

# GA-AM1M-S2H

Sep.03, 2013

Revision : 1.01

01	COVER SHEET
02	BOM & PCB MODIFY HISTORY
03	BLOCK DIAGRAM
04	APU DDRIII, PCI_E
05	APU CONTROL VGA
06	APU ACPI/AUDIO
07	APU SATA/USB/SPI
08	APU POWER & GND
09	DDRIII CHANNEL A
10	PCI_E x4, VGA
11	ITE 8620E CX
12	ALC887 CODEC
13	FUSB3.0 , 2.0
14	COM , LPT , FAN CTRL
15	ATX, F_PANEL, PWR SEQ
16	PWM ISL62771
17	SB, APU18 V, DUAL POWER
18	DDR POWER , VCC18
19	LAN RTL8111F
20	HDMI
21	
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23	
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<b>GIGABYTE™</b>		
Title <b>COVER SHEET</b>		
Size	Document Number	Rev
Custom	<b>GA-AM1M-S2H</b>	<b>1.01</b>
Date: Friday, February 21, 2014 Sheet 1 of 20		

**Model Name:GA-AM1M-S2H**

## Component value change history

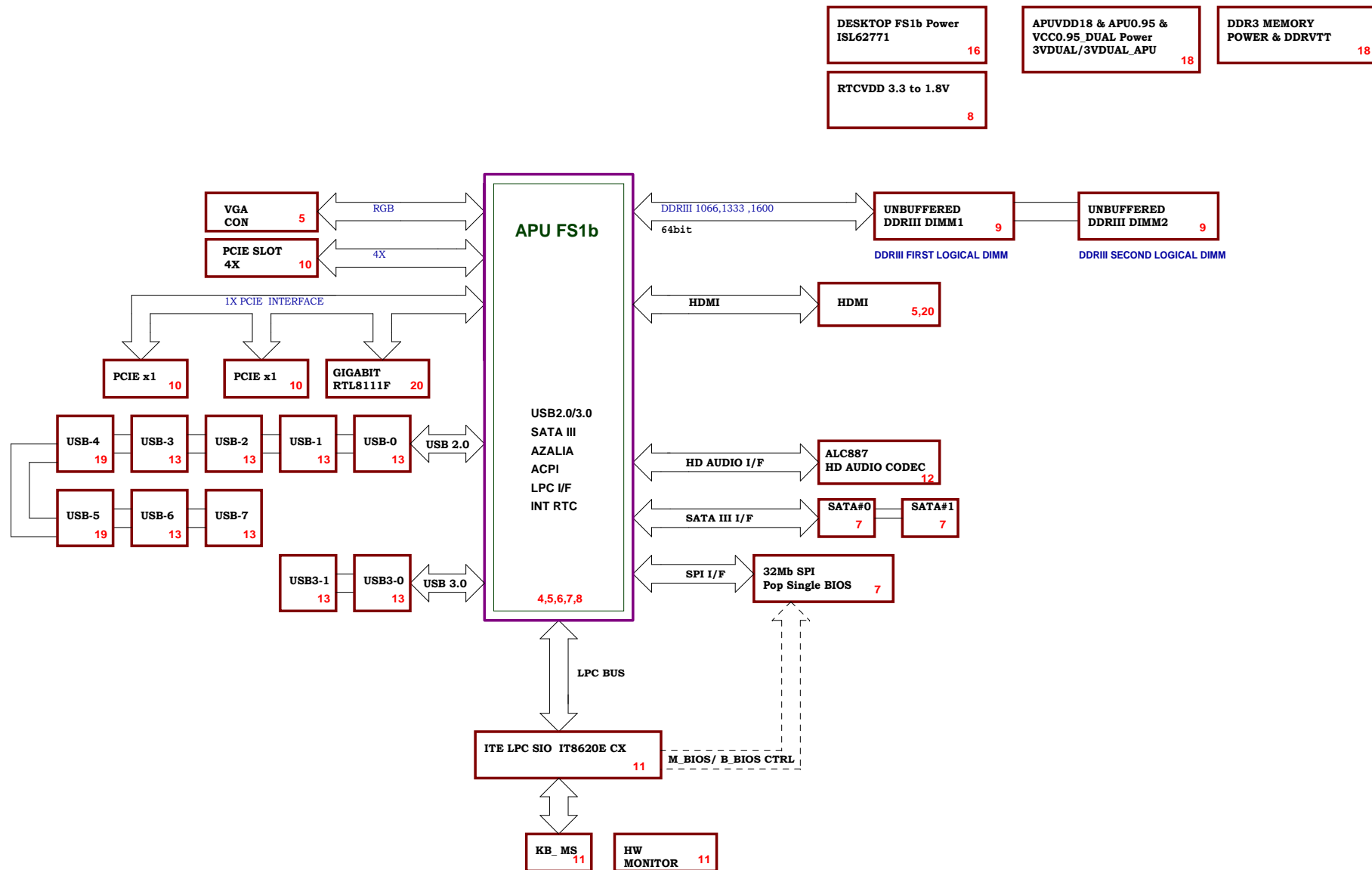
**Revision : 1.01**  
**TIP/TOP : 9MAM1MS2H-00**  
**P-Code: U13125-0**

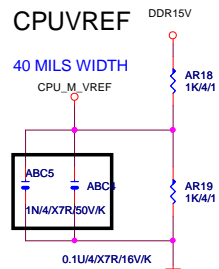
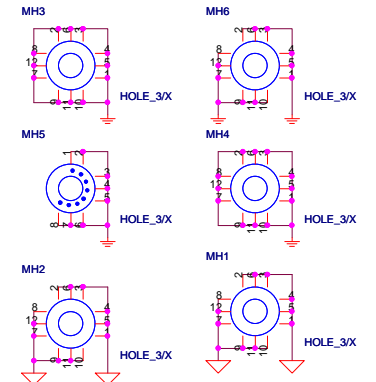
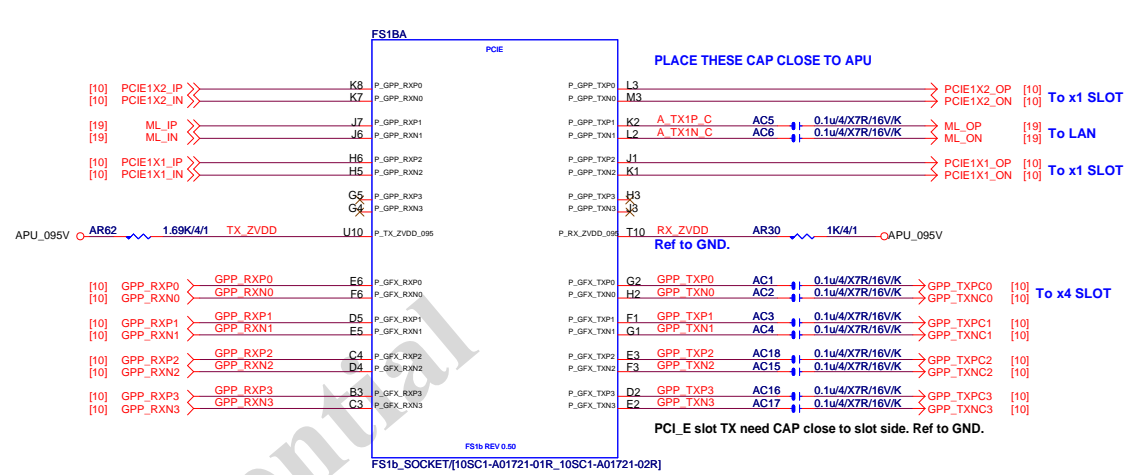
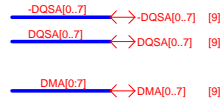
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### Circuit or PCB layout change for next version

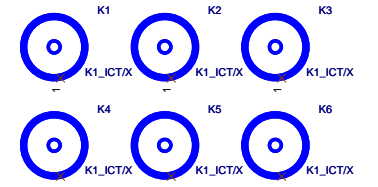
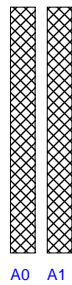
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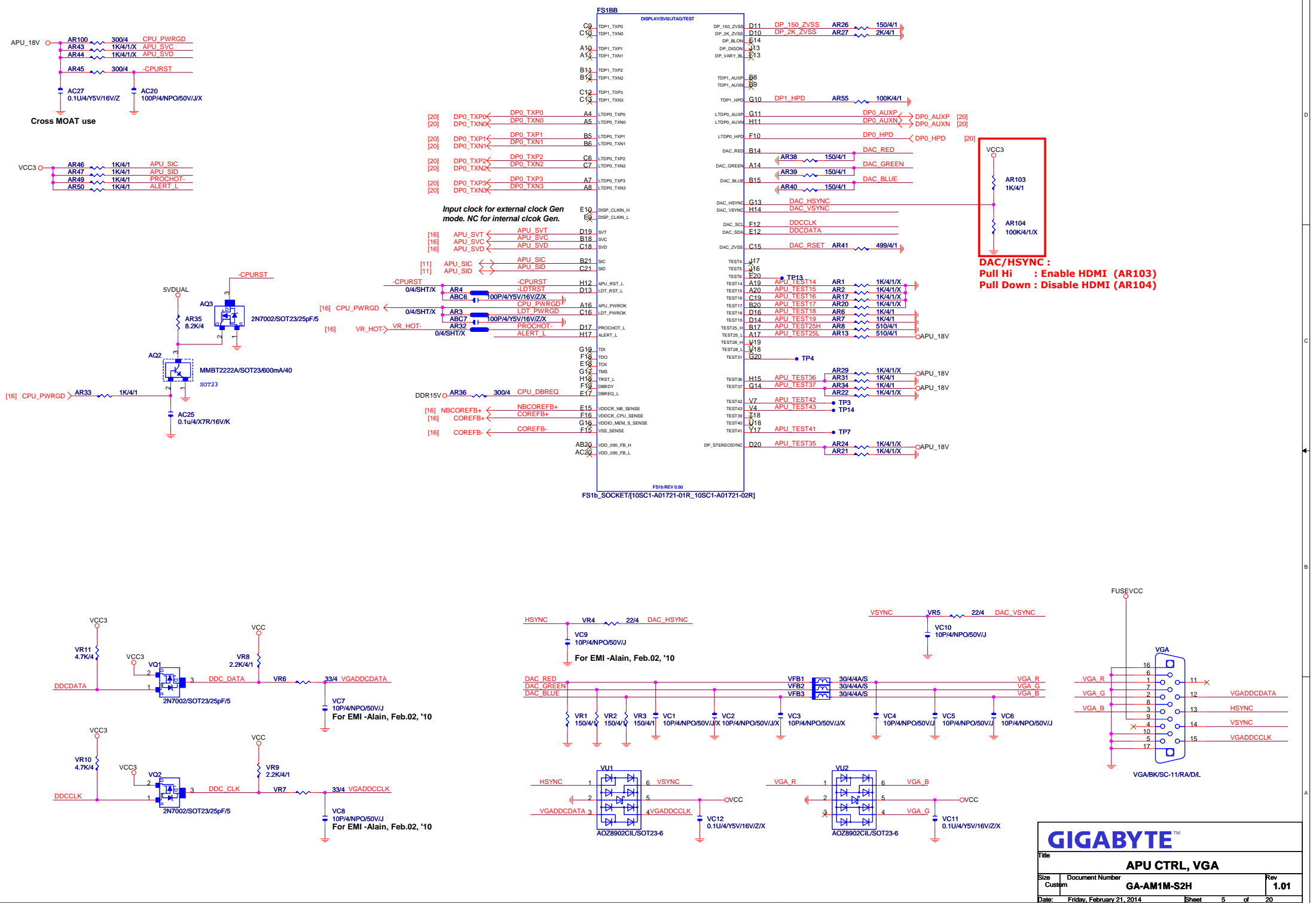
# APU FS1b CUSTOMER DESKTOP REFERENCE DESIGN





## MEM CHA





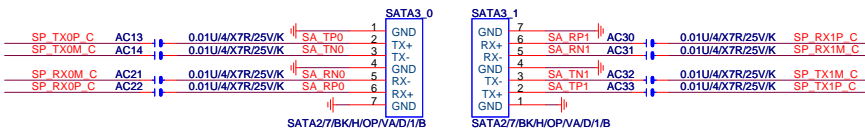
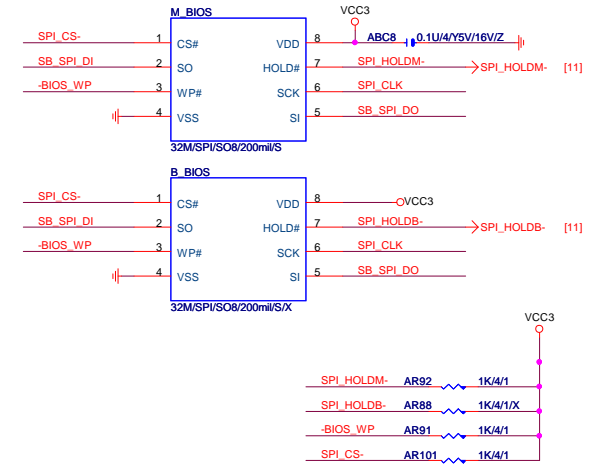
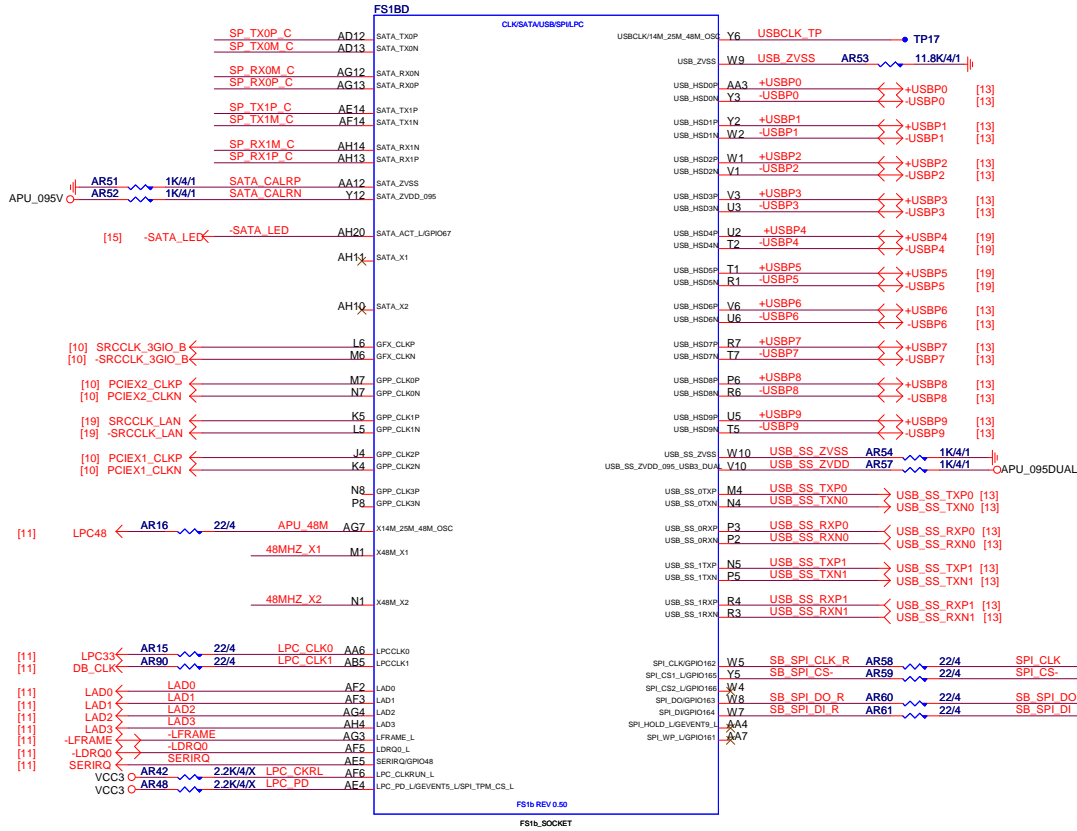
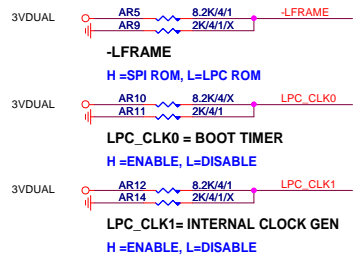
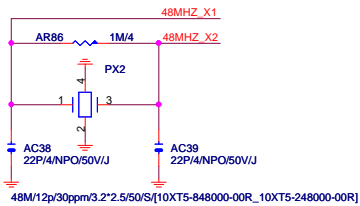


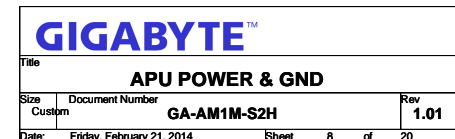
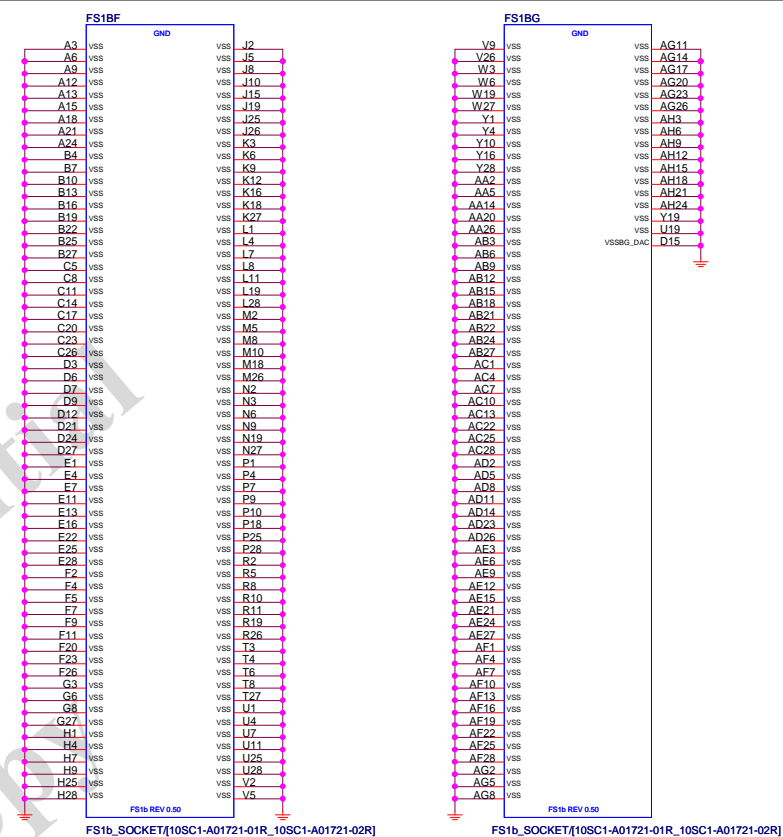
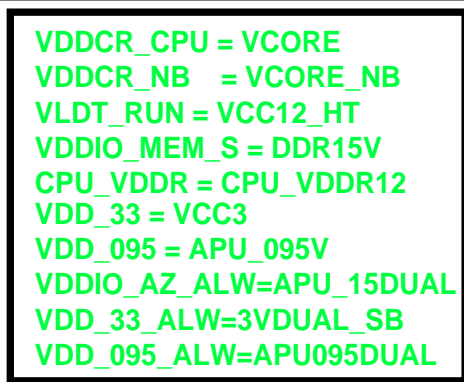
**S.B HEATSINK**

## POWER CHECK

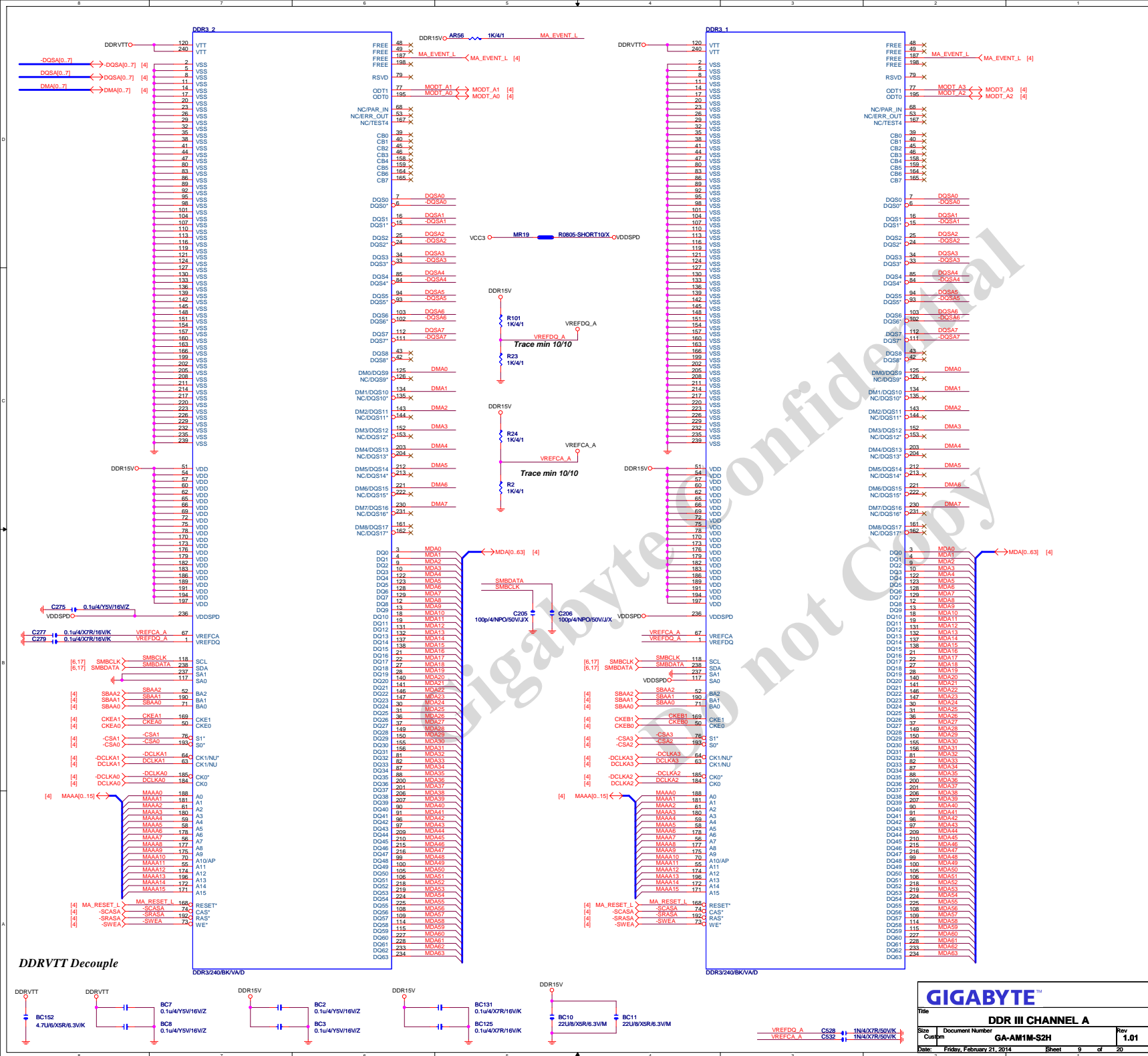
**GPP\_CLK0~2** : Output clock.

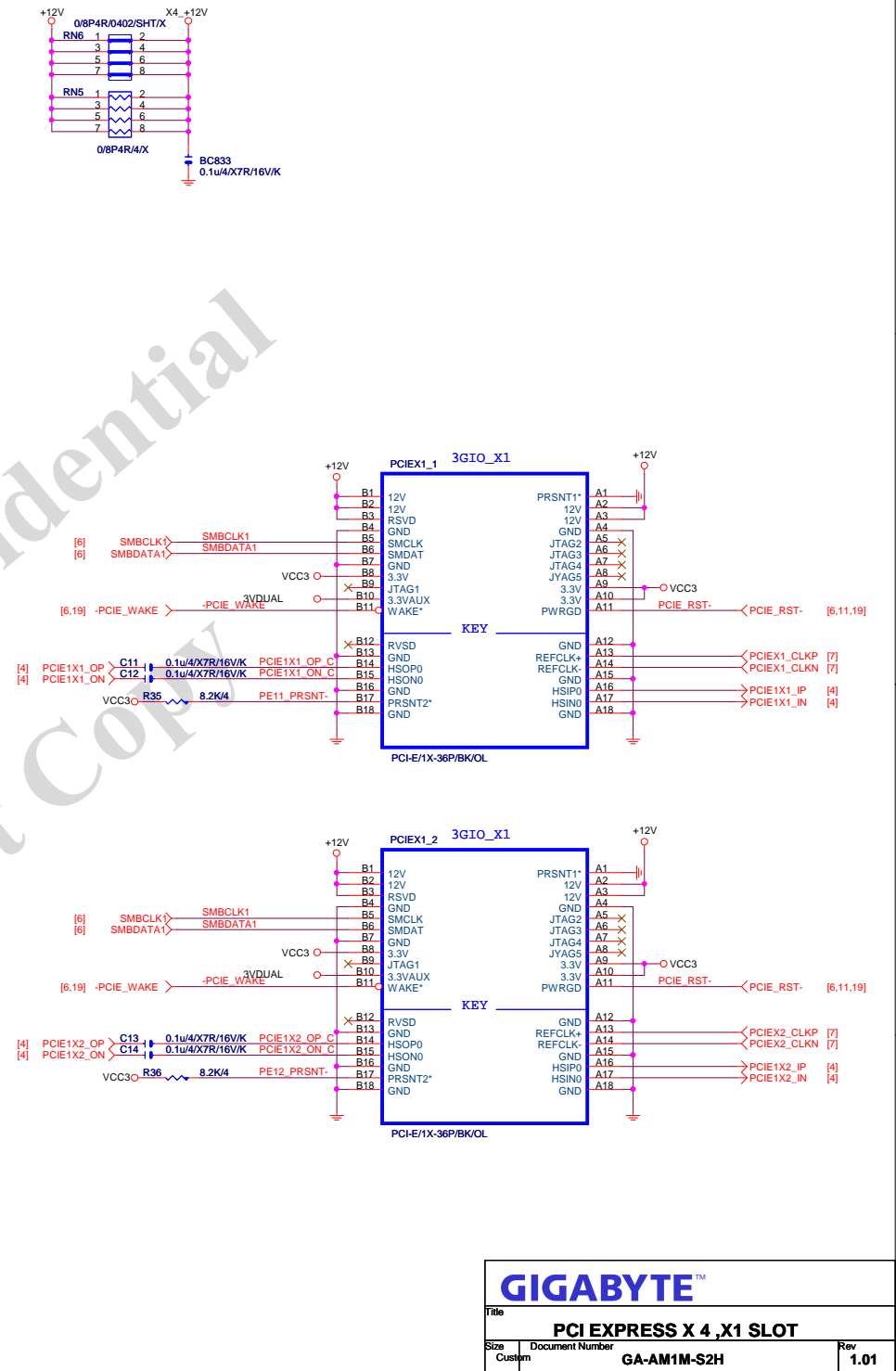
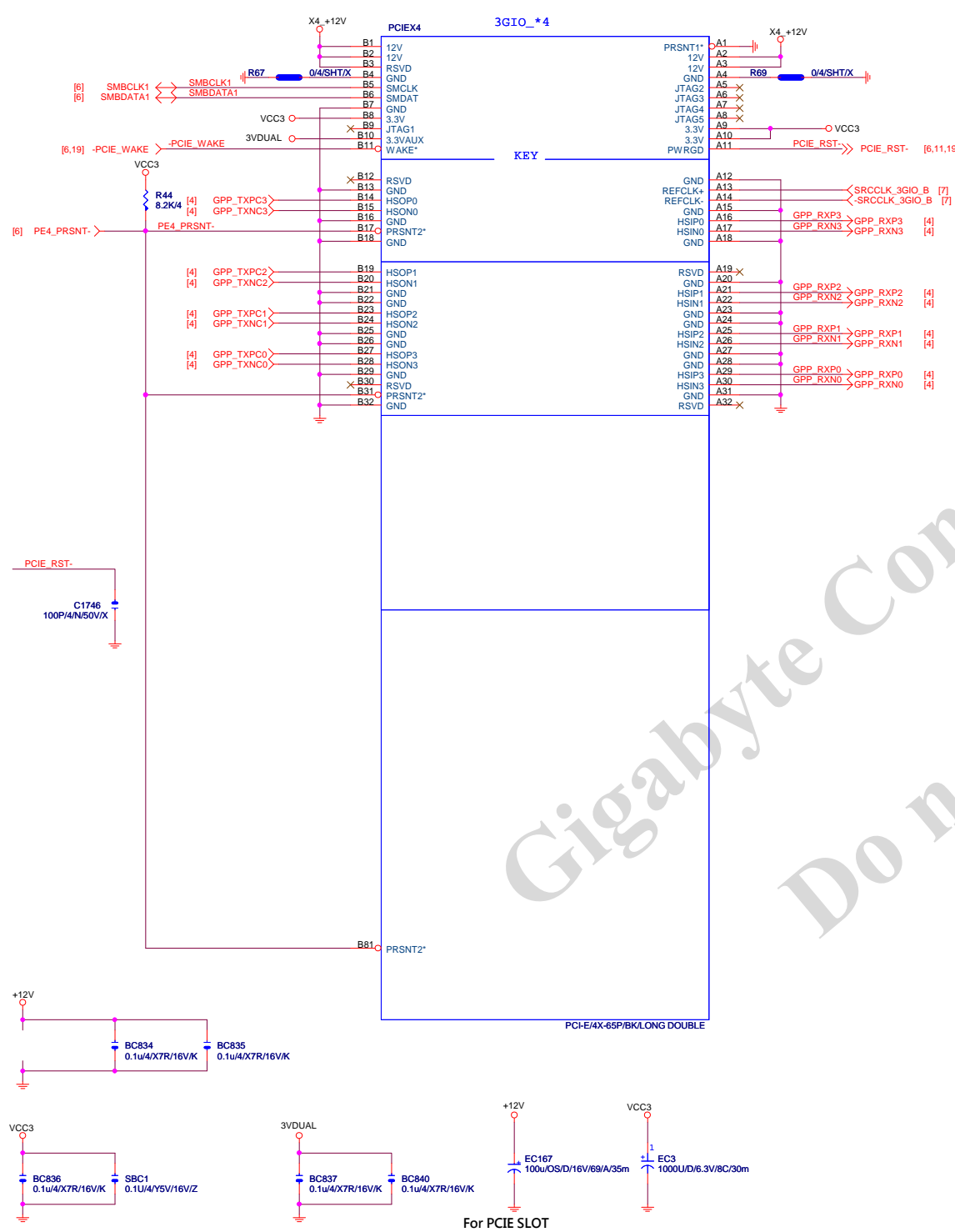
**GPP\_CLK3:** Output when used with internal clock Gen,  
Input when used with external clock Gen.

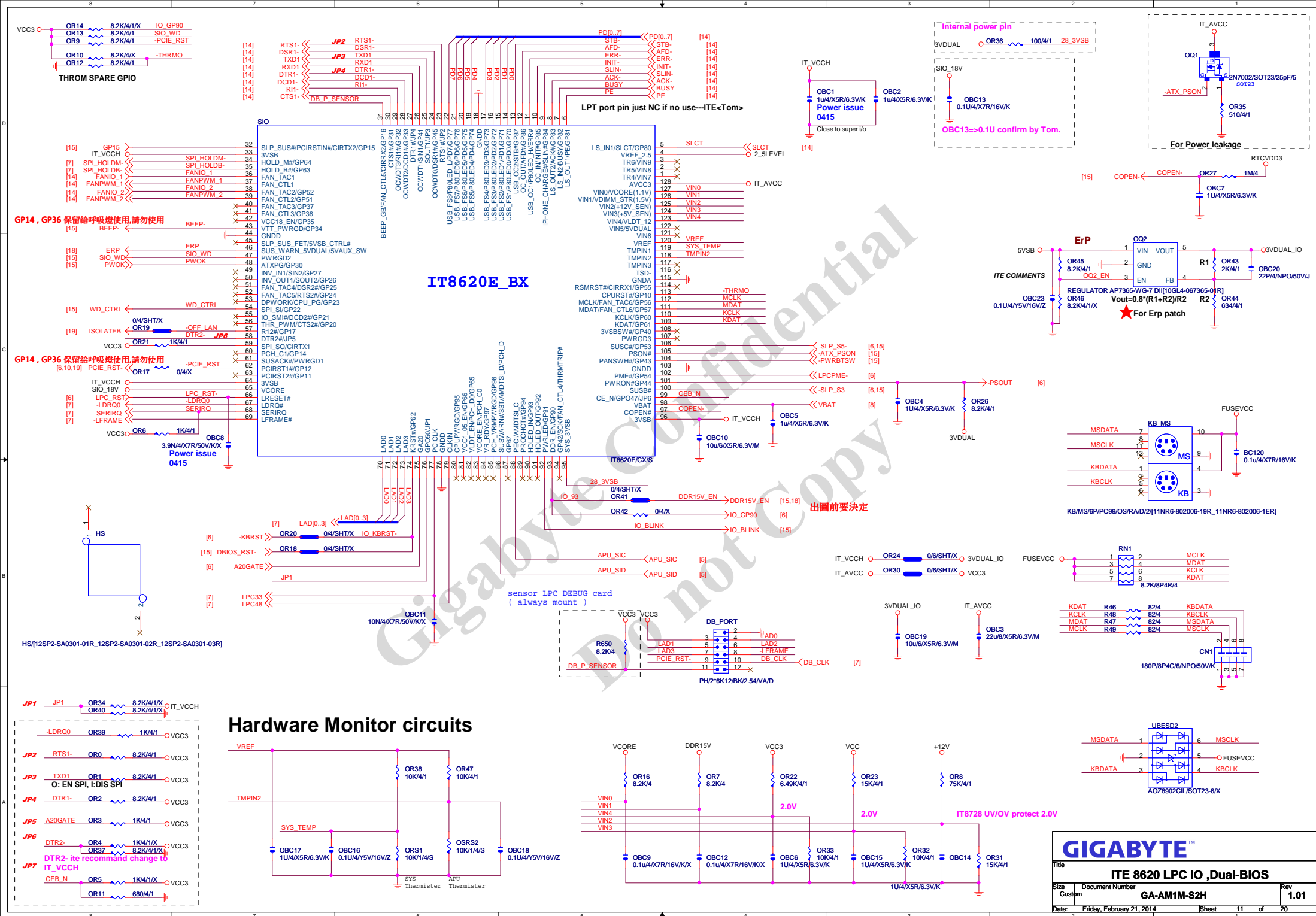












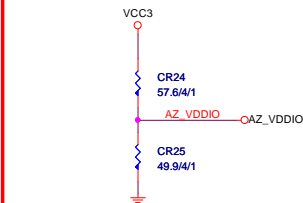
# SPDIF\_OUT

co-layout

CR46,CR57 For ALC889A driver config SPDIF02 HDMI  
CBC40 For ALC888-VD & ALC892 CAP

50歐姆:4/5  
ACZ\_BITCLK:4/12  
CR14/CBC4 close to SouthBridge

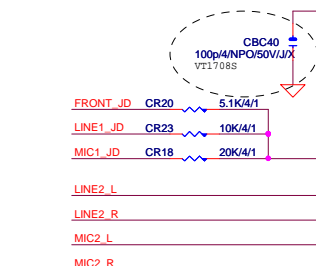
Note :  
CU1 Pin9 Must Follow HD Host Voltage  
For FS1b / FT3 HD Interface : 1.5V  
For Hudson / SBXXX HD Interface : 3.3V



# AZALIA CODEC ALC887-VD2/ALC889/VT1708S/VT1708SCE Colay

	ALC887-VD2	ALC889	VT1708S	VT1708SCE
CR65	X	O	O	X
CR64	X	X	X	O
CR44/CBC26	47ohm+1nF	47ohm+1nF	22ohm+100P	22ohm+100P
CR34	20K/1%	20K/1%	5.1K/1%	20K/1%
CR31	O	O	O	O
CR30	X	X	X	X
CBC1/CBC2	22uF/X5R	22uF/X5R	22uF/X5R	22uF/X5R
CR20	5.11K/4/1	5.11K/4/1	5.1K/4/1	5.1K/4/1
CBC35	O	X	X	O
CBC39/CBC40	N/A	N/A	100P/4	100P/4
CR6/CR7/CR54/CR58	22K/4	22K/4	10K/4	10K/4
CR5/CR8/CR13/CR11/ CR57/CR53	75 ohm	62 ohm	75 ohm	75 ohm
CR51/CD1/CBC7	O	X	X	O
CD2/CD3/CQ3/CQ5	X	O	O	X
CR1/CR14/CR17/CR22	75 ohm	62 ohm	1K ohm	1K ohm

## Digital Area Analog Area

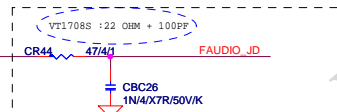


JD resistors close to pin13 of CODEC

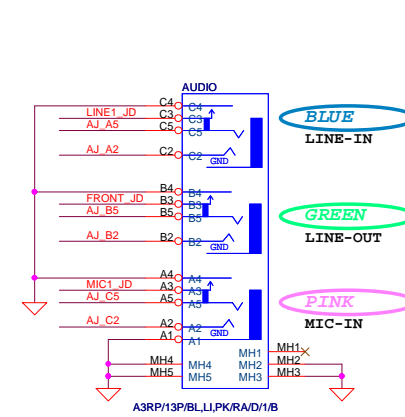
# CODEC POWER/EMI PAD



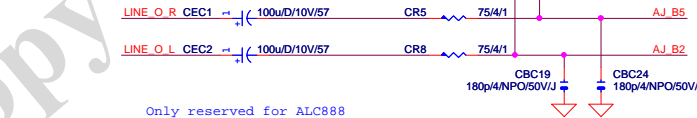
JD resistors close to pin34 of CODEC



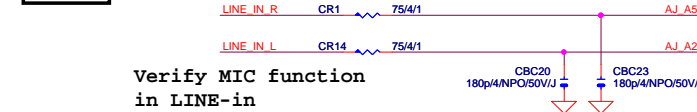
# Rear Audio Jack



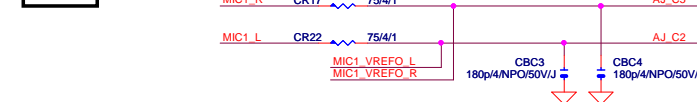
## LINE-OUT



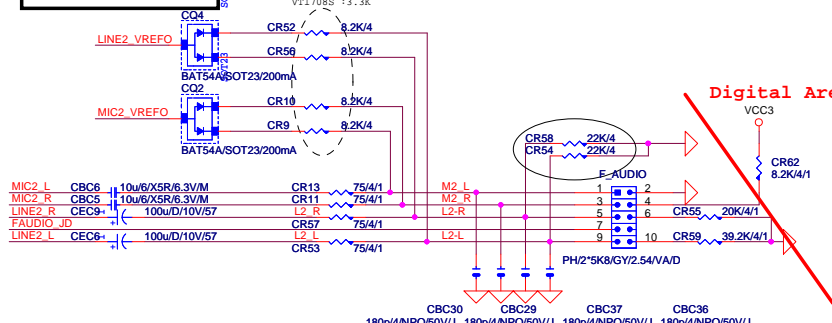
## LINE-IN



## MIC-IN



## AZALIA FRONT PANEL



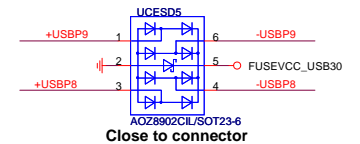
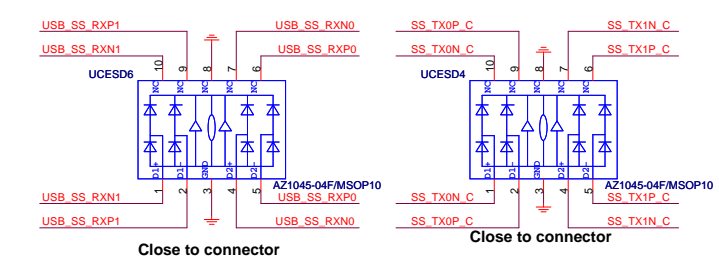
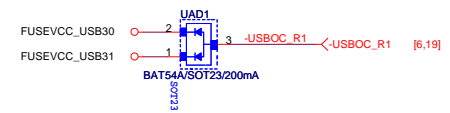
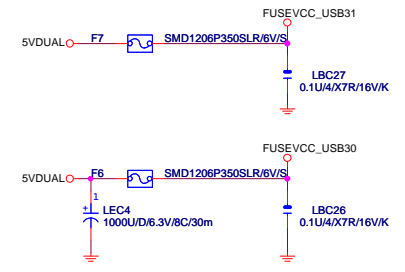
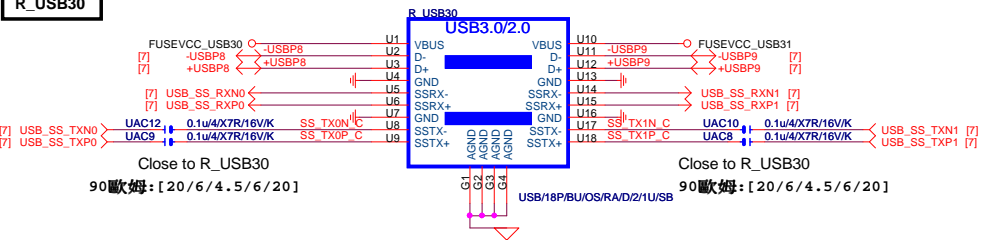
Title  
**ALC892 CODEC**

Size  
Document Number  
**GA-AM1M-S2H**

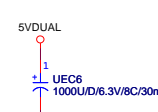
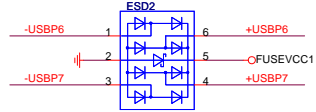
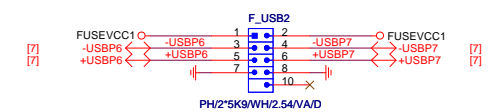
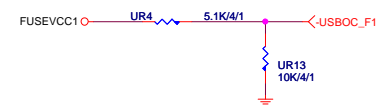
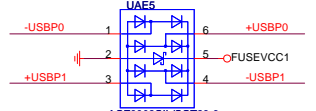
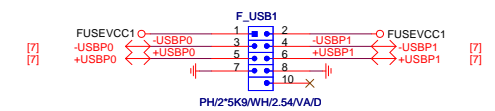
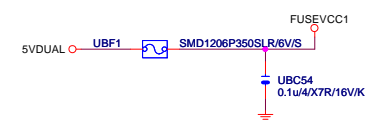
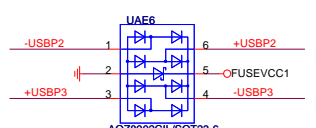
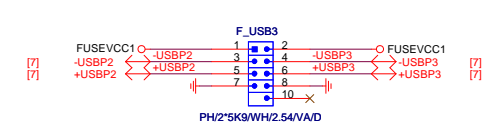
Rev  
**1.01**

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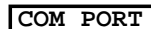
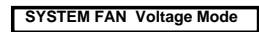
# R\_USB30



# FRONT USB



## CPU FAN



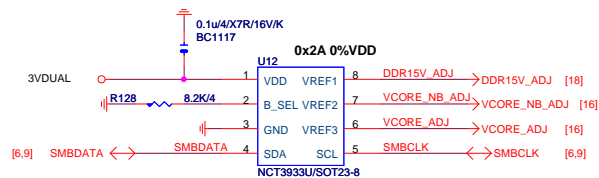
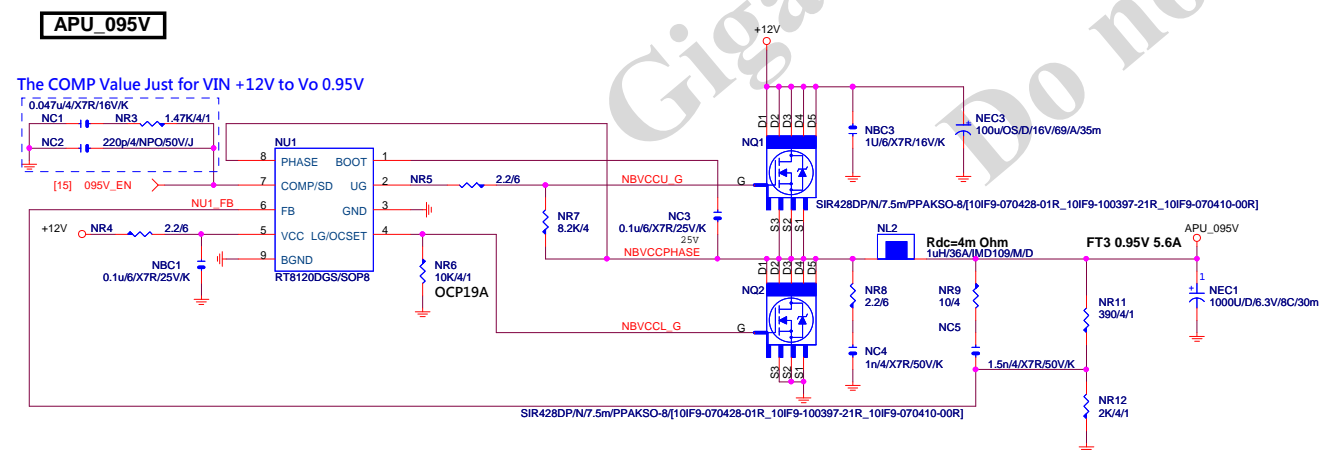
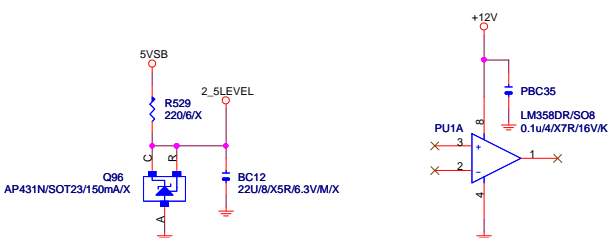
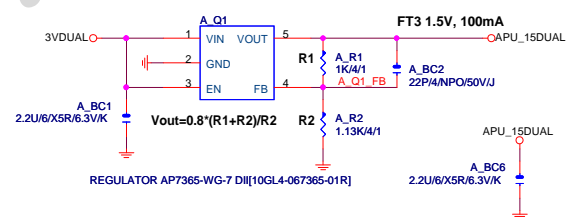
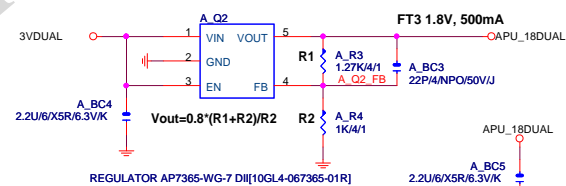
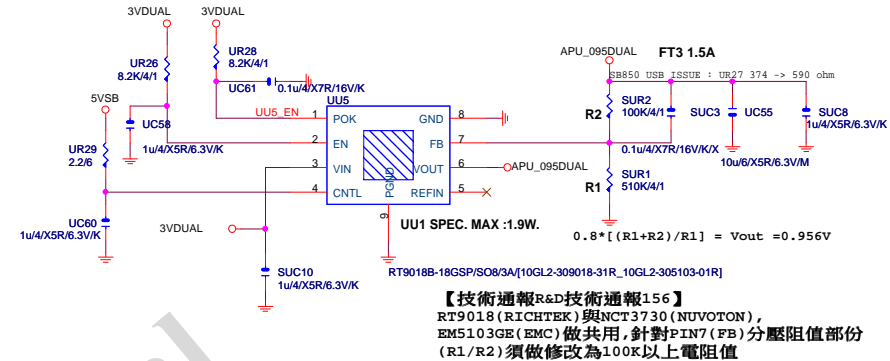
Title			
COM , LPT , FAN CTRL			
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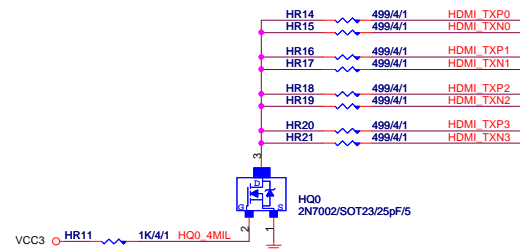
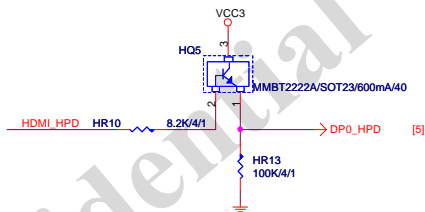
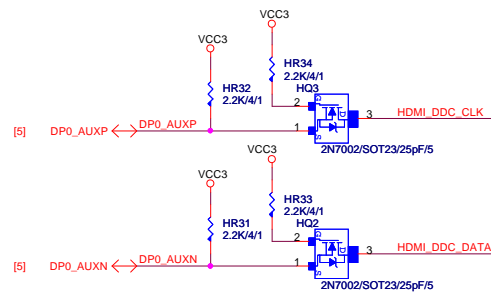
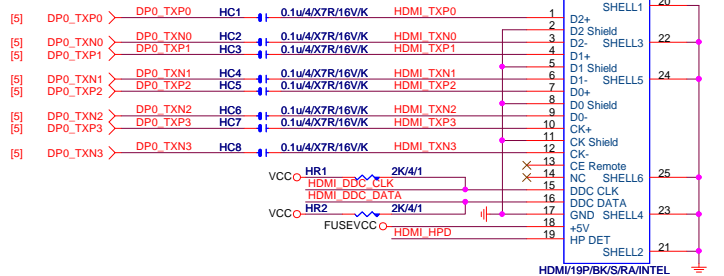
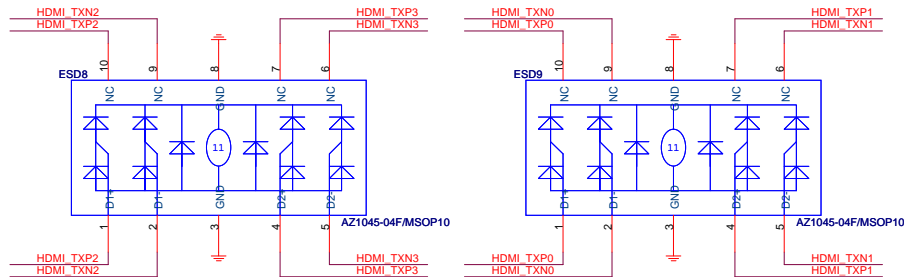
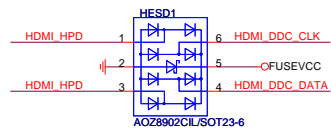












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