

Compal Confidential

Schematics Document

INTEL AUBURNDALE with IBEX core logic

www.aitech1.ru

Cartier UMA

LA-4902P

2009-12-07

REV:1.0

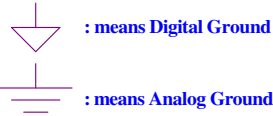
機 密	等級	硬體二部
	產出人員	
	產出日期	
	解密日期	

Security Classification	Compal Secret Data			Compal Electronics, Inc.		
Issued Date	2008/09/15	Deciphered Date	2009/12/31	Title	Cover Sheet	
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.				Size	Document Number	Rev
				Custom	LA-4902P	0.3
				Date:	Monday, December 14, 2009	Sheet 1 of 47

Voltage Rails (O MEANS ON X MEANS OFF)

<div>power plane</div> <div>State</div>	+RTCVCC	+B +3VL	+5VALW +3VALW	+3VM +1.05VM	+1.5V +0.75V	+5VS +3VS +1.5VS +VCCP +CPU_CORE +1.05VS +1.8VS
S0	O	O	O	O	O	O
S1	O	O	O	O	O	O
S3	O	O	O	O	O	X
S5 S4/AC	O	O	O	O	X	X
S5 S4/ Battery only	O	O	X	X	X	X
S5 S4/AC & Battery don't exist	O	X	X	X	X	X

Symbol Note :



@ : means just reserve , no build
CONN@ : means ME part.

Install below 45 level BOM structure for ver. 0.1

45@ : means just put it in the BOM of 45 level.

Install below 43 level BOM structure for ver. 0.1

DEBUG@ : means just build when PCIE port 80 CARD function enable. Remove before MP
N10M@ : Install for N10M Graphic controller
1098@ : Install for 1098 KBC controller

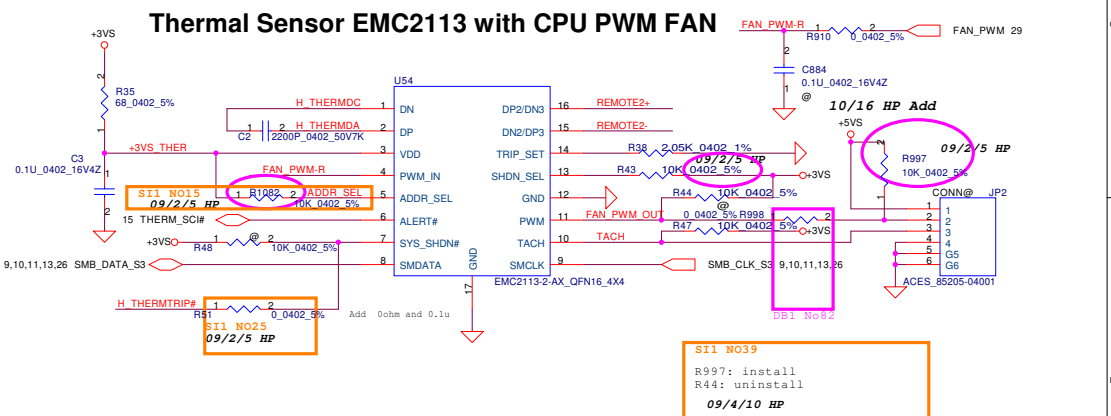
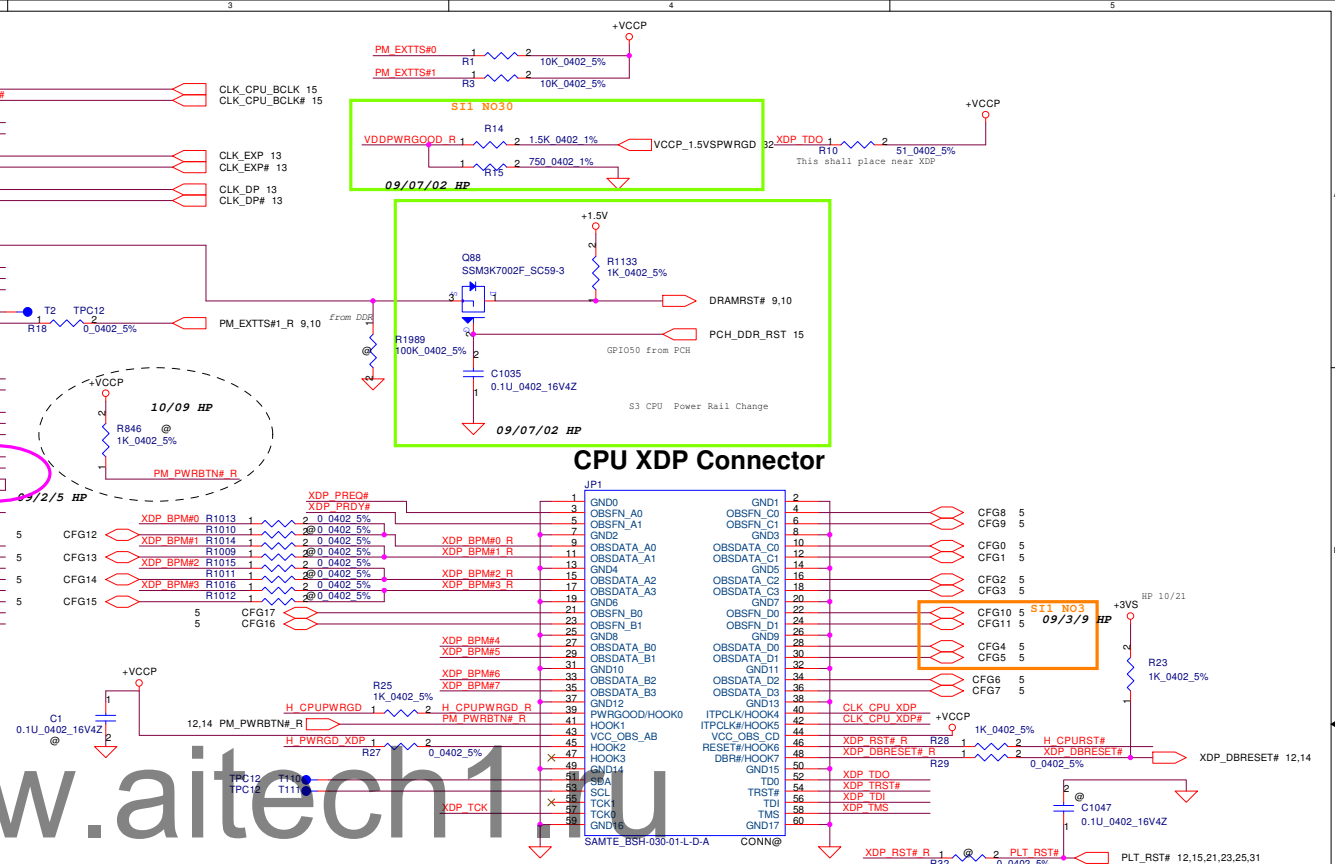
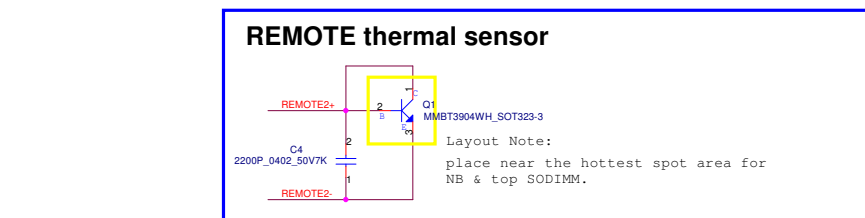
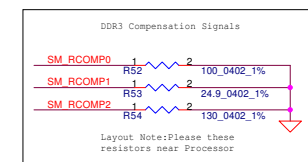
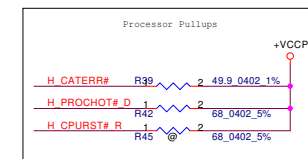
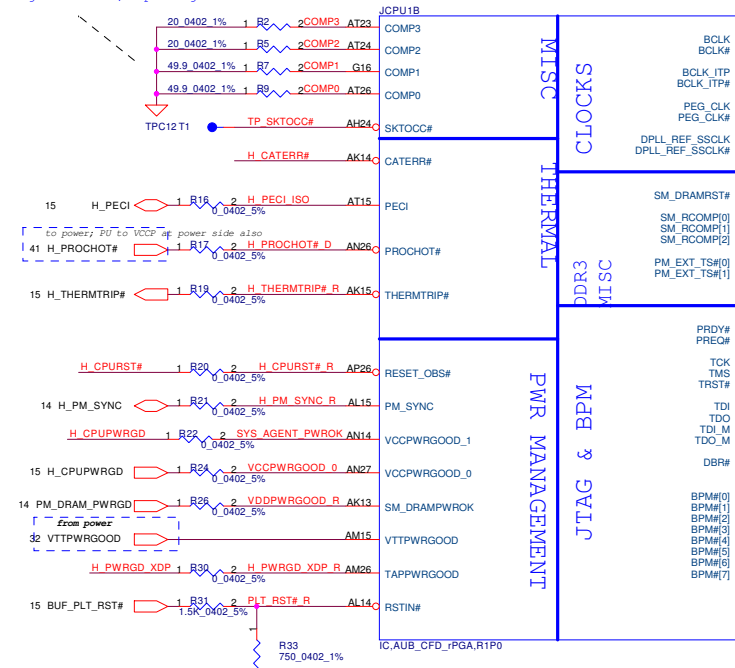
SMBUS Control Table

	SOURCE	BATT	XDP	SODIMM	CLK CHIP	MINI CARD	DOCK	NIC	THERMAL SENSOR	G-SENSOR
SMB_EC_CK1 SMB_EC_DA1	SMSC1098	V	X	X	X	X	X	X	X	X
SMBCLK SMBDATA	Calpella	X	V	V	V	V	V	X	X	V
SML0CLK SML0DATA	Calpella	X	X	X	X	X	X	V	X	X
SML1CLK SML1DATA	Calpella	X	X	X	X	X	X	X	V	V

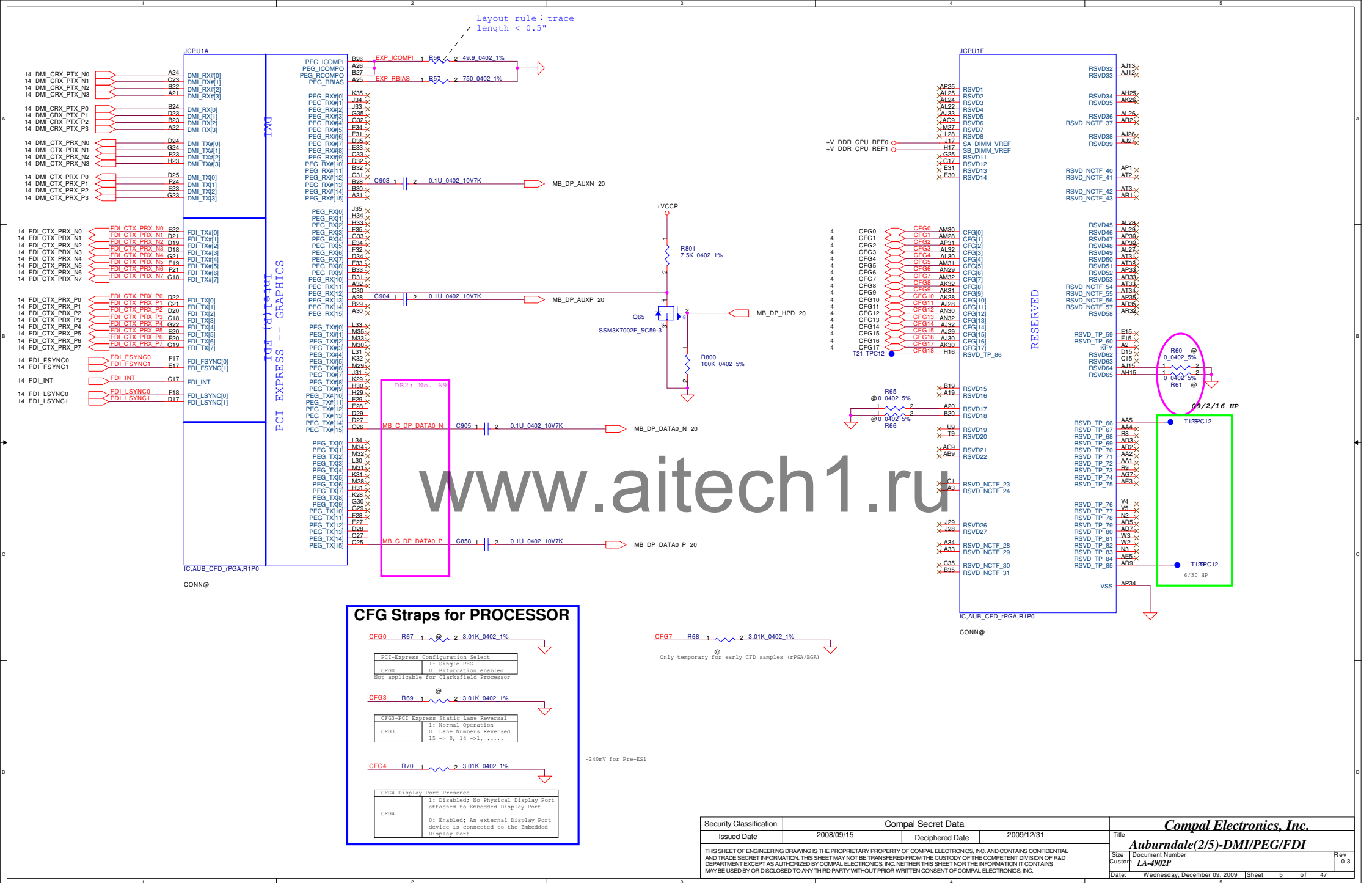
Reserve below BOM structure for ver. 0.1

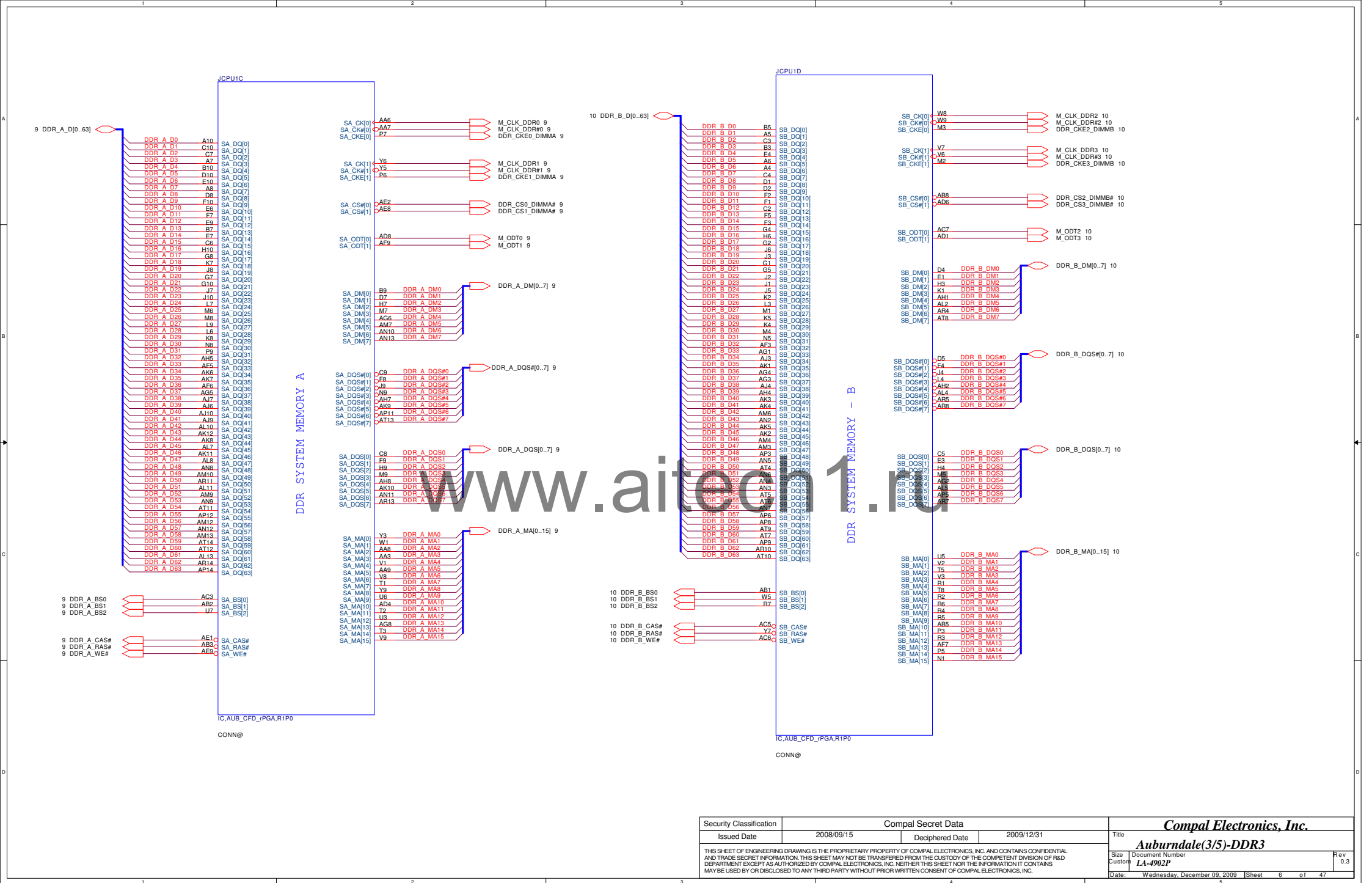
1091@ : Install for 1091 KBC controller

Layout rule : 10mil width trace
length < 0.5", spacing 20mil

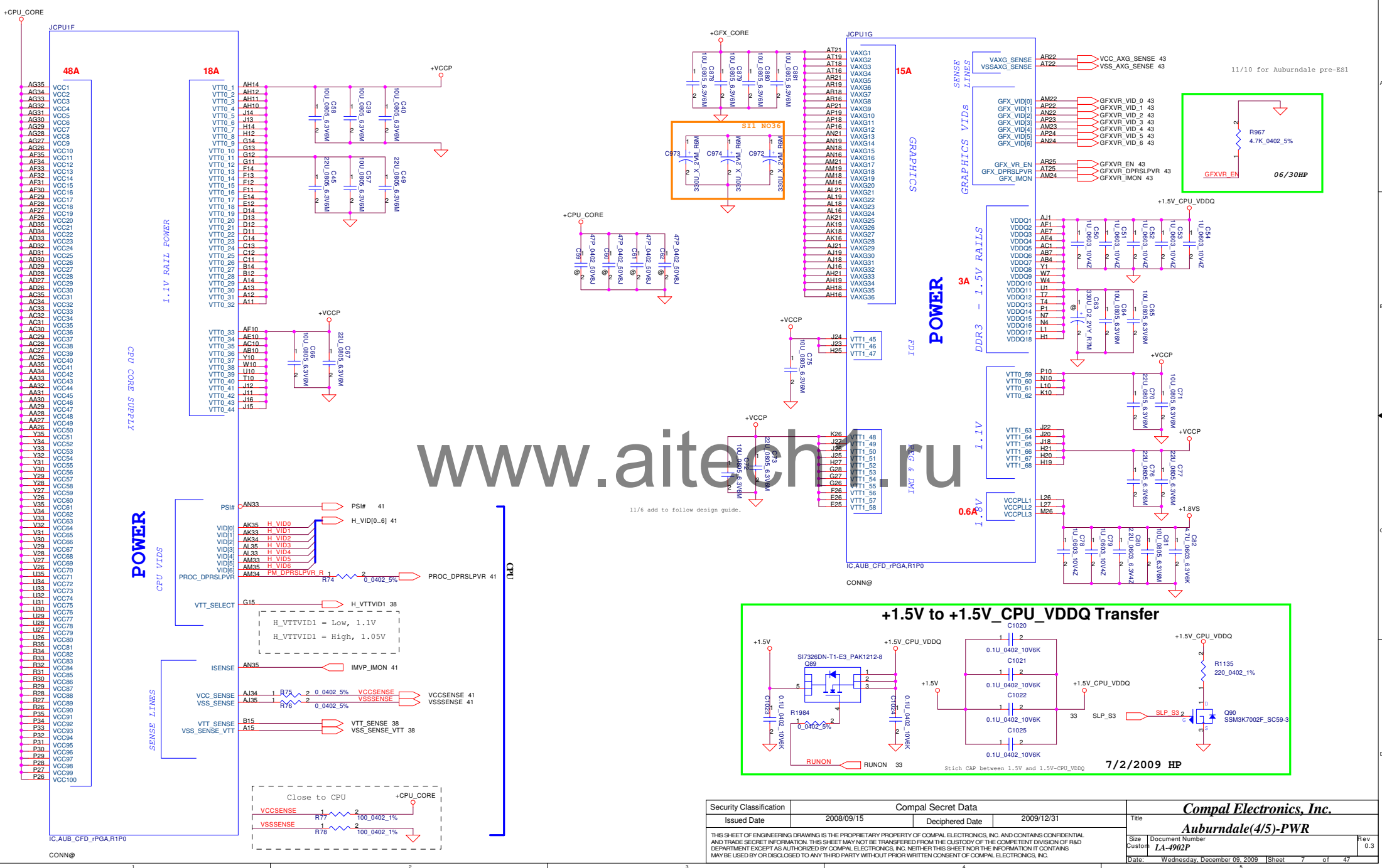


Security Classification	Compal Secret Data			Compal Electronics, Inc. Auburndale(1/5)-Thermal/XDP		
Issued Date	2008/09/15	Deciphered Date	2009/12/31	Title	Auburndale(1/5)-Thermal/XDP LA-4902P	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL 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.				Size	Document Number	Rev
				Custom	LA-4902P	0.3
				Date:	Wednesday, December 09, 2009	Sheet 4 of 47

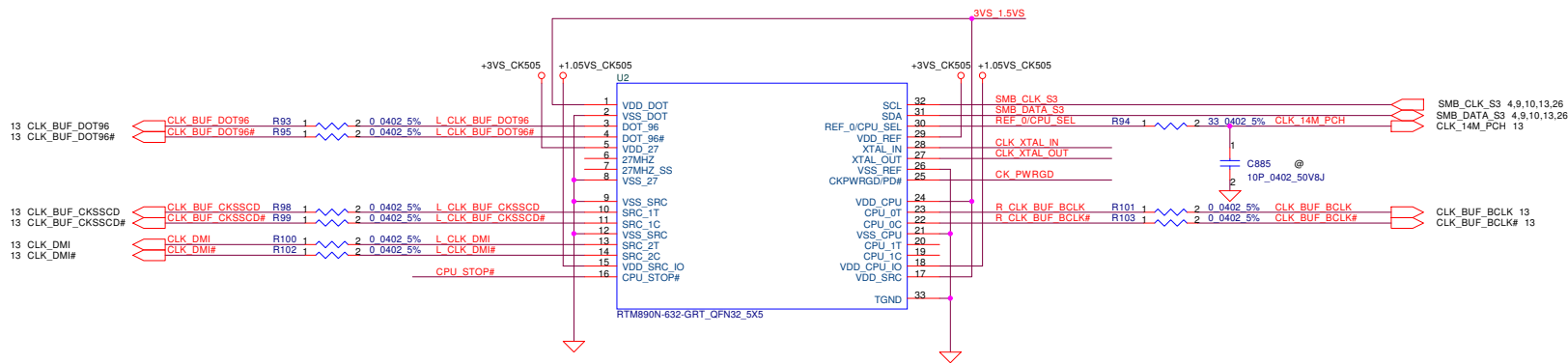




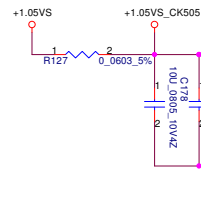
Security Classification		Compal Secret Data		Title	
Issued Date	2008/09/15	Deciphered Date	2009/12/31	Auburndale(3/5)-DDR3	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				Size	Document Number
				Custom	LA-4902P
				Date:	Wednesday, December 09, 2009
				Sheet	6 of 47
				Rev	0.3



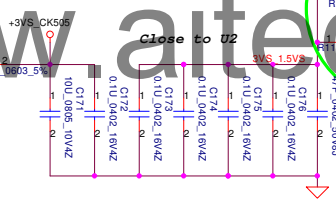
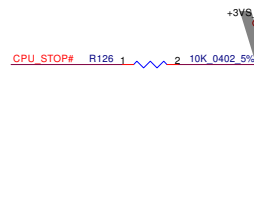
Security Classification		Compal Secret Data		Compal Electronics, Inc.		
Issued Date		2008/09/15	Deciphered Date		2009/12/31	Title
						Auburndale(4/5)-PWR
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. 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.						Rev 0.3
Size		Document Number		Date		
Custom		LA-4902P		Wednesday, December 09, 2009		
Sheet		7		of 47		



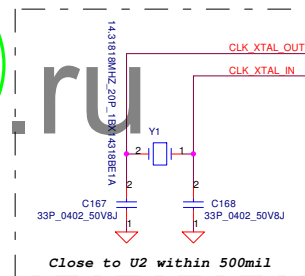
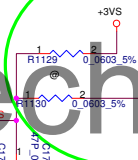
CLK Gen feature 1.5V support 6/29



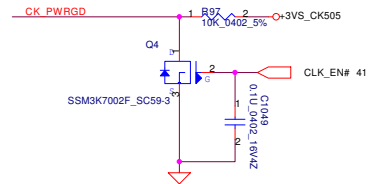
Close to U2



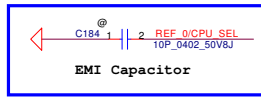
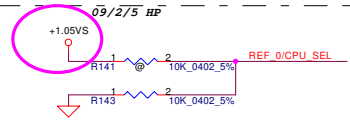
Close to U2



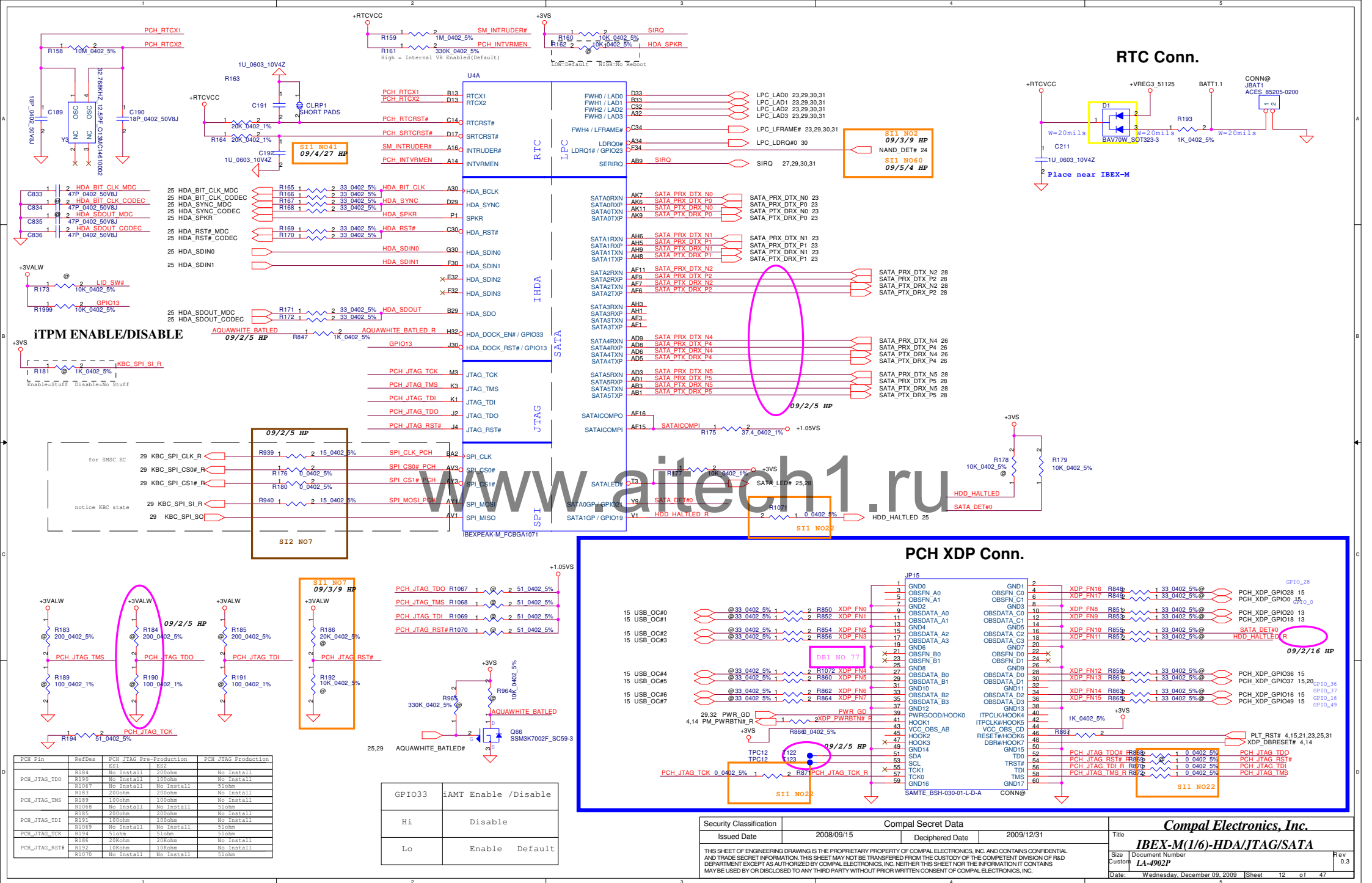
Close to U2 within 500mil



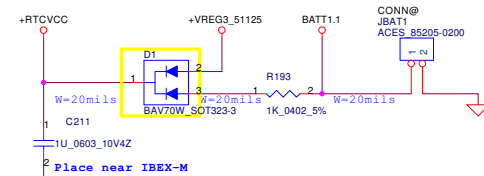
PIN	30	CPU_0	CPU_1
0 (Default)		133MHz	133MHz
1		100MHz	100MHz



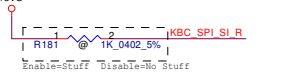
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2008/09/15	Deciphered Date	2009/12/31	Title	CLOCK GENERATOR
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY 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.				Size	Document Number
				LA-4902P	Rev 0.3
				Date:	Wednesday, December 09, 2009
				Sheet	11 of 47



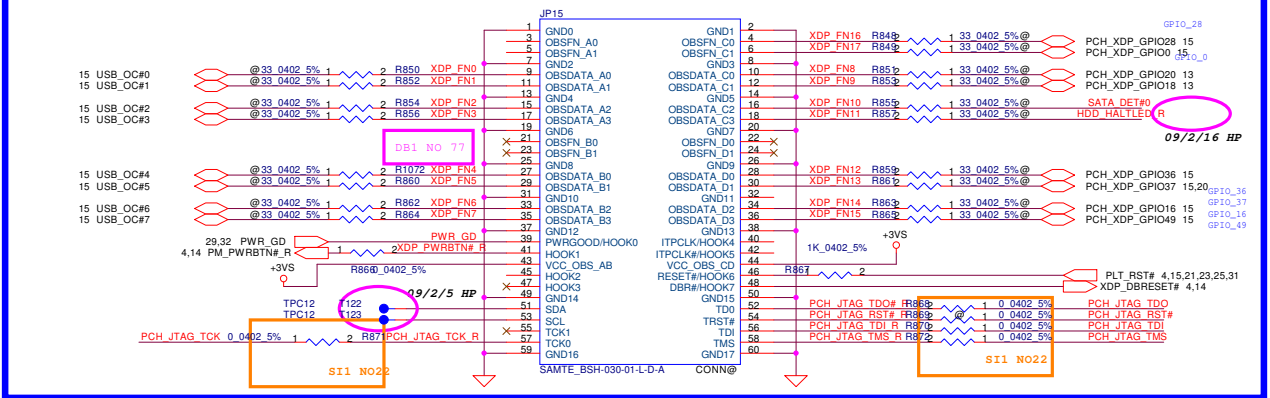
RTC Conn.



ITPM ENABLE/DISABLE



PCH XDP Conn.



PCH Pin	Refdes	PCH JTAG Pre-Production	PCH JTAG Production
PCH_JTAG_TDO	R184	No Install	200ohm
PCH_JTAG_TMS	R185	No Install	100ohm
PCH_JTAG_TDI	R186	No Install	100ohm
PCH_JTAG_RST#	R187	No Install	100ohm
PCH_JTAG_TCK	R188	No Install	100ohm
PCH_JTAG_RST#	R189	No Install	100ohm
PCH_JTAG_RST#	R190	No Install	100ohm
PCH_JTAG_RST#	R191	No Install	100ohm
PCH_JTAG_RST#	R192	No Install	100ohm
PCH_JTAG_RST#	R193	No Install	100ohm
PCH_JTAG_RST#	R194	No Install	100ohm
PCH_JTAG_RST#	R195	No Install	100ohm
PCH_JTAG_RST#	R196	No Install	100ohm
PCH_JTAG_RST#	R197	No Install	100ohm
PCH_JTAG_RST#	R198	No Install	100ohm
PCH_JTAG_RST#	R199	No Install	100ohm
PCH_JTAG_RST#	R200	No Install	100ohm

GPIO33	iAMT Enable /Disable
Hi	Disable
Lo	Enable Default

8/31/2009 HP

EXP

WLAN

NIC

EXP

WLAN

NIC

U4B

PERN1
PERP1
PETN1
PETP1

PERN2
PERP2
PETN2
PETP2

PERN3
PERP3
PETN3
PETP3

PERN4
PERP4
PETN4
PETP4

PERN5
PERP5
PETN5
PETP5

PERN6
PERP6
PETN6
PETP6

PERN7
PERP7
PETN7
PETP7

PERN8
PERP8
PETN8
PETP8

PERN9
PERP9
PETN9
PETP9

PERN10
PERP10
PETN10
PETP10

PERN11
PERP11
PETN11
PETP11

PERN12
PERP12
PETN12
PETP12

PERN13
PERP13
PETN13
PETP13

PERN14
PERP14
PETN14
PETP14

PERN15
PERP15
PETN15
PETP15

PERN16
PERP16
PETN16
PETP16

PERN17
PERP17
PETN17
PETP17

PERN18
PERP18
PETN18
PETP18

PERN19
PERP19
PETN19
PETP19

PERN20
PERP20
PETN20
PETP20

PERN21
PERP21
PETN21
PETP21

PERN22
PERP22
PETN22
PETP22

PERN23
PERP23
PETN23
PETP23

PERN24
PERP24
PETN24
PETP24

PERN25
PERP25
PETN25
PETP25

PERN26
PERP26
PETN26
PETP26

PERN27
PERP27
PETN27
PETP27

PERN28
PERP28
PETN28
PETP28

PERN29
PERP29
PETN29
PETP29

PERN30
PERP30
PETN30
PETP30

PERN31
PERP31
PETN31
PETP31

PERN32
PERP32
PETN32
PETP32

PERN33
PERP33
PETN33
PETP33

PERN34
PERP34
PETN34
PETP34

PERN35
PERP35
PETN35
PETP35

PERN36
PERP36
PETN36
PETP36

PERN37
PERP37
PETN37
PETP37

PERN38
PERP38
PETN38
PETP38

PERN39
PERP39
PETN39
PETP39

PERN40
PERP40
PETN40
PETP40

PERN41
PERP41
PETN41
PETP41

PERN42
PERP42
PETN42
PETP42

PERN43
PERP43
PETN43
PETP43

PERN44
PERP44
PETN44
PETP44

PERN45
PERP45
PETN45
PETP45

PERN46
PERP46
PETN46
PETP46

PERN47
PERP47
PETN47
PETP47

PERN48
PERP48
PETN48
PETP48

PERN49
PERP49
PETN49
PETP49

PERN50
PERP50
PETN50
PETP50

PERN51
PERP51
PETN51
PETP51

PERN52
PERP52
PETN52
PETP52

PERN53
PERP53
PETN53
PETP53

PERN54
PERP54
PETN54
PETP54

PERN55
PERP55
PETN55
PETP55

PERN56
PERP56
PETN56
PETP56

PERN57
PERP57
PETN57
PETP57

PERN58
PERP58
PETN58
PETP58

PERN59
PERP59
PETN59
PETP59

PERN60
PERP60
PETN60
PETP60

PERN61
PERP61
PETN61
PETP61

PERN62
PERP62
PETN62
PETP62

PERN63
PERP63
PETN63
PETP63

PERN64
PERP64
PETN64
PETP64

PERN65
PERP65
PETN65
PETP65

PERN66
PERP66
PETN66
PETP66

PERN67
PERP67
PETN67
PETP67

PERN68
PERP68
PETN68
PETP68

PERN69
PERP69
PETN69
PETP69

PERN70
PERP70
PETN70
PETP70

PERN71
PERP71
PETN71
PETP71

PERN72
PERP72
PETN72
PETP72

PERN73
PERP73
PETN73
PETP73

PERN74
PERP74
PETN74
PETP74

PERN75
PERP75
PETN75
PETP75

PERN76
PERP76
PETN76
PETP76

PERN77
PERP77
PETN77
PETP77

PERN78
PERP78
PETN78
PETP78

PERN79
PERP79
PETN79
PETP79

PERN80
PERP80
PETN80
PETP80

PERN81
PERP81
PETN81
PETP81

PERN82
PERP82
PETN82
PETP82

PERN83
PERP83
PETN83
PETP83

PERN84
PERP84
PETN84
PETP84

PERN85
PERP85
PETN85
PETP85

PERN86
PERP86
PETN86
PETP86

PERN87
PERP87
PETN87
PETP87

PERN88
PERP88
PETN88
PETP88

PERN89
PERP89
PETN89
PETP89

PERN90
PERP90
PETN90
PETP90

PERN91
PERP91
PETN91
PETP91

PERN92
PERP92
PETN92
PETP92

PERN93
PERP93
PETN93
PETP93

PERN94
PERP94
PETN94
PETP94

PERN95
PERP95
PETN95
PETP95

PERN96
PERP96
PETN96
PETP96

PERN97
PERP97
PETN97
PETP97

PERN98
PERP98
PETN98
PETP98

PERN99
PERP99
PETN99
PETP99

PERN100
PERP100
PETN100
PETP100

PERN101
PERP101
PETN101
PETP101

PERN102
PERP102
PETN102
PETP102

PERN103
PERP103
PETN103
PETP103

PERN104
PERP104
PETN104
PETP104

PERN105
PERP105
PETN105
PETP105

PERN106
PERP106
PETN106
PETP106

PERN107
PERP107
PETN107
PETP107

PERN108
PERP108
PETN108
PETP108

PERN109
PERP109
PETN109
PETP109

PERN110
PERP110
PETN110
PETP110

PERN111
PERP111
PETN111
PETP111

PERN112
PERP112
PETN112
PETP112

PERN113
PERP113
PETN113
PETP113

PERN114
PERP114
PETN114
PETP114

PERN115
PERP115
PETN115
PETP115

PERN116
PERP116
PETN116
PETP116

PERN117
PERP117
PETN117
PETP117

PERN118
PERP118
PETN118
PETP118

PERN119
PERP119
PETN119
PETP119

PERN120
PERP120
PETN120
PETP120

PERN121
PERP121
PETN121
PETP121

PERN122
PERP122
PETN122
PETP122

PERN123
PERP123
PETN123
PETP123

PERN124
PERP124
PETN124
PETP124

PERN125
PERP125
PETN125
PETP125

PERN126
PERP126
PETN126
PETP126

PERN127
PERP127
PETN127
PETP127

PERN128
PERP128
PETN128
PETP128

PERN129
PERP129
PETN129
PETP129

PERN130
PERP130
PETN130
PETP130

PERN131
PERP131
PETN131
PETP131

PERN132
PERP132
PETN132
PETP132

PERN133
PERP133
PETN133
PETP133

PERN134
PERP134
PETN134
PETP134

PERN135
PERP135
PETN135
PETP135

PERN136
PERP136
PETN136
PETP136

PERN137
PERP137
PETN137
PETP137

PERN138
PERP138
PETN138
PETP138

PERN139
PERP139
PETN139
PETP139

PERN140
PERP140
PETN140
PETP140

PERN141
PERP141
PETN141
PETP141

PERN142
PERP142
PETN142
PETP142

PERN143
PERP143
PETN143
PETP143

PERN144
PERP144
PETN144
PETP144

PERN145
PERP145
PETN145
PETP145

PERN146
PERP146
PETN146
PETP146

PERN147
PERP147
PETN147
PETP147

PERN148
PERP148
PETN148
PETP148

PERN149
PERP149
PETN149
PETP149

PERN150
PERP150
PETN150
PETP150

PERN151
PERP151
PETN151
PETP151

PERN152
PERP152
PETN152
PETP152

PERN153
PERP153
PETN153
PETP153

PERN154
PERP154
PETN154
PETP154

PERN155
PERP155
PETN155
PETP155

PERN156
PERP156
PETN156
PETP156

PERN157
PERP157
PETN157
PETP157

PERN158
PERP158
PETN158
PETP158

PERN159
PERP159
PETN159
PETP159

PERN160
PERP160
PETN160
PETP160

PERN161
PERP161
PETN161
PETP161

PERN162
PERP162
PETN162
PETP162

PERN163
PERP163
PETN163
PETP163

PERN164
PERP164
PETN164
PETP164

PERN165
PERP165
PETN165
PETP165

PERN166
PERP166
PETN166
PETP166

PERN167
PERP167
PETN167
PETP167

PERN168
PERP168
PETN168
PETP168

PERN169
PERP169
PETN169
PETP169

PERN170
PERP170
PETN170
PETP170

PERN171
PERP171
PETN171
PETP171

PERN172
PERP172
PETN172
PETP172

PERN173
PERP173
PETN173
PETP173

PERN174
PERP174
PETN174
PETP174

PERN175
PERP175
PETN175
PETP175

PERN176
PERP176
PETN176
PETP176

PERN177
PERP177
PETN177
PETP177

PERN178
PERP178
PETN178
PETP178

PERN179
PERP179
PETN179
PETP179

PERN180
PERP180
PETN180
PETP180

PERN181
PERP181
PETN181
PETP181

PERN182
PERP182
PETN182
PETP182

PERN183
PERP183
PETN183
PETP183

PERN184
PERP184
PETN184
PETP184

PERN185
PERP185
PETN185
PETP185

PERN186
PERP186
PETN186
PETP186

PERN187
PERP187
PETN187
PETP187

PERN188
PERP188
PETN188
PETP188

PERN189
PERP189
PETN189
PETP189

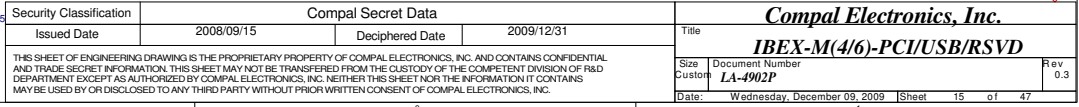
PERN190
PERP190
PETN190
PETP190

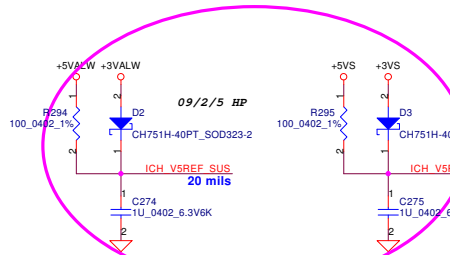
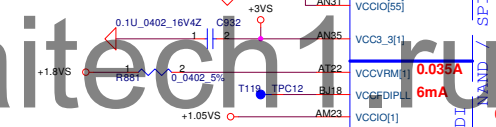
PERN191
PERP191
PETN191
PETP191

PERN192
PERP192
PETN192
PETP192

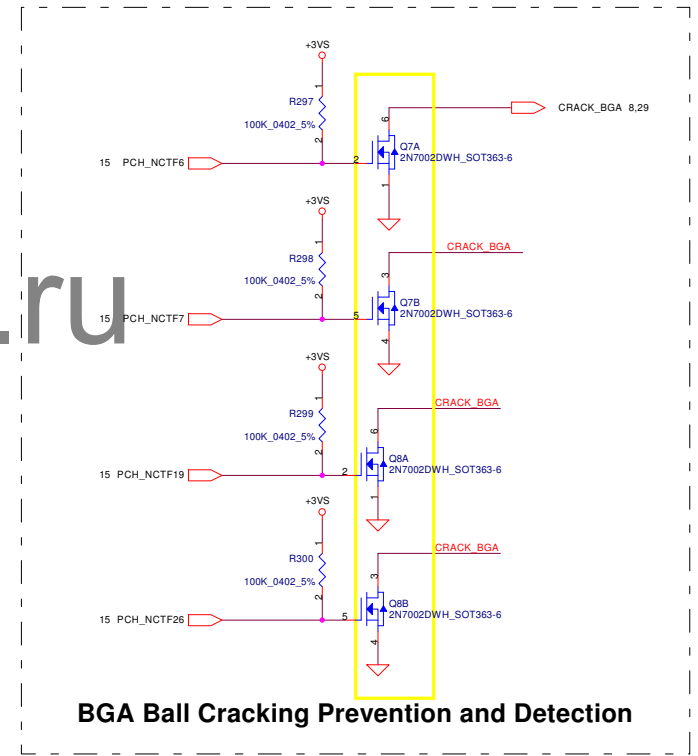
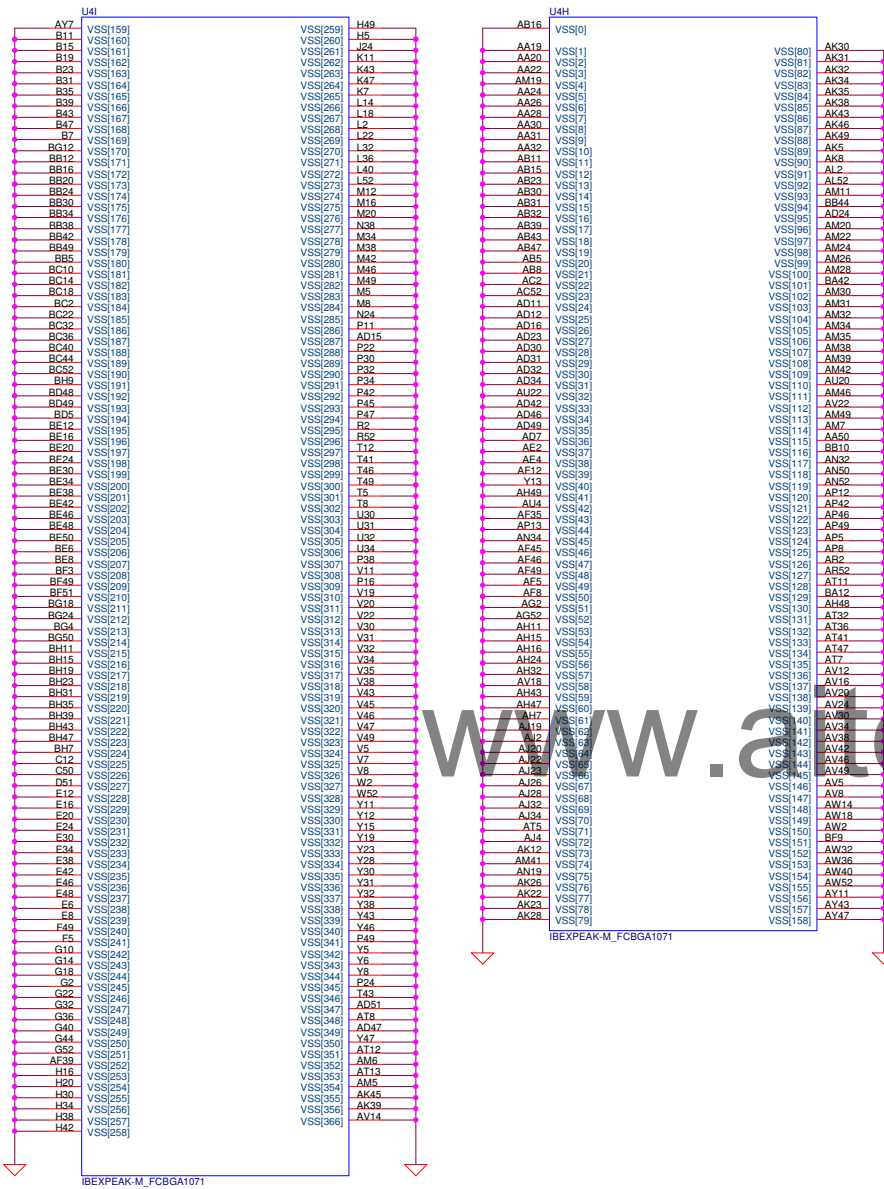
PERN193
PERP193
PETN193
PETP193

PERN194
PERP194
PETN194
PETP194



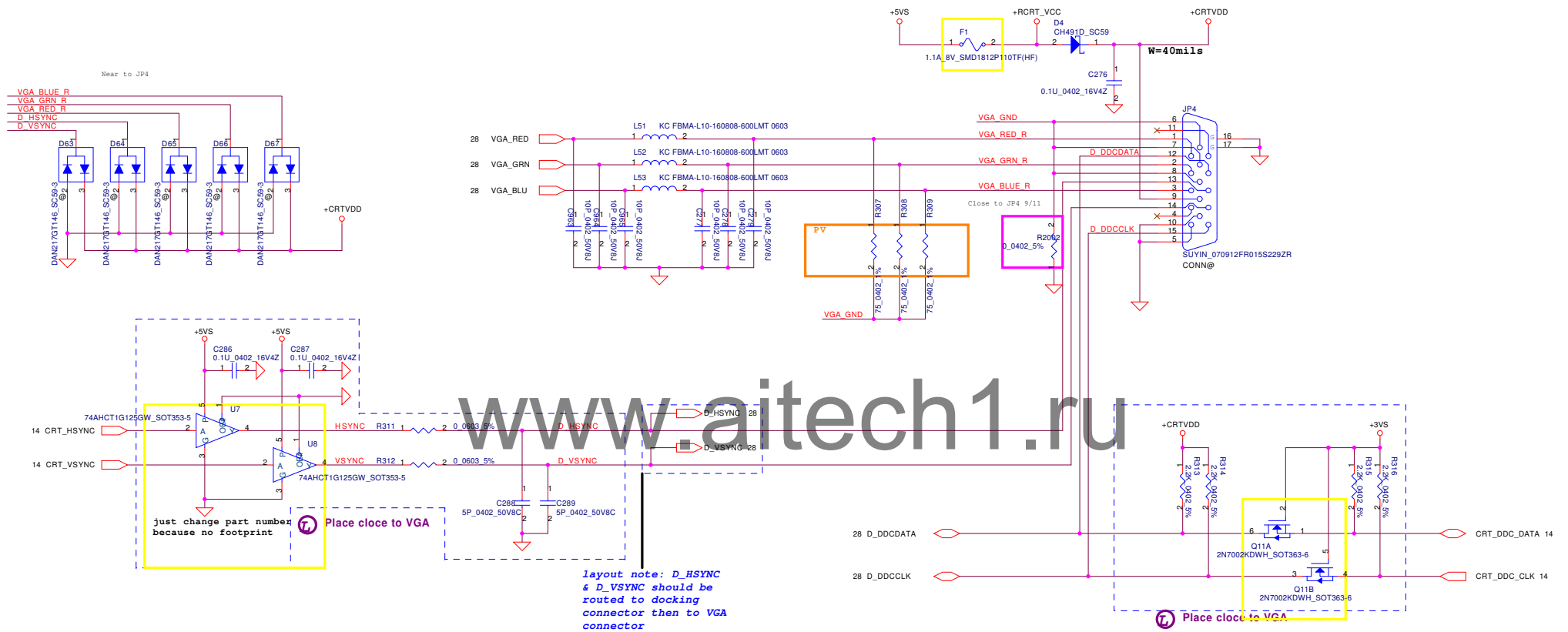


THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS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

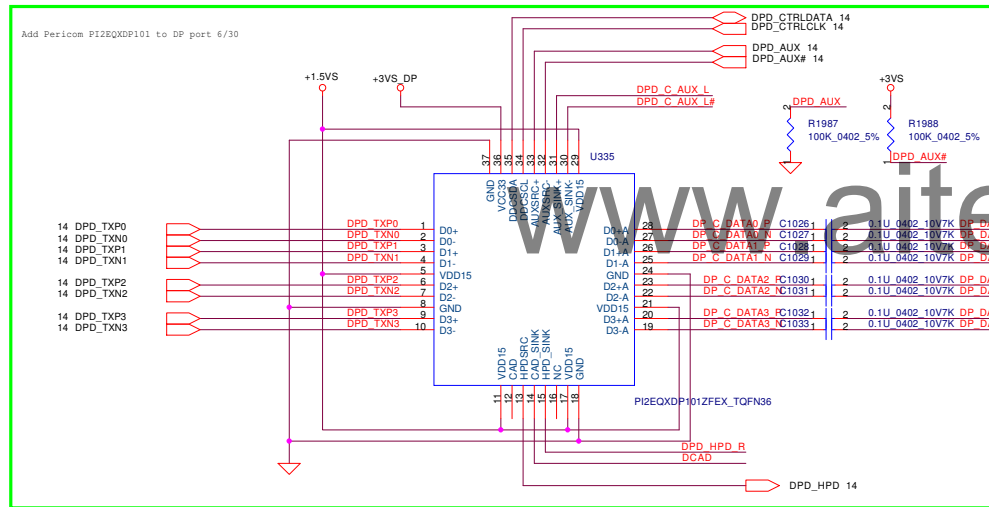
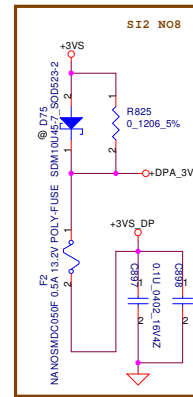


Security Classification		Compal Secret Data		Title	
Issued Date	2008/09/15	Deciphered Date	2009/12/31	IBEX-M(6/6)-GND	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM 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.				Size	Rev
				Document Number	0.3
				Custom	LA-4902P
				Date:	Wednesday, December 09, 2009
				Sheet	17 of 47

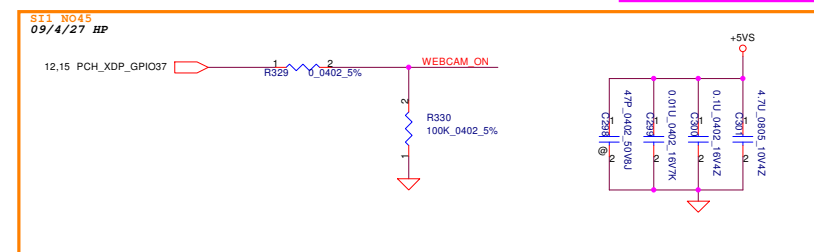
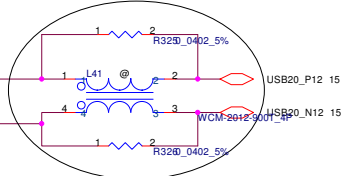
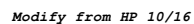
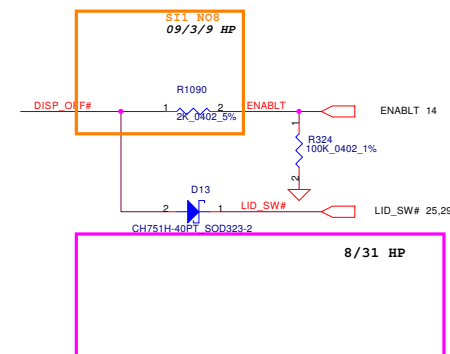
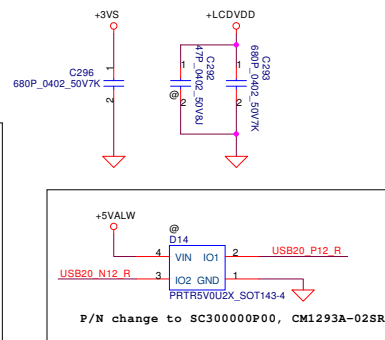
CRT Connector



Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2008/09/15	Deciphered Date	2009/12/31	Title
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.				CRT Connector
Size	Document Number	LA-4902P		Rev
Date:	Wednesday, December 09, 2009	Sheet	18 of 47	0.3



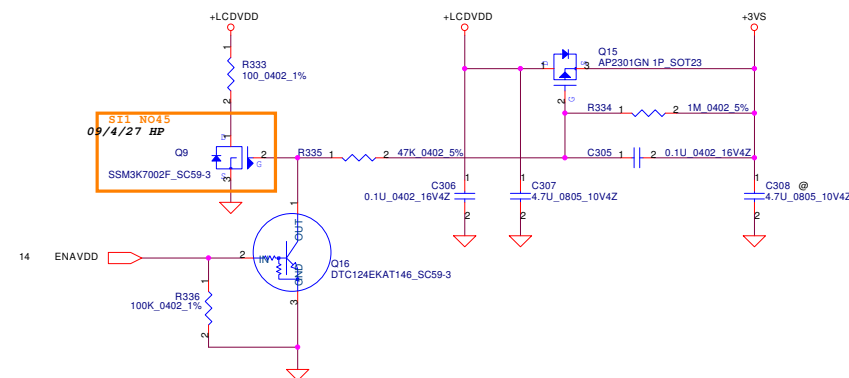
Security Classification		Compal Secret Data		Compal Electronics, Inc. Display Port Connector	
Issued Date	2008/09/15	Deciphered Date	2009/12/31	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS 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.				Size	Document Number
				LA-4902P Date: Wednesday, December 09, 2009 Sheet 19 of 47	



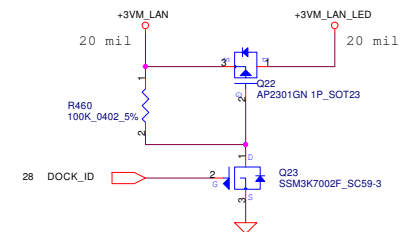
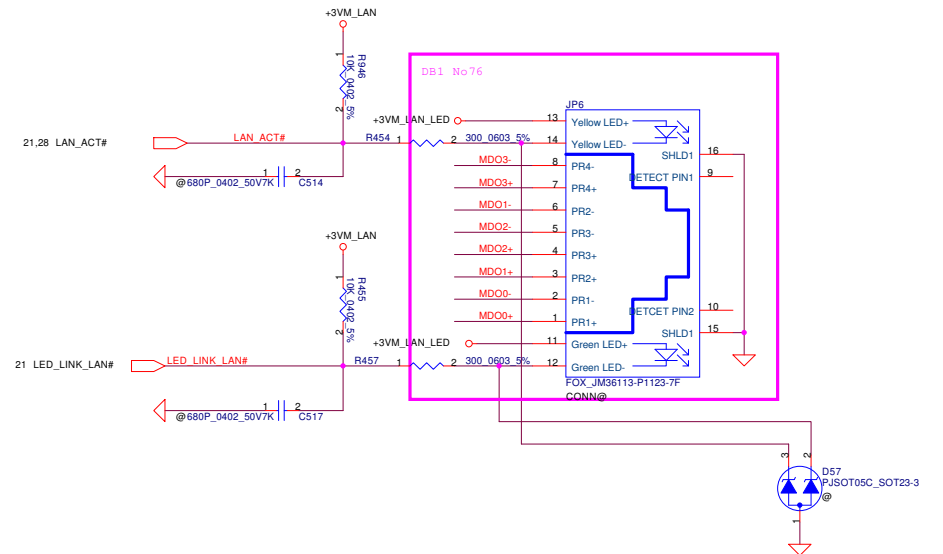
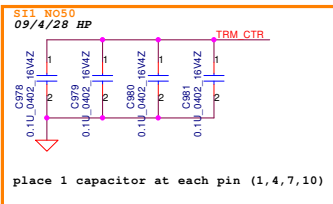
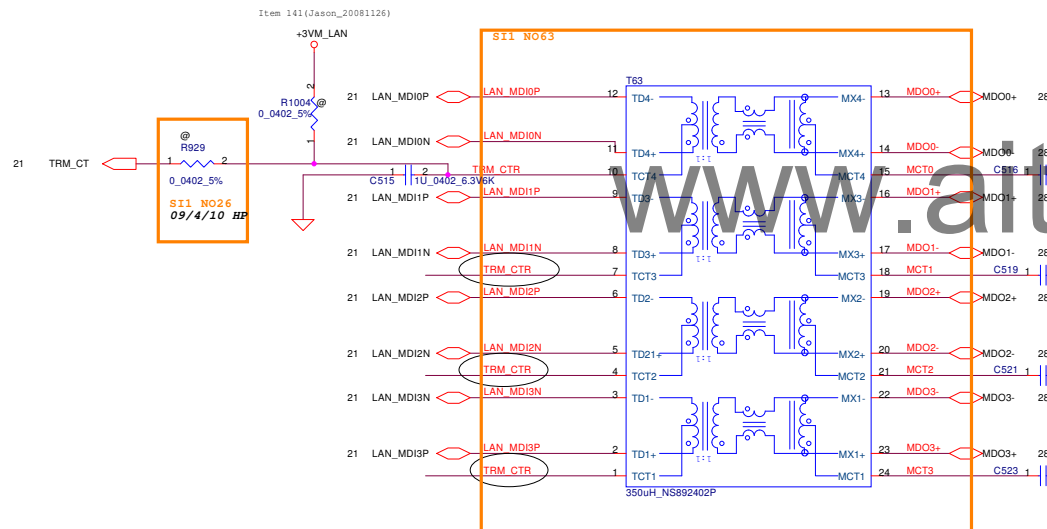
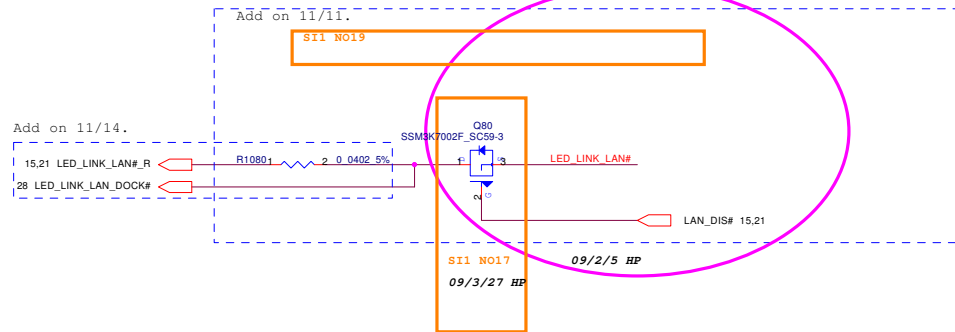
Change eDP LCD connector to 30pin for Coaxial cable 9/13

www.aitech1.ru

LCD POWER CIRCUIT

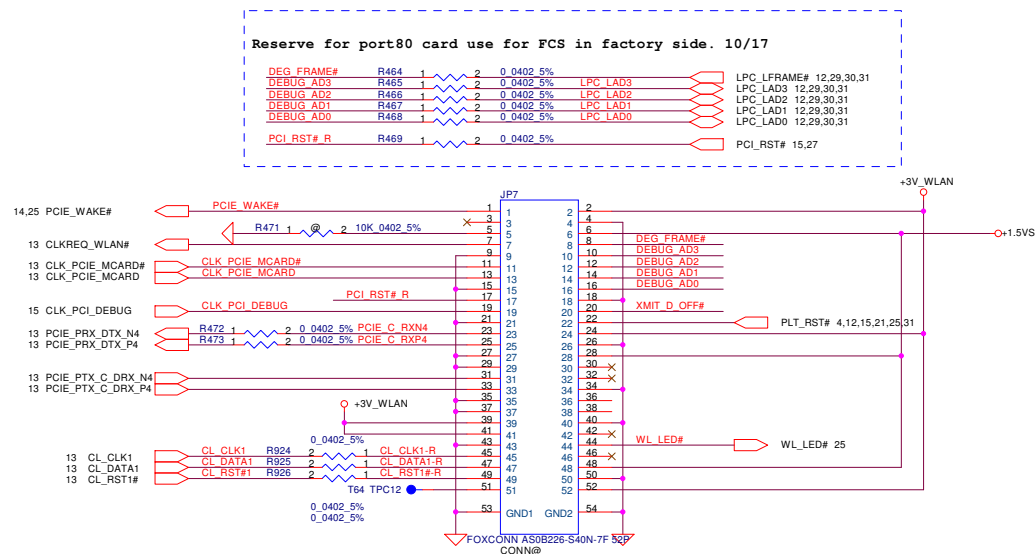
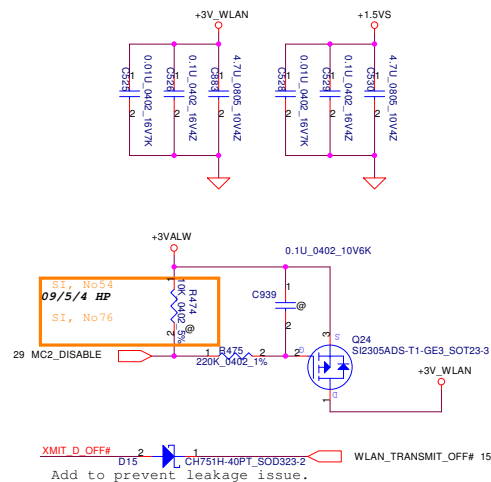


Security Classification		Compal Secret Data		Compal Electronics, Inc. LCD CONN & Q-Switch & GPIO Ext.	
Issued Date	2008/09/15	Deciphered Date	2009/12/31	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. 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.				Size	Document Number LA-4902P
				Date:	Wednesday, December 09, 2009
				Sheet	20 of 47

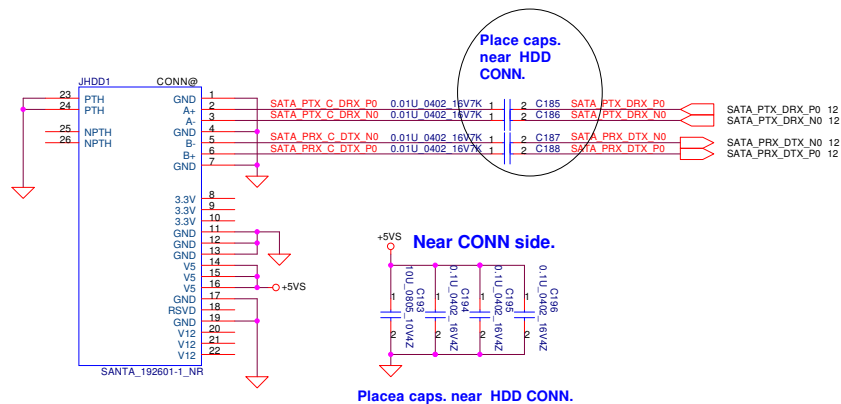


Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2008/09/15	Deciphered Date	2009/12/31	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				Magnetic & RJ45	
Size	Document Number	Rev		Date	
	LA-4902P	0.3		Wednesday, December 09, 2009	
Sheet		22 of 47		5	

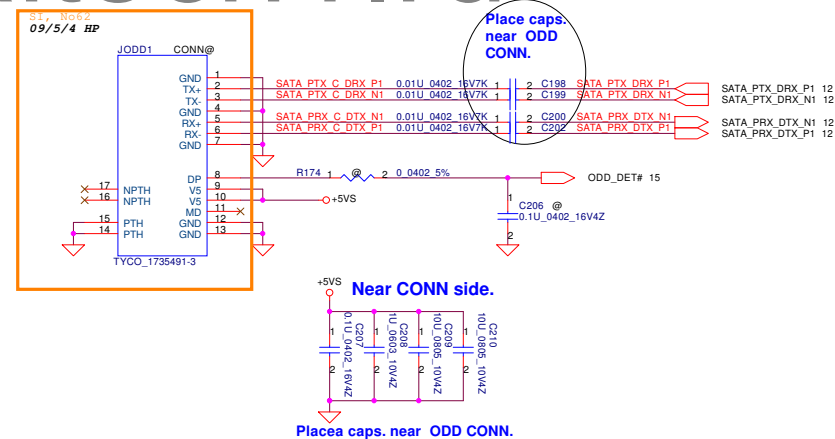
WLAN (Half mini Card)



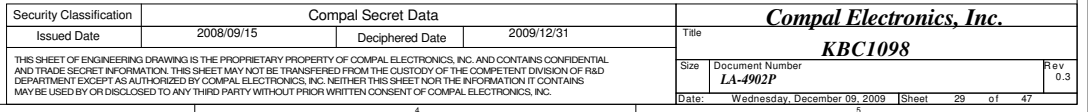
SATA HDD CONN.

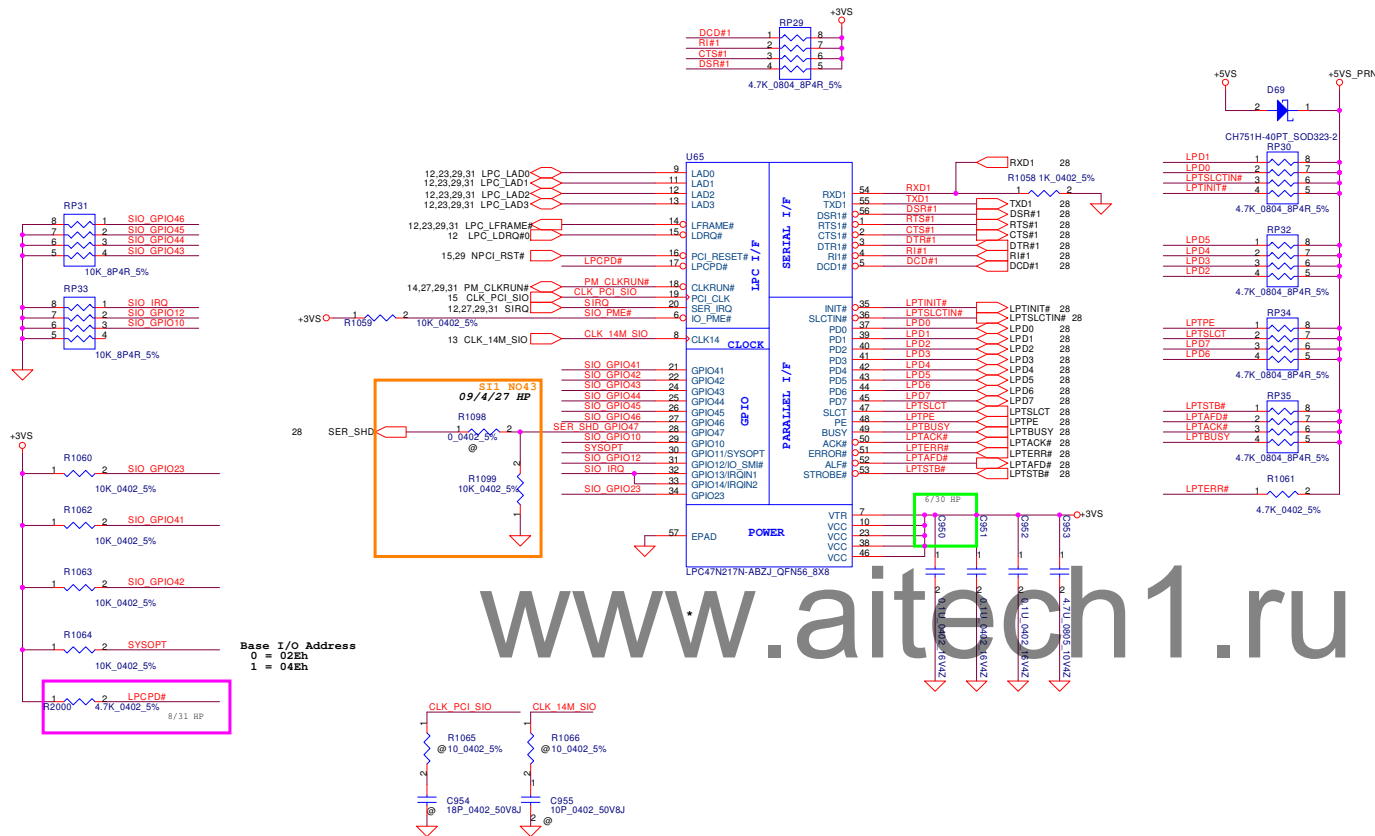


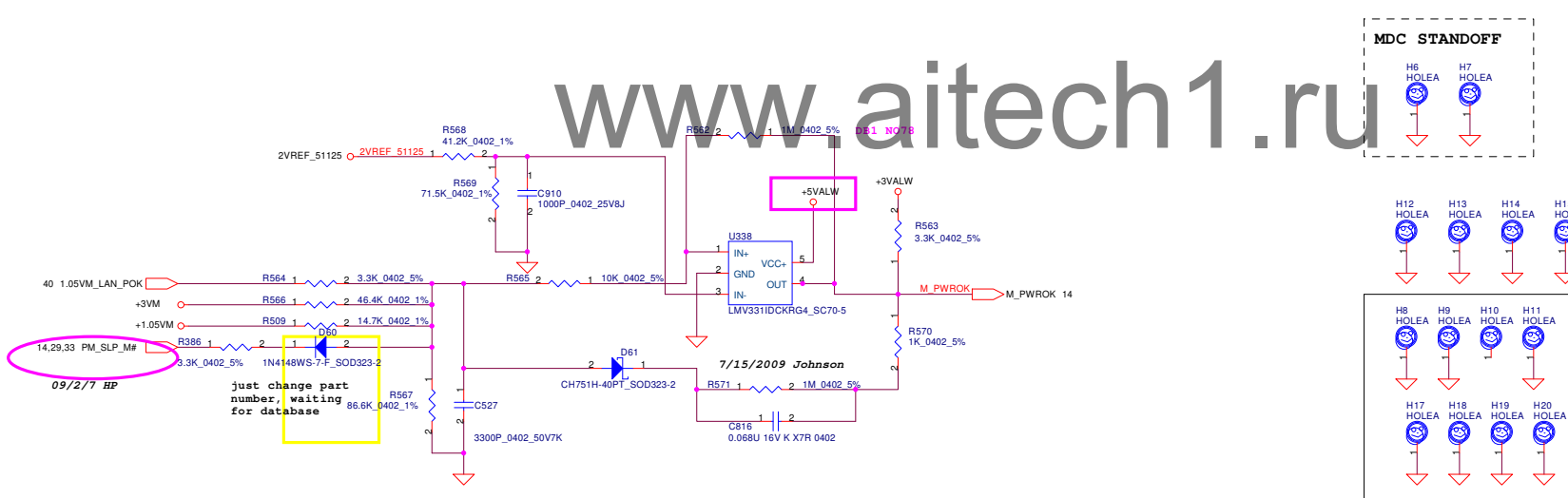
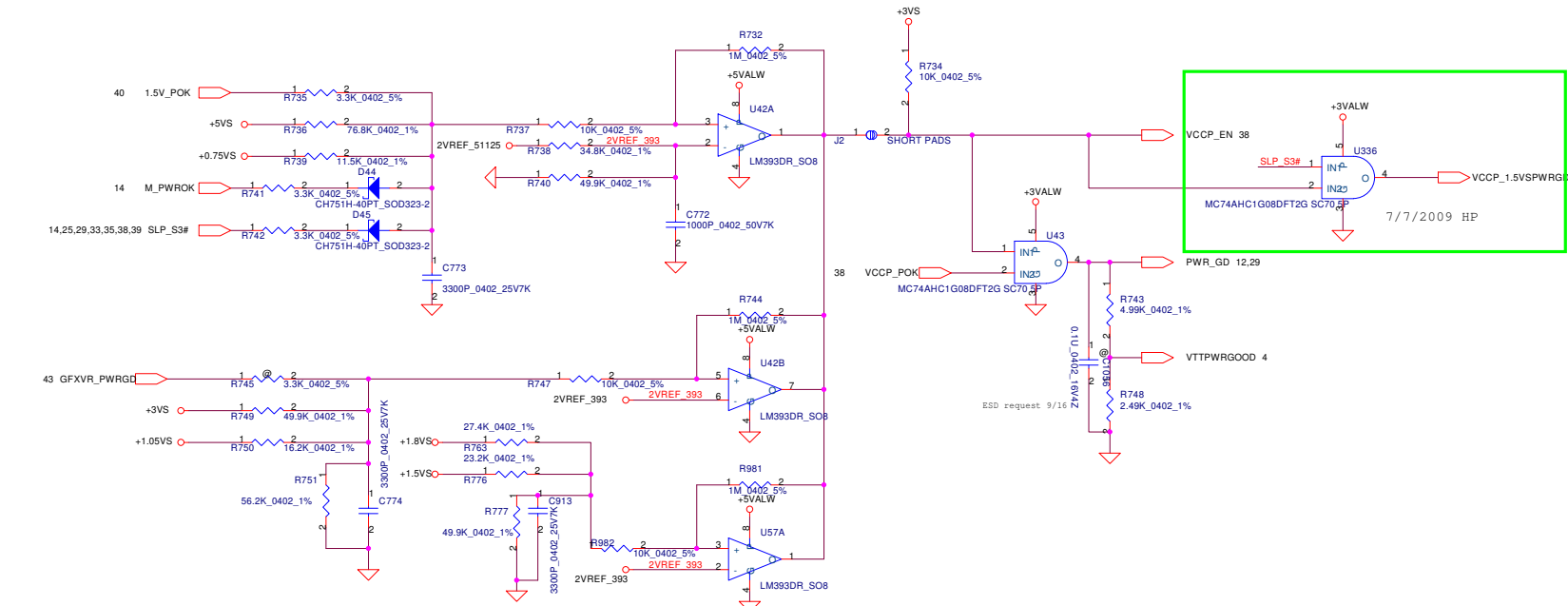
SATA ODD CONN.



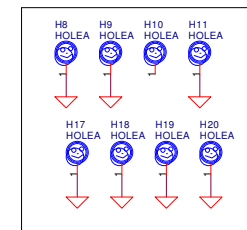
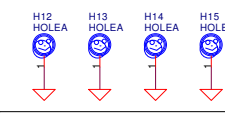
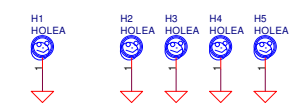
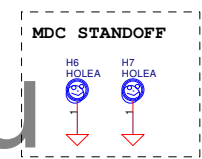
Security Classification		Compal Secret Data		Compal Electronics, Inc.		
Issued Date	2008/09/15	Deciphered Date	2009/12/31	Title	WLAN/ODD/HDD	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY 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.				Size	Document Number	Rev
					LA-4902P	0.3
				Date:	Wednesday, December 09, 2009	Sheet 23 of 47





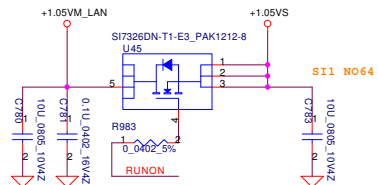


www.aitech1.ru

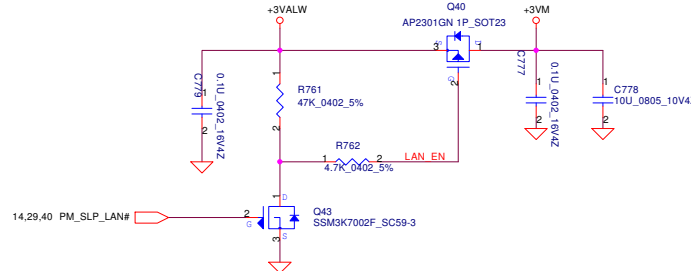


Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2008/09/15	Deciphered Date	2009/12/31	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				POK CKT	
Size	Document Number	Rev		Date	
	LA-4902P	0.3		Wednesday, December 09, 2009	
Sheet		of		47	
32					

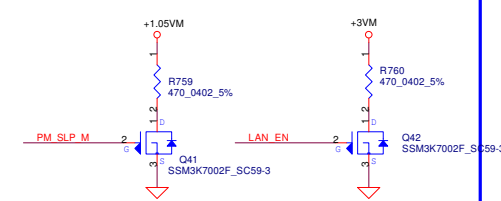
+1.05VM_LAN to +1.05VS Transfer



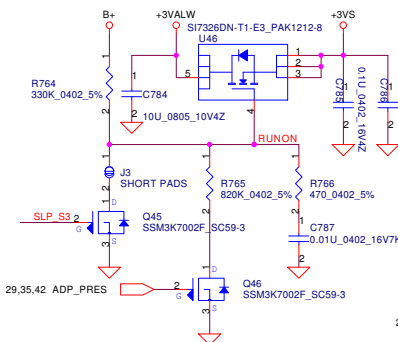
+3VALW to +3VM Transfer



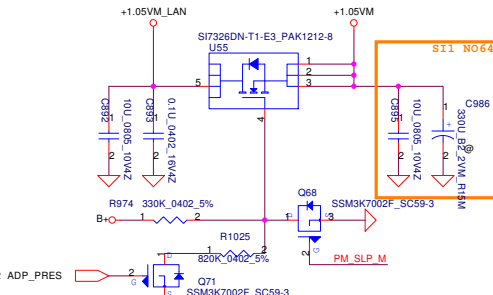
Discharge circuit-2 for V-M



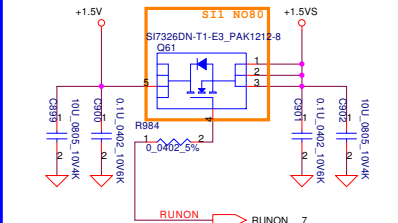
+3VALW to +3VS Transfer



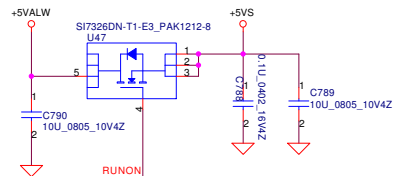
+1.05VM_LAN to +1.05VM Transfer



+1.5V to +1.5VS Transfer

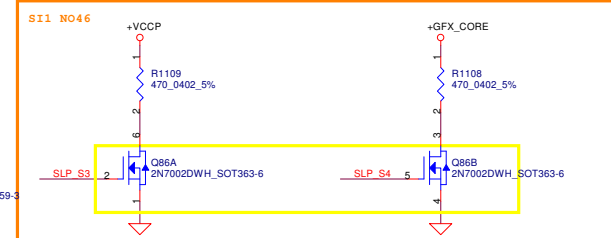
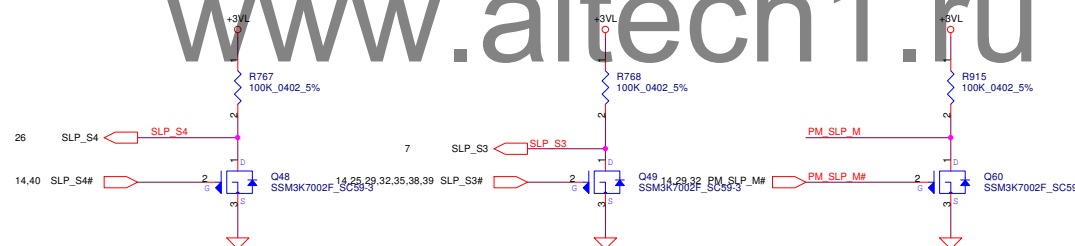


+5VALW to +5VS Transfer

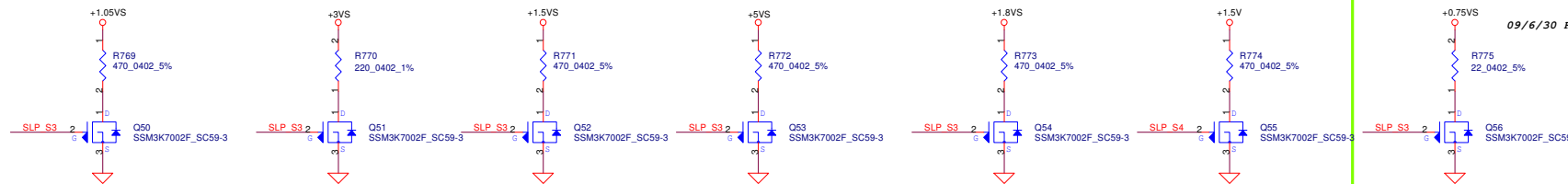


10/17 HP correct it

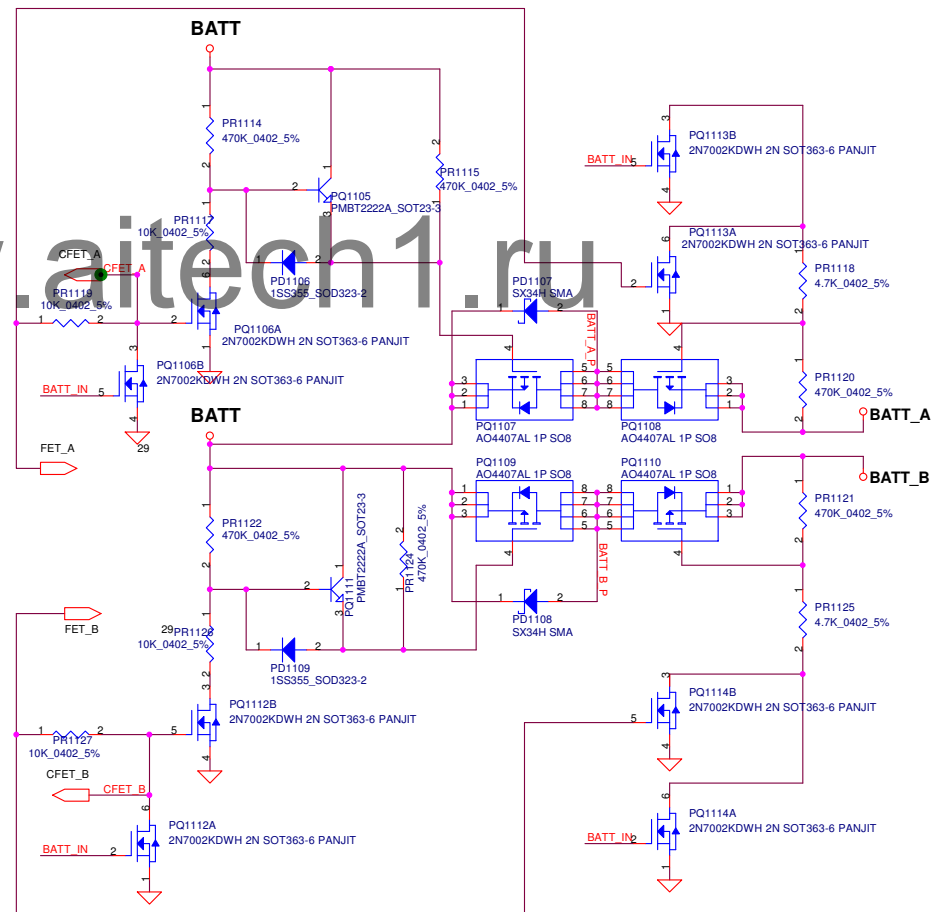
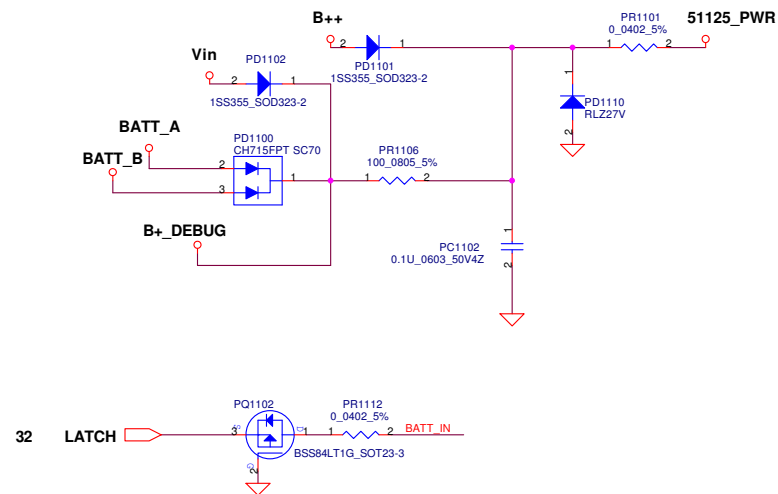
www.aitech1.ru

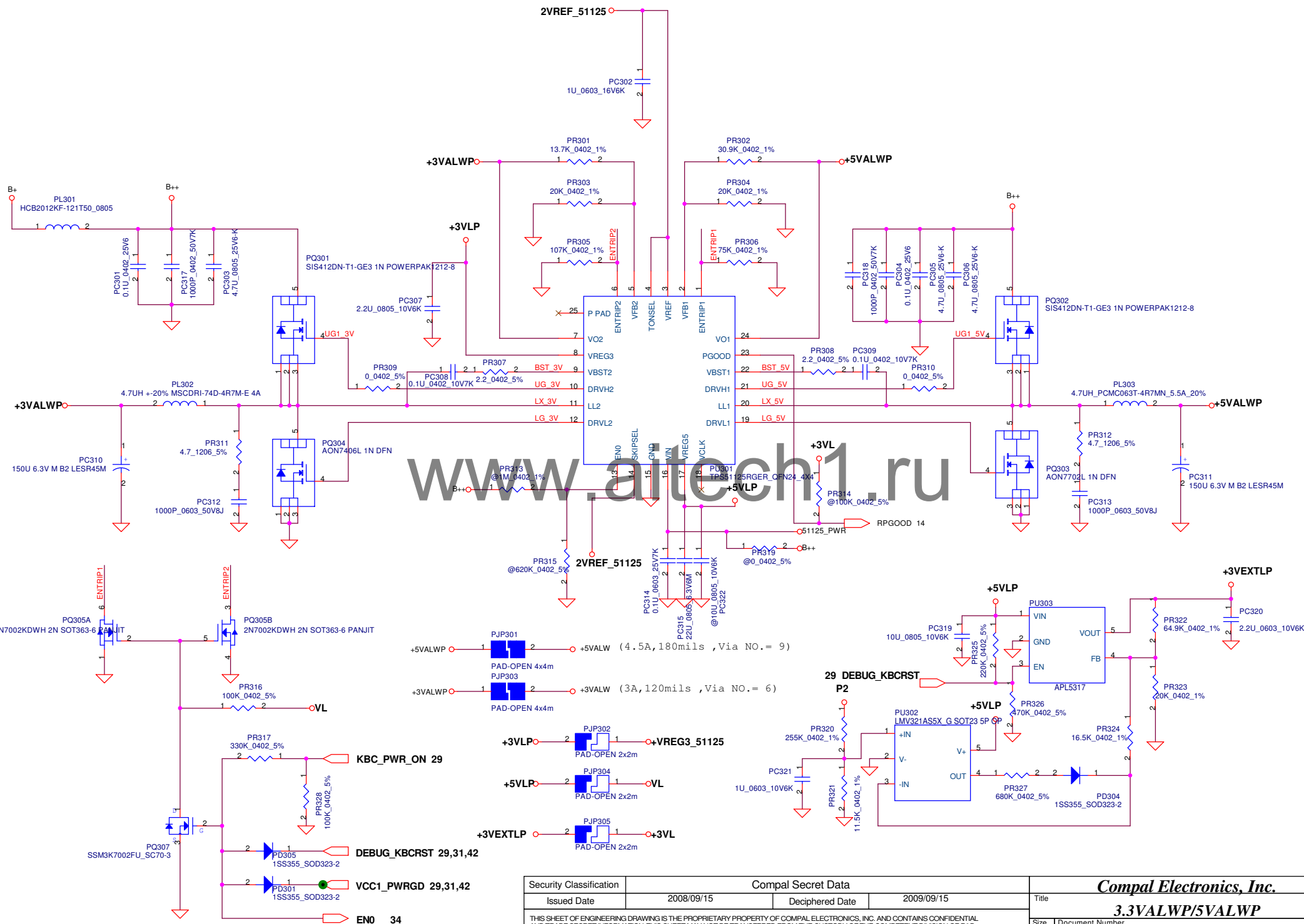


Discharge circuit-1

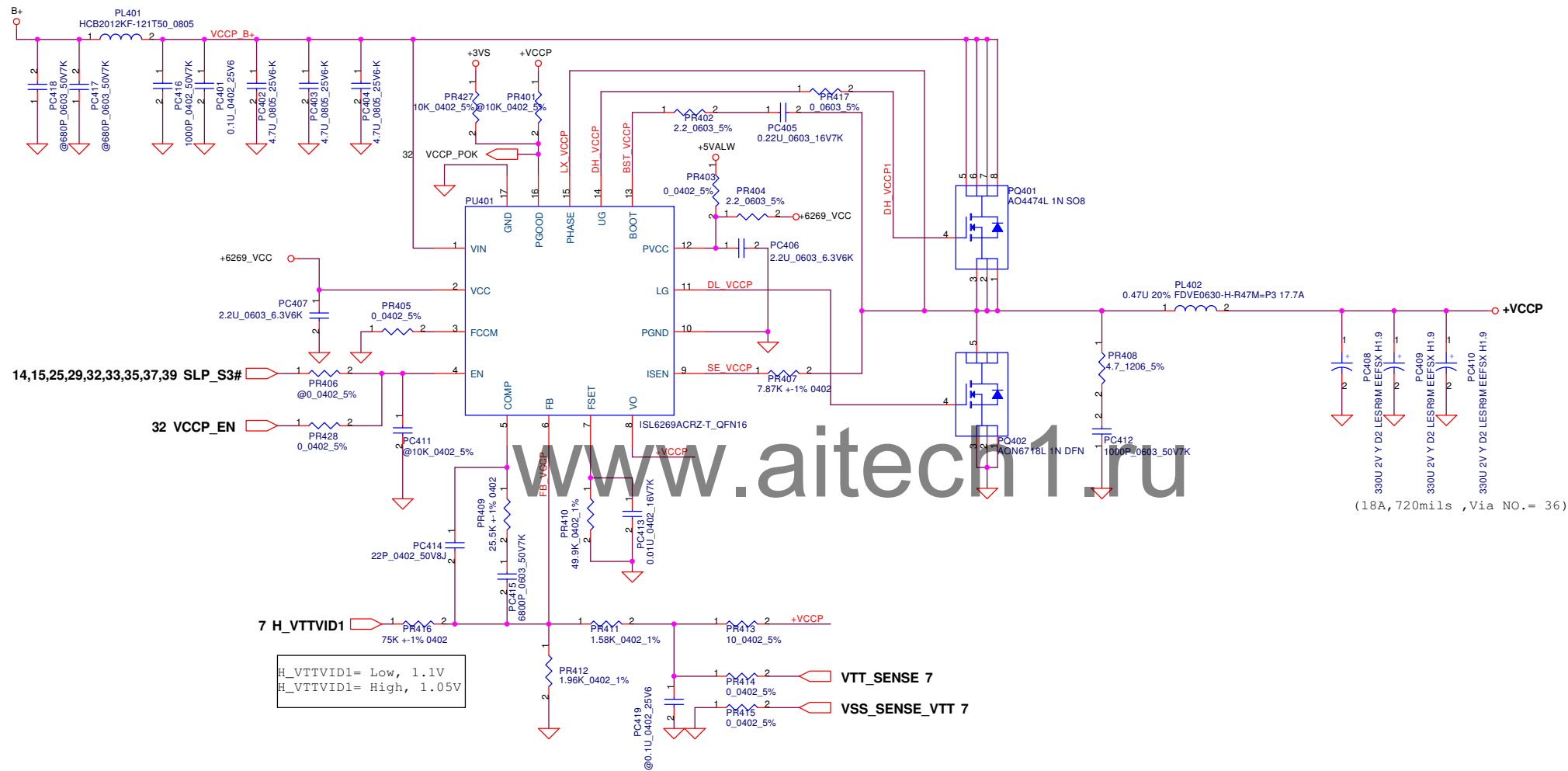


Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2008/09/15	Deciphered Date	2009/12/31	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				DC/DC Circuits	
Size		Document Number		Rev	
LA-4902P		0.3		Date	
Wednesday, December 09, 2009		Sheet		33 of 47	

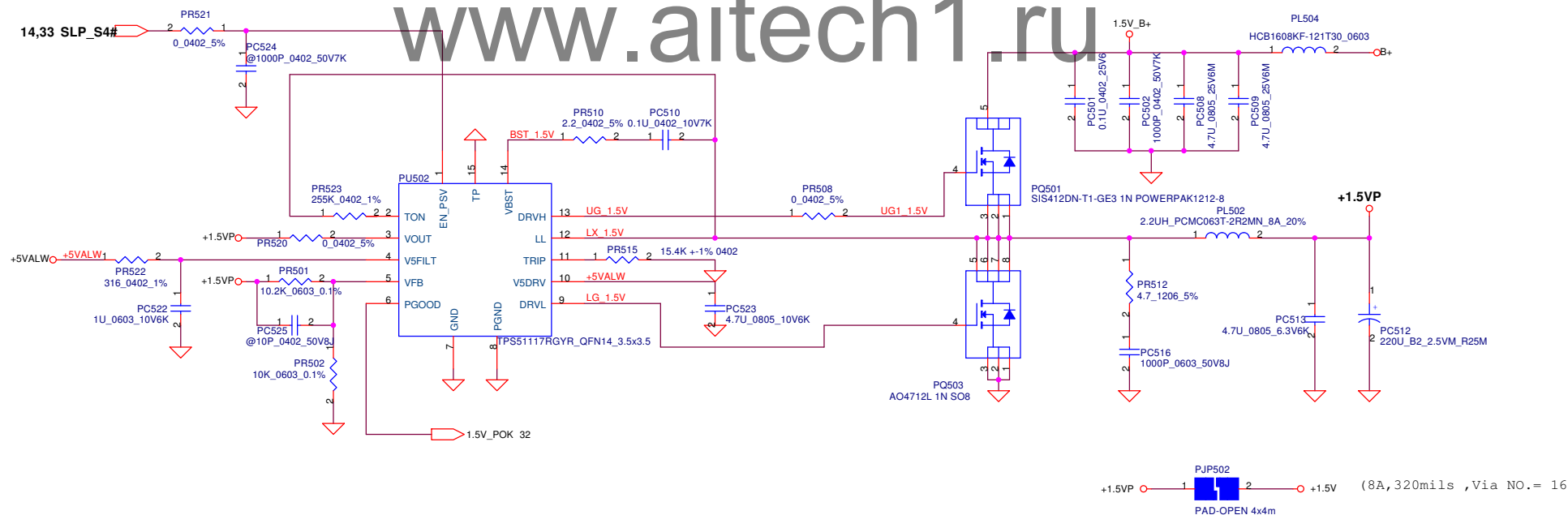
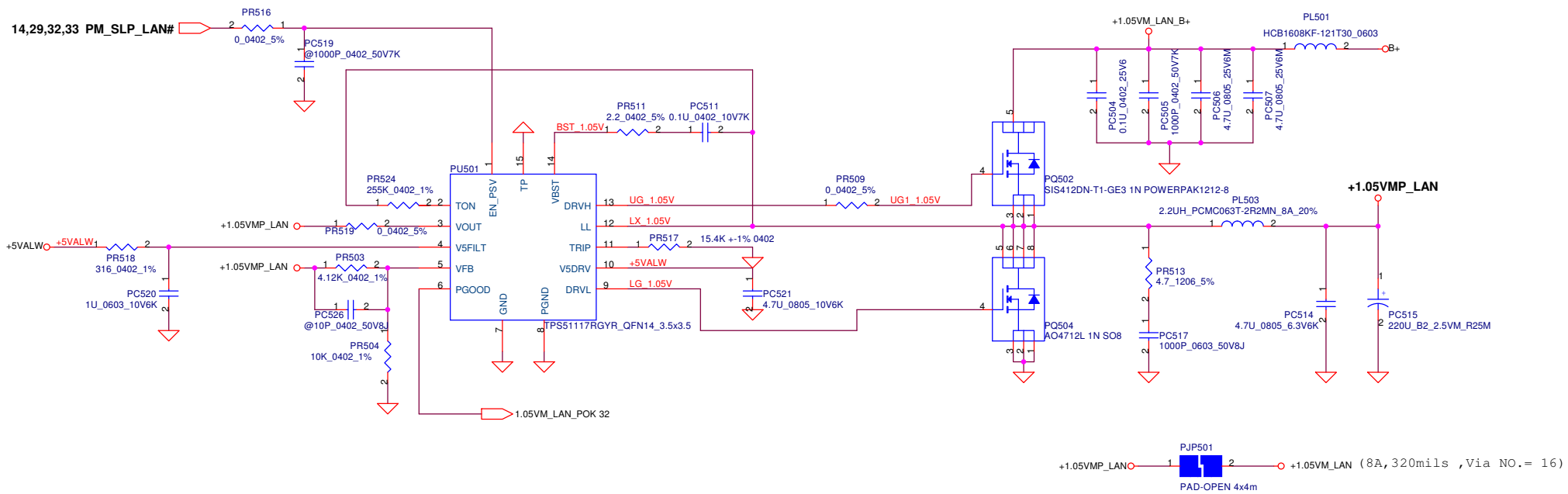




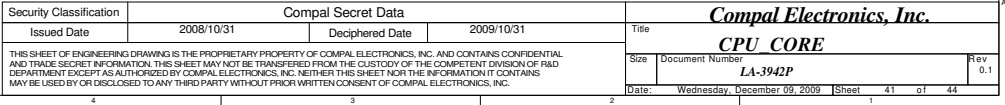
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2008/09/15	Deciphered Date	2009/09/15		
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Title	
				3.3VALWP/5VALWP	
Size	Custom	Document Number	LA-4902P	Rev	0.1
Date:		Wednesday, December 09, 2009		Sheet	37 of 44

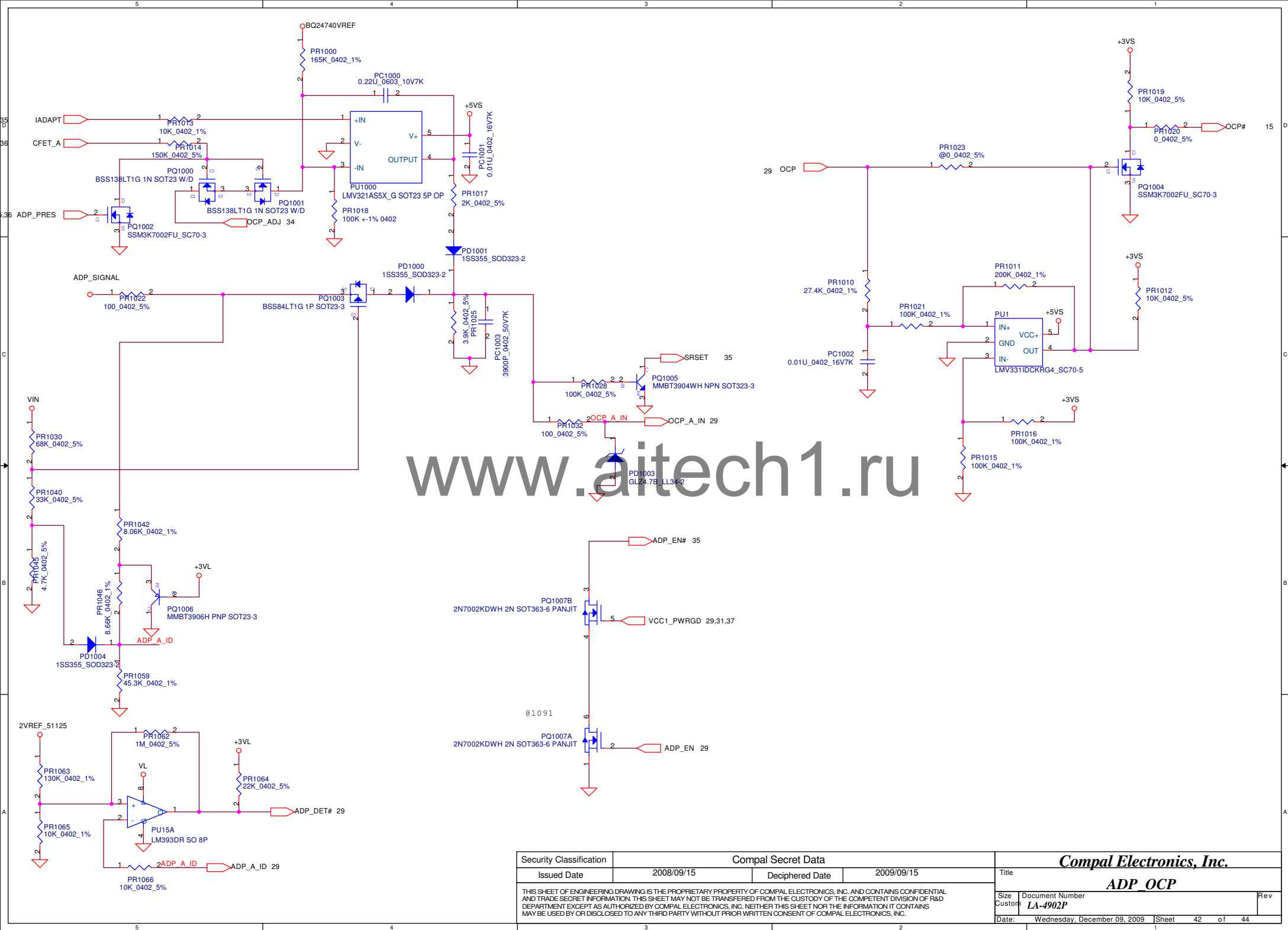


Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2008/09/15	Deciphered Date	2009/09/15	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				1.05V_VCCP	
Size	Document Number	Rev		0.1	
Date: Wednesday, December 09, 2009		Sheet	38	of	44



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2008/09/15	Deciphered Date	2009/09/15	Title	
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.				Size	Document Number
					LA-4902P
				Rev	0.1
				Date:	Wednesday, December 09, 2009
				Sheet	40 of 44





Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2008/09/15	Deciphered Date	2009/09/15	Title	
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.				ADP OCP	
Size	Custom	Document Number	LA-4902P	Rev	
Date:	Wednesday, December 09, 2009	Sheet	42	of 44	



Item	Reason for change	PG#	Modify List	Date	Phase
1					
2					
3					
4					
5					
6					
7					

www.aitech1.ru

No1. P21, LED0 and LED1 nets reversed
No2. P16, for HP item 84, R20,R85,C274 value change
No3. P20, due to JEDP1 42pin to 30 pin, redefining the signals, please remember to change footprint, symbol, part number.
No4. P20, JEDP1 change footprint and value
No5. P14,15, delete PCH LVDS signals and USB_5 for LVDS_CAMERA
No6. P21, LED0 and LED1 change Back.
No7. P23, HDD/ODD footprint modified.
No8. P20, add 2 pins on JEDP1 by myself, different from database part
No9. P20, use real JEDP1 from database

No10. P12, for HP item 69, delete SMB_DATA_S3, SMB_CLK_S3 and add 2 test points
No11. P14, for HP item 78, install R227
No12. P29, for HP item 82, KB_RST# pull high to +3VS
No13. P4, for HP item 85, uninstall R997 and del R40
No14. P4, for HP item 97, delete R34,R36,R37,R46,R49 and change name of XDP_TDI & XDP_TDO, and short XDP_TDI_M to XDP_TDO_M
No15. P4, for HP item 98, add a series R between pin3 and 5 on U54
No16. P21, for HP item 127, delete C484-C487, C945, R427, R428, R963, Q18
No17. P22, for HP item 100, delete Q80A
No18. P22, for HP item 101, Source and Drain of Q80B are swapped and change to a single 2N7002

No20. P12&P29, for HP item 103, change R948, R949, R952, R953, R939, R176, R180, R940 to 0ohm and R950 to 33ohm

No21. P28, for HP item 104, Connect +5VS to JP32 pins 11, 178, 179.
No22. P11, for HP item 105, R141 is connected to +1.05VS
No23. P12, for HP item 106, R100B and Q70A, replace Q70B with a single 7002
No24. P28, for HP item 107, Delete R635-R638 and short the signals
No25. P12, for HP item 108, Delete C203-C205 and short the signals
No26. P21, for HP item 110, LED0 and LED1 nets reversed again
No27. P22, for HP item 111, Control signal for Q80B_GATE should be LAN_DIS#
No28. P12, for HP item 112, NO INSTALL R967 for ESI silicon
No29. P12, for HP item 113, INSTALL R847 and change to 1Kohm.
Connect R847.1 to Q66.1 and remove the GND connection at R847.1.
No30. P12, for HP item 80, install R184 and R190
No31. P15 & P28, for HP item 79, GPIO38 and GPIO39 on U4 connect DOCK_ID0 and DOCK_ID1 to the docking connector pins 77 and 78

No32. P15, for HP item 60, delete R283
No33. P29, for HP item 66, change K504 to K503, change 10K to 0 Ohm, change the Table, add a NOR gate
No34. for No 18, change Q80 Source and Drain pin back.

No35. P32, for HP item 115, change PM_SLP_LAN# to PM_SLP_M# at R386-1
No36. P24, for HP item 116, swap Recuperation because of canceling item 106
No37. P19, for HP item 117, swap DPD_CTRLDATA and DPD_CTRLCLK, AUX connects to CLK and AUX# connects to DATA, add isolation nFET in series with Q74A and Q74B.

No38. P15, add 7 47P 0402 but "0" at every clock of PCI
No39. P12, change RTCVCC source from +VREG5_51125 instead of +3VL

No40. ESD change: (1) 0: D63-D67, D14, D57, D32, D68, D33, D34, D36, D62, D62, D37
No41. ESD change: (2) change P/N: D14, D57, D32, D68, D33, D34, D36, D62, D37
No42. ESD change: (3) affact layout: D14, D33, D34, D36, D62, D37
No43. modify C962 GND disconnection and R70 to GND
No44. modify HP part number, please search"change HP P/N" to know which parts changed.
No45. for Load BOM problems, change some parts as below:
(1) add CONN8: JCPU1, JP5
(2) add P/N for dual 2N7002: Q2,Q3,Q7,Q8,Q81
(3) change P/N: R570, C6, C829, R43, R44, R47

No46. for DRC check,
(1) P23, delete dummy net of JODD1 pin16, 17
(2) P28, add intersheet symbol at SMB_CLK_S3 and SMB_DATA_S3
(3) P21, add a TP at U18.7: LAN_CTRL_L8
(4) P14, delete a dummy net N19910781
(5) P28, change JP32 pin DCAD net name to DCAD1

No47. for parts forbidden:
(1) C829 change to SE026104KN0 (2) R800 change to SD028100380
(3) D68 change to SCA00000E000 (4) C818 change to 0402 SE070104Z80

No48. EMI concern:
(1) install C833, C836, C956
(2) P25, JP25 pin difinition changes.
(3) R931 to 47 ohm
(4) P18, modify CRT circuits: add L and C, change R places, install C

No49. P29, for HP item 123, Change R680 to 100 ohms, and uninstall R699
No50. P29, delete R886, R887 and relative circuits
No51. P29, delete R892 for BATCON
No52. P23, change JODD1 pin16, 17 type to avoid from useless net names
No53. HF parts link database: D1

No54. HF parts link database:
(1) Q78 link SB00000H500
(2) D16, D63-D67 link SC2AN217020
(3) D1 link SC2N202U000
(4) D23-D29 did not link SC2P202U000, just revise manually
(5) Q57 & Q58 link SB000007H10
(6) C263 & C269 link SGA202211D0
(7) lots of 2N7002(Q4, Q23, Q32,Q41,Q42,Q43,Q45,Q46,48,49,50,51, 52,53,54,55,56,60,65,66,68,71,76,79,80) link SB000009080
(8) T63 link SP050002I10
(7) U42A, U42B, U44A, U57A link SA003930080

No55. combine power schematics 0212
No56. P29, for HP item 122, Connect D42-2 to VCORE_GP (not PM_PWROK)
TEST. change U42,U44,U57 value and footprint LM393DG_S08

before netin
No57. change U42,U44,U57 link another SA003930080

2/16

No58. P5, for HP item 126, R60 and R61 should be NO INSTALL.
No59. P12, for HP item 127, Connect R857.1 to HDD_HALTLED instead of HDD_HALTLED
No60. P9,10, for HP item 128, Connect JDIMAI.199 and JDIMB1.199 to 3VS as Intel reference board
No61. P16, for HP item 131, Based on spec, VcCTX_LVDS and VCCA_LVD to GND.
No62. P19, for HP item 136, install Q76 and no install R1055 as there must be isolation
No63. P13, for HP item 138, Change Gate of Q77 to +3VALW

No64. change Pb-free
(1)R1058 to SD028100180,
(2)R1059,1060,1062,1063,1064 to SD028100280
(3)R615, 1061 to SD028470180
(4)RP31, RP33 to SD309100280
(5)RP29, 30, 32,34,35 to SD309470180 --> footprint should keep original
(5)C953 to SE053475280
(6)C950, 951, 952 to SE070104Z80
change HF
(1) SW1 to SN100000W10

No65. separate GND signals
(1) P28 and P25, add GNDA and resistors,

No66. P20, change JEDP1 to 24 pin connector, delete LANE[1:3] and EDID, as well as U4 relative signals.
No67. P31, change SPI ROM back to DB1 design, but mount 8pin, unmount 16pin
No68. P19, change misunderstand name:DPD_C_AUX/DPD_C_AUX# to DPD_C_AUX_L/DPD_C_AUX_L#

2/19

No69. P5, delete MB_DP_DATA[1:3] N/P for JEDP pin cutting
No70. C6 and C685 change to SE071100J80 because of Jason's request(vendor doesn't have the original 25V part)
No71. P25, install C888,C889

2/20

No72. for HP item 66, P29, U66.5 should be connected to 3VL so that KBC can read board before boot and apply necessary fixes.
No73. for HP item 103, P31, R1035 should be 0ohm
No74. P27, change SC_PWR circuits for unsurely current

2/23

No74. P26, uninstall U31 and add J1 for cost down
No75. change some test point footprint to IPC12: T61,T62,T1,T55,T97,T22, and P14 lots of points

2/24

No76. P22, JP6 symbol error, modified!

No77. P12, add a net name XDP_FN4

2/25

No78. P32, change U44.8 to +5VALW for HP request
No79. P29, change R680=220 ohms

combine power schematics

No80. P25,

- (1) JP24: redefine the singals of the pins,
- (2) JP25: reverse pin definition

No81.

- (1)U4 change PN to SA00002KV30 for ES2
- (2)P31, &U1, &U2 change to SA000037A00

3/6

No82.

- (1)P29, Firmwave said unmount R1021 and mount R1022
- (2)P4, delete R998 <BOM structure>, otherwise BOM will be error

www.aitech1.ru

Security Classification		Compal Secret Data			
Issued Date		2008/03/13	Deciphered Date	2009/05/11	Title
					Compal Electronics, Inc.
					Hardware revision -DB2
					Size Document Number
					LA-4902P
					Rev 0.3
					Date: Wednesday, December 09, 2009 Sheet 45 of 47

No1. for HP item 5, P32, change U44A to U57B and delete U44
No2. for HP item 6, P12&24, connect JP12.17 to U4A.F34 and add 10K pull-up to +3VS for Braidwood detection.
No3. for HP item 7, P4, change debug ports to CFG4 - pin 28, CFG5 - pin 30, CFG10 - pin 22, and CFG11 pin 24
No4. for HP item 11, P20, reverse Q9A
No5. for HP item 12, P13, Change all express clock series terminations from 33ohm to 0ohm, R208, R209, R211, R212, R41 and R59 should be 0ohm
No6. for HP item 13, P22, Change all express clock series terminations from 33ohm to 0ohm, R208, R209, R211, R212, R41 and R59 should be 0ohm
No7. for HP item 14, P12, Unmount R186 and R192 because latest PCH EDS shows that PCH XDP UTAG_RST# is now NO CONNECT on PCH
No8. for HP item 16, P20, Change D12 to 2Kohm resistor and remove R322
No9. for HP item 17, P20, Change Q79.2 to L1D_SW#
No10. for HP item 18, P22, Source and Drain on Q80B should be swapped
No11. for HP item 22, P27, add ESD Diodes and pullups for the SCCLK, SCIO, SCRST lines on the SC socket
No12. P14, add RGB name:DAC_RED_R,DAC_GRN_R,DAC_BLU_R
No13. P29, R593 part number: "space" delete
No14. P31, reverse JP30 pin definition
No15. P4, change R1082 from 0 ohm to 10K
No16. P18, change R307, R308, R309, R301, R302, R303 from 75ohm to 150ohm
No17. for HP item 2, P22, Source and Drain on Q80B should be swapped
No18. P28, add a reversing circuit for STB_LED# to fix the LED bug
No19. P21,P28, delete redundant net LAN_ACT#_DOCK and change it to LAN_ACT#
No20. P31, revise BIOS connector to CONN@ and unmount #U1
No21. P9, reivse "M1@" to "M1@"
No22. P12, revise 0ohm(R868,R869,R870,R871,R872,R1071) from SD034000080 to SD028000080
No23. P25, modify Power button circuits
No24. for HP item, P15 and 24, GPIO ->WWAN_DET# and pull high 100K
No25. for HP item, P15, SHDN, surff R51 for SYS_SHDN# and add these 3 to my schematics as C972-974
No26. for HP item, P22, VCI pin U18.6 should be NO CONNECT. R929 uninstall
No27. for HP item, P9,10, Remove M18 for UMA and make it always installed. UMA will only use M1
No28. P41, reserve 100Kohm pull up to 3Vl on U63.1
No29. for HP item, P15, LAN_DI# should pull up to +3VM LAN instead of 3VALW
No30. for HP item, P4, Change R14/R15 to P1.K1#/R18 per DGI.52
No31. for HP item, P16, Add NO INSTALL 0ohm to GND on GPIO8 on PCH and remove PULL UP to 3VLAW because PCH has an integrated pull up.
No32. for HP item, P13, for UMA:
NO INSTALL: R210, Y4, C222
INSTALL 0ohm resistor in C223
No33. P14, revise for HP item 13 not mentioned, delete LVD_VREFH and LVD_VREFL to GND
No34. for HP item, P19, Reserve 0.1uF on DDC_EN and DP_EN for concern about noise.
No35. P29, R1021 Removed
No36. R1022 Install (main battery selection)
No37. R1023 Install (OCP function)
No38. R1024 Install (travel battery selection)
No39. R694 Install (SMSC CBB will required it)
No40. P31, delete U64 and #U1
No41. for HP item 18 and 57, P24, modify WWAN circuits
No42. for HP item 51, P29, change system ID by installing R660 and uninstalling the others
No43. for HP item 53, P29, add uninstalled 0ohm and 10K pull down at SER_SHD
No44. for HP item 46, P9,10, Install a new voltage divider for VREF_CA that is different from VREF_DQ divider
No45. for HP item 61, P15,20, delete R969, R330 R328, C297 R327 R329 Q14 C304 and Q9A, R268, delete WEBCAM_OFF circuits and add WEBCAM_ON circuits.
No46. P33, add +VCCP and +GFX_CORE discharge circuits
No47. P27, change Smart Card circuits
No48. for HP item 48, P9,10,
(1) add 1 uninstalled 300uF on DIMMB +1.5V,
(2) add 2 10uF on +0.75VS,
(3) delete 4 uninstalled 10uF on +1.5V
(4) unistall 8 0.1uF on +1.5V
No49. for HP item 49, P16, delete R289
No50. for HP item 52, P22, TRM_CRT: add 4 0.1uF
No51. for HP item 56, P22, change caps to 150uF and 22uF, delete the others.
No52. for HP item 60, P22, simplify WWAN/WWAN/BT LED circuits. uninstall Q62 and Q64
No53. for HP item 61, P20, modify WEBCAM again
No54. for HP item 64, P23, uninstall R474. The concern is leakage when system is off.
No55. for HP item 65, P29, Uninstall pull-up on KERST# (R893) as it is not needed.
No56. for HP item 66, P29, Change R586R57# from 10K to 100K to reduce current.
No57. for HP item 67, P29, for ADC small input filters, add R1113-R1116 and C382-C384
No58. for HP item 68, P16, uninstall R234 for wrong power rail.
No59. for HP item 70, P16, add 10K pull-up to USB_C0#2 as we are not using it.
No60. for HP item 71, P12&24, change net name from BRAID_DET to NAND_DET#
No61. for HP item 73, P13&21, add CLK_PCIE_LAN_REQ1# connected U18.4# to U4B.U4
No62. P23, change JODD1, link data
No63. P22, swap T63 MDI +/- signals
No64. for HP item 15, P33, add 330uF to each of +1.05VS and +1.05VM
No65. P22, swap again
No66. for HP item 15, P33, change 330uF to smaller package because of lack of space, and delete C782, C894
No67. P15, EMI concern: change R1026 to 47 ohm
No68. for HP item 68, P29, change net name :AC_AND CHG --> AC_ADG_PRES
No69. for HP item 74, P33, uninstall R775 and Q56
No70. for HP item 73, P29, uninstall D42

power schematics updated: CARTIER_UMA_PWR_20090508.DSN
No71. P20, JEDP.20 change to +VS
No72. P26, add eSATA connector and redriver circuits
No73. P19, correct Q75B's direction
No74. P29, cost down, change NOR to dual 2N7002
No75. P26, cost down, delete R605, and short the circuits
No76. P23, from Johnson, we should keep the pull high resistor because EC will not program the internal pull-high afterwards.
power schematics updated: CARTIER_UMA_PWR_20090513.DSN
No77. for HP item 75, P24, install C45-c47 39pF
No78. P21, c495, c497 CHANGE TO X5R SE095104K80
No79. P7, delete uninstalled VCCP 47pF * 4 and 10uF * 1(C41-C44, C46)
power schematics updated: CARTIER_UMA_PWR_20090515.DSN
No80. P33, Q61 change part
No81. for HP item 22, P27, install D70-72
No82. for HP item 76, P14, 29, 41
(1) add R=1k between PGD_IN and VGATE, and uninstall R237.
(2) remove D42.
(3) remove PR217 and PR230
No83. for HP item 77, P19, uninstall R1076
No84. for HP item 78, P24, change R1046.2 to GND
Remove R1051 and R1048 and make the following changes:
Install R1046 (100K) but change R1046.2 to GND
Install R1047 (100K) but change R1047.1 to 3VS
power schematics updated: CARTIER_UMA_PWR_20090518.DSN
No85. P21, change 10uF to 22uF to stabilize voltage
No86. change HF part:
(1) SA411250130 S IC 74AHCT1G125GW SOT353 5P BUS BUFFER
-> SA00000RY00: U7, U8, (PN change only)
(2) SB000008E00 S TR MMBT3904W NPN SOT323-3
->SB000008E10: Q1,
(3) SB00000A000 S TR 2N7002DW T/R7 2N SOT-363-6
-> SB00000A010: Q2, Q3, Q5, Q7, Q8, Q10, Q63, Q77, Q86, Q87
(4) SB570025280 S TR 2N7002DW-7-F 2N SOT-363
-> SB00000E010: Q11, Q72, Q73, Q74, Q75, Q81
(5) SC2N2020U000 S DIO ROW DAN202UGT106 3P C/C SC-70
-> SC600000B00: D1
(6) SCA00000A00 S ZEN ROW PJDL0C5 3P C/A SOT23
-> SCA00000A10: D58
(7) SJ100001V00 S CRYSTAL 32.768KHZ 1TJS125DJ4A420P
SJ100000A00: Y6, Y7
(8) SP04301P120 S FUSE SMD1812P110TF 1.1A 6V UL/CSA/TUV
-> SP04301P110: F1
(9) SC1N4148180 S DIO 1N4148WS-7-F SOD-323
-> SC1000004P00: D60, D70, D71, D72 (PN change only)
No87. after Gerber out: BOM
(1) change Q70 to SB923050020
(2) link database:
JP31(enter myself), C888, R782, R202, R200, R791, R785, R800, R796, R797, C184, C885, C887, C231, C232, C236, C241, C243, C244, C247, C248, C251, C252, C253, C261, C264, C270, C271, C272, C274, C275, C515, RP16, RP18, RP26, RP27, R787
No88. according to Monji, P13, check R215 to 22 ohm
No89. U67: Change SA00002ZR0L to SA00002ZR00
for DELL prohibition part
No90. P08, change MLCC part references for power team request
(1) 10uF: C103、C993、C994、C988、C92 C94、C97、C116、C113、C90 C89、C98、C99、C100、C101 C102、C91、C84、C96、C83 C111、C88
(2) 22uF: the others
(3) change C105 ~ C108 to SGA00001Q80
No91. change schematics parts of Q24 and Q70, the same P/N SB923050020
No92. P27, change R1086 to 100K, R1085 to 10K, delete R1110 like DIS
No3. PCH PN: SA00002KV60; LAN PN: SA00002M040

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date		2008/03/13	Deciphered Date	2009/05/11	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Title	
				Hardware revision -SI	
				Size	Document Number
C				LA-4902P	Rev 0.3
Date:		Wednesday, December 09, 2009		Sheet	46 of 47

5/20
No1. change schematics parts of Q24 and Q70, the same P/N SB923050020

5/25
No2. P27, change R1086 to 100K, R1085 to 10K, delete R1110 like DIS
No3. PCH FN: SA00002KV60; LAN FN: SA00002MO40

6/2
No4. P12, change reference name: JBATT1 --> JBAT1
No5. P25 & P31, JP25 and JP30 are reversed(H and V) because of footprint silkscreen problem, remember not to change routing, just change ME pin1

No6. P12, P29, P31, add net names of SPI signals
No7. P12,29,31, change 24.9ohm for SMSC request:R939,R940,R950,R948,R952,R1035

6/18
No8. P19, add 1 fuse on DP power

6/22
No9. P19, as per Johnson's request, for cost down
(1) uninstall C123, C699
(2) change C552 from 150uF to 100uF +0.1uF*2 (not ok)
(3) change C263 and C269 to 100uF (not ok)

www.aitech1.ru