

# Compal Confidential

## DCL56 Schematics Document

### Banias uFCBGA/uFCPGA Package with Odem Core Logic

2004-02-03 for C-test

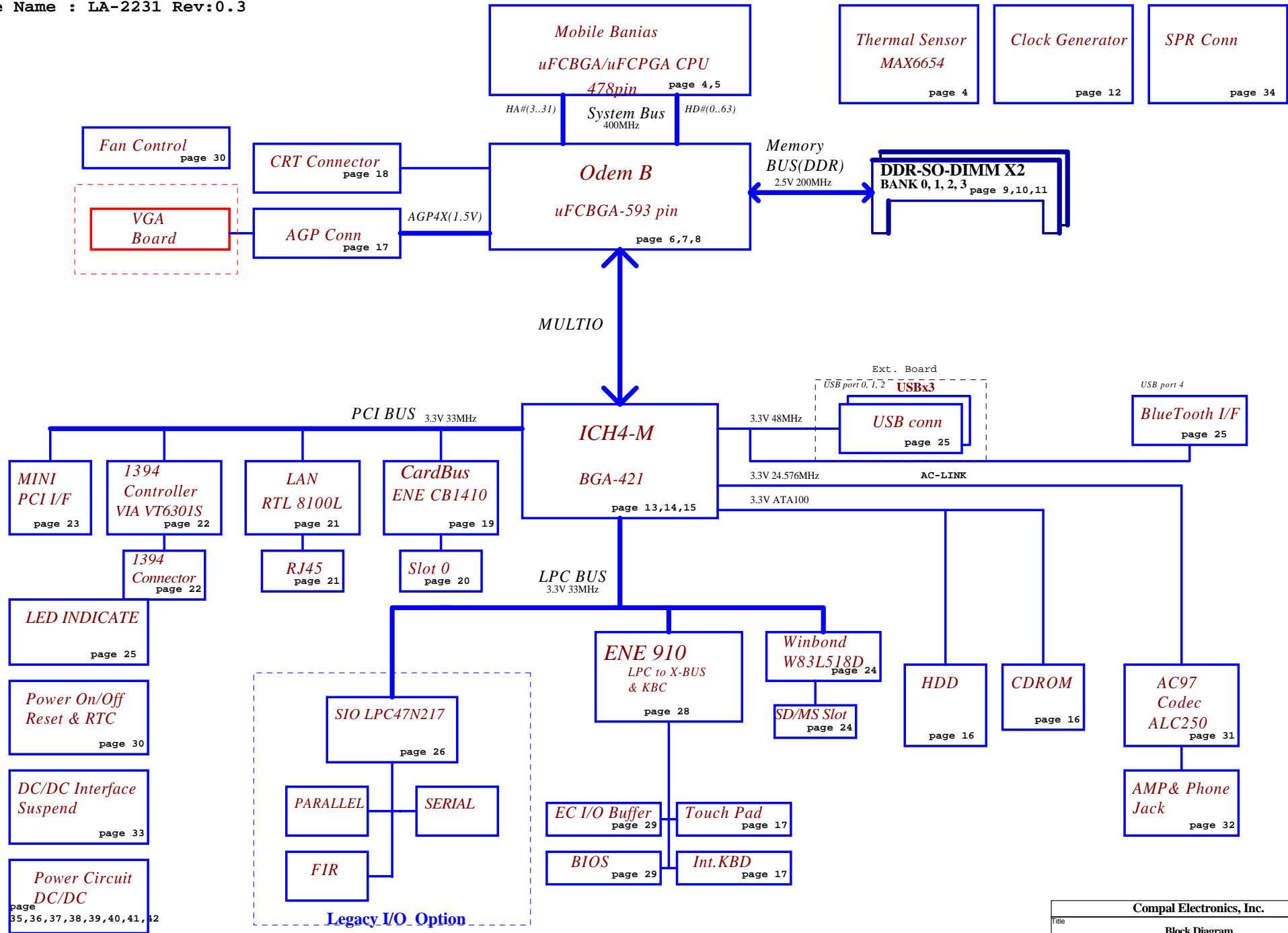
REV: 0.3

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Compal Electronics, Inc.		
Title		
Cover Sheet		
Size	Document Number	Rev
	DCL56 LA2231	0.3
Date:	Thursday, February 05, 2004	Sheet 1 of 45

Model Name :DCL56

File Name : LA-2231 Rev:0.3



Compal Electronics, Inc.		
Title Block Diagram		
Size	Document Number DCL56 LA2231	Rev 0.3
Date:	Tuesday, February 17, 2004	Sheet 2 of 45

## 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 MCH	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	AGP 4X	ON	OFF	OFF
+1.8VALW	1.8V power rail	ON	ON	ON*
+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

BID2	BID1	BID0	PCB Revision
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0	0	1	0.2
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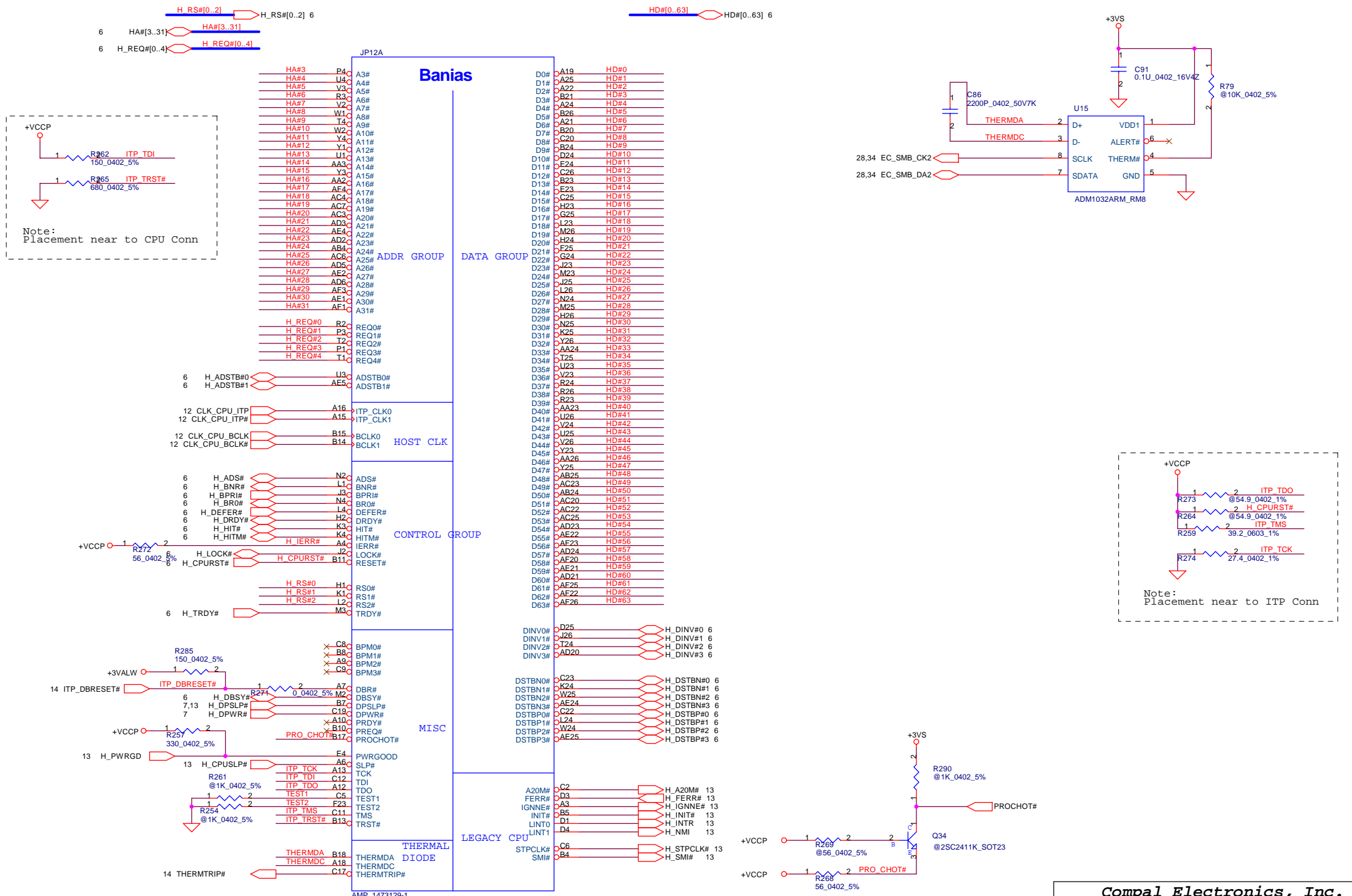
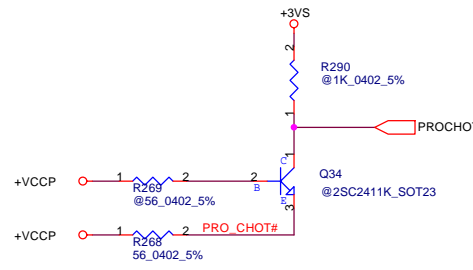
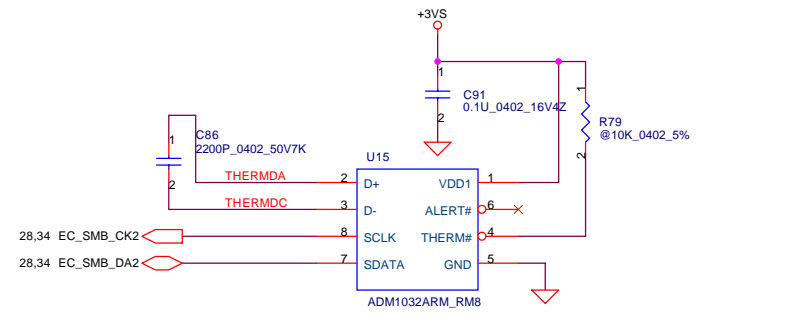
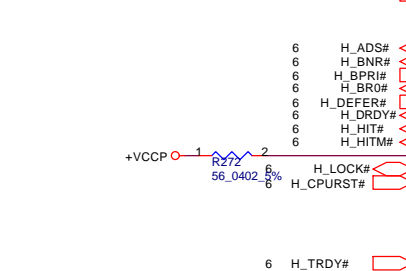
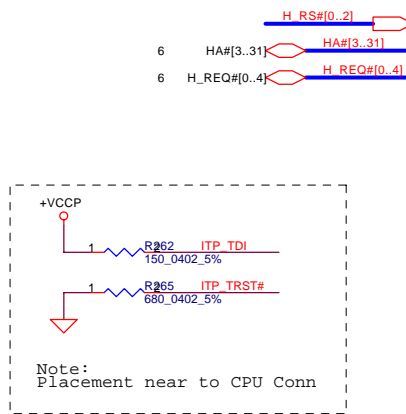
## External PCI Devices

Device	IDSEL#	REQ#/GNT#	Interrupts
VGA			PIRQA
CardBus	AD19	2	PIRQC
LAN	AD17	3	PIRQD
Mini-PCI	AD18,AD22	1/4	PIRQC/PIRQD
1394	AD16	0	PIRQB

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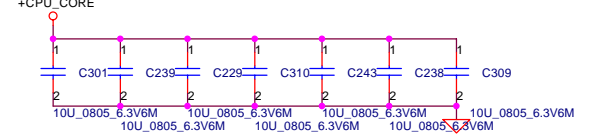
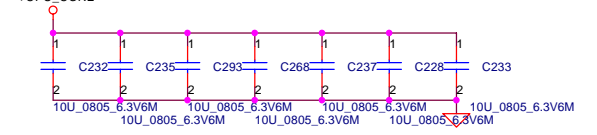
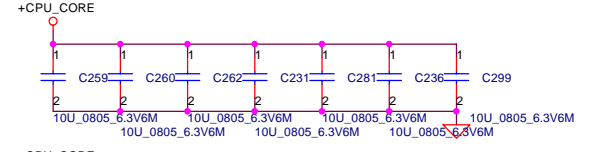
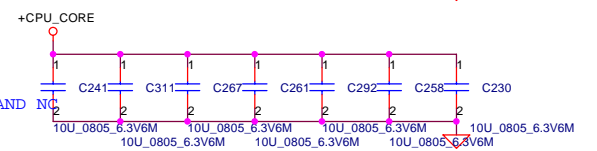
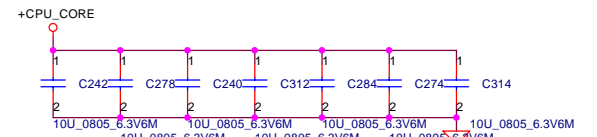
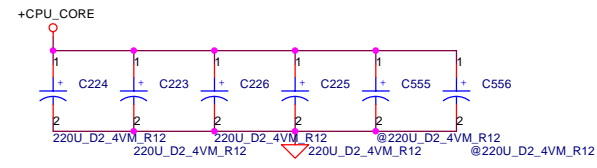
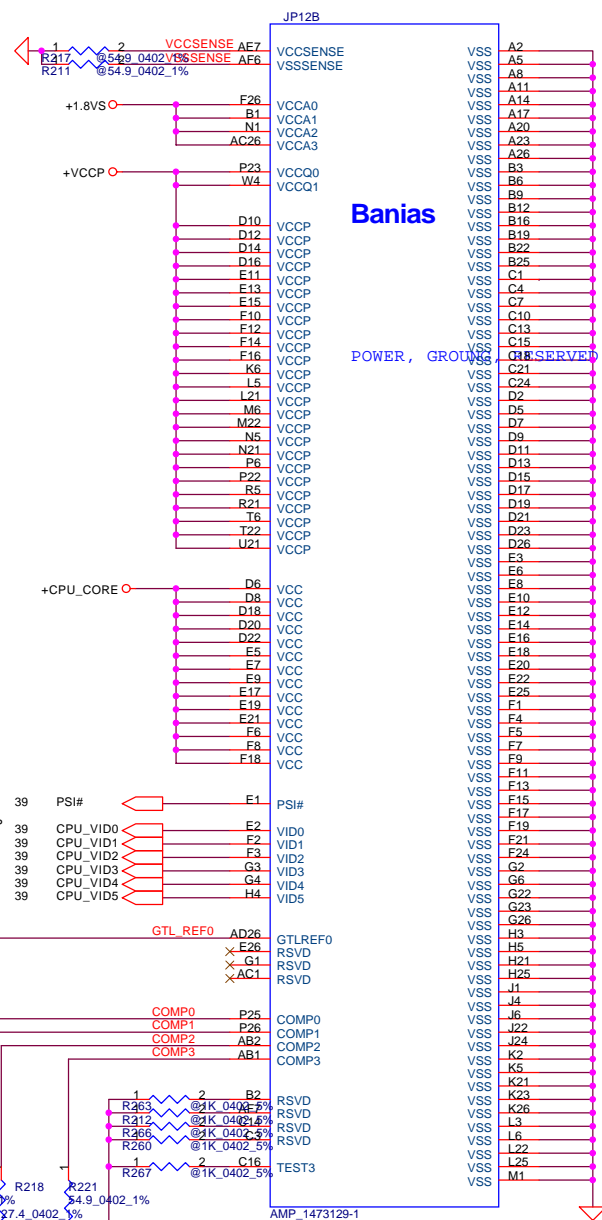
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Size	Document Number	Rev
B	DCL56 LA2231	0.3
Date:	Thursday, February 05, 2004	Sheet 3 of 45

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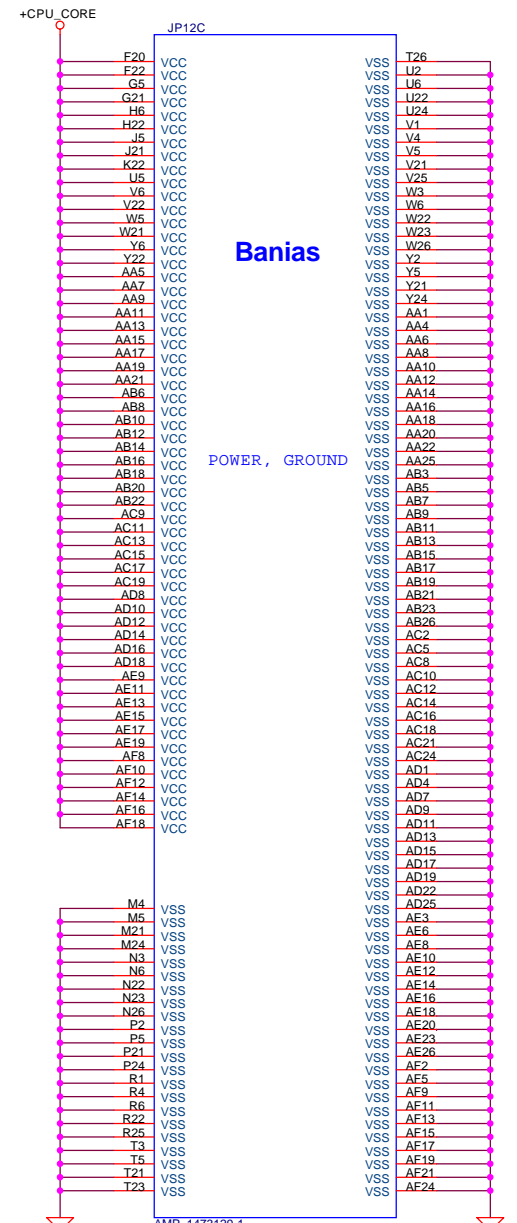
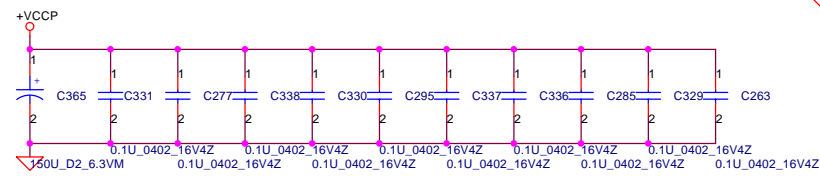
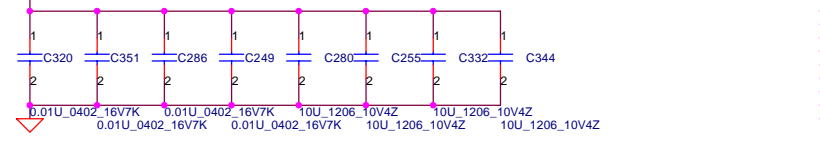


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<b>Compal Electronics, Inc.</b>		
Title <b>Banias Processor in mFCPGA479 with ITP</b>		
Size A3	Document Number <b>DCL56 LA2231</b>	Rev 0.3
Date: Thursday, February 05, 2004	Sheet 4	of 45



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

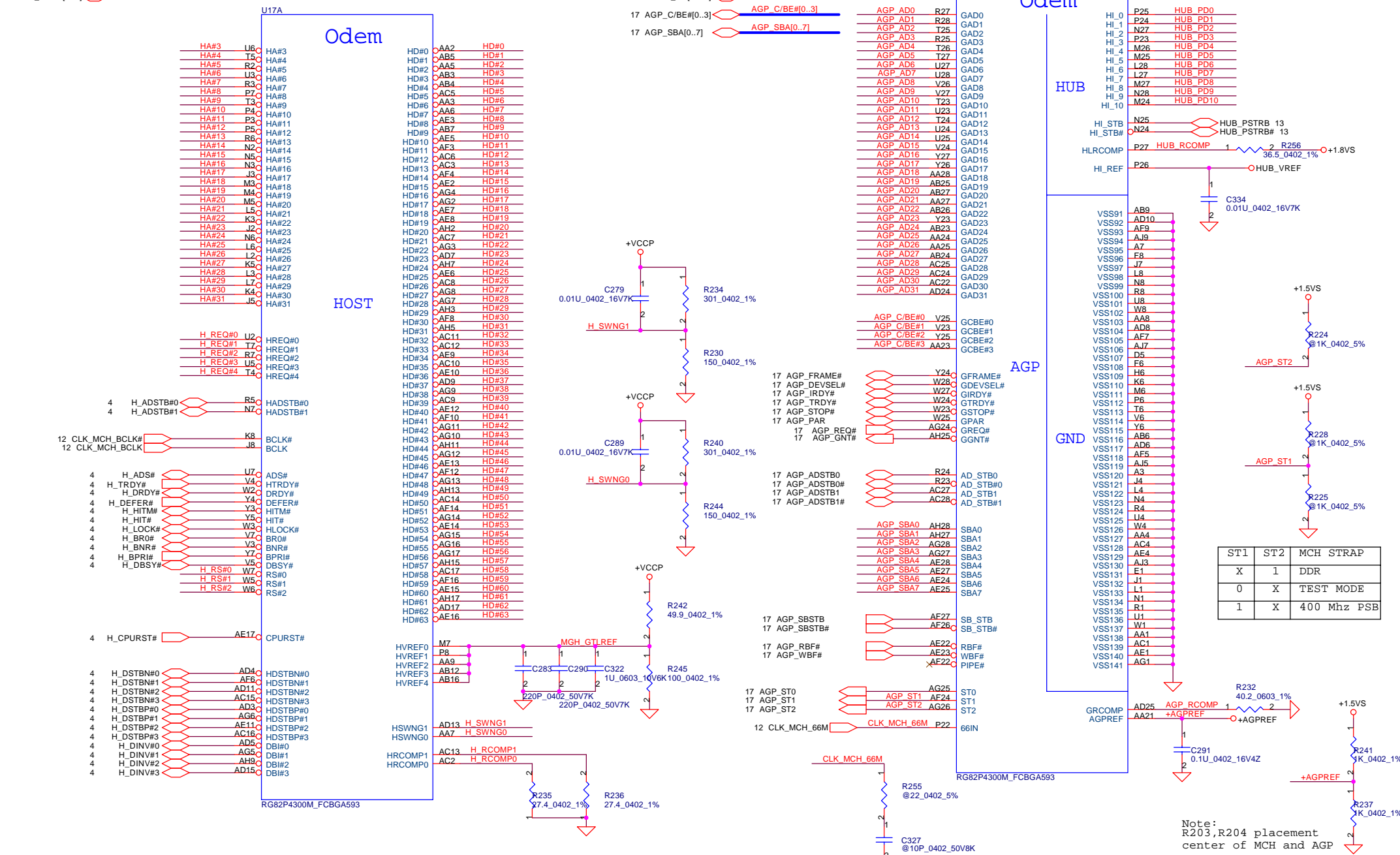


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4 H\_RS#[0..2] HA\_RS#[0..2]  
 4 HA#[3..31] HA#[3..31]  
 4 H\_REQ#[0..4] H\_REQ#[0..4]

HD#[0..63] HD#[0..63] 4

HUB\_PD[0..10] HUB\_PD[0:10] 13



ST1	ST2	MCH STRAP
X	1	DDR
0	X	TEST MODE
1	X	400 Mhz PSB

Note:  
 R203,R204 placement  
 center of MCH and AGP

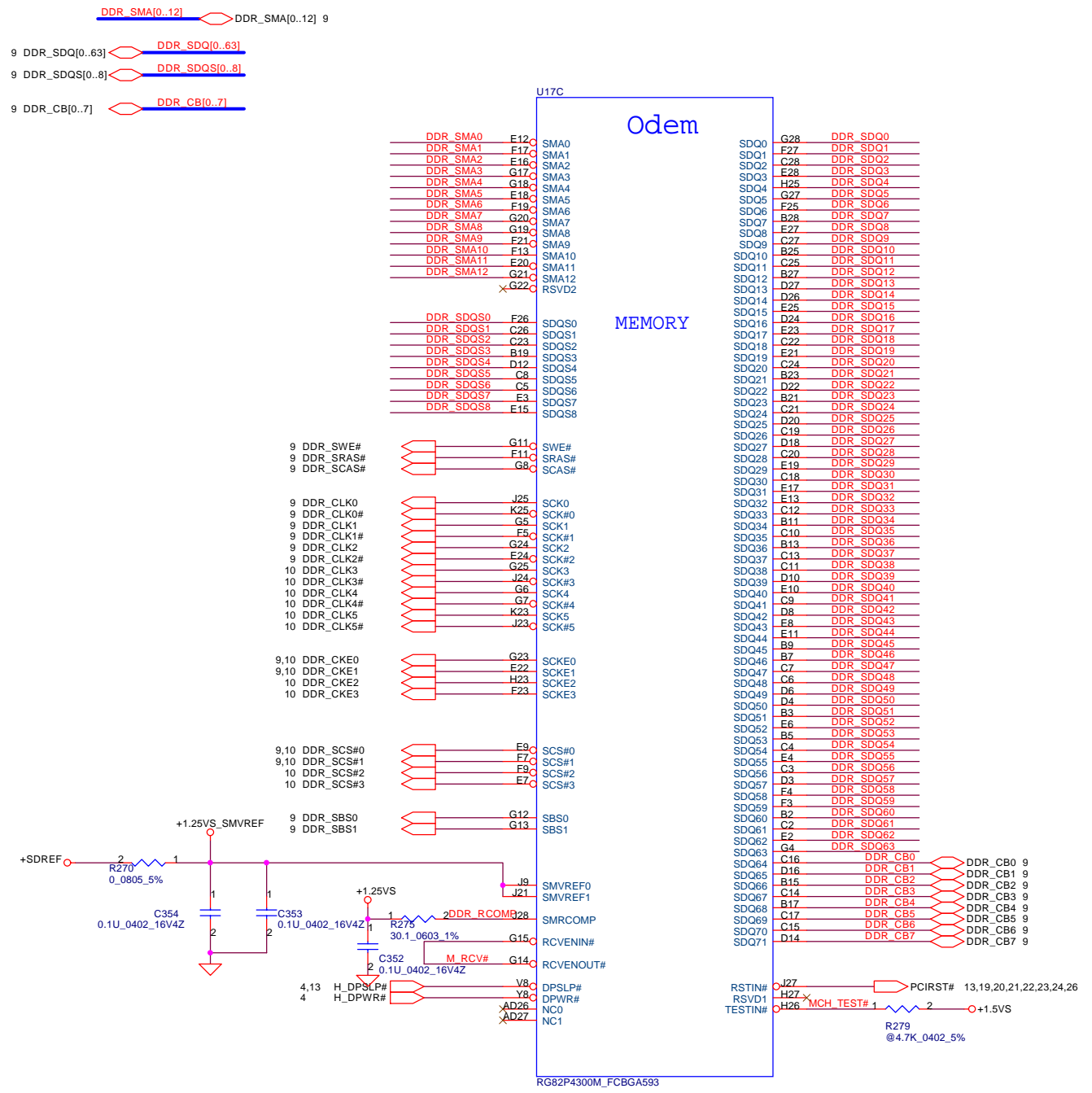
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Title: Odem (1 of 3)

Size	Document Number	Rev
Custpm	DCL56 LA2231	0.3

Date: Thursday, February 05, 2004 Sheet 6 of 45

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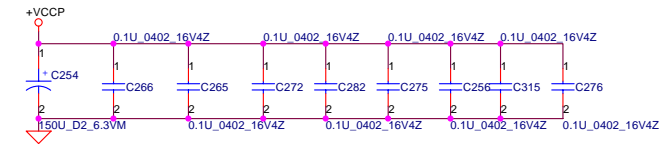
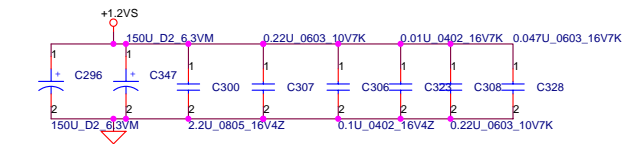
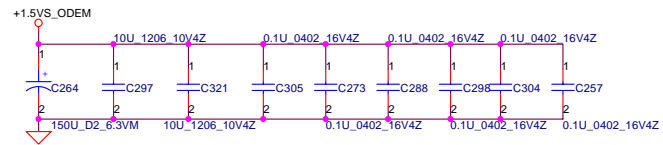
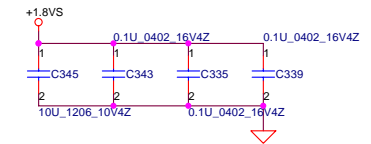
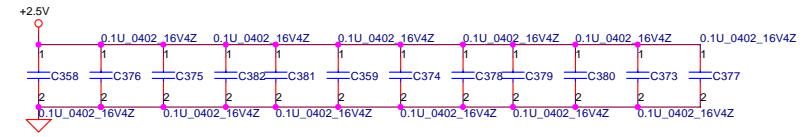
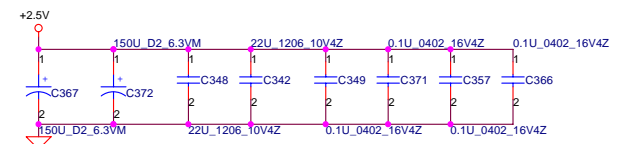
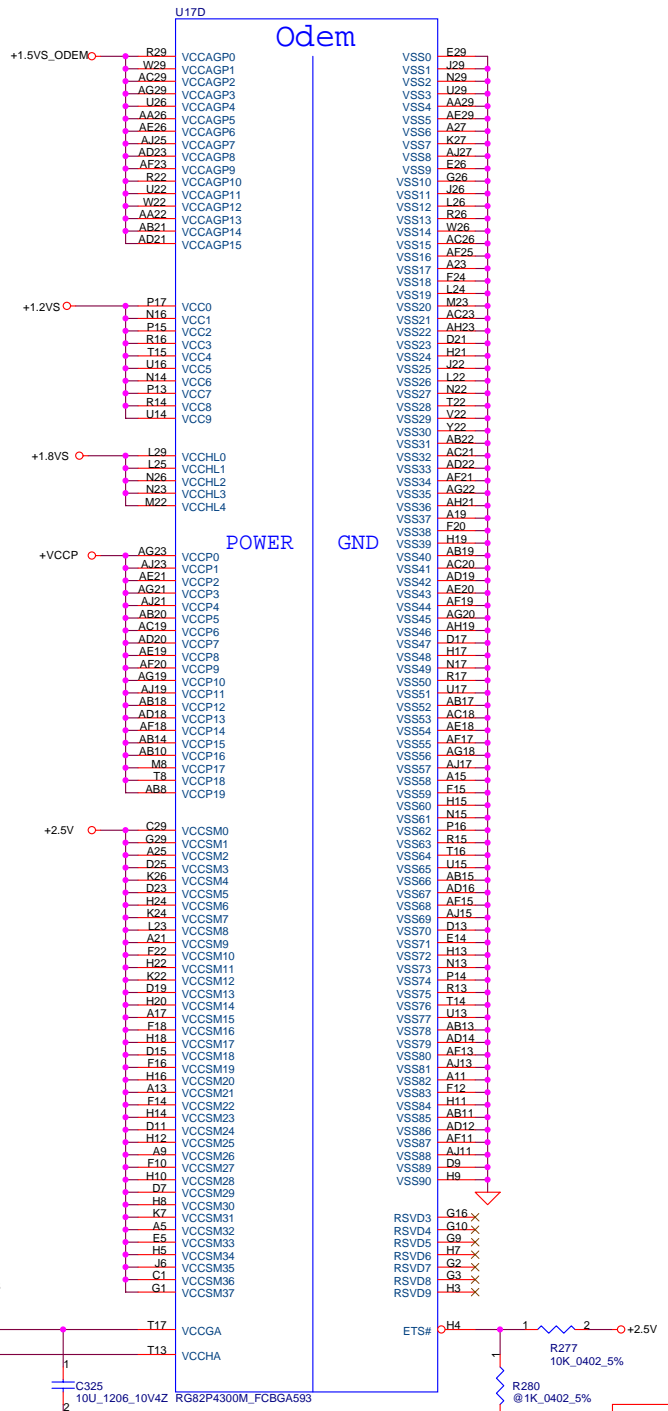


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Title: Odem(2 of 3)

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Custpm	DCL56 LA2231	0.3
Date:	Thursday, February 05, 2004	Sheet 7 of 45

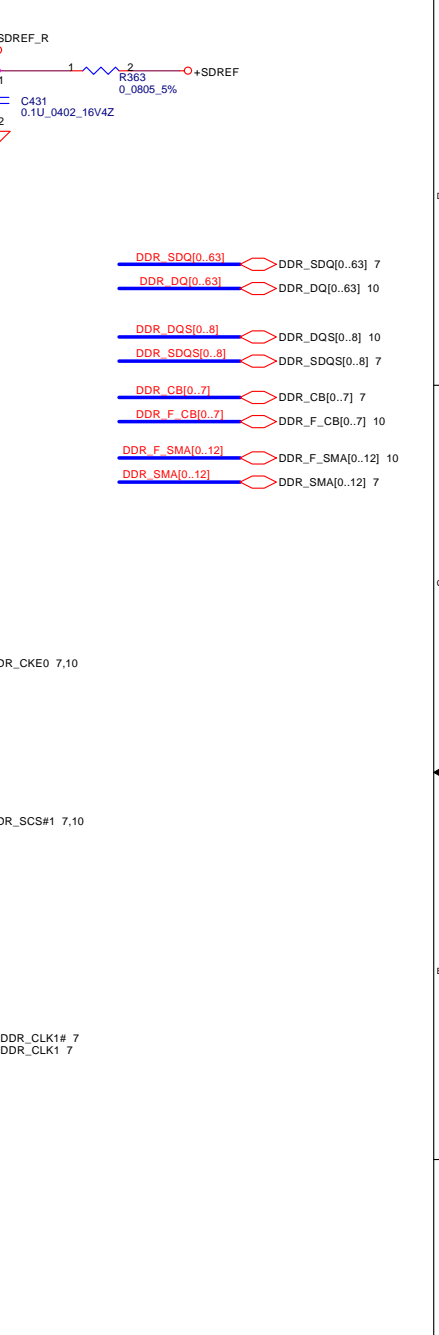
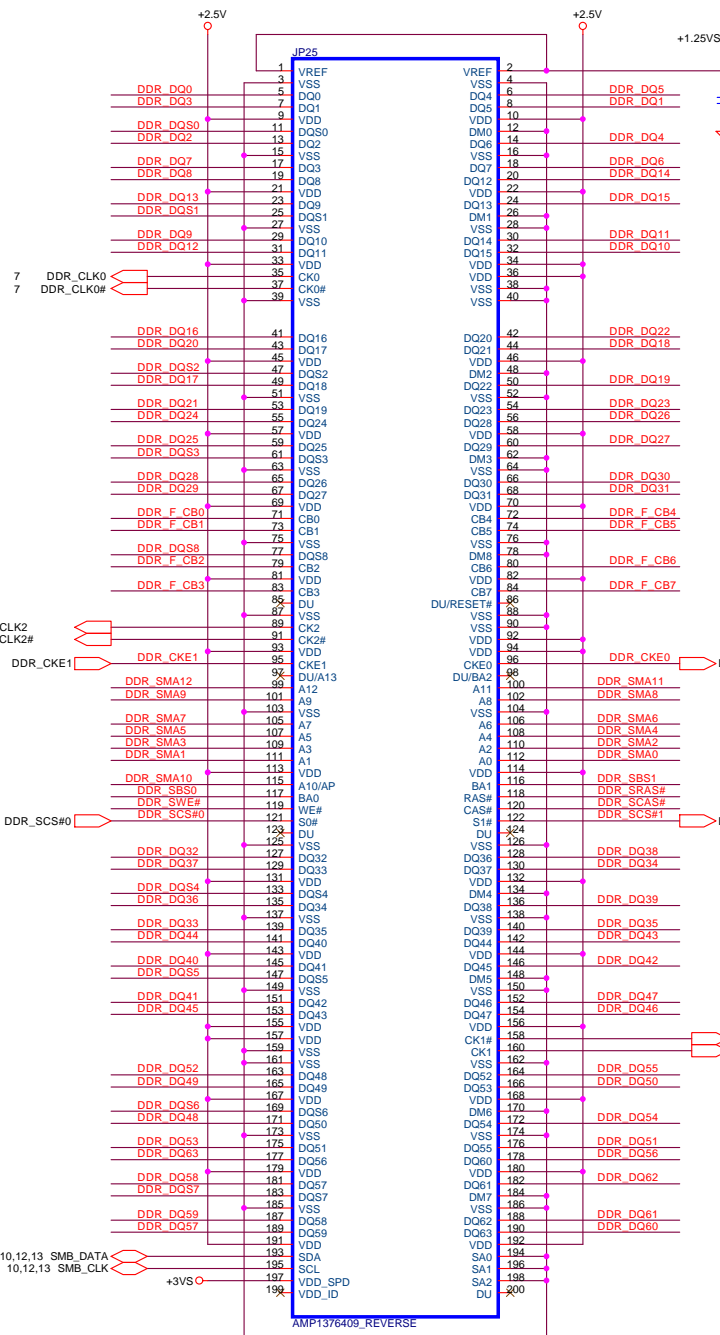
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Size	Document Number	Rev
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Date:	Thursday, February 05, 2004	Sheet 8 of 45

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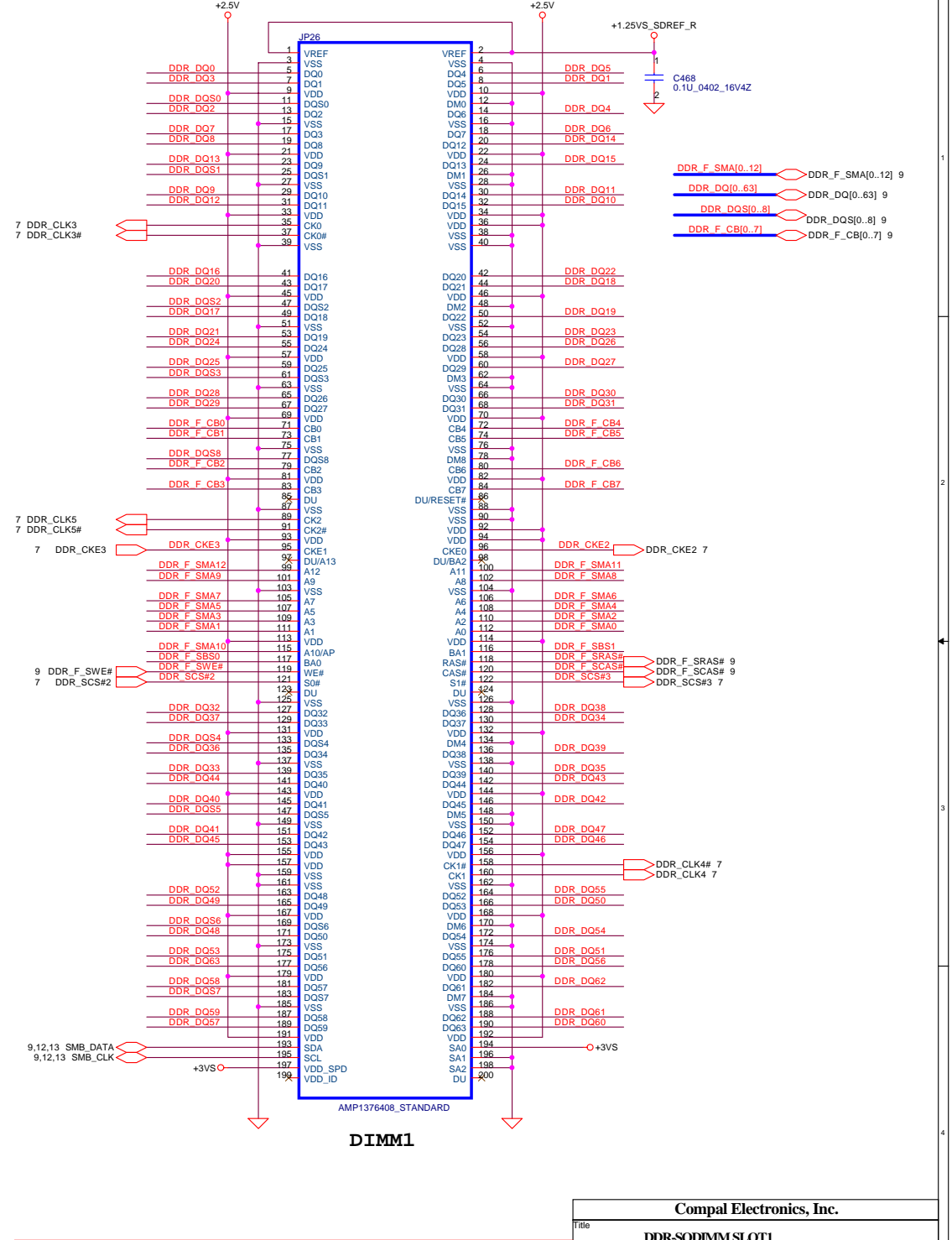
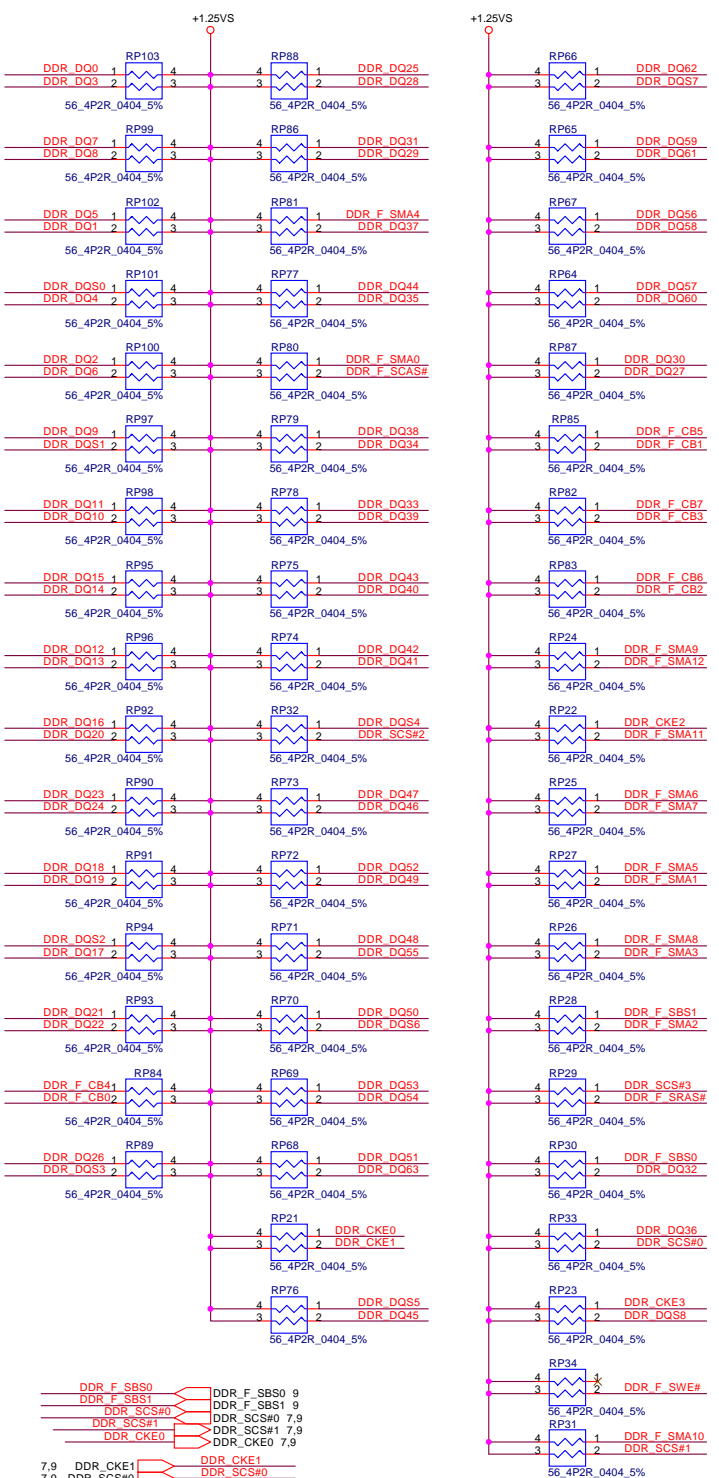


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**DDR-SODIMM SLOT0**

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Date:	Thursday, February 05, 2004	Sheet 9 of 45

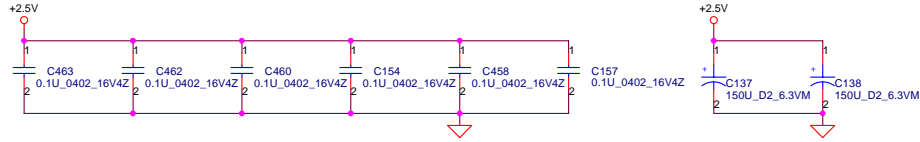
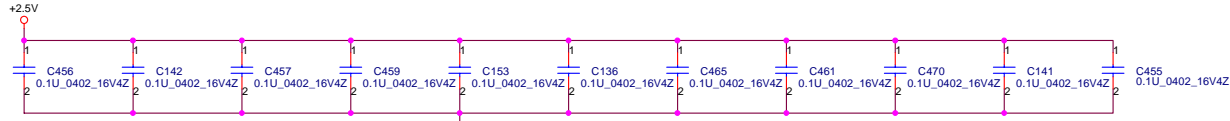


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DDR-SODIMM SLOT1		
Size	Document Number	Rev
	DCL56 LA2231	0.3
Date:	Thursday, February 05, 2004	Sheet 10 of 45

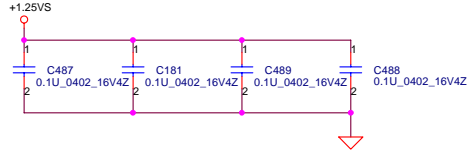
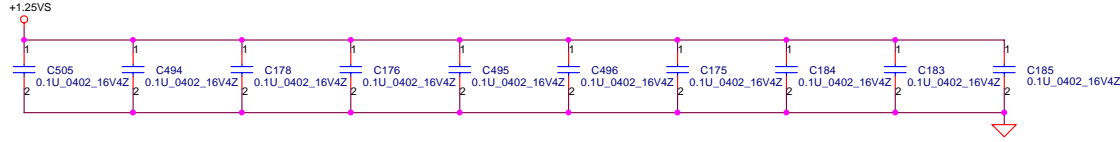
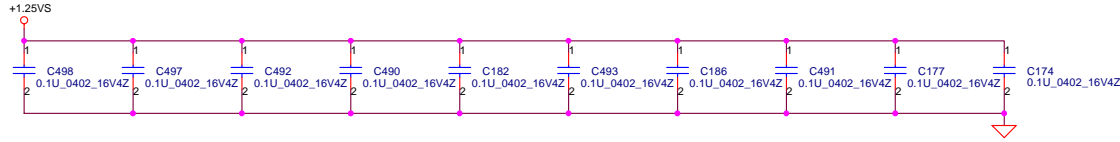
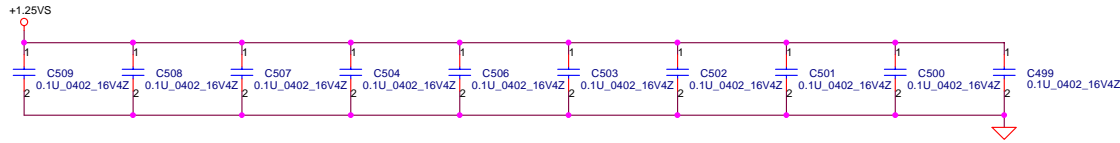
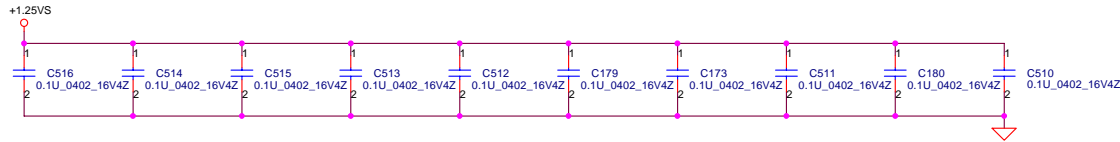
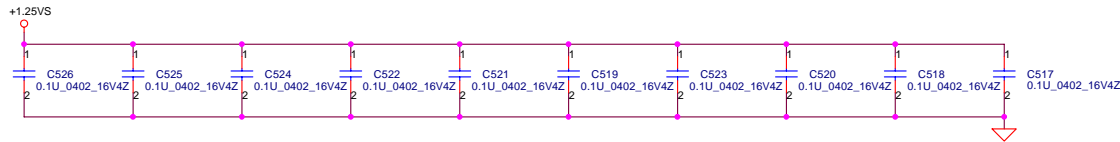
**Layout note :**

Distribute as close as possible to DDR-SODIMM.



**Layout note :**

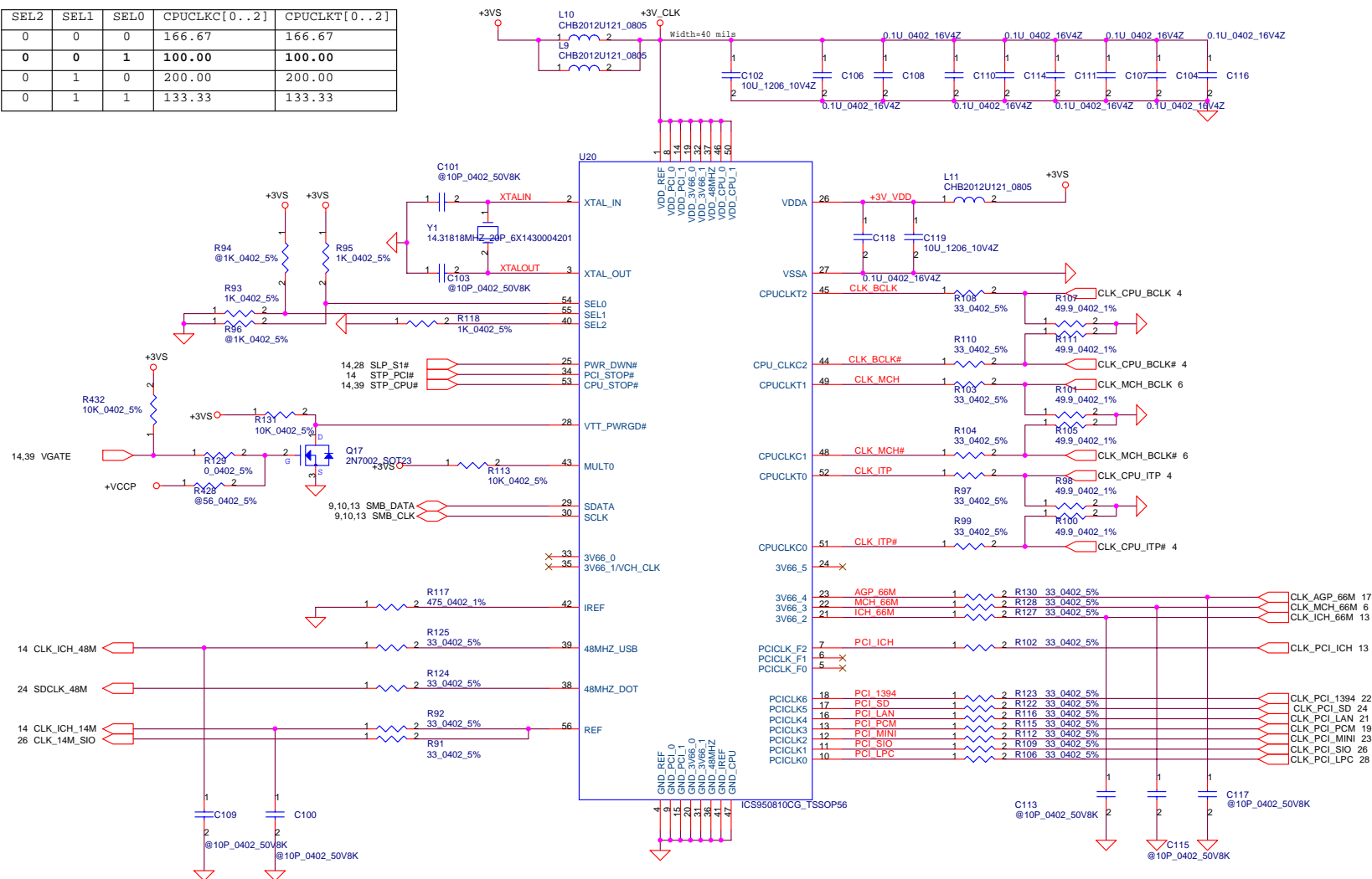
Place one cap close to every 2 pull up resistors termination to +1.25V



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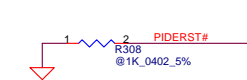
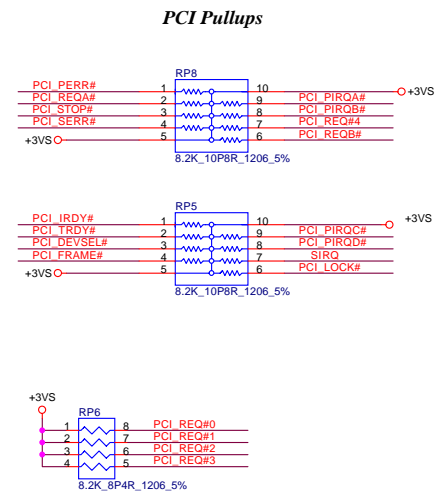
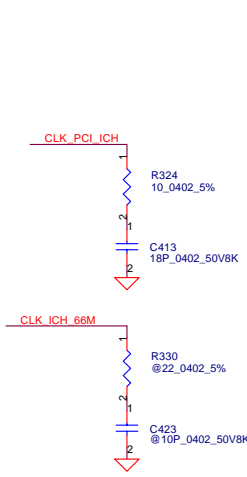
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Title <b>DDR SODIMM Decoupling</b>		
Size	Document Number <b>DCL56 LA2231</b>	Rev 0.3
Date:	Thursday, February 05, 2004	Sheet 11 of 45

SEL2	SEL1	SEL0	CPUCLK[0..2]	CPUCLKT[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

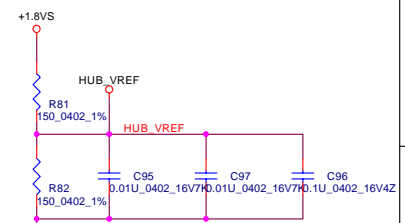
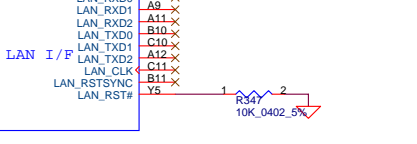
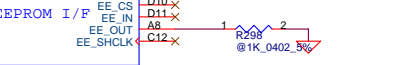
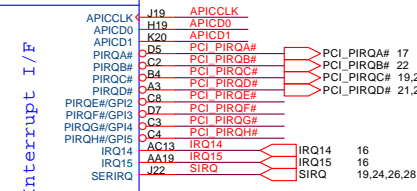
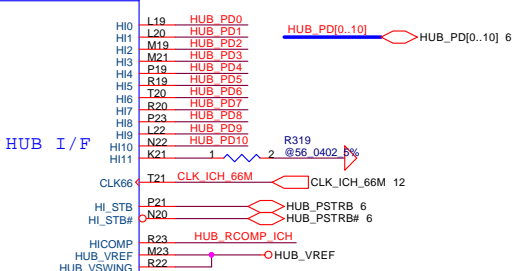
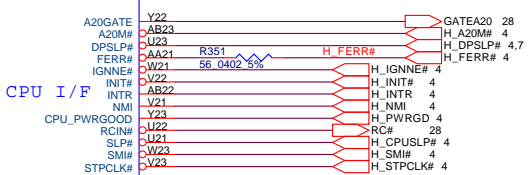
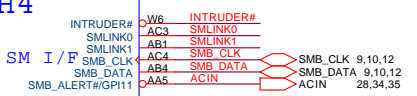
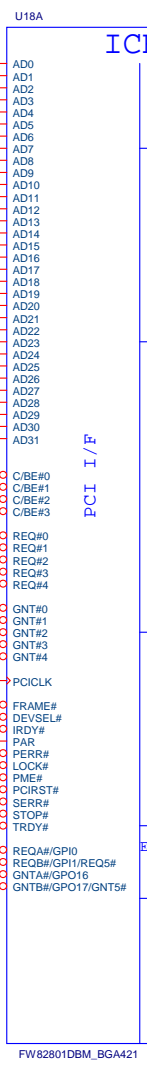
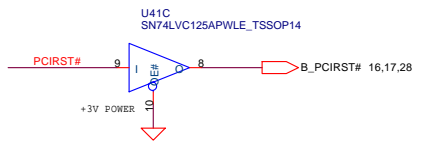
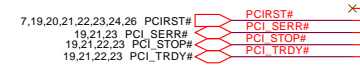
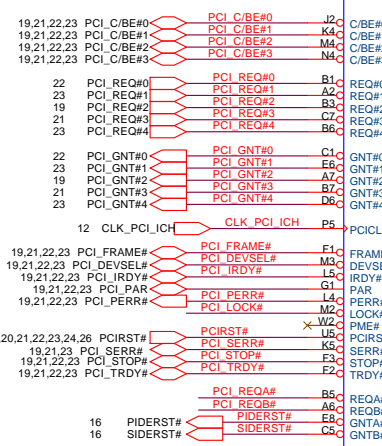


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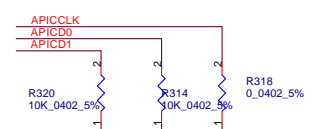
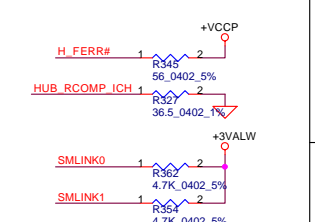
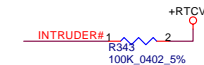
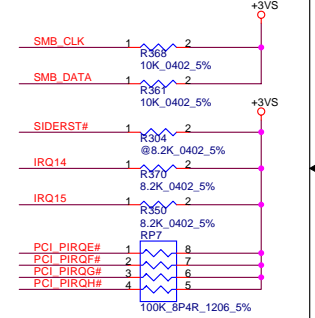
<b>Compal Electronics, Inc.</b>		
Title Clock Generator		
Size B	Document Number DCL56 LA2231	Rev 0.3
Date:	Thursday, February 05, 2004	Sheet 12 of 45



PCI_AD0	H5	AD0
PCI_AD1	J3	AD1
PCI_AD2	H3	AD2
PCI_AD3	K1	AD3
PCI_AD4	GS	AD4
PCI_AD5	J4	AD5
PCI_AD6	H4	AD6
PCI_AD7	J5	AD7
PCI_AD8	K2	AD8
PCI_AD9	G2	AD9
PCI_AD10	G4	AD10
PCI_AD11	G4	AD11
PCI_AD12	L2	AD12
PCI_AD13	H2	AD13
PCI_AD14	L3	AD14
PCI_AD15	E5	AD15
PCI_AD16	F4	AD16
PCI_AD17	E5	AD17
PCI_AD18	N2	AD18
PCI_AD19	N2	AD19
PCI_AD20	E3	AD20
PCI_AD21	N3	AD21
PCI_AD22	E4	AD22
PCI_AD23	M5	AD23
PCI_AD24	E2	AD24
PCI_AD25	P1	AD25
PCI_AD26	E1	AD26
PCI_AD27	P2	AD27
PCI_AD28	D3	AD28
PCI_AD29	R1	AD29
PCI_AD30	D2	AD30
PCI_AD31	P4	AD31

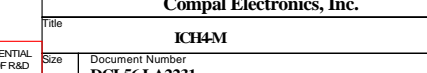
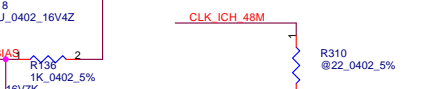
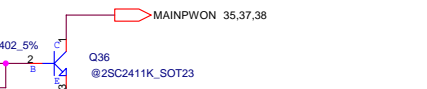
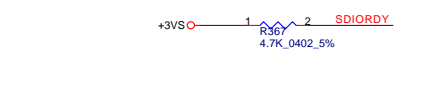
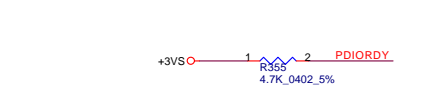
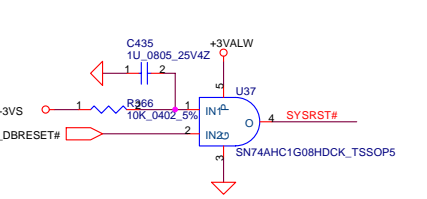
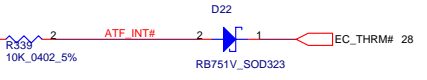
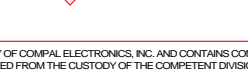
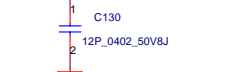
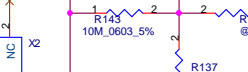
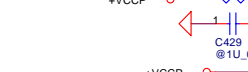
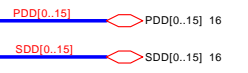
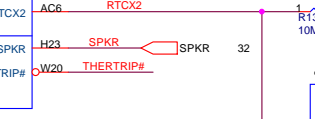
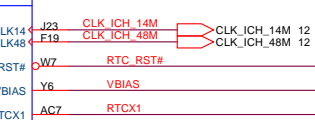
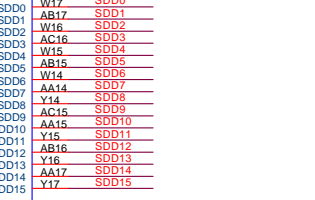
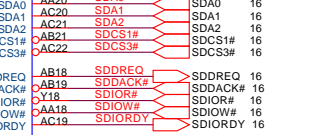
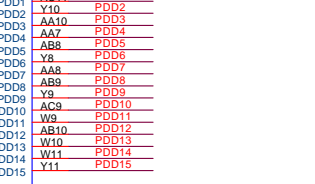
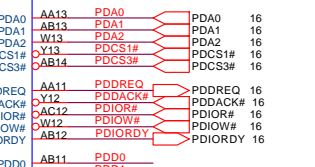
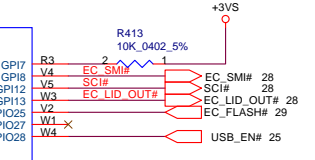
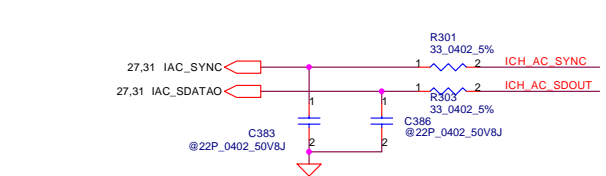
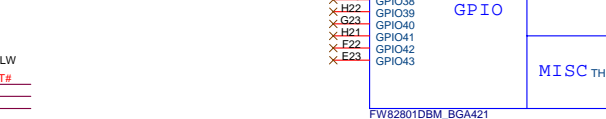
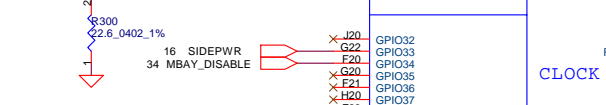
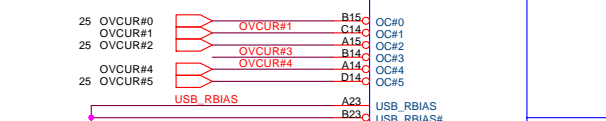
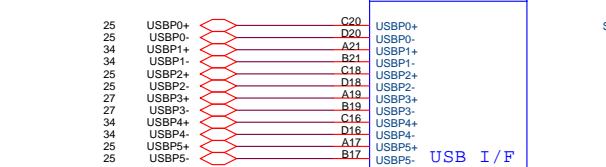
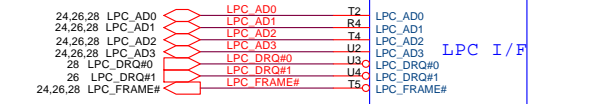
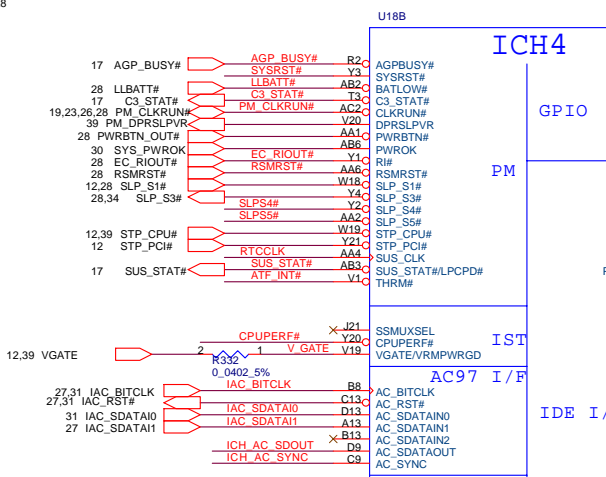
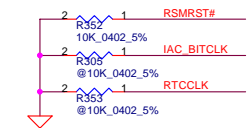
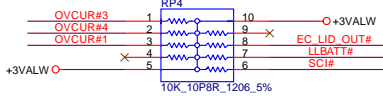
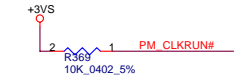
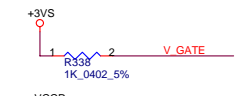
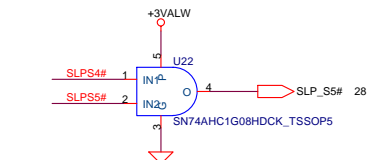


Note:  
R272, R273 placement  
center of MCH and  
ICH4M



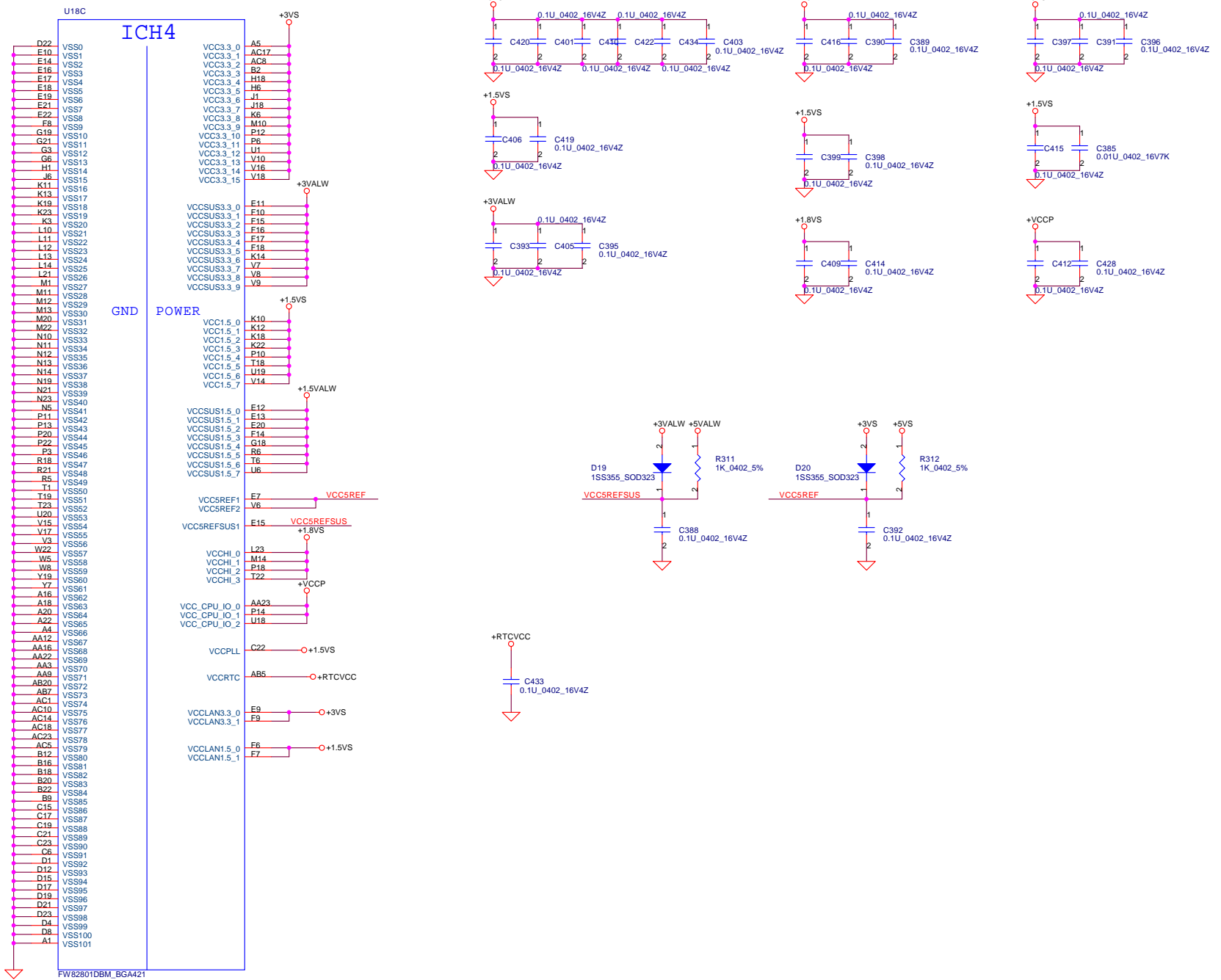
Compal Electronics, Inc.			
Title: ICH4M			
Size	Document Number	Rev	
	DCL56 LA2231	0.3	
Date:	Thursday, February 05, 2004	Sheet	13 of 45

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Compal Electronics, Inc.		
Title <b>ICH4-M</b>		
Size	Document Number <b>DCL56 LA2231</b>	Rev 0.3
Date:	Thursday, February 05, 2004	Sheet 14 of 45

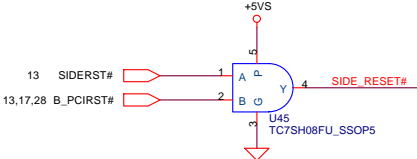
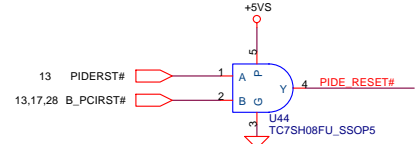
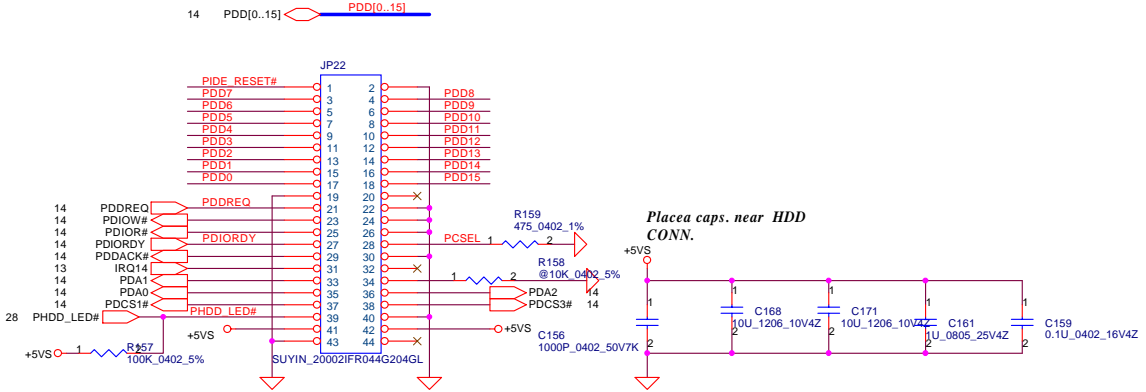
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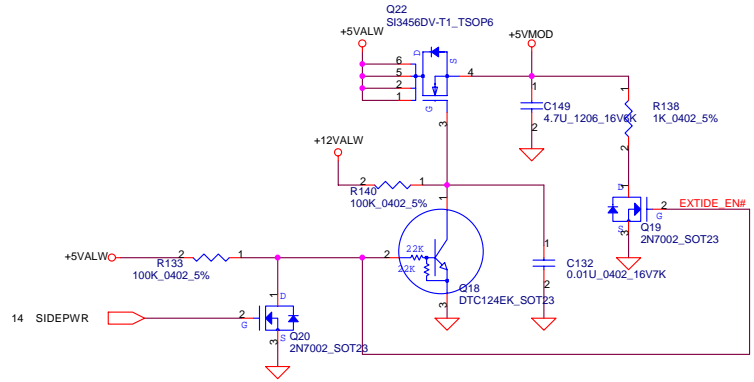
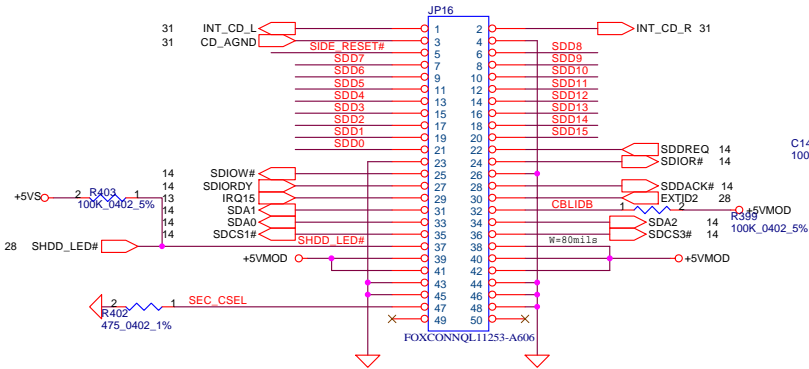
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<b>Compal Electronics, Inc.</b>		
Title <b>ICH4-M</b>		
Size	Document Number <b>DCL56 LA2231</b>	Rev 0.3
Date:	Thursday, February 05, 2004	Sheet 15 of 45

**HDD Connector**



**CD-ROM Connector**

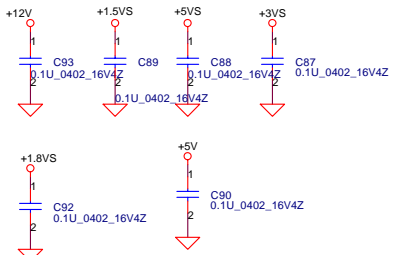
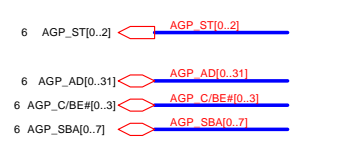
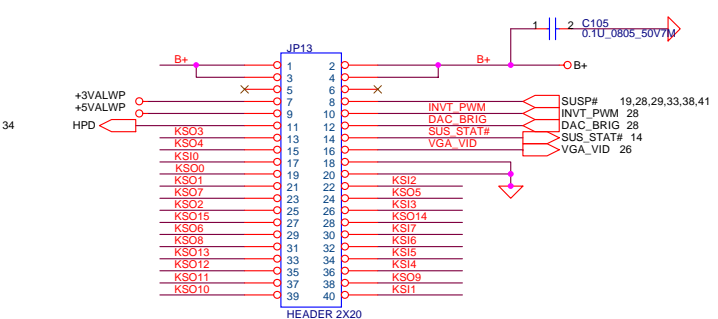
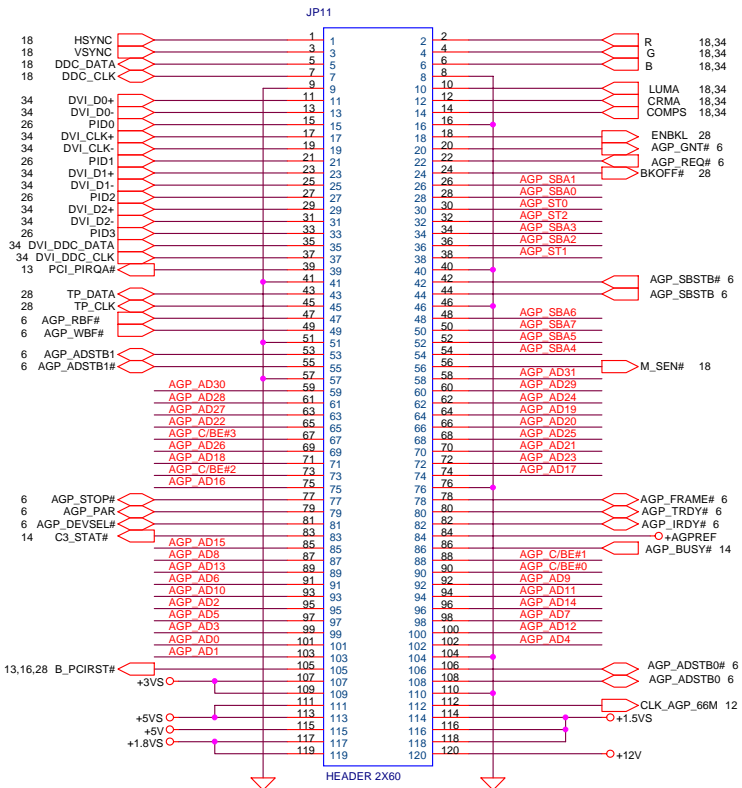


SI3456DV: N CHANNEL  
 VGS: 4.5V, RDS: 65 mOHM  
 Id(MAX): 5.1A  
 VGS,+20V

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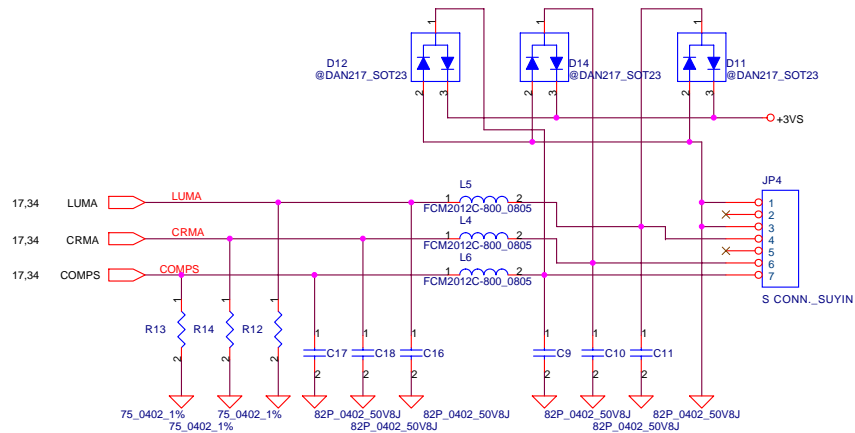
<b>Compal Electronics, Inc.</b>		
Title <b>IDE/CD-ROM Module</b>		
Size	Document Number <b>DCL56 LA2231</b>	Rev 0.3
Date:	Thursday, February 05, 2004	Sheet 16 of 45



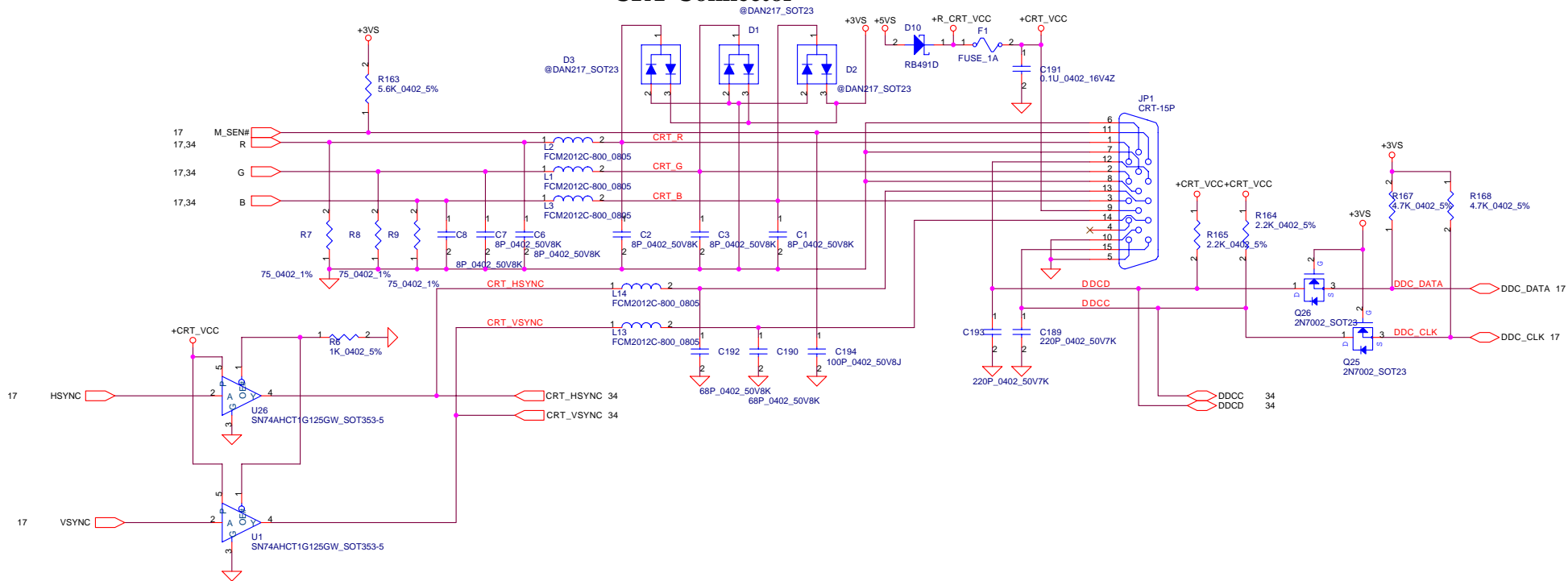


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<b>Compal Electronics, Inc.</b>		
Title <b>AGPConn.</b>		
Size	Document Number <b>DCL56 LA2231</b>	Rev 0.3
Date:	Thursday, February 05, 2004	Sheet 17 of 45

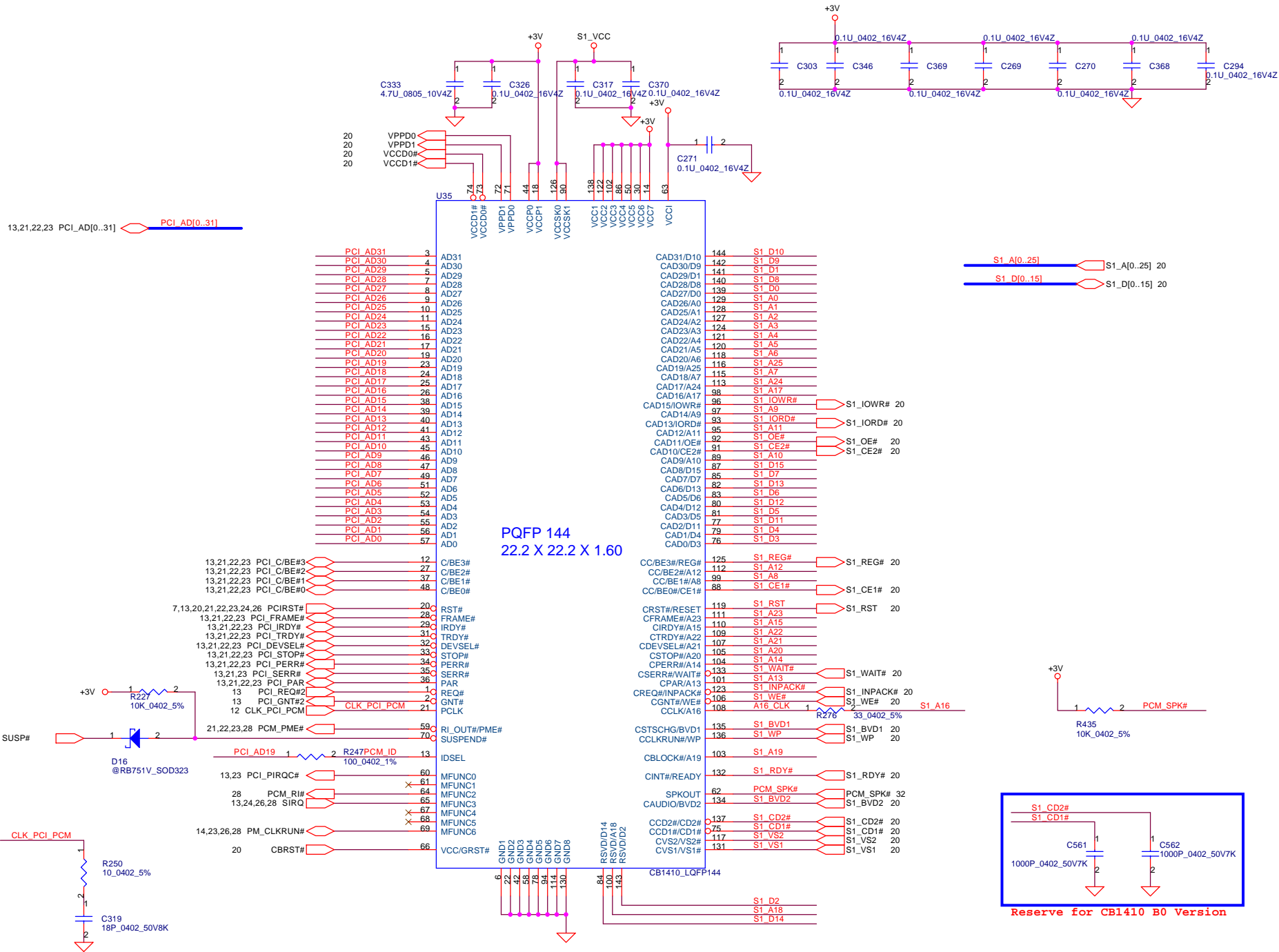


### CRT Connector

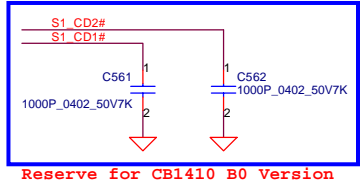


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<b>Compal Electronics, Inc.</b>		
<b>AGPConn. &amp; CRT</b>		
Title		
Size	Document Number	Rev
	<b>DCL56 LA2231</b>	0.3
Date:	Thursday, February 05, 2004	Sheet 18 of 45

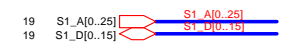
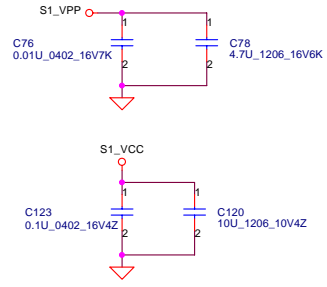
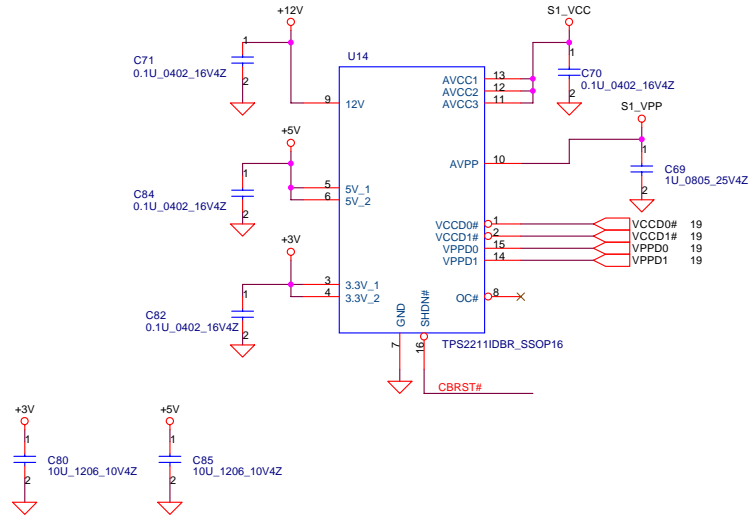


PQFP 144  
22.2 X 22.2 X 1.60

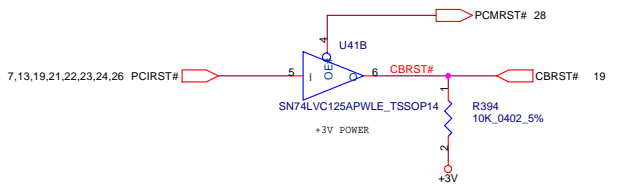
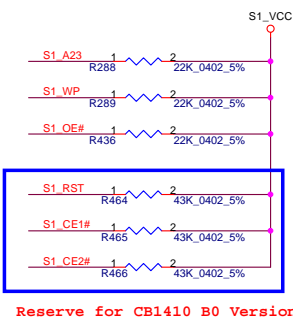
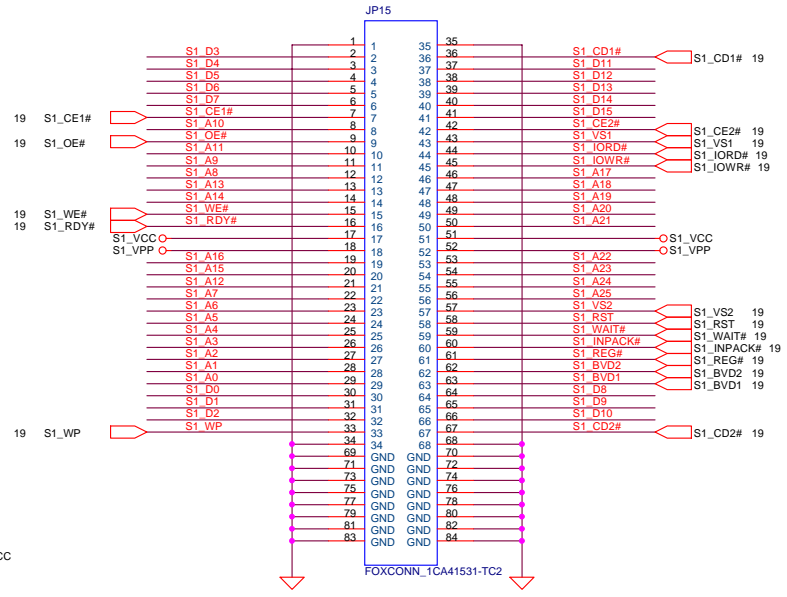


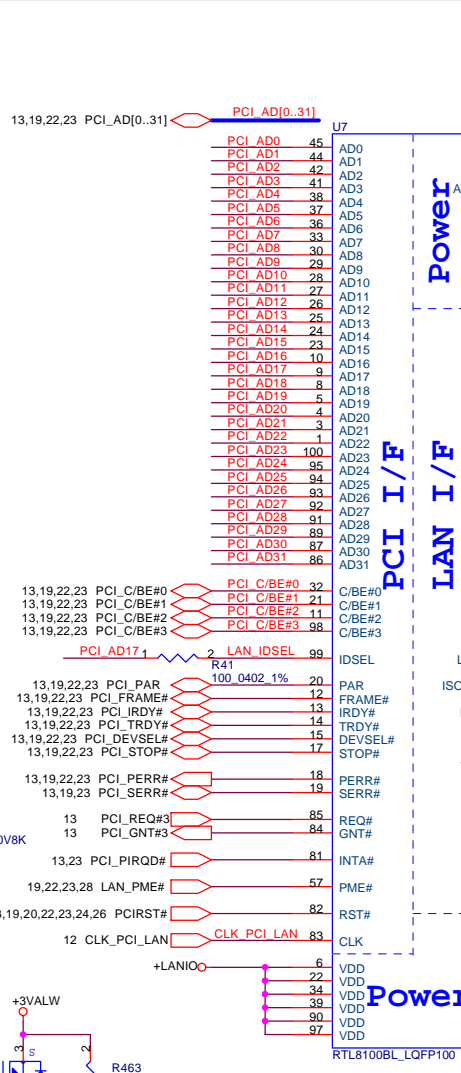
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PCMCIA Power Controller

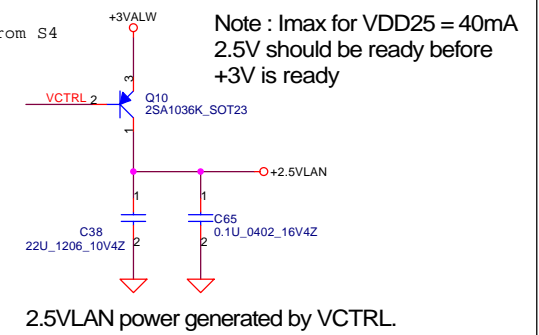


CardBus Socket

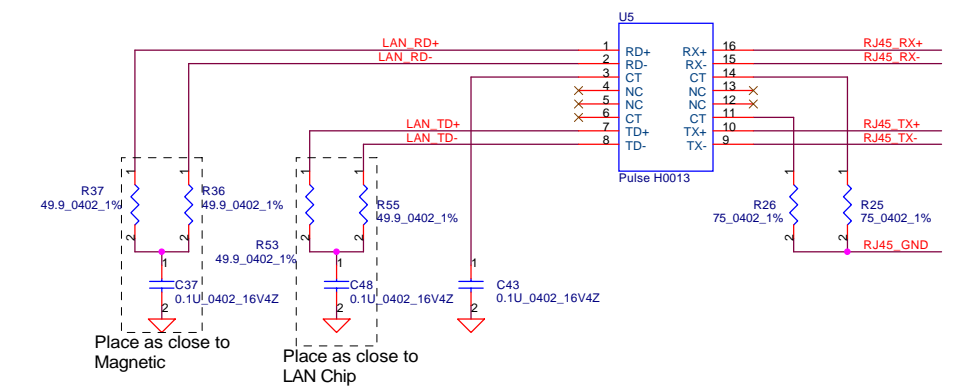




For Wake on Lan from S4

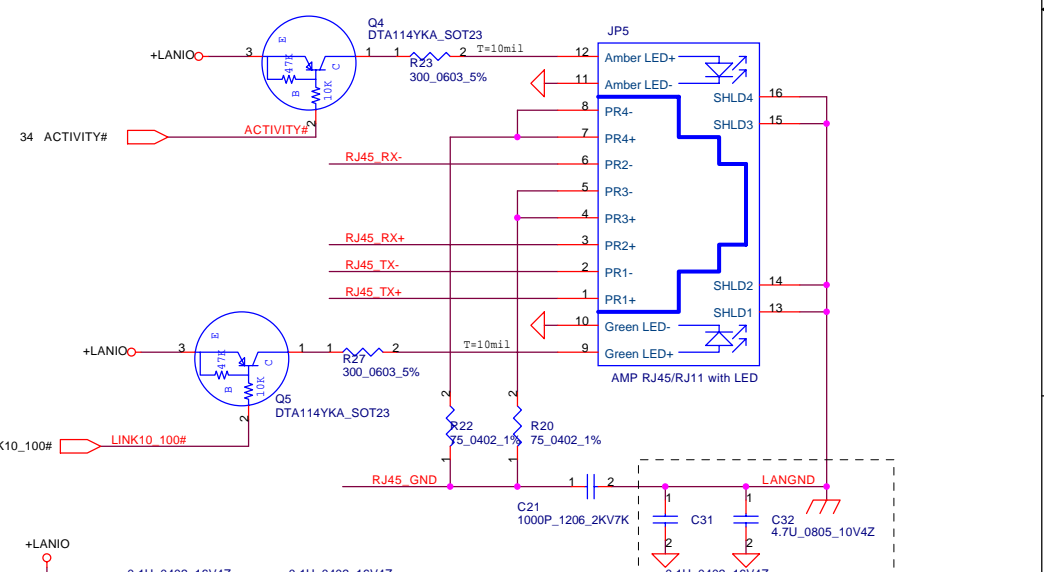


2.5VLAN power generated by VCTRL.



Place as close to Magnetic

Place as close to LAN Chip



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

Compal Electronics, Inc.

Title <b>LAN RTL8100BL</b>		
Size B	Document Number <b>DCL56 LA2231</b>	Rev 0.3
Date Thursday, February 05, 2004	Sheet 21	of 45

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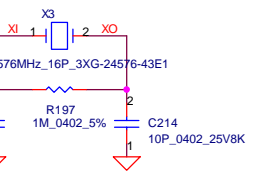
13,19,21,23 PCI\_AD[0..31] PCI\_AD[0..31]

# IEEE 1394 VT6307S

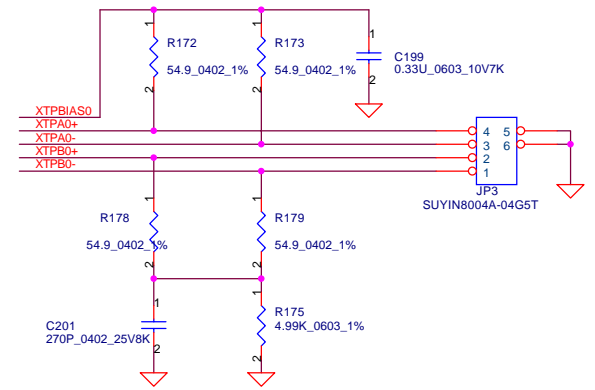
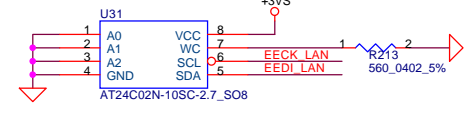
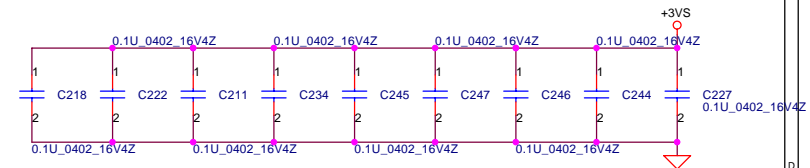
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PCI AD1	24	AD1
PCI AD2	20	AD2
PCI AD3	19	AD3
PCI AD4	18	AD4
PCI AD5	16	AD5
PCI AD6	15	AD6
PCI AD7	14	AD7
PCI AD8	11	AD8
PCI AD9	10	AD9
PCI AD10	9	AD10
PCI AD11	8	AD11
PCI AD12	7	AD12
PCI AD13	4	AD13
PCI AD14	2	AD14
PCI AD15	2	AD15
PCI AD16	117	AD16
PCI AD17	116	AD17
PCI AD18	115	AD18
PCI AD19	114	AD19
PCI AD20	113	AD20
PCI AD21	107	AD21
PCI AD22	109	AD22
PCI AD23	107	AD23
PCI AD24	103	AD24
PCI AD25	102	AD25
PCI AD26	101	AD26
PCI AD27	98	AD27
PCI AD28	97	AD28
PCI AD29	96	AD29
PCI AD30	95	AD30
PCI AD31	94	AD31

13,19,21,23 PCI_C/BE#0	12	CBE0#
13,19,21,23 PCI_C/BE#1	1	CBE1#
13,19,21,23 PCI_C/BE#2	119	CBE2#
13,19,21,23 PCI_C/BE#3	104	CBE3#
PCI_AD16	1	IDSEL
PCI_FRAME#	2	FRAME#
13,19,21,23 PCI_IRDY#	121	IRDY#
13,19,21,23 PCI_TRDY#	123	TRDY#
13,19,21,23 PCI_DEVSEL#	125	DEVSEL#
13,19,21,23 PCI_STOP#	127	STOP#
13,19,21,23 PCI_PERR#	128	PERR#
13 PCI_REQ#0	93	REQ#
13 PCI_GNT#0	92	GNT#
13 PCI_PIRQB#	88	PIRQB#
12 CLK_PCI_1394	90	PCIRST#
		PCICLK

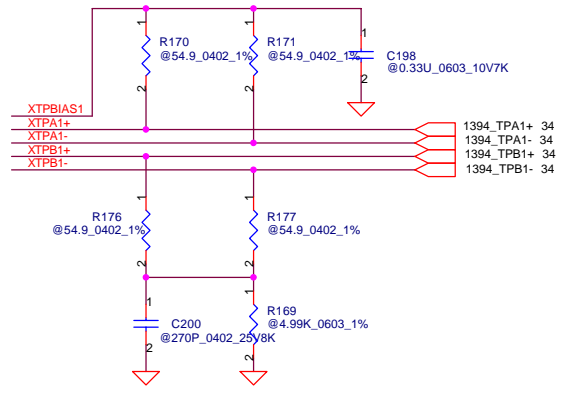
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VSSC1	112	
VSSC0	33	
VSSB3	9	
VSSB2	13	
VSSB1	6	
VSSB0	18	
VSSA4	108	
VSSA3	100	
VSSA2	91	
VSSA1	31	
VSSA0	64	
NC21	X	
NC19	X	
NC18	X	
NC17	X	
NC16	X	
NC15	X	
NC14	X	
NC13	X	
NC12	X	
IZCEEENA	43	
NC11	X	
NC10	X	
NC9	X	
NC8	X	
NC7	X	
NC6	X	
NC5	X	
NC4	X	
NC3	X	



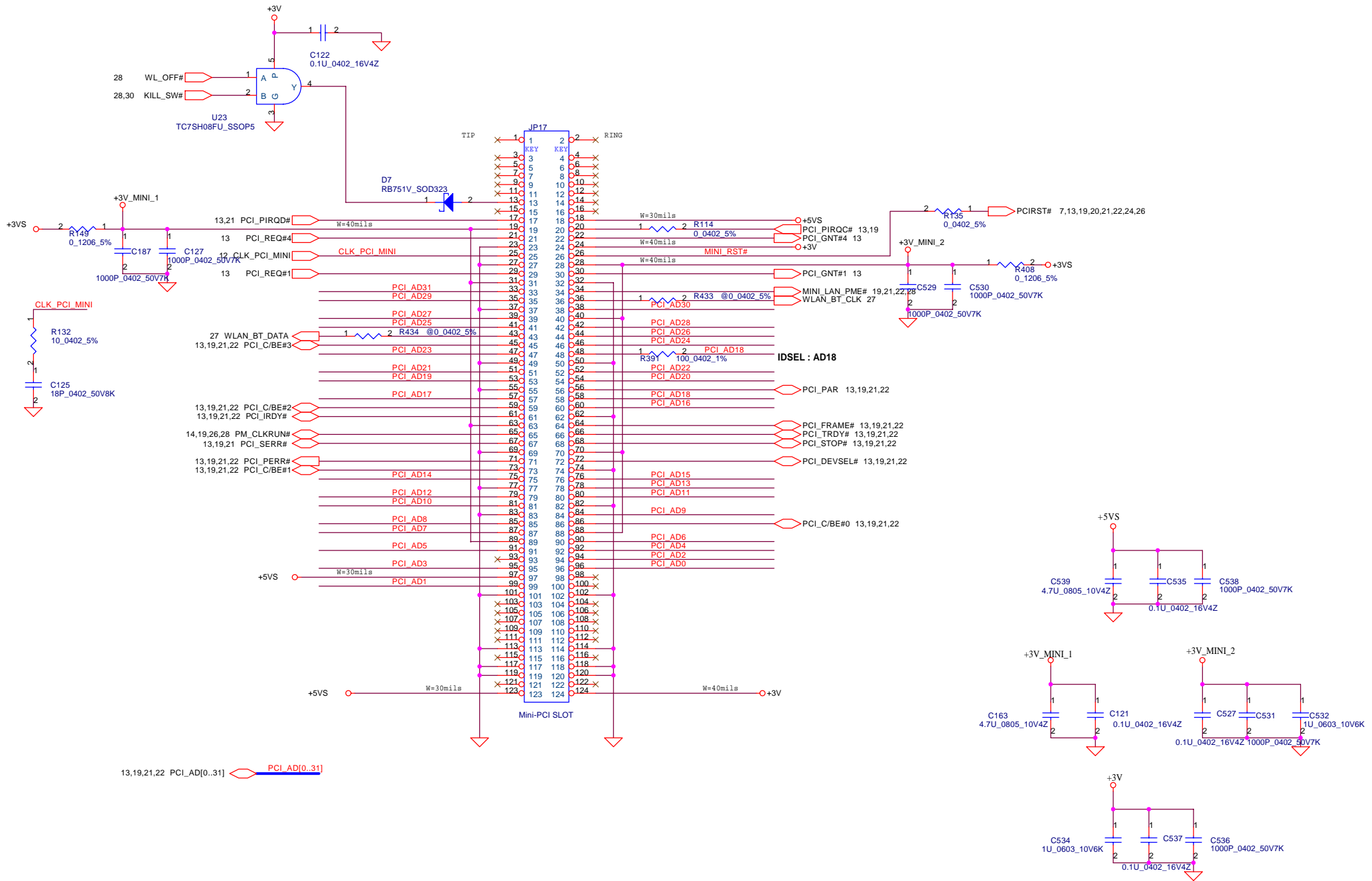
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Note: These components need to close to chip pins.

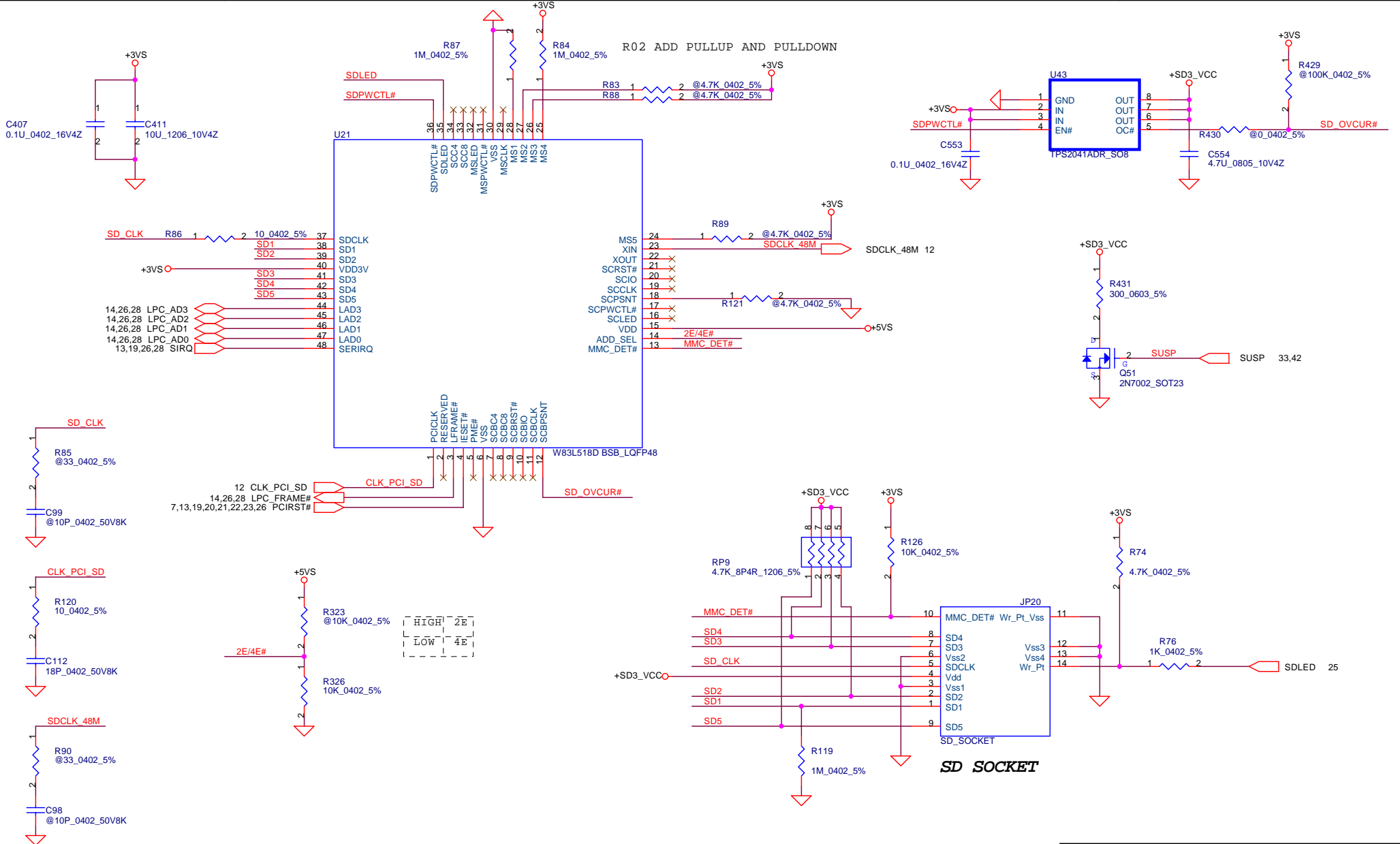


Compal Electronics, Inc.		
Title	IEEE-1394 VT6306	
Size	Document Number	Rev
Custom	DCL56 LA2231	0.3
Date:	Thursday, February 05, 2004	Sheet 22 of 45



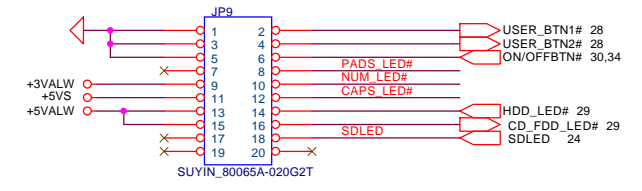
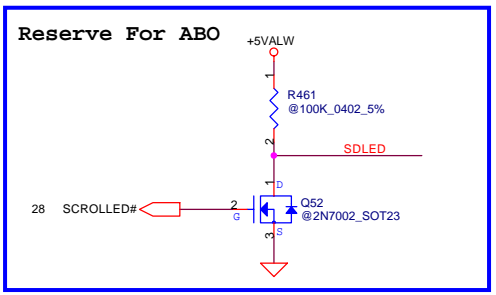
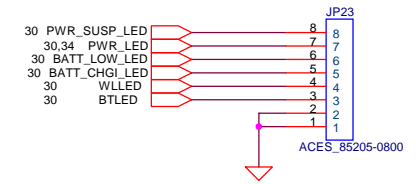
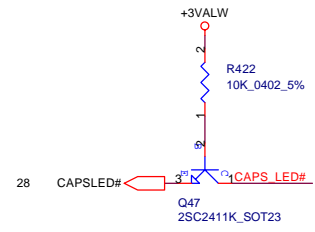
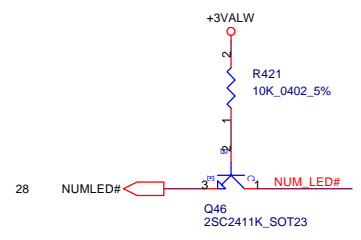
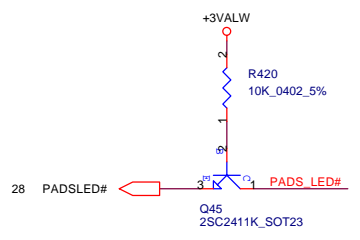
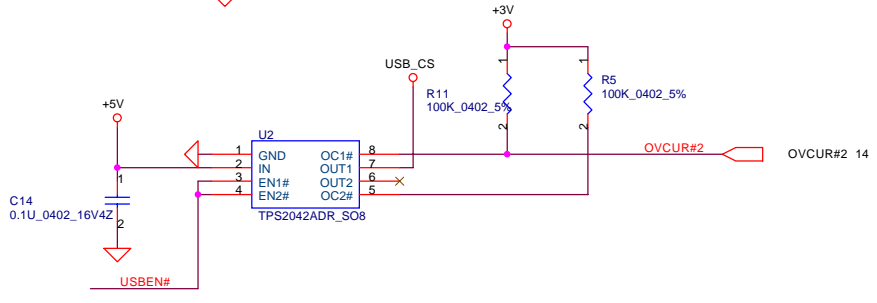
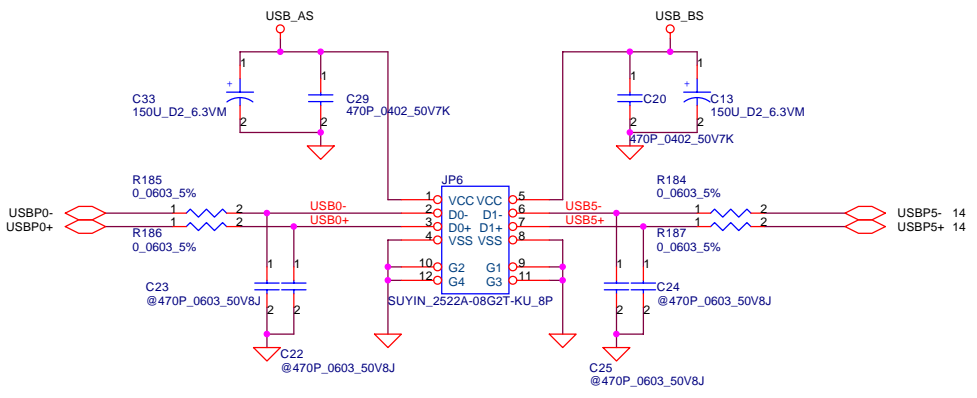
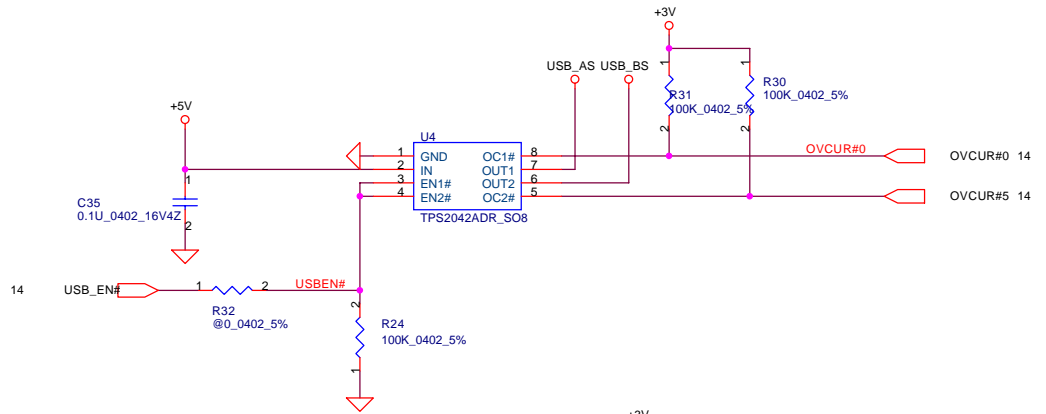
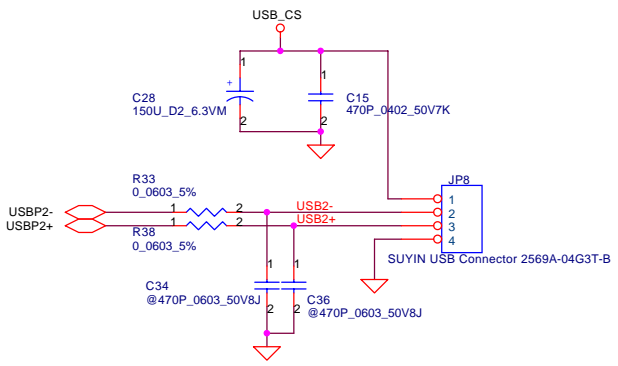
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Title	<b>Mini PCI Slot</b>	
Size	Document Number	Rev
Custom	<b>DCL56 LA2231</b>	0.3
Date:	Thursday, February 05, 2004	Sheet 23 of 45

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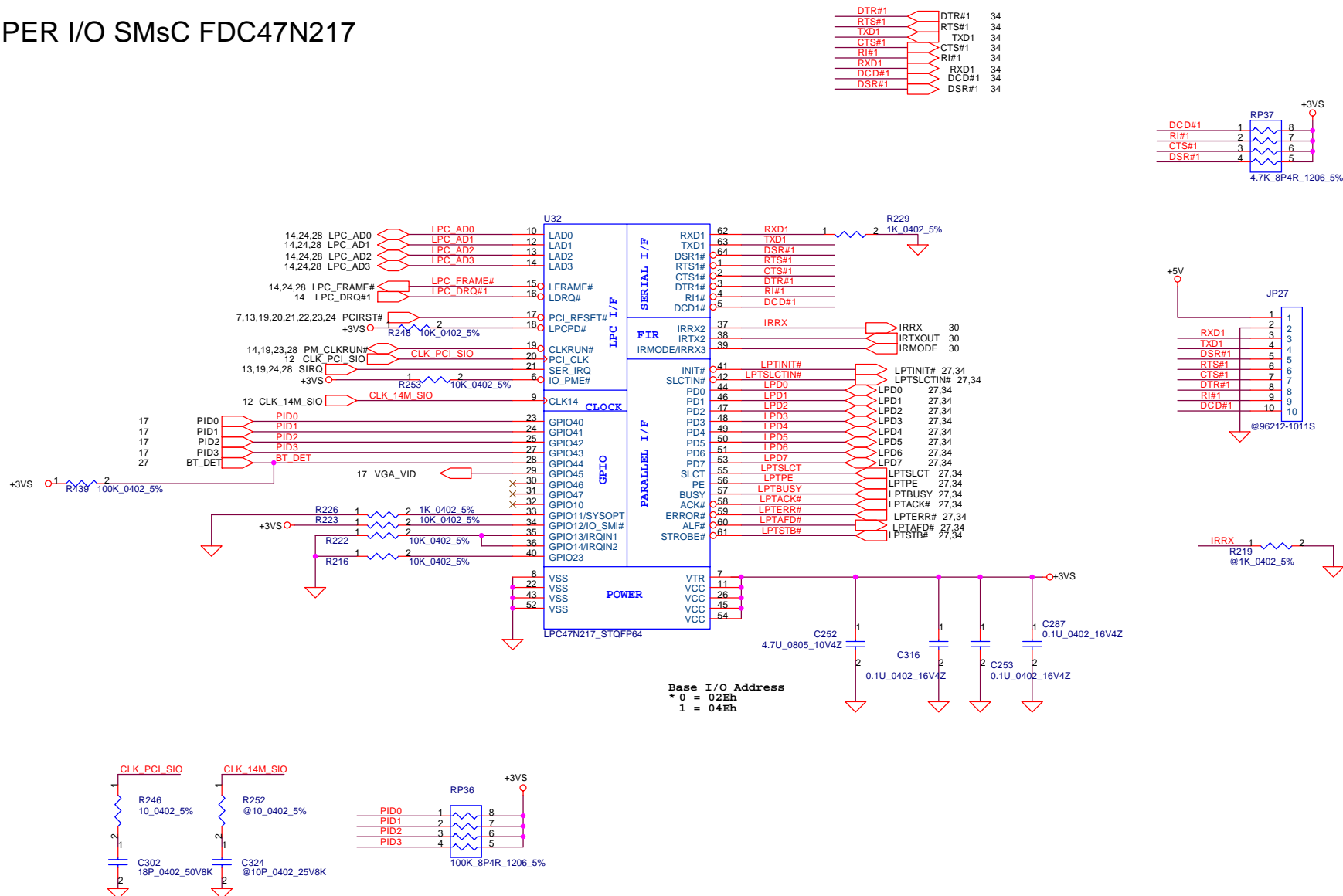
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Title <b>SD CARD Controller/Socket</b>		
Size B	Document Number <b>DCL56 LA2231</b>	Rev 0.3
Date: Thursday, February 05, 2004	Sheet 24	of 45





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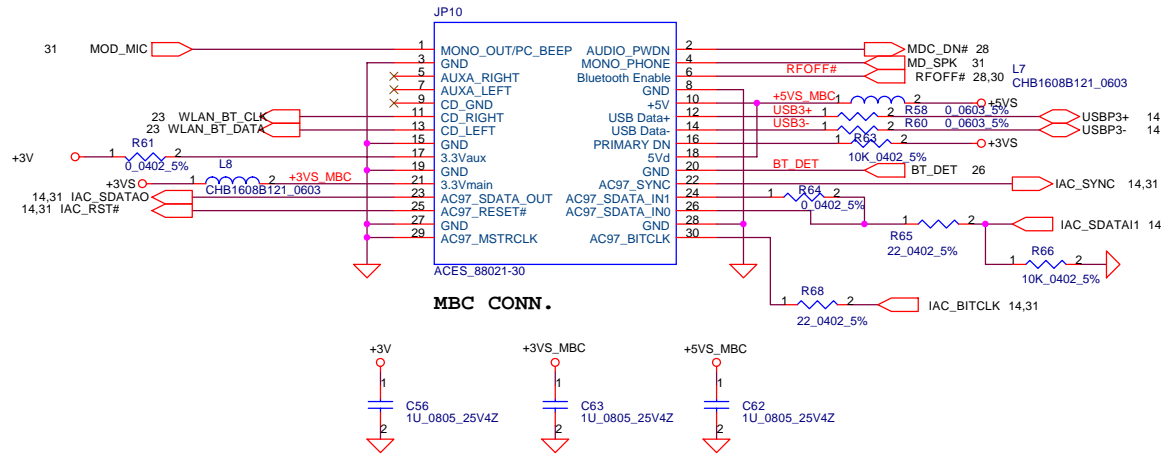
# SUPER I/O SMsC FDC47N217



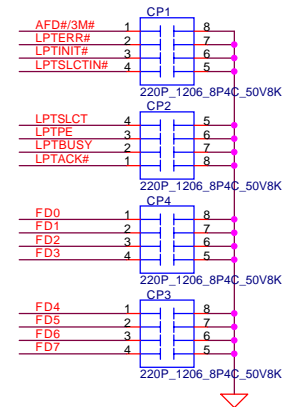
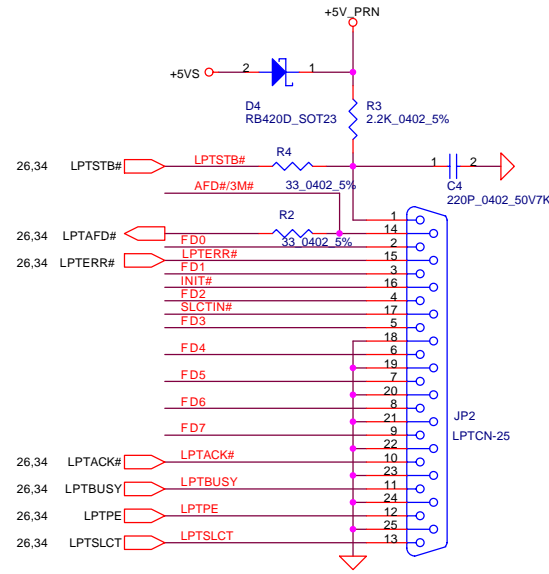
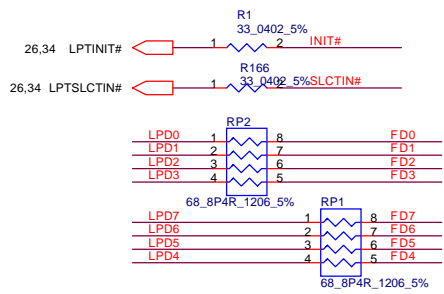
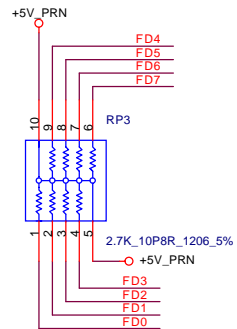
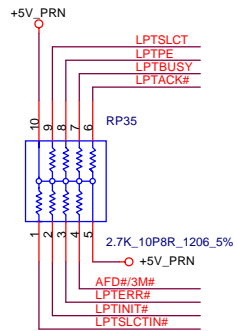
Base I/O Address  
 \* 0 = 02Eh  
 1 = 04Eh

<b>Compal Electronics, Inc.</b>		
Title <b>SUPER I/O</b>		
Size B	Document Number <b>DCL56 LA2231</b>	Rev 0.3
Date:	Thursday, February 05, 2004	Sheet 26 of 45

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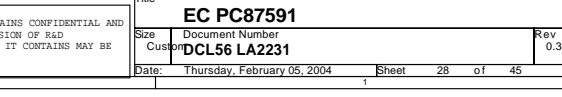
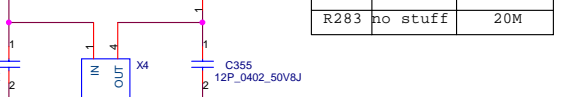
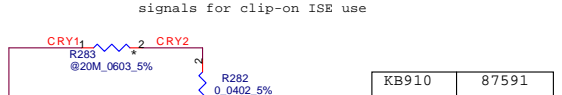
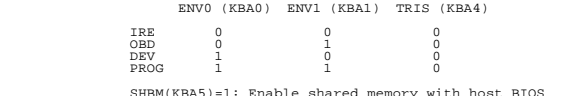
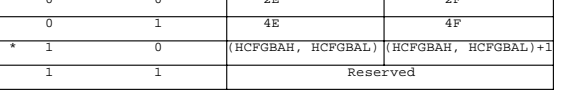
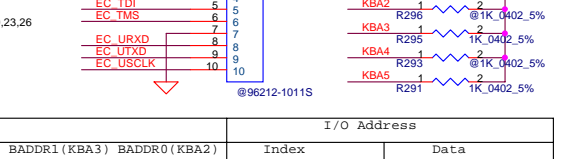
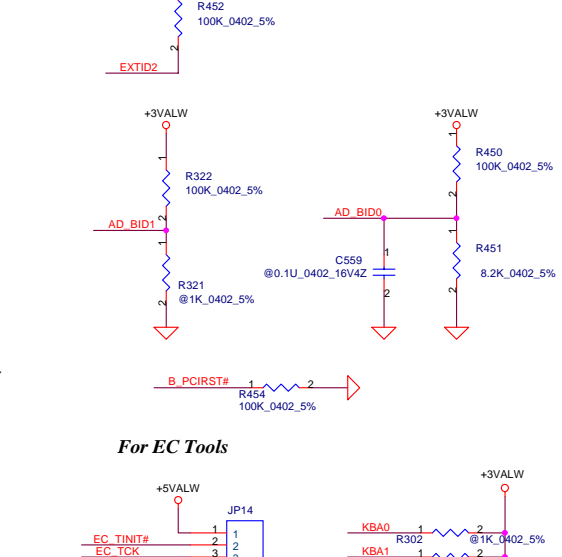
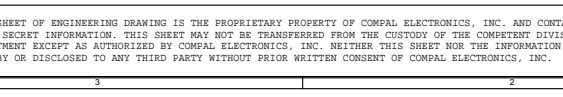
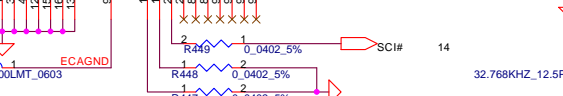
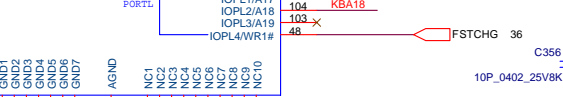
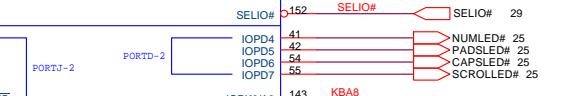
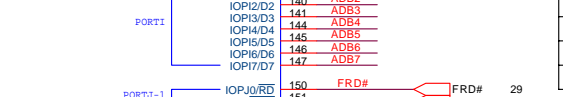
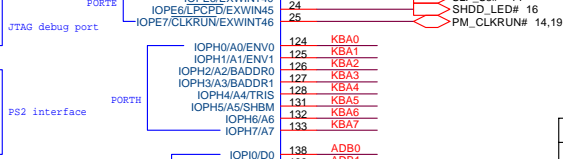
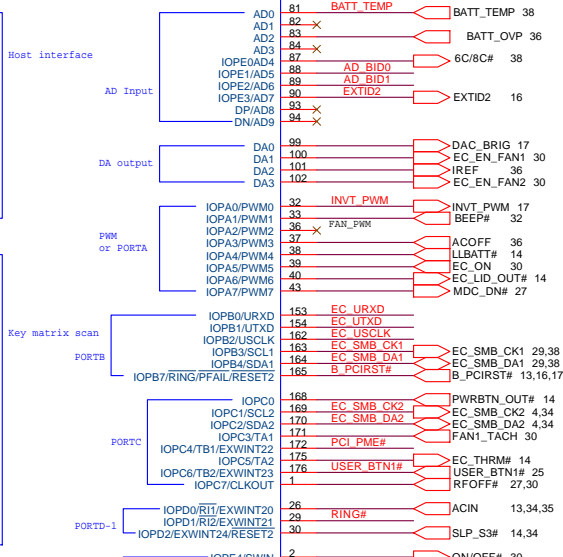
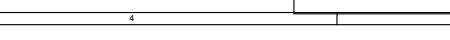
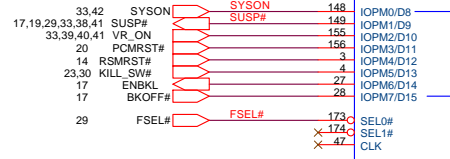
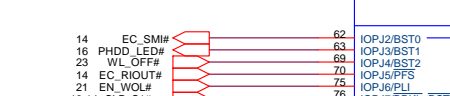
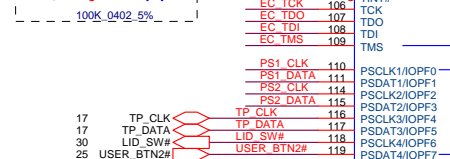
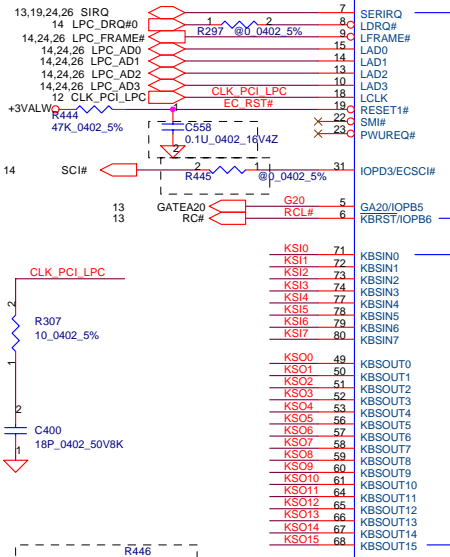
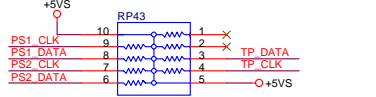
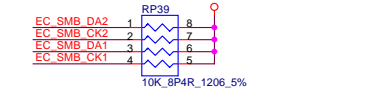
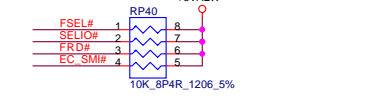
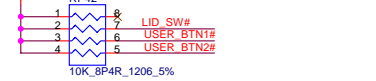
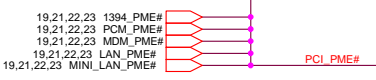
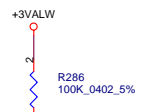
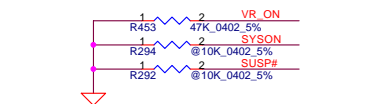
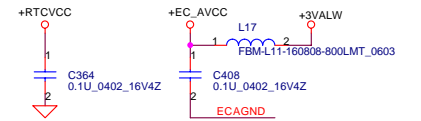
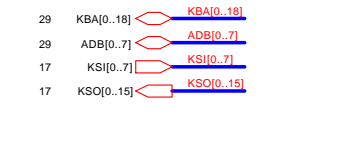
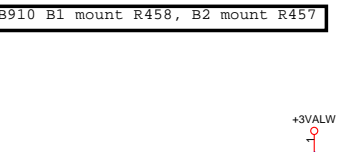
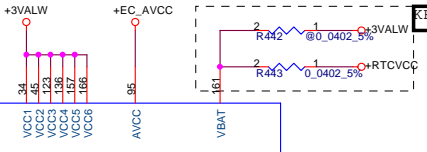
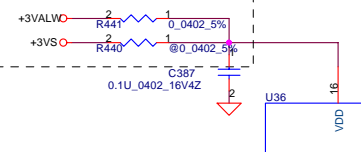
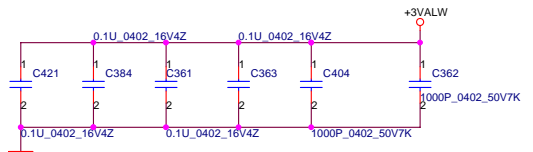
## PARALLEL PORT



## Compal Electronics, Inc.

Title		
PARALLEL/MDC PORT		
Size	Document Number	Rev
DCL56	LA2231	0.3
Date:	Thursday, February 05, 2004	Sheet 27 of 45

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

ENV0 (KBA0)	ENV1 (KBA1)	TRIS (KBA4)
IRE 0	0	0
OBD 0	1	0
DEV 1	0	0
PROG 1	0	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

Resistor	Value
R282	0
R283	120K
R283	no stuff
R283	20M

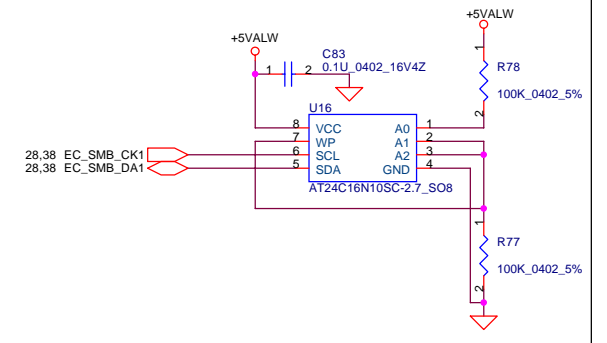
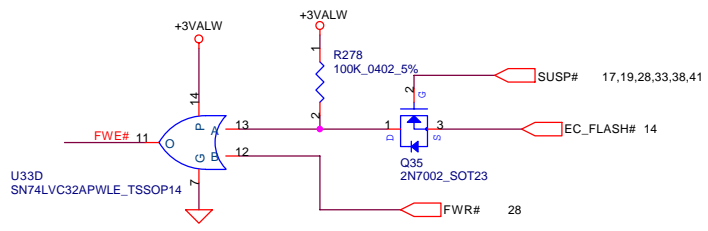
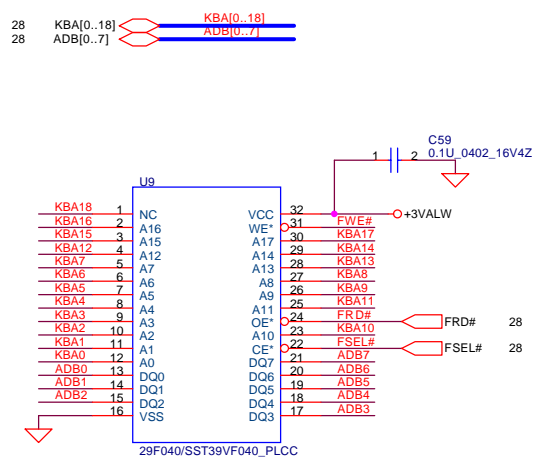
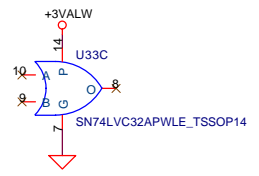
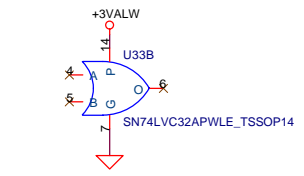
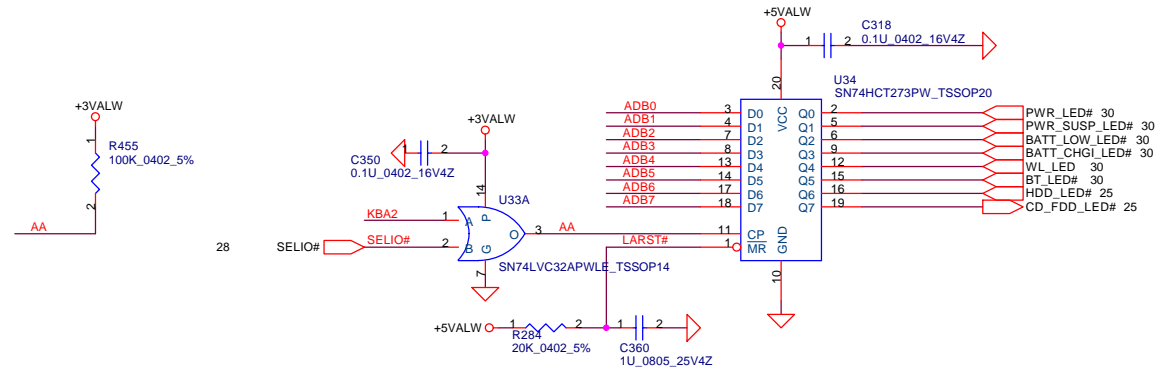
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**Compal Electronics, Inc.**

Title: **EC PC87591**

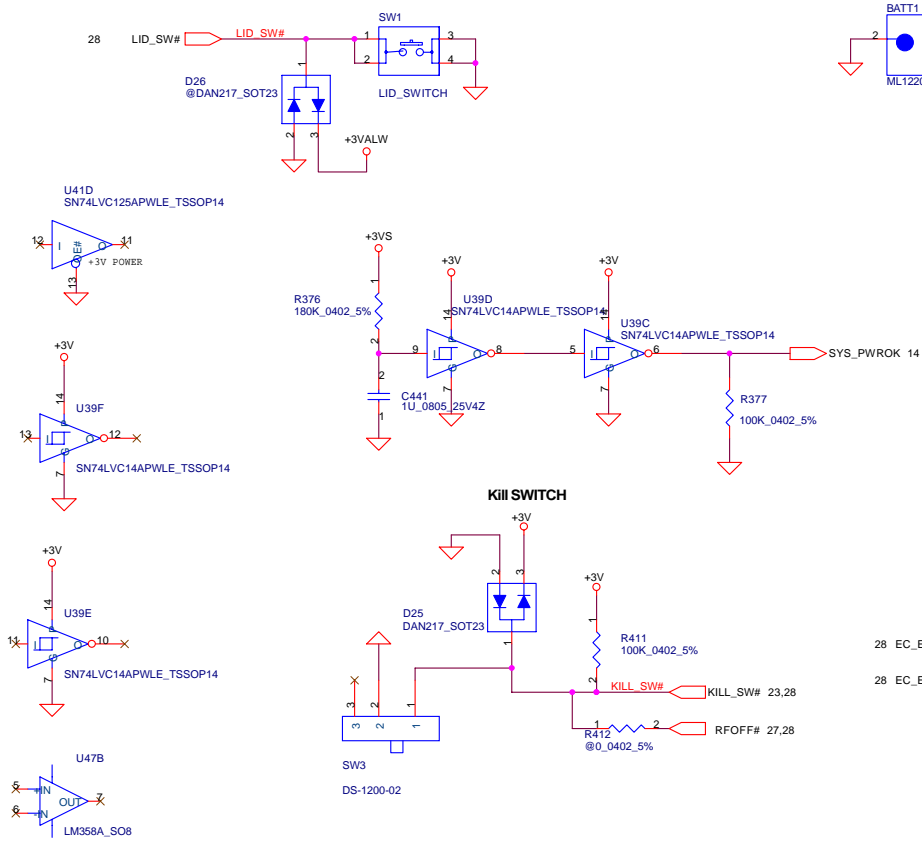
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 Custom: **DCL56 LA2231** Rev: 0.3

Date: Thursday, February 05, 2004 Sheet: 28 of 45

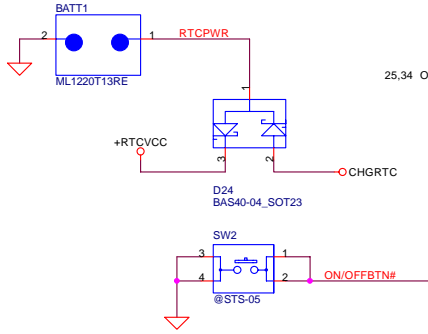


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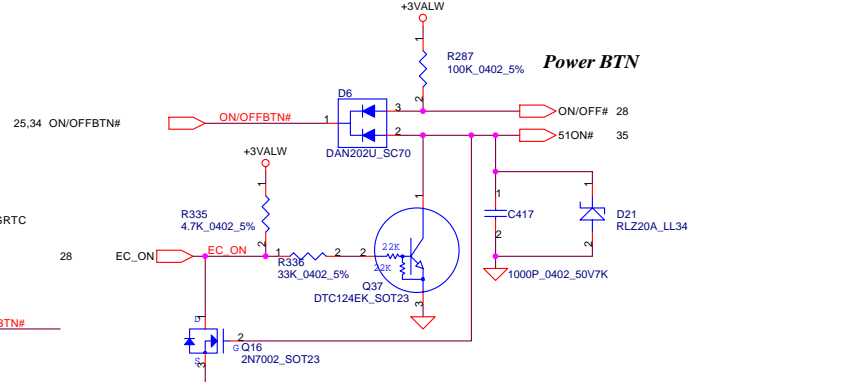
**Power ON Circuit**



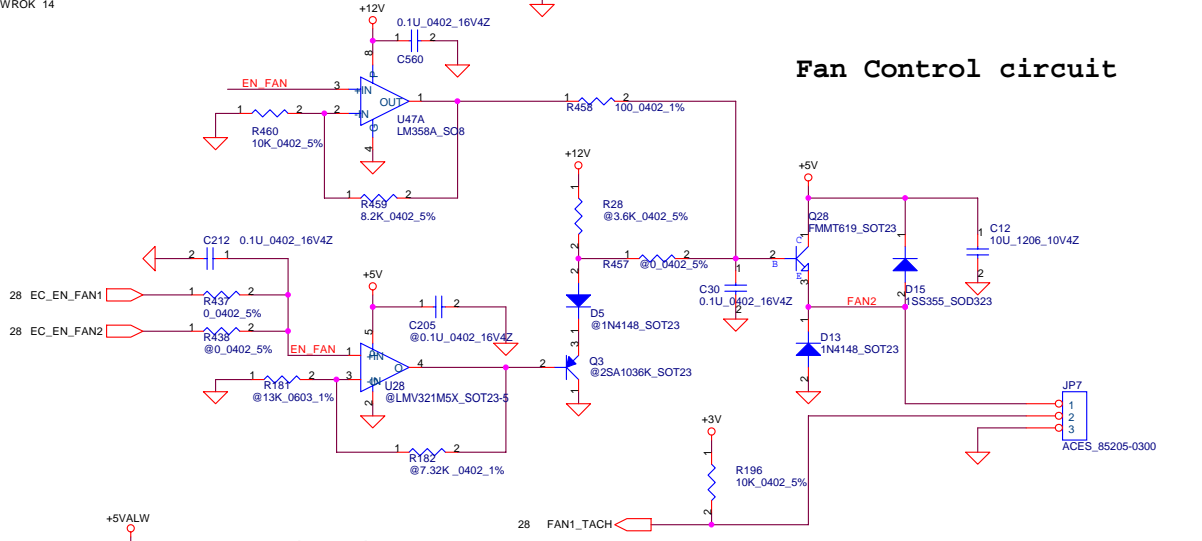
**RTC Battery**



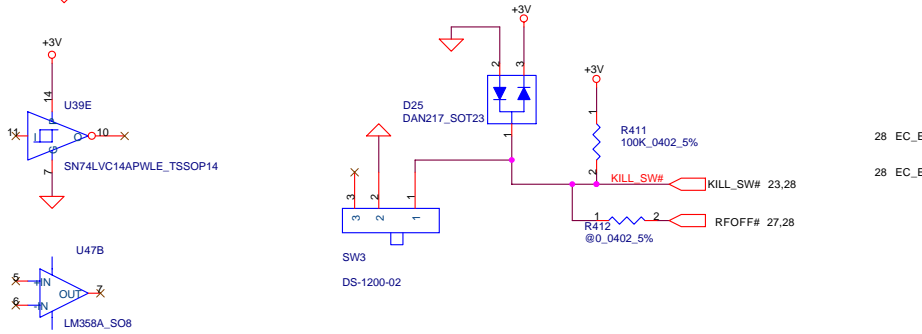
**Power BTN**



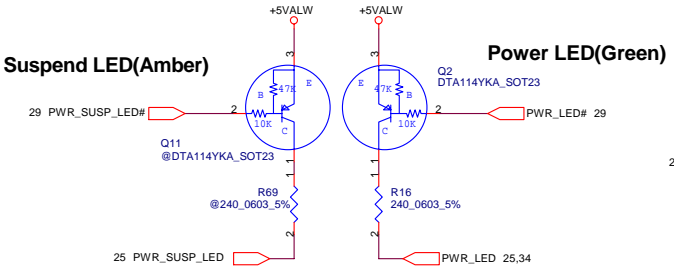
**Fan Control circuit**



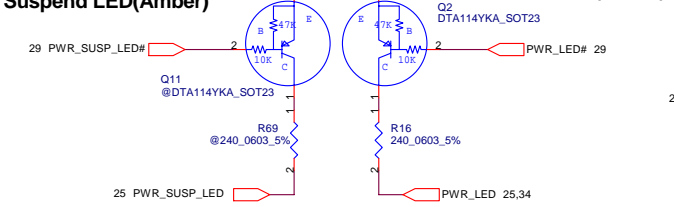
**KILL SWITCH**



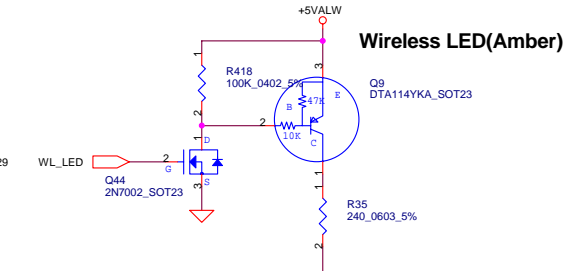
**Suspend LED(Amber)**



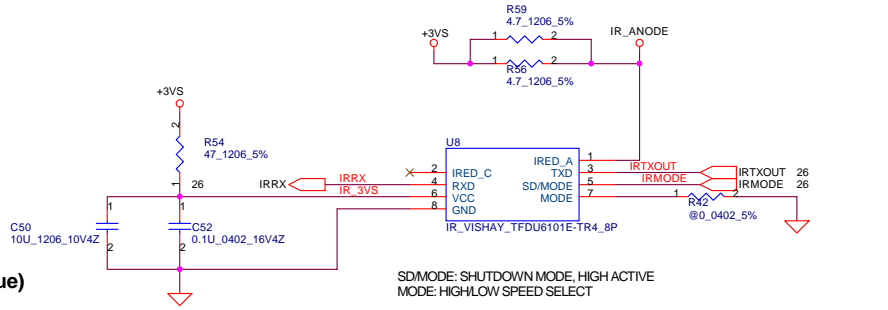
**Power LED(Green)**



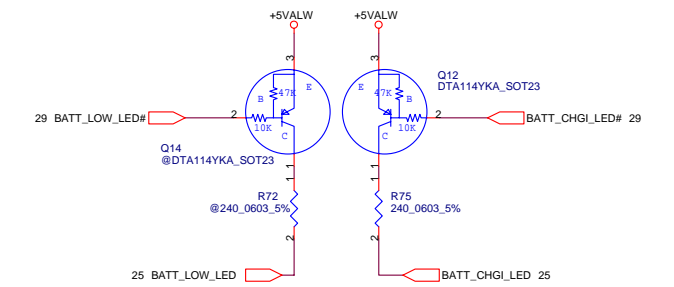
**Wireless LED(Amber)**



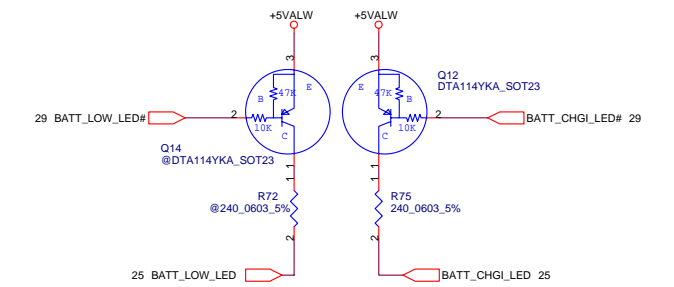
**FIR Module**



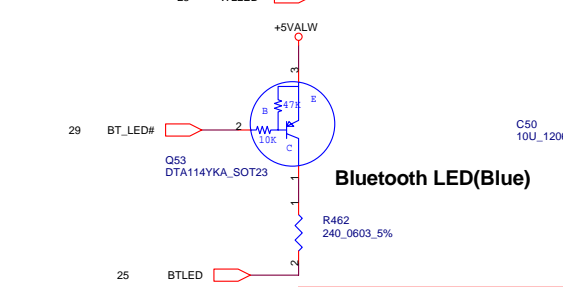
**BATT Low LED(Amber)**



**BATT Charge LED(Green)**



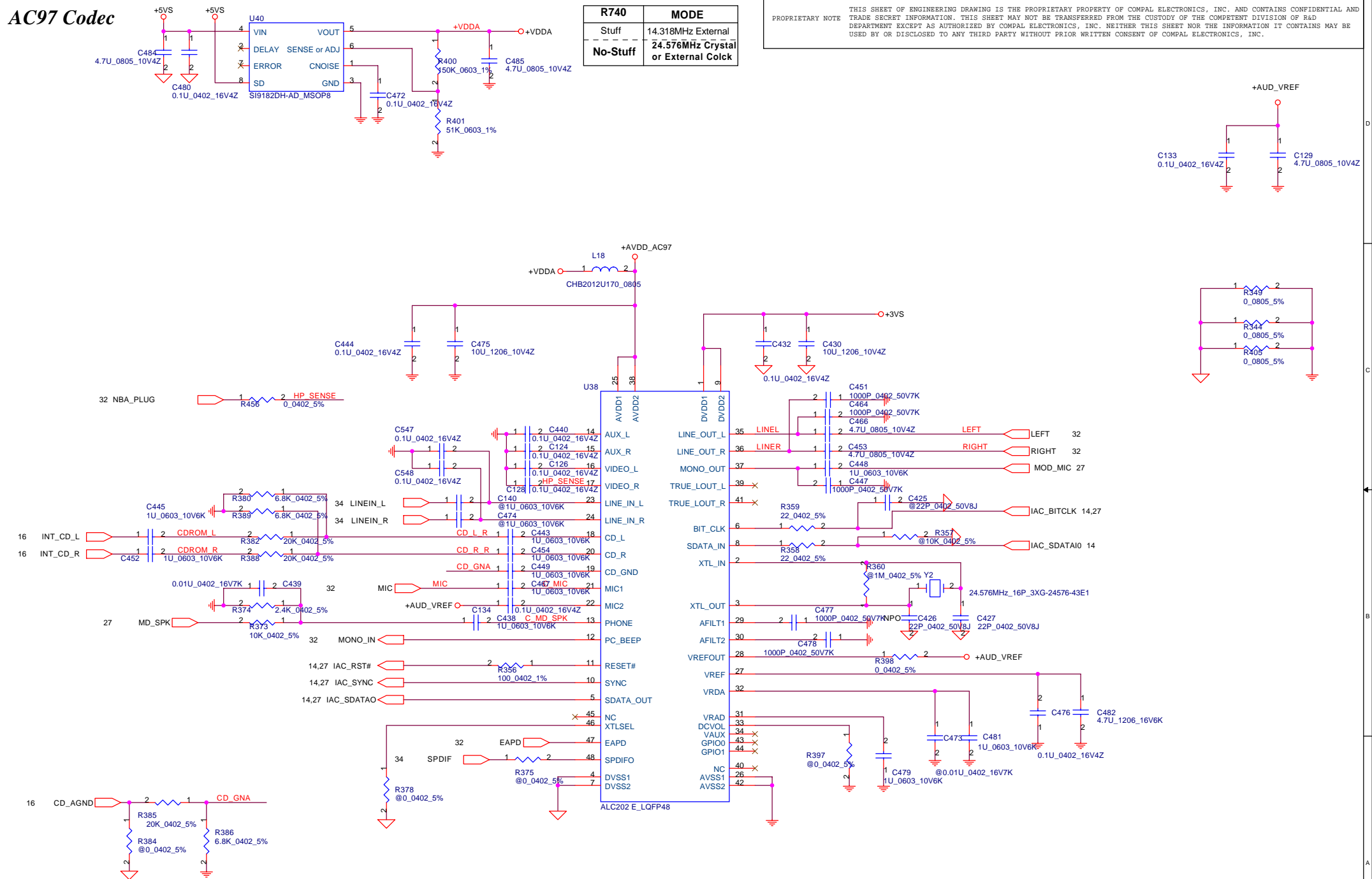
**Bluetooth LED(Blue)**



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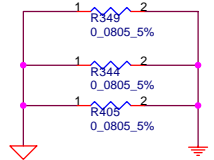
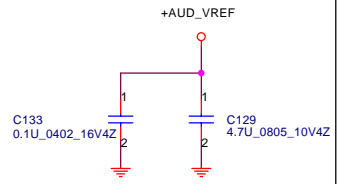
<b>Compal Electronics, Inc.</b>		
Title <b>Power OK/Reset/RTC battery/Lid Switch/Int. KB</b>		
Size	Document Number <b>DCL56 LA2231</b>	Rev 0.3
Date:	Thursday, February 05, 2004	Sheet 30 of 45

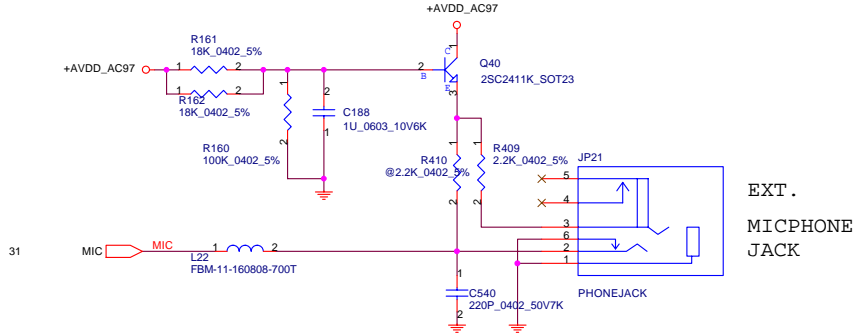
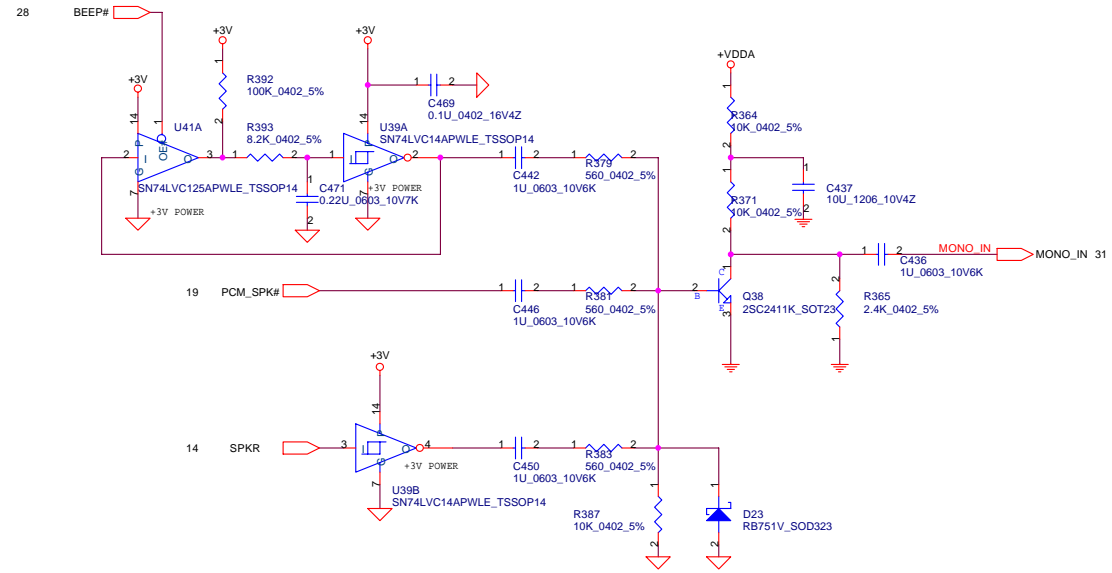
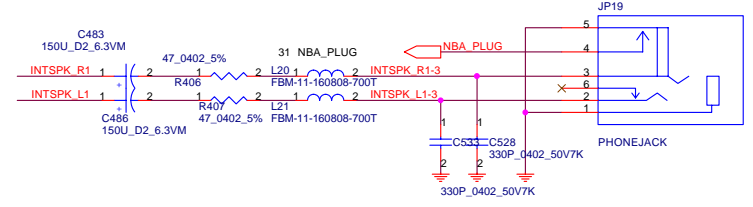
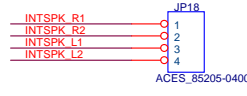
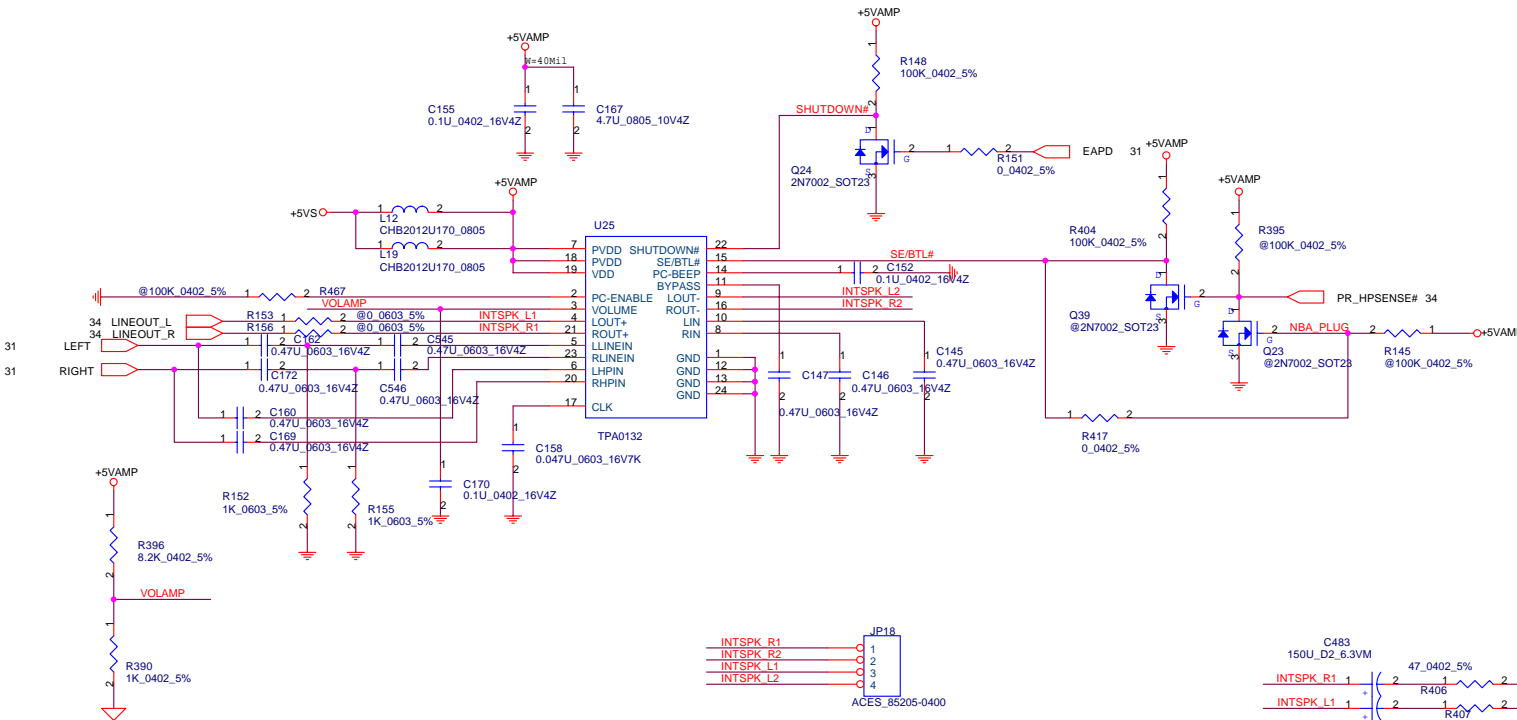
# AC97 Codec



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R740	MODE
Stuff	14.318MHz External
No-Stuff	24.576MHz Crystal or External Colck

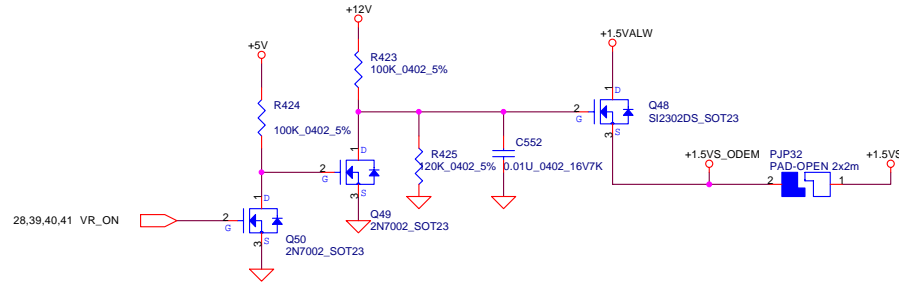
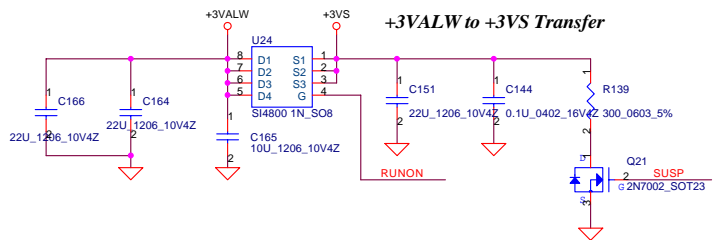
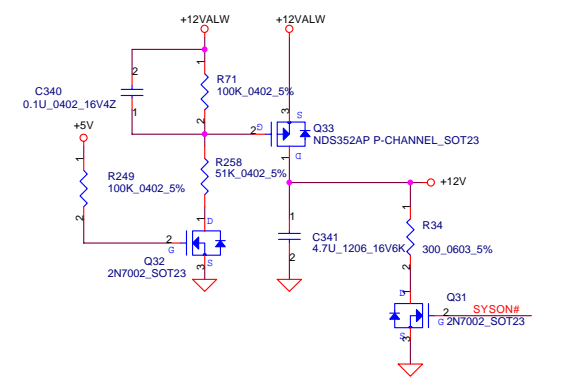
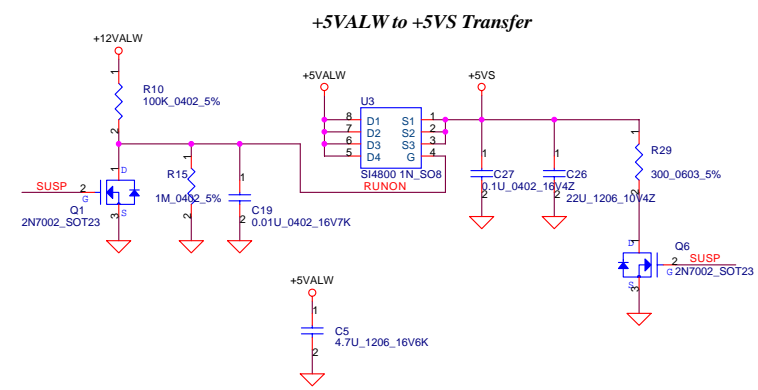
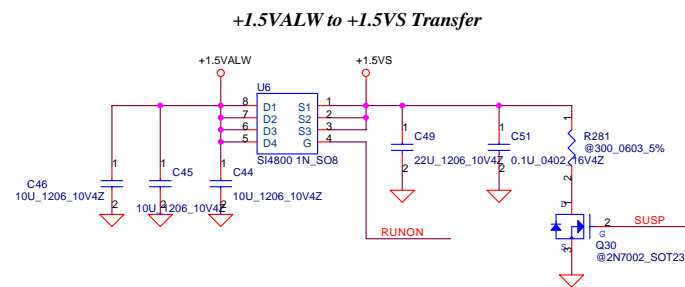
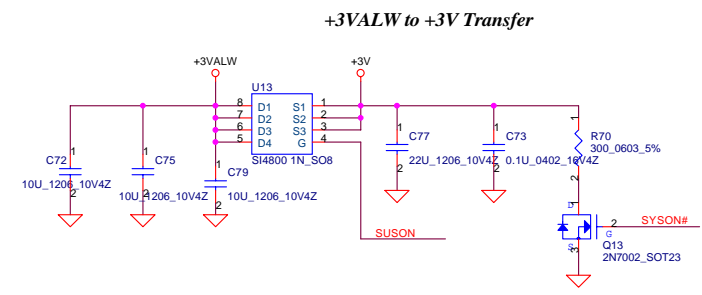
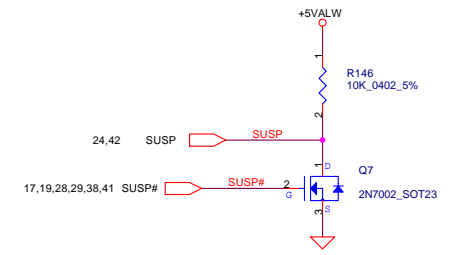
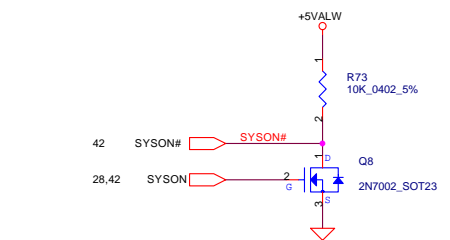
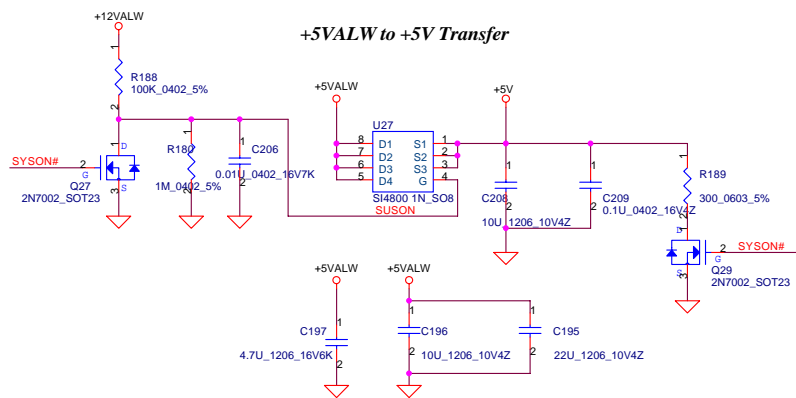




<b>Compal Electronics, Inc.</b>		
<b>AMP &amp; Audio Jack</b>		
Title		
Size	Document Number	Rev
	<b>DCL56 LA2231</b>	0.3
Date:	Thursday, February 05, 2004	Sheet 32 of 45

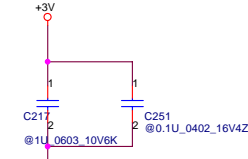
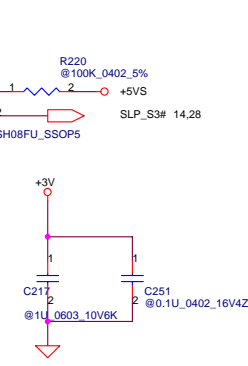
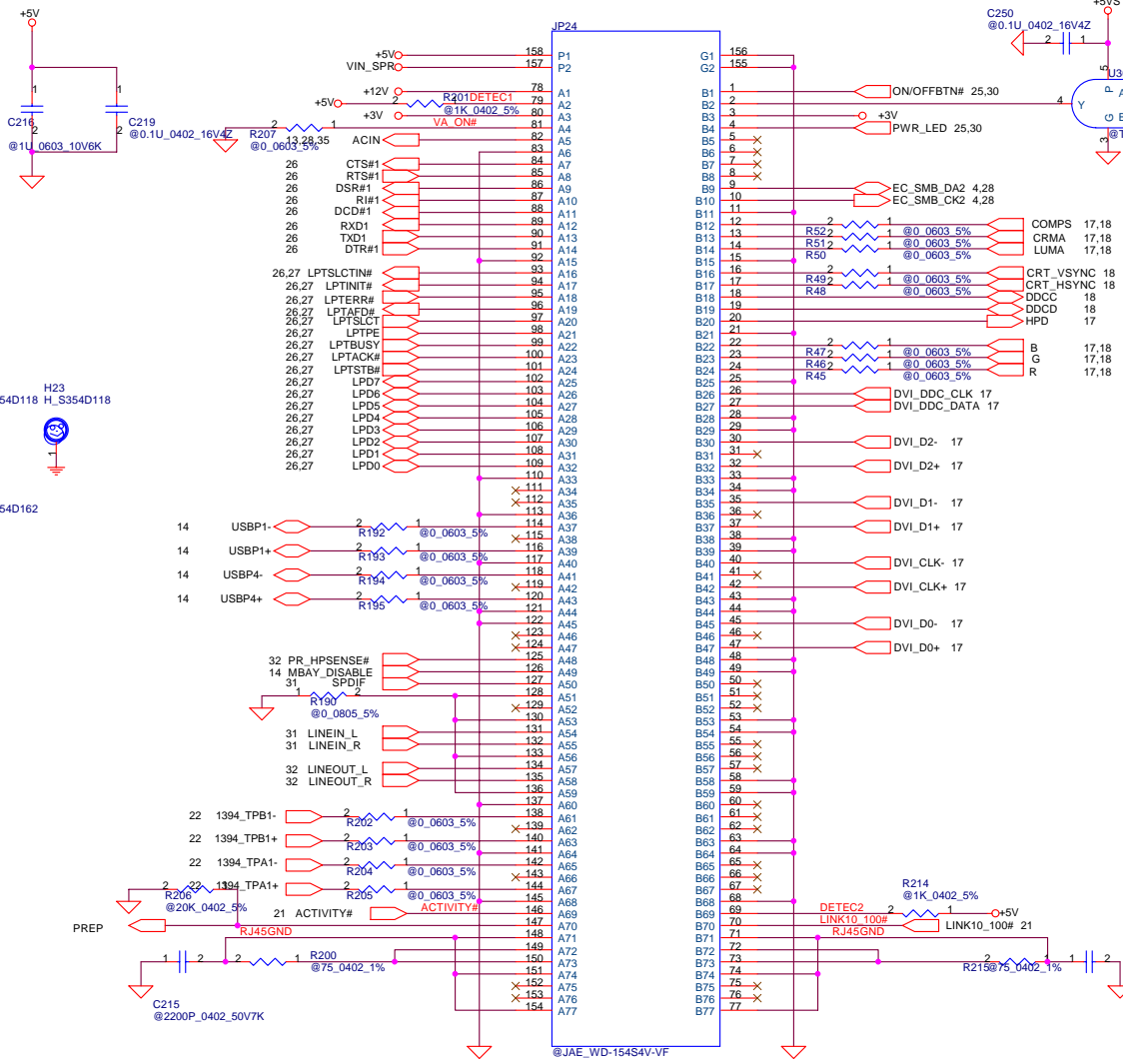
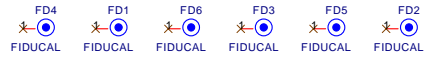
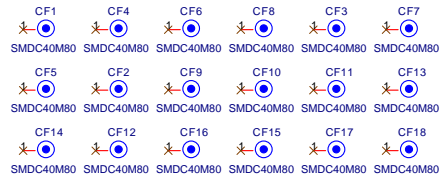
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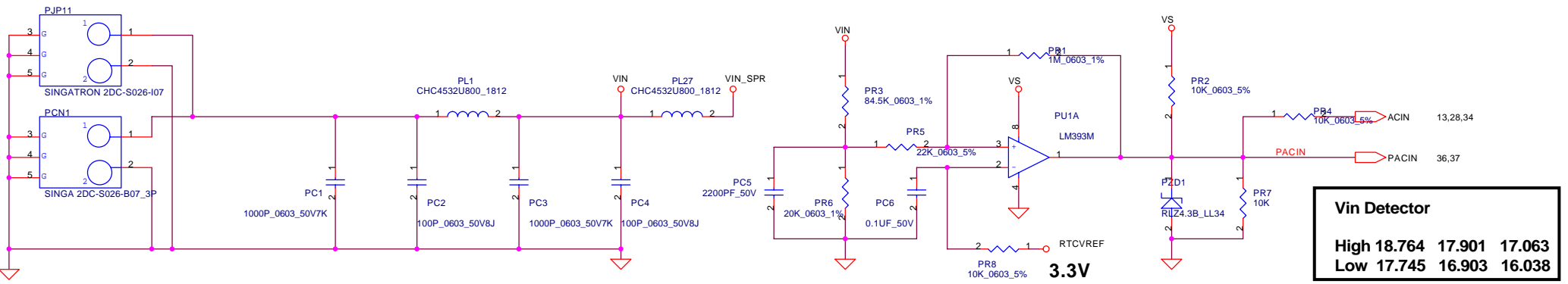
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<b>Compal Electronics, Inc.</b>		
<b>DC/DC Circuit Interface</b>		
Size	Document Number	Rev
	<b>DCL56 LA2231</b>	0.3
Date:	Thursday, February 05, 2004	Sheet 33 of 45

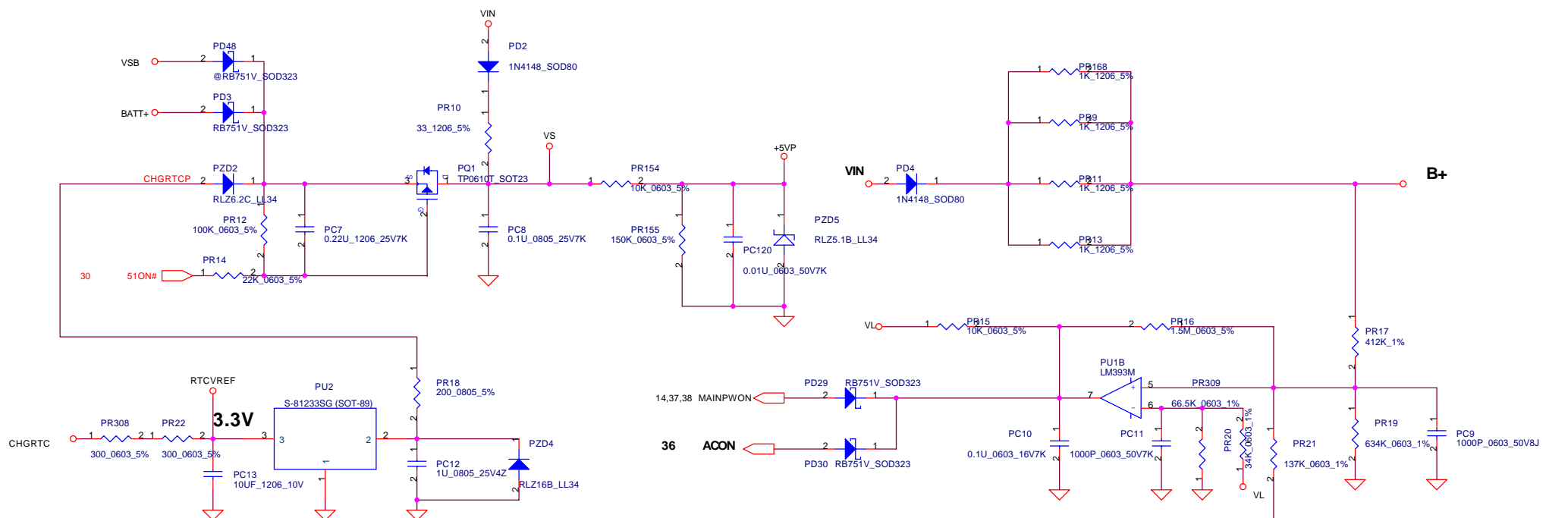


<b>Compal Electronics, Inc.</b>		
<b>Skew Hole</b>		
Title		
Size	Document Number	Rev
	<b>DCL56 LA2231</b>	0.3
Date:	Thursday, February 05, 2004	Sheet 34 of 45

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Vin Detector		
High	18.764	17.901
Low	17.745	16.903
	17.063	16.038

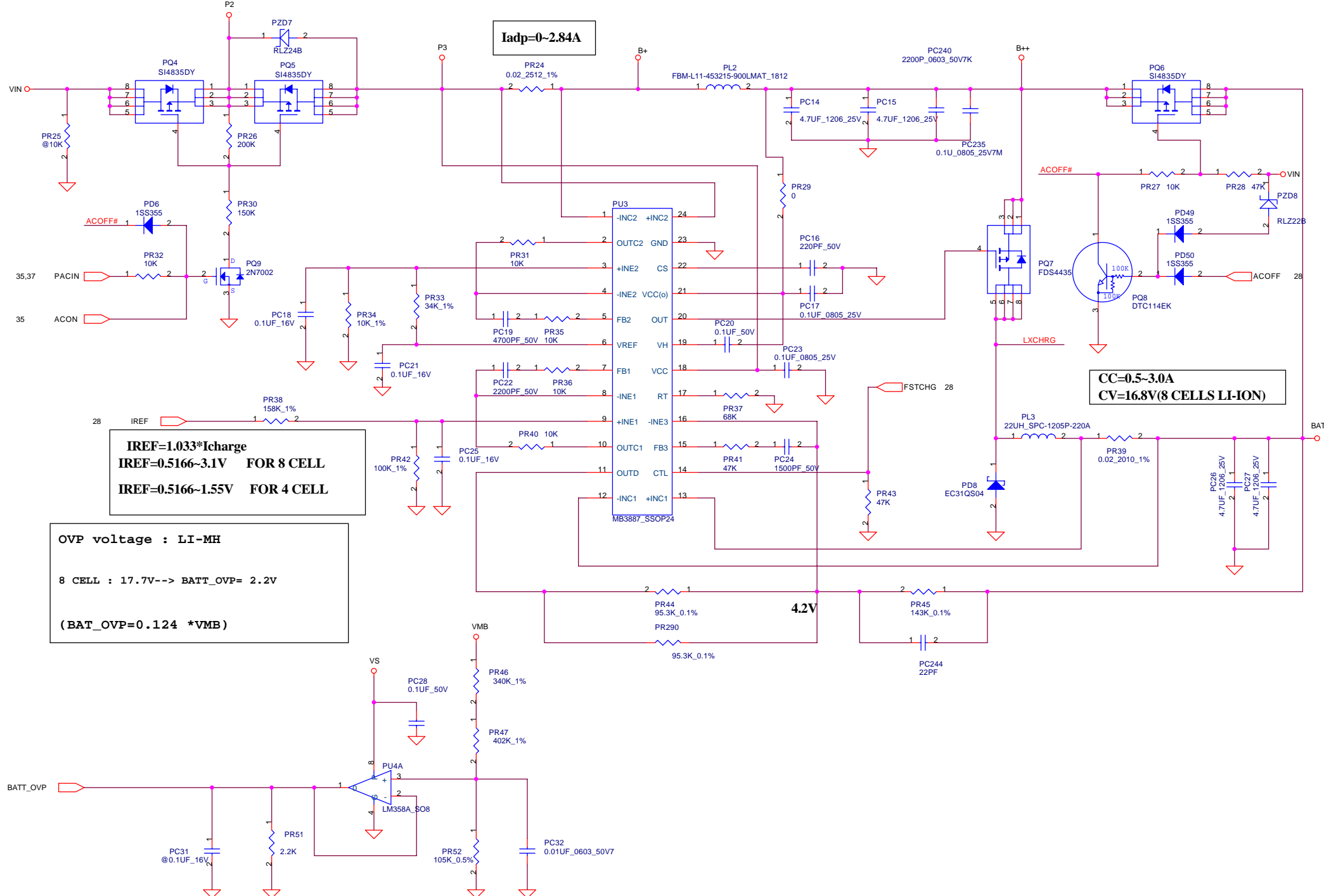


Precharge detector AC ADAPTOR		
16.69	16.05	15.42
15.6	15.02	14.35

Precharge detector AC ADAPTOR		
6.33	6.12	5.92
5.227	5.09	4.85

- |               |  |      |   |   |       |                           |
|---------------|--|------|---|---|-------|---------------------------|
| +2.5VP        |  | PJP1 | 1 | 2 | +2.5V | (6A,240mils ,Via NO.= 12) |
| PAD-OPEN 3x3m |  |      |   |   |       |                           |
- |               |  |      |   |   |          |                         |
|---------------|--|------|---|---|----------|-------------------------|
| +1.5VALWP     |  | PJP3 | 1 | 1 | +1.5VALW | (2A,80mils ,Via NO.= 4) |
| PAD-OPEN 3x3m |  |      |   |   |          |                         |
- |               |  |      |   |   |        |                         |
|---------------|--|------|---|---|--------|-------------------------|
| +1.8VSP       |  | PJP4 | 1 | 1 | +1.8VS | (1A,40mils ,Via NO.= 2) |
| PAD-OPEN 3x3m |  |      |   |   |        |                         |
- |               |  |      |   |   |         |                            |
|---------------|--|------|---|---|---------|----------------------------|
| +12VALWP      |  | PJP5 | 1 | 1 | +12VALW | (120mA,20mils ,Via NO.= 1) |
| PAD-OPEN 2x2m |  |      |   |   |         |                            |
- |               |  |      |   |   |        |                           |
|---------------|--|------|---|---|--------|---------------------------|
| +5VALWP       |  | PJP7 | 1 | 2 | +5VALW | (5A,200mils ,Via NO.= 10) |
| PAD-OPEN 3x3m |  |      |   |   |        |                           |
- |               |  |      |   |   |        |                           |
|---------------|--|------|---|---|--------|---------------------------|
| +3VALWP       |  | PJP8 | 1 | 2 | +3VALW | (5A,200mils ,Via NO.= 10) |
| PAD-OPEN 3x3m |  |      |   |   |        |                           |
- |               |  |      |   |   |         |                         |
|---------------|--|------|---|---|---------|-------------------------|
| +1.25VP       |  | PJP2 | 1 | 2 | +1.25VS | (1A,40mils ,Via NO.= 2) |
| PAD-OPEN 3x3m |  |      |   |   |         |                         |
- |               |  |      |   |   |        |                         |
|---------------|--|------|---|---|--------|-------------------------|
| +1.2VSP       |  | PJP6 | 1 | 2 | +1.2VS | (2A,80mils ,Via NO.= 4) |
| PAD-OPEN 3x3m |  |      |   |   |        |                         |
- |               |  |       |   |   |       |                        |
|---------------|--|-------|---|---|-------|------------------------|
| +1.05VALWP    |  | PJP26 | 1 | 2 | +VCCP | (1A,40mils ,Via NO.=2) |
| PAD-OPEN 3x3m |  |       |   |   |       |                        |

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**Iadp=0-2.84A**

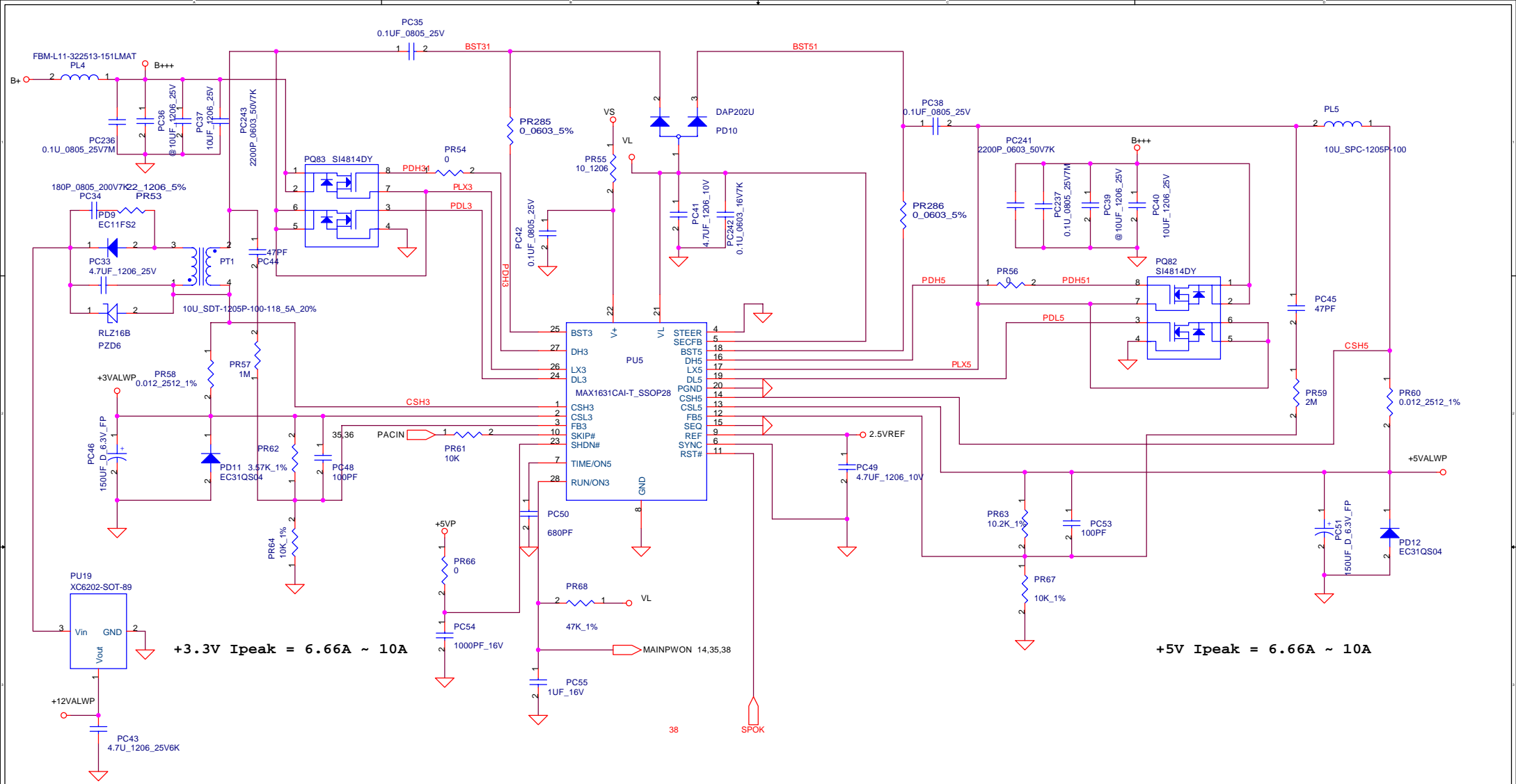
**CC=0.5-3.0A  
CV=16.85V(8 CELLS LI-ION)**

**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)**

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<b>Compal Electronics, Inc.</b>		
Title		
<b>CHARGER</b>		
Size	Document Number	Rev
<b>B</b>	<b>DCL56 LA2231</b>	<b>0.3</b>
Date:	Thursday, February 05, 2004	Sheet 36 of 45

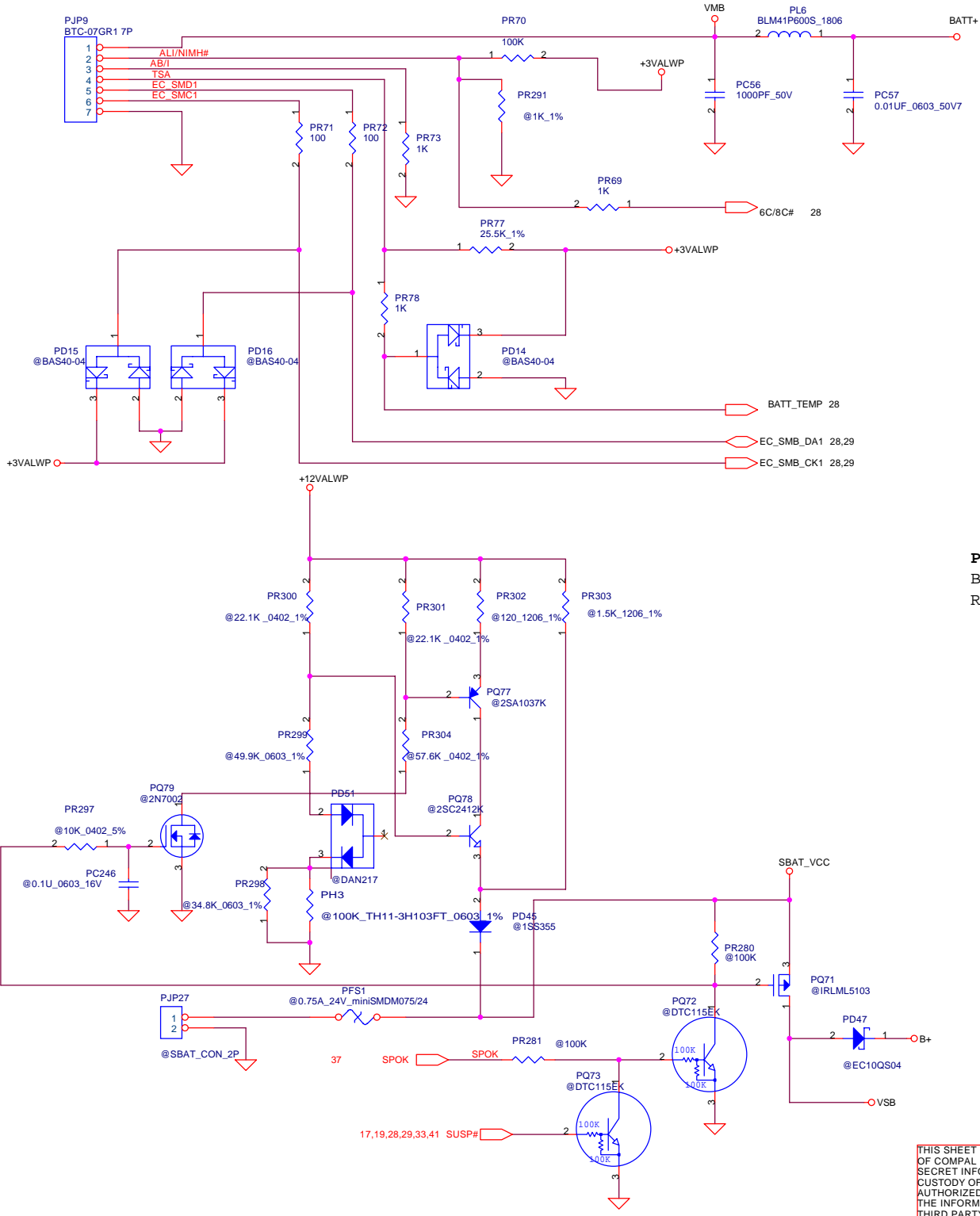


**+3.3V Ipeak = 6.66A ~ 10A**

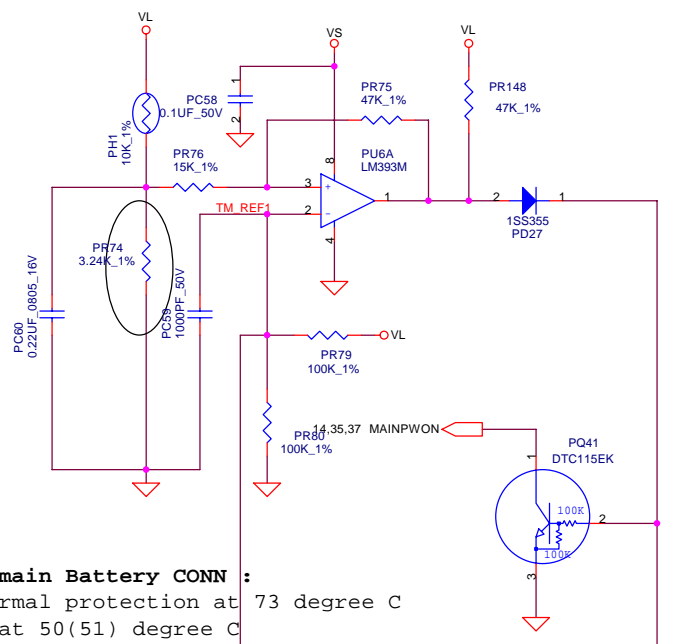
**+5V Ipeak = 6.66A ~ 10A**

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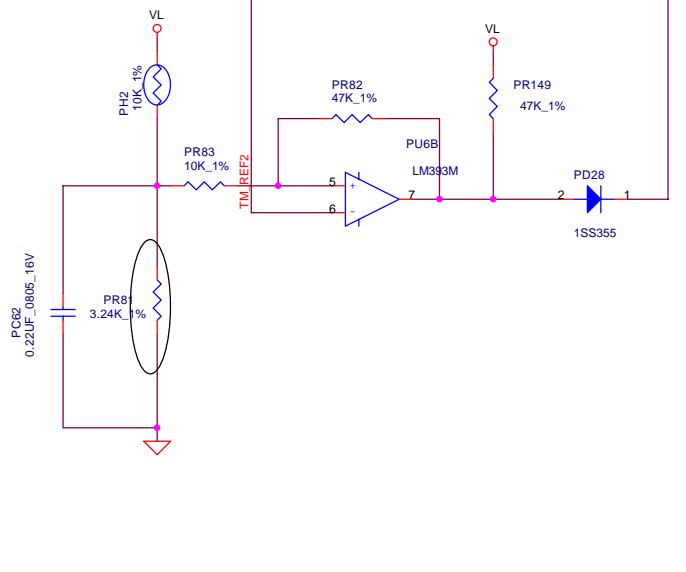
<b>Compal Electronics, Inc.</b>		
Title		
<b>5V/3.3V/12V</b>		
Size	Document Number	Rev
<b>B</b>	<b>DCL56 LA2231</b>	<b>0.3</b>
Date:	Thursday, February 05, 2004	Sheet 37 of 45



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



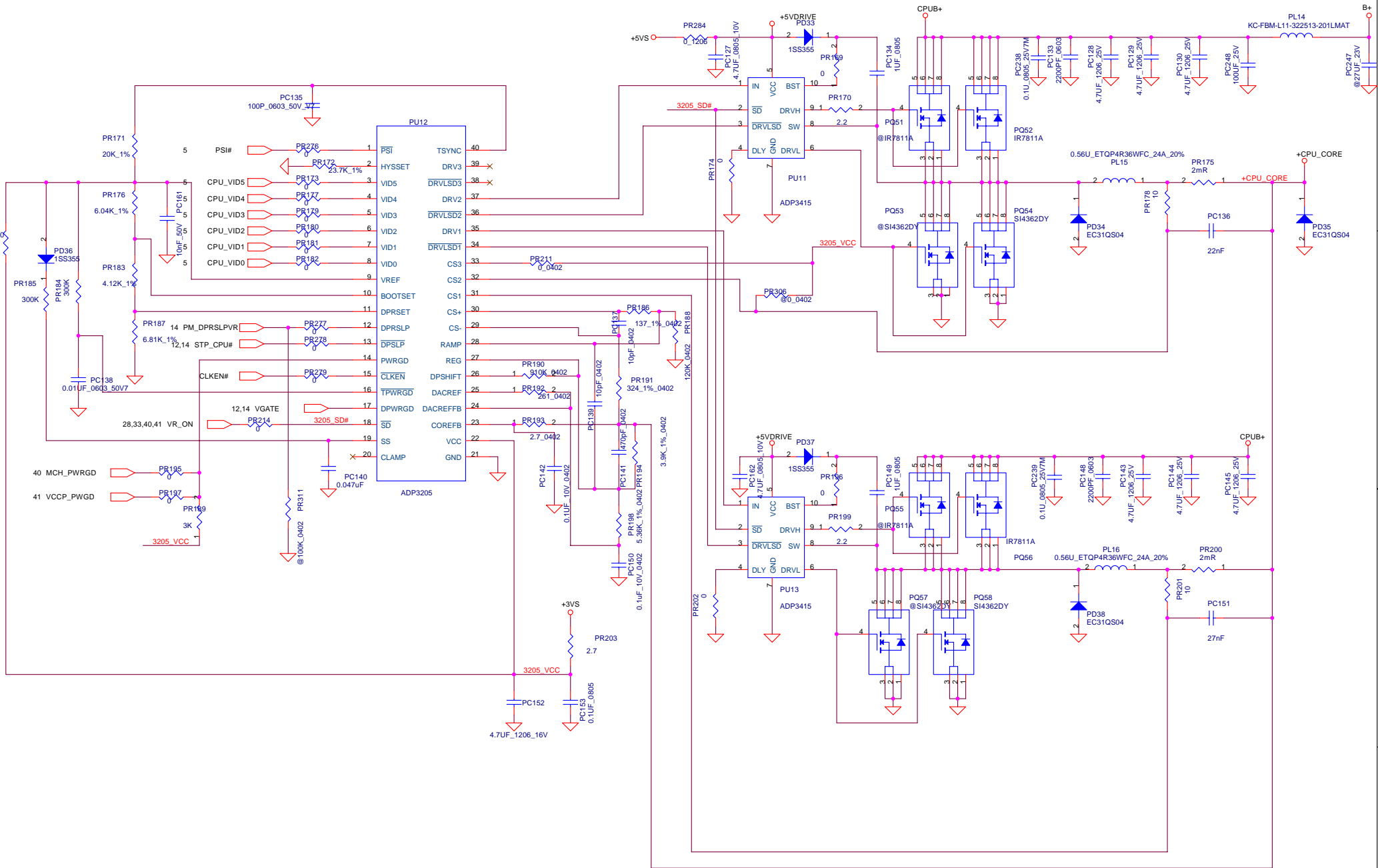
**PH2 near main Battery CONN :**  
 BAT. thermal protection at 73 degree C  
 Recovery at 50(51) degree C



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<b>Compal Electronics, Inc.</b>		
Title <b>BATTERY CONN / OTP/1.2V</b>		
Size <b>B</b>	Document Number <b>DCL56 LA2231</b>	Rev <b>0.3</b>
Date: Thursday, February 05, 2004		Sheet 38 of 45

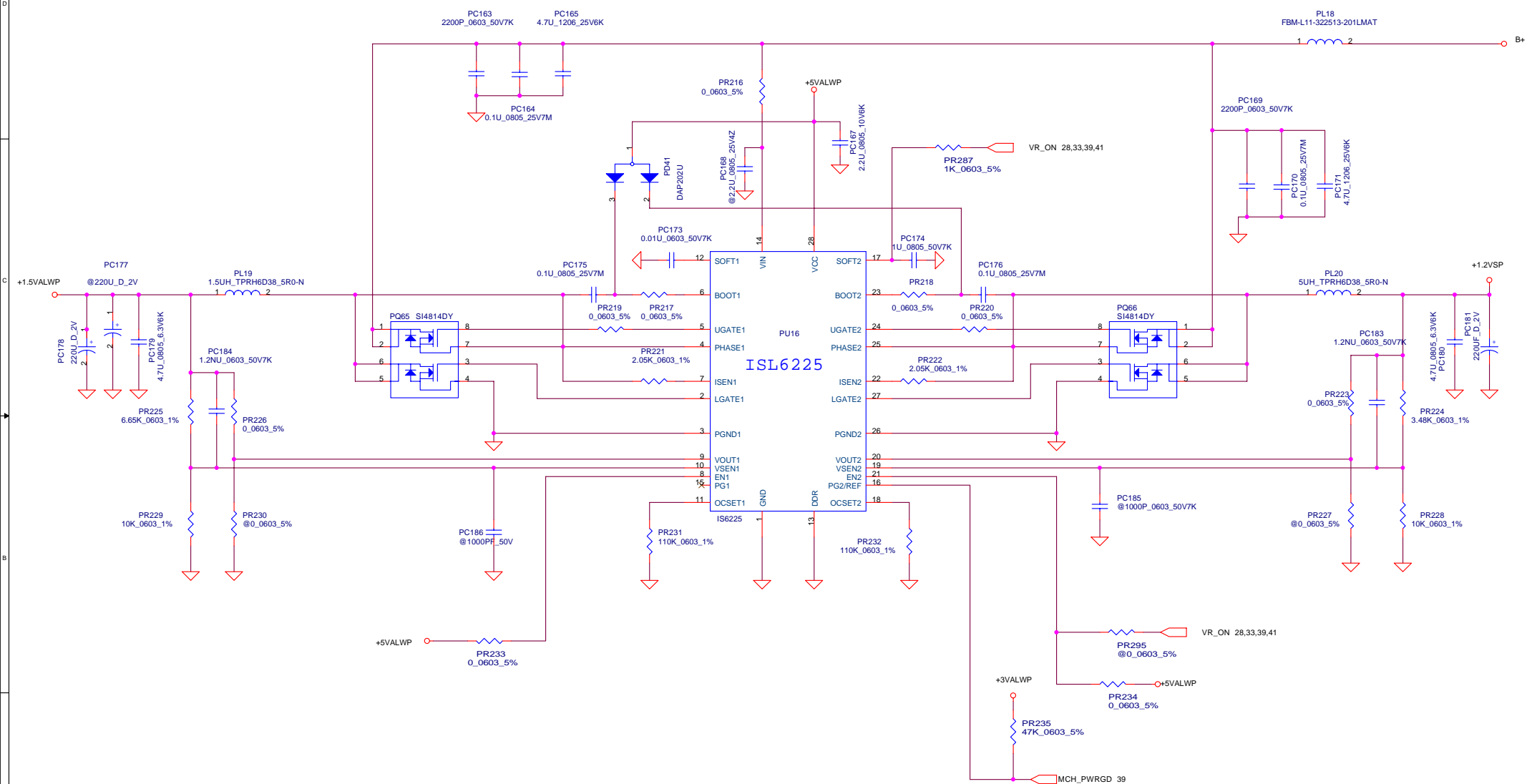
# CPU-CORE



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<b>Compal Electronics, Inc.</b>		
<b>+VCC_H CORE</b>		
Size	Document Number	Rev
B	DCL56 LA2231	0.3
Date:	Thursday, February 05, 2004	Sheet 39 of 45

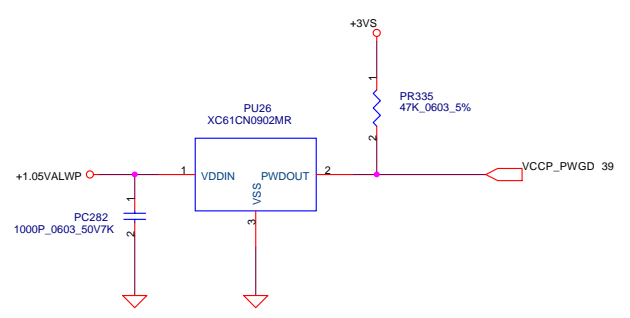
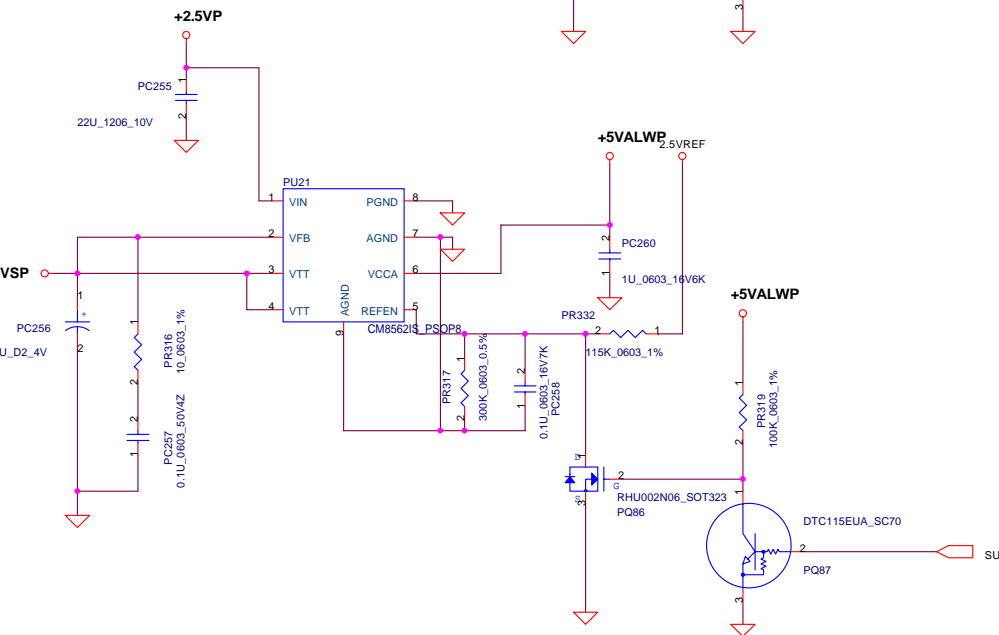
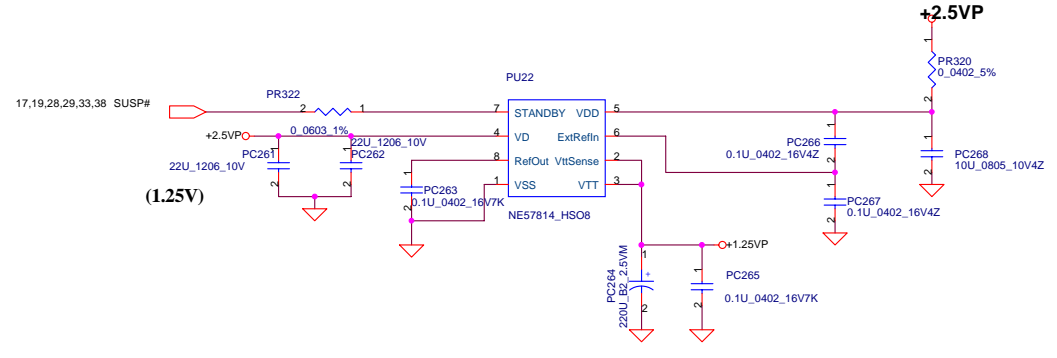
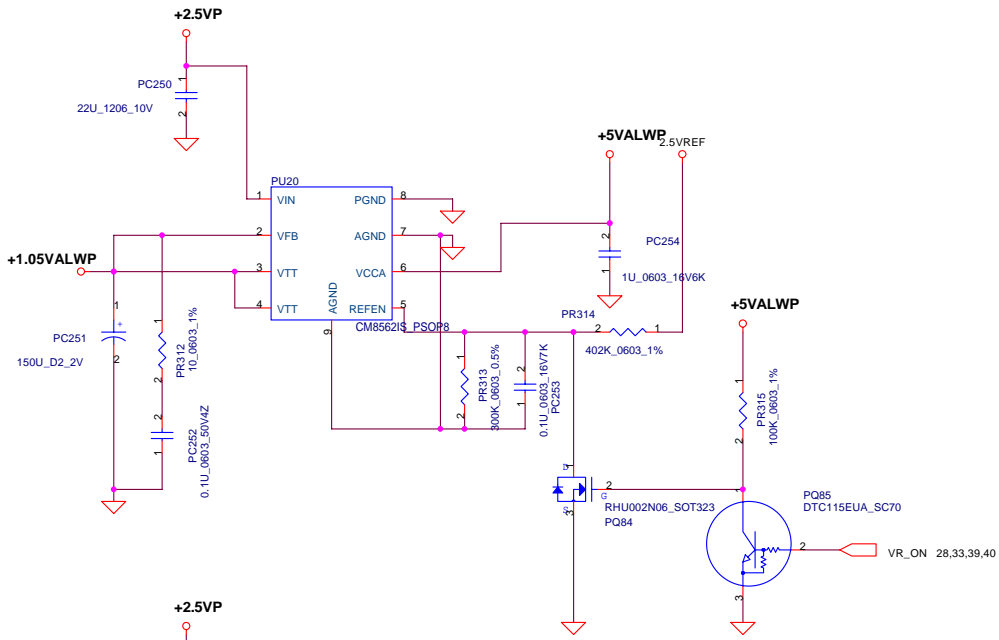
+1.5VALWPV/+1.2VSP



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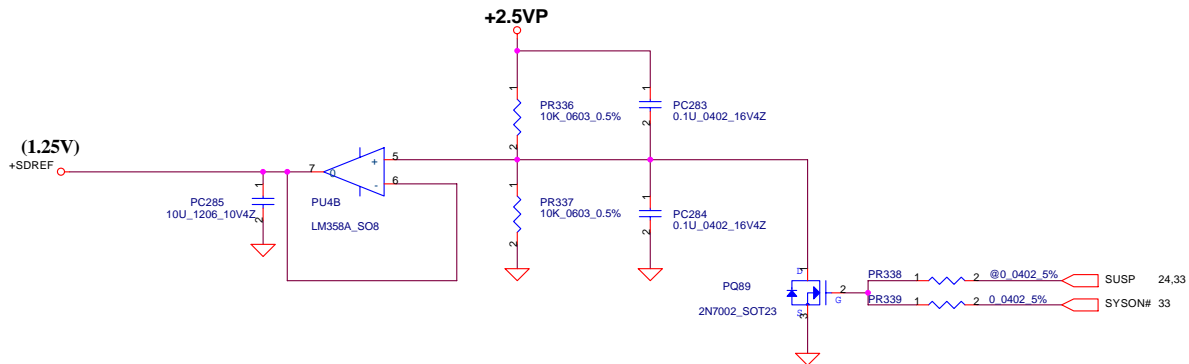
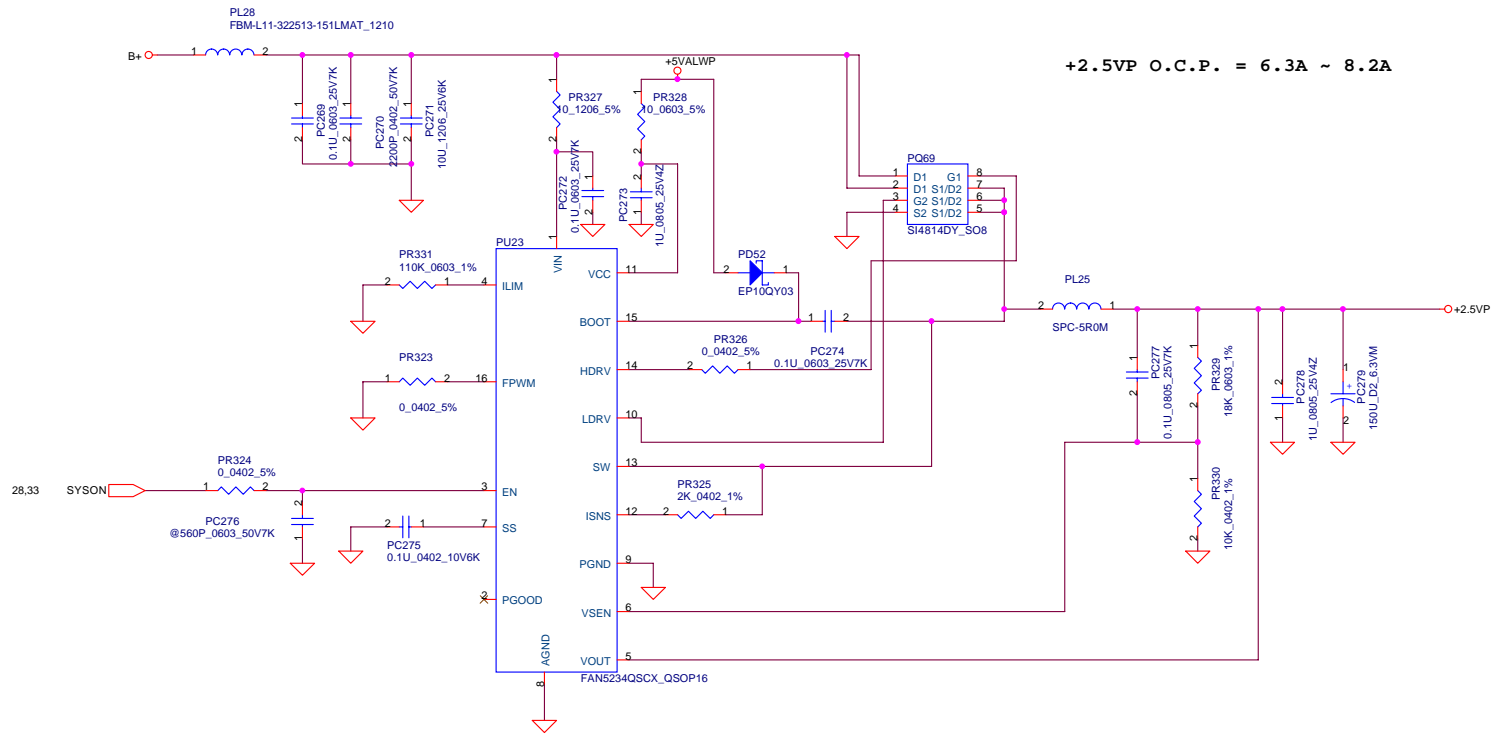
<b>Compal Electronics, Inc.</b>			
Title			
<b>1.5V &amp; 1.2V</b>			
Size	Document Number		Rev
<b>B</b>	<b>DCL56 LA2231</b>		<b>0.3</b>
Date:	Thursday, February 05, 2004	Sheet	40 of 45





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<b>Compal Electronics, Inc.</b>			
Title			
<b>1.8V &amp; 1.05V</b>			
Size	Document Number	Rev	
B	<b>DCL56 LA2231</b>	0.3	
Date:	Thursday, February 05, 2004	Sheet	41 of 45



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<b>Compal Electronics, Inc.</b>			
Title			
<b>2.5V &amp; 1.25V</b>			
Size	Document Number		Rev
<b>B</b>	<b>DCL56 LA2231</b>		<b>0.3</b>
Date:	Thursday, February 05, 2004	Sheet	42 of 45

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

Item	Fixed Issue	Reason for change	Rev.	PG#	Modify List	VER	Phase
1.	IDE reset signal level error	Change signal level from 3V to 5V		P16	Delete D8,D9,R144,R147 Add U44,U45		DVT
2.	LED light not enough	Change VCC from +3VALW to +5VALW		P25	Add Q45,Q46,Q47 Add R420,R421,R422		DVT
3.	Change flash ROM size	Change from 4Mb to 8Mb		P29	Delete U9 Add U42		DVT
4.	Change flash ROM size	Change from 8Mb to 4Mb		P29	Delete U42, C549, R419, JP28 Add U9, C59		PVT
5.	Change USB Power	Change USB Power from +5VALW to +5V		P25	Change U2.2, U4.2 form +5VALW to +5V		PVT
6.	Noise when system boot	Change PCM_SPK# sequence		P19	Add R435 on PCM_SPK# and pull up to +3V		PVT
7.	Some CF card can't read	Pull up S1_OE#		P20	Add R436 on S1_OE# to pull up to S1_VCC		PVT
8.	Change FAN Connector	Change FAN Connector		P30	Change FAN Connector JP7 from 4-Pin to 3-Pin		PVT
9.	Add Bluetooth Detect Pin	Add Bluetooth Detect Pin		P30	Add Bluetooth Detect Pin form Super I/O GPIO20 to JP10 Pin20		PVT

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<b>Compal Electronics, Inc.</b>		
Title		
<b>Note &amp; Revision</b>		
Size	Document Number	Rev
	<b>DCL56 LA2231</b>	0.3
Date:	Thursday, February 05, 2004	Sheet 43 of 45

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

Item	Fixed Issue	Reason for change	Rev.	PG#	Modify List	VER	Phase
1		change cpu core from two phase to one phase		39	1.delete PC127,PU11,PD33,PR169,PR170, PC134,PR174,PQ51,PQ52,PQ53, PQ54,PC128,PC129,PC130,PC238, PC133,PD34,PR175,PC136,PR178  2.add PR306:0, PQ76:SI4362, PL28:0.6U 3.Change PR200 from 2m(CYNTEC) to 1m (DALE) PC51 from 22nF to 33nF PR190 from 620K to 910K PR188 from 240k to 390k PC143,PC144,PC145 from 4.7U from 10U		DVT
2		For new version FAN5236 & ISL6225, modify enable function		40,41,42	1. delete PR287, PR234, PR288, PR254, PR289, PR274 2. add PR295: 0, PR296: 0, PR297 3. change PC143,PC144,PC 145 from 4.7U to 10u		DVT
3		modify for 3.3v to reduce power loss		37	Change PC34 from 470PF to 180PF		DVT
4		modify 5V reference		37	change PR63 from 10k to 10.2k		DVT
5		modify charging current		35	Change PR22 from 200 to 300 Add PR308 from 300		DVT
6		modify bridge battery charging current		38	1. Add PR300:22.1K, PR301: 22.1K, PR302:442, PR303:6.8K, PQ77:2SA1037K, PQ78: 2SC2412K, PH3:100K ,PD51:DAN217, PQ79: 2N7002,PR299:49.9K, PR304 :57.6K, PC246: 0.1U, PR297:10K 2. Delete PD46		DVT
7		modify and to reduce 5VALWPS,3VALWPS output recover edge voltage		37	1.Change PD12 from EP10QY03 to EC10QS04 PD11 from EP10QY03 to EC10QS04 PU13(ADP3415 driver) VCC from +5VALWP to +5VS PU12(ADP3205 controller) VCC from +3VALWP to+3VS 2.Delete PQ10,PQ11:SI4800DY, PQ12,PQ13:SI4810DY, PC46,PC56 Add PQ82,PQ83:SI4814DY		DVT
8		modify precharge circuit		35	1.Change PR17 from 150k to 412k PR19 from 2.4M to 634K PR20 from 10K to 34K PR21 from 75K to 137K 2 Add PR309 :66.5K		DVT
9		modify battery OVP:8 cell:2.2V  6 cell 1.8V		36	1 change PR47 from 174k to 402k		DVT

<b>Compal Electronics, Inc.</b>			
Title <b>PIR</b>			
Size	Document Number		Rev
	<b>DCL56 LA2231</b>		<b>0.3</b>
Date:	Thursday, February 05, 2004	Sheet	44 of 45

Item	Fixed Issue	Reason for change	Rev.	PG#	Modify List	VER	Phase
1		change cpu core from two phase to one phase		39	1.ADD PC127,PU11,PD33,PR169,PR170, PC134,PR174,PQ51,PQ52,PQ53, PQ54,PC128,PC129,PC130,PC238, PC133,PD34,PR175,PC136,PR178  2.DELETE PR306:0, PQ76:SI4362, PL28:0.6U 3.Change PR175,PR200 from 1m (DALE) TO 2m(CYNTEC), PC151,PC136 from 33nF to 22nF, PR188 from 240k to 120k , ADD PC128,PC129,PC130 : 4.7U  4.Change PR186 from 56 TO 137(Frequency from 300k to 250KHZ), 5. ChangePR188 from 240k to 120k(Vcore from 1.46 to 1.466v,vid code=1.468v when Io=0A), PR187 change from 3.4k to 3.48k(Vboot=1.2v,and Vc4from0.741 to 0.752v)		PVT
2		Change new version FAN5236d & ISL6225b to ISL6225CA&FAN5236, modify enable function		40,41,42	1. ADD PR287, PR234, PR288, PR254, PR289, PR274 2. DELETE PR295: 0, PR296: 0, PR297 3.ADD PR287,PR288,PR289 4.Change PC174,PC198,PC222 FROM 0.01U TO 4.7U 16V		PVT
3		modify FAN5236 RC feed back compasation		40,41,42	PC183,PC184,PC207,PC208:FROM 0.01UF TO 1.2NF		PVT
4		change cpu core cap to 6*4.7uF 1210 not 3*10uF due to 10uF cap height >2mm		39	PC128,PC129,PC130,PC143,PC144,PC145FROM 10UF TO 4.7UNF		PVT
5		modify bridge battery charging current:		38	change PR302 be120 1206,PR303 be1.5k 1206		PVT
6		modify PU17,PU18 max current,OCP		40,41	change PR221,PR222,PR241,PR242 fom 1.27k(0603) to 1.05k(1206)		PVT
7		modify charger CP point :from from 61.5W to 54W		36	change PR332 fom 21K(0603) to 26.1K(0603)		PVT
8		modify and confirm PU12 Vref build time		39	INCREASE PR310 10KB between PU12Vref(PIN9) to PU12 VCC		
9		FOR bridge battery safety, add PTC as protection		38	add PFS1 0.75A/24V		

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Title <b>PIR</b>			
Size	Document Number		Rev
	<b>DCL56 LA2231</b>		<b>0.3</b>
Date:	Thursday, February 05, 2004		Sheet 45 of 45

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