

Compal Confidential

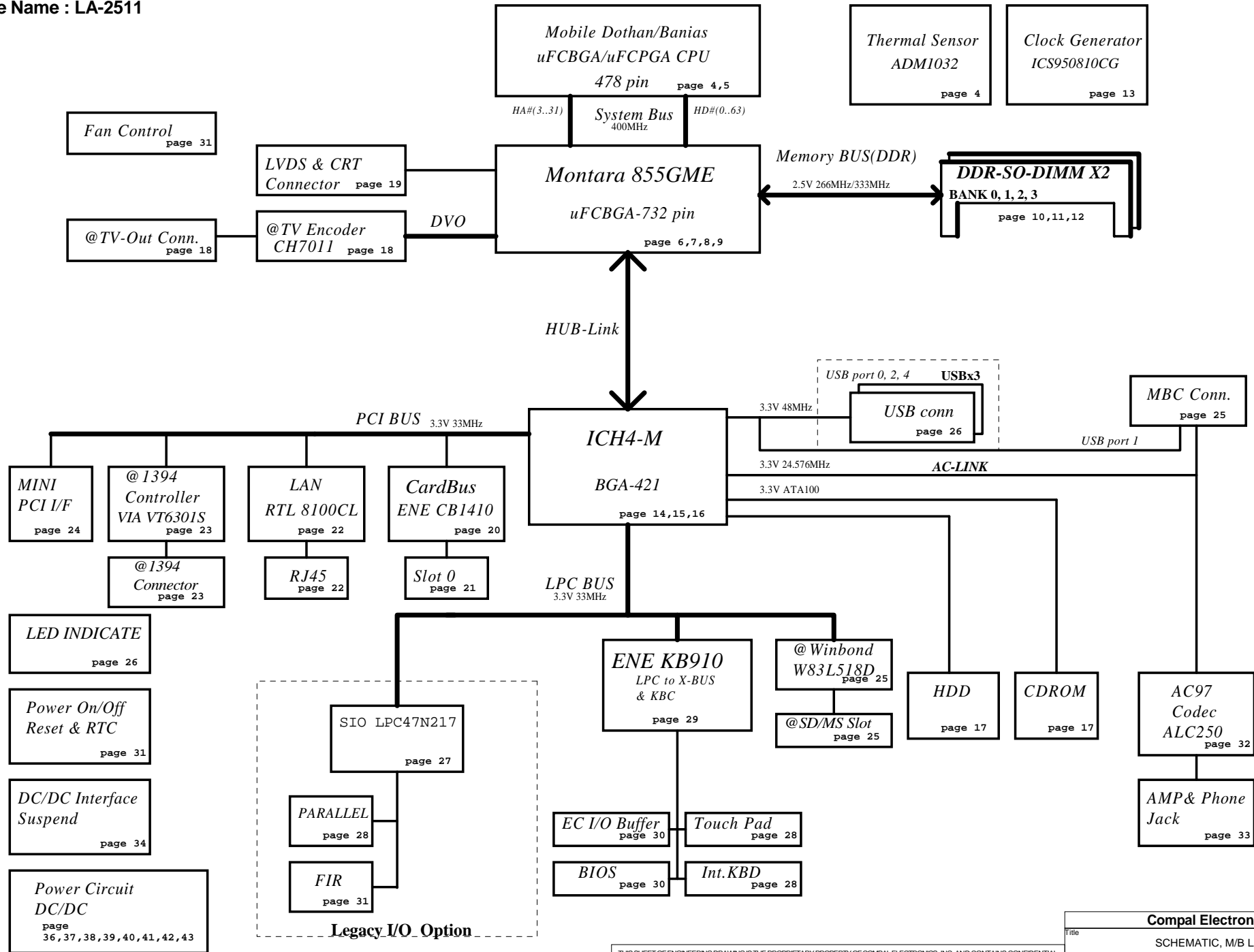
Schematics Document

**Dothan/ Banias uFCBGA/uFCPGA
Package
with Montara-GME Core Logic
REV: 0.1**

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-2511		
Size	Document Number	Rev
	401313	B
Date:	~P期二, 十月 19, 2004	Sheet 1 of 45

File Name : LA-2511



Compal Electronics, Inc.		
Title SCHEMATIC, M/B LA-2511		
Size	Document Number	Rev
	401313	B
Date:	星期二, 十月 19, 2004	Sheet 2 of 45

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	Description	S0-S1	S3	S5
VIN	Adapter power supply (19V)	N/A	N/A	N/A
B+	AC or battery power rail for power circuit.	N/A	N/A	N/A
+CPU_CORE	Core voltage for CPU	ON	OFF	OFF
+VCCP	1.05V rail for Processor I/O	ON	OFF	OFF
+1.2VS	1.2VS switched power rail for GMCH	ON	OFF	OFF
+1.25VS	1.25V switched power rail	ON	OFF	OFF
+1.5VALW	1.5V power rail	ON	ON	ON
+1.5V	1.5V power rail	ON	ON	OFF
+1.5VS	1.5V power rail for GMCH	ON	OFF	OFF
+1.8VS	1.8V switched power rail	ON	OFF	OFF
+2.5V	2.5V power rail	ON	ON	OFF
+2.5VS	2.5V switched power rail	ON	OFF	OFF
+3VALW	3.3V always on power rail	ON	ON	ON*
+3V	3.3V power rail	ON	ON	OFF
+3VS	3.3V switched power rail	ON	OFF	OFF
+5VALW	5V always on power rail	ON	ON	ON*
+5V	5V power rail	ON	ON	OFF
+5VS	5V switched power rail	ON	OFF	OFF
+12VALW	12V always on power rail	ON	ON	ON*
RTCVCC	RTC power	ON	ON	ON

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

Board ID Table for AD channel

Vcc	3.3V +/- 5%			
R368	100K +/- 5%			
Board ID	R361	VAD_BID min	VAD_BID typ	VAD_BID max
0	0	0 V	0 V	0 V
1	8.2K +/- 5%	0.216 V	0.250 V	0.289 V
2	18K +/- 5%	0.436 V	0.503 V	0.538 V
3	33K +/- 5%	0.712 V	0.819 V	0.875 V
4	56K +/- 5%	1.036 V	1.185 V	1.264 V
5	100K +/- 5%	1.453 V	1.650 V	1.759 V
6	200K +/- 5%	1.935 V	2.200 V	2.341 V
7	NC	2.500 V	3.300 V	3.300 V

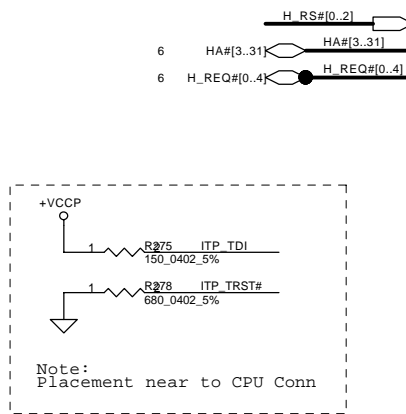
Board ID	PCB Revision
0	
1	0.1
2	0.2
3	1.0
4	
5	
6	
7	

External PCI Devices

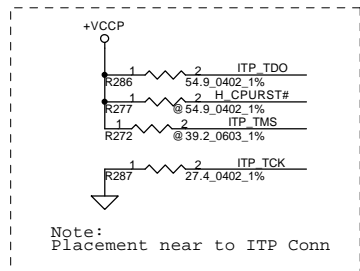
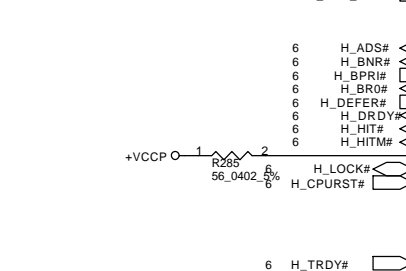
Device	IDSEL#	REQ#GNT#	Interrupts
CardBus	AD20	2	PIRQA
LAN	AD17	3	PIRQF
Mini-PCI	AD18/AD20	1/4	PIRQG/PIRQH
1394	AD16	0	PIRQE

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.

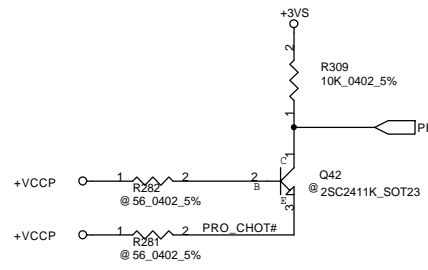
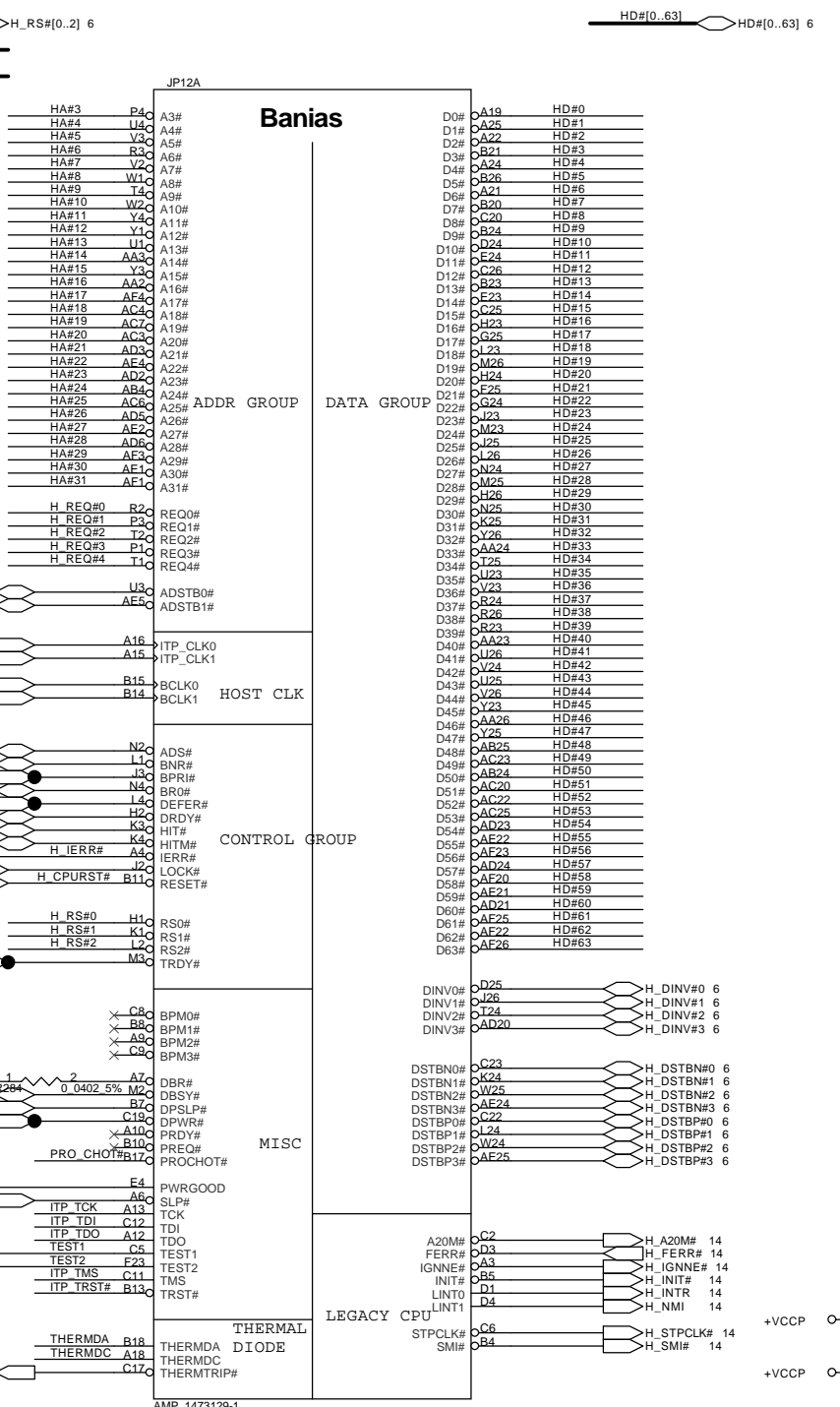
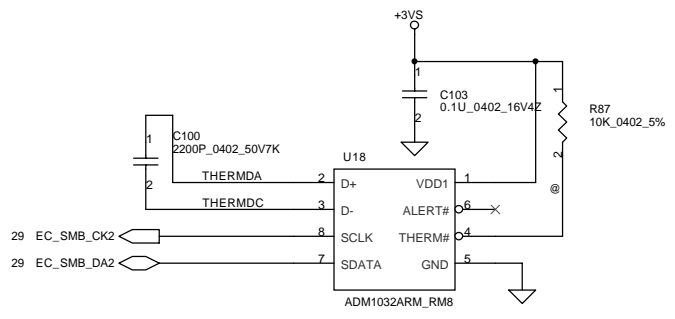
Compal Electronics, Inc.		
Title	SCHEMATIC, M/B LA-2511	
Size B	Document Number	Rev B
	401313	
Date:	~P期二, 十月 19, 2004	Sheet 3 of 45



Note:
Placement near to CPU Conn

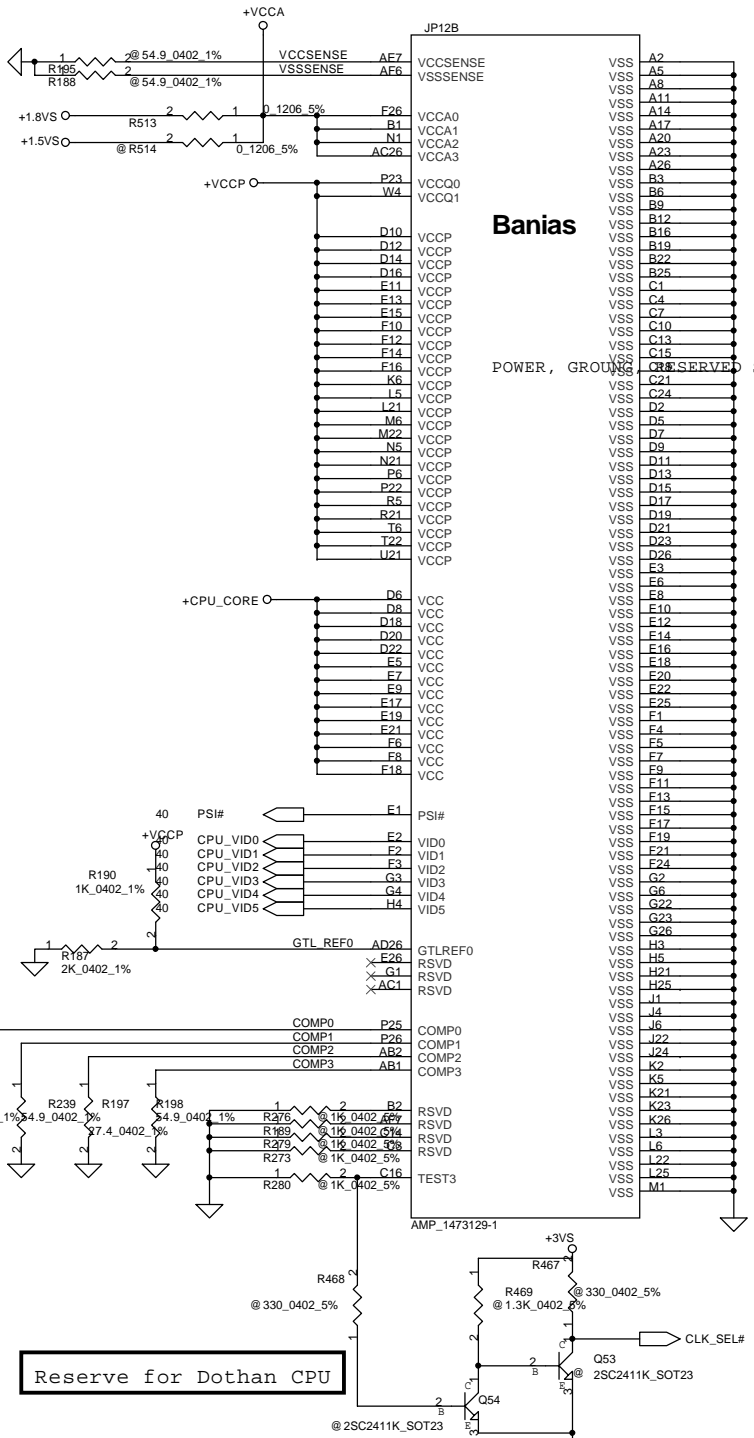


Note:
Placement near to ITP Conn



Compal Electronics, Inc.			
Title SCHEMATIC, M/B LA-2511			
Size A3	Document Number 401313	Rev B	
Date: ~P 周二, 十月 19, 2004	Sheet 4	of 45	

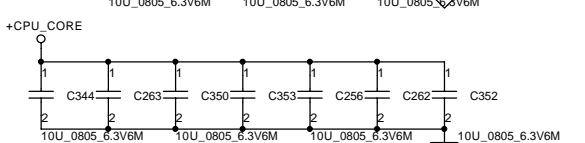
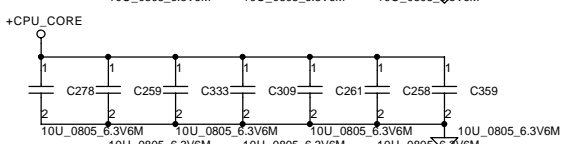
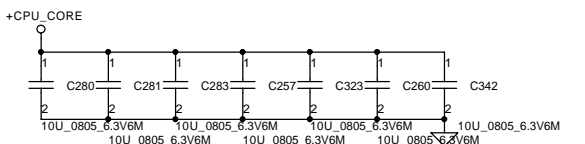
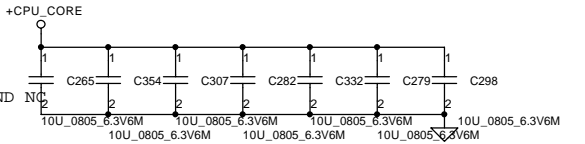
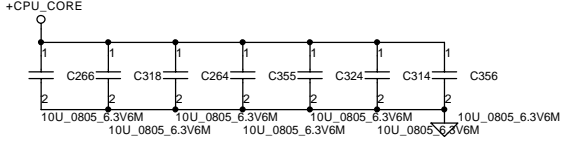
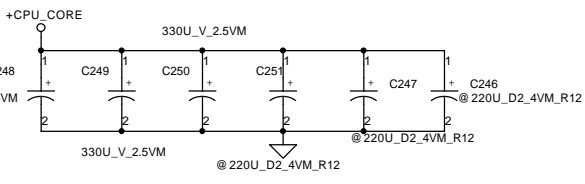
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPANET DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS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



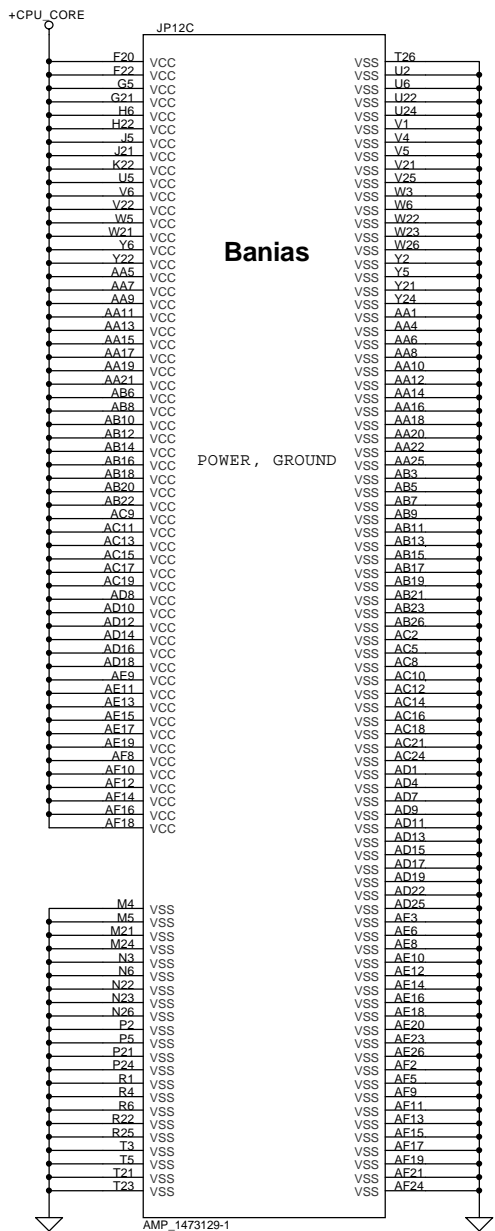
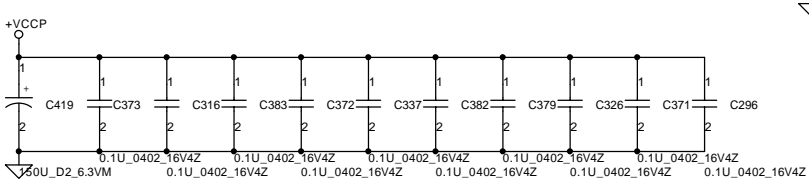
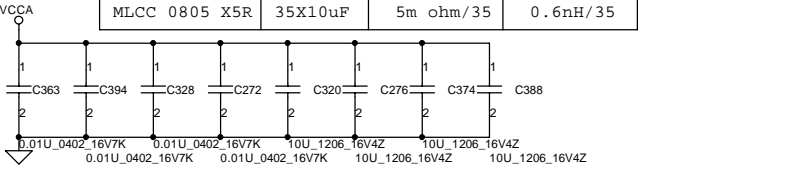
Reserve for Dothan CPU

Banias

POWER, GROUND RESERVED SIGNALS AND NC



Vcc-core Decoupling	C, uF	ESR, mohm	ESL, nH
SPCAP, Polymer	4X220uF	12m ohm/4	3.5nH/4
	3X330uF	9m ohm/3	
MLCC 0805 X5R	35X10uF	5m ohm/35	0.6nH/35



Banias

POWER, GROUND

Compal Electronics, Inc.

Title SCHEMATIC, M/B LA-2511

Size A3 Document Number 401313 Rev B

Date: -P期二 十月 19, 2004 Sheet 5 of 45

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.



Montara-GM(L)

HA#3	P23	HA#3
HA#4	T25	HA#4
HA#5	T28	HA#5
HA#6	R27	HA#6
HA#7	U23	HA#7
HA#8	U24	HA#8
HA#9	R24	HA#9
HA#10	U28	HA#10
HA#11	V28	HA#11
HA#12	U27	HA#12
HA#13	T27	HA#13
HA#14	V27	HA#14
HA#15	U25	HA#15
HA#16	V26	HA#16
HA#17	Y24	HA#17
HA#18	V25	HA#18
HA#19	V23	HA#19
HA#20	W23	HA#20
HA#21	Y25	HA#21
HA#22	AA27	HA#22
HA#23	W24	HA#23
HA#24	W23	HA#24
HA#25	W27	HA#25
HA#26	Y27	HA#26
HA#27	AA28	HA#27
HA#28	W28	HA#28
HA#29	AB27	HA#29
HA#30	Y26	HA#30
HA#31	AB28	HA#31

H_REQ#0	R28	HREQ#0
H_REQ#1	P25	HREQ#1
H_REQ#2	R23	HREQ#2
H_REQ#3	R25	HREQ#3
H_REQ#4	T23	HREQ#4
H_ADSTB#0	T26	HADSTB#0
H_ADSTB#1	AA28	HADSTB#1

AD29	BCLK#	BCLK#
AE29	BCLK	BCLK
K28	HYSWING	HYSWING
B18	HXSWING	HXSWING
H28	HYRCOMP	HYRCOMP
B20	HXRCOMP	HXRCOMP
K21	HVREF0	HVREF0
J21	HVREF1	HVREF1
J17	HVREF2	HVREF2
Y28	HCCVREF	HCCVREF
Y22	HAVREF	HAVREF

H_DSTBN#0	J28	HDSTBN#0
H_DSTBN#1	C27	HDSTBN#1
H_DSTBN#2	E22	HDSTBN#2
H_DSTBN#3	D18	HDSTBN#3
H_DSTBP#0	K27	HDSTBP#0
H_DSTBP#1	D26	HDSTBP#1
H_DSTBP#2	E21	HDSTBP#2
H_DSTBP#3	E18	HDSTBP#3
H_DINV#0	J25	DINV#0
H_DINV#1	E25	DINV#1
H_DINV#2	B25	DINV#2
H_DINV#3	G19	DINV#3
CPURST#	F15	CPURST#

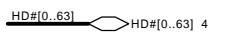
HUB_PD0	U17	HL_0
HUB_PD1	U4	HL_1
HUB_PD2	U3	HL_2
HUB_PD3	V3	HL_3
HUB_PD4	W2	HL_4
HUB_PD5	W6	HL_5
HUB_PD6	V6	HL_6
HUB_PD7	W7	HL_7
HUB_PD8	T3	HL_8
HUB_PD9	V5	HL_9
HUB_PD10	V4	HL_10
HI_PSTRB	W3	HLSTB
HI_PSTRB#	V2	HLSTB#
HUB_VSWING	T2	HLRCOMP
HUB_VREF	U2	PSWING
	W1	HLVREF

HOST

HUB I/F

27.4 Ohm For GM
37.4 Ohm For GM+

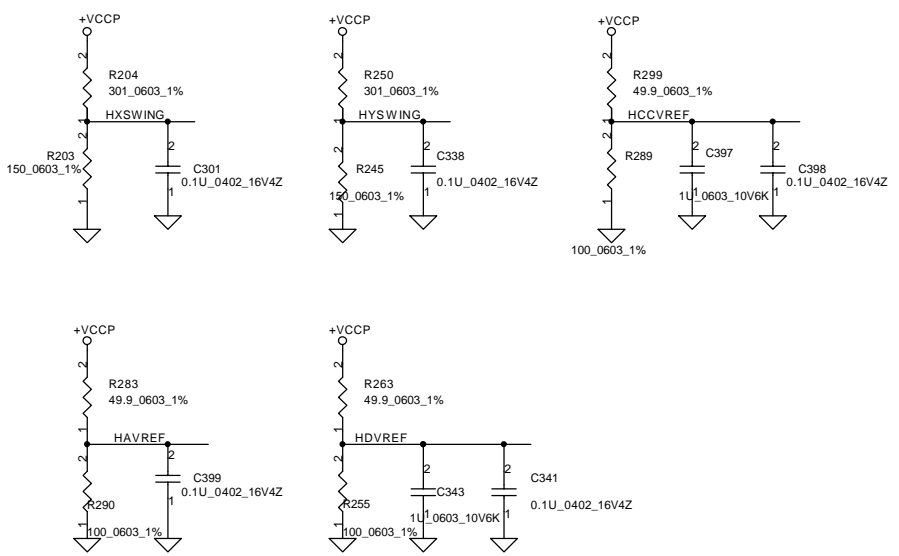
RG82G4350M_uFCBGA732



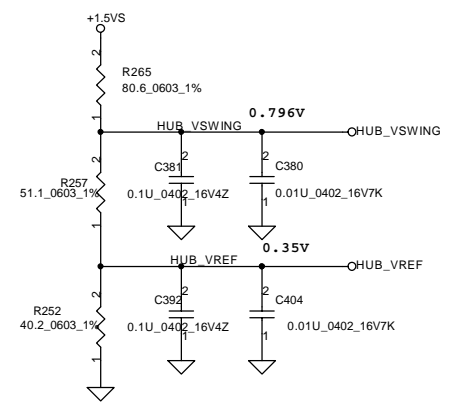
HD#0	K22	HD#0
HD#1	H27	HD#1
HD#2	K25	HD#2
HD#3	L24	HD#3
HD#4	L27	HD#4
HD#5	G28	HD#5
HD#6	L27	HD#6
HD#7	L23	HD#7
HD#8	L25	HD#8
HD#9	J24	HD#9
HD#10	J25	HD#10
HD#11	G23	HD#11
HD#12	G27	HD#12
HD#13	K26	HD#13
HD#14	J23	HD#14
HD#15	H26	HD#15
HD#16	E26	HD#16
HD#17	F26	HD#17
HD#18	B27	HD#18
HD#19	H23	HD#19
HD#20	E27	HD#20
HD#21	G25	HD#21
HD#22	E28	HD#22
HD#23	G27	HD#23
HD#24	G24	HD#24
HD#25	C28	HD#25
HD#26	B26	HD#26
HD#27	G22	HD#27
HD#28	C26	HD#28
HD#29	E26	HD#29
HD#30	G23	HD#30
HD#31	B21	HD#31
HD#32	HREQ#2	HD#32
HD#33	G21	HD#33
HD#34	C24	HD#34
HD#35	C23	HD#35
HD#36	G22	HD#36
HD#37	E24	HD#37
HD#38	D24	HD#38
HD#39	B22	HD#39
HD#40	G20	HD#40
HD#41	E23	HD#41
HD#42	B22	HD#42
HD#43	B23	HD#43
HD#44	C23	HD#44
HD#45	E21	HD#45
HD#46	C20	HD#46
HD#47	C21	HD#47
HD#48	G18	HD#48
HD#49	E19	HD#49
HD#50	E20	HD#50
HD#51	G17	HD#51
HD#52	D20	HD#52
HD#53	F19	HD#53
HD#54	C19	HD#54
HD#55	C17	HD#55
HD#56	E17	HD#56
HD#57	B19	HD#57
HD#58	G16	HD#58
HD#59	E16	HD#59
HD#60	C16	HD#60
HD#61	E17	HD#61
HD#62	D16	HD#62
HD#63	C18	HD#63

ADS#	L28	H_ADS#	4
HTRDY#	M25	H_TRDY#	4
DRDY#	M24	H_DRDY#	4
DEFER#	M28	H_DEFER#	4
HIT#	N28	H_HIT#	4
HIT#	N27	H_HIT#	4
HLOCK#	E27	H_LOCK#	4
BREQ#	M23	H_BR0#	4
BNR#	E25	H_BR0#	4
BPR#	E28	H_BNR#	4
DSSY#	M26	H_DSSY#	4
RS#0	N23	H_RS#0	4
RS#1	P26	H_RS#1	4
RS#2	M27	H_RS#2	4

HOST REF VOLTAGE



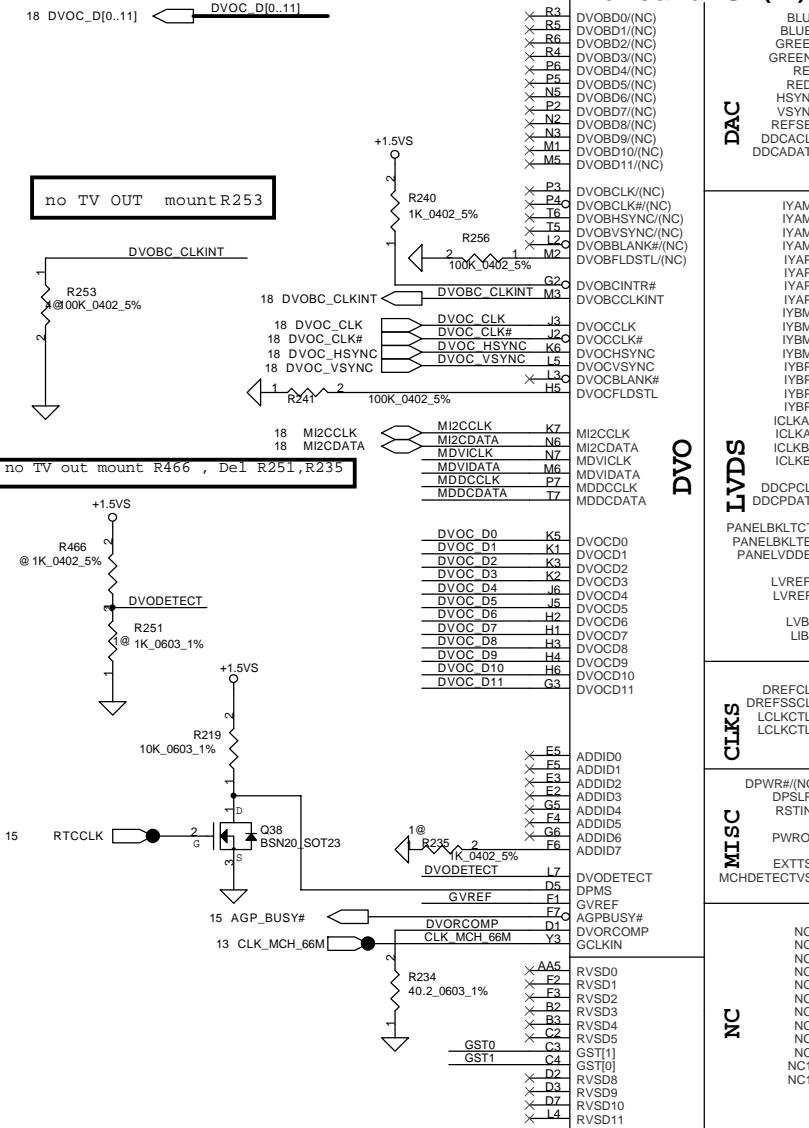
HUB I/F REF VOLTAGE



Compal Electronics, Inc.		
Title: SCHEMATIC, M/B LA-2511		
Size	Document Number	Rev
	401313	B
Date:	~P 星期二, 十月 19, 2004	Sheet 6 of 45

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.

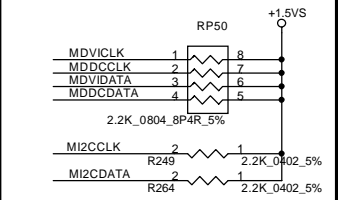
Montara-GM(L)



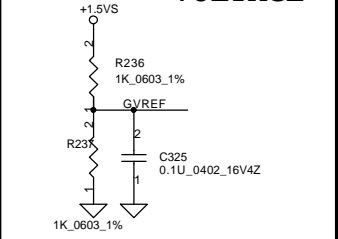
no TV OUT mount R253

no TV Out mount R466 , Del R251, R235

I2C BUS PULL UP



DVO REF VOLTAGE



Starp pin list

- LCLKCTLB: High for P4
- N.C. for Banias(default low)
- DVODETECT: Low to enable DVO
- High to disable DVO

GST0	GST1	PSB/Sys Mem/ GFX Core
0	0	400/266/200 (default)
0	1	400/200/200
1	0	400/200/133

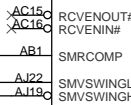
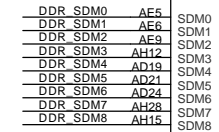
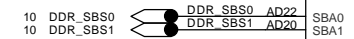
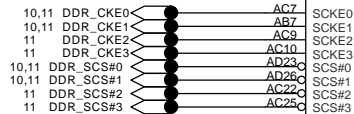
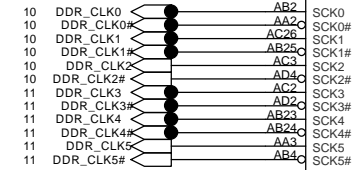
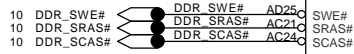
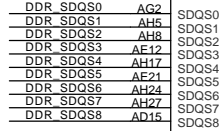
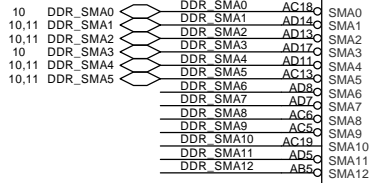
Compal Electronics, Inc.

Title: SCHEMATIC, M/B LA-2511
 Date: ~P 星期三, 十月 19, 2004 Sheet 7 of 45

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.

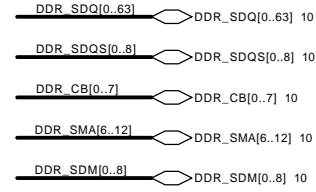
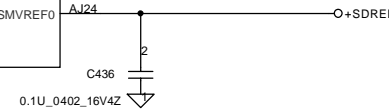
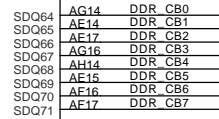
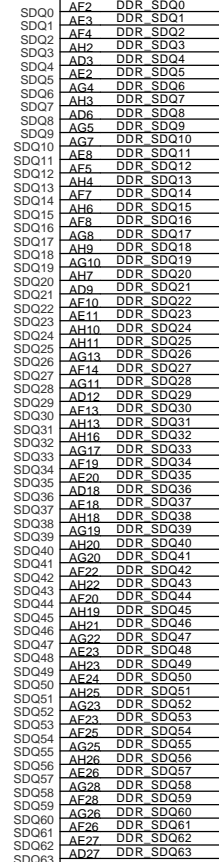
RG82G4350M_uFCBGA732

Montara-GM(L)

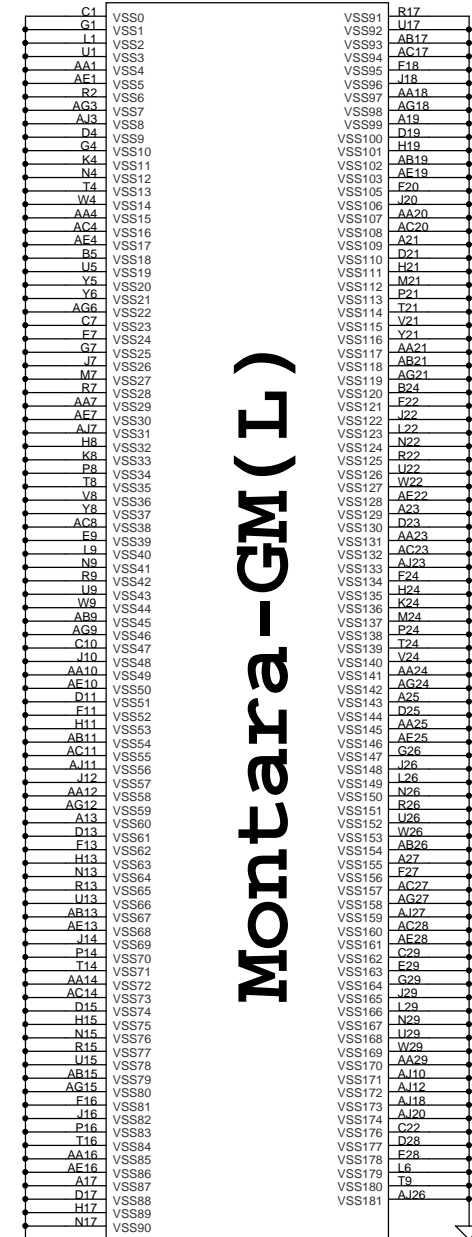
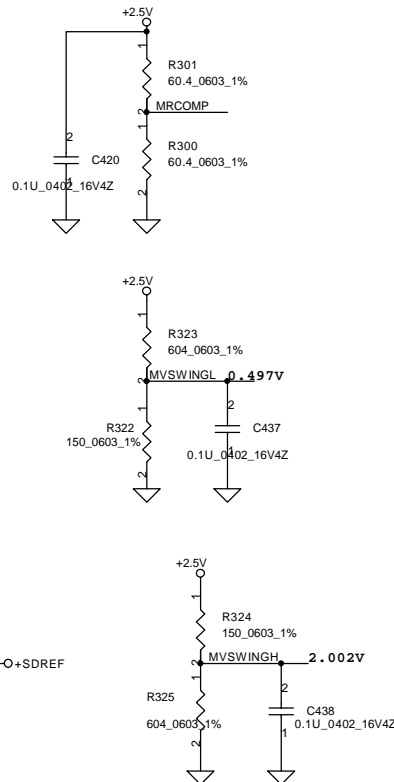


MEMORY

RG82G4350M_uFCBGA732



DDR REF & SWING VOLTAGE

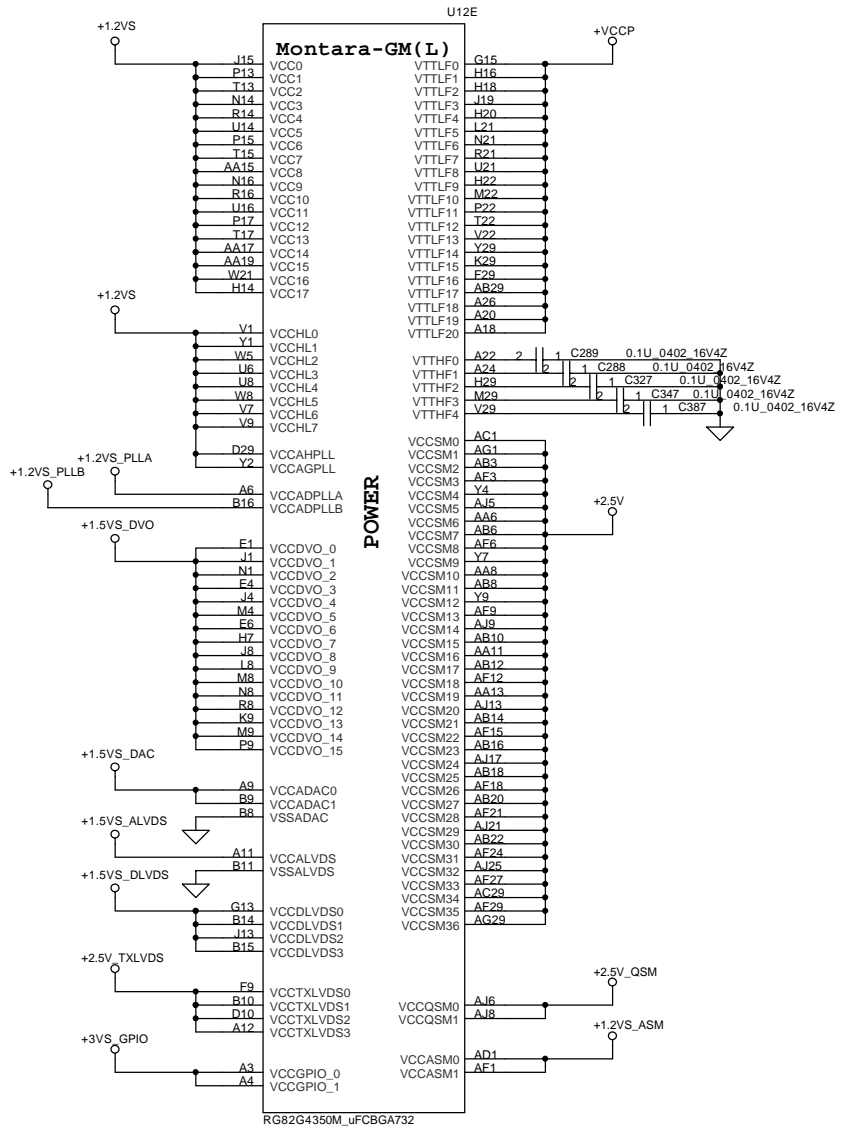


RG82G4350M_uFCBGA732

Montara-GM(L)

Compal Electronics, Inc.			
Title: SCHEMATIC, M/B LA-2511			
Size	Document Number	401313	Rev B
Date:	~P 星期二, 十月 19, 2004	Sheet 8	of 45

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.

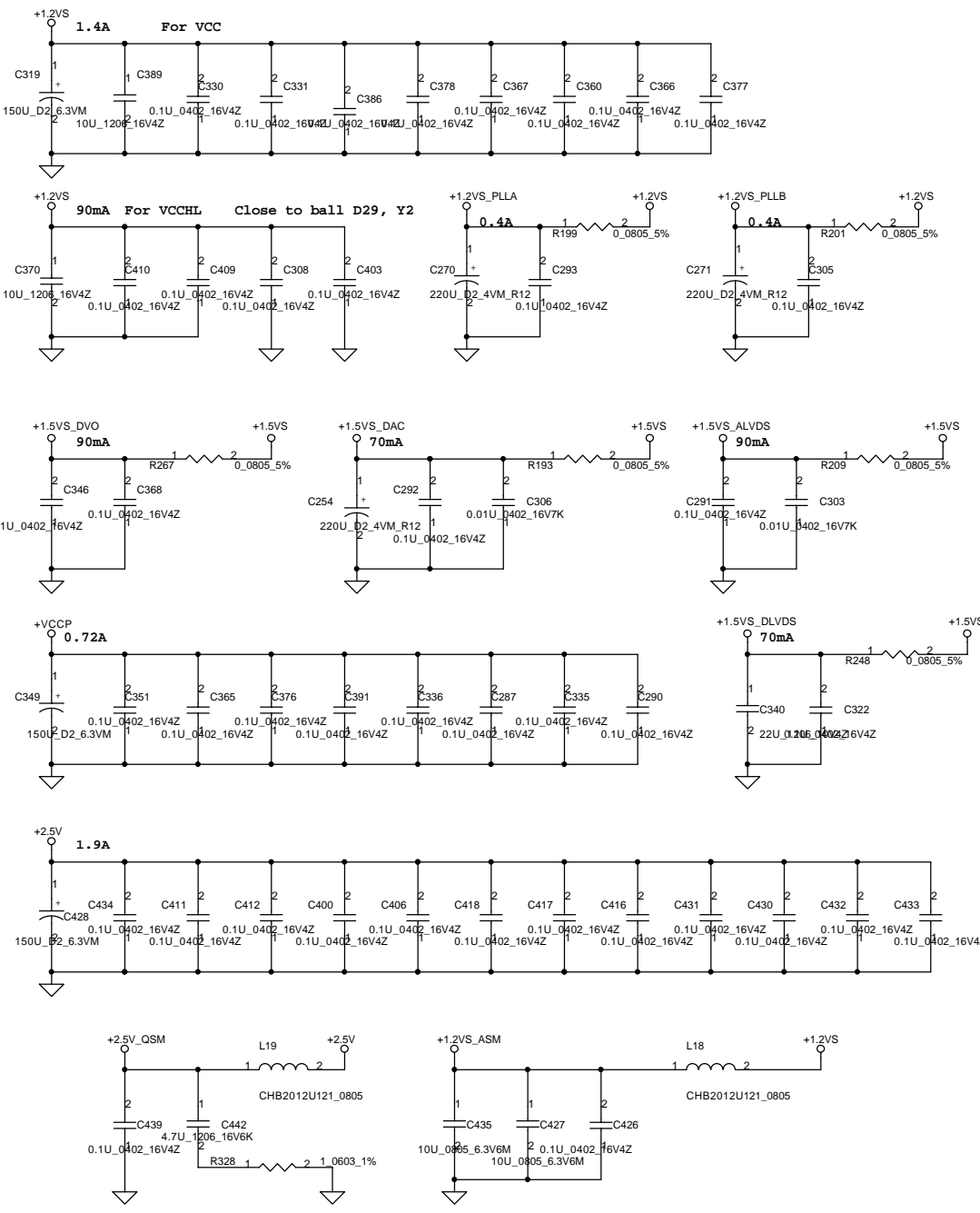


POWER

U12E

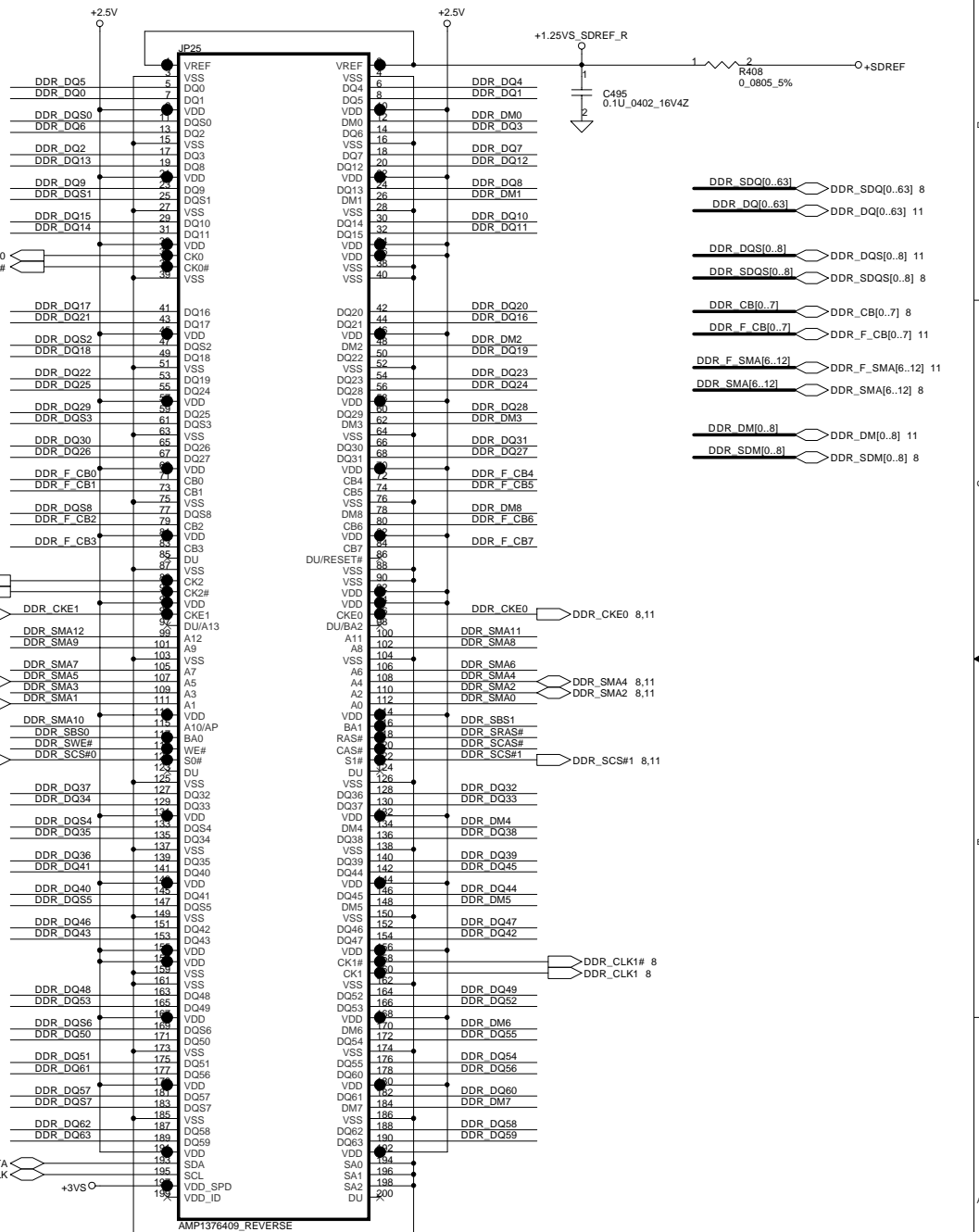
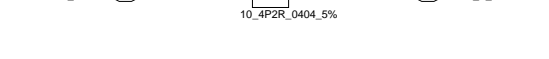
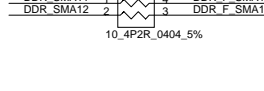
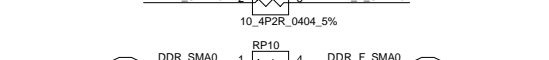
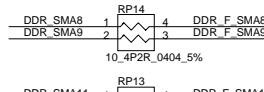
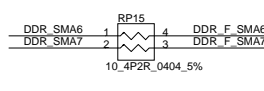
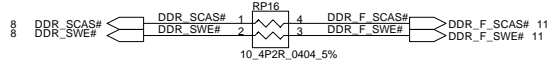
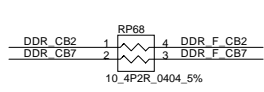
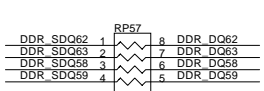
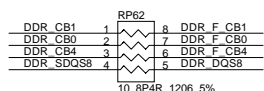
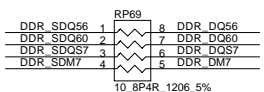
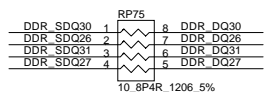
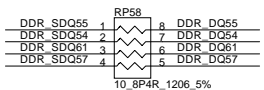
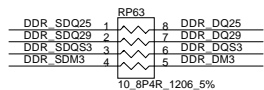
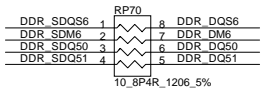
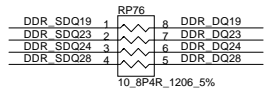
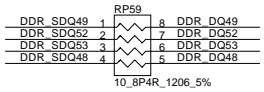
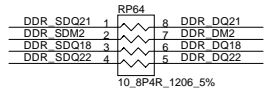
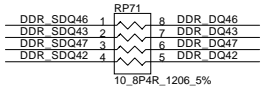
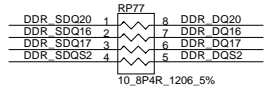
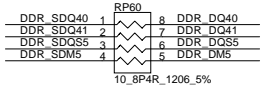
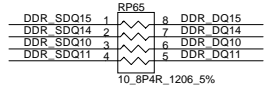
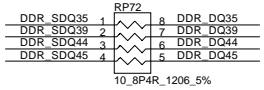
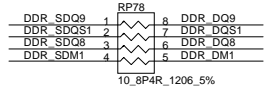
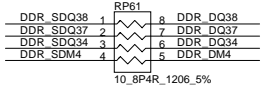
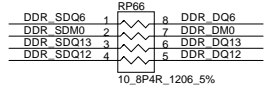
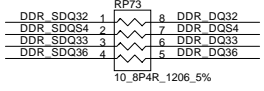
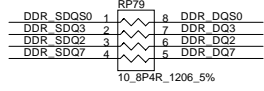
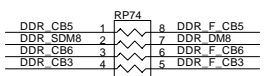
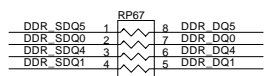
Montara-GM(L)

RG82G4350M_uFCBGA732



Compal Electronics, Inc.		
Title		
SCHEMATIC, M/B LA-2511		
Size	Document Number	Rev
	401313	B
Date:	~P 星期二, 十月 19, 2004	Sheet 9 of 45

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.



- DDR_SDQ[0..63] 8
- DDR_DQ[0..63] 11
- DDR_DQS[0..8] 11
- DDR_SDQS[0..8] 8
- DDR_CB[0..7] 8
- DDR_F_CB[0..7] 11
- DDR_F_SMA[6..12] 11
- DDR_SMA[6..12] 8
- DDR_DM[0..8] 11
- DDR_SDM[0..8] 8

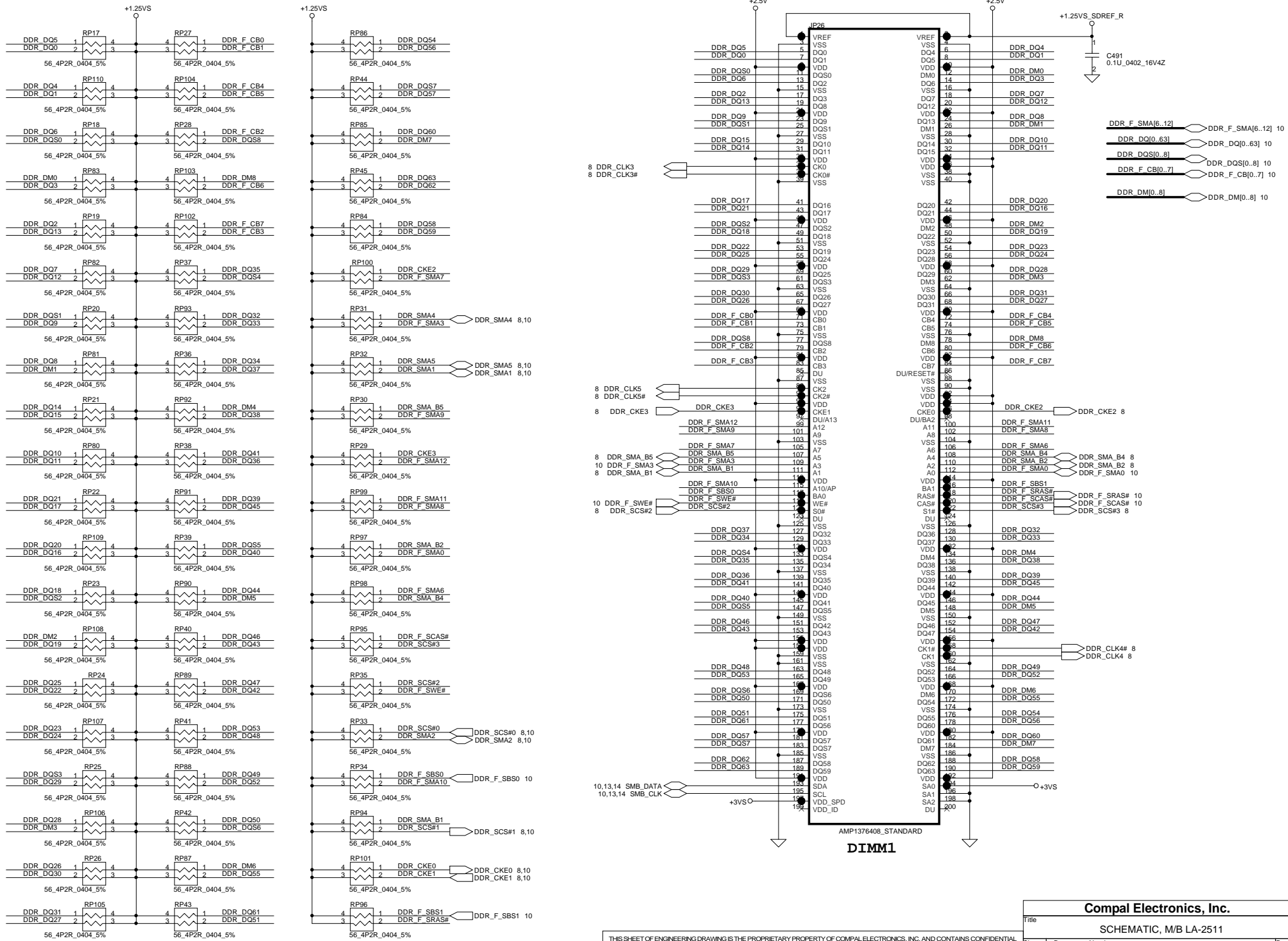
DIMMO

Compal Electronics, Inc.

SCHEMATIC, M/B LA-2511

THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION...

Title		SCHEMATIC, M/B LA-2511	
Size	Document Number	401313	
Date	日期	二月 19, 2004	Sheet 10 of 45



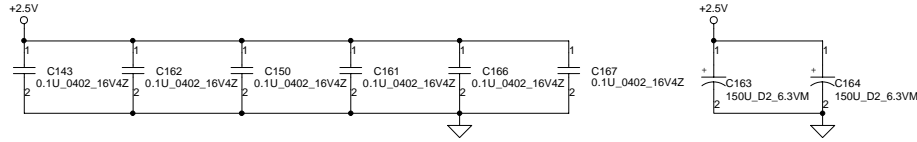
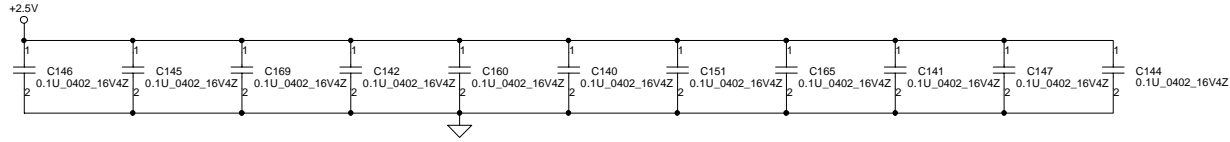
- DDR F SMA[6..12] ⇔ DDR_F_SMA[6..12] 10
- DDR DQ[0..63] ⇔ DDR_DQ[0..63] 10
- DDR DQS[0..8] ⇔ DDR_DQS[0..8] 10
- DDR F CB[0..7] ⇔ DDR_F_CB[0..7] 10
- DDR DM[0..8] ⇔ DDR_DM[0..8] 10

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.		
SCHEMATIC, M/B LA-2511		
File	Document Number	Rev
	401313	B
Date	星期二, 十月 19, 2004	Sheet 11 of 45

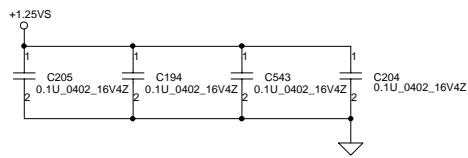
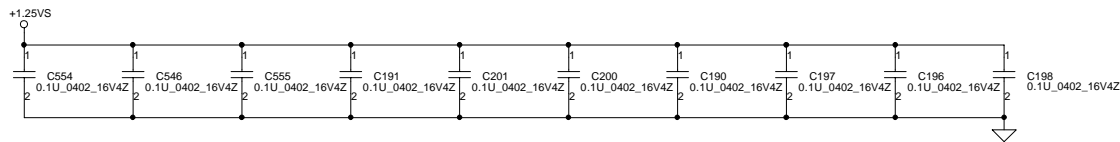
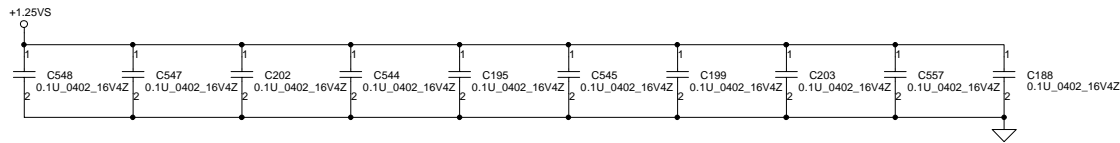
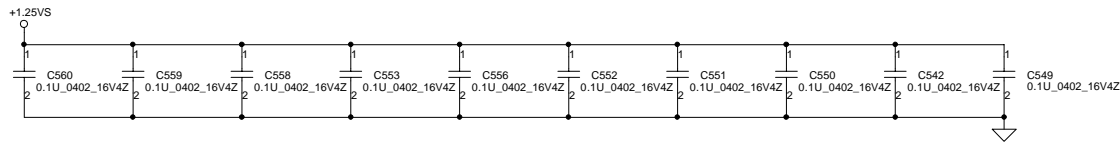
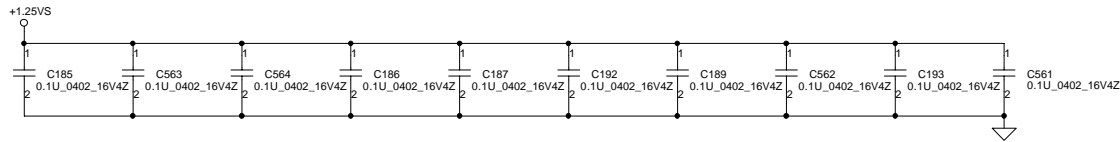
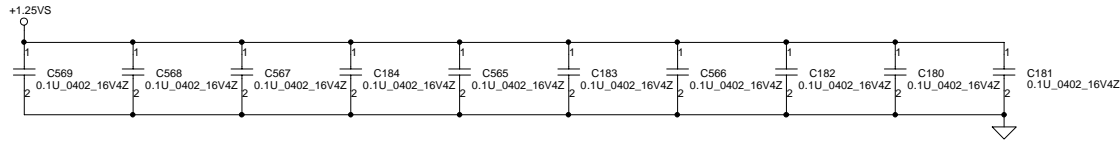
Layout note :

Distribute as close as possible to DDR-SODIMM.



Layout note :

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



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.

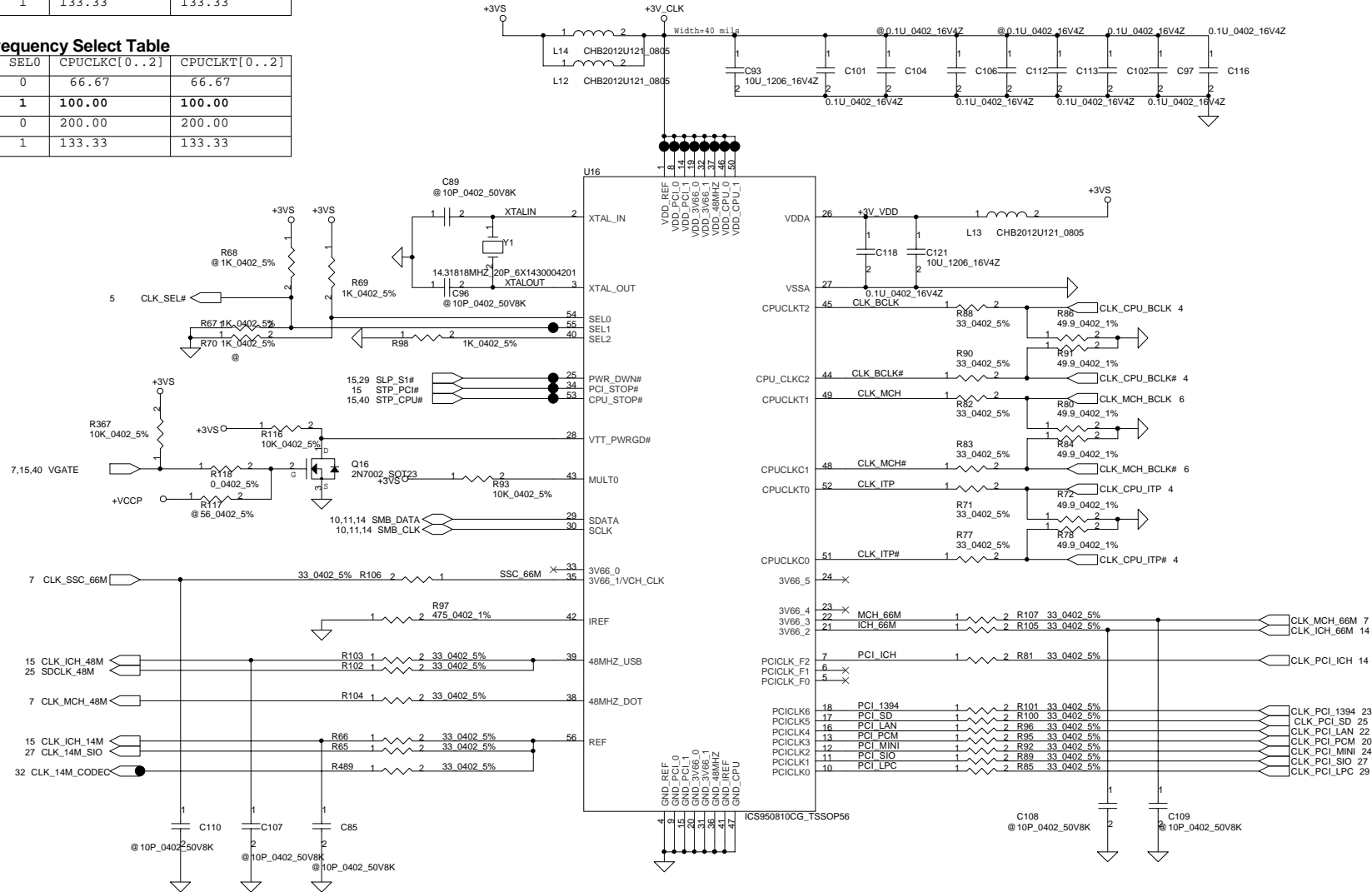
Compal Electronics, Inc.			
Title			
SCHEMATIC, M/B LA-2511			
Size	Document Number	Rev	
	401313	B	
Date:	星期三, 十月 19, 2004	Sheet	12 of 45

ICS950810 Frequency Select Table

SEL2	SEL1	SEL0	CPUCCLK[0..2]	CPUCCLKT[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

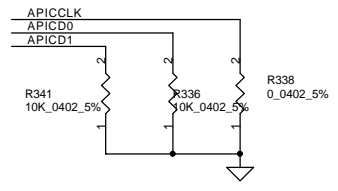
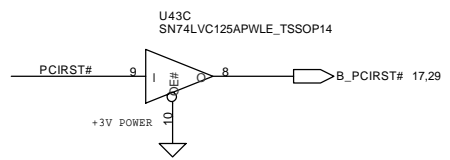
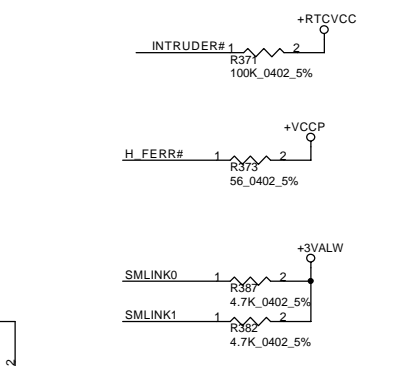
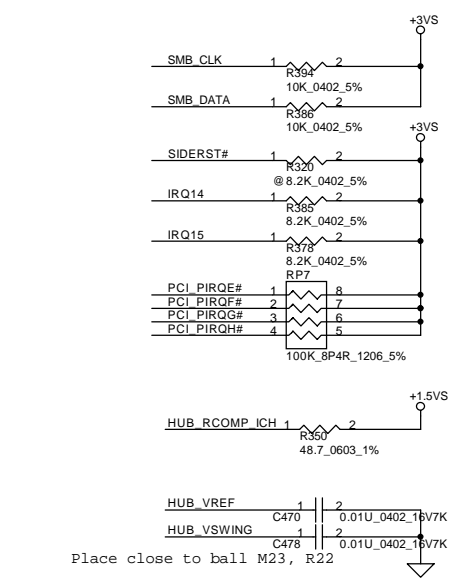
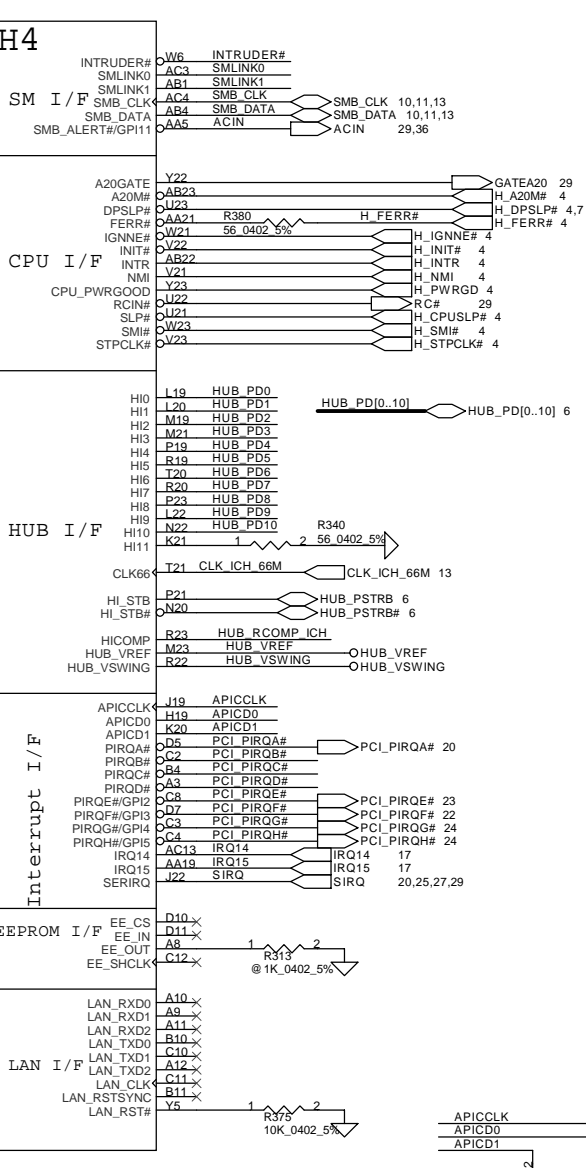
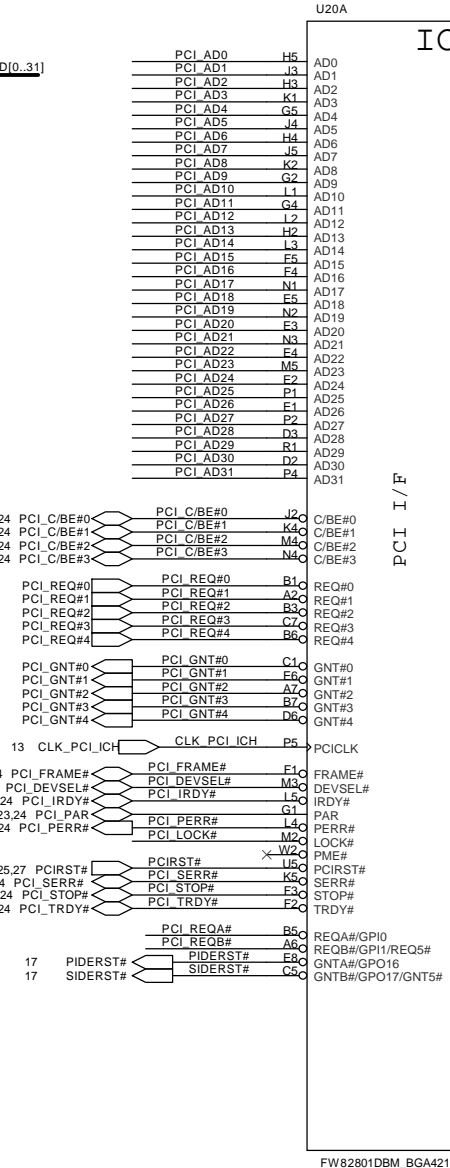
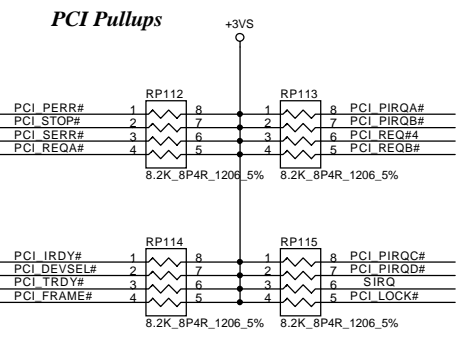
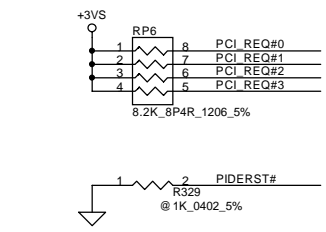
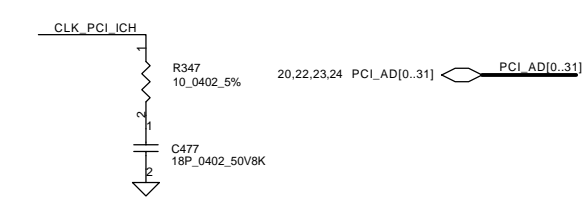
CY28346-2 Frequency Select Table

SEL2	SEL1	SEL0	CPUCCLK[0..2]	CPUCCLKT[0..2]
0	0	0	66.67	66.67
0	0	1	100.00	100.00
0	1	0	200.00	200.00
0	1	1	133.33	133.33



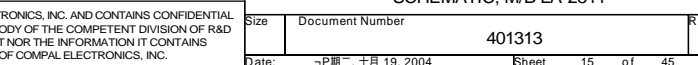
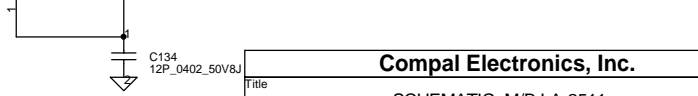
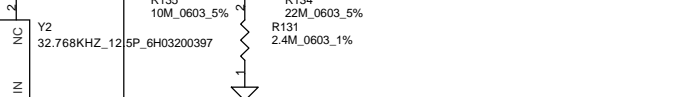
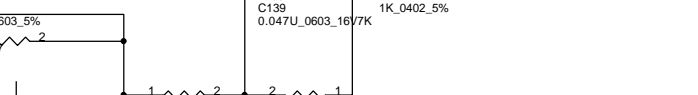
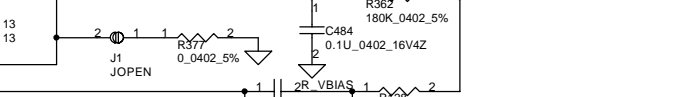
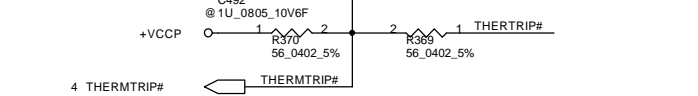
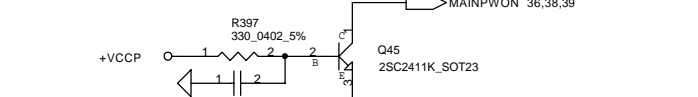
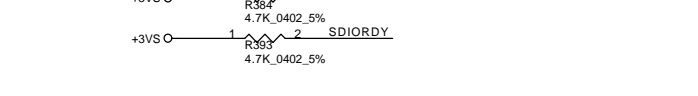
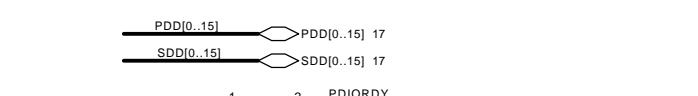
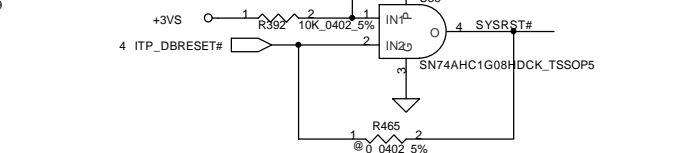
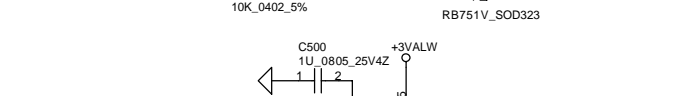
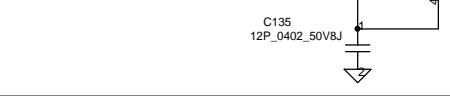
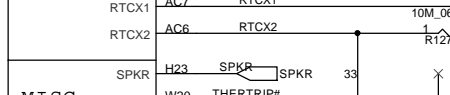
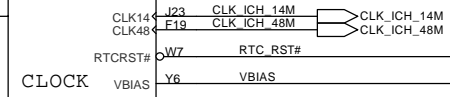
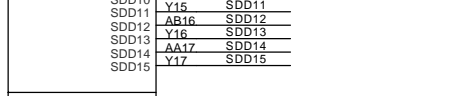
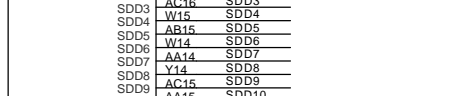
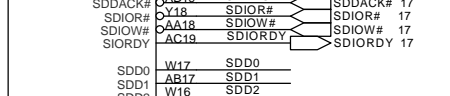
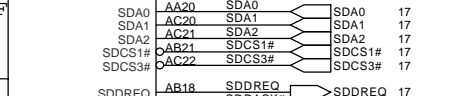
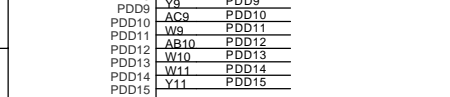
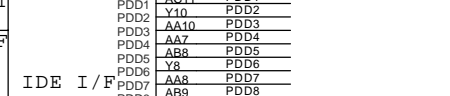
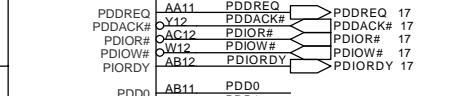
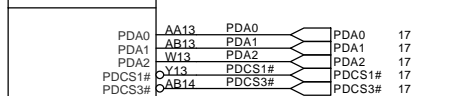
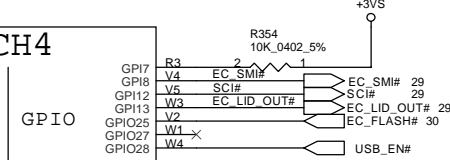
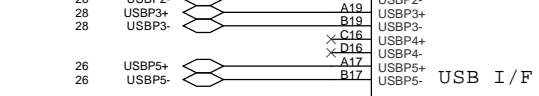
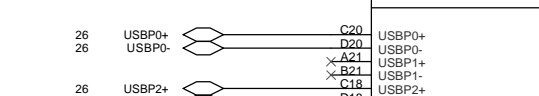
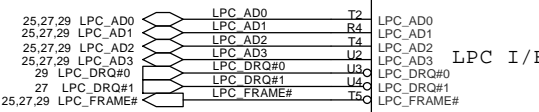
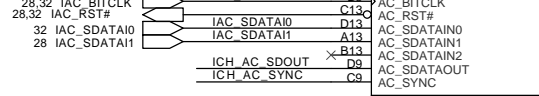
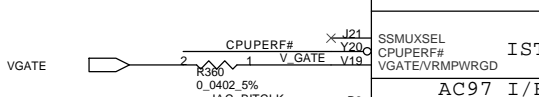
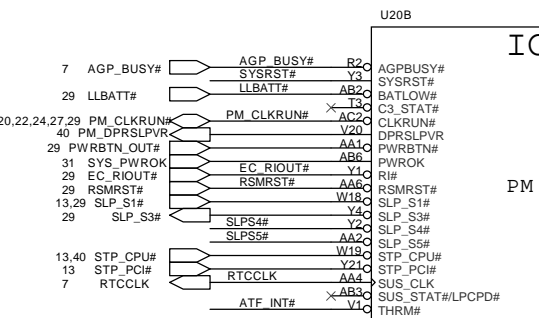
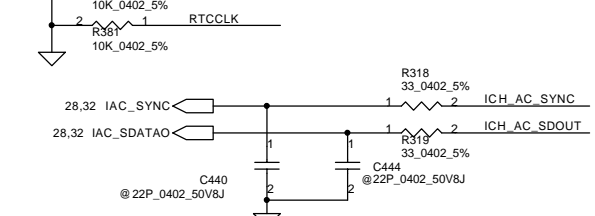
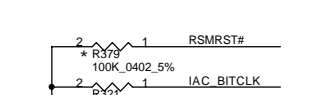
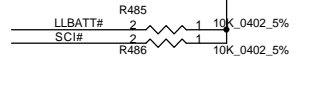
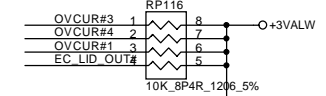
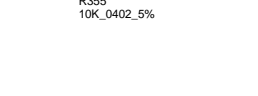
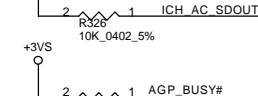
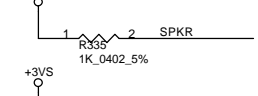
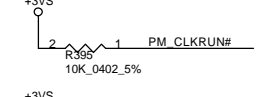
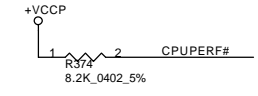
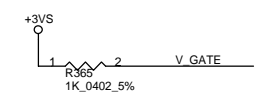
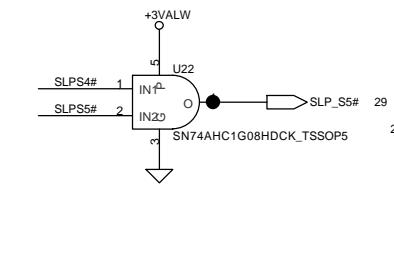
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS 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.		
SCHEMATIC, M/B LA-2511		
Size B	Document Number 401313	Rev B
Date: 星期二, 十月 19, 2004	Sheet 13	of 45



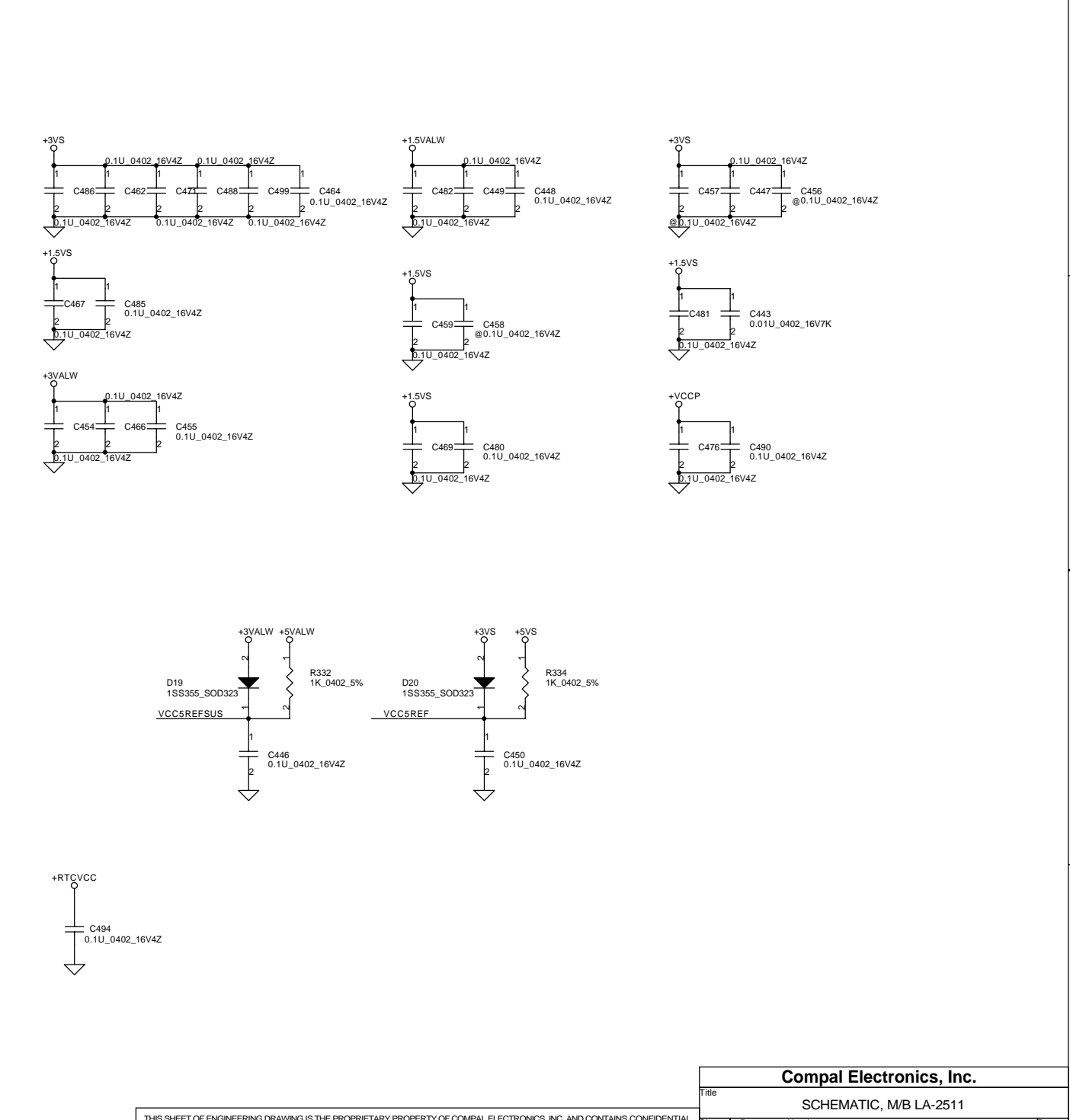
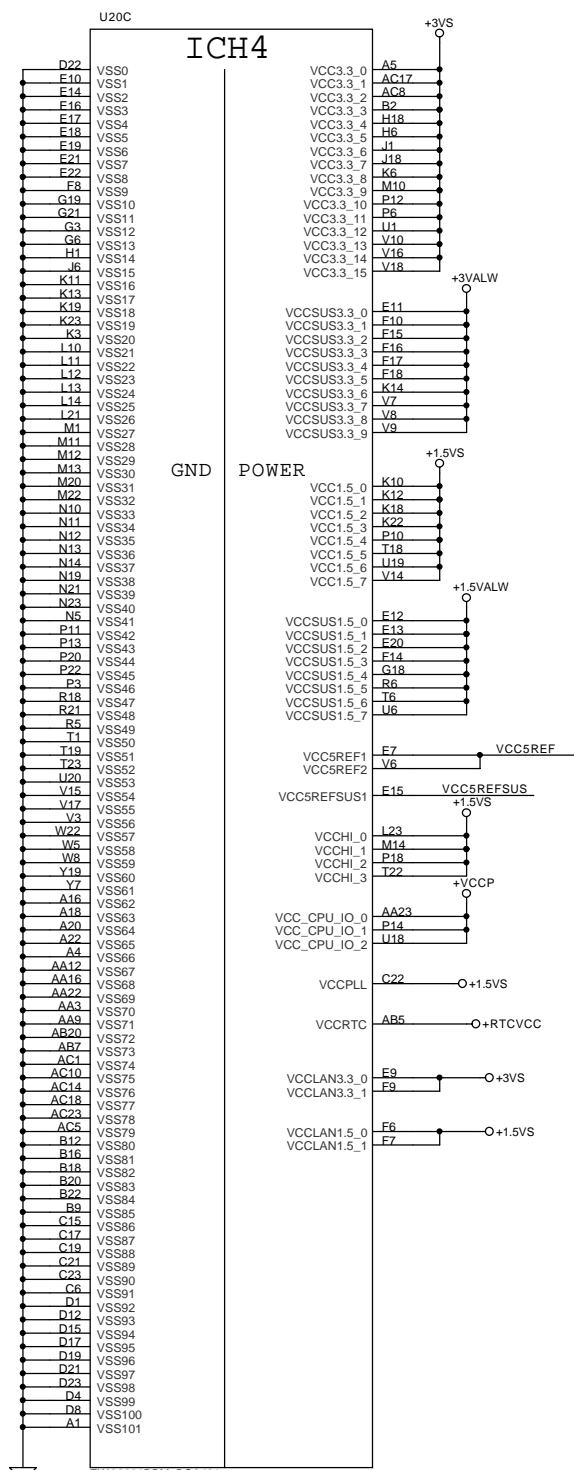
Compal Electronics, Inc.			
Title: SCHEMATIC, M/B LA-2511			
Size:	Document Number:	401313	Rev: B
Date:	~P期二, 十月 19, 2004	Sheet: 14	of 45

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.

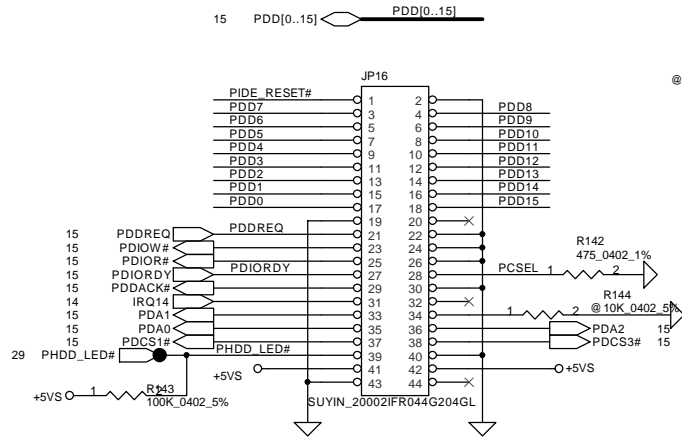
Compal Electronics, Inc.			
Title SCHEMATIC, M/B LA-2511			
Size	Document Number	Rev	
	401313	B	
Date:	~P 星期三, 十月 19, 2004		Sheet 15 of 45



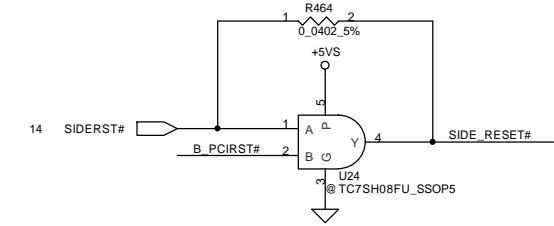
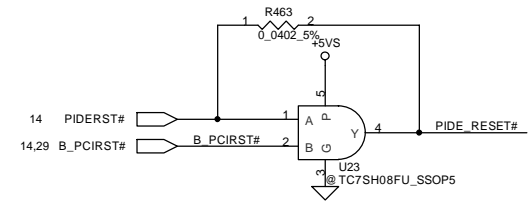
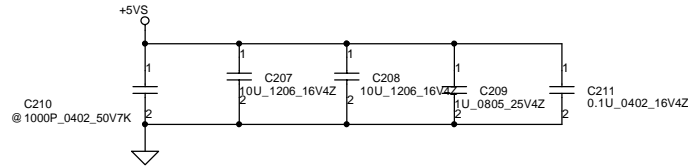
Compal Electronics, Inc.			
Title SCHEMATIC, M/B LA-2511			
Size	Document Number	401313	
		Rev B	
Date:	~P 星期二, 十月 19, 2004	Sheet	16 of 45

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.

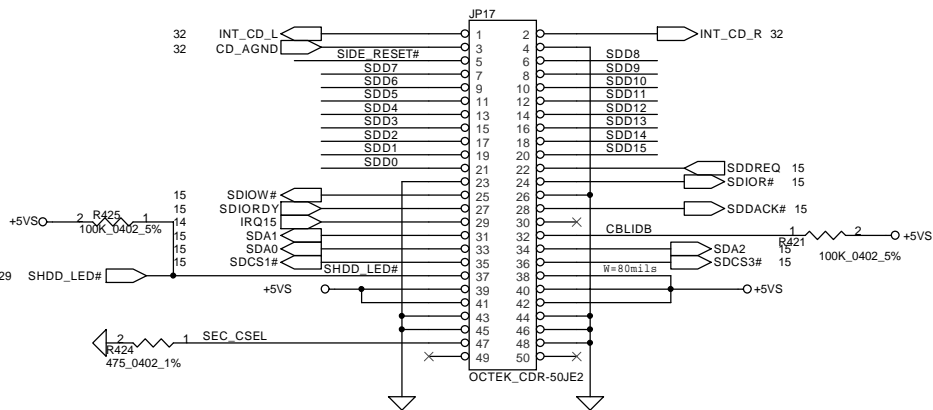
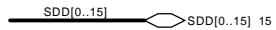
HDD Connector



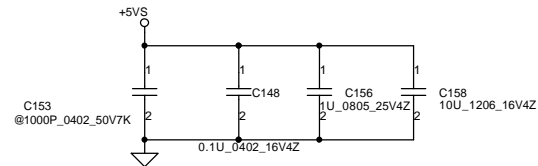
Place caps. near HDD
CONN.



CD-ROM Connector



Place caps. near CDROM
CONN.



Compal Electronics, Inc.

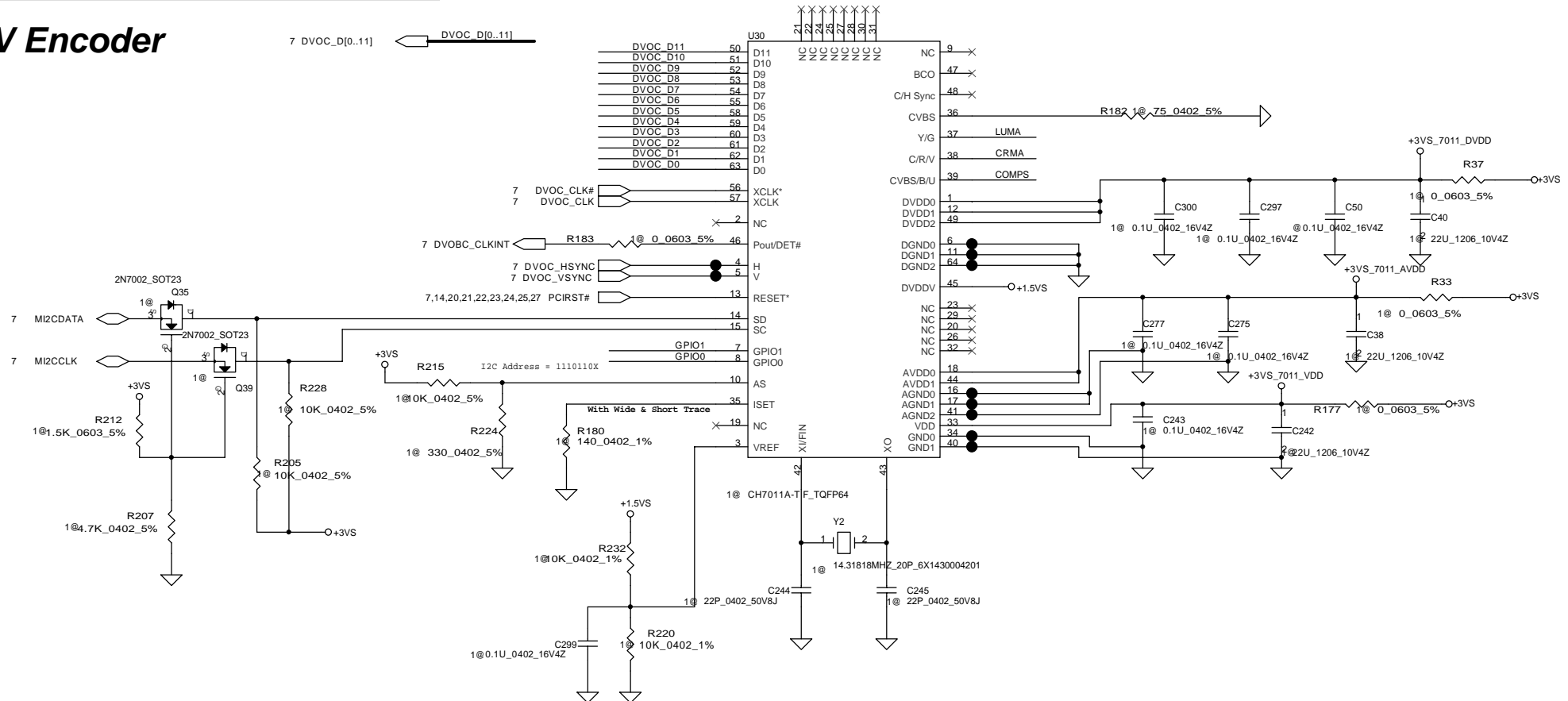
Title			SCHEMATIC, M/B LA-2511		
Size	Document Number				Rev
	401313				B
Date:	~P期二, 十月 19, 2004		Sheet	17	of 45

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.

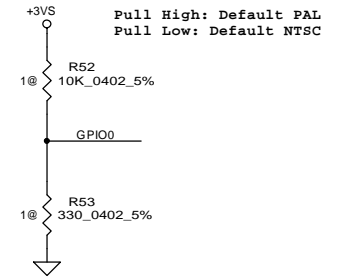
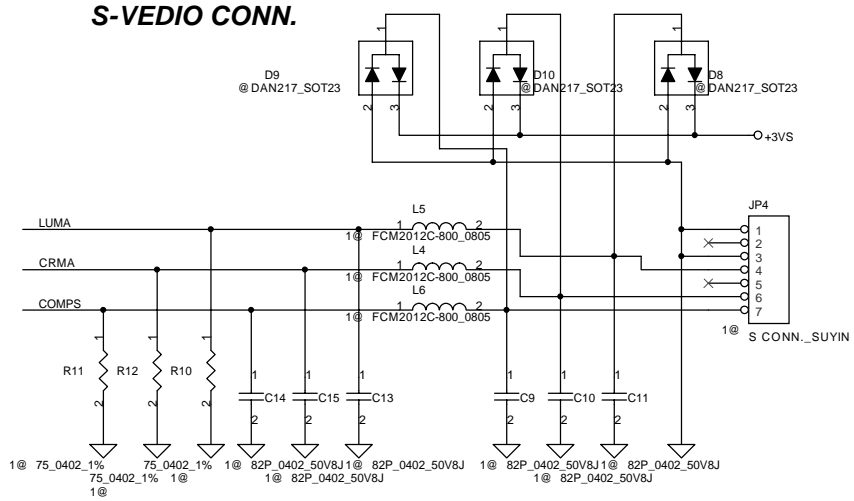
For ABO without TV_out:all this page component unmount

TV Encoder

7 DVOC_D[0..11] ← DVOC_D[0..11]



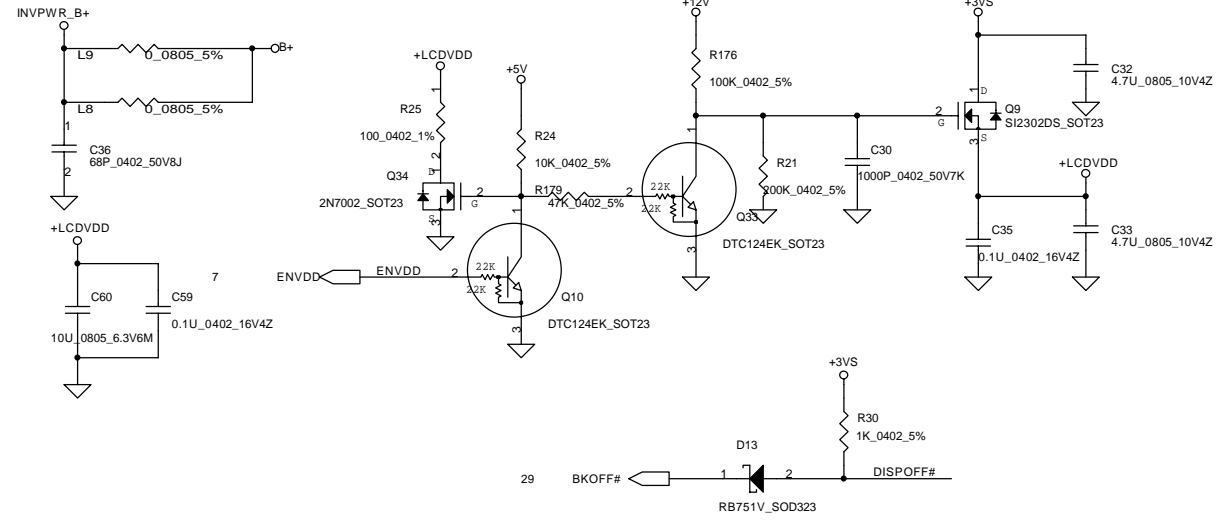
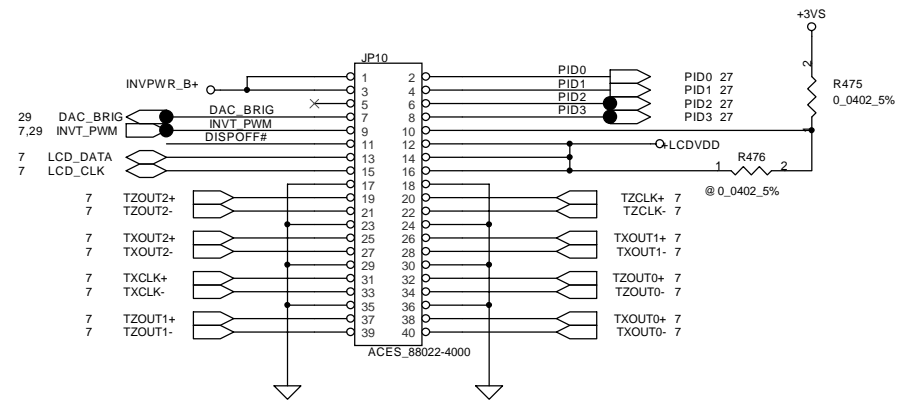
S-VIDEO CONN.



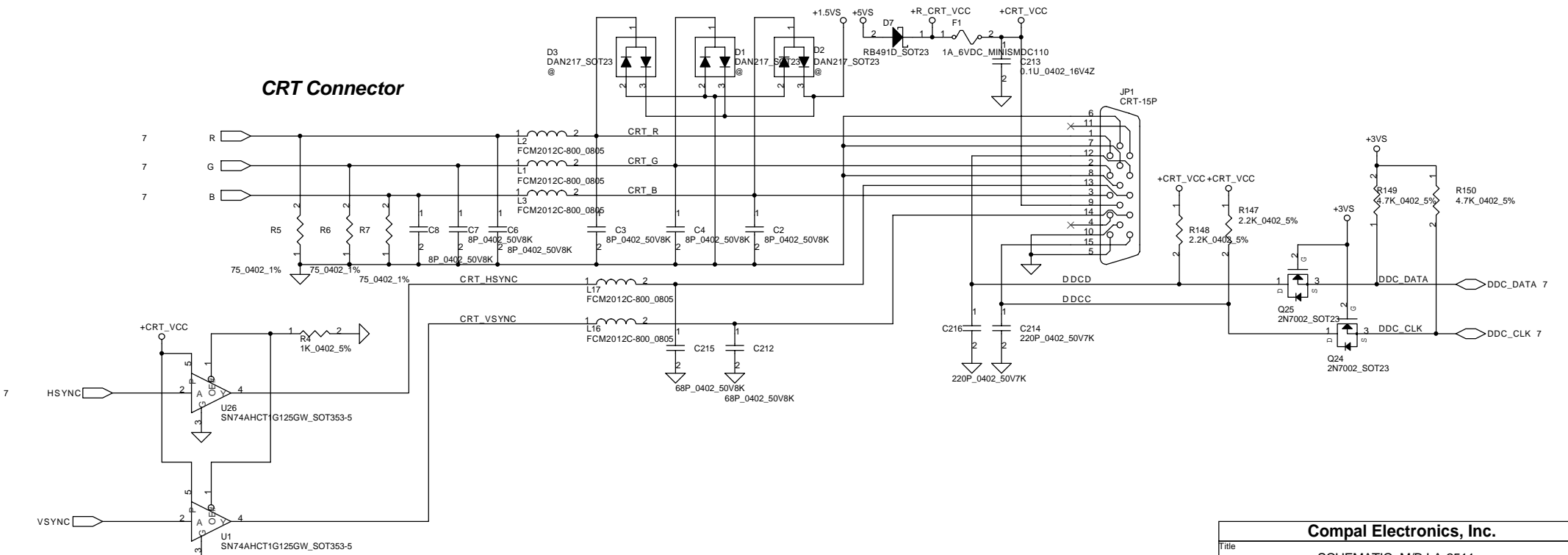
Compal Electronics, Inc.	
Title SCHEMATIC, M/B LA-2511	
Size	Document Number 401313
Date	Rev B
Date: ~P 星期二, 十月 19, 2004 Sheet 18 of 45	

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.

LVDS Connector

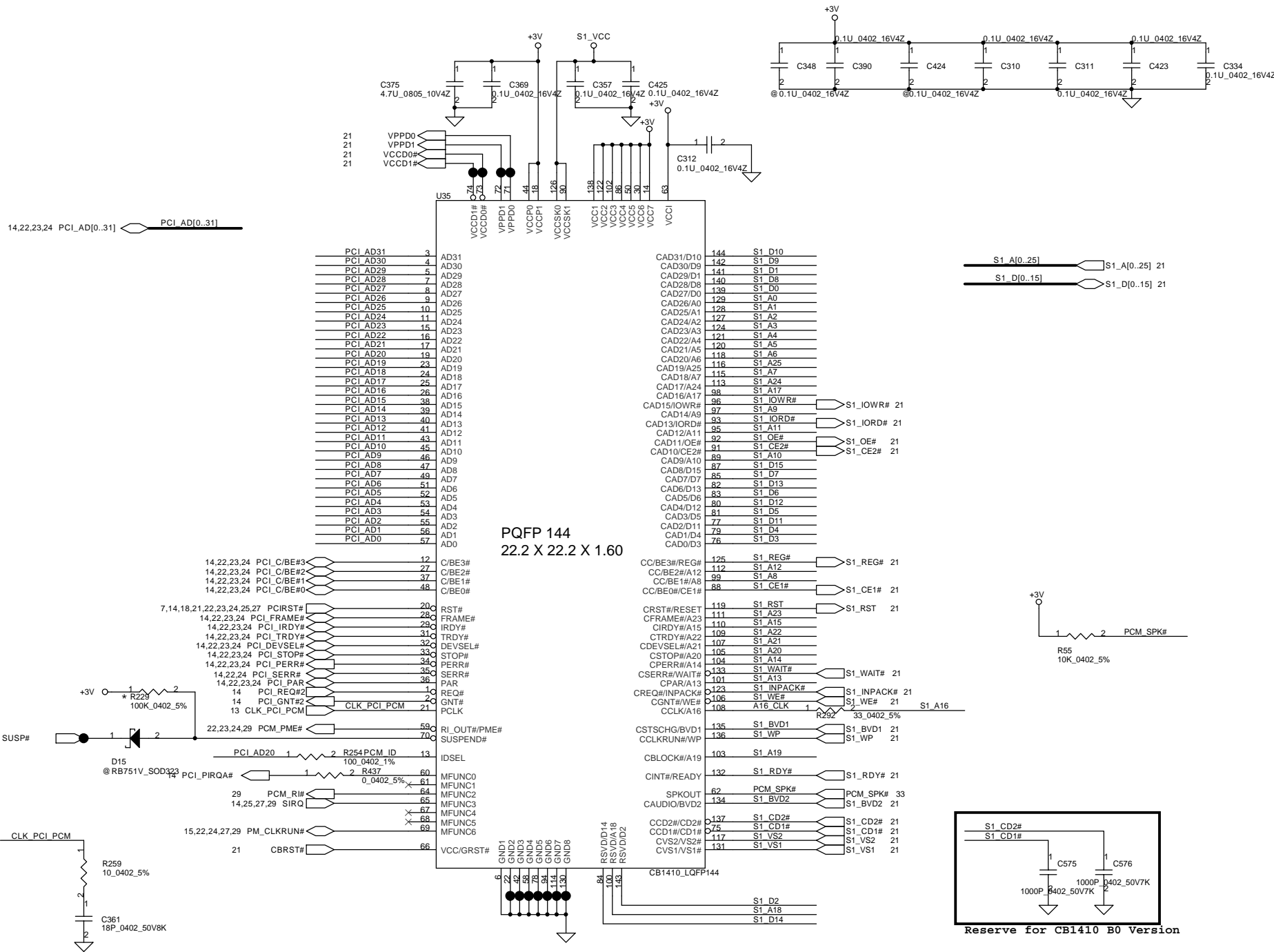


CRT Connector

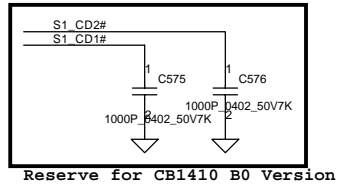


THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS 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.		
Title: SCHEMATIC, M/B LA-2511		
Size	Document Number	Rev
	401313	B
Date:	~P 星期二, 十月 19, 2004	Sheet 19 of 45



PQFP 144
22.2 X 22.2 X 1.60

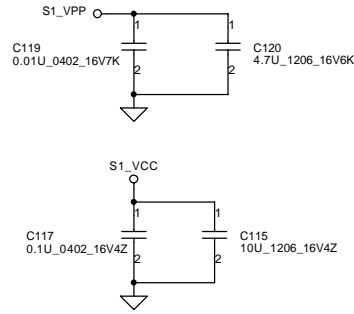
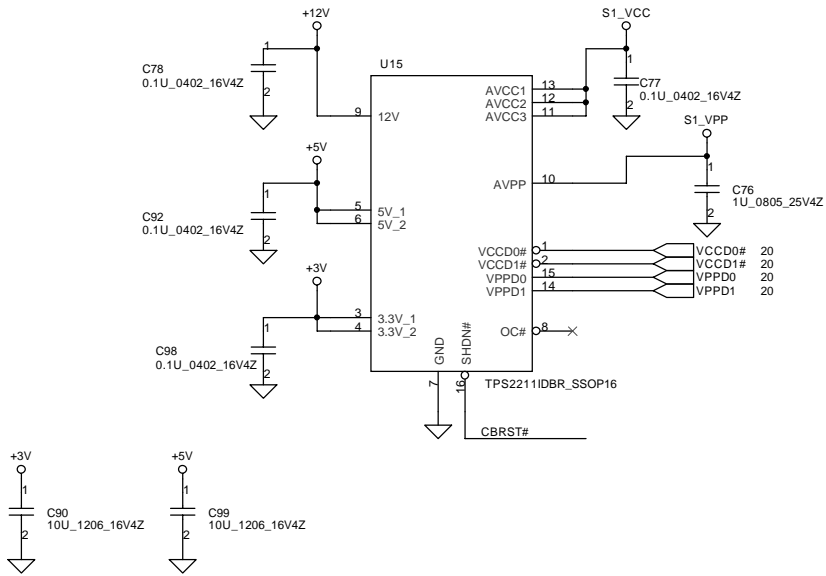


Reserve for CB1410 B0 Version

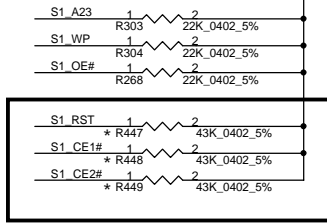
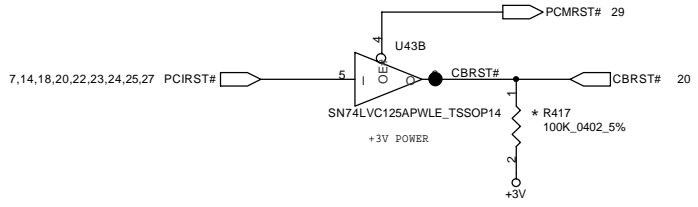
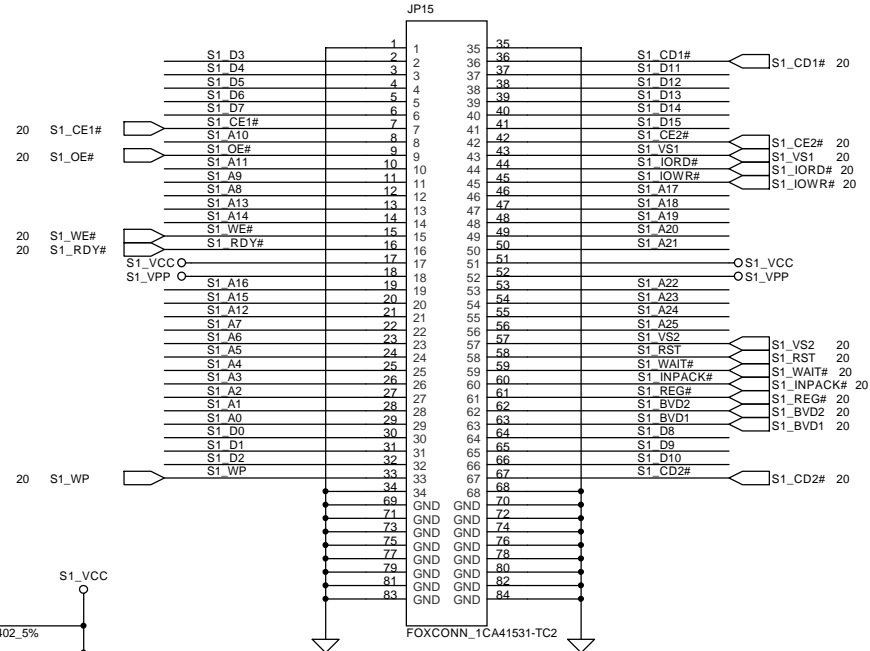
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS 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-2511		
Size	Document Number 401313	Rev B
Date:	~P 星期二, 十月 19, 2004	Sheet 20 of 45

PCMCIA Power Controller



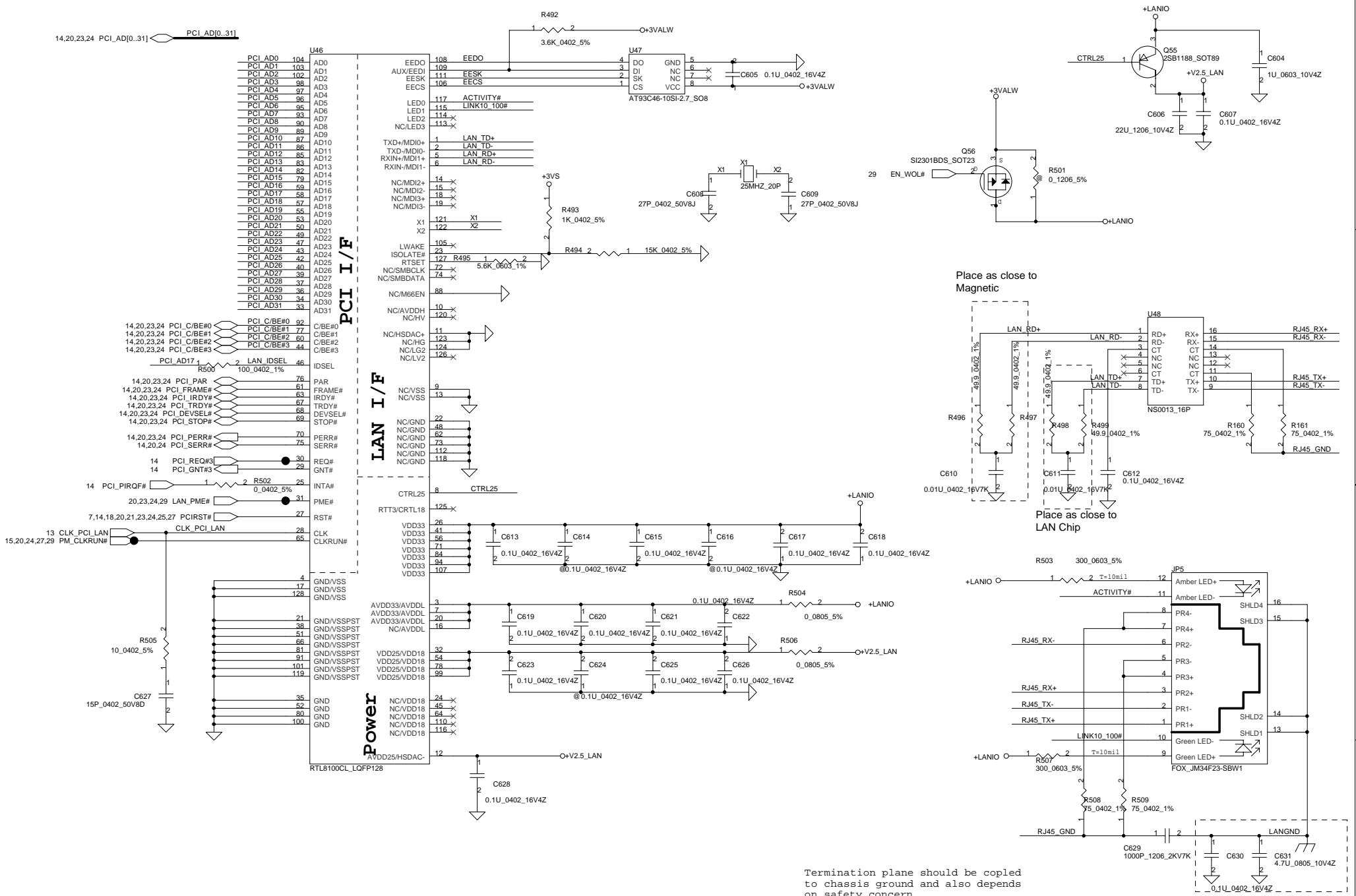
CardBus Socket



Reserve for CB1410 B0 Version

Compal Electronics, Inc.			
Title: SCHEMATIC, M/B LA-2511			
Size:	Document Number:	401313	Rev: B
Date:	~P期二, 十月 19, 2004		Sheet 21 of 45

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.



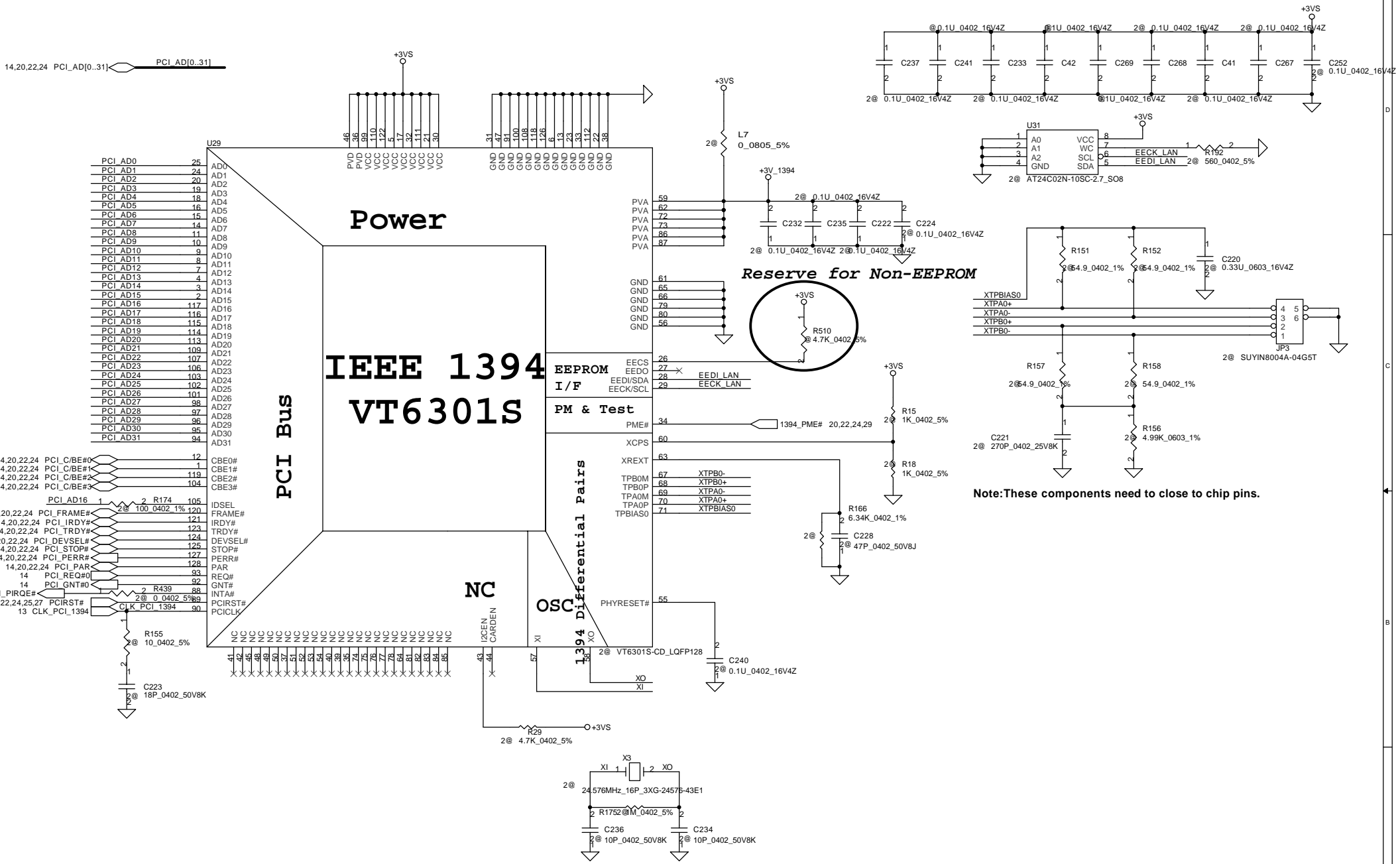
Termination plane should be copied to chassis ground and also depends on safety concern

Compal Electronics, Inc.

SCHEMATIC, M/B LA-2511

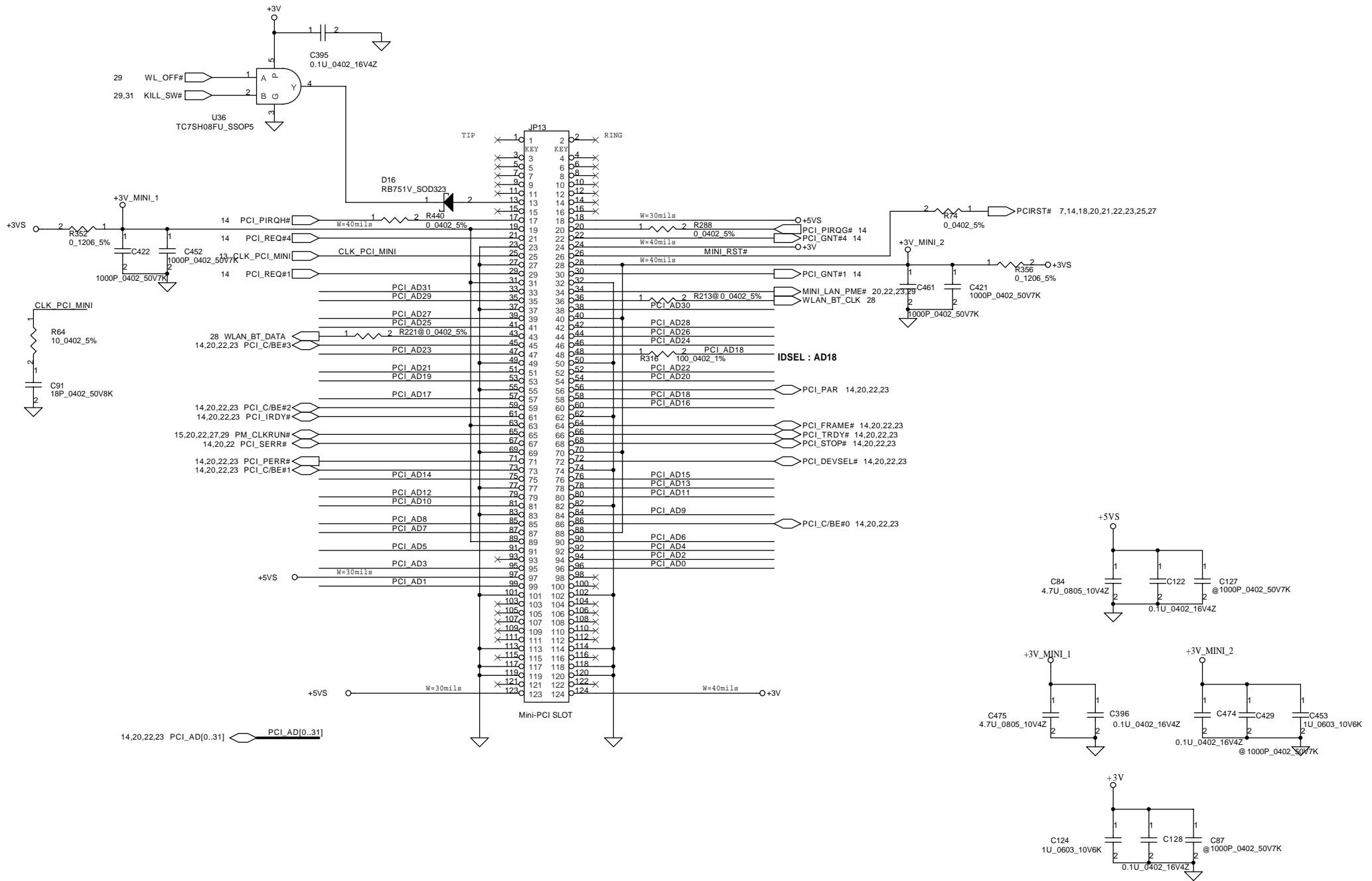
Title	SCHEMATIC, M/B LA-2511		Rev	B
Size	Custom	Document Number	401313	Date
Date	星期二, 十月 19, 2004	Sheet	22	of 45

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-2511			
Size	Document Number	401313	Rev B
Date: 二月 19, 2004		Sheet 23 of 45	

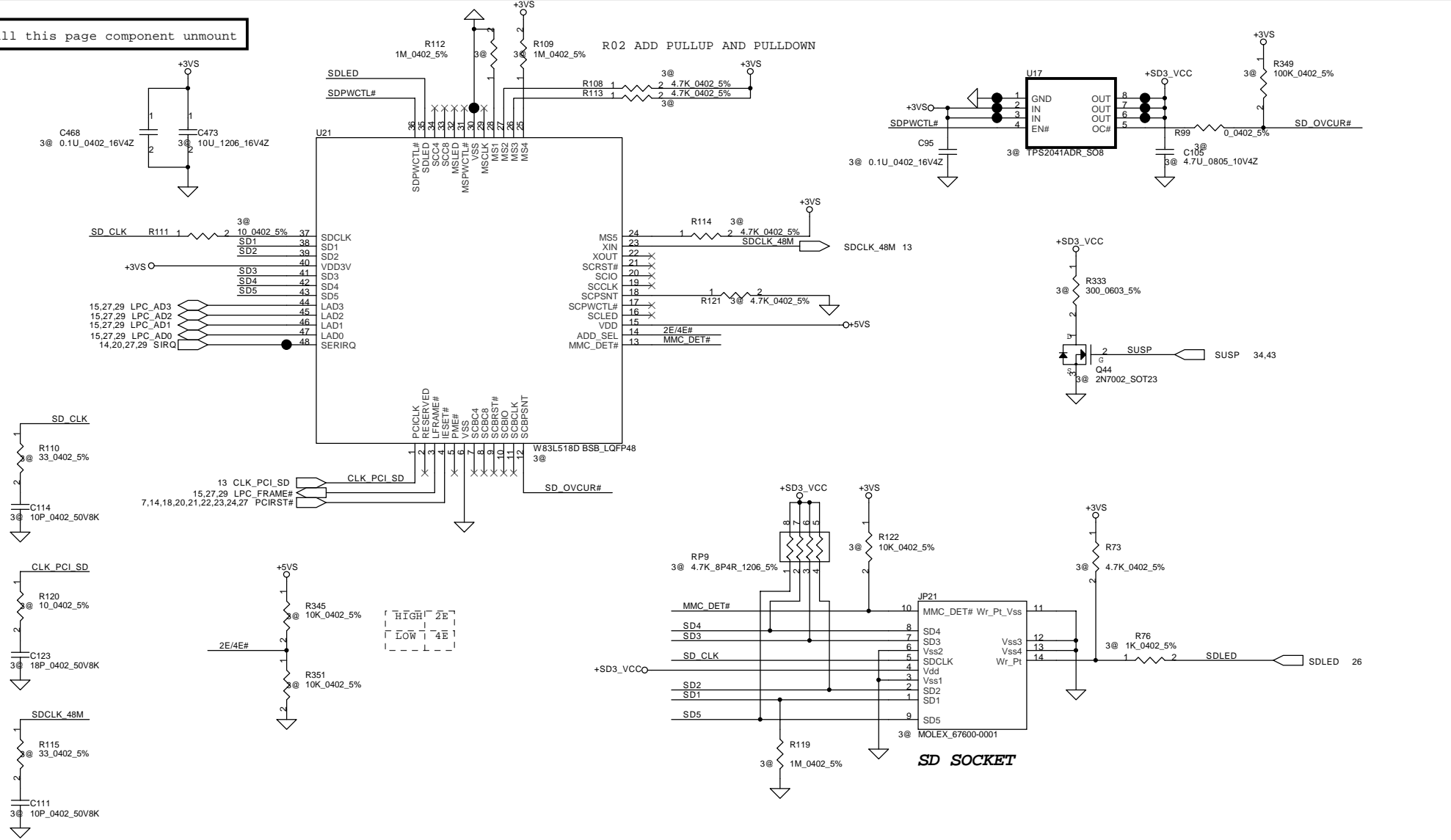
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS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

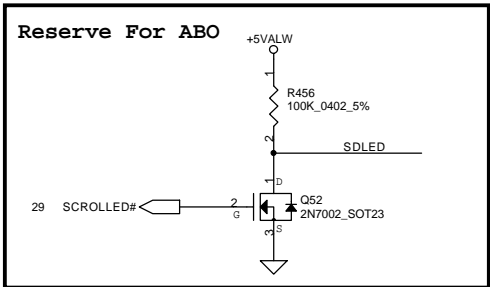
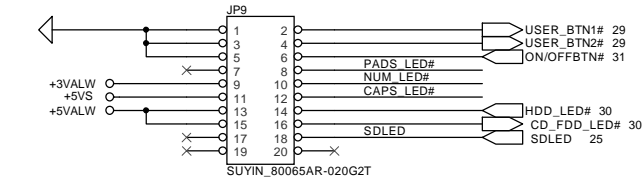
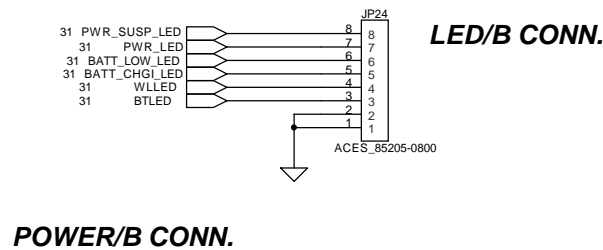
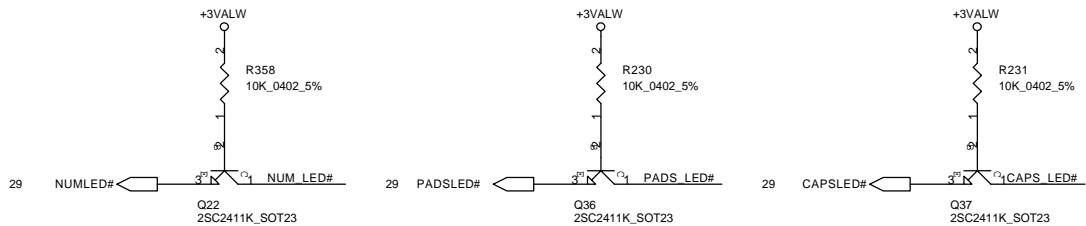
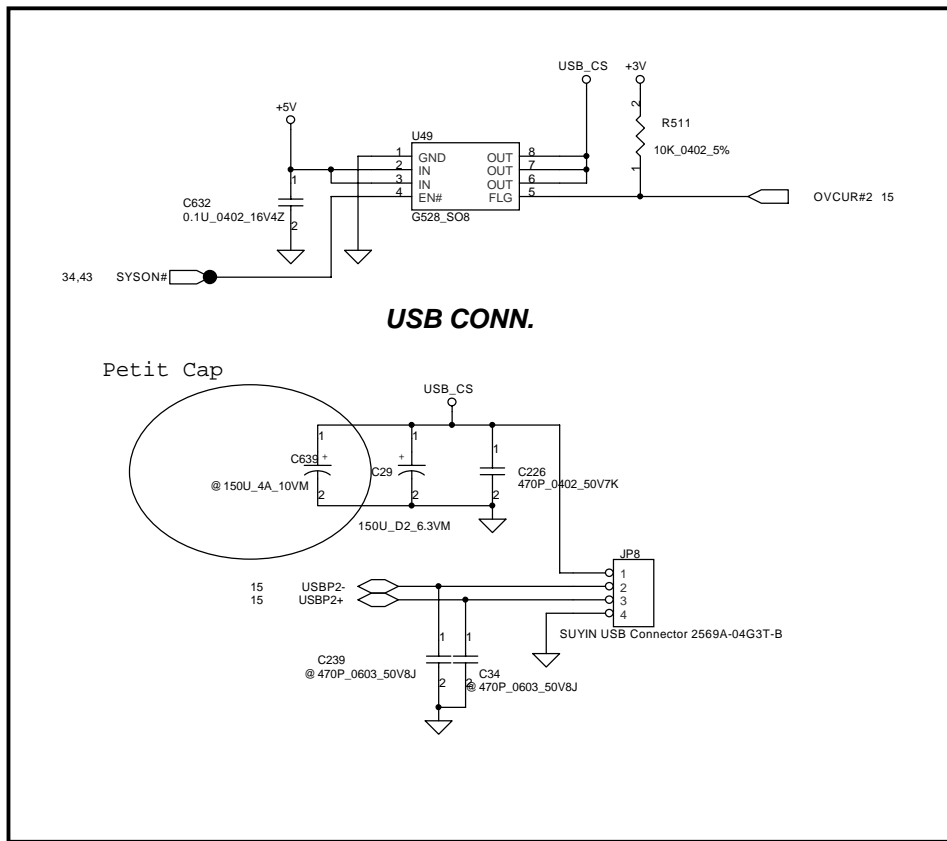
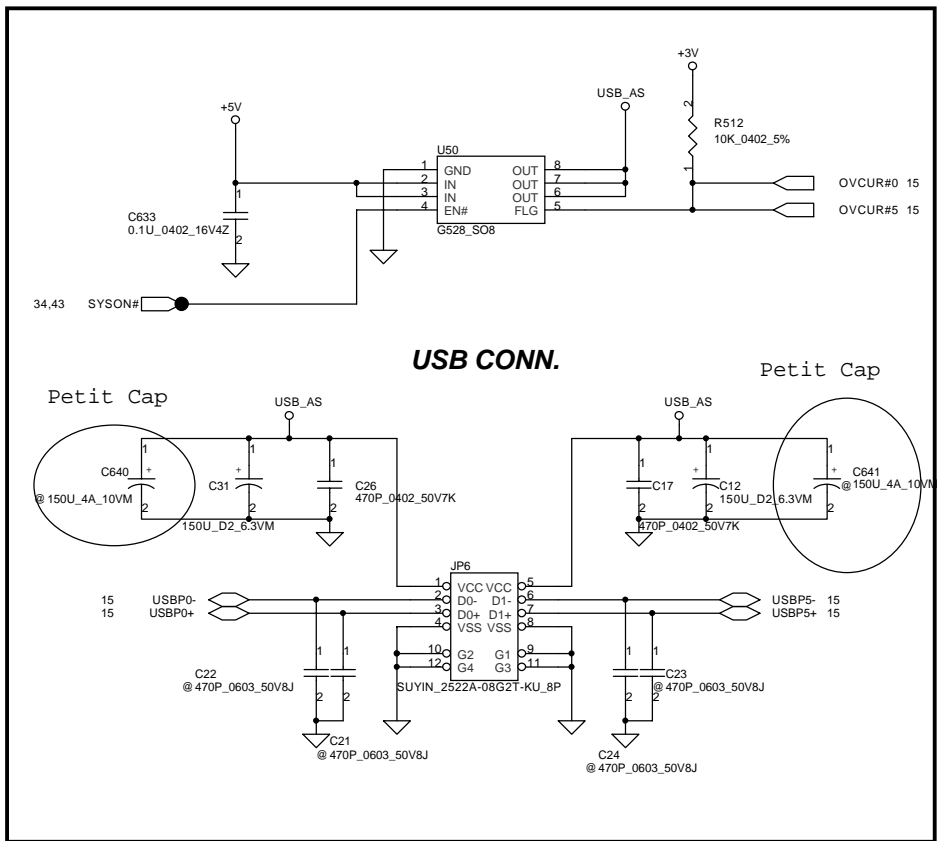
Compal Electronics, Inc.		
Title SCHEMATIC, M/B LA-2511		
Size B	Document Number 401313	Rev B
Date: ~P期二, 十月 19, 2004	Sheet 24	of 45

FOR ABO: all this page component unmount



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.

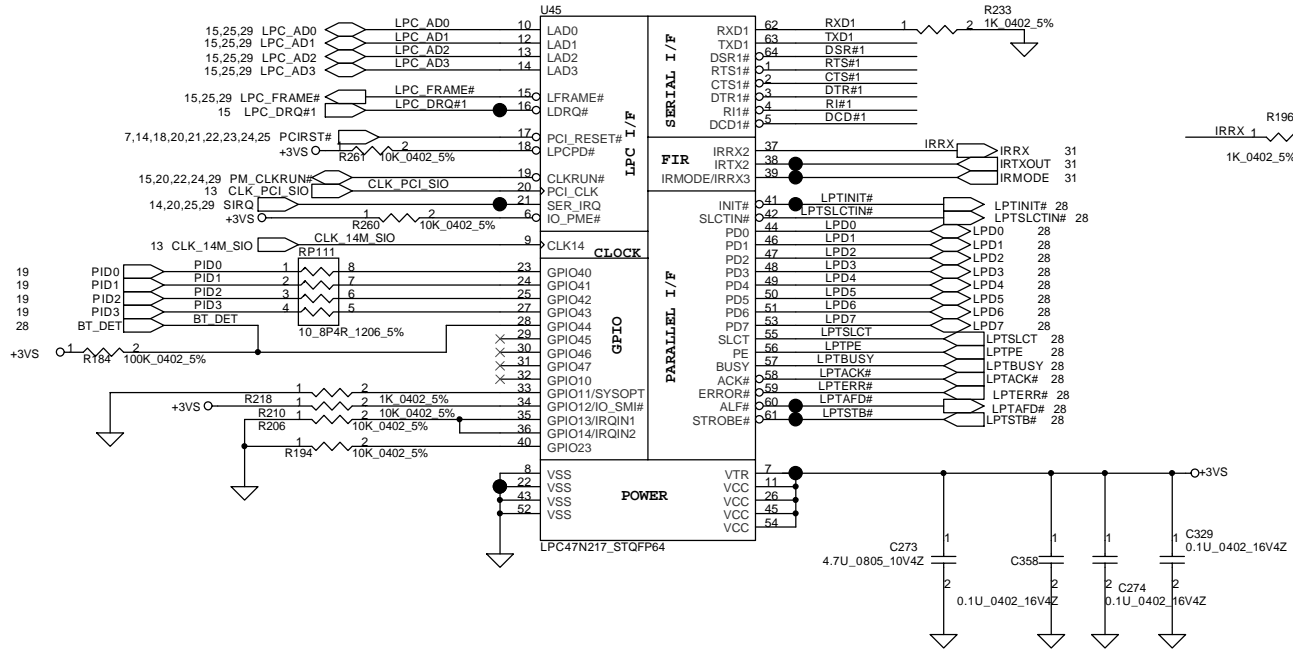
Compal Electronics, Inc.		
Title SCHEMATIC, M/B LA-2511		
Size B	Document Number 401313	Rev B
Date: ~月~日, 2004	Sheet 25 of 45	



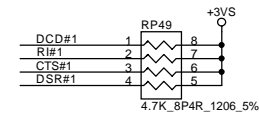
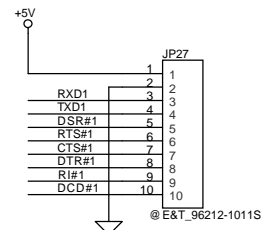
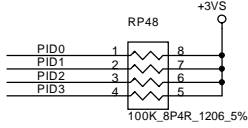
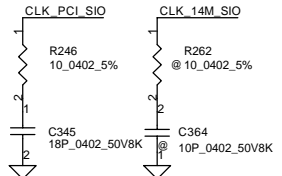
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS 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-2511		
Size B	Document Number 401313	Rev B
Date: ~P星期二, 十月 19, 2004	Sheet 26 of 45	

SUPER I/O SMC FDC47N227



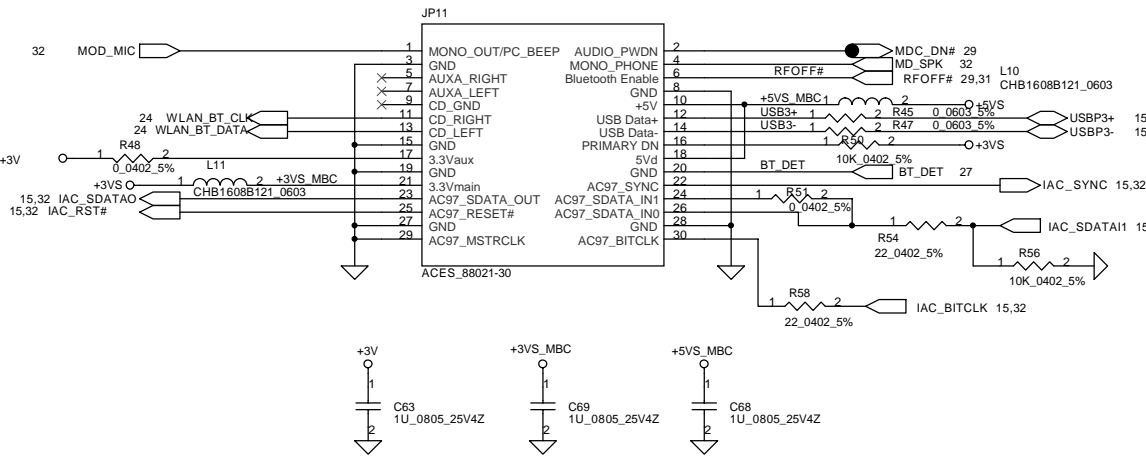
Base I/O Address
 * 0 = 02Eh
 1 = 04Eh



Compal Electronics, Inc.		
Title SCHEMATIC, M/B LA-2511		
Size B	Document Number 401313	Rev B
Date: ~P期二, 十月 19, 2004	Sheet 27	of 45

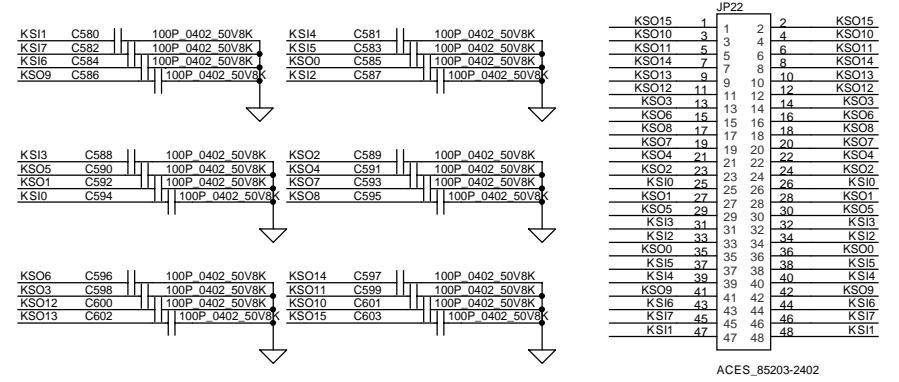
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS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

MBC CONN.



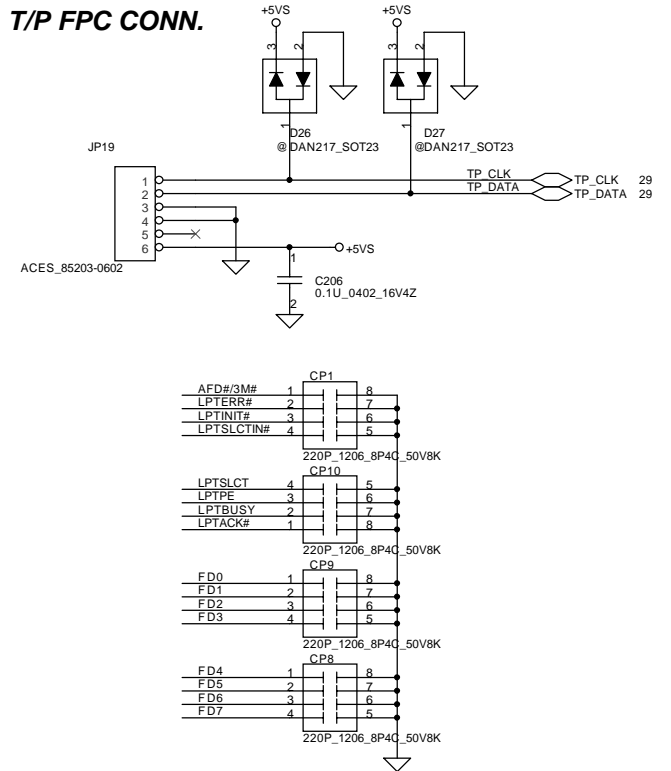
29 KSI[0..7]
29 KSO[0..15]

INT_KBD CONN.

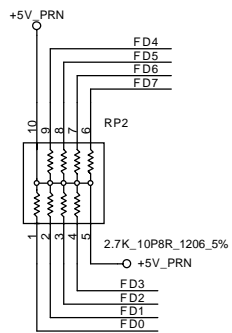
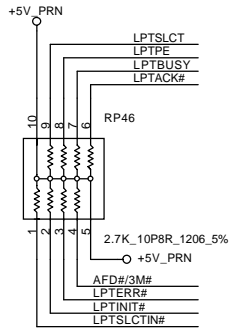
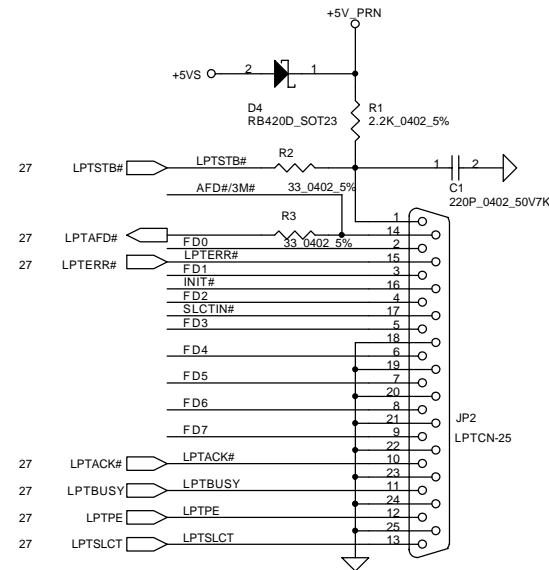


As close as possible to K/B connector

T/P FPC CONN.



PARALLEL PORT

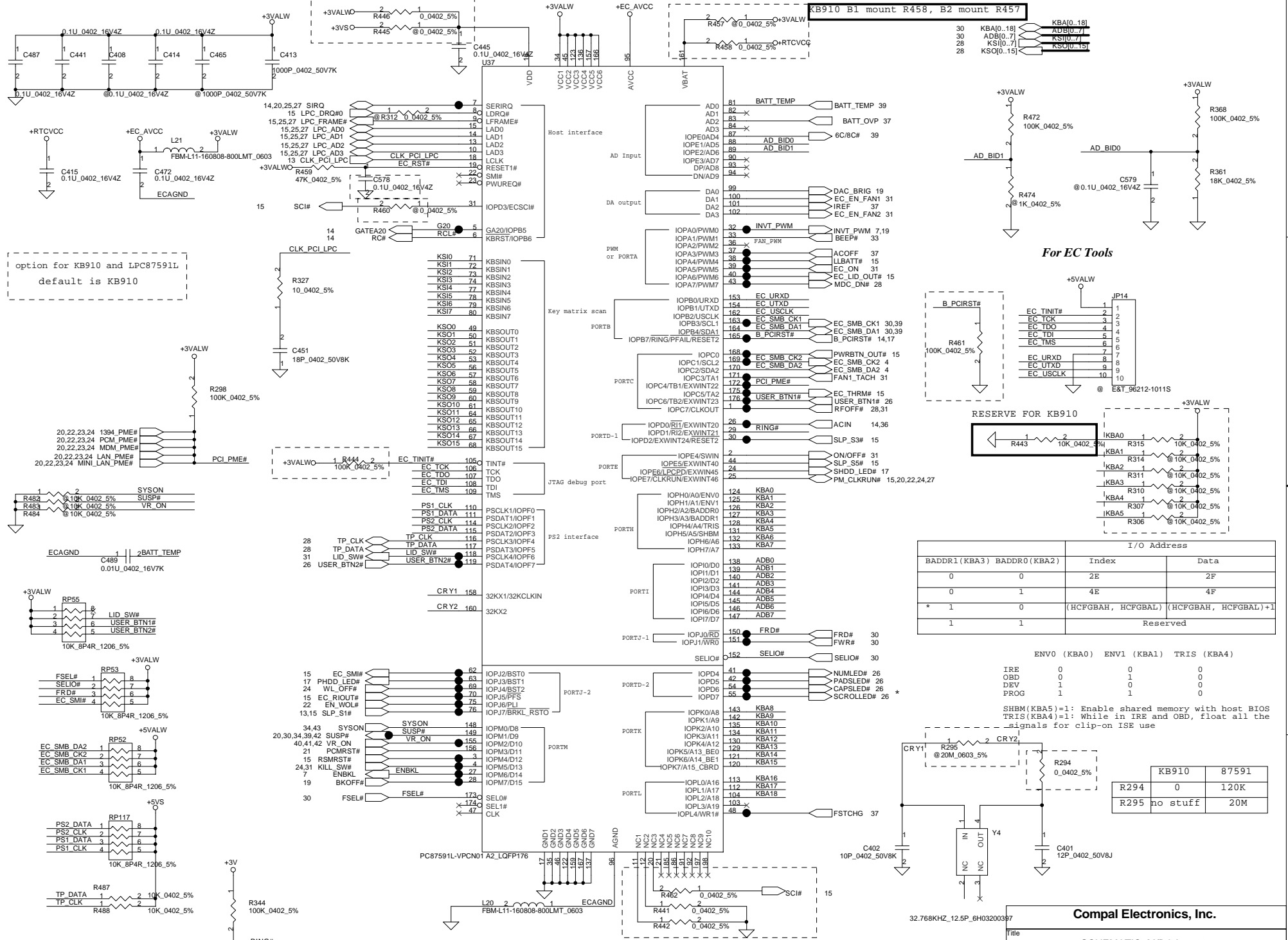


27 LPD[0..7]

Compal Electronics, Inc.

Title			
SCHEMATIC, M/B LA-2511			
Size	Document Number	401313	Rev B
Date:	-P 期二, 十月 19, 2004	Sheet 28	of 45

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.



option for KB910 and LPC87591L
default is KB910

For EC Tools

RESERVE FOR KB910

I/O Address			
BADDR1 (KBA3)	BADDR0 (KBA2)	Index	Data
0	0	2E	2F
0	1	4E	4F
* 1	0	(HCFGBAH, HCFGBAL)	(HCFGBAH, HCFGBAL)+1
1	1	Reserved	

ENV0 (KBA0) ENV1 (KBA1) TRIS (KBA4)

IRE	0	NUMLED#	0
OBD	0	1	0
DEV	1	0	0
PROG	1	1	0

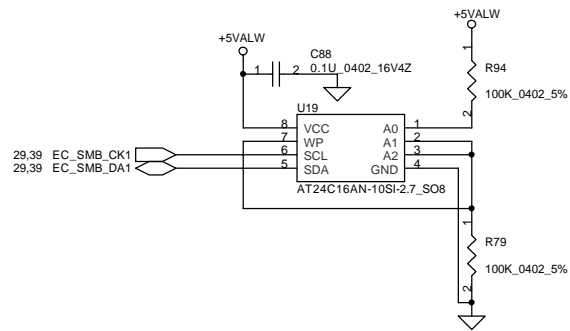
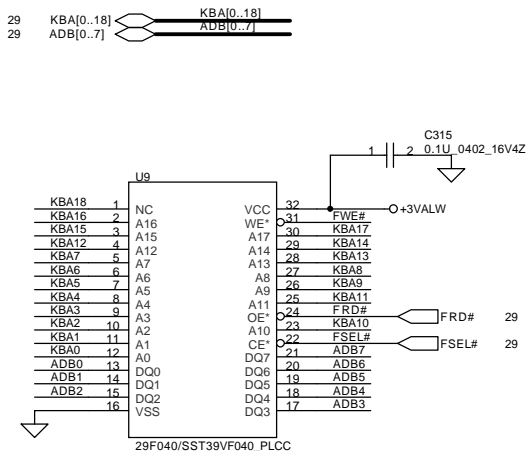
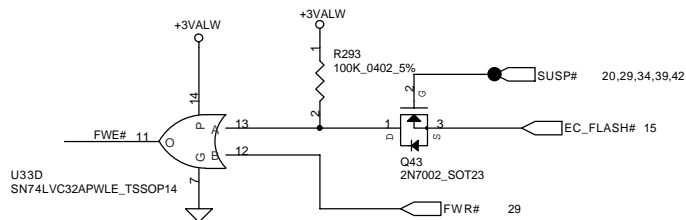
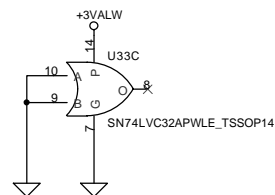
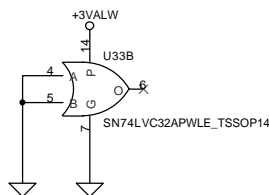
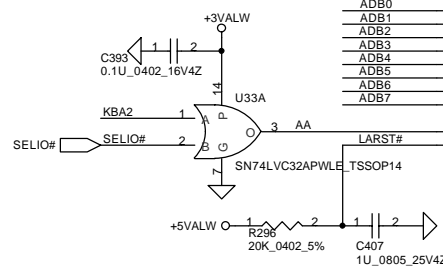
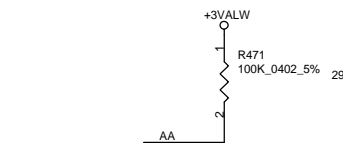
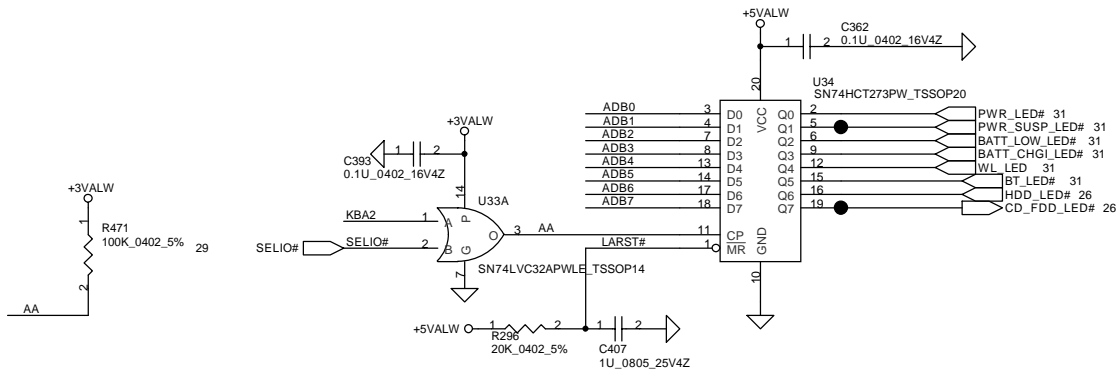
SHBM(KBA5)=1: Enable shared memory with host BIOS
TRIS(KBA4)=1: While in IRE and OBD, float all the signals for clip-on ISE use

KB910	87591
R294	0
R295	no stuff
	20M

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.

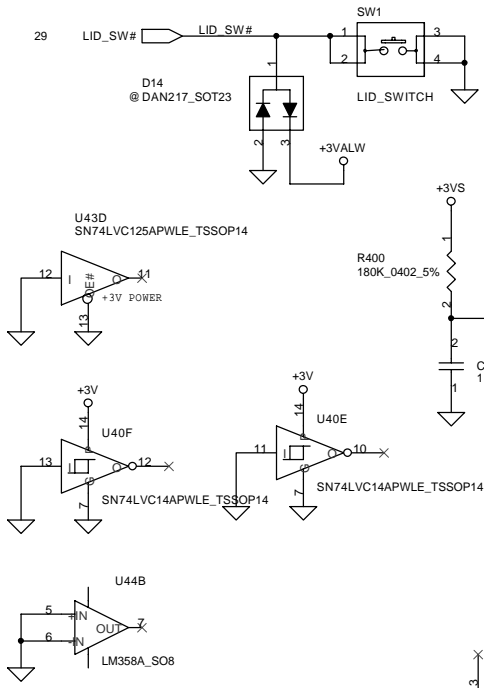
Title		
SCHEMATIC, M/B LA-2511		
Size	Document Number	Rev
Custom	401313	B
Date:	星期二, 十月 19, 2004	Sheet 29 of 45



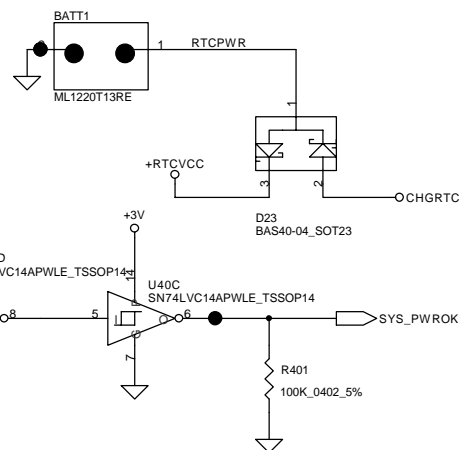
Compal Electronics, Inc.			
Title SCHEMATIC, M/B LA-2511			
Size B	Document Number 401313	Rev B	
Date: ~P 星期二, 十月 19, 2004	Sheet 30	of	45

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.

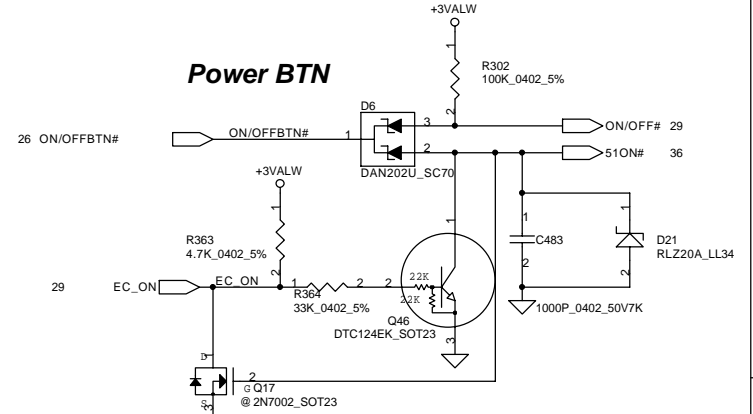
Power ON Circuit



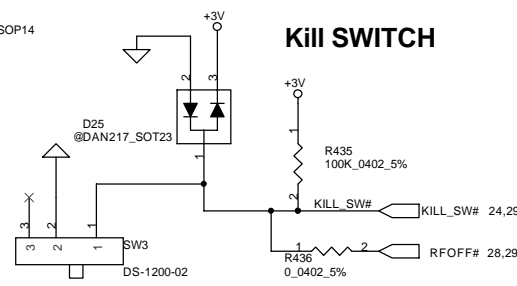
RTC Battery



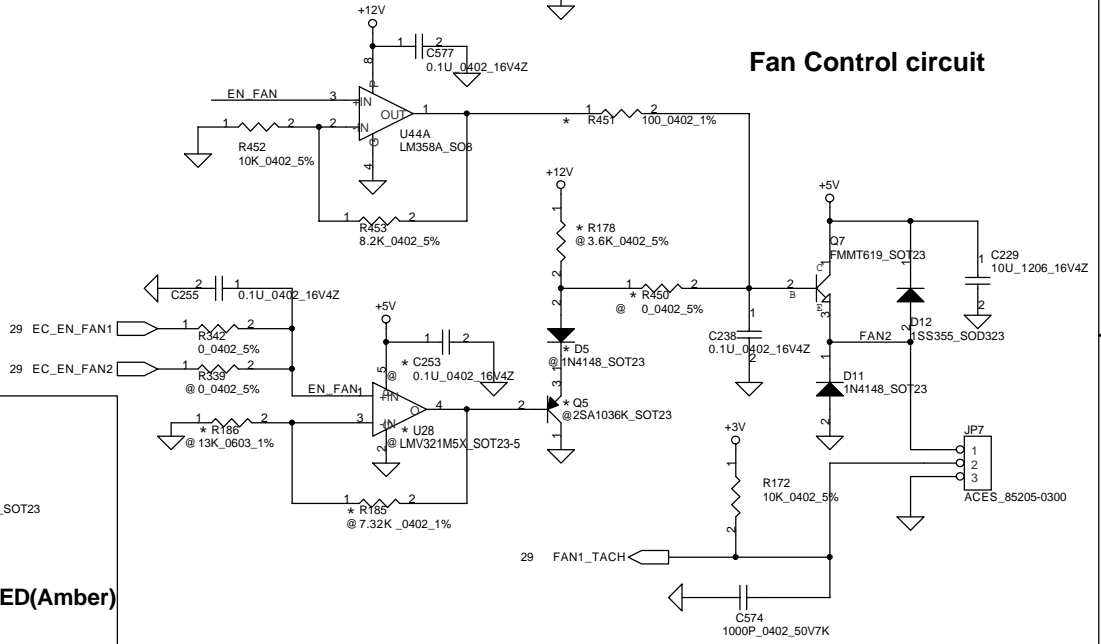
Power BTN



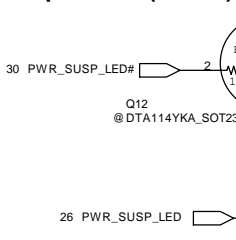
Kill SWITCH



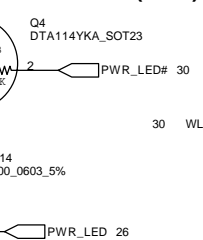
Fan Control circuit



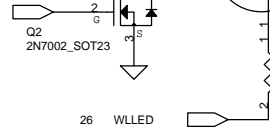
Suspend LED(Amber)



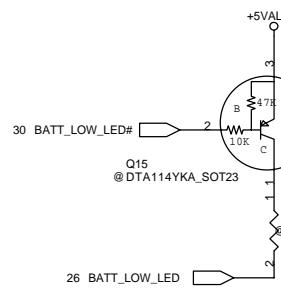
Power LED(Blue)



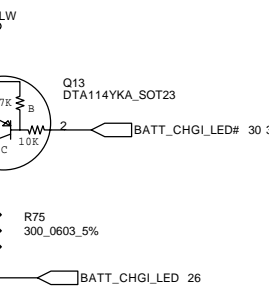
Wireless LED(Amber)



BATT Low LED(Amber)



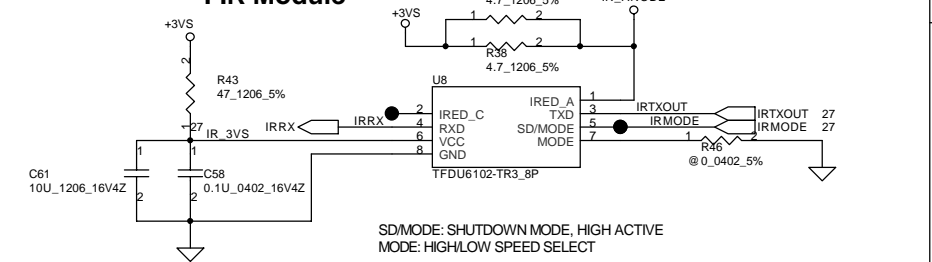
BATT Charge LED(Blue)



Bluetooth LED(Blue)



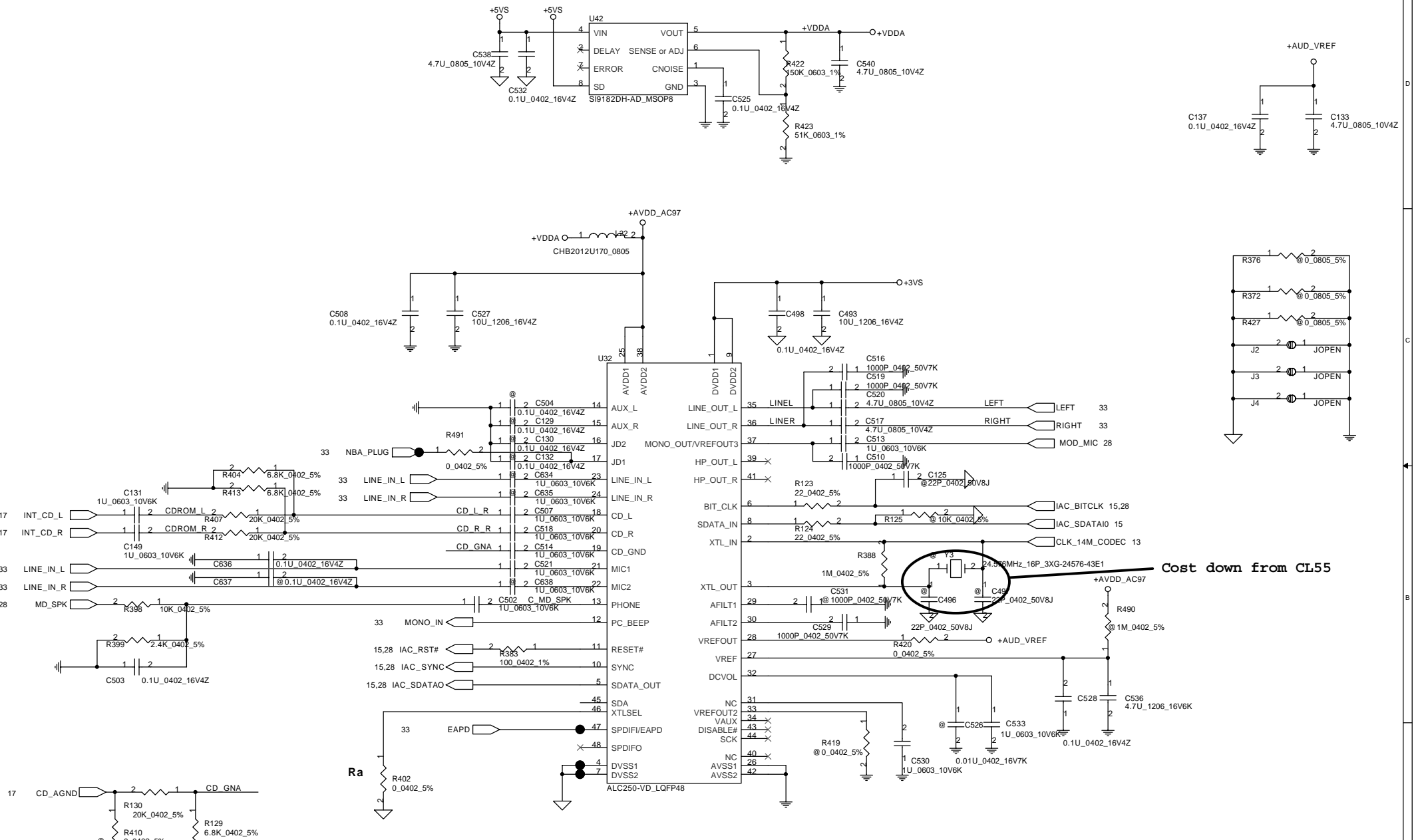
FIR Module



Compal Electronics, Inc.			
Title: SCHEMATIC, M/B LA-2511			
Size:	Document Number:	401313	
Date:	~P 周二, 十月 19, 2004	Sheet:	31 of 45

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.

AC97 Codec



Ra	MODE
Stuff	14.318MHz External
No-Stuff	24.576MHz Crystal or External Colck

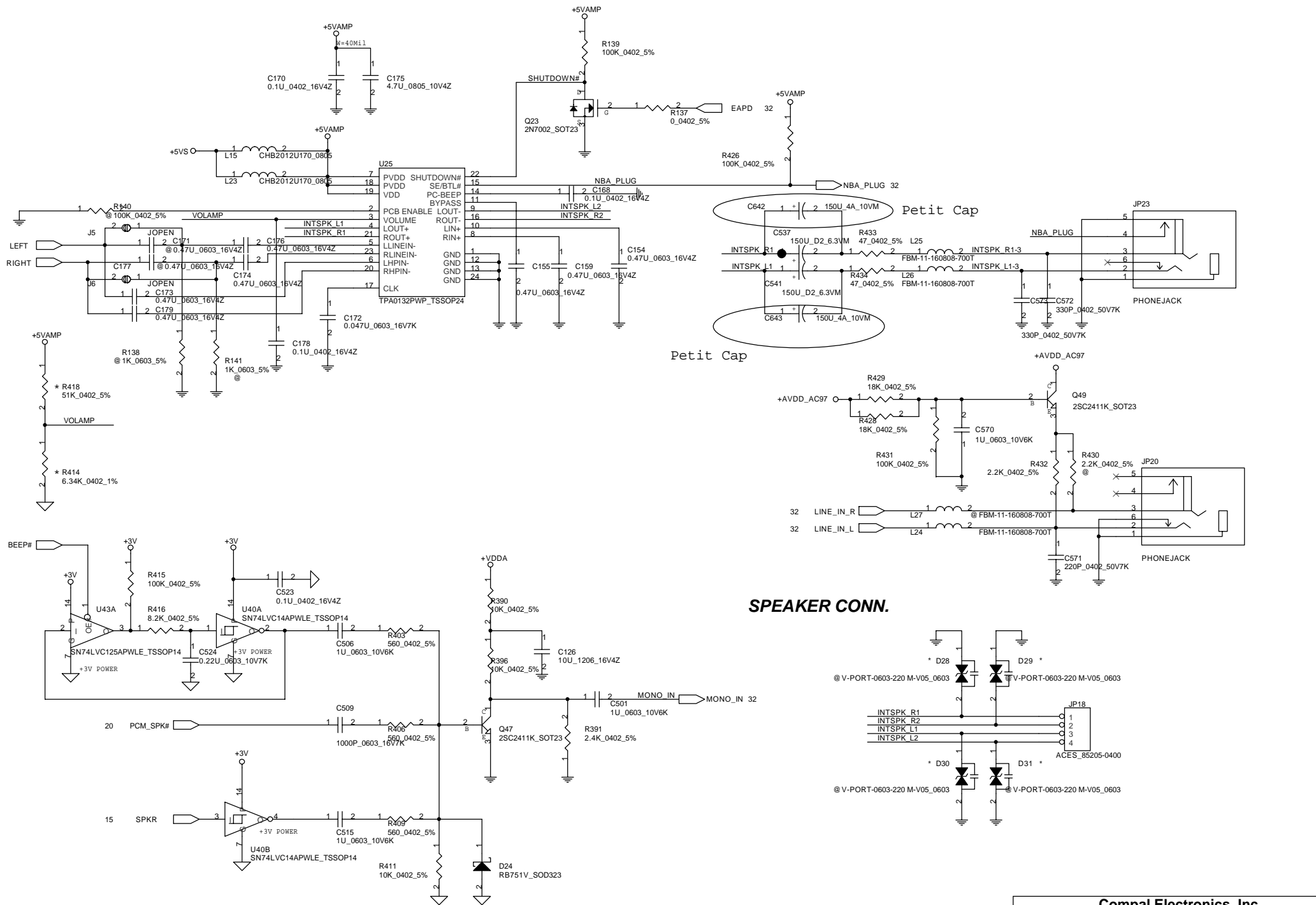
Compal Electronics, Inc.

Title: SCHEMATIC, M/B LA-2511

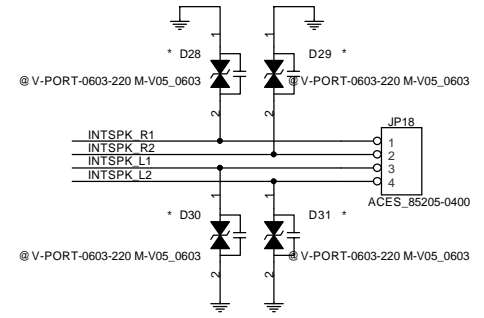
Size B Document Number 401313 Rev B

Date: ~P星期二, 十月 19, 2004 Sheet 32 of 45

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.

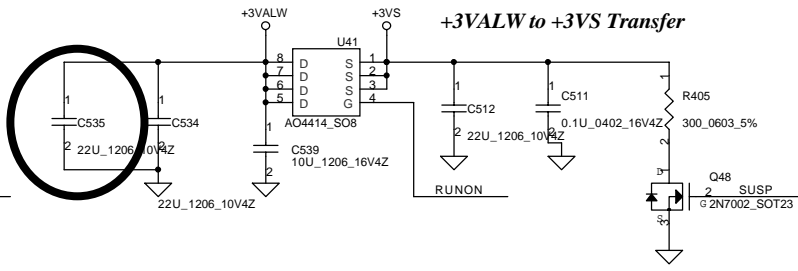
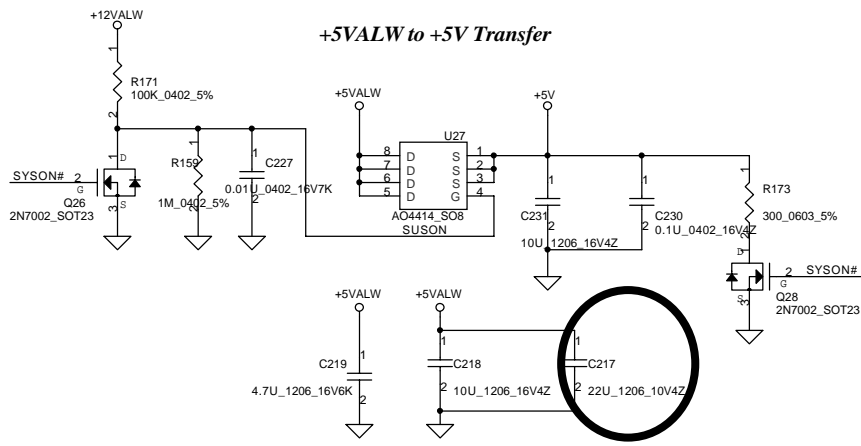


SPEAKER CONN.

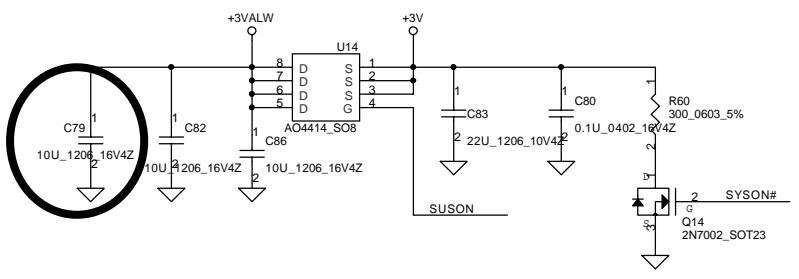


THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS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

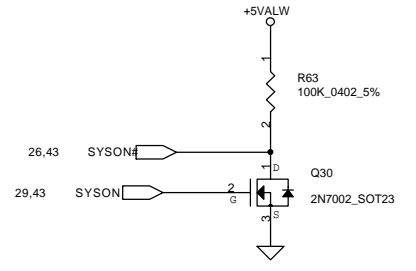
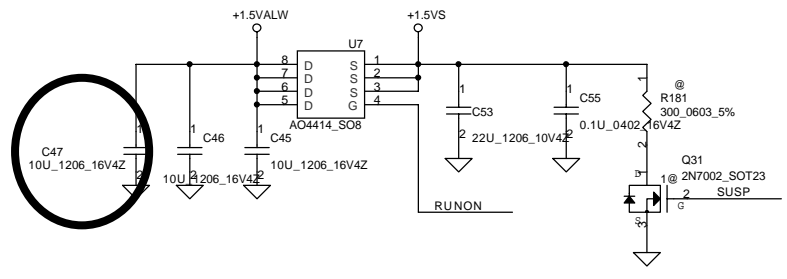
Compal Electronics, Inc.			
Title SCHEMATIC, M/B LA-2511			
Size	Document Number	401313	Rev B
Date:	~P 星期二, 十月 19, 2004		Sheet 33 of 45



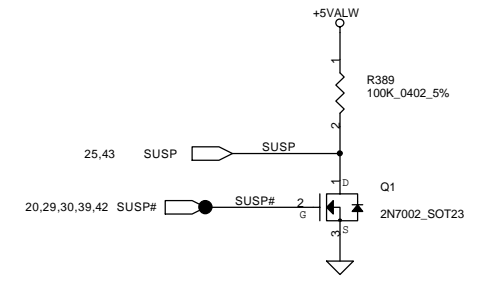
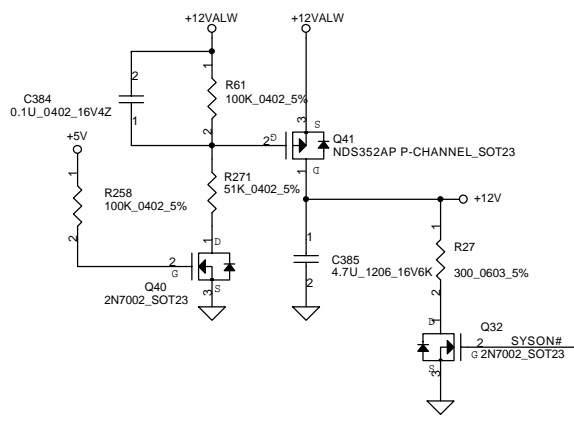
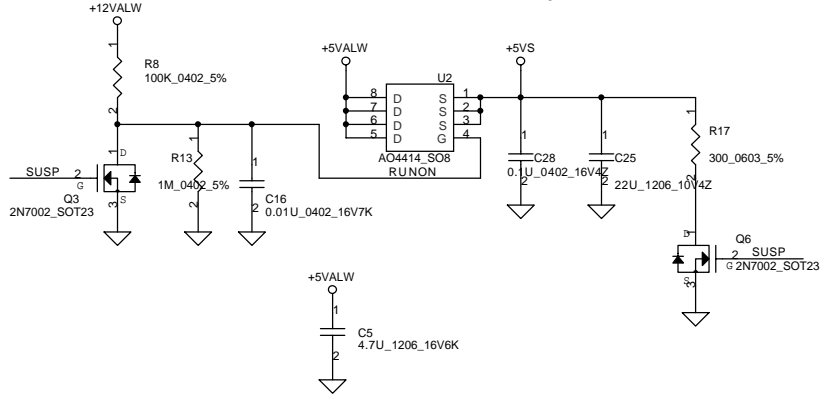
+3VALW to +3V Transfer



+1.5VALW to +1.5VS Transfer

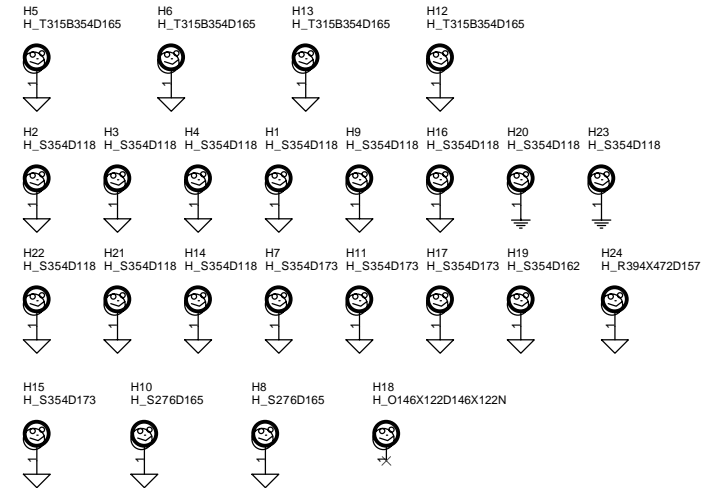
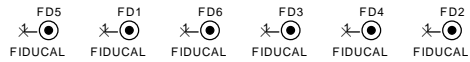
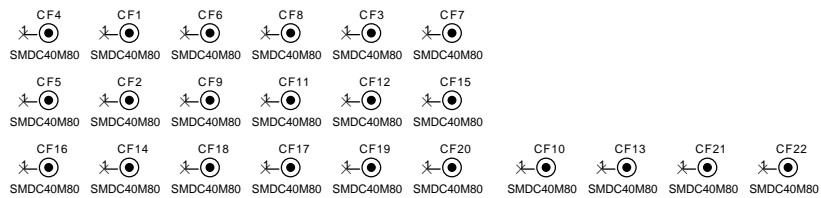


+5VALW to +5VS Transfer



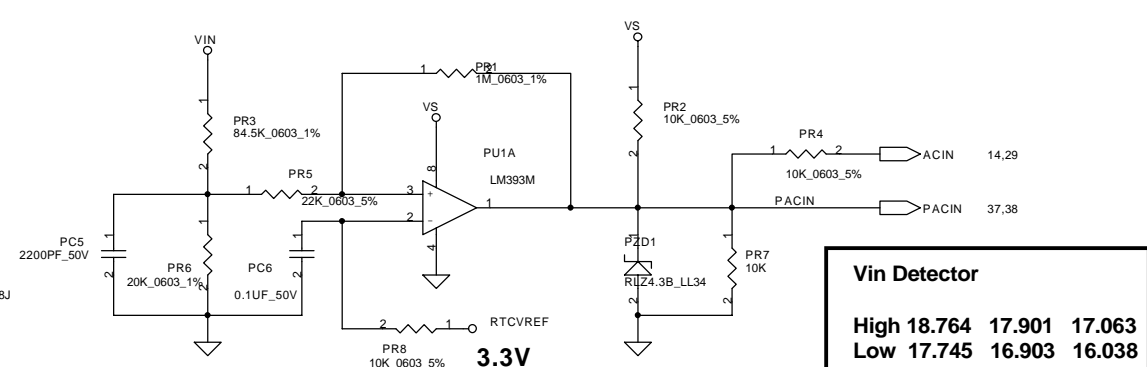
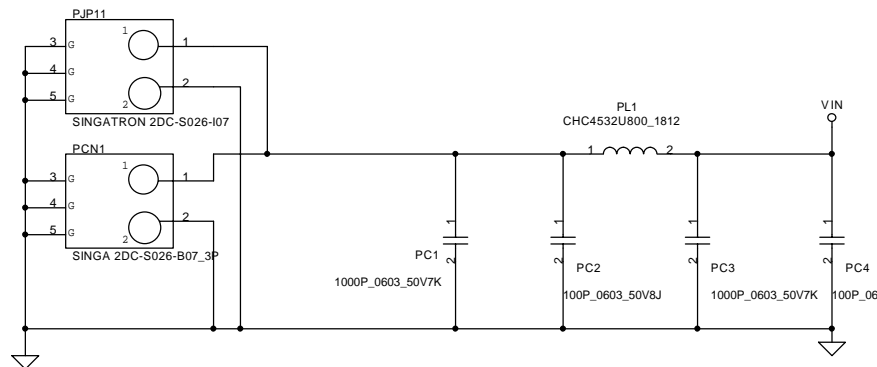
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS 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-2511			
Size	Document Number	401313	Rev B
Date:	~P 星期二, 十月 19, 2004		Sheet 34 of 45

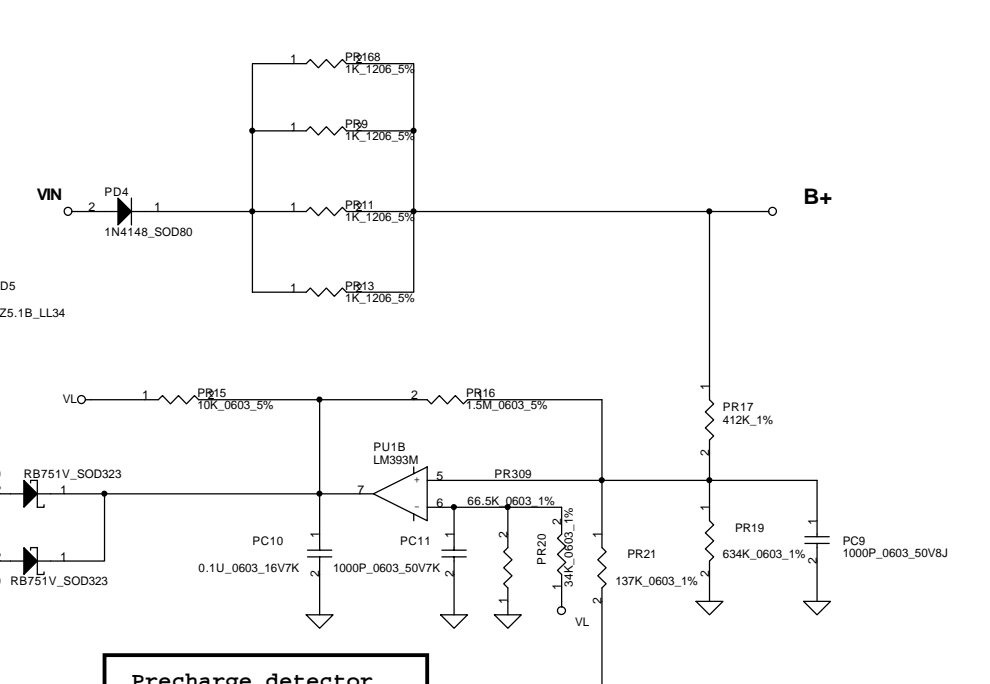
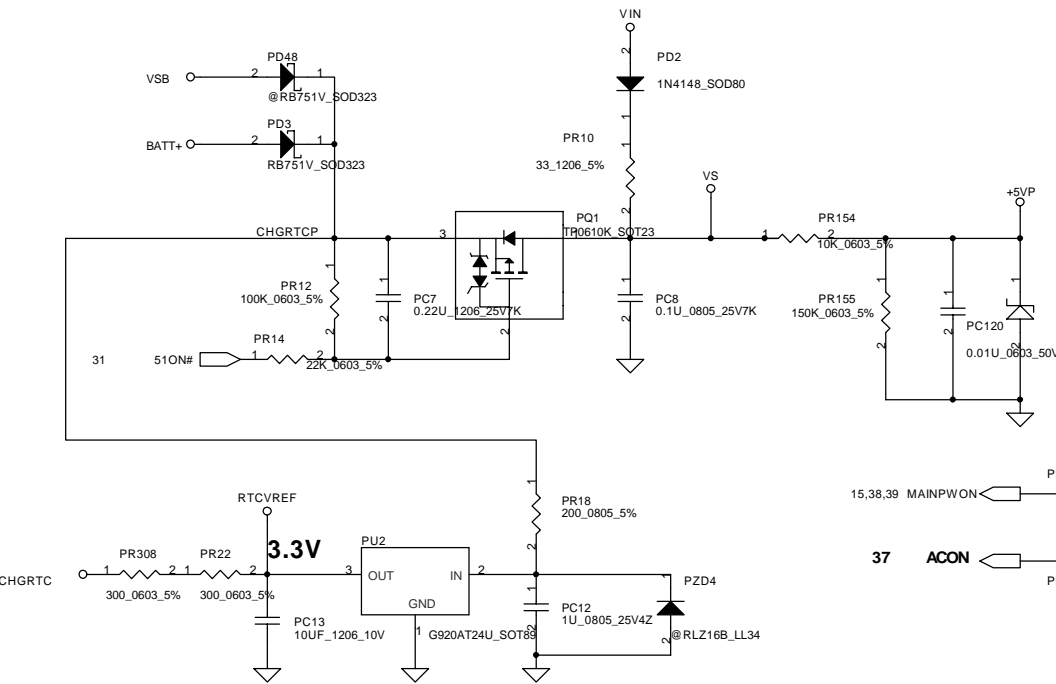


THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS 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-2511		
Size	Document Number	Rev
	401313	B
Date:	~P期二, 十月 19, 2004	Sheet 35 of 45

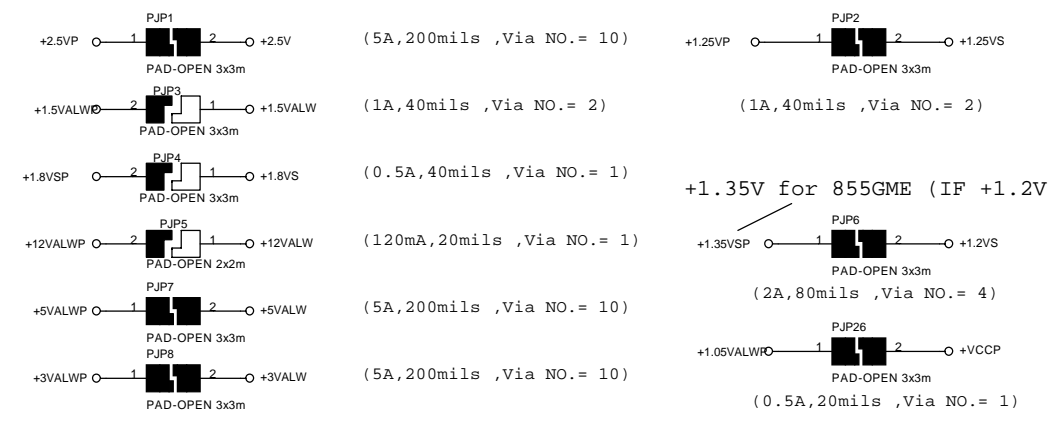


Vin Detector		
High	18.764	17.901
Low	17.745	16.903
	17.063	16.038

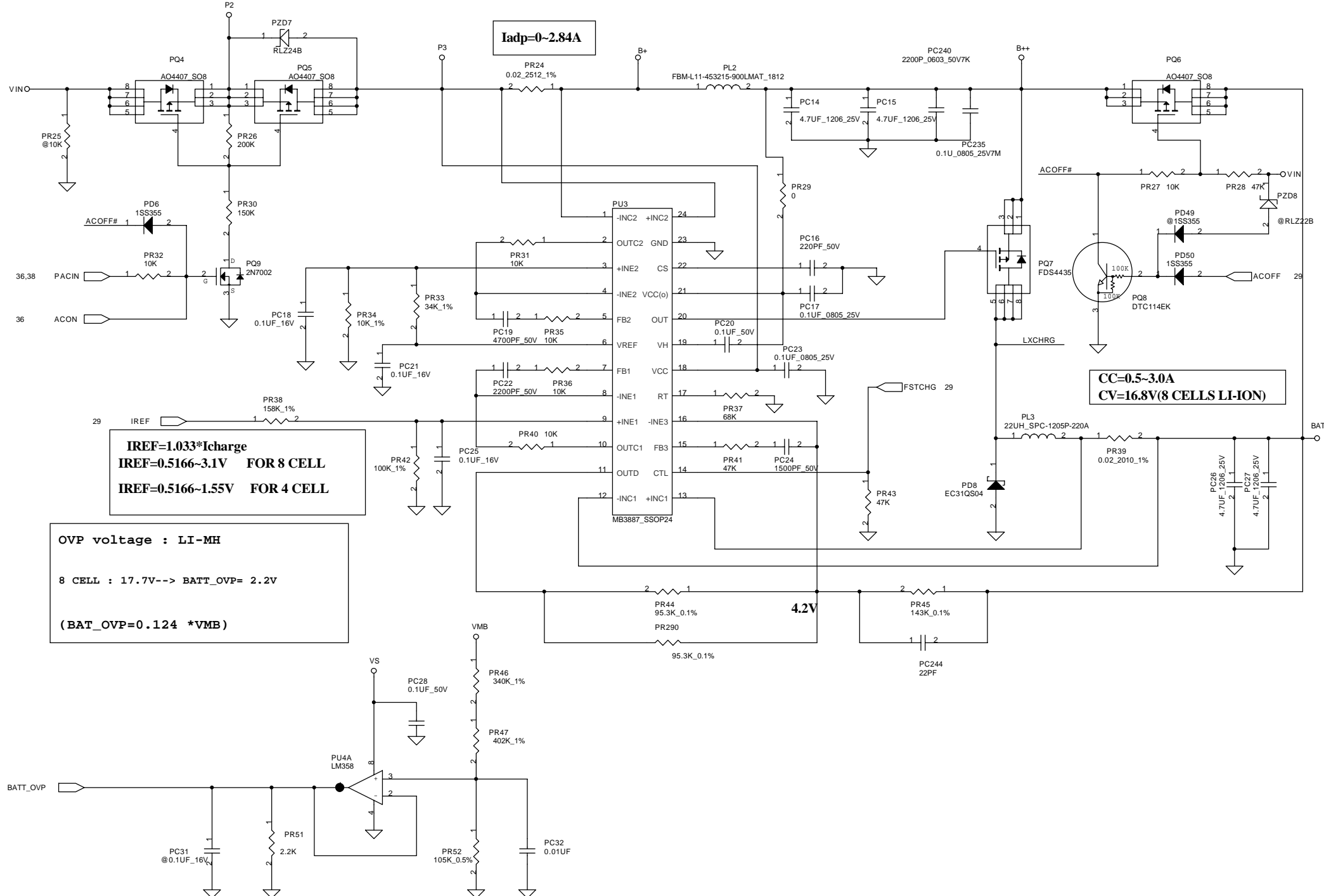


Precharge detector AC ADAPTOR		
	16.69	16.05
	15.6	15.02
	14.35	14.35

Precharge detector AC ADAPTOR		
	6.33	6.12
	5.227	5.09
	4.85	4.85



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.



Iadp=0-2.84A

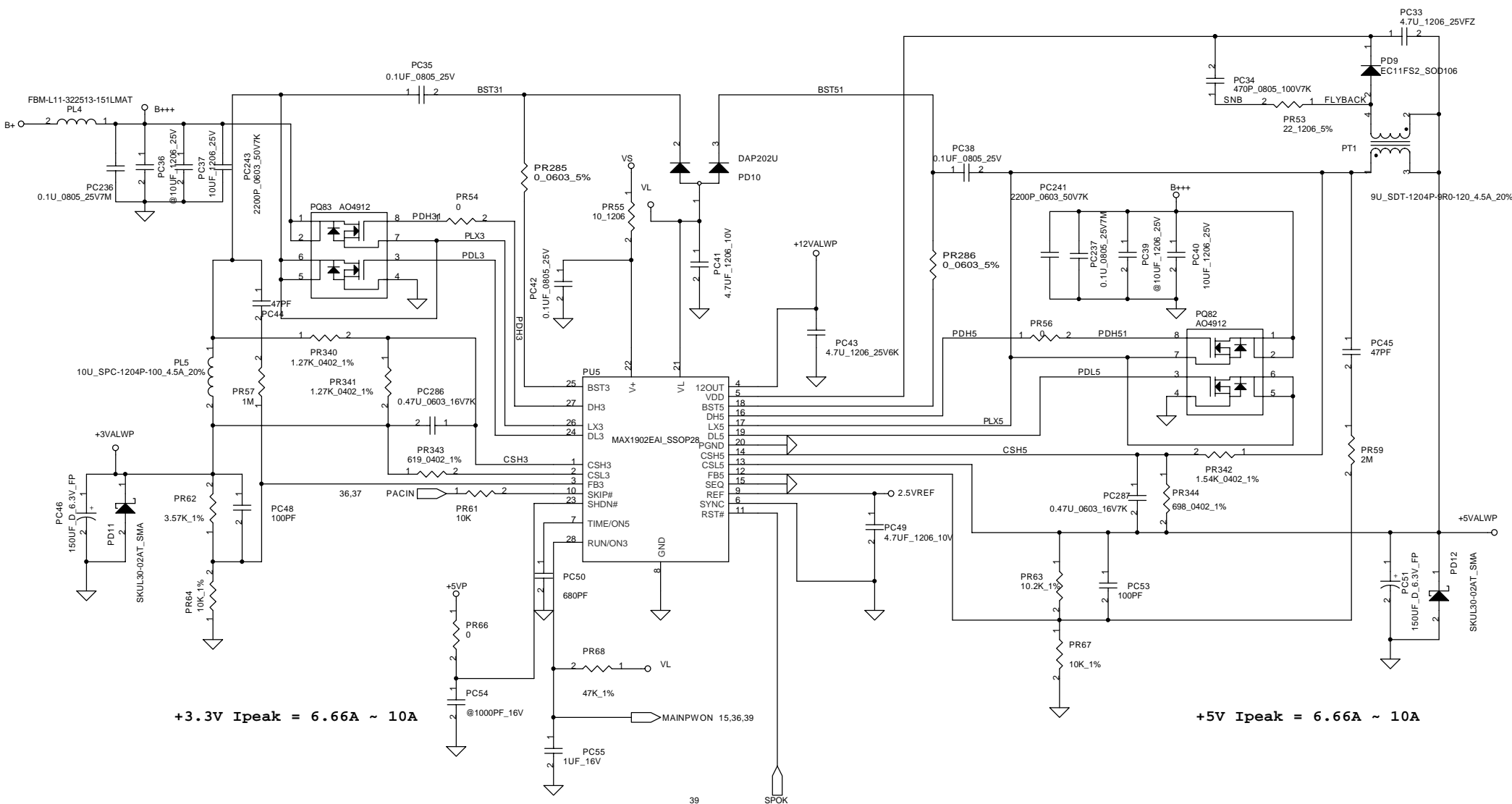
**CC=0.5-3.0A
CV=16.8V(8 CELLS LI-ION)**

**IREF=1.033*Icharge
IREF=0.5166-3.1V FOR 8 CELL
IREF=0.5166-1.55V FOR 4 CELL**

OVP voltage : LI-MH
8 CELL : 17.7V--> BATT_OVP= 2.2V
(BAT_OVP=0.124 *VMB)

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-2511		
Size B	Document Number 401313	Rev B
Date: -P期二, 十月 19, 2004	Sheet 37	of 45

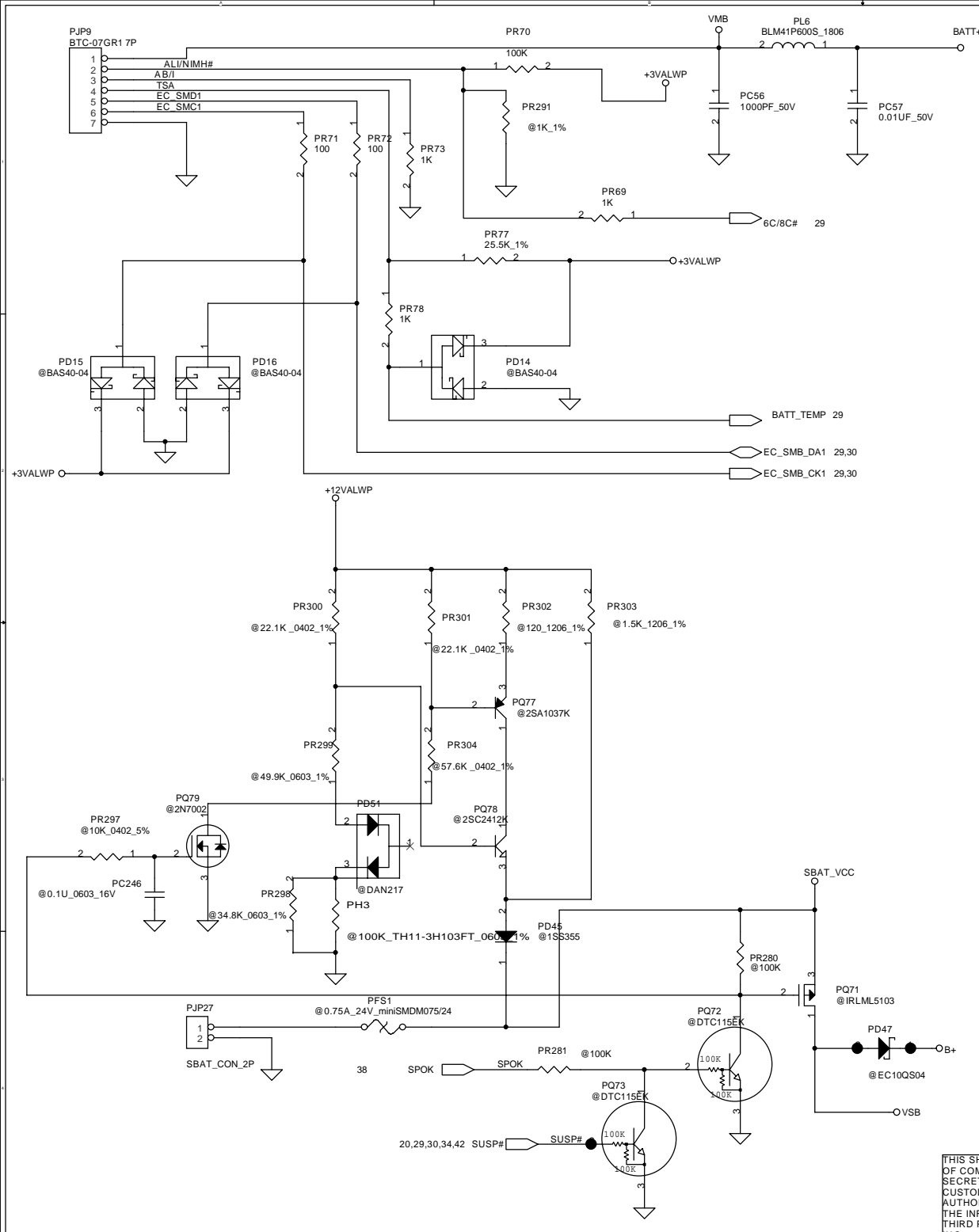


+3.3V Ipeak = 6.66A ~ 10A

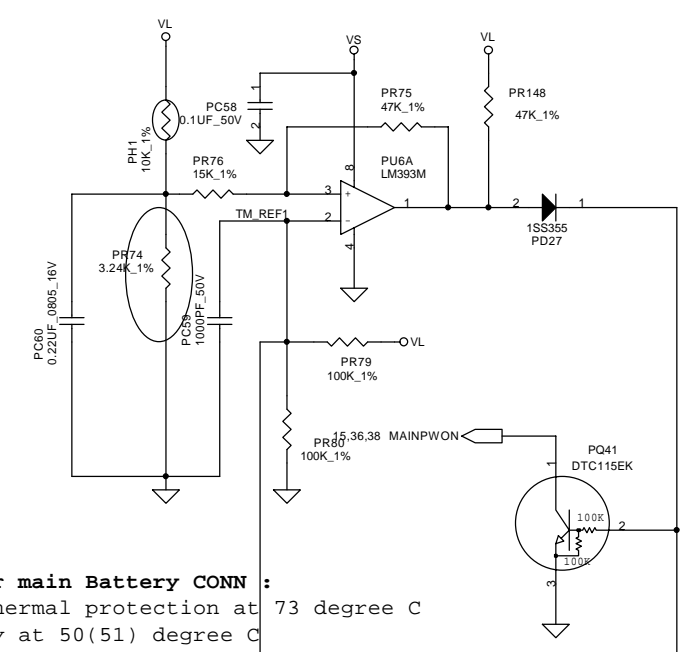
+5V Ipeak = 6.66A ~ 10A

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 THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

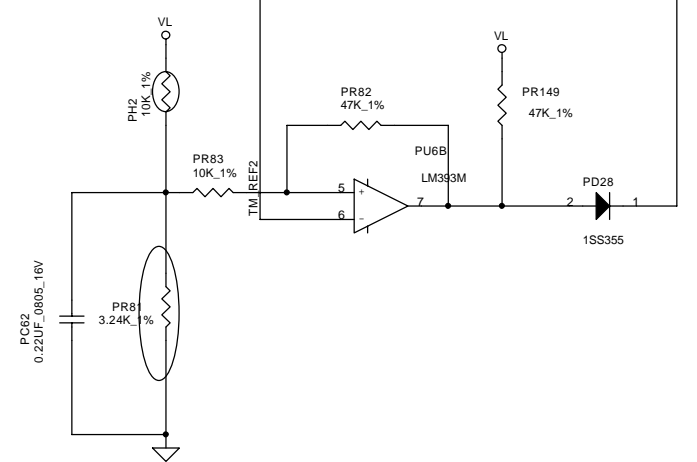
Compal Electronics, Inc.			
Title SCHEMATIC, M/B LA-2511			
Size B	Document Number 401313	R ev B	
Date: -P 期二, 十月 19, 2004		Sheet 38 of 45	



PH1 under CPU bottom side :
 CPU thermal protection at 82 degree C
 Recovery at 48 degree C

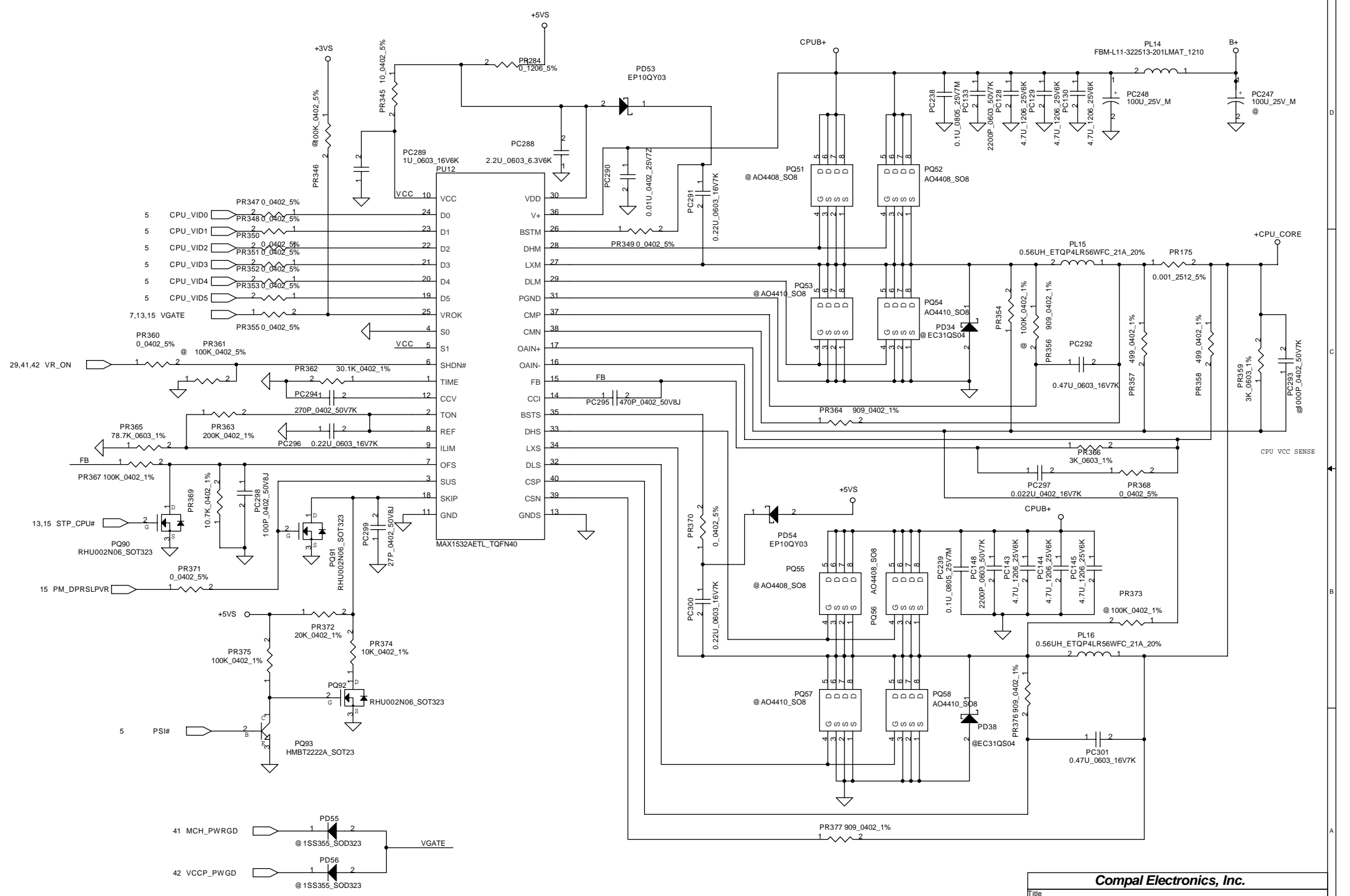


PH2 near main Battery CONN :
 BAT. thermal protection at 73 degree C
 Recovery at 50(51) degree C



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-2511			
Size B	Document Number 401313	Rev B	
Date: -P期二, 十月 19, 2004		Sheet 39 of 45	

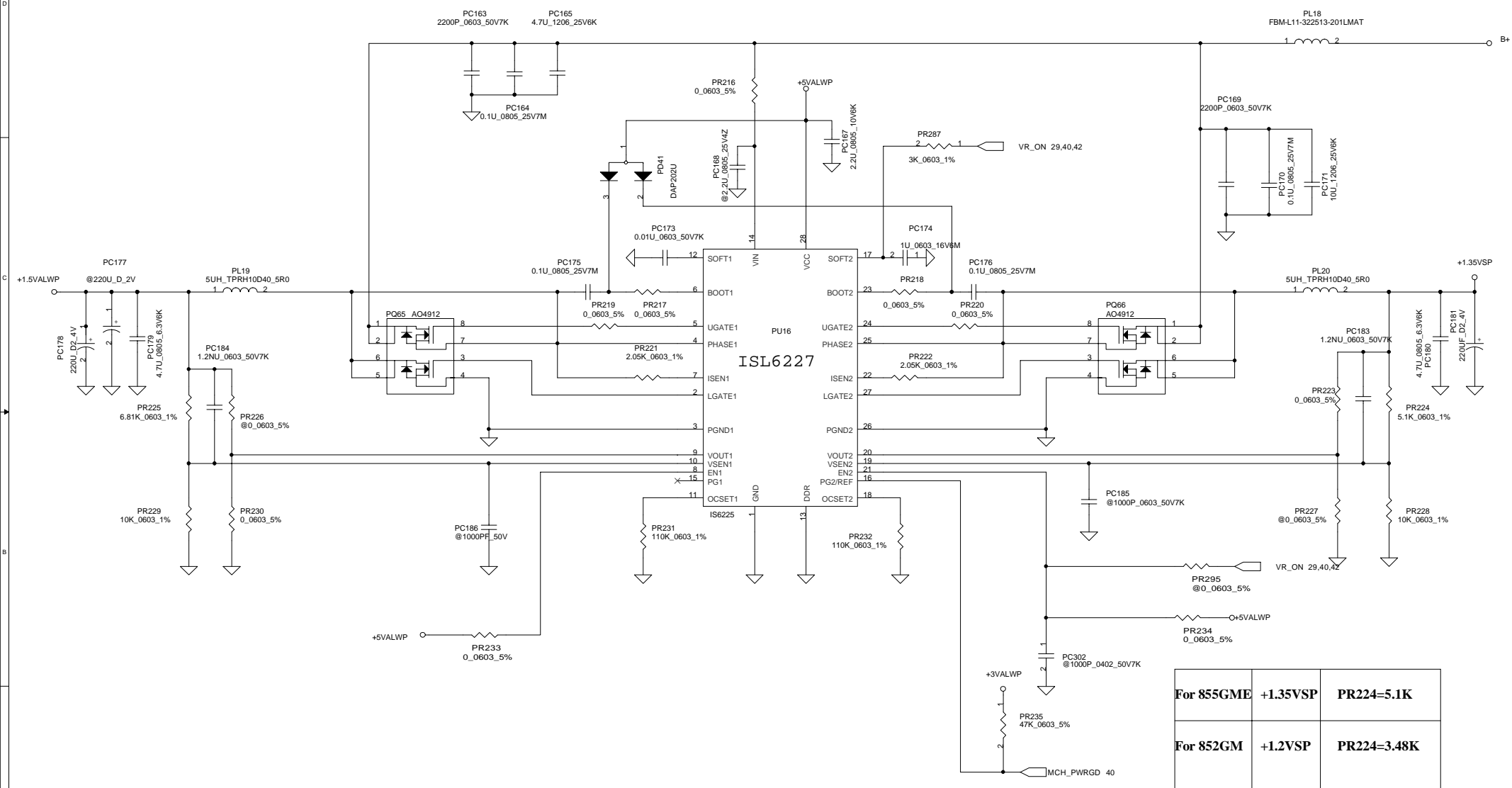


Compal Electronics, Inc.		
SCHEMATIC, M/B LA-2511		
Size	Document Number	Rev
B	401313	B
Date:	~P 星期二, 十月 19, 2004	Sheet 40 of 45

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.

+1.5VALWPV/+1.35VSP (GME)

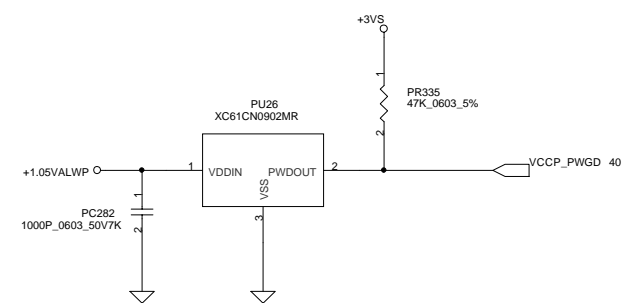
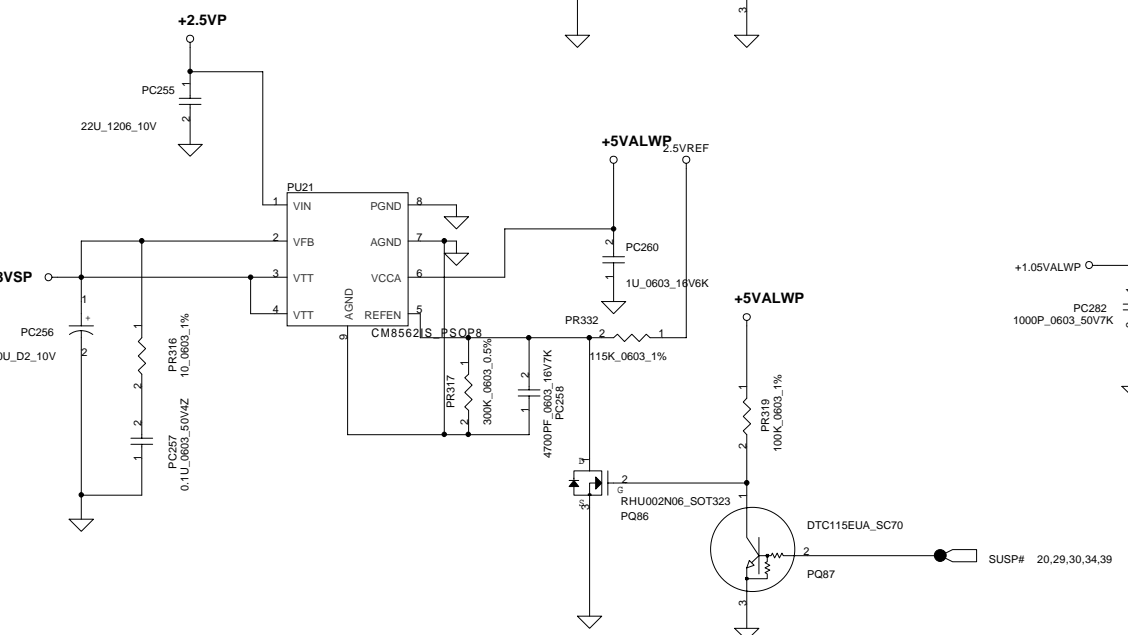
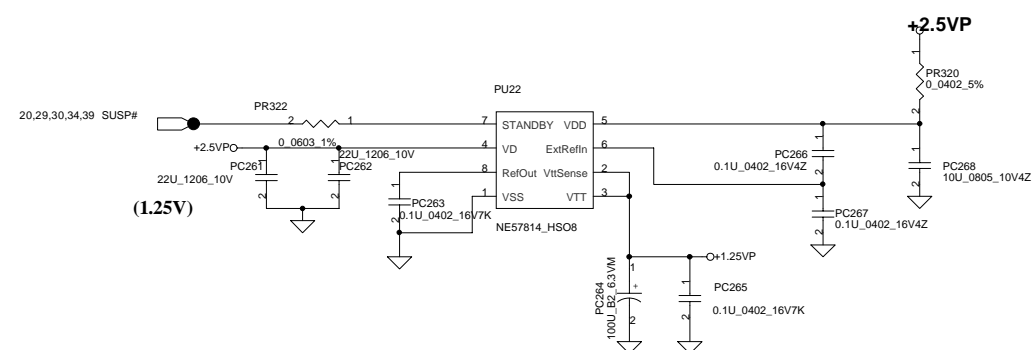
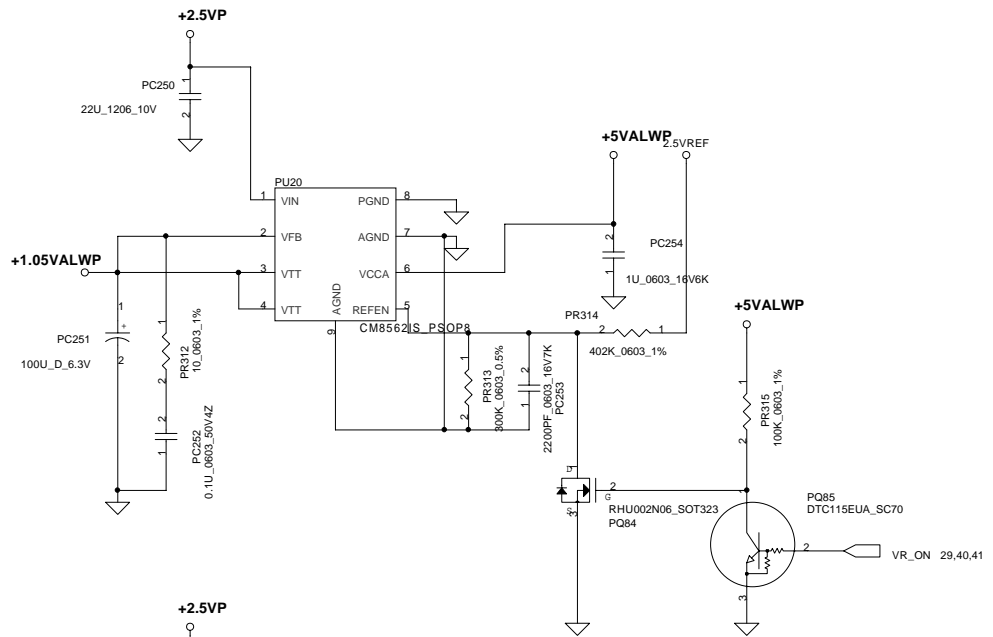
(IF +1.2V for 852GM)



For 855GME	+1.35VSP	PR224=5.1K
For 852GM	+1.2VSP	PR224=3.48K

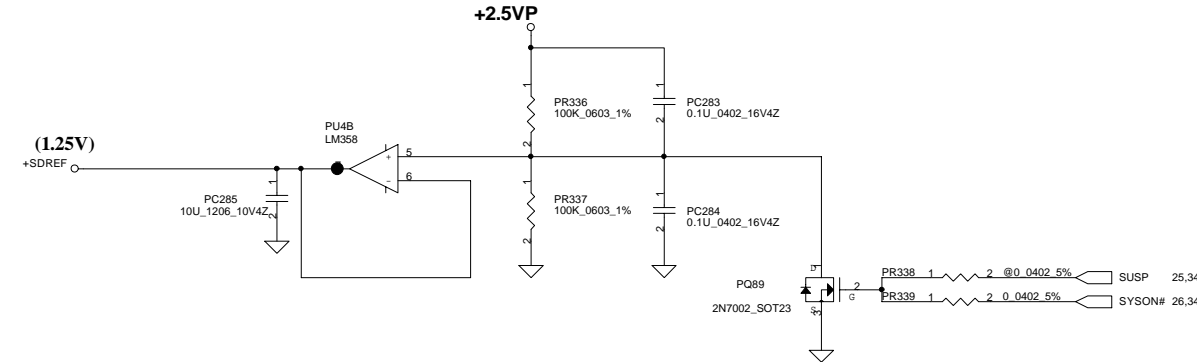
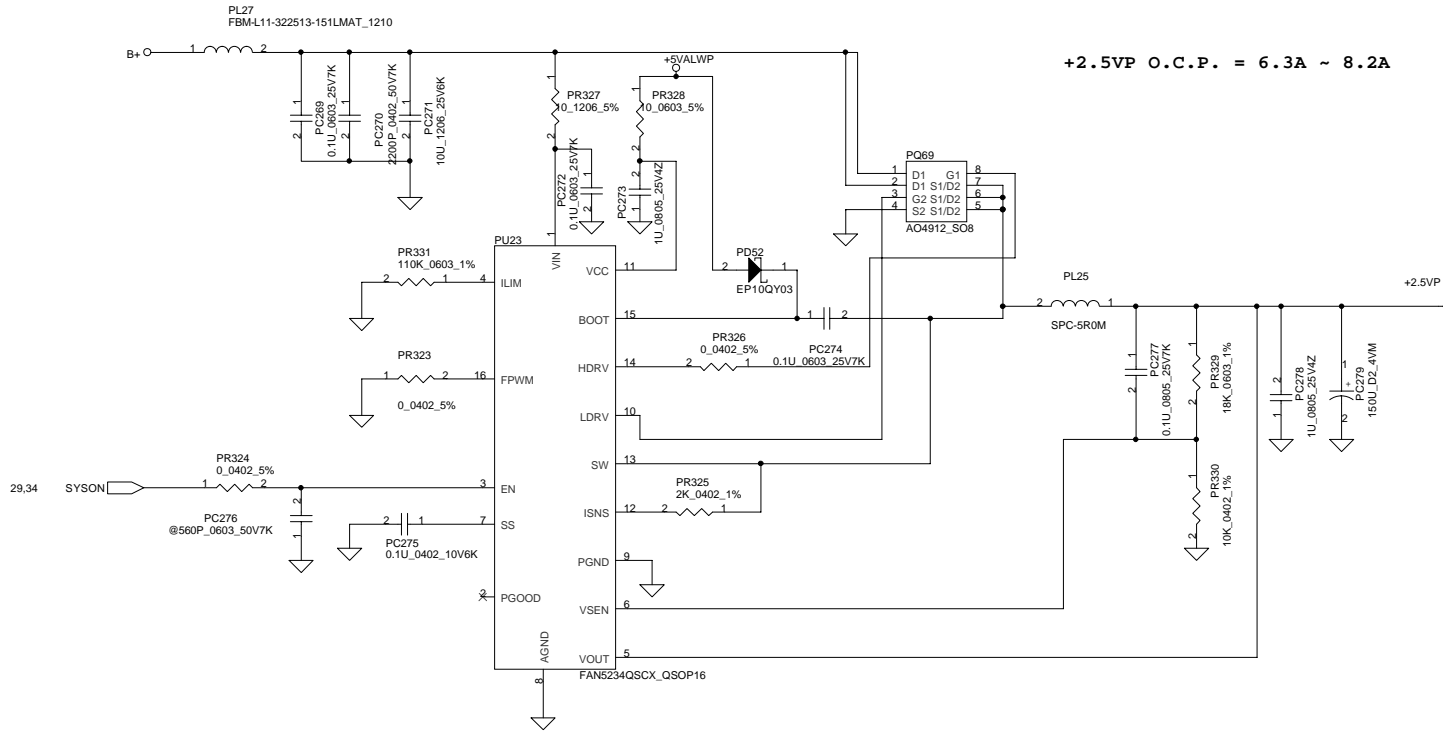
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS 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.		
SCHEMATIC, M/B LA-2511		
Size B	Document Number 401313	Rev B
Date: 星期二, 十月 19, 2004	Sheet 41	of 45



Compal Electronics, Inc.		
SCHEMATIC, M/B LA-2511		
Size B	Document Number 401313	Rev B
Date: 星期二, 十月 19, 2004	Sheet 42	of 45

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.		
SCHEMATIC, M/B LA-2511		
Size B	Document Number	Rev B
	401313	
Date: 星期二, 十月 19, 2004	Sheet	43 of 45

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.

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

Item	Fixed Issue	Reason for change	Rev.	PG#	Modify List	VER	Phase
1		Modify 1.05VP voltage level		42	1. change PR314 to 402k		DVT
2		Change PU16(ISL6227) 135VSP power build from softstart build to enable build		41	1.delete PR287; change PC174 from 1u 0805 to 0.01u 0603;add PR295:0		DVT
3		To leave PC302 for 1.35VSP soft start time		41			DVT
4		Change PU16(ISL6227) 135VSP power build from enable build to softstart build due to the sequence		41	1.add PR287:1k ; change PC174 from 0.01u 0603 to 1u 0603;delete PR295:0;add PR234:0		DVT
5		change PU2 from S-81233SG(sot89) to G920AT24U(sot89)		36	1.delete PZD2;PZD4		PVT
6		MODIFY 1.35V RISE TIME			1CHANGE PR287 FROM 1K TO 3K		PVT
7		MODIFY 1.35V VOLTAGE LEVEL			1CHANGE PR224 FROM 3.48K TO 5.1K		PVT
8		CHANGE CPU CORE MOS			1.CHANGE PQ52/PQ56 from IR7811A to AO4408; CHANGE PQ54/PQ58 from SI4362 to AO4410;CHANGE PR349/PR370 FROM 0 TO 2.2		PVT
9		PQ1 MOS PHASE OUT			1CHANGE PQ1 FROM TP0610T TO TP0610K		PVT

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-2511			
Size	Document Number	Rev	B
	401313		
Date:	星期二, 十月 19, 2004	Sheet	44 of 45

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

Item	Fixed Issue	Reason for change	Rev.	PG#	Modify List	VER	Phase
1	Delete R45,R47	EMI cost down	0.2	28			
2	Add R505,C627	Improve signal quality					
3							
4							
5							
6							
7							
8							
9							

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-2511		
Size	Document Number	Rev
	401313	B
Date:	~日期二, 十月 19, 2004	Sheet 45 of 45