

# Compal confidential

## Schematics Document Mobile Dothan uFCPGA with Intel Alviso\_GM+ICH6-M core logic

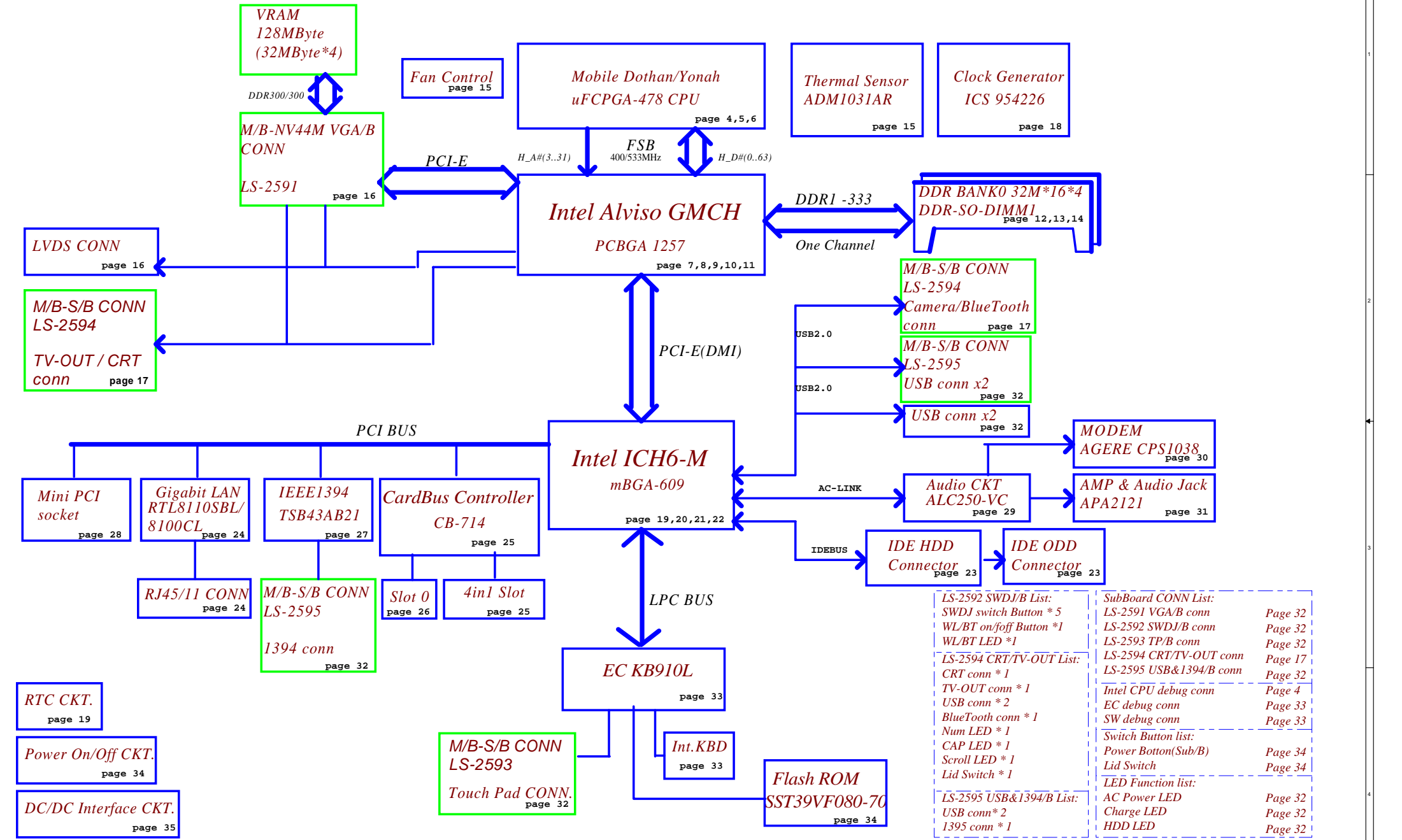
2004-10-08

LA-2591

REV:01

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.

<b>Compal Electronics, Inc.</b>			
Title			
<b>Cover Sheet</b>			
Size	Document Number		Rev
Custom	<b>LA-2591</b>		0.1
Date:	Monday, October 11, 2004	Sheet	1 of 43



I2C / SMBUS ADDRESSING

External PCI Devices

DEVICE	IDSEL #	REQ/GNT #	PIRQ
LAN	AD17	0	F
CARD BUS	AD20	1	A
Cardreader			B
1394	AD16	2	E
Wireless LAN(MINI PCI)	AD18	3	G,H

Power Managment table

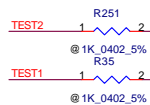
Signal State	+12VALW +3VALW +5VALW	+3V +2.5V	+CPU_CORE +VCCF(1.05v) +5VS +3VS +2.5VS +1.5VS +1.25VS +1.1VS (VGA/B) +1.2VS (VGA/B) +1.8VS (VGA/B)
S0	ON	ON	ON
S1	ON	ON	ON
S3	ON	ON	OFF
S5 S4/AC	ON	OFF	OFF
S5 S4/AC don't exist	OFF	OFF	OFF

SMBUS Control Table

	SOURCE	INVERTER	BATT	SERIAL EEPROM	THERMAL SENSOR (CPU) ADM1032	SODIMM	CLK CHIP	MINI PCI	LCD
SMB_EC_CK1 SMB_EC_DA1	KB910L	×	✓	×	×	×	×	×	×
SMB_EC_CK2 SMB_EC_DA2	KB910L	×	×	×	✓	×	×	×	×
ICH_SMBCLK ICH_SMBDATA	ICH6-M	×	×	×	×	✓	✓	×	×
LCD_DDCCLK LCD_DDCDATA	Alviso GM-GP	×	×	×	×	×	×	×	✓
I2CC_SCL I2CC_SDA	NV44M	×	×	×	×	×	×	×	✓

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			
Design Note			
Size	Document Number		Rev
Custor	LA-2591		0.1
Date:	Monday, October 11, 2004	Sheet	3 of 43



Place near J1TP 0.5"

<21> ITP\_DBRESET#

ITP\_DBRESET#

@ 200.0402\_1%

R38

ITP BPM#0

ITP BPM#1

ITP BPM#2

ITP BPM#3

ITP BPM#4

ITP BPM#5

ITP BPM#6

ITP BPM#7

ITP BPM#8

ITP BPM#9

ITP BPM#10

ITP BPM#11

ITP BPM#12

ITP BPM#13

ITP BPM#14

ITP BPM#15

ITP BPM#16

ITP BPM#17

ITP BPM#18

ITP BPM#19

ITP BPM#20

ITP BPM#21

ITP BPM#22

ITP BPM#23

ITP BPM#24

ITP BPM#25

ITP BPM#26

ITP BPM#27

ITP BPM#28

ITP BPM#29

ITP BPM#30

ITP BPM#31

ITP BPM#32

ITP BPM#33

ITP BPM#34

ITP BPM#35

ITP BPM#36

ITP BPM#37

ITP BPM#38

ITP BPM#39

ITP BPM#40

ITP BPM#41

ITP BPM#42

ITP BPM#43

ITP BPM#44

ITP BPM#45

ITP BPM#46

ITP BPM#47

ITP BPM#48

ITP BPM#49

ITP BPM#50

ITP BPM#51

ITP BPM#52

ITP BPM#53

ITP BPM#54

ITP BPM#55

ITP BPM#56

ITP BPM#57

ITP BPM#58

ITP BPM#59

ITP BPM#60

ITP BPM#61

ITP BPM#62

ITP BPM#63

ITP BPM#64

ITP BPM#65

ITP BPM#66

ITP BPM#67

ITP BPM#68

ITP BPM#69

ITP BPM#70

ITP BPM#71

ITP BPM#72

ITP BPM#73

ITP BPM#74

ITP BPM#75

ITP BPM#76

ITP BPM#77

ITP BPM#78

ITP BPM#79

ITP BPM#80

ITP BPM#81

ITP BPM#82

ITP BPM#83

ITP BPM#84

ITP BPM#85

ITP BPM#86

ITP BPM#87

ITP BPM#88

ITP BPM#89

ITP BPM#90

ITP BPM#91

ITP BPM#92

ITP BPM#93

ITP BPM#94

ITP BPM#95

ITP BPM#96

ITP BPM#97

ITP BPM#98

ITP BPM#99

ITP BPM#100

ITP BPM#101

ITP BPM#102

ITP BPM#103

ITP BPM#104

ITP BPM#105

ITP BPM#106

ITP BPM#107

ITP BPM#108

ITP BPM#109

ITP BPM#110

ITP BPM#111

ITP BPM#112

ITP BPM#113

ITP BPM#114

ITP BPM#115

ITP BPM#116

ITP BPM#117

ITP BPM#118

ITP BPM#119

ITP BPM#120

ITP BPM#121

ITP BPM#122

ITP BPM#123

ITP BPM#124

ITP BPM#125

ITP BPM#126

ITP BPM#127

ITP BPM#128

ITP BPM#129

ITP BPM#130

ITP BPM#131

ITP BPM#132

ITP BPM#133

ITP BPM#134

ITP BPM#135

ITP BPM#136

ITP BPM#137

ITP BPM#138

ITP BPM#139

ITP BPM#140

ITP BPM#141

ITP BPM#142

ITP BPM#143

ITP BPM#144

ITP BPM#145

ITP BPM#146

ITP BPM#147

ITP BPM#148

ITP BPM#149

ITP BPM#150

ITP BPM#151

ITP BPM#152

ITP BPM#153

ITP BPM#154

ITP BPM#155

ITP BPM#156

ITP BPM#157

ITP BPM#158

ITP BPM#159

ITP BPM#160

ITP BPM#161

ITP BPM#162

ITP BPM#163

ITP BPM#164

ITP BPM#165

ITP BPM#166

ITP BPM#167

ITP BPM#168

ITP BPM#169

ITP BPM#170

ITP BPM#171

ITP BPM#172

ITP BPM#173

ITP BPM#174

ITP BPM#175

ITP BPM#176

ITP BPM#177

ITP BPM#178

ITP BPM#179

ITP BPM#180

ITP BPM#181

ITP BPM#182

ITP BPM#183

ITP BPM#184

ITP BPM#185

ITP BPM#186

ITP BPM#187

ITP BPM#188

ITP BPM#189

ITP BPM#190

ITP BPM#191

ITP BPM#192

ITP BPM#193

ITP BPM#194

ITP BPM#195

ITP BPM#196

ITP BPM#197

ITP BPM#198

ITP BPM#199

ITP BPM#200

ITP BPM#201

ITP BPM#202

ITP BPM#203

ITP BPM#204

ITP BPM#205

ITP BPM#206

ITP BPM#207

ITP BPM#208

ITP BPM#209

ITP BPM#210

ITP BPM#211

ITP BPM#212

ITP BPM#213

ITP BPM#214

ITP BPM#215

ITP BPM#216

ITP BPM#217

ITP BPM#218

ITP BPM#219

ITP BPM#220

ITP BPM#221

ITP BPM#222

ITP BPM#223

ITP BPM#224

ITP BPM#225

ITP BPM#226

ITP BPM#227

ITP BPM#228

ITP BPM#229

ITP BPM#230

ITP BPM#231

ITP BPM#232

ITP BPM#233

ITP BPM#234

ITP BPM#235

ITP BPM#236

ITP BPM#237

ITP BPM#238

ITP BPM#239

ITP BPM#240

ITP BPM#241

ITP BPM#242

ITP BPM#243

ITP BPM#244

ITP BPM#245

ITP BPM#246

ITP BPM#247

ITP BPM#248

ITP BPM#249

ITP BPM#250

ITP BPM#251

ITP BPM#252

ITP BPM#253

ITP BPM#254

ITP BPM#255

ITP BPM#256

ITP BPM#257

ITP BPM#258

ITP BPM#259

ITP BPM#260

ITP BPM#261

ITP BPM#262

ITP BPM#263

ITP BPM#264

ITP BPM#265

ITP BPM#266

ITP BPM#267

ITP BPM#268

ITP BPM#269

ITP BPM#270

ITP BPM#271

ITP BPM#272

ITP BPM#273

ITP BPM#274

ITP BPM#275

ITP BPM#276

ITP BPM#277

ITP BPM#278

ITP BPM#279

ITP BPM#280

ITP BPM#281

ITP BPM#282

ITP BPM#283

ITP BPM#284

ITP BPM#285

ITP BPM#286

ITP BPM#287

ITP BPM#288

ITP BPM#289

ITP BPM#290

ITP BPM#291

ITP BPM#292

ITP BPM#293

ITP BPM#294

ITP BPM#295

ITP BPM#296

ITP BPM#297

ITP BPM#298

ITP BPM#299

ITP BPM#300

ITP BPM#301

ITP BPM#302

ITP BPM#303

ITP BPM#304

ITP BPM#305

ITP BPM#306

ITP BPM#307

ITP BPM#308

ITP BPM#309

ITP BPM#310

ITP BPM#311

ITP BPM#312

ITP BPM#313

ITP BPM#314

ITP BPM#315

ITP BPM#316

ITP BPM#317

ITP BPM#318

ITP BPM#319

ITP BPM#320

ITP BPM#321

ITP BPM#322

ITP BPM#323

ITP BPM#324

ITP BPM#325

ITP BPM#326

ITP BPM#327

ITP BPM#328

ITP BPM#329

ITP BPM#330

ITP BPM#331

ITP BPM#332

ITP BPM#333

ITP BPM#334

ITP BPM#335

ITP BPM#336

ITP BPM#337

ITP BPM#338

ITP BPM#339

ITP BPM#340

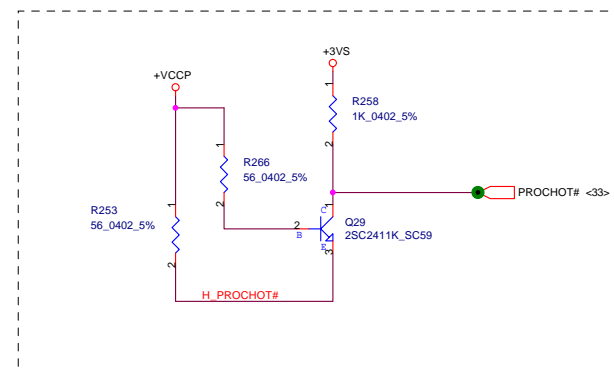
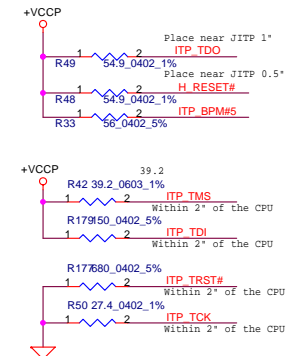
ITP BPM#341

ITP BPM#342

ITP BPM#343

ITP BPM#344

IT



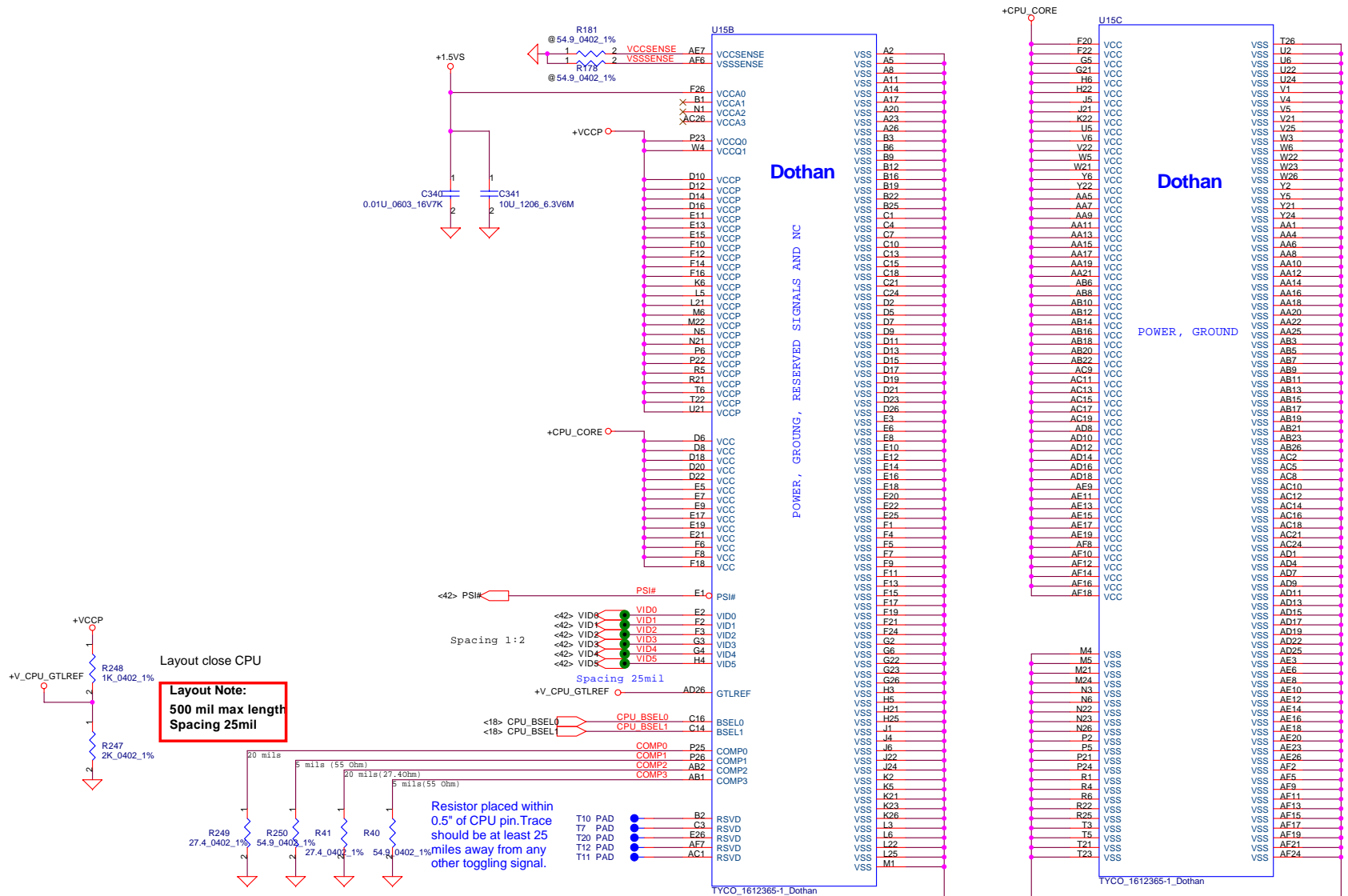
Add pullups for PWRGOOD and THERMTRIP per INTEL

R32  
200\_0402\_5%

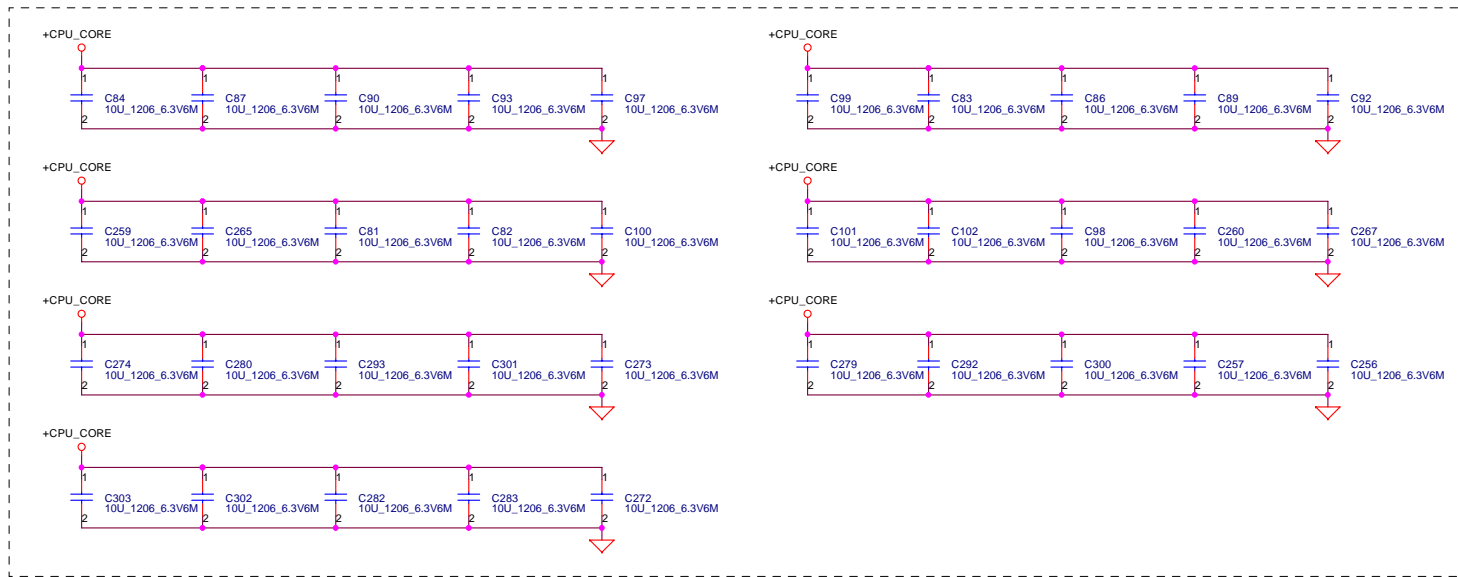
+VCCP 1 2 H\_PWRGOOD

Title		<b>Dothan Processor(1/2)</b>		Rev	0.1
Size	Document Number				
Custom	<b>LA-2591</b>				
Date:	Monday, October 11, 2004	Sheet	4	of	43

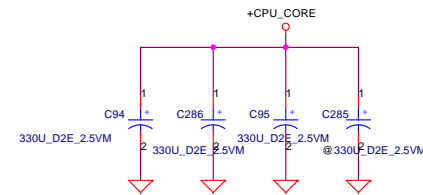
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS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



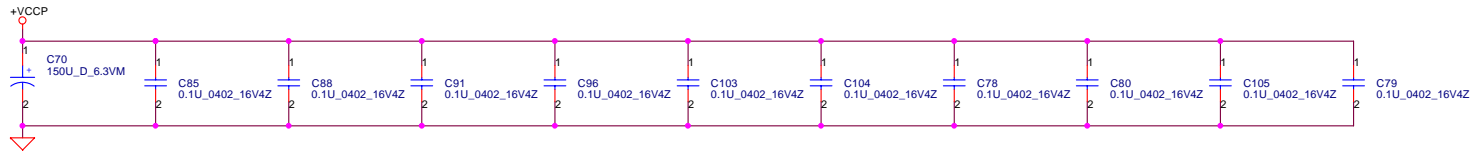
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS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



#### Near VCORE regulator.



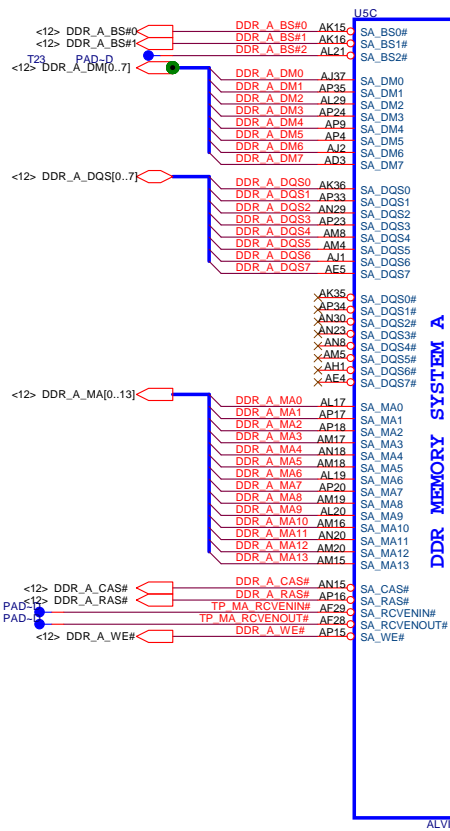
ESR <= 3m ohm  
Capacitor > 880 uF



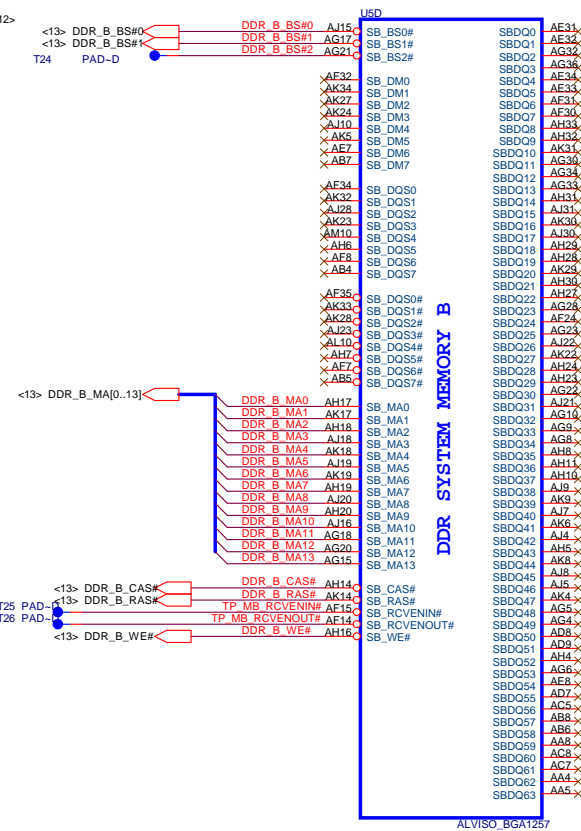
Compal Electronics, Inc.			
Dothan Bypass			
Title	Document Number	Rev	
Size	LA-2591	0.1	
Date:	Monday, October 11, 2004	Sheet	6 of 43

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 Symbol as same as Intel CRB schematic, So Layout Guide will show these signals routed differentially.



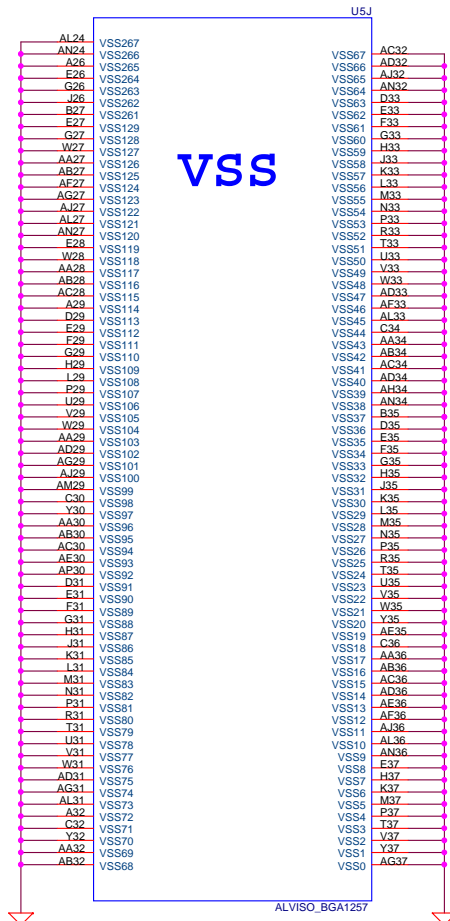
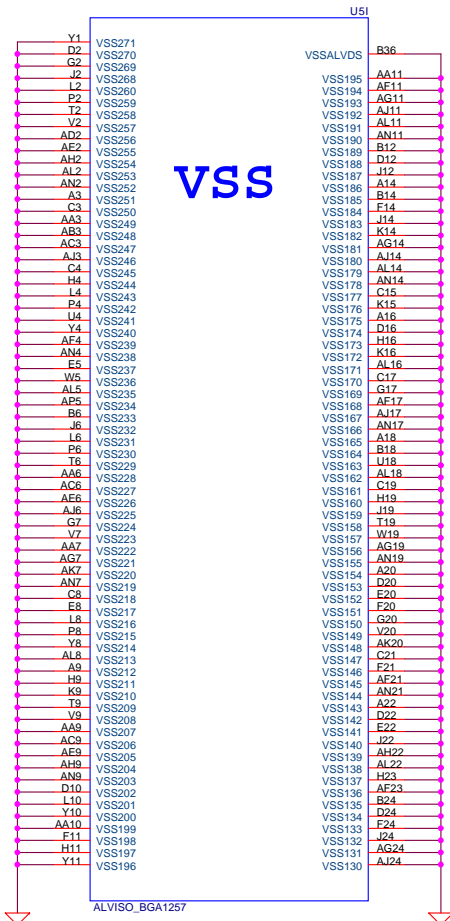
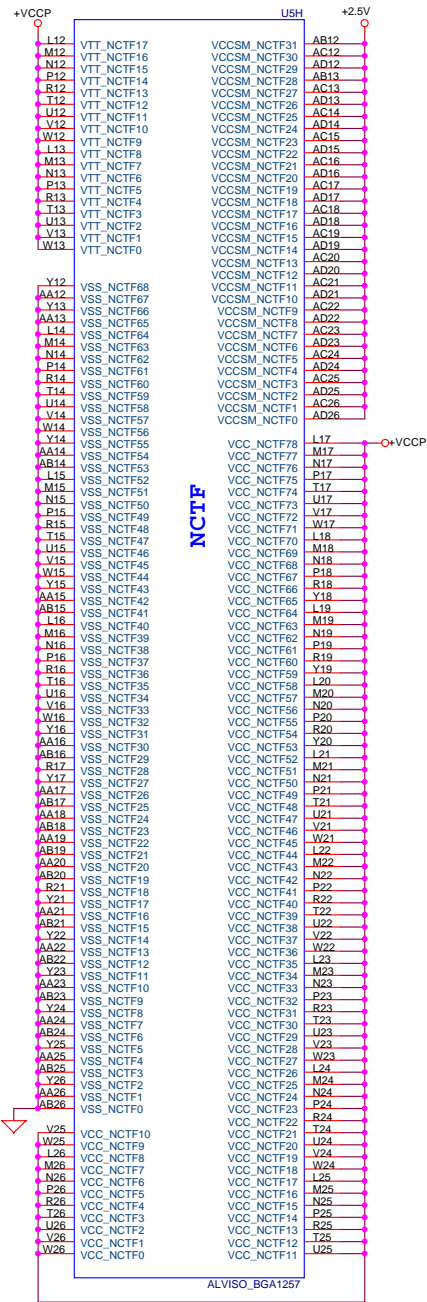
ALVISO\_BGA1257

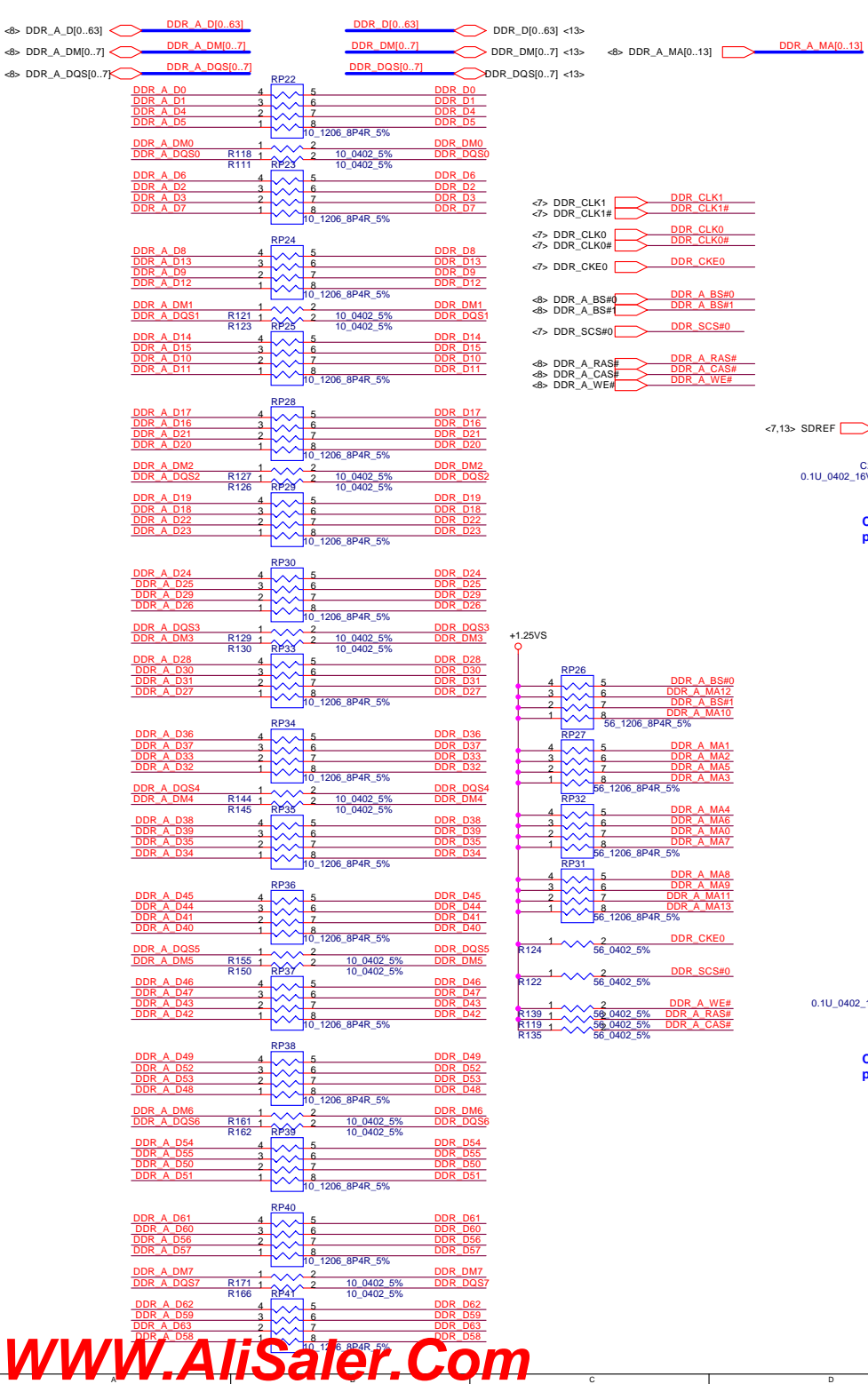
ALVISO\_BGA1257





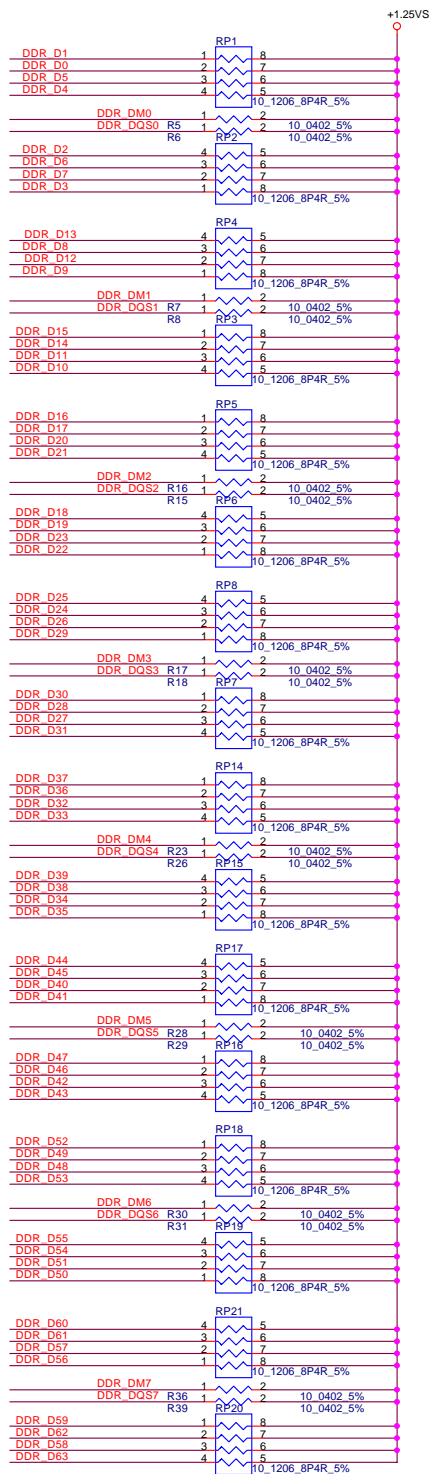




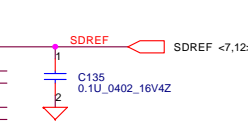
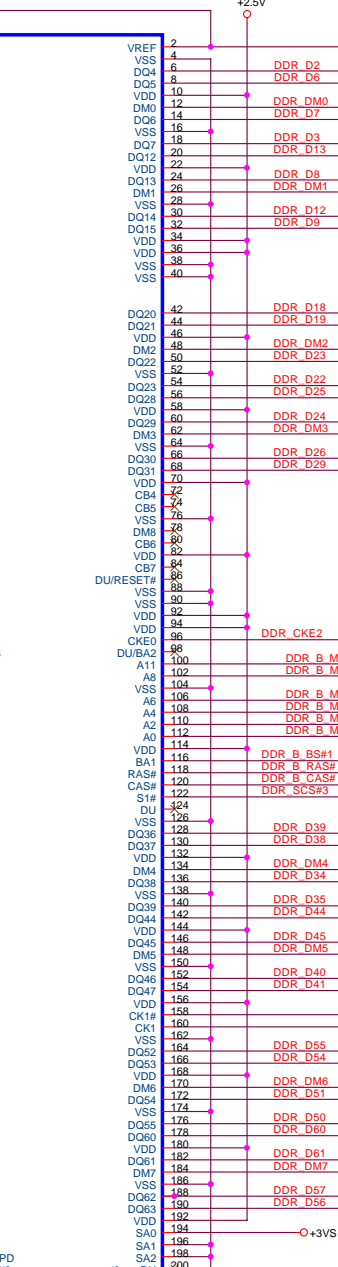
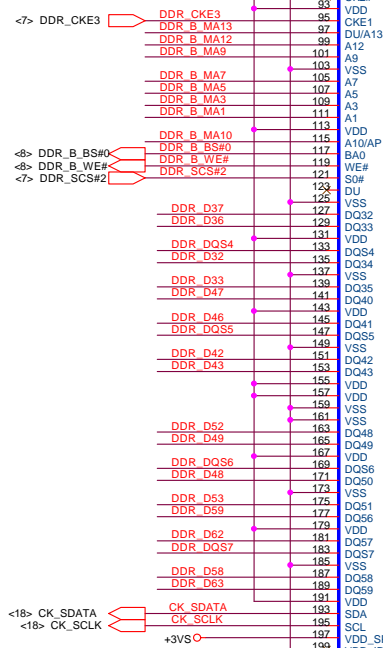
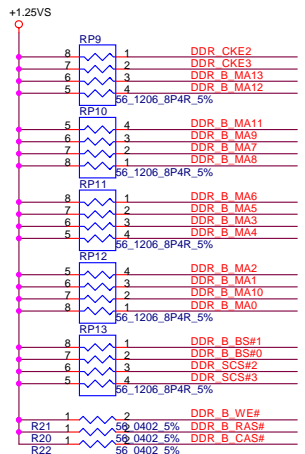


THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS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

Compal Electronics, Inc.			
DDR-SODIMM SLOT0			
Title	Document Number	Rev	
	LA-2591	0.1	
Date	Monday, October 11, 2004	Sheet	12 of 43



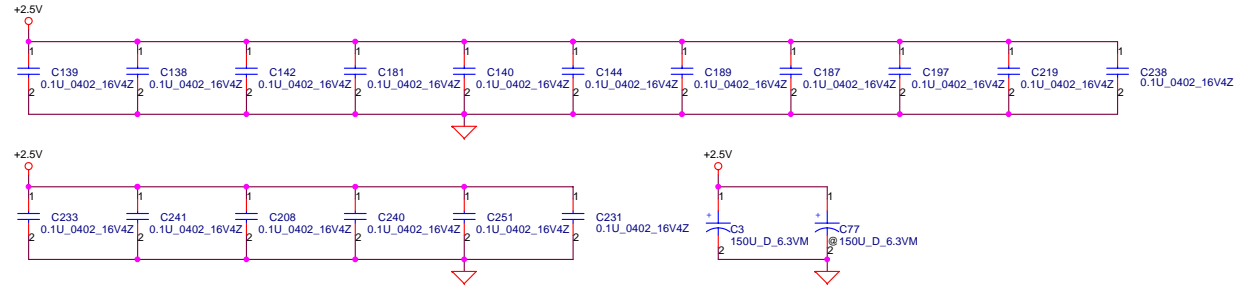
DDR D[0..63] <=> DDR\_D[0..63] <12>  
DDR DM[0..7] <=> DDR\_DM[0..7] <12>  
DDR DQS[0..7] <=> DDR\_DQS[0..7] <12>  
DDR\_B\_MA[0..13] <=> DDR\_B\_MA[0..13]



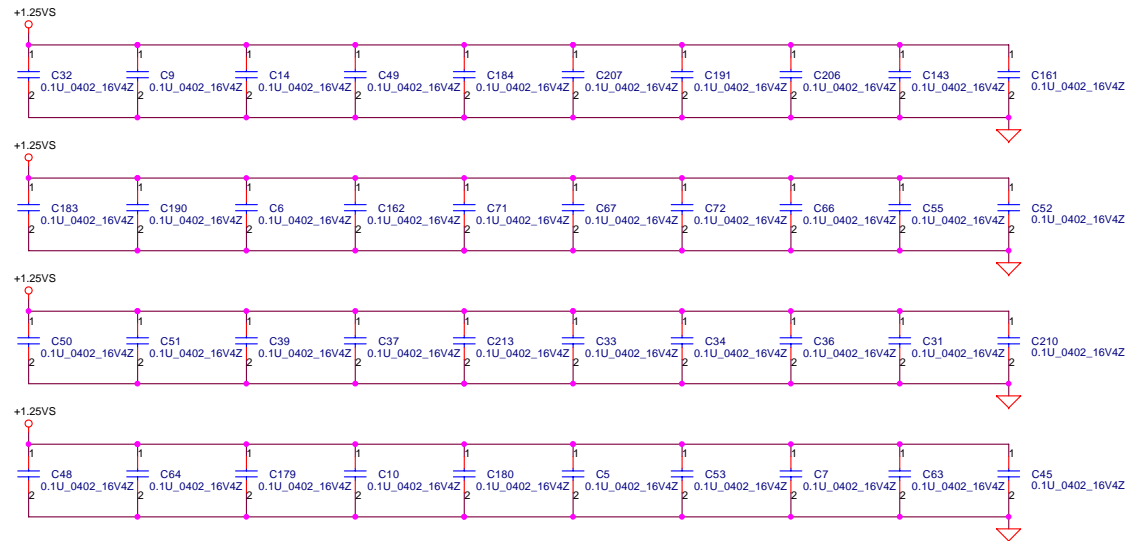
Compal Electronics, Inc.			
Title			
DDR-SODIMM SLOT1			
Size	Document Number	Rev	
	LA-2591	0.1	
Date:	Monday, October 11, 2004	Sheet	13 of 43

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.

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

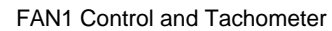
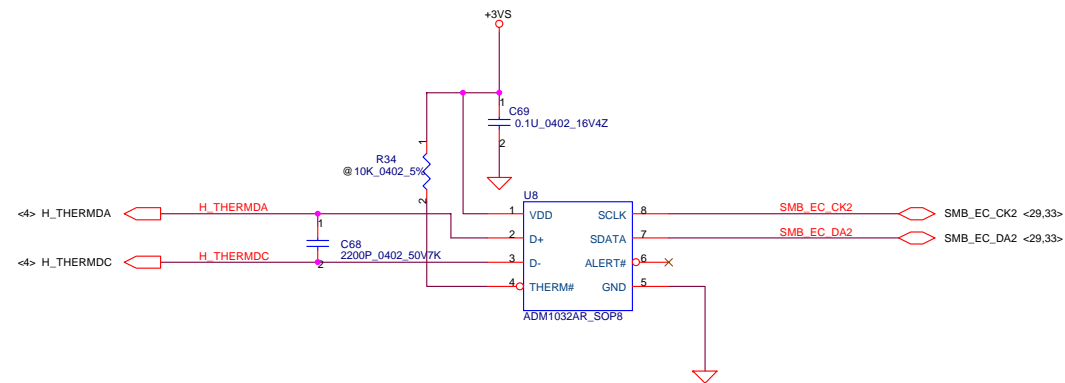


Layout note :  
Place one cap close to every 2 pull up resistors termination to  
+1.25V



Compal Electronics, Inc.			
Title			
DDR SODIMM Decoupling			
Size	Document Number	Rev	
Custom	LA-2591	0.1	
Date:	Monday, October 11, 2004	Sheet	14 of 43

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.

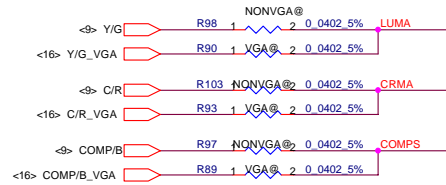




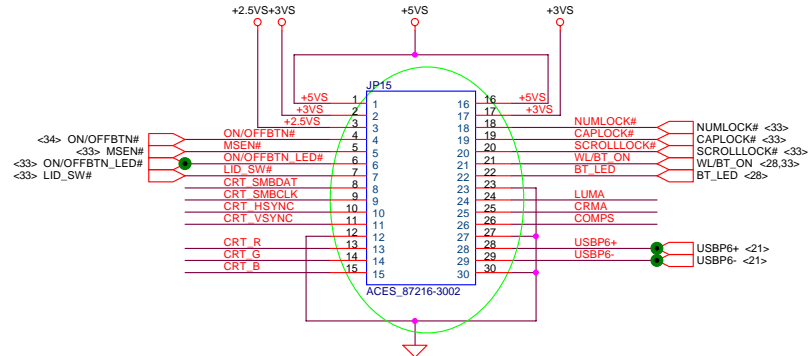




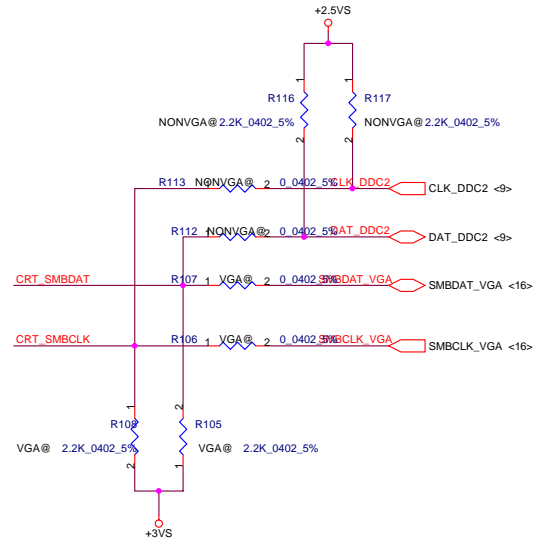
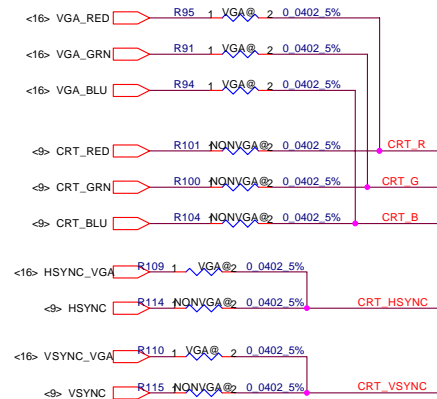
## TV-Out Connector



## VGA I/O PORT Connector

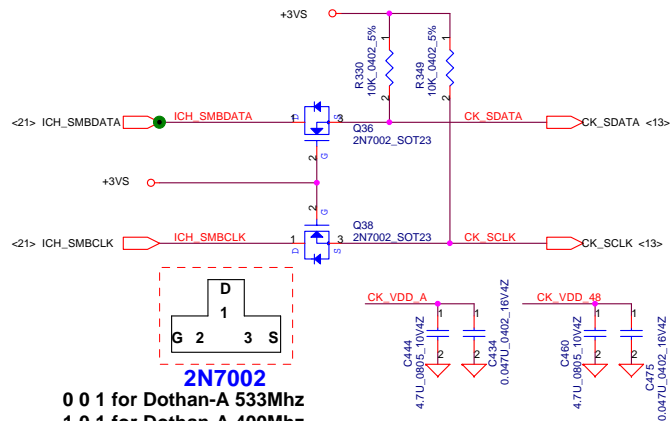


## CRT CONNECTOR



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.			
TV_OUT and DVI connector			
Title	Document Number	Rev	
Size	LA-2591	0.1	
Date:	Monday, October 11, 2004	Sheet	17 of 43



0 0 1 for Dothan-A 533Mhz  
1 0 1 for Dothan-A 400Mhz  
0 0 1 for Dothan-B 533Mhz  
0 1 1 for Dothan-B 400Mhz

FSC	FSB	FSA	CPU	SRC	PCI
CLKSEL0	CLKSEL1	CLKSEL2	MHz	MHz	MHz
0	0	0	266	100	33.3
0	0	1	133	100	33.3
0	1	0	200	100	33.3
0	1	1	166	100	33.3
1	0	0	333	100	33.3
1	0	1	100	100	33.3
1	1	0	400	100	33.3
1	1	0	RESERVED		

Table : ICS 954226

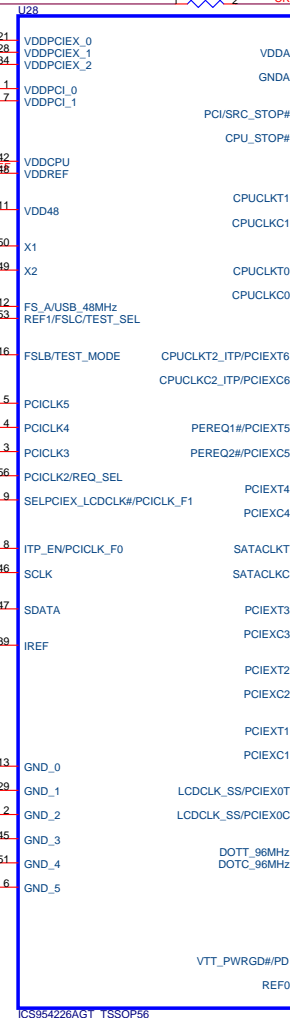
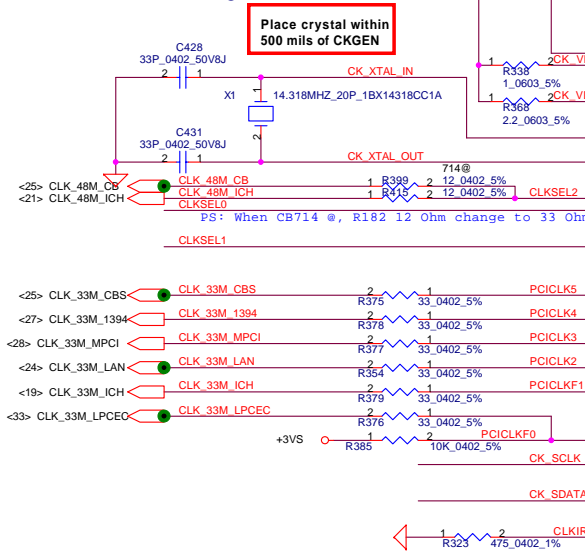
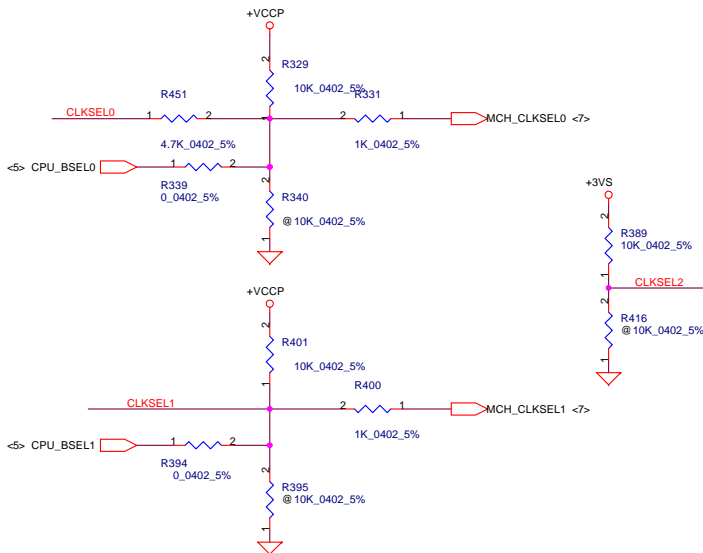
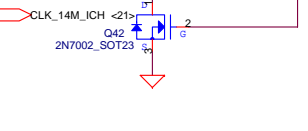
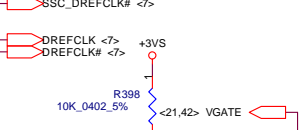
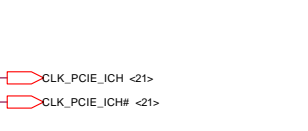
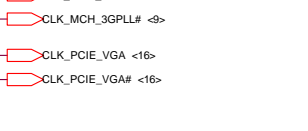
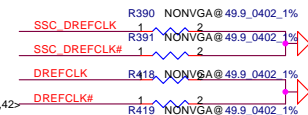
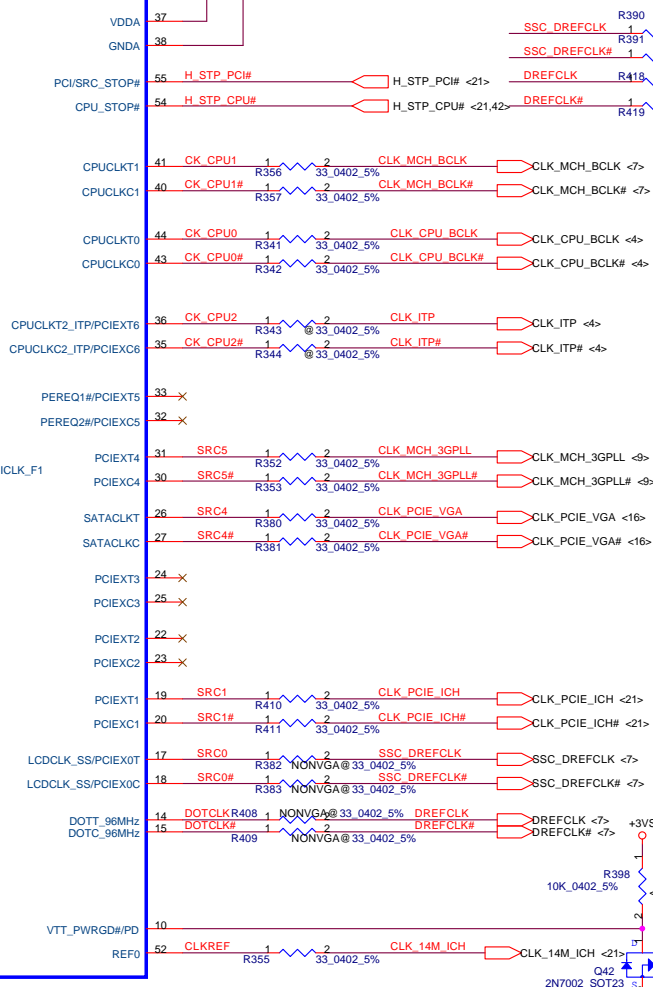
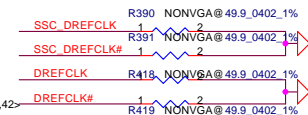
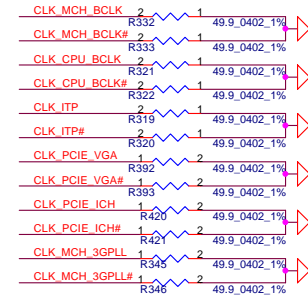


Table : ICS 954226

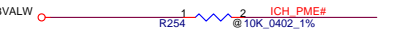
Place near each pin  
W>40 mil

Place near ICS954226

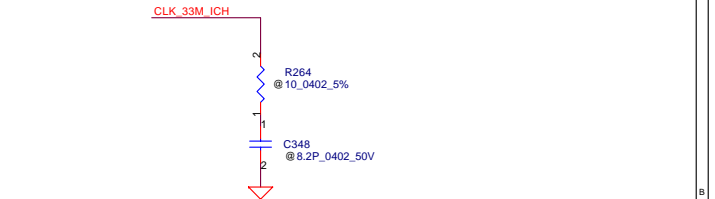
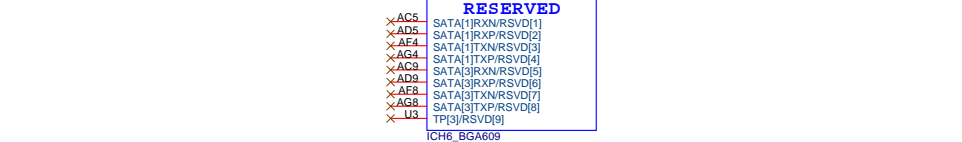


Compal Electronics, Inc.			
Clock Generator			
Title	Size	Document Number	Rev
	Custom	LA-2591	0.1
Date	Monday, October 11, 2004	Sheet	18 of 43

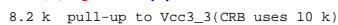
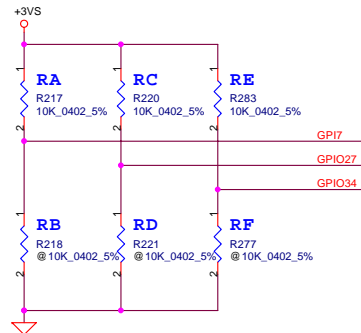
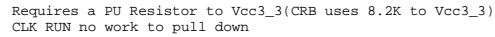
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS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



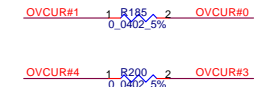
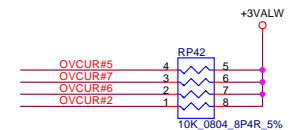
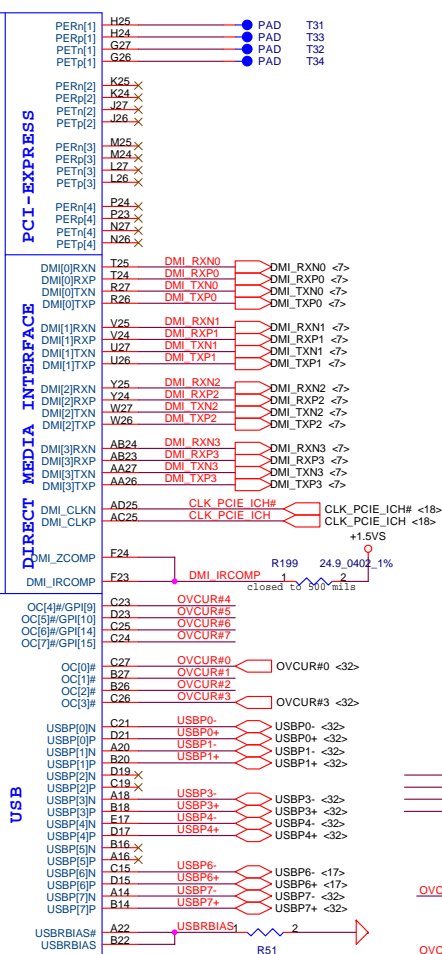
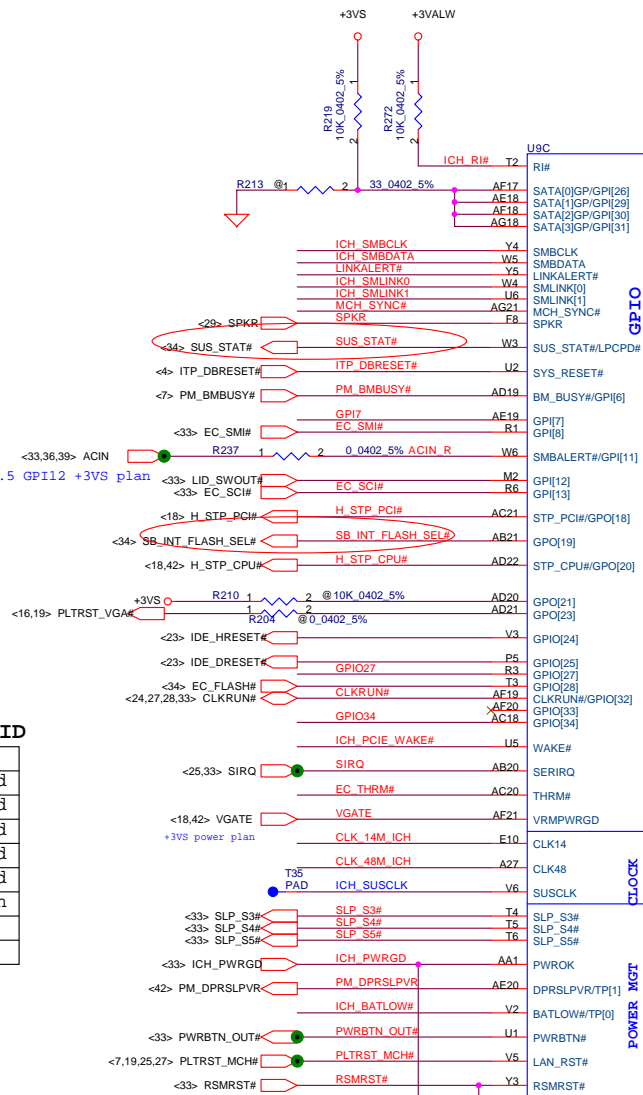
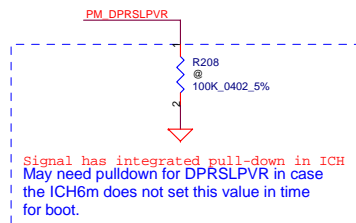
PME# signal has an integrated pull-up of 18 k to 42 k







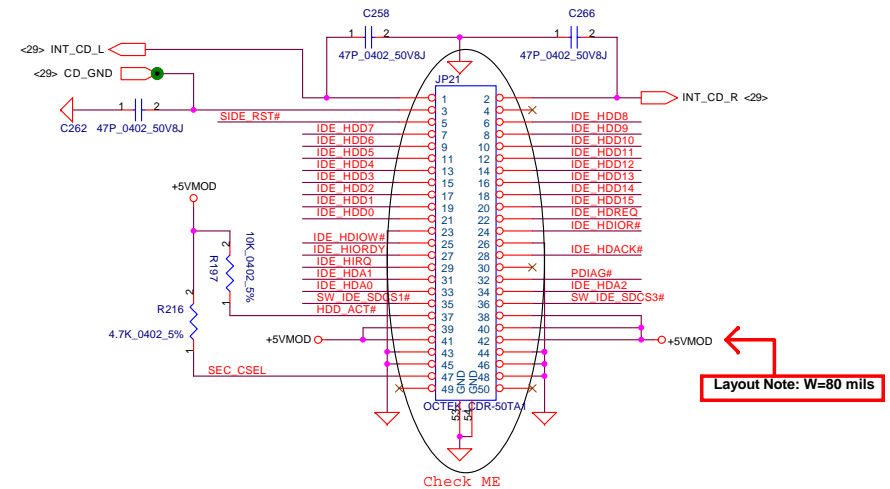
GPIO7/GPIO27/GPIO34			Vendor
0	0	0	Reserved
0	0	1	Reserved
0	1	0	Reserved
0	1	1	Reserved
1	0	0	Reserved
1	0	1	Infineon
1	1	0	Samsung
1	1	1	Hynix



USBPN/USBPP impedance 45 Ohm



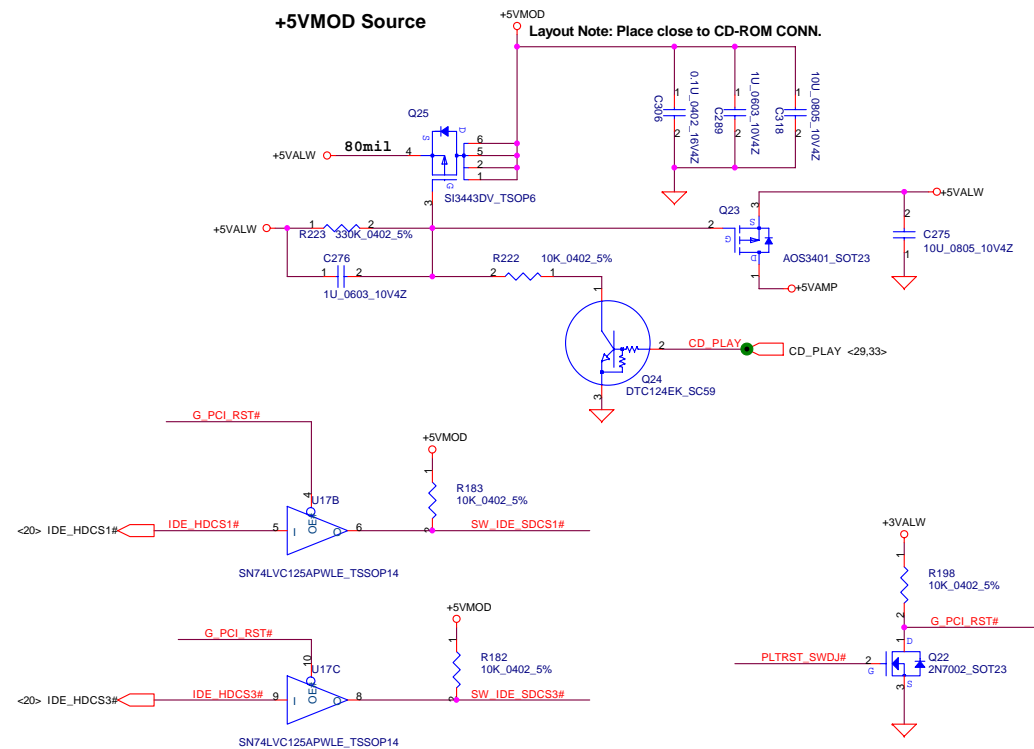
### CD-ROM Connector



**Layout Note: W=80 mils**

Check ME

**Layout Note: Place close to CD-ROM CONN.**

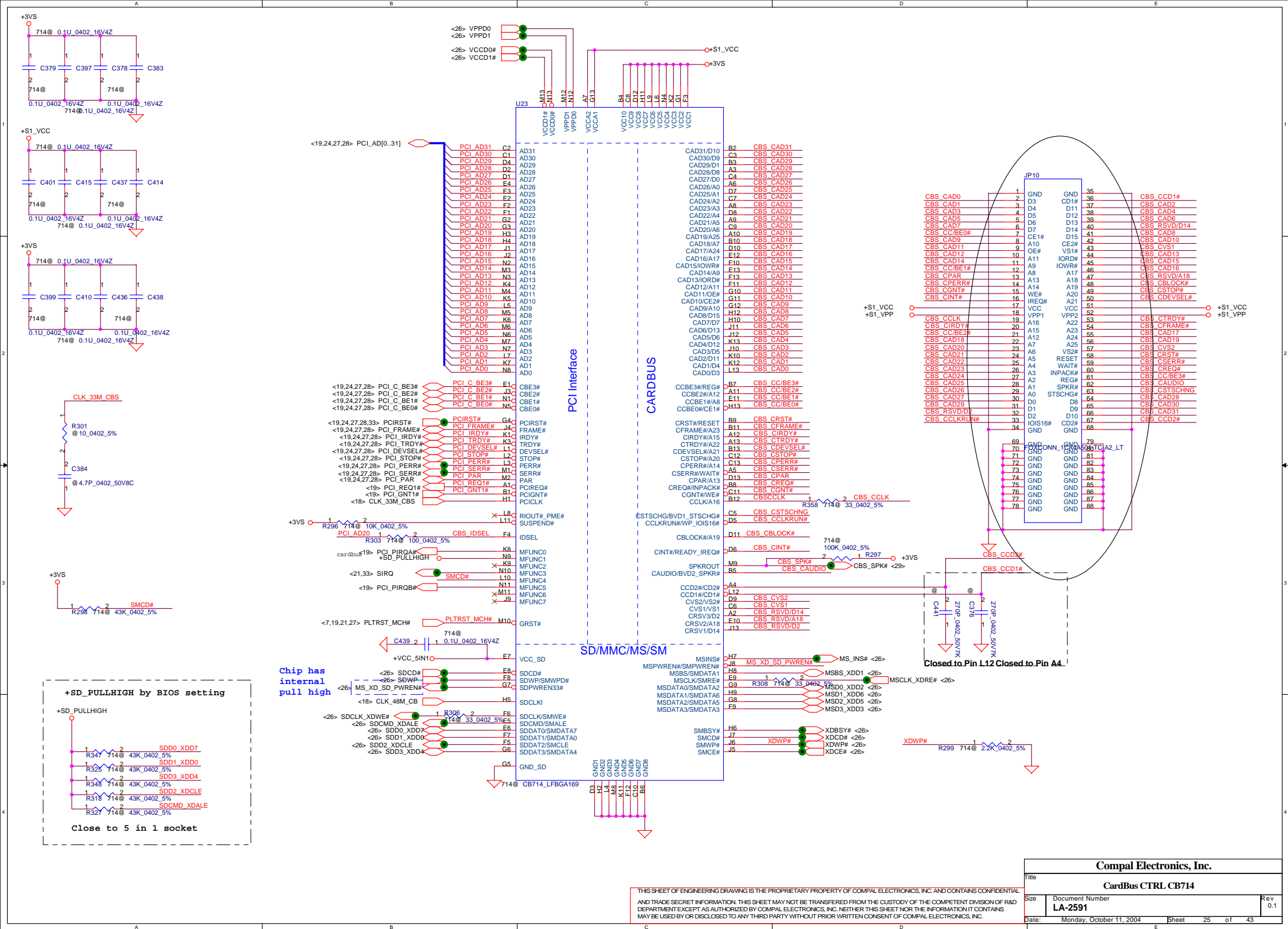


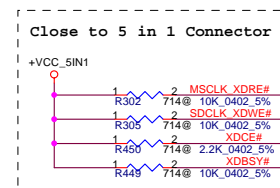
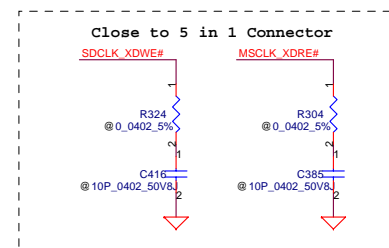
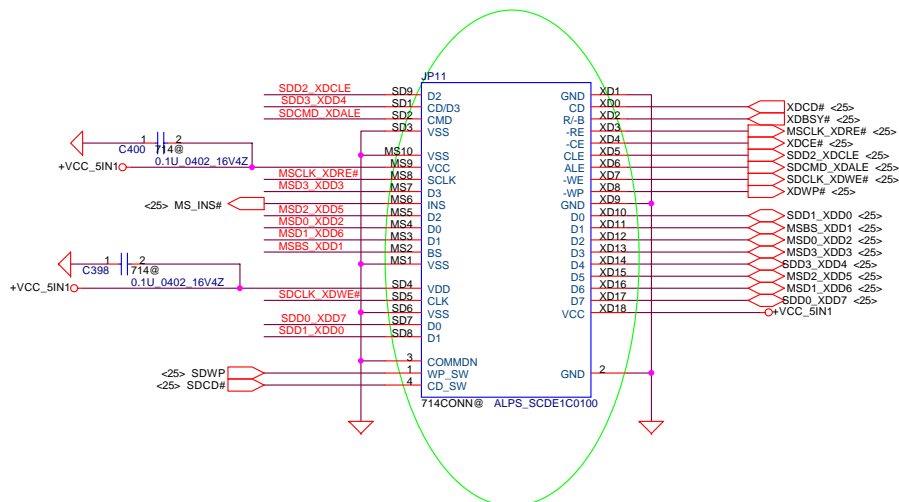
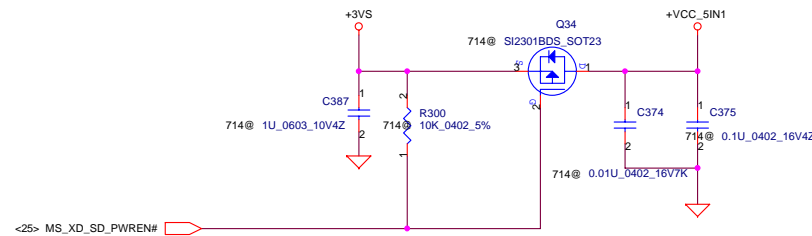
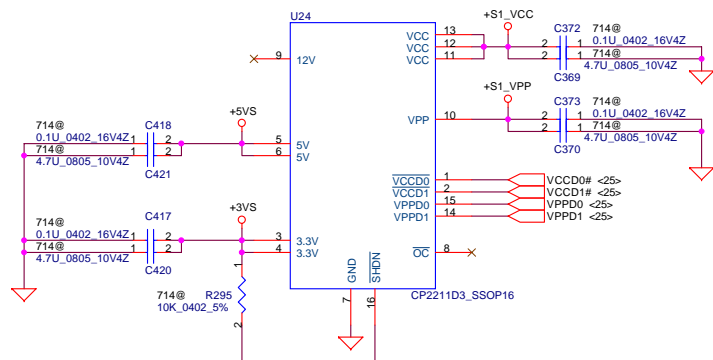
<b>Compal Electronics, Inc.</b>			
Title			
<b>HDD &amp; CD-ROM CONN.</b>			
Size	Document Number <b>LA-2591</b>		Rev 0.1
Date:	Monday, October 11, 2004	Sheet	23 of 43





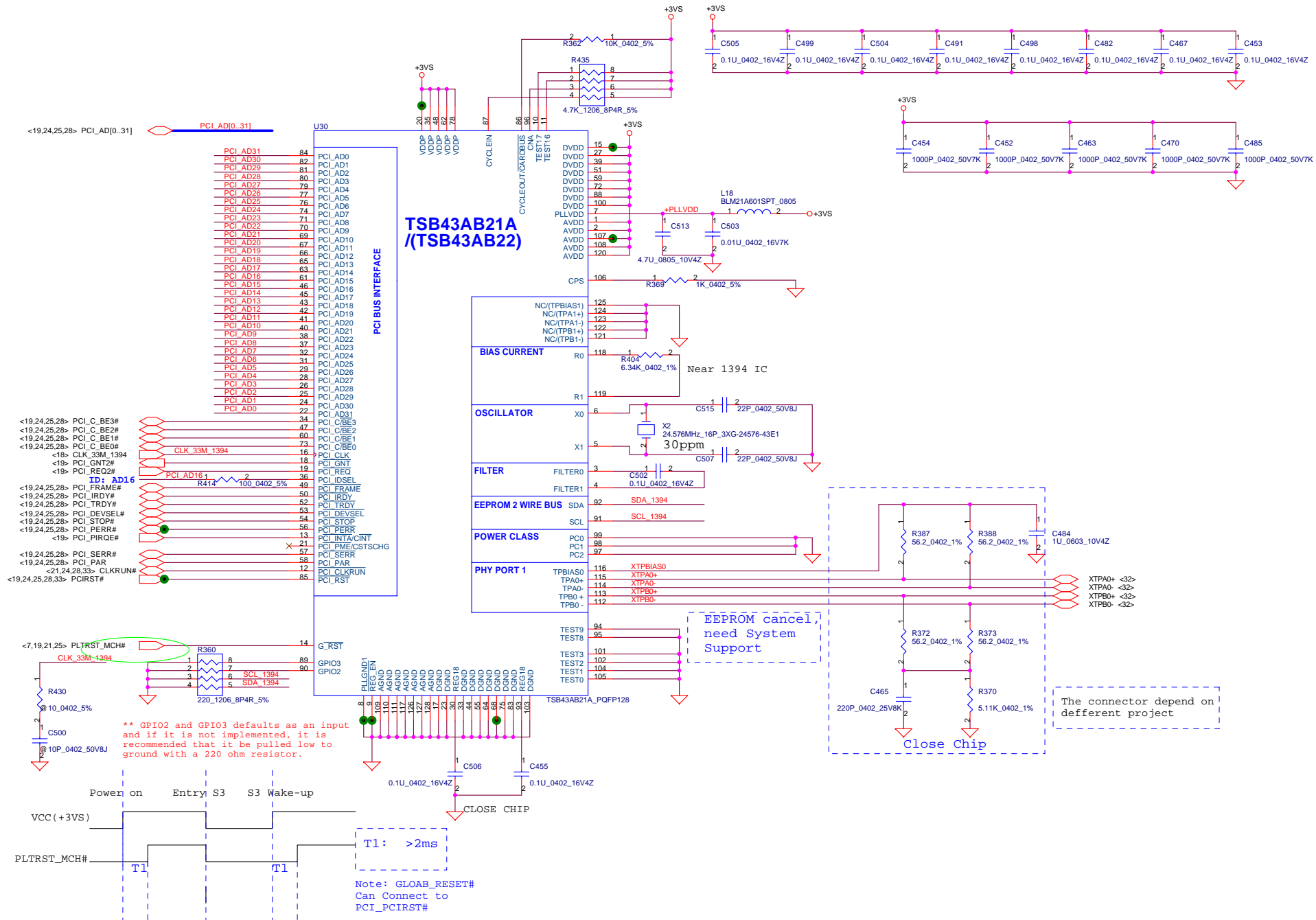






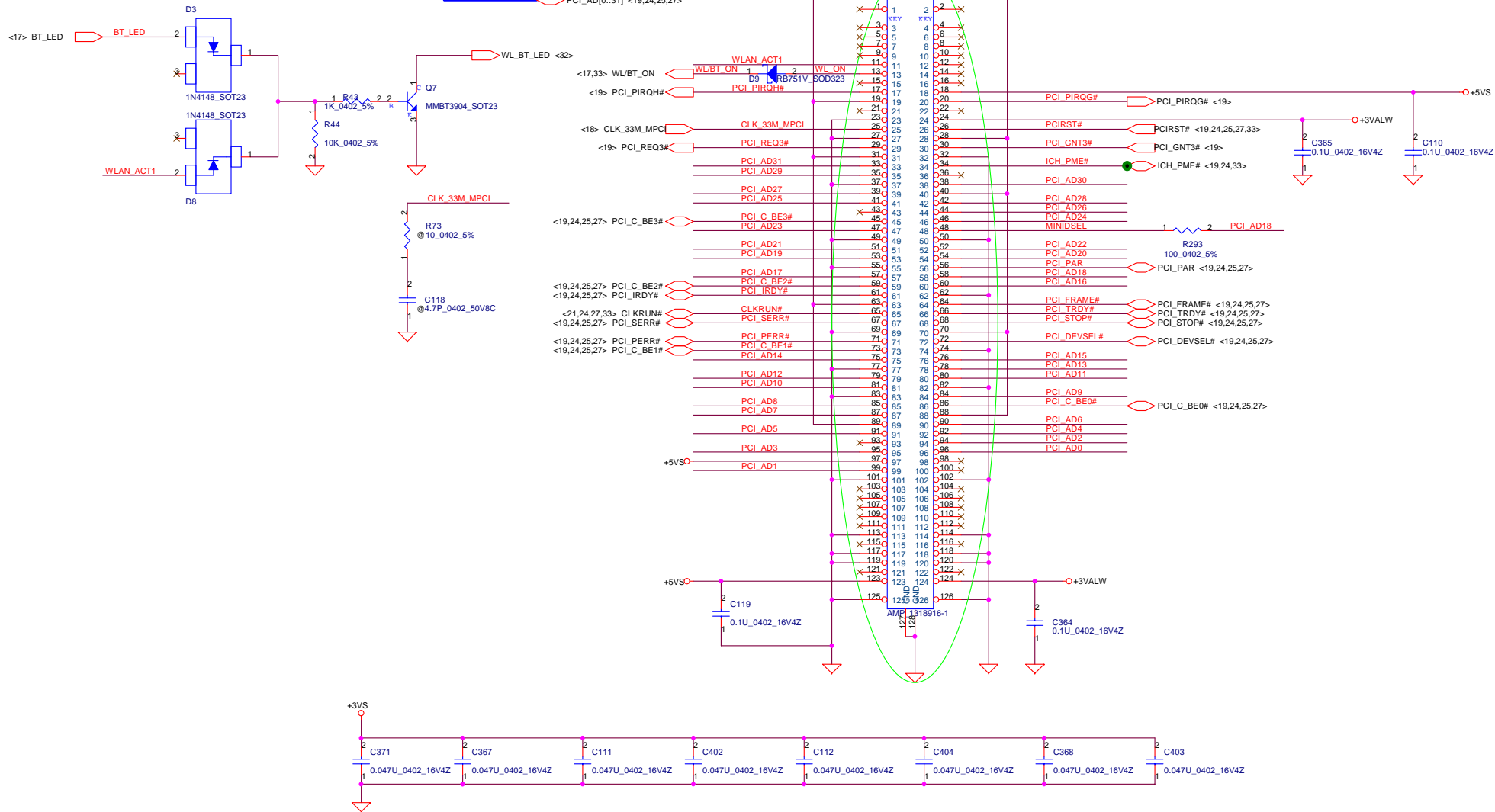
Compal Electronics, Inc.			
Title			
CARD BUS SOCKET			
Size	Document Number	Rev	
	LA-2591	0.1	
Date:	Monday, October 11, 2004	Sheet	26 of 43

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.

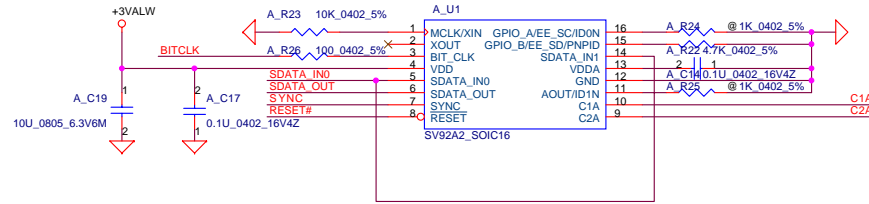
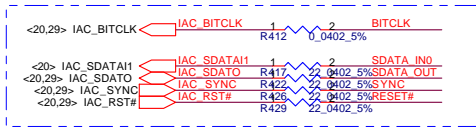
Compal Electronics, Inc.			
IEEE 1394 CONTROLLER			
Size	Document Number	Rev	
	LA-2591	0.1	
Date:	Monday, October 11, 2004	Sheet	27 of 43



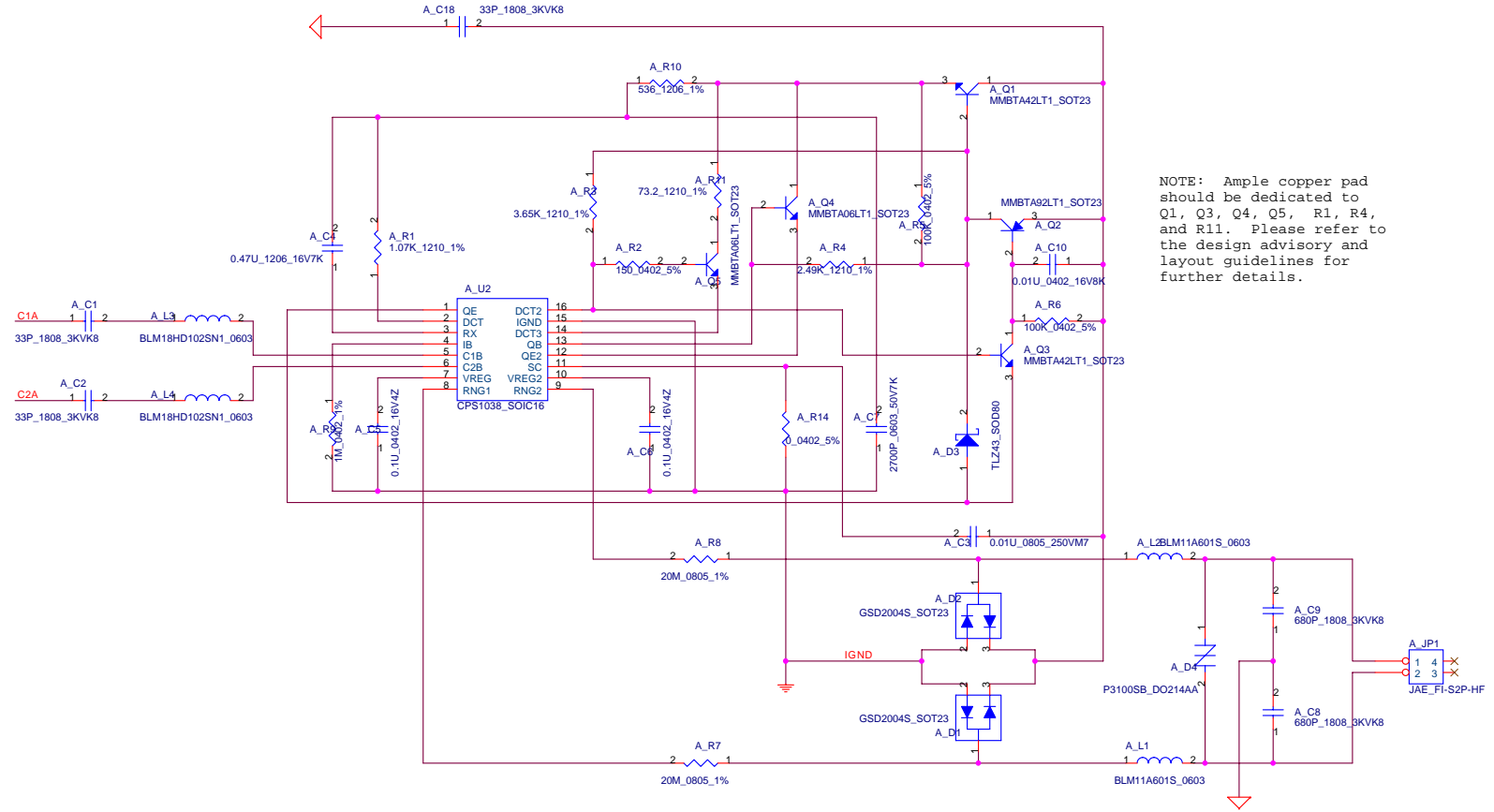
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS 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			
MINPCI			
Size	Document Number		Rev
	LA-2591		0.1
Date:	Monday, October 11, 2004	Sheet	28 of 43



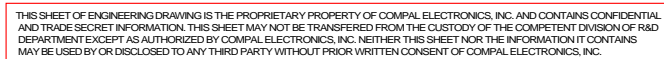
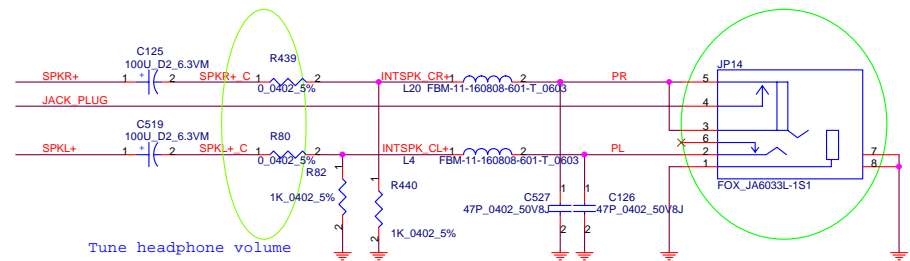
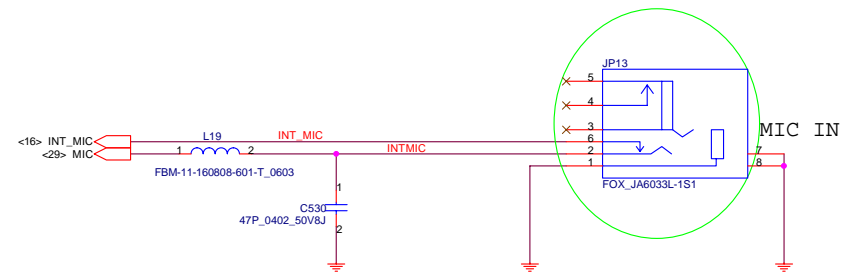
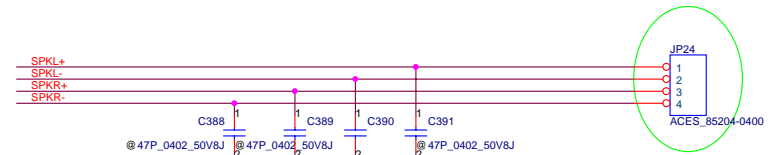


No Ground Plane In DAA Section



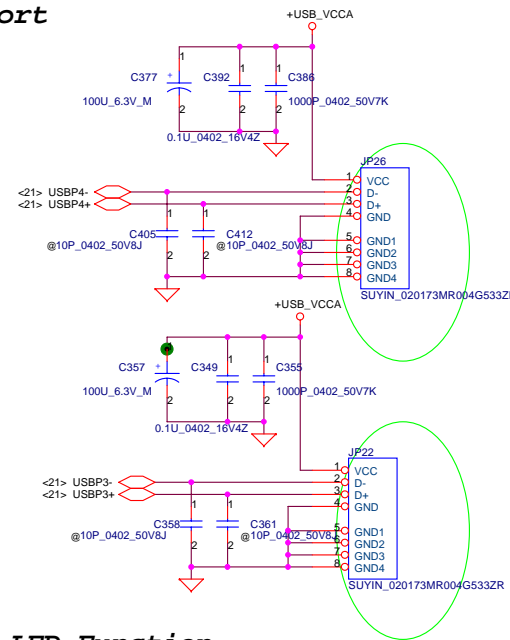
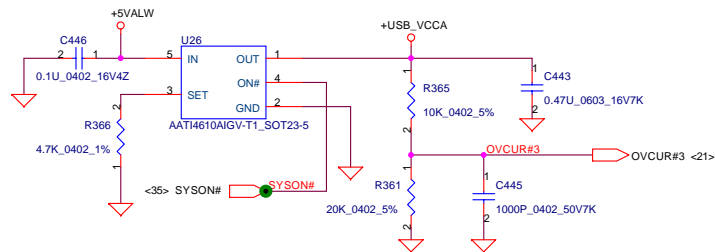
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPALELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPALELECTRONICS, INC. NEITHER THIS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

Compalelectronics, Inc.			
Title			
MODEM-AgereMOM CPS1038			
Size	Document Number	Rev	
	LA-2591	0.1	
Date:	Monday, October 11, 2004	Sheet	30 of 43

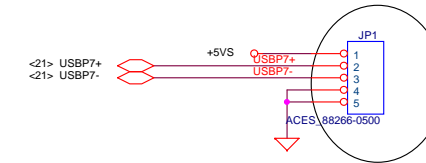


<b>Compal Electronics, Inc.</b>			
Title			
<b>AMP &amp; Audio Jack</b>			
Size	Document Number	Rev	
	<b>LA-2591</b>	<b>0.1</b>	
Customer			
Date:	Monday, October 11, 2004	Sheet	31 of 43

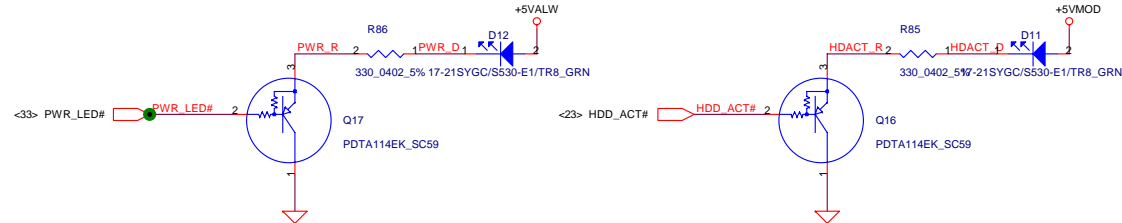
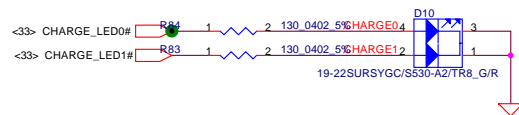
## USB Port



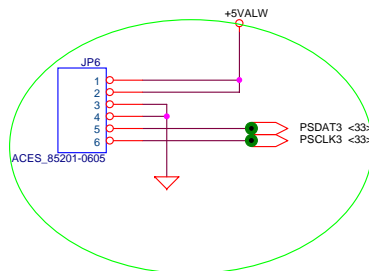
## Camera USB KEY



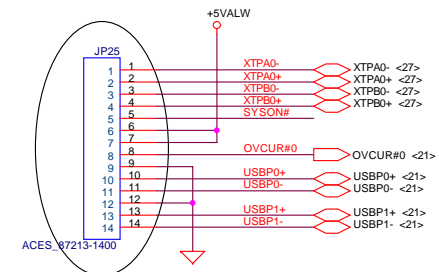
## LED Function



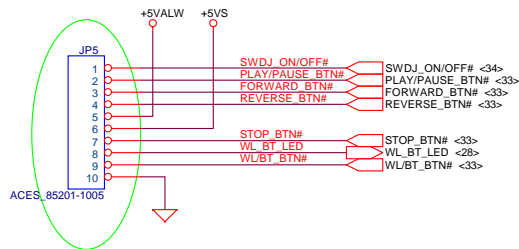
## T/P Board



## 1394/USB Board



## SWDJ Board



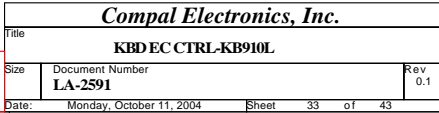
Compal Electronics, Inc.

USB Port

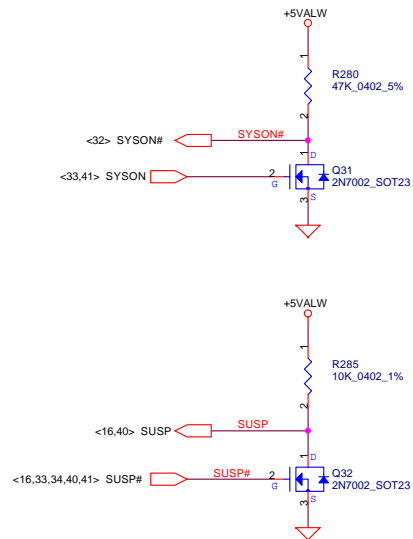
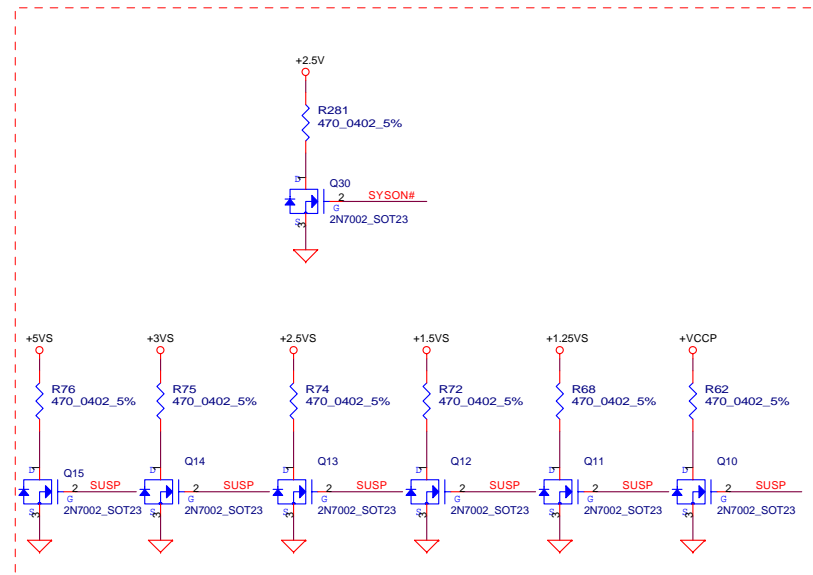
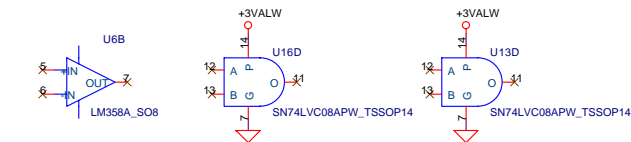
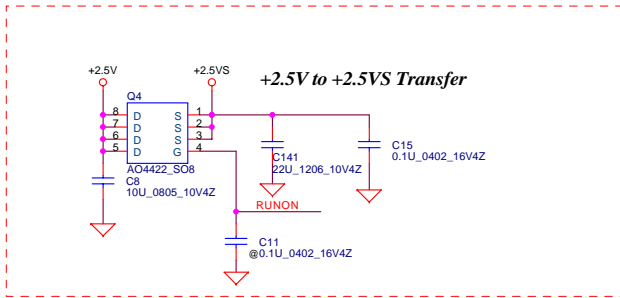
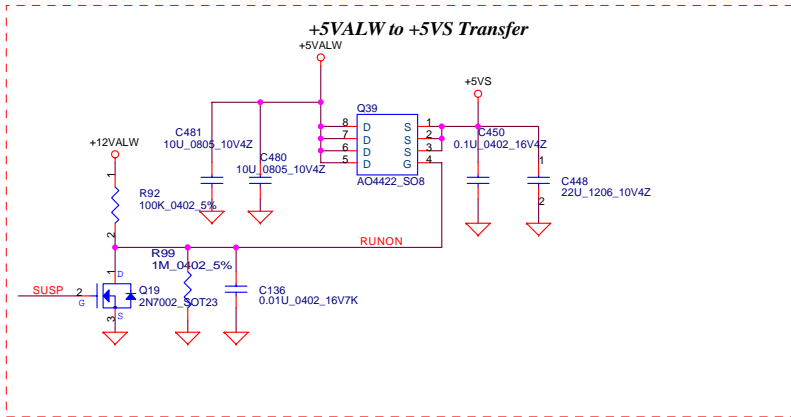
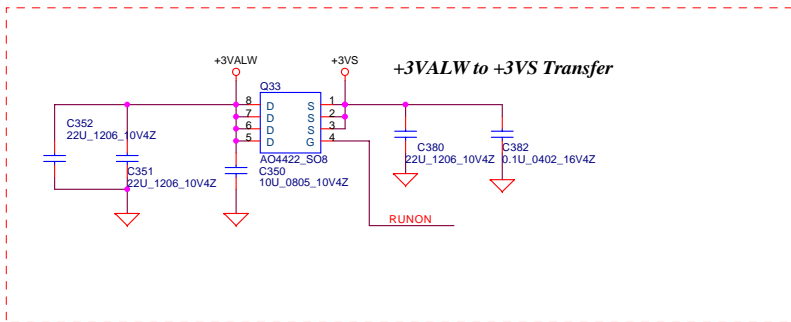
Title	Document Number	Rev
Size	LA-2591	0.1
Date	Monday, October 11, 2004	Sheet 32 of 43

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.



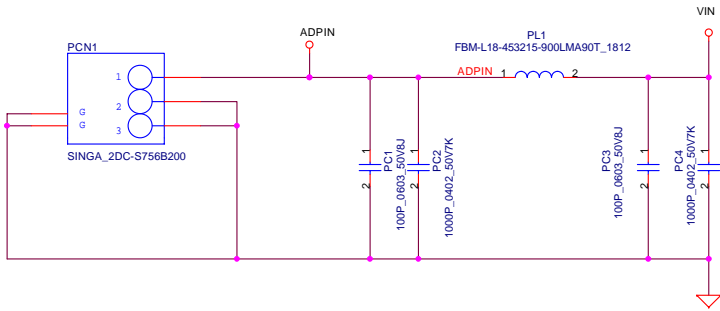




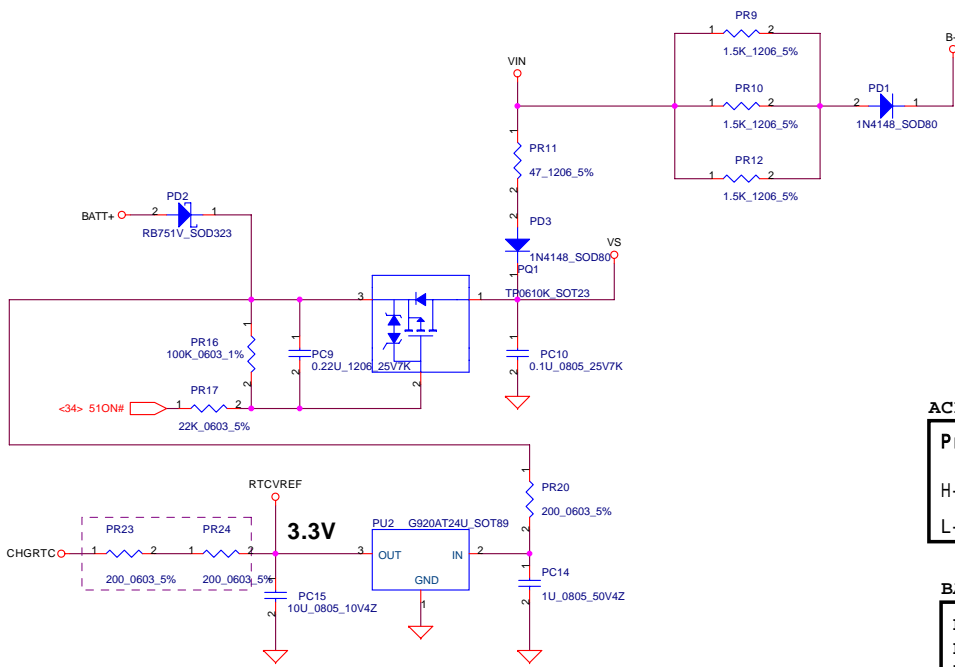
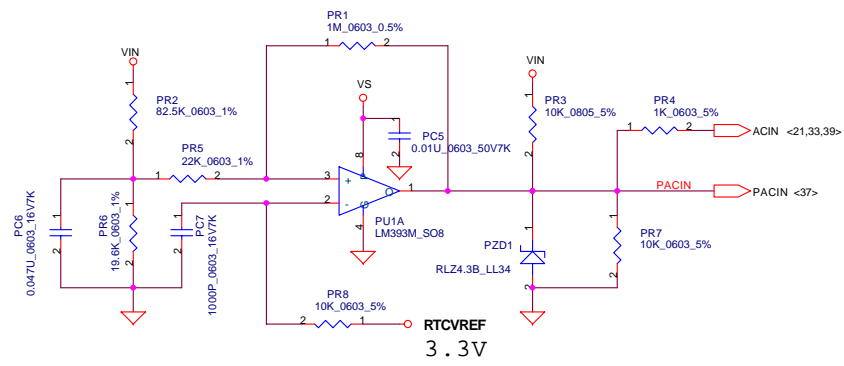


THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS 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			
POWER CONTROL			
Size	Document Number		Rev
	LA-2591		0.1
Customer			
Date	Monday, October 11, 2004	Sheet	35 of 43

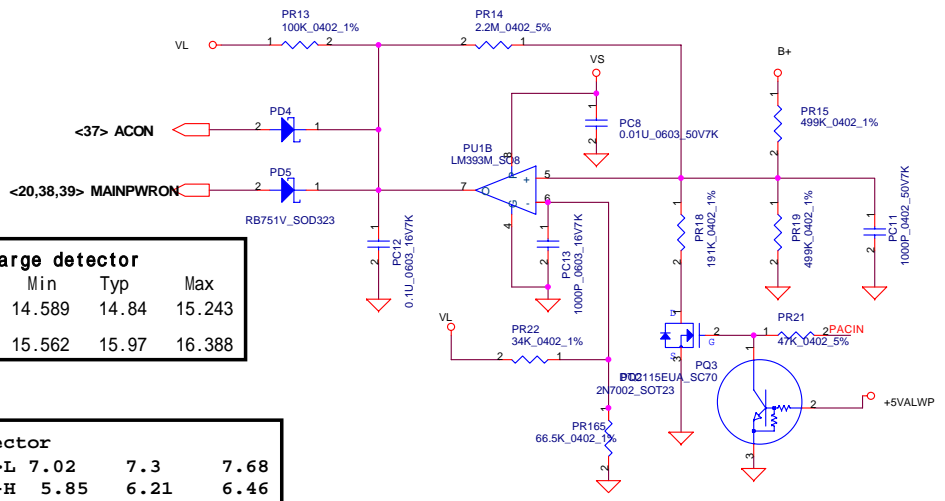


Vin Detector		
18.234	17.841	17.449
17.597	17.210	16.813



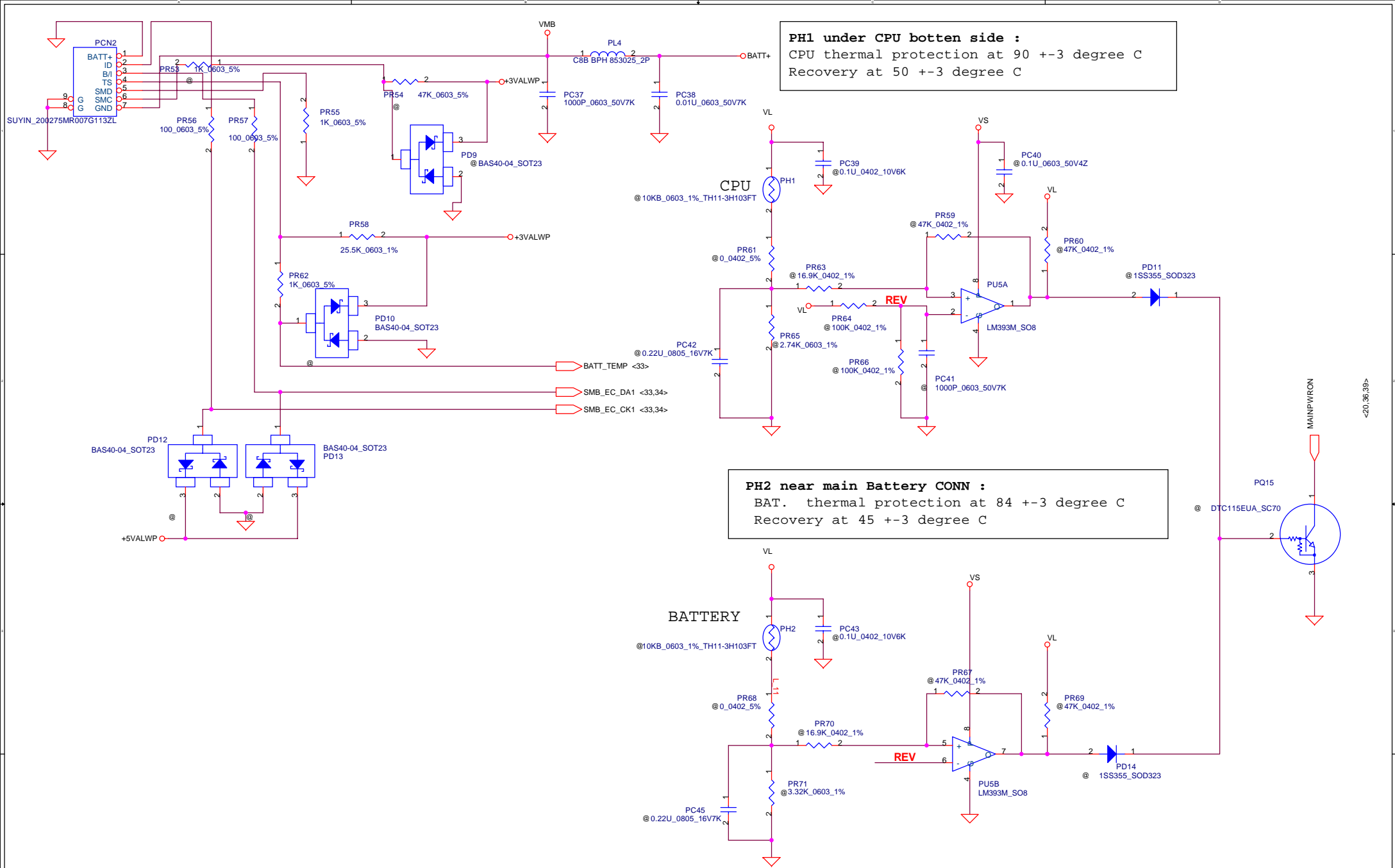
ACIN			
Precharge detector			
	Min	Typ	Max
H->L	14.589	14.84	15.243
L->H	15.562	15.97	16.388

BATT			
Detector			
H-->L	7.02	7.3	7.68
L---H	5.85	6.21	6.46



Compal Electronics, Inc.			
Detector			
Size	Document Number	Rev	
		0.1	
Date:	Monday, October 11, 2004	Sheet	36 of 43

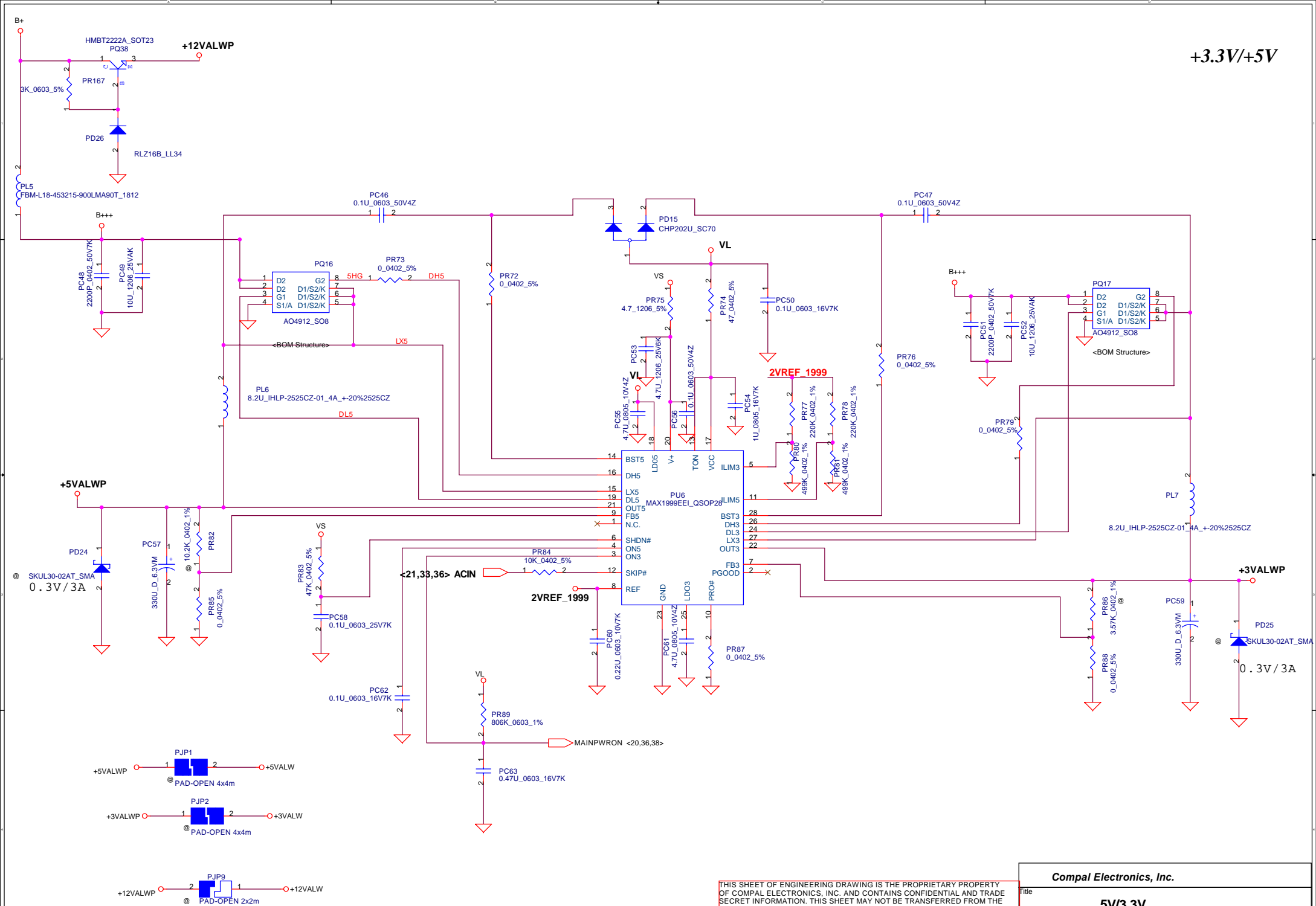




Title		
BATTERY CONN		
Size	Document Number	Rev
B	DFL32 M/B LA-2242	0.1
Date: Monday, October 11, 2004		
Sheet 38 of 43		

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

+3.3V/+5V



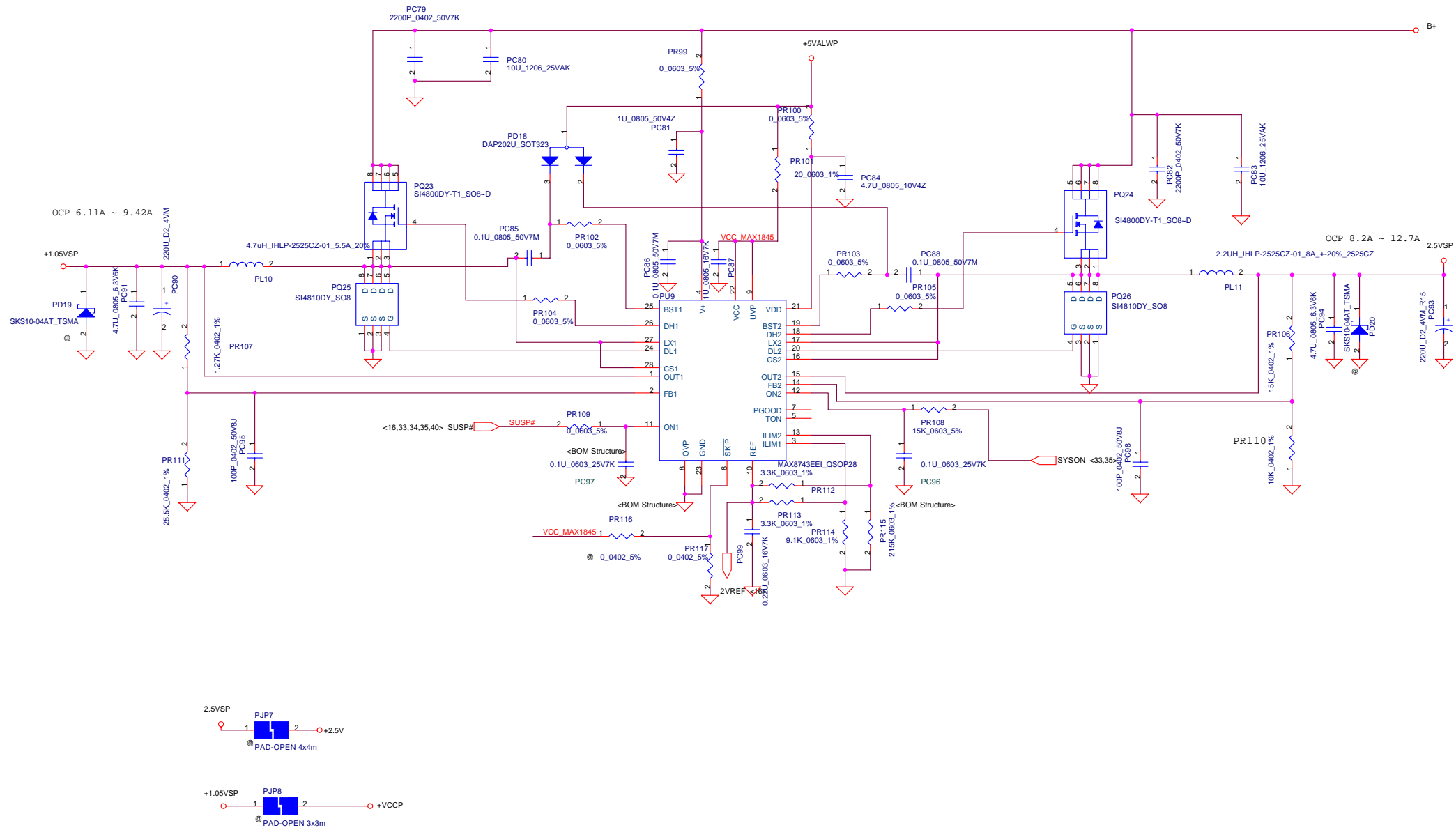
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS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

File			5V/3.3V		
Size			Document Number		
Date: Monday, October 11, 2004			Sheet 39 of 43		
			Rev 0.1		







COMPAL ELECTRONICS, INC			
Title			
+2.5VP / +1.05VP			
Size	Document Number	Rev	
B	ZR2 LA2521	0.1	
Date: Monday, October 11, 2004		Sheet	41 of 43

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.



Item	Fixed Issue	Reason for change	Rev.	PG#	Modify List	B. Ver#	Phase
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

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

Compal Electronics, Inc.			
Title			
PIR			
Size	Document Number		Rev
	LA-2591		0.1
Date:	Monday, October 11, 2004		Sheet 43 of 43