GA-MA69VM-S2

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18	ATI SB600-ACPI/USB
19	ATI SB600-SATA/IDE
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26	AUDIO JACK
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31	POWER SEQUENCE
32	VCC12 & DDRII POWER
33	FRONT PANEL & ATX POWER CONNCTOR
34	LAN RTL8110SC
35	TI TSB43AB23 1394a

Revision:1.0

GIGABYTE

Title: COVER SHEET		
Size: Custom	Document Number: GA-MA69VM-S2	Rev: 1.0
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Model Name:GA-MA69VM-S2

Component value change history

Version: 1.0

P-Code: A95168-0 / U95021-0

Date	Change Item	Reason
2006.10.27	0.1 New BOM Release.	
2006.11.24	0.1 New BOM Release.	Modify from 9MMA69MS2R-00-01
2007.01.08	0.2 BOM Release.	Change PCI LAN from Marvell 88E8001 to Realtek RTL8110SC
2007.02.09	1.0A BOM Release.	Change SB600 A21 to A13 ,Remove 1394a Function Add 採購 DIP 替料 ,Change PCIe*16 slot to Blue color
2007.02.15	1.0A ECN BOM Release.	Add 採購 MLCC 替料
2007.03.05	1.0B BOM Release.	Change SB600 A13 to A21
2007.03.19	1.0B ECN BOM Release.	Add 採購 MLCC 替料
2007.03.19	1.0C BOM Release.	Change RM ,Add 大陸PCB

Circuit or PCB layout change for next version

Date	Change Item	Reason
2006.10.26	Rev0.1 Gerber-out	
2006.11.23	Rev0.1 Gerber-out	Modify from MA69CM-S2 0.1
2007.01.05	Rev0.2 Gerber-out	Change PCI LAN from Marvell 88E8001 to Realtek RTL8110SC
2007.02.08	Rev1.0 Gerber-out	Change Choke foot-print

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Title: BOM & PCB MODIFY HISTORY

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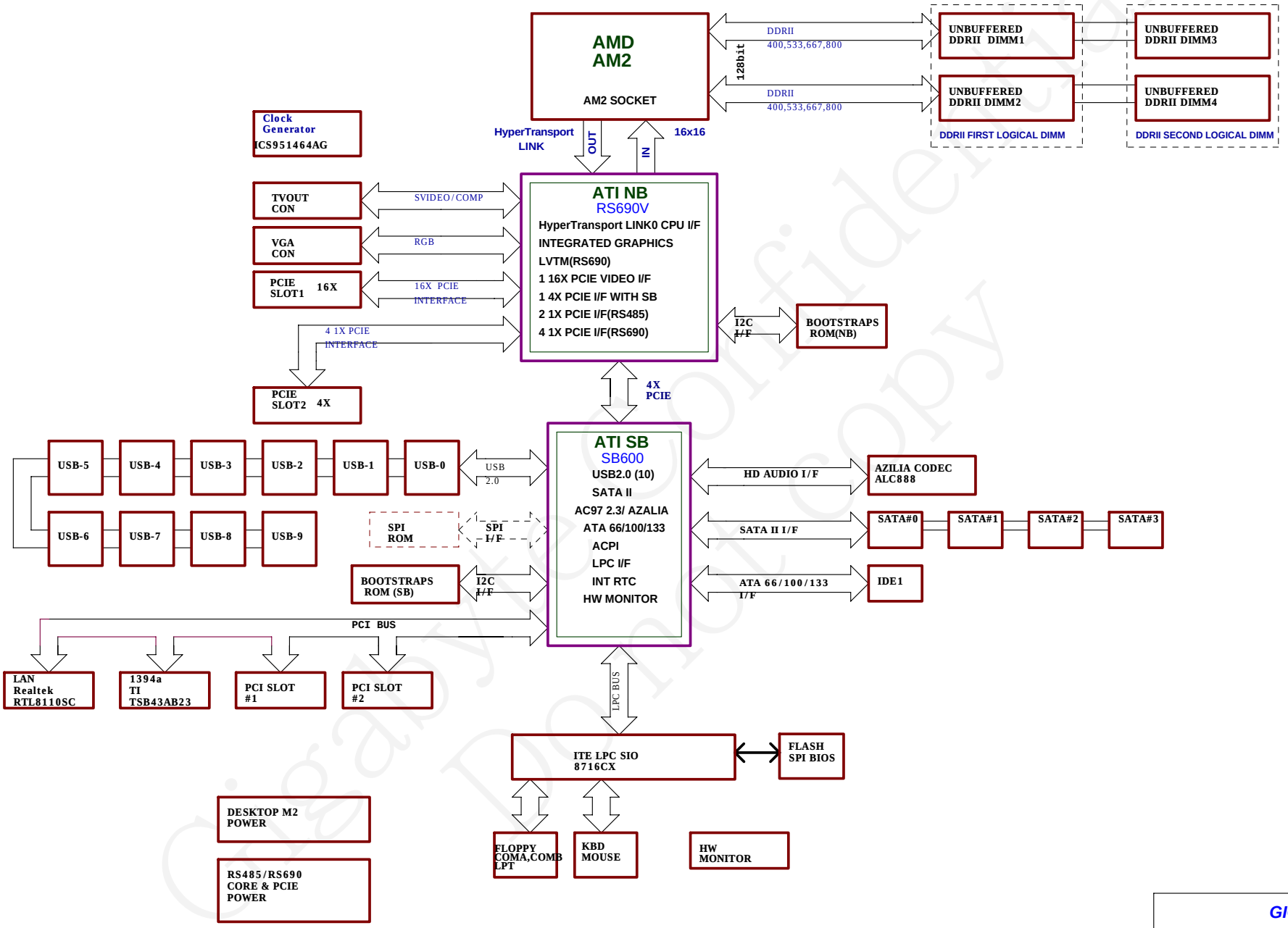
BLOCK DIAGRAM

MORAY RS690 CUSTOMER DESKTOP REFERENCE DESIGN



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Title: BLOCK DIAGRAM

Size: Custom | Document Number: GA-MA69VM-S2 | Rev: 1.0

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L0_CADIN_L[0..15] L0_CADIN_L[0..15] 11
L0_CADIN_H[0..15] L0_CADIN_H[0..15] 11
L0_CLKIN_L[0..1] L0_CLKIN_L[0..1] 11
L0_CLKIN_H[0..1] L0_CLKIN_H[0..1] 11
L0_CADOUT_L[0..15] L0_CADOUT_L[0..15] 11
L0_CADOUT_H[0..15] L0_CADOUT_H[0..15] 11
L0_CLKOUT_L[0..1] L0_CLKOUT_L[0..1] 11
L0_CLKOUT_H[0..1] L0_CLKOUT_H[0..1] 11

CPU_VDD_RUN = VCORE
CPU_VDDA_RUN = VDDA25
VLDT_RUN = VCC12_HT
CPU_VDDIO_SUS = DDR18V
CPU_VTT_SUS = DDRVTT

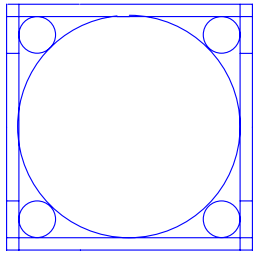
VLDT_A = VCC12_HT
VLDT_B = HT12B

M2CPUA

HYPERTRANSPORT

		L0_CLKIN_H1	N6	L0_CLKIN_H(1)	L0_CLKOUT_H(1)	AD5	L0_CLKOUT_H1
		L0_CLKIN_L1	P6	L0_CLKIN_L(1)	L0_CLKOUT_L(1)	AD4	L0_CLKOUT_L1
		L0_CLKIN_H0	N3	L0_CLKIN_H(0)	L0_CLKOUT_H(0)	AD1	L0_CLKOUT_H0
		L0_CLKIN_L0	N2	L0_CLKIN_L(0)	L0_CLKOUT_L(0)	AC1	L0_CLKOUT_L0
VCC12_HT	R3	49.9/4/1	V4	L0_CTLIN_H(1)	L0_CTLOUT_H(1)	Y6	1 TP78
GND	R4	49.9/4/1	V5	L0_CTLIN_L(1)	L0_CTLOUT_L(1)	W6	1 TP79
11 L0_CTLIN_H0		L0_CTLIN_H0	U1	L0_CTLIN_H(0)	L0_CTLOUT_H(0)	W2	L0_CTLOUT_H0 11
11 L0_CTLIN_L0		L0_CTLIN_L0	V1	L0_CTLIN_L(0)	L0_CTLOUT_L(0)	W3	L0_CTLOUT_L0 11
		L0_CADIN_H15	U6	L0_CADIN_H(15)	L0_CADOUT_H(15)	Y5	L0_CADOUT_H15
		L0_CADIN_L15	V6	L0_CADIN_L(15)	L0_CADOUT_L(15)	Y4	L0_CADOUT_L15
		L0_CADIN_H14	T4	L0_CADIN_H(14)	L0_CADOUT_H(14)	AB6	L0_CADOUT_H14
		L0_CADIN_L14	T5	L0_CADIN_L(14)	L0_CADOUT_L(14)	AA6	L0_CADOUT_L14
		L0_CADIN_H13	R6	L0_CADIN_H(13)	L0_CADOUT_H(13)	AB5	L0_CADOUT_H13
		L0_CADIN_L13	T6	L0_CADIN_L(13)	L0_CADOUT_L(13)	AB4	L0_CADOUT_L13
		L0_CADIN_H12	P4	L0_CADIN_H(12)	L0_CADOUT_H(12)	AD6	L0_CADOUT_H12
		L0_CADIN_L12	P5	L0_CADIN_L(12)	L0_CADOUT_L(12)	AC6	L0_CADOUT_L12
		L0_CADIN_H11	M4	L0_CADIN_H(11)	L0_CADOUT_H(11)	AE6	L0_CADOUT_H11
		L0_CADIN_L11	M5	L0_CADIN_L(11)	L0_CADOUT_L(11)	AE6	L0_CADOUT_L11
		L0_CADIN_H10	L6	L0_CADIN_H(10)	L0_CADOUT_H(10)	AF5	L0_CADOUT_H10
		L0_CADIN_L10	M6	L0_CADIN_L(10)	L0_CADOUT_L(10)	AE4	L0_CADOUT_L10
		L0_CADIN_H9	K4	L0_CADIN_H(9)	L0_CADOUT_H(9)	AH6	L0_CADOUT_H9
		L0_CADIN_L9	K5	L0_CADIN_L(9)	L0_CADOUT_L(9)	AG6	L0_CADOUT_L9
		L0_CADIN_H8	J6	L0_CADIN_H(8)	L0_CADOUT_H(8)	AH5	L0_CADOUT_H8
		L0_CADIN_L8	K6	L0_CADIN_L(8)	L0_CADOUT_L(8)	AH4	L0_CADOUT_L8
		L0_CADIN_H7	U3	L0_CADIN_H(7)	L0_CADOUT_H(7)	Y1	L0_CADOUT_H7
		L0_CADIN_L7	U2	L0_CADIN_L(7)	L0_CADOUT_L(7)	W1	L0_CADOUT_L7
		L0_CADIN_H6	R1	L0_CADIN_H(6)	L0_CADOUT_H(6)	AA2	L0_CADOUT_H6
		L0_CADIN_L6	T1	L0_CADIN_L(6)	L0_CADOUT_L(6)	AA3	L0_CADOUT_L6
		L0_CADIN_H5	R3	L0_CADIN_H(5)	L0_CADOUT_H(5)	AB1	L0_CADOUT_H5
		L0_CADIN_L5	R2	L0_CADIN_L(5)	L0_CADOUT_L(5)	AA1	L0_CADOUT_L5
		L0_CADIN_H4	N1	L0_CADIN_H(4)	L0_CADOUT_H(4)	AC2	L0_CADOUT_H4
		L0_CADIN_L4	P1	L0_CADIN_L(4)	L0_CADOUT_L(4)	AC3	L0_CADOUT_L4
		L0_CADIN_H3	L1	L0_CADIN_H(3)	L0_CADOUT_H(3)	AE2	L0_CADOUT_H3
		L0_CADIN_L3	M1	L0_CADIN_L(3)	L0_CADOUT_L(3)	AE3	L0_CADOUT_L3
		L0_CADIN_H2	L3	L0_CADIN_H(2)	L0_CADOUT_H(2)	AF1	L0_CADOUT_H2
		L0_CADIN_L2	L2	L0_CADIN_L(2)	L0_CADOUT_L(2)	AE1	L0_CADOUT_L2
		L0_CADIN_H1	J1	L0_CADIN_H(1)	L0_CADOUT_H(1)	AG2	L0_CADOUT_H1
		L0_CADIN_L1	K1	L0_CADIN_L(1)	L0_CADOUT_L(1)	AG3	L0_CADOUT_L1
		L0_CADIN_H0	J3	L0_CADIN_H(0)	L0_CADOUT_H(0)	AH1	L0_CADOUT_H0
		L0_CADIN_L0	J2	L0_CADIN_L(0)	L0_CADOUT_L(0)	AG1	L0_CADOUT_L0

SOCKET_M2
M2[12KRC-04K807-22R_12KRC-04K807-23R]



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Title: CPU HYPER TRANSPORT

Size: Custom | Document Number: GA-MA69VM-S2 | Rev: 1.0

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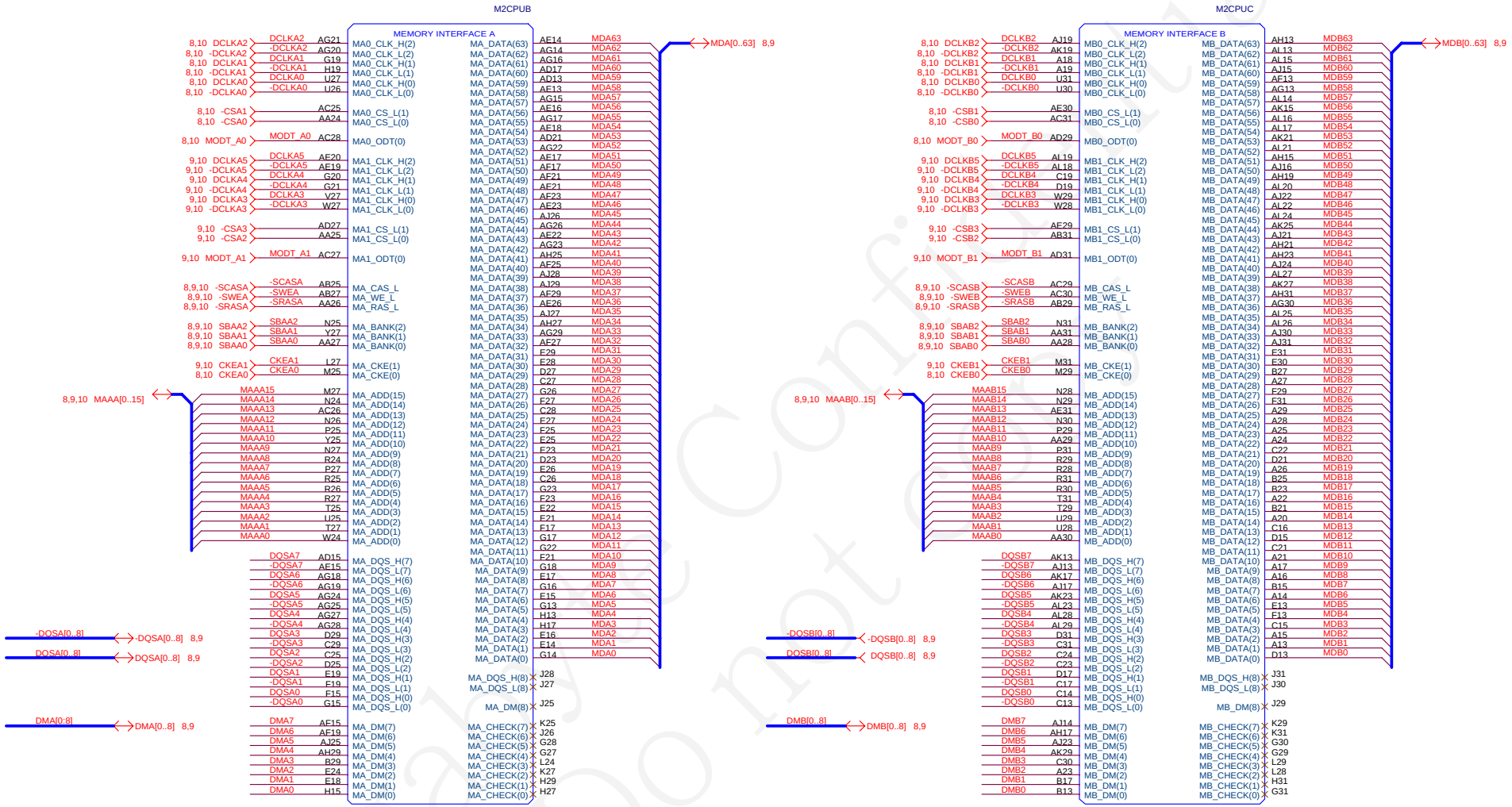

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Title: CPU DDRII MEMORY

Size: Custom | Document Number: GA-MA69VM-S2 | Rev: 1.0

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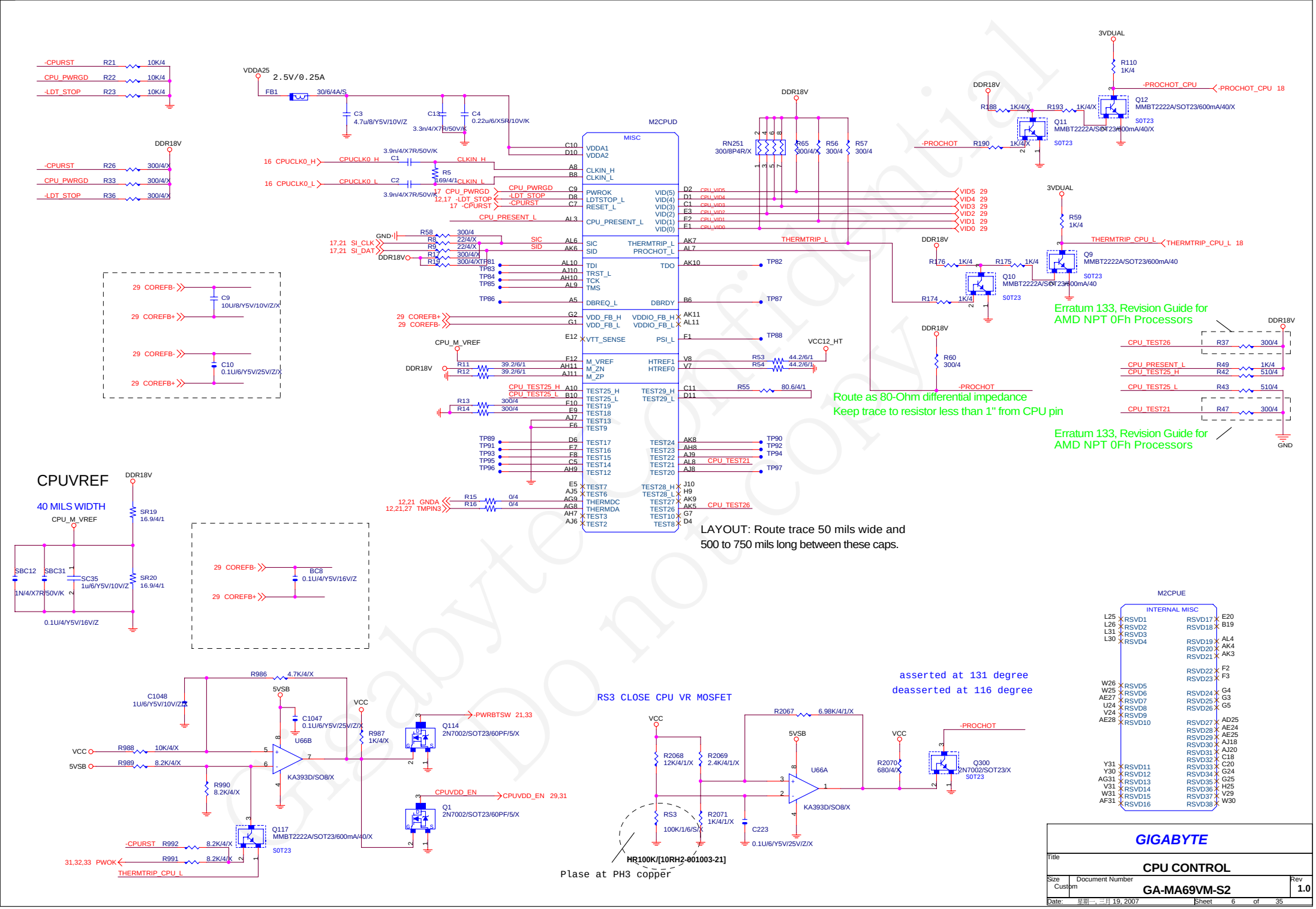
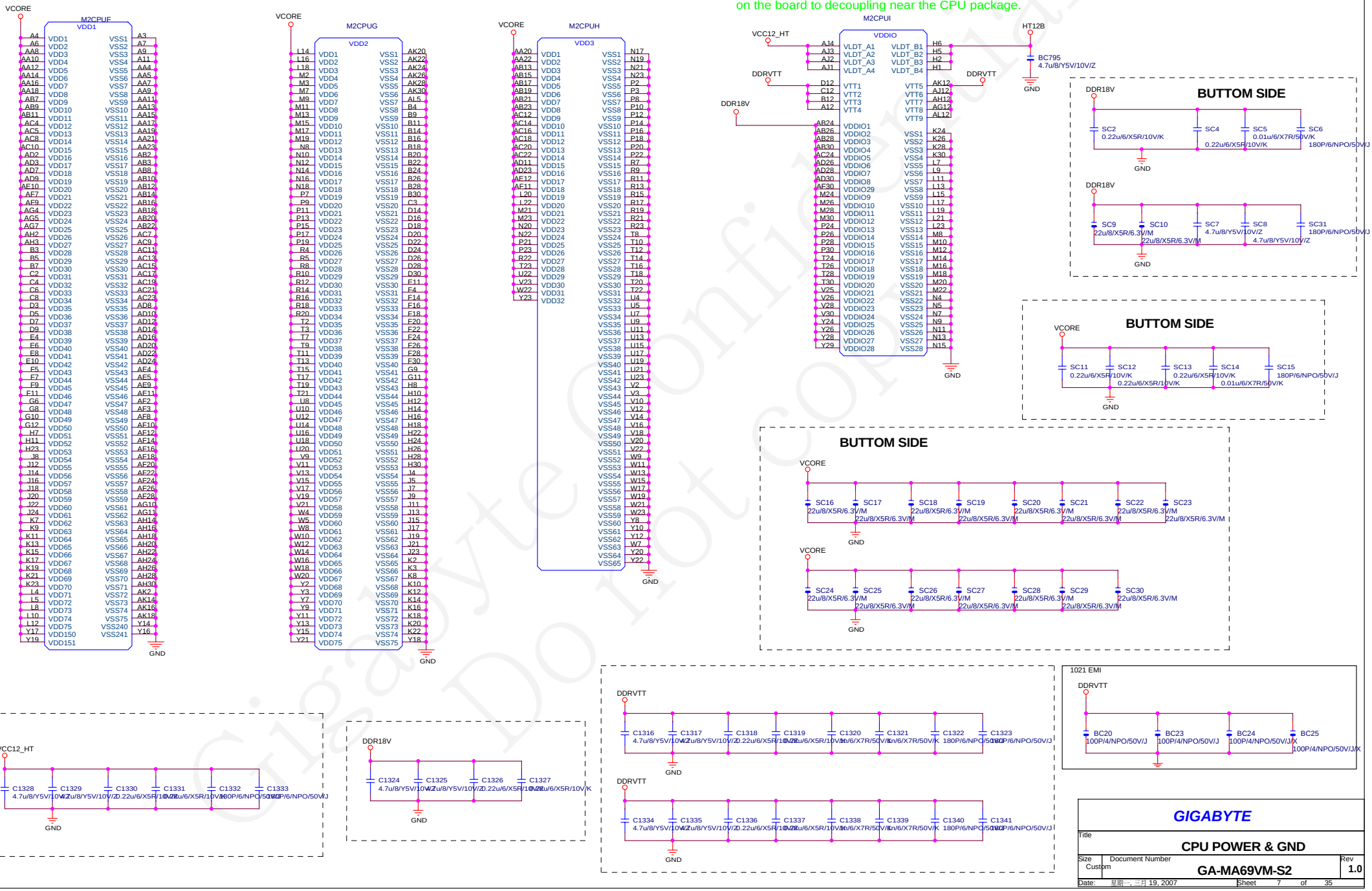


VLDT_RUN_B is connected to the VLDT_RUN power supply through the package or on the die. It is only connected on the board to decoupling near the CPU package.



Title	CPU POWER & GND		
Size: Custom	Document Number: GA-MA69VM-S2	Rev: 1.0	
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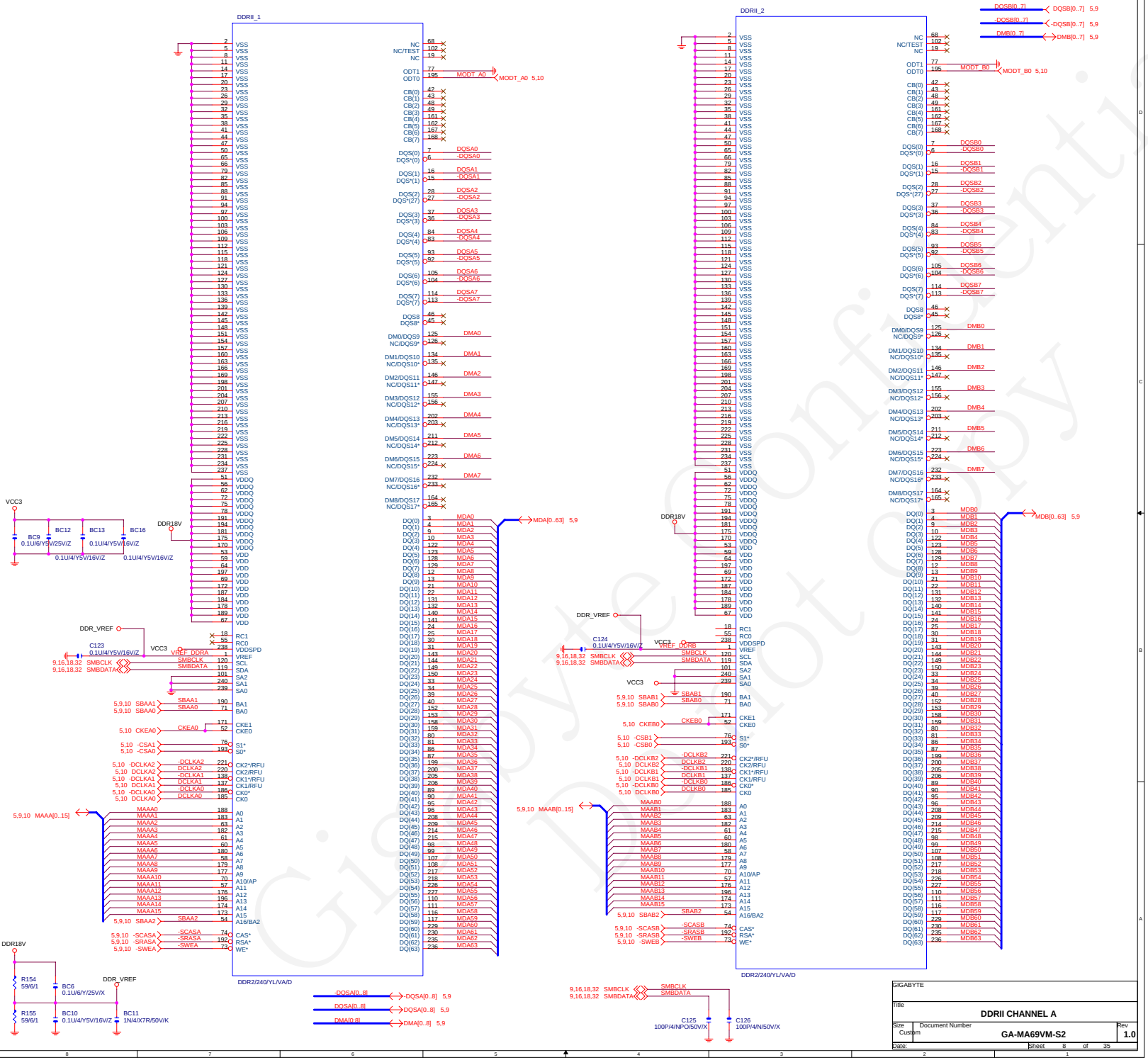

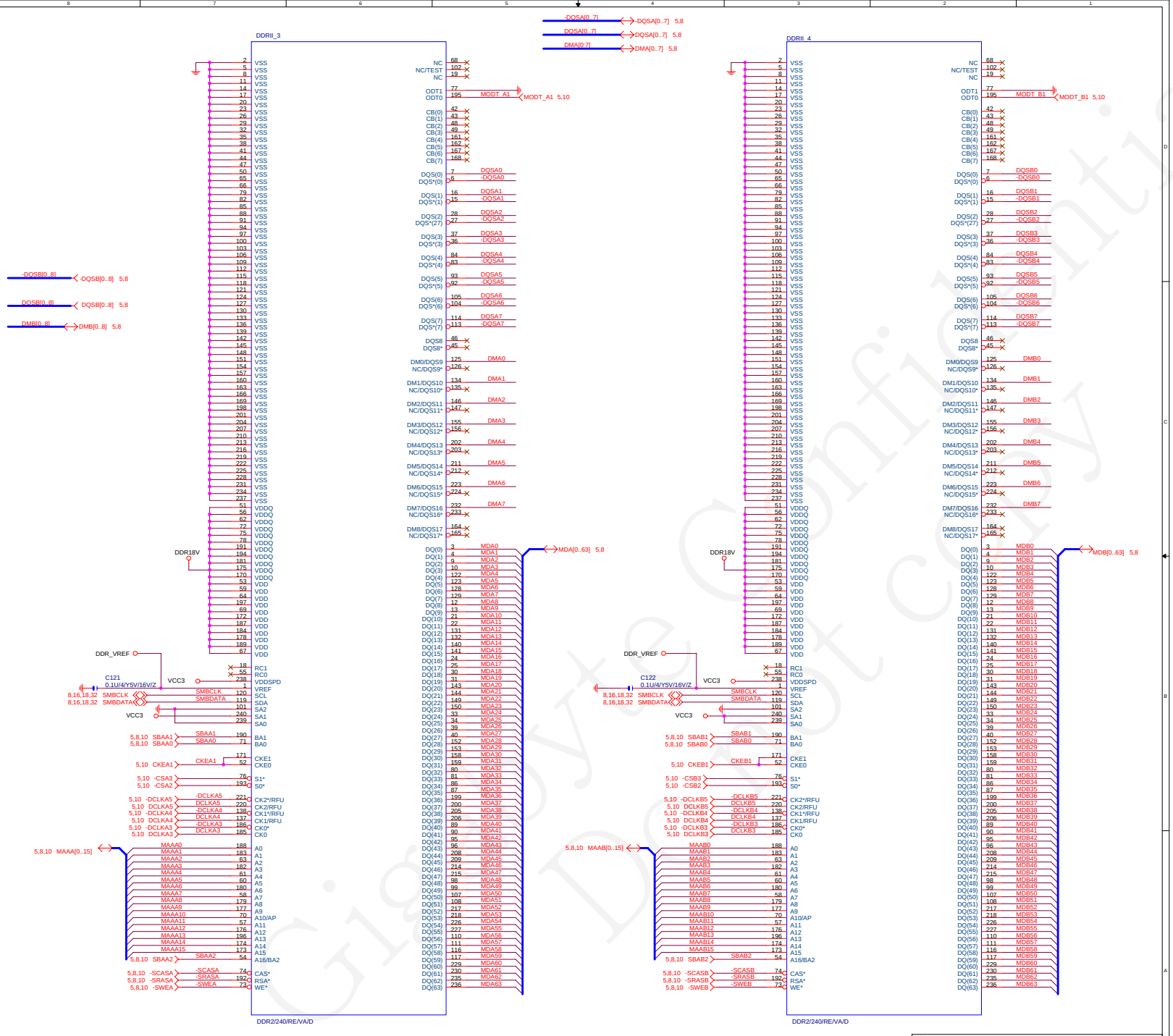

GIGABYTE

Title: **DDRII CHANNEL B**

Size	Document Number	Rev
Custom	GA-MA69VM-S2	1.0

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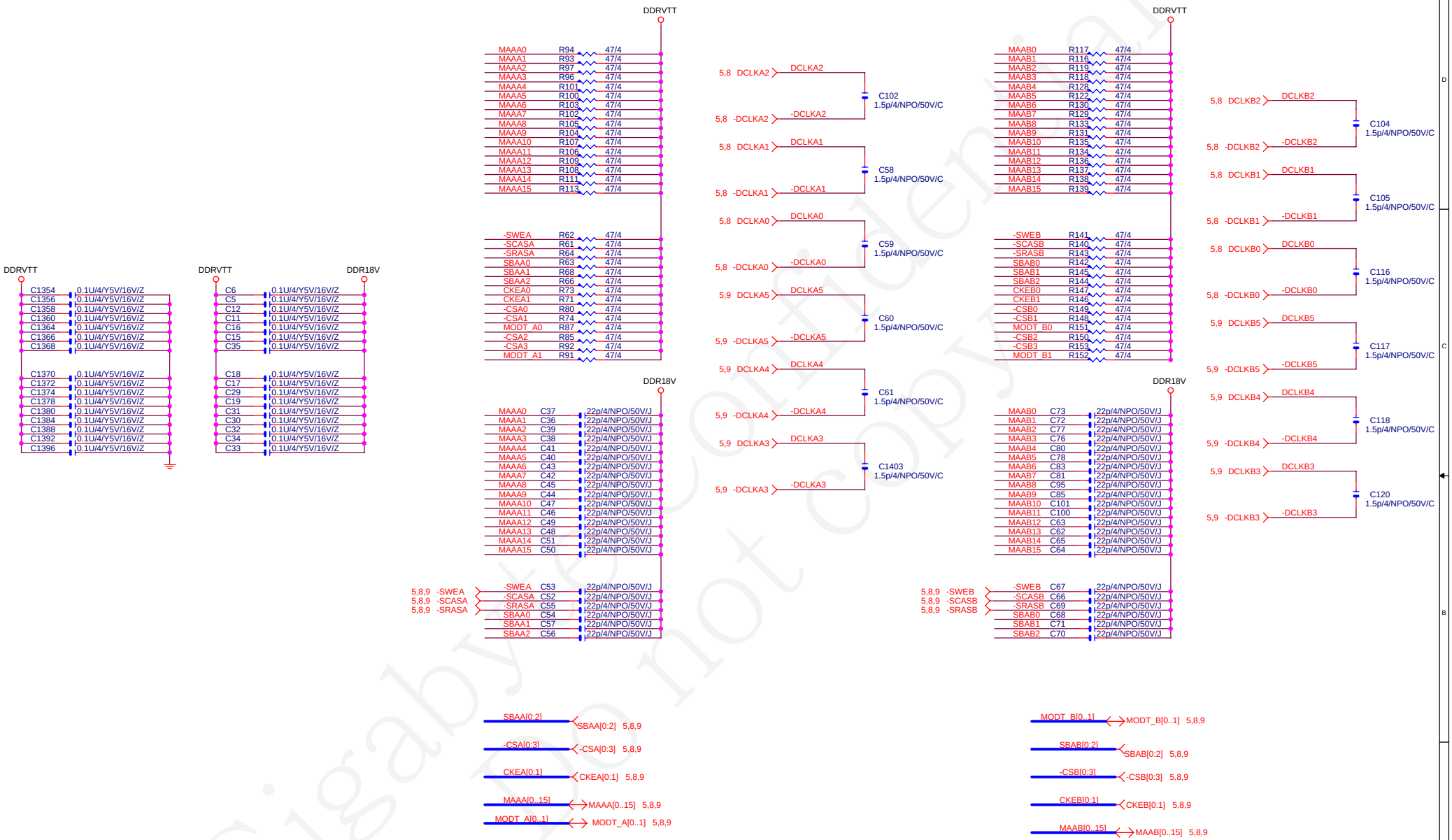

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Title	DDRII TERMINATOR	
Size B	Document Number GA-MA69VM-S2	Rev 1.0
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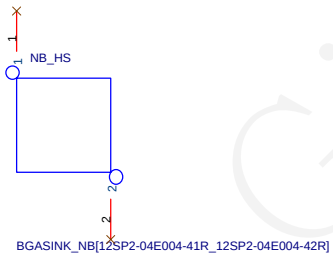
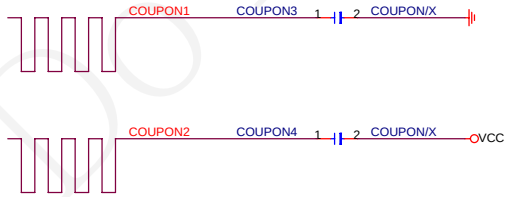
N.B HEATSINK





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Title: ATI RS690V-HOST

Size: Custom | Document Number: GA-MA69VM-S2 | Rev: 1.0

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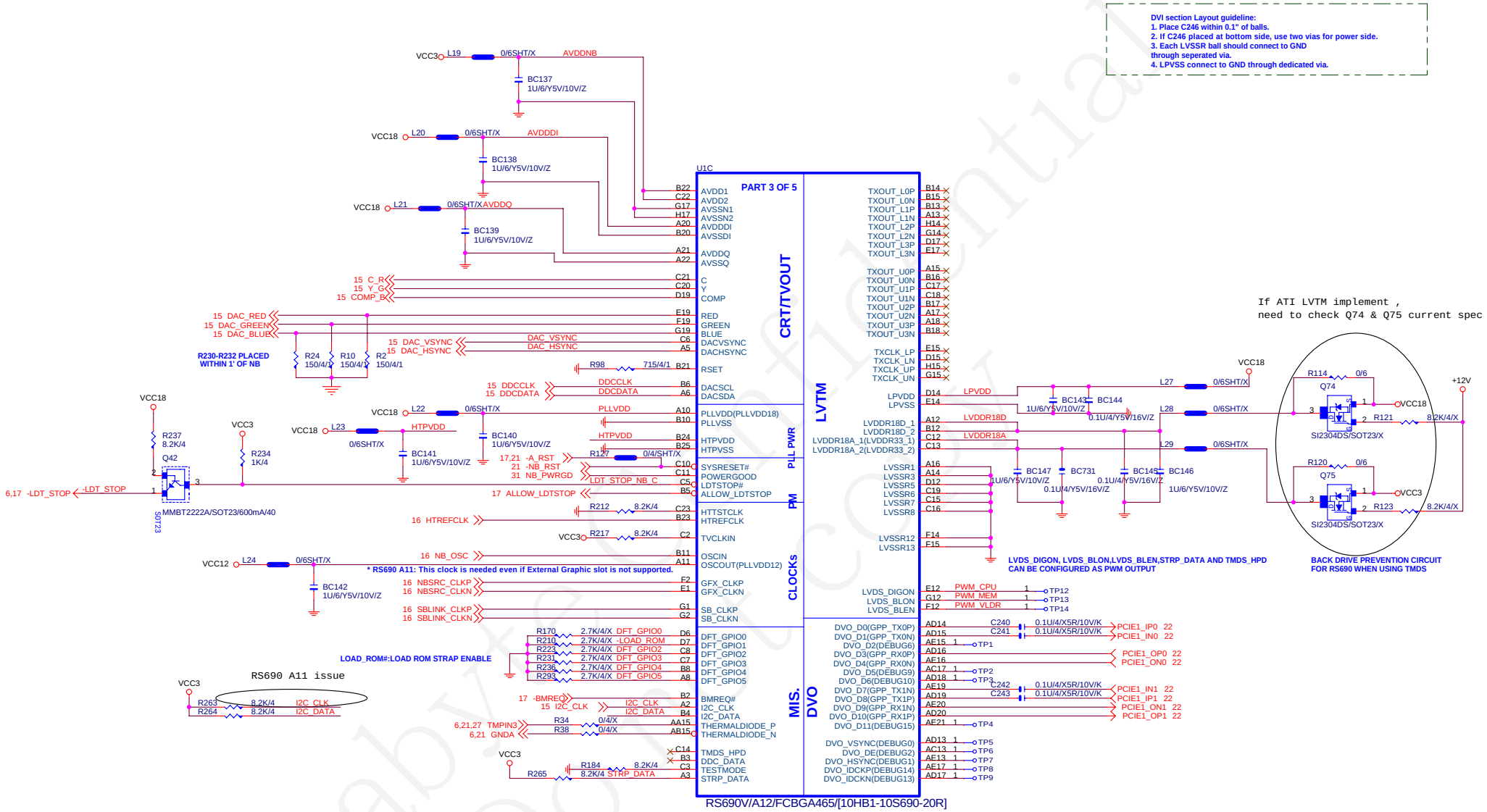

	RS690	RS690 only (NC for RS485)		
	DFT_GPIO1	DFT_GPIO0	DFT_GPIO[4:2]	DFT_GPIO5
PULL HIGH (internally pulled high)	Bypass the loading of EEPROM straps and use Hardware default values DEFAULT	Memory side port not available DEFAULT	These pin straps are used to configure PCI-E GPP mode: 111: register defined (register default to Config E) DEFAULT 110: 4-0-0-0-0 Config A 101: 4-4 Config B 100: 4-2-2 Config C 011: 4-2-1-1 Config D 010: 4-1-1-1-1 Config E others: register defined (register default to Config E)	Enable debug bus via the memory IO pads, if available in the package use default values DEFAULT
PULL LOW	I2C Master can load strap values from EEPROM if connected, or use default values if not connected	Memory side port available		use the memory data bus to output the debug bus

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Title: ATI RS690V-RGB

Size: Custom | Document Number: GA-MA69VM-S2 | Rev: 1.0

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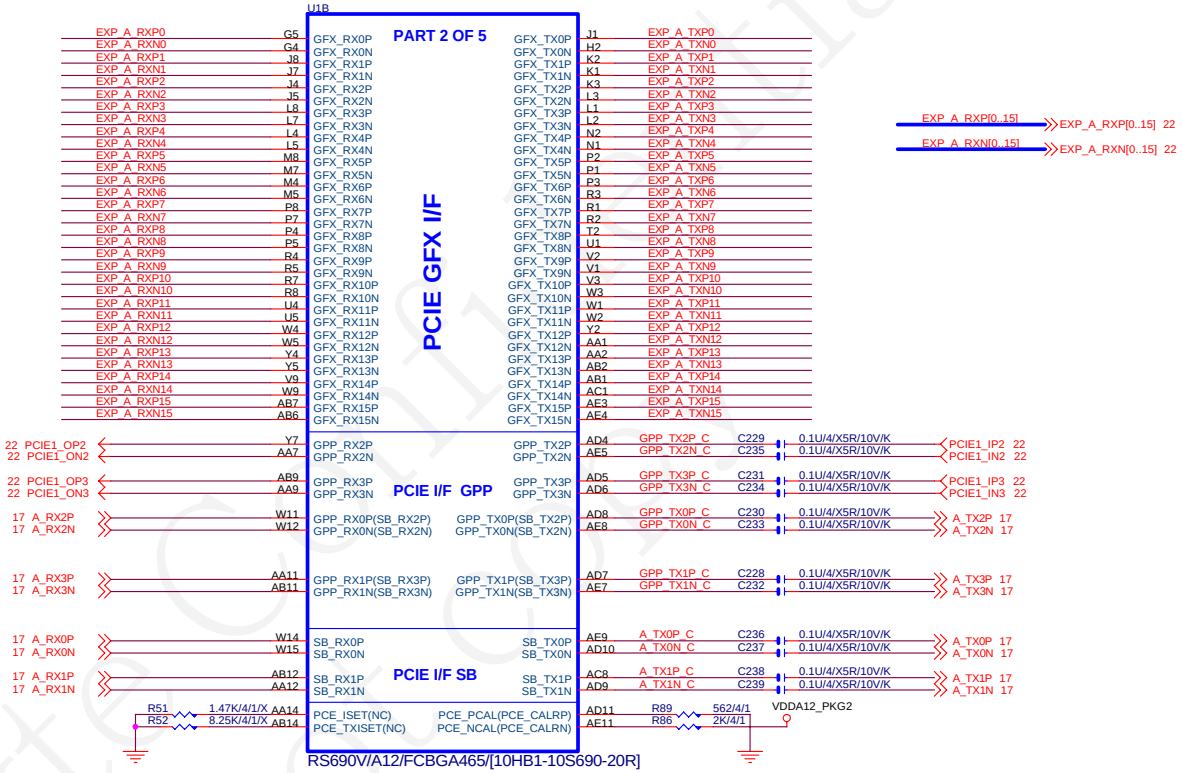

GIGABYTE			
Title	ATI RS690V-PCIE		
Size: Custom	Document Number: GA-MA69VM-S2		Rev: 1.0
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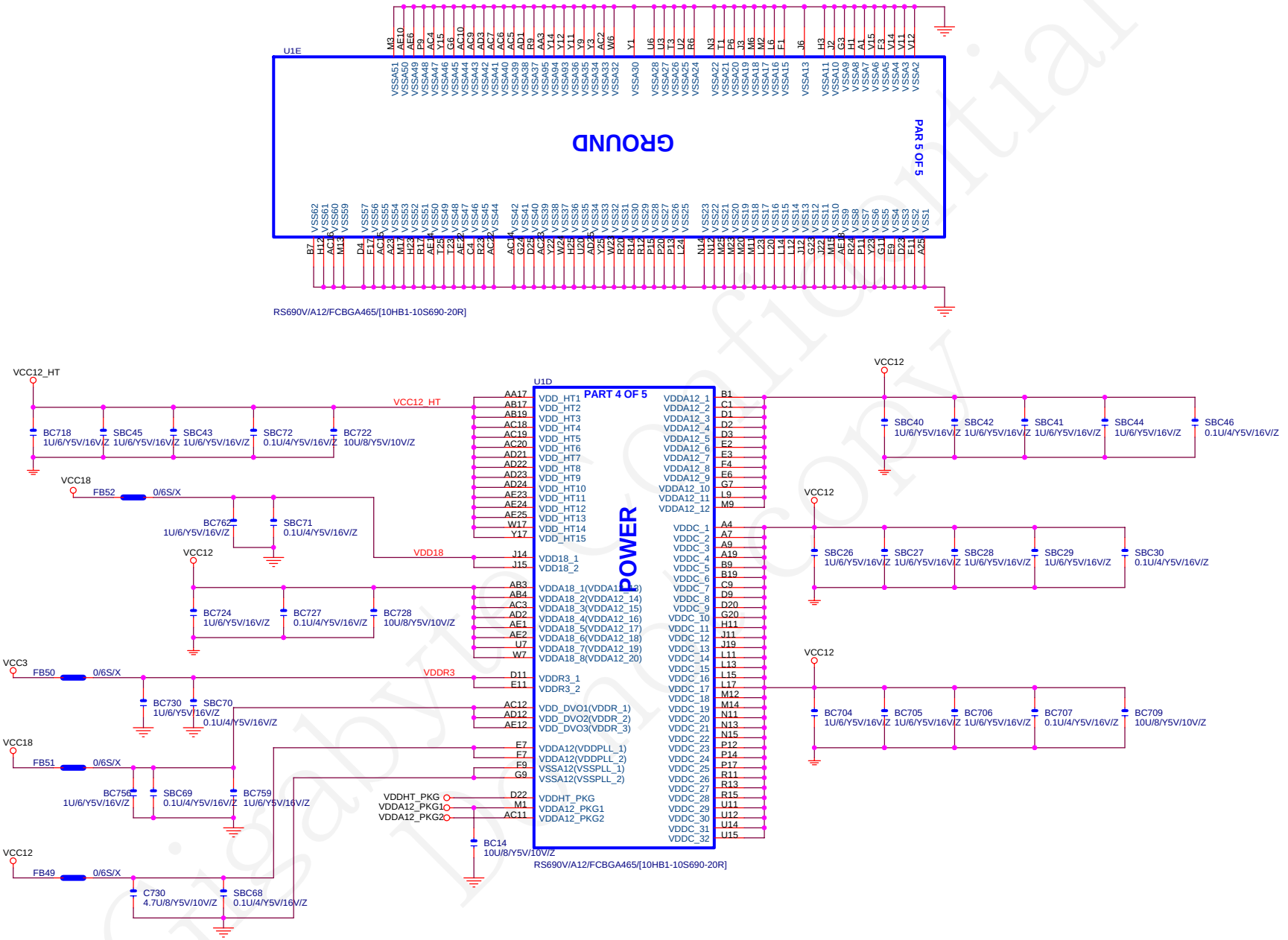

GIGABYTE		
Title	ATI RS690V-PWR/GND	
Size: Custom	Document Number: GA-MA69VM-S2	Rev: 1.0
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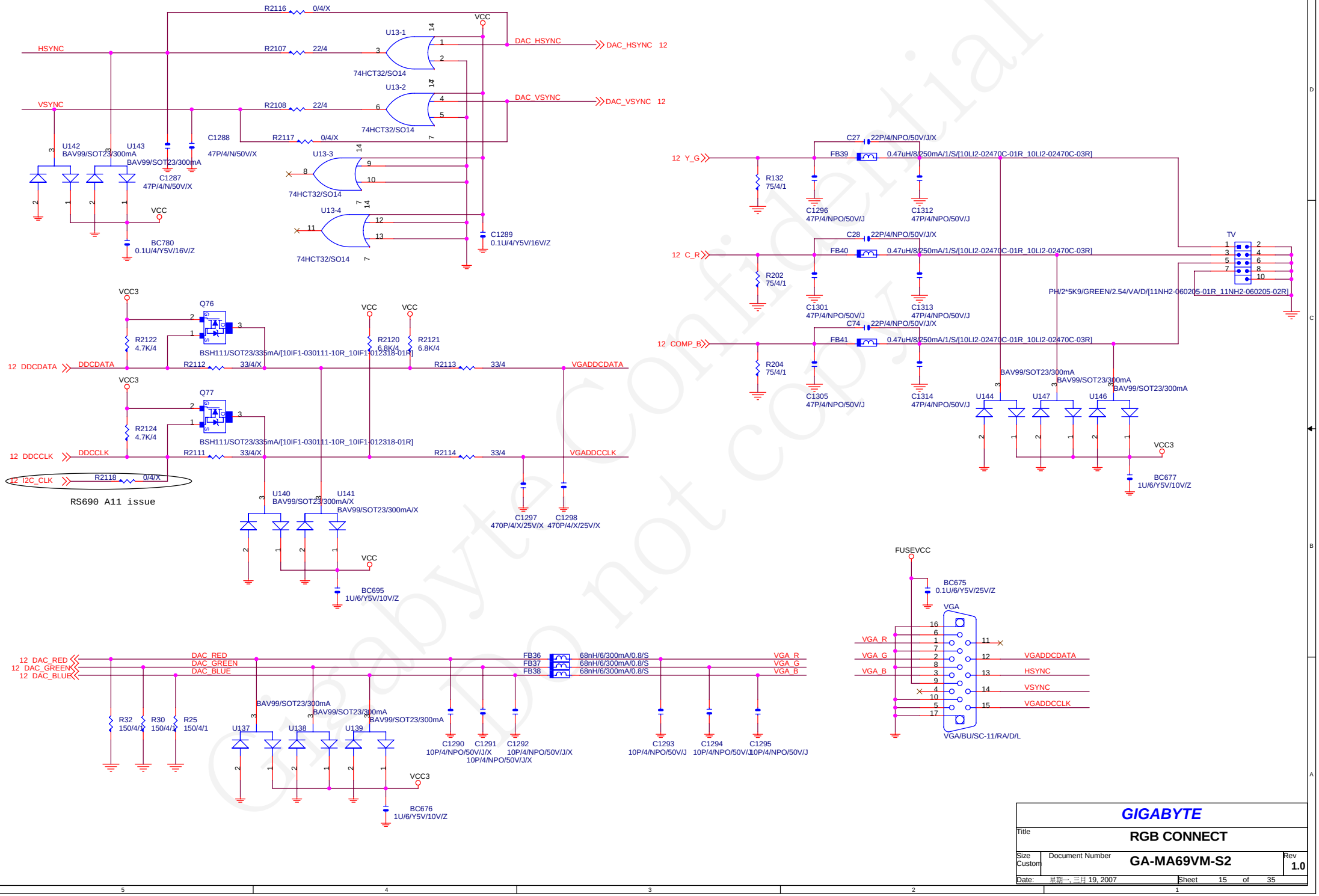

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Title	RGB CONNECT	
Size: Custom	Document Number: GA-MA69VM-S2	Rev: 1.0
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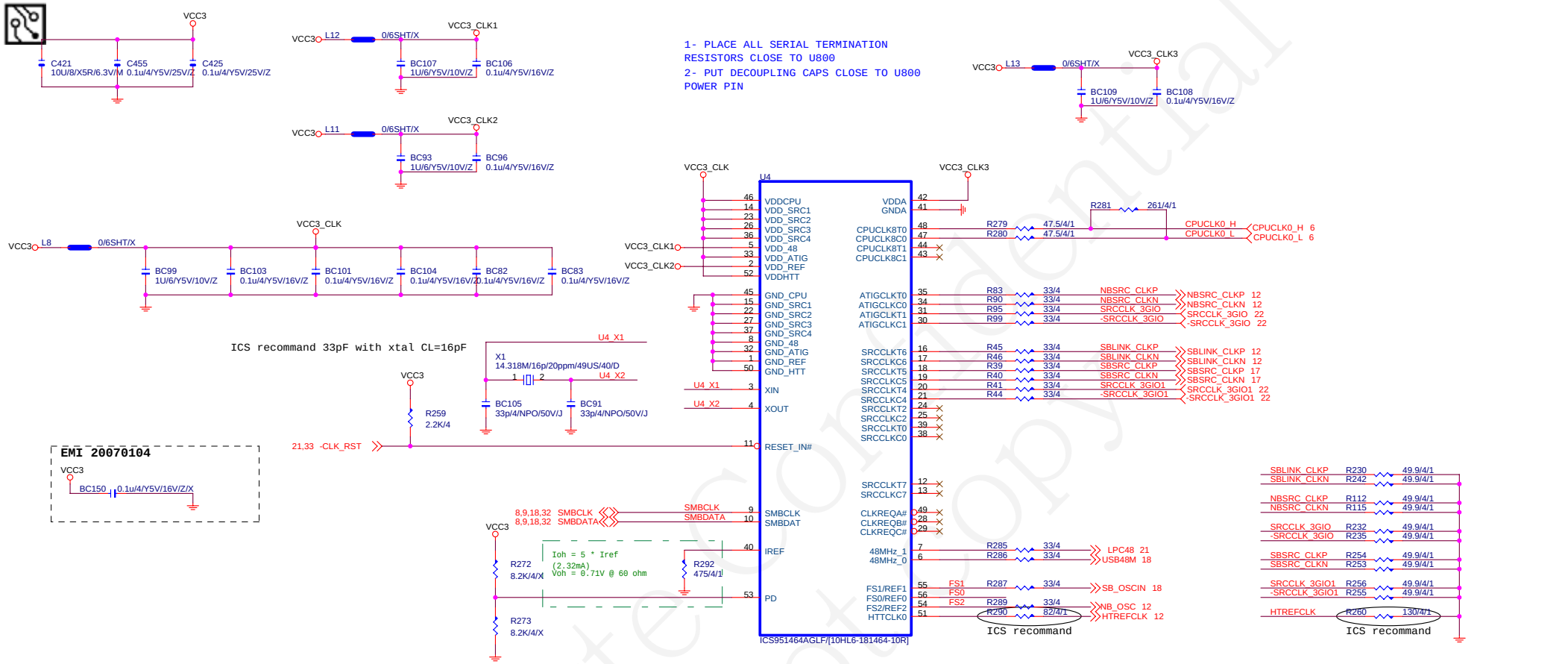

EXT CLK FREQUENCY SELECT TABLE(MHZ)

FS2	FS1	FS0	CPU	SRCCLK [2:1]	HTT	PCI	USB	COMMENT
0	0	0	Hi-Z	100.00	Hi-Z	Hi-Z	48.00	Reserved
0	0	1	X	100.00	X/3	X/6	48.00	Reserved
0	1	0	180.00	100.00	60.00	30.00	48.00	Reserved
0	1	1	220.00	100.00	36.56	73.12	48.00	Reserved
1	0	0	100.00	100.00	66.66	33.33	48.00	Reserved
1	0	1	133.33	100.00	66.66	33.33	48.00	Reserved
1	1	1	200.00	100.00	66.66	33.33	48.00	Normal ATHLON64 operation

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Title: ICS951464AGLF CLOCK GENERATOR

Size: Custom | Document Number: GA-MA69VM-S2 | Rev: 1.0

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	SB CALIBRATION RESISITOR VALUE
	SB600
R601	562 OHM 1%
R602	2.05K 1%
R603	0R

S.B HEATSINK

SB_HS

BGASINK_SB/[12SP2-030010-91R_12SP2-030010-92R]

PLACE PCIE CAPS CLOSE TO U600

SB600 SB 23x23mm

Part 1 of 4

SB600/A21/FCBGA549/[10HB1-10B600-20R]

PCI EXPRESS INTERFACE

PCI CLKS

PCI INTERFACE

XTAL

LPC

CPU

RTC

PCLK0_PCLK1
ROM TYPE:
H, L = SPI ROM
L, H = LPC ROM

H = K8

L = EXTERNAL 48MHz

H = INTERNAL RTC

L = IGNORE DEBUG STRAPS

L = IGNORE DEBUG STRAPS

ATI Anthony recommand

20mil

20mil

20mil

BATTERY
BAT-SK/BK/P/S/S/GF/[11SA1-012032-22R_11SA1-012032-23R]

BATTERY
CR2032

CLR_CMOS	
SHORT	CLEAR CMOS
OPEN	NORMAL

CLR_CMOS

PH/1*2/BK/2.54/VA/D::[8-9]POP

NOT ADD ICT FOR RTCVDD PIN

GIGABYTE

Title: ATI SB600-PCIE/PCI/CPU/LPC

Size: Custom | Document Number: GA-MA69VM-S2 | Rev: 1.0

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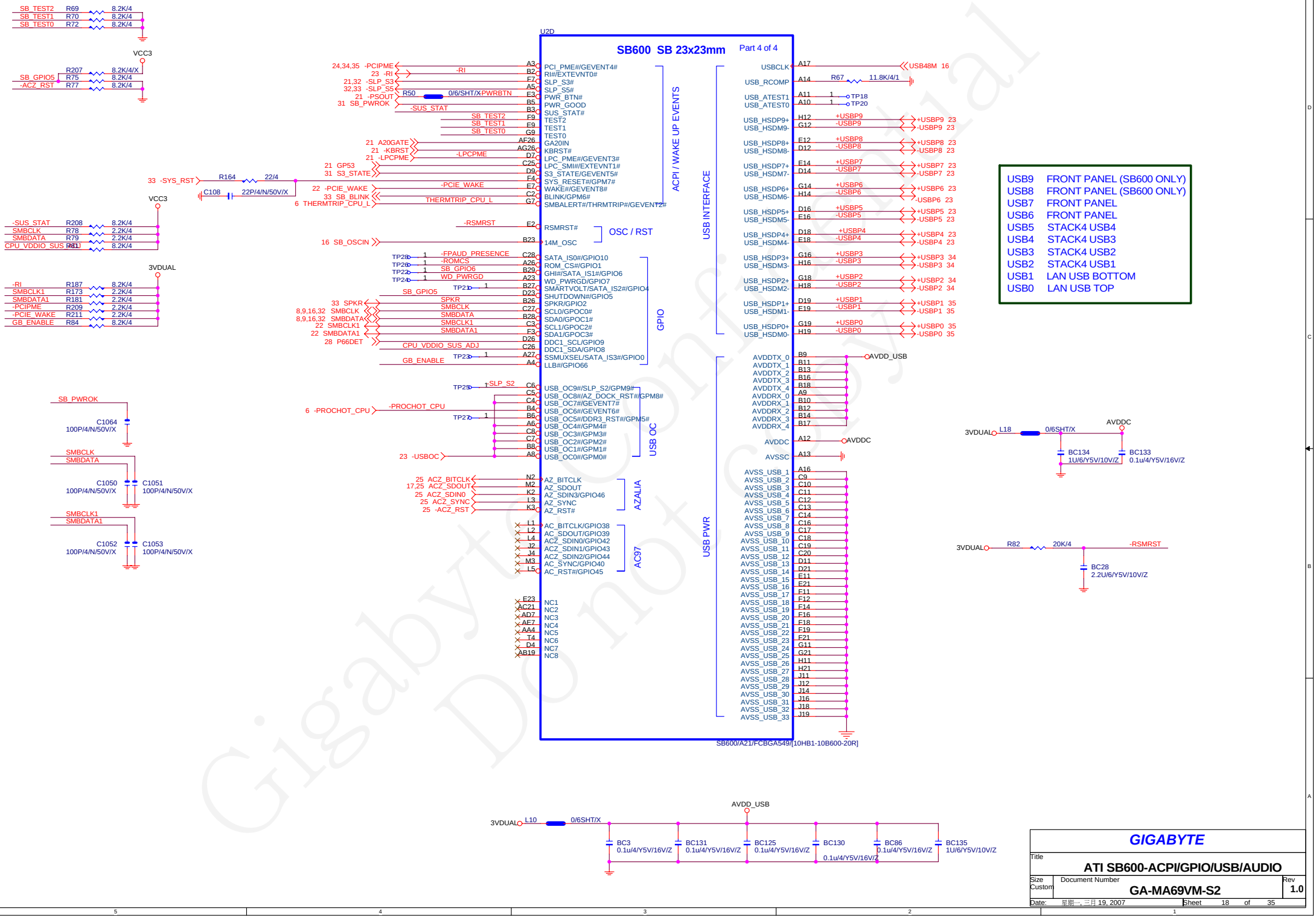
SB600 SB 23x23mm
Part 4 of 4
U2D
SB600/A21/FCBGA549/[10HB1-10B600-20R]
USB9 FRONT PANEL (SB600 ONLY)
USB8 FRONT PANEL (SB600 ONLY)
USB7 FRONT PANEL
USB6 FRONT PANEL
USB5 STACK4 USB4
USB4 STACK4 USB3
USB3 STACK4 USB2
USB2 STACK4 USB1
USB1 LAN USB BOTTOM
USB0 LAN USB TOP
GIGABYTE
ATI SB600-ACPI/GPIO/USB/AUDIO
GA-MA69VM-S2
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Do not copy

SP_TX2P_C C1279 0.01U/4/X7R/16V/K
SP_TX2M_C C1278 0.01U/4/X7R/16V/K
SP_RX2M_C C1282 0.01U/4/X7R/16V/K
SP_RX2P_C C1283 0.01U/4/X7R/16V/K

SATAII2_3
SATA2/7/YL/H/P/VA/D/2/B/GBT

SATAII1
SATAII3

PLACE SATA AC COUPLING CAPS CLOSE TO SB600

SP_TX3P_C C1280 0.01U/4/X7R/16V/K
SP_TX3M_C C1281 0.01U/4/X7R/16V/K
SP_RX3M_C C1285 0.01U/4/X7R/16V/K
SP_RX3P_C C1284 0.01U/4/X7R/16V/K

SP_TX0P_C C1310 0.01U/4/X7R/16V/K
SP_TX0M_C C1309 0.01U/4/X7R/16V/K
SP_RX0M_C C1308 0.01U/4/X7R/16V/K
SP_RX0P_C C1302 0.01U/4/X7R/16V/K

SATAII0_1
SATA2/7/YL/H/P/VA/D/2/B/GBT

SATAII0
SATAII2

SP_TX1P_C C1286 0.01U/4/X7R/16V/K
SP_TX1M_C C1300 0.01U/4/X7R/16V/K
SP_RX1M_C C1311 0.01U/4/X7R/16V/K
SP_RX1P_C C1307 0.01U/4/X7R/16V/K

U2B

SB600 SB 23x23mm
Part 2 of 4

SERIAL ATA

SP_TX0P_C AH21 SATA_TX0+
SP_TX0M_C AJ21 SATA_TX0-
SP_RX0M_C AH20 SATA_RX0-
SP_RX0P_C AJ20 SATA_RX0+
SP_TX1P_C AH18 SATA_TX1+
SP_TX1M_C AJ18 SATA_TX1-
SP_RX1M_C AH17 SATA_RX1-
SP_RX1P_C AJ17 SATA_RX1+
SP_TX2P_C AH13 SATA_TX2+
SP_TX2M_C AH14 SATA_TX2-
SP_RX2M_C AH16 SATA_RX2-
SP_RX2P_C AJ16 SATA_RX2+
SP_TX3P_C AJ11 SATA_TX3+
SP_TX3M_C AH11 SATA_TX3-
SP_RX3M_C AH12 SATA_RX3-
SP_RX3P_C AJ13 SATA_RX3+

R2194 1K/4/1 SATA_CAL AE12 SATA_CAL
SATA_X1 AD16 SATA_X1
SATA_X2 AD18 SATA_X2
33 -SATA_LED -SATA_LED AC12 SATA_ACT#/GPIO67
PLLVDD_SATA AD14 PLLVDD_SATA_1
AJ10 PLLVDD_SATA_2
XTLVDD AC16 XTLVDD_SATA
AVDD_SATA AE14 AVDD_SATA_1
AE16 AVDD_SATA_2
AE18 AVDD_SATA_3
AE19 AVDD_SATA_4
AF19 AVDD_SATA_5
AF21 AVDD_SATA_6
AG22 AVDD_SATA_7
AG23 AVDD_SATA_8
AH22 AVDD_SATA_9
AH23 AVDD_SATA_10
AJ12 AVDD_SATA_11
AJ14 AVDD_SATA_12
AJ19 AVDD_SATA_13
AJ22 AVDD_SATA_14
AJ23 AVDD_SATA_15
AB14 AVSS_SATA_1
AB16 AVSS_SATA_2
AB18 AVSS_SATA_3
AC14 AVSS_SATA_4
AC18 AVSS_SATA_5
AC19 AVSS_SATA_6
AD12 AVSS_SATA_7
AD19 AVSS_SATA_8
AD21 AVSS_SATA_9
AE12 AVSS_SATA_10
AE21 AVSS_SATA_11
AF11 AVSS_SATA_12
AF14 AVSS_SATA_13
AF16 AVSS_SATA_14
AF18 AVSS_SATA_15
AG11 AVSS_SATA_16
AG12 AVSS_SATA_17
AG13 AVSS_SATA_18
AG14 AVSS_SATA_19
AG16 AVSS_SATA_20
AG17 AVSS_SATA_21
AG18 AVSS_SATA_22
AG19 AVSS_SATA_23
AG20 AVSS_SATA_24
AG21 AVSS_SATA_25
AH10 AVSS_SATA_26
AH19 AVSS_SATA_27

SERIAL ATA POWER

SATA_X2
SATA_X1
R168 10M/4
X6
25M/20p/30ppm/49US/20/D
C115 10P/4/NPO/50V/J
C119 10P/4/NPO/50V/J

ATA 66/100

IDE_IORDY AB29 PIORDY
IDE_IRQ AA28 IRQ14
IDE_A0 AA29 PDA0
IDE_A1 AB27 PDA1
IDE_A2 Y28 PDA2
IDE_DACK# AB28 -PDDACK
IDE_DRQ AC27 PDDREQ
IDE_IOR# AC29 -PDIOR
IDE_IOW# AC28 -PDIOW
IDE_CS1# W28 -PCS1
IDE_CS3# W27 -PCS3

IDE_D0/GPIO15 AD28 PDD0
IDE_D1/GPIO16 AD26 PDD1
IDE_D2/GPIO17 AE29 PDD2
IDE_D3/GPIO18 AF27 PDD3
IDE_D4/GPIO19 AG29 PDD4
IDE_D5/GPIO20 AH28 PDD5
IDE_D6/GPIO21 AJ28 PDD6
IDE_D7/GPIO22 AJ27 PDD7
IDE_D8/GPIO23 AH27 PDD8
IDE_D9/GPIO24 AG27 PDD9
IDE_D10/GPIO25 AG28 PDD10
IDE_D11/GPIO26 AF28 PDD11
IDE_D12/GPIO27 AF29 PDD12
IDE_D13/GPIO28 AE28 PDD13
IDE_D14/GPIO29 AD25 PDD14
IDE_D15/GPIO30 AD29 PDD15

PDD[0..15] → PDD[0..15] 28

SPI ROM

SPI_DI/GPIO12 J3 TP31
SPI_DO/GPIO11 J6 TP32
SPI_CLK/GPIO47 G3 TP33
SPI_HOLD#/GPIO31 G2 TP34
SPI_CS#/GPIO32 G6 TP35
LAN_RST#/GPIO13 C23 -SB600_LAN_RST TP29
ROM_RST#/GPIO14 G5 -SB600_ROM_RST TP30

HW MONITOR

FANOUT0/GPIO3 M4
FANOUT1/GPIO48 T3
FANOUT2/GPIO49 V4
FANIN0/GPIO50 N3
FANIN1/GPIO51 P2
FANIN2/GPIO52 W4
TEMP_COMM P5
TEMPIN0/GPIO61 P7
TEMPIN1/GPIO62 P8
TEMPIN2/GPIO63 T8
TEMPIN3/TALERT#/GPIO64 T7
VIN0/GPIO53 V5
VIN1/GPIO54 L7
VIN2/GPIO55 M8
VIN3/GPIO56 V6
VIN4/GPIO57 M6
VIN5/GPIO58 P4
VIN6/GPIO59 M7
VIN7/GPIO60 V7

AVDD N1 L15 0/6SHT/X VCC3
AVSS M1
BC119 0.1u/4/Y5V/16V/Z

Special NS_VIA CONNECTS HWM_AGND TO GND at VIA hole only

SB600/A21/FCBGA549/[10HB1-10B600-20R]

NOTE: ROUTE TEMP_COMM AS A 10MIL TRACE

XTLVDD
VCC3 L14 0/6SHT/X
BC112 1U/6/Y5V/10V/Z
BC110 0.1u/4/Y5V/16V/Z

PLLVDD_SATA
VCC_SB L16 0/6SHT/X
BC124 1U/6/Y5V/10V/Z
BC123 0.1u/4/Y5V/16V/Z

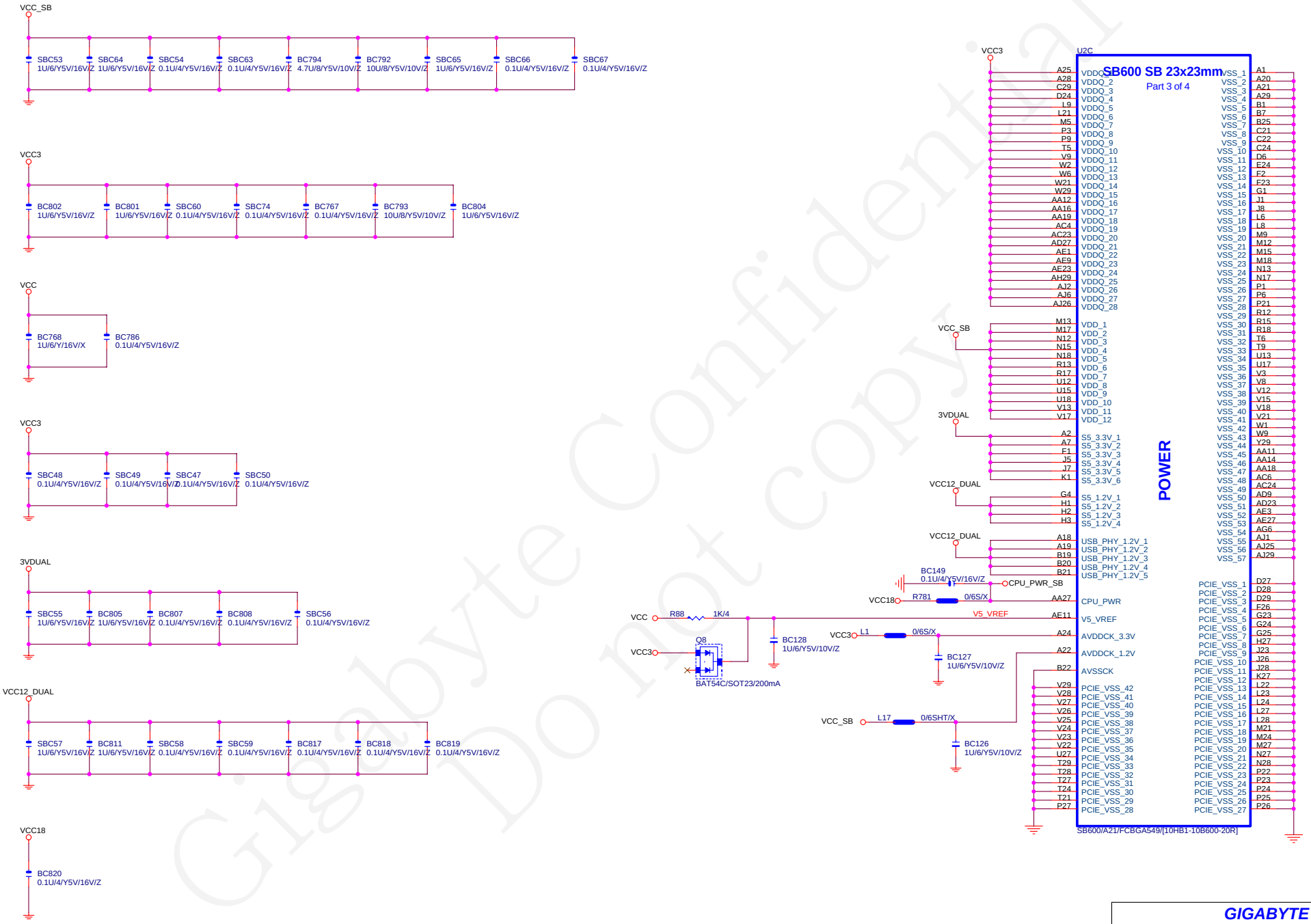
AVDD_SATA
VCC_SB L9 0/6SHT/X
BC148 1U/6/Y5V/10V/Z
BC118 0.1u/4/Y5V/16V/Z
SBC52 0.1u/4/Y5V/16V/Z
SBC61 0.1u/4/Y5V/16V/Z
BC85 0.1u/4/Y5V/16V/Z
SBC62 0.1u/4/Y5V/16V/Z
SBC73 10U/8/X5R/6.3V/M

GIGABYTE

Title: ATI SB600-SATA/IDE/HWM/SPI

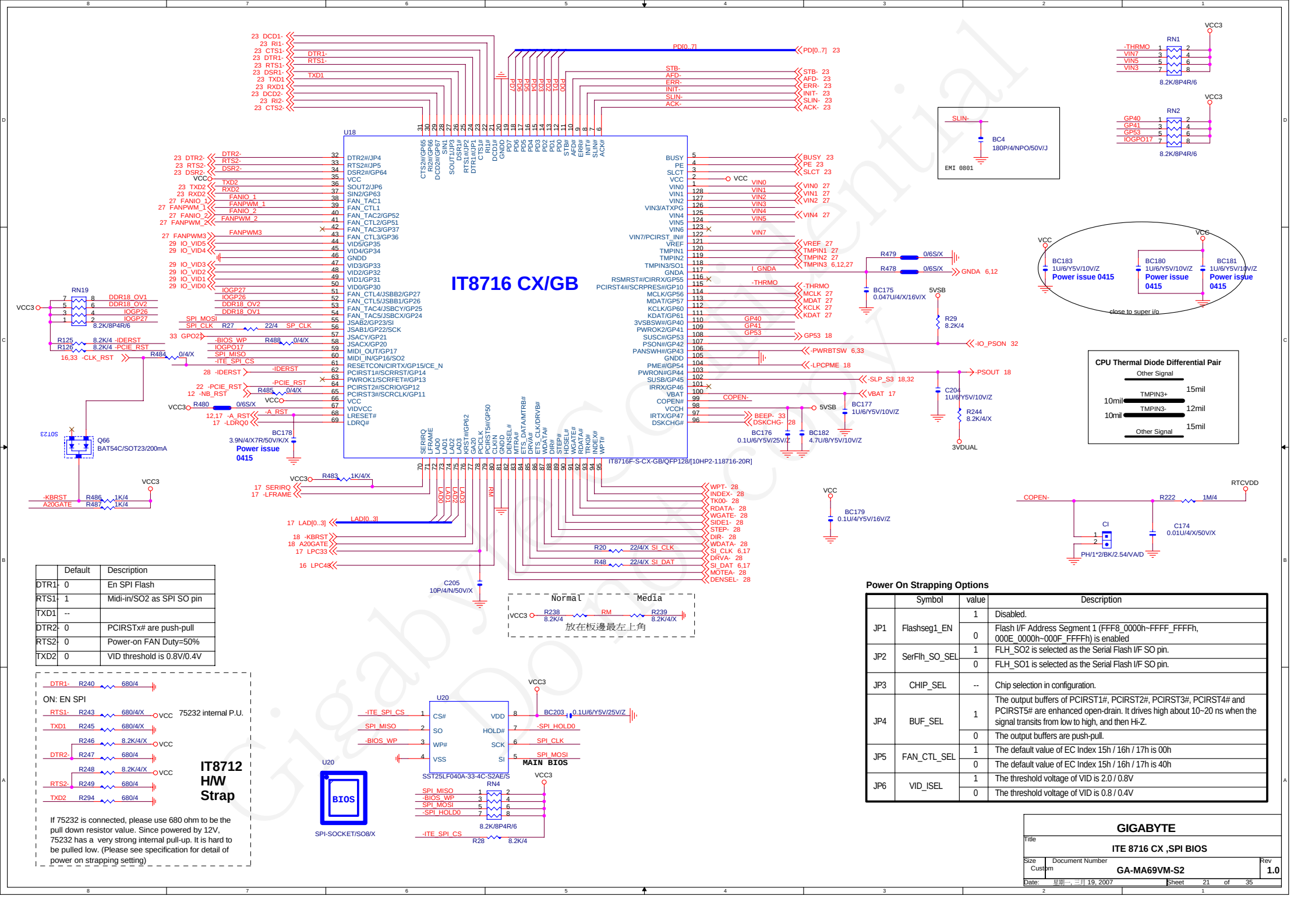
Size: Custom | Document Number: GA-MA69VM-S2 | Rev: 1.0

Date: 星期一, 三月 19, 2007 | Sheet 19 of 35



GIGABYTE

Title	ATI SB600-PWR/GND	
Size: Custom	Document Number: GA-MA69VM-S2	Rev: 1.0
Date: 星期一, 三月 19, 2007	Sheet 20 of 35	



	Default	Description
DTR1-	0	En SPI Flash
RTS1-	1	Midi-in/SO2 as SPI SO pin
TXD1	--	
DTR2-	0	PCIRSTx# are push-pull
RTS2-	0	Power-on FAN Duty=50%
TXD2	0	VID threshold is 0.8V/0.4V

ON: EN SPI

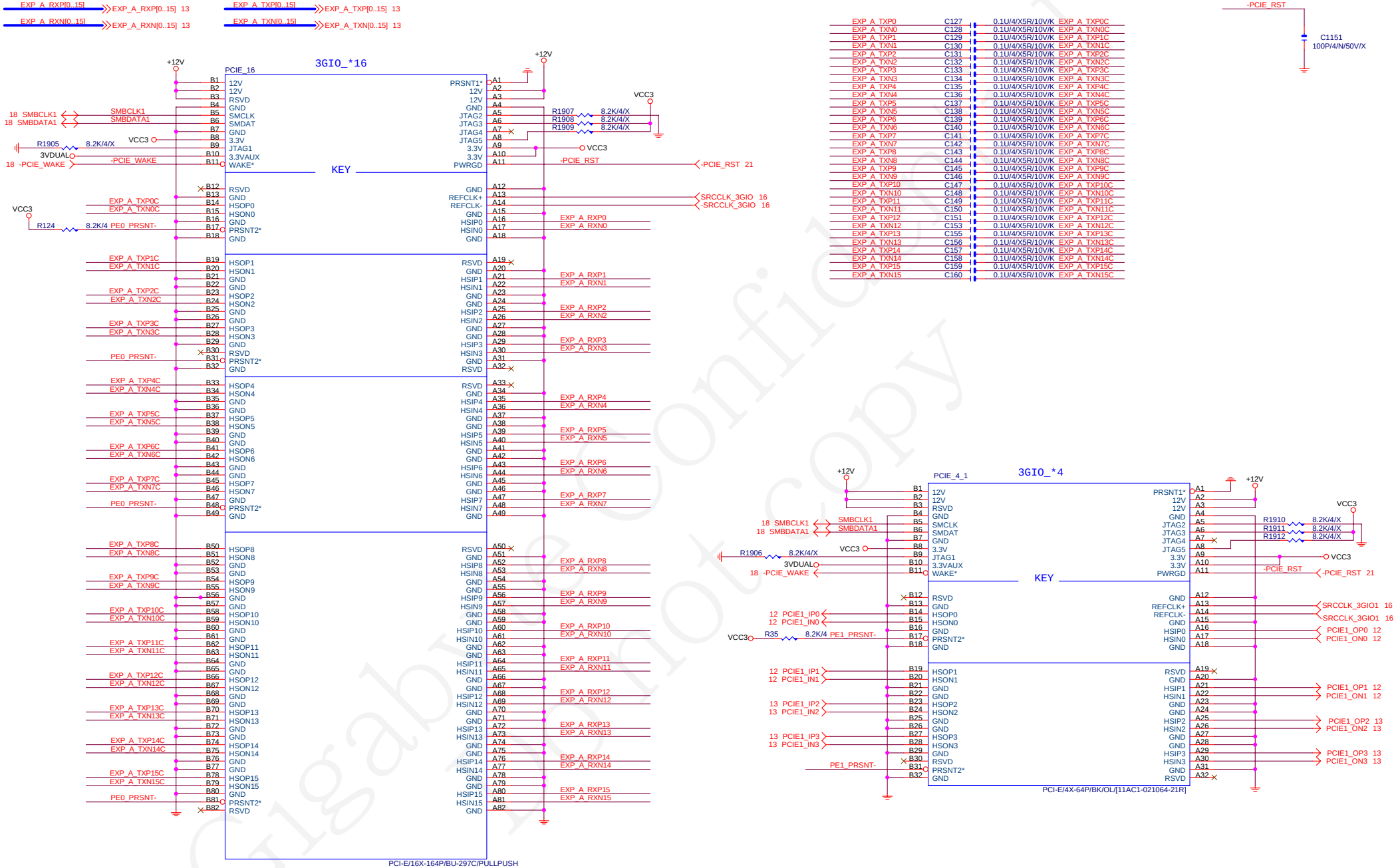
75232 internal P.U.

IT8712 H/W Strap

If 75232 is connected, please use 680 ohm to be the pull down resistor value. Since powered by 12V, 75232 has a very strong internal pull-up. It is hard to be pulled low. (Please see specification for detail of power on strapping setting)

Power On Strapping Options

	Symbol	value	Description
JP1	Flashseg1_EN	1	Disabled.
		0	Flash I/F Address Segment 1 (FFF8_0000h~FFFF_FFFFh, 000E_0000h~000F_FFFFh) is enabled
JP2	SerFlh_SO_SEL	1	FLH_SO2 is selected as the Serial Flash I/F SO pin.
		0	FLH_SO1 is selected as the Serial Flash I/F SO pin.
JP3	CHIP_SEL	--	Chip selection in configuration.
JP4	BUF_SEL	1	The output buffers of PCIRST1#, PCIRST2#, PCIRST3#, PCIRST4# and PCIRST5# are enhanced open-drain. It drives high about 10~20 ns when the signal transits from low to high, and then Hi-Z.
		0	The output buffers are push-pull.
JP5	FAN_CTL_SEL	1	The default value of EC Index 15h / 16h / 17h is 00h
		0	The default value of EC Index 15h / 16h / 17h is 40h
JP6	VID_ISEL	1	The threshold voltage of VID is 2.0 / 0.8V
		0	The threshold voltage of VID is 0.8 / 0.4V



GIGABYTE

Title	PCI EXPRESS X 16 & X4	
Size: Custom	Document Number: GA-MA69VM-S2	Rev: 1.0
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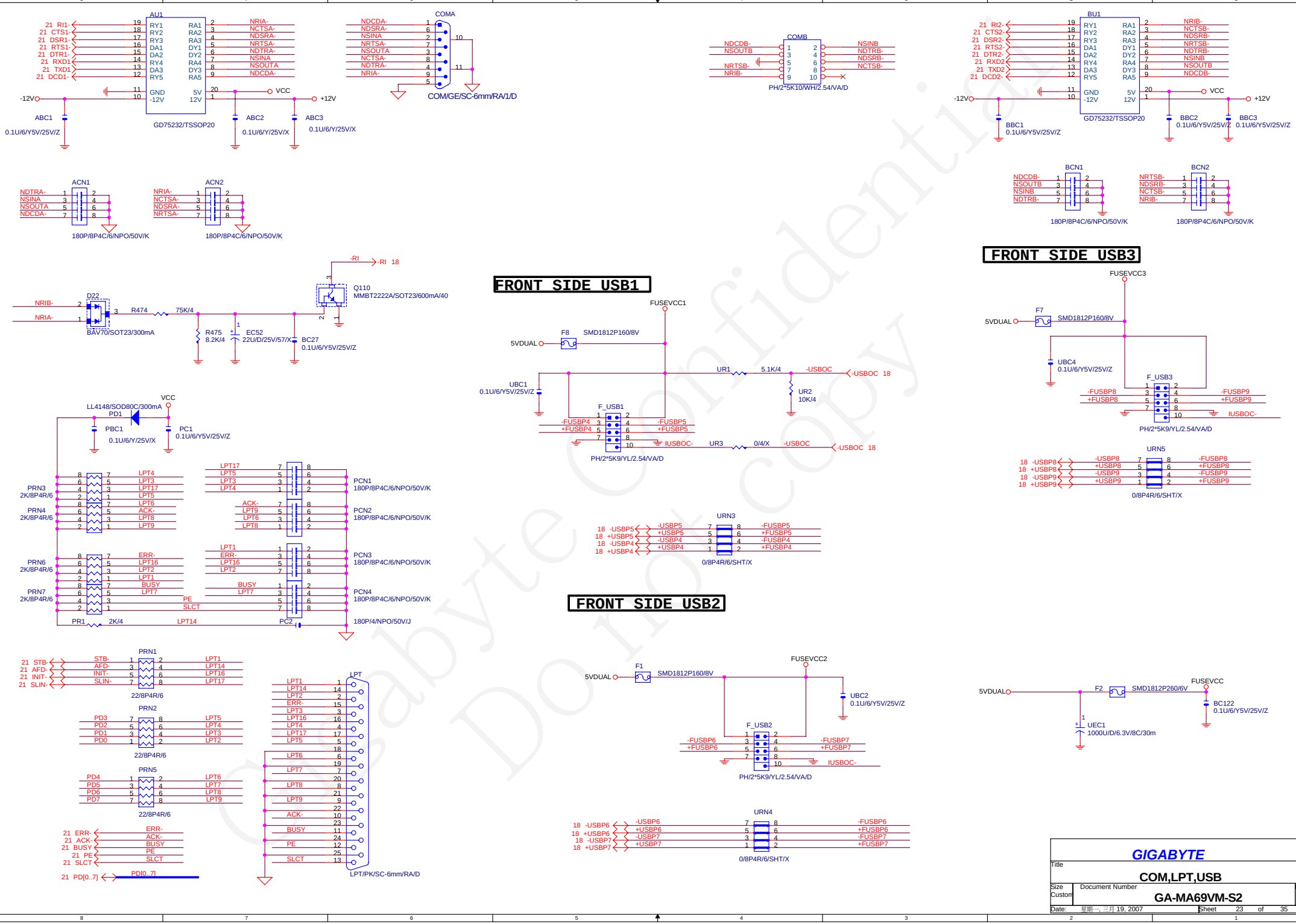
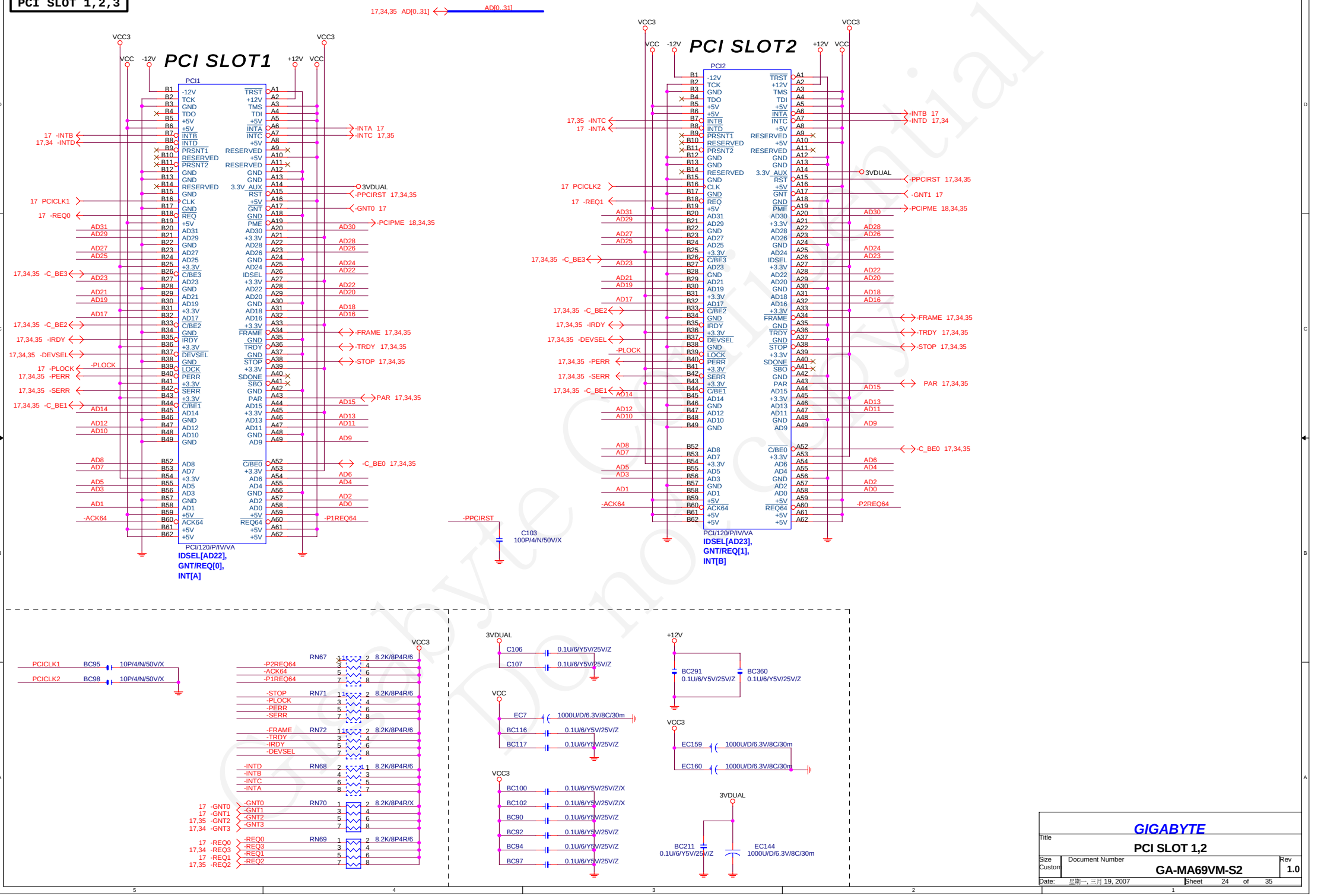
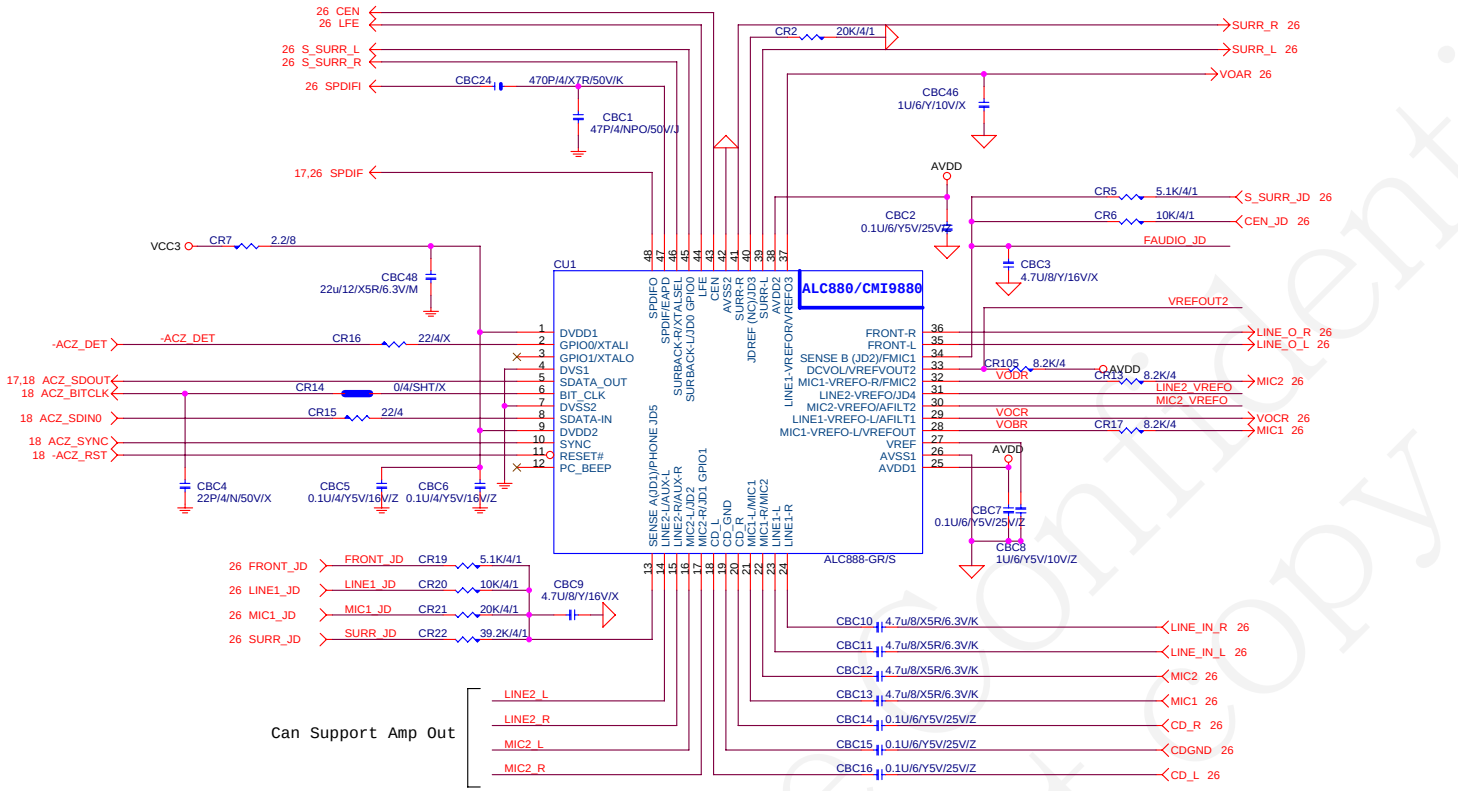
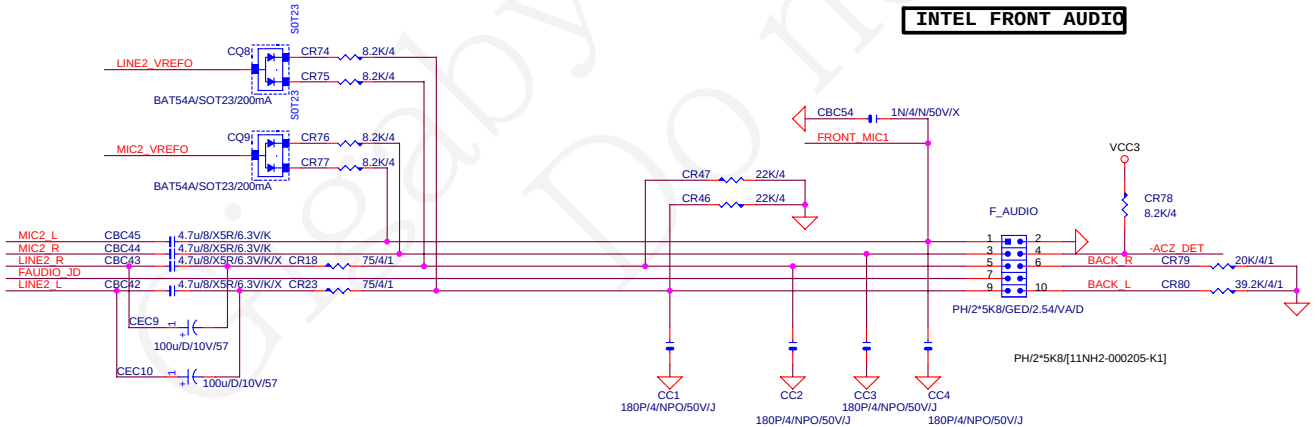


PCI SLOT 1,2,3



Title	PCI SLOT 1,2		
Size: Custom	Document Number: GA-MA69VM-S2		Rev: 1.0
Date: 星期一, 三月 19, 2007	Sheet 24 of 35		





GIGABYTE

Title: ALC888 CODEC

Size: Custom | Document Number: GA-MA69VM-S2 | Rev: 1.0

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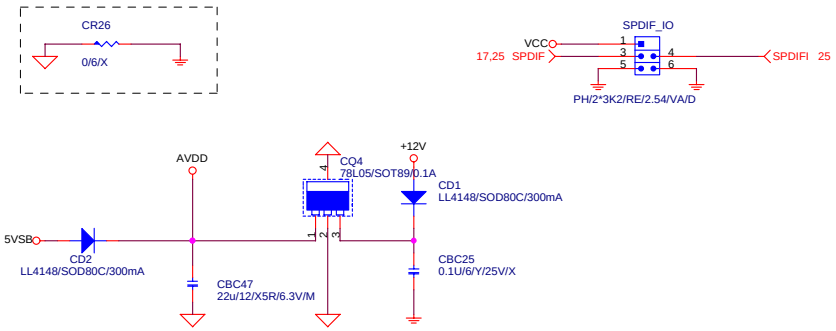

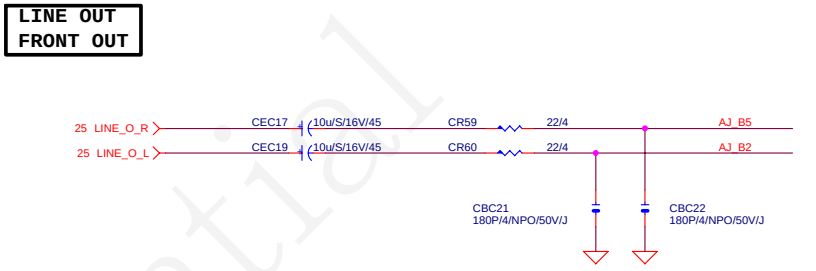

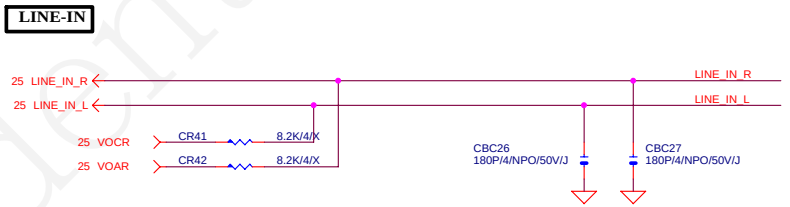

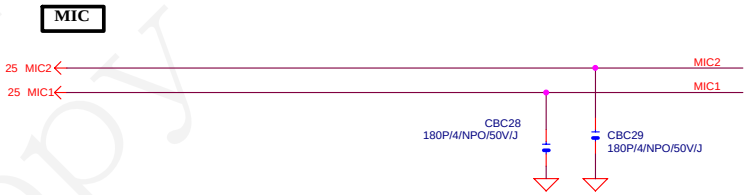

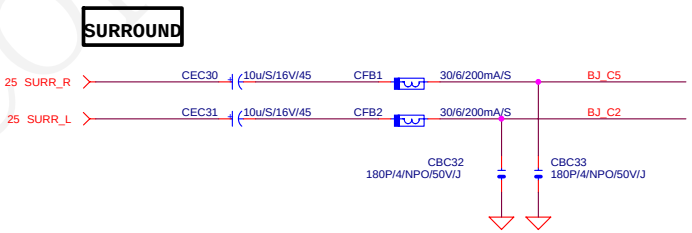

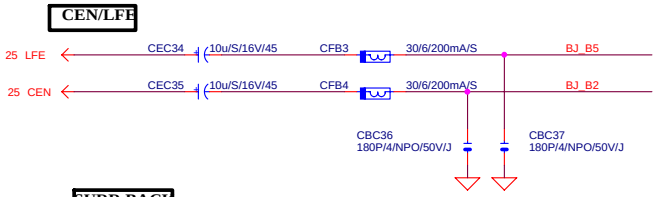

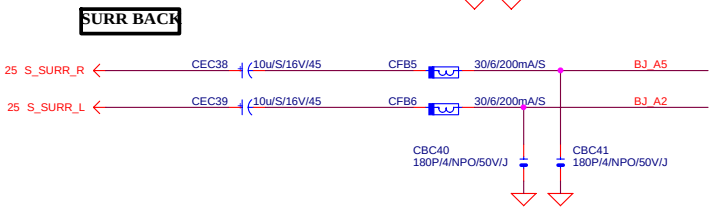

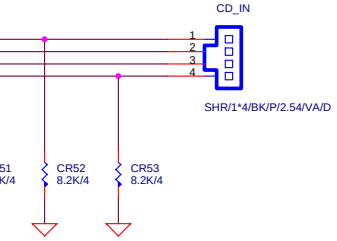

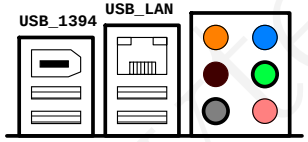

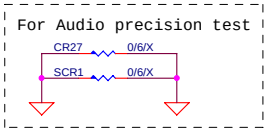

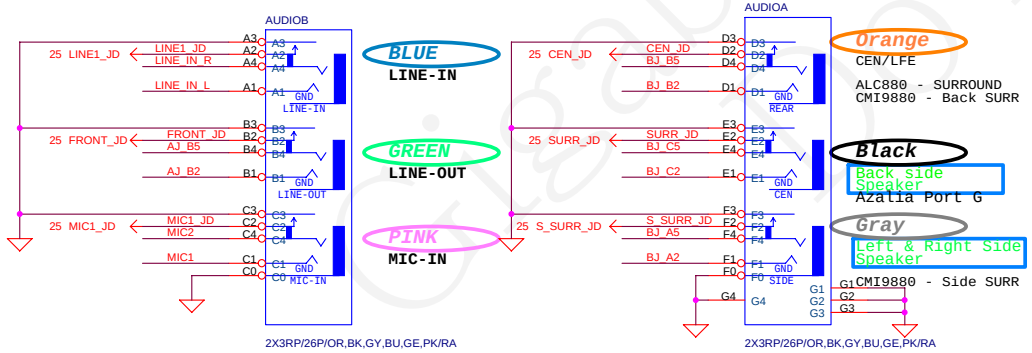

A3RJ/13P/B/[11NR6-403006-01_11NR6-403006-02]
3RJ+15F/[11NR6-403004-11]

A3RJ/13P/OBG/[11NR6-403006-71]
3RJ+15F/[11NR6-403004-31]

GIGABYTE

Title: AUDIO JACK

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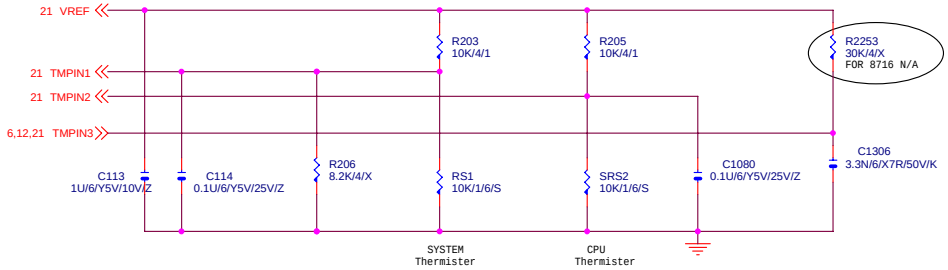
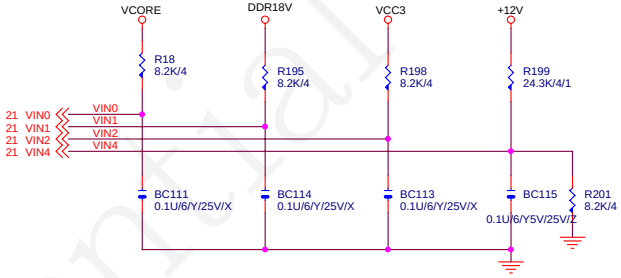
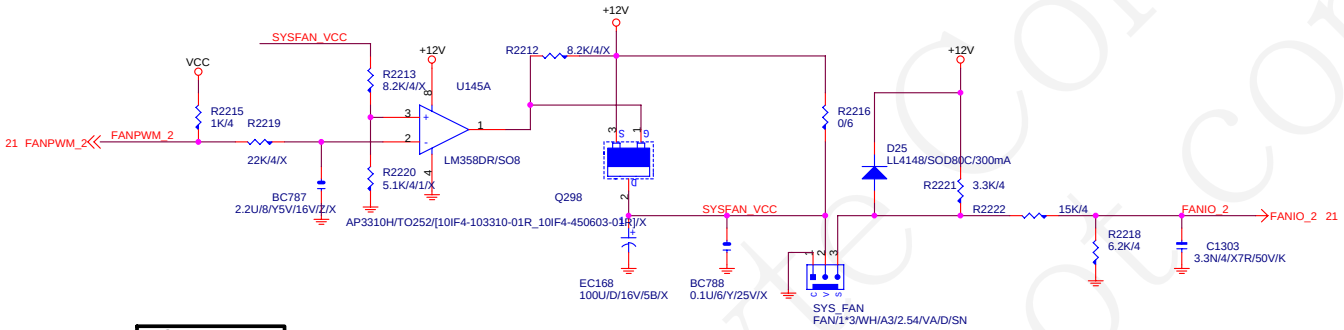
Hardware Monitor circuits

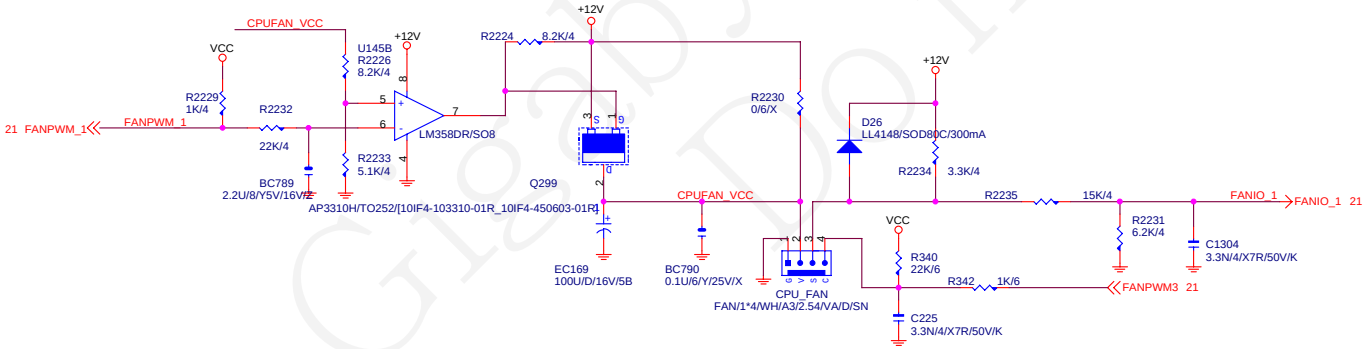




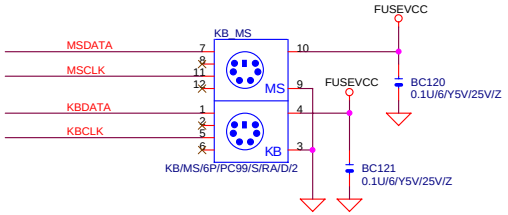
SYSTEM FAN

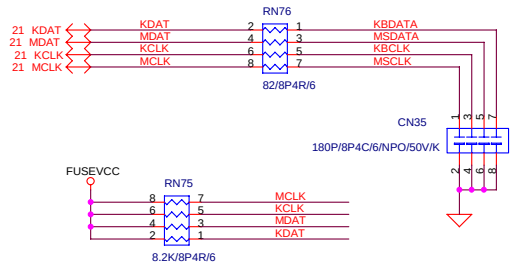


CPU FAN



KB & MS





GIGABYTE		
Title: FAN/HWMO		
Size: Custom	Document Number: GA-MA69VM-S2	Rev: 1.0
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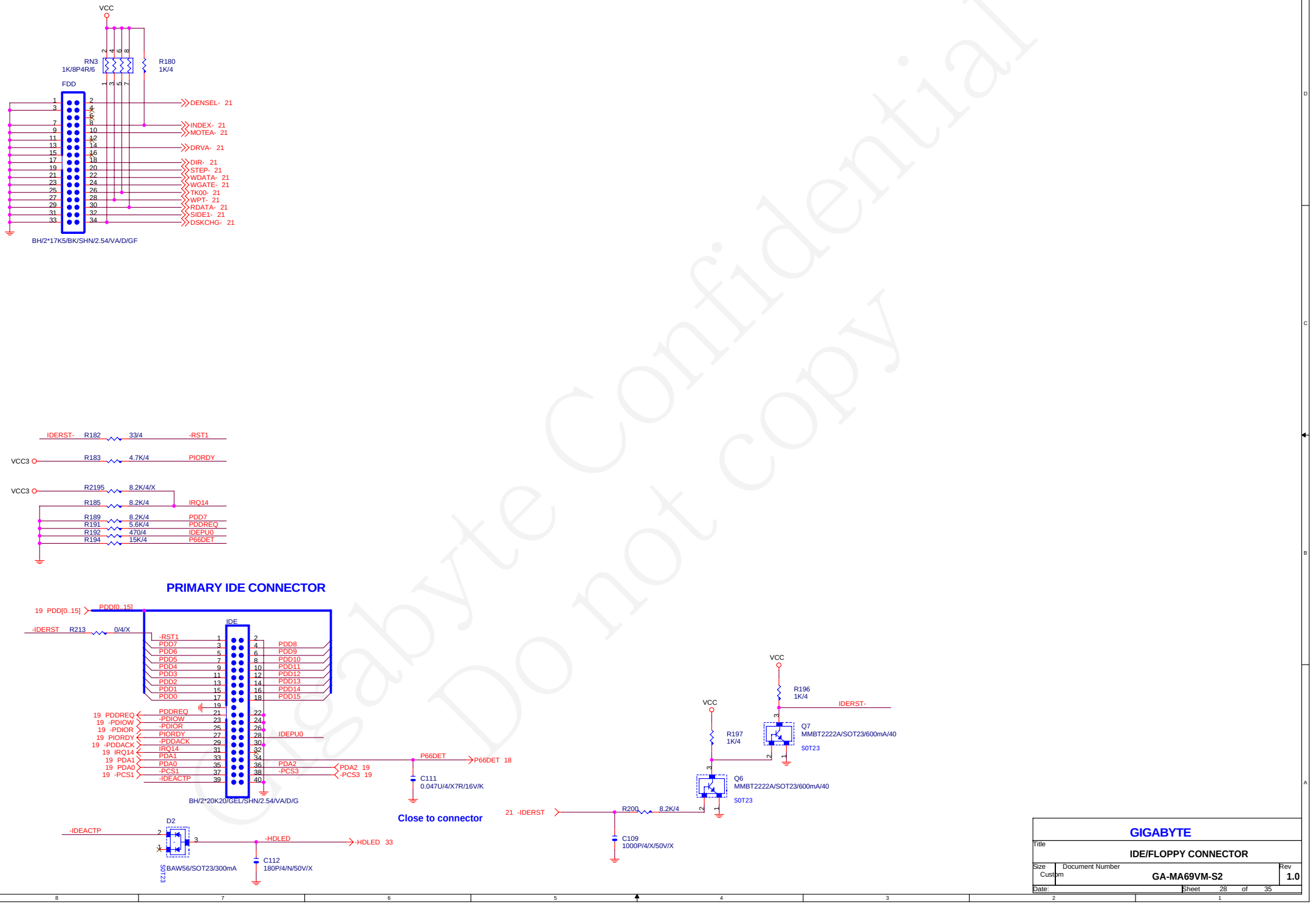

GIGABYTE

Title	IDE/FLOPPY CONNECTOR	
Size: Custom	Document Number: GA-MA69VM-S2	Rev: 1.0
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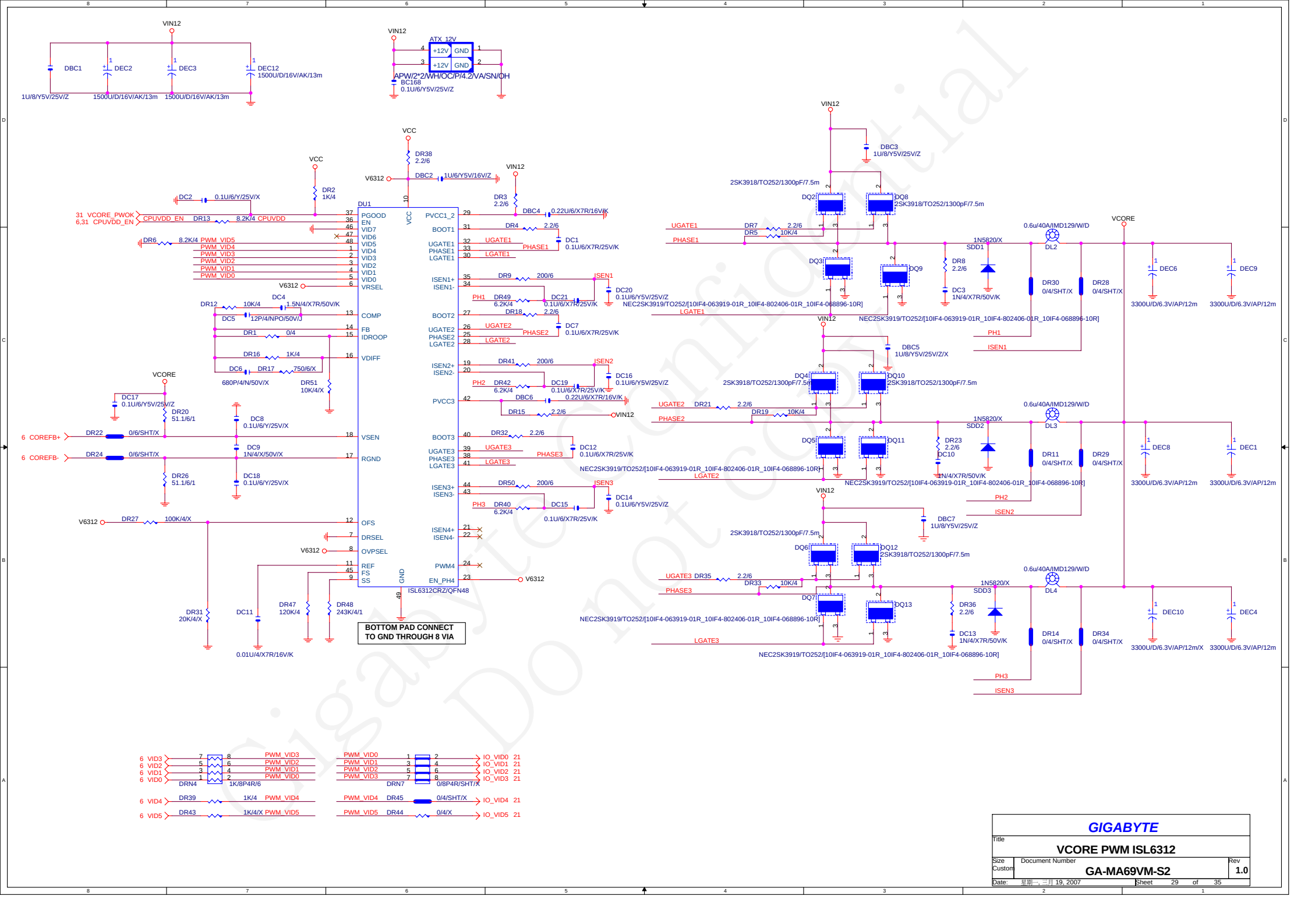

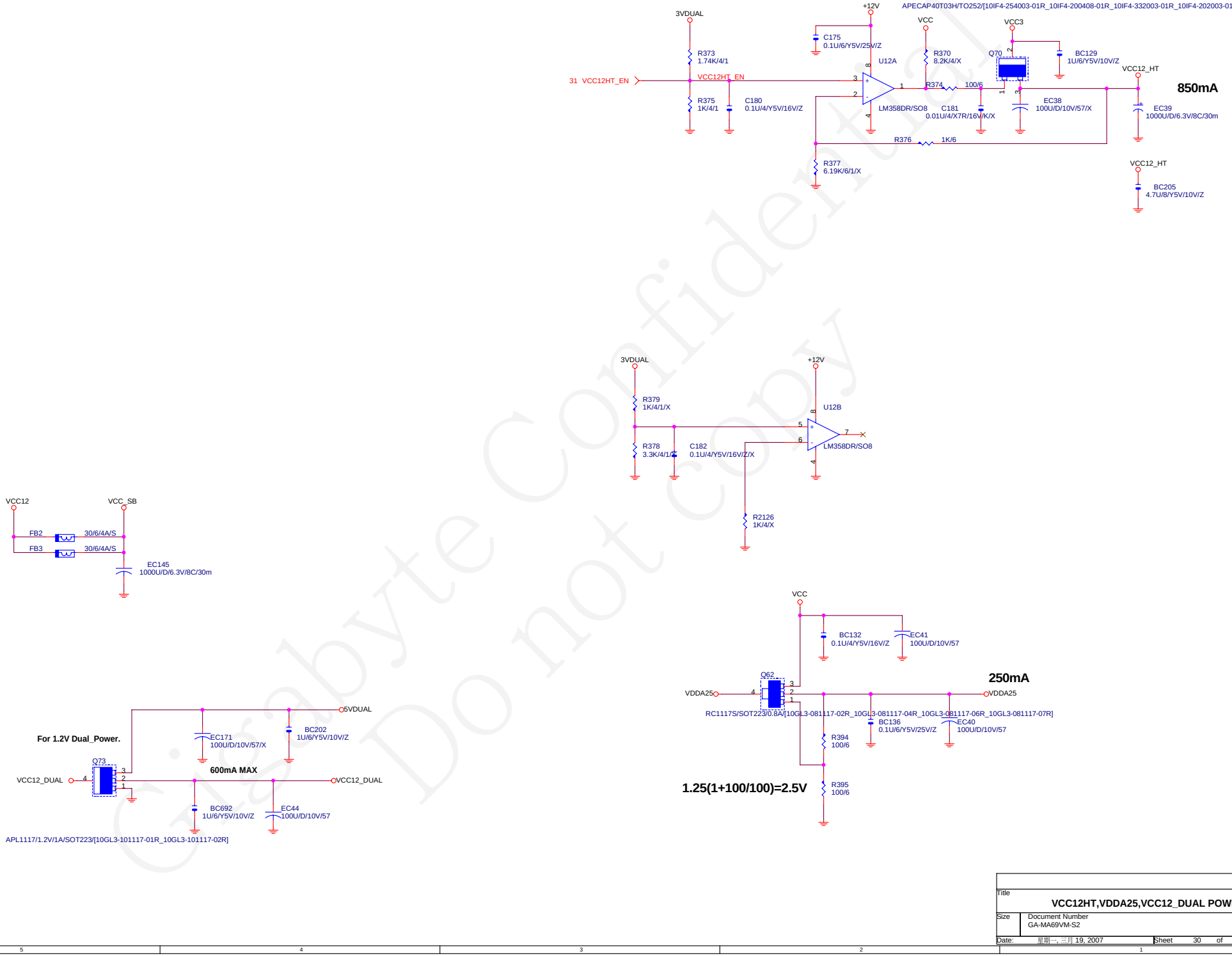

Title	VCC12HT,VDDA25,VCC12_DUAL POWER	
Size	Document Number GA-MA69VM-S2	Rev 1.0
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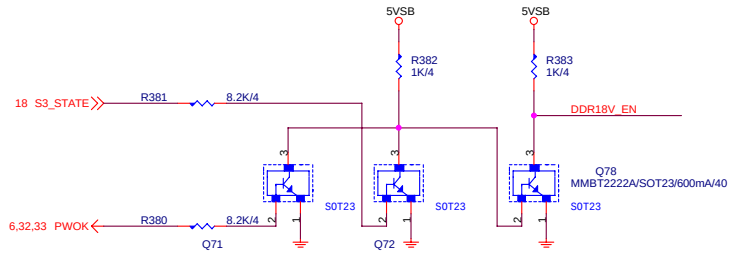

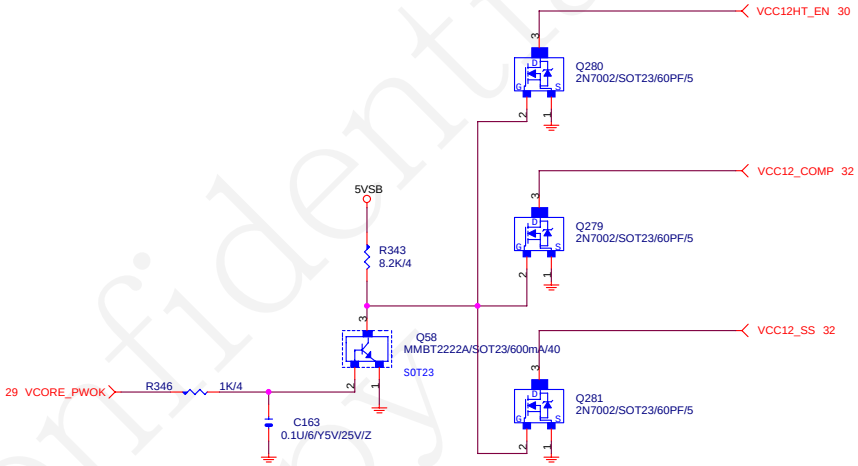

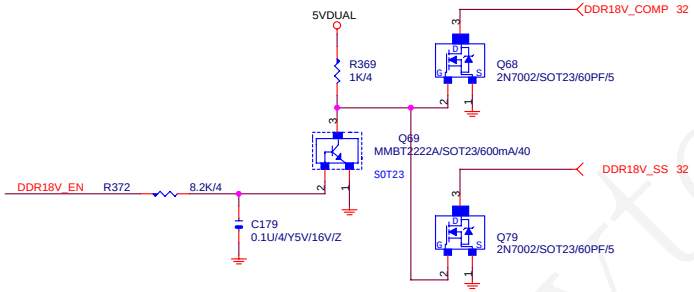

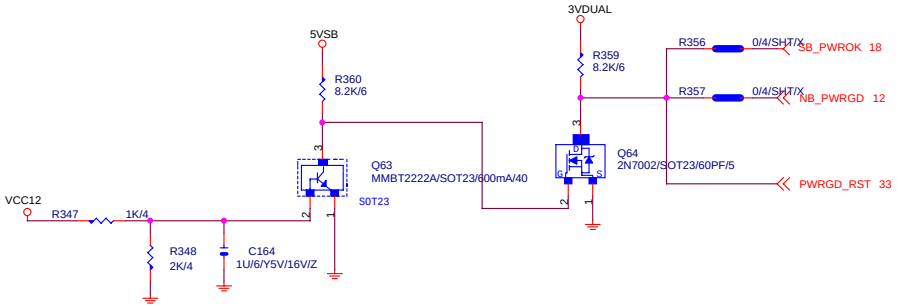

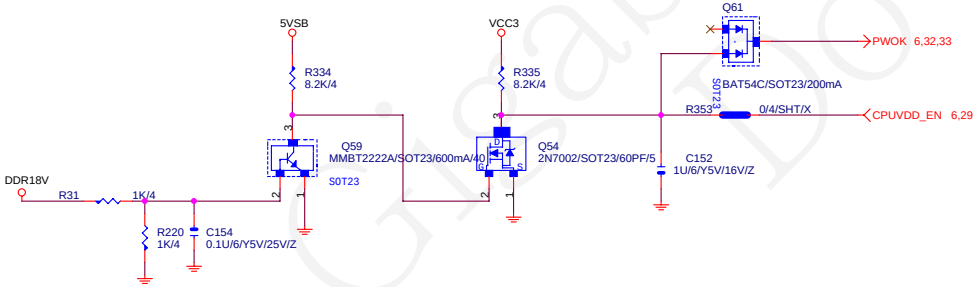

Title	POWER SEQUENCE	
Size	Document Number GA-MA69VM-S2	Rev 1.0
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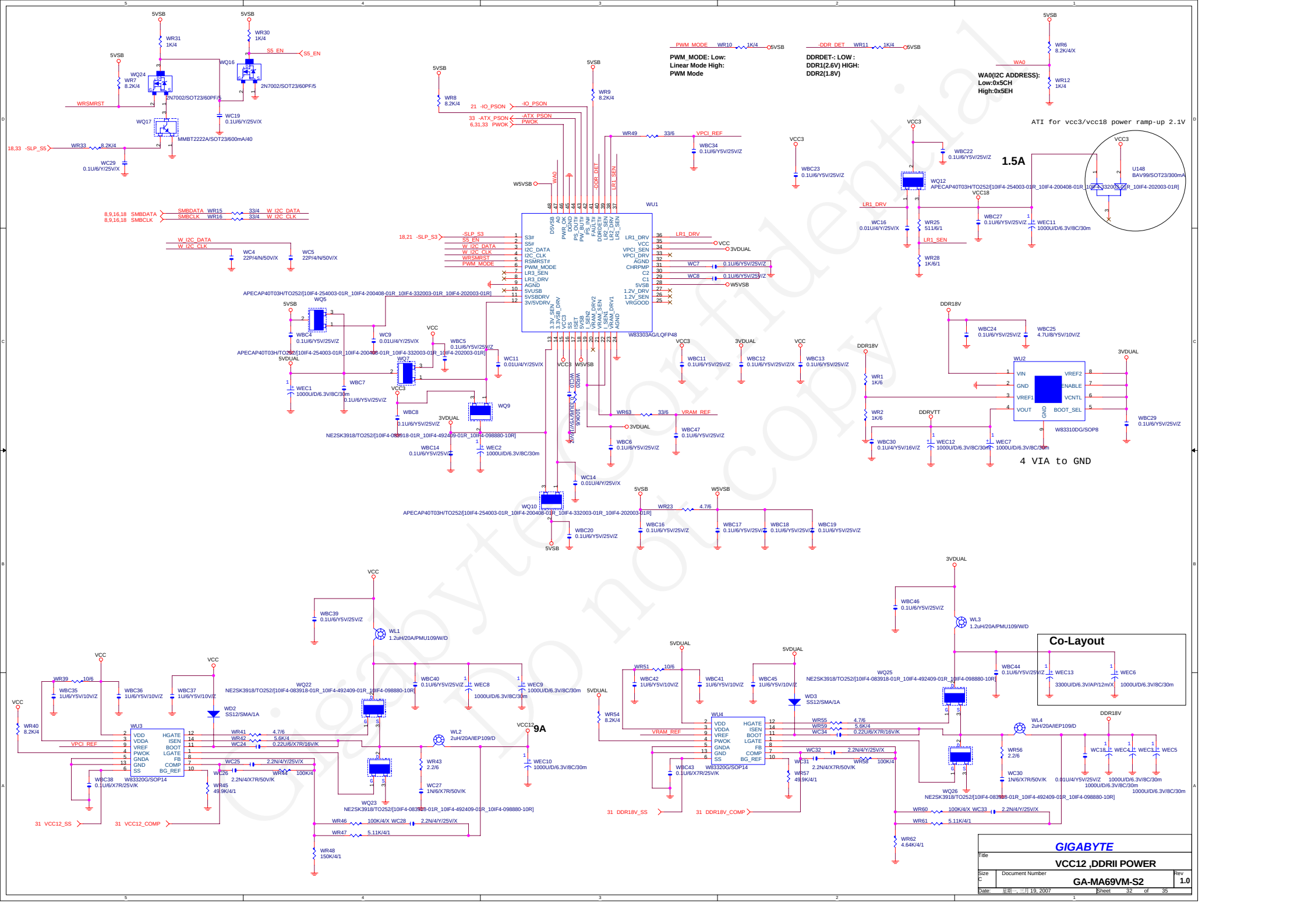
PWM_MODE: Low:
Linear Mode High:
PWM Mode
DDRDET-: LOW :
DDR1(2.6V) HIGH:
DDR2(1.8V)
WA0(I2C ADDRESS):
Low:0x5CH
High:0x5EH
ATI for vcc3/vcc18 power ramp-up 2.1V
1.5A
4 VIA to GND
Co-Layout
9A
W83303AG/LQFP48
W83310DG/SOP8
W83320G/SOP14
NE2SK3918/TO252/[10IF4-083918-01R_10IF4-492409-01R_10IF4-098880-10R]
APECAP40T03H/TO252/[10IF4-254003-01R_10IF4-200408-01R_10IF4-332003-01R_10IF4-202003-01R]
2N7002/SOT23/60PF/5
MMBT2222A/SOT23/600mA/40
BAV99/SOT23/300mA
SS12/SMA/1A
GIGABYTE
VCC12 ,DDRII POWER
GA-MA69VM-S2
1.0
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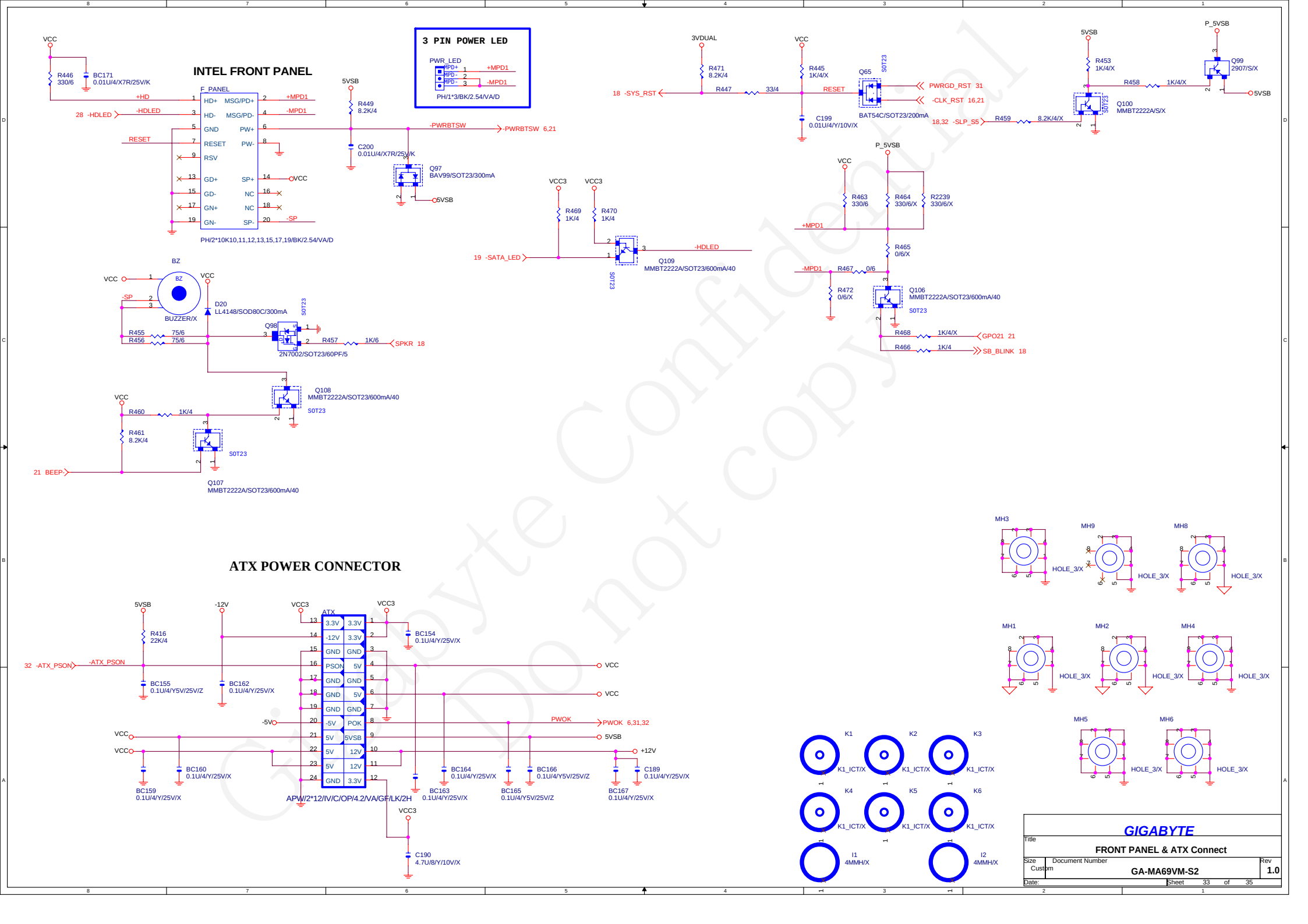
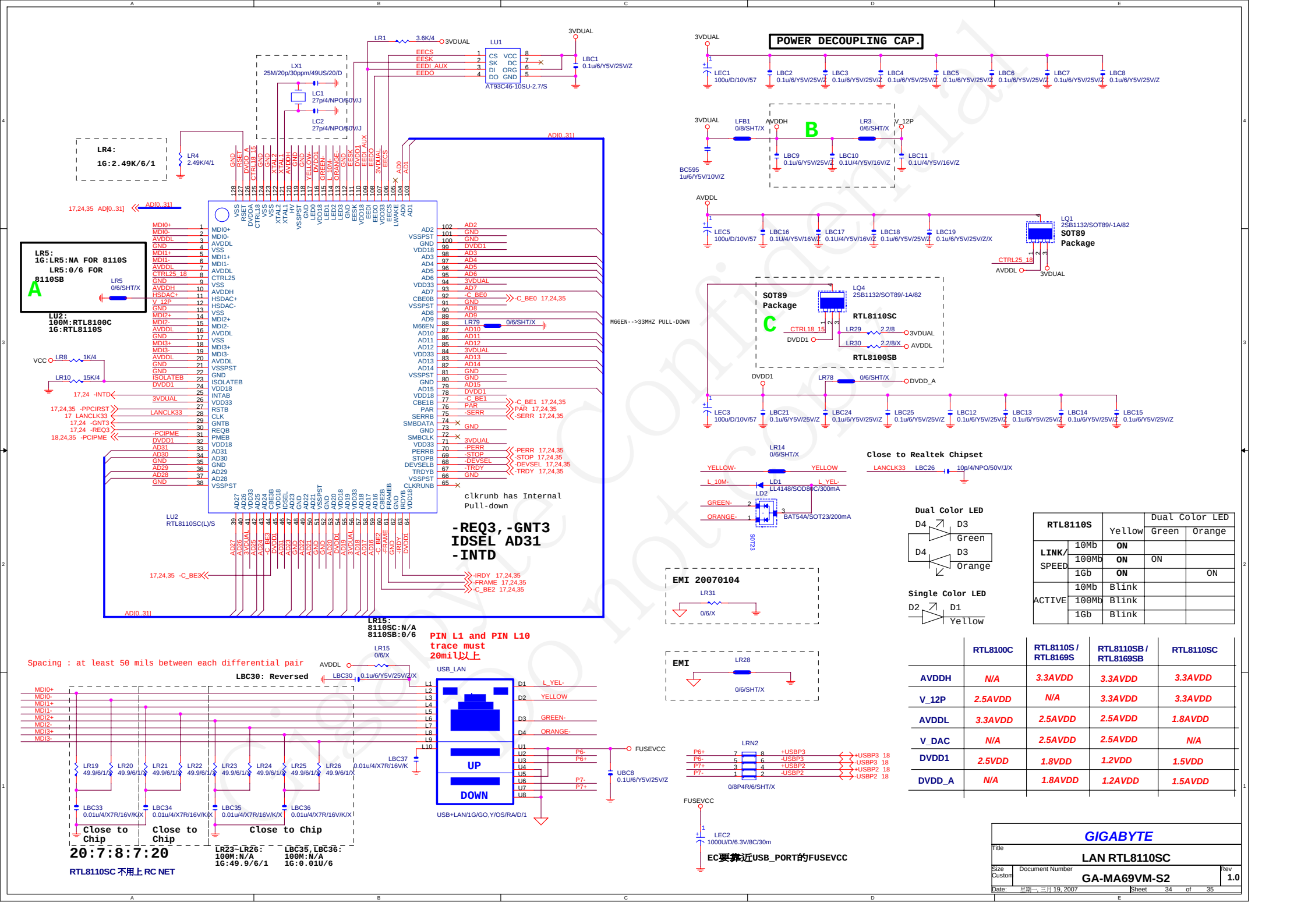
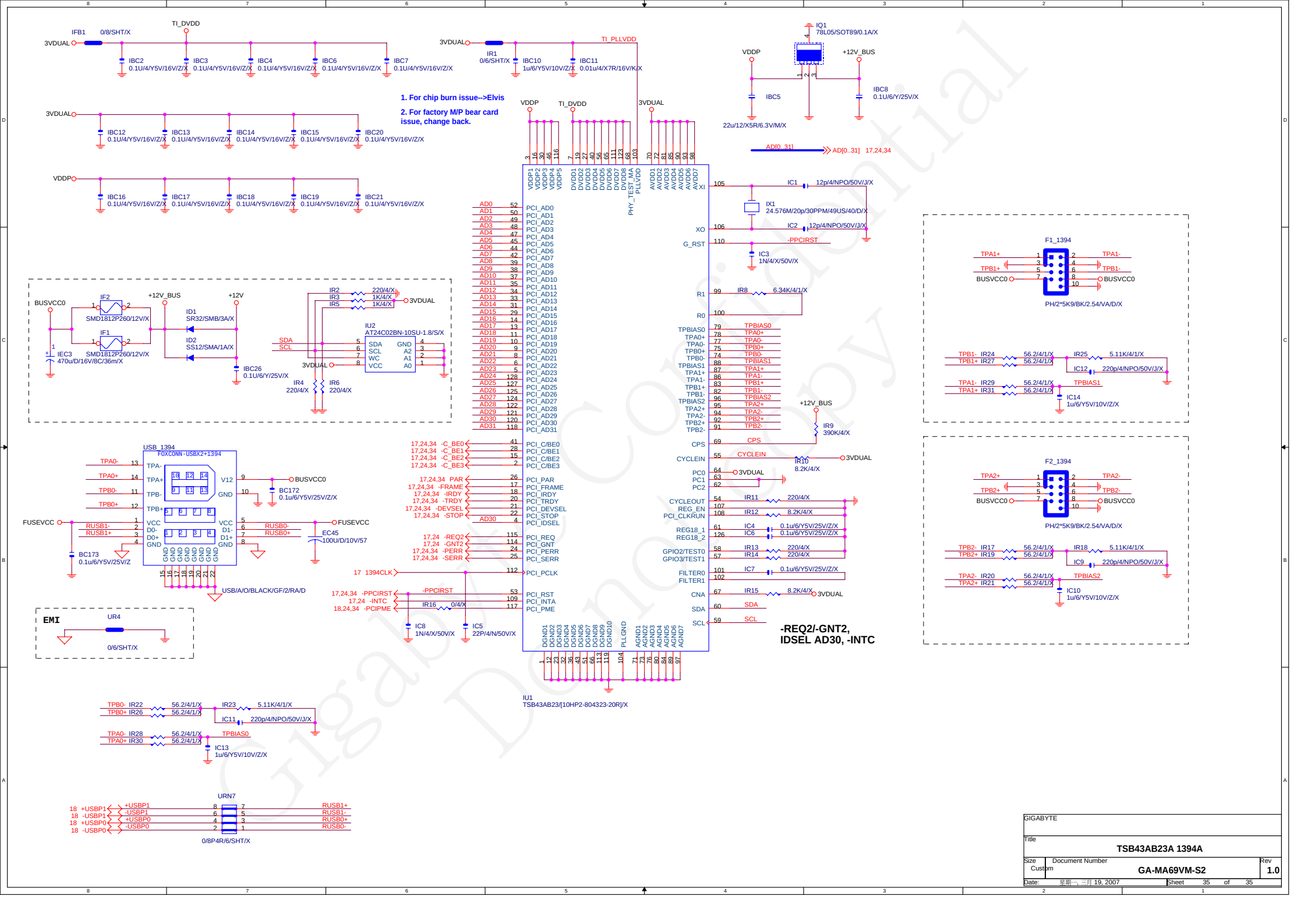




RTL8110S		Yellow	Dual Color LED	
			Green	Orange
LINK/SPEED	10Mb	ON		
	100Mb	ON	ON	
	1Gb	ON		ON
ACTIVE	10Mb	Blink		
	100Mb	Blink		
	1Gb	Blink		

	RTL8100C	RTL8110S / RTL8169S	RTL8110SB / RTL8169SB	RTL8110SC
AVDDH	N/A	3.3AVDD	3.3AVDD	3.3AVDD
V_12P	2.5AVDD	N/A	3.3AVDD	3.3AVDD
AVDDL	3.3AVDD	2.5AVDD	2.5AVDD	1.8AVDD
V_DAC	N/A	2.5AVDD	2.5AVDD	N/A
DVDD1	2.5VDD	1.8VDD	1.2VDD	1.5VDD
DVDD_A	N/A	1.8AVDD	1.2AVDD	1.5AVDD


1. For chip burn issue-->Elvis
2. For factory M/P bear card issue, change back.
-REQ2/-GNT2, IDSEL AD30, -INTC
IU1 TSB43AB23/[10HP2-804323-20R]/X
USB_1394 FOXCONN-USBX2+1394
USB/A/O/BLACK/GF/2/RA/D
URN7
0/8P4R/6/SHT/X
F1_1394
PH/2*5K9/BK/2.54/VA/D/X
F2_1394
PH/2*5K9/BK/2.54/VA/D/X
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GIGABYTE
Title
TSB43AB23A 1394A
Size Custom
Document Number GA-MA69VM-S2
Rev 1.0
Date: 星期一, 三月 19, 2007
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