

REV: 1.1

SHEET

TITLE

01	COVER SHEET
02	BOM & PCB MODIFY HISTORY
03	BLOCK DIAGRAM
04	CPU LGA1156-A
05	CPU LGA1156-B
06	CPU LGA1156-C
07	DDR III CHANNEL A
08	DDR III CHANNEL B
09	DDR III POWER CAP
10	PCH_FDI,DMI,USB,PCIE,NVRAM
11	PCH_DP,CLK BUFFER
12	PCH_HOST,SATA,PCI
13	PCH_GPIO,CTRL,AUDIO
14	PCH_PWR,GND
15	PCI_EXPRESS*16 SLOT
16	PCI_EXPRESS*4 SLOT
17	PCI_SLOT 1,2
18	ITE 8720 LPC IO
19	Dual BIOS,PHOT,D-OC
20	ALC888B
21	REAR AUDIO JACK
22	CLOCK GEN ICS9LPRS914
23	DISCRETE POWER
24	DDR 15V,PWR_SEQ
25	CPU_VAXG_PWM_ISL6314CRZ
26	CPU_VTT_PWM_ISL6322G
27	VCORE_PWM_ISL6334CR

SHEET

TITLE

[illegible]

GA-H55M-S2H Version: 1.1

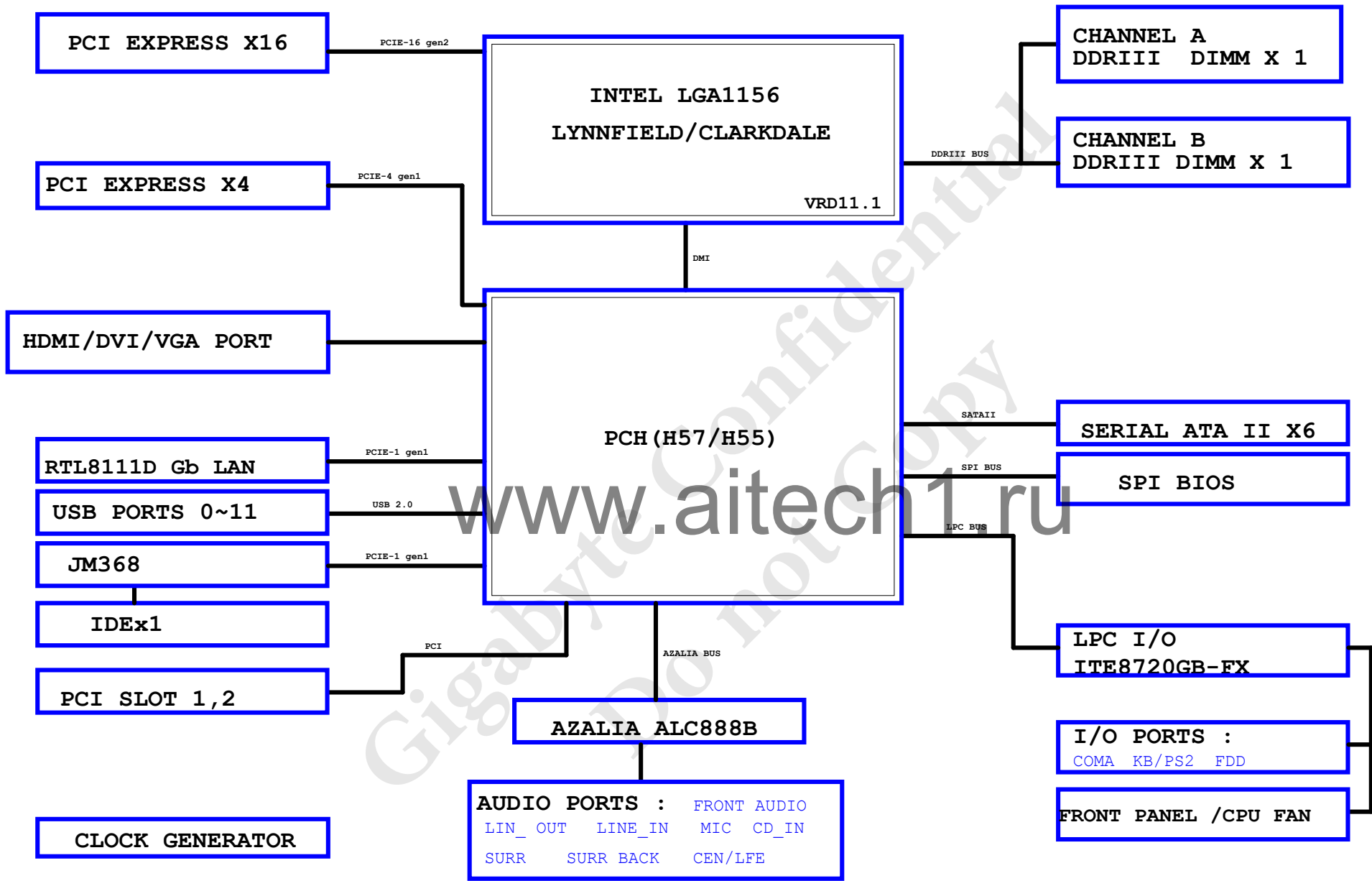
Circuit or PCB layout change
for next version

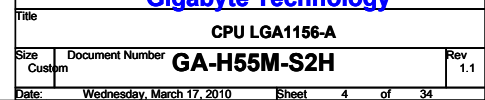
Component value change history

2010/03/17

[illegible][illegible]

BLOCK DIAGRAM





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#	
[7] -CSA1	AW24	SA_CS#	AL4 DQSA2
	AW21	SA_CS#	AL3 -DQSA2
	AW23	SA_CS#	AL1 DMA2
[7] CKEA0	AU10	SA_CKE[0]	AT4 MDA16
[7] CKEA1	AW10	SA_CKE[1]	AU2 MDA17
	AV10	SA_CKE[2]	AW3 MDA18
	AY10	SA_CKE[3]	AW4 MDA19
		SA_CKE[4]	AT3 MDA20
MODT_A0	AV23	SA_ODT[0]	SA_ODT[0]
MODT_A1	AV24	SA_ODT[1]	SA_ODT[1]
	AW23	SA_ODT[2]	SA_ODT[2]
	AY24	SA_ODT[3]	SA_ODT[3]
[7] DCLKA0	AR22	SA_CK[0]	AY6 DQSA3
[7] -DCLKA0	AR21	SA_CK#	SA_DQS#
[7] DCLKA1	AP18	SA_CK#	SA_DM[3]
[7] -DCLKA1	AN18	SA_CK[1]	
	AN21	SA_CK#	AW5 MDA24
	AP21	SA_CK#	AY5 MDA25
	AP19	SA_CK#	AU8 MDA26
	AN19	SA_CK#	AY8 MDA27
		SA_CK#	AU5 MDA28
		SA_CK#	AV6 MDA29
		SA_CK#	AV7 MDA30
		SA_CK#	AW7 MDA31
[7,8] -DDR3_RST	AV8	SM_DRAMRST#	
TP1	AK22	SA_CS#	AR28 DQSA4
TP1	AM22	SA_CS#	AT29 -DQSA4
TP1	AL23	SA_CS#	AN29 DMA4
TP1	AK23	SA_CS#	
		SA_CS#	AN27 MDA32
		SA_CS#	AT28 MDA33
		SA_CS#	AP28 MDA34
		SA_CS#	AP30 MDA35
		SA_CS#	AP27 MDA36
		SA_CS#	AP27 MDA37
		SA_CS#	AR29 MDA38
		SA_CS#	AN30 MDA39
		SA_CS#	
		SA_CS#	AV32 DQSA5
		SA_CS#	AW32 -DQSA5
		SA_CS#	AW31 DMA5
		SA_CS#	
		SA_CS#	AU30 MDA40
		SA_CS#	AU31 MDA41
		SA_CS#	AV33 MDA42
		SA_CS#	AU34 MDA43
		SA_CS#	AV30 MDA44
		SA_CS#	AW30 MDA45
		SA_CS#	AU33 MDA46
		SA_CS#	AW33 MDA47
		SA_CS#	
		SA_CS#	AW36 DQSA6
		SA_CS#	AV35 -DQSA6
		SA_CS#	AU35 DMA6
		SA_CS#	
		SA_CS#	AW35 MDA48
		SA_CS#	AY35 MDA49
		SA_CS#	AV37 MDA50
		SA_CS#	AU37 MDA51
		SA_CS#	AY34 MDA52
		SA_CS#	AW34 MDA53
		SA_CS#	AV36 MDA54
		SA_CS#	AW37 MDA55
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		SA_CS#	AR30 DQSA7
		SA_CS#	AR38 -DQSA7
		SA_CS#	AT38 DMA7
		SA_CS#	
		SA_CS#	AT39 MDA56
		SA_CS#	AT40 MDA57
		SA_CS#	AN38 MDA58
		SA_CS#	AN39 MDA59
		SA_CS#	AU38 MDA60
		SA_CS#	AP39 MDA61
		SA_CS#	AP40 MDA62
		SA_CS#	AP40 MDA63

DDR_A

1 OF 10

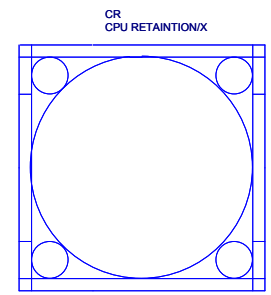
LGA1156(10SC1-F01156-01R)

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	AU25	SB_MA[10]	AF5 MDB6
MAAB11	AW16	SB_MA[11]	AE6 MDB7
MAAB12	AY15	SB_MA[12]	
MAAB13	AW18	SB_MA[13]	AH6 DQSB1
MAAB14	AY12	SB_MA[14]	AJ5 -DQSB1
MAAB15	AV11	SB_MA[15]	AH4 DMB1
		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]	AC6 MDB12
[8] SBAB2	AW12	SB_BS[2]	AC4 MDB13
		SB_BS[3]	AJ7 MDB14
		SB_BS[4]	AK7 MDB15
[8] -CSB0	AY27	SB_CS#	
[8] -CSB1	AY27	SB_CS#	AN6 DQSB2
	AY26	SB_CS#	AM6 -DQSB2
	AY26	SB_CS#	AM7 DMB2
	AY26	SB_CS#	
[8] CKEB0	AW8	SB_CKE[0]	AL6 MDB16
[8] CKEB1	AW9	SB_CKE[1]	AN6 MDB17
	AW9	SB_CKE[2]	AP6 MDB18
	AW9	SB_CKE[3]	AR5 MDB19
		SB_CKE[4]	AL5 MDB20
MODT_B0	AU29	SB_ODT[0]	AM4 MDB21
MODT_B1	AU27	SB_ODT[1]	AN7 MDB22
	AV27	SB_ODT[2]	AP5 MDB23
	AV28	SB_ODT[3]	
	AV28	SB_ODT[4]	
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		SB_ODT[63]	

DDR_B

2 OF 10

LGA1156(10SC1-F01156-01R)



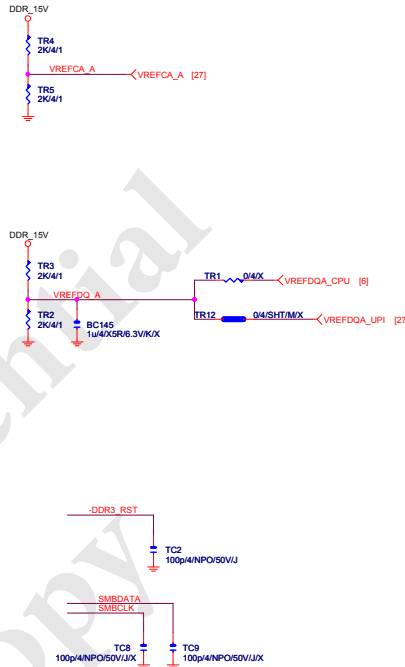
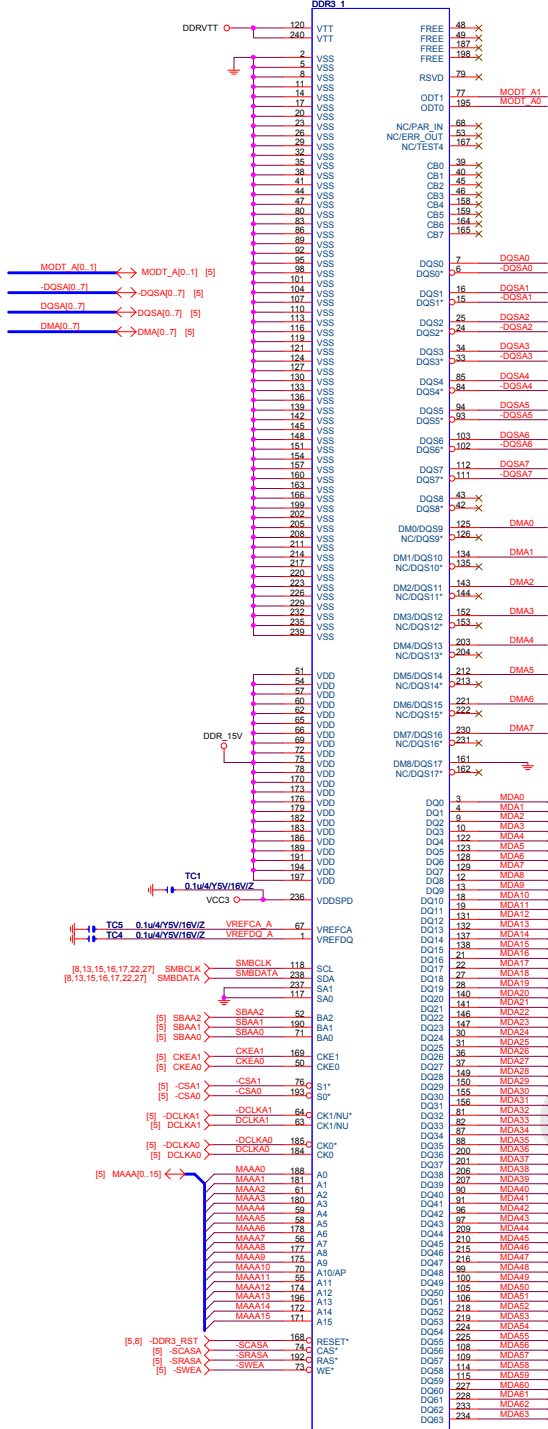
Need check the new CPU ME

LGA1156_P

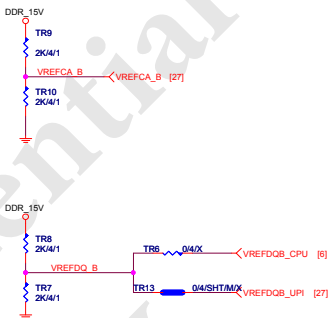
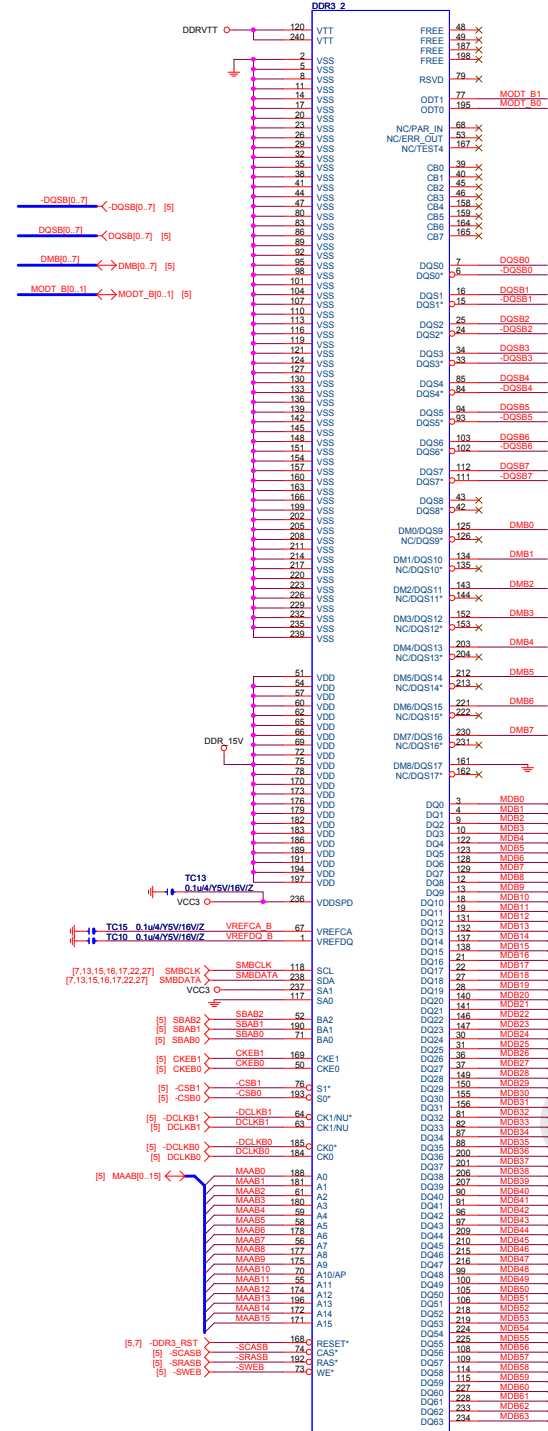


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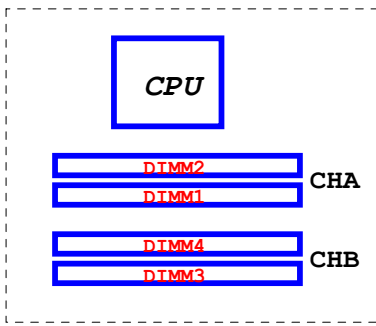
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CPU LGA1156-B			
Size			
Custom			
Document Number			
GA-H55M-S2H			
Date			
Wednesday, March 17, 2010			
Sheet			
5 of 34			
Rev			
1.1			



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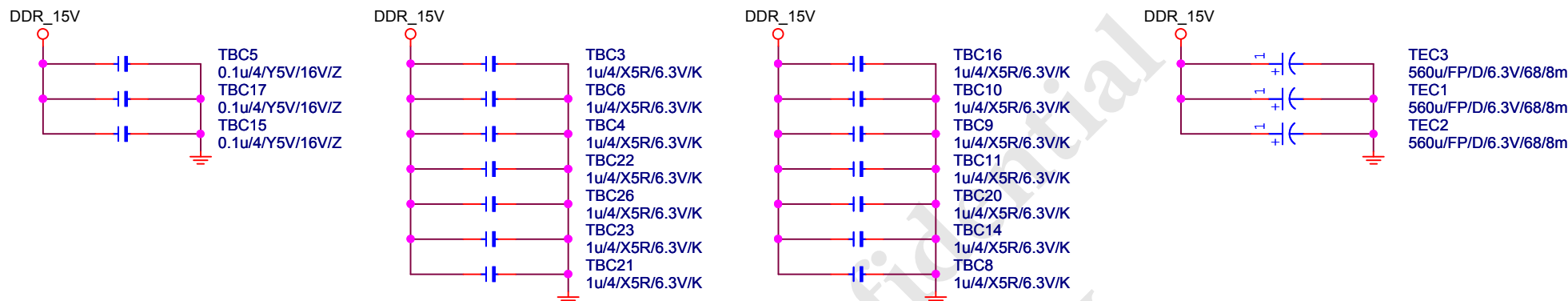


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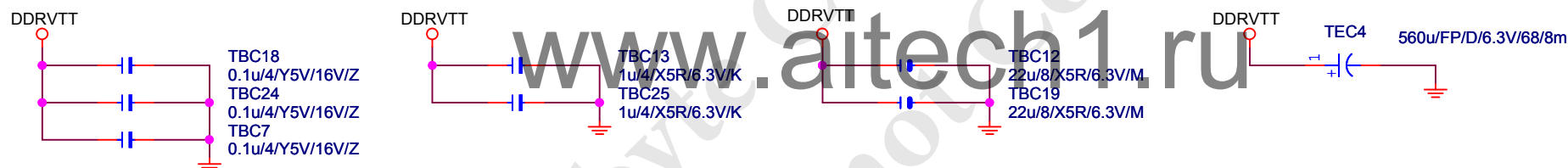


DDR TERMINATION CHANNEL A/B

DDR15V Decouple



DDRVTT Decouple



REF VCC層GND, GND層GND要塞孔



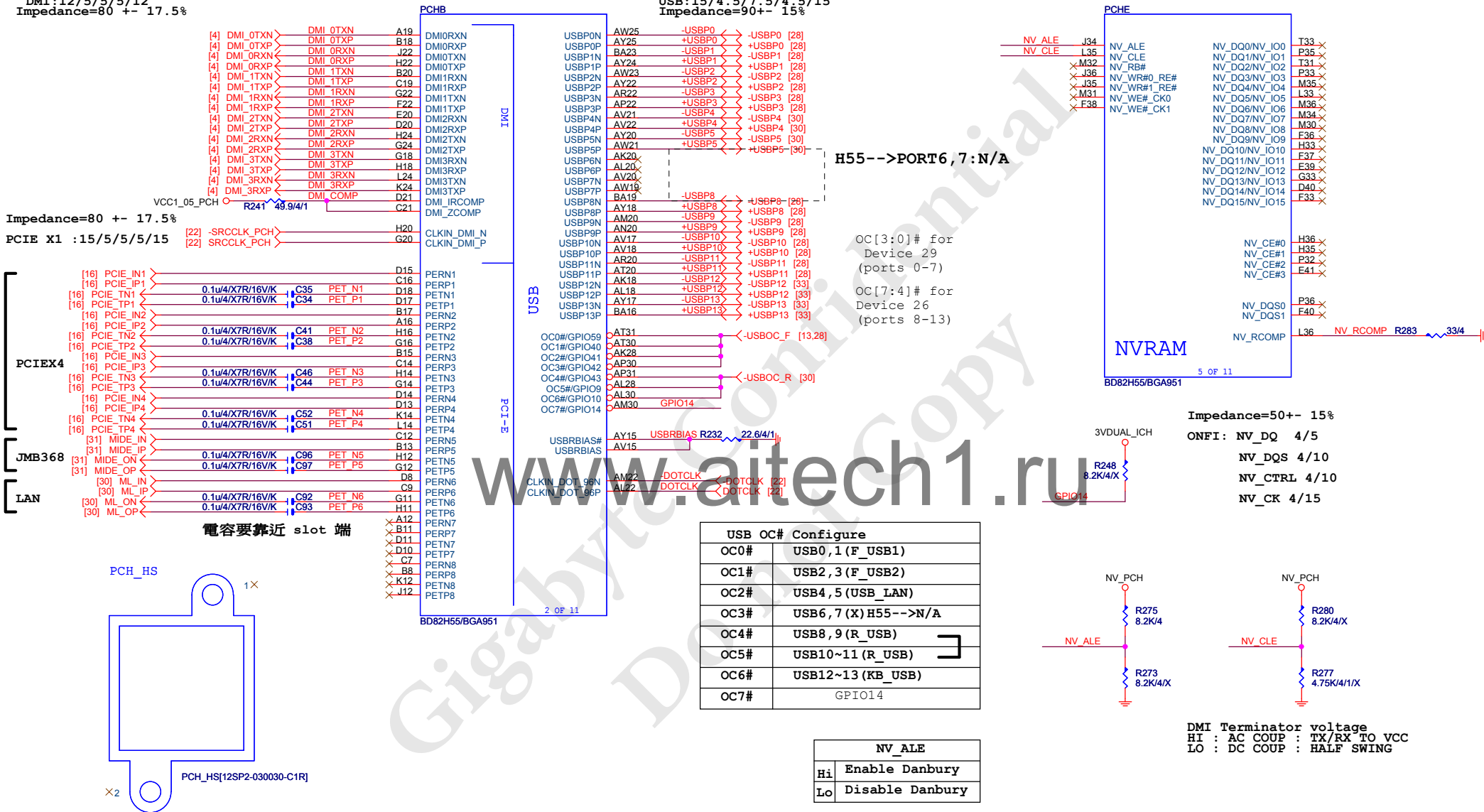
REF GND層GND, VCC層GND要塞孔

Gigabyte Technology

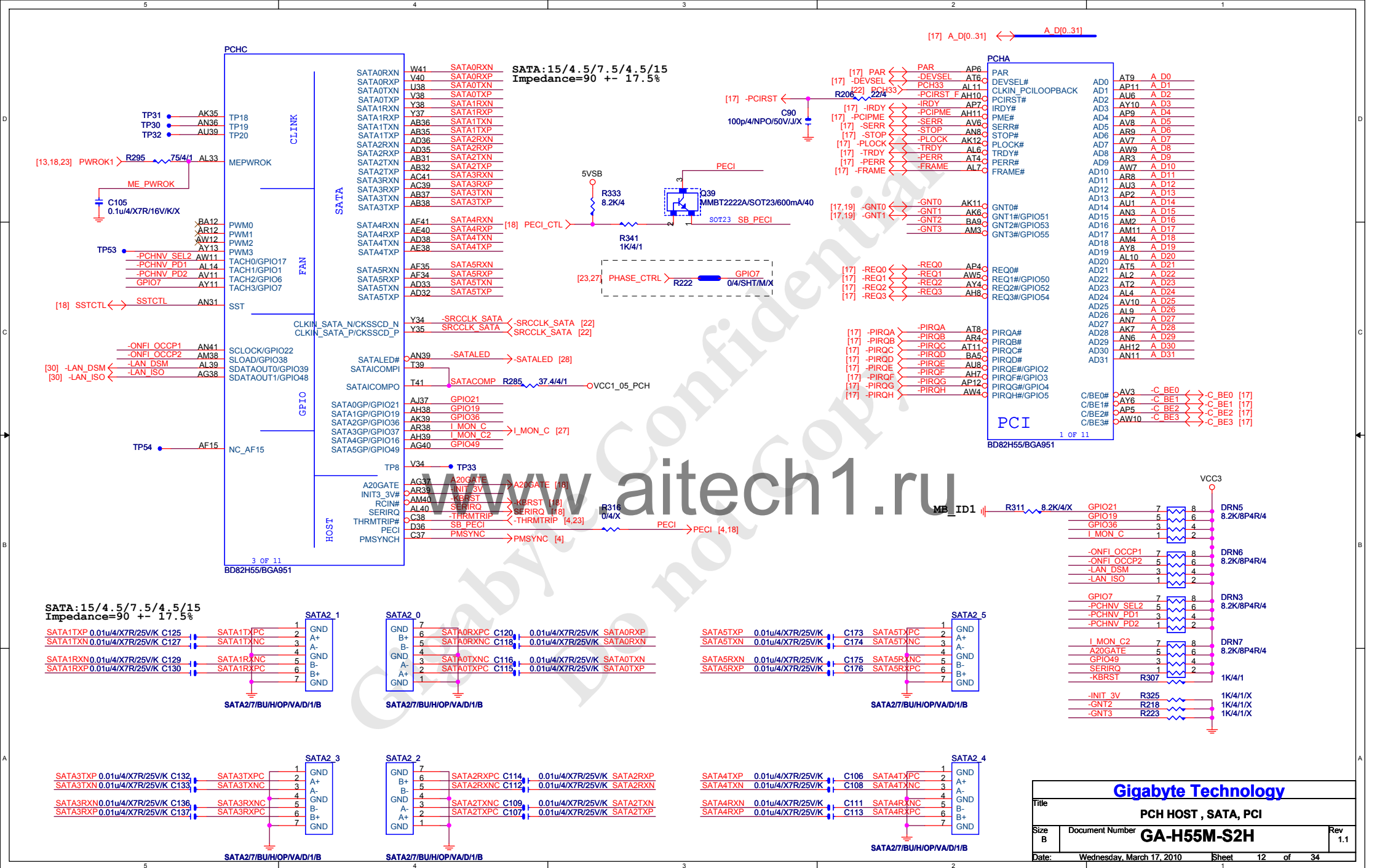
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Size A	Document Number	GA-H55M-S2H	
Date: Wednesday, March 17, 2010		Sheet 9 of 34	Rev 1.1

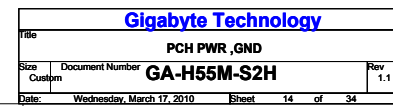
DMI:12/5/5/5/12
Impedance=80 +- 17.5%

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

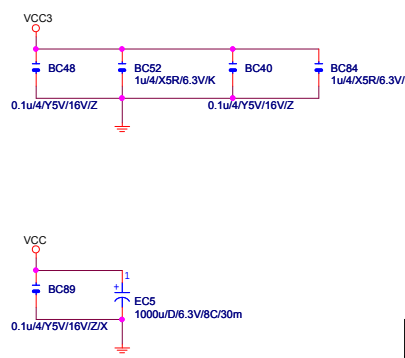
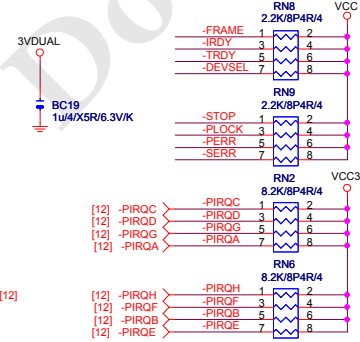
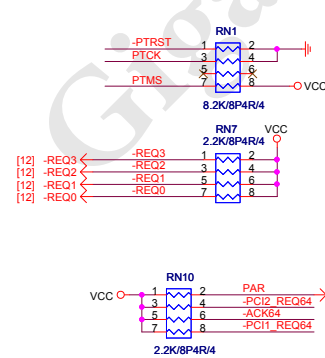
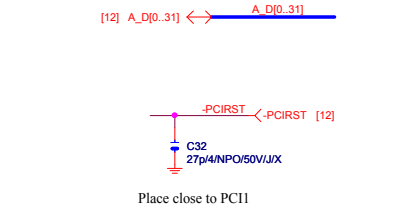
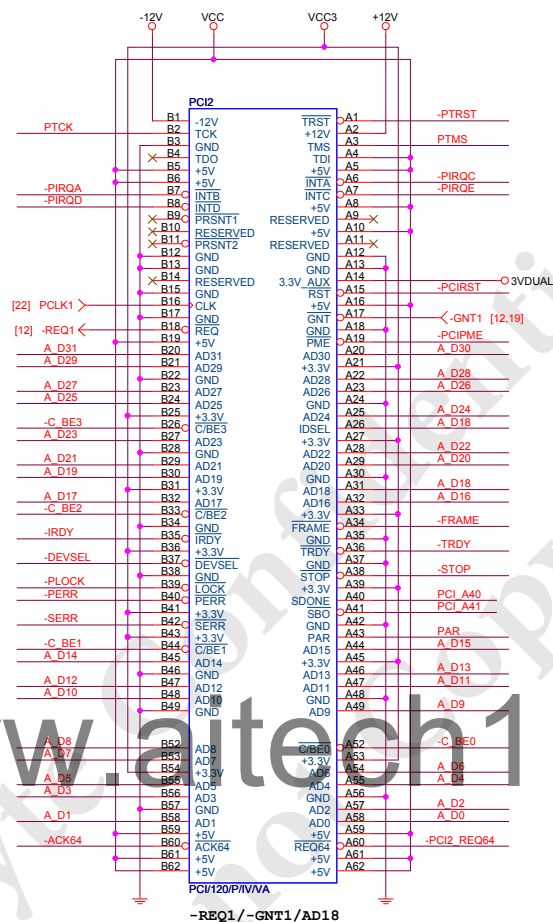
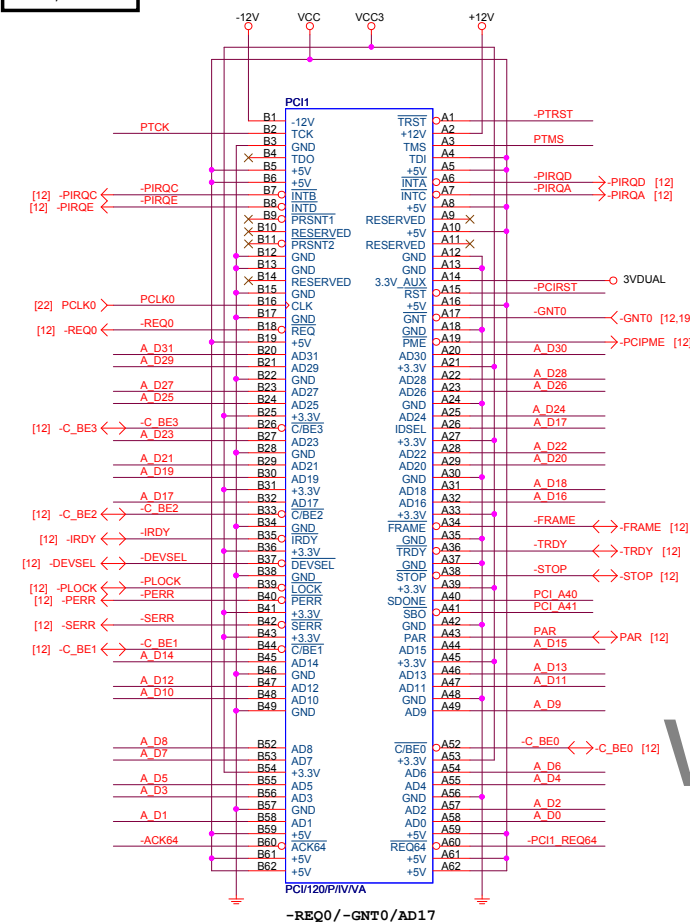


DMI Terminator voltage
HI : AC COUP : TX/RX TO VCC
LO : DC COUP : HALF SWING

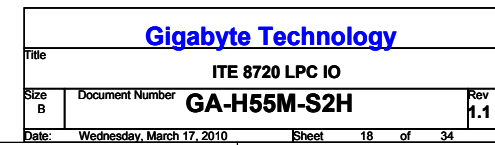




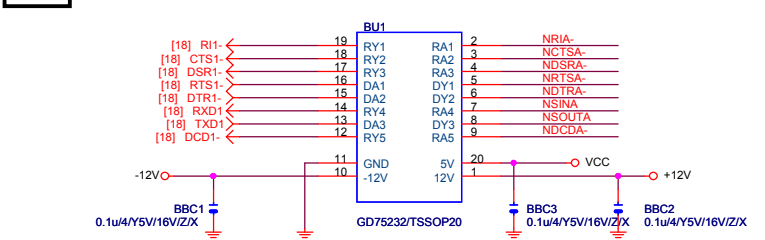
PCI1, 2 SLOT



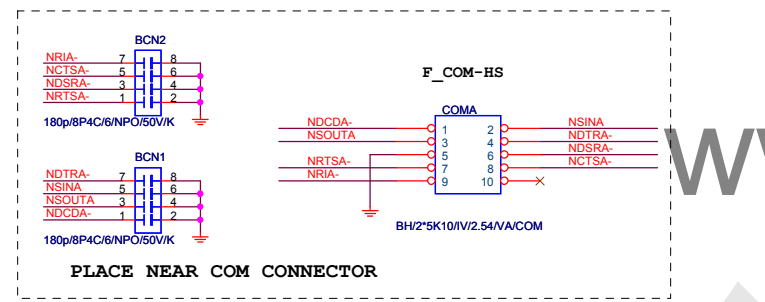
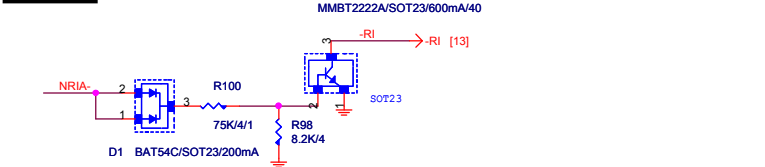
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Size	Document Number	Rev	
Custom	GA-H55M-S2H	1.1	
Date:	Wednesday, March 17, 2010	Sheet	17 of 34



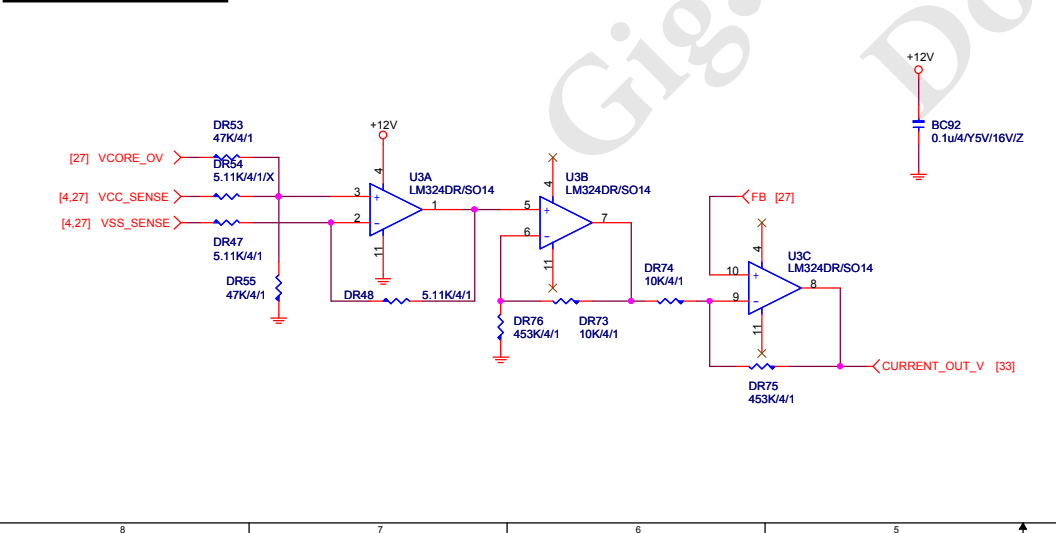
COMB



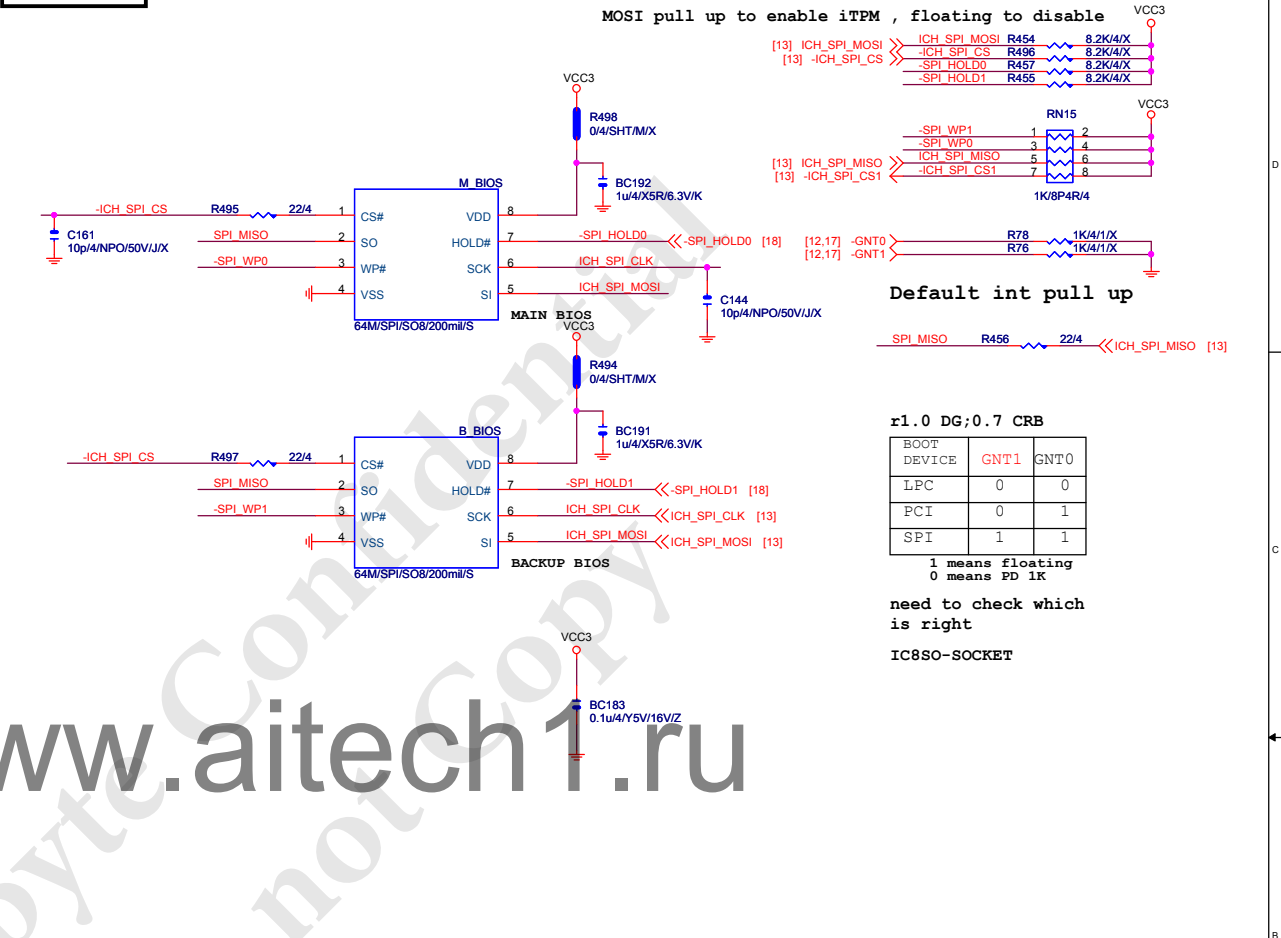
RING IN



DYNAMIC CURRENT OC



DUAL BIOS



Default int pull up



r1.0 DG;0.7 CRB

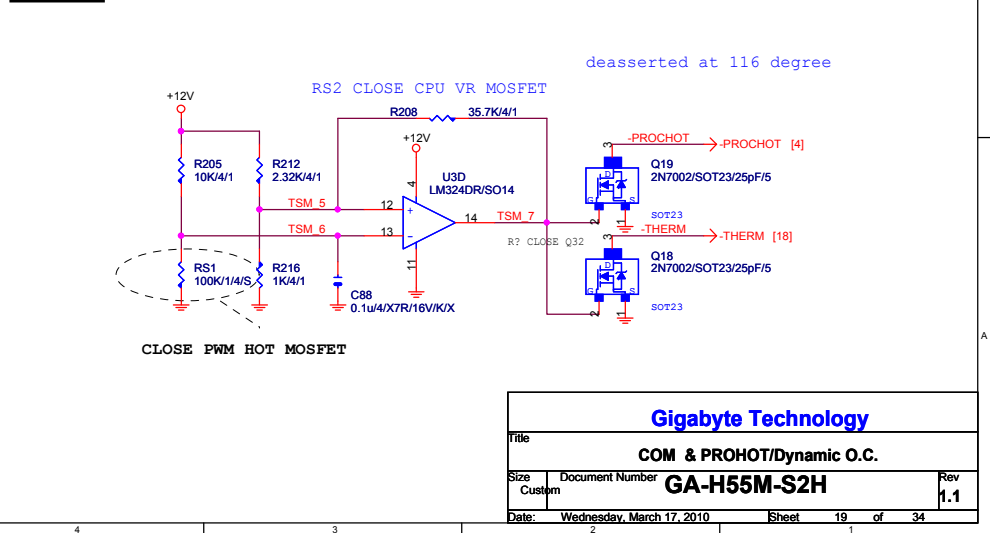
BOOT DEVICE	GNT1	GNT0
LPC	0	0
PCI	0	1
SPI	1	1

1 means floating
0 means PD 1K

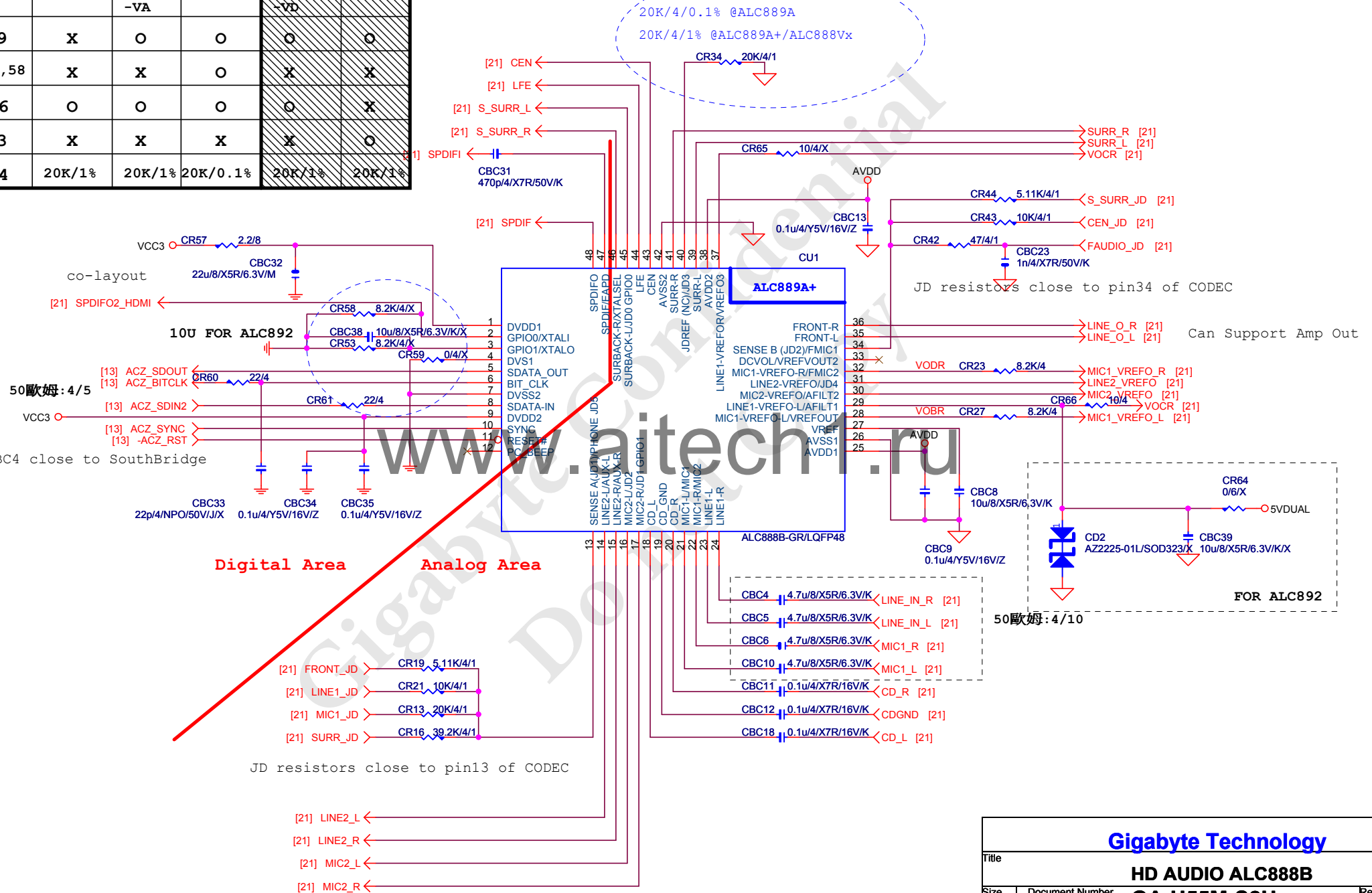
need to check which is right

IC8SO-SOCKET

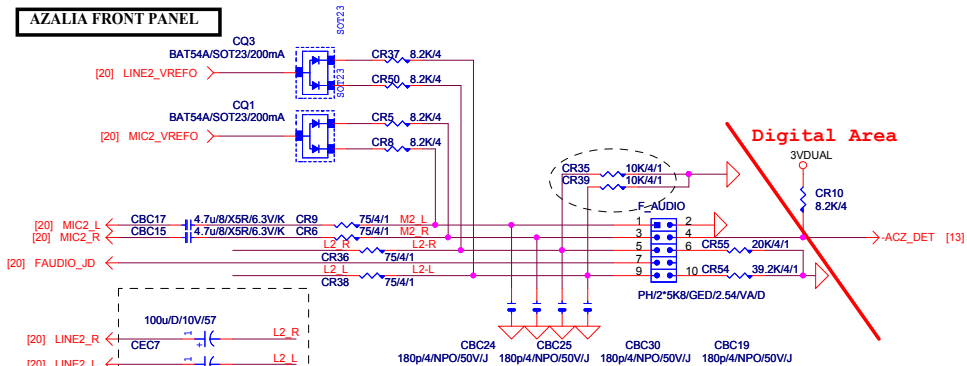
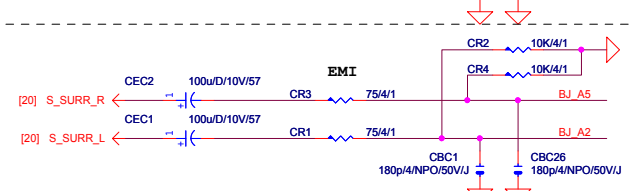
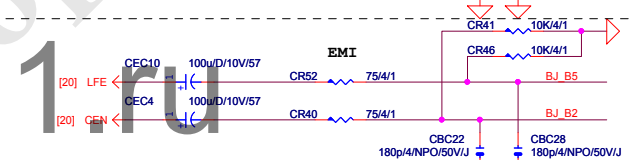
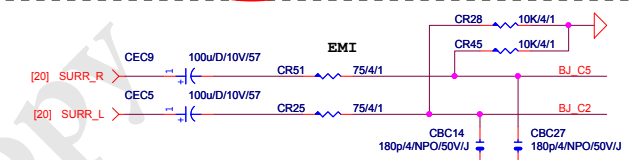
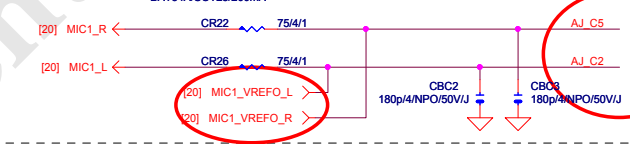
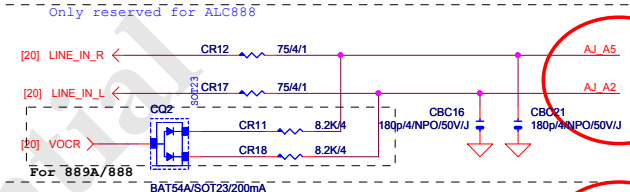
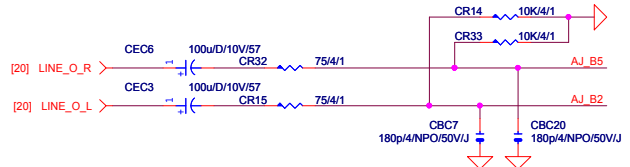
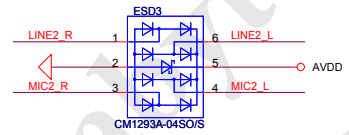
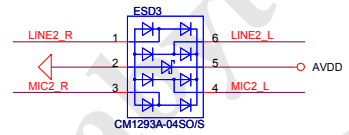
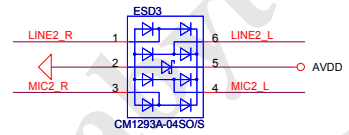
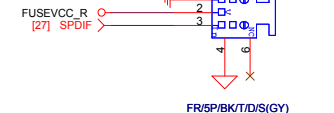
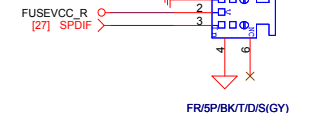
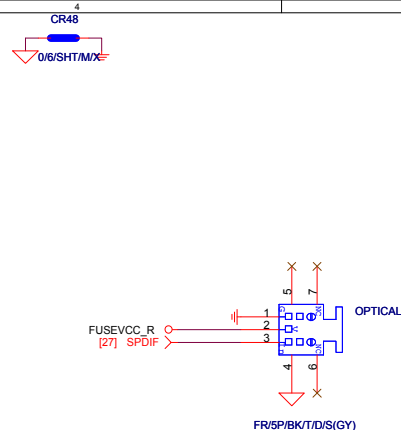
-PROHOT



	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%

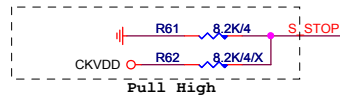
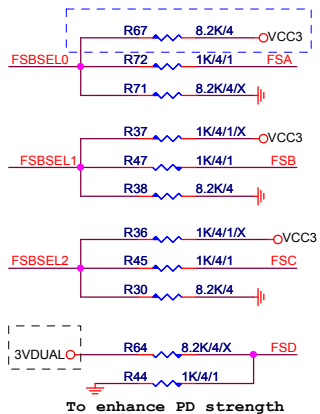
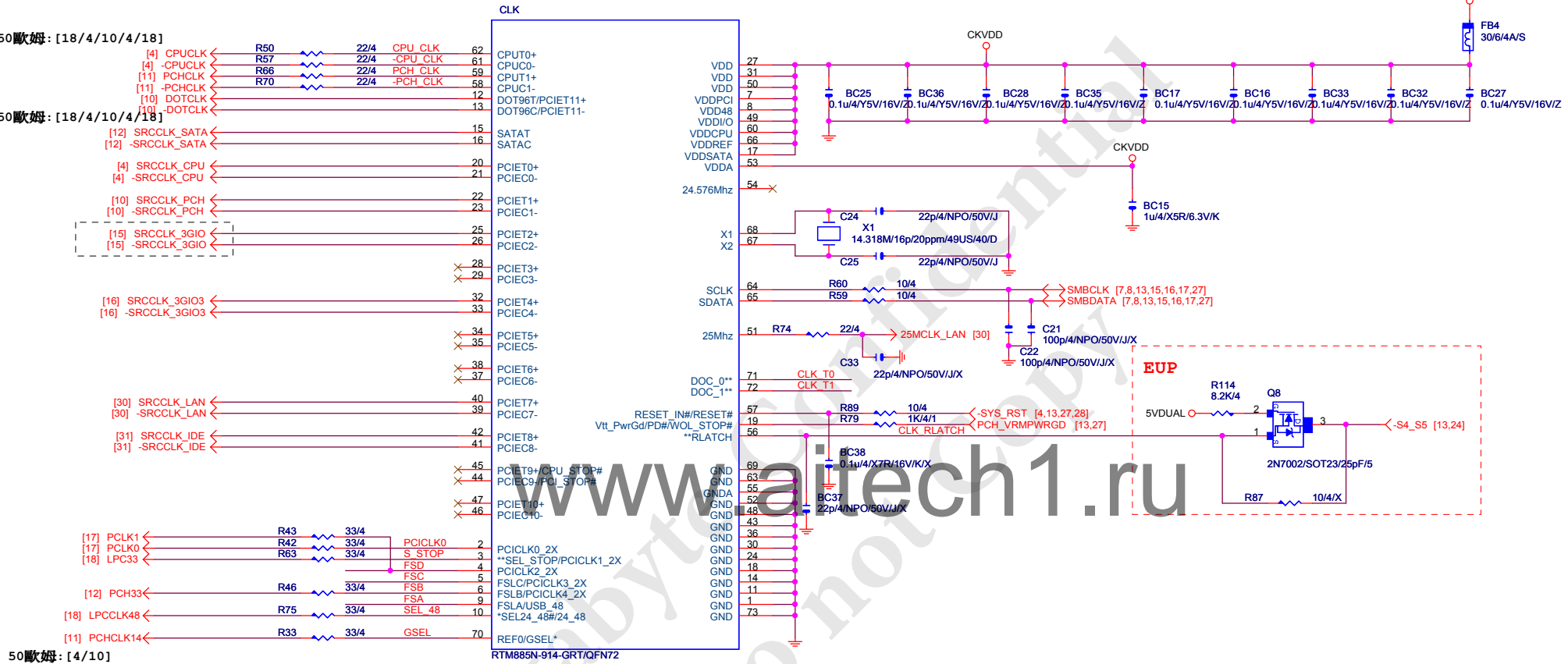


Can Support Amp Out



50歐姆:[18/4/10/4/18]

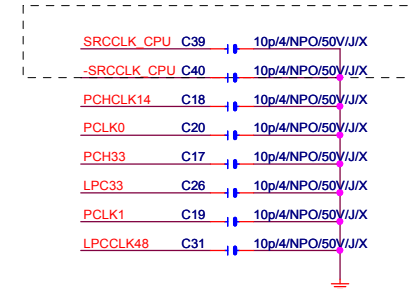
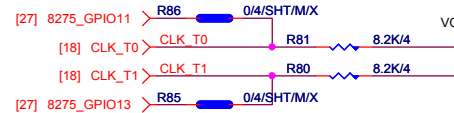
50歐姆:[18/4/10/4/18]



GSEL=1, 96Mhz from 12/13
GSEL=0, 100Mhz from 12/13

SEL_48=1, 24Mhz from pin10
SEL_48=0, 48Mhz from pin10

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

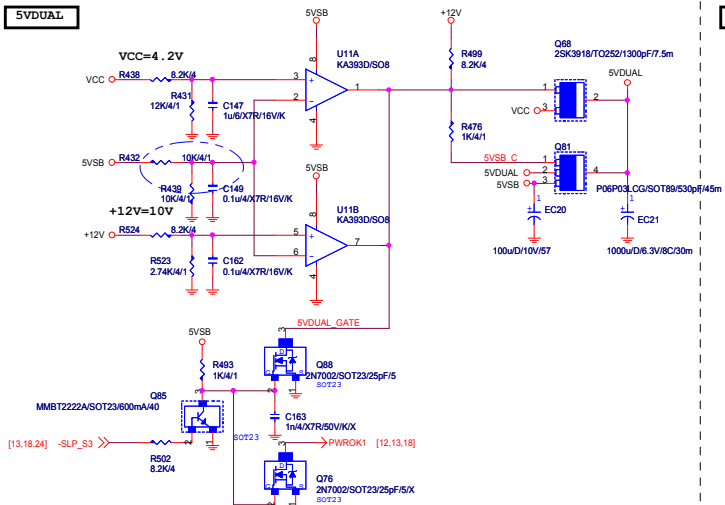


SEL_STOP: latched input to select pin functionality
1 = Selects pin 44/45 to be PCI_STOP#/CPU_STOP#
0 = Selects pin 44/45 to be PCIE outputs ;
3.3V PCICLK output

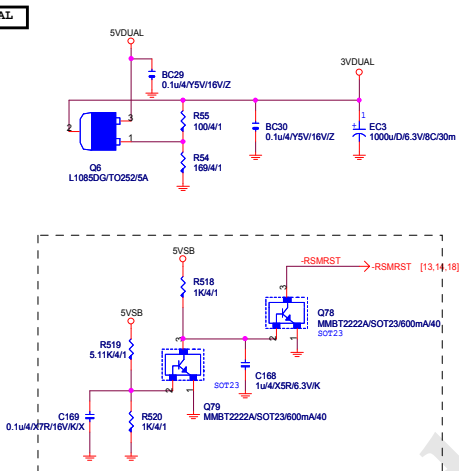
Gigabyte Technology

Title		
CK505 CLK GEN		
GA-H55M-S2H		
Size	Document Number	Rev
Custom		1.1
Date:	Wednesday, March 17, 2010	Sheet 22 of 34

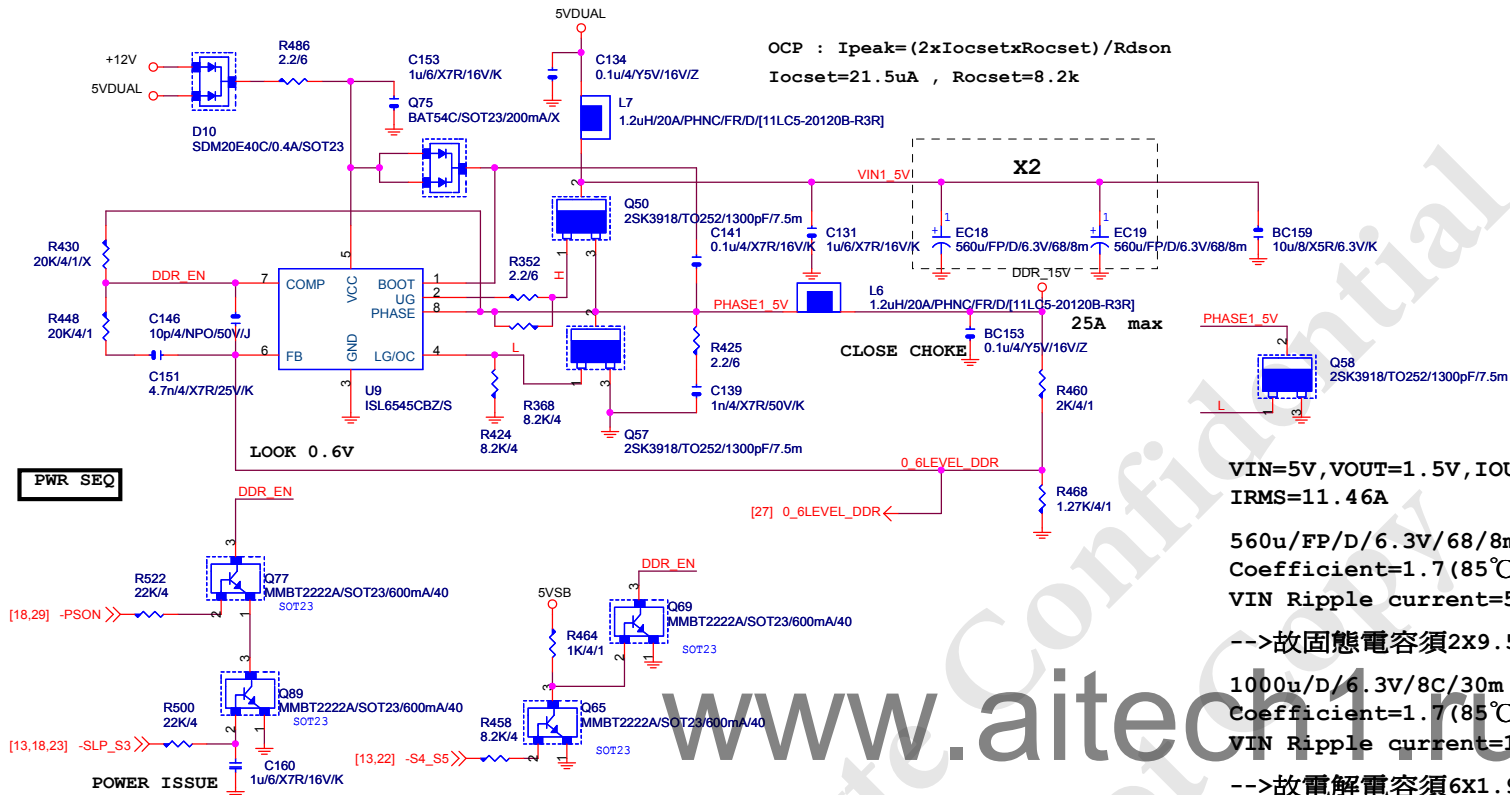
5VDUAL



3VDUAL



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 $2 \times 9.52 = 19.04 > 11.46A$

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

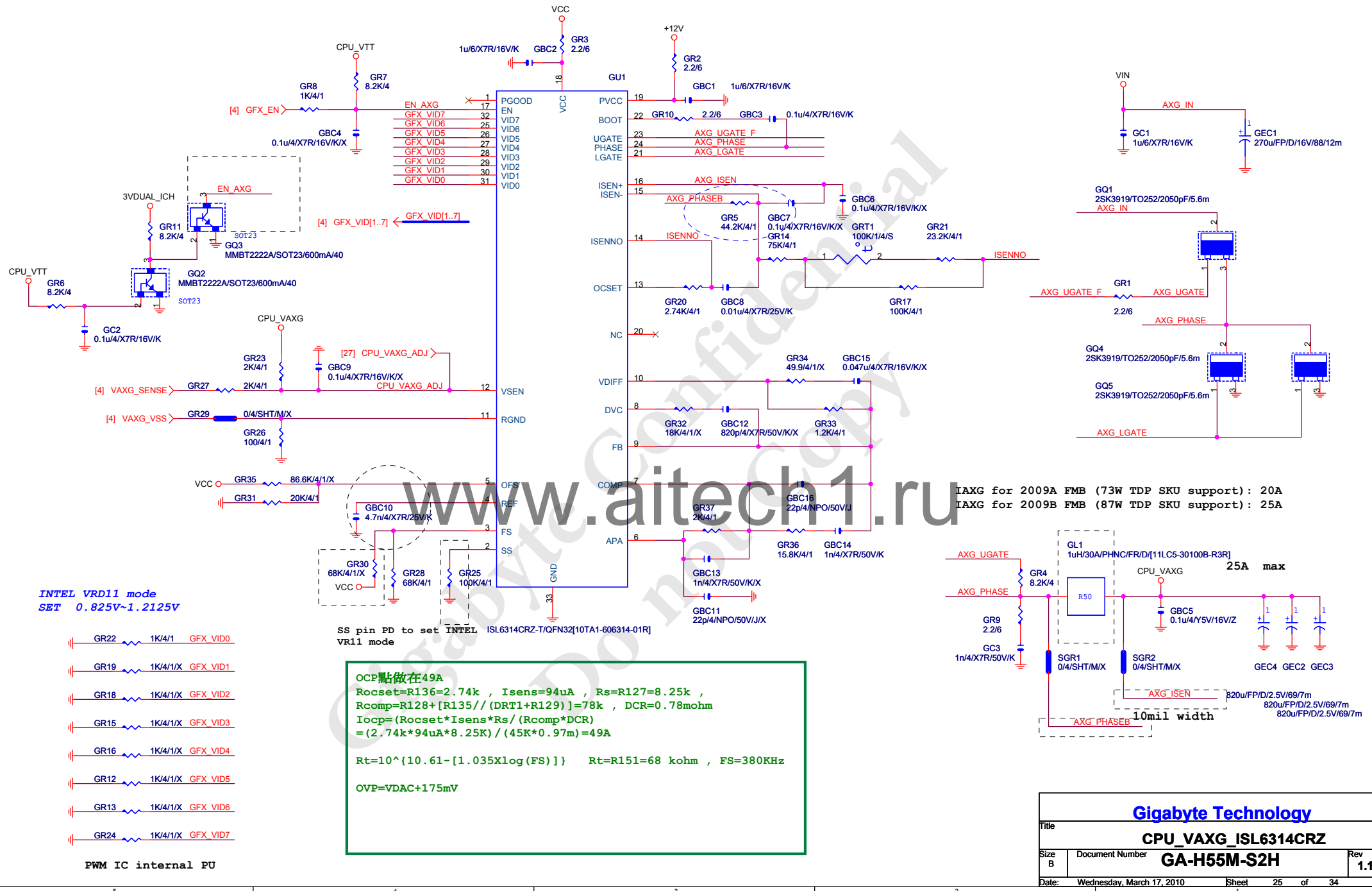
IRMS=3.5A

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

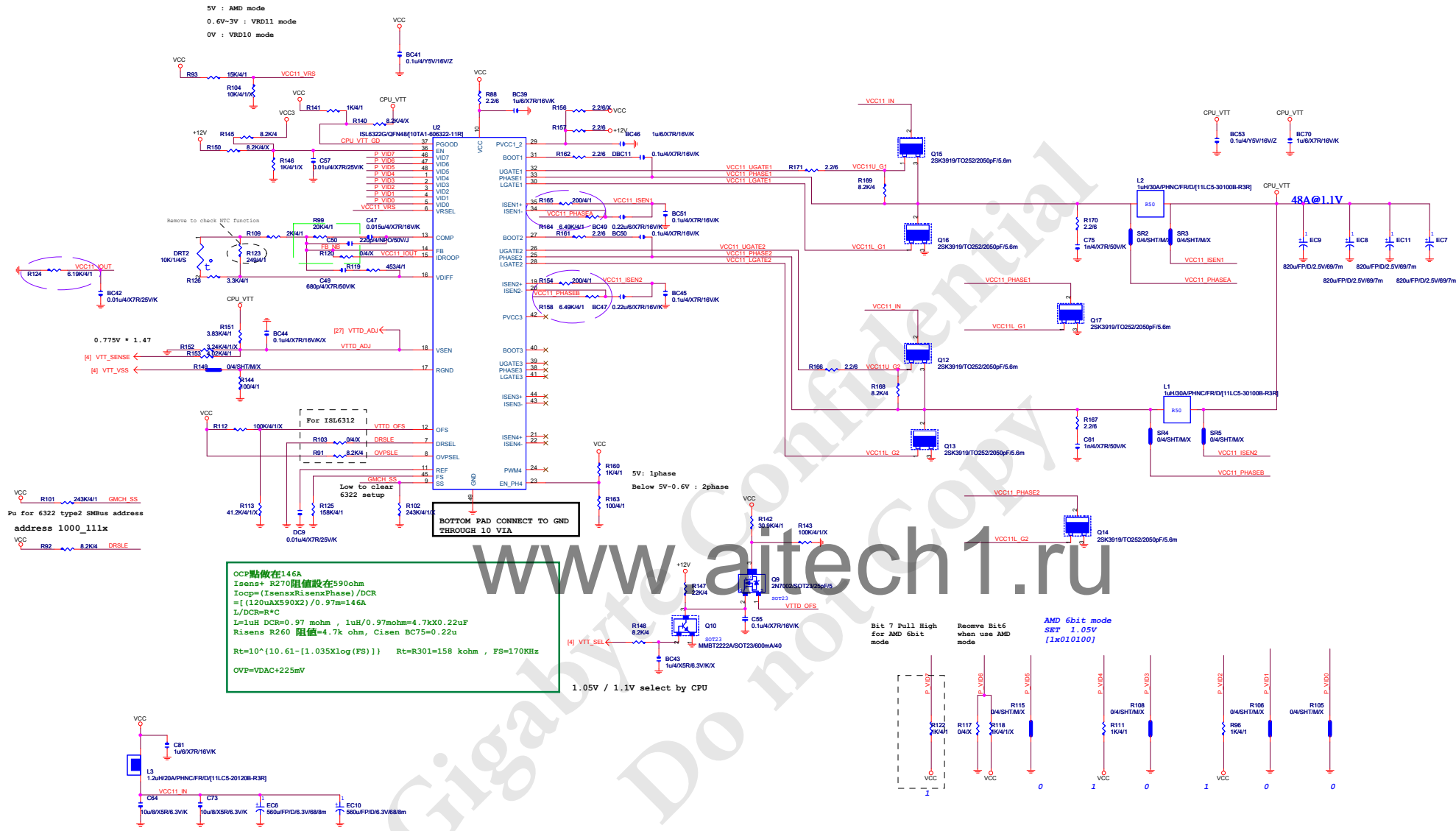
-->故電解電容須 $2 \times 1.938 = 3.876 > 3.5A$

Gigabyte Technology

Title			DDR_15V
Size	Document Number	GA-H55M-S2H	
Custom			Rev 1.1
Date:	Wednesday, March 17, 2010	Sheet	24 of 34



5V : AMD mode
0.6V~3V : VRD11 mode
0V : VRD10 mode



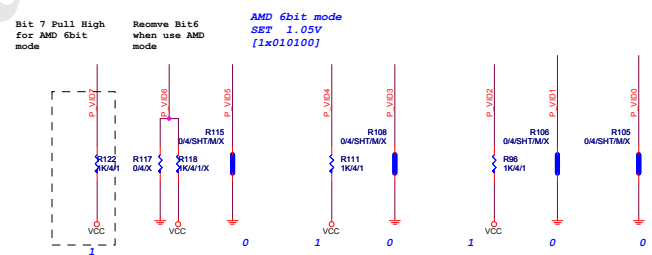
VIN=5V, VOUT=1.1V, IOUT=48A, PHASE=2
IRMS=11.91A

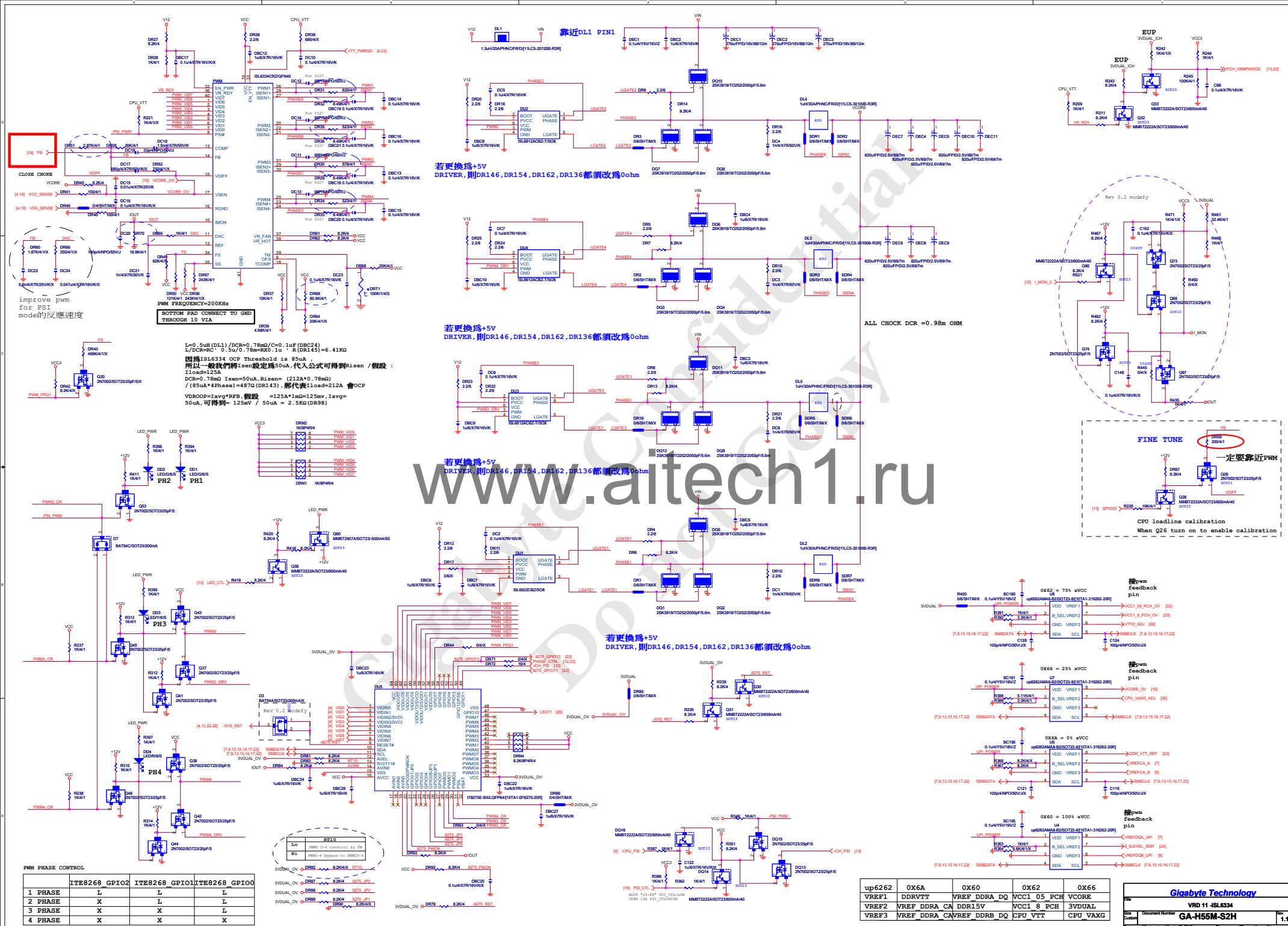
560uF/FPID/6.3V/68/8m RIPPLe CURRENT=5.6A
Coefficient=1.7(85℃), 1(105℃)
VIN Ripple current=5.6X1.7=9.52A(85℃)

-->故固態電容須2X9.52=19.04>11.91A

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

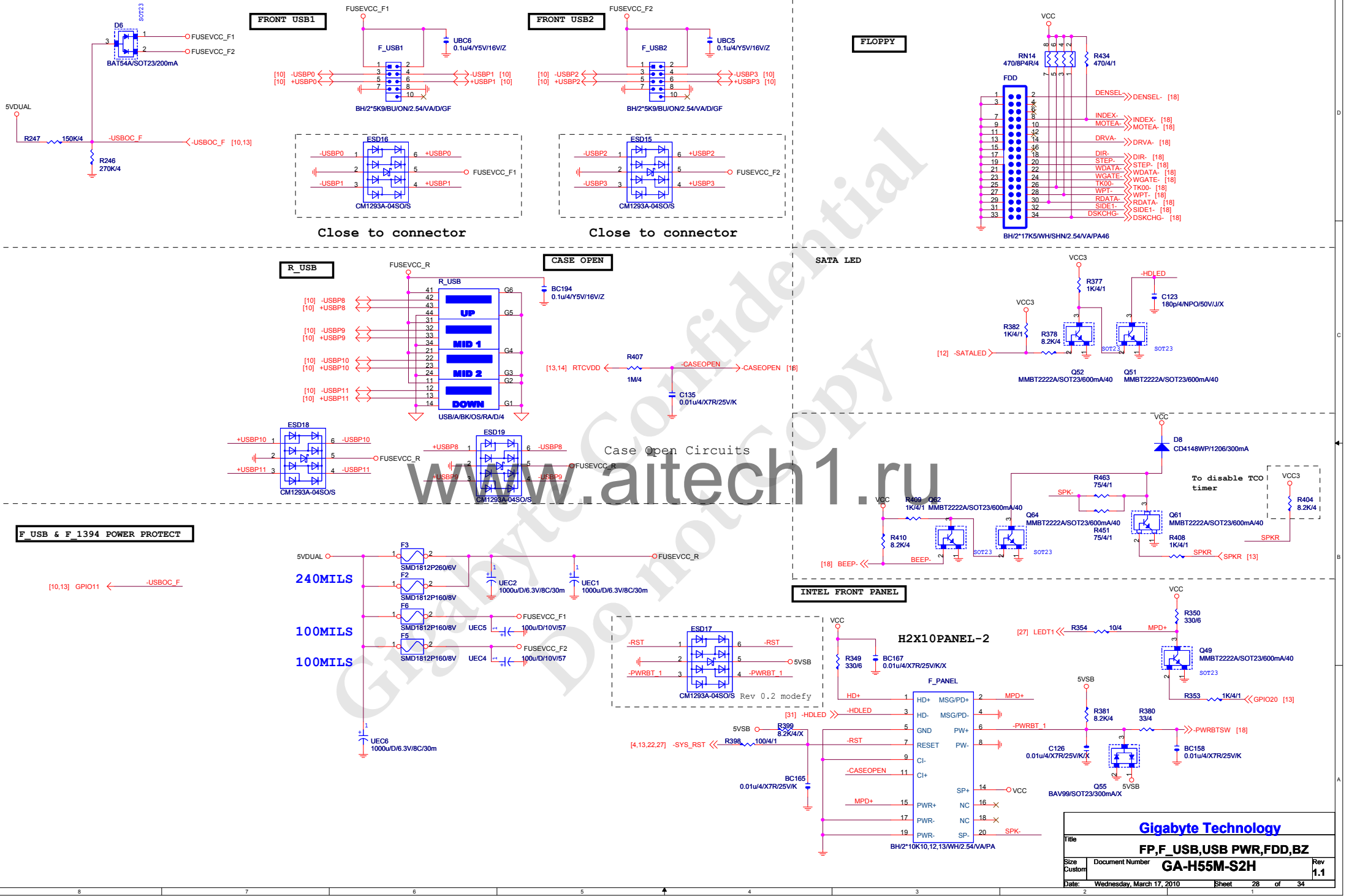
-->故電解電容須7X1.938=13.566>11.91A



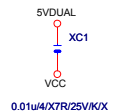
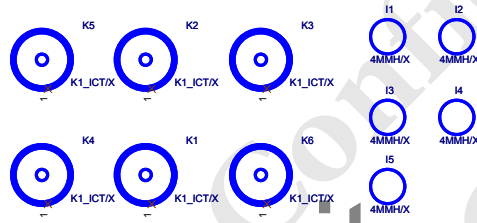
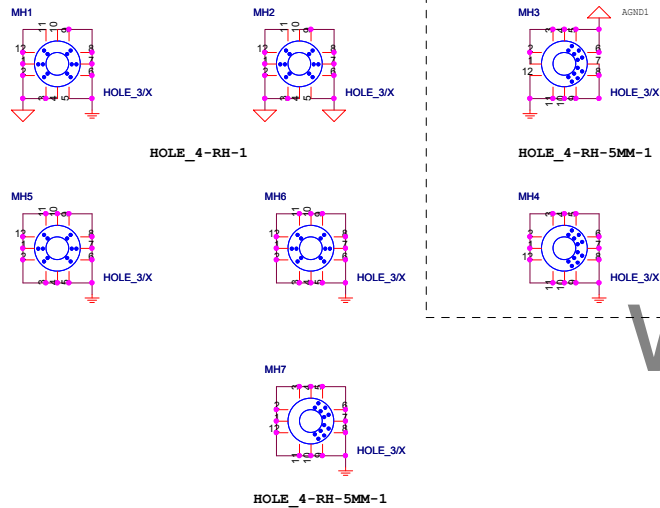
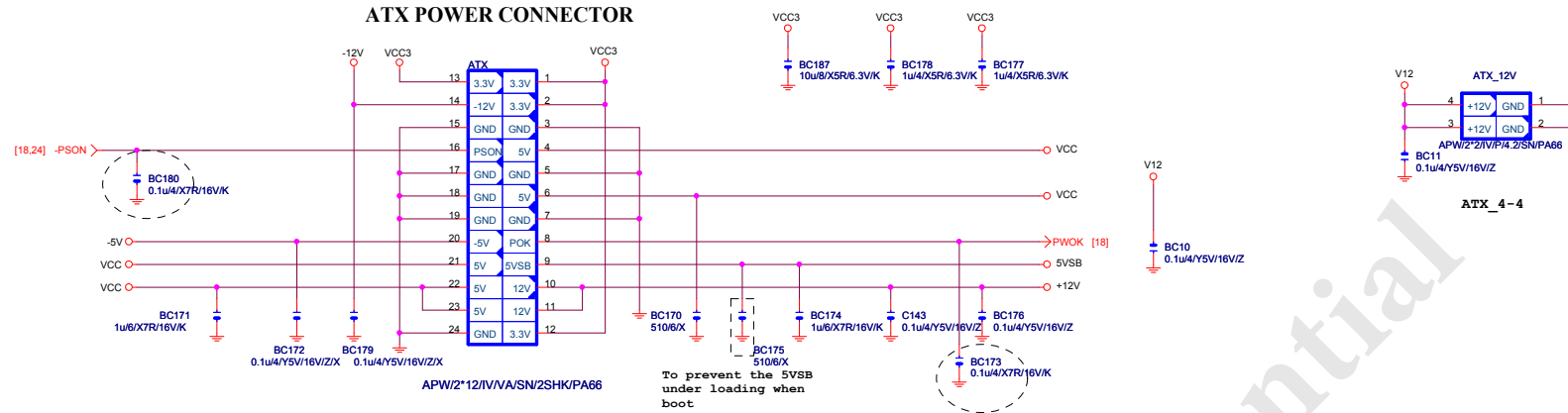


PWM PHASE CONTROL			
	ITE8268 GPIO2	ITE8268 GPIO1	ITE8268 GPIO0
1 PHASE	L	L	L
2 PHASE	X	L	L
3 PHASE	X	X	L
4 PHASE	X	X	X

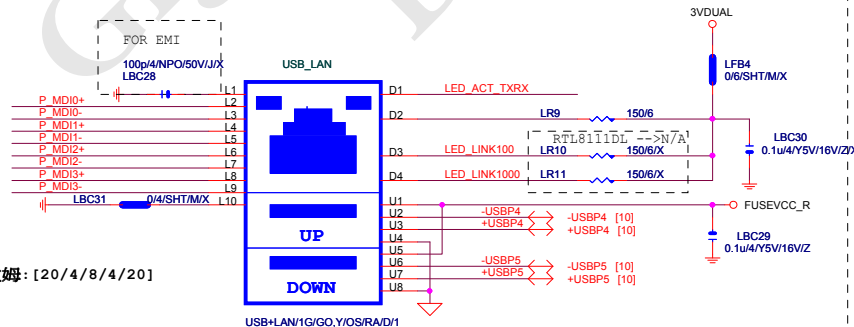
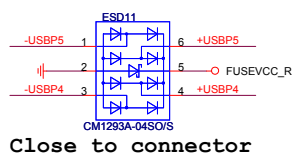
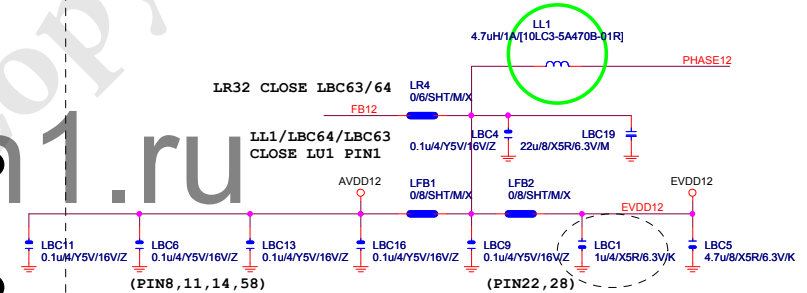
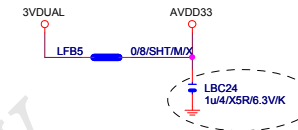
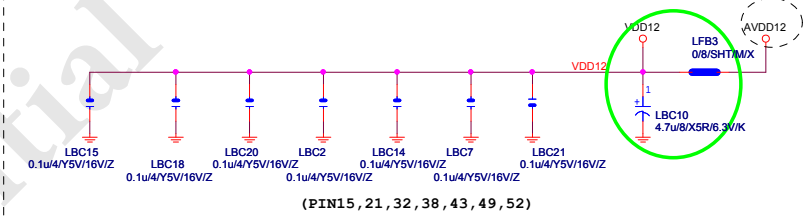
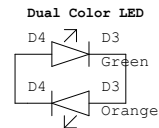
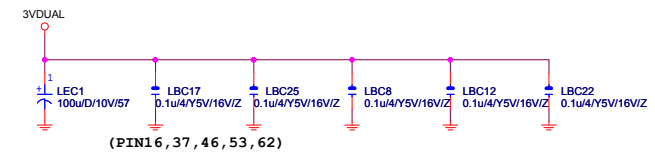
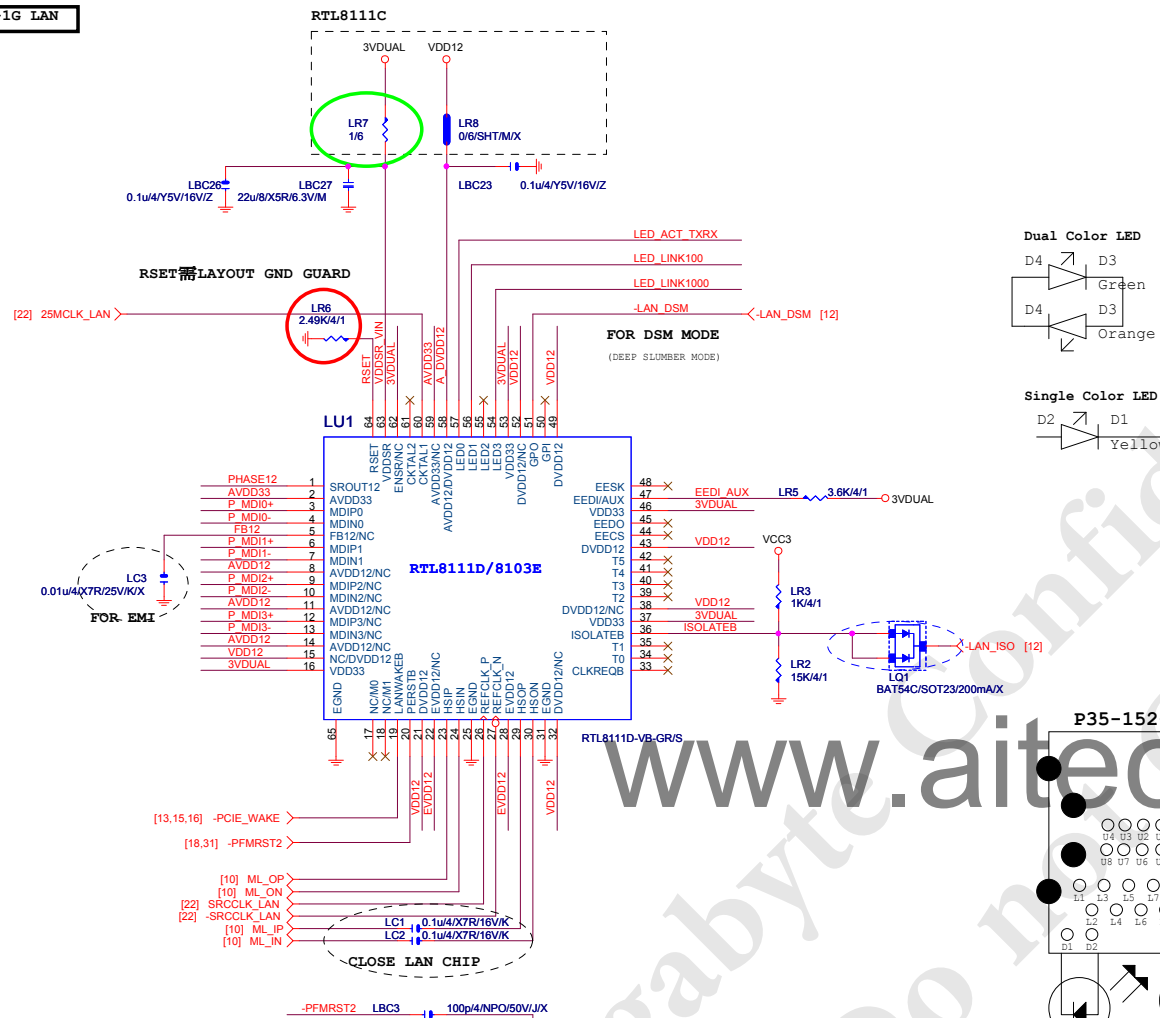
up6262	0X6A	0X60	0X62	0X66
VREF1	DDRVT	VREF_DDRA_DQ	VCC1_05_PCH	VCORE
VREF2	VREF_DDRA_CA	DDR15V	VCC1_8_PCH	3VDUAL
VREF3	VREF_DDRA_CAV	VREF_DDRB_DQ	CPU_VTT	CPU_VAXO



ATX POWER CONNECTOR



PCIE-1G LAN



90歐姆: [20/4/8/4/20]

90 歐姆: [15/4.5/7.5/4.5/15]

Gigabyte Technology

REALTEK RTL8111C

GA-H55M-S2H

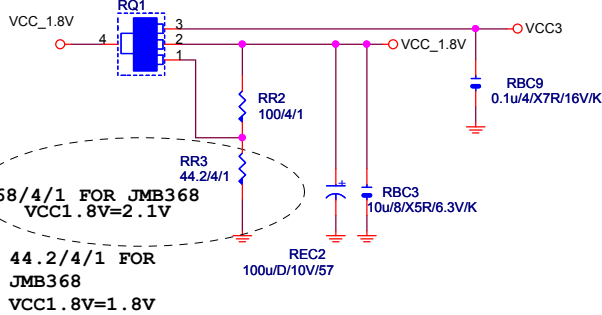
Rev
1.1

Date: Wednesday, March 17, 2010 Sheet 30 of 34

Date:	Wednesday, March 17, 2010	Sheet	30	31	32
		1			

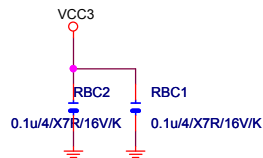
3.3V to 1.8V Voltage Regulator

L1117LGN/SOT223/1A

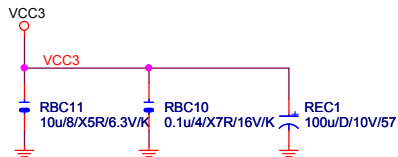


68/4/1 FOR JMB368
VCC1.8V=2.1V

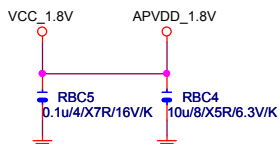
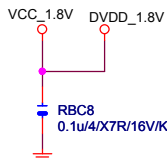
44.2/4/1 FOR
JMB368
VCC1.8V=1.8V



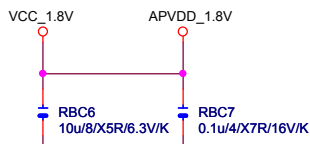
close to IC



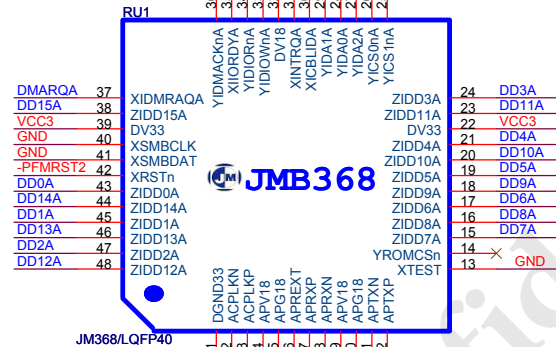
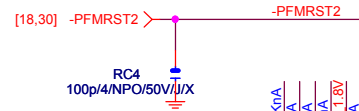
Close to pin22 and pin39



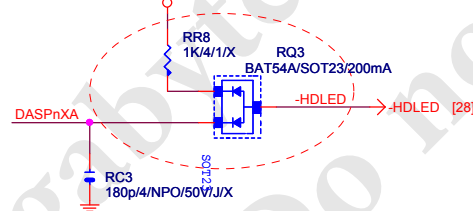
CLOSE TO pin22



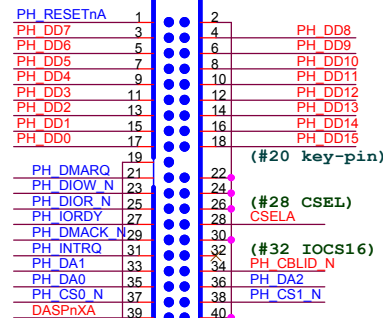
close to pin17



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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

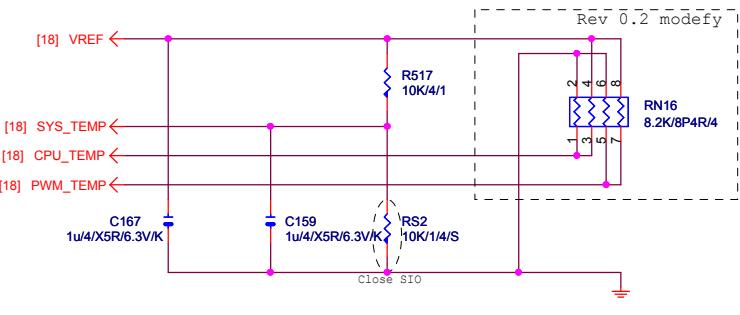
PH INTRQ INTRQA

PH CBLID_N PDIAGnA

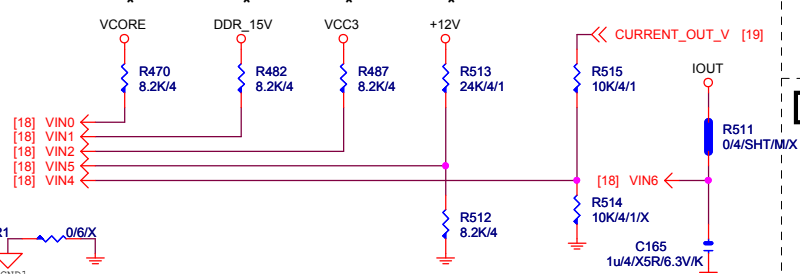
Gigabyte Technology

Title		
JMR368		
Size	Document Number	Rev
Custom	GA-H55M-S2H	1.1
Date:	Wednesday, March 17, 2010	Sheet 31 of 34

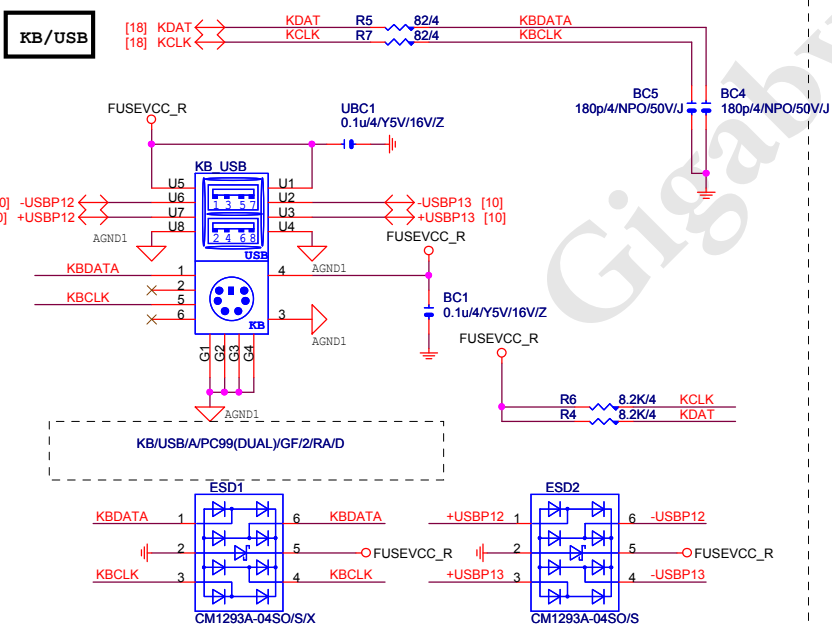
TEMP H/W MONITOR



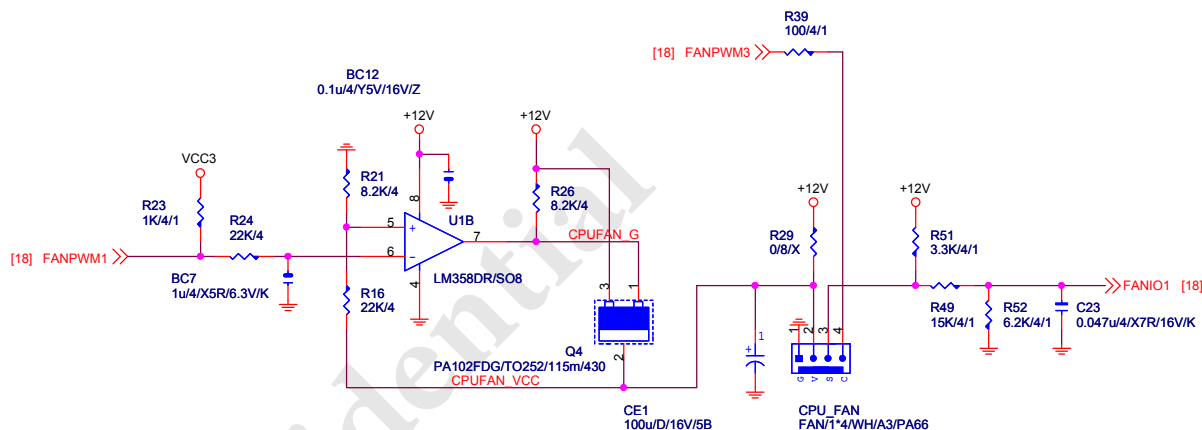
VOLTAGE-- H/W MONITOR



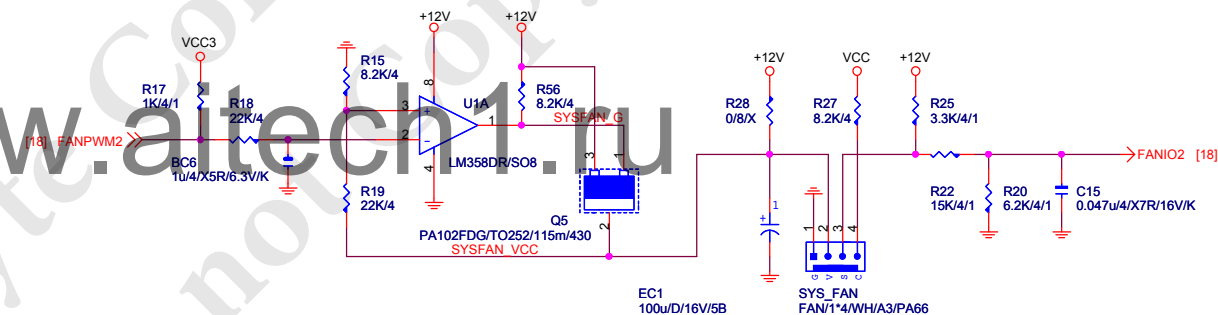
KB/USB



CPU SMART FAN



SYS SMART FAN Linear SYS_FAN

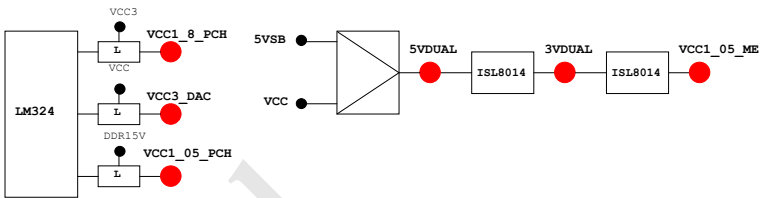


PCH GPIO LIST TABLE					
PIN NAME	PWR	Default	USAGE	NOTE	
GP0	MAIN	H-Z	GPI	-PECI_REQ	N/A
GP1/TACH1	MAIN		GPI	ICH_FAN_TACH1	N/A
GP2/PIRQE#	MAIN		GPI	-PIRQE	P/U 8.2K VCC3
GP3/PIRQF#	MAIN		GPI	-PIRQF	P/U 8.2K VCC3
GP4/PIRQG#	MAIN		GPI	-PIRQG	P/U 8.2K VCC3
GP5/PIRQH#	MAIN		GPI	-PIRQH	P/U 8.2K VCC3
GP6/TACH2	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

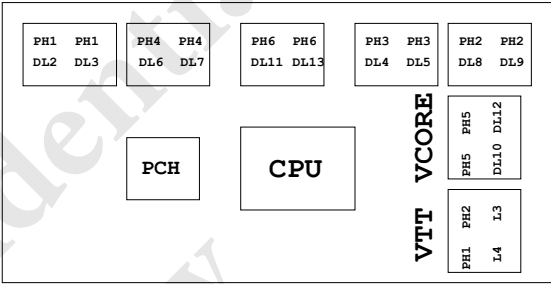
Super I/O ITE8720 GPIO Table

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#CIRRX1/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/VDDA_EN/GB_01	MB_ID2	
PD6/GP76/BUSS01	MB_ID3	
PD7/GP77/BUSS02	MB_ID4	
AFD#/GP86/SMBC_R	32 PIN	FST_2X8
INIT#/GP85/SMBD_M	SEC_2x8	GTLREF_AD2
ACK#/GP83	DDR_LED1_C	
VIDO1/GP21/DCD2#	DDR_LED2_C	
STB#/GP87/SMBC_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 Termination
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