

Model Name:GA-G41MT-S2

Revision 2.11

SHEET

TITLE

01	COVER SHEET
02	BLOCK DIAGRAM
03	BOM & PCB MODIFY HISTORY
04	P4_LGA775_A
05	P4_LGA775_B,D
06	P4_LGA775_C
07	P4_LGA775_E,F,G,H
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09	G41_DDRII
10	G41_PCI E, DMI
11	G41_VGA
12	G41_GND
13	G41_PWR
14	PCI EXPRESS*16 SLOT
15	DDR3 CHANNEL A
16	DDR3 CHANNEL B
17	DDR3 TERMINATION
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19	ICH7 IDE, GPIO, SATA, CTRL
20	ICH7 VCC, GND
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22	PCI SLOT 1,PCIE*1,2
23	IDE/FLOPPY/F_USB/R_USB
24	ITE 8720 GB
25	COM_LPT
26	CI,HWM,KB/MS,DUALBIOS
27	CODEC ALC887-VD2

SHEET

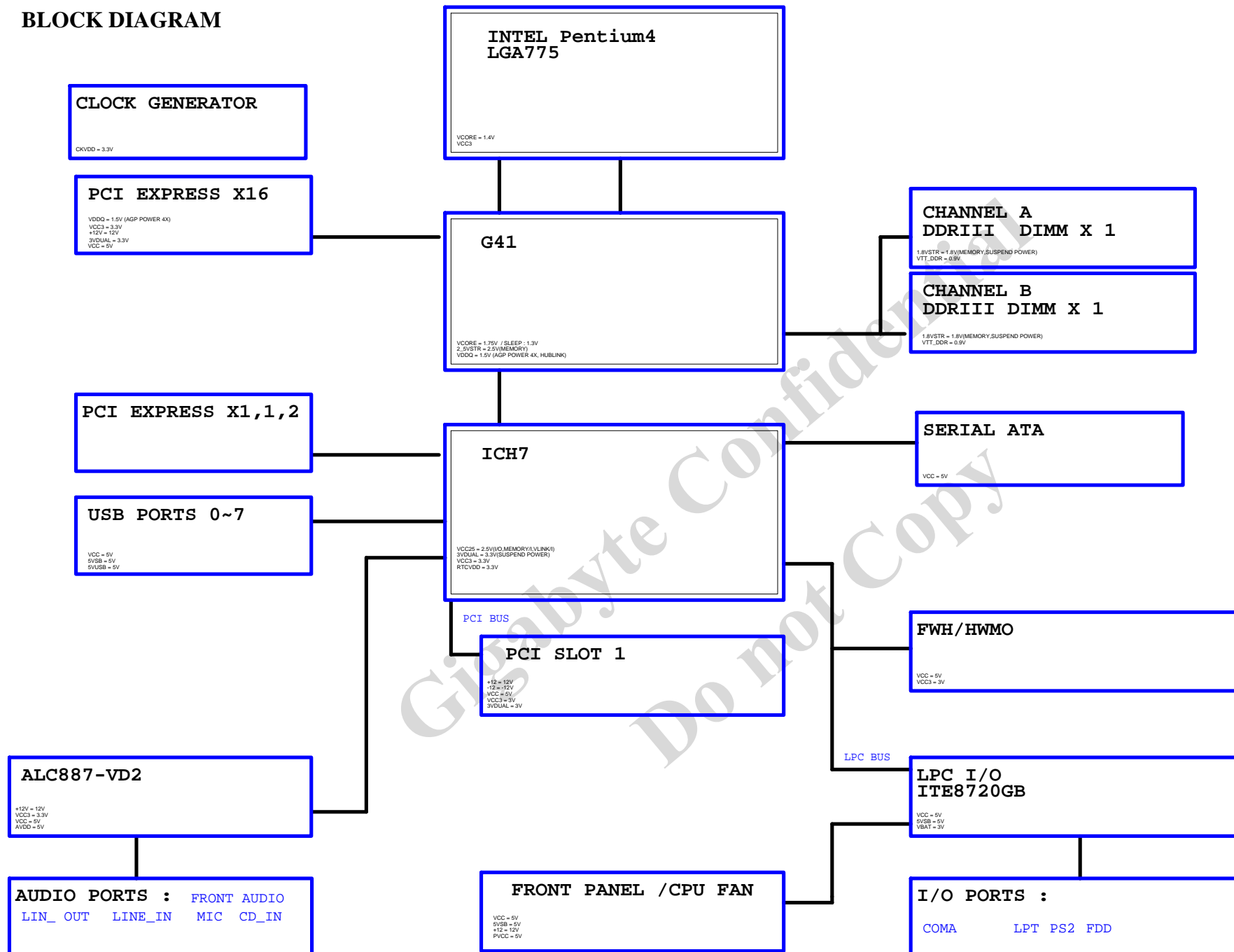
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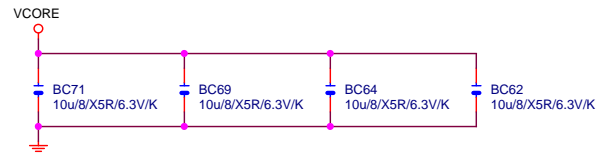
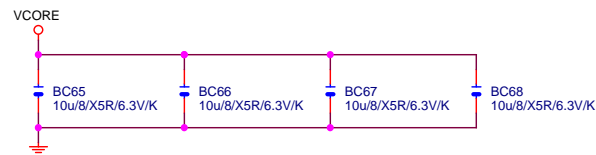
28	REAR AUDIO JACK
29	DISCRETE POWER
30	VCORE PWM_ISL6312
31	ATX, OTHERS POWER
32	FRONT PANEL
33	ARTHEROS AR8151/AR8152

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Cover Sheet			
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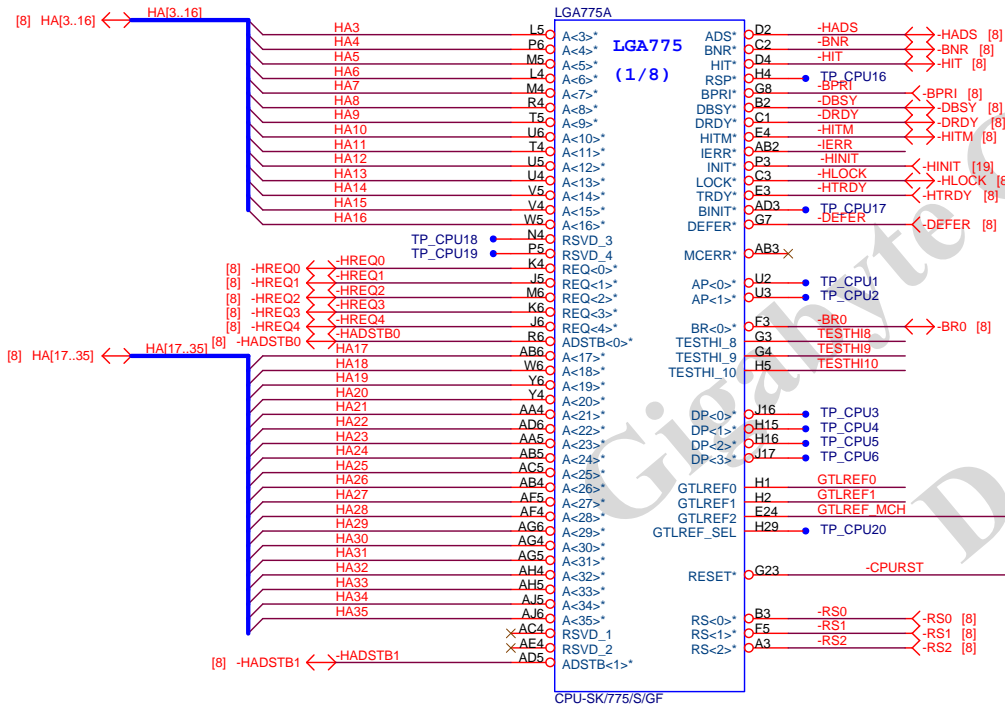
BLOCK DIAGRAM



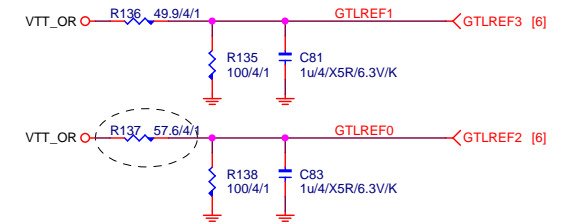


LGA775-39-2

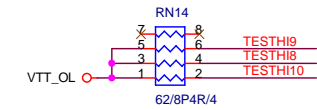
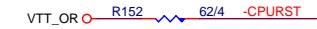
LGA775A

LGA775
(1/8)

CPU-SK/775/S/GF

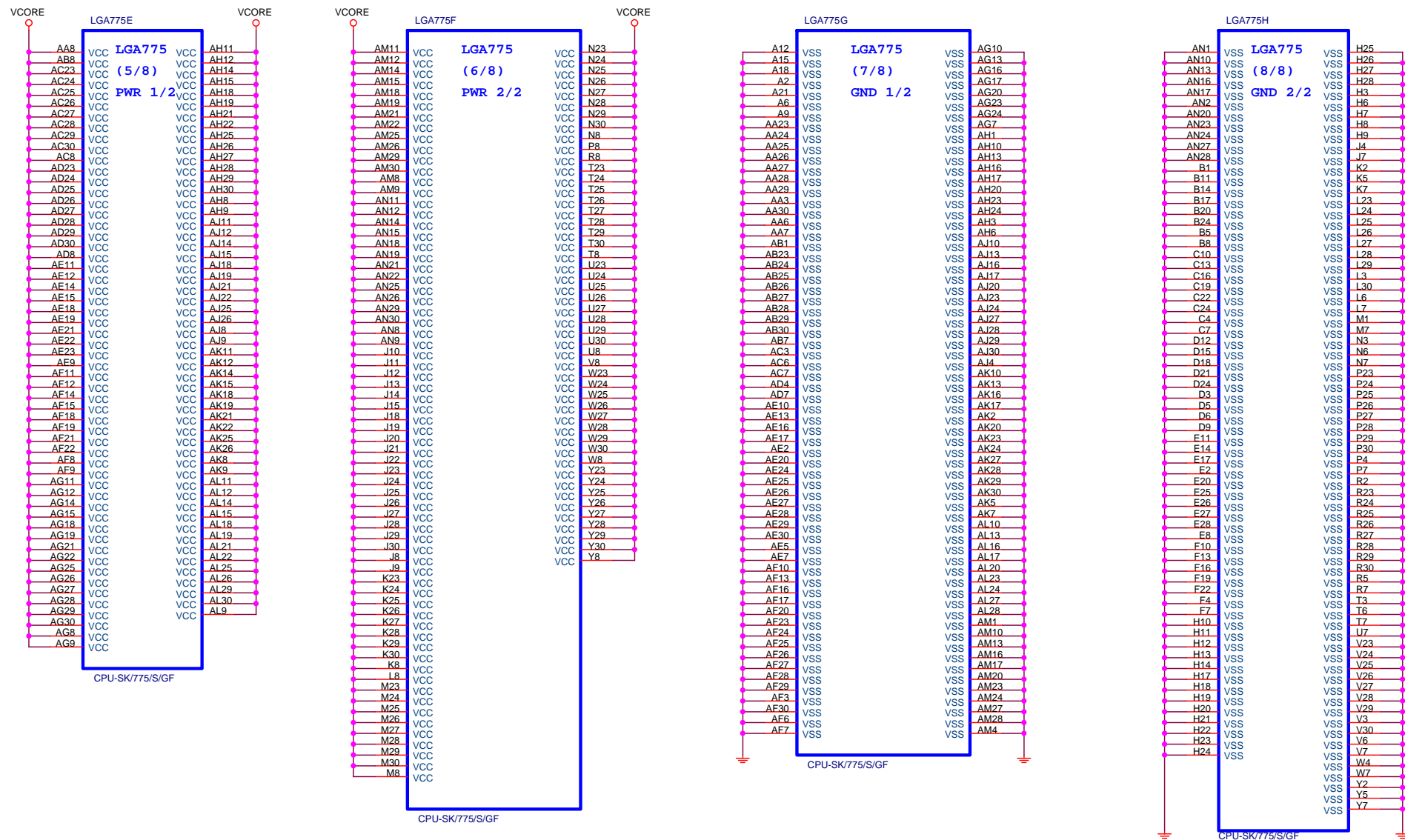


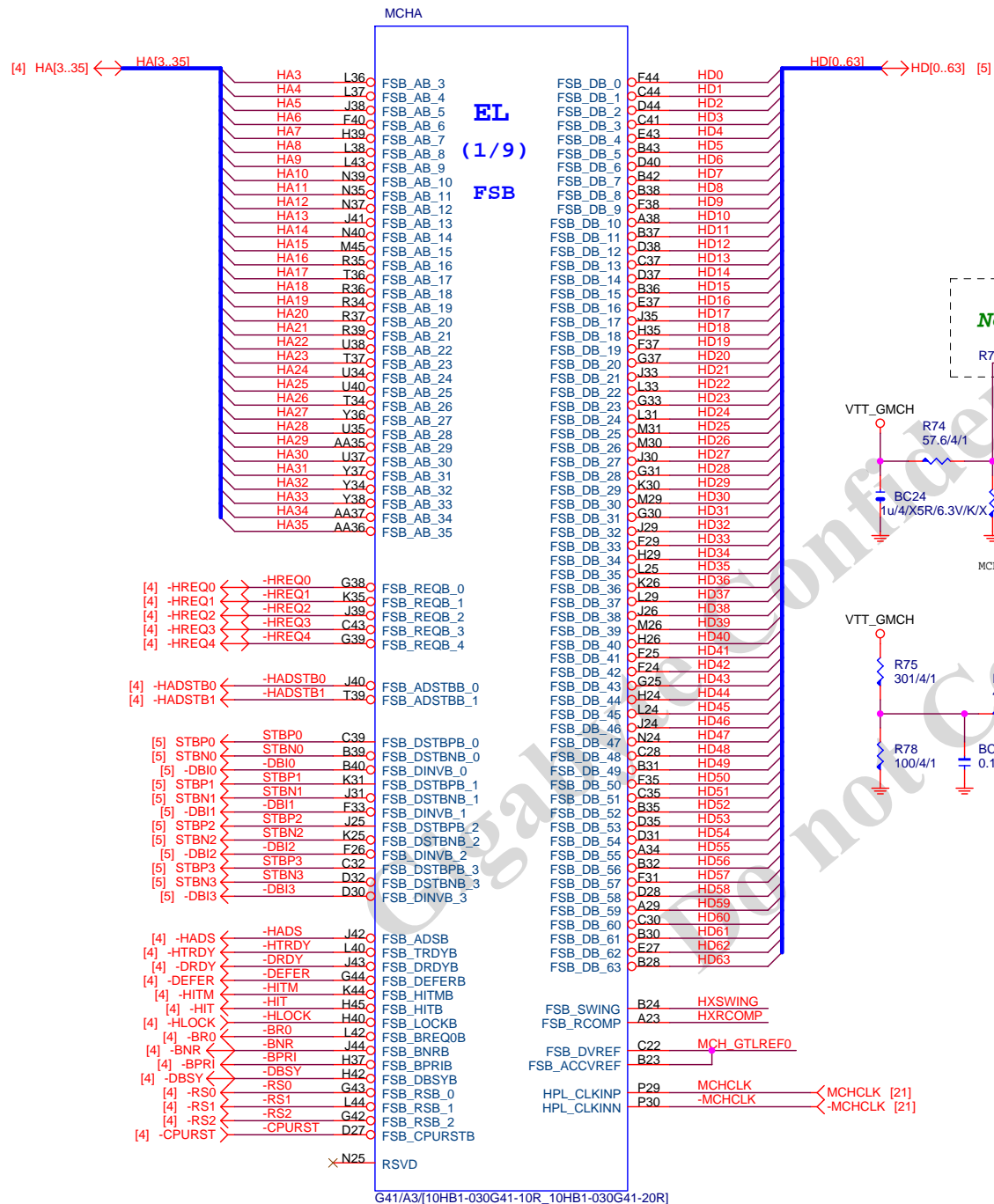
中間値 0.9V



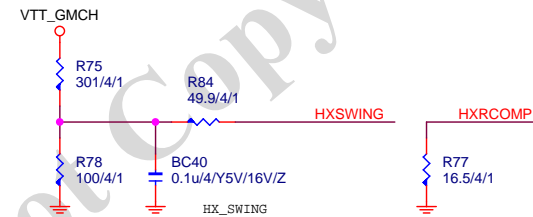
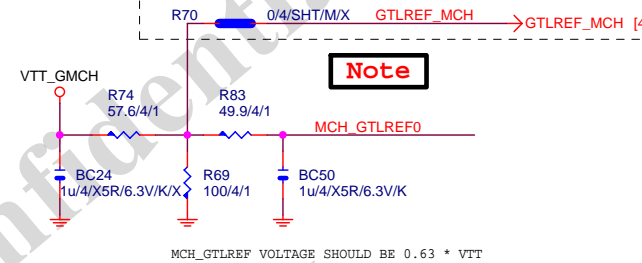
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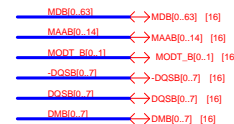
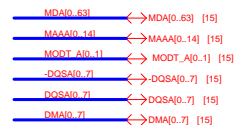
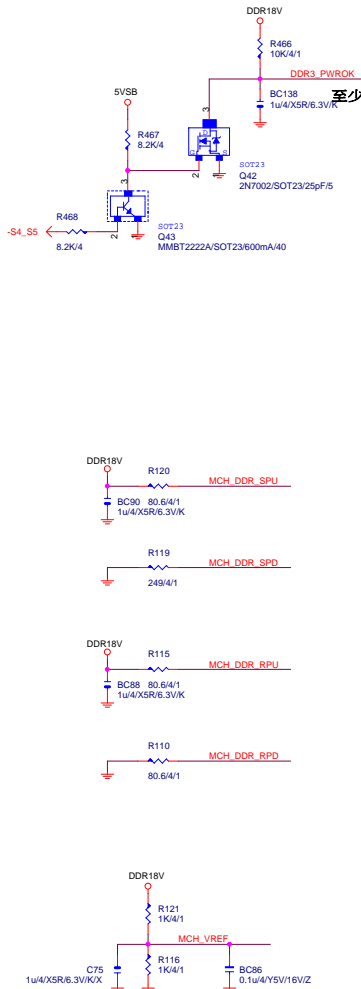
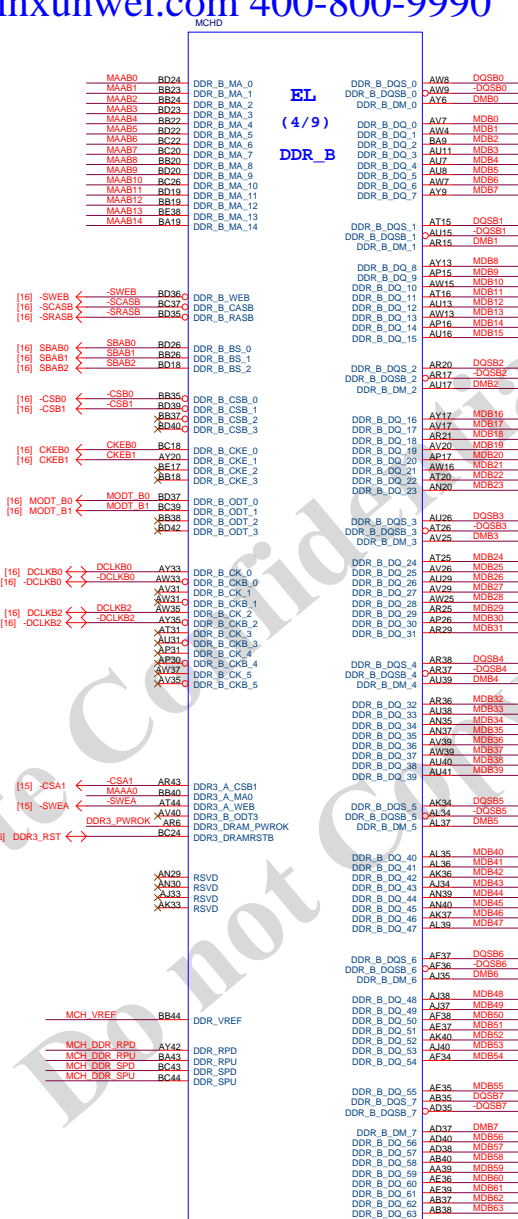
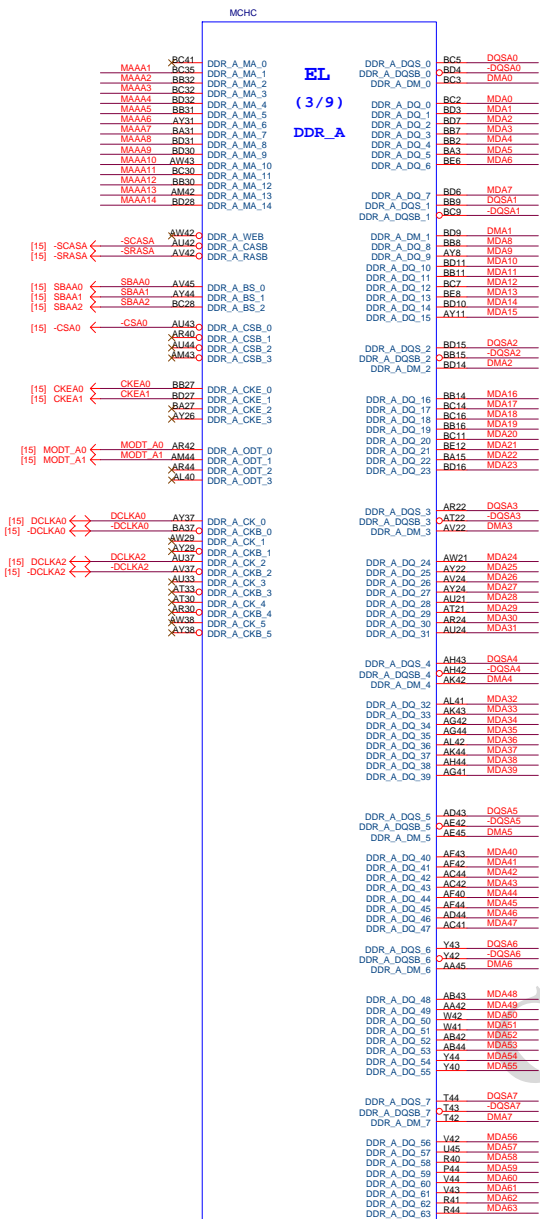


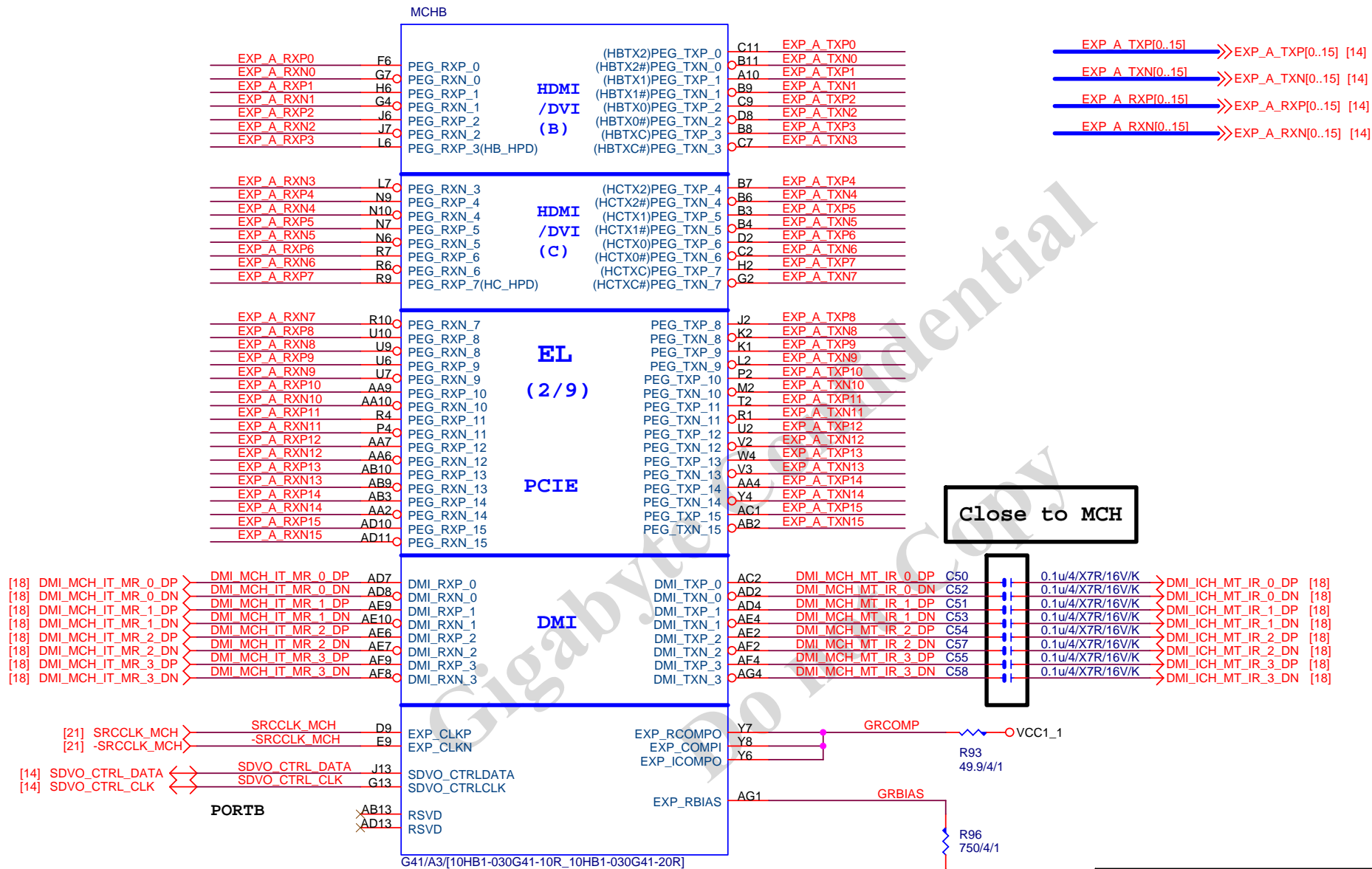
Not used for CoreTM2 Duo and Wolfdale



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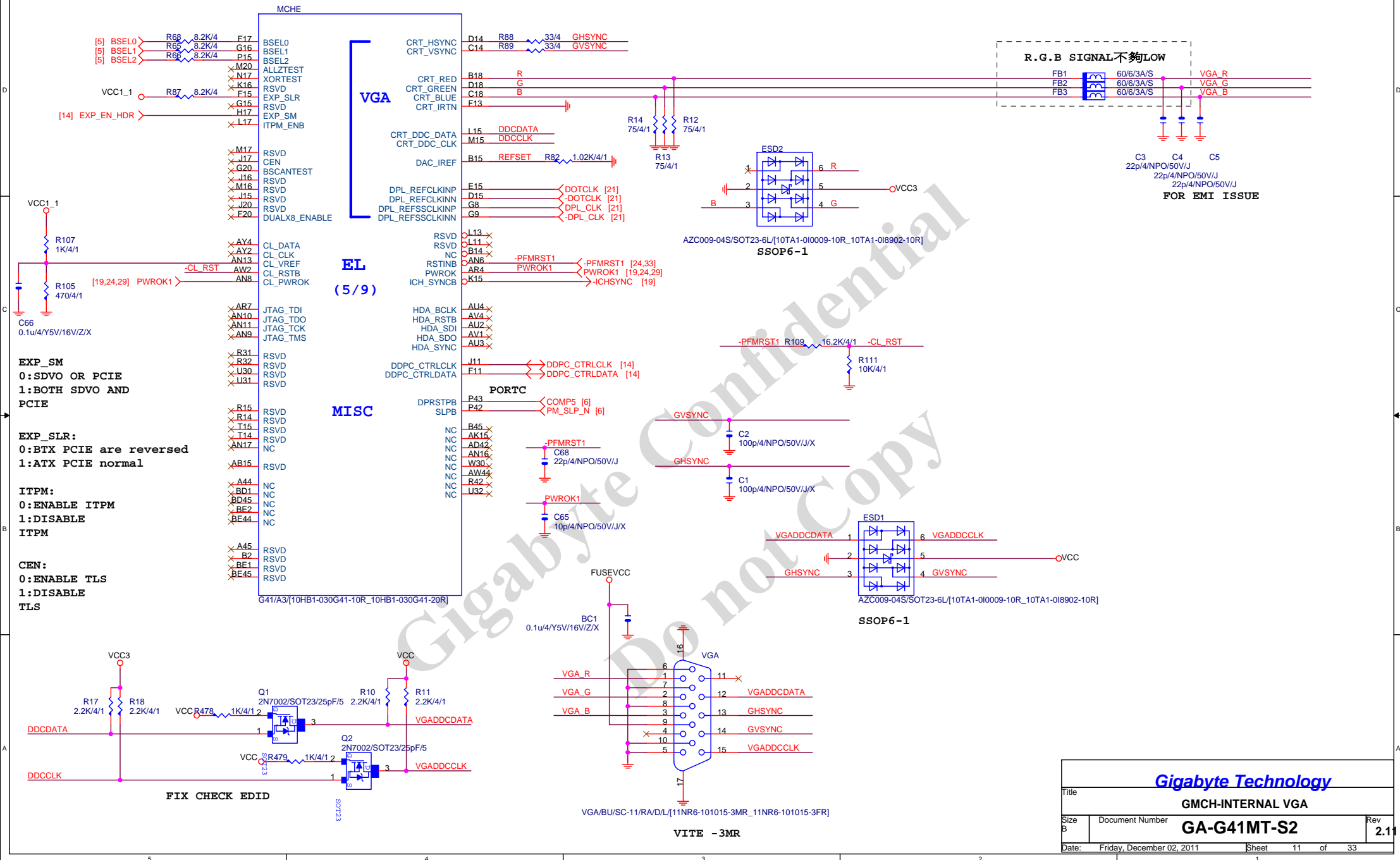
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GMCH-PCI E & DMI		
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MCHH

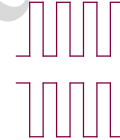
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A15	VSS	AK38
A19	VSS	AK39
A27	VSS	AL38
A31	VSS	BB6
A36	VSS	BD12
A40	VSS	BD17
AA1	VSS	BD8
AA8	VSS	BE10
AA11	VSS	BE15
AA12	VSS	BE19
AA13	VSS	BE22
AA20	VSS	BE24
AA22	VSS	BE29
AA24	VSS	BE34
AA26	VSS	BE40
AA34	VSS	C16
AA38	VSS	C3
AA40	VSS	C5
AA44	VSS	D11
AB4	VSS	D16
AB6	VSS	D21
AB7	VSS	D25
AB8	VSS	D26
AB11	VSS	D38
AB12	VSS	D6
AB19	VSS	D7
AB21	VSS	E3
AB23	VSS	E31
AB25	VSS	E41
AB27	VSS	E5
AB34	VSS	F16
AB36	VSS	F2
AB39	VSS	F30
AC5	VSS	F4
AC20	VSS	F42
AC22	VSS	F45
AC24	VSS	F49
AC26	VSS	G11
AC45	VSS	G17
AD3	VSS	G24
AD6	VSS	G26
AD9	VSS	G29
AD12	VSS	G3
AD19	VSS	G35
AD21	VSS	H1
AD23	VSS	H11
AD25	VSS	H13
AD27	VSS	H15
AD34	VSS	H16
AD36	VSS	H20
AD39	VSS	H25
AE1	VSS	H30
AE8	VSS	H31
AE11	VSS	H33
AE20	VSS	H38
AE22	VSS	H44
AE24	VSS	H7
AE26	VSS	H8
AE34	VSS	H9
AE38	VSS	J3
AE40	VSS	J37
AE44	VSS	J4
AF6	VSS	J5
AF7	VSS	J8
AF10	VSS	J9
AF11	VSS	K11
AF12	VSS	K13
AF13	VSS	K17
AF33	VSS	K20
AF36	VSS	K24
AF39	VSS	K29
AG5	VSS	K33
AG19	VSS	K45
AG21	VSS	L10
AG23	VSS	L16
AG25	VSS	L20
AG27	VSS	U11
AG45	VSS	U12
AH2	VSS	U13
AH3	VSS	U16
AH4	VSS	U17
AJ20	VSS	U19
AJ22	VSS	U20
AJ24	VSS	U36
AJ26	VSS	U39
AJ36	VSS	U44
AJ39	VSS	U8
AJ44	VSS	W1
AJ45	VSS	W16
	VSS	W17
	VSS	A3
	VSS	A43
	VSS	A6
	VSS	B44
	VSS	BC1

G41/A3/[10HB1-030G41-10R_10HB1-030G41-20R]

BA5	VSS	EL
BB21	VSS	(9/9)
BB25	VSS	GND
BB28	VSS	
BB6	VSS	
BD12	VSS	
BD17	VSS	
BD8	VSS	
BE10	VSS	
BE15	VSS	
BE19	VSS	
BE22	VSS	
BE24	VSS	
BE29	VSS	
BE34	VSS	
BE40	VSS	
C16	VSS	
C3	VSS	
C5	VSS	
D11	VSS	
D16	VSS	
D21	VSS	
D25	VSS	
D26	VSS	
D38	VSS	
D6	VSS	
D7	VSS	
E3	VSS	
E31	VSS	
E41	VSS	
E5	VSS	
F16	VSS	
F2	VSS	
F30	VSS	
F4	VSS	
F42	VSS	
F45	VSS	
F49	VSS	
G11	VSS	
G17	VSS	
G24	VSS	
G26	VSS	
G29	VSS	
G3	VSS	
G35	VSS	
H1	VSS	
H11	VSS	
H13	VSS	
H15	VSS	
H16	VSS	
H20	VSS	
H25	VSS	
H30	VSS	
H31	VSS	
H33	VSS	
H38	VSS	
H44	VSS	
H7	VSS	
H8	VSS	
H9	VSS	
J3	VSS	
J37	VSS	
J4	VSS	
J5	VSS	
J8	VSS	
J9	VSS	
K11	VSS	
K13	VSS	
K17	VSS	
K20	VSS	
K24	VSS	
K29	VSS	
K33	VSS	
K45	VSS	
L10	VSS	
L16	VSS	
L20	VSS	
U11	VSS	
U12	VSS	
U13	VSS	
U16	VSS	
U17	VSS	
U19	VSS	
U20	VSS	
U36	VSS	
U39	VSS	
U44	VSS	
U8	VSS	
W1	VSS	
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W17	VSS	
A3	VSS	
A43	VSS	
A6	VSS	
B44	VSS	
BC1	VSS	

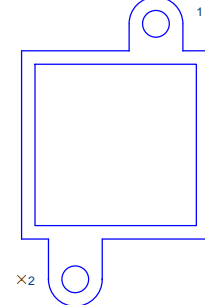
G41/A3/[10HB1-030G41-10R_10HB1-030G41-20R]

L26	VSS
L30	VSS
L35	VSS
L39	VSS
L4	VSS
L8	VSS
L9	VSS
M1	VSS
M24	VSS
M25	VSS
M44	VSS
N11	VSS
N13	VSS
N16	VSS
N26	VSS
N29	VSS
N30	VSS
N33	VSS
N36	VSS
N38	VSS
N8	VSS
P16	VSS
P17	VSS
P25	VSS
P26	VSS
P31	VSS
R11	VSS
R12	VSS
R16	VSS
R17	VSS
R19	VSS
R2	VSS
R30	VSS
R38	VSS
R45	VSS
R5	VSS
R8	VSS
T10	VSS
T11	VSS
T12	VSS
T13	VSS
T16	VSS
T17	VSS
T19	VSS
T20	VSS
T3	VSS
T30	VSS
T31	VSS
T32	VSS
T33	VSS
T35	VSS
T38	VSS
T4	VSS
T40	VSS
T6	VSS
T7	VSS
T8	VSS
T9	VSS
U1	VSS
W2	VSS
W20	VSS
W22	VSS
W24	VSS
W26	VSS
W44	VSS
W45	VSS
W5	VSS
Y10	VSS
Y11	VSS
Y12	VSS
Y13	VSS
Y16	VSS
Y17	VSS
Y19	VSS
Y2	VSS
Y21	VSS
Y23	VSS
Y26	VSS
Y27	VSS
Y3	VSS
Y35	VSS
Y39	VSS
Y9	VSS
BD45	VSS
BD2	VSS
BD44	VSS
BE3	VSS
BE43	VSS
C1	VSS
C45	VSS
F1	VSS
BD43	VSS
AD30	NC
AC30	NC
AE30	NC
AE30	NC



COUPON1 COUPON1 1 2 COUPON/X VCORE
COUPON2 COUPON2 1 2 COUPON/X

NB_HEATSIN



NB_HS

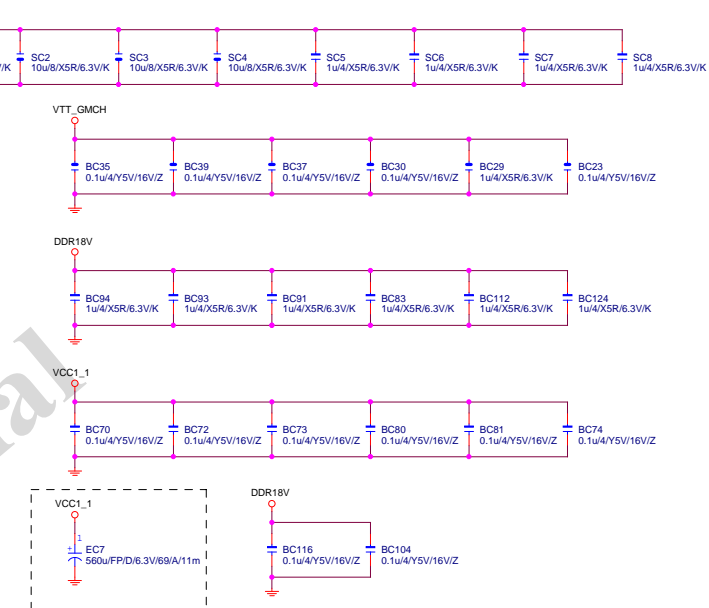
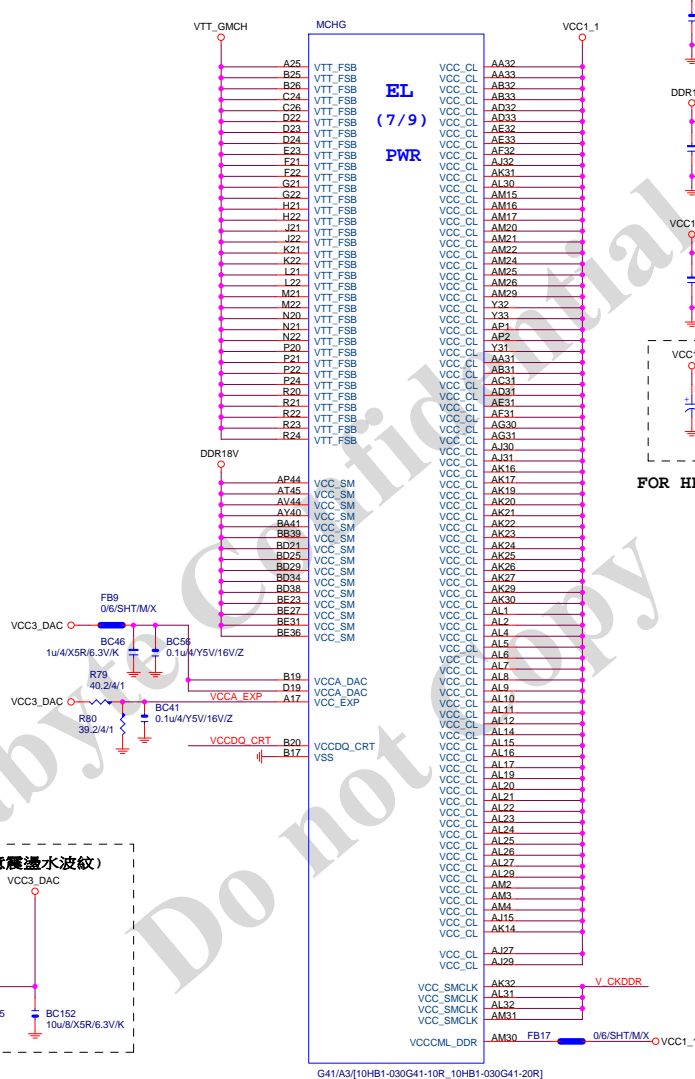
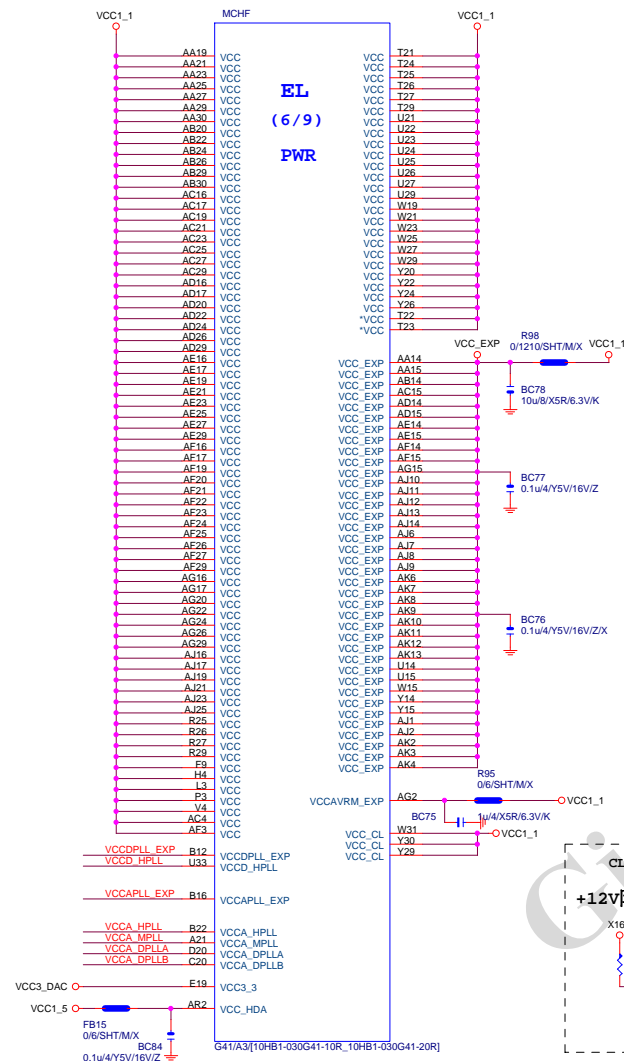
NB_HEATSINK[12SP2-S04520-03R_12SP2-S04520-01R_12SP2-S04520-02R]

BGASINK445A-L

NEW COST DOWN

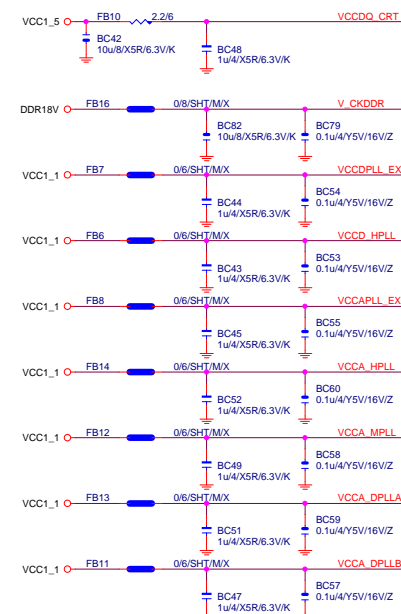
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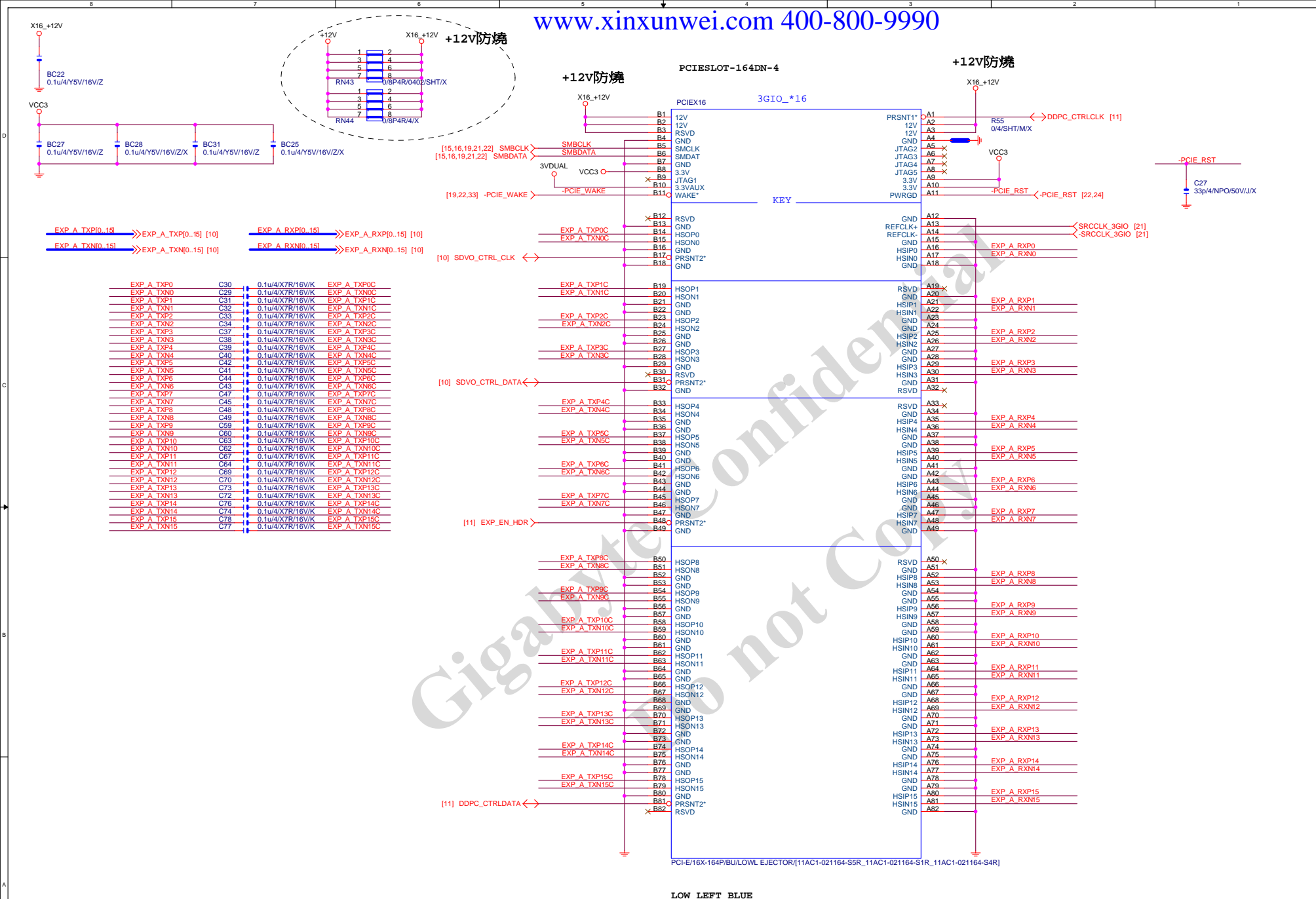
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GMCH-GND				
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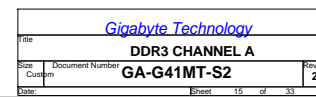
FOR HEAT/OC DDR3 1333

CLOSE北橋(注意震盪水波紋)



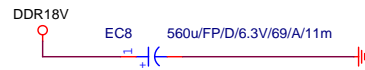


LOW LEFT BLUE

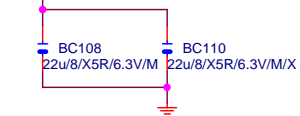


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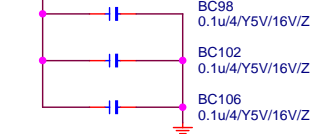
DDR18V Decouple



DDRVTT Decouple



DDR18V Decouple

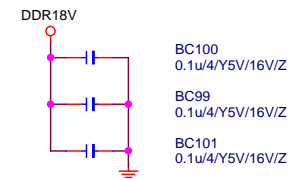


DDRVTT Decouple

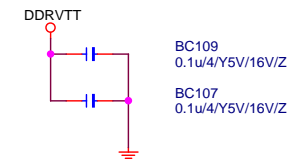


DDR TERMINATION CHANNEL B

DDR18V Decouple

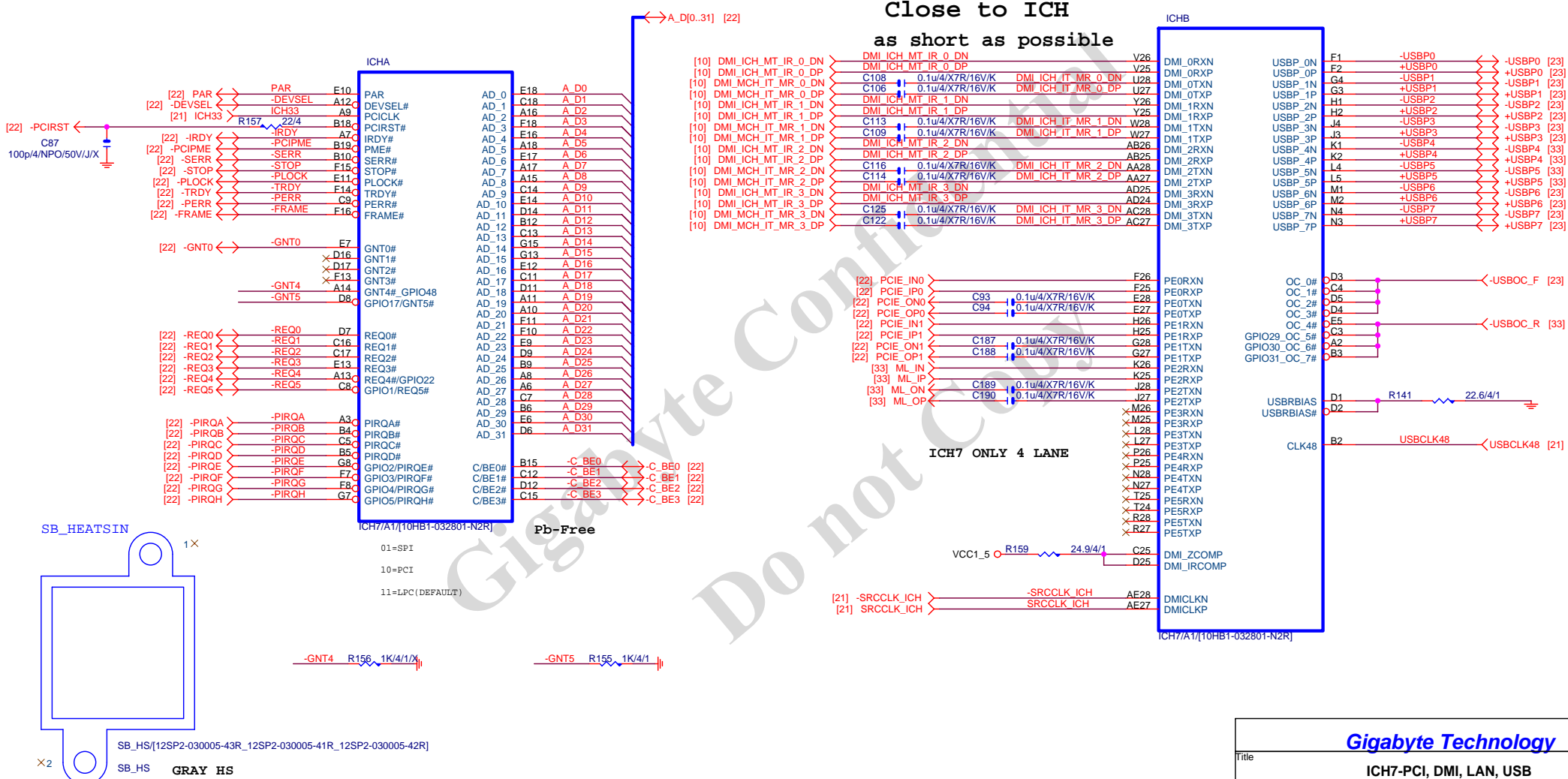


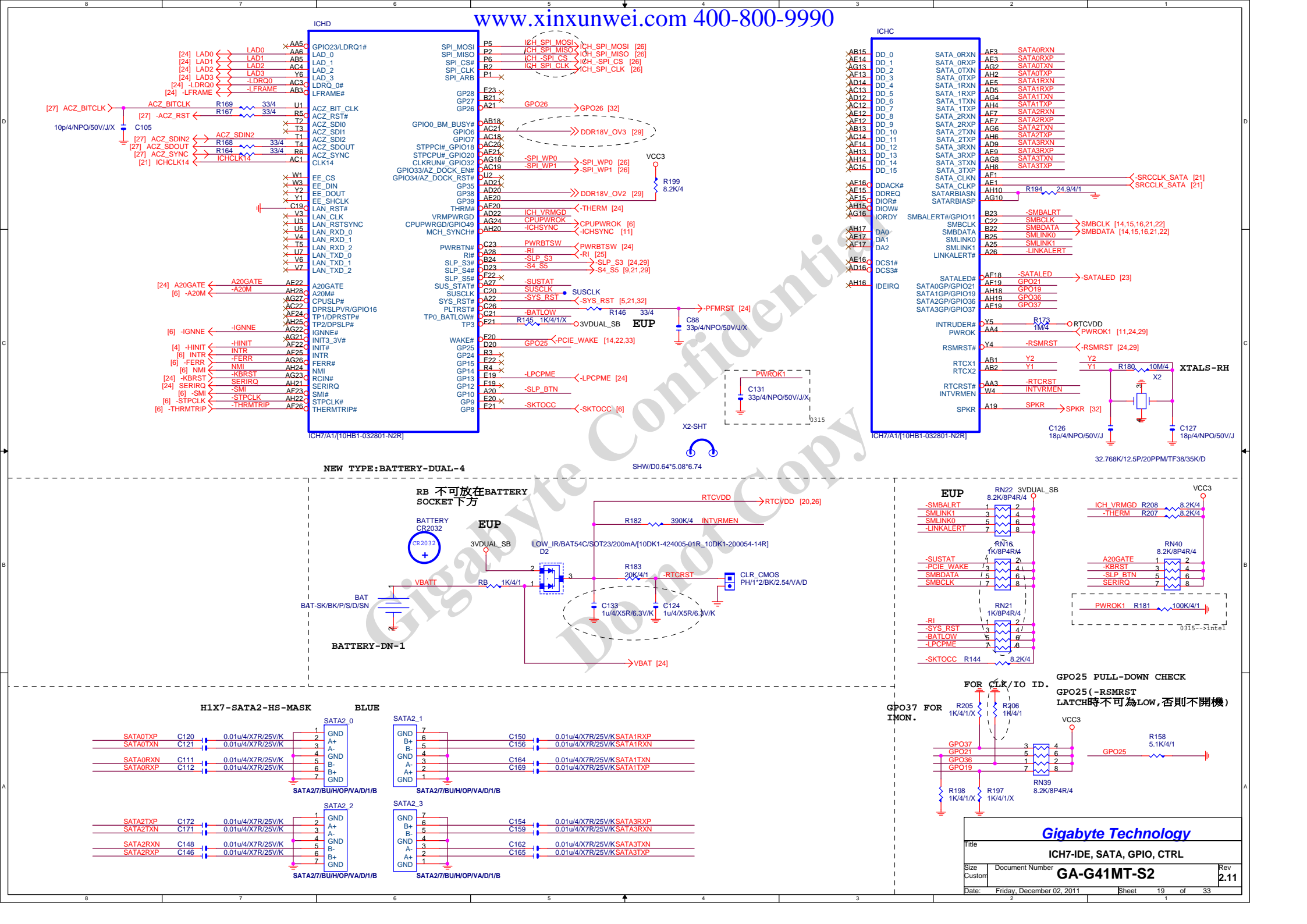
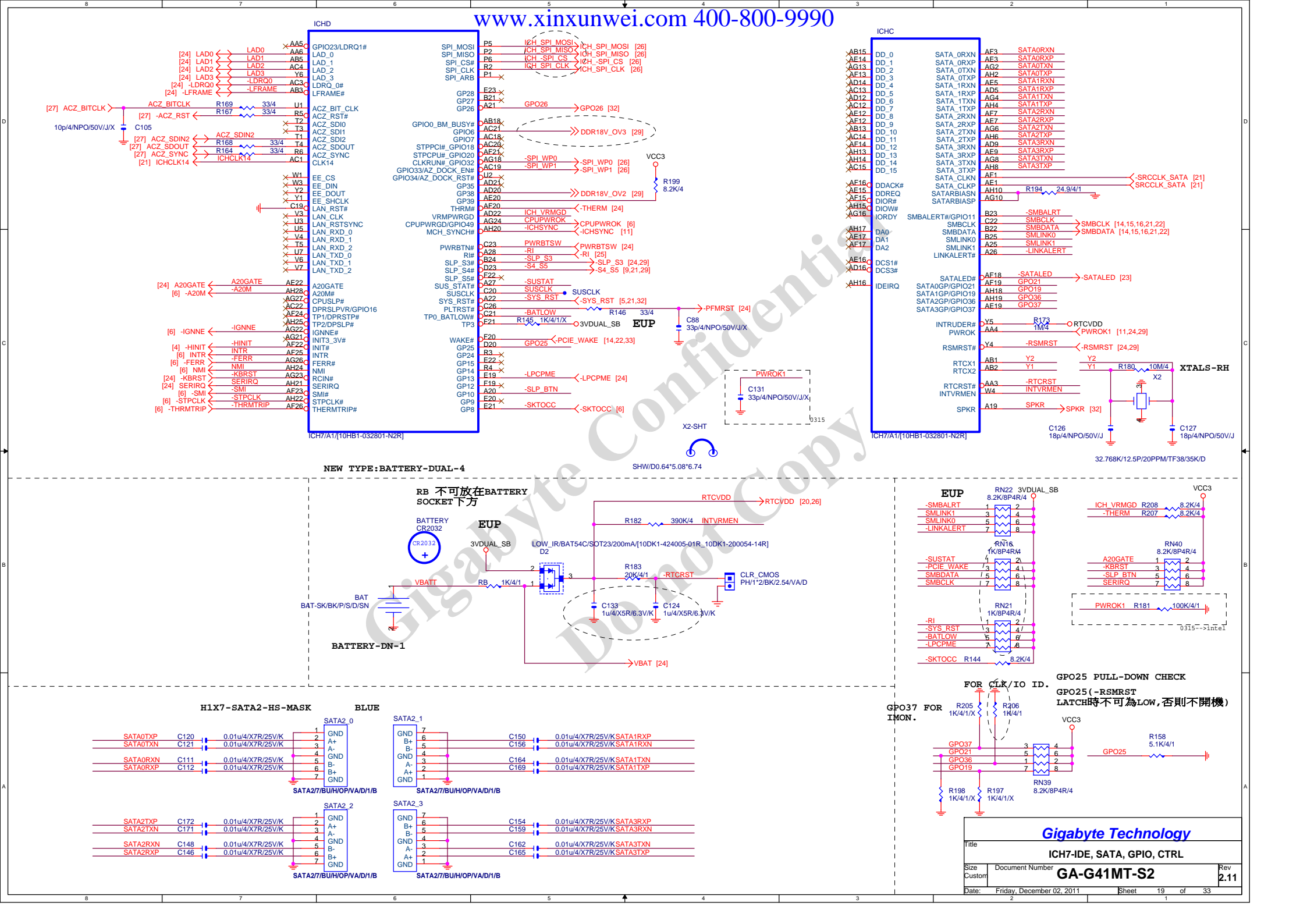
DDRVTT Decouple

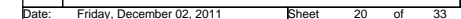


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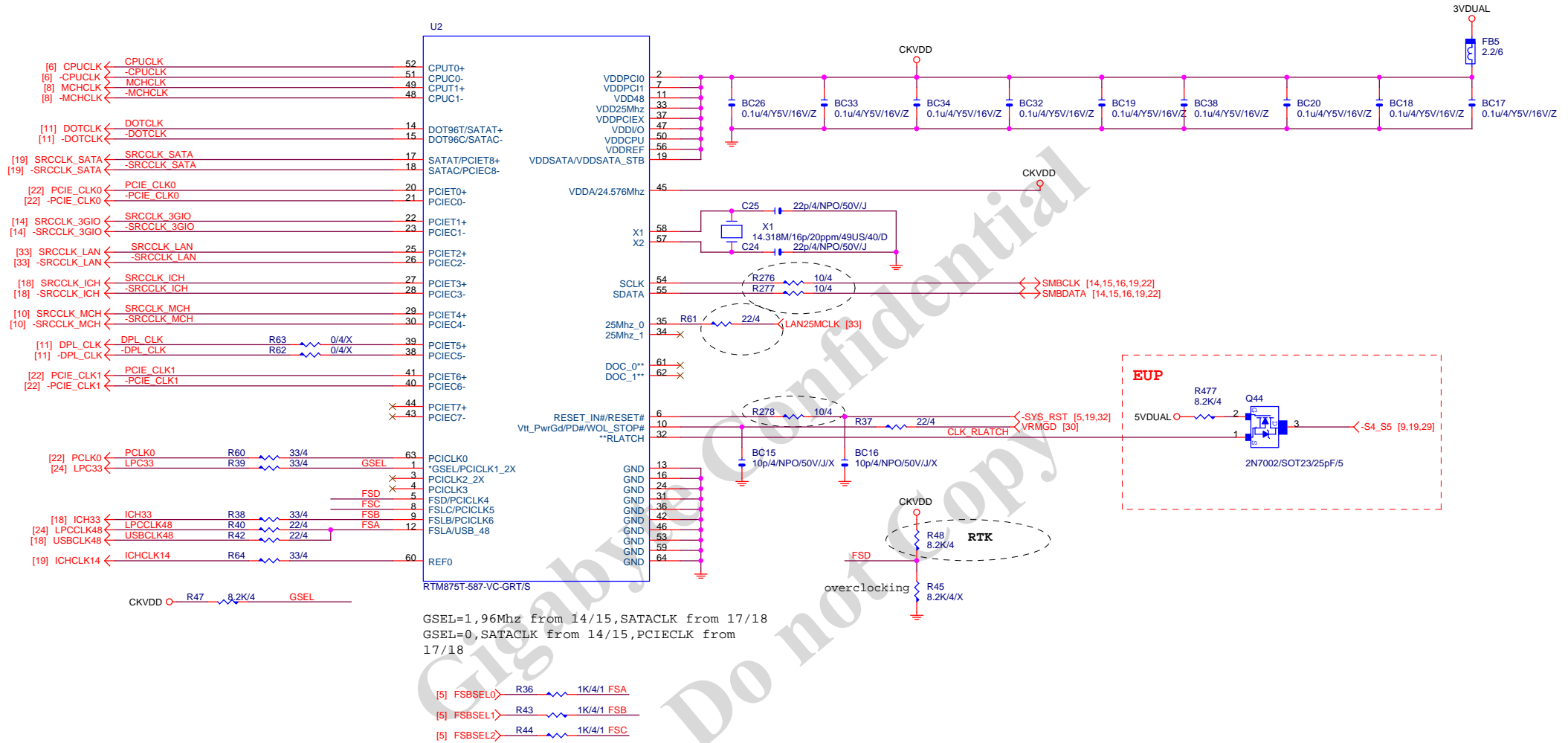
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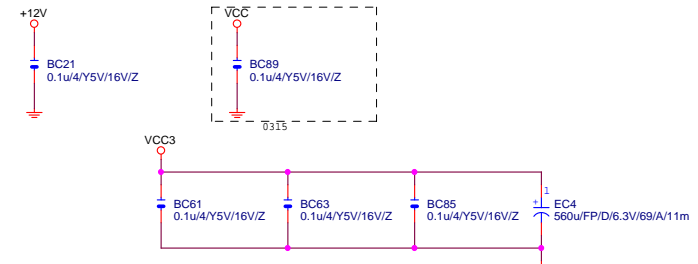
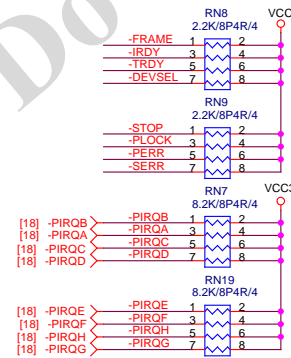
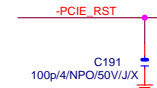
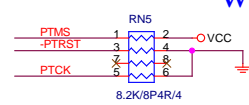


CLK GEN CK505

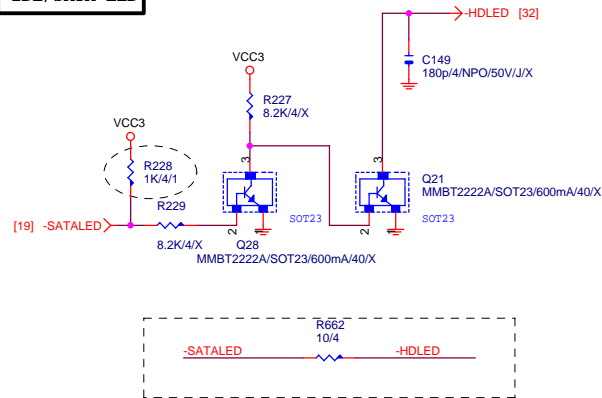


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CK505 CLK GEN					
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IDE/SATA LED



IDE RESET

N/A

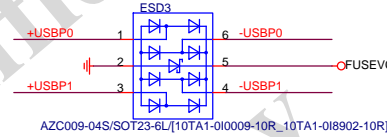
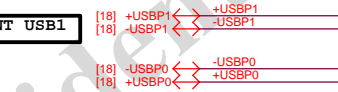
FLOPPY

N/A

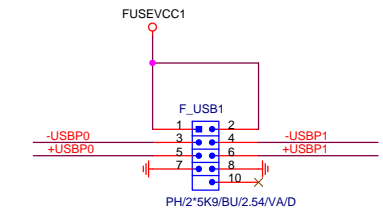
IDE

N/A

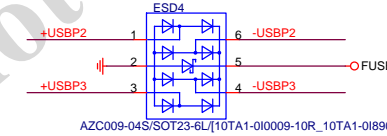
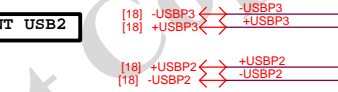
FRONT USB1



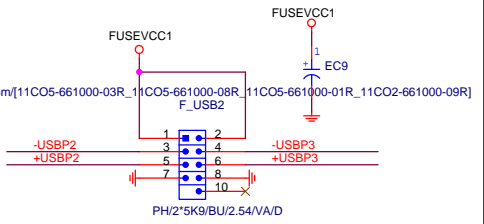
SSOP6-1



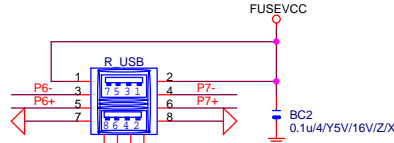
FRONT USB2



SSOP6-1



REAR USB

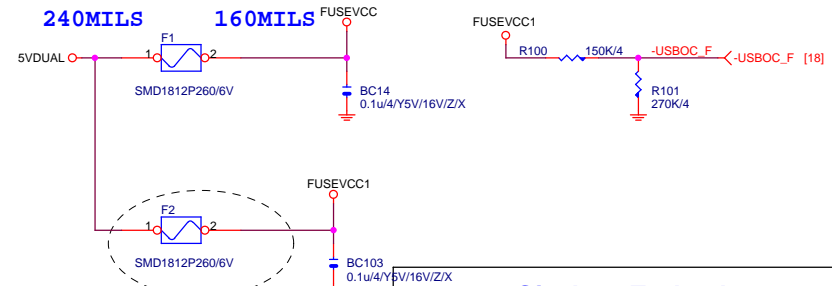


USB/A/O/BLACK/GF/2/RA/D[111NR6-302004-M1R_11NR6-302004-M2R]

POP USBX2

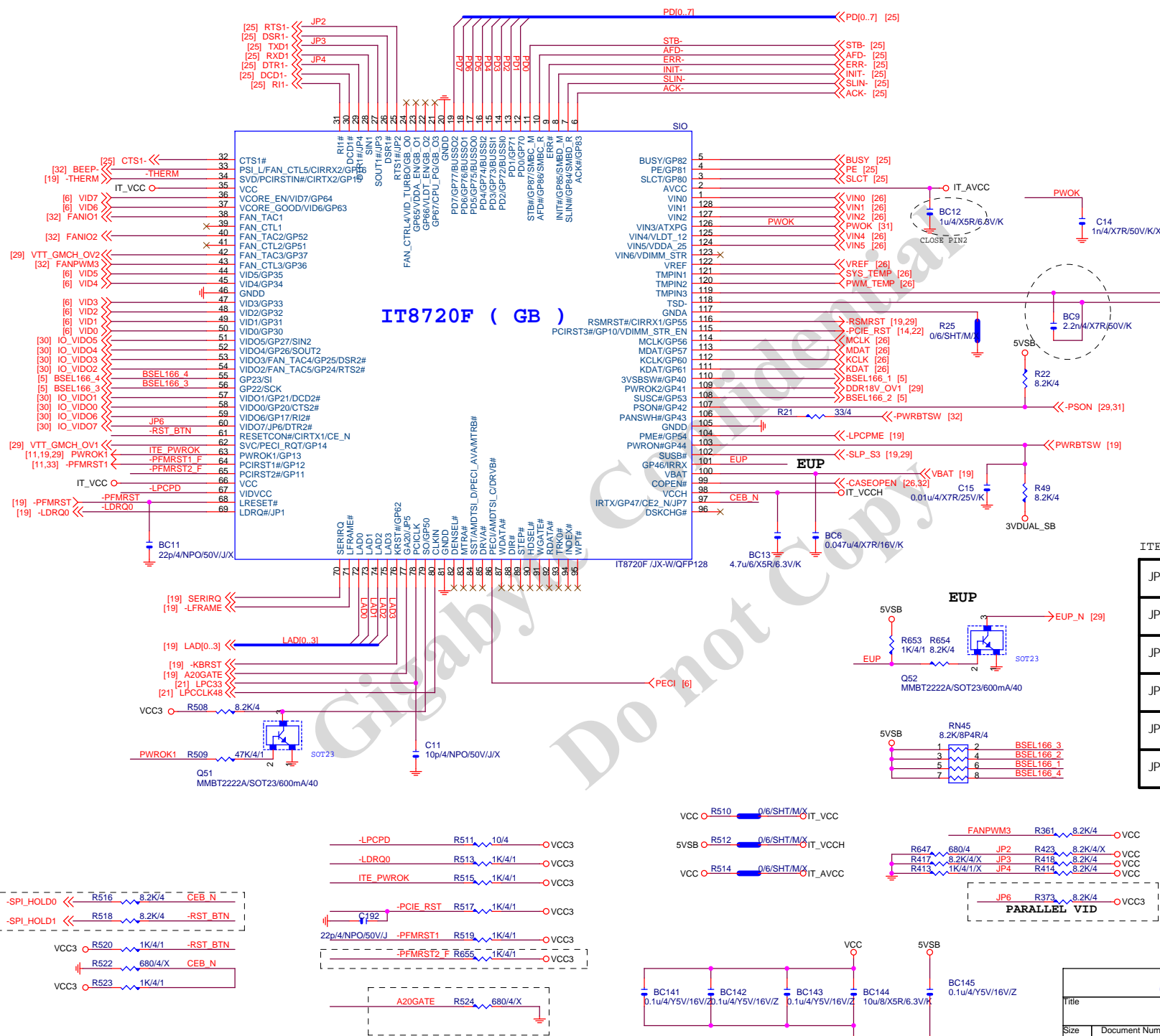
RED

USB FUSE



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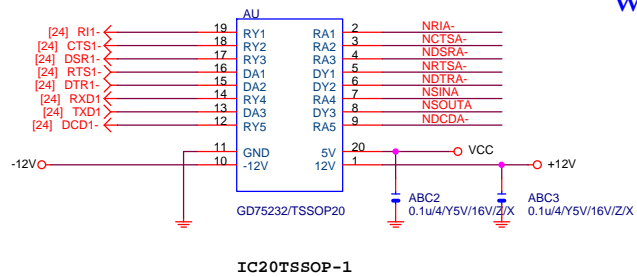
Title			IDE,FDD,F_USB,R_USB		
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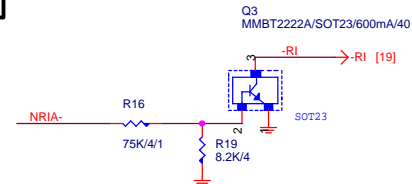
ITE8720 Power on Strapping

JP2	1	Disable VID/SVID output pins
	0	Enable VIDO0-7 output pins
JP3	1	SPI-Flash Disable
	0	SPI-Flash Enable
JP4	1	k8 power sequency function is Disable
	0	k8 power sequency function is Enable
JP5	1	Disable WDT reset PWROK
	0	Enable WDT reset PWROK
JP6	1	Parallel VID output
	0	Serial VID output
JP7	1	Enable Dual BIOS Function
	0	Disable Dual BIOS Function

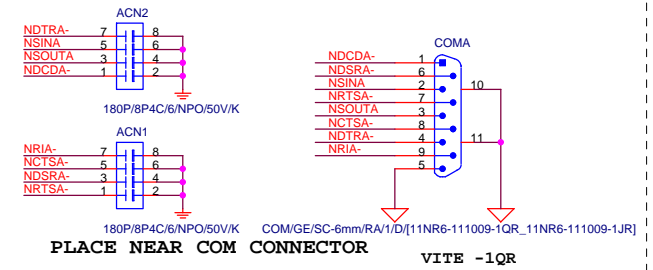
COMA



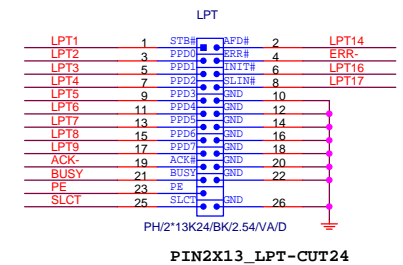
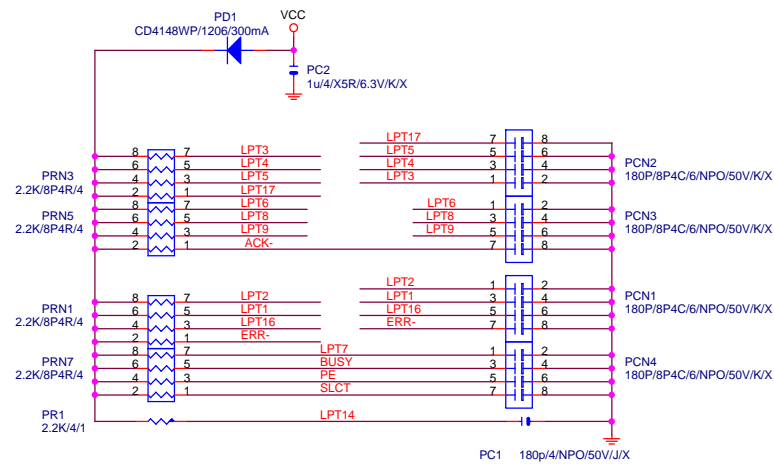
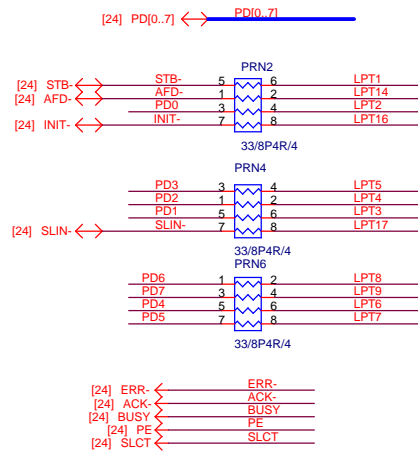
RING IN



EXTERNAL COMA



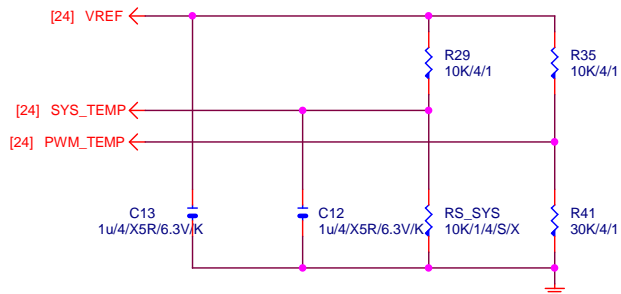
LPT PORT



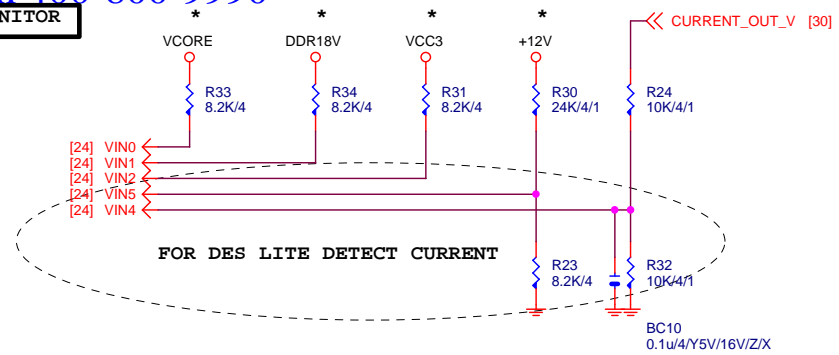
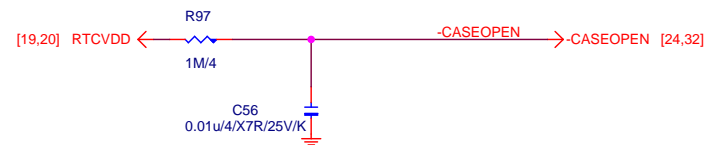
Gigabyte Technology

Title			
COM & LPT PORT			
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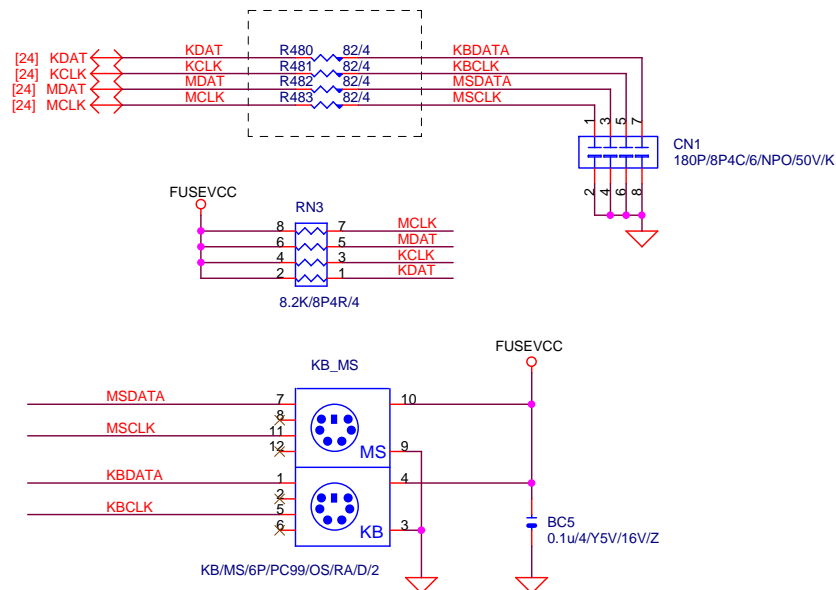
2.11

TEMP H/W MONITOR**VOLTAGE-- H/W MONITOR**

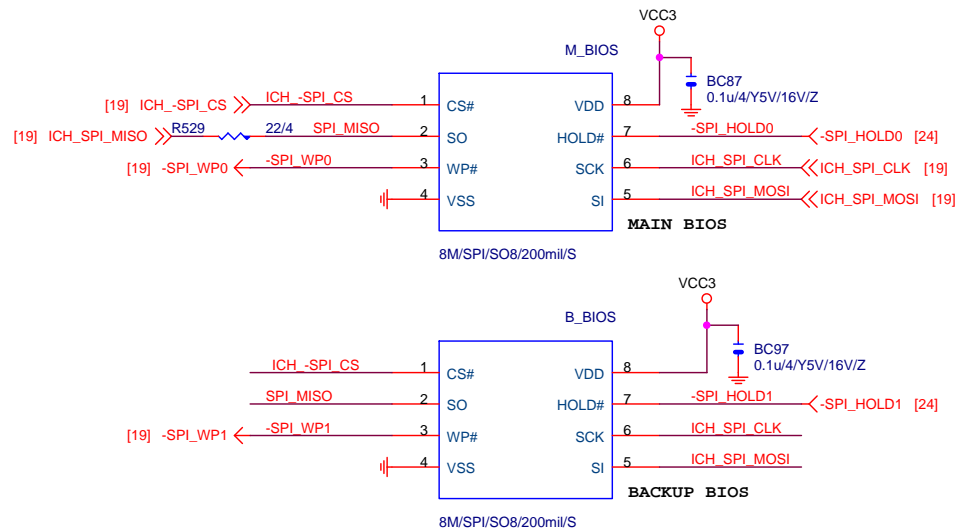
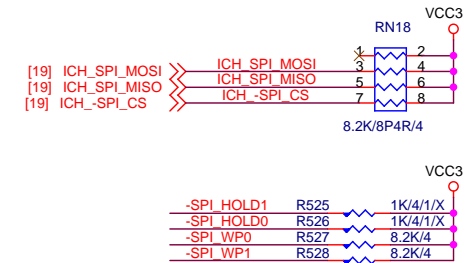
IT8720-->VIN5
IT8718-->VIN7

**CASE OPEN**

Case Open Circuits

KB/MS**DUAL BIOS**

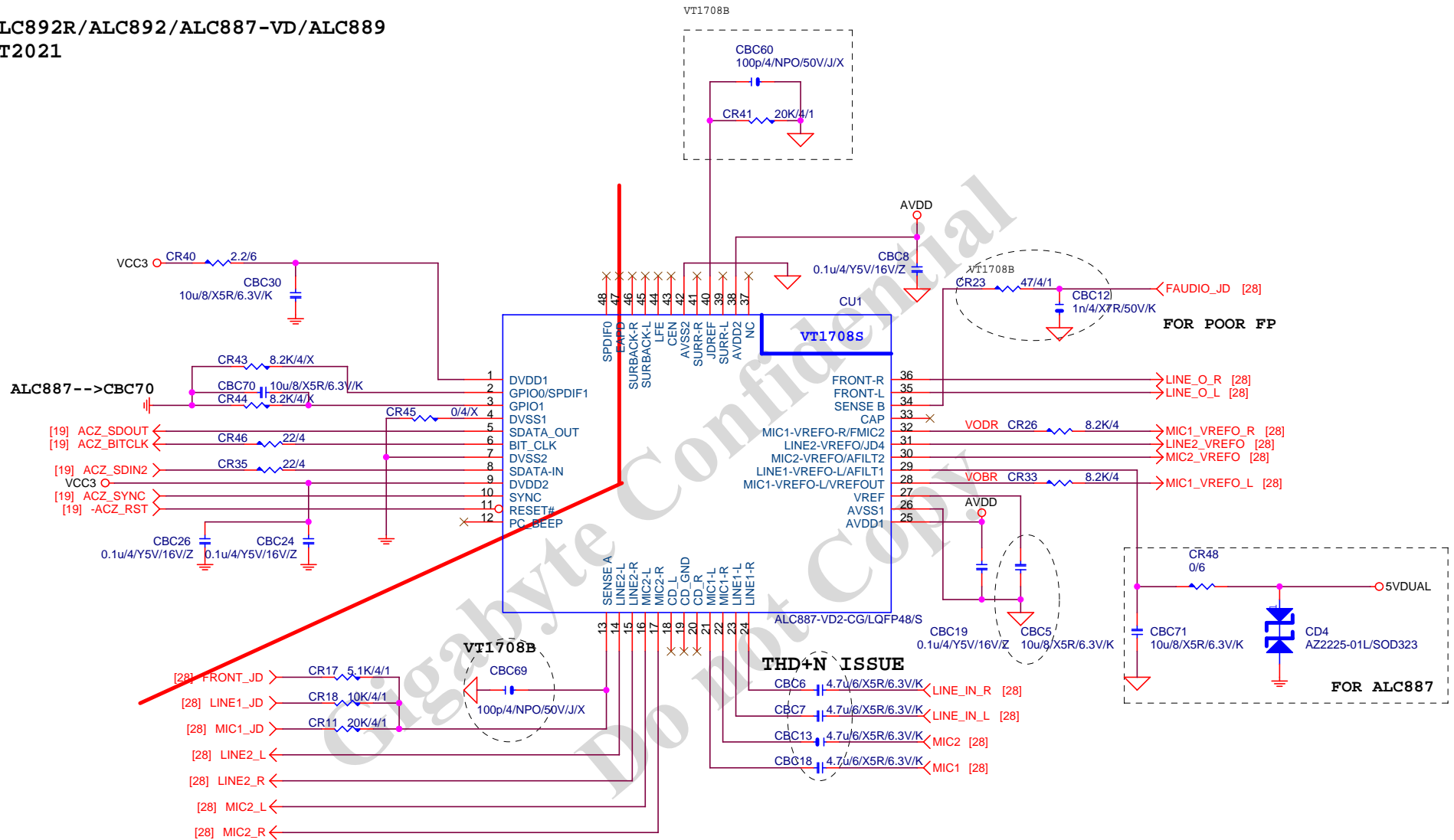
(NEW HOLD# DESIGN)

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Title			
HW-MONITOR/CI/KB/MS/BIOS			
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AZALIA CODEC

CO-LAY
ALC888B/ALC892R/ALC892/ALC887-VD/ALC889
VT1708S/VT2021

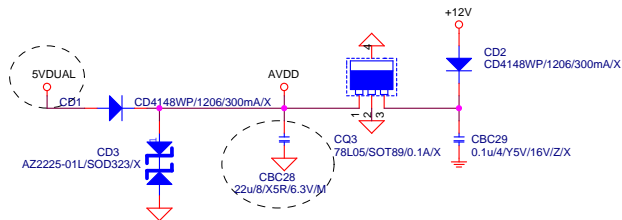


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ALC887-VD2

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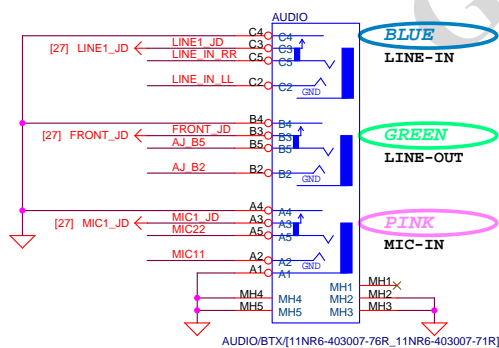
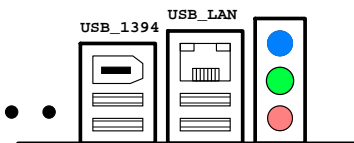
CODEC POWER/EMI PAD



CD IN N/A

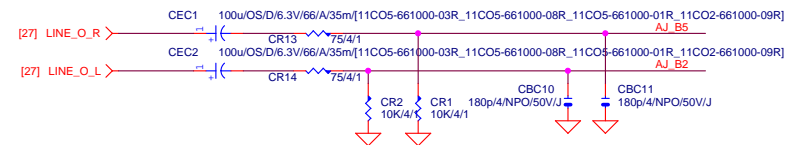
SPDIF IN N/A

AZALIA JACK

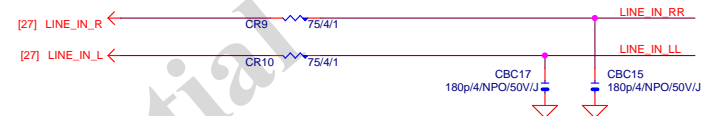


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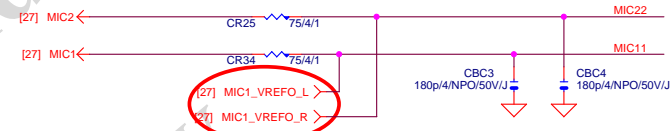
LINE-OUT



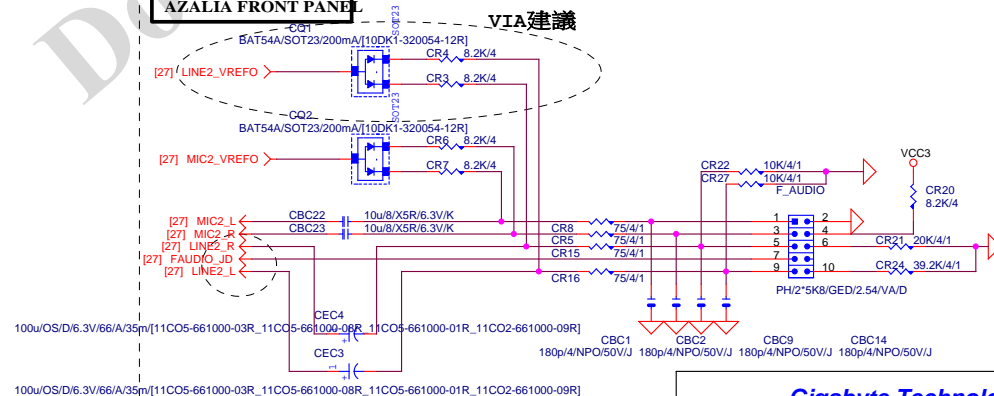
LINE-IN



MIC-IN

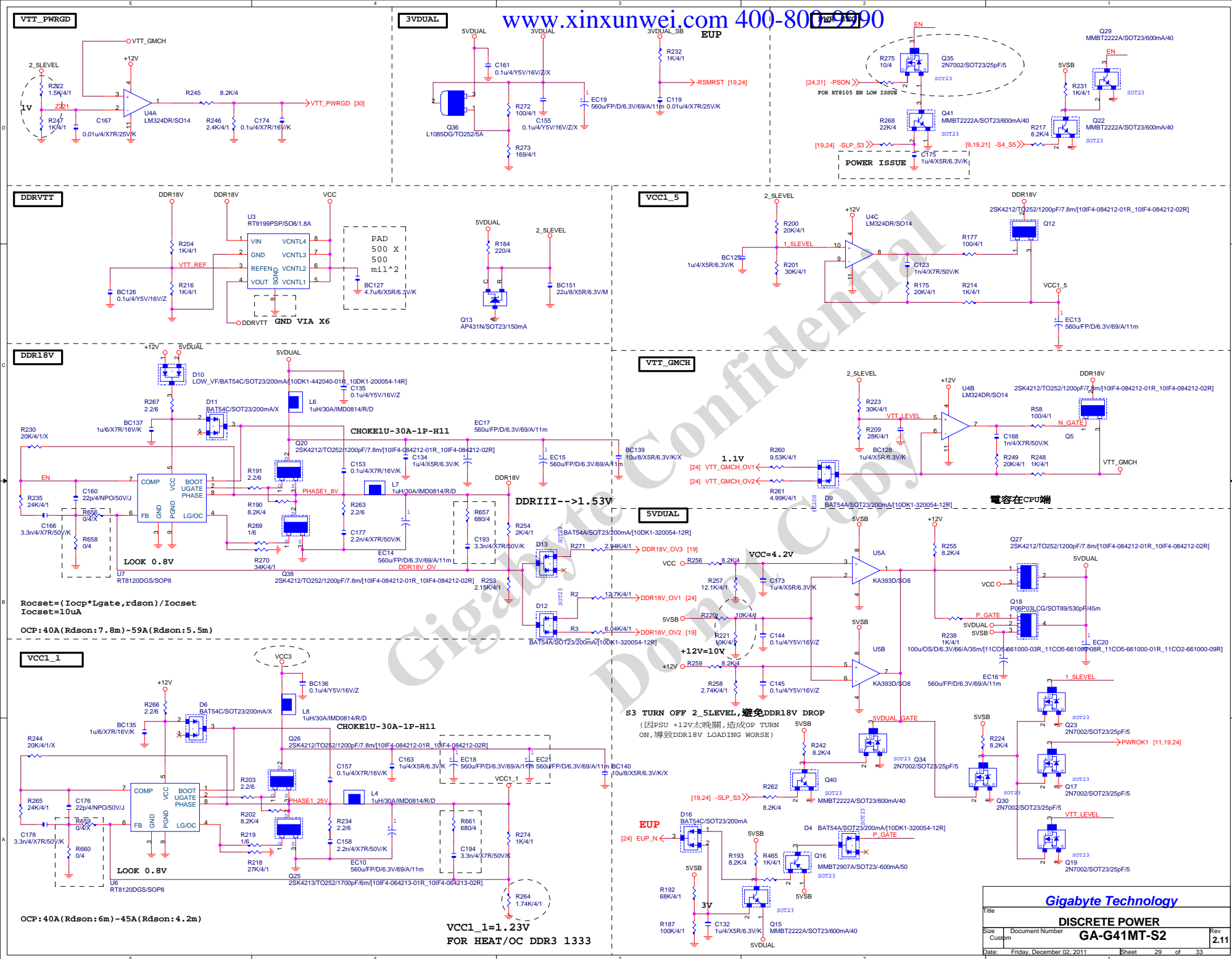


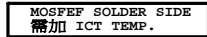
AZALIA FRONT PANEL



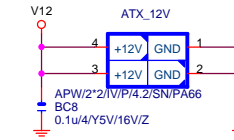
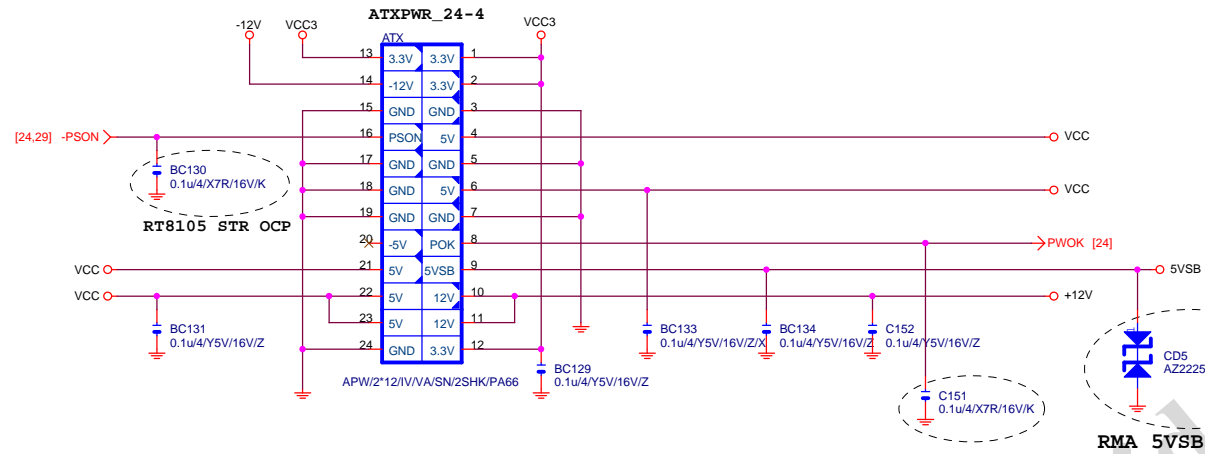
Gigabyte Technology

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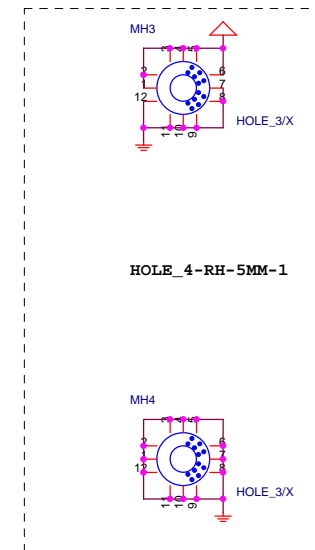
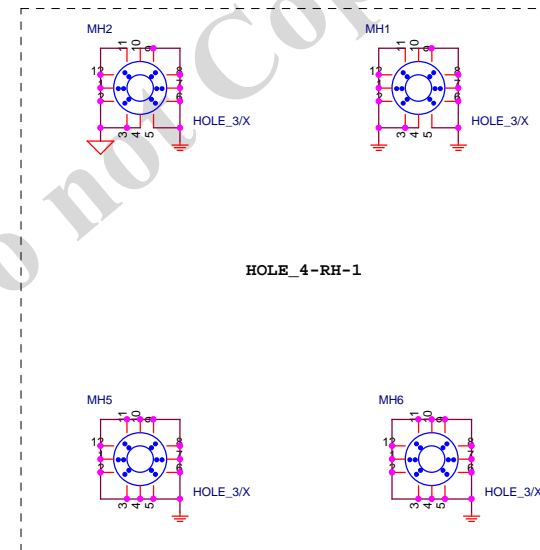
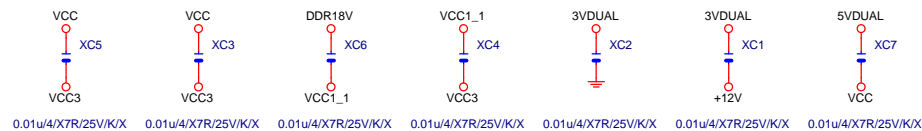
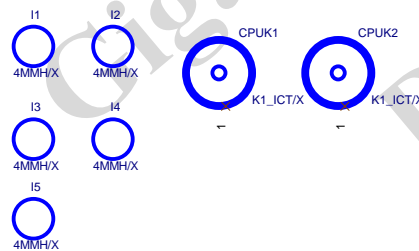
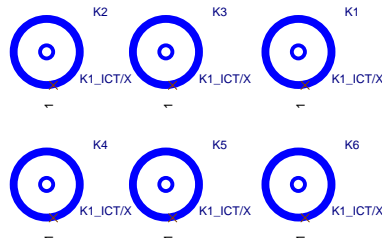
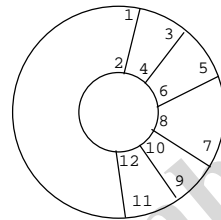
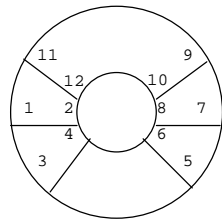
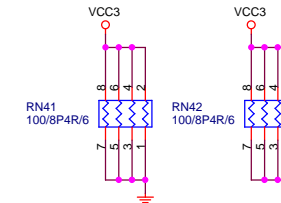
ATX POWER CONNECTOR



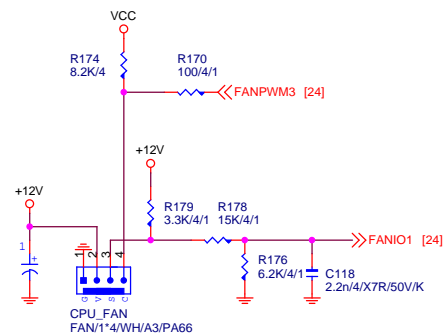
ATX_4-5

MIN. LOAD

FIX PWR AcBel(ATX-400C-A2ADB)

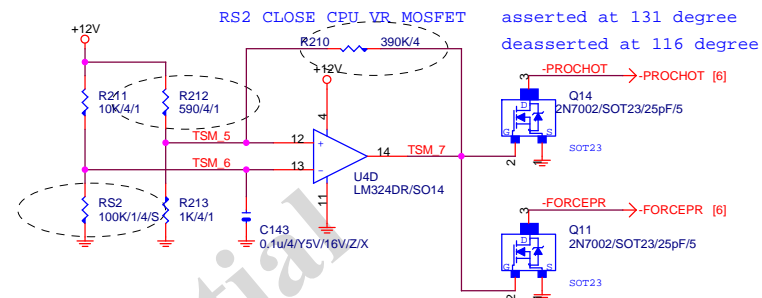


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ATX POWER CONNECTOR		
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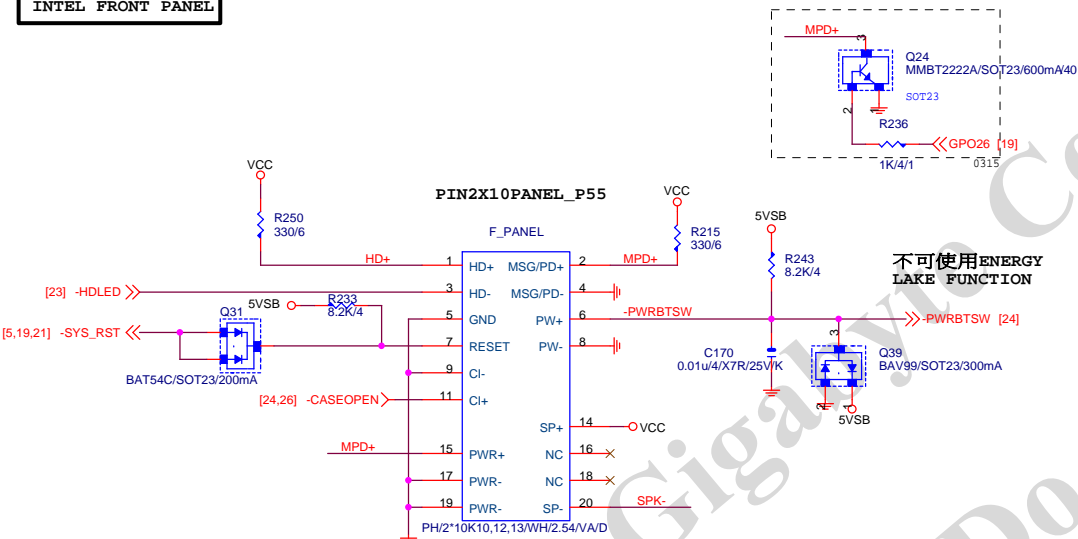


CE1

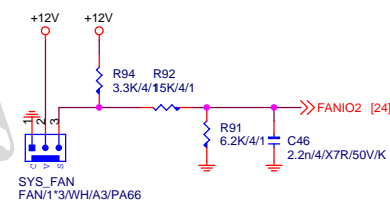
100u/OS/D/16V/69/A/35m/[11CO5-661000-08R_11CO5-661000-03R_11CO5-661000-01R_11CO5-691000-09R]



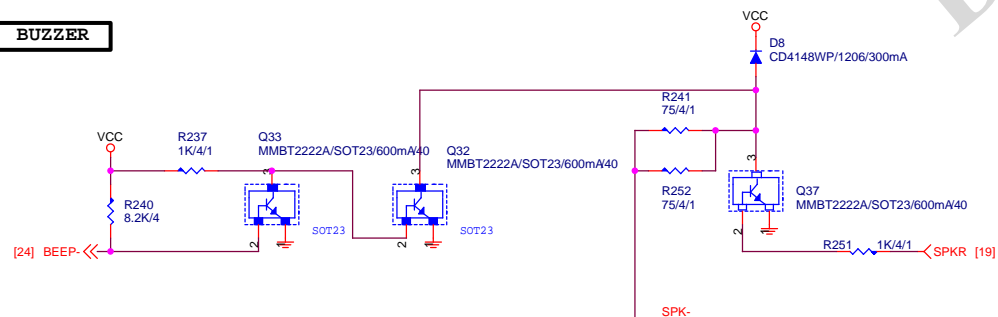
INTEL FRONT PANEL



SYS_FAN



BUZZER



PCIE-1G LAN

CHOKE4U7-500MA-1

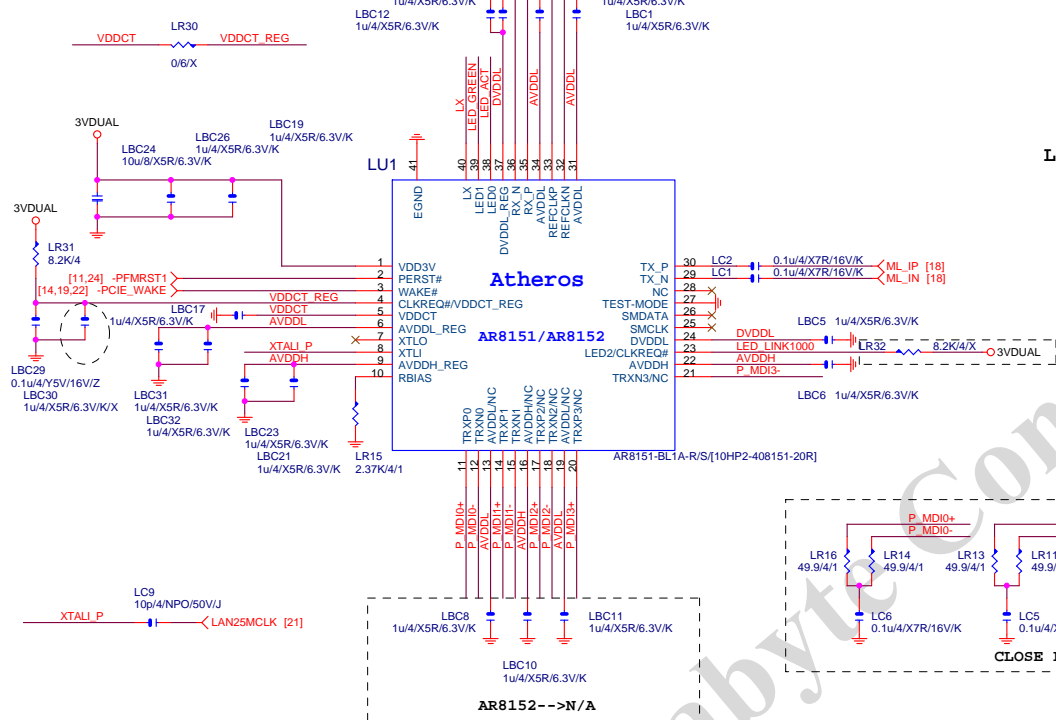
AR8131/AR8132 SWR:

LL1, LBC27, LBC16(O), LR30(X)

AR8152 LDO OUTPUT(PIN4):LL1(X)

1.AL1A:LR30(O), LBC27, 26(O)

2.BL1A:LR30(O), LBC27, 26(X)



LED0(ACT) LED1(LINK) LED2(LINK1G)

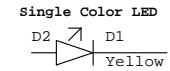
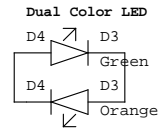
CLKREQ# PULL-UP FOR EFUSE:

1.AR8151:LR31(O), LR32(X)

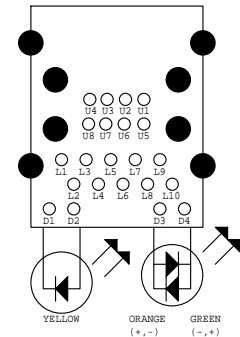
2.AR8152:LR31(X), LR32(O)

AR8152-->N/A

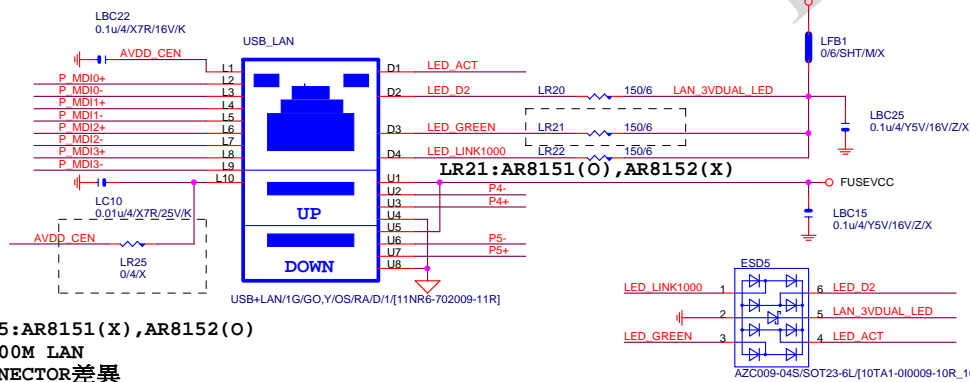
CLOSE LAN CHIP



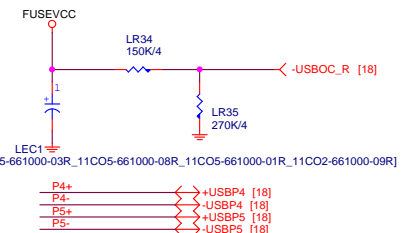
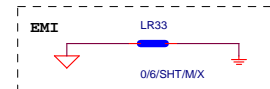
P35-152-19W9



USB_LAN CONNECTOR

1G :USB+LAN/1G/GO, Y/OS/RA/D/1
100M:USB+LAN/100/GO, Y/OS/RA/D/1LR25:AR8151(X), AR8152(O)
因100M LAN
CONNECTOR差異

USB_LAN



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