

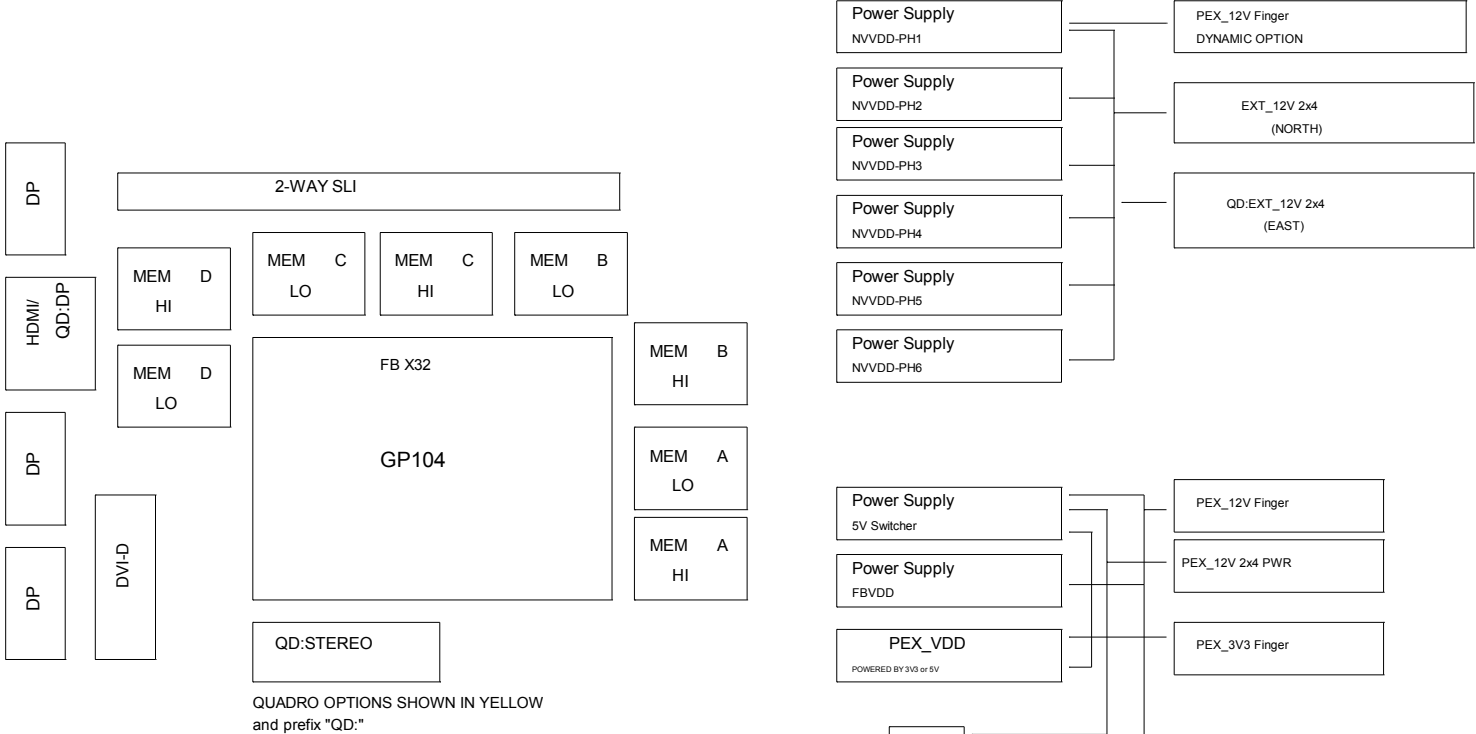
PG411 A01

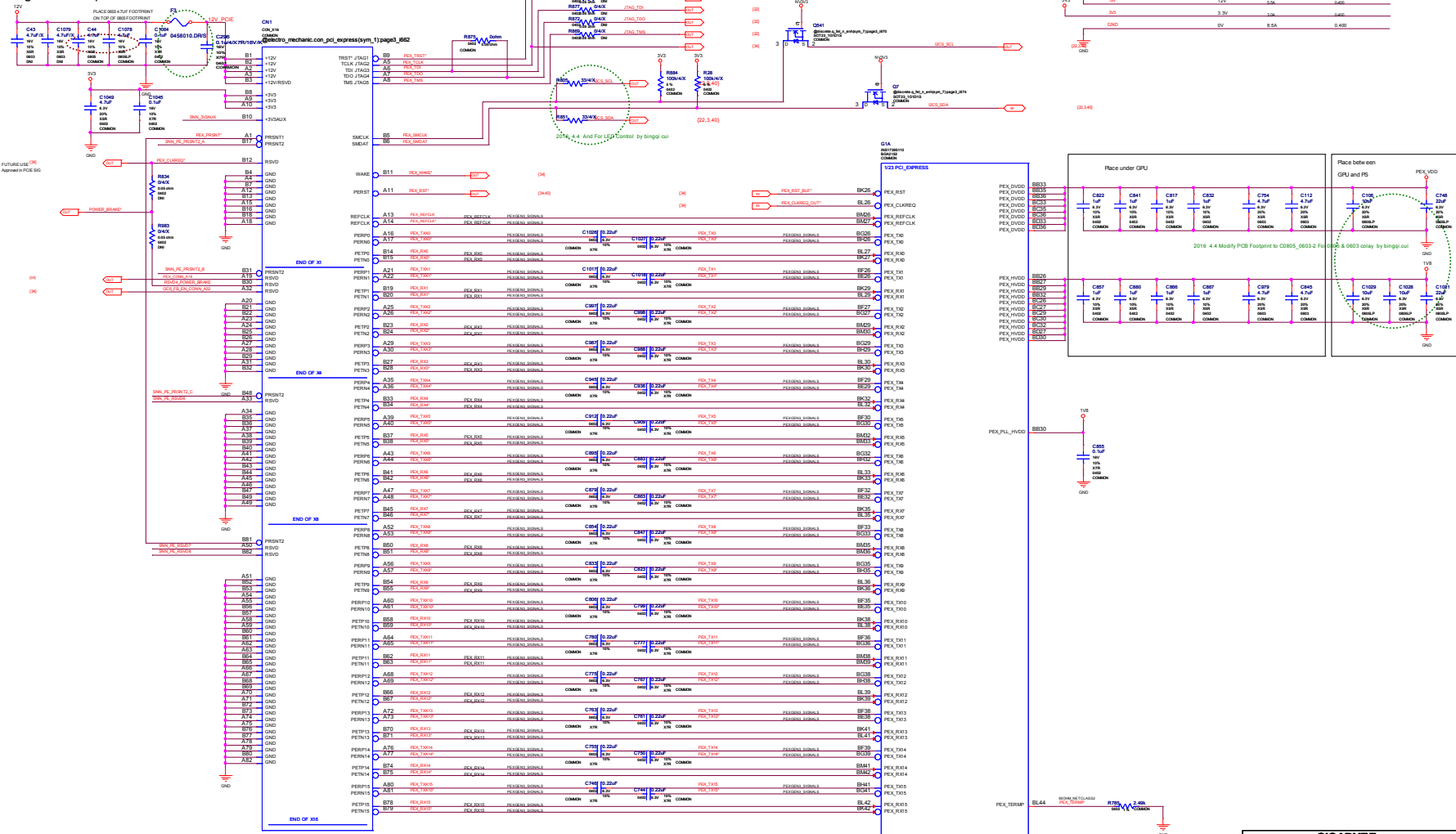
GP104 - 8GB GDDR5, 256b, 256Mx32
Tall DVI-D + DP + DP + DP/HDMI + DP

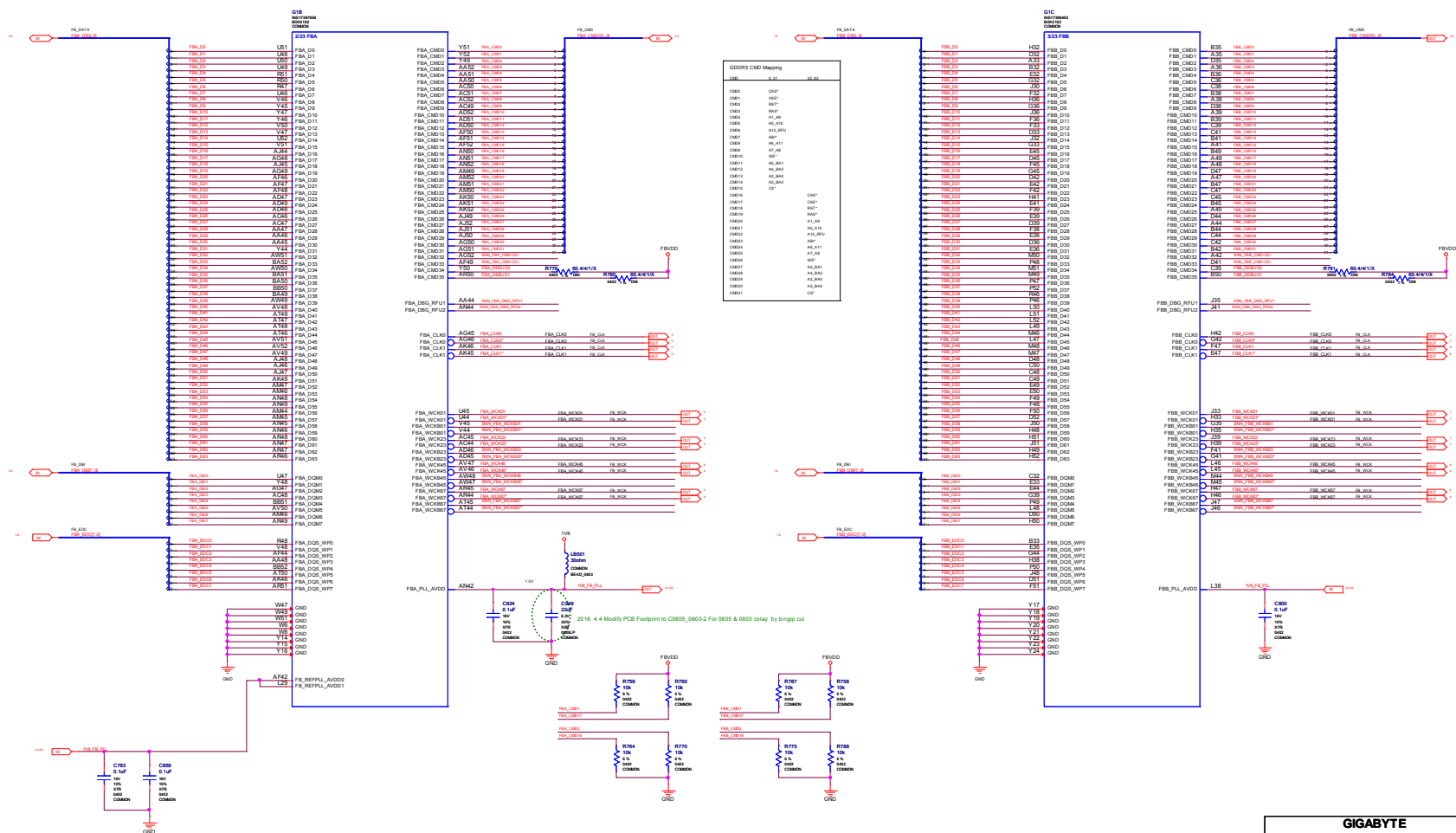
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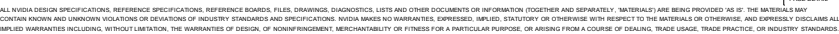
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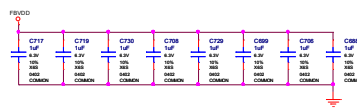
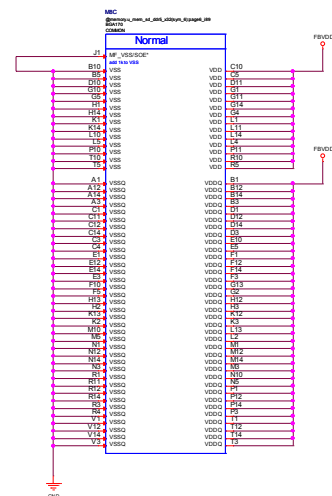
Page	Description
26	PS: FBVDD
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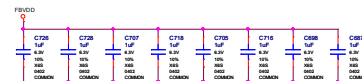
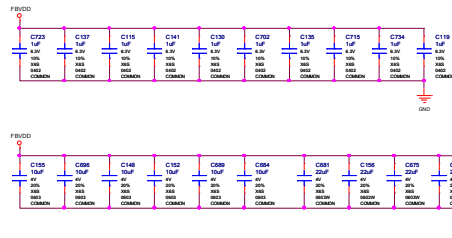
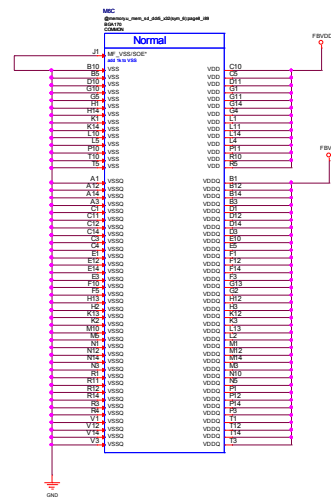
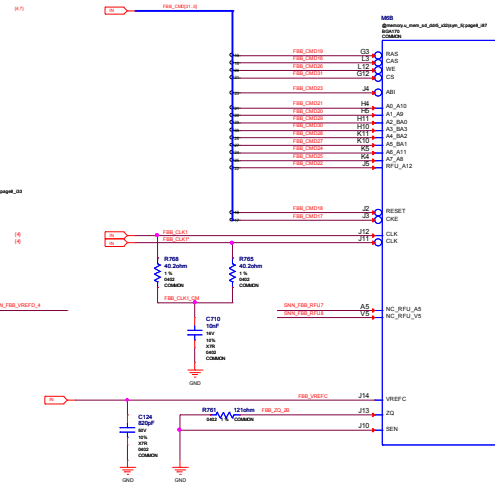




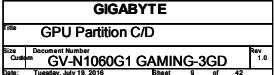


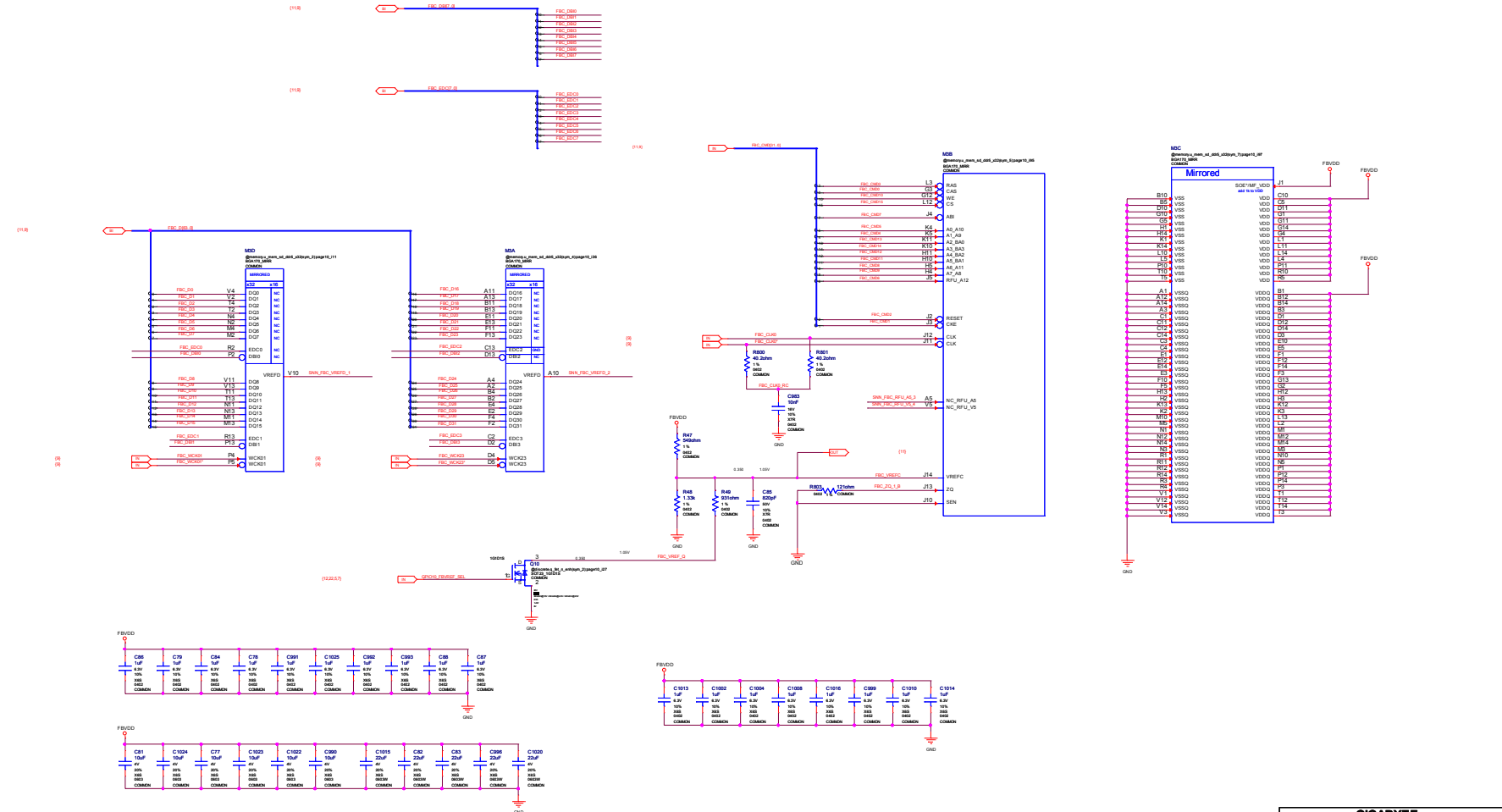






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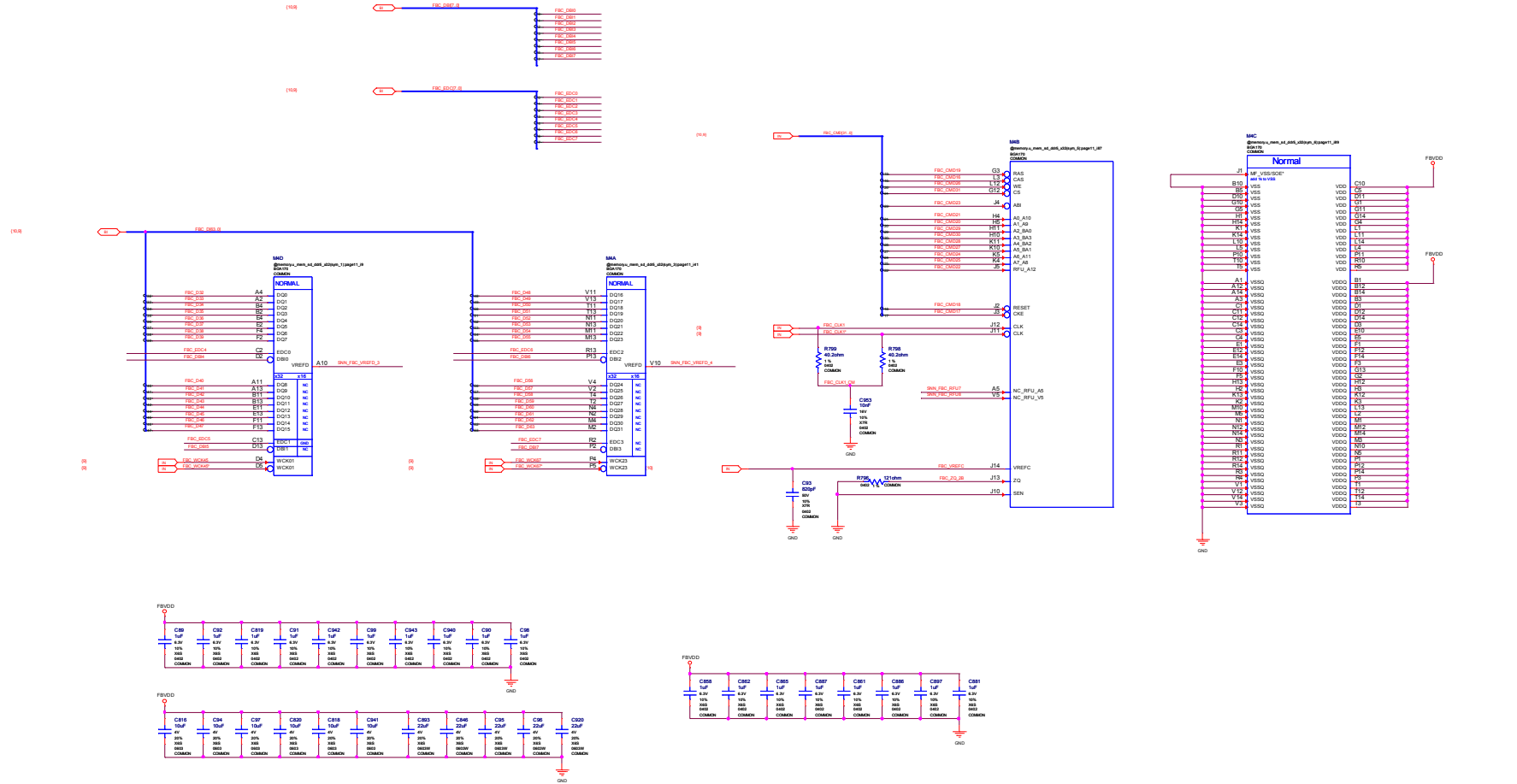


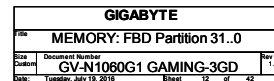


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ASSEMBLY
PAGE DETAIL
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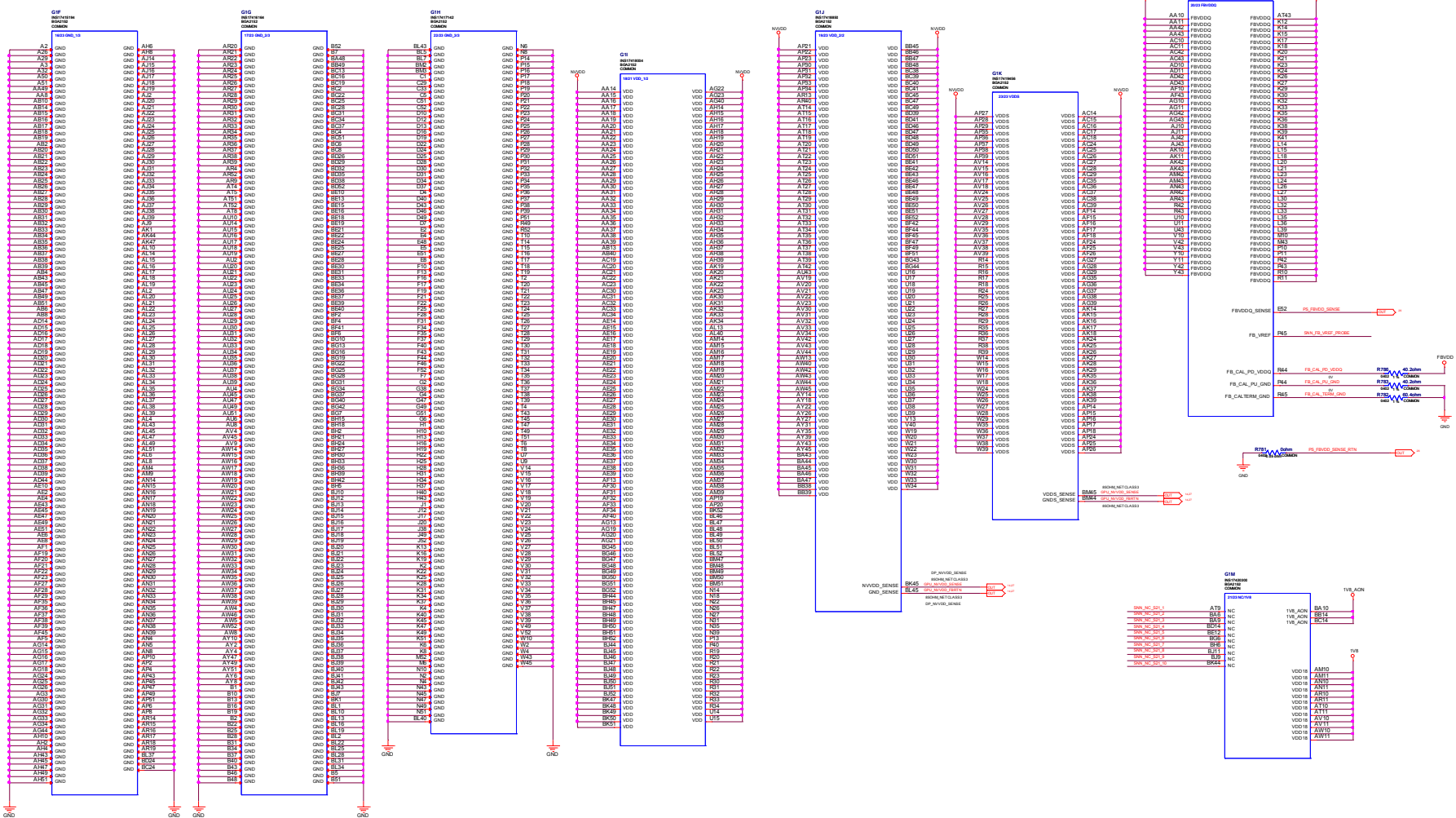
GIGABYTE			
Doc	MEMORY: FBC Partition 31..0		
Doc Number	GV-N1060G1 GAMING-3GD		
Rev	1.0		
Date	Tuesday, Aug 18, 2015		
Rev	36	of	54

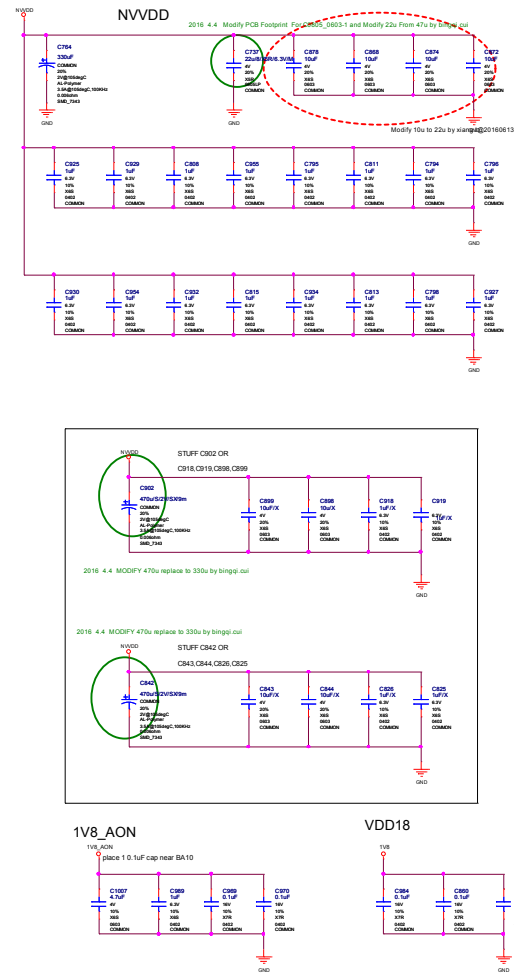
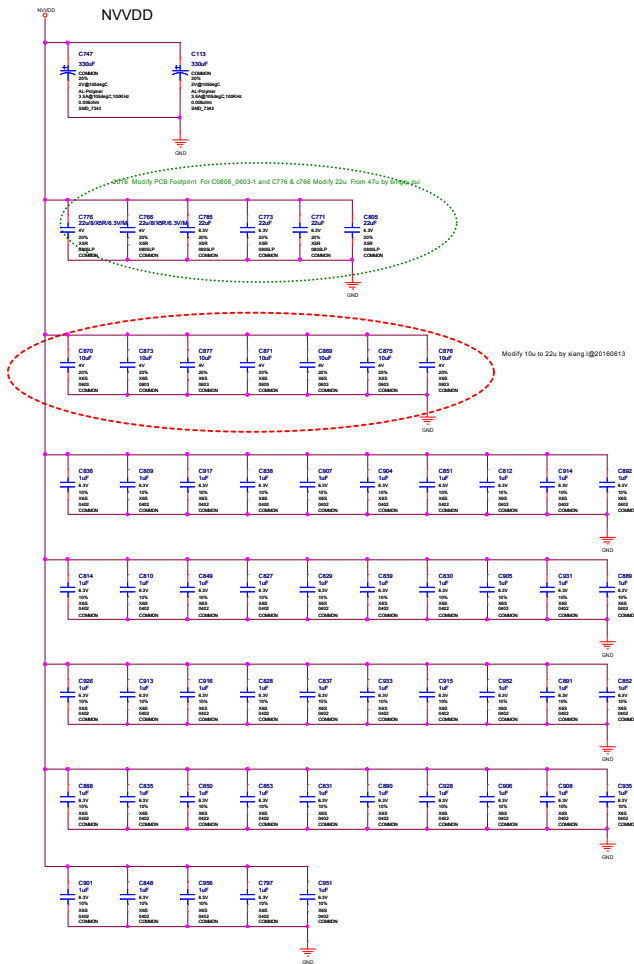
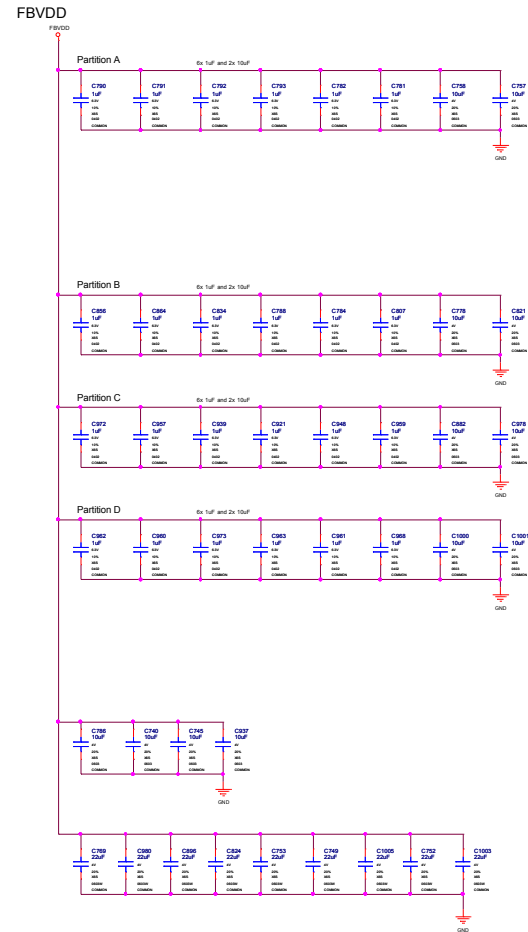






GIGABYTE			
MEMORY: FBD Partition 63..32			
Size	Document Number		Rev
Custom	GV-N1060G1 GAMING-3GD		1.0
Date:	Tuesday, July 10, 2018	Sheet	13 of 42



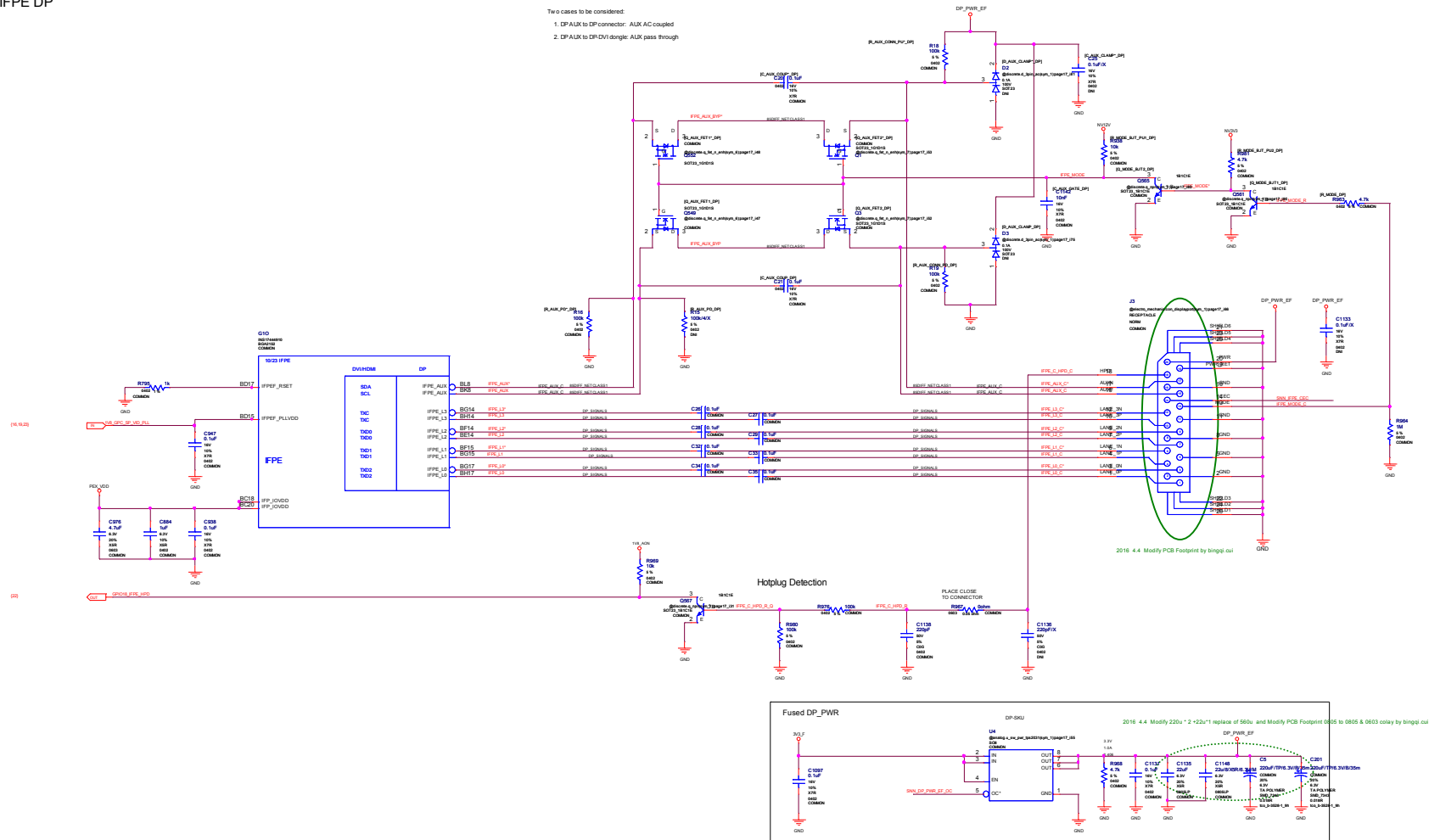




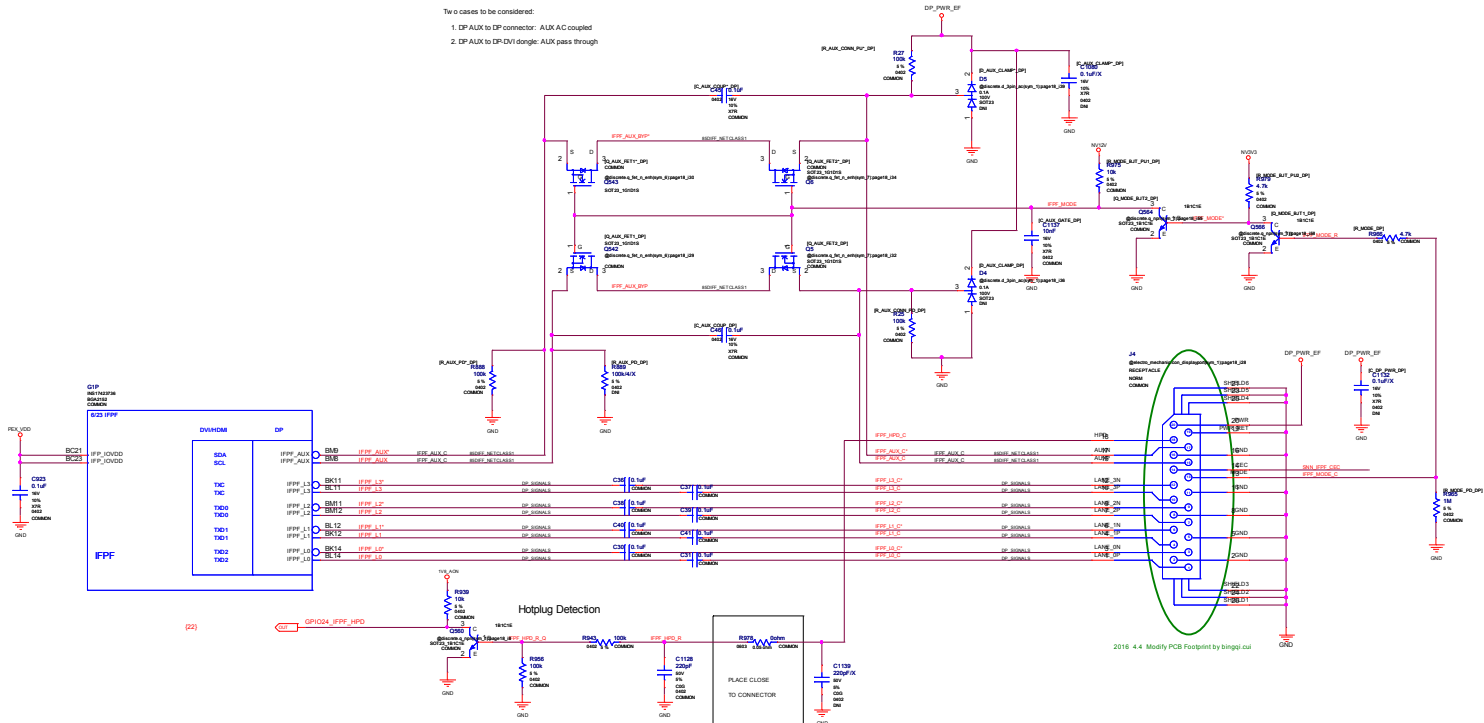
GIGABYTE			
File IFPAB DVI-D-DL			
Size Custom	Document Number GV-N1060G1 GAMING-3GD		Rev 1
Date	Tuesday, July 10, 2018	Sheet	18 of 42

Two cases to be considered:

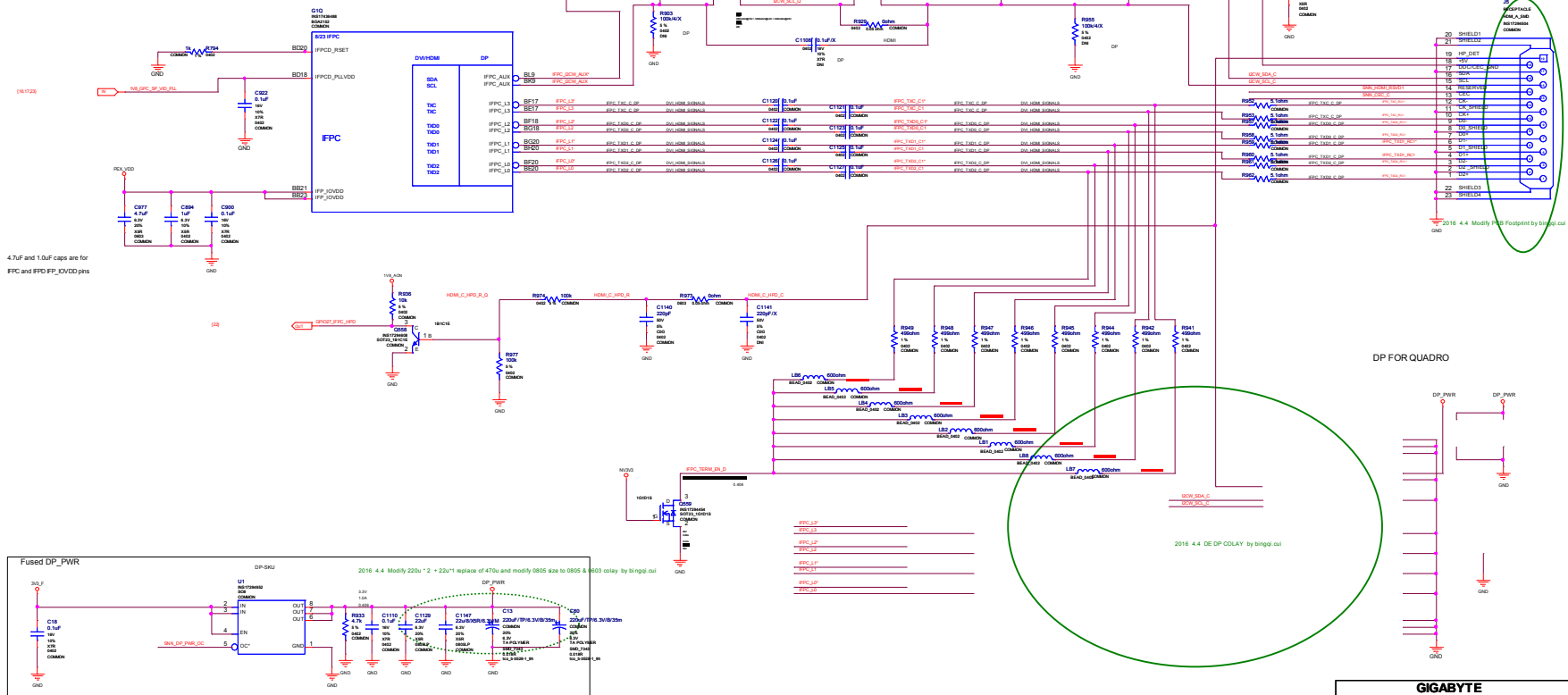
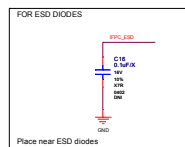
1. DP AUX to DP connector: AUX AC coupled
2. DP AUX to DP-DVI dongle: AUX pass through



Two cases to be considered:
1. DP AUX to DP connector: AUX A/C coupled
2. DP AUX to DP/DVI dongle: AUX pass through



* I2C to DDC level switching

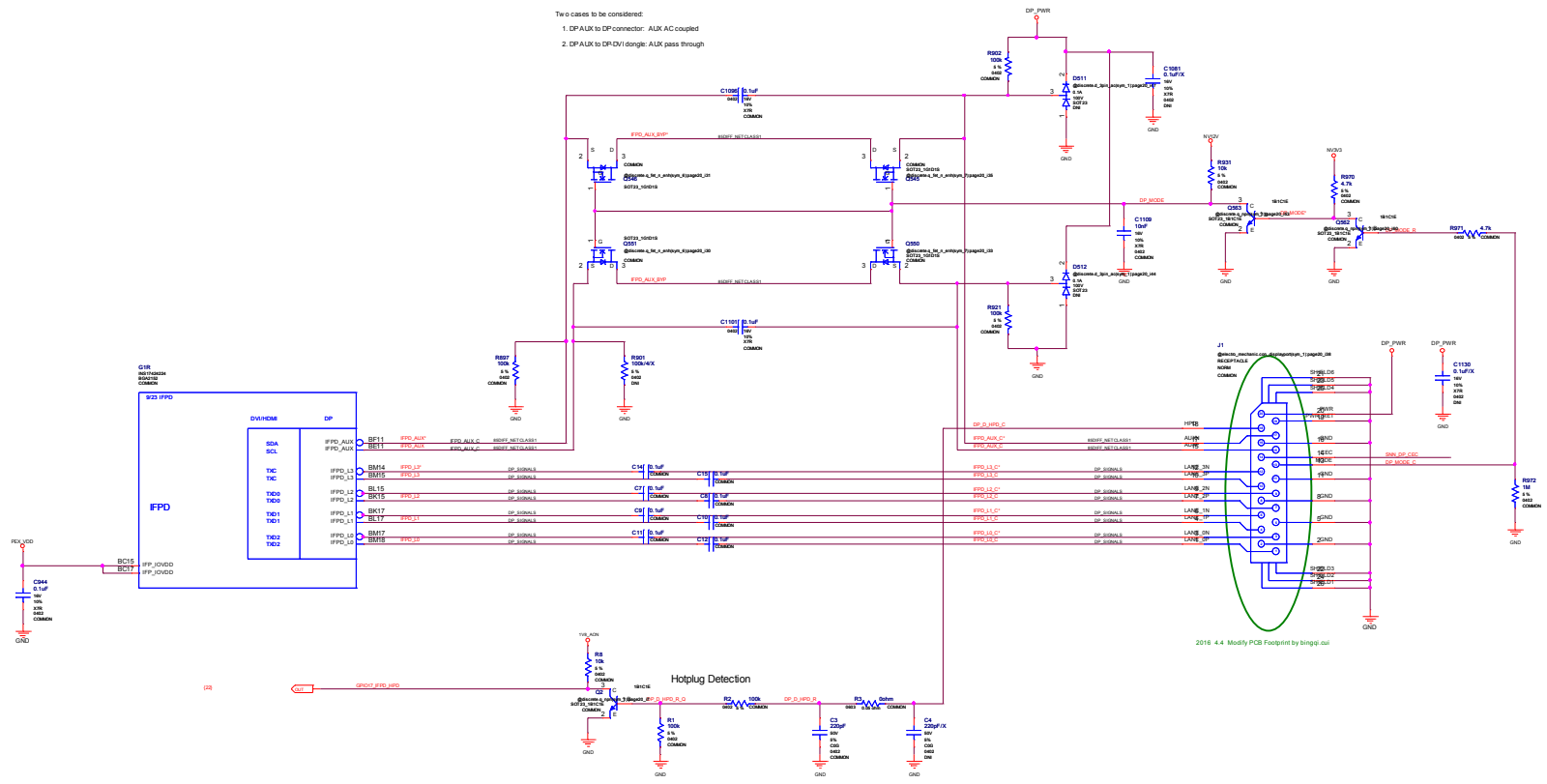


GIGABYTE			
Title IFPC HDMI 2.0			
Size Custom	Document Number GV-N1060G1 GAMING-3GD		Rev 1
Date Tuesday, July 18, 2018	Sheet 18 of 42		

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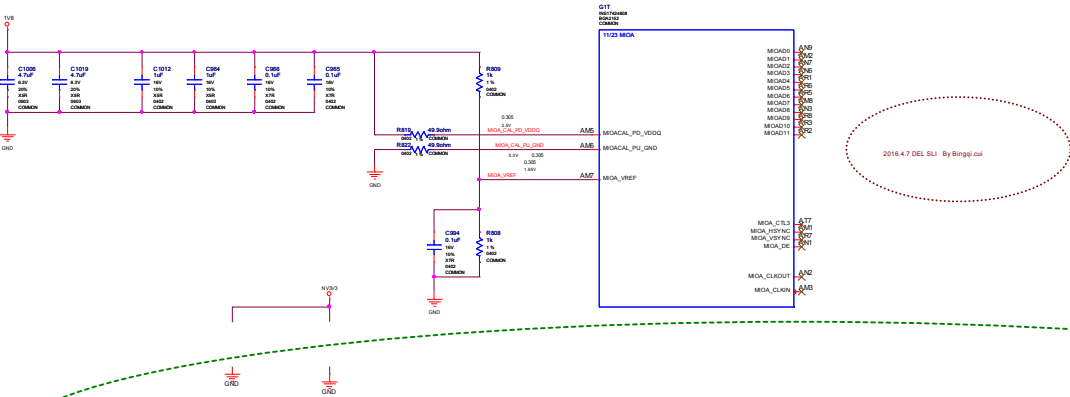
ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	IFPC HOM 2.0/DP

- Two cases to be considered:
- 1. DP AUX to DP connector: AUX AC coupled
 - 2. DP AUX to DP DV DONGLE: AUX pass through

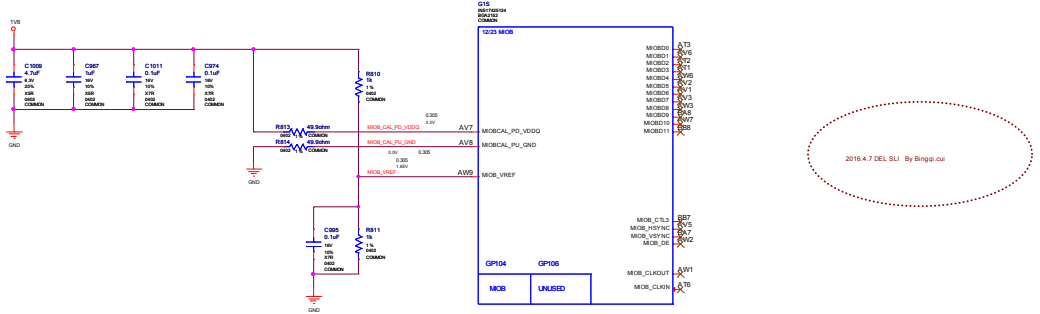


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GIGABYTE		
Doc	IFPD DP	
Doc Number	GV-N1080G1 GAMING-3GD	
Rev	1.0	
Date	2018.08.16	Rev



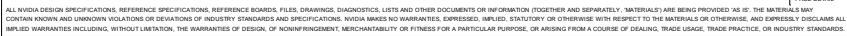
2016.4.7 Del Co-Lay By Bingqi.cui



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ASSEMBLY
PAGE DETAIL
"ASSEMBLY_DESCRIPTION"
MIOA/B Interface and Frame Lock

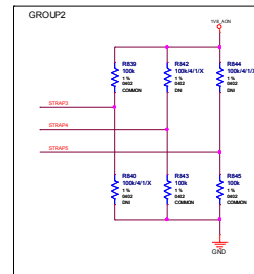
GIGABYTE			
MIOA/B Interface and FRAME LOCK			
Doc	Document Number	Rev	
	GV-N1060G1 GAMING-3GD	1.0	
Date	Released	By	
2016.4.18.2016		21 of 24	



STRAP5	STRAP4	STRAP3	SMB_ALT_ADDR	DEVID_SEL	PCIE_CFG	VGA_DEVICE
M	H	H	1	1	1	1
M	H	L	1	1	1	0
M	L	H	1	1	0	1
M	L	L	1	1	0	0
L	H	M	1	0	1	1
L	M	H	1	0	1	0
L	M	L	1	0	0	1
L	L	M	1	0	0	0
H	H	H	0	1	1	1
H	H	L	0	1	1	0
H	L	H	0	1	0	1
H	L	L	0	1	0	0
L	H	H	0	0	1	1
L	H	L	0	0	1	0
L	L	H	0	0	0	1 DEFAULT
L	L	L	0	0	0	0

1:PCIE_CFG LOW POWER
0:PCIE_CFG HIGH POWER

1:VGA_DEVICE ENABLE
0:VGA_DEVICE DISABLE

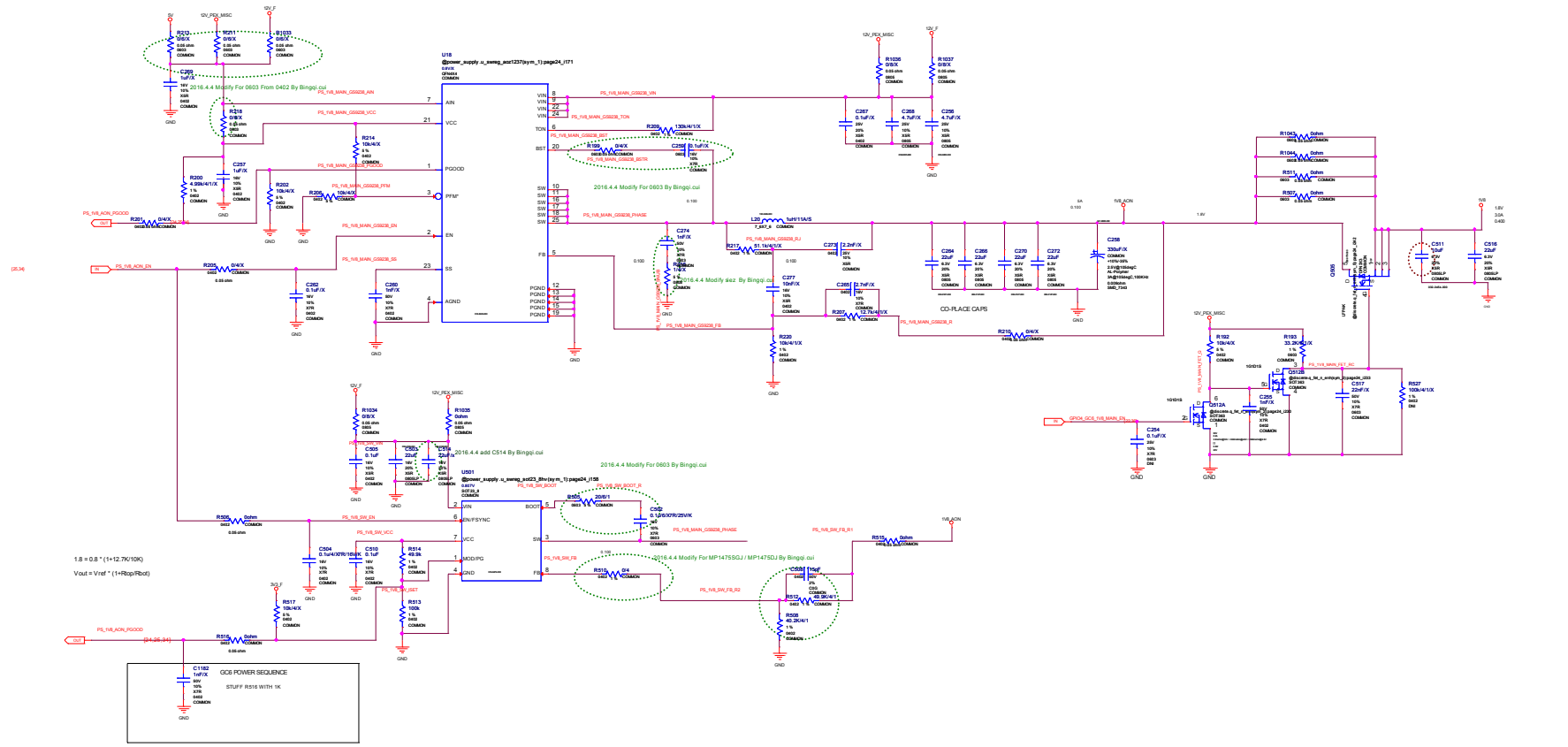


The image displays the PCB layout of the GIGABYTE AORUS Ultra 7900XTX graphics card. The layout is divided into several functional sections:

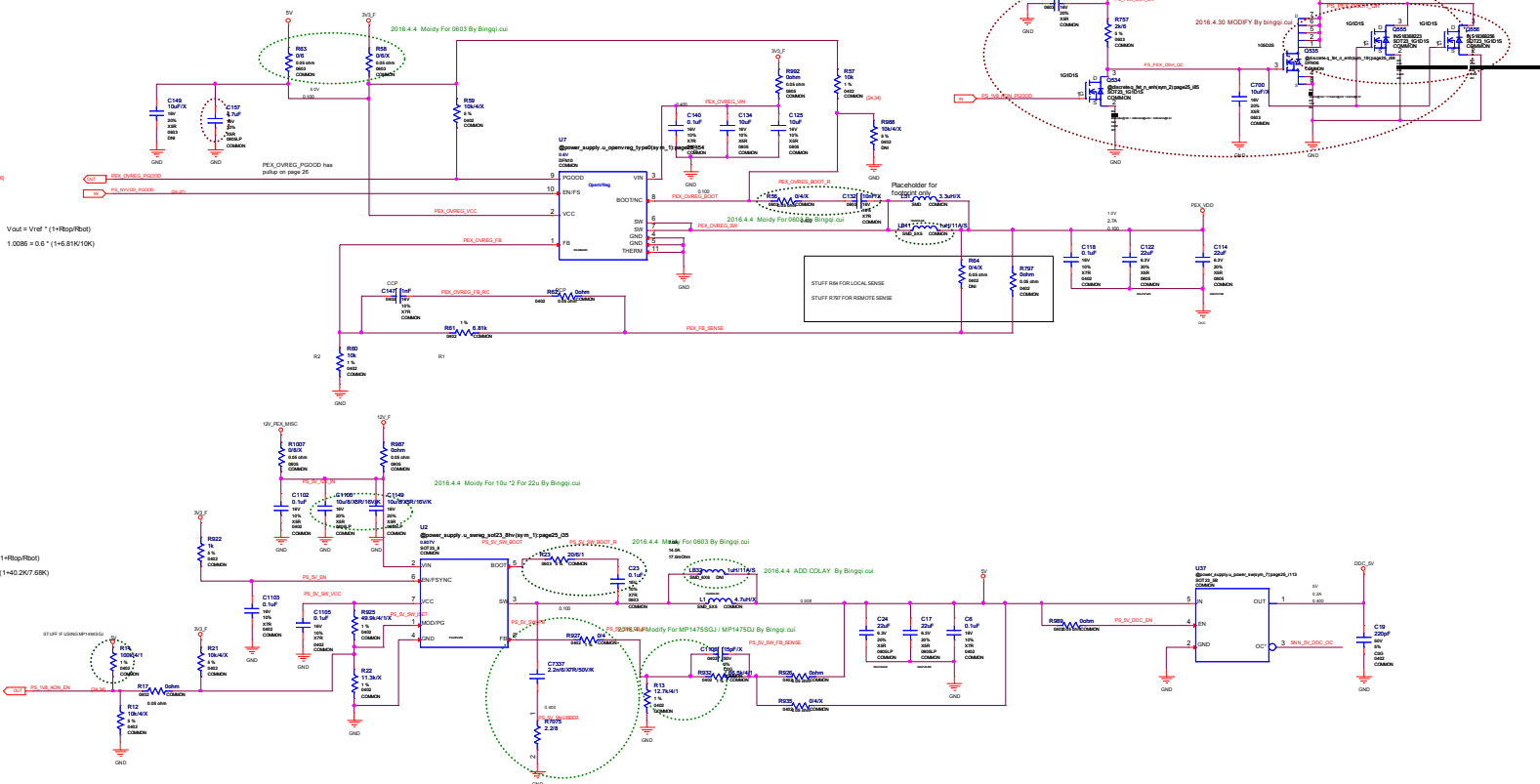
- GPU Section:** The central component is the AMD Radeon 7900XTX GPU (U1), which is connected to the 16-pin PCIe power connector (PWR1) and the 24-pin ATX power connector (PWR2). The GPU is also connected to the 16-pin DisplayPort (DP1) and the 12-pin HDMI (HDMI1).
- VRAM Section:** The GPU is connected to the 16GB GDDR6X VRAM (U2) via a 16-bit memory interface. The VRAM is connected to the GPU's memory controller (M1) and the 16-bit memory controller (M2).
- BIOS Section:** The BIOS chip (U3) is connected to the GPU's BIOS controller (BIOS1) and the 16-bit BIOS controller (BIOS2).
- Support Components:** The PCB includes various support components such as capacitors (C1-C10), resistors (R1-R10), and a temperature sensor (T1).
- Connectors:** The card features a 16-pin PCIe power connector (PWR1), a 24-pin ATX power connector (PWR2), a 16-pin DisplayPort (DP1), and a 12-pin HDMI (HDMI1).

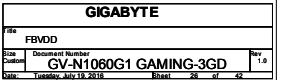
The layout is designed to optimize performance and power efficiency, ensuring the card can deliver the full performance of the AMD Radeon 7900XTX GPU.

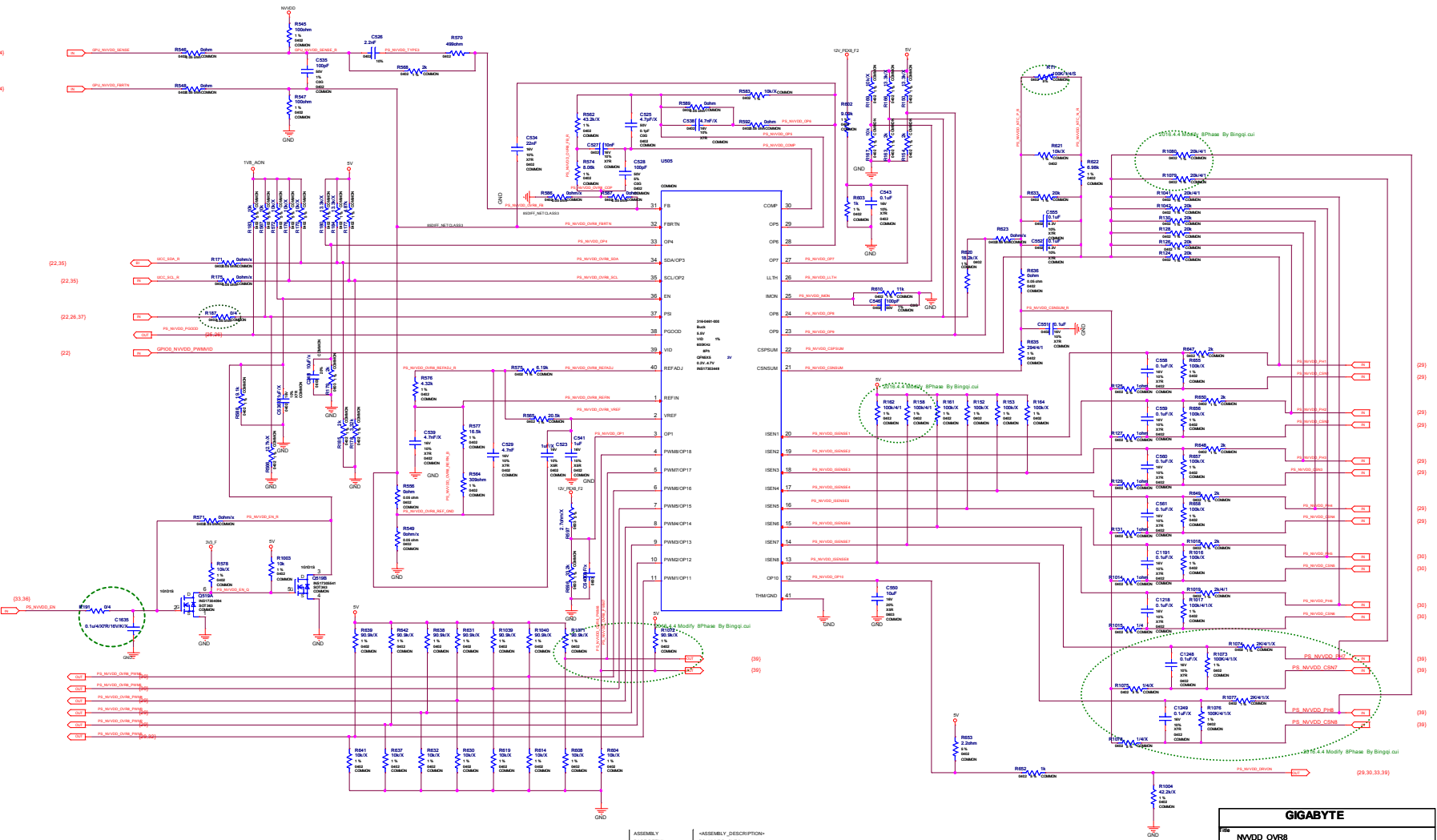
XTALOUTBUFF		
1.8V	0.9V	0V
66% PWM	33% PWM	DISABLED (100%)

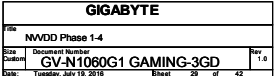


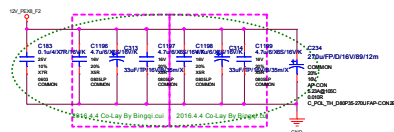
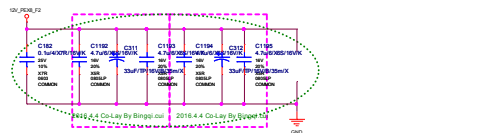
PEX PLL Switcher



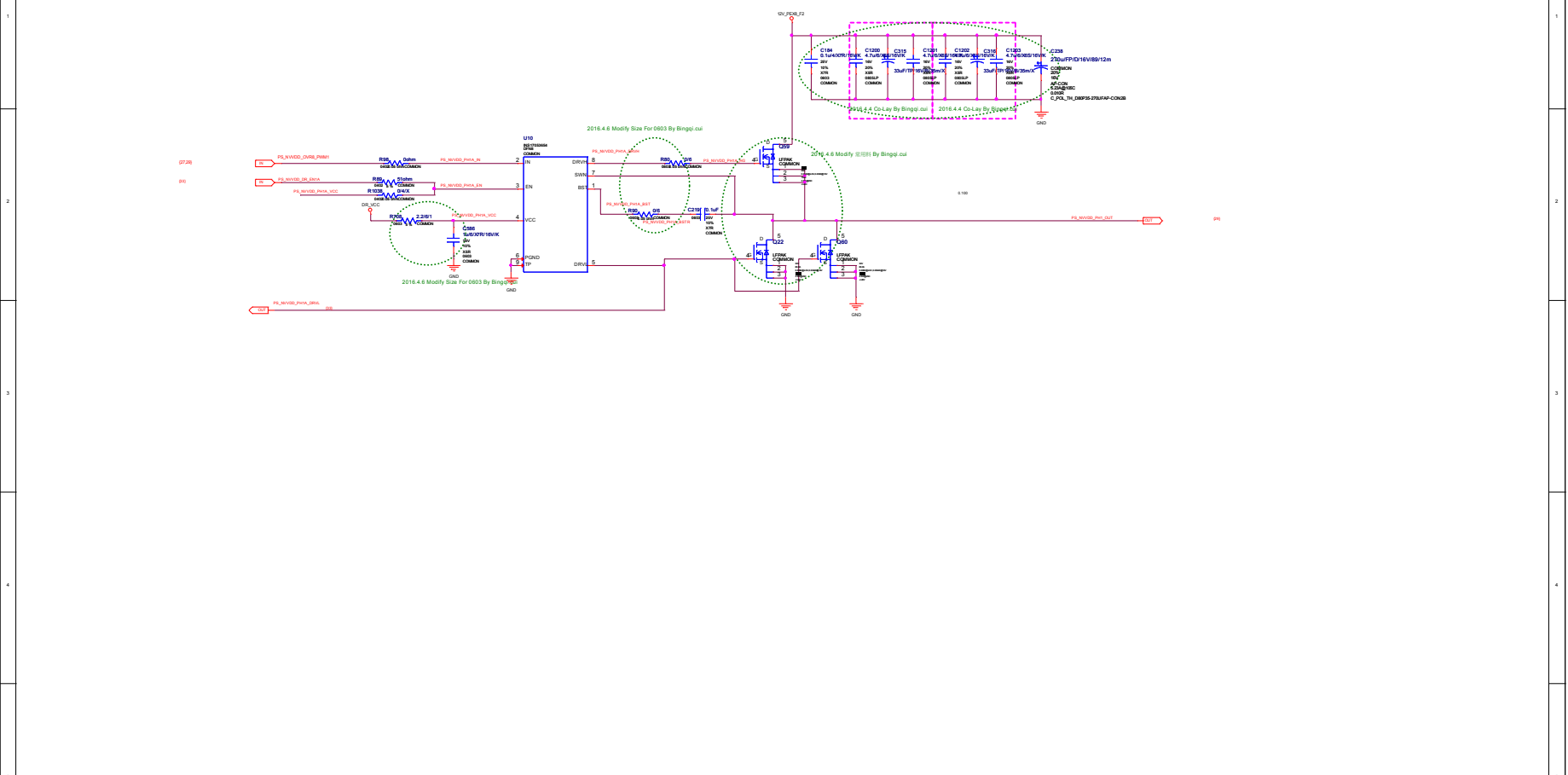




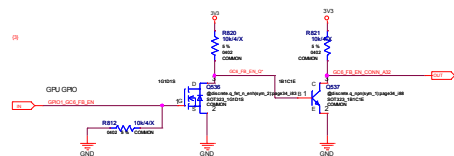
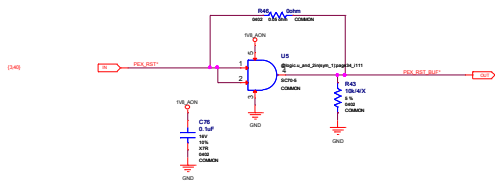


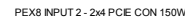


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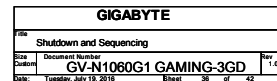




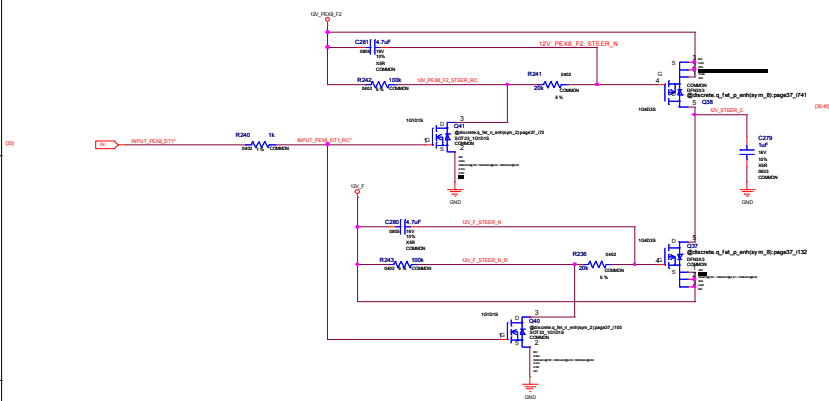




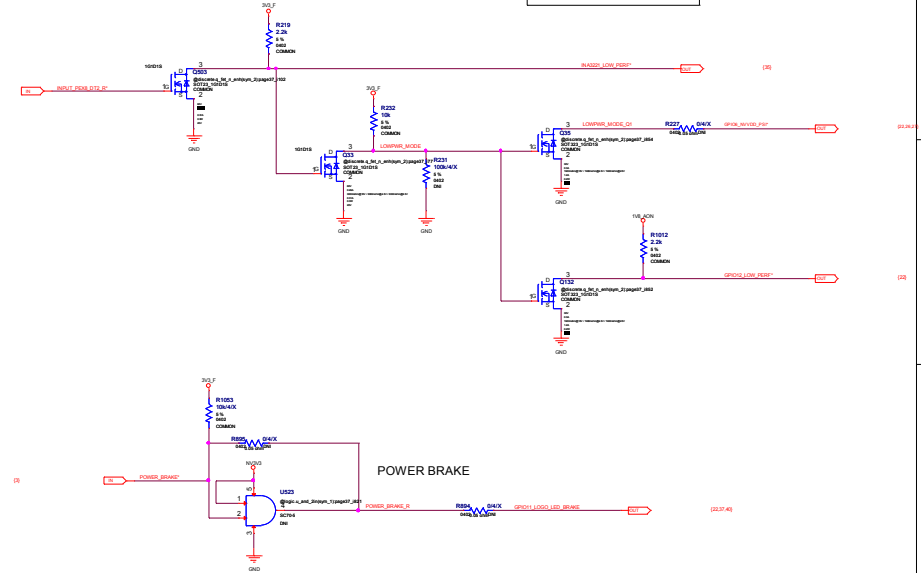
Title			
Inputs, Filtering, and Monitoring			
Size	Document Number	Rev	
Custom	GV-N1060G1 GAMING-3GD	1.0	
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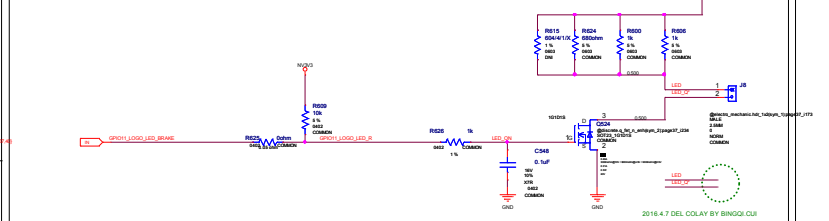
PEX Input - 12V Current Steering FETs



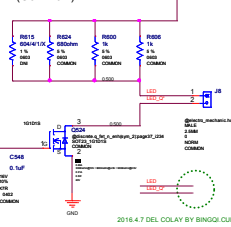
PEX Input - Power Level/PSI Control



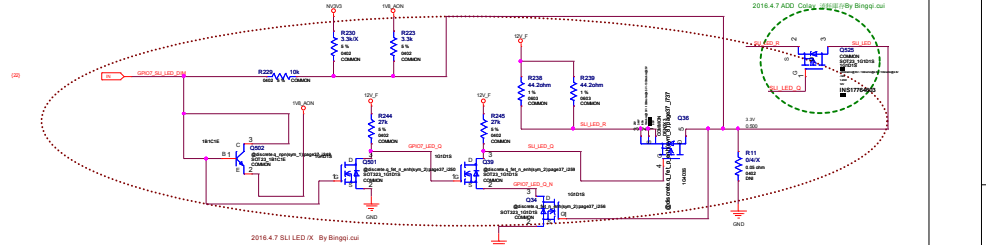
GeForce Logo LED

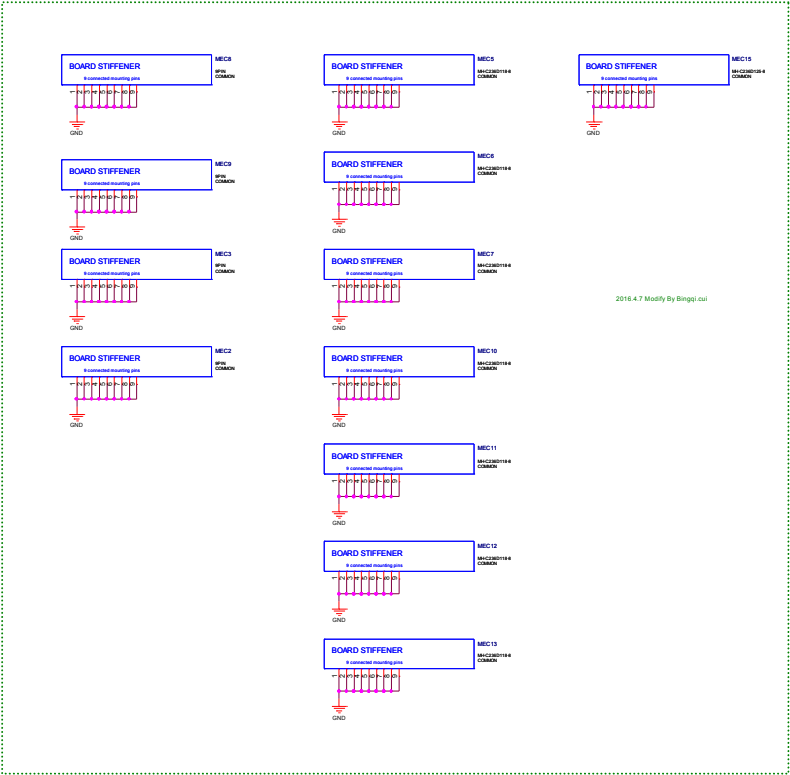


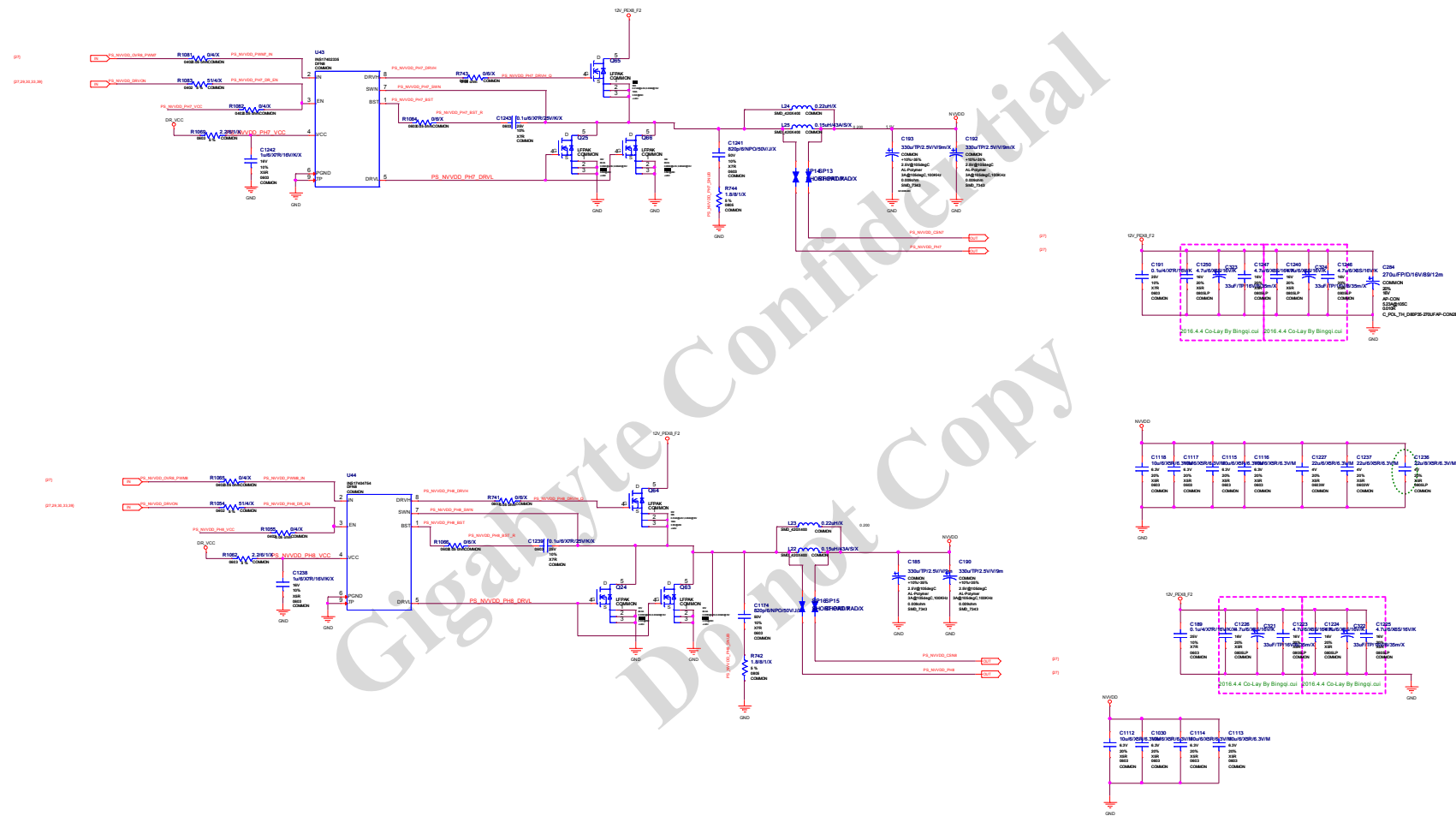
LED HEADER (COMMON)



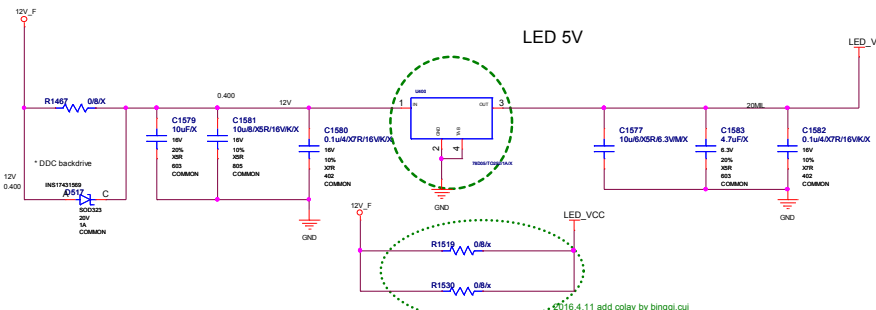
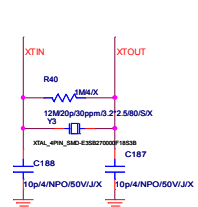
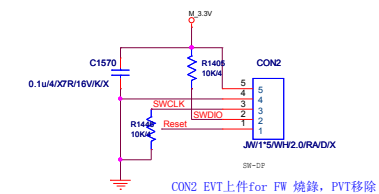
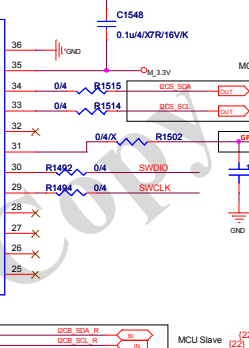
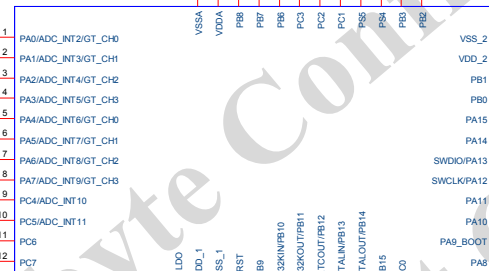
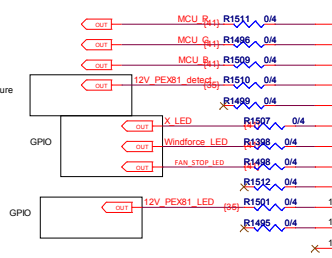
SLI LED (GEFORCE ONLY)







GIGABYTE			
File 7 & 8			
Size	Document Number		Re
Quotion	GV-N1060G1 GAMING-3GD		
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History									
Data		Modify							
2016.04.04		First version							