

PG142-B00

DP + DP + DP + HDMI/DP

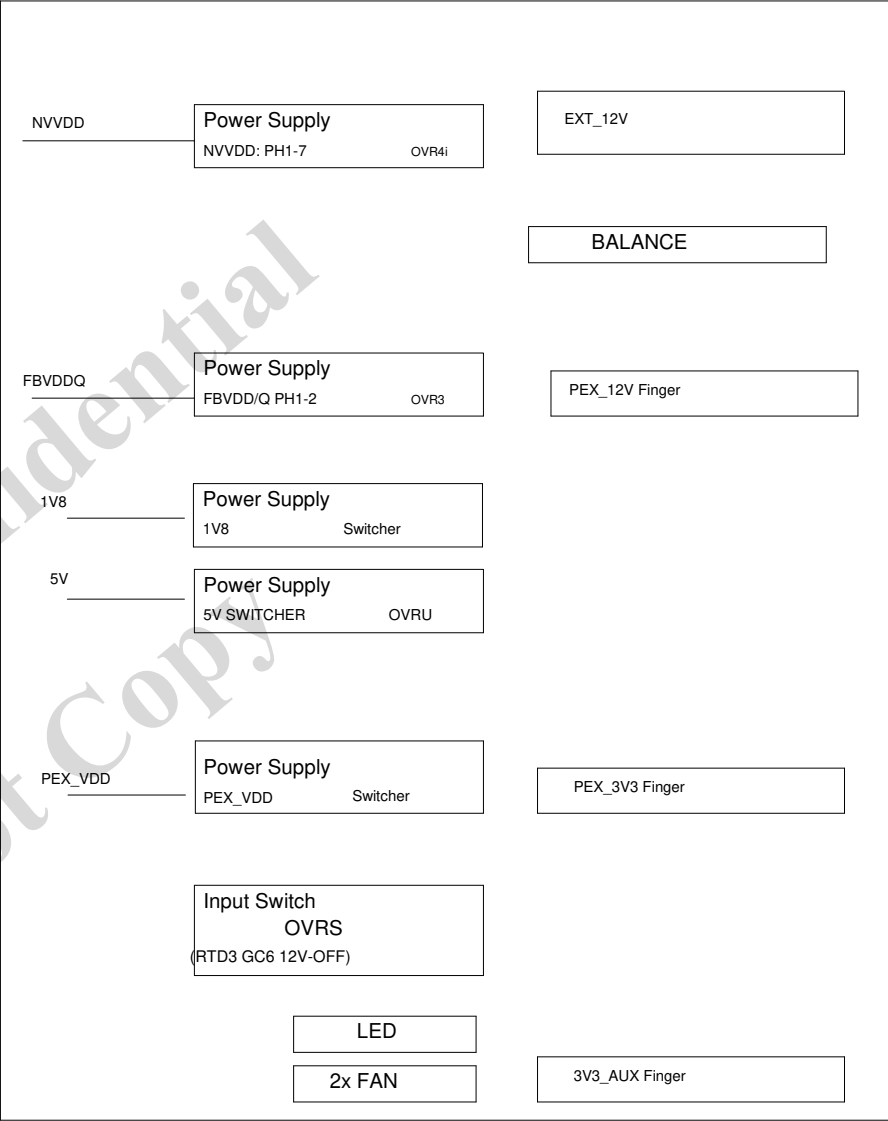
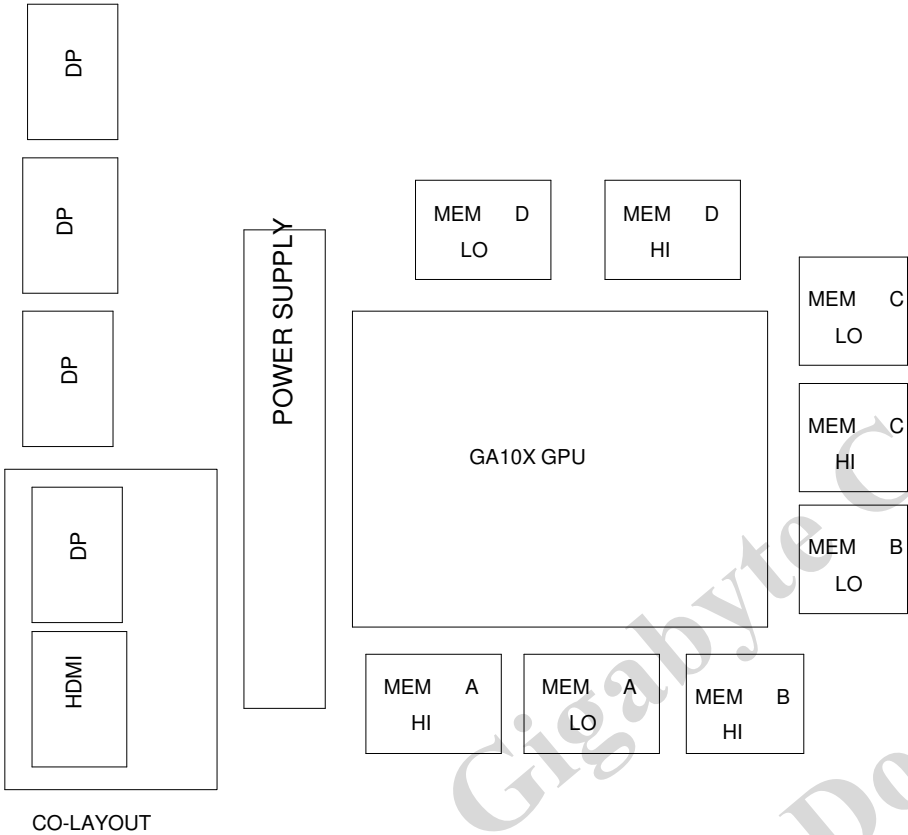
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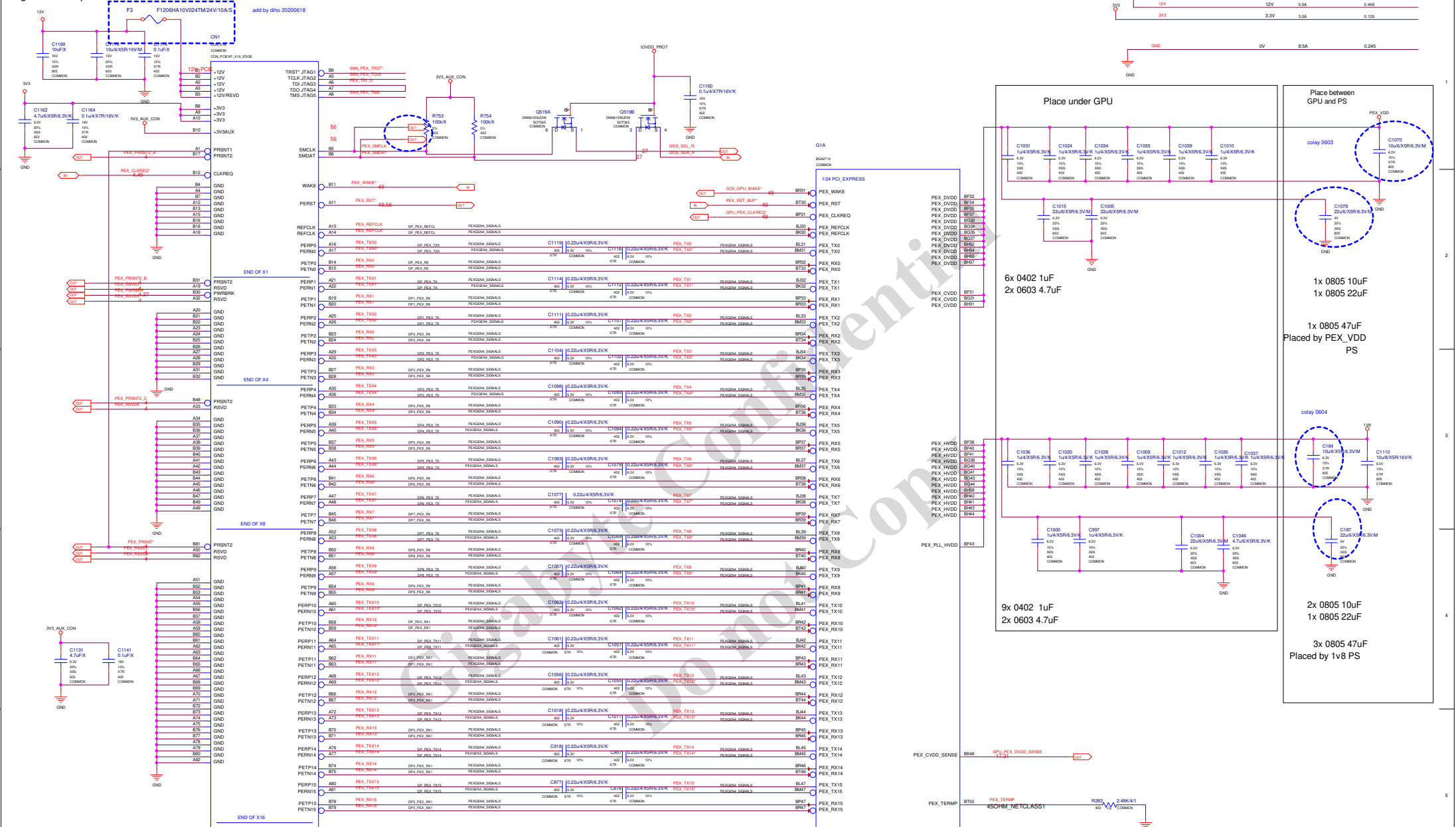
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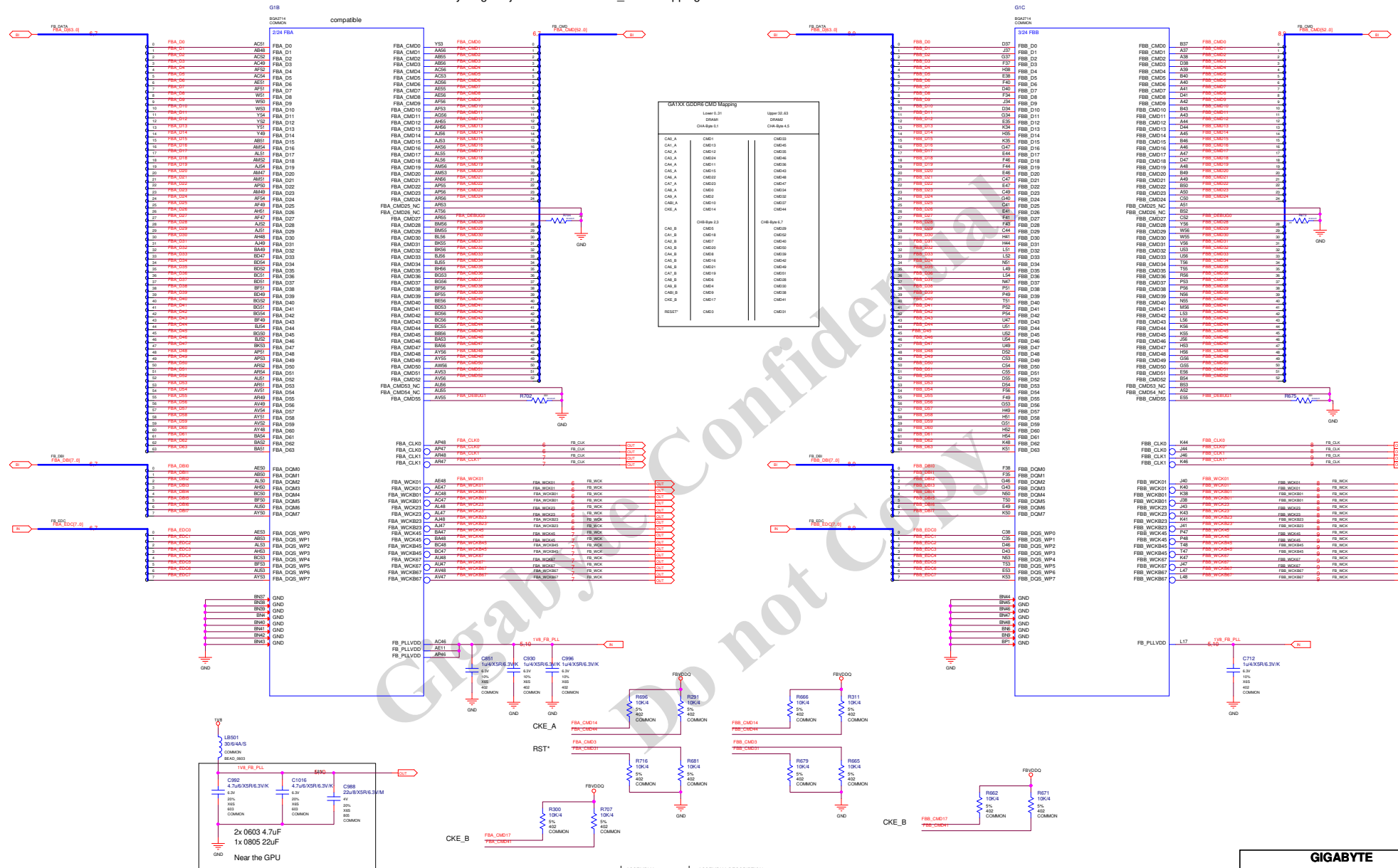
ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PCI Express

GIGABYTE

File			
PCI Express			
Size	Document Number	Rev	
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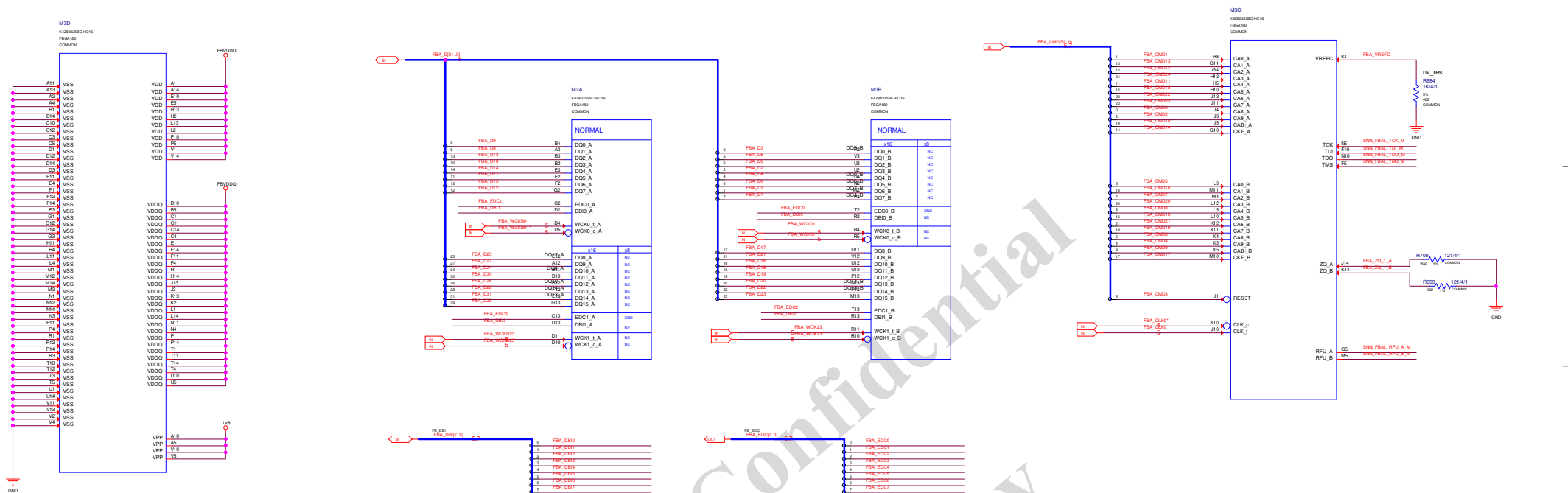
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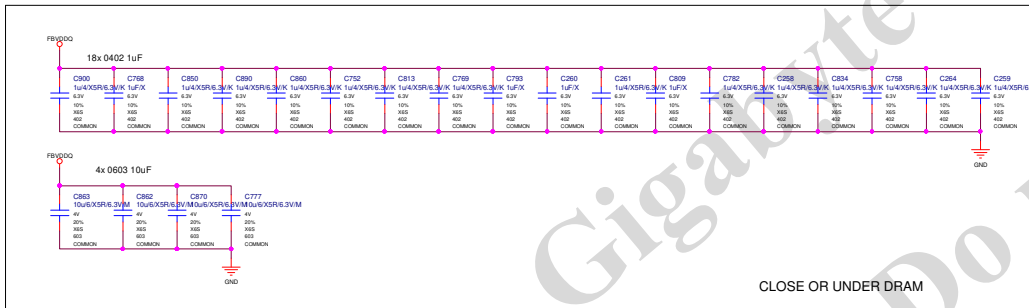
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ASSEMBLY_DESCRIPTION:
MEMORY: GPU FB AB
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GIGABYTE

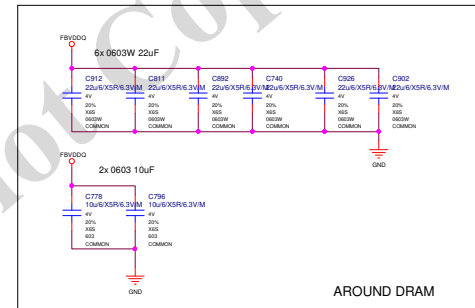
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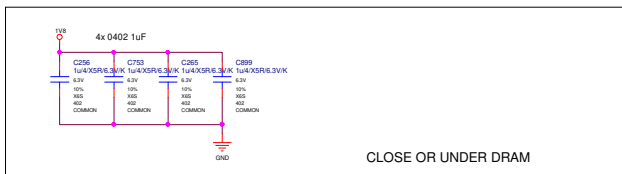
decap via : at least 2 gnd vias and 2 power vias for each cap



CLOSE OR UNDER DRAM



AROUND DRAM

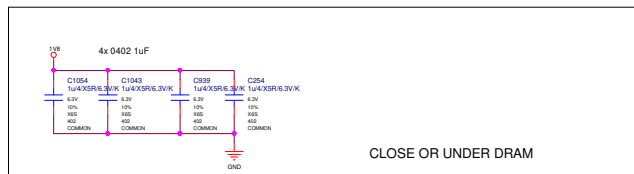
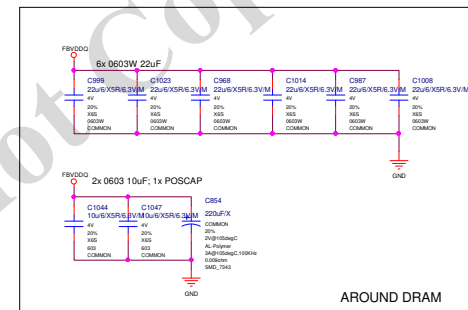
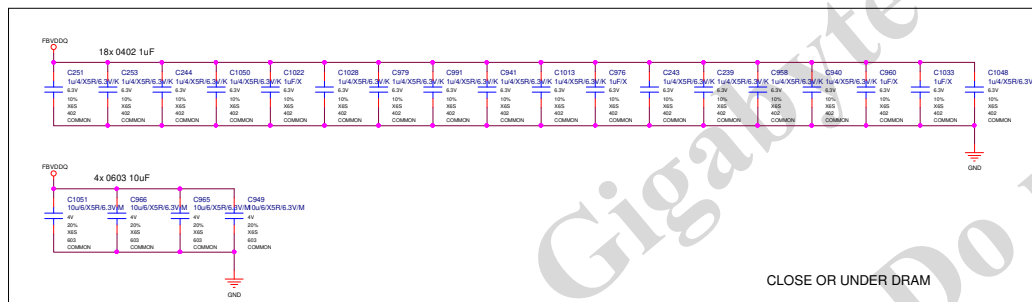
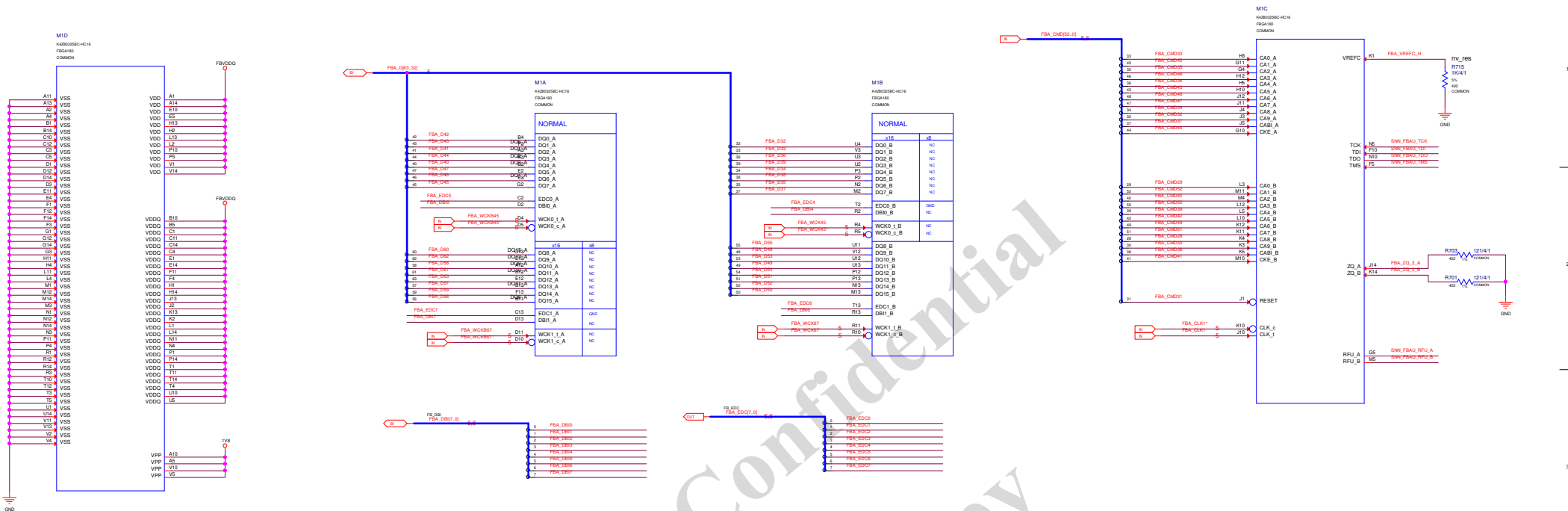


CLOSE OR UNDER DRAM

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ASSEMBLY
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MEMORY: FBA[31..0]

GIGABYTE			
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CLOSE OR UNDER DRAM

AROUND DRAM

CLOSE OR UNDER DRAM

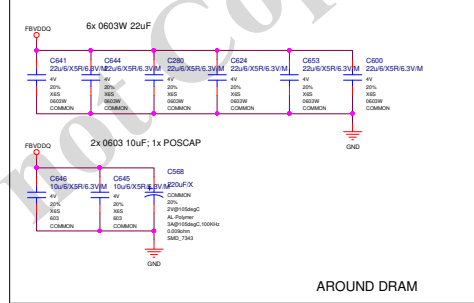
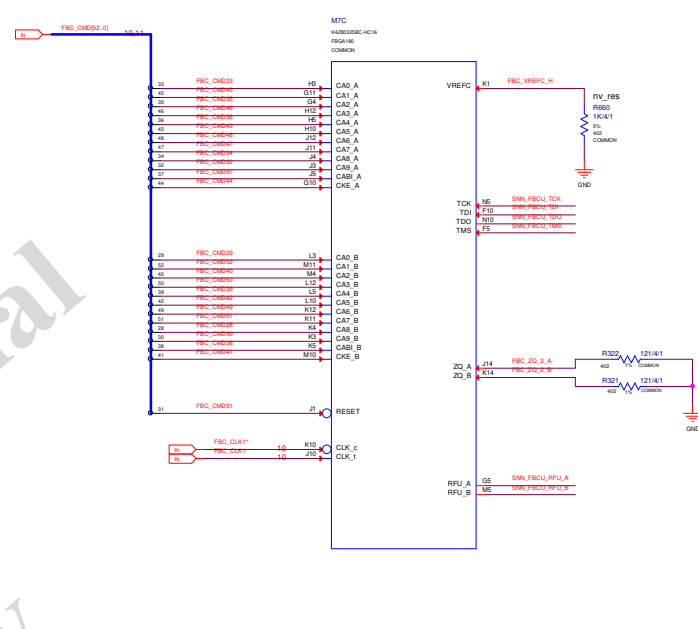
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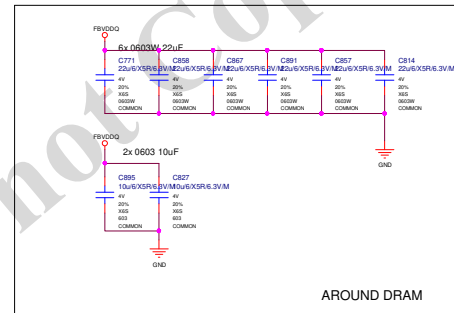
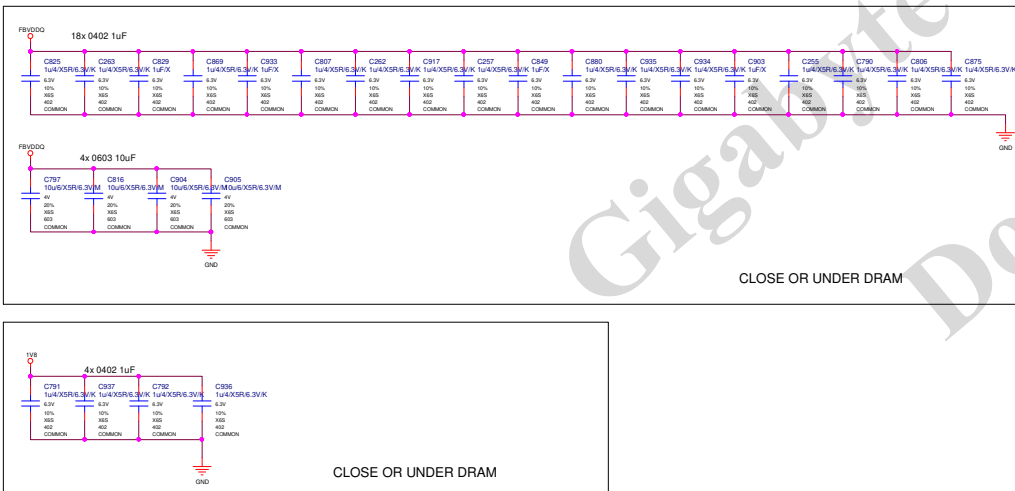
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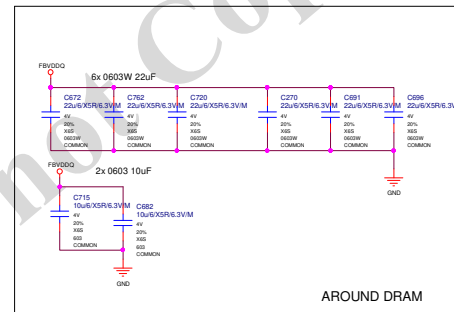
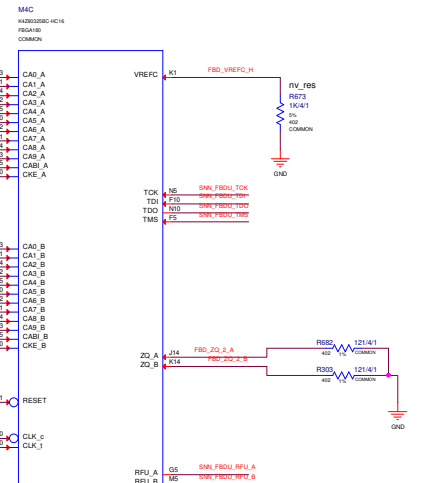
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MEMORY: FBA[63:32]
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GIGABYTE			
Title Page9: MEMORY: FBB Partition 63..32			
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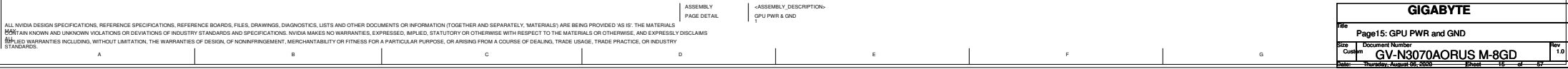


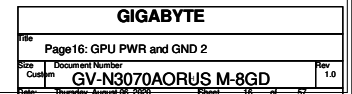


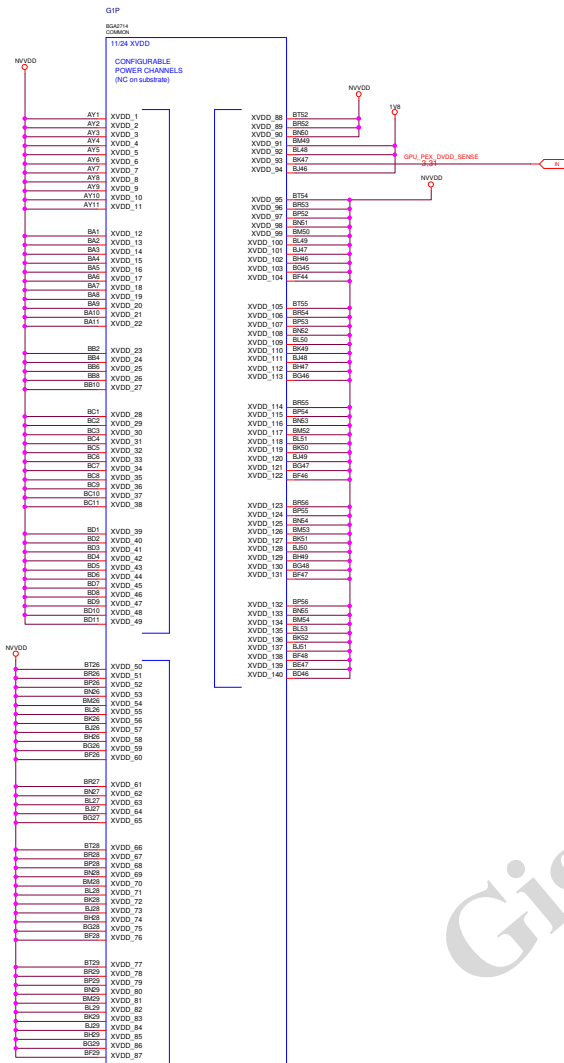




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MEMORY: FBD[63:32]
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ASSEMBLY
PAGE DETAIL
-ASSEMBLY DESCRIPTION-
GPU PWR & GND 3
(XVDD)

GIGABYTE				
File Page17: XVDD				
Size	Document Name			Rev
Column	GV-N3070AORUS M-8GD			1.0
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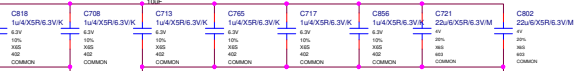
FBVDDQ

UNDER GPU: 24x 0402 1uF; 8x 0603 10uF

Partition A



Partition B



Partition C



Partition D



UNDER GPU

5x 0603 10uF; 9X 0603 22uF

5x 10uF

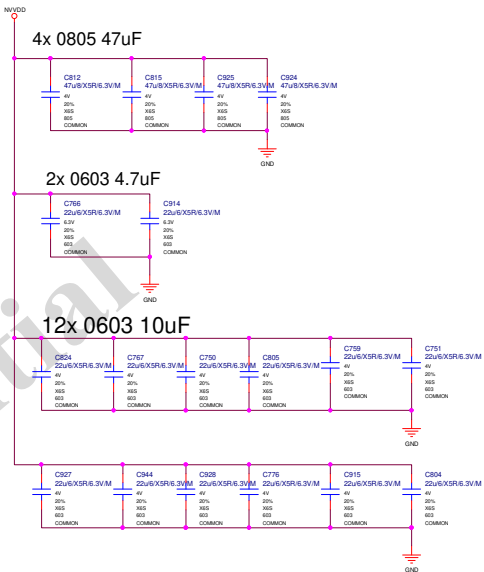
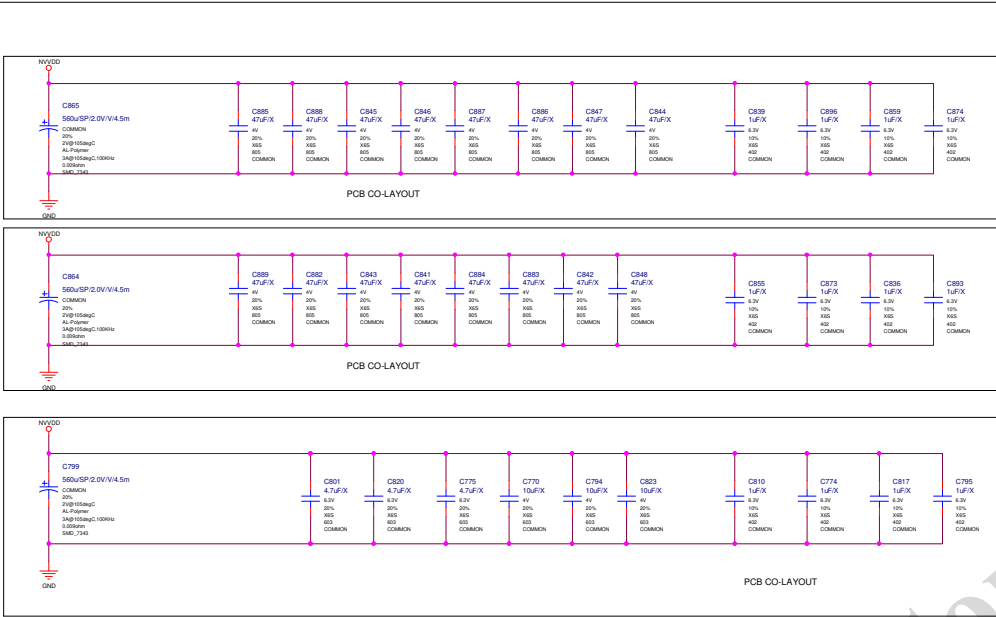


9x 22uF

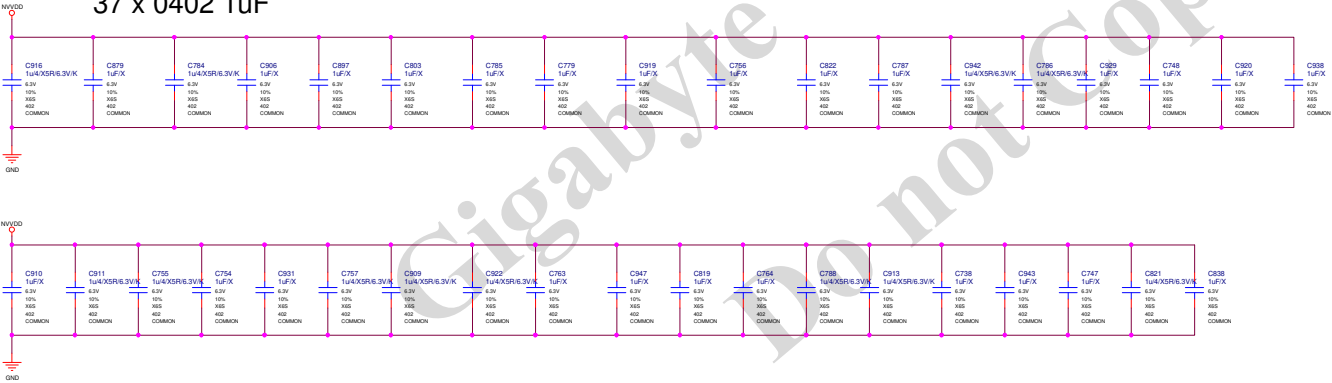


CLOSE TO GPU

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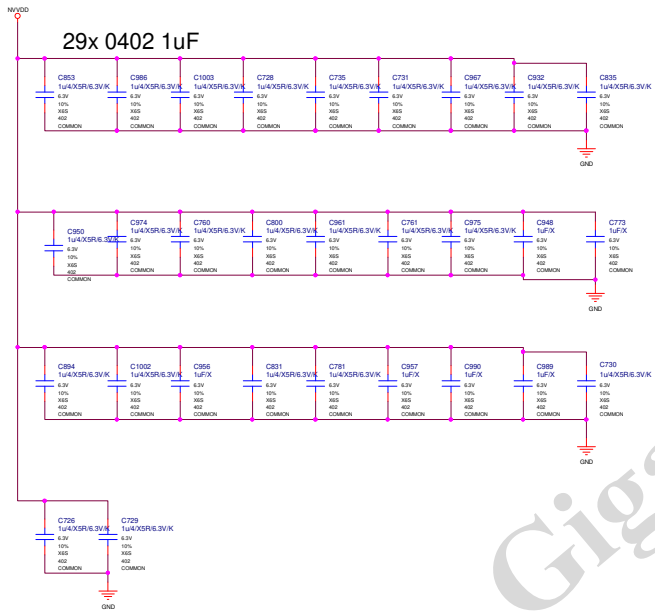
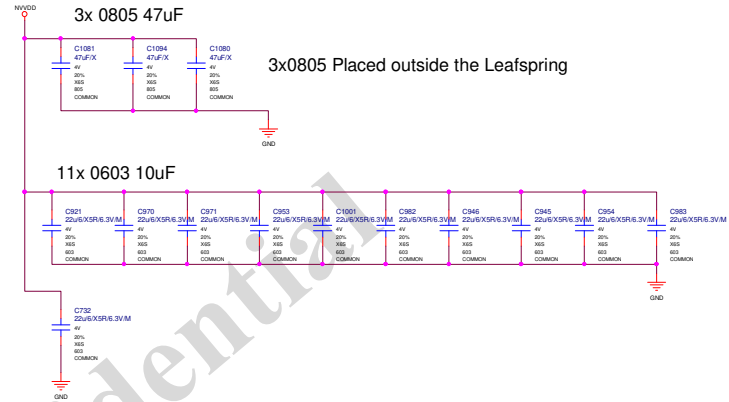
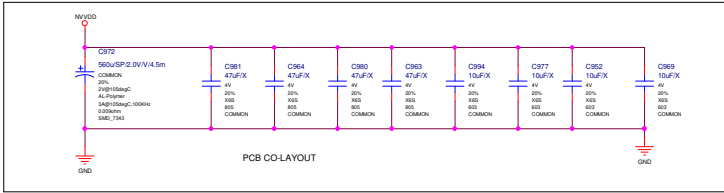


37 x 0402 1uF



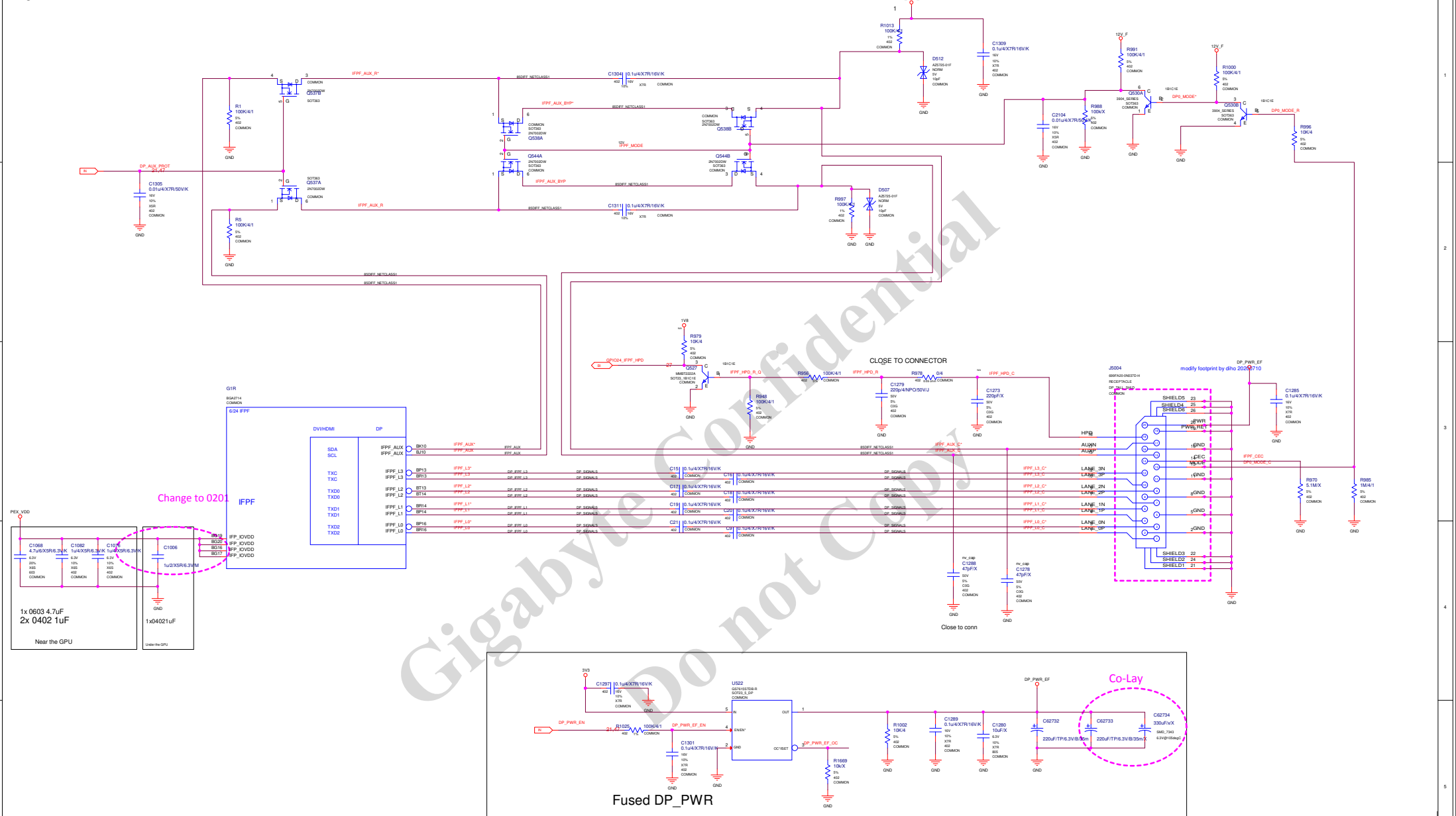
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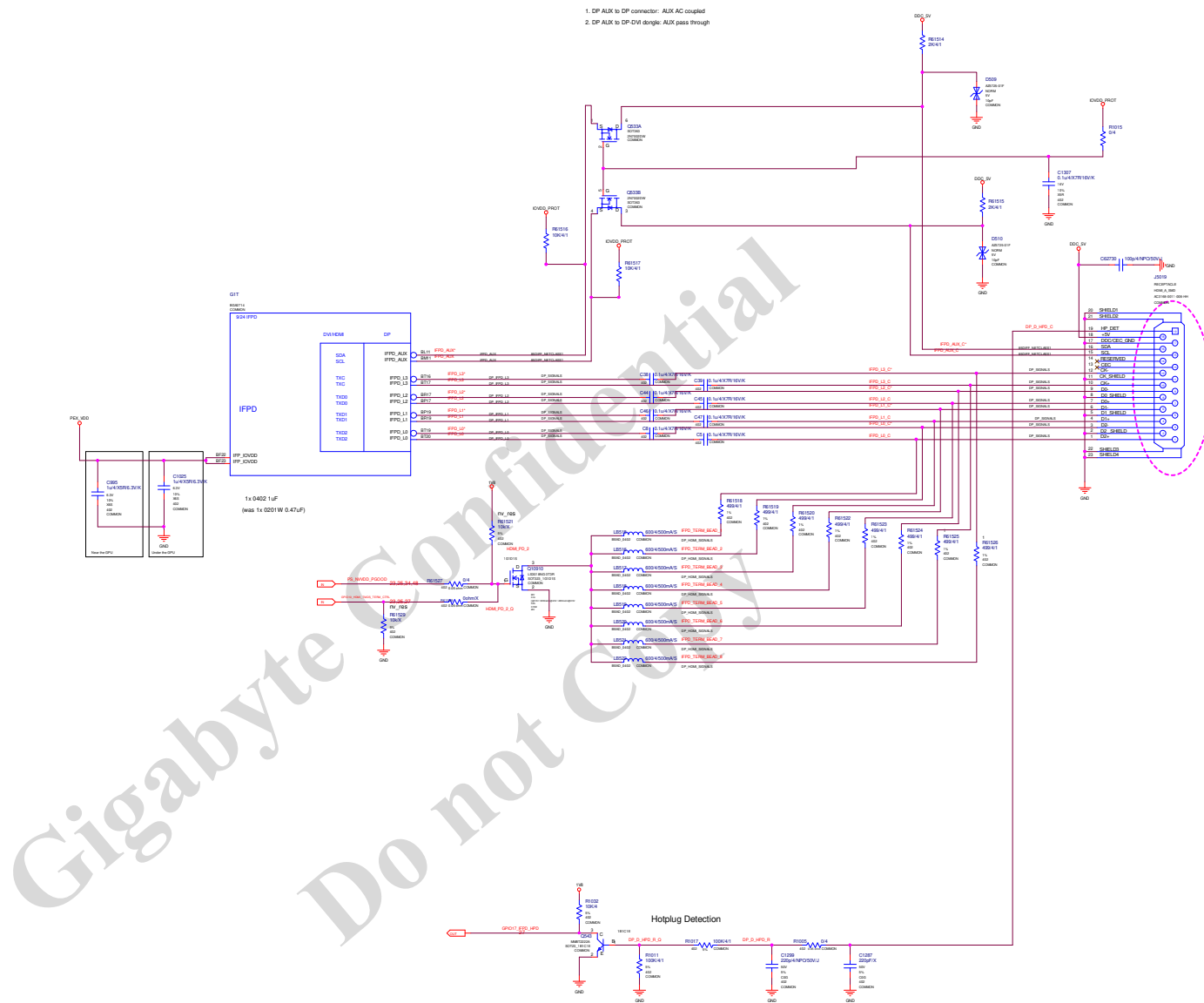
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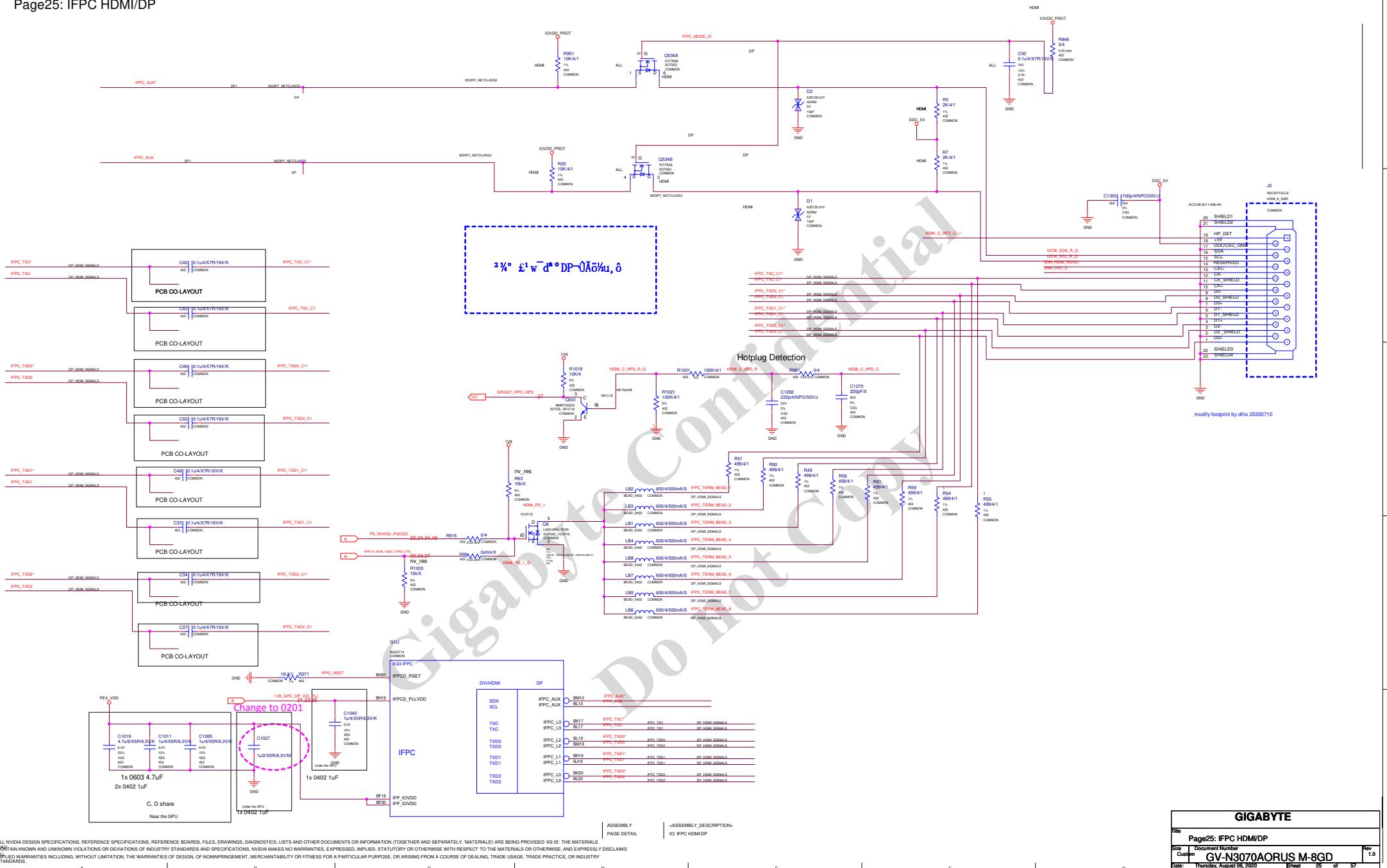


UNDER GPU









STRAP2	STRAP1	STRAP0	RAMCFG[4:0]	
L	L	L	0000	RAMCFG SAMSUNG 8Gb 7GHz
L	L	H	0001	RAMCFG MICRON 8Gb 7GHz
L	H	L	0010	RAMCFG HYNIX 8Gb 7GHz
H	H	L	0011	RAMCFG SAMSUNG 16Gb 8GHz
TBD				

H=High :Tied to 1.8V
M=Middle:Tied to 0.9V
L=Low :Tied to 0V

ROM_SO	ROM_SI	ROM_SCLK	SMARTFAN[2:0] FS_OVERT	1:ENABLE 0:DISABLE
H	H	H	0111	FS_OVERT ENABLE
H	H	M	0000	FS_OVERT DISABLE

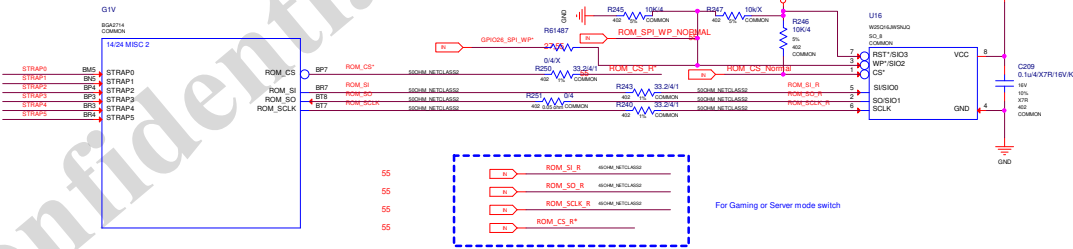
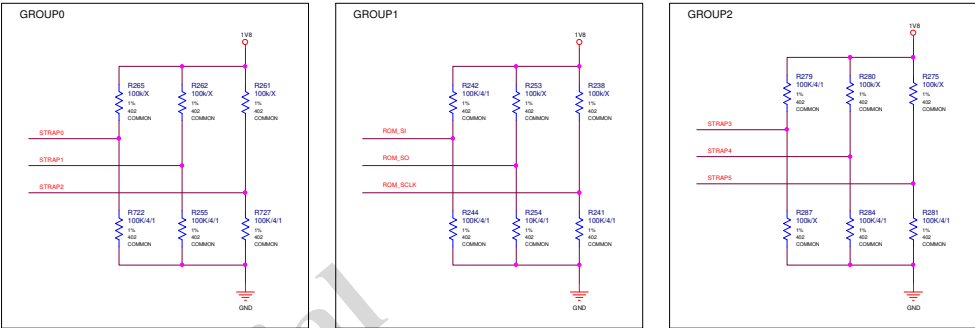
DEFAULT

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	0	1	0
L	H	M	1	0	1	1
L	M	H	1	0	1	0
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
L	L	L	0	0	0	0

H=High :Tied to 1.8V
M=Middle:Tied to 0.9V
L=Low :Tied to 0V

1:SMB_ALT_ADDR ENABLE
0:SMB_ALT_ADDR DISABLE
1:DEVID_SEL REBRAND
0:DEVID_SEL ORIGINAL

1:PCIE_CFG LOW POWER
0:PCIE_CFG HIGH POWER
1:VGA_DEVICE ENABLE
0:VGA_DEVICE DISABLE





Del NV LED

WHITE DRIVE

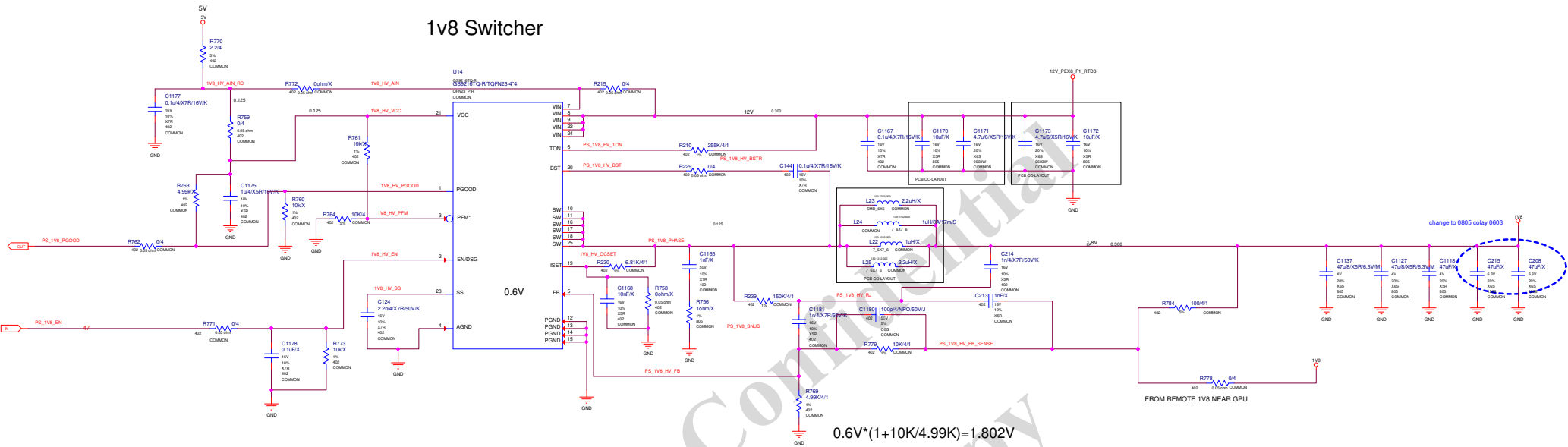
LOGO LED WHITE

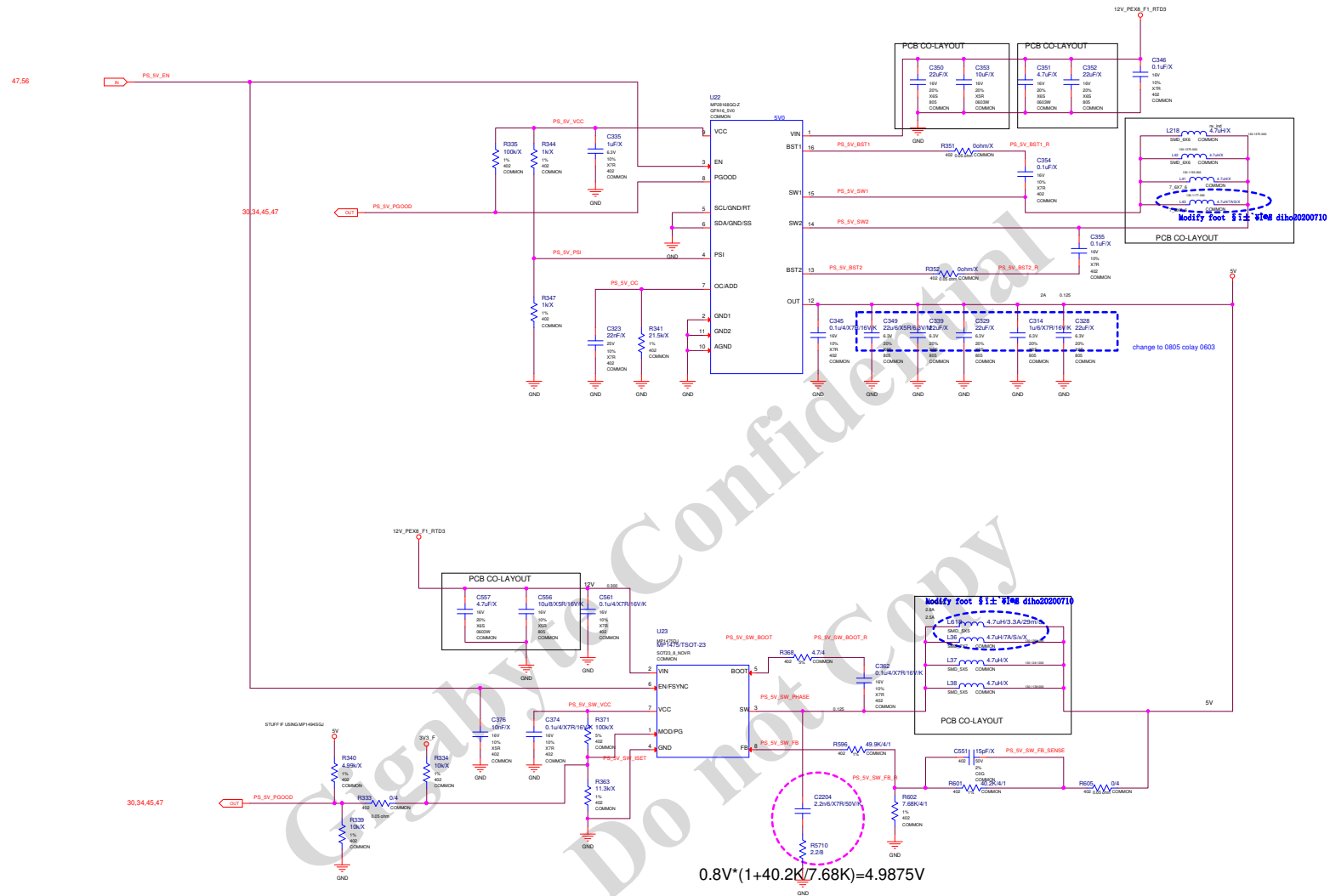
LOGO LED RED

RED DRIVE

GREEN DRIVE

BLUE DRIVE

$$0.6V \cdot (1 + 10K/4.99K) = 1.802V$$



$$0.8V \cdot (1 + 40.2K / 7.68K) = 4.9875V$$

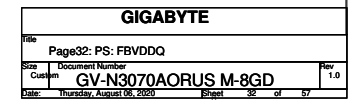
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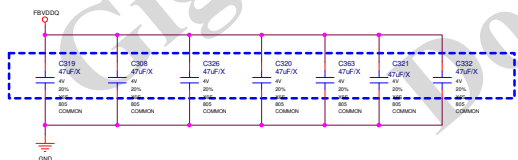
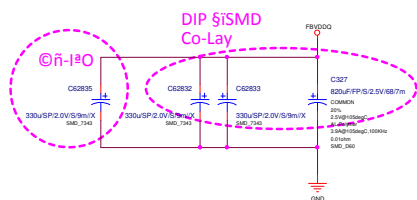
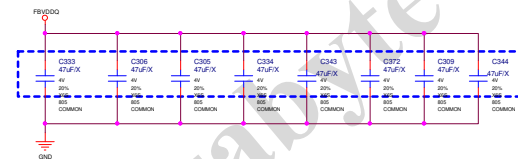
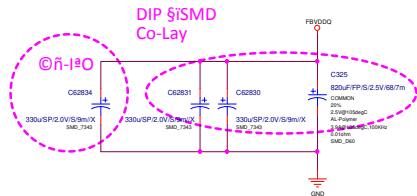
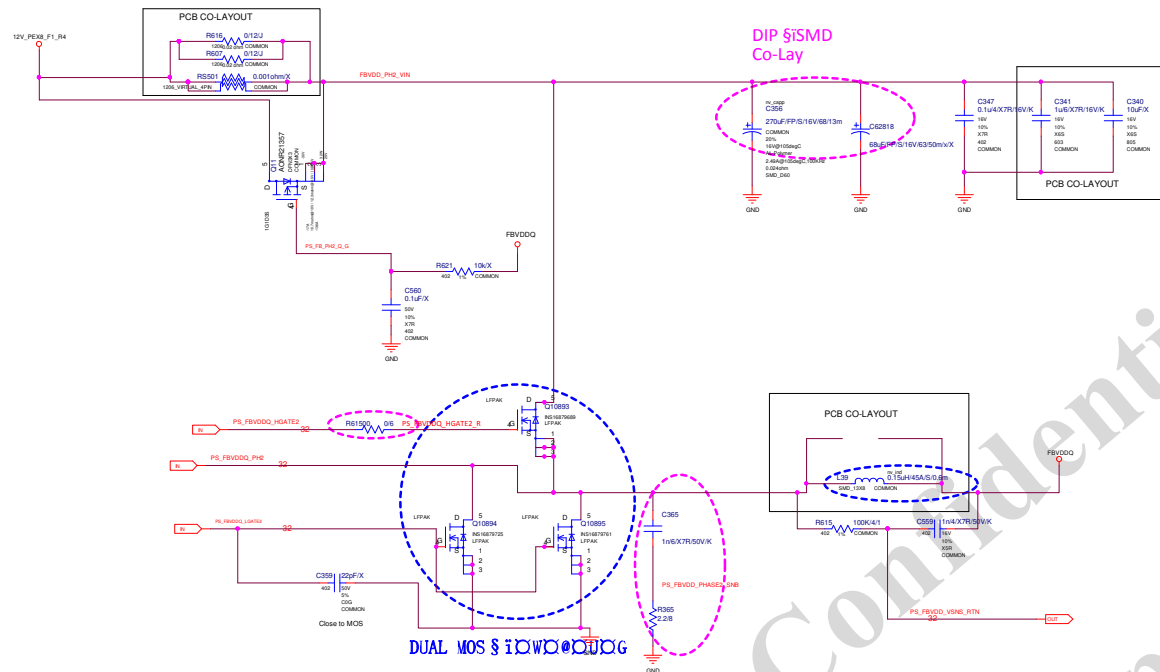
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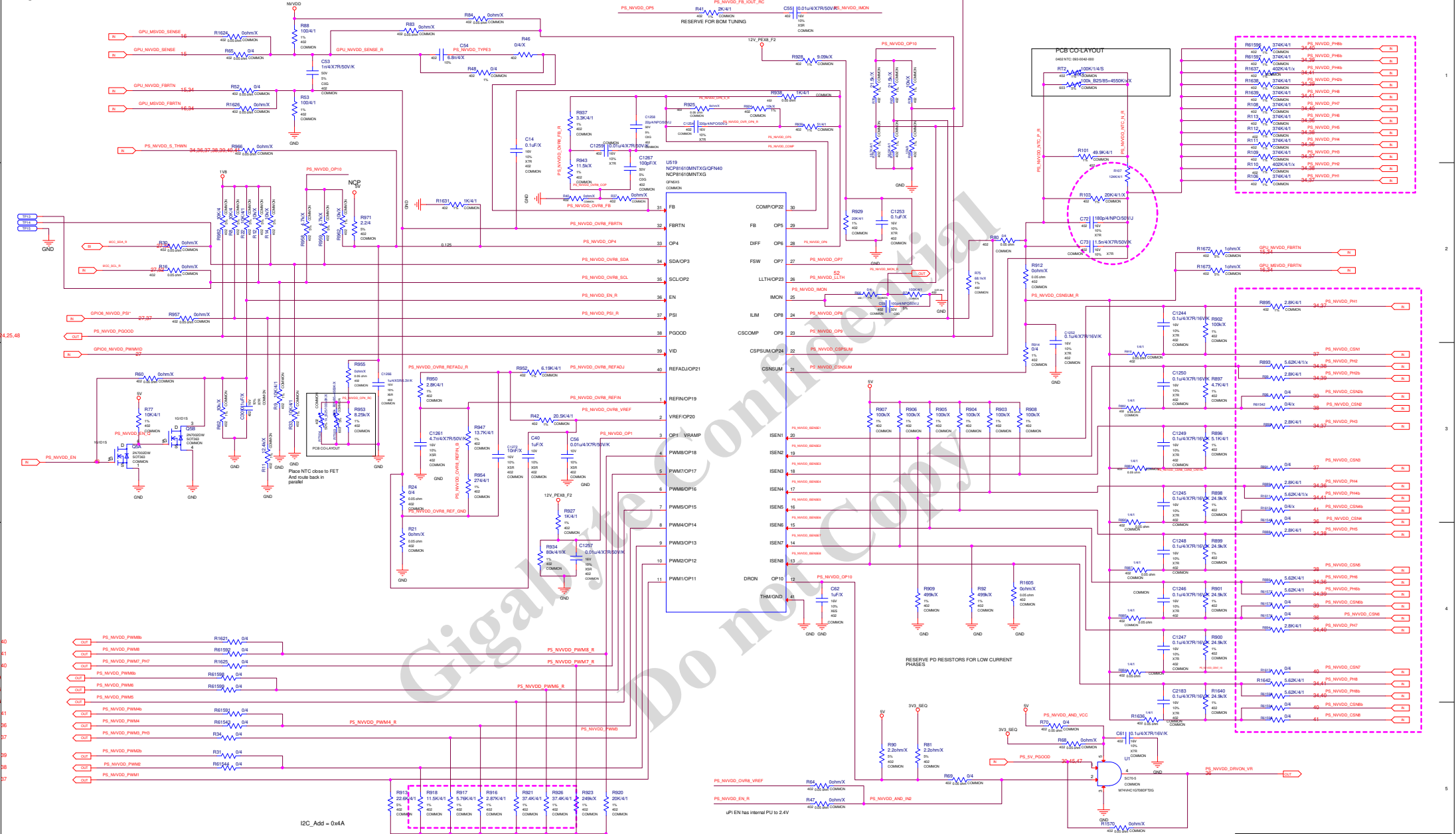
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Page30: PS: 5V			
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FBVDD PH2 INPUT ANTI-BACKDRIVE





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PS: NVVDD Controller

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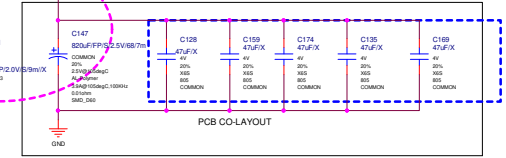
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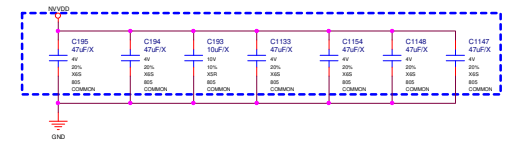
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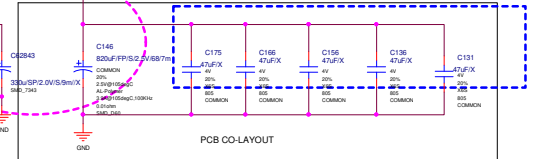
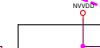
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Date	Thursday, 3/27/21 2:00		Sheet 05 of 07



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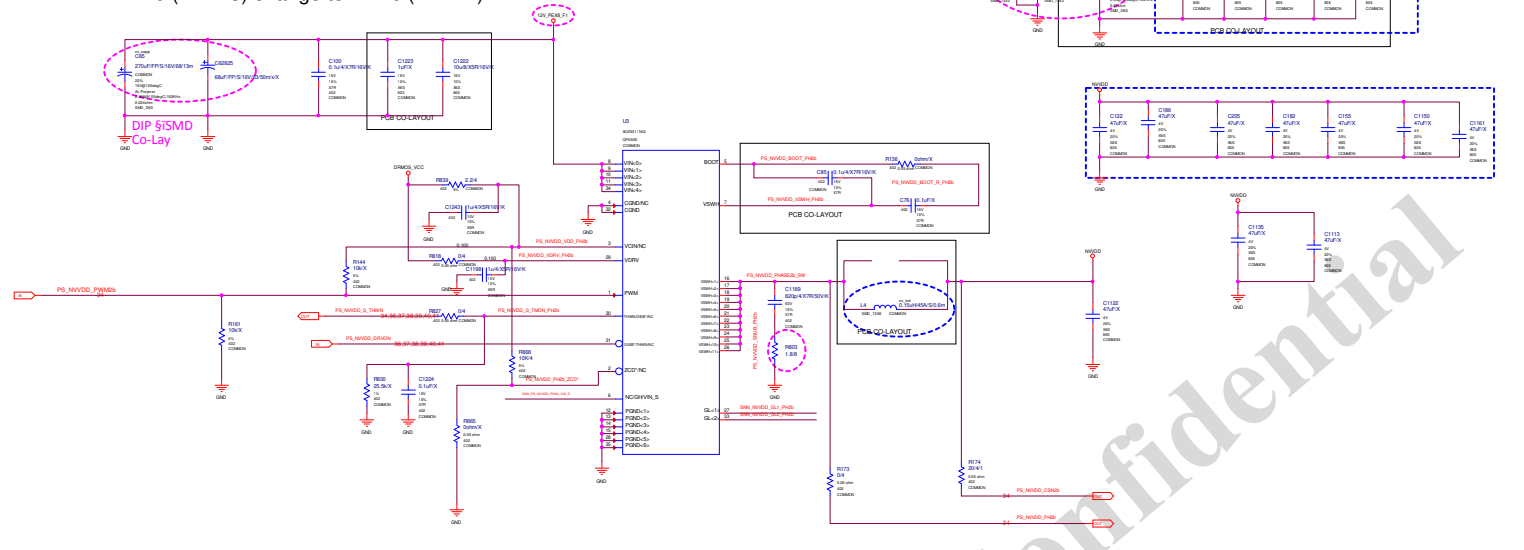
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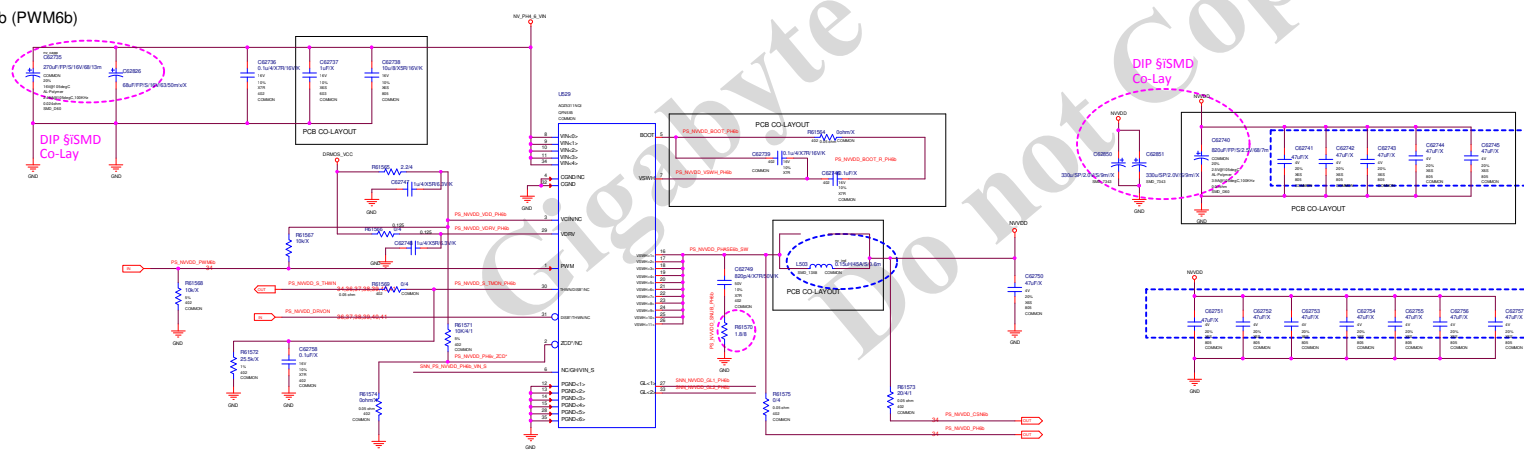
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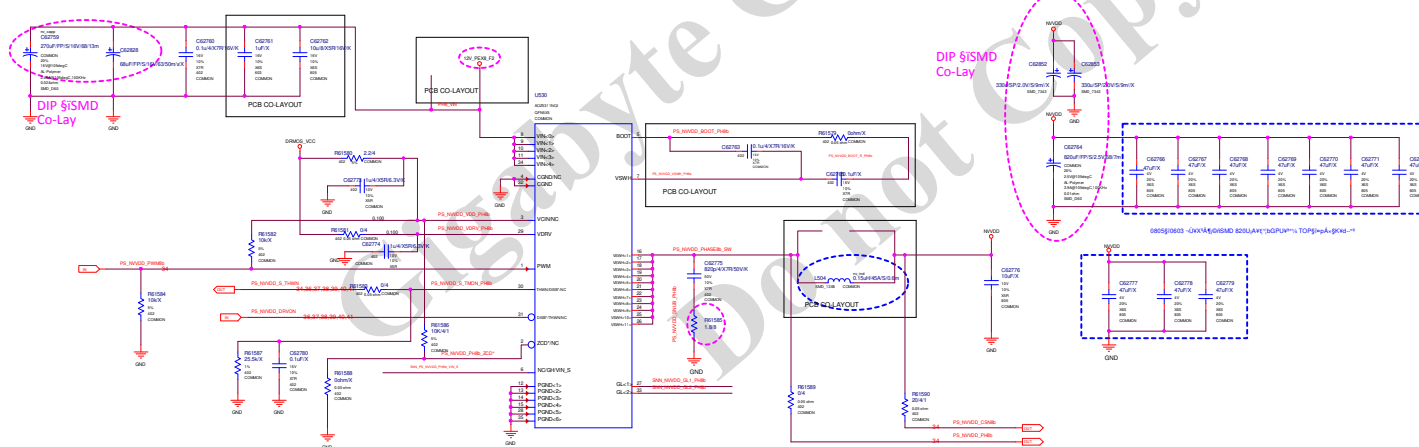
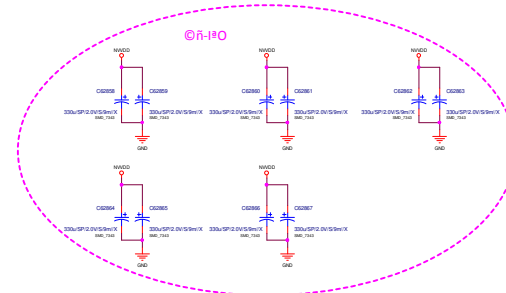
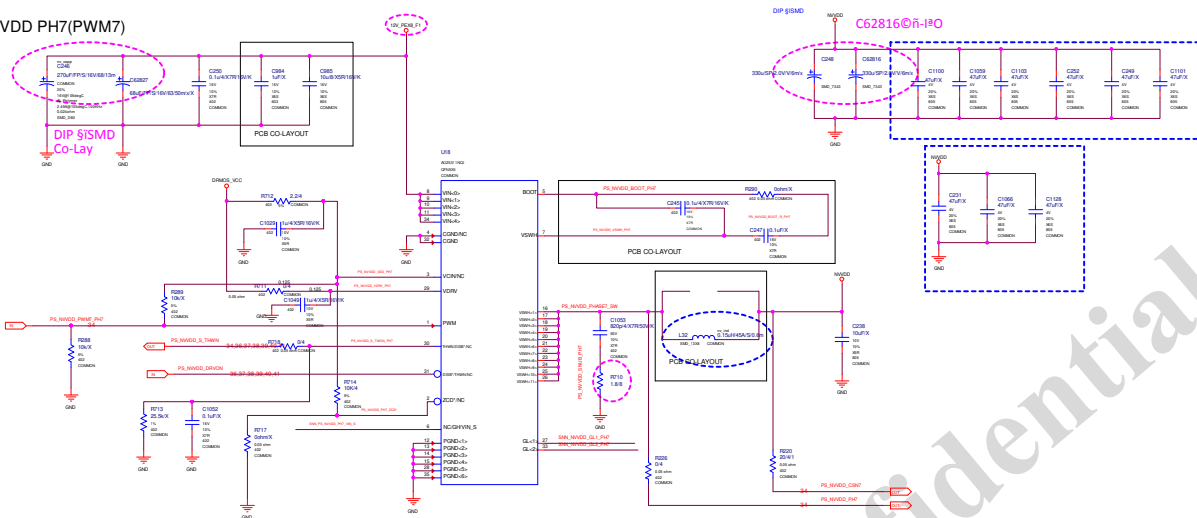
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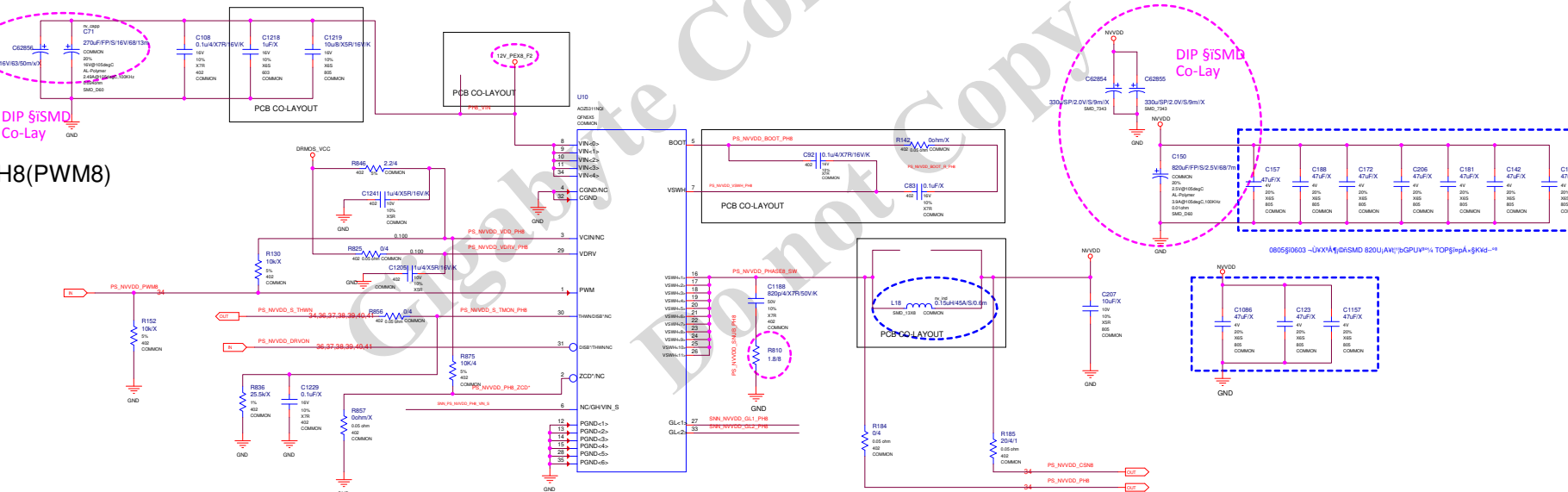
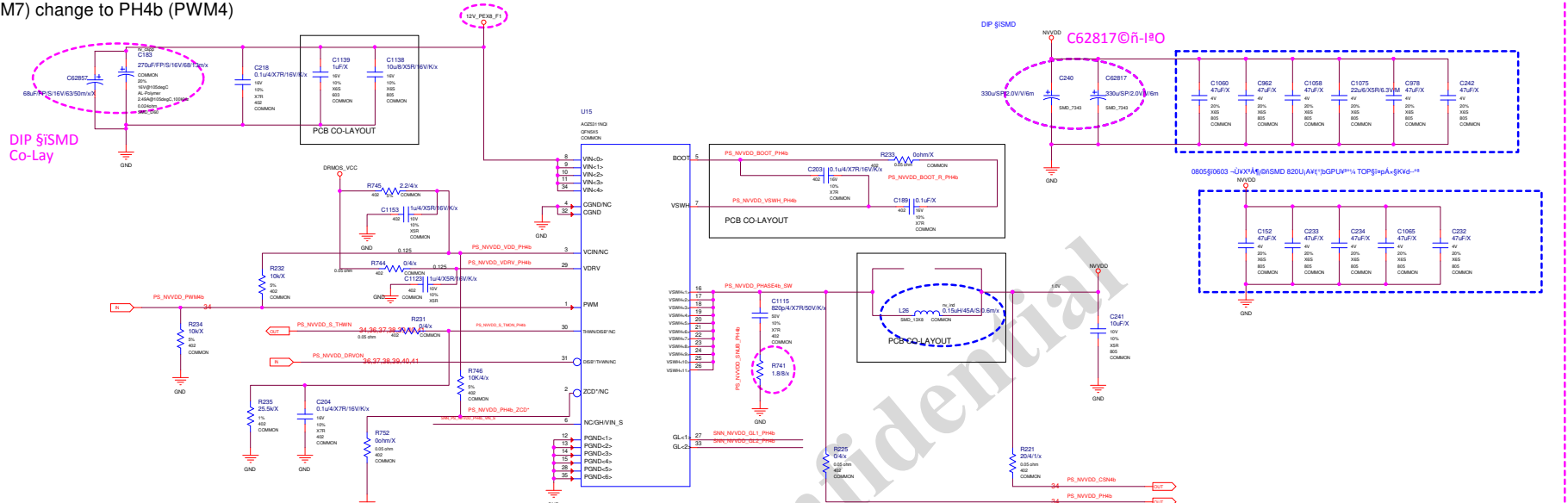
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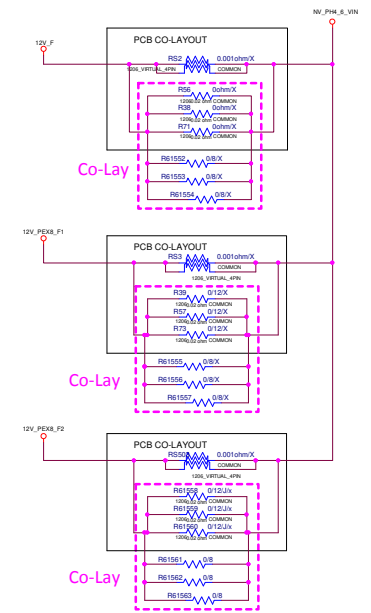
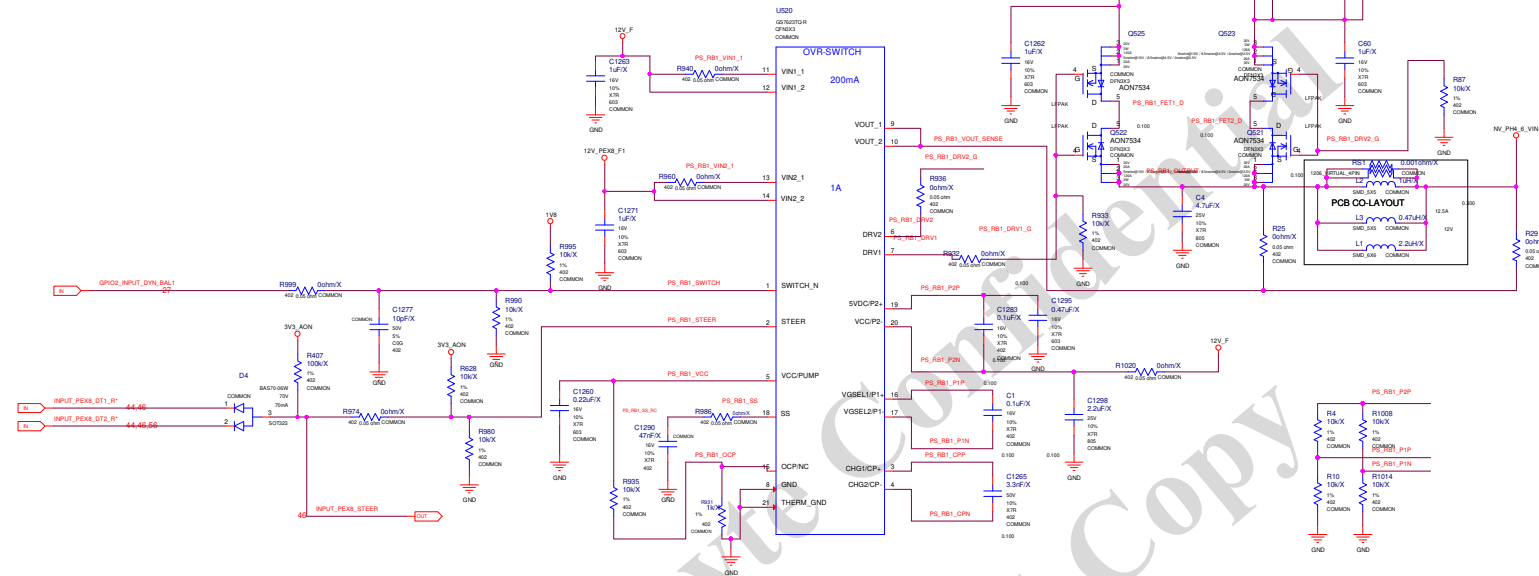
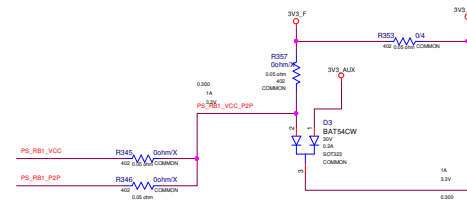


NVVDD PH6b (PWM6b)





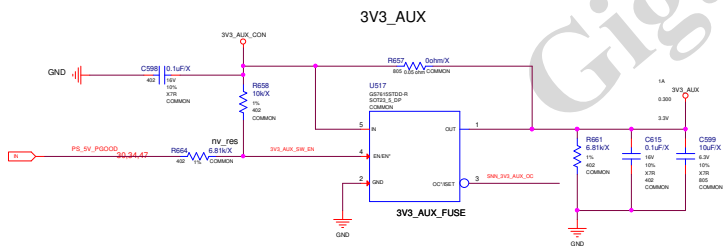
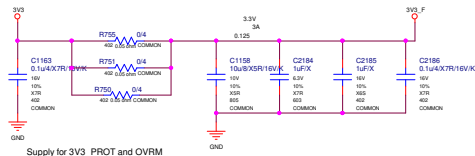
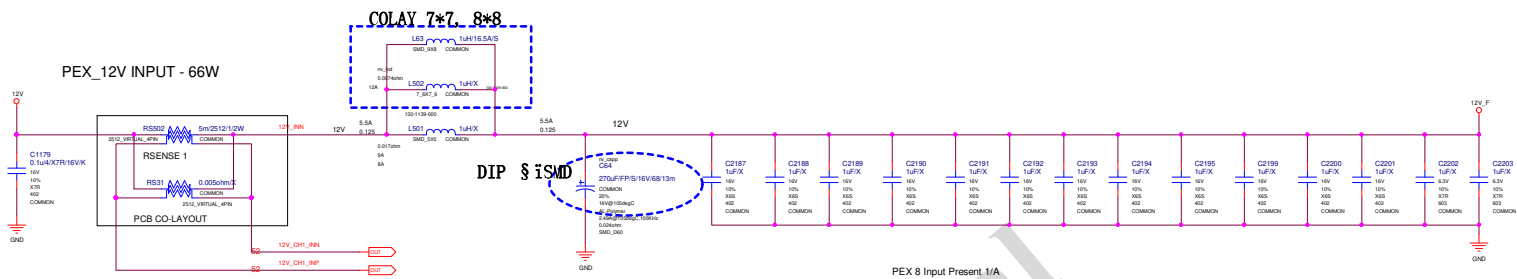




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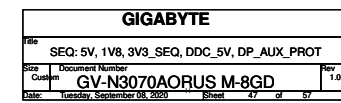


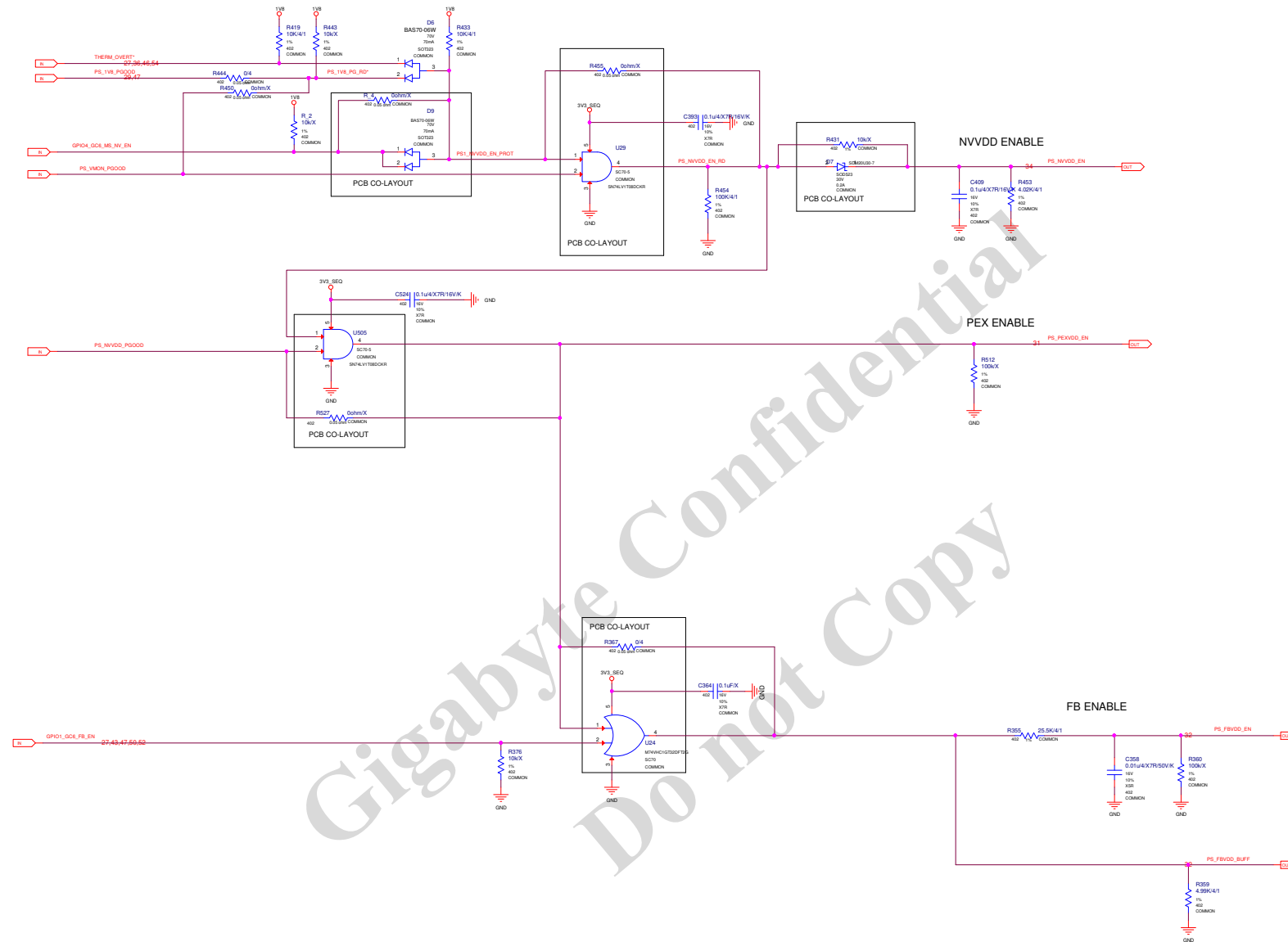


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ASSEMBLY
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PS: PEX_12V, PEX_3V3 AND A3V3_AUX

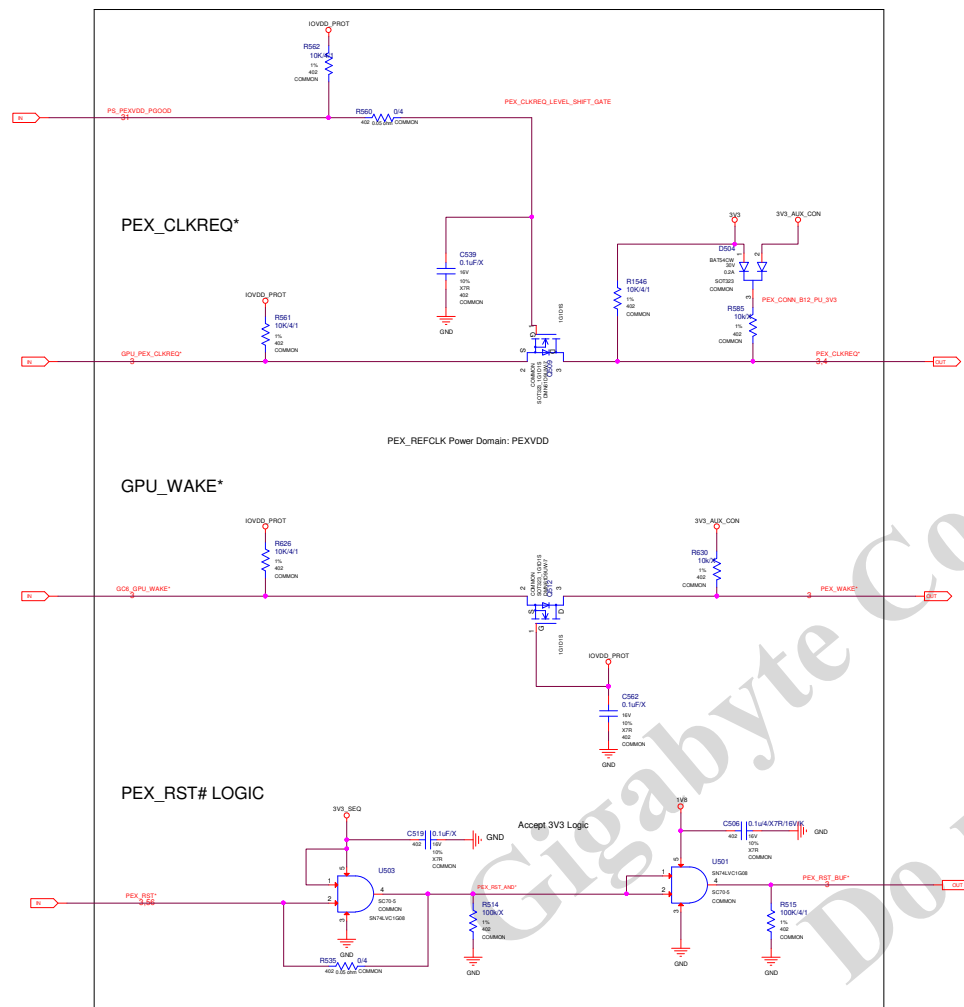




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PAGE DETAIL	SEQ: NVVDD, PEX, FBVDDQ ENABLE

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Size	Document Number		Rev
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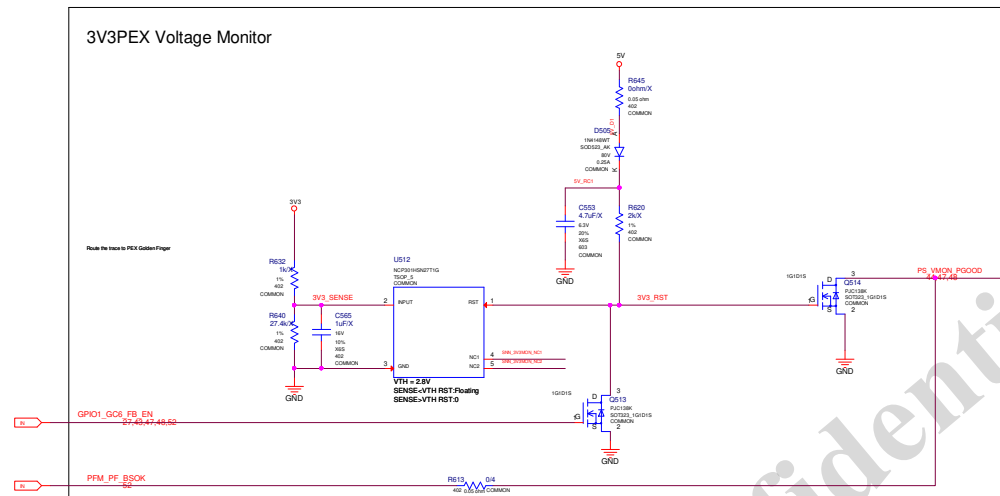
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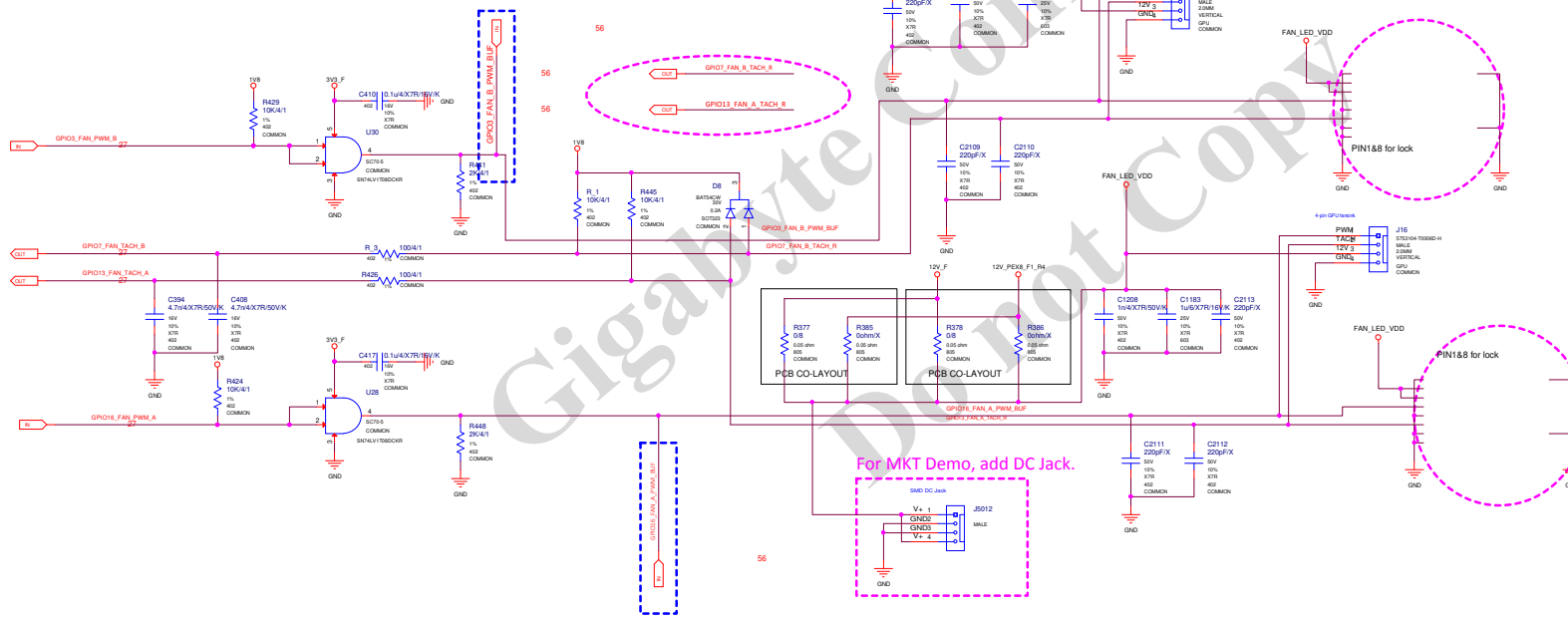
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Size	Document Number	GV-N3070AORUS M-8GD	
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Date	Tuesday, September 28, 2022	Page	49 of 57



BOM Configuration

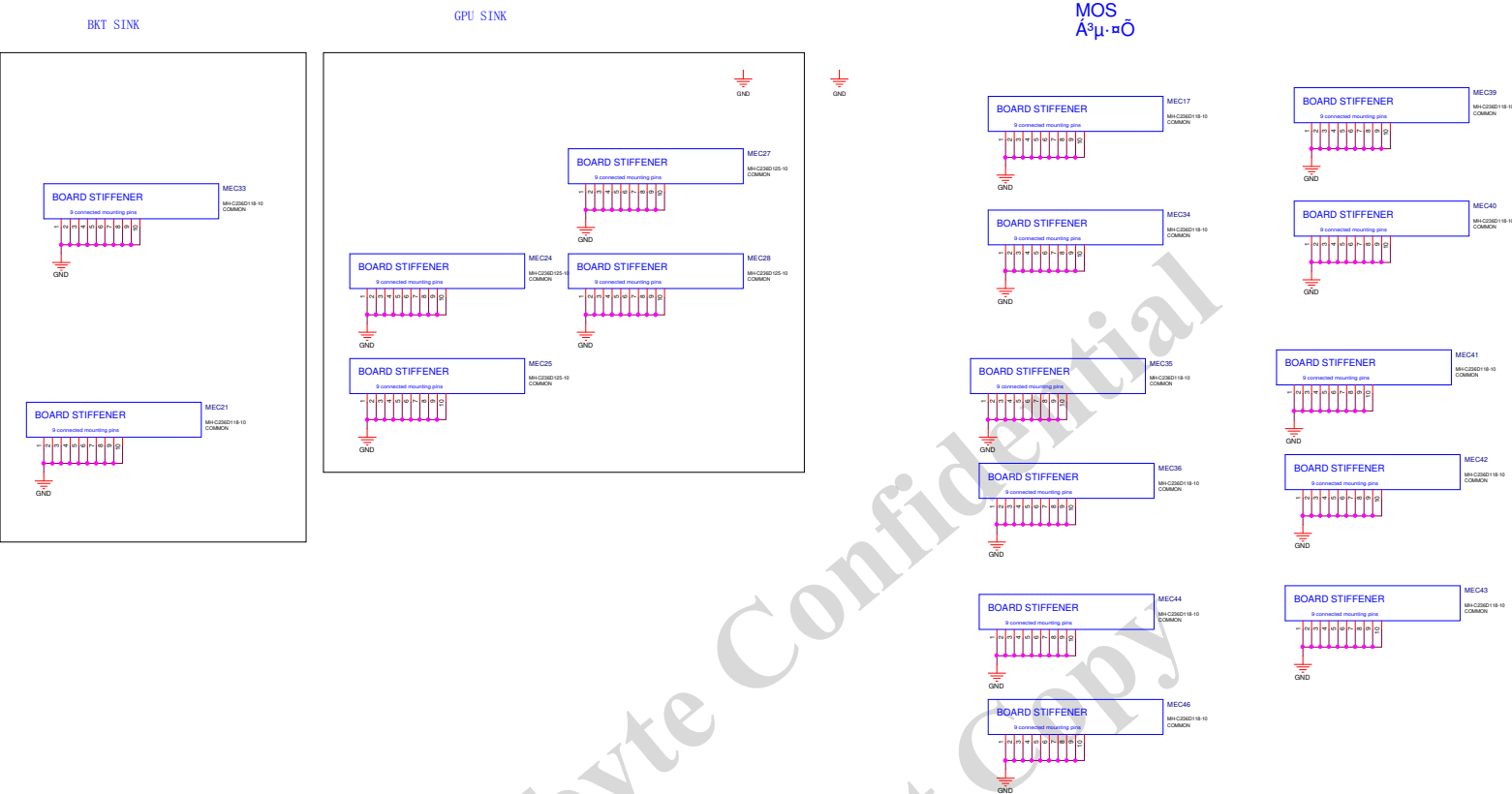
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Use Pre-Filter	Pre-Filter	Pre-Filter	Pre-Filter
NO Pre-Filter	Voltage_Monitor	Voltage_Monitor	N/A

Signal	Direction	Function
3V3	INPUT	Sense the 3V3 Voltage from PCIE golden finger
12V	INPUT	Sense the 12V Voltage from PCIE golden finger
PS_VMON_PGOOD	OPEN-DRAIN	Floating(t _H) once both 3V3 and 12V reach V _{th}
GC6_FB_EN	INPUT	Indicator for RTD3/GC6 resistance, Use to Mask the VMON_PGOOD
PS_PF_SKIP	INPUT	From INA3221(VPU) or Pre-filter(SKIP)
PS_PF_BSKK	INPUT	From INA3221(PV) or Pre-filter(BS_OK)



For MKT Demo, add DC Jack.

GIGABYTE			
Title FAN&LED			
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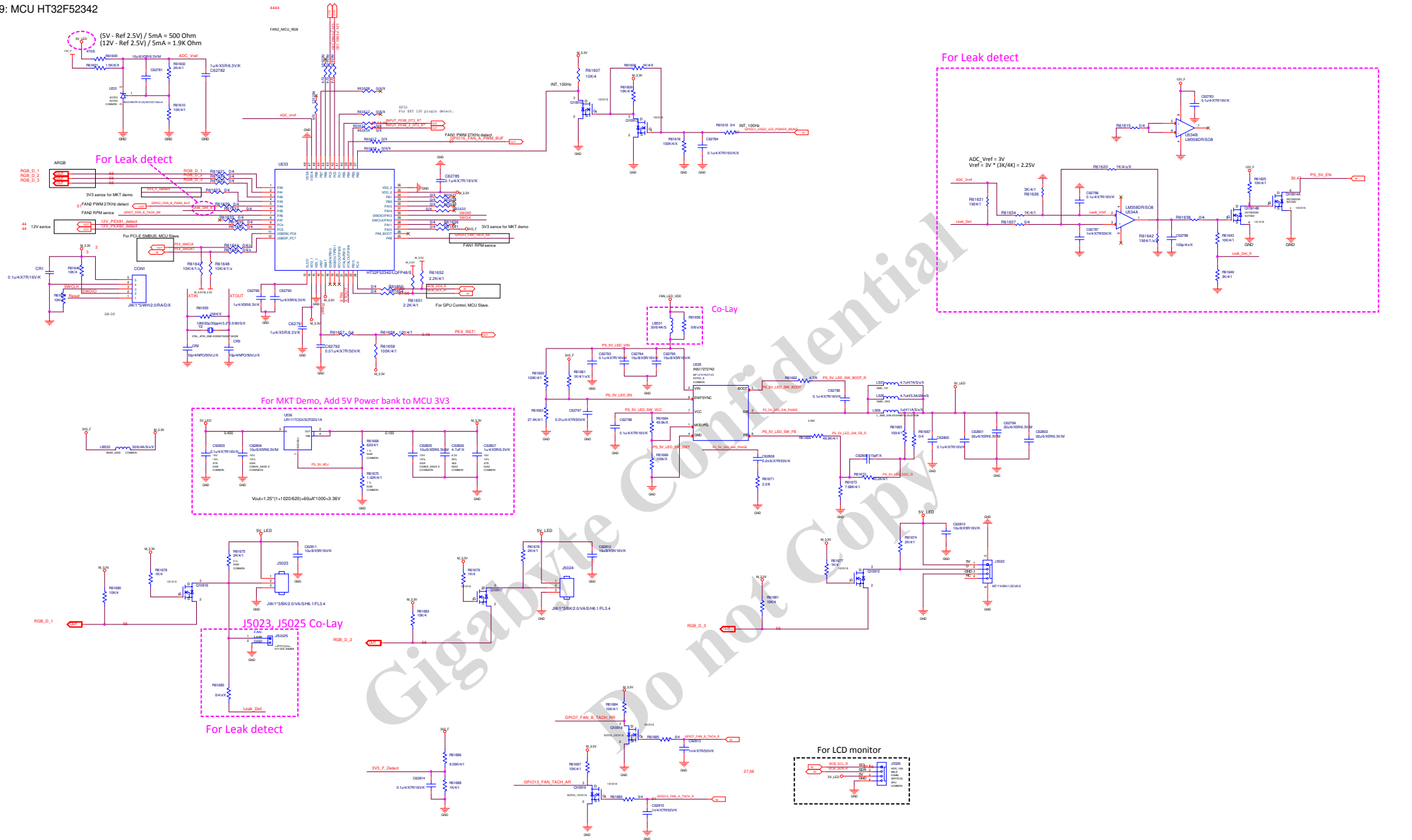
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