Model Name : H410M DS2V *Rev 1.01*

SHEET	TITLE
01	COVER SHEET
02	BOM & PCB MODIFY HISTORY
03	BLOCK DIAGRAM
04	CPU_LGA1151-A
05	CPU_LGA1151-B-DDR4
06	CPU_LGA1151-C
07	CPU_LGA1150-D
08	DDR4 CHANNEL A
09	DDR4 CHANNEL B
10	PCH_CLK BUFFER
11	PCH_DMI,USB,PCIE
12	PCH_MISC
13	PCH SATA,PCIE,SATA_EXPRESS
14	PCH PWR
15	PCH GND
16	ITE 8686 LPC IO
17	HWM
18	FAN CTRL--SIO
19	BIOS
20	CEC
21	PCI EXPRESS*16 SLOT
22	PCI EXPRESS*1 SLOT
23	SATA Connector
24	M.2 X4 (A)
25	IT8892E (NA)
26	PCI SLOT (NA)
27	ASM1085 POWER (NA)
28	LDO POWER (NA)

SHEET	TITLE
29	ISL95866 PWM-IRON
30	ISL95866 VCORE-IRON
31	ISL95866 VCCGT-IRON
32	VCCSA_VCCIO_VCCPLL
33	RT8237_DDR_BEAD
34	RT8068A_VPP
35	RT8237_PCH-BEAD
36	DISCRETE POWER
37	POWER MAP
38	ATX POWER , A_-PROCHOT
39	KB_MS
40	DVI CONN
41	RTD2168 - DP to VGA - IC
42	RTD2168 - DP to VGA - Conn
43	REALTEK 8111G
44	USB_LAN CONNECTOR-81118
45	Realtek ALC887
46	REAR AUDIO JACK
47	ADUIO LED
48	R_USB30_1
49	R_USB30_2
50	HDMI (MASK)
51	Redriver-R_USB31 (NA)
52	F_USB30
53	F_USB
54	F_PANEL
55	COM, TPM
56	EMI-ESD
	NTC MAP

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Title: **Cover Sheet**

Size	Document Number	Rev
Custom	H410M DS2V	1.01

Date: Sunday, April 05, 2020 Sheet 1 of 56

Model Name : H410M DS2V

Component value change history

Data	Change Item	Reason
2019/12/18	NEW BOM	BOM-01
2020/02/19	1. ATX change to 11NH4-020024-11R/11NH4-020024-12R 2. ATX_12V_2X4 change to 11NH4-020008-B4R/11NH4-020008-B1R 3. DAR55 change to 8.2K/4/1 4. DAR41 change to 6.04K/4/1 5. NRN11 change to 10RN3-A41001-17R/10RN3-A41001-12R 6. remove WR30.WR105.WR86 7. ADD NQ8.W_OVC5,DGC1.W_OVC1.DAC44.W_OVC6 8. ADD W_OVQ2,DAQ3,DAQ4,Q2,Q3,Q5.KMEDI.NR21,DAR122.DAR123 9. ADD DAR126.W_OVR3.W_OVC4.W_OVR4,W_OVR5,W_OVR6,NR22, DGR2,R5,DGR4,DAR121,DDR11,DDR12 10. ADD W_OVQ1,DDQ2,DDQ3,DAQ6,DDQ4,DGQ2,DGQ3,DGQ4 11. ADD W_OVU1,DGC2,DGC3,W_OVR14,WR95,R3,DGR3,DGR5,DDR13,DGQ1	BOM-02
2020/03/17	1. W_OVR14 change to 1.69K/4/1 2. NR22 change to 1K/4/1 3. MAR15,MAR16,MAR17,MAR18 change to 2K/4/1 4. DAR41 change to 7.5K/4/1 5. DAR52 change to 82.5K/4/1 6. DAR47 change to 14K/4/1 7. NR21 change to 0/4 8. NR34 change to 1M/4/1 9. DAR44 change to 698/4/1 10. DAR126 change to 11K/4/1 11. DAR67 change to 12.7K/4/1 12. remove R1.WR25.NR138.DDQ4.DGQ4.DGR5.DDR13 13. ADD MC20.MC19.NR70.NR10.NR122.WR26.NR9 14. ADD NBC28,W_OVC8,W_OVC9,NBC11,DDR14,WR6,DGR6, 15. ADD MR23.MR25.MR24.MR26	BOM-10A
2020/04/13	1. remove NR222 2. 80A change to 80M 3. W_OVR14 change to 1.6K/4/1	BOM-10B

Circuit or PCB layout change

DATE	Change Item	Reason
2019/12/18	NEW	Rev 0.1
2020/02/19	1. ADD PSU控制線路 2. Add loadline線路 3. ADD HAD_SDO控制線路 4. ADD VCCPLL_OC線路 5. ADD VCCSTG線路	Rev 0.2
2020/03/16	1. WR112改接VCCSTG . ADD WR26 2. NR70改接N_PCH_TDO 並改PU VCCSTG , NRN12改接VCCSTG 3. 0402與0201 COLAY footprint取消.都改0402	Rev 1.0
2020/03/17	1. Add W_OVC8. W_OVC9 2. WBC77 net 改VCCSFR_OC	Rev 1.01

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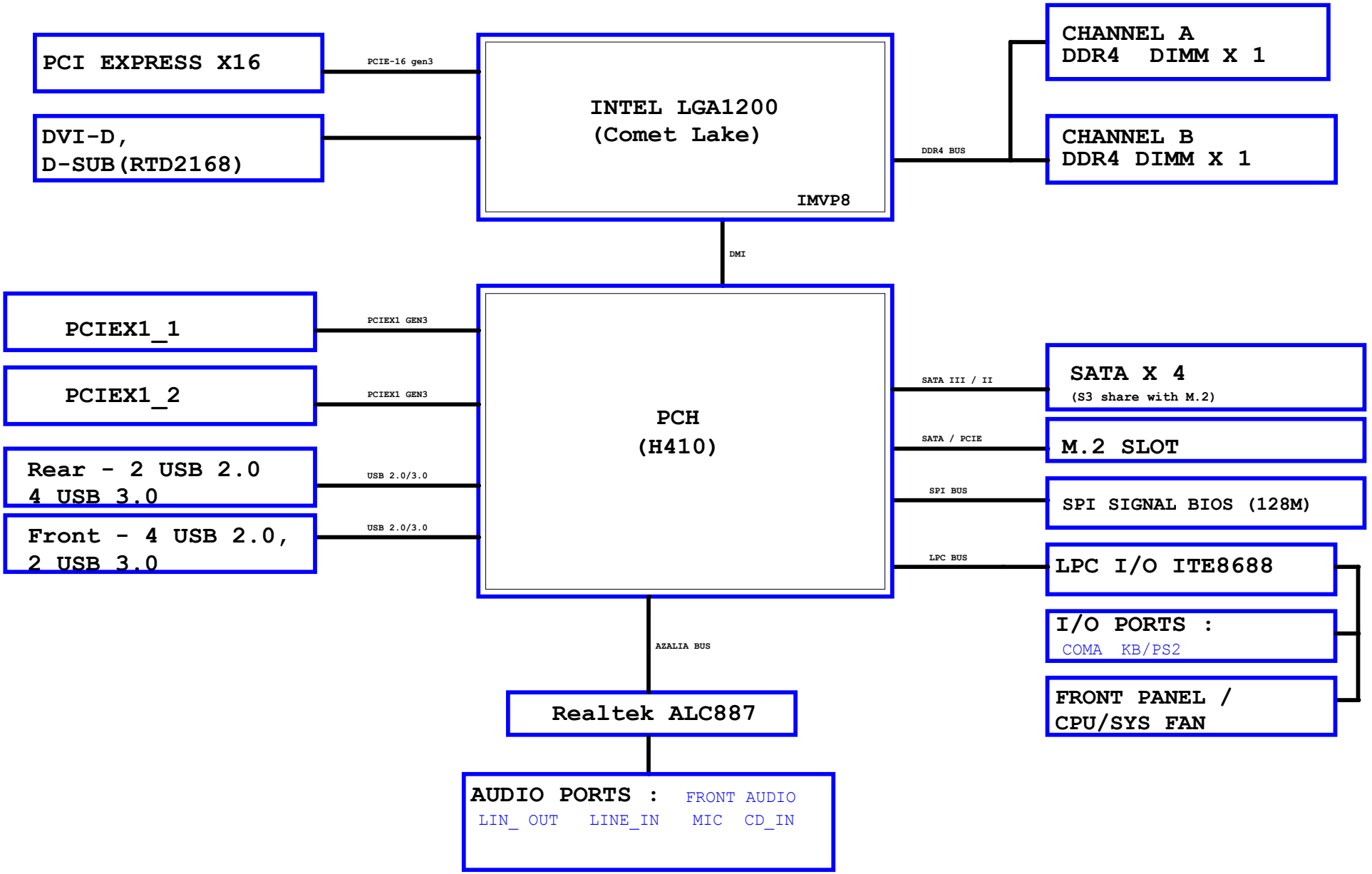
Title: BOM & PCB MODIFY HISTORY

Size: Custom | Document Number: H410M DS2V | Rev: 1.01

Date: Monday, April 13, 2020 | Sheet 2 of 56

BLOCK DIAGRAM



Gigabyte Technology		
Title: BLOCK DIAGRAM		
Size: C	Document Number: H410M DS2V	Rev: 1.01
Date: Sunday, April 05, 2020	Sheet 3 of 56	

檢查組態調整線路
The CFG signals default value of '1'

CFG[4]: 0=eDP enable / 1=eDP disable
CFG[7]: 1=PEG Train immediately following RESET
0=PEG Wait for BIOS

CFG[13]: 1=VCCSA Fixed Mode / 0=SVID Mode

若有不上CODEC出貨的可能，請預留CLK and SDO對地電阻。

Title	CPU LGA1200-A
Size	Custom
Document Number	H410M DS2V
Rev	1.01
Date:	Sunday, April 05, 2020
Sheet	4 of 56

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LGA1200A

CML_S_IP

T=190922B

MDA0	AE39	DDR0_DQ[0]	
MDA1	AE38	DDR0_DQ[1]	
MDA2	AH39	DDR0_DQ[2]	
MDA3	AH38	DDR0_DQ[3]	
MDA4	AF40	DDR0_DQ[4]	
MDA5	AE40	DDR0_DQ[5]	
MDA6	AH40	DDR0_DQ[6]	
MDA7	AG40	DDR0_DQ[7]	
MDA8	AK39	DDR0_DQ[8]	
MDA9	AK40	DDR0_DQ[9]	
MDA10	AN39	DDR0_DQ[10]	
MDA11	AM40	DDR0_DQ[11]	
MDA12	AL40	DDR0_DQ[12]	
MDA13	AK38	DDR0_DQ[13]	
MDA14	AN40	DDR0_DQ[14]	
MDA15	AN38	DDR0_DQ[15]	
MDA16	AR39	DDR0_DQ[16]/DDR0_DQ[32]	
MDA17	AR40	DDR0_DQ[18]/DDR0_DQ[33]	
MDA18	AV39	DDR0_DQ[18]/DDR0_DQ[34]	
MDA19	AU40	DDR0_DQ[19]/DDR0_DQ[35]	
MDA20	AR38	DDR0_DQ[20]/DDR0_DQ[36]	
MDA21	AT40	DDR0_DQ[21]/DDR0_DQ[37]	
MDA22	AW38	DDR0_DQ[22]/DDR0_DQ[38]	
MDA23	AV38	DDR0_DQ[23]/DDR0_DQ[39]	
MDA24	AV36	DDR0_DQ[24]/DDR0_DQ[40]	
MDA25	AY36	DDR0_DQ[25]/DDR0_DQ[41]	
MDA26	AV33	DDR0_DQ[26]/DDR0_DQ[42]	
MDA27	AY34	DDR0_DQ[27]/DDR0_DQ[43]	
MDA28	AY35	DDR0_DQ[28]/DDR0_DQ[44]	
MDA29	AW36	DDR0_DQ[29]/DDR0_DQ[45]	
MDA30	AY33	DDR0_DQ[30]/DDR0_DQ[46]	
MDA31	AW33	DDR0_DQ[31]/DDR0_DQ[47]	
MDA32	AW11	DDR0_DQ[32]/DDR1_DQ[0]	
MDA33	AV11	DDR0_DQ[33]/DDR1_DQ[1]	
MDA34	AY7	DDR0_DQ[34]/DDR1_DQ[2]	
MDA35	AY8	DDR0_DQ[35]/DDR1_DQ[3]	
MDA36	AW9	DDR0_DQ[36]/DDR1_DQ[4]	
MDA37	AW10	DDR0_DQ[37]/DDR1_DQ[5]	
MDA38	AV7	DDR0_DQ[38]/DDR1_DQ[6]	
MDA39	AW7	DDR0_DQ[39]/DDR1_DQ[7]	
MDA40	AW5	DDR0_DQ[40]/DDR1_DQ[8]	
MDA41	AY5	DDR0_DQ[41]/DDR1_DQ[9]	
MDA42	AW2	DDR0_DQ[42]/DDR1_DQ[10]	
MDA43	AW3	DDR0_DQ[43]/DDR1_DQ[11]	
MDA44	AY4	DDR0_DQ[44]/DDR1_DQ[12]	
MDA45	AV5	DDR0_DQ[45]/DDR1_DQ[13]	
MDA46	AV1	DDR0_DQ[46]/DDR1_DQ[14]	
MDA47	AV2	DDR0_DQ[47]/DDR1_DQ[15]	
MDA48	AT1	DDR0_DQ[48]/DDR1_DQ[32]	
MDA49	AN1	DDR0_DQ[49]/DDR1_DQ[33]	
MDA50	AT3	DDR0_DQ[50]/DDR1_DQ[34]	
MDA51	AP1	DDR0_DQ[51]/DDR1_DQ[35]	
MDA52	AT2	DDR0_DQ[52]/DDR1_DQ[36]	
MDA53	AN3	DDR0_DQ[53]/DDR1_DQ[37]	
MDA54	AR1	DDR0_DQ[54]/DDR1_DQ[38]	
MDA55	AN2	DDR0_DQ[55]/DDR1_DQ[39]	
MDA56	AL2	DDR0_DQ[56]/DDR1_DQ[40]	
MDA57	AH1	DDR0_DQ[57]/DDR1_DQ[41]	
MDA58	AL3	DDR0_DQ[58]/DDR1_DQ[42]	
MDA59	AJ1	DDR0_DQ[59]/DDR1_DQ[43]	
MDA60	AH3	DDR0_DQ[60]/DDR1_DQ[44]	
MDA61	AL1	DDR0_DQ[61]/DDR1_DQ[45]	
MDA62	AH2	DDR0_DQ[62]/DDR1_DQ[46]	
MDA63	AK1	DDR0_DQ[63]/DDR1_DQ[47]	

	AK30	DDR0_ECC[7]	
	AM32	DDR0_ECC[6]	
	AJ32	DDR0_ECC[5]	
	AK32	DDR0_ECC[4]	
	AL32	DDR0_ECC[3]	
	AM31	DDR0_ECC[2]	
	AM30	DDR0_ECC[1]	
	AL30	DDR0_ECC[0]	
8 VREF_CAB	VREF_CAB AC38	DDR_VREF_CA_1	
8 VREF_CAB	VREF_CAB AC40	DDR_VREF_CA_0	

DDR CHANNEL A

		DDR0_CKP[0]	
		DDR0_CKN[0]	
		DDR0_CKP[1]	
		DDR0_CKN[1]	
		DDR0_CKP[2]	
		DDR0_CKN[2]	
		DDR0_CKP[3]	
		DDR0_CKN[3]	
		DDR0_CKE[0]	
		DDR0_CKE[1]	
		DDR0_CKE[2]	
		DDR0_CKE[3]	
		DDR0_CS#[0]	
		DDR0_CS#[1]	
		DDR0_CS#[2]	
		DDR0_CS#[3]	
		DDR0_ODT[0]	
		DDR0_ODT[1]	
		DDR0_ODT[2]	
		DDR0_ODT[3]	
		DDR0_BA[0]/DDR0_CAB[4]/DDR0_BA[0]	
		DDR0_BA[1]/DDR0_CAB[6]/DDR0_BA[1]	
		DDR0_BA[2]/DDR0_CAA[5]/DDR0_BG[0]	
		DDR0_MA[14]/DDR0_CAA[9]/DDR0_BG[1]	
		DDR0_RAS#/DDR0_CAB[3]/DDR0_MA[16]	
		DDR0_WE#/DDR0_CAB[2]/DDR0_MA[14]	
		DDR0_CAS#/DDR0_CAB[1]/DDR0_MA[15]	
		DDR0_MA[0]/DDR0_CAB[9]/DDR0_MA[0]	
		DDR0_MA[1]/DDR0_CAB[8]/DDR0_MA[1]	
		DDR0_MA[2]/DDR0_CAB[5]/DDR0_MA[2]	
		DDR0_MA[3]	
		DDR0_MA[4]	
		DDR0_MA[5]/DDR0_CAA[0]/DDR0_MA[5]	
		DDR0_MA[6]/DDR0_CAA[2]/DDR0_MA[6]	
		DDR0_MA[7]/DDR0_CAA[4]/DDR0_MA[7]	
		DDR0_MA[8]/DDR0_CAA[3]/DDR0_MA[8]	
		DDR0_MA[9]/DDR0_CAA[1]/DDR0_MA[9]	
		DDR0_MA[10]/DDR0_CAB[7]/DDR0_MA[10]	
		DDR0_MA[11]/DDR0_CAA[7]/DDR0_MA[11]	
		DDR0_MA[12]/DDR0_CAA[6]/DDR0_MA[12]	
		DDR0_MA[13]/DDR0_CAB[0]/DDR0_MA[13]	
		DDR0_MA[15]/DDR0_CAA[8]/DDR0_ACT#	
		DDR0_PAR	
		DDR0_ALERT#	
		DDR0_DQSP[7]/DDR1_DQSP[5]	
		DDR0_DQSN[7]/DDR1_DQSN[5]	
		DDR0_DQSP[6]/DDR1_DQSP[4]	
		DDR0_DQSN[6]/DDR1_DQSN[4]	
		DDR0_DQSP[5]/DDR1_DQSP[1]	
		DDR0_DQSN[5]/DDR1_DQSN[1]	
		DDR0_DQSP[4]/DDR1_DQSP[0]	
		DDR0_DQSN[4]/DDR1_DQSN[0]	
		DDR0_DQSP[3]/DDR0_DQSP[5]	
		DDR0_DQSN[3]/DDR0_DQSN[5]	
		DDR0_DQSP[2]/DDR0_DQSP[4]	
		DDR0_DQSN[2]/DDR0_DQSN[4]	
		DDR0_DQSP[1]	
		DDR0_DQSN[1]	
		DDR0_DQSP[0]	
		DDR0_DQSN[0]	
		DDR0_DQSP[8]	
		DDR0_DQSN[8]	

	AU24	M_DCLKA0	M_DCLKA0 8
	AV24	M_-DCLKA0	M_-DCLKA0 8
	AY23	M_DCLKA1	M_DCLKA1 8
	AW23	M_-DCLKA1	M_-DCLKA1 8
	AT19		
	AU19		
	AY18		
	AW18		
	AY31	CKEA0	CKEA0 8
	AW31	CKEA1	CKEA1 8
	AV30		
	AV31		
	AY15	M_-CSA0	M_-CSA0 8
	AY13	M_-CSA1	M_-CSA1 8
	AV15		
	AV13		
	AY14	MODT_A0	MODT_A0 8
	AV14	MODT_A1	MODT_A1 8
	AU14		
	AT14		
	AY16	SBAA0	SBAA0 8
	AW17	SBAA1	SBAA1 8
	AV29	BG_A0	BG_A0 8
	AW29	BG_A1	BG_A1 8
	AV16	MAAA16	
	AW16	MAAA14	
	AU16	MAAA15	
	AU18	MAAA0	
	AY25	MAAA1	
	AY24	MAAA2	
	AW25	MAAA3	
	AV25	MAAA4	
	AY26	MAAA5	
	AV26	MAAA6	
	AY27	MAAA7	
	AW27	MAAA8	
	AY28	MAAA9	
	AU17	MAAA10	
	AV27	MAAA11	
	AV28	MAAA12	
	AW14	MAAA13	
	AY30	M_-ACT_A	8
	AV18	M_DDR_PARA	8
	AY29	M_-ALERT_A	8
	AJ3	M_DQSA7	
	AK3	M_-DQSA7	
	AP3	M_DQSA6	
	AR3	M_-DQSA6	
	AV3	M_DQSA5	
	AV4	M_-DQSA5	
	AV8	M_DQSA4	
	AV9	M_-DQSA4	
	AV34	M_DQSA3	
	AV35	M_-DQSA3	
	AU38	M_DQSA2	
	AT38	M_-DQSA2	
	AM38	M_DQSA1	
	AL38	M_-DQSA1	
	AG38	M_DQSA0	
	AF38	M_-DQSA0	
	AJ30		
	AJ31		

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CPU-SK/1200/S/GF

LGA1200B

CML_S_IP

T=190922B

MDB0	AD34	DDR1_DQ[0]/DDR0_DQ[16]	
MDB1	AD35	DDR1_DQ[1]/DDR0_DQ[17]	
MDB2	AE36	DDR1_DQ[2]/DDR0_DQ[18]	
MDB3	AF36	DDR1_DQ[3]/DDR0_DQ[19]	
MDB4	AG35	DDR1_DQ[4]/DDR0_DQ[20]	
MDB5	AG34	DDR1_DQ[5]/DDR0_DQ[21]	
MDB6	AD36	DDR1_DQ[6]/DDR0_DQ[22]	
MDB7	AG36	DDR1_DQ[7]/DDR0_DQ[23]	
MDB8	AJ36	DDR1_DQ[8]/DDR0_DQ[24]	
MDB9	AJ35	DDR1_DQ[9]/DDR0_DQ[25]	
MDB10	AL36	DDR1_DQ[10]/DDR0_DQ[26]	
MDB11	AM35	DDR1_DQ[11]/DDR0_DQ[27]	
MDB12	AK36	DDR1_DQ[12]/DDR0_DQ[28]	
MDB13	AJ34	DDR1_DQ[13]/DDR0_DQ[29]	
MDB14	AM36	DDR1_DQ[14]/DDR0_DQ[30]	
MDB15	AM34	DDR1_DQ[15]/DDR0_DQ[31]	
MDB16	AT36	DDR1_DQ[16]/DDR0_DQ[48]	
MDB17	AP36	DDR1_DQ[17]/DDR0_DQ[49]	
MDB18	AT34	DDR1_DQ[18]/DDR0_DQ[50]	
MDB19	AP33	DDR1_DQ[19]/DDR0_DQ[51]	
MDB20	AR36	DDR1_DQ[20]/DDR0_DQ[52]	
MDB21	AT35	DDR1_DQ[21]/DDR0_DQ[53]	
MDB22	AR33	DDR1_DQ[22]/DDR0_DQ[54]	
MDB23	AT33	DDR1_DQ[23]/DDR0_DQ[55]	
MDB24	AP31	DDR1_DQ[24]/DDR0_DQ[56]	
MDB25	AT31	DDR1_DQ[25]/DDR0_DQ[57]	
MDB26	AT29	DDR1_DQ[26]/DDR0_DQ[58]	
MDB27	AP28	DDR1_DQ[27]/DDR0_DQ[59]	
MDB28	AR31	DDR1_DQ[28]/DDR0_DQ[60]	
MDB29	AT30	DDR1_DQ[29]/DDR0_DQ[61]	
MDB30	AR28	DDR1_DQ[30]/DDR0_DQ[62]	
MDB31	AT28	DDR1_DQ[31]/DDR0_DQ[63]	
MDB32	AT12	DDR1_DQ[32]/DDR1_DQ[16]	
MDB33	AR12	DDR1_DQ[33]/DDR1_DQ[17]	
MDB34	AT10	DDR1_DQ[34]/DDR1_DQ[18]	
MDB35	AR10	DDR1_DQ[35]/DDR1_DQ[19]	
MDB36	AP12	DDR1_DQ[36]/DDR1_DQ[20]	
MDB37	AT11	DDR1_DQ[37]/DDR1_DQ[21]	
MDB38	AP10	DDR1_DQ[38]/DDR1_DQ[22]	
MDB39	AN10	DDR1_DQ[39]/DDR1_DQ[23]	
MDB40	AR8	DDR1_DQ[40]/DDR1_DQ[24]	
MDB41	AT8	DDR1_DQ[41]/DDR1_DQ[25]	
MDB42	AT5	DDR1_DQ[42]/DDR1_DQ[26]	
MDB43	AT6	DDR1_DQ[43]/DDR1_DQ[27]	
MDB44	AP8	DDR1_DQ[44]/DDR1_DQ[28]	
MDB45	AT7	DDR1_DQ[45]/DDR1_DQ[29]	
MDB46	AP5	DDR1_DQ[46]/DDR1_DQ[30]	
MDB47	AR5	DDR1_DQ[47]/DDR1_DQ[31]	
MDB48	AM8	DDR1_DQ[48]	
MDB49	AM7	DDR1_DQ[49]	
MDB50	AK6	DDR1_DQ[50]	
MDB51	AM5	DDR1_DQ[51]	
MDB52	AM6	DDR1_DQ[52]	
MDB53	AK7	DDR1_DQ[53]	
MDB54	AK5	DDR1_DQ[54]	
MDB55	AL5	DDR1_DQ[55]	
MDB56	AF7	DDR1_DQ[56]	
MDB57	AH8	DDR1_DQ[57]	
MDB58	AG5	DDR1_DQ[58]	
MDB59	AF6	DDR1_DQ[59]	
MDB60	AH6	DDR1_DQ[60]	
MDB61	AH7	DDR1_DQ[61]	
MDB62	AF5	DDR1_DQ[62]	
MDB63	AH5	DDR1_DQ[63]	

	AM26	DDR1_ECC[7]	
	AM27	DDR1_ECC[6]	
	AL28	DDR1_ECC[5]	
	AK28	DDR1_ECC[4]	
	AM28	DDR1_ECC[3]	
	AL26	DDR1_ECC[2]	
	AK26	DDR1_ECC[1]	
	AJ28	DDR1_ECC[0]	
9 VREF_DQB	VREF_DQB AB40	DDR_VREF_CA_3	
9 VREF_DQB	VREF_DQB AC39	DDR_VREF_CA_2	

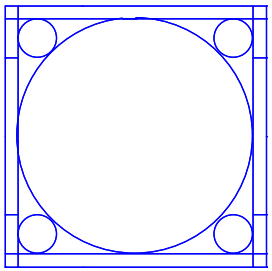
DDR CHANNEL B

		DDR1_CKP[0]	
		DDR1_CKN[0]	
		DDR1_CKP[1]	
		DDR1_CKN[1]	
		DDR1_CKP[2]	
		DDR1_CKN[2]	
		DDR1_CKP[3]	
		DDR1_CKN[3]	
		DDR1_CKE[0]	
		DDR1_CKE[1]	
		DDR1_CKE[2]	
		DDR1_CKE[3]	
		DDR1_CS#[0]	
		DDR1_CS#[1]	
		DDR1_CS#[2]	
		DDR1_CS#[3]	
		DDR1_ODT[0]	
		DDR1_ODT[1]	
		DDR1_ODT[2]	
		DDR1_ODT[3]	
		DDR1_BA[0]/DDR1_CAB[4]/DDR1_BA[0]	
		DDR1_BA[1]/DDR1_CAB[6]/DDR1_BA[1]	
		DDR1_BA[2]/DDR1_CAA[5]/DDR1_BG[0]	
		DDR1_MA[14]/DDR1_CAA[9]/DDR1_BG[1]	
		DDR1_RAS#/DDR1_CAB[3]/DDR1_MA[16]	
		DDR1_WE#/DDR1_CAB[2]/DDR1_MA[14]	
		DDR1_CAS#/DDR1_CAB[1]/DDR1_MA[15]	
		DDR1_MA[0]/DDR1_CAB[9]/DDR1_MA[0]	
		DDR1_MA[1]/DDR1_CAB[8]/DDR1_MA[1]	
		DDR1_MA[2]/DDR1_CAB[5]/DDR1_MA[2]	
		DDR1_MA[3]	
		DDR1_MA[4]	
		DDR1_MA[5]/DDR1_CAA[0]/DDR1_MA[5]	
		DDR1_MA[6]/DDR1_CAA[2]/DDR1_MA[6]	
		DDR1_MA[7]/DDR1_CAA[4]/DDR1_MA[7]	
		DDR1_MA[8]/DDR1_CAA[3]/DDR1_MA[8]	
		DDR1_MA[9]/DDR1_CAA[1]/DDR1_MA[9]	
		DDR1_MA[10]/DDR1_CAB[7]/DDR1_MA[10]	
		DDR1_MA[11]/DDR1_CAA[7]/DDR1_MA[11]	
		DDR1_MA[12]/DDR1_CAA[6]/DDR1_MA[12]	
		DDR1_MA[13]/DDR1_CAB[0]/DDR1_MA[13]	
		DDR1_MA[15]/DDR1_CAA[8]/DDR1_ACT#	
		DDR1_PAR	
		DDR1_ALERT#	
		DDR1_DQSP[7]	
		DDR1_DQSN[7]	
		DDR1_DQSP[6]	
		DDR1_DQSN[6]	
		DDR1_DQSP[5]/DDR1_DQSP[3]	
		DDR1_DQSN[5]/DDR1_DQSN[3]	
		DDR1_DQSP[4]/DDR1_DQSP[2]	
		DDR1_DQSN[4]/DDR1_DQSN[2]	
		DDR1_DQSP[3]/DDR0_DQSP[7]	
		DDR1_DQSN[3]/DDR0_DQSN[7]	
		DDR1_DQSP[2]/DDR0_DQSP[6]	
		DDR1_DQSN[2]/DDR0_DQSN[6]	
		DDR1_DQSP[1]/DDR0_DQSP[3]	
		DDR1_DQSN[1]/DDR0_DQSN[3]	
		DDR1_DQSP[0]/DDR0_DQSP[2]	
		DDR1_DQSN[0]/DDR0_DQSN[2]	
		DDR1_DQSP[8]	
		DDR1_DQSN[8]	

	AT23	M_DCLKB0	M_DCLKB0 9
	AU23	M_-DCLKB0	M_-DCLKB0 9
	AV22	M_DCLKB1	M_DCLKB1 9
	AU22	M_-DCLKB1	M_-DCLKB1 9
	AT21		
	AU21		
	AU20		
	AV20		
	AT25	CKEB0	CKEB0 9
	AR26	CKEB1	CKEB1 9
	AT26		
	AP26		
	AN17	M_-CSB0	M_-CSB0 9
	AN15	M_-CSB1	M_-CSB1 9
	AR16		
	AM15		
	AM17	MODT_B0	MODT_B0 9
	AP14	MODT_B1	MODT_B1 9
	AM16		
	AM14		
	AP18	SBAB0	SBAB0 9
	AN19	SBAB1	SBAB1 9
	AM23	BG_B0	BG_B0 9
	AM22	BG_B1	BG_B1 9
	AM18	MAAB16	
	AP17	MAAB14	
	AP16	MAAB15	
	AP19	MAAB0	
	AP20	MAAB1	
	AR20	MAAB2	
	AM20	MAAB3	
	AP21	MAAB4	
	AN21	MAAB5	
	AR22	MAAB6	
	AM21	MAAB7	
	AP22	MAAB8	
	AN23	MAAB9	
	AR18	MAAB10	
	AP23	MAAB11	
	AP24	MAAB12	
	AP15	MAAB13	
	AP25	M_-ACT_B	9
	AM19	M_DDR_PARB	9
	AP24	M_-ALERT_B	9
	AF8	M_DQSB7	
	AG8	M_-DQSB7	
	AK8	M_DQSB6	
	AL8	M_-DQSB6	
	AP6	M_DQSB5	
	AP7	M_-DQSB5	
	AN11	M_DQSB4	
	AN12	M_-DQSB4	
	AP29	M_DQSB3	
	AP30	M_-DQSB3	
	AP34	M_DQSB2	
	AP35	M_-DQSB2	
	AL34	M_DQSB1	
	AK34	M_-DQSB1	
	AF34	M_DQSB0	
	AE34	M_-DQSB0	
	AJ27		
	AJ26		

2 OF 13

CPU-SK/1200/S/GF



黑色cover

LGA1200
ILM_BP_CR/115X/BKNI/[12KRC-SF0001-81R_12KRC-SF0001-82R]

8 MDA[0..63] MDA[0..63]

9 MDB[0..63] MDB[0..63]

8 M_DQSA[0..7] M_DQSA[0..7]

8 M_-DQSA[0..7] M_-DQSA[0..7]

8 MAAA[0..16] MAAA[0..16]

9 MAAB[0..16] MAAB[0..16]

9 M_DQSB[0..7] M_DQSB[0..7]

9 M_-DQSB[0..7] M_-DQSB[0..7]

Gigabyte Technology	
Title	CPU LGA1200-B
Size: Custom	Document Number: H410M DS2V
Rev	1.01
Date: Sunday, April 05, 2020	Sheet 5 of 56

VCCSA

WBC56 22u/6/X5R/6.3V/M

WBC57 22u/6/X5R/6.3V/M

DCC56 22u/6/X5R/6.3V/M

放CPU SOCKET (TOP LAYER)

VCCSA

放CPU SOCKET (Bottom LAYER)

VCCSFR_OC

WBC77 22u/6/X5R/6.3V/M

VCCSFR_OC CAP

放CPU SOCKET (TOP LAYER)

VCCSFR_OC

W_OVC8 22u/6/X5R/6.3V/M

VCCSFR_OC

W_OVC9 22u/6/X5R/6.3V/M

VCCIO2 CAP

放CPU SOCKET (Bottom LAYER)

VCCIO

WBC53 22u/6/X5R/6.3V/M

WBC54 22u/6/X5R/6.3V/M

WBC59 22u/6/X5R/6.3V/M

放CPU SOCKET (TOP LAYER)

+VCCDDQ_EDGECAP2

WBC75 22u/6/X5R/6.3V/M

+VCCDDQ_EDGECAP1

WBC76 22u/6/X5R/6.3V/M

放CPU SOCKET (Bottom LAYER)

*CML增加,RKL才會用到

VCCGT

LGA1200J CML_S_IP

T=190922B

AA32 AA34 AA35 AA36 AA37 AA38 AB32 AB33 AB34 AB35 AB36 AC32 AD32 AE32 AF32 AG32 R40 T37 T38 T39 T40 U33 U34 U35 U36 U37 U38 U39 U40 V32 V33 V34 V36 V38 V40 W32 W34 W35 W36 W37 W38 Y32 Y33 Y34 Y36 Y38 → VCCGT

VCCGT_SENSE AB37

VSSGT_SENSE AB38

VCCGT_SENSE 29

VSSGT_SENSE 29

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CPU-SK/1200/S/GF

VCCIO_1_2
VOUT = 0.95V
IOUT = 9.5A

VCCIO_0
VOUT = 0.95V FOR CML
VOUT = 1.05V FOR RKL
IOUT = 8A

VCCSA

VDDQ

LGA1200K CML_S_IP

T=190922B

B3 B6 D1 G3 H1 L11 L12 L3 M1 M11 M12 N11 N12 N13 → VCCSA

AR14 AT24 AU15 AU25 AV17 AV19 AV23 AW13 AW15 AW24 AW26 AW28 AW30 AY17 → VCCDDQ

AJ9 AK10 AK11 AL10 AL11 → VCCIO_2

AK25 AL12 AL24 AM12 → VCCIO_1

AA3 AB8 AC1 AC7 AD6 U5 V3 V7 W1 W7 W8 → VCCIO_0

VCCIO

C6 AE4 D5 → VCCSA_SENSE / VCCIO_1_2_SENSE / VCCIO_0_SENSE

D6 → VSS_SA_VCCIO_0_SENSE

AM13 AM24 → VCCDDQ_EDGECAP2 / VCCDDQ_EDGECAP1

+VCCDDQ_EDGECAP2

+VCCDDQ_EDGECAP1

U2 V1 V2 → VCCST

WR87 0/4 VCCST_VCCPLL

R1 → VCCSFR

WR125 0/4 VCCST_VCCPLL

AU13 AU27 → VCCSFR_OC

WBC124 1u/4/X5R/6.3V/K

WR86 0/4/X VDDQ

R2 R3 → VCCSTG

WR95 0/4 VCCPLL_OC

VCCSTG

R4 T5 T6 → VCCFPGM0 / VCCFPGM1 / VCCFPGM2

VCCFPGM

VCCSTG

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CPU-SK/1200/S/GF

3VDUAL

W_OVU1

VIN VOUT GND EN FB

VCCPLL_OC_EN

W_OVC1 2.2u/4/X5R/6.3V/M

R1 W_OVR3 1K/4/1

W_OVC4 22P/4/NPO/50V/J

VCCPLL_OC_FB

R2 W_OVR14 1.6K/4/1

W_OVC6 10u/6/X5R/6.3V/M

VCCPLL_OC

W_OVC5 0.1u/4/X7R/16V/K

Vout=0.8*(R1+R2)/R2

AP7365-WG-7/SOT23-5/600mA

CML=0.17A

RKL=0.25A

3VDUAL

W_OVR5 8.2K/4

3VDUAL

W_OVR6 8.2K/4

VDDQ

W_OVR4 8.2K/4

W_OVQ1 SOT23

VCCPLL_OC_EN

W_OVQ2 SOT23 2N7002/SOT23/25pF/5

W_OVC7 0.01u/4/X7R/25V/K/X

MMBT2222A/SOT23/600mA/40

WR6 0/4

LGA1200L CML_S_IP

T=190922B

K16 G16 → FIVR_PROBE_ANA_1 / FIVR_PROBE_ANA_0

H8 → EXTBGREF

AU32 AN25 → DDR_VIEW_1 / DDR_VIEW_0

P33 R33 J4 L4 → PEG_VIEW_3 / PEG_VIEW_2 / PE16_AMON2_PEG_VIEW_1 / PE16_AMON1_PEG_VIEW_0

P8 M8 → PE4_AMON2 / PE4_AMON1

G4 E4 → DMI_AMON2 / DMI_AMON1

J11 J13 → CPU_EDM_1 / CPU_EDM_0

B15 → H_RTCCLK

AH33 AH32 → THERMDA2 / THERMDC2

THERMDA1 THERMDC1

D8 F8 → WTP2 / WTP3

CPU_TRIGGEROUT D12

CPU_TRIGGERIN E12

A_CPU_PCH_TO_R WR88 33/4

A_CPU_PCH_TO 13

N_PCH_CPU_TI 13

AL18 L33 → VCCCOREG5 / VCCCOREG4

M16 M33 N4 T33 → RSVD_M16 / RSVD_M33 / RSVD_N4 / RSVD_T33

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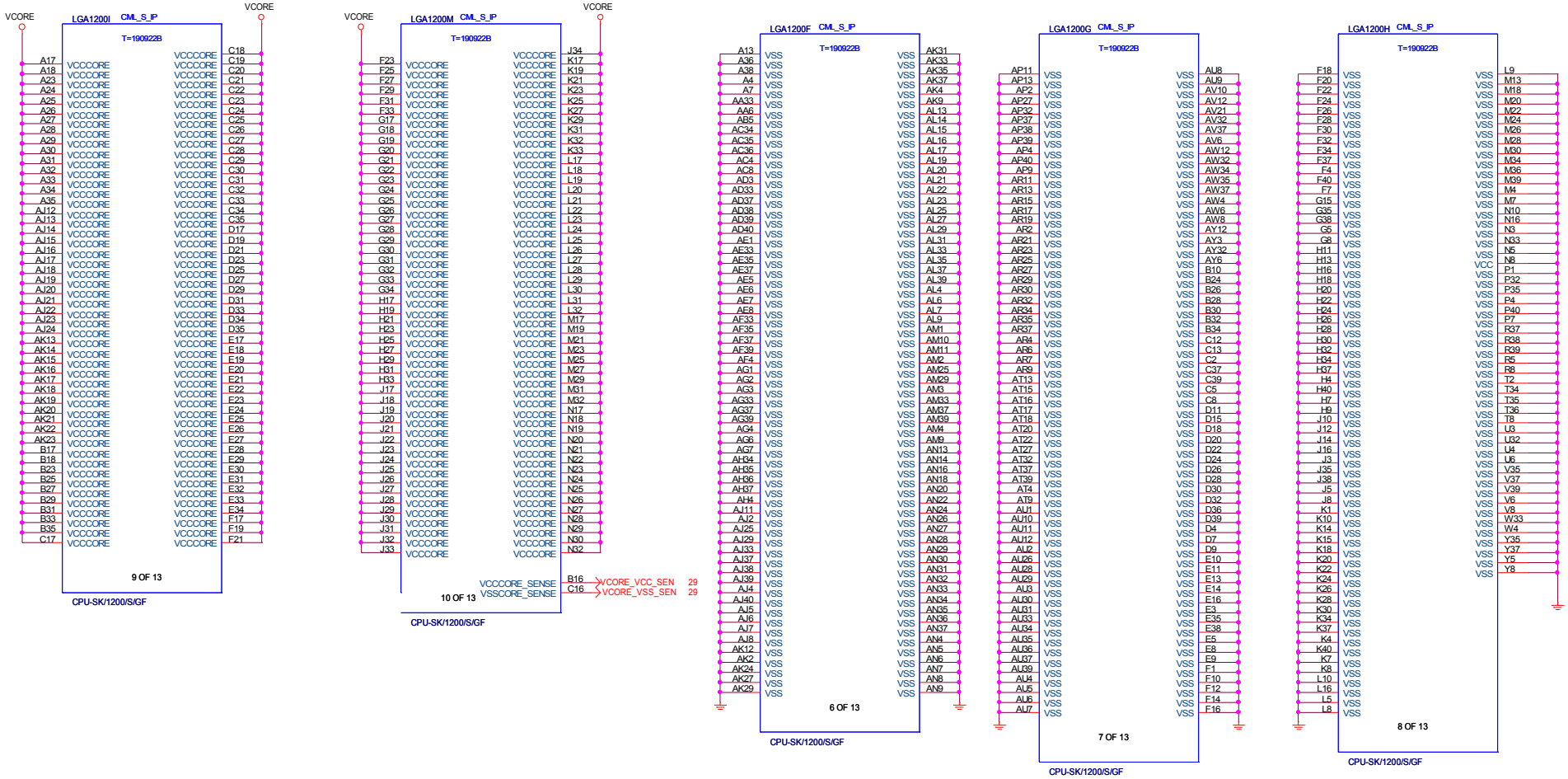
CPU-SK/1200/S/GF

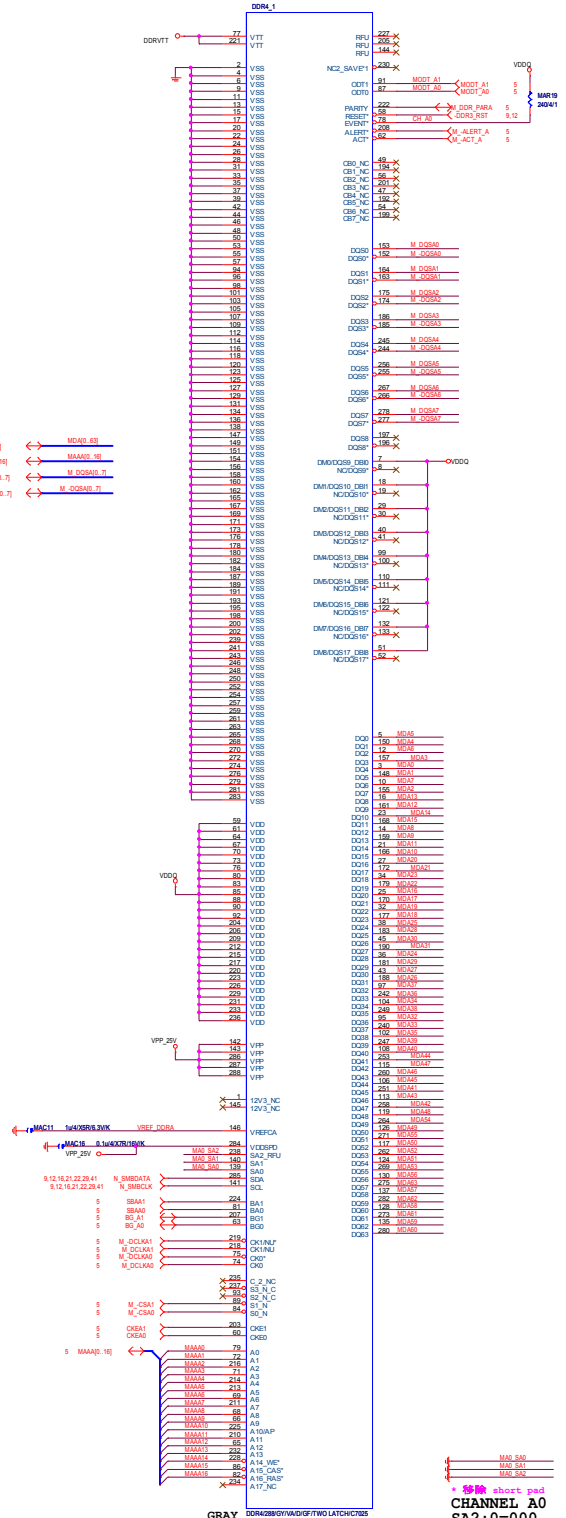
Gigabyte Technology		
Title: CPU LGA1200-C		
Size: Custom	Document Number: H410M DS2V	Rev: 1.01
Date: Monday, April 13, 2020	Sheet 6 of 56	



* 刪 Vcore 電容

Gigabyte Technology		
Title: CPU LGA1200-D		
Size: Custom	Document Number: H410M DS2V	Rev: 1.01
Date: Sunday, April 05, 2020	Sheet 7 of 56	

Rev:0.6

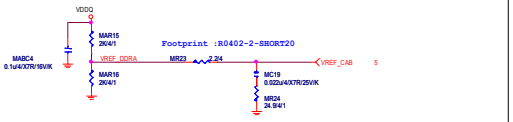


GRAY DDR4/288/GY/VA/D/GF/TWO LATCH/C7625

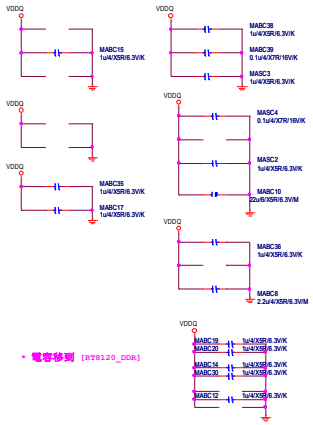
* 灰色 雙耳扣

* 移除 short pad

CHANNEL A0
SA2:0=000

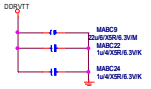


DDR12V Decouple

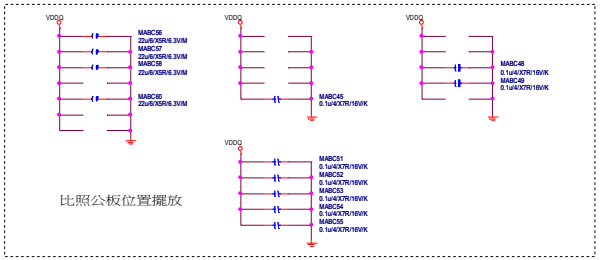


* 電容移到 [RT8120_DDR]

DDRVTT Decouple



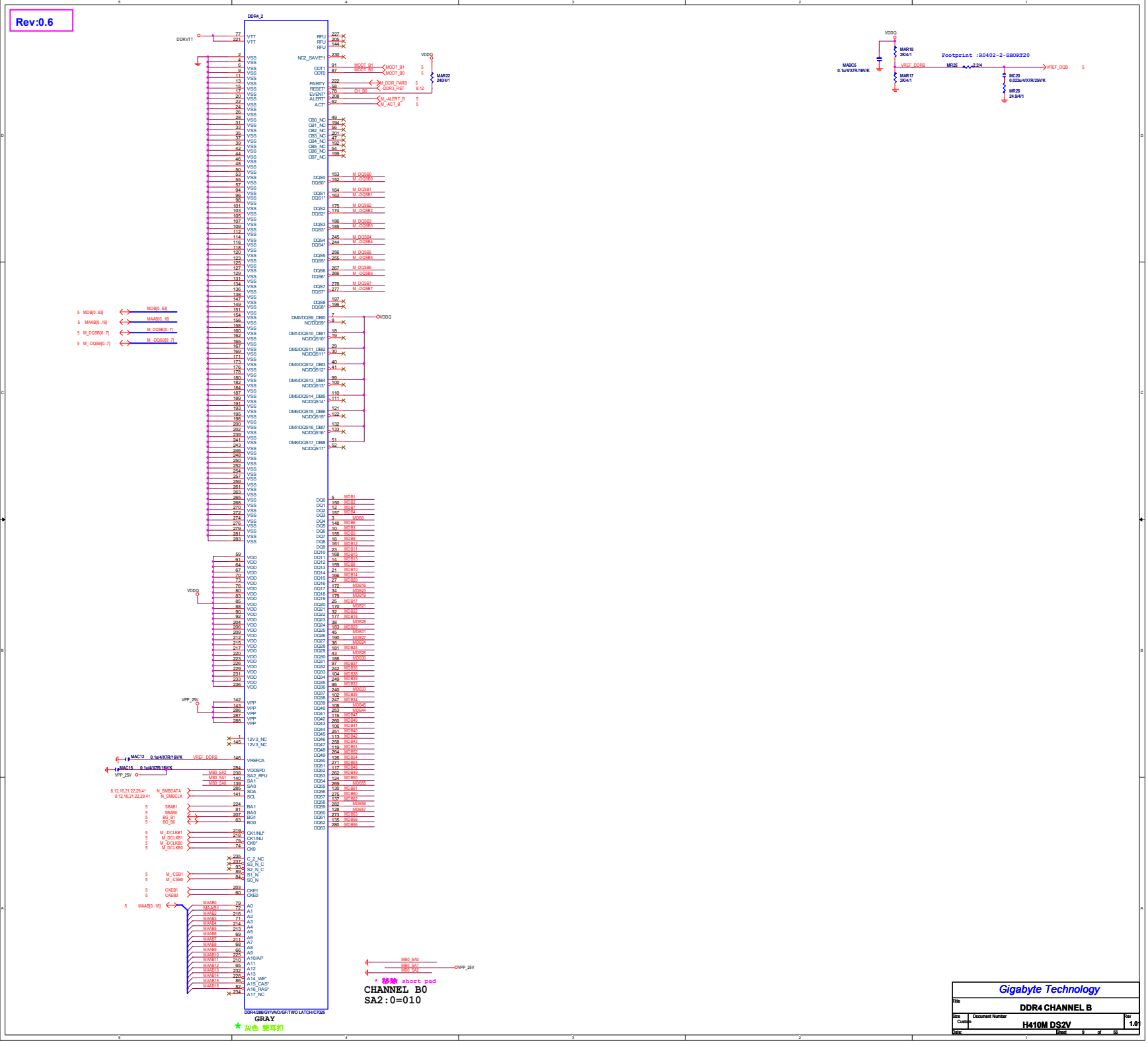
* 新電容



比照公板位置擺放

Gigabyte Technology			
Title: DDR4 CHANNEL A			
Size: Custom	Document Number: H410M DS2V		Rev: 1.0
Date:	Sheet 8 of 56		

Rev:0.6

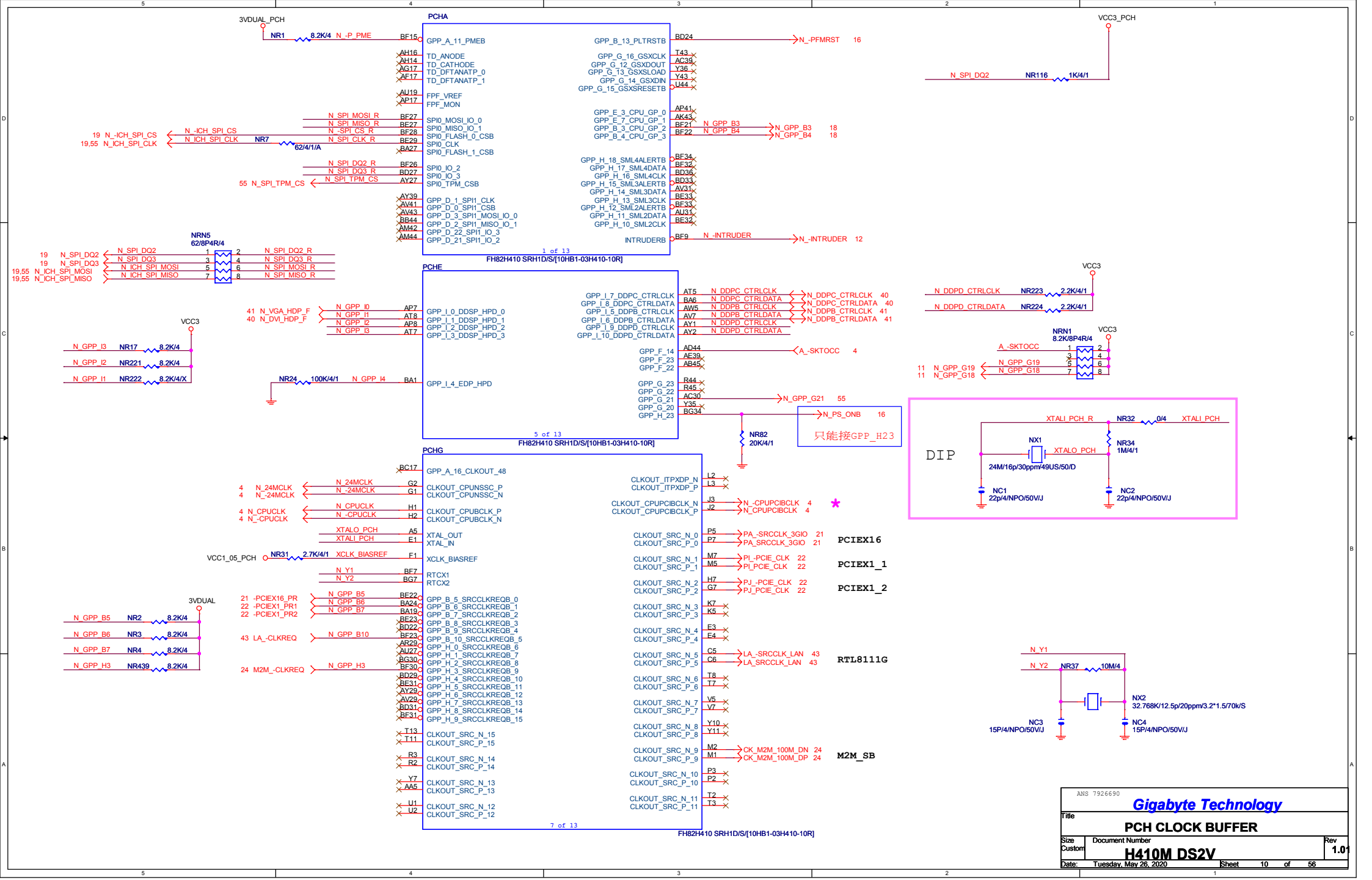


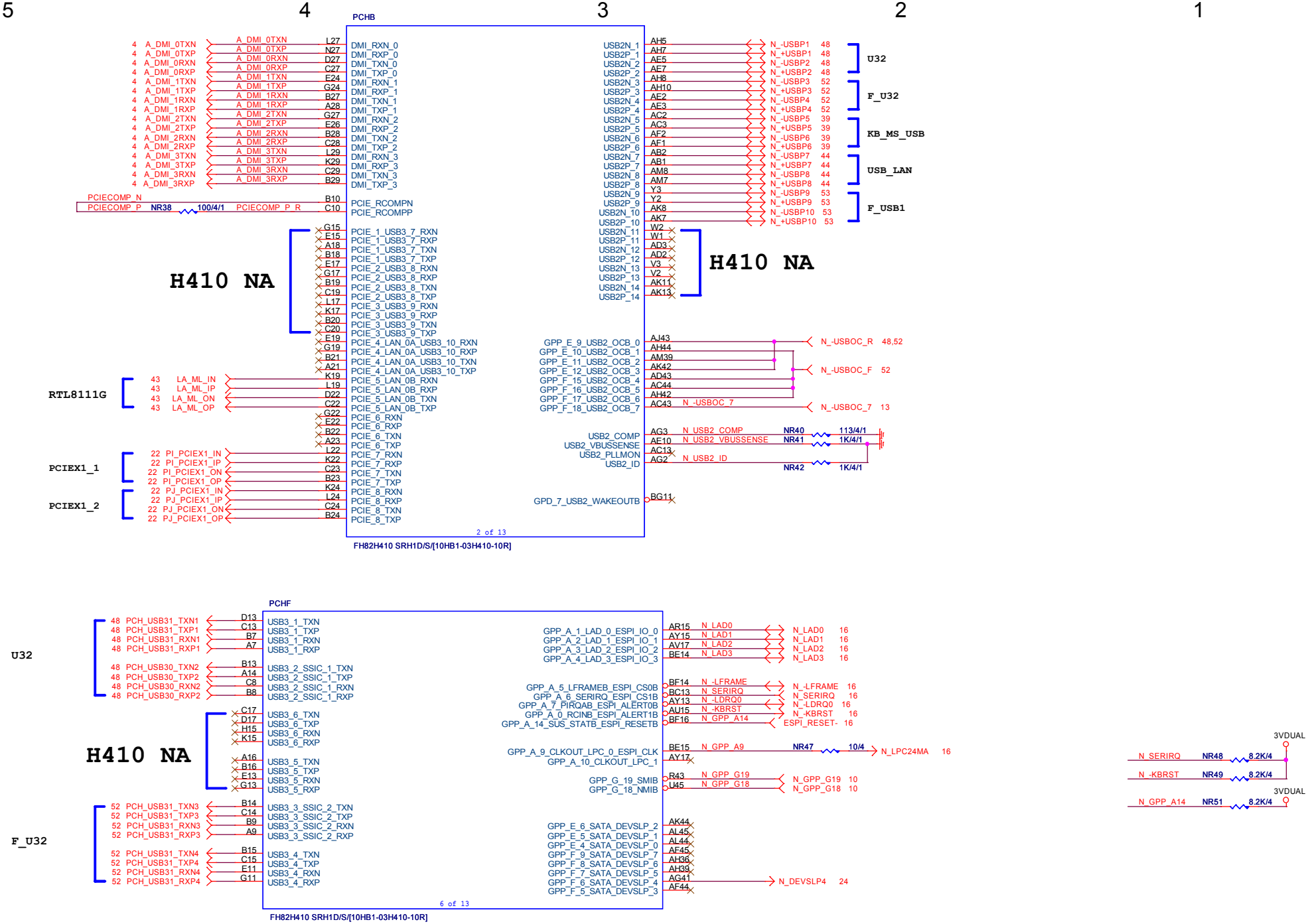
Gigabyte Technology

Title: DDR4 CHANNEL B

Size: Custom | Document Number: H410M DS2V | Rev: 1.0

Date: | Sheet 9 of 56


3VDUAL_PCH
NR1 8.2K/4 N_-P_PME BF15
PCHA
GPP_A_11_PMEB
GPP_B_13_PLTRSTB BD24 N_-PFMRST 16
TD_ANODE AH16
TD_CATHODE AH14
TD_DFTANATP_0 AG17
TD_DFTANATP_1 AF17
GPP_G_16_GSXCLK T43
GPP_G_12_GSXDOUT AC39
GPP_G_13_GSXSLOAD Y36
GPP_G_14_GSXDIN Y43
GPP_G_15_GSXSRESETB U44
FPF_VREF AU19
FPF_MON AP17
GPP_E_3_CPU_GP_0 AP41
GPP_E_7_CPU_GP_1 AK43
GPP_B_3_CPU_GP_2 BF21 N_GPP_B3 N_GPP_B3 18
GPP_B_4_CPU_GP_3 BF22 N_GPP_B4 N_GPP_B4 18
N_SPI_MOSI_R BF27
N_SPI_MISO_R BF27
N_-SPI_CS_R BF28
N_SPI_CLK_R BF29
SPI0_MOSI_IO_0
SPI0_MISO_IO_1
SPI0_FLASH_0_CSB
SPI0_CLK
SPI0_FLASH_1_CSB
19 N_-ICH_SPI_CS
19,55 N_ICH_SPI_CLK
N_-ICH_SPI_CS
N_ICH_SPI_CLK
NR7 62/4/1/A
BA27
N_SPI_DQ2_R BF26
N_SPI_DQ3_R BD27
N_SPI_TPM_CS AY27
SPI0_IO_2
SPI0_IO_3
SPI0_TPM_CSB
55 N_SPI_TPM_CS
GPP_H_18_SML4ALERTB BF34
GPP_H_17_SML4DATA BF32
GPP_H_16_SML4CLK BD36
GPP_H_15_SML3ALERTB BD33
GPP_H_14_SML3DATA AV31
GPP_H_13_SML3CLK BE33
GPP_H_12_SML2ALERTB BF33
GPP_H_11_SML2DATA AU31
GPP_H_10_SML2CLK BE32
AY39 GPP_D_1_SPI1_CLK
AV41 GPP_D_0_SPI1_CSB
AV43 GPP_D_3_SPI1_MOSI_IO_0
BB44 GPP_D_2_SPI1_MISO_IO_1
AM42 GPP_D_22_SPI1_IO_3
AM44 GPP_D_21_SPI1_IO_2
INTRUDERB BF9 N_-INTRUDER N_-INTRUDER 12
1 of 13
FH82H410 SRH1D/S/[10HB1-03H410-10R]
VCC3_PCH
N_SPI_DQ2 NR116 1K/4/1
NRN5 62/8P4R/4
19 N_SPI_DQ2
19 N_SPI_DQ3
19,55 N_ICH_SPI_MOSI
19,55 N_ICH_SPI_MISO
N_SPI_DQ2 1
N_SPI_DQ3 3
N_ICH_SPI_MOSI 5
N_ICH_SPI_MISO 7
2 N_SPI_DQ2_R
4 N_SPI_DQ3_R
6 N_SPI_MOSI_R
8 N_SPI_MISO_R
PCHE
GPP_I_7_DDPC_CTRLCLK AT5 N_DDPC_CTRLCLK N_DDPC_CTRLCLK 40
GPP_I_8_DDPC_CTRLDATA BA6 N_DDPC_CTRLDATA N_DDPC_CTRLDATA 40
GPP_I_5_DDPB_CTRLCLK AW5 N_DDPB_CTRLCLK N_DDPB_CTRLCLK 41
GPP_I_6_DDPB_CTRLDATA AV7 N_DDPB_CTRLDATA N_DDPB_CTRLDATA 41
GPP_I_9_DDPD_CTRLCLK AY1 N_DDPD_CTRLCLK
GPP_I_10_DDPD_CTRLDATA AY2 N_DDPD_CTRLDATA
N_DDPD_CTRLCLK NR223 2.2K/4/1
N_DDPD_CTRLDATA NR224 2.2K/4/1
VCC3
41 N_VGA_HDP_F
40 N_DVI_HDP_F
N_GPP_I0 AP7
N_GPP_I1 AT8
N_GPP_I2 AP8
N_GPP_I3 AT7
GPP_I_0_DDSP_HPD_0
GPP_I_1_DDSP_HPD_1
GPP_I_2_DDSP_HPD_2
GPP_I_3_DDSP_HPD_3
GPP_F_14 AD44 A_-SKTOCC 4
GPP_F_23 AE39
GPP_F_22 AB45
NRN1 8.2K/8P4R/4
A_-SKTOCC 1
N_GPP_G19 3
N_GPP_G18 7
2 4 6 8
11 N_GPP_G19
11 N_GPP_G18
VCC3
N_GPP_I3 NR17 8.2K/4
N_GPP_I2 NR221 8.2K/4
N_GPP_I1 NR222 8.2K/4/X
NR24 100K/4/1 N_GPP_I4 BA1
GPP_I_4_EDP_HPD
GPP_G_23 R44
GPP_G_22 R45
GPP_G_21 AC30 N_GPP_G21 55
GPP_G_20 Y35
GPP_H_23 BG34 N_PS_ONB 16
只能接GPP_H23
5 of 13
FH82H410 SRH1D/S/[10HB1-03H410-10R]
NR82 20K/4/1
DIP
XTALI_PCH_R NR32 0/4 XTALI_PCH
NX1
XTALO_PCH
NR34 1M/4/1
24M/16p/30ppm/49US/50/D
NC1 22p/4/NPO/50V/J
NC2 22p/4/NPO/50V/J
PCHG
GPP_A_16_CLKOUT_48 BC17
4 N_24MCLK
4 N_-24MCLK
N_24MCLK G2
N_-24MCLK G1
CLKOUT_CPUNSSC_P
CLKOUT_CPUNSSC_N
4 N_CPUCLK
4 N_-CPUCLK
N_CPUCLK H1
N_-CPUCLK H2
CLKOUT_CPUBCLK_P
CLKOUT_CPUBCLK_N
XTALO_PCH A5
XTALI_PCH E1
XTAL_OUT
XTAL_IN
VCC1_05_PCH
NR31 2.7K/4/1 XCLK_BIASREF F1
XCLK_BIASREF
N_Y1 BF7
N_Y2 BG7
RTCX1
RTCX2
CLKOUT_ITPXDP_N L2
CLKOUT_ITPXDP_P L3
CLKOUT_CPUPCIBCLK_N J3 N_-CPUPCIBCLK 4
CLKOUT_CPUPCIBCLK_P J2 N_CPUPCIBCLK 4
CLKOUT_SRC_N_0 P5 PA_-SRCCLK_3GIO 21
CLKOUT_SRC_P_0 P7 PA_SRCCLK_3GIO 21
PCIEX16
CLKOUT_SRC_N_1 M7 PI_-PCIE_CLK 22
CLKOUT_SRC_P_1 M5 PI_PCIE_CLK 22
PCIEX1_1
CLKOUT_SRC_N_2 H7 PJ_-PCIE_CLK 22
CLKOUT_SRC_P_2 G7 PJ_PCIE_CLK 22
PCIEX1_2
CLKOUT_SRC_N_3 K7
CLKOUT_SRC_P_3 K5
CLKOUT_SRC_N_4 E3
CLKOUT_SRC_P_4 E4
CLKOUT_SRC_N_5 C5 LA_-SRCCLK_LAN 43
CLKOUT_SRC_P_5 C6 LA_SRCCLK_LAN 43
RTL8111G
CLKOUT_SRC_N_6 T8
CLKOUT_SRC_P_6 T7
CLKOUT_SRC_N_7 V5
CLKOUT_SRC_P_7 V7
CLKOUT_SRC_N_8 Y10
CLKOUT_SRC_P_8 Y11
CLKOUT_SRC_N_9 M2 CK_M2M_100M_DN 24
CLKOUT_SRC_P_9 M1 CK_M2M_100M_DP 24
M2M_SB
CLKOUT_SRC_N_10 P3
CLKOUT_SRC_P_10 P2
CLKOUT_SRC_N_11 T2
CLKOUT_SRC_P_11 T3
7 of 13
FH82H410 SRH1D/S/[10HB1-03H410-10R]
3VDUAL
N_GPP_B5 NR2 8.2K/4
N_GPP_B6 NR3 8.2K/4
N_GPP_B7 NR4 8.2K/4
N_GPP_H3 NR439 8.2K/4
21 -PCIEX16_PR
22 -PCIEX1_PR1
22 -PCIEX1_PR2
N_GPP_B5 BE22
N_GPP_B6 BA24
N_GPP_B7 BA19
GPP_B_5_SRCCLKREQB_0
GPP_B_6_SRCCLKREQB_1
GPP_B_7_SRCCLKREQB_2
GPP_B_8_SRCCLKREQB_3
GPP_B_9_SRCCLKREQB_4
GPP_B_10_SRCCLKREQB_5
GPP_H_0_SRCCLKREQB_6
GPP_H_1_SRCCLKREQB_7
GPP_H_2_SRCCLKREQB_8
GPP_H_3_SRCCLKREQB_9
GPP_H_4_SRCCLKREQB_10
GPP_H_5_SRCCLKREQB_11
GPP_H_6_SRCCLKREQB_12
GPP_H_7_SRCCLKREQB_13
GPP_H_8_SRCCLKREQB_14
GPP_H_9_SRCCLKREQB_15
43 LA_-CLKREQ
N_GPP_B10 BF23
24 M2M_-CLKREQ
N_GPP_H3 BF30
T13 CLKOUT_SRC_N_15
T11 CLKOUT_SRC_P_15
R3 CLKOUT_SRC_N_14
R2 CLKOUT_SRC_P_14
Y7 CLKOUT_SRC_N_13
AA5 CLKOUT_SRC_P_13
U1 CLKOUT_SRC_N_12
U2 CLKOUT_SRC_P_12
N_Y1
N_Y2
NR37 10M/4
NX2 32.768K/12.5p/20ppm/3.2*1.5/70k/S
NC3 15P/4/NPO/50V/J
NC4 15P/4/NPO/50V/J
ANS 7926690
Gigabyte Technology
Title
PCH CLOCK BUFFER
Size Custom
Document Number
H410M DS2V
Rev 1.01
Date: Tuesday, May 26, 2020
Sheet 10 of 56



ANS 7926690	Gigabyte Technology	
Title	PCH DMI,USB,PCIE	
Size: Custom	Document Number: H410M DS2V	Rev: 1.01
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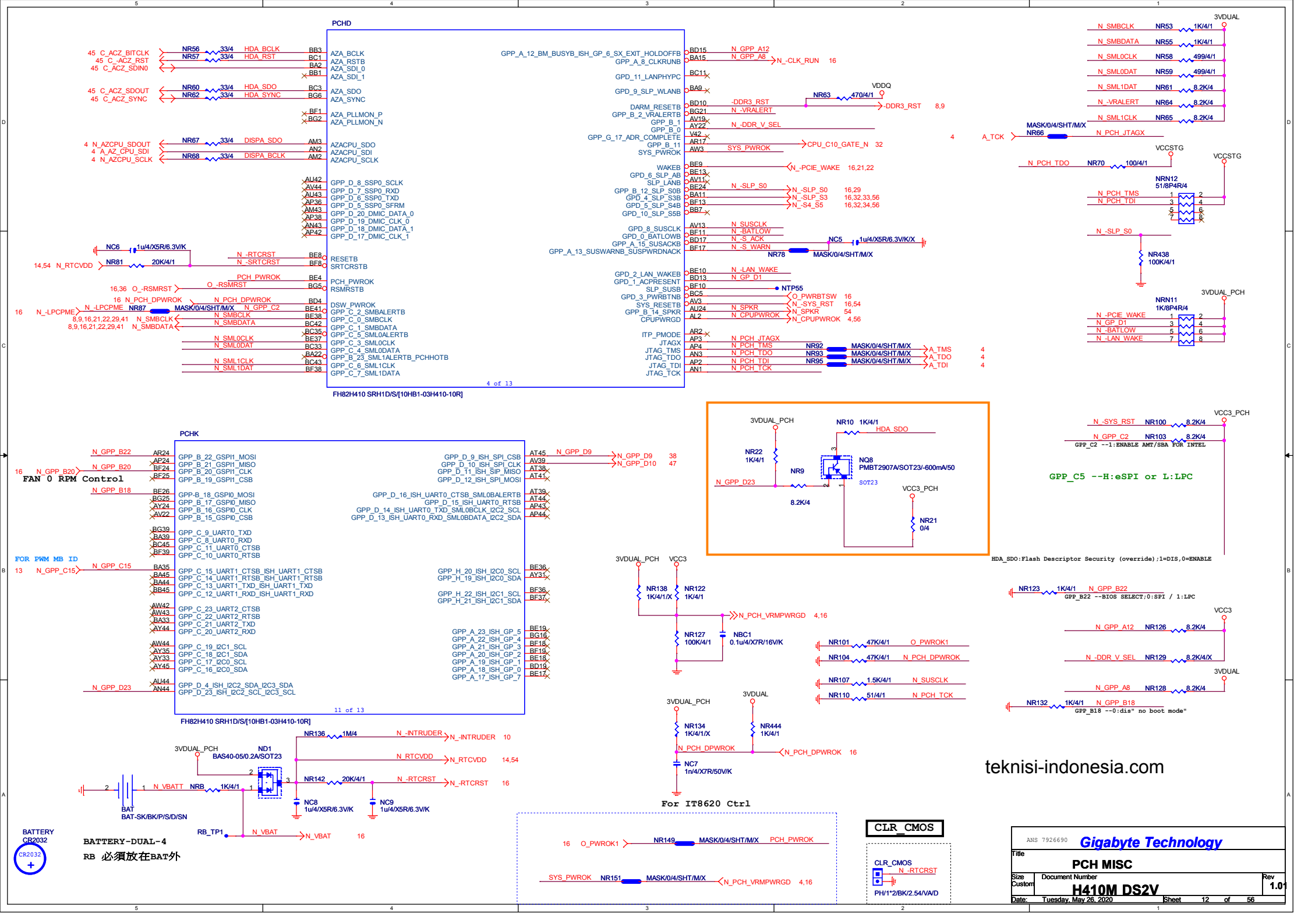
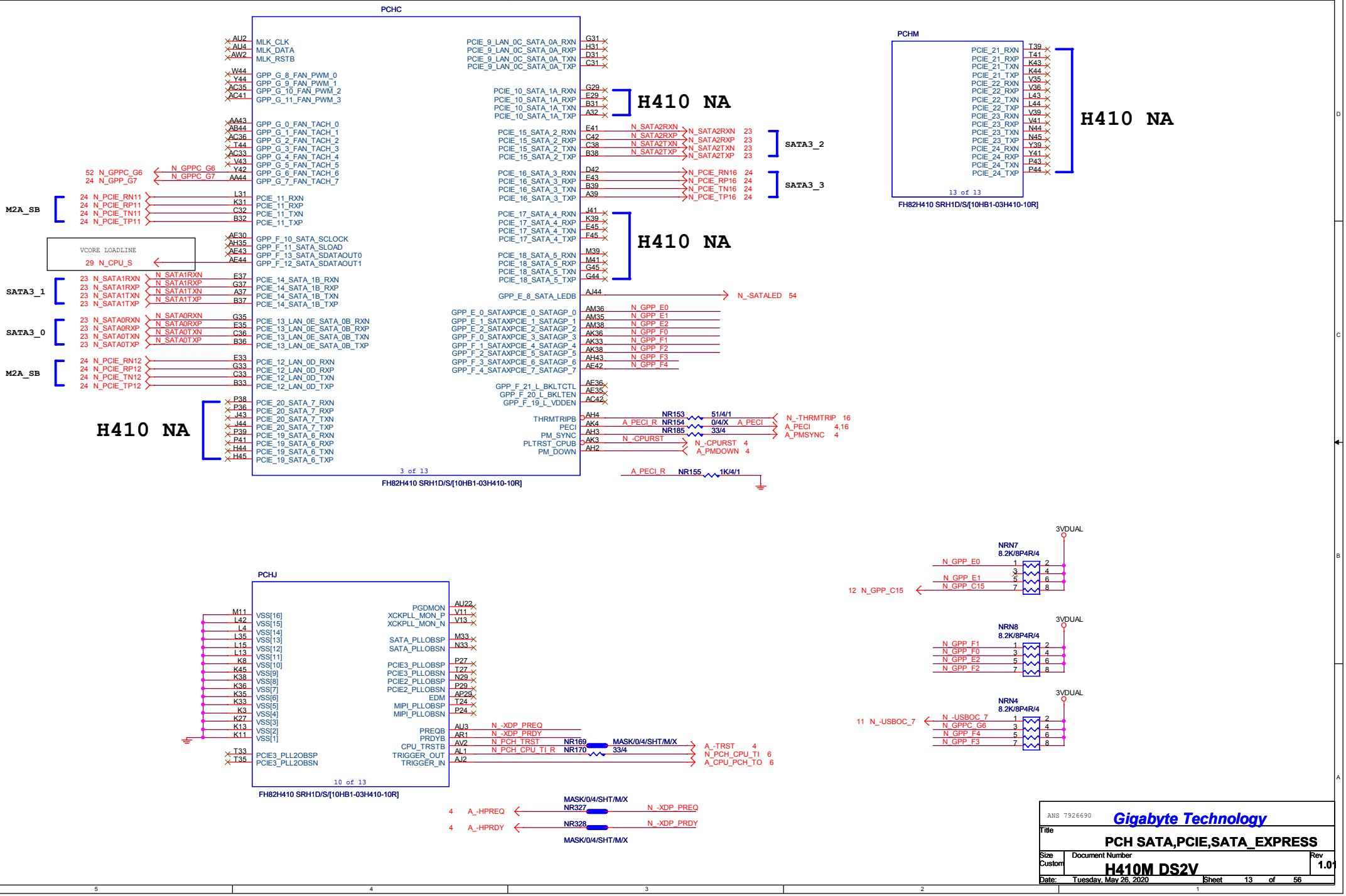


ANS 7926690

Gigabyte Technology

Title	PCH MISC	
Size: Custom	Document Number: H410M DS2V	Rev: 1.01
Date: Tuesday, May 26, 2020	Sheet 12 of 56	


PCHC
MLK_CLK
MLK_DATA
MLK_RSTB
GPP_G_8_FAN_PWM_0
GPP_G_9_FAN_PWM_1
GPP_G_10_FAN_PWM_2
GPP_G_11_FAN_PWM_3
GPP_G_0_FAN_TACH_0
GPP_G_1_FAN_TACH_1
GPP_G_2_FAN_TACH_2
GPP_G_3_FAN_TACH_3
GPP_G_4_FAN_TACH_4
GPP_G_5_FAN_TACH_5
GPP_G_6_FAN_TACH_6
GPP_G_7_FAN_TACH_7
N_GPPC_G6
N_GPPC_G7
M2A_SB
PCIE_11_RXN
PCIE_11_RXP
PCIE_11_TXN
PCIE_11_TXP
VCORE LOADLINE
N_CPU_S
GPP_F_10_SATA_SCLOCK
GPP_F_11_SATA_SLOAD
GPP_F_13_SATA_SDATAOUT0
GPP_F_12_SATA_SDATAOUT1
SATA3_1
PCIE_14_SATA_1B_RXN
PCIE_14_SATA_1B_RXP
PCIE_14_SATA_1B_TXN
PCIE_14_SATA_1B_TXP
SATA3_0
PCIE_13_LAN_0E_SATA_0B_RXN
PCIE_13_LAN_0E_SATA_0B_RXP
PCIE_13_LAN_0E_SATA_0B_TXN
PCIE_13_LAN_0E_SATA_0B_TXP
M2A_SB
PCIE_12_LAN_0D_RXN
PCIE_12_LAN_0D_RXP
PCIE_12_LAN_0D_TXN
PCIE_12_LAN_0D_TXP
H410 NA
PCIE_20_SATA_7_RXN
PCIE_20_SATA_7_RXP
PCIE_20_SATA_7_TXN
PCIE_20_SATA_7_TXP
PCIE_19_SATA_6_RXN
PCIE_19_SATA_6_RXP
PCIE_19_SATA_6_TXN
PCIE_19_SATA_6_TXP
3 of 13
FH82H410 SRH1D/S/[10HB1-03H410-10R]
PCIE_9_LAN_0C_SATA_0A_RXN
PCIE_9_LAN_0C_SATA_0A_RXP
PCIE_9_LAN_0C_SATA_0A_TXN
PCIE_9_LAN_0C_SATA_0A_TXP
PCIE_10_SATA_1A_RXN
PCIE_10_SATA_1A_RXP
PCIE_10_SATA_1A_TXN
PCIE_10_SATA_1A_TXP
H410 NA
PCIE_15_SATA_2_RXN
PCIE_15_SATA_2_RXP
PCIE_15_SATA_2_TXN
PCIE_15_SATA_2_TXP
N_SATA2RXN
N_SATA2RXP
N_SATA2TXN
N_SATA2TXP
SATA3_2
PCIE_16_SATA_3_RXN
PCIE_16_SATA_3_RXP
PCIE_16_SATA_3_TXN
PCIE_16_SATA_3_TXP
N_PCIE_RN16
N_PCIE_RP16
N_PCIE_TN16
N_PCIE_TP16
SATA3_3
PCIE_17_SATA_4_RXN
PCIE_17_SATA_4_RXP
PCIE_17_SATA_4_TXN
PCIE_17_SATA_4_TXP
H410 NA
PCIE_18_SATA_5_RXN
PCIE_18_SATA_5_RXP
PCIE_18_SATA_5_TXN
PCIE_18_SATA_5_TXP
GPP_E_8_SATA_LEDB
N_-SATALED
GPP_E_0_SATAXPCIE_0_SATAGP_0
GPP_E_1_SATAXPCIE_1_SATAGP_1
GPP_E_2_SATAXPCIE_2_SATAGP_2
GPP_F_0_SATAXPCIE_3_SATAGP_3
GPP_F_1_SATAXPCIE_4_SATAGP_4
GPP_F_2_SATAXPCIE_5_SATAGP_5
GPP_F_3_SATAXPCIE_6_SATAGP_6
GPP_F_4_SATAXPCIE_7_SATAGP_7
N_GPP_E0
N_GPP_E1
N_GPP_E2
N_GPP_F0
N_GPP_F1
N_GPP_F2
N_GPP_F3
N_GPP_F4
GPP_F_21_L_BKLTCTL
GPP_F_20_L_BKLTEN
GPP_F_19_L_VDDEN
THRMTRIPB
PECI
PM_SYNC
PLTRST_CPUB
PM_DOWN
N_-CPURST
A_PMDOWN
NR153
NR154
NR185
NR155
A_PECI_R
N_-THRMTRIP
A_PECI
A_PMSYNC
PCHM
PCIE_21_RXN
PCIE_21_RXP
PCIE_21_TXN
PCIE_21_TXP
PCIE_22_RXN
PCIE_22_RXP
PCIE_22_TXN
PCIE_22_TXP
PCIE_23_RXN
PCIE_23_RXP
PCIE_23_TXN
PCIE_23_TXP
PCIE_24_RXN
PCIE_24_RXP
PCIE_24_TXN
PCIE_24_TXP
H410 NA
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FH82H410 SRH1D/S/[10HB1-03H410-10R]
PCHJ
VSS[16]
VSS[15]
VSS[14]
VSS[13]
VSS[12]
VSS[11]
VSS[10]
VSS[9]
VSS[8]
VSS[7]
VSS[6]
VSS[5]
VSS[4]
VSS[3]
VSS[2]
VSS[1]
PCIE3_PLL2OBSP
PCIE3_PLL2OBSN
PGDMON
XCKPLL_MON_P
XCKPLL_MON_N
SATA_PLLOBSP
SATA_PLLOBSN
PCIE3_PLLOBSP
PCIE3_PLLOBSN
PCIE2_PLLOBSP
PCIE2_PLLOBSN
EDM
MIPI_PLLOBSP
MIPI_PLLOBSN
PREQB
PRDYB
CPU_TRSTB
TRIGGER_OUT
TRIGGER_IN
N_-XDP_PREQ
N_-XDP_PRDY
N_PCH_TRST
N_PCH_CPU_TI_R
A_-TRST
N_PCH_CPU_TI
A_CPU_PCH_TO
MASK/0/4/SHT/M/X
NR169
NR170
33/4
10 of 13
FH82H410 SRH1D/S/[10HB1-03H410-10R]
A_-HPREQ
A_-HPRDY
NR327
NR328
3VDUAL
NRN7
8.2K/8P4R/4
N_GPP_E0
N_GPP_E1
N_GPP_C15
NRN8
8.2K/8P4R/4
N_GPP_F1
N_GPP_F0
N_GPP_E2
N_GPP_F2
NRN4
8.2K/8P4R/4
N_-USBOC_7
N_GPPC_G6
N_GPP_F4
N_GPP_F3
ANS 7926690
Gigabyte Technology
Title
PCH SATA,PCIE,SATA_EXPRESS
Size
Custom
Document Number
H410M DS2V
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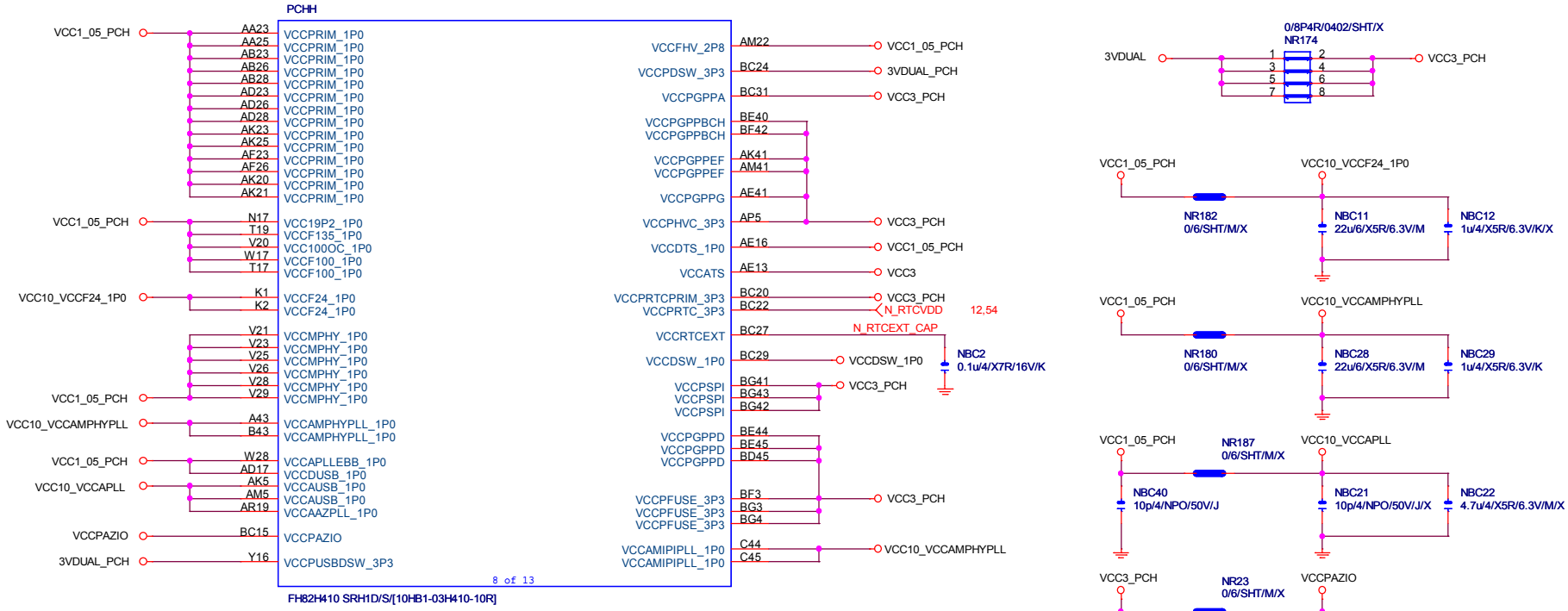
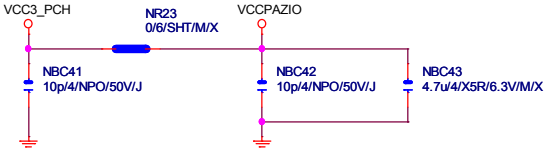
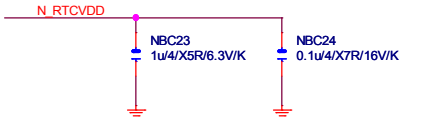
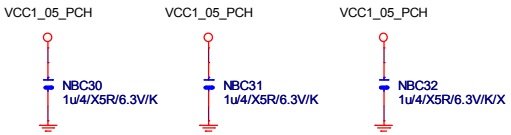
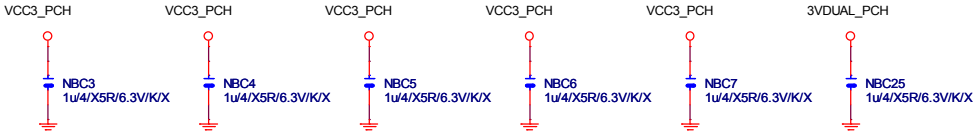
56

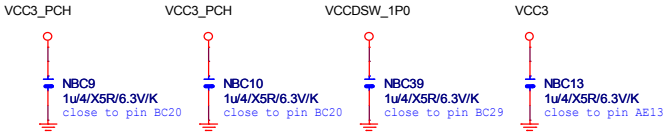












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Gigabyte Technology

Title	PCH PWR	
Size: B	Document Number: H410M DS2V	Rev: 1.01
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PCHI

A25	VSS	VSS	A42
A30	VSS	VSS	D45
P22	VSS	VSS	BG44
AV38	VSS	VSS	BF44
AV45	VSS	VSS	BF45
AV8	VSS	VSS	BF2
AY11	VSS	VSS	W29
AY19	VSS	VSS	A35
AY37	VSS	VSS	A40
AY4	VSS	VSS	A41
AY42	VSS	VSS	AA17
AY8	VSS	VSS	AA18
B25	VSS	VSS	AA20
B3	VSS	VSS	AA21
B30	VSS	VSS	AA26
B35	VSS	VSS	AA28
B4	VSS	VSS	AA29
B41	VSS	VSS	AB17
BA13	VSS	VSS	AC32
BA17	VSS	VSS	AE4
BA29	VSS	VSS	AE8
BA31	VSS	VSS	AF18
BA37	VSS	VSS	AF20
BA4	VSS	VSS	AF21
BA42	VSS	VSS	AF25
BB40	VSS	VSS	AF28
BC38	VSS	VSS	AF29
BC40	VSS	VSS	AF4
BC9	VSS	VSS	AF42
BD11	VSS	VSS	AG18
BD16	VSS	VSS	AG20
BD2	VSS	VSS	AG21
BD21	VSS	VSS	AG23
BD25	VSS	VSS	AG25
F2	VSS	VSS	AG26
E31	VSS	VSS	AG28
E6	VSS	VSS	AG29
E8	VSS	VSS	AH11
F39	VSS	VSS	AH13
F43	VSS	VSS	AH30
G4	VSS	VSS	AH32
G40	VSS	VSS	AH33
G42	VSS	VSS	AH38
F6	VSS	VSS	AJ1
G9	VSS	VSS	AJ17
H11	VSS	VSS	AJ18
H13	VSS	VSS	AJ20
H17	VSS	VSS	AJ21
H19	VSS	VSS	AJ23
H22	VSS	VSS	AJ25
H24	VSS	VSS	AJ26
H27	VSS	VSS	AJ28
H29	VSS	VSS	AJ29
H33	VSS	VSS	AJ45
H35	VSS	VSS	AK10
H38	VSS	VSS	AK14
H4	VSS	VSS	AK16
H42	VSS	VSS	AK17
H9	VSS	VSS	AK18
J4	VSS	VSS	AK26
M36	VSS	VSS	AK28
M38	VSS	VSS	AM14
M4	VSS	VSS	AN14
M8	VSS	VSS	AP19
M9	VSS	VSS	AR22
N13	VSS	VSS	AR27
N15	VSS	VSS	AU29
N19	VSS	VSS	AU33
N22	VSS	VSS	AV1
N24	VSS	VSS	AV10
N31	VSS	VSS	AV15
N42	VSS	VSS	AV24
P10	VSS	VSS	AV27
P12	VSS	VSS	AV33
AV35	VSS		

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FH82H410 SRH1D/S/[10HB1-03H410-10R]

PCHL

BD34	VSS[70]	VSS[1]	AB18
BD39	VSS[71]	VSS[2]	AB20
BD7	VSS[72]	VSS[3]	AB21
BE2	VSS[73]	VSS[4]	AB25
BF43	VSS[74]	VSS[5]	AB29
BF5	VSS[75]	VSS[6]	AB4
BG18	VSS[76]	VSS[7]	AB42
BG23	VSS[77]	VSS[8]	AC10
BG28	VSS[78]	VSS[9]	AC11
BG32	VSS[79]	VSS[10]	AC14
BG37	VSS[80]	VSS[11]	AC16
BG40	VSS[81]	VSS[12]	AC38
BG9	VSS[83]	VSS[13]	AC4
C1	VSS[84]	VSS[14]	AC5
A12	VSS[85]	VSS[15]	AC7
C2	VSS[86]	VSS[16]	AC8
C37	VSS[87]	VSS[17]	AD1
A6	VSS[88]	VSS[18]	AD18
C9	VSS[89]	VSS[19]	AD20
D1	VSS[90]	VSS[20]	AD21
D10	VSS[91]	VSS[21]	AD25
D12	VSS[92]	VSS[22]	AD29
D15	VSS[93]	VSS[23]	AD45
D16	VSS[94]	VSS[24]	AE11
B12	VSS[95]	VSS[25]	AE14
D19	VSS[96]	VSS[26]	AE32
D21	VSS[97]	VSS[27]	AE33
D24	VSS[98]	VSS[28]	AE38
D25	VSS[99]	VSS[29]	AK29
D29	VSS[100]	VSS[30]	AK30
D30	VSS[101]	VSS[31]	AK32
D33	VSS[102]	VSS[32]	AK35
D35	VSS[103]	VSS[33]	AK39
D36	VSS[104]	VSS[34]	AL4
D39	VSS[105]	VSS[35]	AL42
D44	VSS[106]	VSS[36]	AM10
D7	VSS[107]	VSS[37]	AM11
P13	VSS[108]	VSS[38]	AM13
P15	VSS[109]	VSS[39]	AM17
P17	VSS[110]	VSS[40]	AM19
P19	VSS[111]	VSS[41]	AM24
P31	VSS[112]	VSS[42]	AM27
P33	VSS[113]	VSS[43]	AM29
P35	VSS[114]	VSS[44]	AM32
P4	VSS[115]	VSS[45]	AM33
P42	VSS[116]	VSS[46]	AM4
P8	VSS[117]	VSS[47]	AN45
R1	VSS[118]	VSS[48]	AP10
R32	VSS[119]	VSS[49]	AP11
T10	VSS[120]	VSS[50]	AP13
T14	VSS[121]	VSS[51]	AP15
T22	VSS[122]	VSS[52]	AP22
T29	VSS[123]	VSS[53]	AP27
T32	VSS[124]	VSS[54]	AP31
T36	VSS[125]	VSS[55]	AP33
T38	VSS[126]	VSS[56]	AP34
Y38	VSS[151]	VSS[57]	AP39
Y4	VSS[152]	VSS[127]	T4
Y8	VSS[153]	VSS[143]	W26
T42	VSS[154]	VSS[128]	V16
T5	VSS[155]	VSS[129]	V17
U4	VSS[156]	VSS[130]	V18
U42	VSS[157]	VSS[131]	V30
V10	VSS[158]	VSS[132]	V32
V14	VSS[159]	VSS[133]	V33
W3	VSS[144]	VSS[134]	V38
AR13	VSS[58]	VSS[135]	V4
AR31	VSS[59]	VSS[136]	V8
AR33	VSS[60]		
AR4	VSS[61]	VSS[138]	W18
AT10	VSS[62]	VSS[139]	W20
AT13	VSS[63]	VSS[140]	W21
AT35	VSS[64]	VSS[141]	W23
AT37	VSS[65]	VSS[142]	W25
AT42	VSS[66]		
AU11	VSS[67]	VSS_1	A44
AU17	VSS[68]	VSS_10	BE1
BD30	VSS[69]	VSS_11	BD1
W45	VSS[145]	VSS_14	B1
Y13	VSS[146]	VSS_15	A2
Y14	VSS[147]	VSS_16	B2
Y30	VSS[148]	VSS_17	A3
Y32	VSS[149]	VSS_18	A4
Y33	VSS[150]	VSS_2	B44
BG14	VSS_BG14	VSS_3	B45

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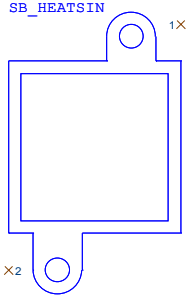
FH82H410 SRH1D/S/[10HB1-03H410-10R]

SB_HEATSIN



業務指定使用B150M-EVO Heatsink

BGAHSINK_SB-N

PCH_HS

PCH_HS/[12SP2-030005-51R_12SP2-030005-52R_12SP2-030005-53R]

Gigabyte Technology			ANS 7926690
Title: PCH GND			
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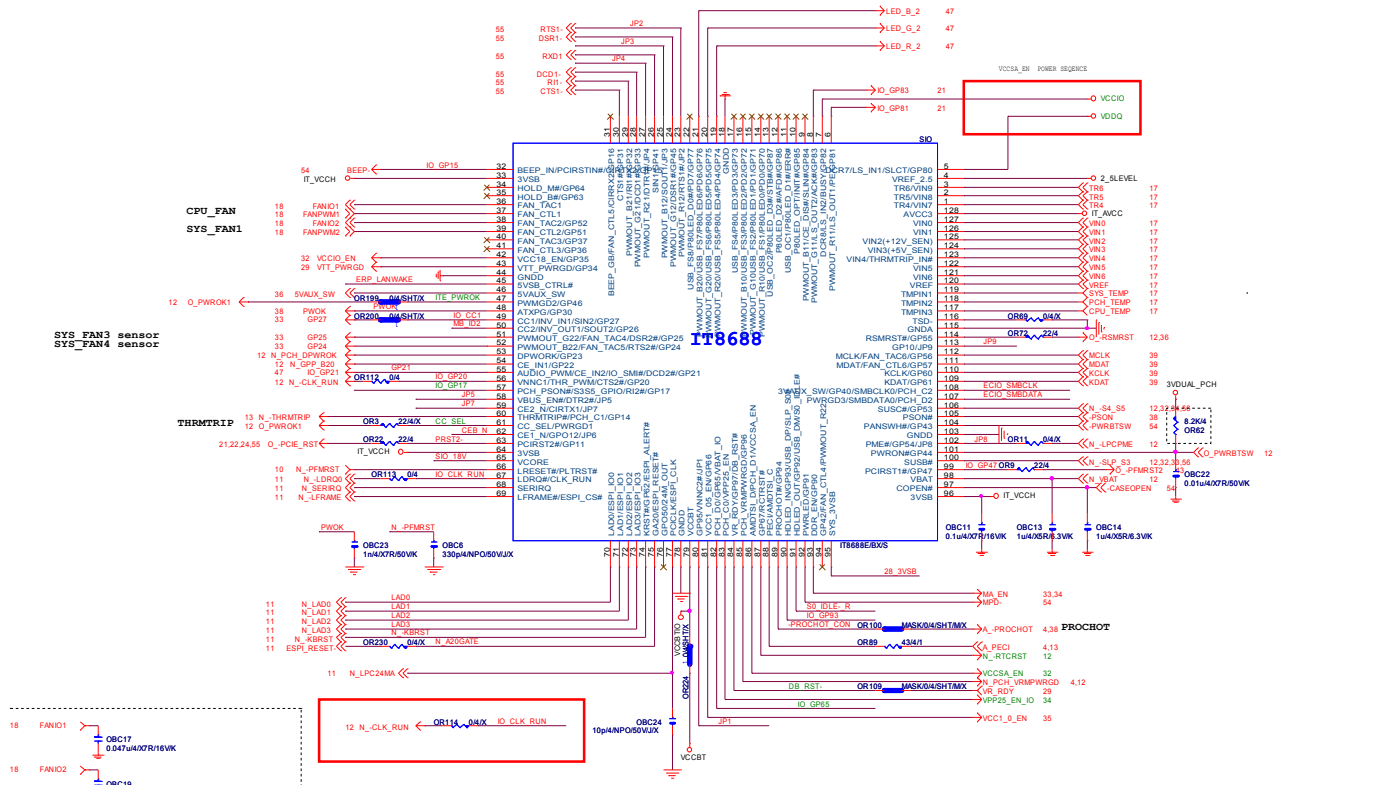
CFL SIO IT8686 REV:0.5

IT8686 LPT+COMA



FAN TABLE	
CPU_FAN	FAN_CTL1 FAN_TAC1
SYS_FAN1	FAN_CTL2 FAN_TAC2
SYS_FAN2	FAN_CTL3 FAN_TAC3
SYS_FAN3	FAN_CTL4 FAN_TAC4
OPT FAN or SYS_FAN4	FAN_CTL5 FAN_TAC5
THRMTRIP	PIN56
PROCHOT	PIN89

DUAL BIOS OPT STRAP

OR58 上件/OR56 不上件 SINGLE BIOS

OR58 不上件/OR56 上件 DUAL BIOS

MB ID

Placement CPU

CPU 端 A_-THRMTRIP不可與PCH及SIO N_-THRMTRIP直接連接。

否則會出現無法拉LOW情況。

SIO CAP

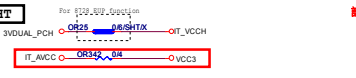
CLOSE SIO PIN4 2_5LEVEL

SIO_18V

internal power pin, max 22nF cap

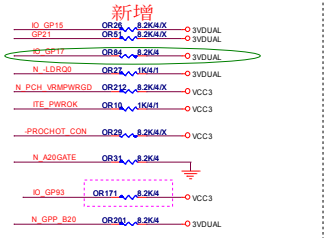
for LPC/eSPI power mode

PWR SHT



SIO PU

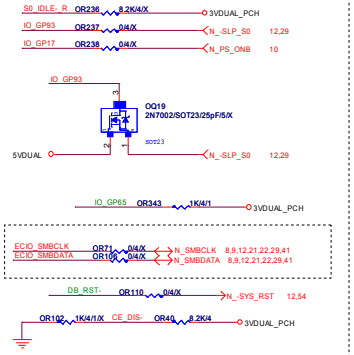
新增



SIO STRAP

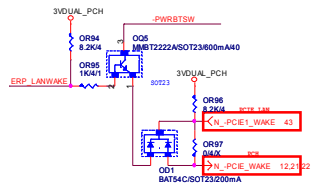
EUP control detect

JP2	1	Disable WDT to rest PWROK
	0	Enable WDT to rest PWROK
JP3		Dual-BIOS CS pin mode select bit "0" See the below table
JP4	1	LPC/ESPI power VCCBT = 3.3V
	0	LPC/ESPI power VCCBT = 1.8V
JP5	1	LPC I/F
	0	ESPI I/F
JP6	1	Enable Dual BIOS Function (for GigaByte Only)
	0	Disable Dual BIOS Function (for GigaByte Only)
JP7		Dual-BIOS CE pin mode select bit "1" See the below table
JP7 JP3	1 1	CE pin disable (Hold pin mode)
	1 0	CE mode 1
	0 1	CE mode 2
	0 0	CE mode 3



請依開案規格，選擇Support Erp下 LAN Wake up組態。

(組態一) PCIE LAN(Single & Dual LAN)



ERP Wake on LAN		
Single LAN	Realtek	組態一
	Atheros	
	Intel 219	組態二
Dual LAN (只留一個LAN支援ERP下WAKE UP)	Atheros+Atheros	組態一
	Intel 219+Atheros	組態三
	Intel 219+Intel 210	
No Support ERP	Single LAN BOM只上OR97。 Dual LAN BOM只上OR97、OR99。	

Gigabyte Technology

Title	IT8686	
Size: Custom	Document Number: H410M DS2V	Rev: 1.01
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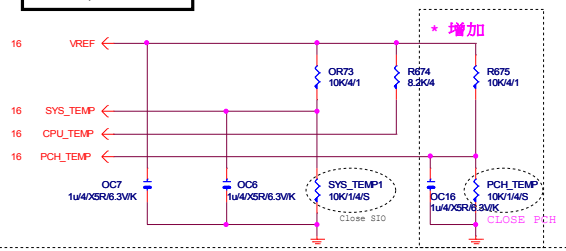
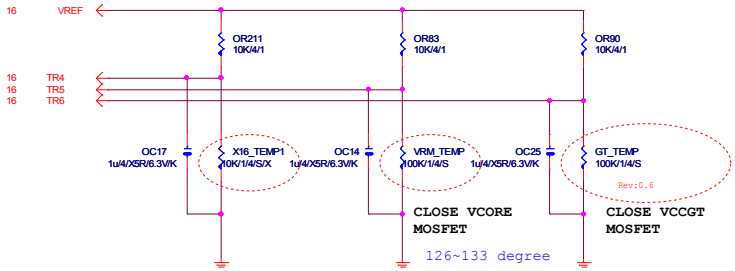
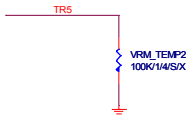
TEMP H/W MONITOR

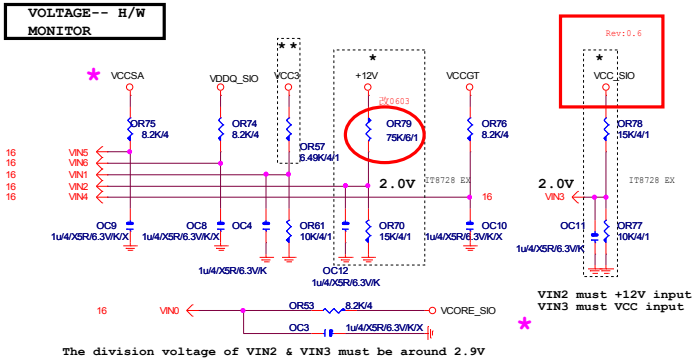


低階機種:3個FAN時使用



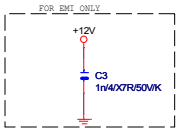


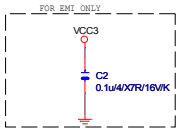
VOLTAGE-- H/W MONITOR



The division voltage of VIN2 & VIN3 must be around 2.9V

(靠近ATX CONNECTOR)





★Update 2015-04.24

Gigabyte Technology		
Title: HWM,KB/MS, FAN CTRL		
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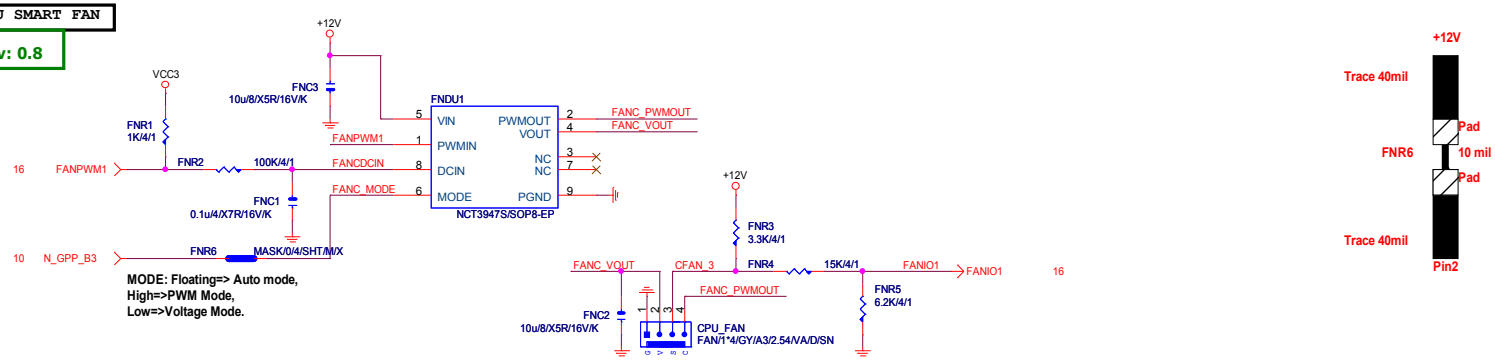
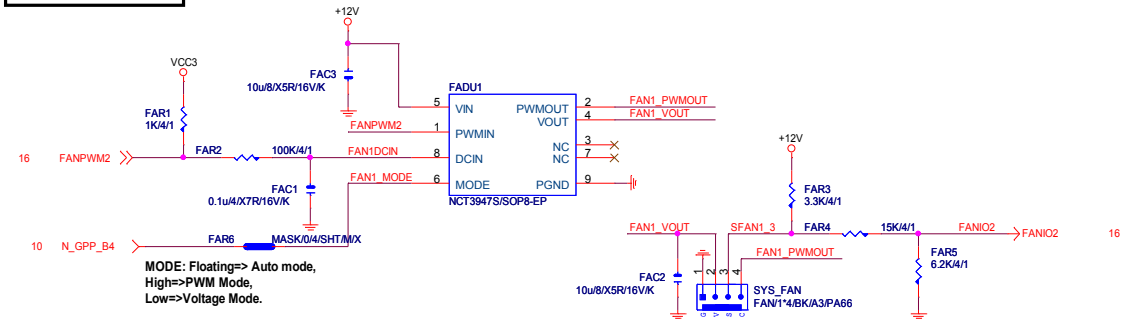
CPU SMART FAN

Rev: 0.8



A. SYSTEM FAN1



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Gigabyte Technology			
Title: FAN CTRL			
Size: Custom	Document Number: H410M DS2V		Rev: 1.01
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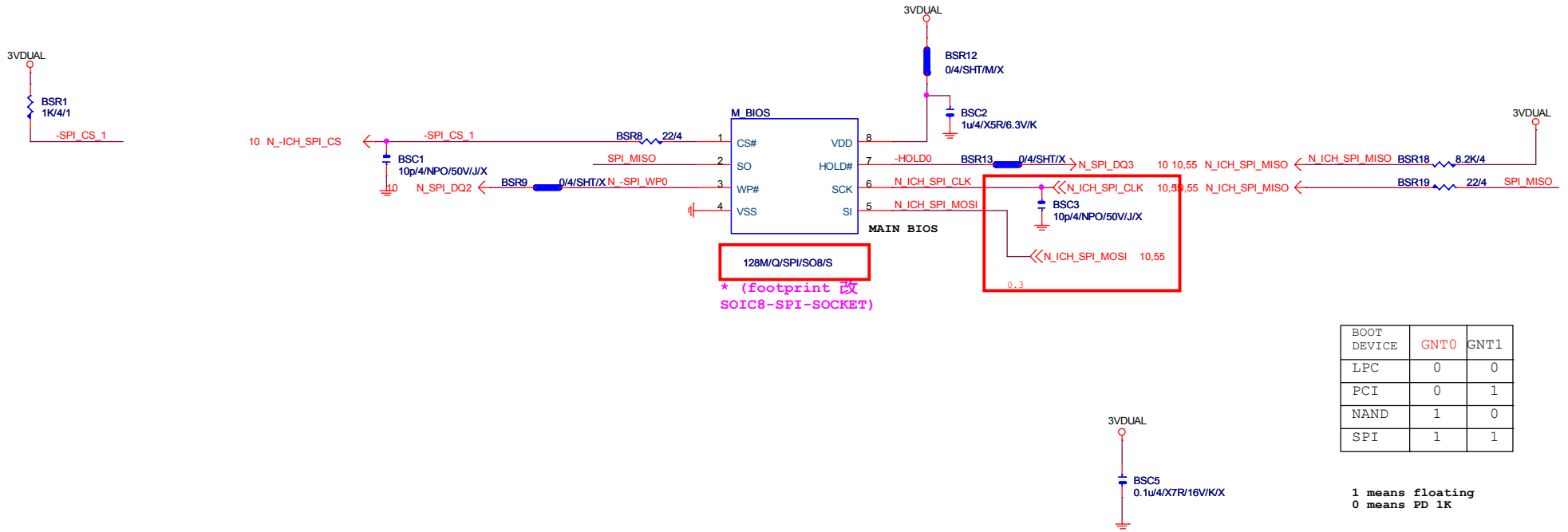
DUAL BIOS

MOSI For DMI RX Termination Voltage

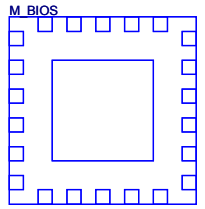


BOOT DEVICE	GNT0	GNT1
LPC	0	0
PCI	0	1
NAND	1	0
SPI	1	1

3VDUAL

BSC5
0.1u/4/X7R/16V/K/X

1 means floating
0 means PD 1K



LCP/G-FL/1.27mm/200MIL/WHITE[10SL2-000008-31R]/X

* 試產先上 , PVT 移除

Gigabyte Technology

Title: BIOS

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CEC_R0.3

GIGABYTE™

Title: CEC relate circuit

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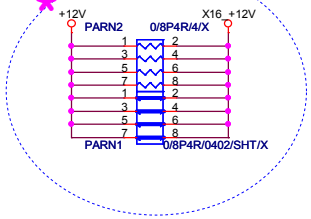
Rev 0.2

+12 protect
short-wire test



PCIESLOT-164P

PCIEX16

3GIO_*16

KEY

PCI-E/16X-164P/GY/LONG DOUBLE/HK*2

黑色SLOT

PCIEX16:16/5/5/5/16

PCI-E REV:1.1--> 2.5GHZ

PCE-E X1(單向) BANDWITH=2.5GHz*(8b/10b)=2Gb/s=250MB/s

PCE-E X1(雙向) BANDWITH=2.5GHz*(8b/10b)X2=4Gb/s=500MB/s

PCE-E X16(單向) BANDWITH=2.5GHz*(8b/10b)X16=32Gb/s=4GB/s

PCE-E X16(雙向) BANDWITH=2.5GHz*(8b/10b)X16X2=64Gb/s=8GB/s

PCI-E REV:2.0--> 5GHZ

Gigabyte Technology	
Title	PCI EXPRESS * 16
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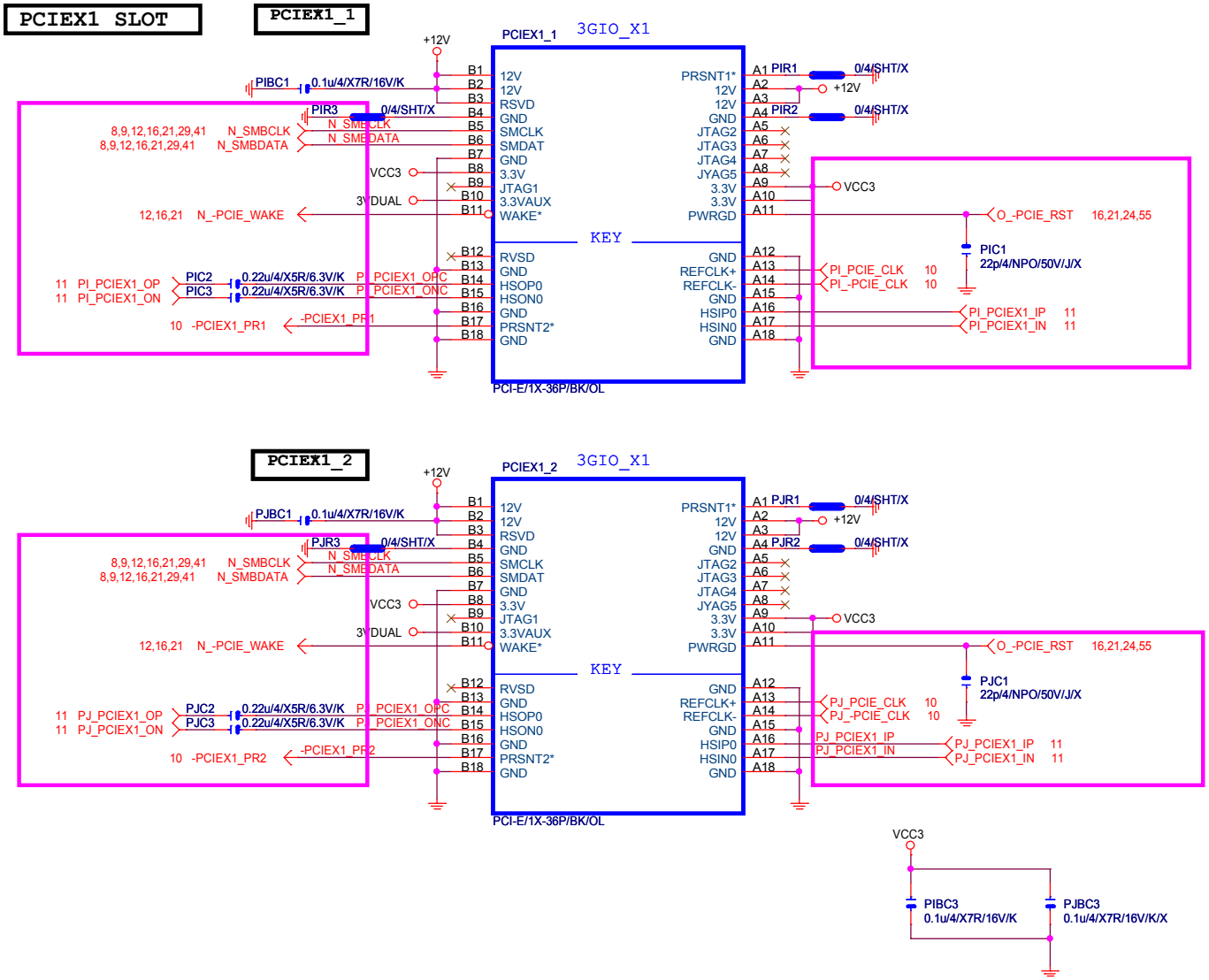
Rev 0.51



Gigabyte Technology		
Title: PCIE_X4		
Size: Custom	Document Number: H410M DS2V	Rev: 1.01
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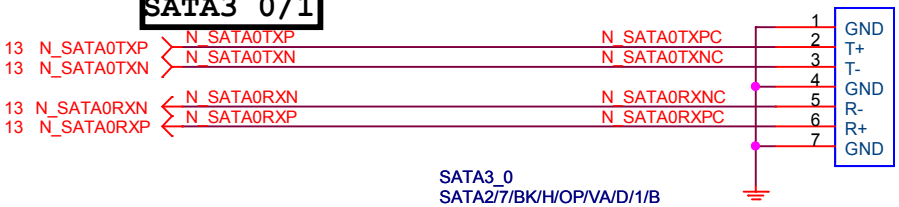
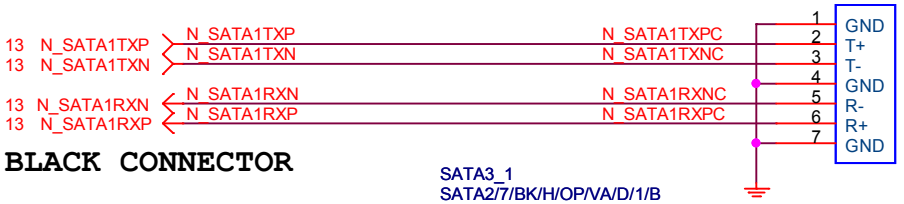
SATA3 0/1



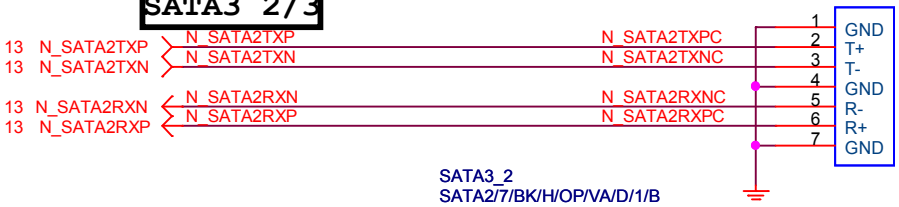
SATA3_0
SATA2/7/BK/H/OP/VA/D/1/B



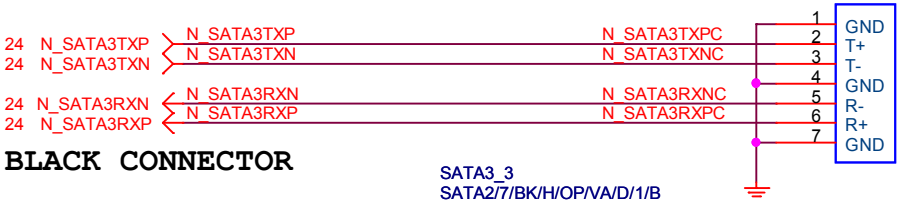
BLACK CONNECTOR

SATA3_1
SATA2/7/BK/H/OP/VA/D/1/B

SATA3 2/3



SATA3_2
SATA2/7/BK/H/OP/VA/D/1/B



BLACK CONNECTOR

SATA3_3
SATA2/7/BK/H/OP/VA/D/1/B

SATA3 4/5

Gigabyte Technology		
Title: SATA		
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Rev 0.4

M.2 Lane2 from PCH port17

M.2 Lane2 from PCH port16

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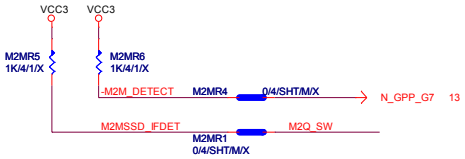
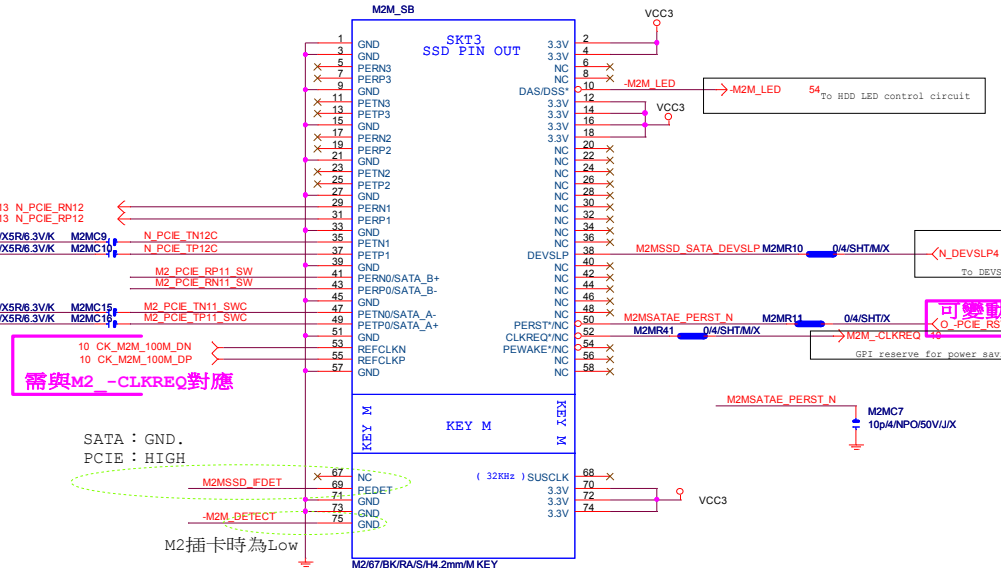
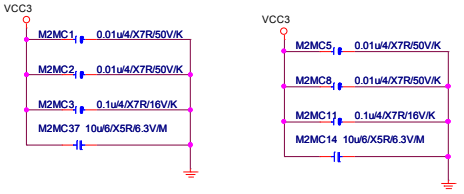
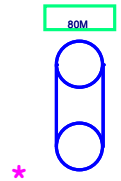
支援SATA and M.2 function



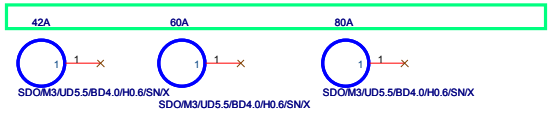




M.2扣具



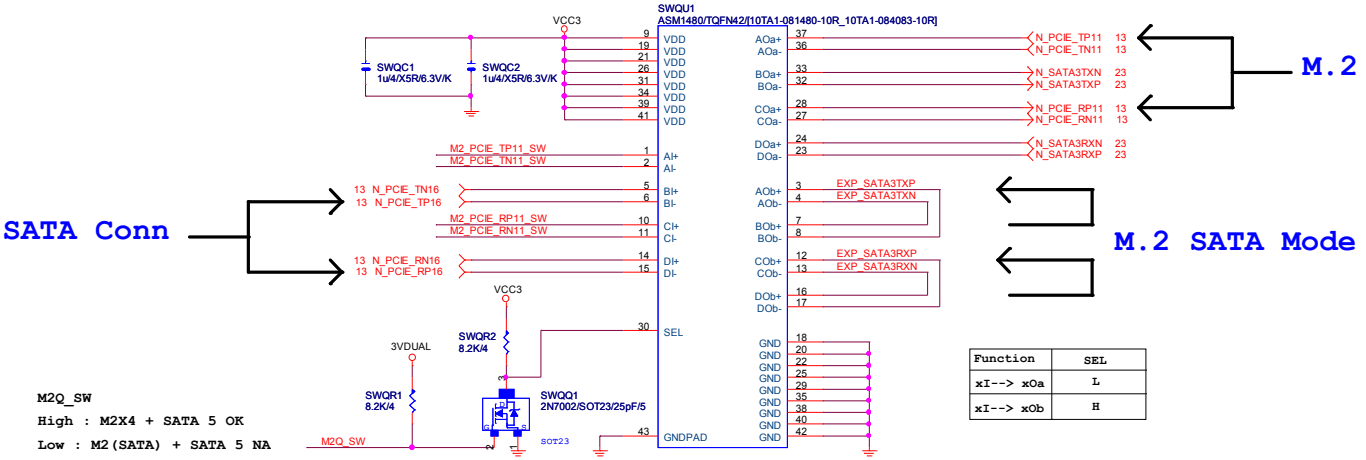
SMD螺柱



★ Footprint : HOLE_165NP

★ Footprint : NGFF-M-75P-8CM-09MM-SMD

舊的Switch,價格低



M2Q_SW
High : M2X4 + SATA 5 OK
Low : M2(SATA) + SATA 5 NA

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

Gigabyte Technology

Title: M.2 X4

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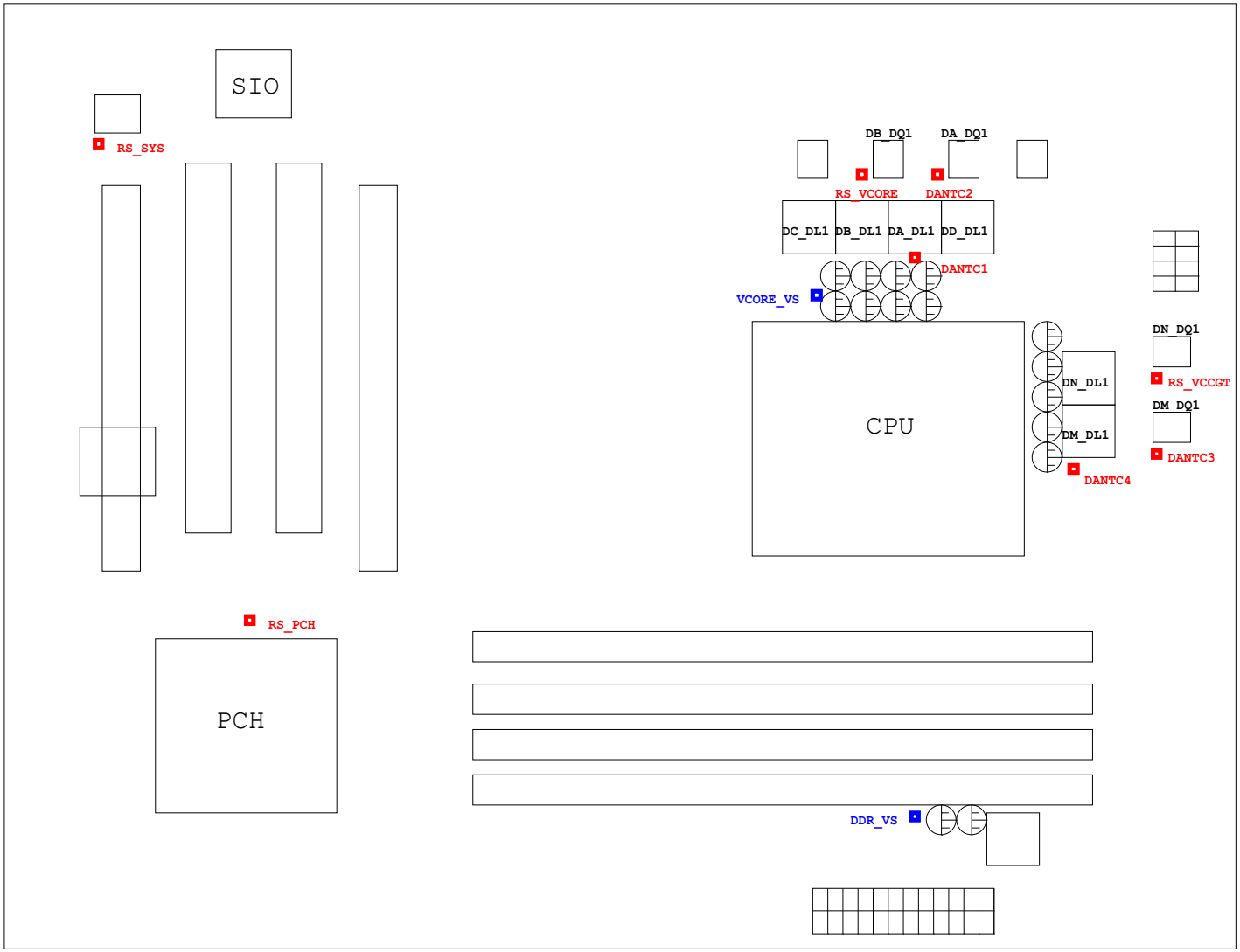

熱敏電阻	擺放靠近位置	走線方式
DANTC1	DA_DL1	N/A
DANTC2	DA_DQ1	Differential
DANTC3	DM_DQ1	N/A
DANTC4	DM_DL1	Differential
RS_VCORE	DB_DQ1	N/A
RS_VCCGT	DN_DQ1	N/A
RS_PCH	PCH	N/A
RS_SYS	CU1	N/A

Gigabyte Technology

Title: NTC MAP

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Gigabyte Technology

Title

IT8892E

Size	Document Number	Rev
Custom	H410M DS2V	1.01

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GIGABYTE™

Title: PCI SLOT 1&2

Size: Custom | Document Number: H410M DS2V | Rev: 1.01

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Rev 0.1

Gigabyte Technology			
Title: ASM1085 POWER			
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REV:0.1

CEC:DAR133.DAR132 上件.DAR18.DAR19.DAR23.DAR131不上件

non CEC:DAR133.DAR132 不上件.DAR18.DAR19.DAR23.上件.
DAR131改short pad
DAR131 short pad footprint:R0603-RH-SHORT30-MASK

VCORE_SIO — VCORE_VS — VCORE
MASK/0/4/SHT/M/X
請注意擺放位置

+12V — DAR128 8.2K/4 — DAQ5 2N7002/SOT23/25pF/5 — 5VDUAL — V_95856

VCCST_VCCPLL — DAC40 1u/4/X5R/6.3V/K — DAR12 100/4/1 — DAR13 100/4/1/X — DAR14 45.3/4/1 — DAR17 2K/4/1/X 不上件
VCCST_VCCPLL — DAR18 2K/4/1
VCC3 — DAR19 10K/4/1
VIN — DAR7 2.2/6/X — DAR8 2.2/6/X — DAR9 2.2/6 — DAC2 1u/4/X5R/6.3V/K — DAC3 1u/6/X7R/16V/K
3VDUAL — DAR133 2K/4/1/X — DAR132 10K/4/1/X
DAR23 3.3K/4/1
DAU1 ISL95856 VDD VDDP

VIN — DAR131 0/6 — VIN_CEC
DAC41 0.22u/6/X7R/16V/K — ISL95856_VIN

VTT_PWRGD_PWM — DAR136 MASK/0/4/SHT/M/10/X
VR_RDY — VR_HOT — VR_ENABLE — VR_READY — VR_HOT#
PVIDSLCK — -PVIDALRT — PVIDSOUT — DAR76 49.9/4/1 — DAR77 MASK/0/4/SHT/M/10/X — DAR78 10/4 — PVIDSLCK_R — -PVIDALRT_R — PVIDSOUT_R — SCLK — ALERT# — SDA
8,9,12,16,21,22,41 N_SMBDATA — 8,9,12,16,21,22,41 N_SMBCLK — I2DATA — I2CLK
PSYS

DC-LL --> 1.1mohm
DAC10 820p/4/X7R/50V/K — DAR37 2K/4/1 — DAR137 MASK/0/4/SHT/M/10/X — DAR35 6.2K/4/1 — DAC8 4.7n/4/X7R/50V/K — DAC11 47p/4/NPO/50V/J — COMP_A
DAR34 8.2K/4 — VCORE — DAR40 1K/4/1 — DAC14 330p/4/NPO/50V/J — DAR39 100/4/1 — DAR41 7.5K/4/1 — FB_CPU — FB_A
7 VCORE_VCC_SEN — DAR139 205K/4/1 — PROG2
7 VCORE_VSS_SEN — DAC38 330p/4/NPO/50V/J — DAR46 100/4/1 — DAC17 330p/4/NPO/50V/J — DAC18 4.7n/4/X7R/50V/K — RTN_A
VCORE — DAR129 100/4/1 — close PWM

DC-LL --> 4mohm
VCCGT — DAR130 100/4/1 — DAR140 MASK/0/4/SHT/M/10/X — DAC23 1.2n/4/X7R/50V/K — DAR57 1.74K/4/1 — DAC22 4.7n/4/X7R/50V/K — DAR55 8.2K/4/1 — DAC24 47p/4/NPO/50V/J — COMP_B
DAR61 1K/4/1 — DAC26 330p/4/NPO/50V/J — DAR60 100/4/1 — DAR63 3.4K/4/1 — FB_GT — FB_B
6 VCCGT_SENSE — DAR142 63.4K/4/1 — PROG3
6 VSSGT_SENSE — DAC39 330p/4/NPO/50V/J — DAR66 100/4/1 — DAC29 330p/4/NPO/50V/J — DAC30 4.7n/4/X7R/50V/K — RTN_B

PROG1 — DAR70 2.87K/4/1
GND_PAD — 53 — 8 VIA Connect GND lay
ISL95866CHRZ-T/QFN-52

VIN_CEC — ISL95856_VIN
BOOT1_A — UGATE1_A — PHASE1_A — LGATE1_A — DAR26 2.2/6 — DAC5 0.22u/6/X7R/16V/K — PHASE1_A 30
BOOT2_A — UGATE2_A — PHASE2_A — LGATE2_A — DAR31 2.2/6 — DAC7 0.22u/6/X7R/16V/K — PHASE2_A 30
PWM3_A — PWM4_A — NC/PWM4_A
ISEN1_A — ISEN2_A — ISEN3_A — ISEN4_A — NC/ISEN4_A
ISUMP_A — ISUMN_A — VSUMA- — DAR44 698/4/1 — DAC16 2.2n/4/X7R/50V/K — DAR42 1K/4/1 — DAC12 0.22u/4/X5R/6.3V/K — DAC13 0.22u/4/X5R/6.3V/K — DAC43 0.33u/4/X5R/6.3V/K — DAR38 33K/4/1 — DAR36 1K/4/1 — DANTC1 10K/1/4/S — VSUMA+
NTC_A — DAR47 14K/4/1 — DAC19 0.1u/4/X7R/16V/K
IMON_A — IMON_A_1 — DAR49 MASK/0/4/SHT/M/10/X — DAC21 330p/4/NPO/50V/J — DAR52 82.5K/4/1 — DAR53 18K/4/1 — DANTC2 470K/1/4/S

DAR44-->698 ohm
OCP-->260A
CLOSE DA_DL1 DC SIDE
CLOSE PHASE 1 MOSFET

BOOT1_B — UGATE1_B — PHASE1_B — LGATE1_B — DAR58 2.2/6 — DAC25 0.22u/6/X7R/16V/K — PHASE1_B 31
PWM2_B — NC/PWM3_B
ISEN1_B — ISEN2_B — NC/ISEN3_B — DAR93 2.2/4 — DAR92 2.2/4 — 0V_95856
for ISL95856 DISABLE PH3
ISUMP_B — ISUMN_B — VSUMB- — DAR54 10/4 — V1N_B
NTC_B — DAR67 12.7K/4/1
IMON_B — DAR69 MASK/0/4/SHT/M/10/X — DAC33 330p/4/NPO/50V/J — DAR72 100K/4/1 — DAR73 18K/4/1 — DANTC3 470K/1/4/S — DAR71 374/4/1 — DAC31 2.2n/4/X7R/50V/K — DAC32 0.1u/4/X7R/16V/K — DAC34 0.1u/4/X7R/16V/K — DAR74 11K/4/1 — DAR75 1K/4/1 — DAC44 0.047u/4/X7R/16V/K — DAR68 2.61K/4/1 — DANTC4 10K/1/4/S — VSUMB+ — VSUMB-
DAC35 0.1u/4/X7R/16V/K

DAR71-->374ohm
OCP-->50A
CLOSE DE_DL1 DC SIDE
CLOSE PHASE 1 MOSFET

VSUMA+ — DAR1 3.65K/4/1 — CSP1_A 30 — ISEN1_A — DAR2 100K/4/1 — DAR3 100K/4/1 — V2N_A — DAR4 100K/4/1 — V3N_A — DAR81 100K/4/1 — V4N_A — DAR6 10/4 — V1N_A — DAC1 0.022u/4/X7R/25V/K — DAR5 200K/4/1/X — VSUMA-
VSUMA+ — DAR10 3.65K/4/1 — CSP2_A 30 — ISEN2_A — DAR11 100K/4/1 — DAR20 100K/4/1 — V1N_A — DAR22 — DAR21 100K/4/1 — V3N_A — DAR82 100K/4/1 — V4N_A — DAR24 10/4 — V2N_A — DAC4 0.022u/4/X7R/25V/K — 200K/4/1/X — VSUMA-
VSUMA+ — DAR25 3.65K/4/1 — CSP3_A 30 — ISEN3_A — DAR27 100K/4/1 — DAR28 100K/4/1 — V1N_A — DAR30 — DAR29 100K/4/1 — V2N_A — DAR83 100K/4/1 — V4N_A — DAR32 10/4 — V3N_A — DAC6 0.022u/4/X7R/25V/K — 200K/4/1/X — VSUMA-
VSUMA+ — DAR84 3.65K/4/1 — CSP4_A 30 — ISEN4_A — DAR85 100K/4/1 — DAR86 100K/4/1 — V1N_A — DAR89 — DAR87 100K/4/1 — V2N_A — DAR90 100K/4/1 — V3N_A — DAR91 10/4 — V4N_A — DAC42 0.022u/4/X7R/25V/K — 200K/4/1/X — VSUMA-
V1N_A — V2N_A — V3N_A — V4N_A — CSN1_A — CSN2_A — CSN3_A — CSN4_A — 30
CLOSE PWM

VSUMB+ — DAR43 3.65K/4/1 — CSP1_B 31 — ISEN1_B — VSUMB- — DAR54 10/4 — V1N_B
V1N_B — CSN1_B 31
CLOSE PWM

+12V — DAR126 11K/4/1 — FB_CPU — DAR122 8.2K/4/1 — DAQ4 2N7002/SOT23/25pF/5 — VCORE_VCC_SEN
+12V — DAR123 8.2K/4/1 — DAQ3 2N7002/SOT23/25pF/5
VCC3 — 不上件 — DAR120 1K/4/1/X — DAR121 8.2K/4 — DAQ6 MMBT2222A/SOT23/600mA/40 — 13 N_CPU_S
connect to N_GPP_F12

3VDUAL — DAR113 8.2K/4 — DAQ1 2N7002/SOT23/25pF/5 — VTT_PWRGD_PWM — DAC48 0.01u/4/X7R/50V/K/X
VCC3 — DAR114 8.2K/4 — DAQ2 2N7002/SOT23/25pF/5 — DAD3 BAT54C/SOT23/200mA/X — DAC49 4.7u/6/X5R/6.3V/K — 12,16 N_SLP_S0
16 VTT_PWRGD — DAR115 0/4/X — VTT_PWRGD_PWM

GIGABYTE™

Title	ISL95866C_PWM	
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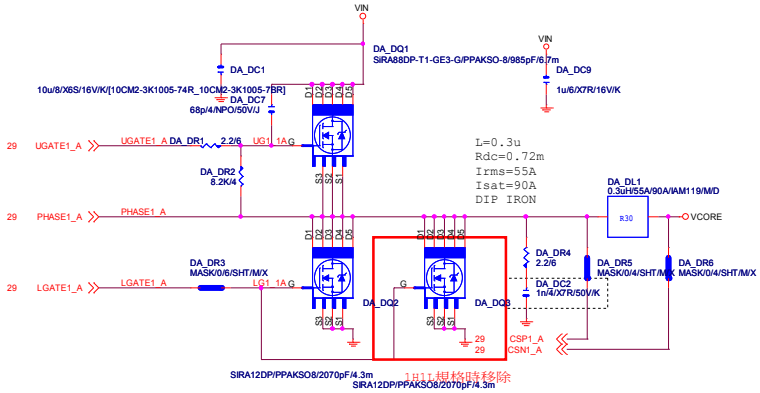
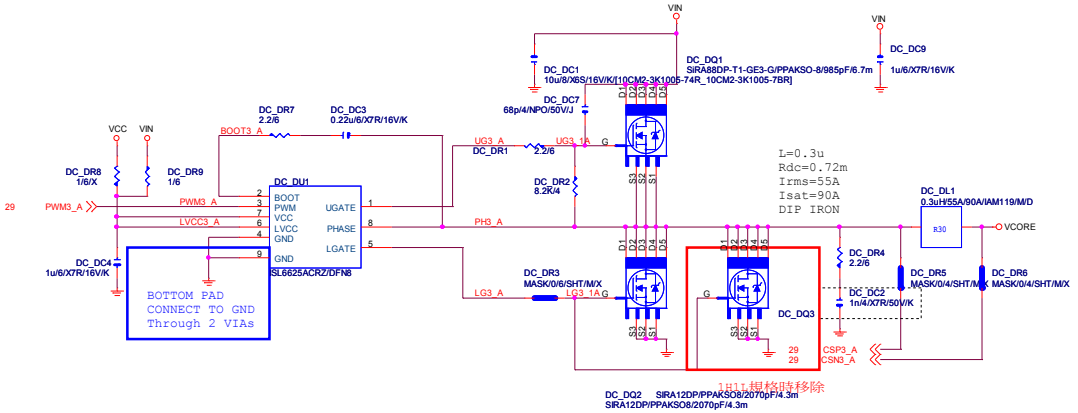
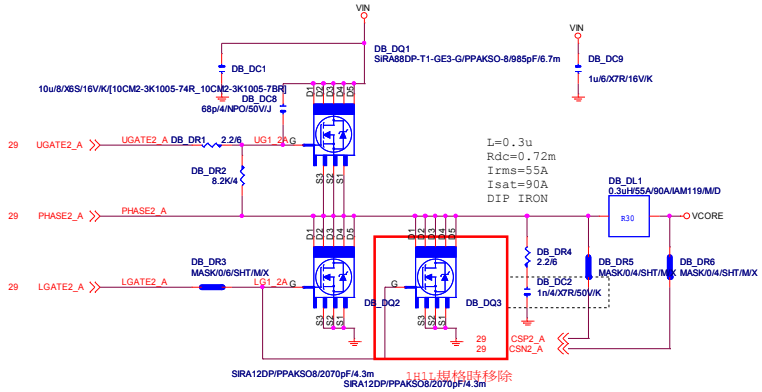
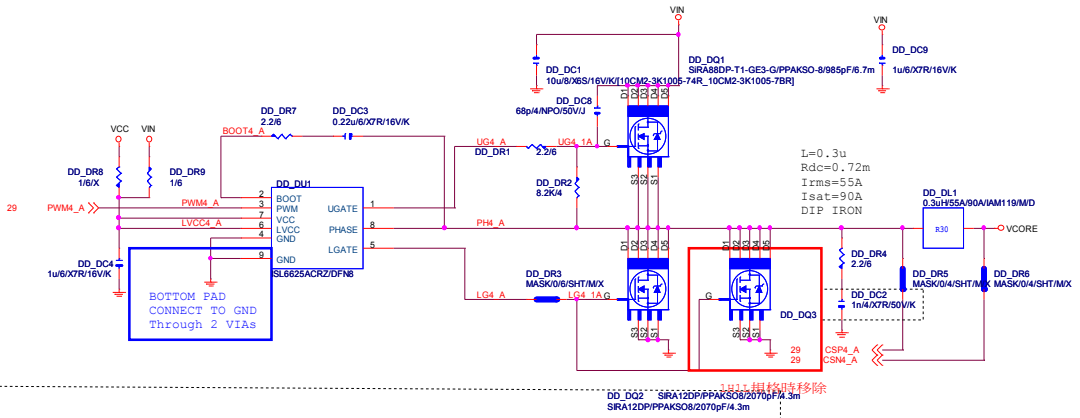
REV:0.1

VCORE



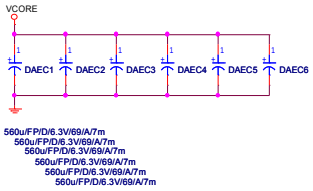


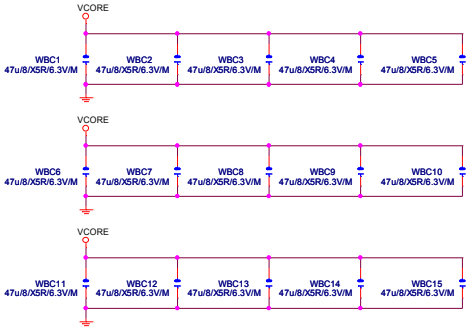


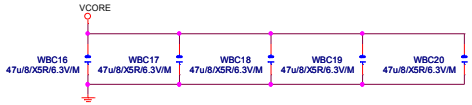


VCORE CAP

560u*6PCS
22u*20PCS



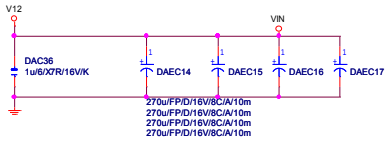




放CPU SOCKET (TOP LAYER)

VIN CAP

270u*4PCS



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Title	ISL95866C_MOS	
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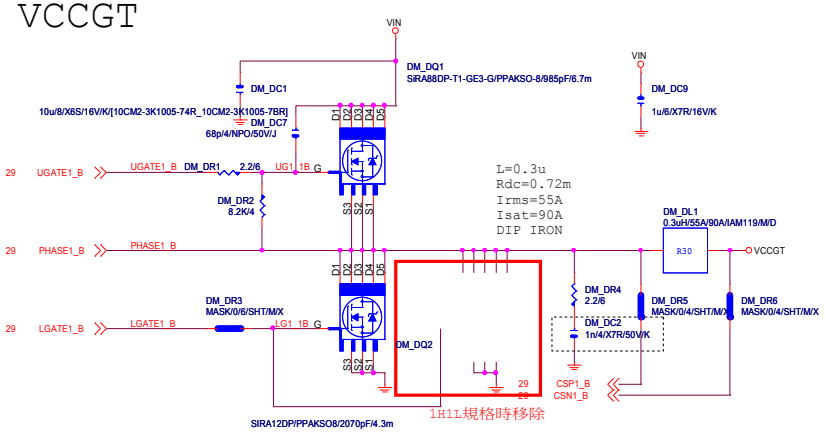
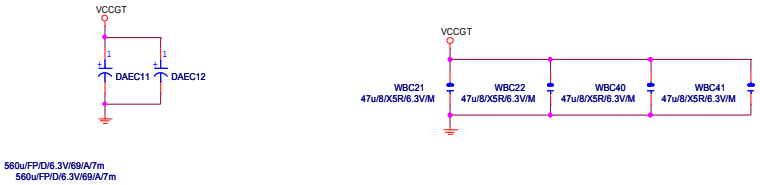
REV::0.1

VCCGT



VCCGT CAP 560u*2PCS 22u*4PCS



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Title: ISL95866C_MOS		
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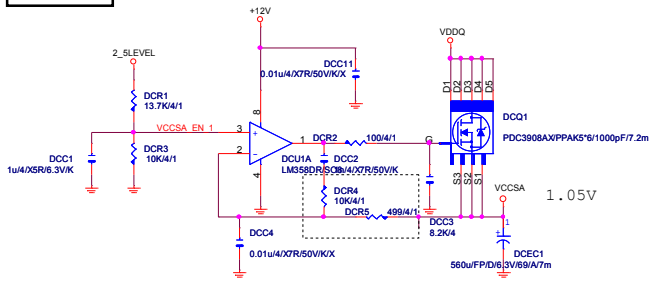
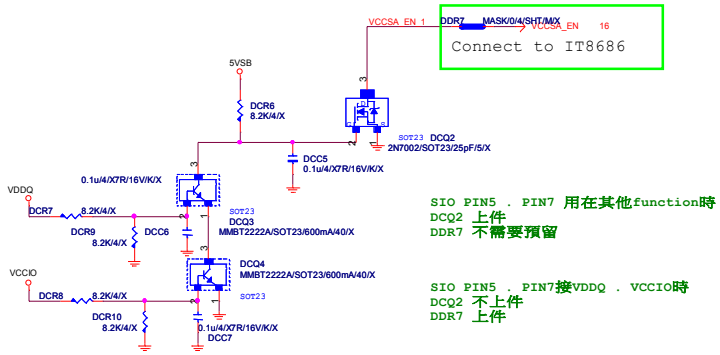
REV:0.3

VCCSA

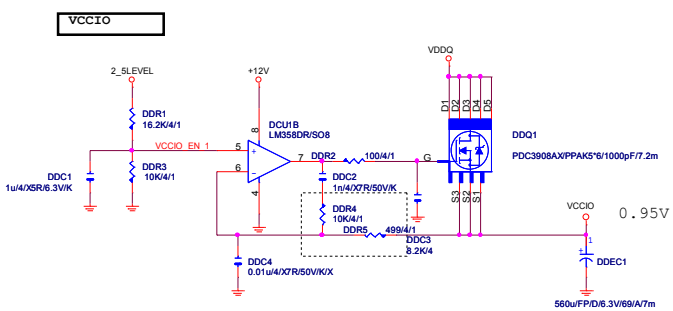


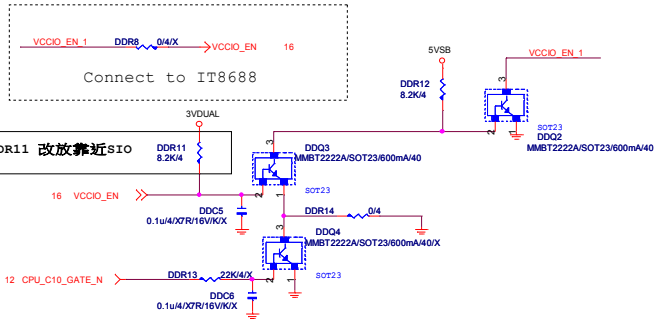


SIO PIN5 . PIN7 用在其他function時
DCQ2 上件
DDR7 不需要預留

SIO PIN5 . PIN7接VDDQ . VCCIO時
DCQ2 不上件
DDR7 上件

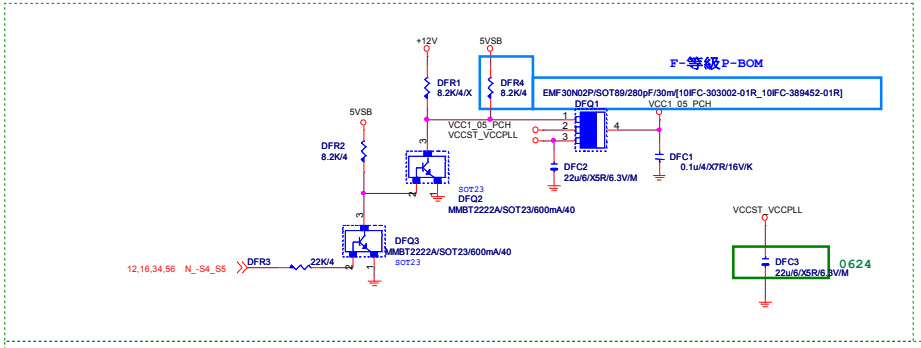
VCCIO



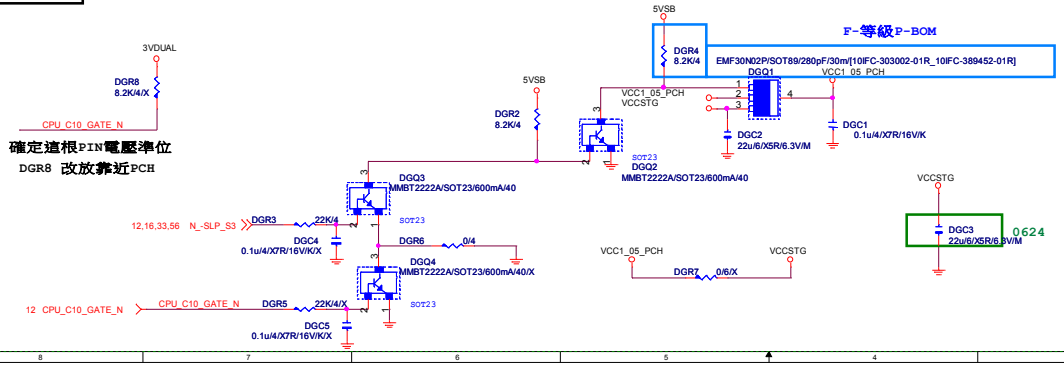


DDR11 改放靠近SIO

VCCST_VCCPLL



VCCSTG



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Title	VCCSA_VCCIO_no 44E	
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REV:0.3

DDR4

5VDUAL
MAR2 8.2K/4
MA_EN
上件

MA_DR38.MA_DC15

VPP_25V使用8120.8068A.RT8237時上件

VDDQ_SIO VDDQ
DDR_VS
MASK/0/4/SHT/M/X

PWR SEQ

CLOSE TO DDR POWER PLANE

For power sequence require

VPP_25V使用8120時上件

5VDUAL
MA_DR8 2.2/6
MA_DC10 1u/6/X7R/16V/K
MA_DR37 100K/4/1
VDDQ_GD
MA_DC9 0.1u/6/X7R/25V/K
VPP_25V
MA_DR40 8.2K/4/X
MA_DR41 8.2K/4
34 VPP25V_GD
MA_DR38
MASK/0/4/SHT/M/10/X
DDR_EN
16,34 MA_EN
MA_DR39 0/4/X
MA_DC15 0.1u/4/X7R/16V/K
MAU2
RT8237/[10TA1-608237-01R]
EN PGOOD VCC BOOT UGATE PHASE FB CS RF GND LGATE
MA_UGATE
MA_PHASE
MA_LGATE
MA_RF
MA_DR45 470K/4/1
MA_DR15 182K/4/1
MA_DR19 470K/4/1/X
VDDQ_GD

FS=290K
OCP=40A

PIN7-->20mil
PIN1-->6mil
PIN2-->6mil
PIN5-->6mil
PIN3-->6mil

MOSFET請依MOSFET使用規則.自行選擇
ON-->10IF9-040406-10R[NTMFS4C06N/N/PPAK/1400pF/4m]
VISHAY-->10IF9-040012-10R[SIRA12DP/PPAKSO8/2070pF/4.3m]

5VDUAL
MA_L2 47/4030/15A/S
BEAD
MA_DC6 0.1u/4/X7R/16V/K Close Choke
MA_DC25 68p/4/NPO/50V/J/X
MA_VIN
MA_DC7 1u/6/X7R/16V/K Close MOS
MAEC1 560u/FP/D/6.3V/69/A/7m
MA_DQ1 SIRA12DP/PPAKSO8/2070pF/4.3m
MA_UGATE MA_DR1 2.2/6 MA_UG
MA_DR2 8.2K/4
MA_PHASE
MA_DQ2
MA_LGATE MA_DR9 2.2/6 MA_LG
SIRA12DP/PPAKSO8/2070pF/4.3m
MA_L1 1uH/35A/IMD109/BP/D
R50
10*10
MA_DR5 2.2/6
MA_DC5 1n/4/X7R/50V/K
MA_DC14 22p/4/NPO/50V/J/X RS
VDDQ
MA_DR13 2K/4/1
RO
MA_DR12 2.8K/4/1
DDR_ADJ

DDR VIN CAP
560u*2PCS

CHOKE與CAP料號可變

SUPPORT DDR4 1.2V
25A MAX

L=1u
DCR=2.5 mohm
Isat=35A
Idc=28A

1H1L規格移除

請放置CHOKE一出來位置.先預留.
請自行確認ripple後再決定是否上件

Remote sense請從最重的負載端點拉回

MAC60 22u/6/X5R/6.3V/M

16 GP25 MA_DR46 9.1K/4/1 1.35V
16 GP24 MA_DR21 26.1K/4/1 1.25V
16 GP27 MA_DR22 6.8K/4/1 1.4V

MAU1上RT9045時上件(不可MASK)

DDRVTT

VDDQ
NCT3103S/SOP8/2A/[10GL2-203103-01R]
MAU1
MAC2 1u/4/X5R/6.3V/K
MAR5 1K/4/1
MA_VTT_REF
MAC1 0.01u/4/X7R/50V/K
MAR4 1K/4/1
VIN GND VREF1 VOUT VREF2 ENABLE VCNTL BOOT_SEL GND
DDRVTT_EN
DDRVTT_BOOT
1.1A MAX
DDRVTT
5VDUAL
MAC7 10u/6/X5R/6.3V/M

DDR CAP

560u*4PCS 22u*2PCS

VDDQ
Footprint EC6D8MM-RH-2
MAEC3 560u/FP/D/6.3V/69/A/7m
MAEC4 560u/FP/D/6.3V/69/A/7m
* 大電容 x4

DDRVTT CAP

* 大電容 x0

DDRVTT
MAC4 22u/6/X5R/6.3V/M

4 DDR_VTT_CTL
12,16,32,56 N_SLP_S3
DDR_VTT_CTL MAR110 MASK/0/4/SHT/M/10/X DDRVTT_EN
N_SLP_S3 MAR111 MASK/0/4/SHT/M/10/X DDRVTT_BOOT

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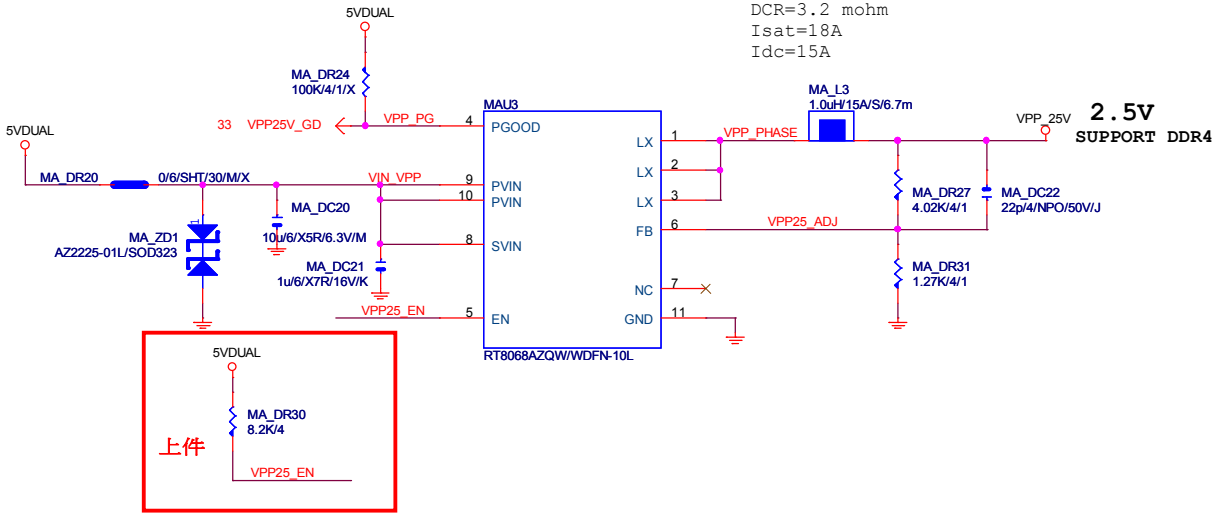
REV:0.1

VPP_25V

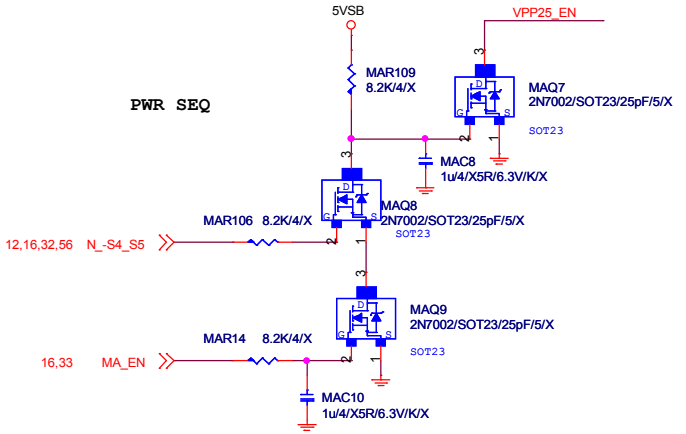
CHOKE與CAP料號可變

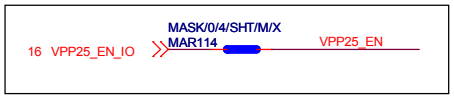
L=1u
DCR=3.2 mohm
Isat=18A
Idc=15A



PWR SEQ

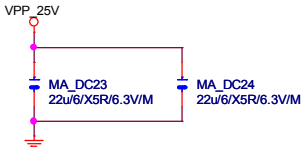
* 刪 MA_DR32





VPP CAP 22u*1PCS

* 大電容 x0



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Title: RT8068A_VPP25 POWER

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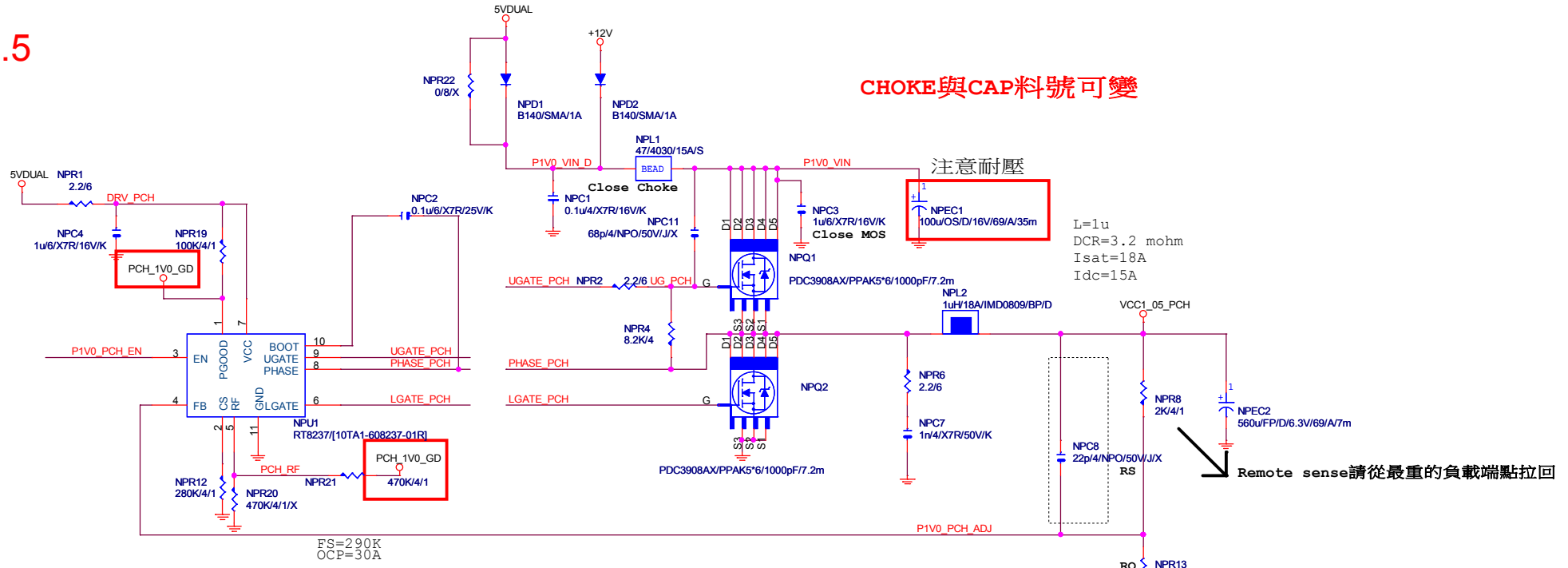
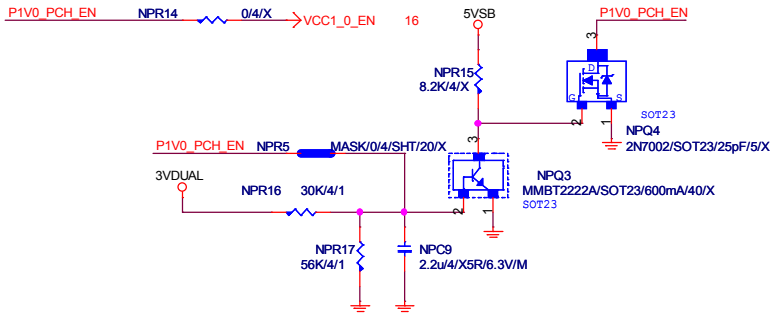
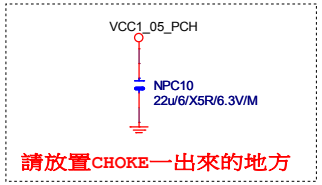
REV:0.5



PWR SEQ





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Title	RT8237_PCH POWER	
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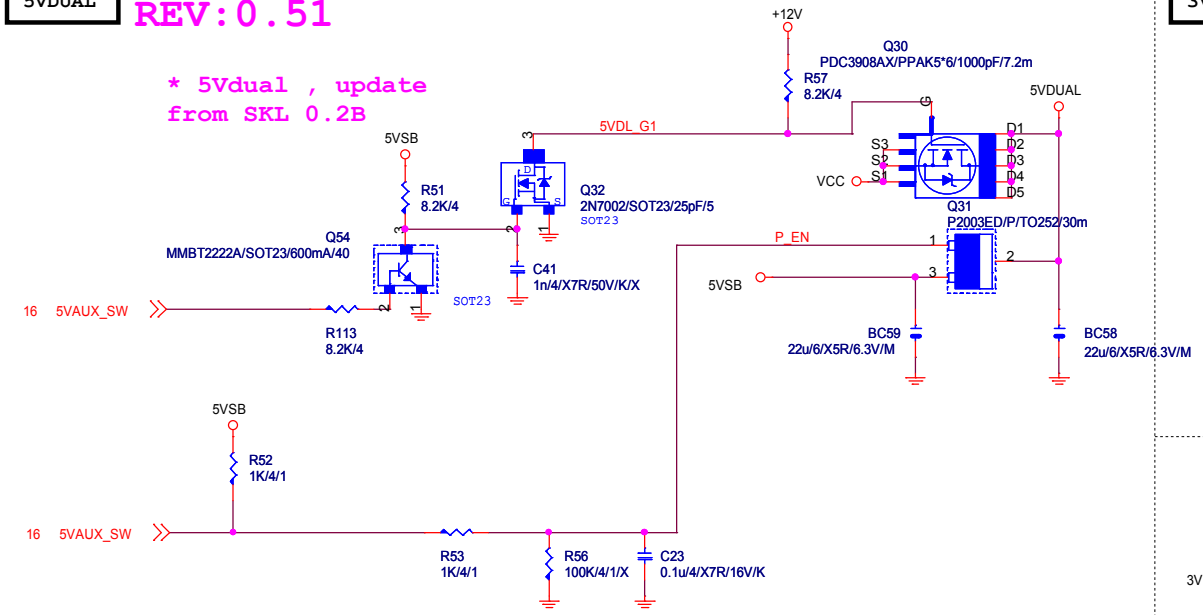
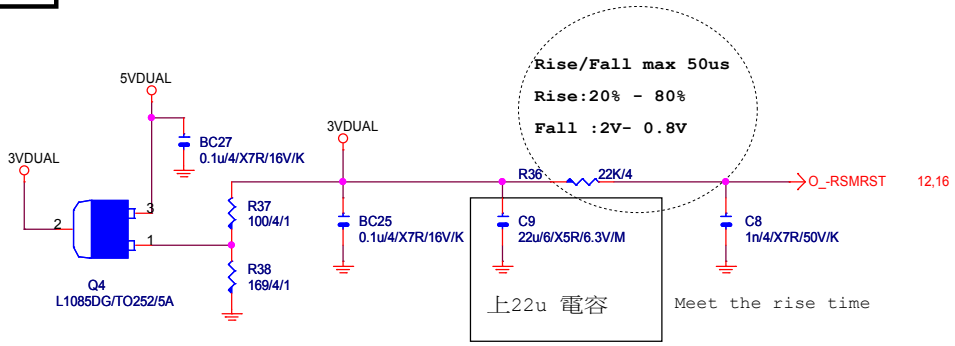
5VDUAL

REV:0.51

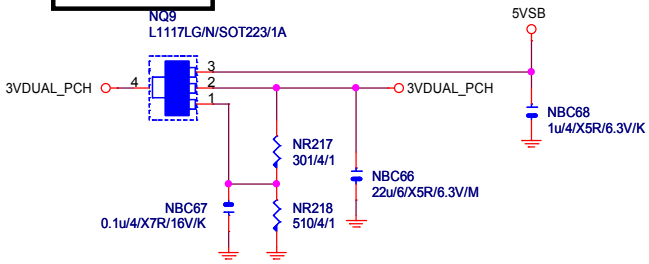
* 5Vdual , update from SKL 0.2B



3VDUAL



3VDUAL_PCH



O_-RSMRST （不上件）

Gigabyte Technology		
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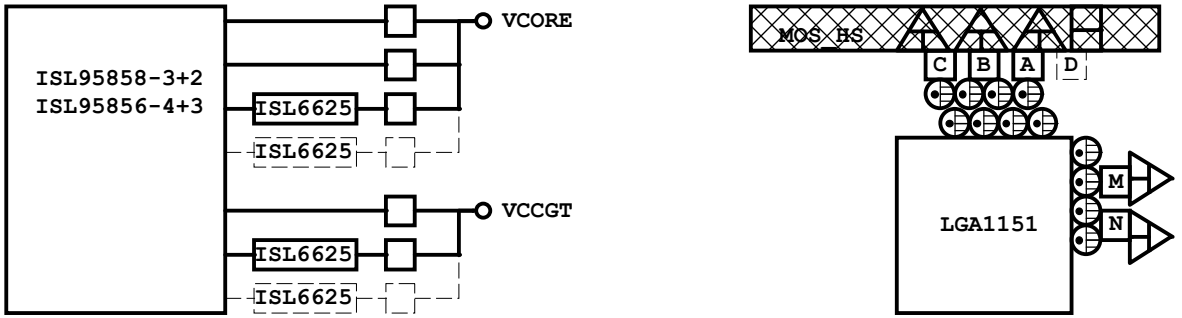
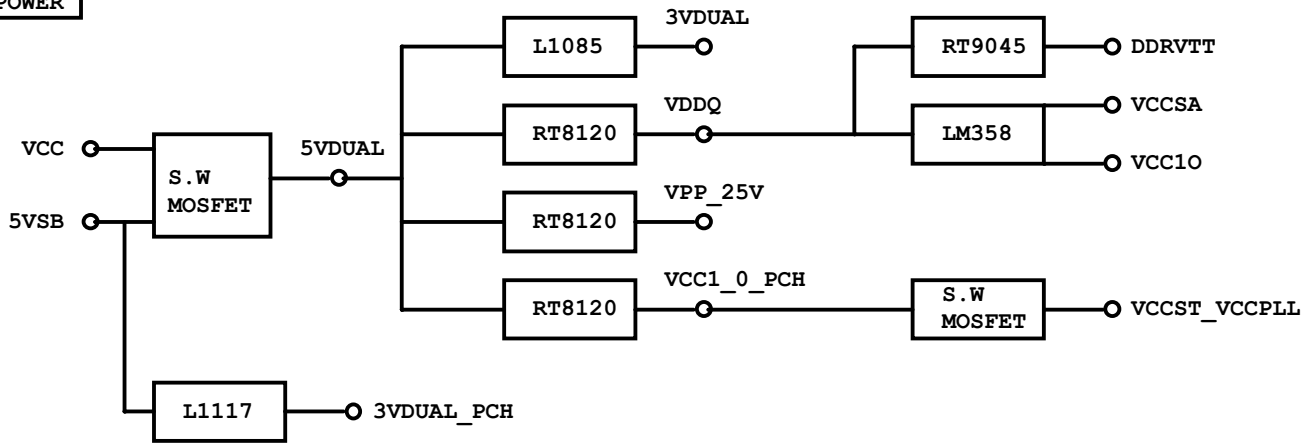
POWER BLOCK MAP

- CPU: VCORE, VCCGT, VCCSA, VCCIO, VDDQ, VCCST_VCCPLL, VCCSFUSEPRG
- DDR4: VDDQ, DDRVTT, VPP_25V, VDDSPD(VCC3)
- PCH: VCC1_0_PCH, VCC1_0_PCH_DSW, VCC10_VCCF24_1P0, VCC10_VCCAMPHYPLL, VCC10_VCCAPLL, VCC3_PCH, 3VDUAL_PCH, VCC3, N_RTCVDD
- IT8628: IT_VCCH, IT_AVCC, 2_5LEVEL
- HM: +12V, VCC, VCC3, VCORE, VCCGT(IMON_VCCGT), VDDQ, VCCSA(IMON_VCORE)

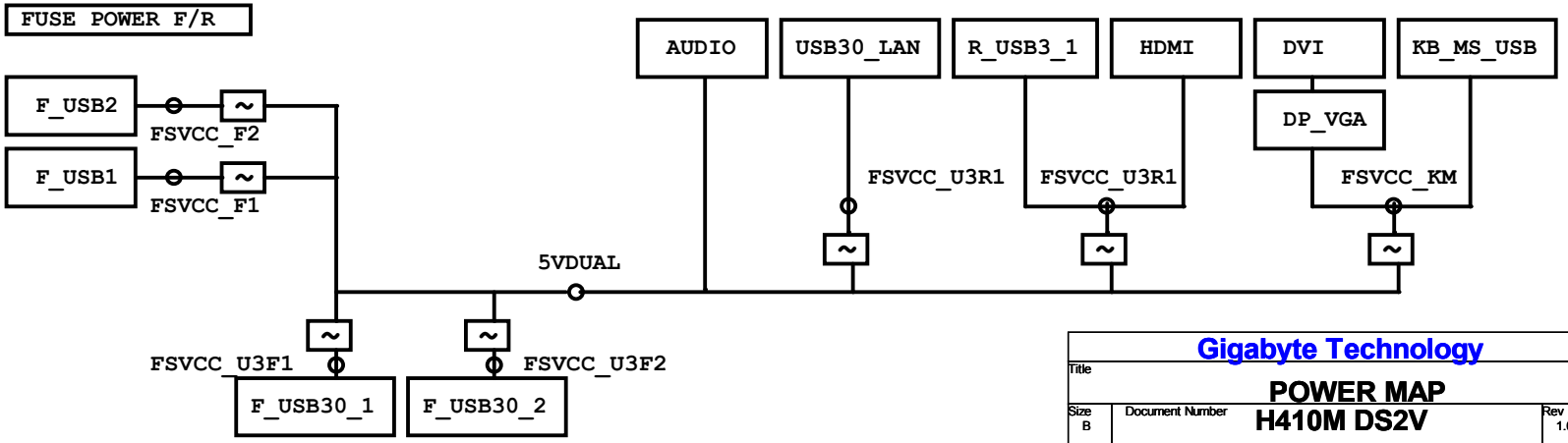
VCORE/VCCGT



POWER



FUSE POWER F/R



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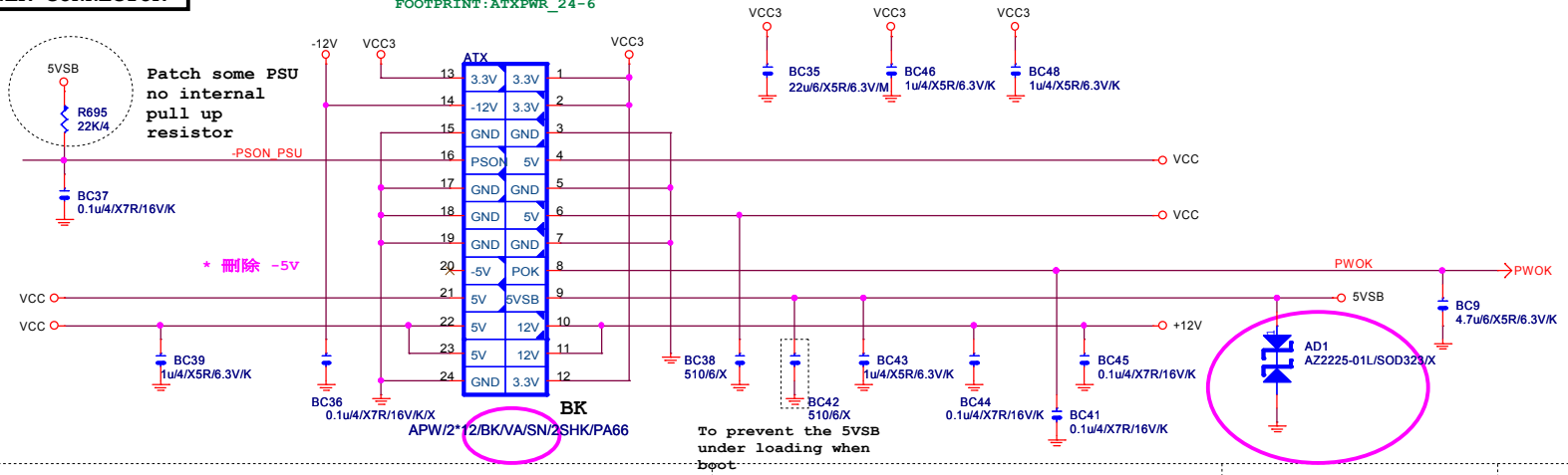
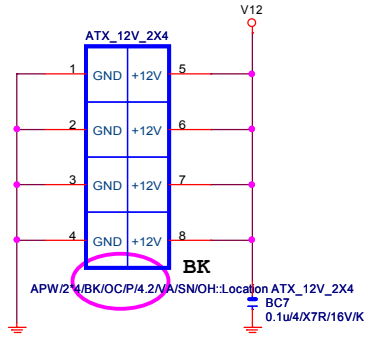
ATXX24 POWER CONNECTOR

2x12(空心Pin)
FOOTPRINT:ATXPWR_24-6

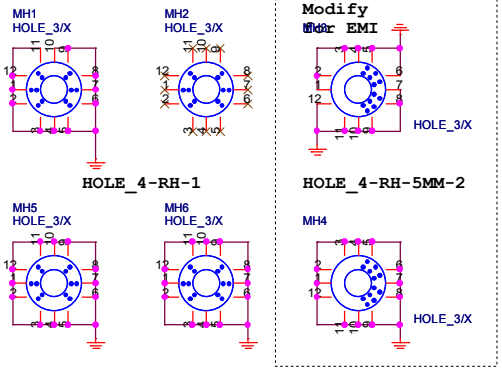


ATXX4 POWER CONNECTOR

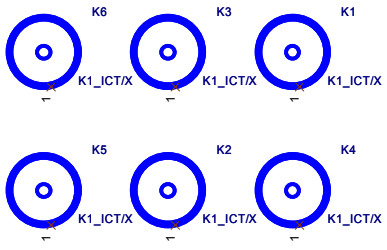
2x4 (空心Pin)
FOOTPRINT:ATXPW2X4-6

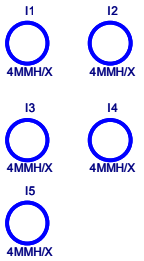


螺絲孔



固定孔/光學點

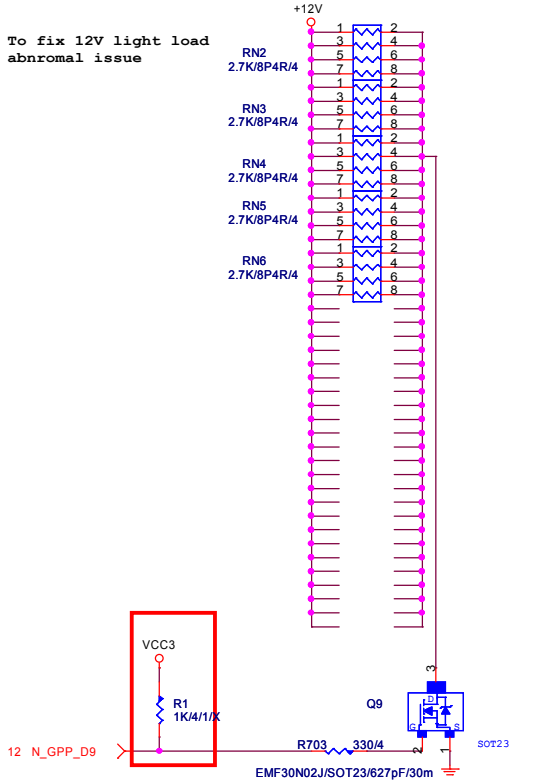




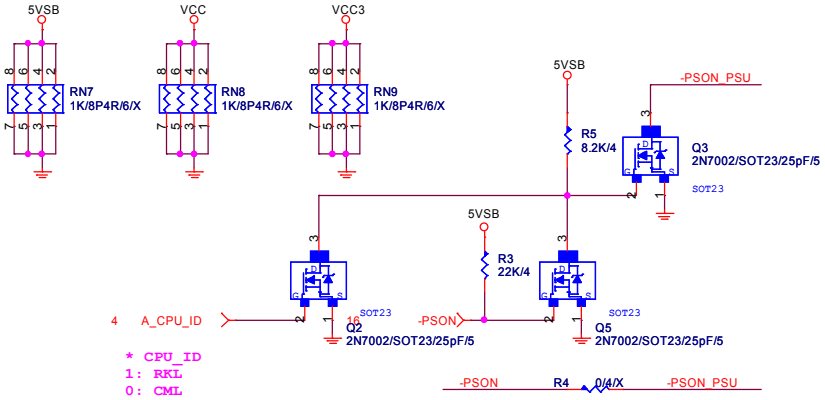
+12V DUMMY LOAD

【技術通報R&D技術通報153】

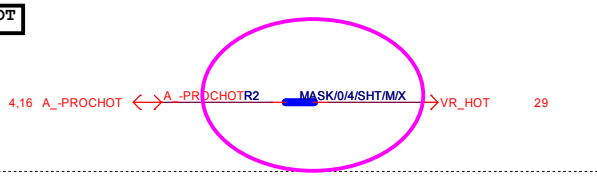
To fix 12V light load
abnromal issue



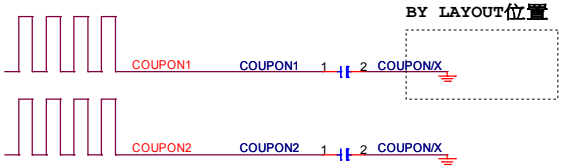
DUMMY LOAD



-PROHOT



COUPON



Gigabyte Technology

Title: ATX POWER CONNECTOR

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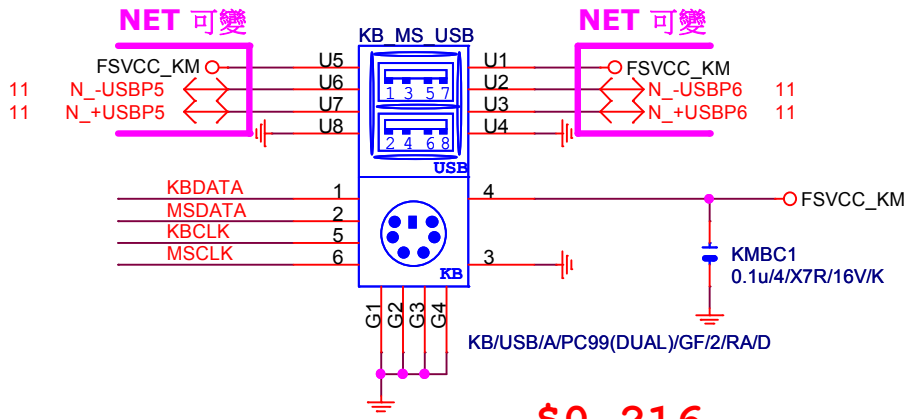
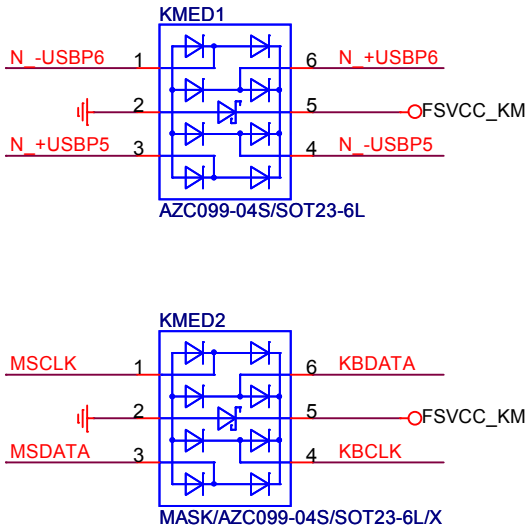
KB_MS_USB

Rev: 0.2

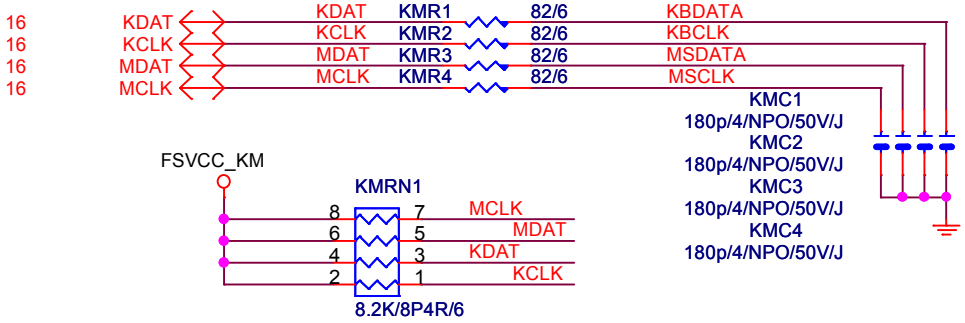


$0.216

ESD

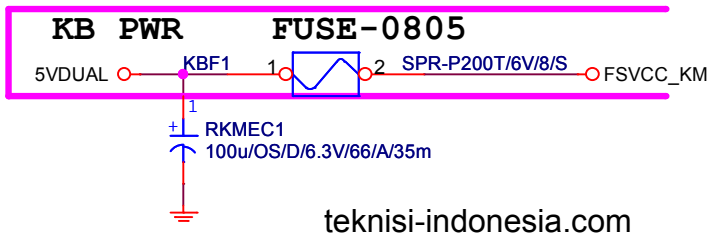


KB_MS_USB DAMPING/PU

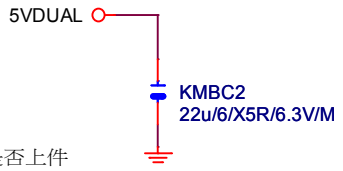


KB_MS_USB PWR

NET 可變, 與其他USB SHARE



USB OC PROTECT



確認電壓ripple後決定是否上件

Gigabyte Technology			
Title: KB_MS			
Size: A	Document Number: H410M DS2V		Rev: 1.01
Date: Sunday, April 05, 2020		Sheet 39 of 56	

DVI

Rev: 0.8

DVI:20/4/6/4/20
Impedance=85 +- 17.5%

NET 可變

4 DVI_TXC
4 DVI_TXC-
VBC1 0.1u/4/X7R/16V/K
VBC2 0.1u/4/X7R/16V/K
DVITXC+ DVITXC- VR1 680/4/1 VR2 680/4/1

4 DVI_TX0
4 DVI_TX0-
VBC3 0.1u/4/X7R/16V/K
VBC4 0.1u/4/X7R/16V/K
DVITX0+ DVITX0- VR3 680/4/1 VR4 680/4/1

4 DVI_TX1
4 DVI_TX1-
VBC5 0.1u/4/X7R/16V/K
VBC7 0.1u/4/X7R/16V/K
DVITX1+ DVITX1- VR7 680/4/1 VR8 680/4/1

4 DVI_TX2
4 DVI_TX2-
VBC8 0.1u/4/X7R/16V/K
VBC9 0.1u/4/X7R/16V/K
DVITX2+ DVITX2- VR9 680/4/1 VR10 680/4/1

DVI_G

VQ1 2N7002/SOT23/25pF/5 SOT23
VCC VR16 8.2K/4 VQ1_2

DVI_SCL
VQ2 2N7002/SOT23/25pF/5 SOT23
VCC VR17 1K/4/1 VQ2_2 N_DDPC_CTRLCLK

DVI_SDA
VQ3 2N7002/SOT23/25pF/5 SOT23
VCC VR18 1K/4/1 VQ3_2 N_DDPC_CTRLDATA

DVI_HP
VQ4 2N7002/SOT23/25pF/5 SOT23
VCC3 VR20 1M/4
VCC VR19 8.2K/4 VQ4_2 N_DVI_HDP_F 10

DVI PU

VCC
防漏電 ★Update 2015.05.27
VD1 BAT54A/SOT23/200mA SOT23
VR14 2.2K/4/1 VR13 2.2K/4/1
DVI_SDA
DVI_SCL

10 N_DDPC_CTRLCLK
10 N_DDPC_CTRLDATA
VR5 2.2K/4/1
VR6 2.2K/4/1
VCC3
VBC6 0.1u/4/X7R/16V/K/X

DVI CONN

NET 可變
FSVCC_U3R1

M1 DVI
DVITX0- 17
DVITX0+ 18
DVITX1- 9
DVITX1+ 10
DVITX2- 1
DVITX2+ 2
3
11
19
12
13
4
5
20
21
DVI_SCL 6
DVI_SDA 7
14
15
DVITXC- 22
DVITXC+ 23
DVI_HP 8
16
VR15 20K/4/1
M5 M6 M7 M8
M2 COMMON
DVI-30P-4P-1

DVI-D/24P/SC/RA/D/SH

平躺式 DVI-D

11NR6-501024-31

ESD

NET 可變
FSVCC_U3R1
VBC10 0.1u/4/X7R/16V/K

VESD3 AZC099-04S/SOT23-6L
DVI_SCL DVI_SDA FSVCC_U3R1 DVI_HP
NET 可變

Close to connector

VESD2 AZ1045-04F/MSOP10
DVITX1+ DVITX1- DVITX2+ DVITX2-

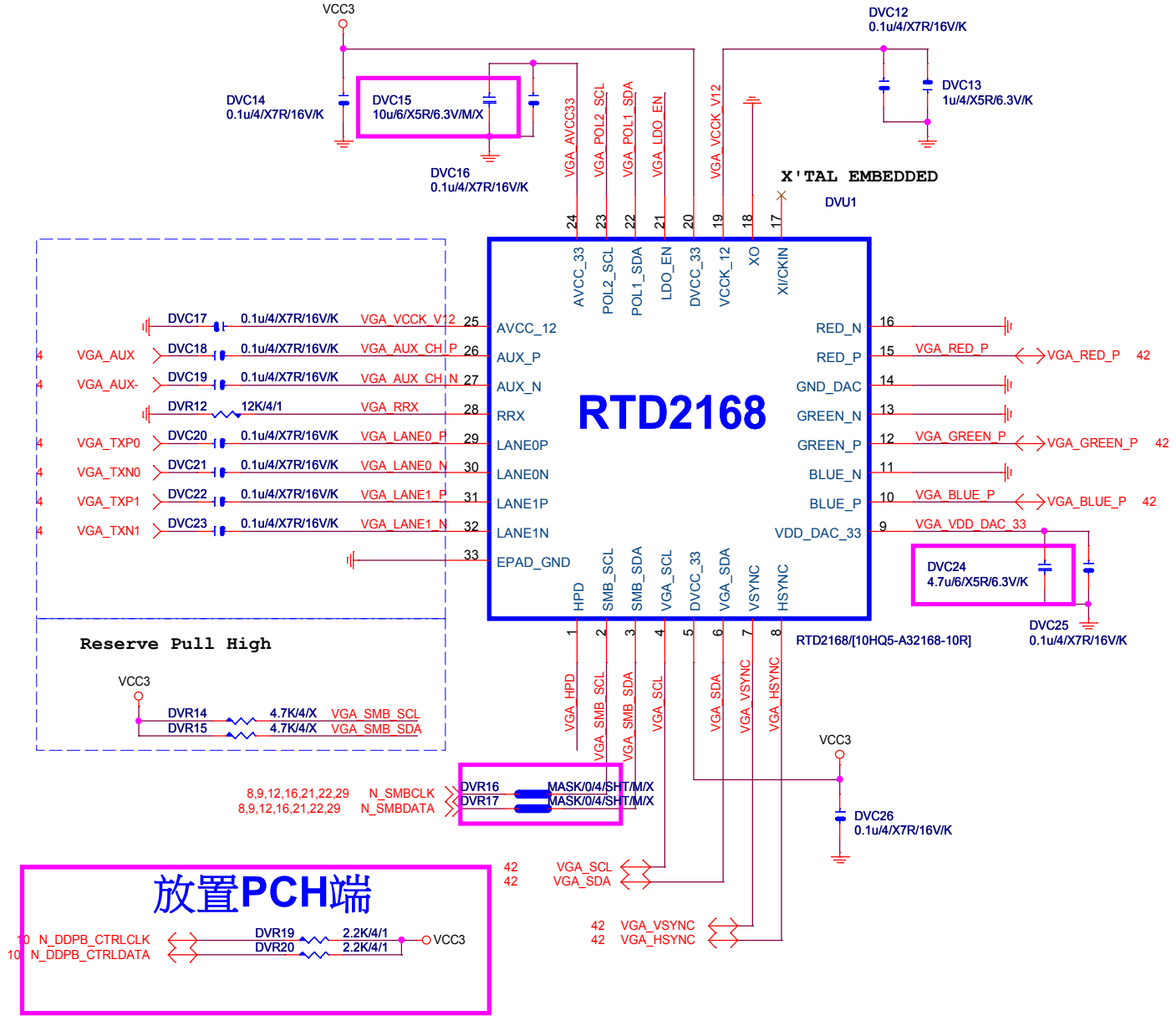
Close to connector

VESD1 AZ1045-04F/MSOP10
DVITXC+ DVITXC- DVITX0+ DVITX0-
* swap

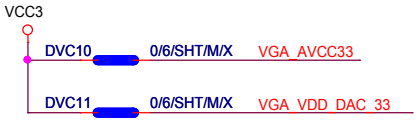
Close to connector

Gigabyte Technology		
Title: DVI		
Size: Custom	Document Number: H410M DS2V	Rev: 1.01
Date: Sunday, April 05, 2020	Sheet 40 of 56	

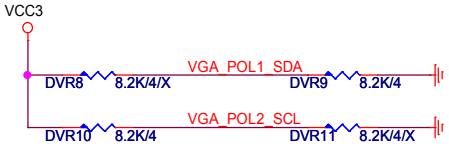
RTD2168 | R2.0



POWER

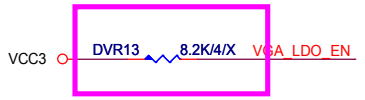


Power on latch



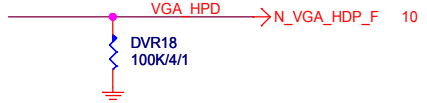
		POL1_SDA(PIN22)	
		0	1
POL2_SCL (PIN23)	0	X	EP MODE
	1	**ROM ONLY MODE**	EEPROM MODE

Embedded LDO



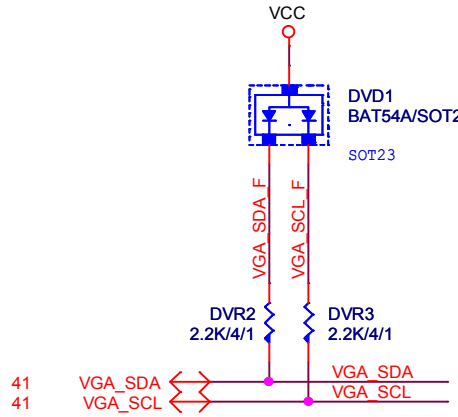
LDO_EN(PIN21)	
0	1
VCCK_V12 from External 1.2V	VCCK_V12 from Embedded LDO

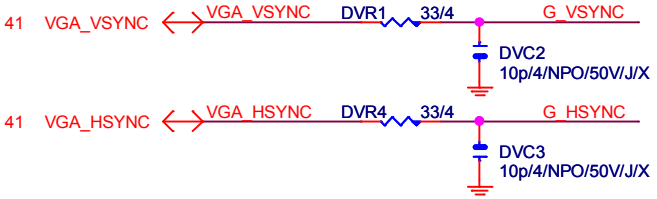
DP HPD

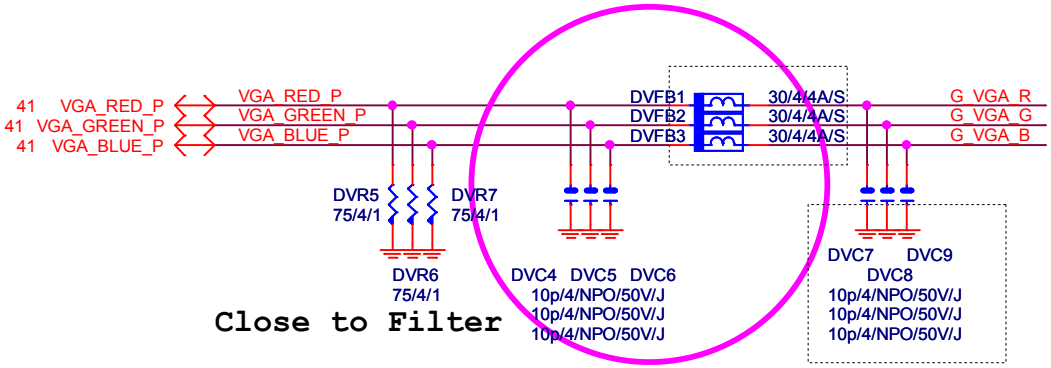


Gigabyte Technology			
Title: DP-VGA RTD2168			
Size: Custom	Document Number: H410M DS2V		Rev: 1.01
Date: Sunday, April 05, 2020		Sheet 41 of 56	

VGA SIGNAL R2.0

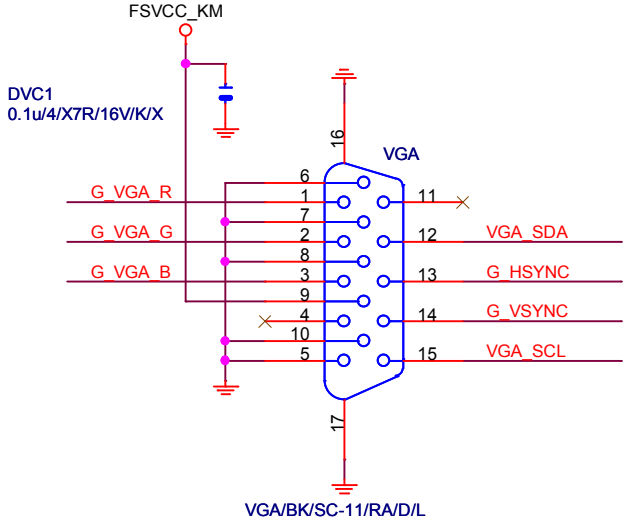




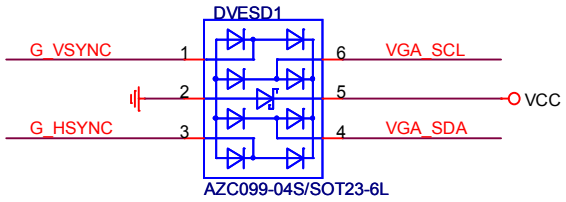


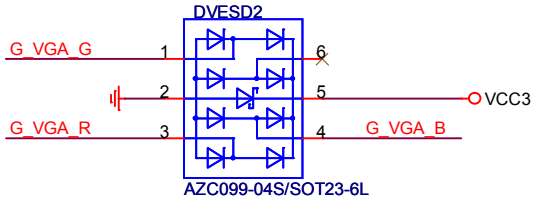
FOR EMI

VGA CONN.



VGA ESD





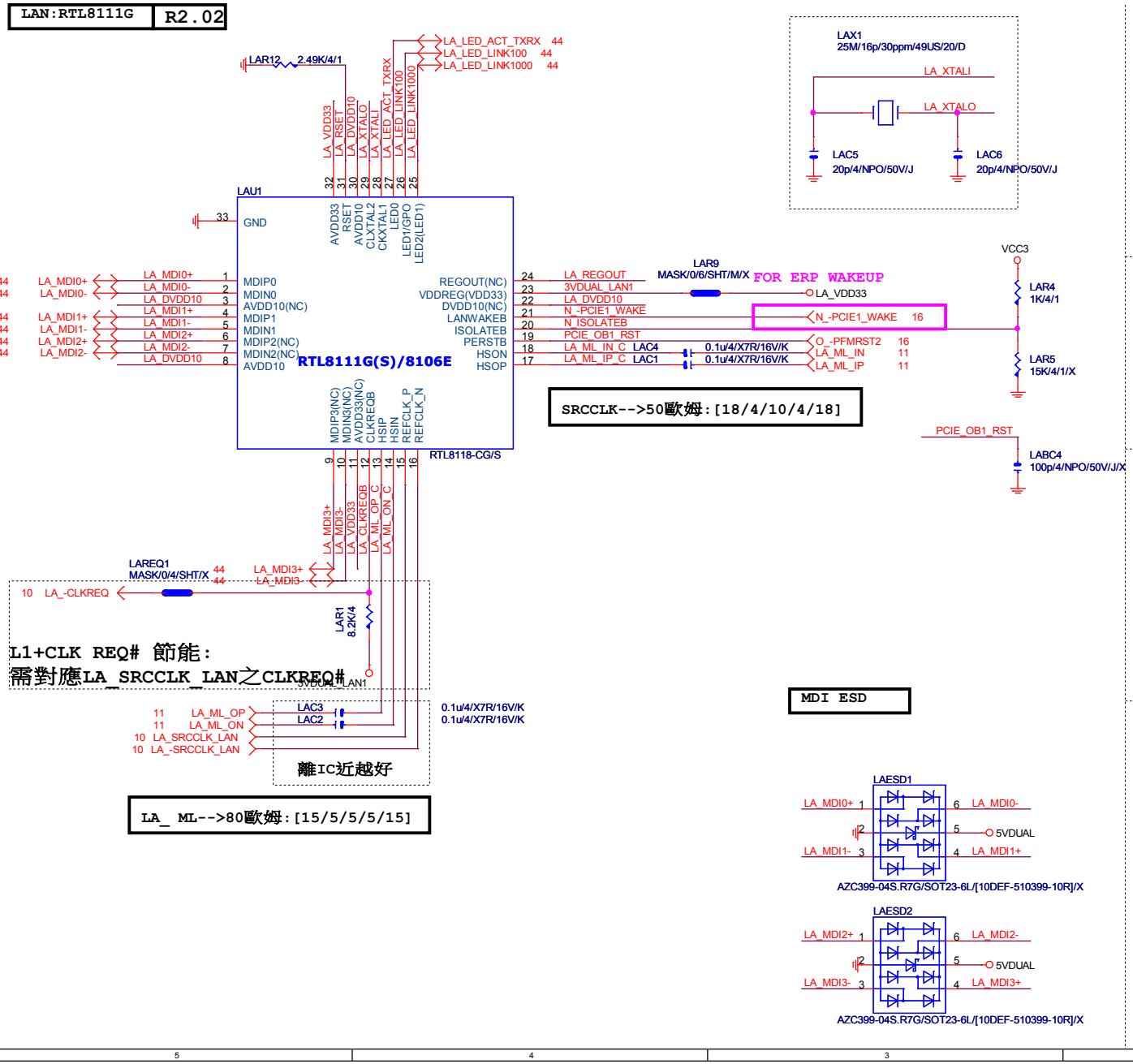
Gigabyte Technology

Title: DP-VGA RTD2168

Size: Custom | Document Number: H410M DS2V | Rev: 1.01

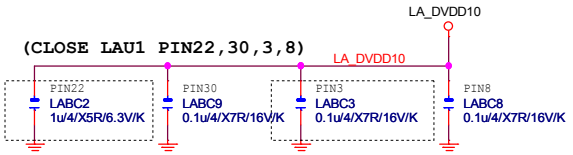
Date: Sunday, April 05, 2020 | Sheet 42 of 56

LAN:RTL8111G R2.02



MDI ESD

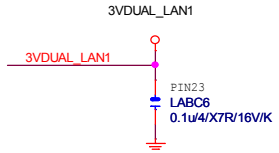
LAN POWER



LABC2:1U CLOSE PIN22[REALTEK REQ]

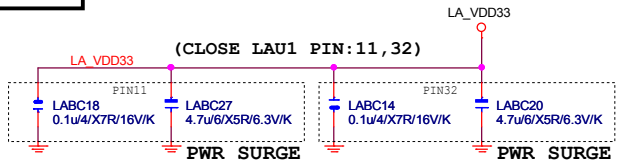
LAN POWER

note: lan power連接及電流



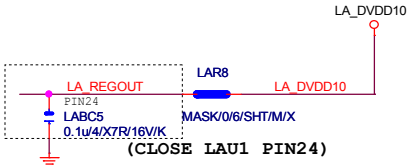
(CLOSE LAU1 PIN23)

LAN POWER



LABC18,27:CLOSE PIN11[REALTEK SURGE]
LABC14,20:CLOSE PIN32[REALTEK SURGE]

LAN POWER



(CLOSE LAU1 PIN24)

Gigabyte Technology

Title: Realtek RTL8111G

Size	Document Number	Rev
Custom	H410M DS2V	1.01

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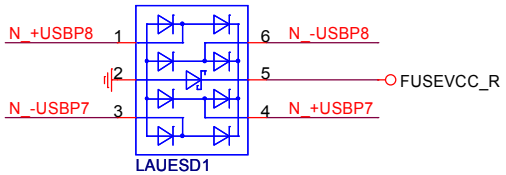
USB_LAN CONNECTOR R2.02

RMA ESD PROTECT

note:可變更USB NAME

可變

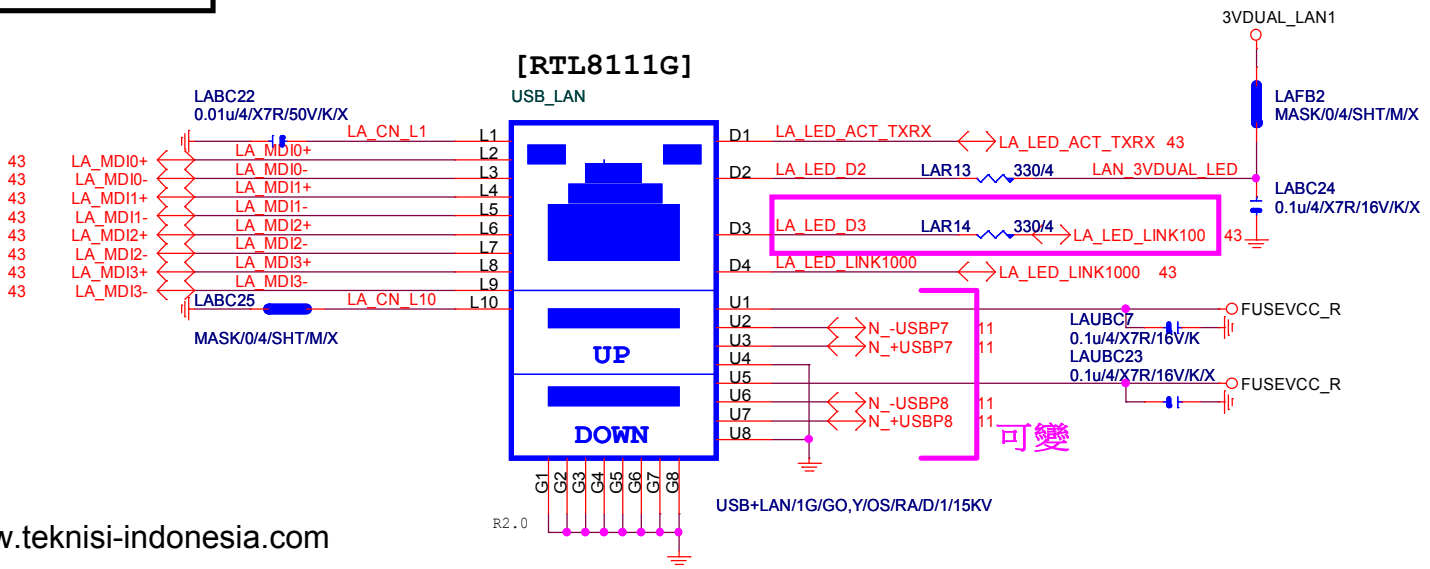


LAUESD1
AZC099-04S/SOT23-6L

USB_LAN CONNECTOR

note:可變更USB NAME

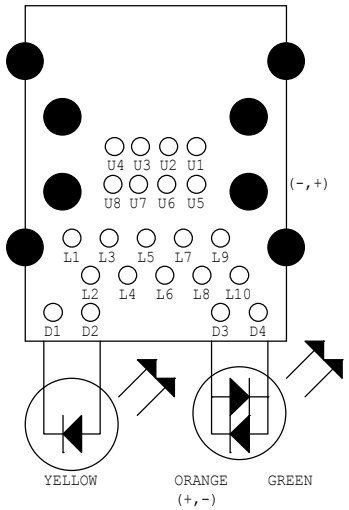
[RTL8111G]



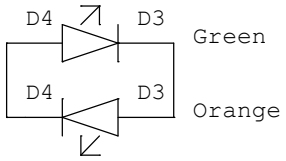
www.teknisi-indonesia.com

LA_MDI-->100歐姆:[20/4/8/4/20]

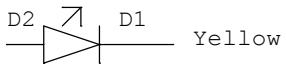
USB_LAN LAYOUT示意圖



Dual Color LED



Single Color LED



USB POWER

note:可變更FUSE

可變

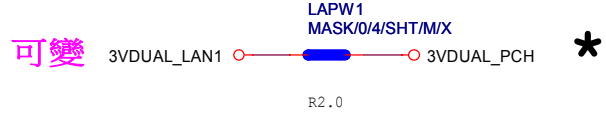
Close to connector

USB_LAN 2-Port 2.0A

FUSE-0805

LAN POWER

note: lan power連接及電流



Gigabyte Technology		
Title: LAN CONNECTOR-RTL8111G		
Size: Custom	Document Number: H410M DS2V	Rev: 1.01
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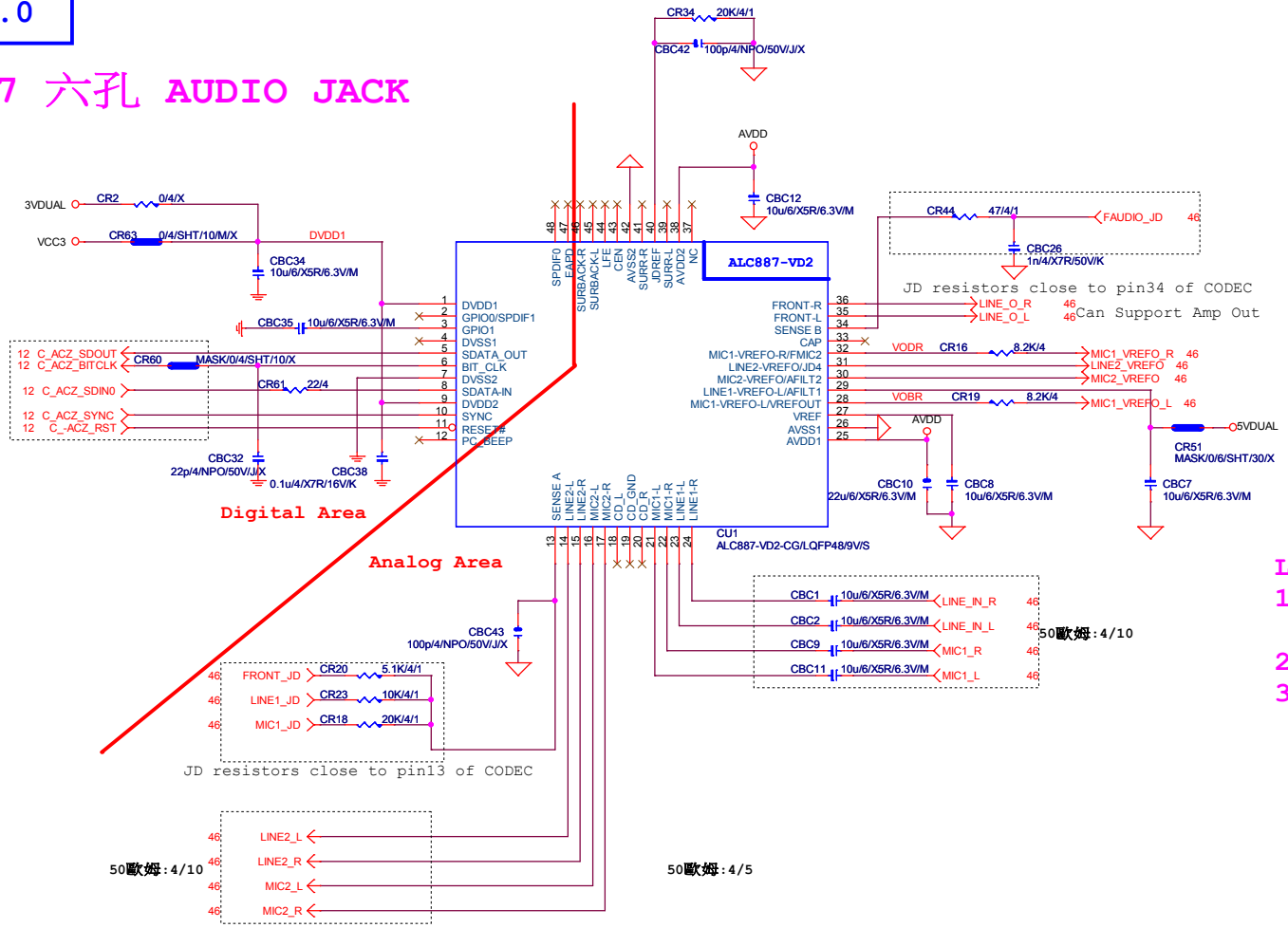
Rev 6.0

ALC887 六孔 AUDIO JACK



LAYOUT注意:螺絲孔下GND方式
1. MH1空間夠,下DGND
   空間不夠,才改為Isolate
2. MH2一律改為Isolate
3. Codec下方,第二層必須參考GND

MH1	MH2
DGND	Isolate

LAYOUT注意:要加
GND切割線

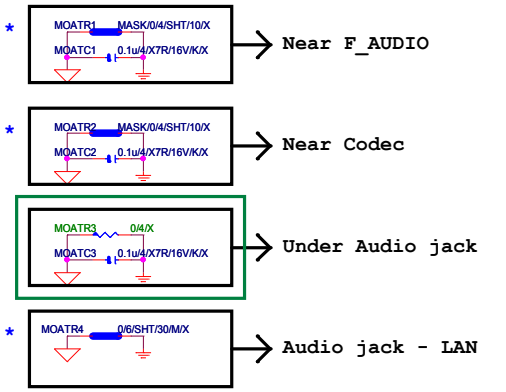
音效區域印刷

BOM OPTION : 1. Chemicon音效電容
2. 金屬外罩 Reserve (LAYOUT上件與否,依照各Model spec)
3. LED Reserve (上件與否和LED顏色,依照各Model spec)

GIGABYTE™

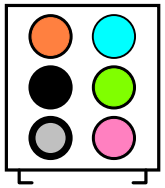
Title	HD AUDIO ALC887	
Size: Custom	Document Number: H410M DS2V	Rev: 1.01
Date: Sunday, April 05, 2020	Sheet 45 of 56	

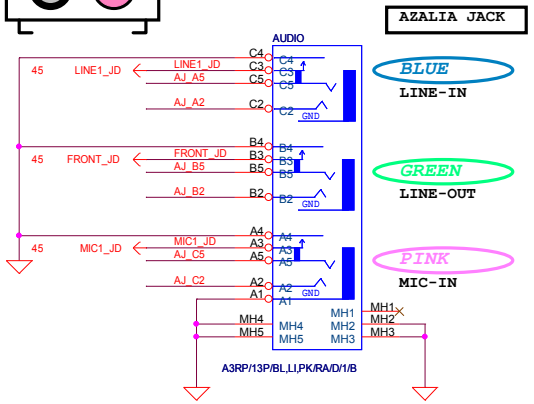
Rev 6.0



*量產前,MOATR1/MOATR2/MOATR4 ....0ohm改short pad

AZALIA JACK





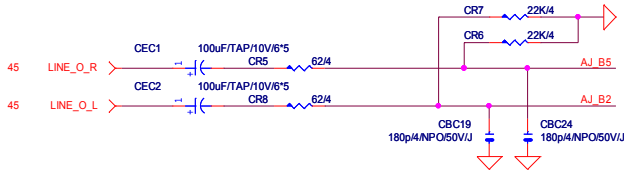
AZALIA JACK

BLUE
LINE-IN

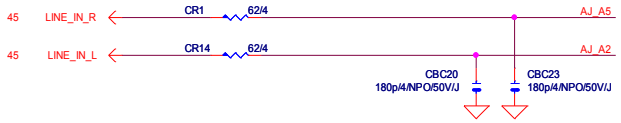
GREEN
LINE-OUT

PINK
MIC-IN

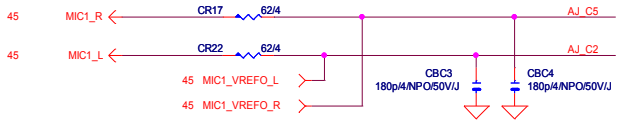
LINE-OUT



LINE-IN



MIC-IN

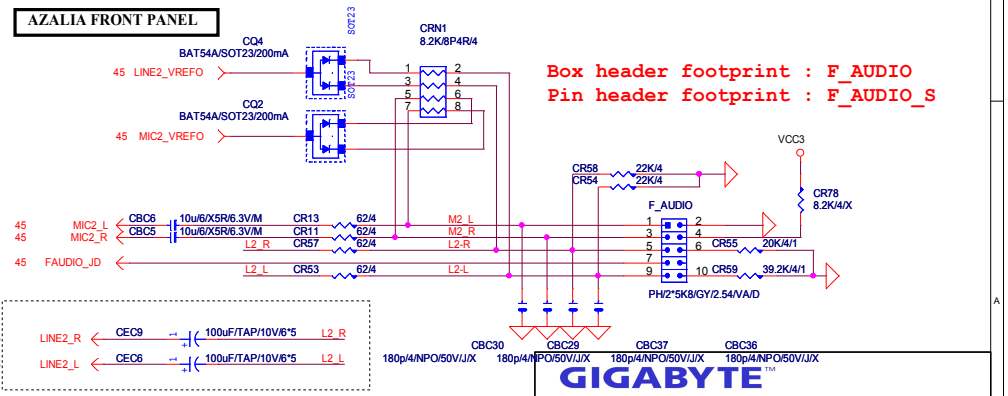


SURROUND

CEN/LFE

SURR BACK

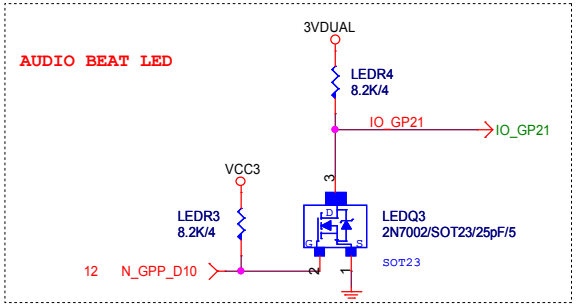
AZALIA FRONT PANEL



GIGABYTE™

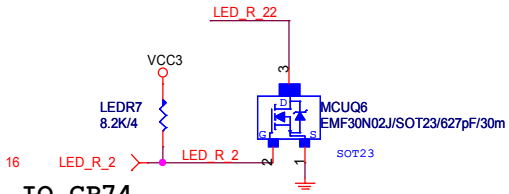
Title	AUDIO JACK	
Size: Custom	Document Number: H410M DS2V	Rev: 1.01
Date: Sunday, April 05, 2020	Sheet 46 of 56	

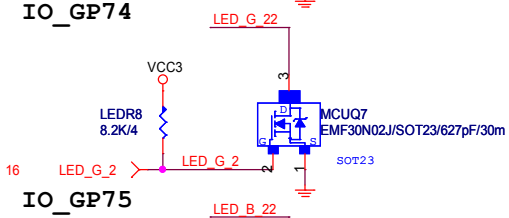
Rev 1.0

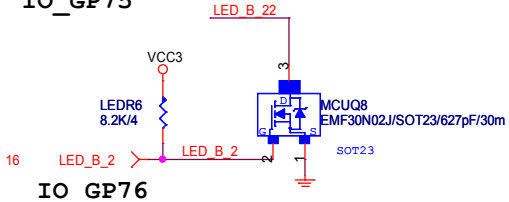


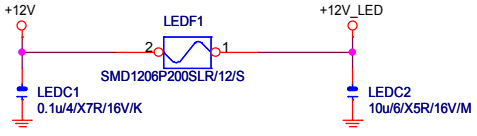
第二區 LED CONTROL

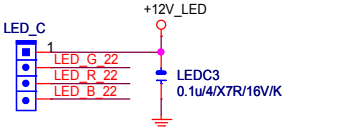
燈條 LED (LED_C放在PCB左邊板邊位置)











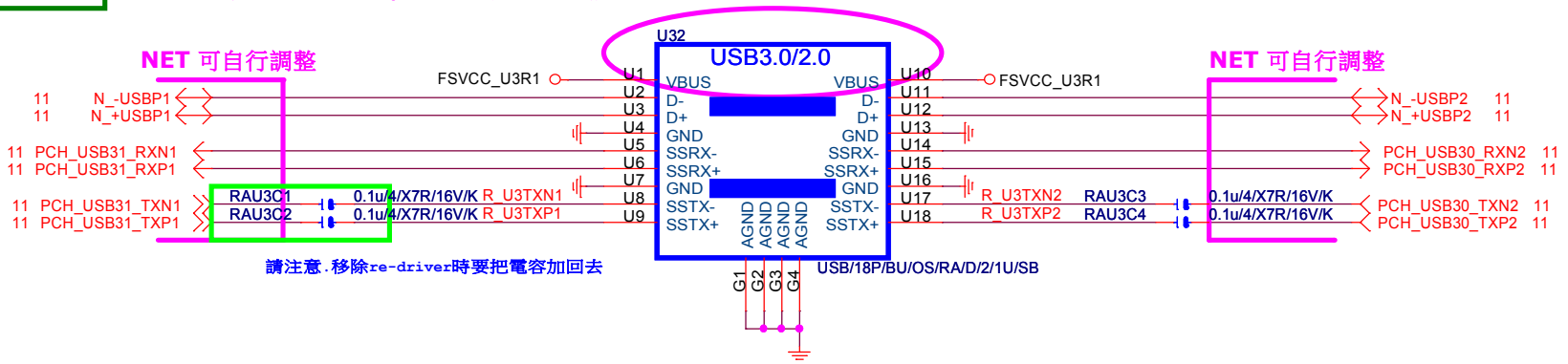
Footprint "PH1X4-ROW-L-1"

GIGABYTE™

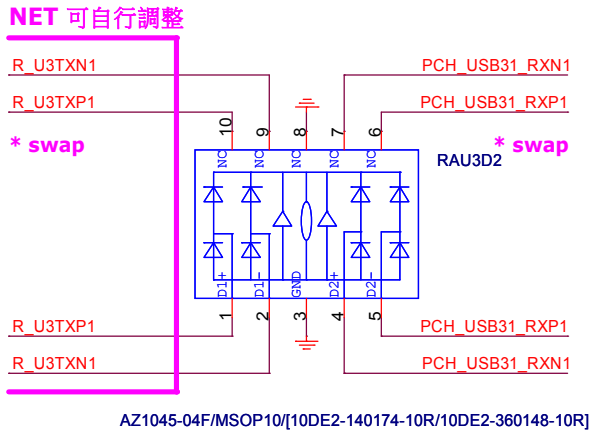
Title	Amient Single LED		
Size: Custom	Document Number: H410M DS2V		Rev: 1.01
Date: Sunday, April 05, 2020		Sheet 47 of 56	

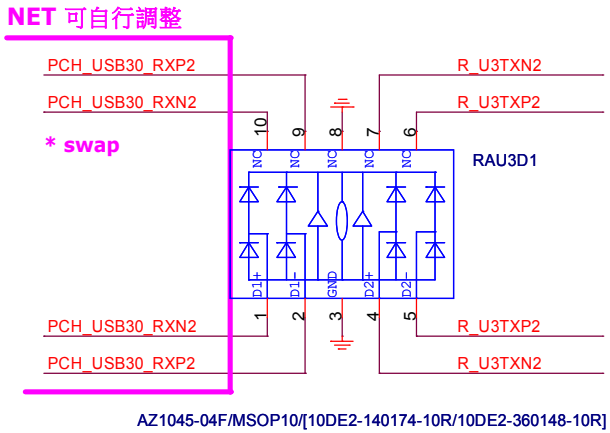
Rev: 0.7

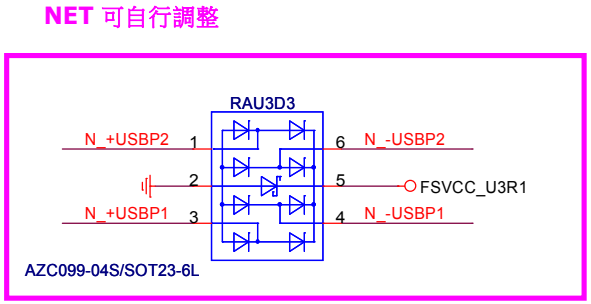
ESD 可自行SWAP PIN ,CONN端 NET 名稱 不可



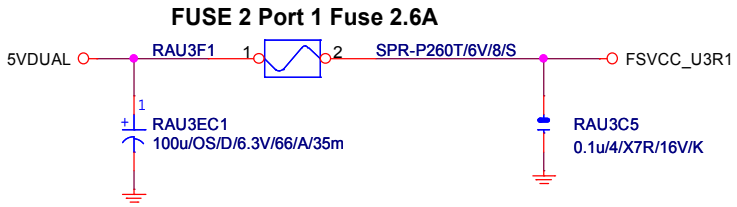
ESD

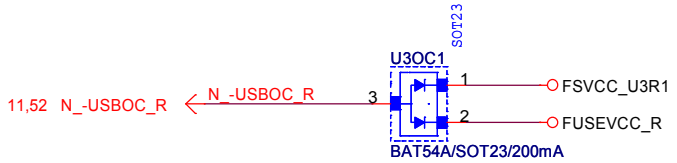






FUSE





Gigabyte Technology

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Gigabyte Technology

Title

R_USB30,USB_OC

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GIGABYTE

Title	FP,F_USB,USB PWR,BZ	
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GIGABYTE™

Title
PI3EQX1002B Redriver/DC-J

Size	Document Number	Rev
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Rev: 0.7

Front USB3.0

NET 自行調整

F_U32 REV=1

FSVCC_U3F1 → VBUS (1)

ID (10)

11 PCH_USB31_RXN3 / 11 PCH_USB31_RXP3 → SSRX1- / SSRX1+ (2, 3)

11 PCH_USB31_TXN3 / 11 PCH_USB31_TXP3 → FAU3C1 / FAU3C2 0.1u/4/X7R/16V/K → FU30_TXN1 / FU30_TXP1 → SSTX1- / SSTX1+ (5, 6)

11 N_-USBP3 / 11 N_+USBP3 → D1- / D1+ (8, 9)

GND (7, 4)

VBUS (19) ← FSVCC_U3F1

FU30_TXN2 / FU30_TXP2 → FAU3C3 / FAU3C4 0.1u/4/X7R/16V/K → SSTX2- / SSTX2+ (15, 14)

SSRX2- / SSRX2+ (18, 17)

D2- / D2+ (12, 11)

GND (16, 13)

BH/2*10K20/BK/ON/2.0/VA/USB3.0/PRT

NET 可自行調整

SSTX2- / SSTX2+ → 0.1u/4/X7R/16V/K → PCH_USB31_TXN4 / PCH_USB31_TXP4

SSRX2- / SSRX2+ → PCH_USB31_RXN4 / PCH_USB31_RXP4

D2- / D2+ → N_-USBP4 11 / N_+USBP4 11

F_USB30 PWR

5VDUAL → FAU3F1 → SPR-P260T/6V/8/S → FSVCC_U3F1

FAU3EC1 100u/OS/D/6.3V/66/A/35m

FAU3C5 0.1u/4/X7R/16V/K

NET 可自行調整

11 N_-USBOC_F → N_-USBOC_F → U3OC3 (SOT23) → FSVCC_U3F1 / FSVCC_F1

BAT54A/SOT23/200mA

NET 可自行調整

PCH_USB31_RXP3 / PCH_USB31_RXN3 / PCH_USB31_RXP4 / PCH_USB31_RXN4 → FAU3D1

PCH_USB31_RXN3 / PCH_USB31_RXP3 / PCH_USB31_RXN4 / PCH_USB31_RXP4

AZ1045-04F/MSOP10/[10DE2-140174-10R/10DE2-360148-10R]

FAU3D3

N_+USBP4 / N_-USBP4 / 3VDUAL / N_-USBP3 / N_+USBP3

AZC099-04S/SOT23-6L

CLOSE F_USB30

FU30_TXP2 / FU30_TXN2 / FU30_TXN1 / FU30_TXP1 → FAU3D2

FU30_TXN2 / FU30_TXP2 / FU30_TXP1 / FU30_TXN1

AZ1045-04F/MSOP10/[10DE2-140174-10R/10DE2-360148-10R]

CLOSE F_USB30

-USBOC_F

POWER 可自行調整

FSVCC_U3F1 → UAR1 8.2K/4 → N_-USBOC_F → N_-USBOC_F 11

UAR2 15K/4/1

-USBOC_R

POWER 可自行調整

FSVCC_U3R1 → UBR1 8.2K/4 → N_-USBOC_R → N_-USBOC_R 11,48

UBR2 15K/4/1

* 接 PCH
N_GPP_G6(SMI) &
PCH PU 3Vdual

13 N_GPPC_G6 → UAD5 (SOT23)

N_-USBOC_F → N_-USBOC_F 11

N_-USBOC_R → N_-USBOC_R 11,48

BAT54A/SOT23/200mA

Gigabyte Technology		
Title: R_USB30,F_USB30, USB_OC		
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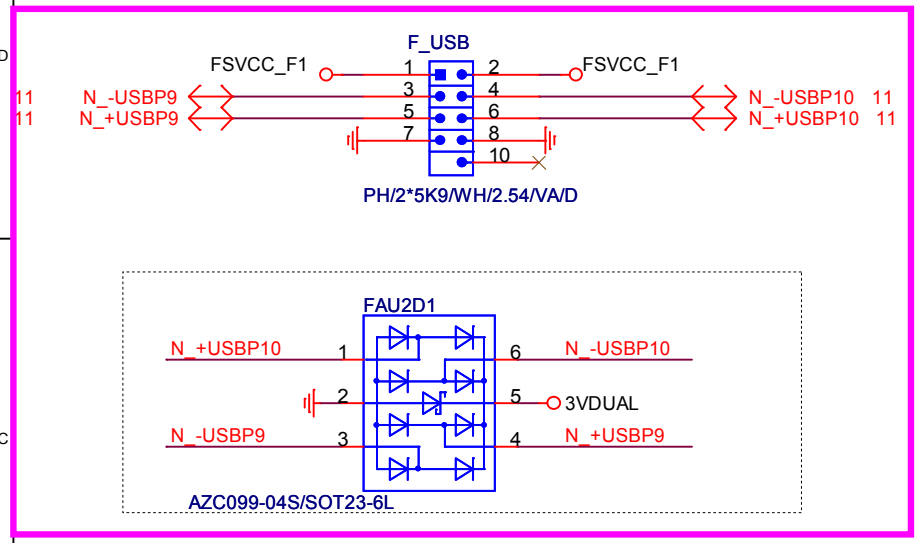
FRONT USB1

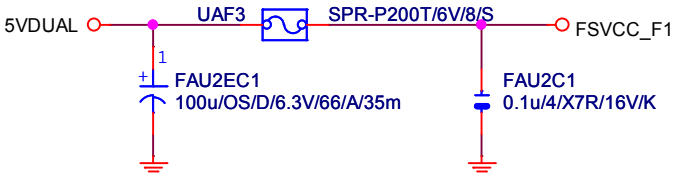
NET 可變

FUSB2X5-HS



Close to connector

FUSE 2 Port 1 Fuse 2A



F_USB 2.0 OC SIGNAL

Gigabyte Technology		
Title: USB2.0		
Size: A	Document Number: H410M DS2V	Rev: 1.01
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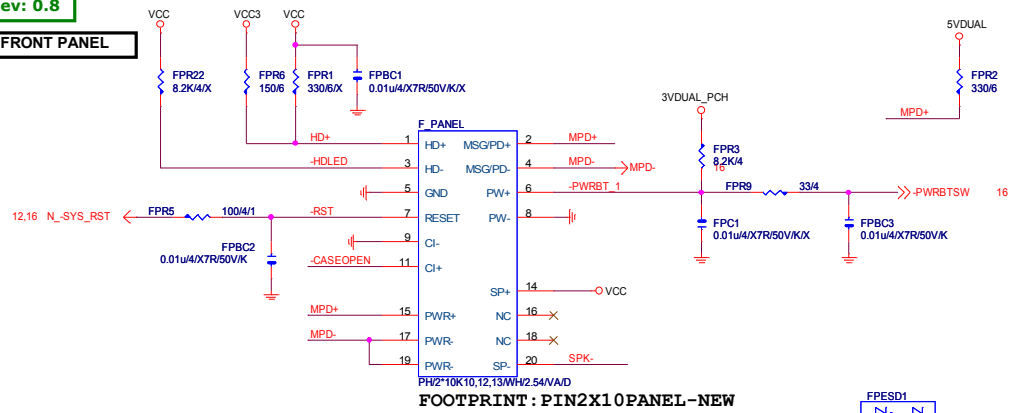
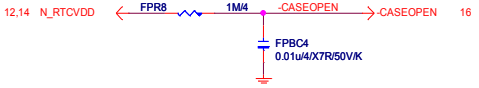
FRONT PANEL

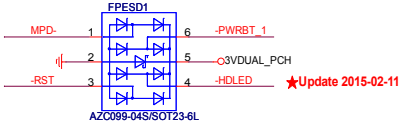
★Update 2016.06.15



FOOTPRINT:PIN2X10PANEL-NEW

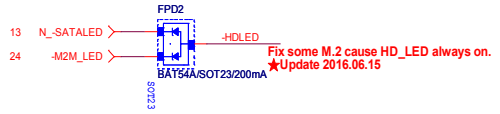
CASE OPEN





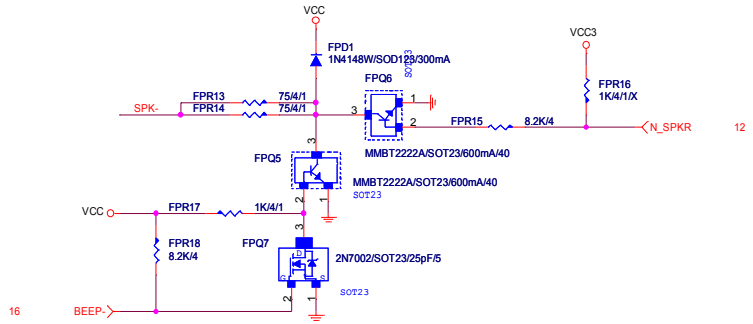
★Update 2015-02-11

SATA/M.2 LED



Fix some M.2 cause HD_LED always on.
★Update 2016.06.15

SPKR



For SPKR voltage issue. FPQ6=>2222, FPQ7=>7002

FRONT PANEL SHORT

Gigabyte Technology		
Title: FRONT PANEL		
Size: Custom	Document Number: H410M DS2V	Rev: 1.01
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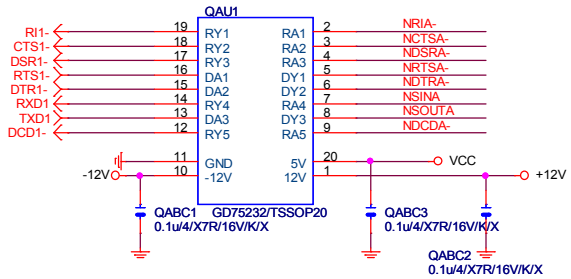
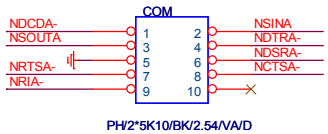
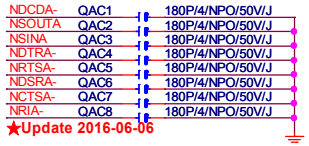
COM PORT

Rev: 0.7





F_COM-HS



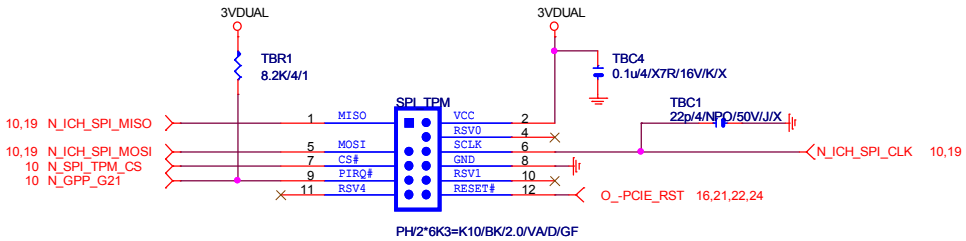
★Update 2016-06-06

LPT PORT

COM RI

N/A

TPM CONNECT



Footprint: TPM2X6-CUT3(2mm)

Gigabyte Technology		
Title: FP,F_USB,USB PWR,BZ		
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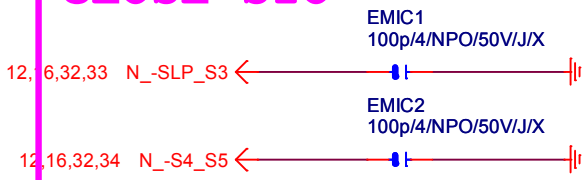
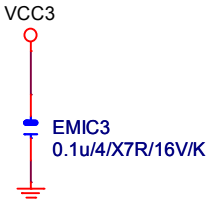
EMI/ESD R0.1

CLOSE SIO



CLOSE PCH

CLOSE NR47



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Title: EMI/ESD		
Size: A	Document Number: H410M DS2V	Rev: 1.01
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