

[illegible][illegible][illegible][illegible][illegible][illegible]

A vertical number line with four points labeled A, B, C, and D from bottom to top. An arrow points to point C.

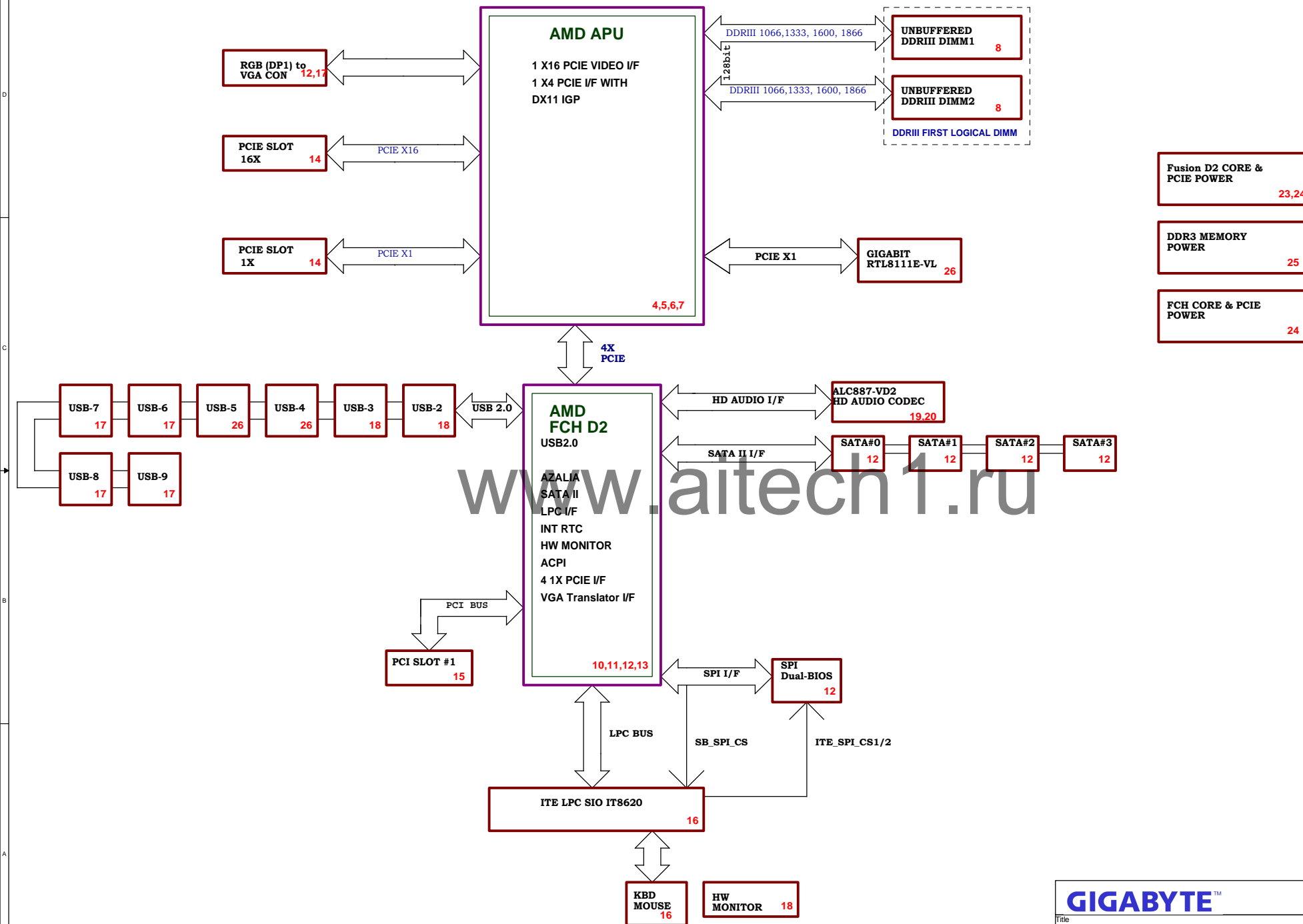
**Version: 3.0**  
P-Code: U98126-0

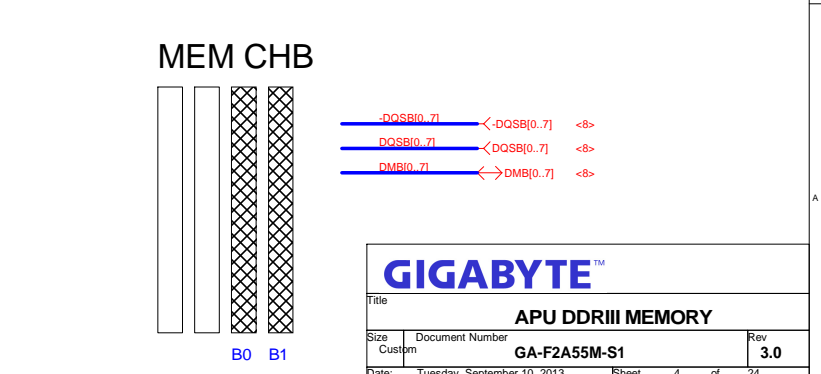
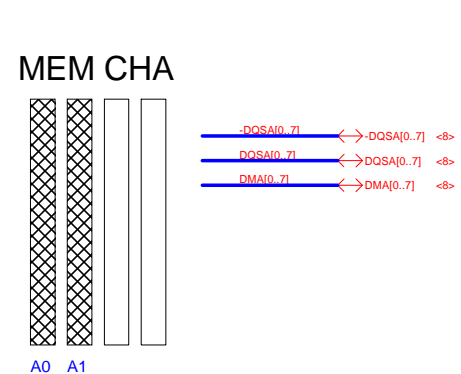
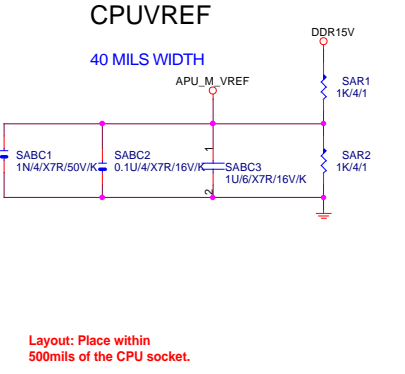
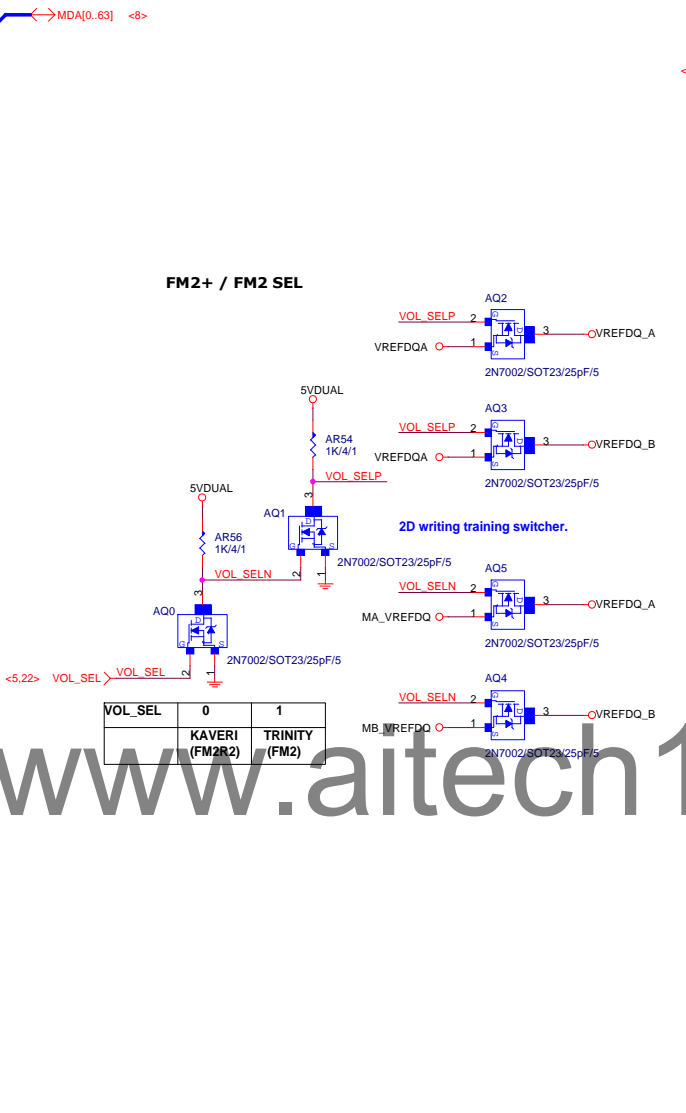
[illegible]

### Circuit or PCB layout change for next version

[illegible]

# AMD Fusion Hudson CUSTOMER DESKTOP REFERENCE DESIGN



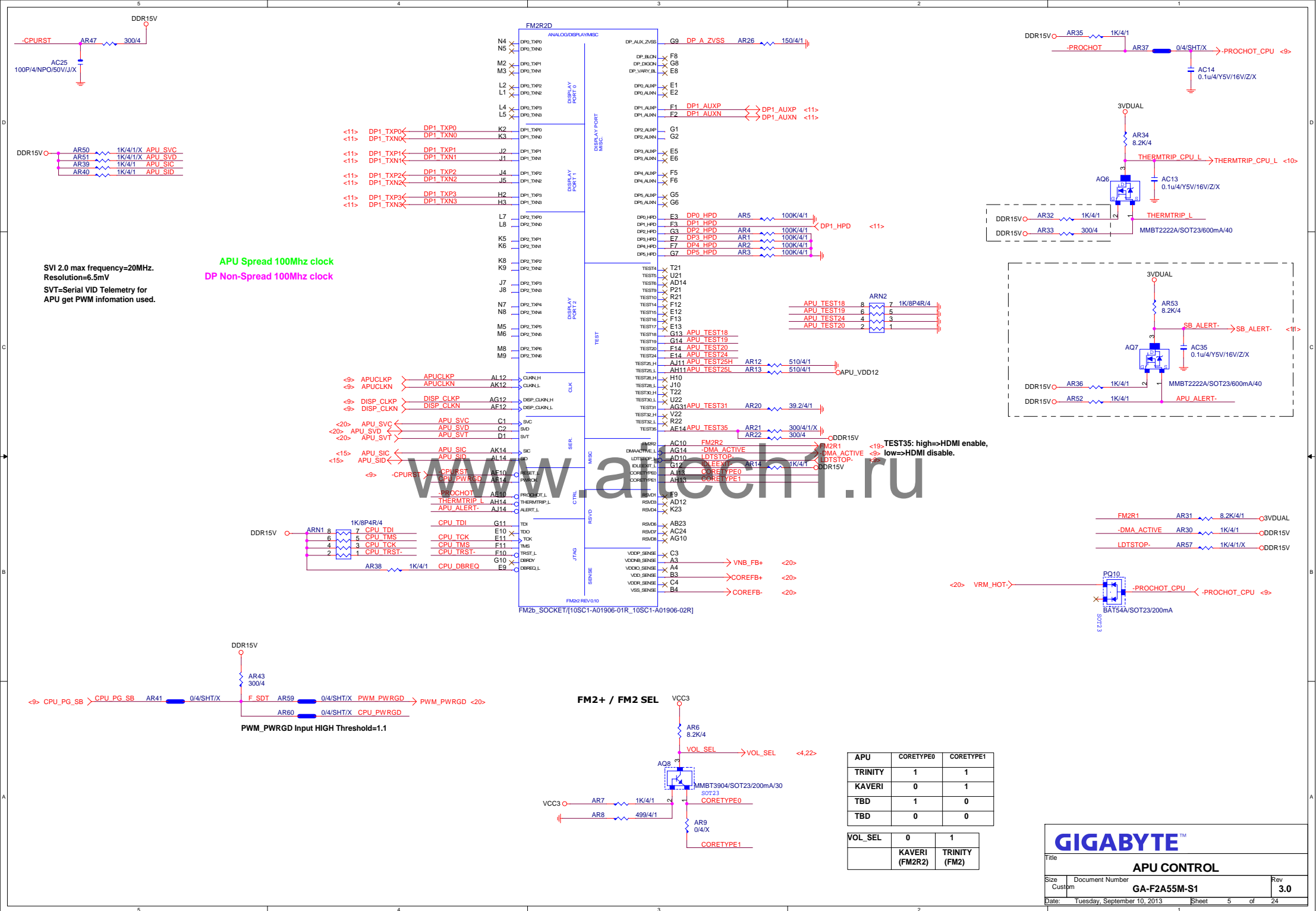


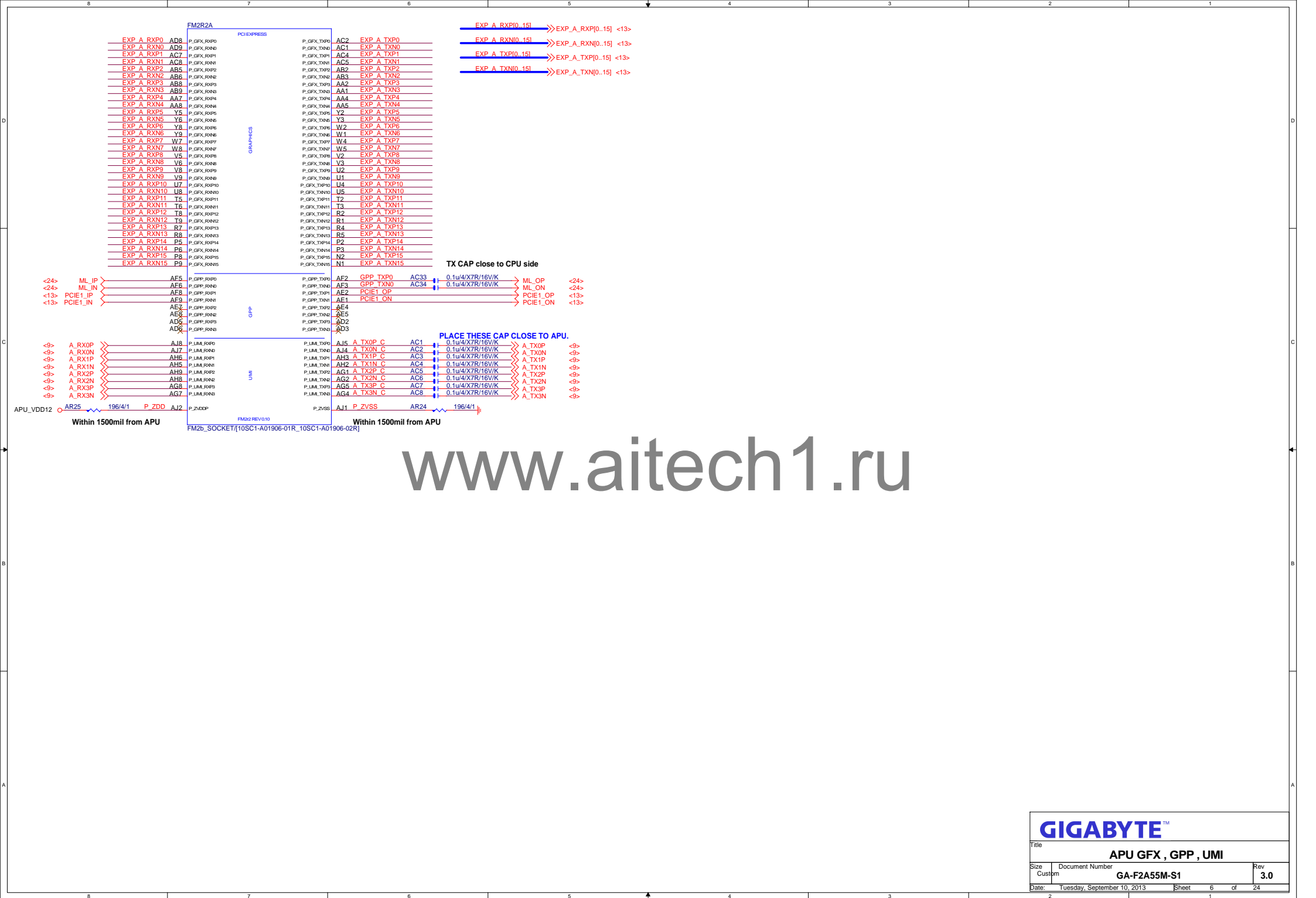
**GIGABYTE™**

Title: **APU DDRIII MEMORY**

Size: **Custom** Document Number: **GA-F2A55M-S1** Rev: **3.0**

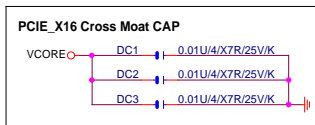
Date: **Tuesday, September 10, 2013** Sheet: **4** of **24**





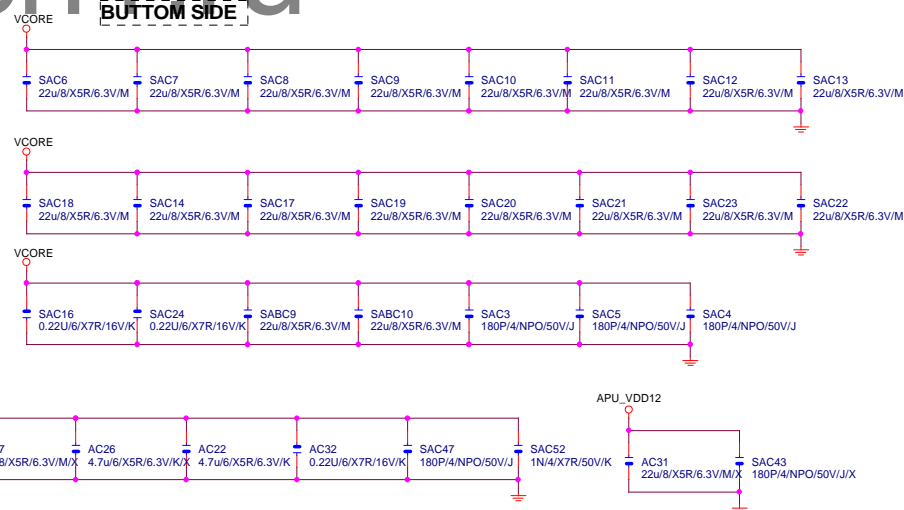
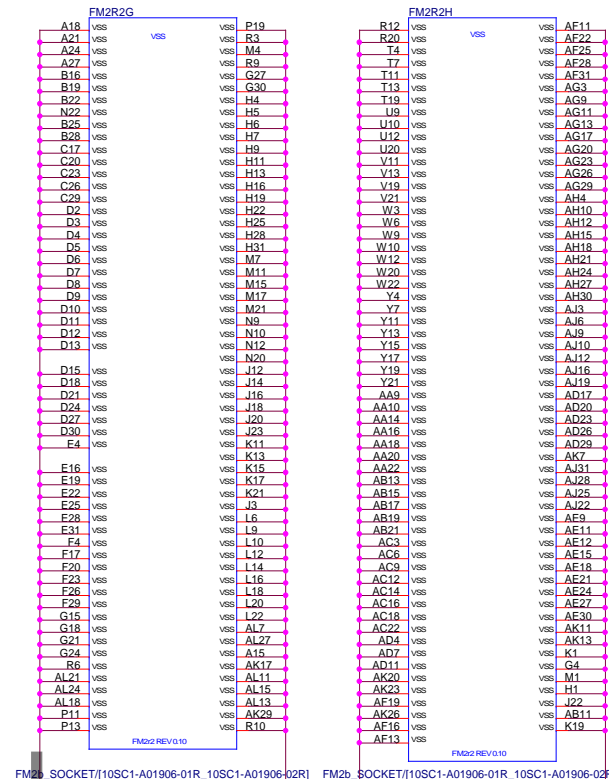
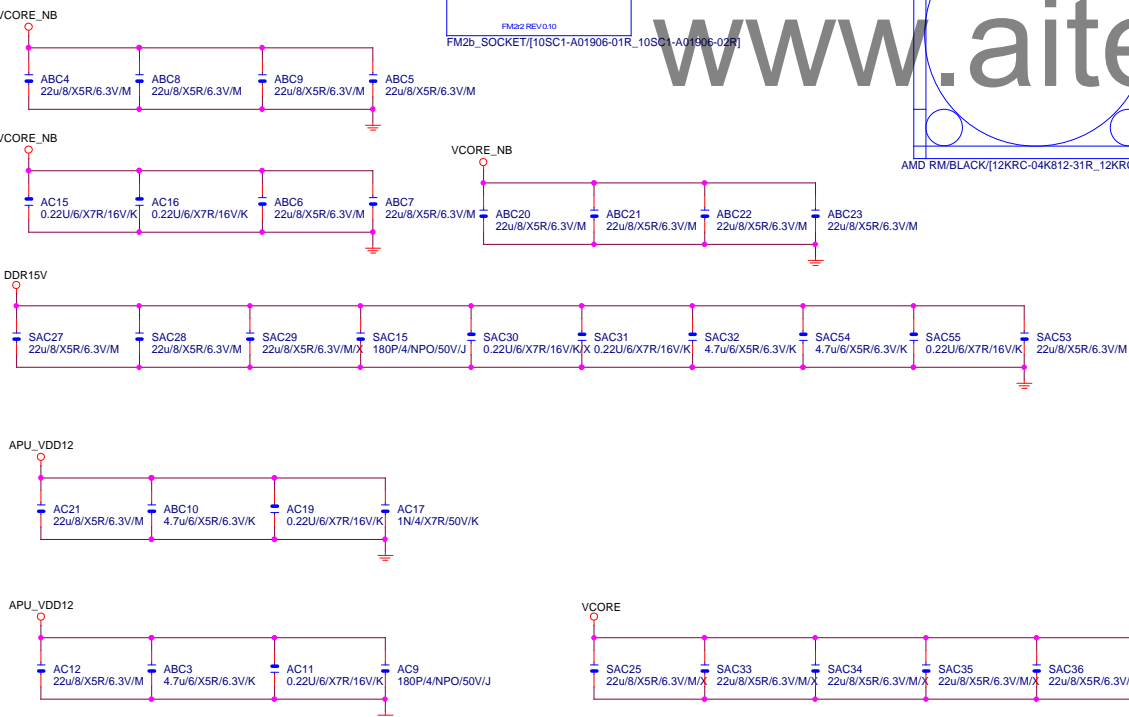
www.aitech1.ru

Pinout diagram for the FM2b-10S0C1-A01906-01R-10S0C1-A01906-02R board. The diagram shows the pin connections for the CPU (AA11 to L15), VR (V1 to V15), and other components. It includes labels for VDD, VDDA25, VDDNB, and VDDNB0. The board is labeled 'FM2b-10S0C1-A01906-01R-10S0C1-A01906-02R'.



VDDNB A8  
VDDNB\_CAP M14 VDDNB CAP SAC1 22u/8/X5R/6.3V/M  
VDDNB\_CAP N13 SAC2 22u/8/X5R/6.3V/M

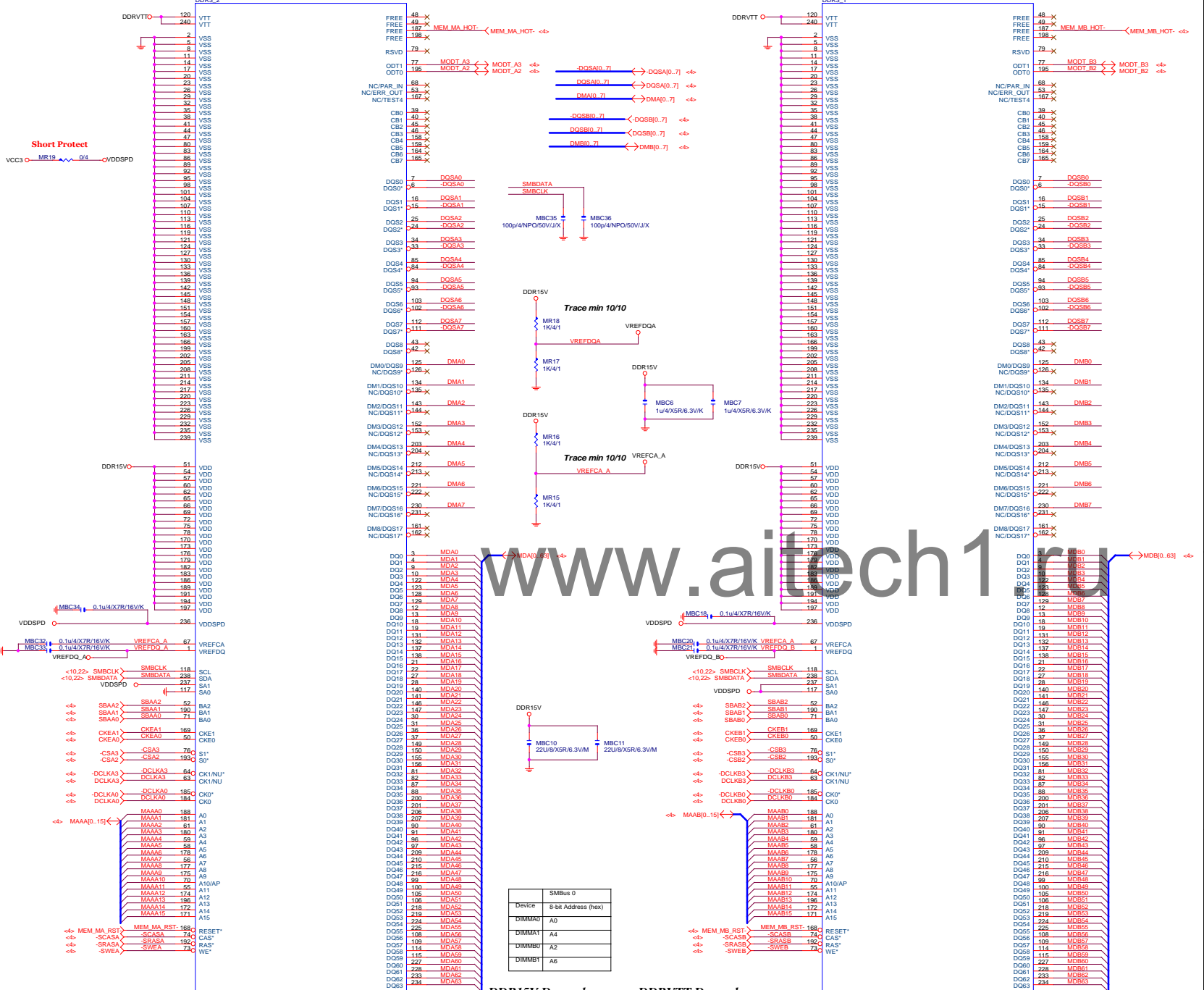
AMD RM/BLACK/T12KRC-04K812-31R 12KRC-04K812-32R



**GIGABYTE™**

## APU POWER & GND

Size Custom	Document Number <b>GA-F2A55M-S1</b>	Rev <b>3.0</b>
Date: Tuesday, September 10, 2013	Sheet 7 of 24	







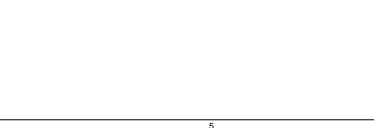
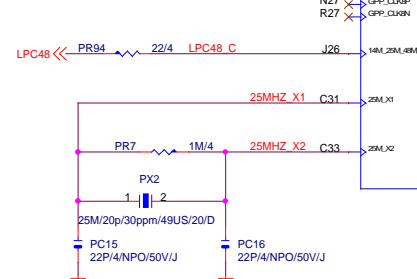
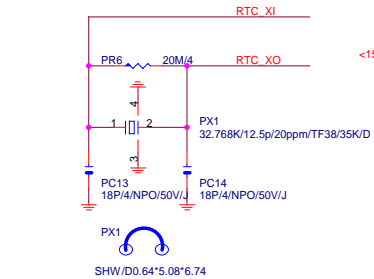
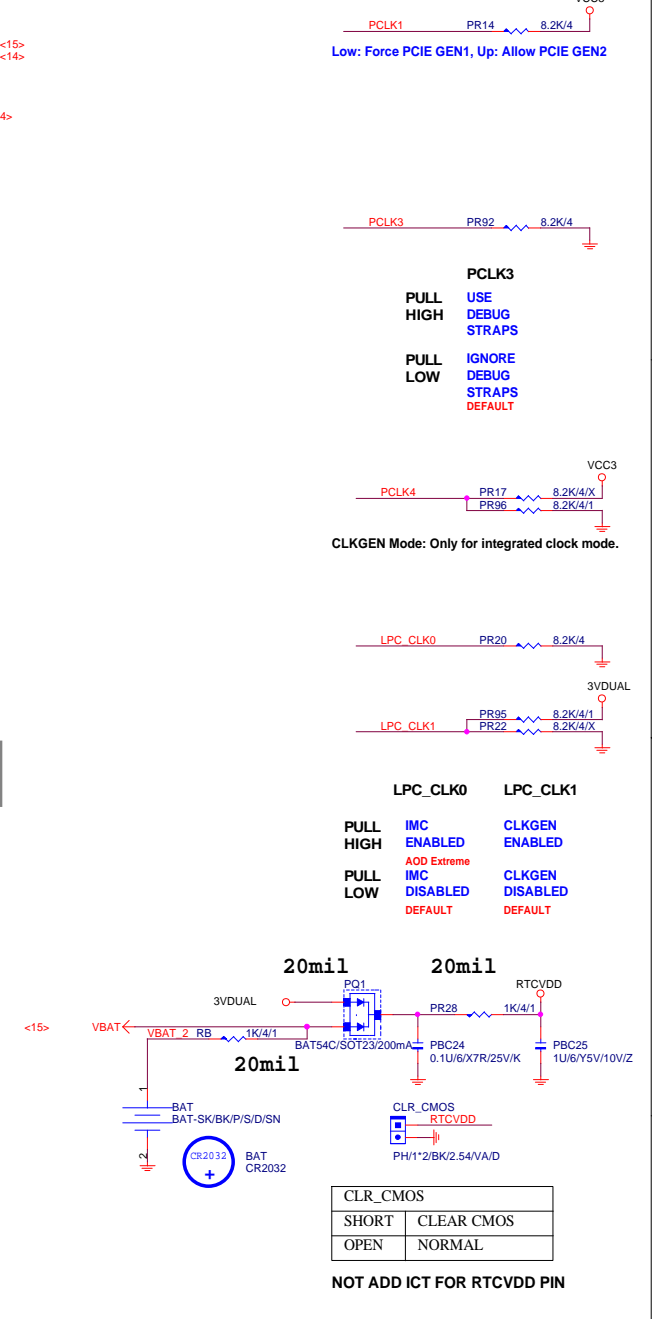
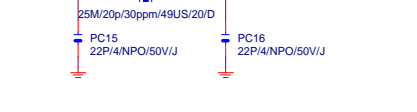
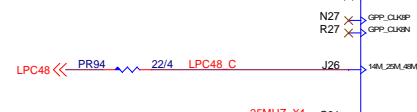
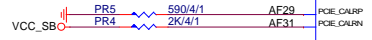
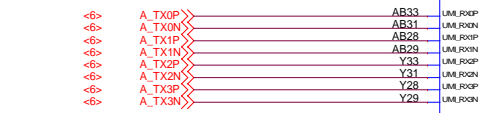
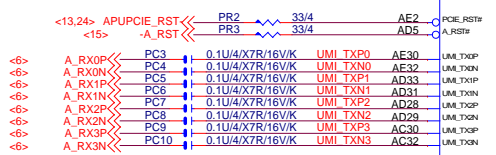
PLACE THESE PCIE AC COUPLING CAPS CLOSE TO SB850

## S.B HEATSINK



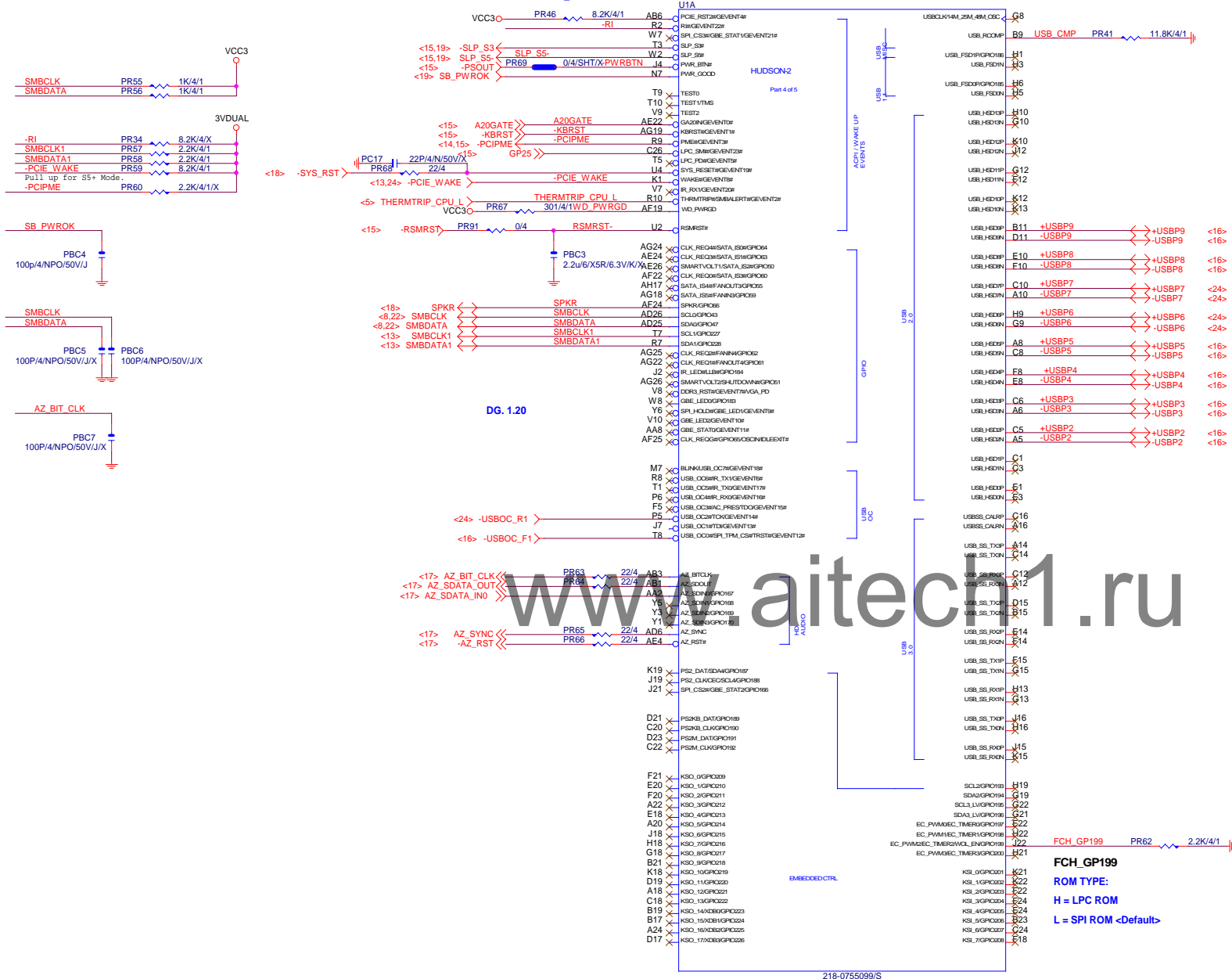
SB\_HS[12SP2-SA0301-01R\_12SP2-SA0301-02R\_12SP2-SA0301-03R]

## For APU PCI\_E devices.



**GIGABYTE™**  
Title  
Hudson D3 PCIE/PCI/CPU/LPC  
Size  
Document Number  
GA-F2A55M-S1  
Date  
Tuesday, September 10, 2013  
Sheet  
9  
of  
24  
Rev  
3.0

For FCH PCI\_E devices.



**GIGABYTE™**

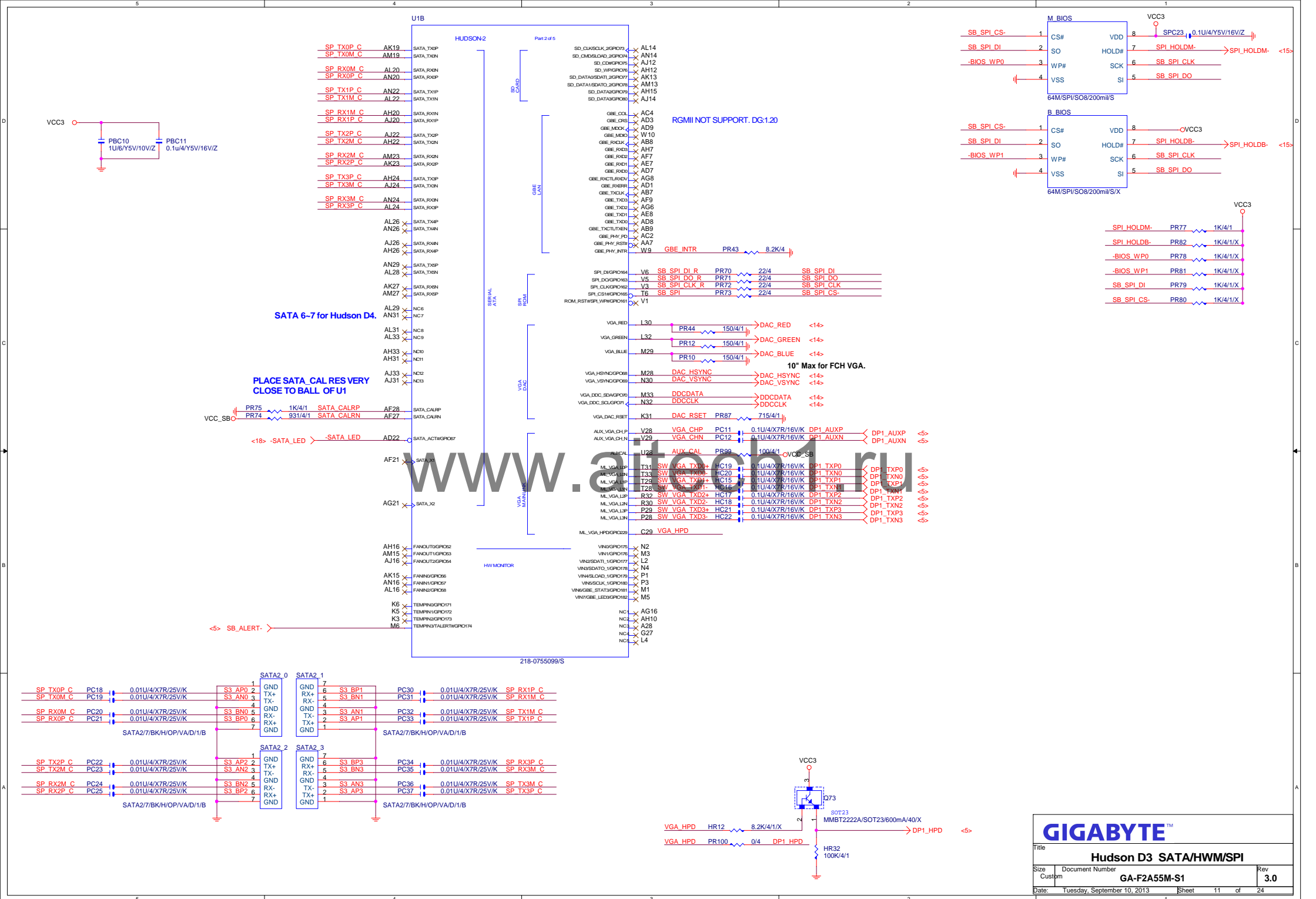
Title **Hudson D3 ACPI/USB/GPIO/AUDIO**

Size Document Number

Custom **GA-F2A55M-S1**

Rev **3.0**

Date: Tuesday, September 10, 2013 Sheet 10 of 24



PLACE ALL THE DECOUPLING CAPS ON THIS SHEET CLOSE TO SB AS POSSIBLE.

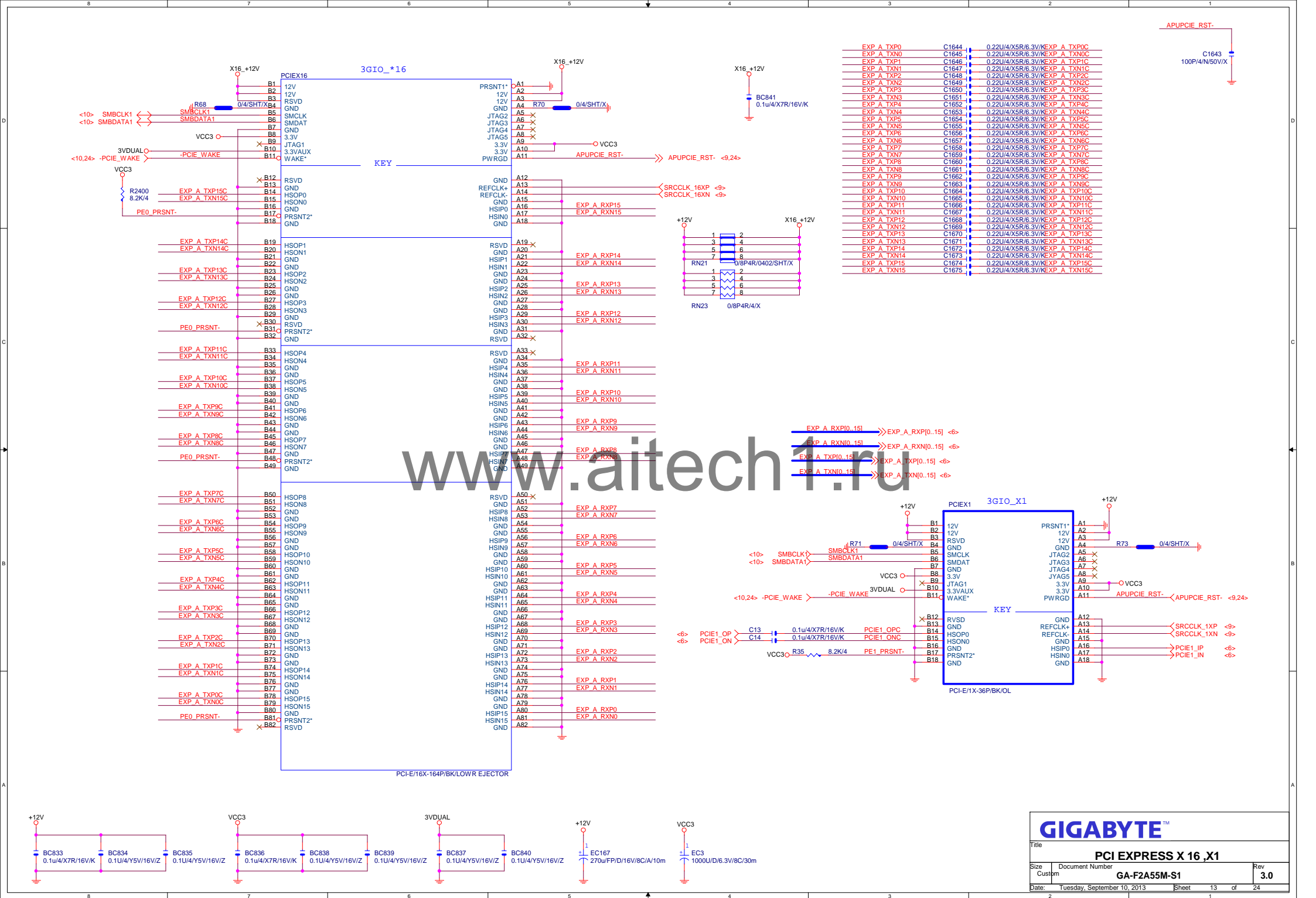
Hudson 3/4 does not support an RGMII/MII interface.

www.aitech1.ru

GIGABYTE™

Title HUDSON D3 PWR & GND

Size	Document Number	Rev
Custom	GA-F2A55M-S1	3.0
Date:	Tuesday, September 10, 2013	Sheet 12 of 24



GIGABYTE™

Title

PCI EXPRESS X 16, X1

Size

Custm

Document Number

GA-F2A55M-S1

Date:

Tuesday, September 10, 2013

Sheet

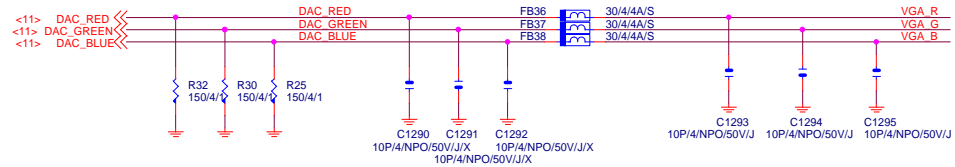
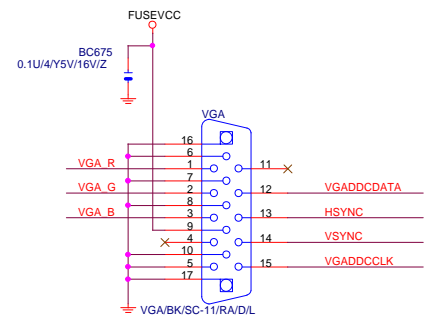
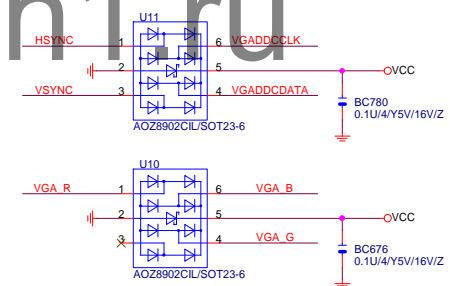
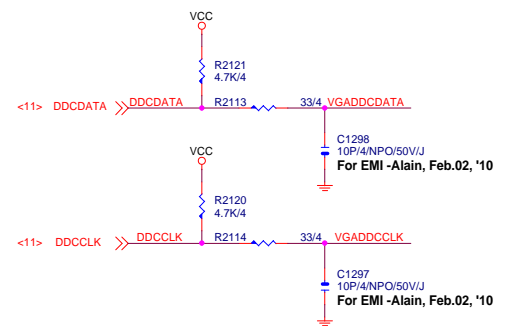
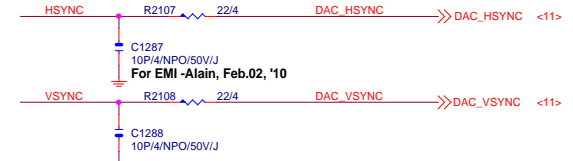
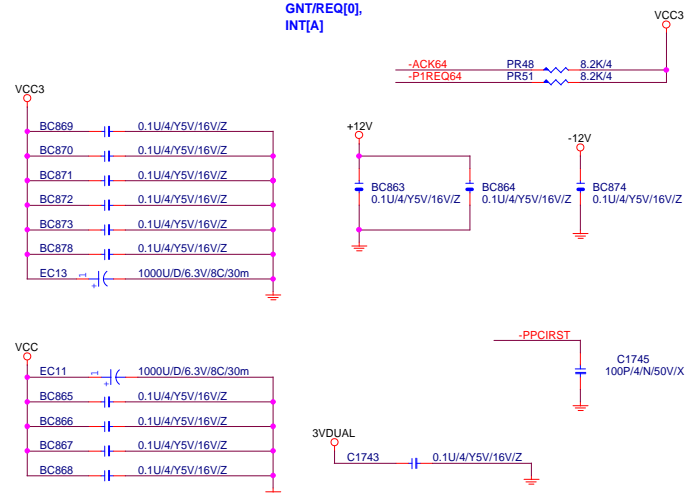
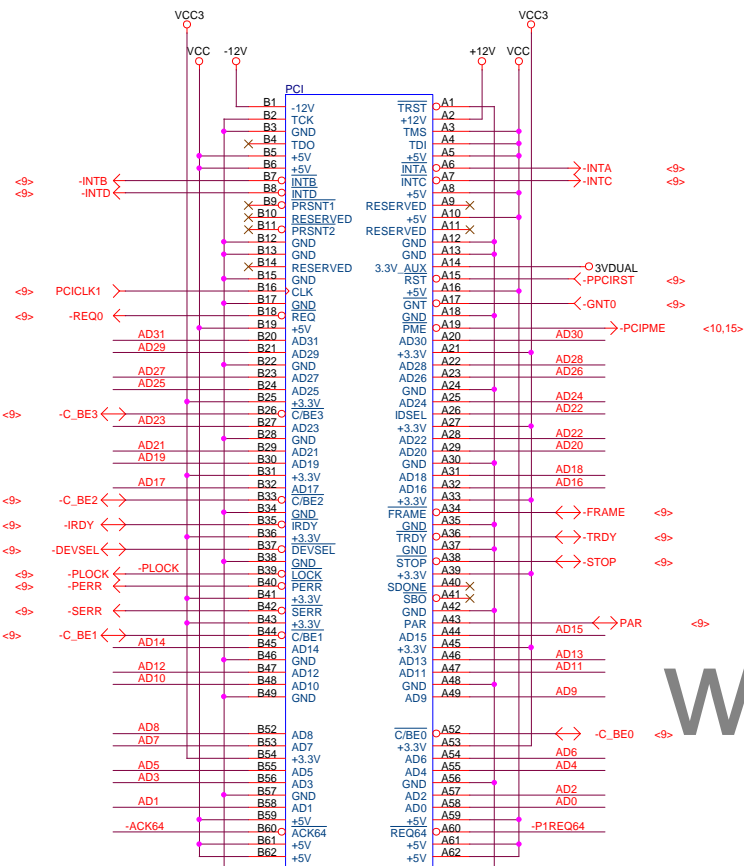
13 of 24

Rev

3.0

# PCI SLOT 1,2

<9> AD[0..31] <-> AD[0..31]



Title

PCI SLOT

Size

Document Number

GA-F2A55M-S1

Rev

3.0

Date:

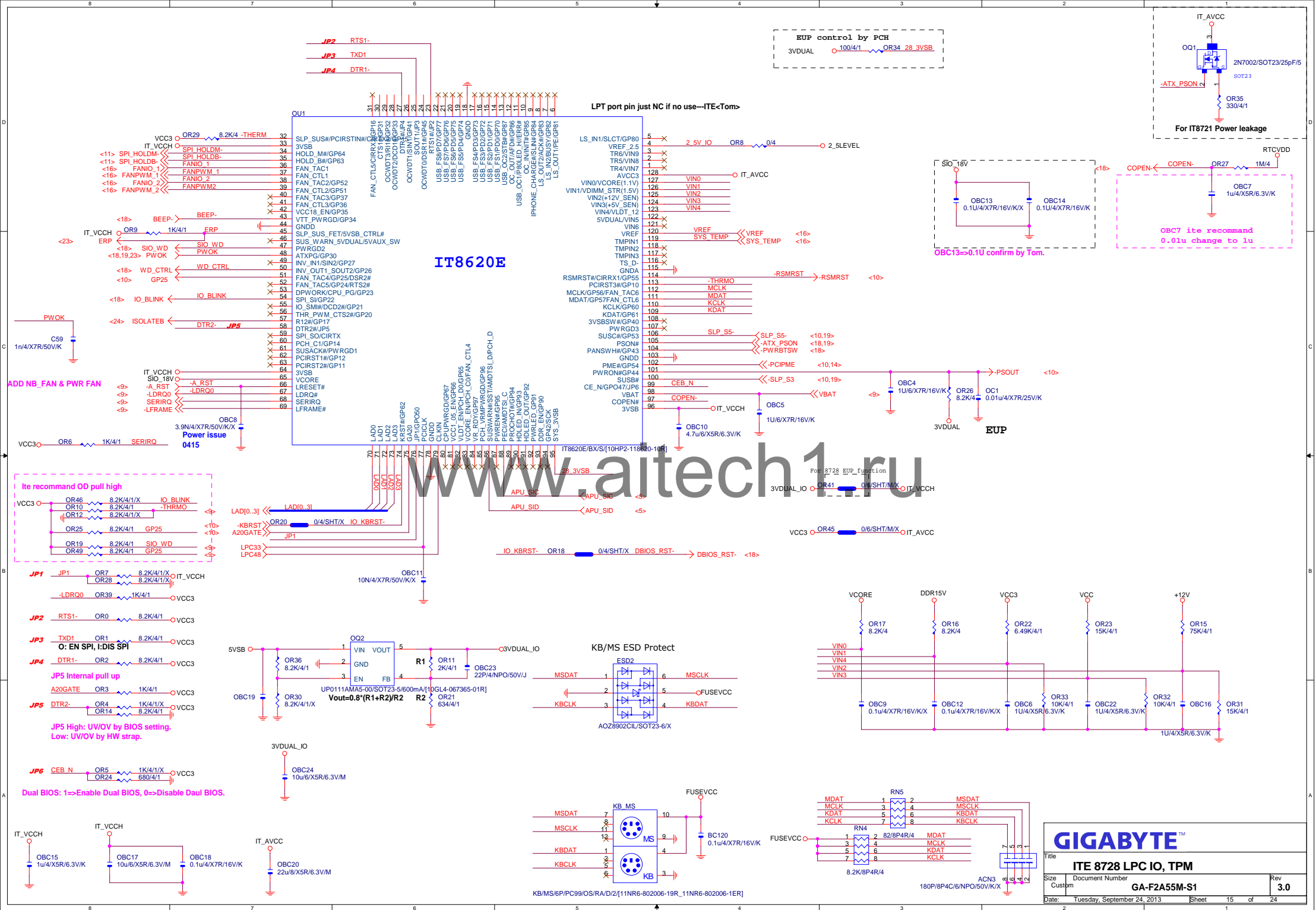
Tuesday, September 10, 2013

Sheet

14

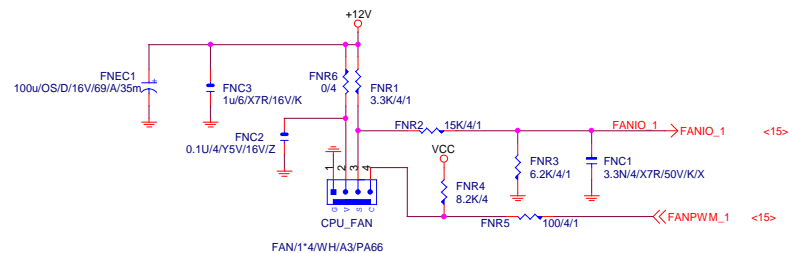
of

24





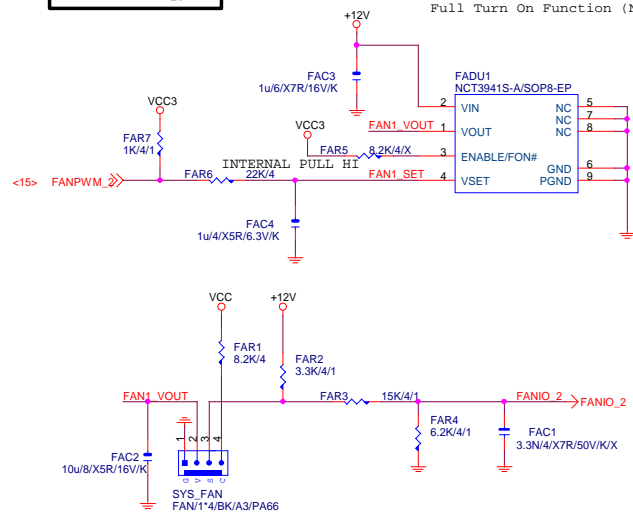
# CPU\_FAN



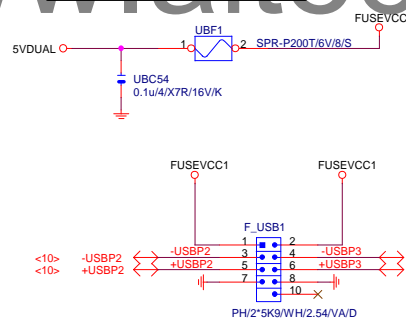
# SYSTEM\_FAN

## Linear SYS\_FAN

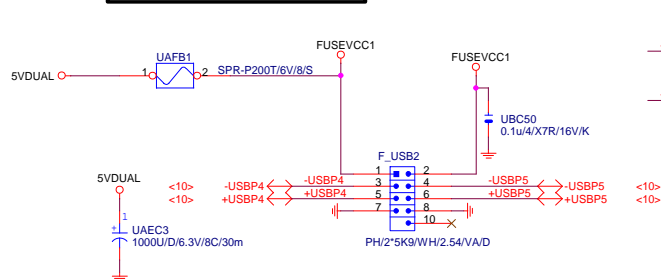
Enable Function (NCT3941S)  
Full Turn On Function (NCT3941S-A)



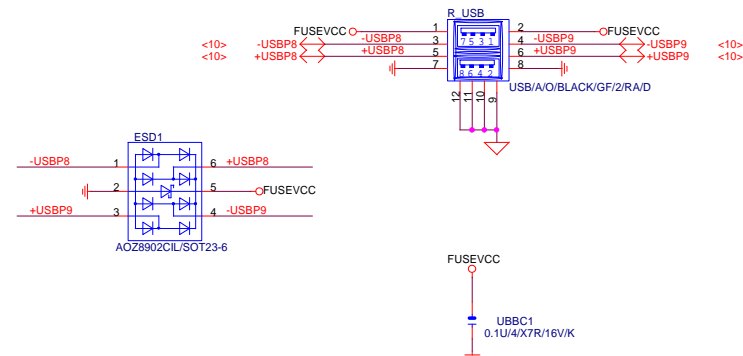
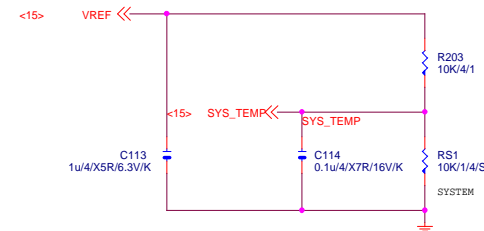
# FRONT SIDE USB1



# FRONT SIDE USB2



# Hardware Monitor circuits

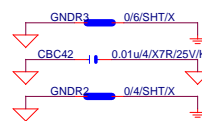
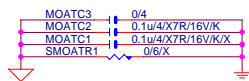
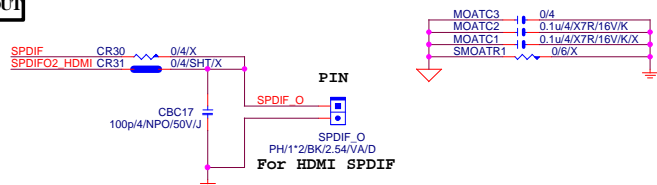


**GIGABYTE**

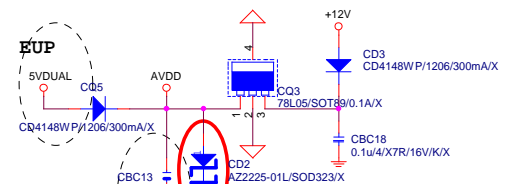
Title		
FAN , HWMO , R_USB		
Size	Document Number	Rev
Custm	GA-F2A55M-S1	3.0
Date:	Thursday, October 24, 2013	Sheet 16 of 24



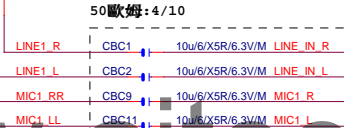
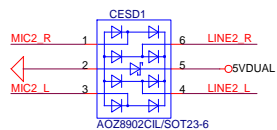
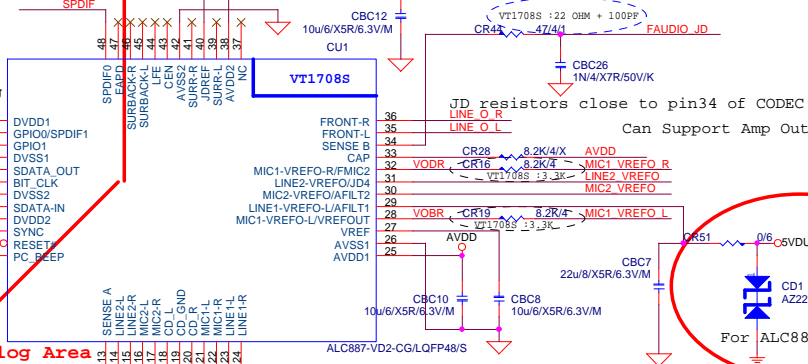
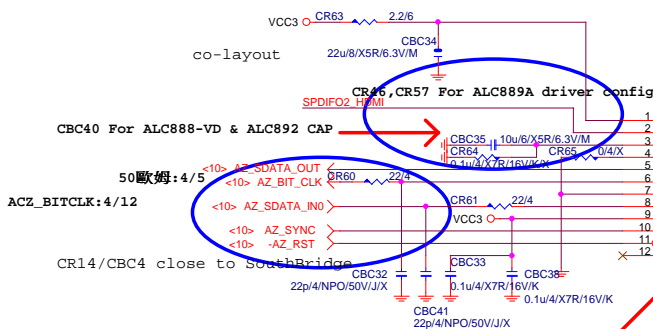
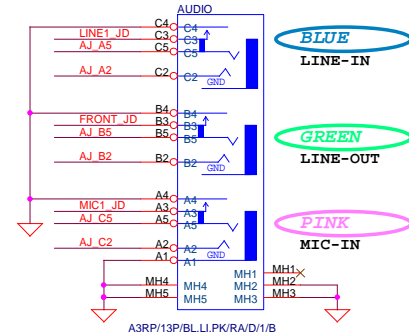
## SPDIF\_OUT



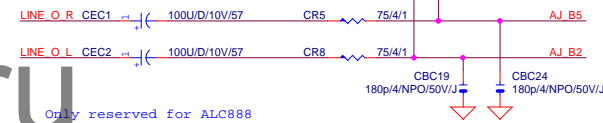
CODEC POWER/EMI PAD



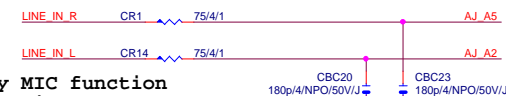
上ALC892時,此顆電容要保留  
ADD CD2 For ESD PROTECT DIODE



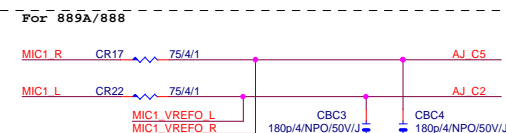
LINE-OUT



**LINE-IN**



Verify MIC function  
in LINE-in

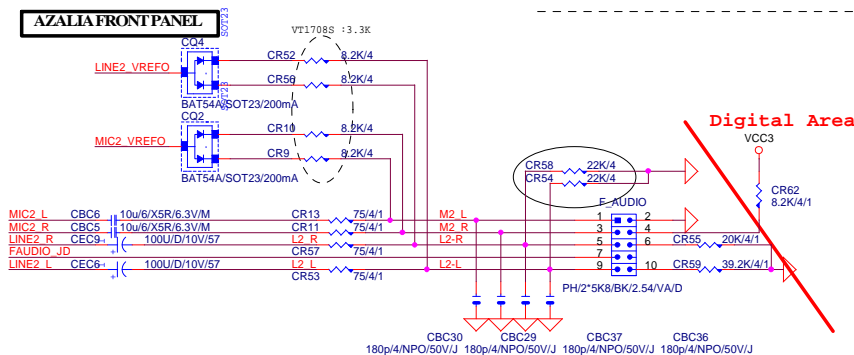


## MIC-IN

AZALIA CODEC [ALC887-VD2/ALC889/VT1708S/VT1708SCE](#) Colav

	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

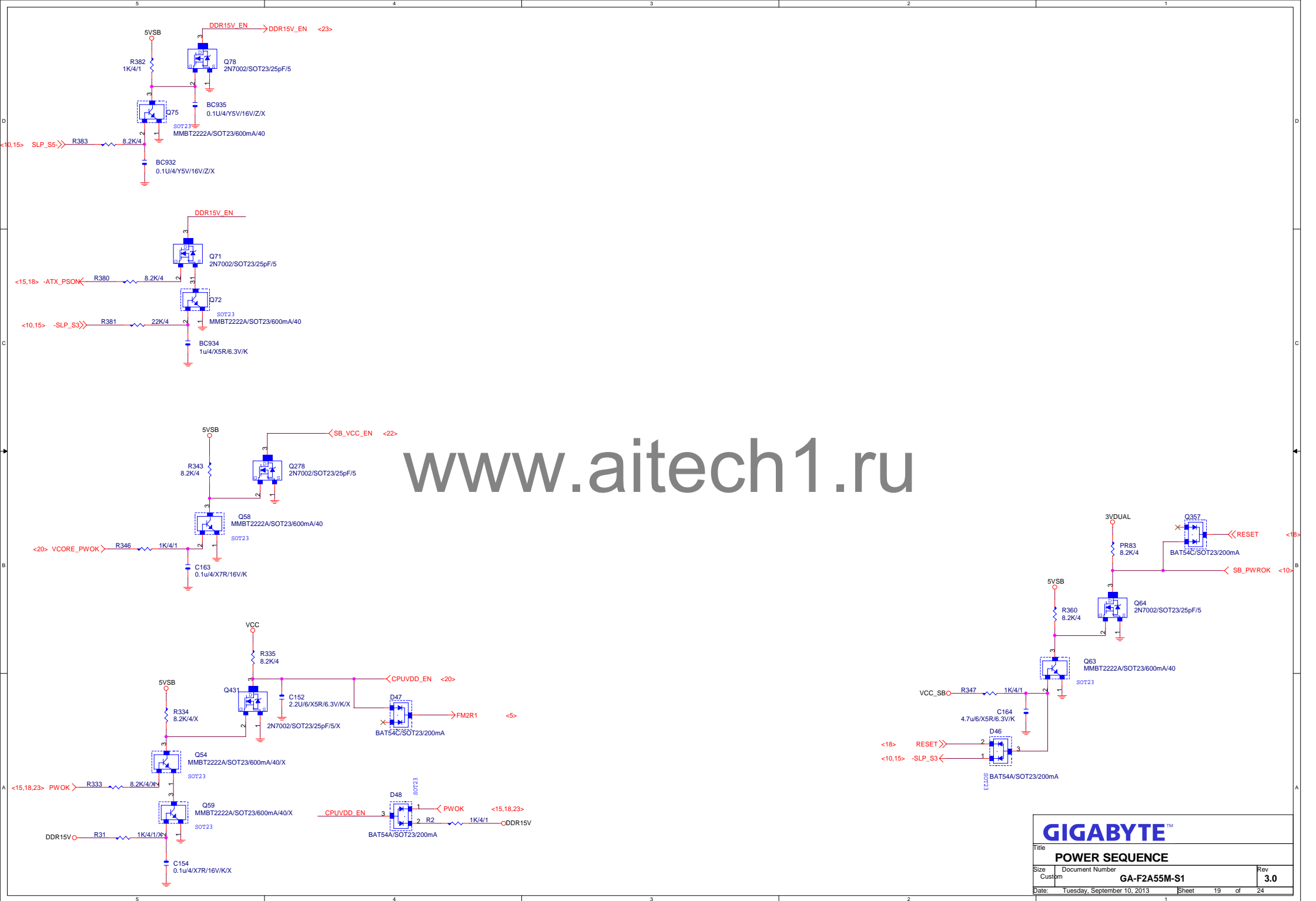
### AZALIA FRONT PANEL



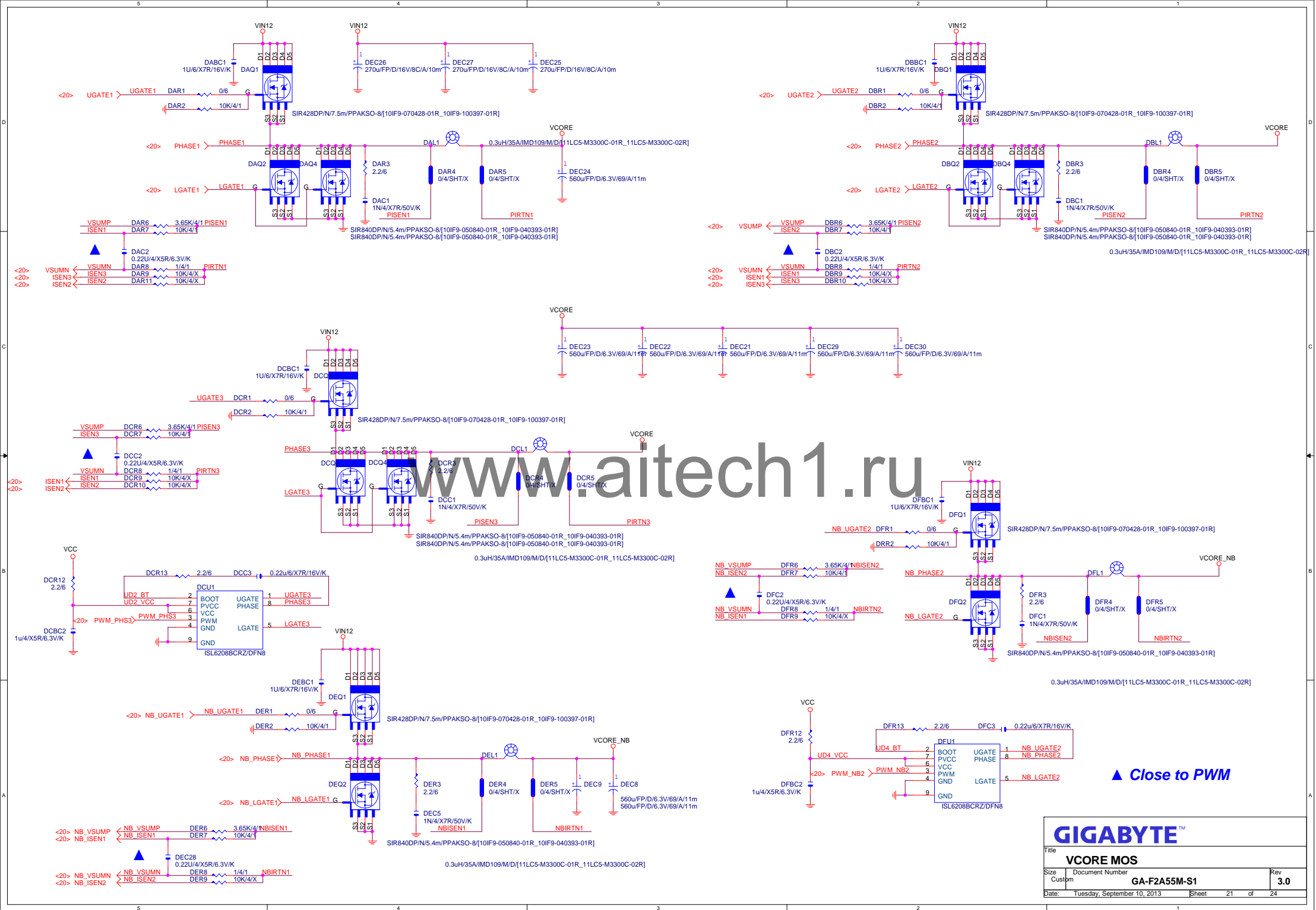
## GIGABYTE

Title				HD AUDIO ALC887-VD2			
Size Custom		Document Number				GA-F2A55M-S1	
						Rev 3.0	
Date:		Tuesday, September 10, 2013		Sheet		17 of 24	

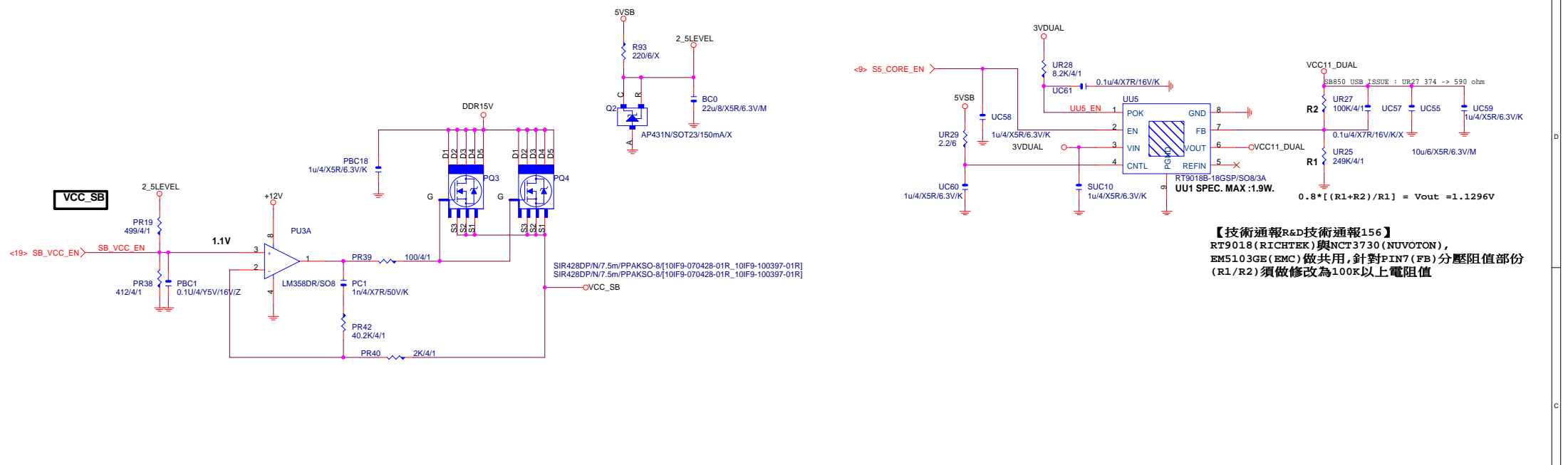






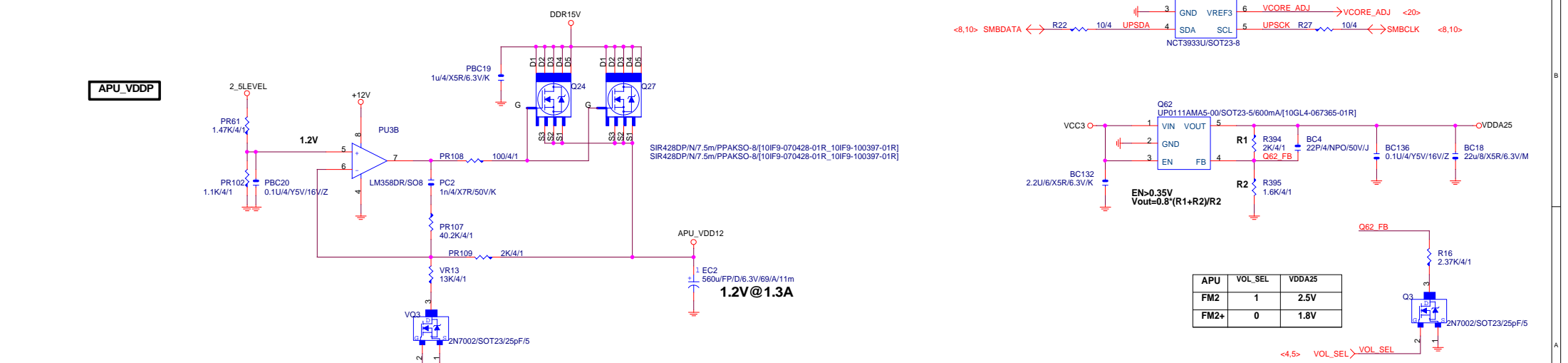


GIGABYTE™			
Title			
Vcore MOS			
Size	Document Number	Rev	
Custom	GA-F2A55M-S1	3.0	
Date:	Tuesday, September 10, 2013	Sheet	21 of 24



1.2V@1.69A

www.aitech1.ru



Vout=0.8\*(R1+R2)/R2

APU	VOL_SEL	APU_VDD12
FM2	1	1.2V
FM2+	0	1.05V

APU	VOL_SEL	VDDA25
FM2	1	2.5V
FM2+	0	1.8V

**GIGABYTE**

Title: VCC\_SB, APU\_VDDPA, VCC11\_DUAL, VDDA25

Size: Custom

Document Number: GA-F2A55M-S1

Date: Tuesday, September 10, 2013

Sheet: 22 of 24

Rev: 3.0



