

Model Name: GA-B85N PHOENIX Revision 1.1

SHEET TITLE

01	COVER SHEET
02	BOM & PCB MODIFY HISTORY
03	BLOCK DIAGRAM
04	CPU_LGA1150-A
05	CPU_LGA1150-B
06	CPU_LGA1150-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	ITE 8620 LPC IO
16	COM,KB_USB30
17	HWM,FAN CTRL,OV,-PROCHOT
18	DUAL BIOS
19	FP,FUSB,SPK,SATALED
20	Realtek ALC898
21	REAR AUDIO JACK
22	USB DAC POWER, mini PCI-E
23	INTEL LAN I217V
24	DISCRETE POWER
25	ATX,CLK GEN
26	RT8120_DDR POWER,M3 POWER
27	VCORE ISL95820_1

SHEET TITLE

28	VCORE ISL95820_2
29	DVI-I
30	HDMI+USB2.0*2
31	mSATA, Mini-PCIe
32	Breathing LED

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Gigabyte Technology		
Cover Sheet		
Size Custom	Document Number	Rev 1.1
Date: Thursday, December 19, 2013	Sheet 1 of 32	

Model Name: GA-B85N PHOENIX *Revision 1.1*

Component value change history

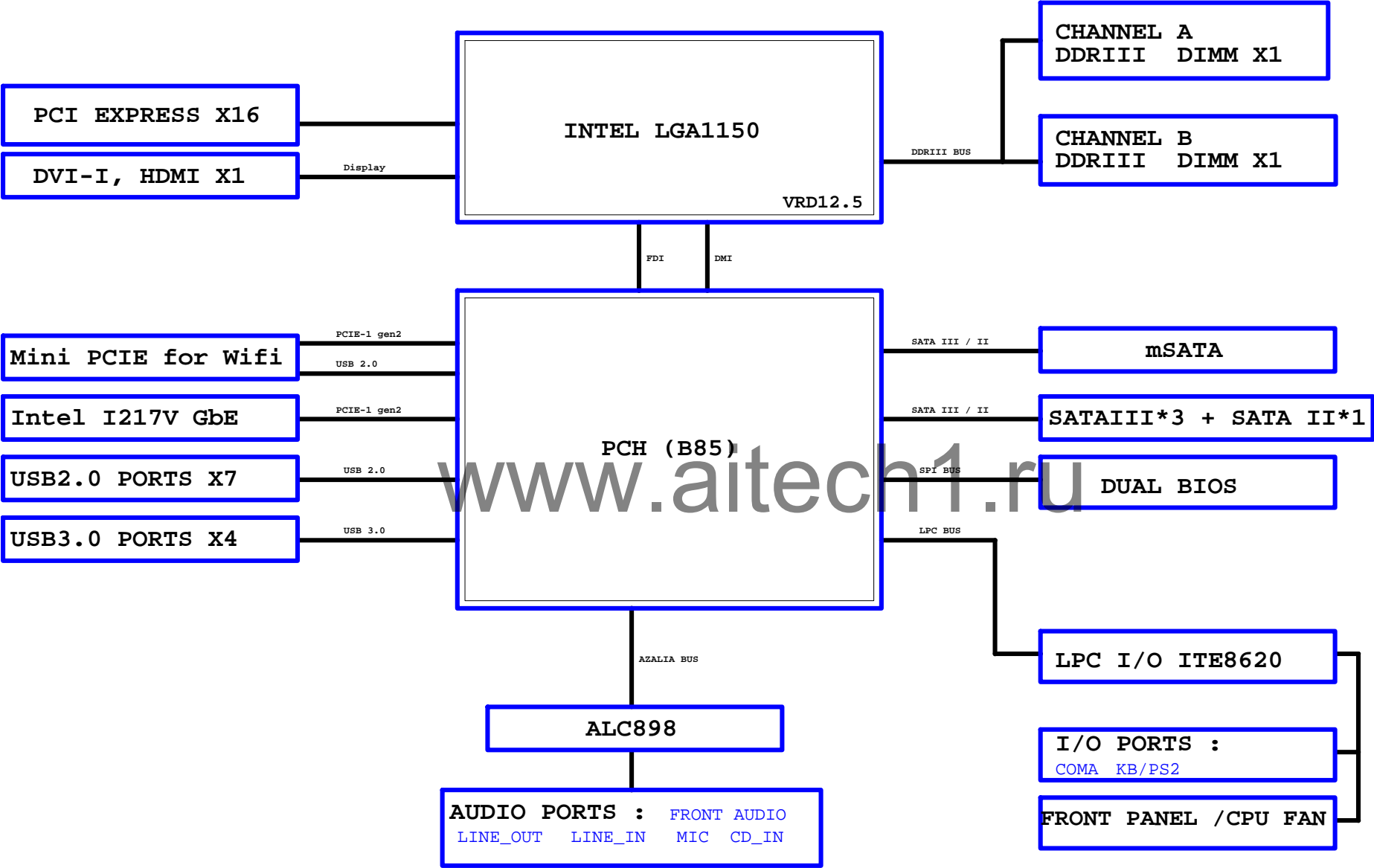
2013/07/02

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Circuit or PCB layout change

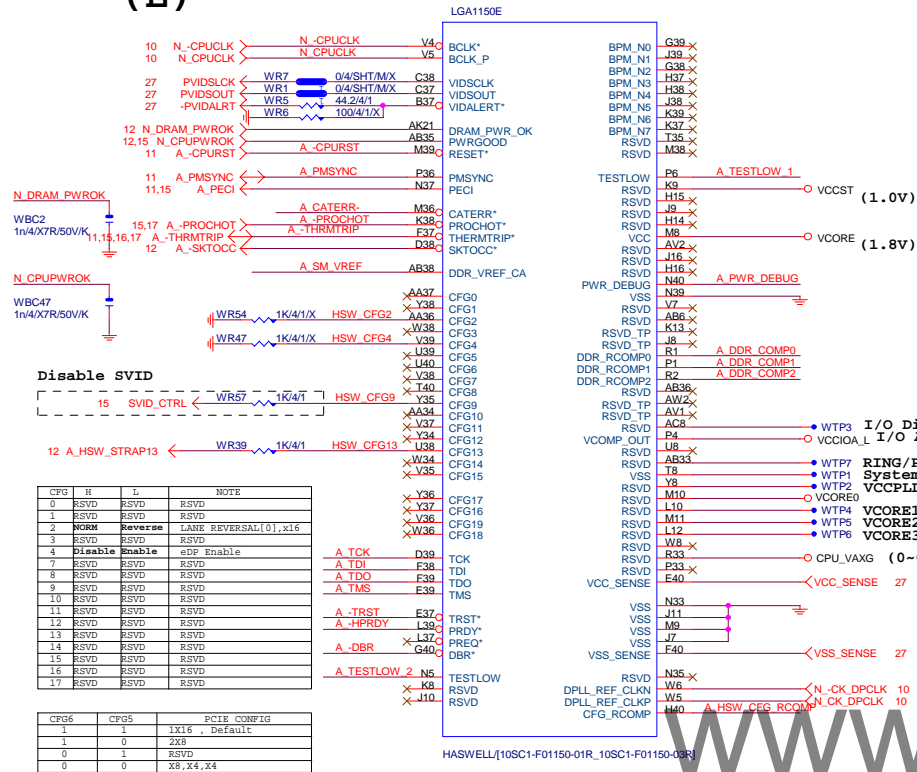
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BLOCK DIAGRAM



LGA1150

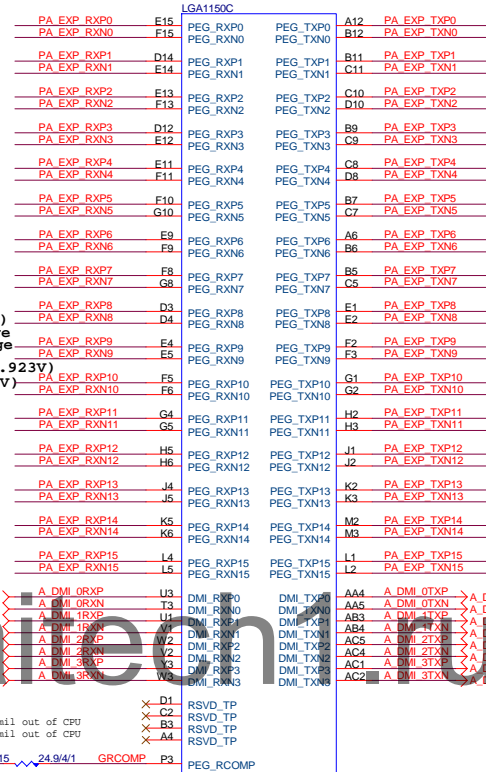
(E)



LGA1150

(C)

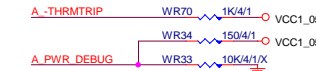
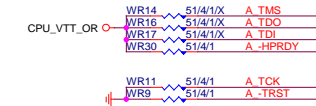
PCIEX16:16/5/5/5/16(breakout min 10/4/4/4/10)
Impedance=80 +- 17.5%



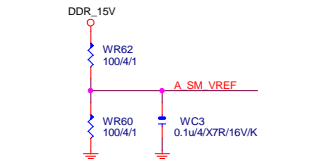
CPU SVID



CPU PU/PD

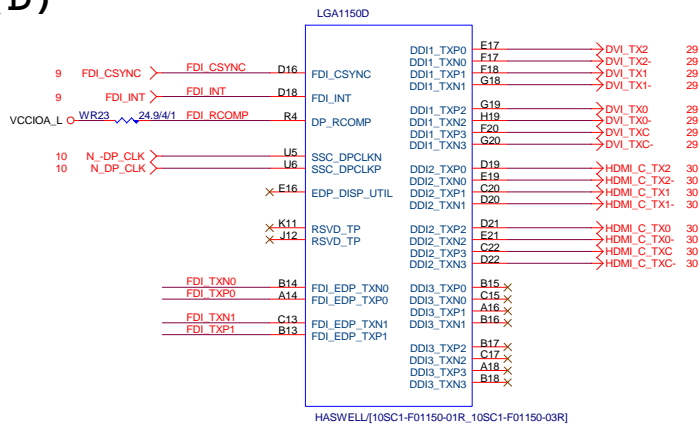


SM REF



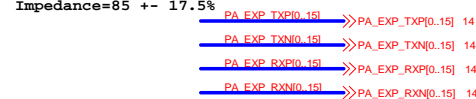
LGA1150

(D)



-CPURST

DMI:12/4/4/4/12(breakout min 8/4/4/4/8)
Impedance=85 +- 17.5%



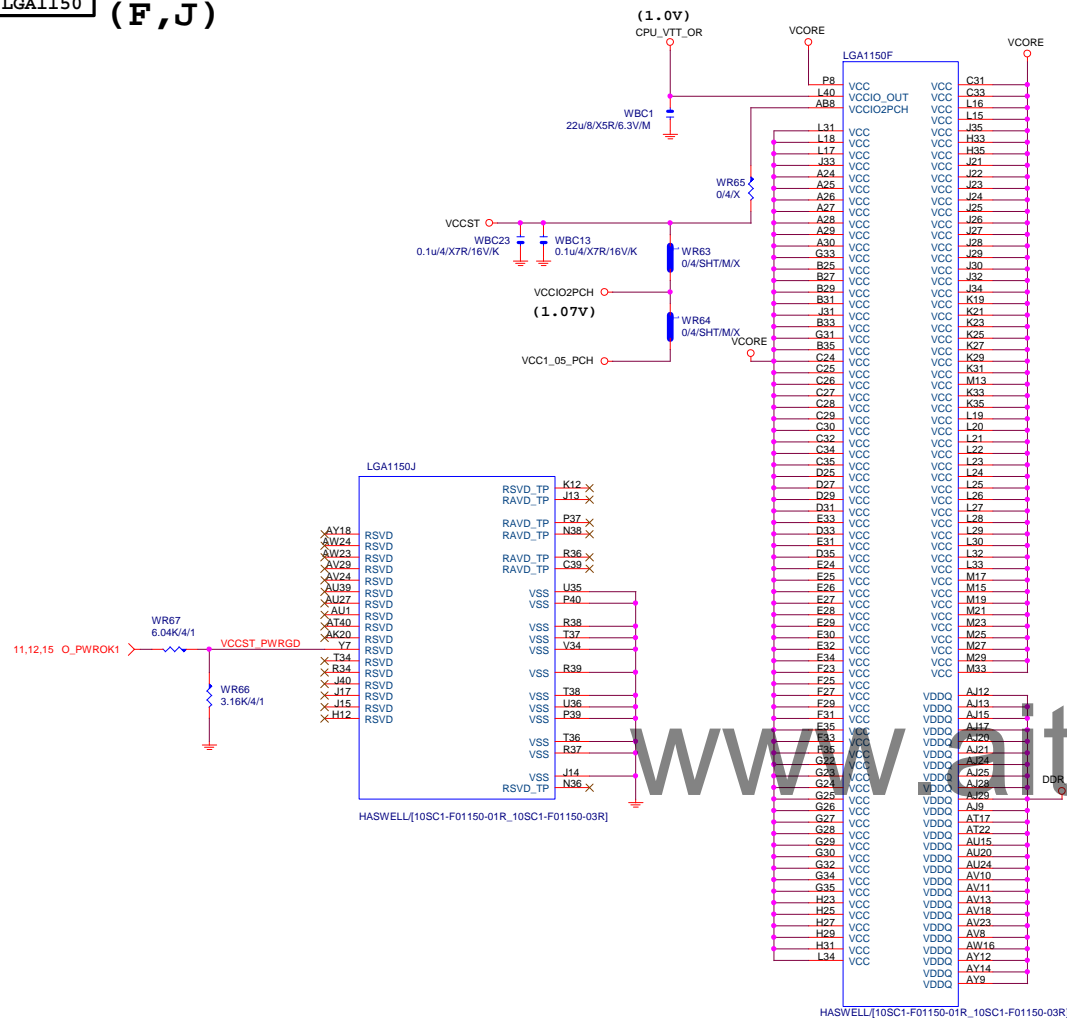
Gigabyte Technology

Title			
CPU LGA1150-A			
Size	Document Number	Rev	
Custom	GA-B85N-Phoenix	1.1	
Date:	Thursday, December 19, 2013	Sheet	4 of 32

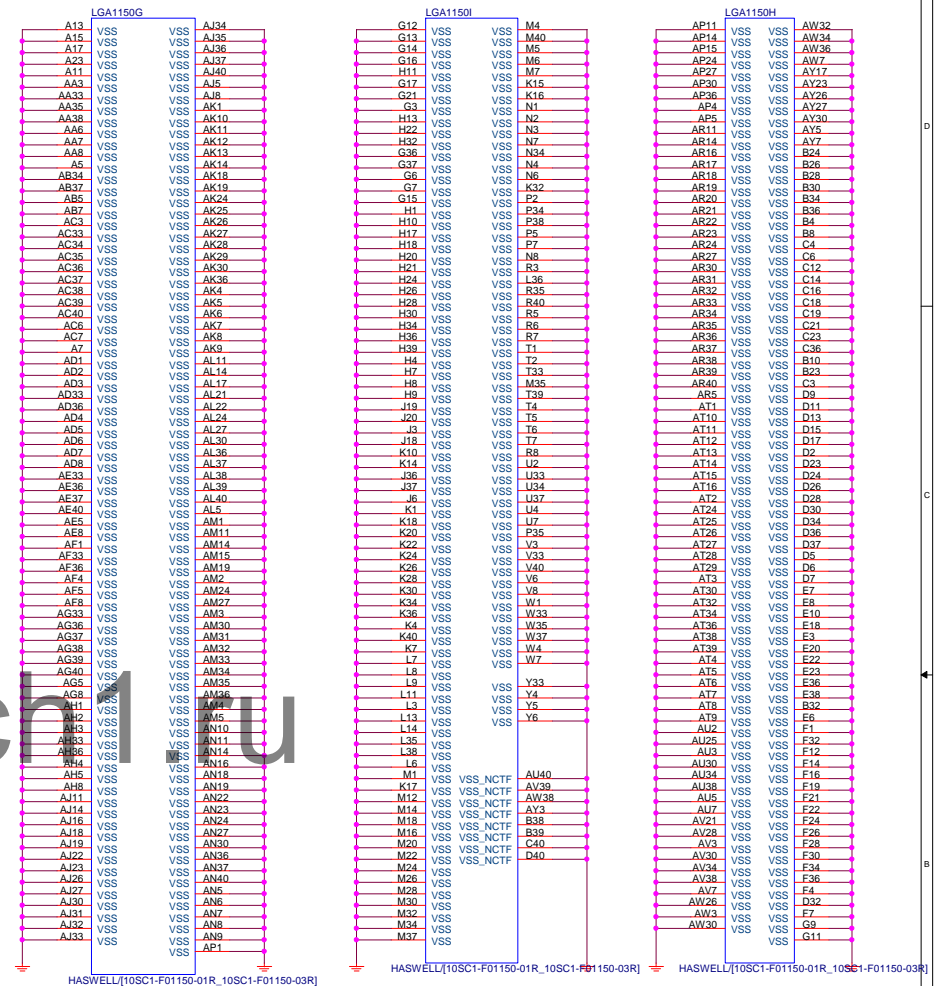
LGA1150A

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MAAA3	AW17	DDR0_MA3	DDR0_DQ3	AF39	MDA3
MAAA4	AU17	DDR0_MA4	DDR0_DQ4	AD37	MDA4
MAAA5	AW18	DDR0_MA5	DDR0_DQ5	AD40	MDA5
MAAA6	AV17	DDR0_MA6	DDR0_DQ6	AF37	MDA6
MAAA7	AT18	DDR0_MA7	DDR0_DQ7	AF40	MDA7
MAAA8	AU18	DDR0_MA8	DDR0_DQ8	AH40	MDA8
MAAA9	AT19	DDR0_MA9	DDR0_DQ9	AH39	MDA9
MAAA10	AW11	DDR0_MA10	DDR0_DQ10	AH38	MDA10
MAAA11	AV19	DDR0_MA11	DDR0_DQ11	AH37	MDA11
MAAA12	AU19	DDR0_MA12	DDR0_DQ12	AH36	MDA12
MAAA13	AY10	DDR0_MA13	DDR0_DQ13	AH35	MDA13
MAAA14	AT20	DDR0_MA14	DDR0_DQ14	AH34	MDA14
MAAA15	AU21	DDR0_MA15	DDR0_DQ15	AH33	MDA15
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MODT_A1	AY8	DDR0_ODT1	DDR0_ODT2	AM38	MDA18
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AW8	AW8	DDR0_ODT3	DDR0_ODT4	AM36	MDA16
AW7	AW7	DDR0_ODT4	DDR0_ODT5	AM35	MDA17
AW6	AW6	DDR0_ODT5	DDR0_ODT6	AM34	MDA14
AW5	AW5	DDR0_ODT6	DDR0_ODT7	AM33	MDA15
AW4	AW4	DDR0_ODT7	DDR0_ODT8	AM32	MDA12
AW3	AW3	DDR0_ODT8	DDR0_ODT9	AM31	MDA13
AW2	AW2	DDR0_ODT9	DDR0_ODT10	AM30	MDA10
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AW0	AW0	DDR0_ODT189	DDR0_ODT190	AM00	MDA2
AW0	AW0	DDR0_ODT190	DDR0_ODT191	AM00	MDA3
AW0	AW0	DDR0_ODT191	DDR0_ODT192	AM00	MDA4
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AW0	AW0				

LGA1150 (F,J)

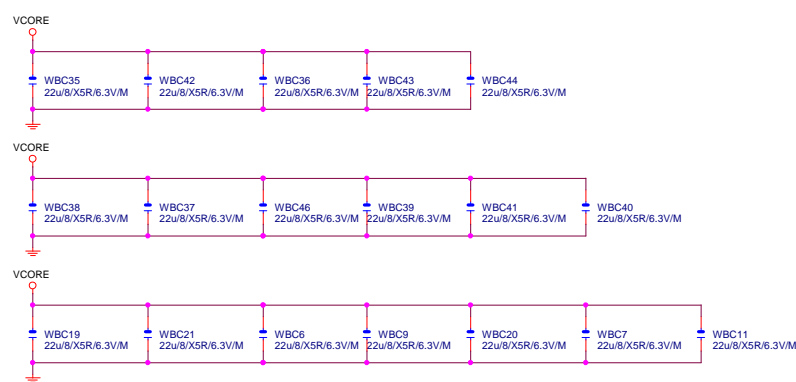


LGA1150 (G,H,I)



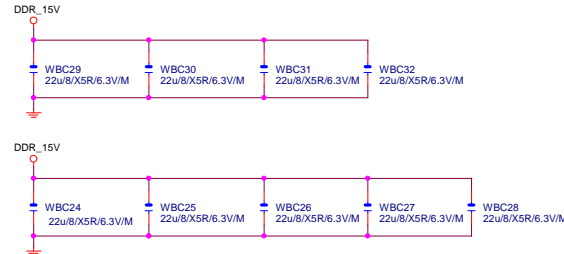
VCore CAP

(x18)



DDR CAP

(x9)

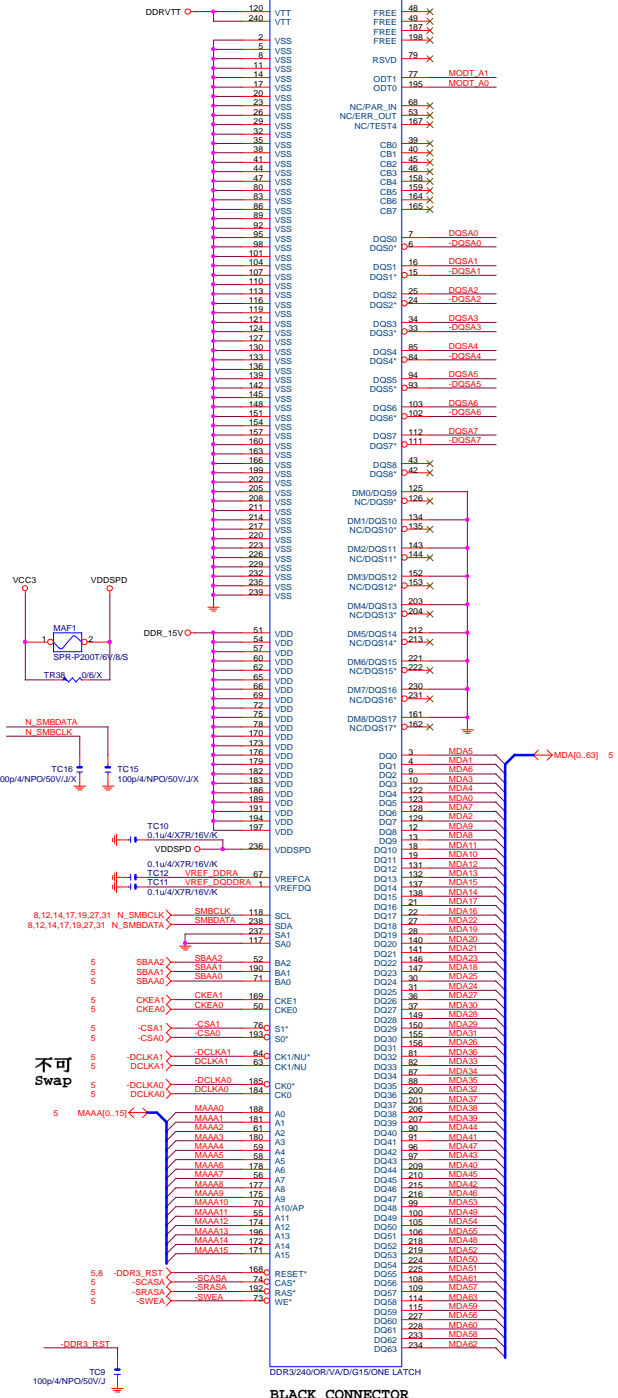


Gigabyte Technology

Title			
CPU LGA1150-C			
Size	Document Number	GA-B85N-Phoenix	Rev
Custom			1.1
Date:	Thursday, December 19, 2013	Sheet 6 of 32	

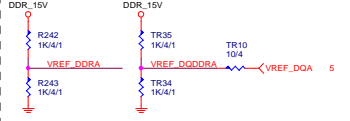
DDR3

(A)

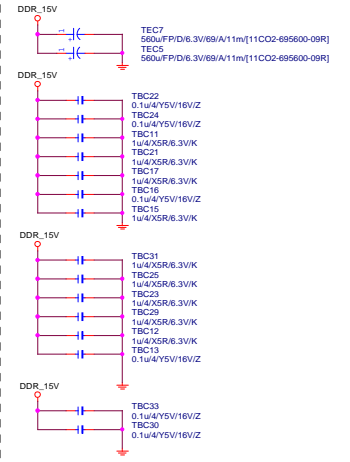


DDR3

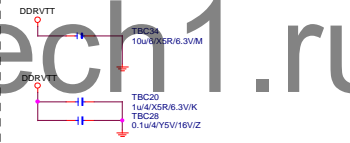
DDR3 VREF



DDR15V Decouple

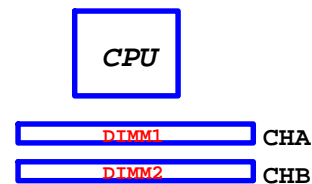


DDRVTT Decouple



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Gigabyte Technology			
DDRIII CHANNEL A			
GA-B85N-Phoenix			
Title	Document Number	Rev	1.1
Size	Custpm		
Date		Sheet	7 of 32



DMI:12/4/4/4/12(breakout min 8/4/4/4/8)
Impedance=85 +- 17.5%

VCC1_5_PCH

NR50 7.5K/4/1 DMI_COMP

NR40 7.5K/4/1 PCIE_COMP

CK_SRCCLK_PCH

CK_SRCCLK_PCH

PCIE-E	23	LA_ML_IN		
	23	LA_ML_IP		
	23	LA_ML_ON		
	23	LA_ML_OP		
	31	MPICIE_INO		
	31	MPICIE_IP0	0.1u4/X7R/16V/K	NBC84PET N5
	31	MPICIE_TN0	0.1u4/X7R/16V/K	NBC85PET P5
	31	MPICIE_TPO		

PCIEX1:16/5/5/5/16 (breakout min 8/4/4/4/8)

PCHB	B85: Port 6/7 N/A
	H81: Port 6/7/12/13 N/A

		USB		N-USB		N-USB	
		USB	N-USB	USB	N-USB	USB	N-USB
DM1_RCOMP	USBN_8	AV16	N +USBP8	N-USBP8	19		
PCIE_RCOMP	USBN_8	AV16	N -USBP8	N +USBP8	19		
	USBN_9	AN16	N -USBP9	N-USBP9	19		
	USBN_9	AP16	N +USBP9	N +USBP9	19		
	USBP_9	AJ18	N -USBP10	N-USBP10	30		
CLKIN_DMI_N	USBN_10	AK18	N +USBP10	N +USBP10	30		
CLKIN_DMI_P	USBP_10	AP18	N -USBP11	N +USBP10	30		

PCIE_PERN_4 OCEB8_GP10 AF40 N GPIO14 W=4 mil out of P
PCIE_PERP_4 OCEB8_GP10 AG40 S=5 mil out of
PCIE_PETN_4 OCEB8_GP10
PCIE_PETP_4 USBRBIASB AV20 N USBRBIAS NR47 22.6/4/1
PCIE_PERN_5 USBRBIASB AV20
PCIE_PERP_5 USBRBIASB
PCIE_PETN_5 CLKIN_DOT96P AP11 CK -DOTCLK
PCIE_PETP_5 CLKIN_DOT96P AM11 CK DOTCLK

PCIE PETIN_6
PCIE PETP_6
PCIE PERN_7
PCIE PERP_7
PCIE PETP_7
PCIE PETP_7
PCIE PETP_7
PCIE PERN_8
PCIE PERP_8
PCIE PETN_8
PCIE PERP_8

www.2

NR130
8.2K/4

O3VDUAL

N-GPIO14

N-USBOC_F

N-USBOC_R

NBC82
0.1u4/X7R/16V/K

NBC83
0.1u4/X7R/16

4/4/4/8) _ _ _ _ _

19 PCH_USB3_RXP5 \rightarrow A18 USB3_

19 PCH_USB3_TXN5 \leftarrow B14 USB3_

19 PCH_USB3_TXP5 \leftarrow A14 USB3_

VCC3

NR62 8.2K/4 AK28 TACK

NR63 8.2K/4 AT34

PCH CLK PD

CK_SRCCLK_PCH

CK -SRCLK PCH

Mount for integrated

CK DOTCLK CK DOTCLK N

NR225 short to GL
graphic SKU

FDILINK *** FDI_TYNO

3_RXP_5
3_TXN_5
3_TXP_5

H6_GP70

ck Panel < 10000 MILS
ont Panel < 6000 MILS

ICD-9-CM# configure

USB OC# Configure	
OC0#	F_USB30
OC1#	USB30_LAN2
OC2#	USB30_LAN1
OC3#	N/A
OC4#	F_USB20
OC5#	KB_MS_USB
OC6#	MINI_PCIE
OC7#	Not Use

Gigabyte Technology			
Title PCH FDI,DMI,USB ,PCIE,NVRAM			
Size	Document Number	GA-B85N-Phoenix	
Custom			
Date:	Thursday, December 19, 2013	Sheet	9 of 32

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H77 HEATSINK

SB_HEATSINK

1X

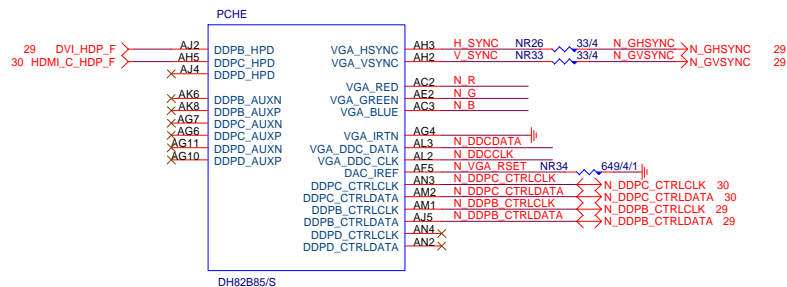
GRAY HS

X2

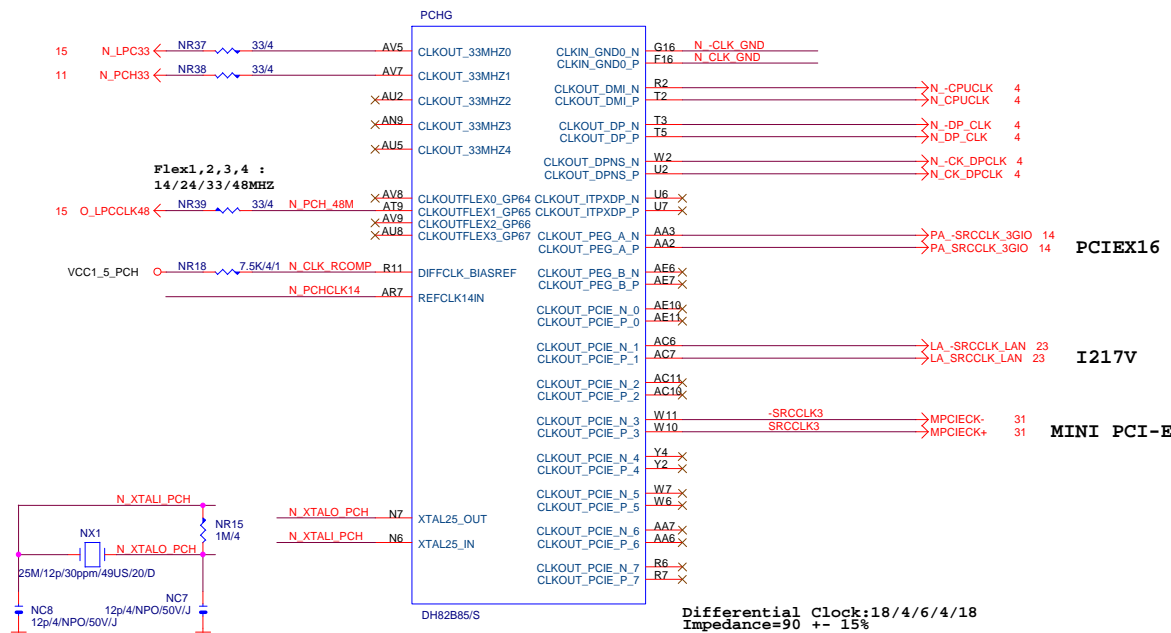
PCH_HS

PCH_HS/[12SP2-S03507-01R]

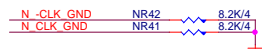
PCH (E)



PCH (G)



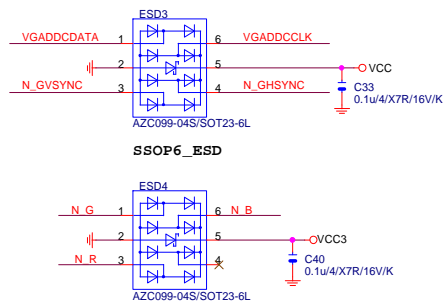
PCH CLK PD



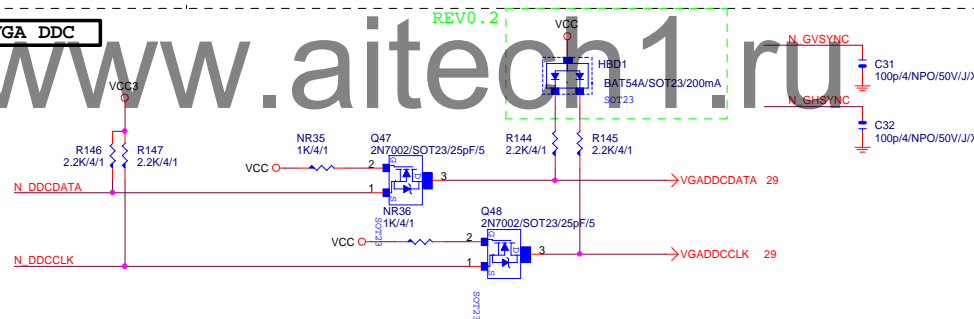
Mount for integrated clock Generation
Mode



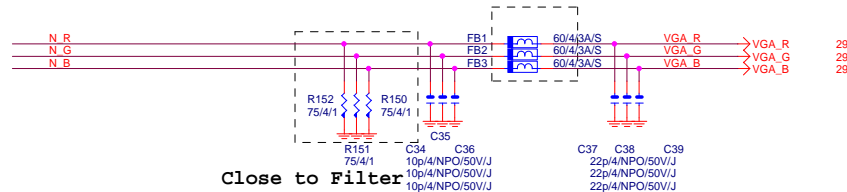
VGA ESD



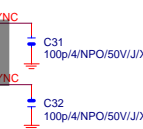
VGA DDC



VGA DDC

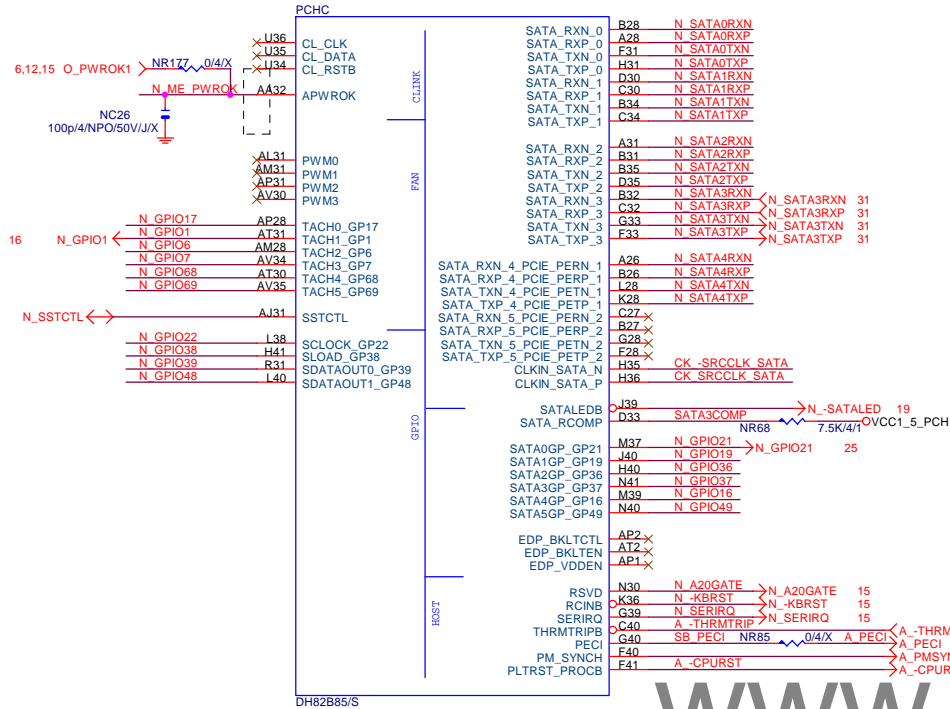


VGA CONNECTOR



PCH (C)

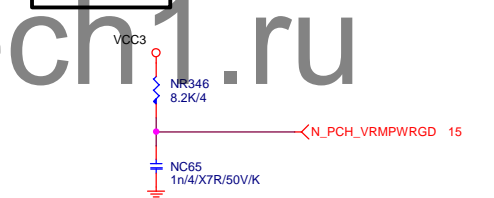
SATA3 : 20/7.5/4.5/7.5/20 (breakout min 8/4/4/4/8)
Impedance=90 +- 17.5%
SATA2 : 15/7.5/4.5/7.5/15 (breakout min 8/4/4/4/8)
Impedance=90 +- 17.5%



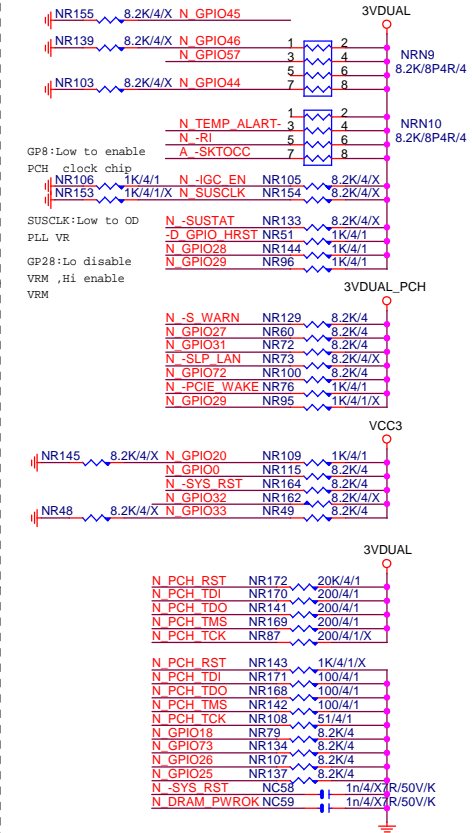
(D)



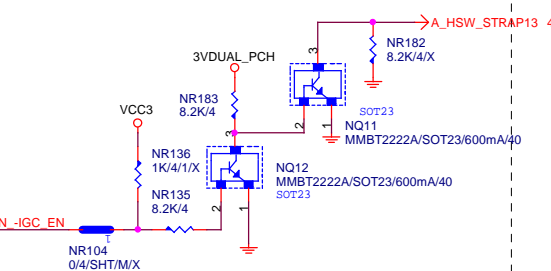
ACZ_SDOUT



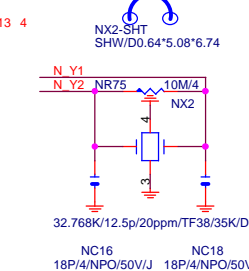
PCH	PU/PD
-----	-------



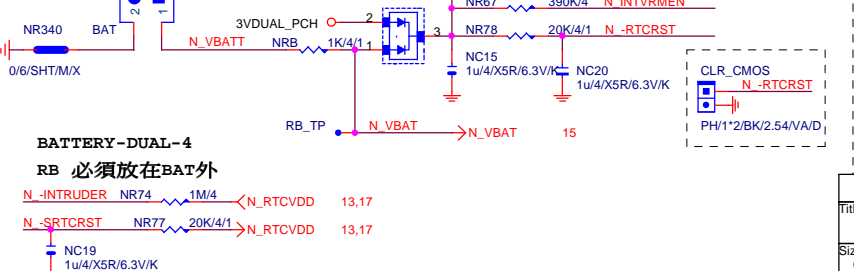
HSW_STRAP13



32.768KHZ



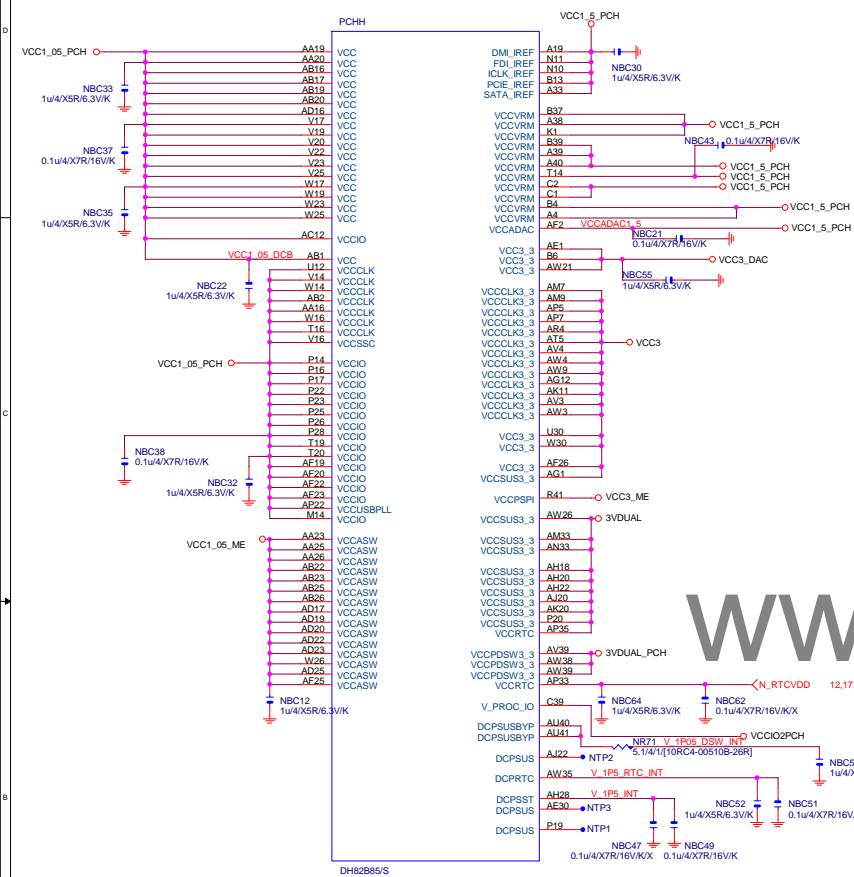
CLR_CMOS



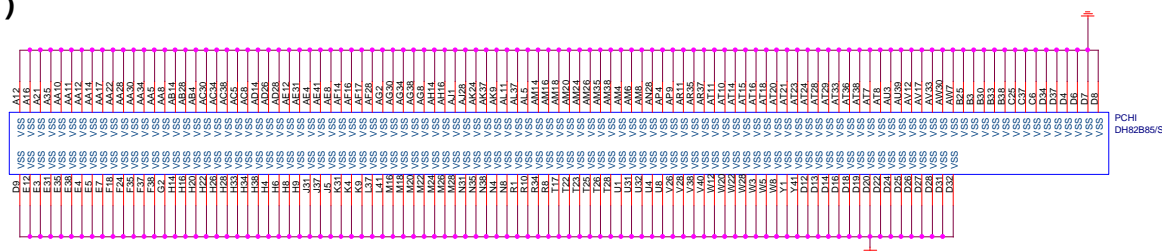
Gigabyte Technology

Title			
PCH GPIO , CTRL , AUDIO			
Size	Document Number	Rev	
Custom	GA-B85N-Phoenix	1.	
Date:	Thursday, December 19, 2013	Sheet	12 of 32

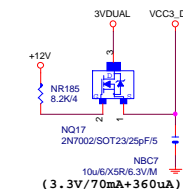
PCH (H)



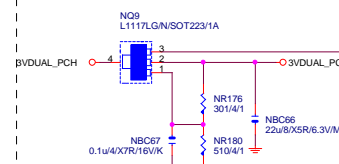
PCH (I)



VCC3_DAC



3VDUAL_PCH



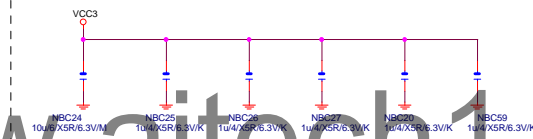
SHT PWR

M3 POWER

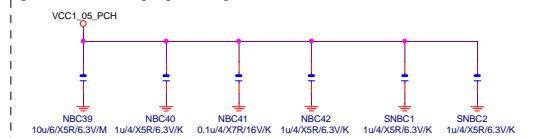


CAP

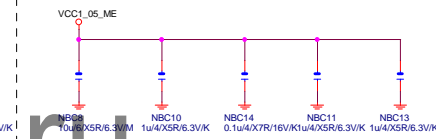
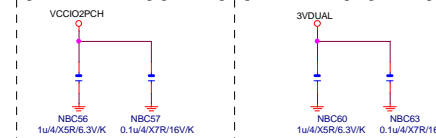
(3.3V) (X6)



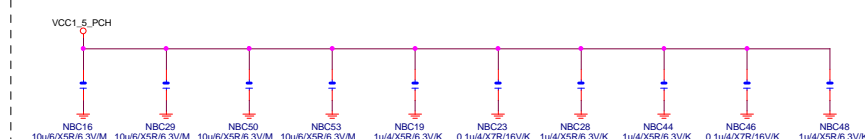
(1.05V)(x6)



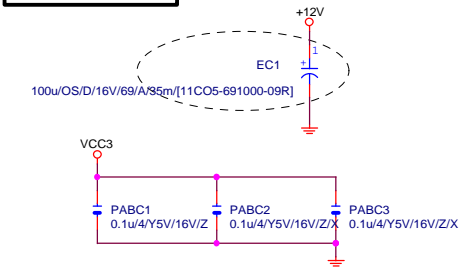
(1.05V) (x5)


$$(1.05V)(x2) \quad (3.3V)(x2)$$


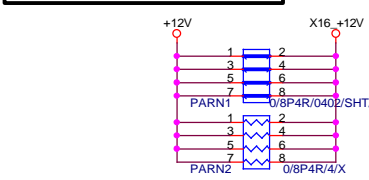
(1.05V)(x10)



PCIEX16 CAP



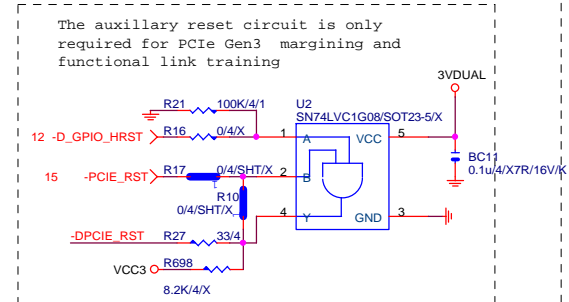
PCIEX16 PROTECT SHT



PCIEX16 AC CAP

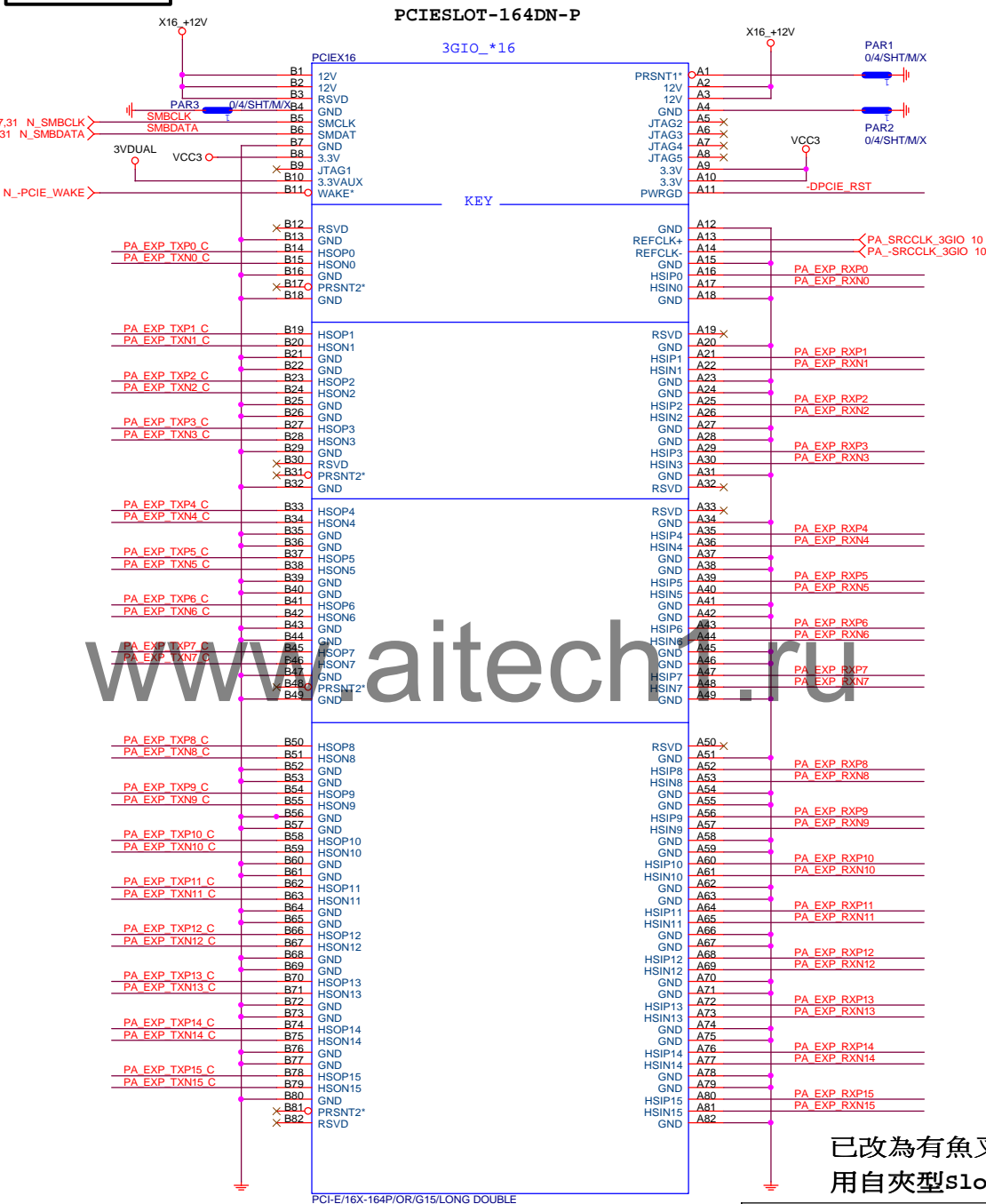
PA EXP TXP0	PAC5	0.22u/4/X5R/6.3V/K	PA EXP TXP0 C
PA EXP TXN0	PAC4	0.22u/4/X5R/6.3V/K	PA EXP TXN0 C
PA EXP TXP1	PAC6	0.22u/4/X5R/6.3V/K	PA EXP TXP1 C
PA EXP TXN1	PAC7	0.22u/4/X5R/6.3V/K	PA EXP TXN1 C
PA EXP TXP2	PAC8	0.22u/4/X5R/6.3V/K	PA EXP TXP2 C
PA EXP TXN2	PAC9	0.22u/4/X5R/6.3V/K	PA EXP TXN2 C
PA EXP TXP3	PAC10	0.22u/4/X5R/6.3V/K	PA EXP TXP3 C
PA EXP TXN3	PAC11	0.22u/4/X5R/6.3V/K	PA EXP TXN3 C
PA EXP TXP4	PAC12	0.22u/4/X5R/6.3V/K	PA EXP TXP4 C
PA EXP TXN4	PAC13	0.22u/4/X5R/6.3V/K	PA EXP TXN4 C
PA EXP TXP5	PAC14	0.22u/4/X5R/6.3V/K	PA EXP TXP5 C
PA EXP TXN5	PAC15	0.22u/4/X5R/6.3V/K	PA EXP TXN5 C
PA EXP TXP6	PAC16	0.22u/4/X5R/6.3V/K	PA EXP TXP6 C
PA EXP TXN6	PAC17	0.22u/4/X5R/6.3V/K	PA EXP TXN6 C
PA EXP TXP7	PAC19	0.22u/4/X5R/6.3V/K	PA EXP TXP7 C
PA EXP TXN7	PAC18	0.22u/4/X5R/6.3V/K	PA EXP TXN7 C
PA EXP TXP8	PAC20	0.22u/4/X5R/6.3V/K	PA EXP TXP8 C
PA EXP TXN8	PAC21	0.22u/4/X5R/6.3V/K	PA EXP TXN8 C
PA EXP TXP9	PAC22	0.22u/4/X5R/6.3V/K	PA EXP TXP9 C
PA EXP TXN9	PAC23	0.22u/4/X5R/6.3V/K	PA EXP TXN9 C
PA EXP TXP10	PAC24	0.22u/4/X5R/6.3V/K	PA EXP TXP10 C
PA EXP TXN10	PAC25	0.22u/4/X5R/6.3V/K	PA EXP TXN10 C
PA EXP TXP11	PAC26	0.22u/4/X5R/6.3V/K	PA EXP TXP11 C
PA EXP TXN11	PAC27	0.22u/4/X5R/6.3V/K	PA EXP TXN11 C
PA EXP TXP12	PAC28	0.22u/4/X5R/6.3V/K	PA EXP TXP12 C
PA EXP TXN12	PAC29	0.22u/4/X5R/6.3V/K	PA EXP TXN12 C
PA EXP TXP13	PAC30	0.22u/4/X5R/6.3V/K	PA EXP TXP13 C
PA EXP TXN13	PAC31	0.22u/4/X5R/6.3V/K	PA EXP TXN13 C
PA EXP TXP14	PAC32	0.22u/4/X5R/6.3V/K	PA EXP TXP14 C
PA EXP TXN14	PAC33	0.22u/4/X5R/6.3V/K	PA EXP TXN14 C
PA EXP TXP15	PAC34	0.22u/4/X5R/6.3V/K	PA EXP TXP15 C
PA EXP TXN15	PAC35	0.22u/4/X5R/6.3V/K	PA EXP TXN15 C

PA EXP RXP0.15] >>> PA_EXP_RXP[0.15] 4
PA EXP RXN0.15] >>> PA_EXP_RXN[0.15] 4
PA EXP TXP0.15] >>> PA_EXP_TXP[0.15] 4
PA EXP TXN0.15] >>> PA_EXP_TXN[0.15] 4



The auxiliary reset circuit is only required for PCIe Gen3 margining and functional link training

PCIEX16 SLOT



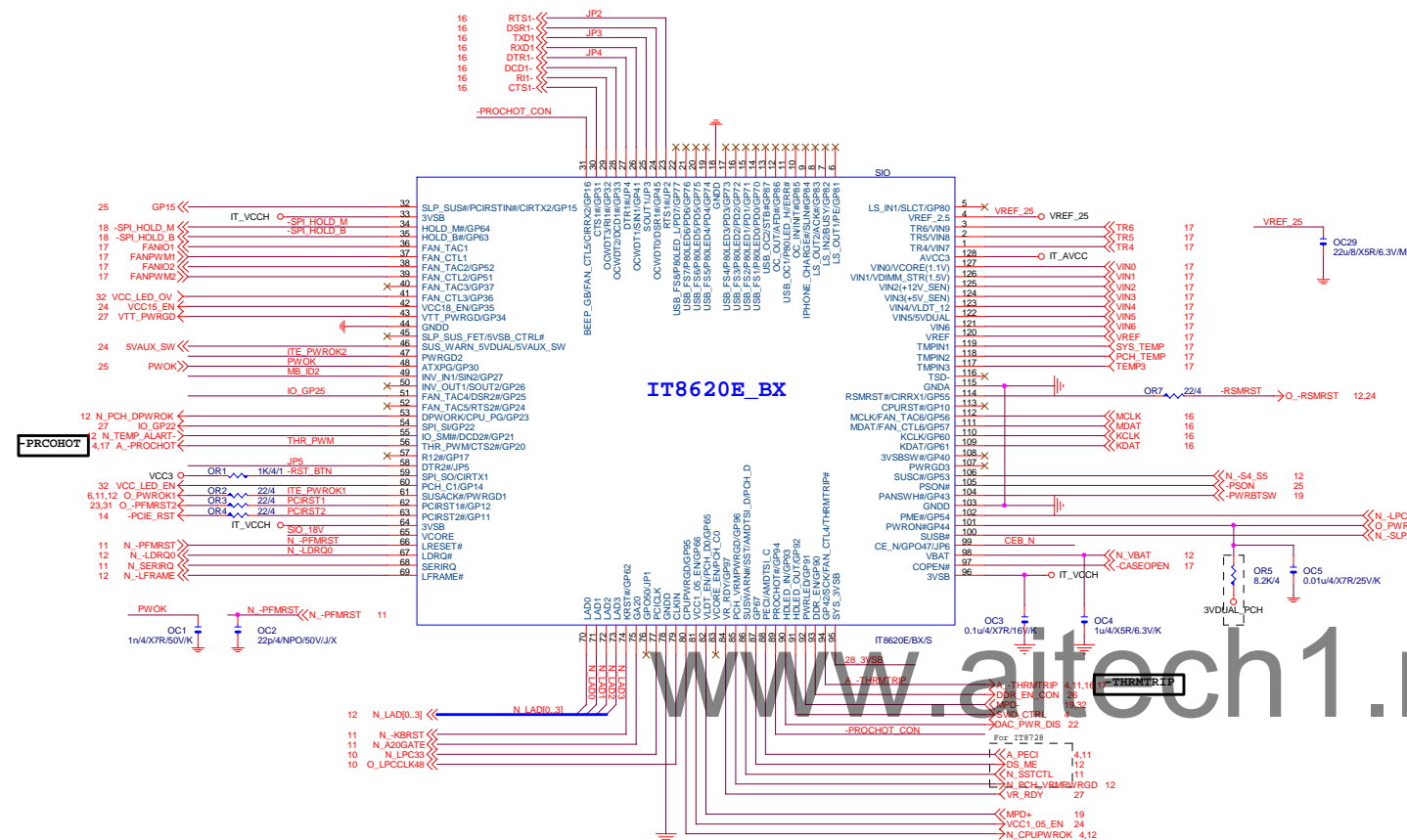
BLACK CONNECTOR

已改為有魚叉腳的slot
用自夾型slot

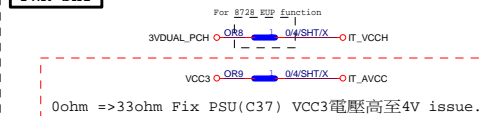
Gigabyte Technology

Title			PCI EXPRESS * 16		
Size			GA-B85N-Phoenix		
Custom			Rev 1.1		
Date:			Thursday, December 19, 2013		
Sheet			14 of 32		

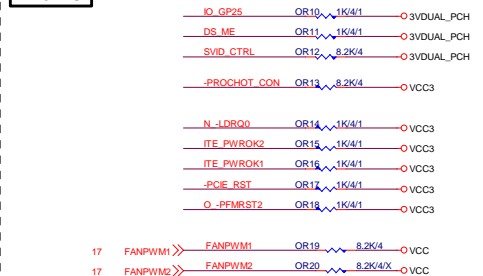
SIO IT8620



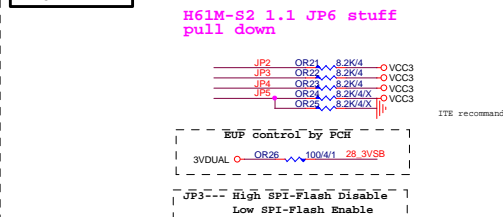
PWR	SHT
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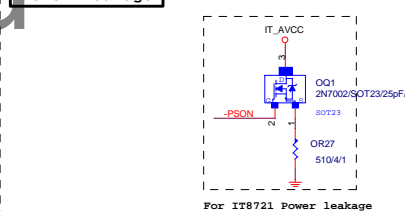
SIO PU



SIO STRAP



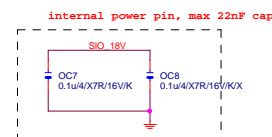
Power leakage



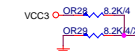
DUAL BIOS OPT STRAP



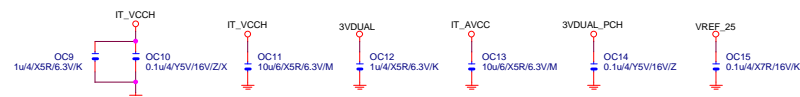
SIO_18V



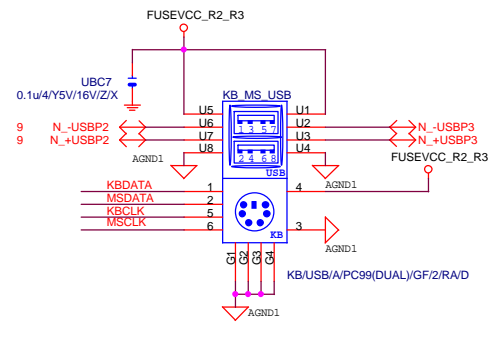
MB ID



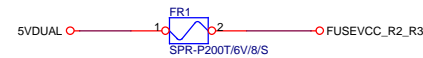
SIO CAP



KB/MS

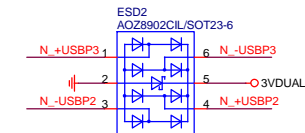


USB2.0 PWR

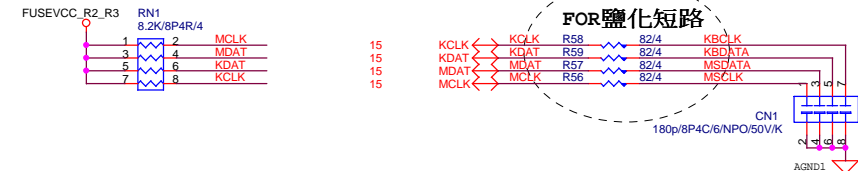


Close to connector
KB_MS_USB 2-Port 2.0A

USB2.0 ESD

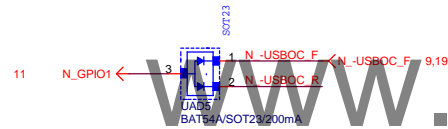
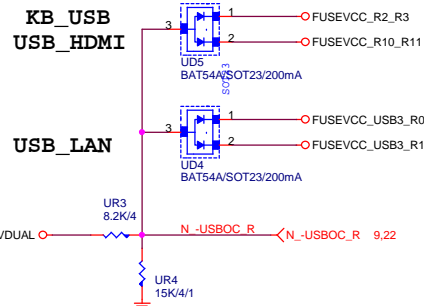


KB_MS



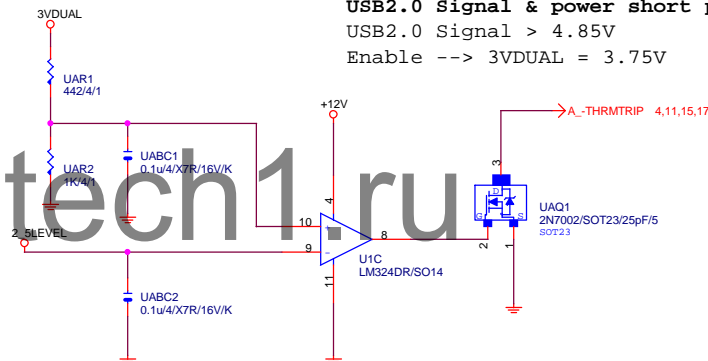
-USBOC_R

USB POWER PROTECT

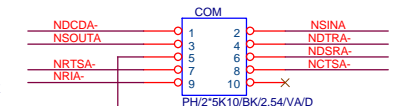
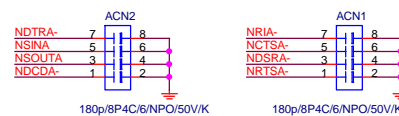
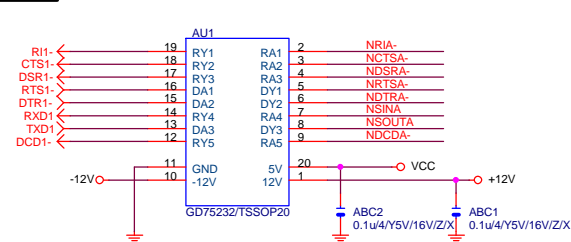


USB2.0 Short Power Protection

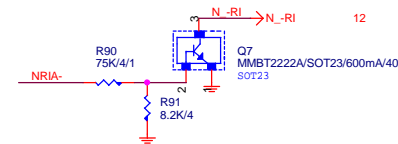
USB2.0 Signal & power short protection
USB2.0 Signal > 4.85V
Enable --> 3VDUAL = 3.75V



COM



COM RI

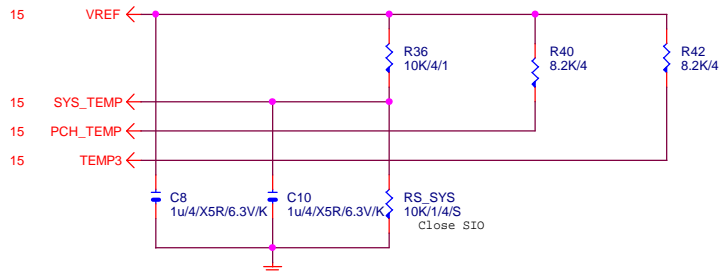


Gigabyte Technology

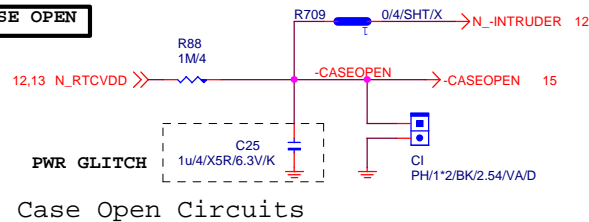
Title
COM-RI,KB_USB,USB_ESATA-PROCHOTSize
Custom Document Number
GA-B85N-PhoenixRev
1.1

Date: Thursday, December 19, 2013 Sheet 16 of 32

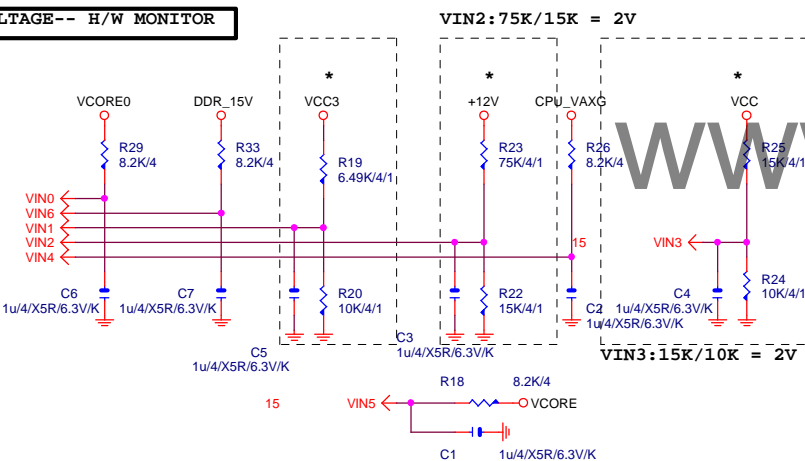
TEMP H/W MONITOR



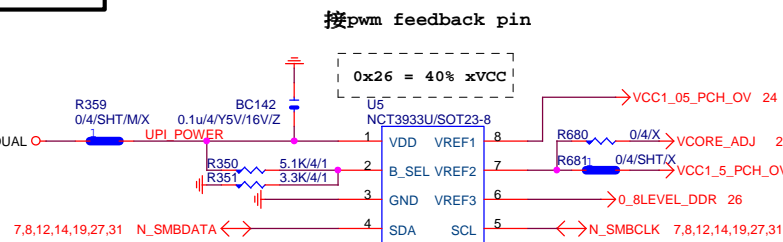
CASE OPEN



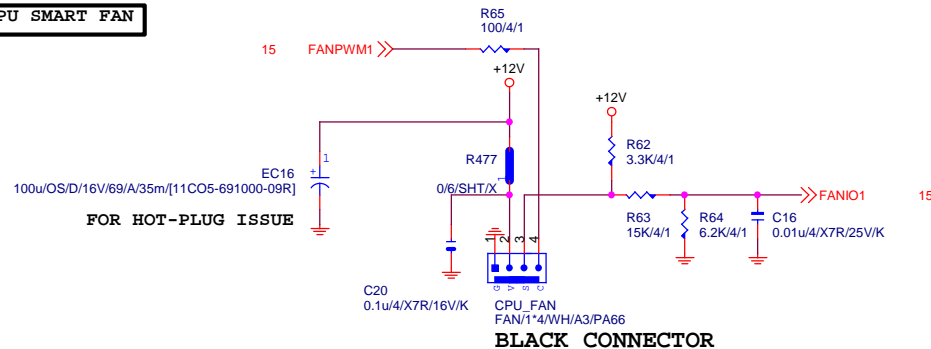
VOLTAGE-- H/W MONITOR



OV NCT3933

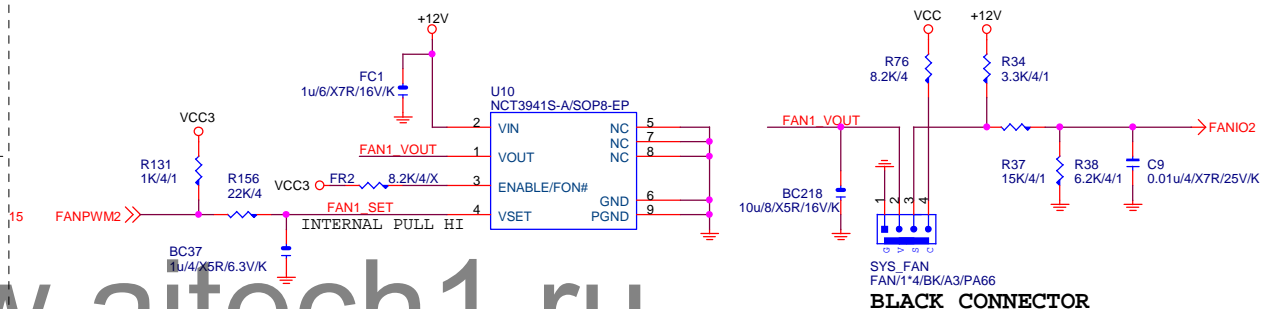


CPU SMART FAN

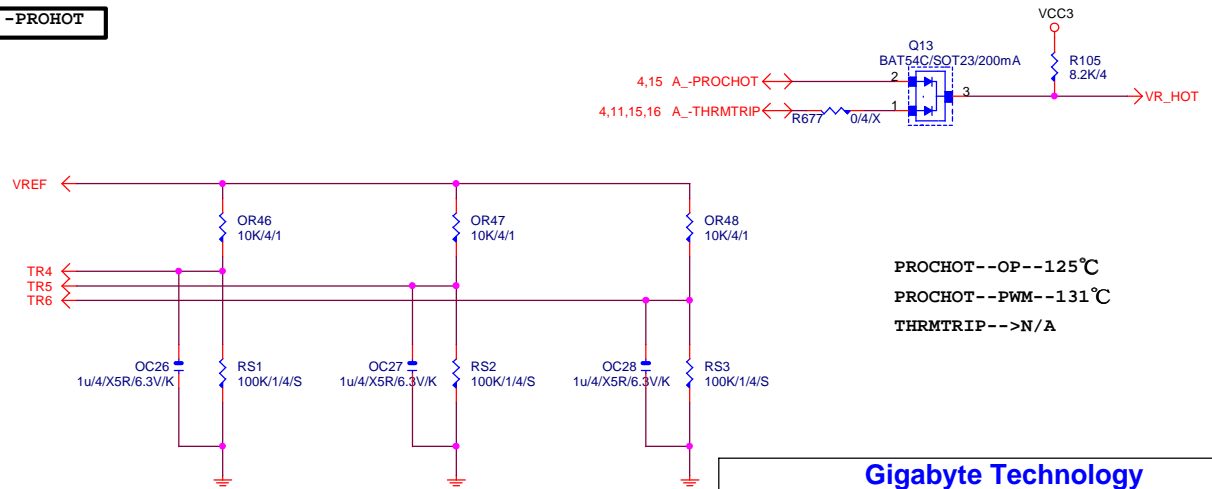


SYS SMART FAN

Linear SYS_FAN



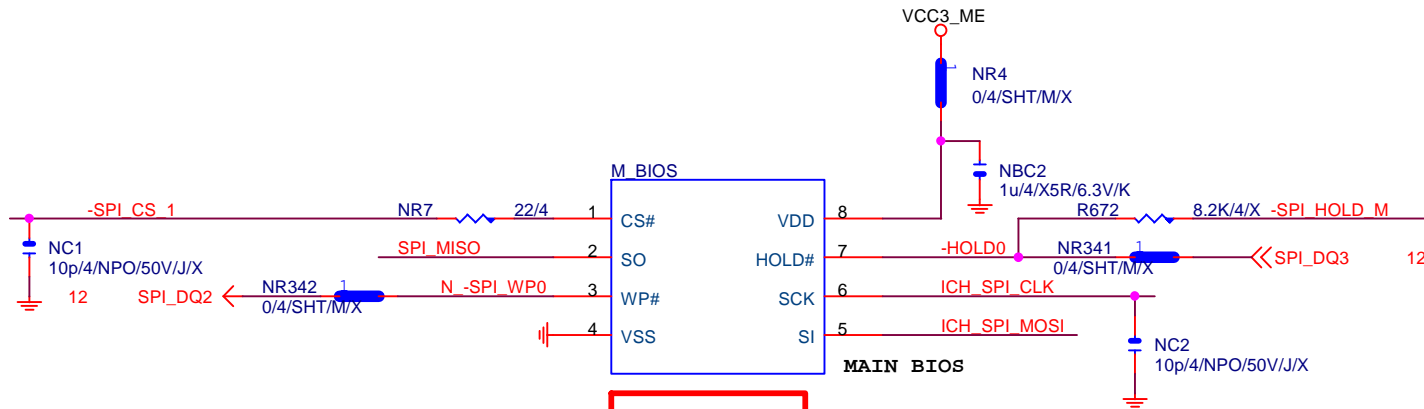
-PROHOT



RS1、RS2、RS3 CLOSE CPU
VR MOSFET

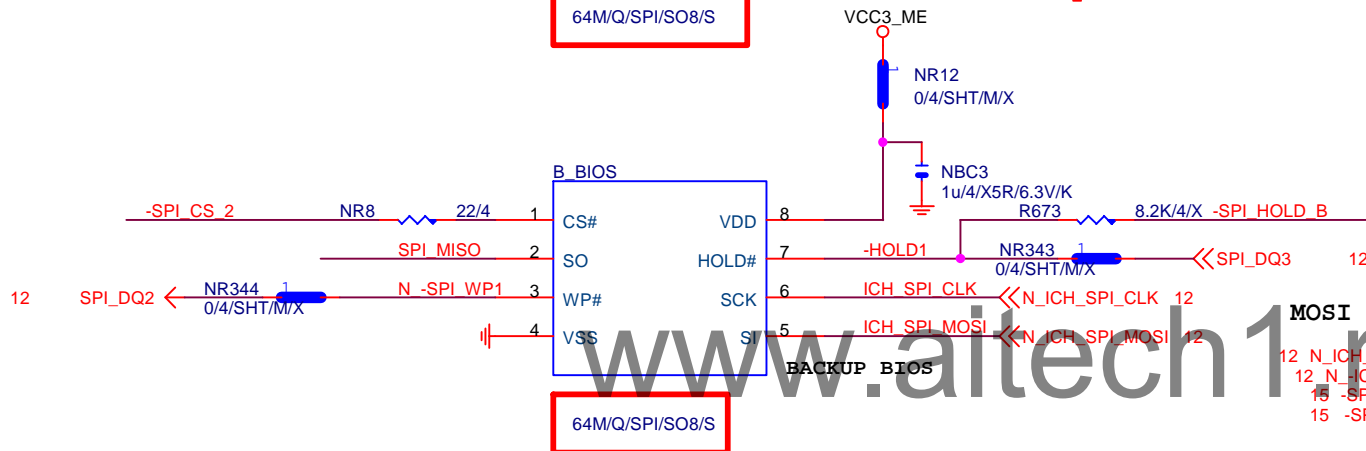
Gigabyte Technology

Title			
HWM,FAN CTRL,OV			
Size	Document Number	Rev	
Custom	GA-B85N-Phoenix	1.1	
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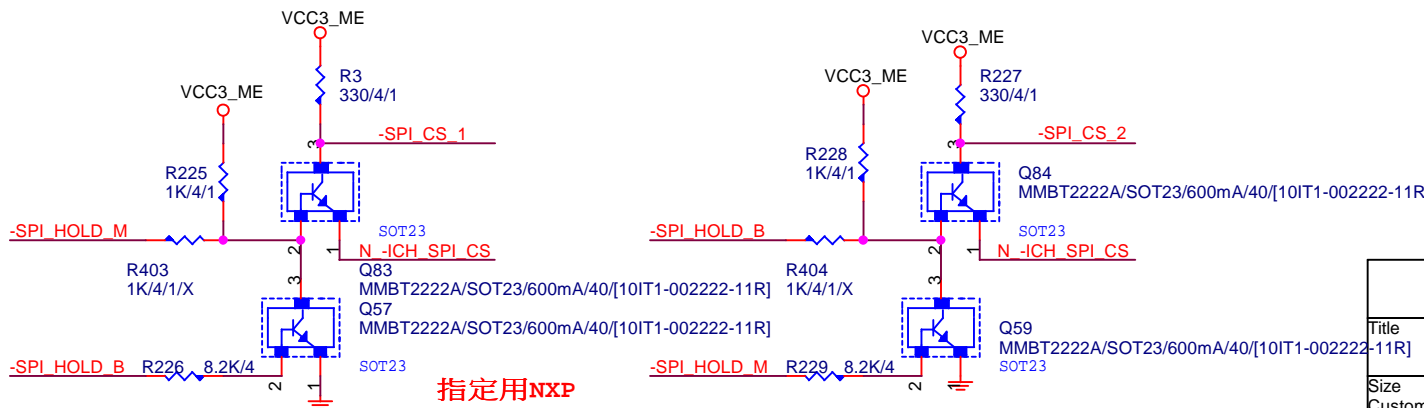
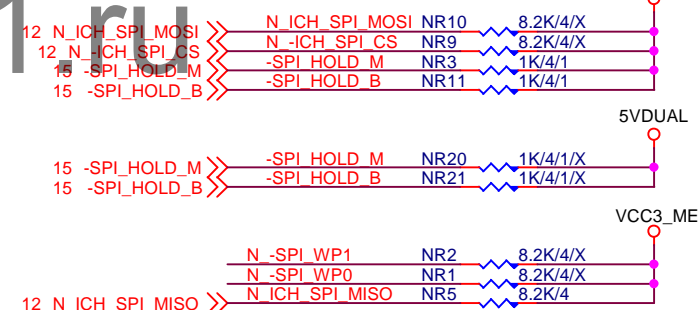


BOOT DEVICE	GNT0	GNT1
LPC	0	0
PCI	0	1
NAND	1	0
SPI	1	1

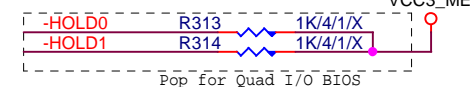
1 means floating
0 means PD 1K



MOSI For DMI RX Termination Voltage



CHECK



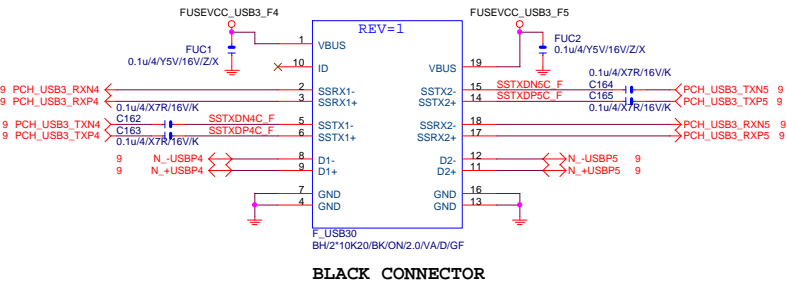
Gigabyte Technology

DUAL BIOS

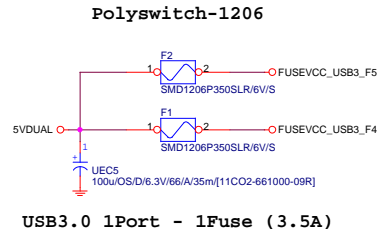
GA-B85N-Phoenix

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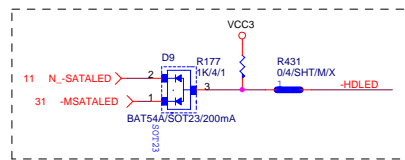
F_USB30



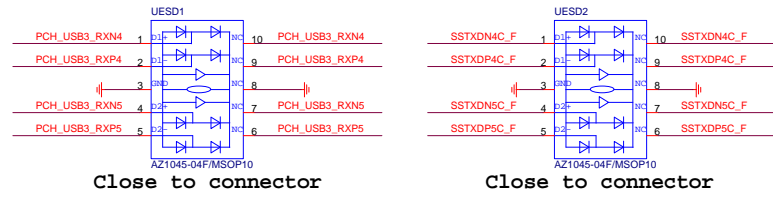
F_USB30 PWR



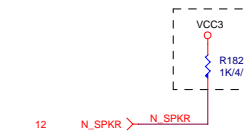
SATA LED



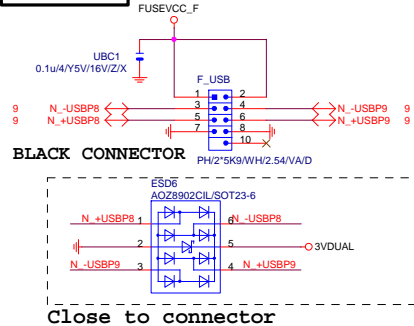
F_USB30 ESD PROTECT



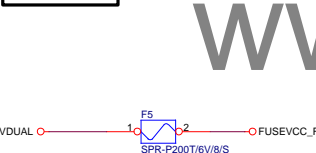
SPKR



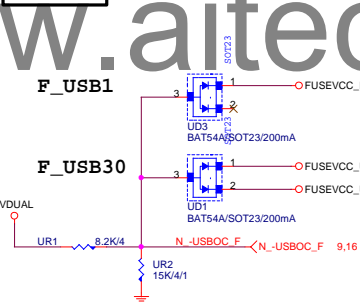
FRONT USB1



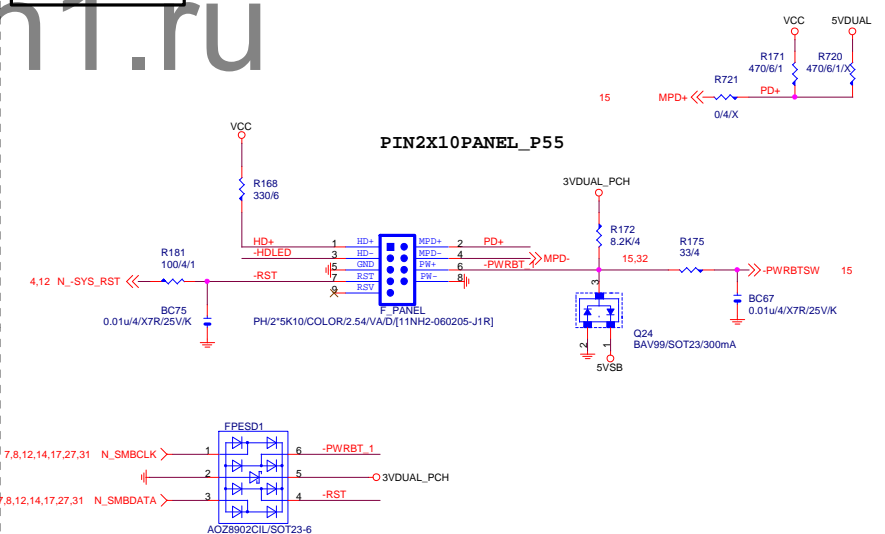
FUSEVCC_F



-USBOC_F

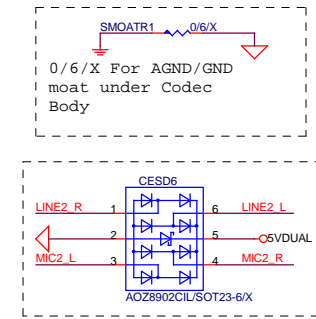
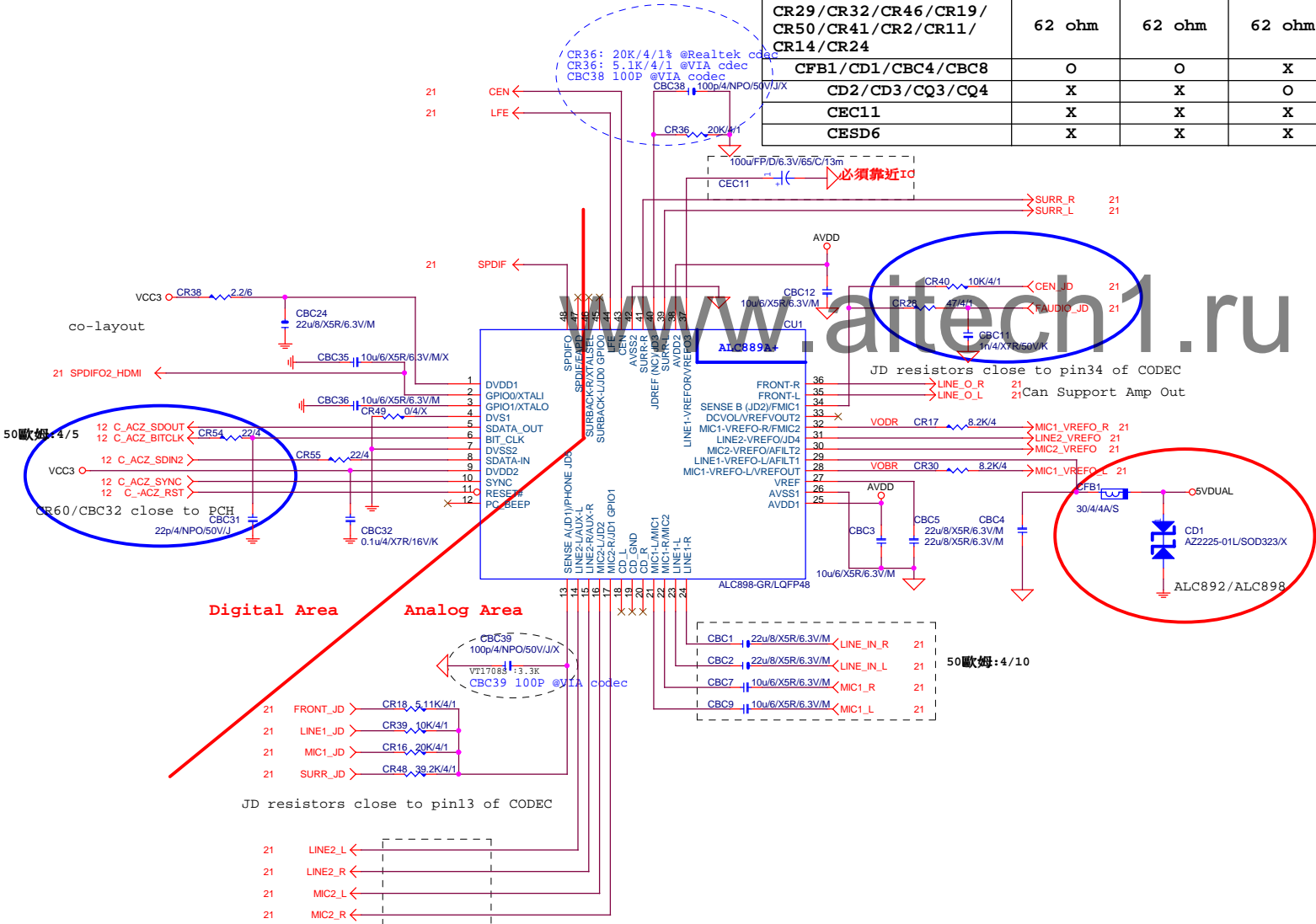


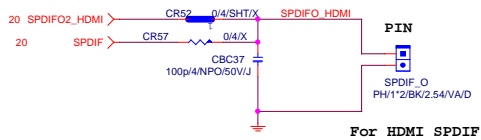
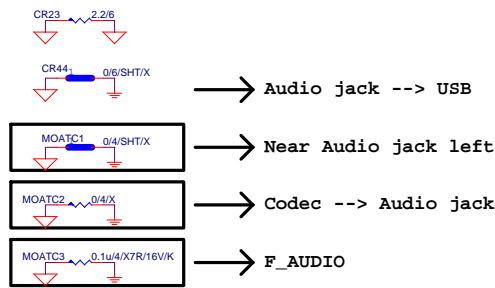
INTEL FRONT PANEL



Gigabyte Technology			
Title	FP,F_USB,USB PWR,SPKR,SATA LED		
Size	Custom	Document Number	GA-B85N-Phoenix
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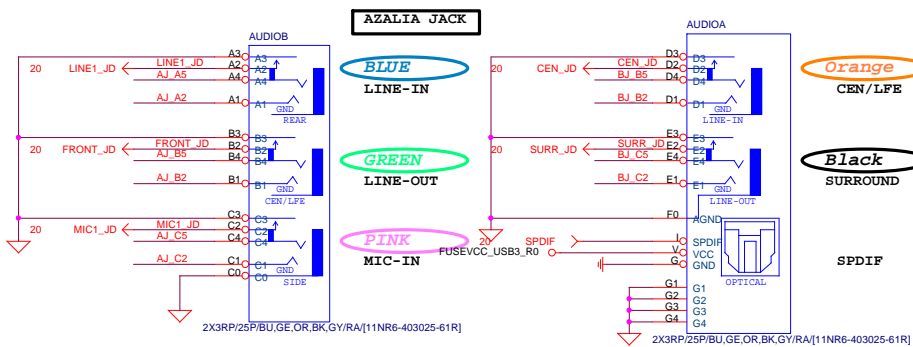
	ALC662	ALC887-VD2	ALC889	VT1708S-CD	VT1708S-CE	VT2021	ALC898/ALC892
CR49	X	X	O	O	X	O	X
CBC36	O	O	X	X	O	X	O
CR28/CBC11	47ohm+1nF	47ohm+1nF	47ohm+1nF	22ohm+100P	22ohm+100P	47ohm+1nF	47ohm+1nF
CR52	X	O	O	O	O	O	O
CR57	O	X	X	X	X	X	X
CBC1/CBC2	10uF/X5R	10uF/X5R	22uF/X5R	10uF/X5R	10uF/X5R	10uF/X5R	22uF/X5R
CR36	20K/4/1	20K/4/1	20K/4/1	5.1K/4/1	20K/4/1	5.1K/4/1	20K/4/1
CR17/CR30/ CR25/CR15/CR12/CR3/	8.2K/4	8.2K/4	8.2K/4	3.3K/4/1	3.3K/4/1	3.3K/4/1	8.2K/4
CBC38/CBC39	X	X	X	100P/4	100P/4	X	X
CR10/CR8/CR20/CR45/ CR42/CR51/CR27/CR26	22K/4	22K/4	22K/4	10K/4/1	10K/4/1	10K/4/1	22K/4
CR7/CR9/CR5/CR13/ CR29/CR32/CR46/CR19/ CR50/CR41/CR2/CR11/ CR14/CR24	62 ohm	62 ohm	62 ohm	75 ohm	75 ohm	75 ohm	62 ohm
CFB1/CD1/CBC4/CBC8	O	O	X	X	O	X	O
CD2/CD3/CQ3/CQ4	X	X	O	O	X	O	X
CEC11	X	X	X	X	X	X	O
CESD6	X	X	X	O	O	O	X



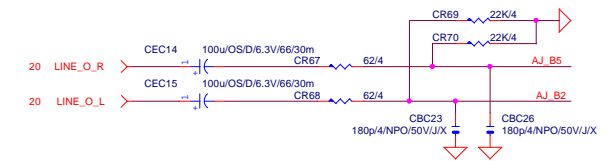


AZALIA JACK

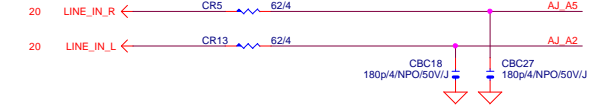
BTX AZALIA CONNECTOR



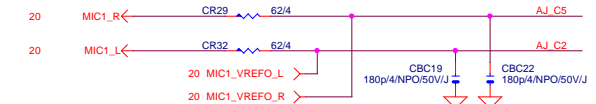
LINE-OUT



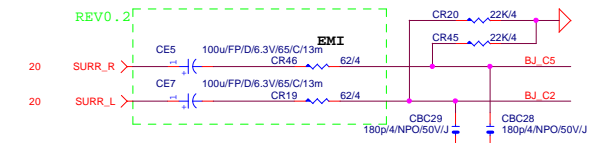
LINE-IN



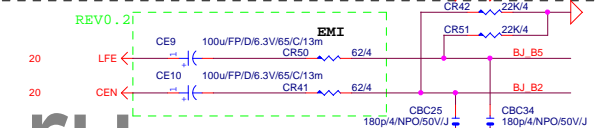
MIC-IN



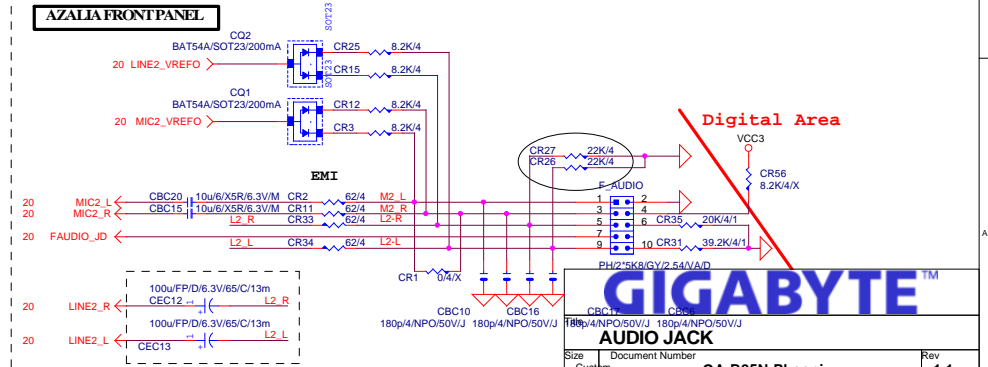
SURROUND

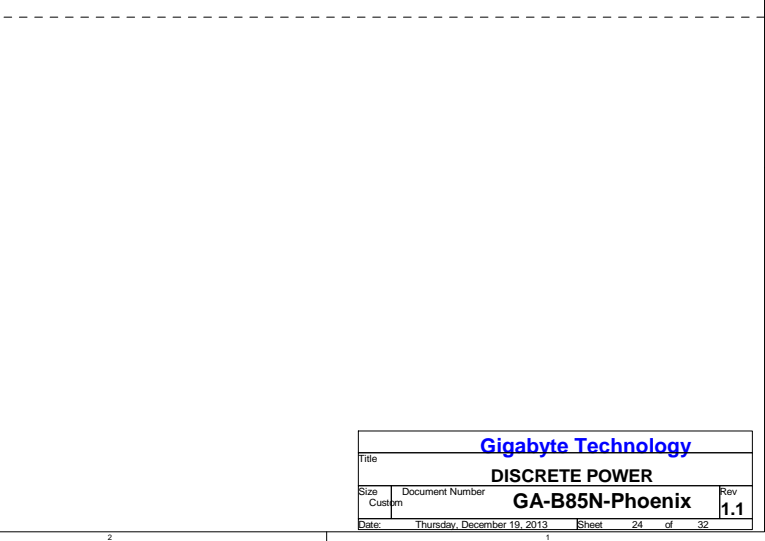
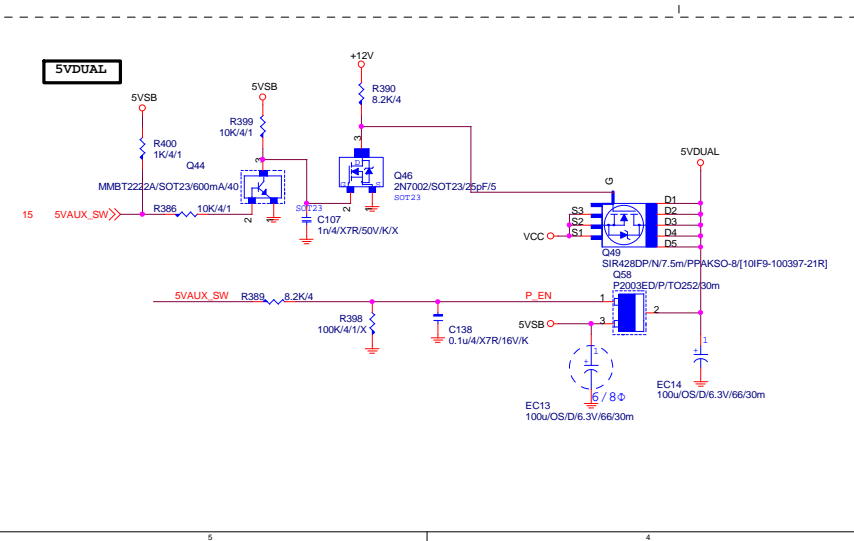
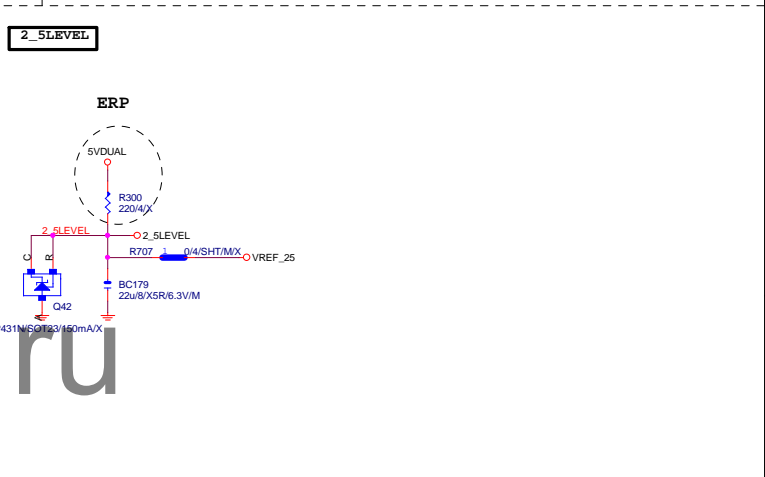
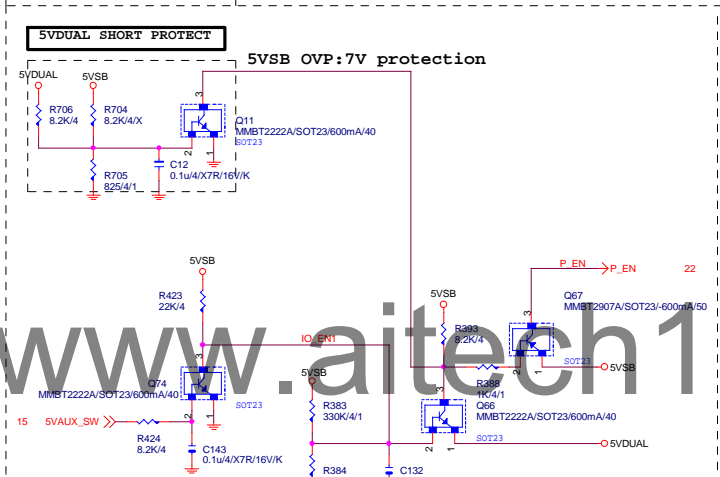
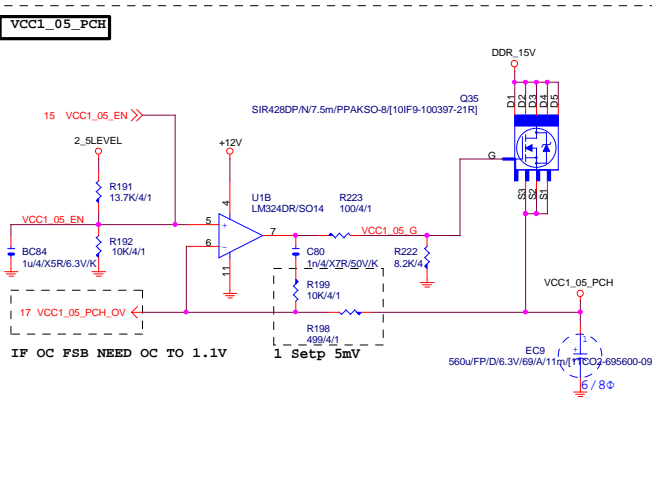
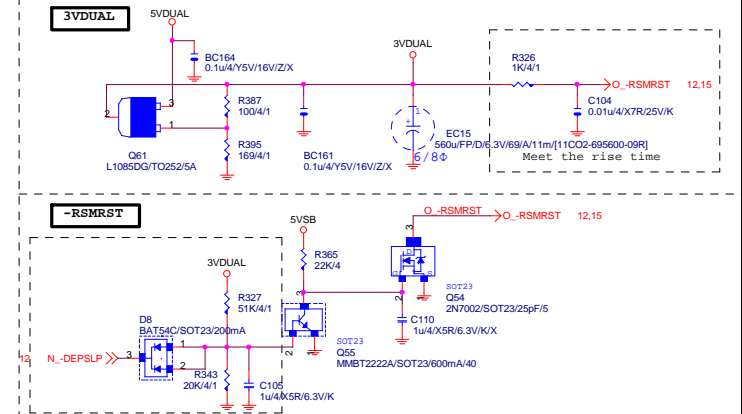
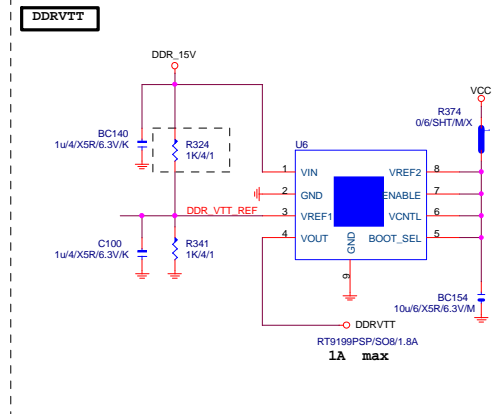
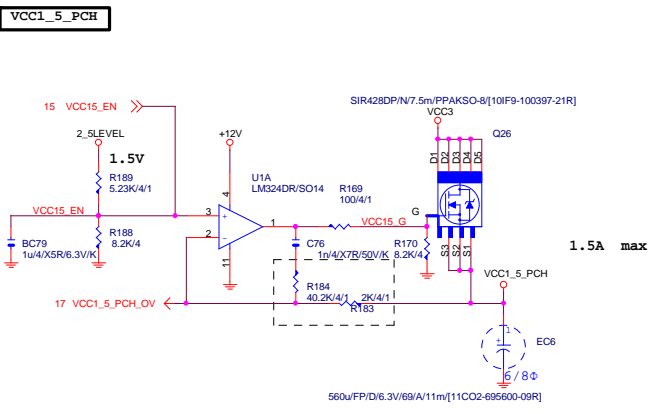


CEN/LFE

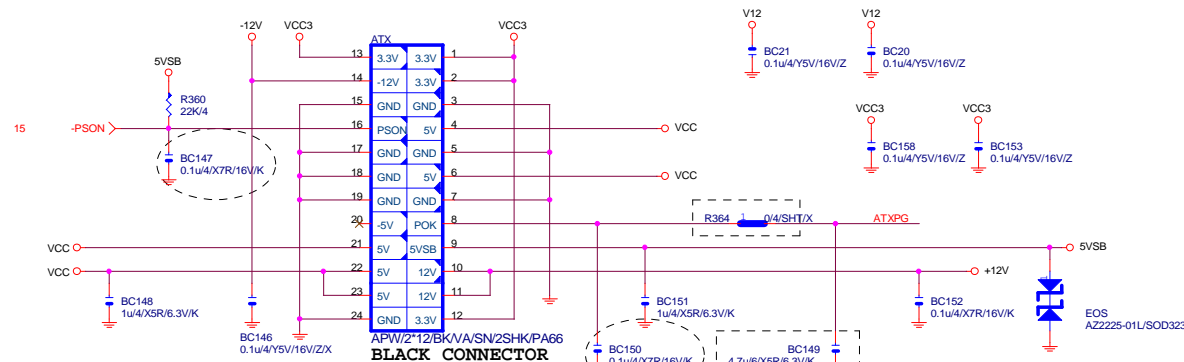


AZALIA FRONT PANEL

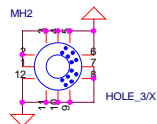




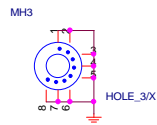
ATXX24 POWER CONNECTOR



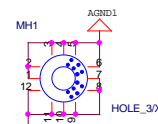
MB LOCATION



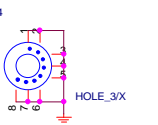
HOLE_4-RH-5MM-1



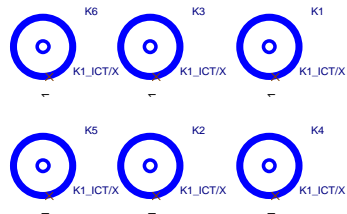
HOLE_4-RH-5MM-5PIN-1



HOLE_4-RH-5MM-1

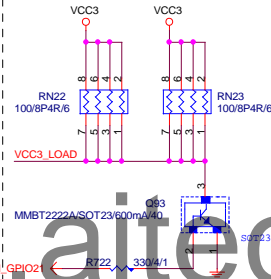


HOLE_4-RH-5MM-5PIN-1



To prevent the 5VSB under loading when boot

FIX PWR MINMUN LOAD



ATXX4 POWER CONNECTOR

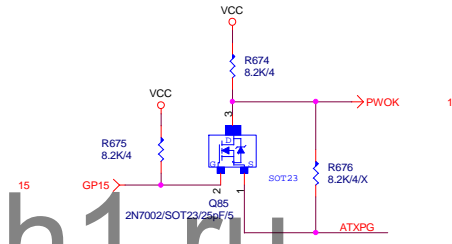


ATX_4-6

BLACK CONNECTOR

PWOK PATCH

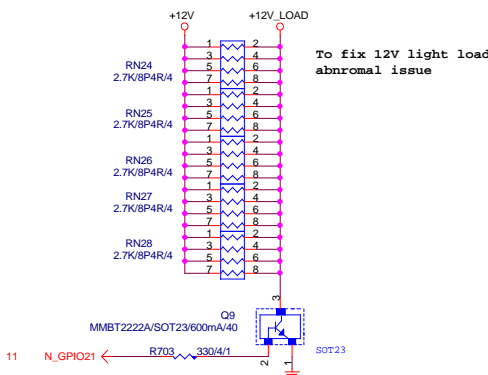
【技術通報R&D技術通報154】



CLK GEN

N/A

【技術通報R&D技術通報153】



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ATX CONNECTOR

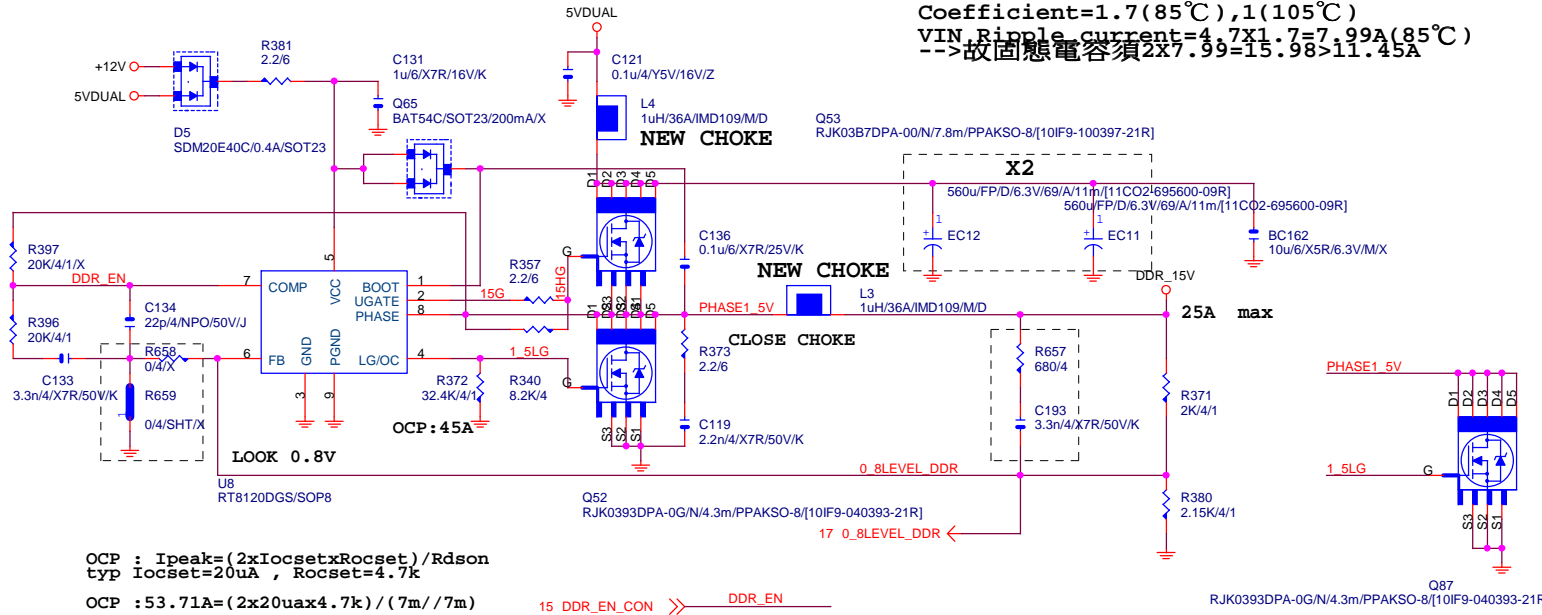
GA-B85N-Phoenix

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DDR15V

VIN=5V, VOUT=1.5V, IOUT=25A, PHASE=1
 IRMS=11.45A
 560u/FP/D/6.3V/68/8m RIPPLE CURRENT=4.7A
 Coefficient=1.7(85°C), 1(105°C)
 VIN_Ripple_current=4.7x1.7=7.99A(85°C)
 -->故固態電容須 $2x7.99=15.98>11.45A$

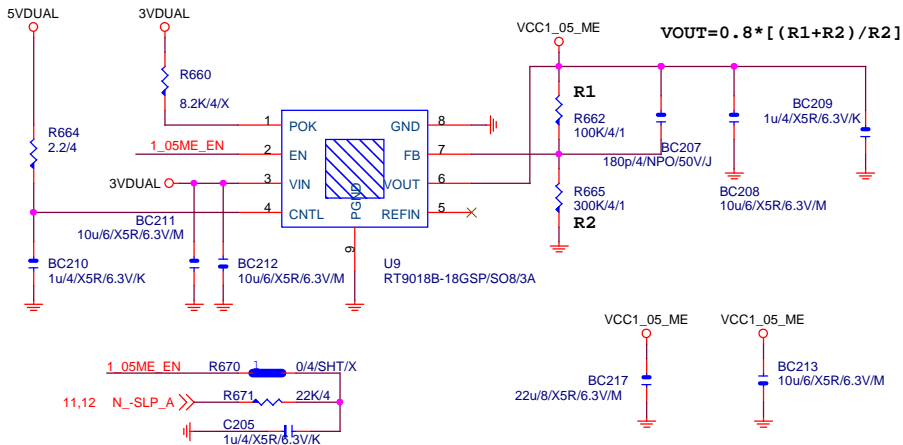


VCC1_05_ME

Z87 N/A

Z87+I217V

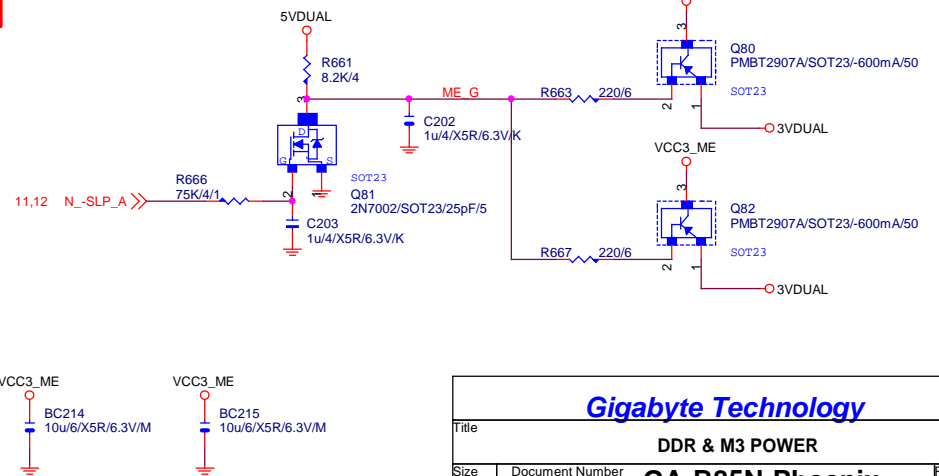
【技術通報R&D技術通報156】
 (RICHTEK), (NUVOTON), (EMC)做共用
 PIN7分壓阻值須做修改為100K以上電阻值



VCC3_ME

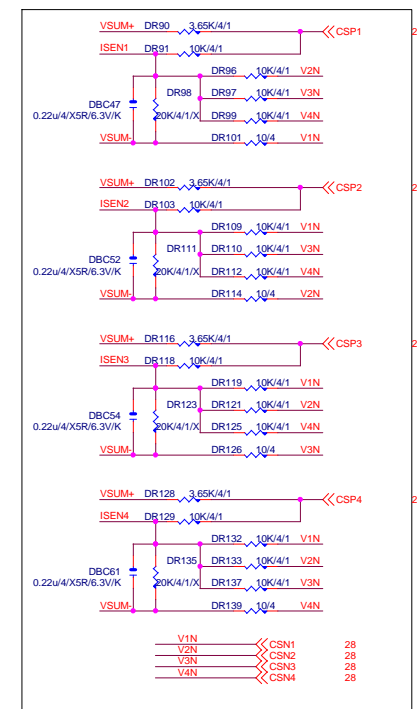
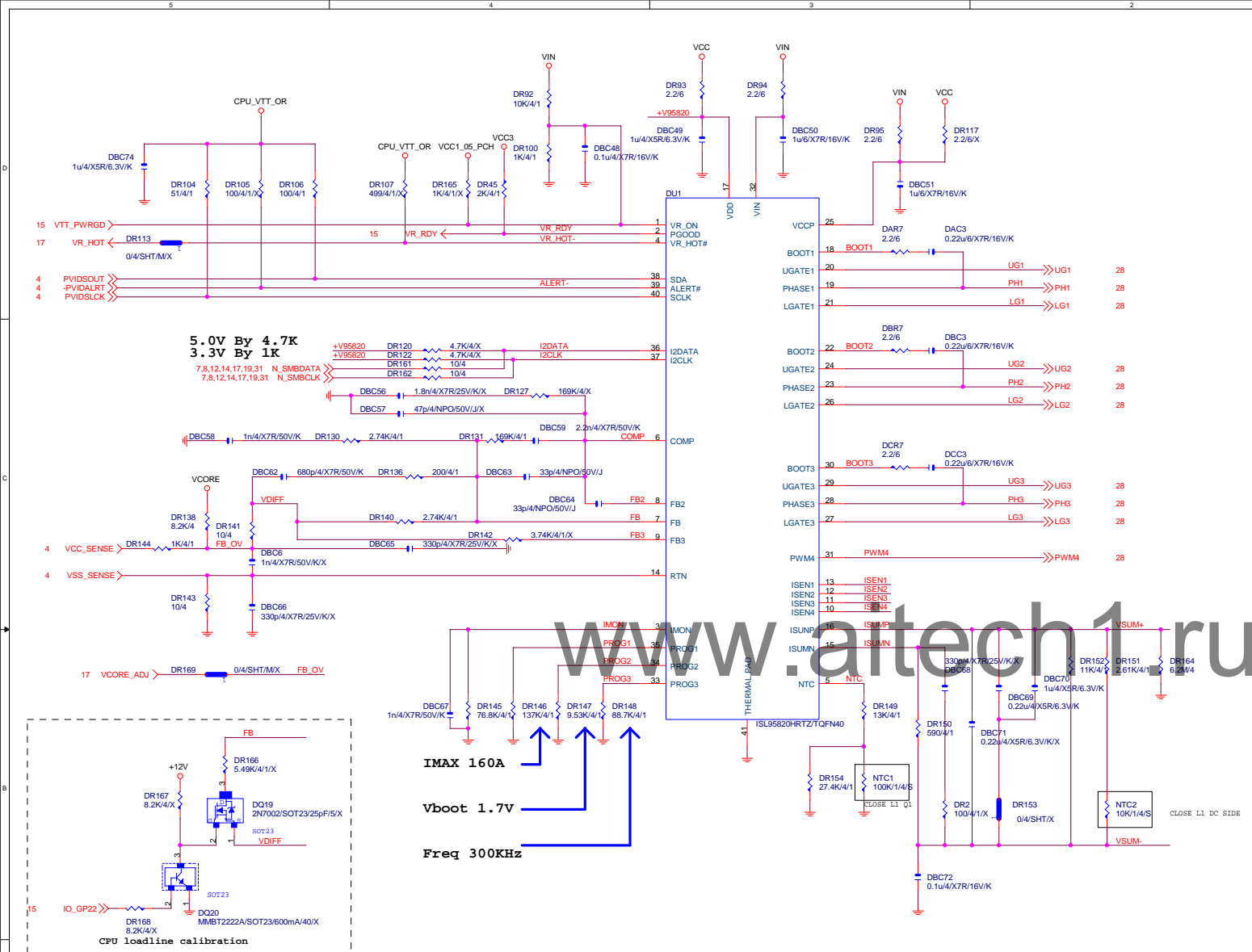
Z87 N/A

Z87+I217V

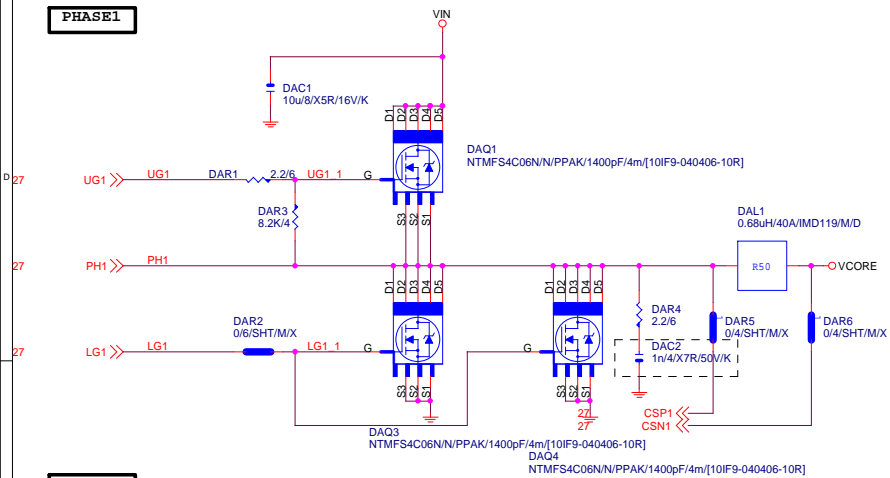


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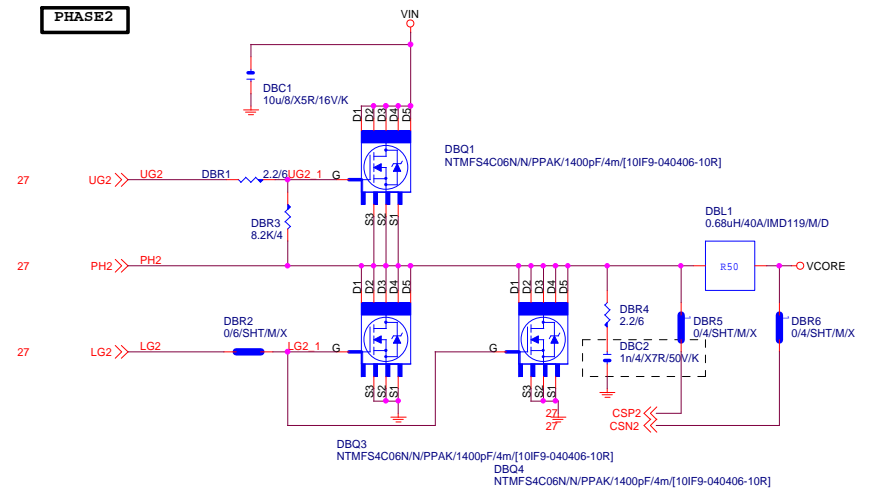
Title			
DDR & M3 POWER			
Size	Document Number	Rev	
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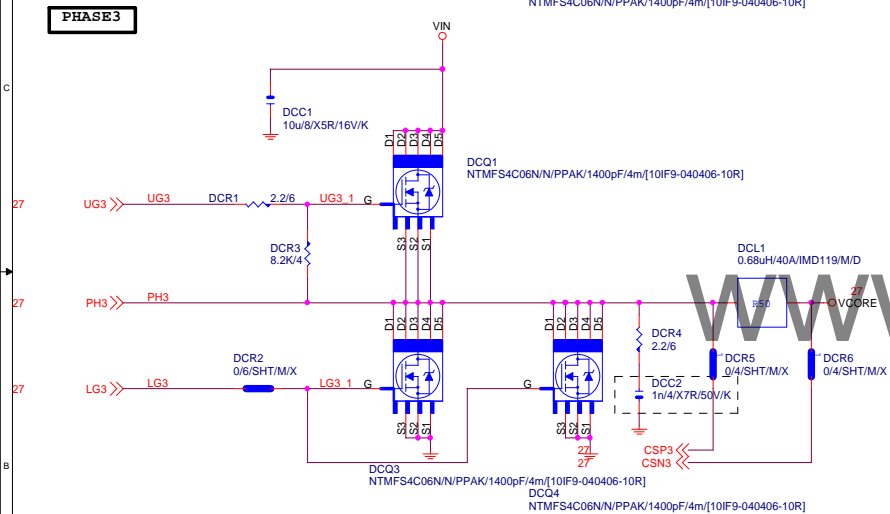
PHASE1



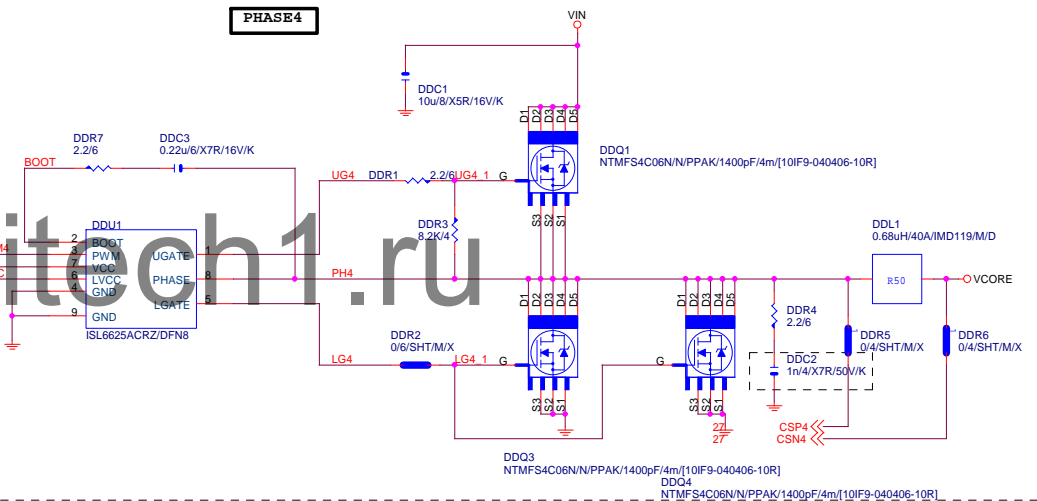
PHASE2



PHASE3

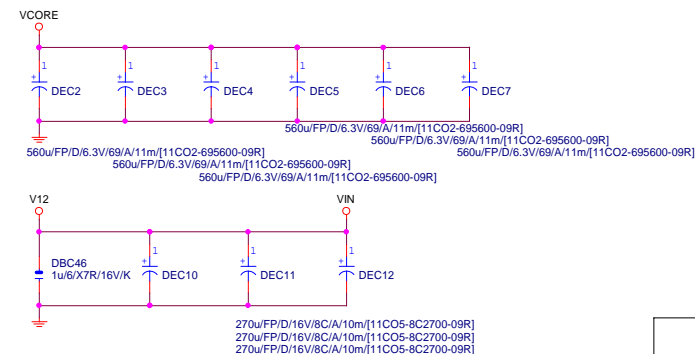


PHASE4



MOS HEATSINK

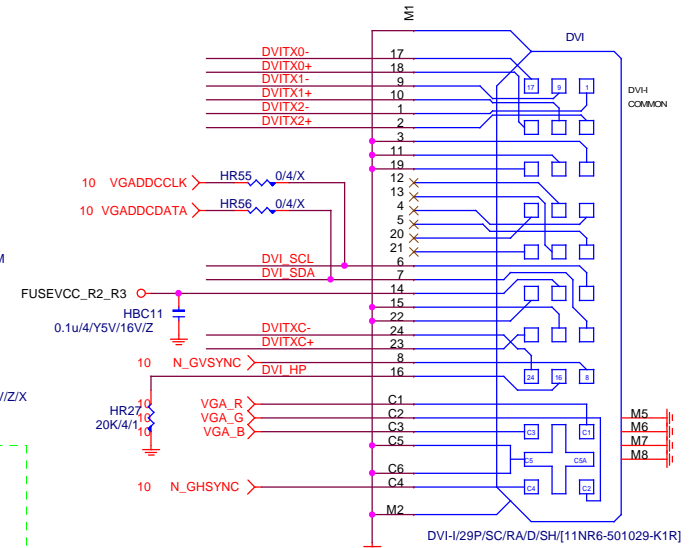
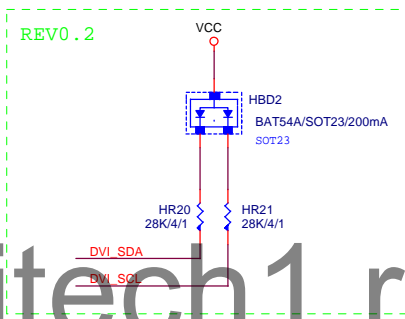
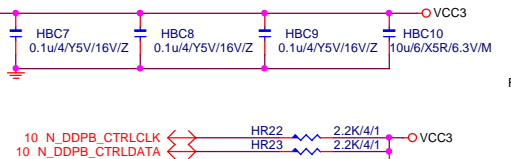
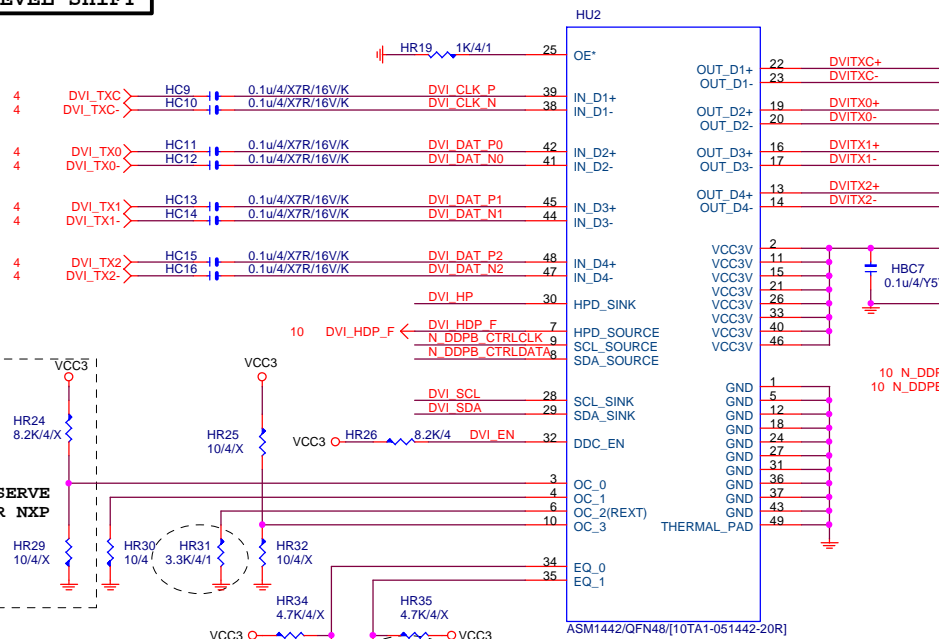
N/A



Gigabyte Technology

Title			CPU CORE VR-2
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DVI LEVEL SHIFT



ASM1442
DEFAULT 0/1/1 SWING:460mV -4dB

ASM1442 1 1:3dB

HDP NONE-REVERSE

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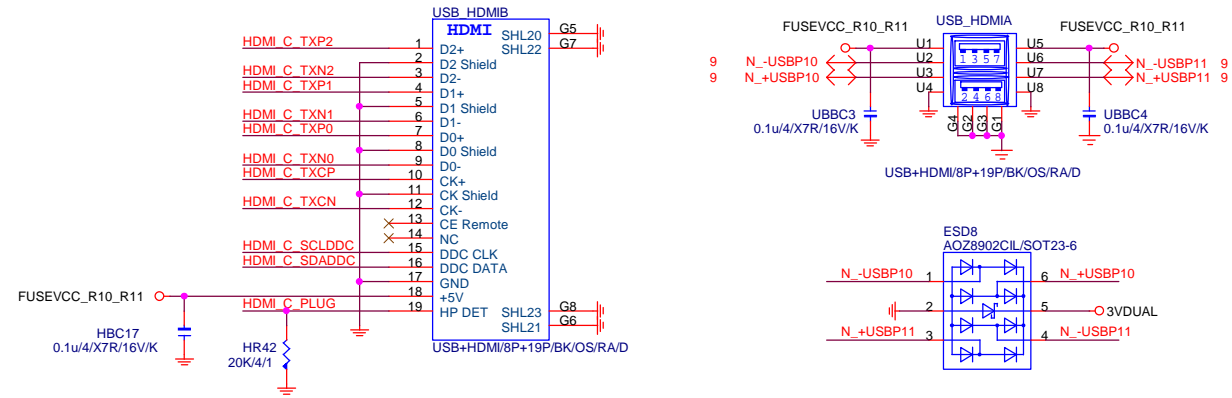
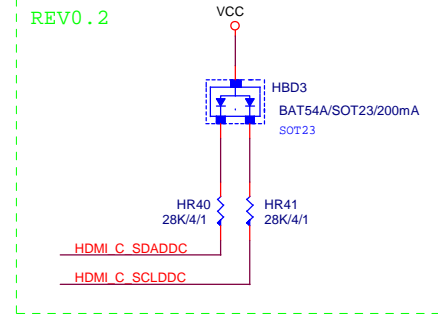
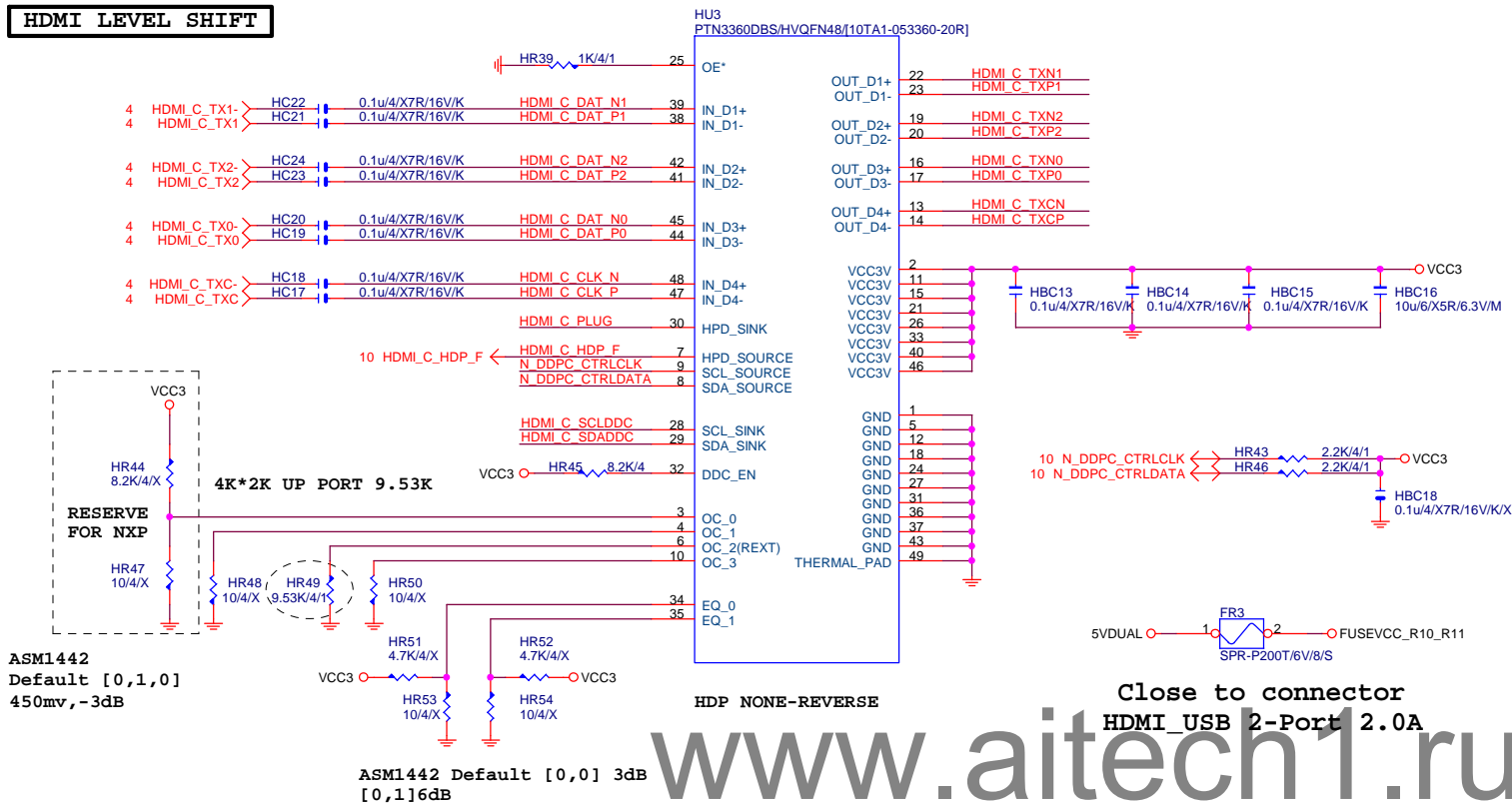
DVI

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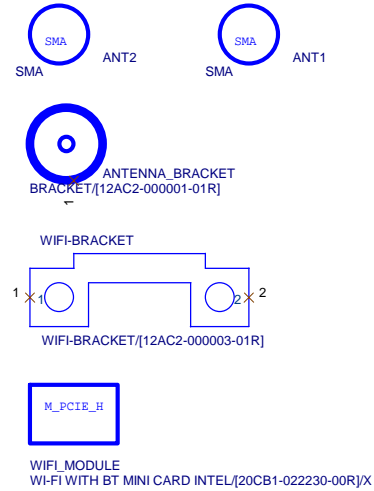
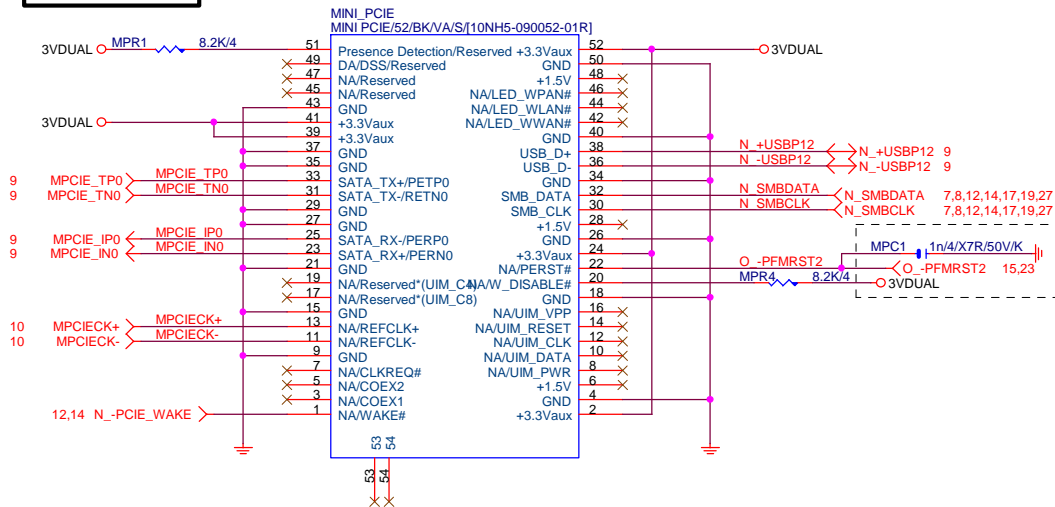
HDMI LEVEL SHIFT



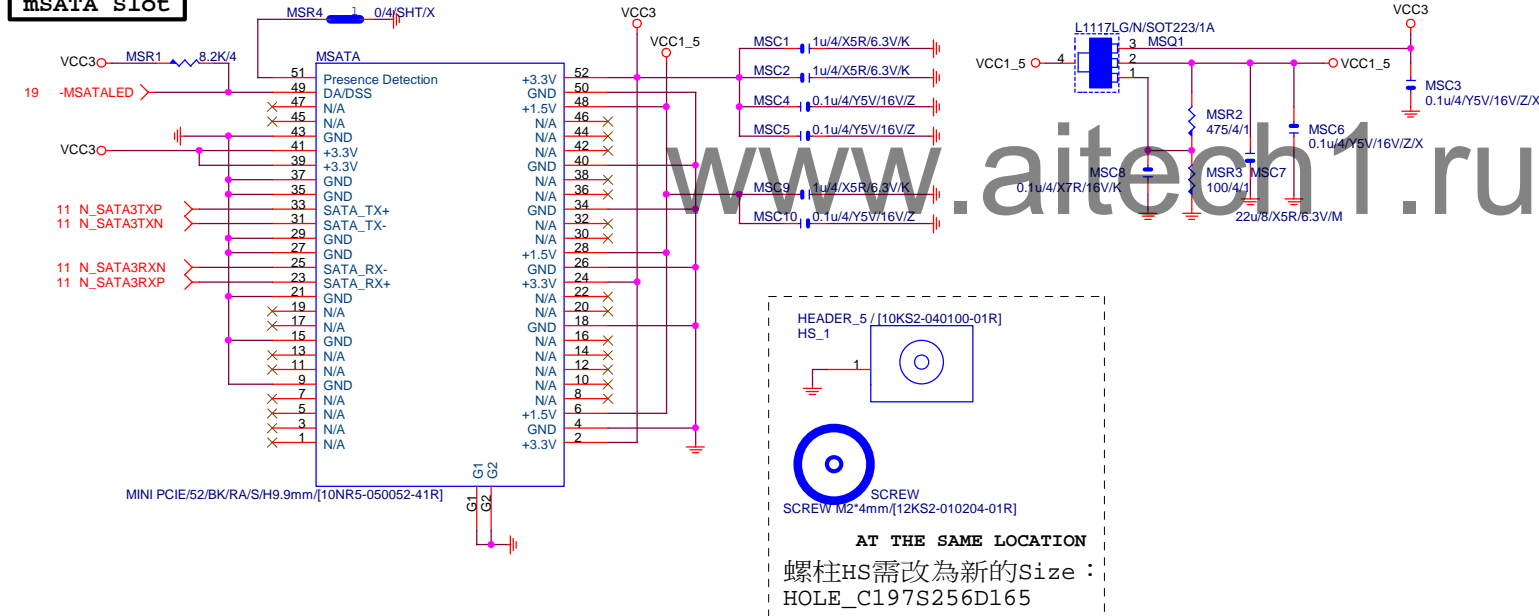
Gigabyte Technology

Title			HDMI + USB2.0 * 2	
Size	Document Number	GA-B85N-Phoenix		Rev
B				1.1
Date:	Thursday, December 19, 2013	Sheet	30 of 32	

Mini PCIE

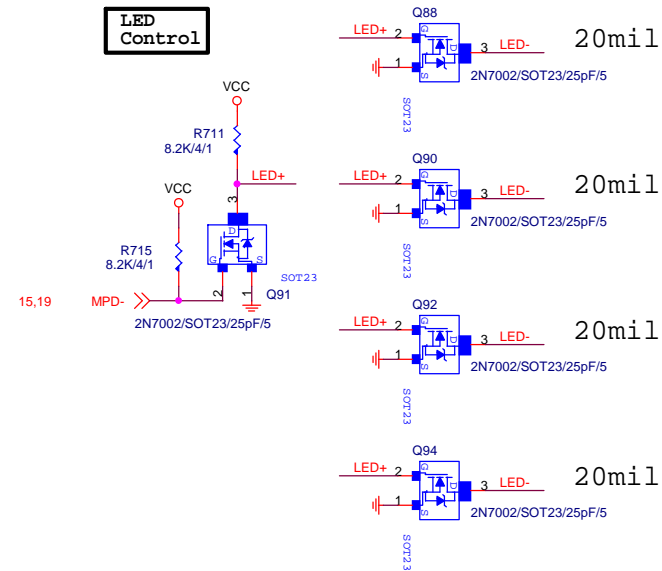
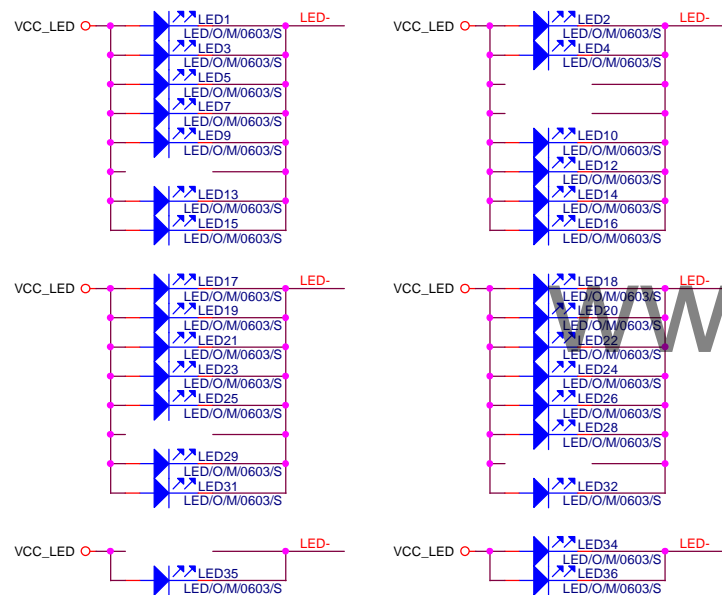
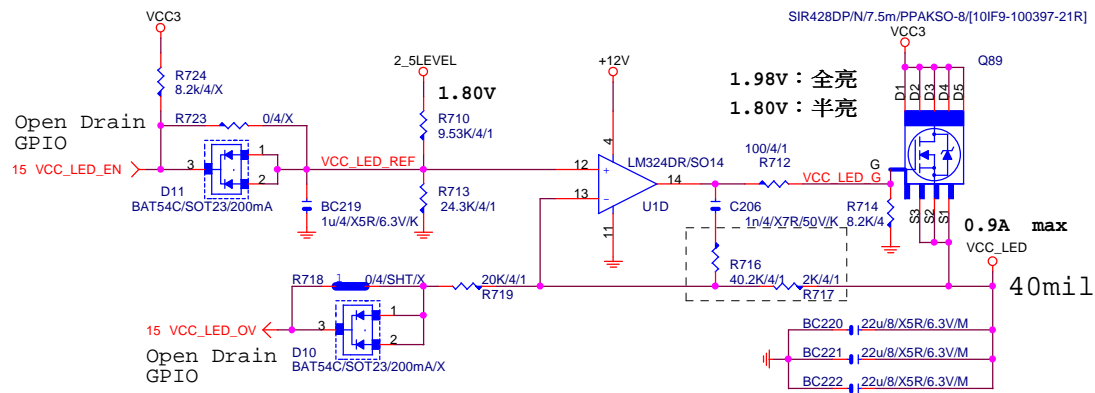


mSATA Slot



Gigabyte Technology

Title			
USB DAC POWER			
Size	Document Number	Rev	
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Gigabyte Technology			
Title			
Breathing LED			
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