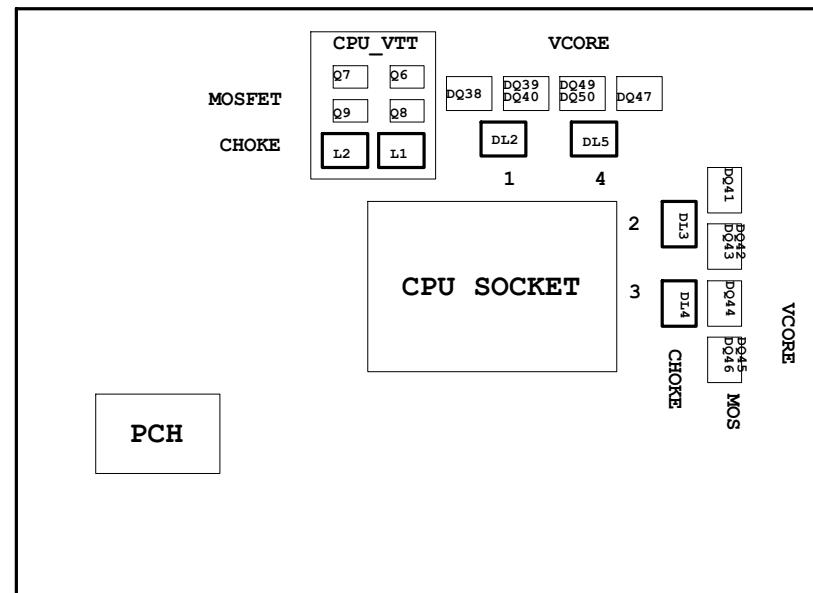


Model Name: GA-P67A-D3-B3 1.01
SHEET
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SHEET
TITLE

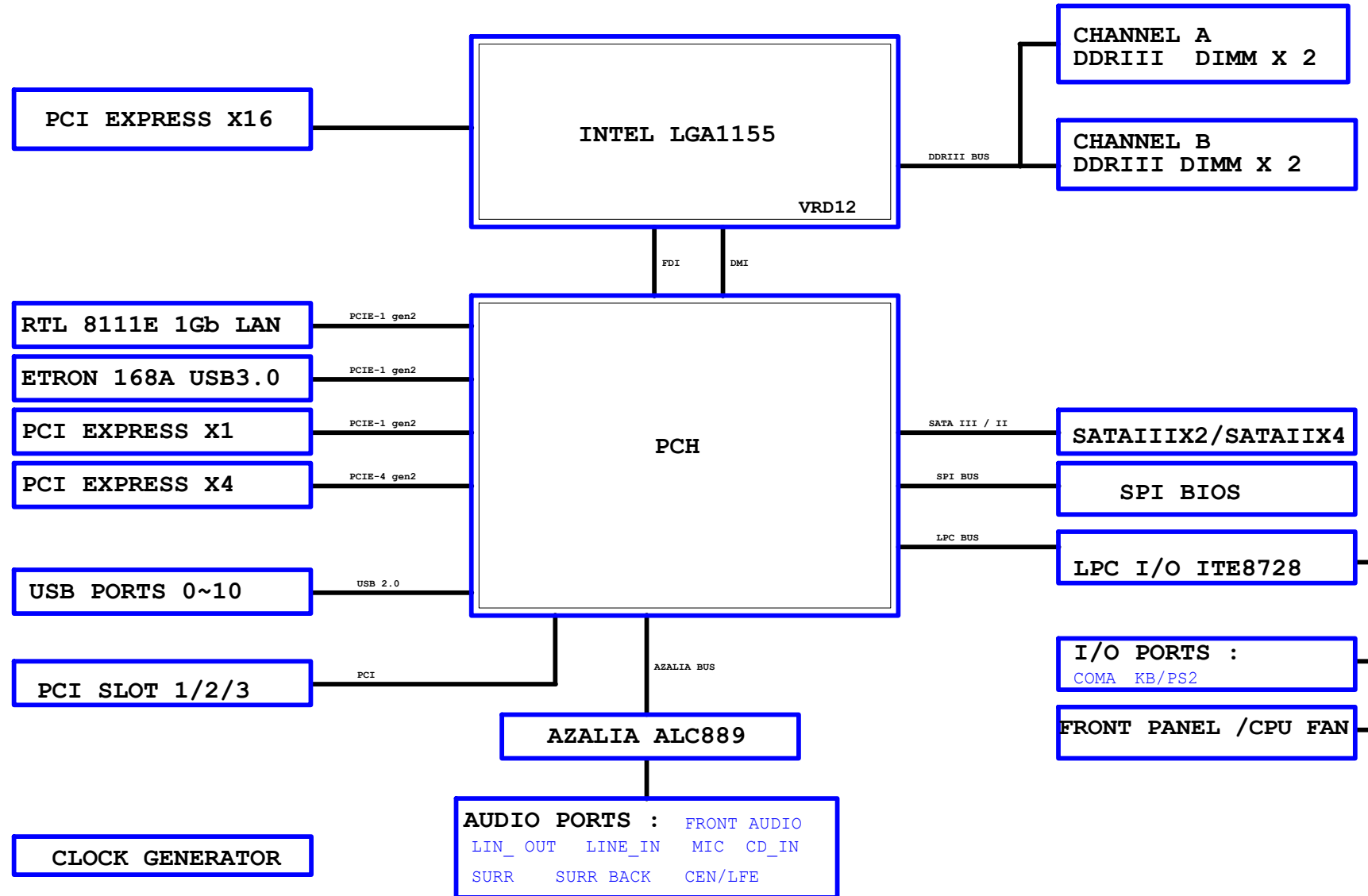
01	COVER SHEET
02	BOM & PCB MODIFY HISTORY
03	BLOCK DIAGRAM
04	CPU LGA1155-A
05	CPU LGA1155-B
06	CPU LGA1155-C
07	DDR III CHANNEL A
08	DDR III CHANNEL B
09	PCH FDI,DMI,USB,PCIE,NVRAM
10	PCH DP,CLK BUFFER
11	PCH HOST,SATA,PCI
12	PCH GPIO,CTRL,AUDIO
13	PCH PWR,GND
14	PCI EXPRESS*16 SLOT
15	PCI EXPRESSX4 SLOT / PCIE X1 SLOT
16	IT8892
17	PCI SLOT 1&2&3
18	I/O ITE8728
19	COM, LPT, TPM
20	Dual BIOS
21	ALC889
22	REAR AUDIO JACK
23	VCORE PWM ISL6364CRZ-1
24	VCORE PWM ISL6364CRZ-2
25	DISCRETE POWER
26	DDR 15V & VCC1 05 PCH PWM ISL6545CBZ
27	CPU VTT PWM ISL95870

28	VCCSA POWER
29	F PANEL , F USB
30	ATX POWER, CLOCK GEN
31	HWM,KB/MS , FAN CTRL
32	REALTEK RTL8111E
33	ETRON 168A
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Gigabyte Technology			
Title	Cover Sheet		
Size	Document Number	GA-P67A-D3-B3	Rev
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BLOCK DIAGRAM



LGA1155A

MAAA0	AV27	SA_MA[0]
MAAA1	AV24	SA_MA[1]
MAAA2	AW24	SA_MA[2]
MAAA3	AW23	SA_MA[3]
MAAA4	AV23	SA_MA[4]
MAAA5	AT23	SA_MA[5]
MAAA6	AT24	SA_MA[6]
MAAA7	AU22	SA_MA[7]
MAAA8	AV22	SA_MA[8]
MAAA9	AT22	SA_MA[9]
MAAA10	AV28	SA_MA[10]
MAAA11	AU21	SA_MA[11]
MAAA12	AT21	SA_MA[12]
MAAA13	AW32	SA_MA[13]
MAAA14	AU20	SA_MA[14]
MAAA15	AT20	SA_MA[15]

7	-SWEA	-SWEA	AW29	SA_WE#
7	-SCASA	-SCASA	AV30	SA_CAS#
7	-SRASA	-SRASA	AU28	SA_RAS#
7	SBA00	SBA00	AY29	SA_BS[0]
7	SBA01	SBA01	AW28	SA_BS[1]
7	SBA02	SBA02	AV20	SA_BS[2]
7	-CSA0	-CSA0	AU29	SA_CS#
7	-CSA1	-CSA1	AV32	SA_CS#
7	-CSA2	-CSA2	AW30	SA_CS#
7	-CSA3	-CSA3	AU33	SA_CS#
7	CKEA0	CKEA0	AV19	SA_CKE[0]
7	CKEA1	CKEA1	AT19	SA_CKE[1]
7	CKEA2	CKEA2	AU18	SA_CKE[2]
7	CKEA3	CKEA3	AV18	SA_CKE[3]
7	MODT_A0	MODT_A0	AV31	SA_ODT[0]
7	MODT_A1	MODT_A1	AU32	SA_ODT[1]
7	MODT_A2	MODT_A2	AU30	SA_ODT[2]
7	MODT_A3	MODT_A3	AW33	SA_ODT[3]

7	DCLKA0	DCLKA0	AY25	SA_CK[0]
7	-DCLKA0	-DCLKA0	AW25	SA_CK[0]
7	DCLKA1	DCLKA1	AU24	SA_CK[1]
7	-DCLKA1	-DCLKA1	AU25	SA_CK[1]
7	DCLKA2	DCLKA2	AW27	SA_CK[2]
7	-DCLKA2	-DCLKA2	AY27	SA_CK[2]
7	DCLKA3	DCLKA3	AV26	SA_CK[3]
7	-DCLKA3	-DCLKA3	AW26	SA_CK[3]

7,8	-DDR3_RST	TR1	0.1uH/4X7R/16V/K/K
		TBC9	0.1uH/4X7R/16V/K/K

AV13	SA_DQS[8]
AV12	SA_DQS[9]
AU12	SA_ECC_CB[0]
AU14	SA_ECC_CB[1]
AW13	SA_ECC_CB[2]
AY13	SA_ECC_CB[3]
AU13	SA_ECC_CB[4]
AW11	SA_ECC_CB[5]
AY12	SA_ECC_CB[6]
AW12	SA_ECC_CB[7]

DDR_0

1 OF 10

LGA1155[10SC1-F01155-01R]

LGA1155B

MAAB0	AK24	SB_MA[0]
MAAB1	AM20	SB_MA[1]
MAAB2	AM19	SB_MA[2]
MAAB3	AK18	SB_MA[3]
MAAB4	AP19	SB_MA[4]
MAAB5	AP18	SB_MA[5]
MAAB6	AM18	SB_MA[6]
MAAB7	AL18	SB_MA[7]
MAAB8	AN18	SB_MA[8]
MAAB9	AV17	SB_MA[9]
MAAB10	AN20	SB_MA[10]
MAAB11	AU17	SB_MA[11]
MAAB12	AT18	SB_MA[12]
MAAB13	AR26	SB_MA[13]
MAAB14	AT18	SB_MA[14]
MAAB15	AV16	SB_MA[15]

8	-SWEB	-SWEB	AR29	SB_WE#
8	-SCASB	-SCASB	AK25	SB_CAS#
8	-SRASB	-SRASB	AP24	SB_RAS#
8	SBAB0	SBAB0	AP24	SB_BS[0]
8	SBAB1	SBAB1	AW17	SB_BS[1]
8	SBAB2	SBAB2	AW17	SB_BS[2]
8	-CSB0	-CSB0	AN25	SB_CS#
8	-CSB1	-CSB1	AN25	SB_CS#
8	-CSB2	-CSB2	AT26	SB_CS#
8	-CSB3	-CSB3	AT26	SB_CS#
8	CKEB0	CKEB0	AU18	SB_CKE[0]
8	CKEB1	CKEB1	AY15	SB_CKE[1]
8	CKEB2	CKEB2	AW15	SB_CKE[2]
8	CKEB3	CKEB3	AY15	SB_CKE[3]

MODT_B0	AL26	SB_ODT[0]
MODT_B1	AP28	SB_ODT[1]
MODT_B2	AK28	SB_ODT[2]
MODT_B3	AK28	SB_ODT[3]

8	DCLKB0	DCLKB0	AL21	SB_CK[0]
8	-DCLKB0	-DCLKB0	AL22	SB_CK[0]
8	DCLKB1	DCLKB1	AK20	SB_CK[1]
8	-DCLKB1	-DCLKB1	AK20	SB_CK[1]
8	DCLKB2	DCLKB2	AL23	SB_CK[2]
8	-DCLKB2	-DCLKB2	AP21	SB_CK[2]
8	DCLKB3	DCLKB3	AN21	SB_CK[3]
8	-DCLKB3	-DCLKB3	AN21	SB_CK[3]

8	VREF_DQB	AH1	FC_AH1
7	VREF_DQA	AH4	FC_AH4

AN16	SB_DQS[9]
AN15	SB_DQS[8]

AL16	SB_ECC_CB[0]
AL15	SB_ECC_CB[1]
AR16	SB_ECC_CB[2]
AL15	SB_ECC_CB[3]
AL15	SB_ECC_CB[4]
AL15	SB_ECC_CB[5]
AL15	SB_ECC_CB[6]
AL15	SB_ECC_CB[7]

AH7	DQS80
AH6	DQS80

AG7	MD80
AG8	MD81
AJ8	MD82
AJ8	MD83
AG6	MD84
AG6	MD85
AJ6	MD86
AJ7	MD87
AM8	DQS81
AJ8	DQS81
AL7	MD88
AM7	MD89
AM10	MD90
AL10	MD91
AL9	MD92
AL9	MD93
AL9	MD94
AM9	MD95

AR8	DQS82
AP8	DQS82
AP7	MD96
AR7	MD97
AP10	MD98
AR10	MD99
AP6	MD100
AR6	MD101
AP9	MD102
AR9	MD103

AN13	DQS83
AN12	DQS83
AM12	MD104
AM13	MD105
AR13	MD106
AP13	MD107
AL12	MD108
AR12	MD109
AL12	MD110
AP12	MD111

AN29	DQS84
AN28	DQS84
AR28	MD112
AR29	MD113
AL28	MD114
AL29	MD115
AP28	MD116
AP29	MD117
AM28	MD118
AM29	MD119

AP32	MD120
AP31	MD121
AP34	MD122
AR31	MD123
AR32	MD124
AL31	MD125
AL32	MD126
AP33	MD127
AP34	MD128

AP32	MD129
AP31	MD130
AP34	MD131
AR31	MD132
AR32	MD133
AL31	MD134
AL32	MD135
AP33	MD136
AP34	MD137

AP32	MD138
AP31	MD139
AP34	MD140
AR31	MD141
AR32	MD142
AL31	MD143
AL32	MD144
AP33	MD145
AP34	MD146

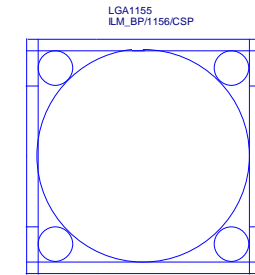
AL33	MD147
AM33	DQS86
AM32	MD148
AM31	MD149
AL35	MD150
AL32	MD151
AM34	MD152
AL31	MD153
AM35	MD154

AL34	MD155
AG35	DQS87
AG34	DQS87
AH35	MD156
AH34	MD157
AE34	MD158
AE35	MD159
AJ35	MD160
AJ34	MD161
AE33	MD162
AE35	MD163

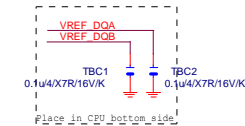
DDR_1

2 OF 10

LGA1155[10SC1-F01155-01R]



Need check the new CPU ME

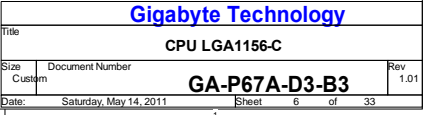


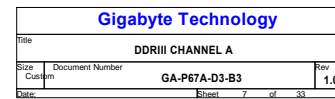
Gigabyte Technology

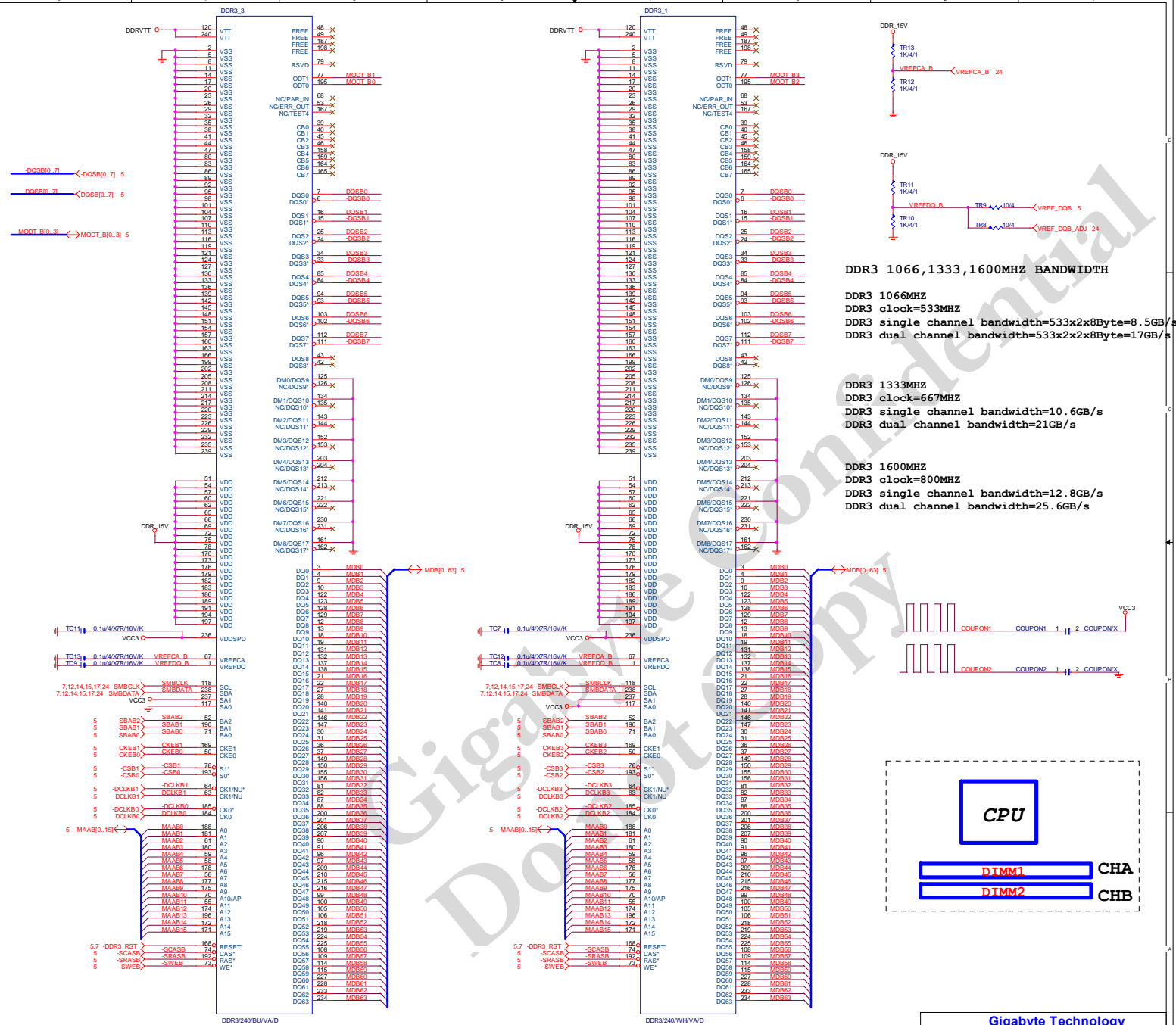
CPU LGA1155-B

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Size	Custom	1.01
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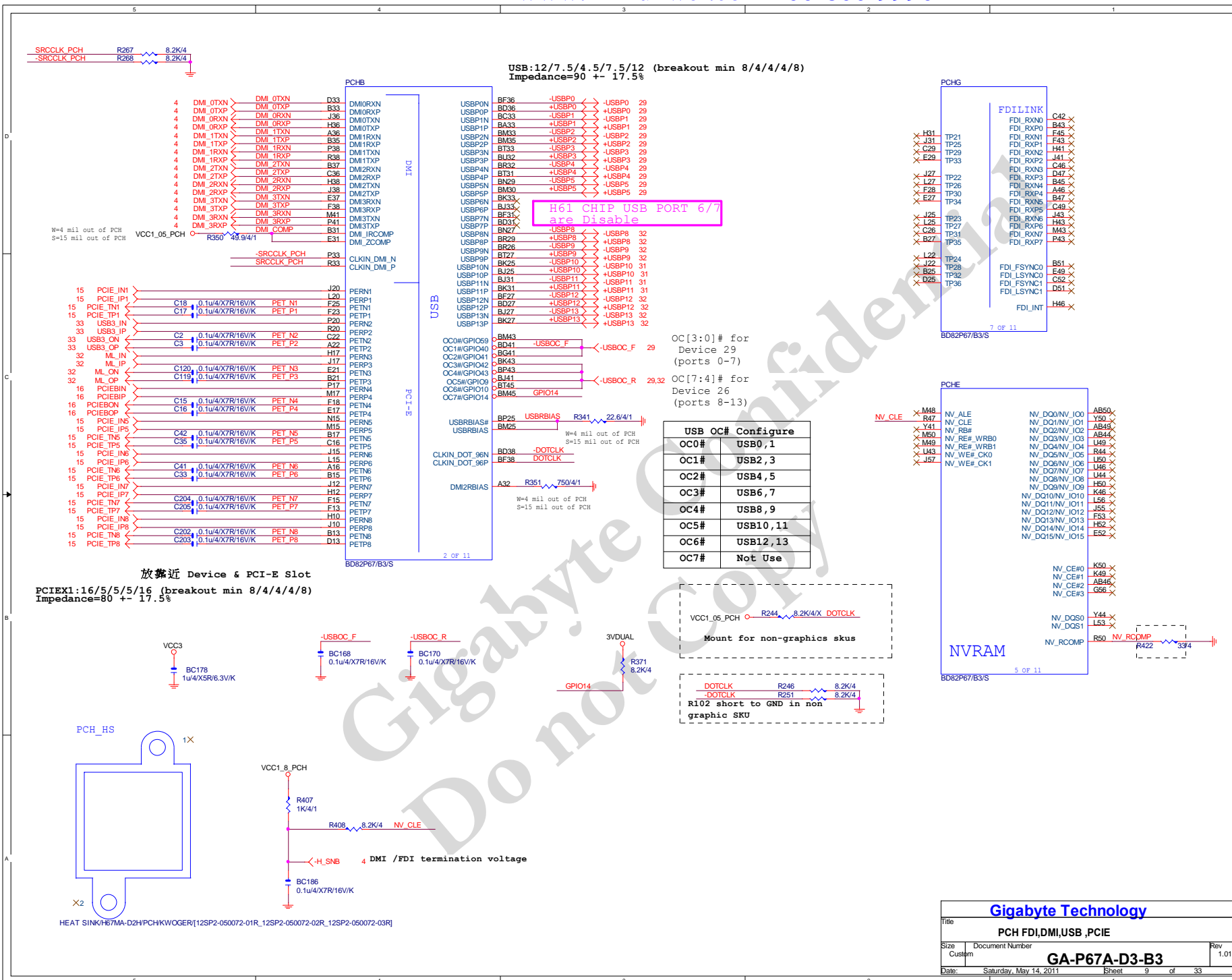
GA-P67A-D3-B3

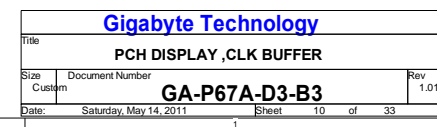






Gigabyte Technology			
Title DDRIII CHANNEL B			
Size Custom	Document Number GA-P67A-D3-B3		Rev 1.0
Date:	Sheet	8	of 33





SATA:20/4.5/7.5/4.5/20 (breakout min 8/4/4/8)
Impedance=90 +- 17.5%

PCHC

CLINK

SATA3

SATA2

FAN

SST

GPIO

HOST

BD82P67/B3/S

3 OF 11

NC_5

AY20

GPIO07

GPIO08

GPIO09

GPIO10

GPIO11

GPIO12

GPIO13

GPIO14

GPIO15

GPIO16

GPIO17

GPIO18

GPIO19

GPIO20

GPIO21

GPIO22

GPIO23

GPIO24

GPIO25

GPIO26

GPIO27

GPIO28

GPIO29

GPIO30

GPIO31

GPIO32

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GPIO220

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GPIO224

GPIO225

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GPIO227

GPIO228

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GPIO230

GPIO231

GPIO232

GPIO233

GPIO234

GPIO235

GPIO236

GPIO237

GPIO238

GPIO239

GPIO240

GPIO241

GPIO242

GPIO243

GPIO244

GPIO245

GPIO246

GPIO247

GPIO248

GPIO249

GPIO250

GPIO251

GPIO252

GPIO253

GPIO254

GPIO255

GPIO256

GPIO257

GPIO258

GPIO259

GPIO260

GPIO261

GPIO262

GPIO263

GPIO264

GPIO265

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GPIO272

GPIO273

GPIO274

GPIO275

GPIO276

GPIO277

GPIO278

GPIO279

GPIO280

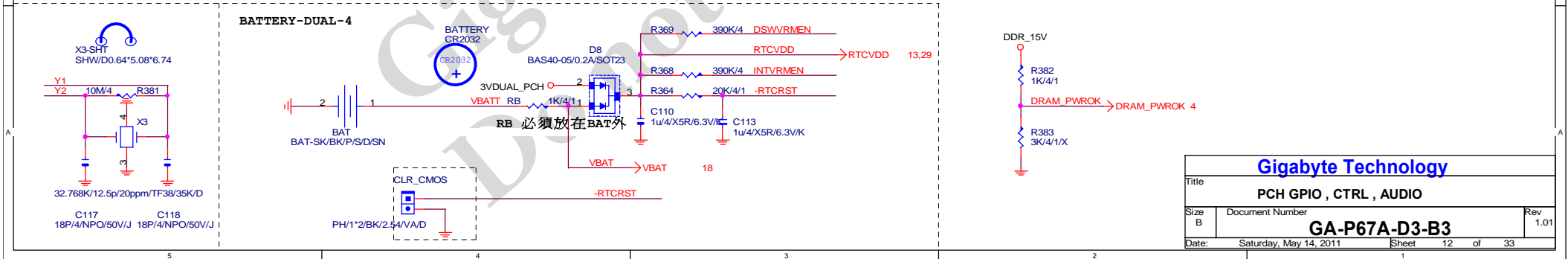
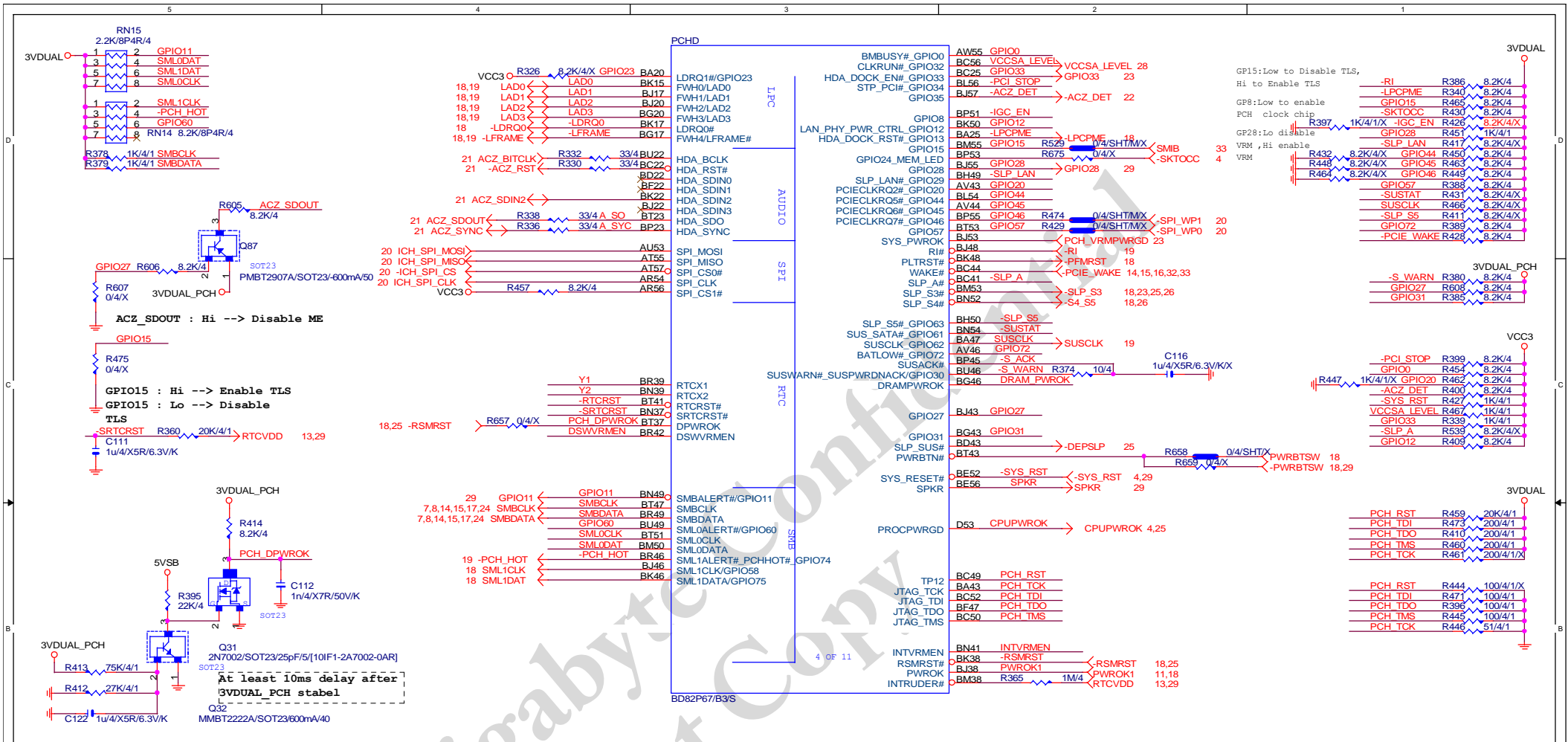
GPIO281

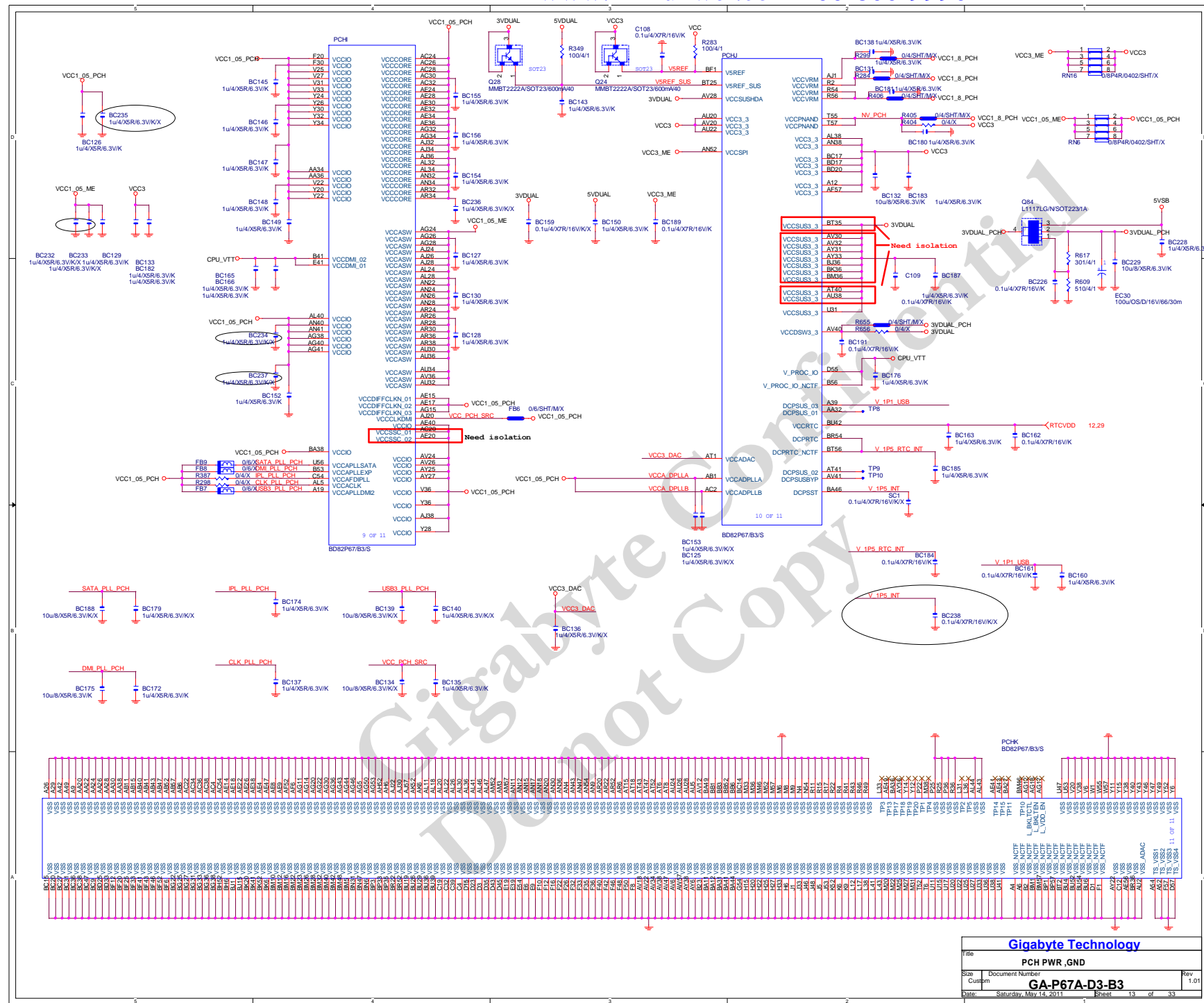
GPIO282

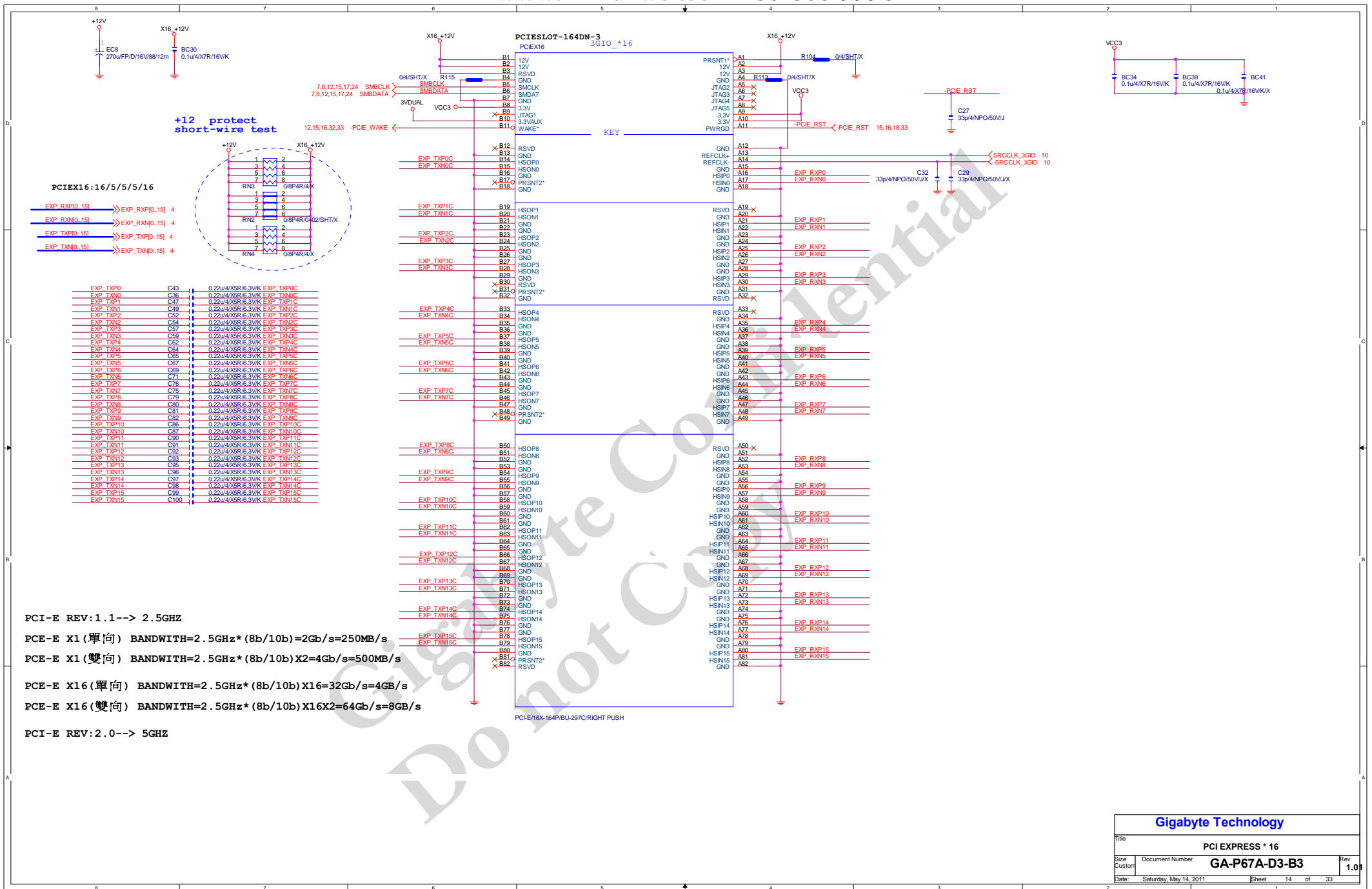
GPIO283

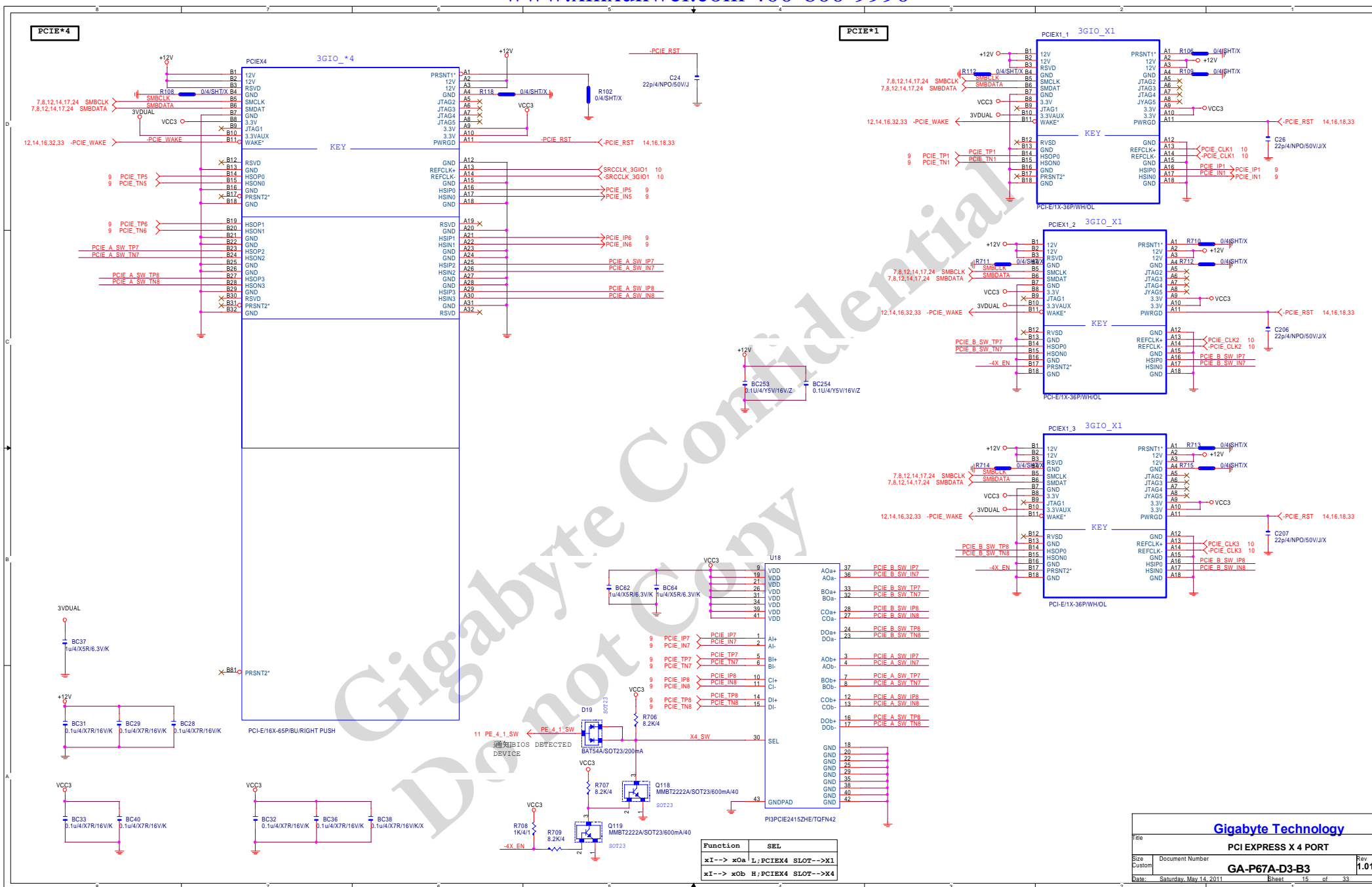
GPIO284

GPIO285

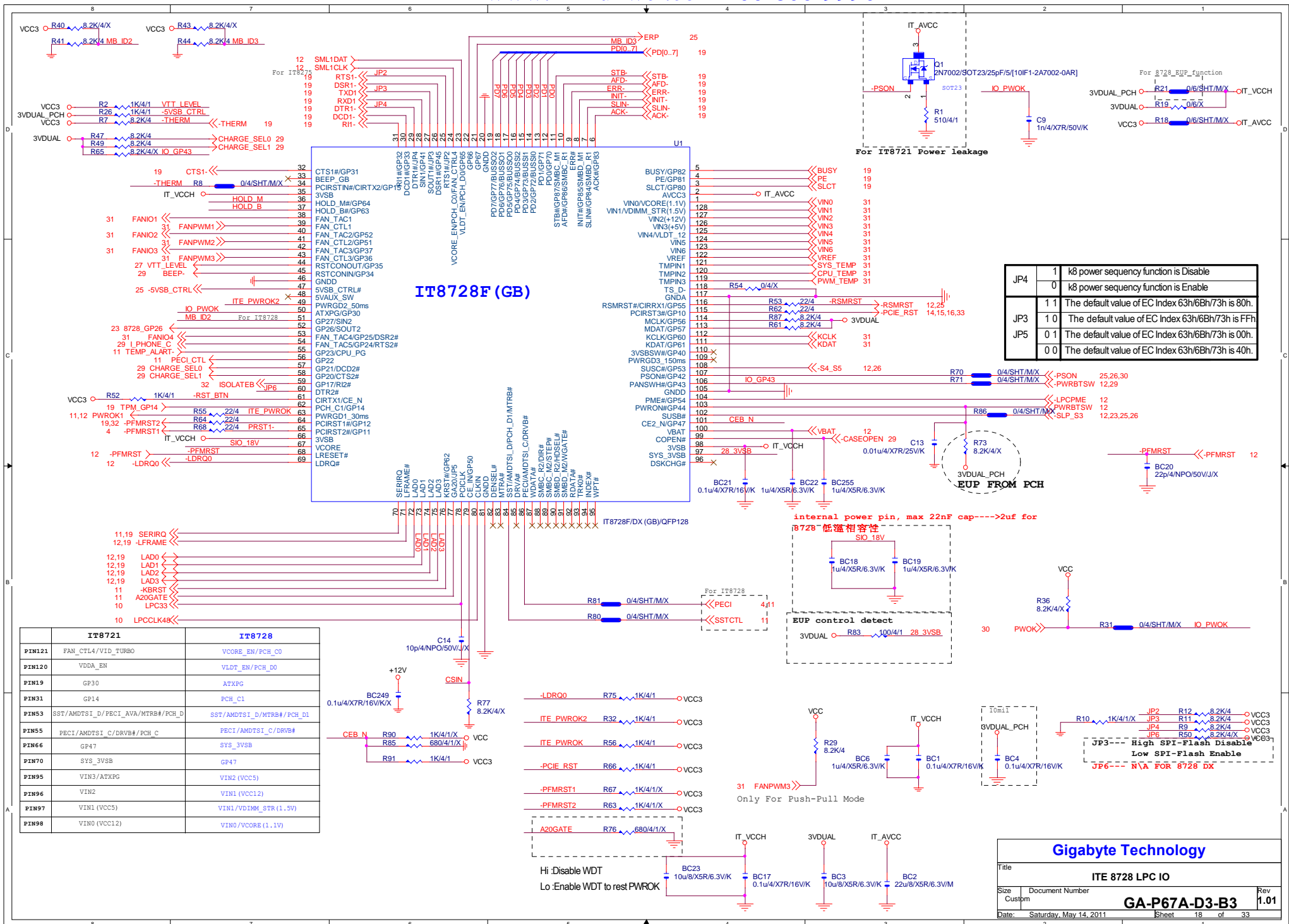


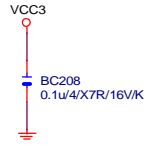






Gigabyte Technology			
Title			
ITE 8892			
Size	Document Number	Rev	
Custom	GA-P67A-D3-B3	1.01	
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Gigabyte Technology

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CR26: 20K/4/0.1% @ALC889A
CR26: 20K/4/1% @others

CR34 20K/4/1

For ALC888-VD/ALC892

CR3 0/4/X → VOCR

AVDD 22

CBC12 0.1u/4/X7R/16V/K

CU1

ALC889A+

FRONT-R
FRONT-L
SENSE B (JD2)/FMIC1
DCVOL/VREF/VOUT2
MIC1-VREFO-R/FMIC2
LINE2-VREFO/JD4
MIC2-VREFO/AFILT2
LINE1-VREFO-L/AFILT1
MIC1-VREFO-L/VREFOUT
AVSS1
AVDD1

LINE1-VREFOR/VREFO3
AVSS2
SURR-R
SURR-L
SURR-D
SURR-U
AVDD2
JREF
CD-R
CD-L
CD-GND
MIC1-RMIC1
MIC1-LMIC2
LINE1-L
LINE1-R

ALC889-GR/S

CR4 47/4/1

FAUDIO_ID 22

CBC26 1n/4/X7R/50V/K

JD resistors close to pin34 of CODEC
Can Support Amp Out

CR28 8.2K/4/X AVDD
CR16 8.2K/4

VOVR

CR19 8.2K/4

VOBR

AVDD

CBC10 0.1u/4/X7R/16V/K

CBC7 22u/8/X5R/6.3V/M/X
CBC8 22u/8/X5R/6.3V/M

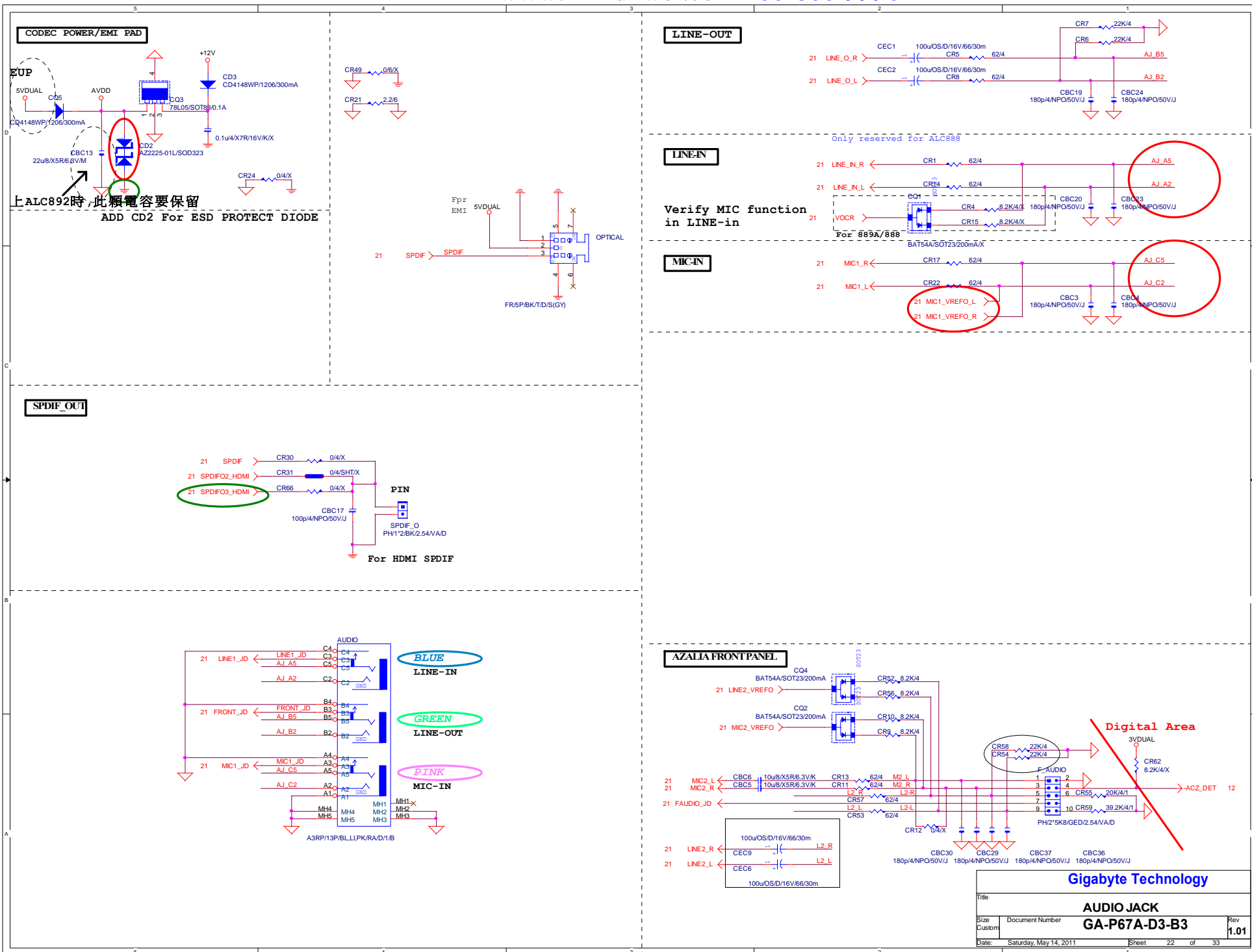
CD1 AZ2225-01L/SOD323/X

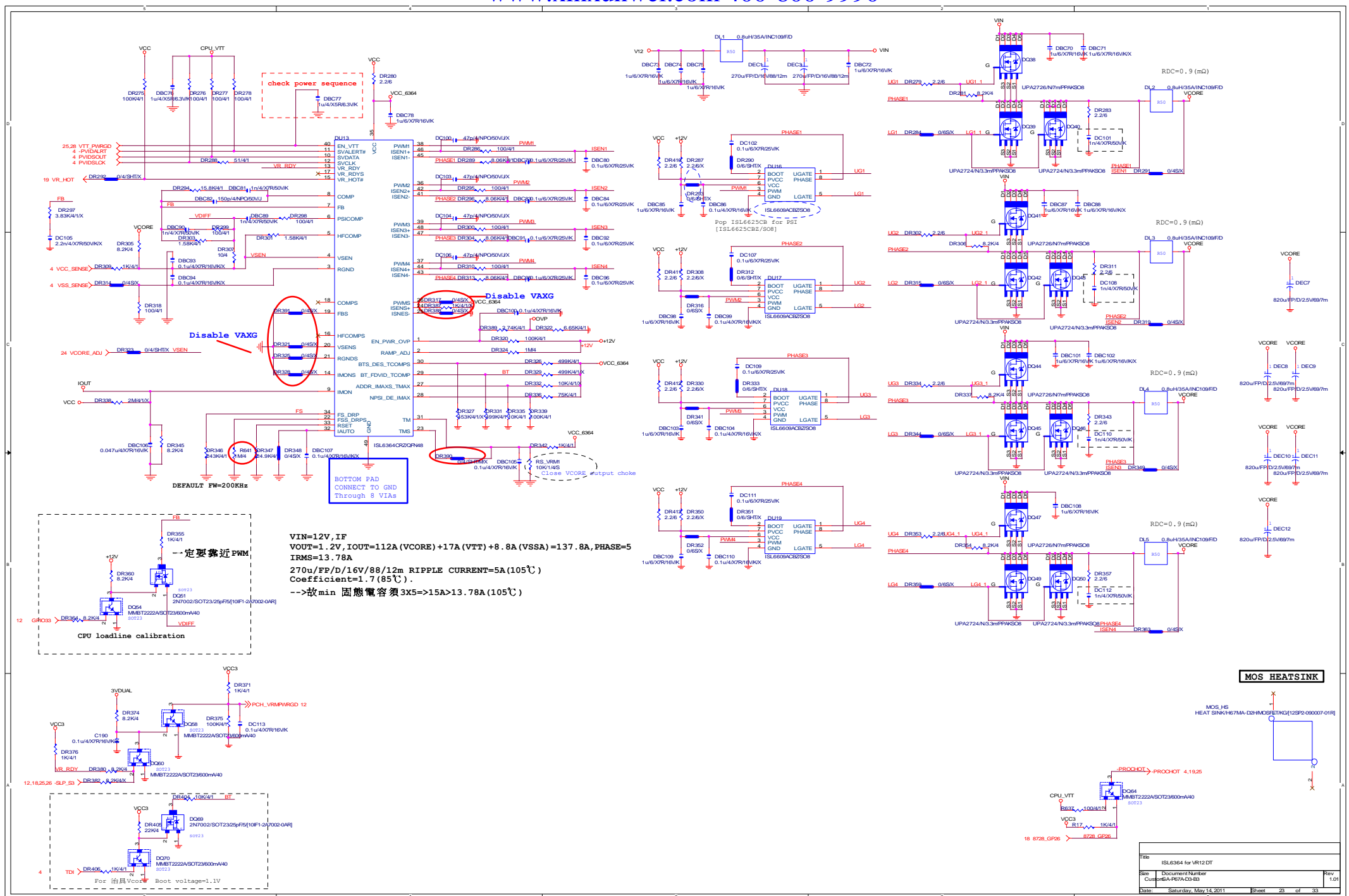
CR51 0/6/X CSVQUAL

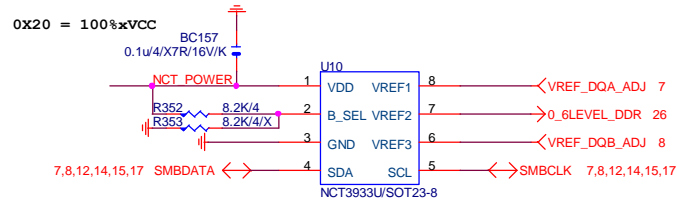
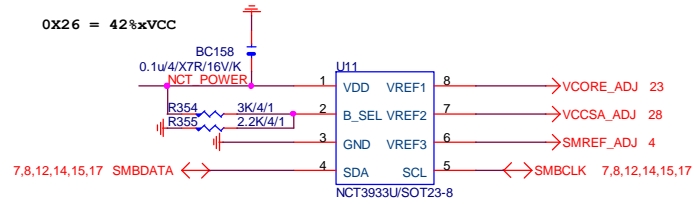
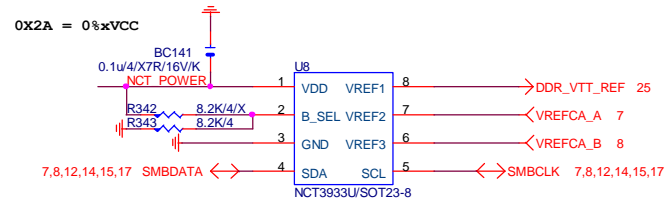
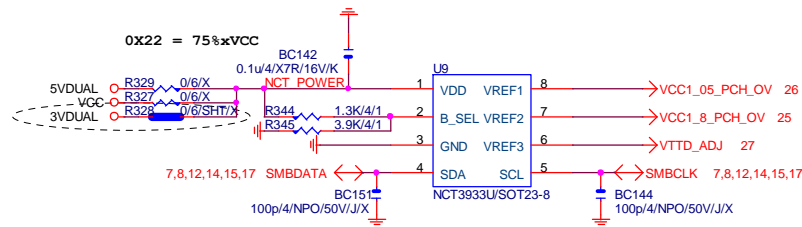
For ALC888-VD/ALC892

50歐姆: 4/10

CBC1 22u/8/X5R/6.3V/M LINE_IN_R 22
CBC2 22u/8/X5R/6.3V/M LINE_IN_L 22
CBC9 10u/8/X5R/6.3V/K MIC1_R 22
CBC11 10u/8/X5R/6.3V/K MIC1_L 22







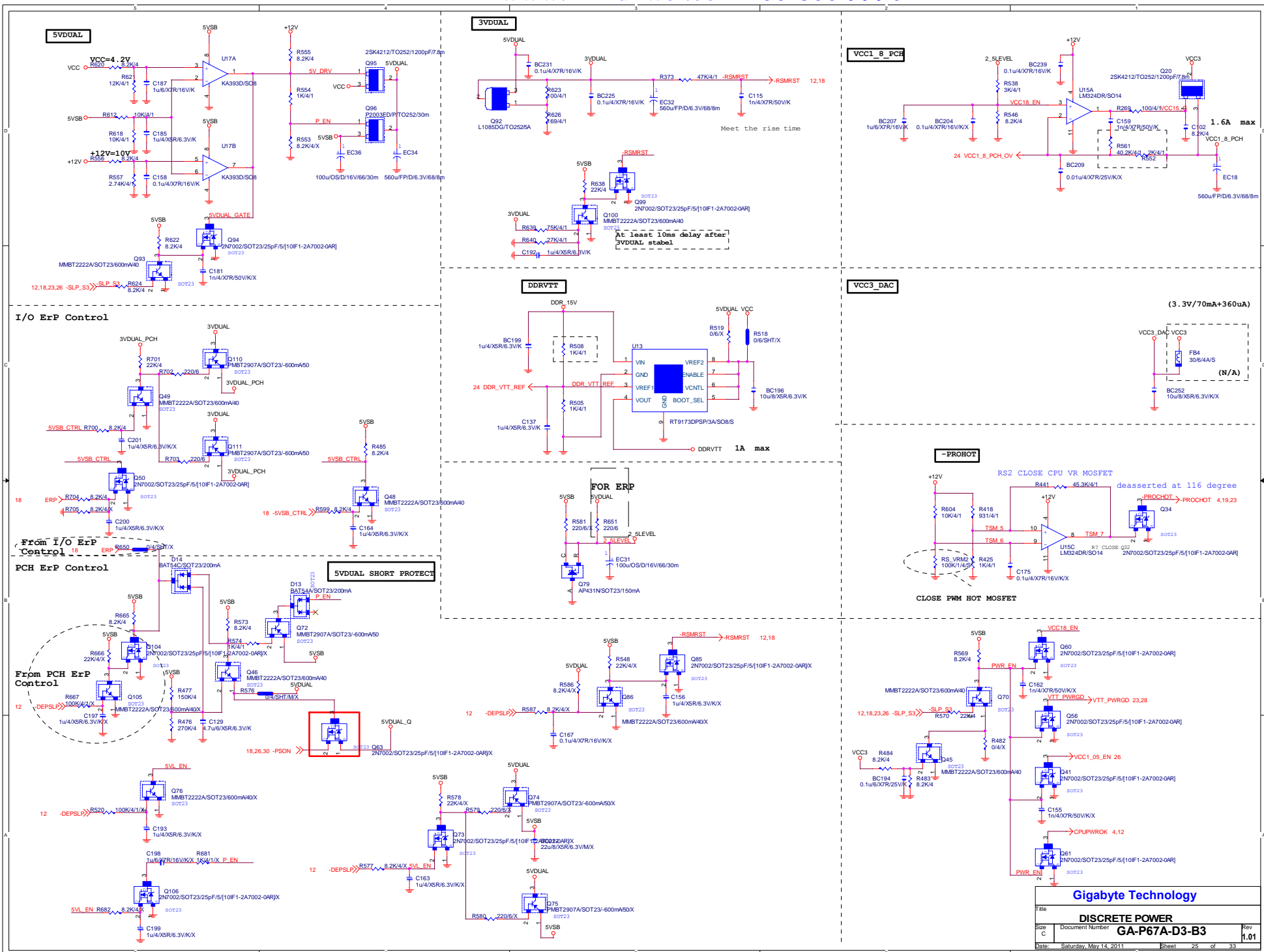
up6262	0X2A	0X20	0X22	0X26
VREF1	DDRVTT	VREF_DDRA_DQ	VCC1_05_PCH	VCORE
VREF2	VREF_DDRA_CA	DDR15V	VCC1_8_PCH	VCCSA
VREF3	VREF_DDRA_CAV	VREF_DDRB_DQ	CPU_VTT	SMREF

Gigabyte Technology

CPU CORE VR-2

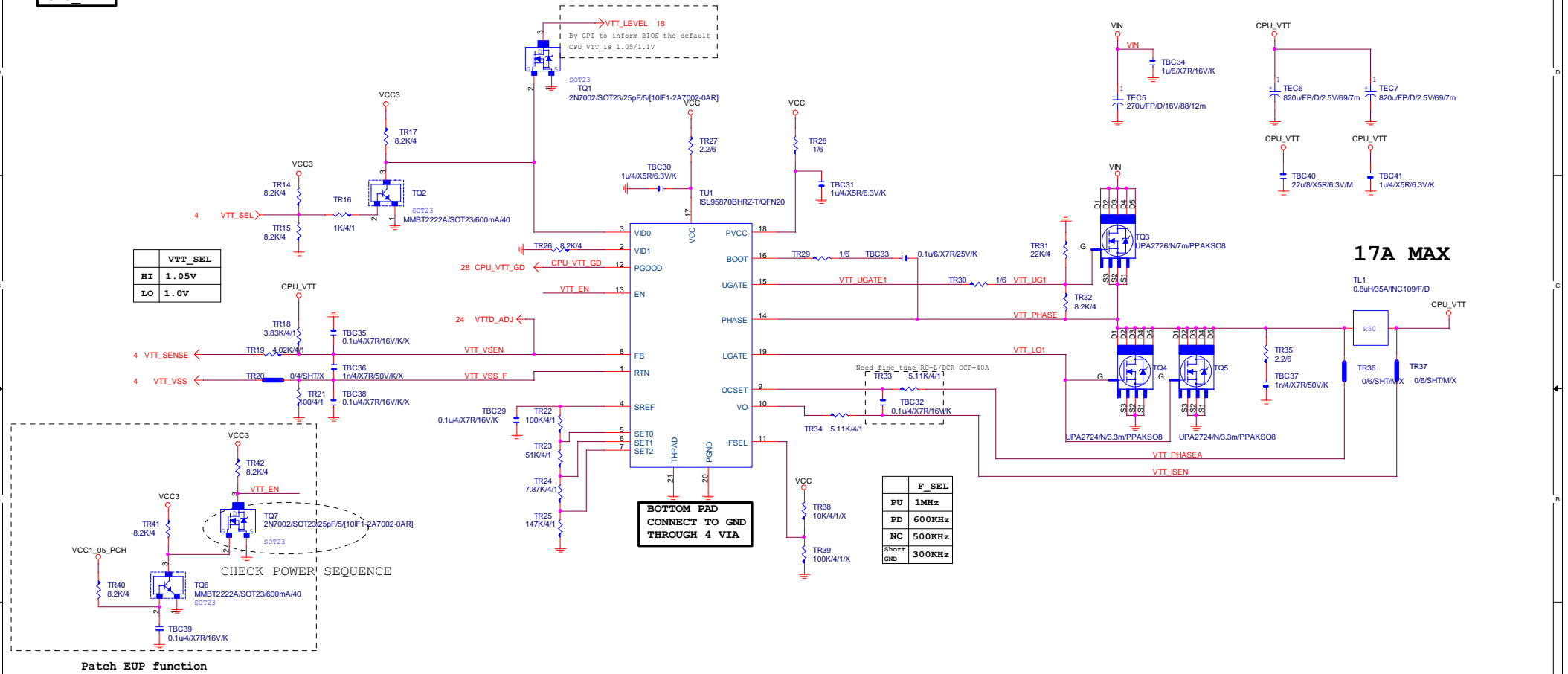
Size	Document Number	Rev
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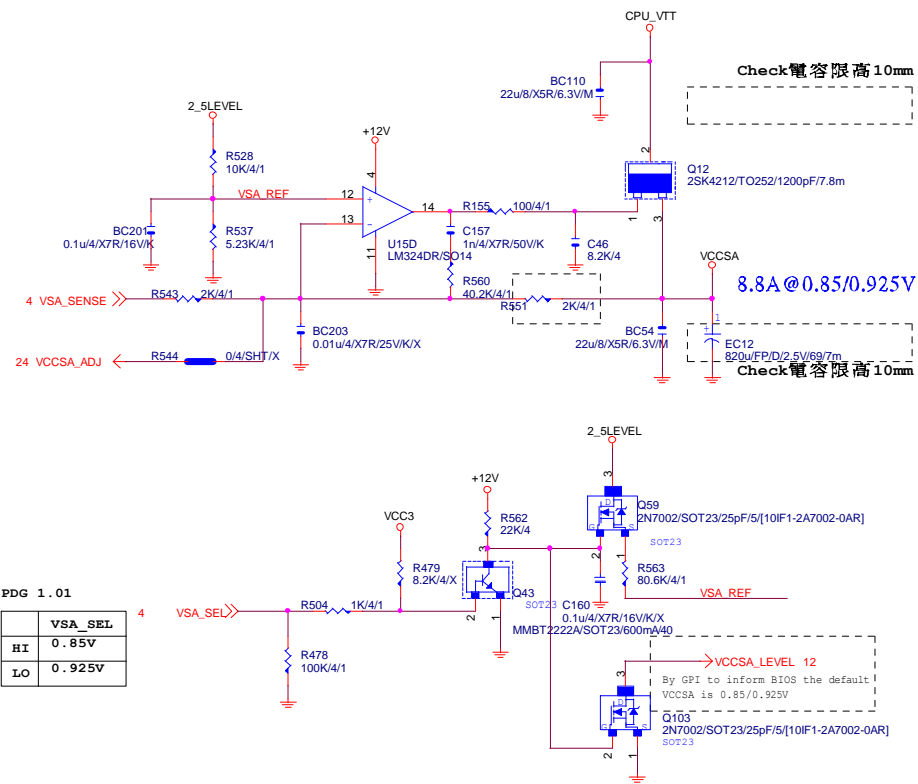
CPU_VTT

VTT_SEL	
HI	1.05V
LO	1.0V



Title CPU_VTT PWM_ISL95870		
Size Custom	Document Number GA-P67A-D3-B3	Rev 1.01
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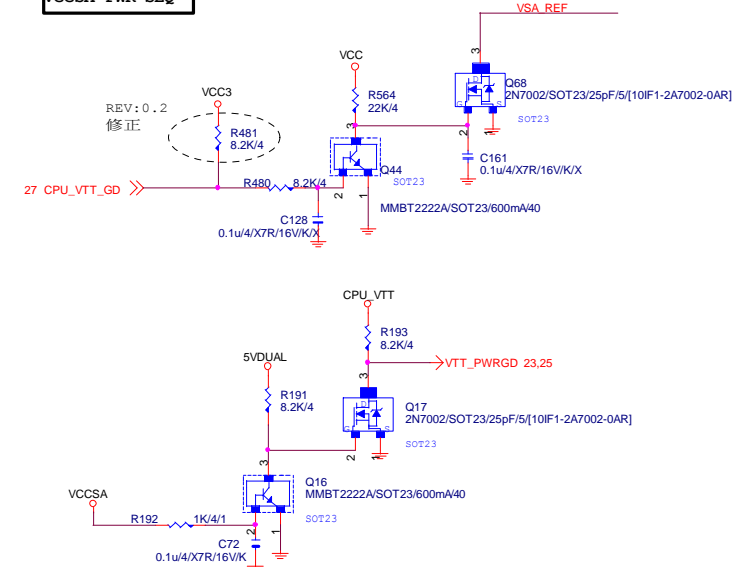
VCC_SA



PDG 1.01

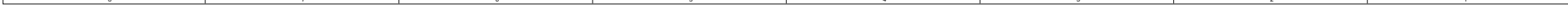
VSA_SEL	
HI	0.85V
LO	0.925V

VCCSA PWR SEQ

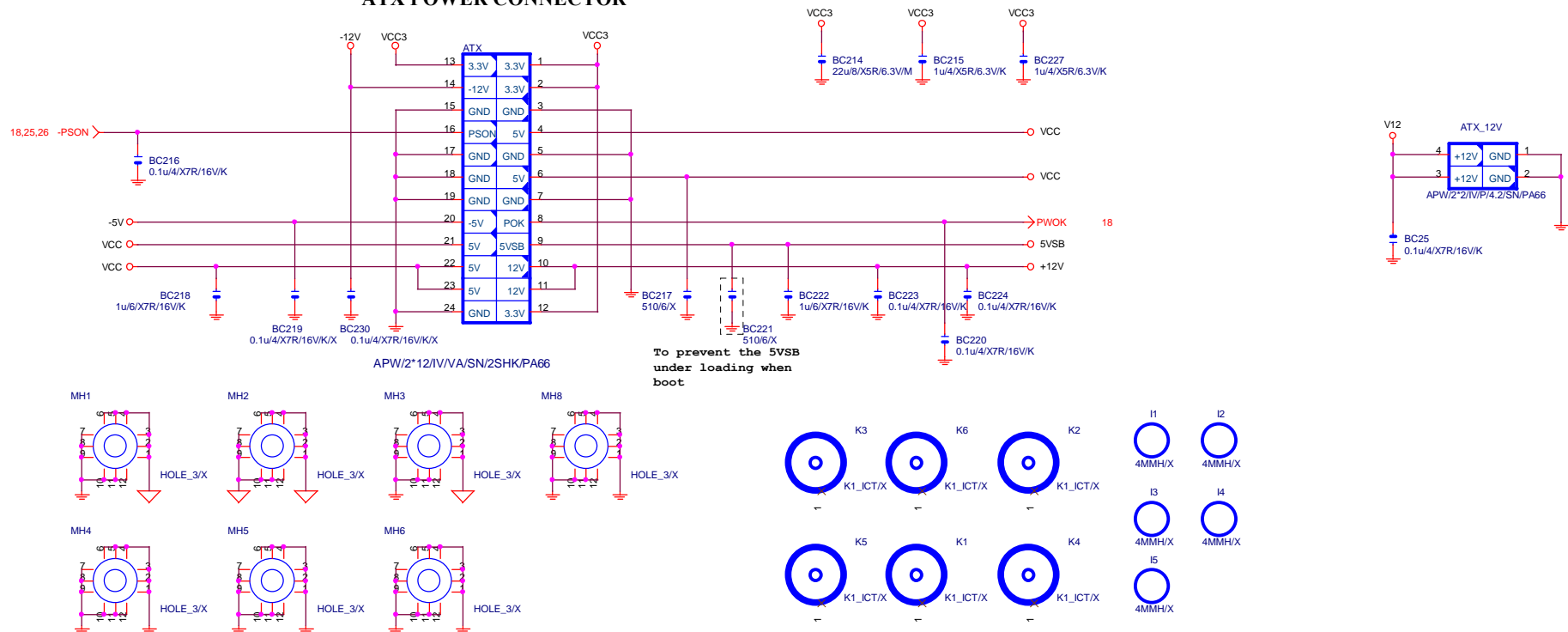


Gigabyte Technology

Title			
CPU VTT PWM_ISL6312			
Size	Document Number		Rev
Custom	GA-P67A-D3-B3		1.01
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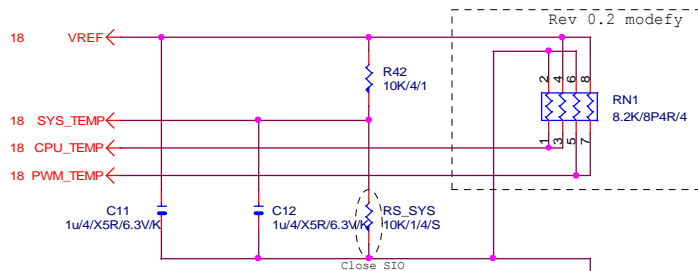


ATX POWER CONNECTOR

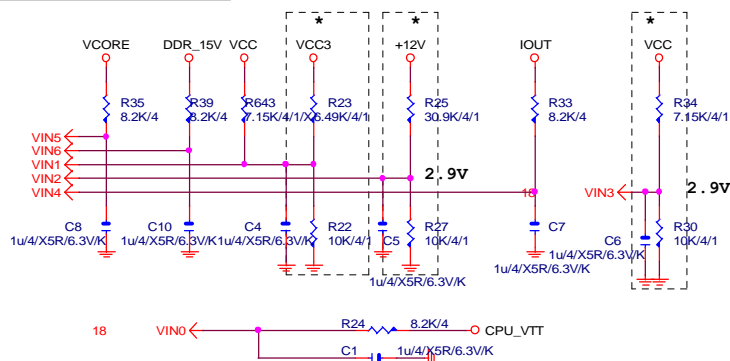


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ATX POWER CONNECTOR		
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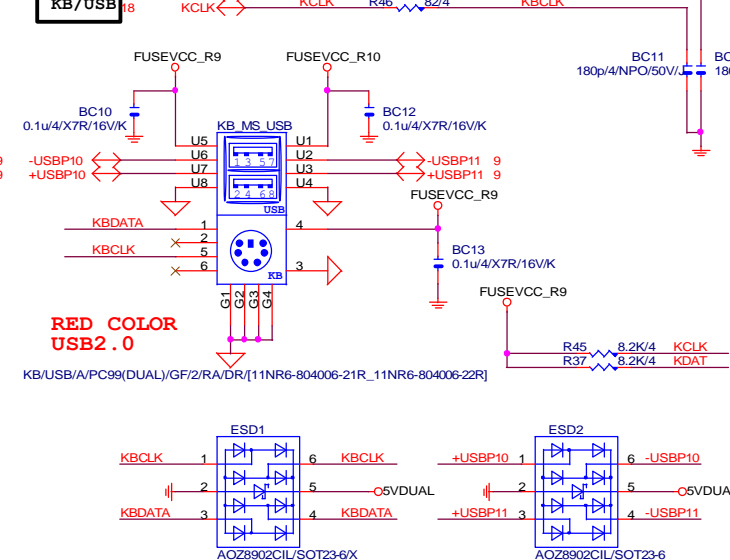
TEMP H/W MONITOR



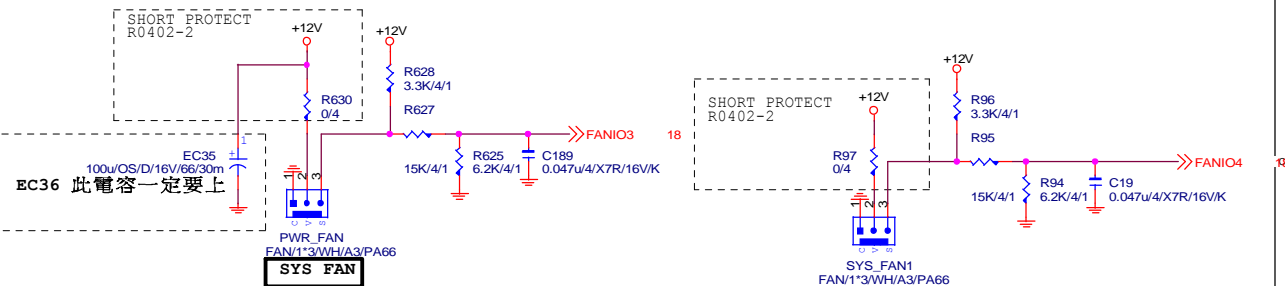
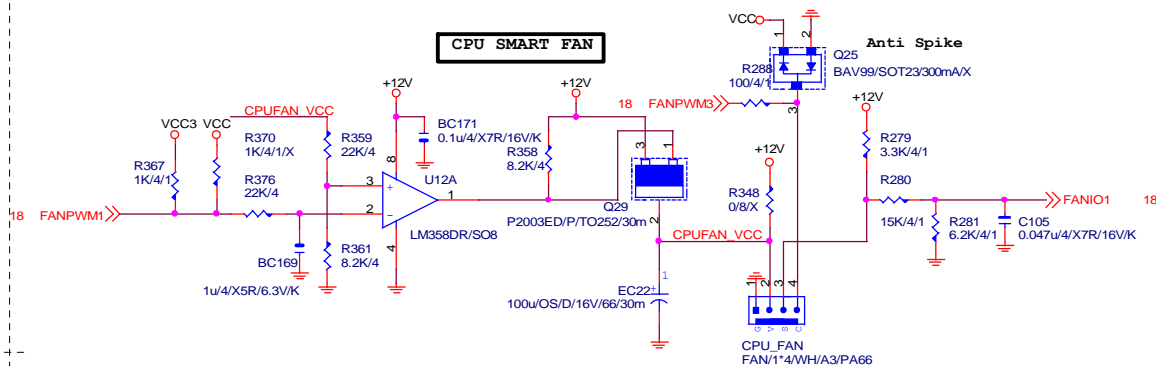
VOLTAGE-- H/W MONITOR



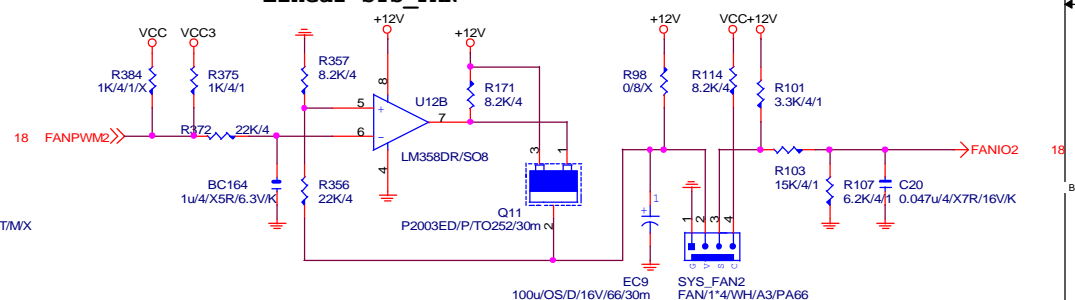
KB/USB



CPU SMART FAN

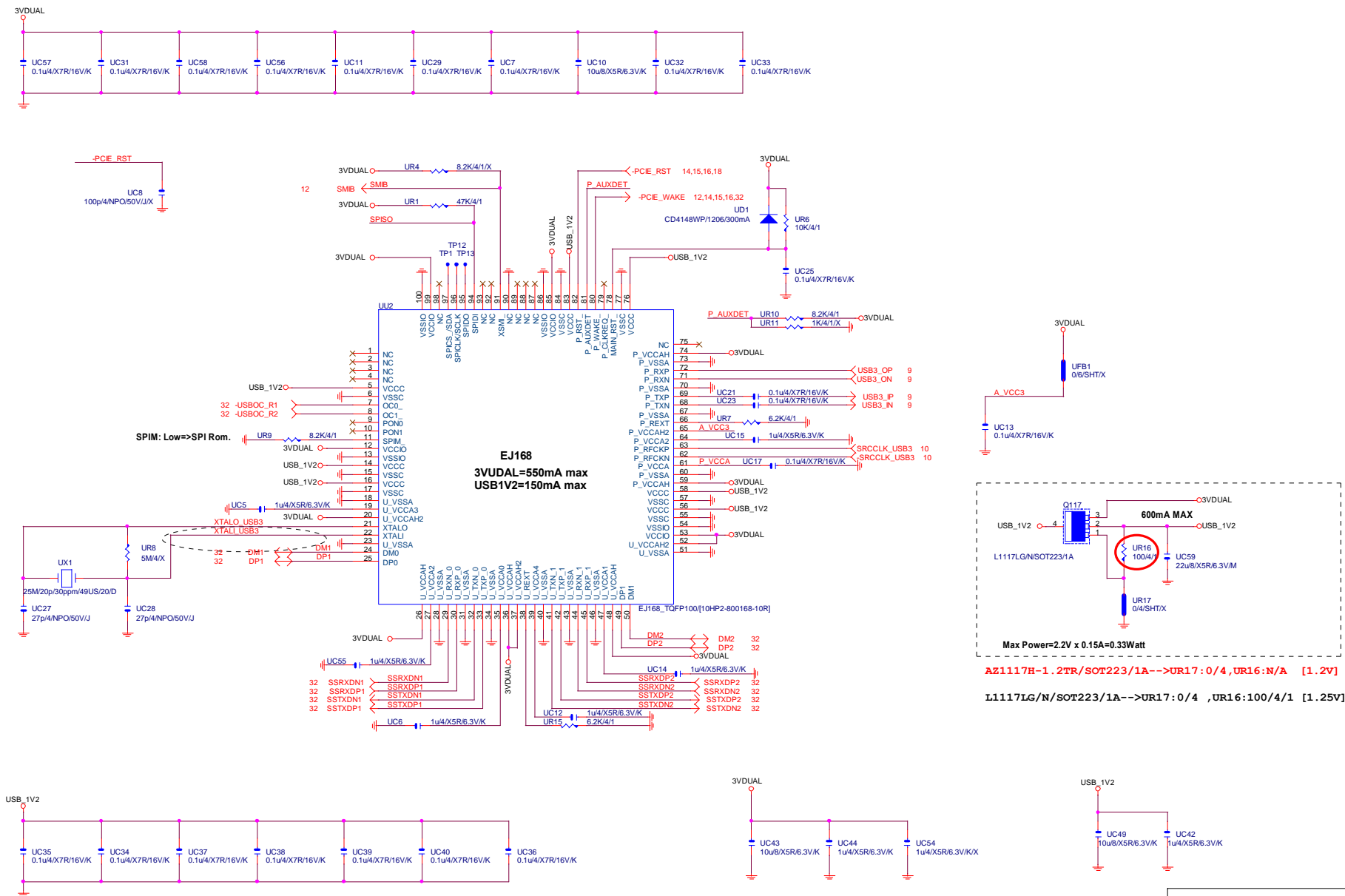


Linear SYS_FAN



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