

rev 1.0

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TITLE

[illegible]

<i>Gigabyte Technology</i>			
Title			
Cover Sheet			
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	GA-X58A-UD3R		1.0
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GA-X58A-UD3R rev 1.0

Circuit or PCB layout change
for next version

Component value change history

[illegible][illegible]

LOW ICH9 GPIO LIST TABLE

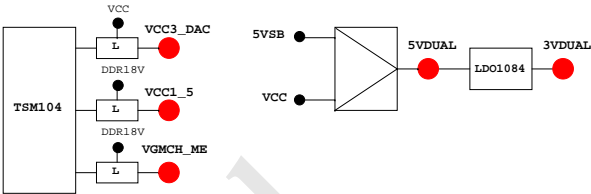
PIN NAME	PWR WELL	AFTER/ PLTRST	USAGE	NOTE
GP0	MAIN	IN	VTT_GMCH_OV3	
GP1/TACH1	MAIN	IN	ICH_FAN_TACH1	P/U 8.2K VCC3
GP2/PIRQE#	MAIN	IN	~PIRQE	P/U 8.2K VCC3
GP3/PIRQF#	MAIN	IN	~PIRQF	P/U 8.2K VCC3
GP4/PIRQG#	MAIN	IN	~PIRQG	P/U 8.2K VCC3
GP5/PIRQH#	MAIN	IN	~PIRQH	P/U 8.2K VCC3
GP6/TACH2	MAIN	IN	ICH_FAN_TACH2	P/U 8.2K VCC3
GP7/TACH3	MAIN	IN	ICH_FAN_TACH3	P/U 8.2K VCC3
GP8	STBY	IN	DDR18V_OV4	
GP9	STBY	H-Z	GPIO9 (DUALBIOS_INPUT)	
GP10	STBY	H-Z	DDR18V_OV5	P/D 100K GND/X
GP11/SMBALERT#	STBY	NATIVE	~SMBALRT	P/U 8.2K 3VDUAL
GP12	STBY	L OUT	AUDIO DETECT	P/U 8.2K VCC3
GP13	STBY	L IN	~LPCPME	P/U 8.2K 3VDUAL
GP14	STBY	H-Z	DDR18V_OV2	P/U 8.2K 3VDUAL
GP15	STBY	H-Z	SPI_WP	STP_PCI#
GP16	MAIN	L OUT	DUAL BIOS CONTROL	N/A
GP17/TACH0	MAIN	IN	ICH_FAN_TACH0	P/U 8.2K VCC3
GP18	MAIN	H OUT	MB_ID1	P/U 8.2K VCC3
GP19	MAIN	IN	VCC15_OV1	P/U 8.2K VCC3/X
GP20	MAIN	OUT	~SPI_WP0	P/U 1K 3VCL
GP21	MAIN	IN	VCC15_OV3	P/U 8.2K VCC3
GP22	MAIN	IN	VCORE_OV3	P/U 8.2K VCC3
GP23	MAIN	OUT	~LDRQ1	P/U 8.2K VCC3
GP24	STBY	OUT	TLs	P/U 8.2K 3VDUAL
GP25	STBY	IN	MB_ID2 (STP_CPU~)	P/U 8.2K 3VDUAL
GP26/S4_STATE#	STBY	OUT	MB_ID0	P/U 8.2K 3VDUAL
GP27	STBY	OUT/LOW	GPIO27 (EL_STATE0)	P/U 8.2K 3VDUAL
GP28	STBY	OUT/LOW	DUAL BIOS CONTROL	N/A
GP29/OC5#	STBY	IN	~USBOC_R	P/U FUSEVCC
GP30/OC6#	STBY	IN	~USBOC_R	P/U FUSEVCC
GP31/OC7#	STBY	IN	~USBOC_R	P/U FUSEVCC
GP32	MAIN	OUT	DUAL_BIOS	P/U 100K+1M VCC3
GP33	MAIN	OUT		
GP34	MAIN	OUT/LOW		N/A
GP35	MAIN	L OUT	400K FS CONTROL	N/A
GP36	MAIN	IN	DUAL BIOS CONTROL	P/U 8.2K VCC3
GP37	MAIN	IN	150K FS CONTROL	P/U 8.2K VCC3
GP38	MAIN	IN	VCORE_OV2	P/U 8.2K VCC3
GP39	MAIN	IN	GPIO39	P/D 8.2K GND
GP48	MAIN	IN	VCORE_OV1	P/U 8.2K VCC3
GP49	MAIN	IN	STARPPING	P/D 8.2K

PIN NAME	PWR WELL	AFTER/ PLTRST	USAGE	NOTE
GP50	MAIN	IN	REQ1#	
GP51	MAIN	IN	GNT1#	P/U 8.2K VCC3
GP52	MAIN	IN	REQ2#	P/U 8.2K VCC3
GP53	MAIN	IN	GNT2#	P/U 8.2K VCC3
GP54	MAIN	IN	REQ3#	P/U 8.2K VCC3
GP55	MAIN	IN	GNT3#	P/U 8.2K VCC3
GP56	STBY	IN	VCORE_OV5	
GP57	STBY	IN	VCORE_OV4	
GP58	STBY	IN	SPI_CS1#	
GP59	STBY		~USBOC_R	
GP60	STBY		LINKALRT#	

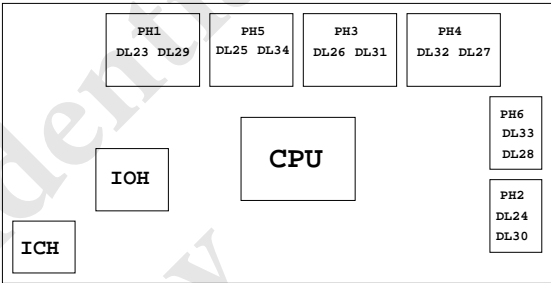
Super I/O GPIO Table

PIN NAME	USAGE	NOTE
SVC/PECI_RQT/GP14	~PECI_REQ	
PWROK1/GP13	PWROK1/ITE_PWROK	
KRST#/GP62	~KBRST	
SO/GP50	~ICH_SPI_CS	
IRTX/GP47/CE2_N/JP7	CEB_N	
GP46/IRRX	~LAN2_DSM	
PSION#/GP42	~PSON	
PWROK2#/GP41	PECI_CTL	
PCIRST3#/GP10/VDIMM_STR_EN	~PCIE_RST	
RSMRST#CIRRX1/GP55	~RSMRST	
PME#/GP54	~LPCPME	
PD5/GP75/BUSS00	N/A	

PIN NAME	USAGE	NOTE
FAN_TAC2/GP52	FANIO2	
FAN_TAC3/GP37	FANIO3	
VIDO3/FAN_TAC4/GP25/DSR2#	FANIO4	
FAN_CTL2/GP51	FANPWM2	
FAN_CTL3/GP36	FANPWM3	
VID4/GP34	BEEP~	
VID3/GP33	TURBO1	
VID2/GP32	TURBO0	
VCORE_GOOD/VID6/GP63	CPUT_LED1_C	
VID5/GP35	CPUT_LED2_C	
VID1/GP31	CPUT_LED3_C	
VID0/GP30	~LAN1_DSM	NBT_LED1_C
SLCT/GP80	CPU_LED1_C	
PE/GP81	CPU_LED2_C	
BUSY/GP82	CPU_LED3_C	
PD3/GP73/BUSSI1	SB_LED1_C	
PD4/GP74/BUSSI2	SB_LED2_C	
VCORE_EN/VID7/GP64	IT_GP64	SB_LED3_C
PD0/GP70	NB_LED1_C	
PD1/GP71	NB_LED2_C	
PD2/GP72/BUSSI0	NB_LED3_C	
GP22/SCK	LOW_PWR_1	
VIDO5/GP27/SIN2	LOW_PWR_2	
PCIRST2#/GP11	~PFMRST1	
PCIRST1#/GP12	~PFMRST2	
3VSB5W#/GP40	CSI_F0	BSEL166_1
SUSC#/GP53	CSI_F1	BSEL166_2
GP23/SI	BSEL166_3/CSISBSL	
VIDO0/GP20/CTS2#	CPUT_LED1_C	BSEL166_4
GP65/VDDA_EN/GB_01	MB_ID2	
PD6/GP76/BUSSO1	MB_ID3	
PD7/GP77/BUSSO2	MB_ID4	
AFD#/GP86/SMB_C_R	空 PIN	FST_2X8
INIT#/GP85/SMBD_M	SEC_2x8	GTLREF_AD2
ACK#/GP83	DDR_LED1_C	
VIDO1/GP21/DCD2#	DDR_LED2_C	
STB#/GP87/SMB_C_M	DDR_LED3_C	
PWRON#GP44	VCORE_OV1	
PANSWH#/GP43	PWRBT5W	
KDAT/GP61	~PWRBT5W	
KCLK/GP60	KDAT	
MDAT/GP57	KCLK	
MACL/GP56	MDAT	
GP66/VLDT_EN/GB_02	NBT_LED1_C	MCLK
SVD/PCIRSTIN#/CIRTX/GP15	PWM2_CR	
KDAT/GP61	PWM2_CR	
GP67/CPU_PG/GB_03	EN_LOADLINE	IT_GP67/~EN_PWM2
SLIN#/GP84/SMBD_R	~EN_PWM2	
PSI_L/FAN_CLT5/CIRRX2/GP16	~THERM	
VIDO4/GP26/SOUT2	DDR18V_PH2_EN	
VIDO2/FAN_TAC5/GP24/DSR2#	DDR18V_LED	
VIDO6/GP17/RI2#	1_1V_PH_EN	
VIDO7/JP6/DTR2#	JP6	
PD5/GP75/BUSS00	SB_LED3_C	



PWM各相位的擺法如下:




BIOS超電壓對應表:

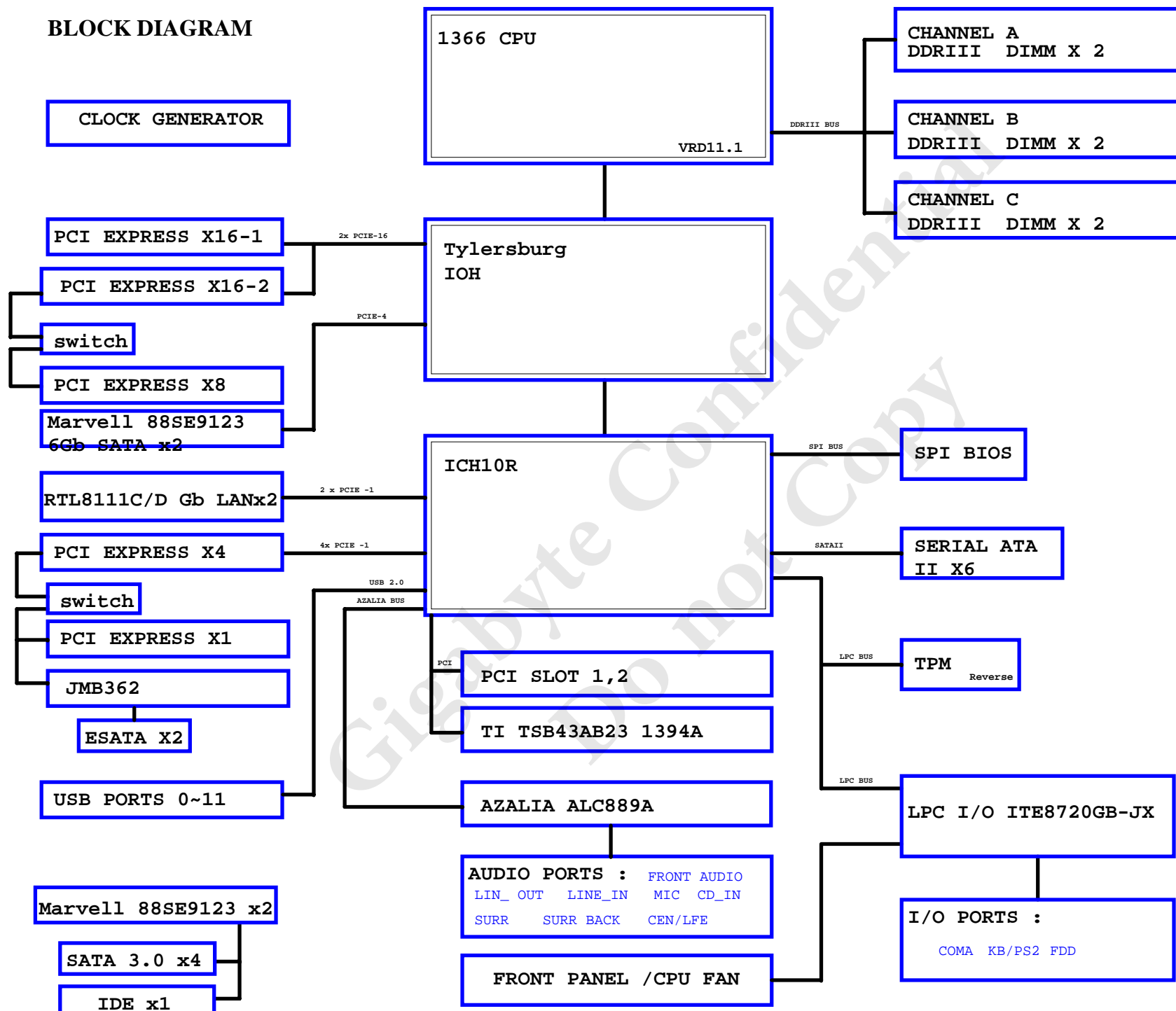
線路圖名稱	BIOS選項
VTT_REF	DRAM Termination
CHAC-CHCC	address
DDR15V	DRAM voltage
VCC18_PLL	CPU PLL
VCCA1_1	CSI PLL
CPU Vcore	CPU Vcore
VCC15	ICH I/O
VCC1_1	IOH core
MCH_RAMVREF	MCH/DRAM Reference (不開放)
VTTD	CPU Termination
VCCA1_5	PCIe
CHA-CHC	Date
VCC1_1_ICH	ICH core

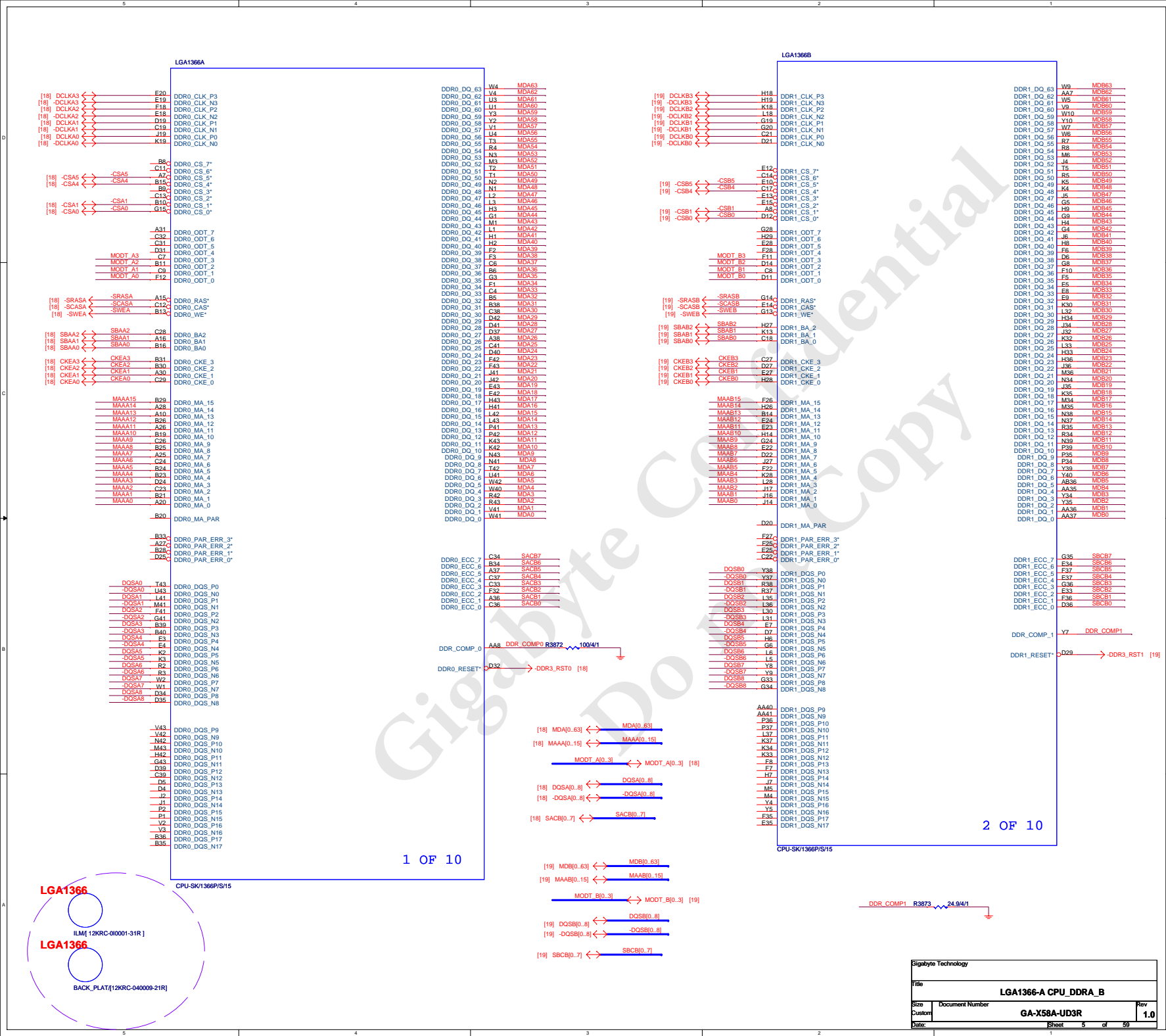
	3 pin FAN control	4 pin FAN control	FAN speed	Controller
CPU FAN	FANPWM1	FANPWM3	FANIO1	IT8718
	ICH_FAN_PWM2	ICH_FAN_PWM0	ICH_FAN_TACH0	ICH8
SYS FAN	FANPWM2	N/A	FANIO2	IT8718
	ICH_FAN_PWM1	N/A	ICH_FAN_TACH1	ICH8
PWR FAN	N/A	N/A	FANIO3	IT8718
			ICH_FAN_TACH2	ICH8

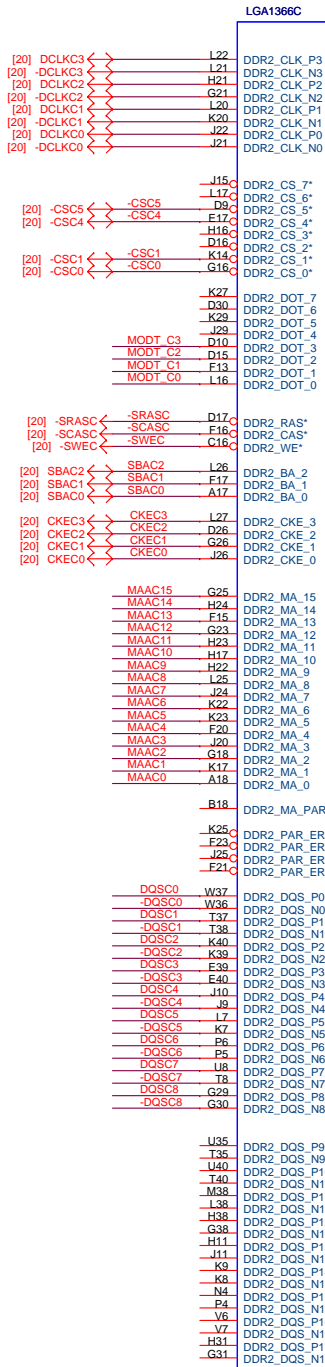
BLOCK DIAGRAM



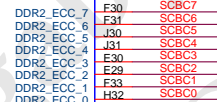
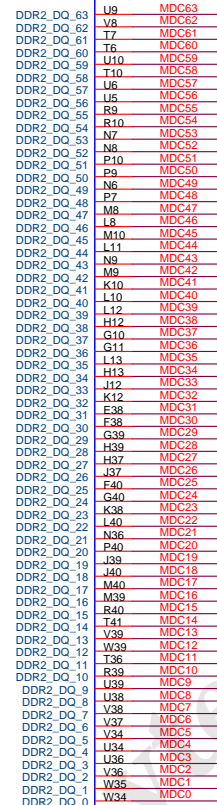
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graph TD; CG[CLOCK GENERATOR];
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CPU-SK/1366P/S/15

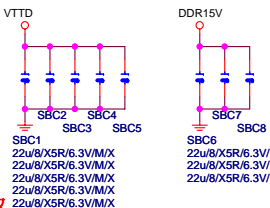
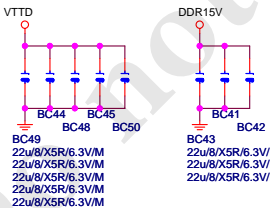


DDR_COMP_2 AC1 DDR_COMP2 R3874 130/4/1

DDR2_RESET E32 -DDR3_RST2 [20]

TOP

CPU下電容 Vcore 24顆
DDR15V 3 顆
VTTD 5 顆
VCC18_PLL 1 顆
VTTA 1 顆



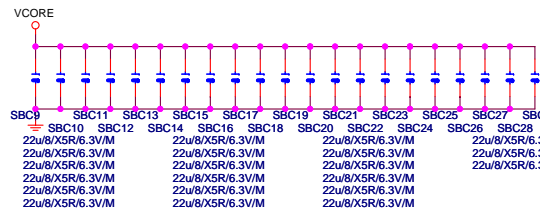
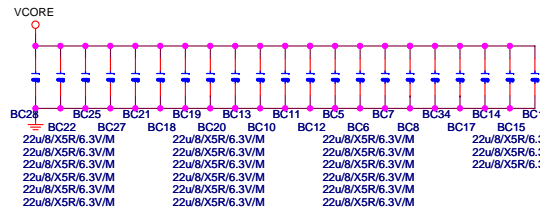
BOTTOM 預留

CPU下電容 Vcore 24顆
DDR15V 3 顆
VTTD 5 顆
VCC18_PLL 1 顆
VTTA 1 顆

LGA1366F



CPU-SK/1366P/S/15

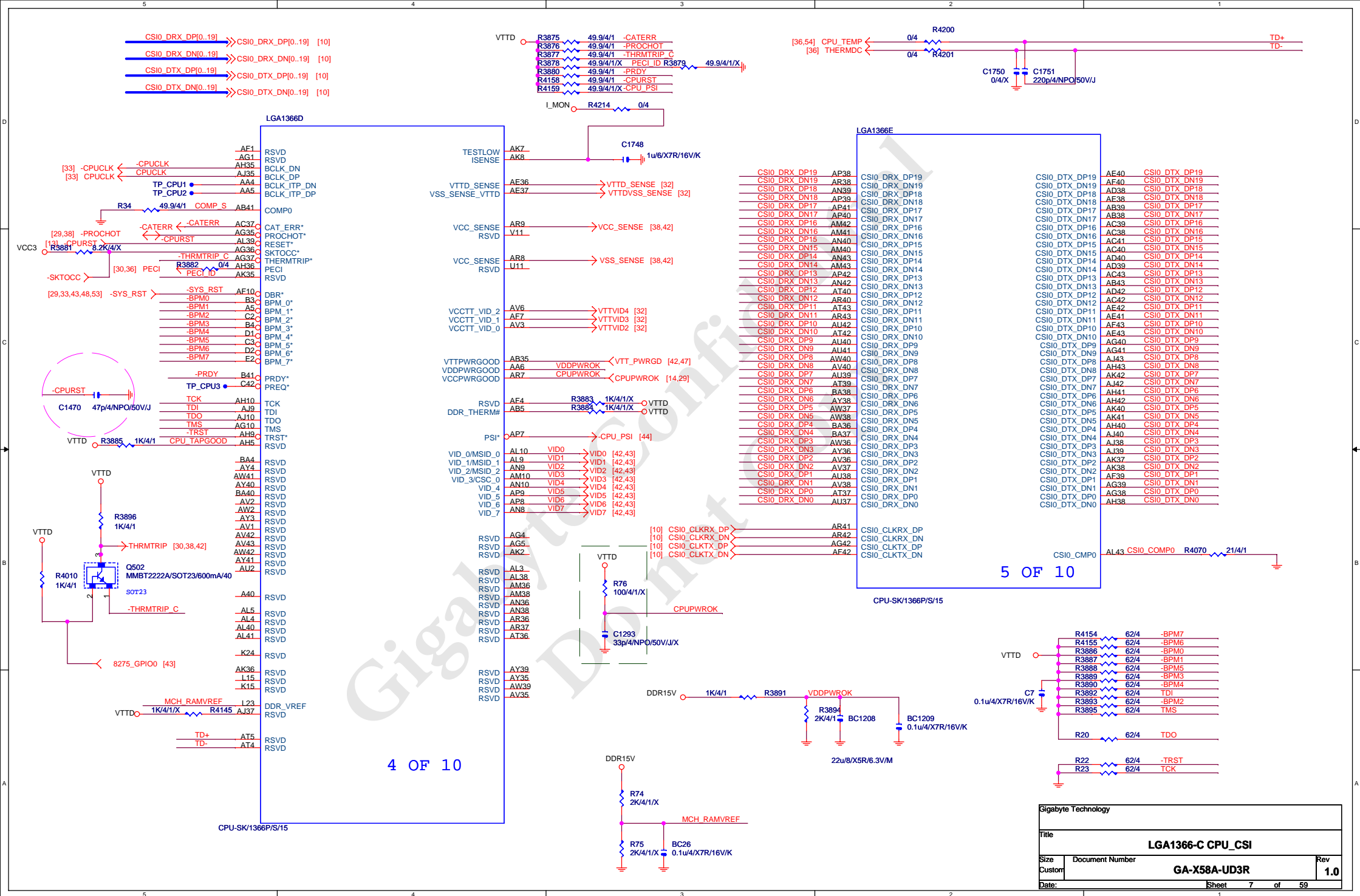


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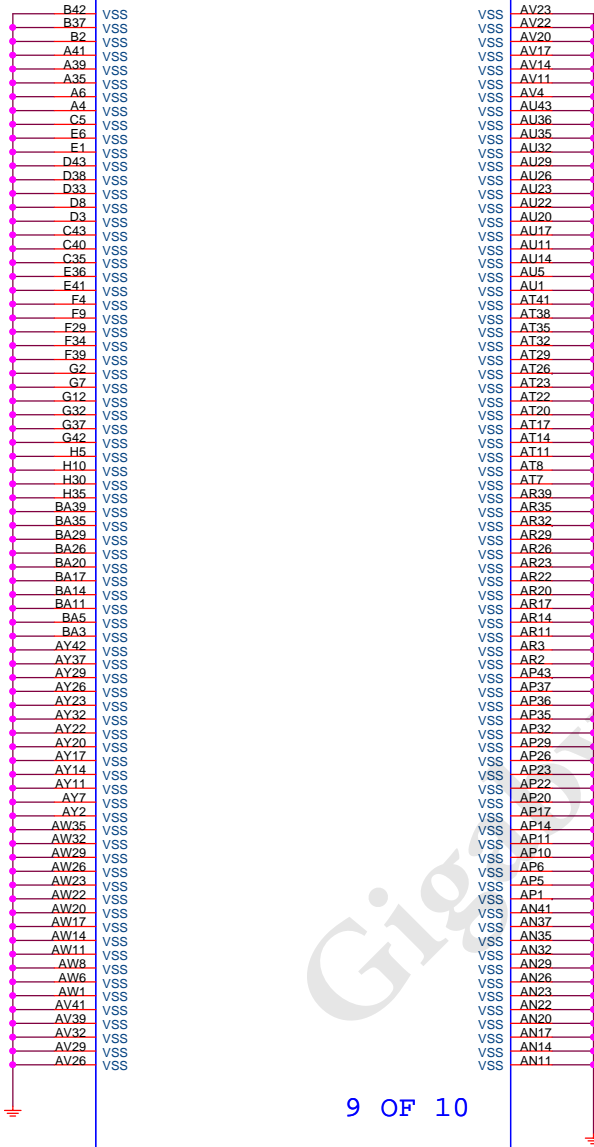
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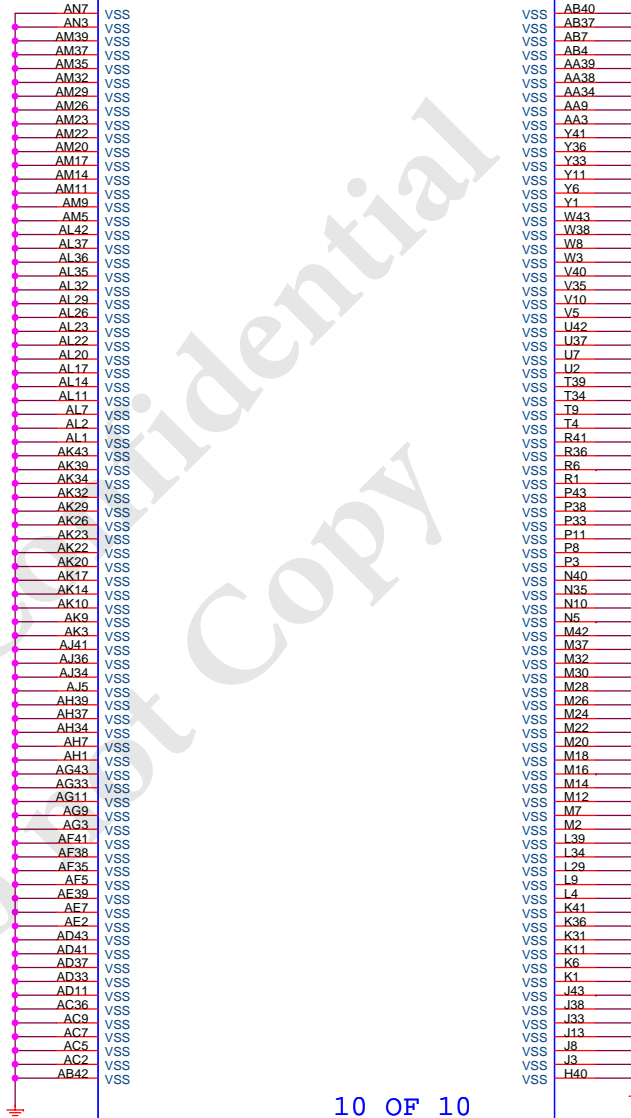


LGA1366I



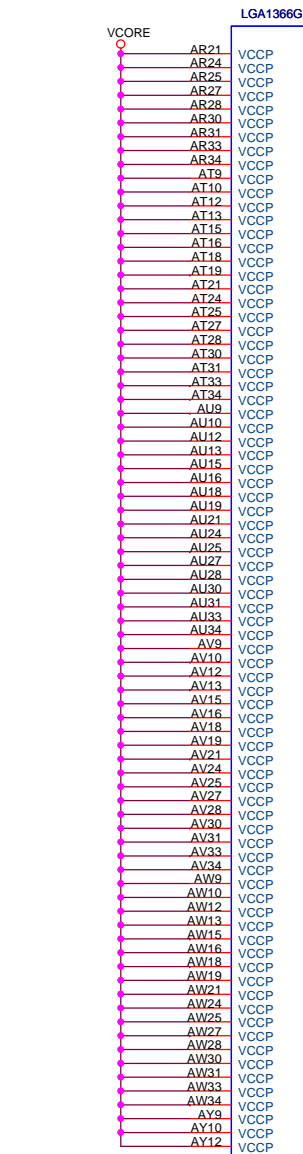
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LGA1366J

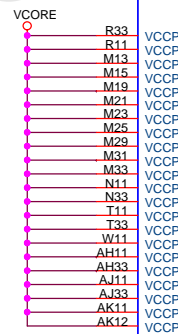
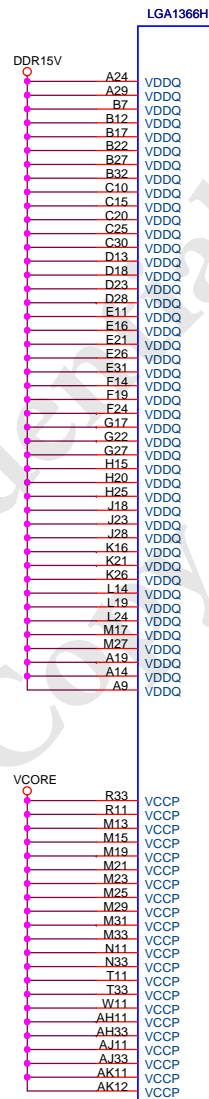
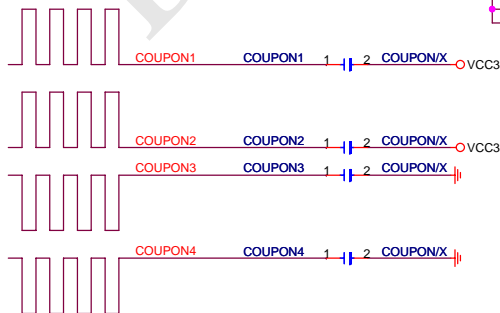
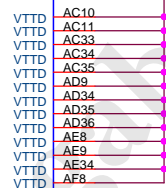
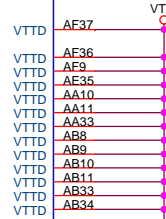
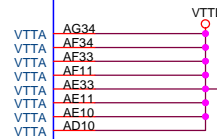
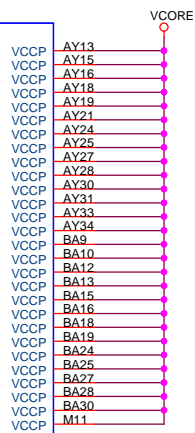
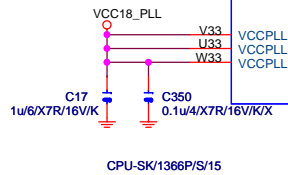


CPU-SK/1366P/S/15

Gigabyte Technology			
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LGA1366-D GND			
Size	Document Number		Rev
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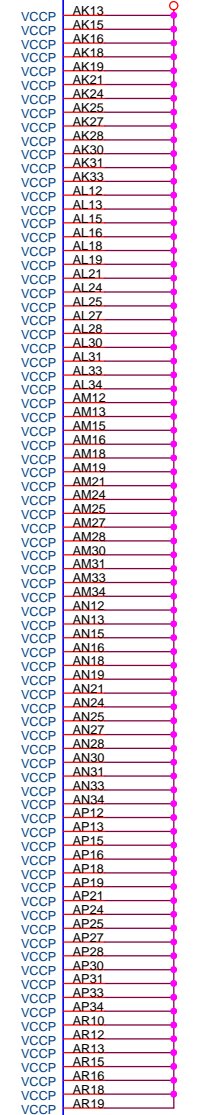


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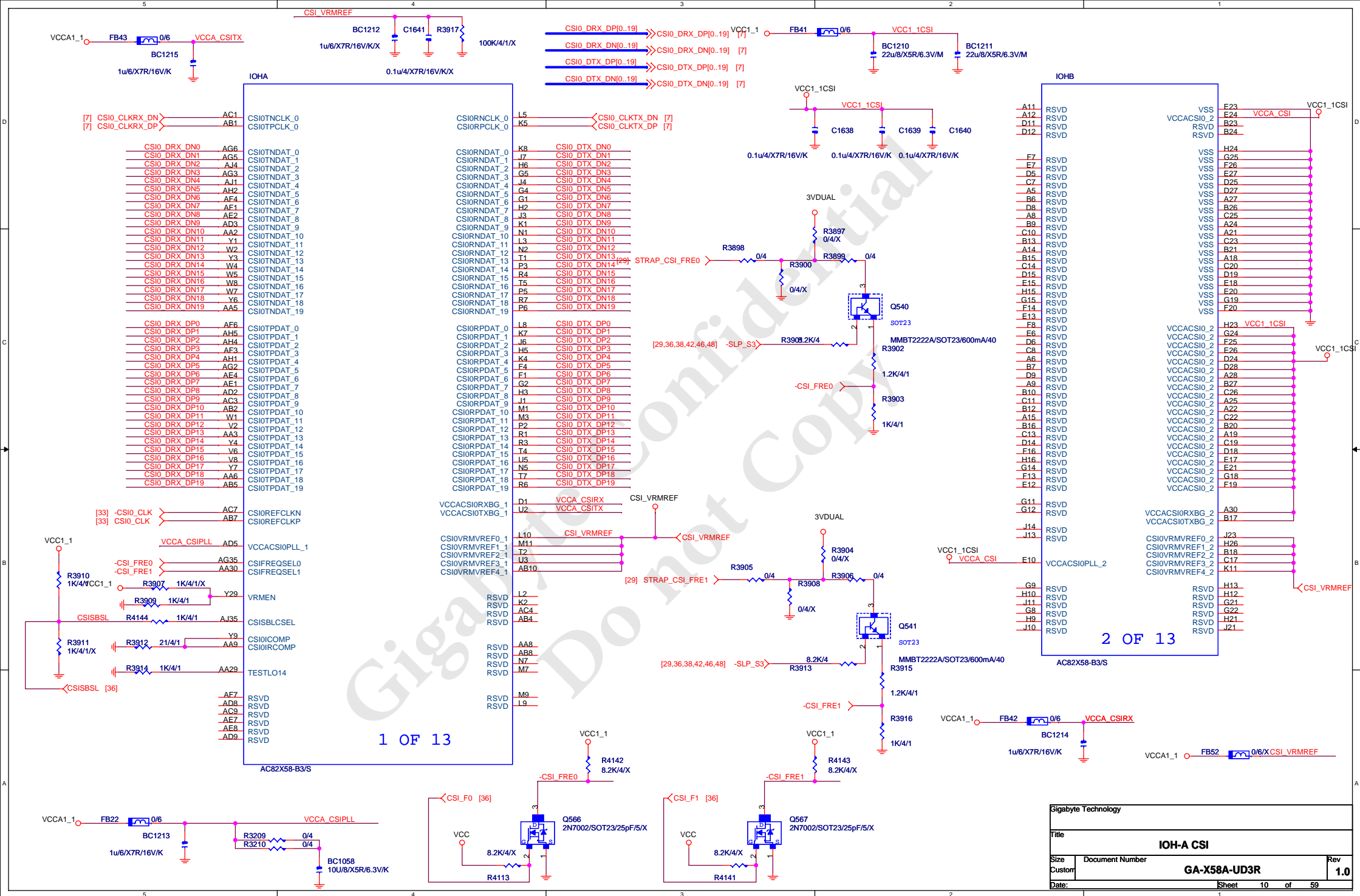


CPU-SK/1366P/S/15

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Size Custom	Document Number GA-X58A-UD3R	Rev 1.0
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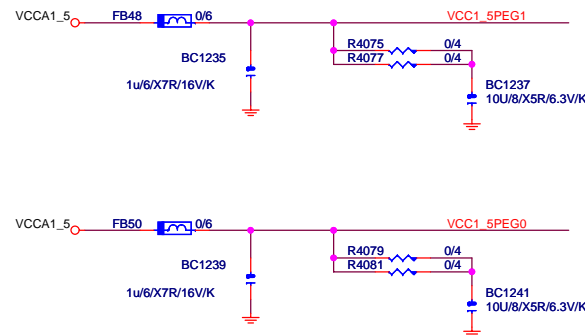
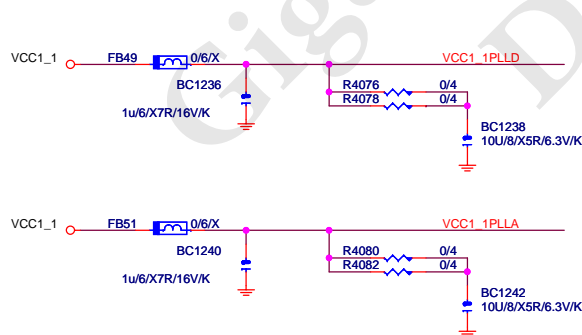
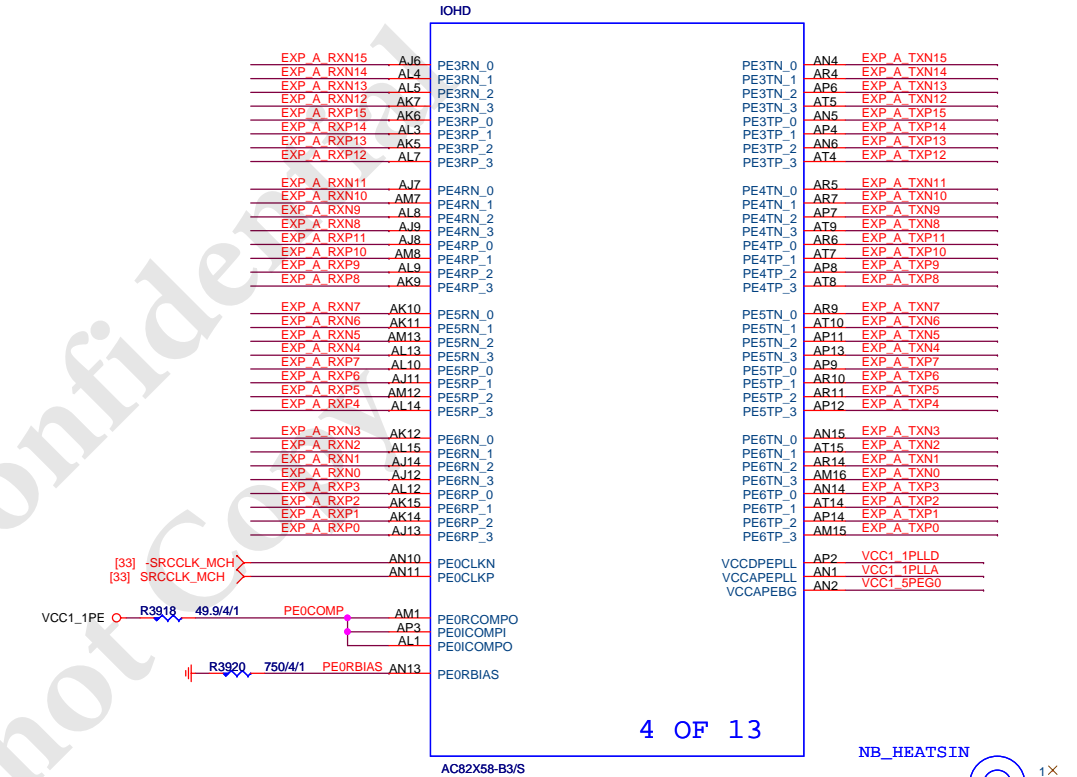
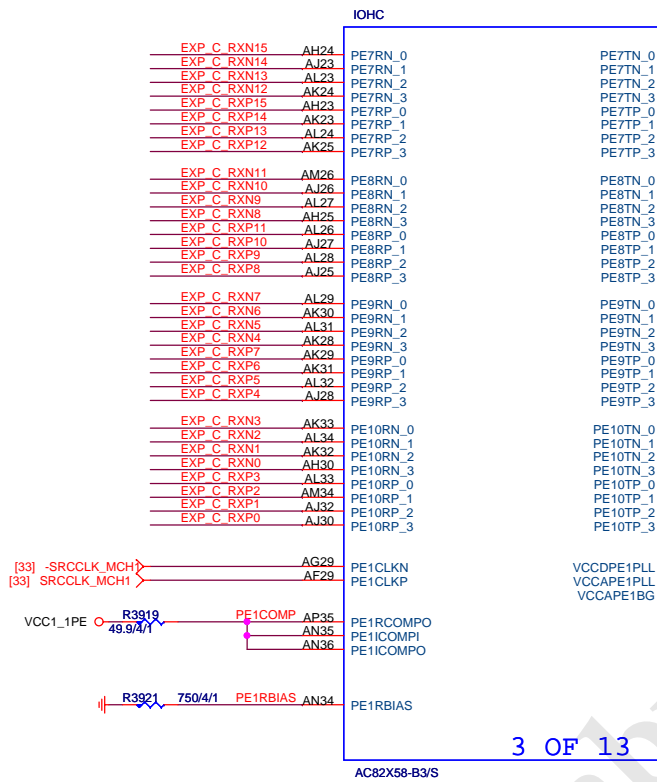


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EXP_A_RXN[0..7] >> EXP_A_RXN[0..7] [23]

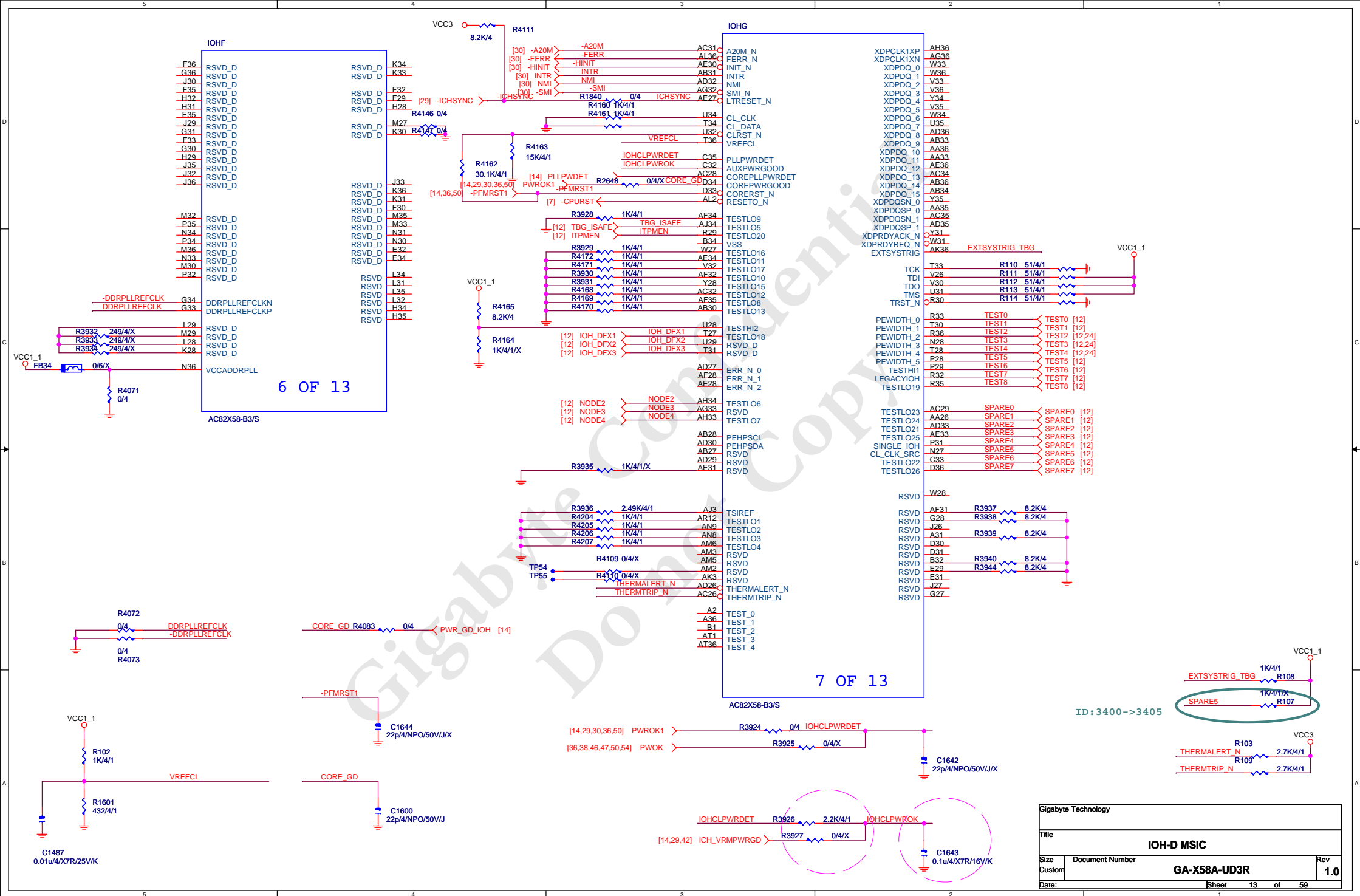
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EXP_A_TXN[8..15] >> EXP_A_TXN[8..15] [22]
EXP_A_RXP[8..15] >> EXP_A_RXP[8..15] [22]
EXP_A_RXN[8..15] >> EXP_A_RXN[8..15] [22]

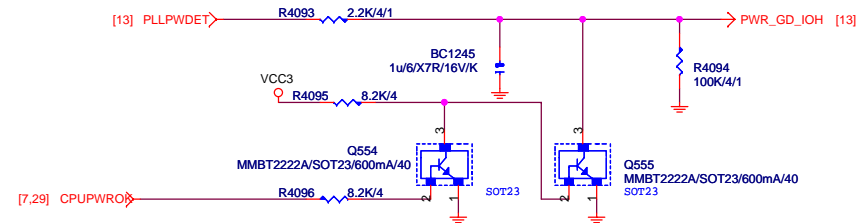
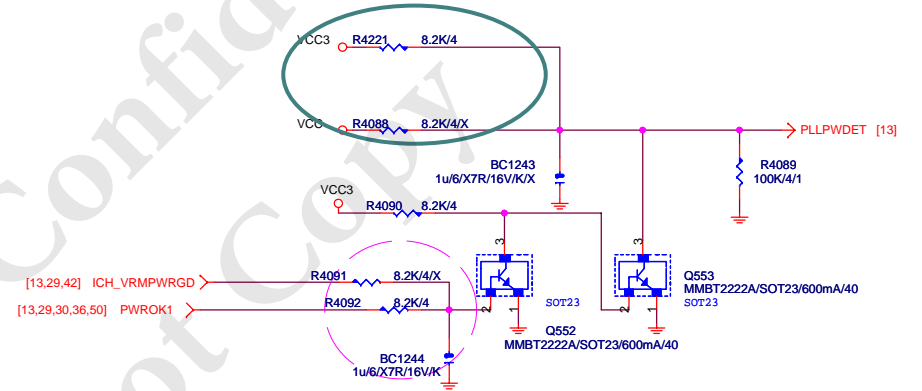
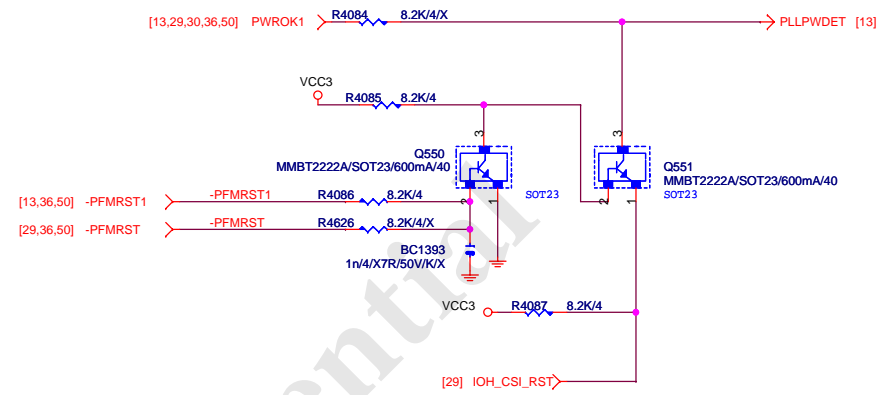
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EXP_C_TXN[0..7] >> EXP_C_TXN[0..7] [26]
EXP_C_RXP[0..7] >> EXP_C_RXP[0..7] [26]
EXP_C_RXN[0..7] >> EXP_C_RXN[0..7] [26]

EXP_C_TXP[8..15] >> EXP_C_TXP[8..15] [25]
EXP_C_TXN[8..15] >> EXP_C_TXN[8..15] [25]
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EXP_C_RXN[8..15] >> EXP_C_RXN[8..15] [25]

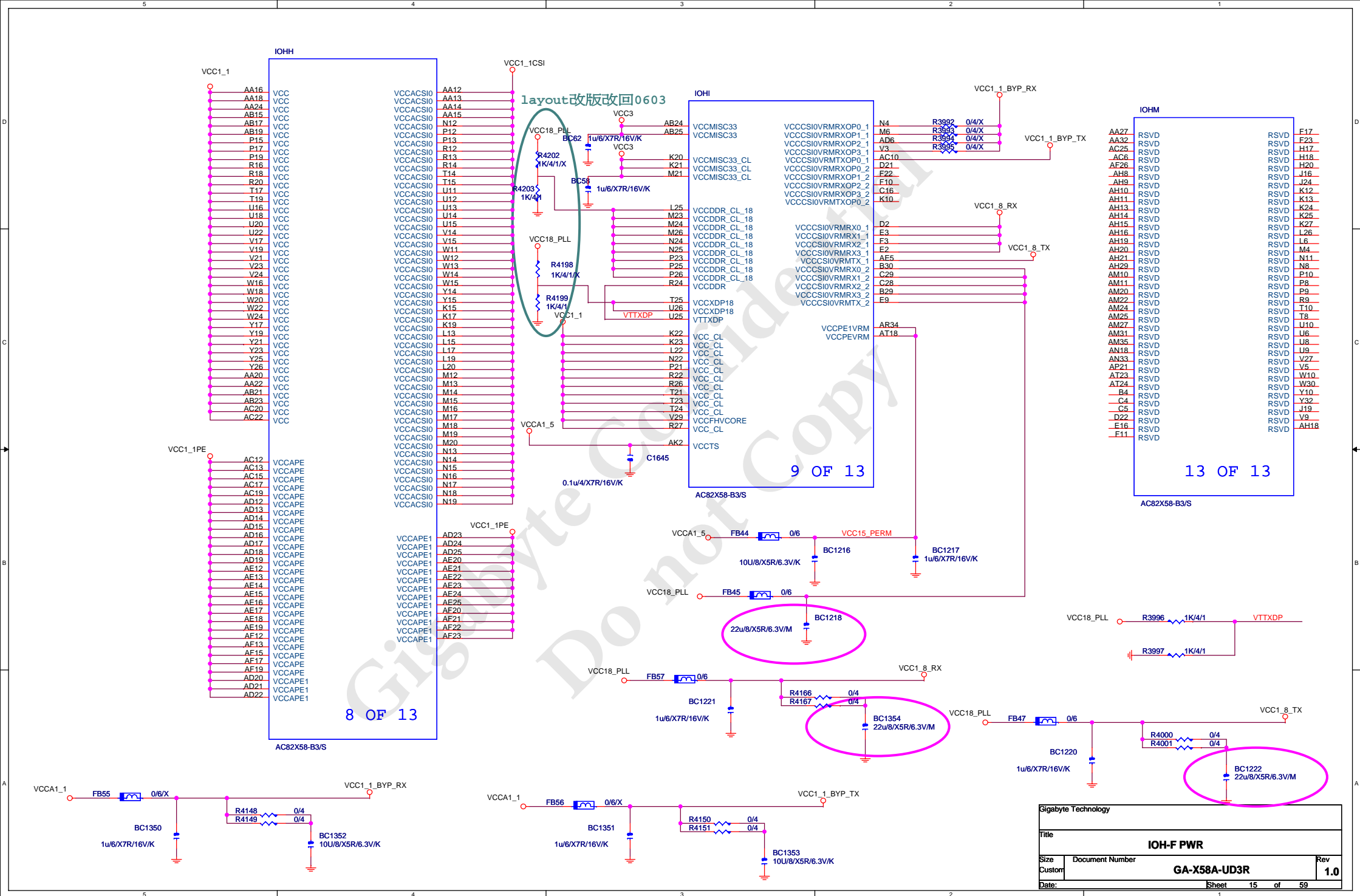


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Size	Document Number	Rev
Custom	GA-X58A-UD3R	1.0
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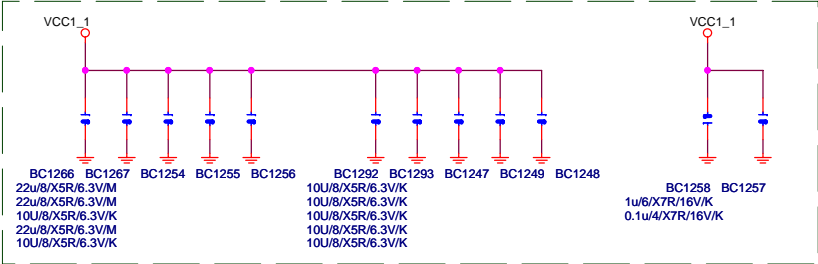


Gigabyte Technology			
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Size	Document Number	GA-X58A-UD3R	Rev
Custom			1.0
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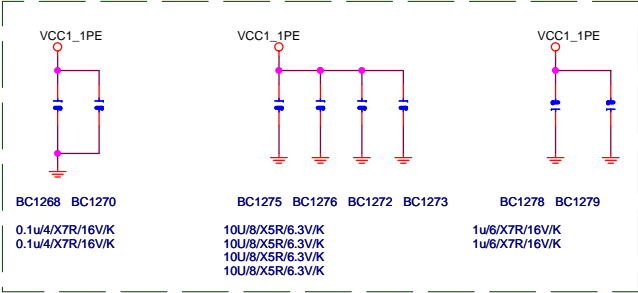


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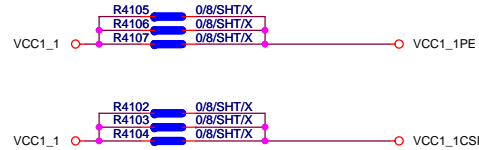
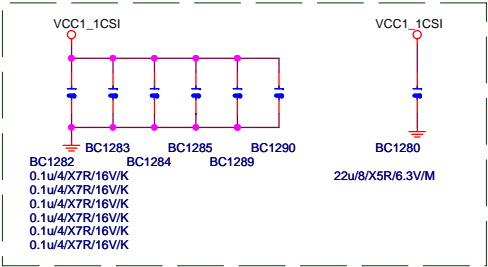
VCC1_1



VCC1_1PE

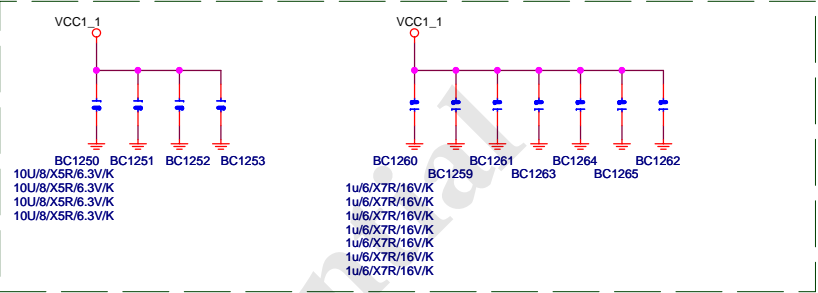


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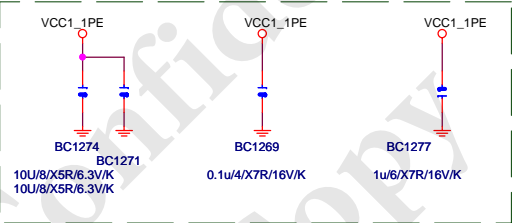


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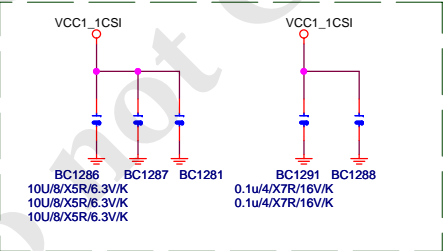
VCC1_1



VCC1_1PE



VCC1_1CSI



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Title IOH-G PWR_1			
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IOHJ

A16 RSVD_SP
A23 RSVD_SP
B14 RSVD_SP
C12 RSVD_SP
C18 RSVD_SP
D16 RSVD_SP
F12 RSVD_SP
G13 RSVD_SP
G17 RSVD_SP
H14 RSVD_SP

VSS

AM9
AM14
AM23
AM32
AM36
AN17
AN26
AN31
AP1
AP15
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AP29
AP36
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AR3
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C6
C21
C27
C30
C34
C34
D3
D7
D10
D20
D33
D35
E5
E11
E19
E25
E30
E36
F5
F9
F18
F21
F27
F31
G6
G23
G29
G32
H1
H4
H8
H22
H27
H33

VSS

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AC82X58-B3/S

IOHK

J15 RSVD_SP
J18 RSVD_SP

VSS

J2
J5
J8
J9
J20
J22
J25
J28
J31
J34
K3
K6
K9
K14
K16
K18
K26
K29
K32
K35
L1
L4
L7
L11
L12
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L36
M2
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P27
P30
P33
P36
R10
R11
R15
R17
R19

VSS

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AC82X58-B3/S

IOHL

A13 RSVD_SP
A17 RSVD_SP
A20 RSVD_SP
C15 RSVD_SP
D13 RSVD_SP
D17 RSVD_SP
E14 RSVD_SP
F15 RSVD_SP
G16 RSVD_SP
J12 RSVD_SP
J17 RSVD_SP

VSS

A3
A4
A33
A35
AA1
AA7
AA11
AA19
AA23
AA28
AA34
AB6
AB12
AB14
AB18
AB22
AB29
AB32
AC2
AC5
AC11
AC16
AC23
AC27
AC33
AD1
AD7
AD28
AD34
AE3
AE9
AE26
AE35
AF5
AF14
AF18
AF24
AF27
AF33
AG1
AG4
AG11
AG13
AG15
AG17
AG19
AG21
AG23
AG25
AG31
AH3
AH7
AH12
AH22
AH35
AJ15
AJ20
AJ24
AJ31
AJ36
AK1
AK8
AK18
AK26
AK34
AL6
AL16
AL22
AL30

VSS

VSS

AM4
AM19
AM28
AM33
AN3
AN7
AN12
AN22
AP5
AP10
AP20
AP24
AP34
AR2
AR13
AR27
AR32
AR36
AT3
AT6
AT16
AT21
AT33
AT35
B5
B11
B19
B22
B28
B31
B35
C1
C2
C3
C9
C24
C31
C36
D4
D23
D29
D32
E1
E4
E8
E22
E28
E33
F2
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G3
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G35
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H11
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H25
H30
H36
Y8

VSS

AC82X58-B3/S

Gigabyte Technology

Title

IOH-H GND

Size

Document Number

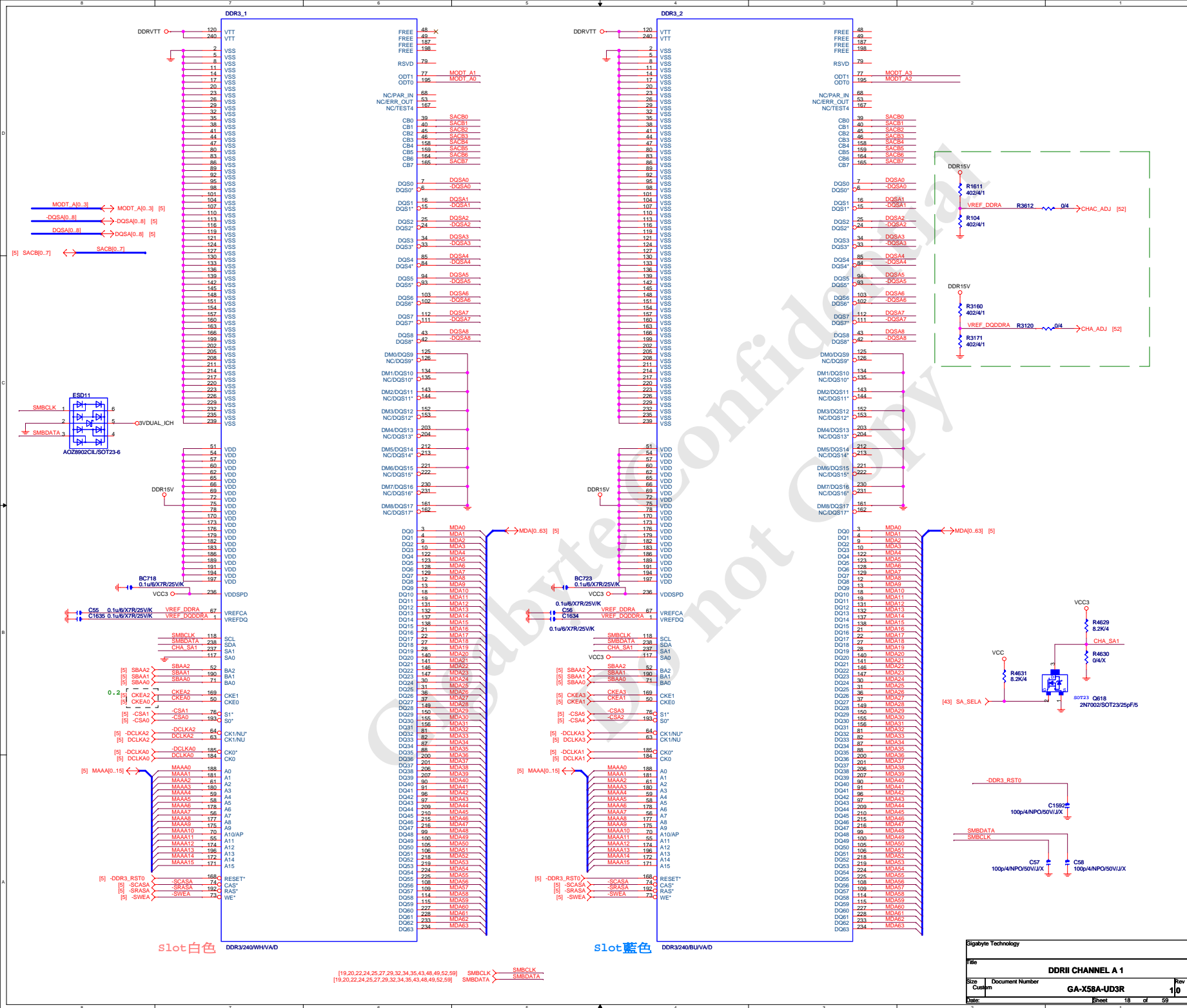
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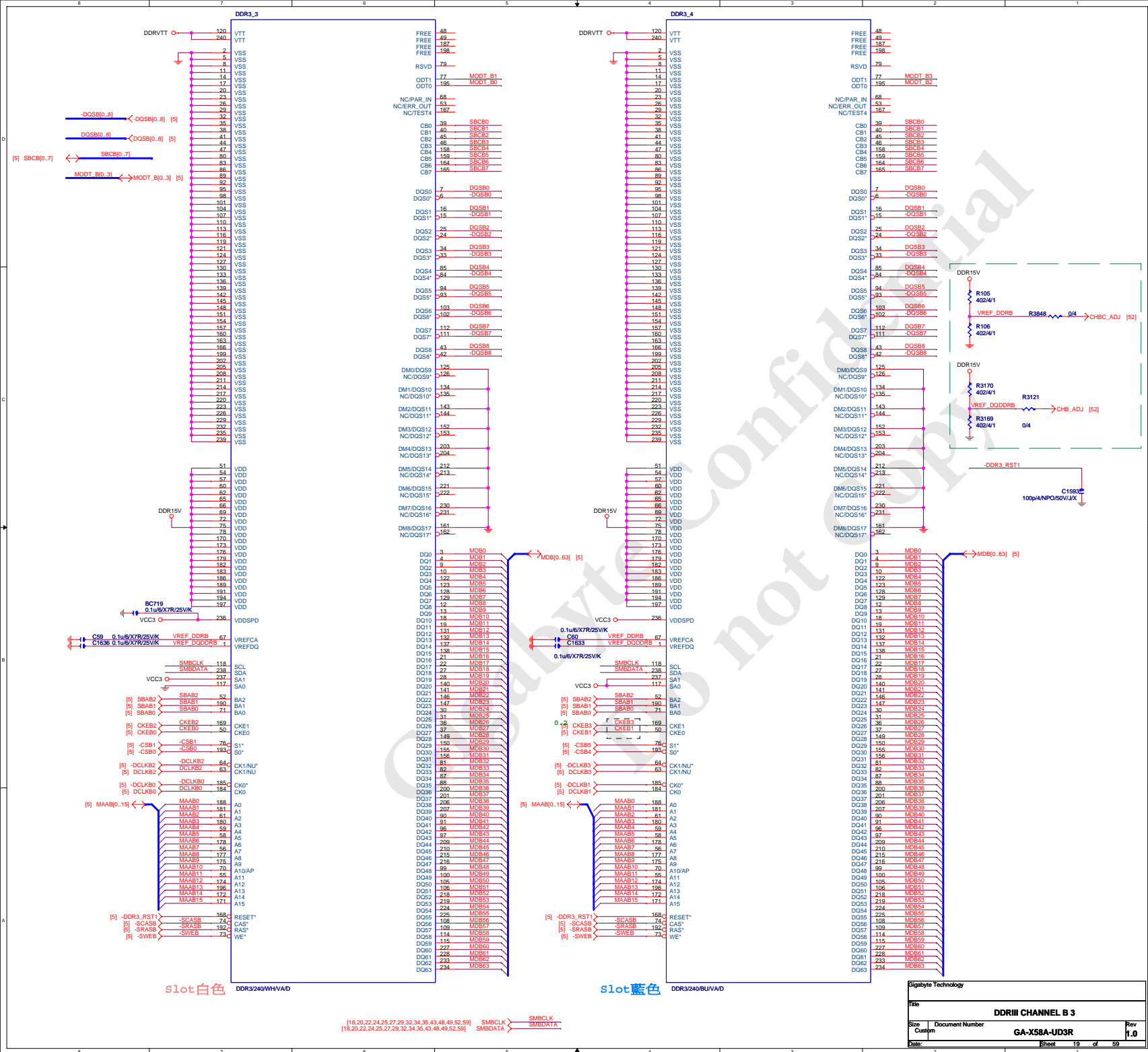
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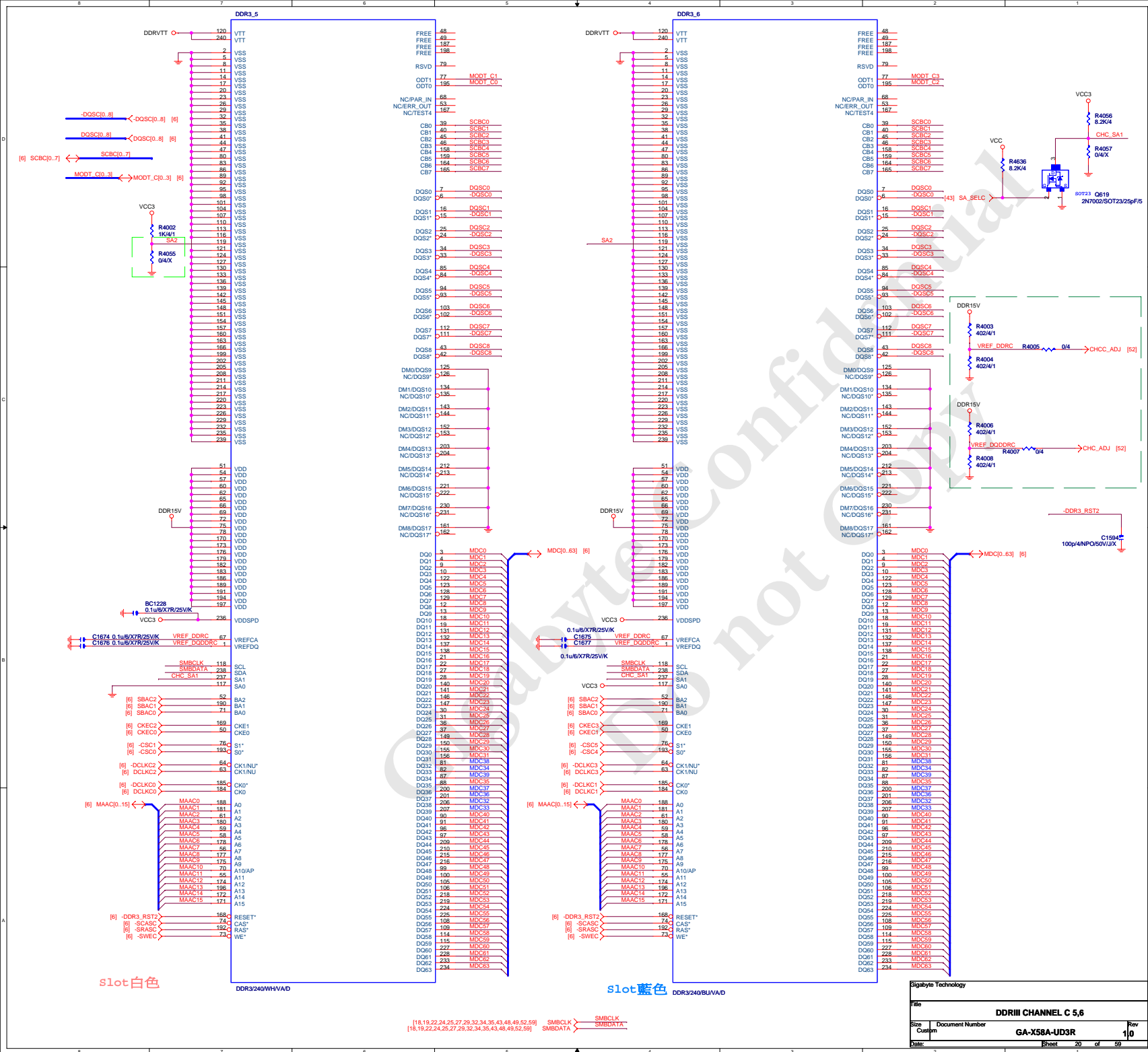
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Date:

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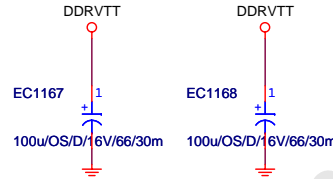
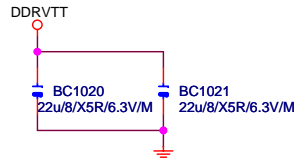
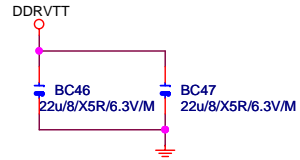
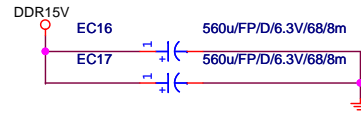
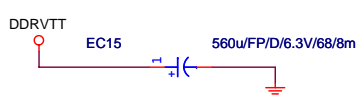






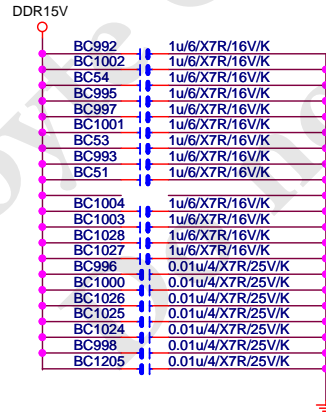
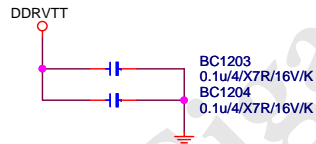
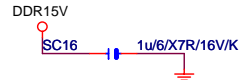
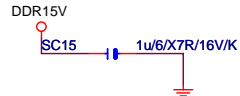
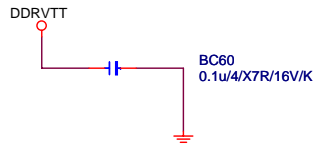
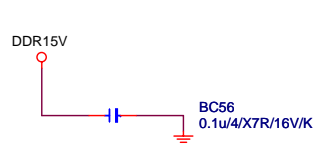
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DDRVTT Decouple



DDR18V Decouple

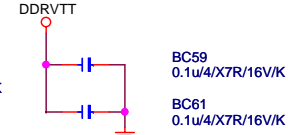
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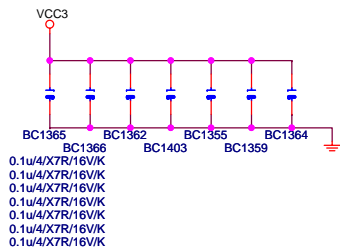
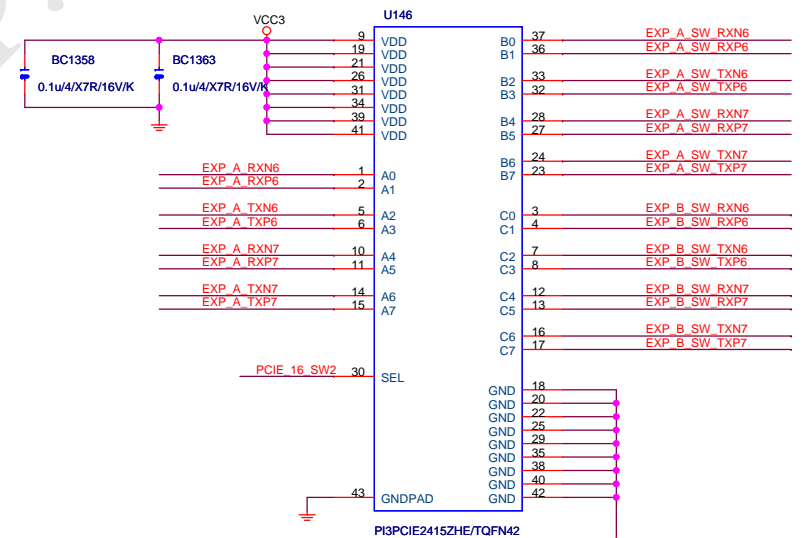
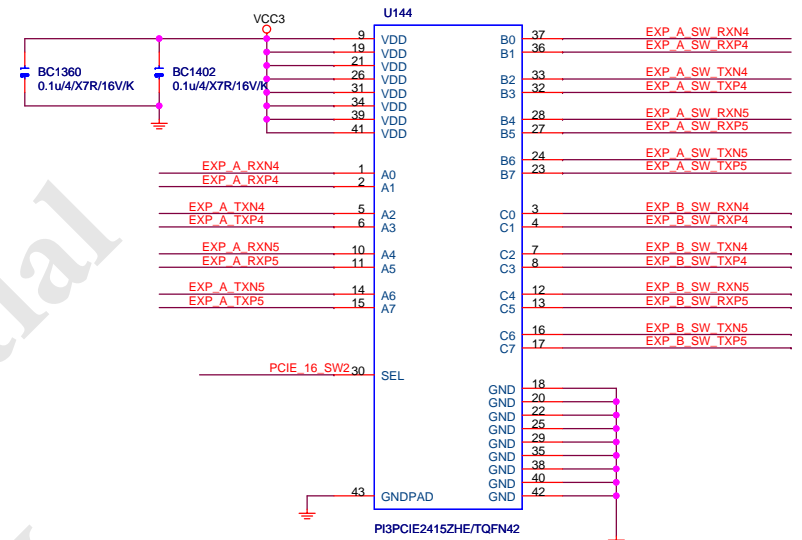


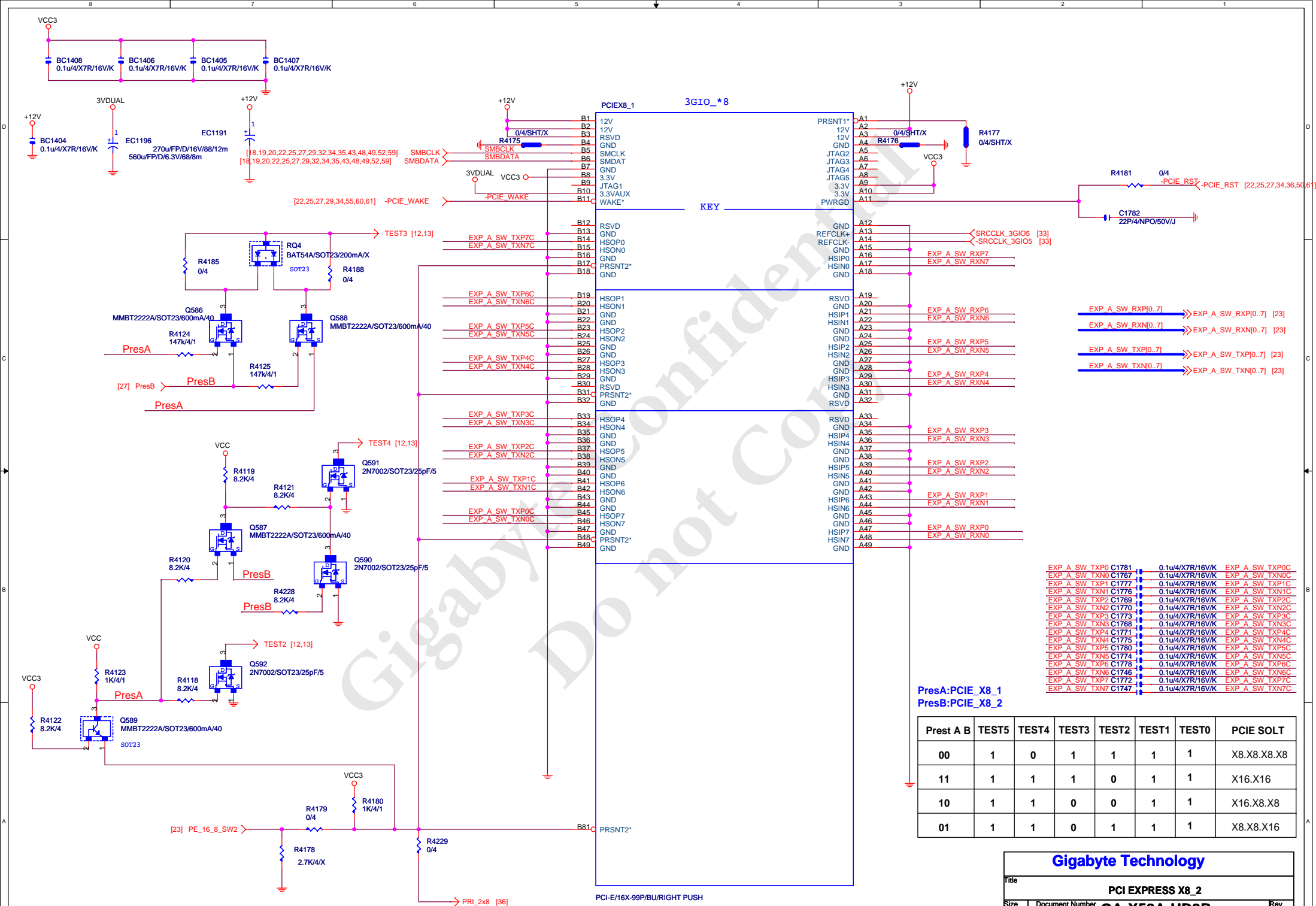
DDR TERMINATION CHANNEL B

DDR18V Decouple

DDRVTT Decouple





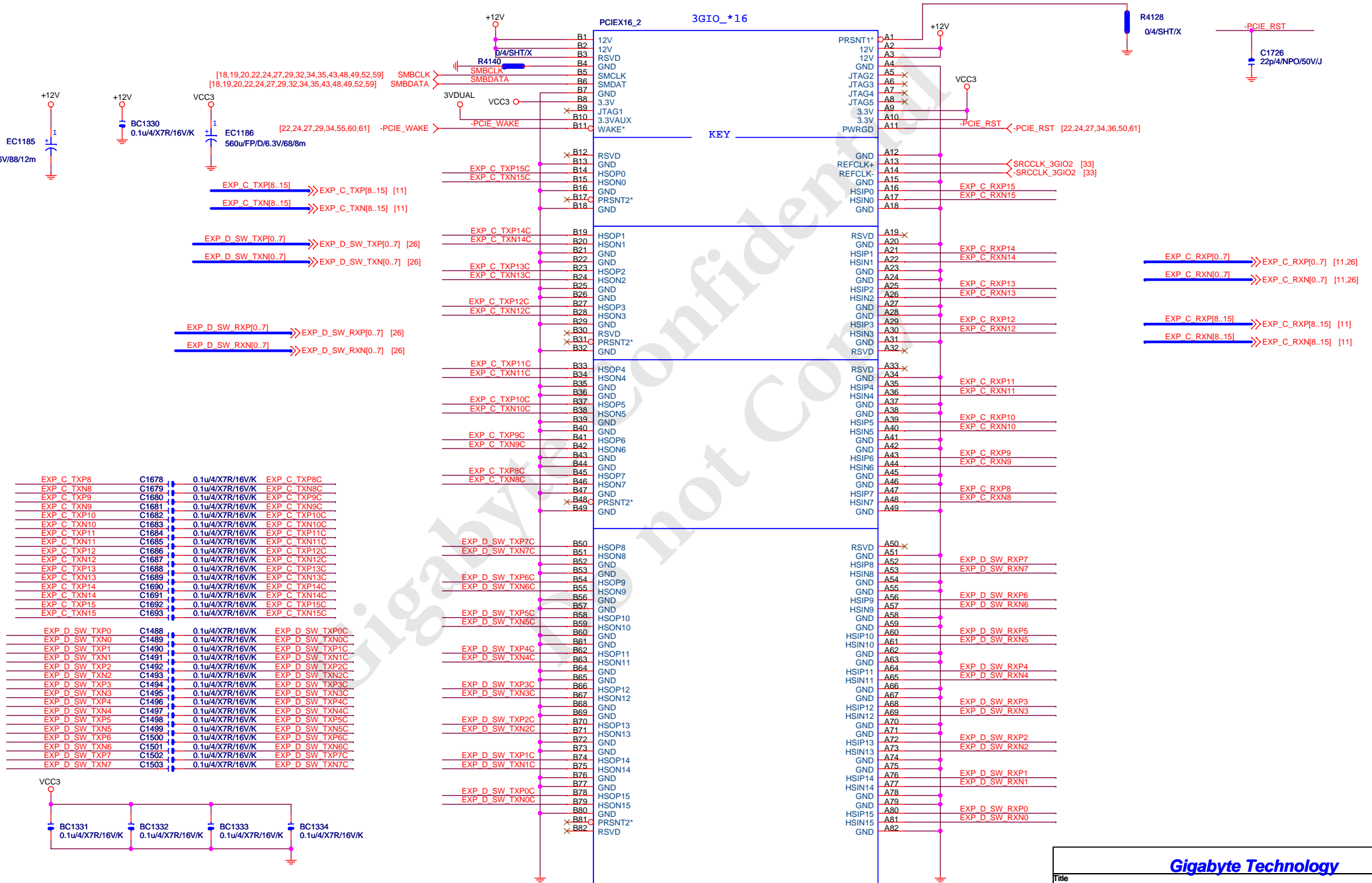


PCIESLOT-164DN-2

PCIE16_2 3GIO_*16

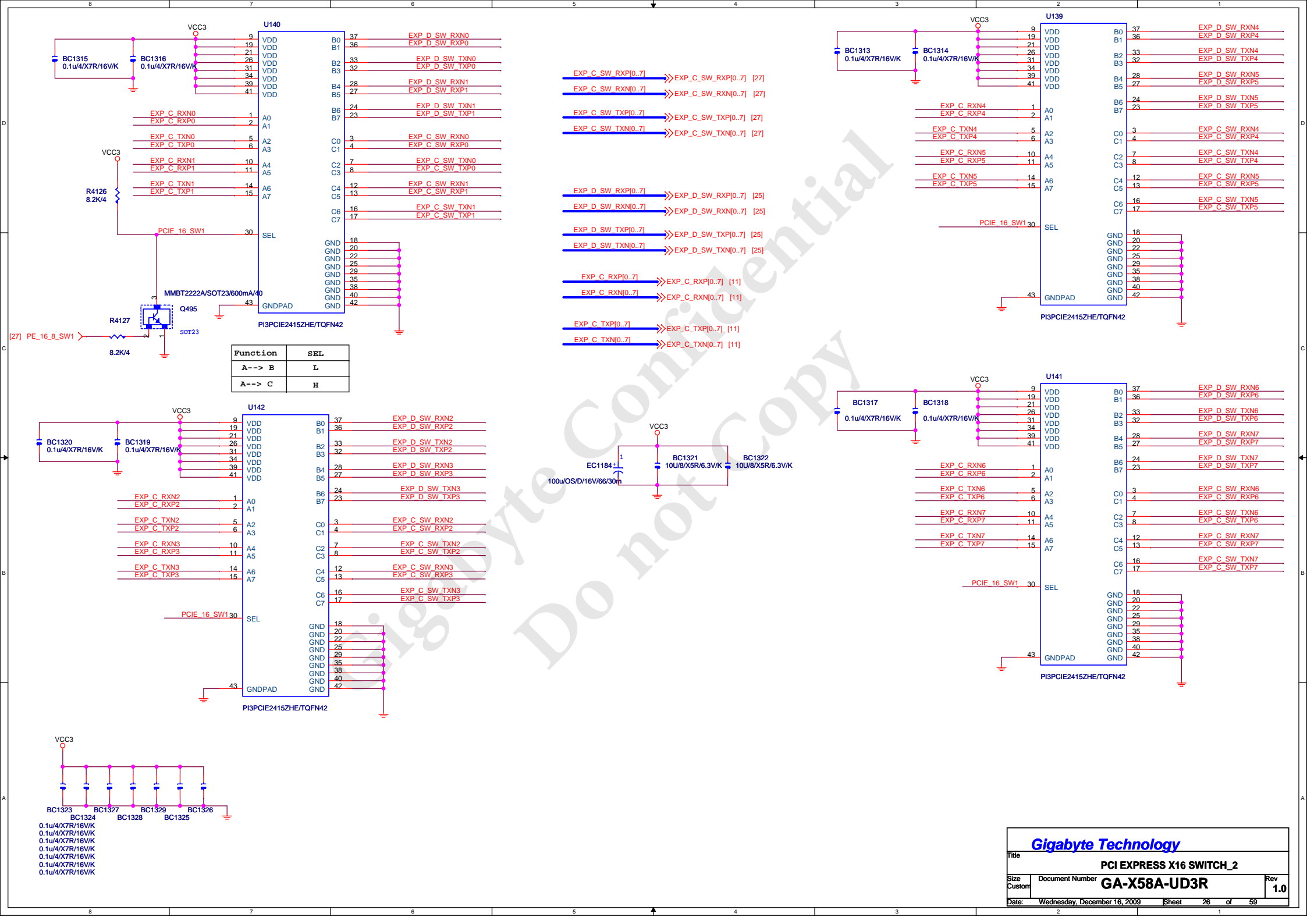
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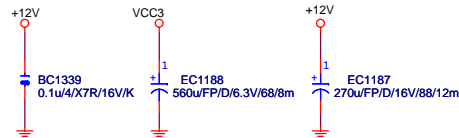
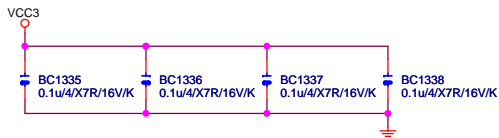
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Gigabyte Technology

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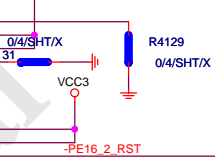
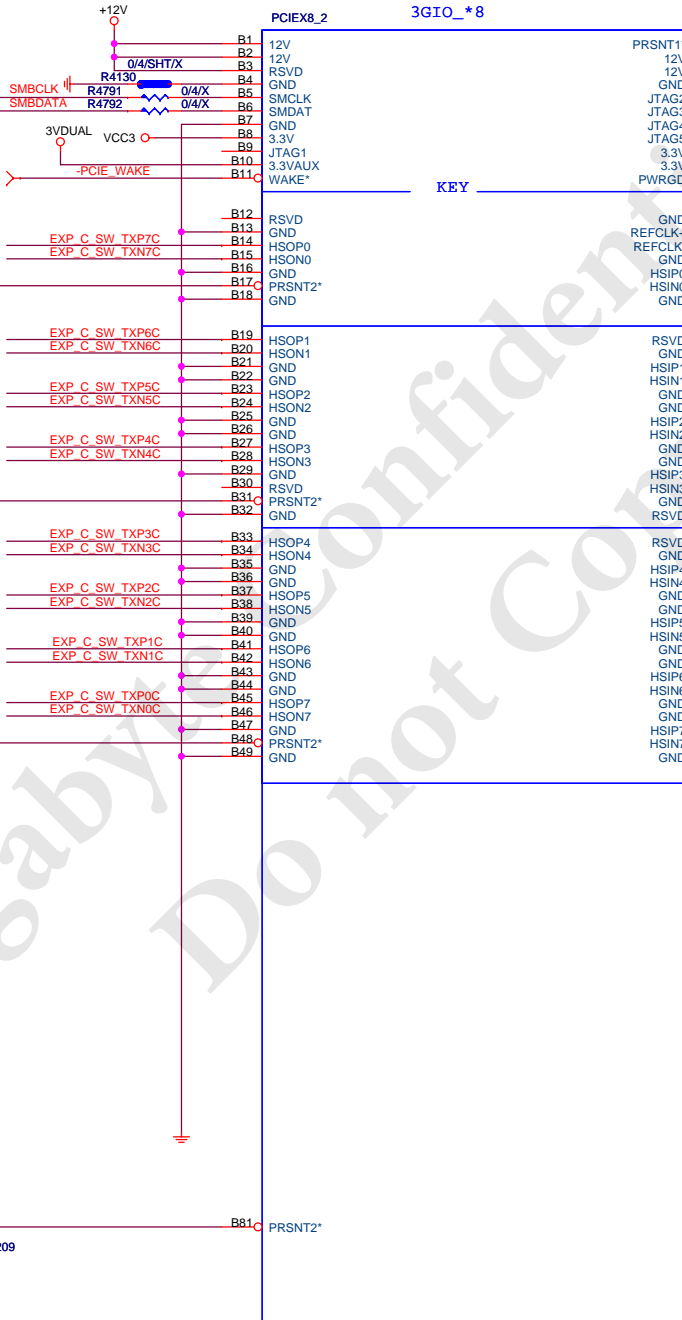
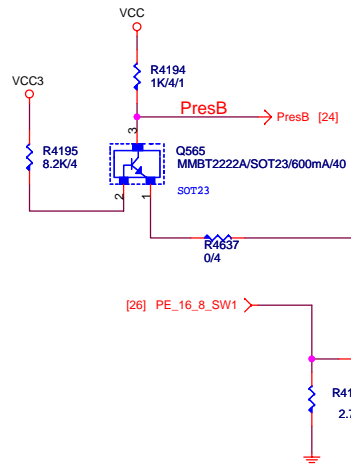


[18,19,20,22,24,25,29,32,34,35,43,48,49,52,59]
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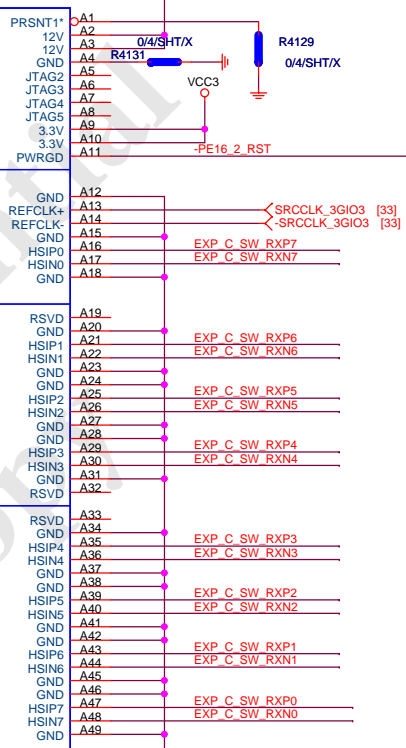
[22,24,25,29,34,55,60,61] -PCIE_WAKE

EXP_C_SW_TXP[0..7] >> EXP_C_SW_TXP[0..7] [26]
EXP_C_SW_TXN[0..7] >> EXP_C_SW_TXN[0..7] [26]

EXP_C_SW_TXP0 C1728 0.1u/4/X7R/16V/K EXP_C_SW_TXP0C
EXP_C_SW_TXN0 C1729 0.1u/4/X7R/16V/K EXP_C_SW_TXN0C
EXP_C_SW_TXP1 C1730 0.1u/4/X7R/16V/K EXP_C_SW_TXP1C
EXP_C_SW_TXN1 C1731 0.1u/4/X7R/16V/K EXP_C_SW_TXN1C
EXP_C_SW_TXP2 C1732 0.1u/4/X7R/16V/K EXP_C_SW_TXP2C
EXP_C_SW_TXN2 C1733 0.1u/4/X7R/16V/K EXP_C_SW_TXN2C
EXP_C_SW_TXP3 C1734 0.1u/4/X7R/16V/K EXP_C_SW_TXP3C
EXP_C_SW_TXN3 C1735 0.1u/4/X7R/16V/K EXP_C_SW_TXN3C
EXP_C_SW_TXP4 C1736 0.1u/4/X7R/16V/K EXP_C_SW_TXP4C
EXP_C_SW_TXN4 C1737 0.1u/4/X7R/16V/K EXP_C_SW_TXN4C
EXP_C_SW_TXP5 C1738 0.1u/4/X7R/16V/K EXP_C_SW_TXP5C
EXP_C_SW_TXN5 C1739 0.1u/4/X7R/16V/K EXP_C_SW_TXN5C
EXP_C_SW_TXP6 C1740 0.1u/4/X7R/16V/K EXP_C_SW_TXP6C
EXP_C_SW_TXN6 C1741 0.1u/4/X7R/16V/K EXP_C_SW_TXN6C
EXP_C_SW_TXP7 C1742 0.1u/4/X7R/16V/K EXP_C_SW_TXP7C
EXP_C_SW_TXN7 C1743 0.1u/4/X7R/16V/K EXP_C_SW_TXN7C



EXP_C_SW_RXP[0..7] >> EXP_C_SW_RXP[0..7] [26]
EXP_C_SW_RXN[0..7] >> EXP_C_SW_RXN[0..7] [26]



PresA:PCIE_X8_1
PresB:PCIE_X8_2

Prest A B	TEST5	TEST4	TEST3	TEST2	TEST1	TEST0	PCIE SOLT
00	1	0	1	1	1	1	X8.X8.X8.X8
11	1	1	1	0	1	1	X16.X16
10	1	1	0	0	1	1	X16.X8.X8
01	1	1	0	1	1	1	X8.X8.X16

ICH GPIO Table

PIN NAME	USAGE	NOTE
GP9_WOL_EN(GPIO9)	8268_P18	
GP20(GPIO20)	8268_P18	
GP0	-PECI_REQ	
GP8	STRAP_CSI_FRE1	
GP12	STRAP_CSI_FRE0	
GP27_QRT_STATE0	3VDUAL_ICH	原ISOLATEB_1
GP26_S4_STATEB	3VDUAL_ICH	原ISOLATEB_2
CLGPIO5_GP57	F_LED1_C	
GP1_TACH1	F_LED2_C	
GP22_SCLOCK	F_LED3_C	
GP28_SLOAD	F_LED4_C	
GP21_SATA0GP	F_LED5_C	
GP6_TACH2	NBT_LED2_C	
GP39_SDATAOUT0	-CPU_PSI_DIS	
GP34(GPIO34)	-SPI_WP0	
GP48_SDATAOUT1	-EN_PWM	
GP19_SATA1GP	-ACZ_DET	
GP25	-CPU_STOP	
GP36_SATA2GP	GPIO36(FS)	
GP37_SATA3GP	SATA3GP	
SMBALERTB_GP11	-SMBALRT	
GP10_ALERTB	ICH_GP10(-CATERR)	原-LAN1_DSM
GP13	-LPCPME	

ICH9

PCI

ICH10R[10HB1-038280-F0R]

ICH9

DMI

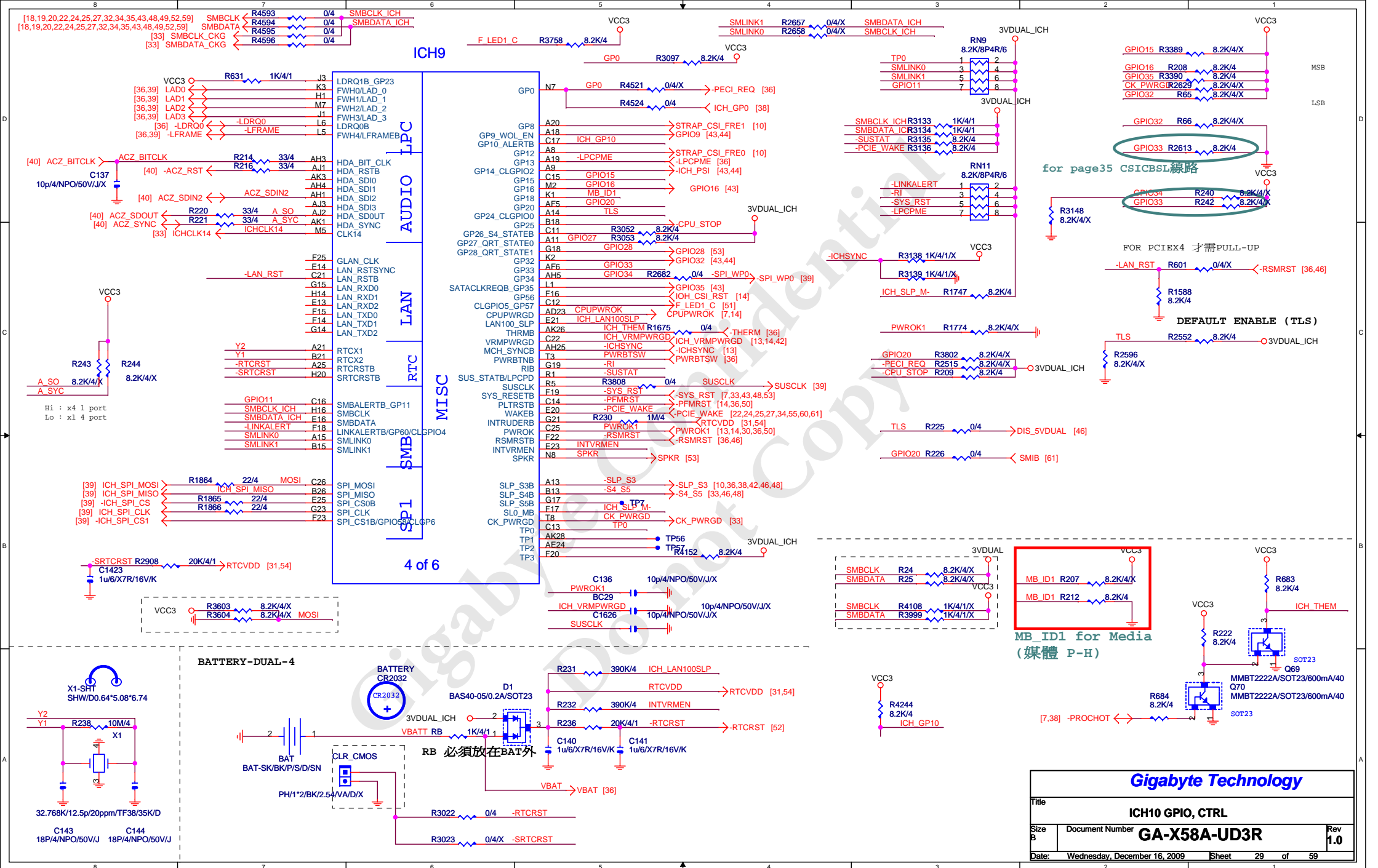
USB

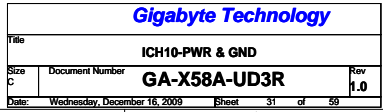
PCI-E

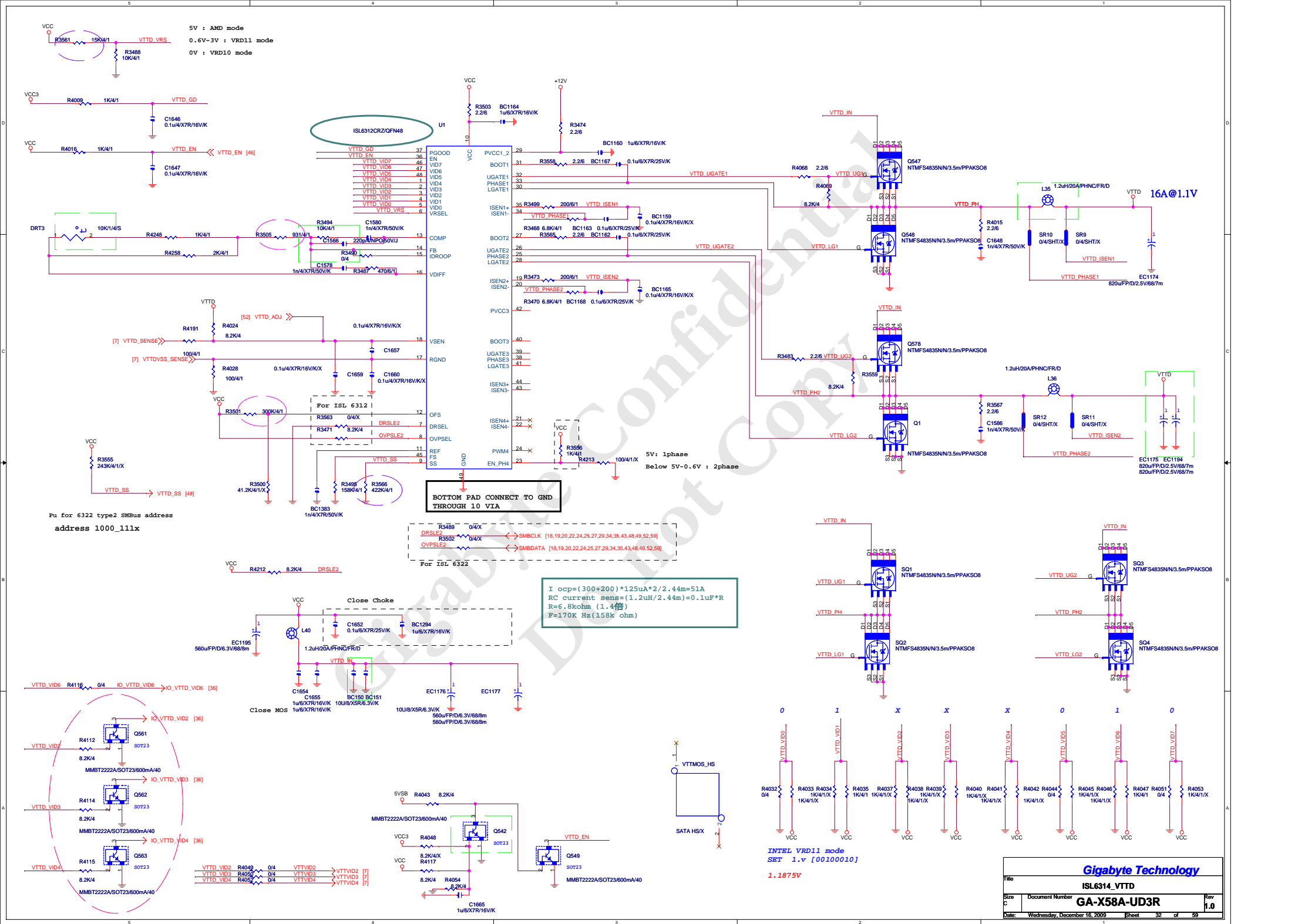
2 OF 6

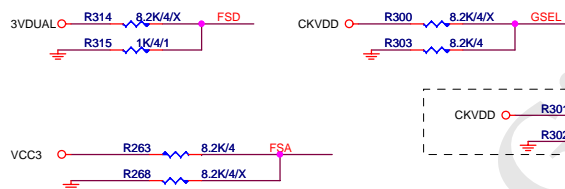
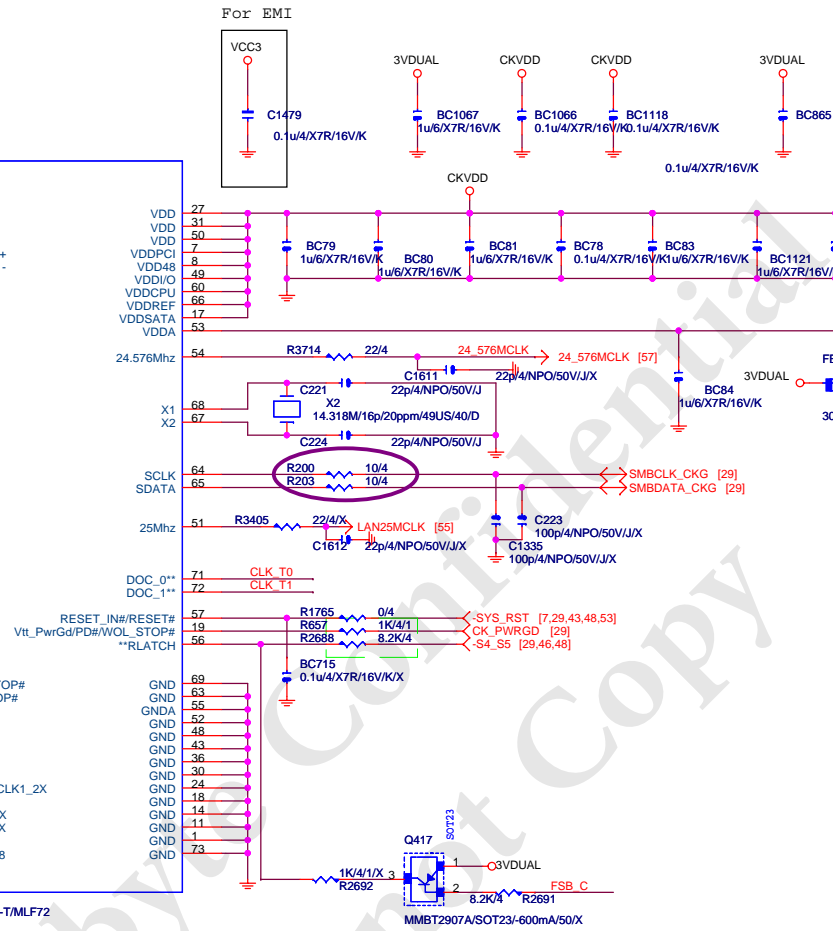
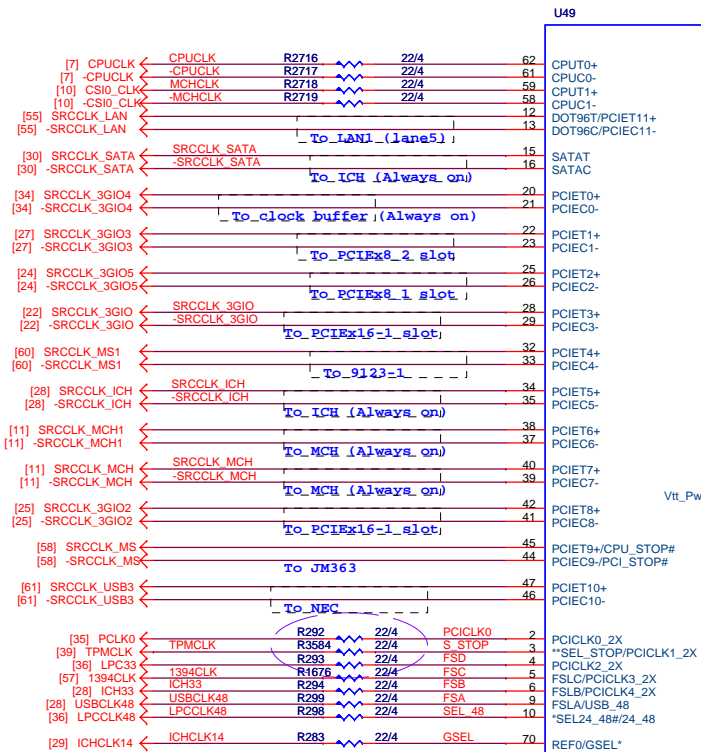
Gigabyte Technology

Title			ICH10 DMI, PCI, USB
Size	Document Number	GA-X58A-UD3R	
B		Rev	1.0
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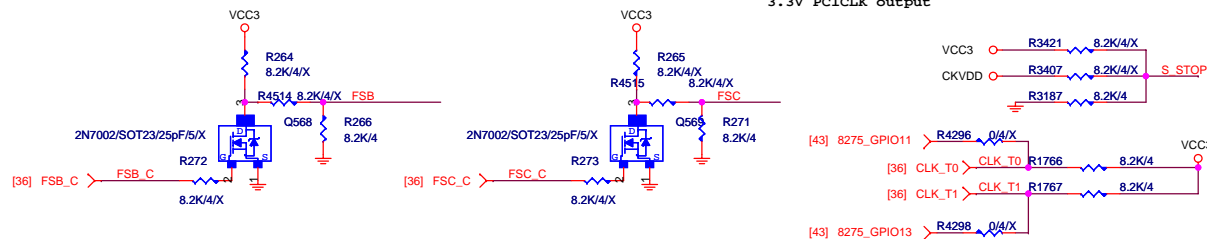
GSEL=1, DOTCLK 96Mhz from 12/13
GSEL=0, PCIECLK11 from 12/13

CKVDD R301 8.2K/4/X SEL_48

R302 8.2K/4

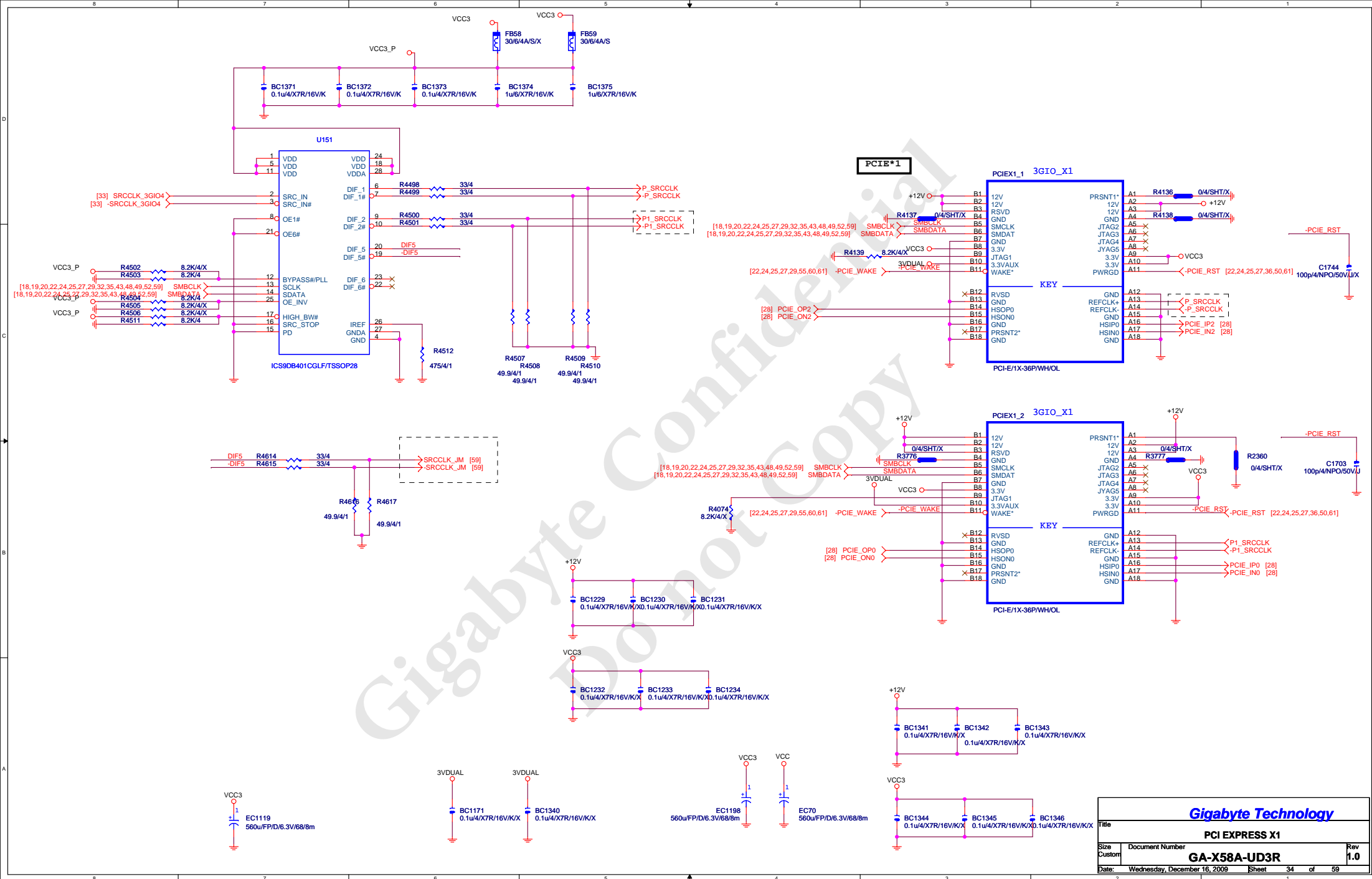
SEL_48= 1, 24Mhz from pin10
SEL_48= 0, 48Mhz from pin10

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

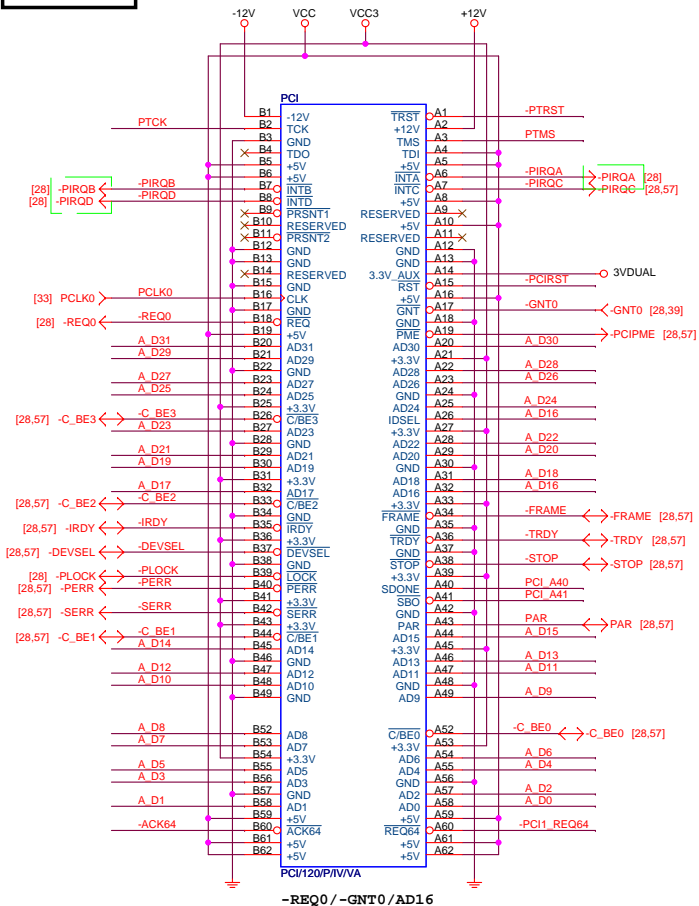


Gigabyte Technology

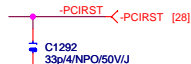
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Size	Document Number	GA-X58A-UD3R	
Custom		Rev	1.0
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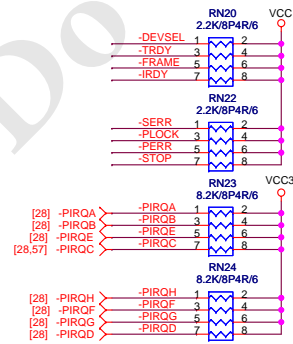
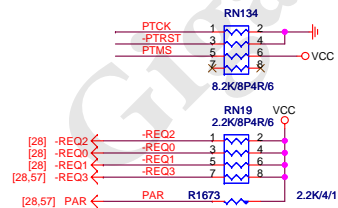
PCI1,2 SLOT



[28.57] A_D[0..31] <-> A_D[0..31]

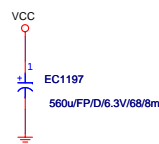
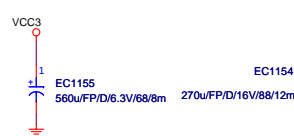


Place close to PCI1

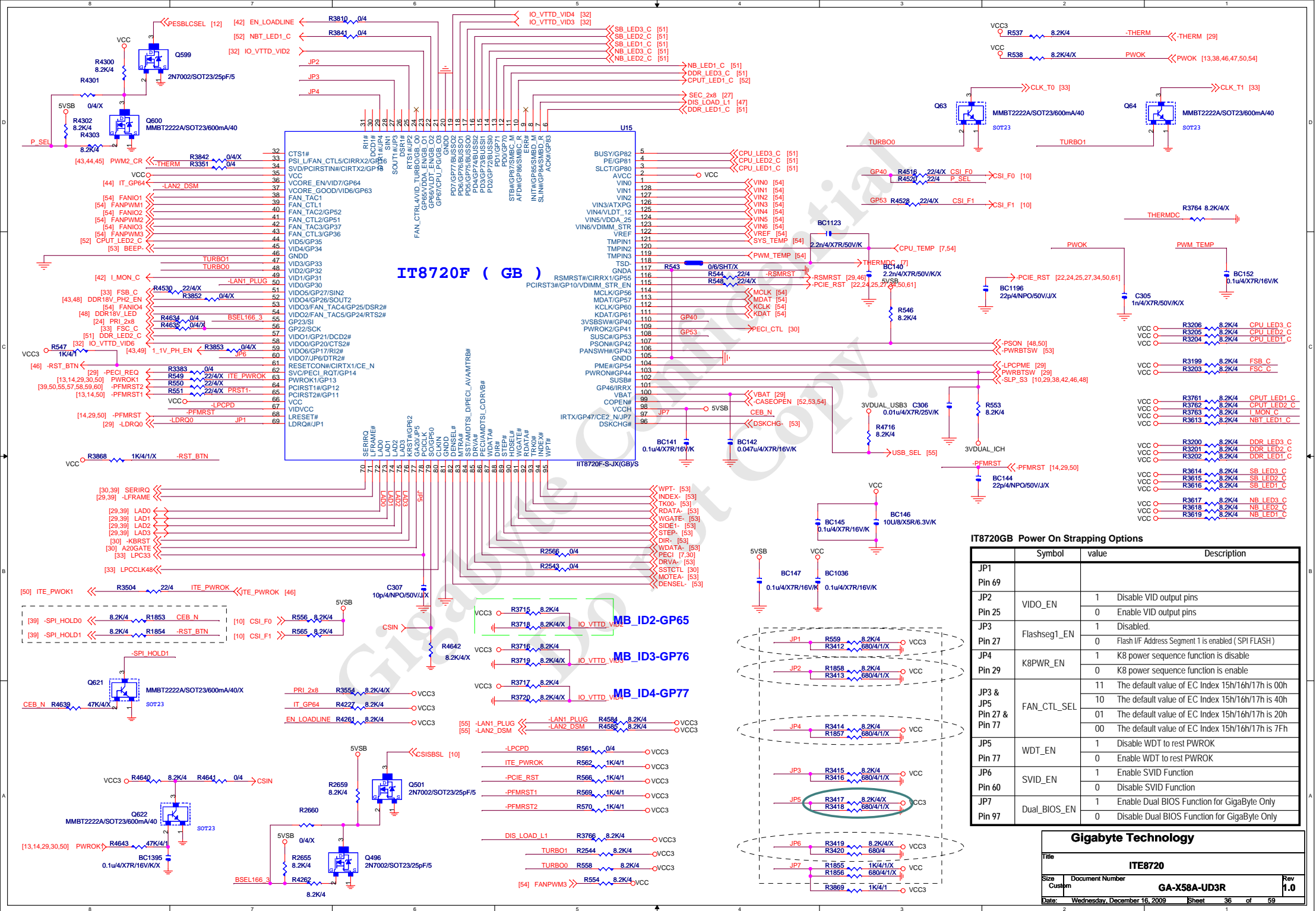


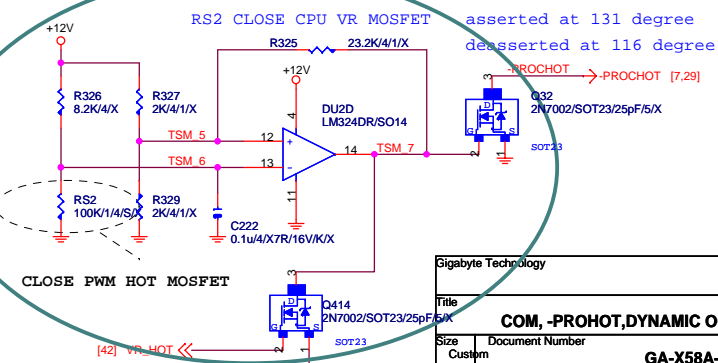
[18,19,20,22,24,25,27,29,32,34,43,48,49,52,59] SMBCLK <-> R1639 0/6/SHT/X PCI A40
[18,19,20,22,24,25,27,29,32,34,43,48,49,52,59] SMBDATA <-> R267 0/6/SHT/X PCI A41

VCC R1674 2.2K/4/1 -PCI1 REQ64
R1677 2.2K/4/1 -ACK64

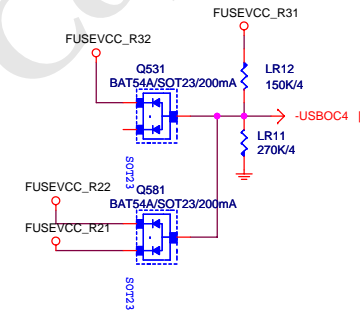
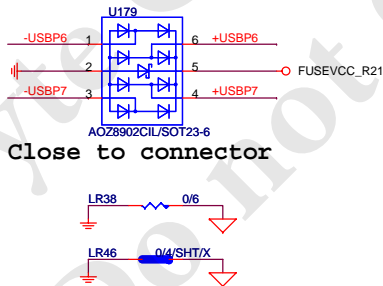
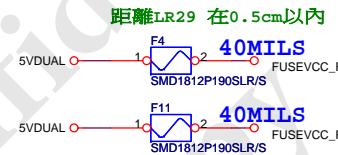
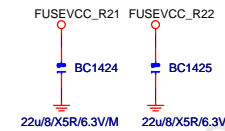
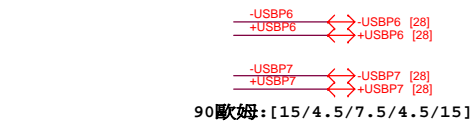
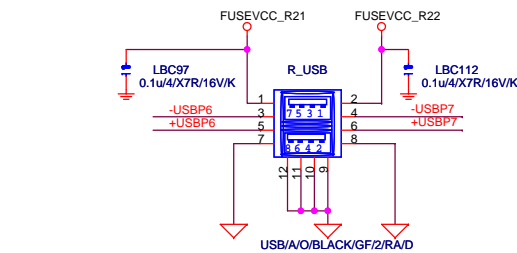
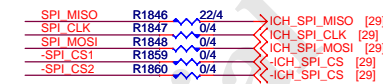
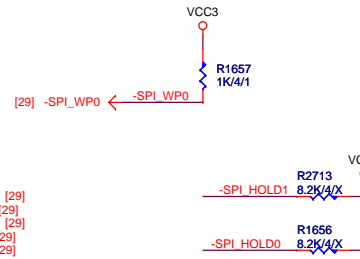
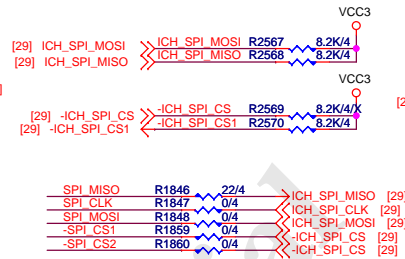
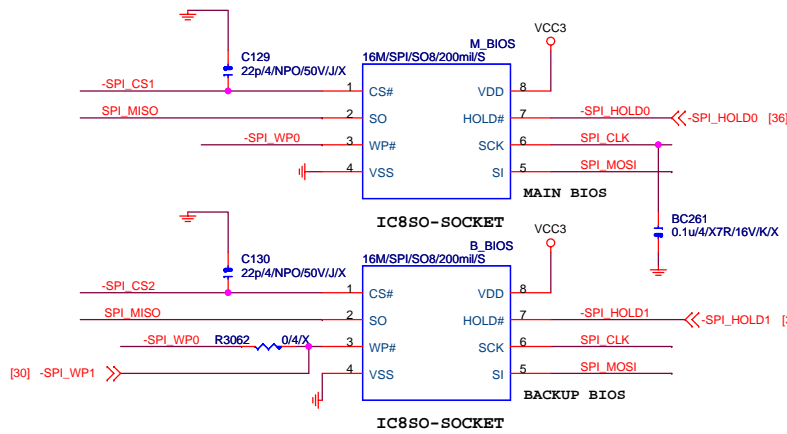
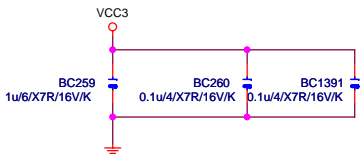
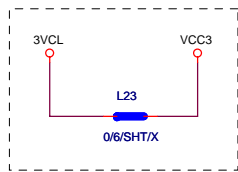


Gigabyte Technology			
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PCI SLOT 1,			
Size			
Document Number	GA-X58A-UD3R		
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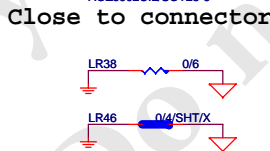
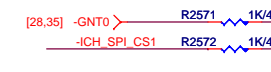


Gigabyte Technology				
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COM, -PROHOT,DYNAMIC OC +12V保護線路				
Size	Document Number	GA-X58A-UD3R		Rev
Custom				1.0
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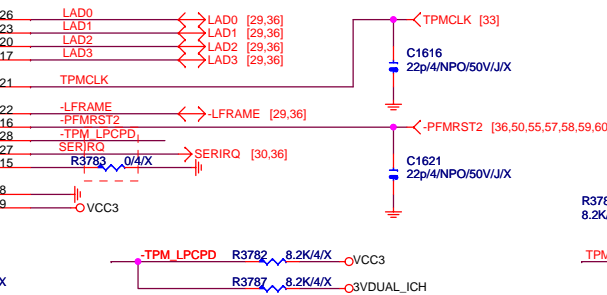
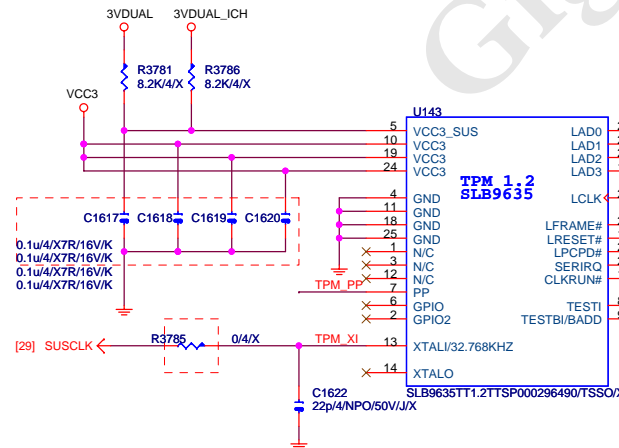


REMOVE PCI_BT1.PCI_BT2

BOOT DEVICE	GNT0	CS1
SPI	0	X
PCI	1	0
FWH	1	1

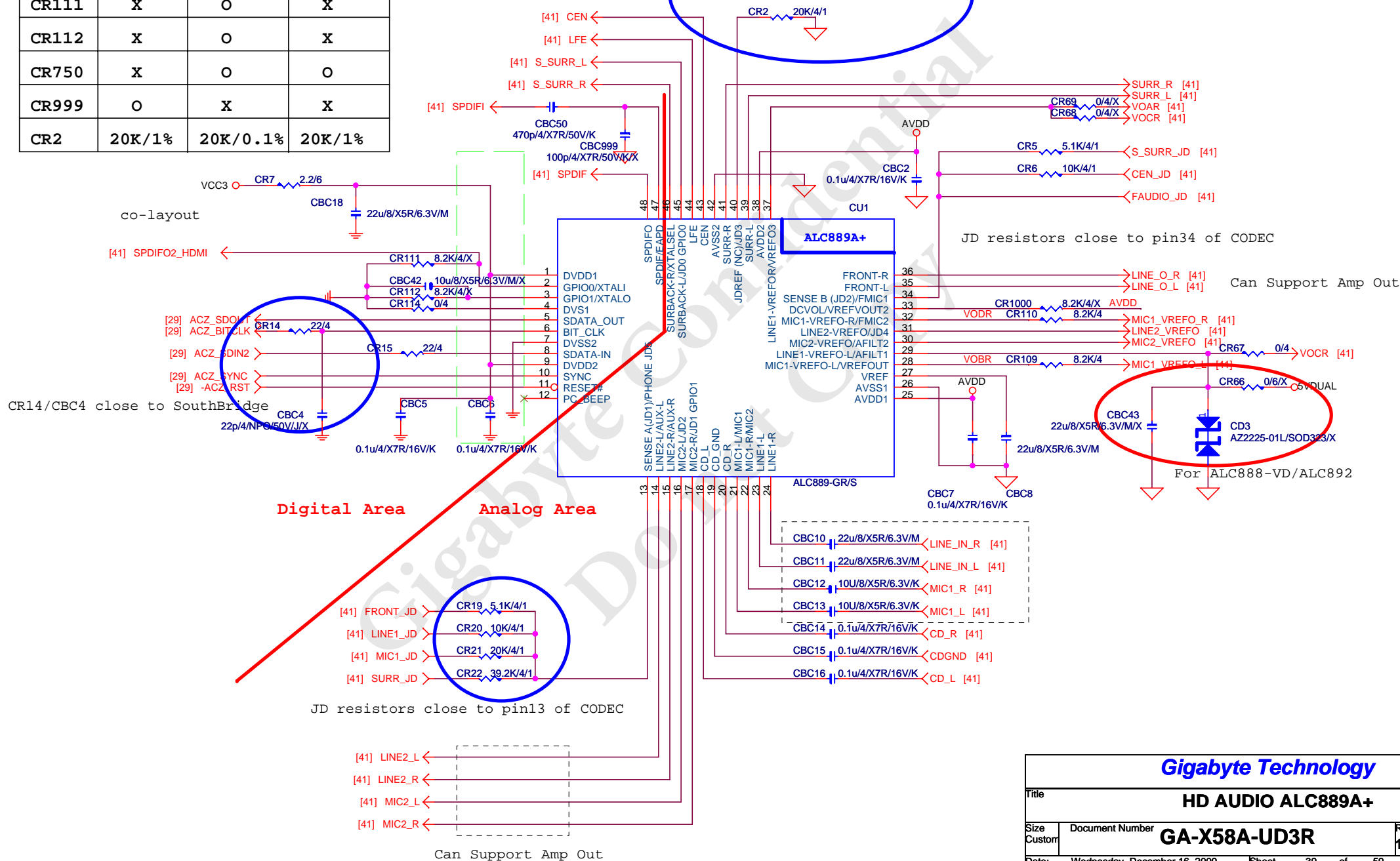


TPM



- TPM Function**
- 1.C1617.C16118.C1619.C1620
 - 2.U143
 - 3.R3782.R3783.R3784.R3785
 - 4.R3584=15 ohm(TPM)不上(no TPM)
 - 5.R295=15 ohm(TPM)22 ohm(no TPM)

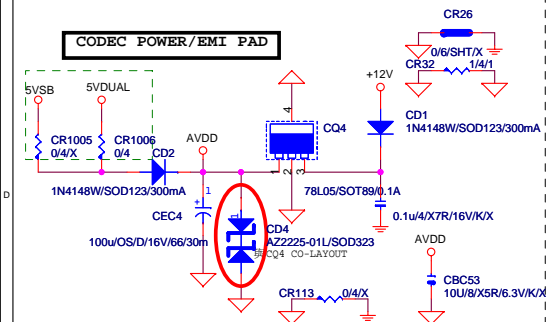
	ALC889A+	ALC889A	ALC888Vx
CR111	X	O	X
CR112	X	O	X
CR750	X	O	O
CR999	O	X	X
CR2	20K/1%	20K/0.1%	20K/1%



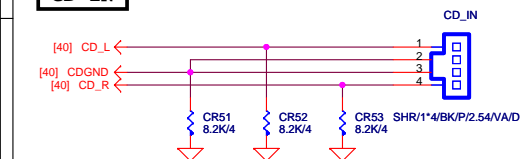
Gigabyte Technology

Title			HD AUDIO ALC889A+
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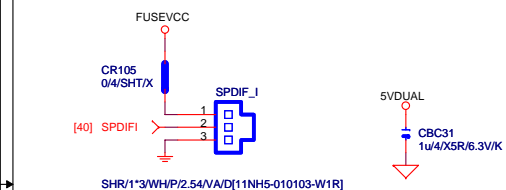
CODEC POWER/EMI PAD



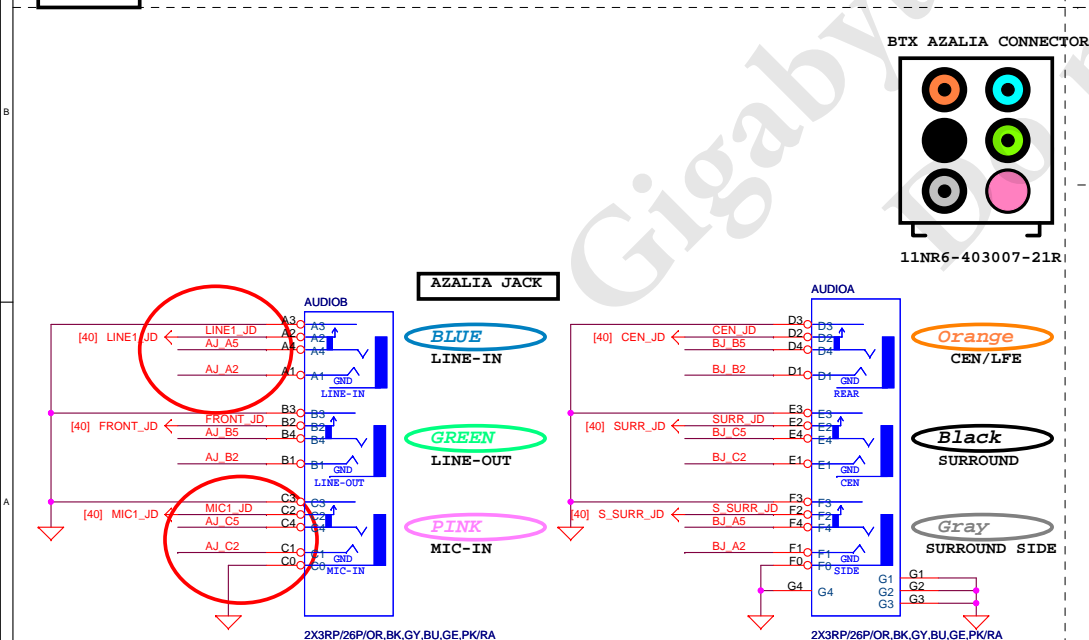
CD IN



SPDIF_I



SPDIF_IN



AZALIA JACK

BLUE

LINE-IN

GREEN

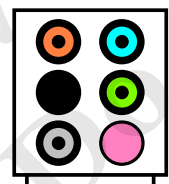
LINE-OUT

PINK

MIC-IN

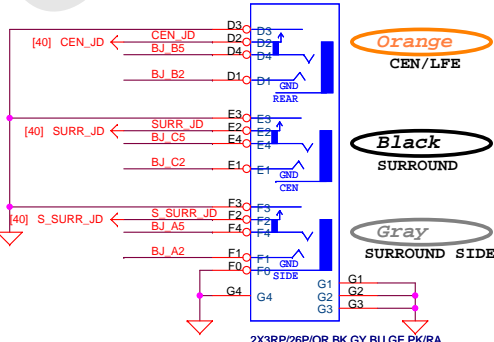
2X3RP/26P/OR,BK,GY,BU,GE,PK/RA

BTX AZALIA CONNECTOR



11NR6-403007-21R

AUDIOA



Orange

CEN/LFE

Black

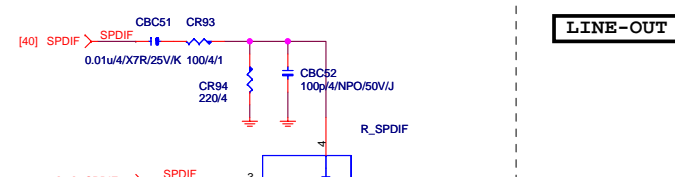
SURROUND

Gray

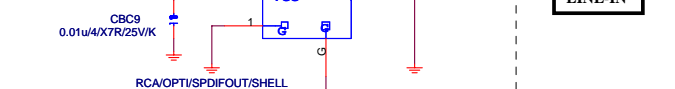
SURROUND SIDE

2X3RP/26P/OR,BK,GY,BU,GE,PK/RA

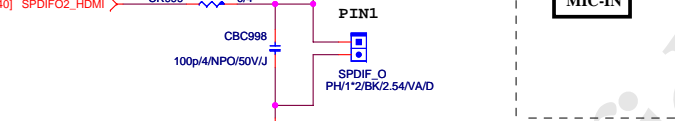
LINE-OUT



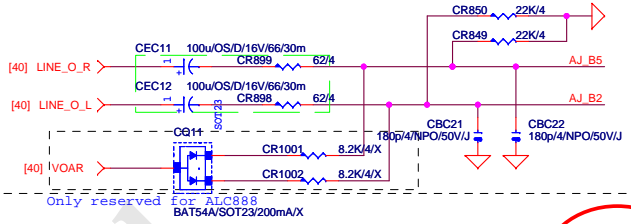
LINE-IN



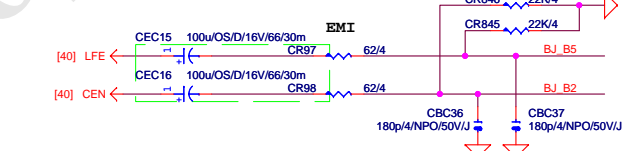
MIC-IN



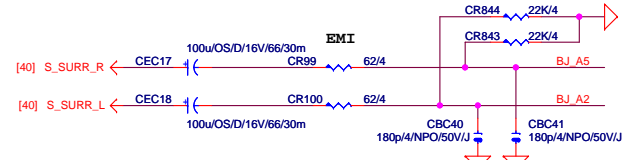
SURROUND



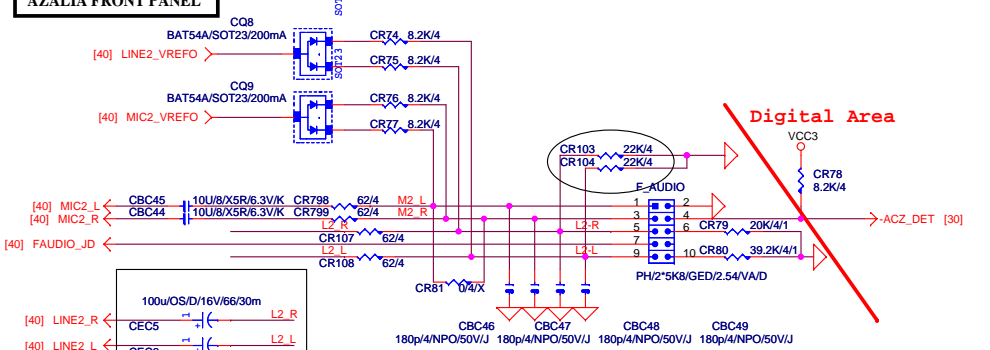
CEN/LFE



SURRE BACK



AZALIA FRONT PANEL



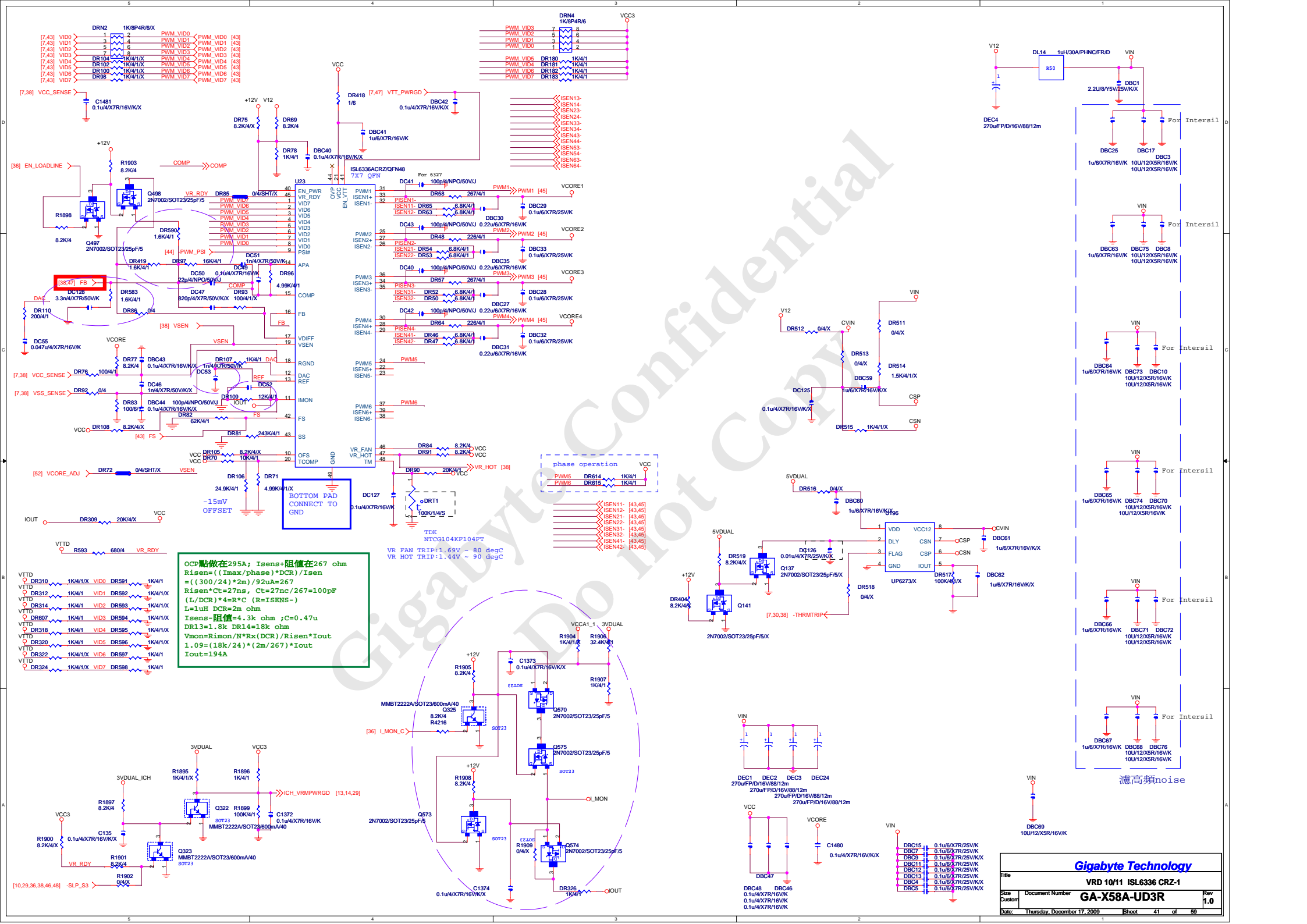
Digital Area

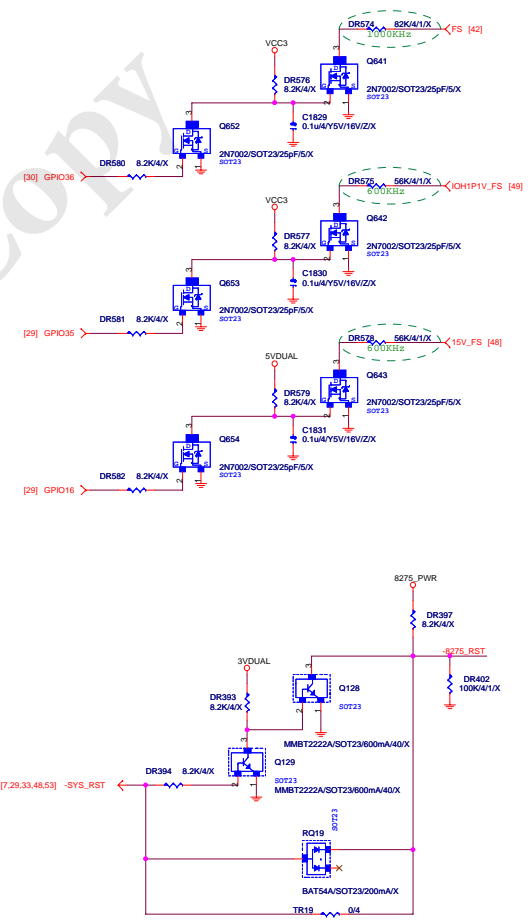
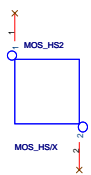
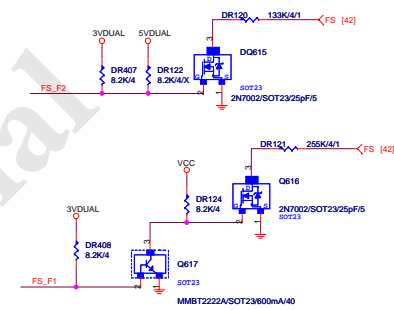
Gigabyte Technology

AUDIO JACK

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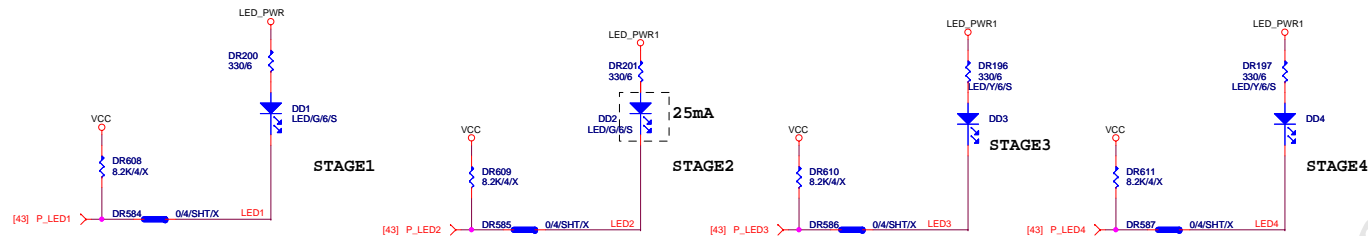




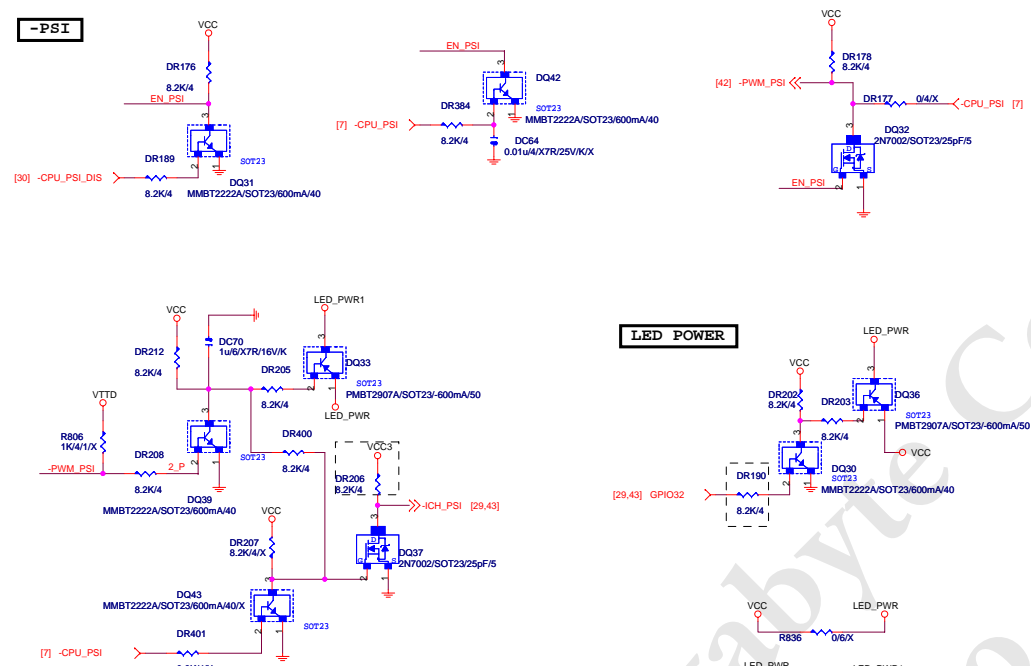
For new 8275

	RT10
Lo	PWM0 0-4 control by FM
Hi	PWM0-4 bypass to PWM00-4

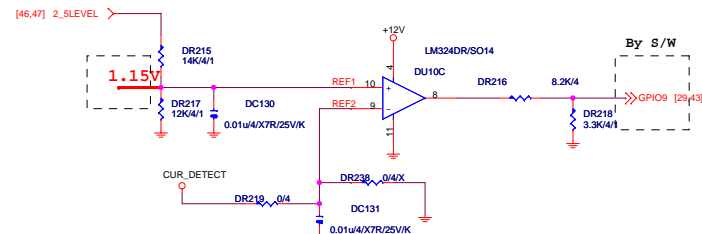
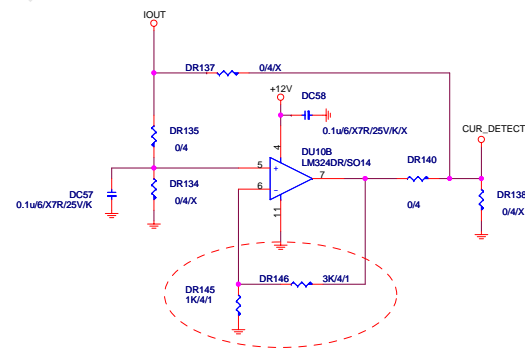
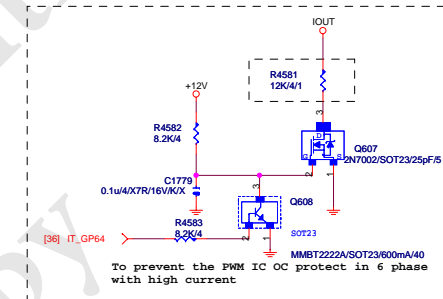
PHASE LED



-PSI



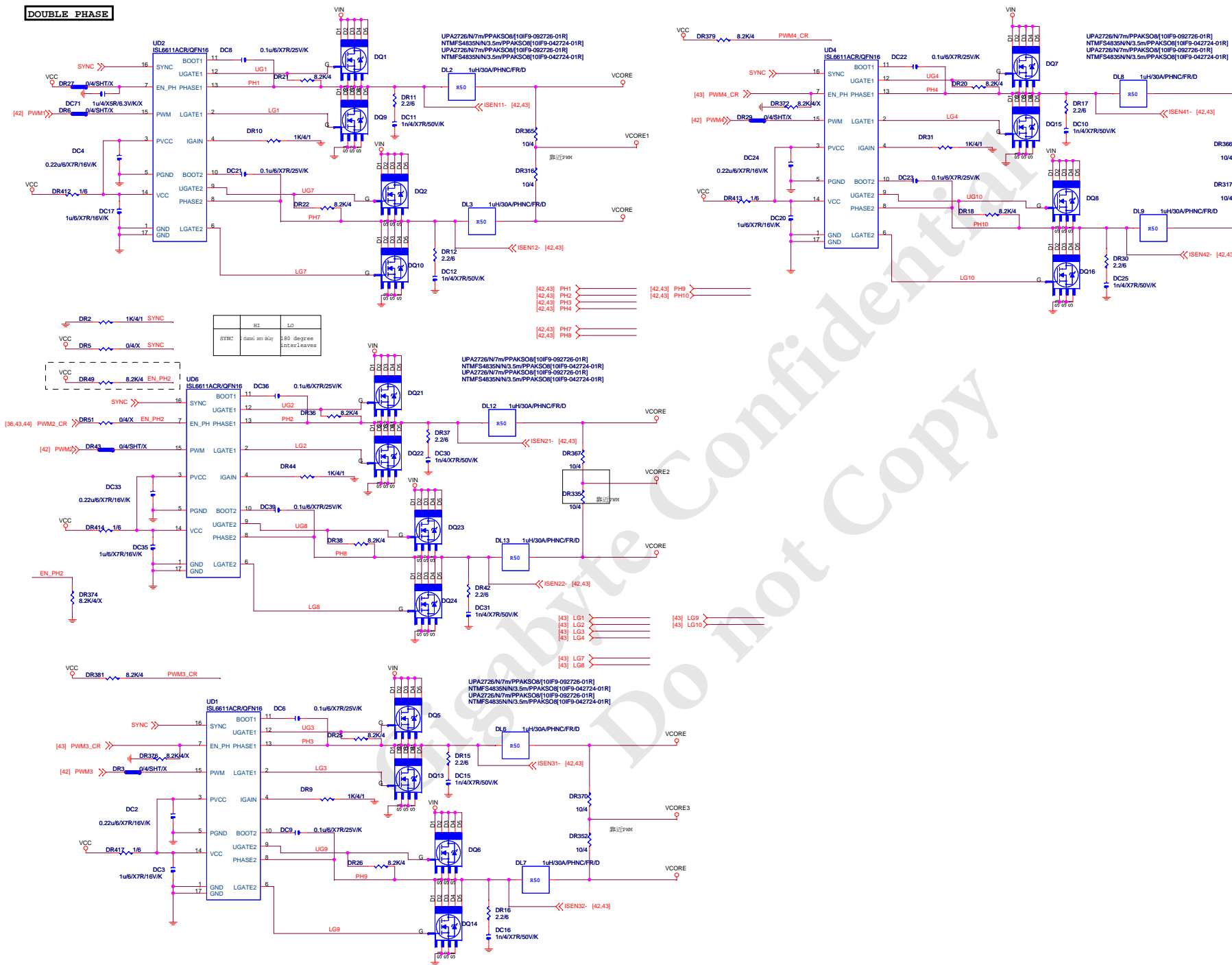
LED POWER

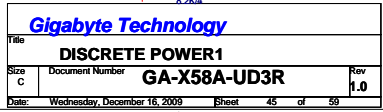


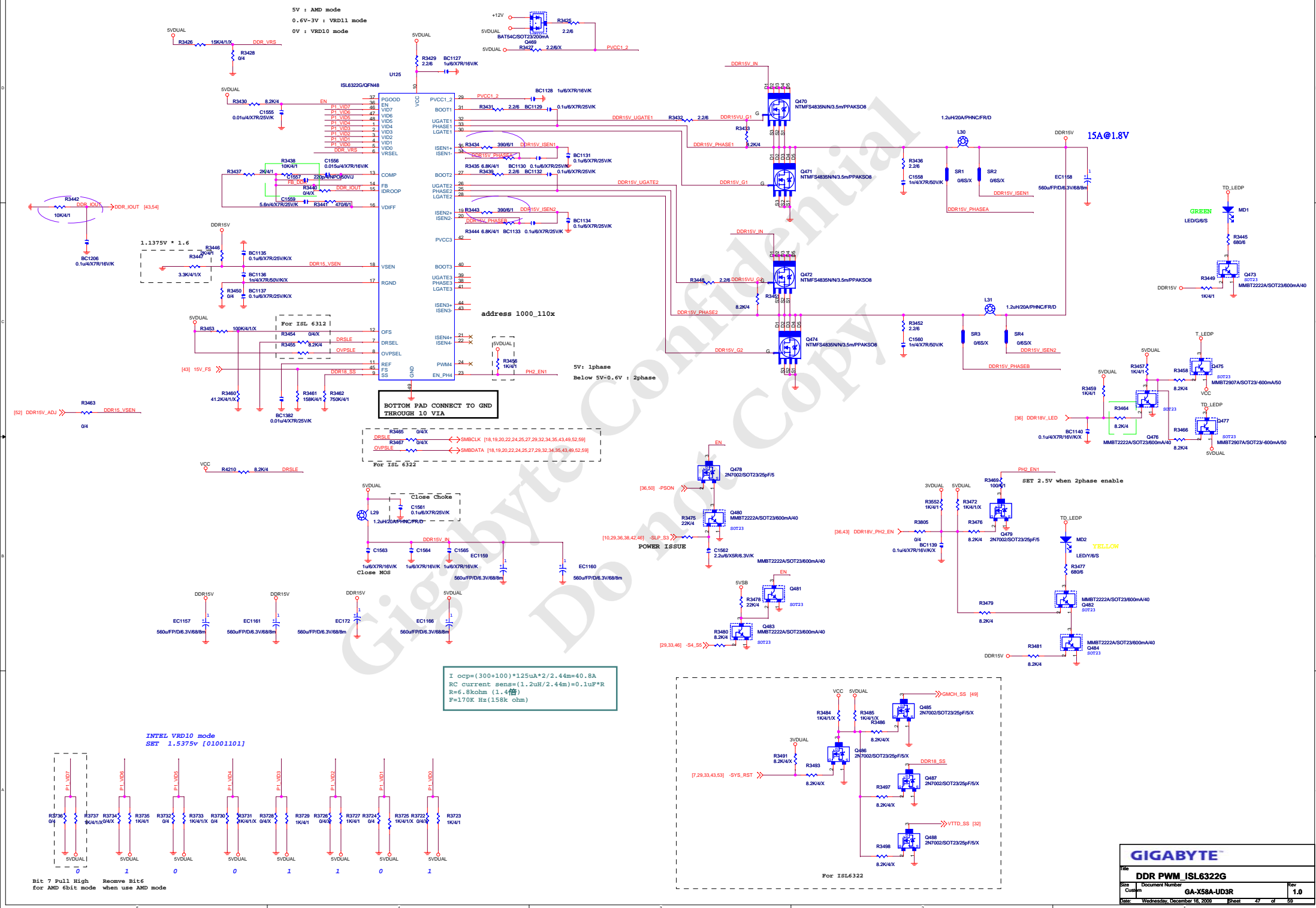
Gigabyte Technology

Title			CPU CORE VR-3
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DOUBLE PHASE

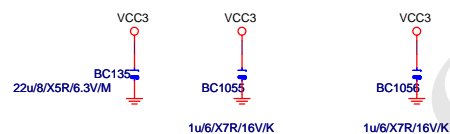
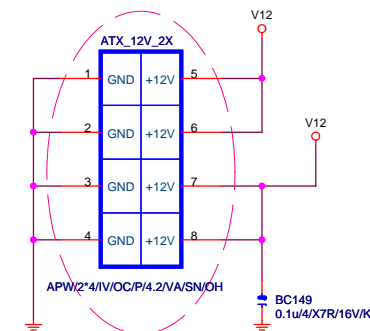
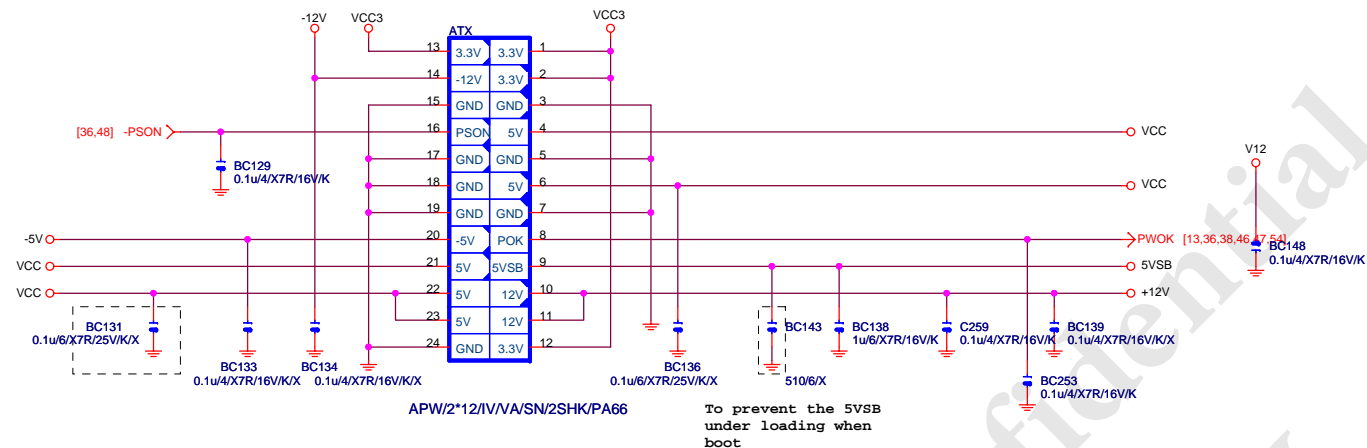




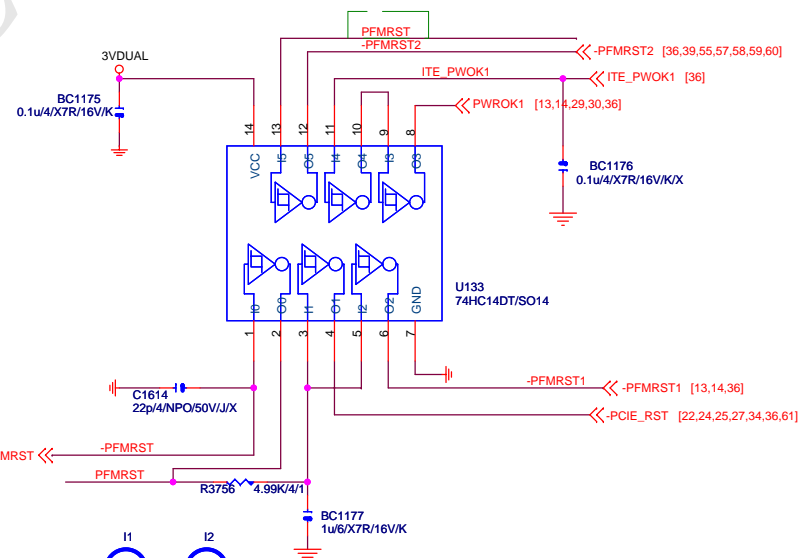
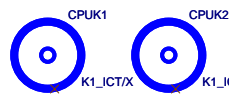
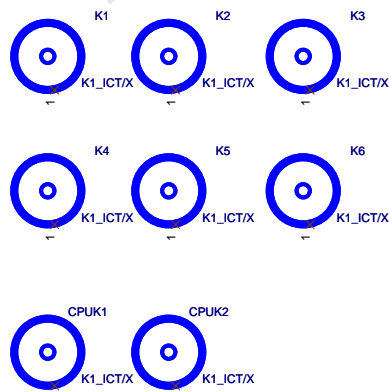
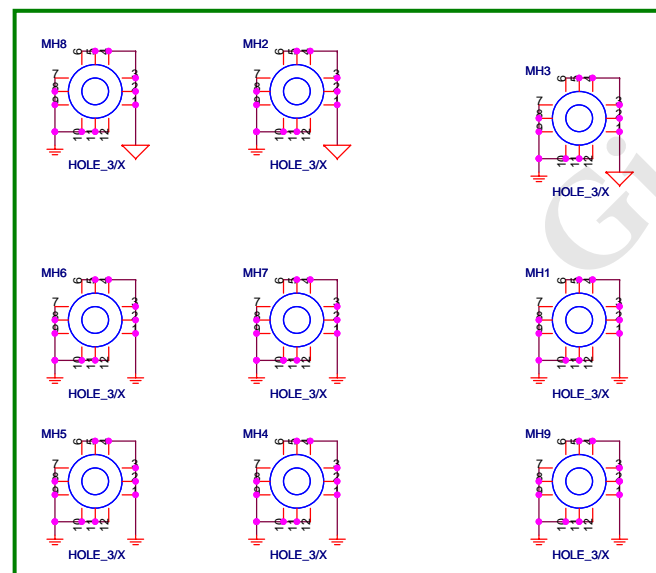




ATX POWER CONNECTOR

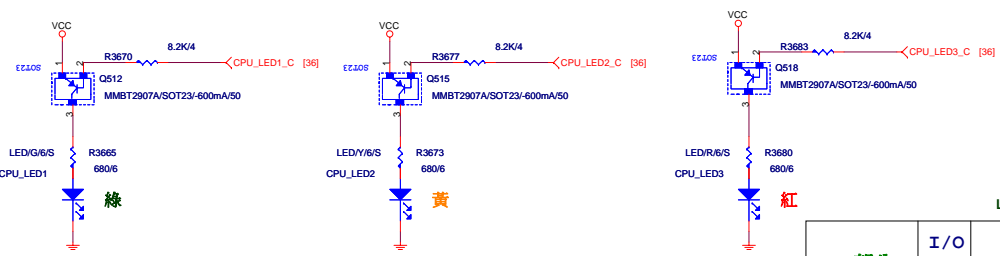


PCB 螺絲孔位置(Footprint不同)



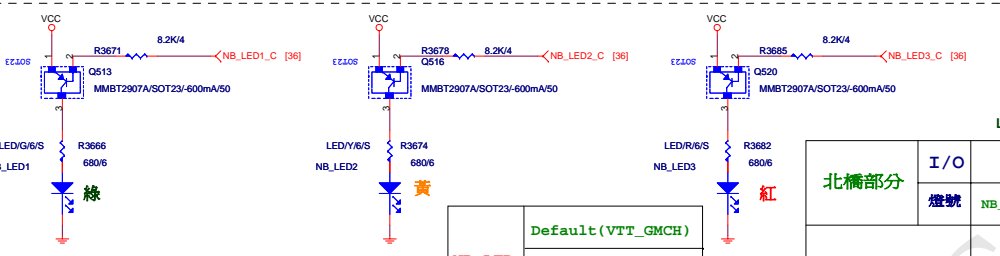
Gigabyte Technology

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ATX POWER CONNECTOR		
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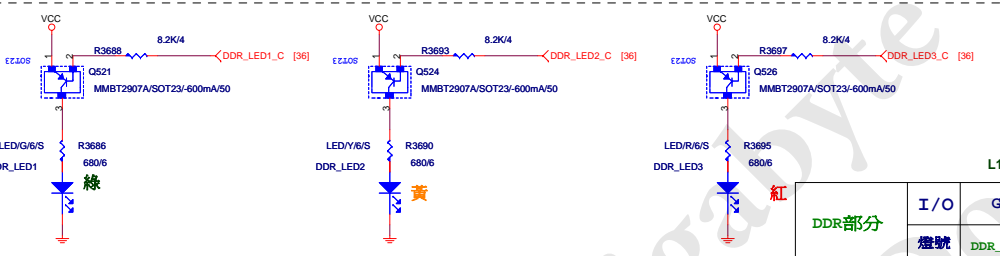
CPU LED 選擇	Default(Vcore)
	CPU PLL
	VTTD

CPU部分	I/O	GP80	GP81	GP82
	燈號	CPU_LED1_C	CPU_LED1_C	CPU_LED1_C
CPU Vcore電壓		1.45V~1.54372V	1.55V~1.59375V	1.6V以上
VTTD		1.25~1.4V	1.42~1.55V	1.56V以上

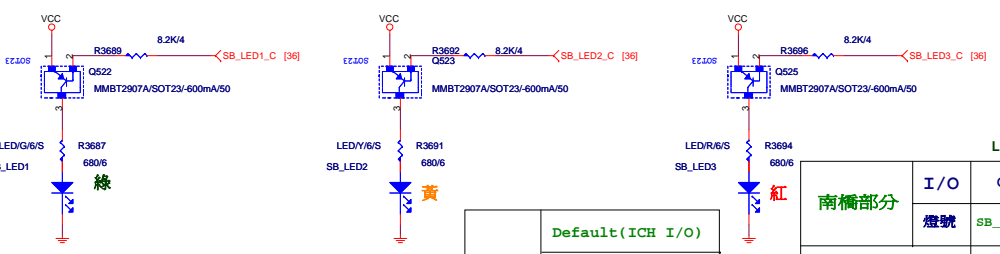


NB LED 選擇	Default(VTT_GMCH)
	VCC1_1

北橋部分	I/O	GP70	GP71	GP72
	燈號	NB_LED1_C	NB_LED2_C	NB_LED3_C
VCC1_1		1.18V~1.3V	1.32~1.5V	1.52V以上



DDR部分	I/O	GP83	GP21	GP87
	燈號	DDR_LED1_C	DDR_LED2_C	DDR_LED3_C
DDR3電壓		1.55~1.65V	1.68~1.74V	1.76V以上



SB LED 選擇	Default(ICH I/O)
	VCC1_5
	VCC1_1_ICH

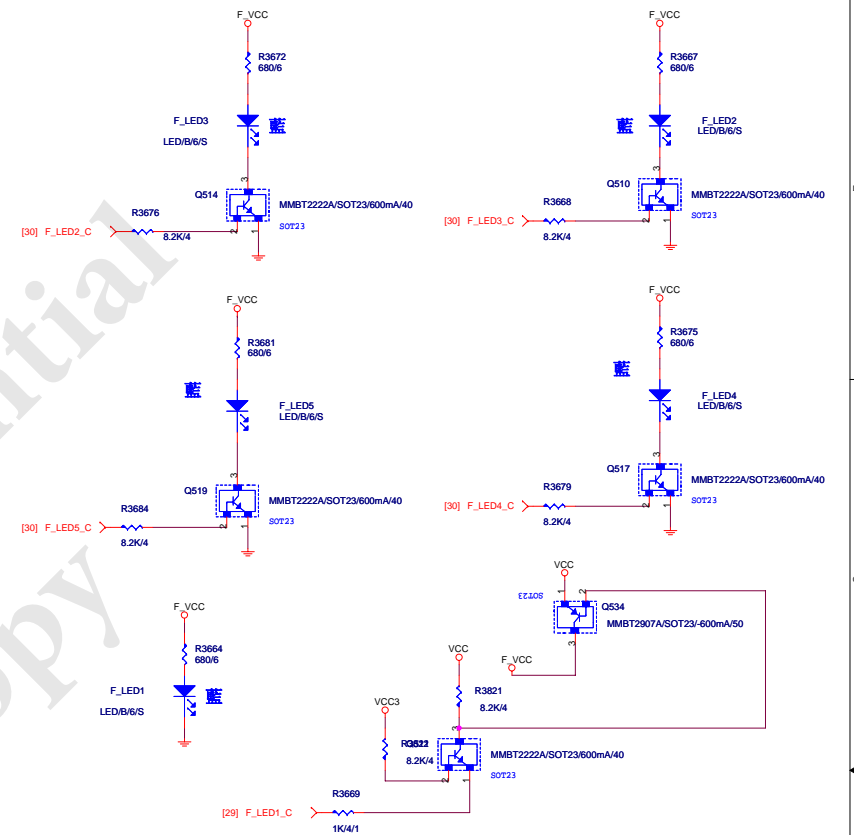
南橋部分	I/O	GP73	GP74	GP64
	燈號	SB_LED1_C	SB_LED2_C	SB_LED3_C
VCC1_5		1.56~1.68V	1.68~1.86V	1.88V以上
VCC1_1_ICH		1.18V~1.3V	1.32~1.5V	1.52V以上

CPU Voltage

IOH Voltage

DDR Voltage

ICH Voltage



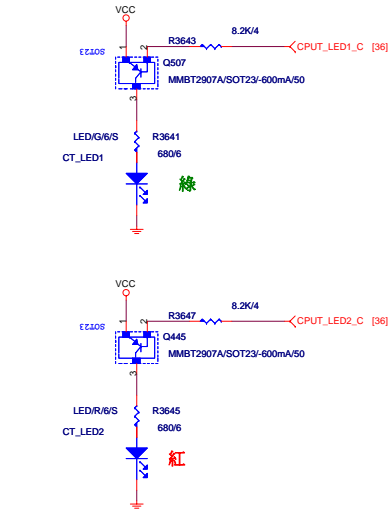
FSB LED	OFF	L1	L2	L3	L4	L5
GPIO		ICH GP57	ICH GP56	ICH GP22	ICH GP38	ICH GP21
CPU 133		145~	155~	165~	175~	185~

燈號表示方式

	L1 (LED1)	L2(LED2)	L3 (LED3)
CPU/DDR NB/SB	綠	黃	紅

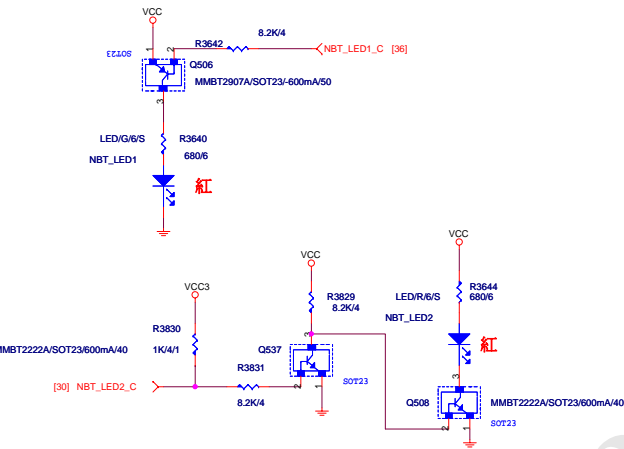
CPU溫度顯示

	I/O	Thermal
CPUT_LED1	GP63	60℃以上
CPUT_LED2	GP35	70℃以上



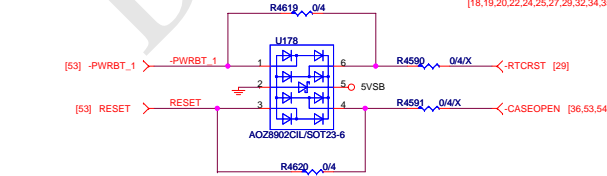
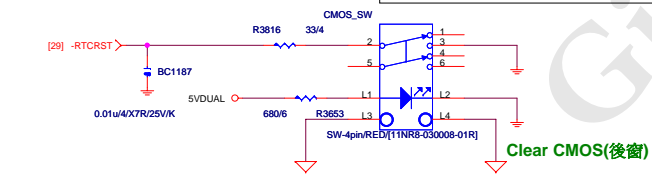
北橋(MCH)溫度顯示

	I/O	Thermal
NBT_LED1	GP30	60℃以上
NBT_LED2	GP31	70℃以上



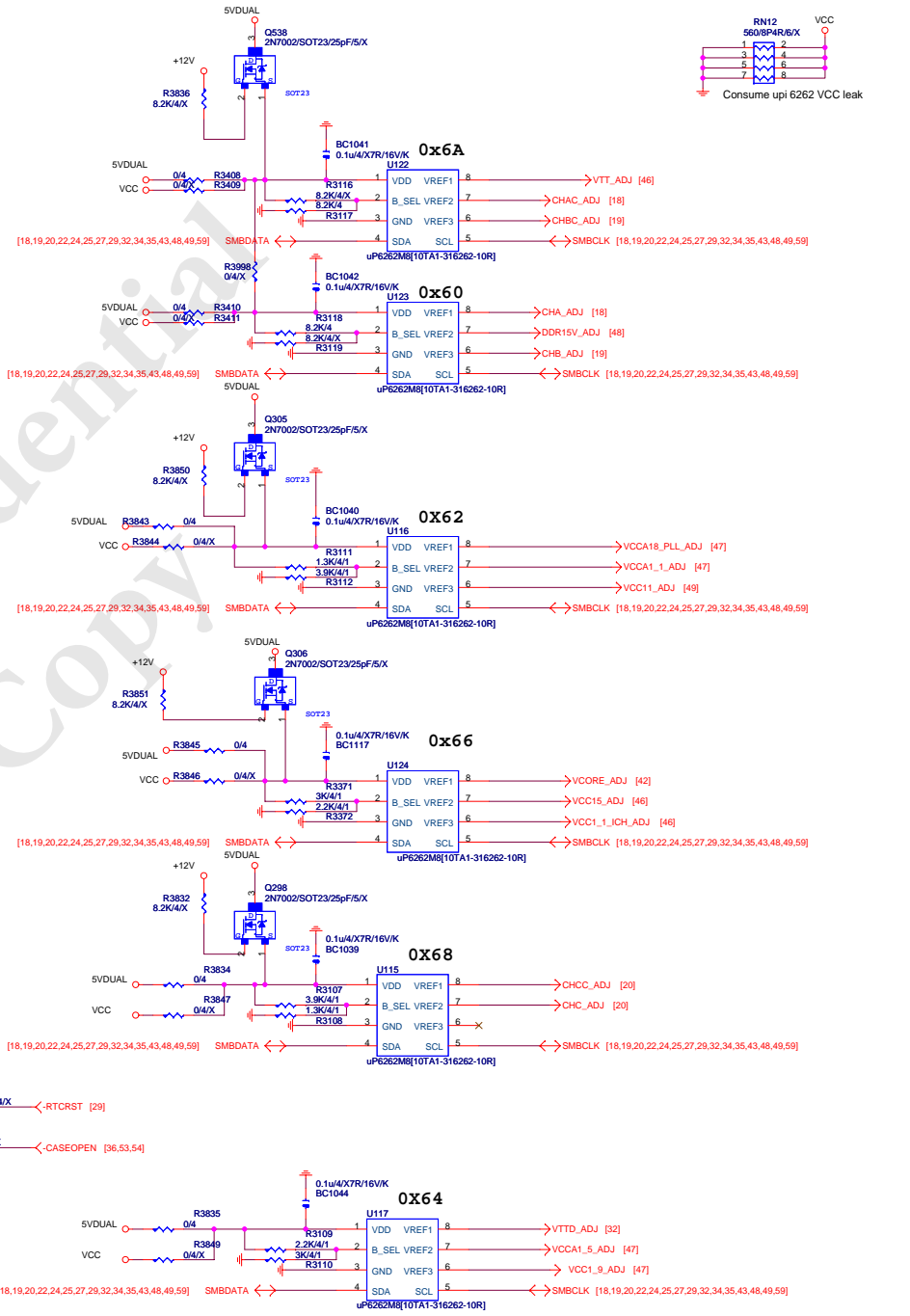
Switch 部分

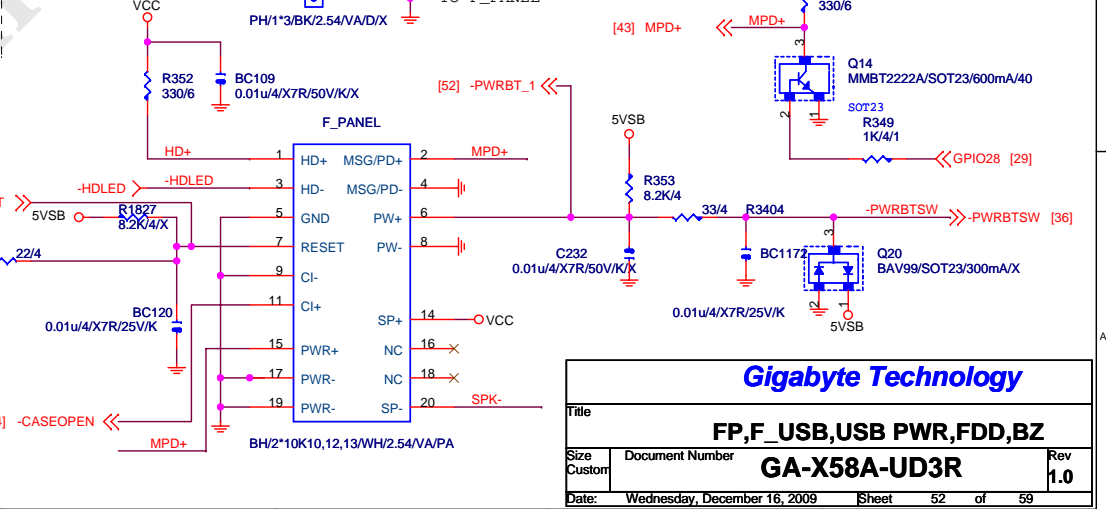
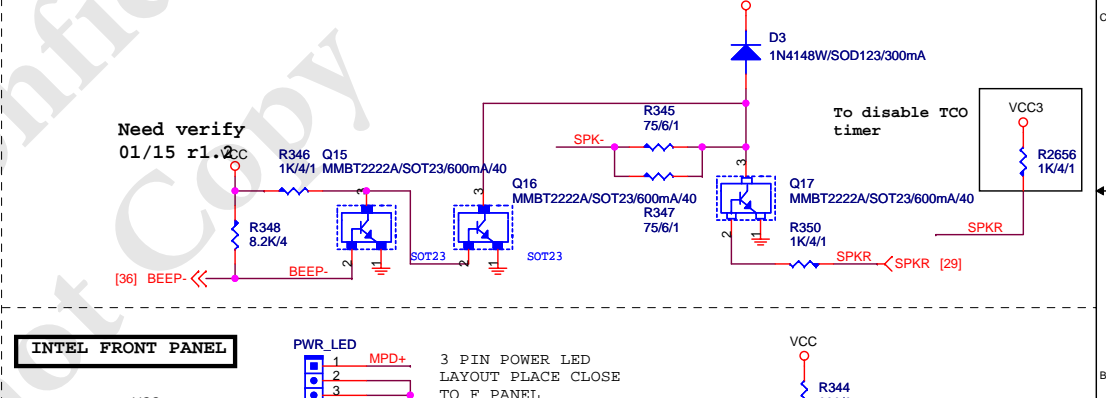
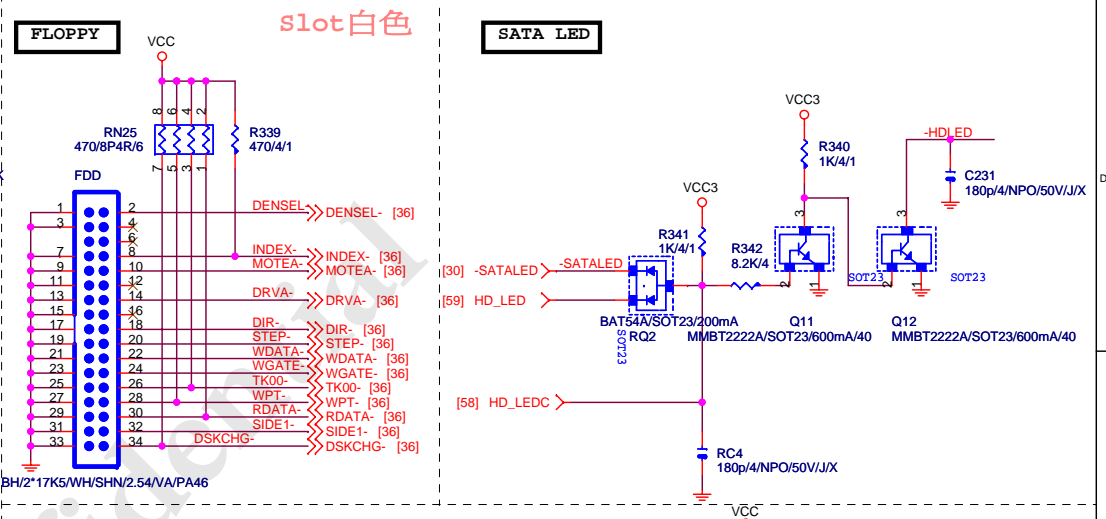
Clear CMOS 90℃料號:11NR8-030008-01R.
Clear CMOS 180℃料號:11NH7-060001-11R.
Power 180℃料號:11NH7-030001-21R.
Reset 180℃料號:11NH7-060001-51R.



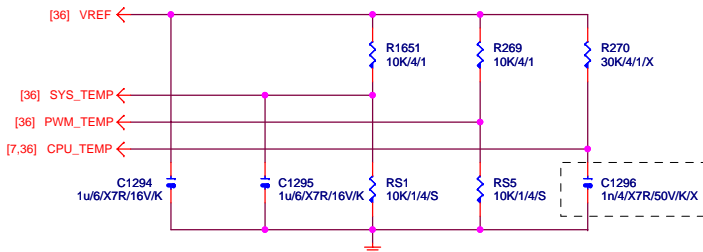
UPI6262 Table

up6262	0X60-U123 (5VDUAL)	0X62-U116 (5VDUAL)	0X6A-U122 (5VDUAL)	0X6E-U124 (5VDUAL)	0X68-U115 (5VDUAL)	0X64-U117 (5VDUAL)
VREF1	CHA_ADJ	VCCA18_PLL_ADJ	VTT_ADJ	VCORE_ADJ	CHCC_ADJ	VTTD_ADJ
VREF2	DDR18V_ADJ	VCCA1_1_ADJ	CHAC_ADJ	VCC15_ADJ	CHC_ADJ	VCC1_1_ICH_ADJ
VREF3	CHB_ADJ	VCC11_ADJ	CHBC_ADJ	VCCA1_5_ADJ	MCH_RAMVREF_ADJ	VCC1_9_ADJ

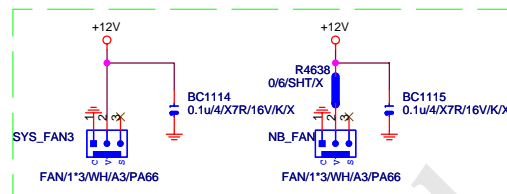
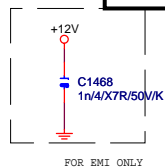




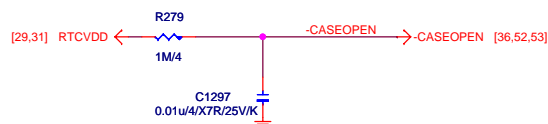
TEMP H/W MONITOR



CPU SMART FAN

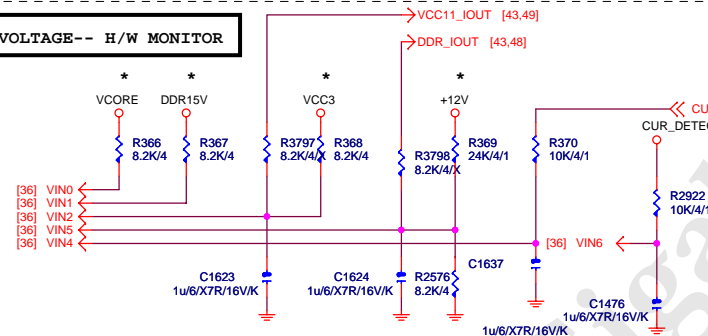


CASE OPEN

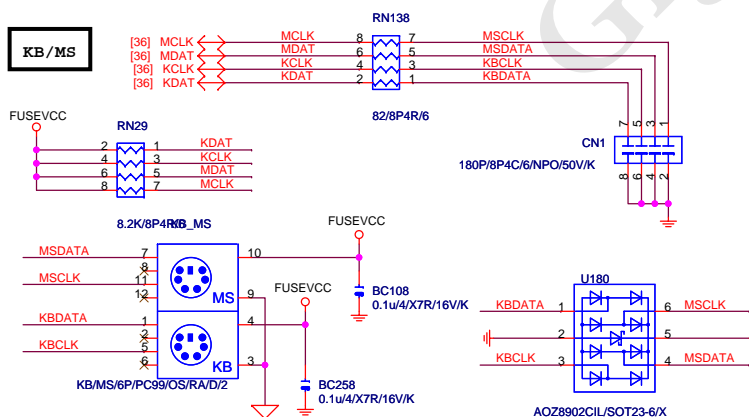


Case Open Circuits

VOLTAGE-- H/W MONITOR

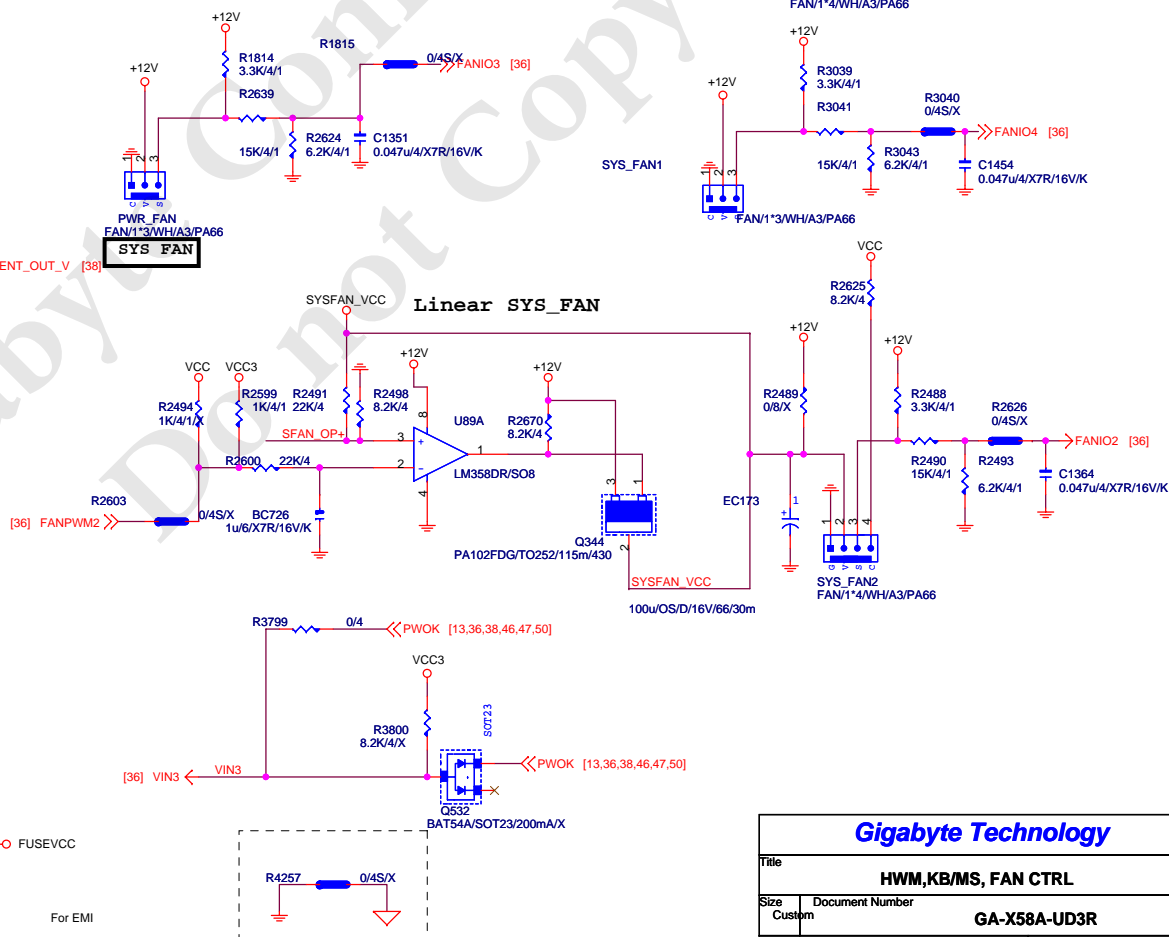


KB/MS



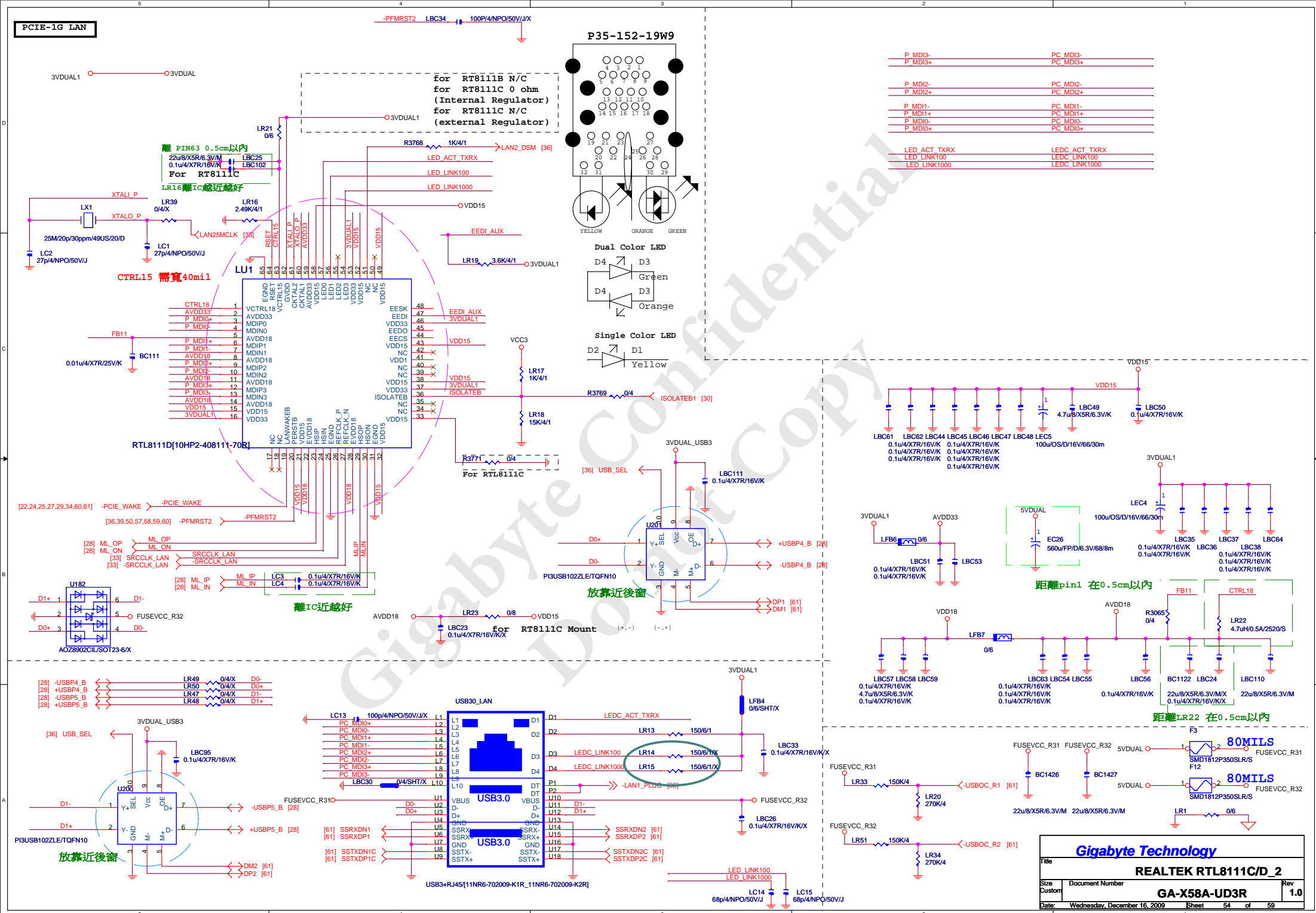
For EMI

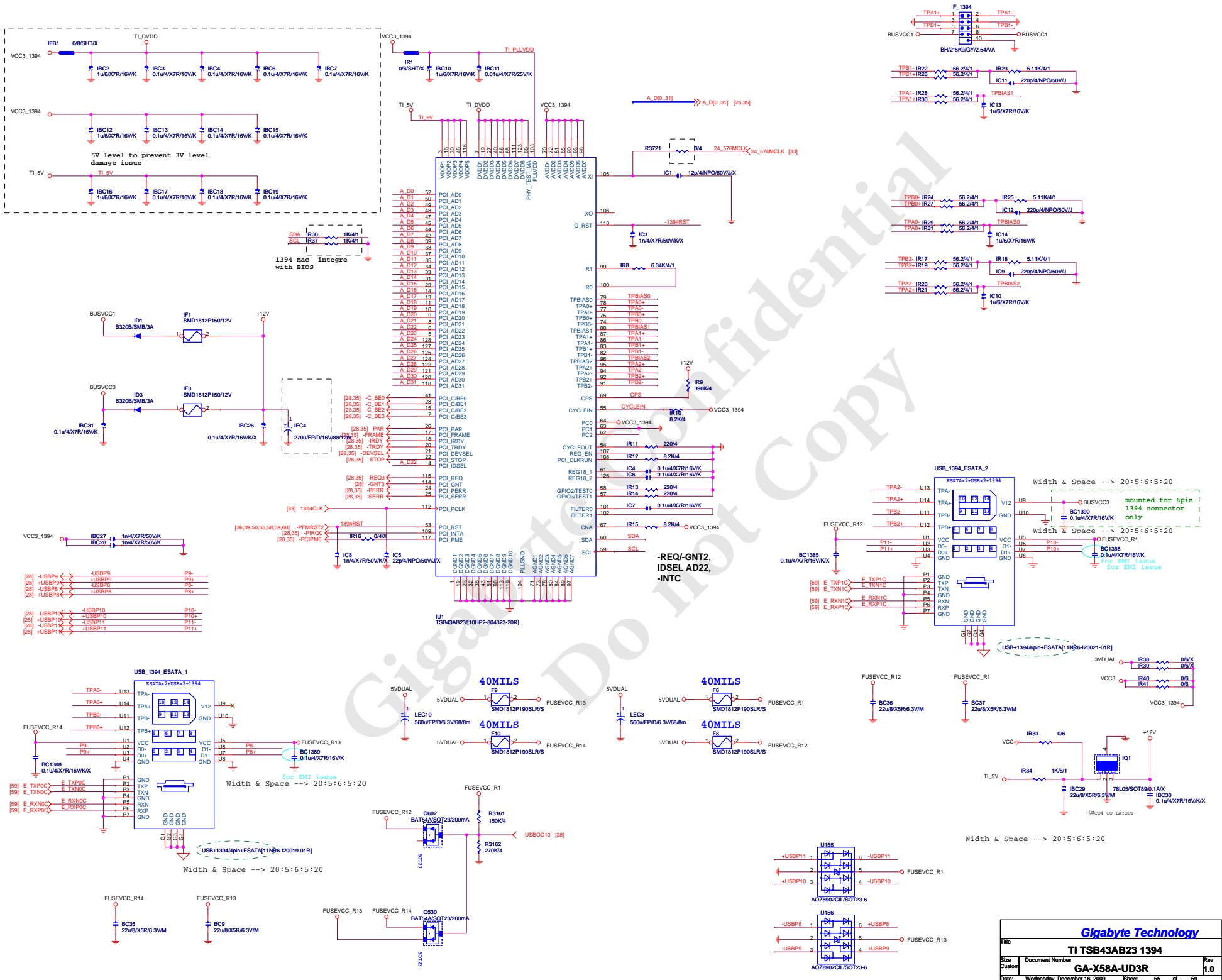
Linear SYS_FAN



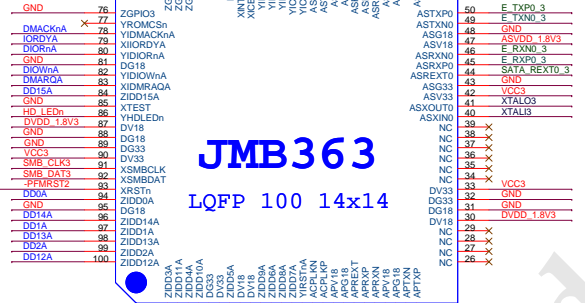
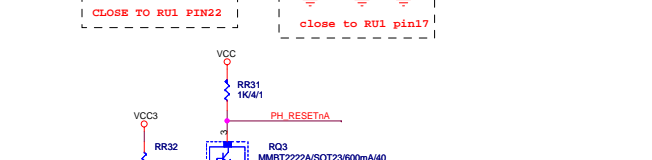
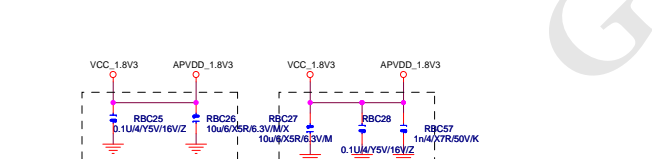
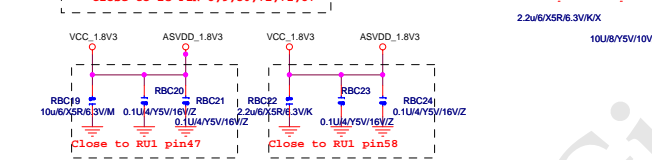
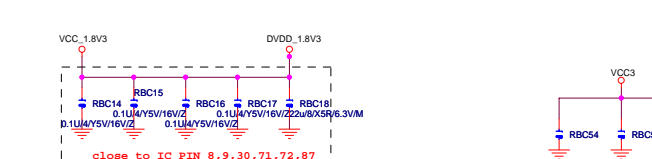
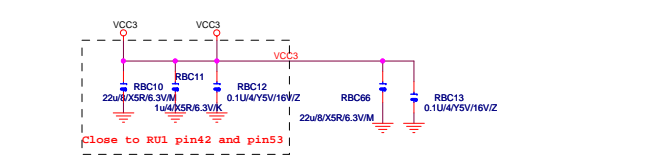
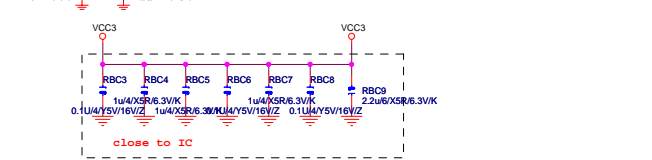
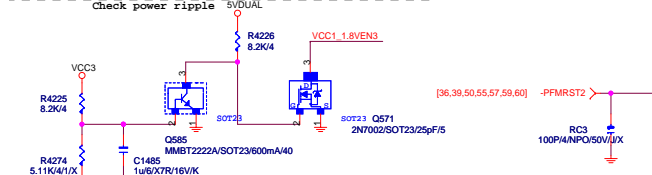
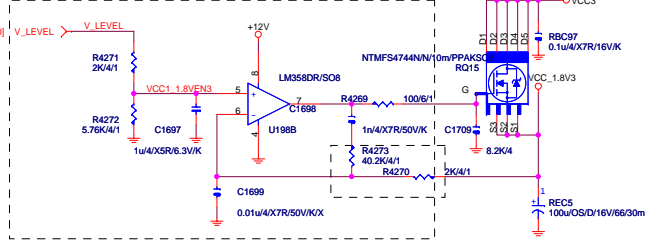
Gigabyte Technology

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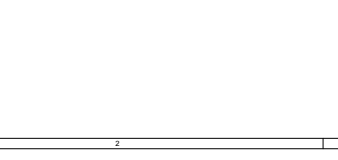
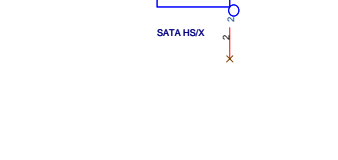
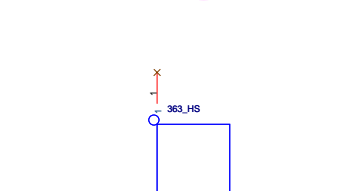
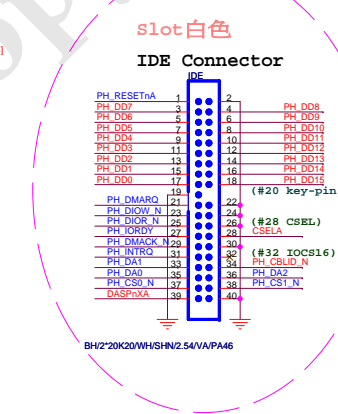
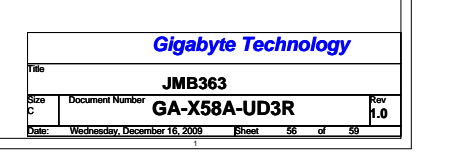
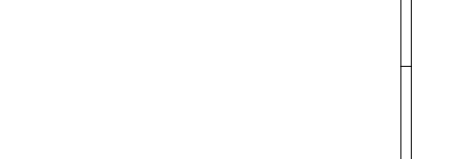
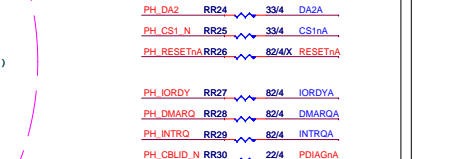
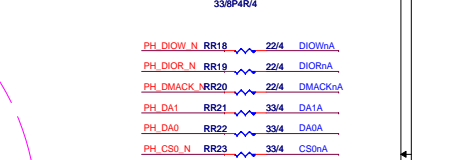
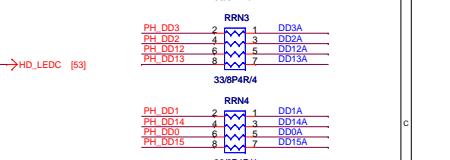
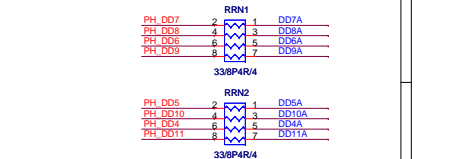
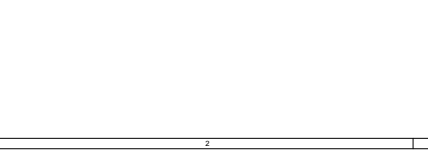
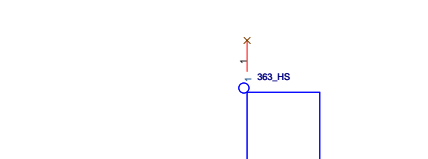
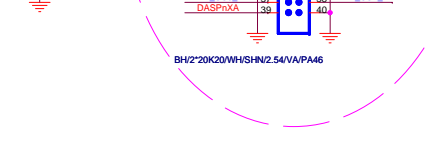
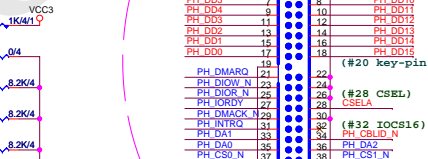
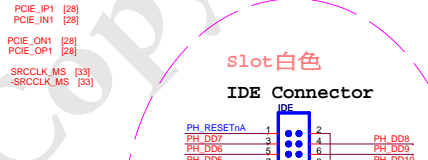
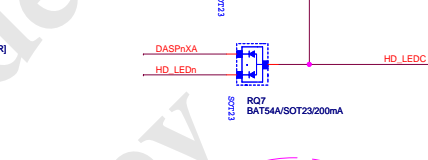
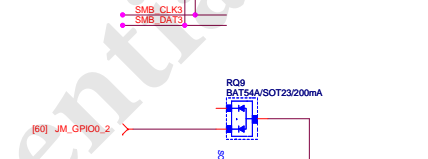
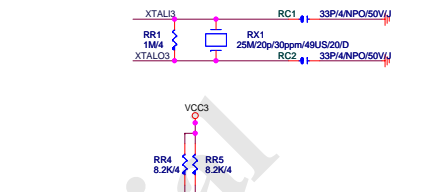
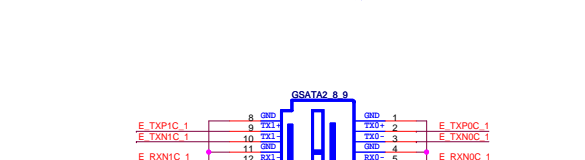
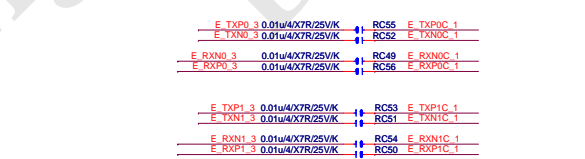
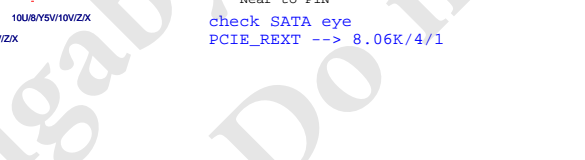
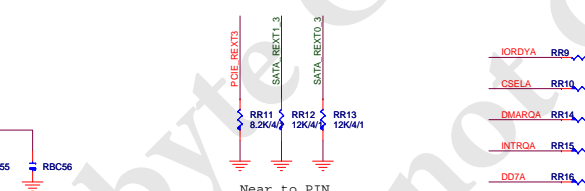
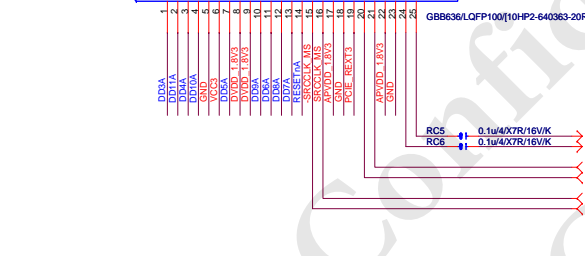




3.3V to 1.8V Voltage Regulator

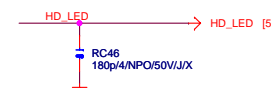
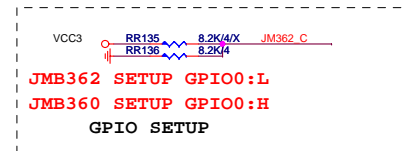
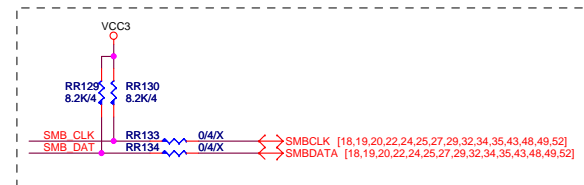
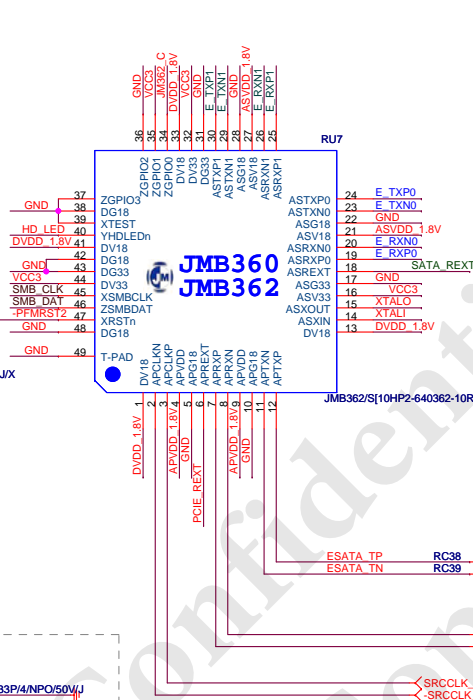
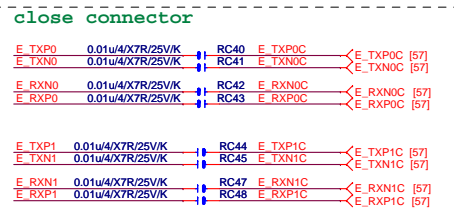
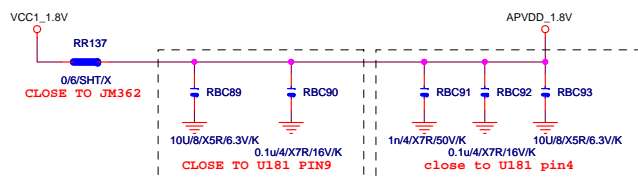
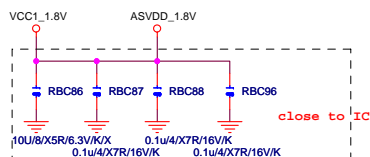
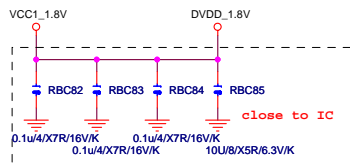
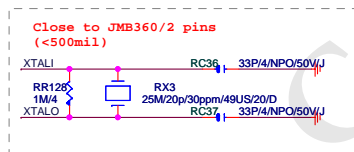
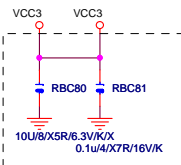
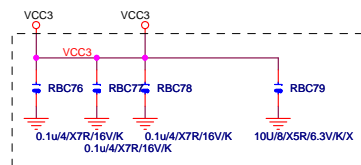
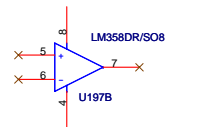
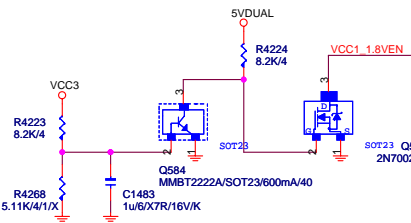
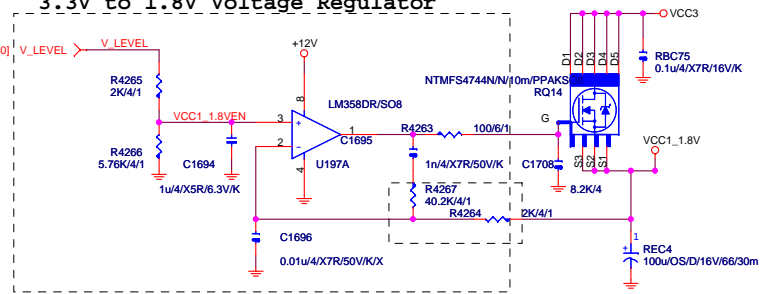


JMB363
LQFP 100 14x14



白色 connector

3.3V to 1.8V Voltage Regulator



Gigabyte Technology			
Title			
JMB362			
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