

rev 1.0

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TITLE

[illegible]

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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

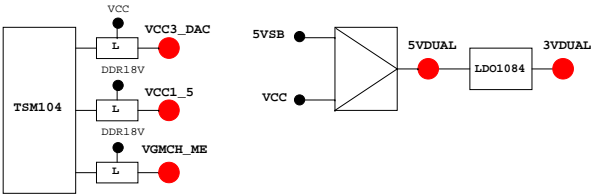
PIN NAME	PWR WELL	AFTER / PLTRST	USAGE	NOTE
GP0	MAIN	IN	VTT_GMCH_OV3	
GP1/TACH1	MAIN	IN	ICH_FAN_TACH1	P/U 8.2K VCC3
GP2/PIRQE#	MAIN	IN	~PIRQE	P/U 8.2K VCC3
GP3/PIRQF#	MAIN	IN	~PIRQF	P/U 8.2K VCC3
GP4/PIRQG#	MAIN	IN	~PIRQG	P/U 8.2K VCC3
GP5/PIRQH#	MAIN	IN	~PIRQH	P/U 8.2K VCC3
GP6/TACH2	MAIN	IN	ICH_FAN_TACH2	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#	

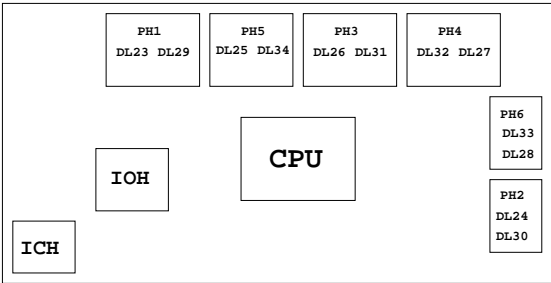
Super I/O GPIO Table

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/SEC	LOW_PWR_1	
VIDO5/GP27/GIN2	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/BUSS01	MB_ID3	
PD7/GP77/BUSS02	MB_ID4	
AFD#/GP86/SMBD_R	SEC_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	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：

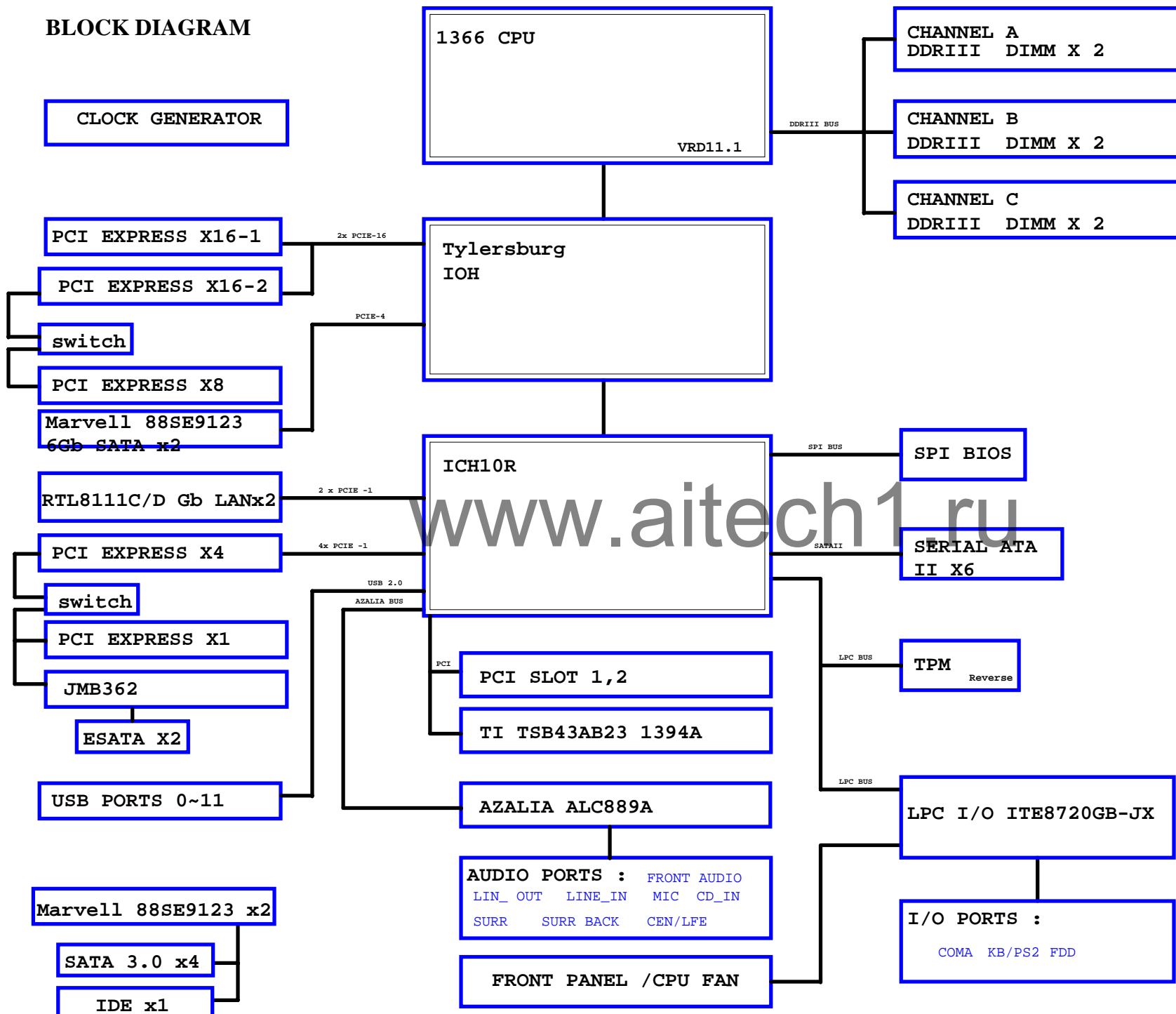


BIOS超電壓對應表：

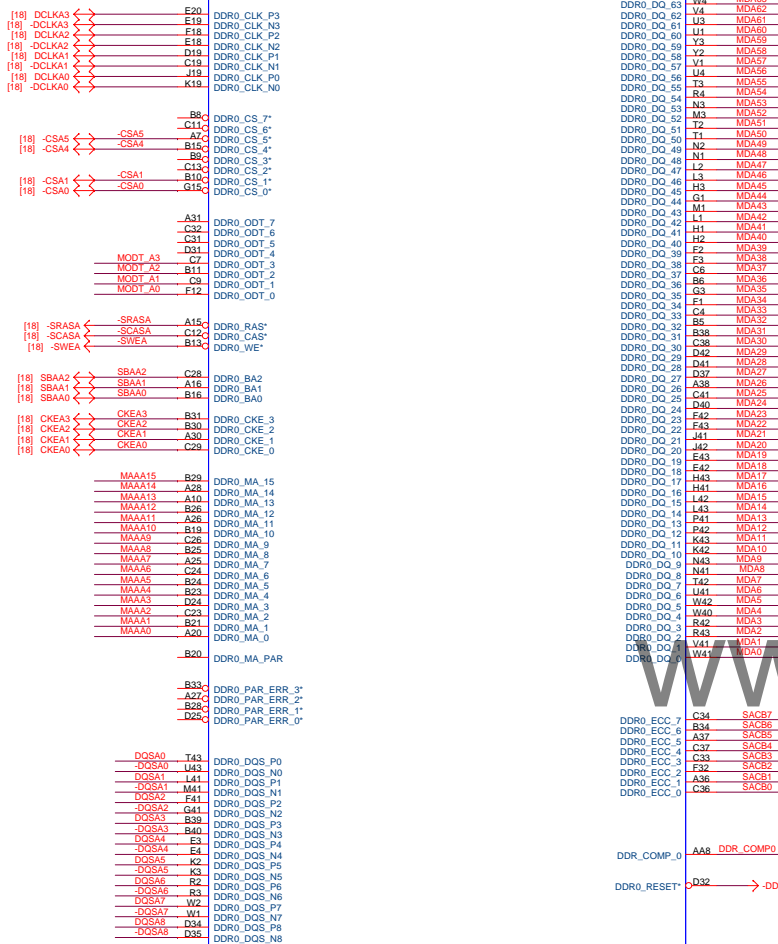
線路圖名稱	BIOS選項
VTT_REF	DRAM Termination
CHAC-CHC6	address
DDR15V	DRAM voltage
VCC18_PLL	CPU PLL
VCCA1_1	CSI PLL
CPU Vcore	CPU Vcore
VCC15	ICH I/O
VCC1_1	IOH core
MCH_RAMVREF	MCH/DRAM Reference (不開放)
VTTD	CPU Termination
VCCA1_5	PCIe
CHA-CHC	Date
VCC1_1_ICH	ICH core

	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



LGA1366A



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LGA1366B



CPU-SK1366P/S15

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LGA1366

LGA1366

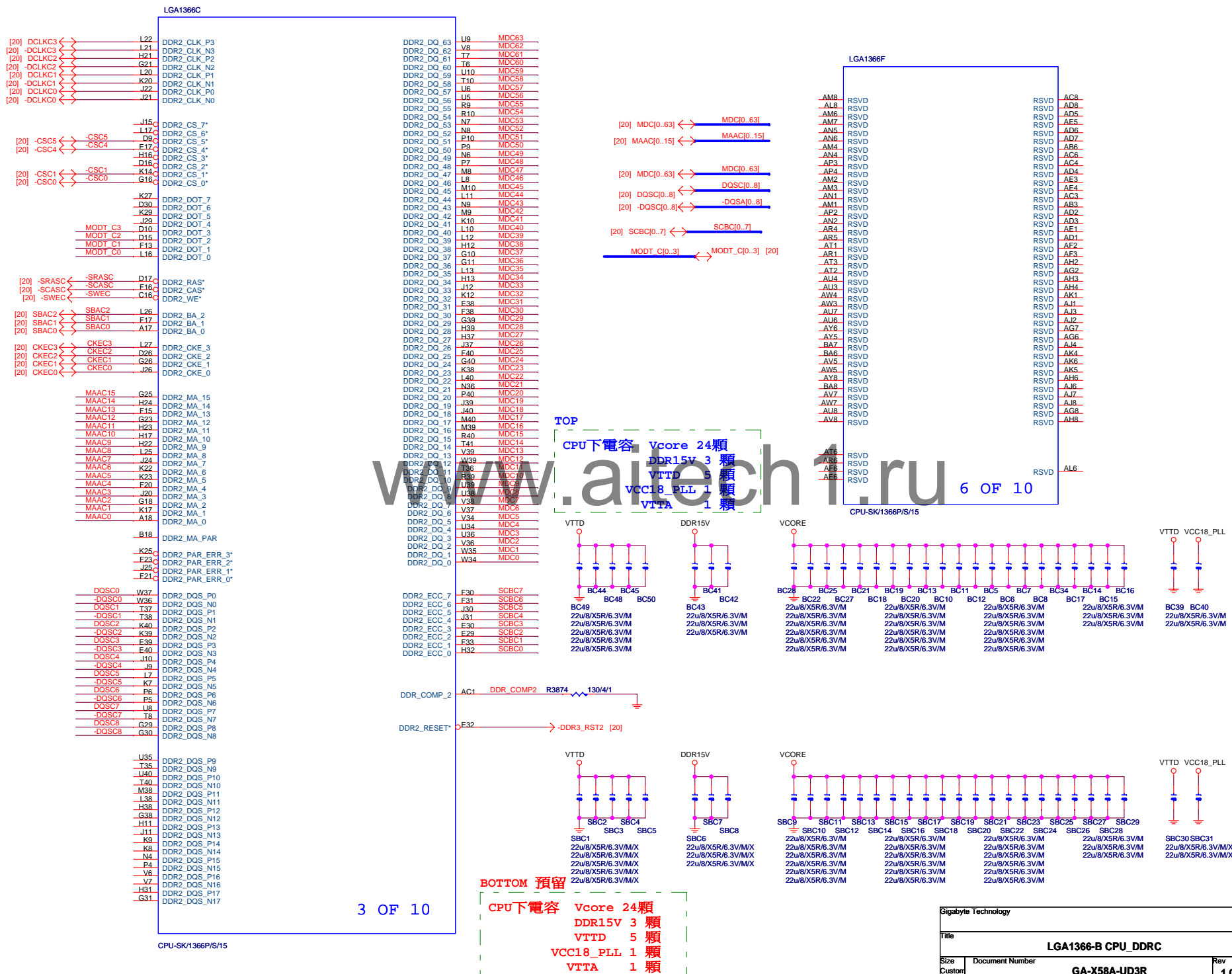
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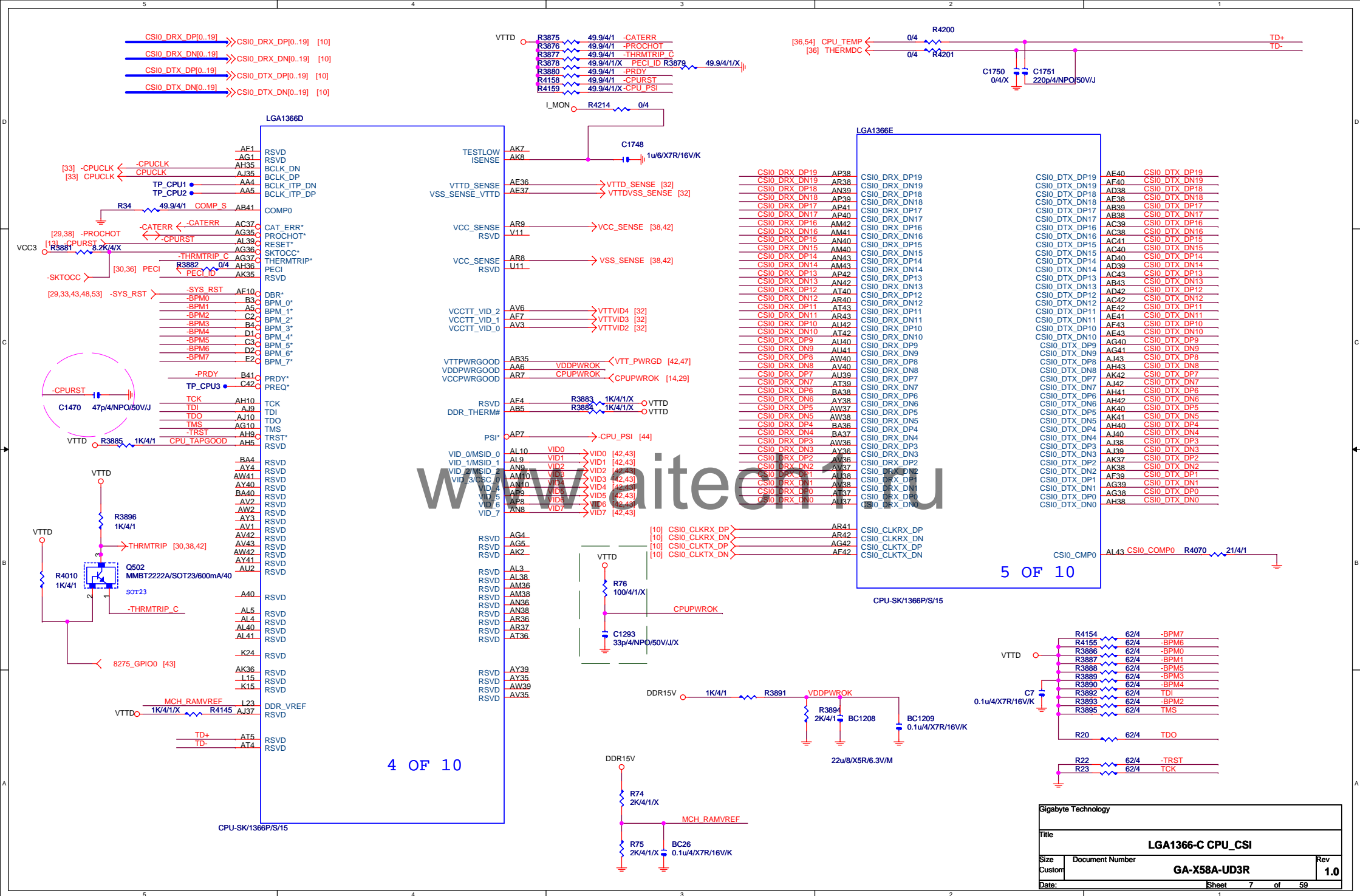
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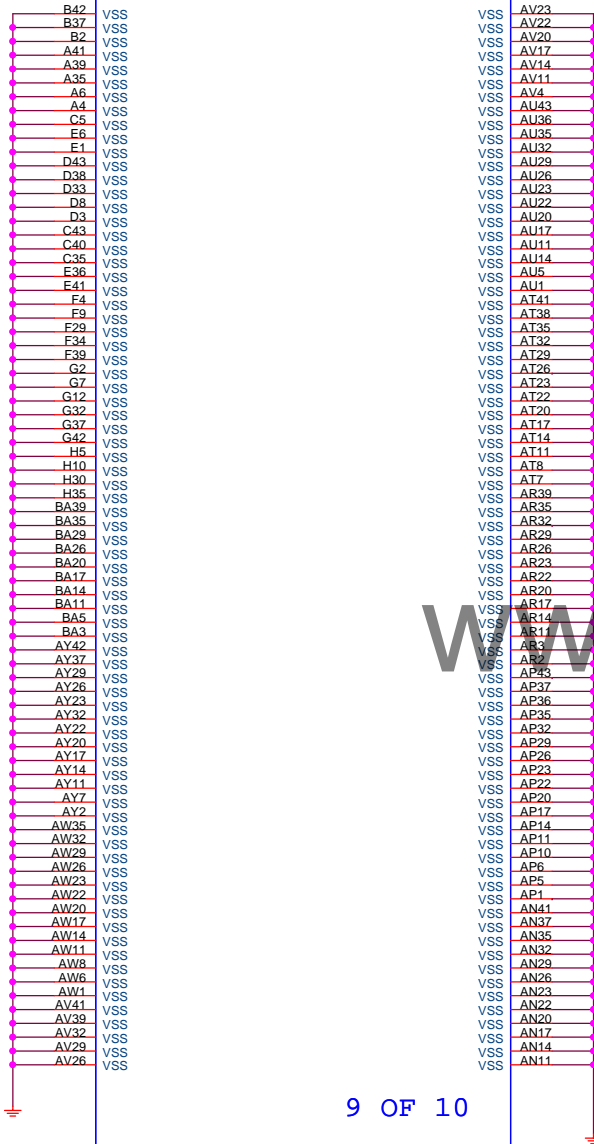
DDR_COMP1 R3873 24.9A/1

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LGA1366-A CPU_DDRA_B		
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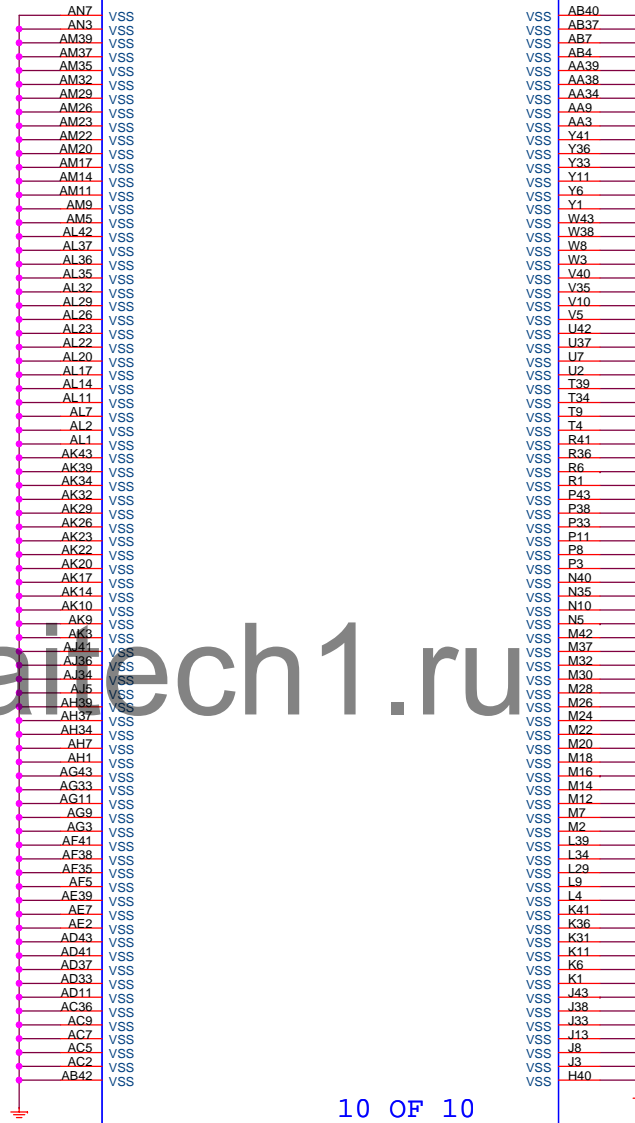


LGA1366I



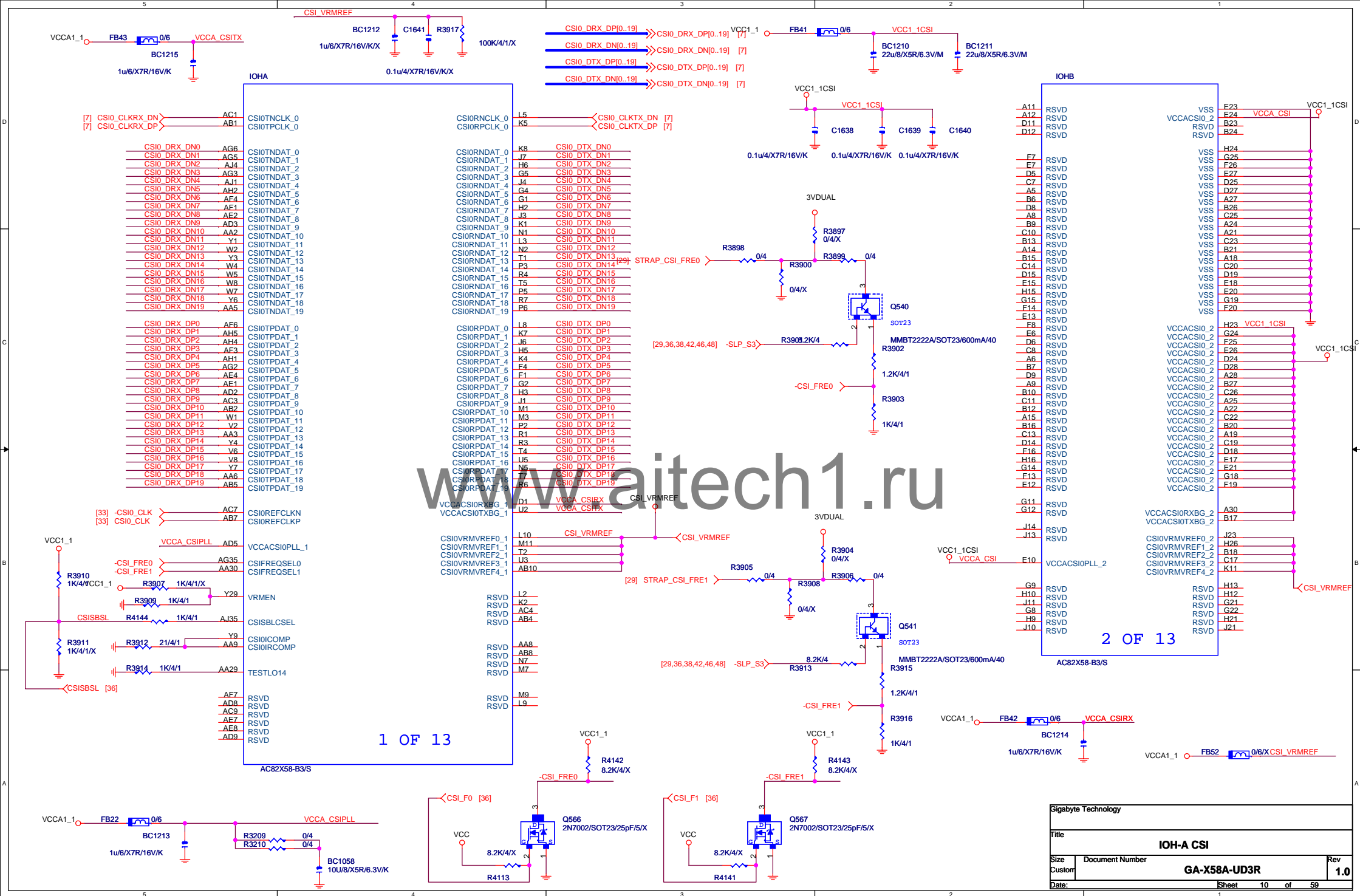
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LGA1366J



CPU-SK/1366P/S/15

Gigabyte Technology		
Title		
LGA1366-D GND		
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EXP_A_TXP[0..7] >> EXP_A_TXP[0..7] [23]
EXP_A_TXN[0..7] >> EXP_A_TXN[0..7] [23]
EXP_A_RXP[0..7] >> EXP_A_RXP[0..7] [23]
EXP_A_RXN[0..7] >> EXP_A_RXN[0..7] [23]

EXP_A_TXP[8..15] >> EXP_A_TXP[8..15] [22]
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]

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

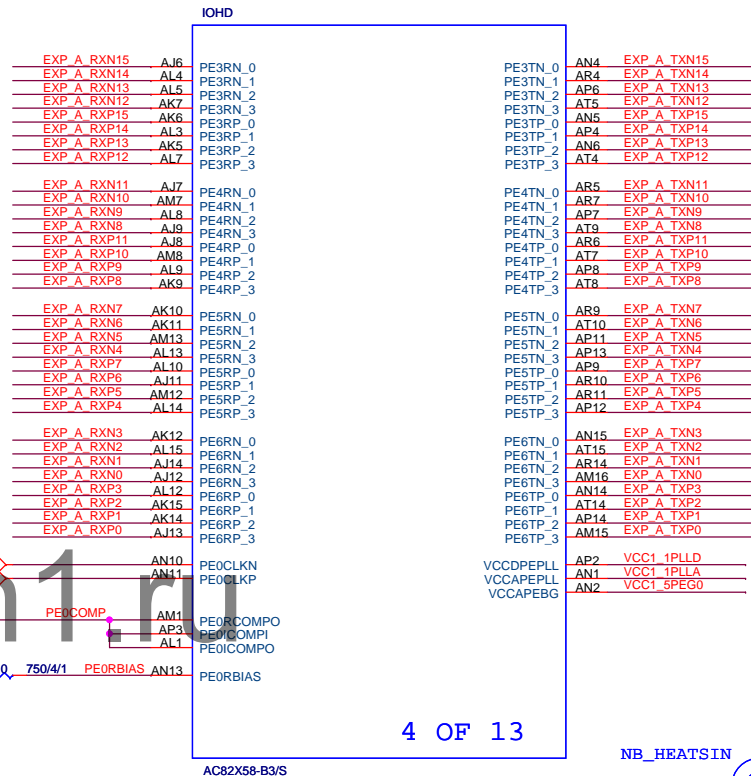
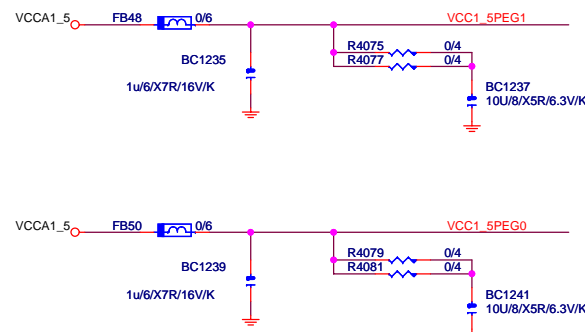
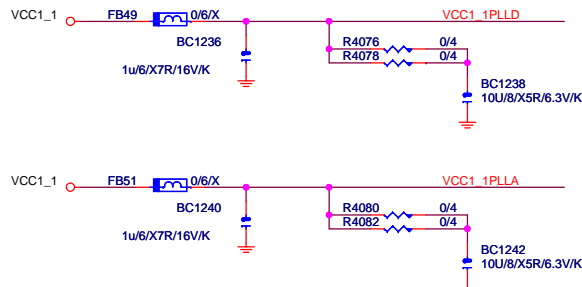
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EXP_C_RXN[8..15] >> EXP_C_RXN[8..15] [25]



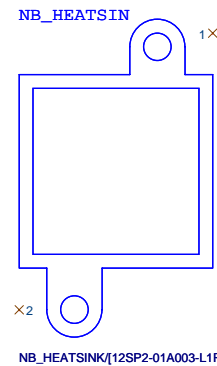
[33] -SRCCLK_MCH >> AG29
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VCC1_1PE R3919 49.9/4/1

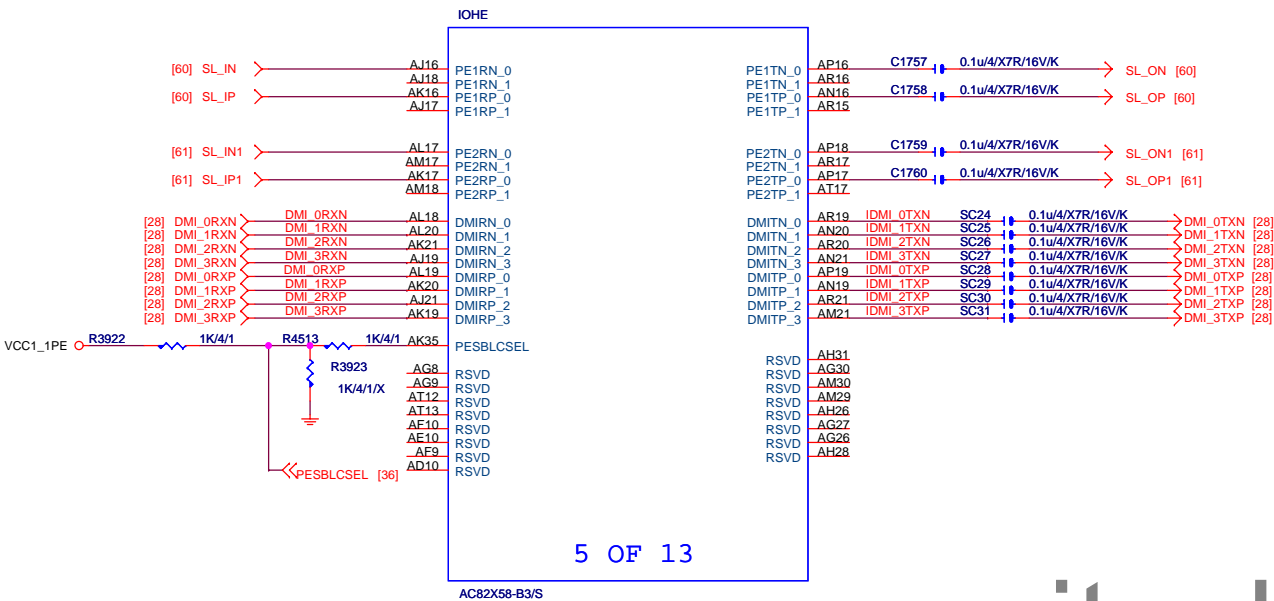
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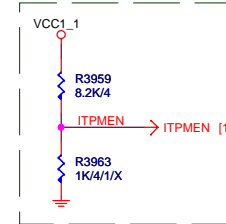
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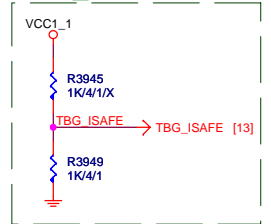
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Size	Document Number	Rev
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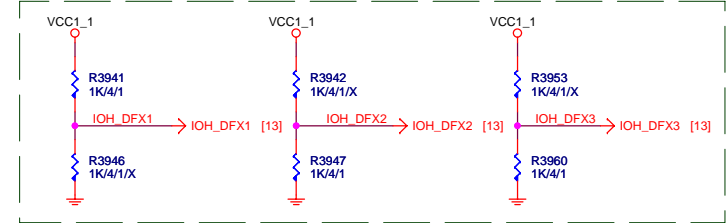
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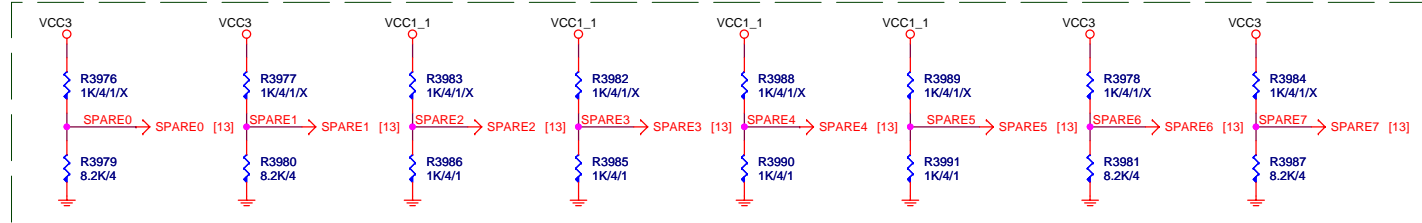
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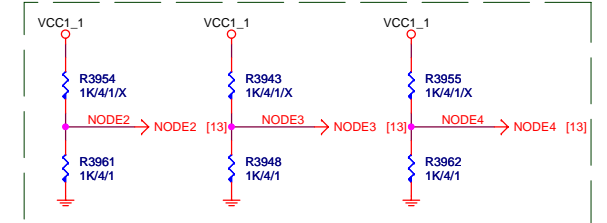
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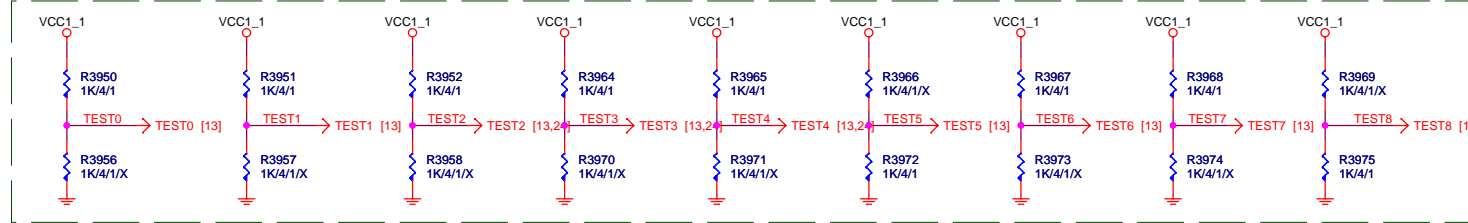
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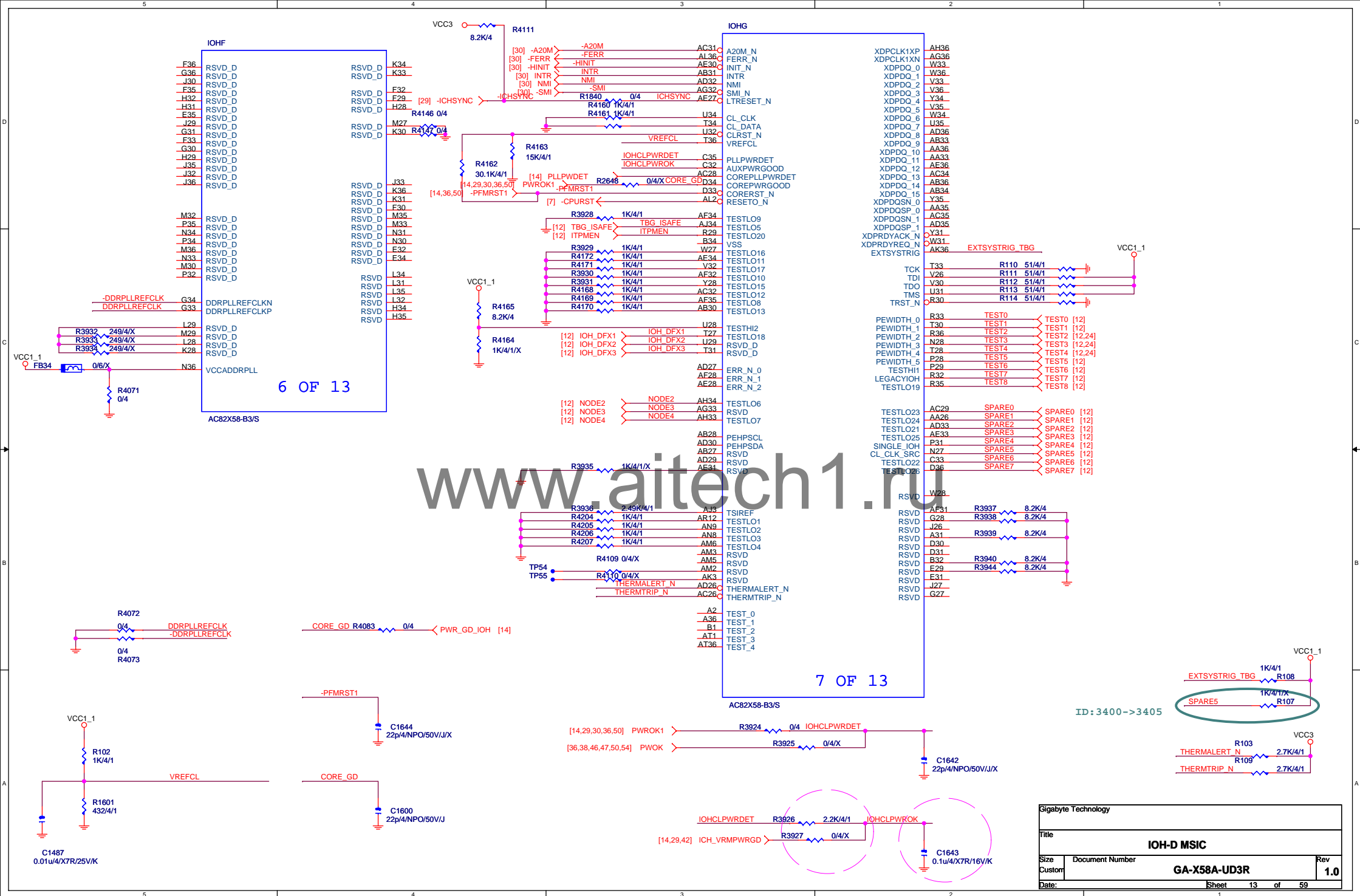
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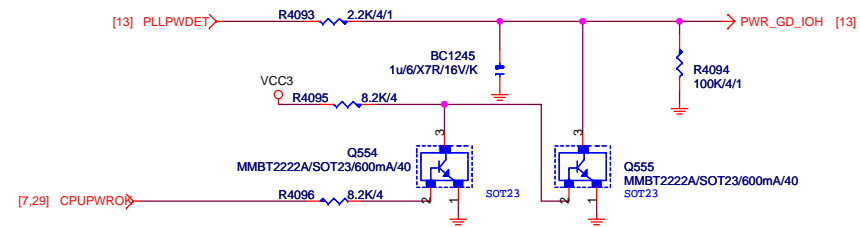
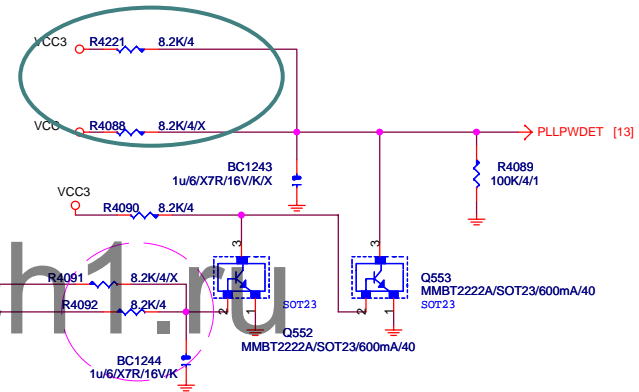
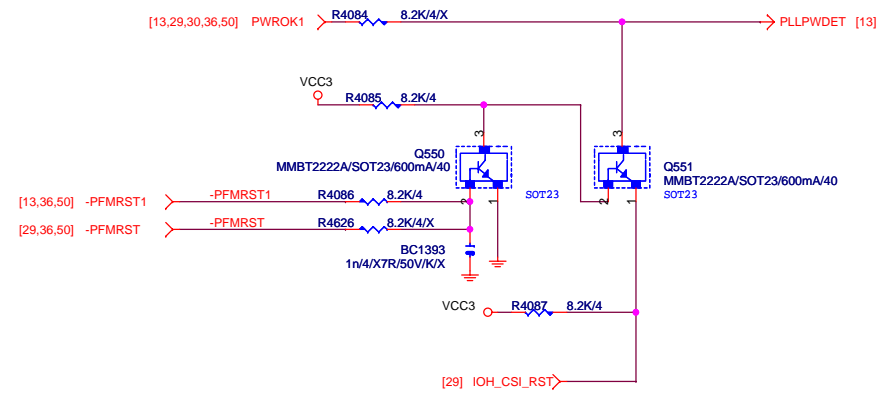


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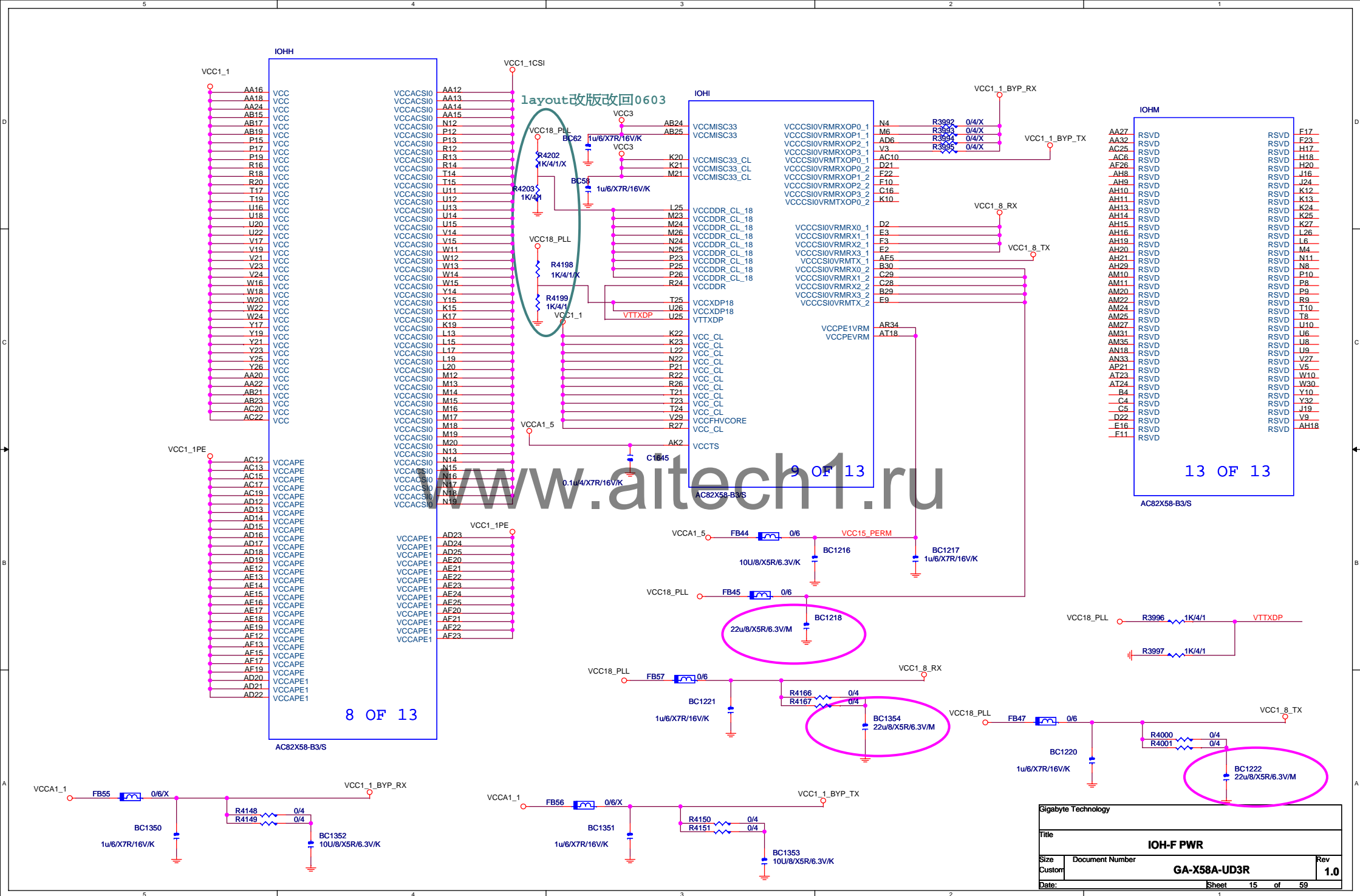


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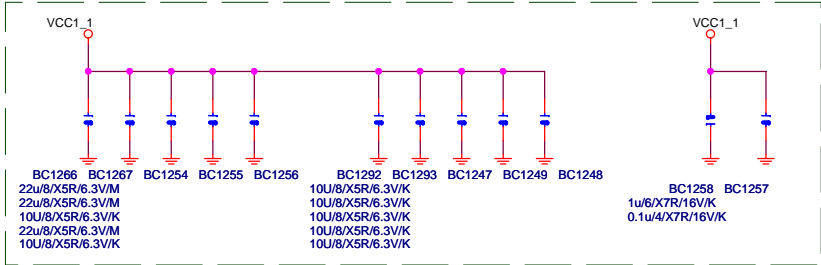


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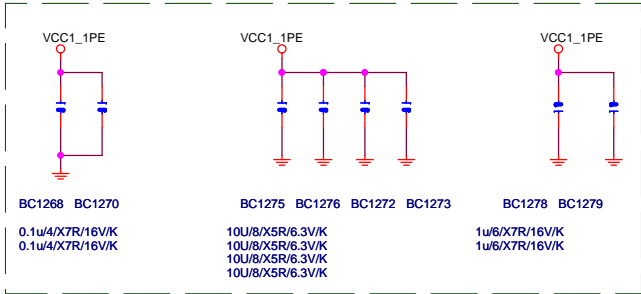


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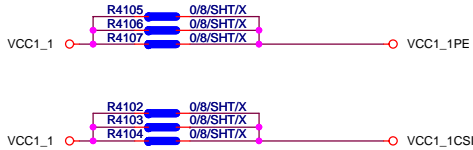
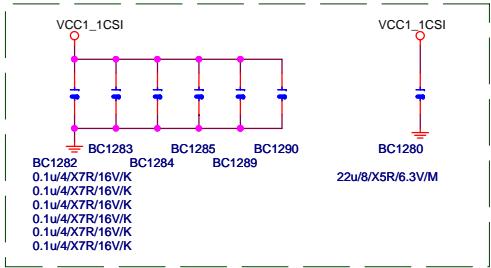
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VCC1_1PE

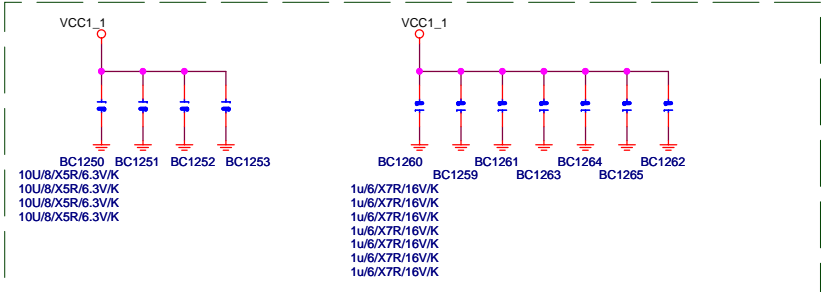


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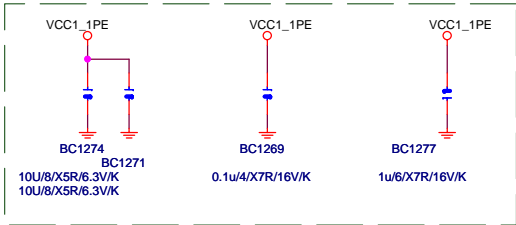


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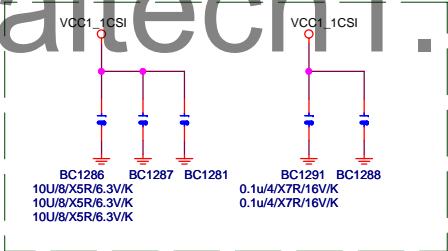
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VCC1_1PE

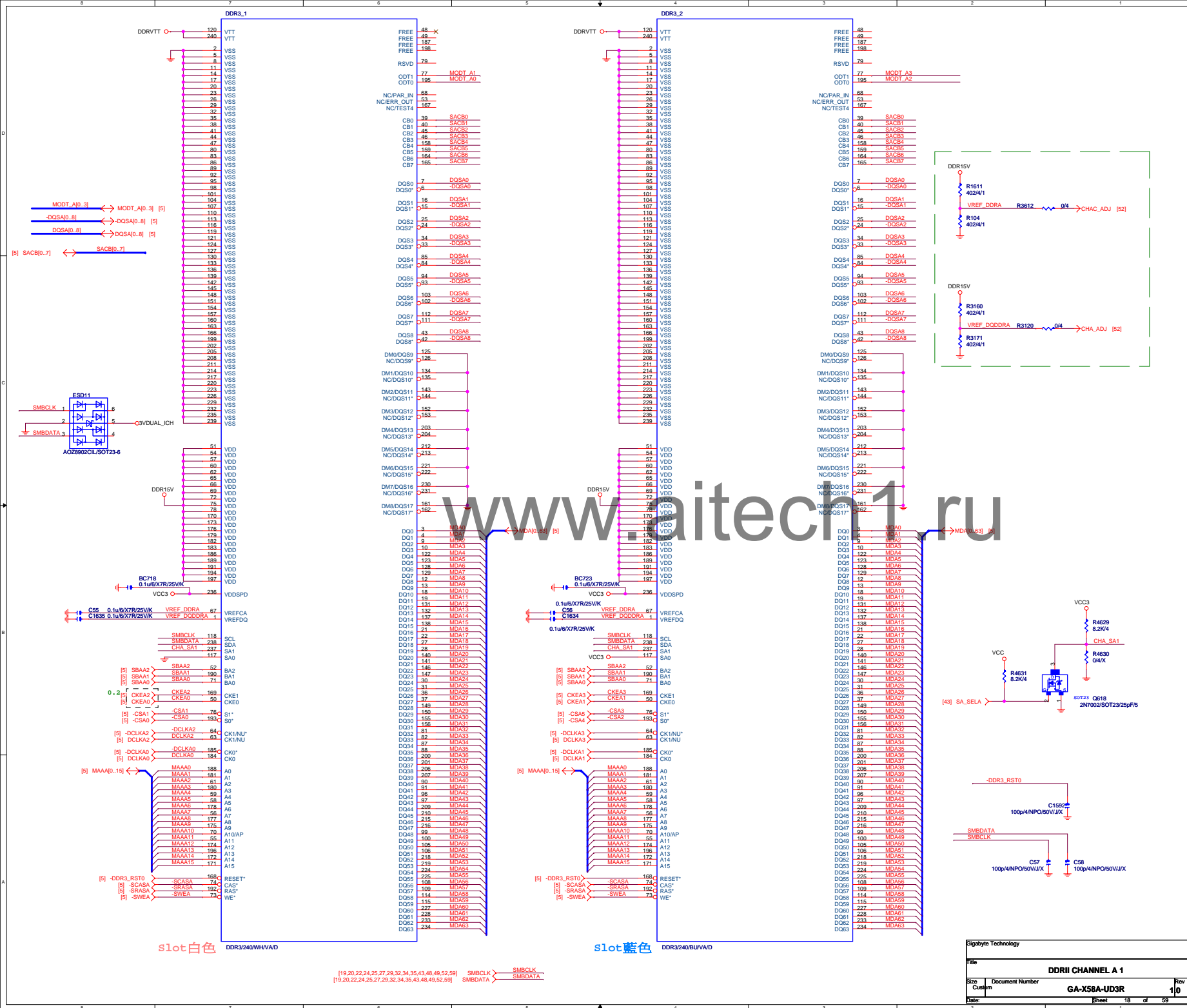


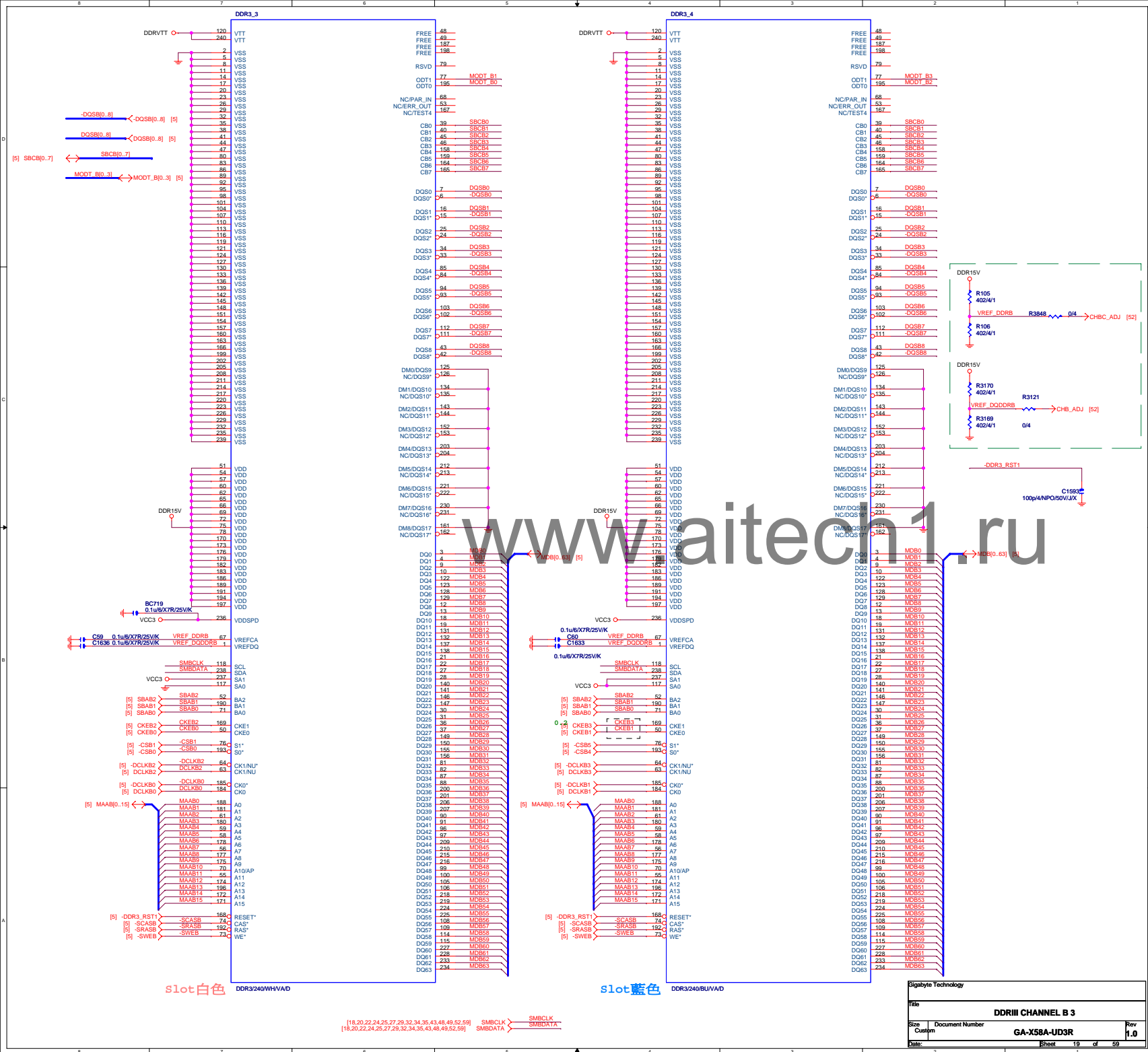
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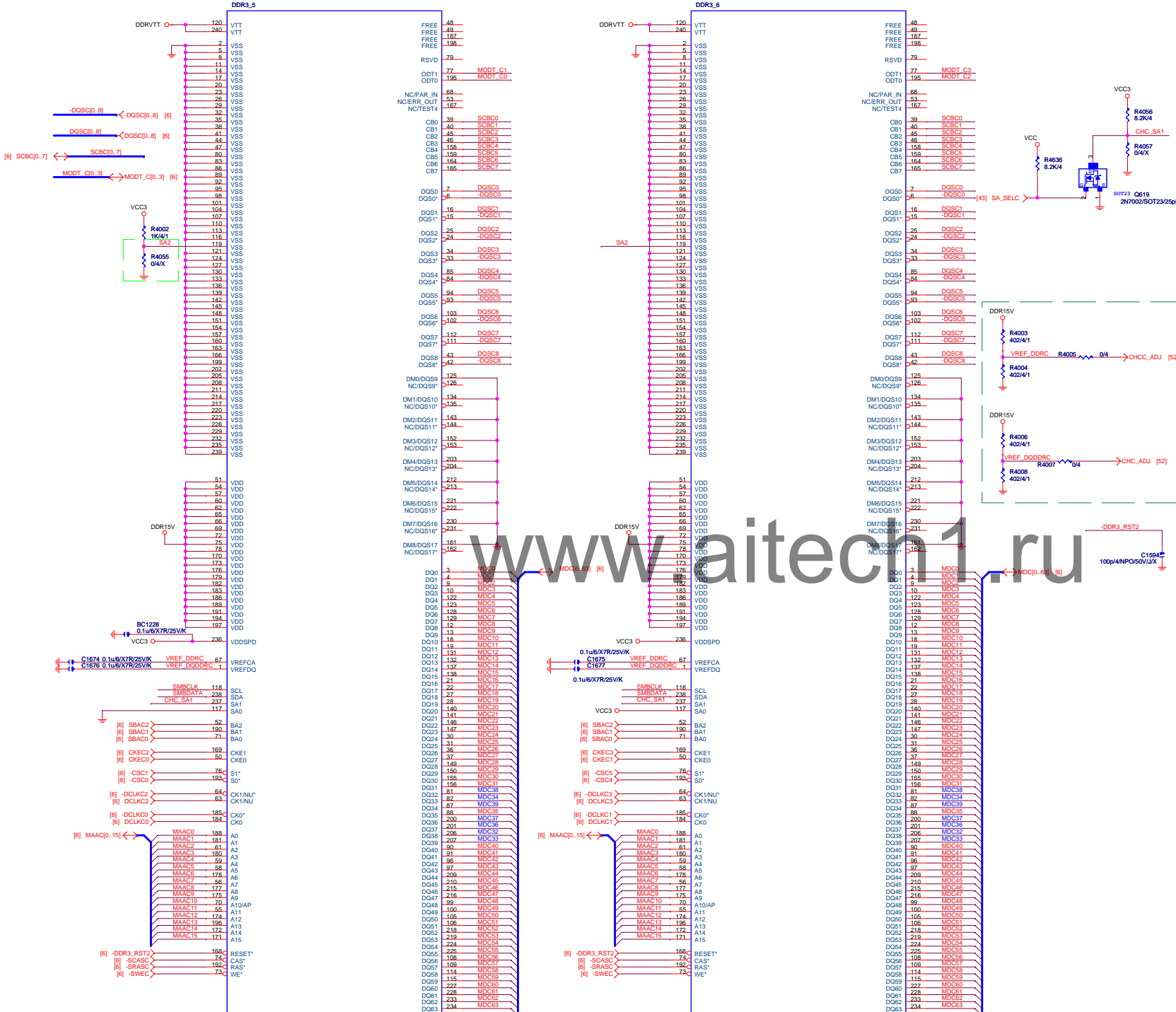


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Gigabyte Technology			
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IOH-G PWR_1			
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slot白色

slot蓝色

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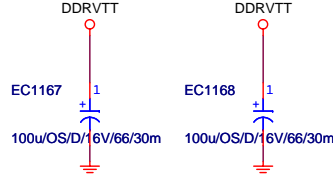
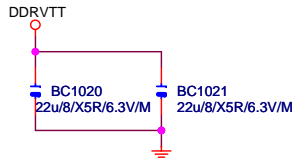
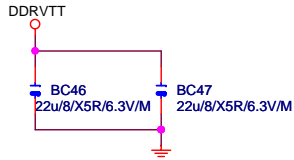
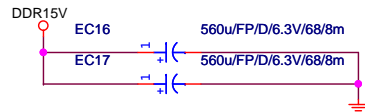
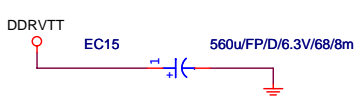
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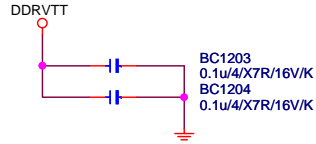
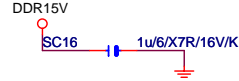
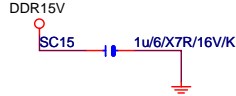
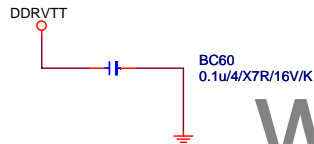
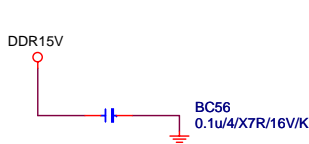
DDR TERMINATION CHANNEL A

DDRVTT Decouple

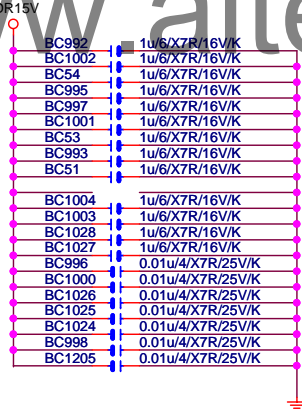


DDR18V Decouple

DDRVTT Decouple



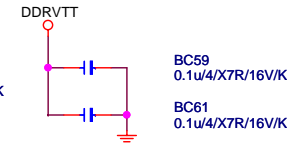
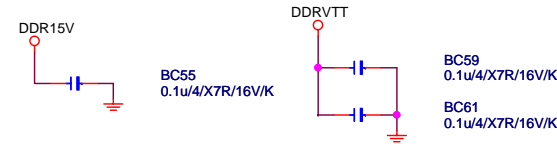
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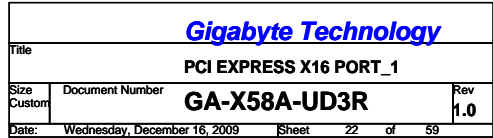


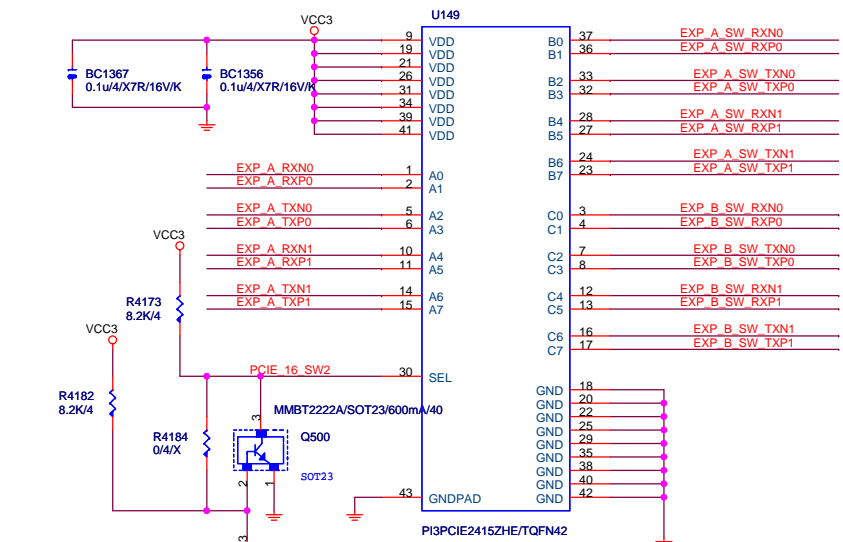
DDR TERMINATION CHANNEL B

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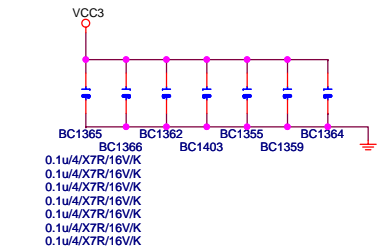
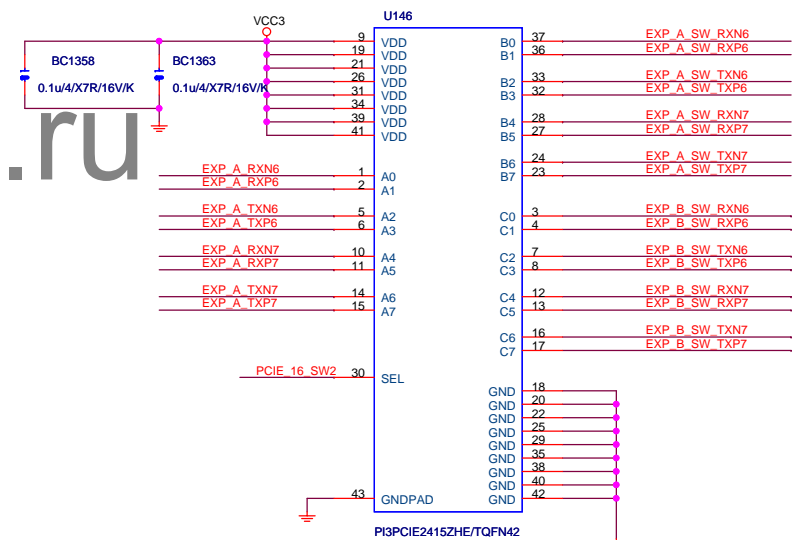
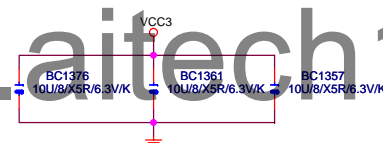
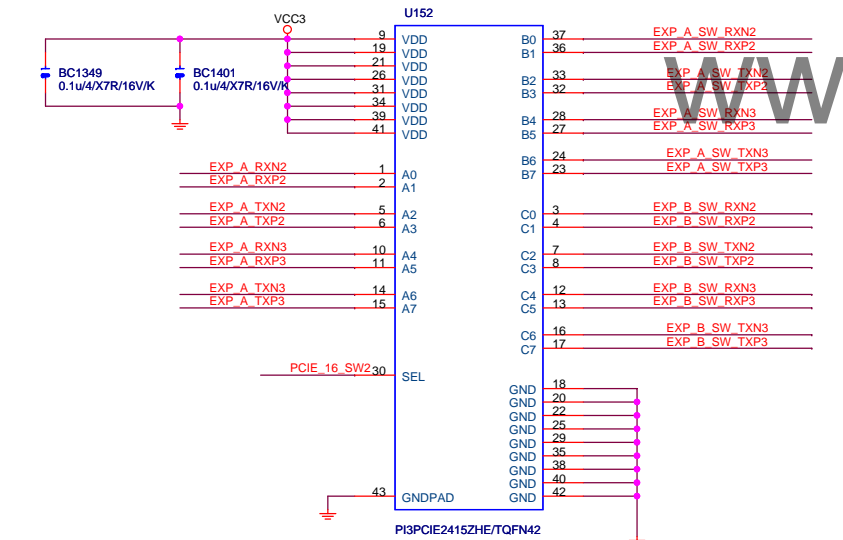
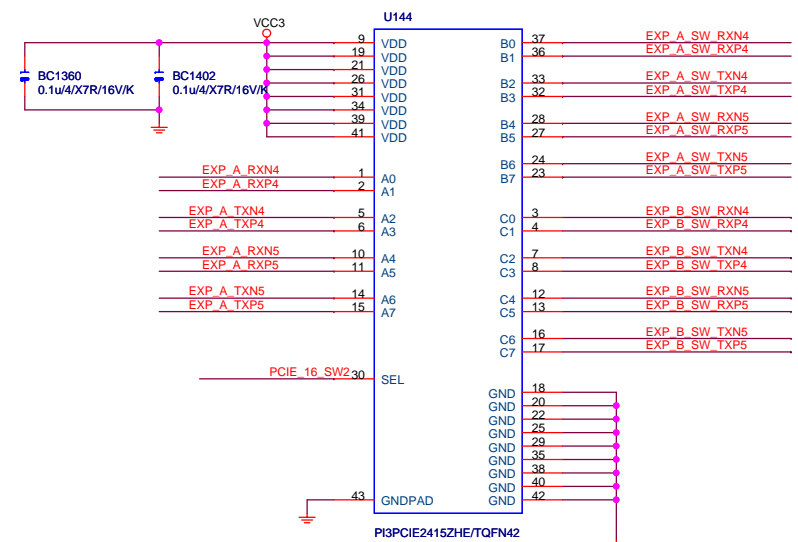
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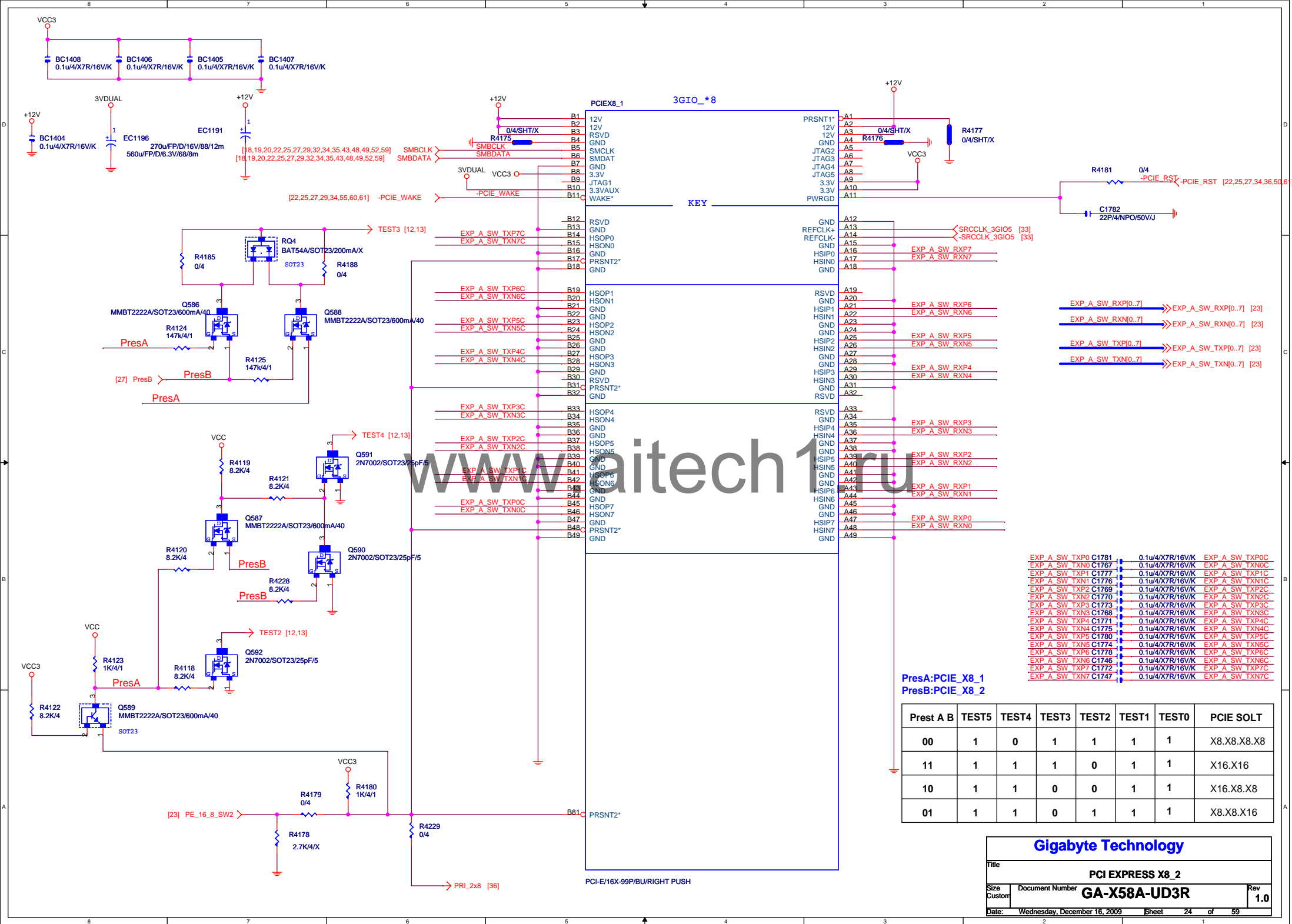






EXP_A_SW_RXP[0..7] >>> EXP_A_SW_RXP[0..7] [24]
EXP_A_SW_RXN[0..7] >>> EXP_A_SW_RXN[0..7] [24]
EXP_A_SW_TXP[0..7] >>> EXP_A_SW_TXP[0..7] [24]
EXP_A_SW_TXN[0..7] >>> EXP_A_SW_TXN[0..7] [24]
EXP_B_SW_RXP[0..7] >>> EXP_B_SW_RXP[0..7] [22]
EXP_B_SW_RXN[0..7] >>> EXP_B_SW_RXN[0..7] [22]
EXP_B_SW_TXP[0..7] >>> EXP_B_SW_TXP[0..7] [22]
EXP_B_SW_TXN[0..7] >>> EXP_B_SW_TXN[0..7] [22]
EXP_A_TXP[0..7] >>> EXP_A_TXP[0..7] [11]
EXP_A_TXN[0..7] >>> EXP_A_TXN[0..7] [11]
EXP_A_RXP[0..7] >>> EXP_A_RXP[0..7] [11]
EXP_A_RXN[0..7] >>> EXP_A_RXN[0..7] [11]



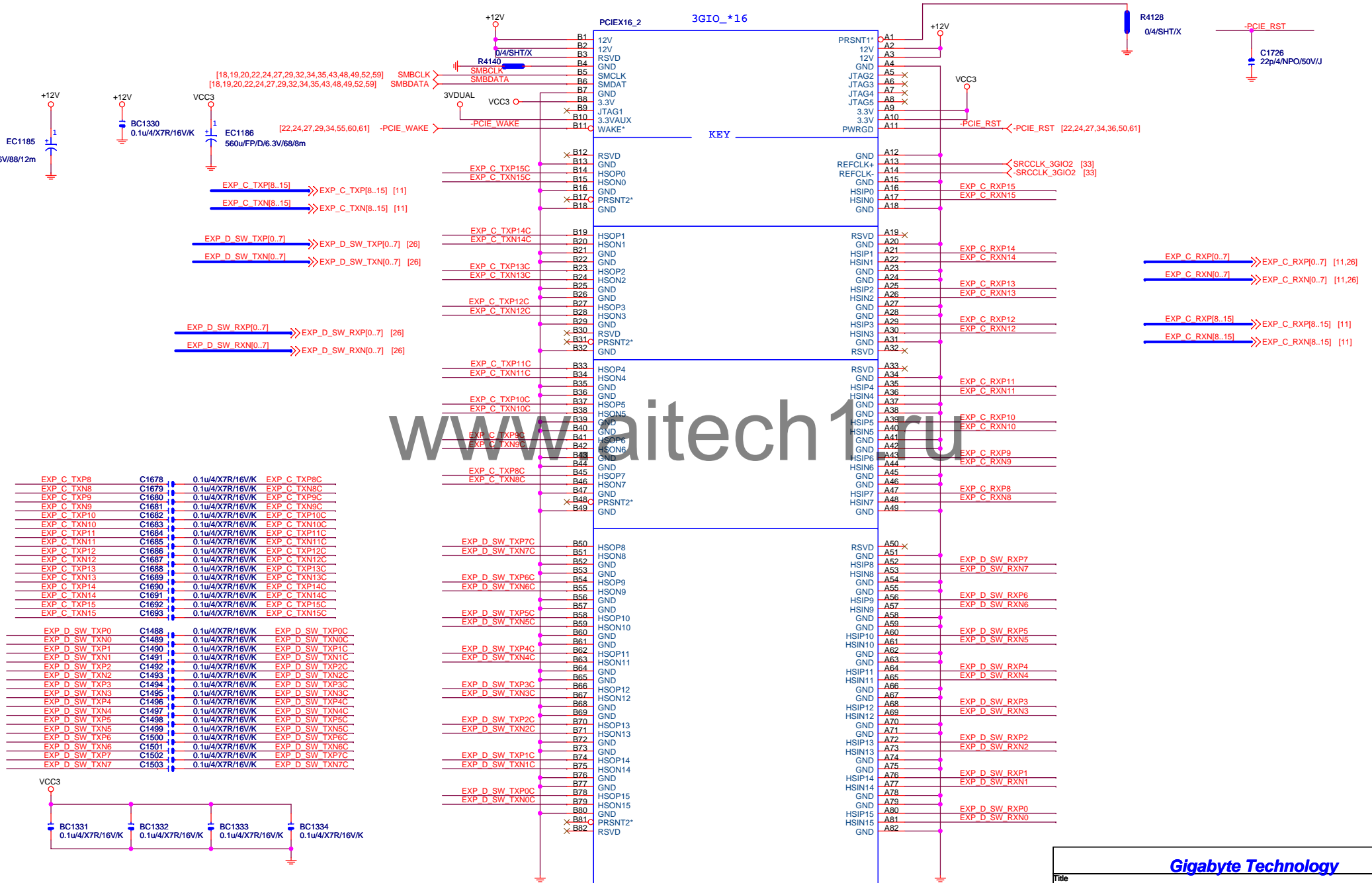


PCIESLOT-164DN-2

PCIE16_2 3GIO_*16

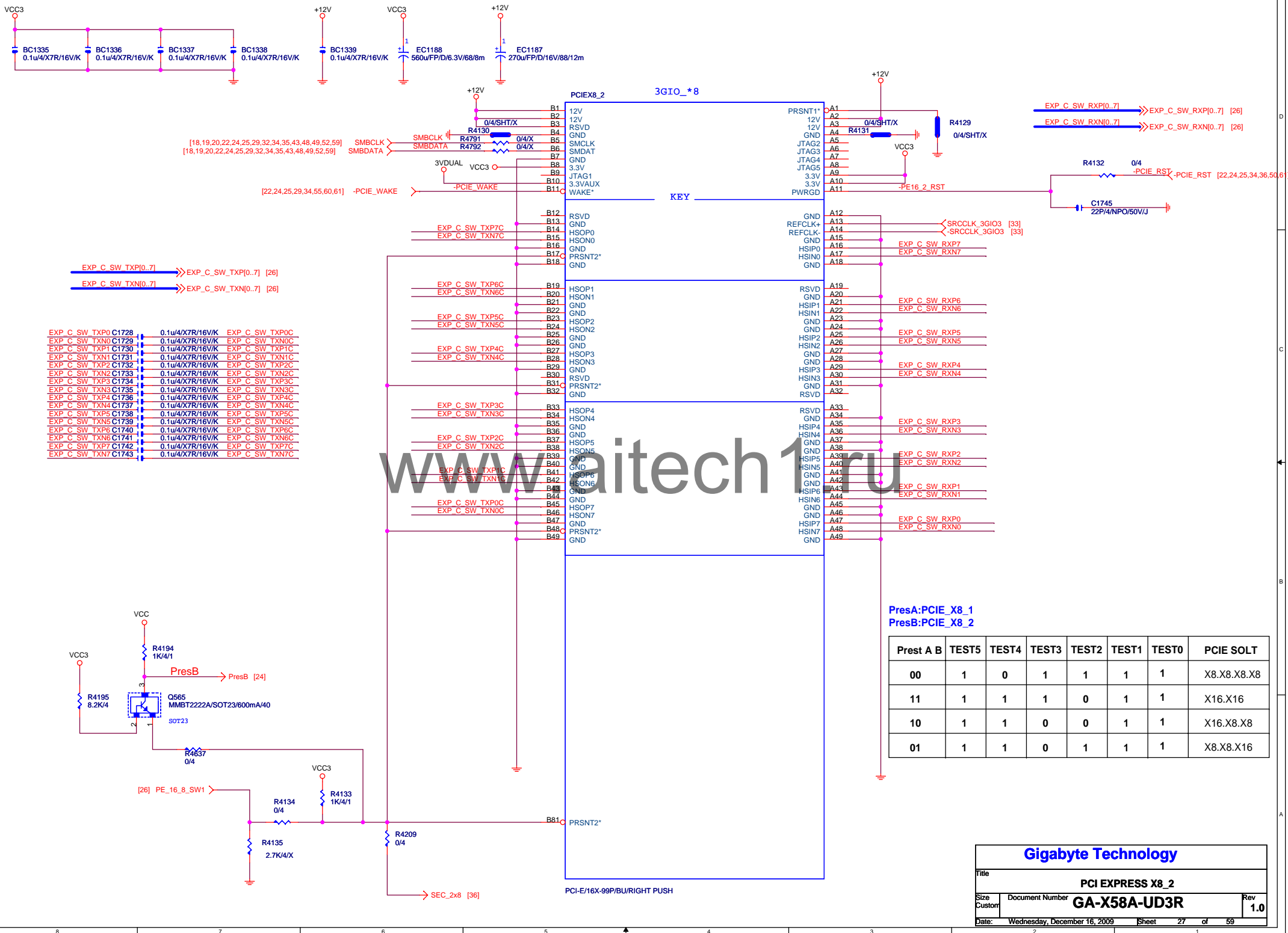
KEY

PCI-E16X-164P/BU-297C/RIGHT PUSH



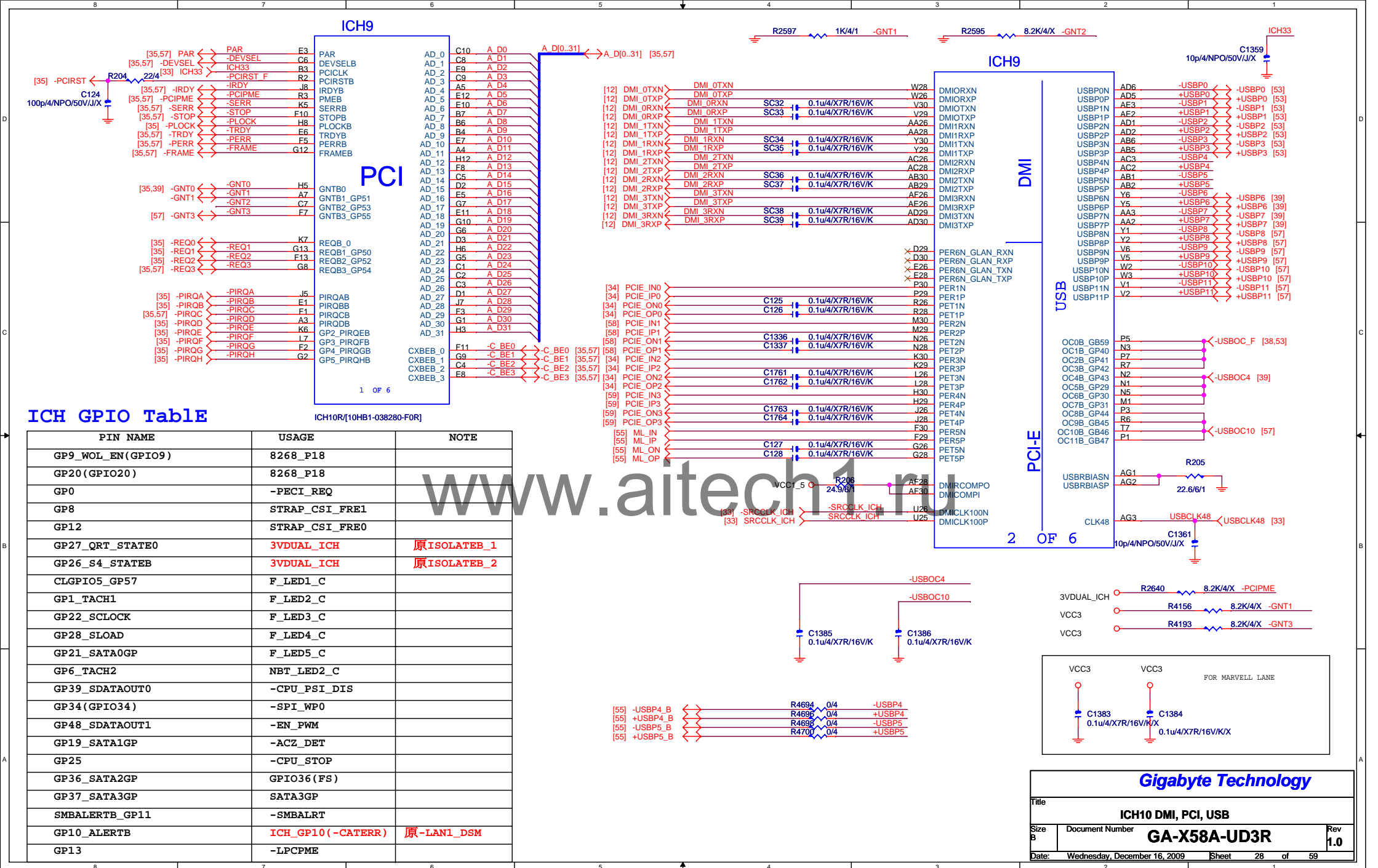
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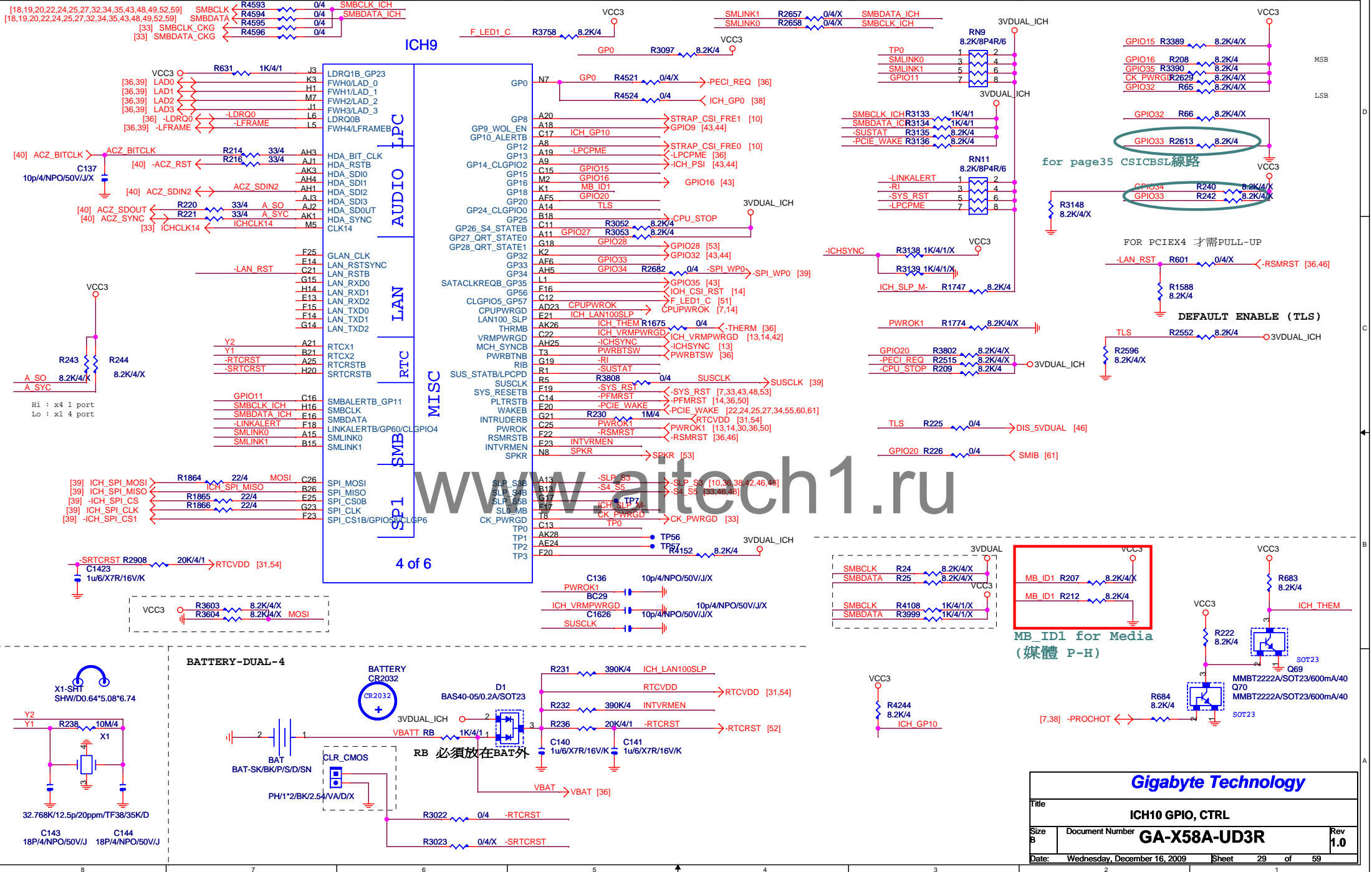
Title		PCI EXPRESS X16 PORT_2	
Size	Document Number	GA-X58A-UD3R	
Custom		Rev 1.0	
Date:	Wednesday, December 16, 2009	Sheet	25 of 59



PresA:PCIE_X8_1
PresB:PCIE_X8_2

PresA 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





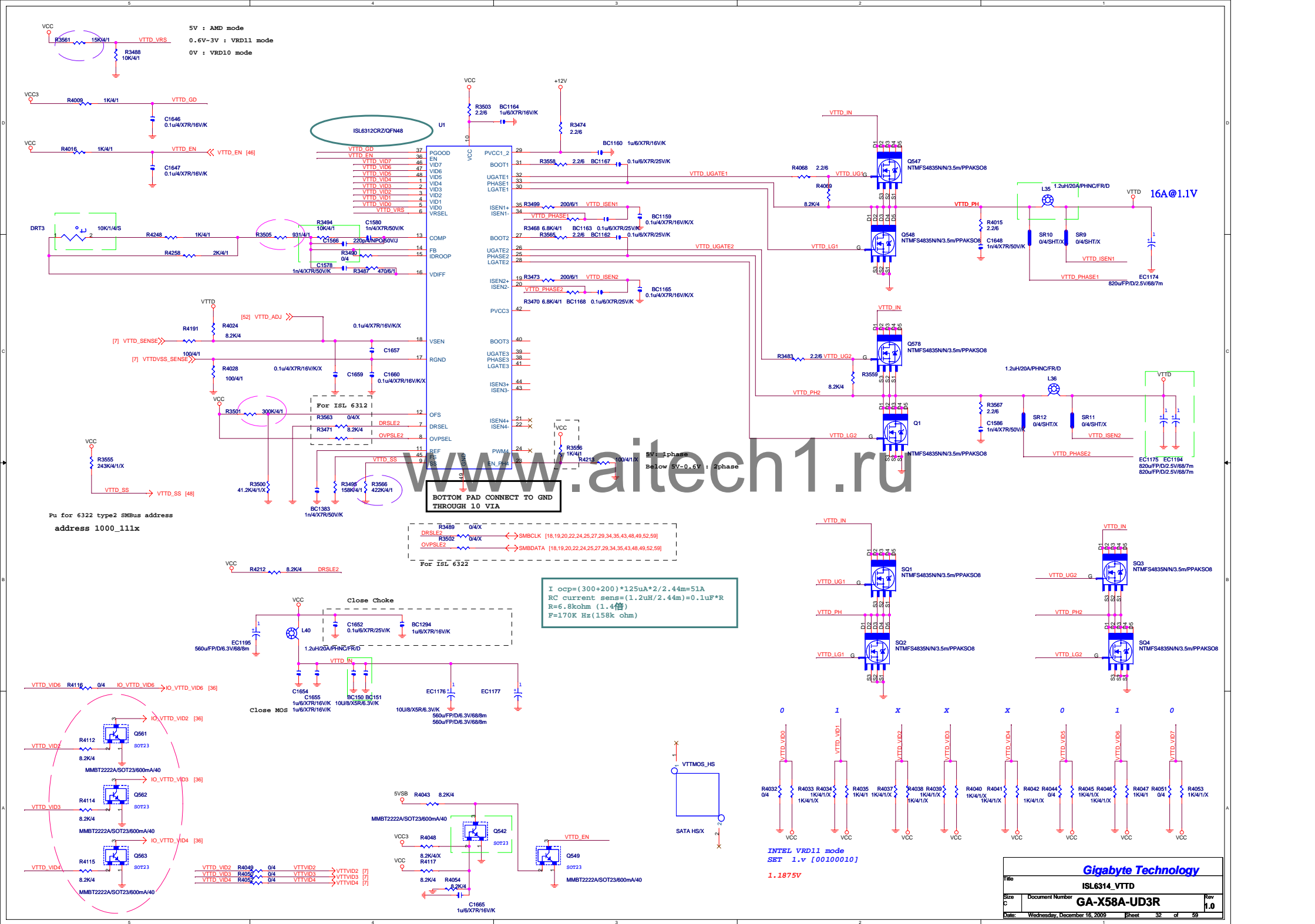
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G29	VSS_101	H19
G25	VSS_102	H22
G16	VSS_103	H25
F9	VSS_104	H26
F8	VSS_105	H28
F28	VSS_106	H29
F26	VSS_107	H9
F21	VSS_108	J29
F12	VSS_109	J30
E30	VSS_110	J6
E22	VSS_111	J28
E18	VSS_112	J29
E2	VSS_113	J6
E15	VSS_114	J29
D28	VSS_115	J29
B5	VSS_116	J29
B28	VSS_117	J29
B25	VSS_118	J29
B22	VSS_119	J29
B2	VSS_120	J29
B2	VSS_121	J29
B2	VSS_122	J29
B19	VSS_123	J29
B14	VSS_124	J29
B11	VSS_125	J29
AK8	VSS_126	J29
AK29	VSS_127	J29
AK2	VSS_128	J29
VSS_129	VSS_129	J29
VSS_130	VSS_130	J29
AK16	VSS_131	J29
AK14	VSS_132	J29
AK12	VSS_133	J29
AJ8	VSS_134	J29
AJ5	VSS_135	J29
AJ26	VSS_136	J29
AJ3	VSS_137	J29
AJ20	VSS_138	J29
AJ16	VSS_139	J29
AJ14	VSS_140	J29
AJ12	VSS_141	J29
AH6	VSS_142	J29
AH20	VSS_143	J29
AH2	VSS_144	J29
AH19	VSS_145	J29
AH15	VSS_146	J29
AH13	VSS_147	J29
AG28	VSS_148	J29
AF9	VSS_149	J29
AF7	VSS_150	J29
AF20	VSS_151	J29
AF25	VSS_152	J29
AF23	VSS_153	J29
AF20	VSS_154	J29
AF15	VSS_155	J29
AF13	VSS_156	J29
AE9	VSS_157	J29
AE8	VSS_158	J29
AE5	VSS_159	J29
AE3	VSS_160	J29
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AE19	VSS_162	J29
AE18	VSS_163	J29
AE15	VSS_164	J29
AE14	VSS_165	J29
AE12	VSS_166	J29
AE10	VSS_167	J29
AE1	VSS_168	J29
AD9	VSS_169	J29
AD7	VSS_170	J29
AD3	VSS_171	J29
AD22	VSS_172	J29
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AD16	VSS_174	J29
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AD13	VSS_177	J29
AD11	VSS_178	J29
AD8	VSS_179	J29
AC6	VSS_180	J29
AC5	VSS_181	J29
AC30	VSS_182	J29
AC29	VSS_183	J29
AC24	VSS_184	J29
AC12	VSS_185	J29
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AB28	VSS_188	J29
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AF3	VSS_197	J29
B27	VSS_198	J29

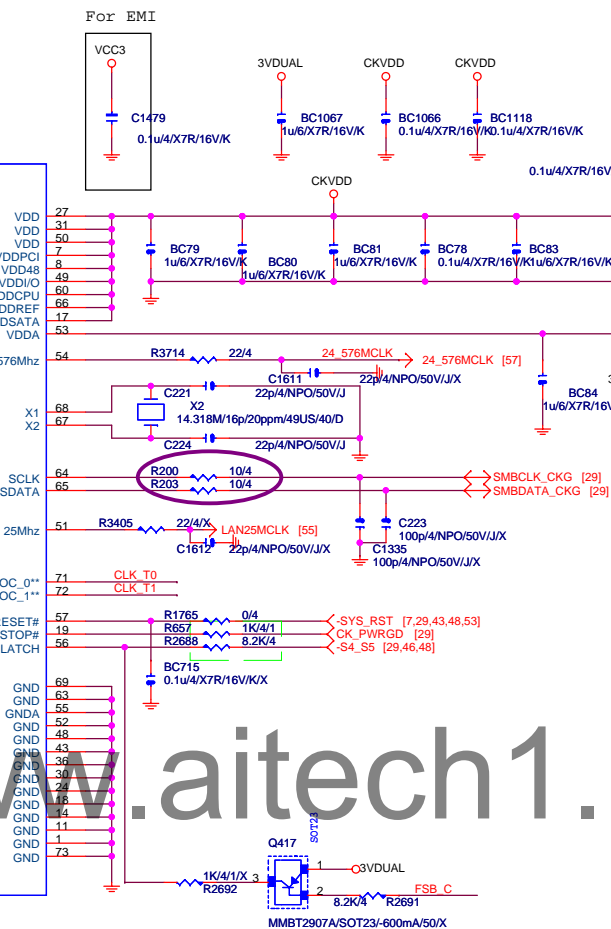
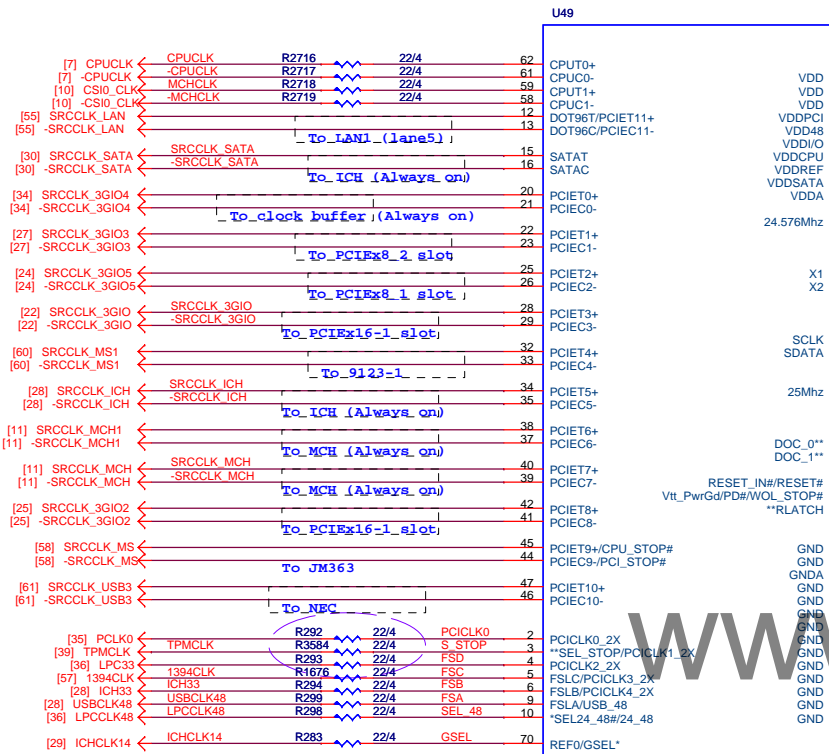
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VSS_95	VSS_95	H26
VSS_94	VSS_94	H28
VSS_93	VSS_93	H29
VSS_92	VSS_92	H9
VSS_91	VSS_91	J29
VSS_90	VSS_90	J30
VSS_89	VSS_89	J6
VSS_88	VSS_88	J28
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VSS_86	VSS_86	J29
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VSS_4	VSS_4	J29
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VSS_2	VSS_2	J29
VSS_1	VSS_1	J29

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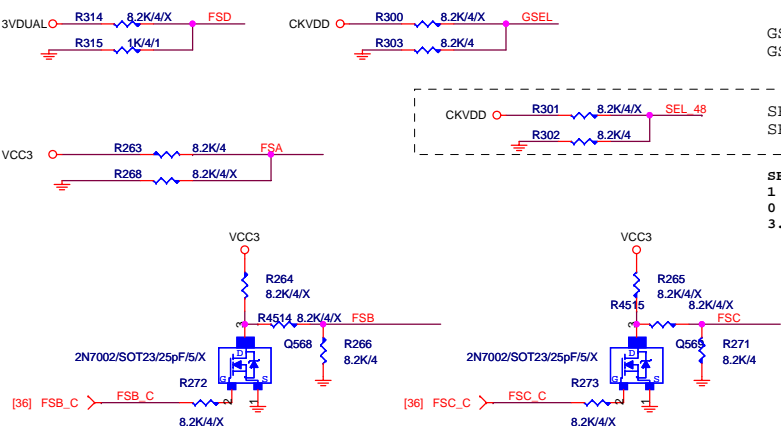




GSEL=1, DOTCLK 96Mhz from 12/13
GSEL=0, PCIECLK11 from 12/13

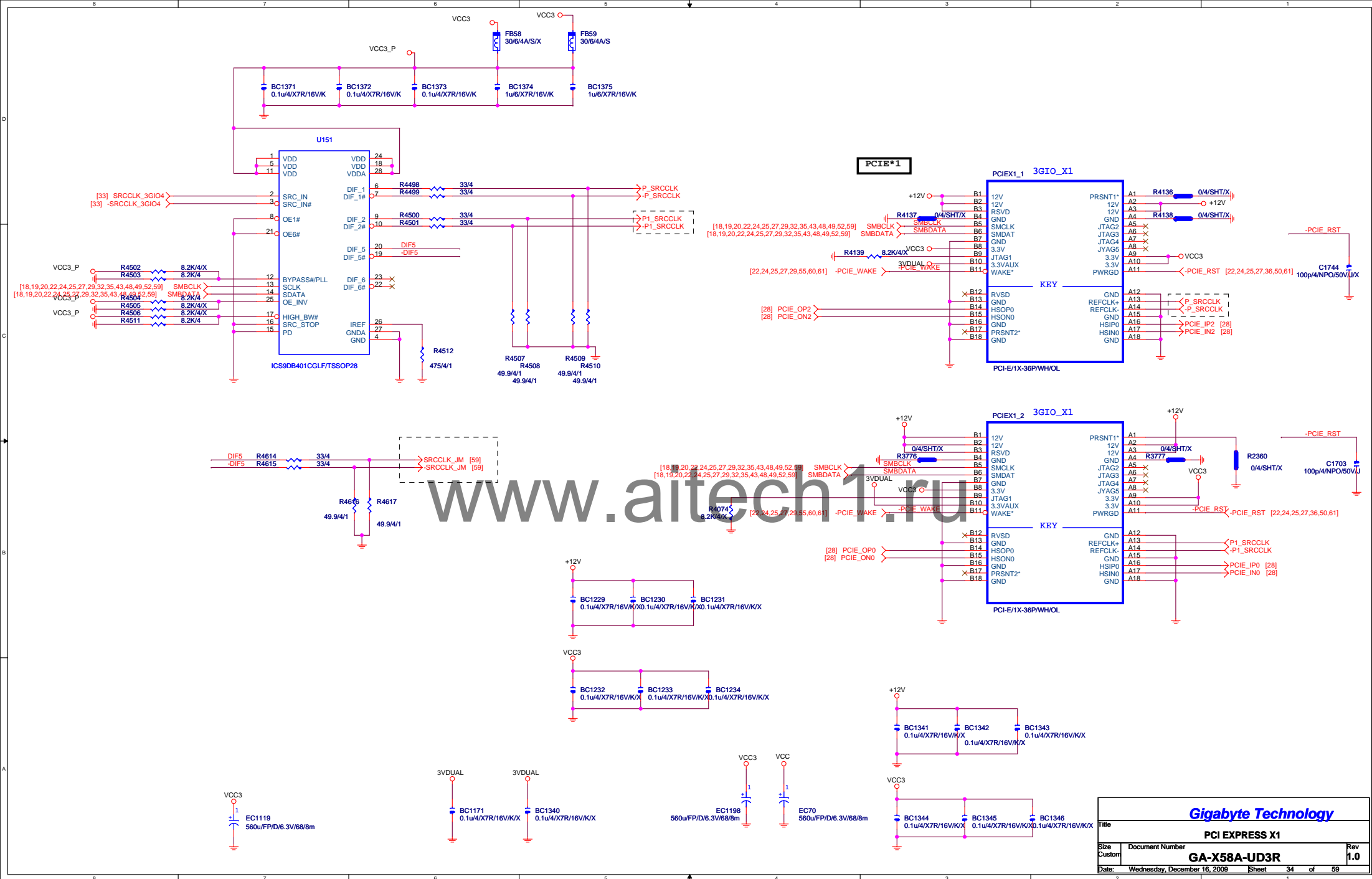
SEL_48= 1, 24Mhz from pin10
SEL_48= 0, 48Mhz from pin10

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

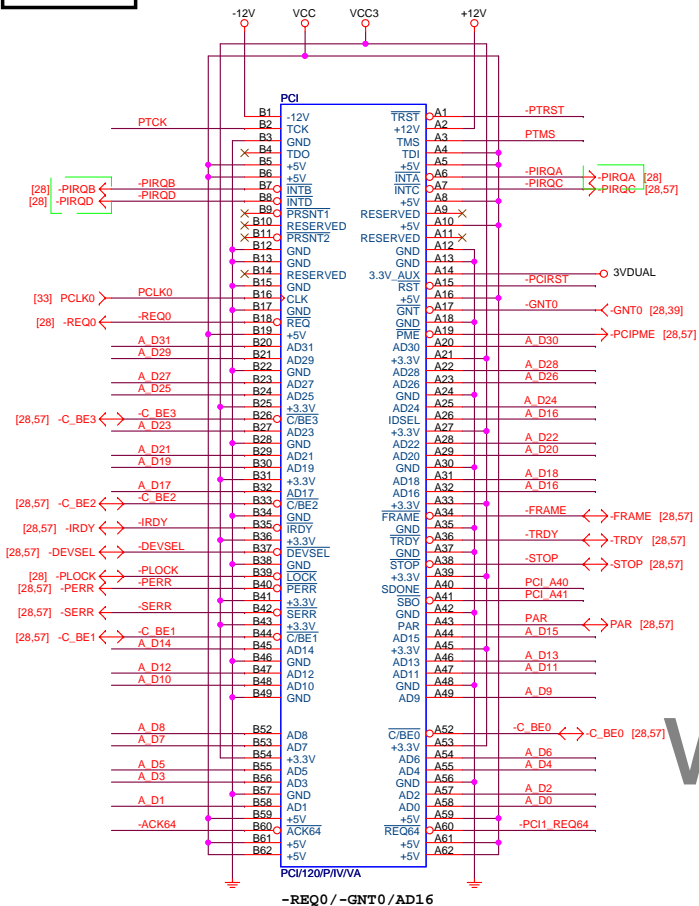


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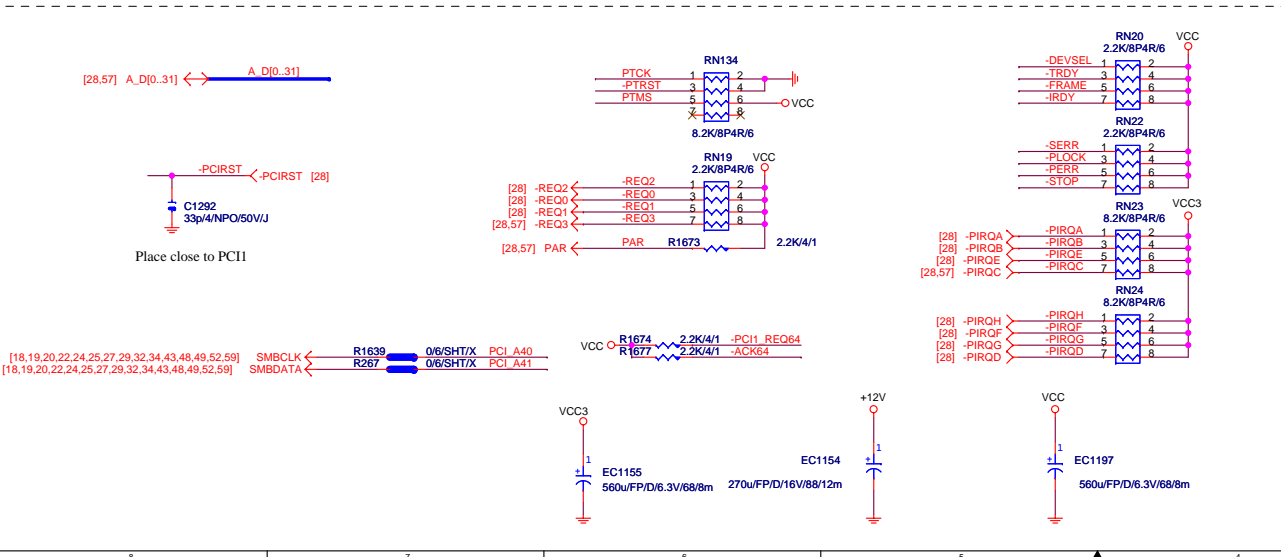
Title			IC9LPRS914
Size			GA-X58A-UD3R
Date			Wednesday, December 16, 2009
Sheet			33 of 59
Rev			1.0

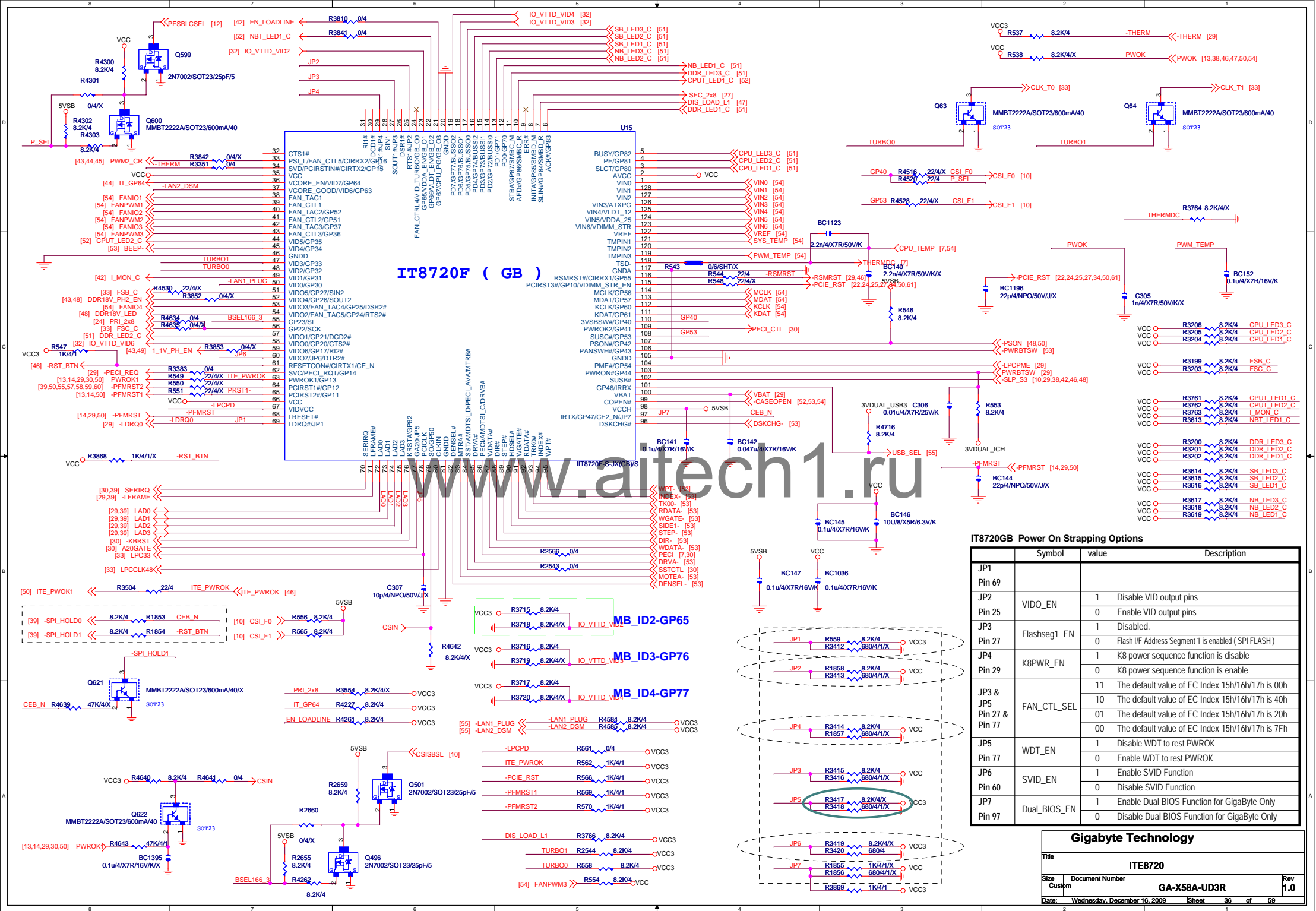


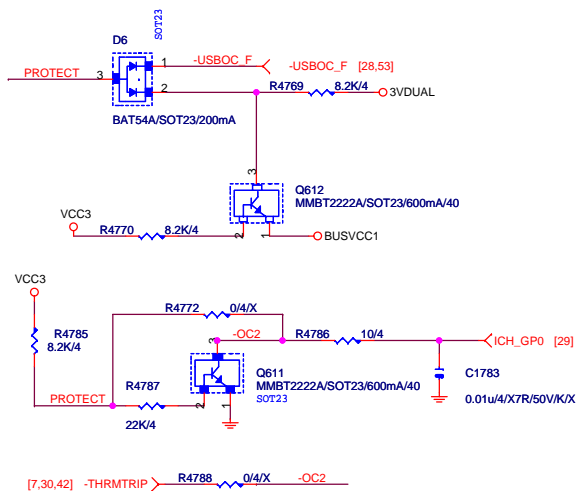
PCI1,2 SLOT



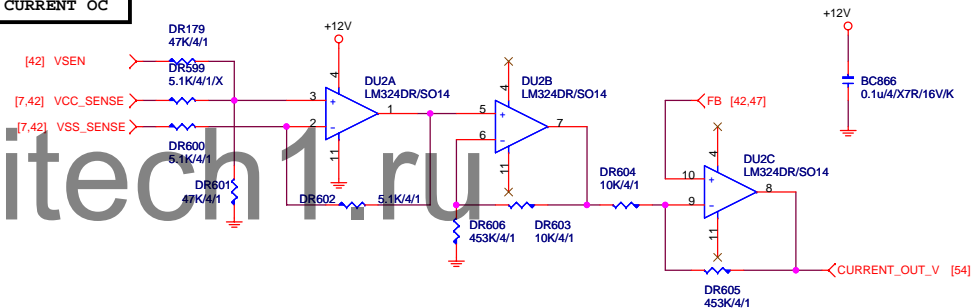
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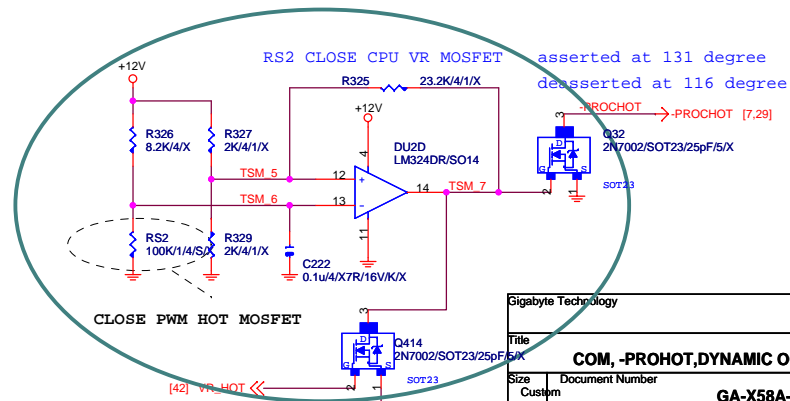
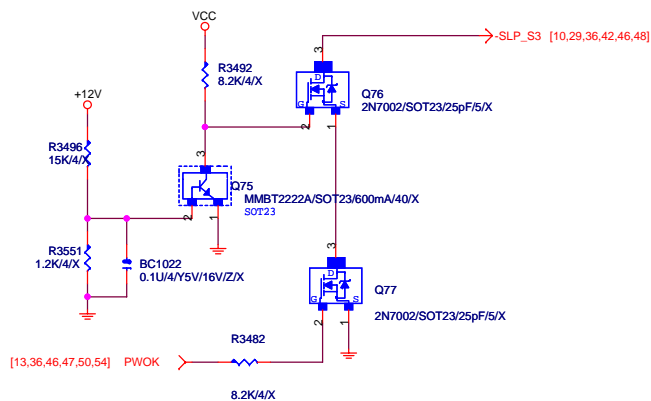




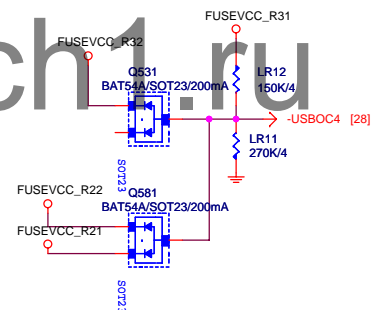
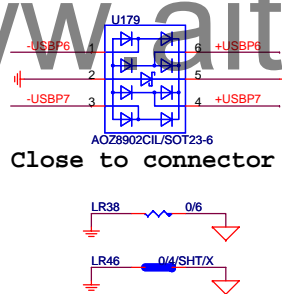
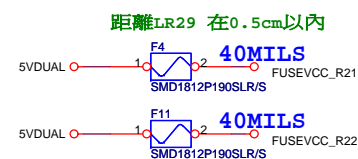
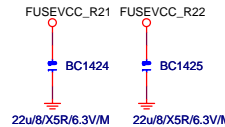
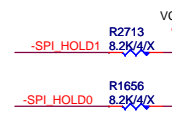
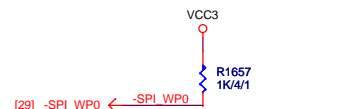
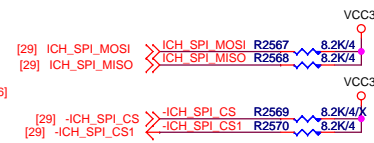
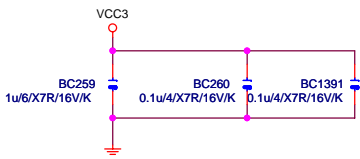
DYNAMIC CURRENT OC



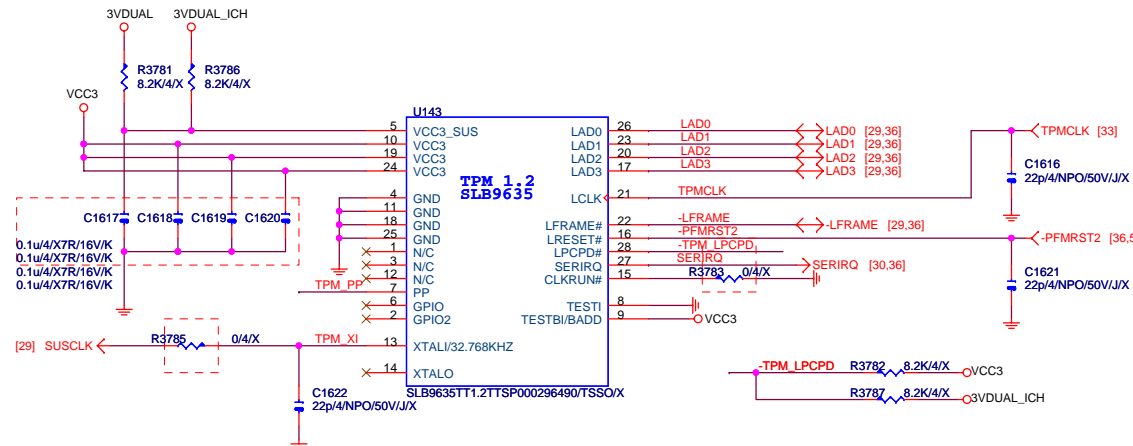
-PROHOT



Gigabyte Technology			
Title	COM, -PROHOT,DYNAMIC OC +12V保護線路		
Size	Document Number	Rev	
Custom	GA-X58A-UD3R	1.0	
Date:	Wednesday, December 16, 2009	Sheet	37 of 59



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



- 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)

<i>Gigabyte Technology</i>			
Title		DUAL BIOS TPM	
Size Custom	Document Number	GA-X58A-UD3R	Rev 1.0
Date:	Wednesday, December 16, 2009	Sheet	38 of 59

[41] CEN ←

[41] LFE ←

[41] S_SURR_L ←

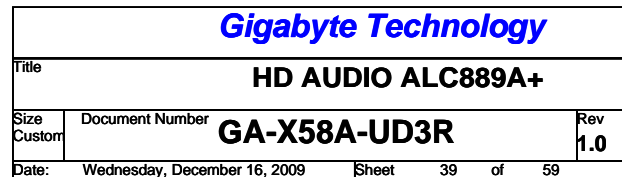
[41] S_SURR_R ←

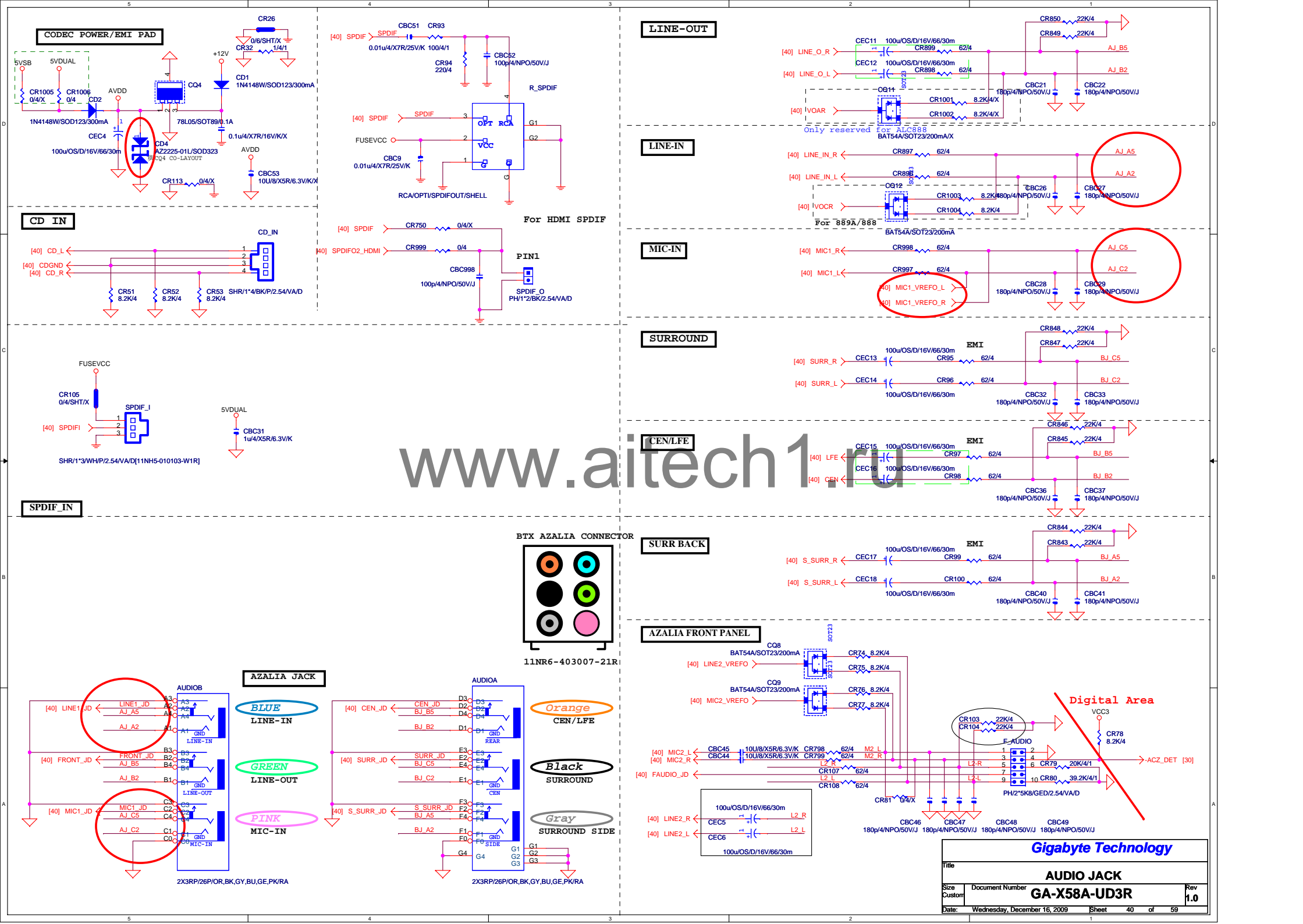
[41] SPDIFI ←

CBC50
470p/4T1R50V/K

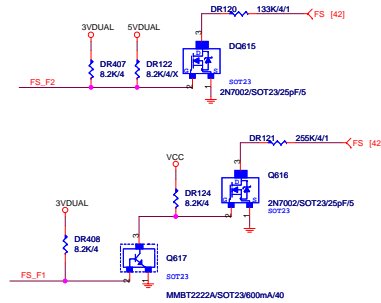
CBC999
100p/4T1R50V/K

[41] SPDIF ←

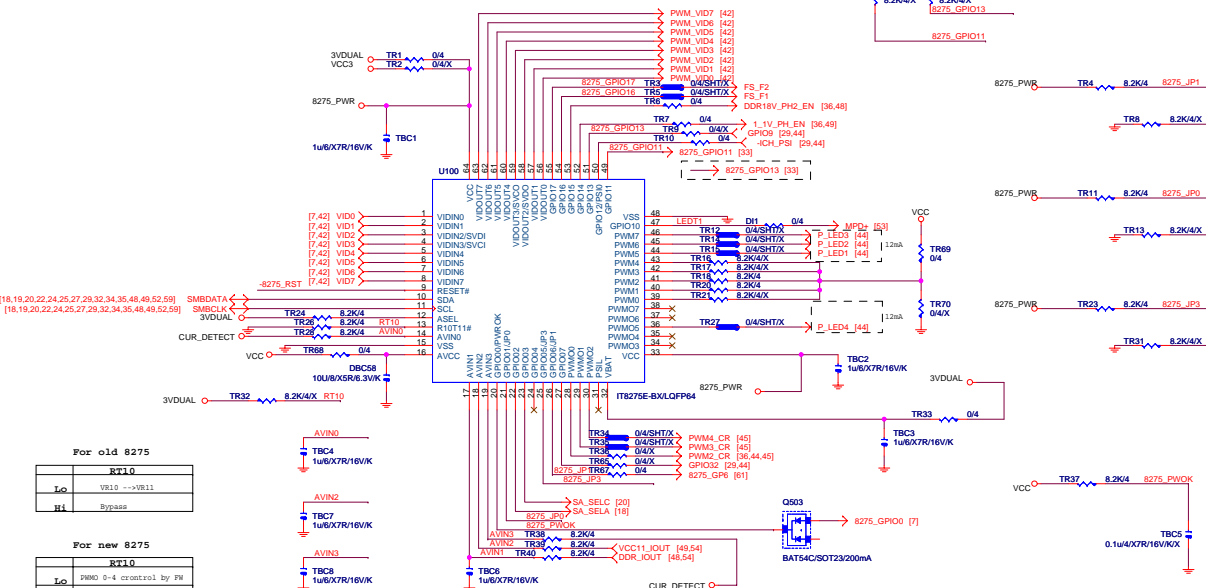
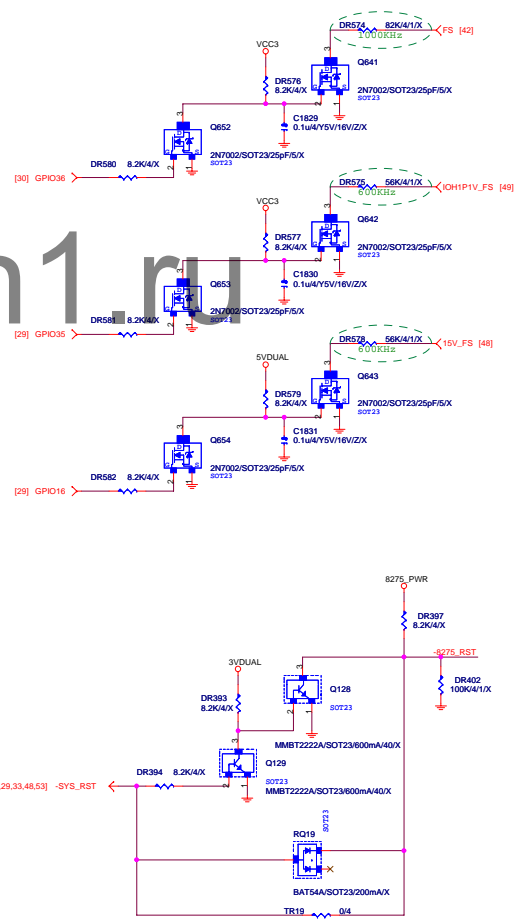
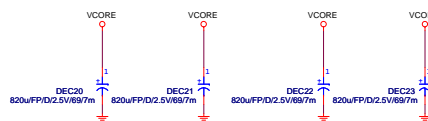
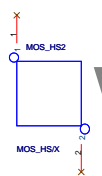
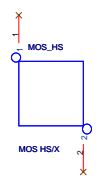




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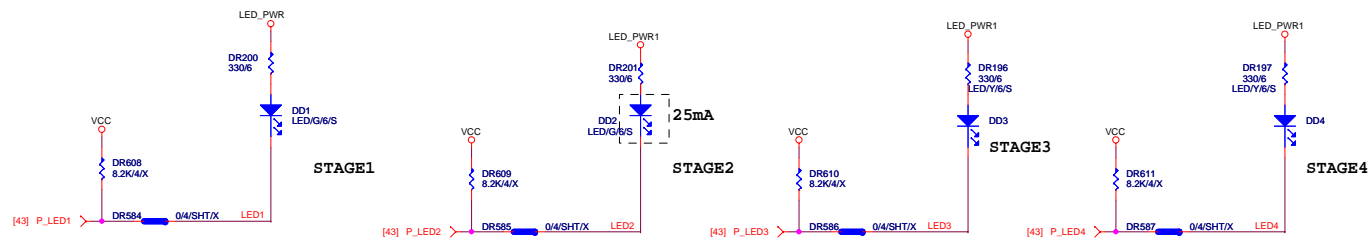
PWM FREQUENCY (400K-1MHz)			
	IT8275 GP17	IT8275 GP16	PCH GP36
400K	L	X	X
500K	L	L	X
600K	X	X	X
700K	X	L	X
1MHz	X	L	L



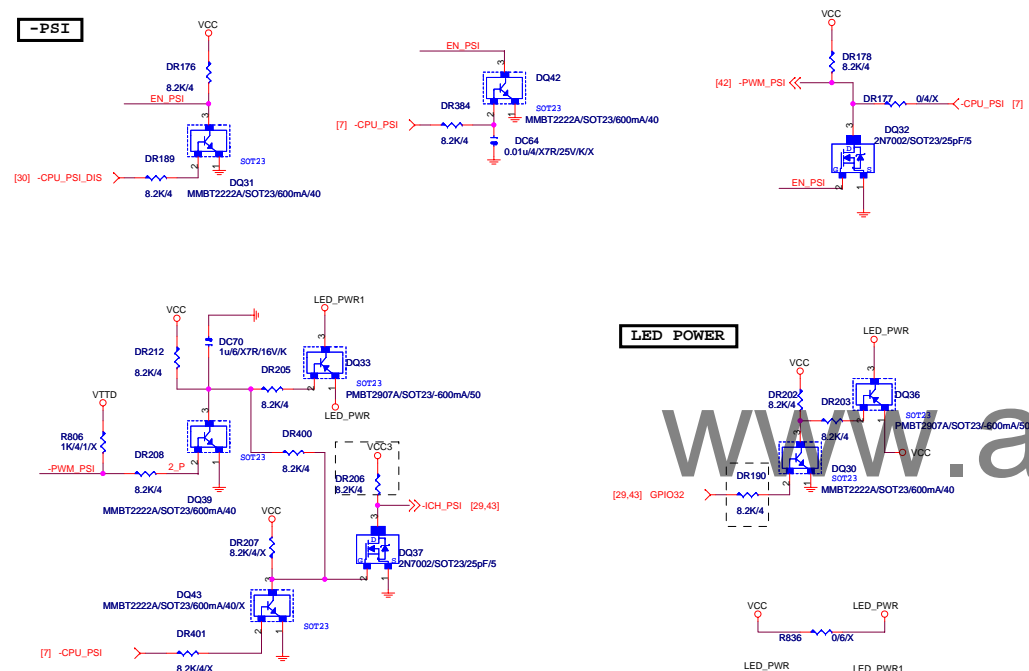
For old 8275	
	RT10
Lo	VR10 ---VR11
VR4	Runacc

For new 8275	
RT10	
Lo	PWM0 0-4 control by FW
Hi	PWM0-4 bypass to PWM00-4

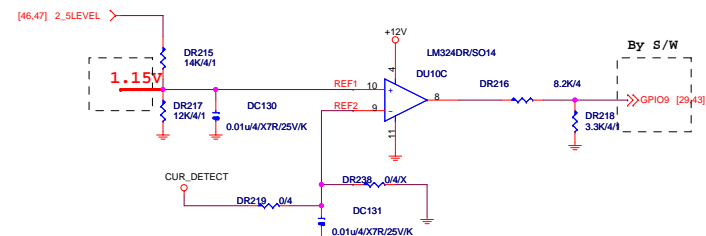
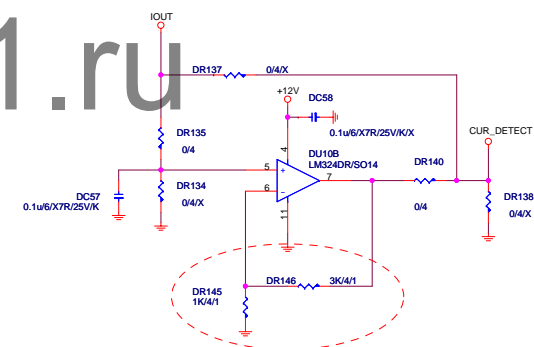
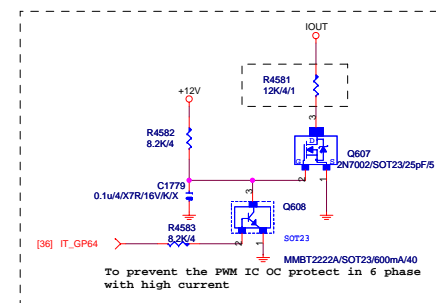
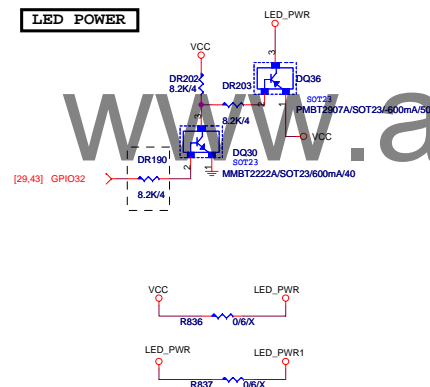
PHASE LED



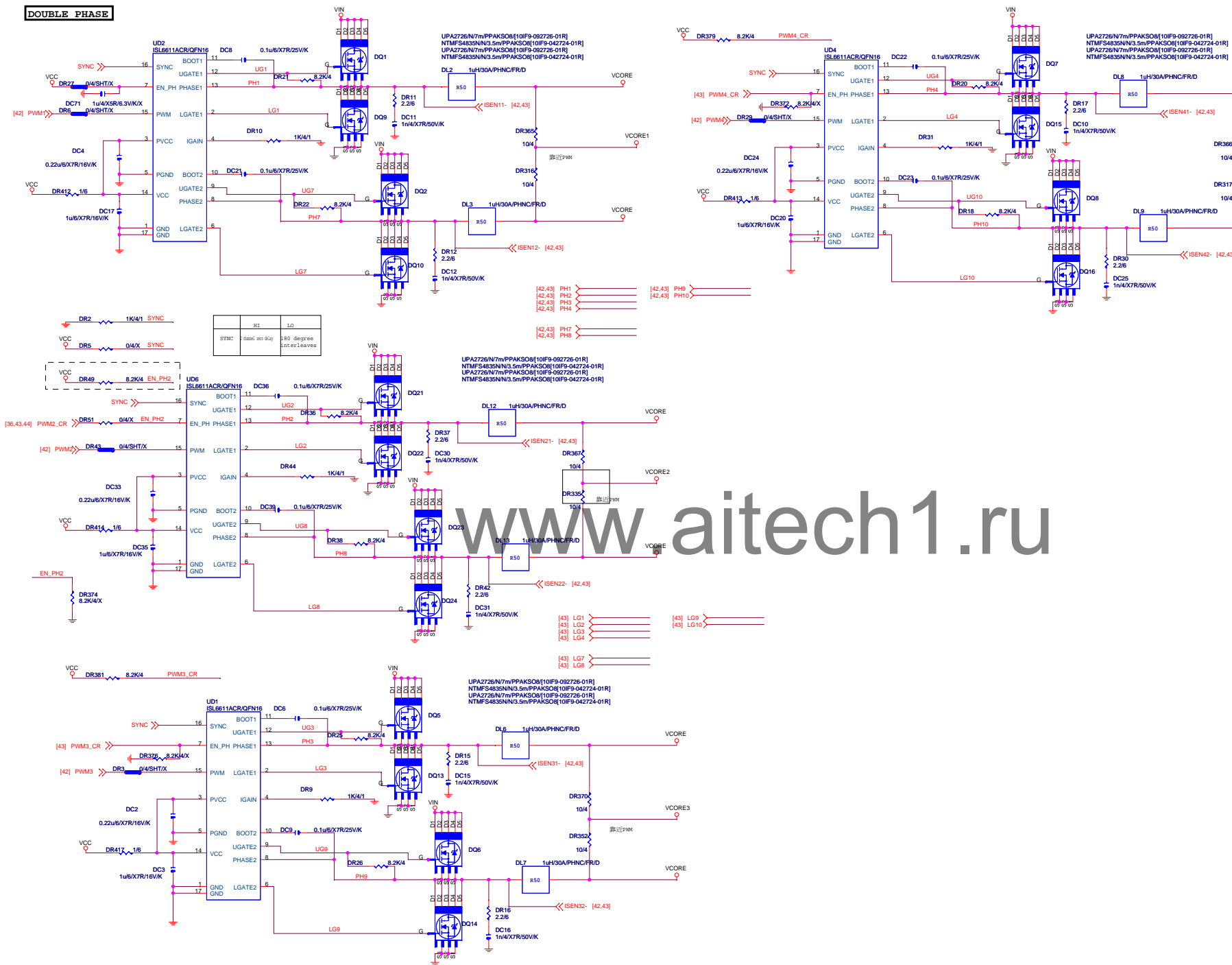
-PSI



LED POWER

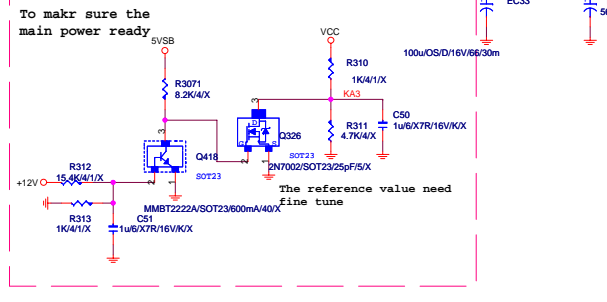
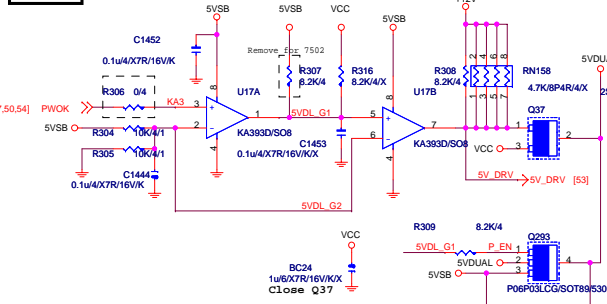


DOUBLE PHASE

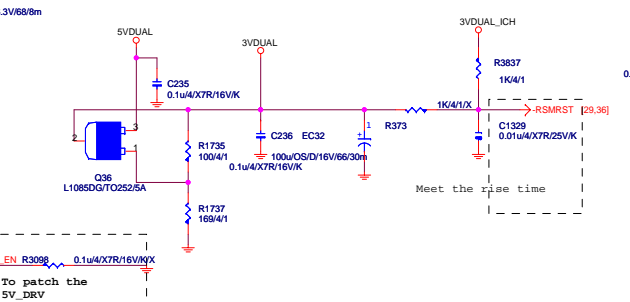
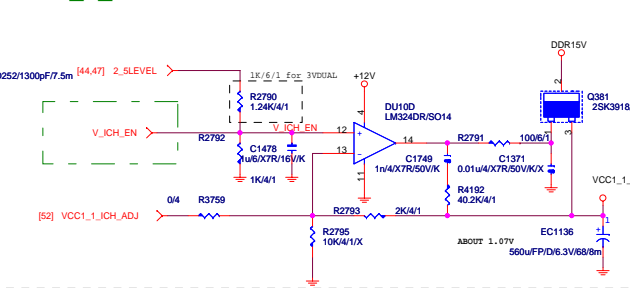


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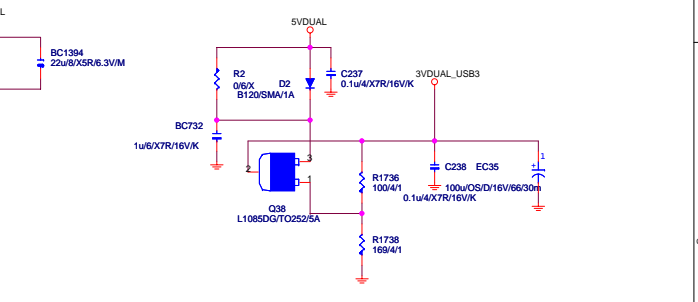
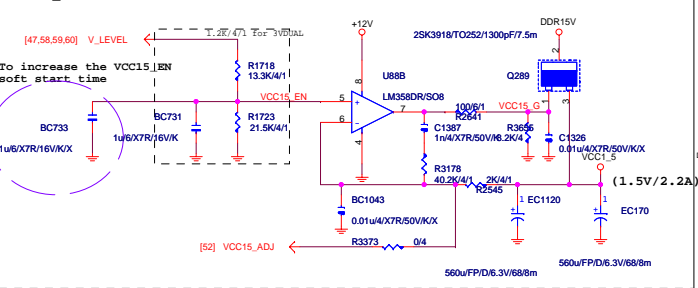
5VDUAL



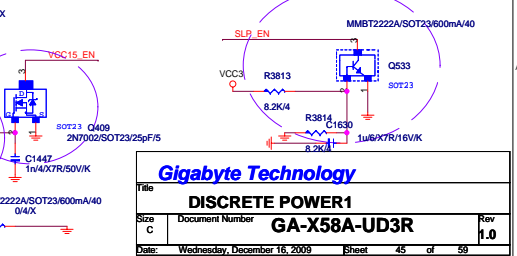
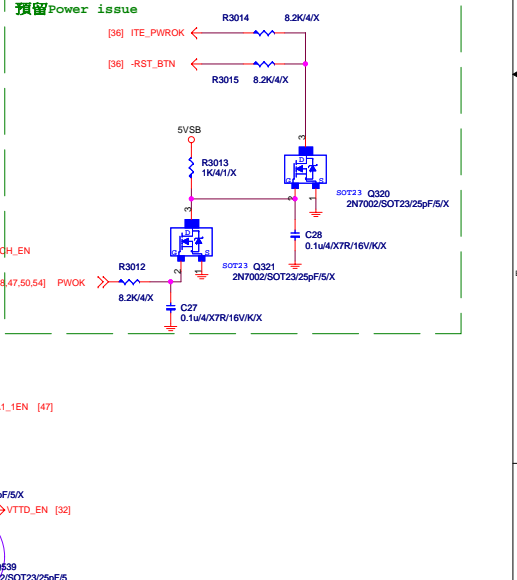
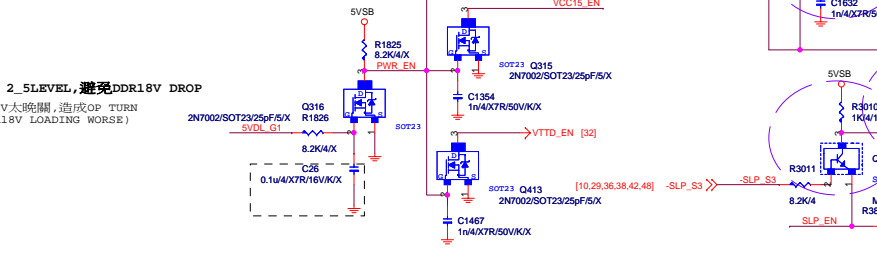
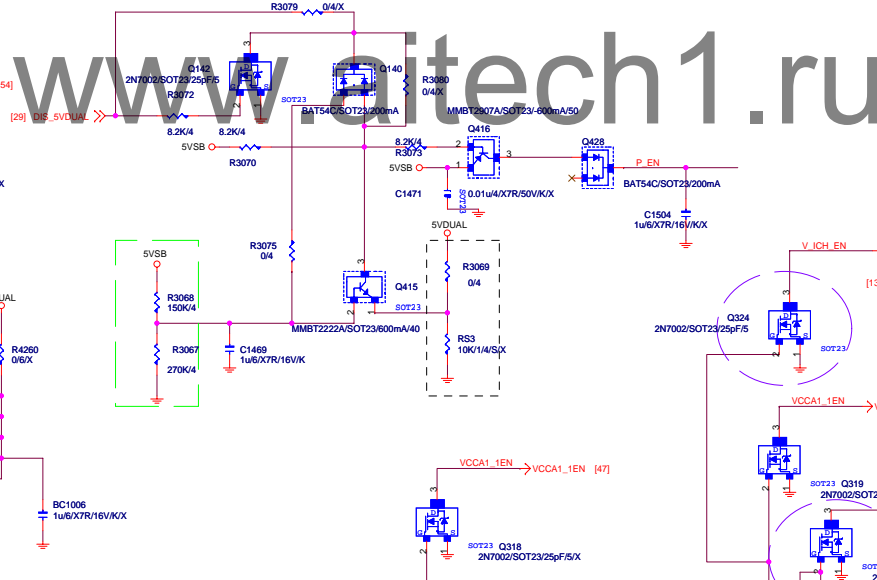
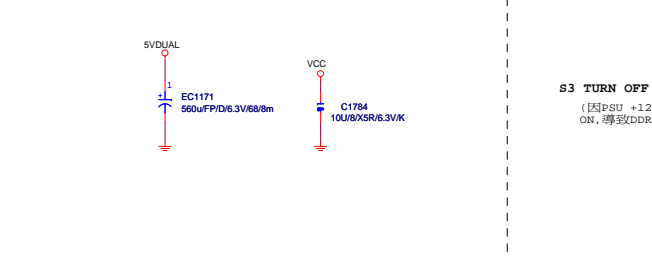
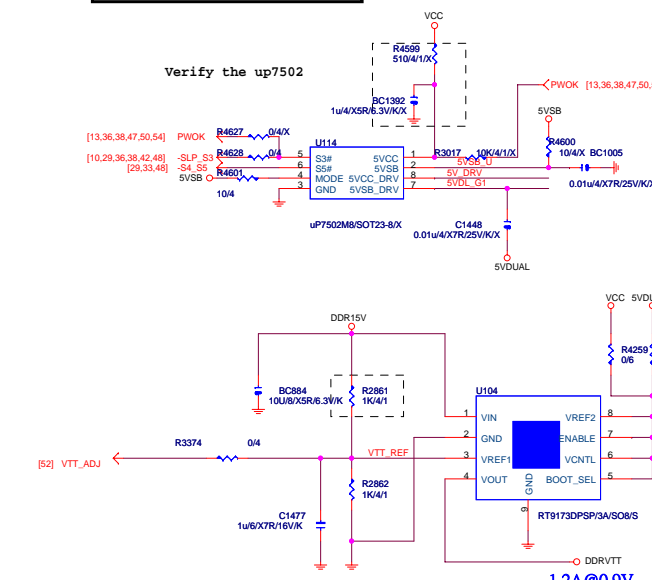
VCC1_1_Ich



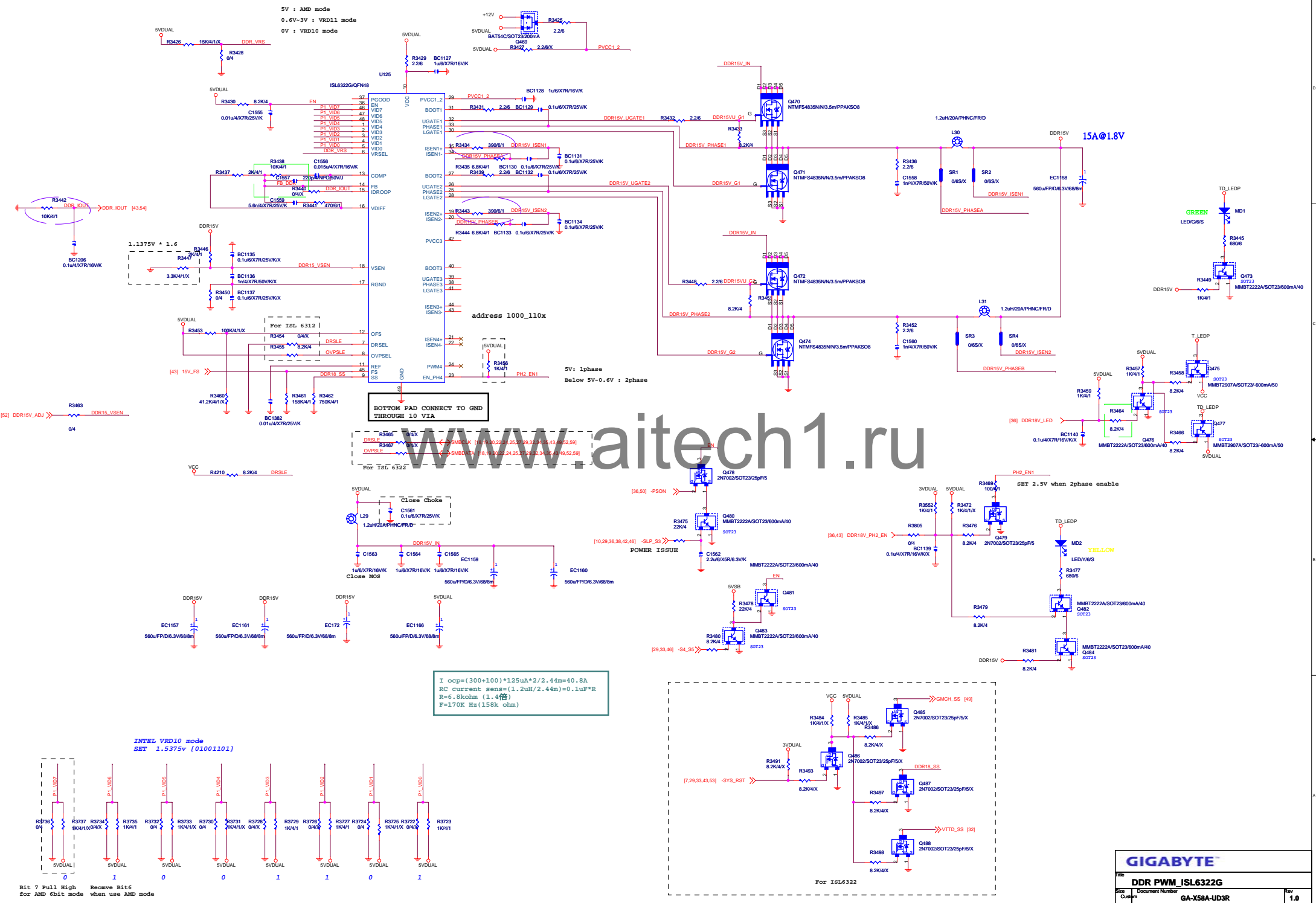
VCC1_5



DDR18V/DDRVT/VCC1_05/VTT_GMCH



S3 TURN OFF 2_5LEVEL, 避免DDR18V DROP
(因PSU +12V太晚關, 造成OP TURN ON, 導致DDR18V LOADING WORSE)



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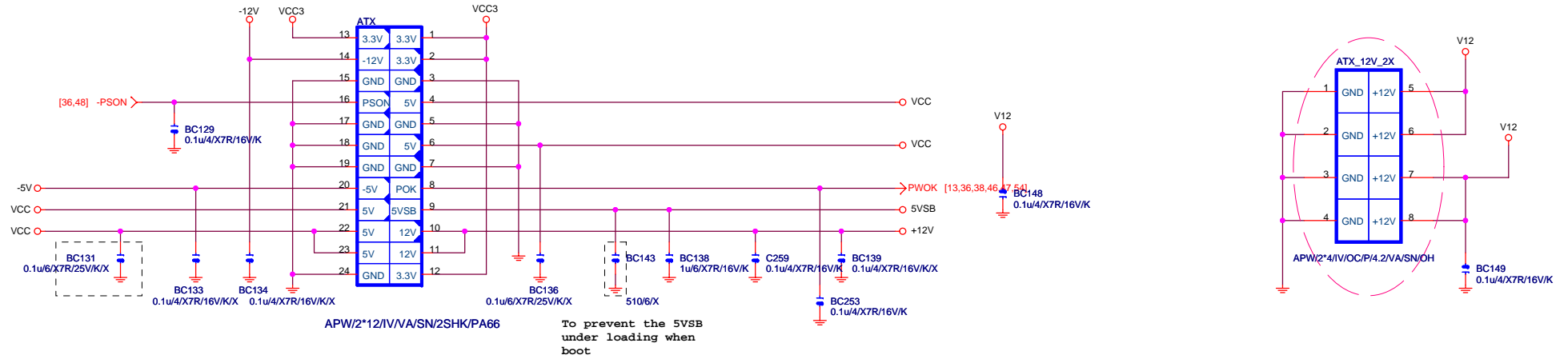
$I_{ocp} = (300+100) \times 125\mu A \times 2 / 2.44m = 40.8A$
 $RC \text{ current sens} = (1.2\mu H / 2.44m) = 0.1\mu s \times R$
 $R = 6.8k\Omega \text{ (1.4倍)}$
 $F = 170K \text{ Hz (158k ohm)}$

INTEL VRD10 mode
SET 1.5375V [01001101]

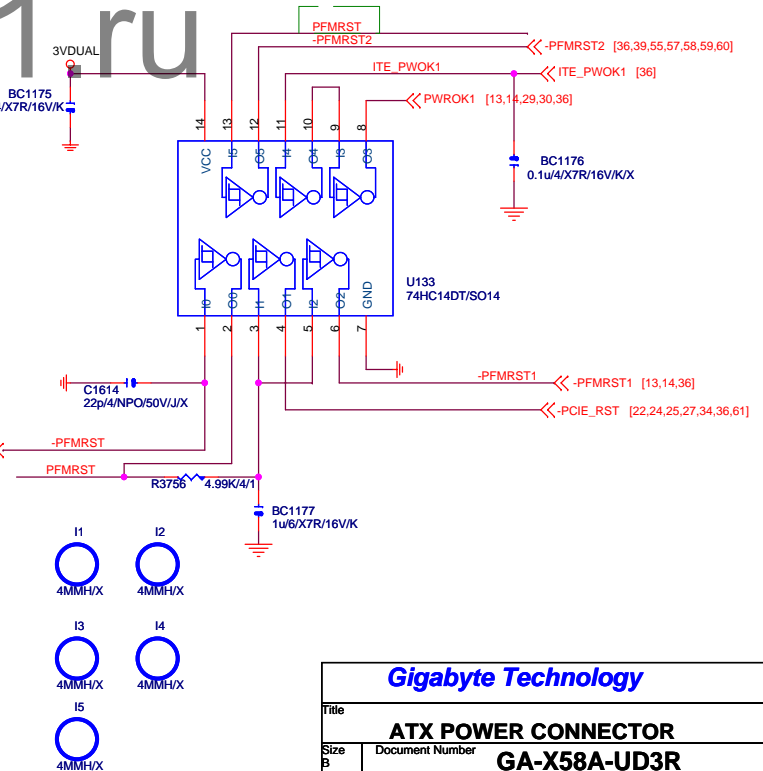
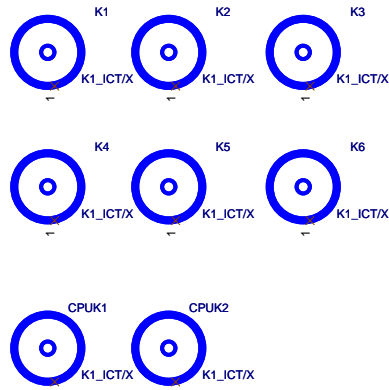
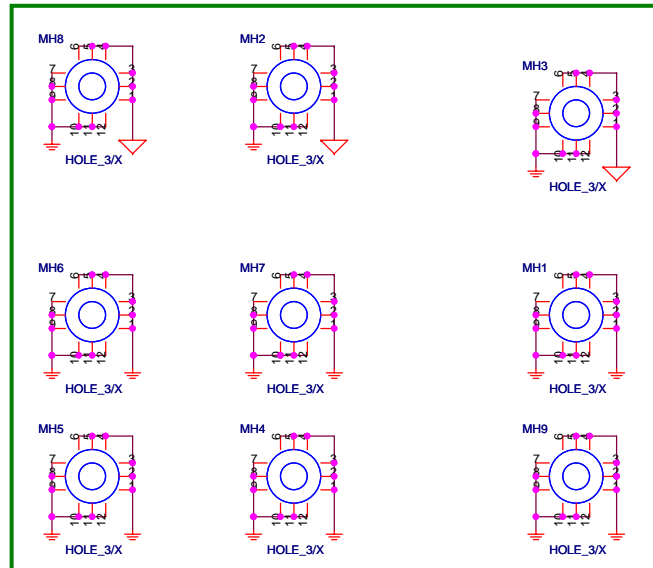
Bit 7 Pull High for AMD 6bit mode
Receive Bit6 when use AMD mode



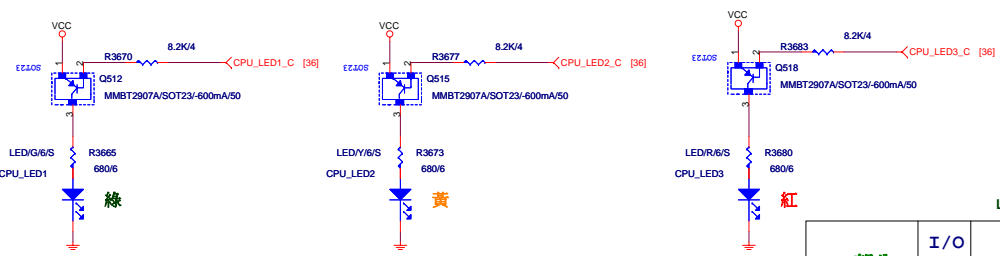
ATX POWER CONNECTOR



PCB 螺絲孔位置 (Footprint不同)



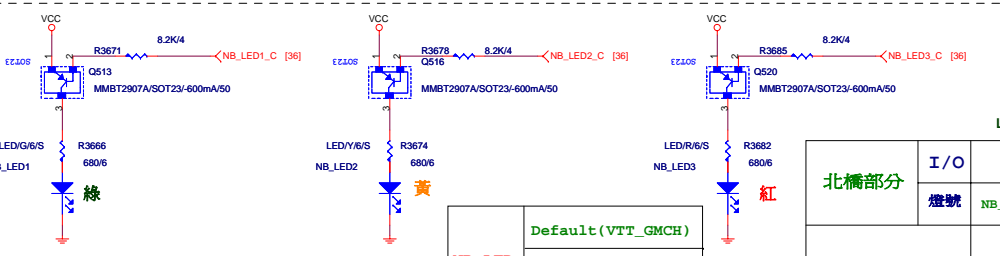
Gigabyte Technology		
Title		
ATX POWER CONNECTOR		
Size	Document Number	Rev
B	GA-X58A-UD3R	1.0
Date:	Wednesday, December 16, 2009	Sheet 49 of 59



CPU Voltage

CPU LED 選擇	Default(Vcore)
	CPU PLL
	VTTD

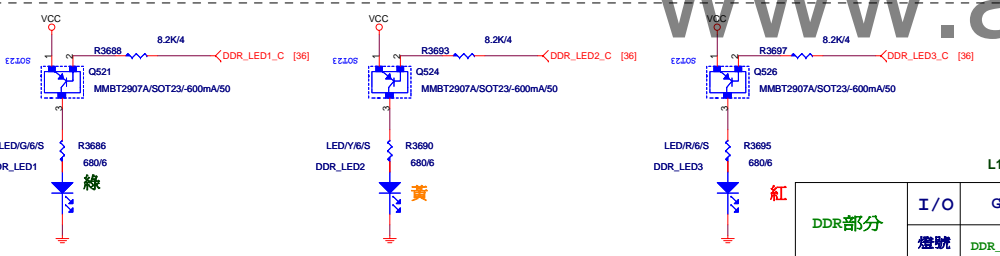
CPU部分	I/O	GP80	GP81	GP82
	燈號	CPU_LED1_C	CPU_LED1_C	CPU_LED1_C
	CPU Vcore電壓	1.45V~1.54372V	1.55V~1.59375V	1.6V以上
VTTD		1.25~1.4V	1.42~1.55V	1.56V以上



IOH Voltage

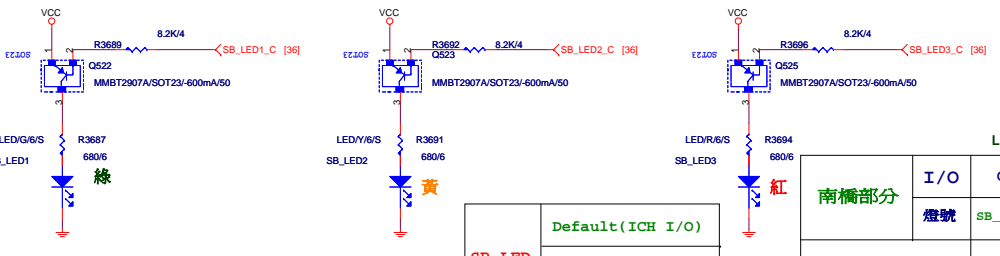
NB LED 選擇	Default(VTT_GMCH)
	VCC1_1

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 Voltage

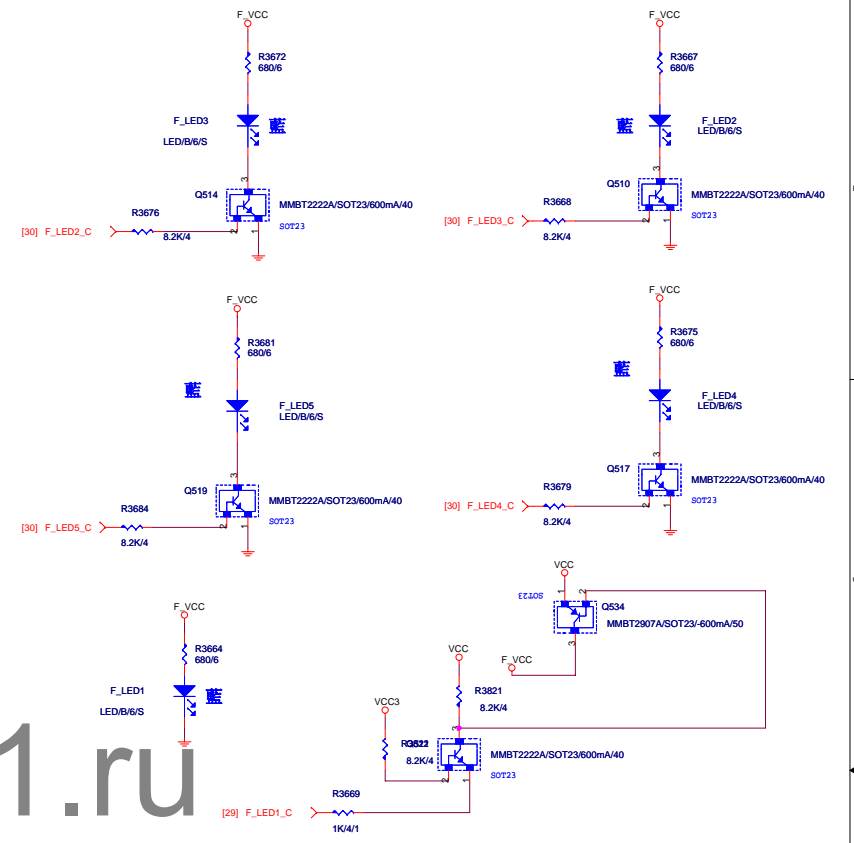
DDR部分	I/O	GP83	GP21	GP87
	燈號	DDR_LED1_C	DDR_LED2_C	DDR_LED3_C
	DDR3電壓	1.55~1.65V	1.68~1.74V	1.76V以上



ICH Voltage

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



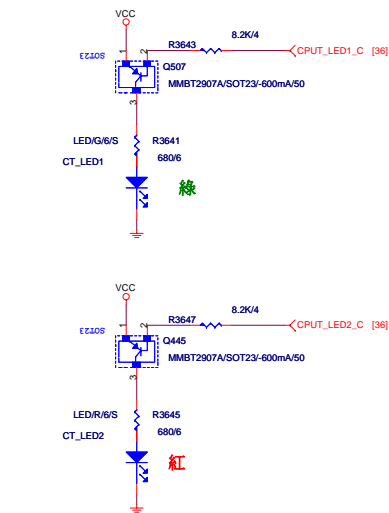
FSB LED	OFF	L1	L2	L3	L4	L5
GPIO		ICH GP57	ICH GP56	ICH GP22	ICH GP38	ICH GP21
CPU 133		145~	155~	165~	175~	185~

燈號表示方式

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

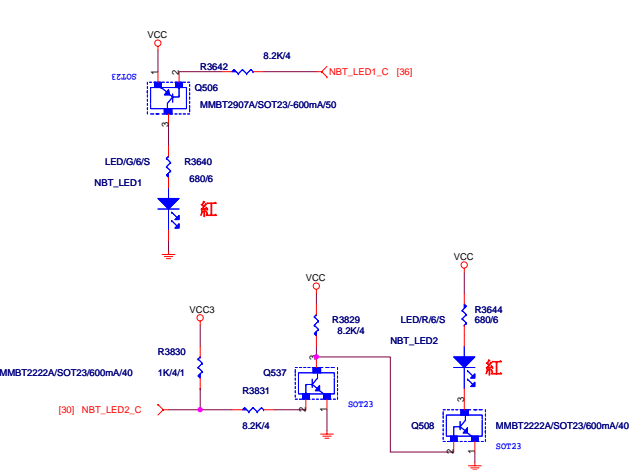
CPU溫度顯示

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



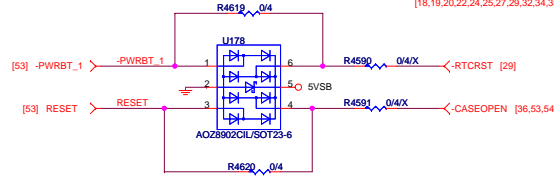
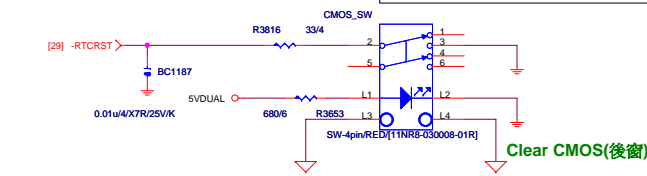
北橋(MCH)溫度顯示

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



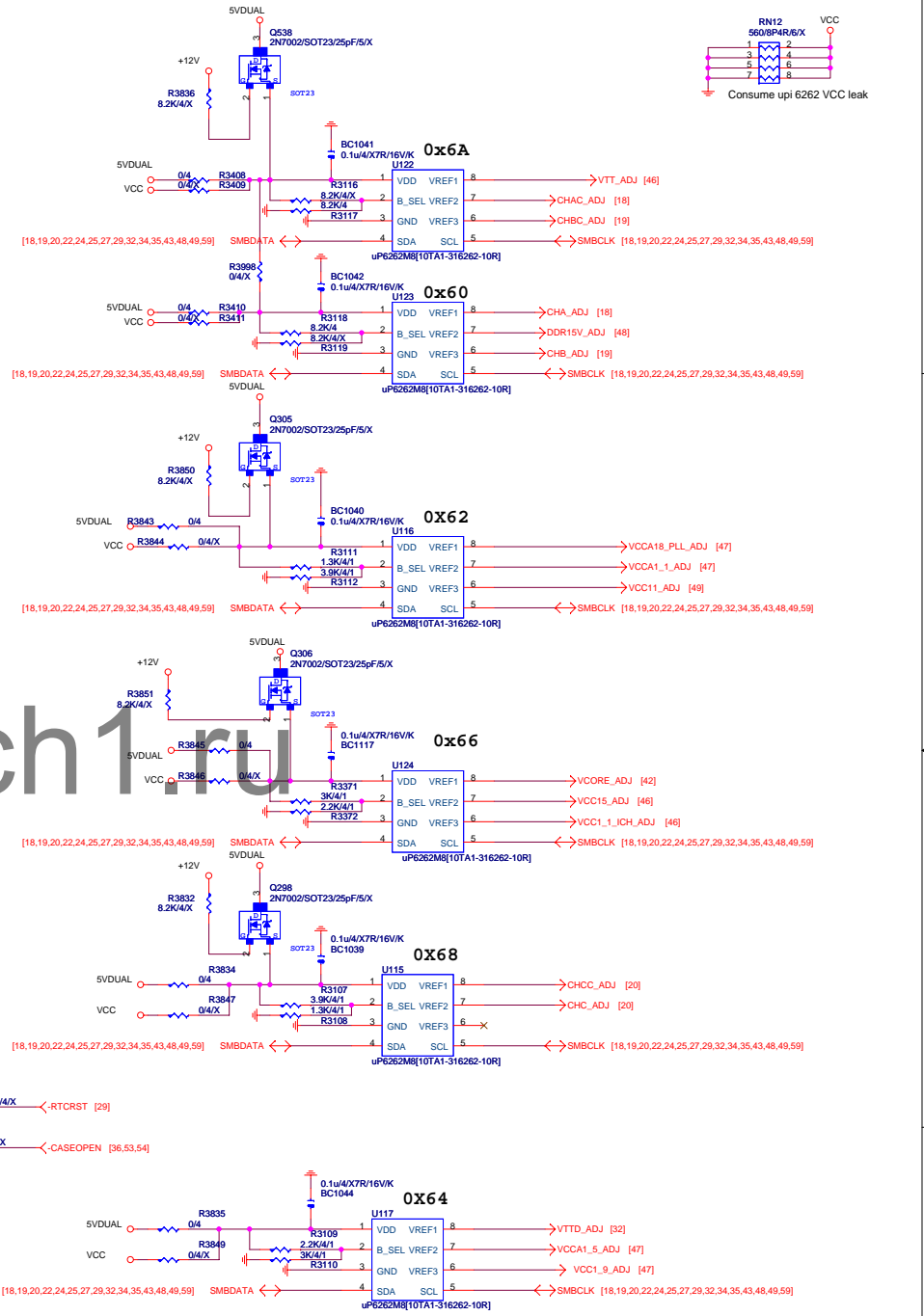
Switch 部分

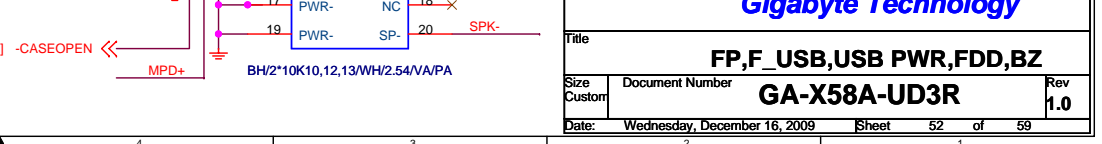
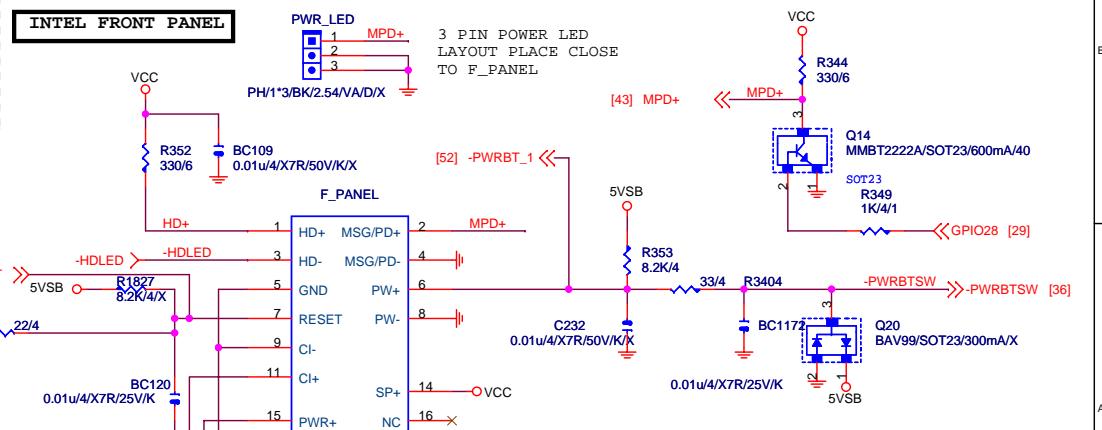
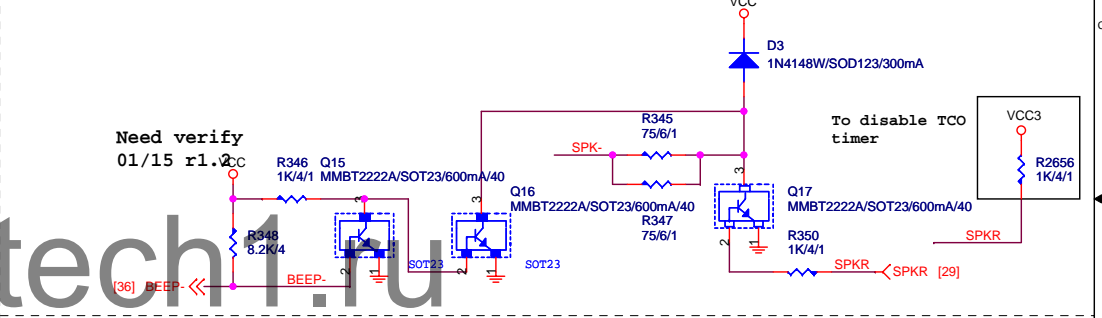
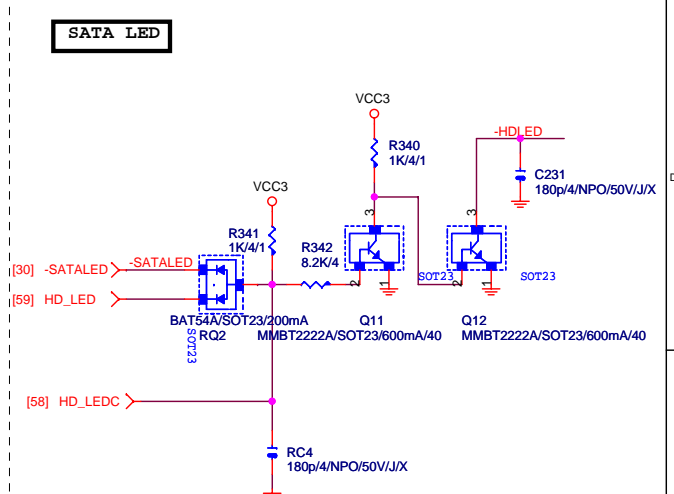
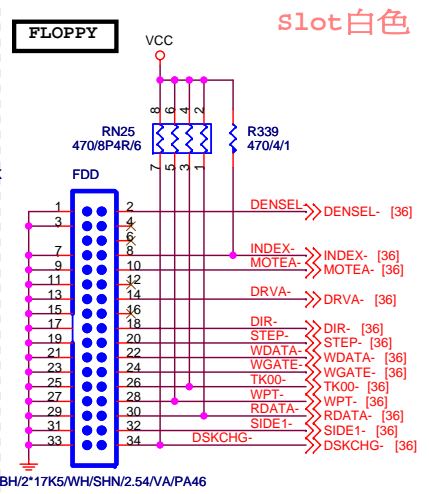
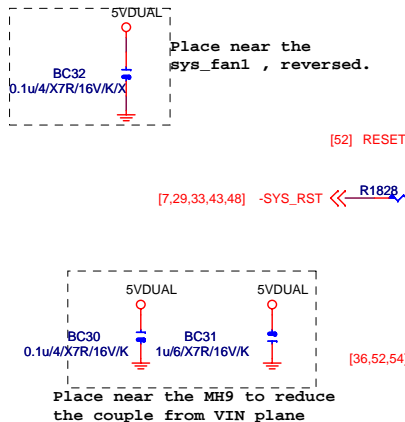
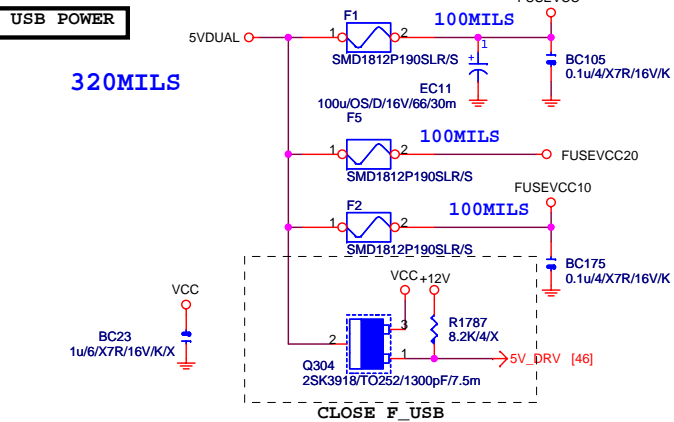
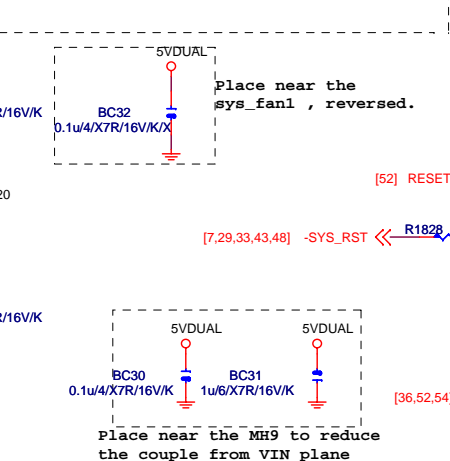
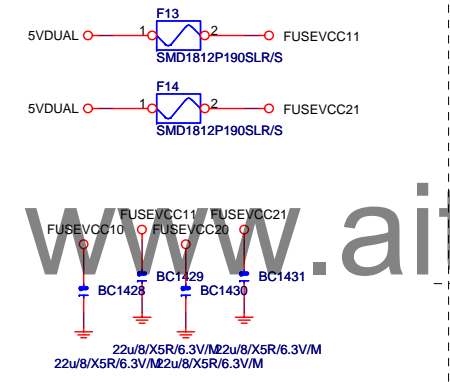
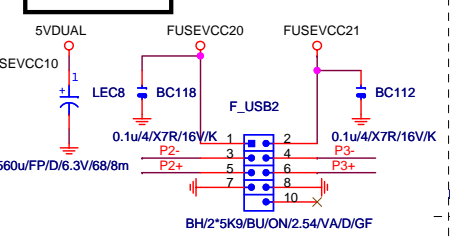
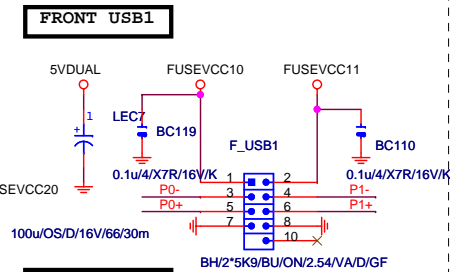
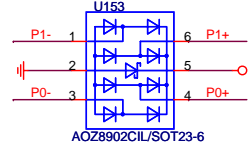
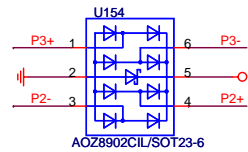
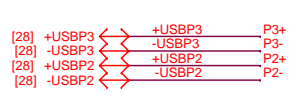
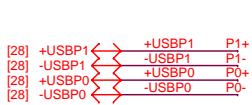
Clear CMOS 90℃料號:11NR8-030008-01R.
Clear CMOS 180℃料號:11NH7-060001-11R.
Power 180℃料號:11NH7-030001-21R.
Reset 180℃料號:11NH7-060001-51R.



UPI6262 Table

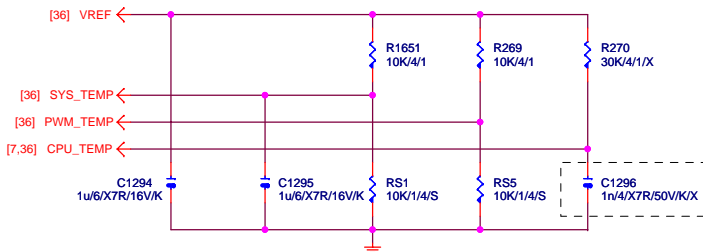
up6262	0X60-U123 (5VDUAL)	0X62-U116 (5VDUAL)	0X6A-U122 (5VDUAL)	0X66-U124 (5VDUAL)	0X68-U115 (5VDUAL)	0X64-U117 (5VDUAL)
VREF1	CHA_ADJ	VCCA18_PLL_ADJ	VTT_ADJ	VCORE_ADJ	CHCC_ADJ	VTTD_ADJ
VREF2	DDR18V_ADJ	VCCA1_1_ADJ	CHAC_ADJ	VCC15_ADJ	CHC_ADJ	VCC1_1_ICH_ADJ
VREF3	CHB_ADJ	VCC11_ADJ	CHBC_ADJ	VCCA1_5_ADJ	MCH_RAMVREF_ADJ	VCC1_9_ADJ



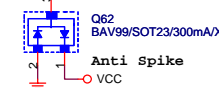
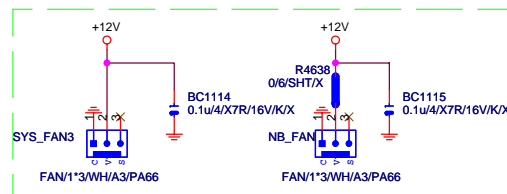
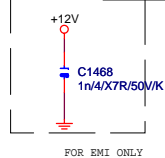


Gigabyte Technology			
Title			
FP,F_USB,USB PWR,FDD,BZ			
Size	Document Number	Rev	
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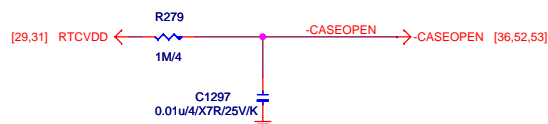
TEMP H/W MONITOR



CPU SMART FAN

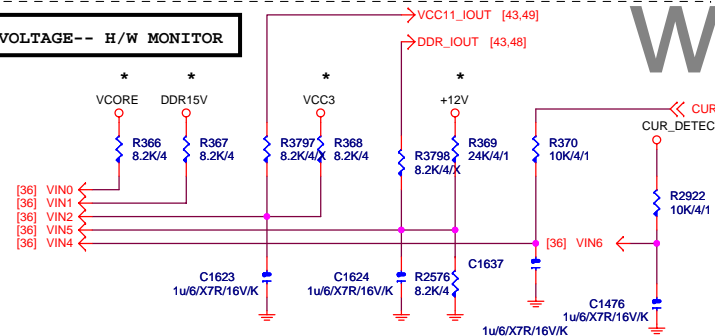


CASE OPEN

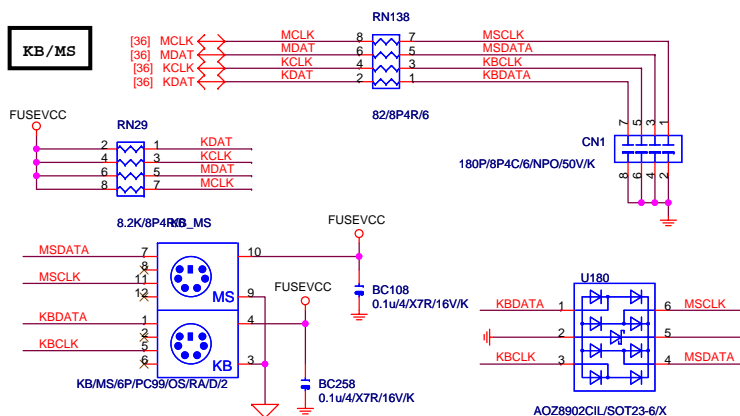


Case Open Circuits

VOLTAGE-- H/W MONITOR

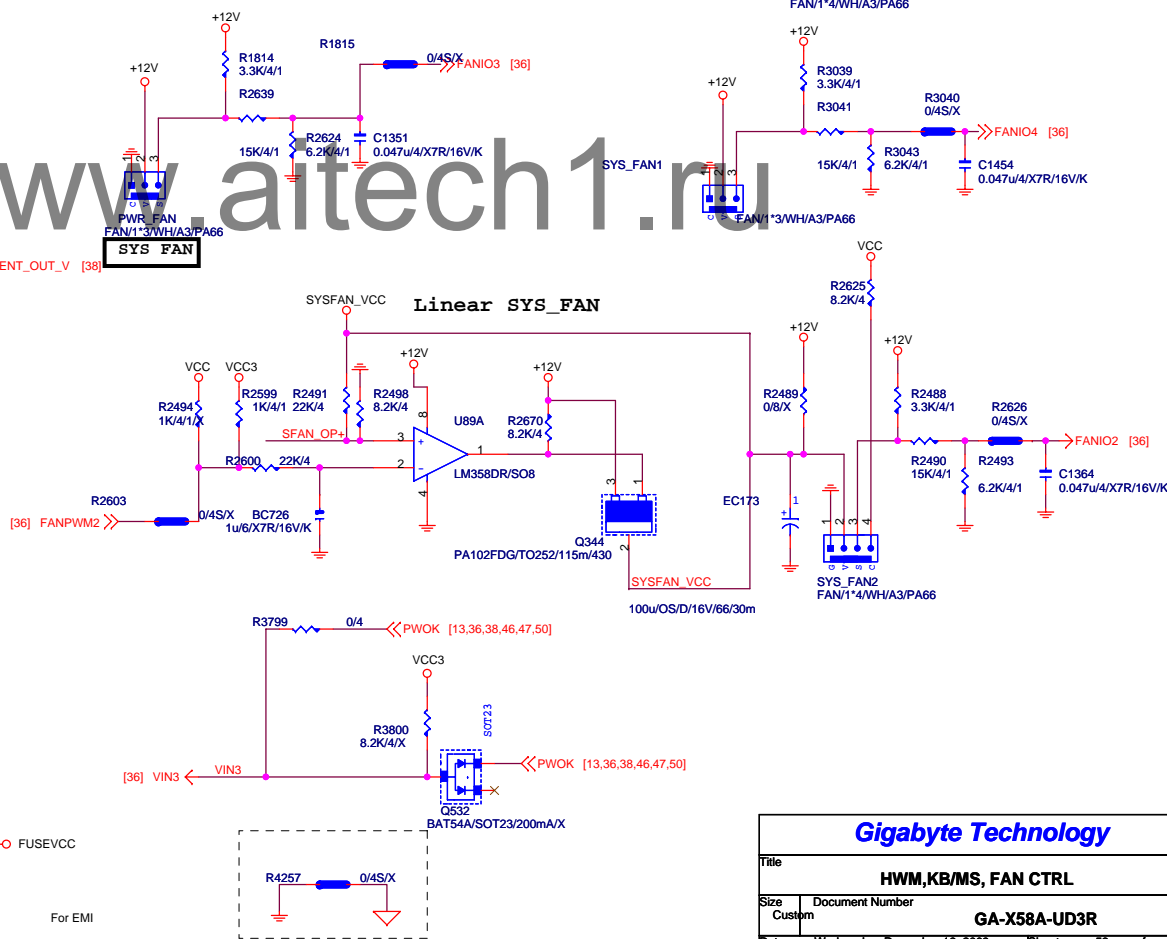


KB/MS



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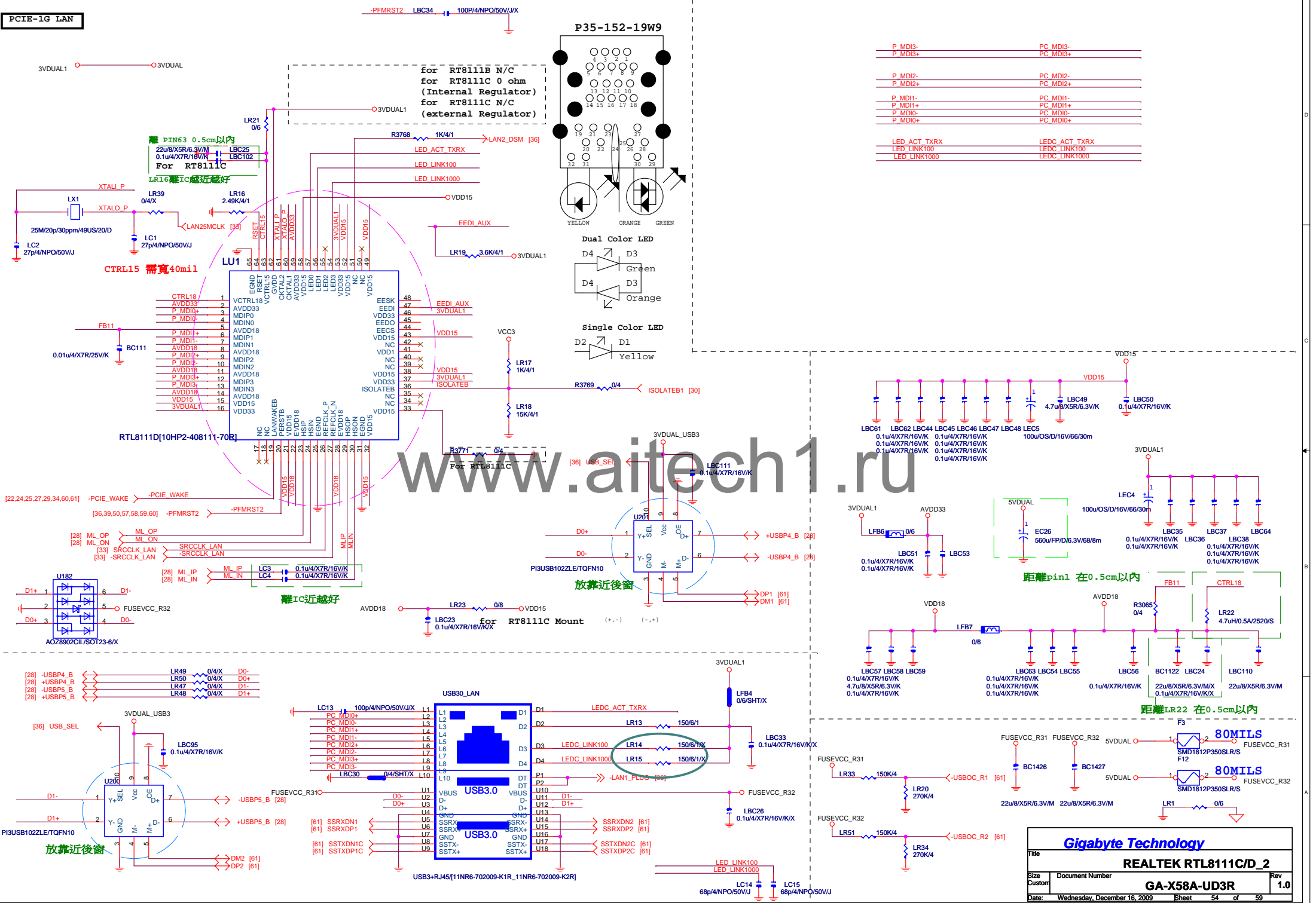
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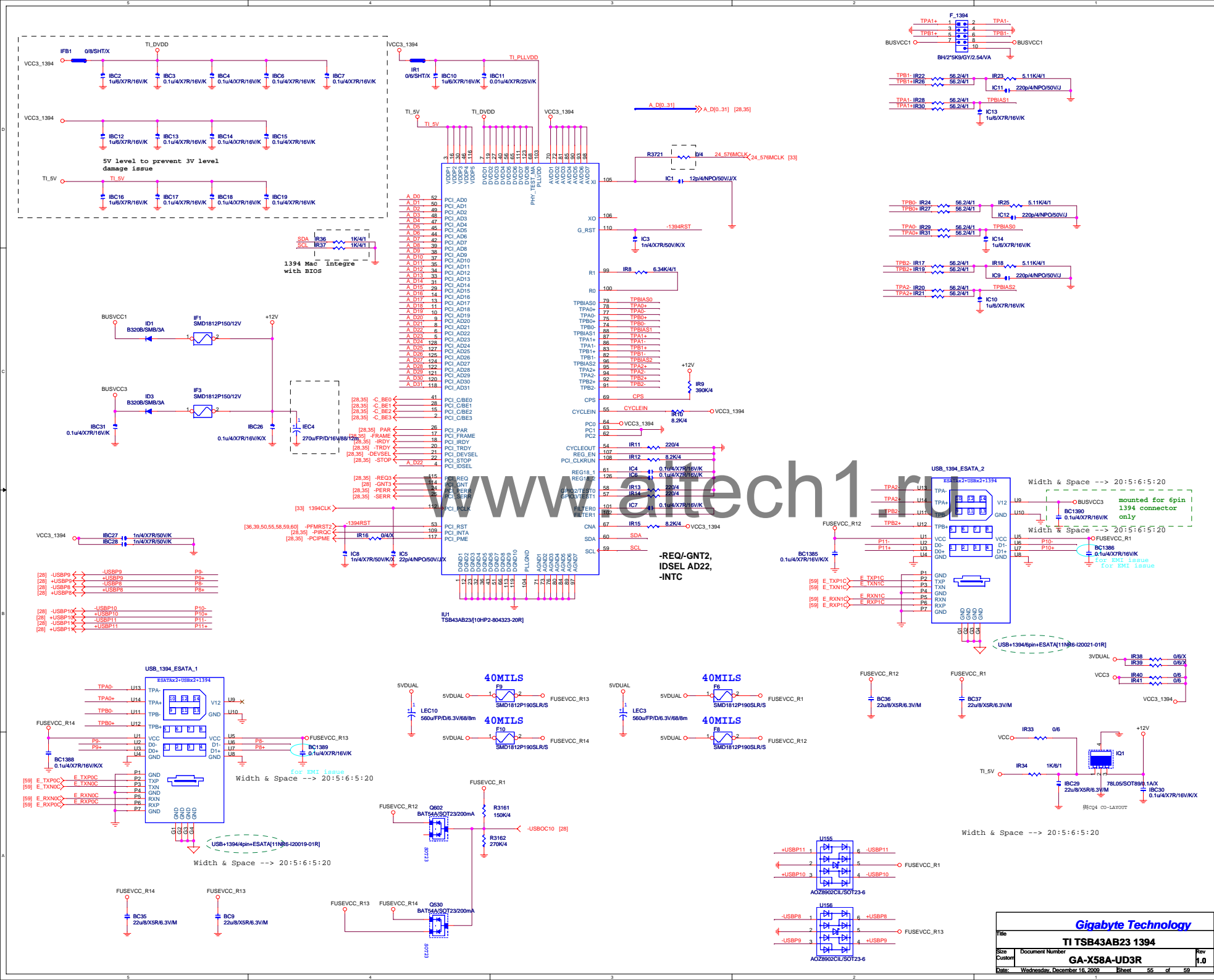


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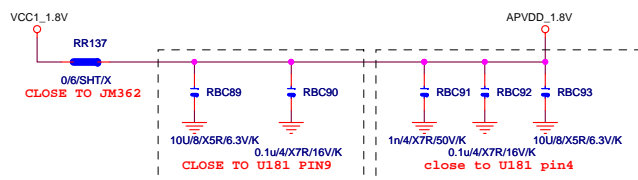
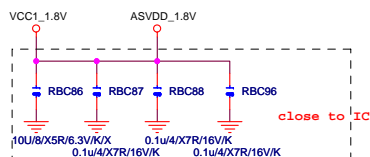
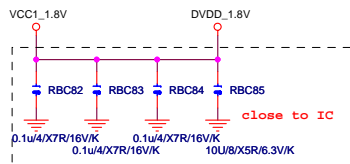
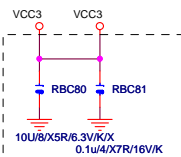
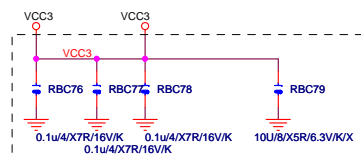
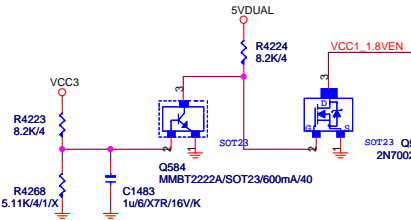
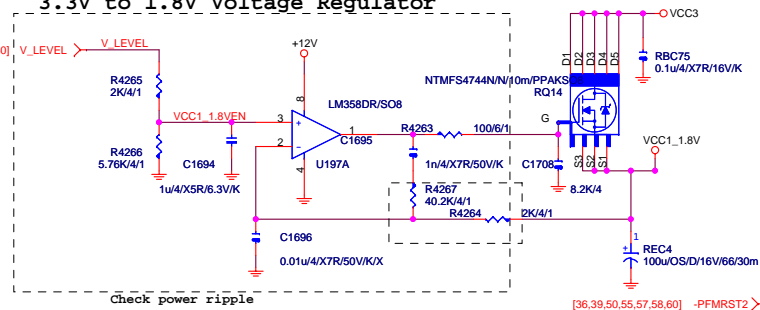
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Size	Document Number	GA-X58A-UD3R	Rev
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PCIE-1G LAN

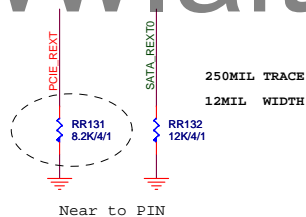
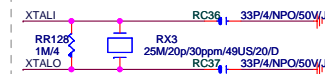




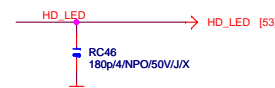
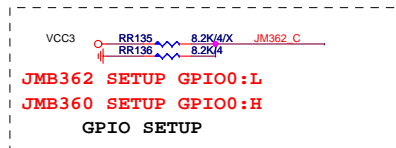
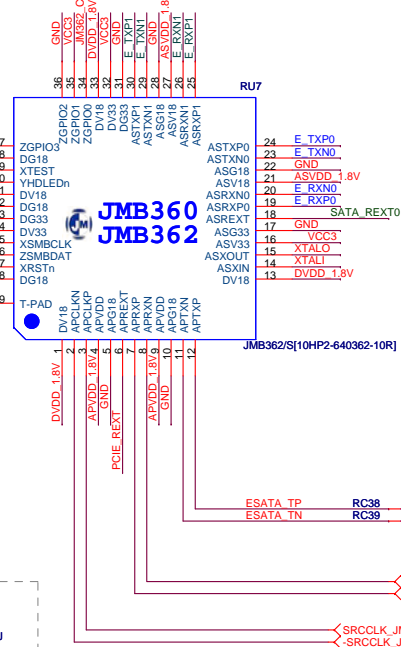
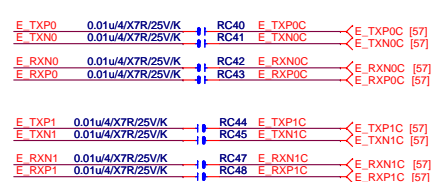
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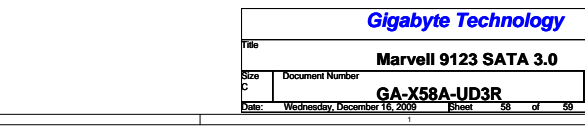
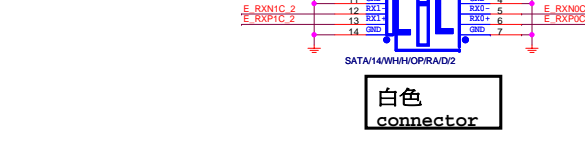
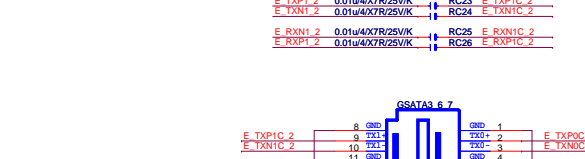
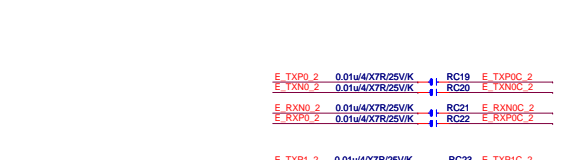
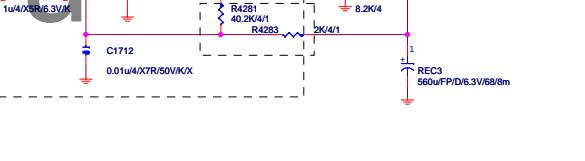
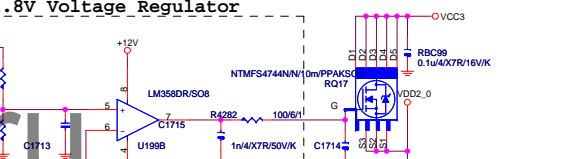
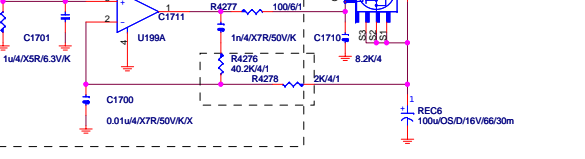
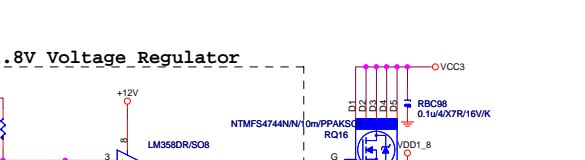
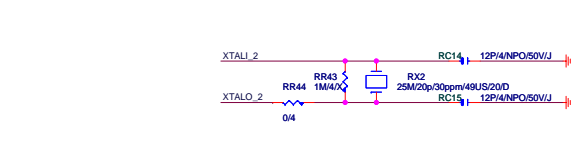
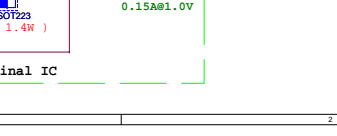
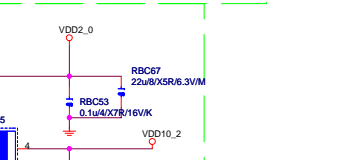
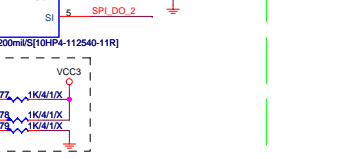
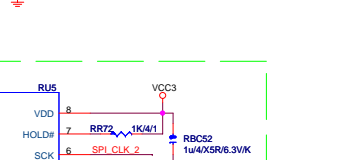
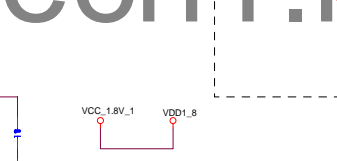
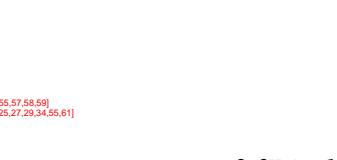
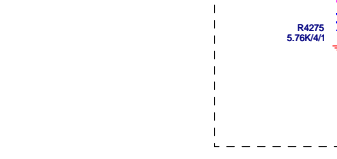
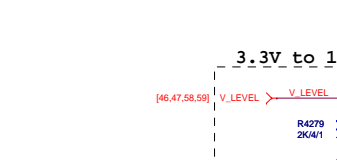
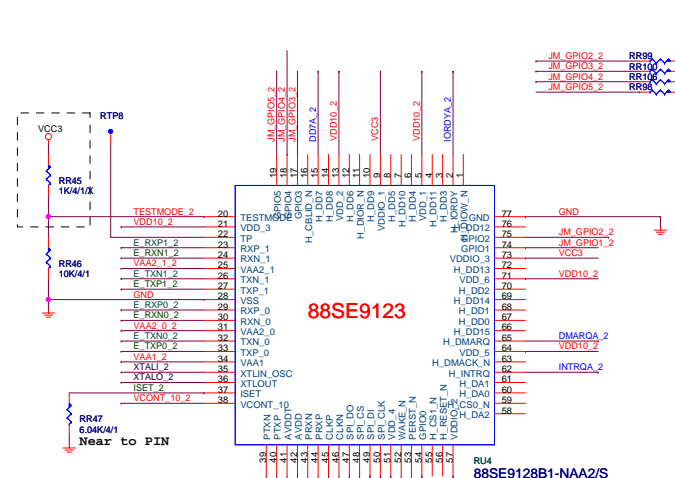
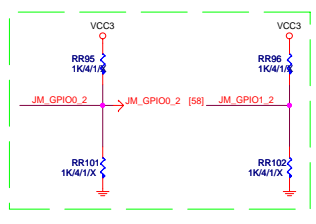
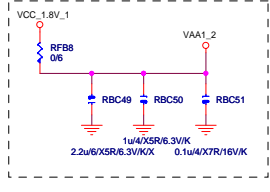
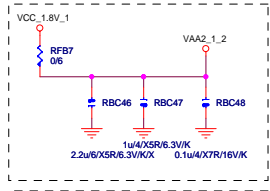
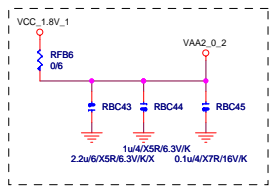
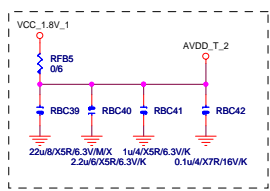
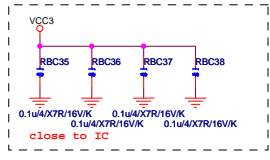
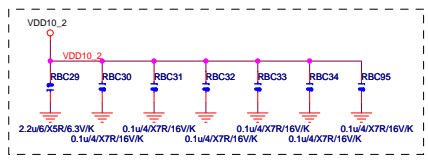
Close to JMB360/2 pins
(<500mil)



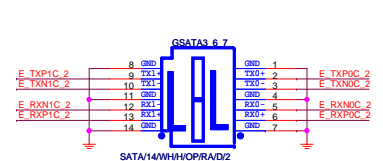
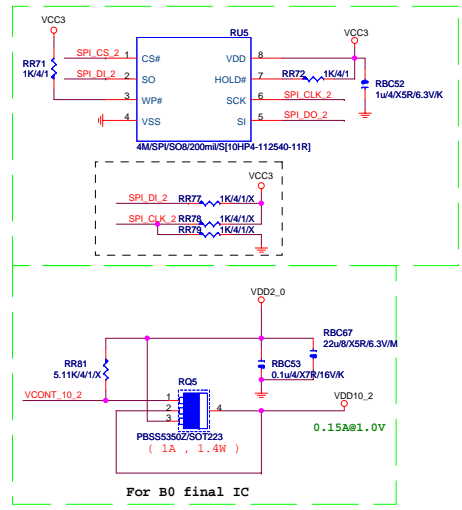
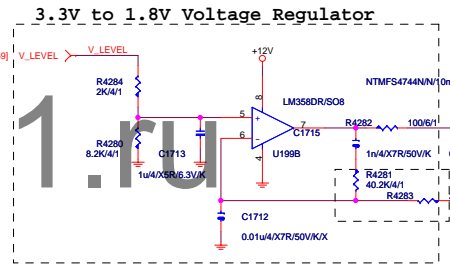
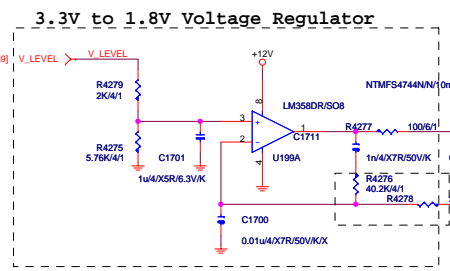
close connector



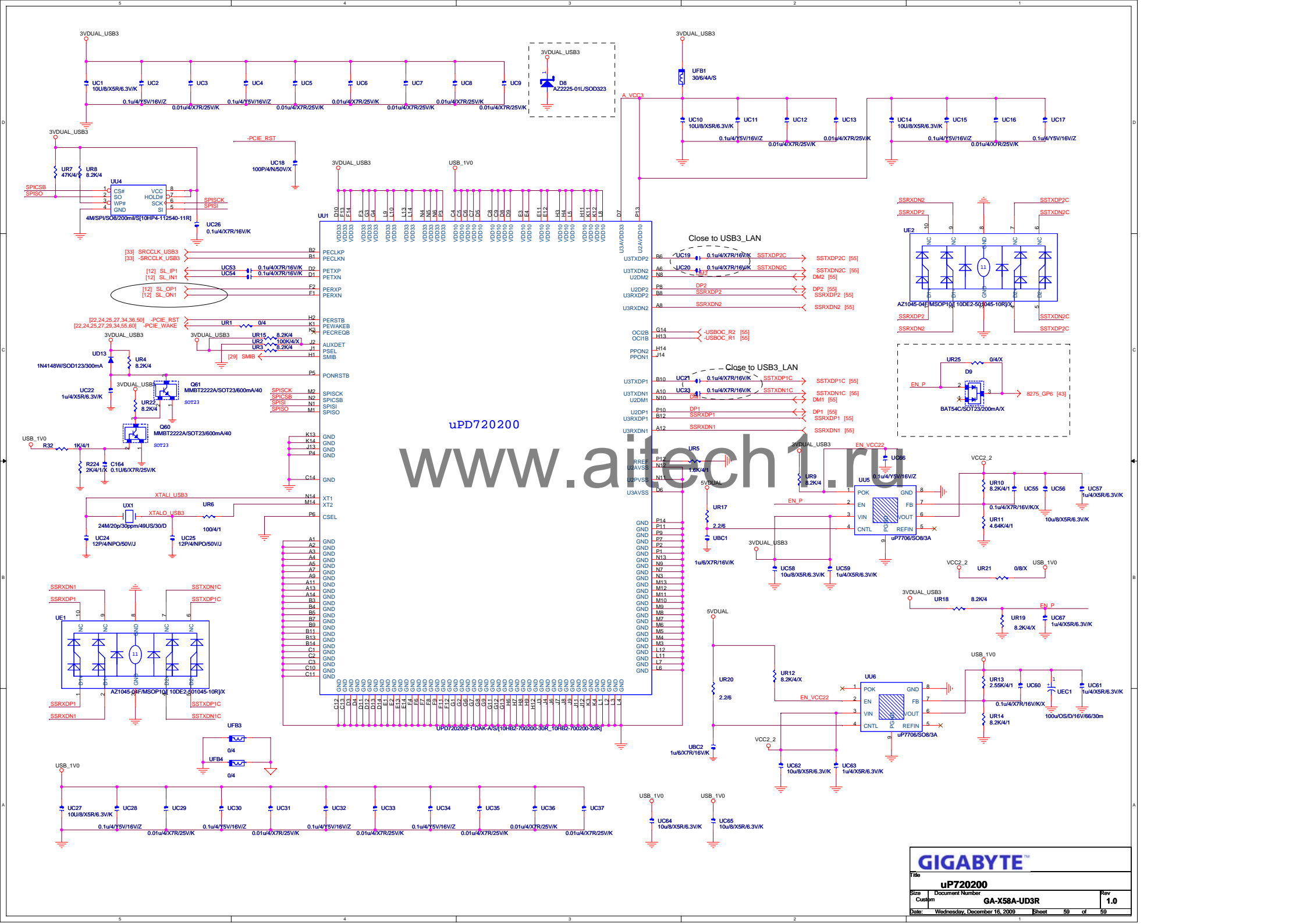
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Title		
JMB362		
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