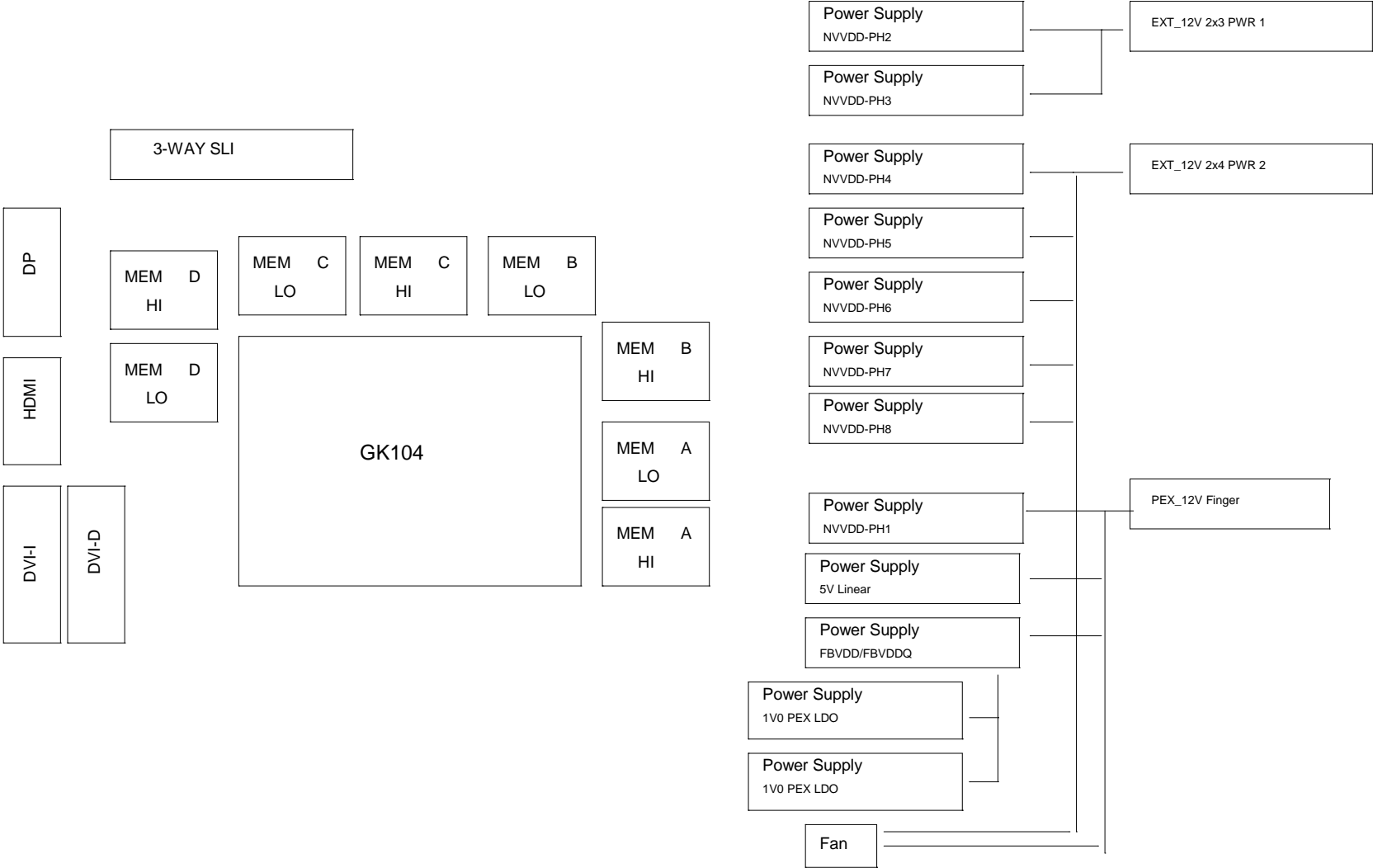


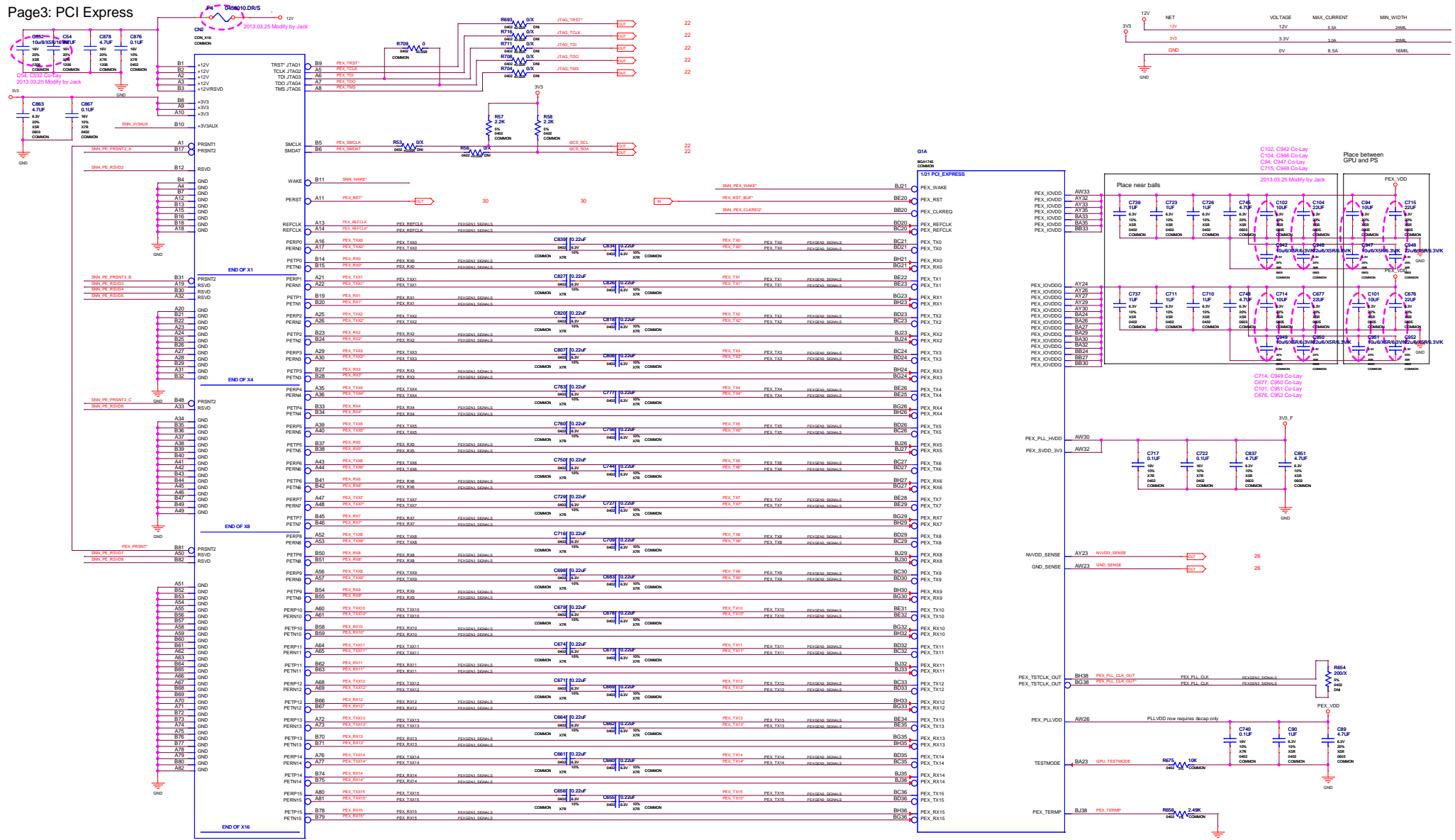
Gigabyte GeForce GTX 760 GV-N760OC-2GD (P2002) 2GB GDDR5, 256b, 64Mx32) Rev 2.0
Stacked DVI-I/DVI-D + HDMI + DP

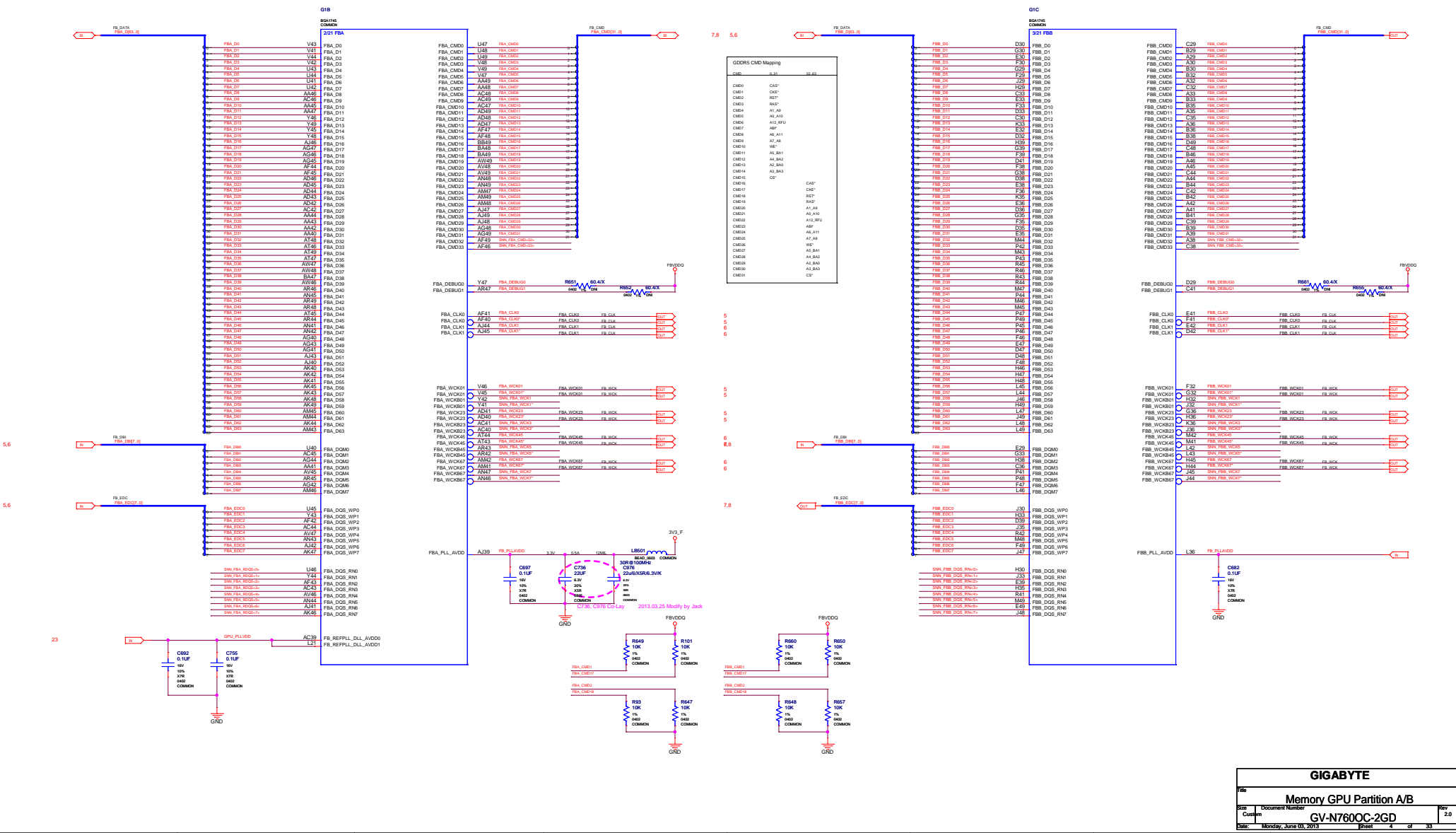
TABLE OF CONTENTS

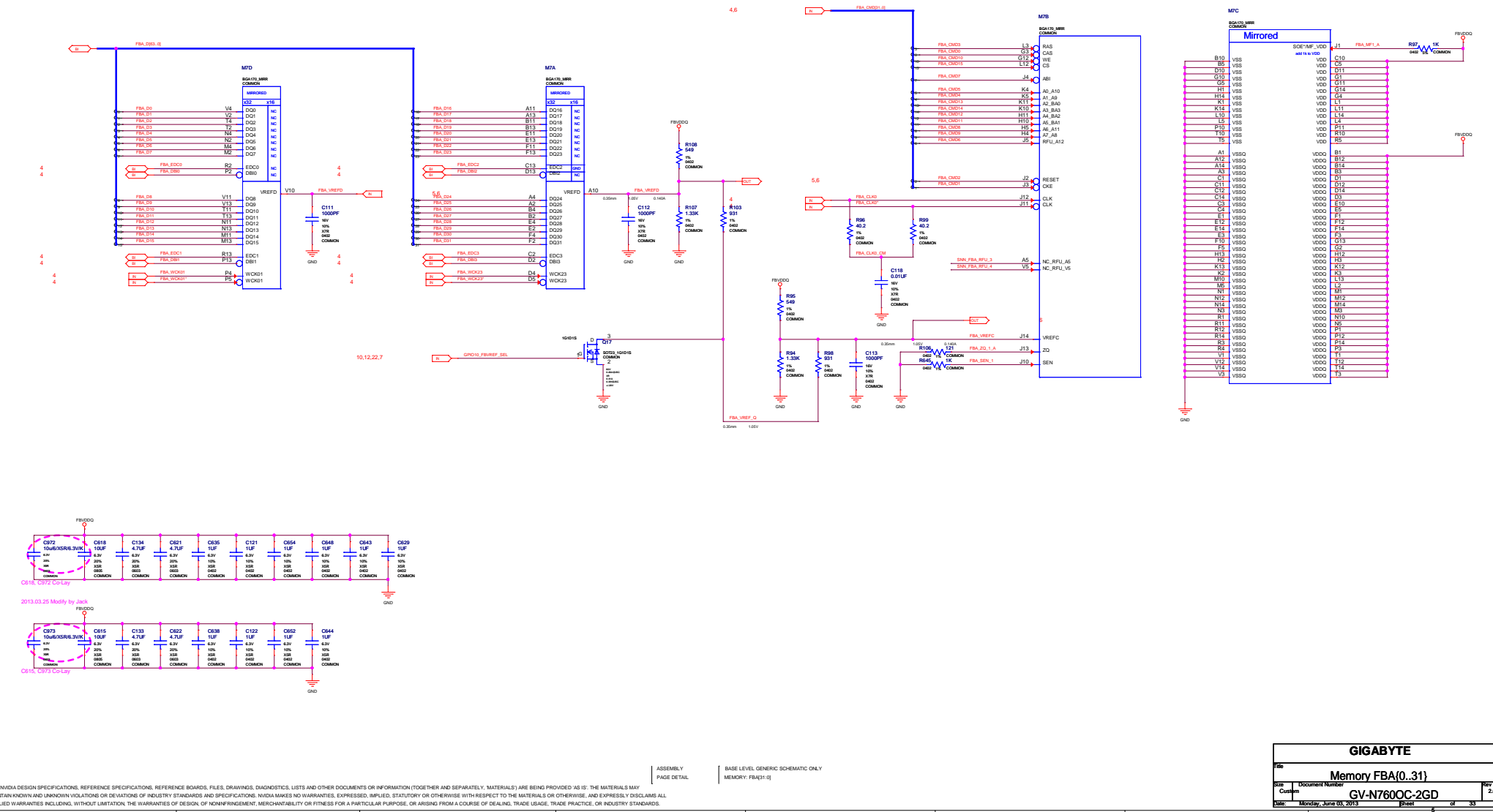
Page	Description
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2	Block Diagram
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4	MEMORY: GPU Partition A/B
5	MEMORY: FBA[31:0]
6	MEMORY: FBA[63:32]
7	MEMORY: FBB[31:0]
8	MEMORY: FBB[63:32]
9	MEMORY: GPU Partition C/D
10	MEMORY: FBC[31:0]
11	MEMORY: FBC[63:32]
12	MEMORY: FBD[31:0]
13	MEMORY: FBD[63:32]
14	GPU PWR and GND
15	GPU Decoupling
16	DACA Interface
17	IFPAB DVI-I-DL
18	IFPEF DVI-D-DL
19	IFPC HDMI
20	IFPD DP
21	MIOA/B Interface
22	MISC1: Fan, Thermal, JTAG, GPIO
23	MISC2: ROM, XTAL, Straps
24	PS: 5V, PEX_VDD
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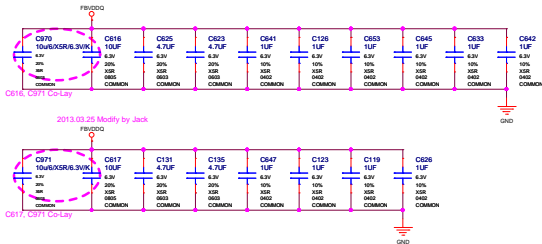


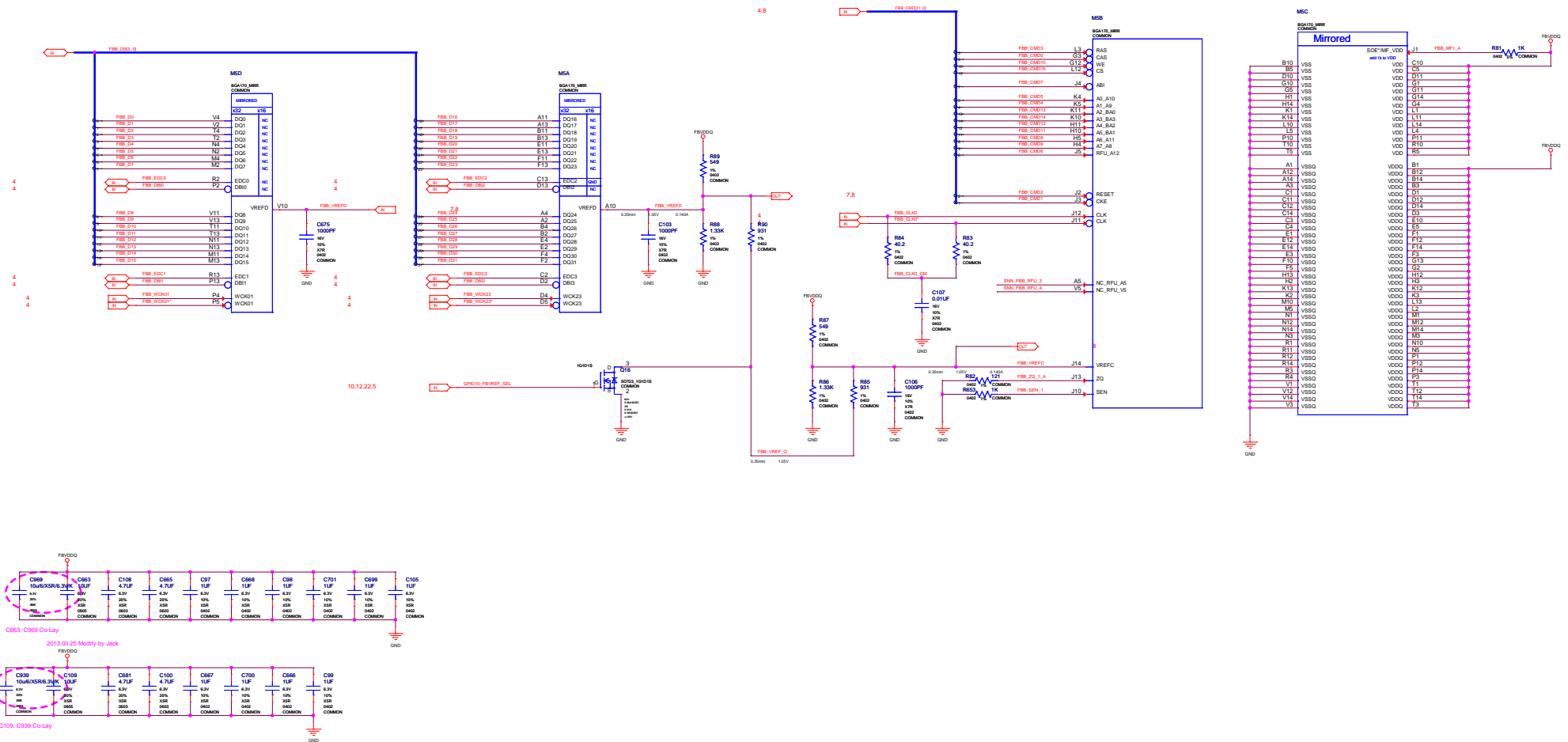


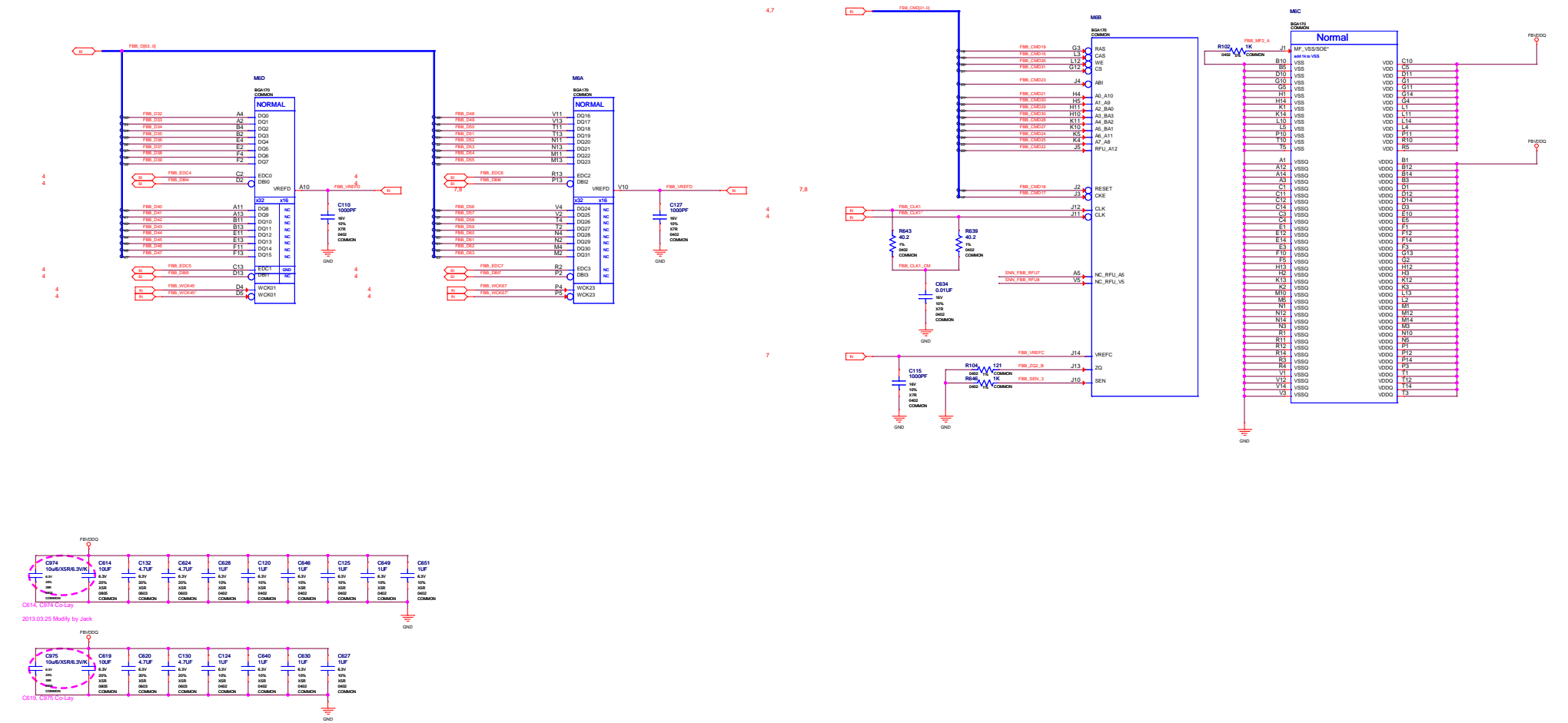


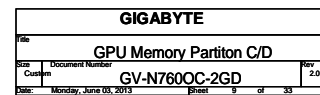


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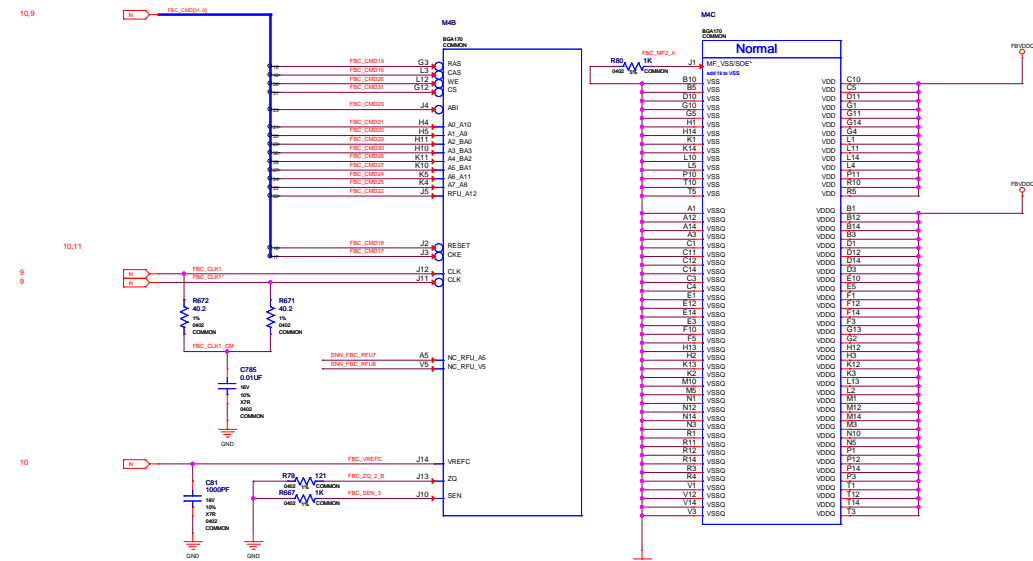
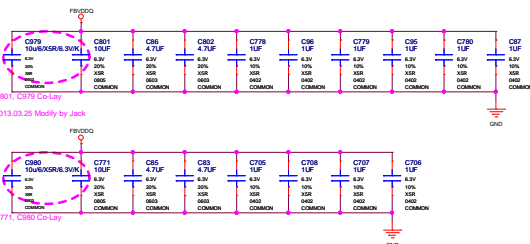


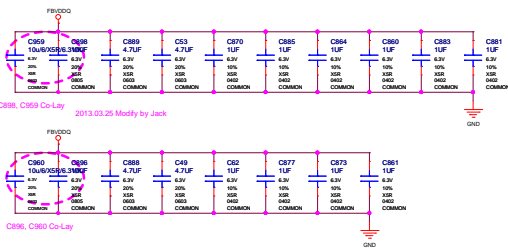




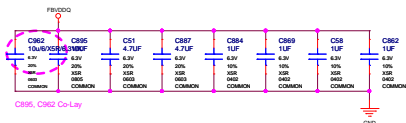
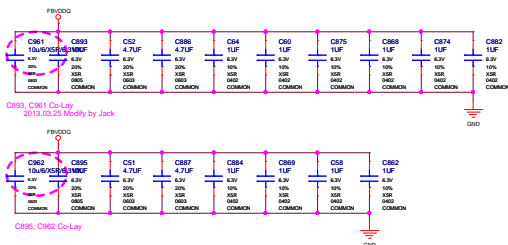


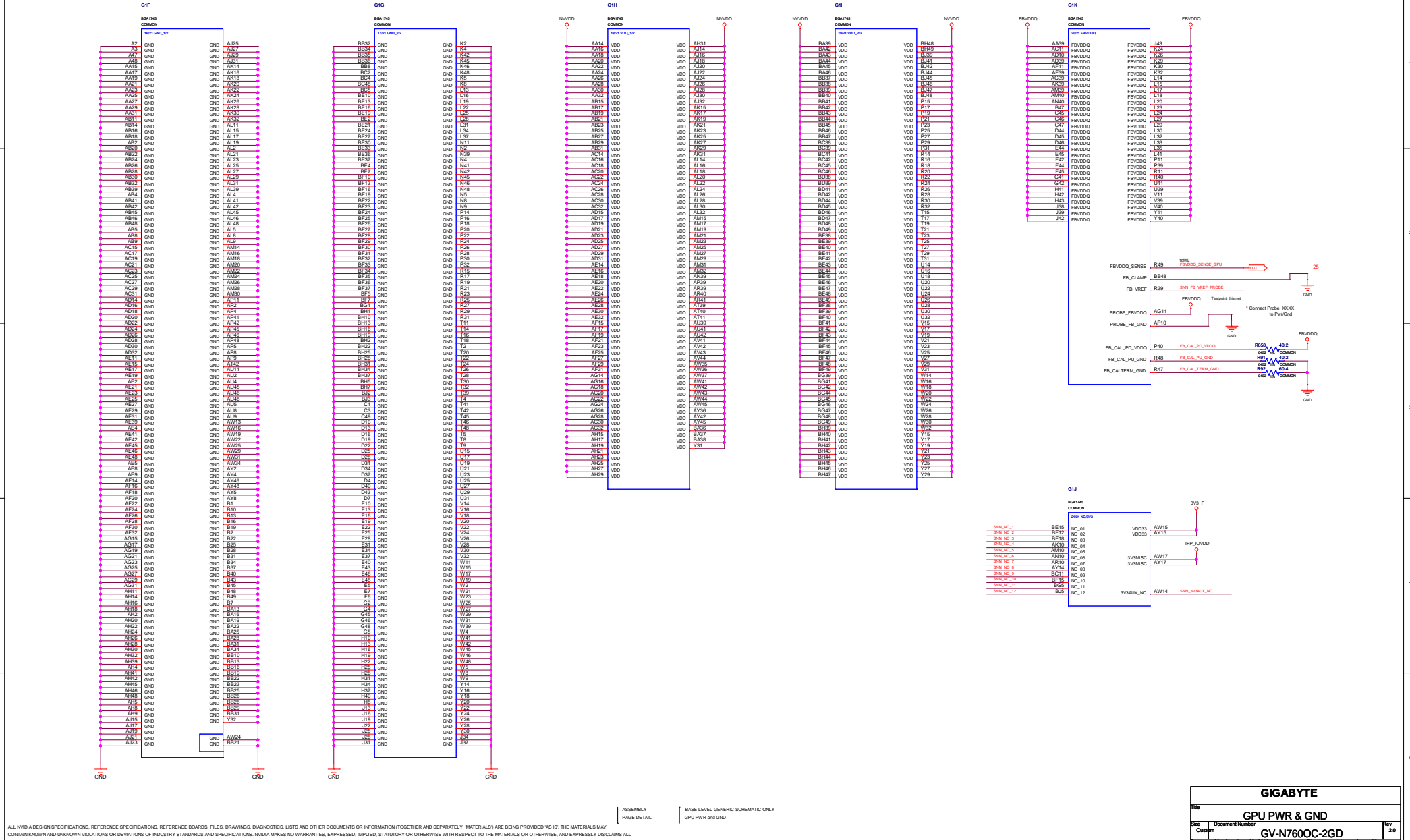






GIGABYTE			
File			
Memory FBD{0..31}			
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Based on GB2-X GDDR5 FBVDDQ Decap Guideline

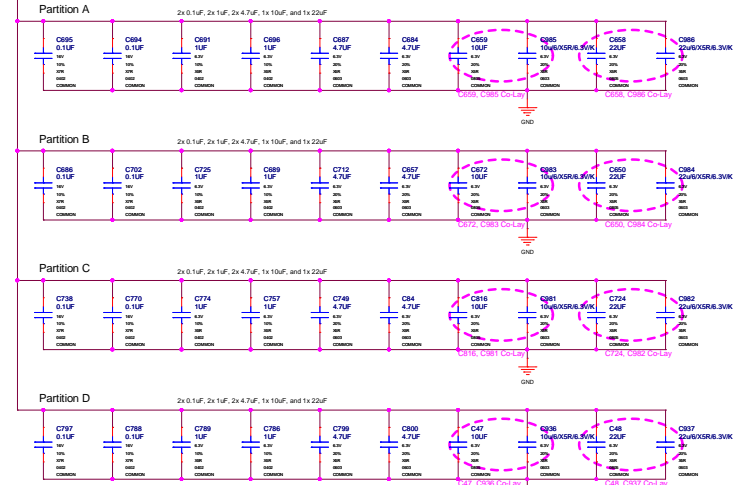
FBVDDQ

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

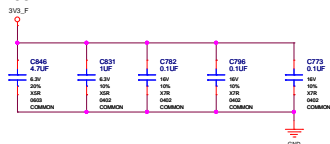
4.7uF, 0603 (Place Near GPU)

10uF, 0805 (Place Near GPU)

22uF, 0805 (Place Near GPU)

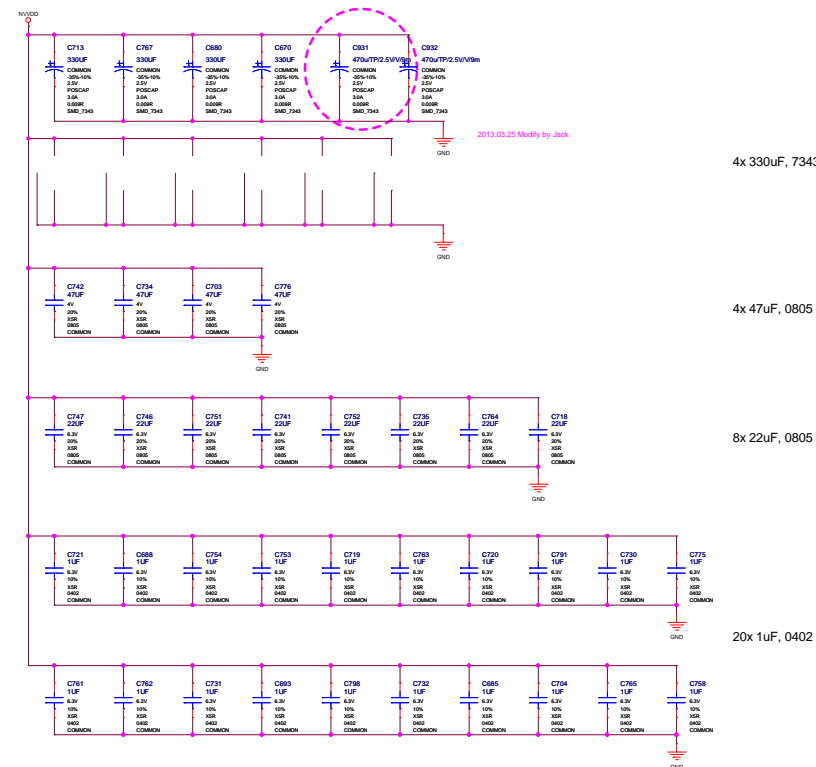


VDD33



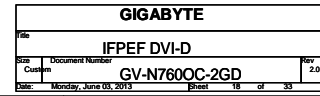
NVVDD Decoupling caps. Place under GPU.

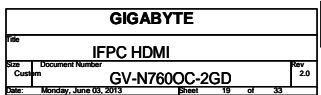
NVVDD





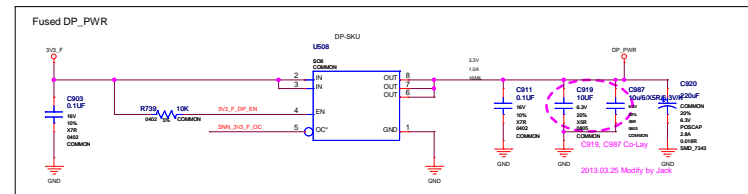
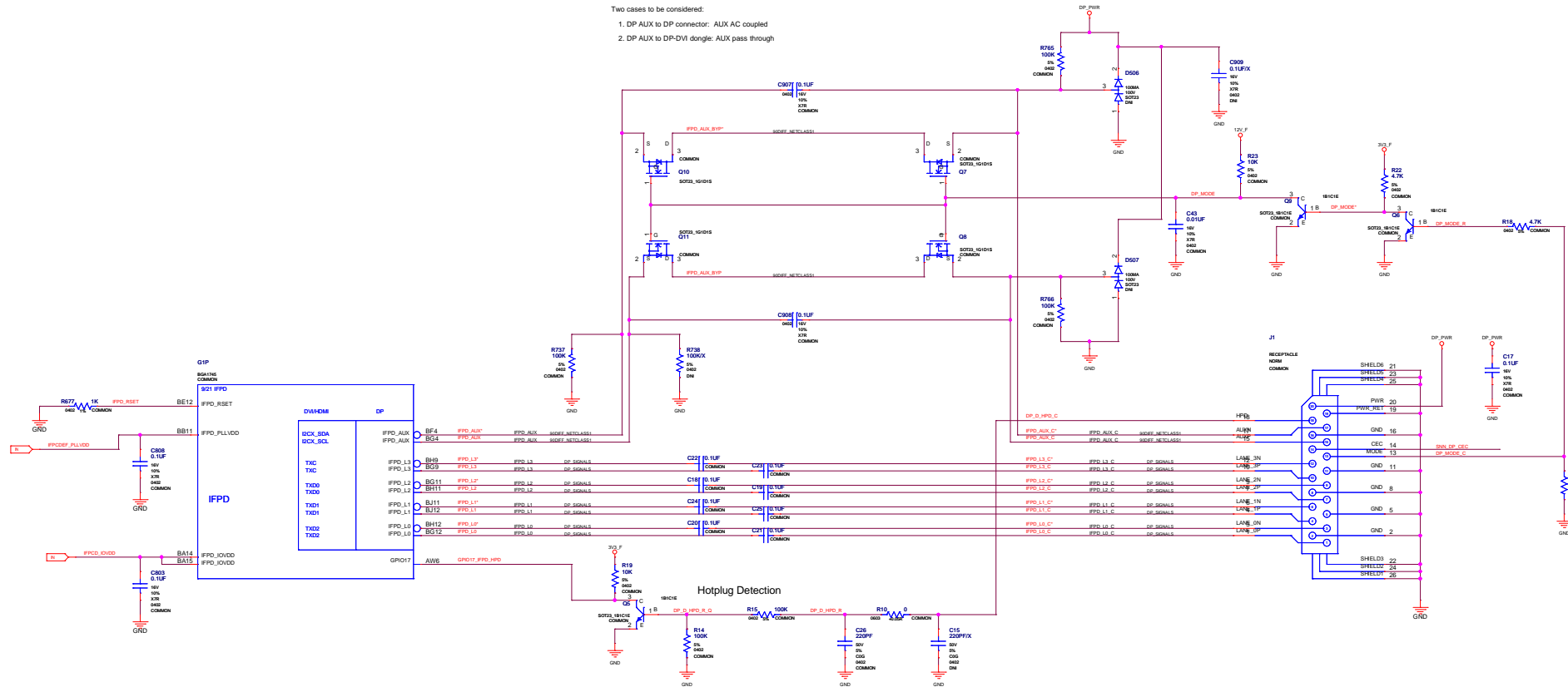




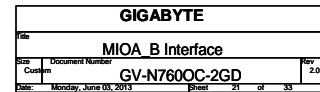


Two cases to be considered:

1. DP AUX to DP connector: AUX AC coupled
2. DP AUX to DP-DVI dongle: AUX pass through



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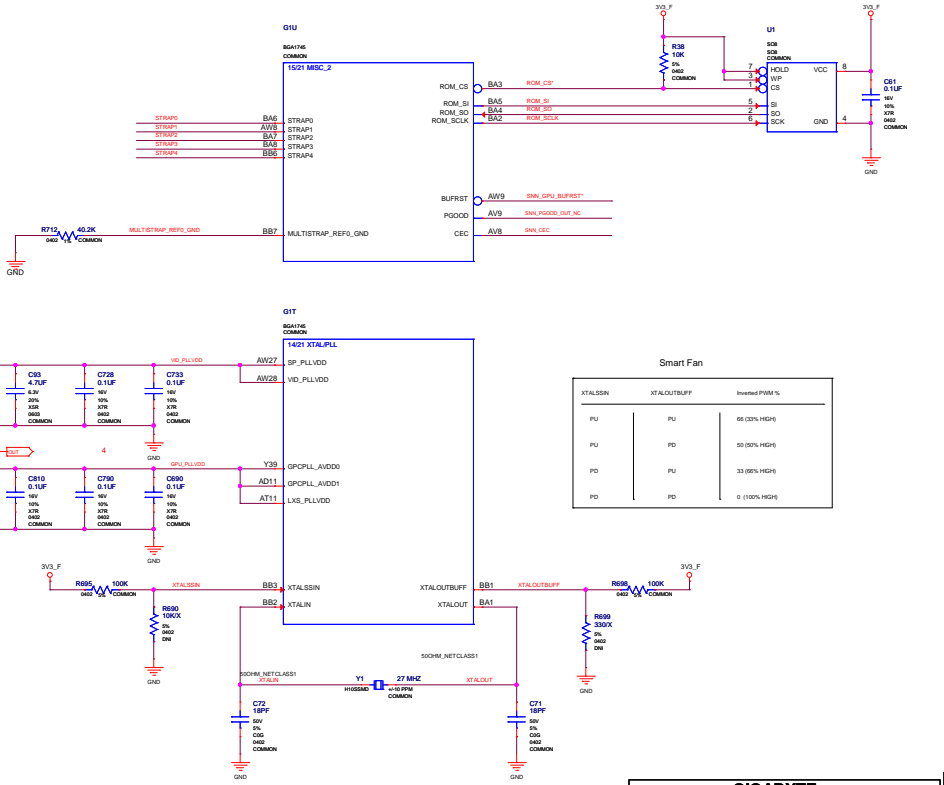


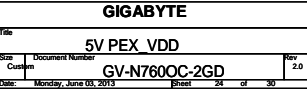
STRAP0	USER_BIT [3:0]*	0000*	5K PD*
STRAP1	3GIO_PADCFG_LUT_ADR*	0000*	5K PD Desktop*
STRAP2	PCI_DEVID [3:0]*	0000 - (0x180)*	5K PD -400 GPU*
STRAP3	SOR_EXPOSED [3:0]*	1111*	45K PU*
STRAP4	DP_PLL_VDD_33V*	1* FOR 3_3V*	
	PEX_MAX_SPEED*	1* FOR GEN2/3*	45K PD*
	PEX_SPD_CHANGE_GEN3*	1* ENABLED*	
	*		
	RAMCFG[0]*	0*	
	RAMCFG[1]*	1*	
ROM_SI	RAMCFG[2]*	1*	35K PD*
	RAMCFG[3]*	0*	
	VGA_DEVICE*	1*	
ROM_SO	SMB_ALT_ADDR*	0*	
	FB[0]_APERTURE_SIZE*	0* For 256MB*	10k PU*
	FB[1]_APERTURE_SIZE*	1* For 256MB*	
	PEX_PLL_EN_TERM100*	0* DISABLED*	
ROM_SCLK	PCI_DEVID_EXT[5]*	0* For 0x180*	25K PD*
	SUB_VENDOR*	1* Dedicated BIOS*	
	PCI_DEVID_EXT[4]*	0* For 0x180*	

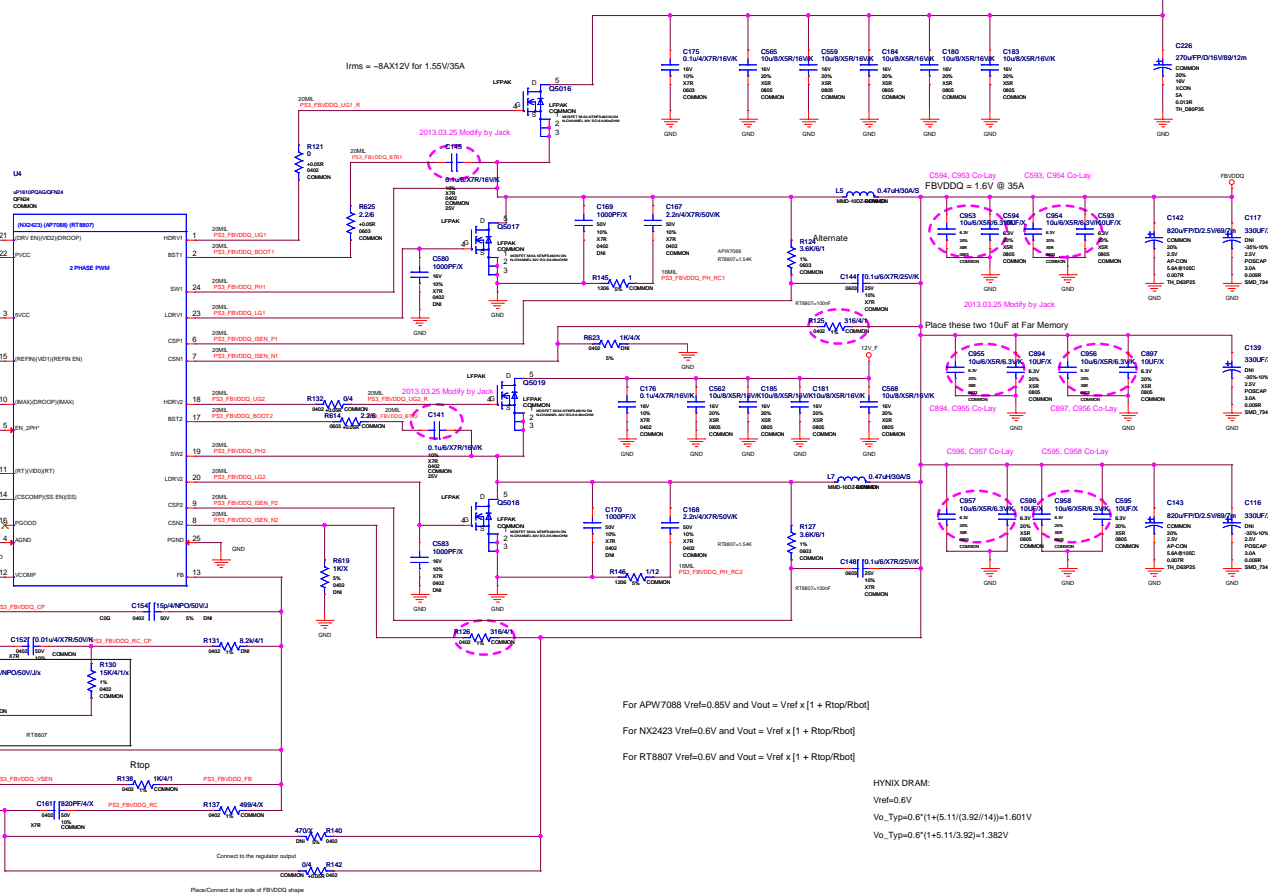
	GND	3V3
5k	0000	1000
10k	0001	1001
15k	0010	1010
20k	0011	1011
25k	0100	1100
30k	0101	1101
35k	0110	1110
45k	0111	1111

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
1000	Reserved
1001	32Mx32 192-bit Elpida
1010	32Mx32 192-bit Hynix
1011	32Mx32 192-bit Samsung
1100	Reserved
1101	64Mx32 192-bit Elpida
1110	64Mx32 192-bit Hynix
1111	64Mx32 192-bit Samsung

0110 for 66Mx32 256-bit Hynix for SKU 0 primary memory





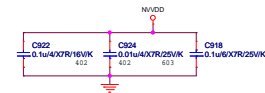
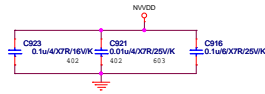
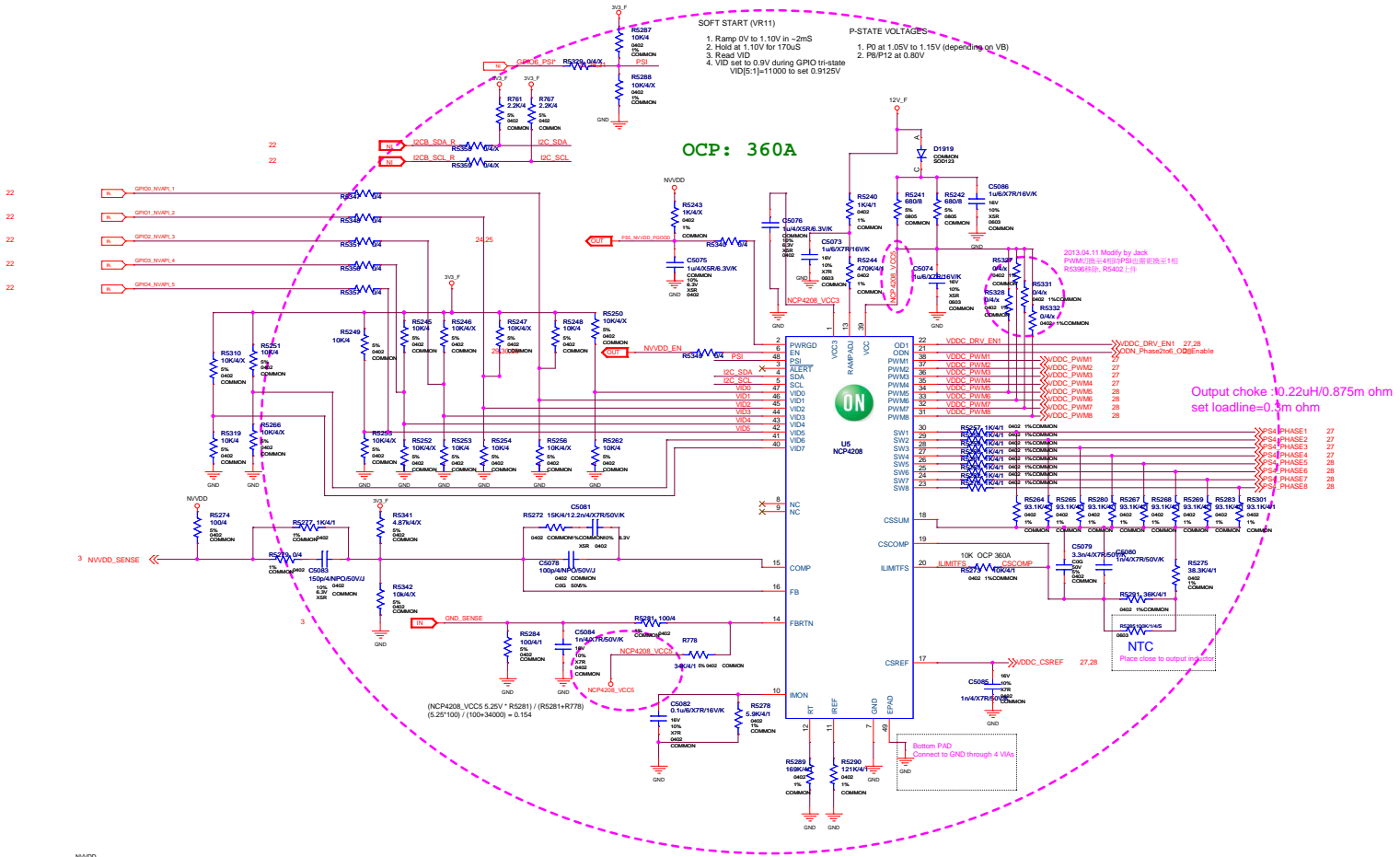


For APW7088 $V_{ref}=0.85V$ and $V_{out} = V_{ref} \times [1 + R_{top}/R_{bot}]$
 For NX2423 $V_{ref}=0.6V$ and $V_{out} = V_{ref} \times [1 + R_{top}/R_{bot}]$
 For RT8807 $V_{ref}=0.6V$ and $V_{out} = V_{ref} \times [1 + R_{top}/R_{bot}]$

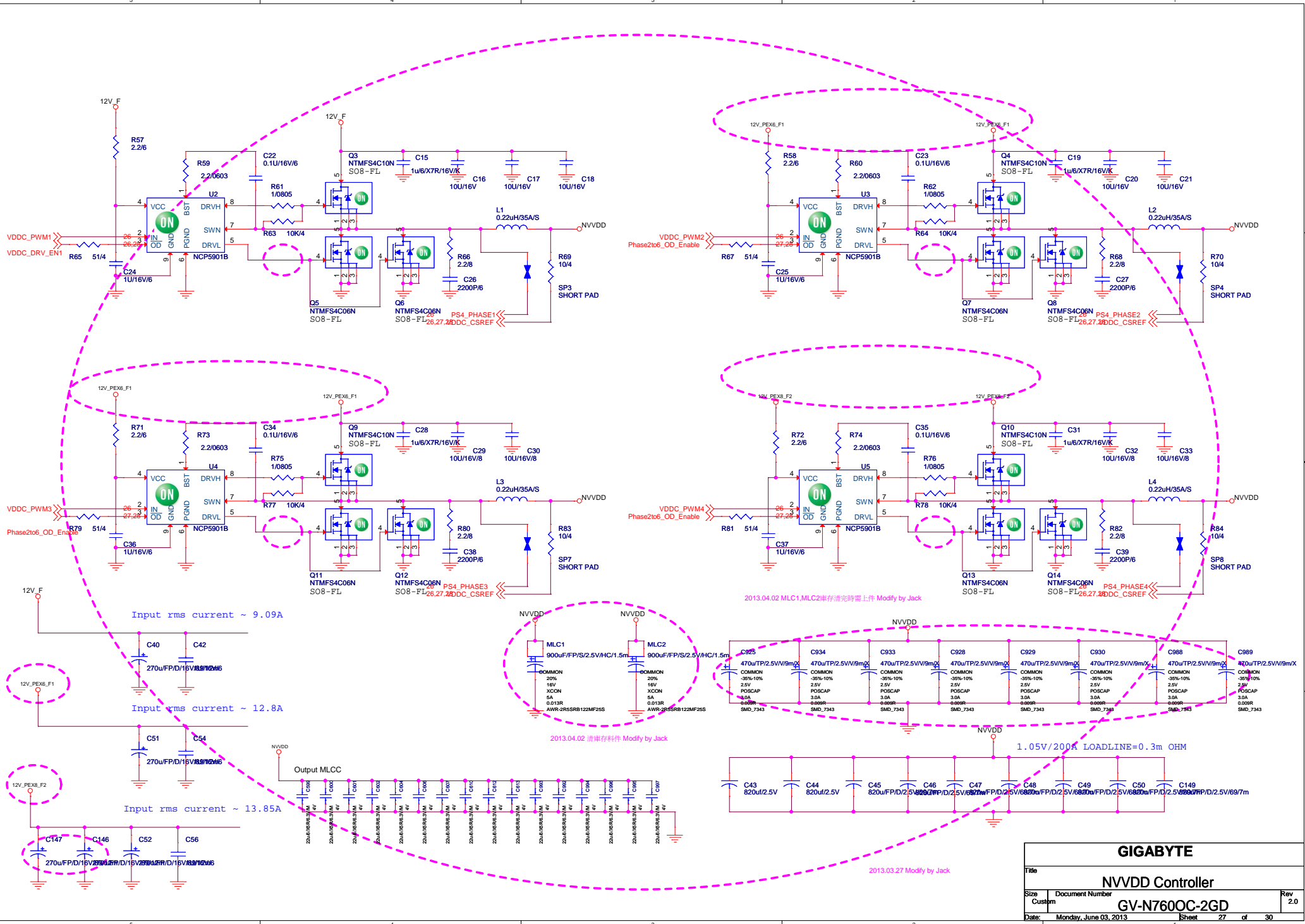
HYNIX DRAM:
Vref=0.6V
Vo_Typ=0.6*(1+(5.11/(3.92/14)))=1.601V
Vo_Typ=0.6*(1+5.11/3.92)=1.382V

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FBVDDQ			
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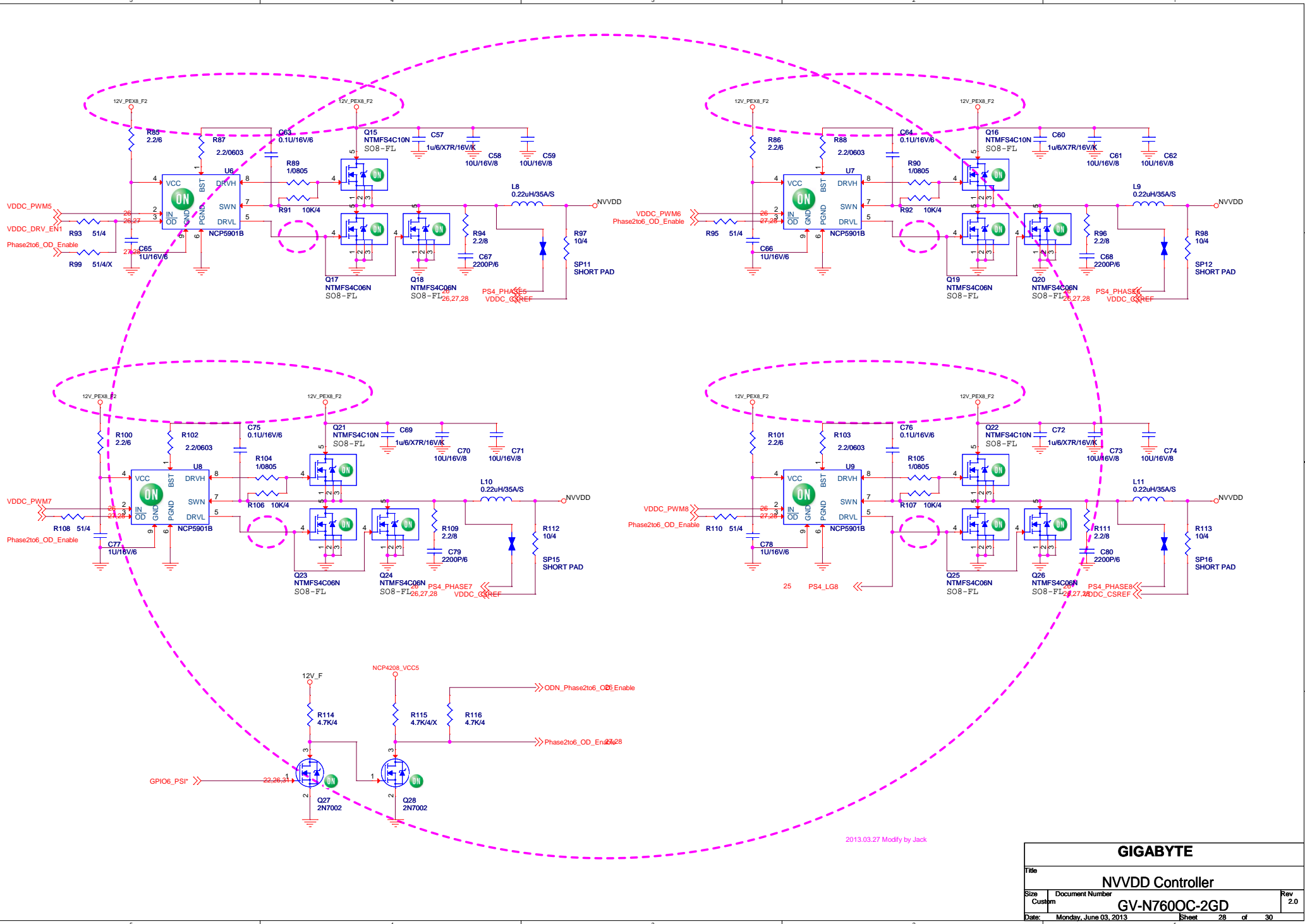
VID Table						
GPIO7	GPIO6	GPIO5	GPIO2	GPIO17	VOUT	
VID_5	VID_4	VID_3	VID_2	VID_1		
0	0	0	0	0	1.2125V	
0	0	0	0	1	1.2000V	
0	0	0	1	0	1.1875V	
0	0	0	1	1	1.1750V	
0	0	1	0	0	1.1625V	
0	0	1	0	1	1.1500V	
0	0	1	1	0	1.1375V	
0	0	1	1	1	1.1250V	
0	1	0	0	0	1.1125V	
0	1	0	0	1	1.1000V	
0	1	0	1	0	1.0875V	
0	1	0	1	1	1.0750V	
0	1	1	0	0	1.0625V	
0	1	1	0	1	1.0500V	
0	1	1	1	0	1.0375V	
0	1	1	1	1	1.0250V	
1	0	0	0	0	1.0125V	
1	0	0	0	1	1.0000V	
1	0	0	1	0	0.9875V	
1	0	0	1	1	0.9750V	
1	0	1	0	0	0.9625V	
1	0	1	0	1	0.9500V	
1	0	1	1	0	0.9375V	
1	0	1	1	1	0.9250V	
1	1	0	0	0	0.9125V	
1	1	0	0	1	0.9000V	
1	1	0	1	0	0.8875V	
1	1	0	1	1	0.8750V	
1	1	1	0	0	0.8625V	
1	1	1	0	1	0.8500V	
1	1	1	1	0	0.8375V	
1	1	1	1	1	0.8250V	



2013.03.27 Modify by Jack

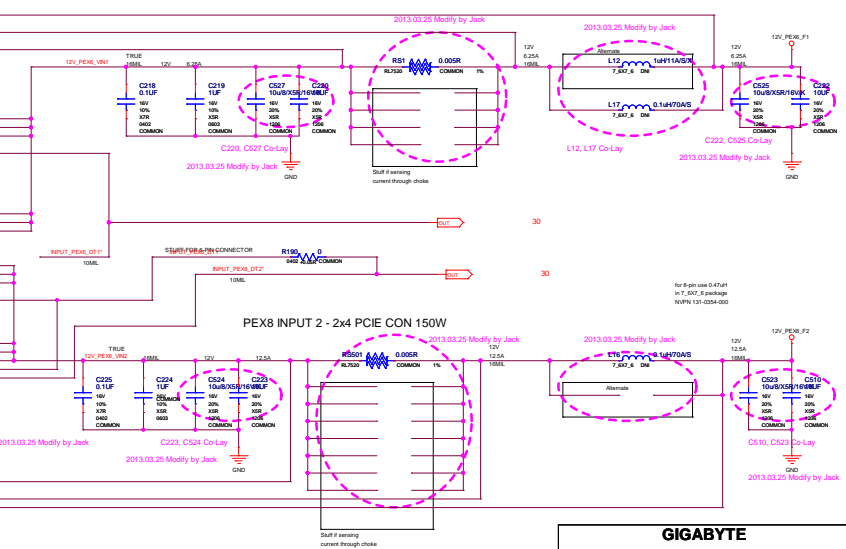
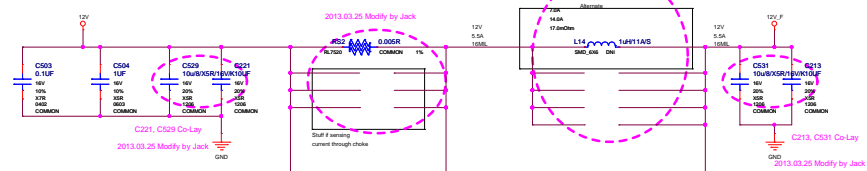
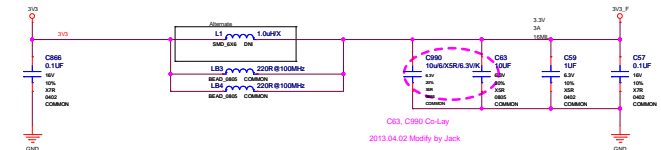
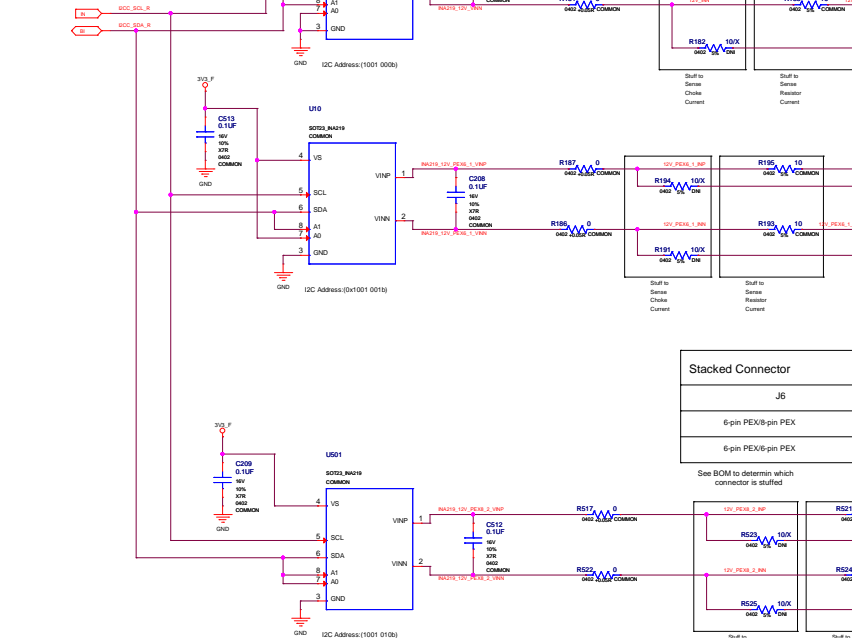


GIGABYTE			
NVVDD Controller			
GV-N760OC-2GD			
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GIGABYTE			
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Stacked Connector
J6
6-pin PEX/8-pin PEX
6-pin PEX/6-pin PEX

See BOM to determin which
connector is stuffed

ASSEMBLY
PAGE DETAIL

BASE LEVEL GENERIC SCHEMATIC ONLY

PS: Inputs, Filtering, and Monitoring

GIGABYTE

Title			
Input Filtering Monitoring			
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THERM OVERT SHUTDOWN LATCH

22,33

IFP_IOVDD (backdrive prevention)

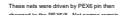
PEX Input - NVVDD Power Sequence

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GIGABYTE			
Title			
Shutdown			
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PEXIS pin then

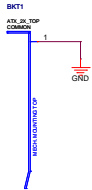




LED HEADER
(COMMON)



Brackets:



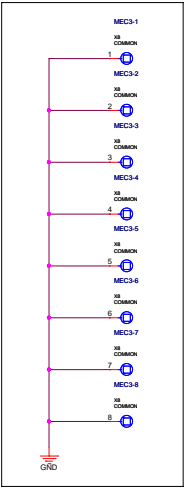
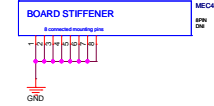
Bracket Screw



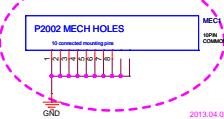
Hockey Stick



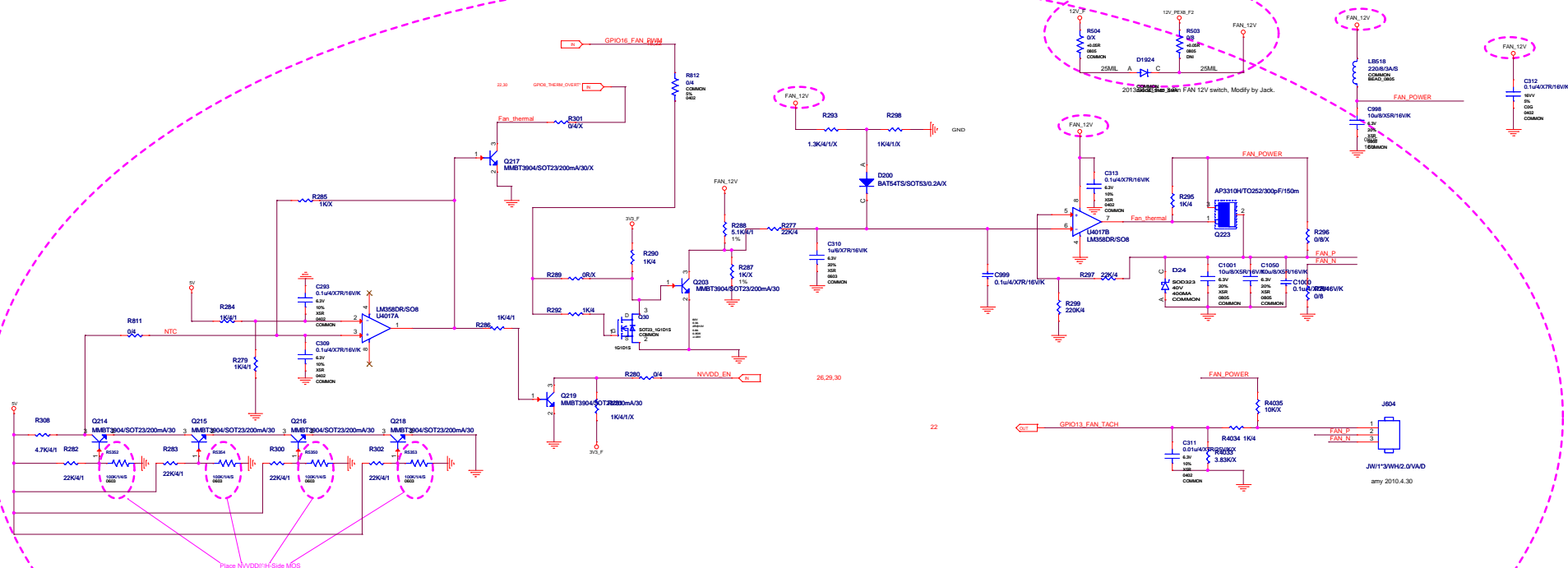
GPU Stiffner



Mechanical Holes Symbol



Thermal_3 Pin Fan



2013.03.28 Modify by Jack