

Model Name: GA-H61M-USB3-B3-JP *Revision 2.0*

SHEET

TITLE

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01	COVER SHEET
02	BOM & PCB MODIFY HISTORY
03	BLOCK DIAGRAM
04	CPU_LGA1155-A
05	CPU_LGA1155-B
06	CPU_LGA1155-C
07	DDR III CHANNEL A
08	DDR III CHANNEL B
09	PCH_FDI,DMI,USB,PCIE,NVRAM
10	PCH_DP,CLK BUFFER
11	PCH_HOST,SATA,PCI
12	PCH_GPIO,CTRL,AUDIO
13	PCH_PWR,GND
14	PCI EXPRESS*16 SLOT
15	PCI EXPRESS*1 SLOT
16	PCI EXPRESS*1 SLOT / CLOCK GEN.
17	ITE 8728 LPC IO
18	COMA,KB_MS,R_USB,-PROCHOT
19	HWM,FAN CTRL,OV
20	DUAL BIOS
21	FP,FUSB,SPK,SATALED
22	ALC889
23	REAR AUDIO JACK
24	ATHEROS AR8151/USB_LAN
25	DISCRETE POWER
26	ATX,-S_WARN,-S_ACK,5VDUAL
27	ISL95870_CPU_VTT

28	VCORE ISL6364_1
29	VCORE ISL6364_2
30	VCORE ISL6364_3
31	DVI/HDMI
32	etron USB 3.0
33	ITE 8893E
34	PCI SLOT
35	Marvell 9172

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Component value change history

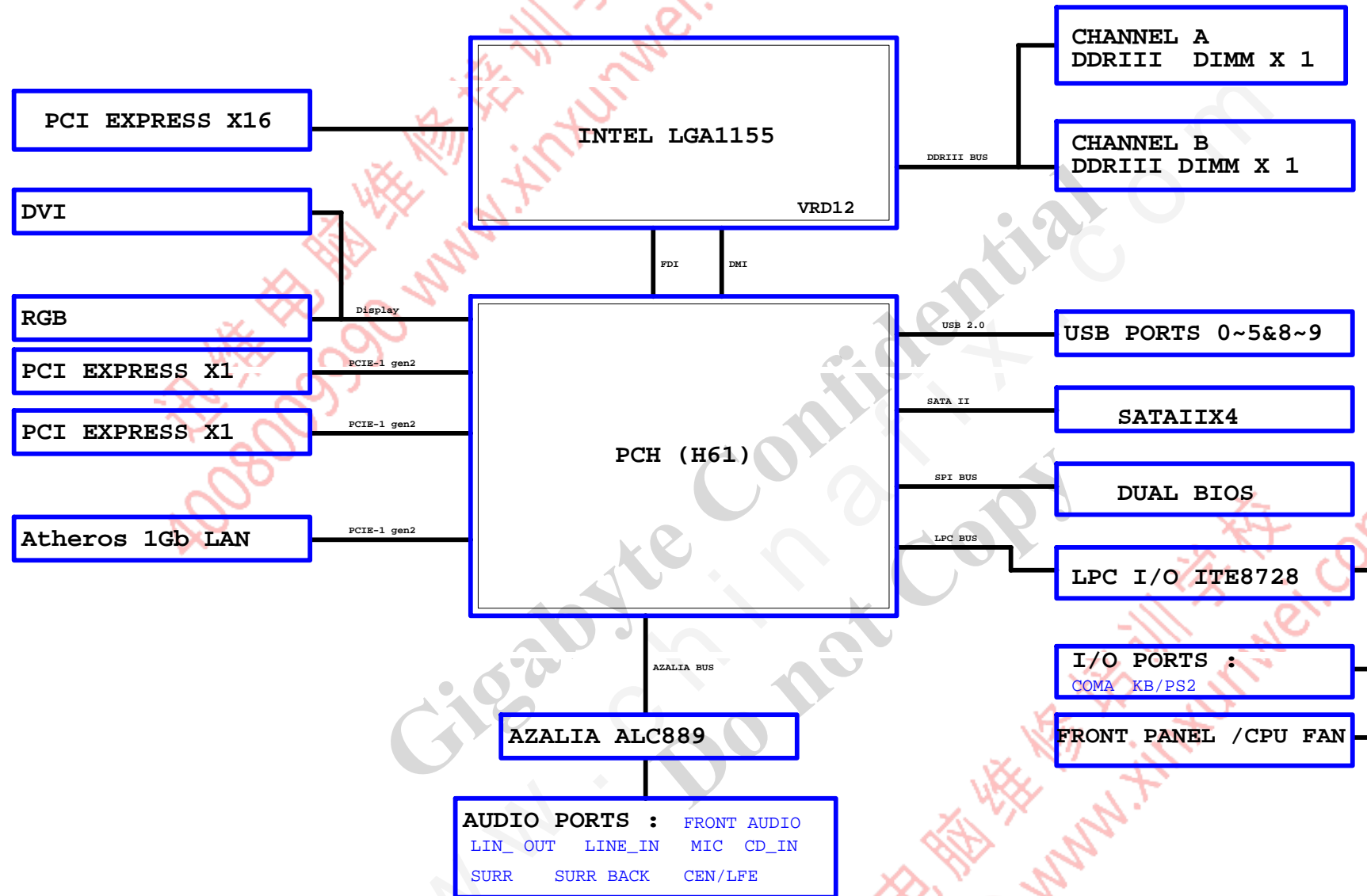
2011/09/01

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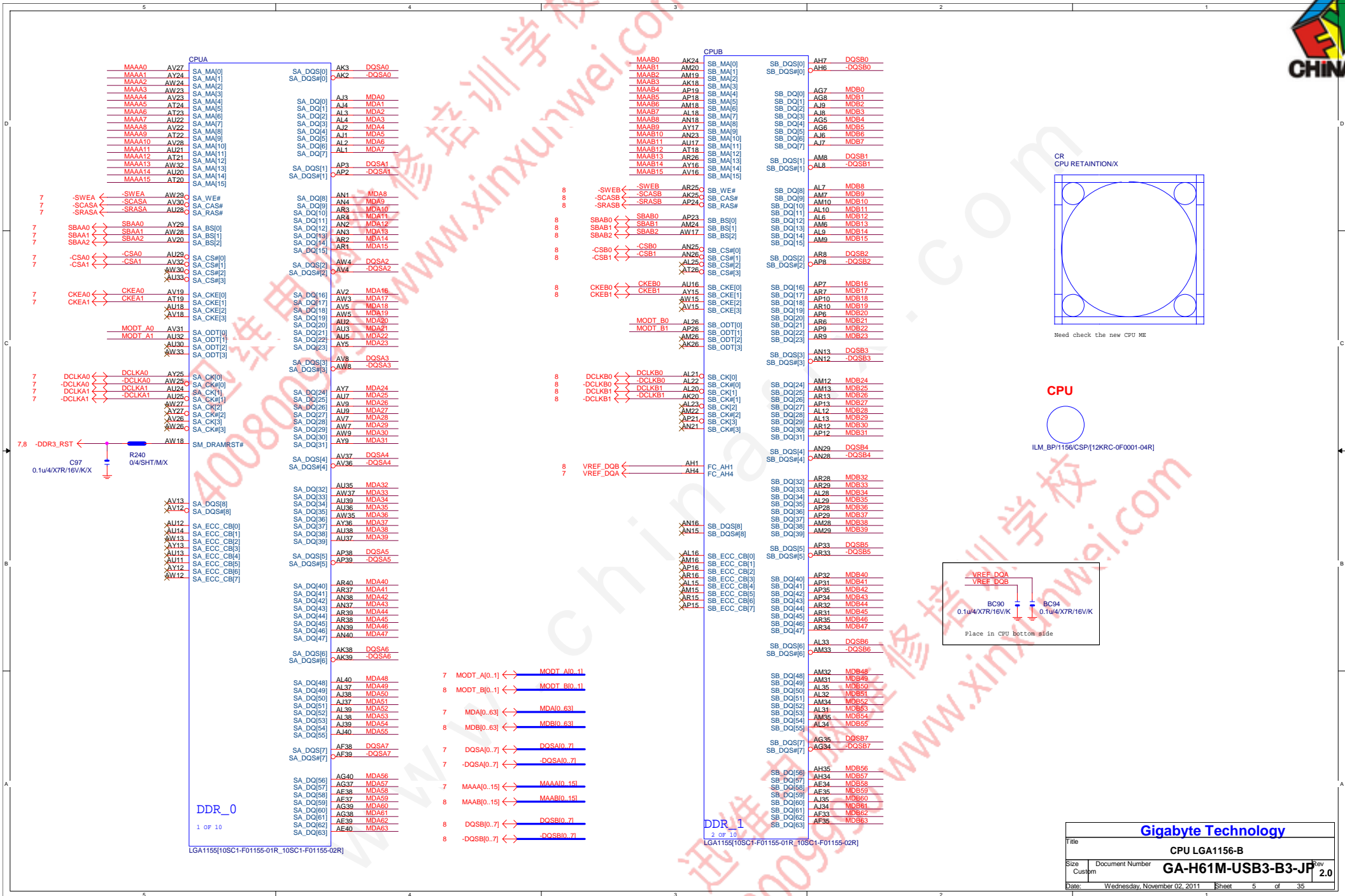
Circuit or PCB layout change

[illegible]

BLOCK DIAGRAM



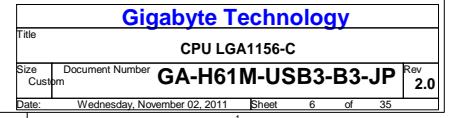
Gigabyte Technology			
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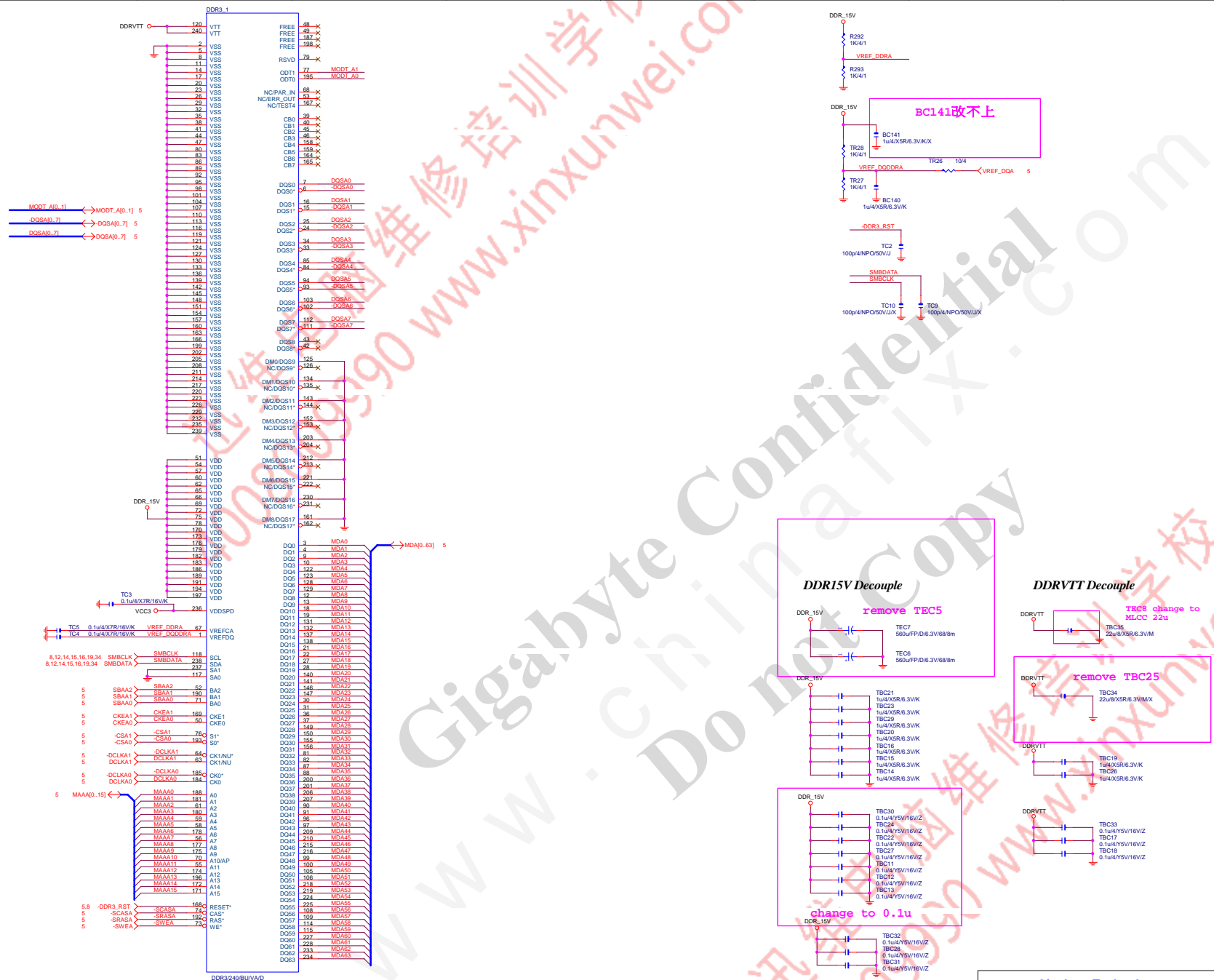


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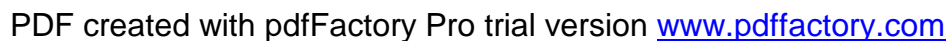
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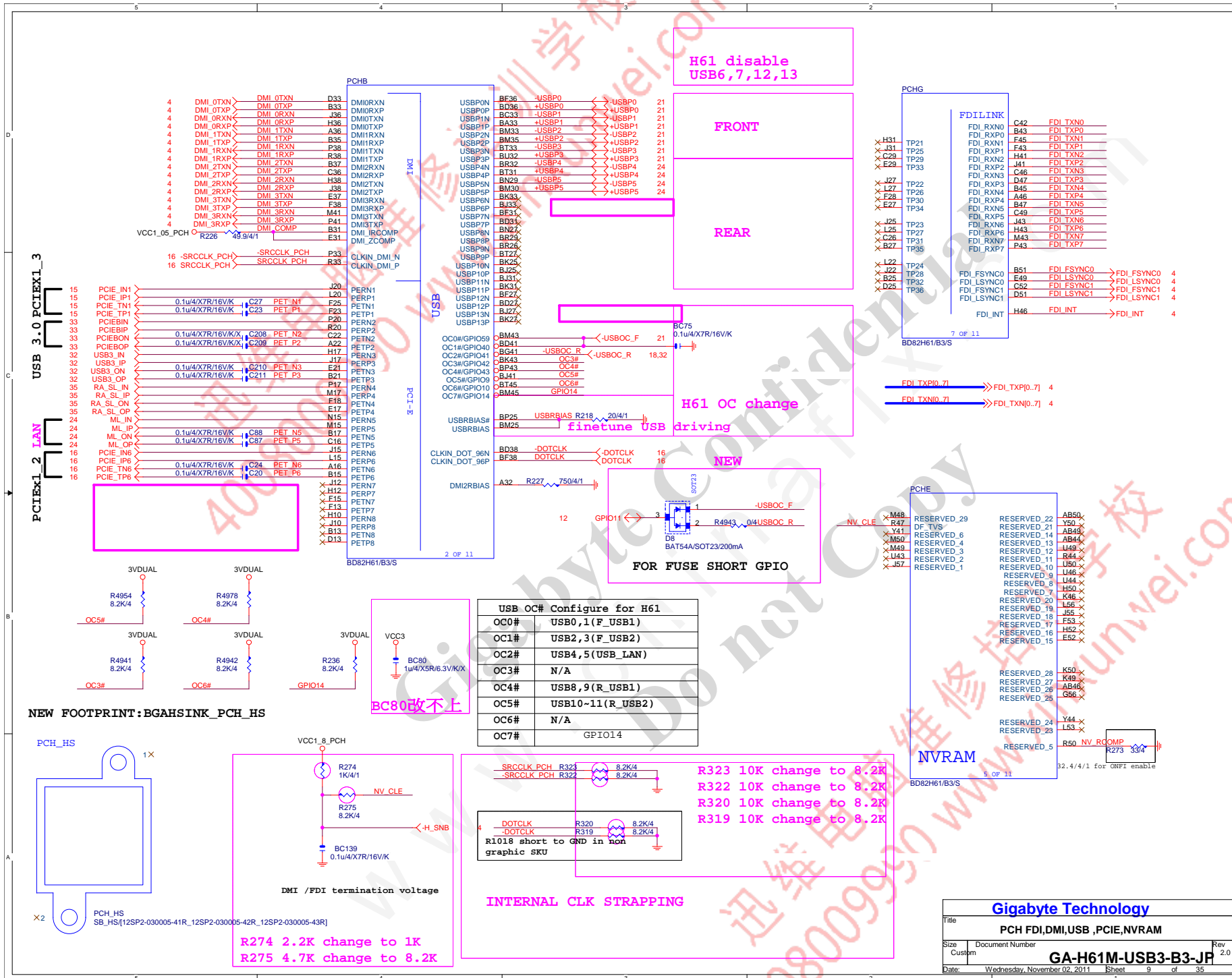
Gigabyte Technology		
CPU LGA1156-B		
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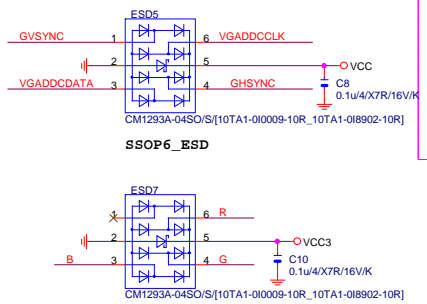
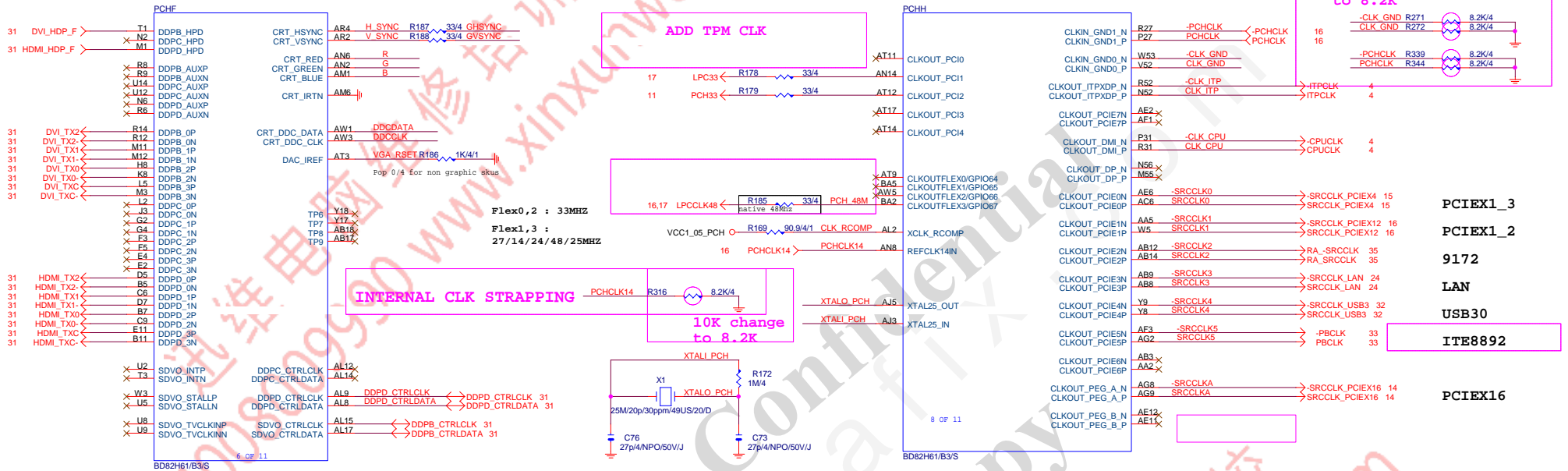




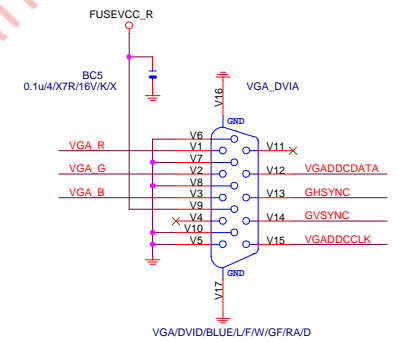
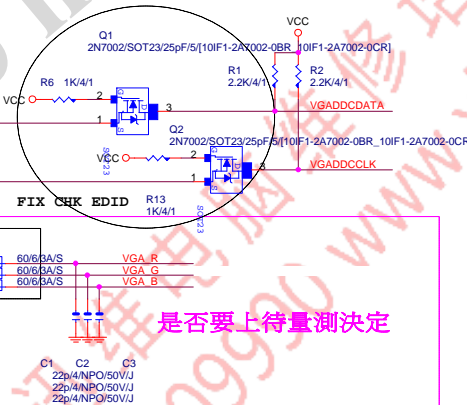
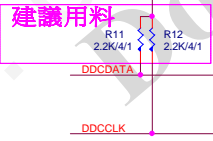
Gigabyte Technology			
File	DDR3 CHANNEL A		
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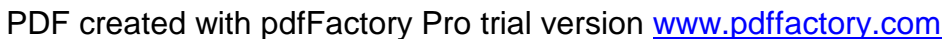


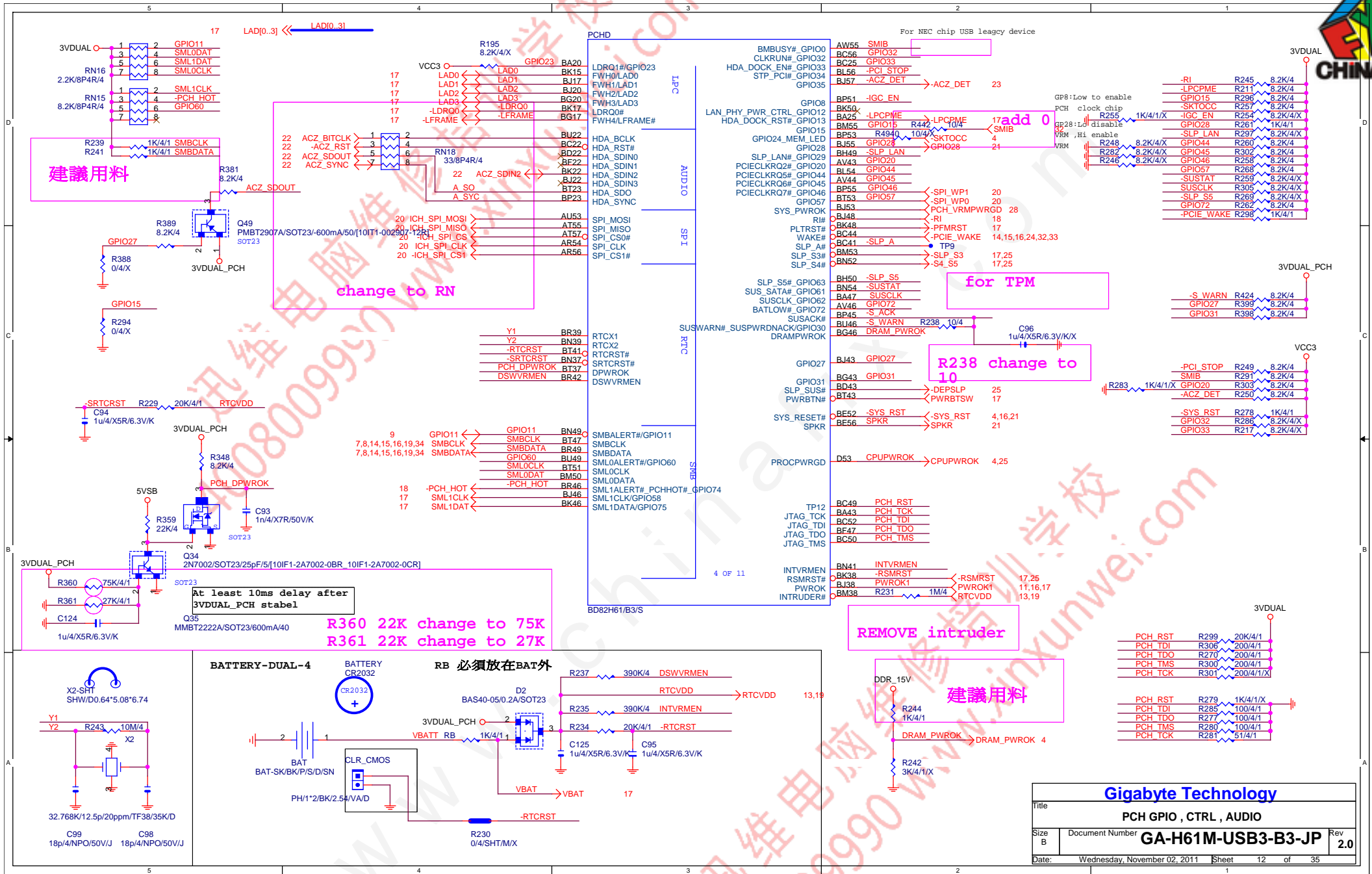


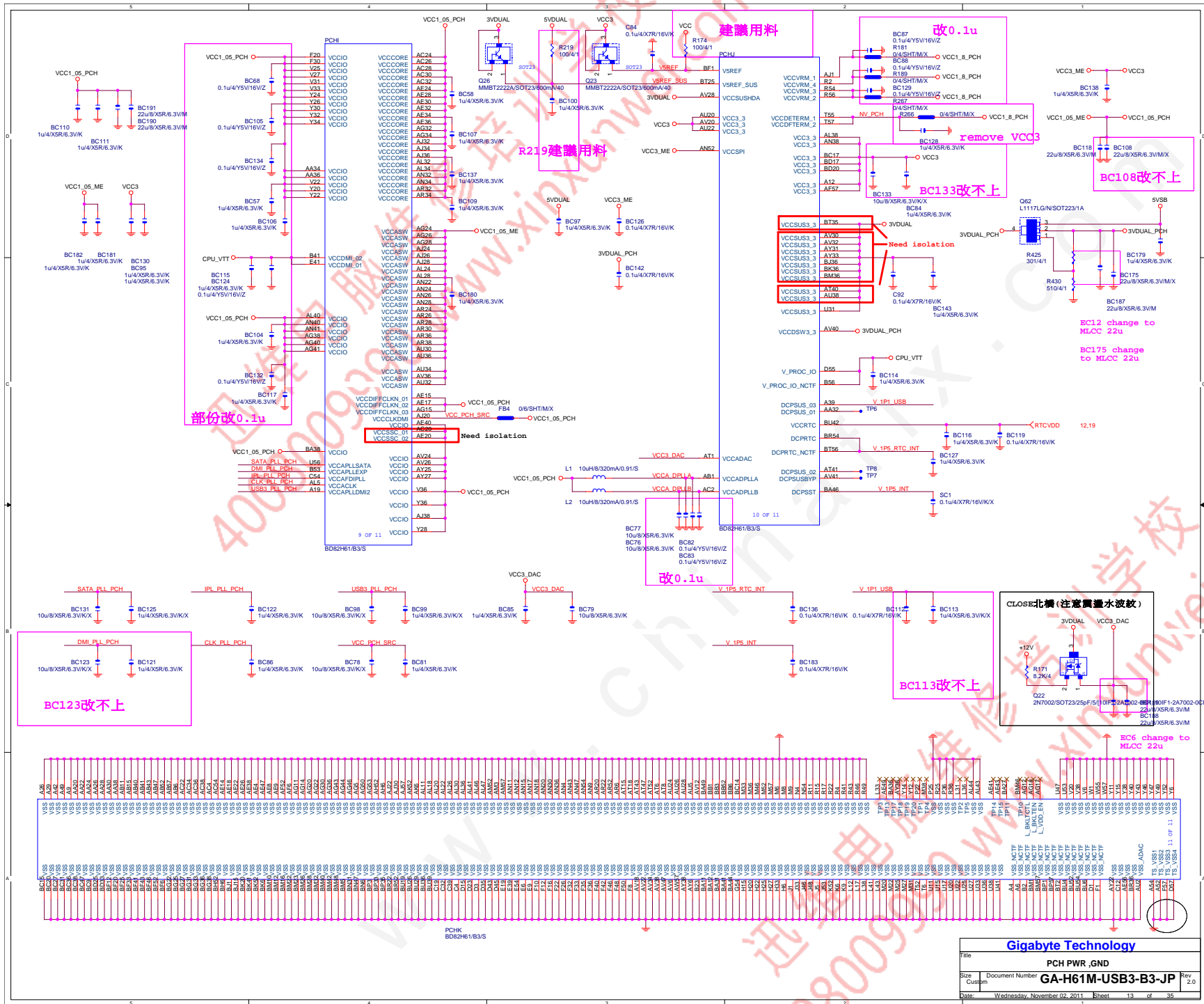
是否要上待量测决定



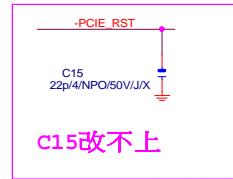
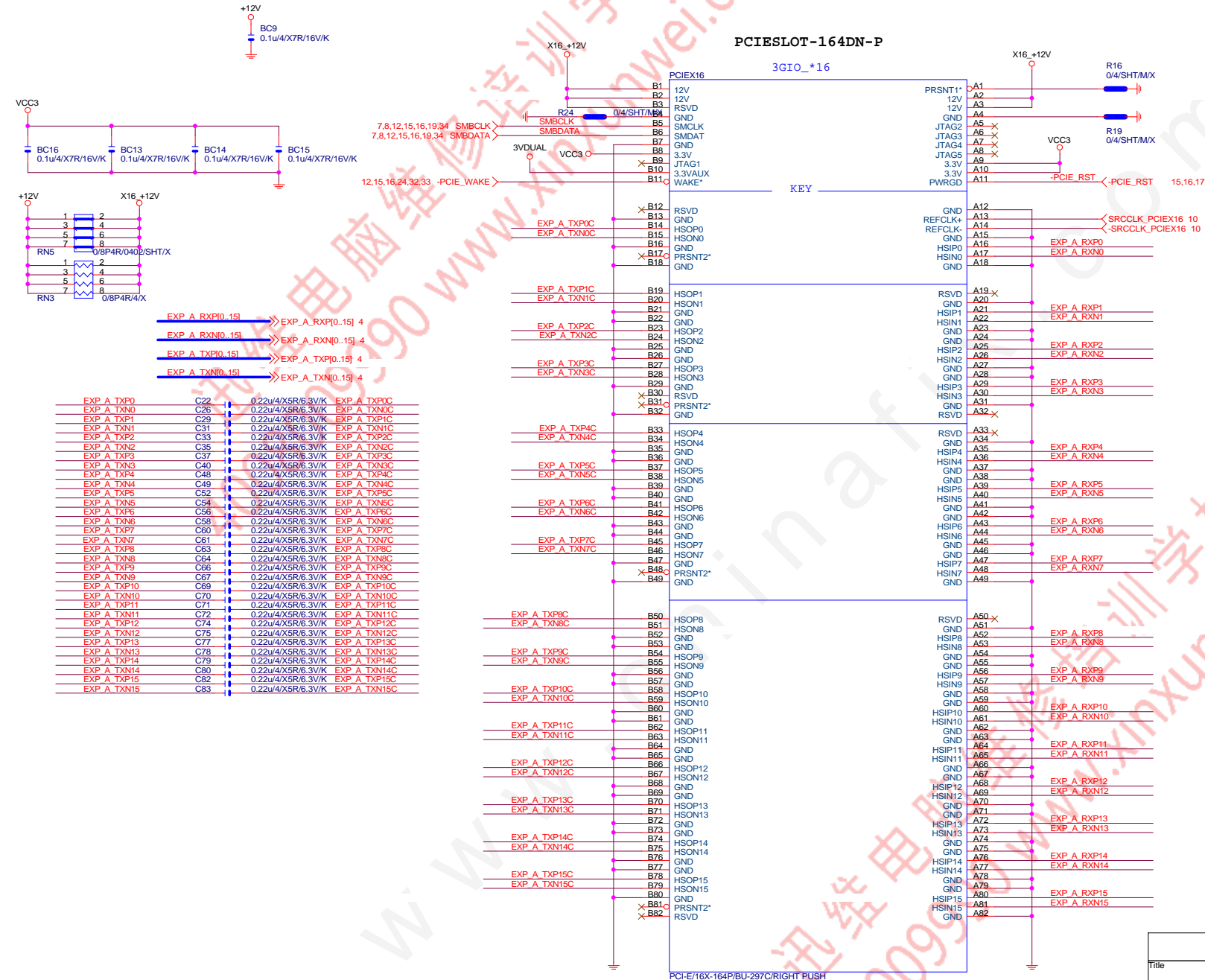
Gigabyte Technology			
PCH DISPLAY, CLK BUFFER			
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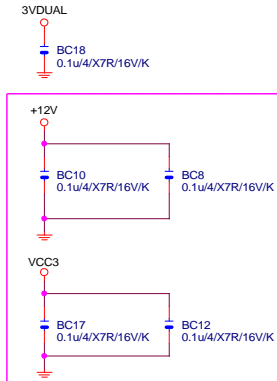
EC6D_8D10MM-RH



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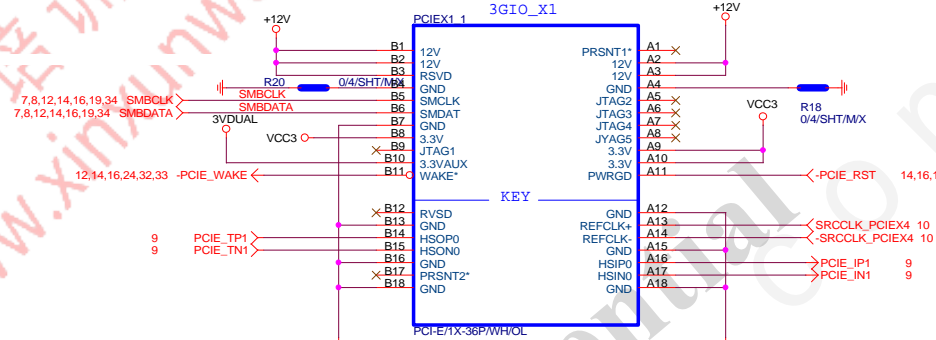
Title		PCI EXPRESS * 16	
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PCIESLOT-64D-98D-P



BC8 BC12改不上

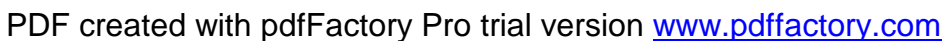
REMOVE RN

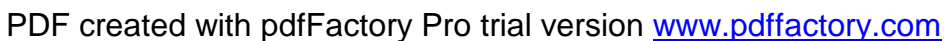


PCIE4 change to PCIE1

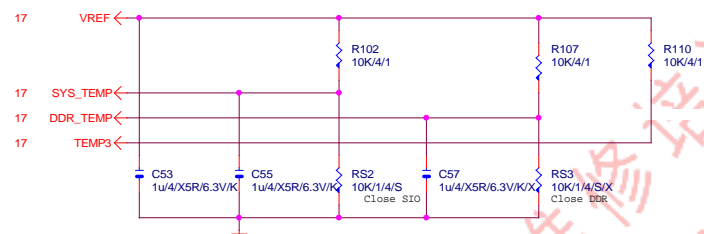
Gigabyte Technology

Title		PCI EXPRESS X 4 PORT	
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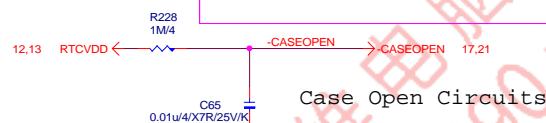


TEMP H/W MONITOR



CASE OPEN

REMOVE intruder



VOLTAGE-- H/W MONITOR

I (VAXG)

CUR_DETECT1

I (VCORE)

CUR_DETECT

I (VCC)

CUR_DETECT

I (VCC)

CUR_DETECT

I (VCC)

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CUR_DETECT

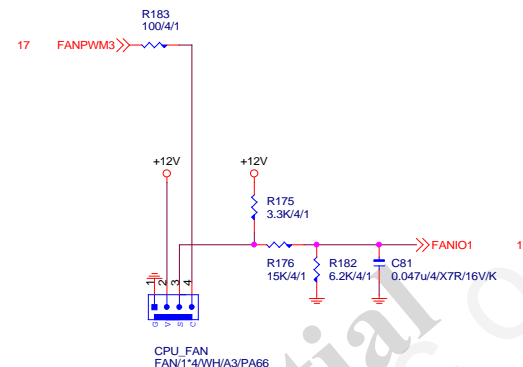
I (VCC)

CUR_DETECT

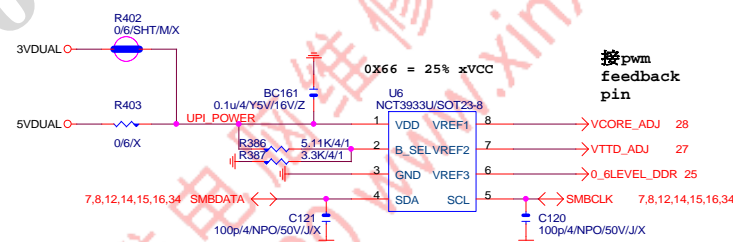
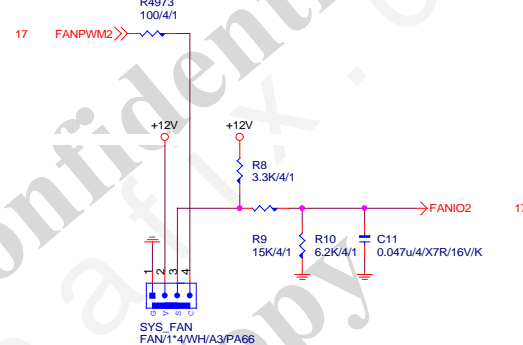
I (VCC)

CUR_DETECT

CPU SMART FAN



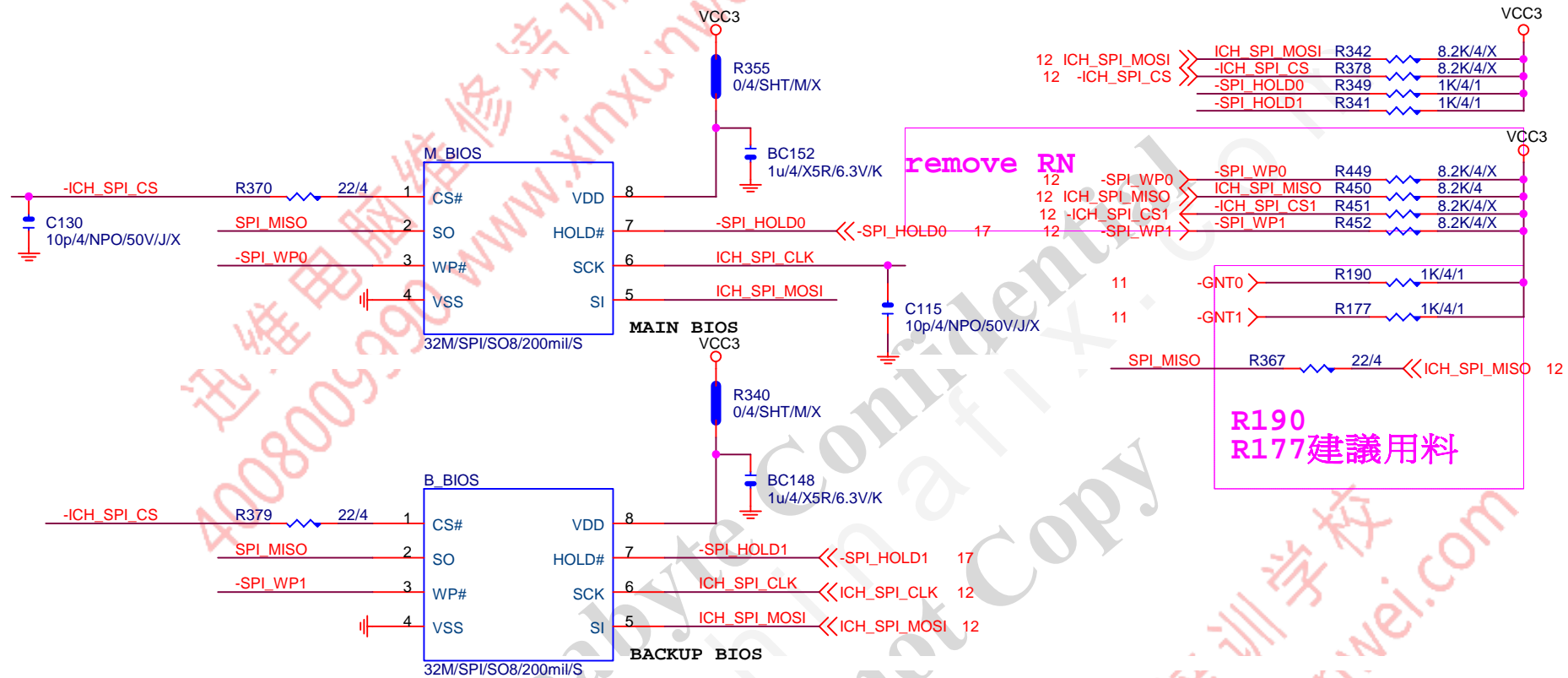
SYS SMART FAN



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Title		
HWM,FAN CTRL,OV		
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DUAL BIOS

R349 R341 改上件 for ITE 8728 DX

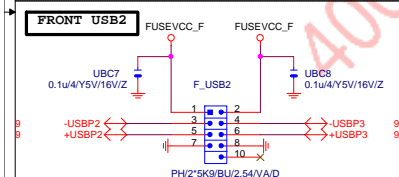
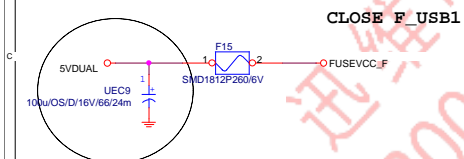
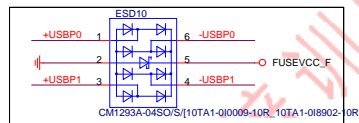
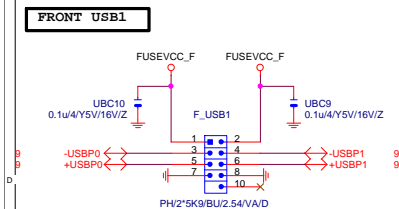


BOOT DEVICE	GNT1	GNT0
LPC	0	0
PCI	0	1
SPI	1	1

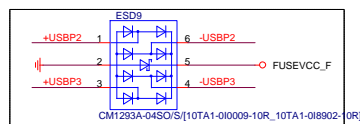
1 means floating
0 means PD 1K

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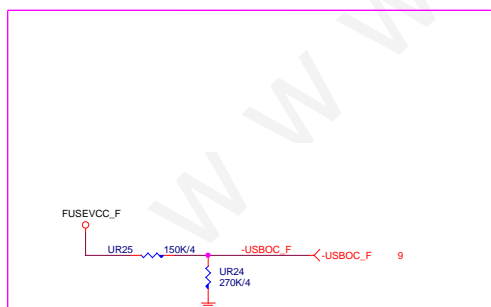
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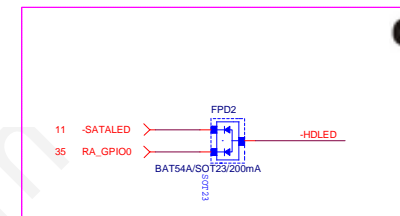
FRONT USB3



FU改pinheader

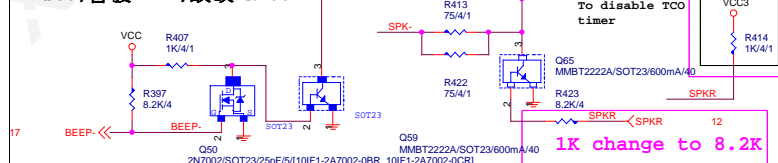


SATA LED

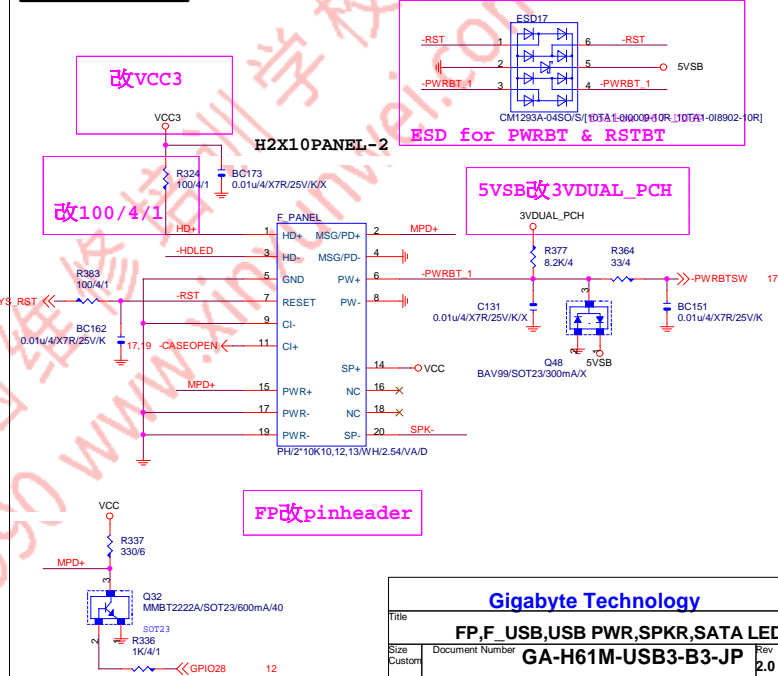


SPKR

RESETCONIN DEFAULT LOW
4sec, 會發BEEP, 故改2N7002



INTEL FRONT PANEL



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Title	FP,F_USB,USB PWR,SPKR,SATA LED	
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BC40	X	X	X	10uF/X5R	10uF/X5R	X	
R20	O	X	X	X	X	X	
R26	20K/1%	20K/1%	20K/1%	20K/1%	20K/1%	20K/1%	20K/1%
R47	X	X	O	X	O	O	
R48	O	O	X	O	X	X	
/11	4.7uF/X5R	4.7uF/X5R	4.7uF/X5R	4.7uF/X5R	4.7uF/X5R	10uF/X5R	4.7uF/X5R
/27/34/	75 ohm	75 ohm	75 ohm	75 ohm	75 ohm	66 ohm or lower	75 ohm
41	X	X	X	O	X	X	
CQ5	O	O	O	X	O	O	

co-layout

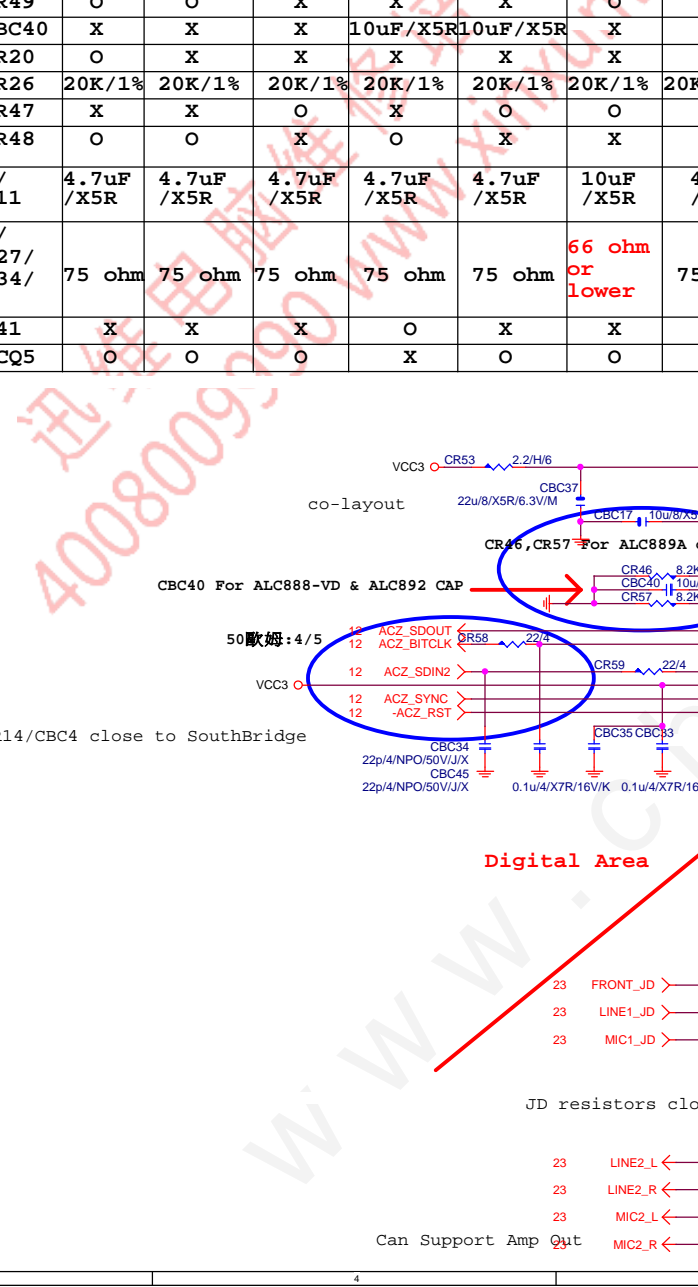
50欧姆: 4/5

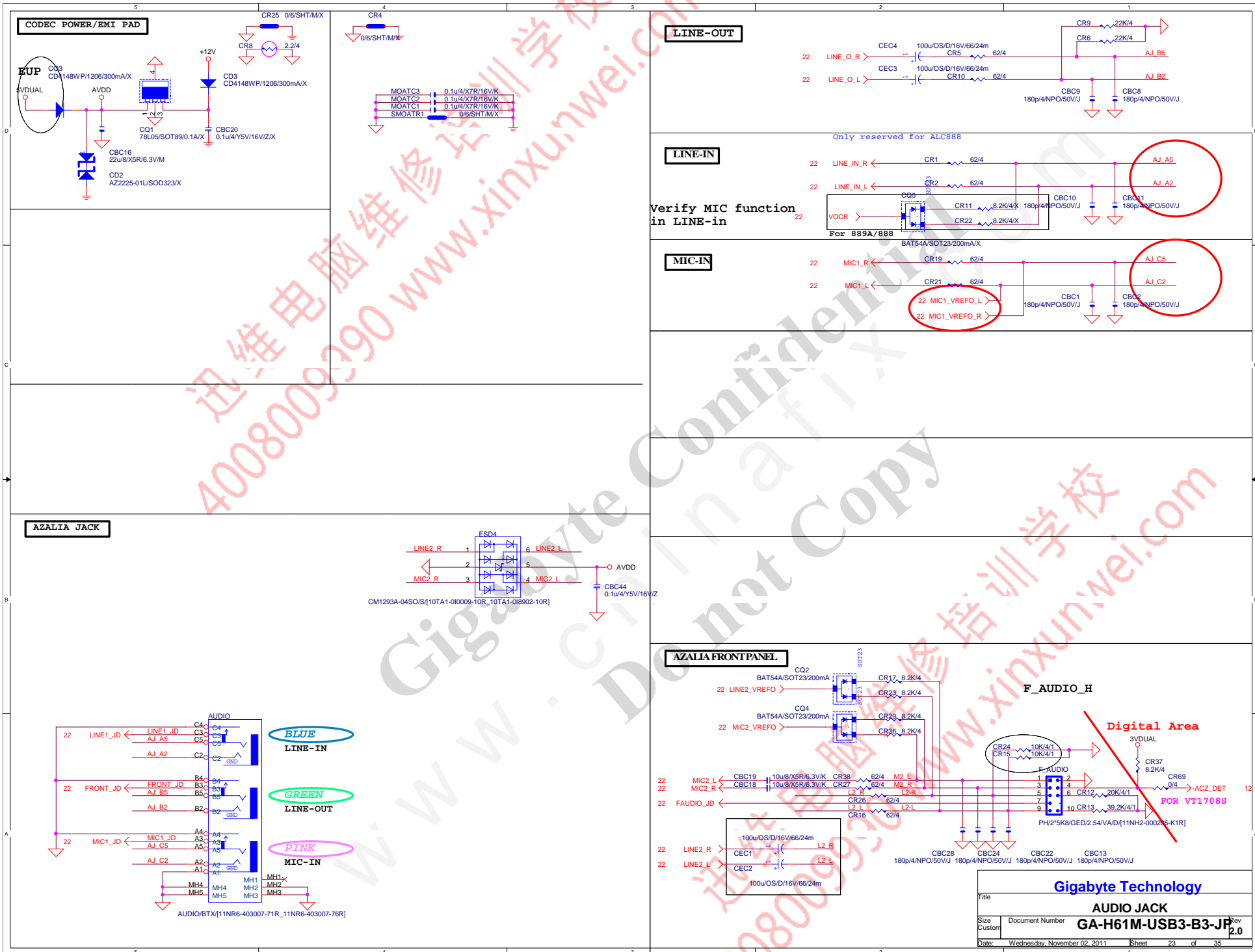
14/CBC4 close to SouthBridge

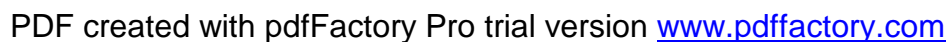
Digital Area

JD resistors close to

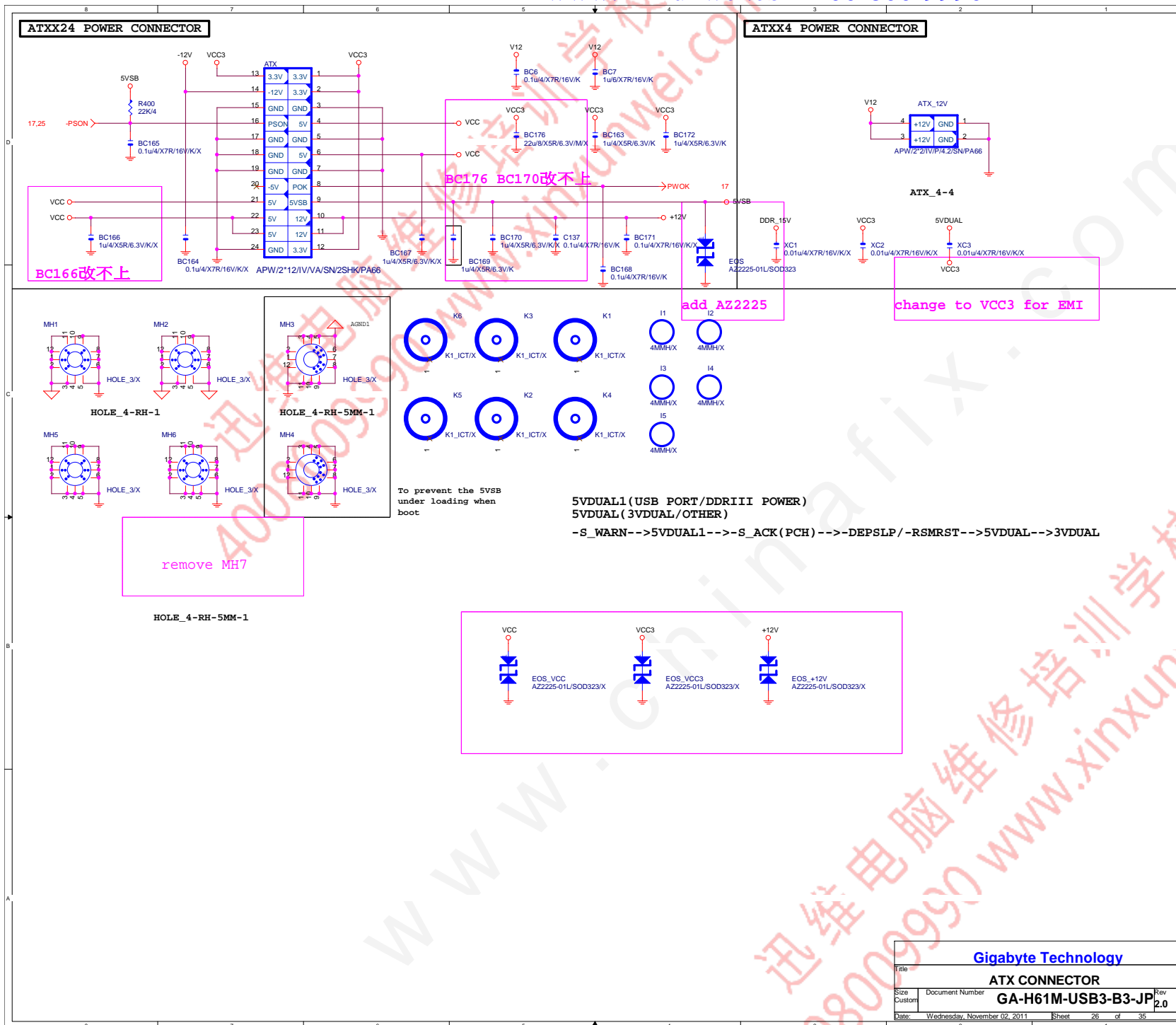
Can Support Amp Out







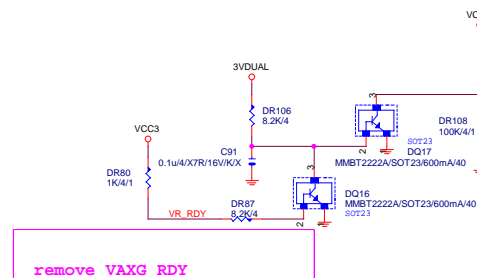
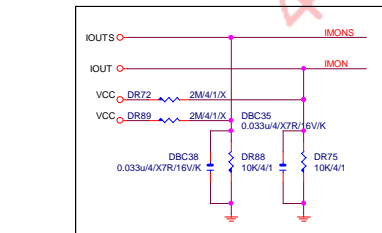




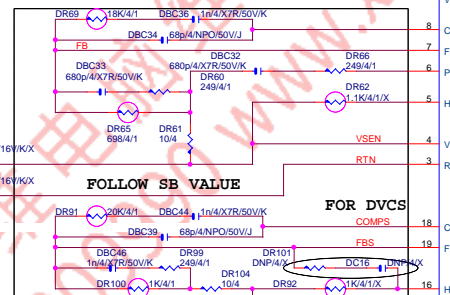
DR85 150 change to 51
 DR69 6.8K change to 11K
 DR82 0 change to 10
 DR62 2.1K change to 1.1K
 DR65 1.6K change to 1.1K
 DR57 100 change to 8.2K
 DR102 100 change to 8.2K
 DR54 short change to 750
 DR103 short change to 1K
 DR91 6.8K change to 10K
 DR100 3.3K change to 1K
 DR69 11K change to 20K
 DR54 change to 1.2K

DR84 56.2 change to 51
 DR92 2.1K change to 1K

DR52 16.2K change to 24.9K

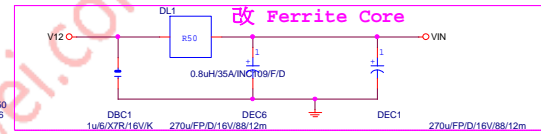
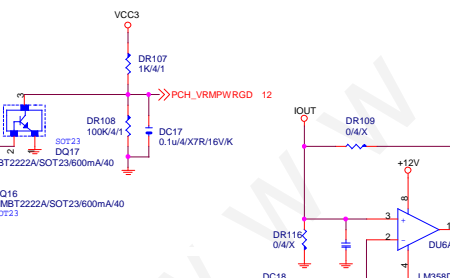


remove VAXG RDY

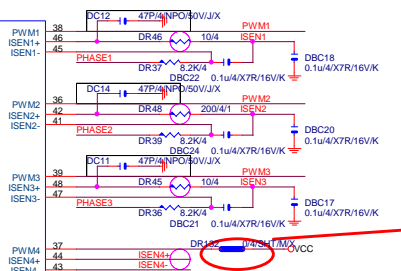


FOLLOW SB VALUE

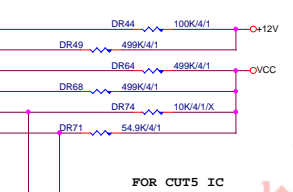
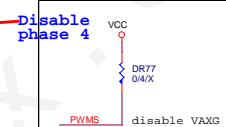
DR56 10K change to 0



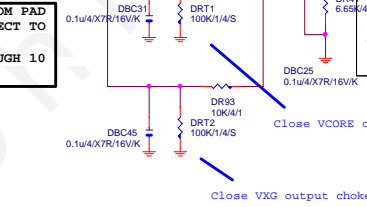
DR46 DR48 DR45 DR47 change to 10
 DR86 change to 750



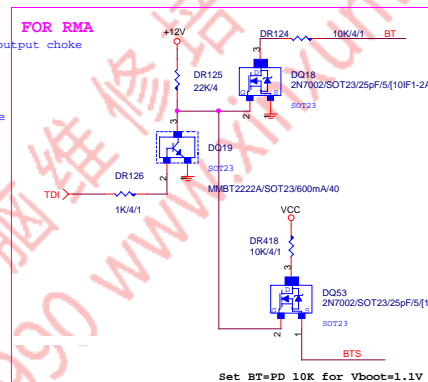
Disable phase 4



FOR CUT5 IC



BOTTOM PAD CONNECT TO GND THROUGH 10 VIA



Close VCC output choke

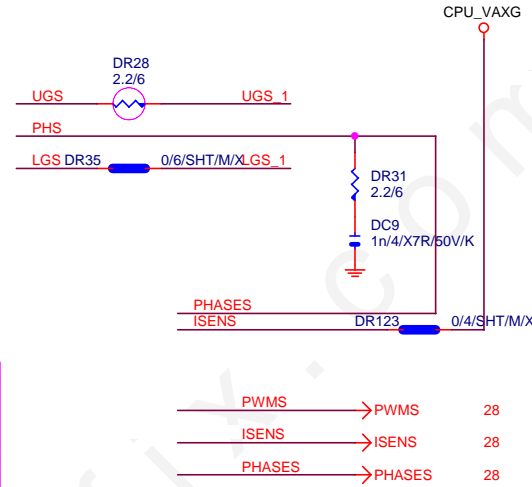
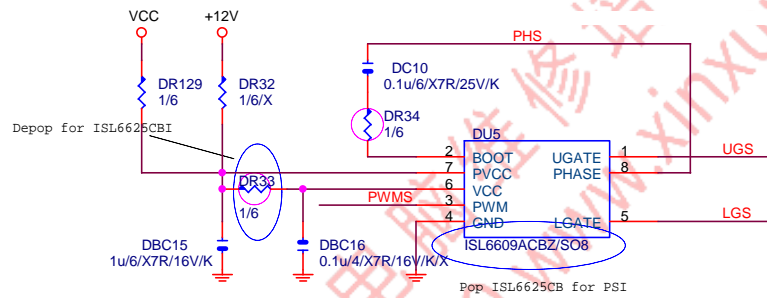
Close VAXG output choke

Gigabyte Technology

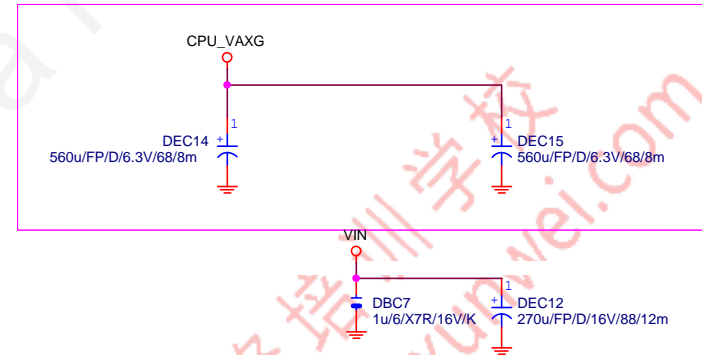
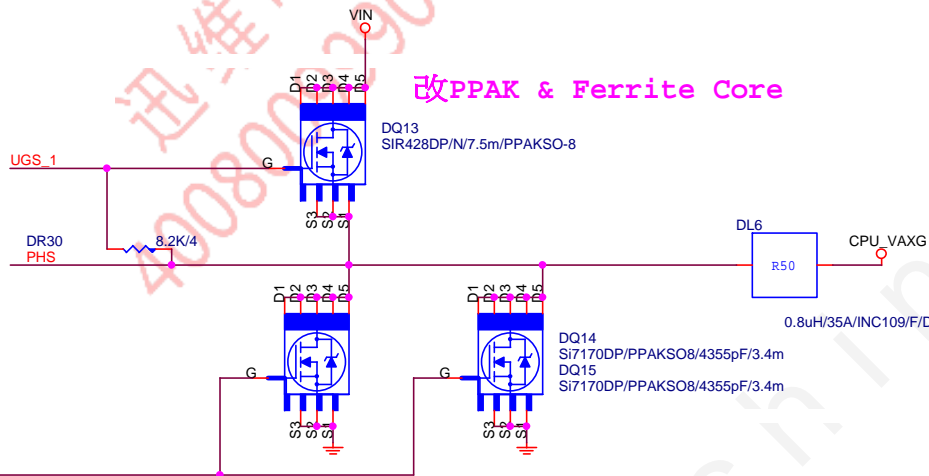
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VAXG

DR33 0 change to 1
DR34 0 change to 1
DR28 0 change to 2.2

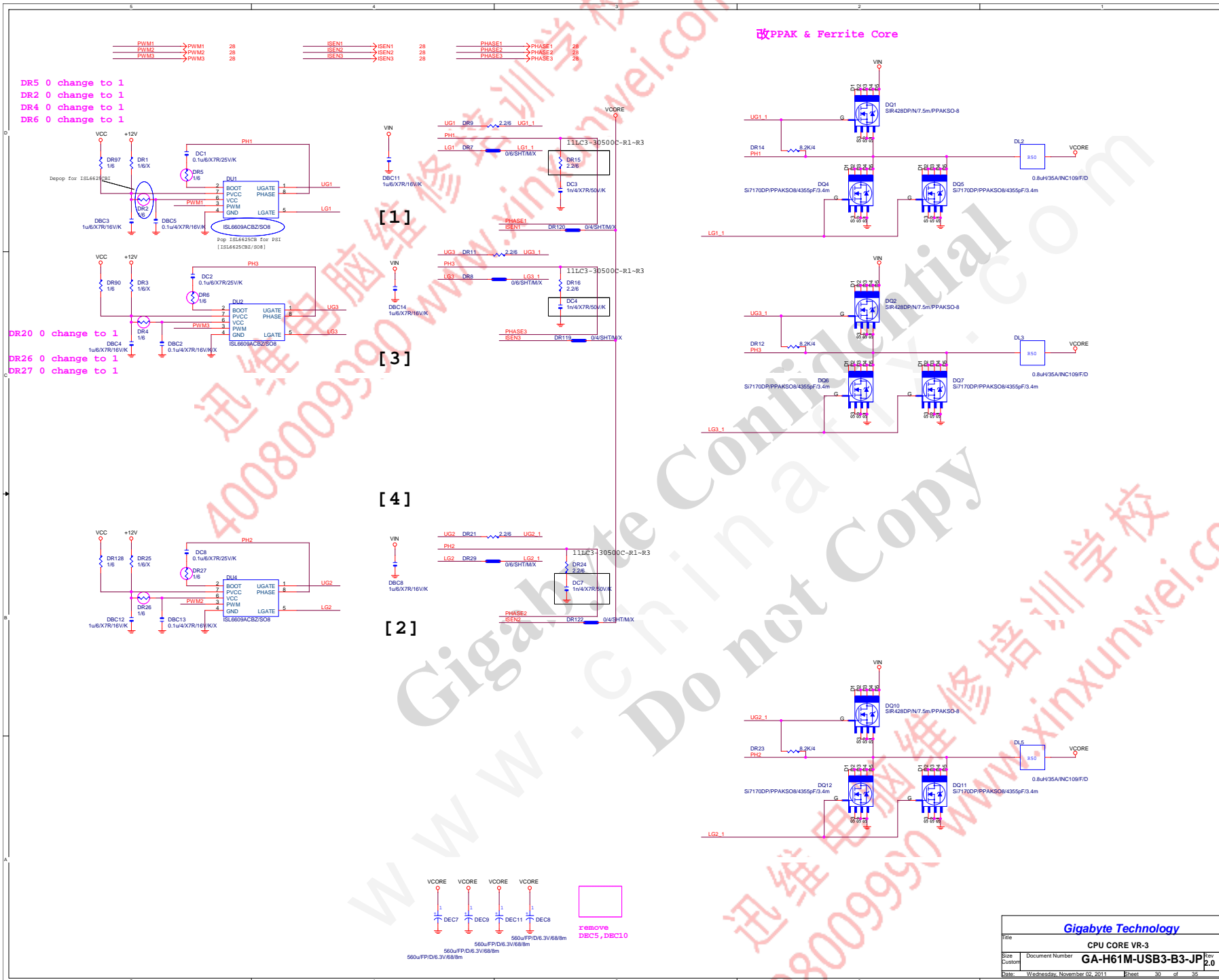


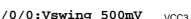
改PPAK & Ferrite Core



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HDMI / DVI			
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