

Model Name: GA-X99 Gaming7 WIFI

SHEET TITLE

01	COVER SHEET
02	BOM & PCB MODIFY HISTORY
03	BLOCK DIAGRAM
04-06	CPU_LGA2011-DDR
07-08	CPU_LGA2011-CTRL_PCIE_DMI
09-10	CPU_LGA2011-PWR
11-12	DDR III CHANNEL A/B
13-14	DDR III CHANNEL C/D
15-16	PCH_SATA_GPIO_AUDIO
17	PCH_DMI_USB_PCIE_PCI
18	PCH_PWR_GND
20-21	PCI EXPRESS X16 SLOT_1/2
22	PCI EXPRESS X16 Switch
23-24	PCI EXPRESS X8 SLOT 1/2
25	PCI EXPRESS X1 SLOTS
26-27	CPU& PEG CLOCK BUFFER
28	ITE 8620 SIO
29	DUAL BIOS
30-31	VCORE IR3580
33-35	DDR A/B & VPP&DDRVTT IR3570*2
36	PCH CORE POWER RT8120
37-38	DISCRETE POWER
39	FP ,TPM ,THB
40	ATX , 80 PORT
41	I/O HWM ,FAN CTRL
42	ITE EC 8791
43	ITE EC 8951

SHEET TITLE

44	BUTTON & PROBE
45	EC HWM ,FAN CTRL
46	SOUND LEVEL SENSOR
47-48	M.2 WIFI & 10Gb SSD
49-52	USB3 HUB A/B
53-55	CREATIVE SOUND3Di
56	USB3_LAN1/2 ,AUDIO JACK
57	USB DAC-UP ,PS2 , WIFI, HS BUTTON
58-59	LAN E2201& i218
60	R_USB30
61	F_USB2 & F_USB3
62	PCH GPIO LIST
63	Parts Location

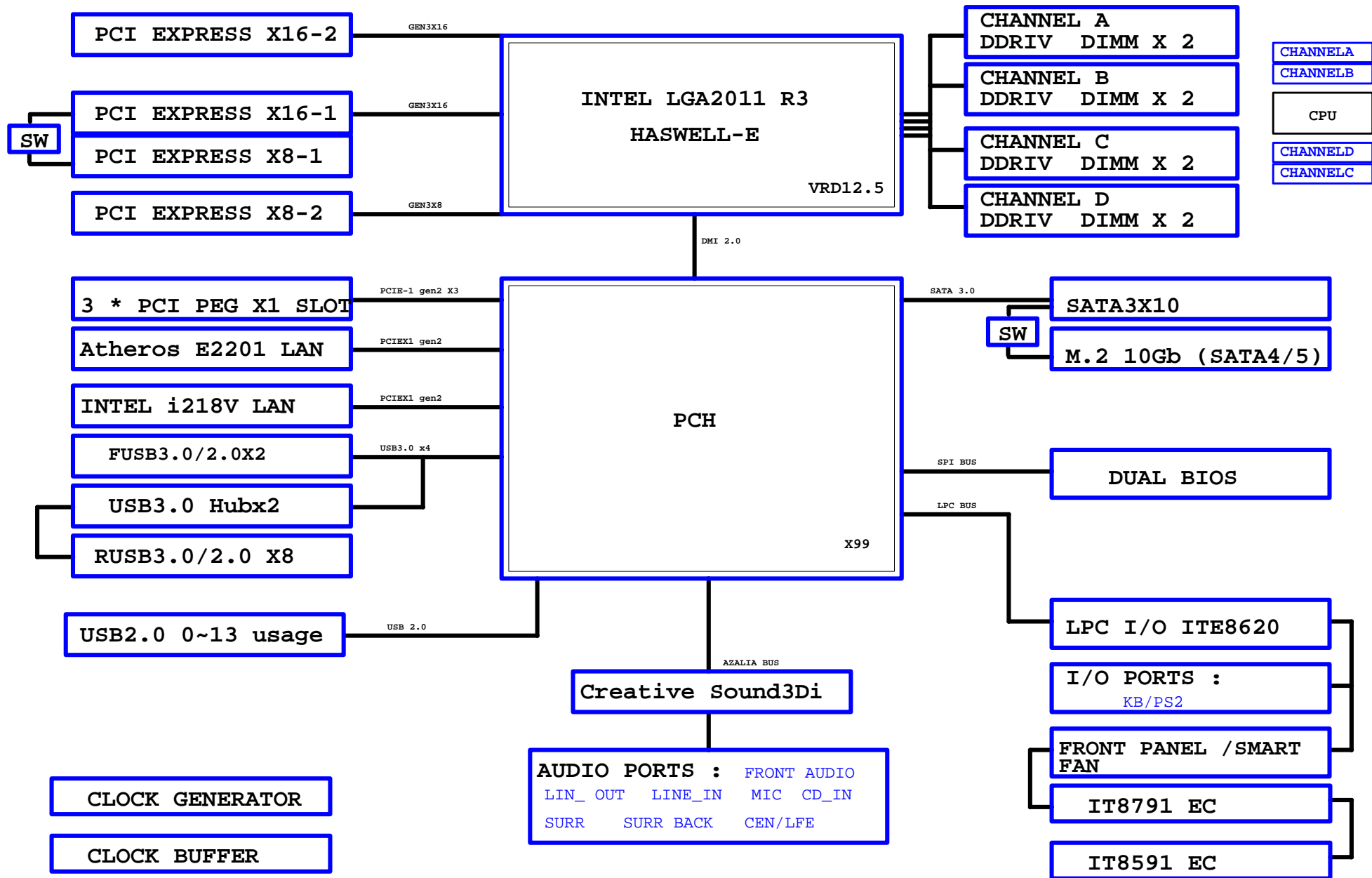
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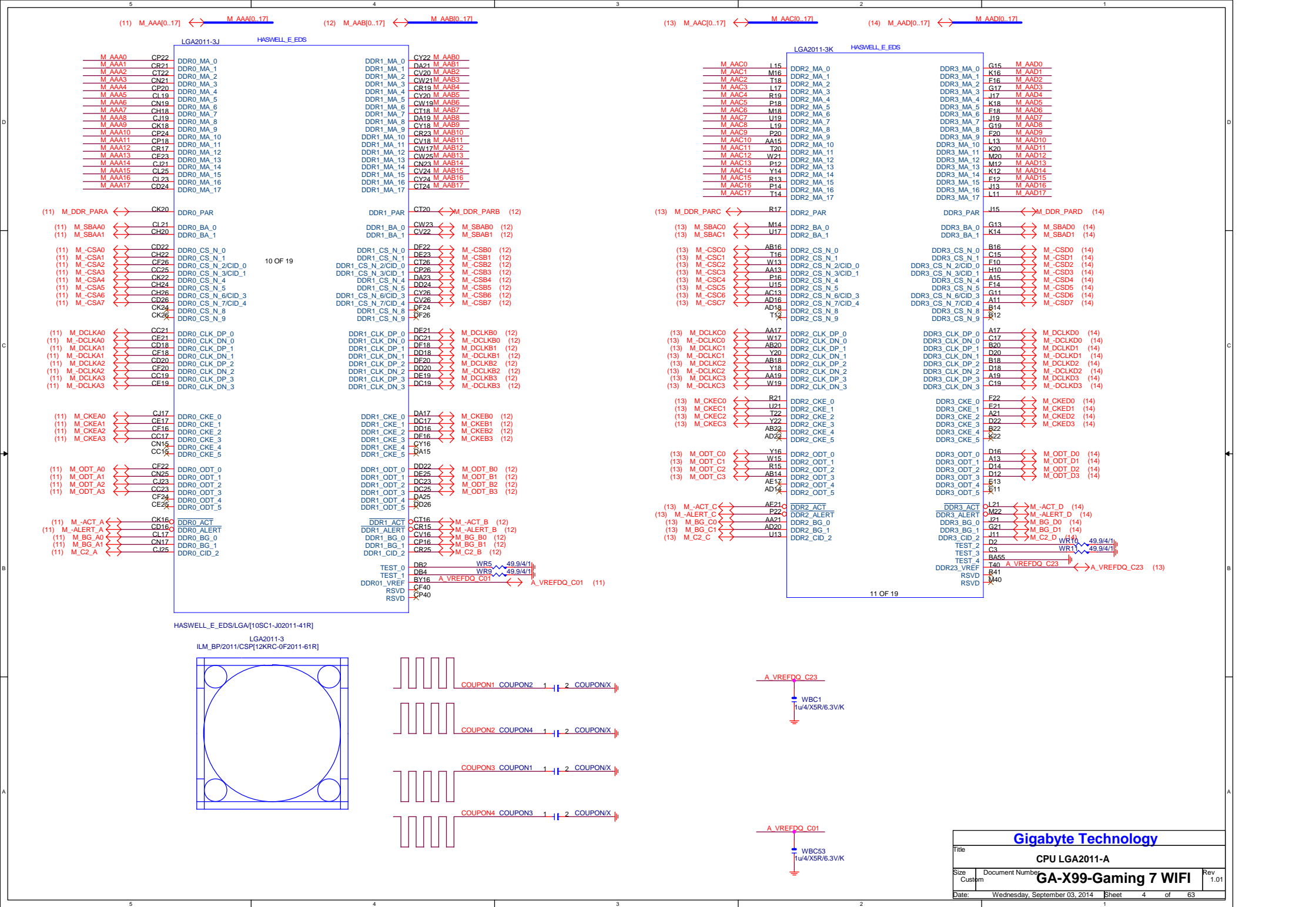
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Circuit or PCB layout change

[illegible]

BLOCK DIAGRAM





CHANNEL A

LGA2011-3F		HASWELL_E_EDS	
M DA0	BU7	DDR0_DQ_0	BY6 M_DQSA0
M DA1	BT6	DDR0_DQ_1	BY6 M_-DQSA0
M DA2	CB8	DDR0_DQ_2	
M DA3	CB8	DDR0_DQ_2	BV12 M_DQSA1
M DA4	BT8	DDR0_DQ_3	BW11 M_-DQSA1
M DA5	BU8	DDR0_DQ_4	
M DA6	CA7	DDR0_DQ_5	CH10 M_DQSA2
M DA7	CB6	DDR0_DQ_6	CG11 M_-DQSA2
M DA8	BT12	DDR0_DQ_7	
M DA9	BU11	DDR0_DQ_8	CK14 M_DQSA3
M DA10	BW13	DDR0_DQ_9	CL13 M_-DQSA3
M DA11	BY14	DDR0_DQ_10	
M DA12	BT14	DDR0_DQ_11	CK30 M_DQSA4
M DA13	BU15	DDR0_DQ_12	CM30 M_-DQSA4
M DA14	CA11	DDR0_DQ_13	
M DA15	BY12	DDR0_DQ_14	CD30 M_DQSA5
M DA16	CE9	DDR0_DQ_15	CF30 M_-DQSA5
M DA17	CF8	DDR0_DQ_16	
M DA18	CK10	DDR0_DQ_17	CC37 M_DQSA6
M DA19	CL11	DDR0_DQ_18	CE37 M_-DQSA6
M DA20	CD10	DDR0_DQ_19	
M DA21	CE11	DDR0_DQ_20	CJ37 M_DQSA7
M DA22	CK8	DDR0_DQ_21	CL37 M_-DQSA7
M DA23	CJ8	DDR0_DQ_22	
M DA24	CE13	DDR0_DQ_23	CV10
M DA25	CG15	DDR0_DQ_24	CT10
M DA26	CM14	DDR0_DQ_25	
M DA27	CH14	DDR0_DQ_26	BV8
M DA28	CC13	DDR0_DQ_27	BW9
M DA29	CD14	DDR0_DQ_28	
M DA30	CM12	DDR0_DQ_29	BU13
M DA31	CL13	DDR0_DQ_30	BV14
M DA32	CK28	DDR0_DQ_31	
M DA33	CH28	DDR0_DQ_32	CG9
M DA34	CK32	DDR0_DQ_33	CH8
M DA35	CH32	DDR0_DQ_34	
M DA36	CL27	DDR0_DQ_35	CG13
M DA37	CJ27	DDR0_DQ_36	CF14
M DA38	CL31	DDR0_DQ_37	
M DA39	CJ31	DDR0_DQ_38	CL29
M DA40	CD28	DDR0_DQ_39	CV29
M DA41	CB28	DDR0_DQ_40	
M DA42	CD32	DDR0_DQ_41	CE29
M DA43	CB32	DDR0_DQ_42	CC29
M DA44	CE27	DDR0_DQ_43	
M DA45	CC27	DDR0_DQ_44	CF36
M DA46	CE31	DDR0_DQ_45	CD36
M DA47	CC31	DDR0_DQ_46	
M DA48	CE35	DDR0_DQ_47	CM36
M DA49	CC35	DDR0_DQ_48	CK36
M DA50	CE38	DDR0_DQ_49	
M DA51	CC39	DDR0_DQ_50	CU9
M DA52	CE34	DDR0_DQ_51	CV9
M DA53	CD34	DDR0_DQ_52	
M DA54	CF38	DDR0_DQ_53	
M DA55	CD38	DDR0_DQ_54	
M DA56	CL35	DDR0_DQ_55	
M DA57	CJ35	DDR0_DQ_56	
M DA58	CL39	DDR0_DQ_57	
M DA59	CJ39	DDR0_DQ_58	
M DA60	CM34	DDR0_DQ_59	
M DA61	CK34	DDR0_DQ_60	
M DA62	CM38	DDR0_DQ_61	
M DA63	CK38	DDR0_DQ_62	
		DDR0_DQ_63	
CT8		DDR0_ECC_0	
CV8		DDR0_ECC_1	
CW13		DDR0_ECC_2	
CU13		DDR0_ECC_3	
CP8		DDR0_ECC_4	
CN8		DDR0_ECC_5	
CP10		DDR0_ECC_6	
CR15		DDR0_ECC_7	

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CHANNEL B

LGA2011-3G		HASWELL_E_EDS	
M DB0	BV4	DDR1_DQ_0	BY4 M_DQSB0
M DB1	BU1	DDR1_DQ_1	BW3 M_-DQSB0
M DB2	CA3	DDR1_DQ_2	
M DB3	CB4	DDR1_DQ_3	CJ5 M_DQSB1
M DB4	BT4	DDR1_DQ_4	CH6 M_-DQSB1
M DB5	BT2	DDR1_DQ_5	
M DB6	CA1	DDR1_DQ_6	CT4 M_DQSB2
M DB7	BY2	DDR1_DQ_7	CV4 M_-DQSB2
M DB8	CE3	DDR1_DQ_8	
M DB9	CF4	DDR1_DQ_9	DB10 M_DQSB3
M DB10	CL5	DDR1_DQ_10	DC9 M_-DQSB3
M DB11	CM4	DDR1_DQ_11	
M DB12	CE5	DDR1_DQ_12	CT30 M_DQSB4
M DB13	CF6	DDR1_DQ_13	CV30 M_-DQSB4
M DB14	CK6	DDR1_DQ_14	
M DB15	CL3	DDR1_DQ_15	DD32 M_DQSB5
M DB16	CR3	DDR1_DQ_16	DB32 M_-DQSB5
M DB17	CV2	DDR1_DQ_17	
M DB18	CT6	DDR1_DQ_18	CB37 M_DQSB6
M DB19	CB6	DDR1_DQ_19	CU37 M_-DQSB6
M DB20	CR1	DDR1_DQ_20	
M DB21	CP2	DDR1_DQ_21	DB38 M_DQSB7
M DB22	CU5	DDR1_DQ_22	DA37 M_-DQSB7
M DB23	CR5	DDR1_DQ_23	
M DB24	DA7	DDR1_DQ_24	DB14
M DB25	DB8	DDR1_DQ_25	DA13
M DB26	DE11	DDR1_DQ_26	
M DB27	DC11	DDR1_DQ_27	BV2
M DB28	DA5	DDR1_DQ_28	BW1
M DB29	CE6	DDR1_DQ_29	
M DB30	DE9	DDR1_DQ_30	CH4
M DB31	DE10	DDR1_DQ_31	CG3
M DB32	CT28	DDR1_DQ_32	
M DB33	CP28	DDR1_DQ_33	CW3
M DB34	CT32	DDR1_DQ_34	CU3
M DB35	CP32	DDR1_DQ_35	
M DB36	CU27	DDR1_DQ_36	DC7
M DB37	CR27	DDR1_DQ_37	DB8
M DB38	CU31	DDR1_DQ_38	
M DB39	CR31	DDR1_DQ_39	CU29
M DB40	DA29	DDR1_DQ_40	CR29
M DB41	DB30	DDR1_DQ_41	
M DB42	DC33	DDR1_DQ_42	DA31
M DB43	DE34	DDR1_DQ_43	CV32
M DB44	DB28	DDR1_DQ_44	
M DB45	CY28	DDR1_DQ_45	CV36
M DB46	DA33	DDR1_DQ_46	CT36
M DB47	DE33	DDR1_DQ_47	
M DB48	CU35	DDR1_DQ_48	DB36
M DB49	CR35	DDR1_DQ_49	DE37
M DB50	CU39	DDR1_DQ_50	
M DB51	CR39	DDR1_DQ_51	CW13
M DB52	CV34	DDR1_DQ_52	CV14
M DB53	CT34	DDR1_DQ_53	
M DB54	CV38	DDR1_DQ_54	
M DB55	CT39	DDR1_DQ_55	
M DB56	DC37	DDR1_DQ_56	
M DB57	DE36	DDR1_DQ_57	
M DB58	DC39	DDR1_DQ_58	
M DB59	DA39	DDR1_DQ_59	
M DB60	DC35	DDR1_DQ_60	
M DB61	DB36	DDR1_DQ_61	
M DB62	DE38	DDR1_DQ_62	
M DB63	DE39	DDR1_DQ_63	
CU13		DDR1_ECC_0	
CV14		DDR1_ECC_1	
DD14		DDR1_ECC_2	
DF14		DDR1_ECC_3	
CR13		DDR1_ECC_4	
CT14		DDR1_ECC_5	
DC13		DDR1_ECC_6	
DE14		DDR1_ECC_7	

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(11) M_DA[0..63] <=> M_DA[0..63]

(11) M_DQSA[0..7] <=> M_DQSA[0..7]

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(12) M_-DQSB[0..7] <=> M_-DQSB[0..7]

Gigabyte Technology

Title			CPU LGA2011-A		
Size	Document Number		Rev	1.01	
Custom	GA-X99-Gaming 7 WIFI				
Date:	Wednesday, September 03, 2014	Sheet	5	of	63

CHANNEL C

LGA2011-3H HASWELL_E_EDS

M DC0	AD38	DDR2_DQ_0	DDR2_QQS_DP_0	V38	M_DQSC0
M DC1	AA37	DDR2_DQ_1	DDR2_QQS_DN_0	W37	M_-DQSC0
M DC2	R37	DDR2_DQ_2			
M DC3	Y38	DDR2_DQ_3	DDR2_QQS_DP_1	U31	M_DQSC1
M DC4	AE37	DDR2_DQ_4	DDR2_QQS_DN_1	V32	M_-DQSC1
M DC5	AC38	DDR2_DQ_5			
M DC6	T38	DDR2_DQ_6	DDR2_QQS_DP_2	AB32	M_DQSC2
M DC7	U37	DDR2_DQ_7	DDR2_QQS_DN_2	AD32	M_-DQSC2
M DC8	V34	DDR2_DQ_8			
M DC9	U33	DDR2_DQ_9	DDR2_QQS_DP_3	U25	M_DQSC3
M DC10	V30	DDR2_DQ_10	DDR2_QQS_DN_3	W25	M_-DQSC3
M DC11	T30	DDR2_DQ_11			
M DC12	U35	DDR2_DQ_12	DDR2_QQS_DP_4	N7	M_DQSC4
M DC13	R35	DDR2_DQ_13	DDR2_QQS_DN_4	P8	M_-DQSC4
M DC14	T32	DDR2_DQ_14			
M DC15	W31	DDR2_DQ_15	DDR2_QQS_DP_5	AB10	M_DQSC5
M DC16	AD34	DDR2_DQ_16	DDR2_QQS_DN_5	Y10	M_-DQSC5
M DC17	AB34	DDR2_DQ_17			
M DC18	AD30	DDR2_DQ_18	DDR2_QQS_DP_6	AH12	M_DQSC6
M DC19	AB30	DDR2_DQ_19	DDR2_QQS_DN_6	AJ13	M_-DQSC6
M DC20	AC35	DDR2_DQ_20			
M DC21	AA35	DDR2_DQ_21	DDR2_QQS_DP_7	AJ7	M_DQSC7
M DC22	AE31	DDR2_DQ_22	DDR2_QQS_DN_7	AH8	M_-DQSC7
M DC23	AC31	DDR2_DQ_23			
M DC24	U27	DDR2_DQ_24	DDR2_QQS_DP_8	AC25	
M DC25	R27	DDR2_DQ_25	DDR2_QQS_DN_8	AE25	
M DC26	U23	DDR2_DQ_26			
M DC27	R23	DDR2_DQ_27	DDR2_QQS_DP_9	AB38	
M DC28	V28	DDR2_DQ_28	DDR2_QQS_DN_9	AC37	
M DC29	T28	DDR2_DQ_29			
M DC30	V24	DDR2_DQ_30	DDR2_QQS_DP_10	T34	
M DC31	T24	DDR2_DQ_31	DDR2_QQS_DN_10	R33	
M DC32	N8	DDR2_DQ_32			
M DC33	K8	DDR2_DQ_33	DDR2_QQS_DP_11	AC33	
M DC34	R7	DDR2_DQ_34	DDR2_QQS_DN_11	AA33	
M DC35	P6	DDR2_DQ_35			
M DC36	J8	DDR2_DQ_36	DDR2_QQS_DP_12	V26	
M DC37	L3	DDR2_DQ_37	DDR2_QQS_DN_12	X26	
M DC38	KE	DDR2_DQ_38			
M DC39	M6	DDR2_DQ_39	DDR2_QQS_DP_13	M8	
M DC40	U8	DDR2_DQ_40	DDR2_QQS_DN_13	L7	
M DC41	W11	DDR2_DQ_41			
M DC42	AA11	DDR2_DQ_42	DDR2_QQS_DP_14	V8	
M DC43	AB8	DDR2_DQ_43	DDR2_QQS_DN_14	X9	
M DC44	T10	DDR2_DQ_44			
M DC45	U11	DDR2_DQ_45	DDR2_QQS_DP_15	AH16	
M DC46	AA9	DDR2_DQ_46	DDR2_QQS_DN_15	AJ15	
M DC47	Y8	DDR2_DQ_47			
M DC48	AE11	DDR2_DQ_48	DDR2_QQS_DP_16	AH10	
M DC49	AE12	DDR2_DQ_49	DDR2_QQS_DN_16	AJ9	
M DC50	AK12	DDR2_DQ_50			
M DC51	AL13	DDR2_DQ_51	DDR2_QQS_DP_17	AD26	
M DC52	AG15	DDR2_DQ_52	DDR2_QQS_DN_17	AB26	
M DC53	AE14	DDR2_DQ_53			
M DC54	AK14	DDR2_DQ_54			
M DC55	AL15	DDR2_DQ_55			
M DC56	AG9	DDR2_DQ_56			
M DC57	AG7	DDR2_DQ_57			
M DC58	AK10	DDR2_DQ_58			
M DC59	AL9	DDR2_DQ_59			
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M DC61	AE9	DDR2_DQ_61			
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AC2Z
AA2Z
AC2Z
AA2Z
AD2Z
AB2Z
AD2Z
AB2Z

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DDR2_ECC_2
DDR2_ECC_3
DDR2_ECC_4
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(13) M_-DQSC[0..7] <— M_-DQSC[0..7]

CHANNEL D

LGA2011-3I HASWELL_E_EDS

M DD0	D38	DDR3_DQ_0	DDR3_QQS_DP_0	E37	M_DQSD0
M DD1	B38	DDR3_DQ_1	DDR3_QQS_DN_0	C37	M_-DQSD0
M DD2	L37	DDR3_DQ_2			
M DD3	M38	DDR3_DQ_3	DDR3_QQS_DP_1	B32	M_DQSD1
M DD4	C39	DDR3_DQ_4	DDR3_QQS_DN_1	A33	M_-DQSD1
M DD5	J39	DDR3_DQ_5			
M DD6	G37	DDR3_DQ_6	DDR3_QQS_DP_2	M32	M_DQSD2
M DD7	K38	DDR3_DQ_7	DDR3_QQS_DN_2	K32	M_-DQSD2
M DD8	A35	DDR3_DQ_8			
M DD9	B34	DDR3_DQ_9	DDR3_QQS_DP_3	E25	M_DQSD3
M DD10	G31	DDR3_DQ_10	DDR3_QQS_DN_3	G25	M_-DQSD3
M DD11	E31	DDR3_DQ_11			
M DD12	F34	DDR3_DQ_12	DDR3_QQS_DP_4	H2	M_DQSD4
M DD13	E35	DDR3_DQ_13	DDR3_QQS_DN_4	G3	M_-DQSD4
M DD14	D32	DDR3_DQ_14			
M DD15	E33	DDR3_DQ_15	DDR3_QQS_DP_5	E7	M_DQSD5
M DD16	K34	DDR3_DQ_16	DDR3_QQS_DN_5	C7	M_-DQSD5
M DD17	M34	DDR3_DQ_17			
M DD18	K30	DDR3_DQ_18	DDR3_QQS_DP_6	AK2	M_DQSD6
M DD19	M30	DDR3_DQ_19	DDR3_QQS_DN_6	AJ1	M_-DQSD6
M DD20	J35	DDR3_DQ_20			
M DD21	L35	DDR3_DQ_21	DDR3_QQS_DP_7	AB4	M_DQSD7
M DD22	L31	DDR3_DQ_22	DDR3_QQS_DN_7	AA5	M_-DQSD7
M DD23	N31	DDR3_DQ_23			
M DD24	F28	DDR3_DQ_24	DDR3_QQS_DP_8	L25	
M DD25	E27	DDR3_DQ_25	DDR3_QQS_DN_8	N25	
M DD26	F24	DDR3_DQ_26			
M DD27	E23	DDR3_DQ_27	DDR3_QQS_DP_9	E38	
M DD28	G29	DDR3_DQ_28	DDR3_QQS_DN_9	H38	
M DD29	F29	DDR3_DQ_29			
M DD30	C25	DDR3_DQ_30	DDR3_QQS_DP_10	C35	
M DD31	B24	DDR3_DQ_31	DDR3_QQS_DN_10	D34	
M DD32	K4	DDR3_DQ_32			
M DD33	H4	DDR3_DQ_33	DDR3_QQS_DP_11	J33	
M DD34	J1	DDR3_DQ_34	DDR3_QQS_DN_11	L33	
M DD35	L1	DDR3_DQ_35			
M DD36	P4	DDR3_DQ_36	DDR3_QQS_DP_12	E26	
M DD37	N3	DDR3_DQ_37	DDR3_QQS_DN_12	D26	
M DD38	K2	DDR3_DQ_38			
M DD39	R3	DDR3_DQ_39	DDR3_QQS_DP_13	M4	
M DD40	E9	DDR3_DQ_40	DDR3_QQS_DN_13	L3	
M DD41	F8	DDR3_DQ_41			
M DD42	E5	DDR3_DQ_42	DDR3_QQS_DP_14	B8	
M DD43	F6	DDR3_DQ_43	DDR3_QQS_DN_14	D8	
M DD44	C9	DDR3_DQ_44			
M DD45	A9	DDR3_DQ_45	DDR3_QQS_DP_15	AH4	
M DD46	D6	DDR3_DQ_46	DDR3_QQS_DN_15	AJ5	
M DD47	G7	DDR3_DQ_47			
M DD48	AG3	DDR3_DQ_48	DDR3_QQS_DP_16	V6	
M DD49	AG1	DDR3_DQ_49	DDR3_QQS_DN_16	W5	
M DD50	AL3	DDR3_DQ_50			
M DD51	AL5	DDR3_DQ_51	DDR3_QQS_DP_17	M26	
M DD52	AG5	DDR3_DQ_52	DDR3_QQS_DN_17	K26	
M DD53	AE3	DDR3_DQ_53			
M DD54	AJ3	DDR3_DQ_54			
M DD55	AL1	DDR3_DQ_55			
M DD56	V4	DDR3_DQ_56			
M DD57	W3	DDR3_DQ_57			
M DD58	AC5	DDR3_DQ_58			
M DD59	AE5	DDR3_DQ_59			
M DD60	U5	DDR3_DQ_60			
M DD61	V6	DDR3_DQ_61			
M DD62	AC3	DDR3_DQ_62			
M DD63	AB6	DDR3_DQ_63			

L2Z
J2Z
L2Z
J2Z
K2Z
M2Z
M2Z
K2Z

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DDR3_ECC_2
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DDR3_ECC_5
DDR3_ECC_6
DDR3_ECC_7

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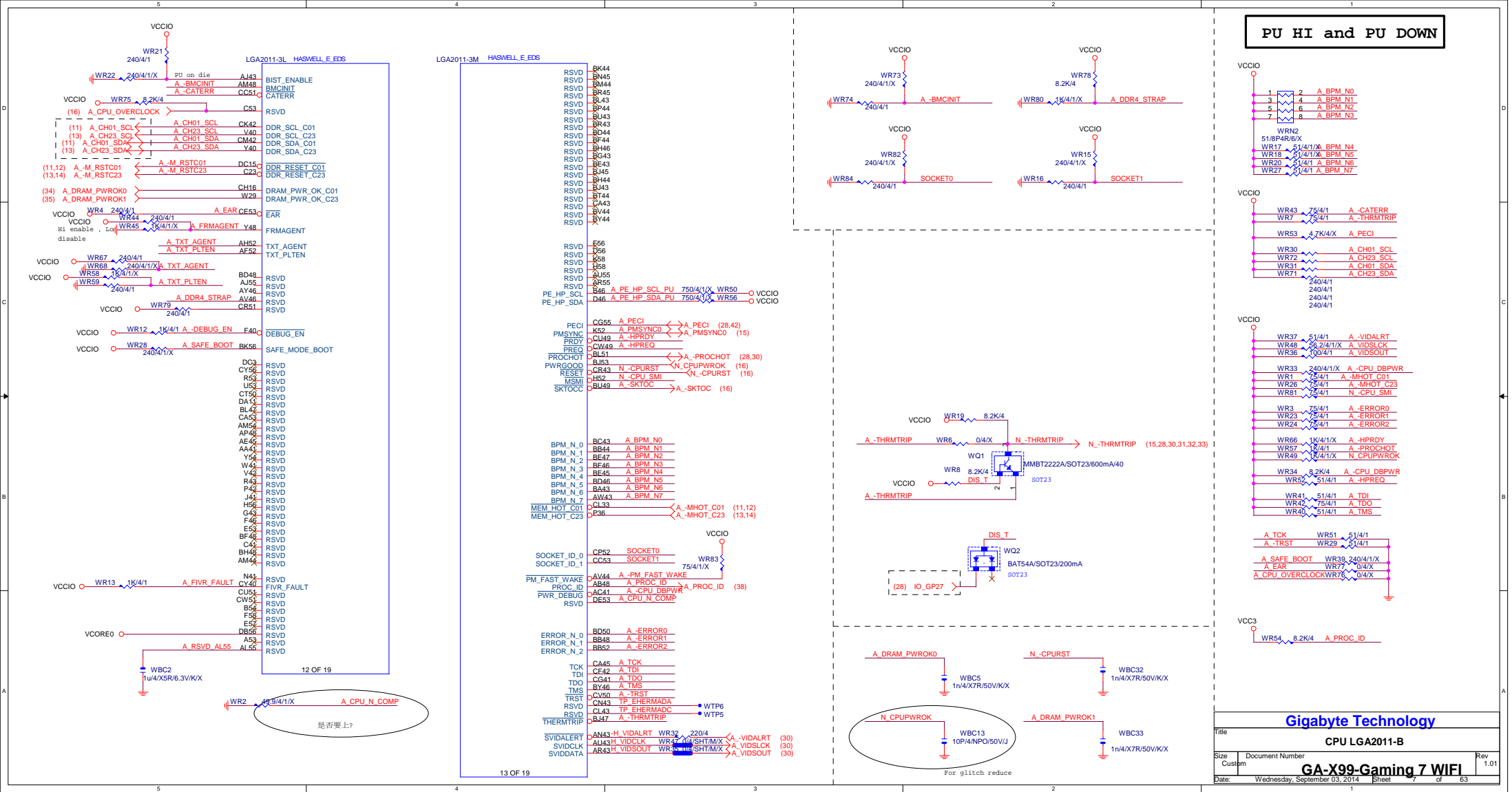
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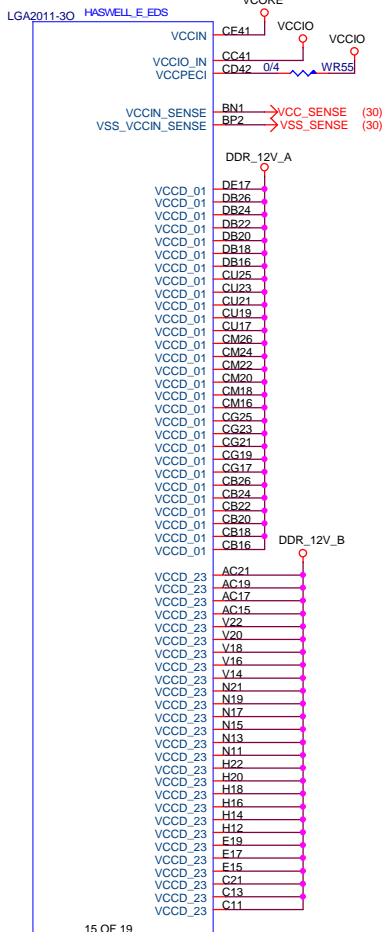
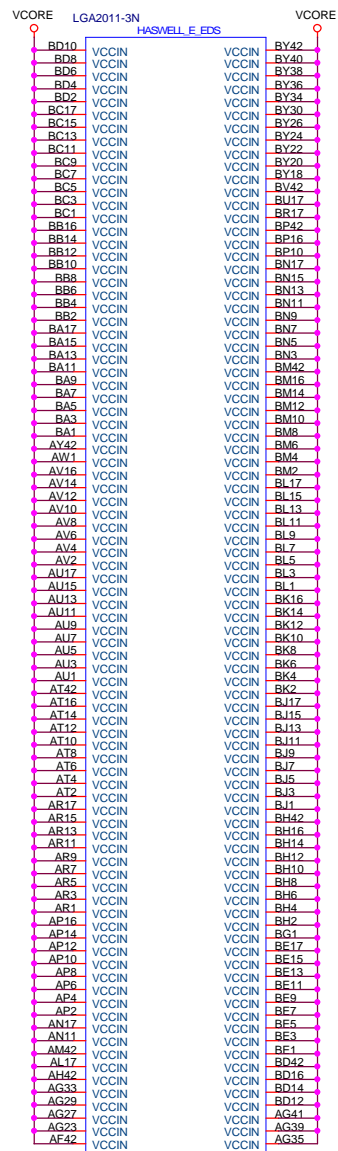
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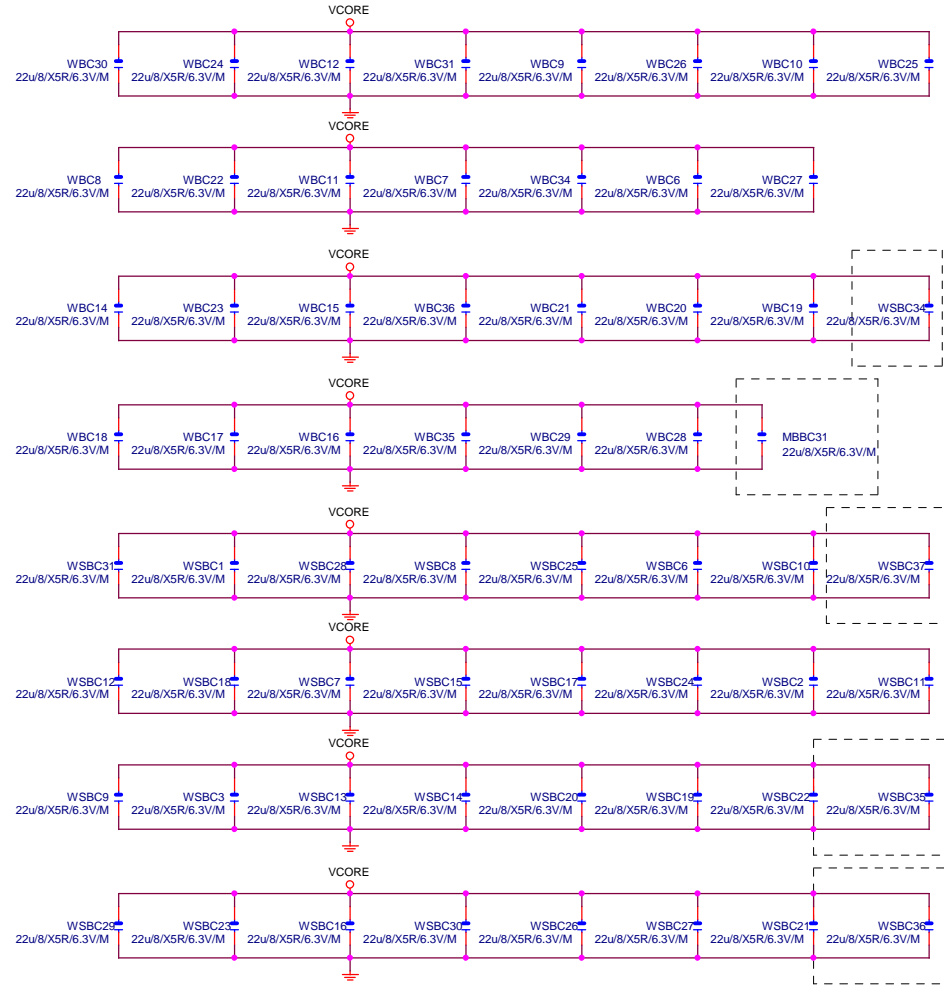
Gigabyte Technology

Title			CPU LGA2011-A		
Size			Document Number		
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Date:			Wednesday, September 03, 2014		
			Sheet 6 of 63		
			Rev 1.01		

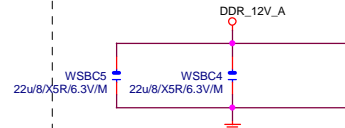




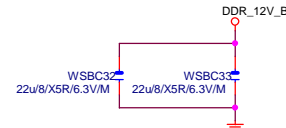
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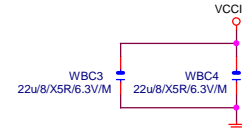
DDR_12V_A



DDR_12V_B



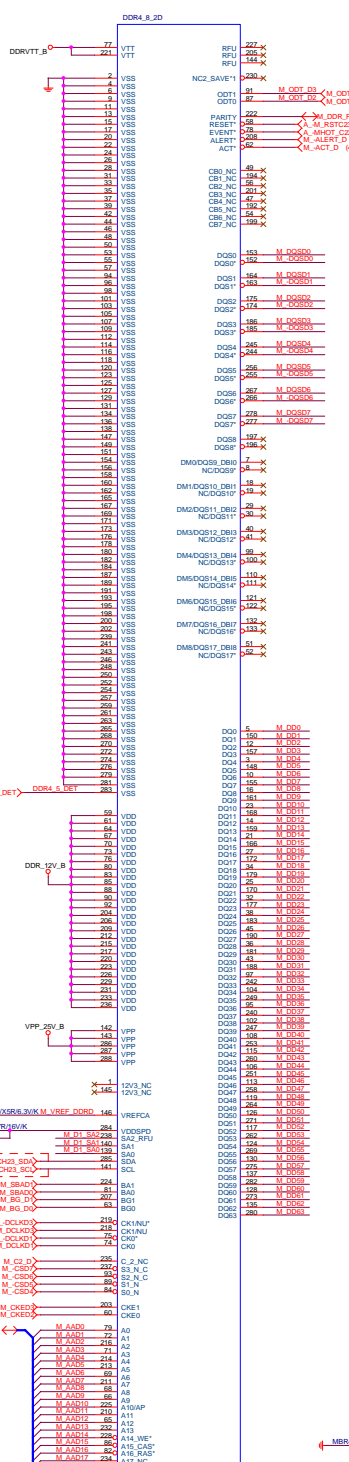
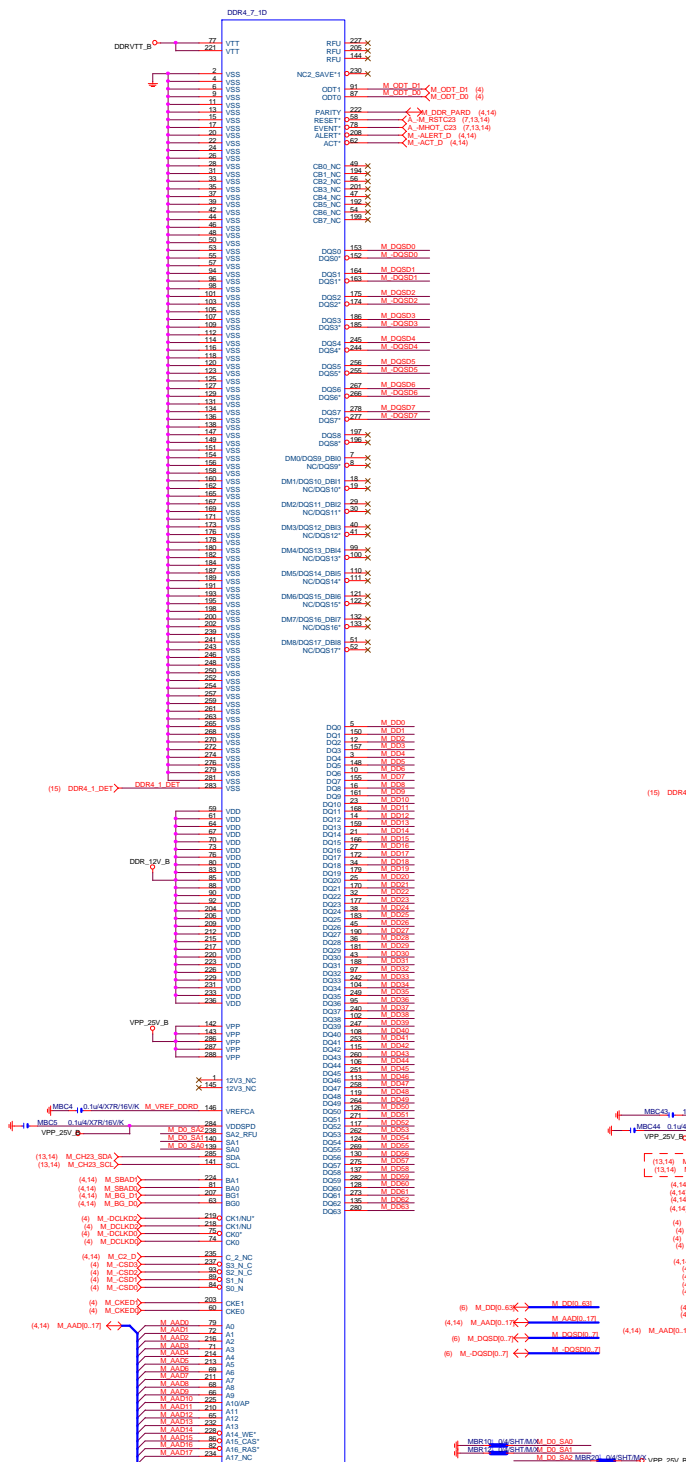
VCCIO



Gigabyte Technology

CPU LGA2011-C

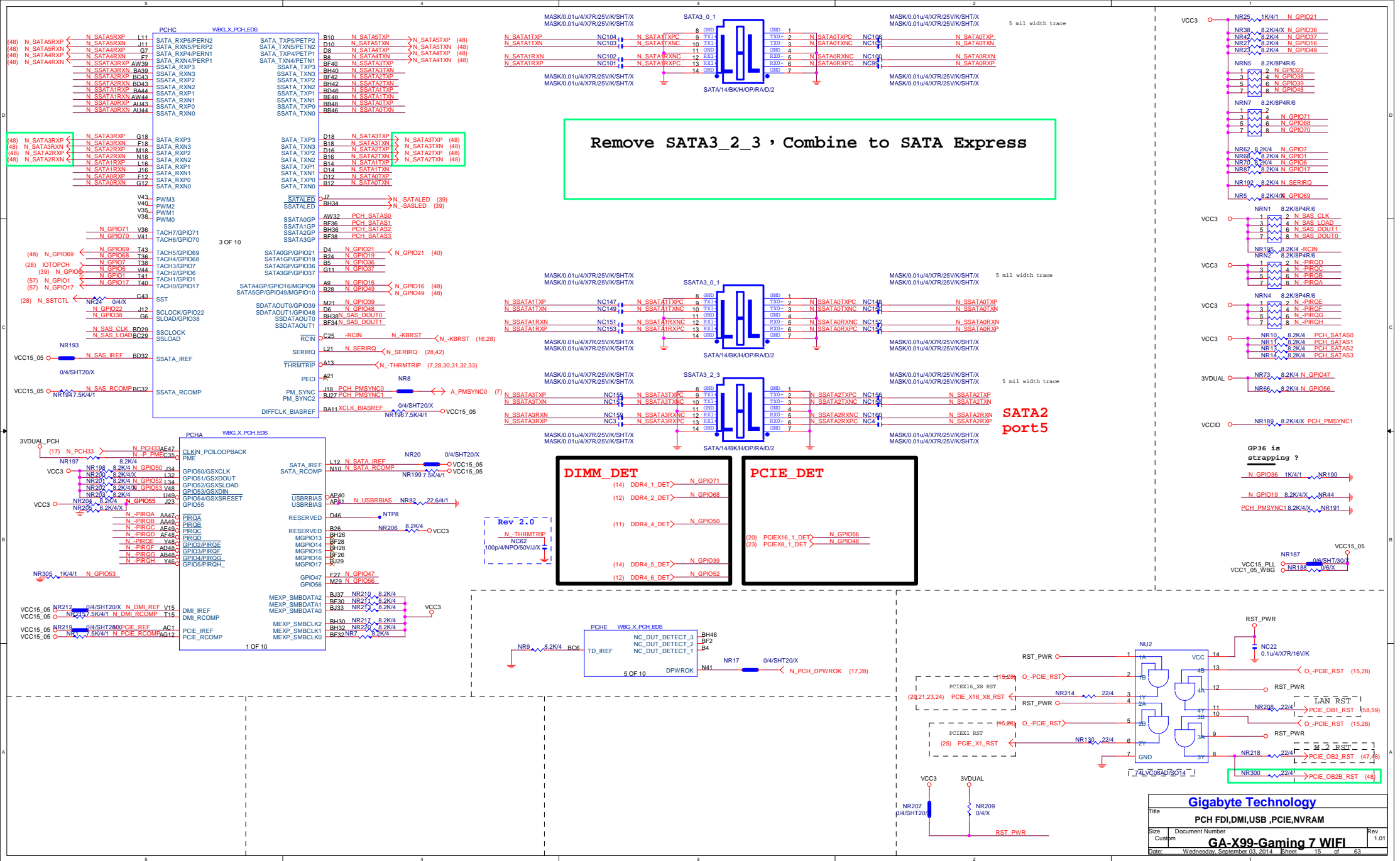
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Size	Document Number			Rev
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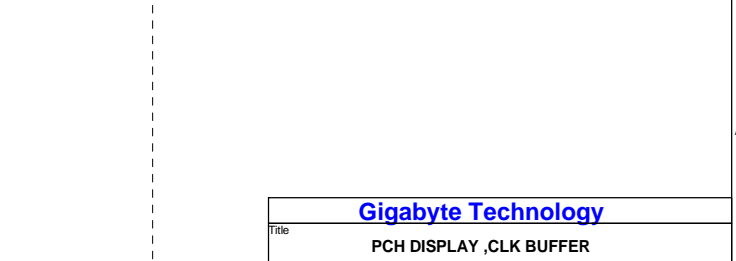
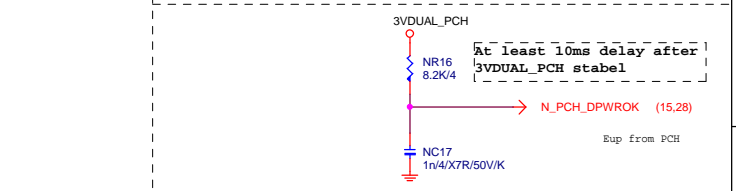
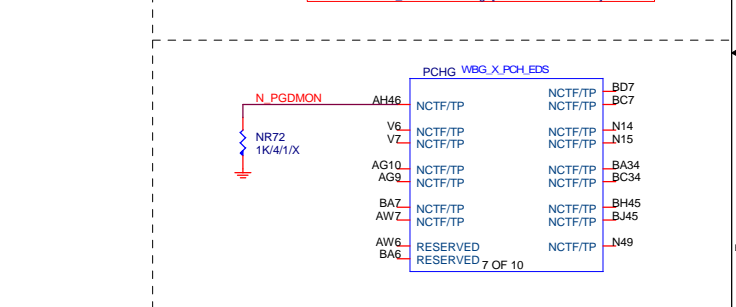
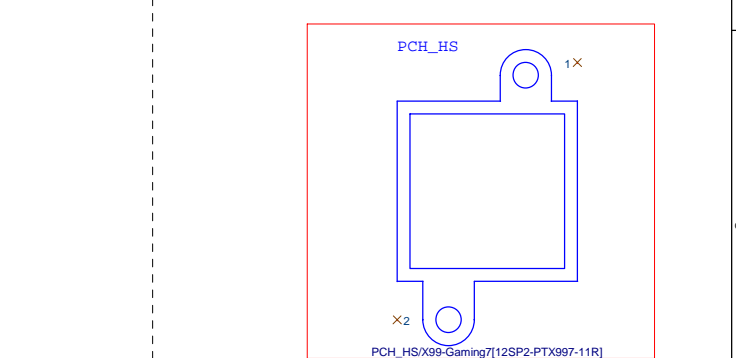
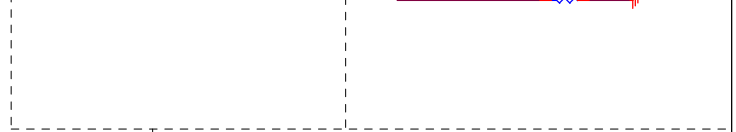
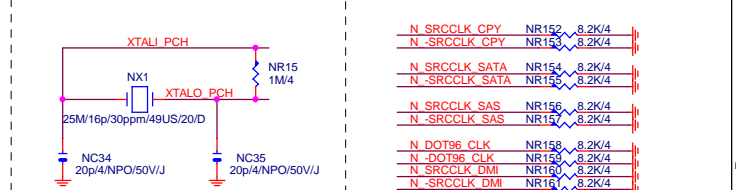
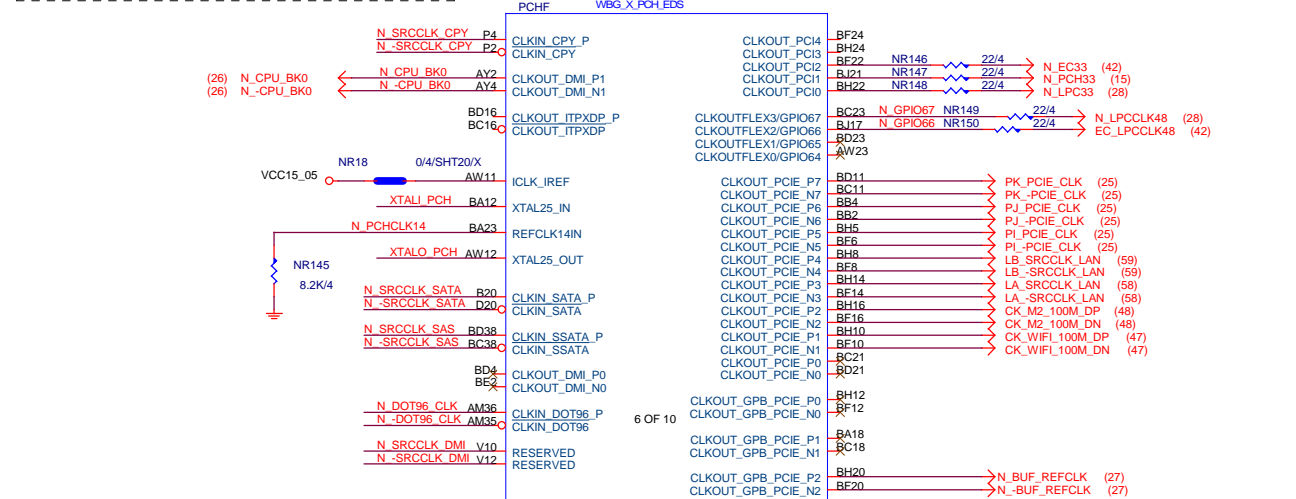
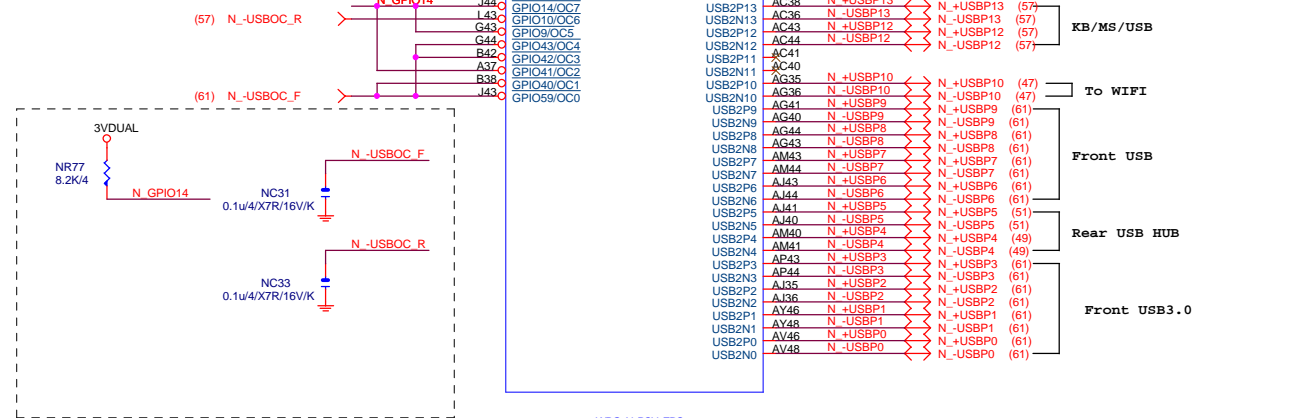
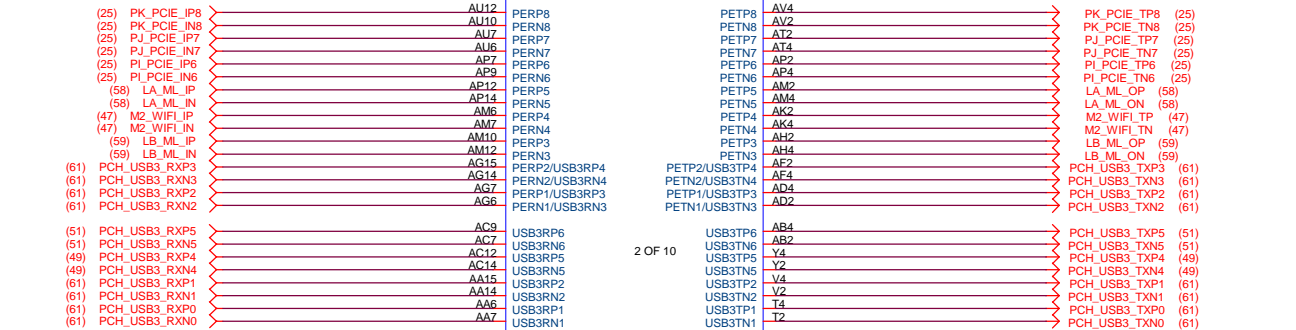
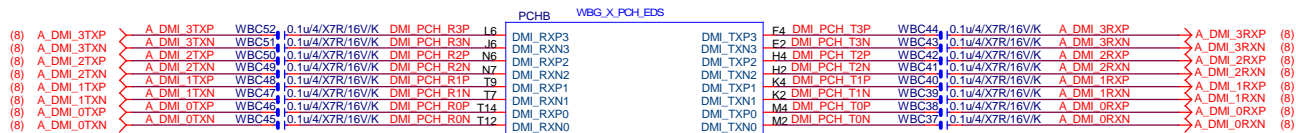


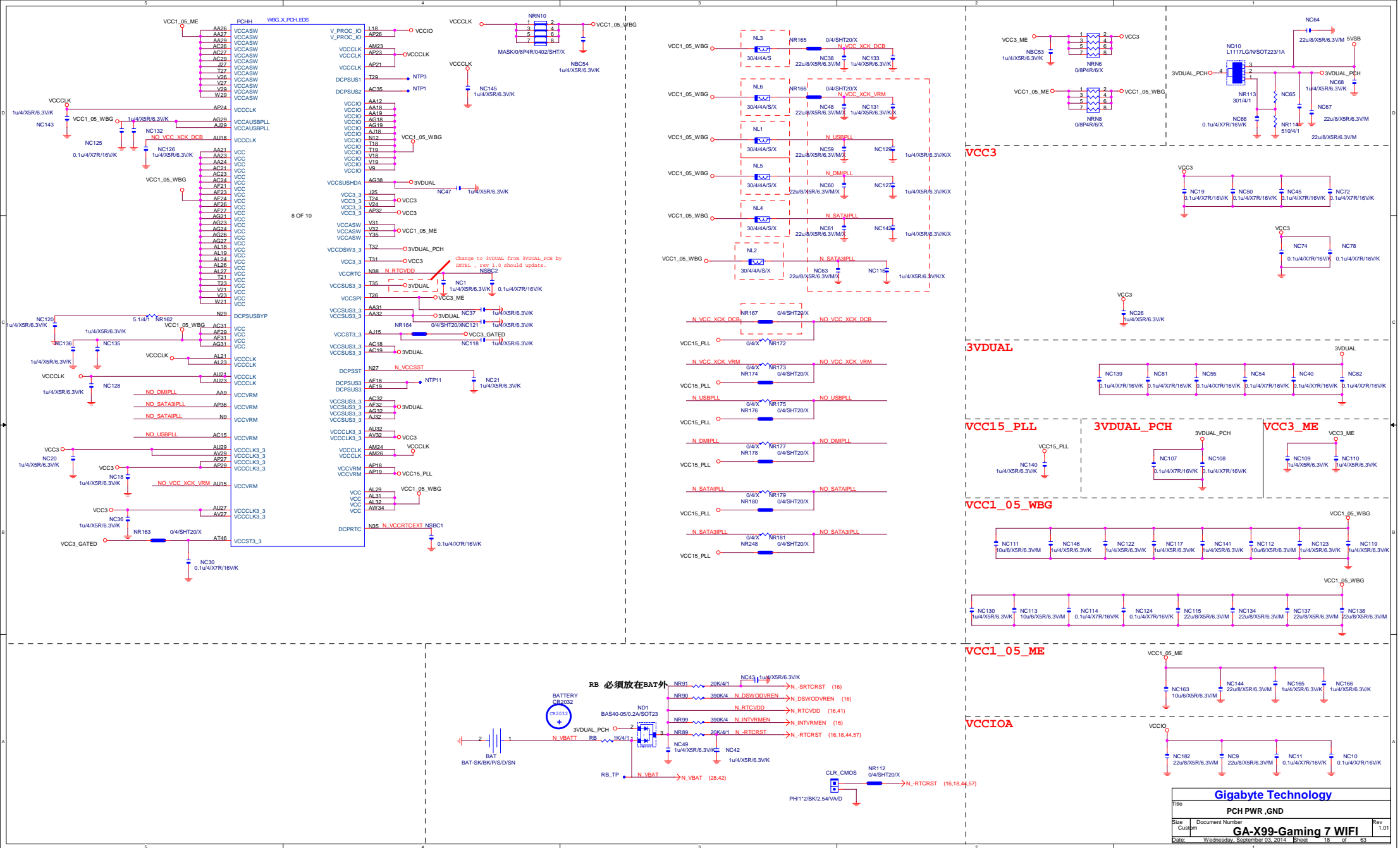
Gigabyte Technology		
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Doc No.	GA-X99-Gaming 7 WIFI	Rev 1.01
Doc No.	GA-X99-Gaming 7 WIFI	Rev 1.01

灰，短邊單耳扣，DIP
CHANNEL D
SA2:0=100

黑，短邊單耳扣，DIP
CHANNEL D
SA2:0=101







PCHI WBG_X_PCH_EDS		
AT41	VSS	VSS
AT44	VSS	VSS
AT48	VSS	VSS
AT6	VSS	VSS
AT9	VSS	VSS
AU1	VSS	VSS
AU14	VSS	VSS
AU3	VSS	VSS
AU35	VSS	VSS
AU36	VSS	VSS
AU38	VSS	VSS
AU40	VSS	VSS
AU41	VSS	VSS
AU49	VSS	VSS
AU9	VSS	VSS
AV18	VSS	VSS
AV20	VSS	VSS
AV21	VSS	VSS
AV23	VSS	VSS
AV25	VSS	VSS
AV30	VSS	VSS
AW1	VSS	VSS
AW16	VSS	VSS
AW18	VSS	VSS
AW21	VSS	VSS
AW27	VSS	VSS
AW29	VSS	VSS
AW3	VSS	VSS
AW38	VSS	VSS
AW43	VSS	VSS
AW47	VSS	VSS
AW49	VSS	VSS
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BA1	VSS	VSS
BA14	VSS	VSS
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BA25	VSS	VSS
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BA30	VSS	VSS
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BA36	VSS	VSS
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BA47	VSS	VSS
BA49	VSS	VSS
BA9	VSS	VSS
BC12	VSS	VSS
BC27	VSS	VSS
BC3	VSS	VSS
AJ3	VSS	VSS
AJ31	VSS	VSS
AJ38	VSS	VSS
AJ6	VSS	VSS
AJ7	VSS	VSS
AJ9	VSS	VSS
AK12	VSS	VSS
AK15	VSS	VSS
AK35	VSS	VSS
AK38	VSS	VSS
AK41	VSS	VSS
AK44	VSS	VSS
AK46	VSS	VSS
AK6	VSS	VSS
AK9	VSS	VSS
AL1	VSS	VSS
AL3	VSS	VSS
AL49	VSS	VSS
AM14	VSS	VSS
AM15	VSS	VSS
AM18	VSS	VSS
AM19	VSS	VSS
AM21	VSS	VSS
AM27	VSS	VSS
AM29	VSS	VSS
AM31	VSS	VSS
AM32	VSS	VSS

9 OF 10

BC39	VSS
BC44	VSS
BC47	VSS
BC49	VSS
BD12	VSS
BD14	VSS
BD18	VSS
BD20	VSS
BD25	VSS
BD27	VSS
BD30	VSS
BD34	VSS
BD36	VSS
BD39	VSS
BD41	VSS
BD44	VSS
BD6	VSS
BD9	VSS
BF18	VSS
BF4	VSS
BF44	VSS
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BG19	VSS
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BH4	VSS
BJ11	VSS
BJ13	VSS
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BJ23	VSS
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BJ39	VSS
N3	VSS
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AP15	VSS
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AP35	VSS
AP38	VSS
AP46	VSS
AP6	VSS
AR1	VSS
AR3	VSS
AR49	VSS
AT12	VSS
AT15	VSS
AT35	VSS
AT38	VSS
AJ27	VSS

PCHJ WBG_X_PCH_EDS

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AA10	VSS	A15
AA3	VSS	A19
AA43	VSS	A23
AA44	VSS	A27
AB46	VSS	A29
AC10	VSS	A31
AC3	VSS	A35
AC49	VSS	A39
AC6	VSS	A43
AD18	VSS	C21
AD19	VSS	C23
AD21	VSS	C7
AD23	VSS	C9
AD24	VSS	D22
AD26	VSS	D24
AD27	VSS	D28
AD29	VSS	D32
AD31	VSS	D36
AD32	VSS	D40
AE1	VSS	D44
AE12	VSS	F14
AE15	VSS	F16
AE3	VSS	F20
AE35	VSS	F23
AE38	VSS	F25
AE41	VSS	F30
AE44	VSS	F36
AE6	VSS	F41
AE9	VSS	F46
AF46	VSS	F9
AG1	VSS	G16
AG3	VSS	G3
AG47	VSS	G49
AG49	VSS	J1
AH48	VSS	J14
AJ1	VSS	J20
AJ10	VSS	J3
AJ12	VSS	J30
AJ14	VSS	J36
AJ19	VSS	J41
AJ21	VSS	J9
AJ23	VSS	K46
AJ24	VSS	L1
AJ26	VSS	Y12
L3	VSS	Y15
L49	VSS	Y38
L7	VSS	Y41
M20	VSS	Y44
M25	VSS	Y6
M30	VSS	Y9
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P12	VSS	V46
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P35	VSS	W18
P38	VSS	W19
P41	VSS	W23
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P46	VSS	W26
P6	VSS	W27
P9	VSS	W3
R1	VSS	W31
R3	VSS	W32
R49	VSS	W47
T10	VSS	W49
	VSS	T48
AU47	VSS	T6
A4	VSS	G1
A45	VSS	BH2
A46	VSS	BH48
A48	VSS	BH49
A5	VSS	BJ2
A7	VSS	BJ4
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B48	VSS	BJ48
B49	VSS	BJ5
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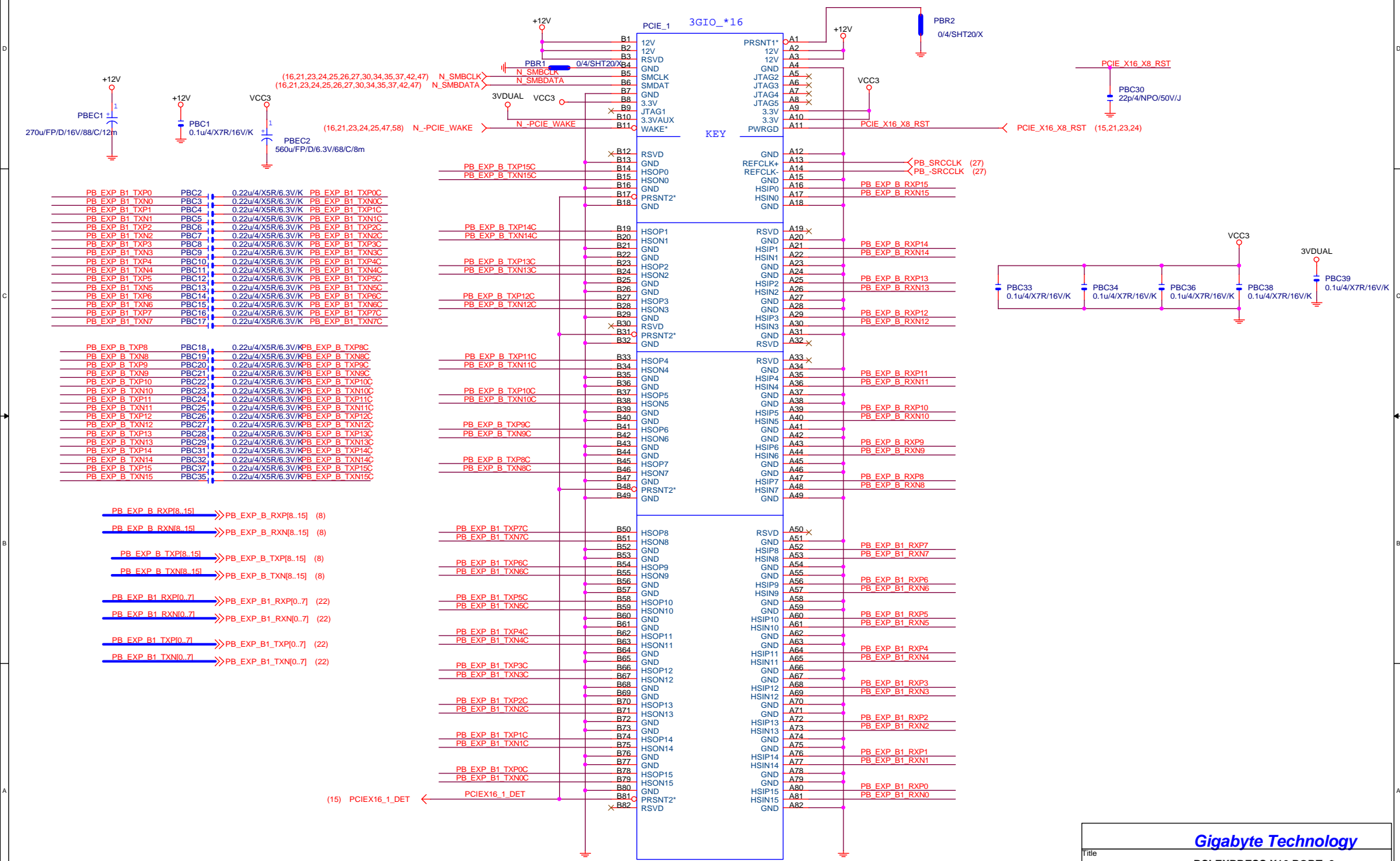
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L1117LG/N/SOT223/1A

Gigabyte Technology

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PCH PWR ,GND			
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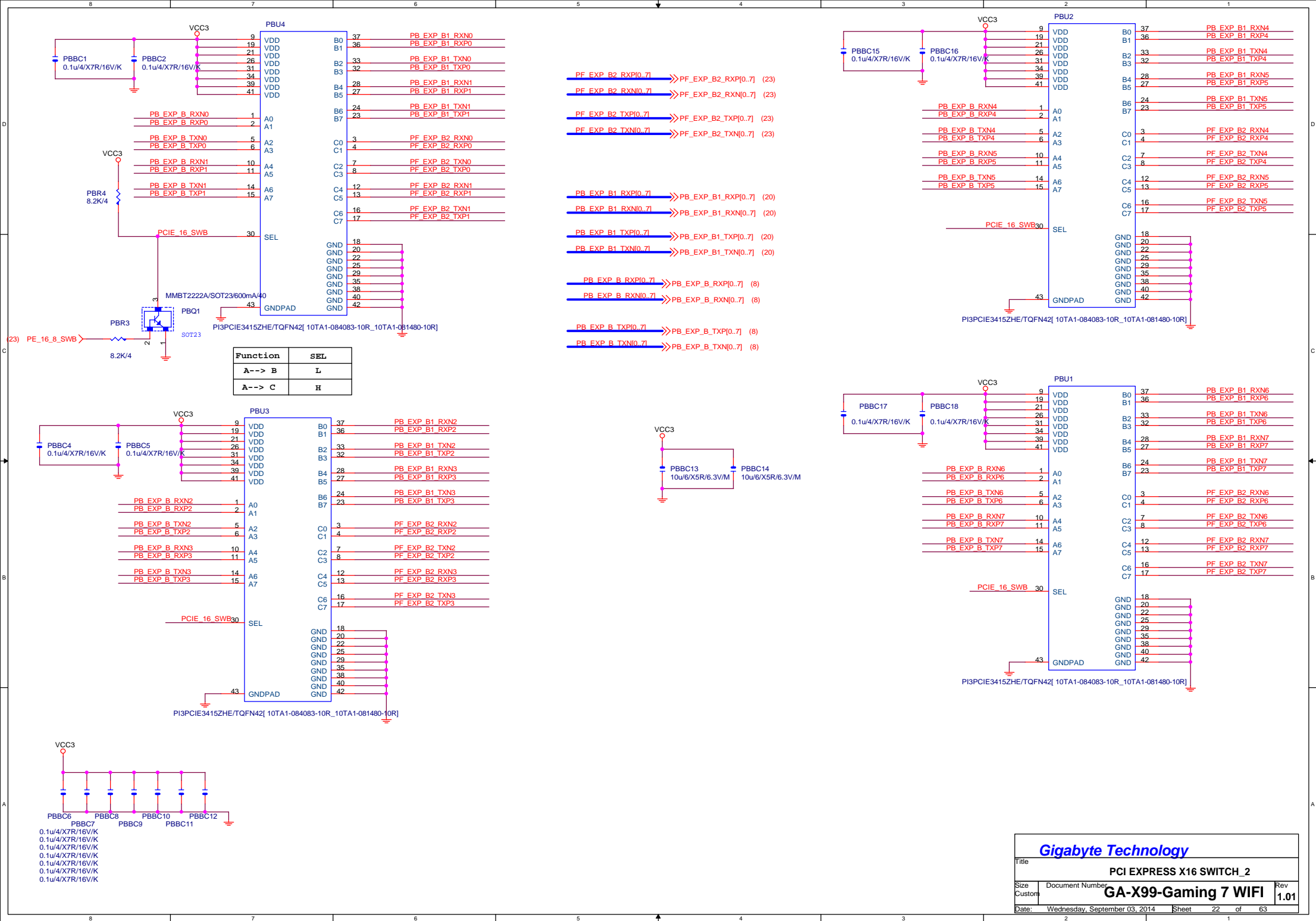
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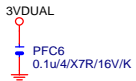
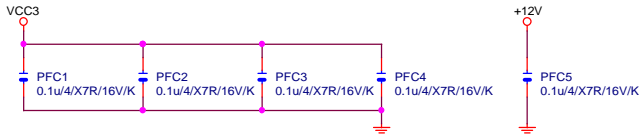


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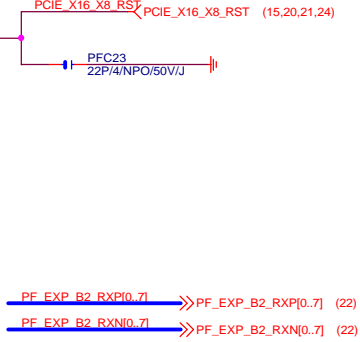
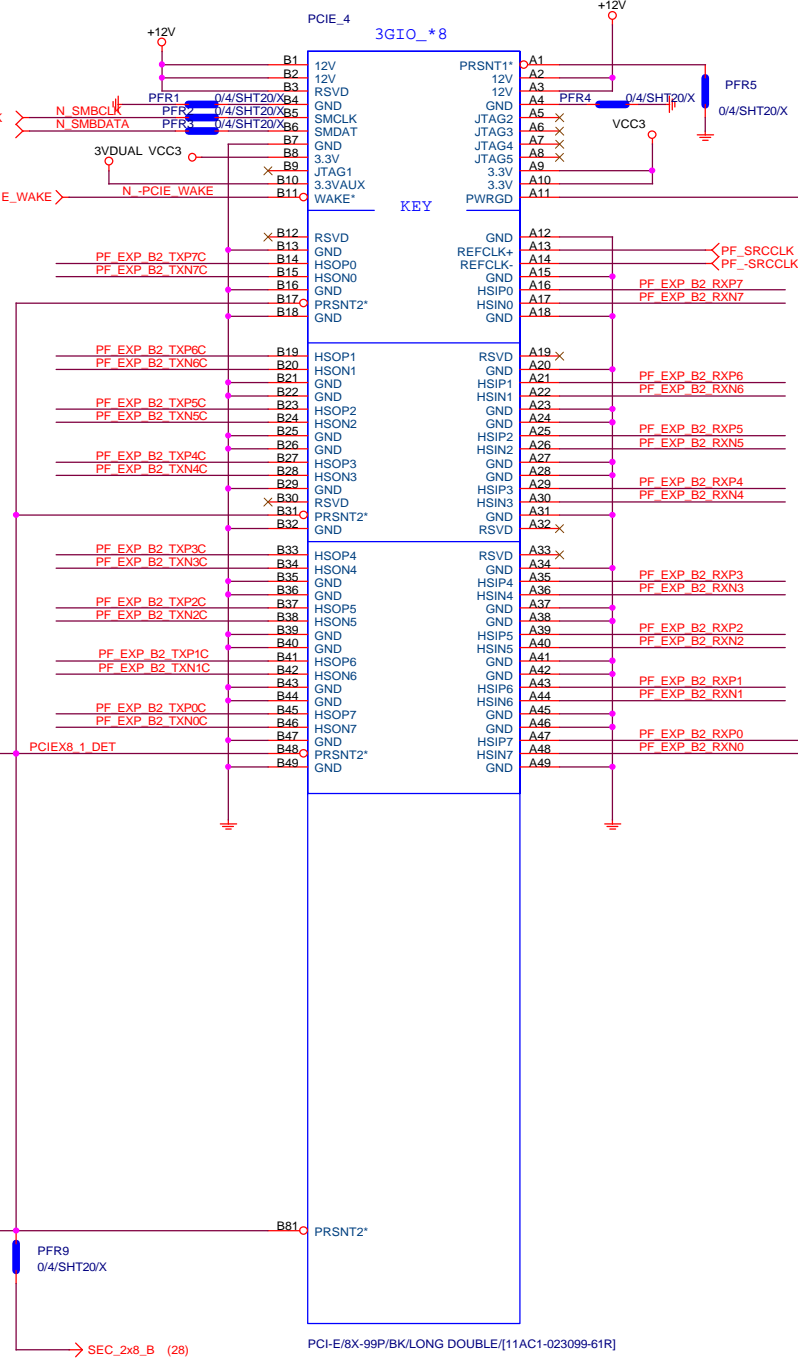
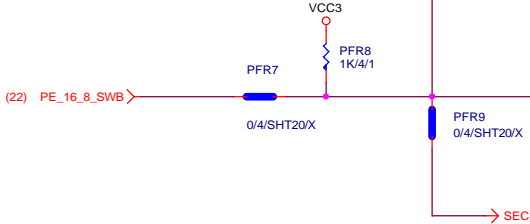
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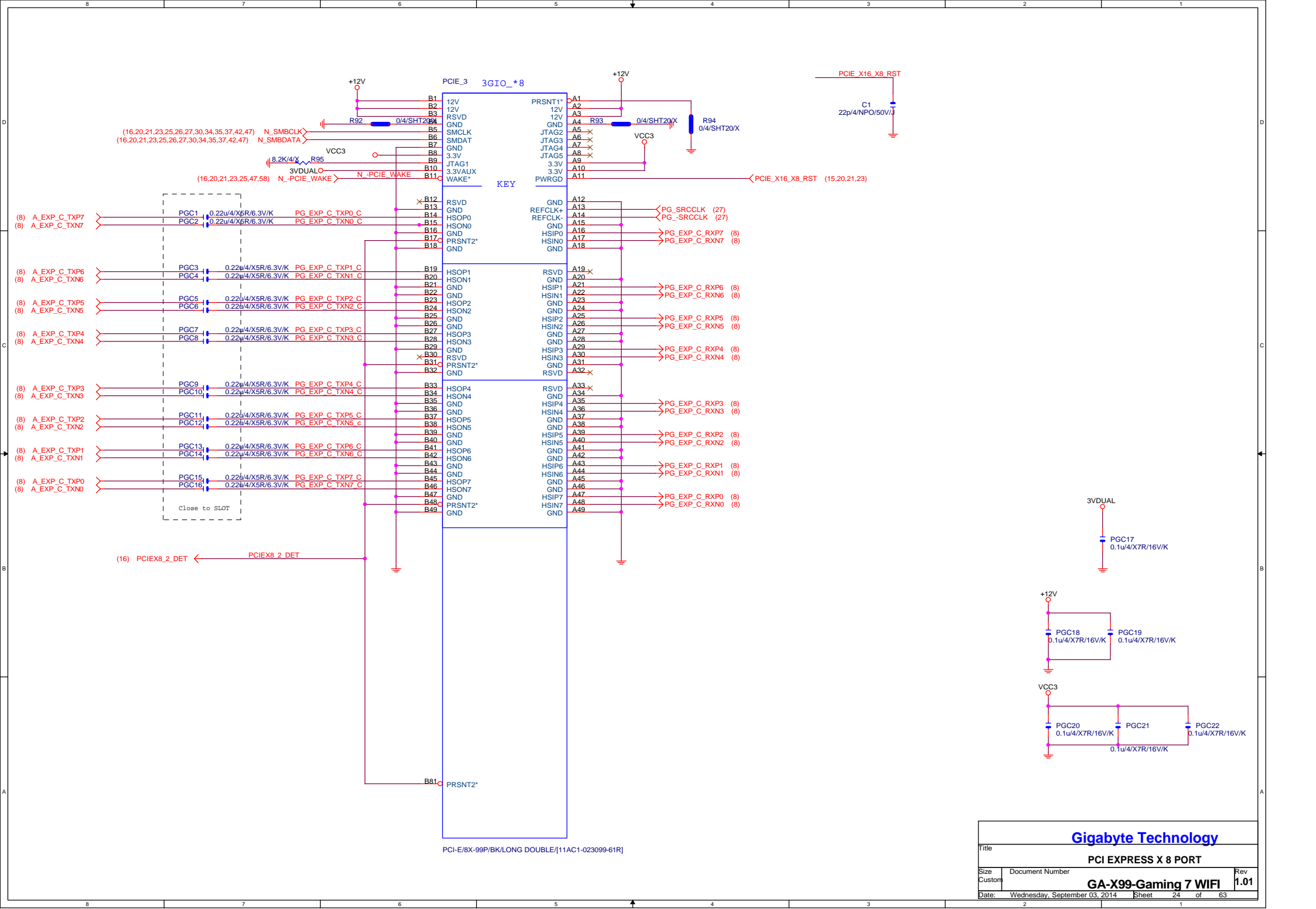






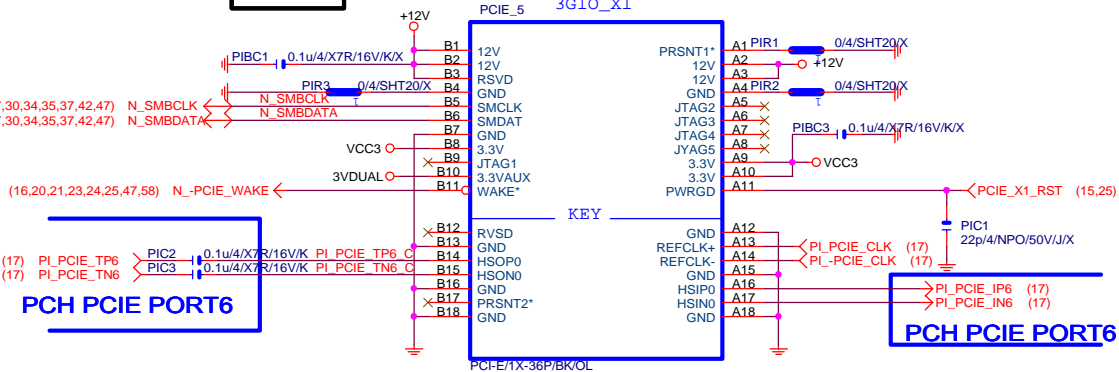
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PF EXP B2 TXP1	PFC9	0.22u/4/X5R/6.3V/K	PF EXP B2 TXP1C
PF EXP B2 TXN1	PFC10	0.22u/4/X5R/6.3V/K	PF EXP B2 TXN1C
PF EXP B2 TXP2	PFC11	0.22u/4/X5R/6.3V/K	PF EXP B2 TXP2C
PF EXP B2 TXN2	PFC12	0.22u/4/X5R/6.3V/K	PF EXP B2 TXN2C
PF EXP B2 TXP3	PFC13	0.22u/4/X5R/6.3V/K	PF EXP B2 TXP3C
PF EXP B2 TXN3	PFC14	0.22u/4/X5R/6.3V/K	PF EXP B2 TXN3C
PF EXP B2 TXP4	PFC15	0.22u/4/X5R/6.3V/K	PF EXP B2 TXP4C
PF EXP B2 TXN4	PFC16	0.22u/4/X5R/6.3V/K	PF EXP B2 TXN4C
PF EXP B2 TXP5	PFC17	0.22u/4/X5R/6.3V/K	PF EXP B2 TXP5C
PF EXP B2 TXN5	PFC18	0.22u/4/X5R/6.3V/K	PF EXP B2 TXN5C
PF EXP B2 TXP6	PFC19	0.22u/4/X5R/6.3V/K	PF EXP B2 TXP6C
PF EXP B2 TXN6	PFC20	0.22u/4/X5R/6.3V/K	PF EXP B2 TXN6C
PF EXP B2 TXP7	PFC21	0.22u/4/X5R/6.3V/K	PF EXP B2 TXP7C
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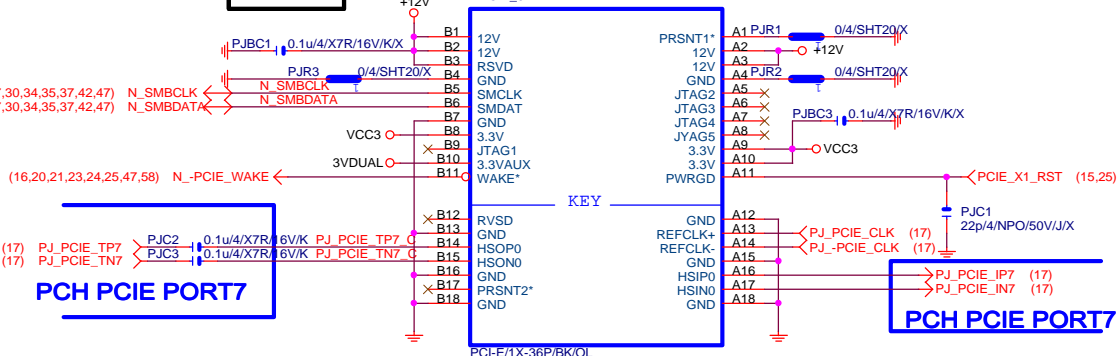


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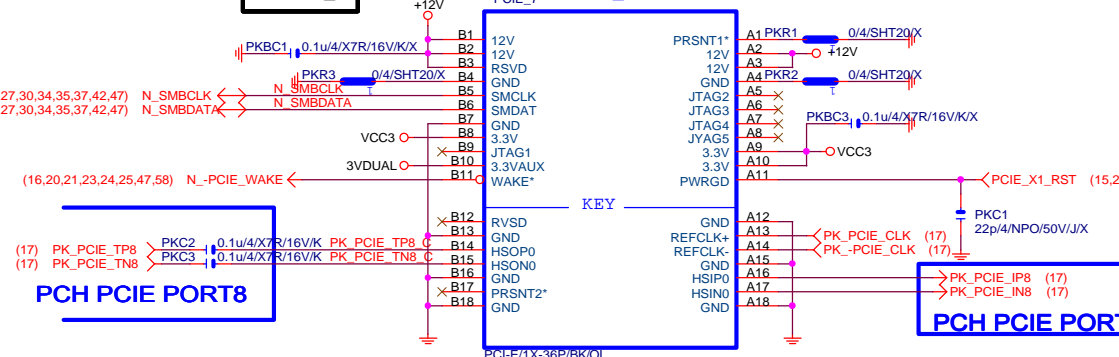
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PCIEX1_2



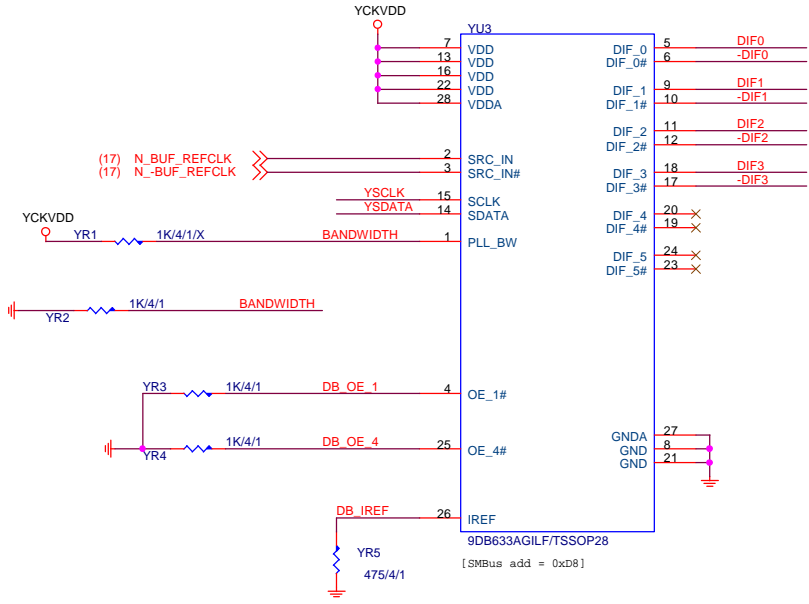
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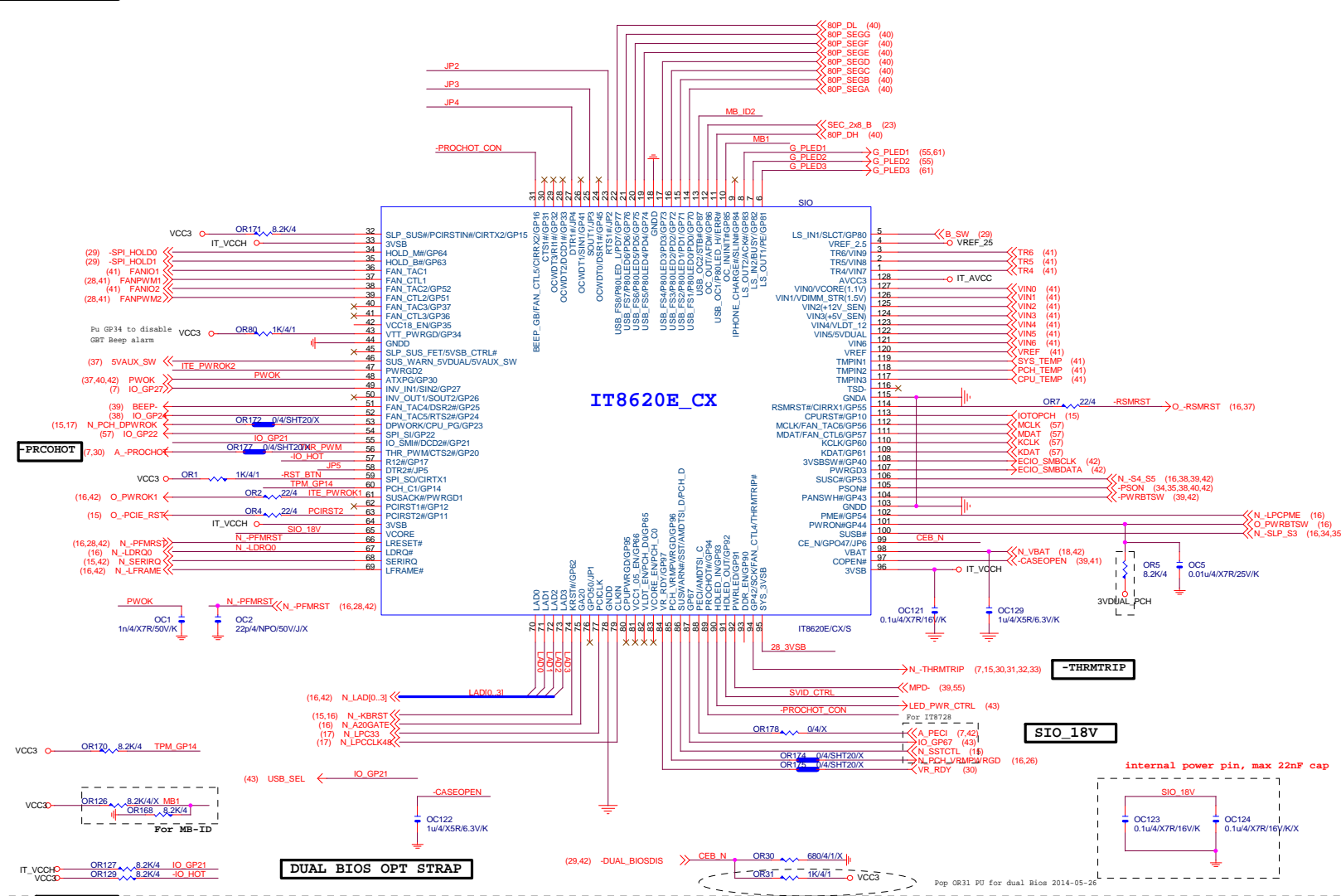
Gigabyte Technology

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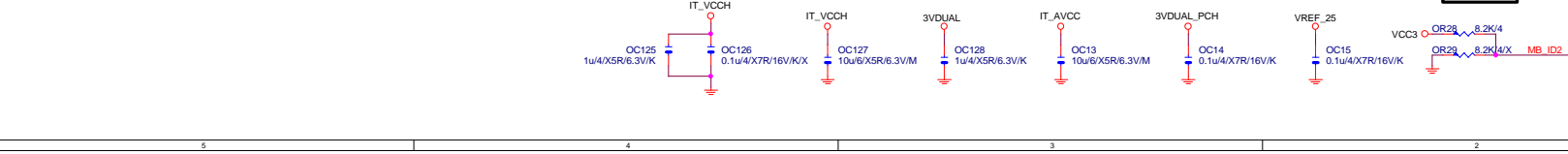
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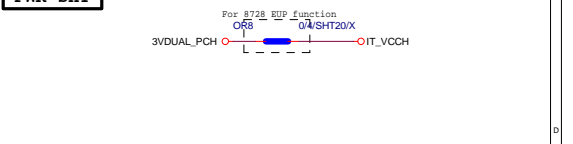
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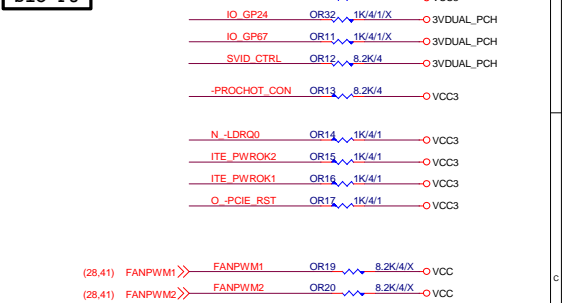
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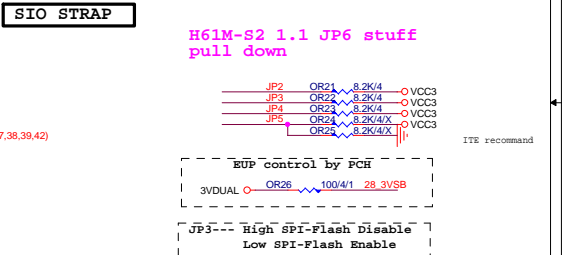
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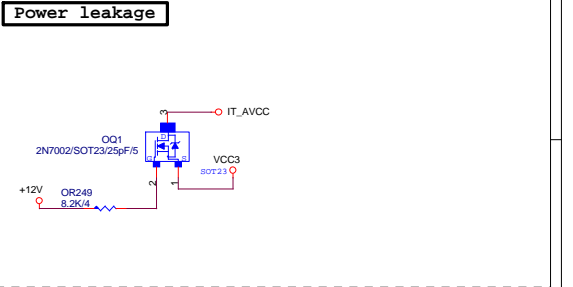
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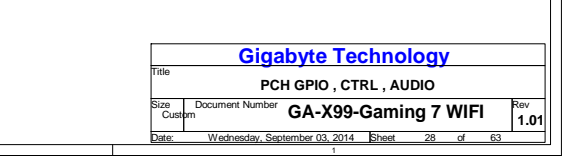
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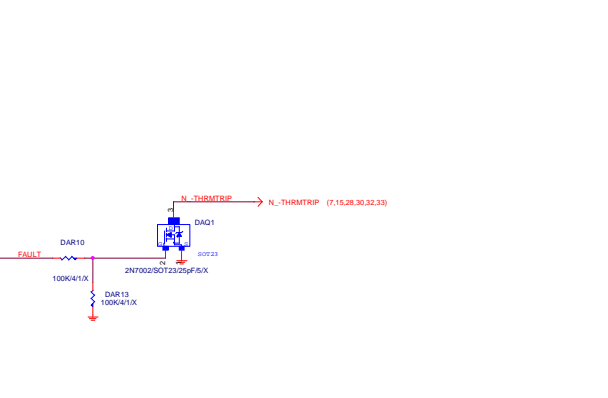
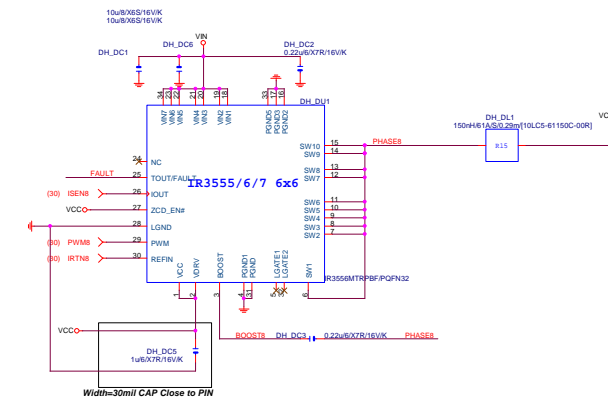
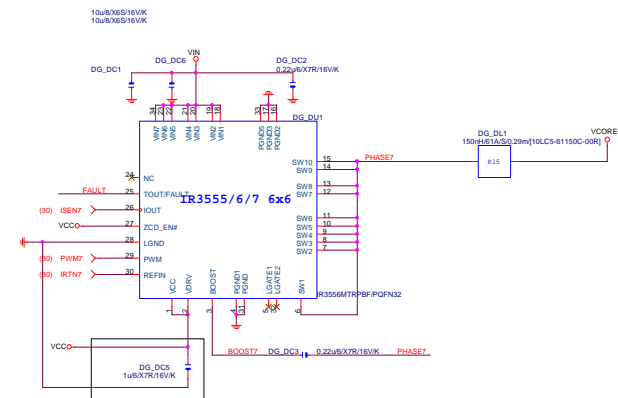
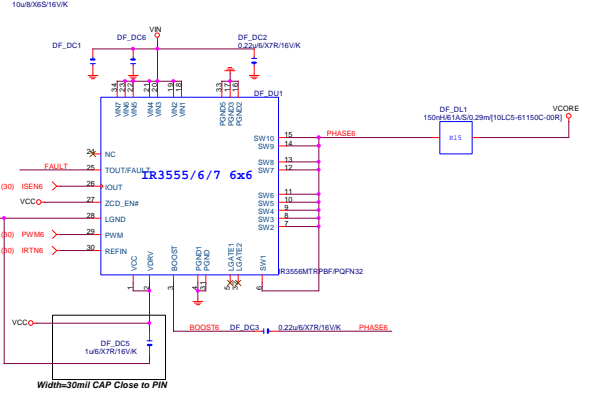
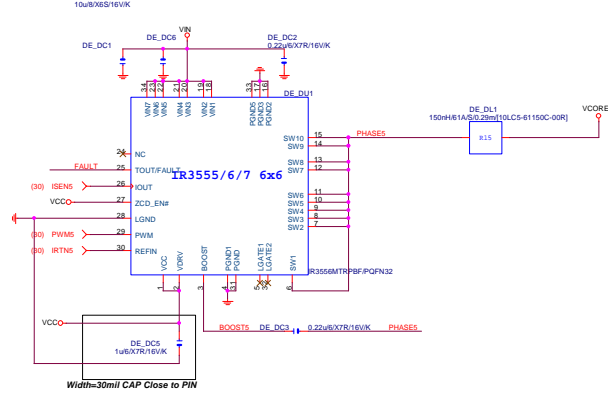
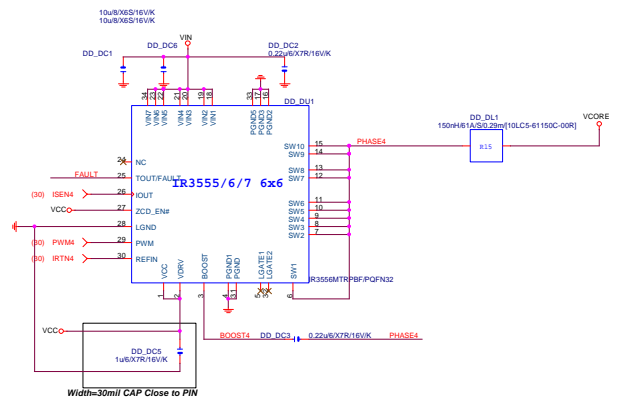
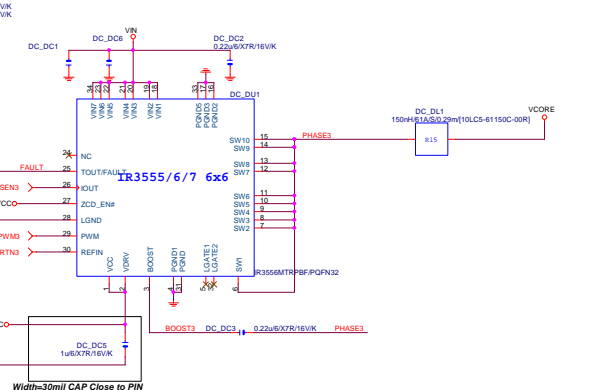
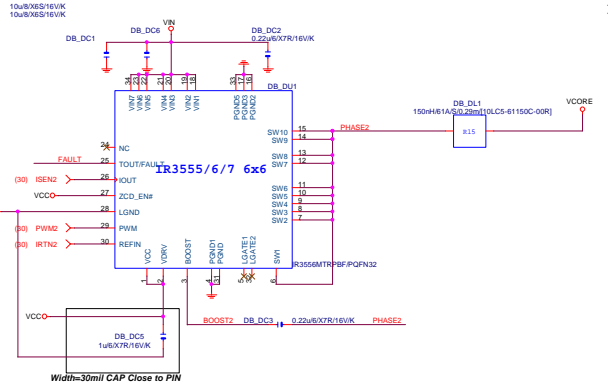
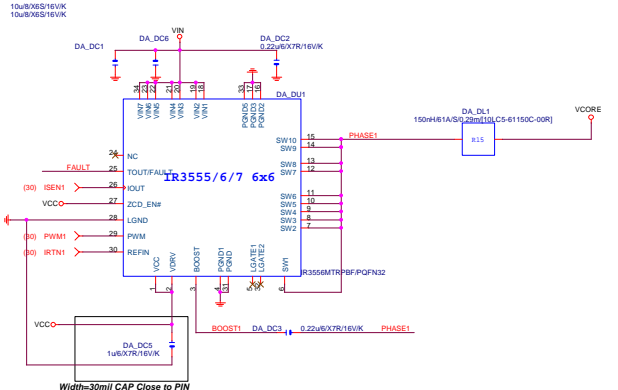
Power leakage



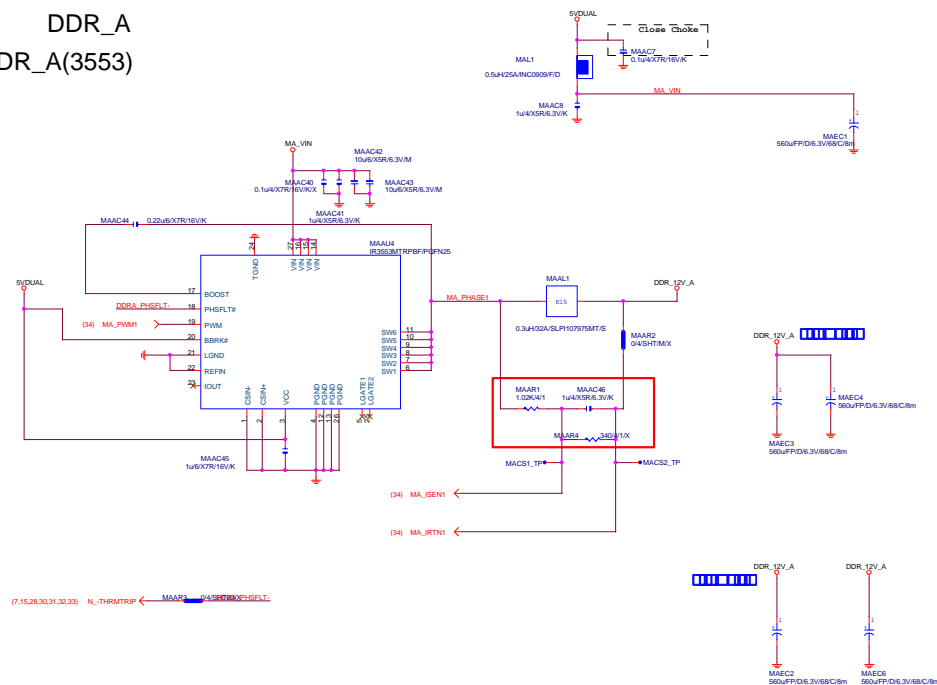
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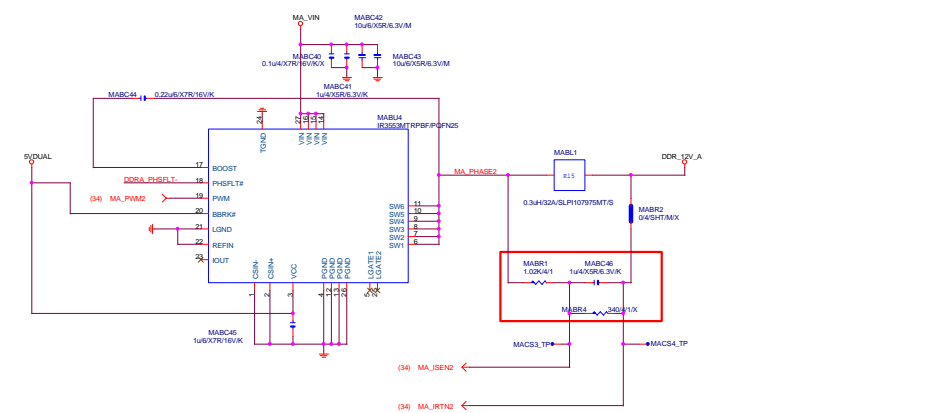
Gigabyte Technology			
Title			
PCH GPIO , CTRL , AUDIO			
Size	Document Number	GA-X99-Gaming 7 WIFI	Rev
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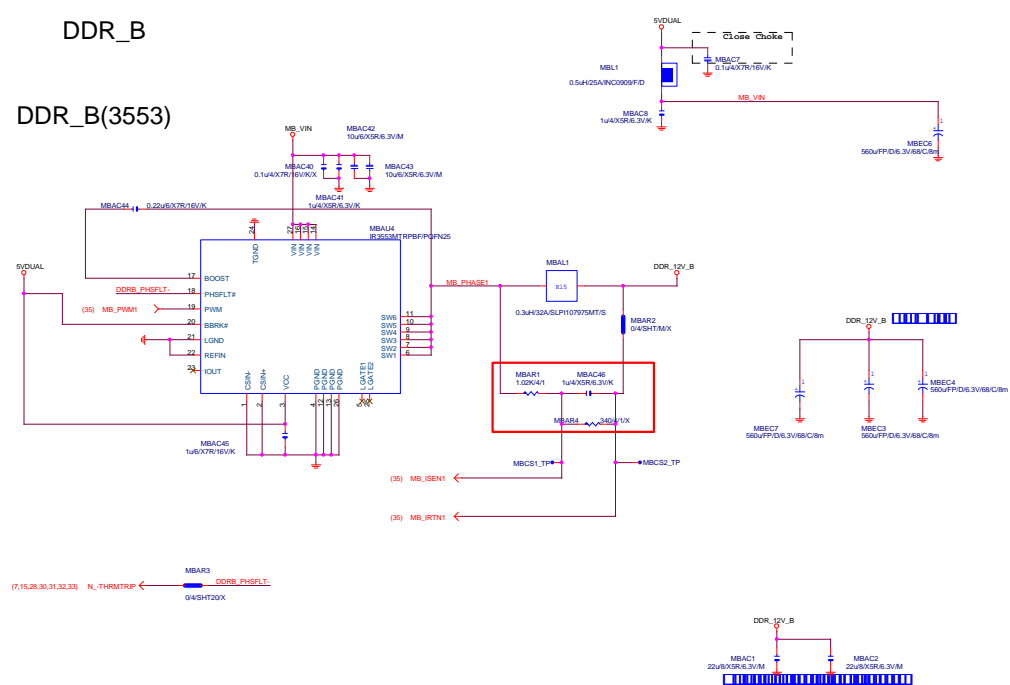
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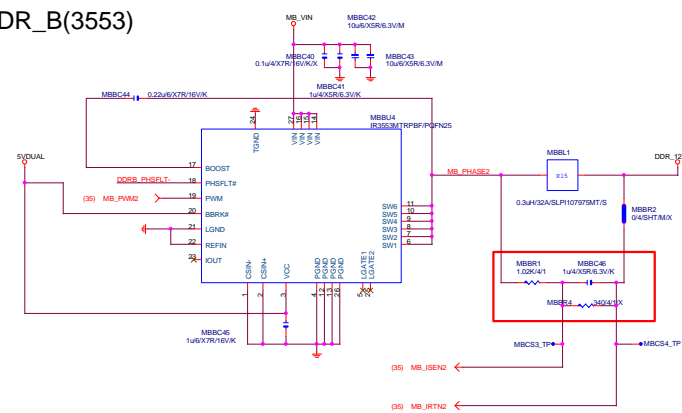
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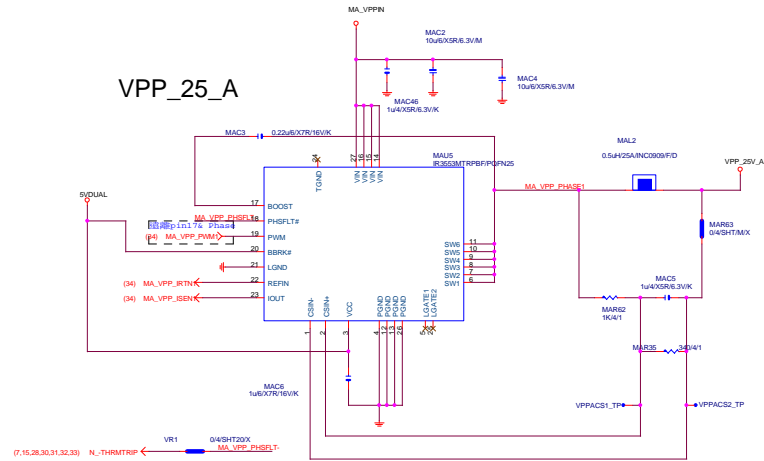
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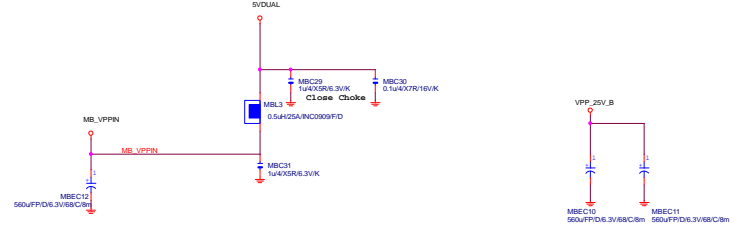
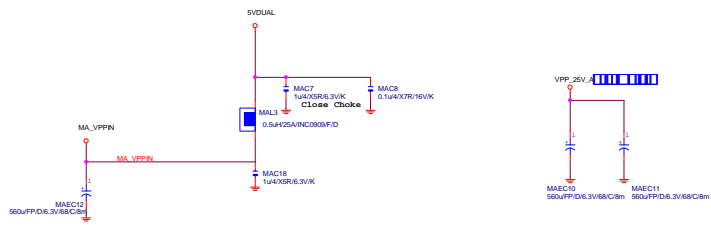
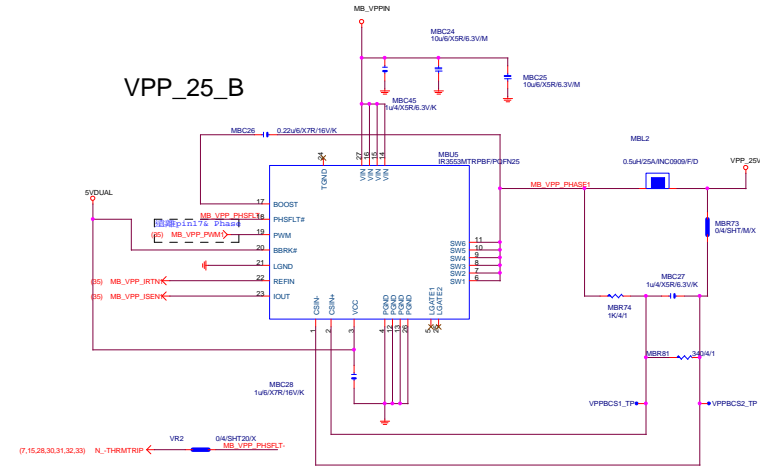
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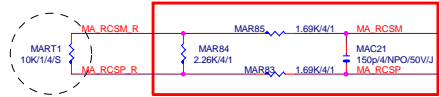
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VPP_25_B

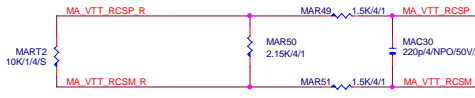


Close to Vcore
output inductor

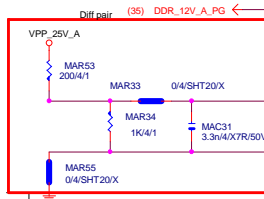


- (32) MA_ISEN1 > MA_ISEN1 L2
- (32) MA_IRTN1 > MA_IRTN1 L2
- (32) MA_ISEN2 > MA_ISEN2 L2
- (32) MA_IRTN2 > MA_IRTN2 L2

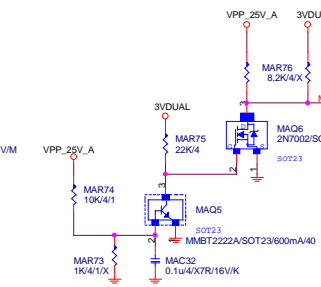
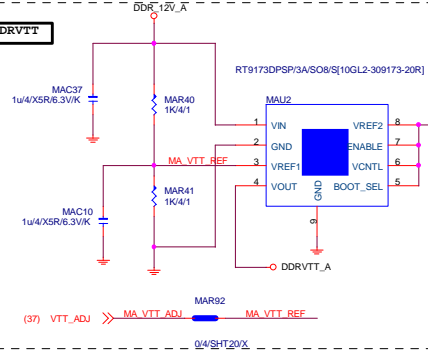
- (33) MA_VPP_ISEN1 > MA_VPP_ISEN1 L1
- (33) MA_VPP_IRTN1 > MA_VPP_IRTN1 L1



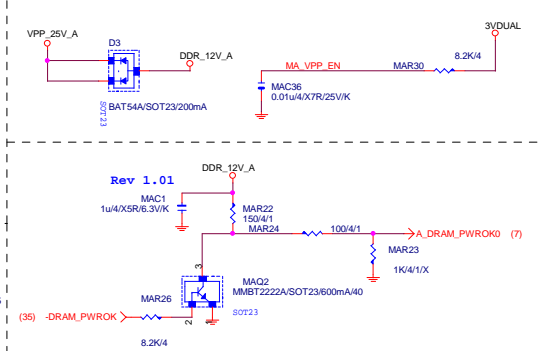
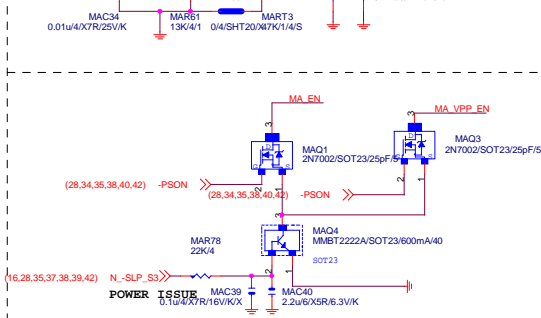
should be routed as
differential pair,
7mil width,8mil
spacing



DDRVTT



For power sequence require



GIGABYTE™			
Title	DDR_A & CPU_VTT POWER IR3570		
Size	Document Number	GA-X99-Gaming 7 WIFI	
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Close to Vcore
output inductor

should be routed as
differential pair,
7mil width,8mil
spacing

DDRVTT

For power sequence require

POWER 1.5VSB
0.1u4/X7R/16V/K

GIGABYTE™

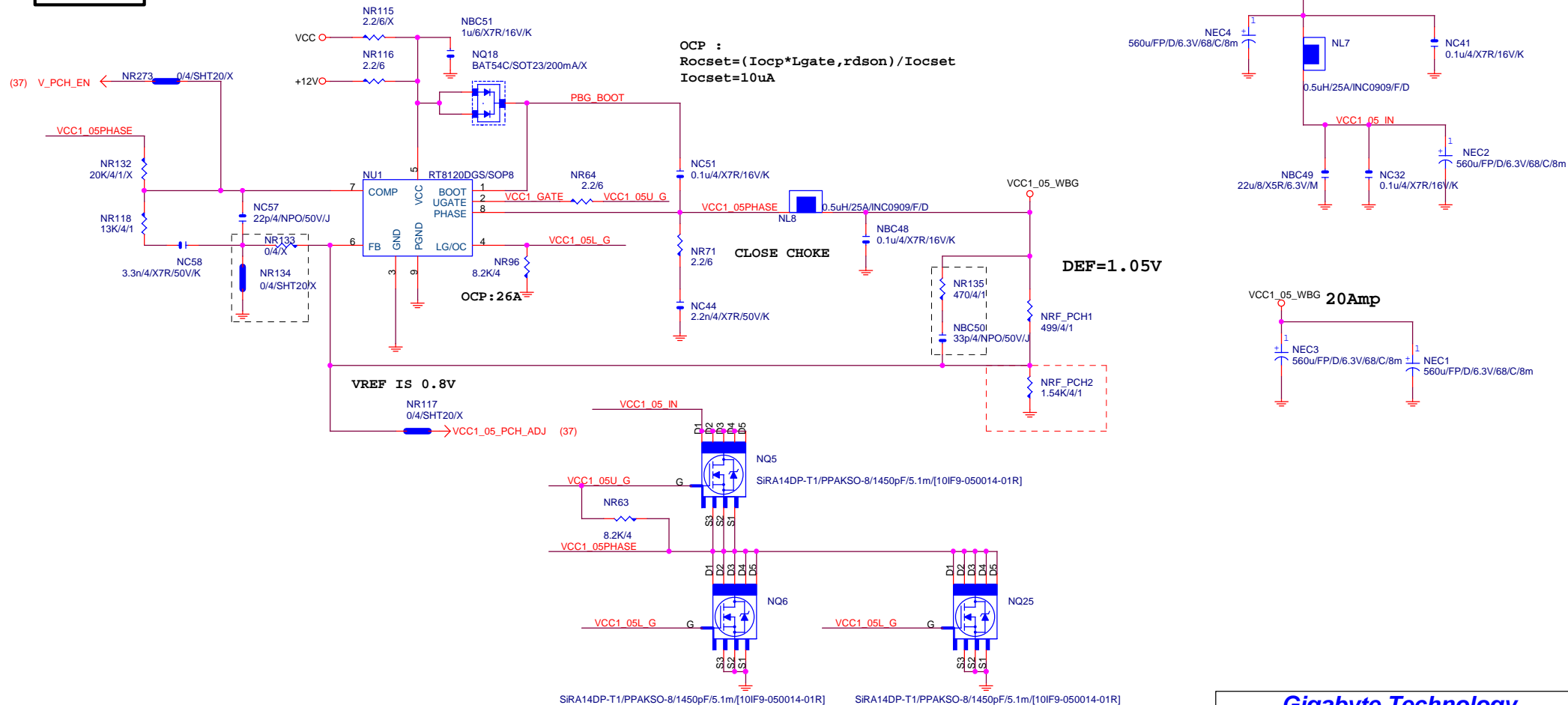
Title
DDR_A & CPU_VTT POWER IR3570

Size C Document Number
GA-X99-Gaming 7 WIFI

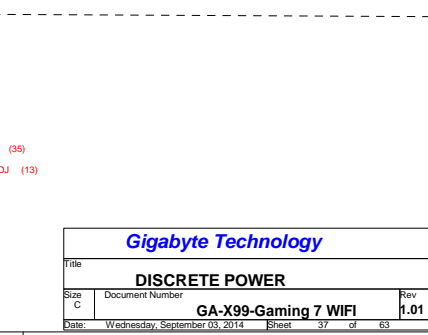
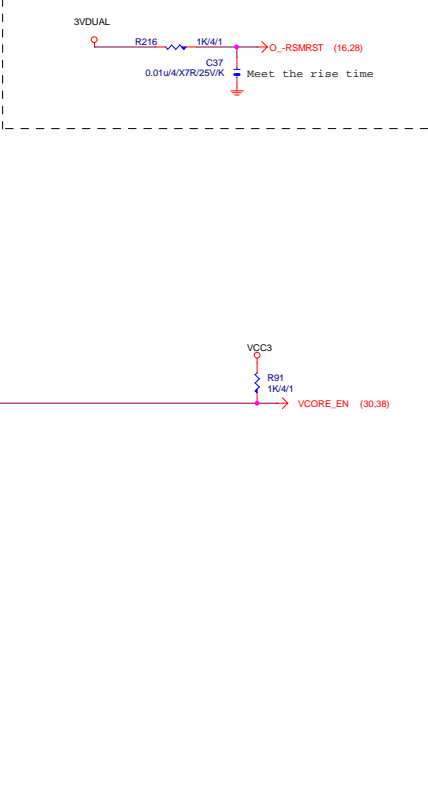
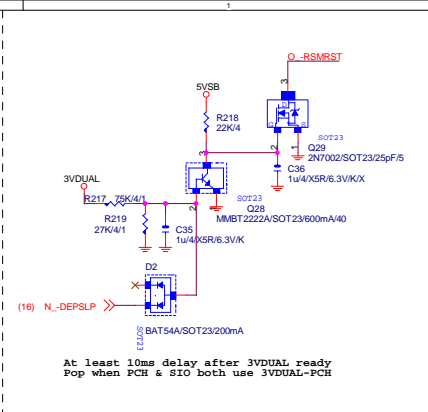
Rev
1.01

Date: Wednesday, September 03, 2014 Sheet 35 of 63

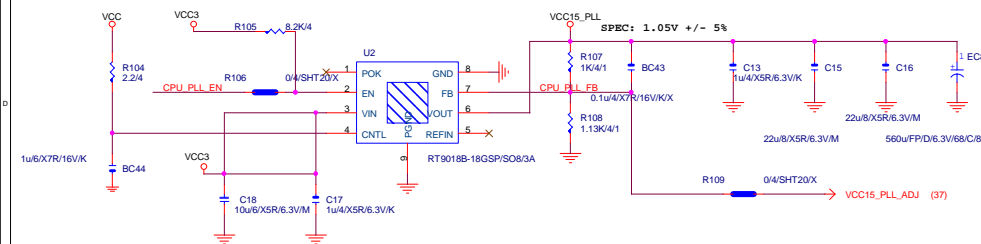
PBG_1.1V



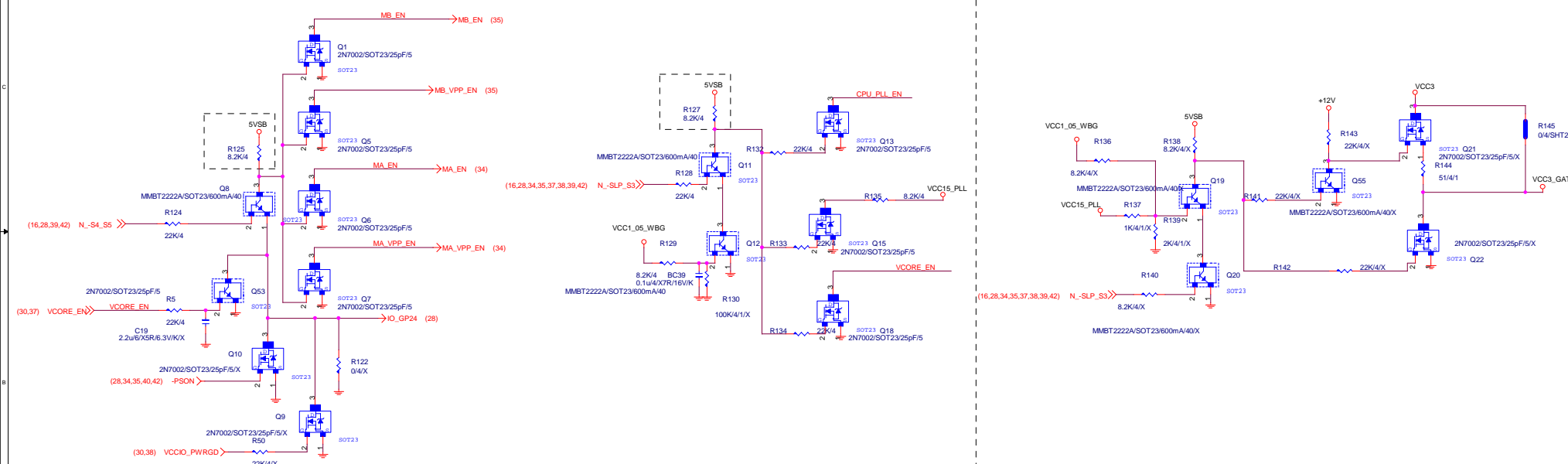
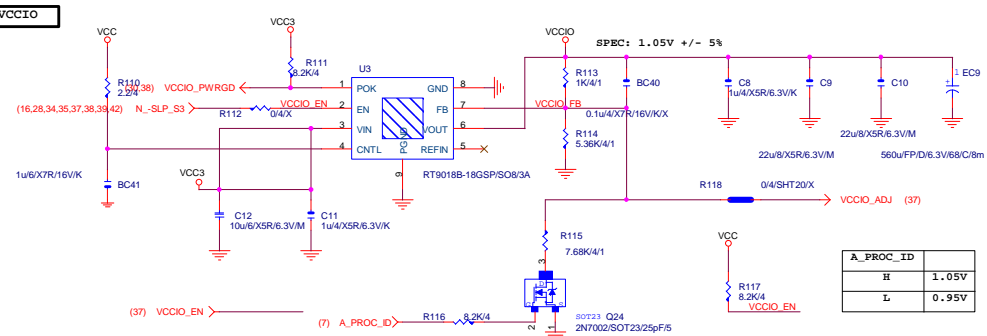
Gigabyte Technology			
Title			
RT8120 PCH			
Size	Document Number		Rev
Custom	GA-X99-Gaming 7 WIFI		1.01
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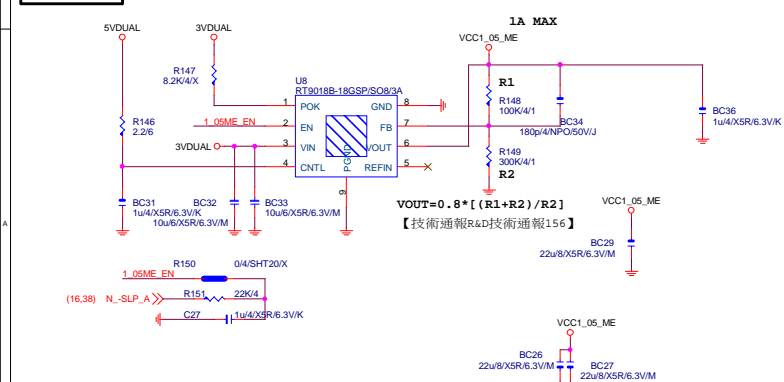
VCC15_PLL



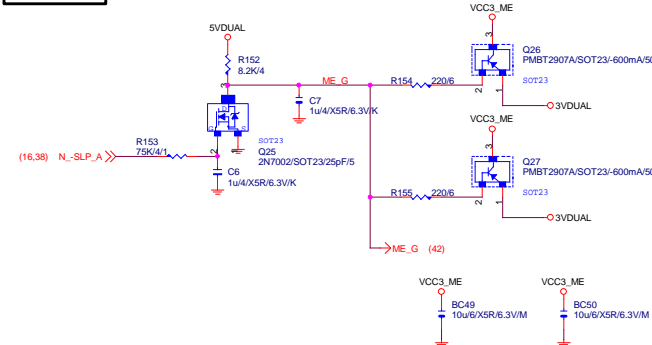
VCCIO



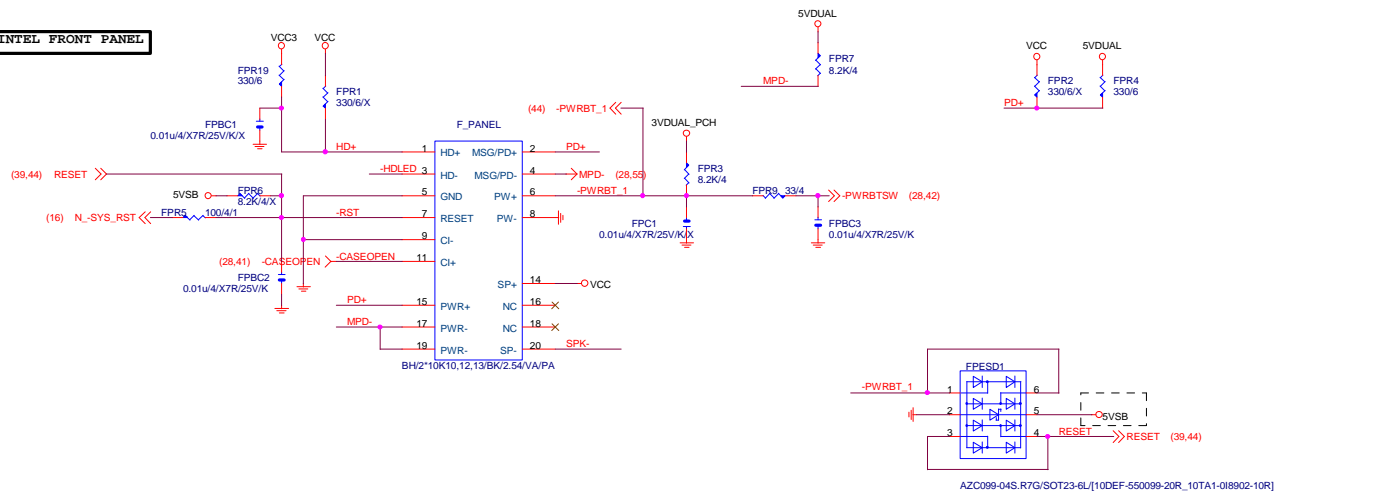
VCC1_05_ME



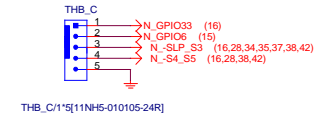
VCC3_ME



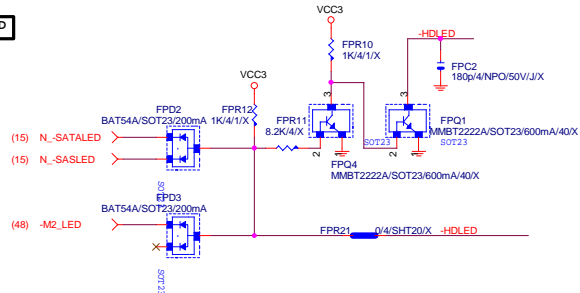
INTEL FRONT PANEL



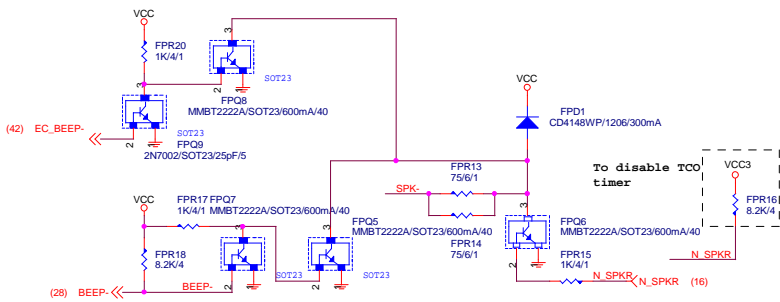
Thunderbolt



SATA LED



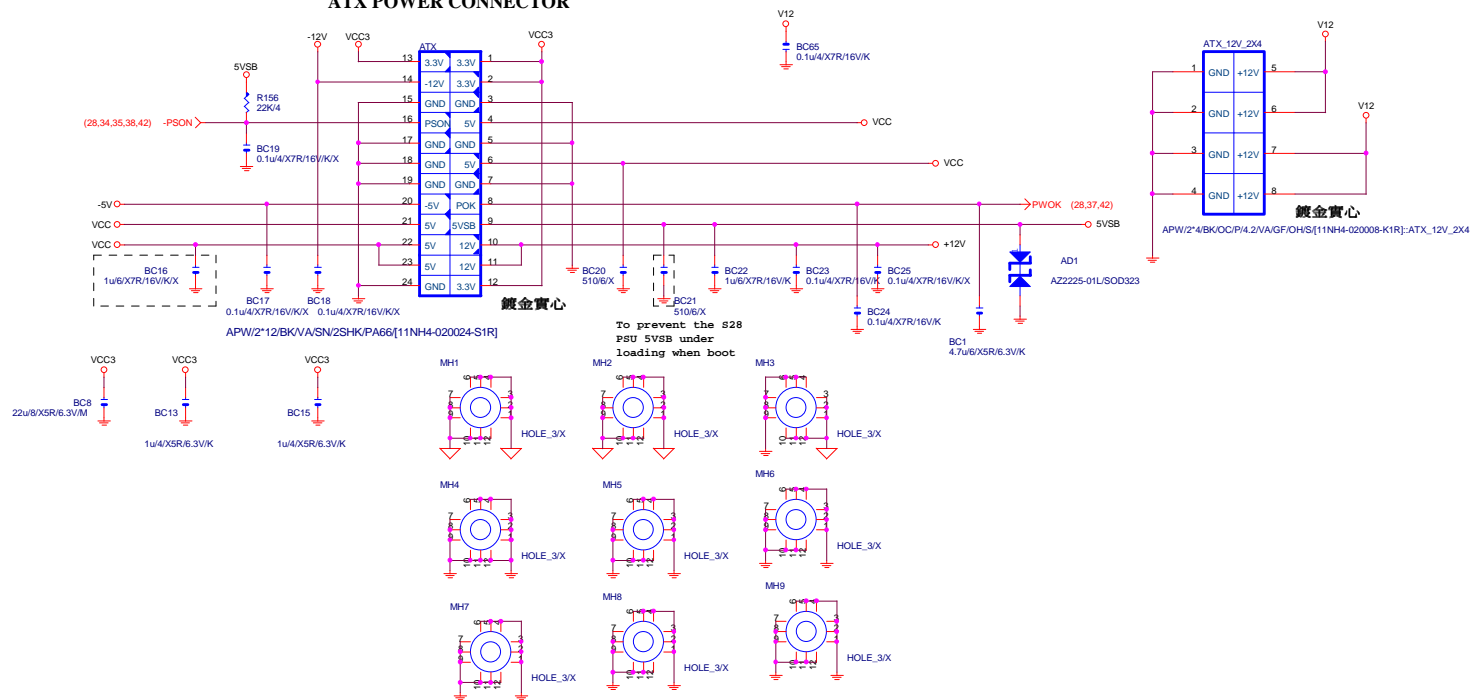
SPKR



Gigabyte Technology

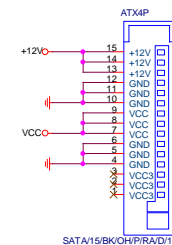
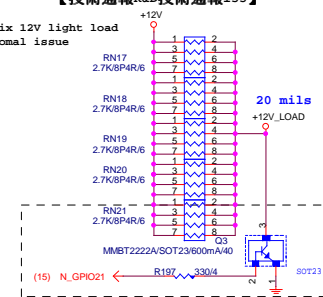
Title		
FP,TPM THB		
Size	Document Number	Rev
Custom	GA-X99-Gaming 7 WIFI	1.01
Date	Wednesday, September 03, 2014	Sheet 39 of 63

ATX POWER CONNECTOR

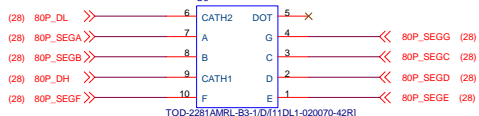
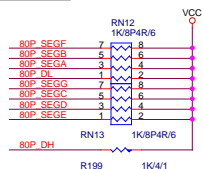


【技術通報R&D技術通報153】

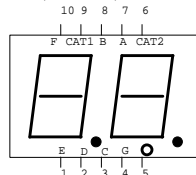
To fix 12V light load abnormal issue



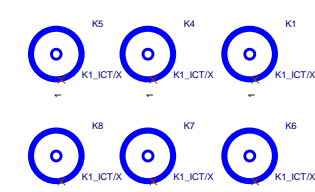
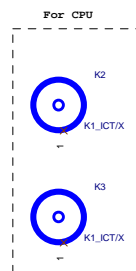
80 PORT



Physical Package (TOP VIEW)



OVER CLOCKING

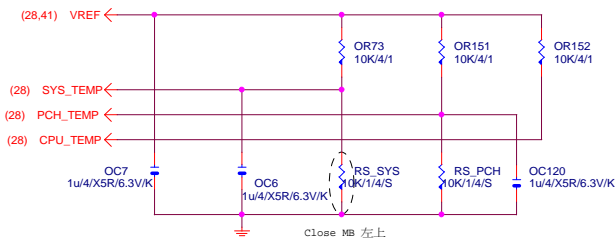


INPUT				OUTPUT	
PR	CL	CLOCK	DATA	Q	-Q
L	H	X	X	H	L
H	L	X	X	L	H
L	L	X	X	H	H
H	H	X	X	L	L
H	H	Rising	L	H	L
H	H	Rising	L	L	H
H	H	L	X	No Change	No Change
H	H	H	X	No Change	No Change
H	H	Falling	X	No Change	No Change

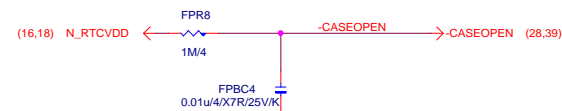
Gigabyte Technology

Title				
ATX, 80PORT				
Size	Document Number			Rev
C	GA-X99-Gaming 7 WIFI			1.01
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TEMP H/W MONITOR

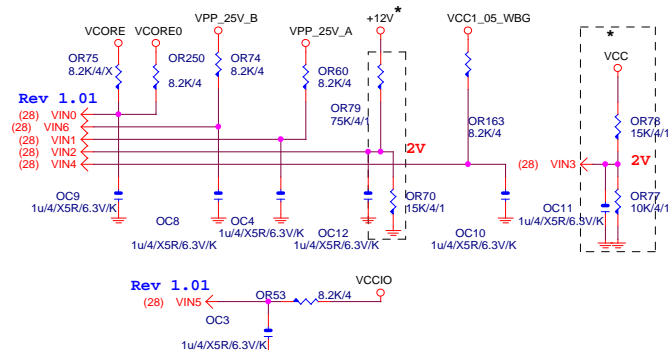


CASE OPEN

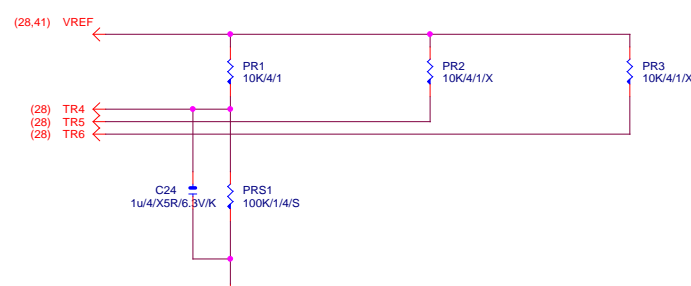


VOLTAGE-- H/W MONITOR

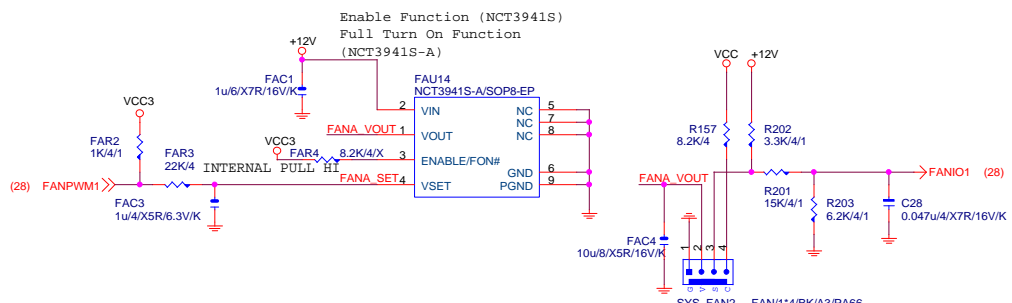
VIN2 must +12V input
VIN3 must VCC input



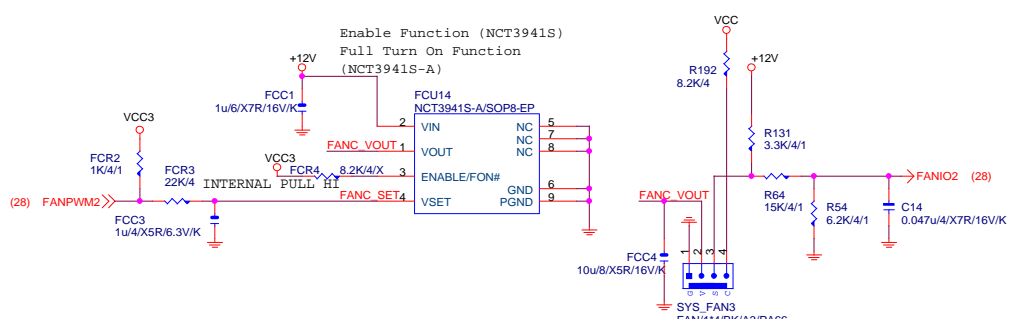
8620 PROCHOT



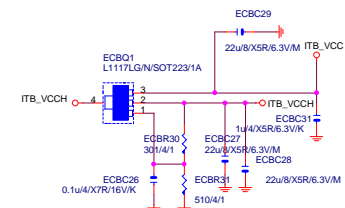
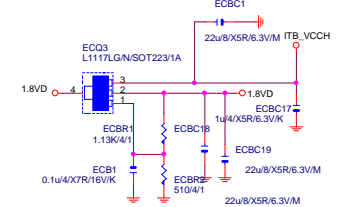
SYS FAN2



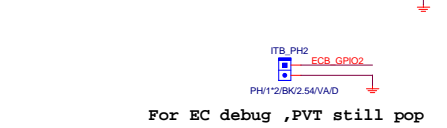
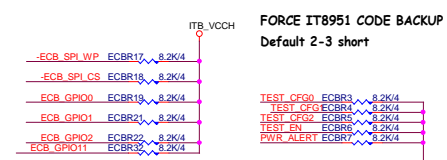
SYS FAN3



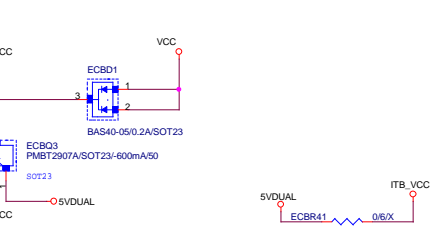
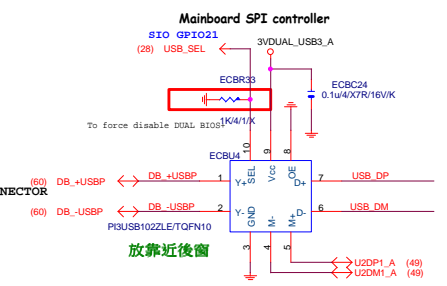
Gigabyte Technology			
Title			
HWM,FAN CTRL			
Size	Document Number	Rev	
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For EC debug ,replace Pin header



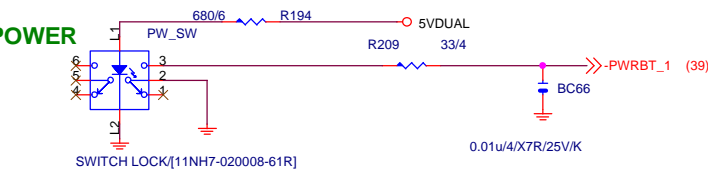
SEL	OE	Y+	Y-
X	H	H _i -Z	H _i -Z
L	L	M+	M-
H	L	D+	D-



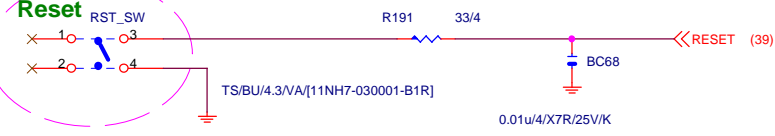
Note.120

Note.164

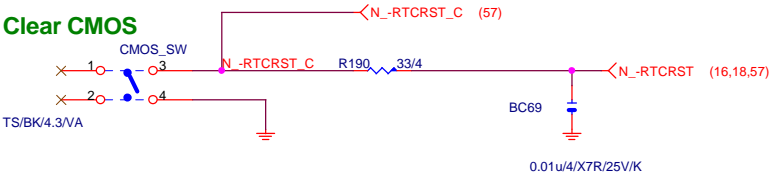
POWER



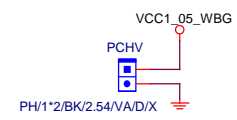
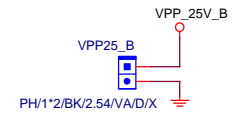
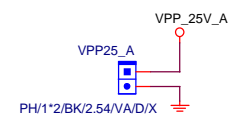
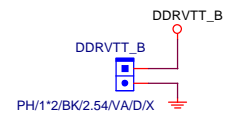
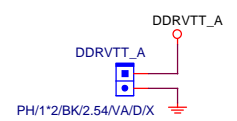
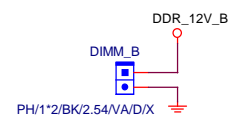
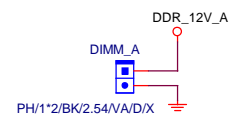
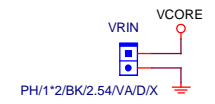
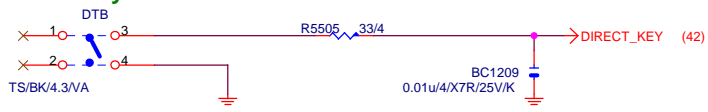
Reset



Clear CMOS

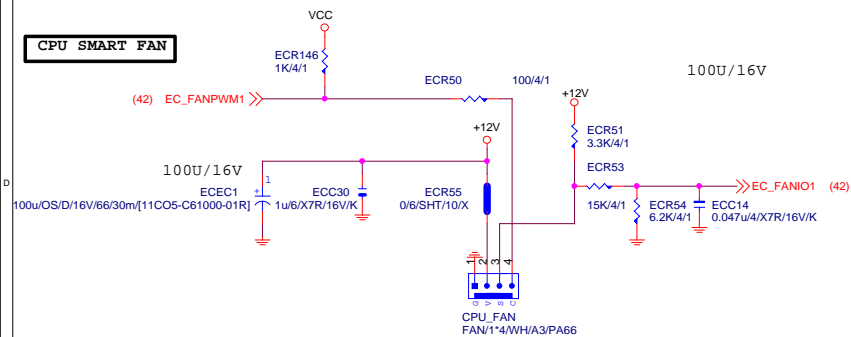


Direct Key

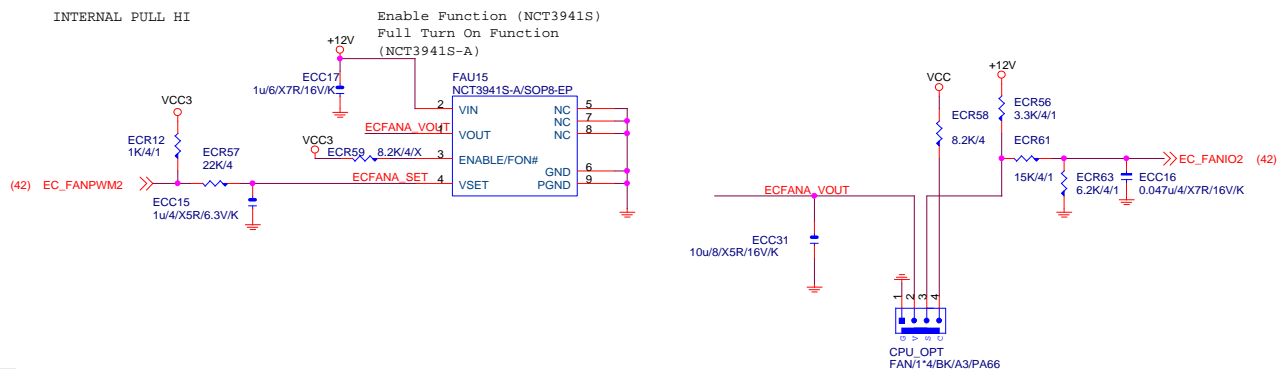


Title			
SWITCH			
Size	Document Number		Rev
B	GA-X99-Gaming 7 WIFI		1.01
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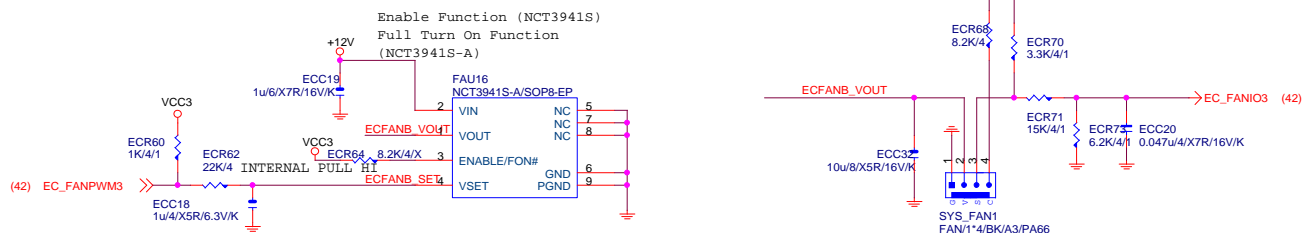
CPU SMART FAN



CPUOPT FAN



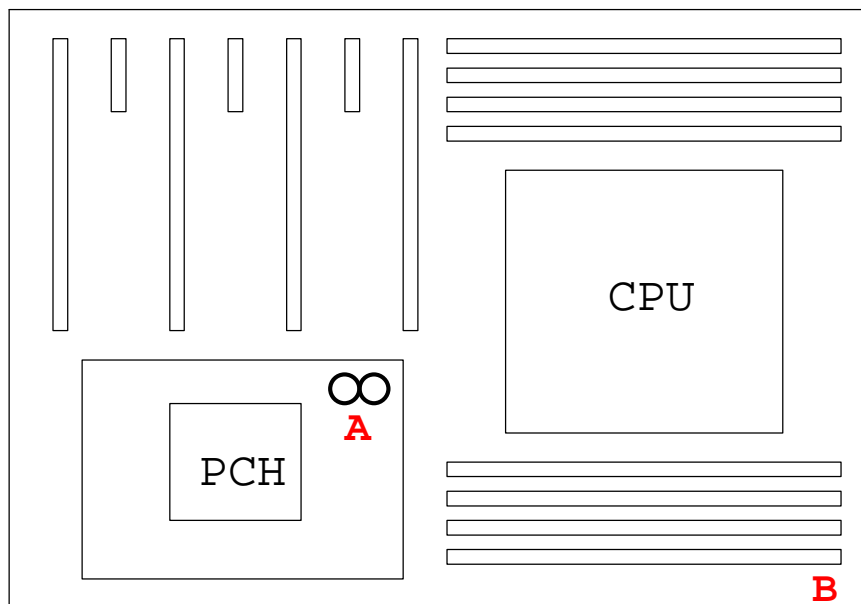
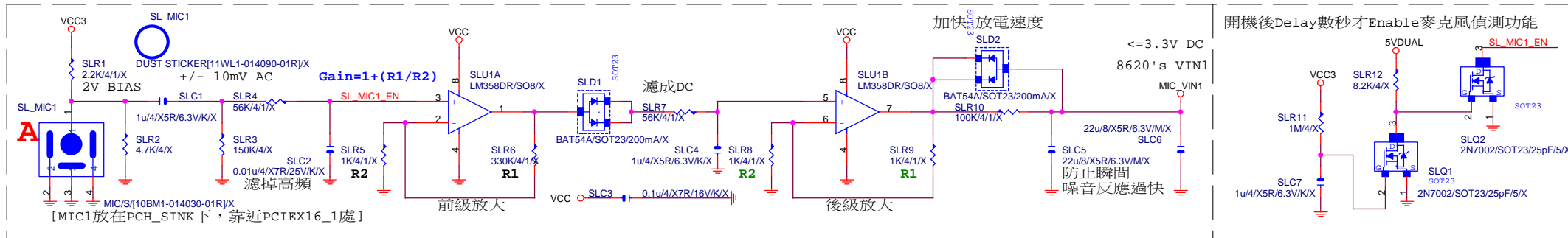
SYS FAN1



Gigabyte Technology

Title			HWM,KB/MS, FAN CTRL
Size	Document Number	Rev	
Custom	GA-X99-Gaming 7 WIFI	1.01	
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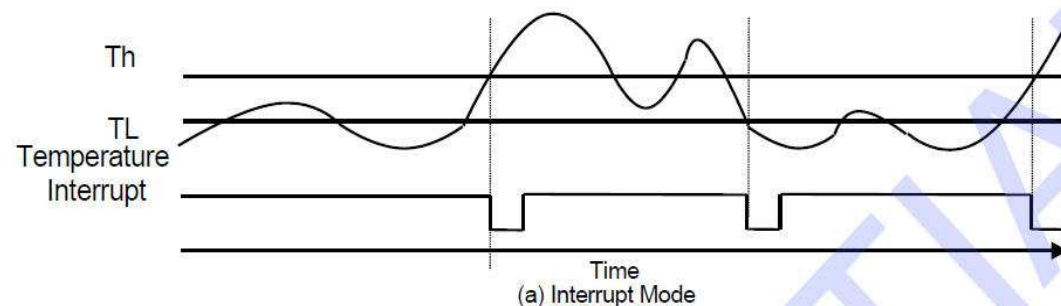
Sound Level (dB-->DC Level)



BIOS & S/W Notice:

1. 假設User設定系統噪音要低於45dB(即VINx=1.75V)，當VINx高於1.75V，8620會把PCH的GPI7拉Low一次。
2. 當噪音降低到VINx低於1.65V(即1.75V-0.1V)時，8620會再把PCH的GPI7拉Low一次。
3. 超過Th時，將CPU & VGA降頻或Throttle。低於Tl時，則回復正常頻率運作。

Figure 9-5. Temperature Interrupt Response Diagram



H/W Notice:

1. 麥克風不可被CPU_FAN & VGA_FAN吹到，用DIP電容擋住顯卡的風。
2. 麥克風需和OP-AMP越靠近越好，<1000mil。
3. IT8620偵測到dB值超過user設定值，通知PCH的GPI7發SMI。
4. 麥克風料號為：[10BM1-014030-01R]

此Table只是假設值，需至無響室測試後確認。

Gigabyte Technology		
Sound Level		
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dB	VINx
30	1.30V
35	1.45V
40	1.60V
45	1.75V
50	1.90V
55	2.05V
60	2.20V
65	2.35V
70	2.50V
75	2.65V
80	2.80V
85	2.95V
90	3.10V
95	3.25V
100	3.33V

請選擇適用的USBport :
SOC/UD7/UD5/G1/G7 : USB3
;UD3/G5:USB5

WIFI use PCIe port4 in X99
(17) M2_WIFI_TP
(17) M2_WIFI_TN

DIP螺絲



CR/[12KS2-110202-01R]

SMD螺柱



CR/[10KS2-040109-01R]

should be SMD level ,need
footprint for SMD reference

M_PCIE_H

WIFI_MODULE
WI-FI WITH BT MINI CARD INTEL[20CB1-027260-20R]

new model p/n , pop in PVT BOM 06/11

(17) N_+USBP10
(17) N_-USBP10

(17) M2_WIFI_LP
(17) M2_WIFI_IN

(17) CK_WIFI100M_DP
(17) CK_WIFI100M_DN

(16,20,21,23,24,25,58) N_-PCIE_WAKE

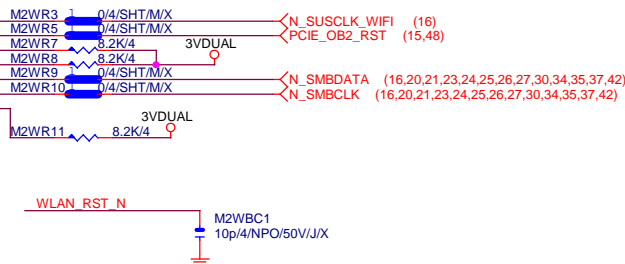
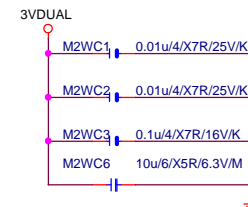
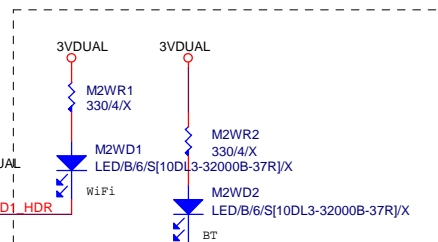
M2WR4 8.2K/4 WIFI_CLKREQ_N
M2WR6 0/4/SHT20/X

M2_WIFI

REV=1

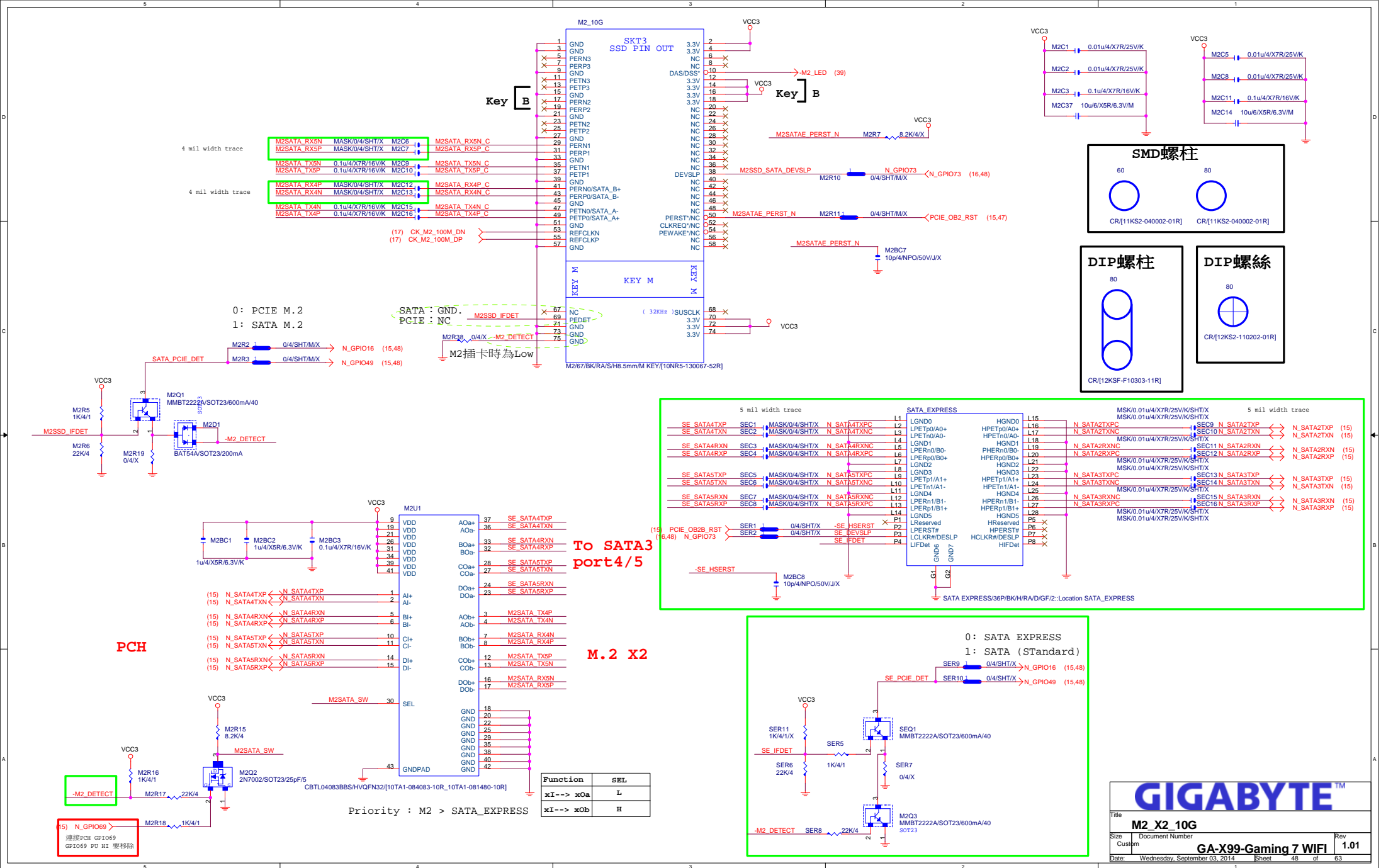
Module Key E

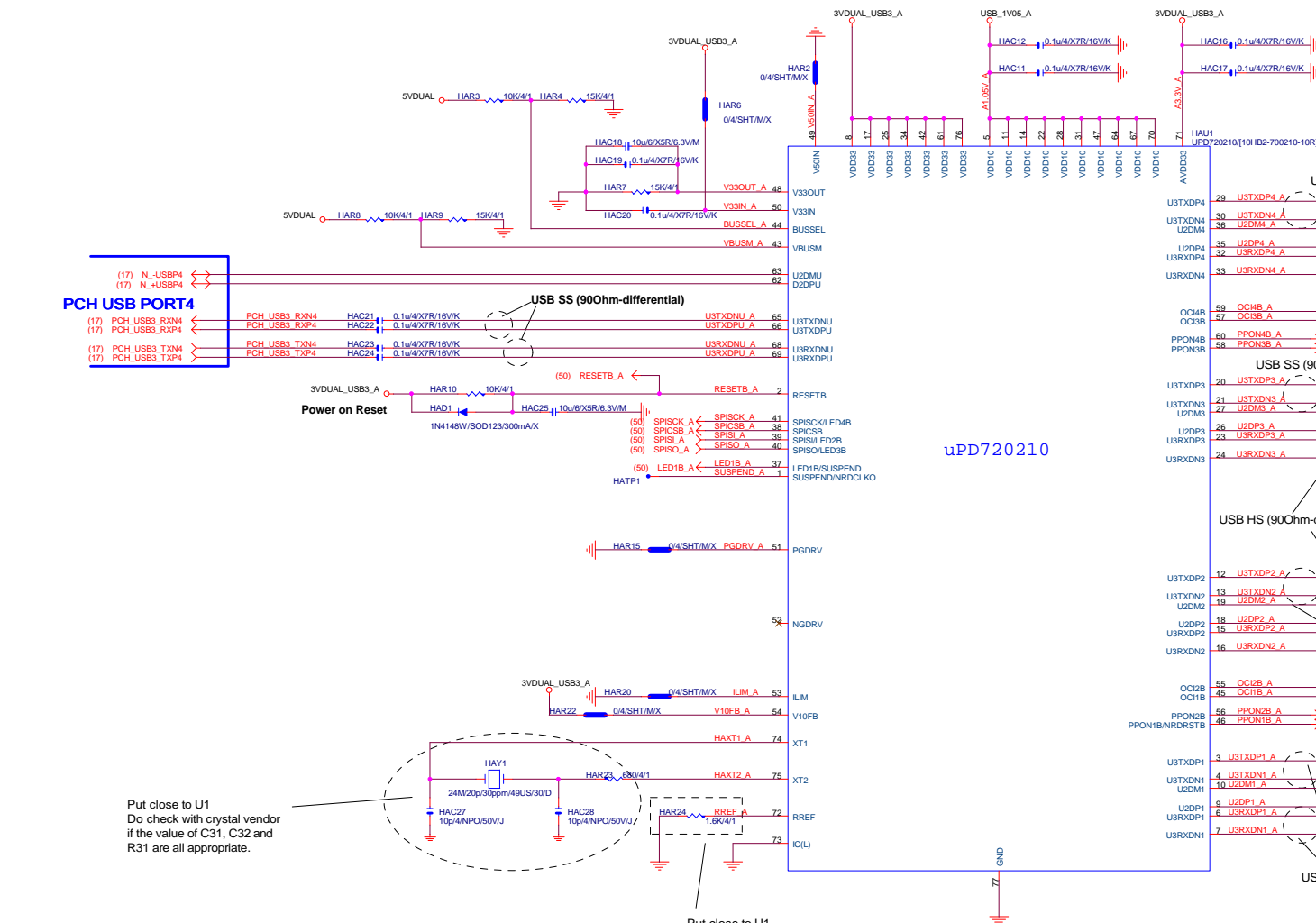
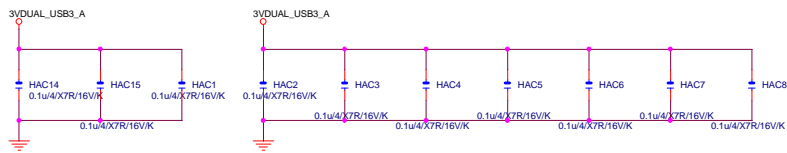
NGFF_M2_E-KEY[10NR5-130067-22R]



GIGABYTE™

Title M2_WIFI		
Size B	Document Number GA-X99-Gaming 7 WIFI	Rev 1.01
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PCH USB PORT4

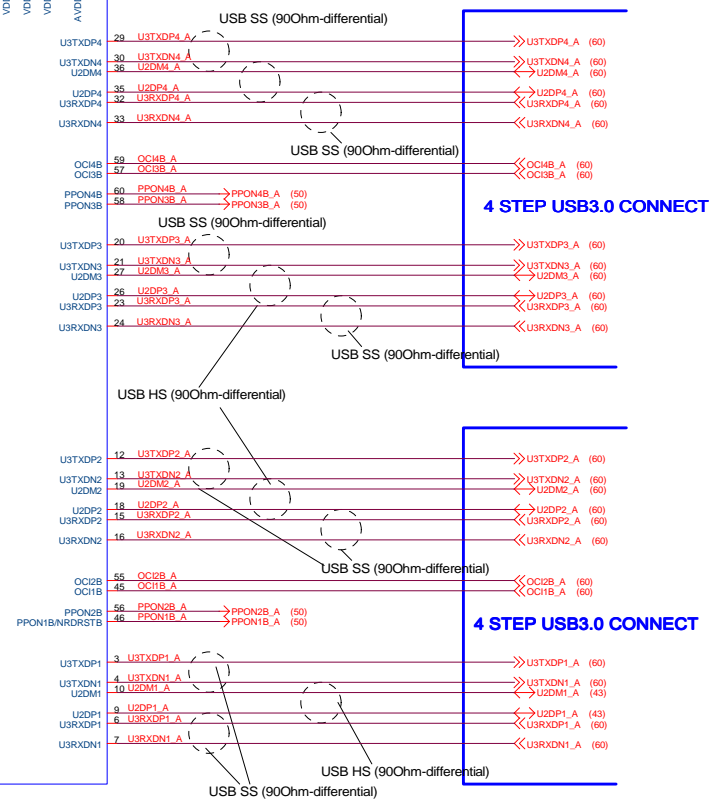
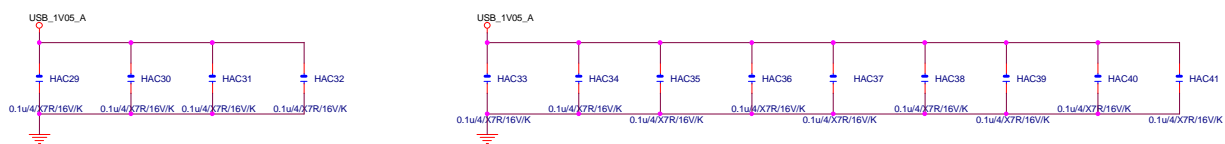
(17) N_-USBP4
(17) N_+USBP4

PCH_USB3_RXN4
PCH_USB3_RXP4
PCH_USB3_TXN4
PCH_USB3_TXP4

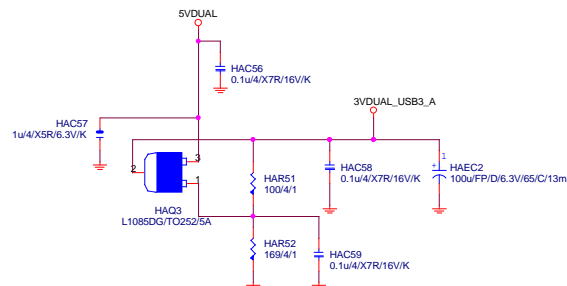
Power on Reset

Put close to U1
Do check with crystal vendor
if the value of C31, C32 and
R31 are all appropriate.

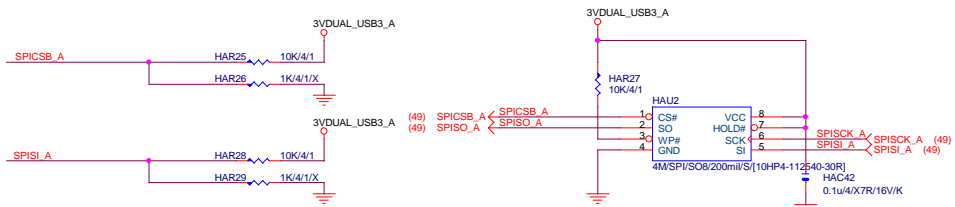
Put close to U1
Short and broad connection to GND
Don't split R32 into multiple
resistors.



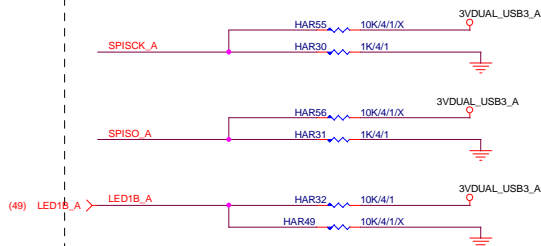
3VDUAL_USB_1



External SPI ROM ; SPI ROM attached mode

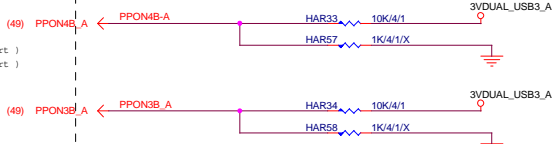


Battery Charging



Number of Ports ; 4Ports mode

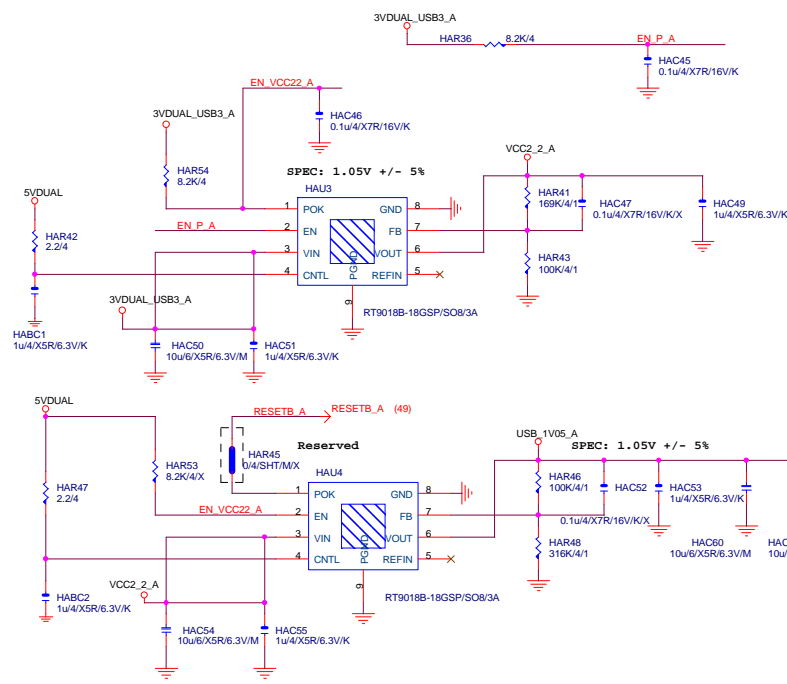
PPON3B / PPON4B : H / H (4 port)
PPON3B / PPON4B : L / L (2 port)

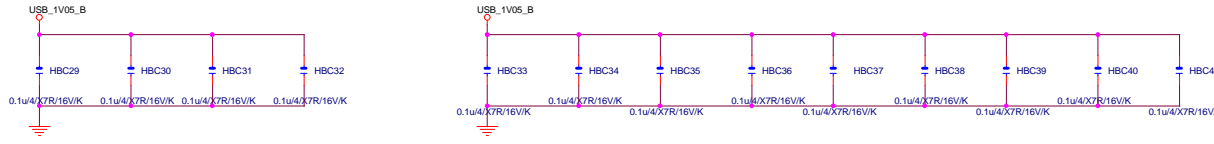
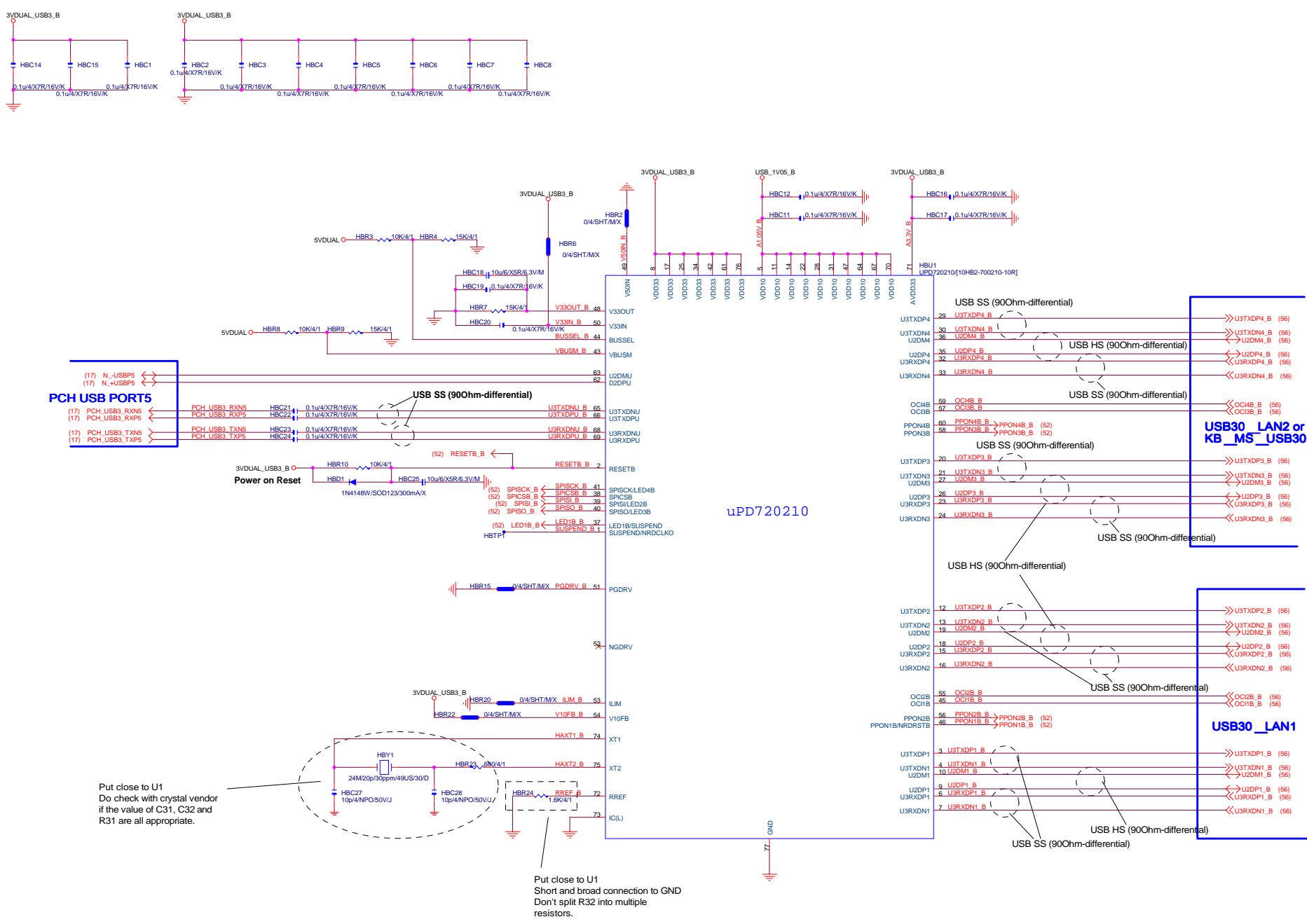


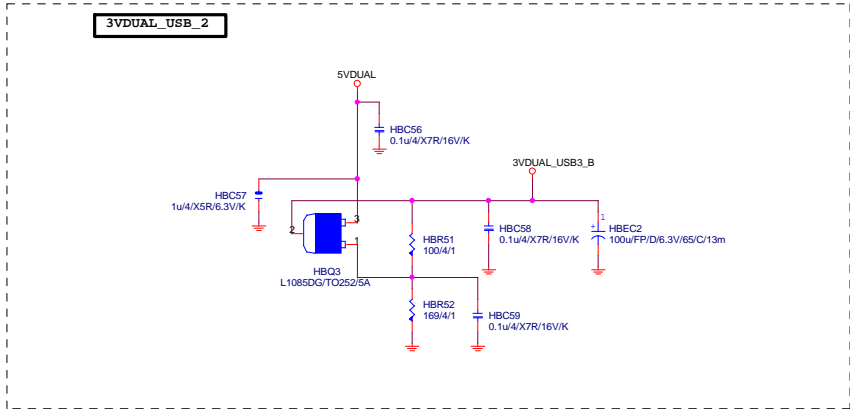
VBUS Power Control ; Individual mode



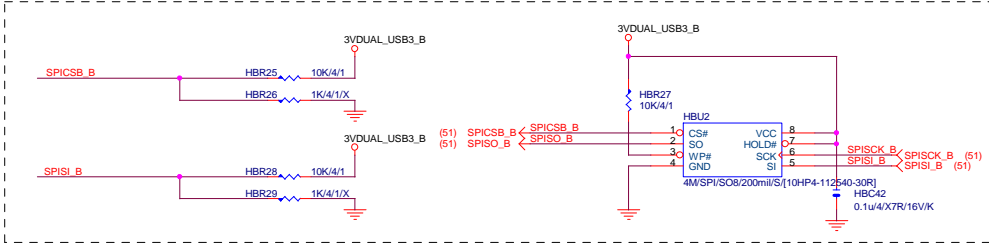
PPON1B Pin Function ; Port1 PPONB mode



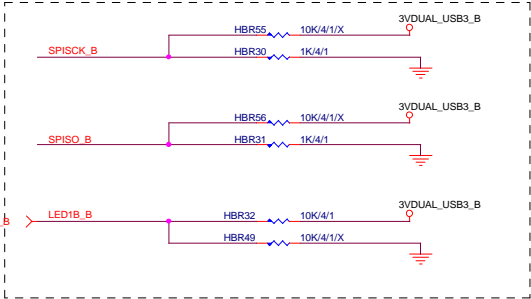




External SPI ROM ; SPI ROM attached mode

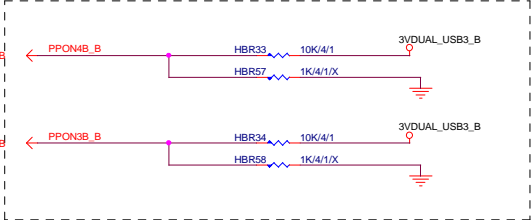


Battery Charging

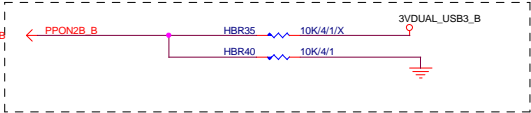


Number of Ports ; 4Ports mode

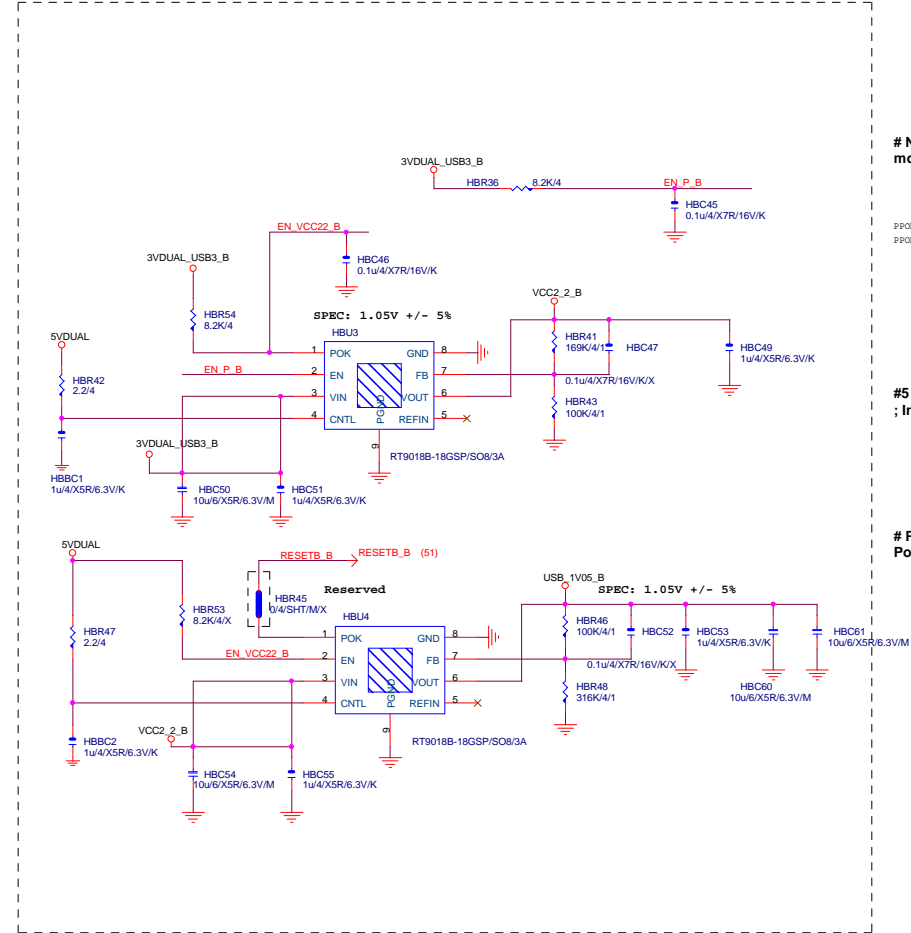
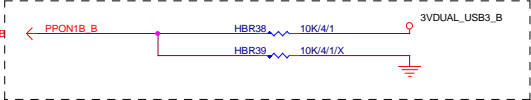
PPON3B / PPON4B : H / H (4 port)
PPON3B / PPON4B : L / L (2 port)

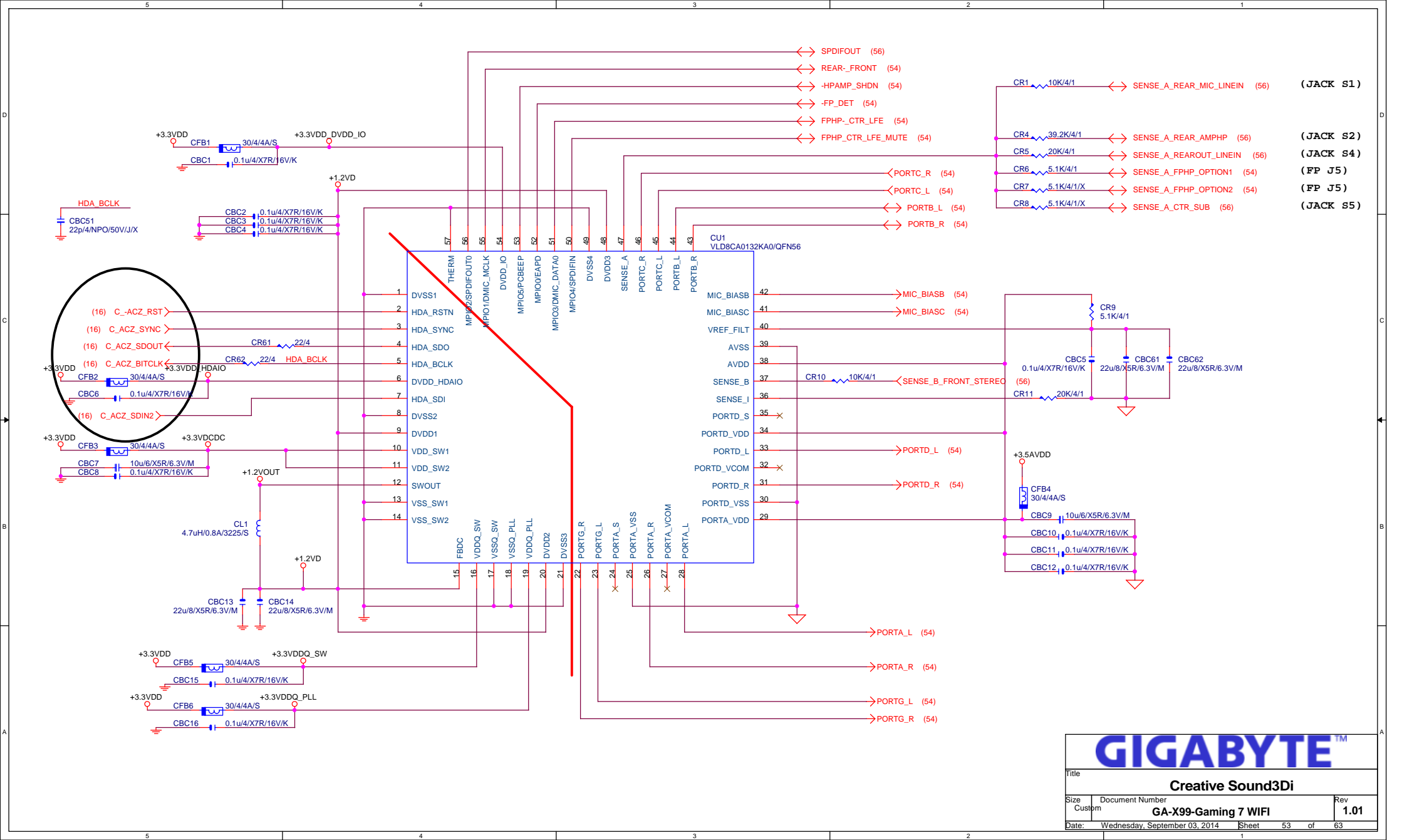


#5 VBUS Power Control ; Individual mode



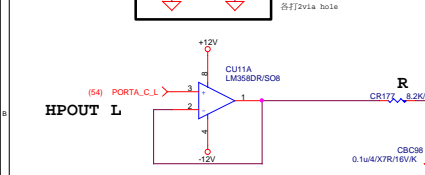
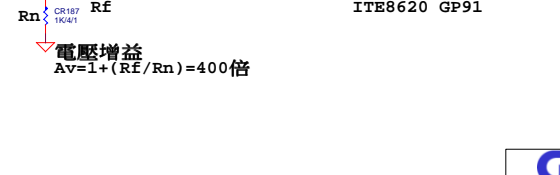
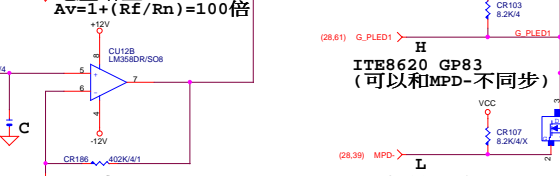
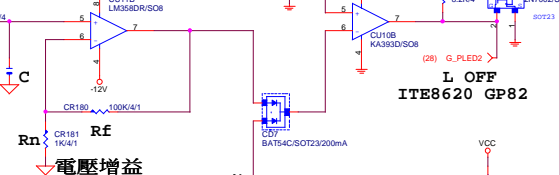
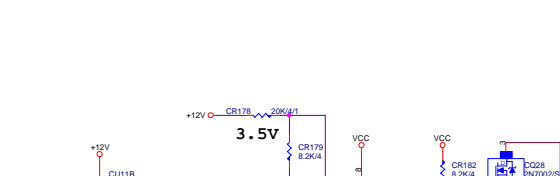
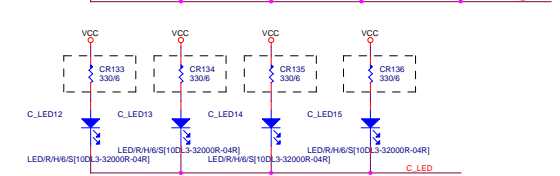
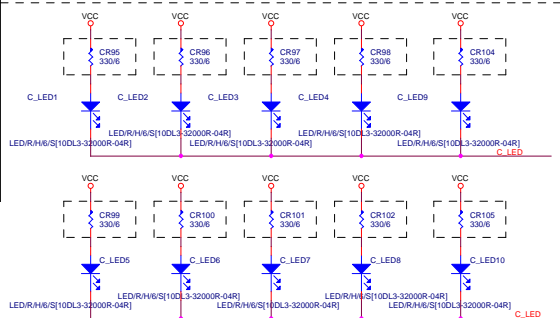
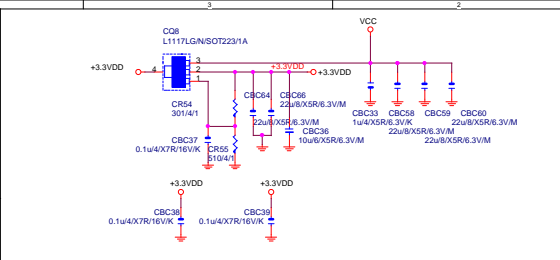
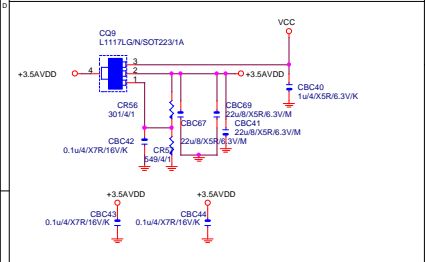
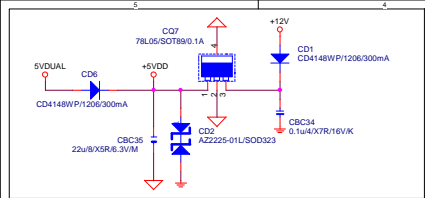
PPON1B Pin Function ; Port1 PPONB mode



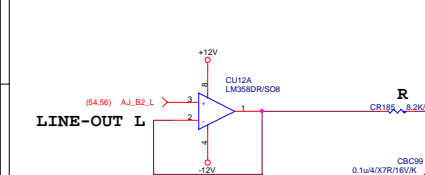


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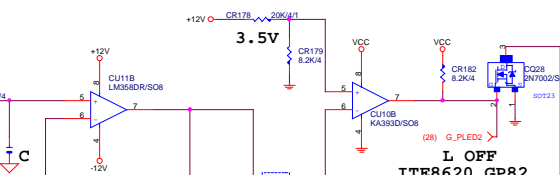
Title		
Creative Sound3Di		
Size	Document Number	Rev
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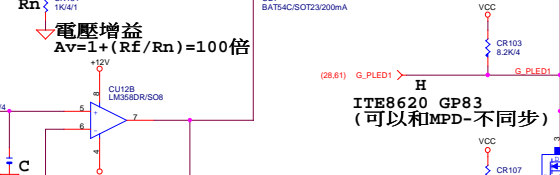
$$f_H = 1 / [2\pi \cdot (R \cdot C)] = 194\text{Hz}$$



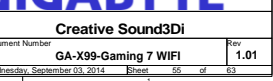
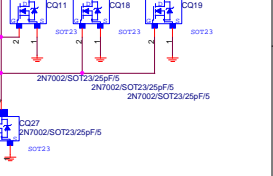
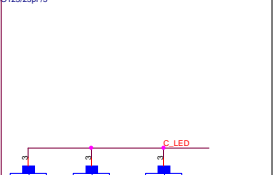
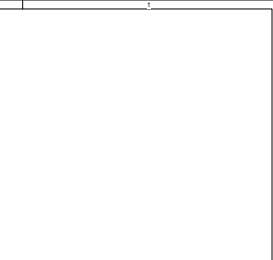
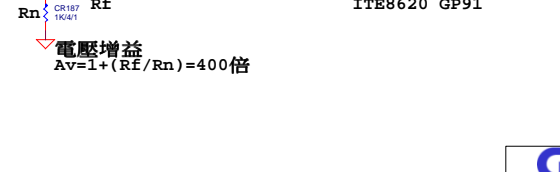
$$f_H = 1 / [2\pi \cdot (R \cdot C)] = 194\text{Hz}$$



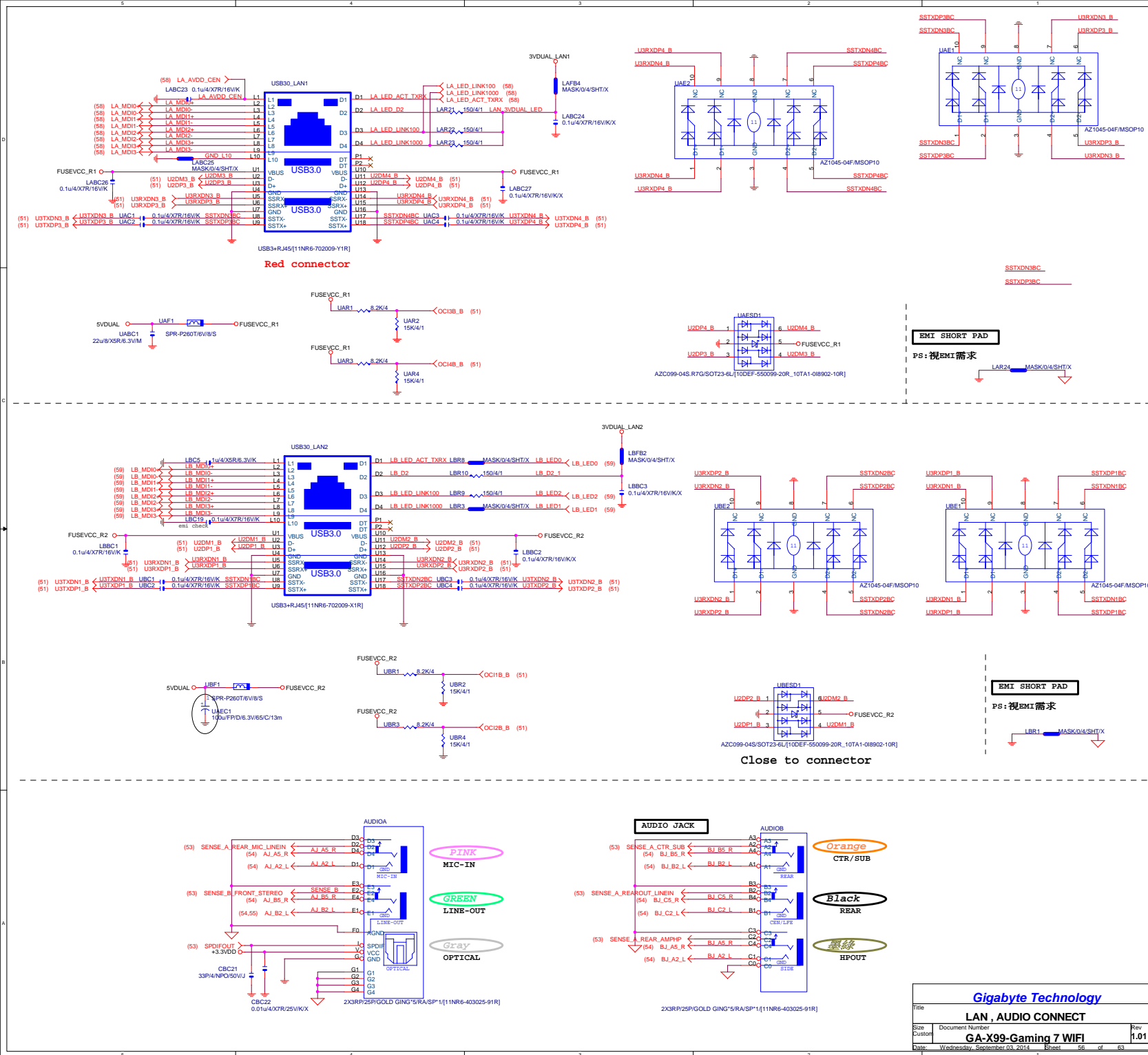
$$A_v = 1 + (R_f / R_n) = 100\text{倍}$$

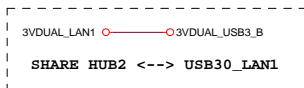


$$A_v = 1 + (R_f / R_n) = 400\text{倍}$$

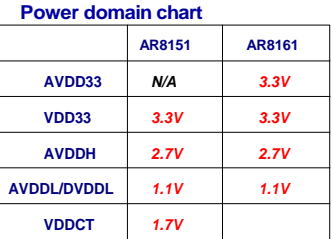


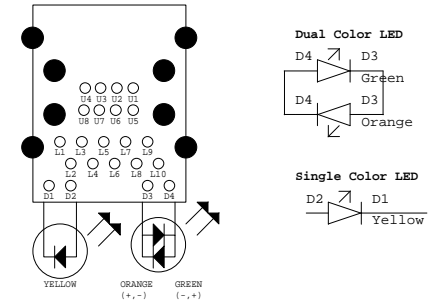
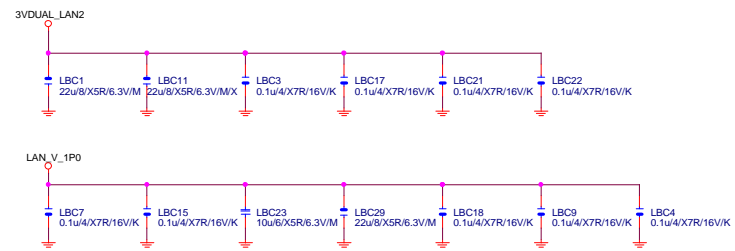
	IO_GP82	IO_GP83	IO_GP91
LED ON	L	H	L
LED OFF	L	L	L
LED BREATH	L	H	Breath
LED TEMPO	Float	H	L





```
NEW DESIGN ONLY FOR INTERNAL SWR
AR8151:LAR3(O),LAR5(X)
AR8161:LAR5(O),LAR3/LAR4(X)
```



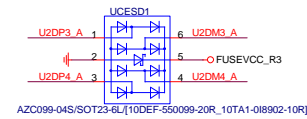
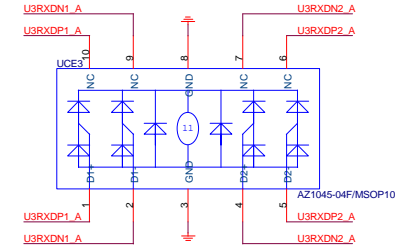
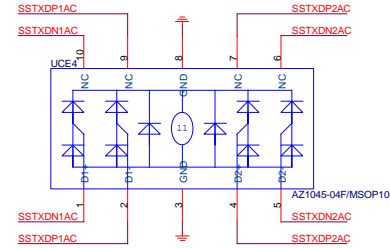
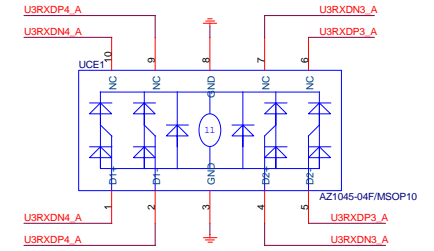
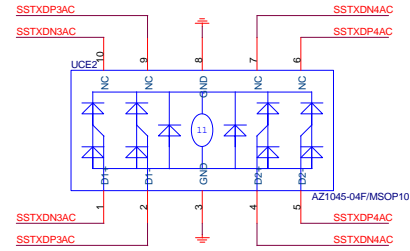
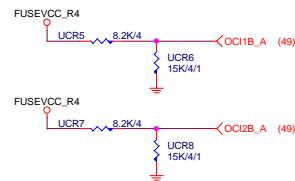
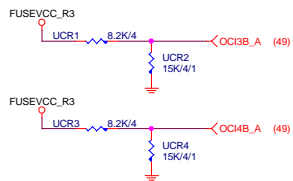
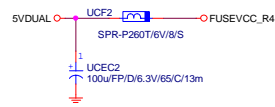
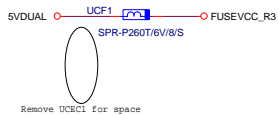
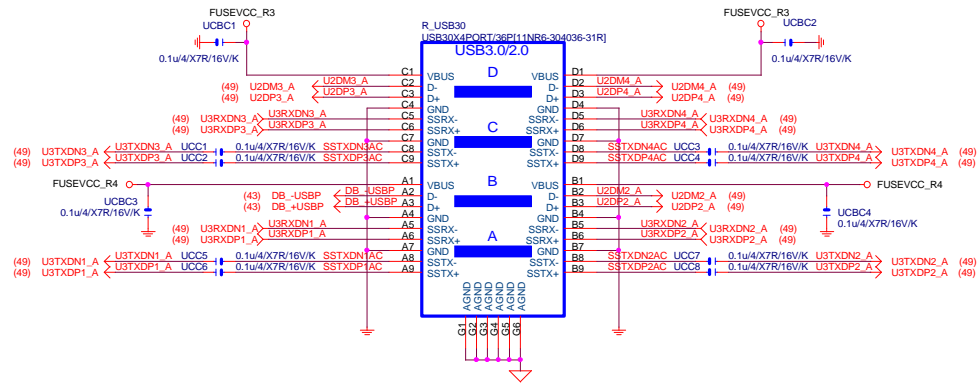


1Gb	Orange
100Mb	Green
10Mb	Off

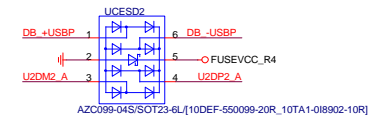
Access	Blinking
Link	Yellow



R_USB30 PORT



Close to connector



Close to connector

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Title			
R_USB30			
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PCH GPIO

PIN NAME	POWER WELL	USAGE	AFTER PLTRST	S3/S5	NOTES
GP[0]	VCC3	-ICH_PSI	IN		8.2K P/U TO VCC3
GP[1]	VCC3	SPARE	IN		8.2K P/U TO VCC3
GP[2]	VCC3	-PIRQE	IN		8.2K P/U TO VCC3
GP[3]	VCC3	-PIRQF	IN		8.2K P/U TO VCC3
GP[4]	VCC3	-PIRQG	IN		8.2K P/U TO VCC3
GP[5]	VCC3	-PIRQH	IN		8.2K P/U TO VCC3
GP[6]	VCC3	GPIO6	IN		8.2K P/U TO VCC3
GP[7]	VCC3	GPIO7	IN		8.2K P/U TO VCC3
GP[8]	3VDUAL	GPIO8	OUT		8.2K P/U TO 3VDUAL
GP[9]	3VDUAL	-USBOC5	IN		USB OVER-CURRENT
GP[10]	3VDUAL	-USBOC6	IN		USB OVER-CURRENT
GP[11]	3VDUAL	GPIO11	IN		8.2K P/U TO 3VDUAL
GP[12]	3VDUAL	GPIO12	OUT		8.2K P/U TO 3VDUAL
GP[13]	3VDUAL	-LPCPME	IN		8.2K P/U TO 3VDUAL
GP[14]	3VDUAL	GPIO14	IN		8.2K P/U TO 3VDUAL
GP[15]	3VDUAL	SPARE	OUT		8.2K P/U TO 3VDUAL (N/A)
GP[16]	VCC3	SPARE	IN		8.2K P/U TO VCC3
GP[17]	VCC3	SPARE	IN		8.2K P/U TO VCC3
GP[18]	VCC3	-SPI_WP0	OUT		8.2K P/U TO VCC3
GP[19]	VCC3	SPARE	OUT		8.2K P/U TO VCC3
GP[20]	VCC3	-SPI_WP1	OUT		8.2K P/U TO VCC3
GP[21]	VCC3	SPARE	IN		8.2K P/U TO VCC3
GP[22]	VCC3	SPARE	IN		1K P/U TO VCC3
GP[23]	VCC3	SPARE	IN		8.2K P/U TO VCC3
GP[24]	3VDUAL	-SKTOC	IN		8.2K P/U TO 3VDUAL (N/A)
GP[25]	3VDUAL	GPIO25	OUT		8.2K P/U TO 3VDUAL
GP[26]	3VDUAL	SPARE	OUT		8.2K P/U TO 3VDUAL
GP[27]	3VDUAL_PCH	SPARE	OUT		8.2K P/U TO 3VDUAL_PCH
GP[28]	3VDUAL	GPIO28	OUT		8.2K P/U TO 3VDUAL
GP[29]	3VDUAL	SPARE	OUT		8.2K P/U TO 3VDUAL (N/A)
GP[30]	3VDUAL	-S_WARN	OUT		CONNECT TO -S_ACK
GP[31]	3VDUAL_PCH	SPARE	IN		8.2K P/U TO 3VDUAL_PCH(N/A)
GP[32]	VCC3	SPARE	OUT		8.2K P/U TO VCC3
GP[33]	VCC3	SPARE	OUT		8.2K P/U TO VCC3
GP[34]	VCC3	SPARE	IN		8.2K P/U TO VCC3
GP[35]	VCC3	-ACZ_DET	OUT		8.2K P/U TO VCC3
GP[36]	VCC3	SPARE	IN		8.2K P/U TO VCC3(N/A)
GP[37]	VCC3	SPARE	IN		8.2K P/U TO VCC3
GP[38]	VCC3	SPARE	IN		1K P/U TO VCC3

PIN NAME	POWER WELL	USAGE	AFTER PLTRST	S3/S5	NOTES
GP[39]	VCC3	SPARE	IN		1K P/U TO VCC3
GP[40]	3VDUAL	-USBOC1	IN		USB OVER-CURRENT
GP[41]	3VDUAL	-USBOC2	IN		USB OVER-CURRENT
GP[42]	3VDUAL	-USBOC3	IN		USB OVER-CURRENT
GP[43]	3VDUAL	-USBOC4	IN		USB OVER-CURRENT
GP[44]	3VDUAL	SPARE	IN		1K P/U TO 3VDUAL
GP[45]	3VDUAL	SPARE	IN		1K P/U TO 3VDUAL
GP[46]	3VDUAL	SPARE	IN		1K P/U TO 3VDUAL
GP[47]	3VDUAL	SPARE	IN		1K P/U TO 3VDUAL
GP[48]	VCC3	SPARE	IN		1K P/U TO VCC3
GP[49]	VCC3	SPARE	IN		8.2K P/U TO VCC3
GP[50]	VCC3	-REQ1	OUT		8.2K P/U TO VCC3
GP[51]	VCC3	-GNT1	OUT		1K P/U TO VCC3
GP[52]	VCC3	-REQ2	OUT		8.2K P/U TO VCC3
GP[53]	VCC3	-GNT2	IN		8.2K P/U TO VCC3(N/A)
GP[54]	VCC3	-REQ3	IN		8.2K P/U TO VCC3
GP[55]	VCC3	-GNT3	IN		8.2K P/U TO VCC3(N/A)
GP[56]	3VDUAL	SPARE	IN		8.2K P/U TO 3VDUAL
GP[57]	3VDUAL	SPARE	IN		8.2K P/U TO 3VDUAL
GP[58]	3VDUAL	SML1CLK	OUT		8.2K P/U TO 3VDUAL
GP[59]	3VDUAL	-USBOC0	IN		USB OVER-CURRENT
GP[60]	3VDUAL	SML0ART	OUT		1K P/U TO 3VDUAL
GP[61]	3VDUAL	SPARE	OUT		8.2K P/U TO 3VDUAL
GP[62]	3VDUAL	SUSCLK	OUT		8.2K P/U TO 3VDUAL(N/A)
GP[63]	3VDUAL	-SLP_S5	OUT		8.2K P/U TO 3VDUAL(N/A)
GP[64]	VCC3	SPARE	OUT		8.2K P/U TO VCC3
GP[65]	VCC3	SPARE	OUT		8.2K P/U TO VCC3
GP[66]	VCC3	SPARE	OUT		8.2K P/U TO VCC3
GP[67]	VCC3	SPARE	OUT		8.2K P/U TO VCC3
GP[68]	VCC3	SPARE	OUT		8.2K P/U TO VCC3
GP[69]	VCC3	SPARE	OUT		8.2K P/U TO VCC3
GP[70]	VCC3	SPARE	OUT		8.2K P/U TO VCC3
GP[71]	VCC3	SPARE	OUT		8.2K P/U TO VCC3
GP[72]	3VDUAL	SPARE	OUT		8.2K P/U TO 3VDUAL
GP[73]	3VDUAL	SPARE	OUT		8.2K P/U TO 3VDUAL
GP[74]	3VDUAL	SML1ART	OUT		1K P/U TO 3VDUAL
GP[75]	3VDUAL	SML1DAT	IN/OUT		8.2K P/U TO 3VDUAL

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PCH GPIO LIST			
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RS_SYS

LED_CON1

REAR PANEL

PE3_LED

PE2_LED

PE4_LED

PE1_LED

DDR4_1_1A

D1_LED

DDR4_2_2A

D2_LED

DDR4_3_1B

D3_LED

DDR4_4_2B

D4_LED

CPU SOCKET

DDR4_8_2D

D8_LED

DDR4_7_1D

D7_LED

DDR4_6_2C

D6_LED

DDR4_5_1C

D5_LED

B_BIOS

M_BIOS

M2_WIFI

M2_20G

M2WD1 M2WD2

SL_MIC1

PCH

ECRS_PCH

RS_PCH

放在PCH背板正中央

LED_CON2

FBIOS_LED
ECRS_SYS

MOSFET
CHOKE

DF_D0U1
DF_DL1

DF_D0U1

6

DB_D0U1
DB_DL1

DB_D0U1

2

DE_D0U1
DE_DL1

DE_D0U1

5

DA_D0U1
DA_DL1

DA_D0U1

1

DART7 8

DD_D0U1
DD_DL1

DD_D0U1

4

DH_D0U1
DH_DL1

DH_D0U1

8

ECRS MOS

DC_D0U1
DC_DL1

DC_D0U1

3

DG_D0U1
DG_DL1

DG_D0U1

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Gigabyte Technology

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