


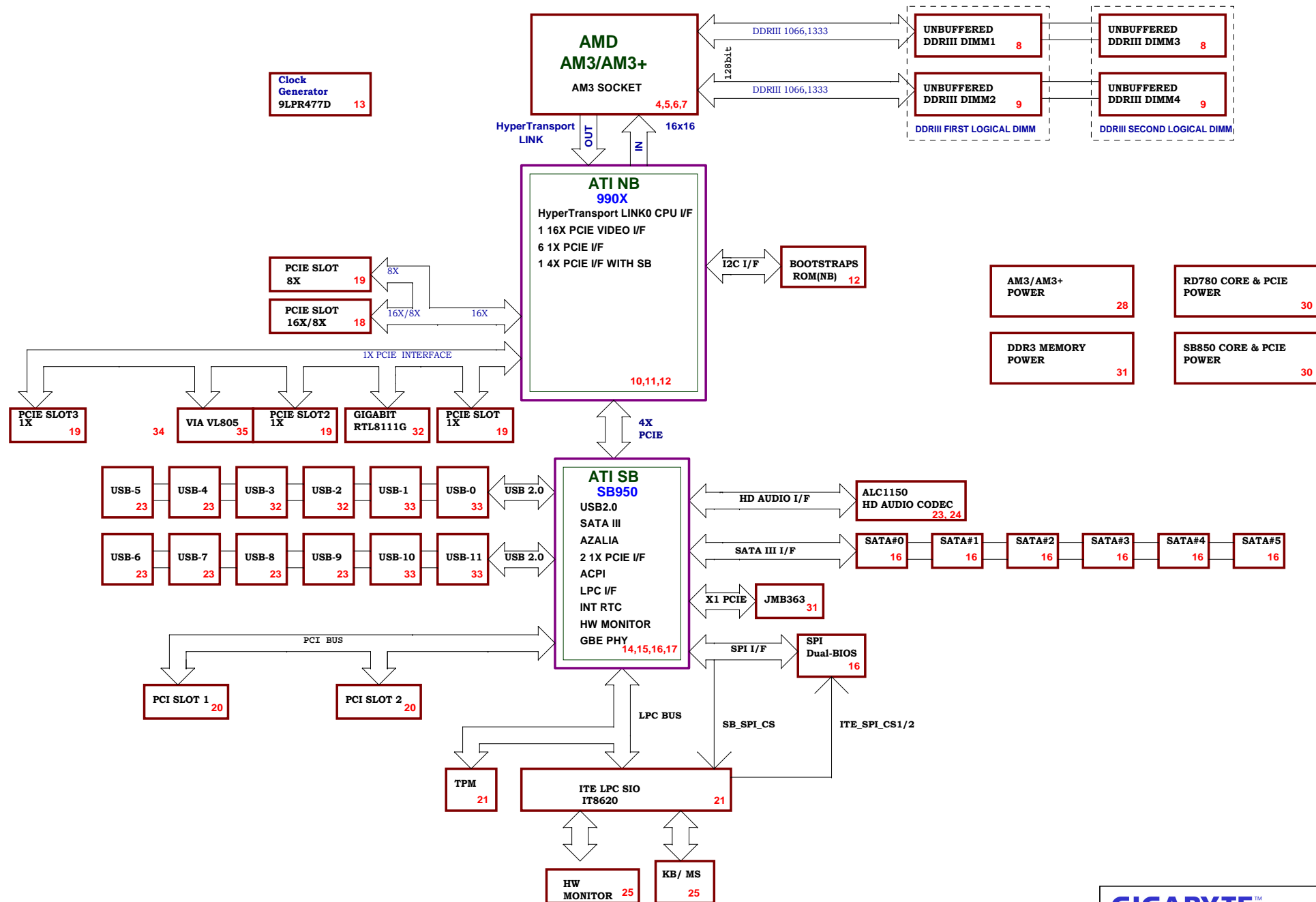
Revision : 1.0

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05	CPU DDRIII MEMORY
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09	DDRIII CHANNEL B
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19	PCI EXPRESS x16
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22	IT8620CX LPC IO ,Dual-BIOS ,TPM
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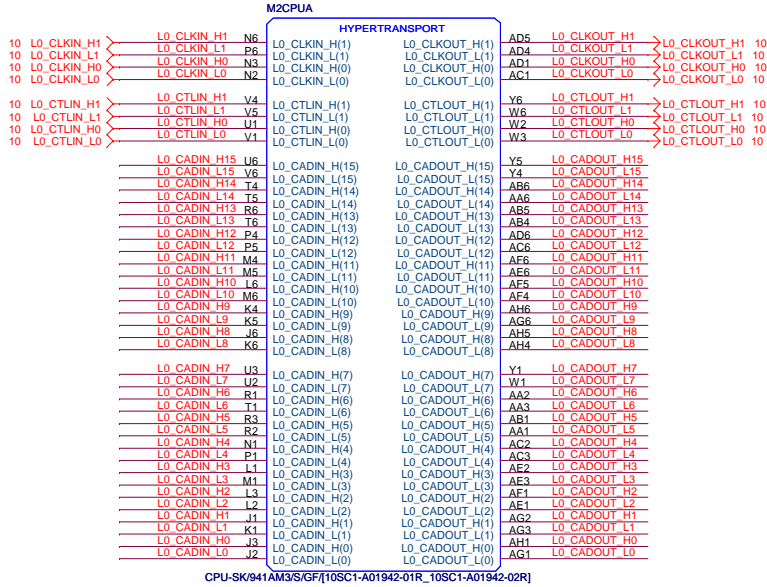
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Title			
<h2>COVER SHEET</h2>			
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GIGABYTE™			
Title BOM & PCB HISTORY			
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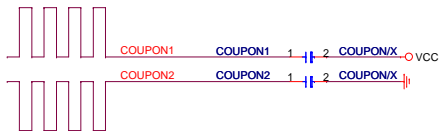


L0_CADIN_L[0..15] < L0_CADIN_L[0..15] 10
L0_CADIN_H[0..15] < L0_CADIN_H[0..15] 10
L0_CADOUT_L[0..15] < L0_CADOUT_L[0..15] 10
L0_CADOUT_H[0..15] < L0_CADOUT_H[0..15] 10

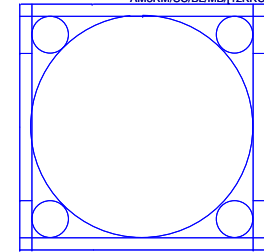


CPU_VDD_RUN = VCORE
CPU_VDDA_RUN = VDDA25
VLDT_RUN = VCC12_HT
CPU_VDDIO_SUS = DDR15V
CPU_VDDR = CPU_VDDR12

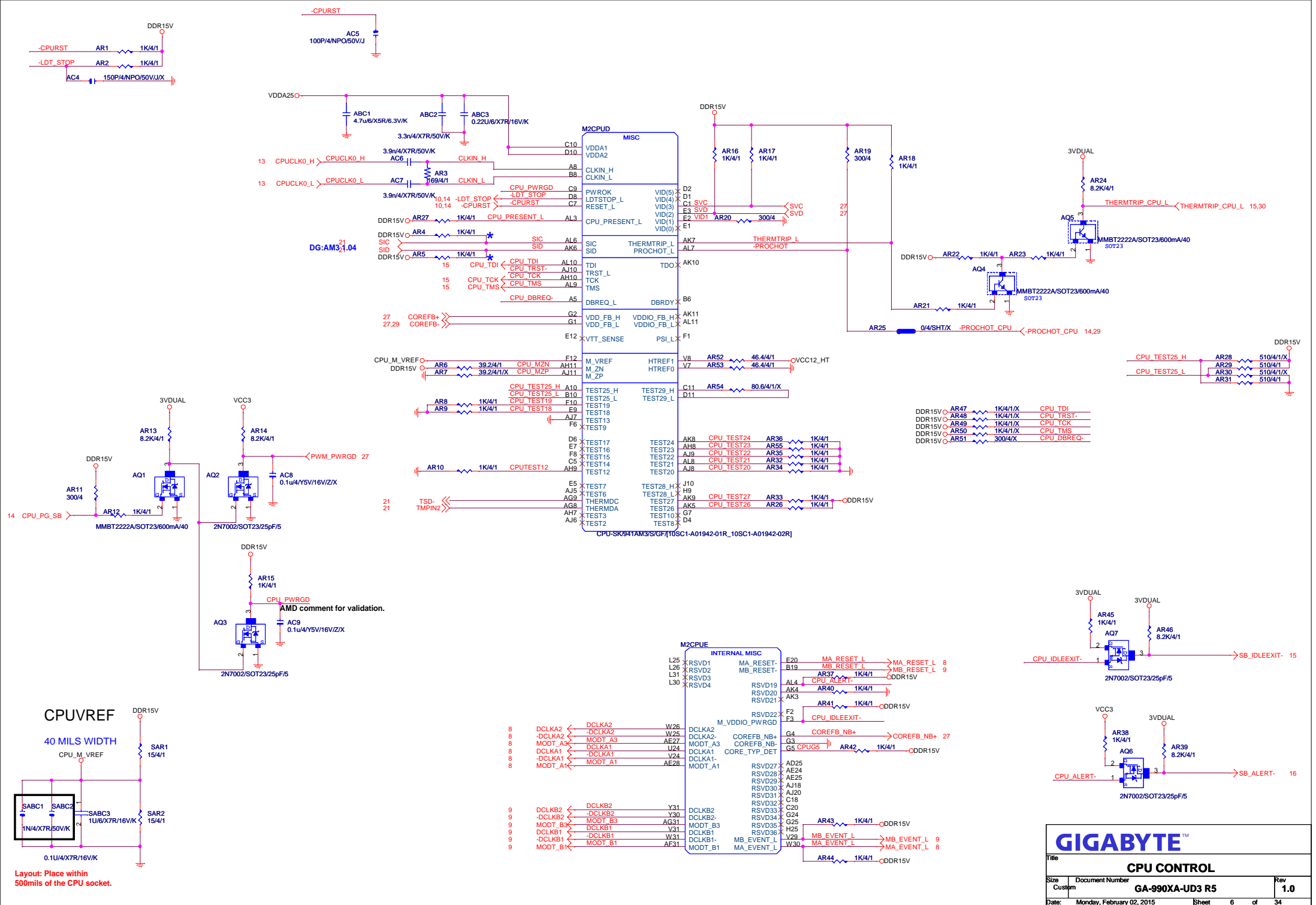
VLDT_A = VCC12_HT
VLDT_B = HT12B



M2CPU
AM3RM/SC/BL/MB/12KRC-04K812-31R



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CPU HYPER TRANSPORT			
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VCORE_NB

VCORE_NB

ABC5 22uB/X5R/6.3V

ABC6 22uB/X5R/6.3V

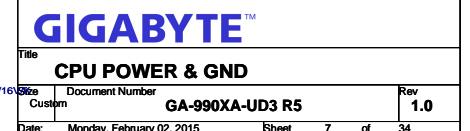
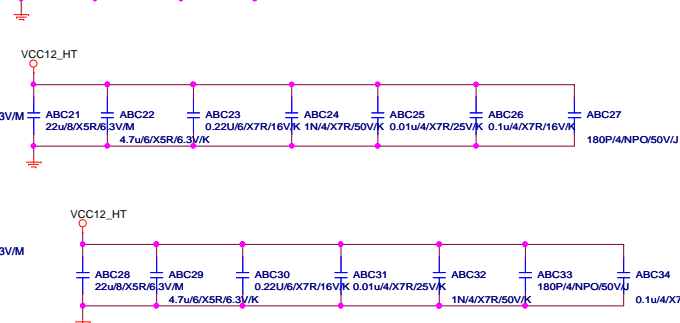
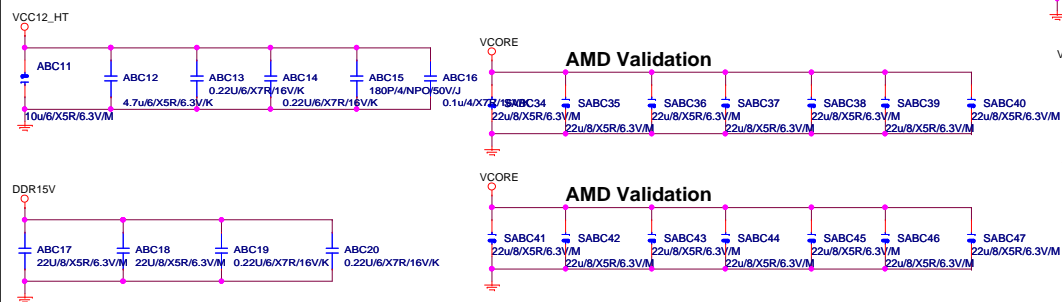
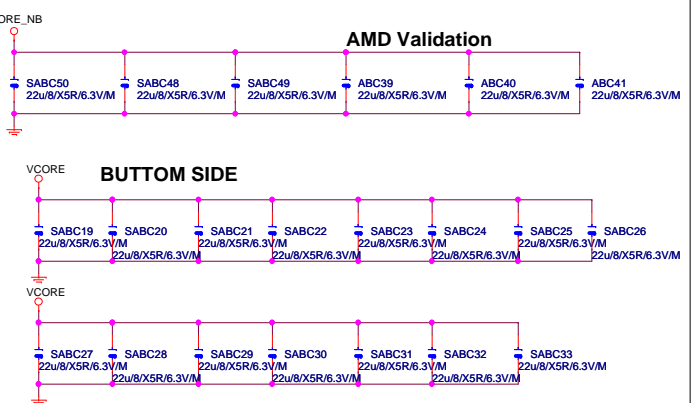
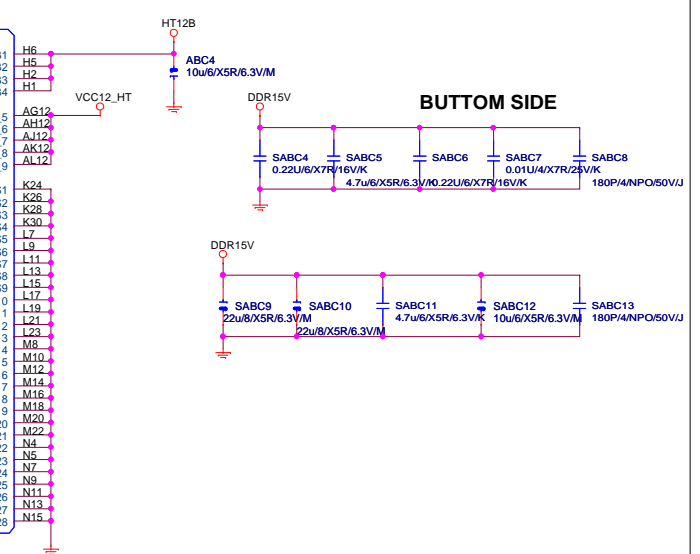
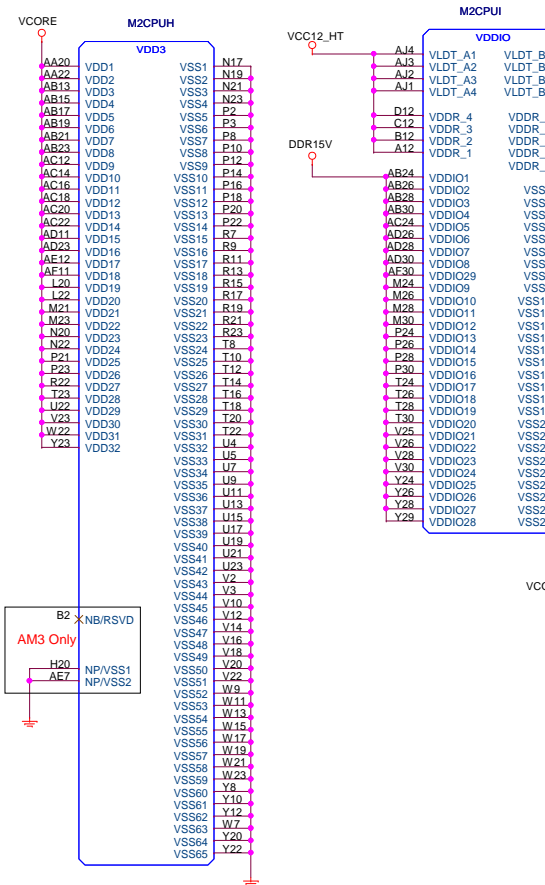
ABC7 4.7uB/X5R/6.3V

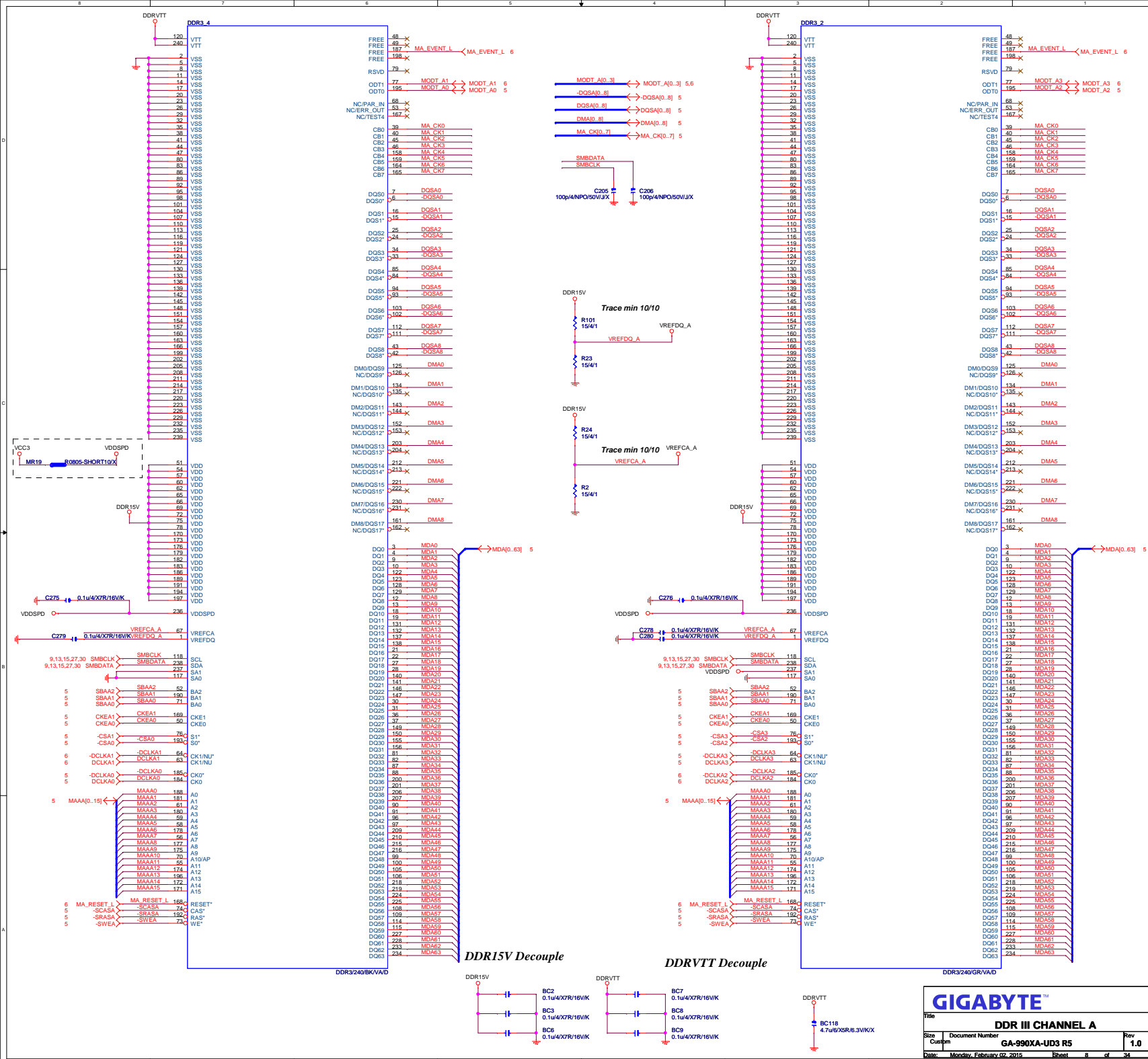
ABC8 0.22uB/X7R/6.3V

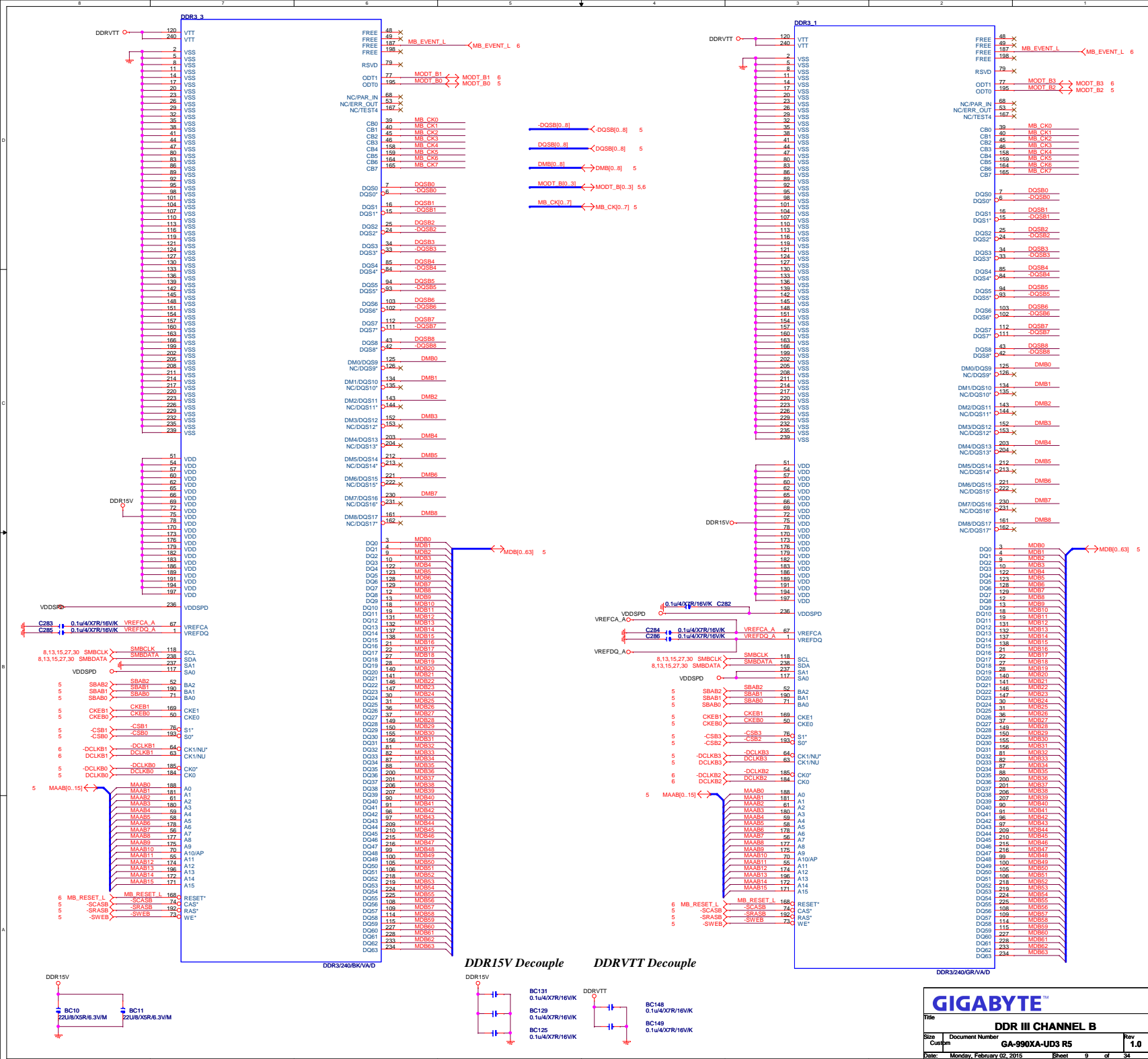
ABC9 0.01uB/X7R/25V

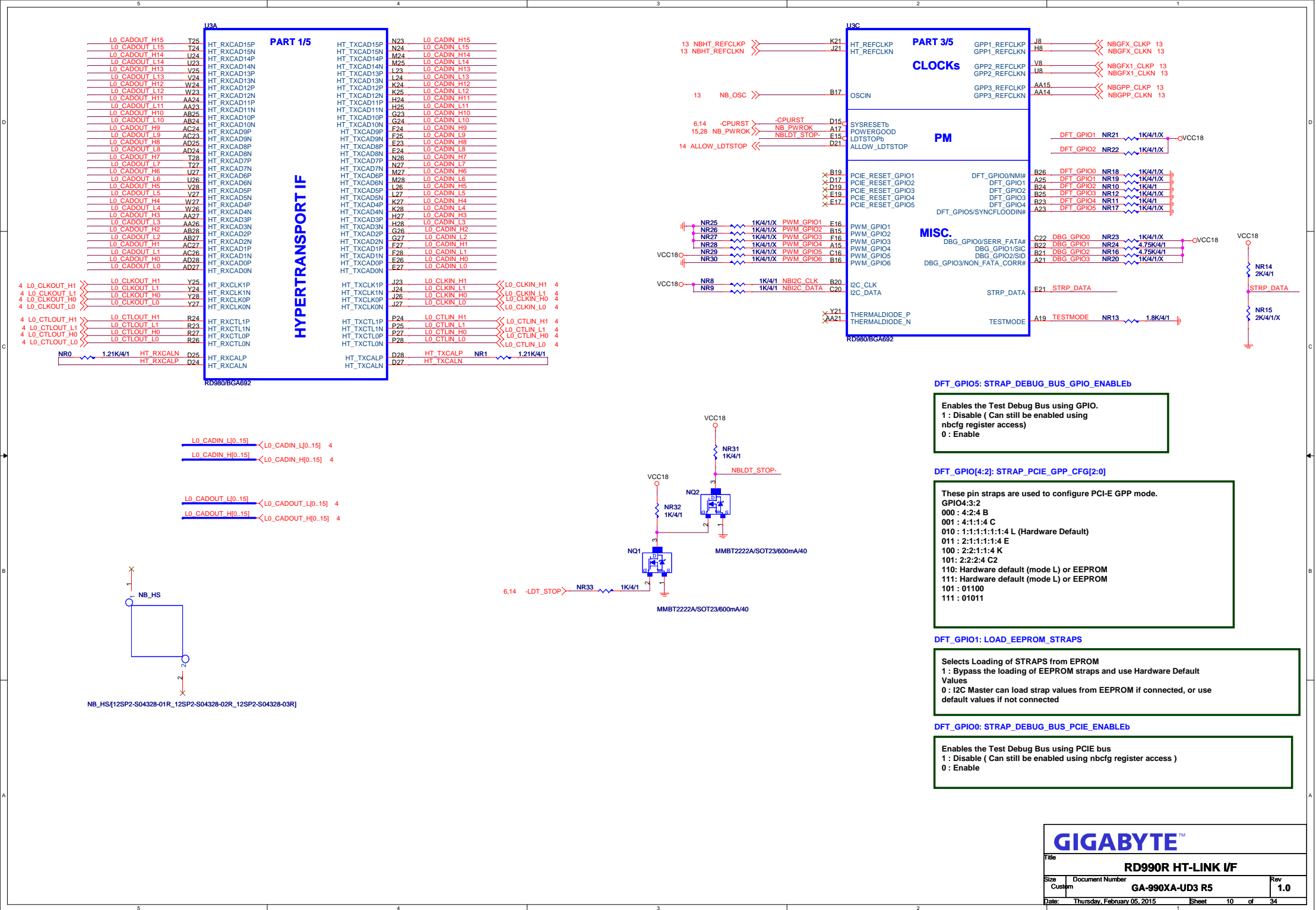
ABC10 180pNPO/50V/J

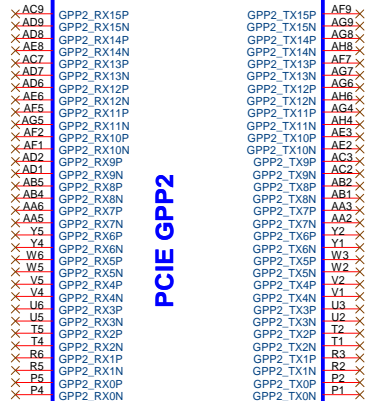
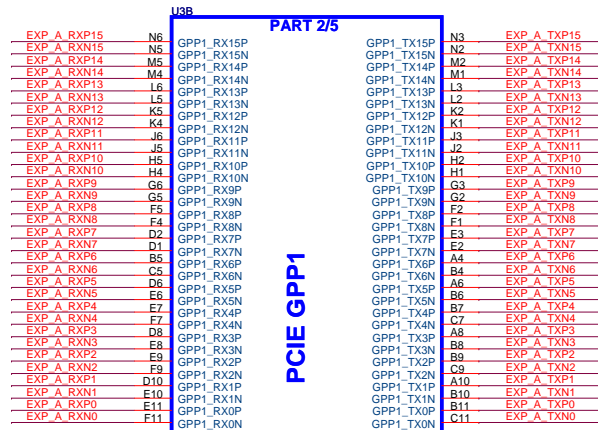
GND









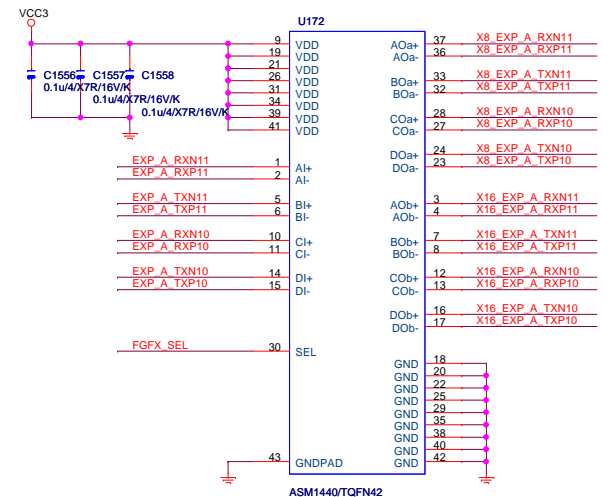
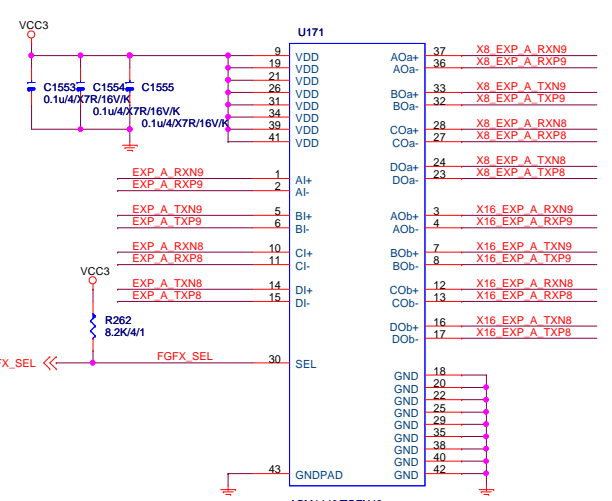
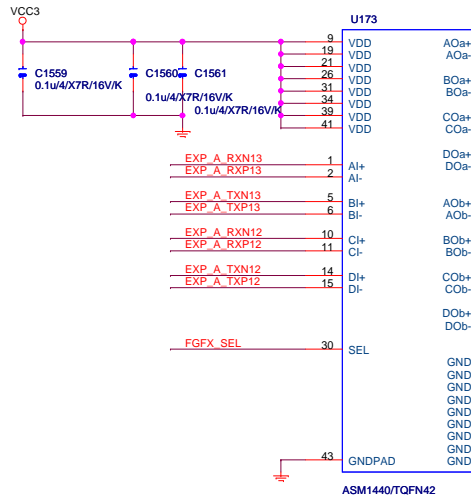
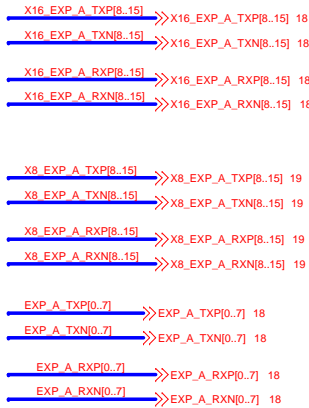
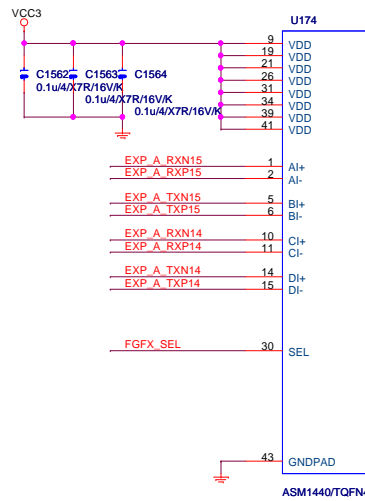


PCI_E slot TX need CAP close to slot side

PLACE THESE CAP CLOSE TO NB.



RD980/BGA692



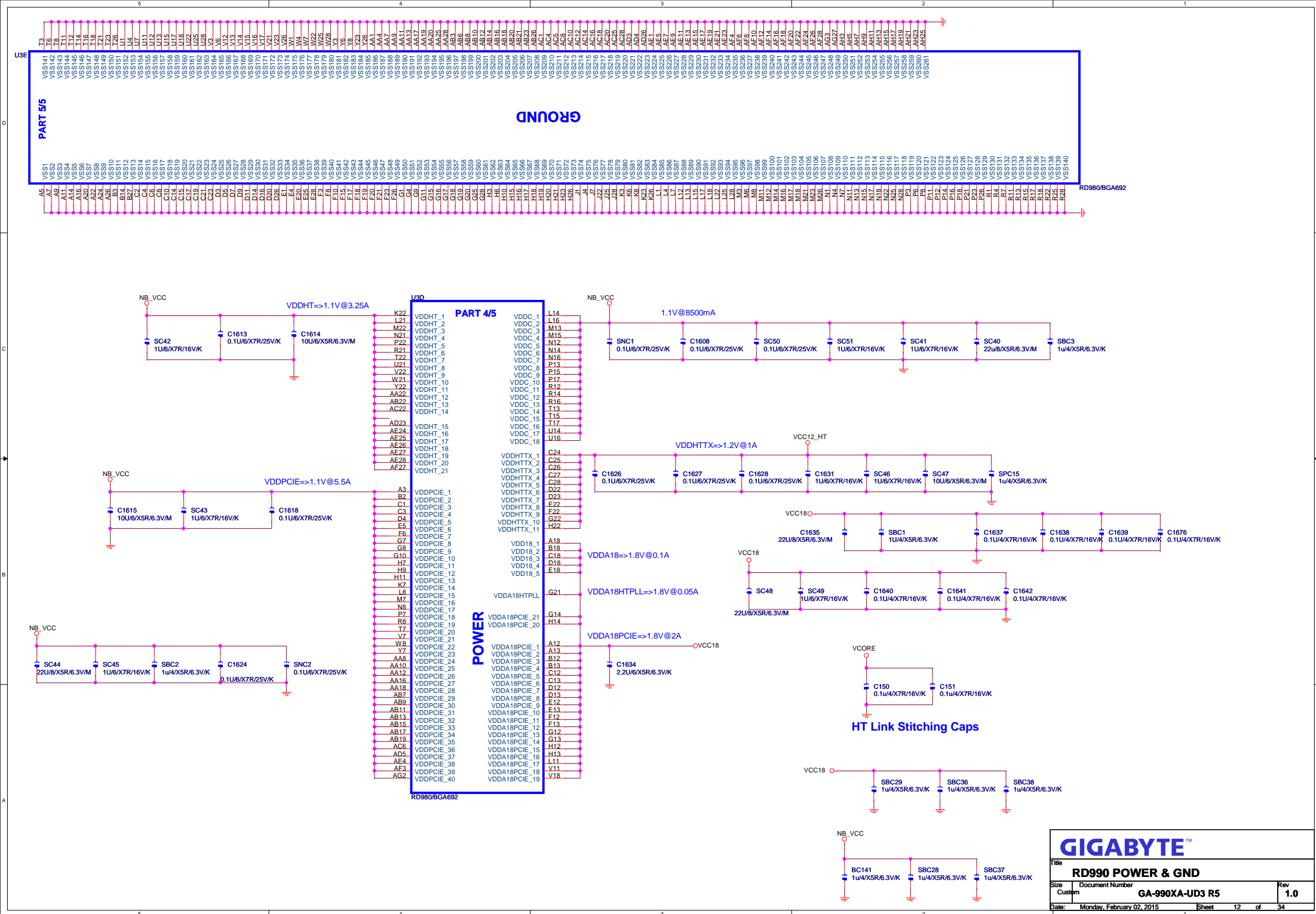
Function	SEL
xI--> xOa	L (X8)
xI--> xOb	H (X16)

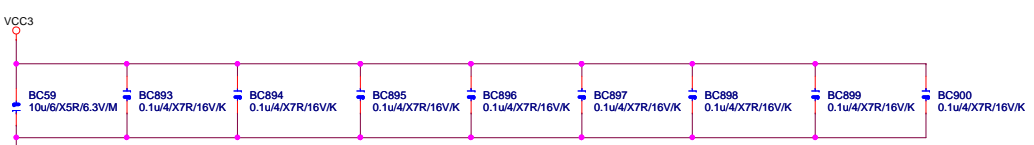
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Title **RD990 PCIE I/F_Switch**

Size Custom Document Number **GA-990XA-UD3 R5** Rev **1.0**

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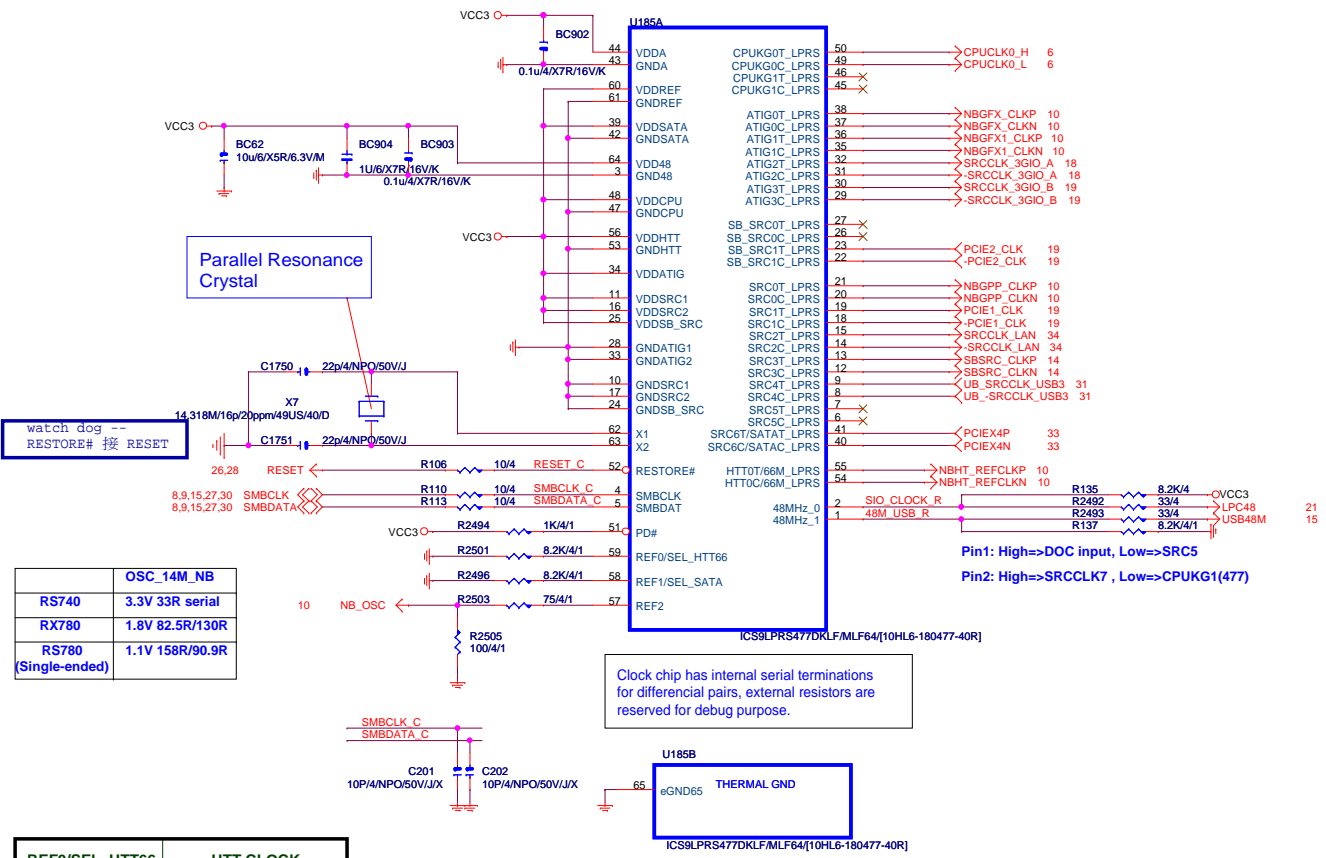
- 1- PLACE ALL THE SERIES TERMINATION RESISTORS AS CLOSE TO U800 AS POSSIBLE
- 2- ROUTE ALL SRCCLKTx AND SRCCLKCx AS DIFFERENT PAIR RULE
- 3- PUT DECOUPLING CAPS CLOSE TO U800 POWER PIN

Place R800/801 less than 500 mils away from U800
R851 less than 100 mils away from R800/801
route CPU clock as 100ohm differential pair

NB CLOCK INPUT TABLE

NB CLOCKS	RS740	RX780	RS780	
HT_REFCLKP	66M SE(SE)	100M DIFF	100M DIFF	
HT_REFCLKN	NC	100M DIFF	100M DIFF	
REFCLK_P	14M SE (3.3V)	14M SE (1.8V)	14M SE (1.1V)	100M DIFF
REFCLK_N	NC	NC	vref	100M DIFF
GFX_REFCLK*	100M DIFF	100M DIFF	100M DIFF	100M DIFF
GPP_REFCLK	NC	100M DIFF	100M DIFF(OUT)	
GPPSB_REFCLK	100M DIFF	100M DIFF	100M DIFF	

* the GFX_REFCLK input is required for all cases



	OSC_14M_NB
RS740	3.3V 33R serial
RX780	1.8V 82.5R/130R
RS780 (Single-ended)	1.1V 158R/90.9R

REF0/SEL_HTT66	HTT CLOCK
0	100.00 DIFFERENTIAL
1	66.66 SINGLE END

REF1/SEL_SATA	SRC6/SATA
0	100.00 DIFFERENTIAL SPREADING SRC CLOCK
1	100.00 NON-SPREADING DIFFERENTIAL SATA CLOCK

Clock chip has internal serial terminations for differential pairs, external resistors are reserved for debug purpose.

ICS9LPRS477DKLF/MLF64[10HL6-180477-40R]

U185B
eGND65 THERMAL GND
ICS9LPRS477DKLF/MLF64[10HL6-180477-40R]

GIGABYTE™

Title

RTM880N-793

Size

Custom

Document Number

GA-990XA-UD3 R5

Rev

1.0

Date

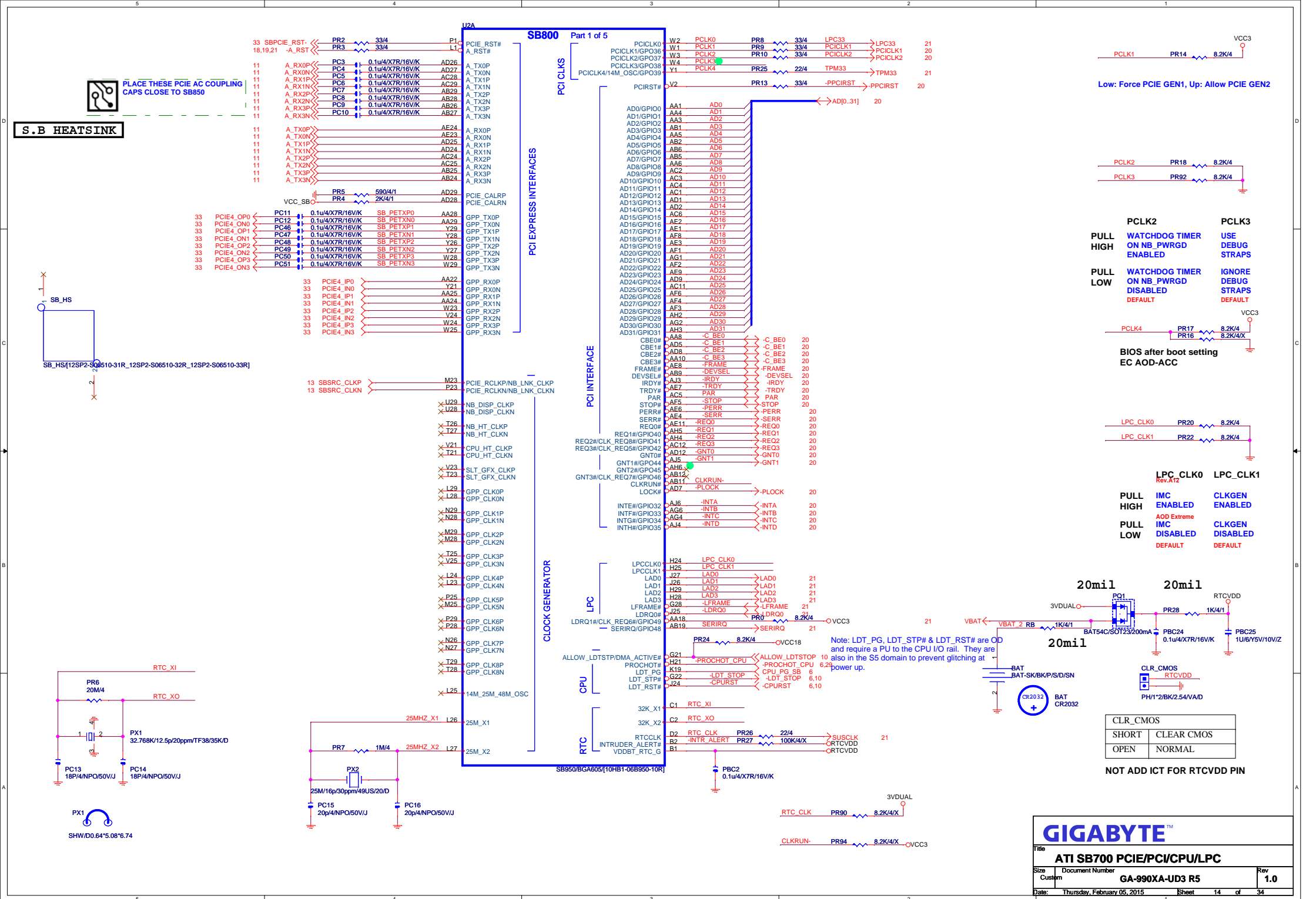
Monday, February 02, 2015

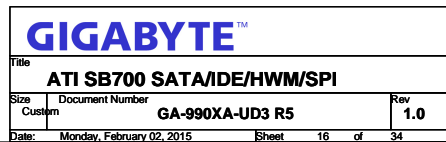
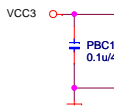
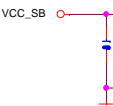
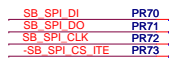
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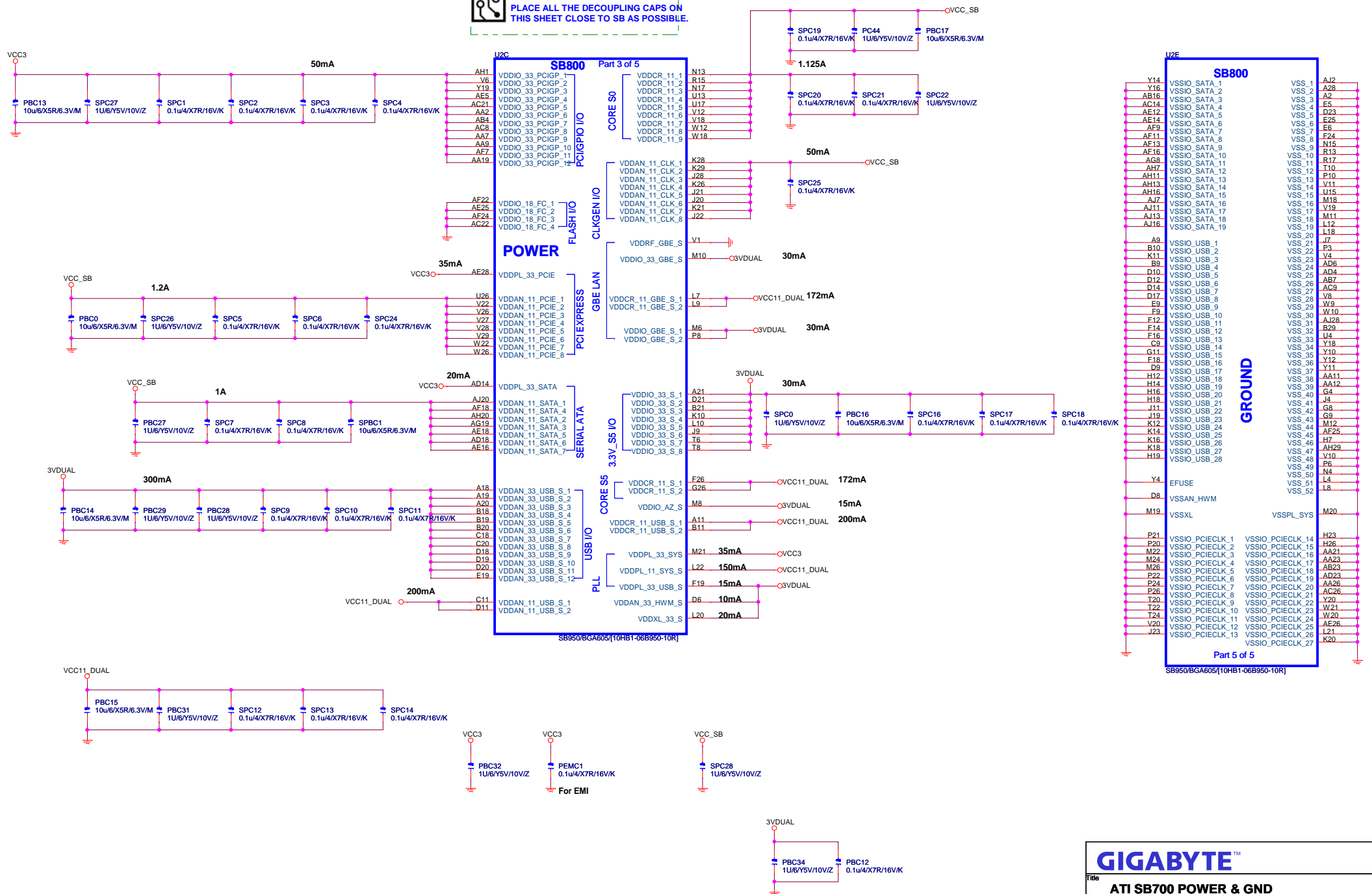
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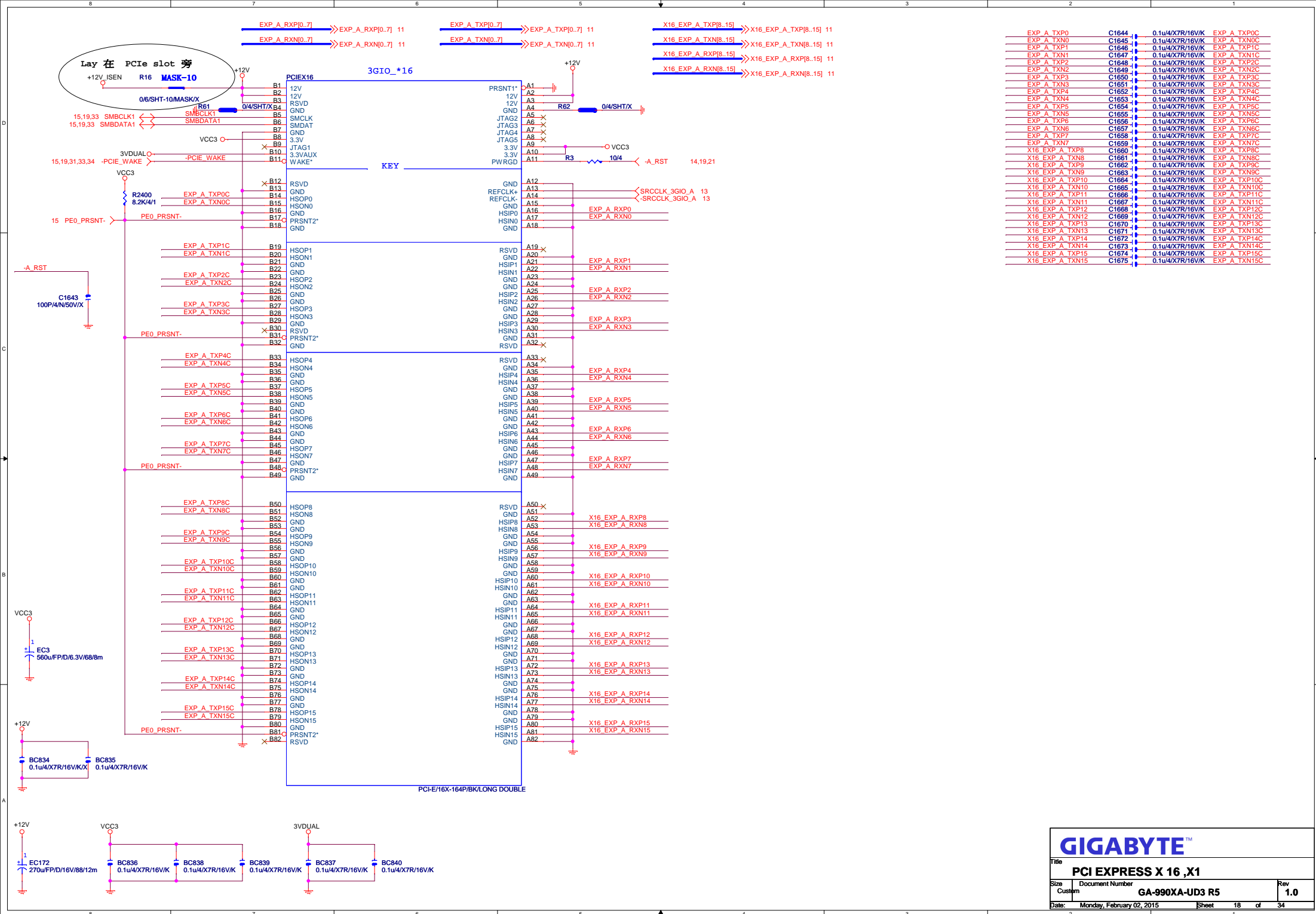


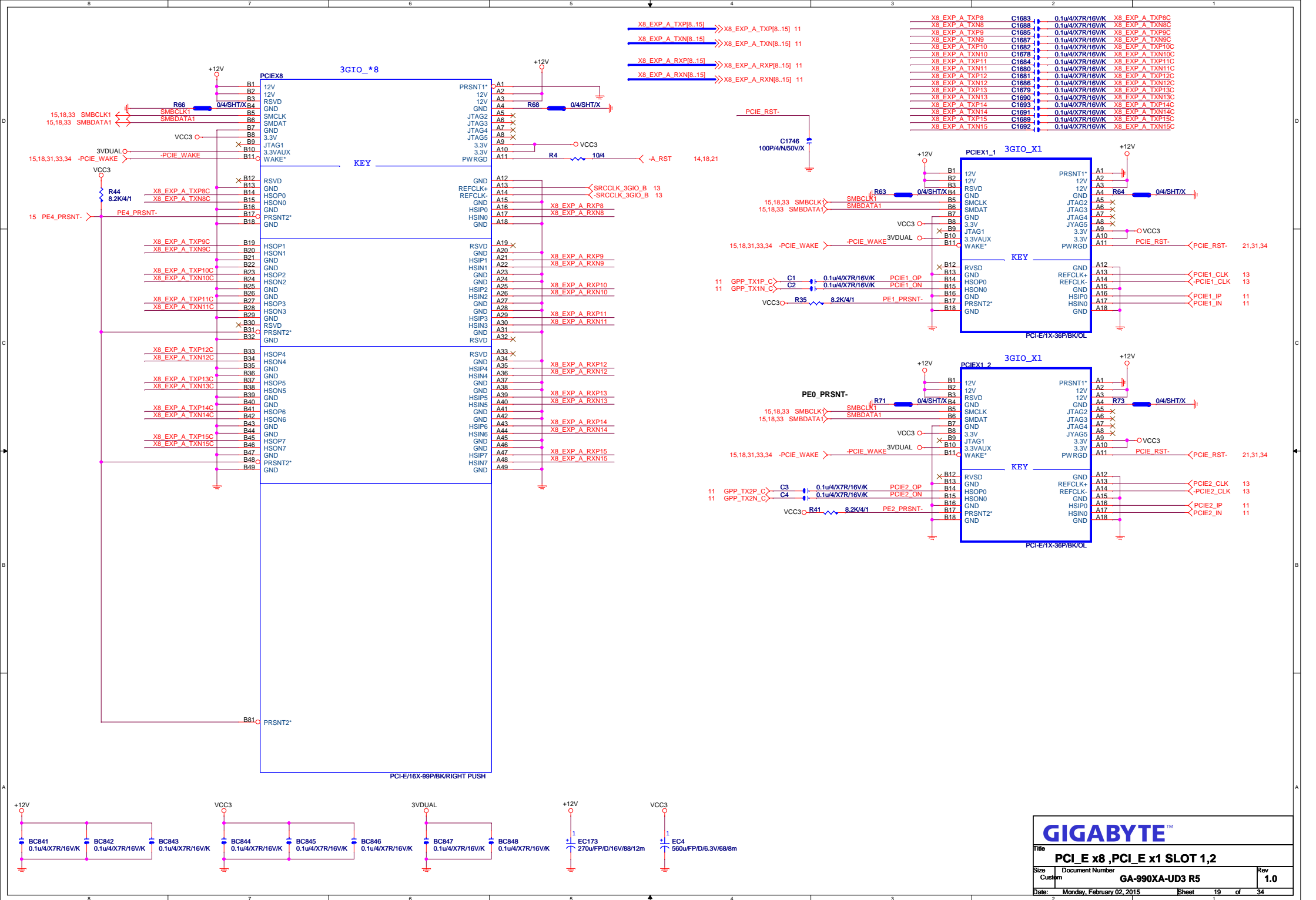


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ATI SB700 POWER & GND

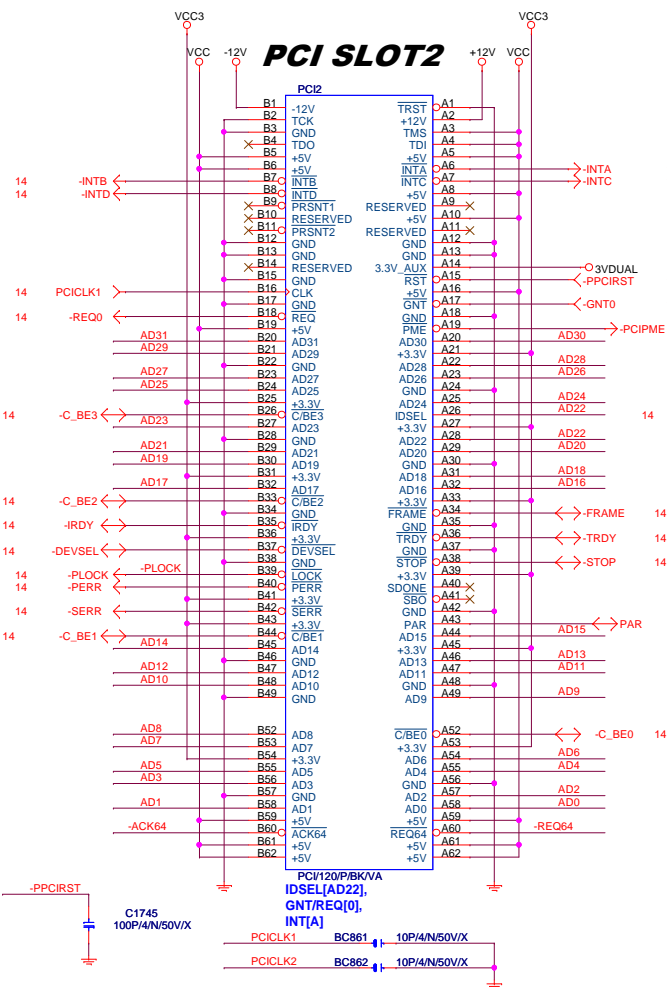
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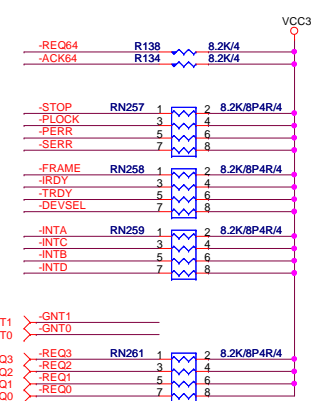
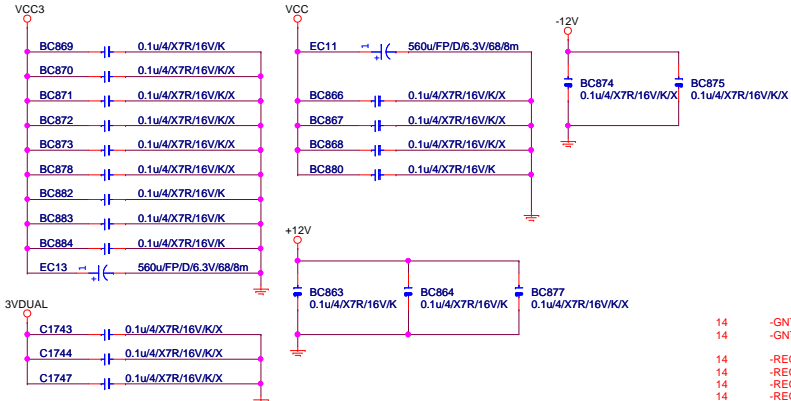
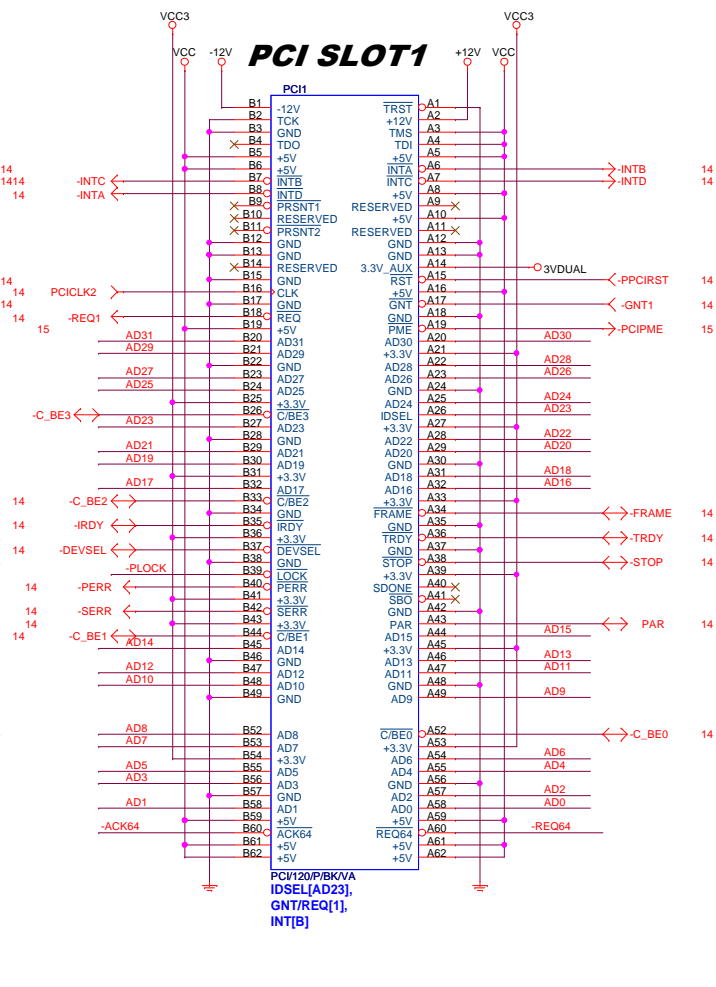


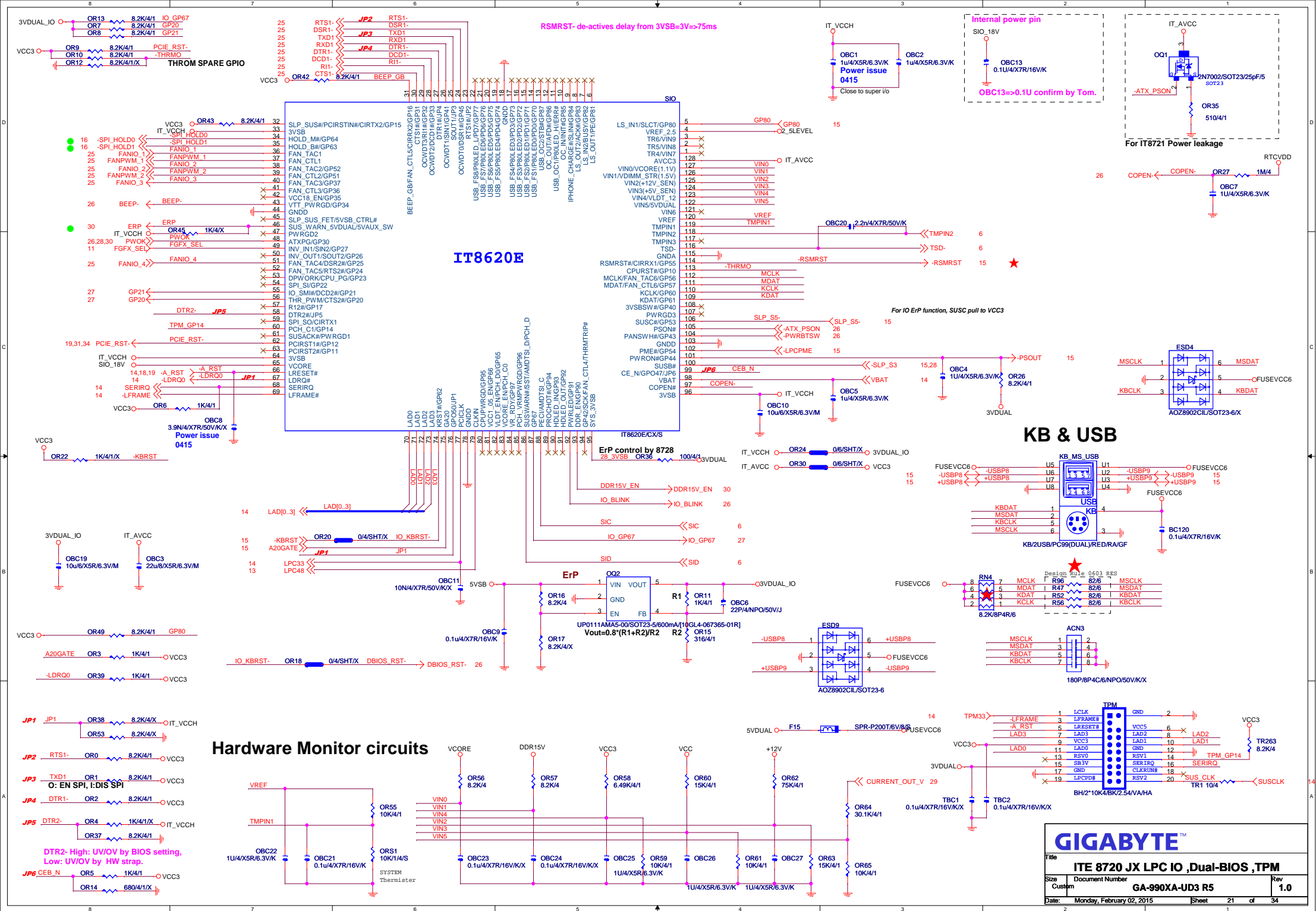
PCI SLOT 1,2

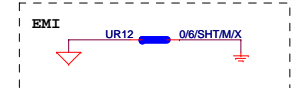
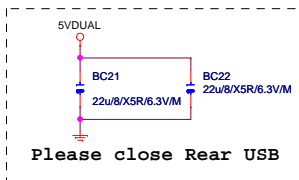
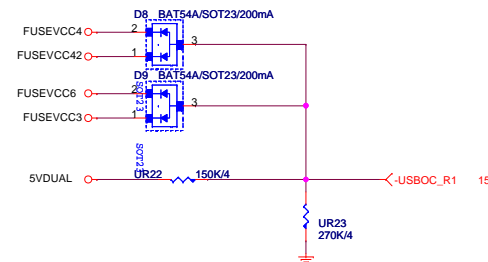
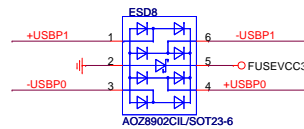
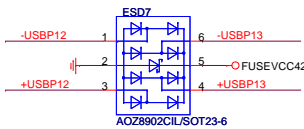
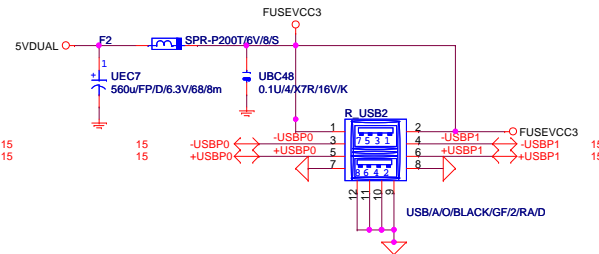
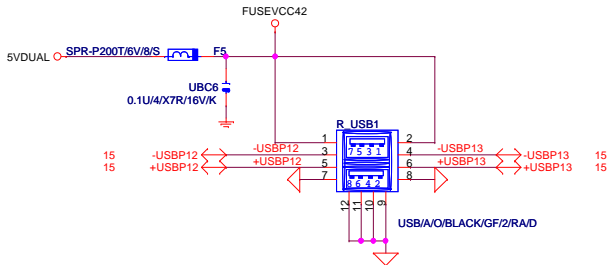
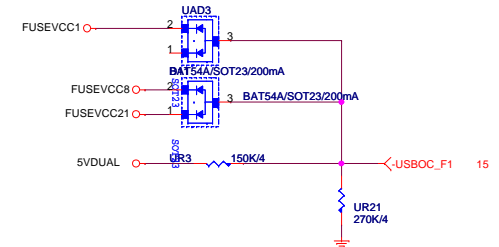
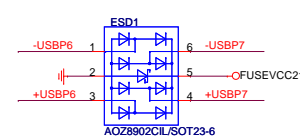
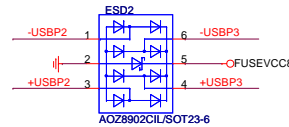
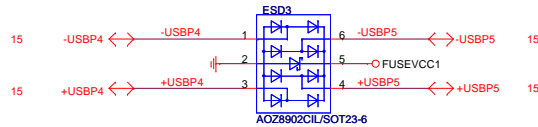
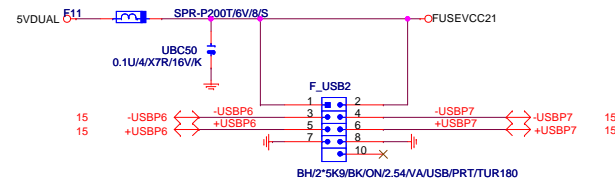
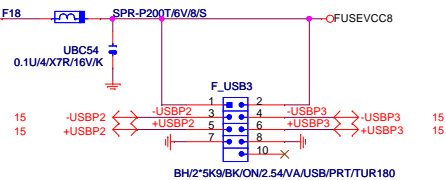
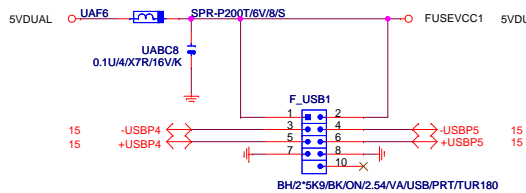
PCI SLOT2



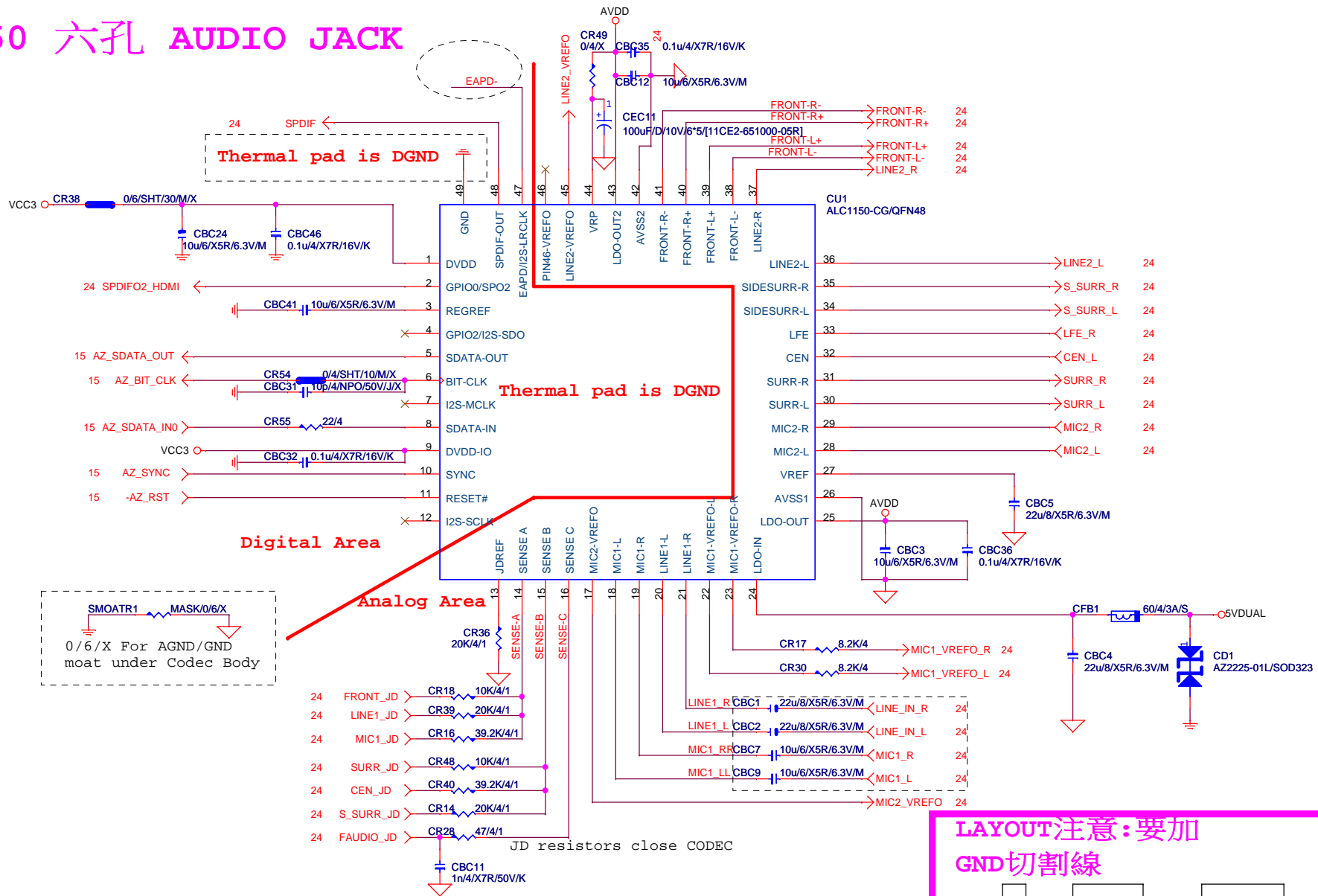
PCI SLOT1







ALC1150 六孔 AUDIO JACK

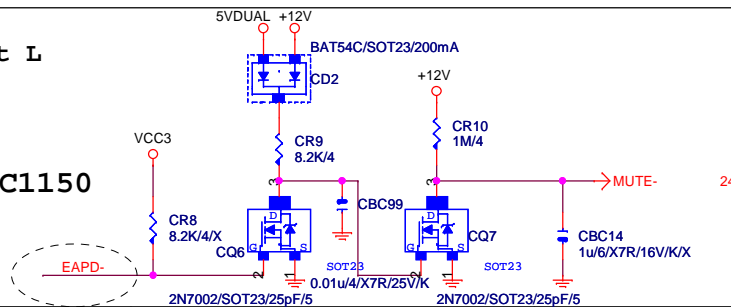


**LAYOUT注意:要加
GND切割線**



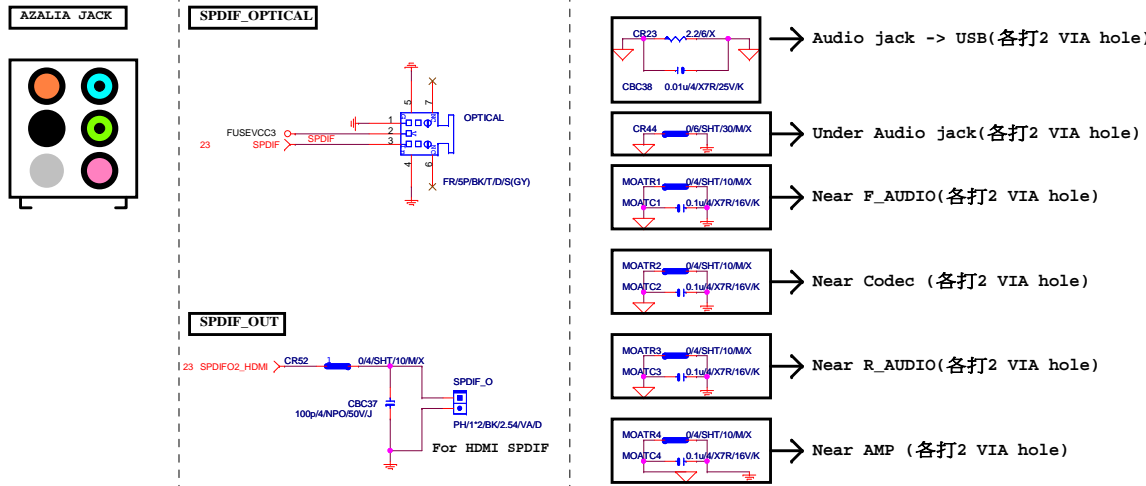
EAPD: Default L
H : ON
L : OFF

Close to ALC1150

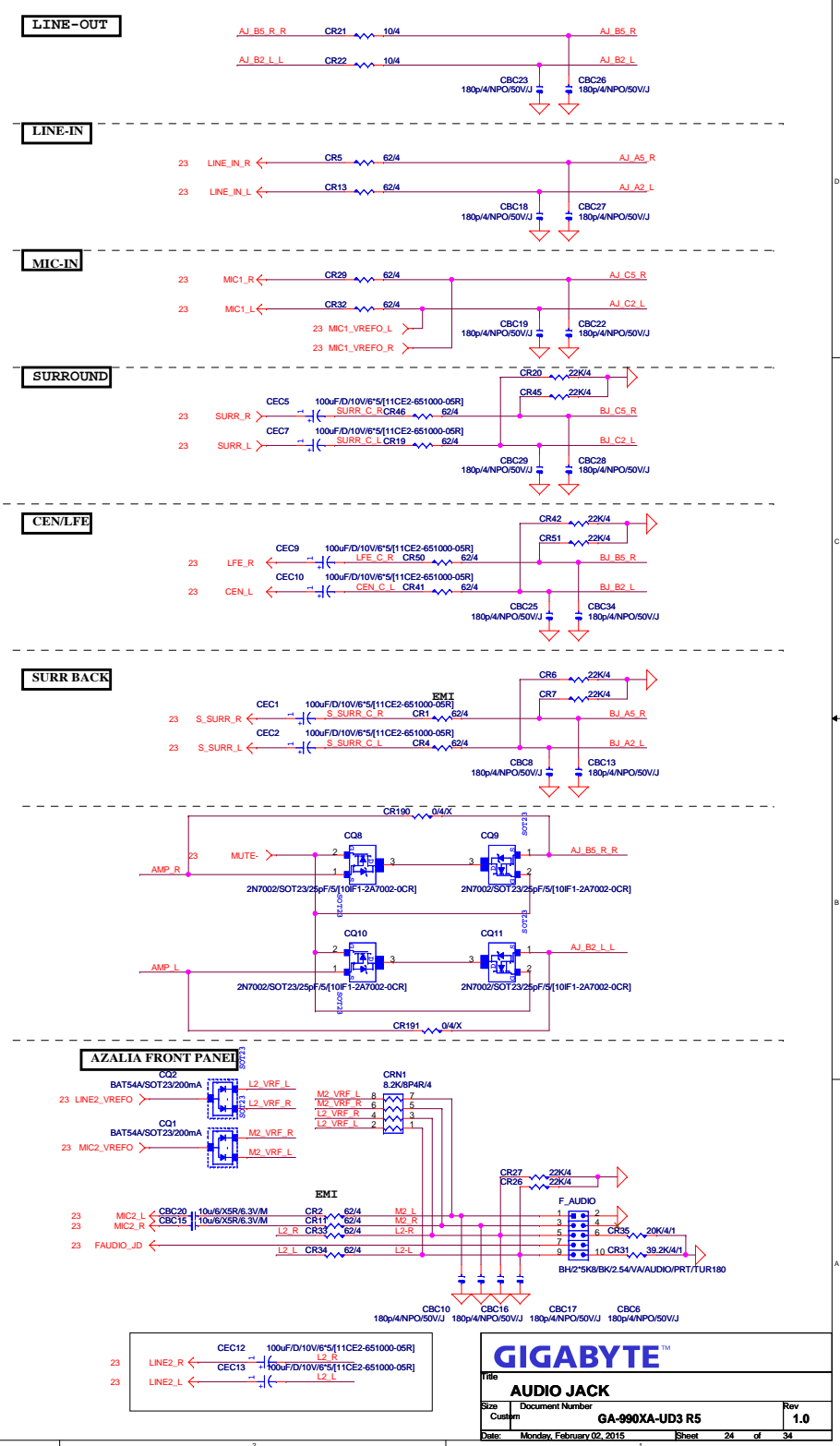
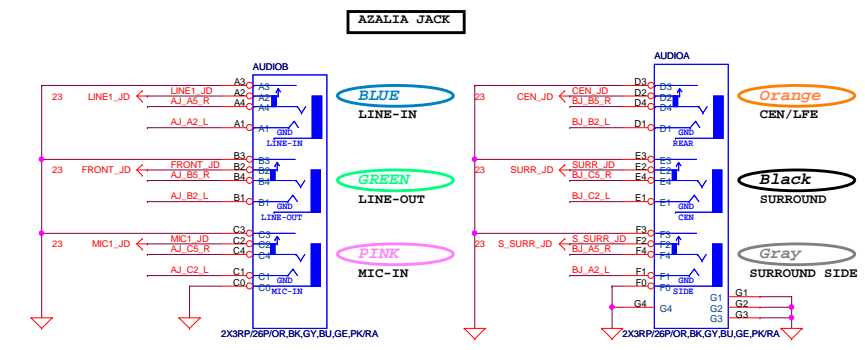
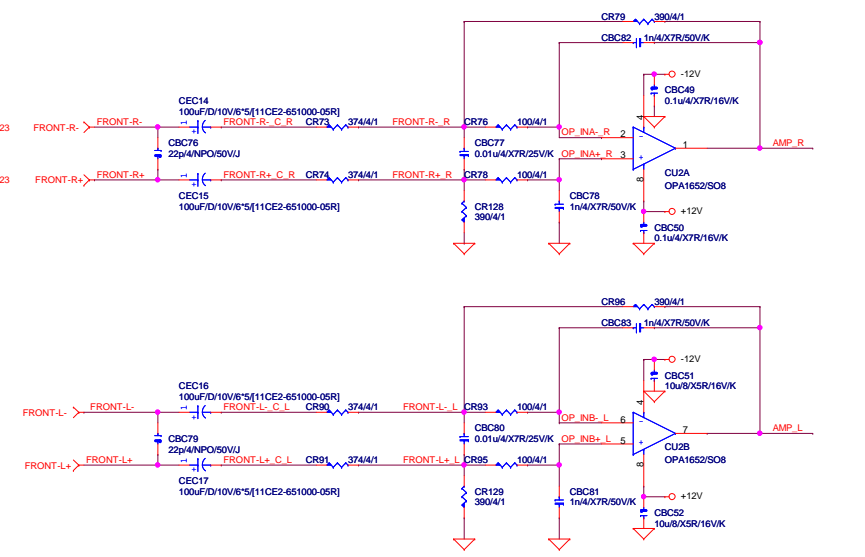


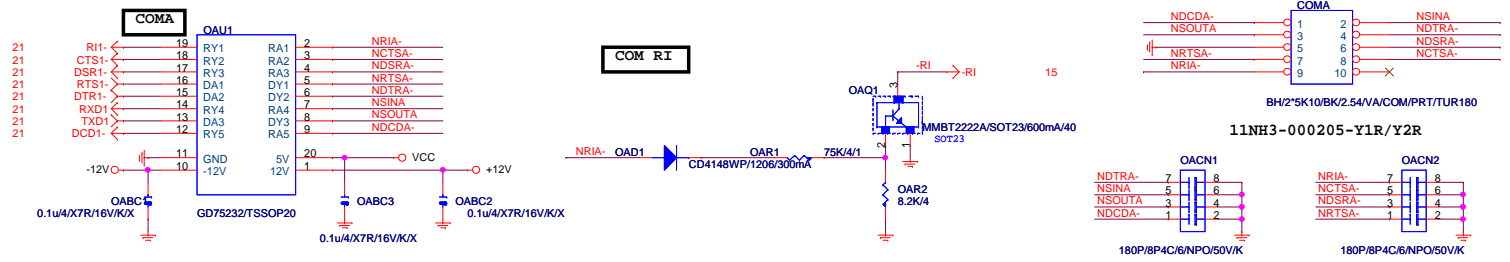
GIGABYTE™

Title			
ALC1150 CODEC			
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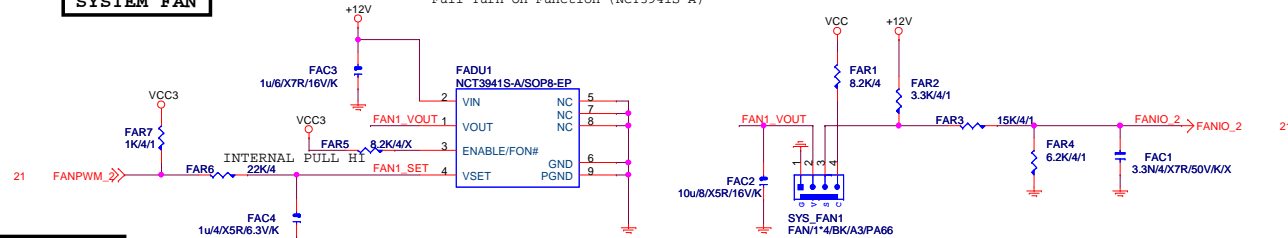
Differential to Single-End AMPLIFIED



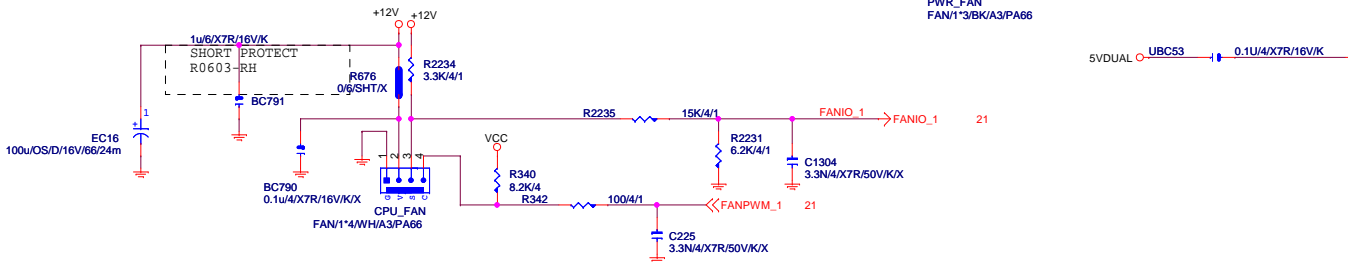


SYSTEM FAN

Enable Function (NCT3941S)
Full Turn On Function (NCT3941S-A)

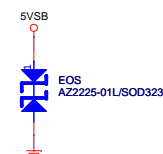
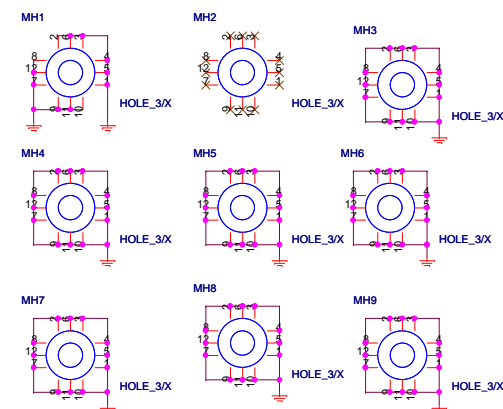
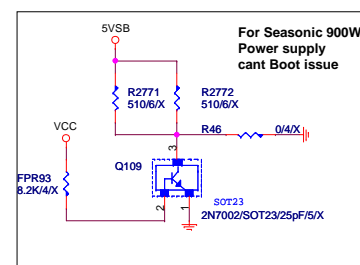
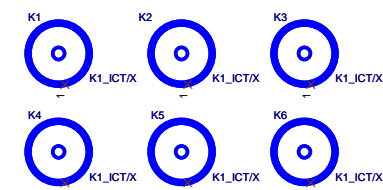
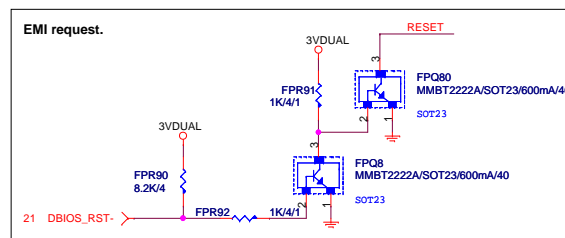
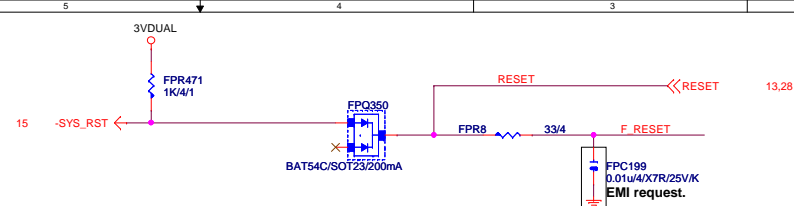


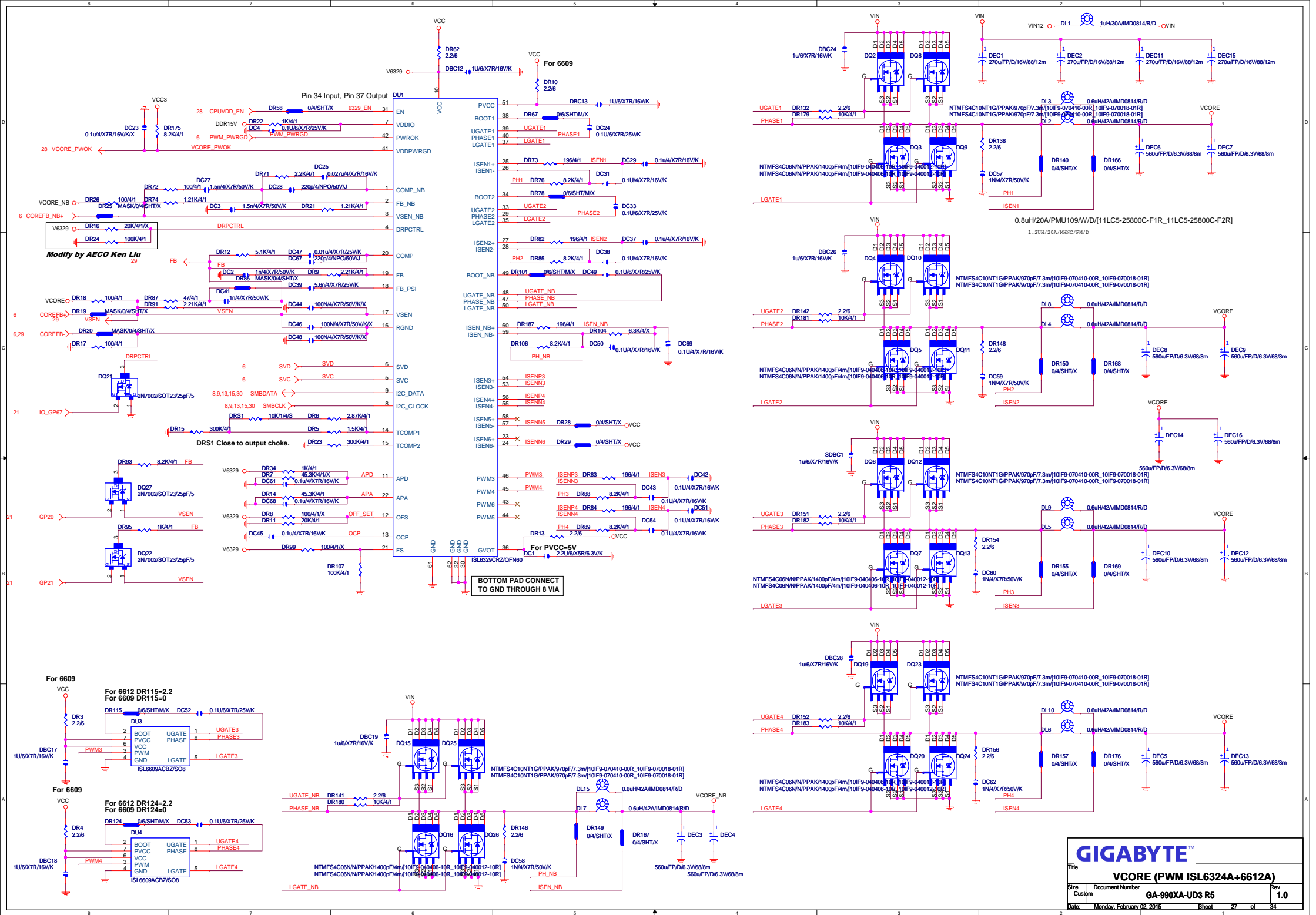
CPU FAN

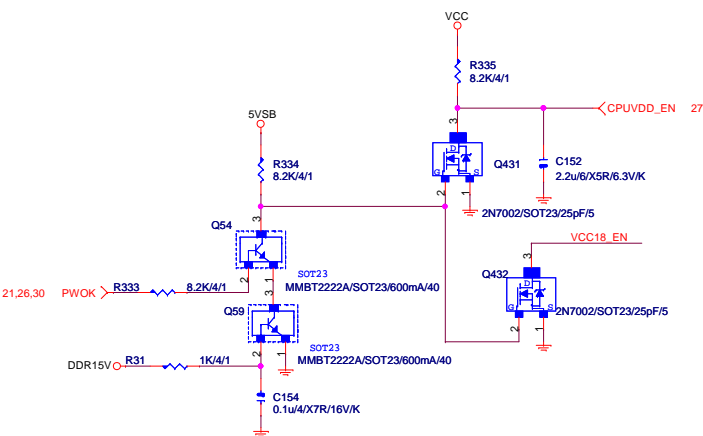
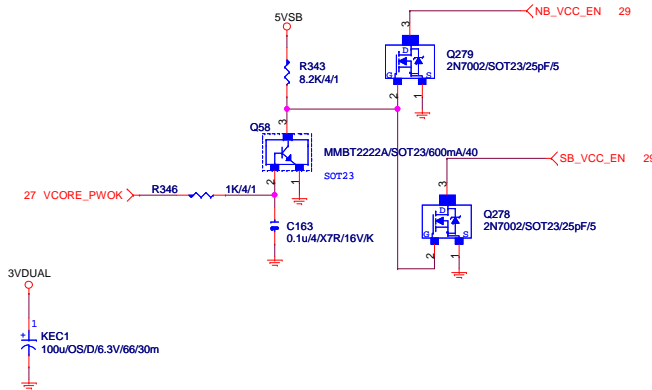
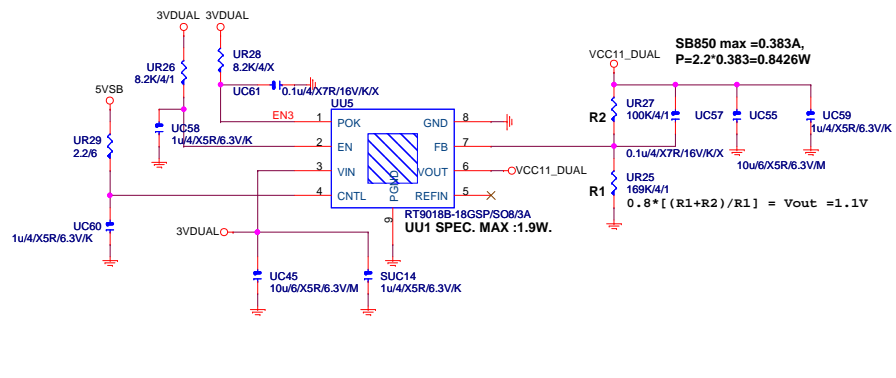


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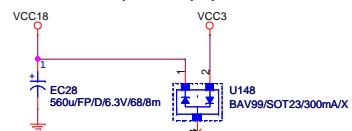
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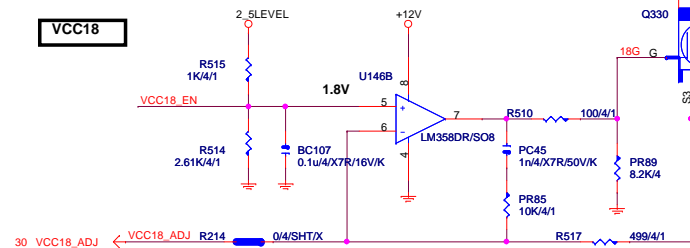




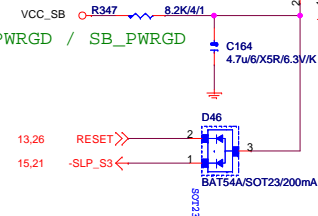
ATI for VCC3/VCC18 power ramp-up 2.1V



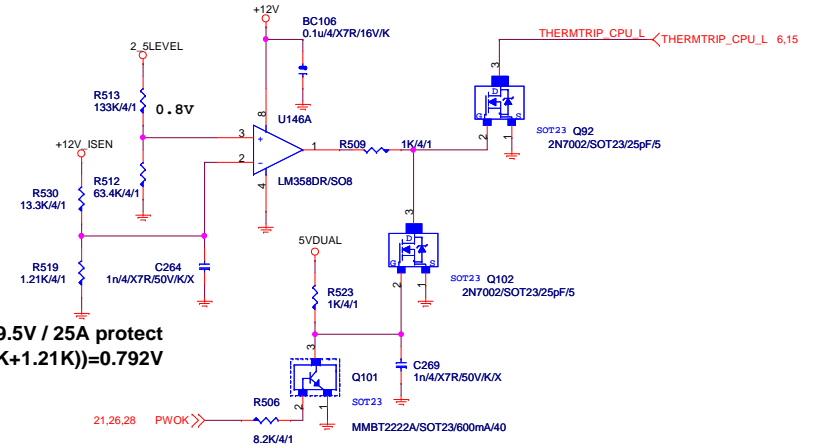
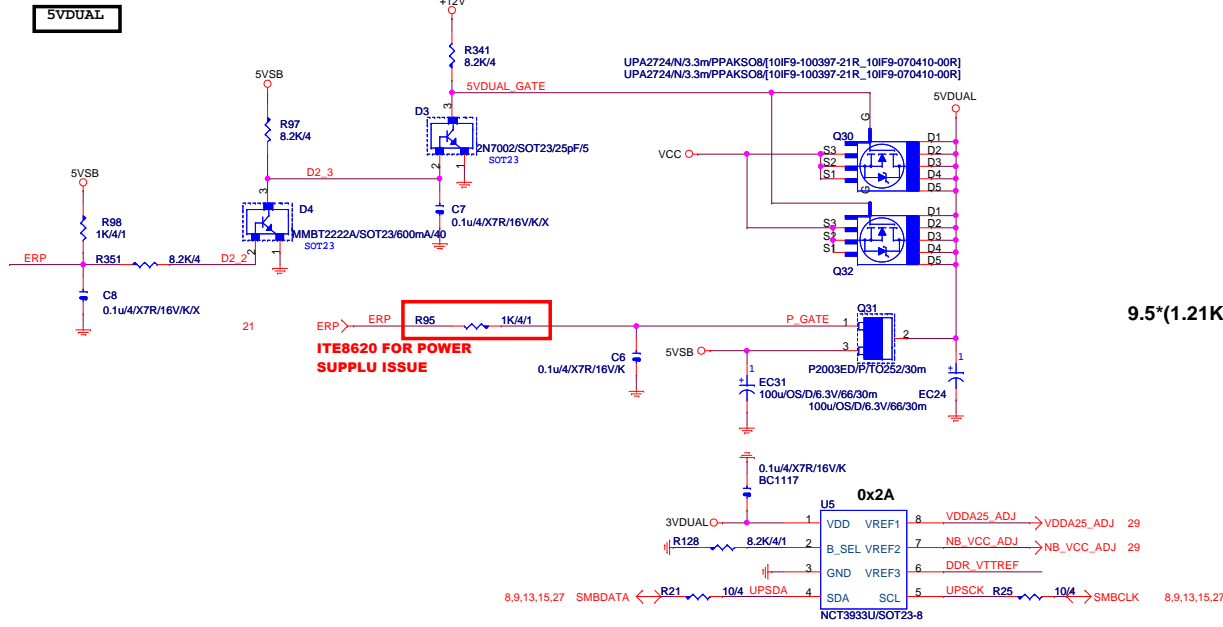
VCC18



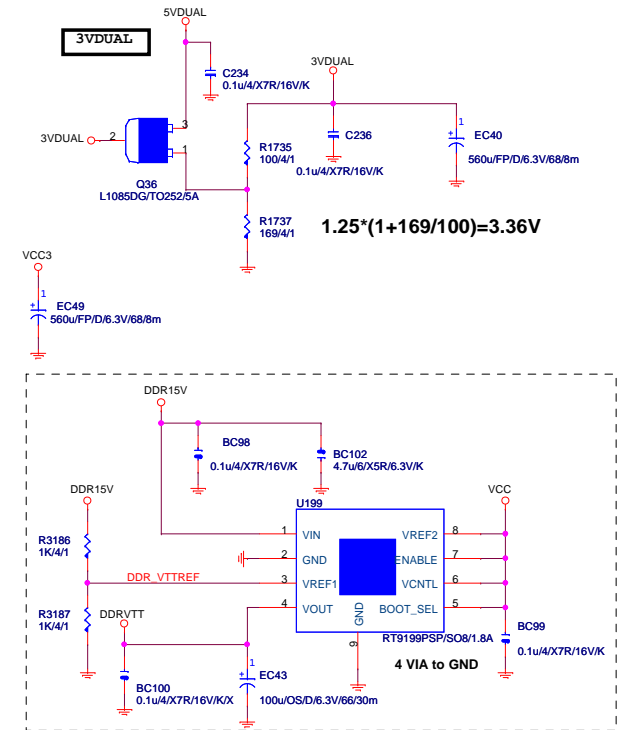
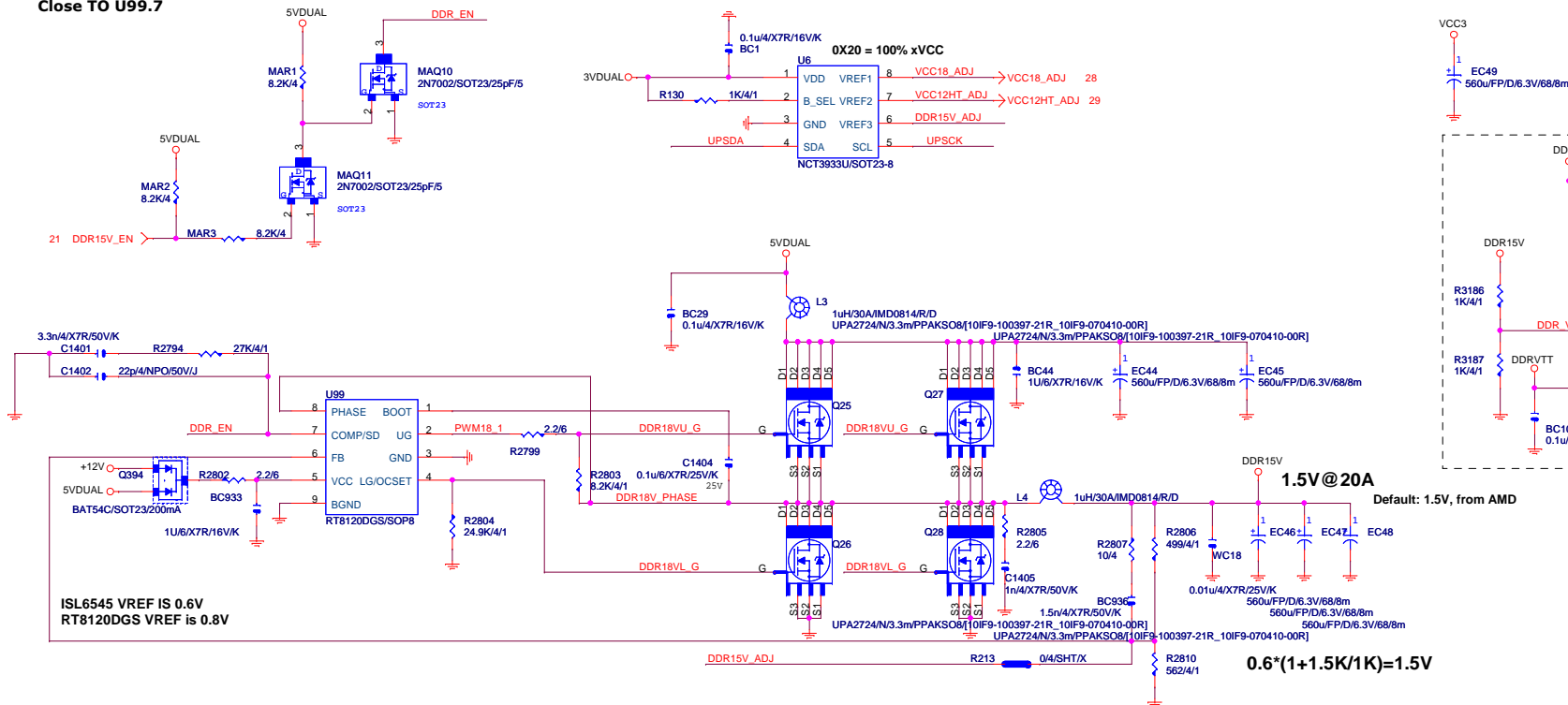
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(1.8V , 1.2V , 1.1V) > NB_PWRGD 前 1ms

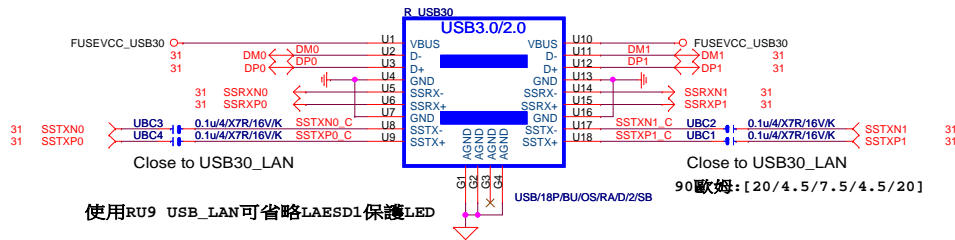
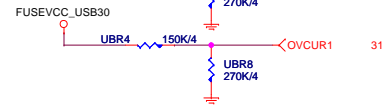
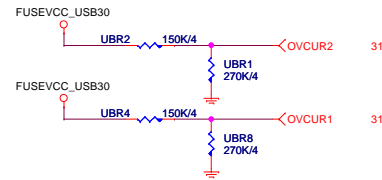
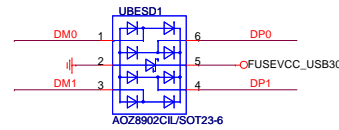
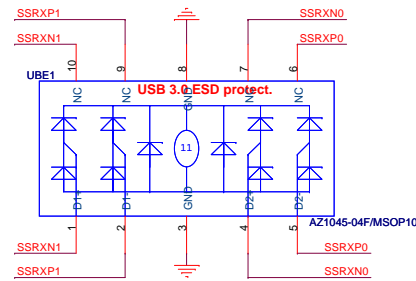
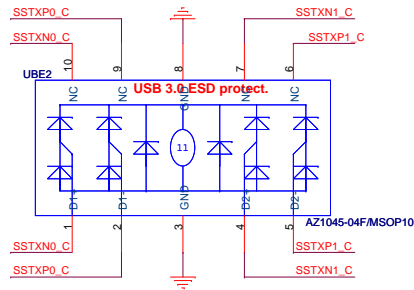
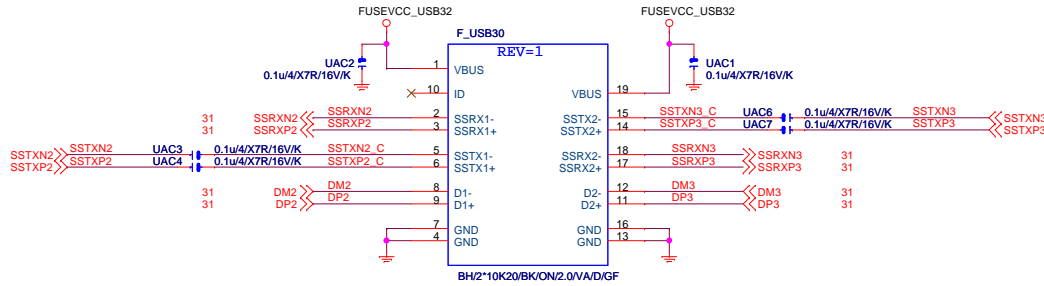
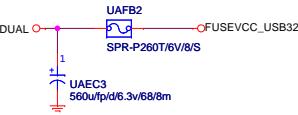
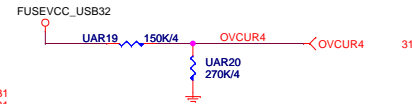
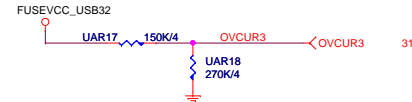
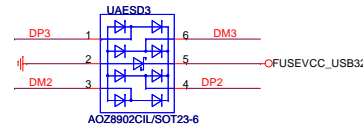
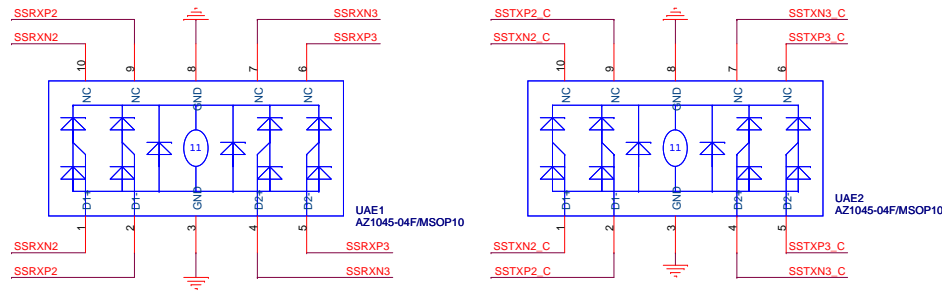


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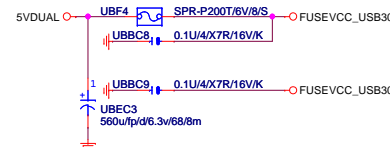
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使用RU9 USB_LAN可省略LAESD1保護LED

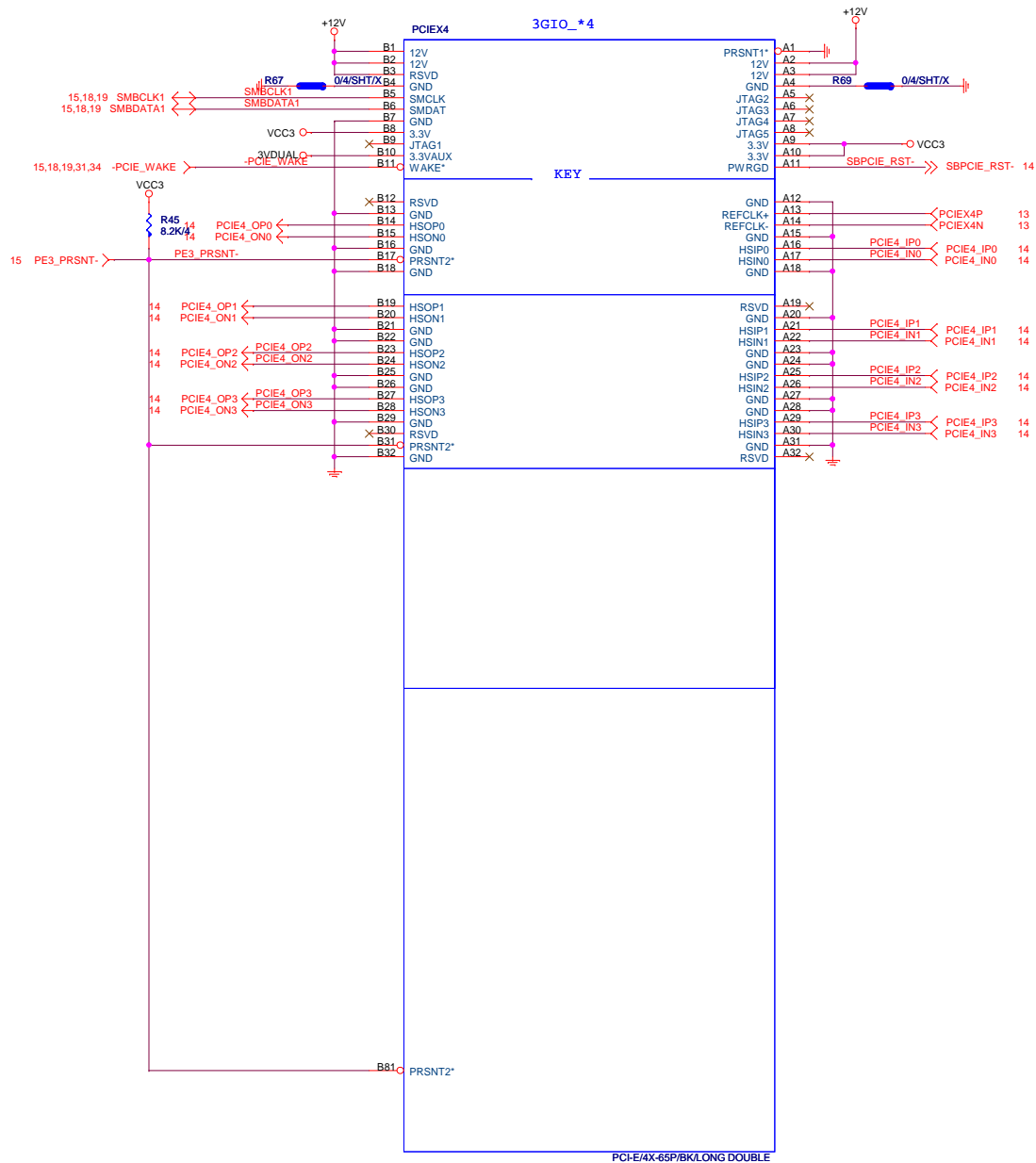
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