

# GA-F2A88XM-HD3

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APU\_VDDIO\_SUS=DDR15V

APU\_VTT\_SUS=DDRVTT

APU\_VDDP\_RUN=APU\_VDDR\_RUN=APU\_VDDP

+1.1V\_RUN=FCH\_VDD\_11\_RUN=VCC\_SB

+3.3V\_RUN=VCC3

+3.3V\_ALW=3VDUAL

GIGABYTE™

Title

COVER SHEET

Size

Custm

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**Version: 3.03**


### Component value change history

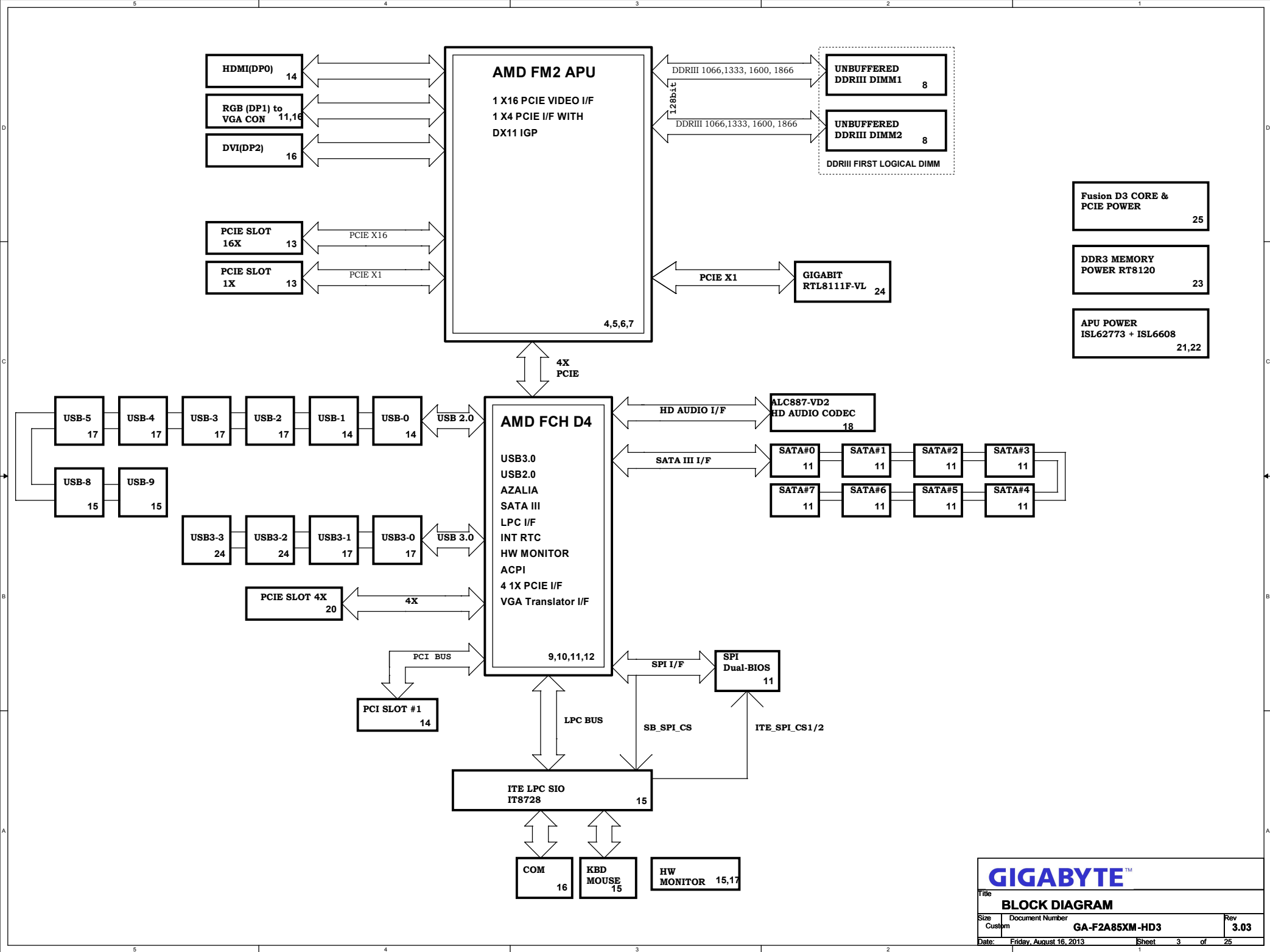
P-Code: U12065-0  
243.84\*174/B/50+/-15%/BLUE

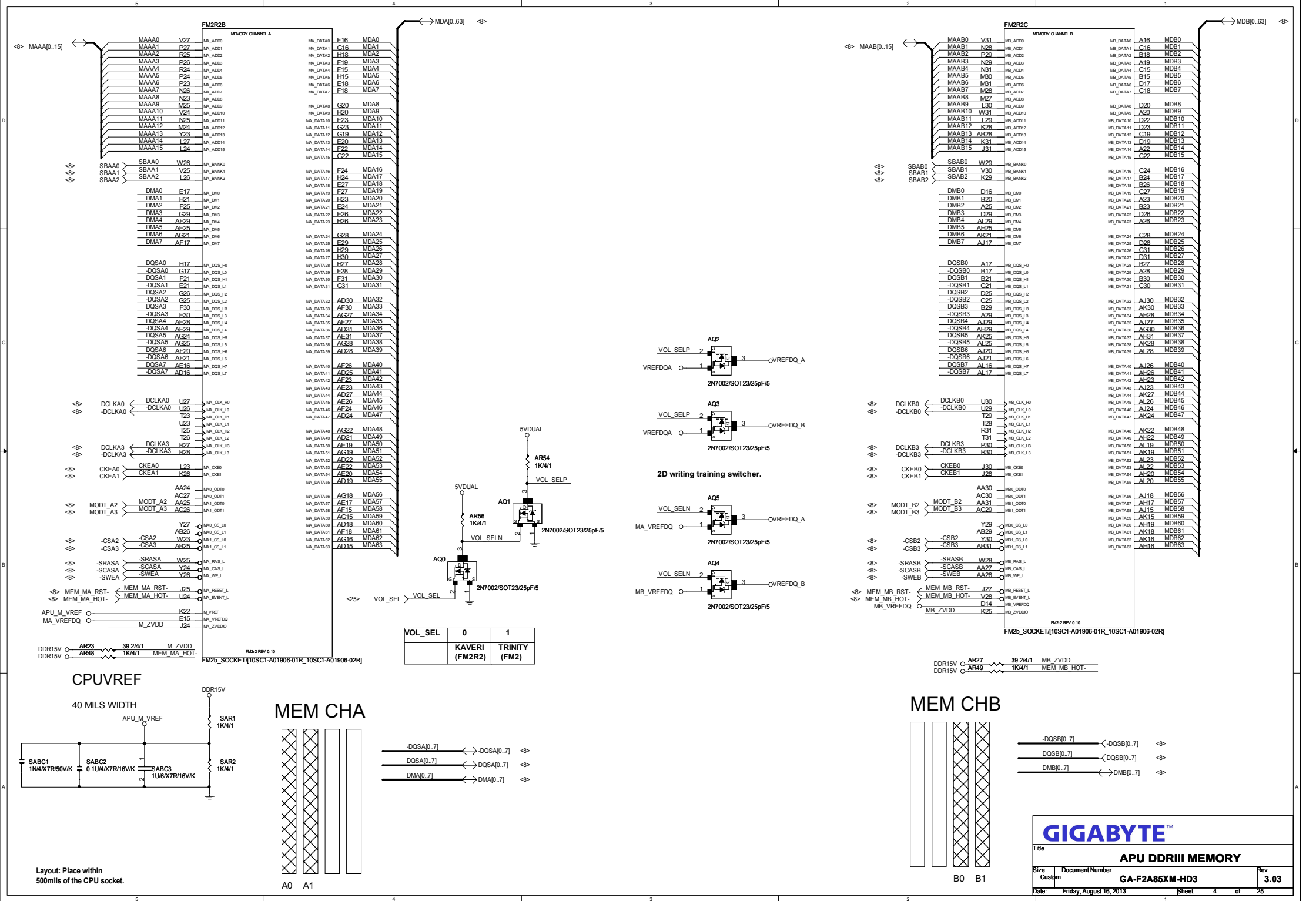
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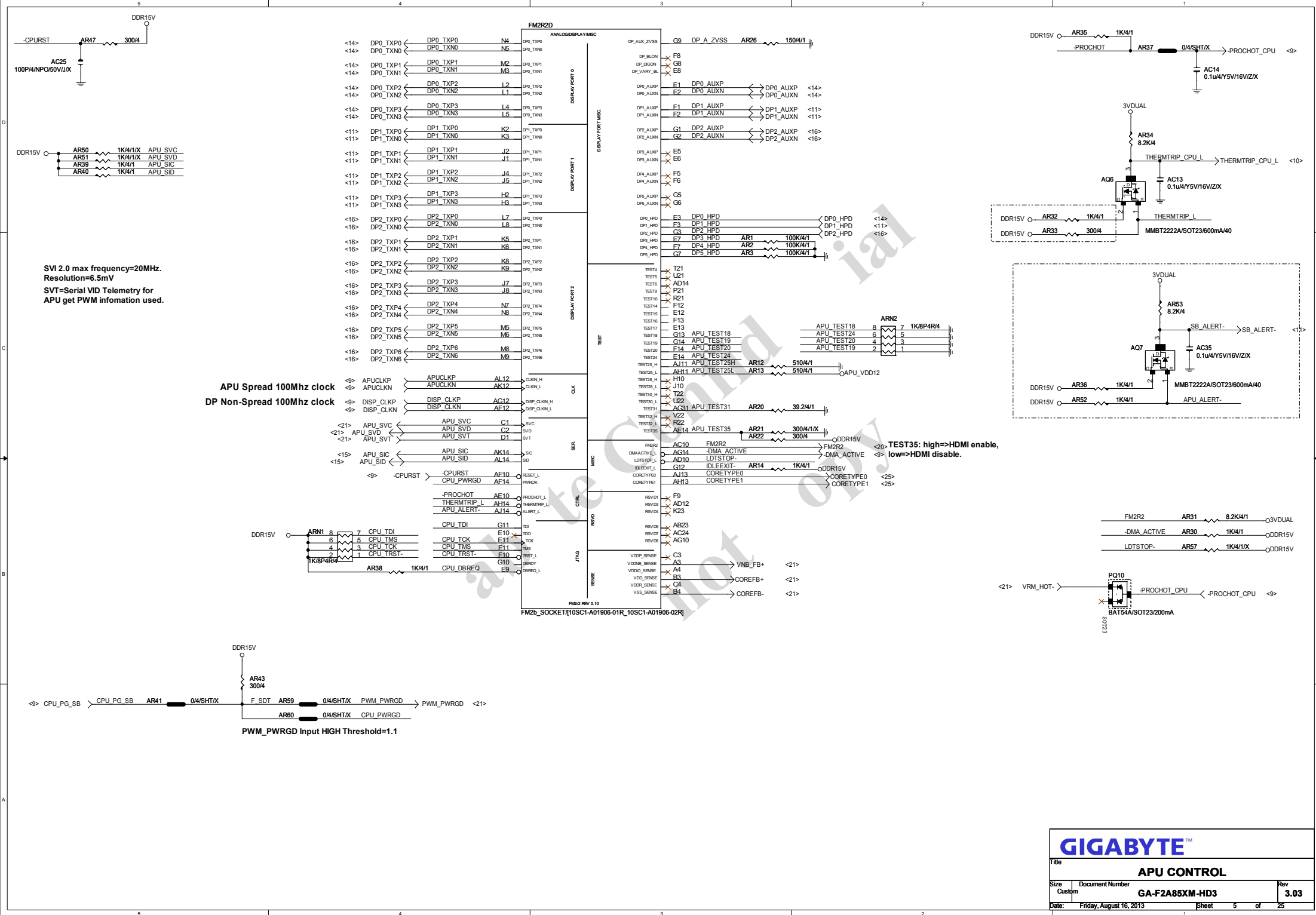
### Circuit or PCB layout change for next version

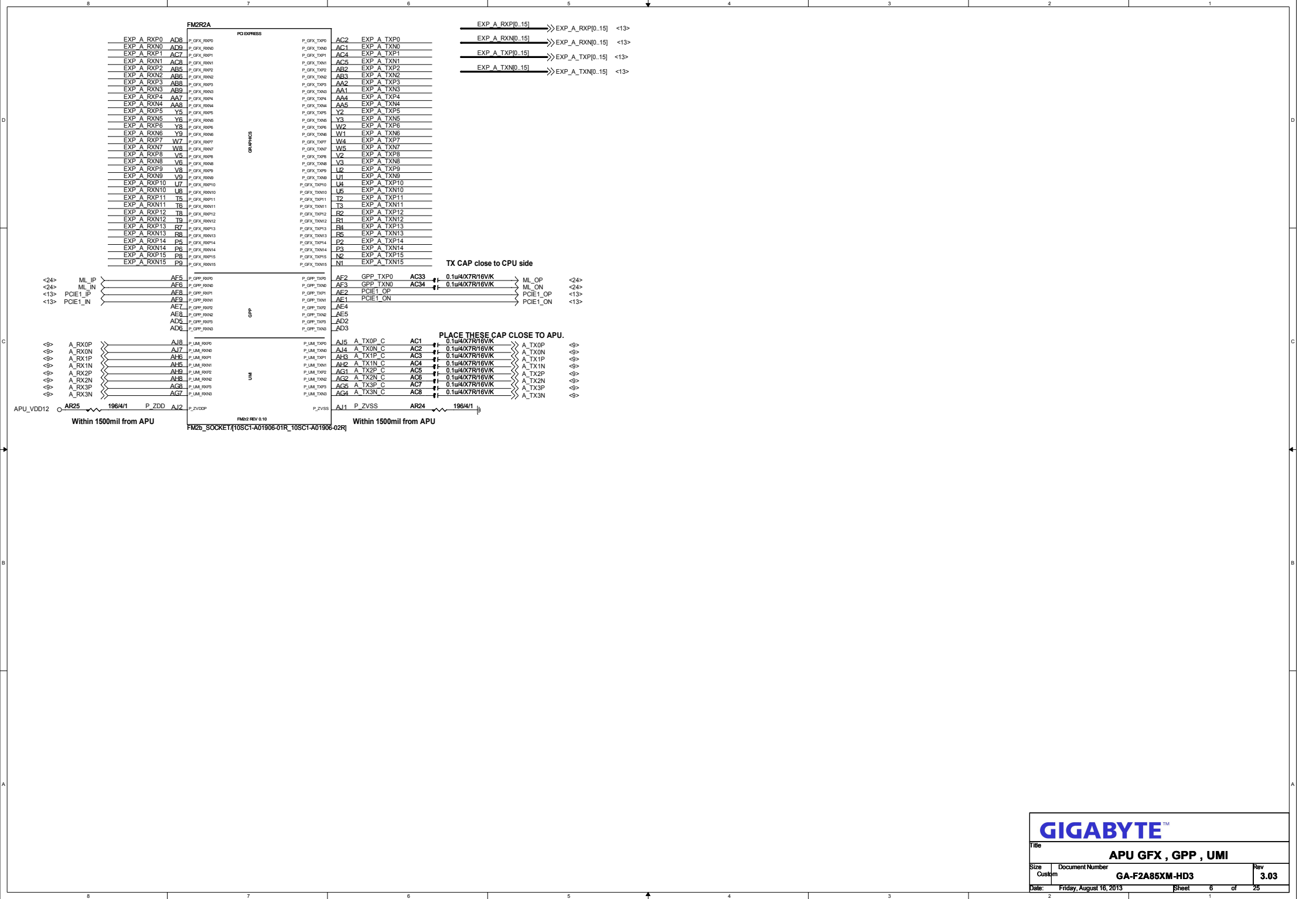
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Title				
<b>BOM &amp; PCB HISTORY</b>				
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Custom	<b>GA-F2A85XM-HD3</b>			<b>3.03</b>
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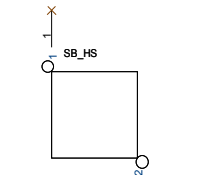




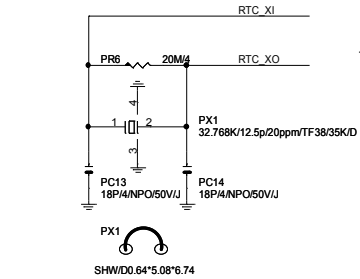


PLACE THESE PCIE AC COUPLING CAPS CLOSE TO SB850

### S.B HEATSINK

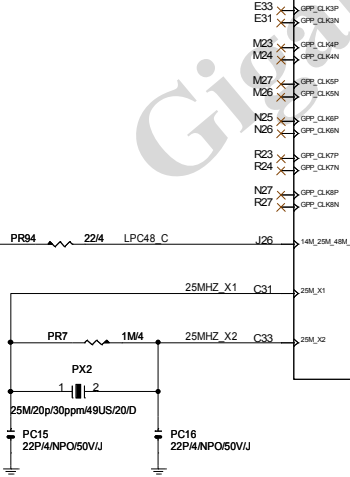
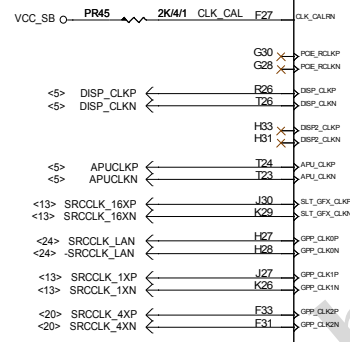
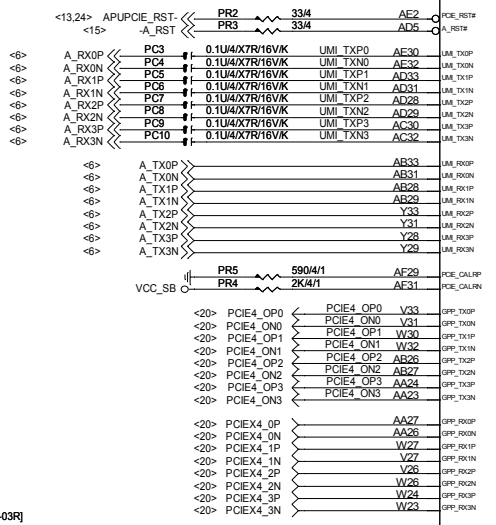


SB\_HS[12SP2-SA0301-01R\_12SP2-SA0301-02R\_12SP2-SA0301-03R]

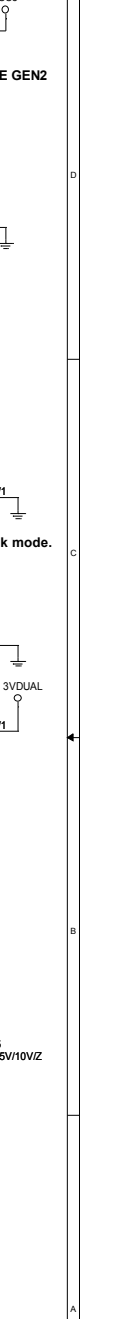
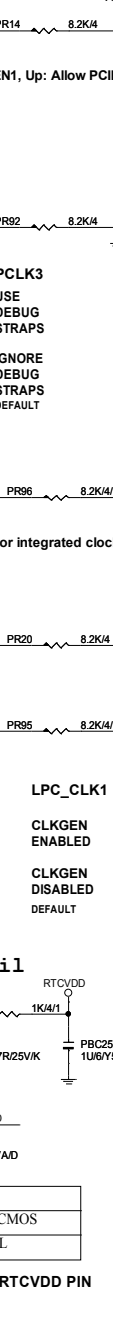
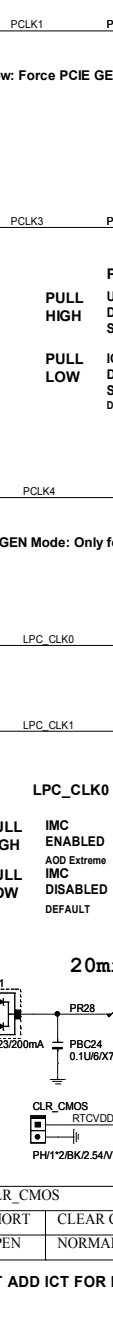
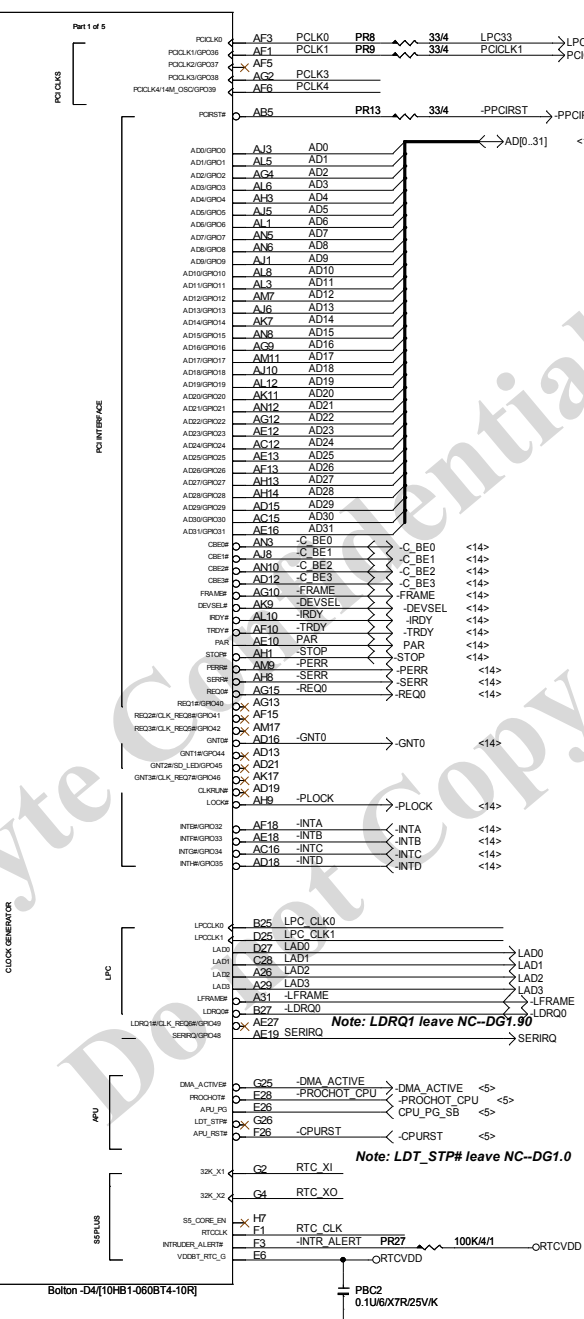


SHW/D0.64\*5.08\*6.74

### For APU PC1\_E devices.



### HUDSON-2

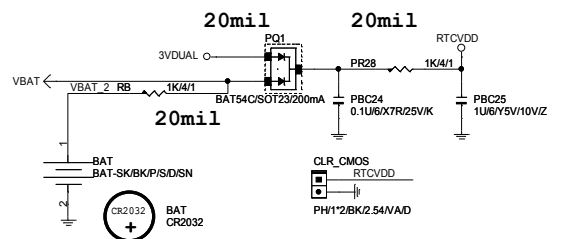


Low: Force PCIE GEN1, Up: Allow PCIE GEN2

PULL HIGH USE DEBUG STRAPS  
PULL LOW IGNORE DEBUG STRAPS DEFAULT

CLKGEN Mode: Only for integrated clock mode.

LPC\_CLK0 IMC ENABLED CLKGEN ENABLED  
PULL HIGH AOD Extreme  
PULL LOW IMC DISABLED CLKGEN DISABLED  
DEFAULT DEFAULT



CLR_CMOS	
SHORT	CLEAR CMOS
OPEN	NORMAL

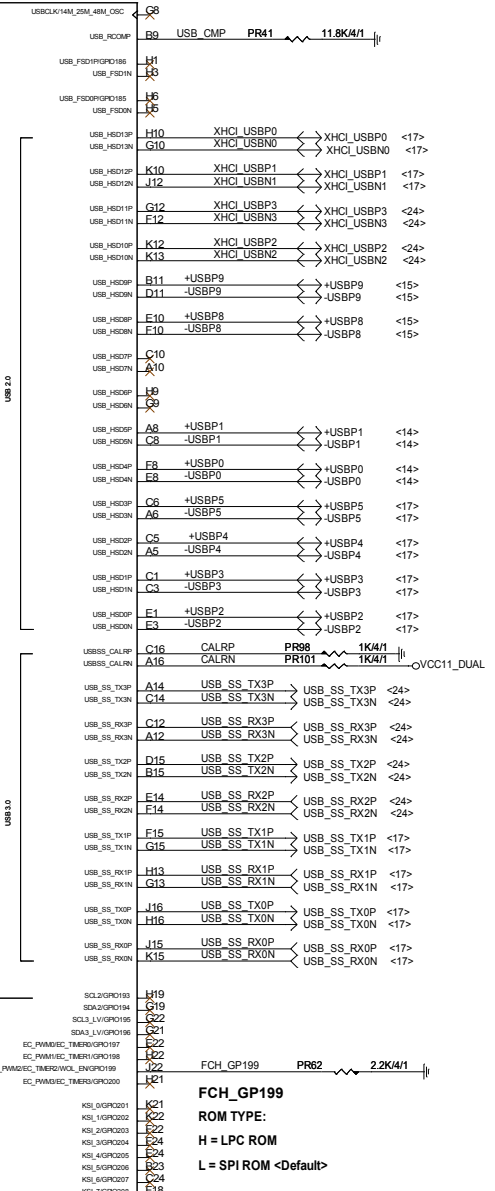
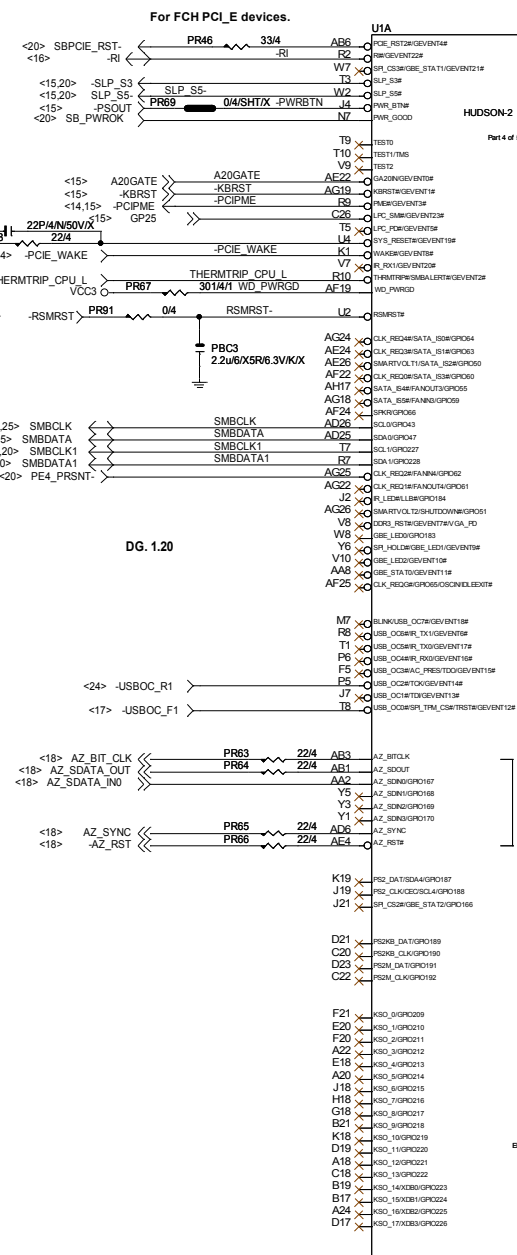
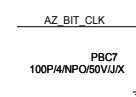
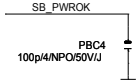
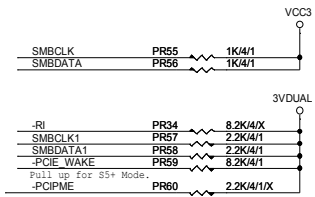
NOT ADD ICT FOR RTCVDD PIN

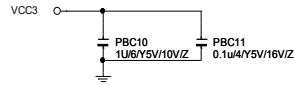
**GIGABYTE**<sup>TM</sup>

TitleHudson D4 PCIE/PCI/CPU/LPC

SizeCustmDocument NumberGA-F2A85XM-HD3Rev3.03

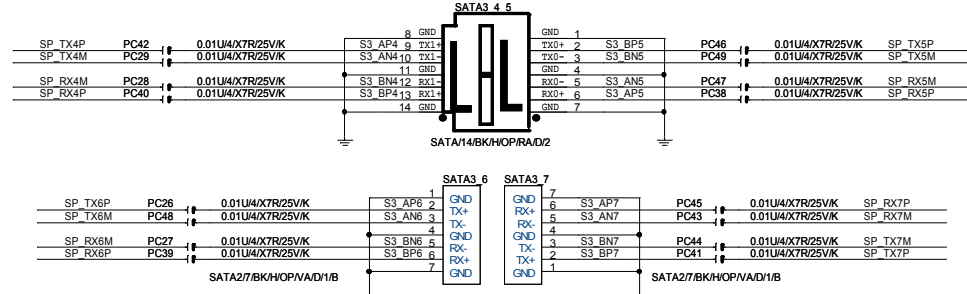
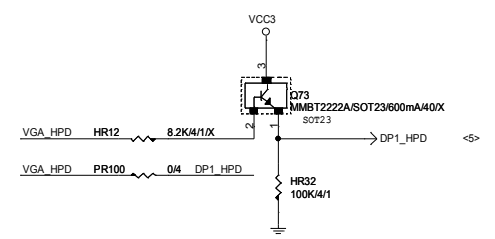
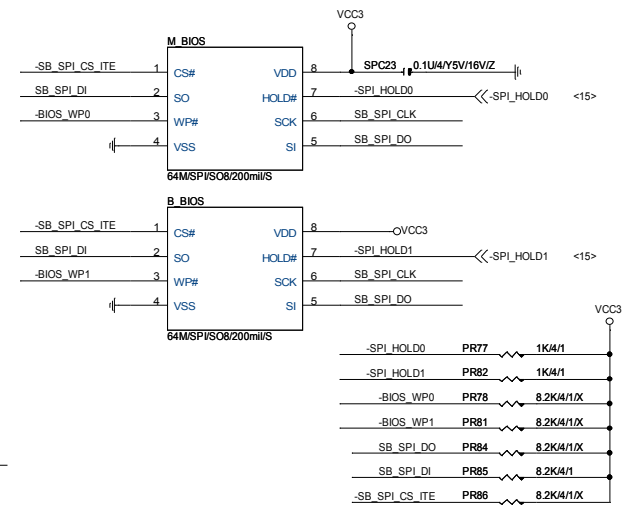
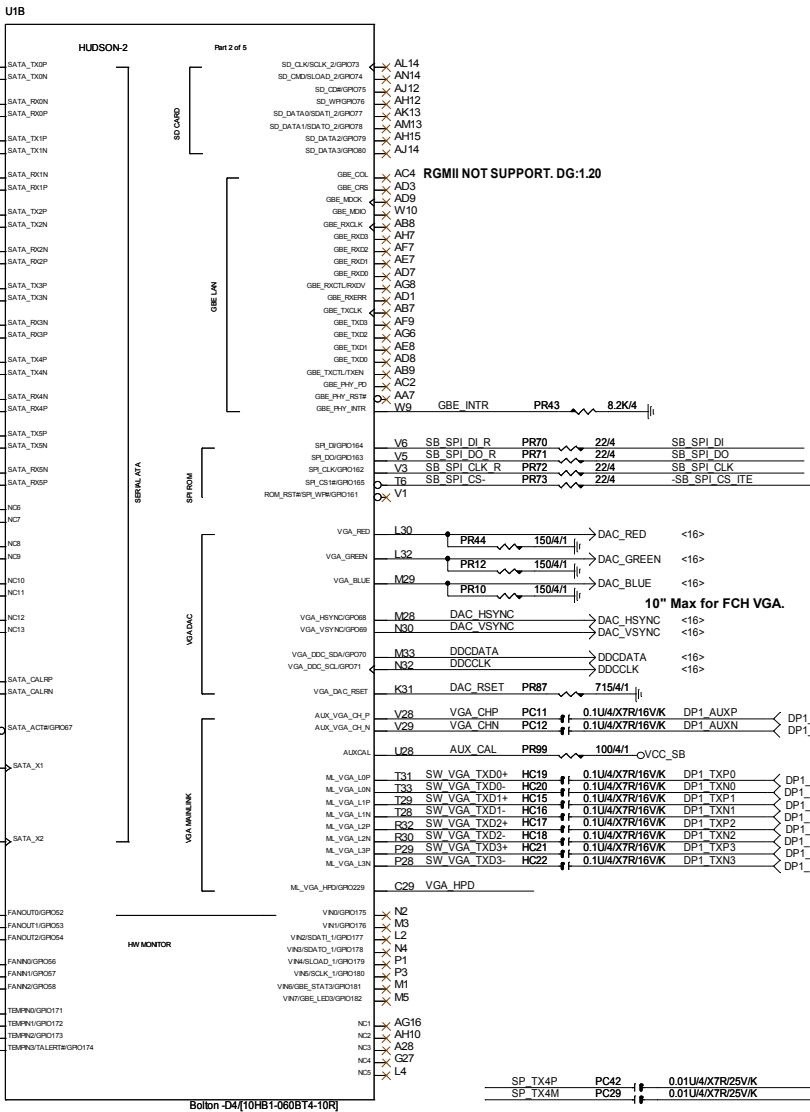
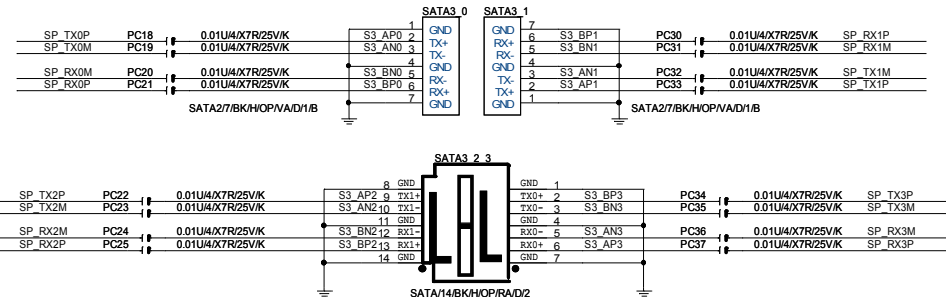
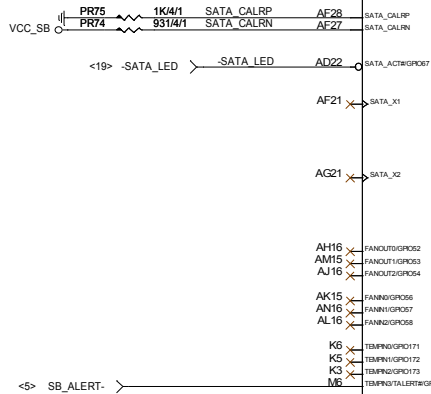
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SATA 6-7 for Hudson D4.

PLACE SATA\_CAL RES VERY CLOSE TO BALL OF U1



**GIGABYTE™**

Title

**Hudson D4 SATA/HWM/SPI**

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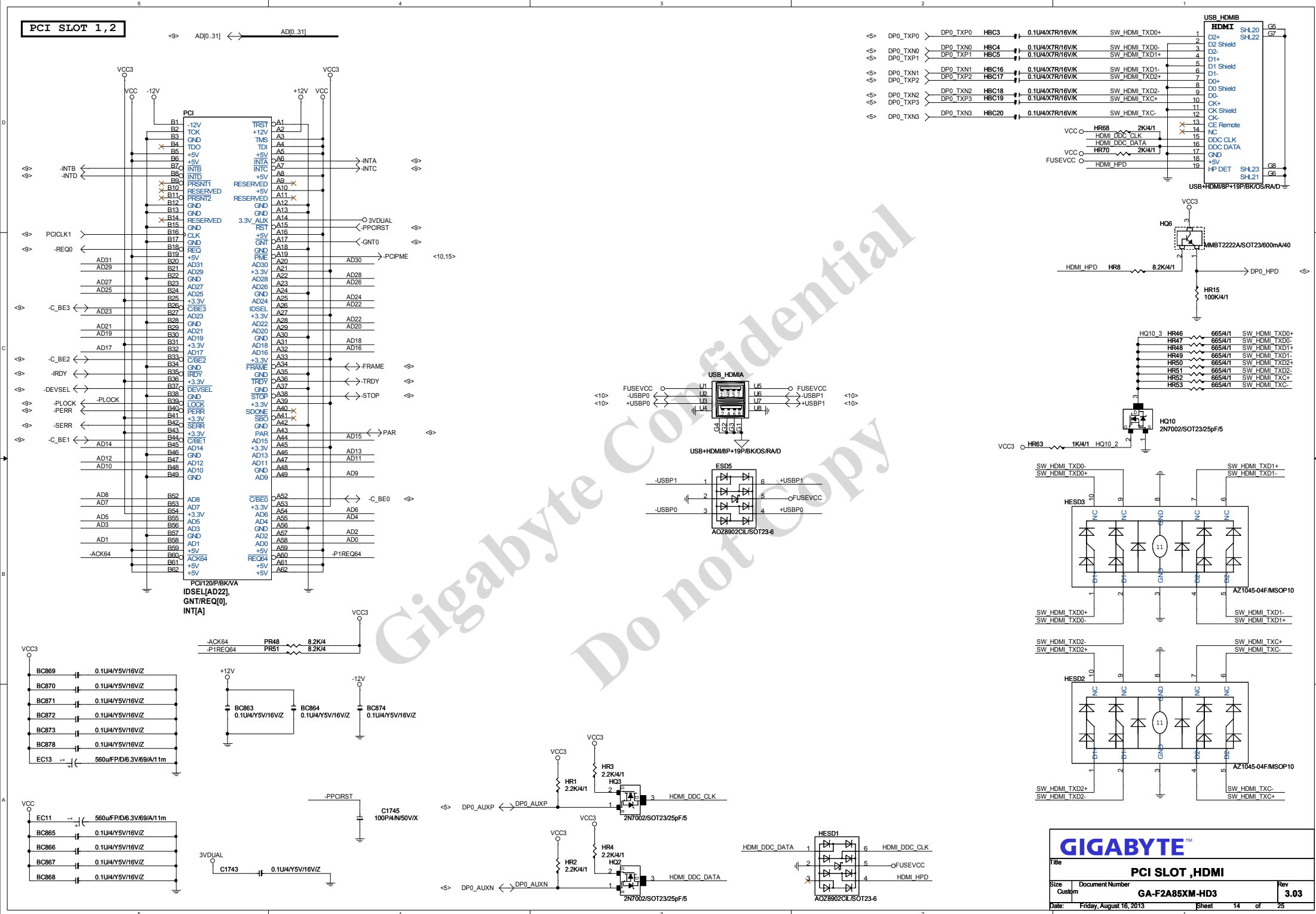
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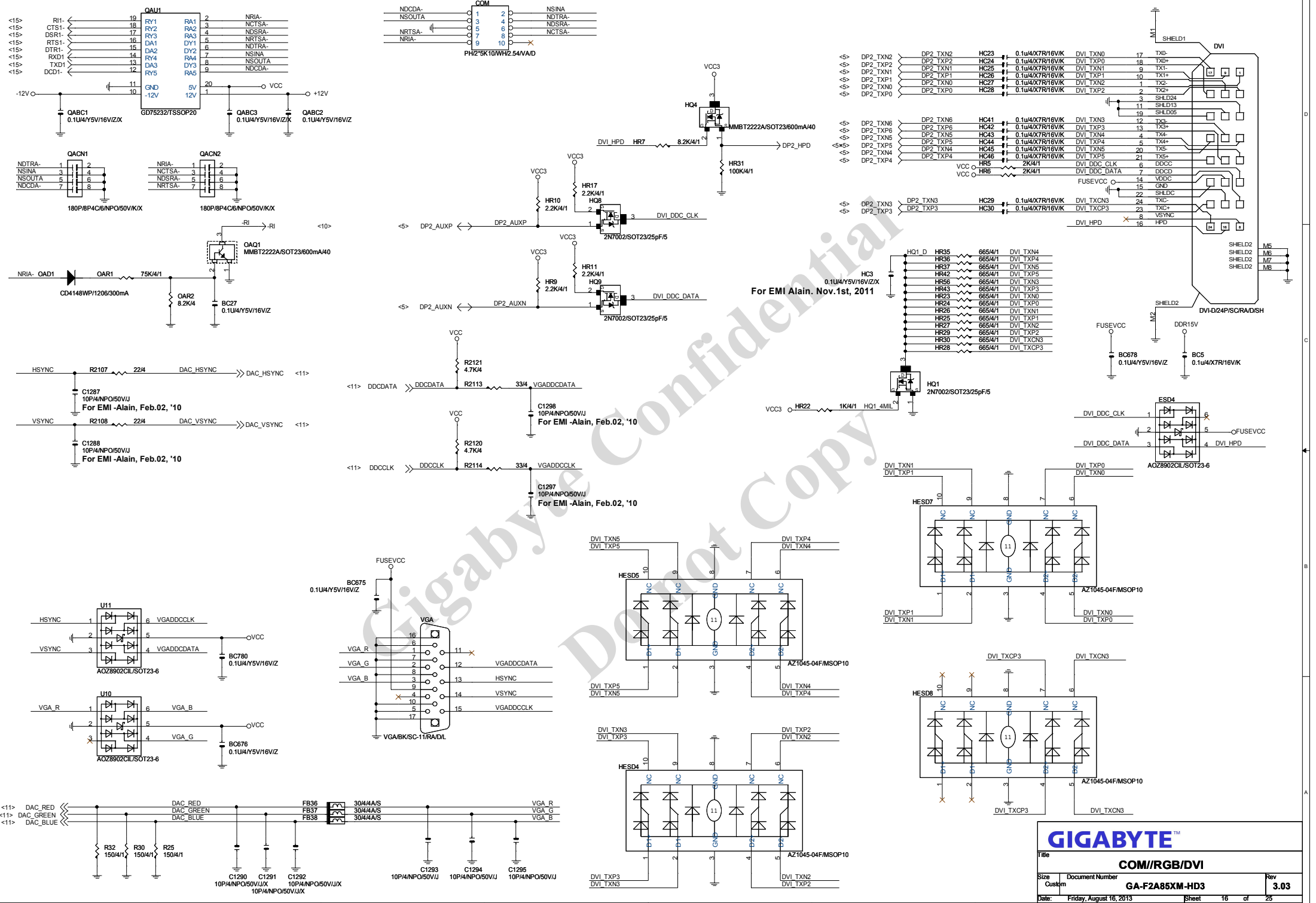




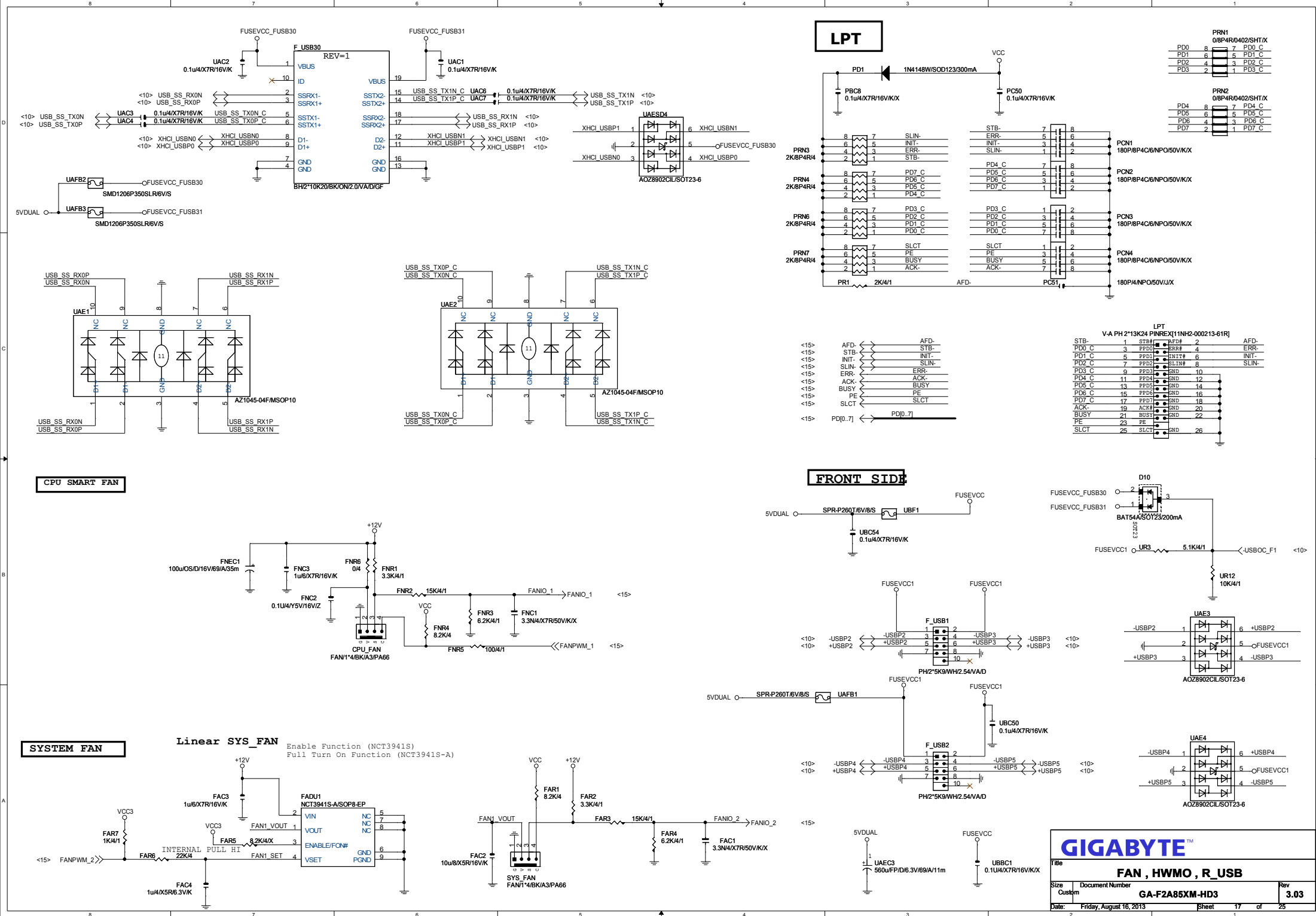












CPU SMART FAN

SYSTEM FAN

FRONT SIDE

LPT

Title

FAN , HWMO , R\_USB

Size

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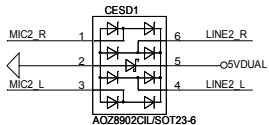
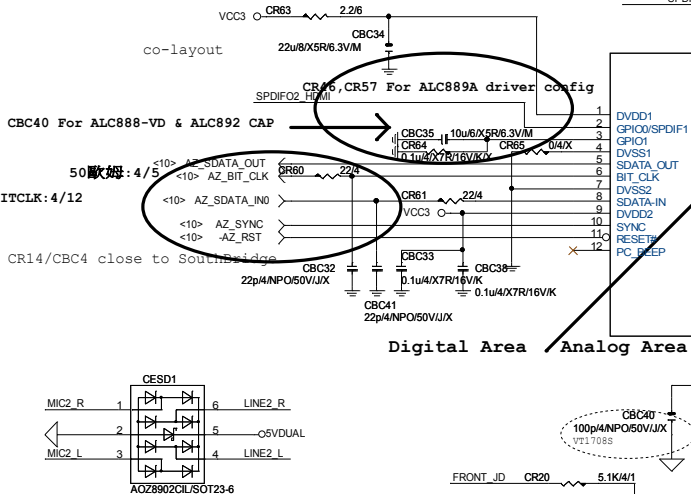
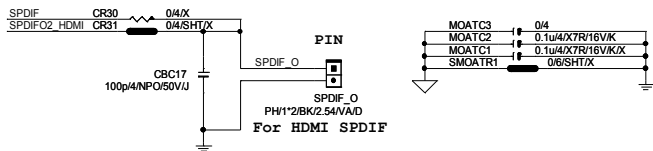
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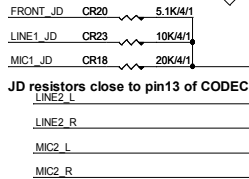
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## SPDIF\_OUT1



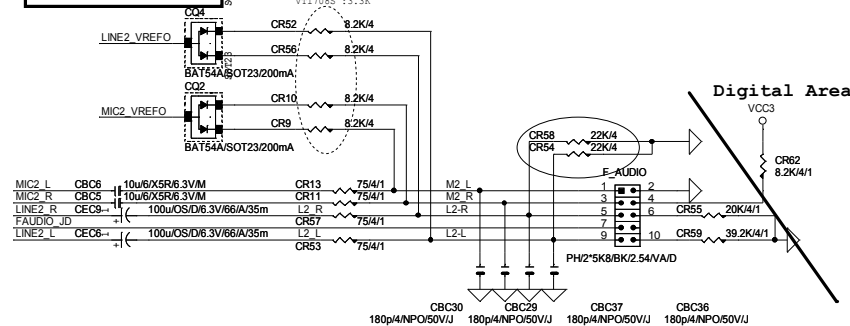
## Digital Area Analog Area



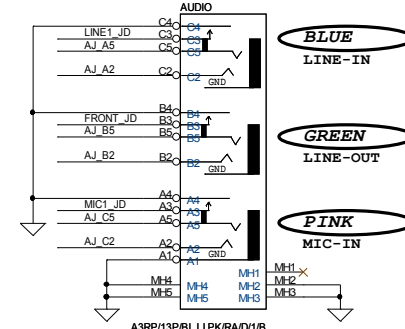
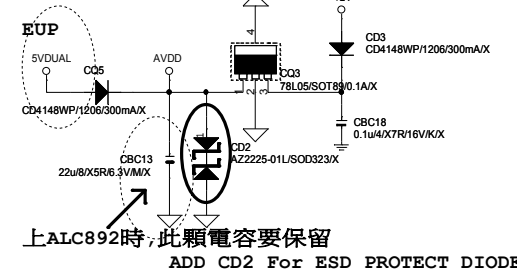
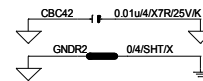
## AZALIA CODEC ALC887-V2/ALC889/VT1708S/VT1708SCE Colay

	ALC887-V2	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

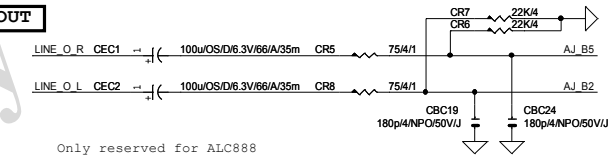
## AZALIA FRONT PANEL



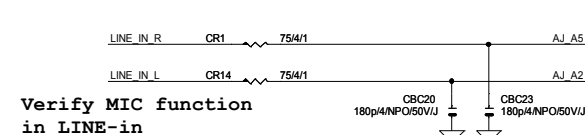
## CODEC POWER/EMI PAD



## LINE-OUT

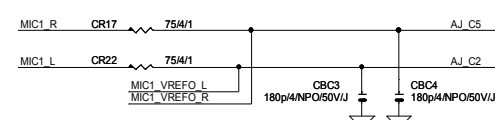


## LINE-IN



## Verify MIC function in LINE-in

## MIC-IN



**GIGABYTE**

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Size: **GA-F2A85XM-HD3**

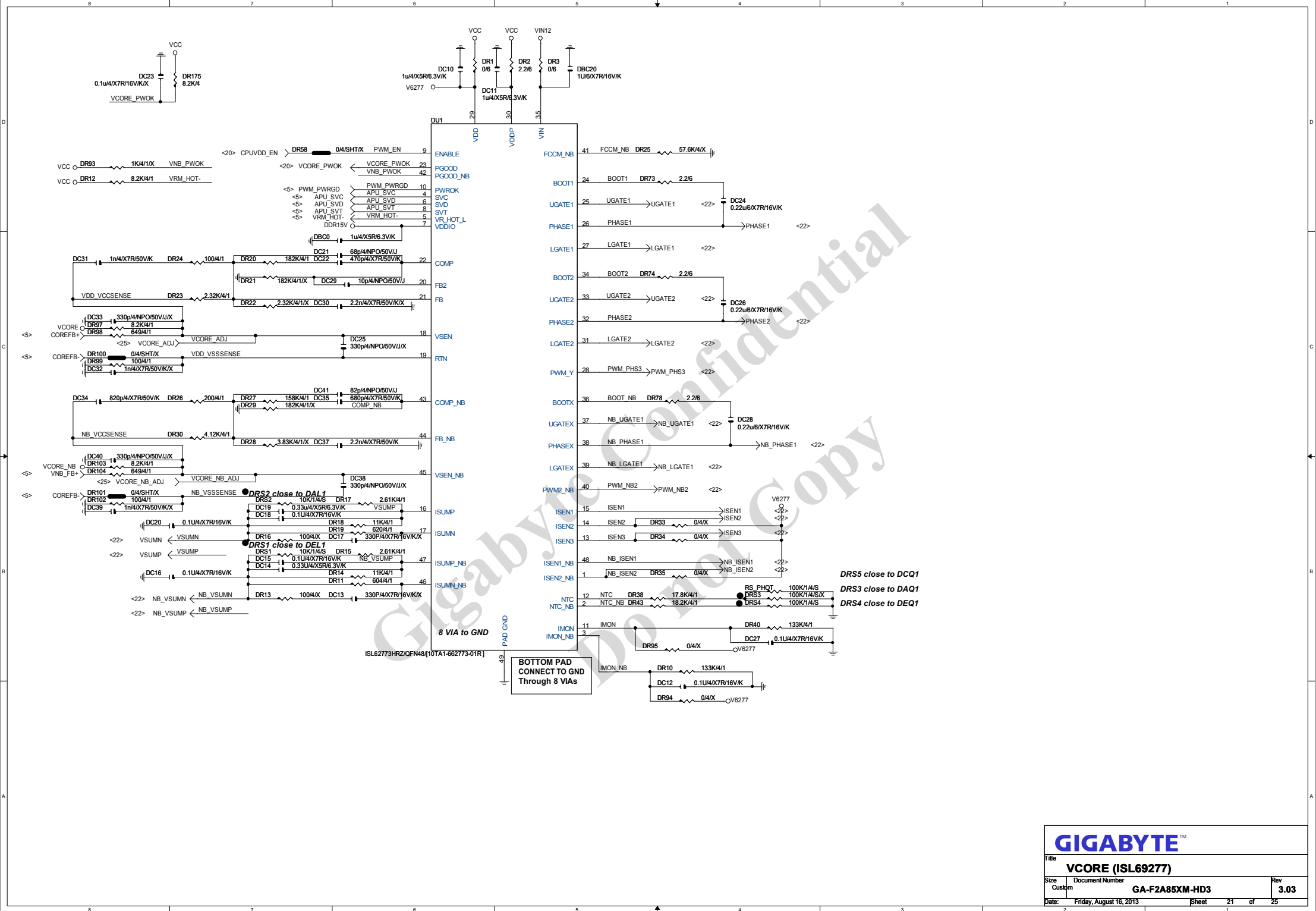
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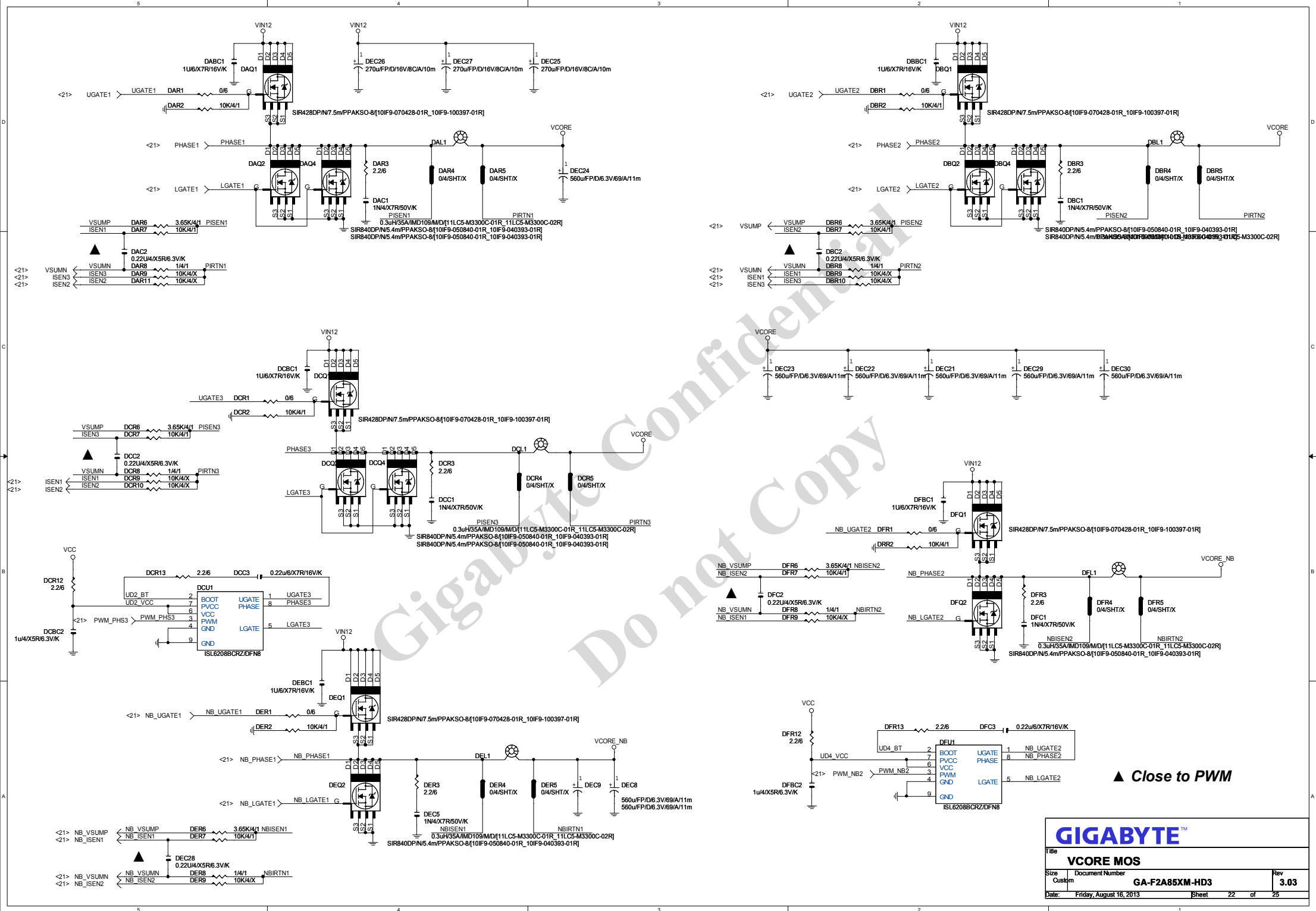
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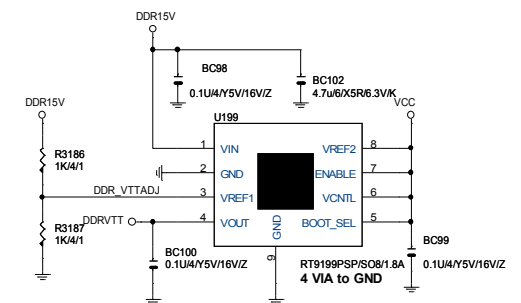
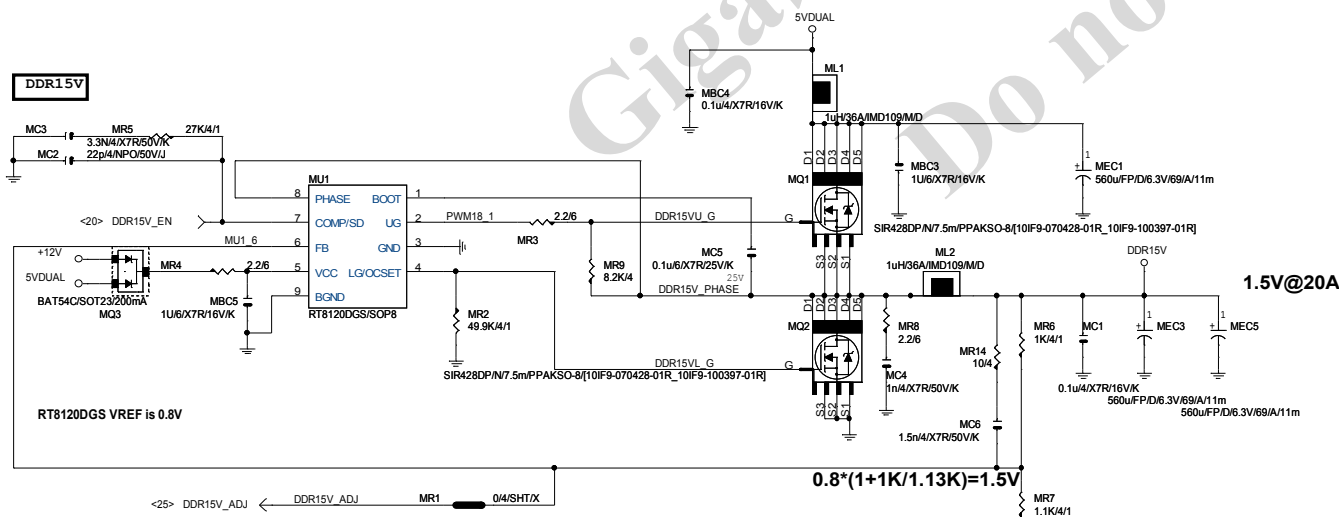
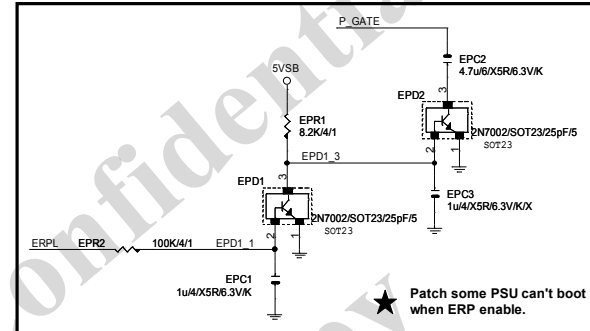
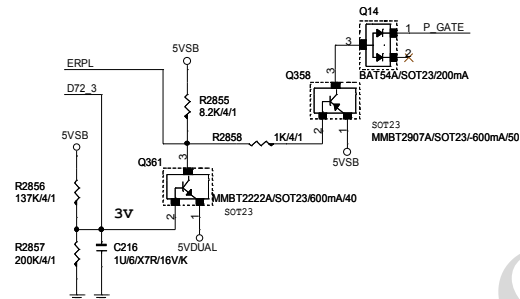
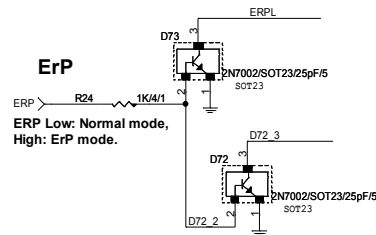
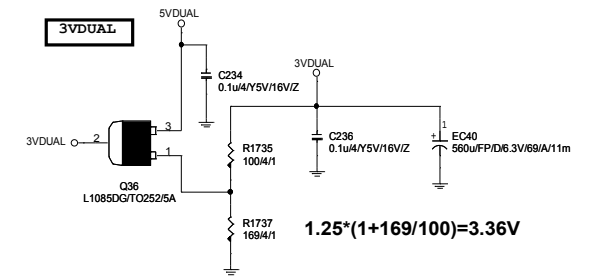
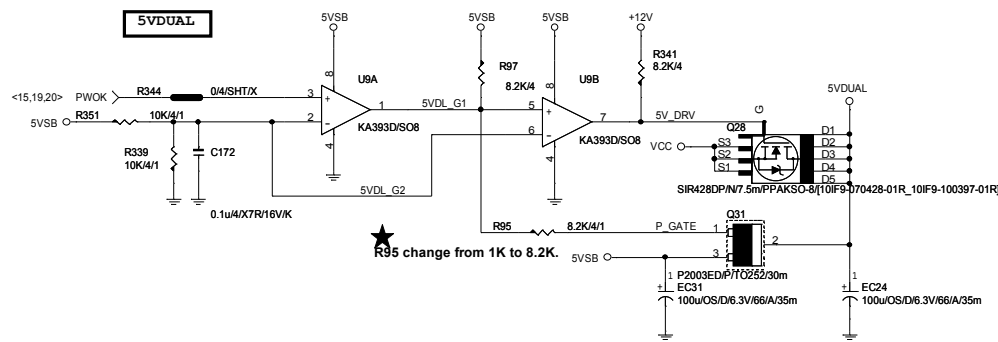






▲ Close to PWM

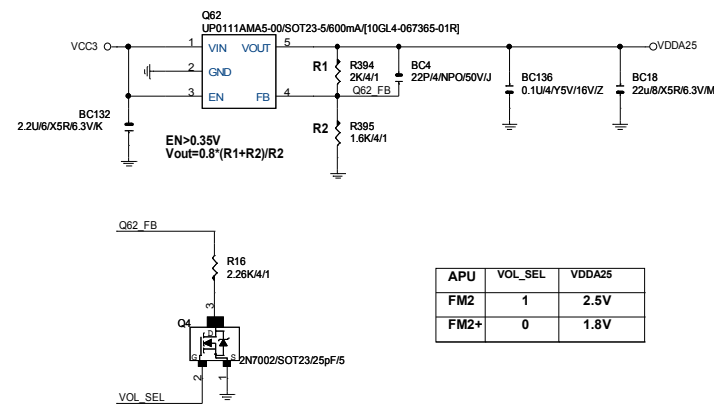
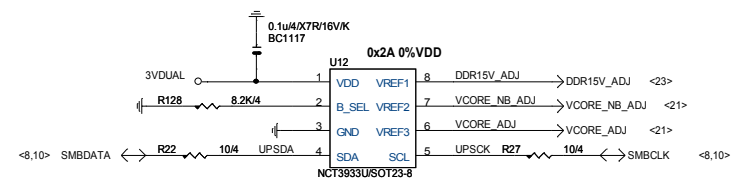
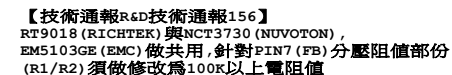
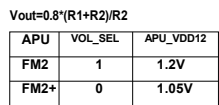
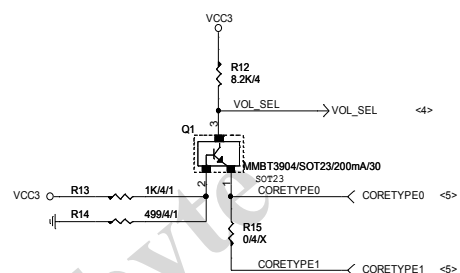
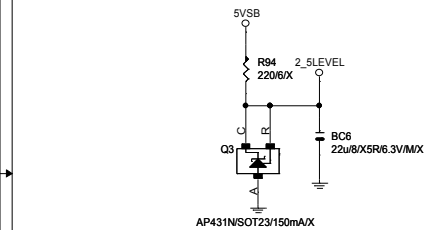
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Title			
Vcore MOS			
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APU	VOL_SEL	VDDA25
FM2	1	2.5V
FM2+	0	1.8V