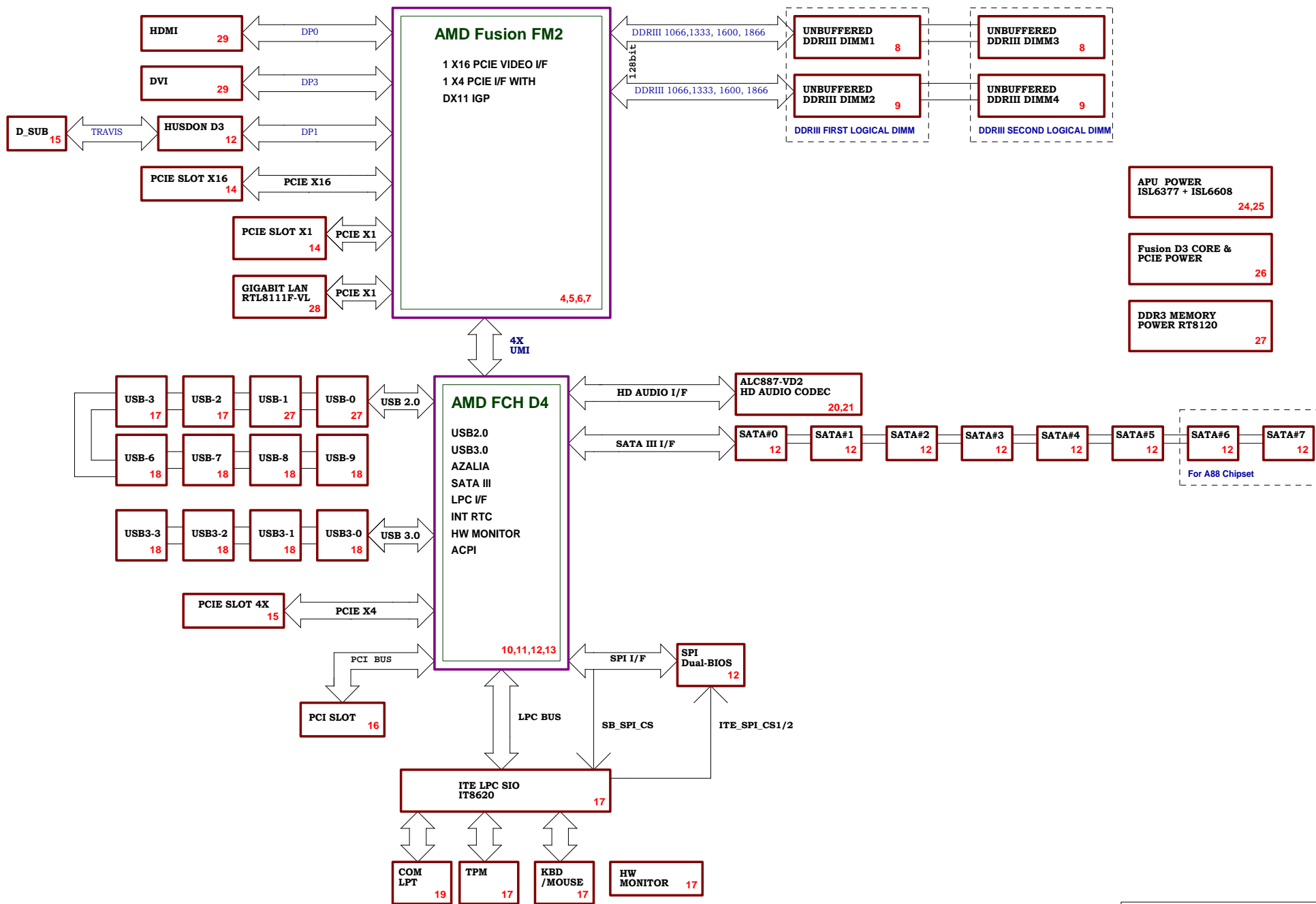
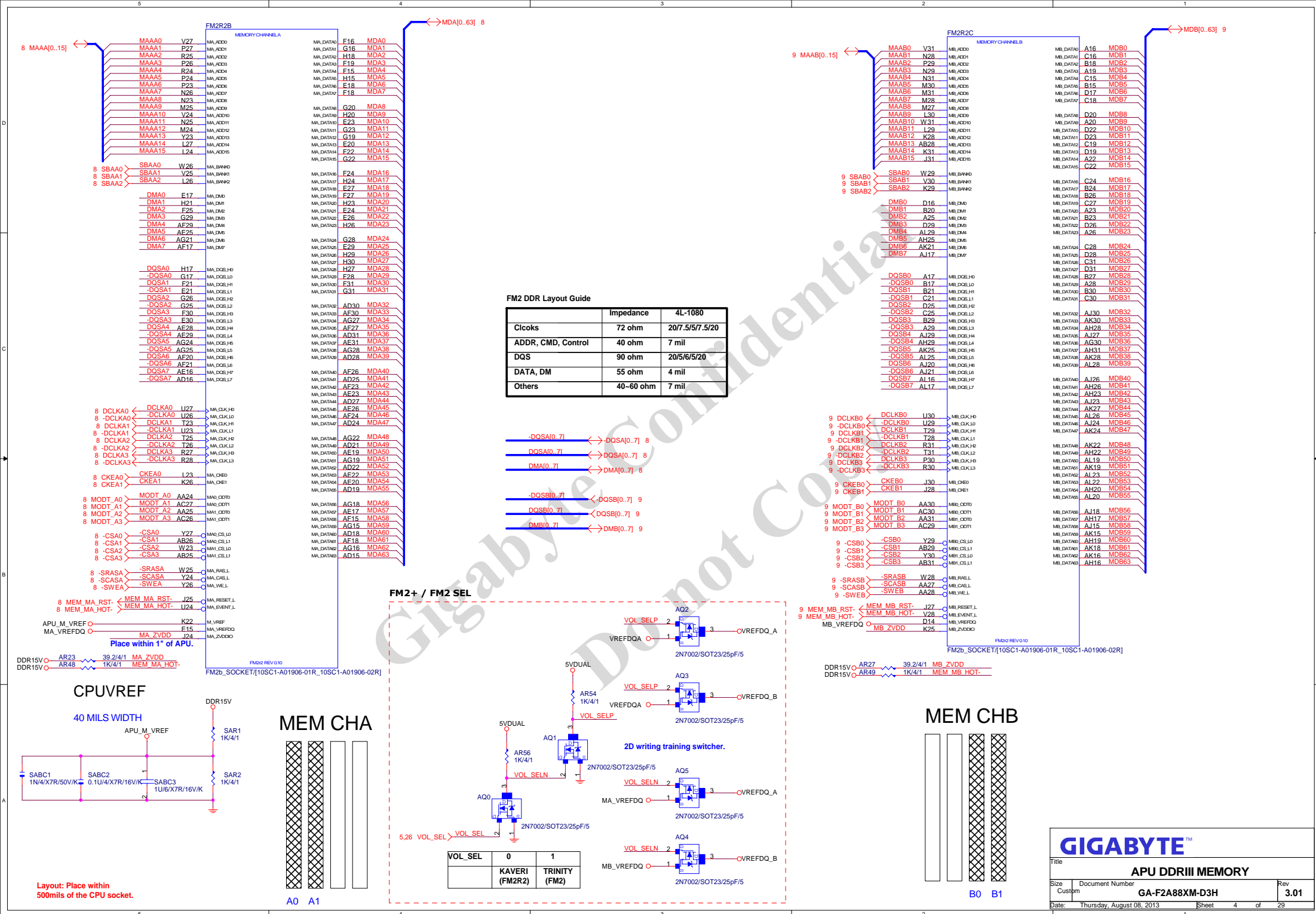
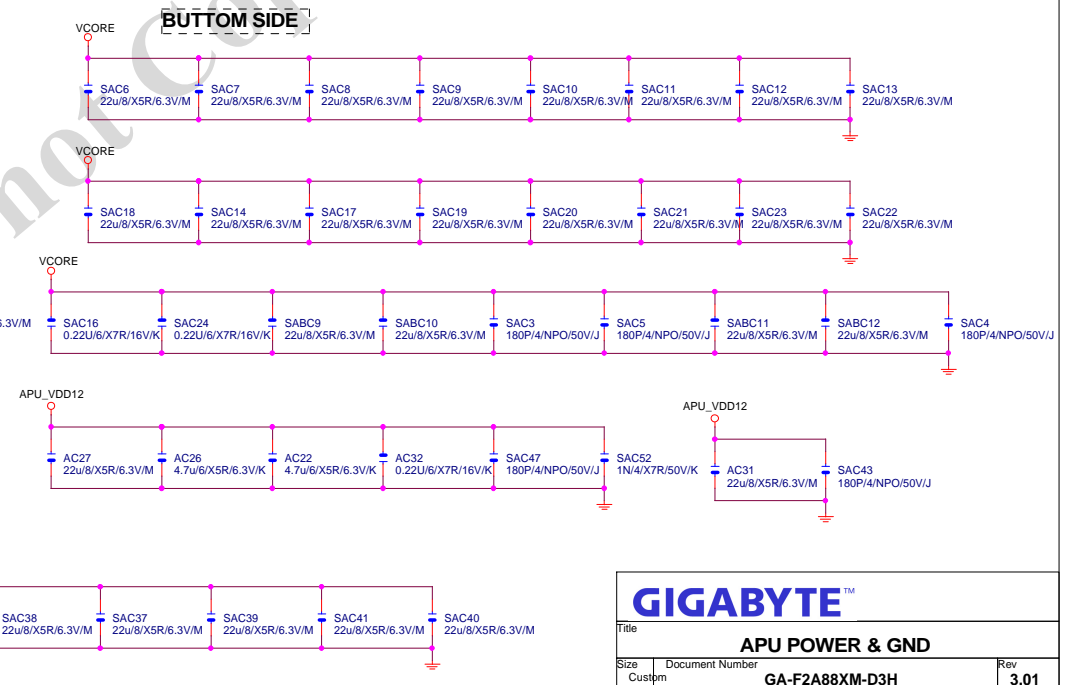
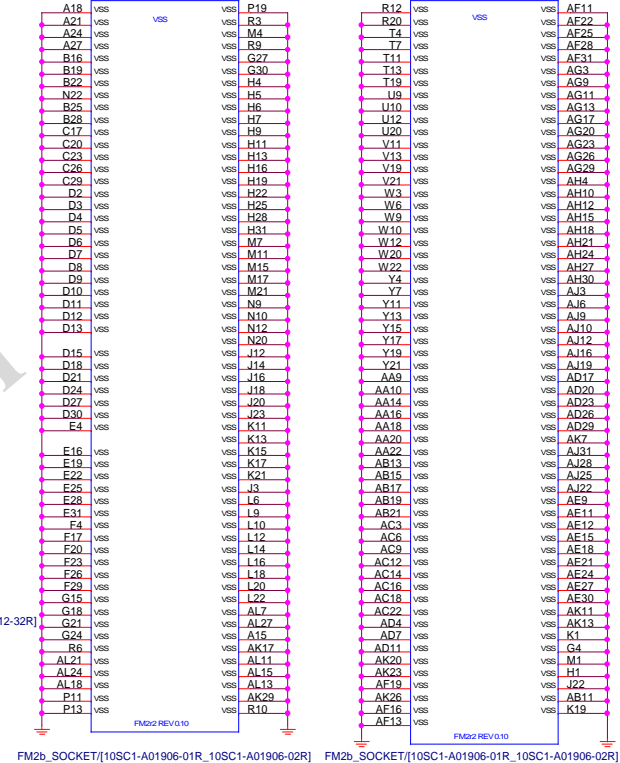


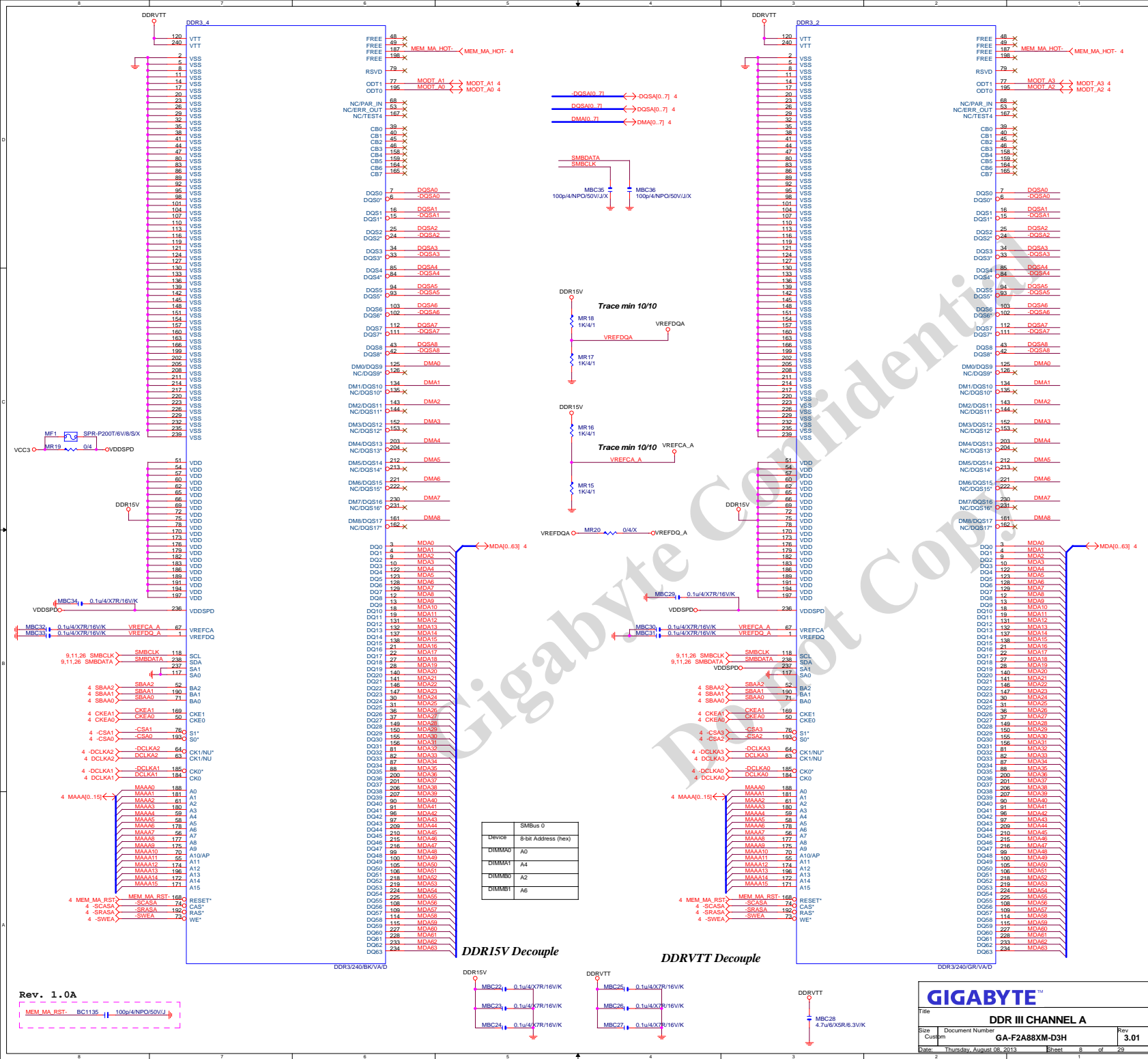
[illegible][illegible][illegible][illegible]

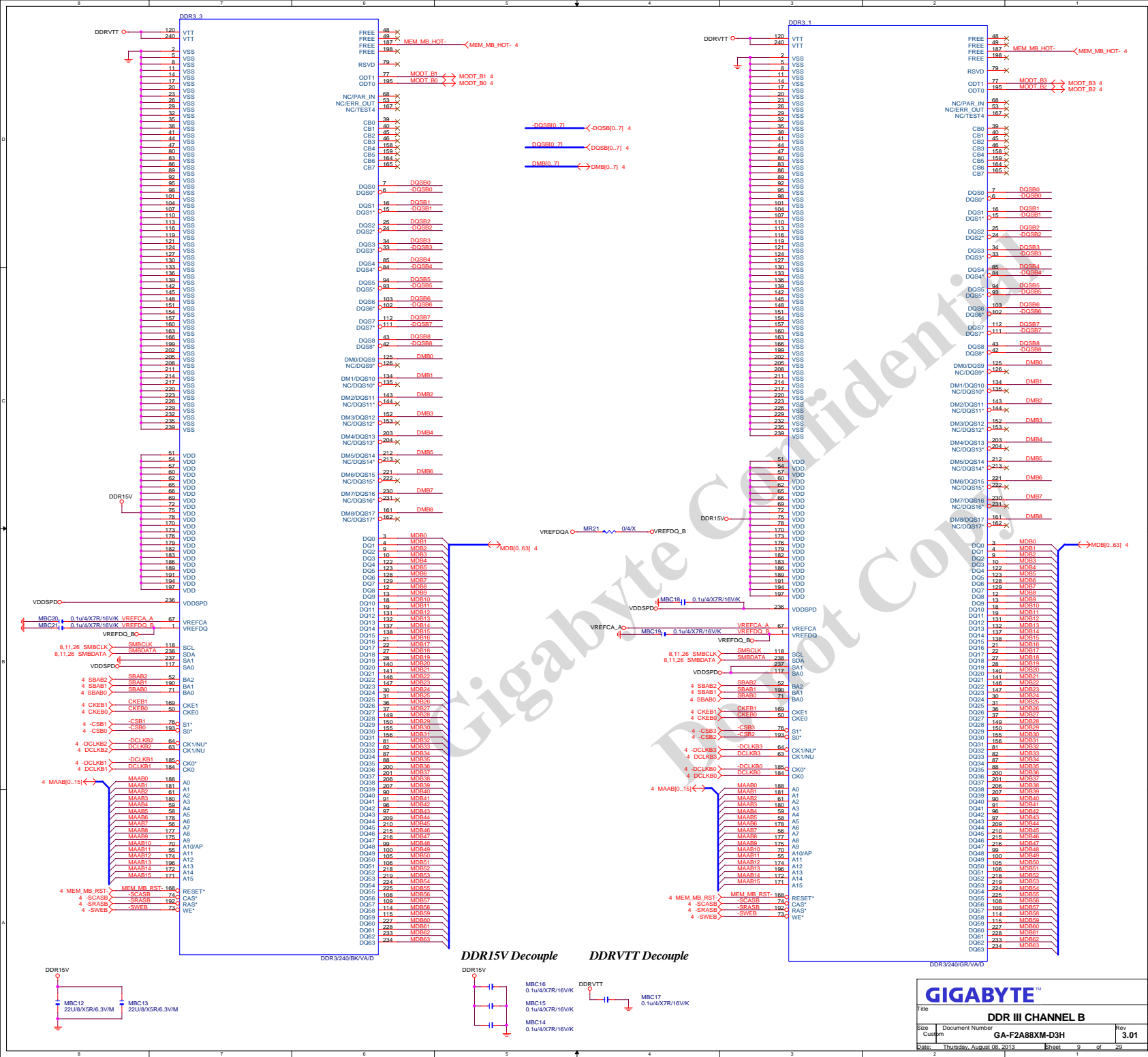
[illegible][illegible][illegible][illegible][illegible]







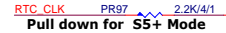






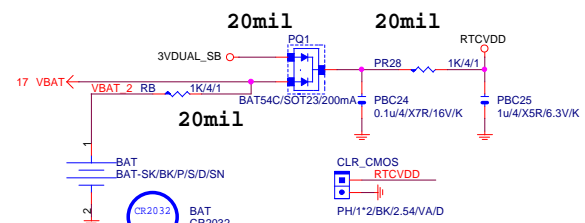
1

SB_HS/[12SP2-S04208-61R_12SP2-S04208-62R_12SP2-S04208-63R]



CLKGEN Mode: Only for integrated clock mode.

	LPC_CLK0	LPC_CLK1
PULL HIGH	IMC ENABLED	CLKGEN ENABLED
PULL LOW	IMC DISABLED	CLKGEN DISABLED
	DEFAULT	DEFAULT

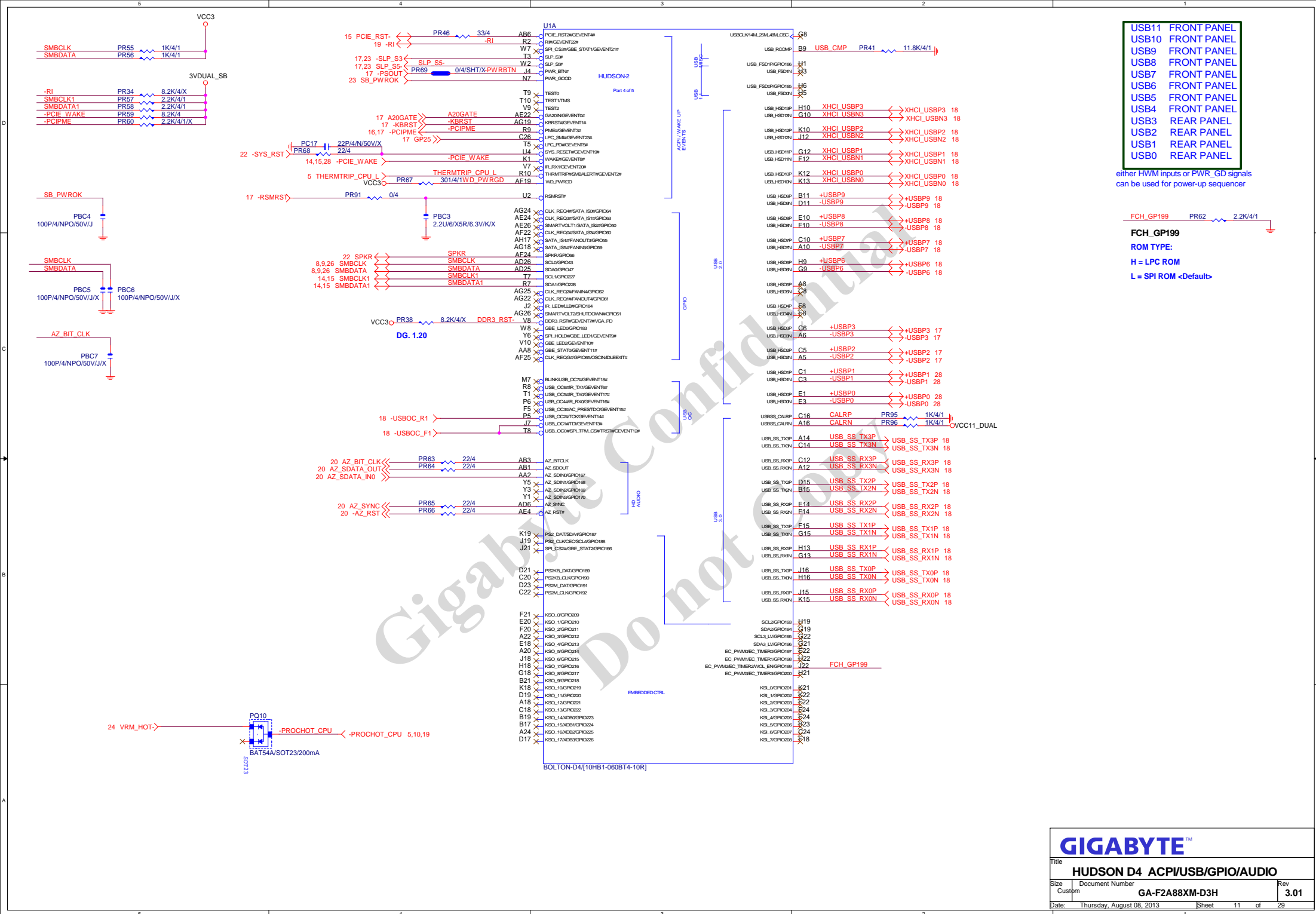


CLR_CMOS	
SHORT	CLEAR CMOS
OPEN	NORMAL

NOT ADD ICT FOR RTCVDD PIN

HUDSON D4 PCIE/PCI/CPU/LPC

Size Custom	Document Number GA-F2A88XM-D3H	Rev 3.01
Date:	Thursday, August 08, 2013	Sheet 10 of 29



SATA 6-7 for Hudson D4.

PLACE SATA_CAL RES VERY CLOSE TO BALL OF U1

VCC_SB 0.1u/4/Y5V/16V/Z

22 -SATA_LED -SATA_LED

5 SB_ALERT- 3VDUAL_SB

U1B HUDSON-2

RGMI NOT SUPPORT. DG:1.20

10" Max for FCH VGA.

SATA3_6

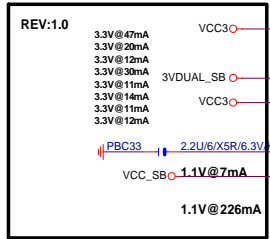
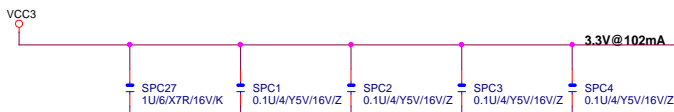
SATA2/7/BK/H/OP/VA/D/1/B

SATA2/7/BK/H/OP/VA/D/1/B

SATA2/7/BK/H/OP/VA/D/1/B

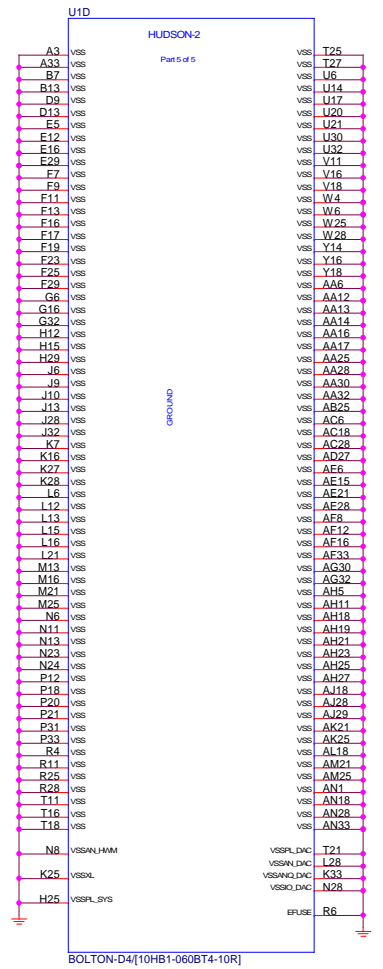
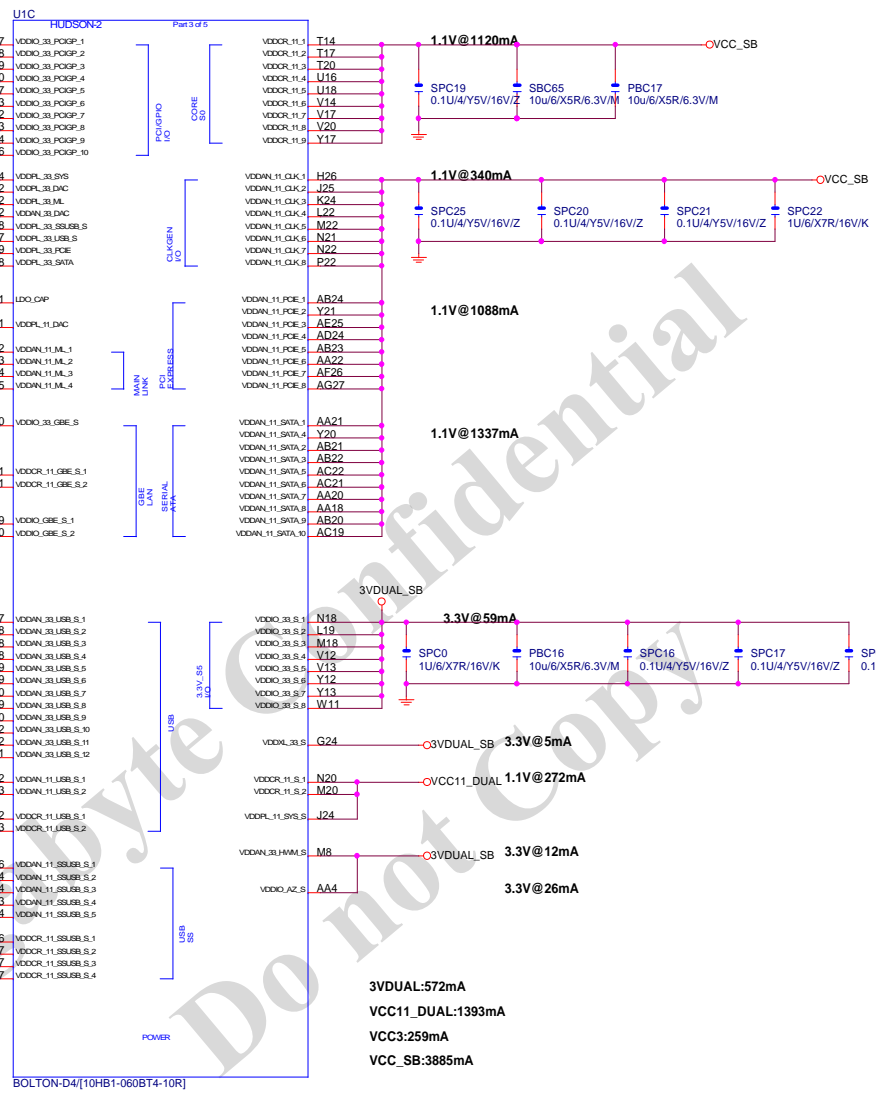
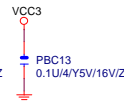
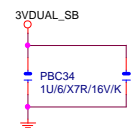
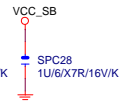
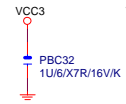
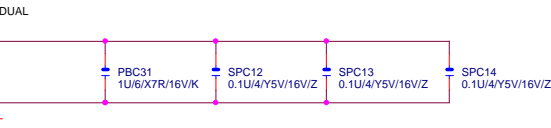
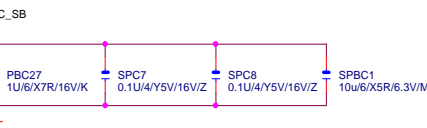
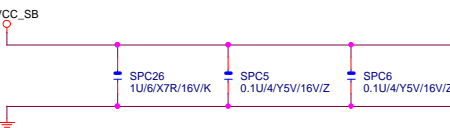
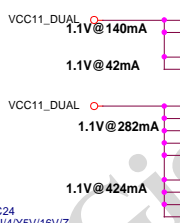
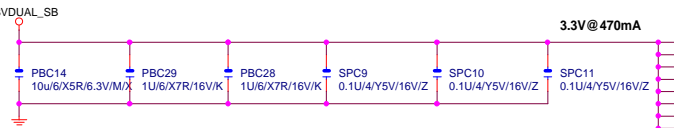
GIGABYTE

HUDSON D4 SATA/VGA
GA-F2A88XM-D3H
3.01

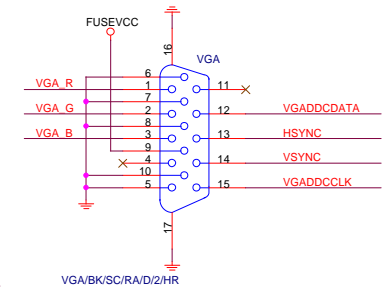
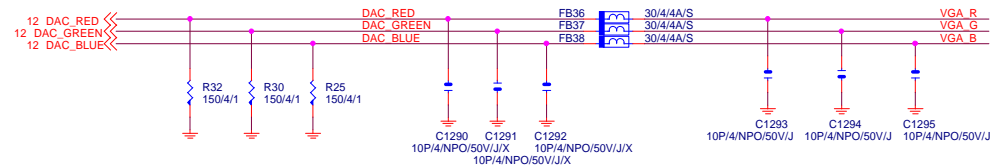


PLACE ALL THE DECOUPLING CAPS ON THIS SHEET CLOSE TO SB AS POSSIBLE.

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



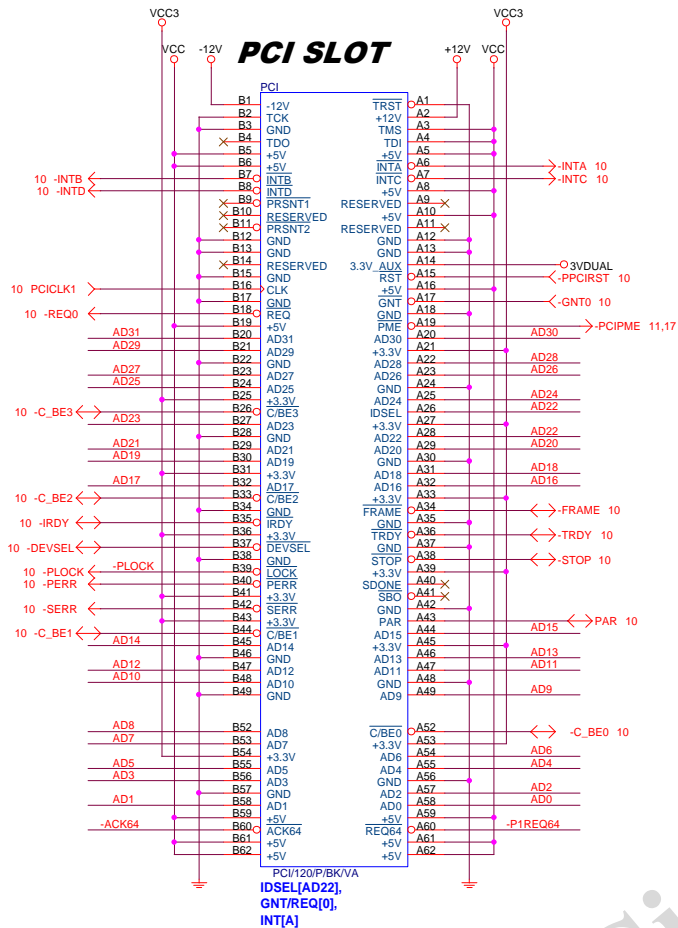
3VDUAL:572mA
VCC11_DUAL:1393mA
VCC3:259mA
VCC_SB:3885mA



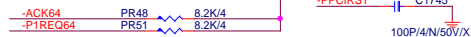
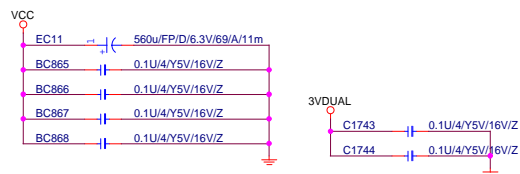
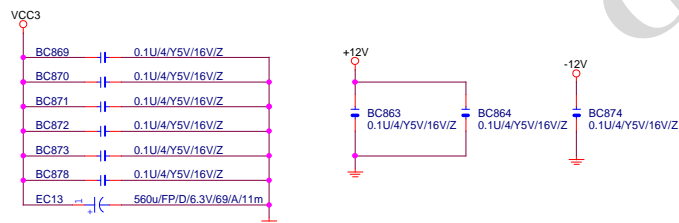
PCI SLOT 1,2

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

PCI SLOT

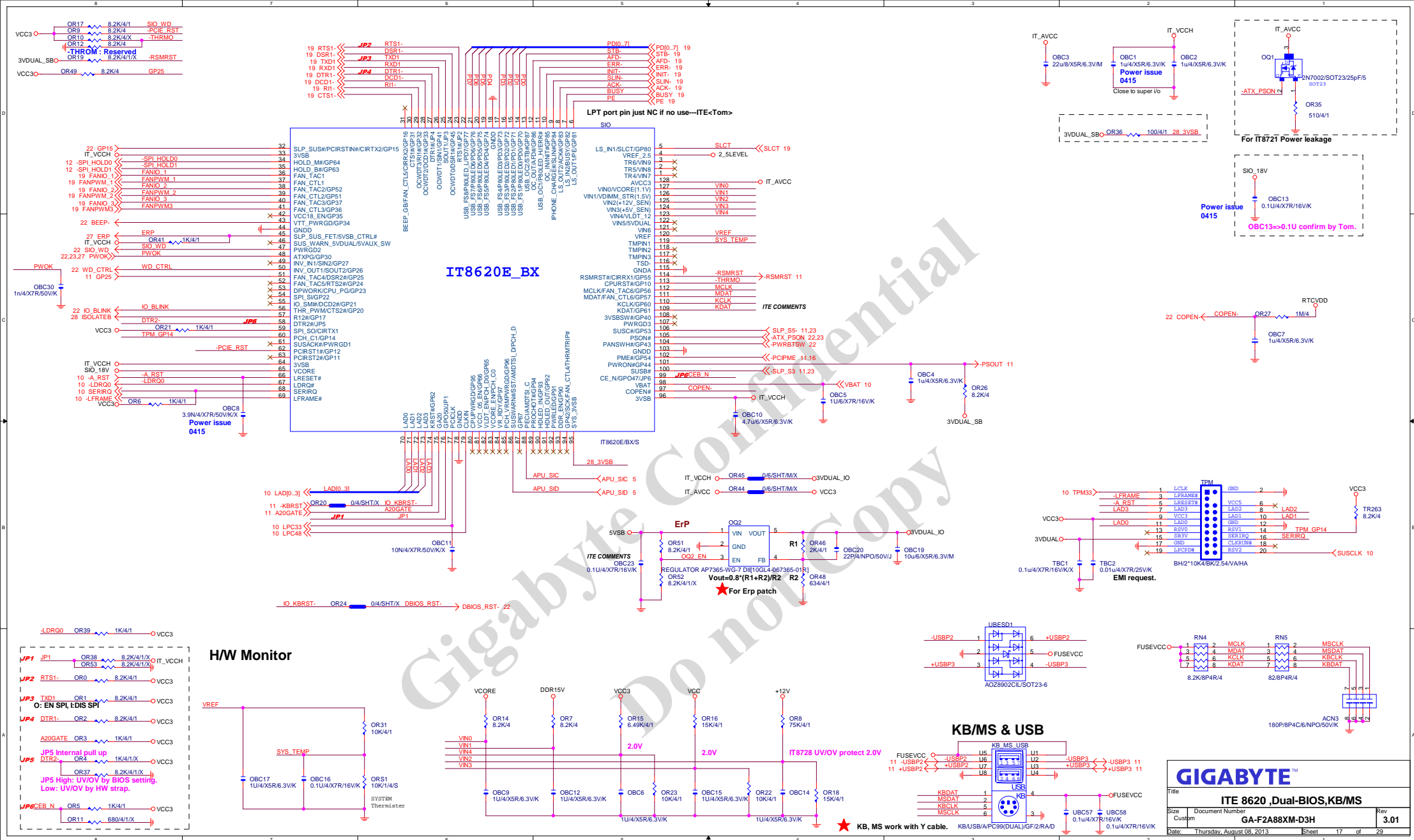


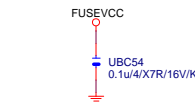
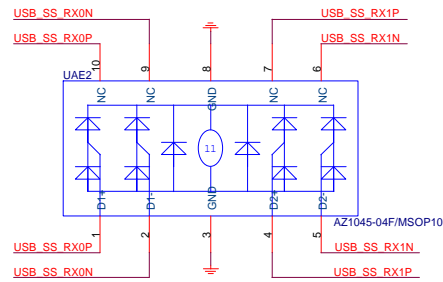
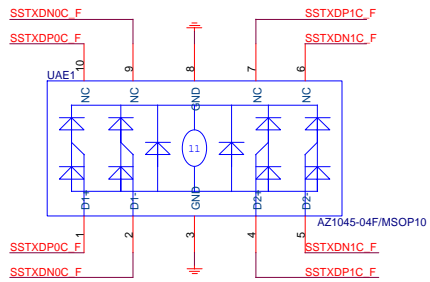
PCI/120/P/BK/VA
IDSEL[AD22],
GNT/REQ[0],
INT[A]



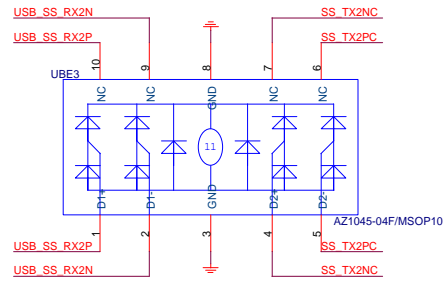
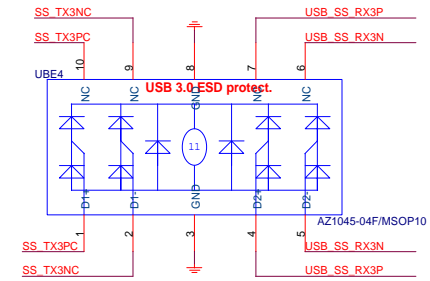
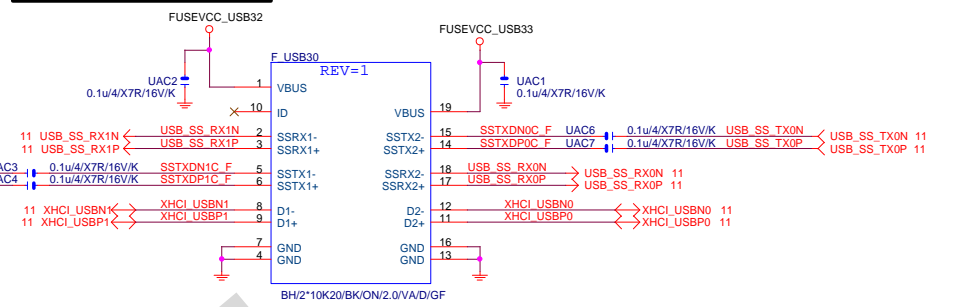
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Title			
PCI SLOT			
Size	Document Number	Rev	
Custom	GA-F2A88XM-D3H	3.01	
Date:	Thursday, August 08, 2013	Sheet	16 of 29

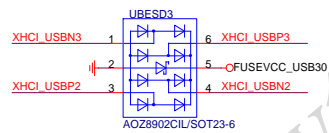
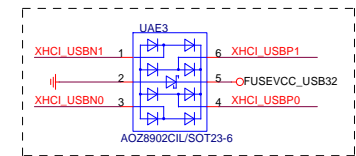
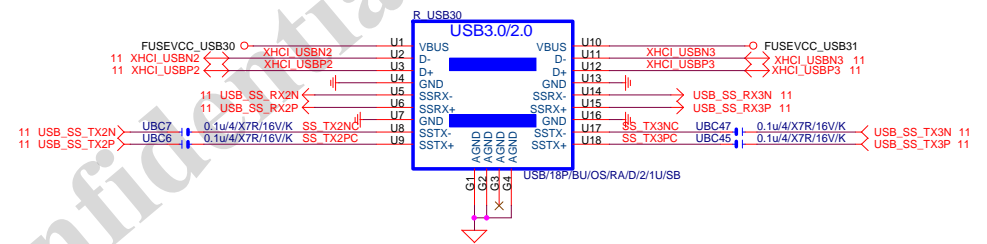




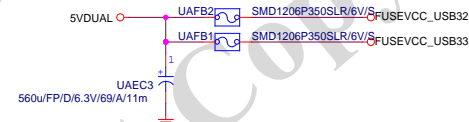
FRONT SIDE USB2



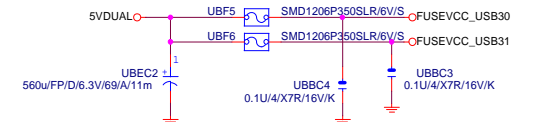
REAR SIDE USB3



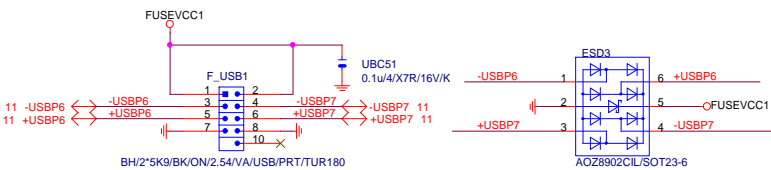
FRONT SIDE



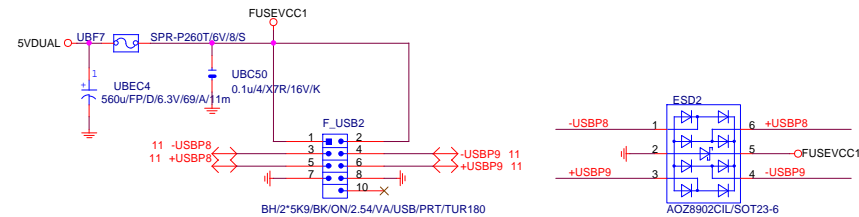
REAR SIDE



FRONT SIDE USB1

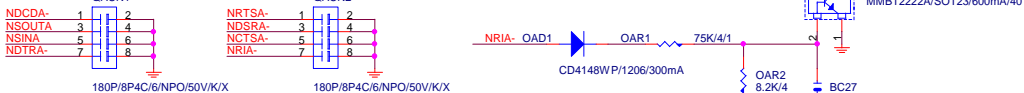


FRONT SIDE USB2

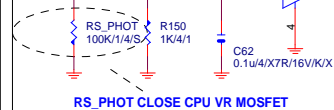


GIGABYTE™			
F_USB, F_USB30, R_USB30			
Size	Document Number	Rev	
Custm	GA-F2A88XM-D3H	3.01	
Date:	Thursday, August 08, 2013	Sheet	18 of 29

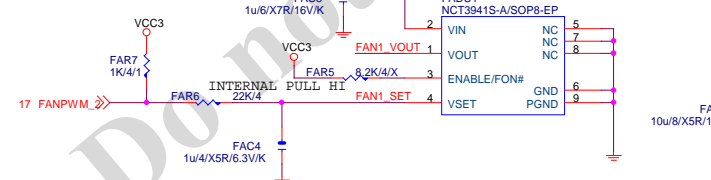
COM



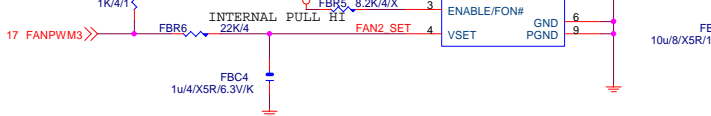
MOSFET Hot Protection



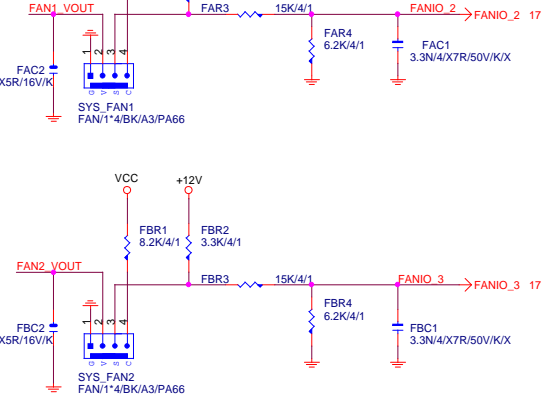
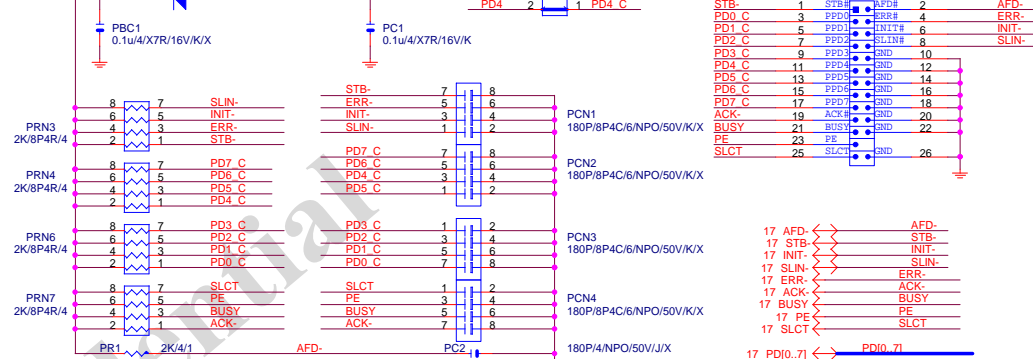
SYSTEM FAN1



SYSTEM FAN2



LPT



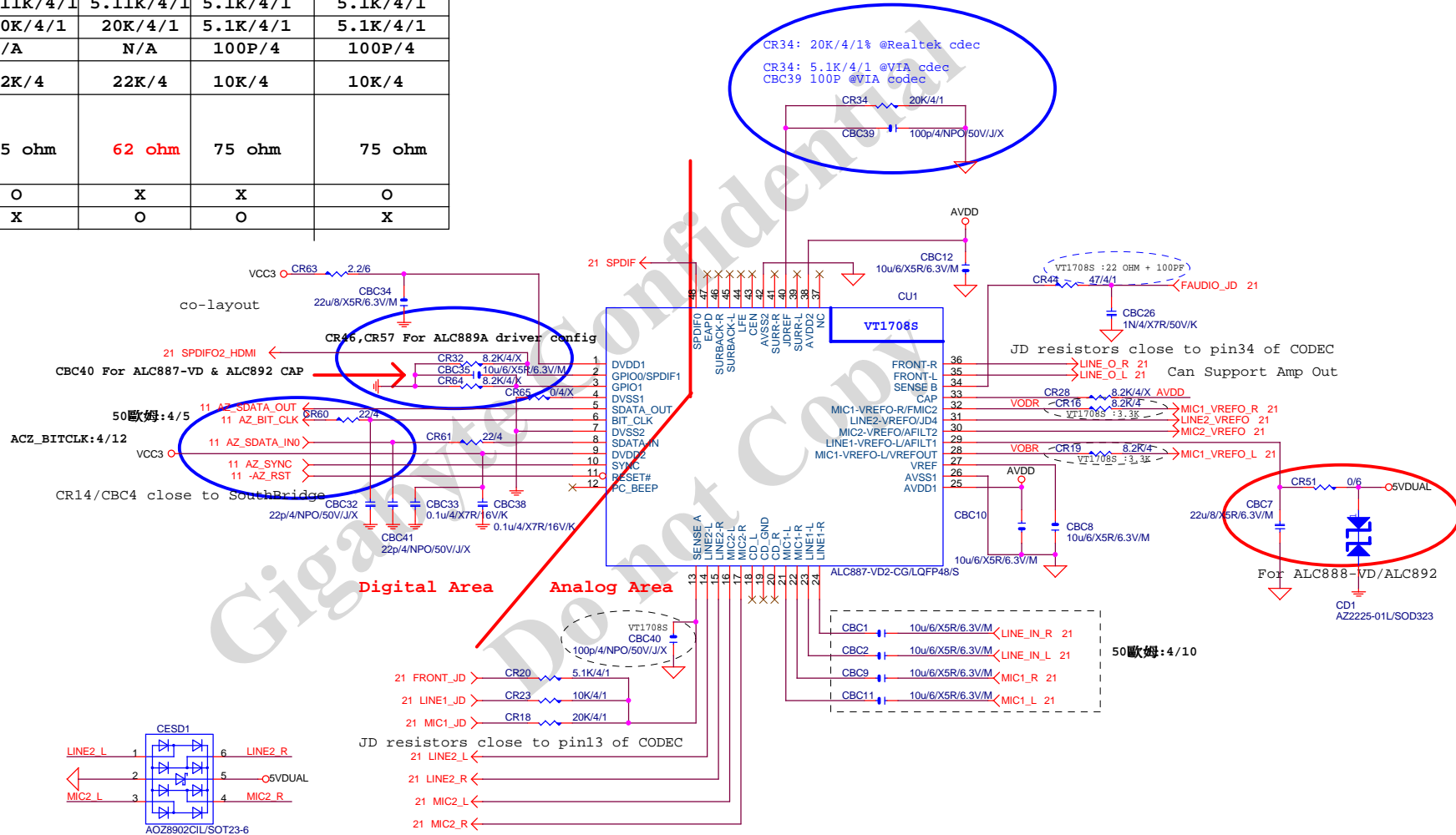
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Title CPU & SYS FAN COM I RT MOSEFT HOT

Size	Document Number	Rev
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Date:	Thursday, August 08, 2013	Sheet	19	of	29
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	ALC887-VD2	ALC889	VT1708S	VT1708SCE
CR65	X	O	O	X
CR64	X	X	X	O
CR44/CBC6	47ohm+1nF	47ohm+1nF	22ohm+100P	22ohm+100P
CR34	20K/1%	20K/1%	5.1K/1%	5.1K/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
CR34	20K/4/1	20K/4/1	5.1K/4/1	5.1K/4/1
CBC39/CBC40	N/A	N/A	100P/4	100P/4
CR6/CR7/CR54/CR58	22K/4	22K/4	10K/4	10K/4
CR5/CR8/CR1/CR14/ CR17/CR22/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



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Title

ALC887-VD2 CODEC

Size
Custom

Document Number

GA-F2A88XM-D3H

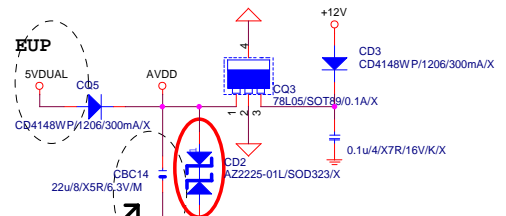
Rev

3.01

Date: Thursday, August 08, 2013

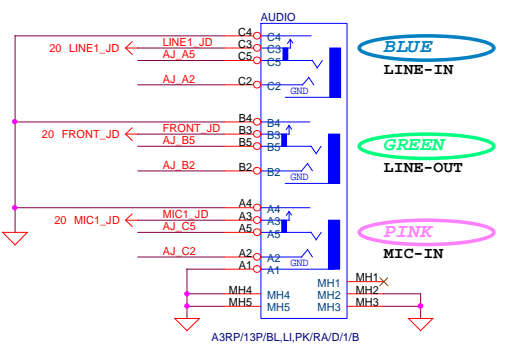
Sheet 20 of 29

CODEC POWER/EMI PAD

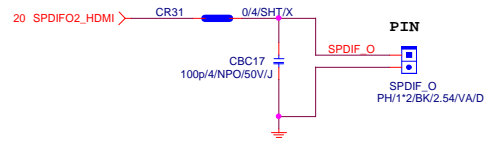


上ALC892時,此顆電容要保留
ADD CD2 For ESD PROTECT DIODE

HD Audio Jack

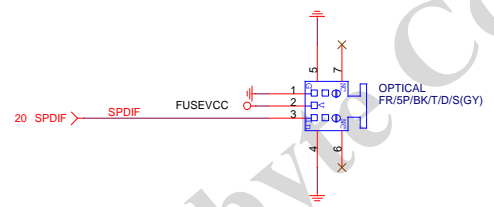


SPDIF_OUT



For HDMI SPDIF

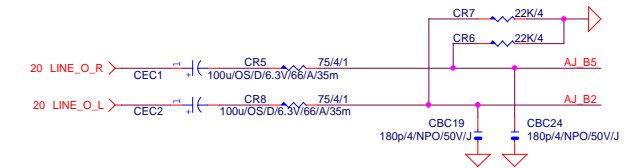
2 type Connector Co-lay



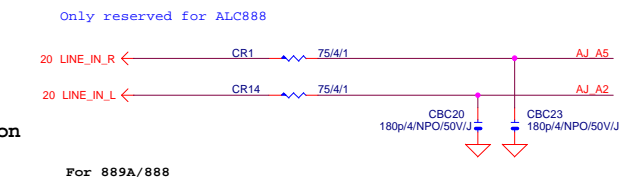
1.0/1.1 Selection

	HDMI_SPDIF	OPTICAL	CR40
Rev: 1.0	V	X	V
Rev: 1.1	HDMI	V	X

LINE-OUT

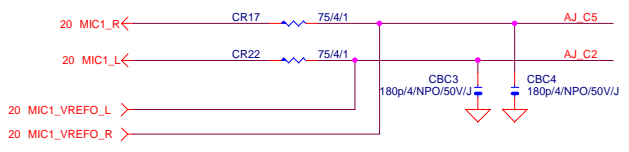


LINE-IN

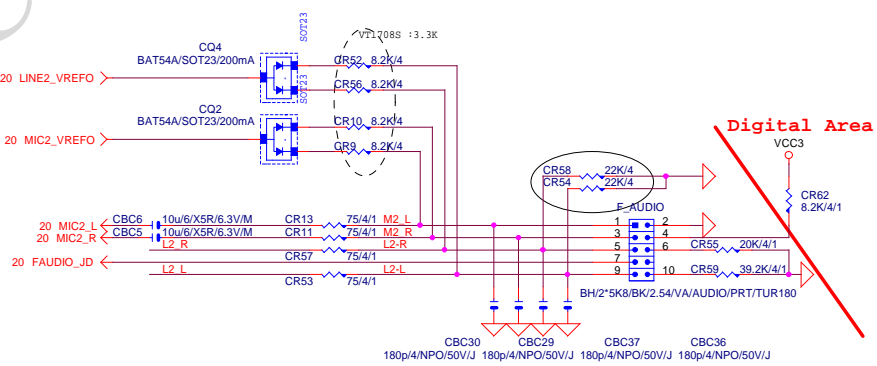


Verify MIC function in LINE-in

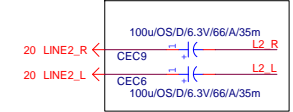
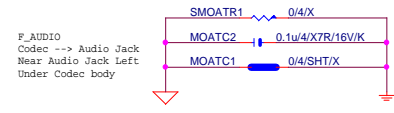
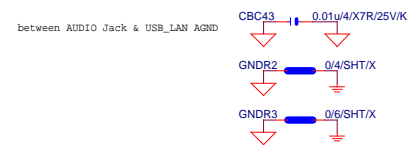
MIC-IN



AZALIA FRONT PANEL



Digital Area



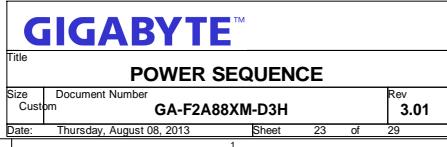
GIGABYTE™

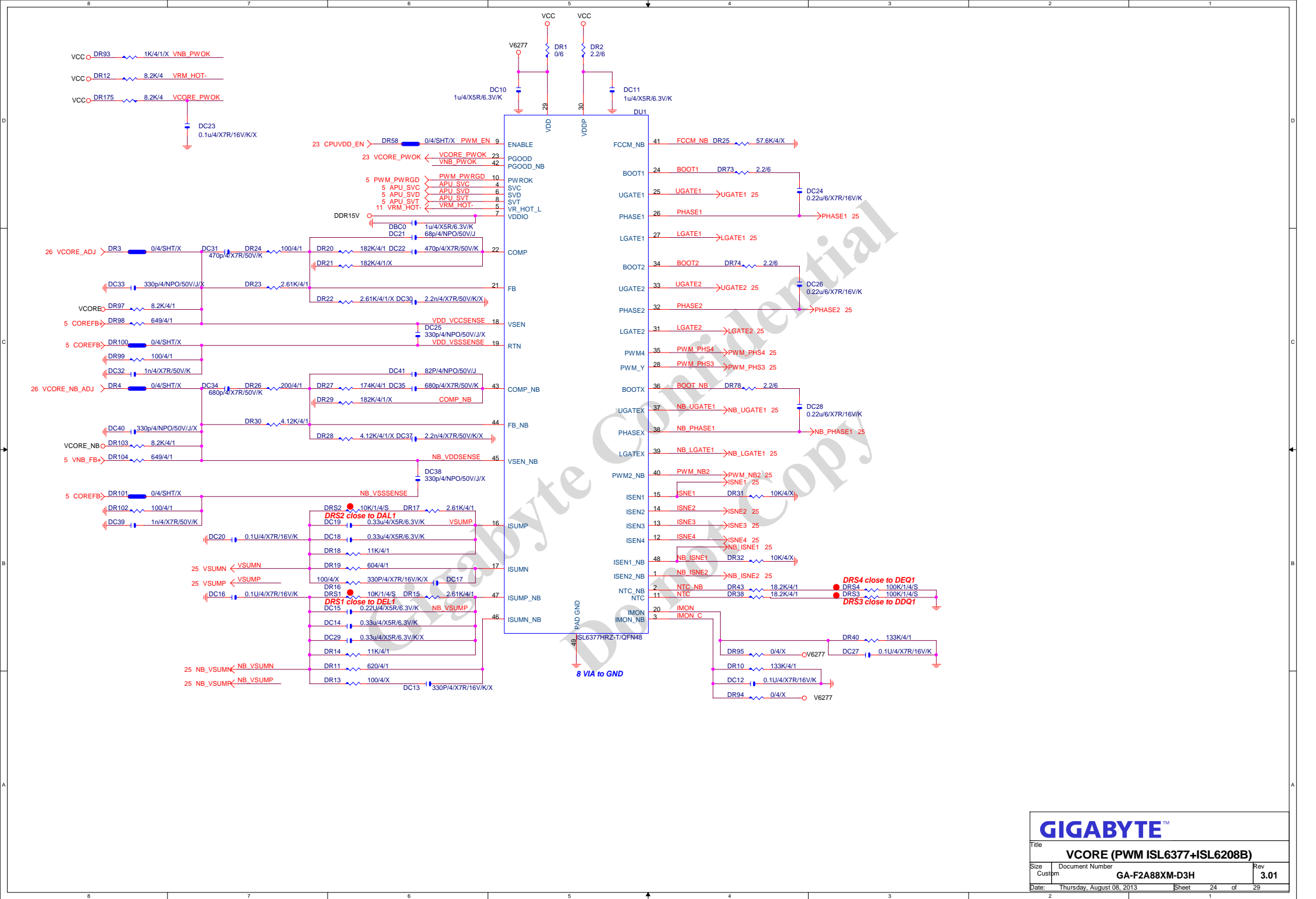
AUDIO JACK

Title
 Size
 Custom
 Date: Thursday, August 08, 2013

Document Number
GA-F2A88XM-D3H
 Sheet 21 of 29

Rev
3.01



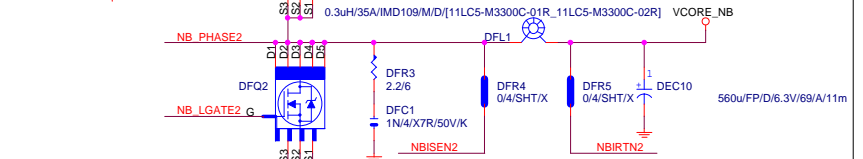
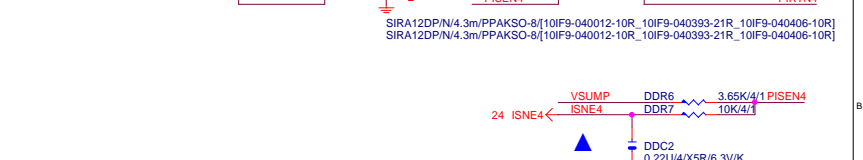
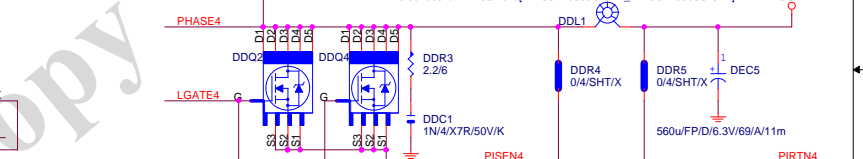
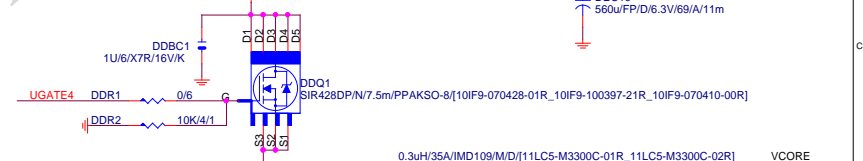
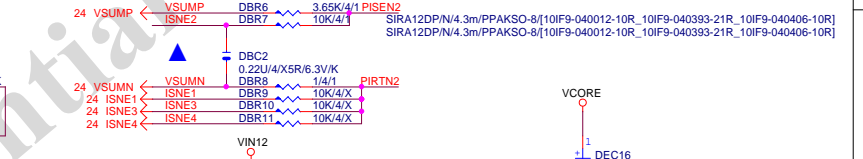
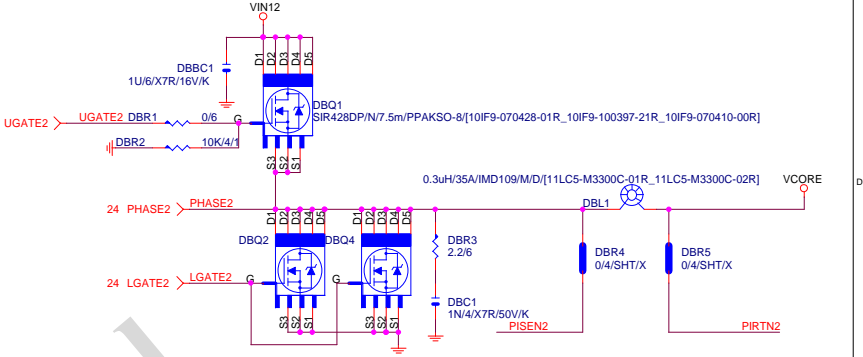
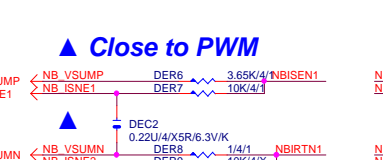
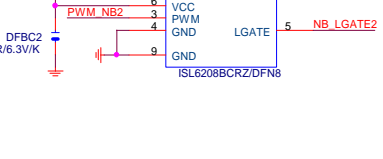
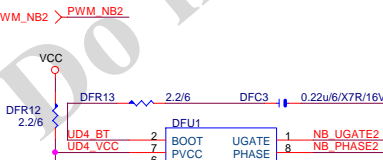
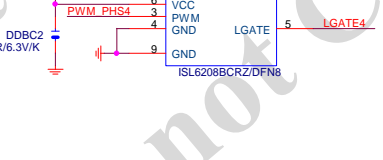
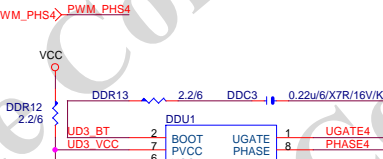
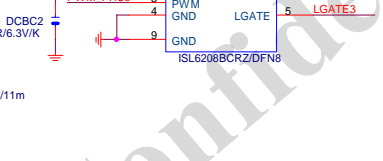
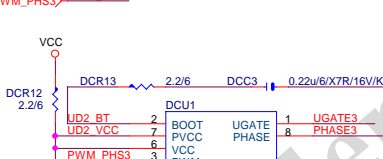
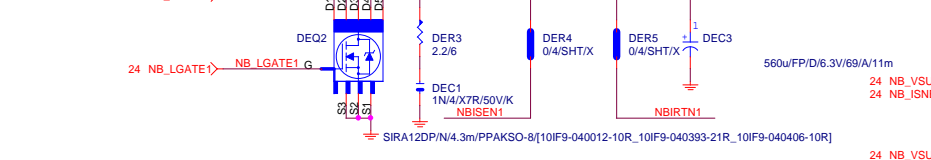
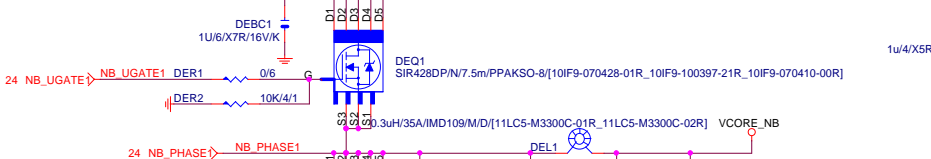
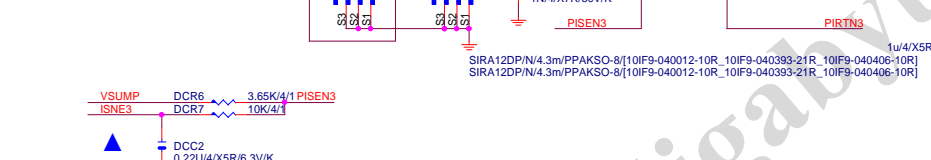
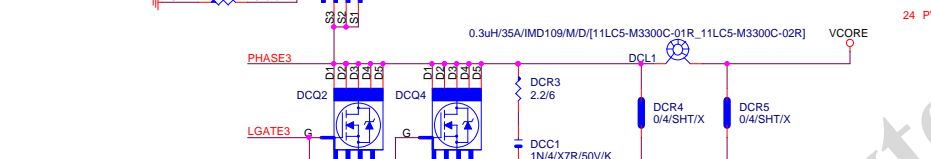
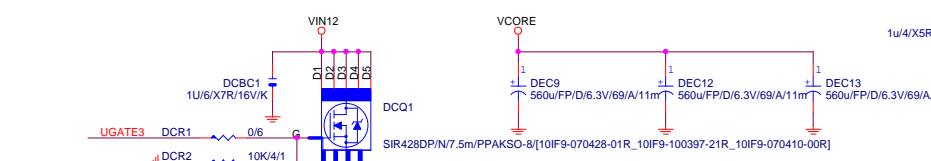
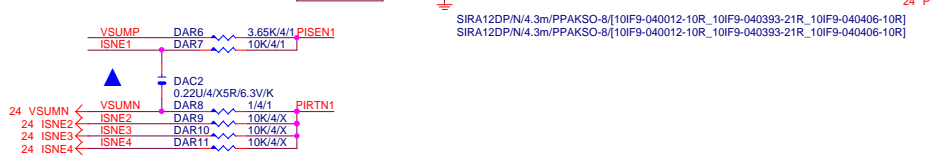
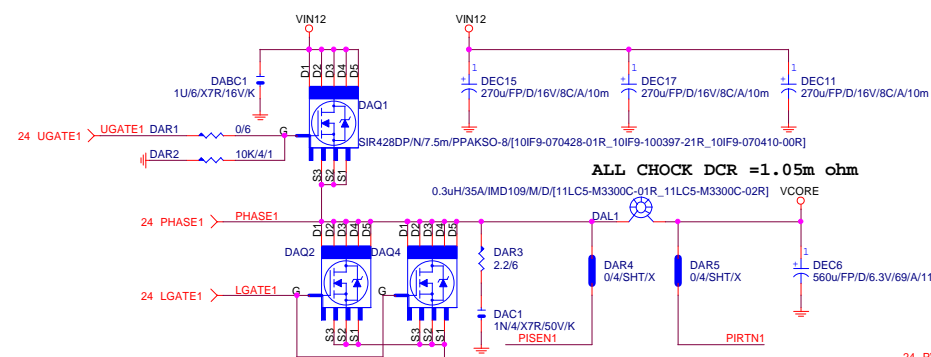


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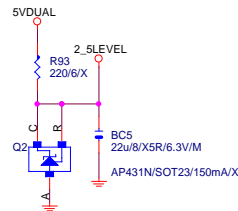
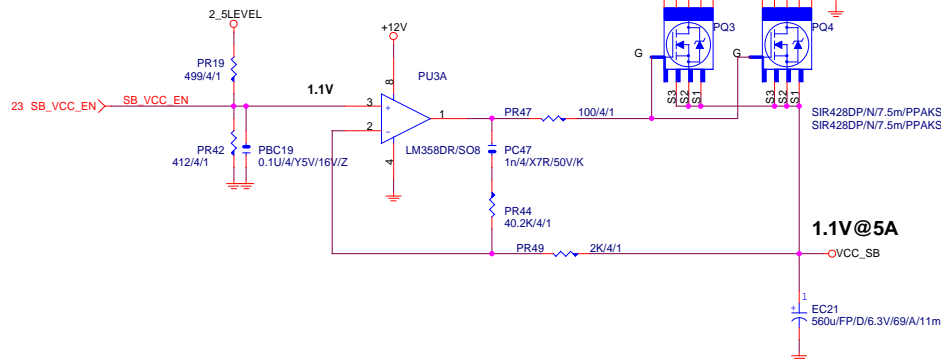
Size	Document Number	Rev
Custom	GA-F2A88XM-D3H	3.01

Date:	Thursday, August 08, 2013	Sheet	24	of	29
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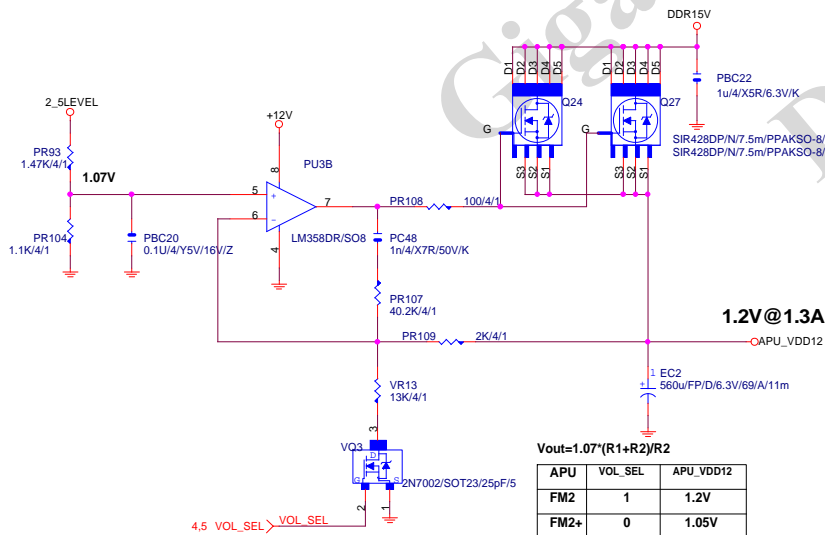


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Title	Document Number	Rev	
Size	GA-F2A88XM-D3H	3.01	
Date:	Thursday, August 08, 2013	Sheet	25 of 29

VCC_SB

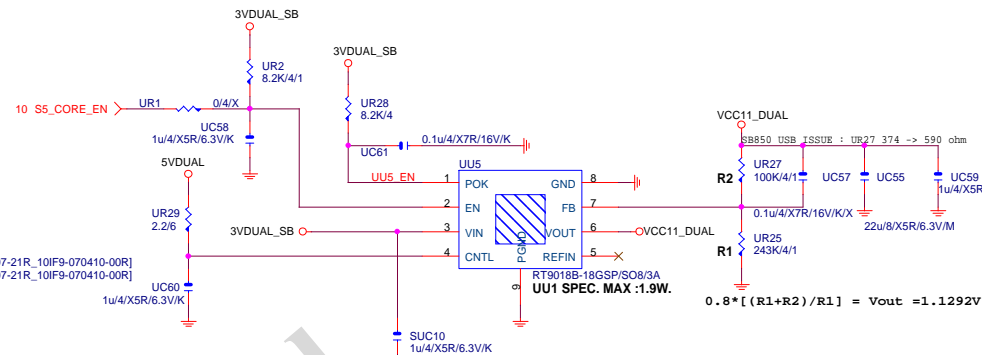


APU_VDDP

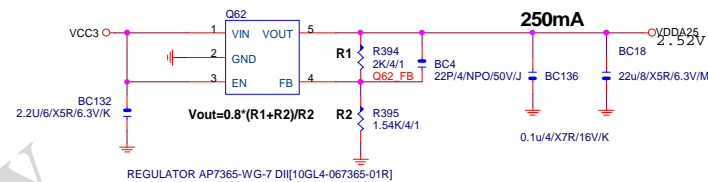


$$V_{out} = 1.07 \cdot (R1 + R2) / R2$$

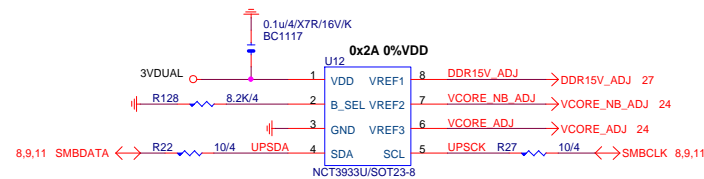
APU	VOL_SEL	APU_VDD12
FM2	1	1.2V
FM2+	0	1.05V



$$0.8 \cdot [(R1 + R2) / R1] = V_{out} = 1.1292V$$

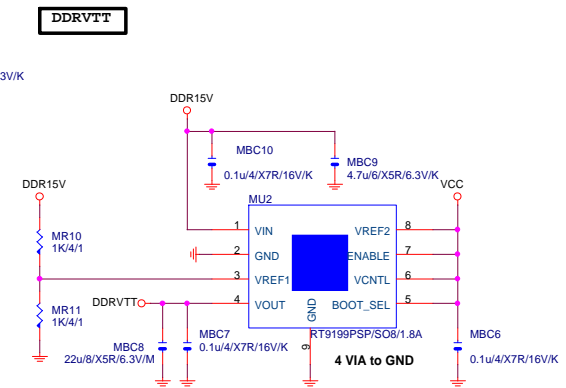
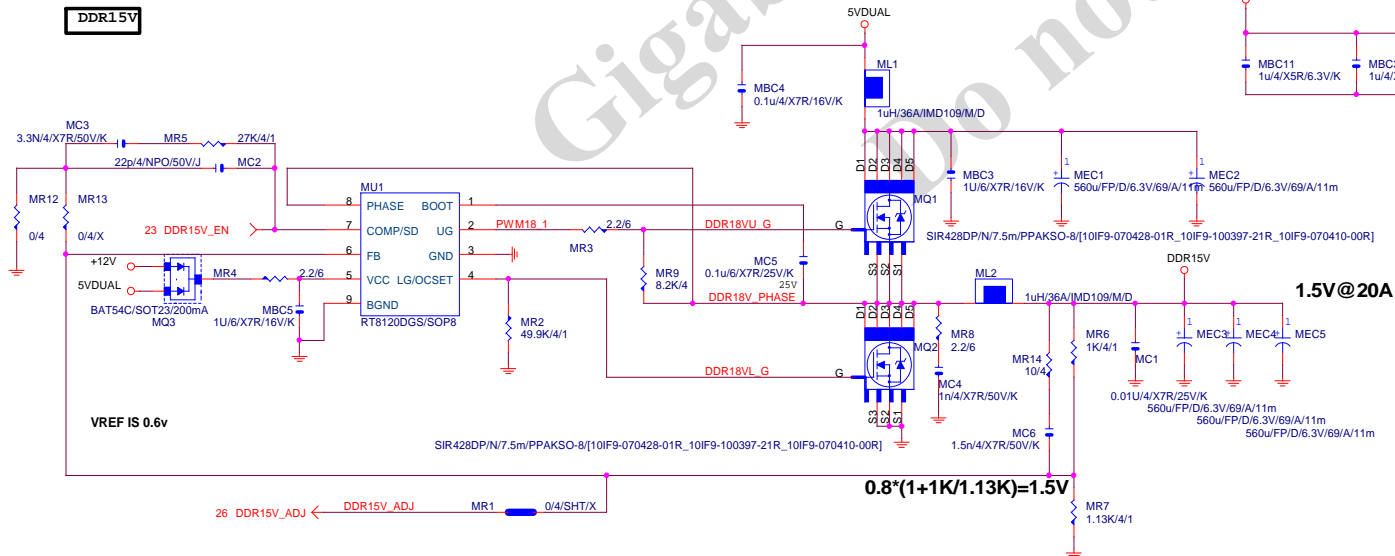
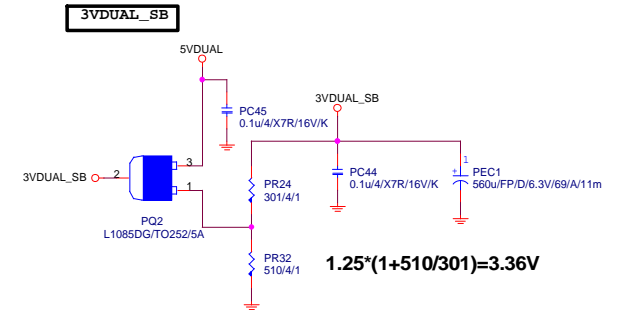
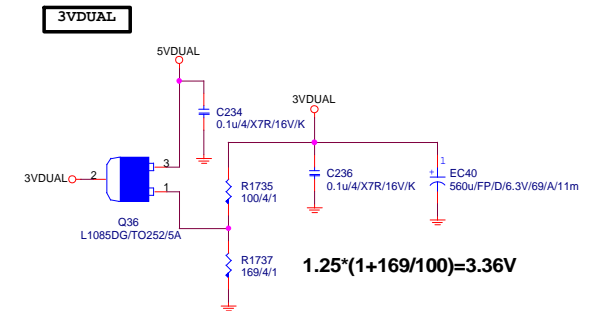
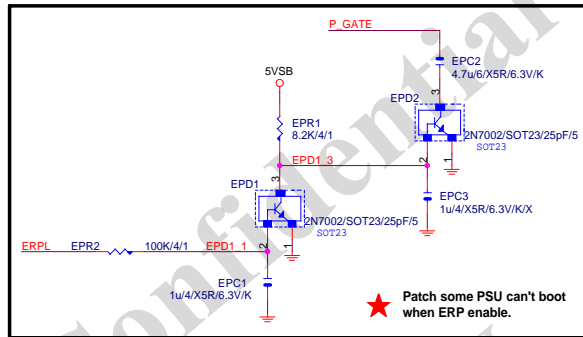
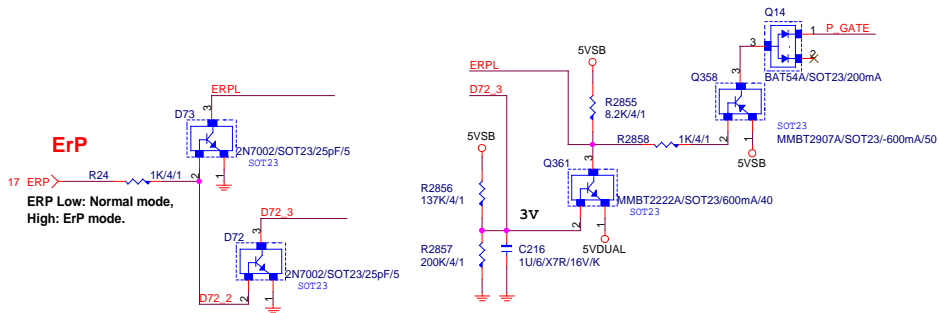
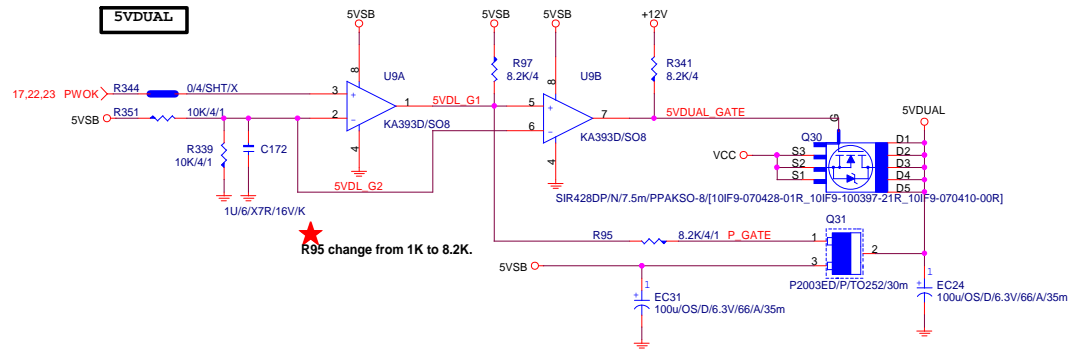


APU	VOL_SEL	VDDA25
FM2	1	2.5V
FM2+	0	1.8V



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Title		
SB PWR,VDDA25,VCC11DUAL		
Size	Document Number	Rev
Custom	GA-F2A88XM-D3H	3.01
Date:	Thursday, August 08, 2013	Sheet 26 of 29



GIGABYTE

Title		
DDR PWR, 5VDUAL, ERP		
Size	Document Number	Rev
Custm	GA-F2A88XM-D3H	3.01
Date:	Thursday, August 08, 2013	Sheet 27 of 29

