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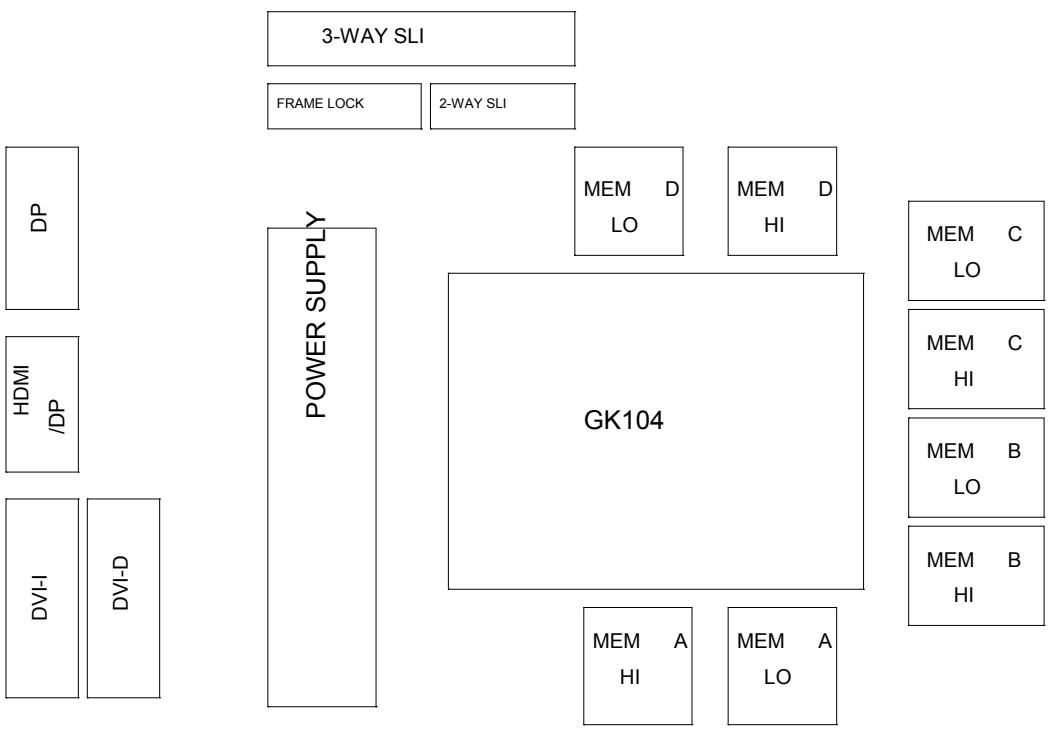

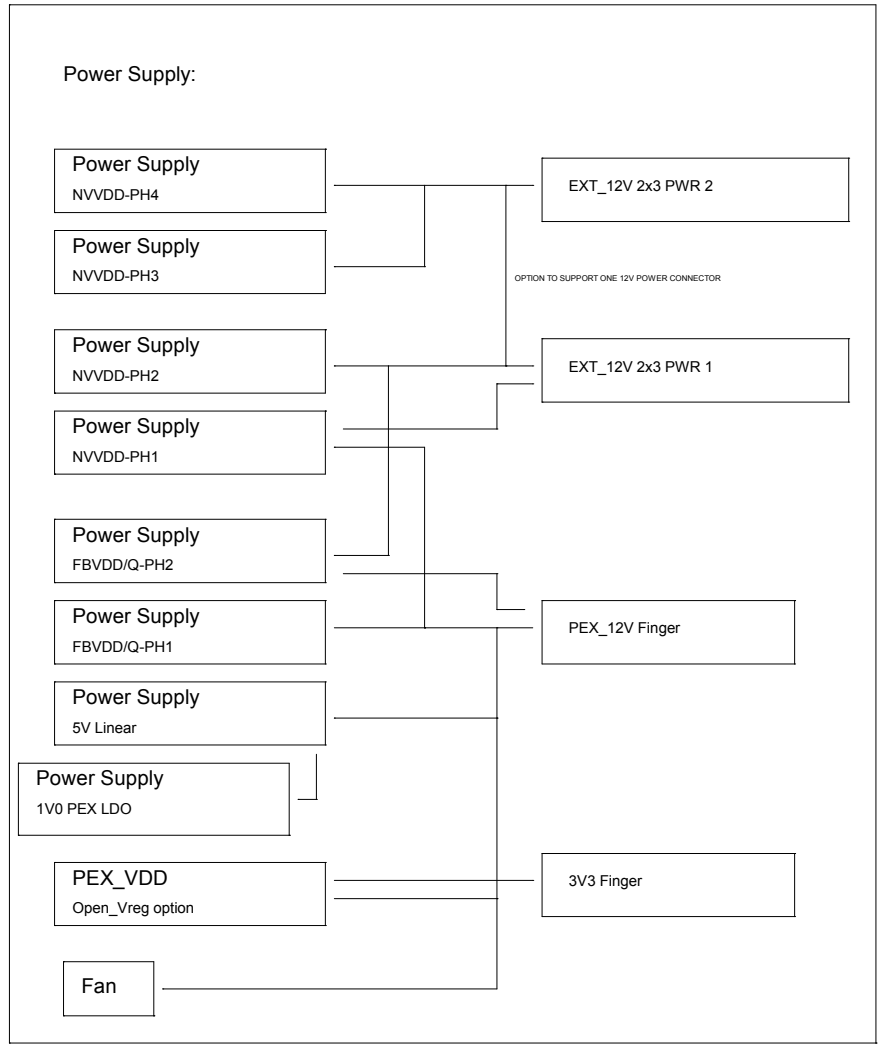

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Block Diagram

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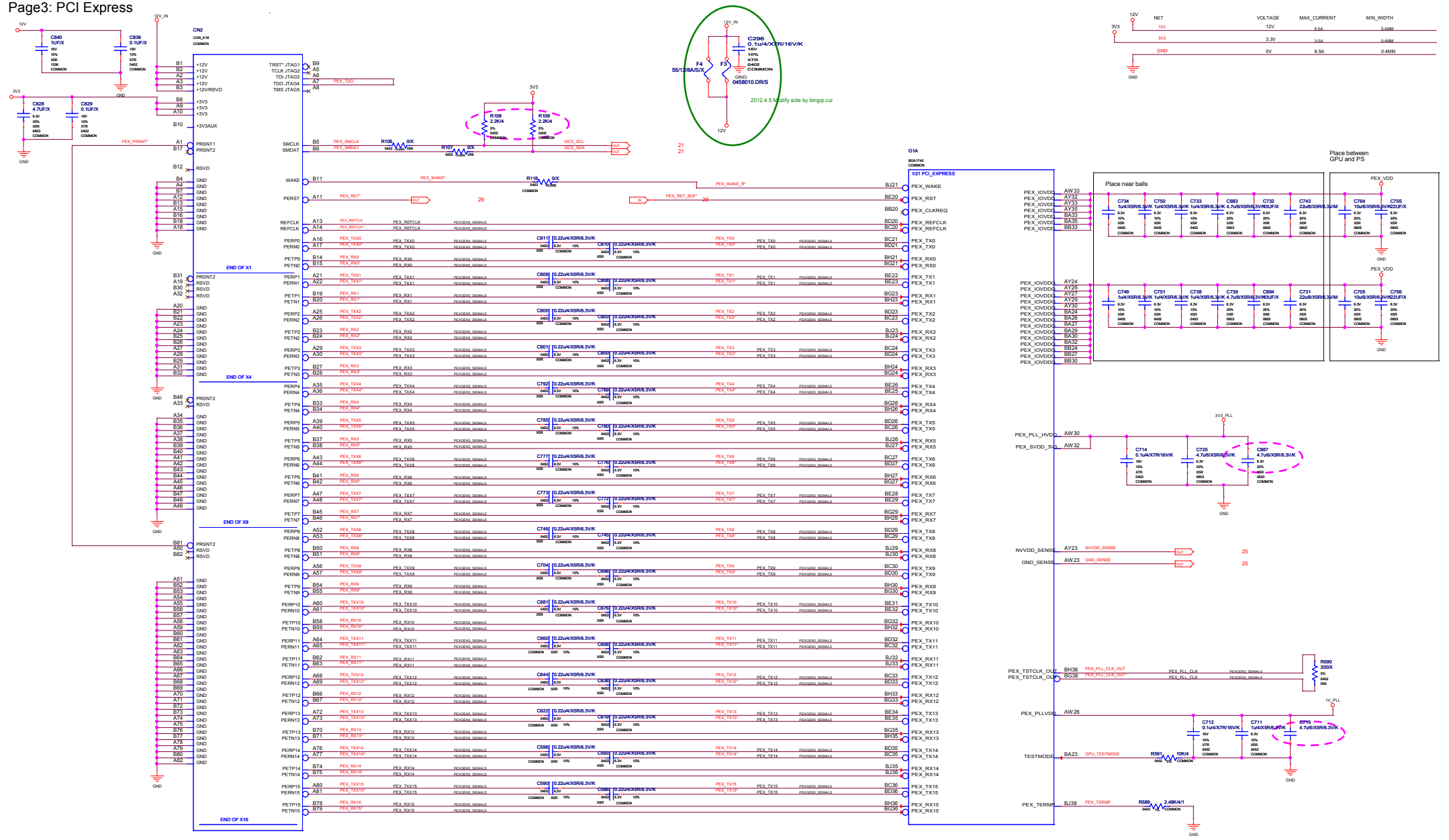
Page3: PCI Express



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PCI Express

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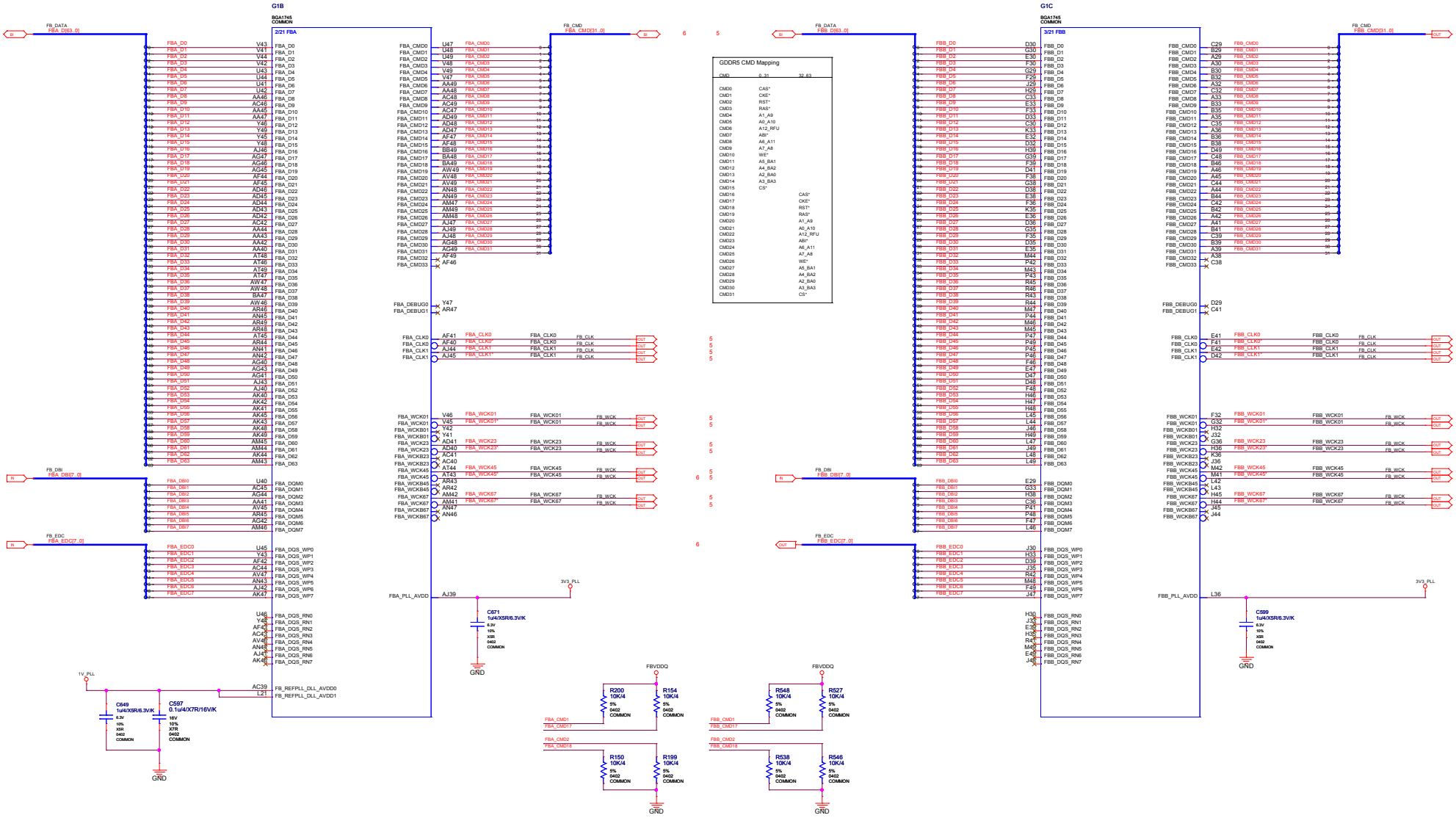
Page4: MEMORY: GPU Partition A/B



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GPU FB_AB

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Title: MEMORY: GPU Partition A/B

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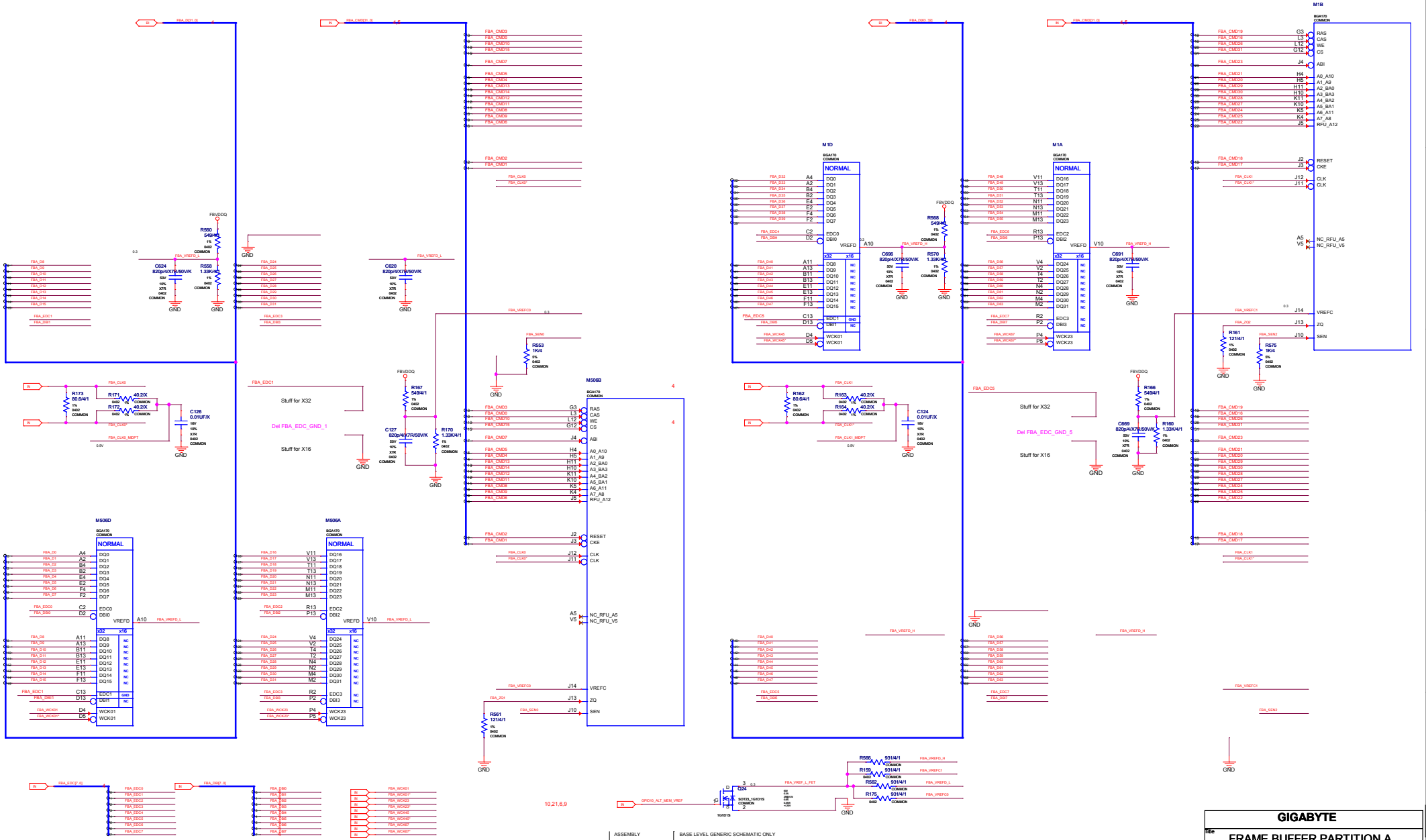
PAGE5: FRAME BUFFER PARTITION A



ASSEMBLY	BASE LEVEL GENERIC SCHEMATIC ONLY
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Title: FRAME BUFFER PARTITION A

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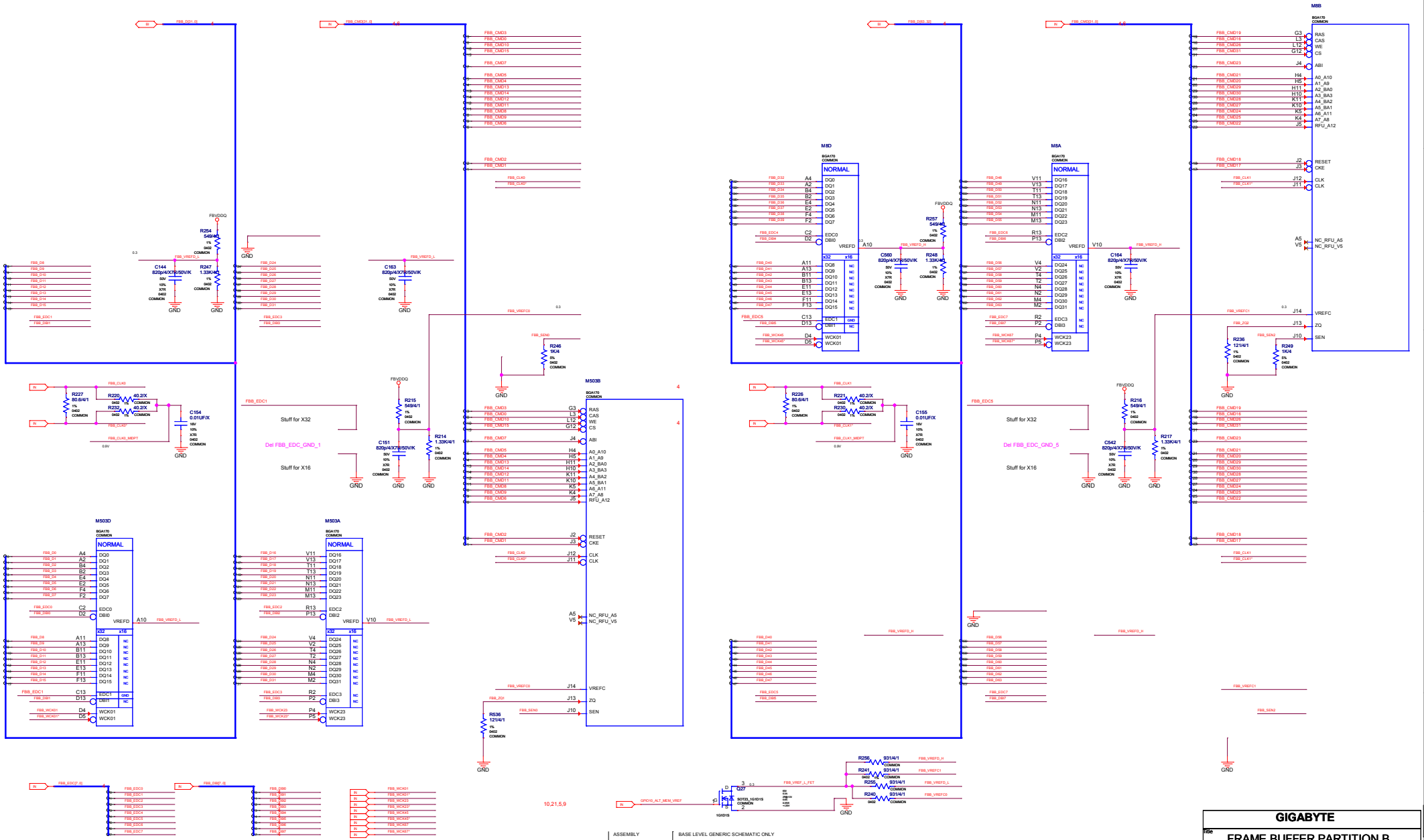
PAGE6: FRAME BUFFER PARTITION B



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Title: FRAME BUFFER PARTITION B

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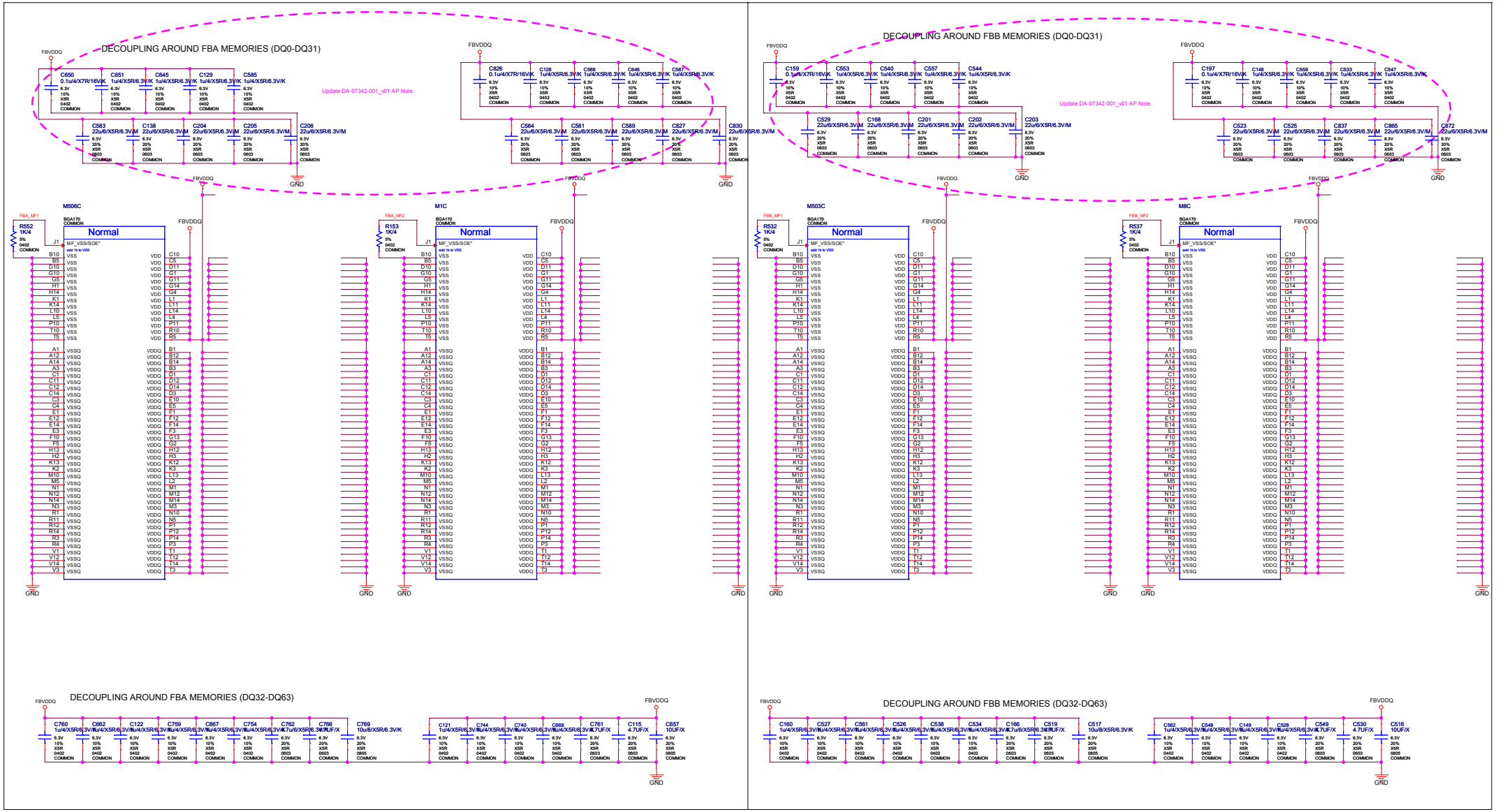
PAGE7: FRAME BUFFER PARTITION A/B DECOUPLING



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MEM FB_AB PWR

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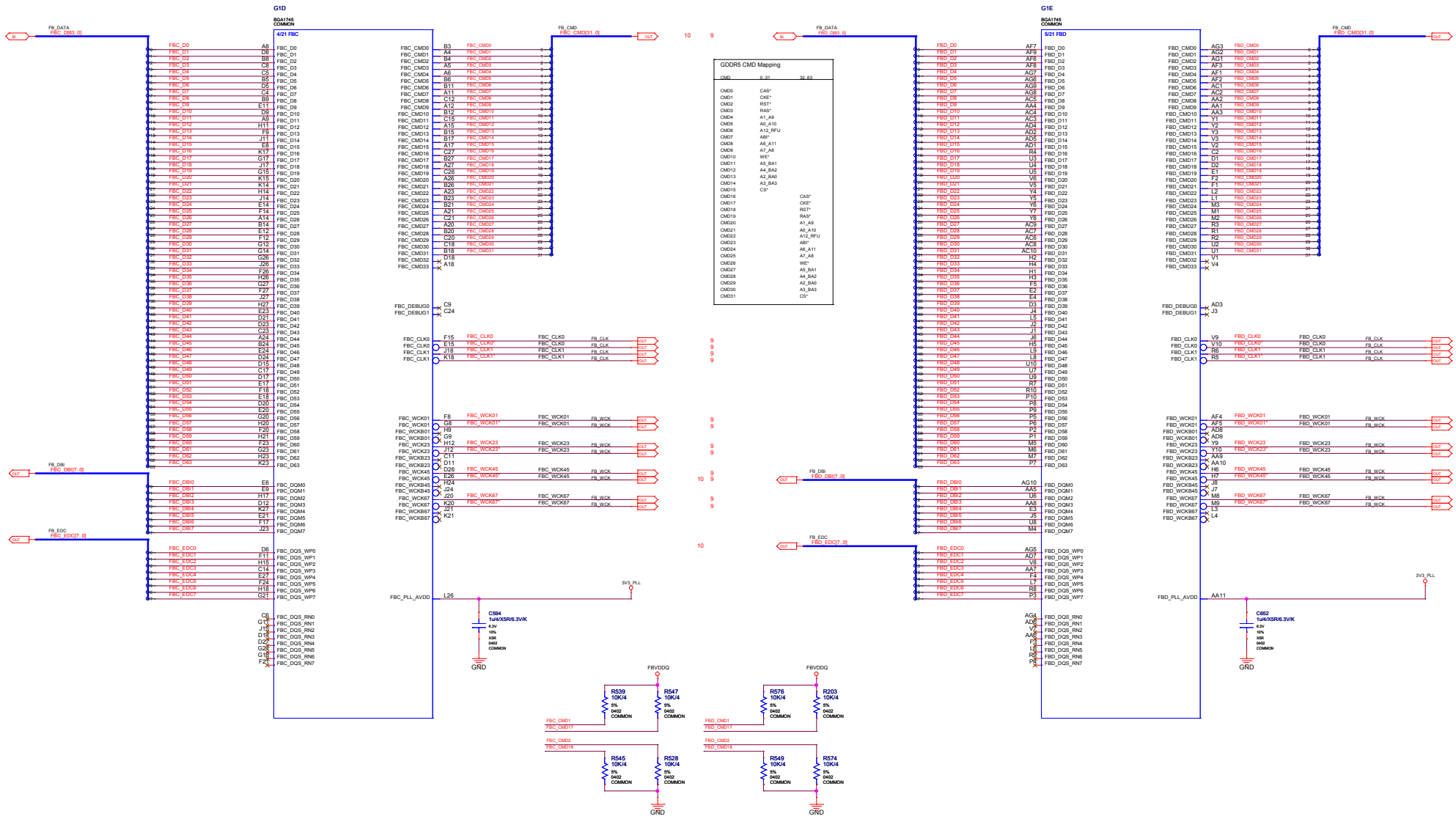
Page8: MEMORY: GPU Partition C/D



ASSEMBLY
PAGE DETAIL

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GPU FB_CD

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Title: MEMORY: GPU Partition C/D

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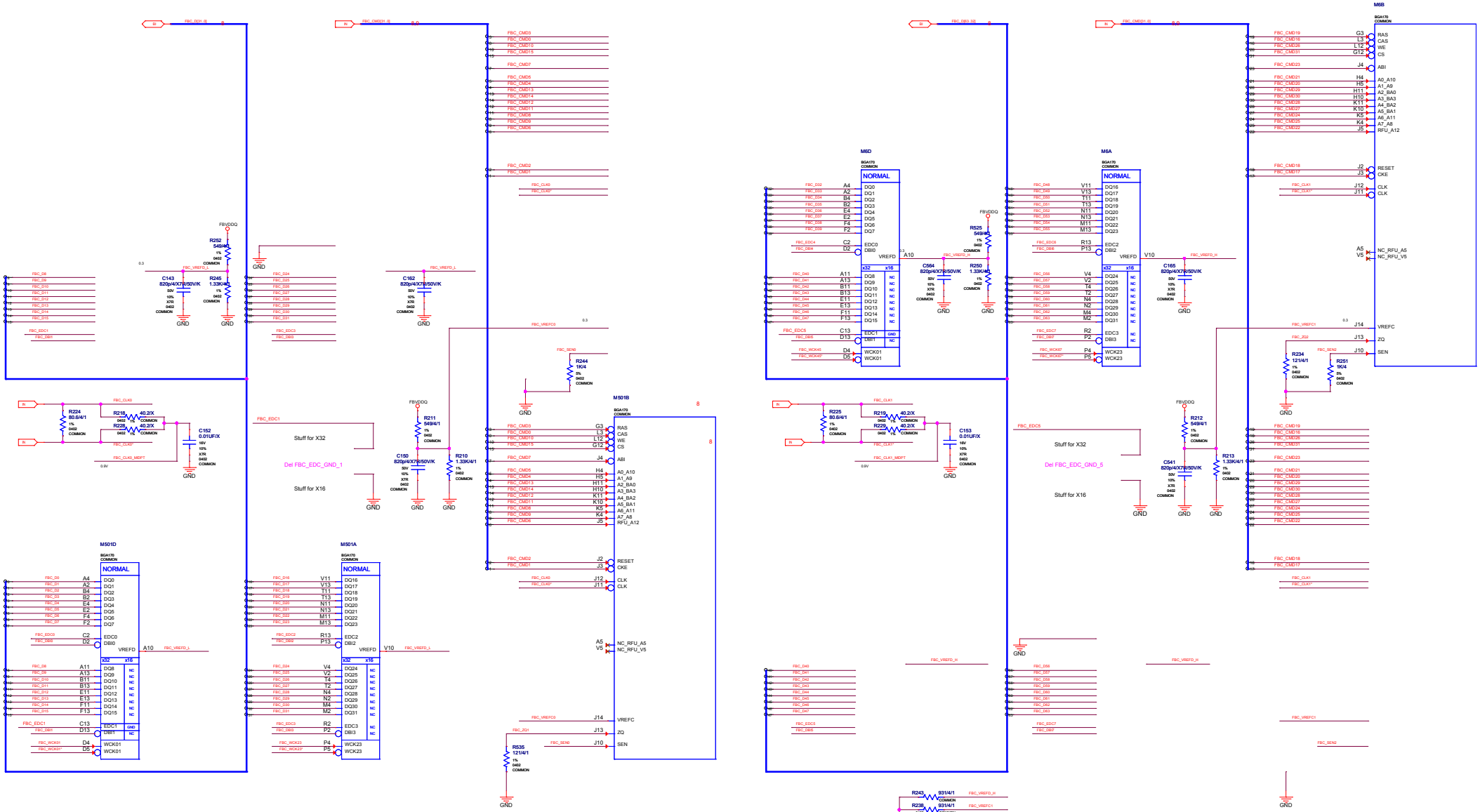
PAGE9: FRAME BUFFER PARTITION C



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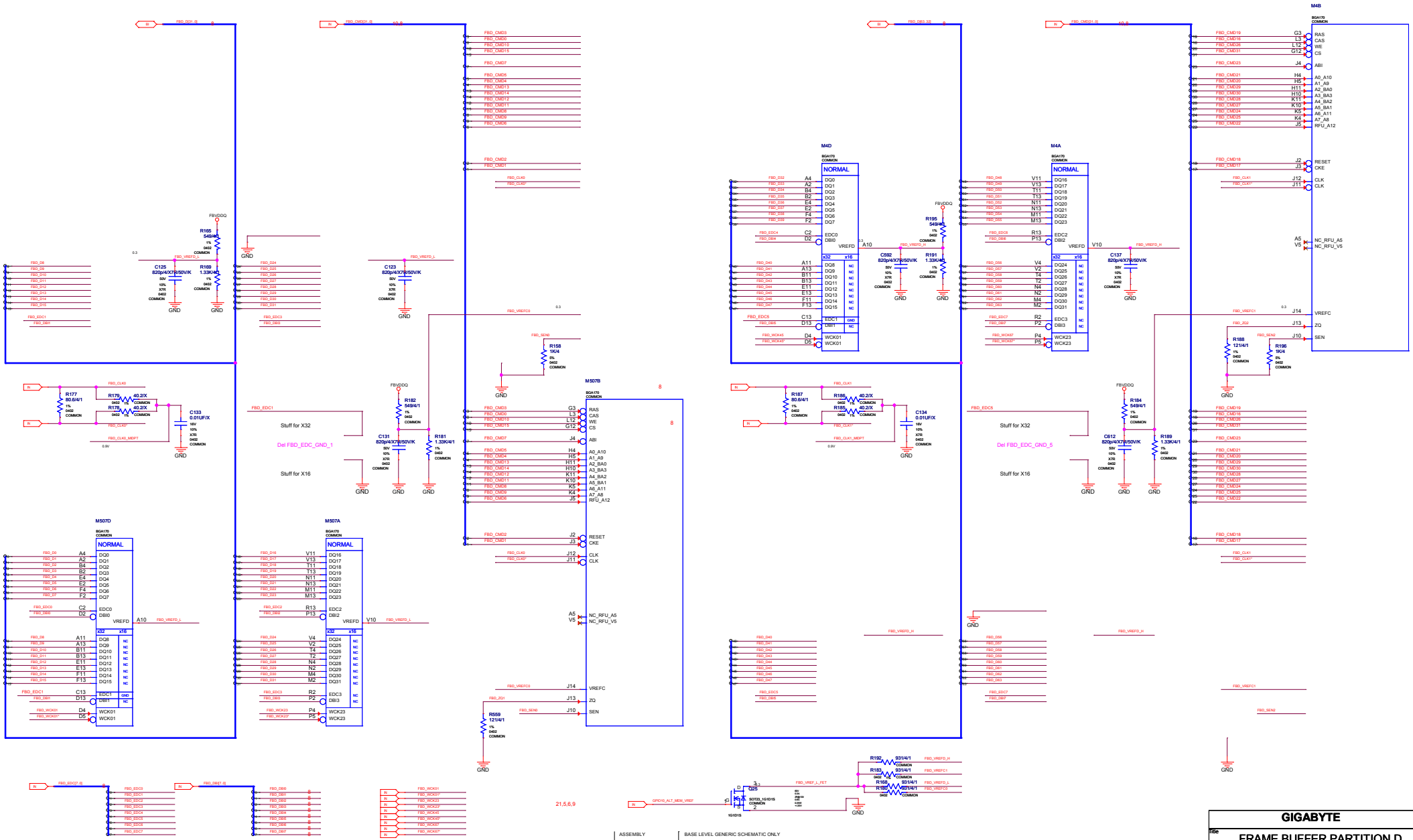
PAGE10: FRAME BUFFER PARTITION D



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MEM FB_D

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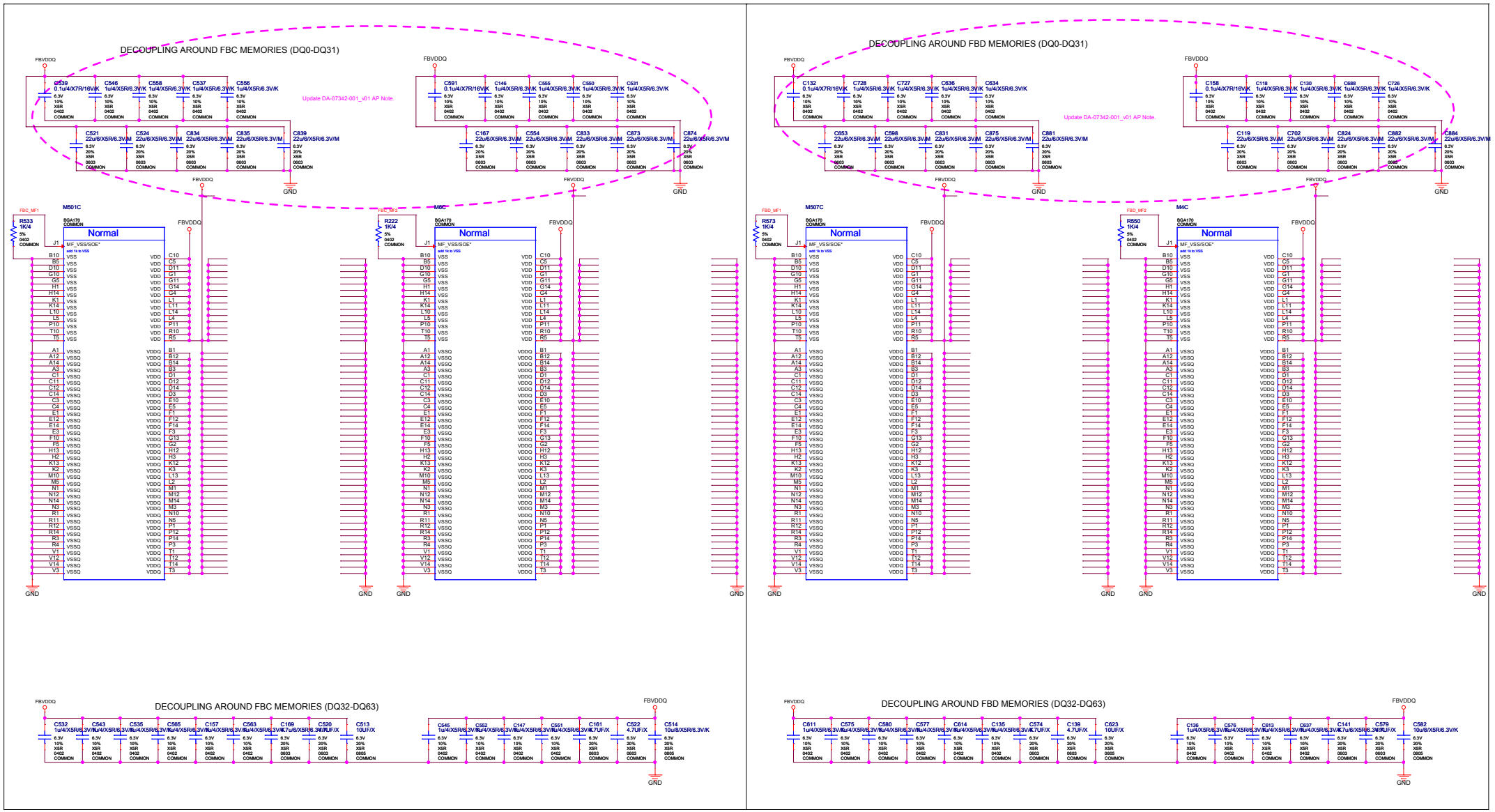
PAGE11: FRAME BUFFER PARTITION C/D DECOUPLING



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MEM FB_CD PWR

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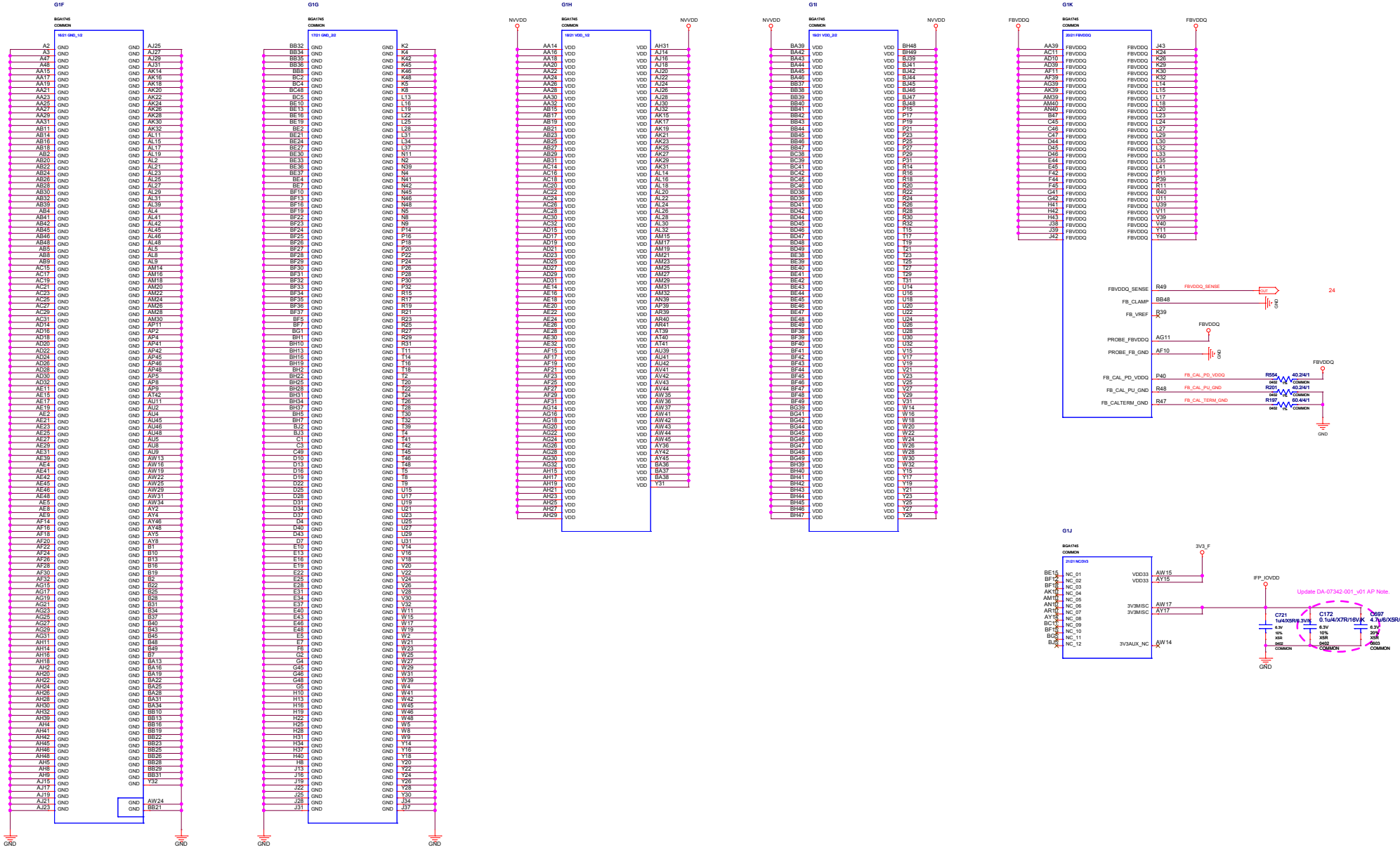
Page12: GPU PWR and GND



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GPU PWR and GND

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Page13: GPU Decoupling

Based on GB2-X GDDR5 FBVDDQ Decap Guideline

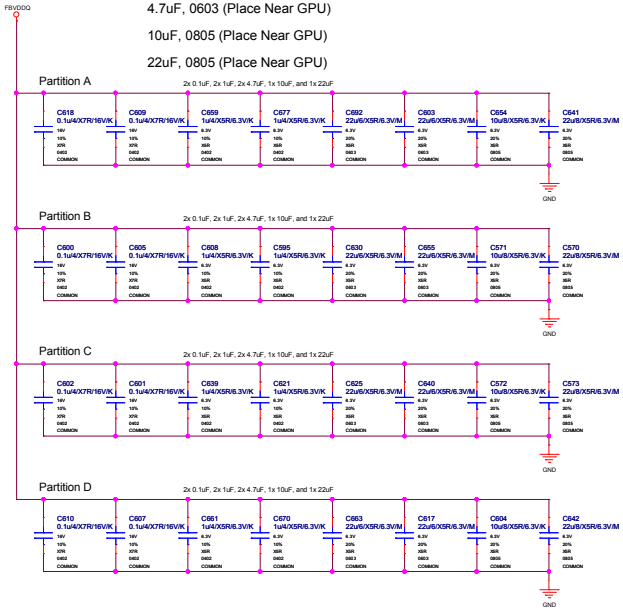
FBVDDQ

0.1uF, 0.47uF & 1uF, 0402 (Place Under GPU)

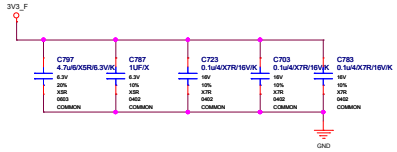
4.7uF, 0603 (Place Near GPU)

10uF, 0805 (Place Near GPU)

22uF, 0805 (Place Near GPU)

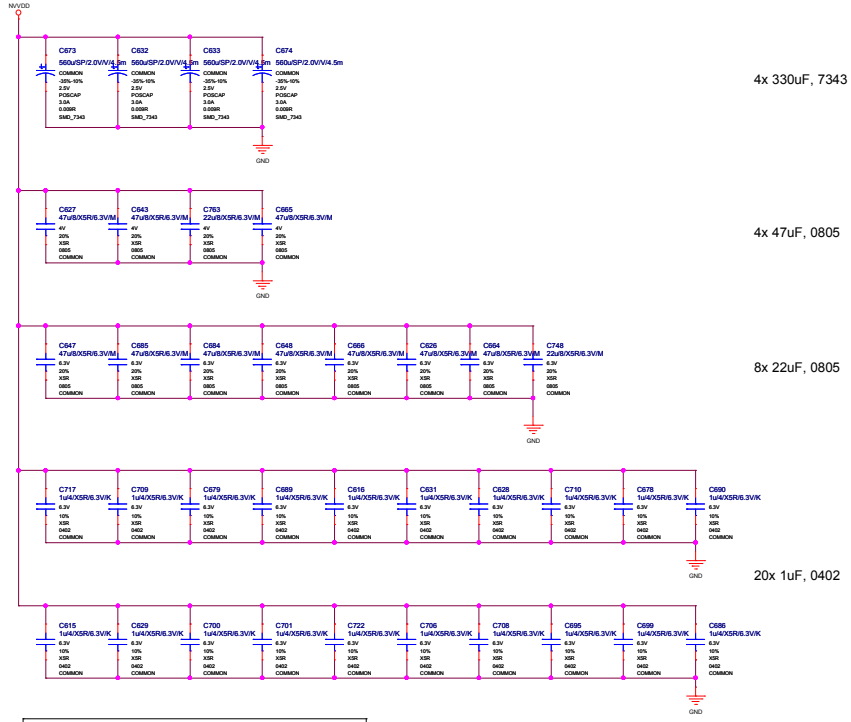


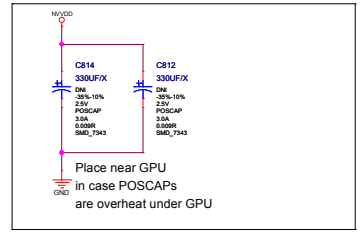
VDD33



NVVDD Decoupling caps. Place under GPU.

NVVDD





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GPU Decoupling

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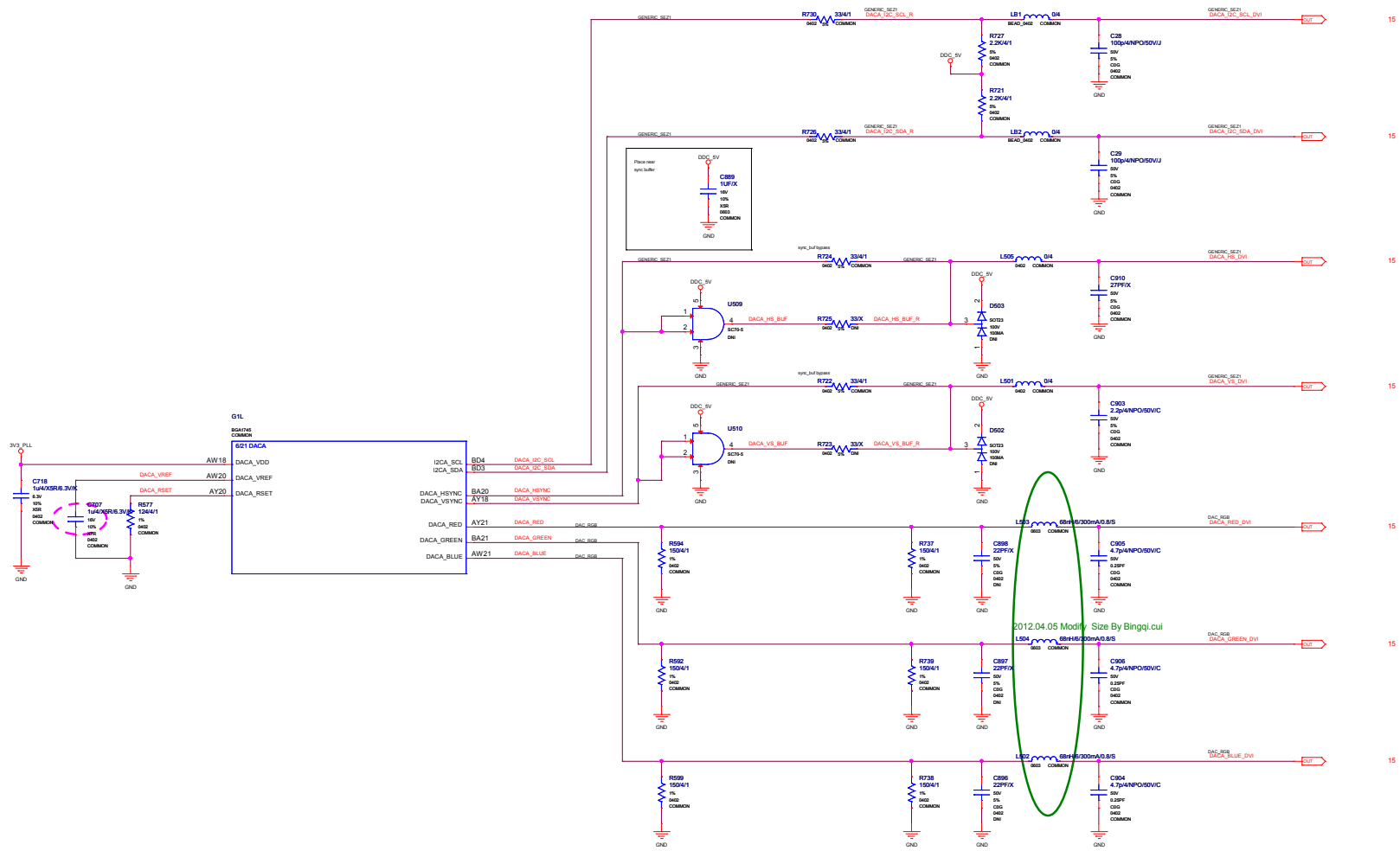
Page14: DACA Interface



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DACA Interface

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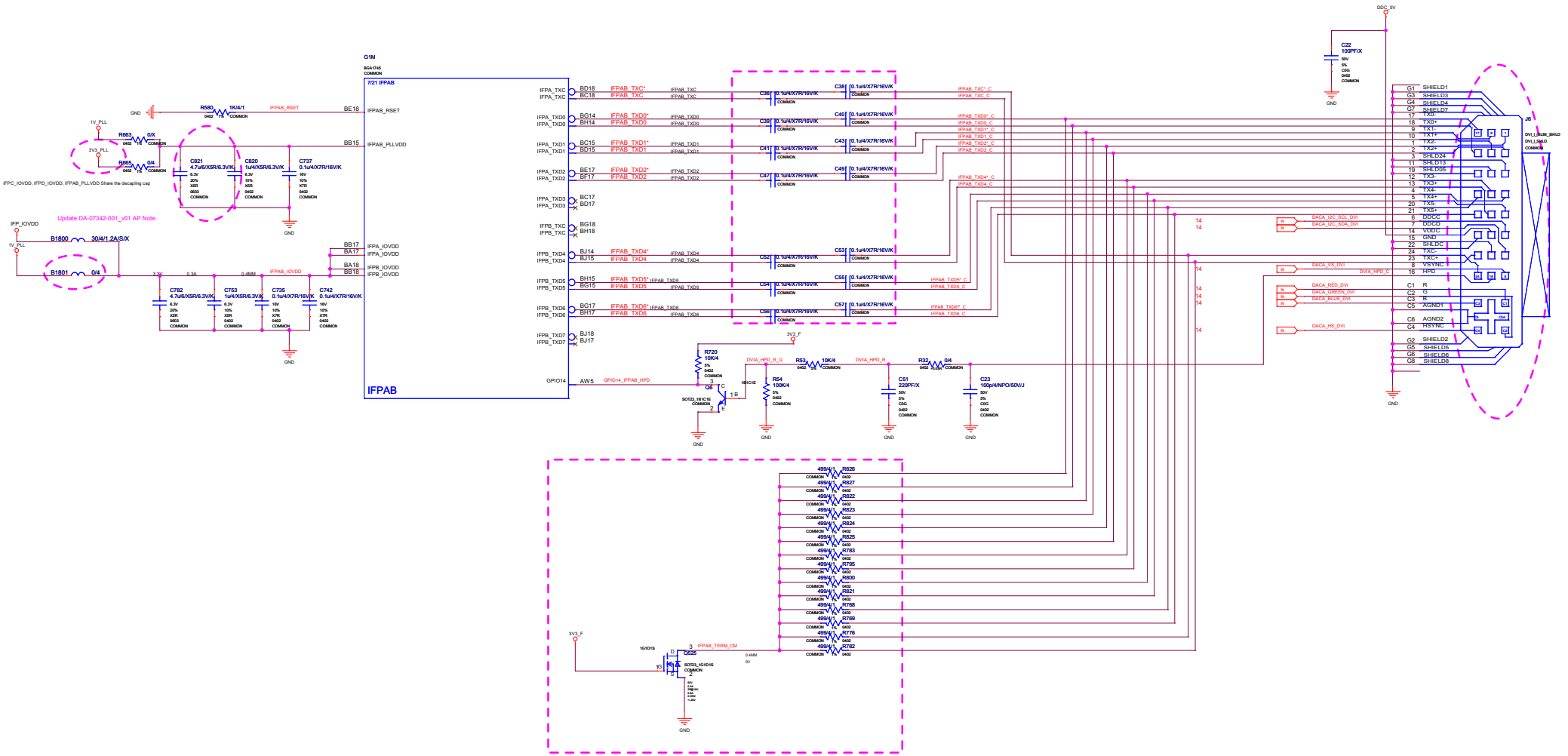

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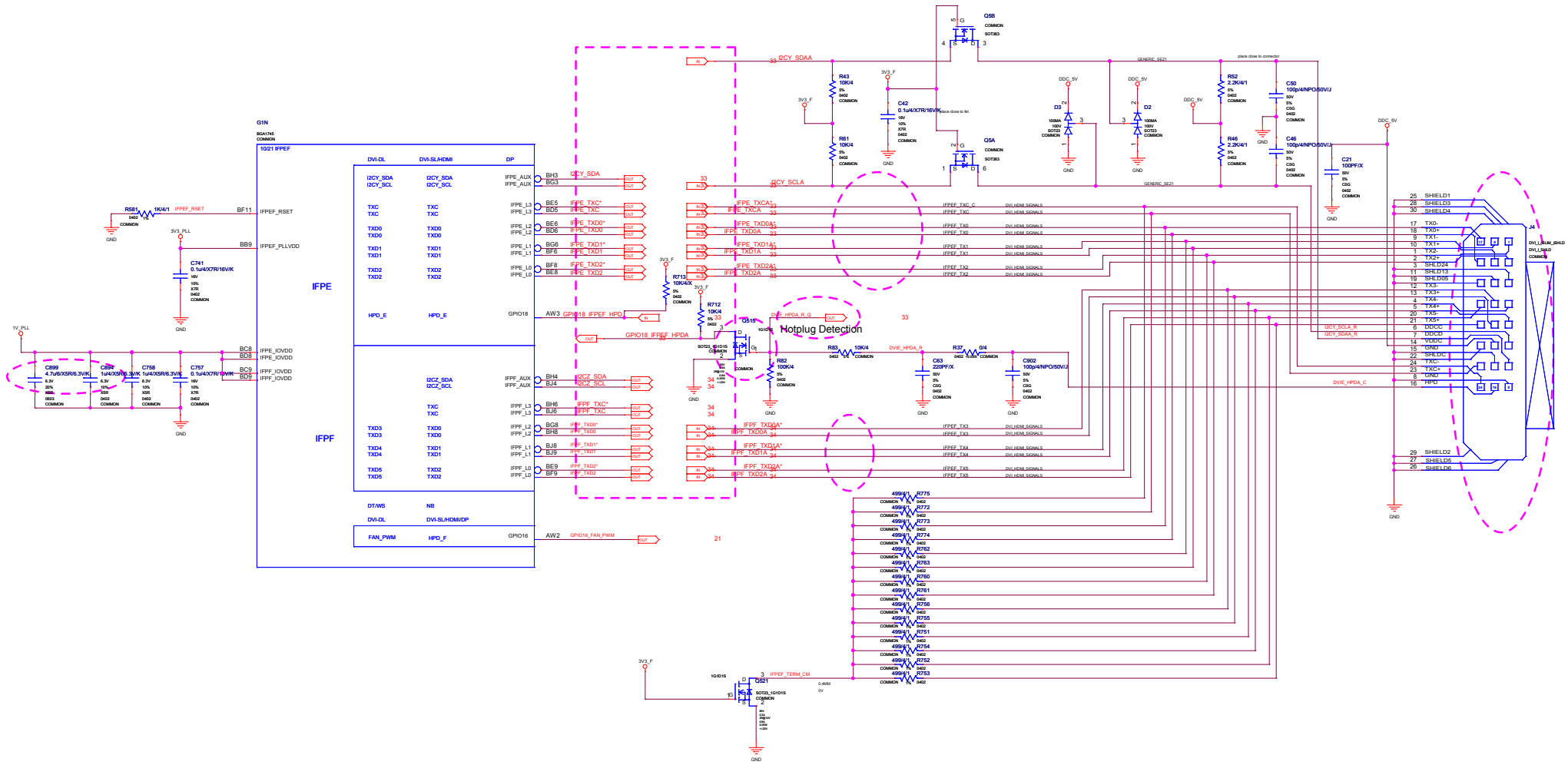

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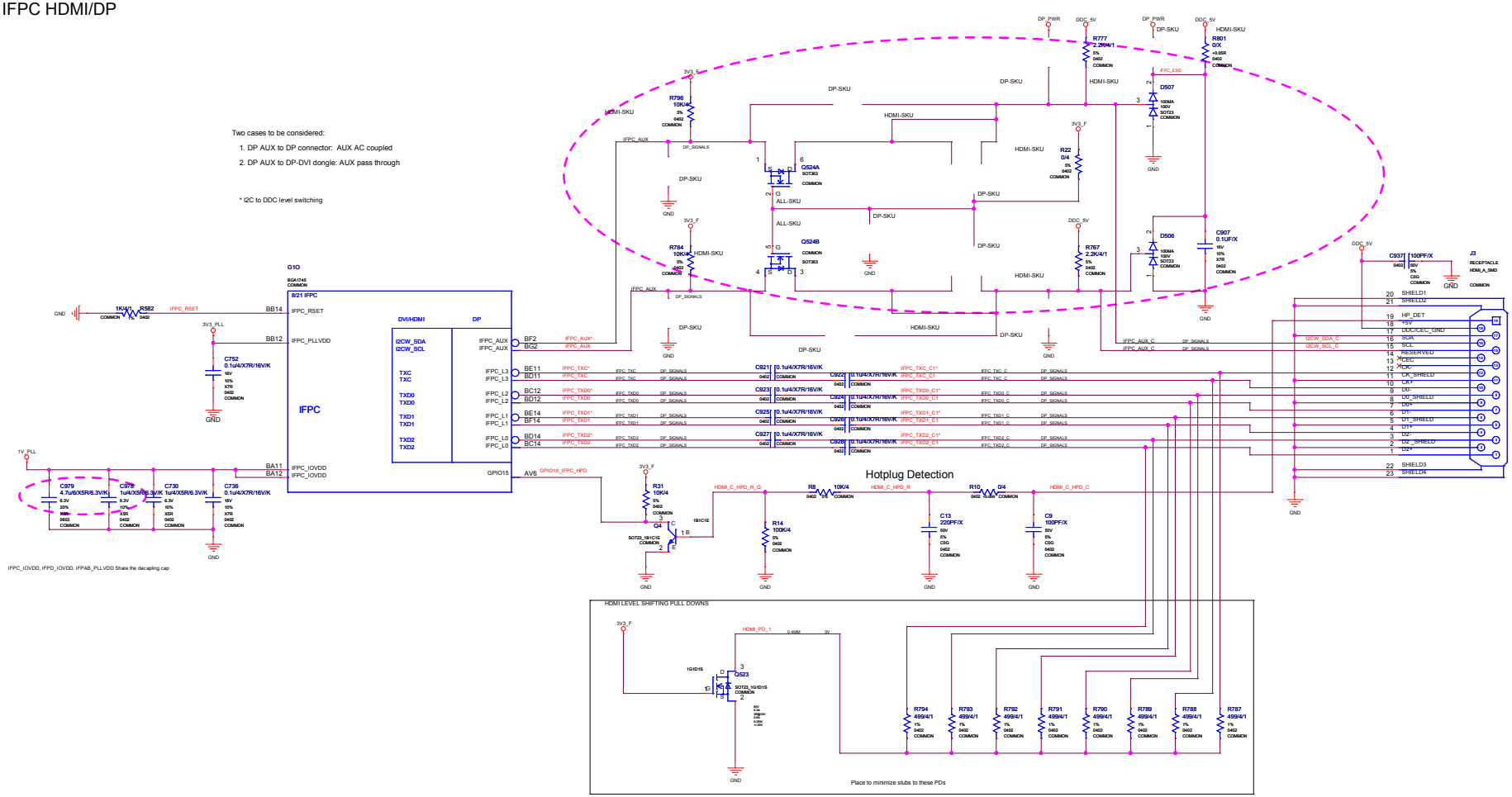
Page17: IFPC HDMI/DP



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IFPC HDMI/DP

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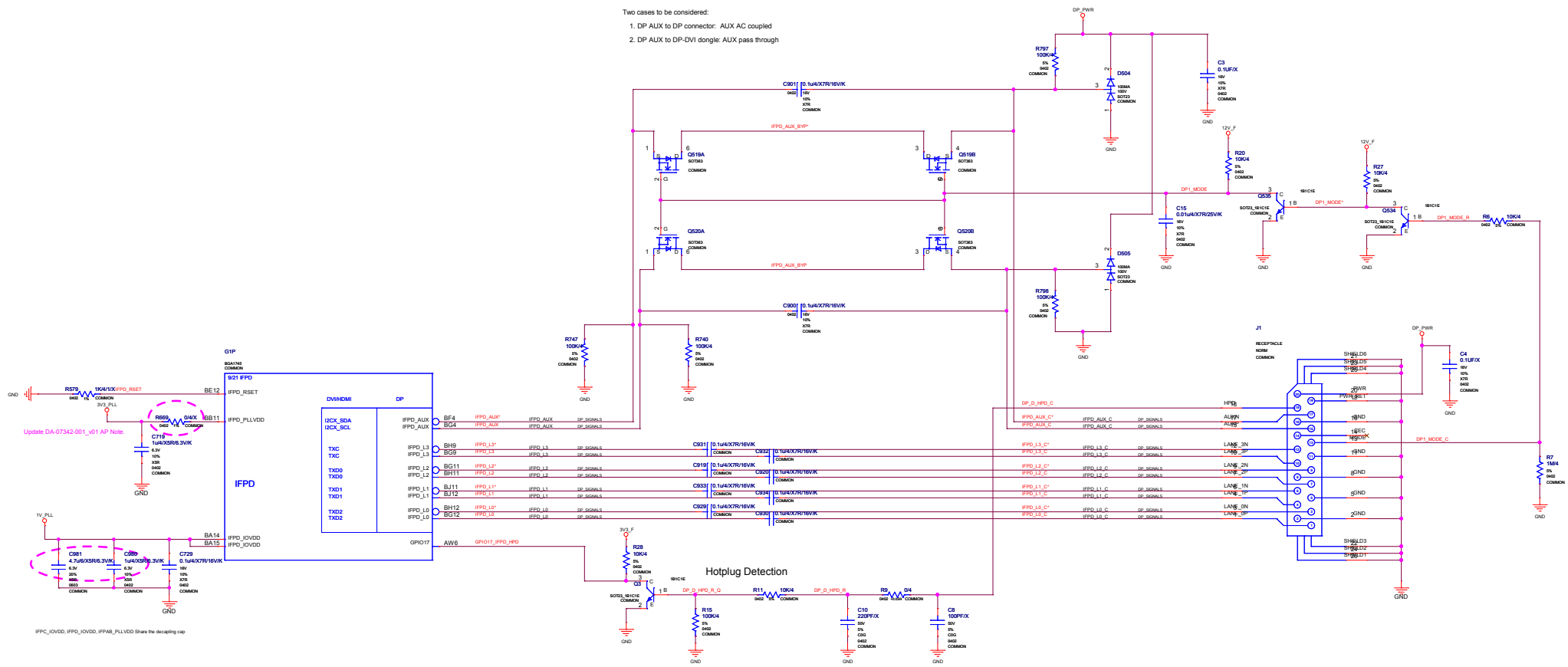
Page18: IFPD DP



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ASSEMBLY
PAGE DETAIL

BASE LEVEL GENERIC SCHEMATIC ONLY
IFPD DP

GIGABYTE

Title	IFPD DP	
Size: Custom	Document Number: GV-N970WF3OC-4GD	Rev: 1.1
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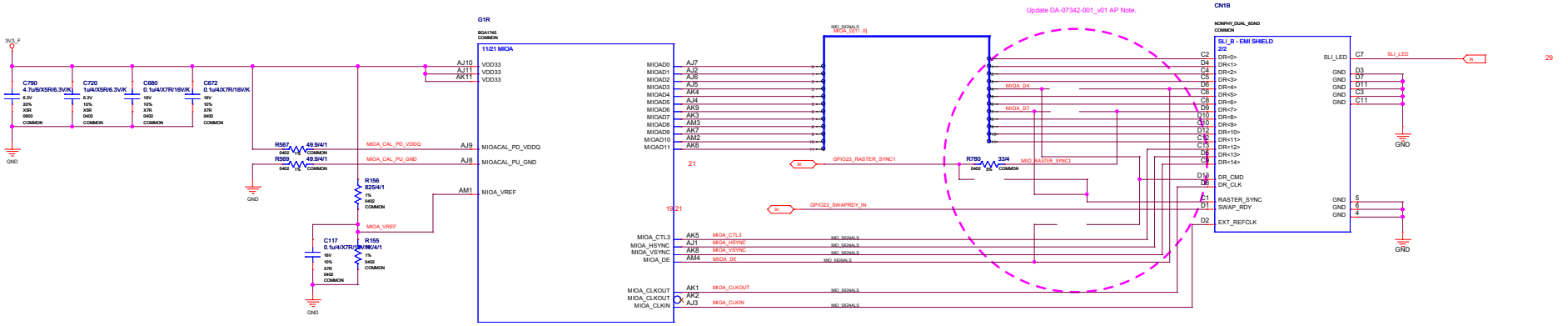
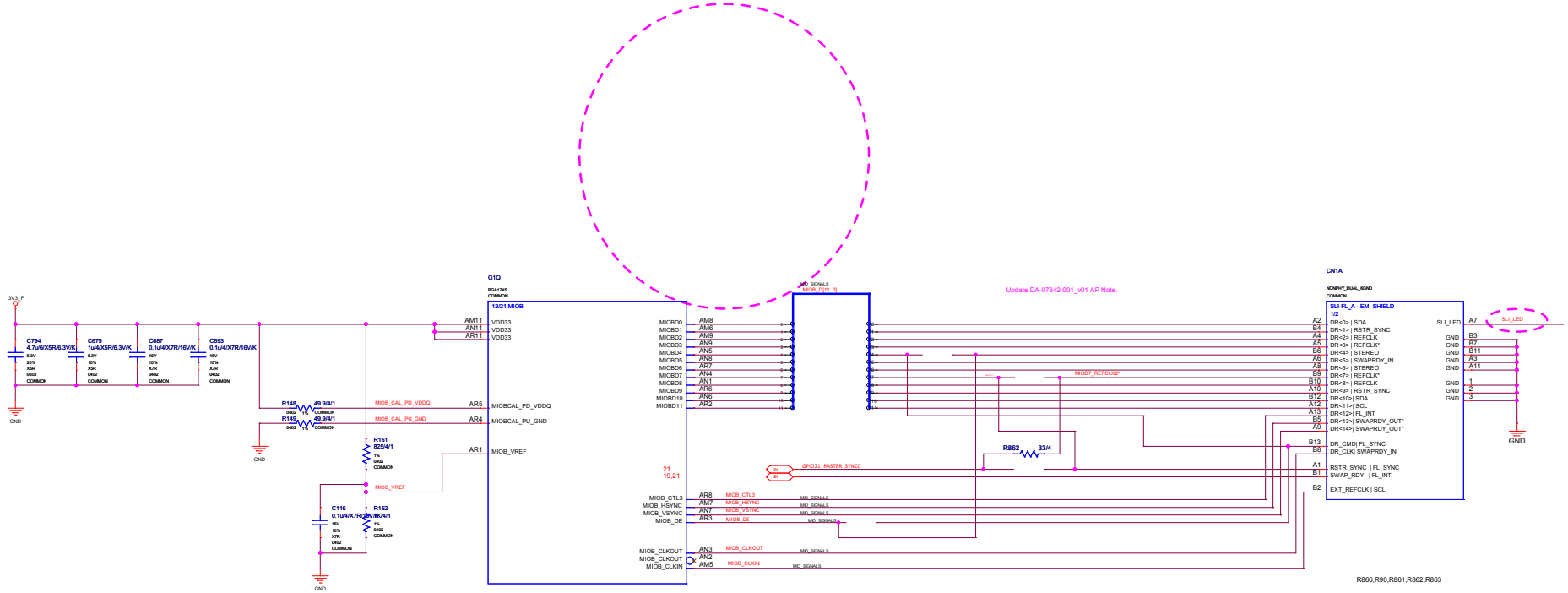
Page19: MIOA/B Interface and Frame Lock





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ASSEMBLY
PAGE DETAIL

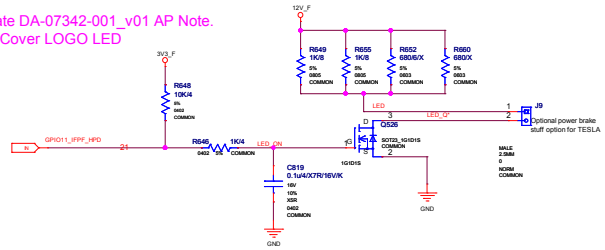
BASE LEVEL GENERIC SCHEMATIC ONLY
MIOA/B Interface and Frame Lock

GIGABYTE

Title	MIOA/B Interface and Frame Lock	
Size: Custom	Document Number: GV-N970WF3OC-4GD	Rev: 1.1
Date: Sunday, September 28, 2014	Sheet 19 of 34	

Page20: Stereo Connector

Update DA-07342-001_v01 AP Note.
Sink Cover LOGO LED



ASSEMBLY
PAGE DETAIL

BASE LEVEL GENERIC SCHEMATIC ONLY
Stereo Connector

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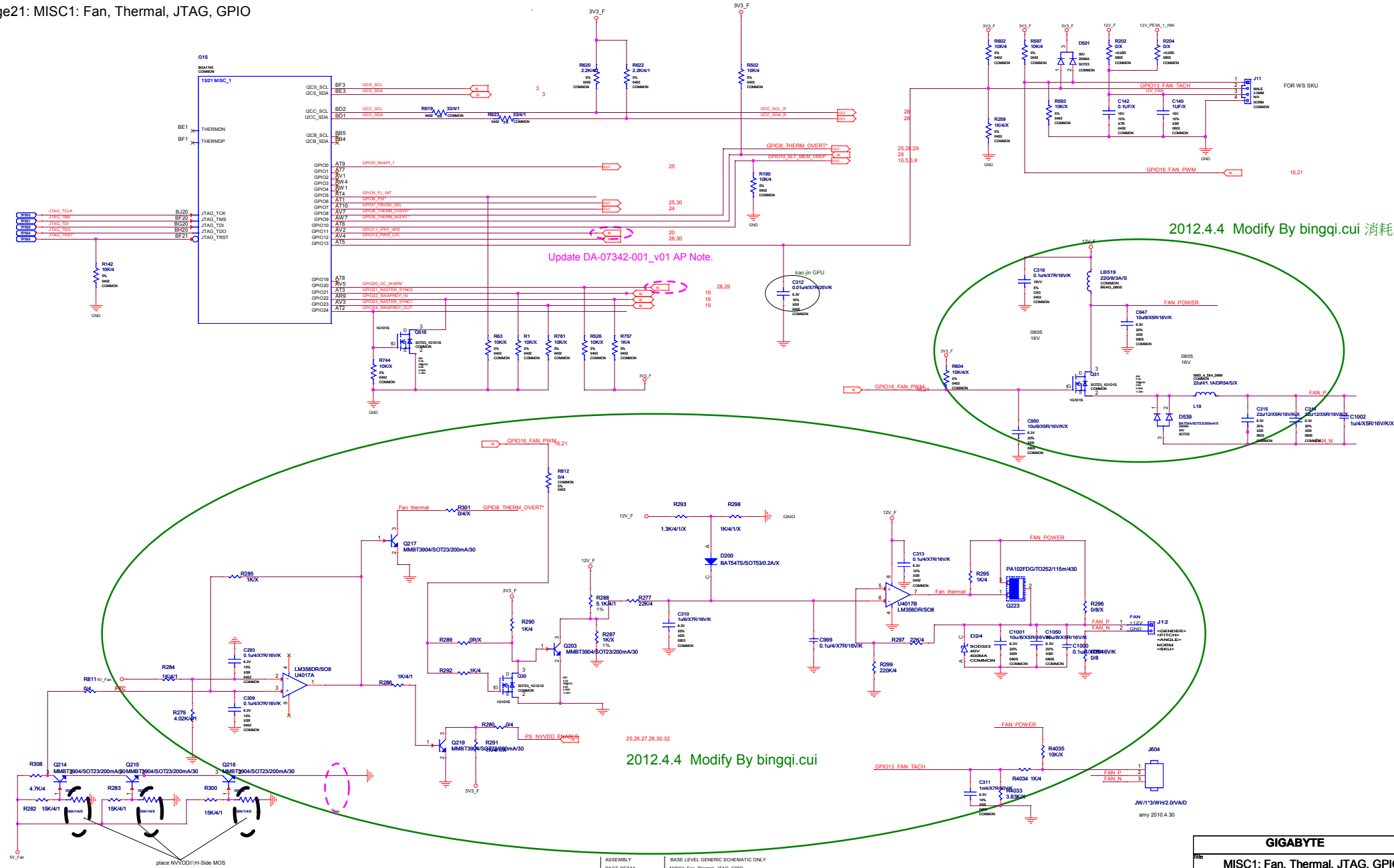
GIGABYTE

Title: Stereo Connector

Size	Document Number	Rev
Custom	GV-N970WF3OC-4GD	1.1

Date: Sunday, September 28, 2014 Sheet 20 of 34

Page21: MISC1: Fan, Thermal, JTAG, GPIO



Page22: MISC2: ROM, XTAL, Straps

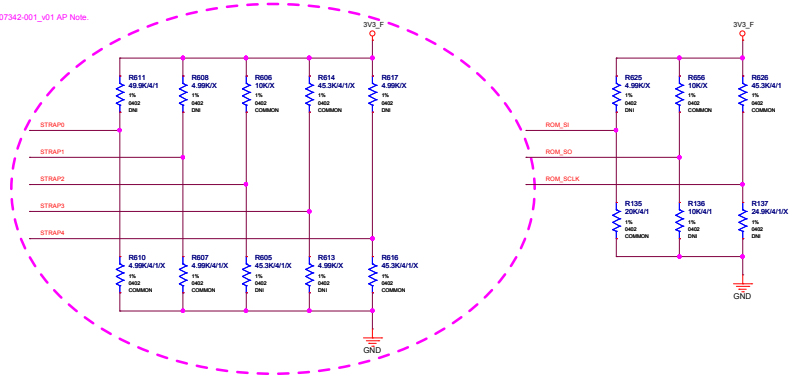
STRAP0	USER_BIT [3:0]*	0000*	5K PD*
STRAP1	3GIO_PADCFG_LUT_ADR*	0000*	5K PD Desktop*
STRAP2	PCI_DEVID [3:0]*	0111 - (0x1187)*	10K PU -325 GPU*
STRAP3	SOR_EXPOSED [3:0]*	1111*	45K PU*
STRAP4	DP_PLL_VDD_33V*	1* FOR 3_3V*	
	PEX_MAX_SPEED*	1* FOR GEN2/3*	45K PD*
	PEX_SPD_CHANGE_GEN3*	1* ENABLED*	
	*		
ROM_SI	RAMCFG[0]*	0*	
	RAMCFG[1]*	1*	64Mx32 256 bit hynix for SKUS primary memory 35K PD*
	RAMCFG[2]*	1*	
	RAMCFG[3]*	0*	
ROM_SO	VGA_DEVICE*	1*	
	SMB_ALT_ADDR*	0*	30k PD*
	FB[0]_APERTURE_SIZE*	1* For 128MB*	
	FB[1]_APERTURE_SIZE*	0* For 128MB*	
ROM_SCLK	PEX_PLL_EN_TERM100*	0* DISABLE*	
	PCI_DEVID_EXT[5]*	0* For 0x1189*	25K PD*
	SUB_VENDOR*	1* Dedicated BIOS*	
	PCI_DEVID_EXT[4]*	0* For 0x1189*	

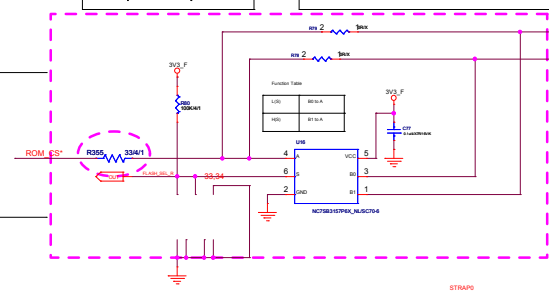
	GND	3V3
5k	0000	1000
10k	0001	1001
15k	0010	1010
20k	0011	1011
25k	0100	1100
30k	0101	1101
35k	0110	1110
45k	0111	1111

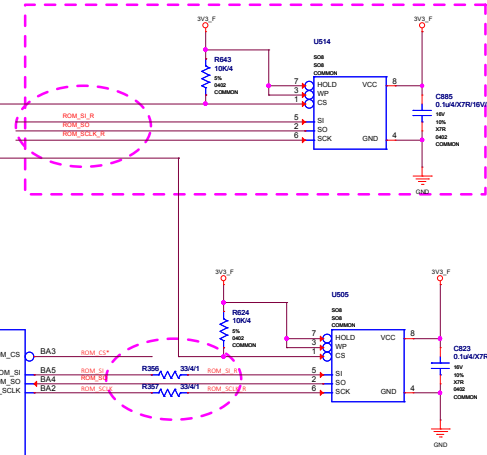
X32 MODE 256bit

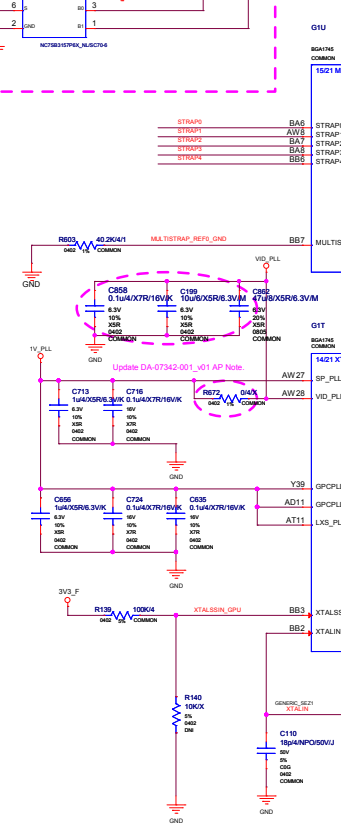
CFG[3:0]	Config Width	Vendor
0000	Reserved	
0001	32Mx32	256-bit Elpida
0010	32Mx32	256-bit Hynix
0011	32Mx32	256-bit Samsung
0100	Reserved	
0101	64Mx32	256-bit Elpida
0110	64Mx32	256-bit Hynix
0111	64Mx32	256-bit Samsung

	MULTI_STRAP_REF0_GND
BINARY PRODUCTION	NC
BINARY BRINGUP	NC
MULTI-LEVEL	40.2k 1% TO GND









XTALSSIN	XTALOUTBUFF	Inverted SmartFan PWM %
PU	PU	66(33% high)
PU	PD	50(50% high)
PD	PU	33(66% high)
PD	PD	0(100% high)

Update DA-07342-001_v01 AP Note.

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ASSEMBLY
PAGE DETAIL

BASE LEVEL GENERIC SCHEMATIC ONLY
MISC2: ROM, XTAL, Straps

GIGABYTE

Title: MISC2: ROM, XTAL, Straps

Size: Custom | Document Number: GV-N970WF3OC-4GD | Rev: 1.1

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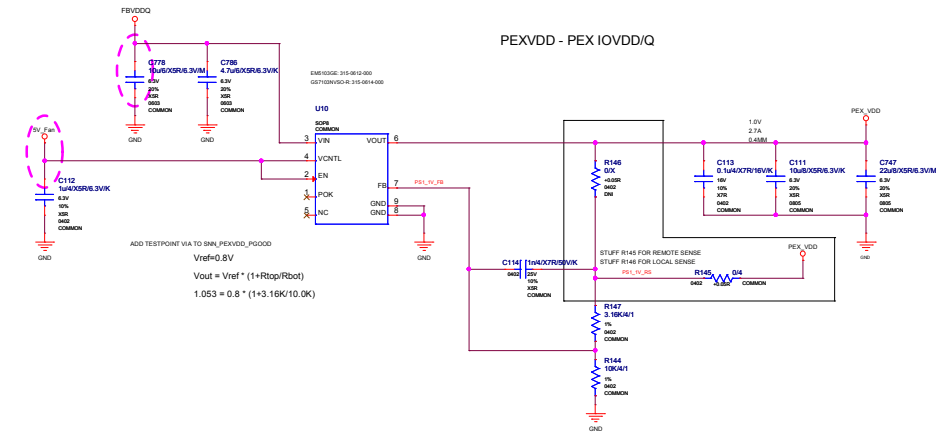
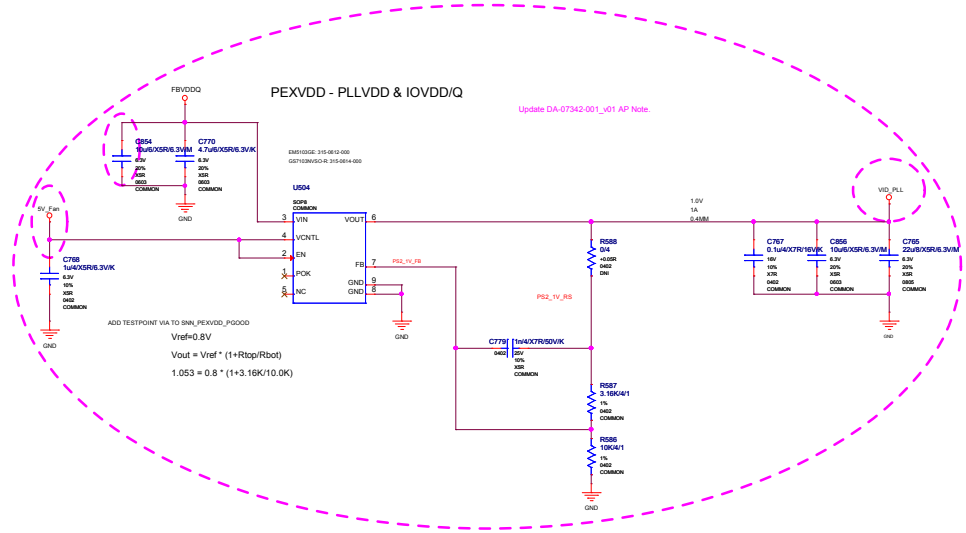
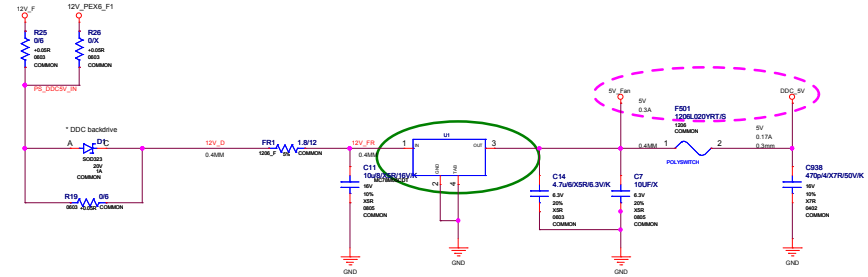
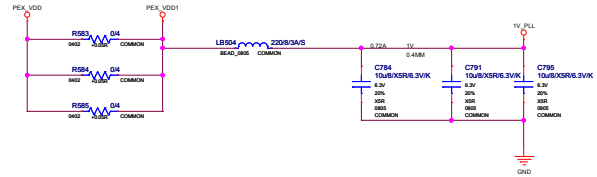




Del PEXVDD Converter





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ASSEMBLY
PAGE DETAIL

BASE LEVEL GENERIC SCHEMATIC ONLY
PS: 5V, PEX_VDD

GIGABYTE

Title: PS: 5V, PEX_VDD

Size: Custom | Document Number: GV-N970WF3OC-4GD | Rev: 1.1

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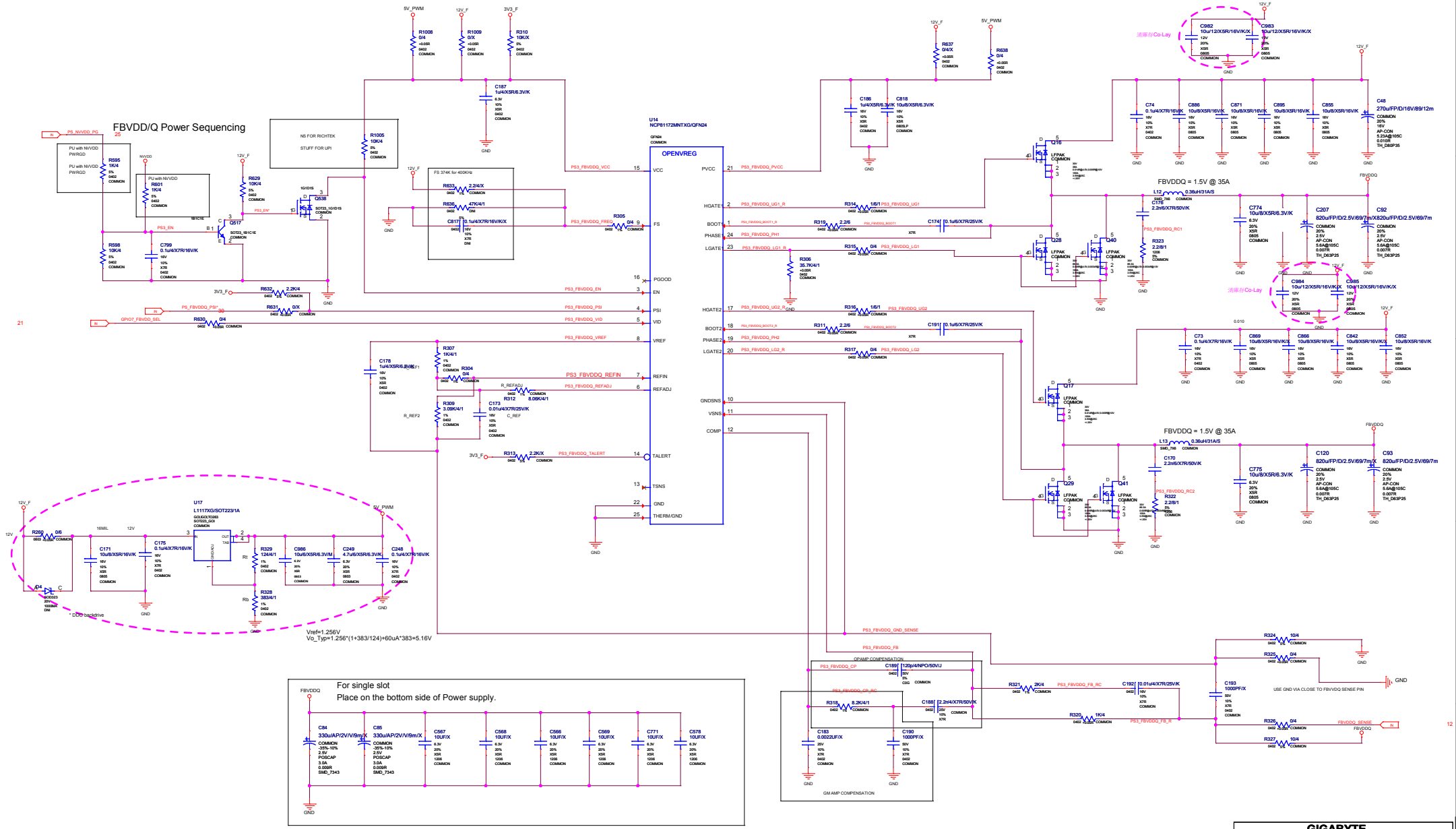
Page24: PS: FBVDD/Q



ASSEMBLY
PAGE DETAIL

BASE LEVEL GENERIC SCHEMATIC ONLY
PS: FBVDD/Q

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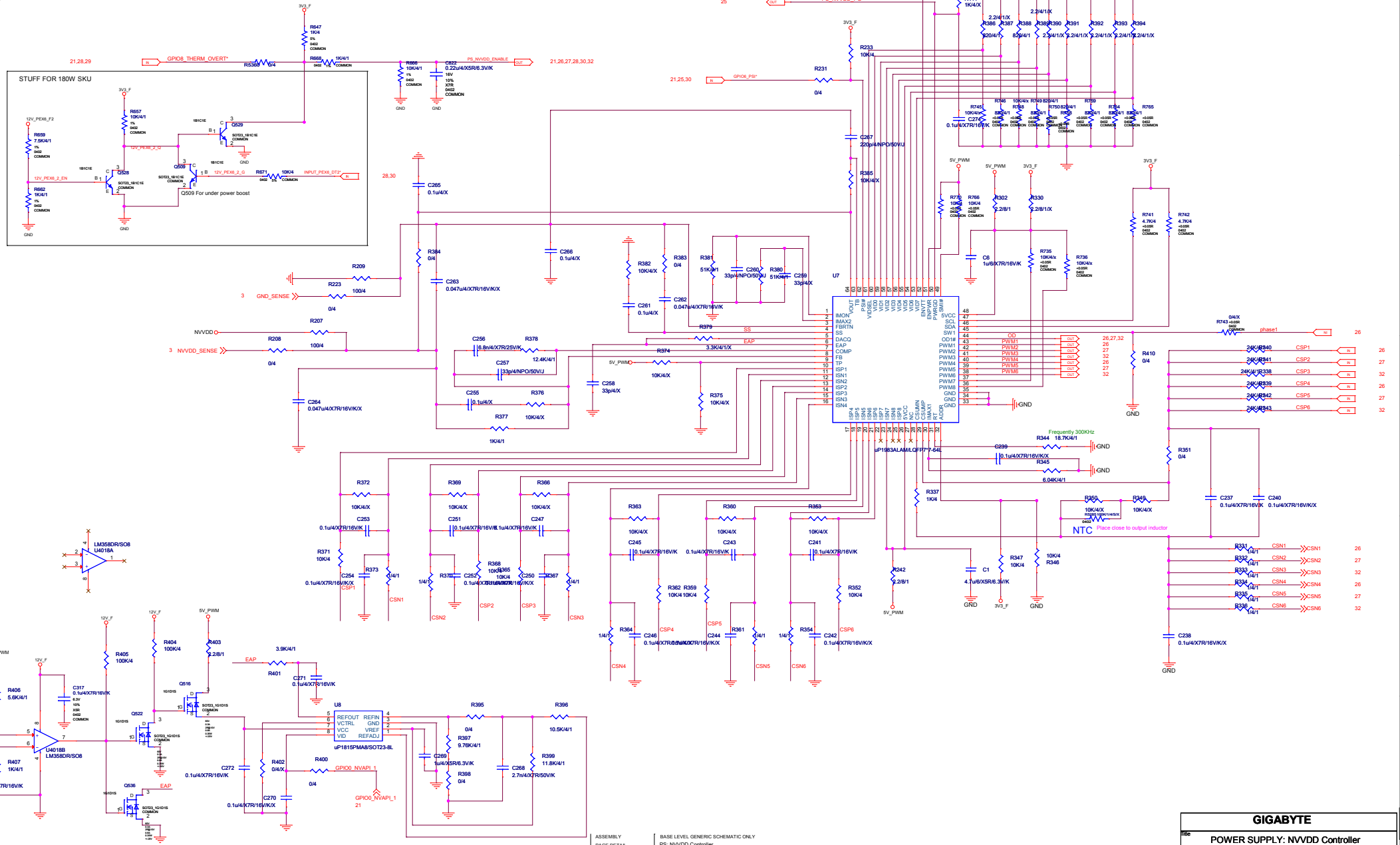
GIGABYTE		
Title: PS: FBVDD/Q		
Size: Custom	Document Number: GV-N970WF3OC-4GD	Rev: 1.1
Date: Sunday, September 28, 2014	Sheet 24 of 34	

Page25: POWER SUPPLY: NVVDD Controller



ASSEMBLY
PAGE DETAIL

BASE LEVEL GENERIC SCHEMATIC ONLY
PS: NVVDD Controller

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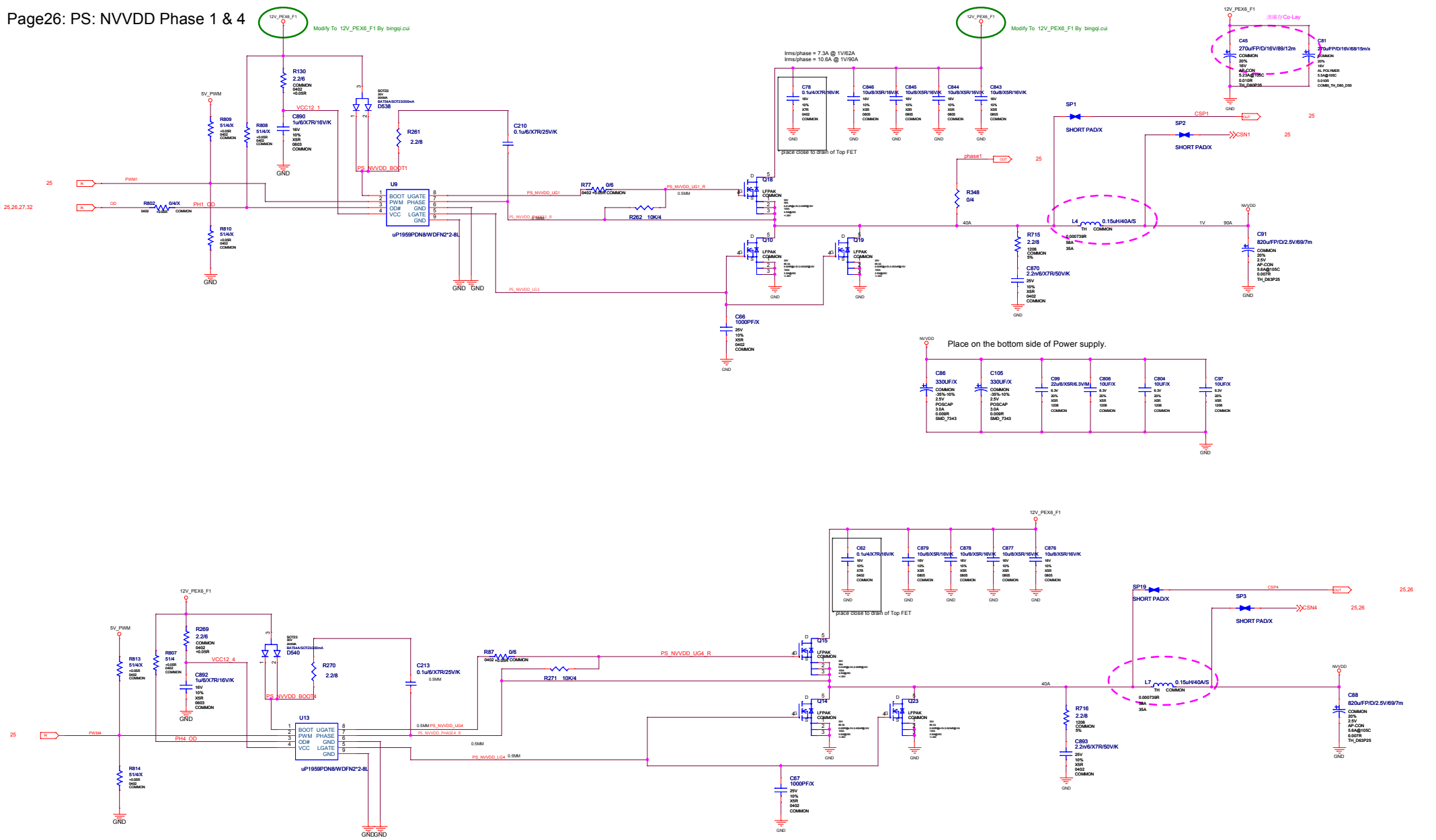
GIGABYTE

Title: POWER SUPPLY: NVVDD Controller

Size	Document Number	Rev
Custom	GV-N970WF3OC-4GD	1.1

Date: Sunday, September 28, 2014 Sheet 25 of 34

Page26: PS: NVVDD Phase 1 & 4



ASSEMBLY
PAGE DETAIL

BASE LEVEL GENERIC SCHEMATIC ONLY
PS: NVDD PHASE 1 & 3

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GIGABYTE

Title: PS: NVDD Phase 1 & 3

Size	Document Number	Rev
Custom	GV-N970WF3OC-4GD	1.1
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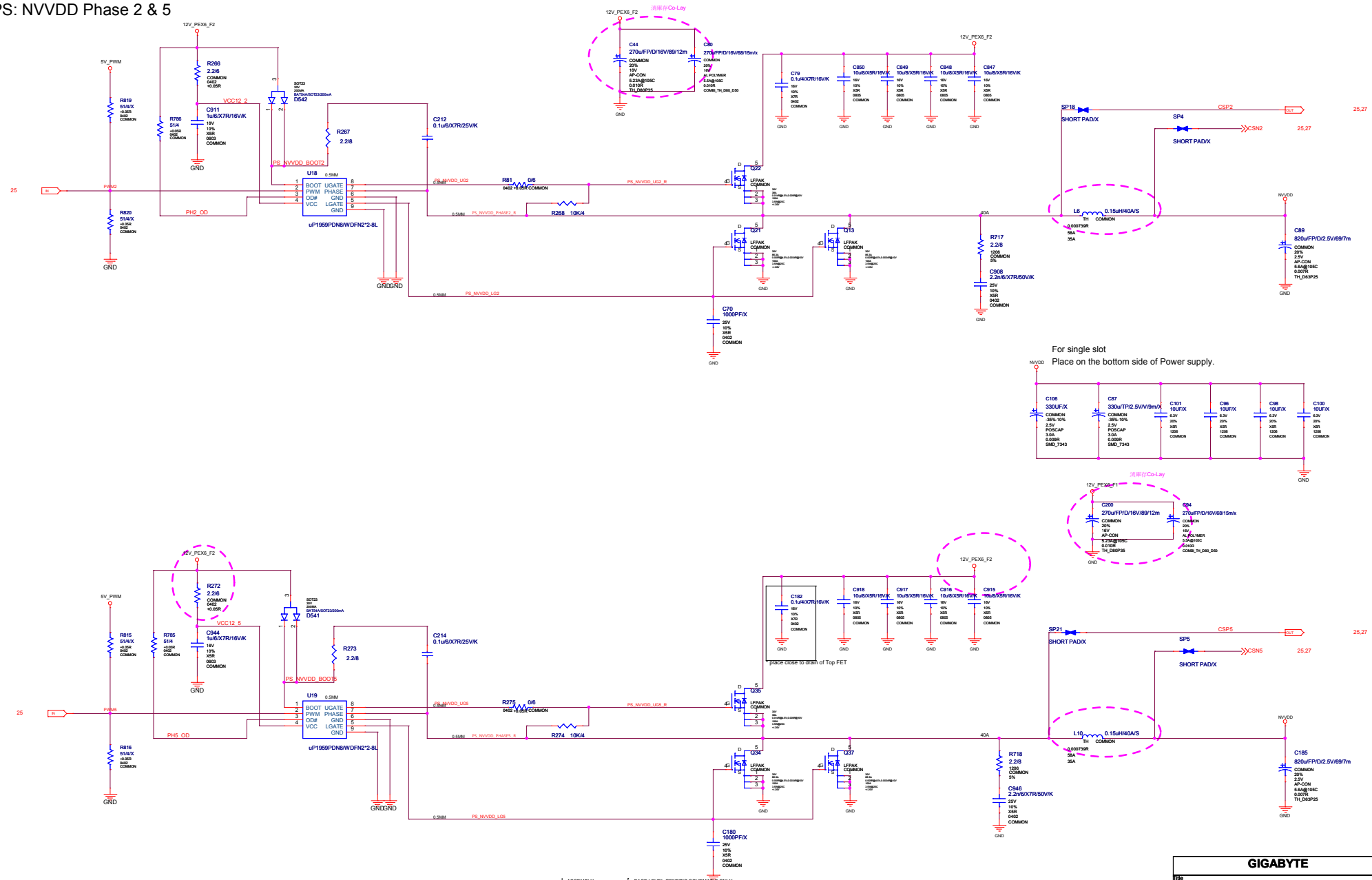
Page27: PS: NVVDD Phase 2 & 5



ASSEMBLY
PAGE DETAIL

BASE LEVEL GENERIC SCHEMATIC ONLY
PS: NVVD PHASES 2 & 4

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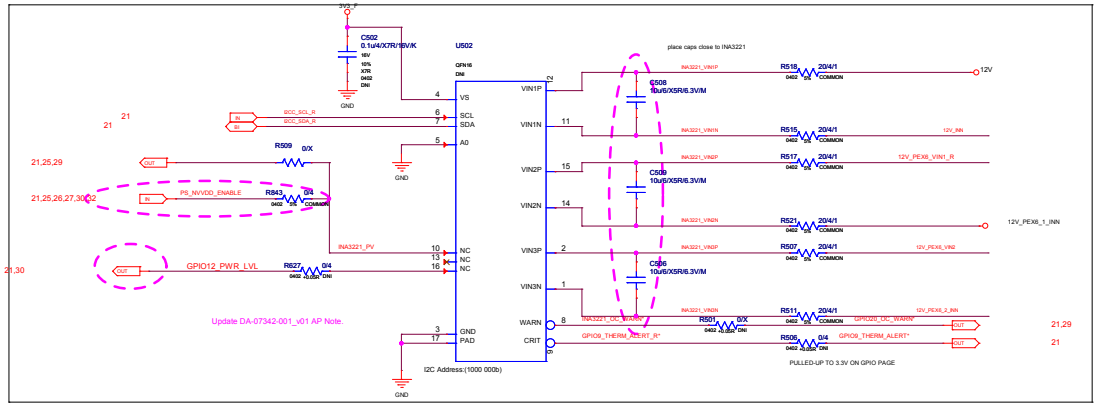
GIGABYTE

Title: PS: NVVDD Phase 2 & 4

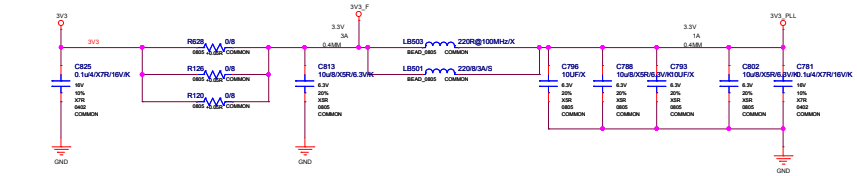
Size: Custom | Document Number: GV-N970WF3OC-4GD | Rev: 1.1

Date: Sunday, September 28, 2014 | Sheet 27 of 34

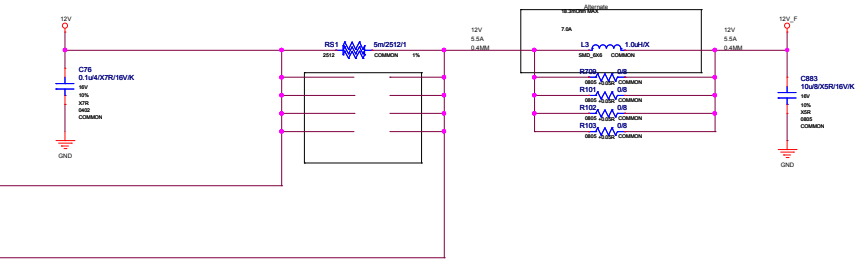
Page28: PS: Inputs, Filtering, and Monitoring



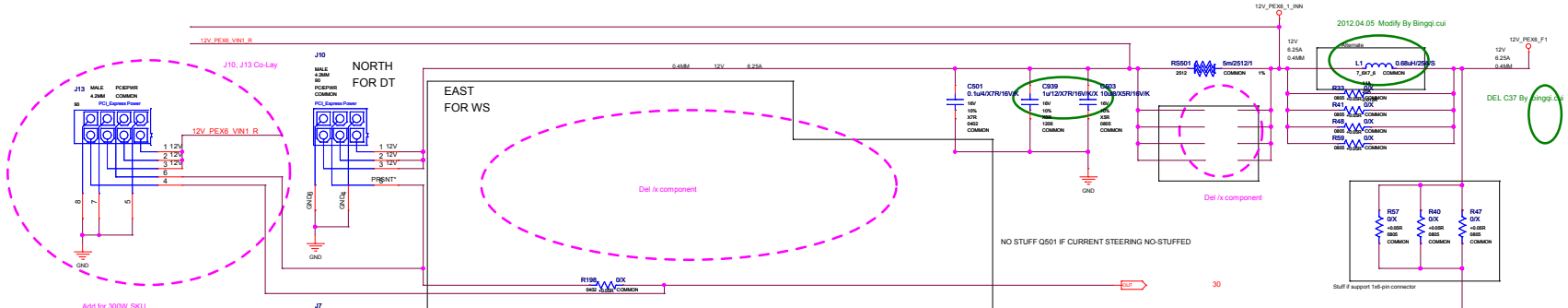
PEX 3V3 INPUT - 10W



PEX_12V INPUT - 66W



PEX6 INPUT 1 - 2x3 PCIE CON 75W



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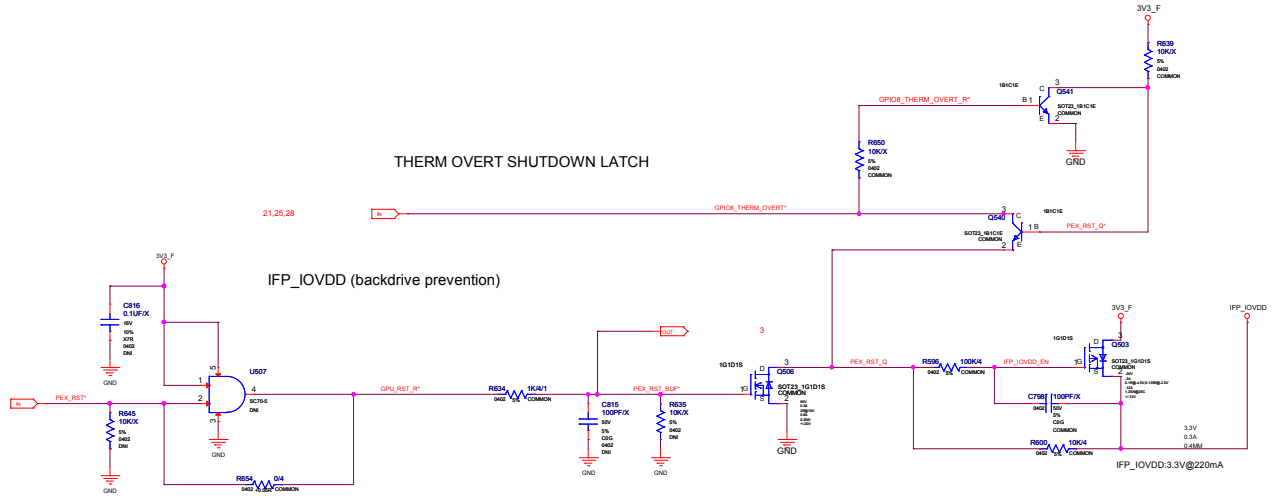
ASSEMBLY
PAGE DETAIL

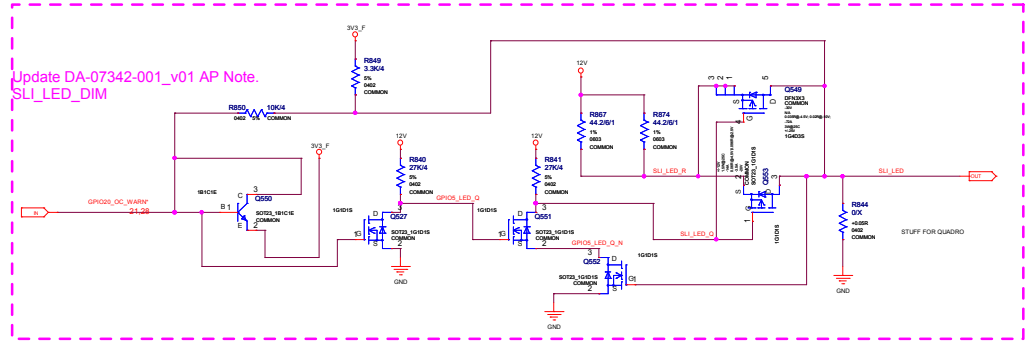
BASE LEVEL GENERIC SCHEMATIC ONLY
PS: Inputs, Filtering, and Monitoring

GIGABYTE		
Title: Inputs, Filtering, and Monitoring		
Size: Custom	Document Number: GV-N970WF3OC-4GD	Rev: 1.1
Date: Sunday, September 28, 2014	Sheet 28 of 34	

Page29: PS: Thermal Shutdown& Light SLI DRIVER



Del old SLI LED



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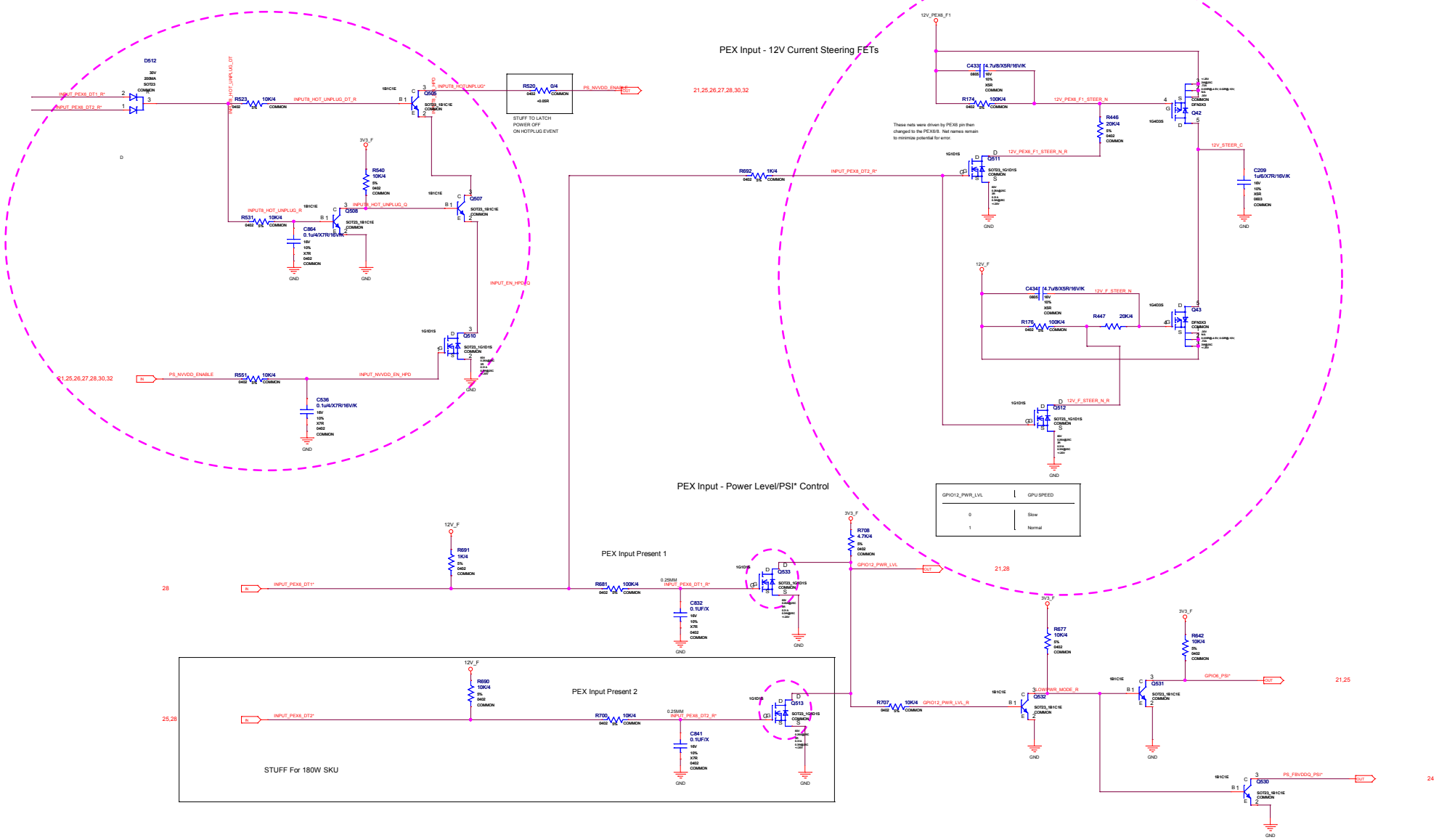
ASSEMBLY
PAGE DETAIL

BASE LEVEL GENERIC SCHEMATIC ONLY
PS: Thermal Shutdown & Lighted SLI DRIVER

GIGABYTE		
Title: Thermal Shutdown& Light SLI DRIVER		
Size: Custom	Document Number: GV-N970WF3OC-4GD	Rev: 1.1
Date: Sunday, September 28, 2014	Sheet 29 of 34	

Page30: PS: 12V Current Steering/Hot Unplug Detect



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ASSEMBLY
PAGE DETAIL

BASE LEVEL GENERIC SCHEMATIC ONLY
PS: 12V Current Steering

GIGABYTE

Title: 12V Current Steering

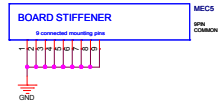
Size: Custom | Document Number: GV-N970WF3OC-4GD | Rev: 1.1

Date: Sunday, September 28, 2014 | Sheet 30 of 34

Page31: MECH

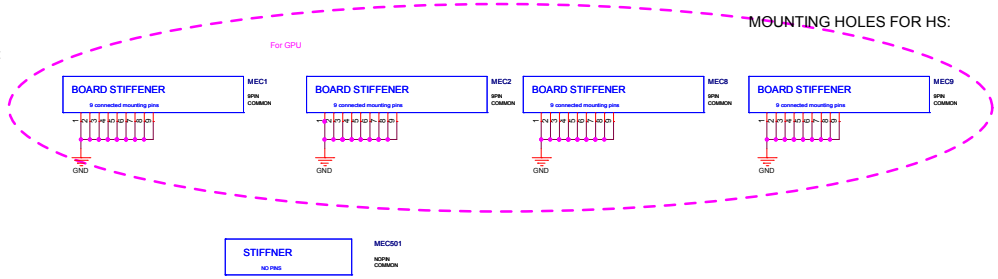
Brackets:

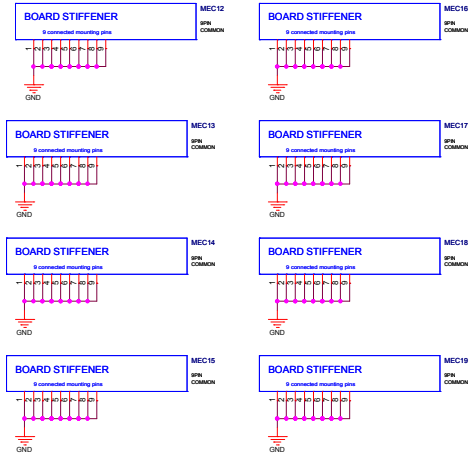
MH-C236D118-8



GPU Stiffener:

MOUNTING HOLES FOR HS:





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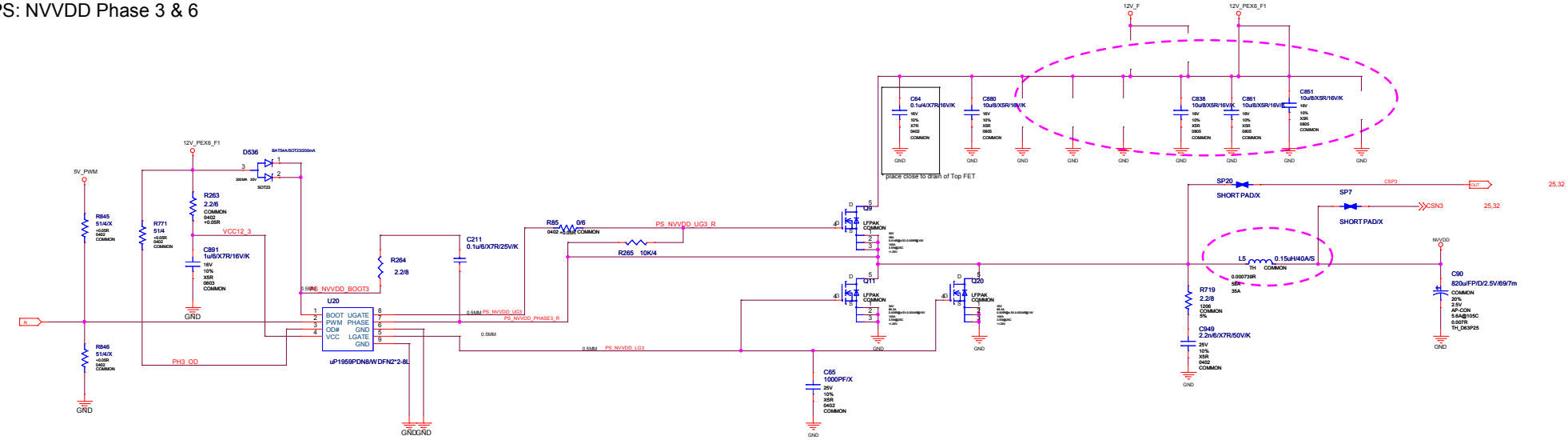

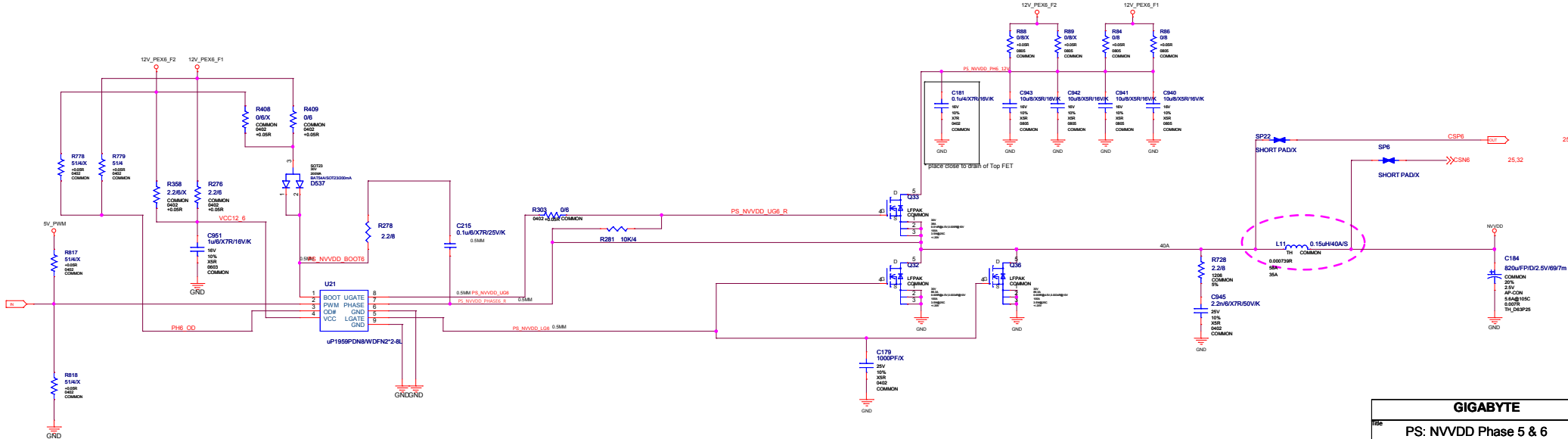

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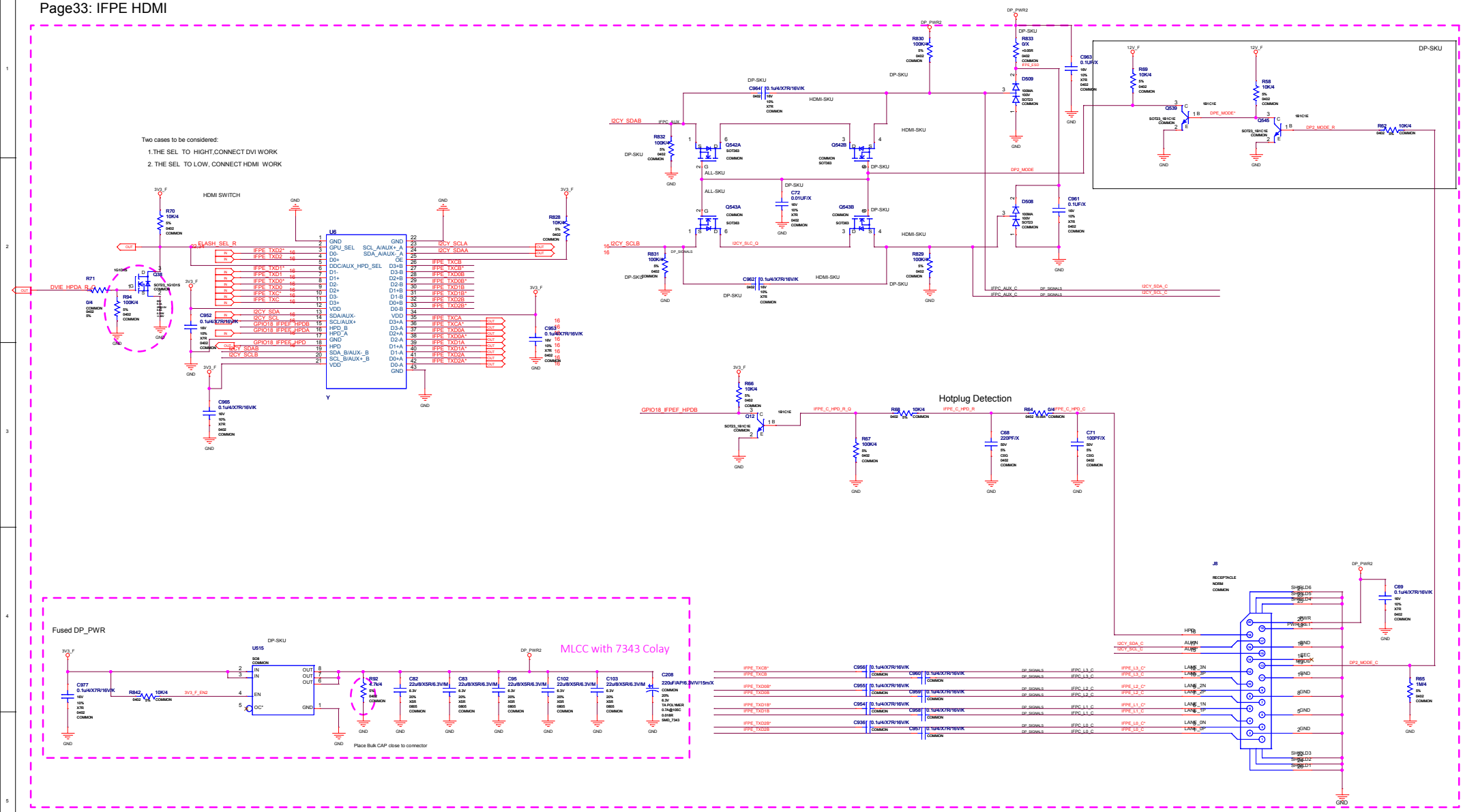

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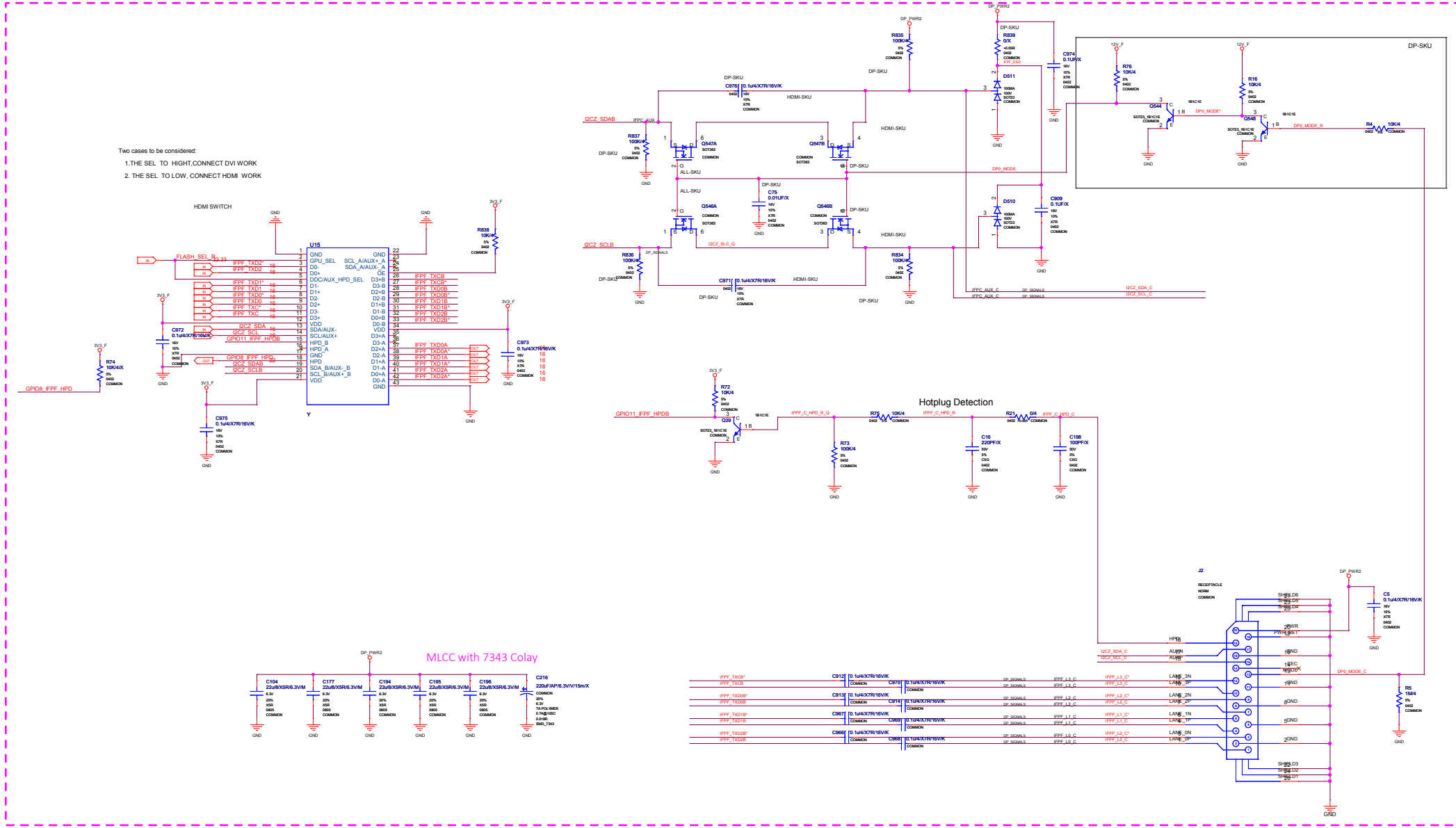

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