



SHEET

TITLE

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18	ITE 8720 LPC IO
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27	F_PANEL , F_USB , FDD

[illegible]



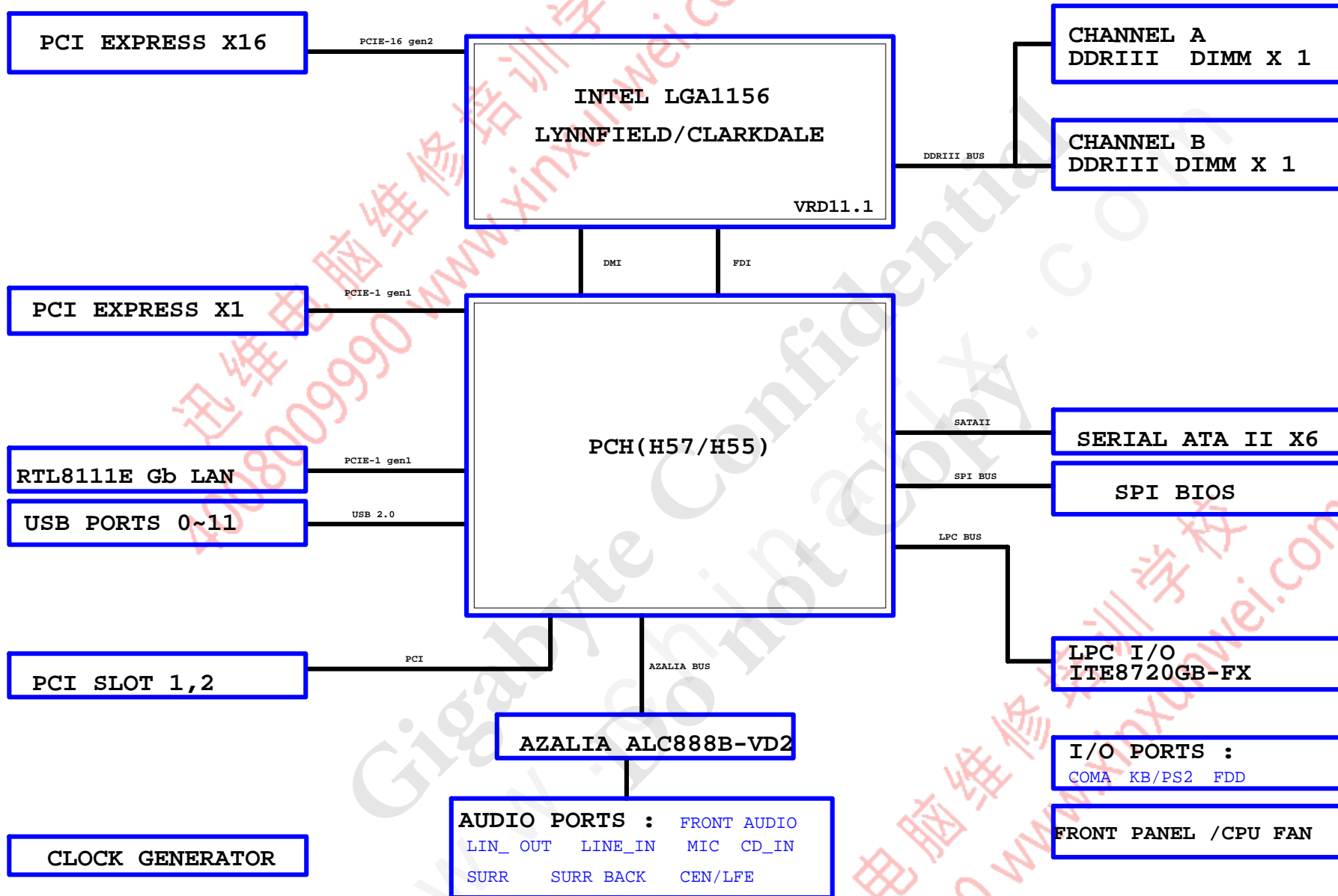
Component value change history

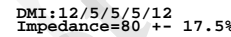
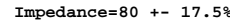
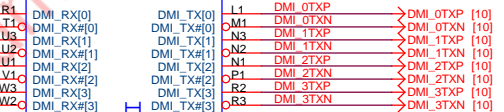
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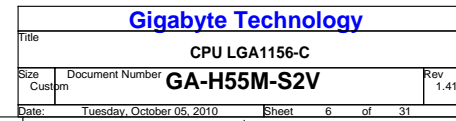
BLOCK DIAGRAM

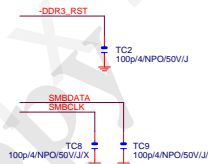
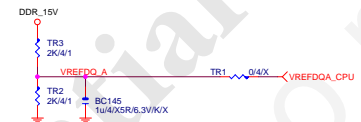
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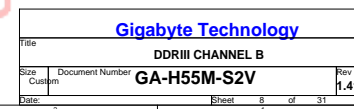


POWER ON CONFIG TABLE (Default=1.2250V)A

LGA1156A			
MAAA0	AW18	SA_MA[0]	SA_DSQ[0]
MAAA1	AY15	SA_MA[1]	SA_DSQ[1]
MAAA2	AV15	SA_MA[2]	SA_DSQ[2]
MAAA3	AU15	SA_MA[3]	SA_DSQ[3]
MAAA4	AW14	SA_MA[4]	SA_DSQ[4]
MAAA5	AY13	SA_MA[5]	SA_DSQ[5]
MAAA6	AV14	SA_MA[6]	SA_DSQ[6]
MAAA7	AU14	SA_MA[7]	SA_DSQ[7]
MAAA8	AW13	SA_MA[8]	SA_DSQ[8]
MAAA9	AY12	SA_MA[9]	SA_DSQ[9]
MAAA10	AV11	SA_MA[10]	SA_DSQ[10]
MAAA11	AU11	SA_MA[11]	SA_DSQ[11]
MAAA12	AW11	SA_MA[12]	SA_DSQ[12]
MAAA13	AY11	SA_MA[13]	SA_DSQ[13]
MAAA14	AV11	SA_MA[14]	SA_DSQ[14]
MAAA15	AR10	SA_MA[15]	SA_DSQ[15]
[7] -SWEA	AT22	SA_WE#	SA_DSQ[8]
[7] -SCASA	AU22	SA_CAS#	SA_DSQ[9]
[7] -SRASA	AT20	SA_RAS#	SA_DSQ[10]
[7] SBAA0	AV20	SA_BS[0]	SA_DSQ[11]
[7] SBAA1	AU19	SA_BS[1]	SA_DSQ[12]
[7] SBAA2	AU12	SA_BS[2]	SA_DSQ[13]
[7] -CSA0	AV21	SA_CS#	SA_DSQ[14]
[7] -CSA1	AW24	SA_CS#	SA_DSQ[15]
[7] -CSA1	AU21	SA_CS#	SA_DSQ[16]
[7] -CSA1	AU23	SA_CS#	SA_DSQ[17]
[7] CKEA0	AU10	SA_CKE[0]	SA_DSQ[18]
[7] CKEA1	AW10	SA_CKE[1]	SA_DSQ[19]
[7] CKEA1	AV10	SA_CKE[2]	SA_DSQ[20]
[7] CKEA1	AY10	SA_CKE[3]	SA_DSQ[21]
MODT_A0	AV23	SA_ODT[0]	SA_DSQ[22]
MODT_A1	AV24	SA_ODT[1]	SA_DSQ[23]
MODT_A1	AW23	SA_ODT[2]	SA_DSQ[24]
MODT_A1	AY24	SA_ODT[3]	SA_DSQ[25]
[7] DCLKA0	AR22	SA_CK[0]	SA_DSQ[26]
[7] -DCLKA0	AR21	SA_CK[1]	SA_DSQ[27]
[7] -DCLKA0	AP18	SA_CK[2]	SA_DSQ[28]
[7] -DCLKA1	AN18	SA_CK[3]	SA_DSQ[29]
[7] -DCLKA1	AN21	SA_CK[4]	SA_DSQ[30]
[7] -DCLKA1	AP21	SA_CK[5]	SA_DSQ[31]
[7] -DCLKA1	AP19	SA_CK[6]	SA_DSQ[32]
[7] -DCLKA1	AN19	SA_CK[7]	SA_DSQ[33]
[7.8] -DDR3_RST	AV8	SM_DRAMRST#	SA_DSQ[34]
AK22	SA_CS#	SA_DSQ[35]	SA_DSQ[36]
AM22	SA_CS#	SA_DSQ[37]	SA_DSQ[38]
AL23	SA_CS#	SA_DSQ[39]	SA_DSQ[40]
AK23	SA_CS#	SA_DSQ[41]	SA_DSQ[42]
AL10	SA_DSQ[43]	SA_DSQ[44]	SA_DSQ[45]
AM10	SA_DSQ[46]	SA_DSQ[47]	SA_DSQ[48]
AN10	SA_DSQ[49]	SA_DSQ[50]	SA_DSQ[51]
AR11	SA_DSQ[52]	SA_DSQ[53]	SA_DSQ[54]
AP11	SA_DSQ[55]	SA_DSQ[56]	SA_DSQ[57]
AK9	SA_DSQ[58]	SA_DSQ[59]	SA_DSQ[60]
AL9	SA_DSQ[61]	SA_DSQ[62]	SA_DSQ[63]
AK11	SA_DSQ[64]	SA_DSQ[65]	SA_DSQ[66]
AM11	SA_DSQ[67]	SA_DSQ[68]	SA_DSQ[69]
AK22	SA_DSQ[70]	SA_DSQ[71]	SA_DSQ[72]
AM22	SA_DSQ[73]	SA_DSQ[74]	SA_DSQ[75]
AL23	SA_DSQ[76]	SA_DSQ[77]	SA_DSQ[78]
AK23	SA_DSQ[79]	SA_DSQ[80]	SA_DSQ[81]
AL10	SA_DSQ[82]	SA_DSQ[83]	SA_DSQ[84]
AM10	SA_DSQ[85]	SA_DSQ[86]	SA_DSQ[87]
AN10	SA_DSQ[88]	SA_DSQ[89]	SA_DSQ[90]
AR11	SA_DSQ[91]	SA_DSQ[92]	SA_DSQ[93]
AP11	SA_DSQ[94]	SA_DSQ[95]	SA_DSQ[96]
AK9	SA_DSQ[97]	SA_DSQ[98]	SA_DSQ[99]
AL9	SA_DSQ[100]	SA_DSQ[101]	SA_DSQ[102]
AK11	SA_DSQ[103]	SA_DSQ[104]	SA_DSQ[105]
AM11	SA_DSQ[106]	SA_DSQ[107]	SA_DSQ[108]
AK22	SA_DSQ[109]	SA_DSQ[110]	SA_DSQ[111]
AM22	SA_DSQ[112]	SA_DSQ[113]	SA_DSQ[114]
AL23	SA_DSQ[115]	SA_DSQ[116]	SA_DSQ[117]
AK23	SA_DSQ[118]	SA_DSQ[119]	SA_DSQ[120]
AL10	SA_DSQ[121]	SA_DSQ[122]	SA_DSQ[123]
AM10	SA_DSQ[124]	SA_DSQ[125]	SA_DSQ[126]
AN10	SA_DSQ[127]	SA_DSQ[128]	SA_DSQ[129]
AR11	SA_DSQ[130]	SA_DSQ[131]	SA_DSQ[132]
AP11	SA_DSQ[133]	SA_DSQ[134]	SA_DSQ[135]
AK9	SA_DSQ[136]	SA_DSQ[137]	SA_DSQ[138]
AL9	SA_DSQ[139]	SA_DSQ[140]	SA_DSQ[141]
AK11	SA_DSQ[142]	SA_DSQ[143]	SA_DSQ[144]
AM11	SA_DSQ[145]	SA_DSQ[146]	SA_DSQ[147]
AK22	SA_DSQ[148]	SA_DSQ[149]	SA_DSQ[150]
AM22	SA_DSQ[151]	SA_DSQ[152]	SA_DSQ[153]
AL23	SA_DSQ[154]	SA_DSQ[155]	SA_DSQ[156]
AK23	SA_DSQ[157]	SA_DSQ[158]	SA_DSQ[159]
AL10	SA_DSQ[160]	SA_DSQ[161]	SA_DSQ[162]
AM10	SA_DSQ[163]	SA_DSQ[164]	SA_DSQ[165]
AN10	SA_DSQ[166]	SA_DSQ[167]	SA_DSQ[168]
AR11	SA_DSQ[169]	SA_DSQ[170]	SA_DSQ[171]
AP11	SA_DSQ[172]	SA_DSQ[173]	SA_DSQ[174]
AK9	SA_DSQ[175]	SA_DSQ[176]	SA_DSQ[177]
AL9	SA_DSQ[178]	SA_DSQ[179]	SA_DSQ[180]
AK11	SA_DSQ[181]	SA_DSQ[182]	SA_DSQ[183]
AM11	SA_DSQ[184]	SA_DSQ[185]	SA_DSQ[186]
AK22	SA_DSQ[187]	SA_DSQ[188]	SA_DSQ[189]
AM22	SA_DSQ[190]	SA_DSQ[191]	SA_DSQ[192]
AL23	SA_DSQ[193]	SA_DSQ[194]	SA_DSQ[195]
AK23	SA_DSQ[196]	SA_DSQ[197]	SA_DSQ[198]
AL10	SA_DSQ[199]	SA_DSQ[200]	SA_DSQ[201]
AM10	SA_DSQ[202]	SA_DSQ[203]	SA_DSQ[204]
AN10	SA_DSQ[205]	SA_DSQ[206]	SA_DSQ[207]
AR11	SA_DSQ[208]	SA_DSQ[209]	SA_DSQ[210]
AP11	SA_DSQ[211]	SA_DSQ[212]	SA_DSQ[213]
AK9	SA_DSQ[214]	SA_DSQ[215]	SA_DSQ[216]
AL9	SA_DSQ[217]	SA_DSQ[218]	SA_DSQ[219]
AK11	SA_DSQ[220]	SA_DSQ[221]	SA_DSQ[222]
AM11	SA_DSQ[223]	SA_DSQ[224]	SA_DSQ[225]
AK22	SA_DSQ[226]	SA_DSQ[227]	SA_DSQ[228]
AM22	SA_DSQ[229]	SA_DSQ[230]	SA_DSQ[231]
AL23	SA_DSQ[232]	SA_DSQ[233]	SA_DSQ[234]
AK23	SA_DSQ[235]	SA_DSQ[236]	SA_DSQ[237]
AL10	SA_DSQ[238]	SA_DSQ[239]	SA_DSQ[240]
AM10	SA_DSQ[241]	SA_DSQ[242]	SA_DSQ[243]
AN10	SA_DSQ[244]	SA_DSQ[245]	SA_DSQ[246]
AR11	SA_DSQ[247]	SA_DSQ[248]	SA_DSQ[249]
AP11	SA_DSQ[250]	SA_DSQ[251]	SA_DSQ[252]
AK9	SA_DSQ[253]	SA_DSQ[254]	SA_DSQ[255]
AL9	SA_DSQ[256]	SA_DSQ[257]	SA_DSQ[258]
AK11	SA_DSQ[259]	SA_DSQ[260]	SA_DSQ[261]
AM11	SA_DSQ[262]	SA_DSQ[263]	SA_DSQ[264]
AK22	SA_DSQ[265]	SA_DSQ[266]	SA_DSQ[267]
AM22	SA_DSQ[268]	SA_DSQ[269]	SA_DSQ[270]
AL23	SA_DSQ[271]	SA_DSQ[272]	SA_DSQ[273]
AK23	SA_DSQ[274]	SA_DSQ[275]	SA_DSQ[276]
AL10	SA_DSQ[277]	SA_DSQ[278]	SA_DSQ[279]
AM10	SA_DSQ[280]	SA_DSQ[281]	SA_DSQ[282]
AN10	SA_DSQ[283]	SA_DSQ[284]	SA_DSQ[285]
AR11	SA_DSQ[286]	SA_DSQ[287]	SA_DSQ[288]
AP11	SA_DSQ[289]	SA_DSQ[290]	SA_DSQ[291]
AK9	SA_DSQ[292]	SA_DSQ[293]	SA_DSQ[294]
AL9	SA_DSQ[295]	SA_DSQ[296]	SA_DSQ[297]
AK11	SA_DSQ[298]	SA_DSQ[299]	SA_DSQ[300]
AM11	SA_DSQ[301]	SA_DSQ[302]	SA_DSQ[303]
AK22	SA_DSQ[304]	SA_DSQ[305]	SA_DSQ[306]
AM22	SA_DSQ[307]	SA_DSQ[308]	SA_DSQ[309]
AL23	SA_DSQ[310]	SA_DSQ[311]	SA_DSQ[312]
AK23	SA_DSQ[313]	SA_DSQ[314]	SA_DSQ[315]
AL10	SA_DSQ[316]	SA_DSQ[317]	SA_DSQ[318]
AM10	SA_DSQ[319]	SA_DSQ[320]	SA_DSQ[321]
AN10	SA_DSQ[322]	SA_DSQ[323]	SA_DSQ[324]
AR11	SA_DSQ[325]	SA_DSQ[326]	SA_DSQ[327]
AP11	SA_DSQ[328]	SA_DSQ[329]	SA_DSQ[330]
AK9	SA_DSQ[331]	SA_DSQ[332]	SA_DSQ[333]
AL9	SA_DSQ[334]	SA_DSQ[335]	SA_DSQ[336]
AK11	SA_DSQ[337]	SA_DSQ[338]	SA_DSQ[339]
AM11	SA_DSQ[340]	SA_DSQ[341]	SA_DSQ[342]
AK22	SA_DSQ[343]	SA_DSQ[344]	SA_DSQ[345]
AM22	SA_DSQ[346]	SA_DSQ[347]	SA_DSQ[348]
AL23	SA_DSQ[349]	SA_DSQ[350]	SA_DSQ[351]
AK23	SA_DSQ[352]	SA_DSQ[353]	SA_DSQ[354]
AL10	SA_DSQ[355]	SA_DSQ[356]	SA_DSQ[357]
AM10	SA_DSQ[358]	SA_DSQ[359]	SA_DSQ[360]
AN10	SA_DSQ[361]	SA_DSQ[362]	SA_DSQ[363]
AR11	SA_DSQ[364]	SA_DSQ[365]	SA_DSQ[366]
AP11	SA_DSQ[367]	SA_DSQ[368]	SA_DSQ[369]
AK9	SA_DSQ[370]	SA_DSQ[371]	SA_DSQ[372]
AL9	SA_DSQ[373]	SA_DSQ[374]	SA_DSQ[375]
AK11	SA_DSQ[376]	SA_DSQ[377]	SA_DSQ[378]
AM11	SA_DSQ[379]	SA_DSQ[380]	SA_DSQ[381]
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AM22	SA_DSQ[385]	SA_DSQ[386]	SA_DSQ[387]
AL23	SA_DSQ[388]	SA_DSQ[389]	SA_DSQ[390]
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AM10	SA_DSQ[397]	SA_DSQ[398]	SA_DSQ[399]
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AL9	SA_DSQ[412]	SA_DSQ[413]	SA_DSQ[414]
AK11	SA_DSQ[415]	SA_DSQ[416]	SA_DSQ[417]
AM11	SA_DSQ[418]	SA_DSQ[419]	SA_DSQ[420]
AK22	SA_DSQ[421]	SA_DSQ[422]	SA_DSQ[423]
AM22	SA_DSQ[424]	SA_DSQ[425]	SA_DSQ[426]
AL23	SA_DSQ[427]	SA_DSQ[428]	SA_DSQ[429]
AK23	SA_DSQ[430]	SA_DSQ[431]	SA_DSQ[432]
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AP11	SA_DSQ[445]	SA_DSQ[446]	SA_DSQ[447]
AK9	SA_DSQ[448]	SA_DSQ[449]	SA_DSQ[450]
AL9	SA_DSQ[451]	SA_DSQ[452]	SA_DSQ[453]
AK11	SA_DSQ[454]	SA_DSQ[455]	SA_DSQ[456]
AM11	SA_DSQ[457]	SA_DSQ[458]	SA_DSQ[459]
AK22	SA_DSQ[460]	SA_DSQ[461]	SA_DSQ[462]
AM22	SA_DSQ[463]	SA_DSQ[464]	SA_DSQ[465]
AL23	SA_DSQ[466]	SA_DSQ[467]	SA_DSQ[468]
AK23	SA_DSQ[469]	SA_DSQ[470]	SA_DSQ[471]
AL10	SA_DSQ[472]	SA_DSQ[473]	SA_DSQ[474]
AM10	SA_DSQ[475]	SA_DSQ[476]	SA_DSQ[477]
AN10	SA_DSQ[478]	SA_DSQ[479]	SA_DSQ[480]
AR11	SA_DSQ[481]	SA_DSQ[482]	SA_DSQ[483]
AP11	SA_DSQ[484]	SA_DSQ[485]	SA_DSQ[486]
AK9	SA_DSQ[487]	SA_DSQ[488]	SA_DSQ[489]
AL9	SA_DSQ[490]	SA_DSQ[491]	SA_DSQ[492]
AK11	SA_DSQ[493]	SA_DSQ[494]	SA_DSQ[495]
AM11	SA_DSQ[496]	SA_DSQ[497]	SA_DSQ[498]
AK22	SA_DSQ[499]	SA_DSQ[500]	SA_DSQ[501]
AM22	SA_DSQ[502]	SA_DSQ[503]	SA_DSQ[504]
AL23	SA_DSQ[505]	SA_DSQ[506]	SA_DSQ[507]
AK23	SA_DSQ[508]	SA_DSQ[509]	SA_DSQ[510]
AL10	SA_DSQ[511]	SA_DSQ[512]	SA_DSQ[513]
AM10	SA_DSQ[514]	SA_DSQ[515]	SA_DSQ[516]
AN10	SA_DSQ[517]	SA_DSQ[518]	SA_DSQ[519]
AR11	SA_DSQ[520]	SA_DSQ[521]	SA_DSQ[522]
AP11	SA_DSQ[523]	SA_DSQ[524]	SA_DSQ[525]
AK9	SA_DSQ[526]	SA_DSQ[527]	SA_DSQ[528]
AL9	SA_DSQ[529]	SA_DSQ[530]	SA_DSQ[531]
AK11	SA_DSQ[532]	SA_DSQ[533]	SA_DSQ[534]
AM11	SA_DSQ[535]	SA_DSQ[536]	SA_DSQ[537]
AK22	SA_DSQ[538]	SA_DSQ[539]	SA_DSQ[540]
AM22	SA_DSQ[541]	SA_DSQ[542]	SA_DSQ[543]
AL23	SA_DSQ[544]	SA_DSQ[545]	SA_DSQ[546]
AK23	SA_DSQ[547]	SA_DSQ[548]	SA_DSQ[549]
AL10	SA_DSQ[550]	SA_DSQ[551]	SA_DSQ[552]
AM10	SA_DSQ[553]	SA_DSQ[554]	SA_DSQ[555]
AN10	SA_DSQ[556]	SA_DSQ[557]	SA_DSQ[558]
AR11	SA_DSQ[559]	SA_DSQ[560]	SA_DSQ[561]
AP11	SA_DSQ[562]	SA_DSQ[563]	SA_DSQ[564]
AK9	SA_DSQ[565]	SA_DSQ[566]	SA_DSQ[567]
AL9	SA_DSQ[568]	SA_DSQ[569]	SA_DSQ[570]
AK11	SA_DSQ[571]	SA_DSQ[572]	SA_DSQ[573]
AM11	SA_DSQ[574]	SA_DSQ[575]	SA_DSQ[576]
AK22	SA_DSQ[577]	SA_DSQ[578]	SA_DSQ[579]
AM22	SA_DSQ[580]	SA_DSQ[581]	SA_DSQ[582]
AL23	SA_DSQ[583]	SA_DSQ[584]	SA_DSQ[585]
AK23	SA_DSQ[586]	SA_DSQ[587]	SA_DSQ[588]
AL10	SA_DSQ[589]	SA_DSQ[590]	SA_DSQ[591]
AM10	SA_DSQ[592]	SA_DSQ[593]	SA_DSQ[594]
AN10	SA_DSQ[595]	SA_DSQ[596]	SA_DSQ[597]
AR11	SA_DSQ[598]	SA_DSQ[599]	SA_DSQ[600]
AP11	SA_DSQ[601]	SA_DSQ[602]	SA_DSQ[603]
AK9	SA_DSQ[604]	SA_DSQ[605]	SA_DSQ[606]
AL9	SA_DSQ[607]	SA_DSQ[608]	SA_DSQ[609]
AK11	SA_DSQ[610]	SA_DSQ[611]	SA_DSQ[612]
AM11	SA_DSQ[613]	SA_DSQ[614]	SA_DSQ[615]
AK22	SA_DSQ[616]	SA_DSQ[617]	SA_DSQ[618]
AM22	SA_DSQ[619]	SA_DSQ[620]	SA_DSQ[621]
AL23	SA_DSQ[622]	SA_DSQ[623]	SA_DSQ[624]
AK23	SA_DSQ[625]	SA_DSQ[626]	SA_DSQ[627]
AL10	SA_DSQ[628]	SA_DSQ[629]	SA_DSQ[630]
AM10	SA_DSQ[631]	SA_DSQ[632]	SA_DSQ[633]
AN10	SA_DSQ[634]	SA_DSQ[635]	SA_DSQ[636]
AR11	SA_DSQ[637]	SA_DSQ[638]	SA_DSQ[639]
AP11	SA_DSQ[640]	SA_DSQ[641]	SA_DSQ[642]
AK9	SA_DSQ[643]	SA_DSQ[644]	SA_DSQ[645]
AL9	SA_DSQ[646]	SA_DSQ[647]	SA_DSQ[648]
AK11	SA_DSQ[649]	SA_DSQ[650]	SA_DSQ[651]
AM11	SA_DSQ[652]	SA_DSQ[653]	SA_DSQ[654]
AK22			

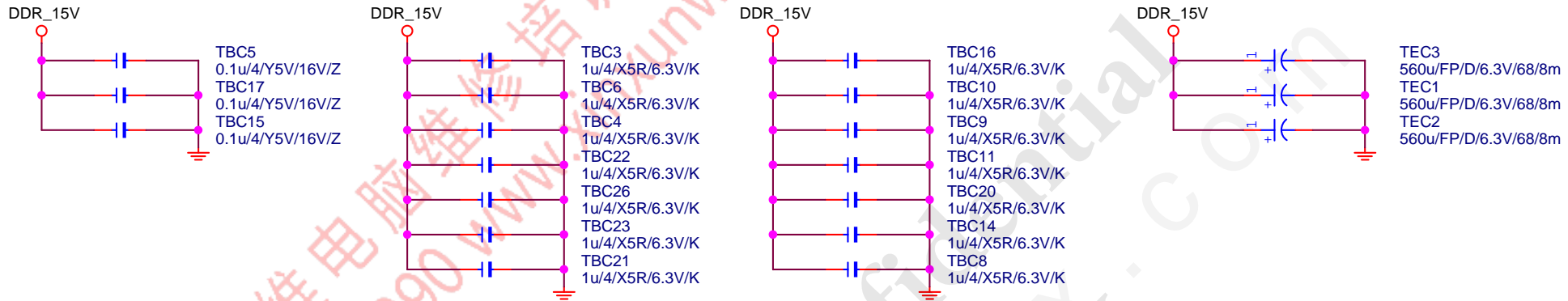




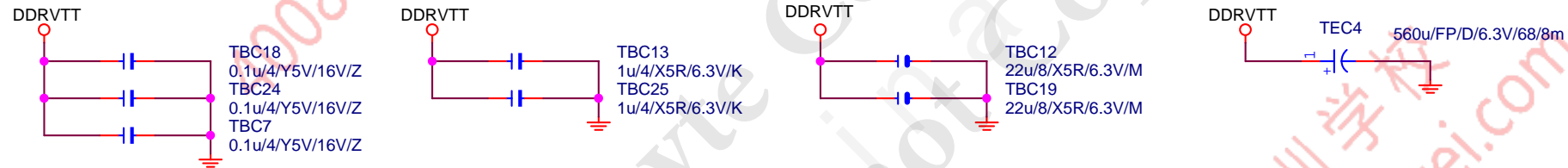


DDR TERMINATION CHANNEL A/B

DDR15V Decouple



DDRVTT Decouple

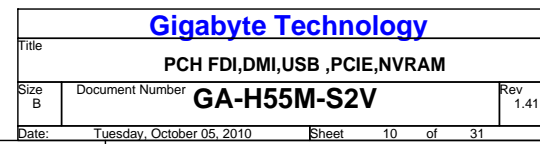


REF VCC層GND, GND層GND要塞孔

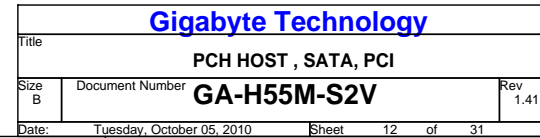
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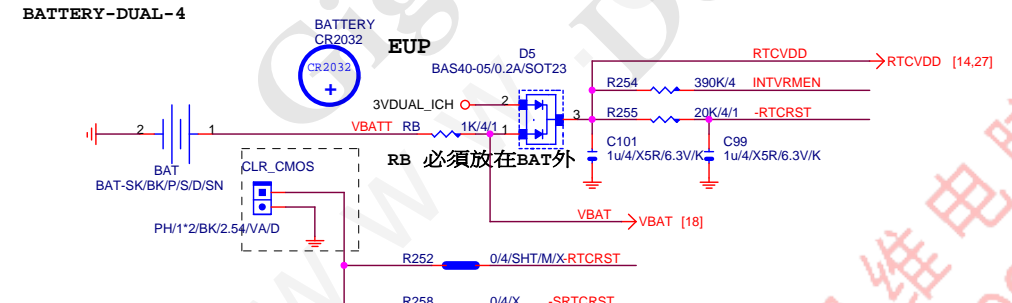
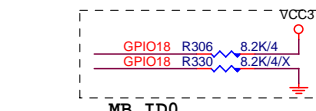
Gigabyte Technology		
Title		
DDRIII POWER CAP		
Size	Document Number	Rev
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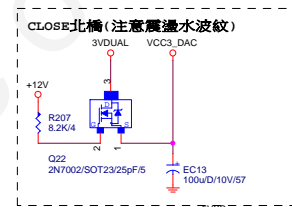
PCHE

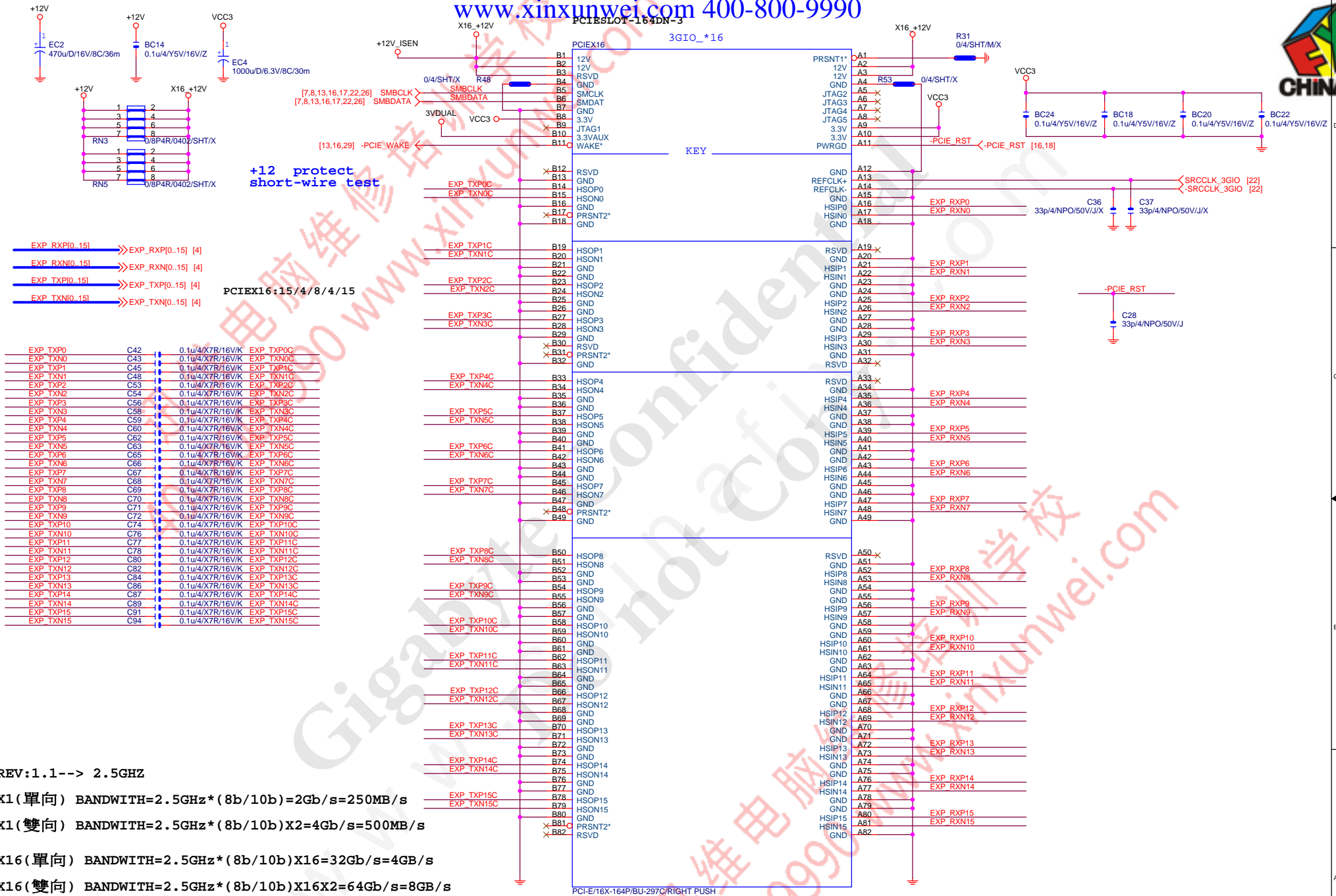






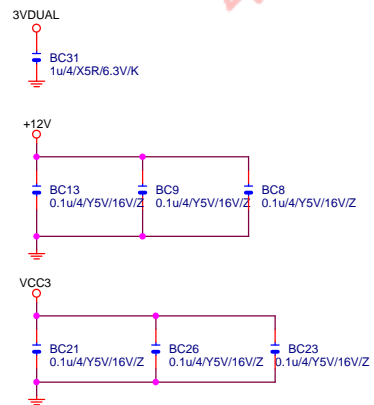


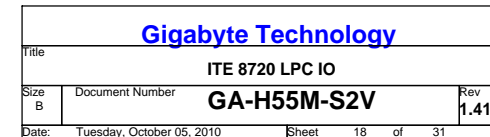




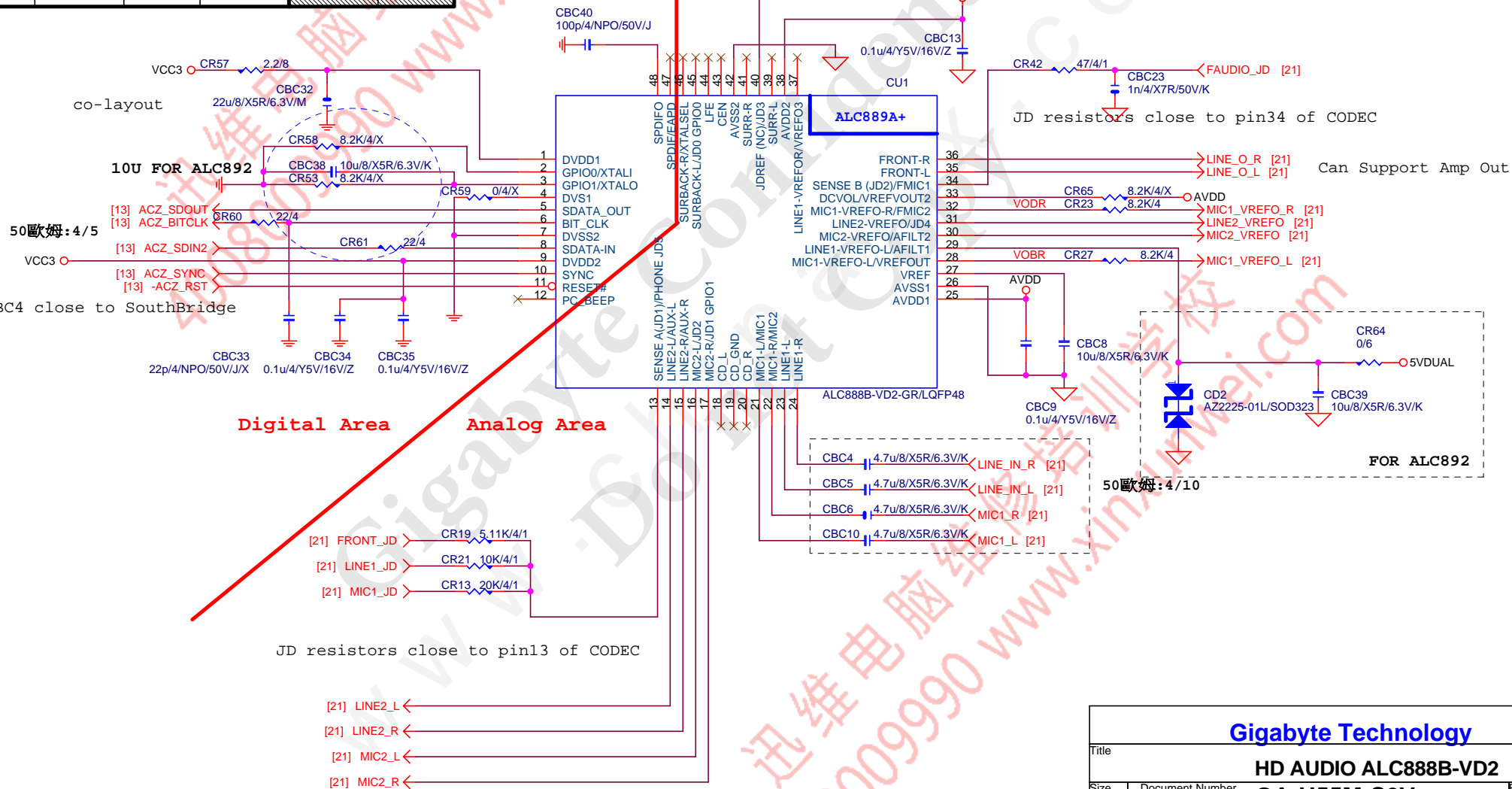
Gigabyte Technology

Title			PCI EXPRESS * 16	
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	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%



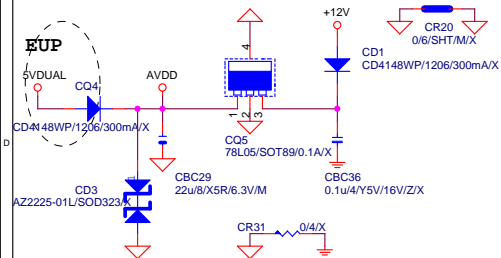
Can Support Amp Out

Gigabyte Technology

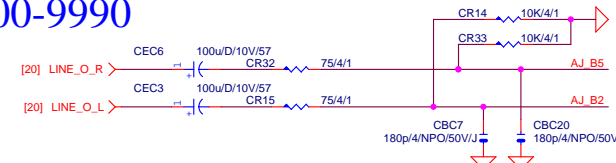
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Size	Document Number	GA-H55M-S2V	
Custom		Rev	1.41
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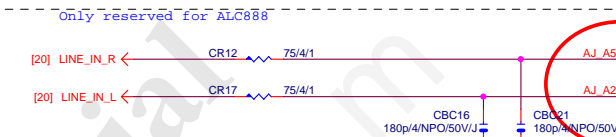
CODEC POWER/EMI PAD



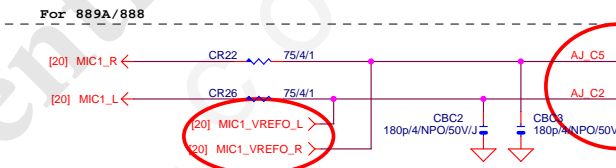
LINE-OUT



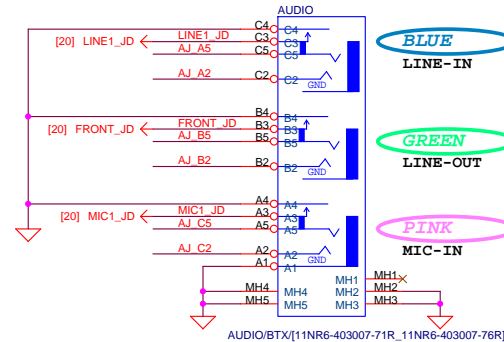
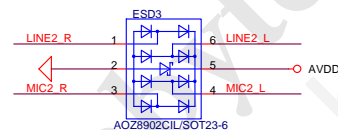
LINE-IN



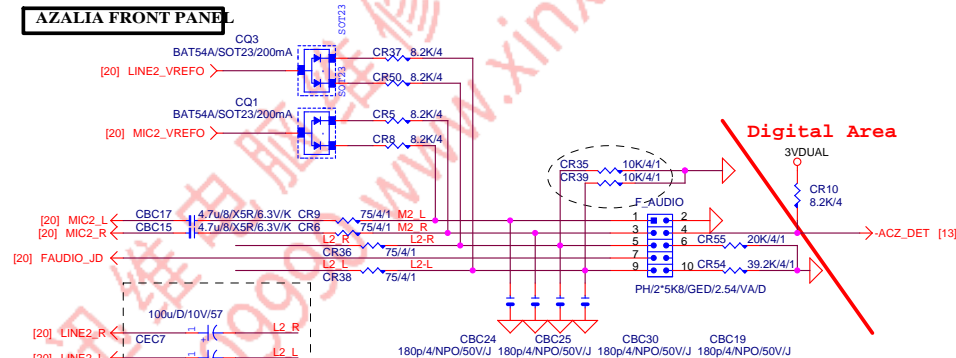
MIC-IN



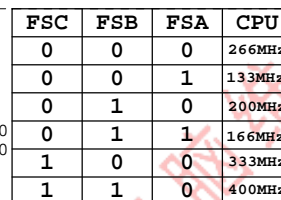
AZALIA JACK



AZALIA FRONT PANEL

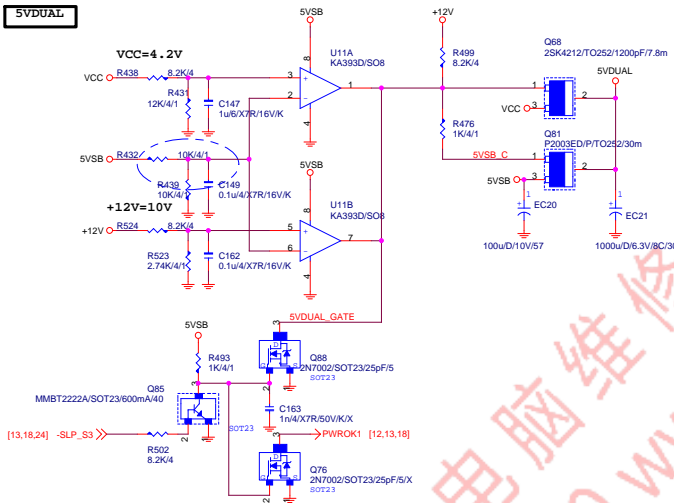


Gigabyte Technology			
Title			
AUDIO JACK			
Size			
Document Number			
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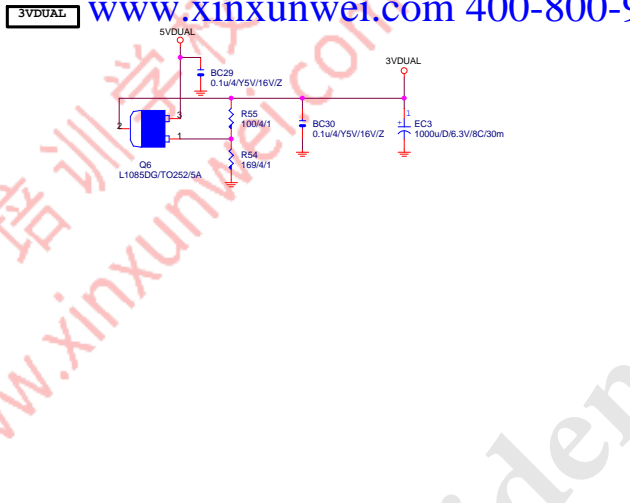


Title				CK505 CLK GEN			
Size	Custom	Document Number				Rev	
		GA-H55M-S2V				1.4	
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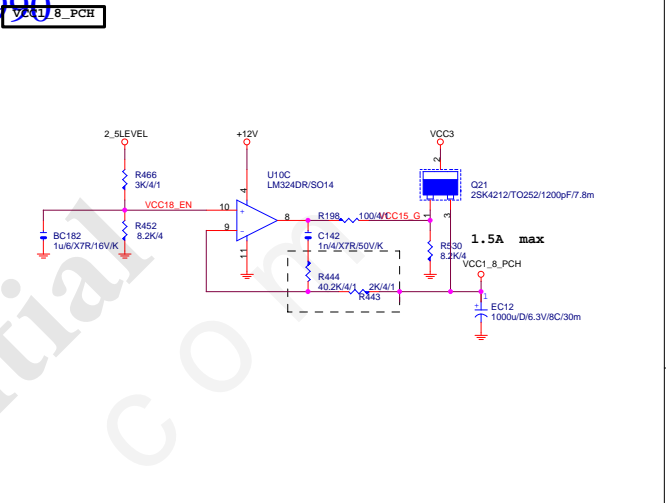
5VDUAL



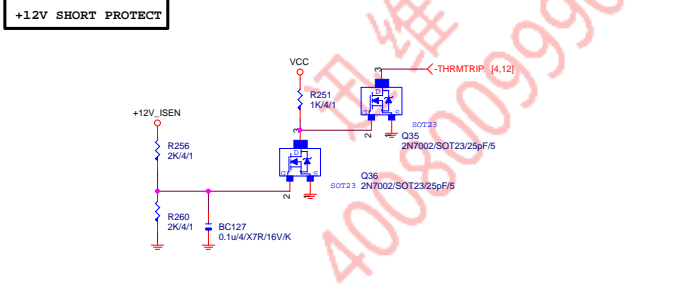
3VDUAL



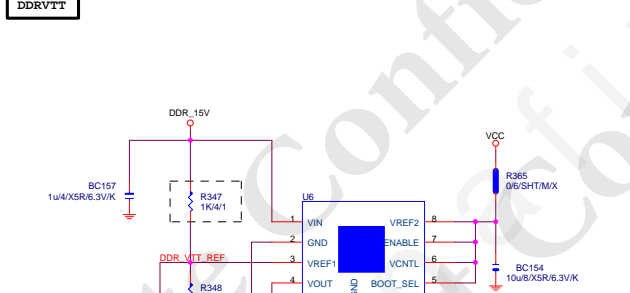
VCC1_8_PCH



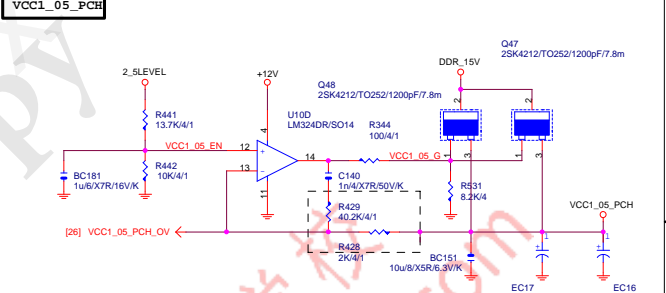
+12V SHORT PROTECT



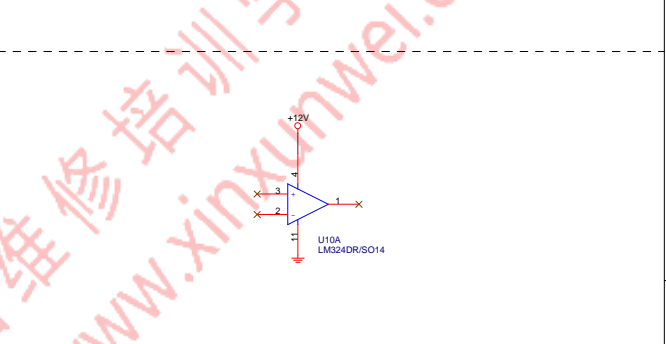
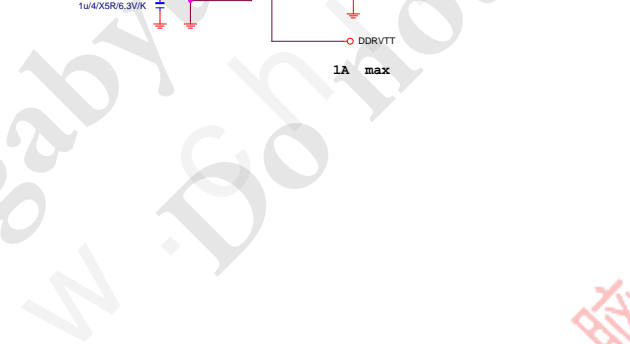
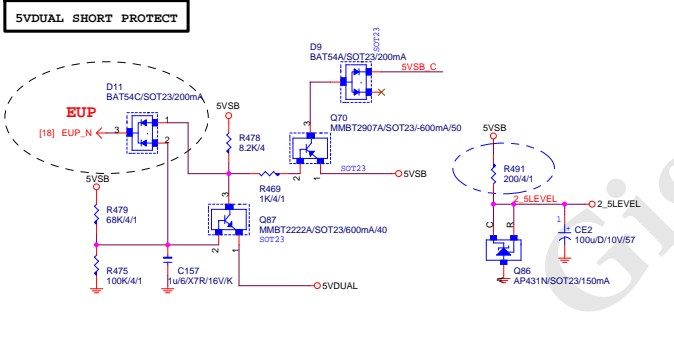
DDRVTT



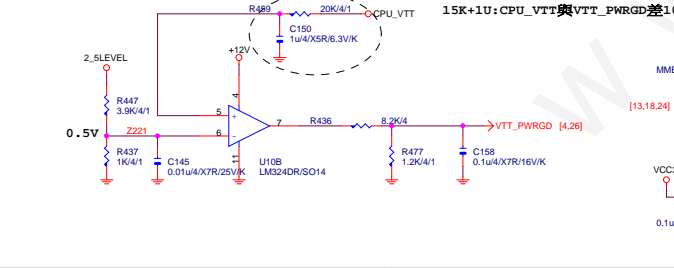
VCC1_05_PCH



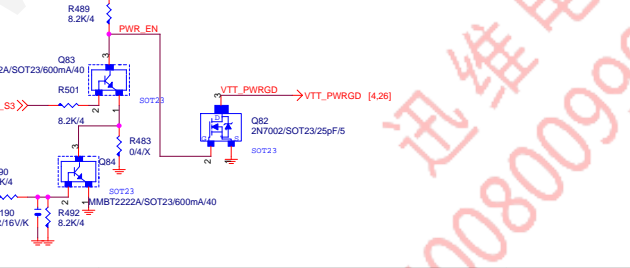
5VDUAL SHORT PROTECT



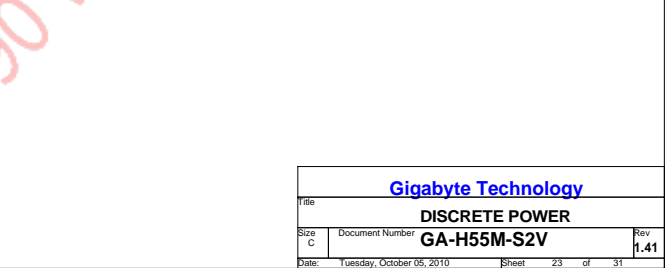
Delay CPU_VTT_RISING Timing,不足造成CPU不穩,開機/DDR/C3/C6 ISSUE.



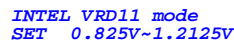
15K+1U: CPU_VTT與VTT_PWRGD差10ms



15K+1U: CPU_VTT與VTT_PWRGD差10ms



Gigabyte Technology			
File	DISCRETE POWER		
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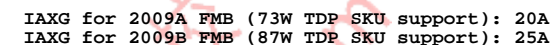


OCP點做在49A
 $R_{ocsc} = R_{136} = 2.74k$, $I_{sens} = 94\mu A$, $R_s = R_{127} = 8.25k$,
 $R_{comp} = R_{128} + [R_{135} / (DRT1 + R_{129})] = 78k$, $DCR = 0.78mohm$
 $I_{occp} = (R_{ocsc} * I_{sens} * R_s / (R_{comp} * DCR))$
 $= (2.74k * 94\mu A * 8.25K) / (45K * 0.97m) = 49A$

 $R_t = 10^{[10.61 - [1.035X \log(FS)]]}$ $R_t = R_{151} = 68 \text{ kohm}$, $FS = 380KHz$

 $OVP = VDAC + 175mV$

PWM IC internal PU



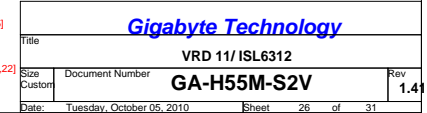
25A max

Gigabyte Technology

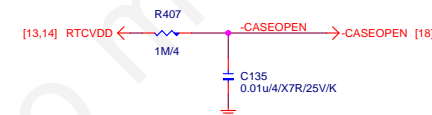
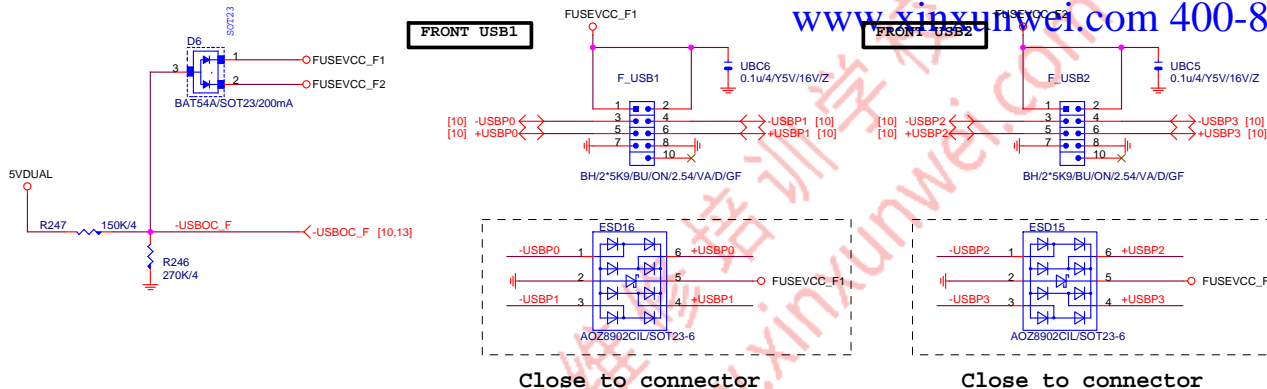
Title	CPU_VAXG_ISL6314CRZ
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Size B	Document Number	GA-H55M-S2V
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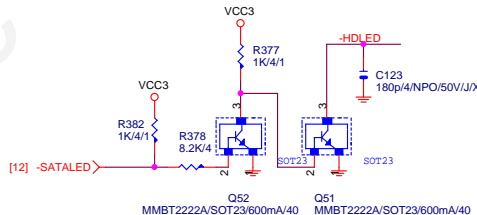
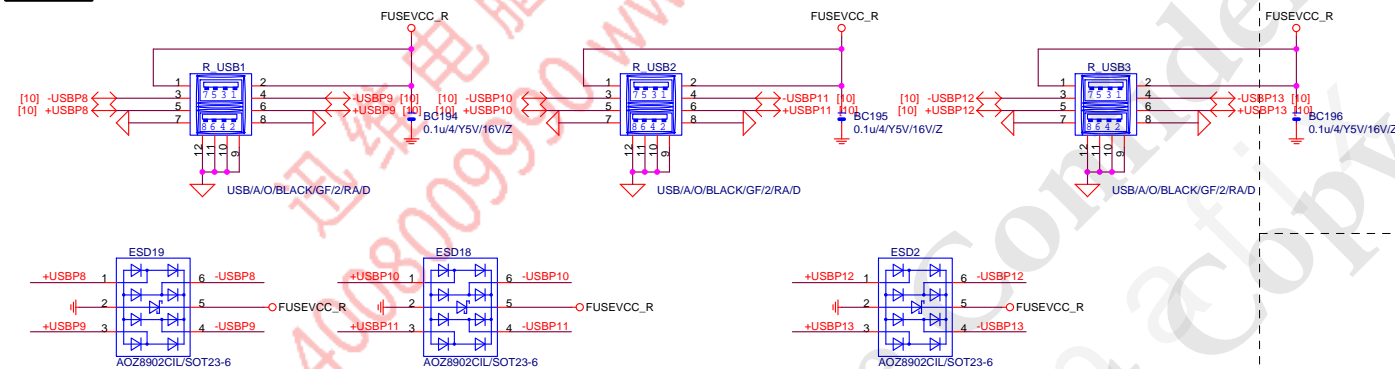
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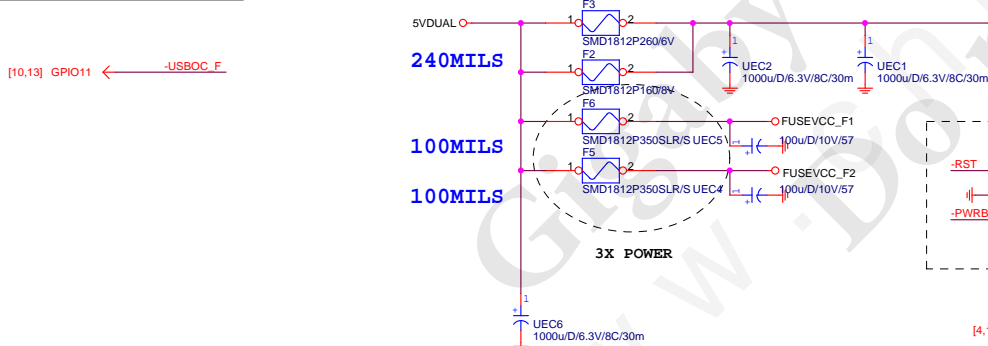
Case Open Circuits



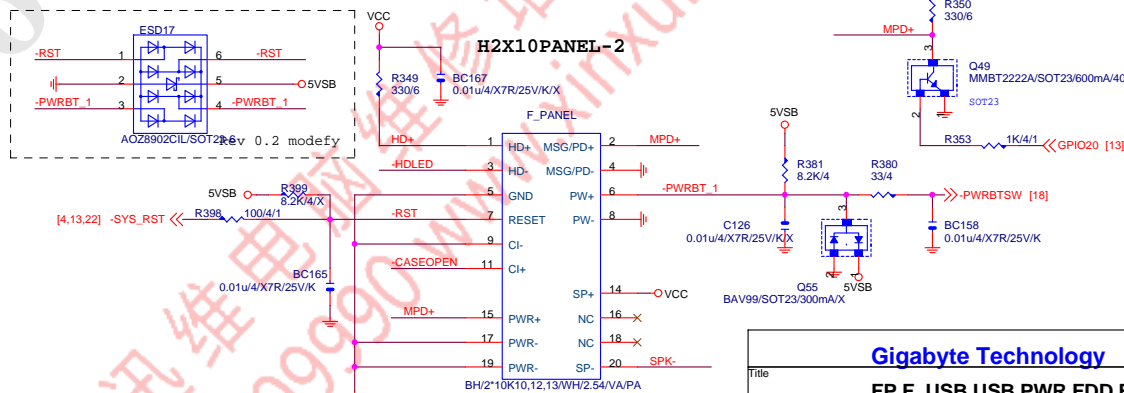
R_USB



F_USB & F_1394 POWER PROTECT



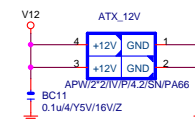
INTEL FRONT PANEL



Gigabyte Technology

Title			FP,F_USB,USB PWR,FDD,BZ	
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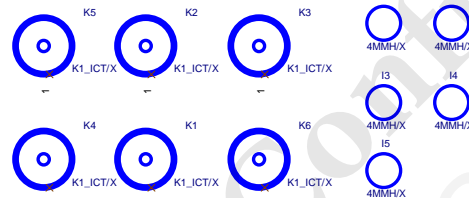
www.xinxunwei.com 400-800-9990



APW/2*12/IV/VA/SN/2SHK/PA66

V12

BC10
0.1u/4/Y5V/16V/



ATX POWER CONNECTOR

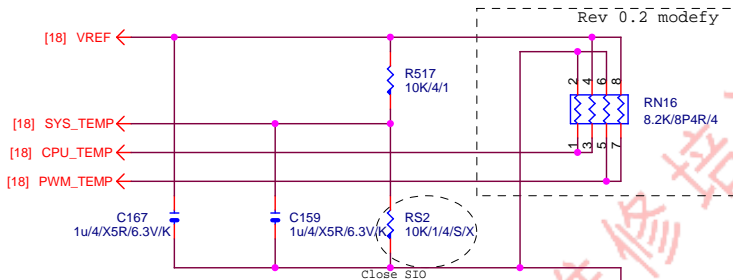
GA-H55M-S2V

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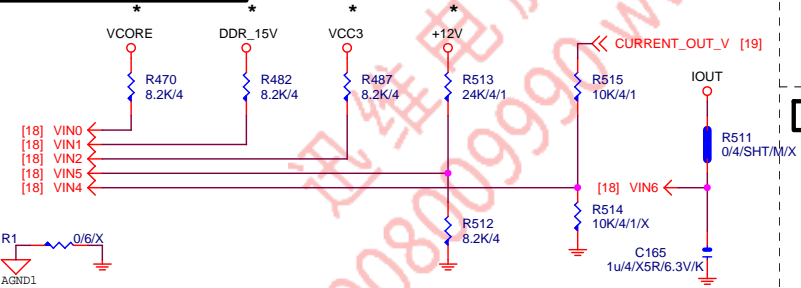
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90歐姐:[15/4.5/7.5/4.5/15]

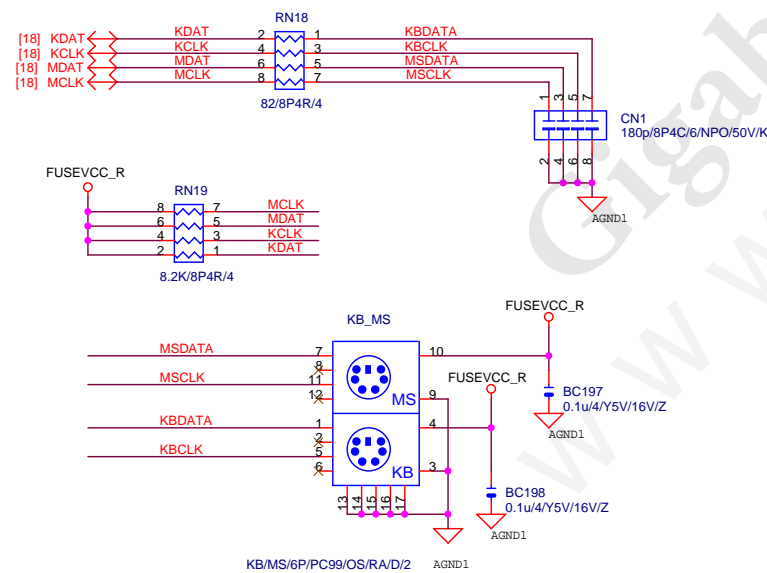
TEMP H/W MONITOR



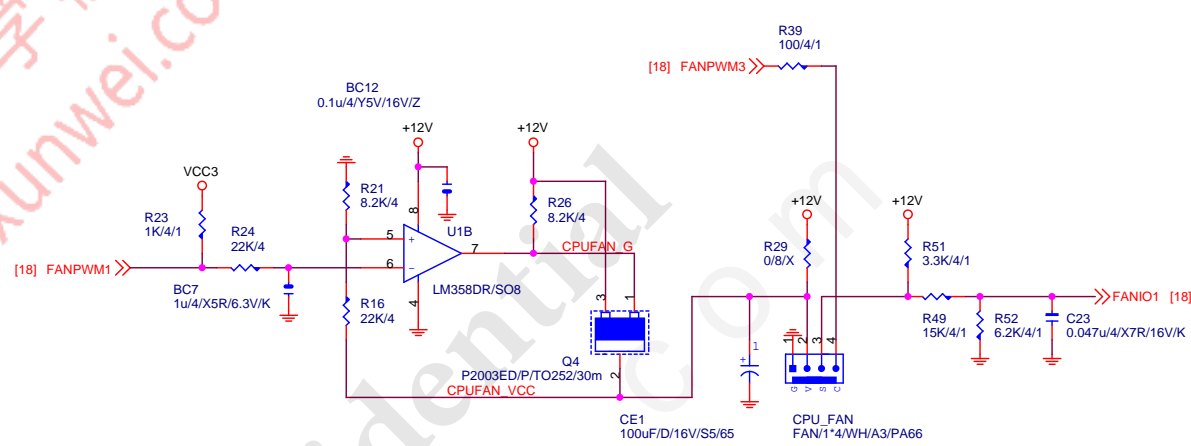
VOLTAGE-- H/W MONITOR



KB/MS

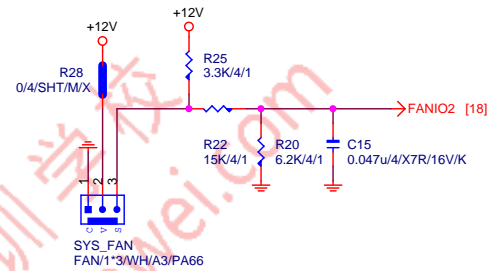


CPU SMART FAN



SYS SMART FAN

Linear SYS_FAN

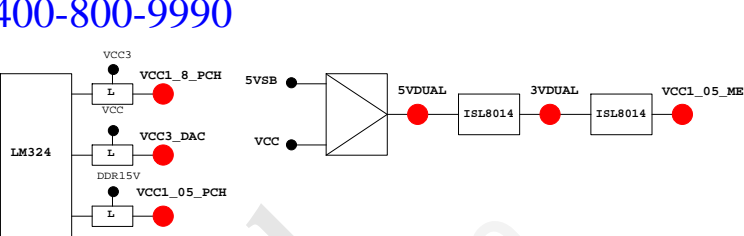


Gigabyte Technology			
Title	HWM,KB/MS, FAN CTRL		
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Custom			Rev 1.41
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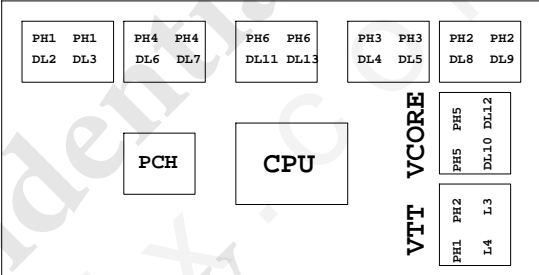
PCH GPIO LIST TABLE					
PIN NAME	PWR	Default	USAGE	NOTE	
GP0	MAIN	H-Z	-PECI_REQ	N/A	
GP1/TACH1	MAIN	GPI	ICH_FAN_TACH1	N/A	
GP2/PIRQE#	MAIN	GPI	-PIRQE	P/U 8.2K VCC3	
GP3/PIRQF#	MAIN	GPI	-PIRQF	P/U 8.2K VCC3	
GP4/PIRQG#	MAIN	GPI	-PIRQG	P/U 8.2K VCC3	
GP5/PIRQH#	MAIN	GPI	-PIRQH	P/U 8.2K VCC3	
GP6/TACH2	MAIN	GPI	ICH_FAN_TACH2	N/A	
GP7/TACH3	MAIN	GPI	ICH_FAN_TACH3	N/A	
GP8	STBY	H	GPI08	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	LAN_PHY_PWR_CTRL	P/U 8.2K 3VDUAL	
GP13	STBY	L	GPI013	P/U 8.2K 3VDUAL	
GP14/OC7#	STBY	NATIVE	OC7#	N/A	
GP15	STBY	L	GPI015	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	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	-ACZ_DET	P/U 8.2K 3VDUAL	
GP27	STBY	H	GPO	GPI027	P/U 8.2K 3VDUAL
GP28	STBY	H	GPO	GPI028	P/U 8.2K 3VDUAL
GP29	STBY	L	GPI	GPI029	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	GPI035	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	GPI063	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

PIN NAME	USAGE	NOTE
SVC/PECI_RQT/GP14	-PECI_REQ	
PWROK1/GP13	PWROK1/ITE_PWROK	
KRST#/GP62	-KBRST	
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#CIRR1X/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/BUSS11	SB_LED1_C	
PD4/GP74/BUSS12	SB_LED2_C	
VCORE_EN/VID7/GP64	IT_GP64	SB_LED3_C
PD0/GP70	NB_LED1_C	
PD1/GP71	NB_LED2_C	
PD2/GP72/BUSS10	NB_LED3_C	
GP22/SCK	LOW_PWR_1	
VID05/GP27/SIN2	LOW_PWR_2	
PCIRST2#/GP11	-PFMRST1	
PCIRST1#/GP12	-PFMRST2	
3VBSBW#/GP40	CSI_F0	BSEL166_1
SUSC#/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	2V PIN	FST_2X8
INIT#/GP85/SMBC_M	SEC_2x8	GTLREF_AD2
ACK#/GP83	DDR_LED1_C	
VID01/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/VLDT_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/SMBC_R	-EN_PWM2	
PSI_L/FAN_CLT5/CIRR2X/GP16	-THERM	
VIDO4/GP26/SOUT2	DDR18V_PH2_EN	
VIDO2/FAN_TAC5/GP24/DSR2#	DDR18V_LED	
VID06/GP17/RI2#	1_1V_PH_EN	
VID07/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

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