

Model Name: P35T-DS4

1.0

SHEET

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SHEET

TITLE

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Title			
Cover Sheet			
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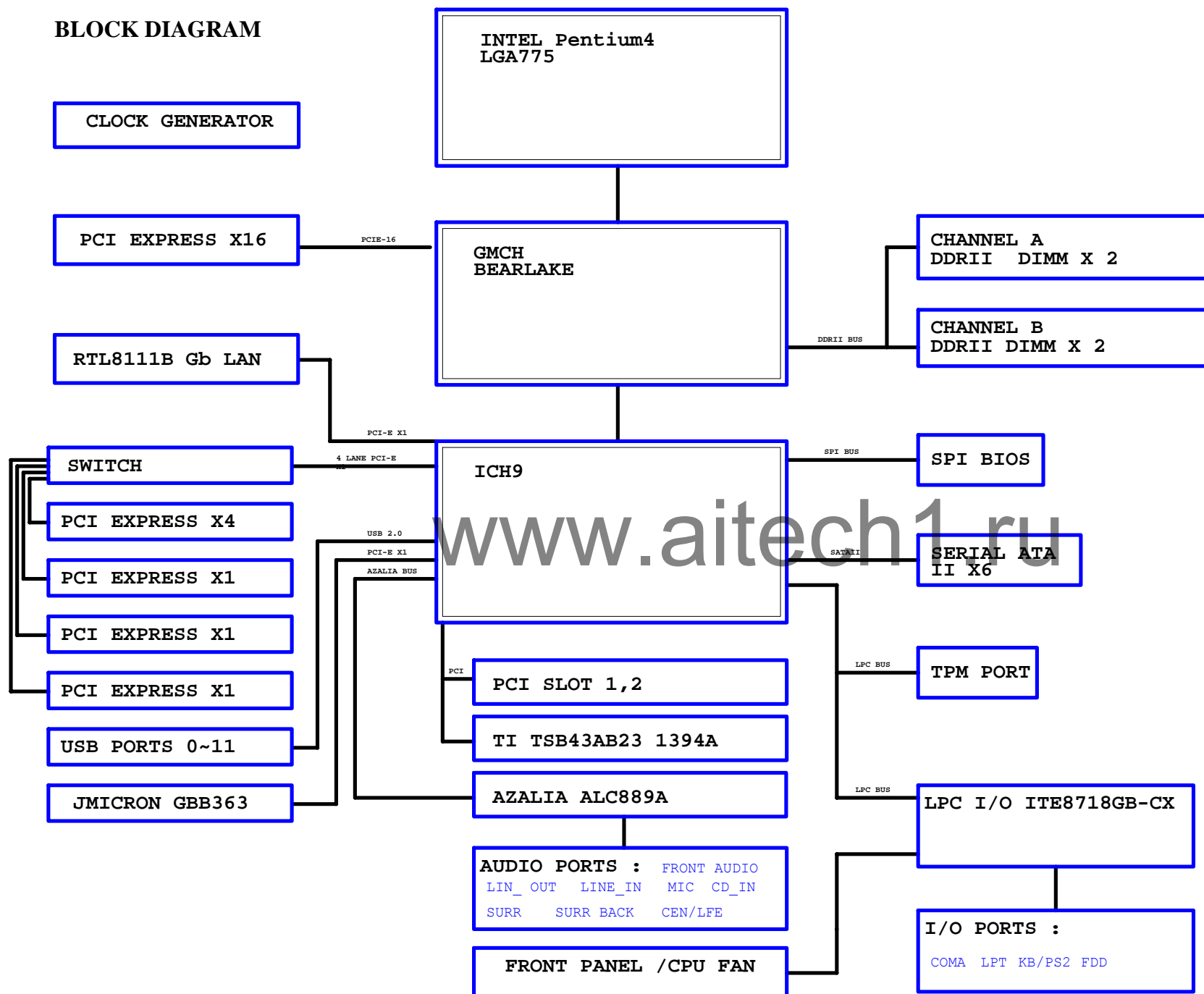
GA-P35T-DS4 Version: 1.0

Circuit or PCB layout change
for next version

Component value change history

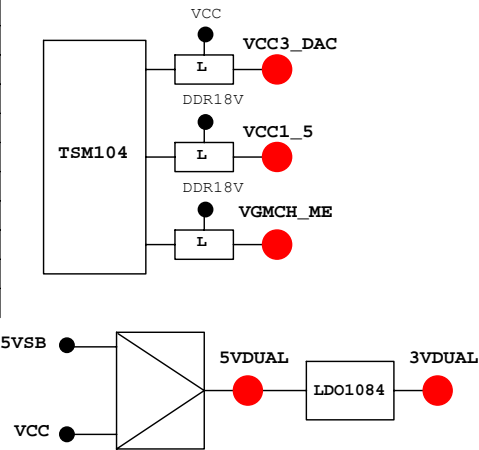
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BLOCK DIAGRAM



LOW ICH9 GPIO LIST TABLE		5		4		3		2		1
PIN NAME	PWR WELL		AFTER/ ELTRST	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/ ELTRST	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#	

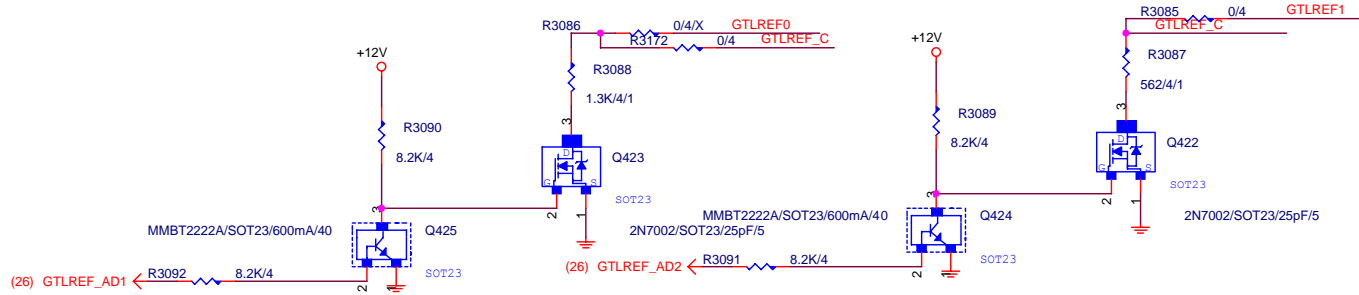
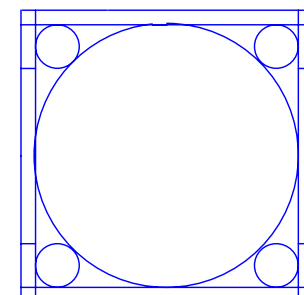
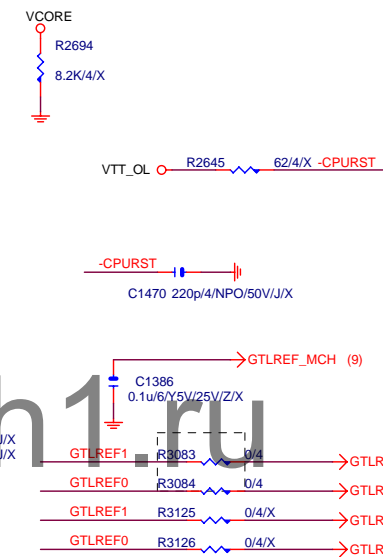
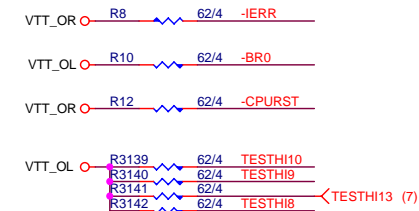
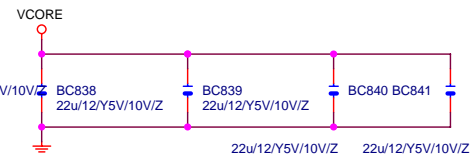


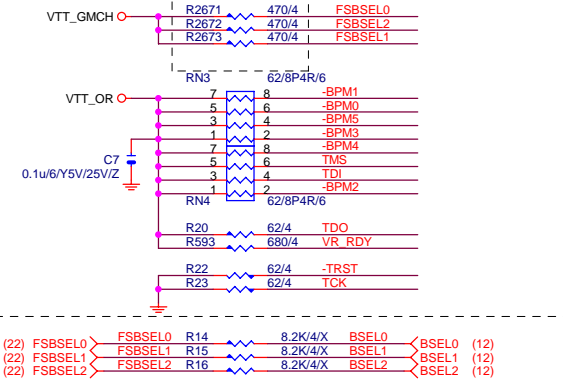
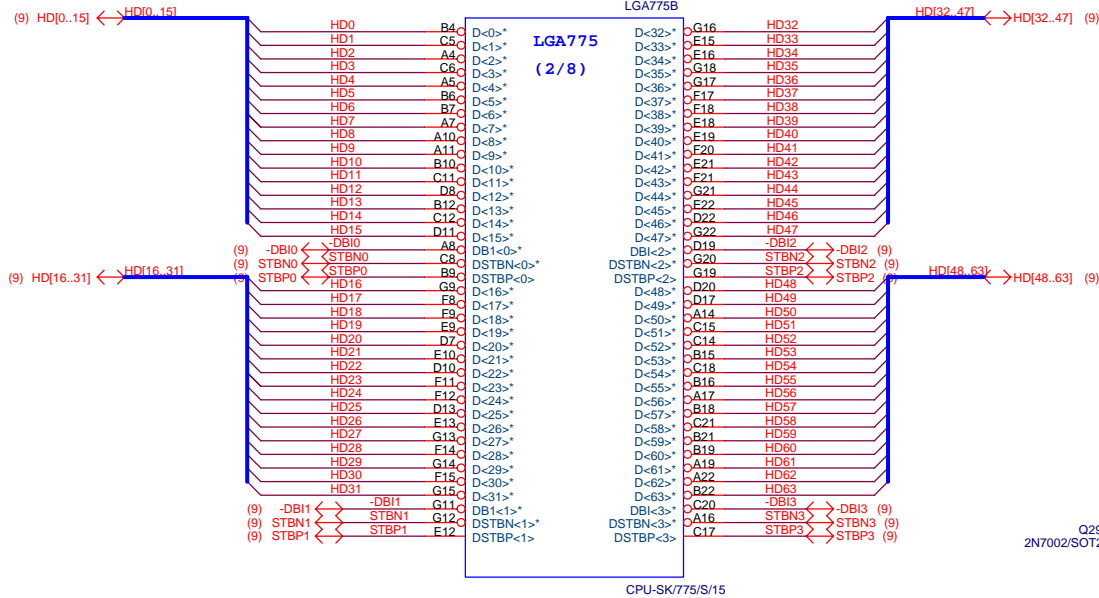
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	3 pin FAN control	4 pin FAN control	FAN speed	Controller
CPU FAN	FANPWM1	FANPWM3	FANIO1	IT8718
	ICH_FAN_PWM2	ICH_FAN_PWM0	ICH_FAN_TACH0	ICH8
SYS FAN	FANPWM2	N/A	FANIO2	IT8718
	ICH_FAN_PWM1	N/A	ICH_FAN_TACH1	ICH8
PWR FAN	N/A	N/A	FANIO3	IT8718
			ICH_FAN_TACH2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

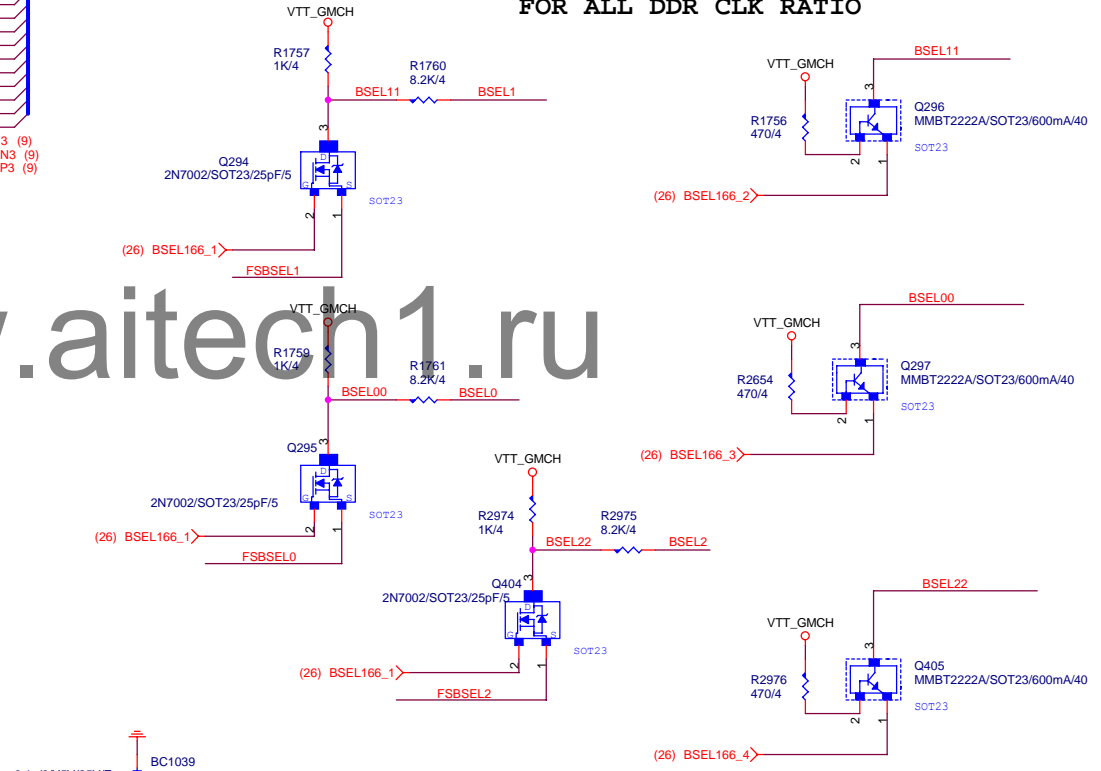
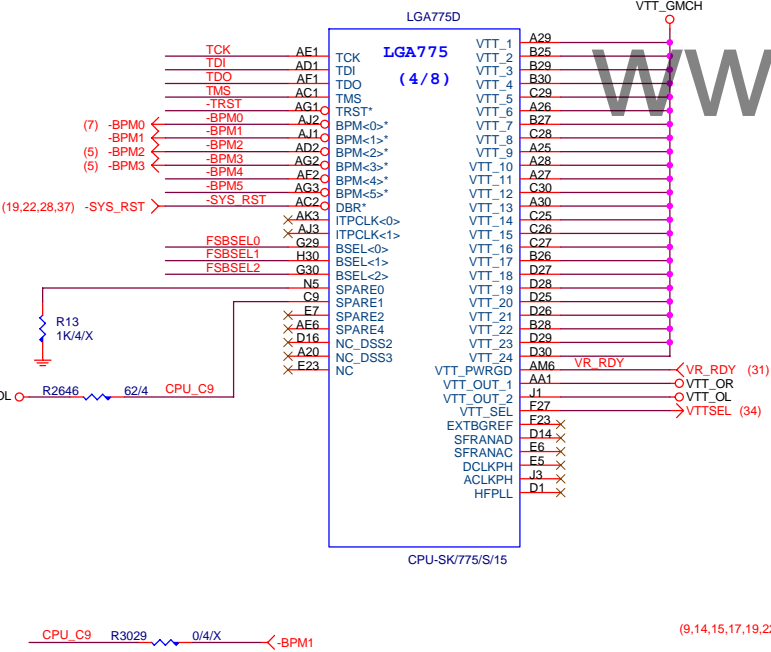
Gigabyte Technology			
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Size B	Document Number		Rev
	P35T-DS4		1.0
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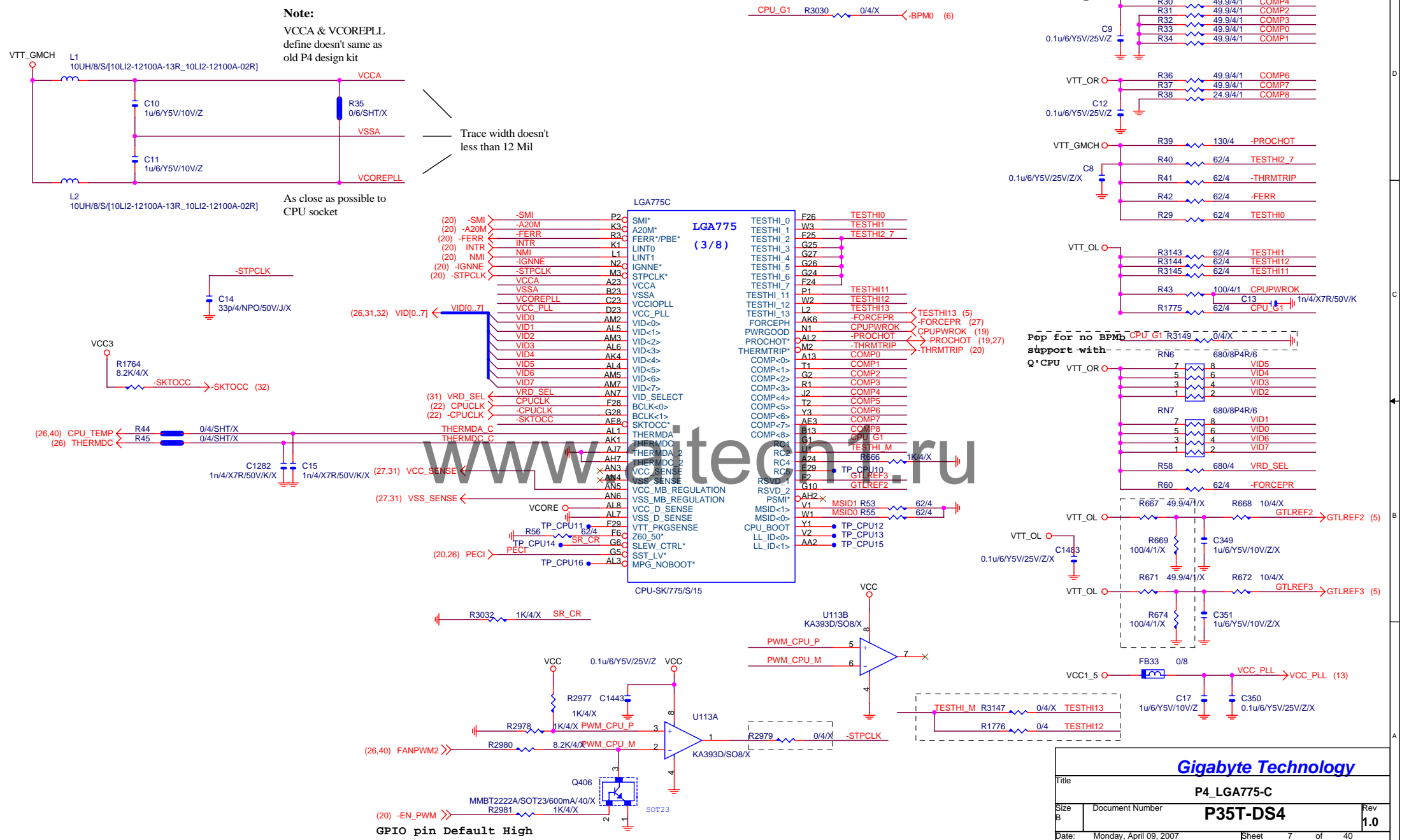
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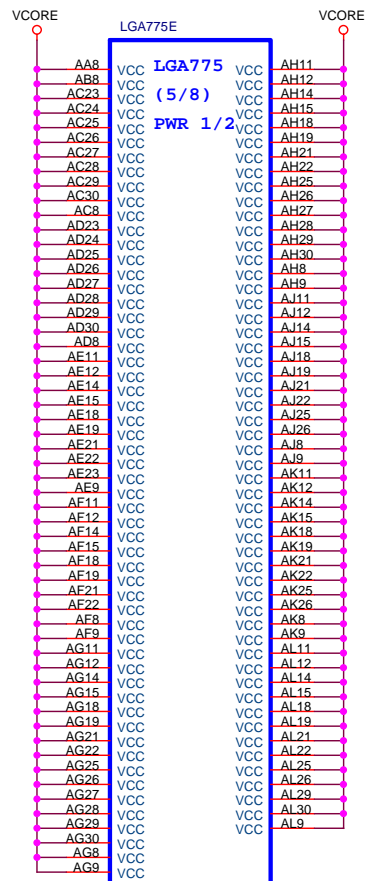




FOR ALL DDR CLK RATIO



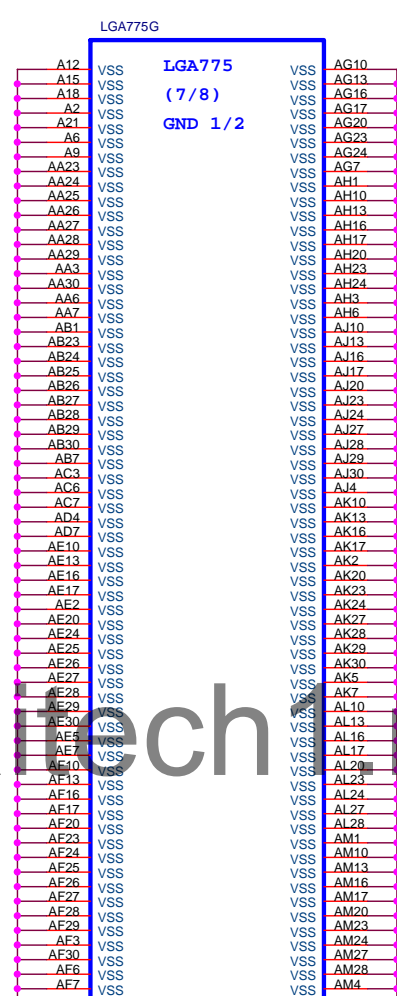




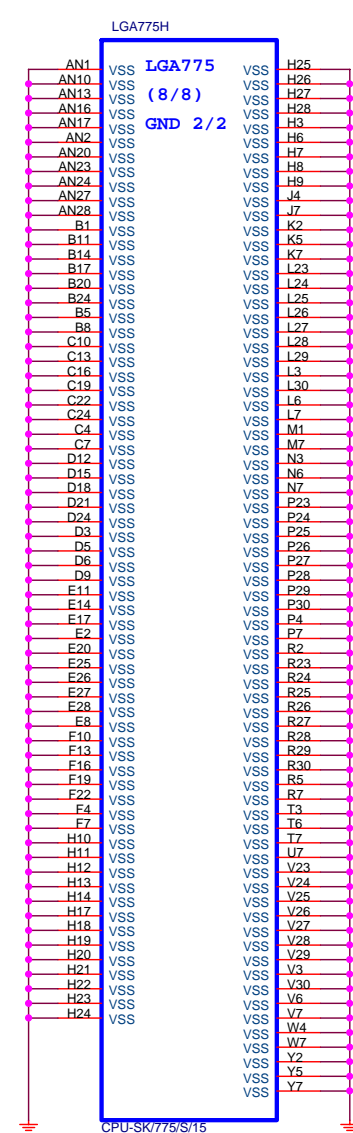
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CPU-SK/775/S/15



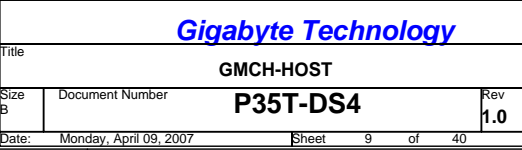
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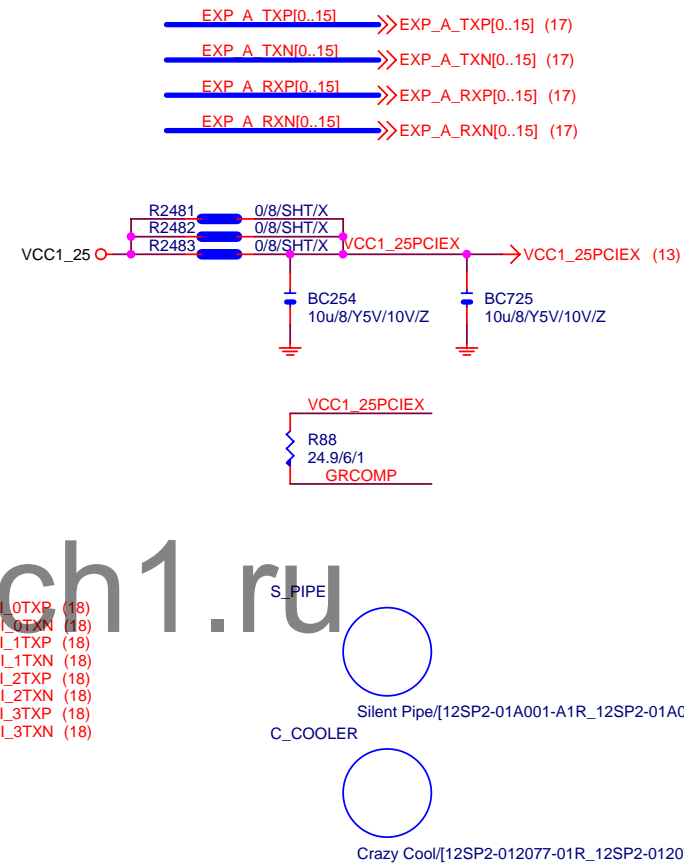
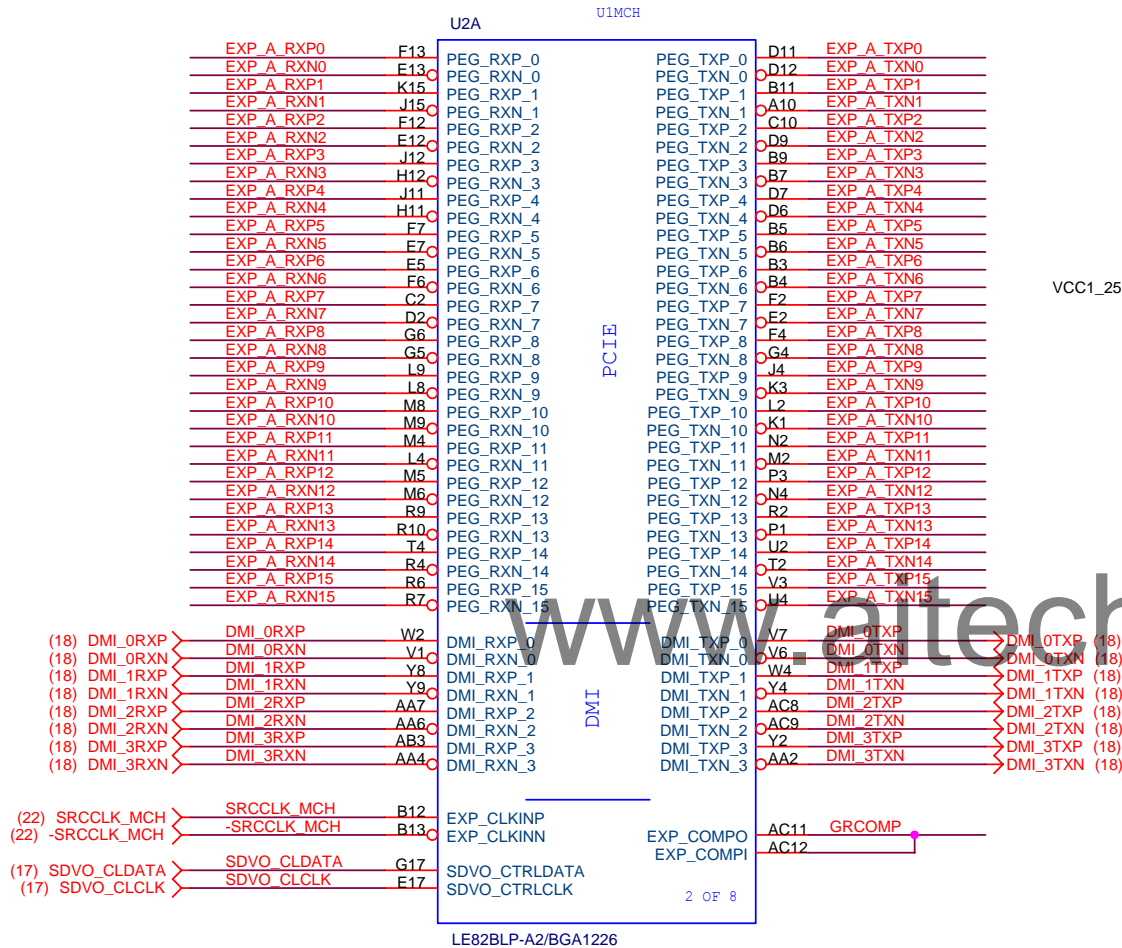


CPU-SK/775/S/15

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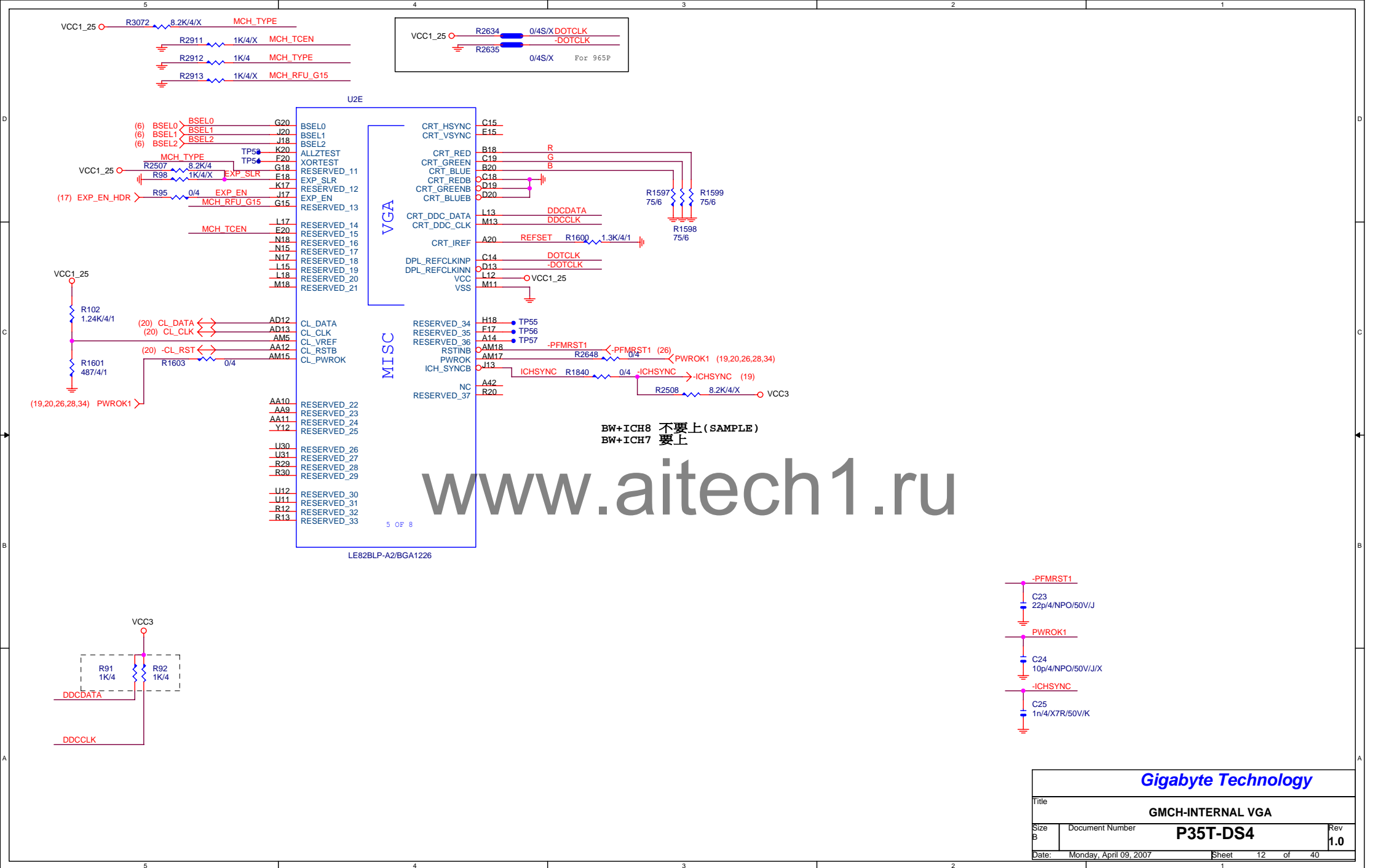
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Size B	Document Number		P35T-DS4	
			Rev 1.0	
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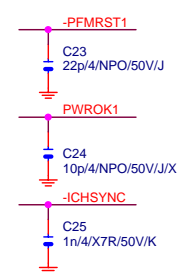


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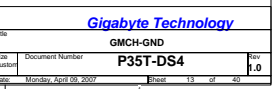
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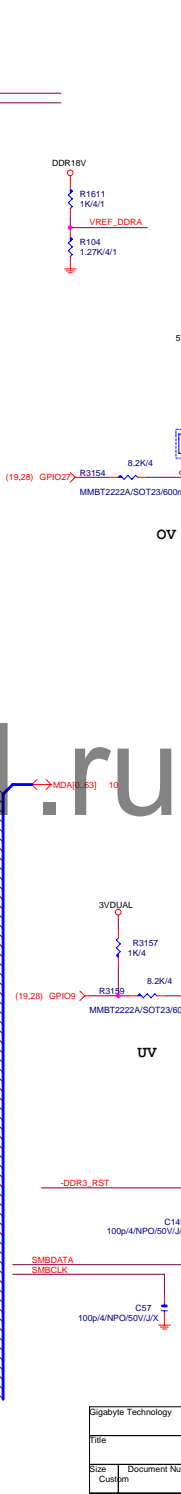
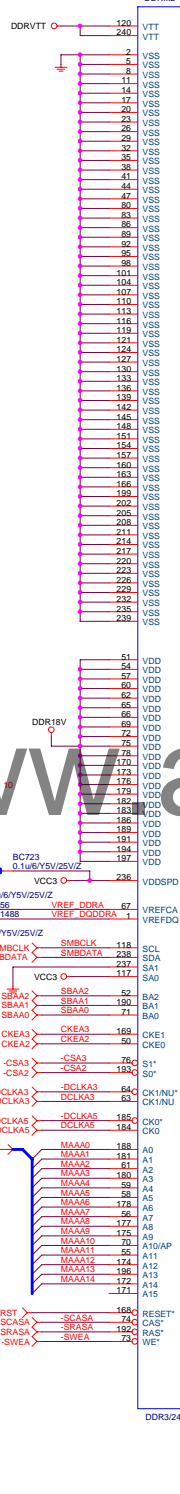
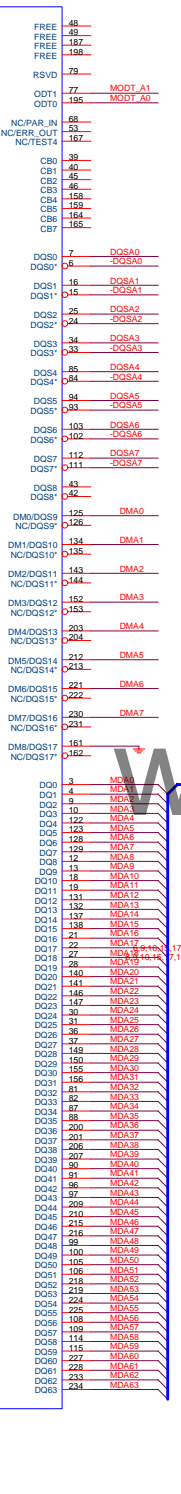
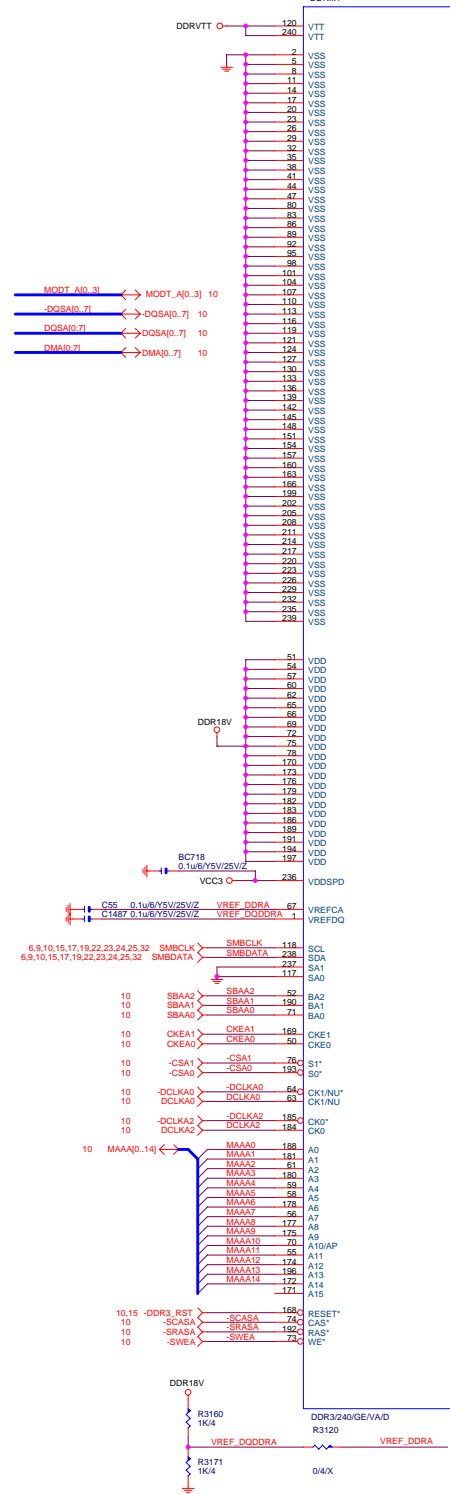


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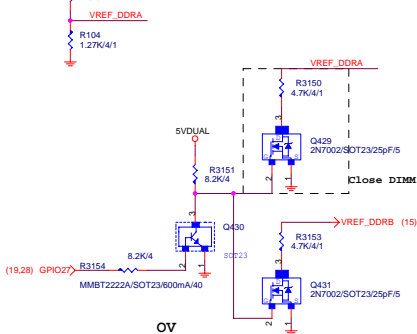
Gigabyte Technology			
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		1.0	



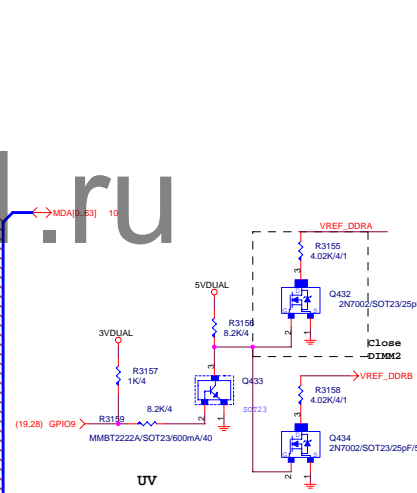


GPIO27	GPIO9	VOLTAGE
GPO/Low	GPI	Default
GPI	GPI	+10%
GPO/Low	GPO/Low	-10%

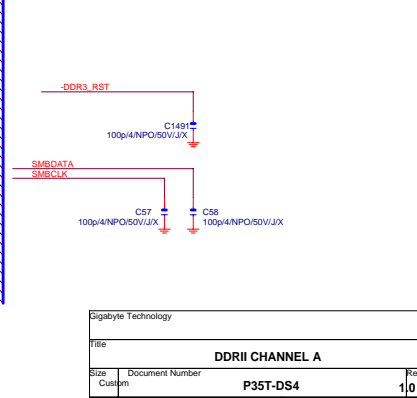
ICH

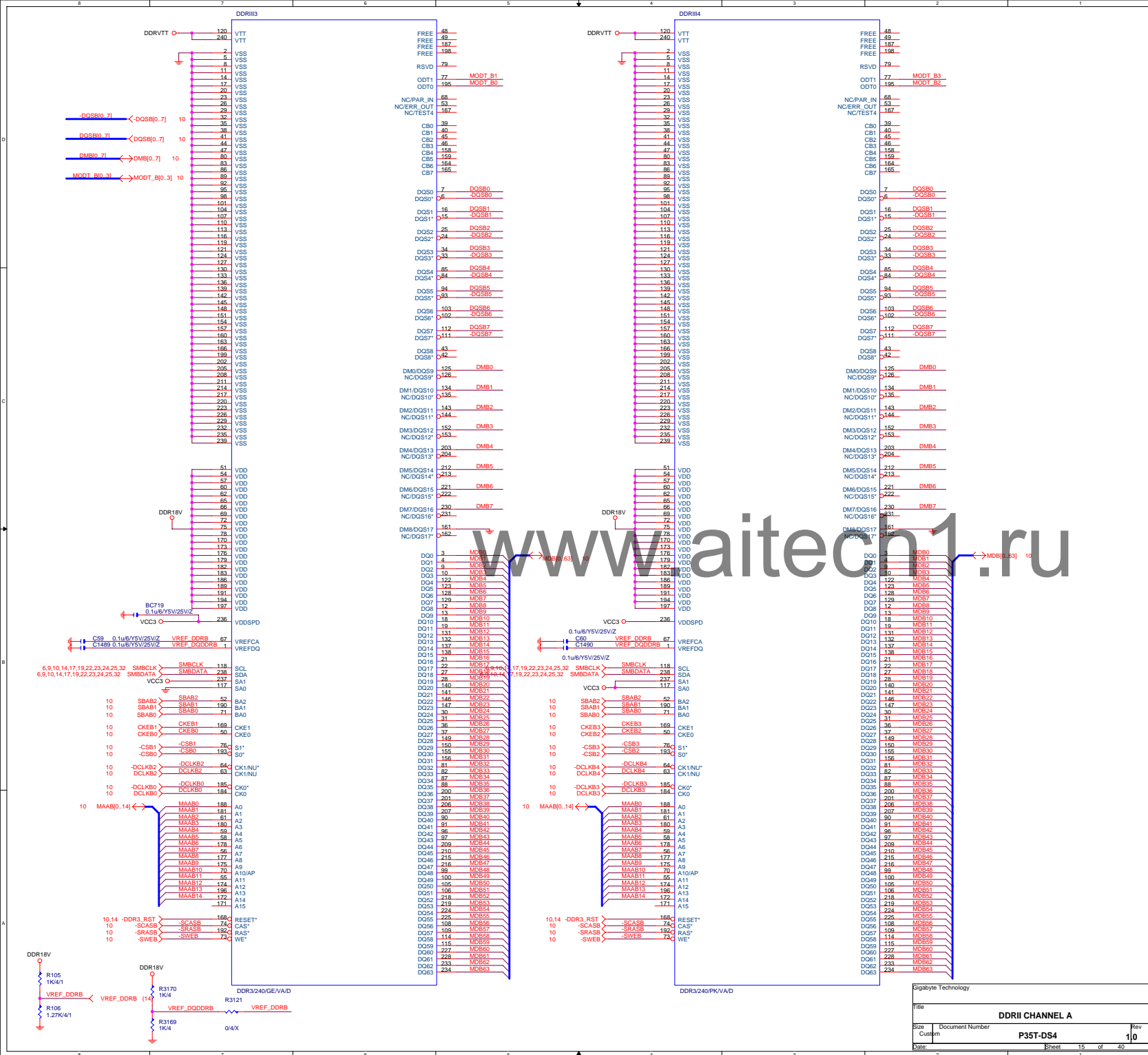


OV



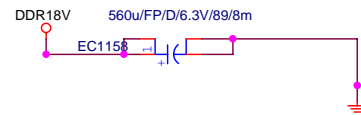
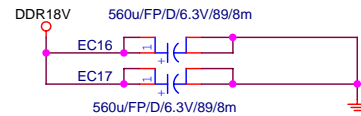
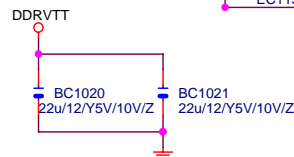
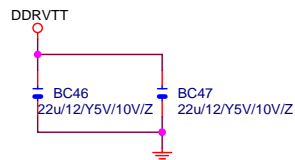
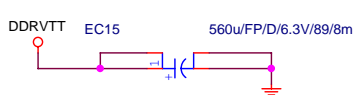
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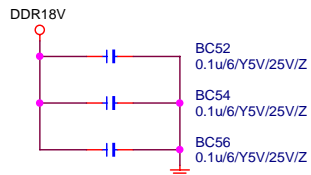


DDR TERMINATION CHANNEL A

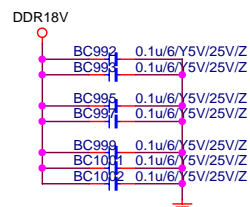
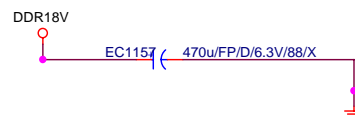
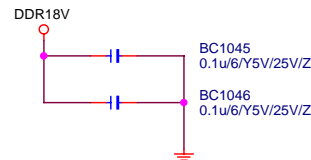
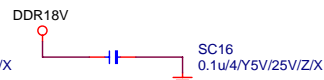
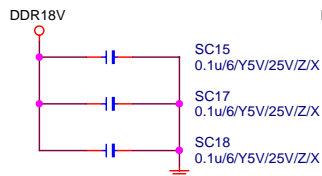
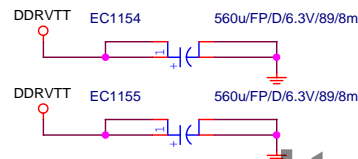
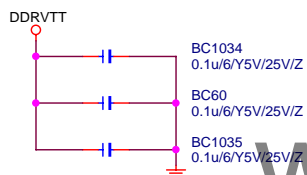
DDRVTT Decouple



DDR18V Decouple

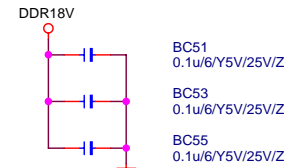


DDRVTT Decouple

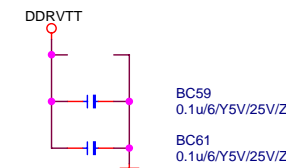


DDR TERMINATION CHANNEL B

DDR18V Decouple



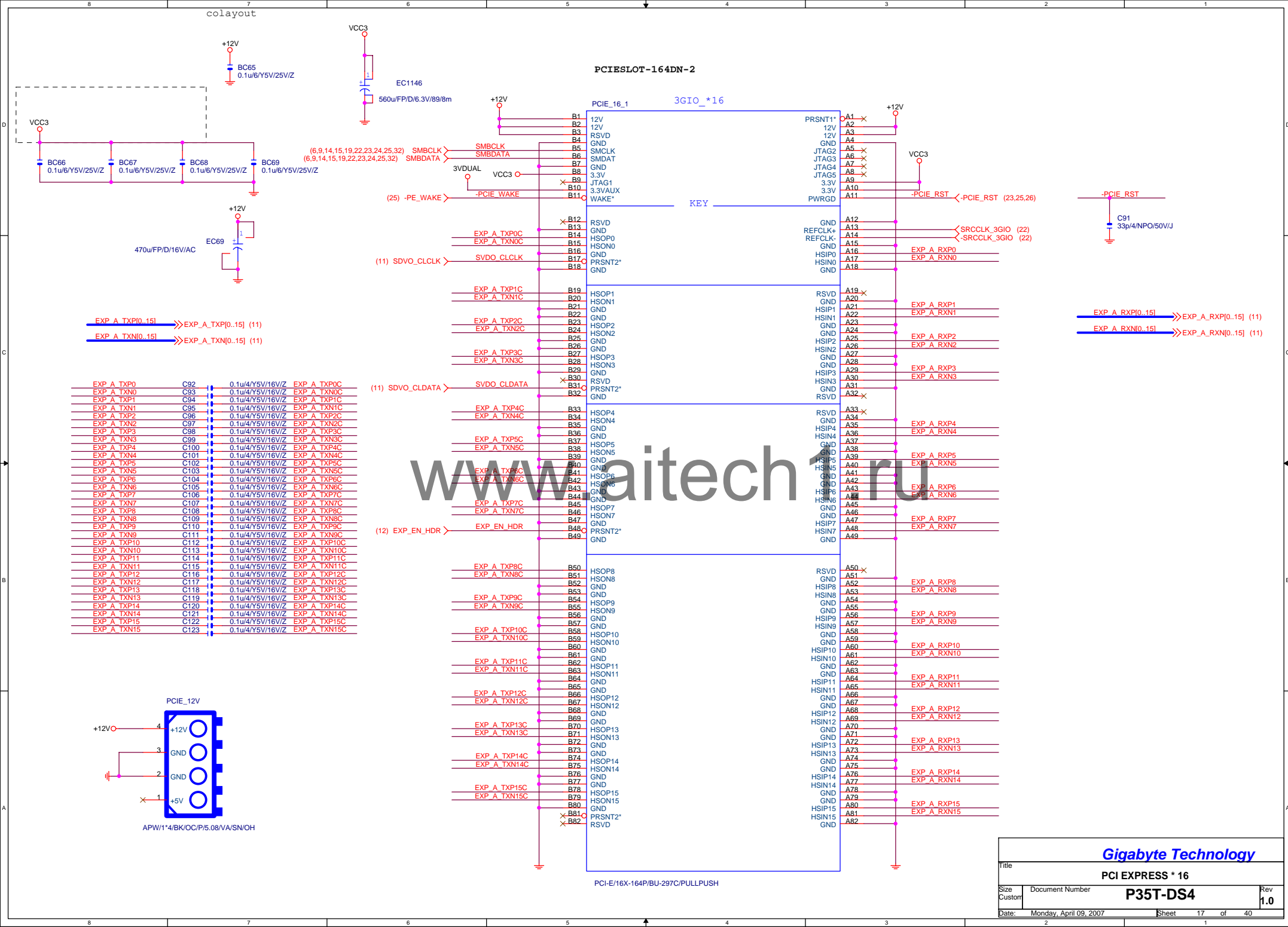
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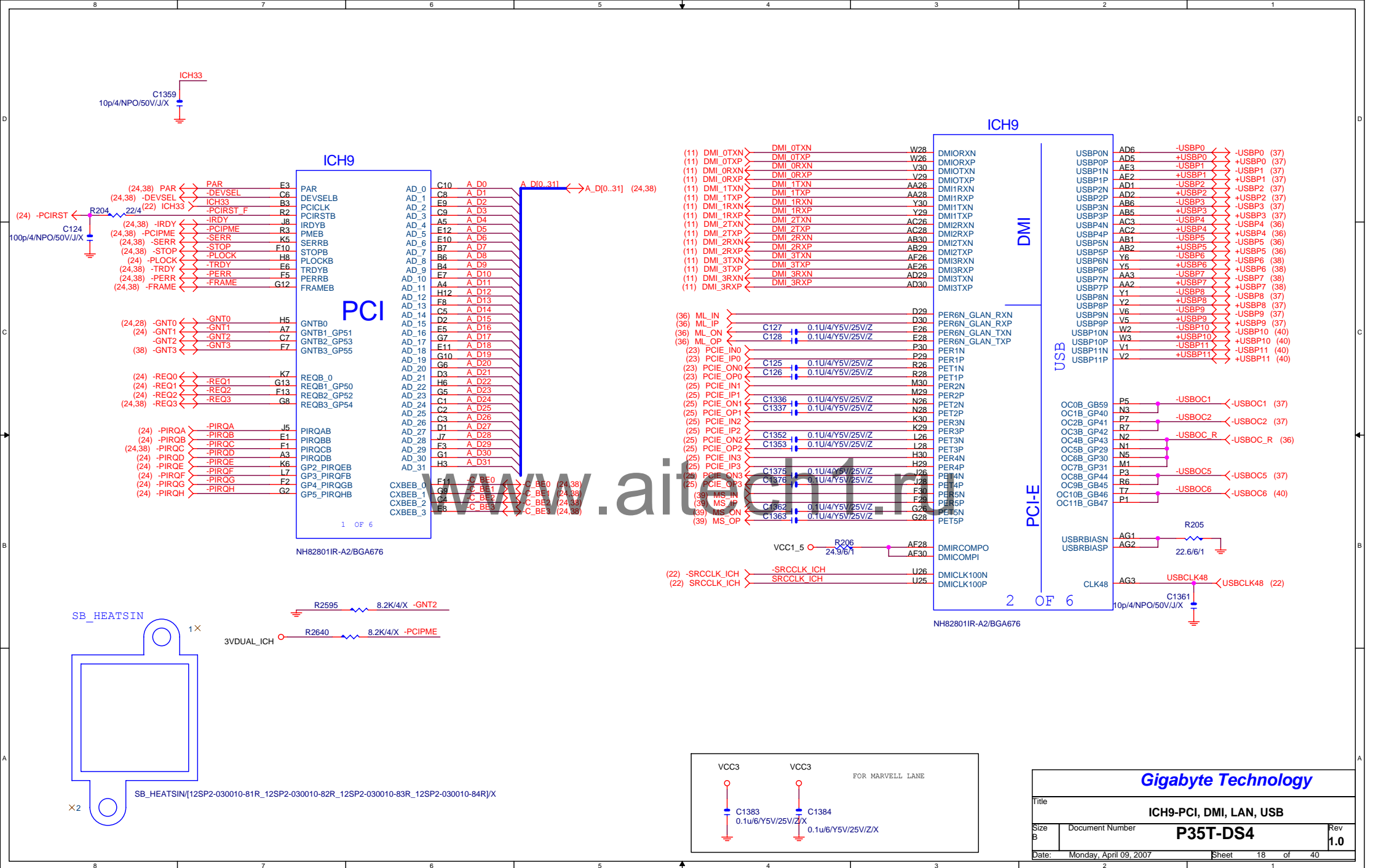


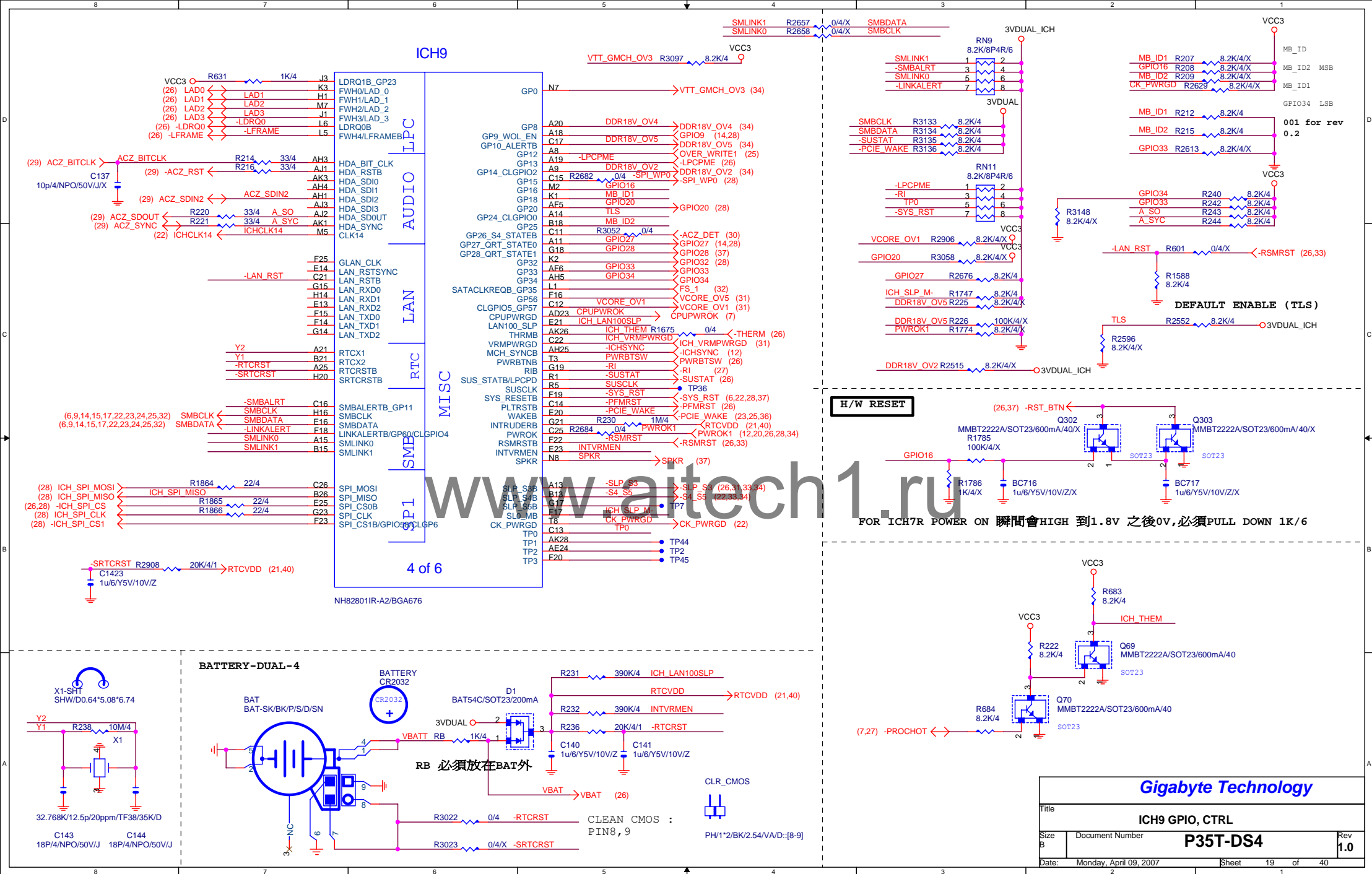
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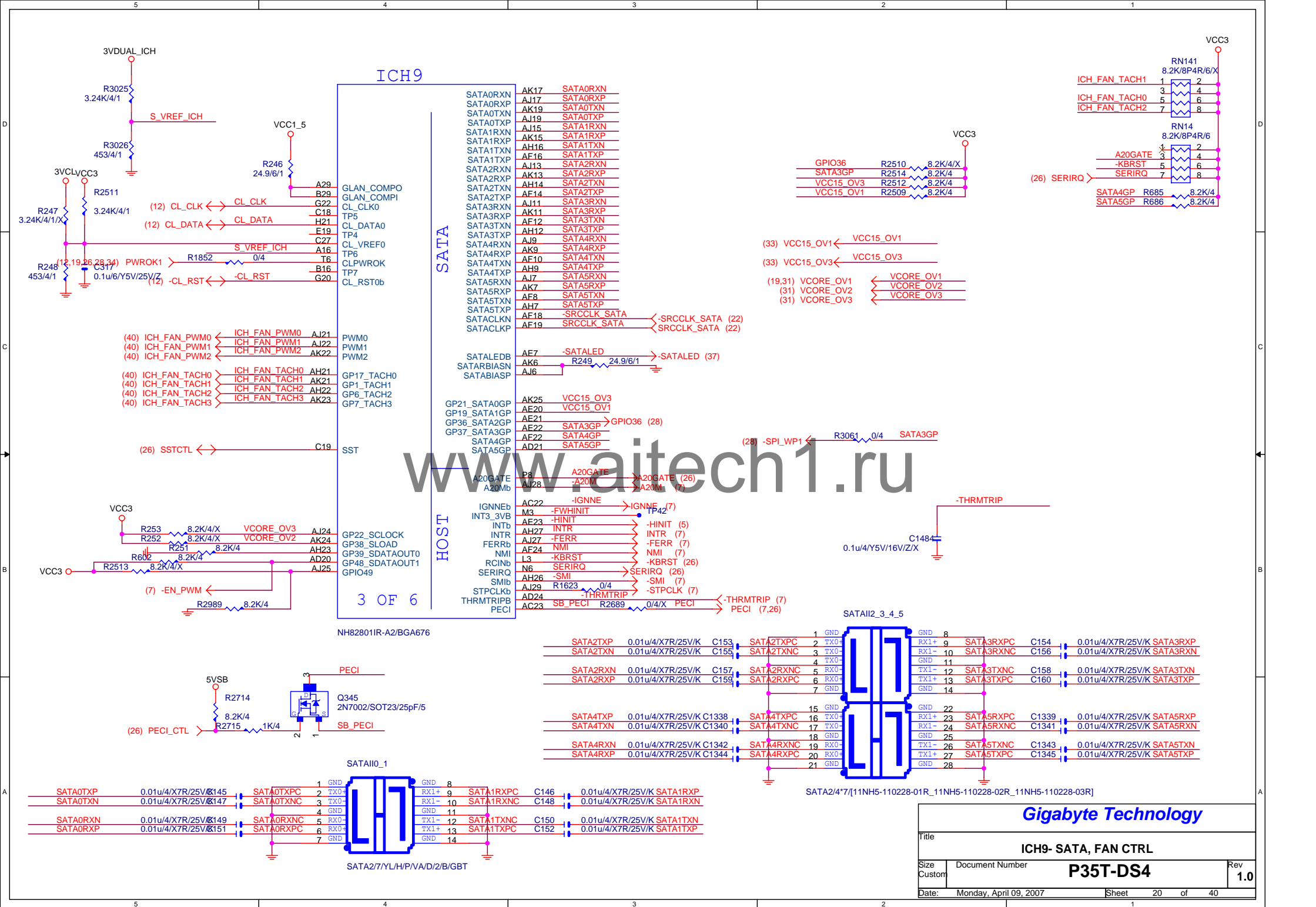
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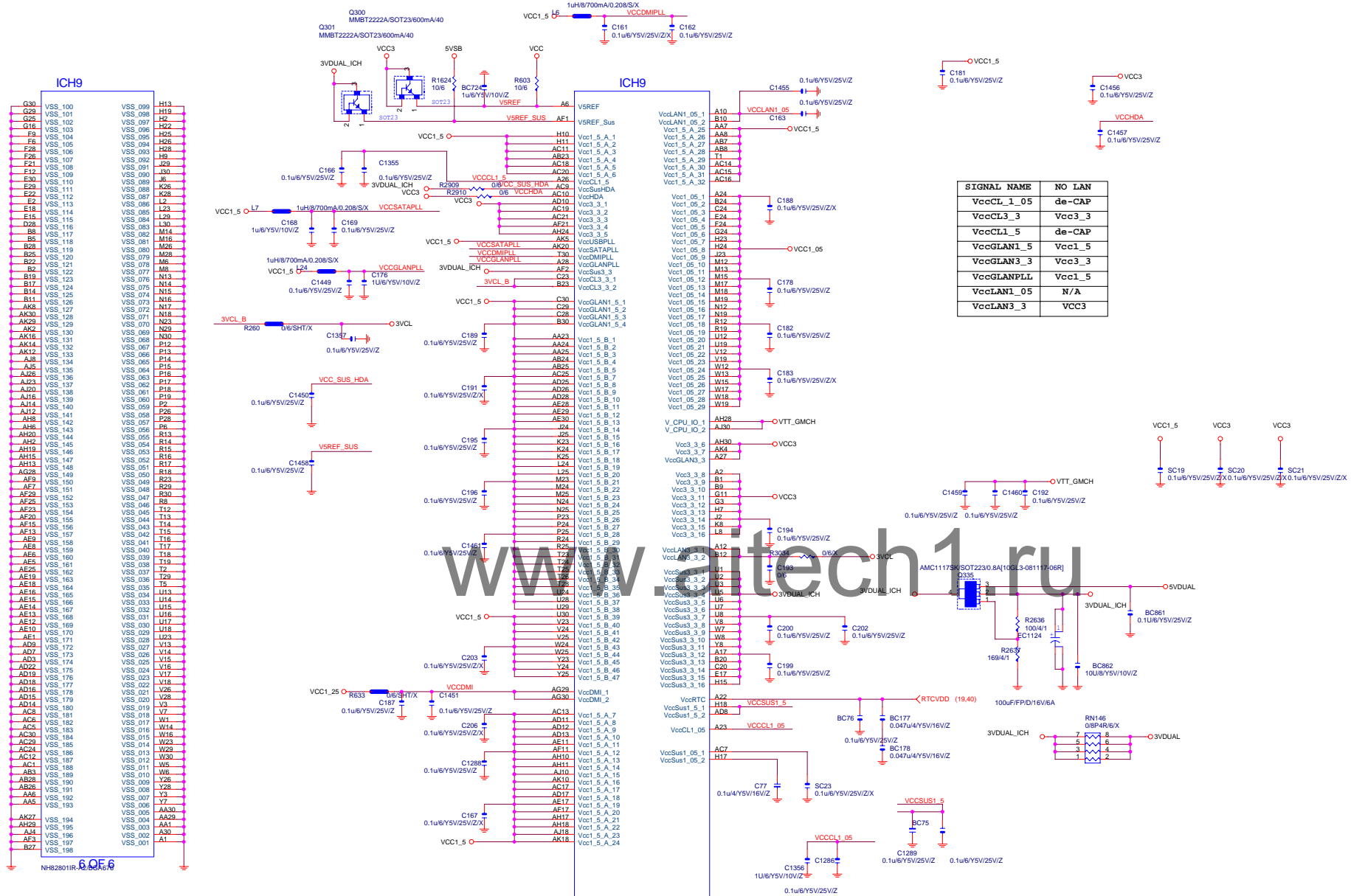
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Size	Document Number	P35T-DS4	
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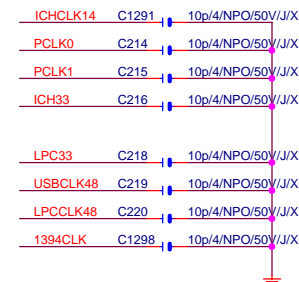
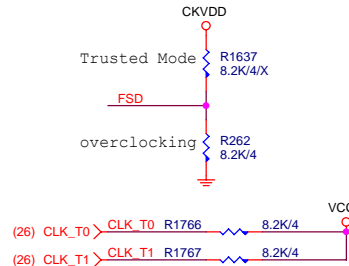
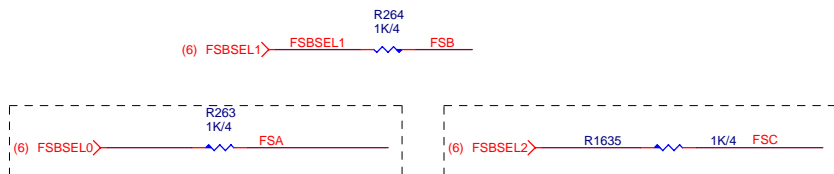
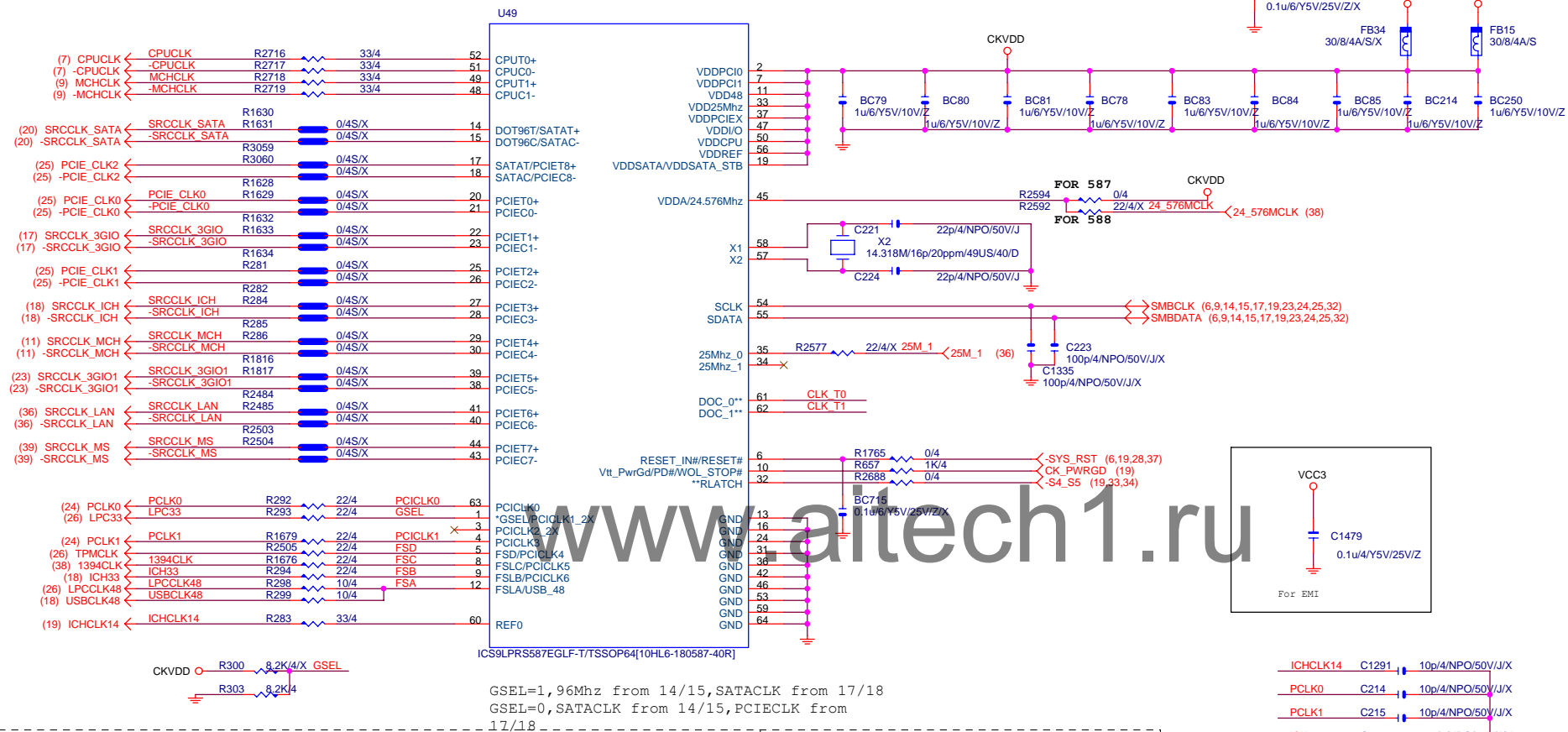


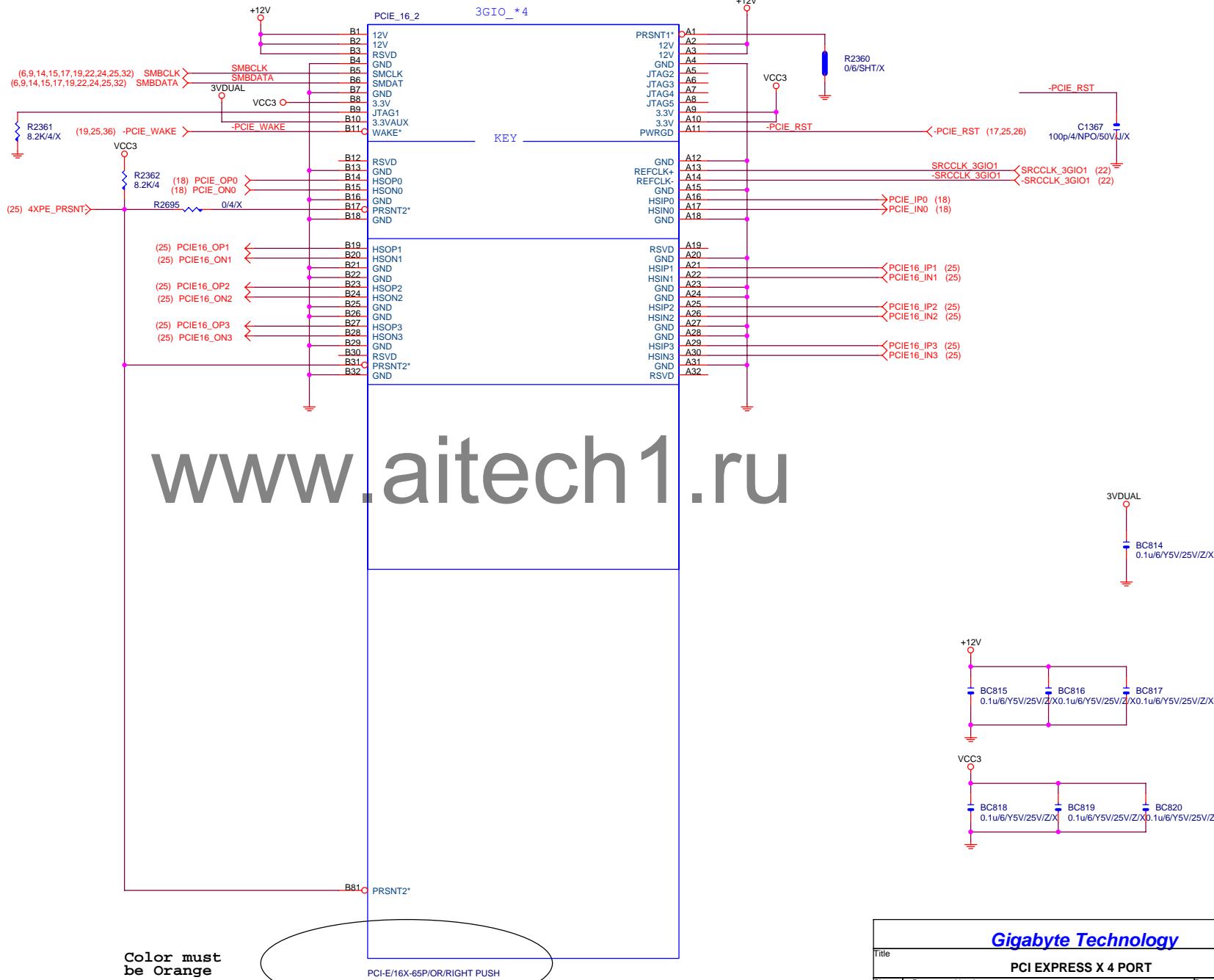
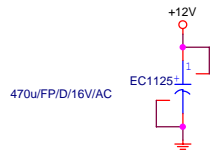










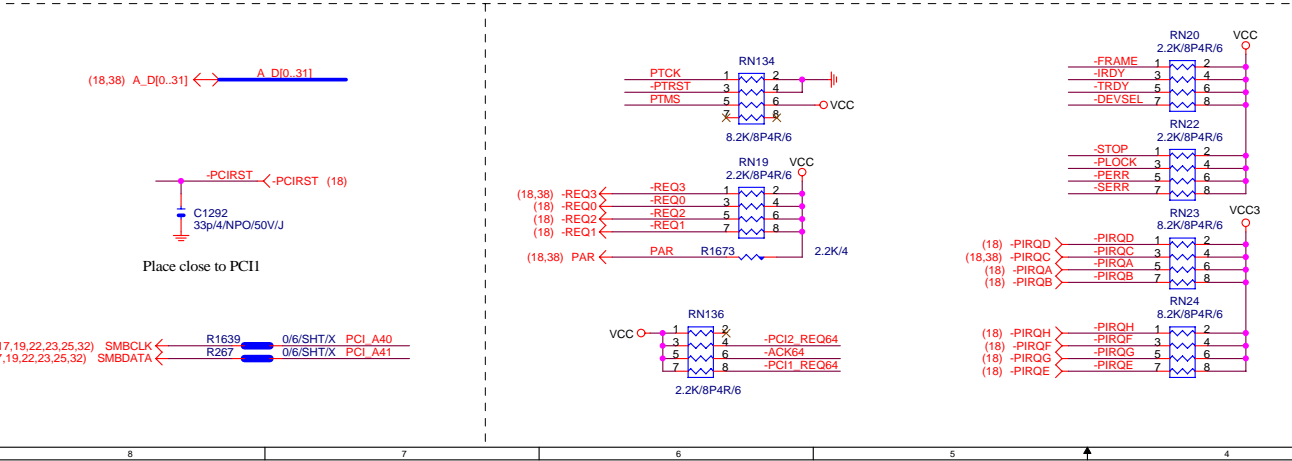
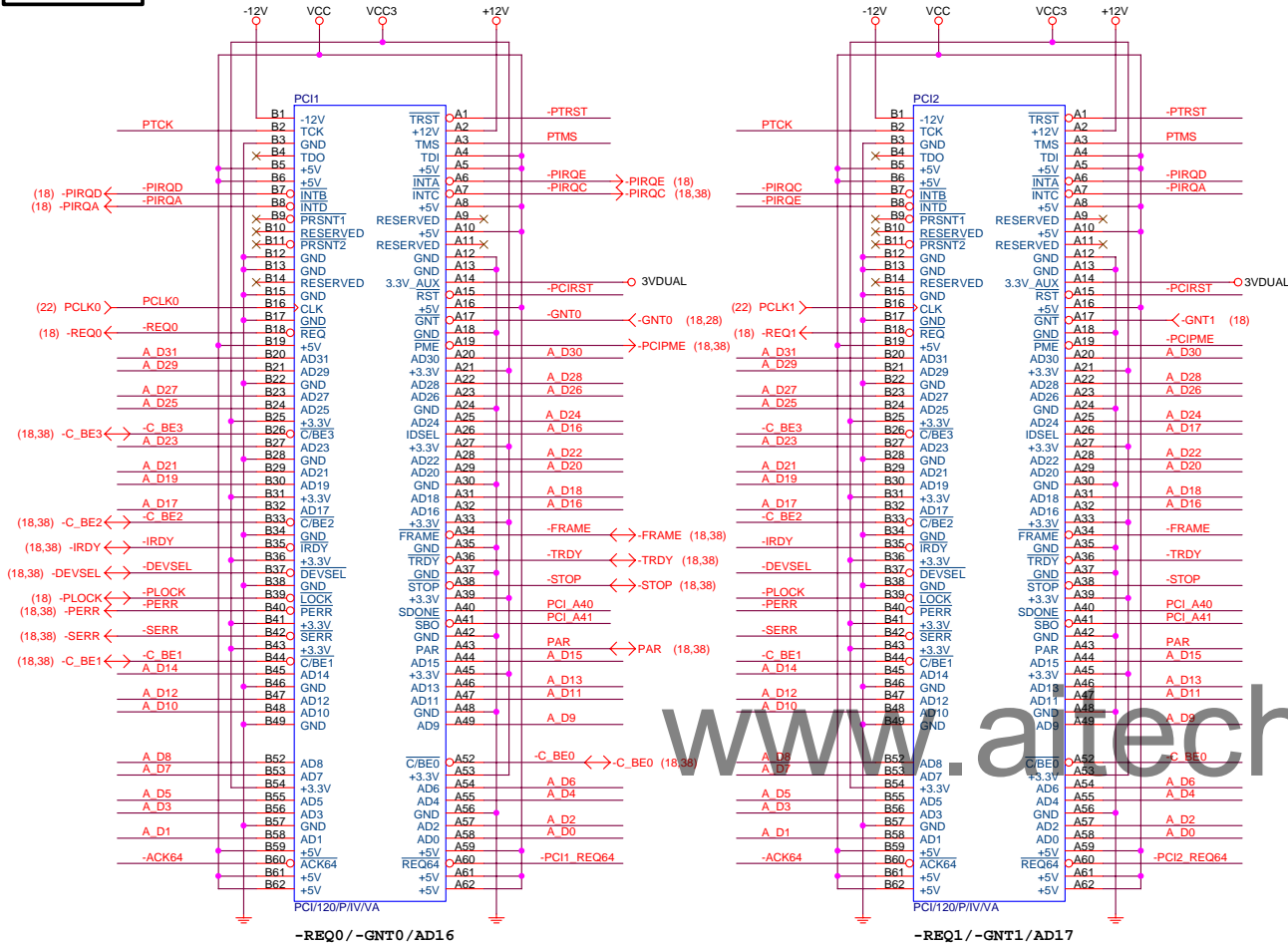


Color must
be Orange

PCI-E/16X-65P/OR/RIGHT PUSH

Gigabyte Technology			
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PCI EXPRESS X 4 PORT			
Size			
Custom	Document Number	P35T-DS4	Rev 1.0
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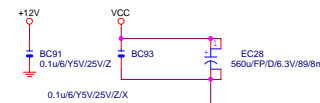
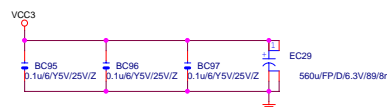
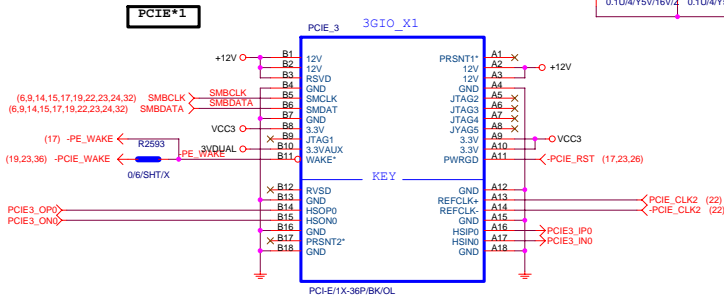
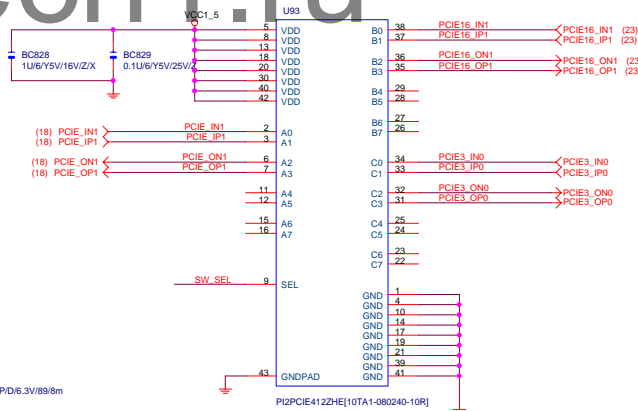
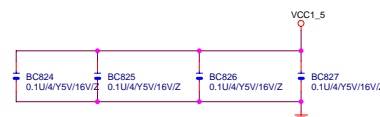
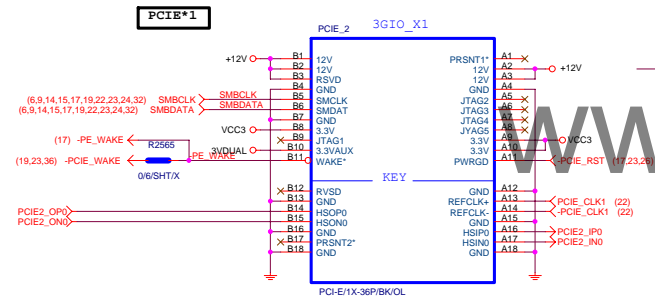
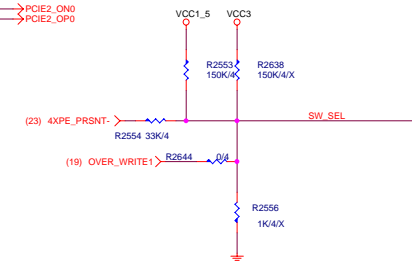
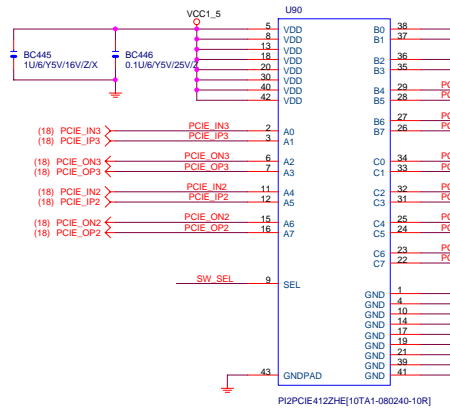
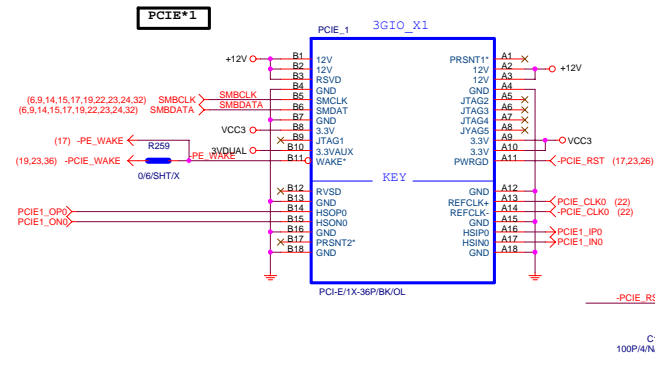
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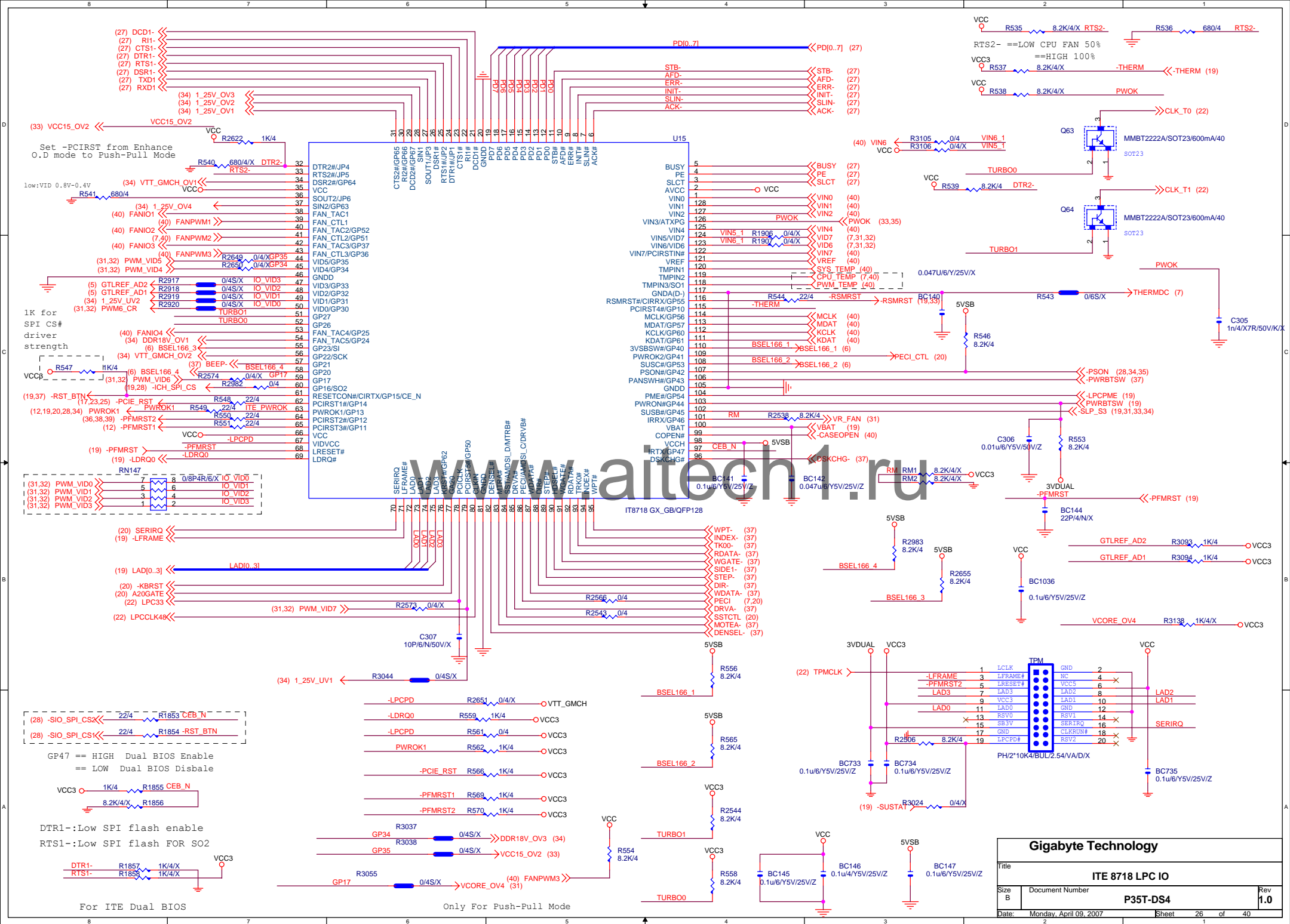
Gigabyte Technology			
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PCI SLOT 1, 2			
P35T-DS4			
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Custom		1.0	
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L : A-B (X4 X1)
H : A-C (X1 X4)

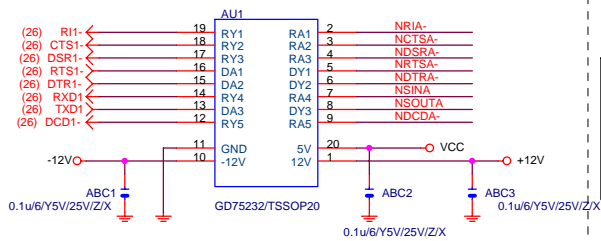
For Vih level consideration



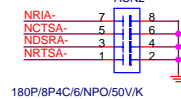
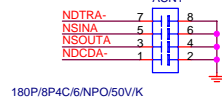
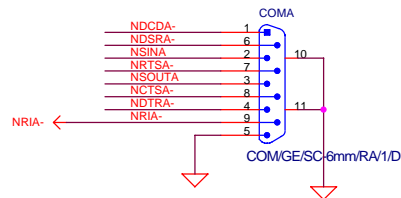
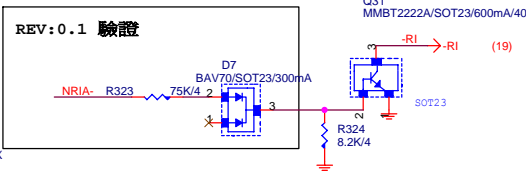
Gigabyte Technology			
File	PCIE_X1 1,2,3 /PCIE SW		
Size	Document Number	P35T-DS4	Rev
C			1.0
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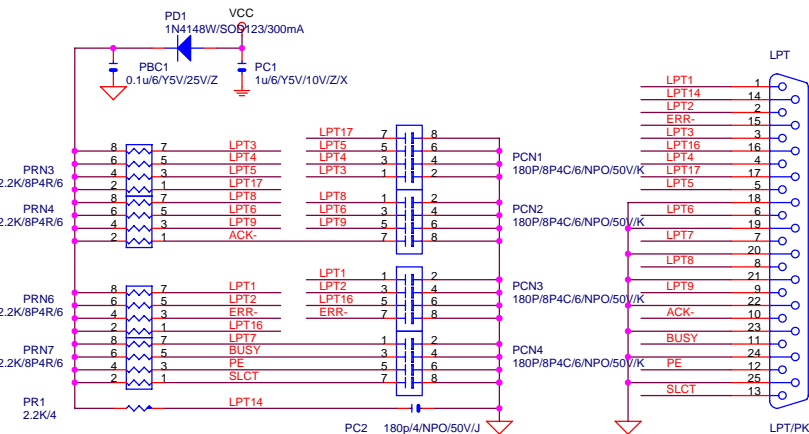
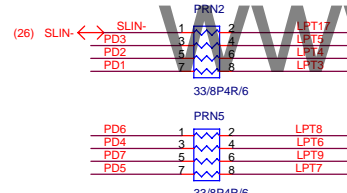
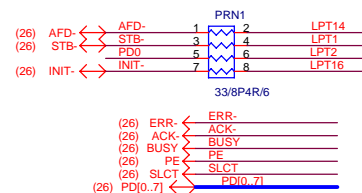
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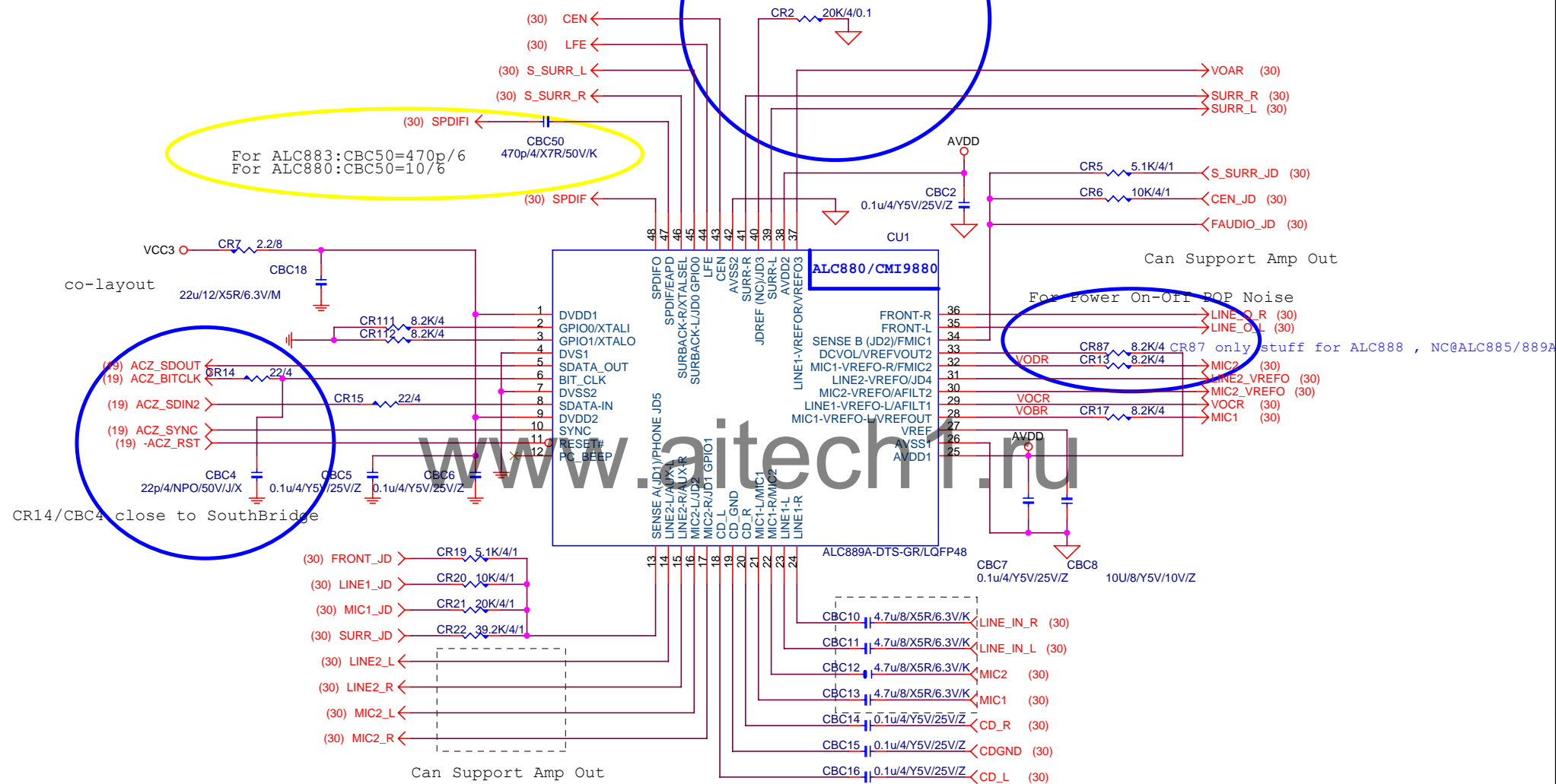
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LPT PORT



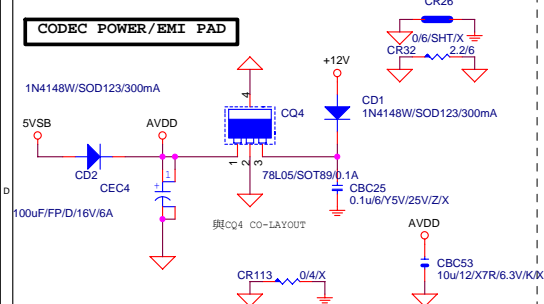
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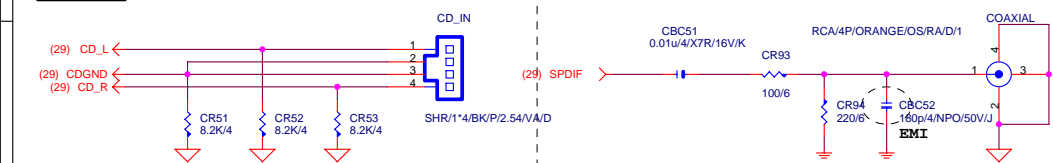
Gigabyte Technology

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Size	Document Number	P35T-DS4	
Custom			Rev 1.0
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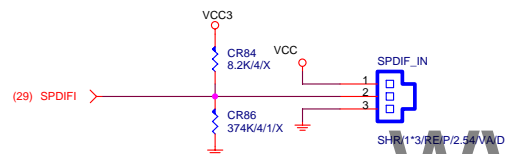
CODEC POWER/EMI PAD



CD IN

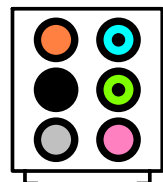


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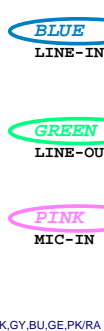
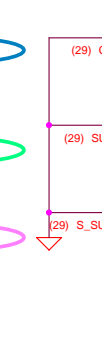
AZALIA JACK

BTX AZALIA CONNECTOR

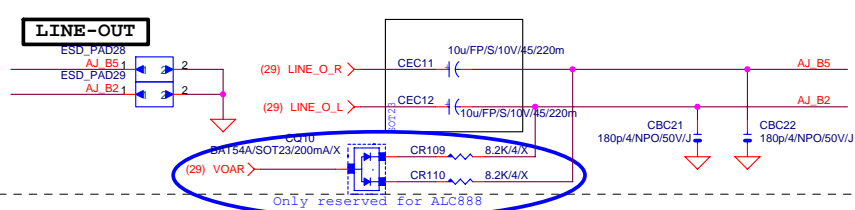


11NR6-403007-21R

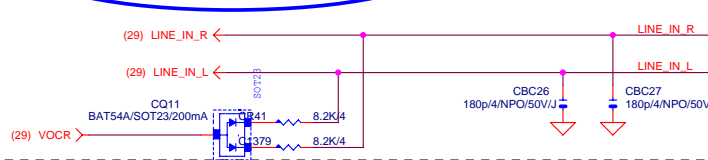
AUDIOA

BLUE
LINE-INGREEN
LINE-OUTPINK
MIC-INOrange
CEN/LFEBlack
SURROUNDGray
SURROUND SIDE

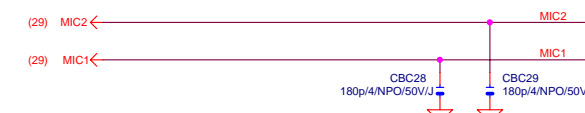
LINE-OUT



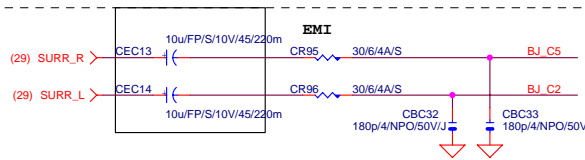
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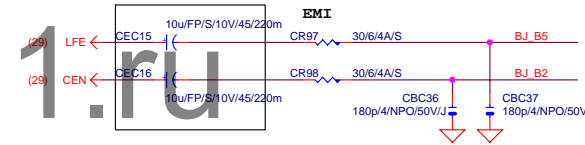
MIC-IN



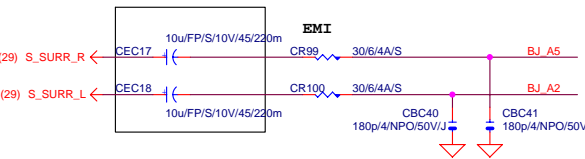
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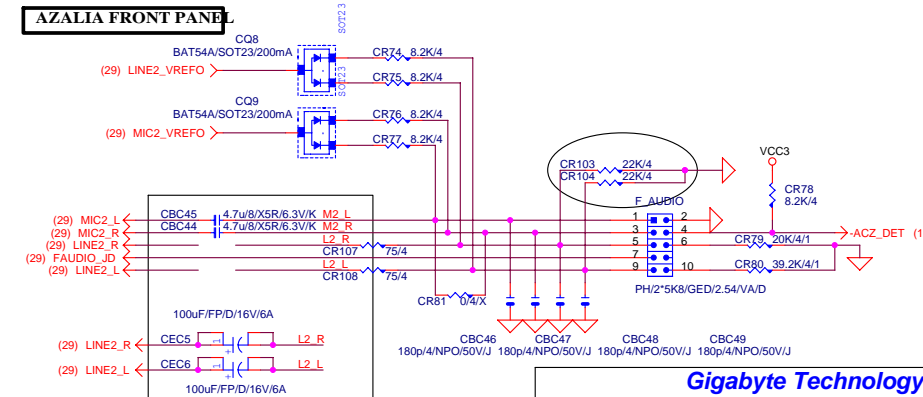
CEN/LFE



SURR BACK

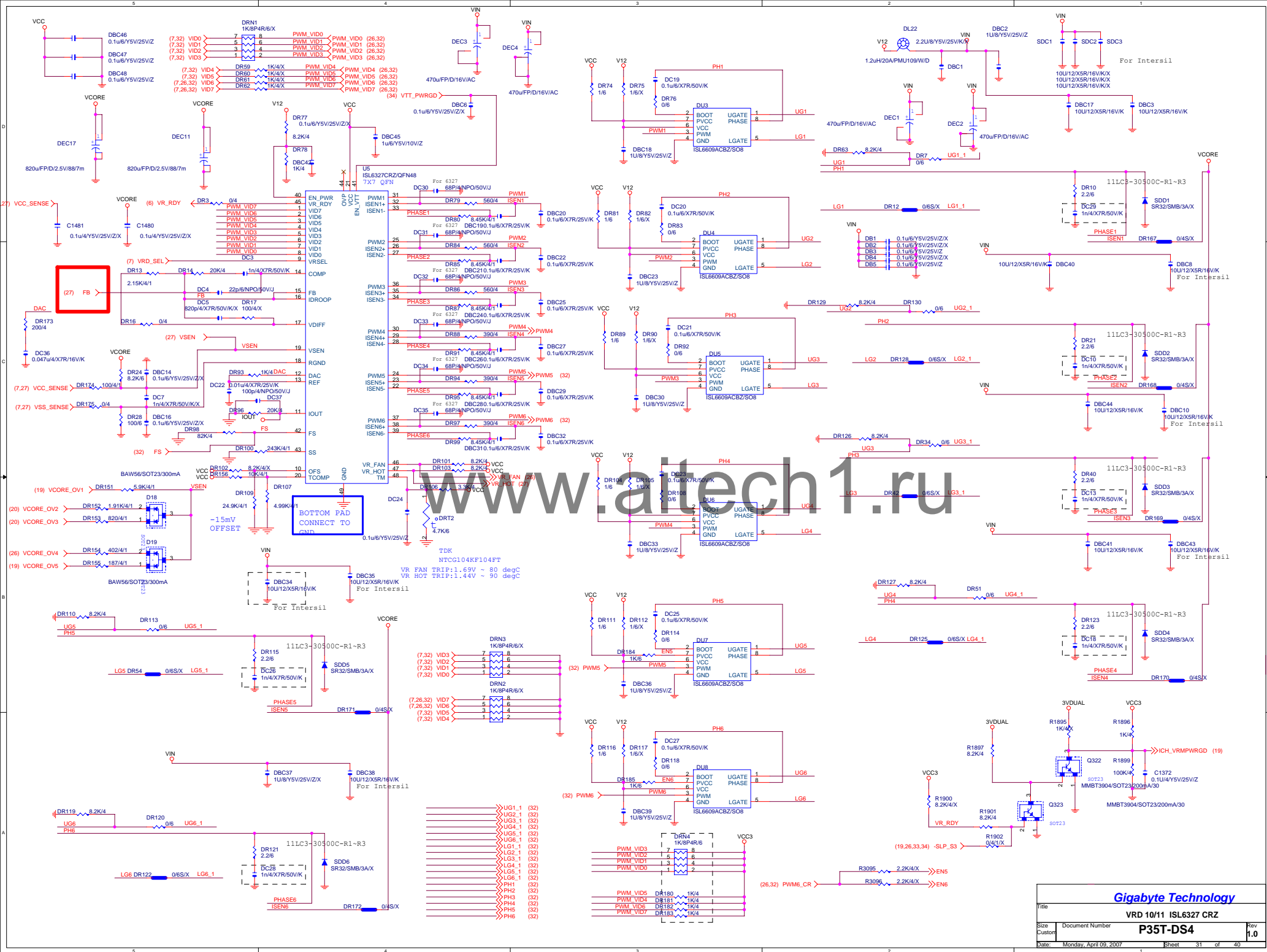


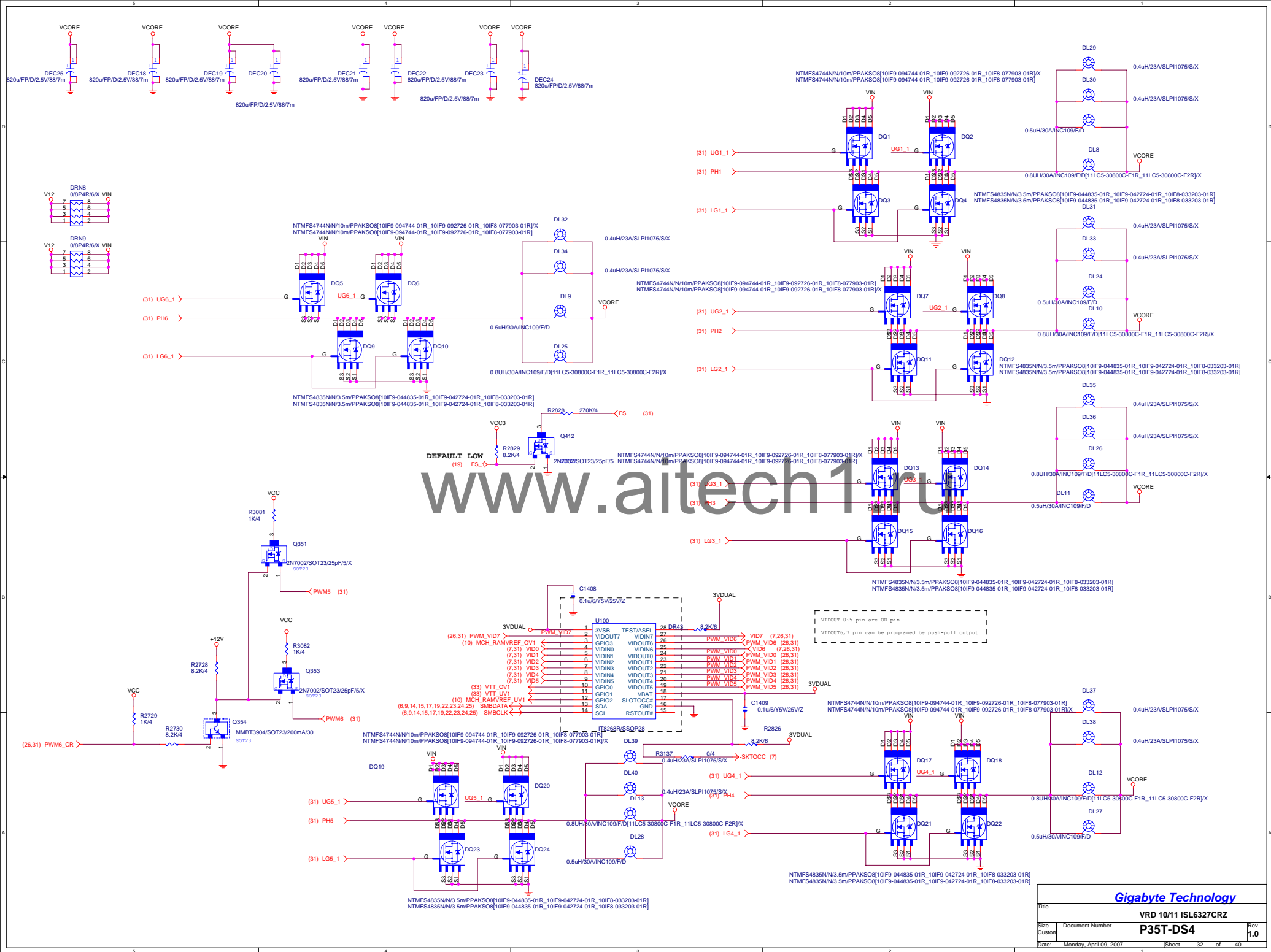
AZALIA FRONT PANEL

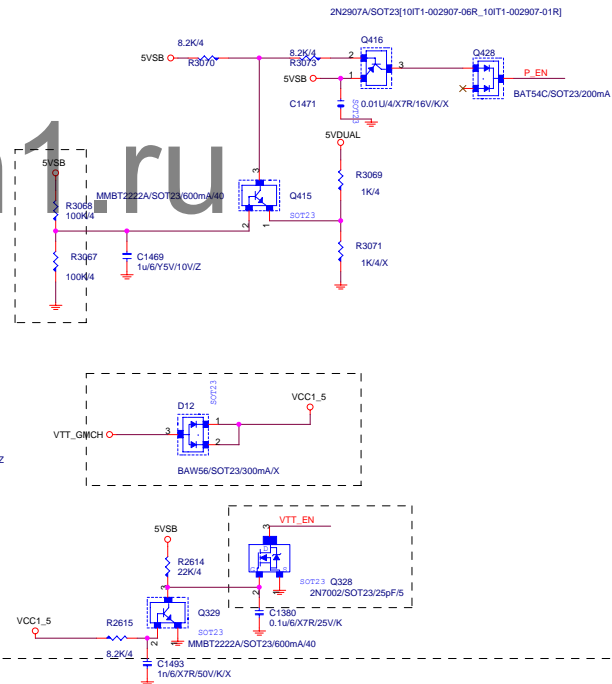
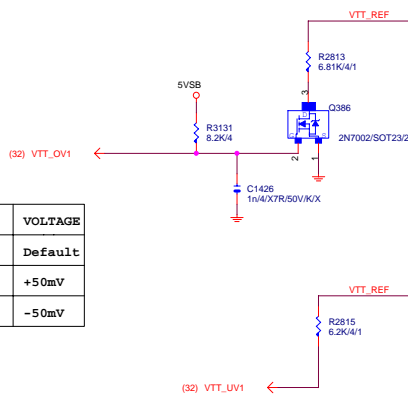
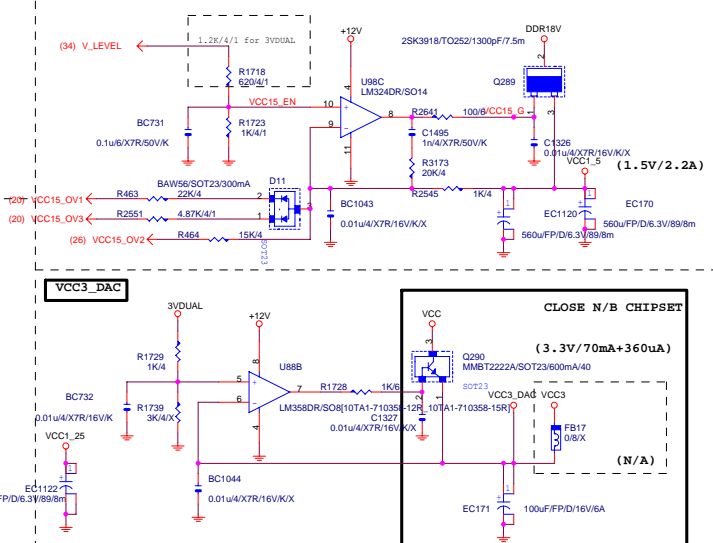
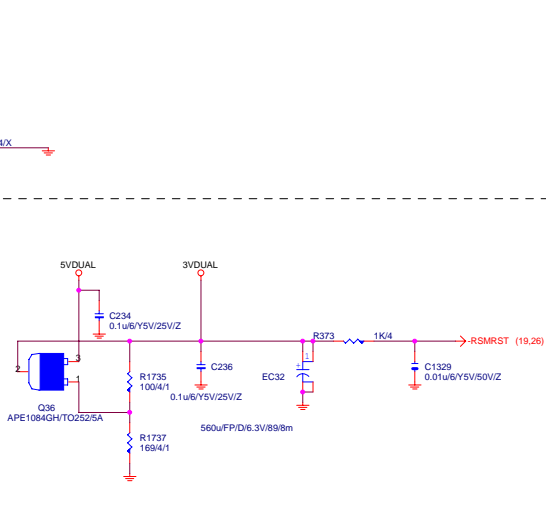
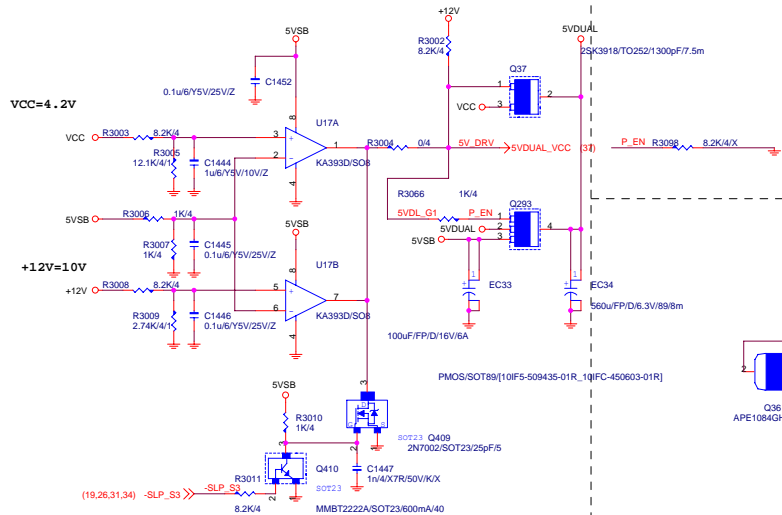


Gigabyte Technology

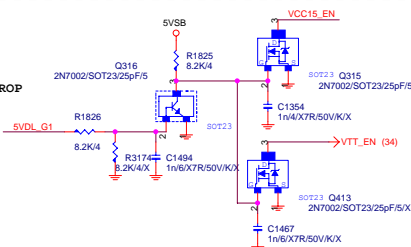
Title			AUDIO JACK
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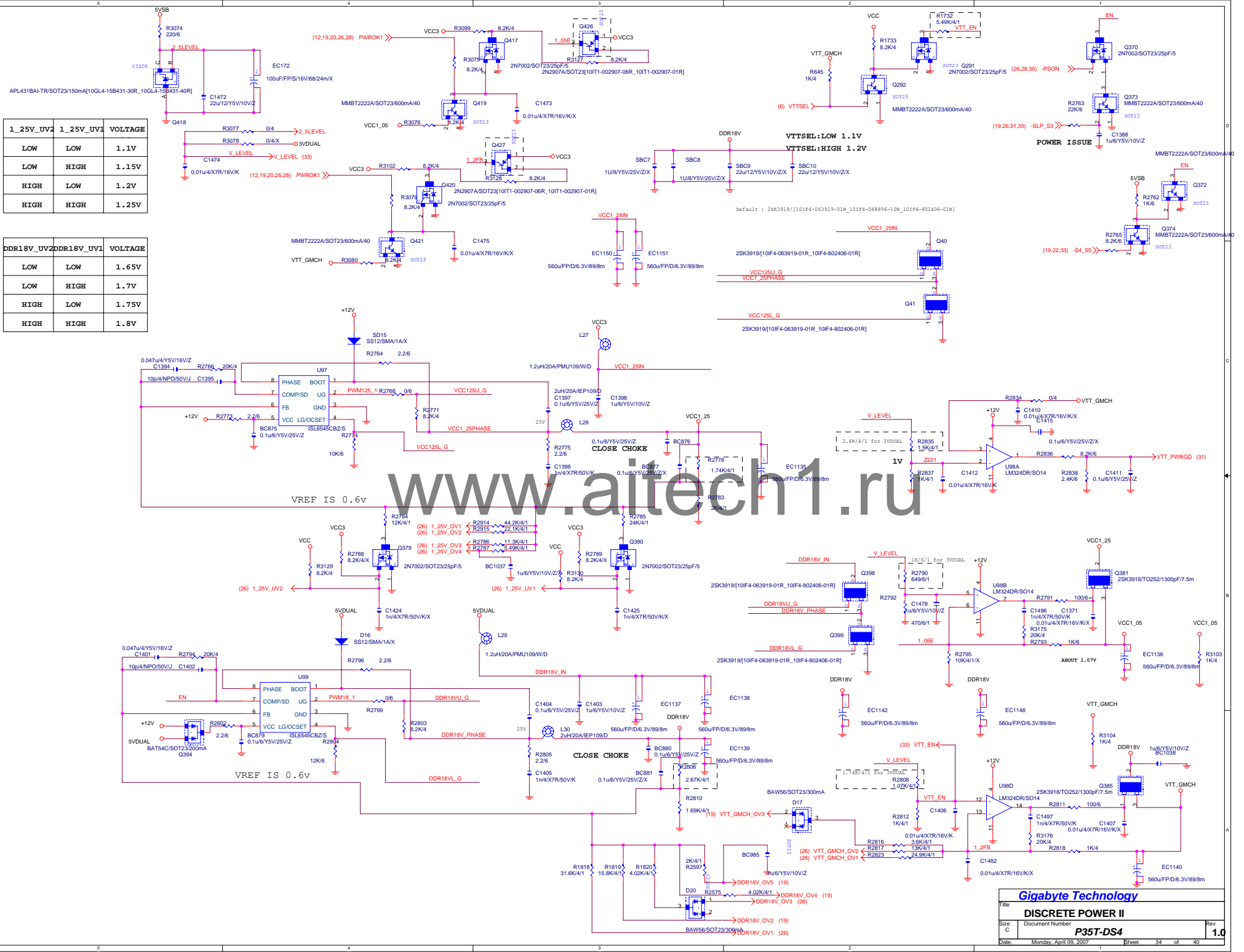


S3 TURN OFF 2_5LEVEL, 避免DDR18V DROP
(因PSU +12V太晚關, 造成OP TURN ON, 導致DDR18V LOADING WORSE)

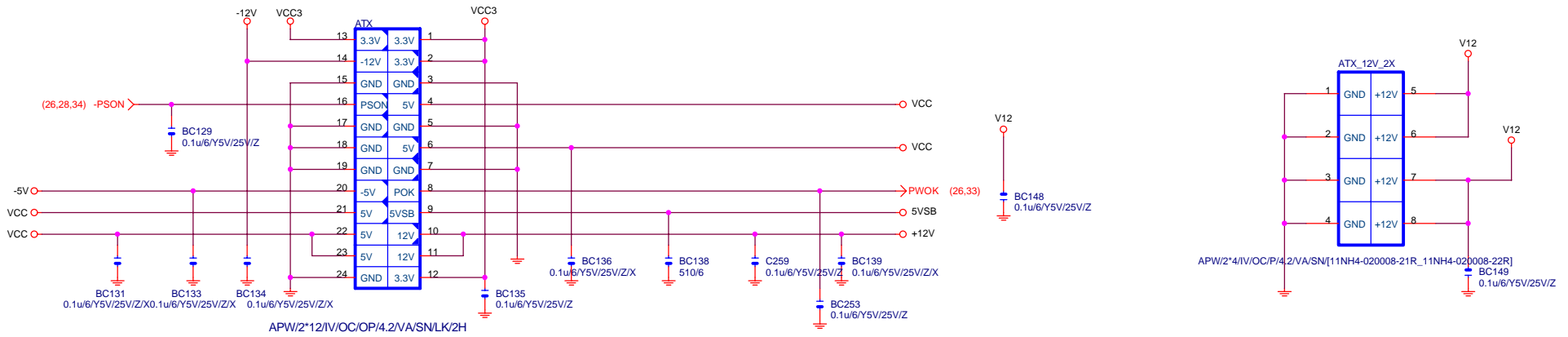


1_25V_UV2	1_25V_UV1	VOLTAGE
LOW	LOW	1.1V
LOW	HIGH	1.15V
HIGH	LOW	1.2V
HIGH	HIGH	1.25V

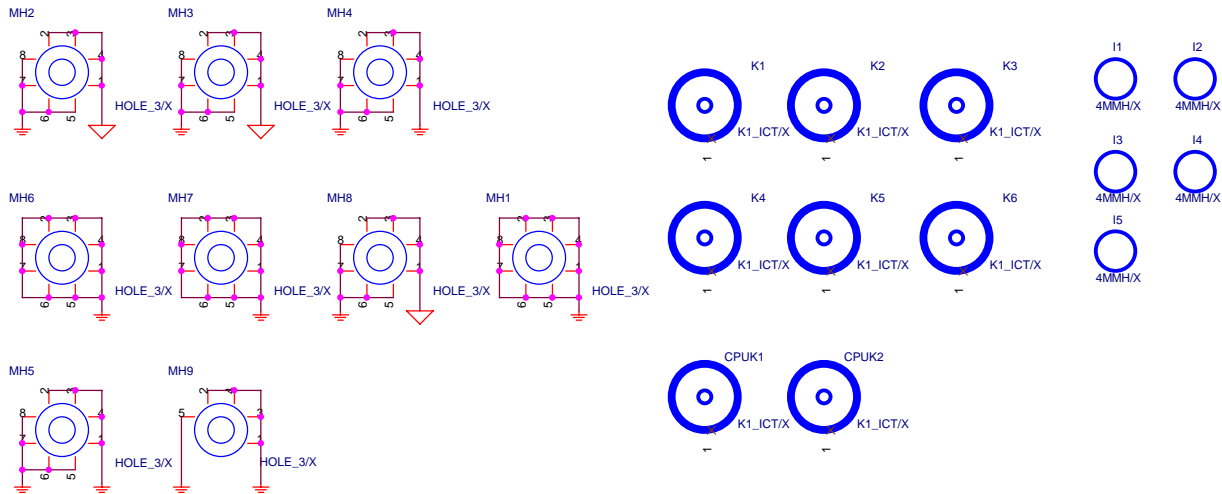
DDR18V_UV2	DDR18V_UV1	VOLTAGE
LOW	LOW	1.65V
LOW	HIGH	1.7V
HIGH	LOW	1.75V
HIGH	HIGH	1.8V



ATX POWER CONNECTOR



HOLE_3-2--->有鉛

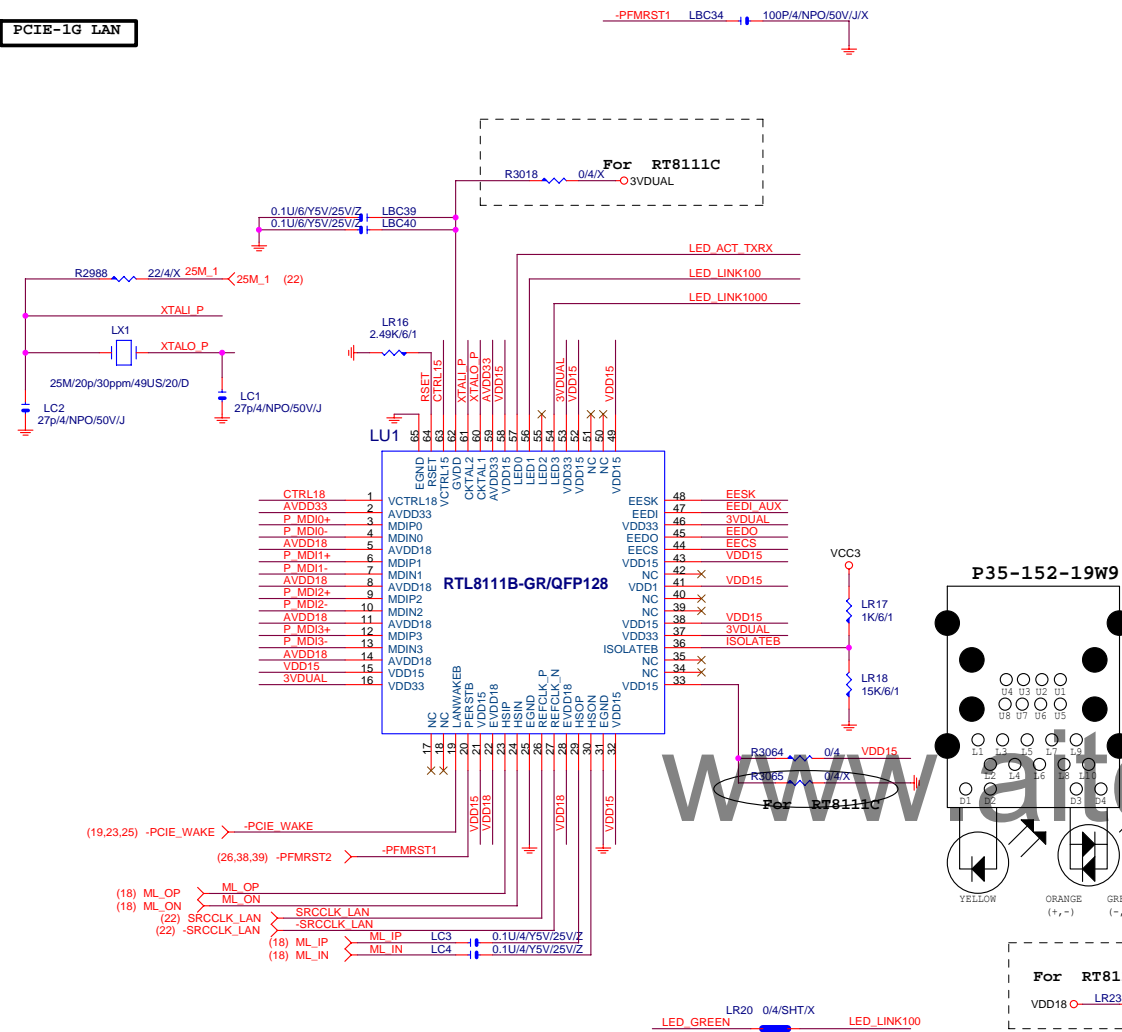


Gigabyte Technology

Title	ATX POWER CONNECTOR
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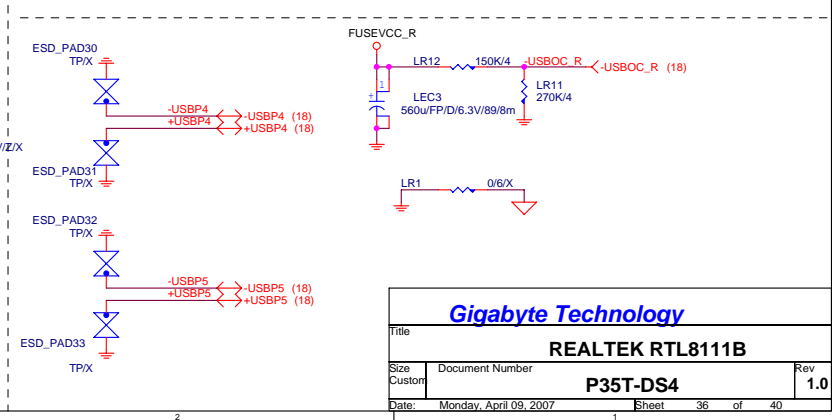
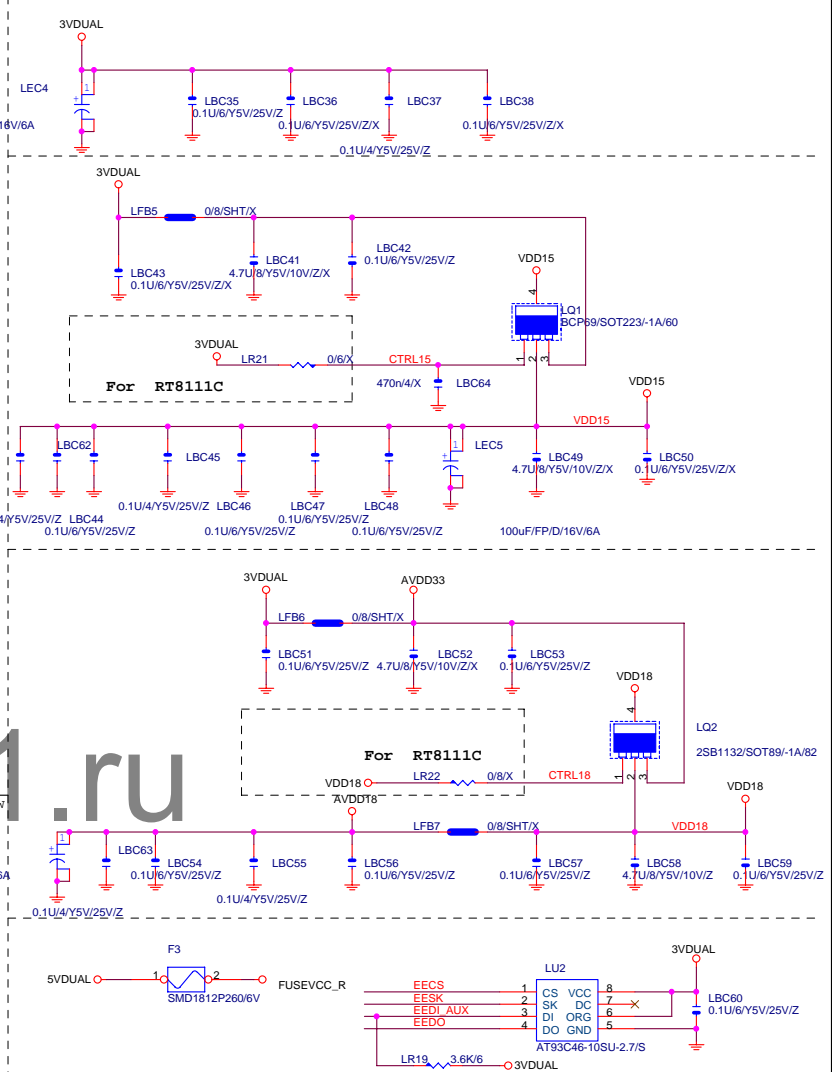
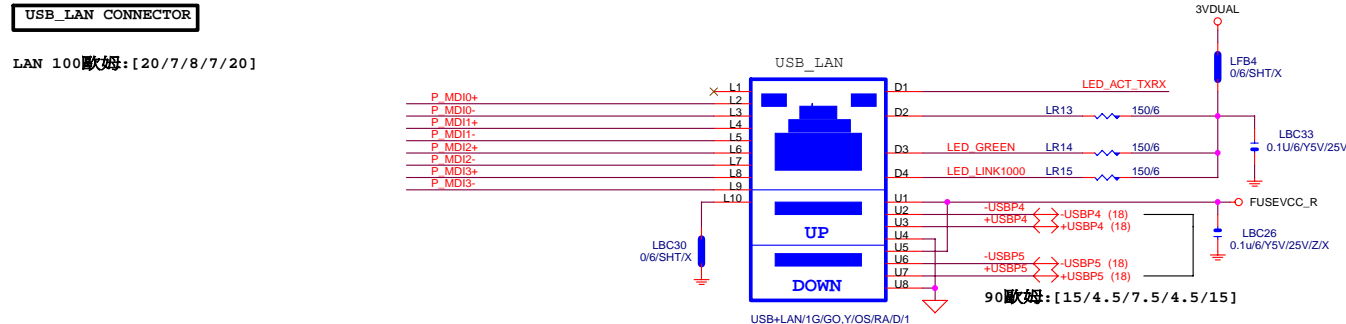
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PCIE-1G LAN

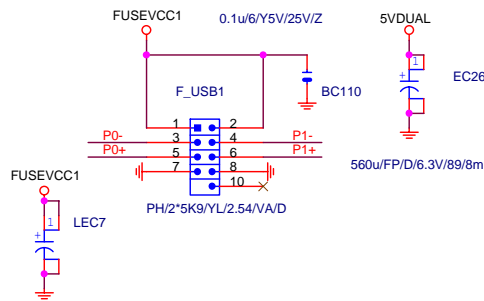


USB_LAN CONNECTOR

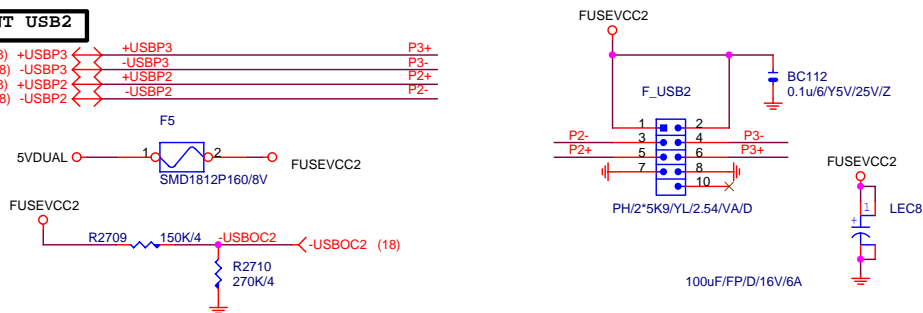
LAN 100 歐姆:[20/7/8/7/20]



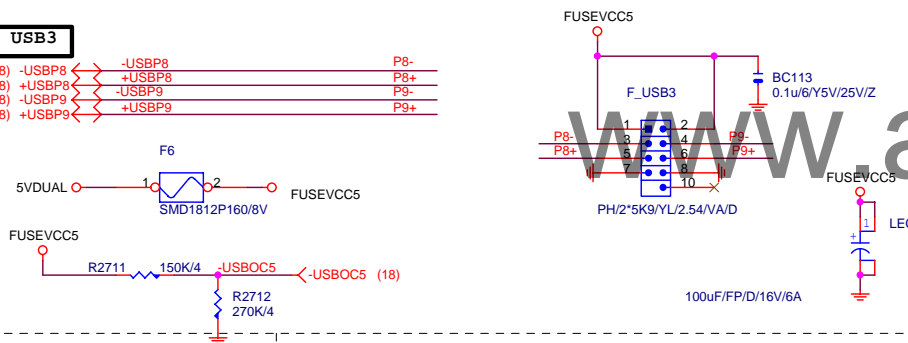
FRONT USB1



FRONT USB2

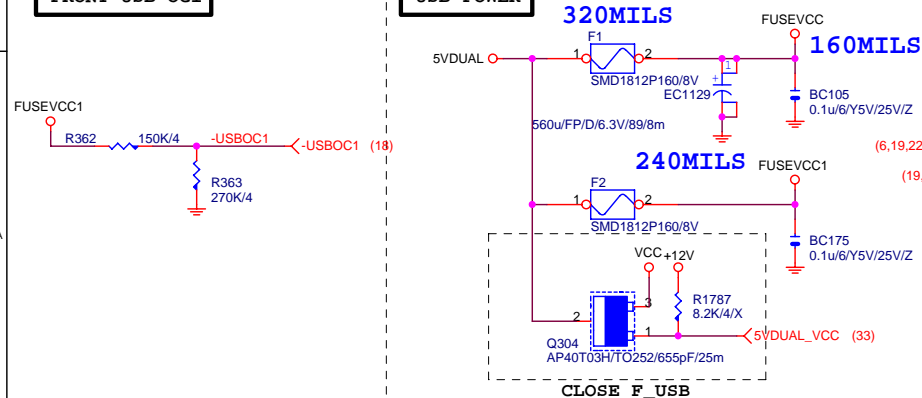


FRONT USB3

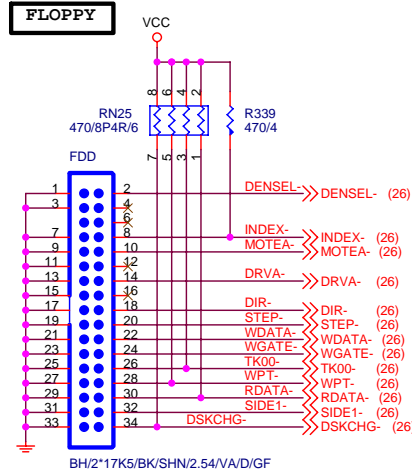


FRONT USB OC1

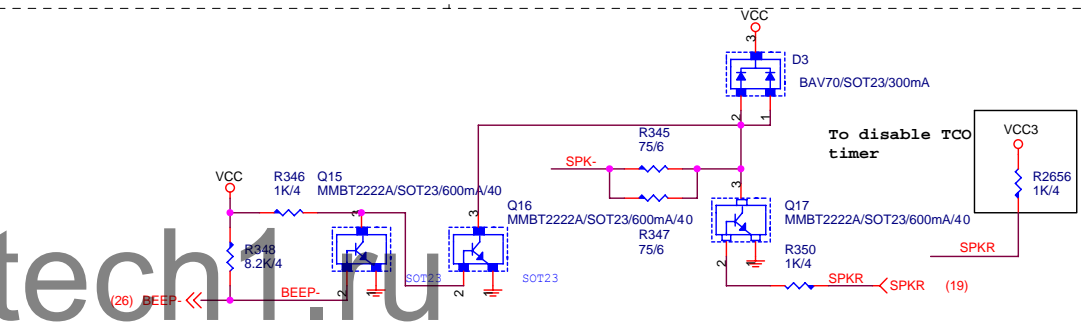
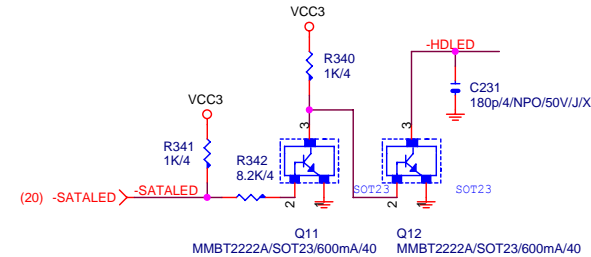
USB POWER



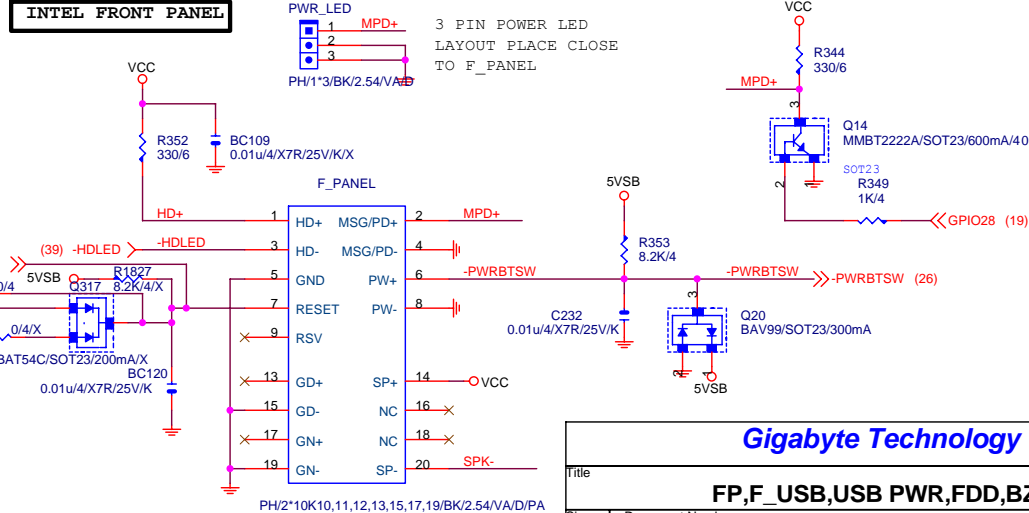
FLOPPY



SATA LED

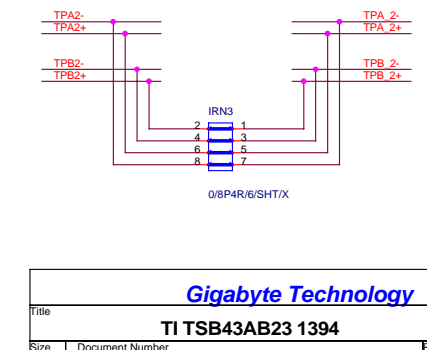
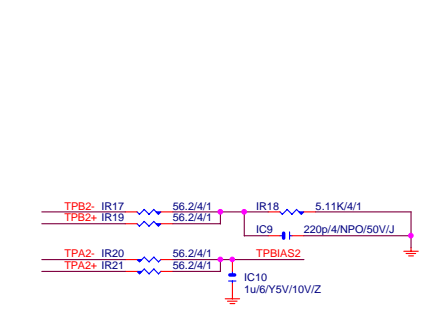
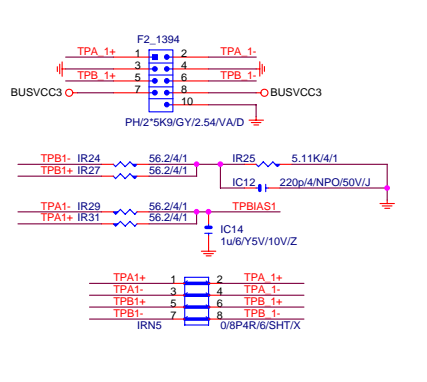
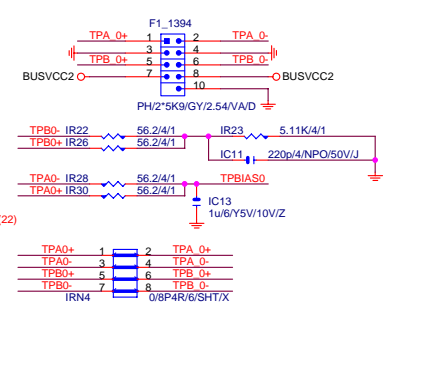
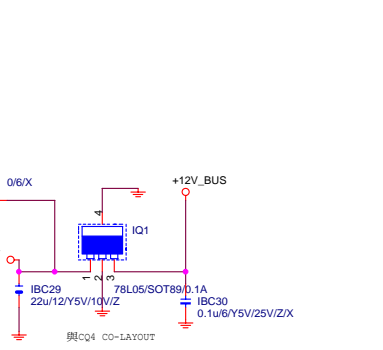
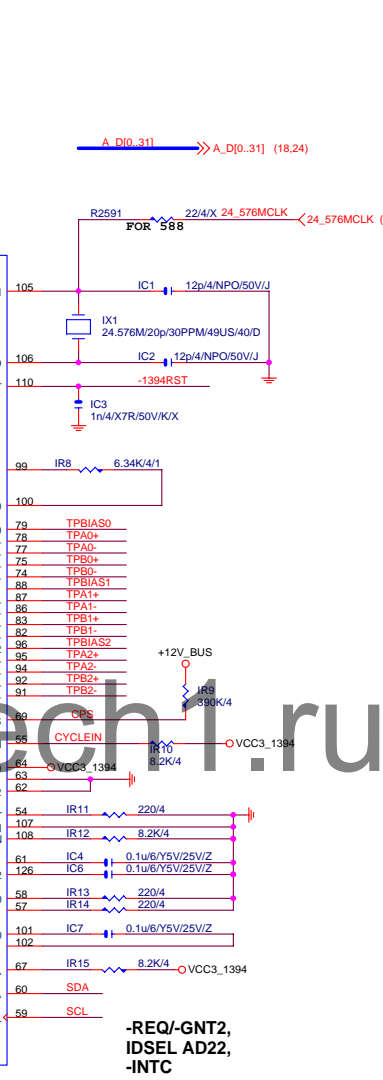
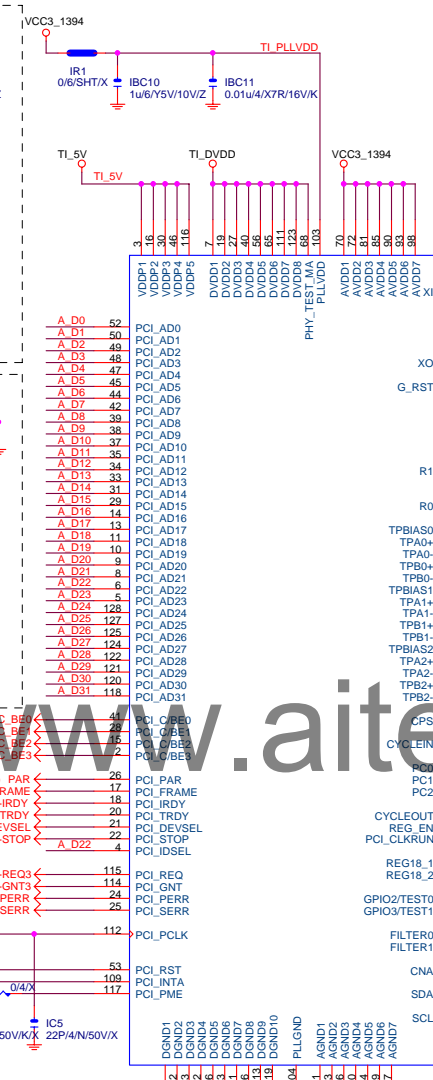
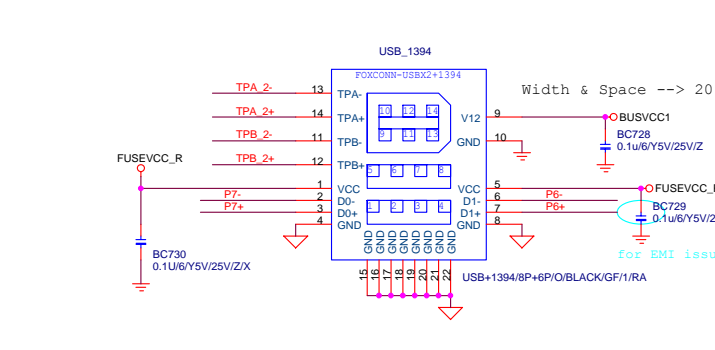
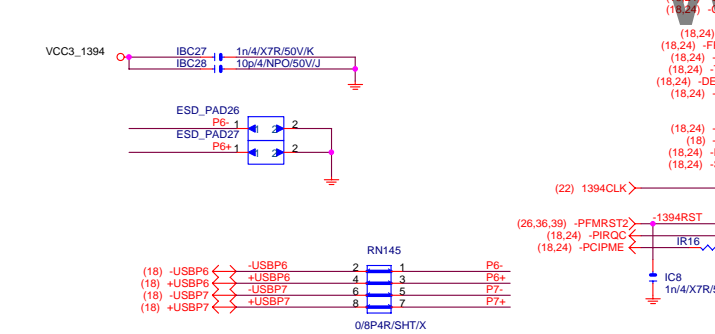
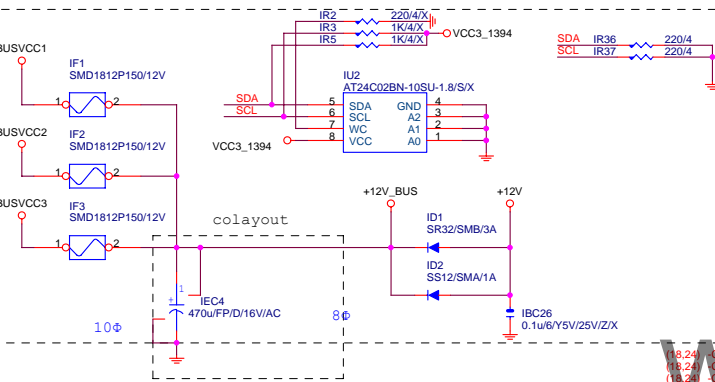
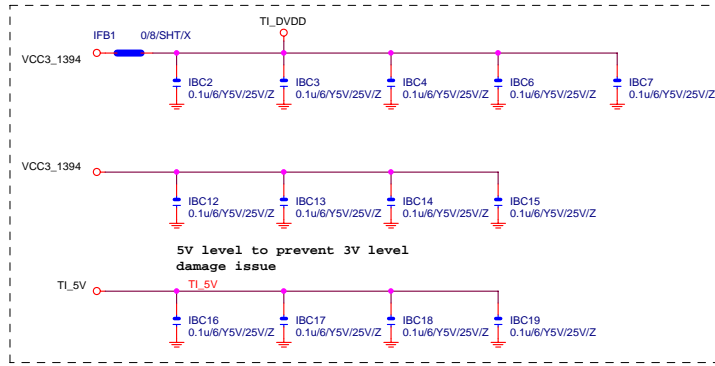


INTEL FRONT PANEL



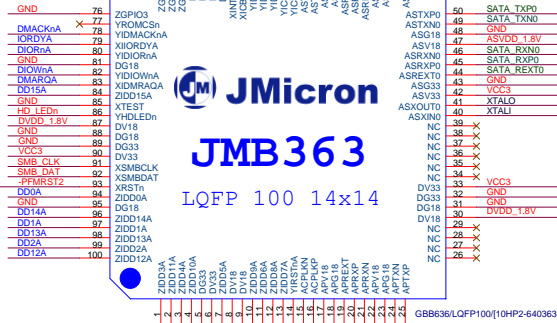
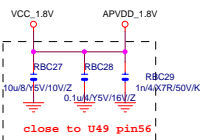
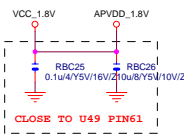
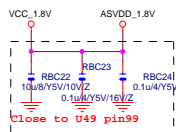
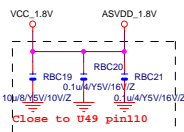
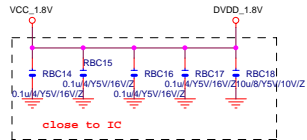
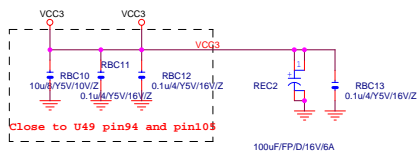
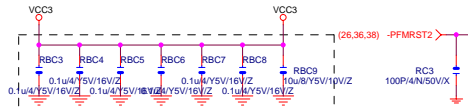
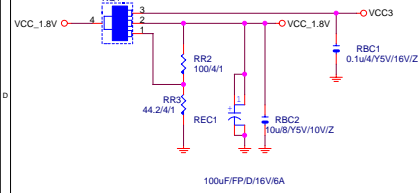
Gigabyte Technology

Title			
FP,F_USB,USB PWR,FDD,BZ			
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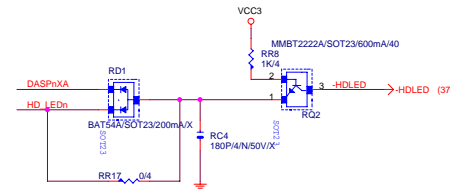
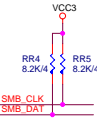
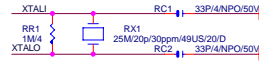
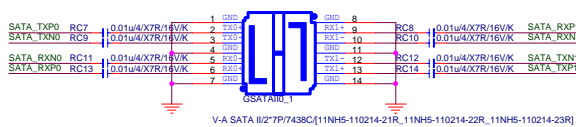
3.3V to 1.8V Voltage Regulator

AMC11175K/SOT223(0.8A)(10GL3-08117-06R)

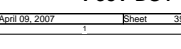
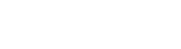
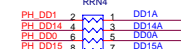
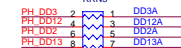
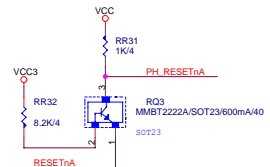
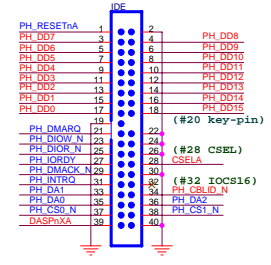


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SATA Connector



IDE Connector



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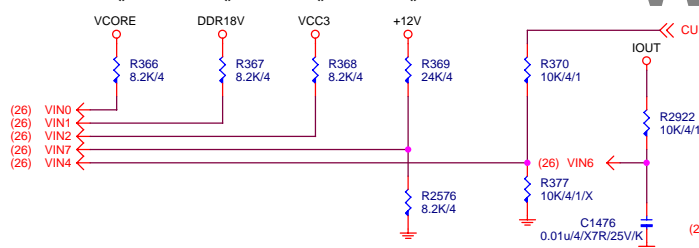
JMB363

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VOLTAGE-- H/W MONITOR

[illegible]

Linear SYS_FAN

FRONT USB2

Gigabyte Technology

HWM,KB/MS, FAN CTRL

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