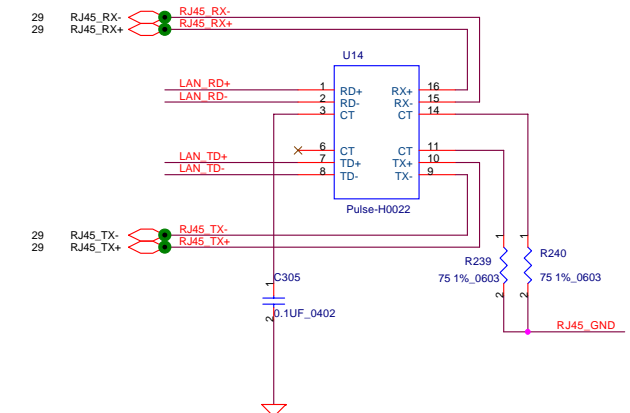
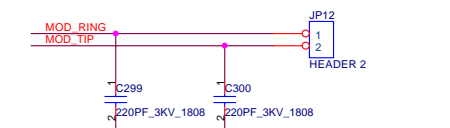
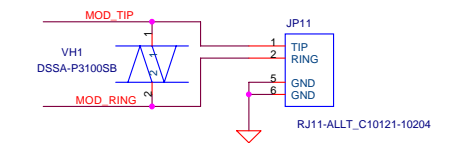
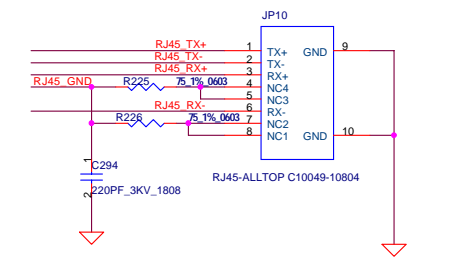
15,20,21,24 FRAME#
15,20,21,24 IRDY#
15,20,21,24 TRDY#
15,20,21,24 DEVSEL#
15,20,21,24 STOP#
15,20,21,24 PERR#
15,21,24 SERR#
15,20,21,24 PAR#
15 REQ#3
15 GNT#3

15 PIRQD#
6,11,15,18,20,21,24,25,27 PCIRST#

12 CLK_PCI_LAN

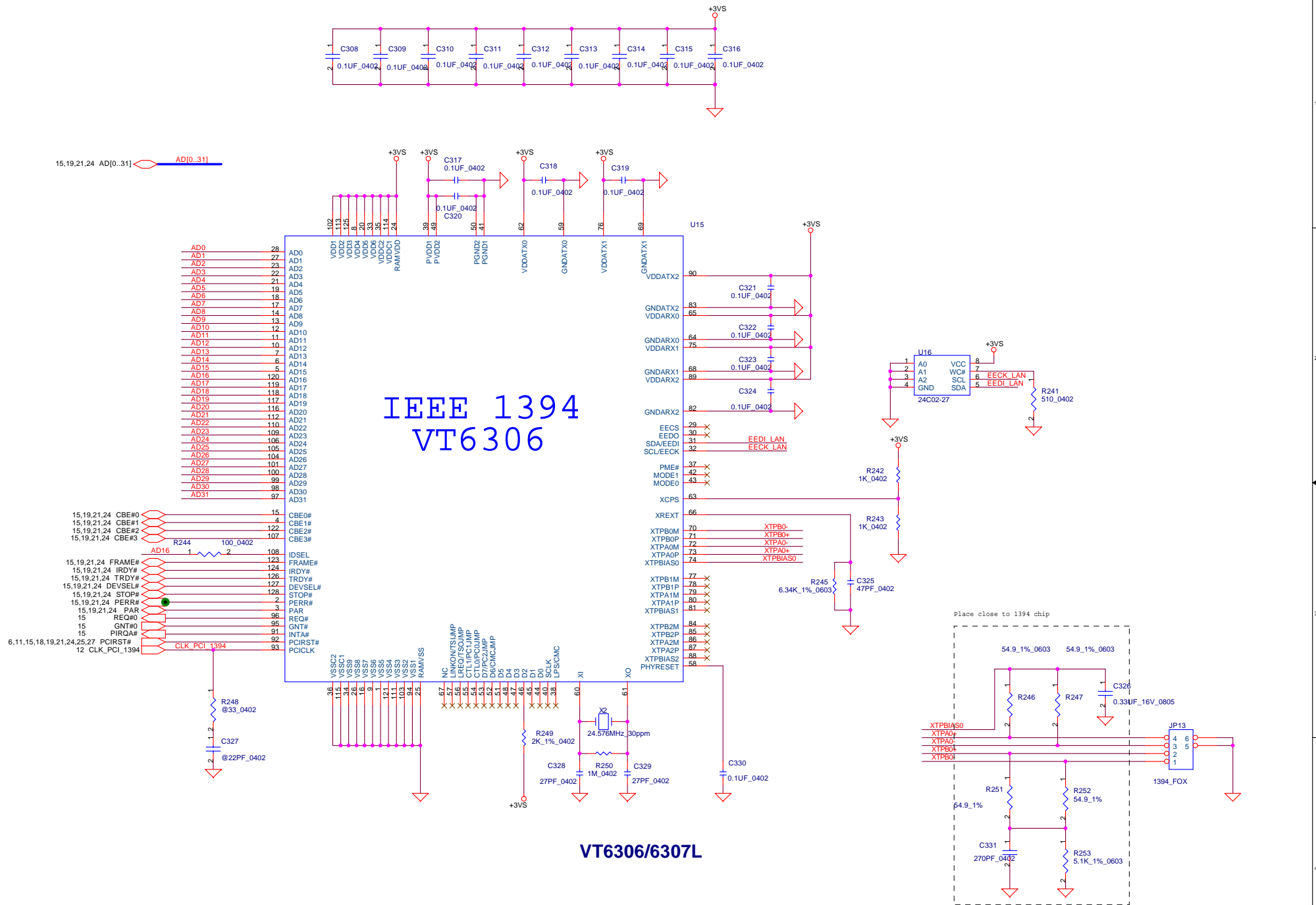
AD0 45
AD1 44
AD2 42
AD3 41
AD4 38
AD5 37
AD6 36
AD7 33
AD8 30
AD9 29
AD10 28
AD11 27
AD12 27
AD13 25
AD14 24
AD15 23
AD16 10
AD17 9
AD18 8
AD19 5
AD20 4
AD21 3
AD22 1
AD23 100
AD24 95
AD25 94
AD26 93
AD27 92
AD28 91
AD29 89
AD30 87
AD31 86

RTL8100BL



Compal Electronics, Inc.			
Title			
SCHEMATIC M/B LA-1571			
Size	Document Number	Rev	
	401238	3B	
Date:	星期一, 六月 21, 2004	Sheet	19 of 38

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



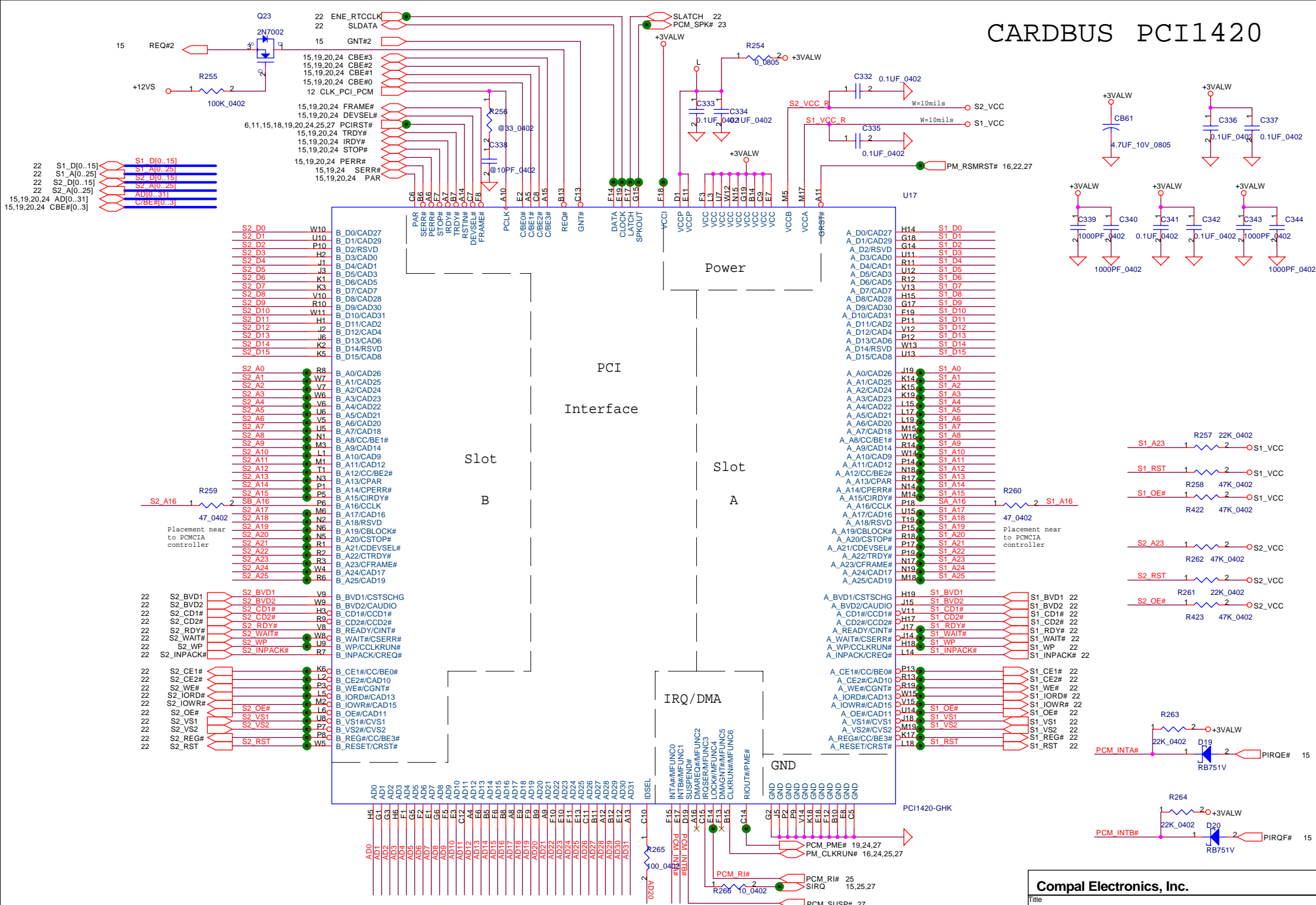
IEEE 1394 VT6306

VT6306/6307L

Compal Electronics, Inc.		
Title SCHEMATIC M/B LA-1571		
Size	Document Number 401238	Rev 3B
Date:	星期一, 六月 21, 2004	Sheet 20 of 38

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

CARDBUS PCI1420

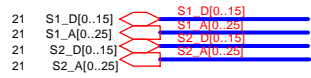
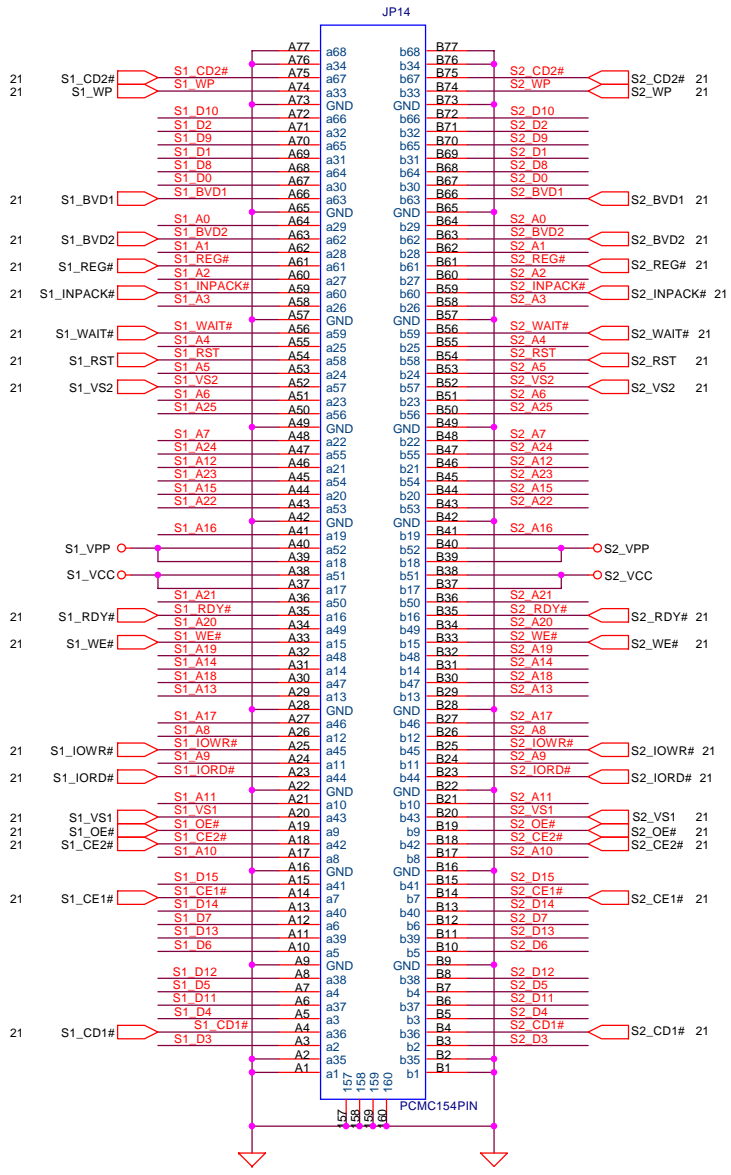


Compal Electronics, Inc.		
Title	SCHEMATIC M/B LA-1571	
Size	Document Number	Rev
B	401238	3B
Date:	星期一, 六月 21, 2004	Sheet 21 of 38

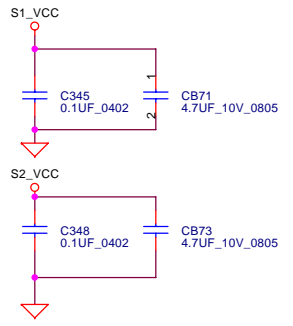
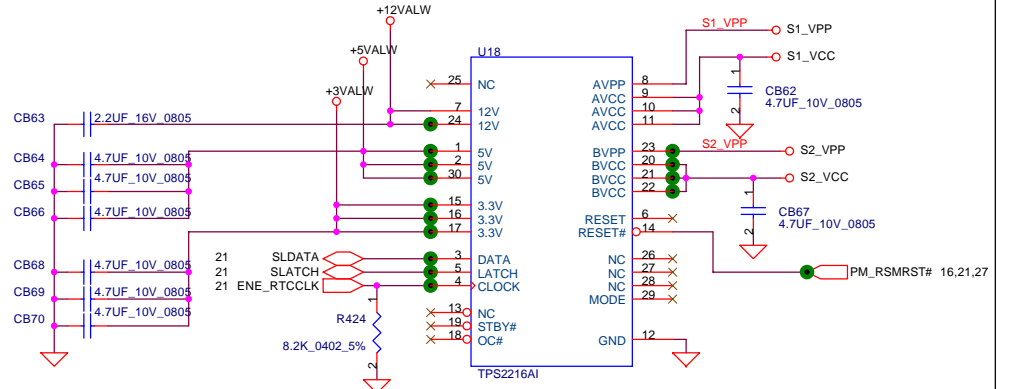
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS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

CARDBUS

SOCKET

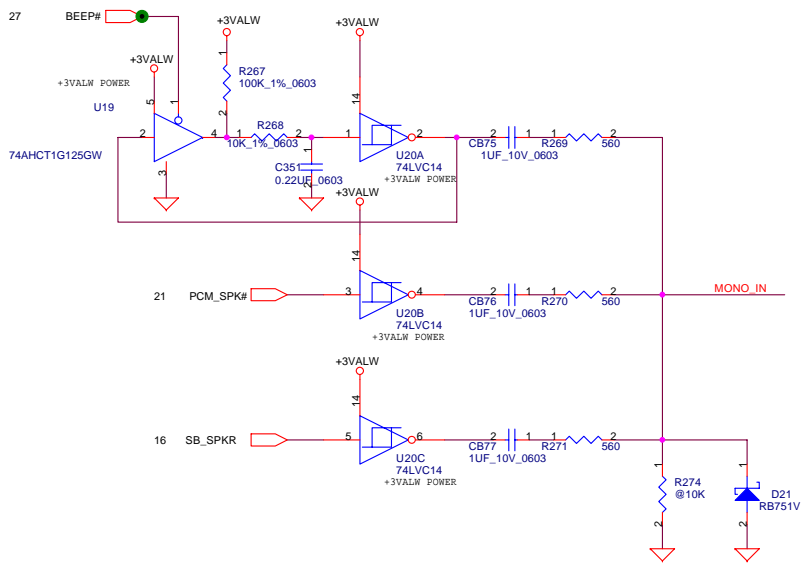


PCMCIA POWER CTRL.

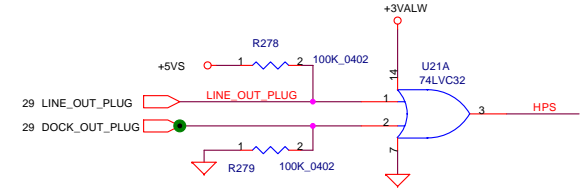
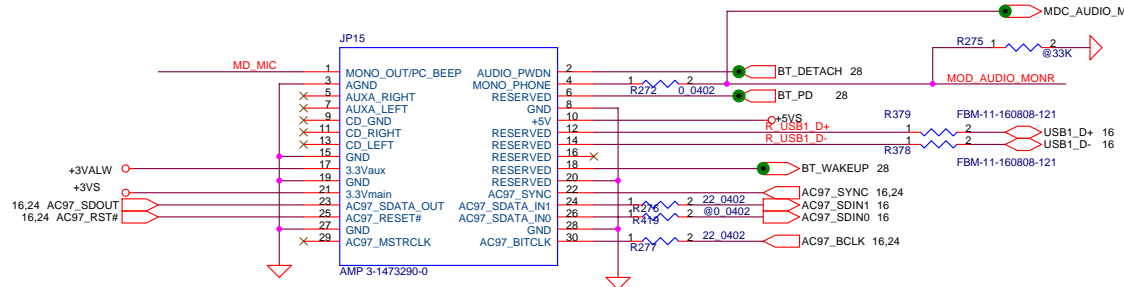


THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE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

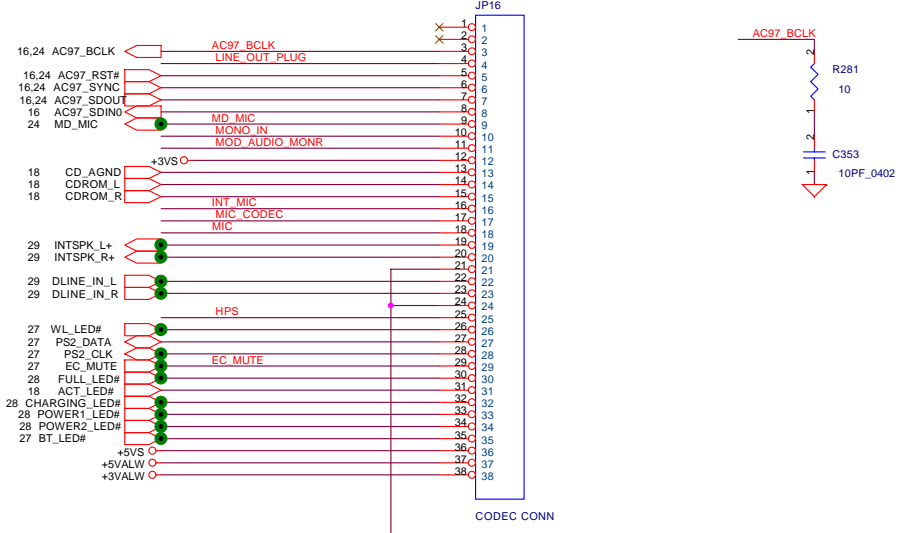
Compal Electronics, Inc.		
Title	SCHEMATIC M/B LA-1571	
Size	Document Number	Rev
B	401238	3B
Date:	星期一, 六月 21, 2004	Sheet 22 of 38



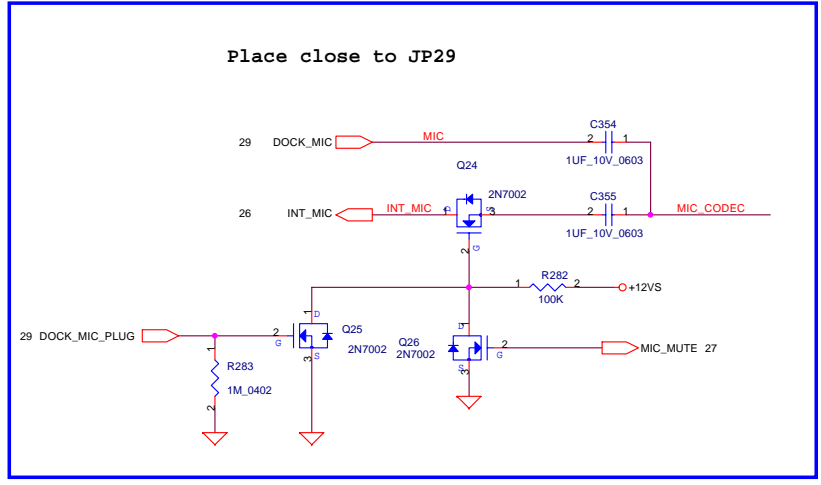
BT/MDC CONN



AC97 CODEC ALC202 CONN



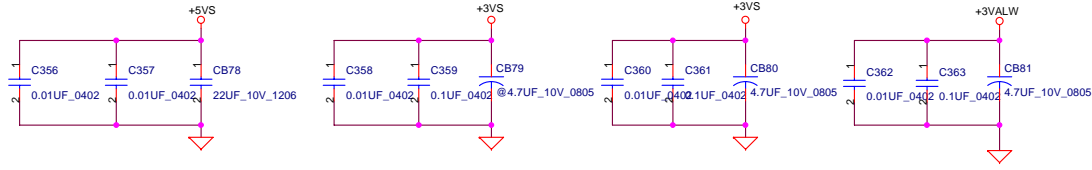
Place close to JP29



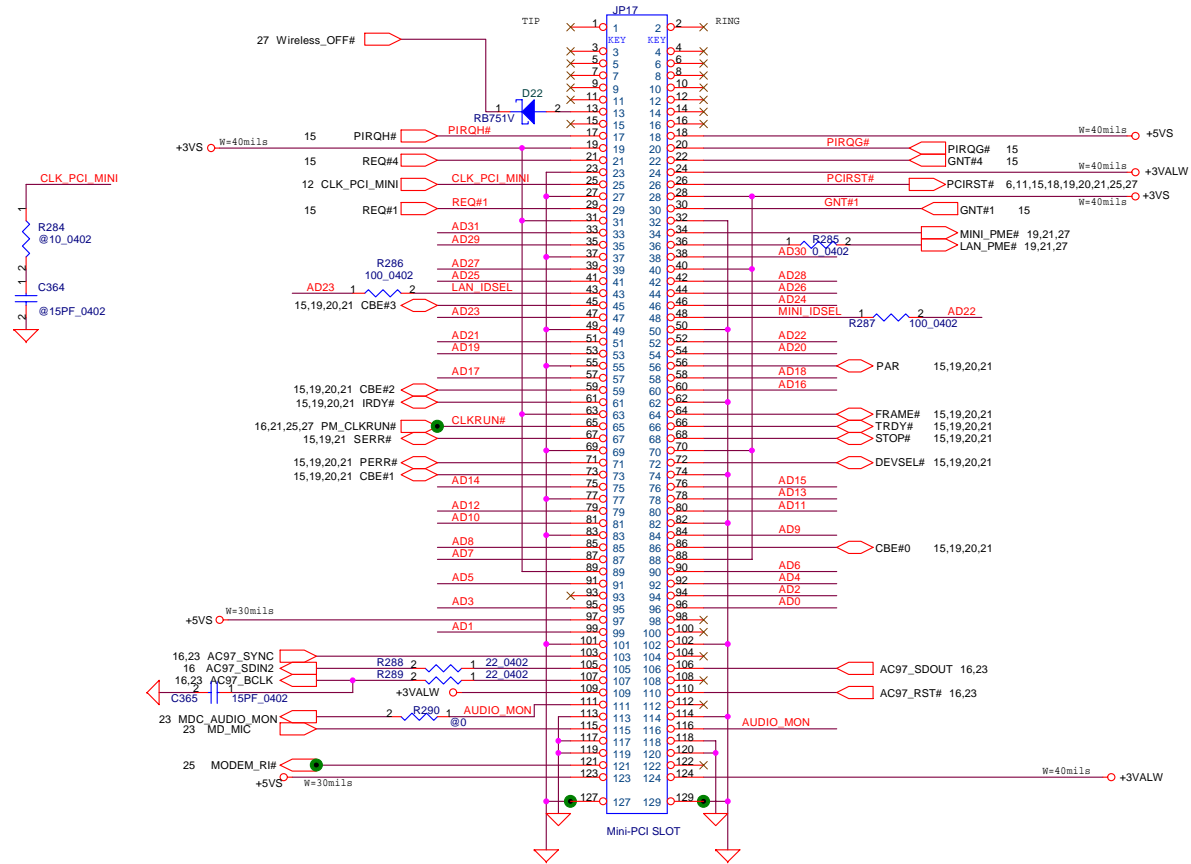
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE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

Compal Electronics, Inc.		
Title SCHEMATIC M/BLA-1571		
Size	Document Number 401238	Rev 3B
Date: 星期一, 六月 21, 2004	Sheet 23	of 38

Mini-PCI Slot



AD[0..31] AD[0..31] 15,19,20,21

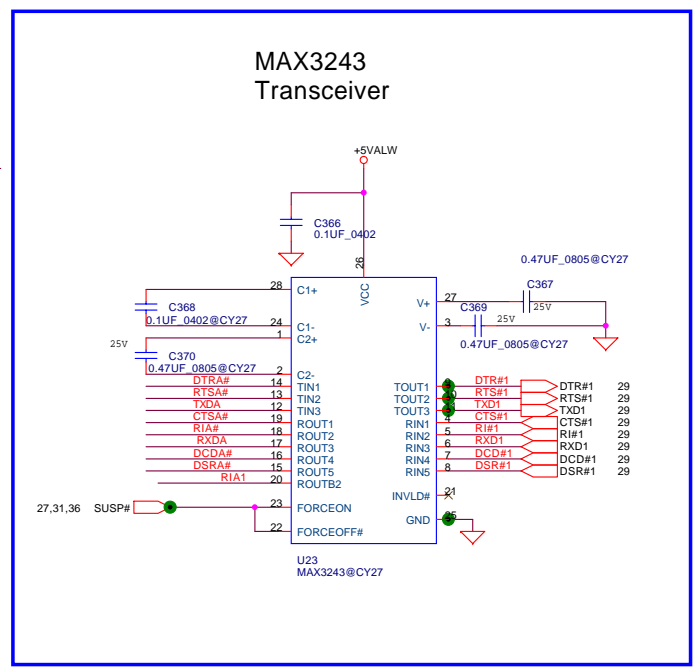
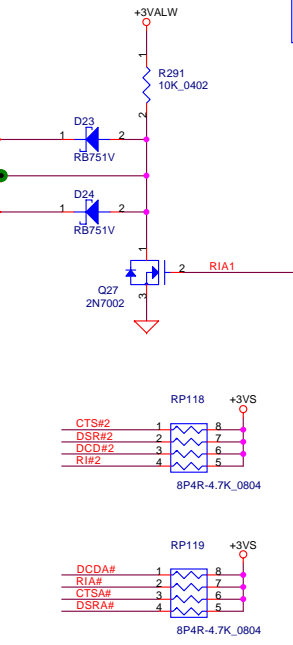
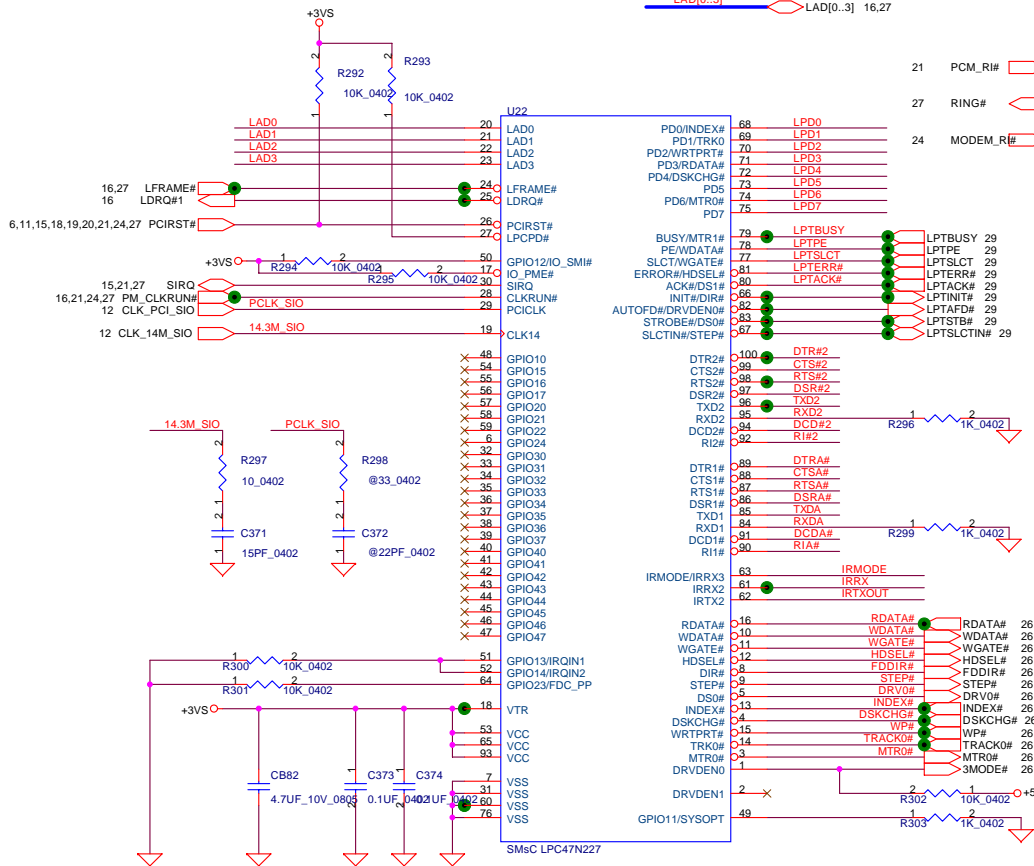


THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE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

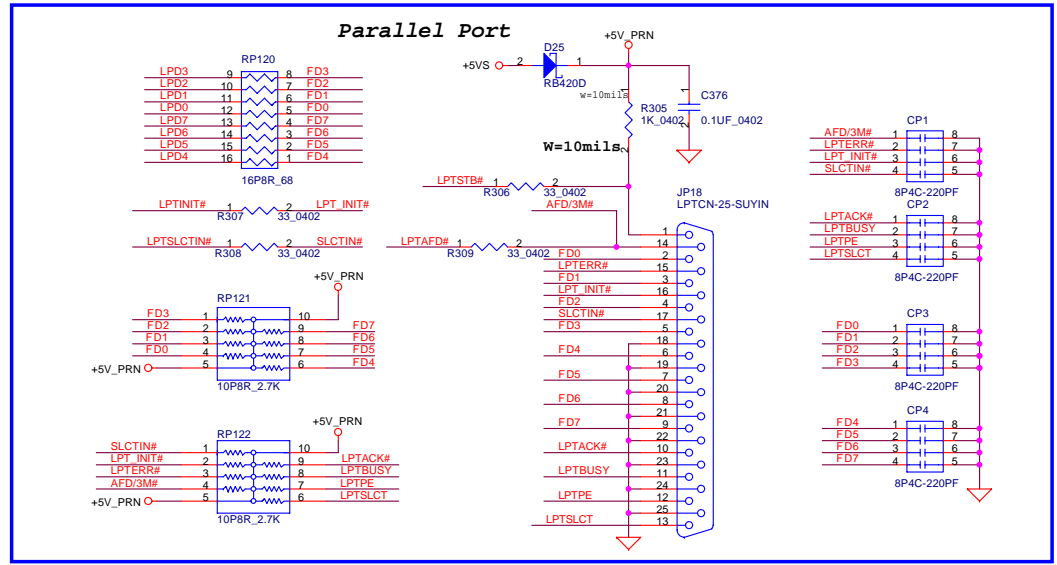
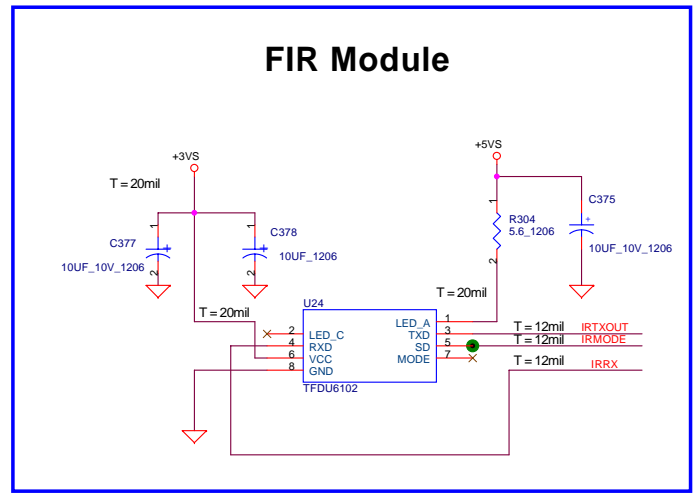
Compal Electronics, Inc.		
Title SCHEMATIC M/B LA-1571		
Size	Document Number 401238	Rev 3B
Date:	星期一, 六月 21, 2004	Sheet 24 of 38

SUPER I/O SMsC LPC47N227

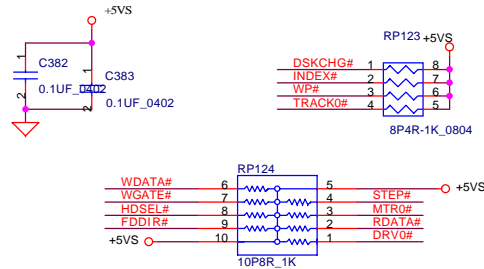
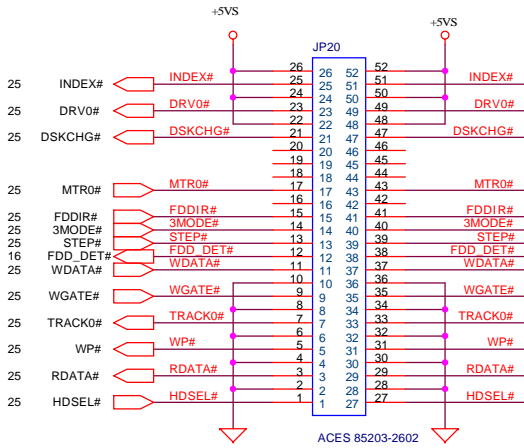
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE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



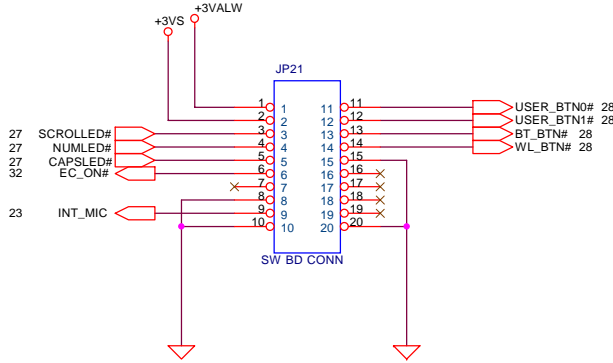
Base I/O Address
 * 0 = 02Eh
 1 = 04Eh



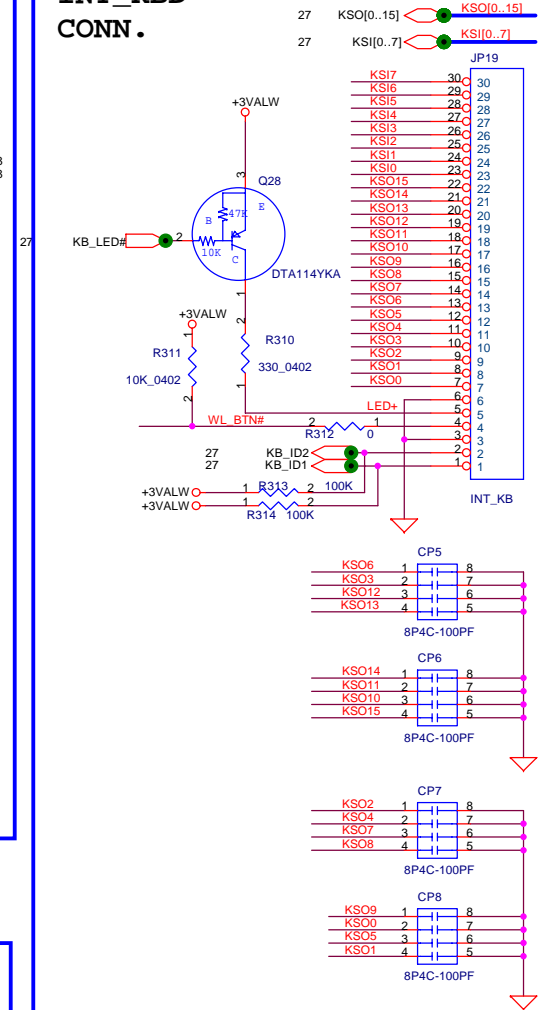
FDD CONN.



SWITCH BOARD CONN.

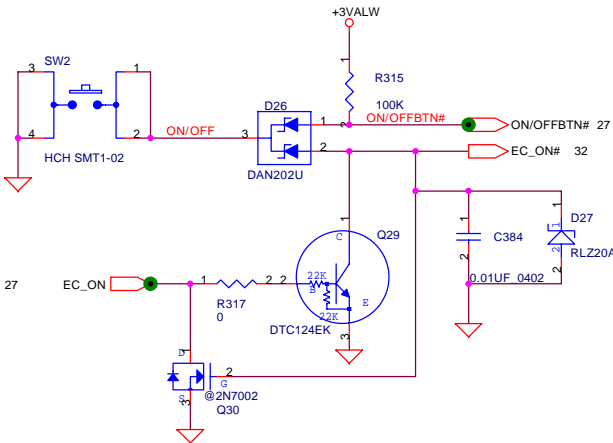


INT_KBD CONN.

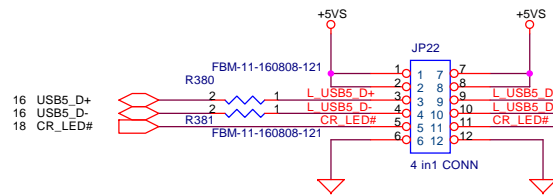


NEED CLOSEST JP18 ADD BY EMI REQUEST

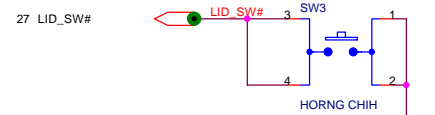
ON/OFF BUTTON



5 IN 1 CONN

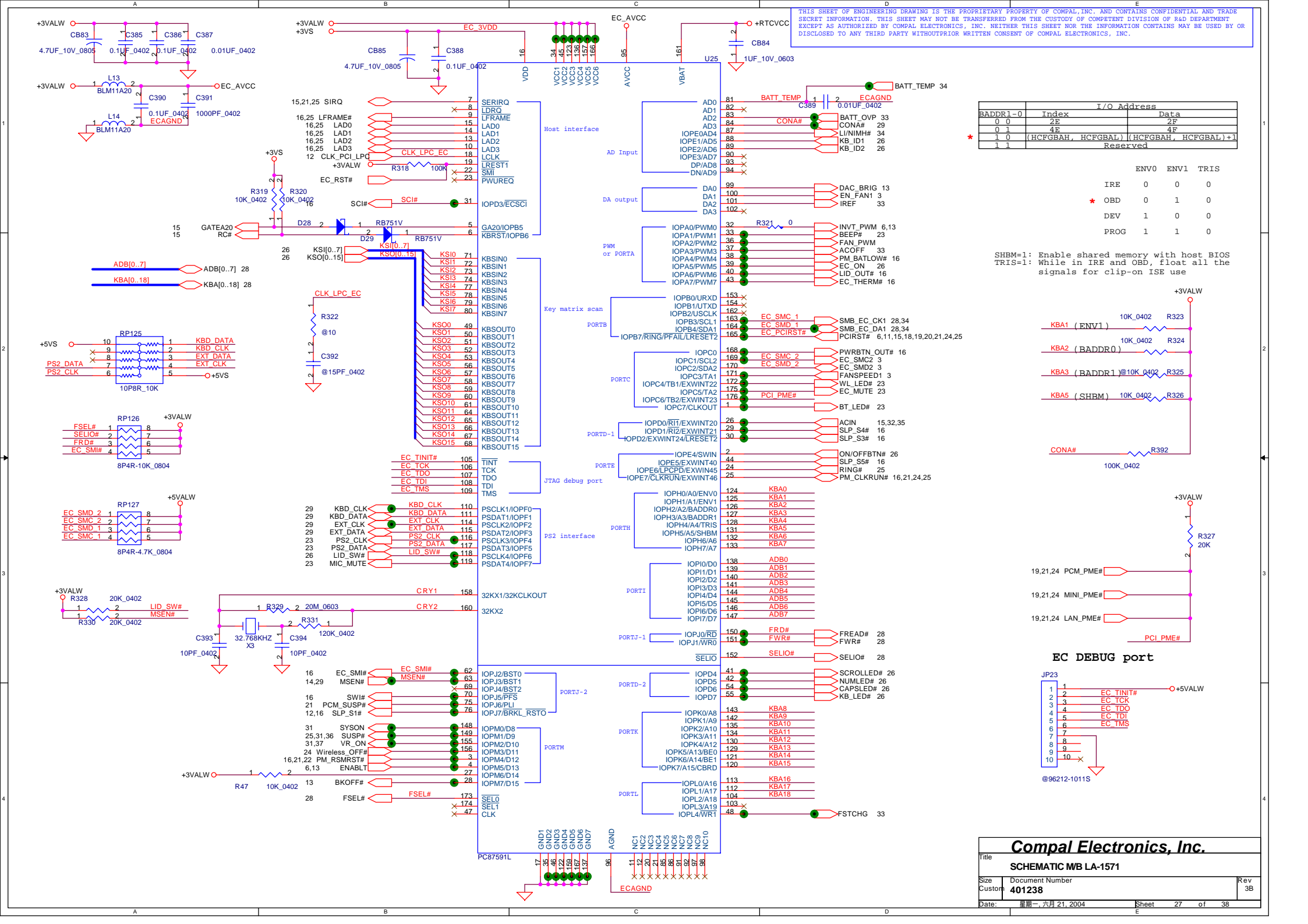


LID SW



Compal Electronics, Inc.		
Title SCHEMATIC M/B LA-1571		
Size	Document Number 401238	Rev 3B
Date:	星期一, 六月 21, 2004	Sheet 26 of 38

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

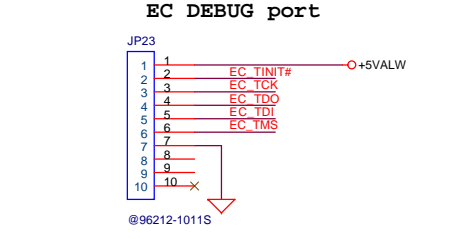
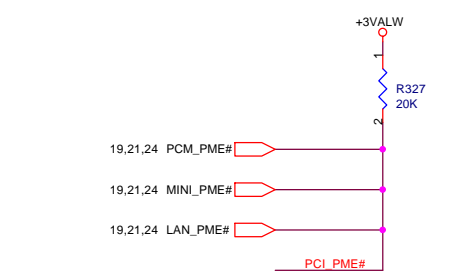
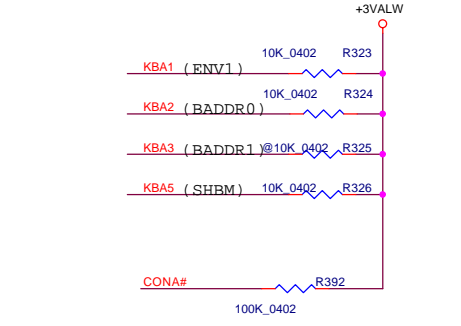


THIS SHEET MAY NOT BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM. THIS SHEET IS THE PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

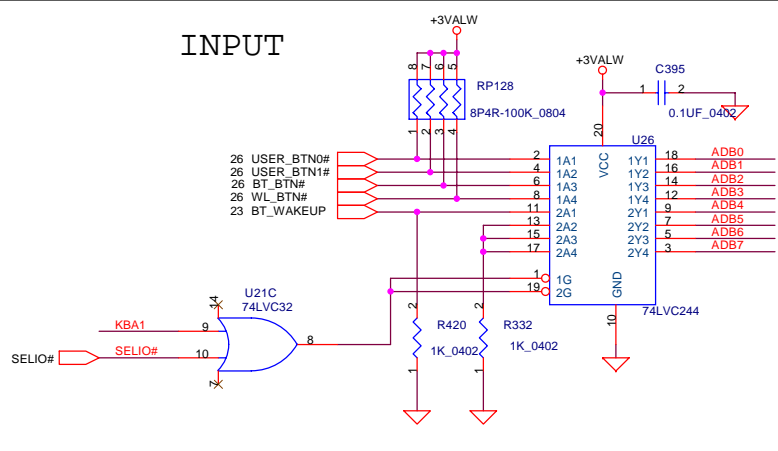
I/O Address		
BADDR1-0	Index	Data
0 0	2E	2F
0 1	4E	4F
1 0	(HCFGBAH, HCFGBAL)	(HCFGBAH, HCFGBAL)+1
1 1		Reserved

	ENV0	ENV1	TRIS
IRE	0	0	0
OBD	0	1	0
DEV	1	0	0
PROG	1	1	0

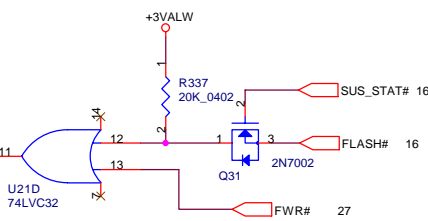
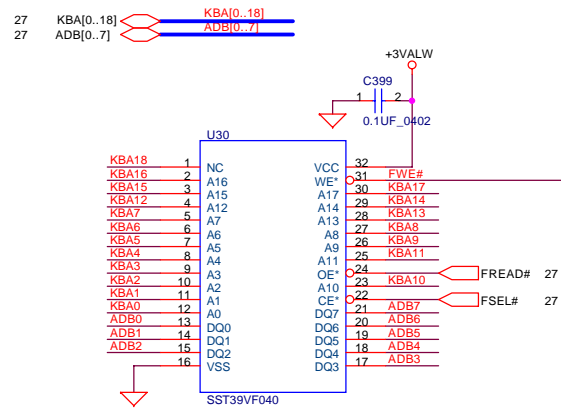
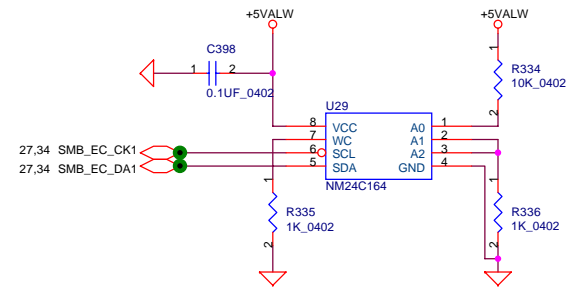
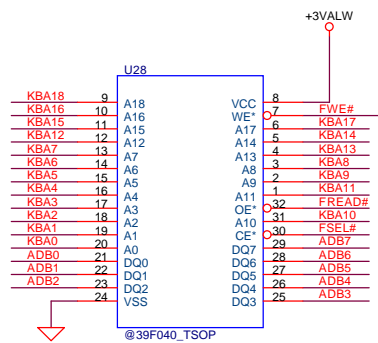
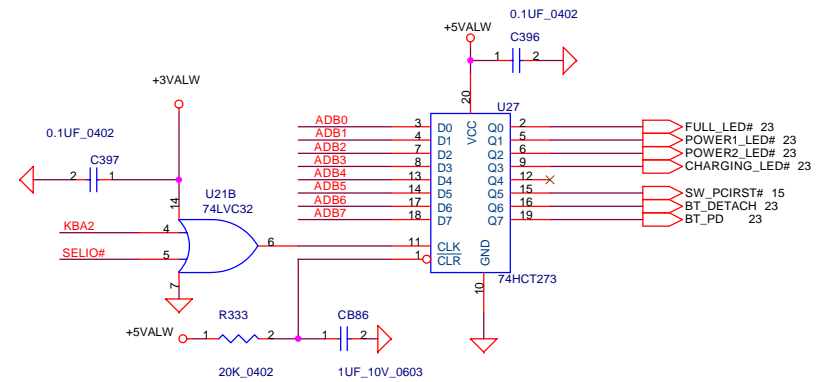
SHBM=1: Enable shared memory with host BIOS
 TRIS=1: While in IRE and OBD, float all the signals for clip-on ISE use



INPUT



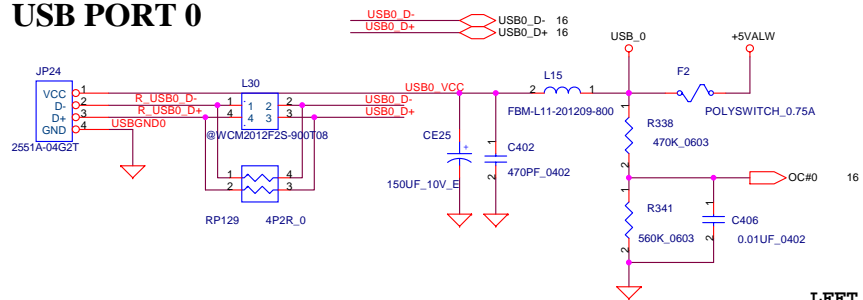
OUTPUT



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.

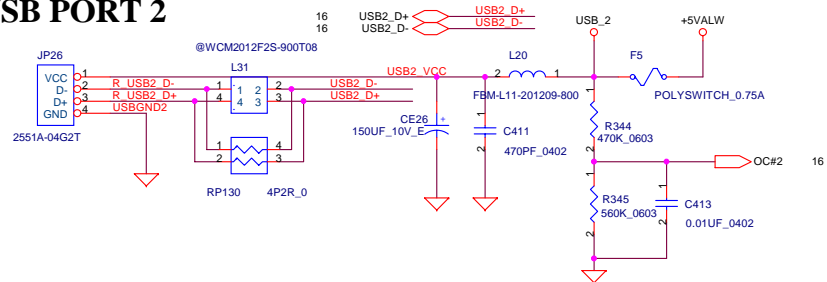
Compal Electronics, Inc.		
Title SCHEMATIC M/B LA-1571		
Size	Document Number 401238	Rev 3B
Date: 星期一, 六月 21, 2004	Sheet 28	of 38

USB PORT 0



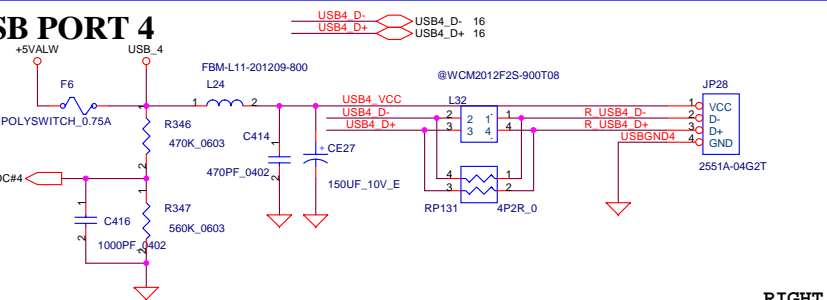
LEFT

USB PORT 2

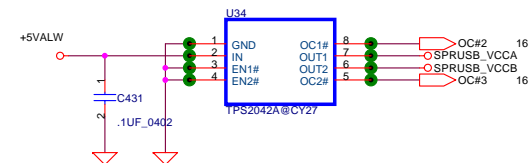


MIDDLE

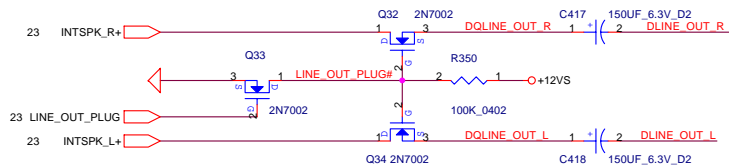
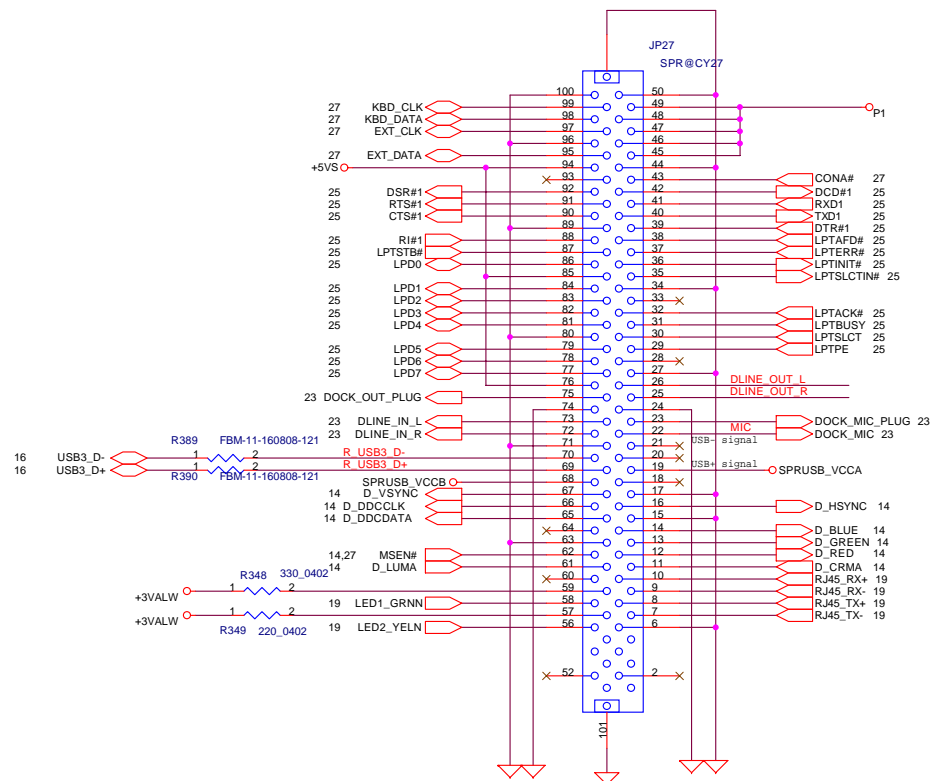
USB PORT 4



RIGHT

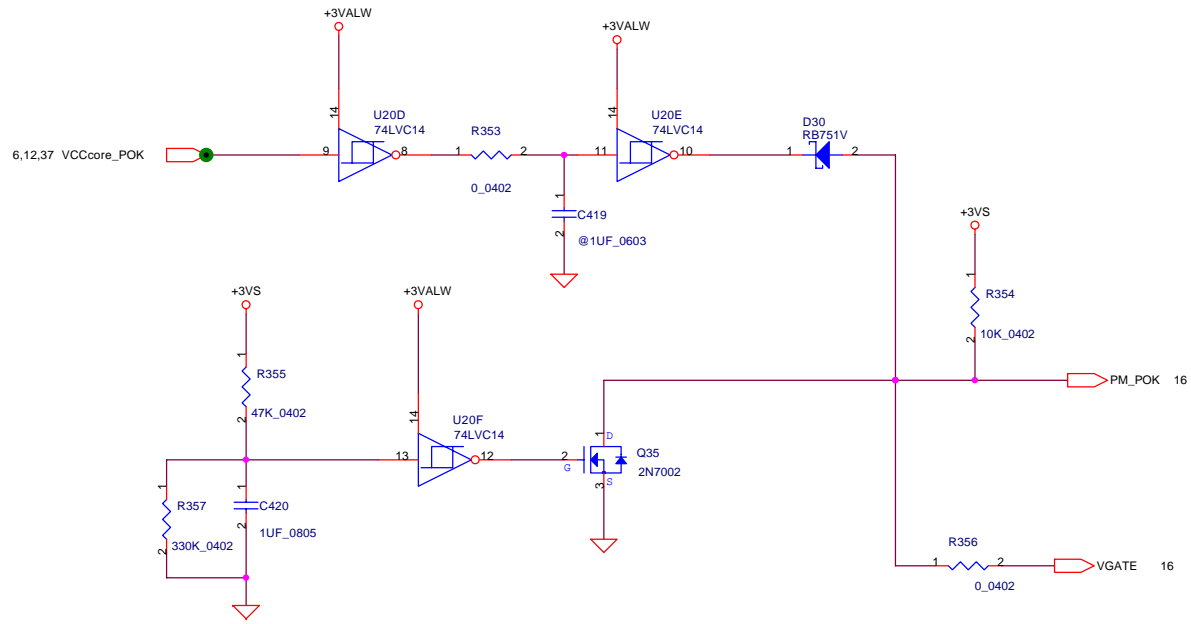


SPR CONN 204PIN



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

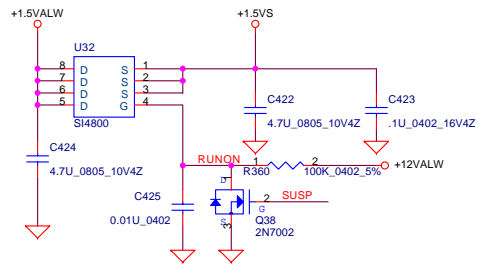
Compal Electronics, Inc.			
Title SCHEMATIC M/B LA-1571			
Size	Document Number	Rev	
	401238	3B	
Date:	星期一, 六月 21, 2004	Sheet	29 of 38



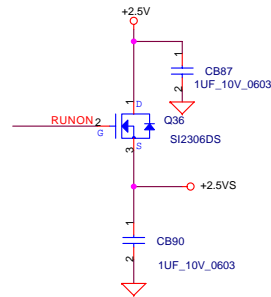
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS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

Compal Electronics, Inc.		
Title SCHEMATIC M/B LA-1571		
Size	Document Number 401238	Rev 3B
Date:	星期一, 六月 21, 2004	Sheet 30 of 38

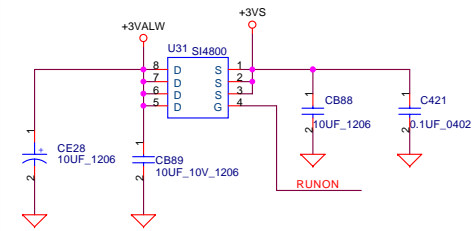
+1.5VALW To +1.5VS Transfer



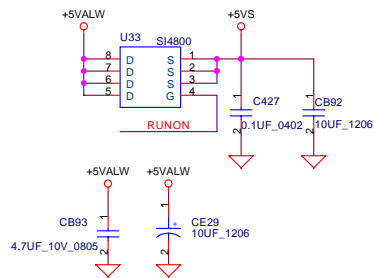
+2.5V to +2.5VS Transfer



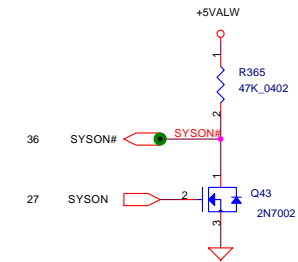
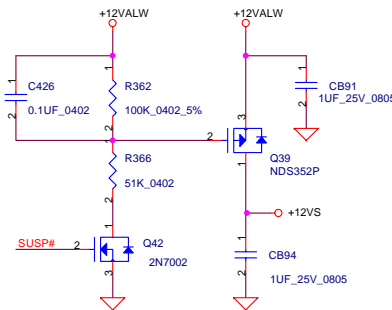
+3VALW to +3VS Transfer



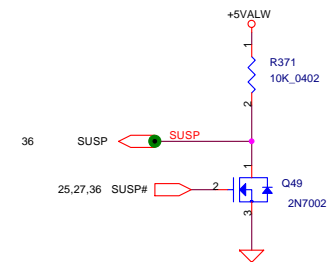
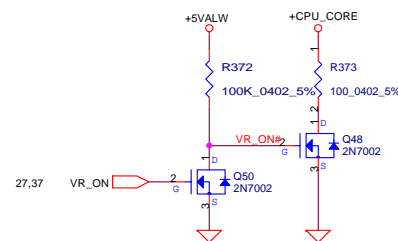
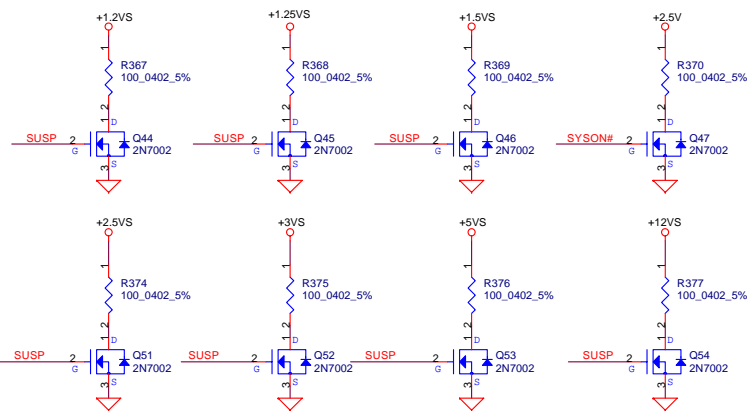
+5VALW to +5VS Transfer



+12VALW TO +12VS Transfer



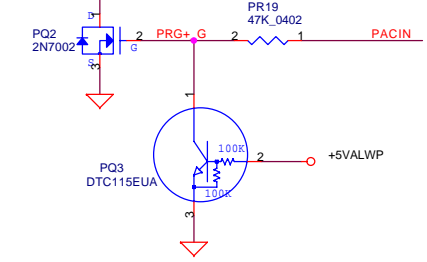
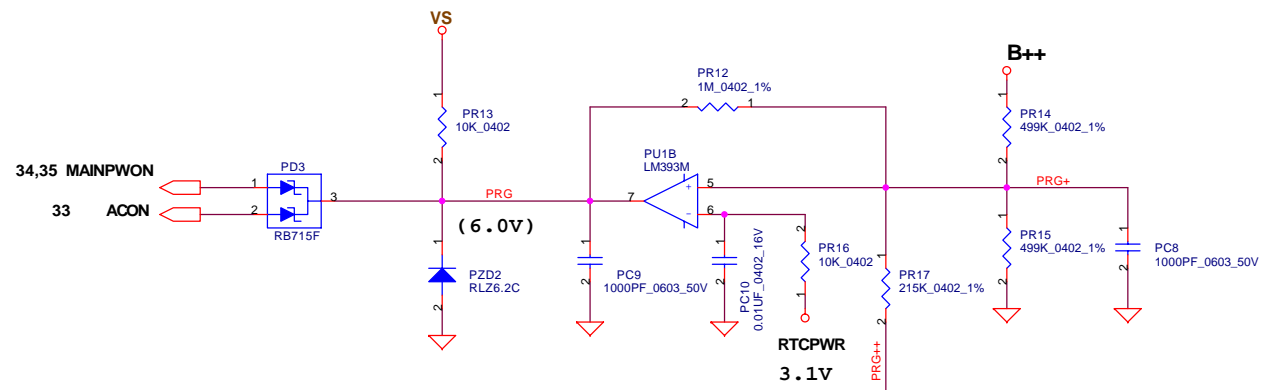
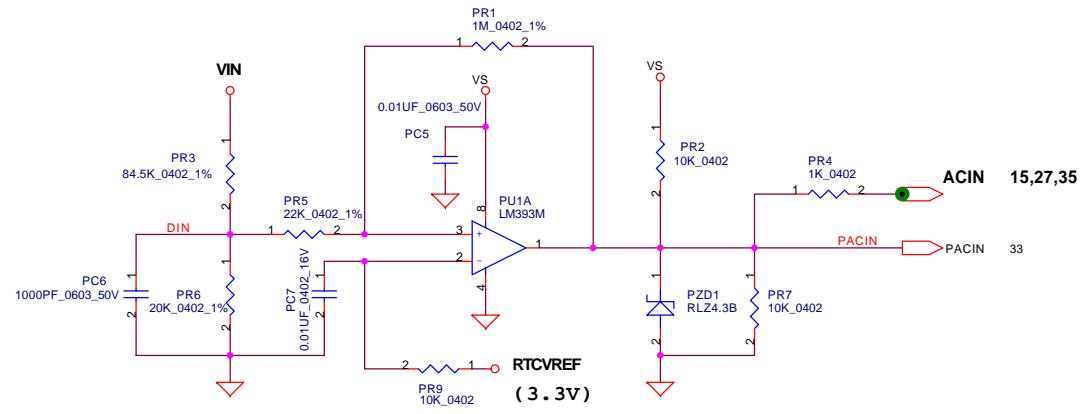
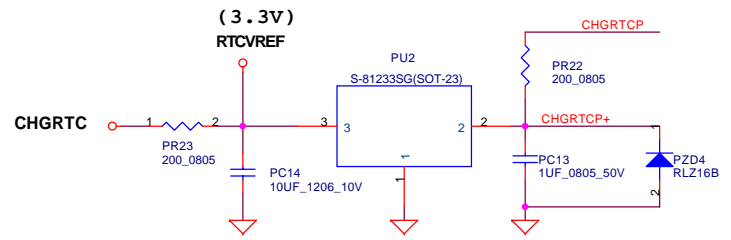
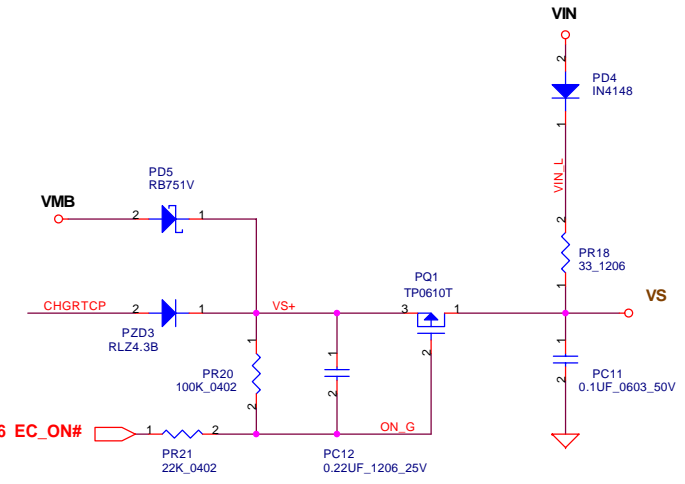
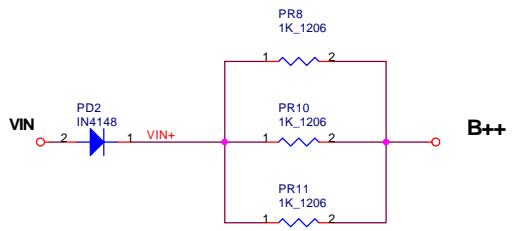
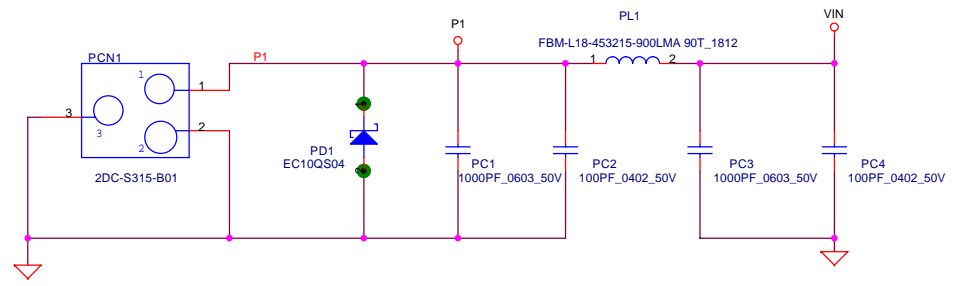
Discharge circuit



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

Compal Electronics, Inc.		
Title SCHEMATIC M/B LA-1571		
Size	Document Number 401238	Rev 3B
Date: 星期一, 六月 21, 2004	Sheet 31	of 38

Vin Detector
High 18.784 17.901 17.077 V
Low 17.877 17.043 16.195 V



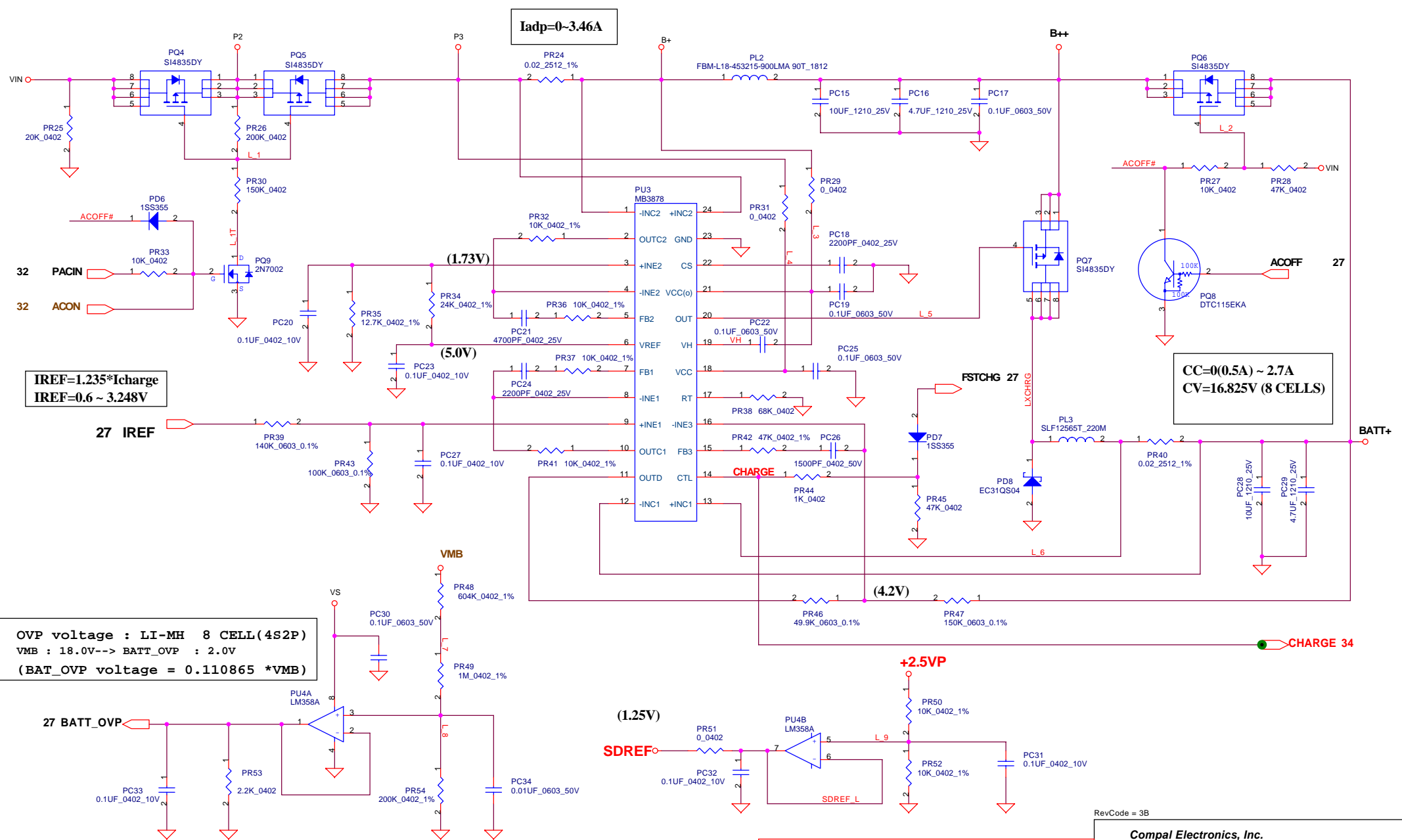
ACIN

Precharge detector			
16.6	15.9	15.2	
13.48	12.93	12.09	

BAT ONLY

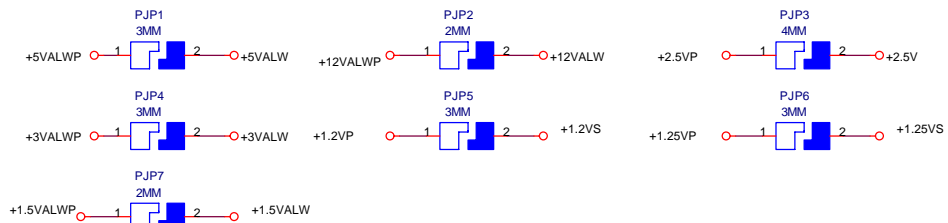
Precharge detector			
8.597	8.247	7.904	
6.310	6.101	5.683	

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.

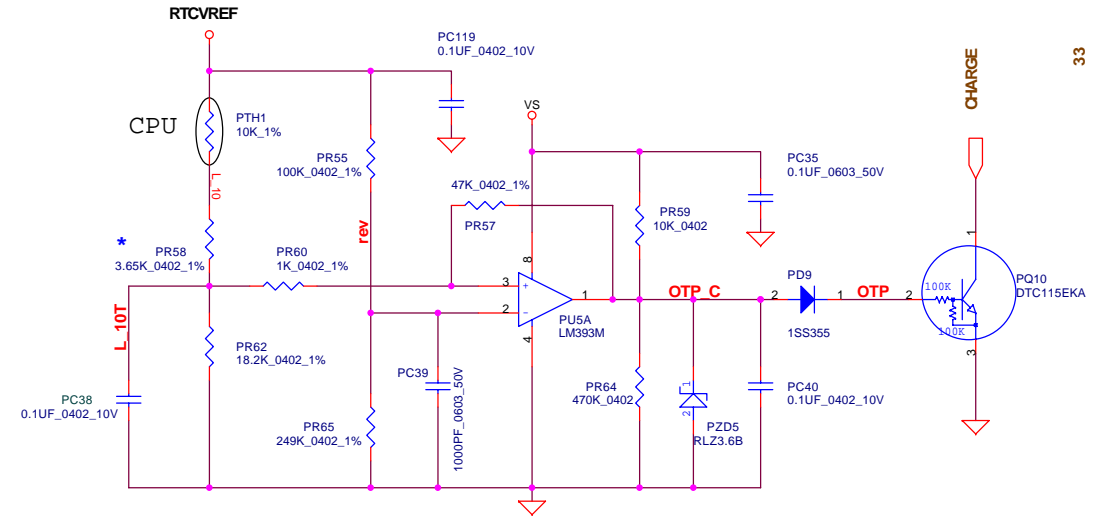


THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS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

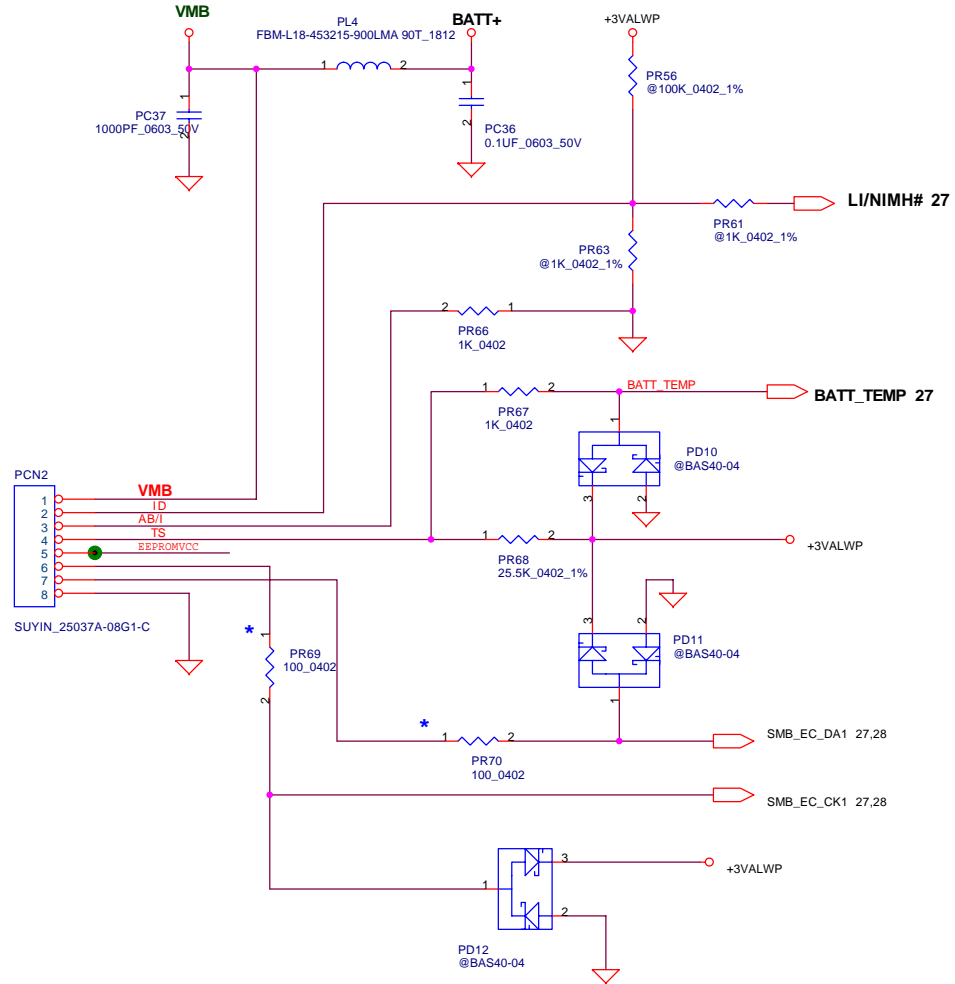
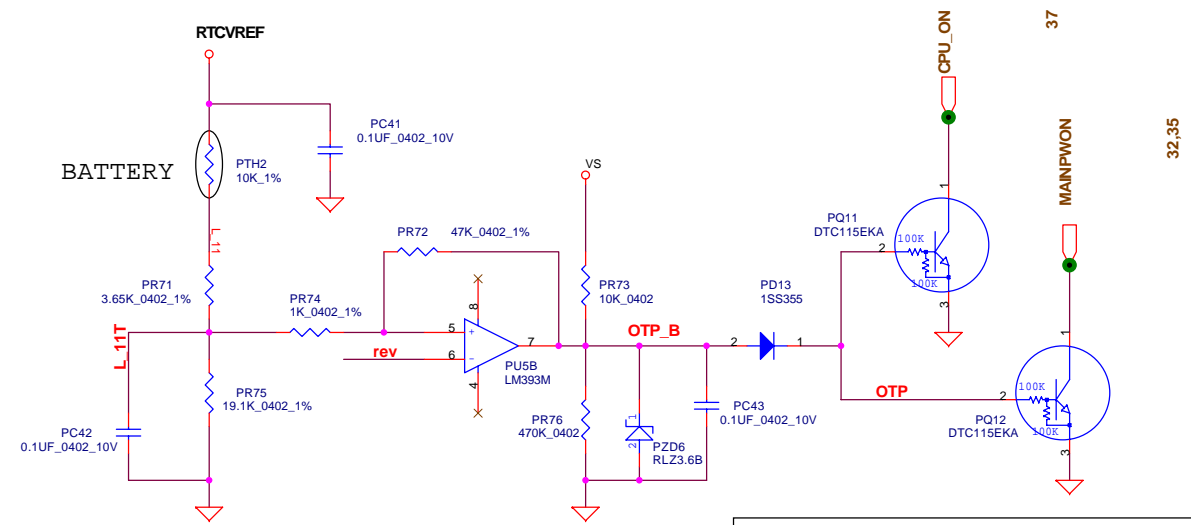
RevCode = 3B		
Compal Electronics, Inc.		
Title		
SCHEMATIC M/B LA-1571		
Size	Document Number	
B	401238	
Date:	星期一, 六月 21, 2004	Sheet 33 of 38



PH1 under CPU botten side :
 CPU thermal protection at 90(91) \pm 3 degree C
 Recovery at 50(51) \pm 3 degree C



PH2 near main Battery CONN :
 BAT. thermal protection at 85(86) \pm 3 degree C
 Recovery at 50(51) degree C

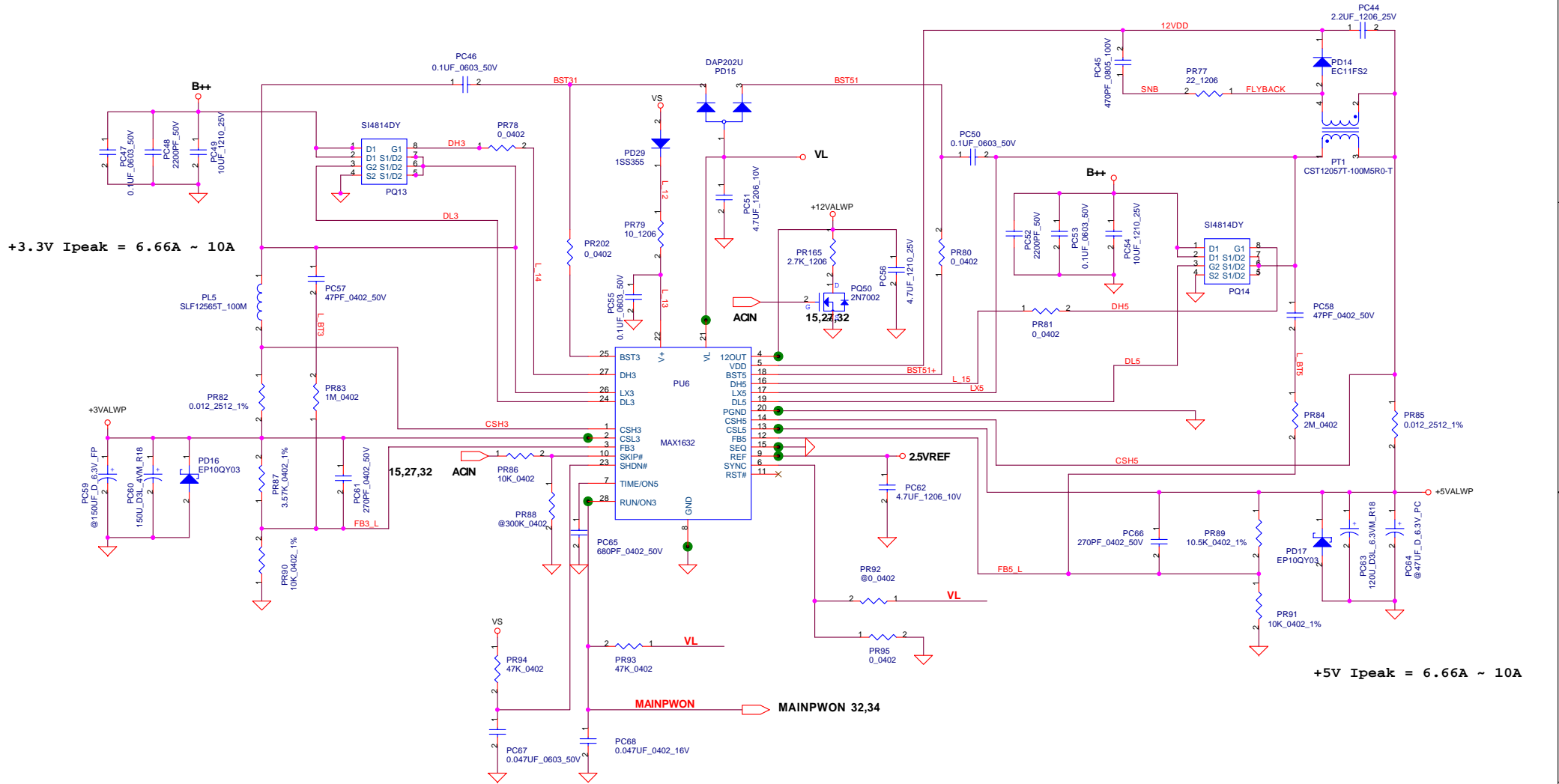


THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS 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: SCHEMATIC M/B LA-1571		
Size: B	Document Number: 401238	Rev: 3B
Date: 星期一, 六月 21, 2004	Sheet: 34	of 38

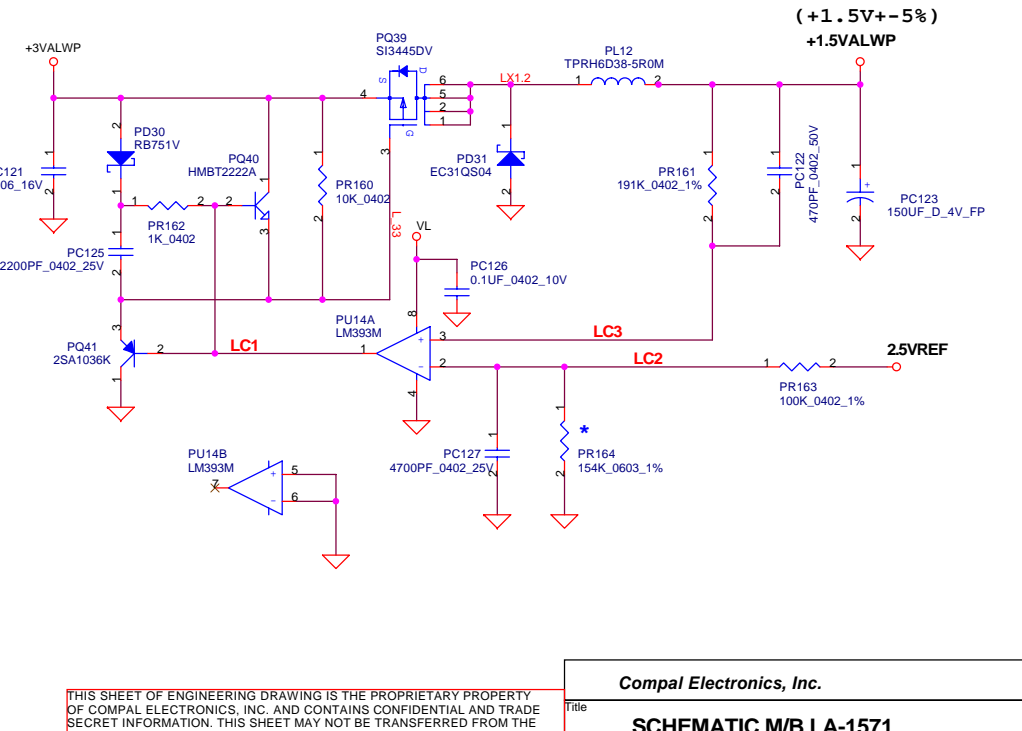
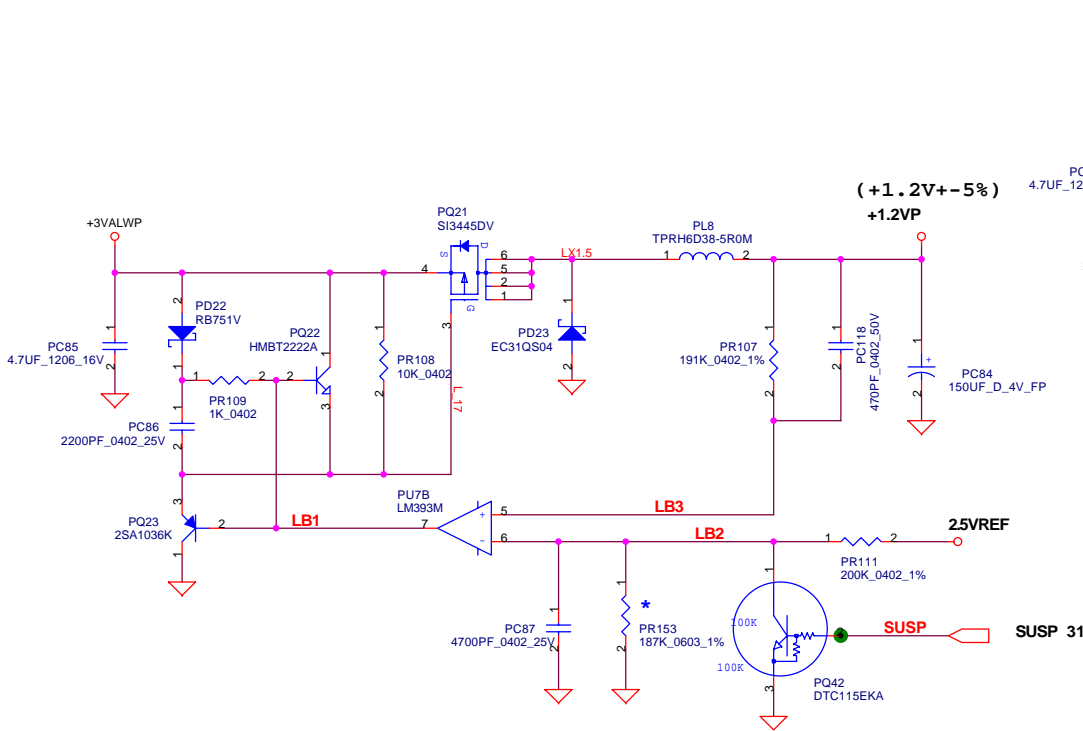
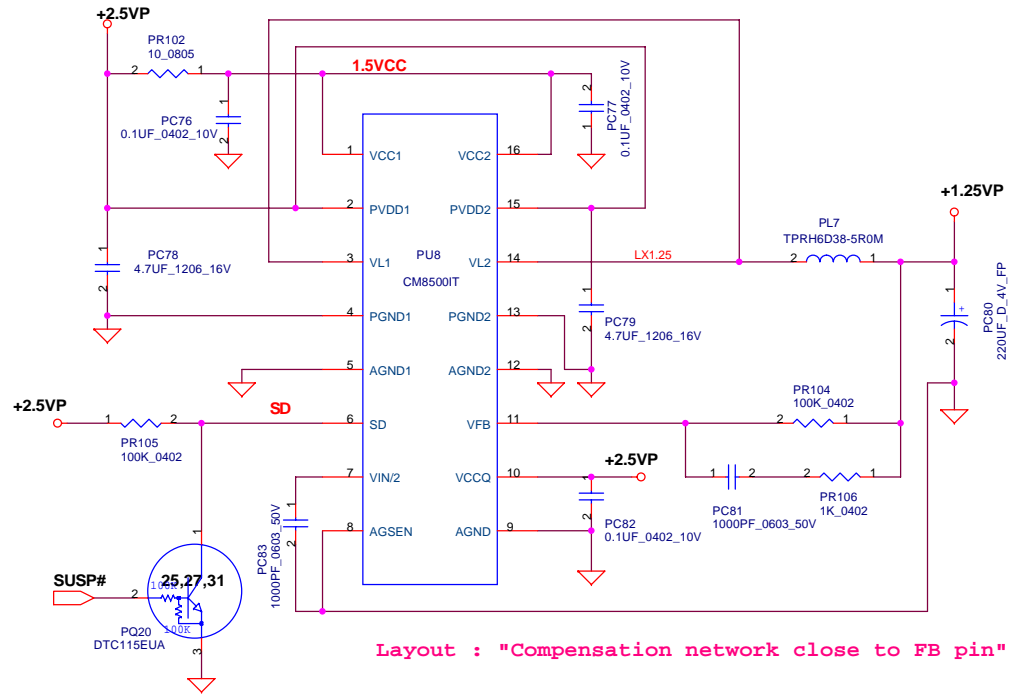
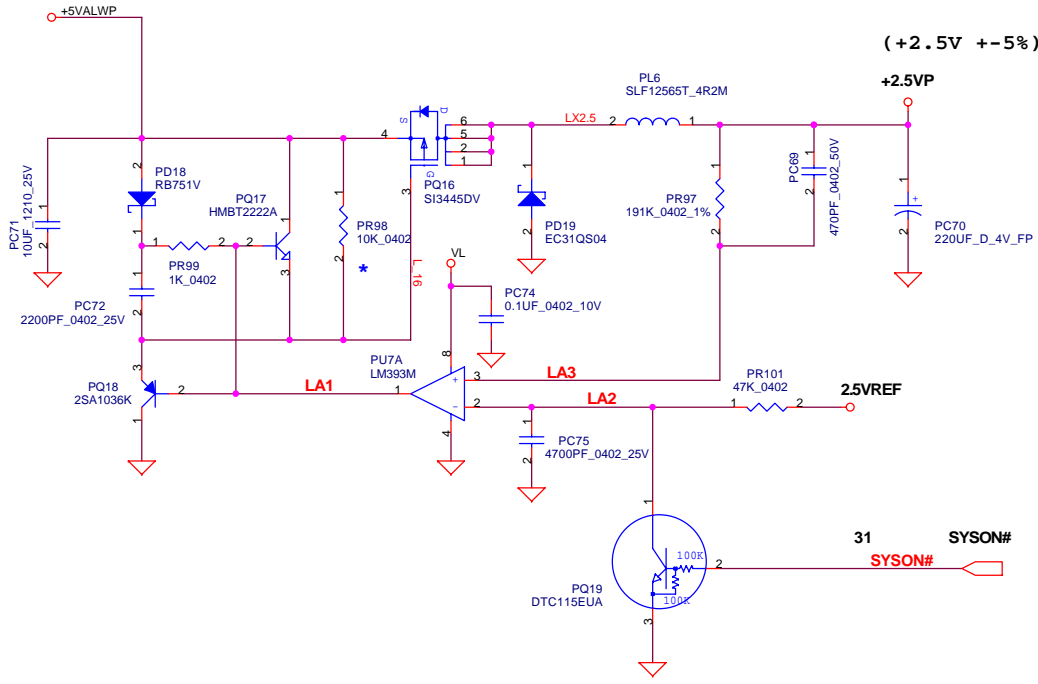
+3.3V Ipeak = 6.66A ~ 10A

+5V Ipeak = 6.66A ~ 10A



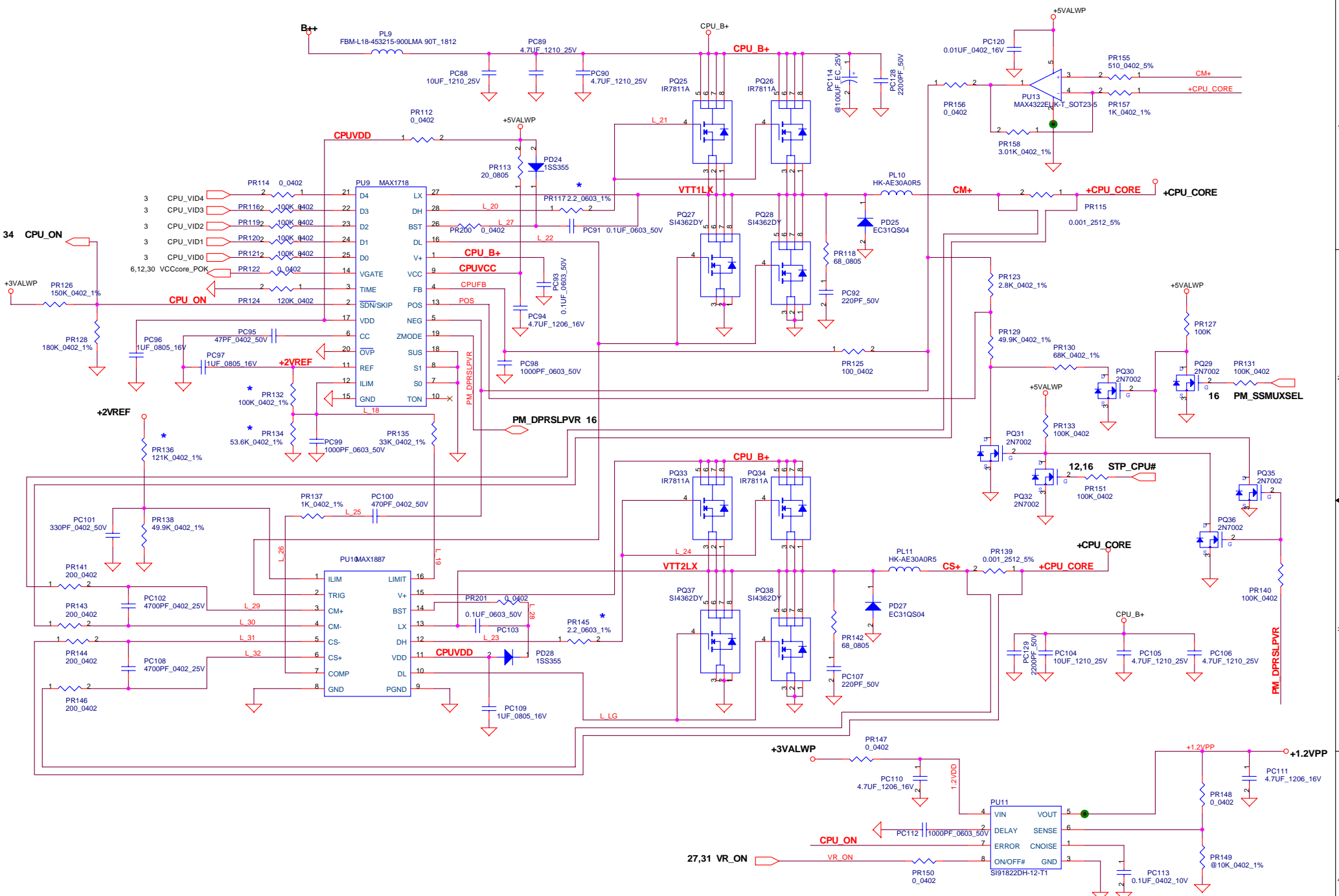
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS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

Compal Electronics, Inc.		
Title		
SCHEMATIC M/B LA-1571		
Size	Document Number	Rev
	401238	3B
Date:	星期一, 六月 21, 2004	Sheet 35 of 38



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

Compal Electronics, Inc.		
Title SCHEMATIC M/B LA-1571		
Size B	Document Number 401238	Rev 3B
Date: 星期一, 六月 21, 2004	Sheet	36 of 38



	PM_SSMUXSEL	STP_CPU#	PM DPRSLPVR	VCORE'	Offset	VCORE
PM	1	1	0	1.30V	0%	1.30V
PM D-S	1	0	0	4.62%		1.239V
BM	0	1	0	1.20V	2.0%	1.176V
BM D-S	0	0	0	4.62%		1.144V
Deeper	X	0	1	1.0V	0%	1.0V

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.

Compal Electronics, Inc.

Title
SCHEMATIC M/B LA-1571

Size B Document Number
401238

Date: 星期一, 六月 21, 2004 Sheet 37 of 38

Rev
3B

+3VALW/+5VALW/
+12VALW/+1.5VALW

PM_RSMRST#

ON/OFF

PWRBTN_OUT#

SYSON / SUSP#

+1.25VS/+1.5VS/+2.5V/
+3VS/+5VS/+12VS

CLOCK

VR_ON

+1.2VPP

+CPU_CORE

VCCcore_POK

PM_POK/CPUPWRGD

PCIRST#

CPURST#

>10 ms

>1ms

110ms

10ms

10ms

7.5ms

1.6ms

1ms

3ms

1.3ms

12ms

1ms

1ms

A-TEST (2002-09-09)

Fine tune power on sequence

- 1.C425 change to 0.01U
- 2.Delete R364
- 3.R396 change to 4.7K_0402
- 4.Delete R194
- 5.Delete R351
- 6.Delete R87
- 7.Delete R359 , Q37 , R361 , Q40 , R364 , C428 , R363 , Q41
- 8.Delete U10
- 9.Add D31

Page04 =To solve 4 sec shutdown restart issue : Delete Q3

Page03 = JP1 change to 3 pin connector(No PWM)

Page11 : EMI solution

- 1.Add U35 , L36 , C432 , R414 , R415 , R416

Page12 : TV-OUT issue

1. R107 , R108 changeto 4.7K

Page06 = Base on Intel spec : Delete Q6 , Q7 , R59 , R61 , C21, R87

Page20 = Delete R248 , C327

Page21 = R258 , R261 change to 47K_0402
Add R422 , R423 47K_0402
Delete R256 , C338

Page22 : Add R424 8.2K_0402

Page25 : Delete R298 , C372

Page28 : Add R420 pull low

Page29 : Add R421 , Q58

Page15 : Add R425 PULL UP

Page16 : Add R426 pull up , R427 pull down

B-TEST (2002-10-10)

Page08 : FB1,2,4,5 change to 0_0805

Page11 : R111 change to 1K_0402

Page12 : Del L36,C432,R414,R415,R416,U35,R148

Page16 : Add R428,R429 for FDD_DET#

Page23 : Add R195,C235
Del R273,R275
Add R281,C353

Page29 : Del R382,3,4,5,6,7. L30,31,32
Add RP129,130,131

Page30 : C420 change to 1UF_0805

B2-TEST (2002-12-26)

Page27 : Change RP125 to 10K

Page29 : Delete Q57, Q58 , R421 , R388 , R391

MP (2003-07-28)

Page11 : Change R107,R108 from 1K_0402 to 1.2K_0402

MP (2004-06-15)

Page11 : Change R111 from 1K_0402 to 33_0402

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

Compal Electronics, Inc.			
Title			
SCHEMATIC M/B LA-1571			
Size	Document Number		Rev
B	401238		3B
Date:	星期一, 六月 21, 2004	Sheet	38 of 38