

REV: 1.0

TITLE

SHEET

TITLE

[illegible]

Version: 1.0

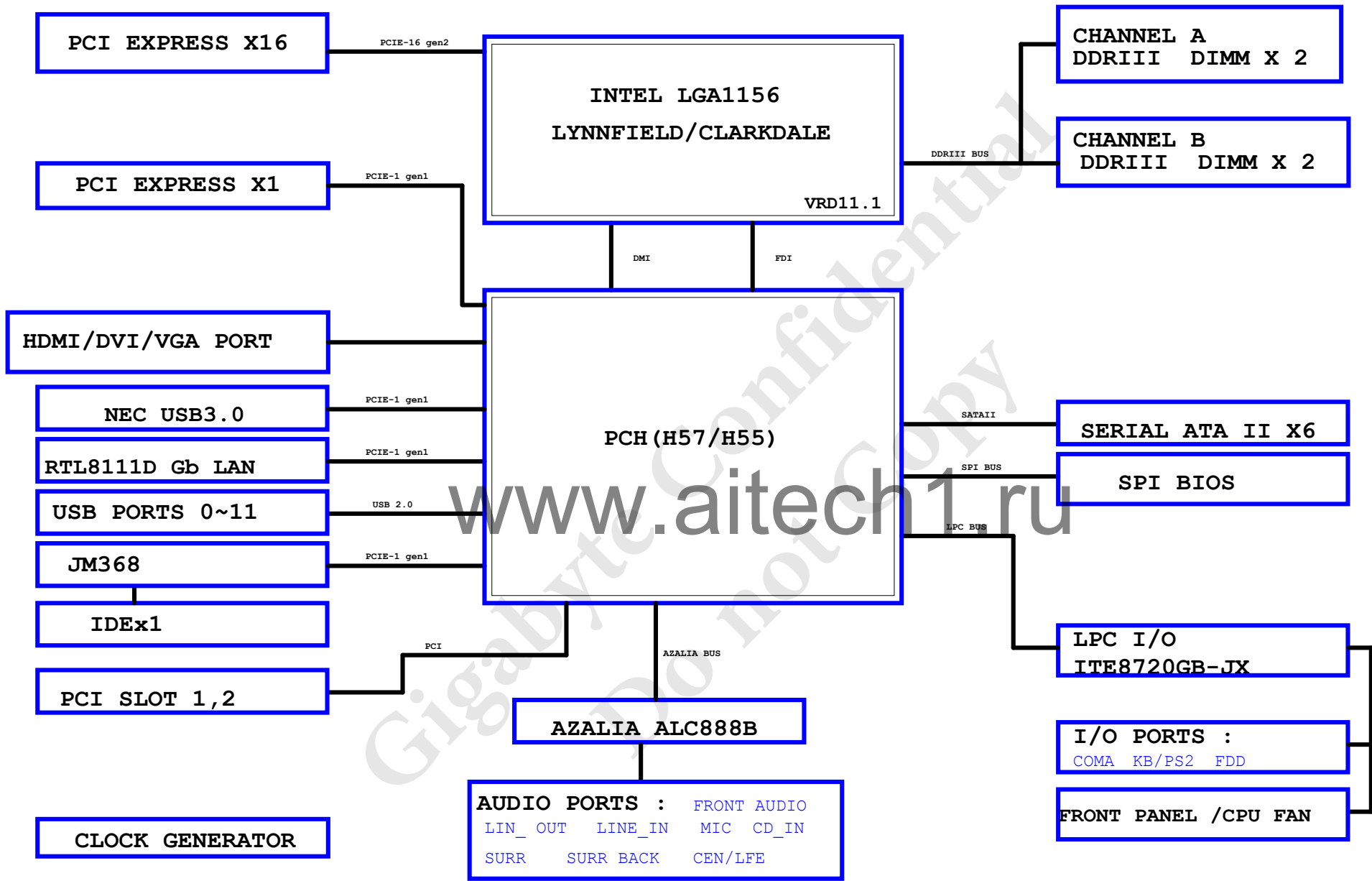
Circuit or PCB layout change
for next version

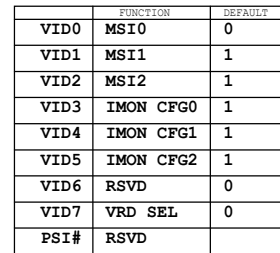
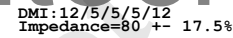
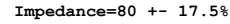
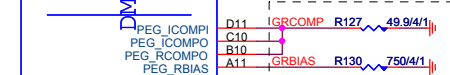
Component value change history

2010/01/27

[illegible][illegible]

BLOCK DIAGRAM



POWER ON CONFIG TABLE (Default=1.2250V)

Check Trace length/ width

Gigabyte Technology				
Title				
CPU LGA1156-A				
Size	Document Number	GA-H55M-USB3P-TO		Rev
Custom				1.0
Date:	Wednesday, January 27, 2010		Sheet	4 of 35

LGA1156A			
MAAA0	AW18	SA_MA[0]	AK3 DQSA0
MAAA1	AY15	SA_MA[1]	AK3 -DQSA0
MAAA2	AV15	SA_MA[2]	AK2 DMA0
MAAA3	AU15	SA_MA[3]	
MAAA4	AW14	SA_MA[4]	AH1 MDA0
MAAA5	AY13	SA_MA[5]	AJ4 MDA1
MAAA6	AV14	SA_MA[6]	AL2 MDA2
MAAA7	AW13	SA_MA[7]	AL1 MDA3
MAAA8	AU14	SA_MA[8]	AG2 MDA4
MAAA9	AW12	SA_MA[9]	AH2 MDA5
MAAA10	AT19	SA_MA[10]	AK1 MDA6
MAAA11	AU11	SA_MA[11]	AK2 MDA7
MAAA12	AW11	SA_MA[12]	
MAAA13	AU24	SA_MA[13]	AP2 DQSA1
MAAA14	AT11	SA_MA[14]	AP3 -DQSA1
MAAA15	AR10	SA_MA[15]	AN1 DMA1
[7] -SWEA	AT22	SA_WE#	AN3 MDA8
[7] -SCASA	AU22	SA_CAS#	AN2 MDA9
[7] -SRASA	AT20	SA_RAS#	AR3 MDA10
[7] SBAA0	AV20	SA_BS[0]	AR2 MDA11
[7] SBAA1	AU19	SA_BS[1]	AM3 MDA12
[7] SBAA2	AU12	SA_BS[2]	AM2 MDA13
		SA_BS[3]	AP1 MDA14
		SA_BS[4]	AR4 MDA15
[7] -CSA0	AV21	SA_CS#(0)	
[7] -CSA1	AW24	SA_CS#(1)	AJ4 DQSA2
[7] -CSA2	AU21	SA_CS#(2)	AL3 -DQSA2
[7] -CSA3	AU23	SA_CS#(3)	AU1 DMA2
[7] CKEA0	AU10	SA_CKE[0]	AT4 MDA16
[7] CKEA1	AW10	SA_CKE[1]	AJ2 MDA17
[7] CKEA2	AV10	SA_CKE[2]	AW3 MDA18
[7] CKEA3	AY10	SA_CKE[3]	AW4 MDA19
		SA_CKE[4]	AT3 MDA20
		SA_CKE[5]	AT1 MDA21
MODT_A0	AV23	SA_ODT[0]	AV2 MDA22
MODT_A1	AV24	SA_ODT[1]	SA_ODT[2]
MODT_A2	AW23	SA_ODT[2]	SA_ODT[3]
MODT_A3	AY24	SA_ODT[3]	
[7] DCLKA0	AR22	SA_CK[0]	AY6 DQSA3
[7] -DCLKA0	AR21	SA_CK#(0)	AW6 -DQSA3
[7] DCLKA1	AP18	SA_CK[1]	AW6 DMA3
[7] -DCLKA1	AN18	SA_CK#(1)	
[7] DCLKA2	AN21	SA_CK[2]	AW5 MDA24
[7] -DCLKA2	AP21	SA_CK#(2)	AY5 MDA25
[7] DCLKA3	AP19	SA_CK[3]	AJ8 MDA26
[7] -DCLKA3	AN19	SA_CK#(3)	AY8 MDA27
[7,8] -DDR3_RST	AV8	SM_DRAMRST#	AU5 MDA28
			AV6 MDA29
			AV7 MDA30
			AW7 MDA31
TP1	AK22	SA_CS#(4)	AR28 DQSA4
TP1	AM22	SA_CS#(5)	AT29 -DQSA4
TP1	AL23	SA_CS#(6)	AN29 DMA4
TP1	AK23	SA_CS#(7)	
			AN27 MDA32
			AT28 MDA33
			AP28 MDA34
			AP30 MDA35
			AP27 MDA36
			AP22 MDA37
			AR29 MDA38
			AN30 MDA39
			AV32 DQSA5
			AW32 -DQSA5
			AW31 DMA5
			AU30 MDA40
			AJ31 MDA41
			AV33 MDA42
			AJ34 MDA43
			AV30 MDA44
			AW30 MDA45
			AJ33 MDA46
			AW33 MDA47
			AW36 DQSA6
			AV35 -DQSA6
			AJ35 DMA6
			AW35 MDA48
			AY35 MDA49
			AV37 MDA50
			AJ37 MDA51
			AY34 MDA52
			AW34 MDA53
			AV36 MDA54
			AW37 MDA55
			AR30 DQSA7
			AR38 -DQSA7
			AT38 DMA7
			AT39 MDA56
			AT40 MDA57
			AN38 MDA58
			AN39 MDA59
			AJ38 MDA60
			AP39 MDA61
			AP40 MDA62
			AP40 MDA63

DDR_A

1 OF 10

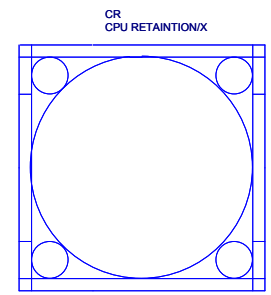
LGA1156(10SC1-F01156-01R)

LGA1156B			
MAAB0	AU20	SB_MA[0]	AF4 DQSB0
MAAB1	AU18	SB_MA[1]	AE5 -DQSB0
MAAB2	AV18	SB_MA[2]	AE4 DMB0
MAAB3	AU17	SB_MA[3]	
MAAB4	AY18	SB_MA[4]	AD7 MDB0
MAAB5	AV17	SB_MA[5]	AD6 MDB1
MAAB6	AW17	SB_MA[6]	AH8 MDB2
MAAB7	AU16	SB_MA[7]	AJ8 MDB3
MAAB8	AT17	SB_MA[8]	AC7 MDB4
MAAB9	AY16	SB_MA[9]	AC6 MDB5
MAAB10	AY25	SB_MA[10]	AF5 MDB6
MAAB11	AW16	SB_MA[11]	AE6 MDB7
MAAB12	AW15	SB_MA[12]	AH6 DQSB1
MAAB13	AW28	SB_MA[13]	AJ5 -DQSB1
MAAB14	AY12	SB_MA[14]	AH4 DMB1
MAAB15	AV11	SB_MA[15]	
[8] -SWEB	AW26	SB_WE#	AG5 MDB8
[8] -SCASB	AW26	SB_CAS#	AH7 MDB9
[8] -SRASB	AW26	SB_RAS#	AK6 MDB10
[8] SBAB0	AW25	SB_BS[0]	AL4 MDB11
[8] SBAB1	AW25	SB_BS[1]	AG6 MDB12
[8] SBAB2	AV12	SB_BS[2]	AC4 MDB13
			AJ7 MDB14
			AK7 MDB15
[8] -CSB0	AY27	SB_CS#(0)	AN6 DQSB2
[8] -CSB1	AW26	SB_CS#(1)	AM6 -DQSB2
[8] -CSB2	AW26	SB_CS#(2)	AM7 DMB2
[8] -CSB3	AW26	SB_CS#(3)	
[8] CKEB0	AW8	SB_CKE[0]	AL6 MDB16
[8] CKEB1	AY9	SB_CKE[1]	AN6 MDB17
[8] CKEB2	AU9	SB_CKE[2]	AP6 MDB18
[8] CKEB3	AV9	SB_CKE[3]	AR5 MDB19
			AL5 MDB20
			AM4 MDB21
			AN7 MDB22
			AP5 MDB23
MODT_B0	AU27	SB_ODT[0]	AR8 DQSB3
MODT_B1	AU27	SB_ODT[1]	AP8 -DQSB3
MODT_B2	AV27	SB_ODT[2]	AT7 DMB3
MODT_B3	AV27	SB_ODT[3]	
[8] DCLKB0	AR17	SB_CK[0]	AT6 MDB24
[8] -DCLKB0	AR16	SB_CK#(0)	AR7 MDB25
[8] DCLKB1	AT15	SB_CK[1]	AP9 MDB26
[8] -DCLKB1	AR15	SB_CK#(1)	AR8 MDB27
[8] DCLKB2	AN17	SB_CK[2]	AN8 MDB28
[8] -DCLKB2	AN16	SB_CK#(2)	AR6 MDB29
[8] DCLKB3	AR18	SB_CK[3]	AL8 MDB30
[8] -DCLKB3	AR18	SB_CK#(3)	AT9 MDB31
TP12	AM23	SB_CS#(4)	AT25 DQSB4
TP13	AM24	SB_CS#(5)	AR24 -DQSB4
TP15	AL24	SB_CS#(6)	AR24 DMB4
TP17	AK24	SB_CS#(7)	
			AN23 MDB32
			AP23 MDB33
			AR25 MDB34
			AR26 MDB35
			AT23 MDB36
			AP22 MDB37
			AP25 MDB38
			AT26 MDB39
			AP32 DQSB5
			AR32 -DQSB5
			AN32 DMB5
			AT32 MDB40
			AP31 MDB41
			AR33 MDB42
			AM32 MDB43
			AT31 MDB44
			AR34 MDB45
			AT33 MDB46
			AR36 DQSB6
			AR37 -DQSB6
			AM33 DMB6
			AR35 MDB48
			AT36 MDB49
			AP36 MDB50
			AP36 MDB51
			AP34 MDB52
			AT35 MDB53
			AN34 MDB54
			AP37 MDB55
			AL37 DQSB7
			AM36 -DQSB7
			AK35 DMB7
			AL35 MDB56
			AM35 MDB57
			AJ36 MDB58
			AJ37 MDB59
			AN35 MDB60
			AM34 MDB61
			AJ35 MDB62
			AL36 MDB63

DDR_B

2 OF 10

LGA1156(10SC1-F01156-01R)



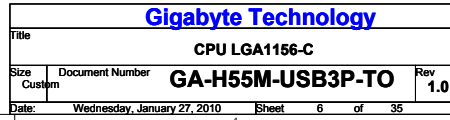
Need check the new CPU ME

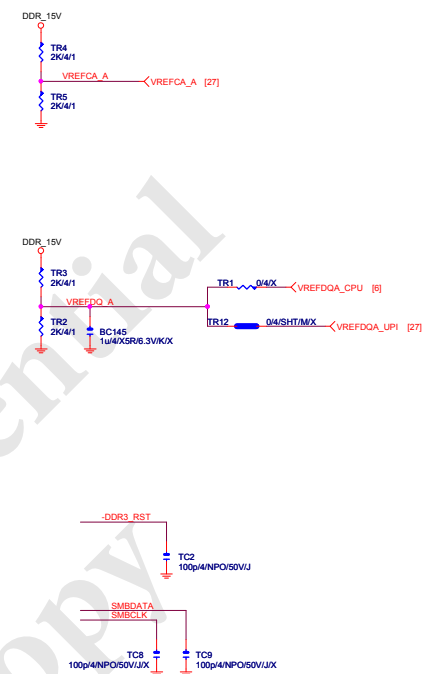
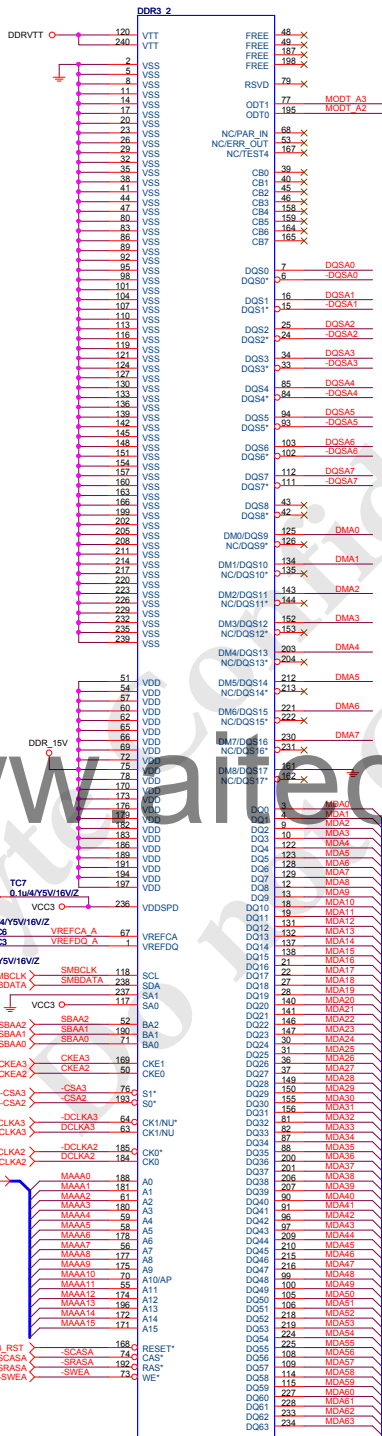
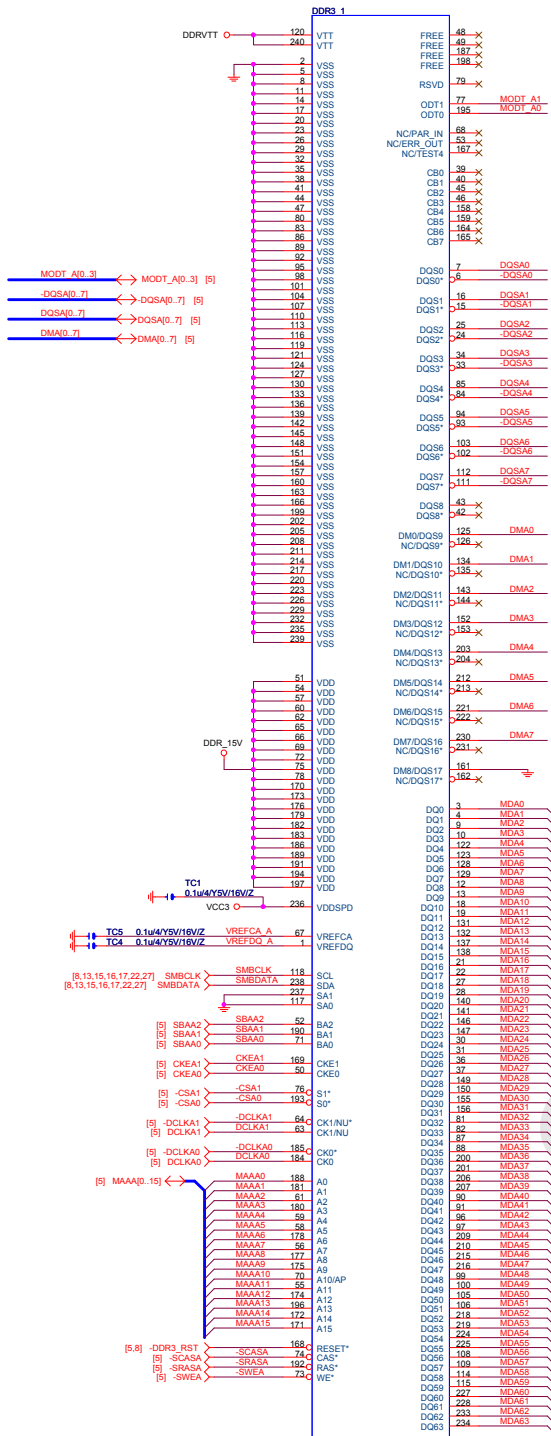
LGA1156_P



PLATE+HLM(12KRC-0F0001-01R)

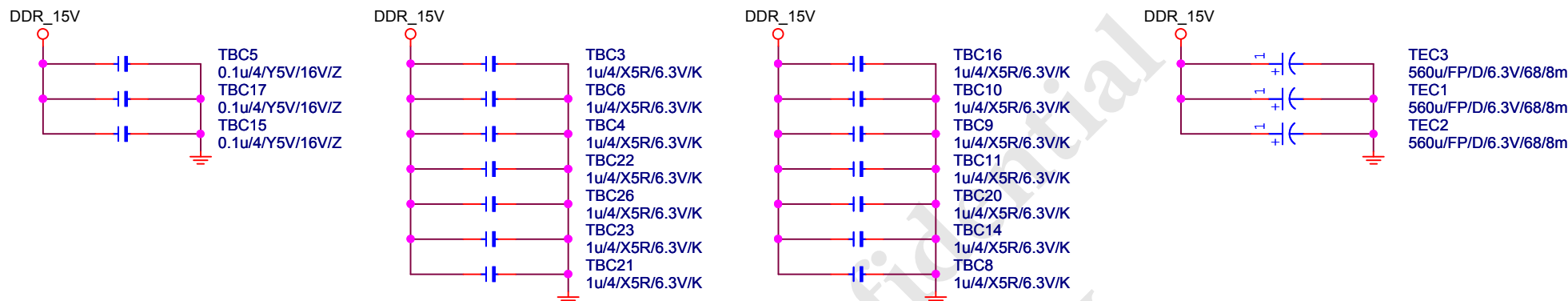
Gigabyte Technology			
Title			
CPU LGA1156-B			
Size			
Custom	Document Number	GA-H55M-USB3P-TO	
Date:			Rev 1.0
Wednesday, January 27, 2010			
Sheet			5 of 35



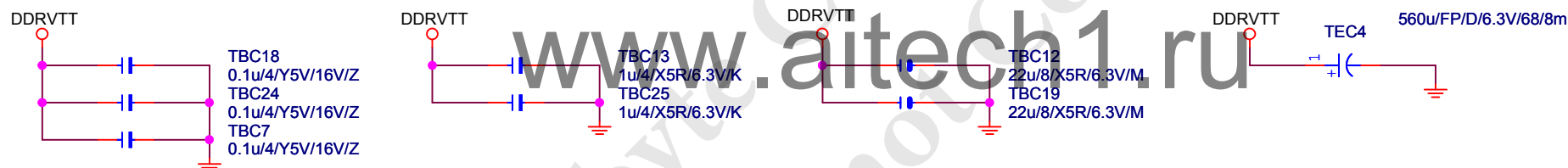


DDR TERMINATION CHANNEL A/B

DDR15V Decouple



DDRVTT Decouple



REF VCC層GND, GND層GND要塞孔



REF GND層GND, VCC層GND要塞孔

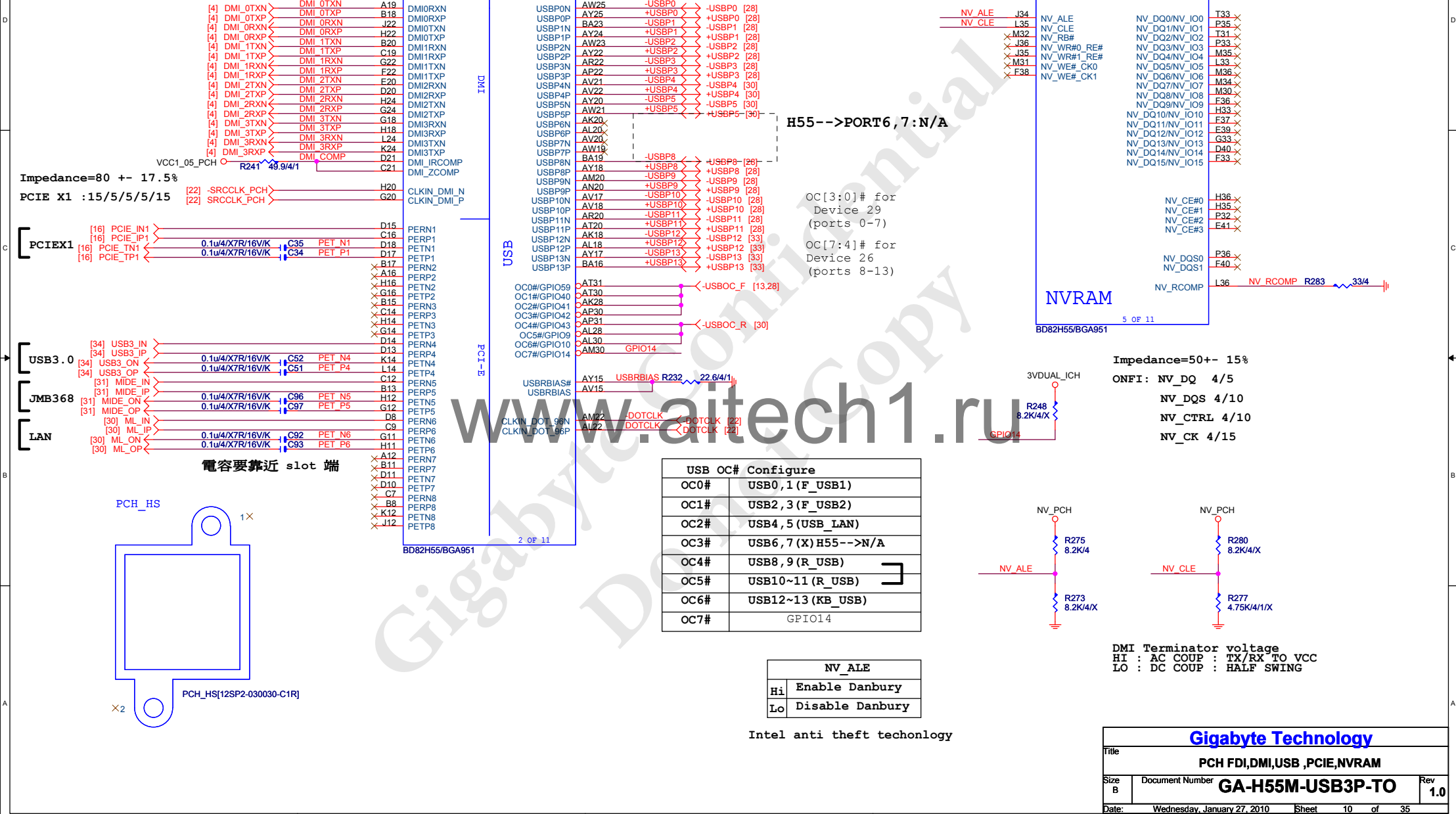
Gigabyte Technology

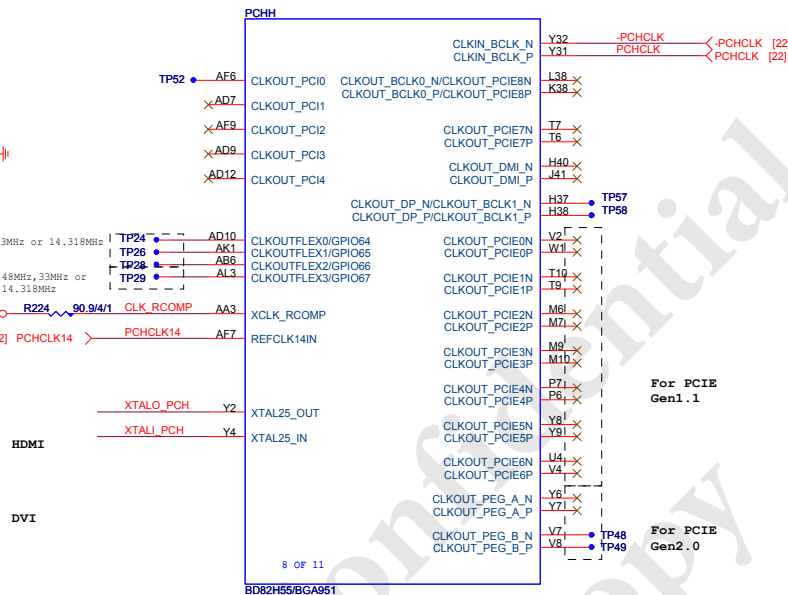
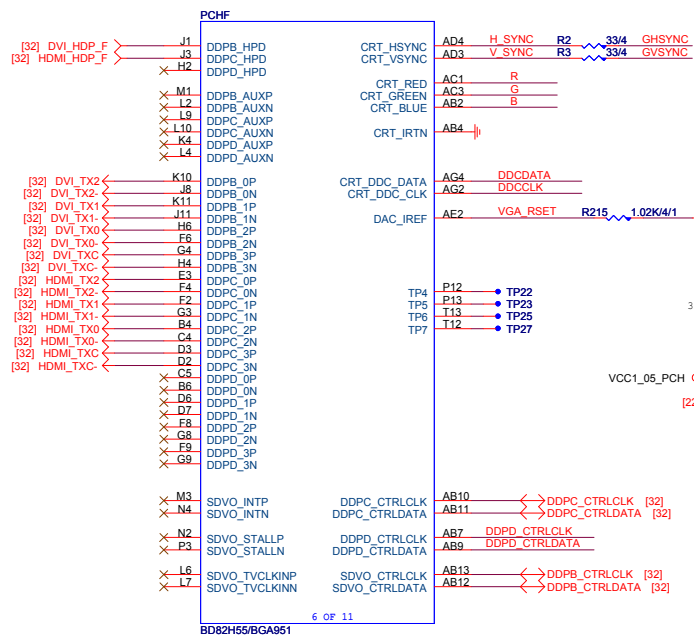
Title			DDRIII POWER CAP
Size A	Document Number	GA-H55M-USB3P-TO	
Date: Wednesday, January 27, 2010		Sheet	9 of 35
		Rev	1.0

PCHB

USB:15/4.5/7.5/4.5/15
Impedance=90+- 15%

PCHE

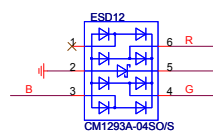
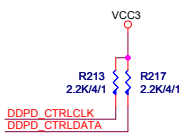
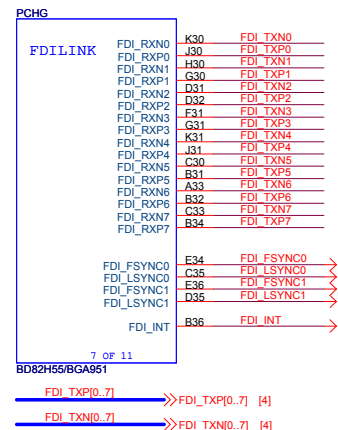




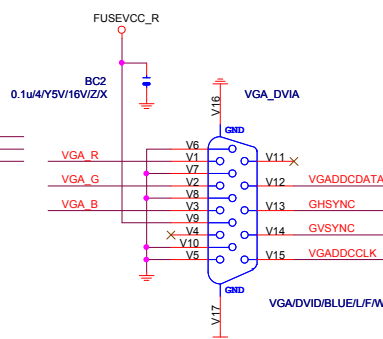
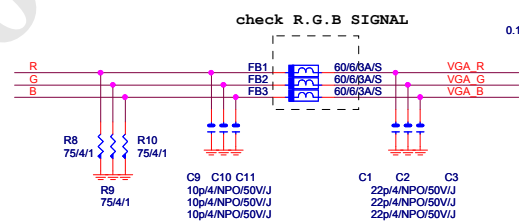
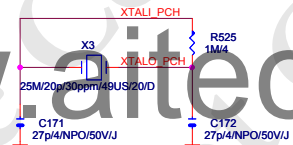
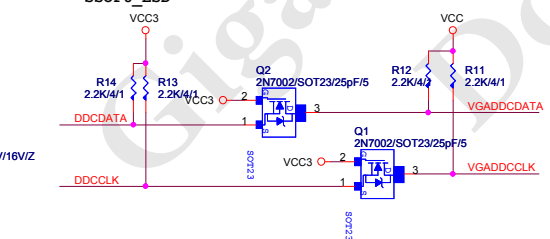
133MHz to CPU

100MHz to CPU

120MHz to CPU

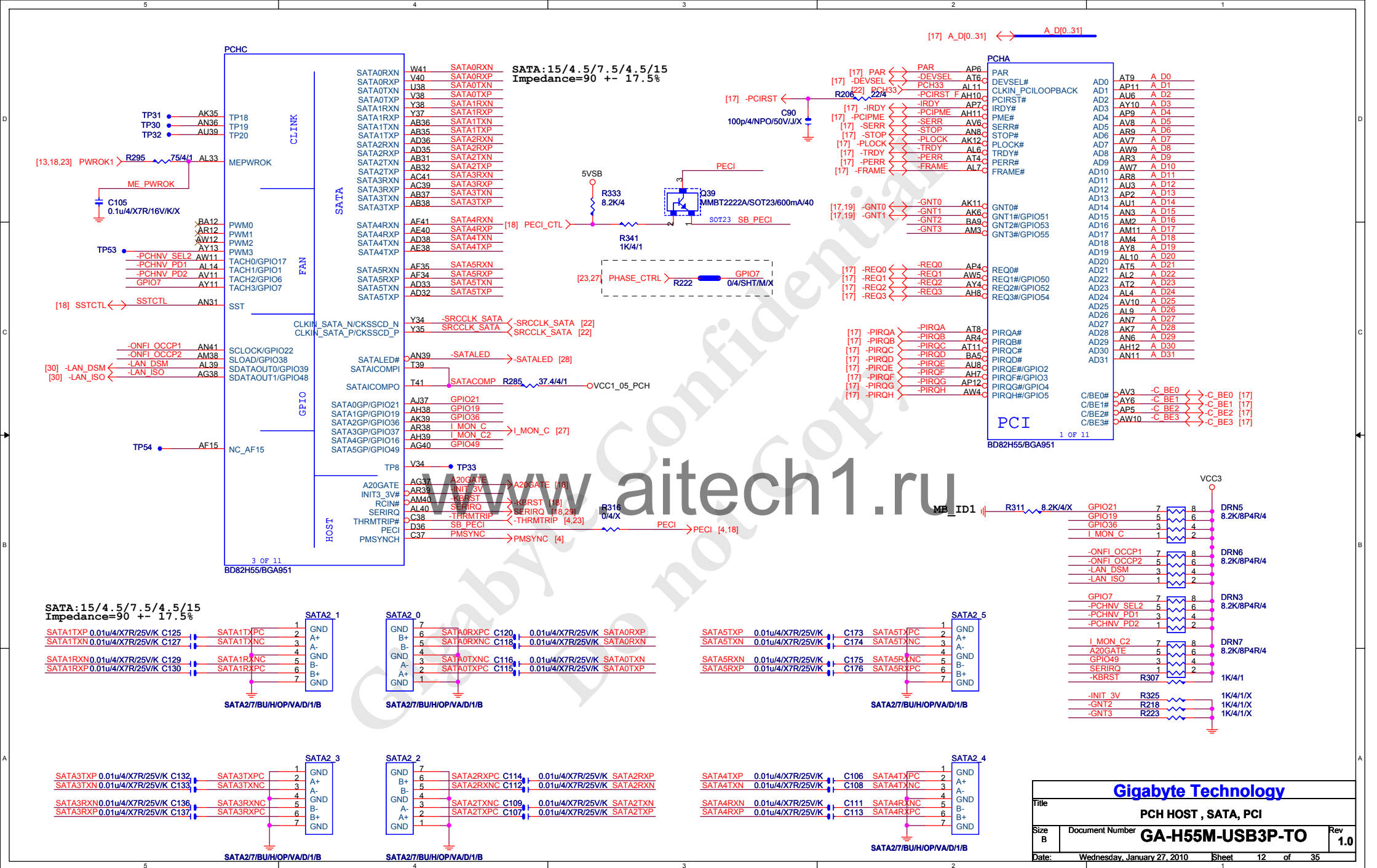


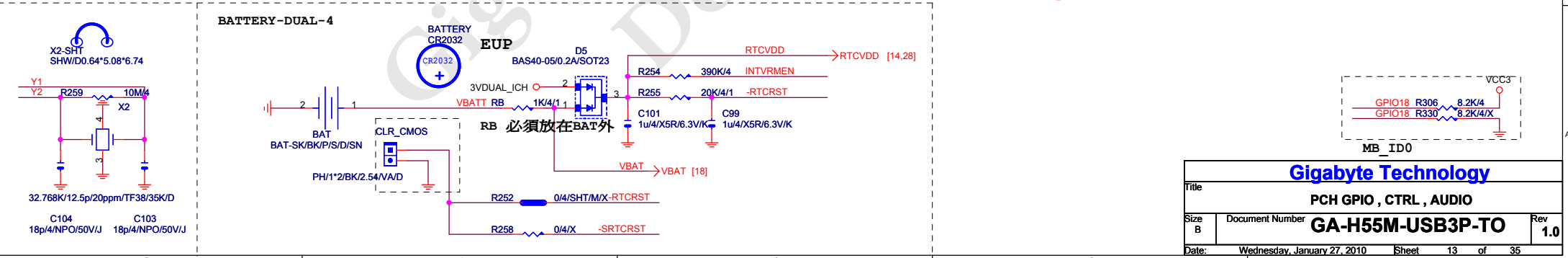
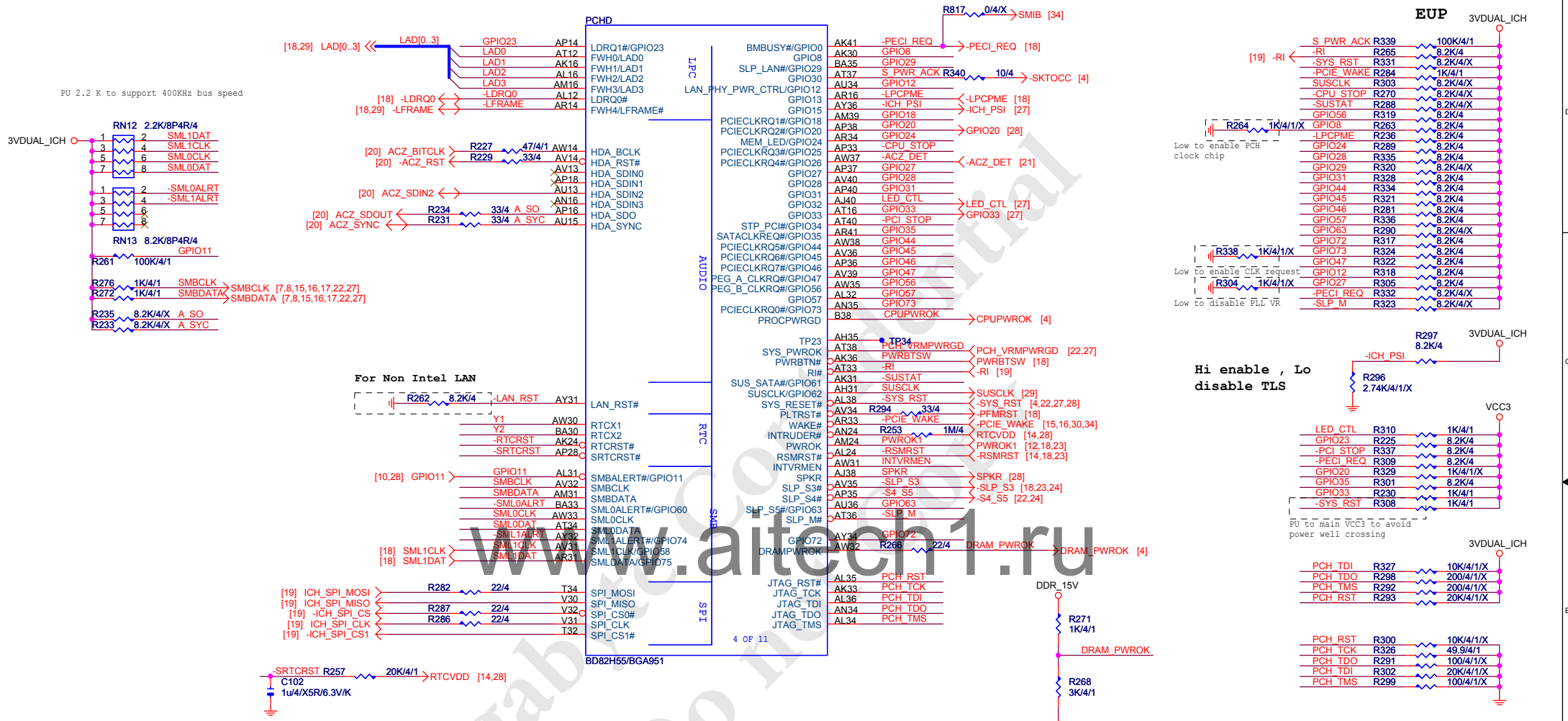
SSOP6_ESD



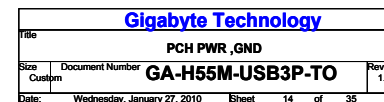
Gigabyte Technology

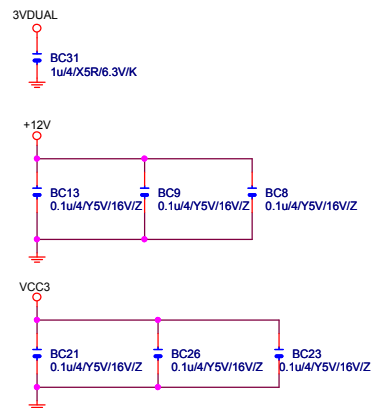
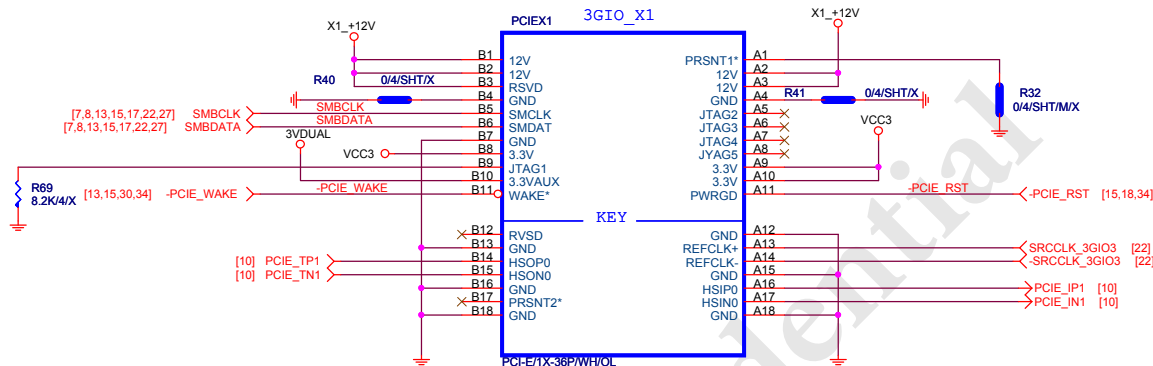
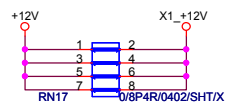
Title			
PCH DISPLAY_CLK BUFFER			
Size	Document Number	Rev	
Custom	GA-H55M-USB3P-TO	1.0	
Date:	Wednesday, January 27, 2010	Sheet	11 of 35





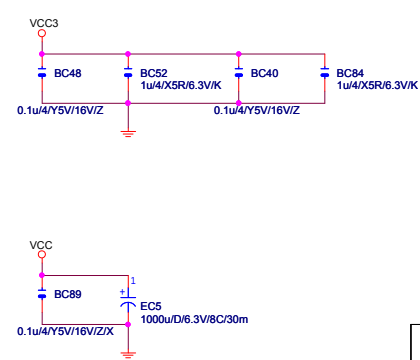
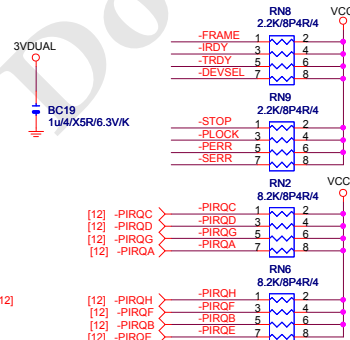
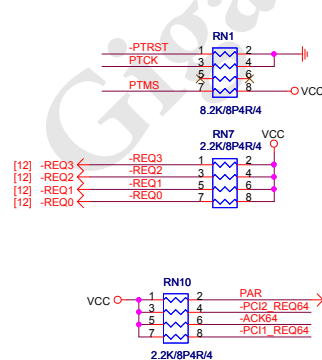
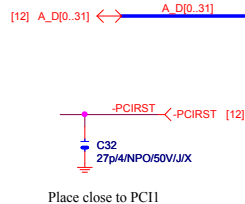
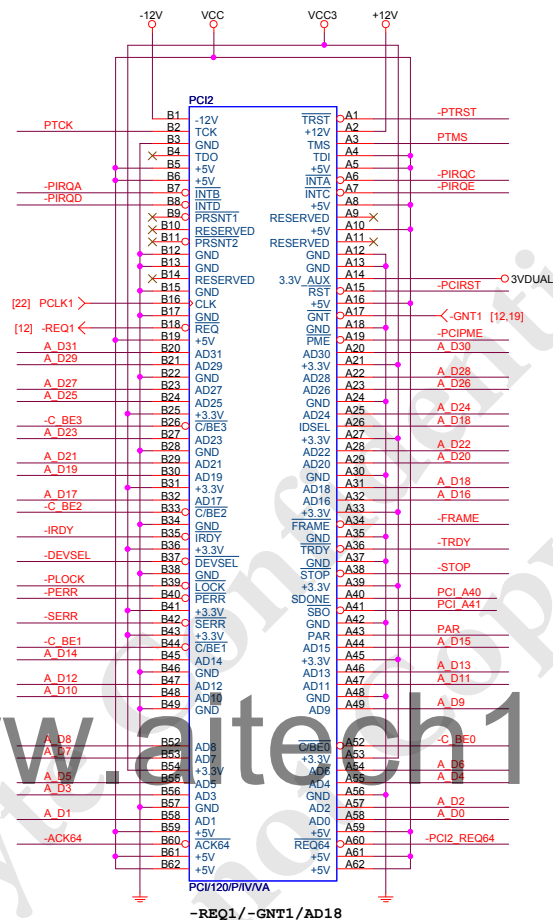
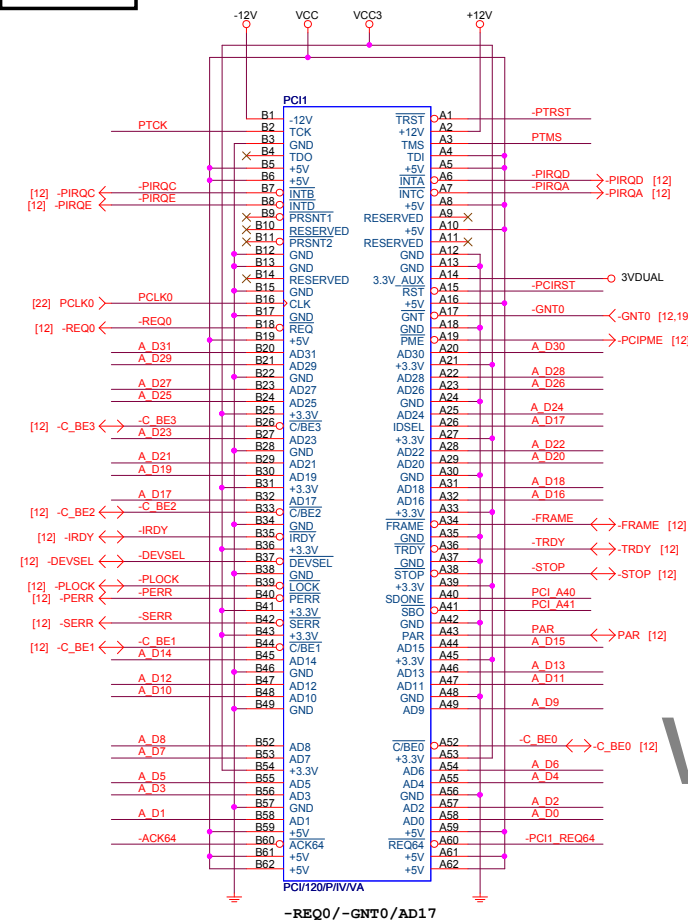
Gigabyte Technology			
PCH GPIO , CTRL , AUDIO			
Title	Document Number	GA-H55M-USB3P-TO	Rev 1.0
Date:	Wednesday, January 27, 2010	Sheet	13 of 35





www.aitech1.ru

PCI1,2 SLOT



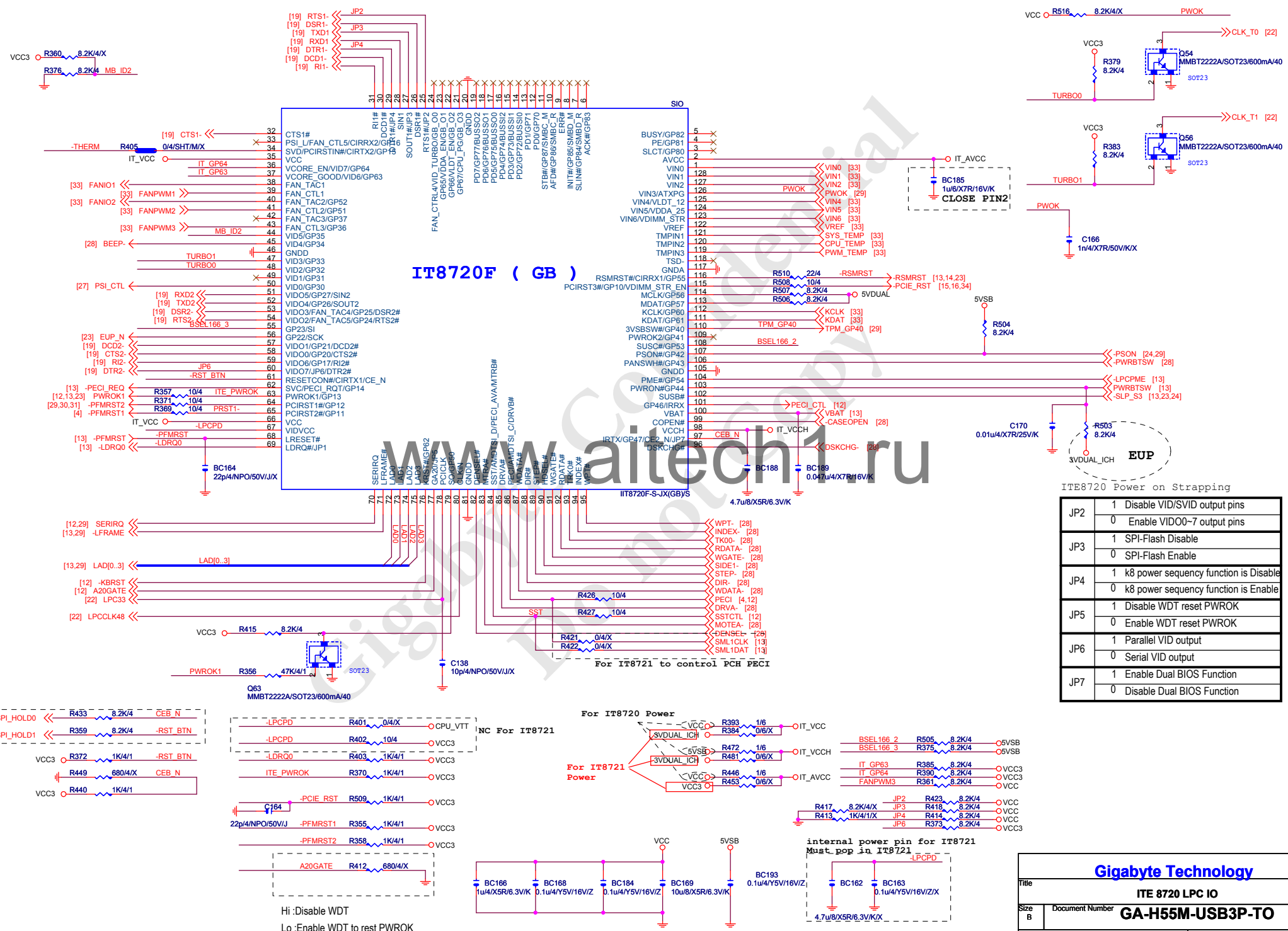
IT8720F (GB)

ITE8720 Power on Strapping

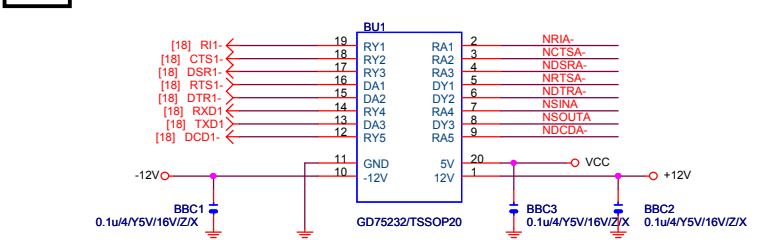
JP2	1	Disable VID/SVID output pins
	0	Enable VID00-7 output pins
JP3	1	SPI-Flash Disable
	0	SPI-Flash Enable
JP4	1	k8 power sequency function is Disable
	0	k8 power sequency function is Enable
JP5	1	Disable WDT reset PWROK
	0	Enable WDT reset PWROK
JP6	1	Parallel VID output
	0	Serial VID output
JP7	1	Enable Dual BIOS Function
	0	Disable Dual BIOS Function

Gigabyte Technology

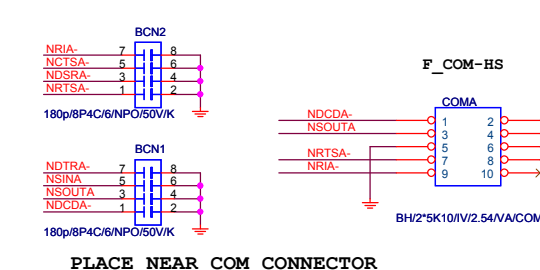
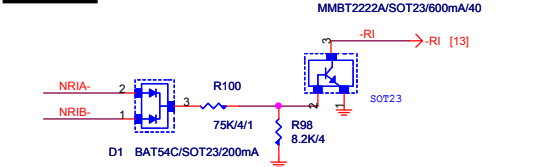
ITE 8720 LPC IO			
Size B	Document Number	GA-H55M-USB3P-TO	
			Rev 1.0
Date:	Wednesday, January 27, 2010	Sheet	18 of 35



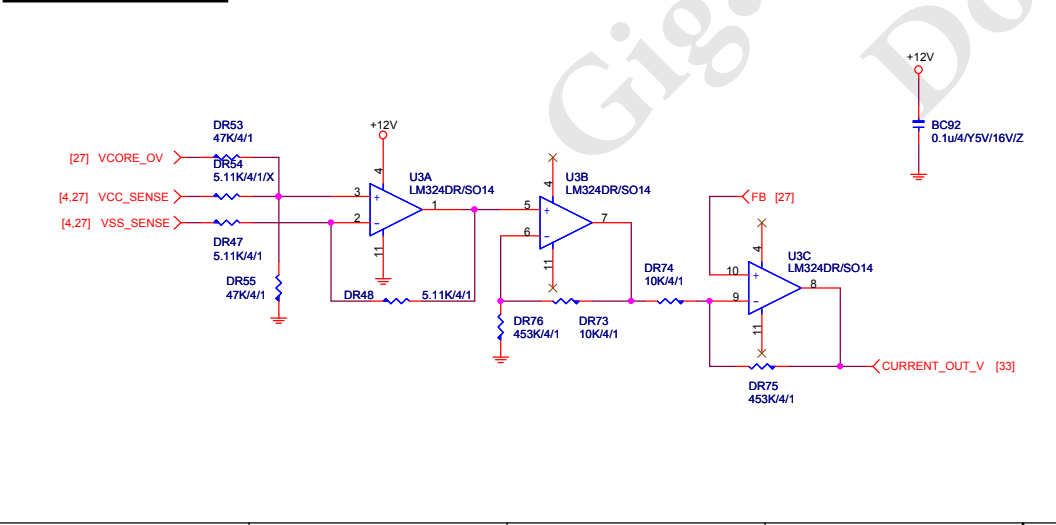
COMA



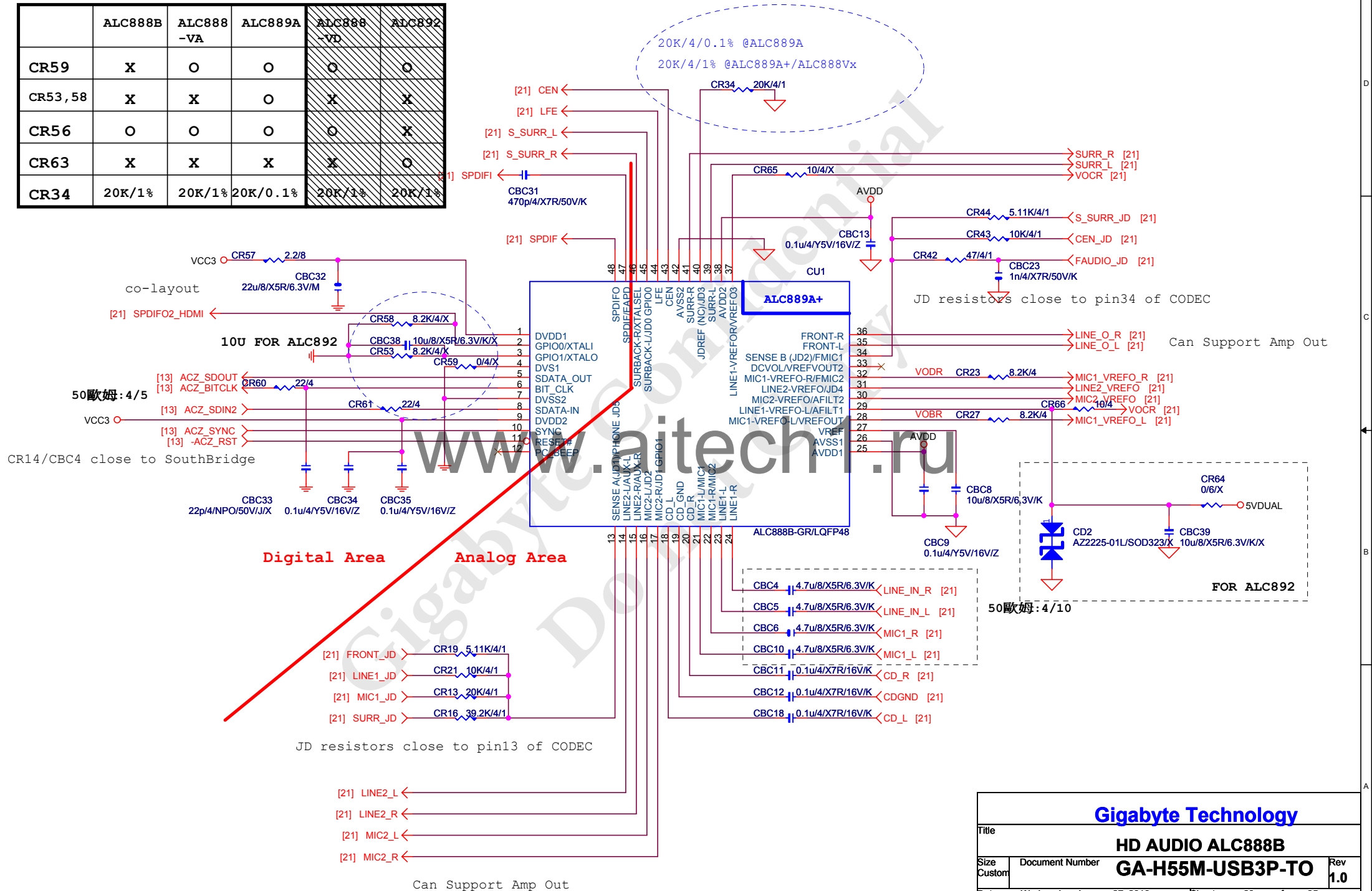
RING IN



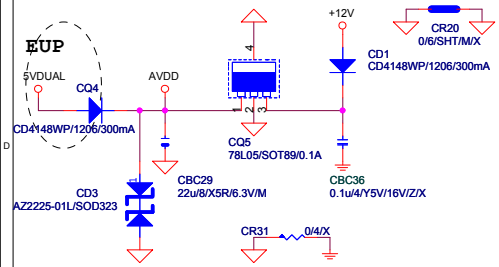
DYNAMIC CURRENT OC



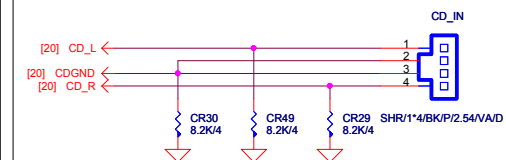
	ALC888B	ALC888 -VA	ALC889A	ALC888 -VD	ALC892
CR59	X	O	O	O	O
CR53, 58	X	X	O	X	X
CR56	O	O	O	O	X
CR63	X	X	X	X	O
CR34	20K/1%	20K/1%	20K/0.1%	20K/1%	20K/1%



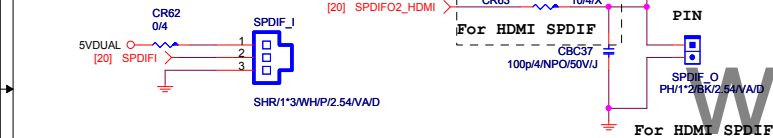
CODEC POWER/EMI PAD



CD IN

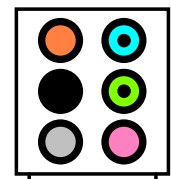


SPDIF IN

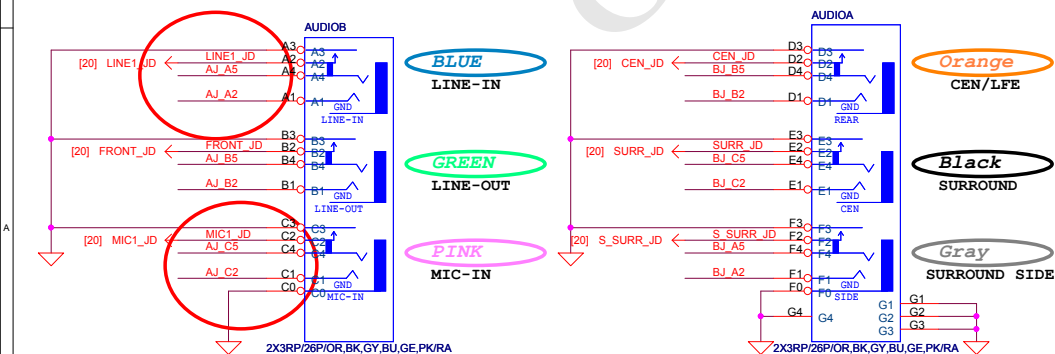


AZALIA JACK

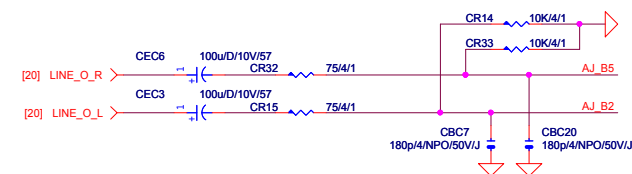
BTX AZALIA CONNECTOR



11NR6-403007-21R

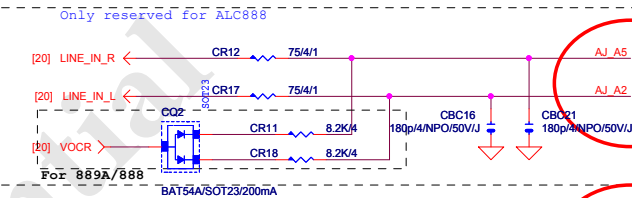


LINE-OUT

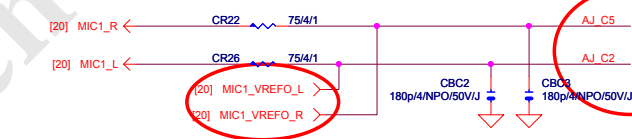


LINE-IN

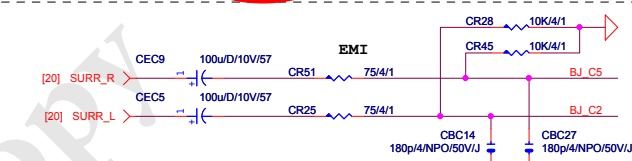
Verify MIC function in LINE-in



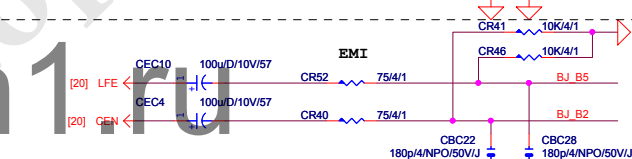
MIC-IN



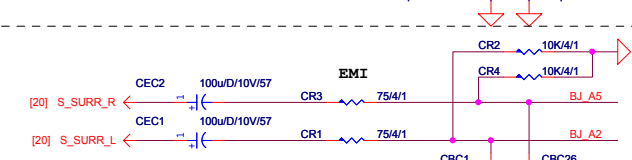
SURROUND



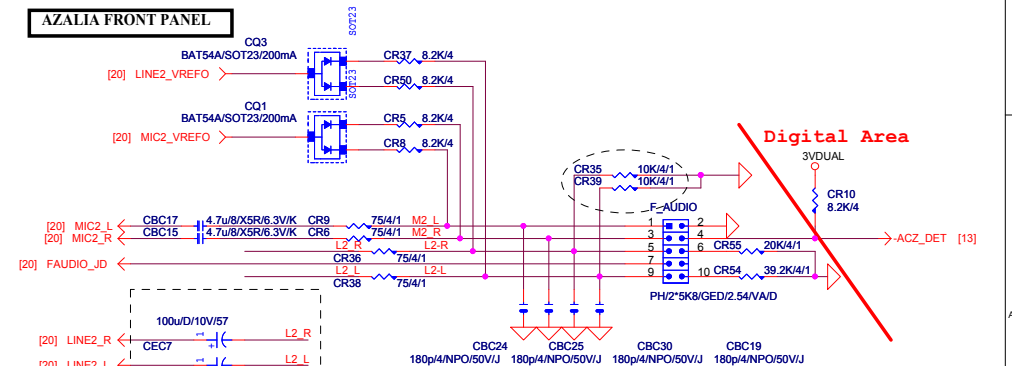
CEN/LFE



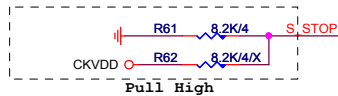
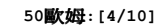
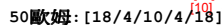
SURR BACK



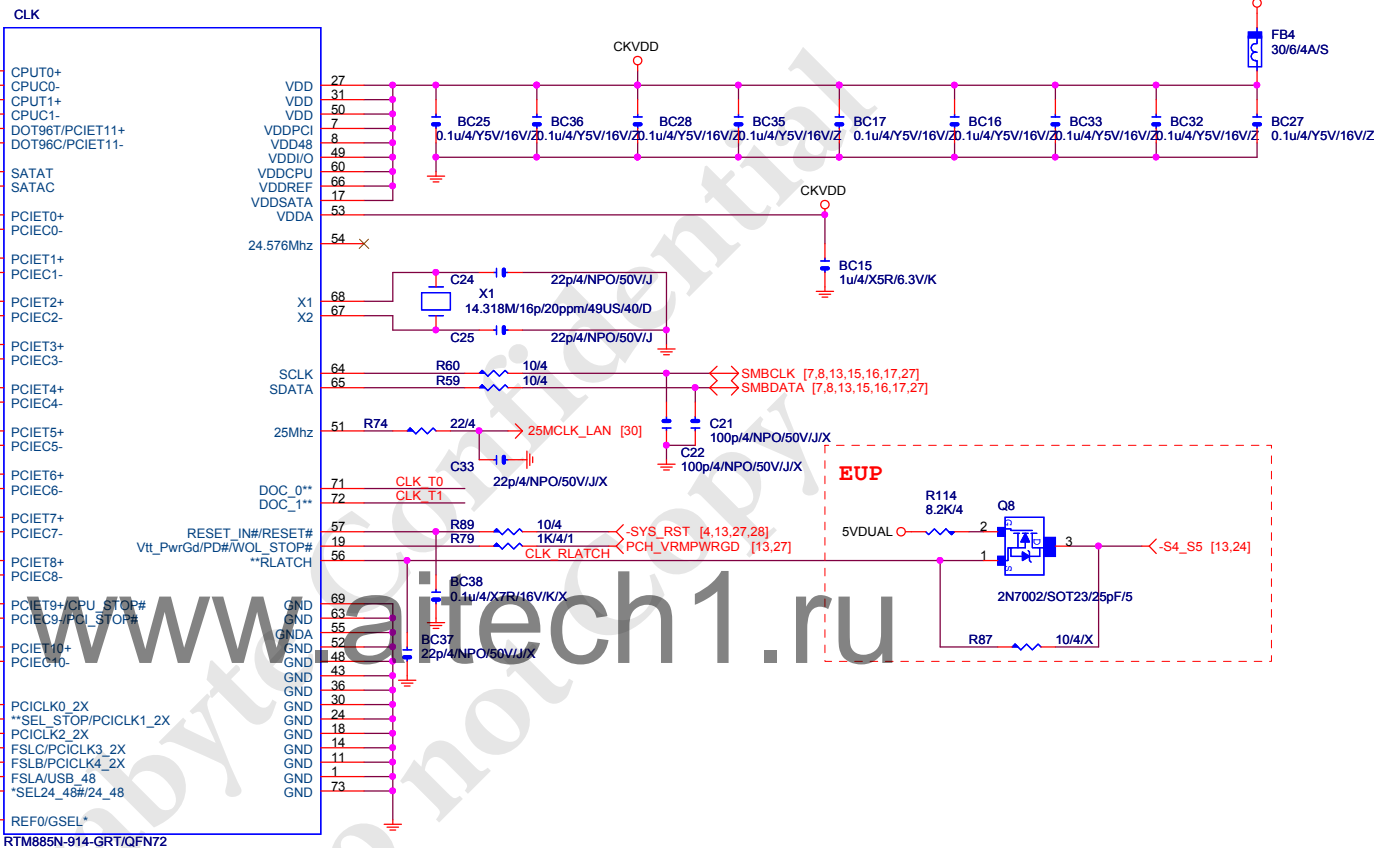
AZALIA FRONT PANEL



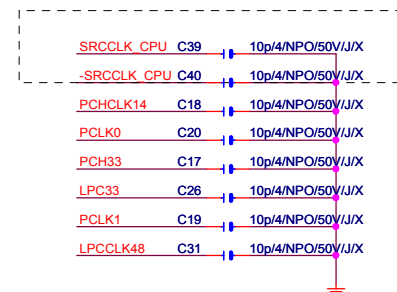
Gigabyte Technology			
AUDIO JACK			
Title	Document Number	GA-H55M-USB3P-TO	Rev 1.0
Size Custom	Wednesday, January 27, 2010	Sheet 21	of 35

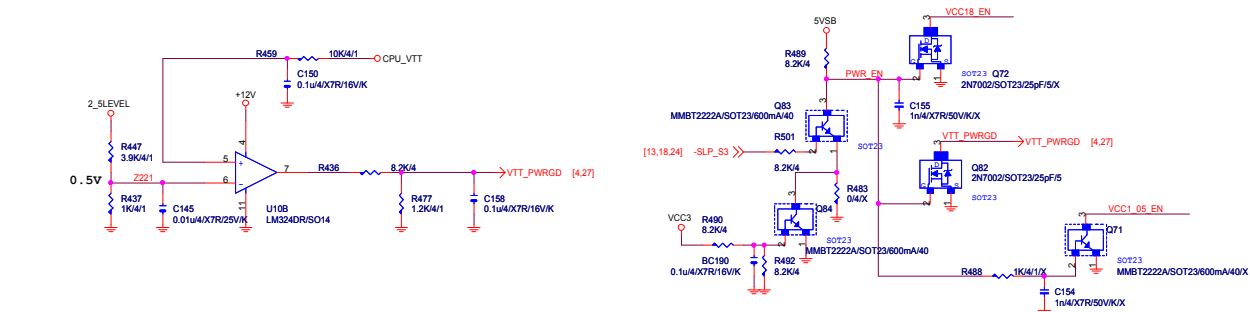
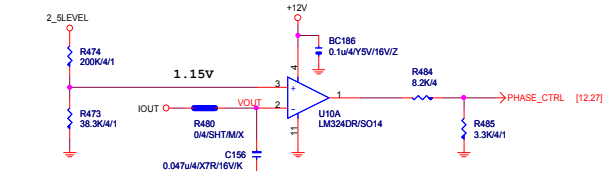
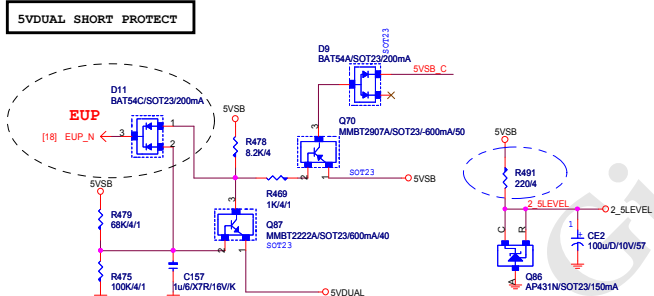
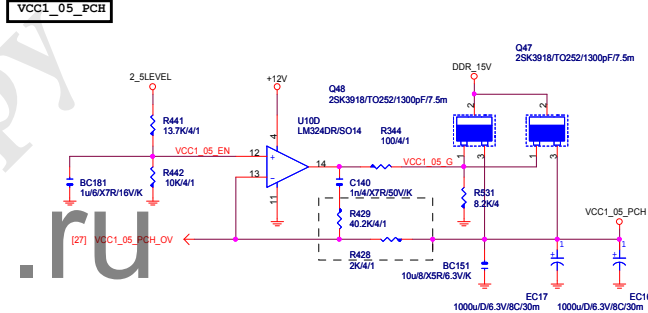
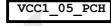
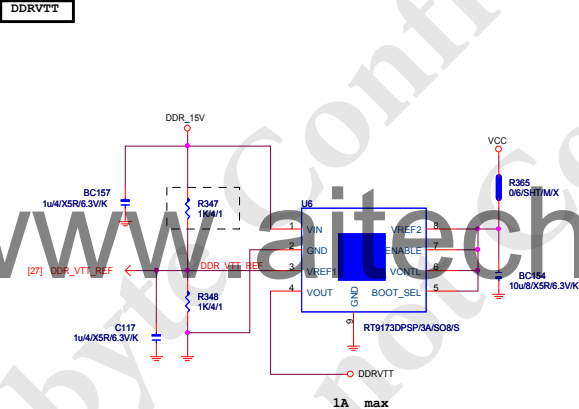
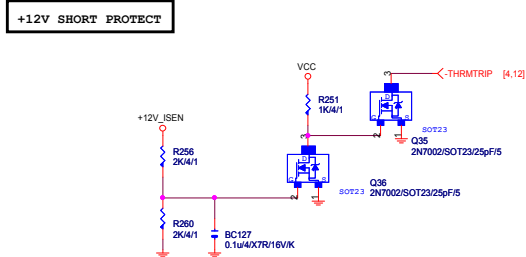
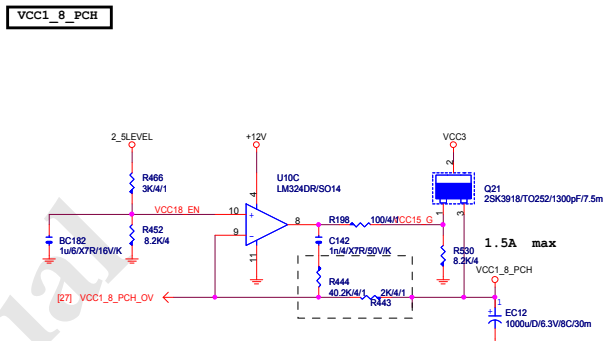
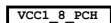
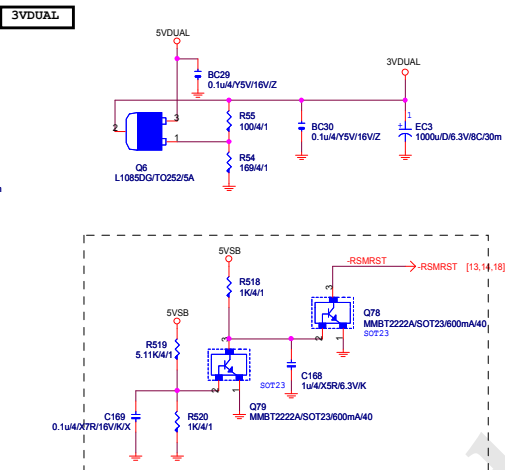
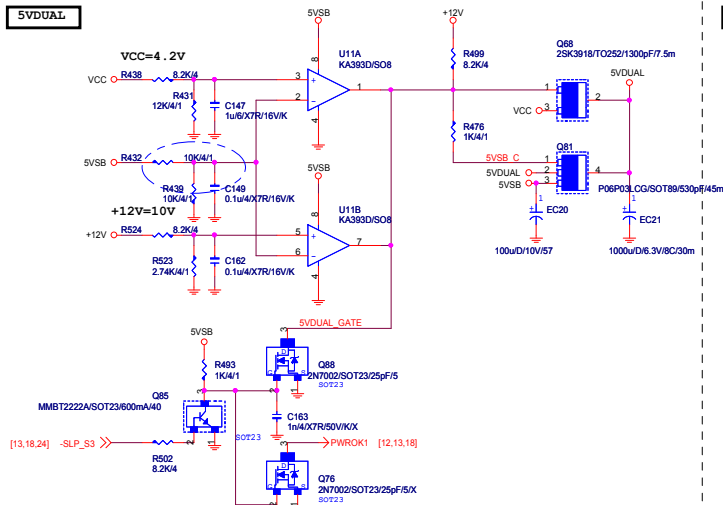


```
SEL_STOP: latched input to select pin functionality
1 = Selects pin 44/45 to be PCI_STOP#/CPU_STOP#
0 = Selects pin 44/45 to be PCIEX outputs ;
3.3V PCICLK output
```

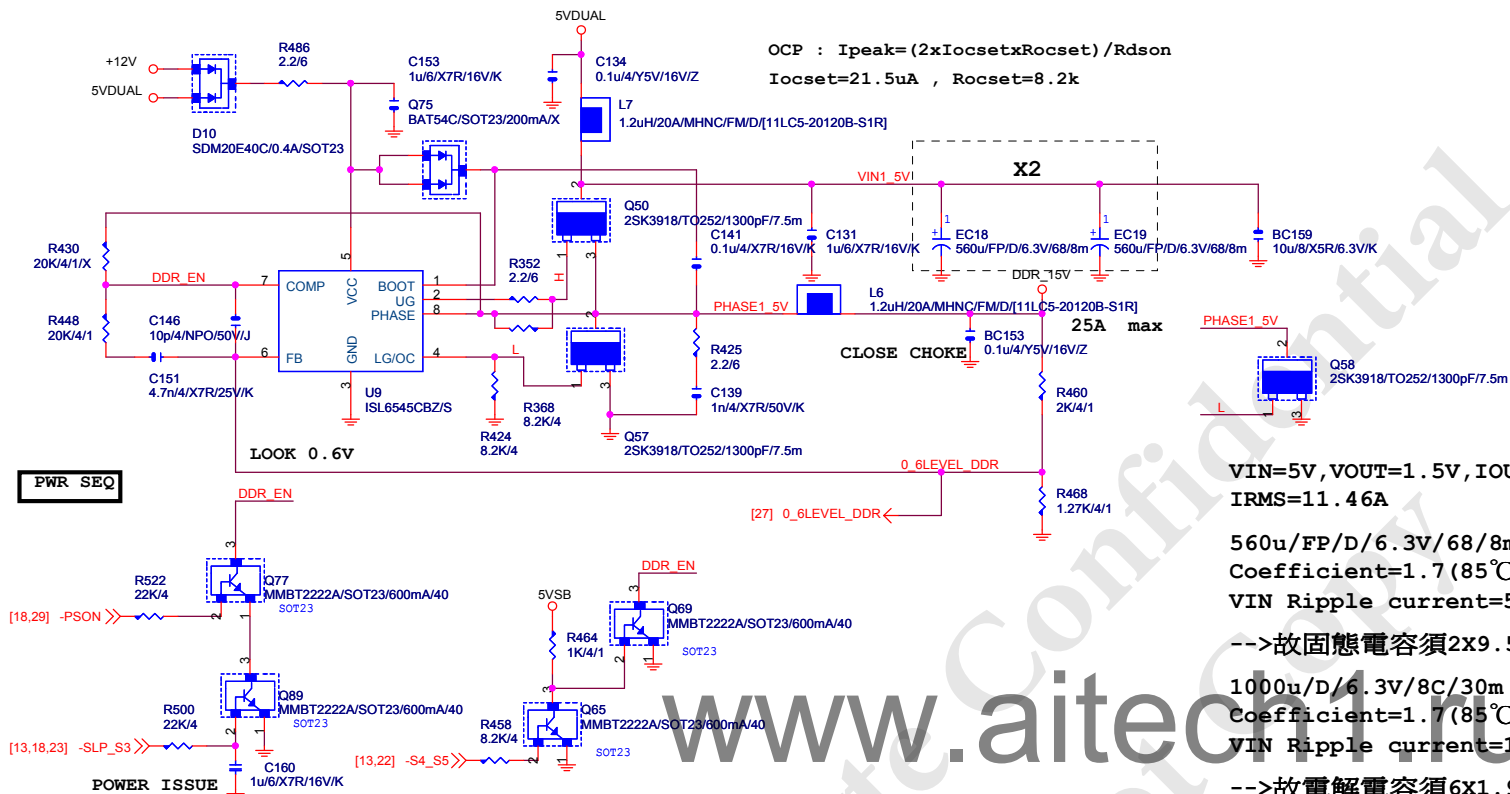


FSC	FSB	FSA	CPU
0	0	0	266MHz
0	0	1	133MHz
0	1	0	200MHz
0	1	1	166MHz
1	0	0	333MHz
1	1	0	400MHz





DDR1_5V



OCP : $I_{peak} = (2 \times I_{ocset} \times R_{ocset}) / R_{dson}$
 $I_{ocset} = 21.5 \mu A$, $R_{ocset} = 8.2k$

VIN=5V,VOUT=1.5V,IOUT=25A,PHASE=1
IRMS=11.46A

560u/FP/D/6.3V/68/8m RIPPLE CURRENT=5.6A
Coefficient=1.7(85°C), 1(105°C)
VIN Ripple current=5.6X1.7=9.52A(85°C)

-->故固態電容須 $2 \times 9.52 = 19.04 > 11.46 \text{A}$

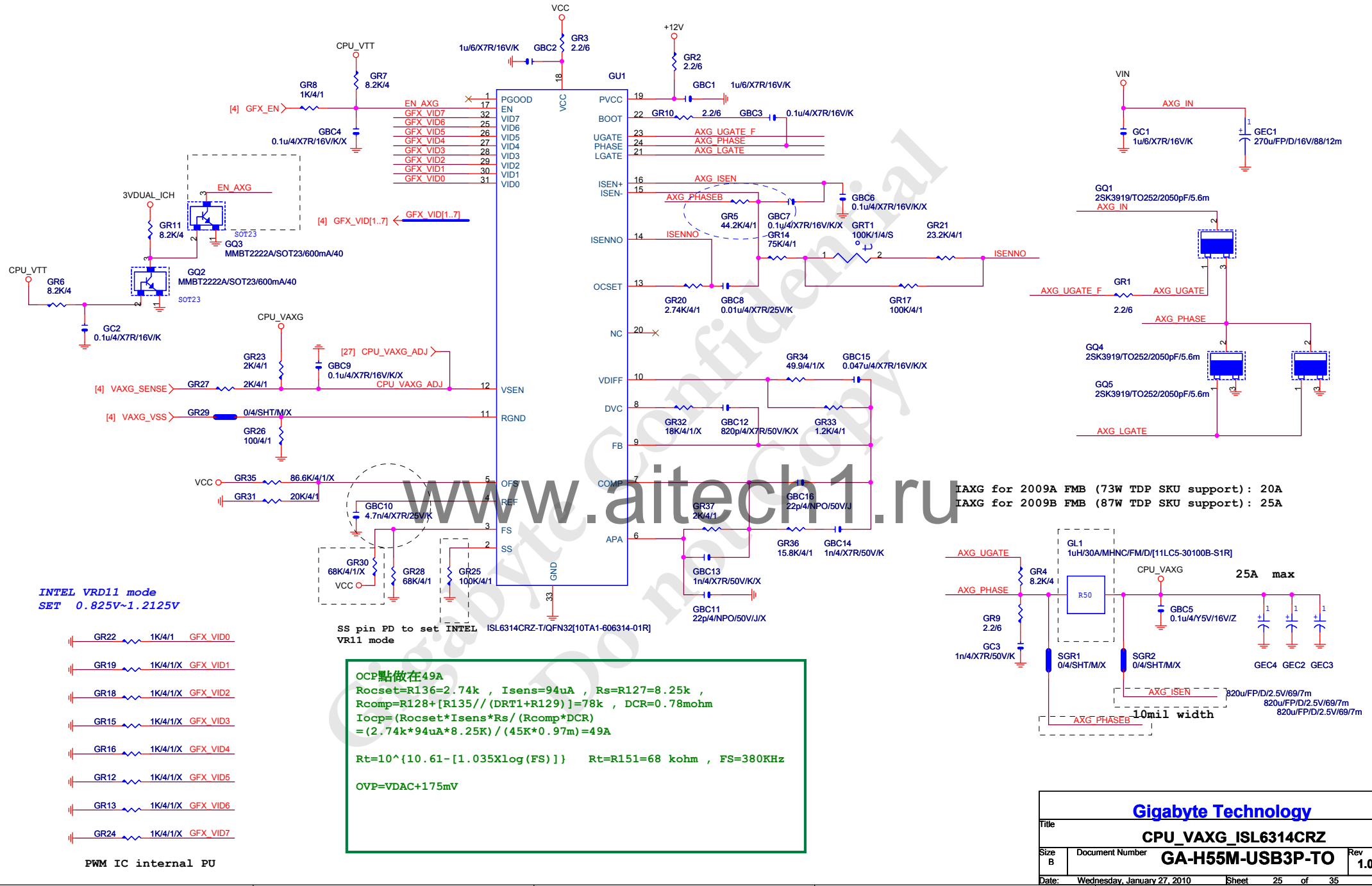
1000u/D/6.3V/8C/30m RIPPLE CURRENT=1.14A
Coefficient=1.7(85°C), 1(105°C)
VIN Ripple current=1.14X1.7=1.938A(85°C)

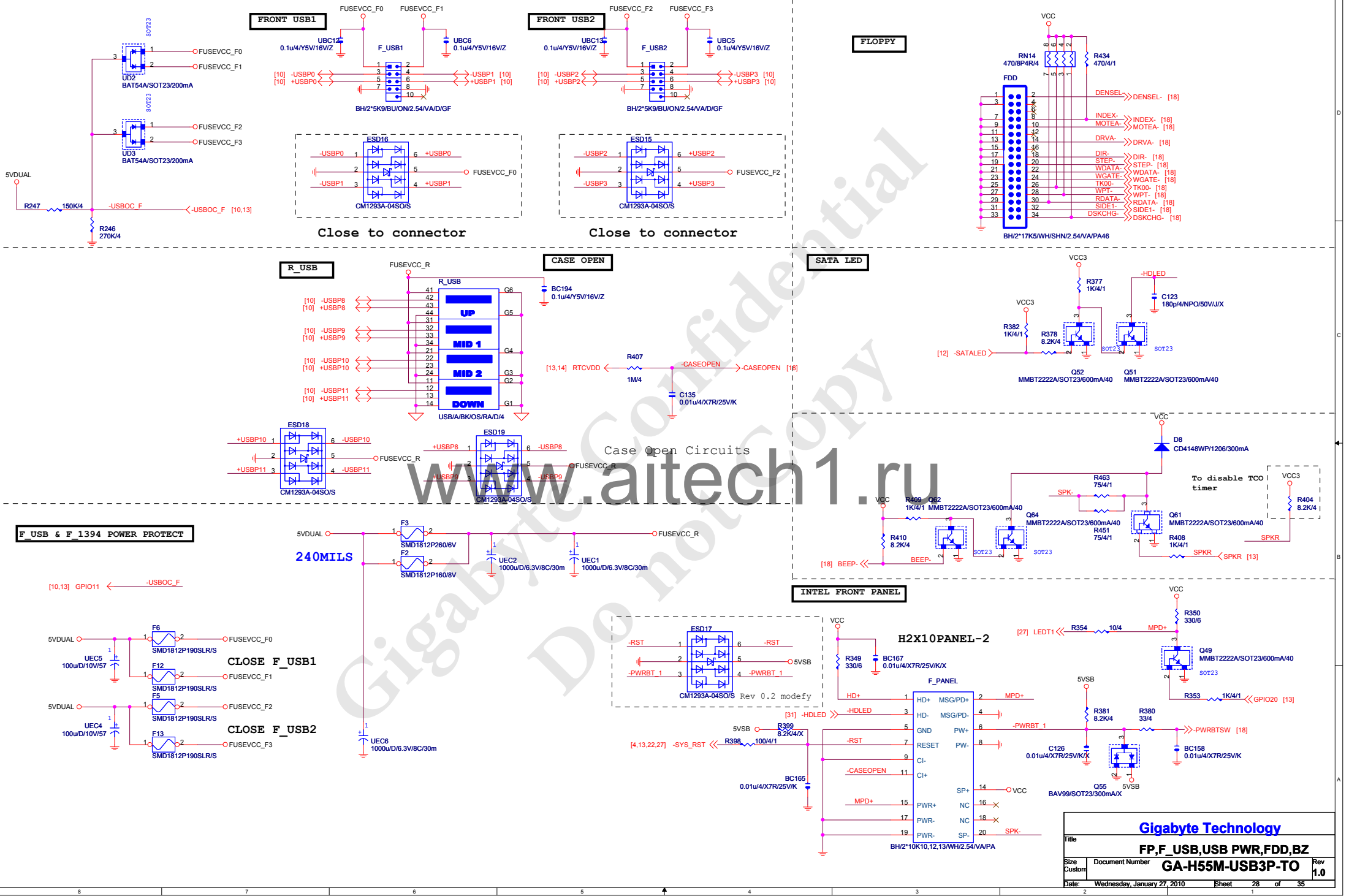
-->故電解電容須 $6 \times 1.938 = 11.628 > 11.46A$

VIN=3V, VOUT=1.05V, IOUT=7.5A, PHASE=1
IRMS=3.5A

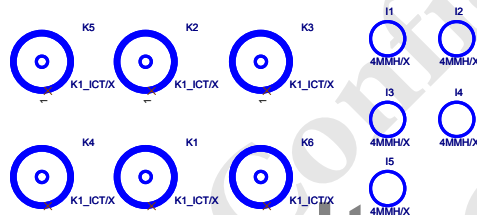
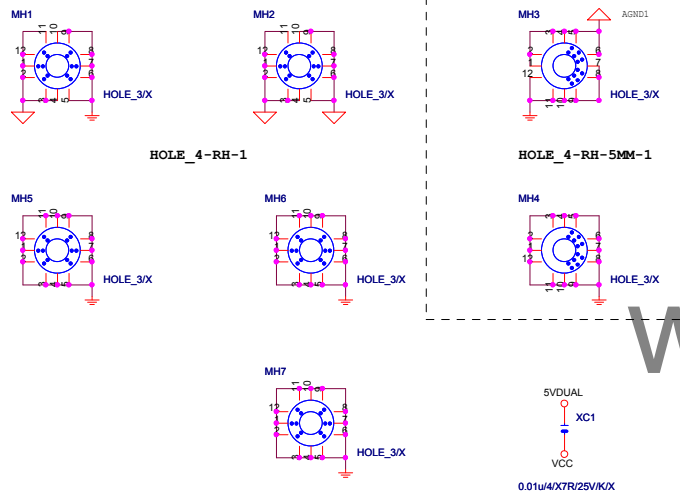
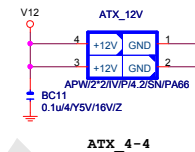
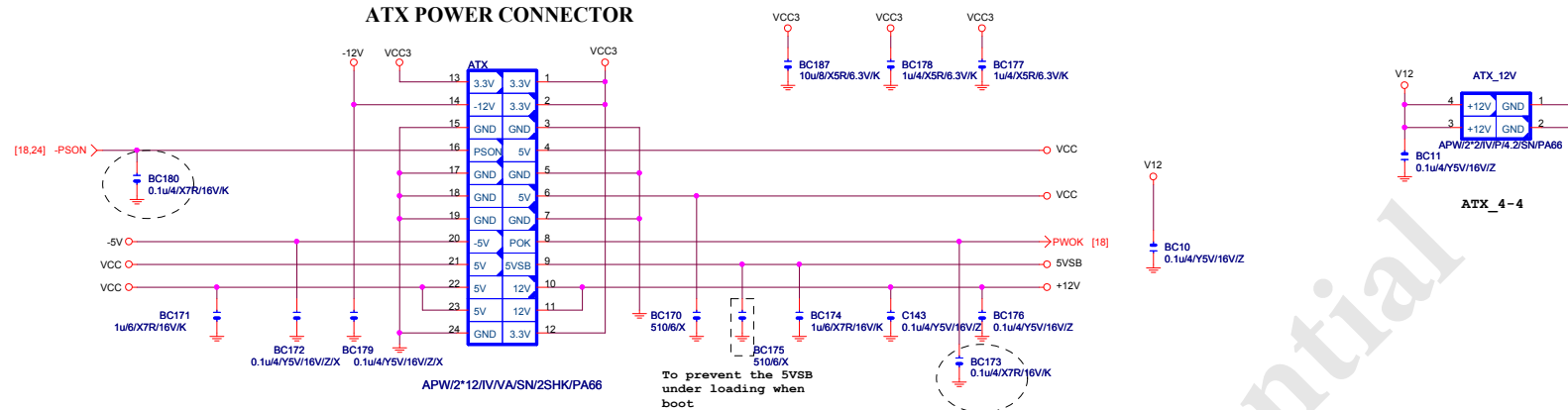
-->故固態電容須 $1 \times 9.52 = 9.52 > 3.5A$

-->故電解電容須 $2 \times 1.938 = 3.876 > 3.5A$



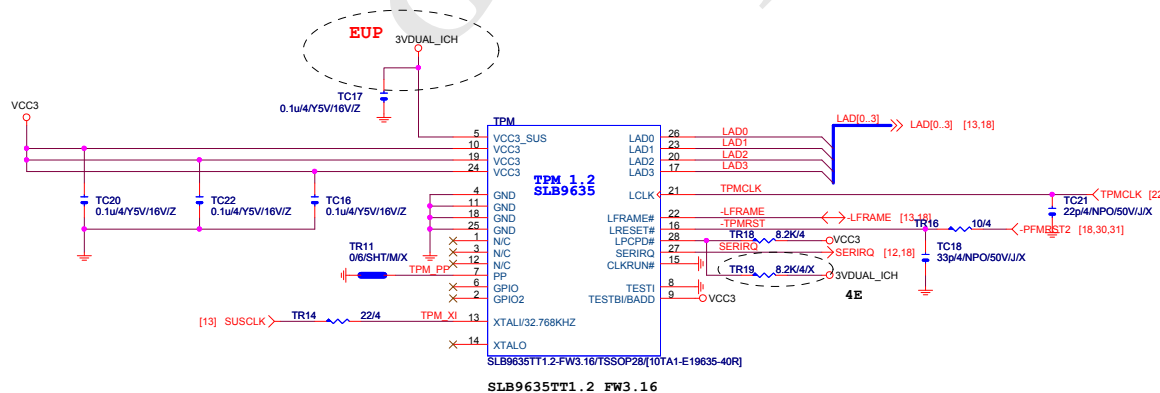


ATX POWER CONNECTOR

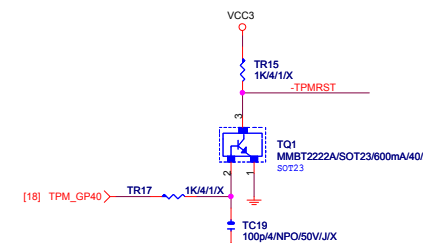


www.aitech1.ru

TPM



FOR OLD TPM PATCH



Gigabyte Technology

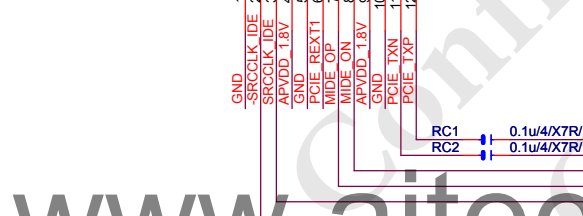
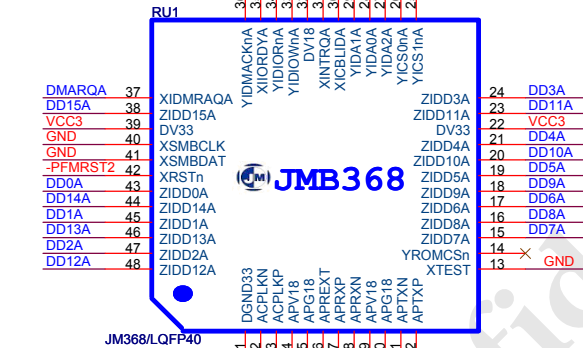
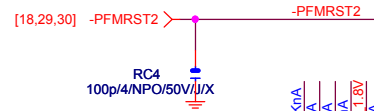
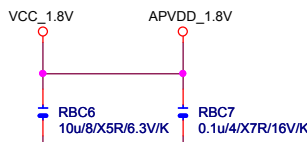
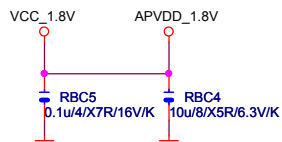
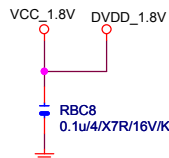
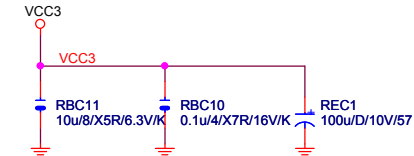
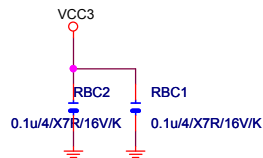
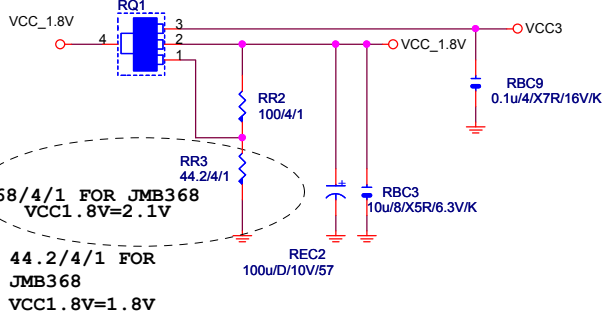
ATX POWER CONNECTOR

GA-H55M-USB3P-TO Rev 1.0

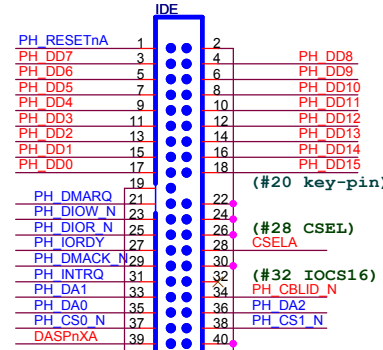
Date: Wednesday, January 27, 2010 Sheet 29 of 35

3.3V to 1.8V Voltage Regulator

L1117LGN/SOT223/1A



IDE Connector



BM/2*20K20/WH/SHN/2.54/VA/PA66

PH_DD7 DD7A
PH_DD8 DD8A
PH_DD6 DD6A
PH_DD9 DD9A

PH_DD5 DD5A
PH_DD4 DD4A
PH_DD10 DD10A
PH_DD11 DD11A

PH_DD3 DD3A
PH_DD12 DD12A
PH_DD2 DD2A
PH_DD13 DD13A

PH_DD1 DD1A
PH_DD0 DD0A
PH_DD14 DD14A
PH_DD15 DD15A

PH_DIOW_N DIOWnA

PH_DIOR_N DIORnA

PH_DMACK_N DMACKnA

PH_DA1 DA1A

PH_DA0 DA0A

PH_CS0_N CS0nA

PH_DA2 DA2A

PH_CS1_N CS1nA

PH_IORDY IORDYA

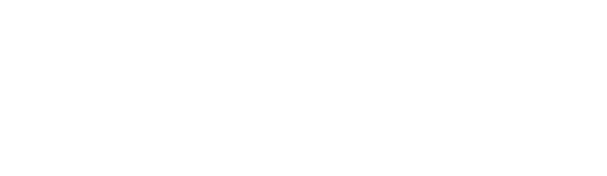
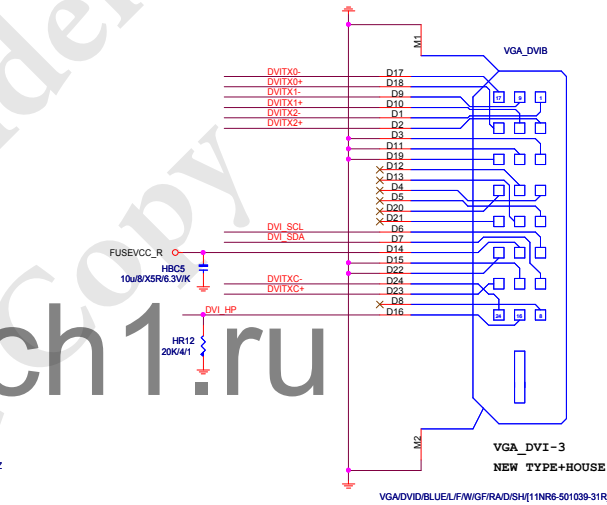
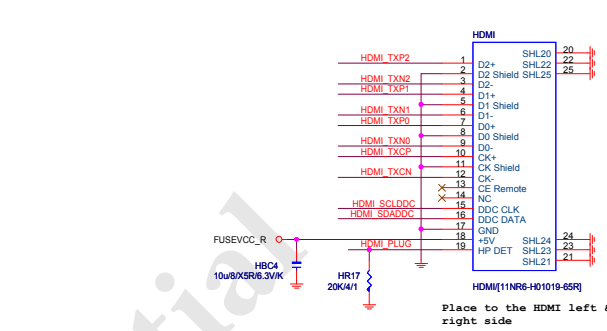
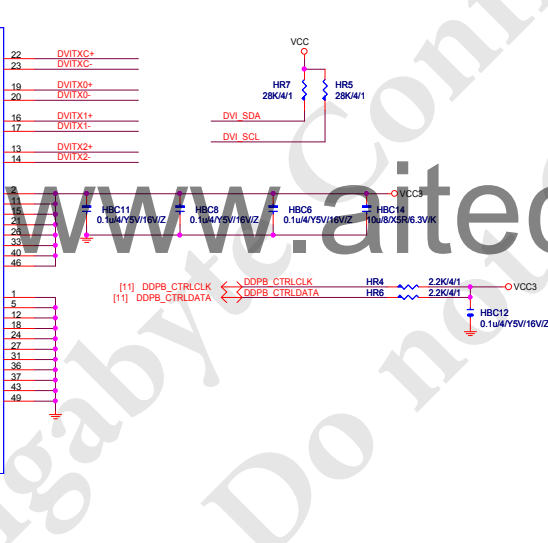
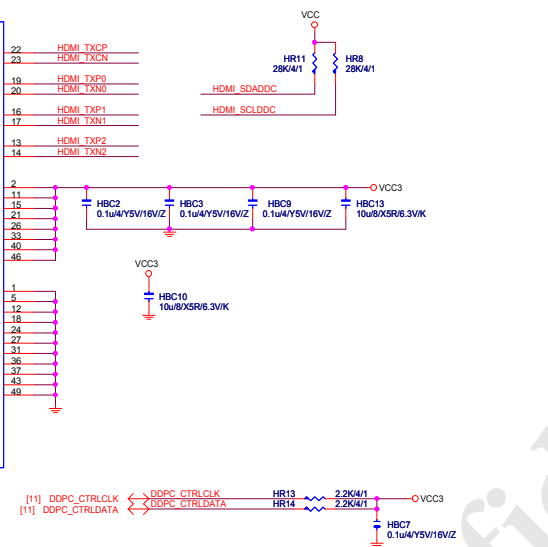
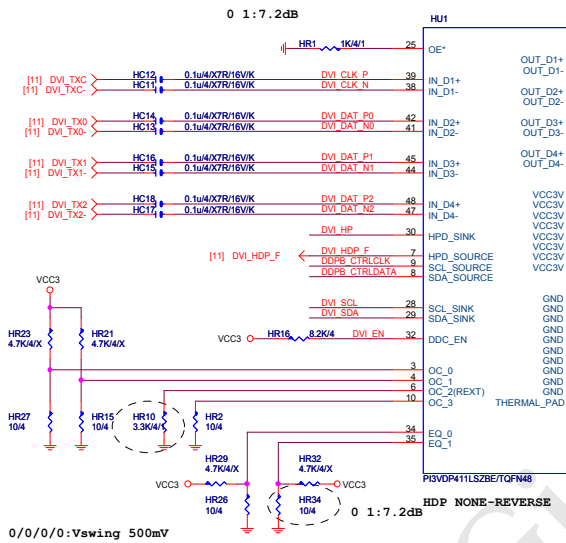
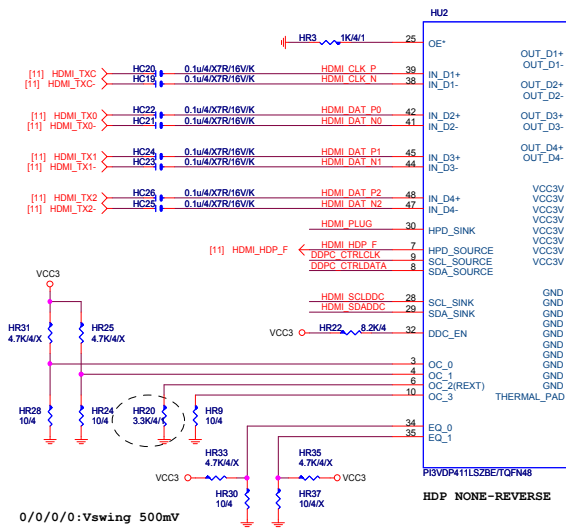
PH_DMARQ DMARQA

PH_INTRQ INTRQA

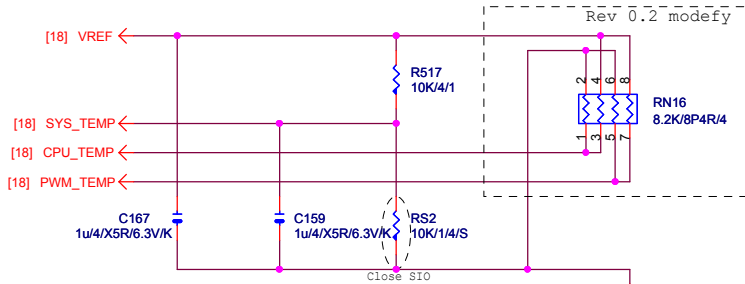
PH_CBLID_N PDIAGnA

Gigabyte Technology

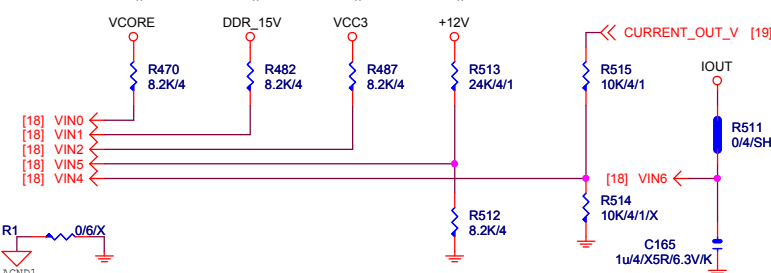
Title		
JMR368		
Size	Document Number	Rev
Custom	GA-H55M-USB3P-TO	1.0
Date:	Wednesday, January 27, 2010	Sheet 31 of 35



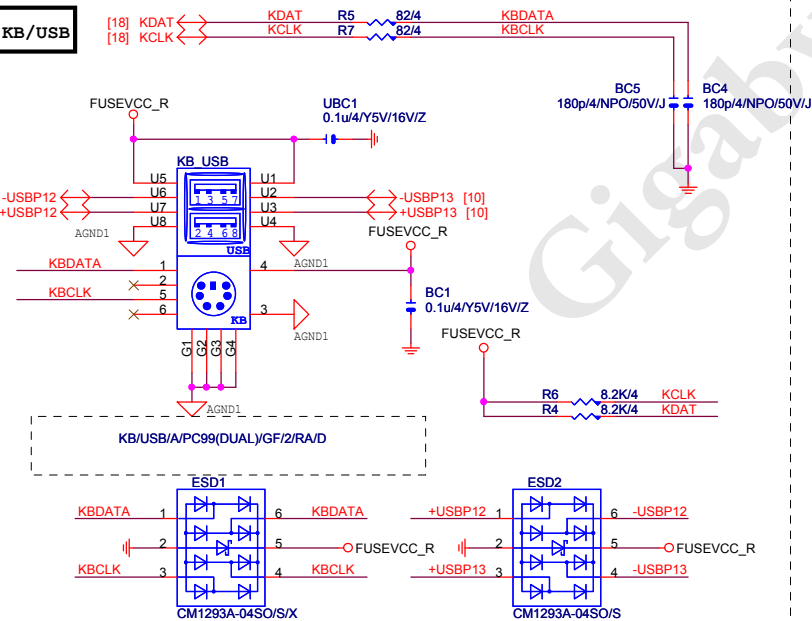
TEMP H/W MONITOR



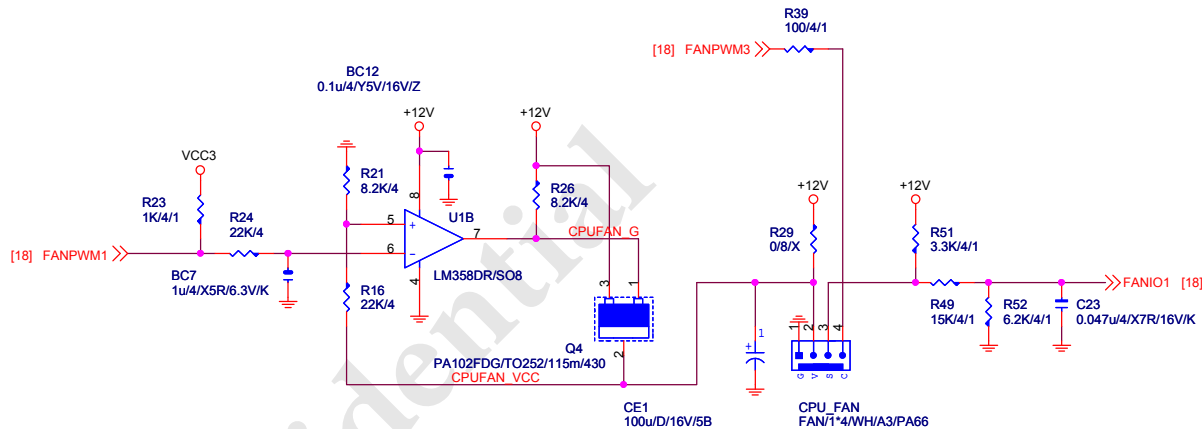
VOLTAGE-- H/W MONITOR



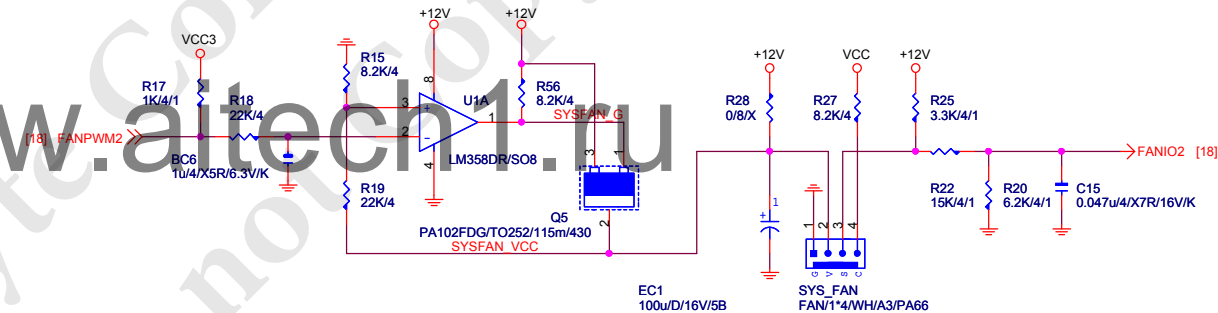
KB/USB



CPU SMART FAN



SYS SMART FAN Linear SYS_FAN



Gigabyte Technology

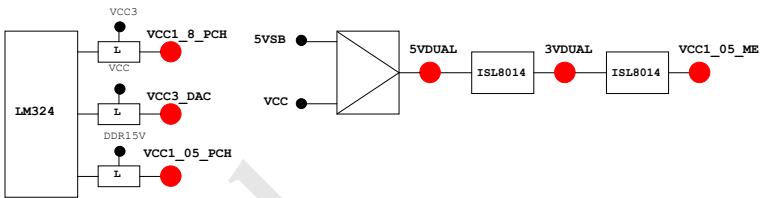
Title		HWM,KB/MS, FAN CTRL	
Size	Document Number	GA-H55M-USB3P-TO	
Custom		Rev 1.0	
Date:	Wednesday, January 27, 2010	Sheet	33 of 35

PCH GPIO LIST TABLE					
PIN NAME	PWR	Default	USAGE	NOTE	
GP0	MAIN	H-Z	GPI	-PECI_REQ	N/A
GP1/TACH1	MAIN		GPI	ICH_FAN_TACH1	N/A
GP2/PIRQE#	MAIN		GPI	-PIRQE	P/U 8.2K VCC3
GP3/PIRQF#	MAIN		GPI	-PIRQF	P/U 8.2K VCC3
GP4/PIRQG#	MAIN		GPI	-PIRQG	P/U 8.2K VCC3
GP5/PIRQH#	MAIN		GPI	-PIRQH	P/U 8.2K VCC3
GP6/TACH2	MAIN		GPI	ICH_FAN_TACH2	N/A
GP7/TACH3	MAIN		GPI	ICH_FAN_TACH3	N/A
GP8	STBY	H	GPO	GPIO8	P/U 8.2K 3VDUAL
GP9/OC5#	STBY		NATIVE	OC5#	N/A
GP10/OC6#	STBY		NATIVE	OC6#	N/A
GP11/SMBALERT#	STBY		NATIVE	-SMBALERT	P/U 8.2K 3VDUAL
GP12	STBY	L	GPI	LAN_PHY_PWR_CTRL	P/U 8.2K 3VDUAL
GP13	STBY	L	GPI	GPIO13	P/U 8.2K 3VDUAL
GP14/OC7#	STBY		NATIVE	OC7#	N/A
GP15	STBY	L	GPO	GPIO15	N/A
GP16	MAIN		GPI	-SKTOCC	P/U 8.2K VCC3
GP17/TACH0	MAIN		GPI	ICH_FAN_TACH0	N/A
GP18	MAIN		NATIVE	MB_ID0	P/D 8.2K GND
GP19	MAIN		GPI	-LAN1_ISO	P/U 8.2K VCC3
GP20	MAIN		NATIVE	LED_CTL	P/U 1K VCC3
GP21	MAIN		GPI	VCC18_PCH_OV2	P/U 8.2K VCC3
GP22	MAIN	H-Z	GPI	VCORE_OV3	P/U 8.2K VCC3
GP23	MAIN		NATIVE	-LDRQ1	P/U 8.2K VCC3
GP24	STBY	L	GPO	TLS	P/U 8.2K 3VDUAL
GP25	STBY		NATIVE	-CPU_STOP	P/U 8.2K 3VDUAL
GP26	STBY		NATIVE	-AC2_DET	P/U 8.2K 3VDUAL
GP27	STBY	H	GPO	GPIO27	P/U 8.2K 3VDUAL
GP28	STBY	H	GPO	GPIO28	P/U 8.2K 3VDUAL
GP29	STBY	L	GPI	GPIO29	N/A
GP30	STBY	H-Z	GPI	S_PWR_ACK	P/U 100K 3VDUAL
GP31	STBY	H-Z	GPI	N/A(Reverse)	P/U 8.2K VCC3
GP32	MAIN	H	GPO	MB_ID1	P/D 8.2K GND
GP33	MAIN	H	GPO	LOAD-LINE	P/U 1K VCC3
GP34	MAIN	H-Z	GPI	-PCI_STOP	P/U 8.2K VCC3
GP35	MAIN	L	GPO	GPIO35	P/U 8.2K VCC3
GP36	MAIN		GPI	-LAN1_DSM	P/U 8.2K VCC3
GP37	MAIN		GPI	N/A	P/U 8.2K VCC3
GP38	MAIN	H-Z	GPI	VCORE_OV2	P/U 8.2K VCC3
GP39	MAIN	H-Z	GPI	-LAN_DSM	P/U 8.2K VCC3
GP40	STBY		NATIVE	OC1#	N/A
GP41	STBY		NATIVE	OC2#	N/A
GP42	STBY		NATIVE	OC3#	N/A
GP43	STBY		NATIVE	OC4#	N/A
GP44	STBY	L	NATIVE	N/A	P/U 8.2K 3VDUAL
GP45	STBY		NATIVE	-LPCPME	P/U 8.2K 3VDUAL
GP46	STBY	L	NATIVE	PWR_LED	P/U 8.2K 3VDUAL
GP47	STBY		NATIVE	PSI_LED	P/U 8.2K 3VDUAL
GP48	MAIN	H-Z	IN	EN_PWM	P/U 8.2K VCC3
GP49	MAIN	H-Z	IN	VCC18_OV1	P/U 8.2K VCC3
GP50	MAIN		NATIVE	-REQ1	P/U 2.2K VCC
GP51	MAIN	H	NATIVE	-GNT1	N/A
GP52	MAIN		NATIVE	-REQ2	P/U 2.2K VCC
GP53	MAIN	H	NATIVE	-GNT2	N/A
GP54	MAIN		NATIVE	-REQ3	P/U 2.2K VCC
GP55	MAIN	H	NATIVE	-GNT3	N/A
GP56	STBY		NATIVE	N/A(Reverse)	P/U 8.2K 3VDUAL
GP57	STBY	H-Z	IN	VCORE_OV1	P/U 8.2K 3VDUAL
GP58	STBY	H-Z	NATIVE	F_USB_OC	P/U 8.2K 3VDUAL
GP59	STBY		NATIVE	USB_OC0#	N/A
GP60	STBY	H-Z	NATIVE	N/A(Reverse)	P/U 8.2K 3VDUAL
GP61	STBY	L	NATIVE	-SUSTAT	N/A
GP62	STBY	L	NATIVE	SUSCLK	N/A
GP63	STBY	L	NATIVE	GPIO63	N/A
GP64	MAIN	L	NATIVE	CLKOUTFLEX0	N/A
GP65	MAIN	L	NATIVE	CLKOUTFLEX1	N/A
GP66	MAIN	L	NATIVE	CLKOUTFLEX2	N/A
GP67	MAIN	L	NATIVE	CLKOUTFLEX3	N/A
GP72	STBY	H-Z	NATIVE	VCORE_OV4	P/U 8.2K 3VDUAL
GP73	STBY		NATIVE	1_05V_OV1	P/U 8.2K 3VDUAL
GP74	STBY	H-Z	NATIVE	1_05V_OV2	P/U 8.2K 3VDUAL
GP75	STBY	H-Z	NATIVE	N/A(Reverse)	P/U 8.2K 3VDUAL

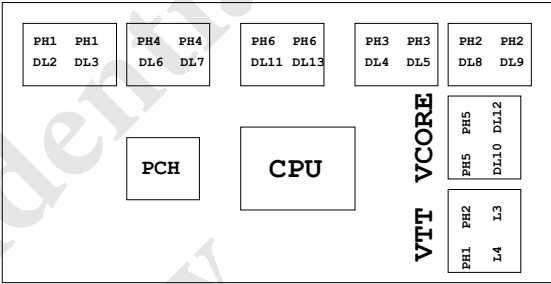
Super I/O ITE8720 GPIO Table

PIN NAME	USAGE	NOTE
SVC/PECI_RQT/GP14	-PECI_REQ	
PWROK1/GP13	PWROK1/ITE_PWROK	
KRST#/GP62	-KRST	
SO/GP50	-ICH_SPI_CS	
IRTX/GP47/CE2_N/JP7	CEB_N	
GP46/IRRX	-LAN2_DSM	
PSION#/GP42	-PSON	
PWROK2#/GP41	PECI_CTL	
PCIRST3#/GP10/VDIMM_STR_EN	-PCIE_RST	
RSMRST#CIRRXL1/GP55	-RSMRST	
PME#/GP54	-LPCPME	
PD5/GP75/BUSS00	N/A	

PIN NAME	USAGE	NOTE
FAN_TAC2/GP52	FANIO2	
FAN_TAC3/GP37	FANIO3	
VIDO3/FAN_TAC4/GP25/DSR2#	FANIO4	
FAN_CTL2/GP51	FANPWM2	
FAN_CTL3/GP36	FANPWM3	
VID4/GP34	BEEP-	
VID3/GP33	TURBO1	
VID2/GP32	TURBO0	
VCORE_GOOD/VID6/GP63	CPUT_LED1_C	
VID5/GP35	CPUT_LED2_C	
VID1/GP31	CPUT_LED3_C	
VID0/GP30	-LAN1_DSM	NBT_LED1_C
SLCT/GP80	CPU_LED1_C	
PE/GP81	CPU_LED2_C	
BUSY/GP82	CPU_LED3_C	
PD3/GP73/BUSSI1	SB_LED1_C	
PD4/GP74/BUSSI2	SB_LED2_C	
VCORE_EN/VID7/GP64	IT_GP64	SB_LED3_C
PD0/GP70	NB_LED1_C	
PD1/GP71	NB_LED2_C	
PD2/GP72/BUSSI0	NB_LED3_C	
GP22/SEN	LOW_PWR_1	
VIDO5/GP27/SEN2	LOW_PWR_2	
PCIRST2#/GP11	-PFMRST1	
PCIRST1#/GP12	-PFMRST2	
3VSB5W#/GP40	CSI_F0	BSEL166_1
SUSCH#/GP53	CSI_F1	BSEL166_2
GP23/SI	BSEL166_3/CSISBSL	
VIDO0/GP20/CTS2#	CPUT_LED1_C	BSEL166_4
GP65/VDPA_EN/GB_01	MB_ID2	
PD6/GP76/BUSS01	MB_ID3	
PD7/GP77/BUSS02	MB_ID4	
AFD#/GP86/SMB_C_R	SEC_PIN	FST_2X8
INIT#/GP85/SMBD_M	SEC_2x8	GTLREF_AD2
ACK#/GP83	DDR_LED1_C	
VIDO1/GP21/DCD2#	DDR_LED2_C	
STB#/GP87/SMB_C_M	DDR_LED3_C	
PWRON#GP44	VCORE_OV1	
PANSWH#/GP43	PWRBTSW	
KDAT/GP61	-PWRBTSW	
KCLK/GP60	KDAT	
MDAT/GP57	KCLK	
MACL/GP56	MDAT	
GP66/VIDT_EN/GB_02	NBT_LED1_C	MCLK
SVD/PCIRSTIN#CIRTX/GP15	PWM2_CR	
KDAT/GP61	PWM2_CR	
GP67/CPU_PG/GB_03	EN_LOADLINE	IT_GP67/-EN_PWM2
SLIN#/GP84/SMBD_R	-EN_PWM2	
PSI_L/FAN_CLT5/CIRRX2/GP16	-THERM	
VIDO4/GP26/SOUT2	DDR18V_PH2_EN	
VIDO2/FAN_TAC5/GP24/DSR2#	DDR18V_LED	
VIDO6/GP17/RI2#	1_1V_PH_EN	
VIDO7/JP6/DTR2#	JP6	
PD5/GP75/BUSS00	SB_LED3_C	



PWM各相位的擺法如下：



BIOS超電壓對應表：

線路圖名稱	BIOS選項
Vcore	CPU Vcore
CPU_VTT	CPU Termination
CPU_VAXG	CPU Graphic Core
VCC1_8_PCH	CPU PLL
VCC1_05_PCH	PCH core
3VDUAL	3VDUAL
DDR15V	DRAM voltage
DDRVTT	DRAM Terminatio
VREF_CA_A/VREF_CA_B	DRAM Address Ref
VREF_DQ_A/VREF_DQ_B	DRAM Data Ref

散熱模組料號：

8IBP：
1.12SP2-01A001-Y1R/Y2R
2.12SP2-01A001-Z1R/Z2R
(HIBRID模組) 包材階

	3 pin FAN control	4 pin FAN control	FAN speed	Controller
CPU FAN	FANPWM1	FANPWM3	FANIO1	IT8720
	ICH_FAN_PWM2	ICH_FAN_PWM0	ICH_FAN_TACH0	PCH
SYS FAN	FANPWM2	N/A	FANIO2	IT8720
	ICH_FAN_PWM1	N/A	ICH_FAN_TACH1	PCH
PWR FAN	N/A	N/A	FANIO3	IT8720
			ICH_FAN_TACH2	PCH