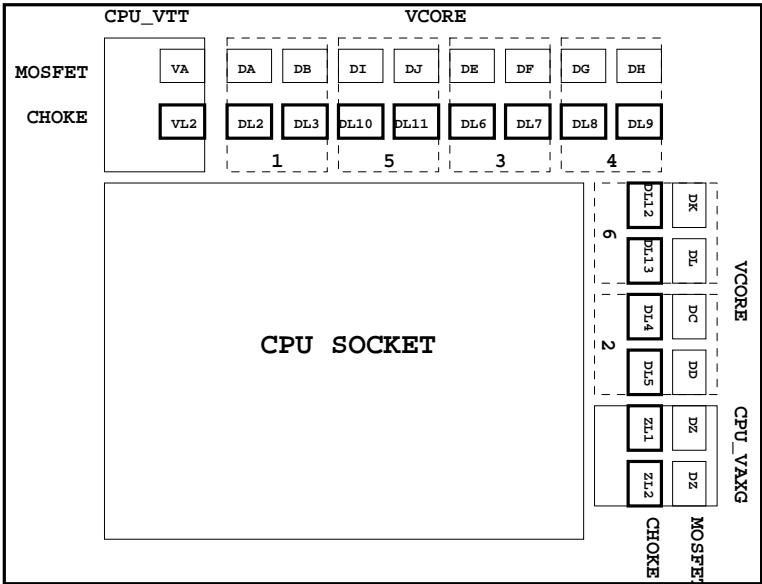


Model Name: GA-Z77X-UD5H-WB rev 1.1

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
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 EXPRESS*8 SLOT
16	PCI EXPRESS*4 SLOT
17	PCI EXPRESS*16/*8/*4 SWITCH
18	PCI EXPRESS*1 SLOTS X3
19	ITE 8892
20	PCI SLOT 1
21	HDMI / DVI / DP
22	MSATA
23	Dual BIOS
24	ALC898
25	REAR AUDIO JACK
26	AMPLIFIER
27	PWM_IR 3567A
28	IR 3598-VCORE POWER
29	IR 3598-VAXG POWER
30	PWM_IR 3570A
31	IR 3570A-VTT & DDR POWER
32	DISCRETE POWER I

SHEET	TITLE
33	VCCSA POWER
34	I/O ITE8728
35	F_PANEL , F_USB , -PHOT
36	F_USB3.0
37	ATX POWER, CLOCK GEN
38	HWM,KB/MS , FAN CTRL
39	ARTHEROS AR8161/AR8151
40	INTEL 82579V
41	Marvell 9172(F+R)
42	Marvell 9172(F)
43	VT6308P 1394
44	VL810 USB3_HUB1(R)
45	VL810 USB3_HUB1(F)
46	RST, PWR, CLR_CMOS
47	TABLE LIST
48	

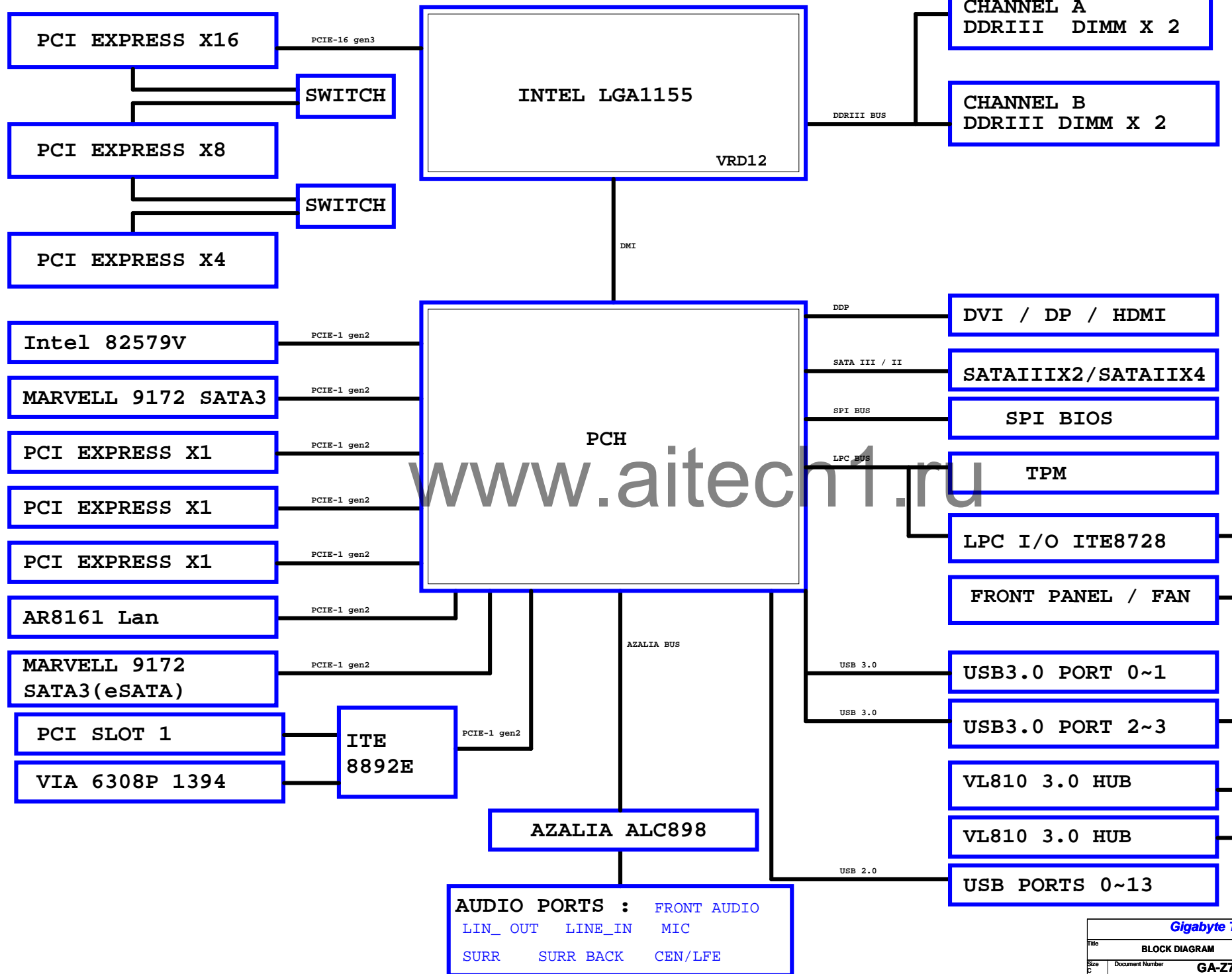


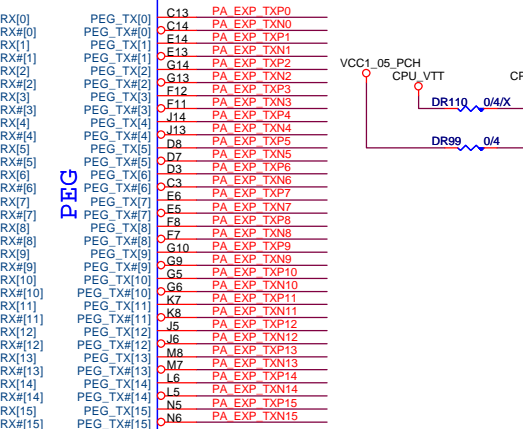
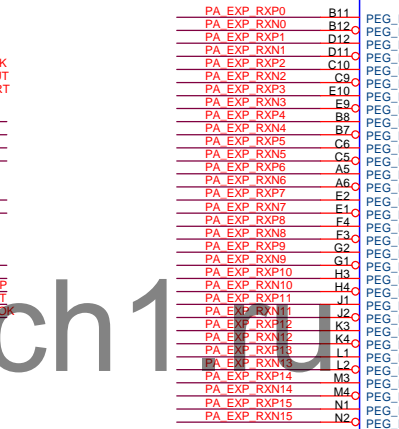
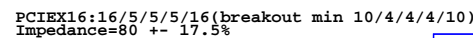
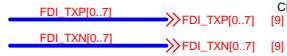
Component value change history

Data	Change Item	Reason
2011/02/10	0.2A	
	REMOVE Amplifier _ISL54405	
2012/01/03	1.0A-EBOM	
	vcore 改 上1下2	
	IT8892改FX	
	Vcore, VTT, vaxg circuit modify =>remove 3931	
2012/01/18	1.0	
	修改值for Magntiude Response高頻高於-1dB	
	改+12v driver piull high R=>0ohm	
	Q41=>MODIFY : SIR840DP/N/5.4m/PPAKSO-8/[10IF9-040393-01R] for on/off charge	
2012/01/19	1.01B	
	修改 PCB 文字面 "SYS_FAN 1", "SYS_FAN 2", "SYS_FAN 3""SYS_FAN 4"	
2012/01/30	1.01C	
	改PROCHOT 阻值	
	改driver串0 ohm to 5v	
	改choke : 0.36uH/38A/IGC109/FS/D/[11LC5-F3360B-01R]	
2012/02/03	1.01D	
	FOR Vcore and Vaxg bom modify	
	For dvi test add HR83	
2012/03/05	1.01E	
	ADD HR147 HR148 FOR VIA HUB USB3 LOSS ISSUE ;	
	ADD MB_ID2 ; H : VIA HUB reset L : 1.01	
2012/03/06	1.02J	
	ADD CPU CFG9 CTRIL	
	ADD DBC126 for EMI	
	ADD MB_ID3 H:Rev1.02	
	ADD MR14,MBC34,MBC35,MBC36,MR15	
2012/03/22	1.03K	
	Modify PCB	
2012/04/20	1.03N	
	Change to IR 3567A (DAU1),Del DAESD1,3570A (MAU40)	
	8728 SIO_18V Change to 0.1uF	
	AUDIO AP w/ inbox driver	
2012/05/09	MB_ID2 OR7->OR15	
2012/06/05	1.1A	
	LAN change to Atheros 8161 , LAR1->1%	
	Add GPIO17 , GPIO1 MB_ID , PCH Core R131-> X , R132->0	
	F.B 30,60 down size ,ATX PWOK Add 4.7u/6/XSR/6.3V/K + 0 ohm	
	Footprint ATX->ATXPWR_24-6 , ATX_12V_2X4->ATXPW2X4-6	
	R199->10K , R198->499 , change N_GPIO38 to standby pin,Add PR5 & OR173	
	VEC3 ,VEC4,VECS Change to 820u	
	IESD3 pin 5 change to FUSEVCC3,LGA1155 change to 12XRC-0F0001-23	
	VCORE,VAXG,DDR_15V,CPU_VTT Low size MOS and Q41 change to 10IF9-040393-11R	
	CFB2,LAFB3,CFB3,LAFB2,LAR5,RHFB2,RIFB2,change to 0402	
2012/07/25	1.1B	
	R191->12.7K PCH core Add 50mV , Del HP_FWR	

DATE	Change Item	Reason
2012/01/19	REV1.01 修改 PCB 文字面 "SYS_FAN 1", "SYS_FAN 2", "SYS_FAN 3""SYS_FAN 4"	
2012/03/02	REV1.02 修改DDR部分	
2012/03/21	REV1.03 修改文字面	
2012/06/04	REV1.1 Add GPIO17 , GPIO1 MB_ID F.B 30,60 down size ,ATX PWOK Add 4.7u/6/X5R/6.3V/K + 0 ohm Footprint ATX->ATXPWR_24-6 , ATX_12V_2X4->ATXPW2X4-6 change N_GPIO38 to standby pin,Add PR5 & OR173 IESD3 pin 5 change to FUSEVCC3 CFB2,LAFB3,CFB3,LAFB2,LAR5,RHFB2,RIFB2,change to 0402	

BLOCK DIAGRAM



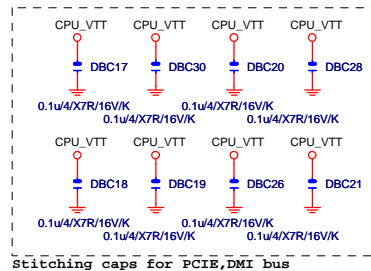
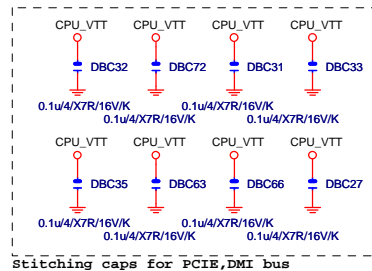
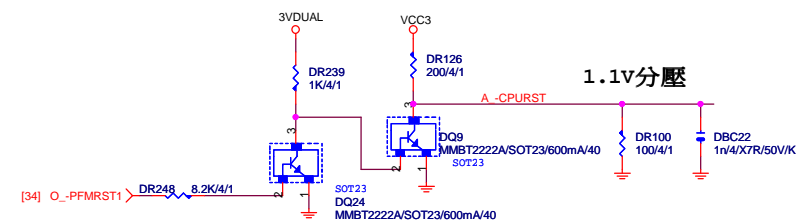
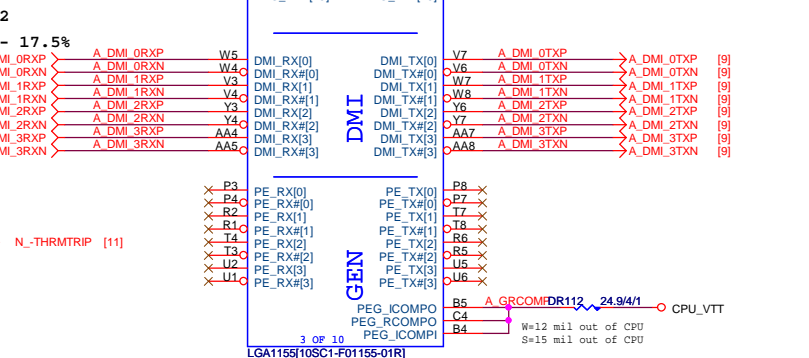
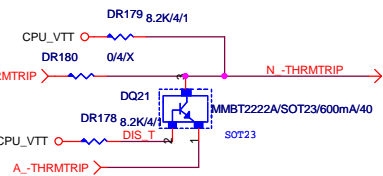
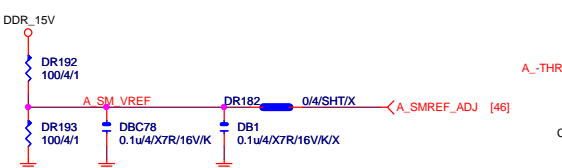


CFG6	CFG5	PCIe CONFIG
1	1	1x16 , Default
1	0	2X8
0	1	RSVD
0	0	X8,X4,X4

N_DRAM_PWROK

DBC34
100p4/NPO/50V/J/X

[12] PCH_GP45 DIS T



LGA1155A

M_AA0	AV27	SA_MA[0]	SA_DQS[0]	AK3	M_DQSA0
M_AA1	AY24	SA_MA[1]	SA_DQS[0]	AK2	M_DQSA0
M_AA2	AW24	SA_MA[2]			
M_AA3	AW23	SA_MA[3]			
M_AA4	AV23	SA_MA[4]	SA_DQ[0]	AJ3	M_DA0
M_AA5	AT24	SA_MA[5]	SA_DQ[1]	AJ4	M_DA1
M_AA6	AT23	SA_MA[6]	SA_DQ[2]	AL3	M_DA2
M_AA7	AU22	SA_MA[7]	SA_DQ[3]	AL4	M_DA3
M_AA8	AV22	SA_MA[8]	SA_DQ[4]	AJ2	M_DA4
M_AA9	AT22	SA_MA[9]	SA_DQ[5]	AJ1	M_DA5
M_AA10	AV28	SA_MA[10]	SA_DQ[6]	AL2	M_DA6
M_AA11	AU21	SA_MA[11]	SA_DQ[7]	AL1	M_DA7
M_AA12	AT21	SA_MA[12]			
M_AA13	AW32	SA_MA[13]	SA_DQS[1]	AP3	M_DQSA1
M_AA14	AU20	SA_MA[14]	SA_DQS[1]	AP2	M_DQSA1
M_AA15	AT20	SA_MA[15]			

[7]	M_SWEA	←	M_SWEA	AW29	SA_WE#
[7]	M_SCASA	←	M_SCASA	AV30	SA_CAS#
[7]	M_SRASA	←	M_SRASA	AU28	SA_RAS#

[7]	M_SBAA0	←	M_SBAA0	AY29	SA_BS[0]
[7]	M_SBAA1	←	M_SBAA1	AW28	SA_BS[1]
[7]	M_SBAA2	←	M_SBAA2	AV20	SA_BS[2]

[7]	M_CSA0	←	M_CSA0	AU29	SA_CS#
[7]	M_CSA1	←	M_CSA1	AV32	SA_CS#
[7]	M_CSA2	←	M_CSA2	AW30	SA_CS#
[7]	M_CSA3	←	M_CSA3	AU33	SA_CS#

[7]	M_CKEA0	←	M_CKEA0	AV19	SA_CKE[0]
[7]	M_CKEA1	←	M_CKEA1	AT19	SA_CKE[1]
[7]	M_CKEA2	←	M_CKEA2	AU18	SA_CKE[2]
[7]	M_CKEA3	←	M_CKEA3	AV18	SA_CKE[3]

	M_ODT_A0	←	M_ODT_A0	AV31	SA_ODT[0]
	M_ODT_A1	←	M_ODT_A1	AU32	SA_ODT[1]
	M_ODT_A2	←	M_ODT_A2	AU30	SA_ODT[2]
	M_ODT_A3	←	M_ODT_A3	AW33	SA_ODT[3]

[7]	M_DCLKA0	←	M_DCLKA0	AY25	SA_CK[0]
[7]	M_DCLKA0	←	M_DCLKA0	AW25	SA_CK[0]
[7]	M_DCLKA1	←	M_DCLKA1	AU24	SA_CK[1]
[7]	M_DCLKA1	←	M_DCLKA1	AU25	SA_CK[1]
[7]	M_DCLKA2	←	M_DCLKA2	AW27	SA_CK[2]
[7]	M_DCLKA2	←	M_DCLKA2	AY27	SA_CK[2]
[7]	M_DCLKA3	←	M_DCLKA3	AU26	SA_CK[3]
[7]	M_DCLKA3	←	M_DCLKA3	AW26	SA_CK[3]

[7,8]	M_DDR3_RST	←	MRT1	AW18	SM_DRAMRST#
			MBC8	0.1u4/X7R/16V/K/X	

AV13	SA_DQS[8]
AV12	SA_DQS#
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]
AY12	SA_ECC_CB[5]
AW12	SA_ECC_CB[6]
AW12	SA_ECC_CB[7]

DDR_0

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LGA1155[10SC1-F01155-01R]

AN1	M_DA8
AN4	M_DA9
AR3	M_DA10
AR4	M_DA11
AN2	M_DA12
AN3	M_DA13
AR2	M_DA14
AR1	M_DA15

AW4	M_DQSA2
AW4	M_DQSA2

AV2	M_DA16
AW3	M_DA17
AV5	M_DA18
AW5	M_DA19
AU2	M_DA20
AU3	M_DA21
AU5	M_DA22
AY5	M_DA23

AV8	M_DQSA3
AW8	M_DQSA3

AY7	M_DA24
AU7	M_DA25
AW9	M_DA26
AU9	M_DA27
AW7	M_DA28
AW9	M_DA30
AY9	M_DA31

AV37	M_DQSA4
AV36	M_DQSA4

AU35	M_DA32
AW37	M_DA33
AU39	M_DA34
AU36	M_DA35
AW35	M_DA36
AY36	M_DA37
AU38	M_DA38
AU37	M_DA39

AP38	M_DQSA5
AP39	M_DQSA5

AR40	M_DA40
AR37	M_DA41
AN38	M_DA42
AN37	M_DA43
AR39	M_DA44
AR38	M_DA45
AN39	M_DA46
AN40	M_DA47

AK38	M_DQSA6
AK39	M_DQSA6

AL40	M_DA48
AL37	M_DA49
AJ38	M_DA50
AJ37	M_DA51
AL39	M_DA52
AL38	M_DA53
AJ39	M_DA54
AJ40	M_DA55

AF38	M_DQSA7
AF39	M_DQSA7

AG40	M_DA56
AG37	M_DA57
AE38	M_DA58
AE37	M_DA59
AG39	M_DA60
AG38	M_DA61
AE39	M_DA62
AE40	M_DA63

[7] M_ODT_A[0..3] ← M_ODT_A[0..3]

[8] M_ODT_B[0..3] ← M_ODT_B[0..3]

[7] M_DA[0..63] ← M_DA[0..63]

[8] M_DB[0..63] ← M_DB[0..63]

[7] M_DQSA[0..7] ← M_DQSA[0..7]

[7] M_DQSA[0..7] ← M_DQSA[0..7]

[7] M_AA[0..15] ← M_AA[0..15]

[8] M_AAB[0..15] ← M_AAB[0..15]

[8] M_DQSB[0..7] ← M_DQSB[0..7]

[8] M_DQSB[0..7] ← M_DQSB[0..7]

LGA1155B

M_AAB0	AK24	SB_MA[0]	AH7	M_DQSB0
M_AAB1	AM20	SB_MA[1]	AH6	M_DQSB0
M_AAB2	AM19	SB_MA[2]		
M_AAB3	AK18	SB_MA[3]	AG7	M_DB0
M_AAB4	AP19	SB_MA[4]	AG8	M_DB1
M_AAB5	AP18	SB_MA[5]	AJ9	M_DB2
M_AAB6	AM18	SB_MA[6]	AJ8	M_DB3
M_AAB7	AL18	SB_MA[7]	AG5	M_DB4
M_AAB8	AL17	SB_MA[8]	AG6	M_DB5
M_AAB9	AN18	SB_MA[9]	AJ6	M_DB6
M_AAB10	AN23	SB_MA[10]	AJ7	M_DB7
M_AAB11	AU17	SB_MA[11]		
M_AAB12	AR26	SB_MA[12]	AM8	M_DQSB1
M_AAB13	AR26	SB_MA[13]	AL8	M_DQSB1
M_AAB14	AV16	SB_MA[14]		
M_AAB15	AV16	SB_MA[15]		

[8]	M_SWEB	←	M_SWEB	AR25	SB_WE#
[8]	M_SCASB	←	M_SCASB	AK25	SB_CAS#
[8]	M_SRASB	←	M_SRASB	AP24	SB_RAS#

[8]	M_SBAB0	←	M_SBAB0	AP23	SB_BS[0]
[8]	M_SBAB1	←	M_SBAB1	AM24	SB_BS[1]
[8]	M_SBAB2	←	M_SBAB2	AW17	SB_BS[2]

[8]	M_CSBO	←	M_CSBO	AN25	SB_CS#
[8]	M_CSBI	←	M_CSBI	AN26	SB_CS#
[8]	M_CSBI	←	M_CSBI	AL26	SB_CS#
[8]	M_CSBI	←	M_CSBI	AT26	SB_CS#

[8]	M_CKEB0	←	M_CKEB0	AU16	SB_CKE[0]
[8]	M_CKEB1	←	M_CKEB1	AY15	SB_CKE[1]
[8]	M_CKEB2	←	M_CKEB2	AW15	SB_CKE[2]
[8]	M_CKEB3	←	M_CKEB3	AV15	SB_CKE[3]

	M_ODT_B0	←	M_ODT_B0	AL26	SB_ODT[0]
	M_ODT_B1	←	M_ODT_B1	AP26	SB_ODT[1]
	M_ODT_B2	←	M_ODT_B2	AK26	SB_ODT[2]
	M_ODT_B3	←	M_ODT_B3	AK26	SB_ODT[3]

AV8	M_DQSA3
AW8	M_DQSA3

[8]	M_DCLKB0	←	M_DCLKB0	AL21	SB_CK[0]
[8]	M_DCLKB0	←	M_DCLKB0	AL22	SB_CK[0]
[8]	M_DCLKB1	←	M_DCLKB1	AL20	SB_CK[1]
[8]	M_DCLKB1	←	M_DCLKB1	AK20	SB_CK[1]
[8]	M_DCLKB2	←	M_DCLKB2	AL23	SB_CK[2]
[8]	M_DCLKB2	←	M_DCLKB2	AM22	SB_CK[2]
[8]	M_DCLKB3	←	M_DCLKB3	AP21	SB_CK[3]
[8]	M_DCLKB3	←	M_DCLKB3	AN21	SB_CK[3]

[8]	M_VREF_DQB	←	AH1	FC_AH1
[7]	M_VREF_DQB	←	AH4	FC_AH4

AN16	SB_DQS[8]
AN15	SB_DQS#

AL16	SB_ECC_CB[0]
AM16	SB_ECC_CB[1]
AP16	SB_ECC_CB[2]
AL15	SB_ECC_CB[3]
AM15	SB_ECC_CB[4]
AP15	SB_ECC_CB[5]

AP32	M_DB40
AP21	M_DB41
AP35	M_DB42
AP34	M_DB43
AR32	M_DB44
AR31	M_DB45
AR35	M_DB46
AR34	M_DB47

AL33	M_DQSB6
AM33	M_DQSB6

AM32	M_DB48
AM31	M_DB49
AL35	M_DB50
AL32	M_DB51
AM34	M_DB52
AL31	M_DB53
AM35	M_DB54
AL34	M_DB55

AG35	M_DQSB7
AG34	M_DQSB7

AH35	M_DB56
AH34	M_DB57
AE34	M_DB58
AE35	M_DB59
AJ35	M_DB60
AJ34	M_DB61
AF33	M_DB62
AF35	M_DB63

DDR_1

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LGA1155[10SC1-F01155-01R]

SB_DQS[0]	AH7	M_DQSB0
SB_DQS#	AH6	M_DQSB0
SB_DQ[0]	AG7	M_DB0
SB_DQ[1]	AG8	M_DB1
SB_DQ[2]	AJ9	M_DB2
SB_DQ[3]	AJ8	M_DB3
SB_DQ[4]	AG5	M_DB4
SB_DQ[5]	AG6	M_DB5
SB_DQ[6]	AJ6	M_DB6
SB_DQ[7]	AJ7	M_DB7
SB_DQS[1]	AM8	M_DQSB1
SB_DQS#	AL8	M_DQSB1
SB_DQ[8]	AM7	M_DB8
SB_DQ[9]	AM10	M_DB10
SB_DQ[10]	AL10	M_DB11
SB_DQ[11]	AL6	M_DB12
SB_DQ[12]	AM6	M_DB13
SB_DQ[13]	AL9	M_DB14
SB_DQ[14]	AM9	M_DB15
SB_DQ[15]		

SB_WE#	AR7	M_DB8
SB_CAS#	AM7	M_DB9
SB_RAS#	AM10	M_DB10
SB_BS[0]	AL10	M_DB11
SB_BS[1]	AL6	M_DB12
SB_BS[2]	AM6	M_DB13
SB_CS#	AL9	M_DB14
SB_CS#	AM9	M_DB15

SB_CS#	AR8	M_DQSB2
SB_CS#	AP8	M_DQSB2

SB_CKE[0]	AP7	M_DB16
SB_CKE[1]	AR7	M_DB17
SB_CKE[2]	AP10	M_DB18
SB_CKE[3]	AR10	M_DB19
SB_ODT[0]	AP6	M_DB20
SB_ODT[1]	AR6	M_DB21
SB_ODT[2]	AP9	M_DB22
SB_ODT[3]	AR9	M_DB23

AN13	M_DQSB3
AN12	M_DQSB3

AM12	M_DB24
AM13	M_DB25
AR13	M_DB26
AP13	M_DB27
AL12	M_DB28
AL13	M_DB29
AR12	M_DB30
AP12	M_DB31

AN29	M_DQSB4
AN28	M_DQSB4

AR28	M_DB32
AR29	M_DB33
AL28	M_DB34
AL29	M_DB35
AP28	M_DB36
AP29	M_DB37
AM28	M_DB38
AM29	M_DB39

AP33	M_DQSB5
AR33	M_DQSB5

AP32	M_DB40
AP21	M_DB41
AP35	M_DB42
AP34	M_DB43
AR32	M_DB44
AR31	M_DB45
AR35	M_DB46
AR34	M_DB47

AL33	M_DQSB6
AM33	M_DQSB6

AM32	M_DB48
AM31	M_DB49
AL35	M_DB50
AL32	M_DB51
AM34	M_DB52
AL31	M_DB53
AM35	M_DB54
AL34	M_DB55

AG35	M_DQSB7
AG34	M_DQSB7

AH35	M_DB56
AH34	M_DB57
AE34	M_DB58
AE35	M_DB59
AJ35	M_DB60
AJ34	M_DB61
AF33	M_DB62
AF35	M_DB63

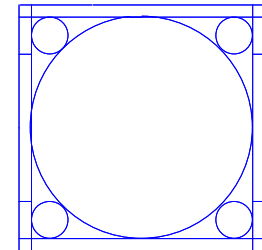
SB_DQ[48]	AM32	M_DB48
SB_DQ[49]	AM31	M_DB49
SB_DQ[50]	AL35	M_DB50
SB_DQ[51]	AL32	M_DB51
SB_DQ[52]	AM34	M_DB52
SB_DQ[53]	AL31	M_DB53
SB_DQ[54]	AM35	M_DB54
SB_DQ[55]	AL34	M_DB55

SB_DQ[56]	AG35	M_DQSB7
SB_DQ[57]	AG34	M_DQSB7

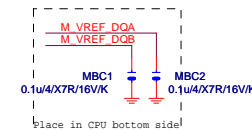
SB_DQ[58]	AH35	M_DB56
SB_DQ[59]	AH34	M_DB57
SB_DQ[60]	AE34	M_DB58
SB_DQ[61]	AE35	M_DB59
SB_DQ[62]	AJ35	M_DB60
SB_DQ[63]	AJ34	M_DB61

LGA1155

ILM_BP/1156/BKN/[12KRC-0F0001-23R]



Need check the new CPU ME

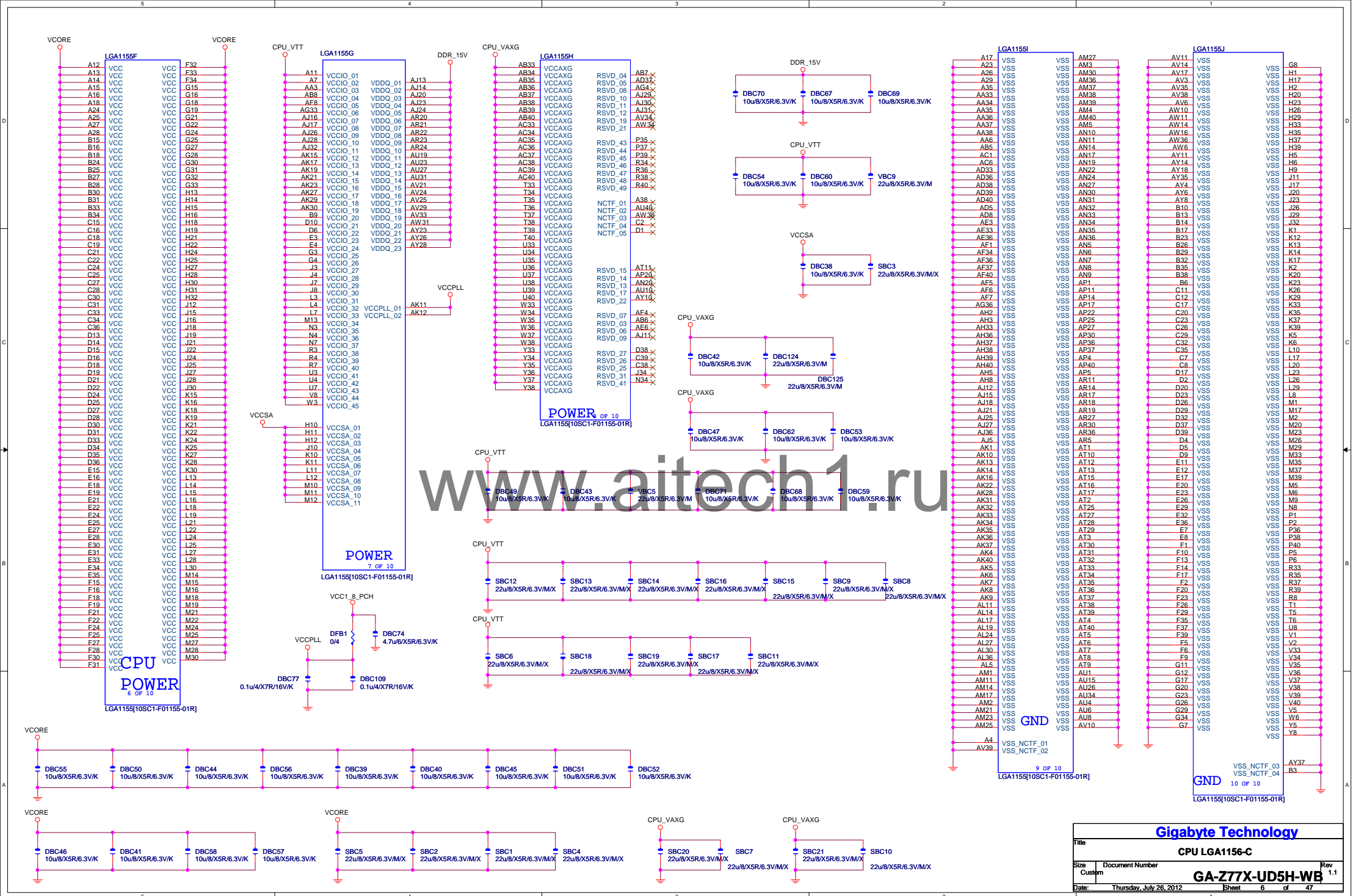


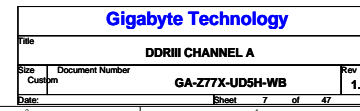
Gigabyte Technology

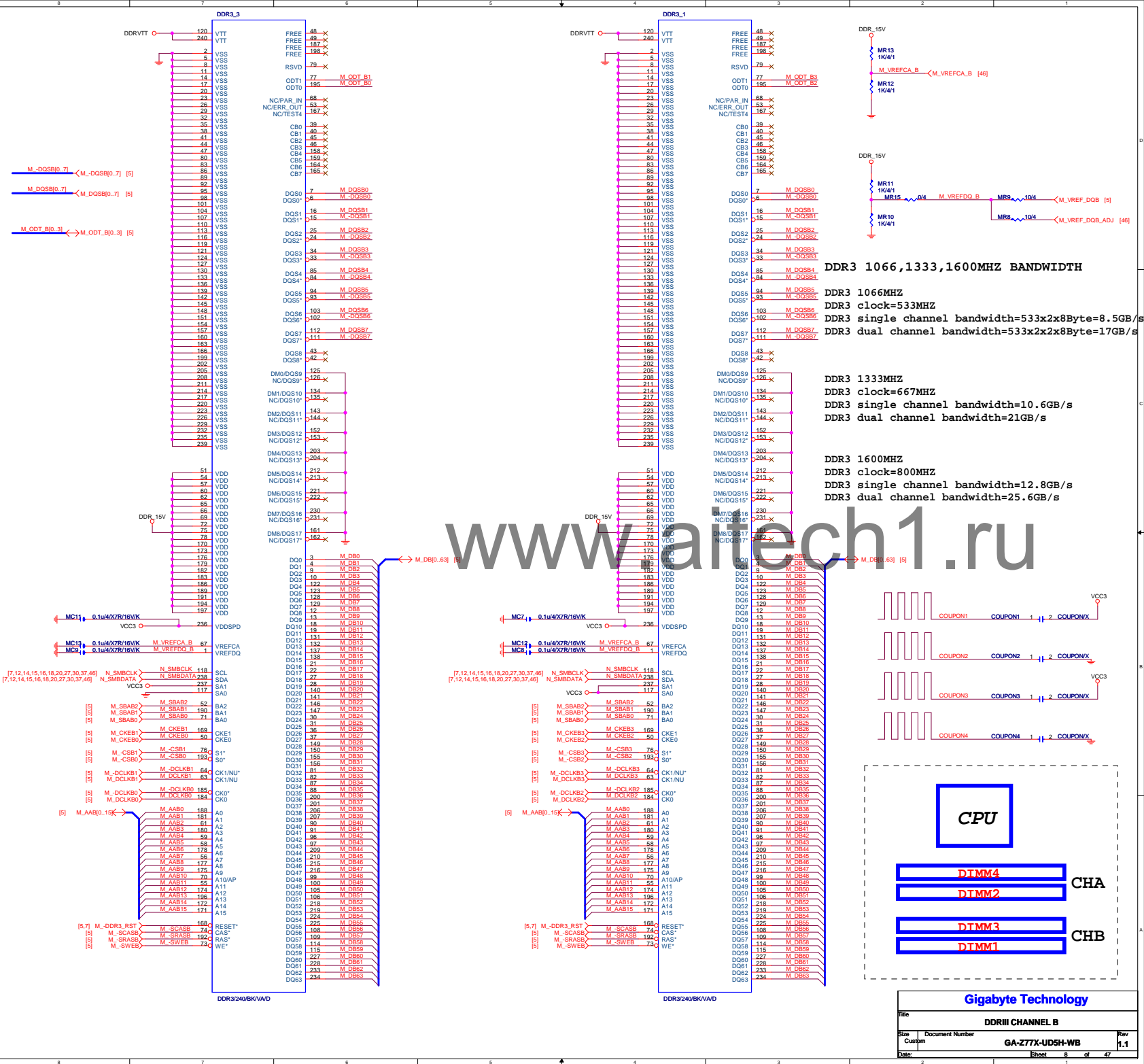
CPU LGA1156-B

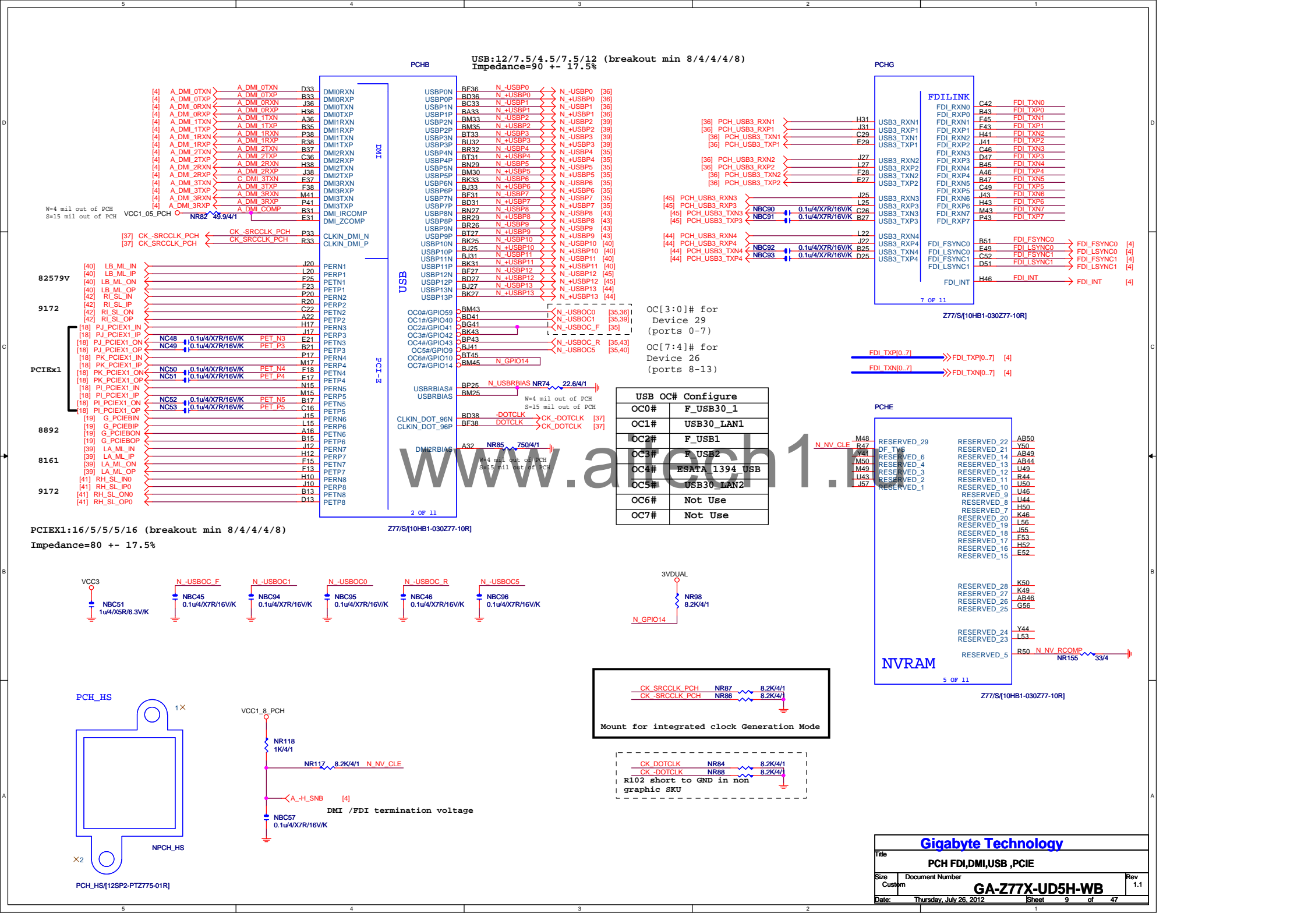
Size Custom Document Number GA-Z77X-UD5H-WB Rev 1.1

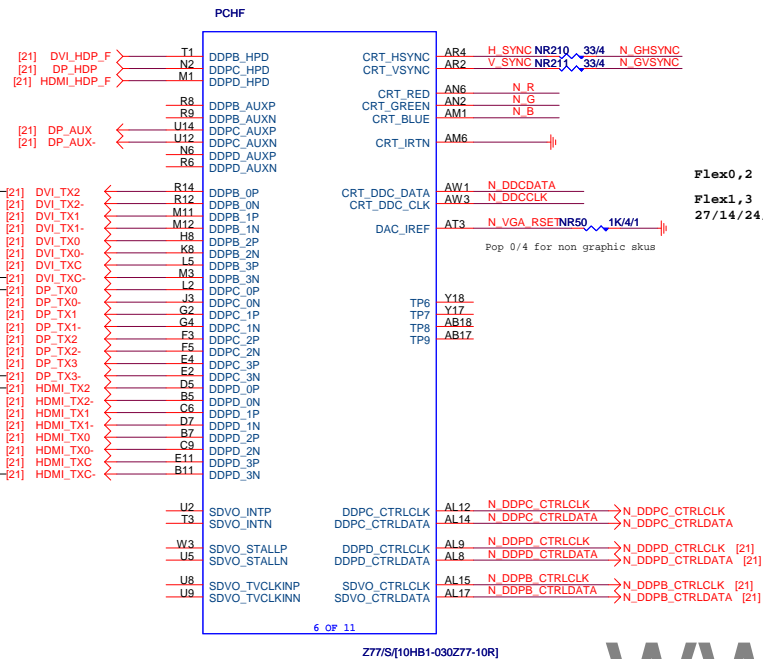
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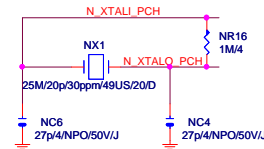








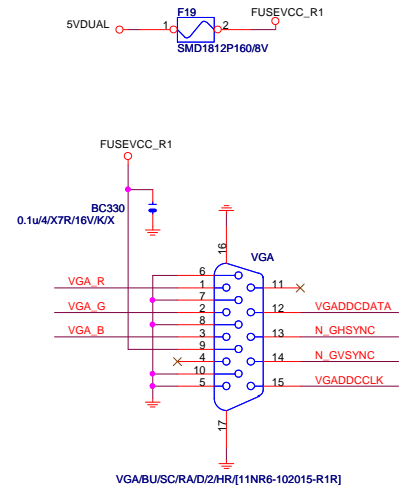
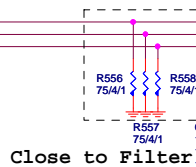
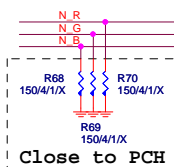
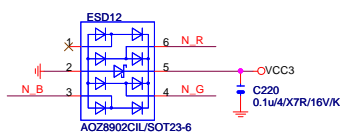
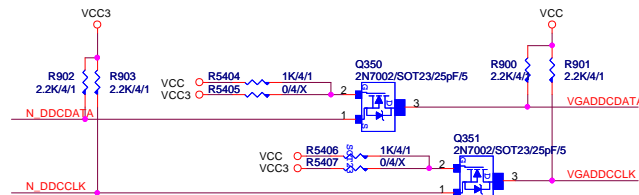
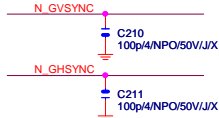
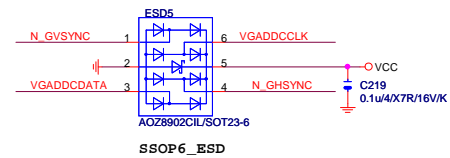
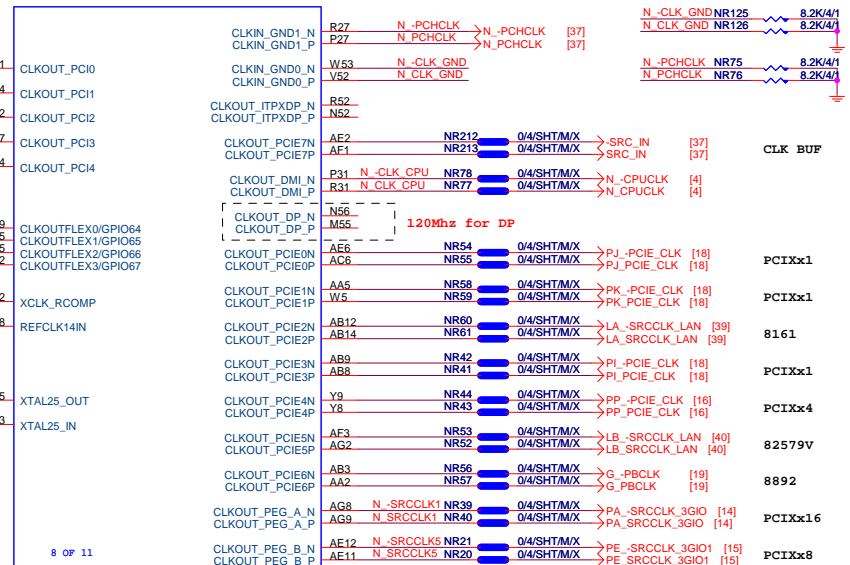
Flex0,2 : 33MHZ
Flex1,3 : 27/14/24/48/25MHZ



N_PCHCLK14

NR33 8.2K/4/1

Mount for integrated clock generation Mode



Gigabyte Technology			
Title			
PCH DISPLAY ,CLK BUFFER			
Size	Document Number	Rev	
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SATA:20/7.5/4.5/7.5/20 (breakout min 8/4/4/8)
Impedance=90 +- 17.5%

PCHC

For WIFI
BA50
BF50
BF49

CL_CLK1
CL_DATA1#
CL_RST1#

APWROK

PWM0
PWM1
PWM2
PWM3

TACH0/GPIO17
TACH1/GPIO1
TACH2/GPIO6
TACH3/GPIO7
TACH4_GPIO68
TACH5_GPIO69
TACH6_GPIO70
TACH7_GPIO71

SST

SCLOCK/GPIO22
SLOAD/GPIO38
SDATAOUT0/GPIO39
SDATAOUT1/GPIO48

NC_5

AY20

NC_5

NC_5

NC_5

NC_5

NC_5

NC_5

NC_5

NC_5

NC_5

NC_5

NC_5

NC_5

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NC_5

NC_5

NC_5

NC_5

SATA0RXN
SATA0RXP
SATA0TXN
SATA0TXP
SATA1RXN
SATA1RXP
SATA1TXN
SATA1TXP

SATA2RXN
SATA2RXP
SATA2TXN
SATA2TXP
SATA3RXN
SATA3RXP
SATA3TXN
SATA3TXP

SATA4RXN
SATA4RXP
SATA4TXN
SATA4TXP
SATA5RXN
SATA5RXP
SATA5TXN
SATA5TXP

CLCKIN_SATA_N
CLKIN_SATA_P

SATA0GP/GPIO21
SATA1GP/GPIO19
SATA2GP/GPIO36
SATA3GP/GPIO37
SATA4GP/GPIO16
SATA5GP/GPIO49

SATA3COMPI
SATA3RCOMPO

TP16
SATA3RBIAS

A20GATE
INIT3_3V#
RCIN#
SERIRQ
THRMTRIP#
PECI
PMSYNCH

AC56 N SATA0RXN
AB55 N SATA0RXP
AE44 N SATA0TXN
AE44 N SATA0TXP
AA53 N SATA1RXN
AA56 N SATA1RXP
AG49 N SATA1TXN
AG47 N SATA1TXP

AL50 N SATA2RXN
AL49 N SATA2RXP
AL56 N SATA2TXN
AL53 N SATA2TXP
AN46 N SATA3RXN
AN44 N SATA3RXP
AN56 N SATA3TXN
AM55 N SATA3TXP

AT49 N SATA4RXN
AT49 N SATA4RXP
AT46 N SATA4TXN
AT44 N SATA4TXP
AT44 N SATA5RXN
AV50 N SATA5RXP
AV49 N SATA5TXN
AV49 N SATA5TXP

AE55 CK-SRCLK SATA
AG56 CK-SRCLK SATA

BE57 N-SATALED
AJ55 N-SATALED
AJ53 N-SATALED

BC54 N GPIO21
AY52 N GPIO19
BG55 N GPIO36
BG53 N GPIO37
AU56 N GPIO16
BA56 N_TEMP_ALARM-

AE54 N SATA3COMP
AE52 N SATA3COMP

AE50
AC52 N SATA3BIAS

BB57 N_A20GATE
BN56 N_INIT 3V
BG56 N_KBRST
AV52 N_SERIRQ
E56 N_THRMTRIP
H48 N_SB_PECI
F55 N_PMSYNCH

BB57 N_A20GATE
BN56 N_INIT 3V
BG56 N_KBRST
AV52 N_SERIRQ
E56 N_THRMTRIP
H48 N_SB_PECI
F55 N_PMSYNCH

BB57 N_A20GATE
BN56 N_INIT 3V
BG56 N_KBRST
AV52 N_SERIRQ
E56 N_THRMTRIP
H48 N_SB_PECI
F55 N_PMSYNCH

BB57 N_A20GATE
BN56 N_INIT 3V
BG56 N_KBRST
AV52 N_SERIRQ
E56 N_THRMTRIP
H48 N_SB_PECI
F55 N_PMSYNCH

NR80 8.2K/4/1X
NR64 8.2K/4/1X
NR81 8.2K/4/1X
NR83 8.2K/4/1X

NR173 8.2K/4/1X
NR146 8.2K/4/1X
NR150 1K/4/1X

NR170 8.2K/4/1X
NR152 8.2K/4/1X
NR171 8.2K/4/1X
NR145 8.2K/4/1X
NR151 8.2K/4/1X
NR172 8.2K/4/1X
NR147 8.2K/4/1X
NR168 8.2K/4/1X
NR153 8.2K/4/1X
NR154 8.2K/4/1X
NR46 8.2K/4/1X

NR149 8.2K/4/1X
NR174 8.2K/4/1X
NR175 1K/4/1X
NR169 1K/4/1X
NR155 1K/4/1X
NR45 1K/4/1X
NR27 1K/4/1X

NR149 8.2K/4/1X
NR174 8.2K/4/1X
NR175 1K/4/1X
NR169 1K/4/1X
NR155 1K/4/1X
NR45 1K/4/1X
NR27 1K/4/1X

NR149 8.2K/4/1X
NR174 8.2K/4/1X
NR175 1K/4/1X
NR169 1K/4/1X
NR155 1K/4/1X
NR45 1K/4/1X
NR27 1K/4/1X

NR149 8.2K/4/1X
NR174 8.2K/4/1X
NR175 1K/4/1X
NR169 1K/4/1X
NR155 1K/4/1X
NR45 1K/4/1X
NR27 1K/4/1X

NR149 8.2K/4/1X
NR174 8.2K/4/1X
NR175 1K/4/1X
NR169 1K/4/1X
NR155 1K/4/1X
NR45 1K/4/1X
NR27 1K/4/1X

NR149 8.2K/4/1X
NR174 8.2K/4/1X
NR175 1K/4/1X
NR169 1K/4/1X
NR155 1K/4/1X
NR45 1K/4/1X
NR27 1K/4/1X

NR149 8.2K/4/1X
NR174 8.2K/4/1X
NR175 1K/4/1X
NR169 1K/4/1X
NR155 1K/4/1X
NR45 1K/4/1X
NR27 1K/4/1X

NR149 8.2K/4/1X
NR174 8.2K/4/1X
NR175 1K/4/1X
NR169 1K/4/1X
NR155 1K/4/1X
NR45 1K/4/1X
NR27 1K/4/1X

NR149 8.2K/4/1X
NR174 8.2K/4/1X
NR175 1K/4/1X
NR169 1K/4/1X
NR155 1K/4/1X
NR45 1K/4/1X
NR27 1K/4/1X

N_DEVSEL#
N_PCH33
N_IRDY
N_SERR
N_STOP
N_PLOCK
N_TRDY
N_PERR
N_FRAME

N_GNT0
N_GNT1
N_GNT2
N_GNT3

N_REQ0
N_REQ1
N_REQ2
N_REQ3

N_PIRQA
N_PIRQB
N_PIRQC
N_PIRQD
N_PIRQE
N_PIRQF
N_PIRQG
N_PIRQH

N_PIRQA
N_PIRQB
N_PIRQC
N_PIRQD
N_PIRQE
N_PIRQF
N_PIRQG
N_PIRQH

N_PIRQA
N_PIRQB
N_PIRQC
N_PIRQD
N_PIRQE
N_PIRQF
N_PIRQG
N_PIRQH

N_PIRQA
N_PIRQB
N_PIRQC
N_PIRQD
N_PIRQE
N_PIRQF
N_PIRQG
N_PIRQH

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N_PIRQE
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N_PIRQG
N_PIRQH

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N_PIRQG
N_PIRQH

N_PIRQA
N_PIRQB
N_PIRQC
N_PIRQD
N_PIRQE
N_PIRQF
N_PIRQG
N_PIRQH

PAR
DEVSEL#
CLKIN_PCILOOPBACK
PCIRST#
IRDY#
PME#
SERR#
STOP#
PLOCK#
TRDY#
PERR#
FRAME#

GNT0#
GNT1#/GPIO51
GNT2#/GPIO53
GNT3#/GPIO55

REQ0#
REQ1#/GPIO50
REQ2#/GPIO52
REQ3#/GPIO54

PIRQA#
PIRQB#
PIRQC#
PIRQD#
PIRQE#/GPIO2
PIRQF#/GPIO3
PIRQG#/GPIO4
PIRQH#/GPIO5

PIRQA#
PIRQB#
PIRQC#
PIRQD#
PIRQE#/GPIO2
PIRQF#/GPIO3
PIRQG#/GPIO4
PIRQH#/GPIO5

PIRQA#
PIRQB#
PIRQC#
PIRQD#
PIRQE#/GPIO2
PIRQF#/GPIO3
PIRQG#/GPIO4
PIRQH#/GPIO5

PIRQA#
PIRQB#
PIRQC#
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PIRQE#/GPIO2
PIRQF#/GPIO3
PIRQG#/GPIO4
PIRQH#/GPIO5

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PIRQB#
PIRQC#
PIRQD#
PIRQE#/GPIO2
PIRQF#/GPIO3
PIRQG#/GPIO4
PIRQH#/GPIO5

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PIRQB#
PIRQC#
PIRQD#
PIRQE#/GPIO2
PIRQF#/GPIO3
PIRQG#/GPIO4
PIRQH#/GPIO5

PIRQA#
PIRQB#
PIRQC#
PIRQD#
PIRQE#/GPIO2
PIRQF#/GPIO3
PIRQG#/GPIO4
PIRQH#/GPIO5

BF15
BF17
BT17
BG12
BN11
BJ12
BU9
BR12
BJ3
BR9
BJ10
BM8
BF3
BN2
BE4
AD15
BE6
BC15
BC6
BT11
BA14
BL2
BC4
BL4
N_STOP
N_FRAME

N_PIRQH
N_PIRQB
N_PIRQB
N_PERR
N_TRDY

N_REQ2
N_SERR
N_REQ1
N_PIRQD

N_PLOCK
N_IRDY
N_STOP
N_FRAME

N_REQ3
N_REQ0
N_PIRQC
N_PIRQC

N_PIRQC
N_PIRQC
N_PIRQC
N_PIRQC

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N_PIRQC

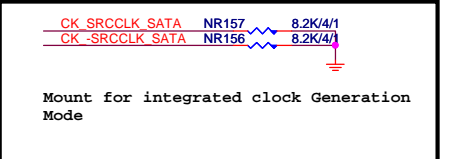
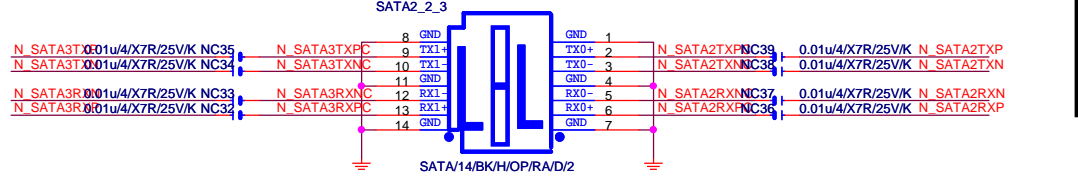
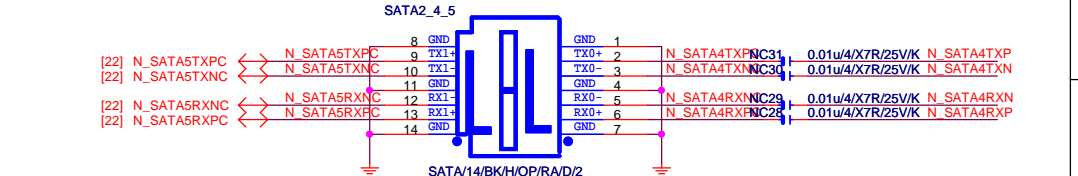
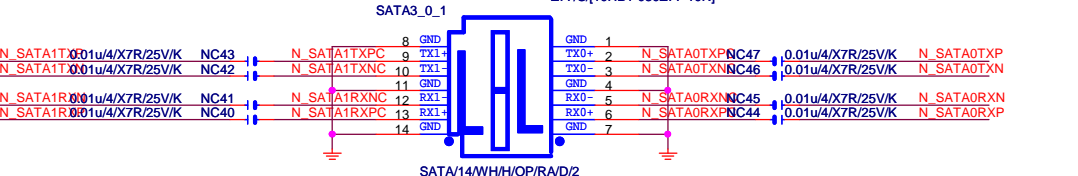
N_PIRQC
N_PIRQC
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N_PIRQC

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1 OF 11
Z77/S[10HB1-030Z77-10R]

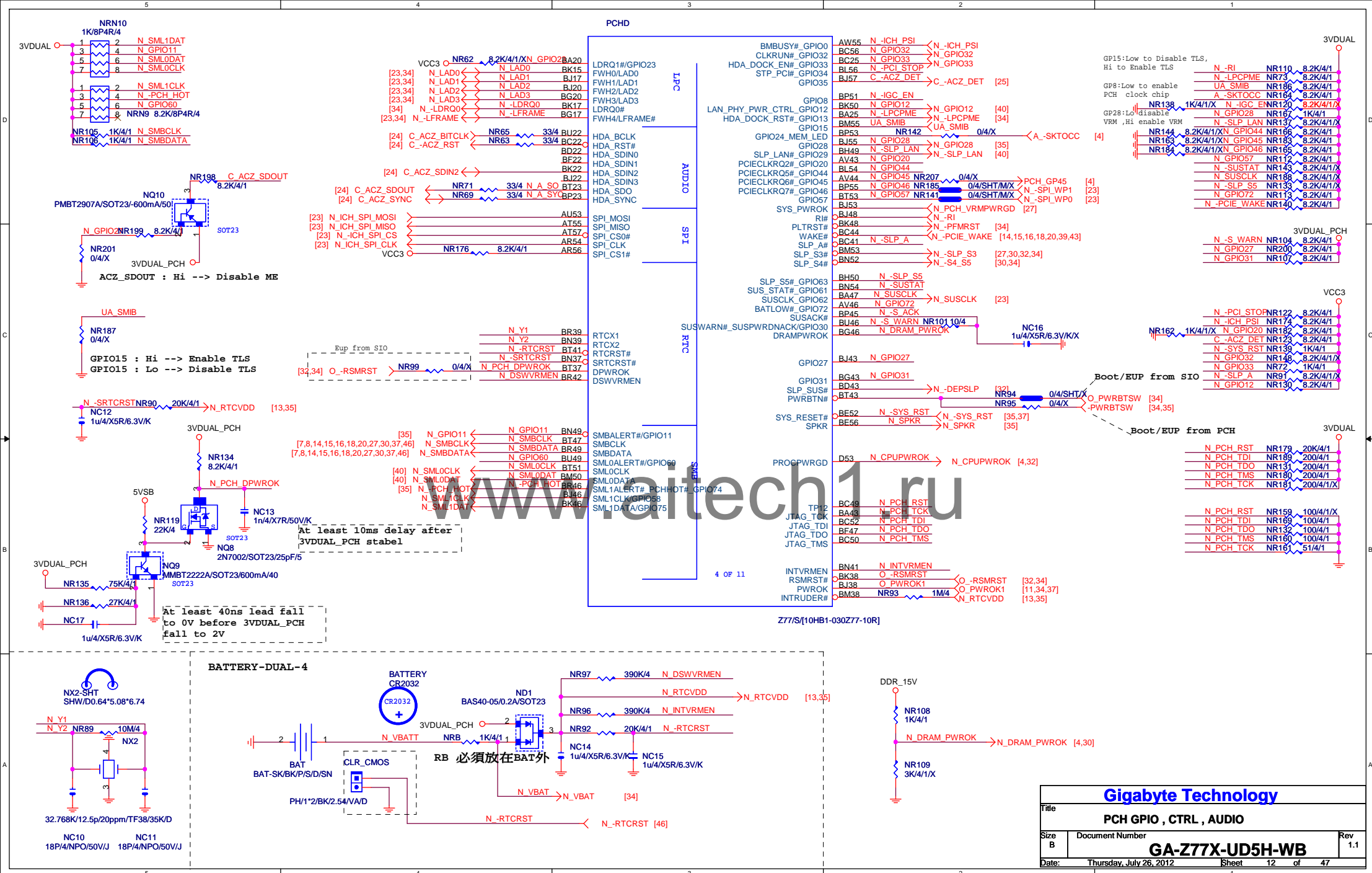


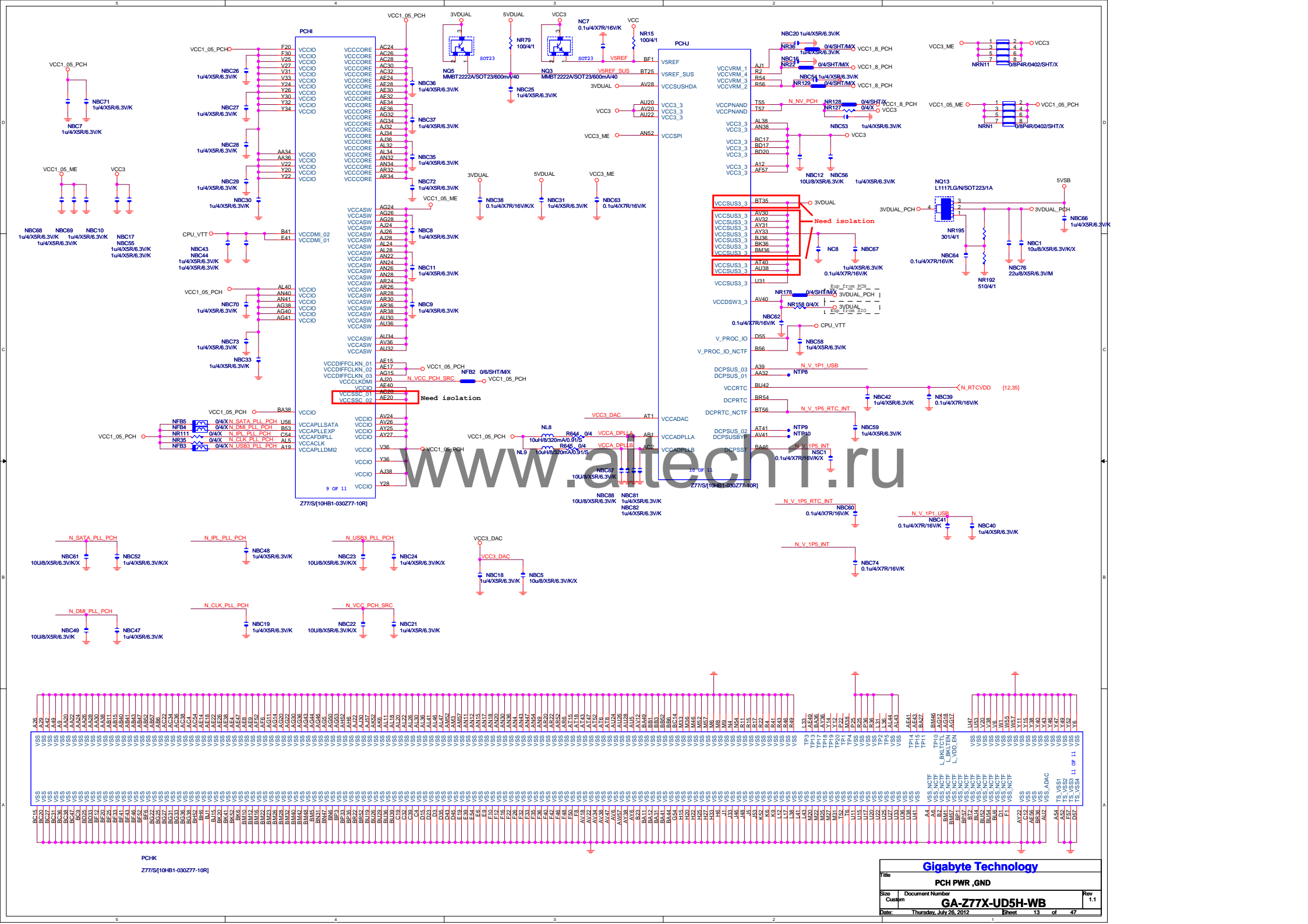
Gigabyte Technology

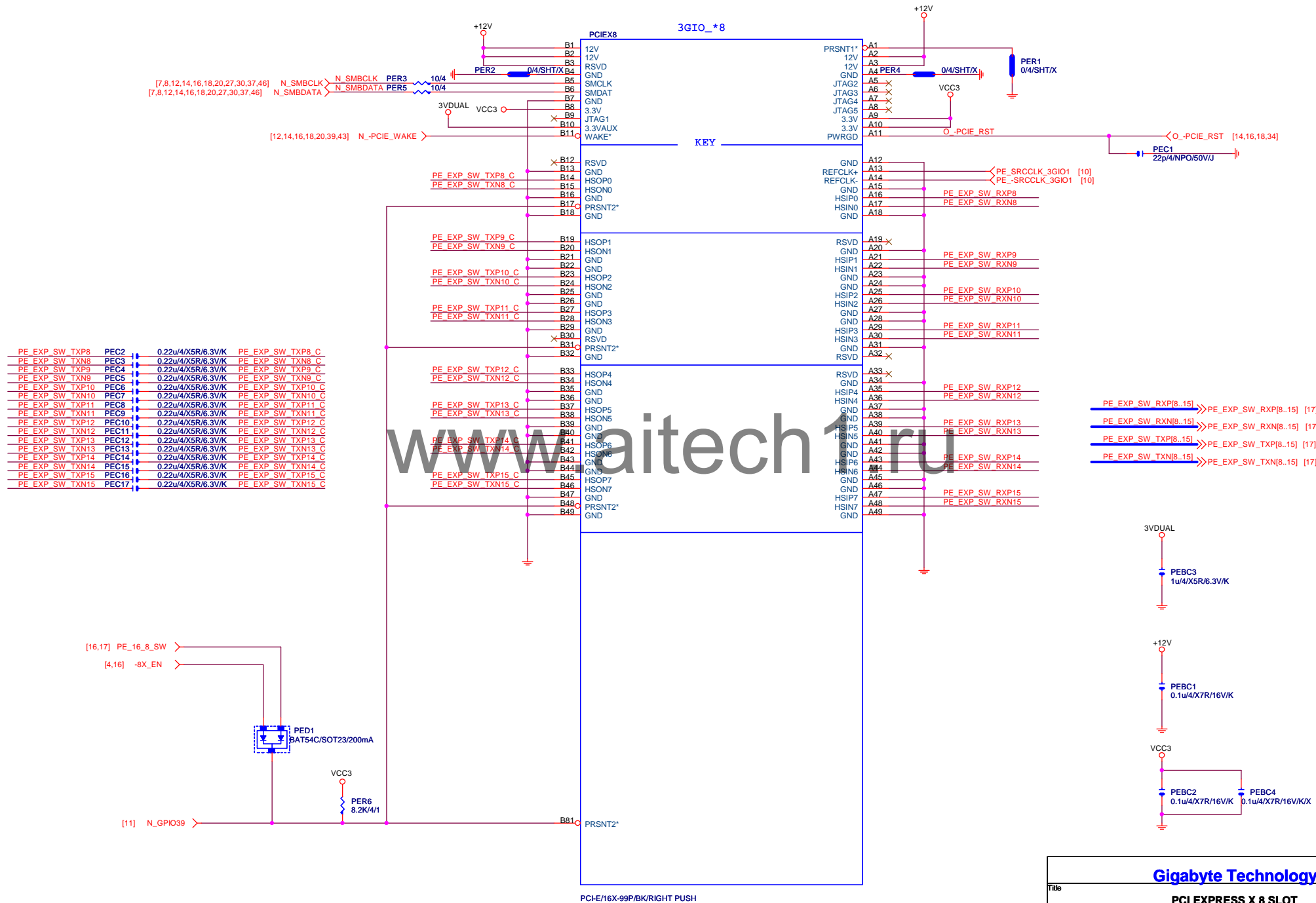
Title
PCH HOST , SATA, PCI

Size B Document Number
GA-Z77X-UD5H-WB

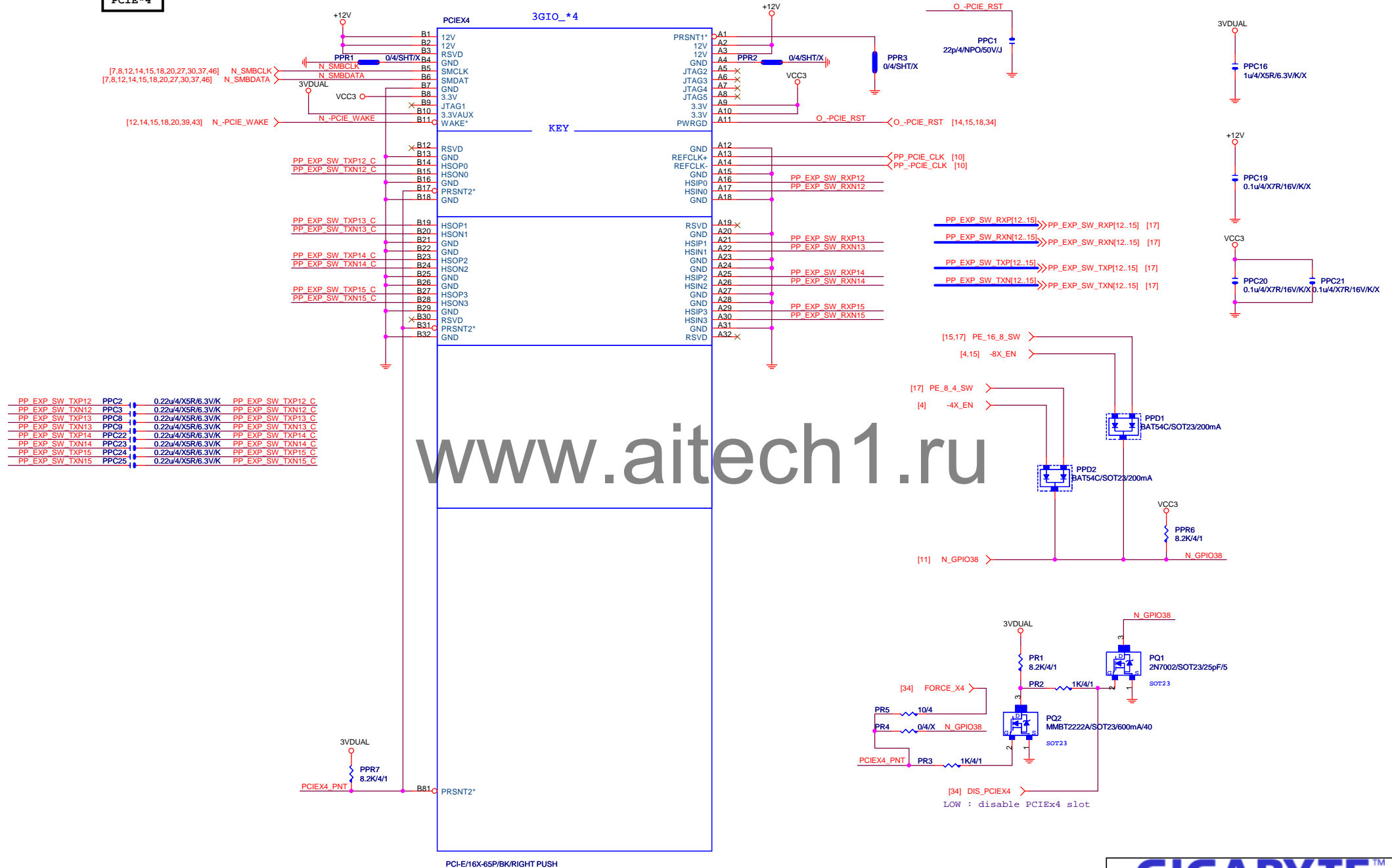
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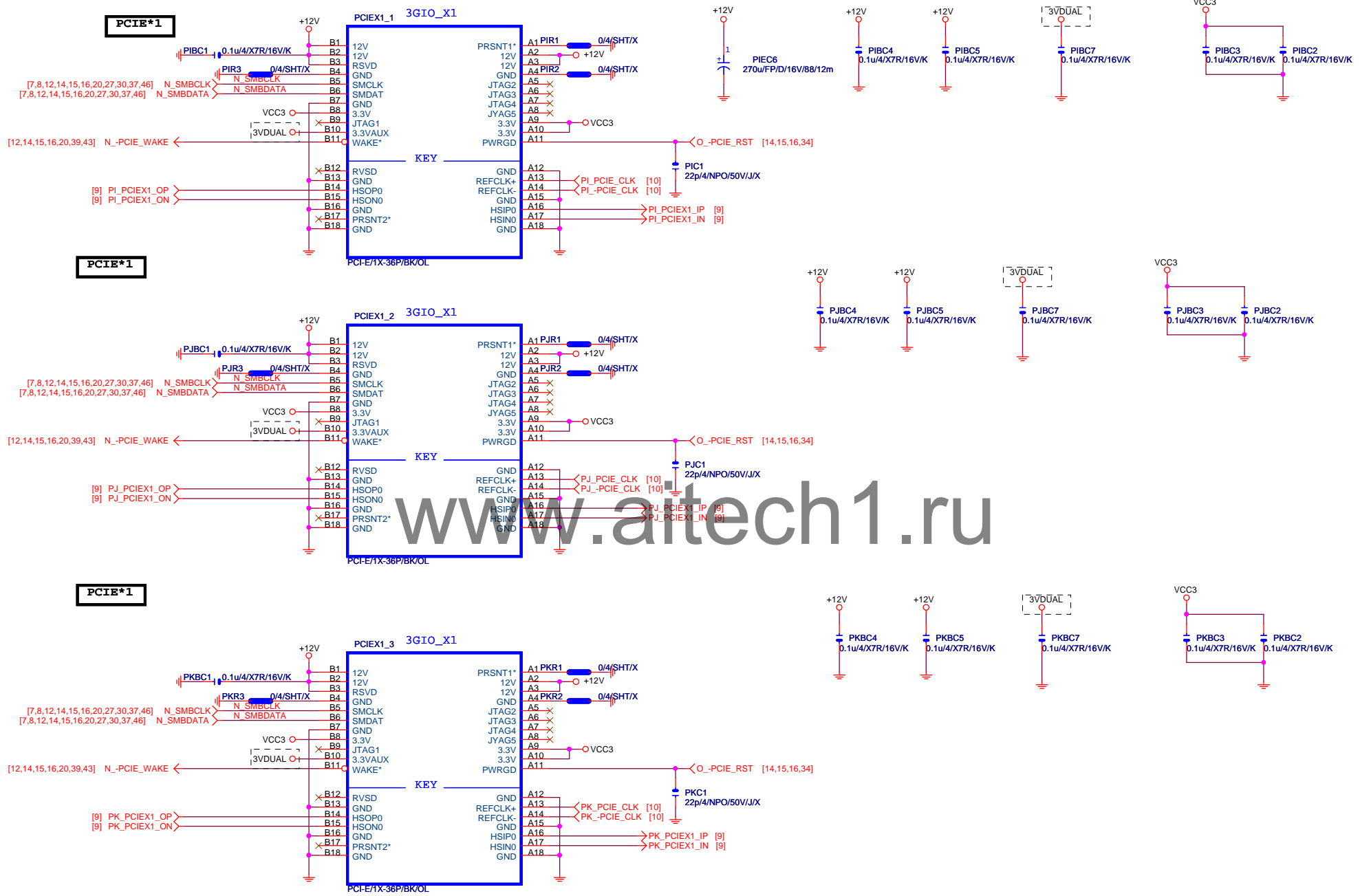


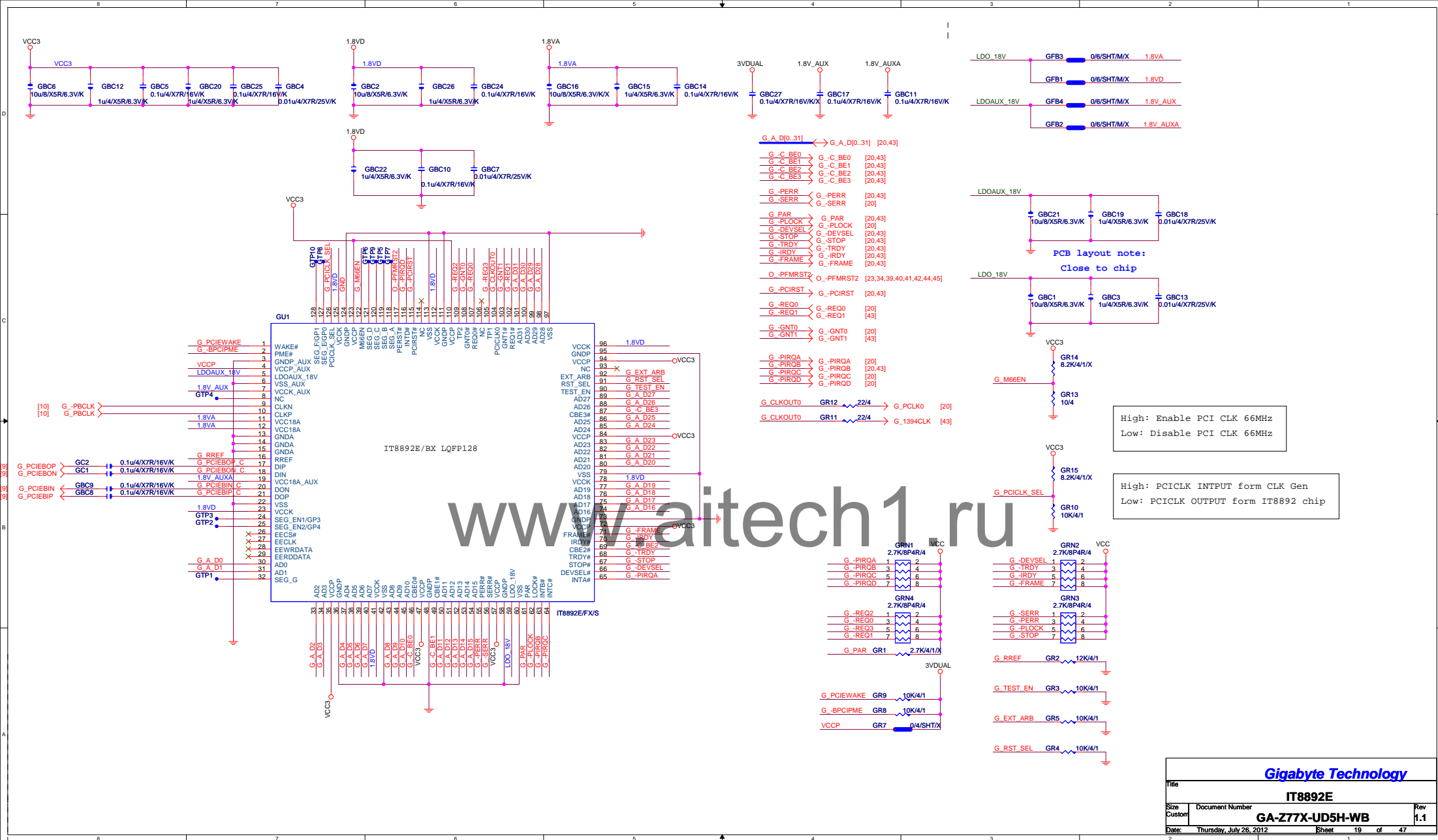
PCIE*4



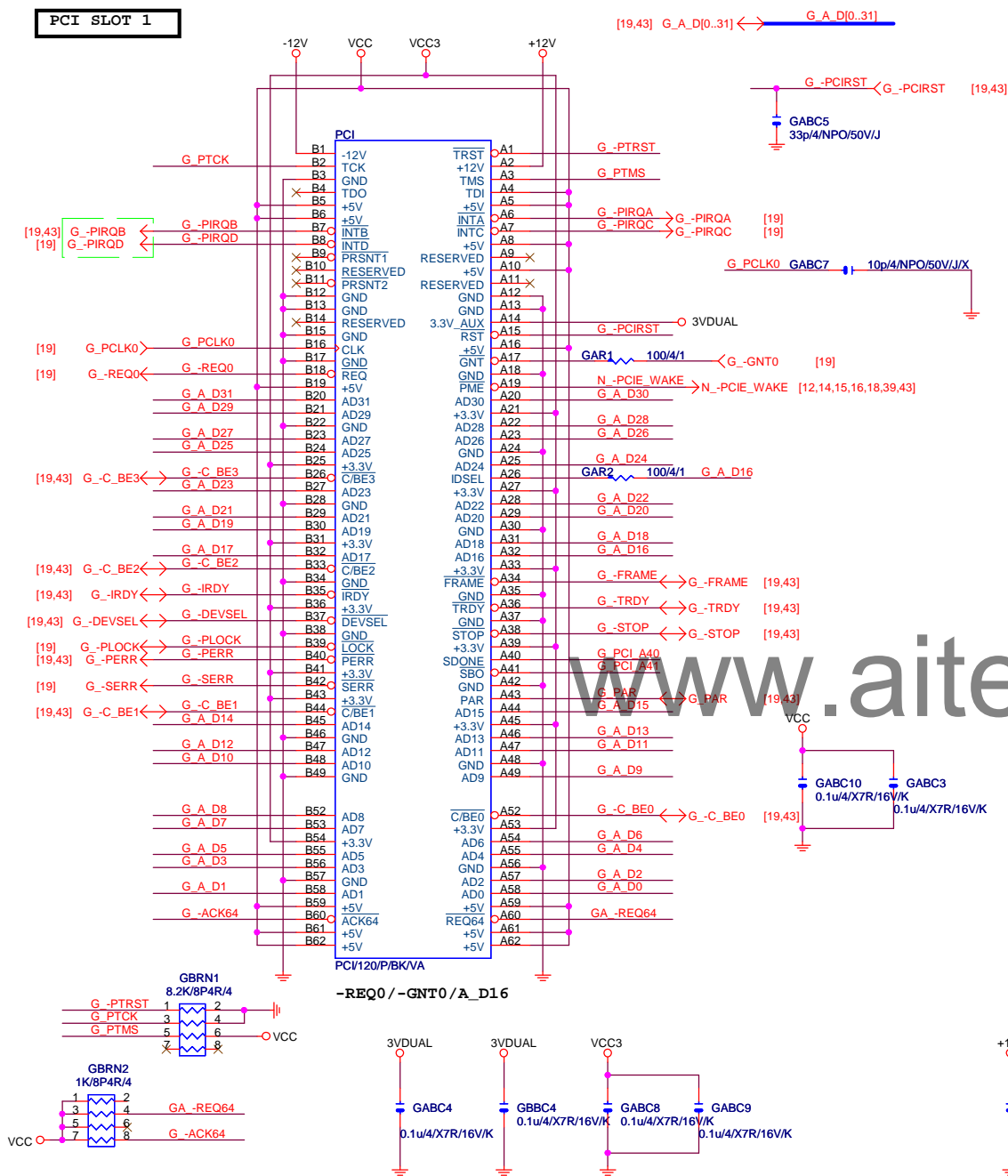
PCI-E/16X-65P/BK/RIGHT PUSH

GIGABYTE™			
Title PCI EXPRESS X4 SLOT			
Size	Document Number	Rev	
Custom	GA-Z77X-UD5H-WB	1.1	
Date:	Thursday, July 26, 2012	Sheet	16 of 47

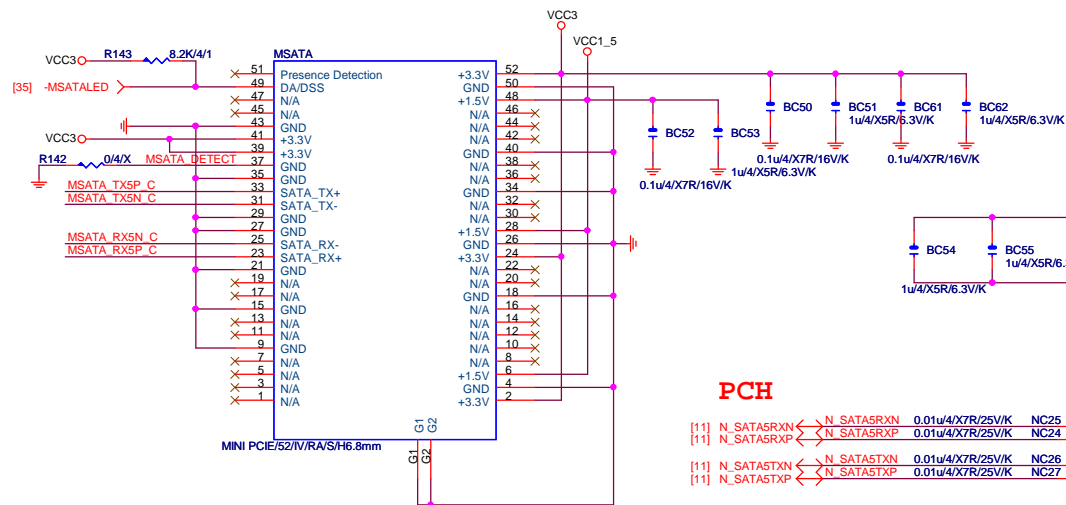




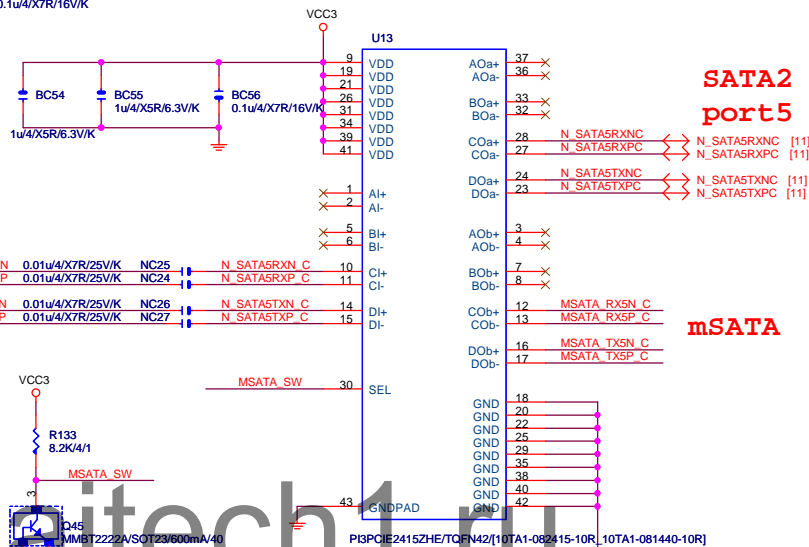
PCI SLOT 1



GIGABYTE™			
Title			
PCI SLOT 1			
Size	Document Number	Rev	
Custom	GA-Z77X-UD5H-WB	1.1	
Date:	Thursday, July 26, 2012	Sheet	20 of 47



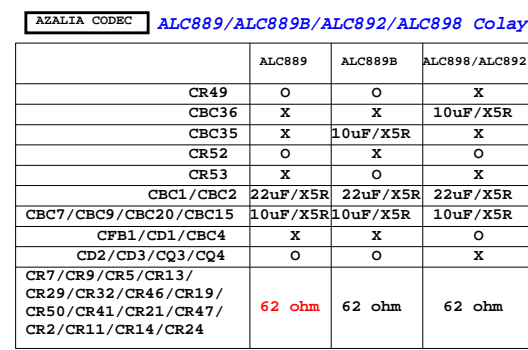
N SATA5RXN C R134 0/4/X N SATA5RXNC
 N SATA5RXP C R136 0/4/X N SATA5RXPC
 N SATA5TXN C R137 0/4/X N SATA5TXNC
 N SATA5TXP C R139 0/4/X N SATA5TXPC
FIX PCH-SATA --> SATA5
R請放在U13背面



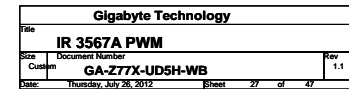
Function	SEL
xI--> xOa	L
xI--> xOb	H

GIGABYTE™

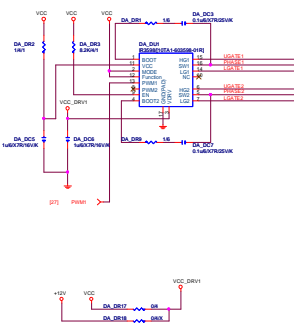
Title MSATA		
Size Custom	Document Number GA-Z77X-UD5H-WB	Rev 1.1
Date: Thursday, July 26, 2012	Sheet 22	of 47



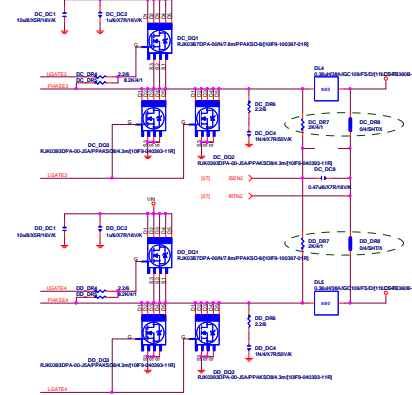
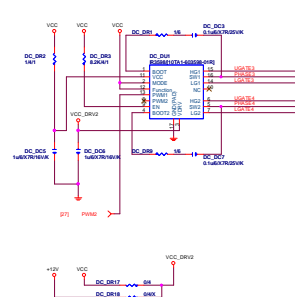
Gigabyte Technology			
HD AUDIO ALC898			
Size	Document Number	GA-Z77X-UD5H-WB	Rev 1.1
Custom			
Date:	Thursday, July 26, 2012	Sheet 24 of 47	



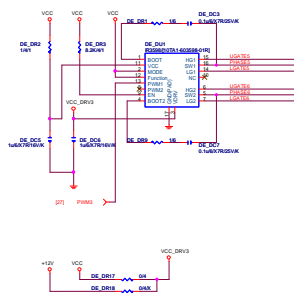
VCORE Phase 1,2



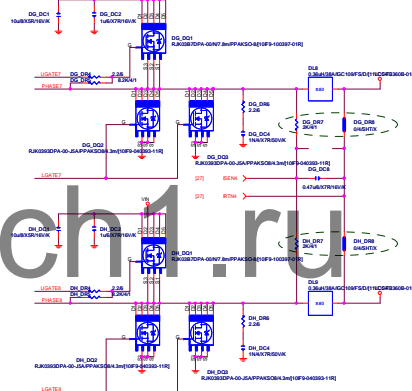
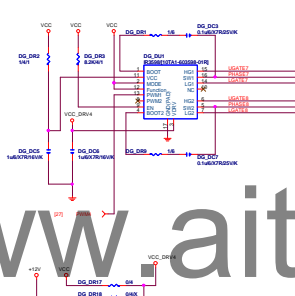
VCORE Phase 3,4



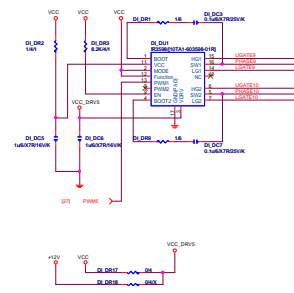
VCORE Phase 5,6



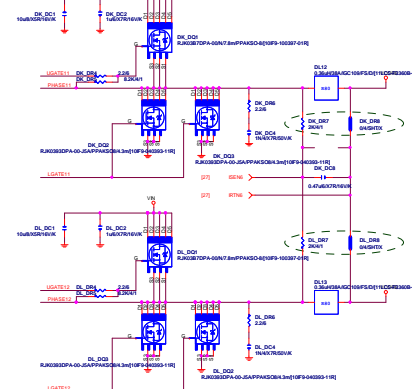
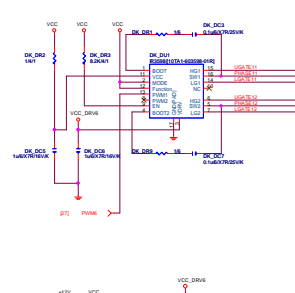
VCORE Phase 7,8



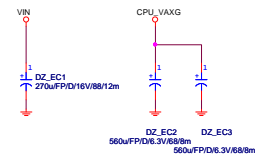
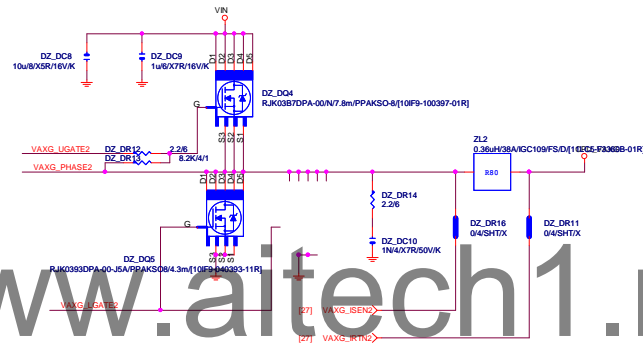
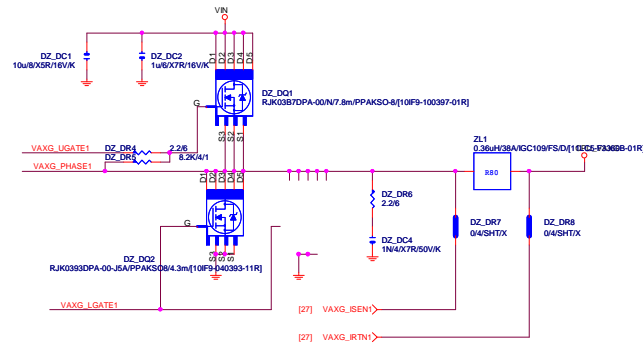
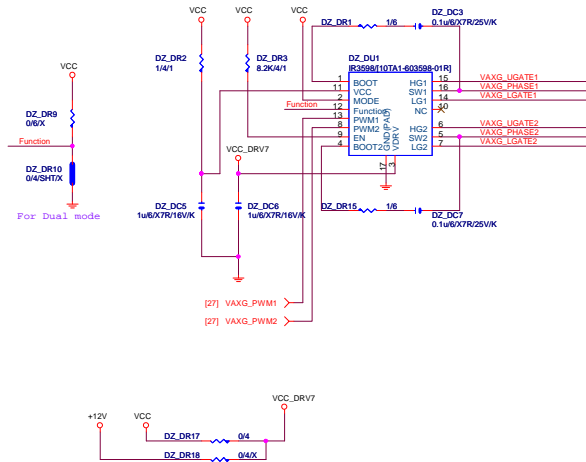
VCORE Phase 9,10



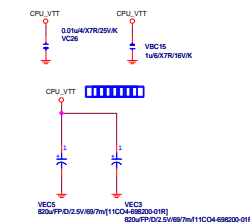
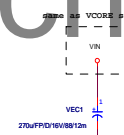
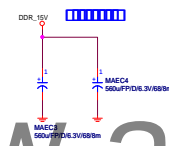
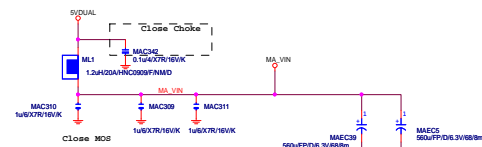
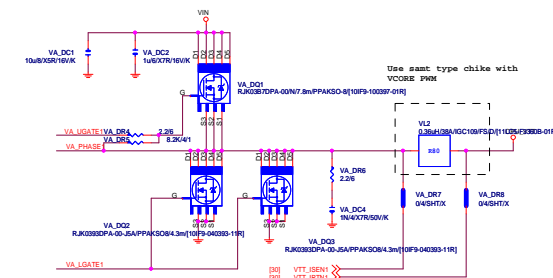
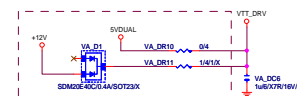
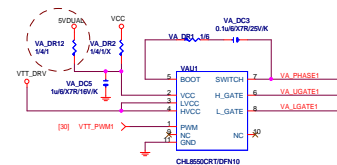
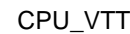
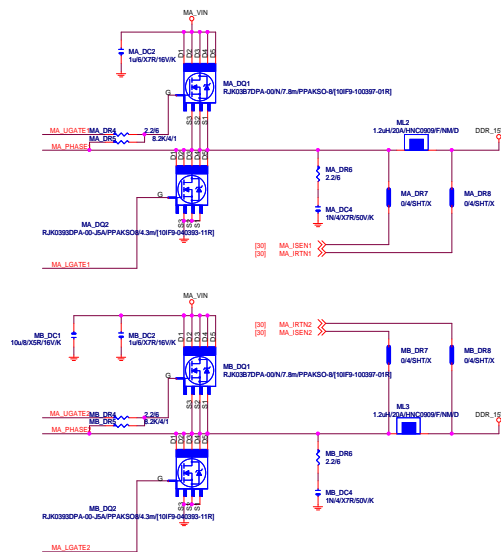
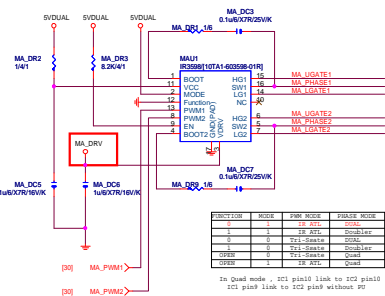
VCORE Phase 11,12

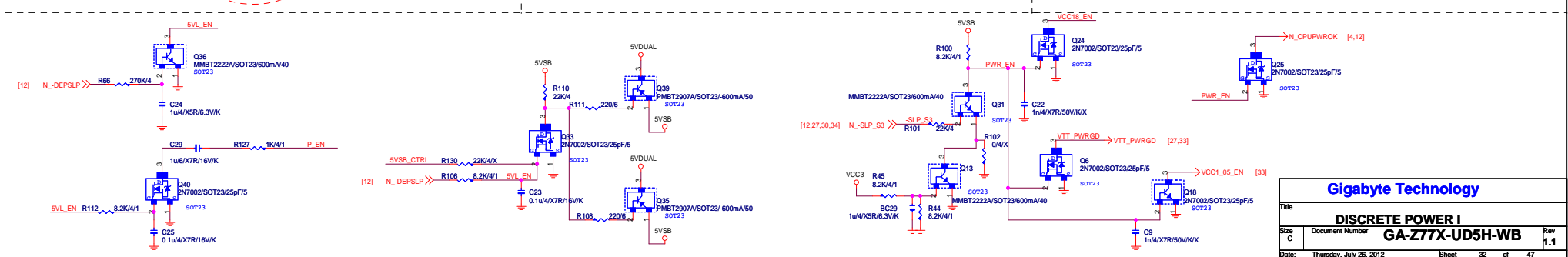
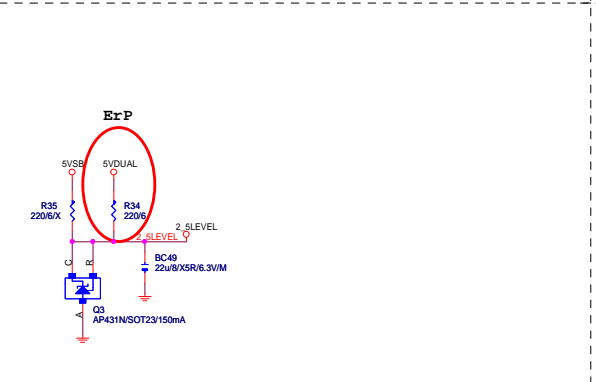
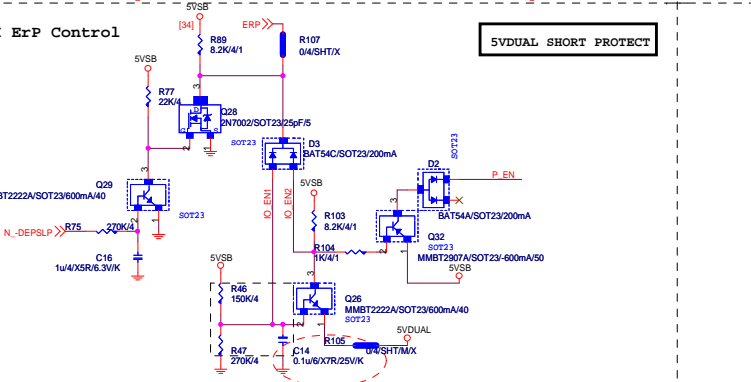
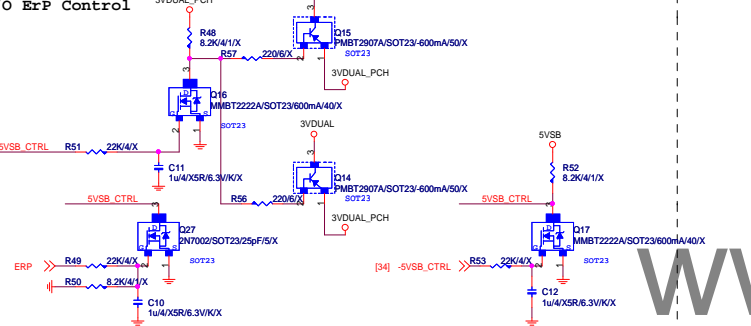
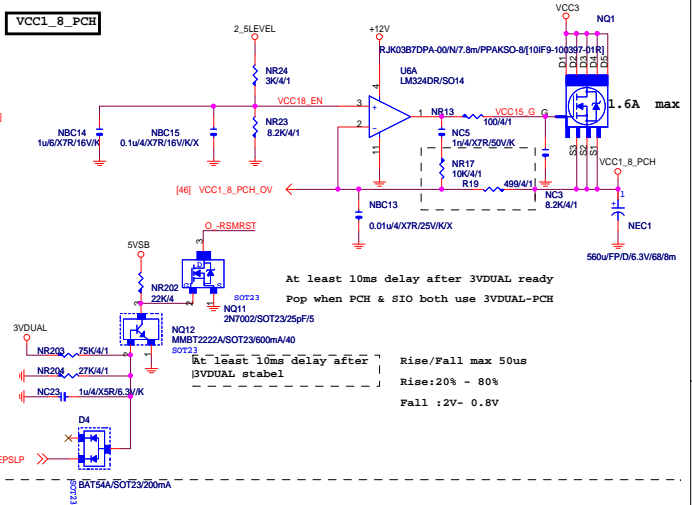


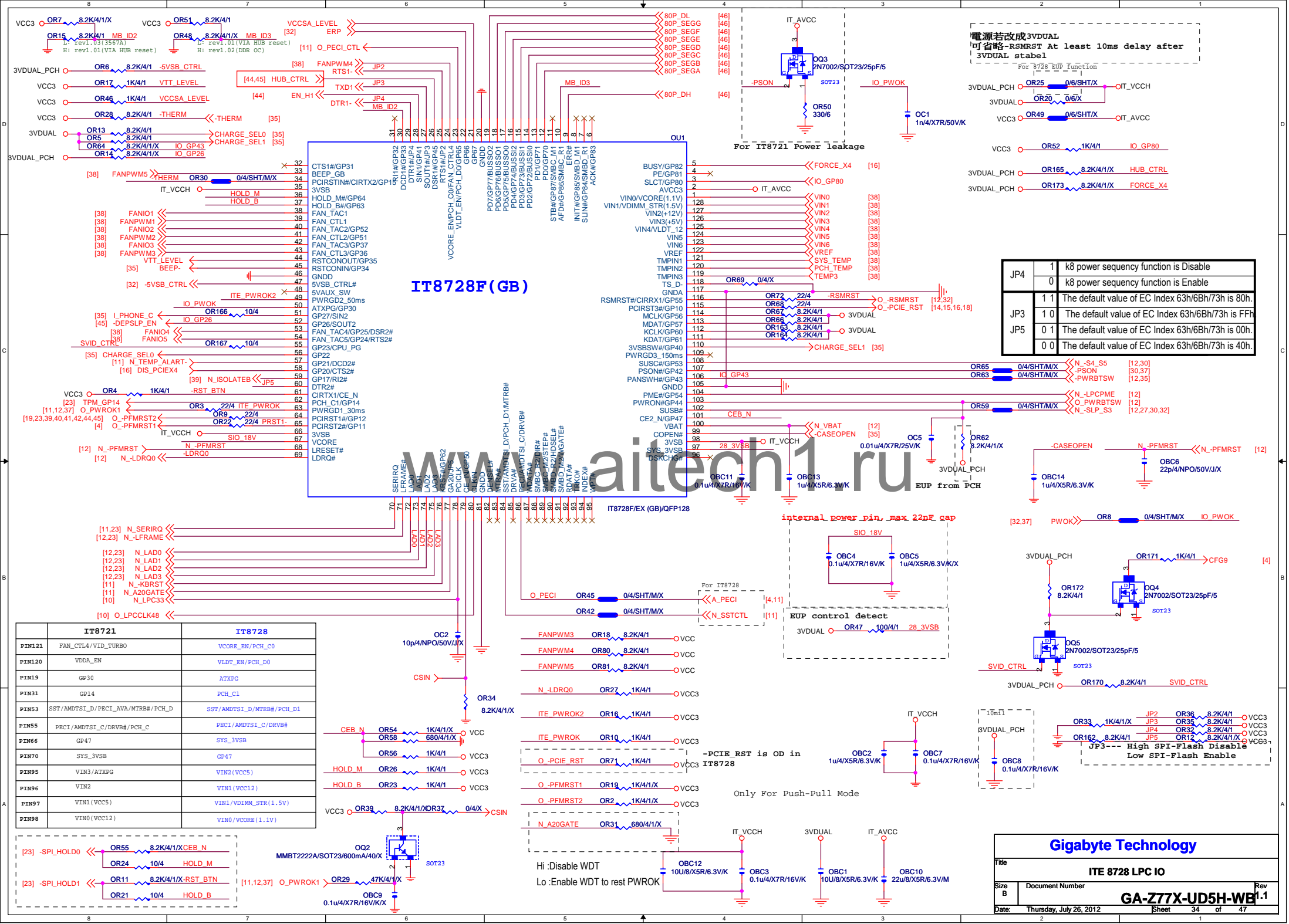
VAXG Phase

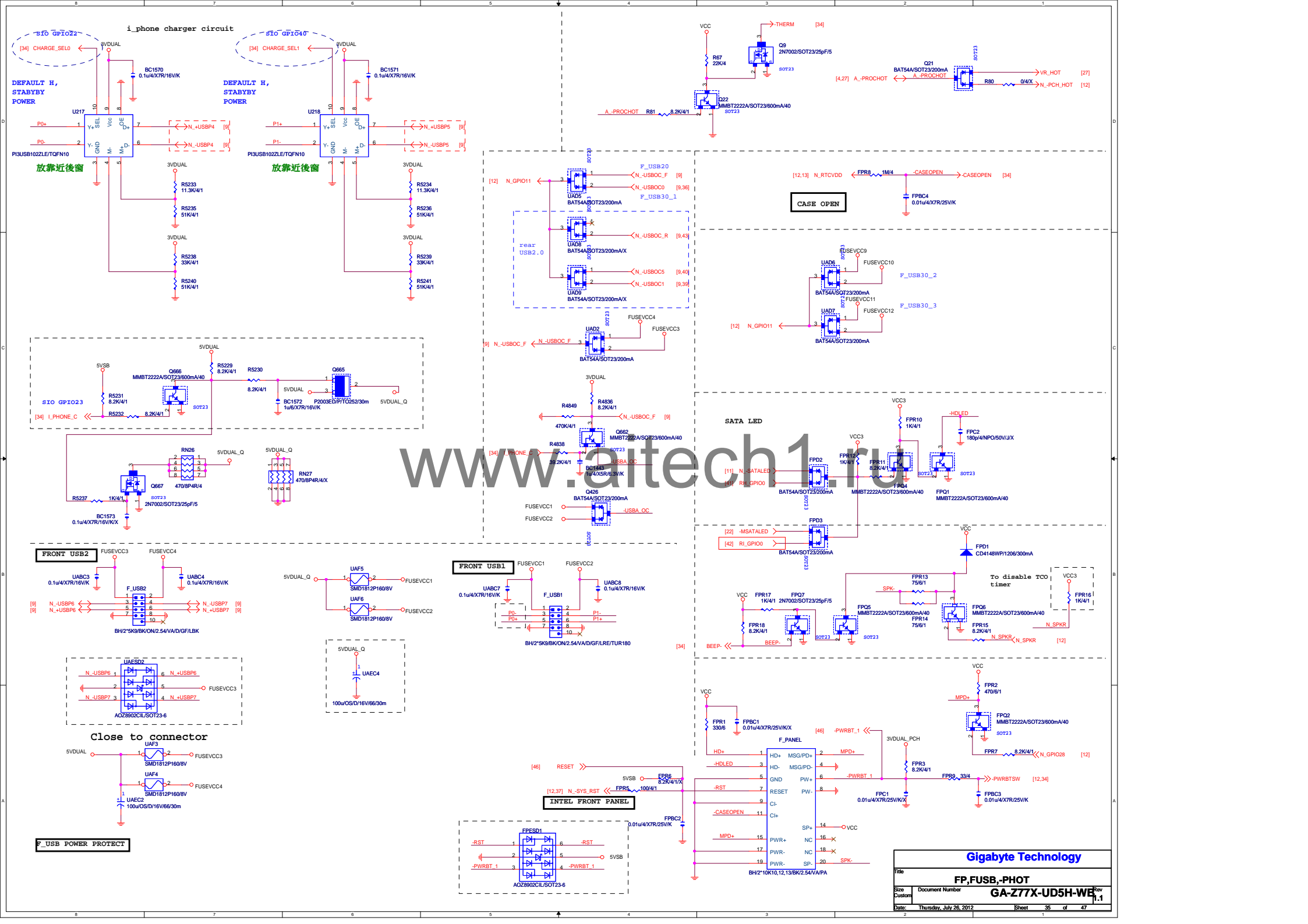


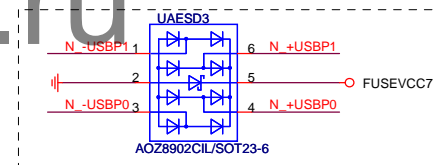
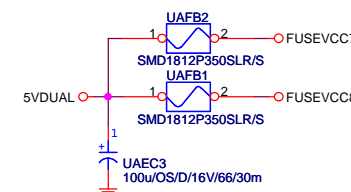
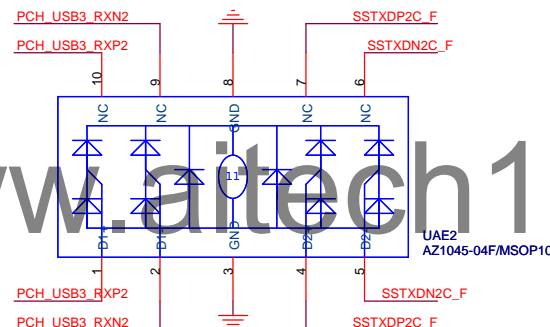
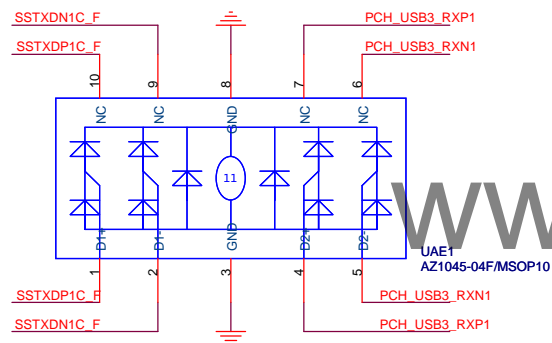
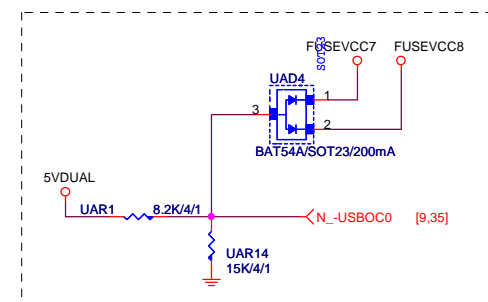
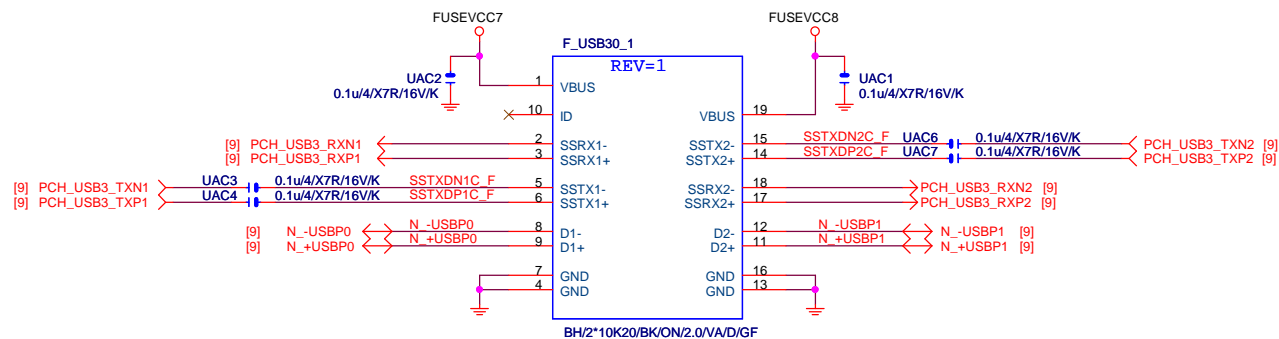
DDR_15V



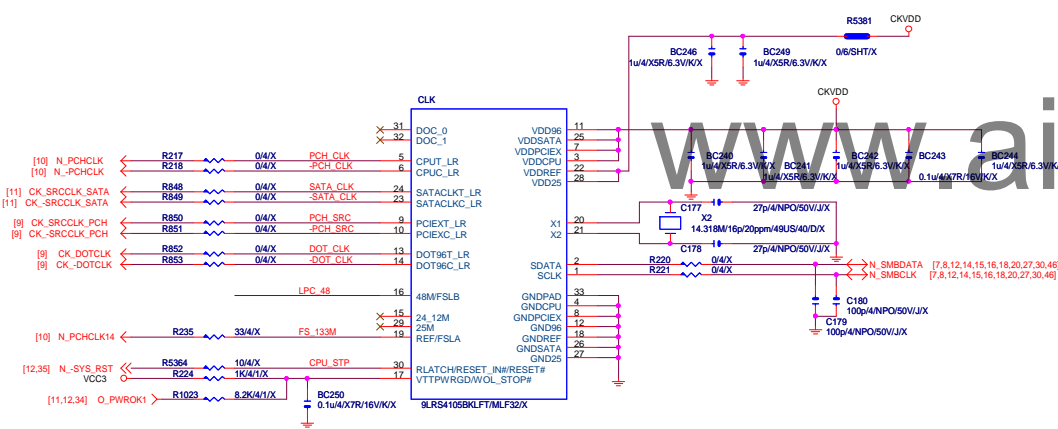
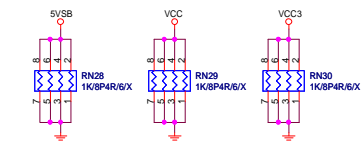
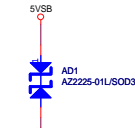
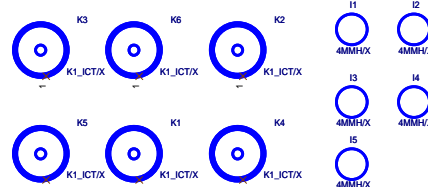
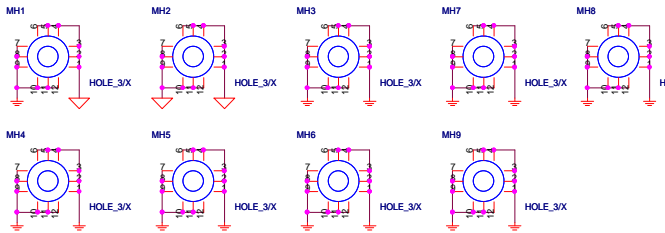
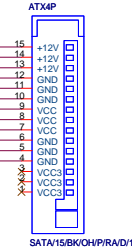
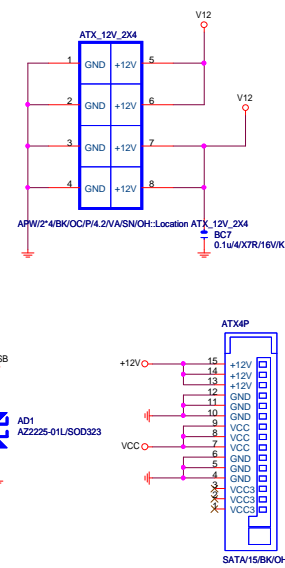
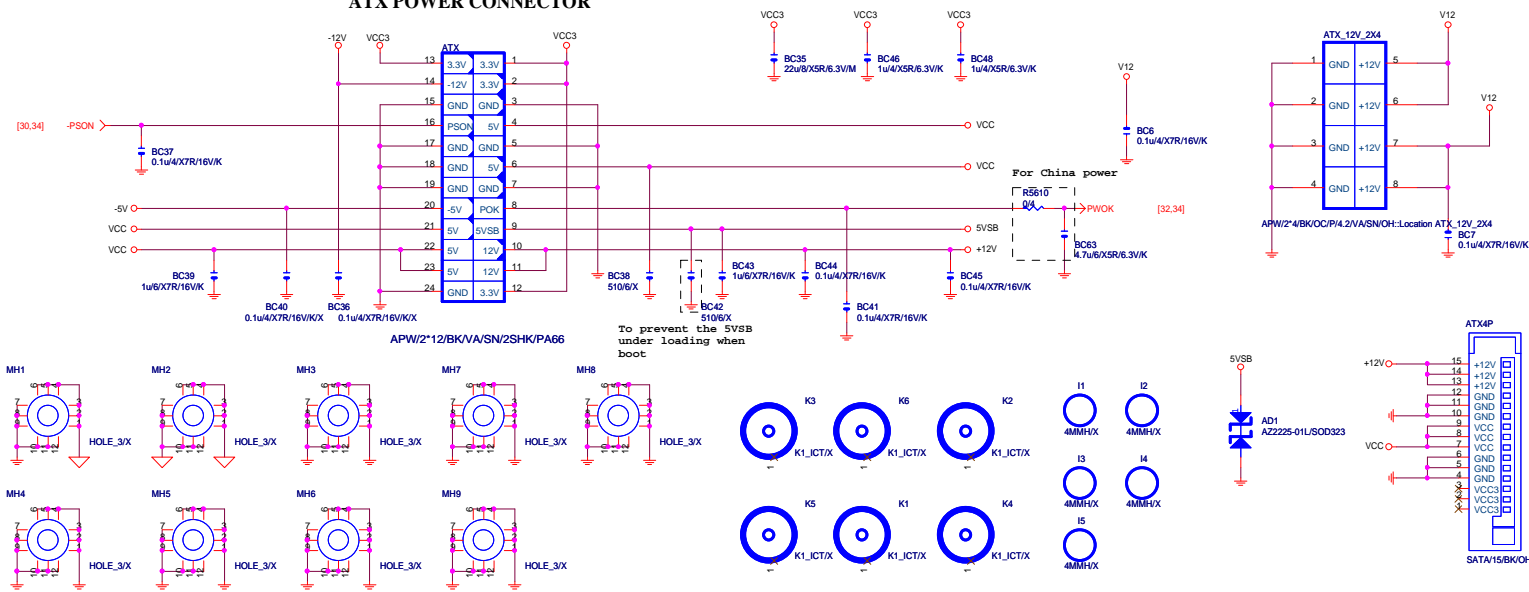




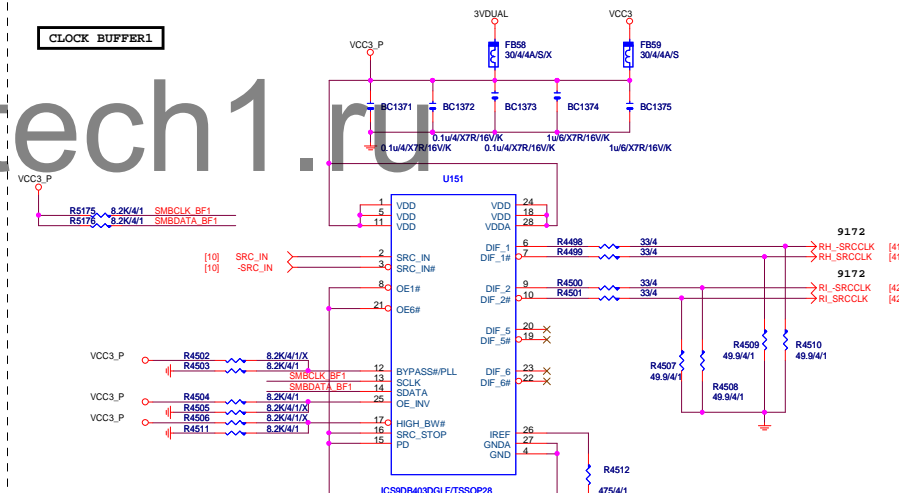




ATX POWER CONNECTOR



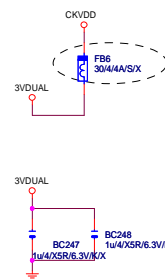
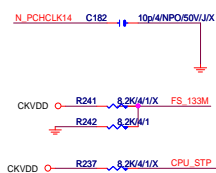
CLOCK BUFFER1



CLK GEN CK505

CPU Frequency Selection

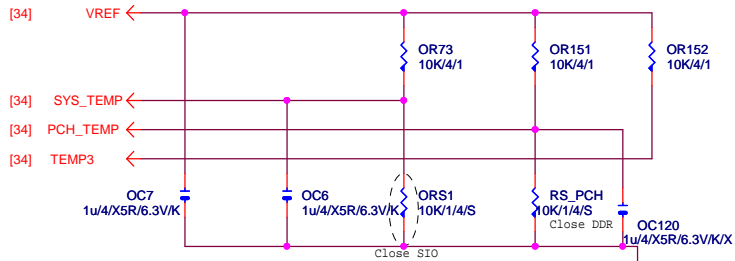
FSLB	FSLA	CPU
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0	1	133M
1	0	200M
1	1	166M



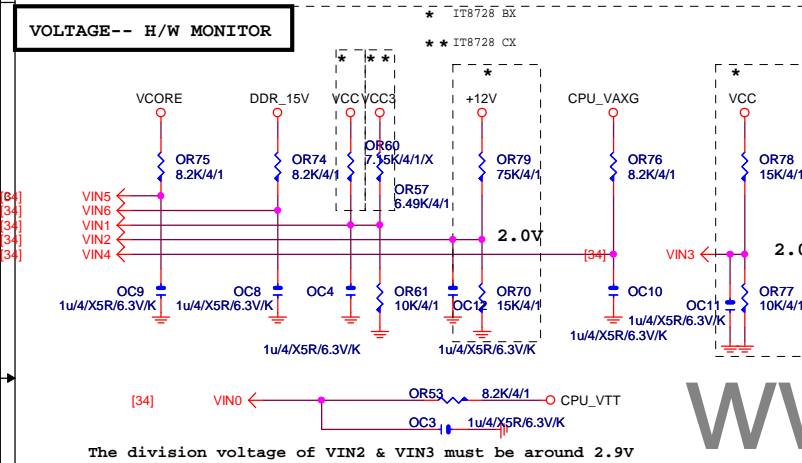
Gigabyte Technology

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ATX POWER , CLOCK GEN			1.1
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C			
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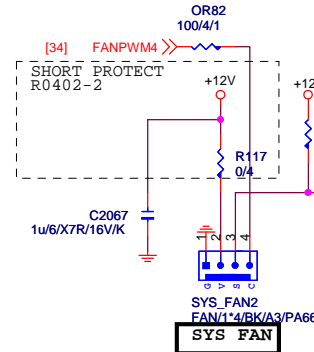
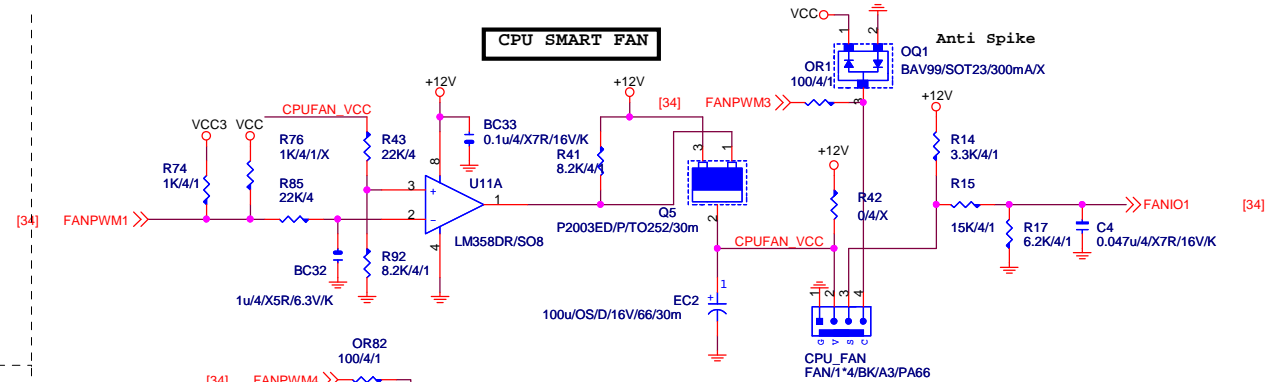
TEMP H/W MONITOR



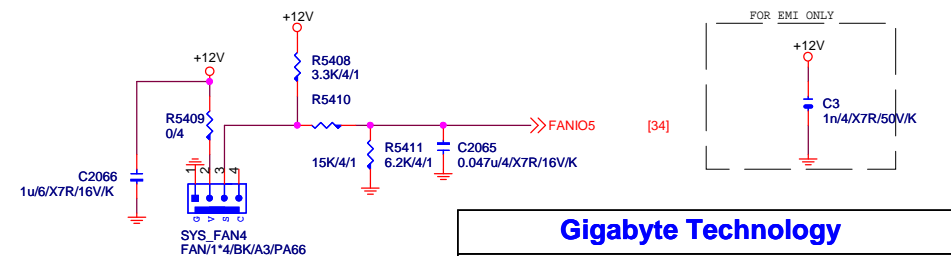
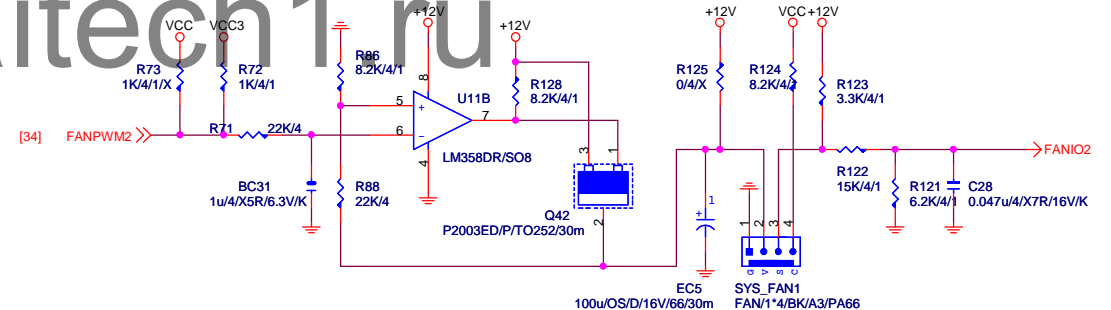
VOLTAGE-- H/W MONITOR



CPU SMART FAN

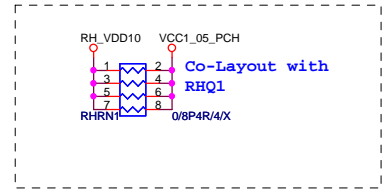
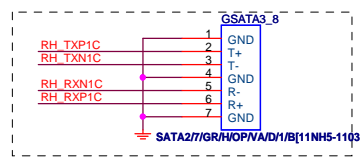
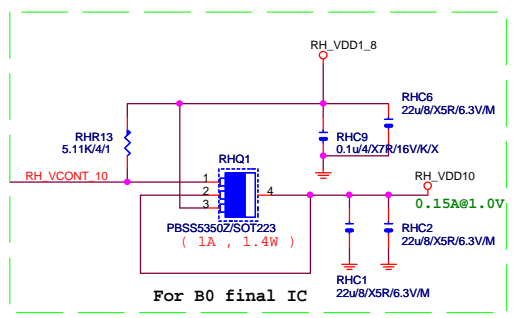
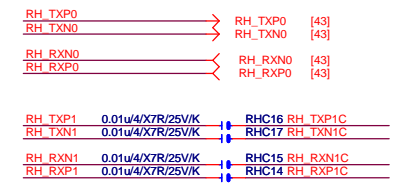
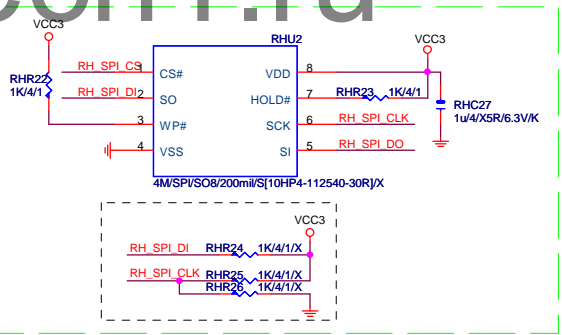
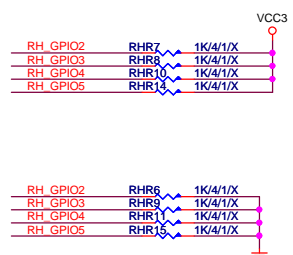
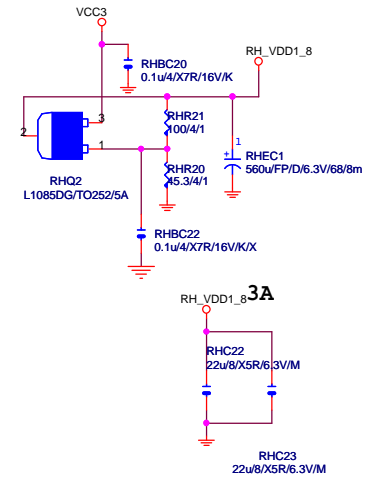
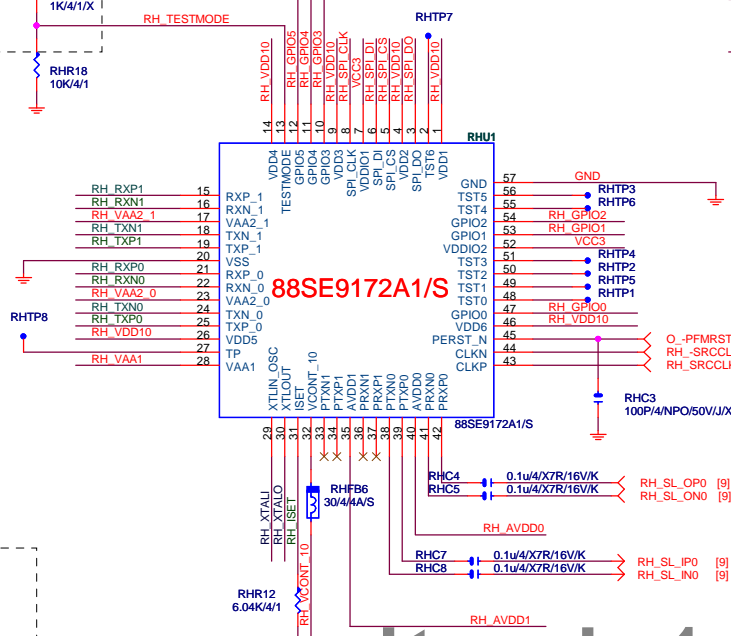
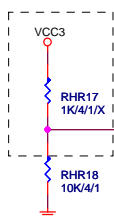
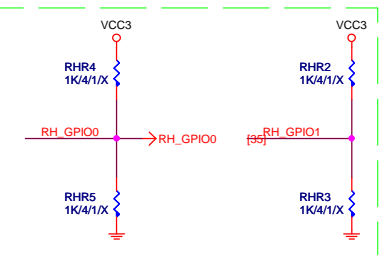
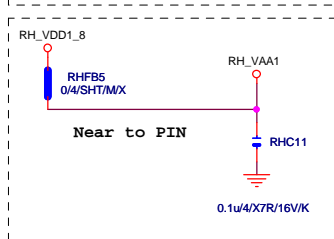
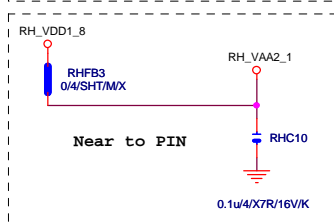
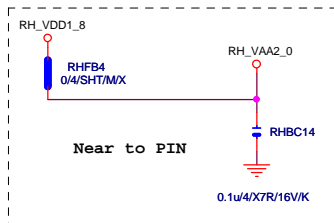
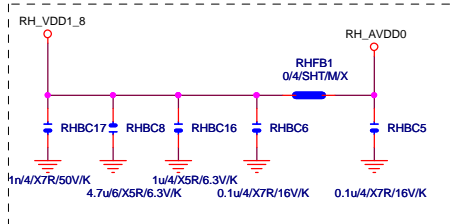
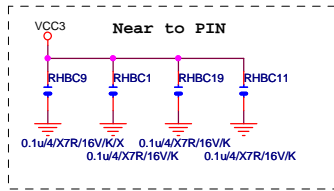
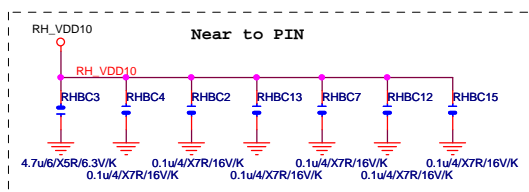


Linear SYS_FAN



Gigabyte Technology

Title			
HWM,KB/MS, FAN CTRL			
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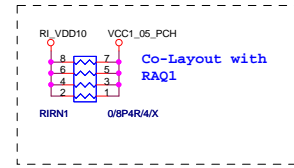
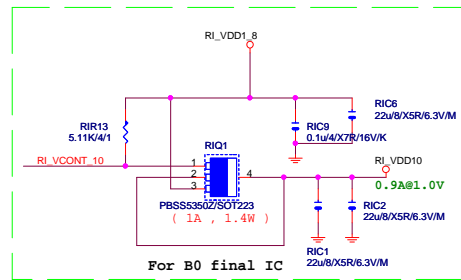
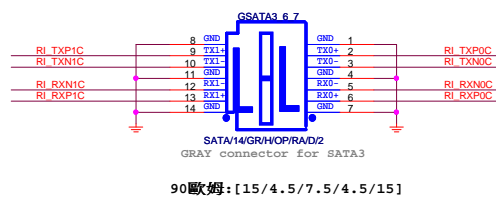
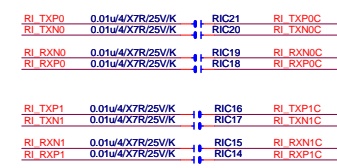
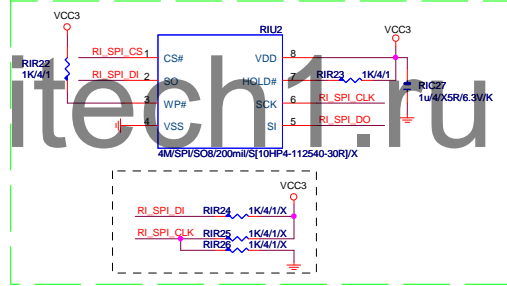
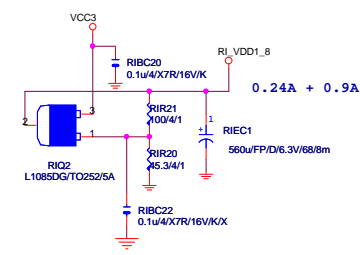
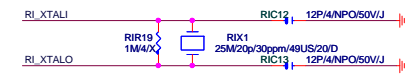
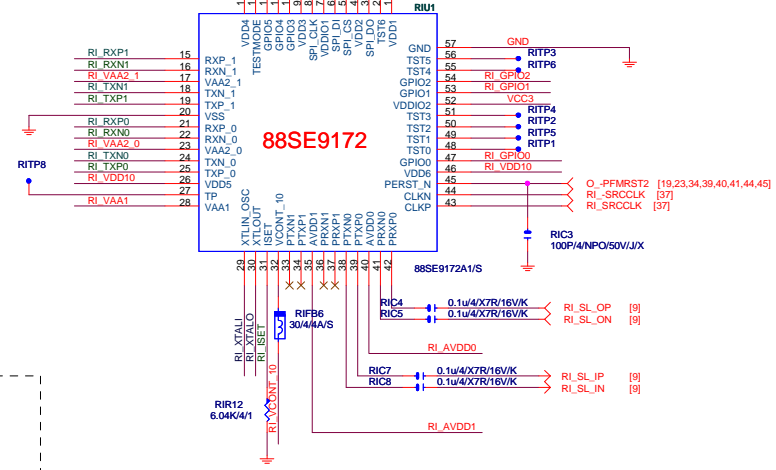
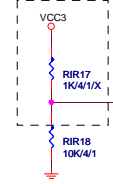
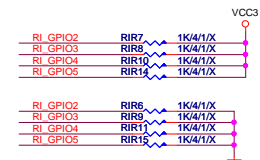
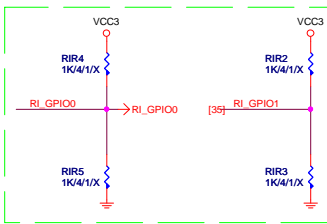
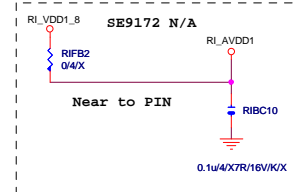
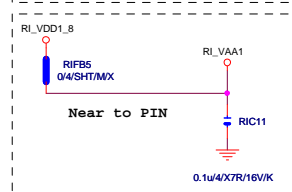
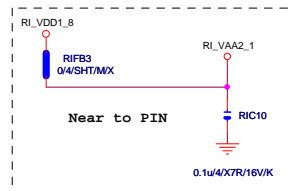
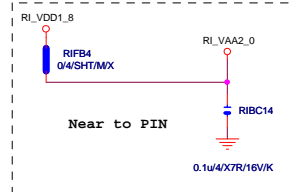
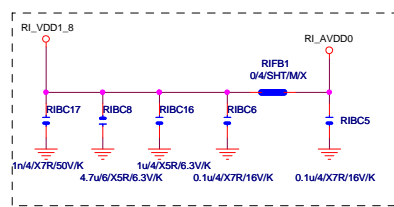
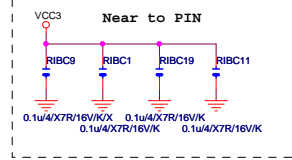
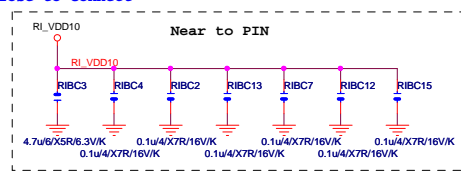
灰色 connector

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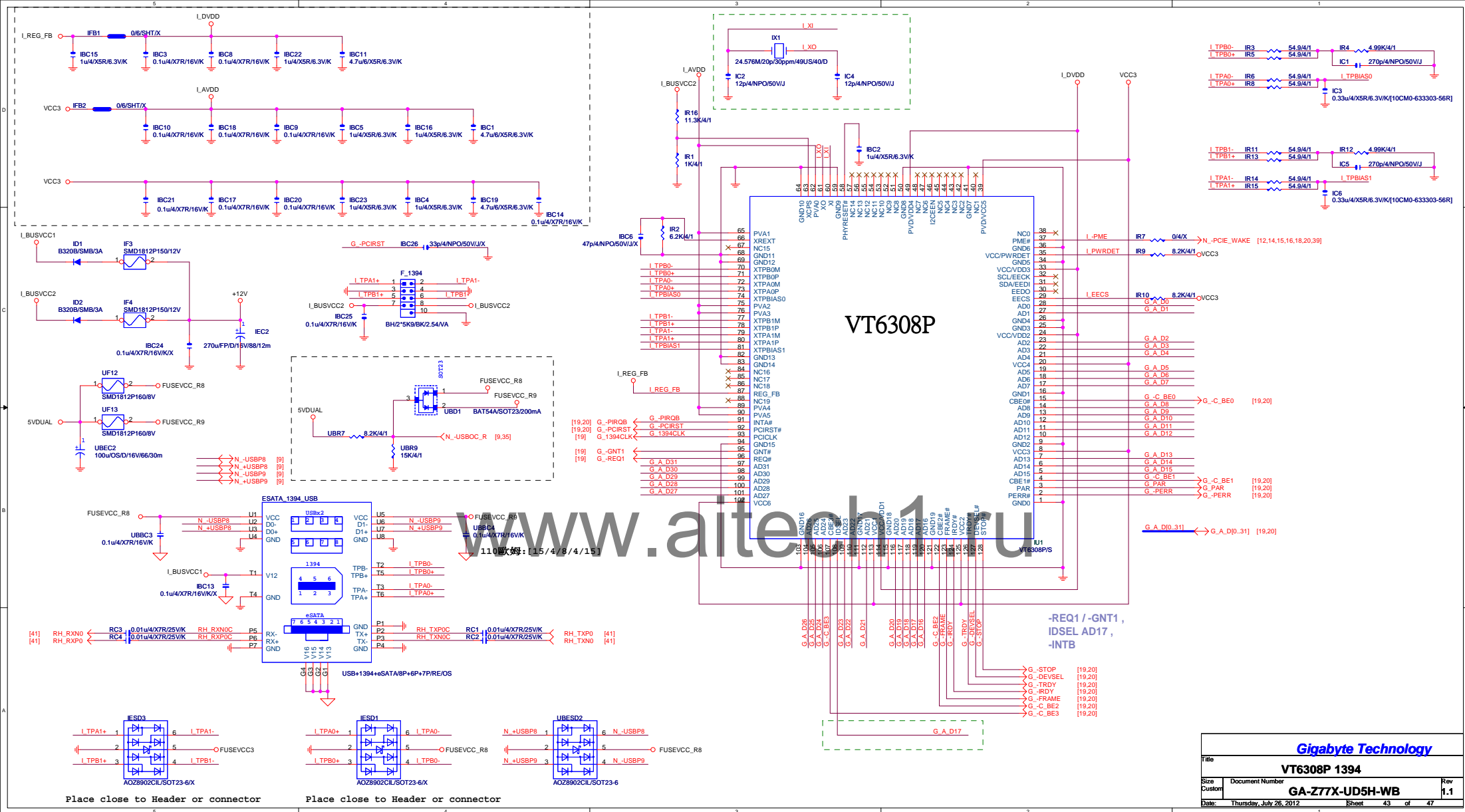
Marvell 9172(F+R)

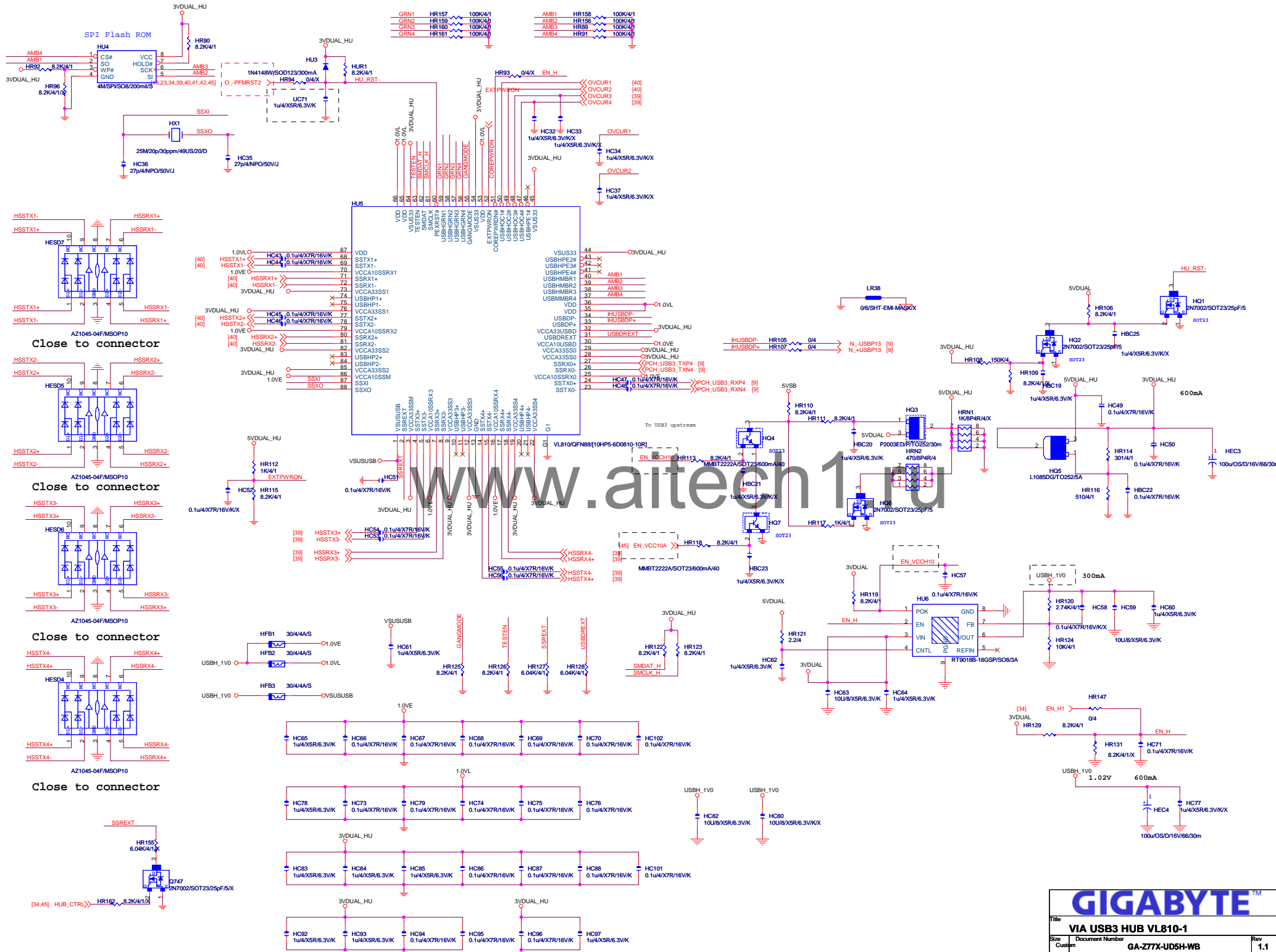
Size Document Number **GA-Z77X-UD5H-WB** Rev **1.1**

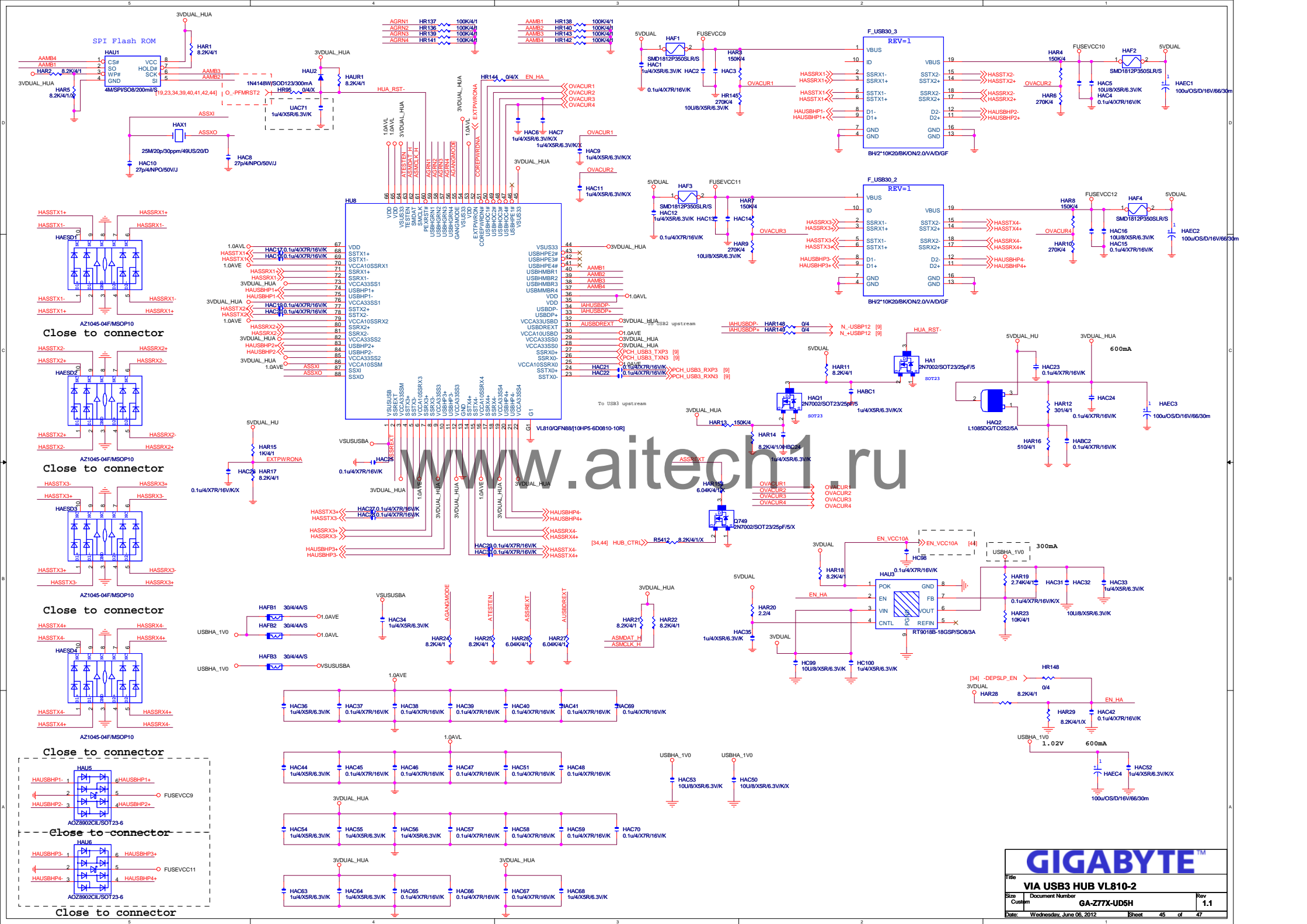
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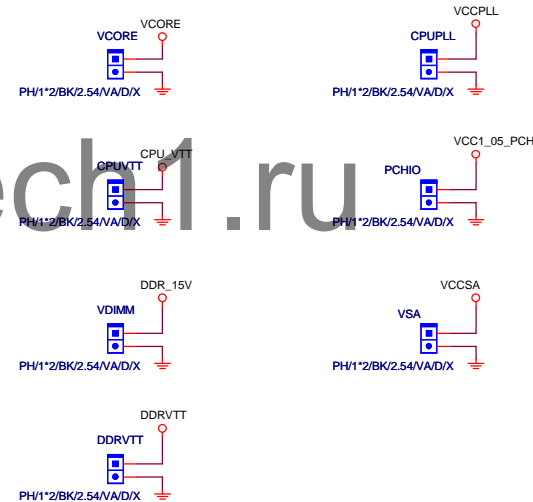
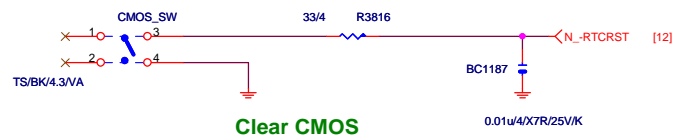
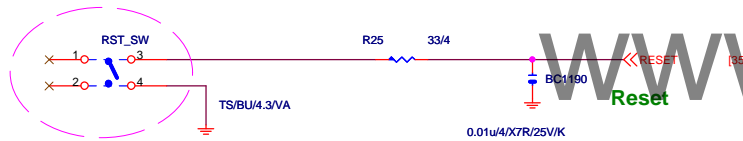
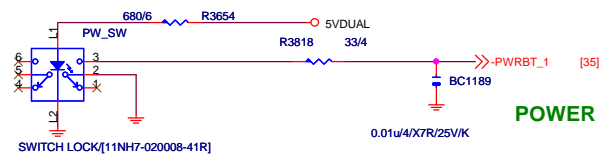
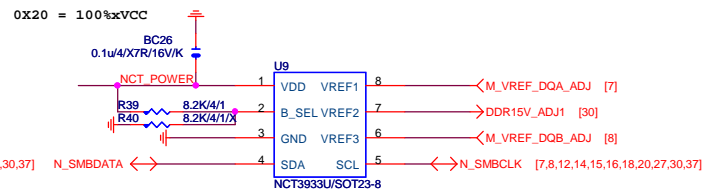
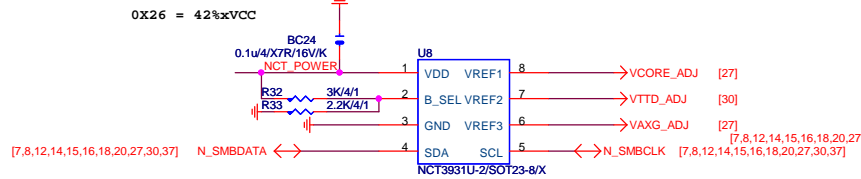
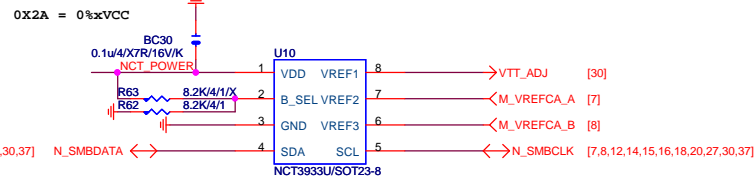
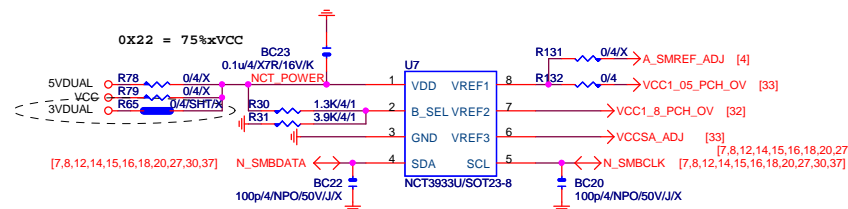


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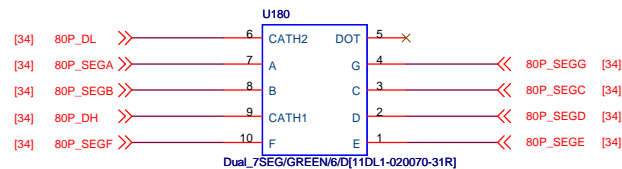
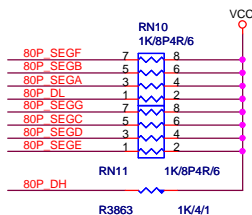




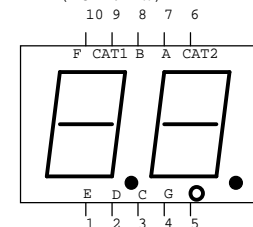




80 PORT



Physical Package
(TOP VIEW)



GIGABYTE™			
Title			
RST,PWR,CLR COMS			
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