

PG413 A00

GP104 - 8GB GDDR5X, 256b, 256Mx32
Tall DVI-D + DP + DP + DP/HDMI + DP

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GTX1080 Pg413-V336_20.pdf
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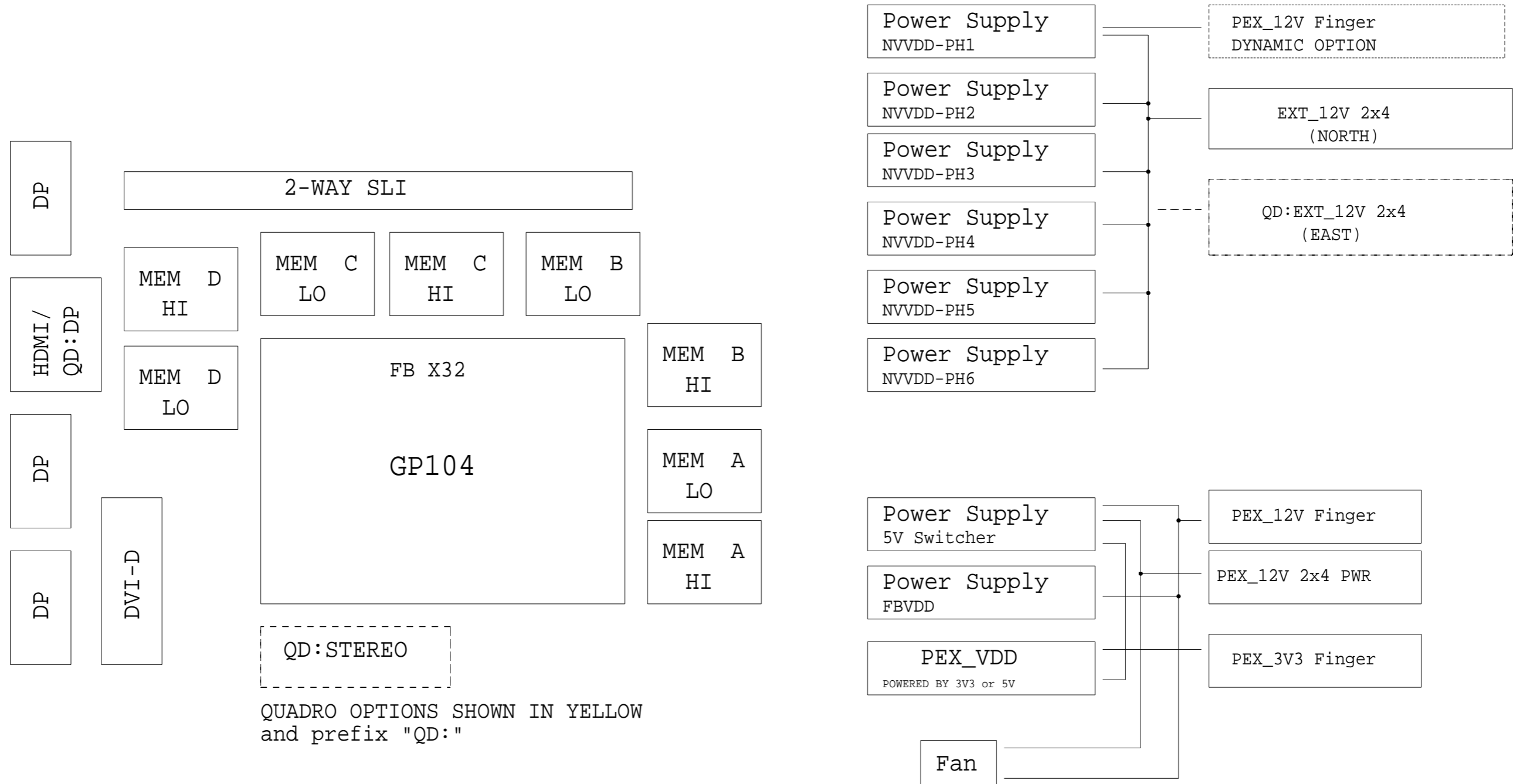
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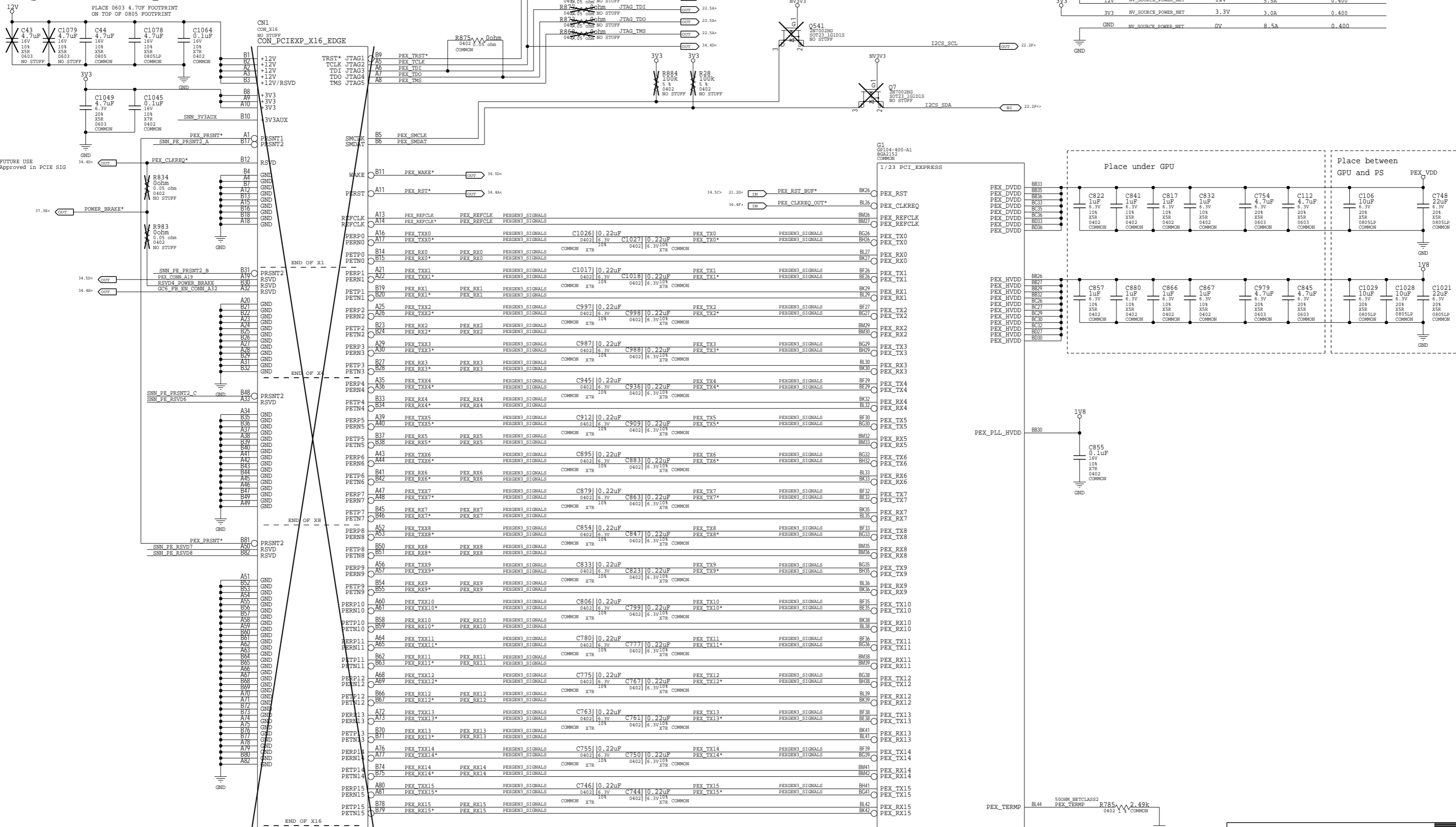
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QUADRO OPTIONS SHOWN IN YELLOW
and prefix "QD:"

Page3: PCI Express

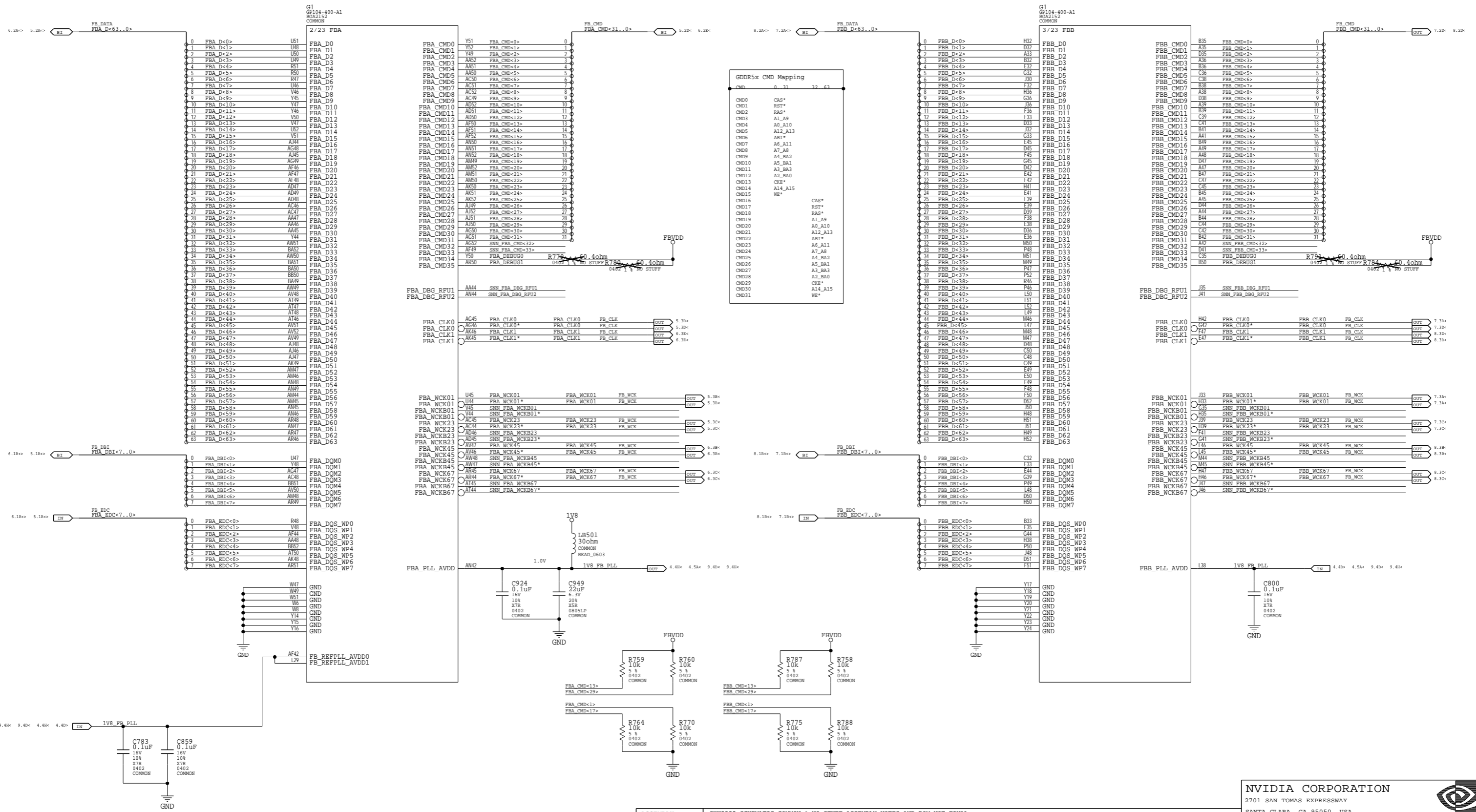


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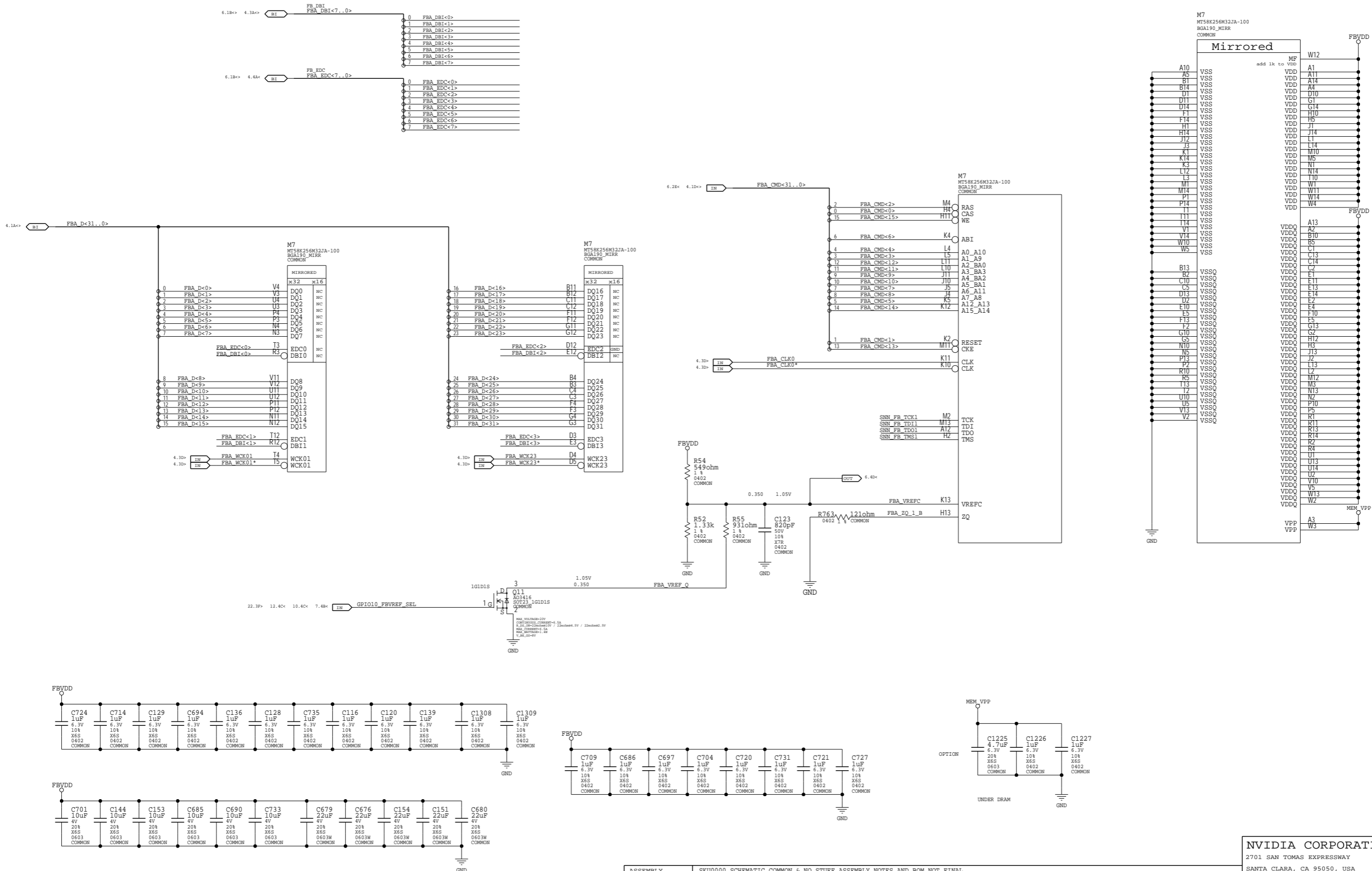
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 PAGE DETAIL MEMORY: GPU Partition A/B

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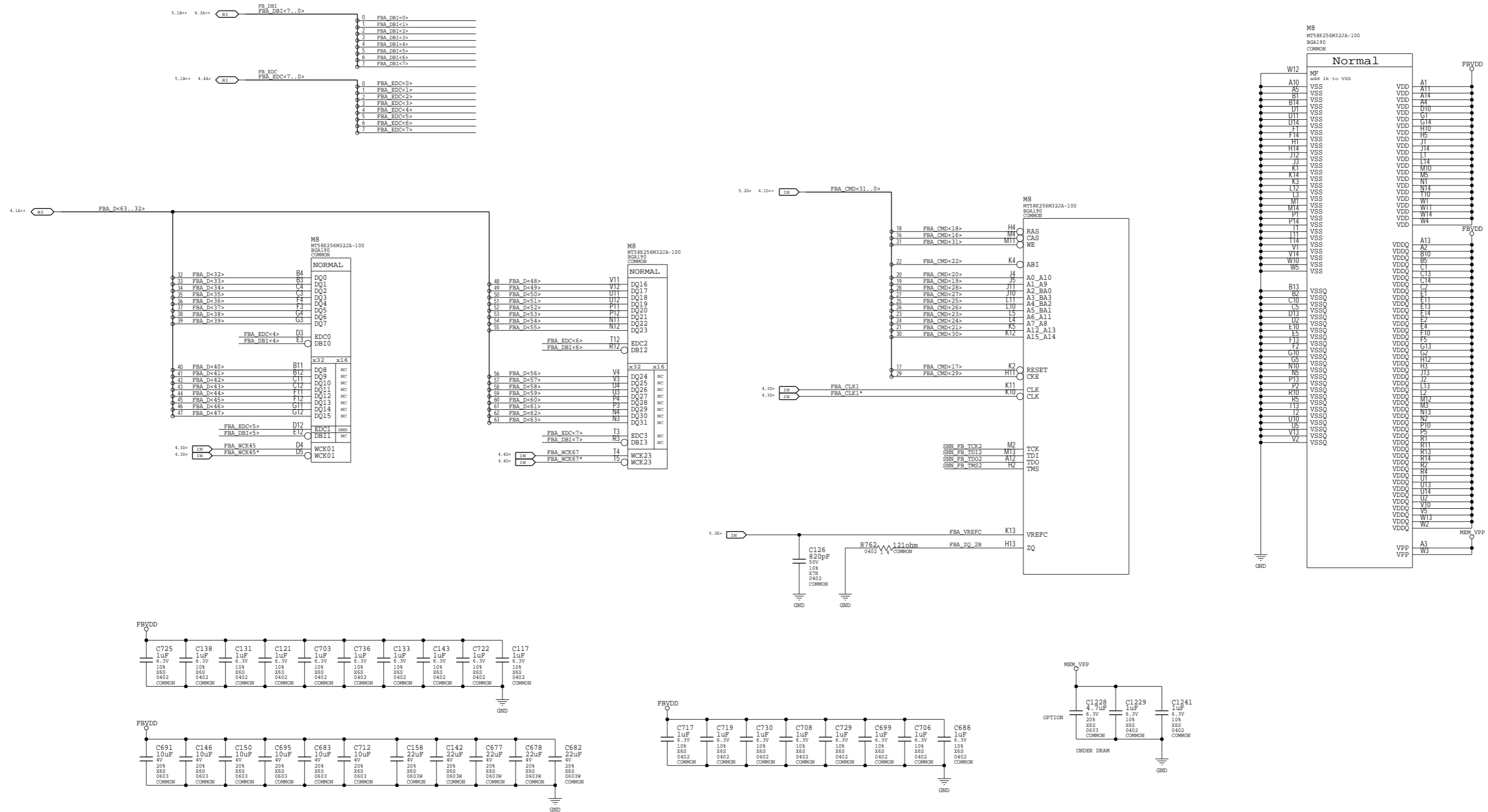


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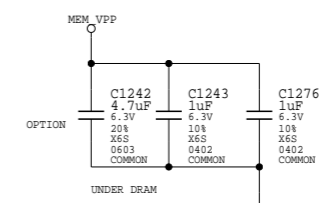
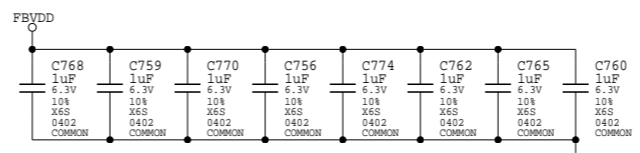
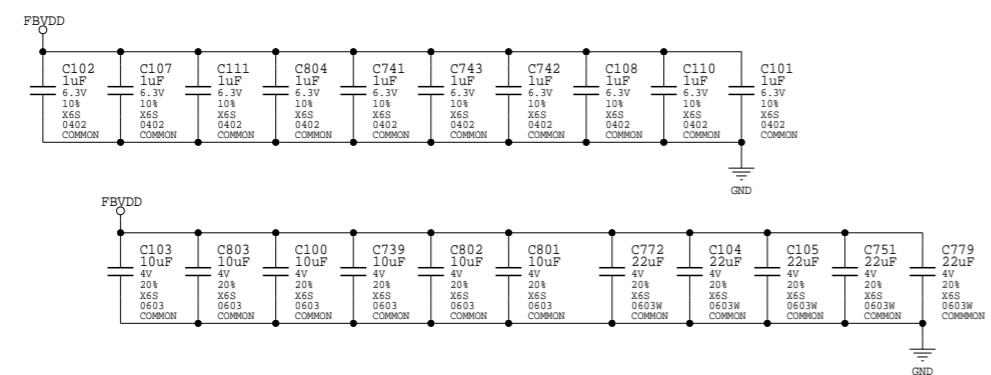
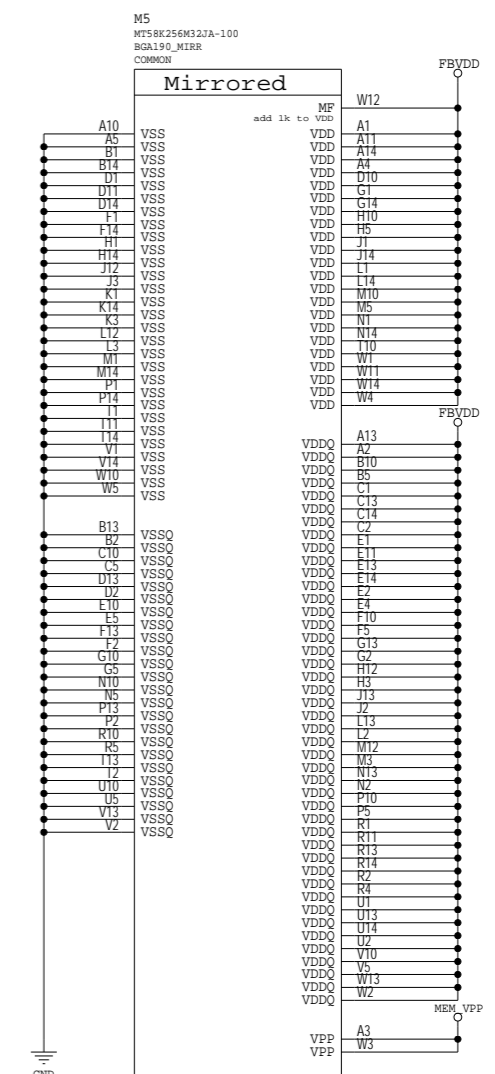
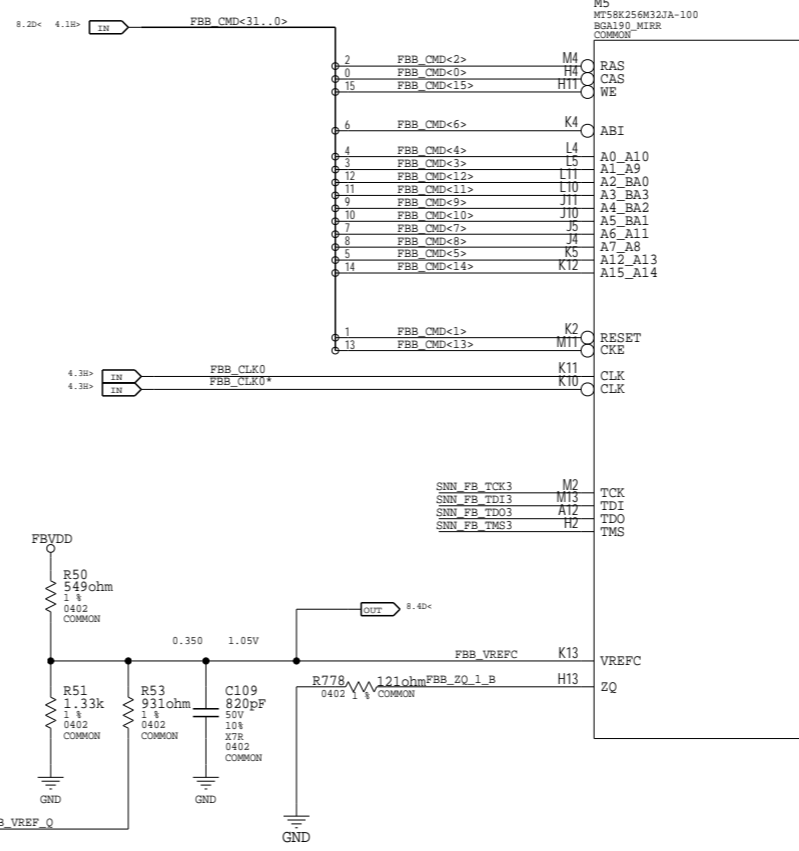
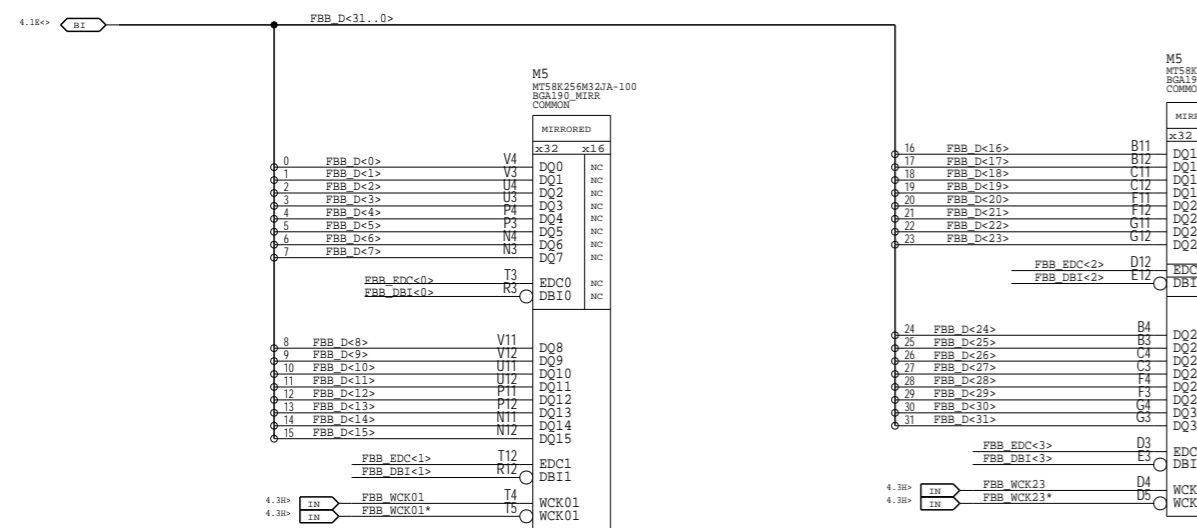


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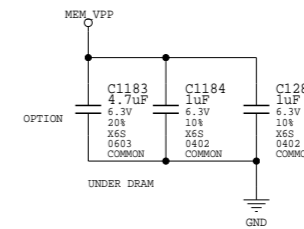
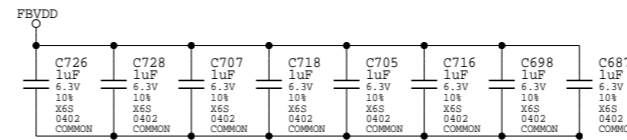
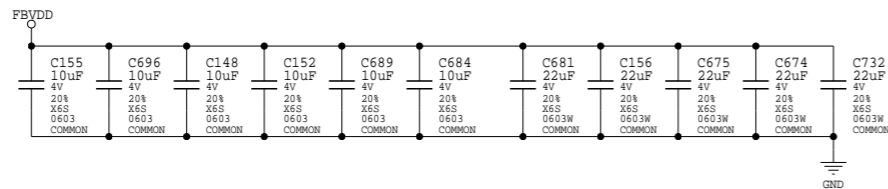
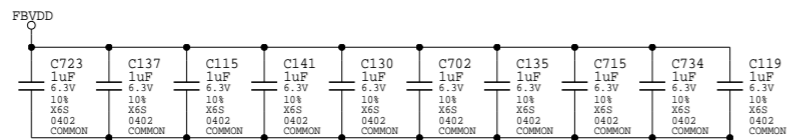
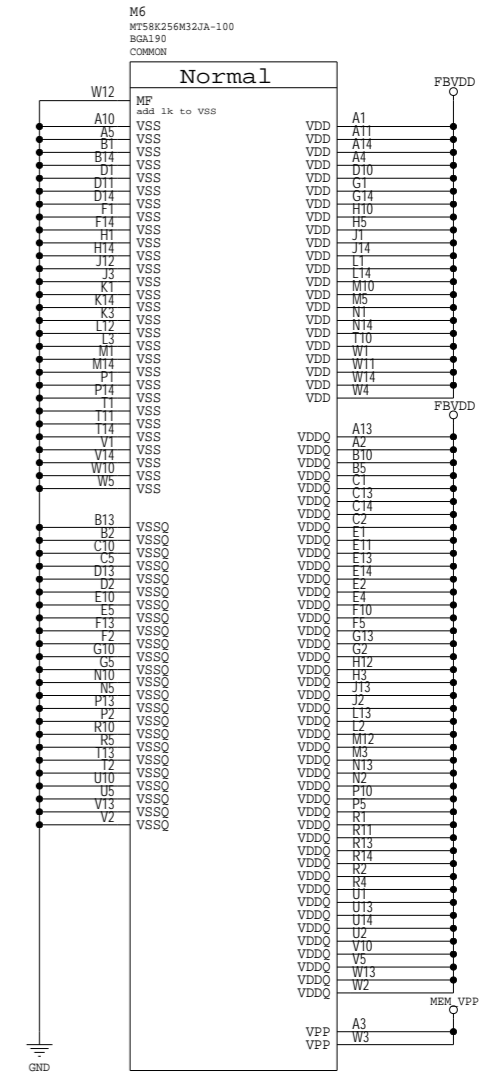
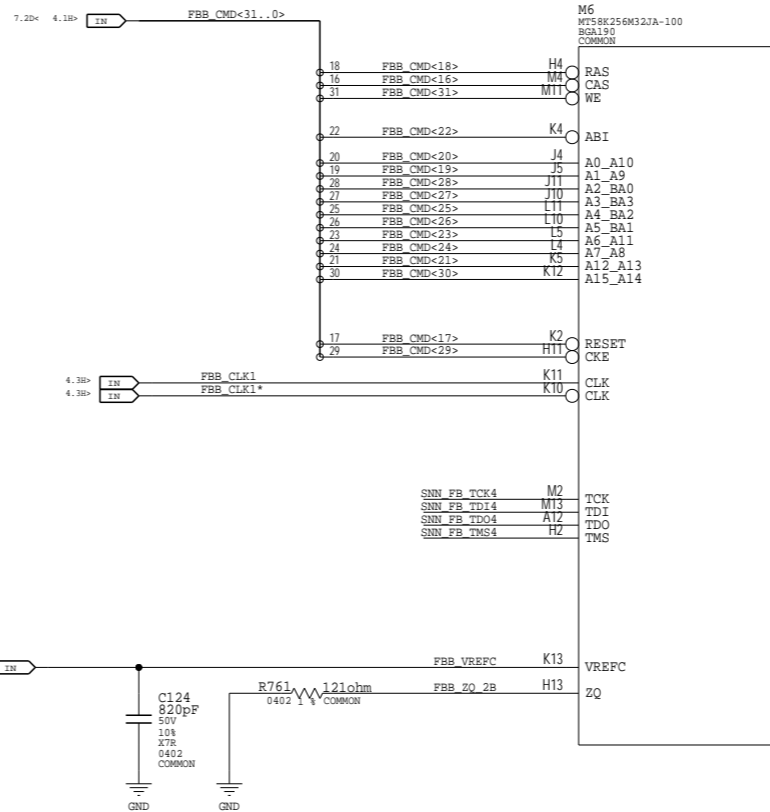
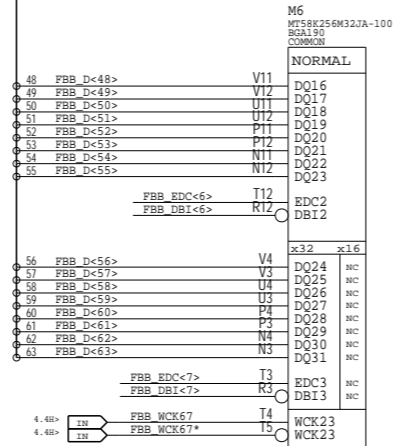
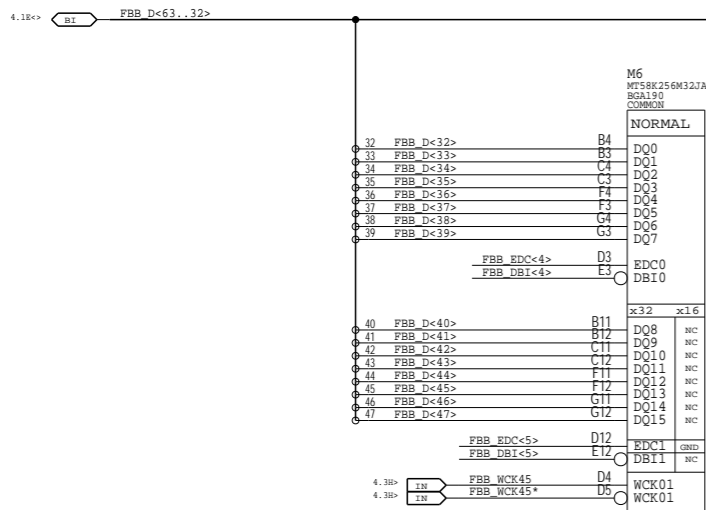
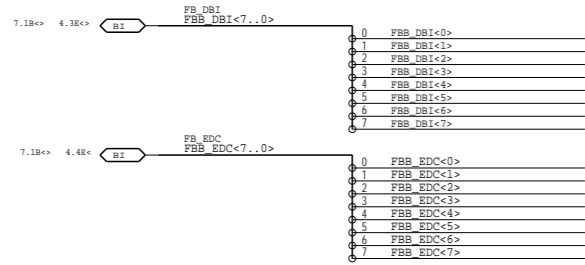


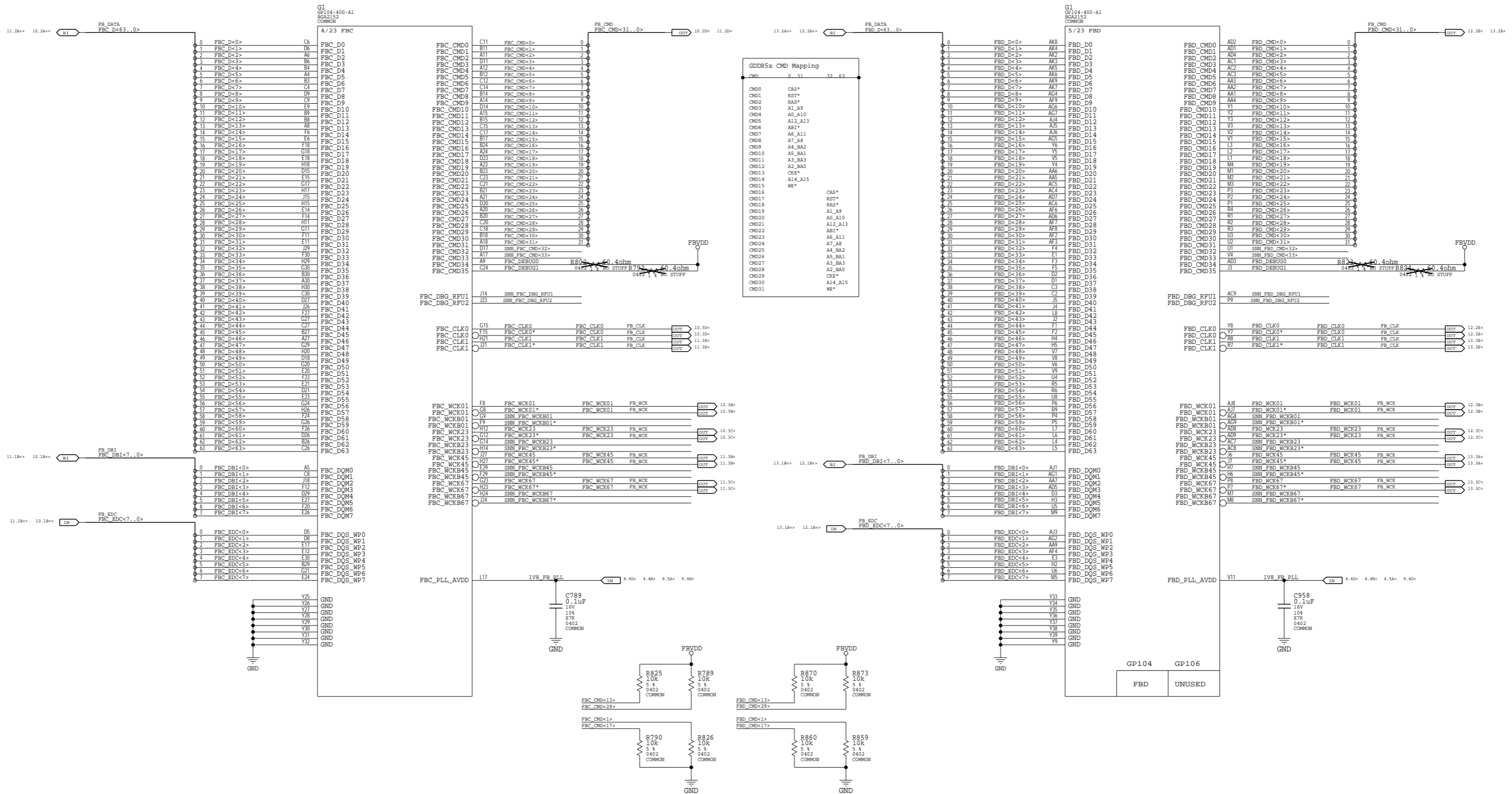
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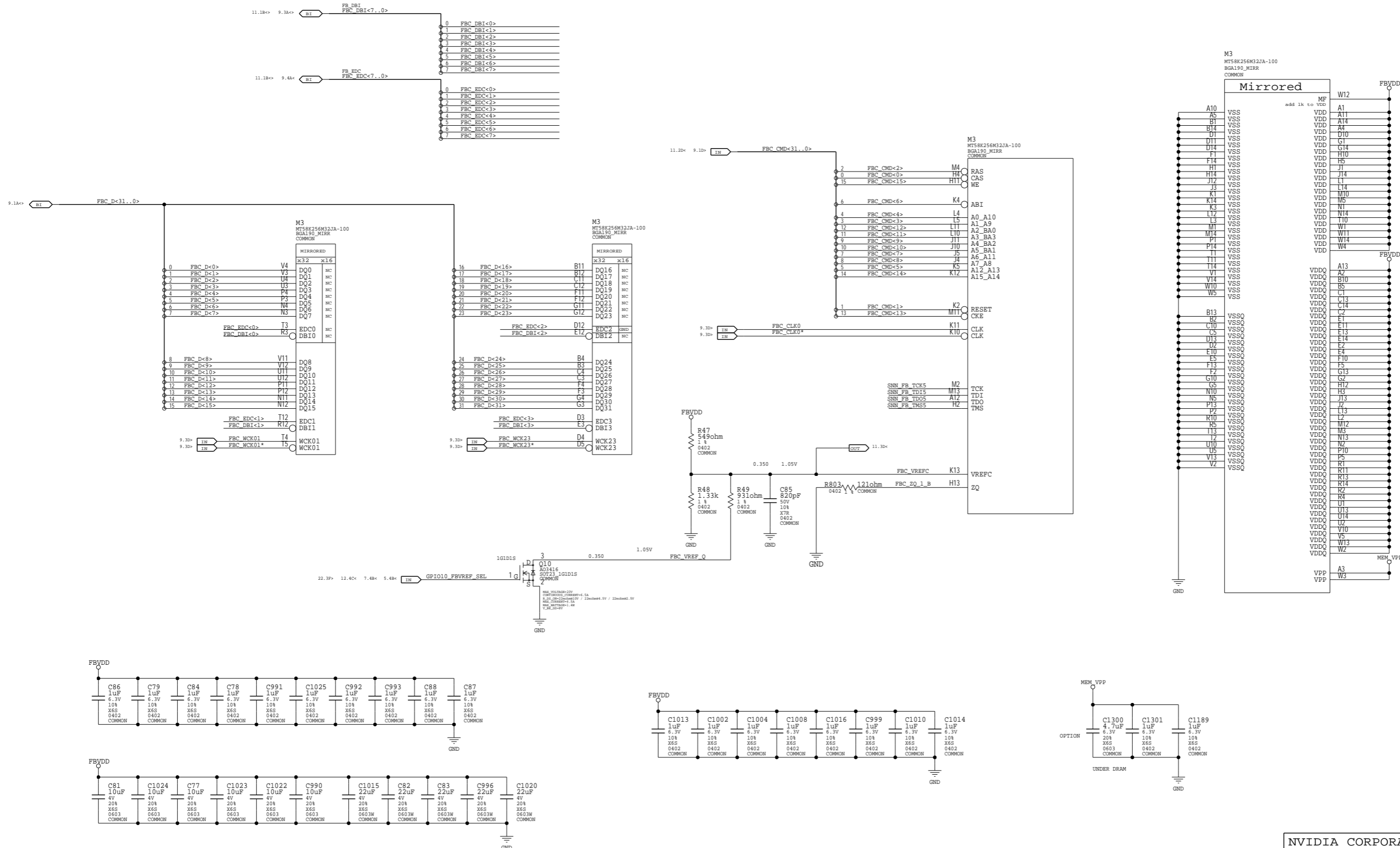
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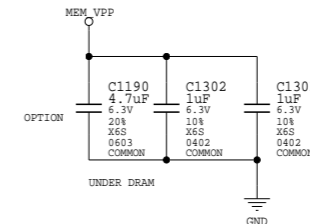
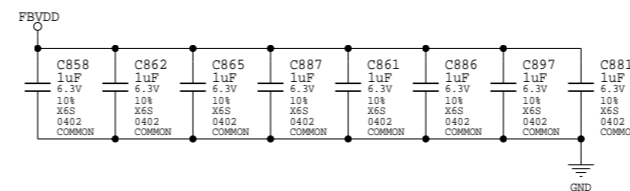
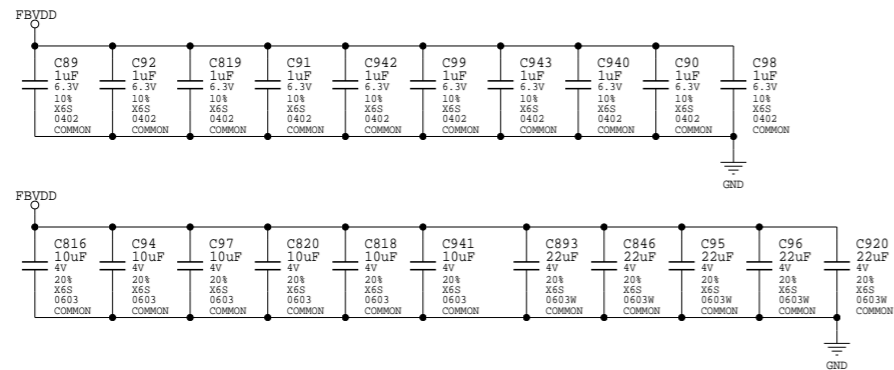
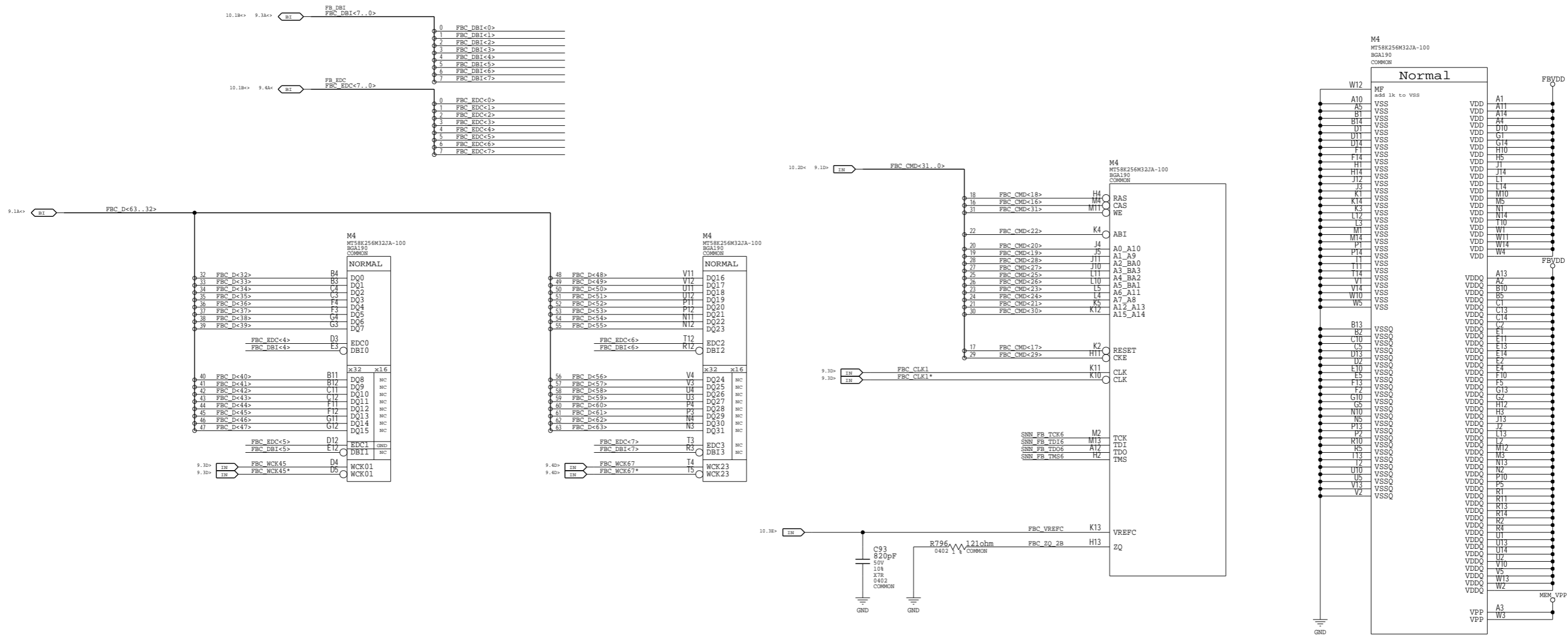
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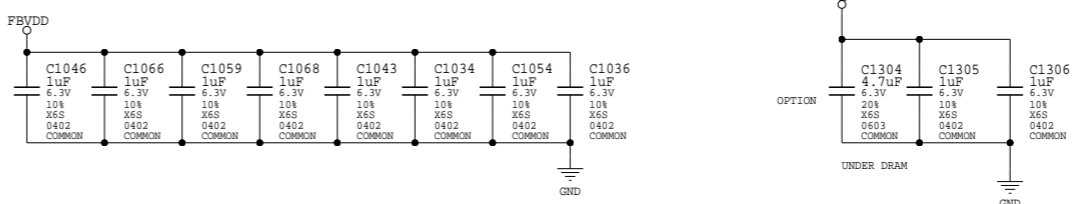
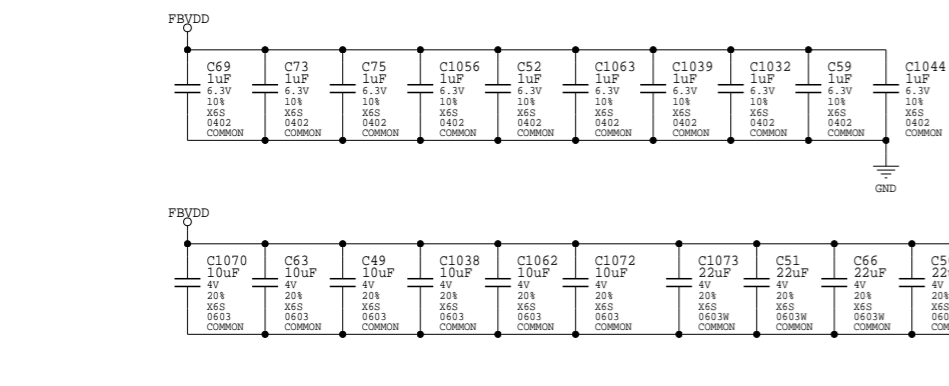
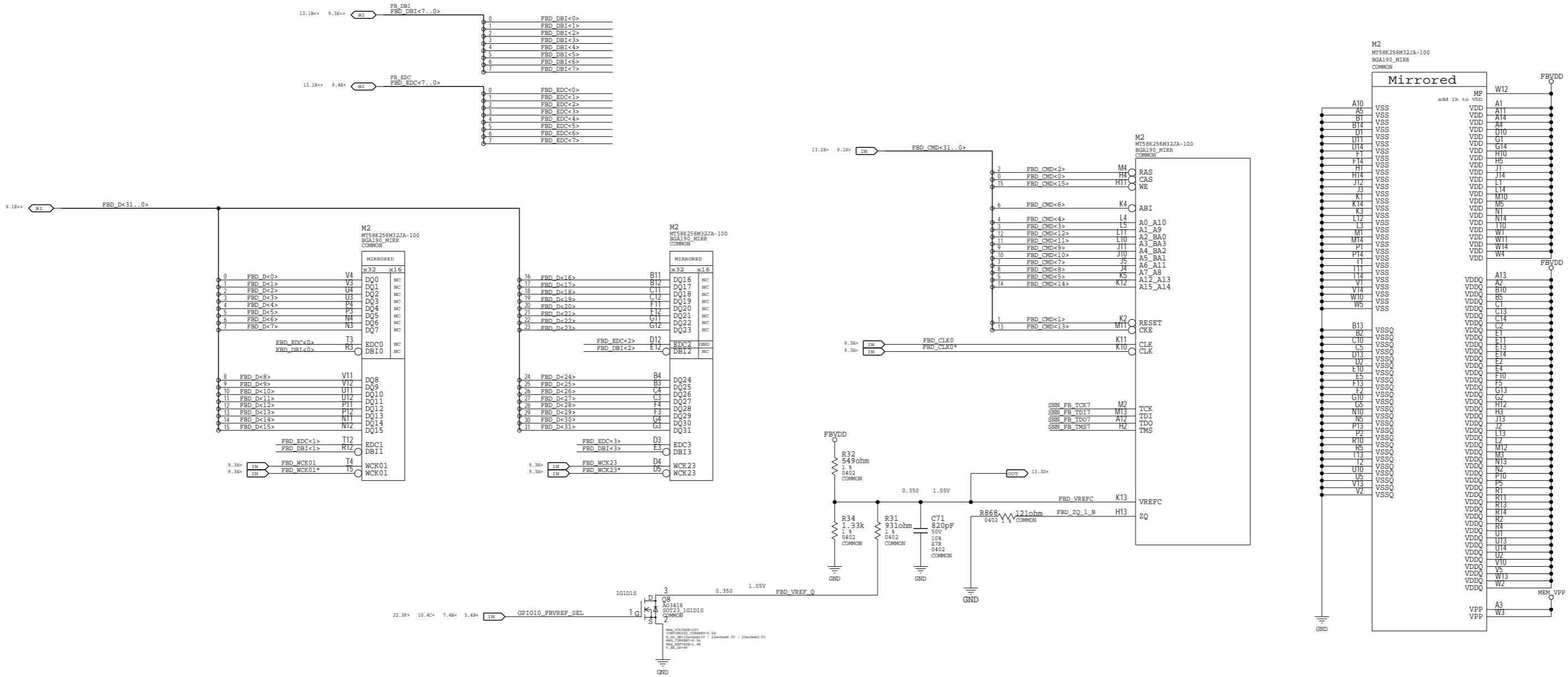


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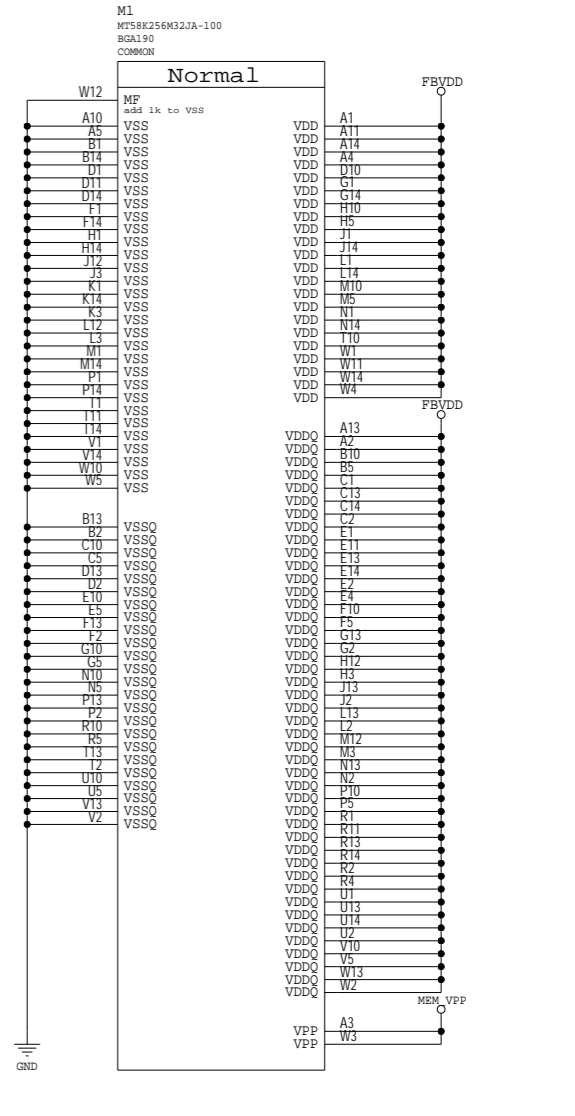
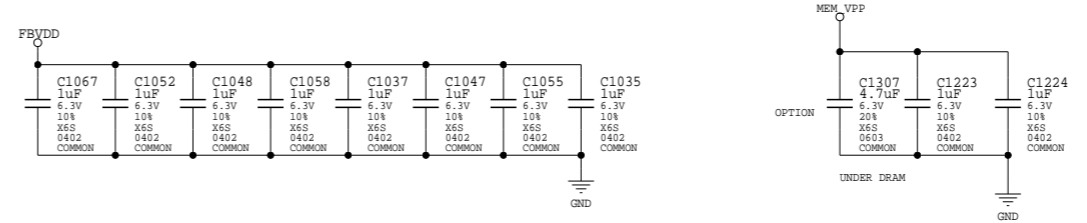
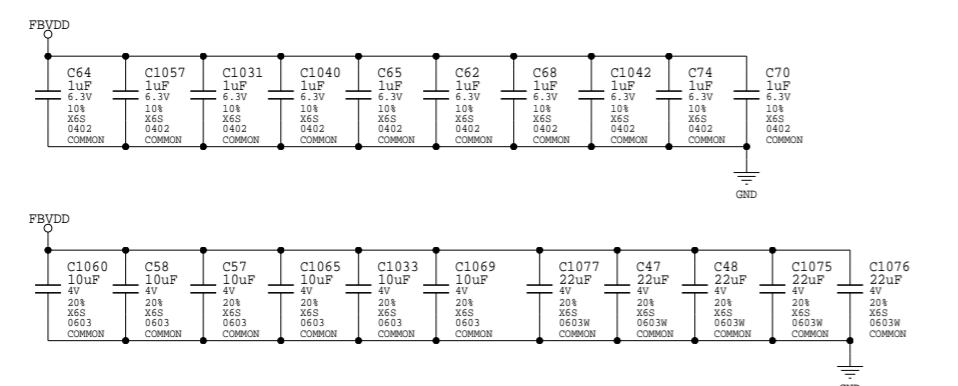
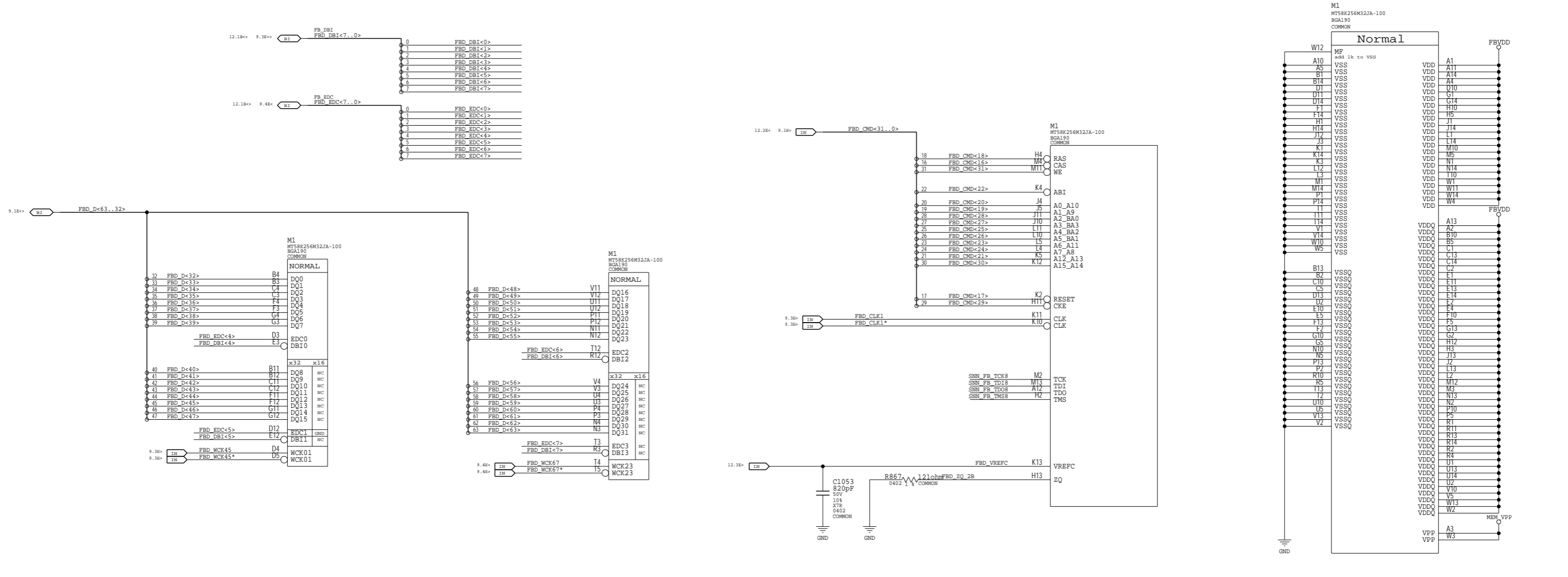
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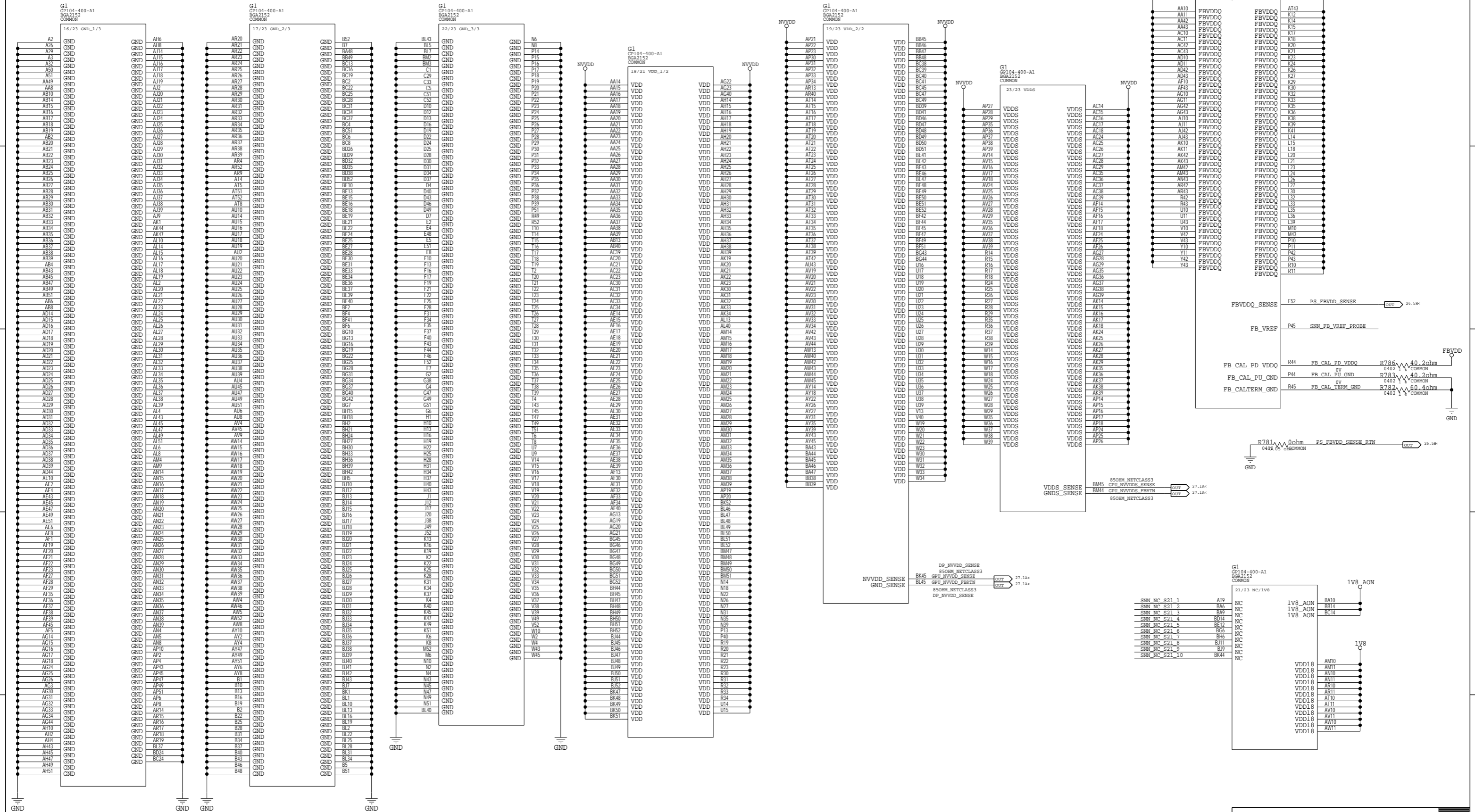
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Page14: GPU PWR and GND

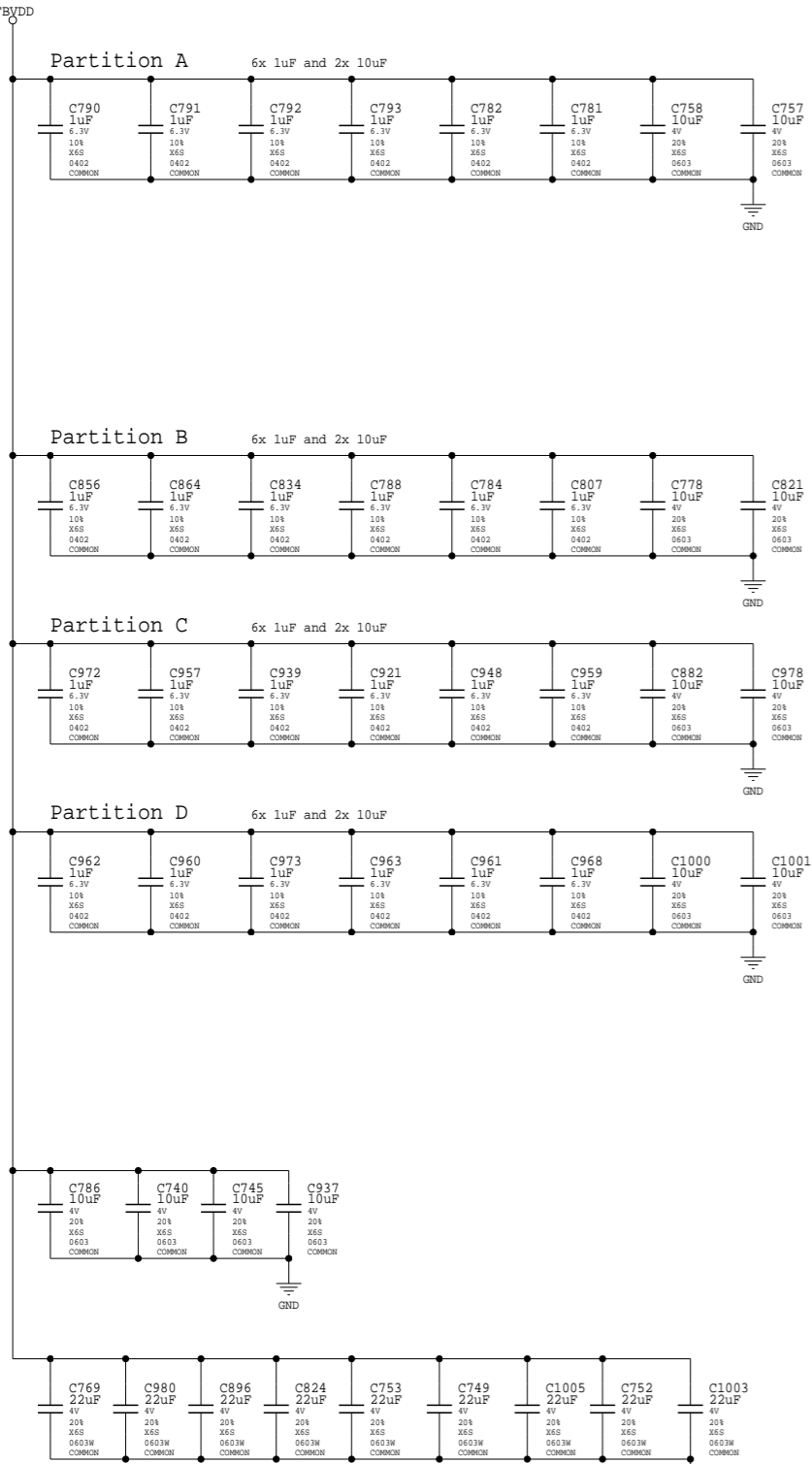


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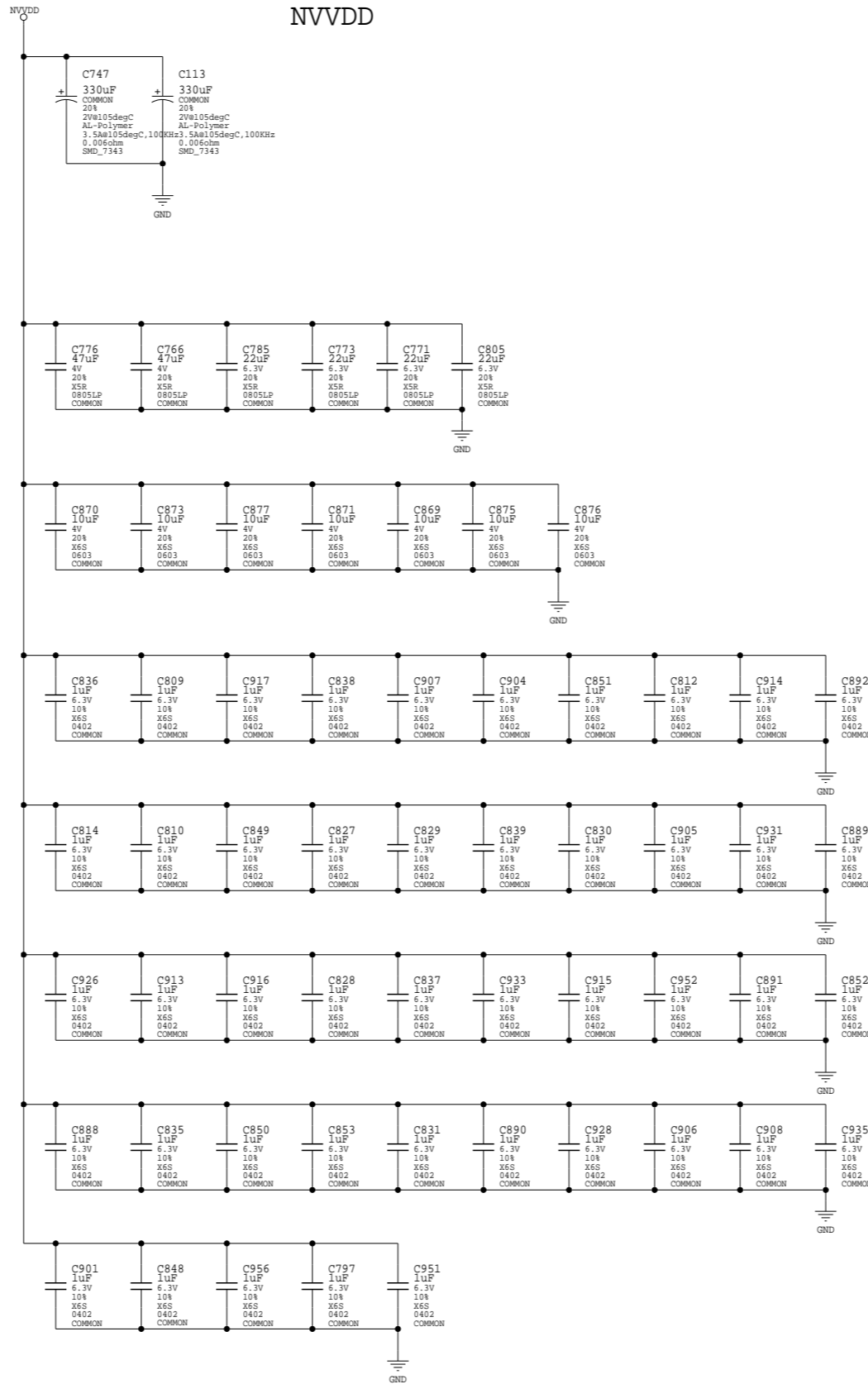
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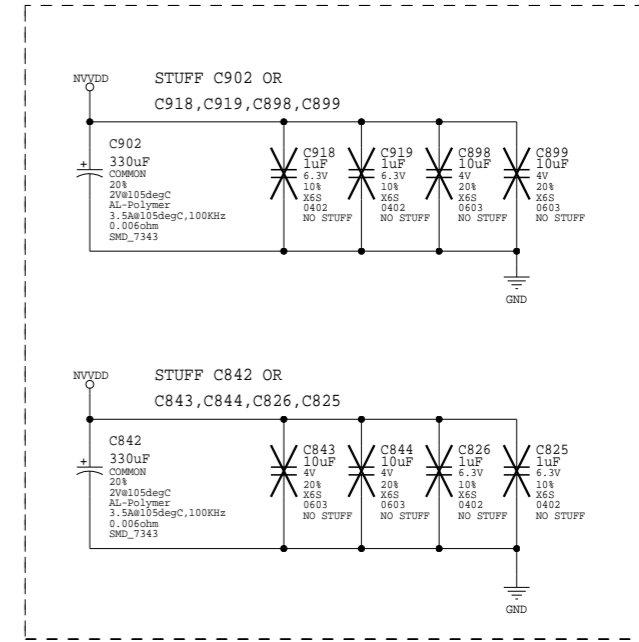
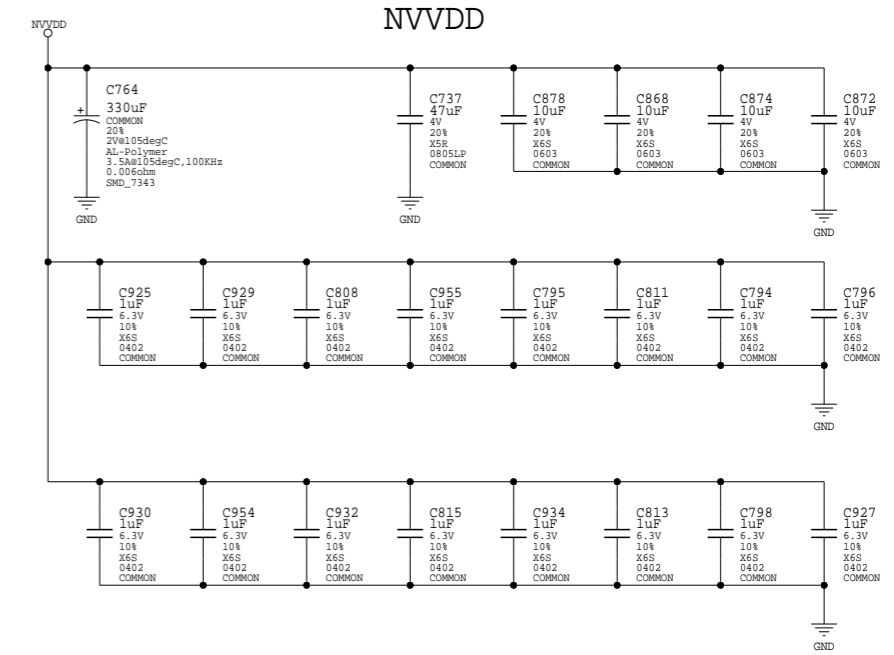
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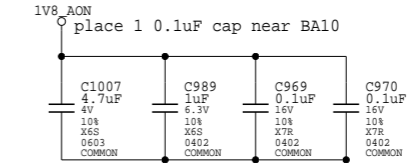
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NVVDD

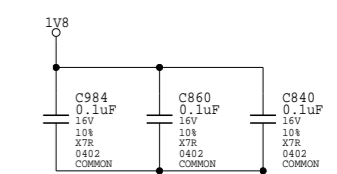


1V8_AON



place 1 0.1uF cap for BB14 and BC14 to share

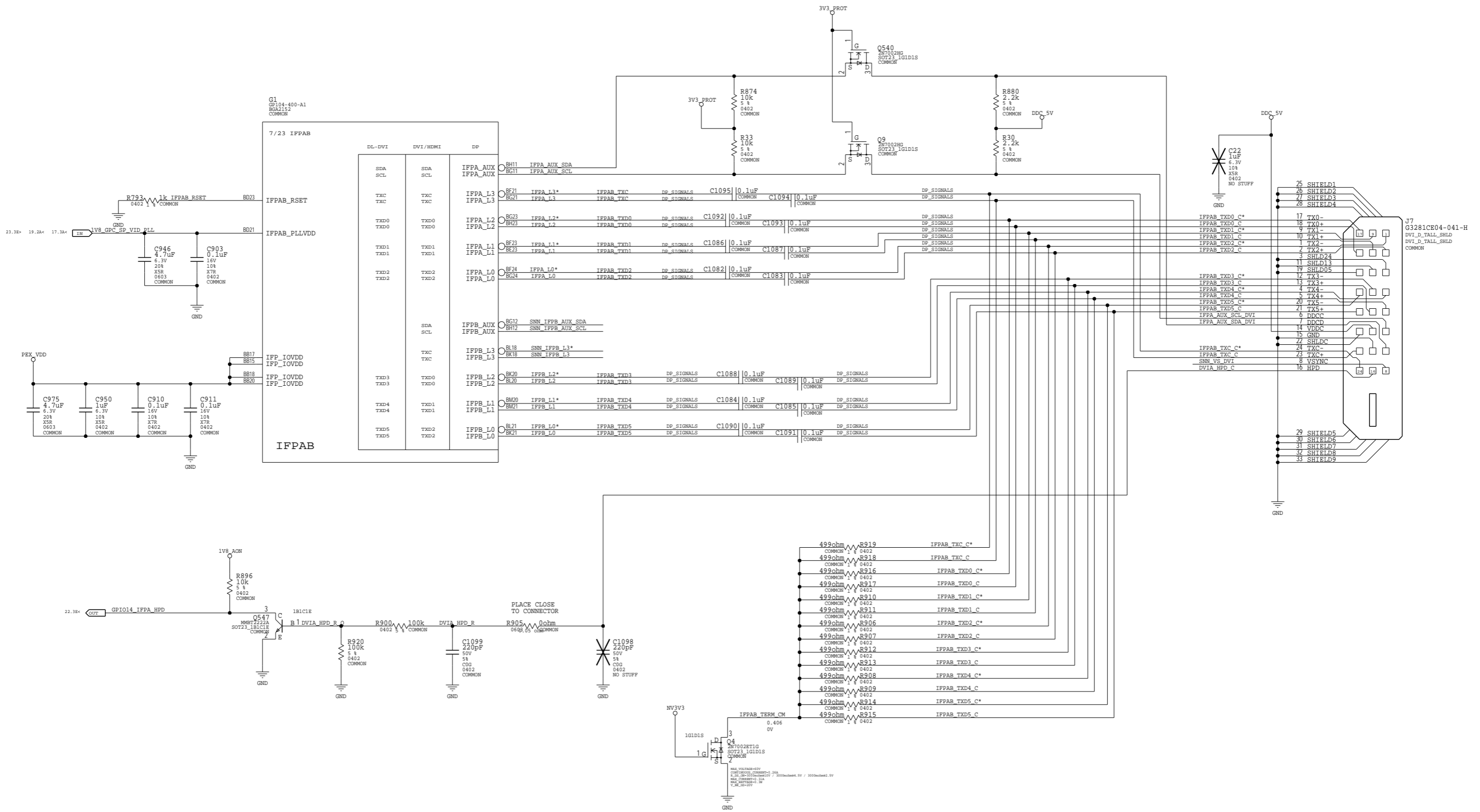
VDD18



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PAGE DETAIL	GPU Decoupling

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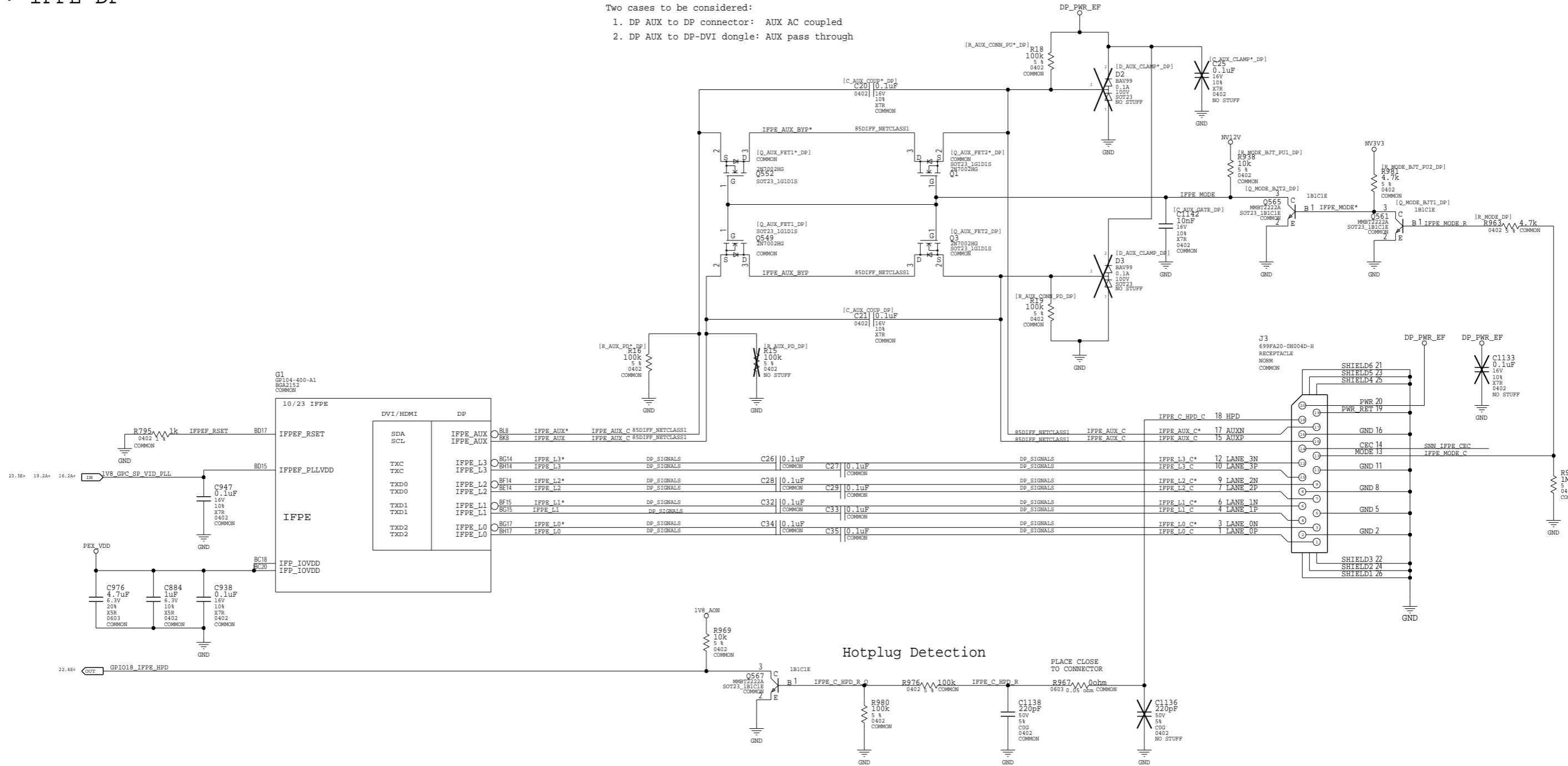


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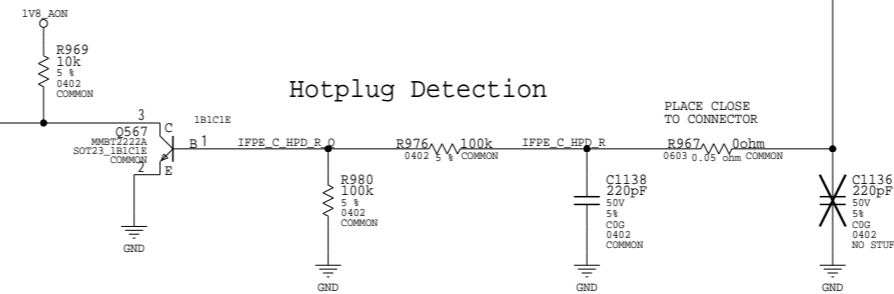
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PAGE DETAIL	IFPAB DVI-D-DL

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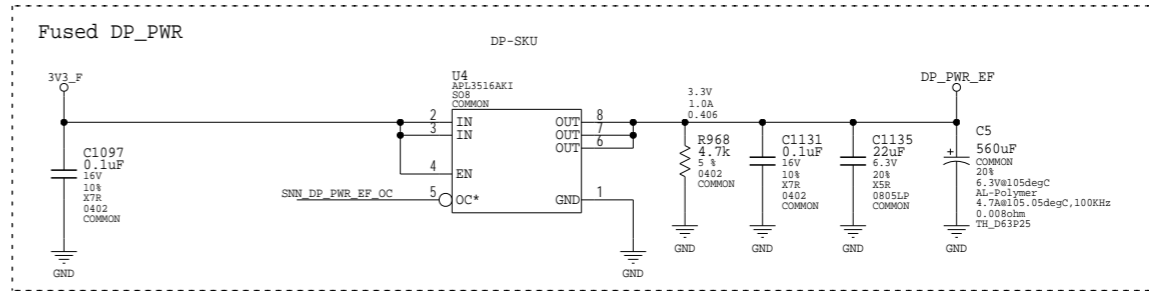
- Two cases to be considered:
1. DP AUX to DP connector: AUX AC coupled
 2. DP AUX to DP-DVI dongle: AUX pass through



Hotplug Detection



Fused DP_PWR



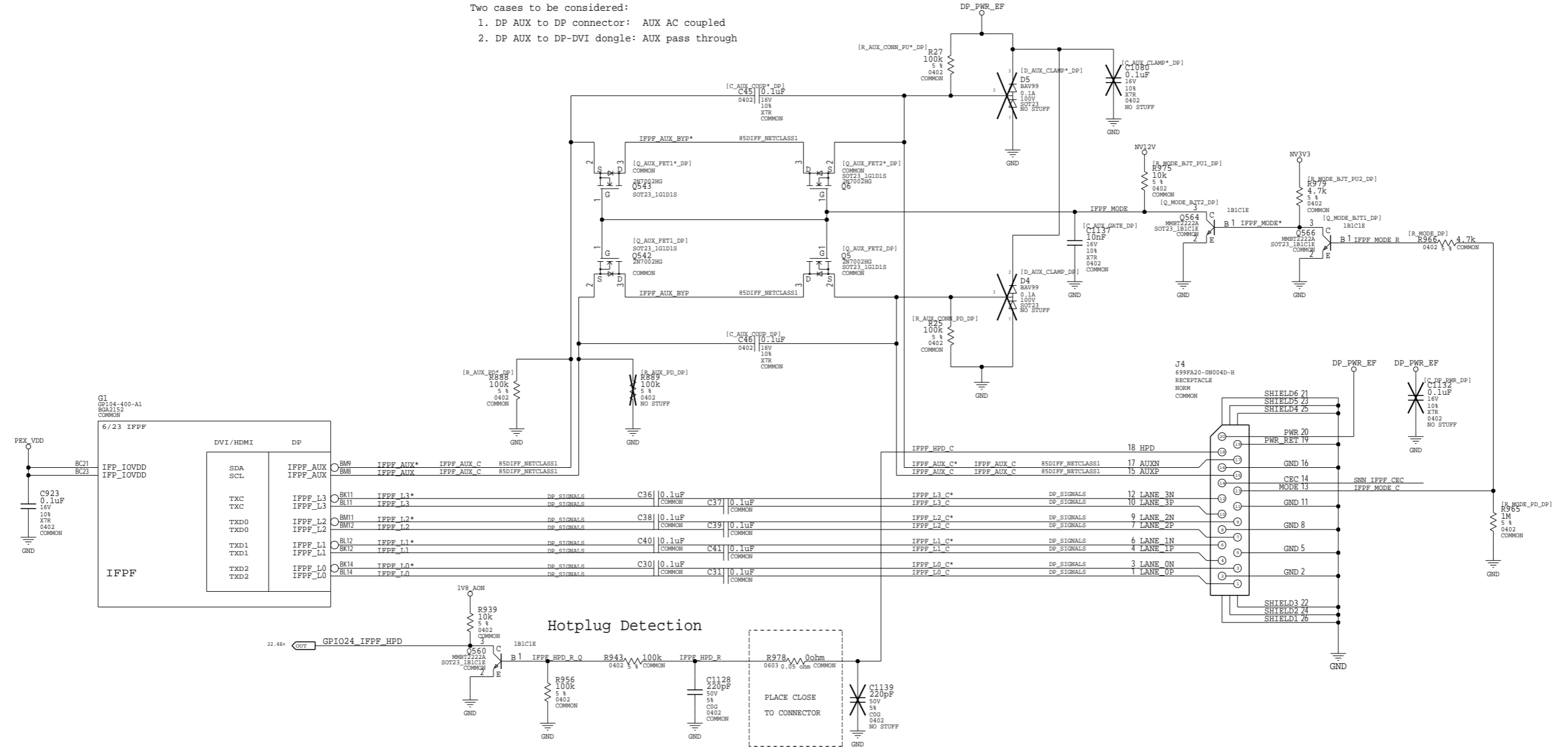
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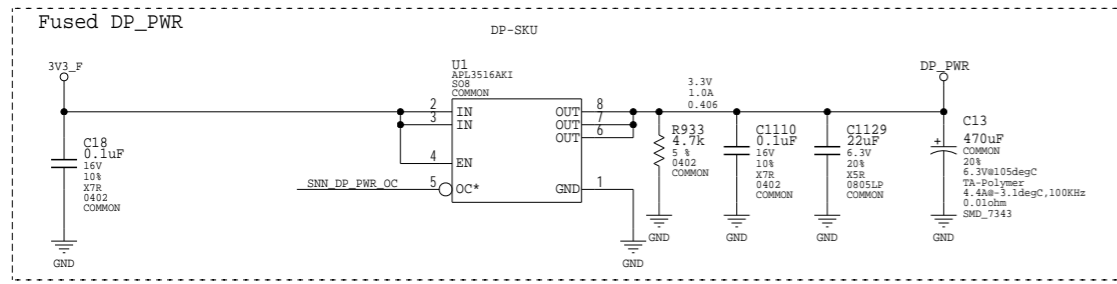
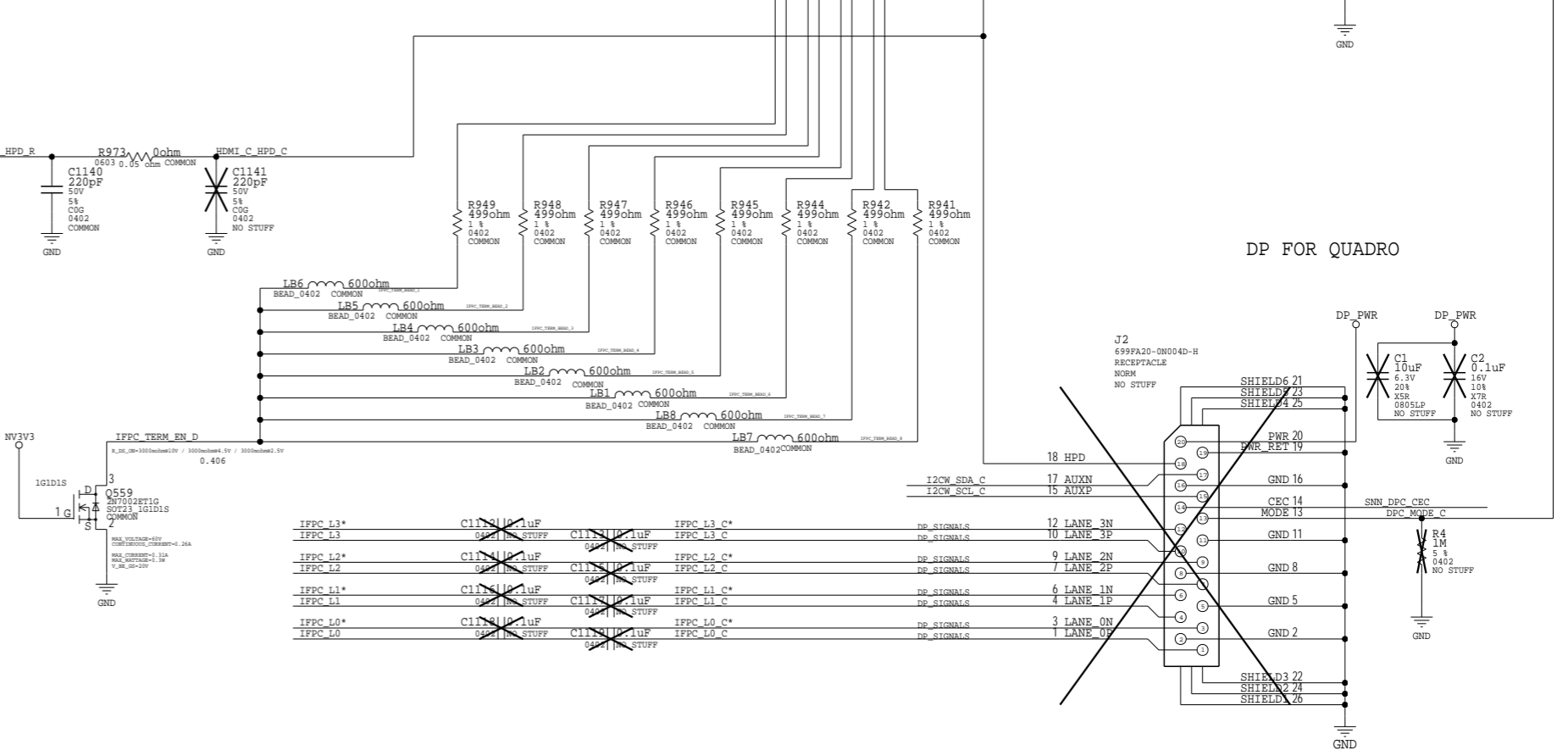
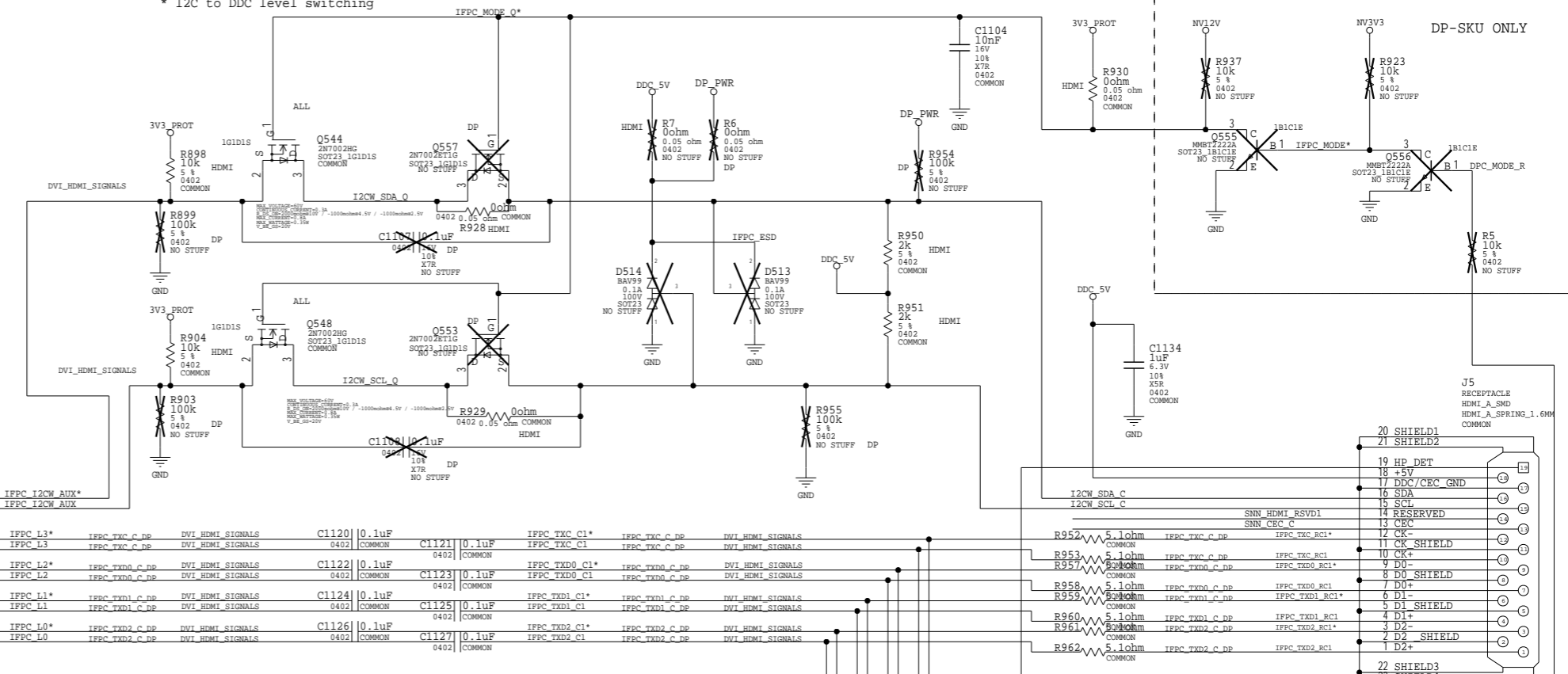
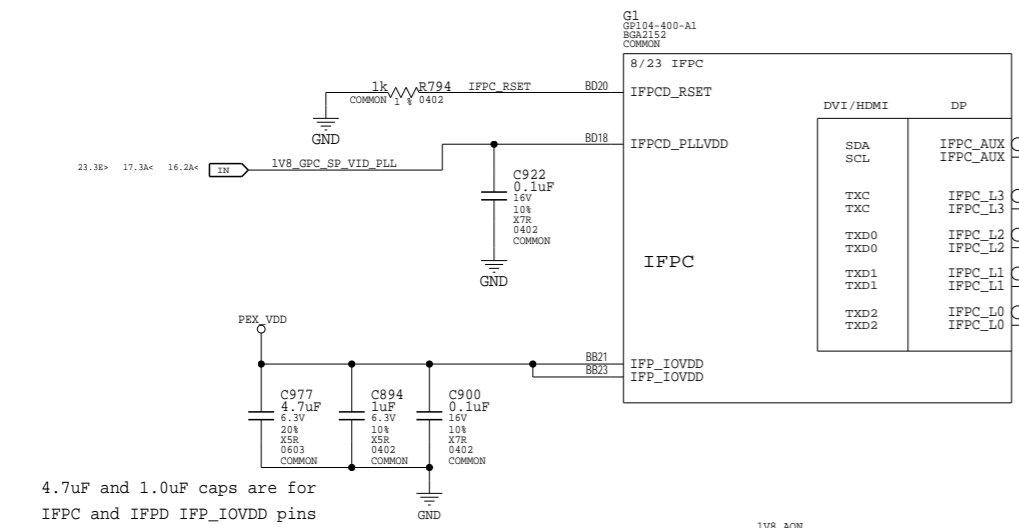
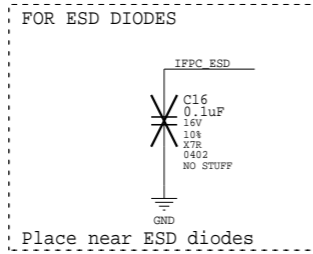
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- Two cases to be considered:
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 2. DP AUX to DP-DVI dongle: AUX pass through



* I2C to DDC level switching



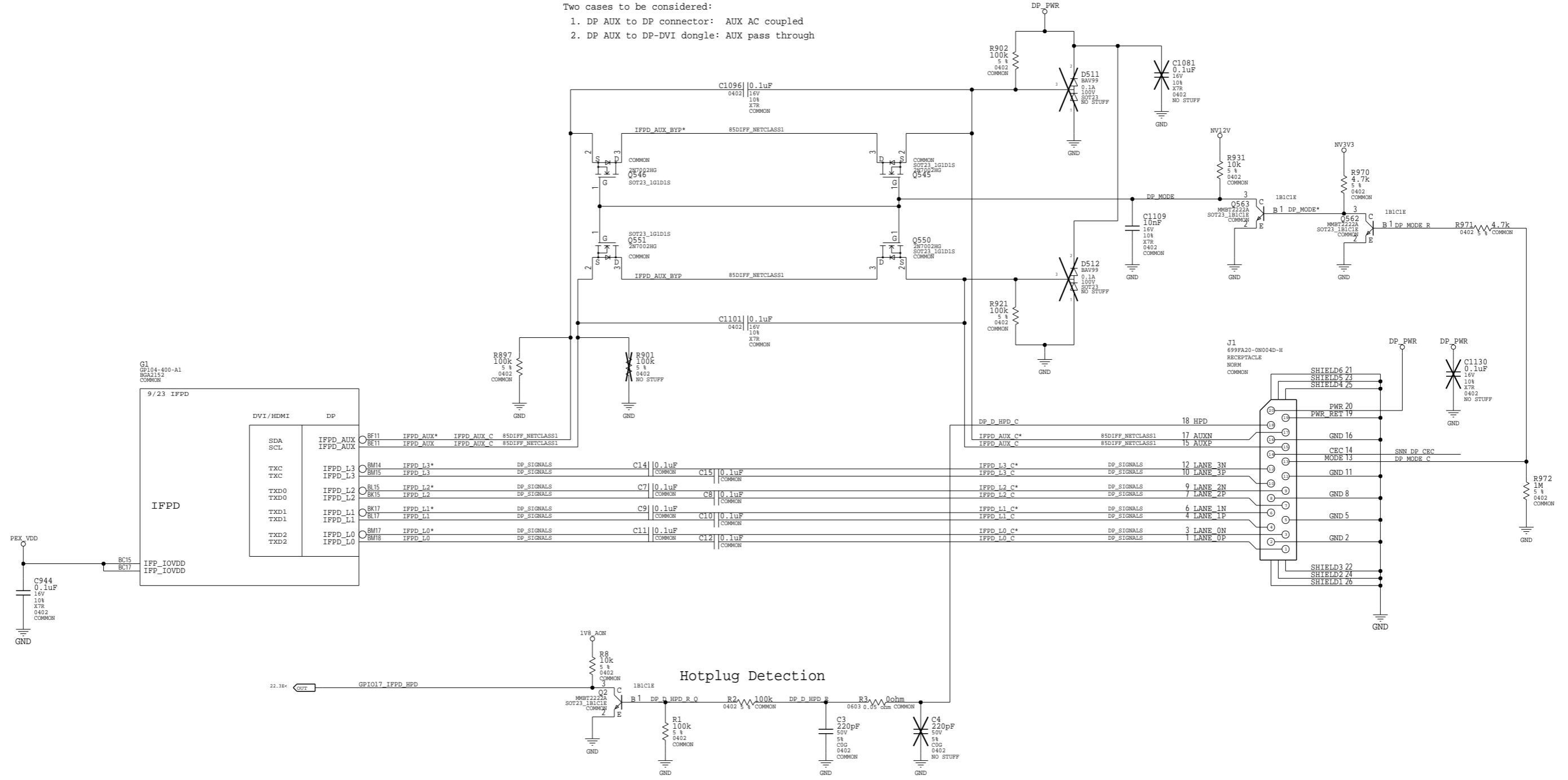
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PAGE DETAIL	IFPC HDMI 2.0/DP

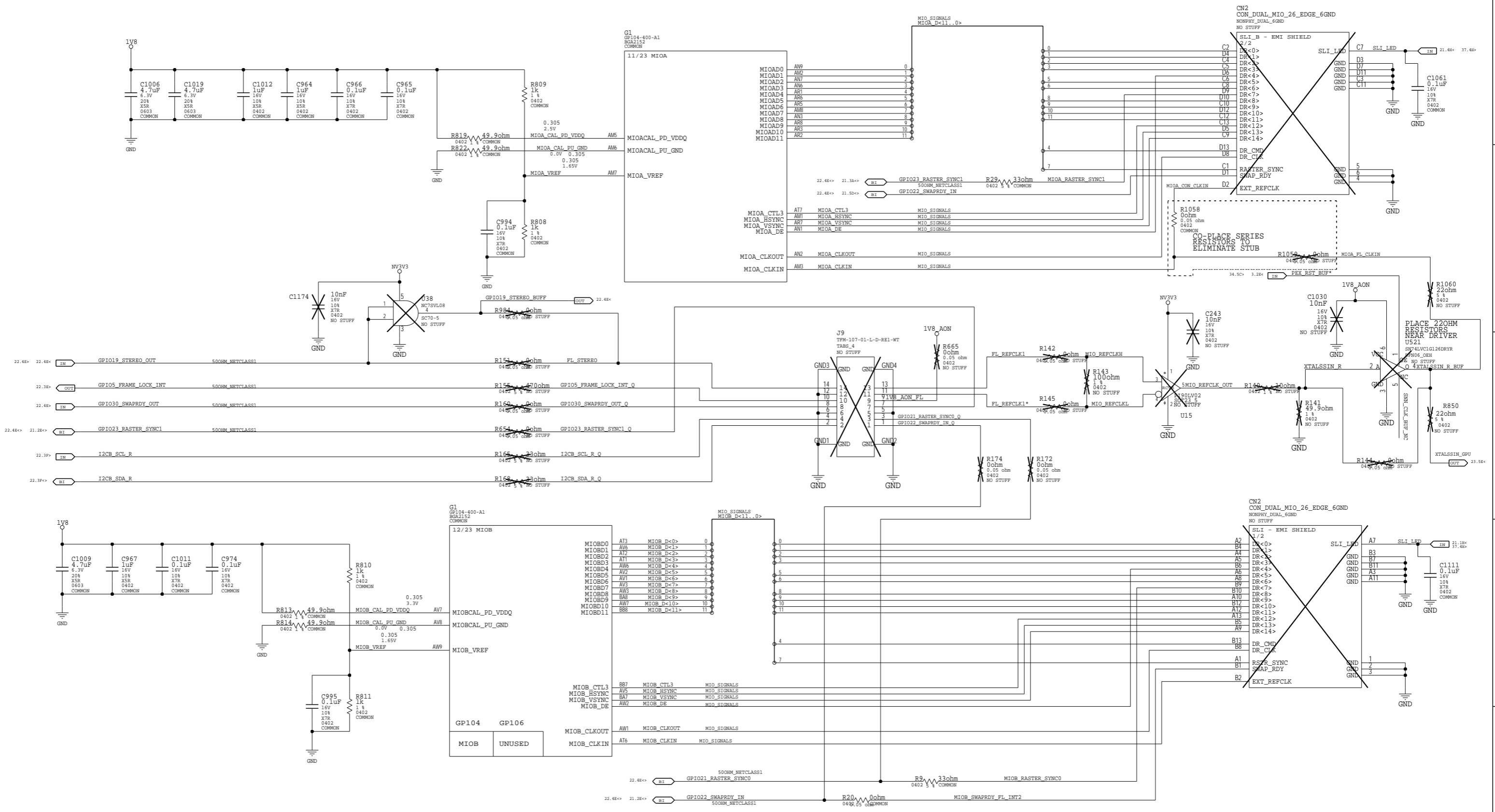
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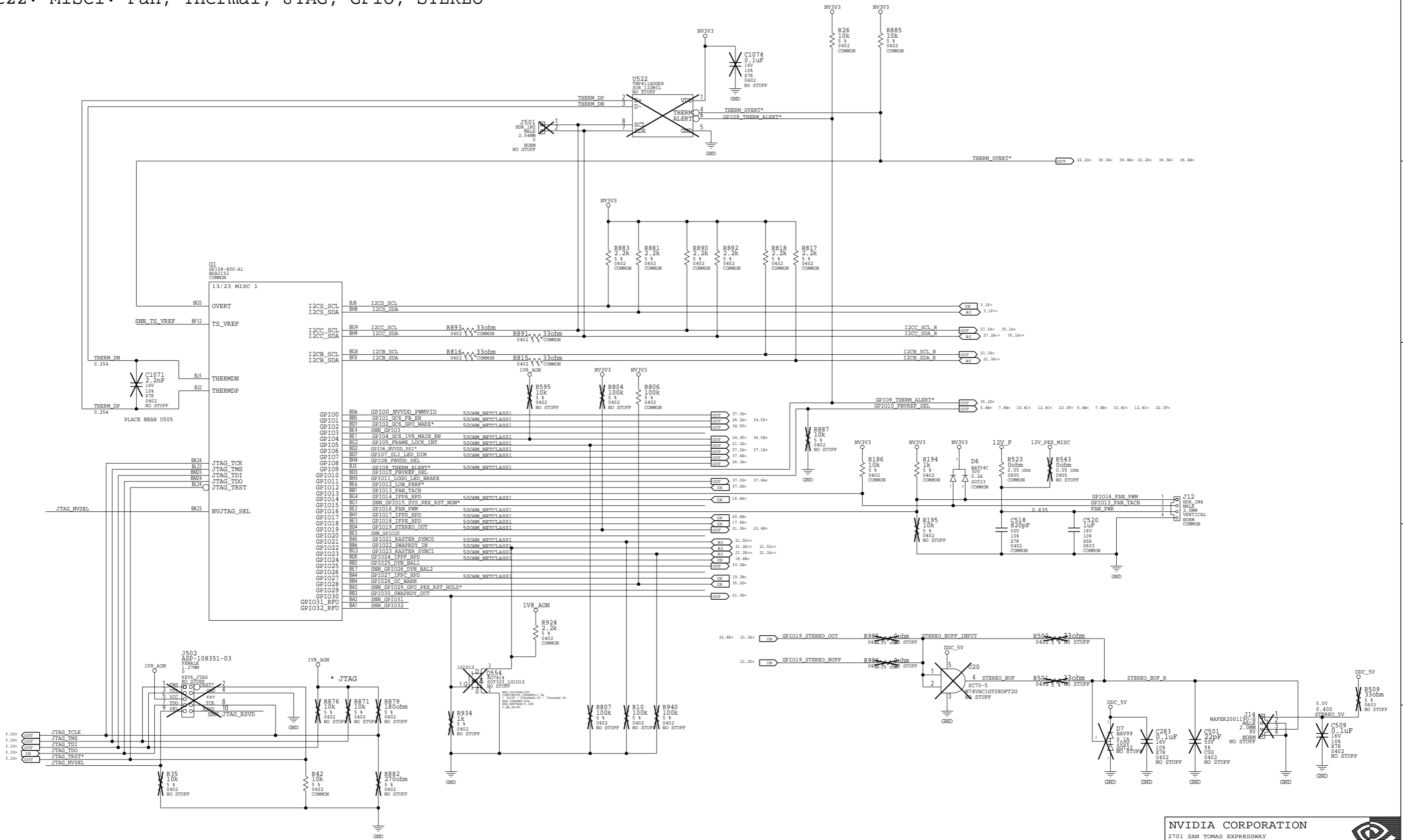
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PAGE DETAIL	MIOA/B Interface and Frame Lock

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ASSEMBLY SKU000 SCHEMATIC COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
 PAGE DETAIL MISC1: Fan, Thermal, JTAG, GPIO, Stereo

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Page23: MISC2: ROM, XTAL, Straps

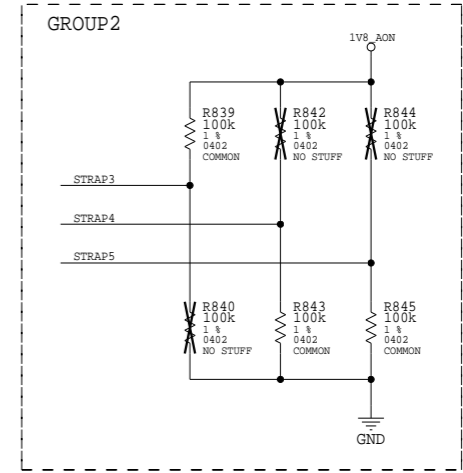
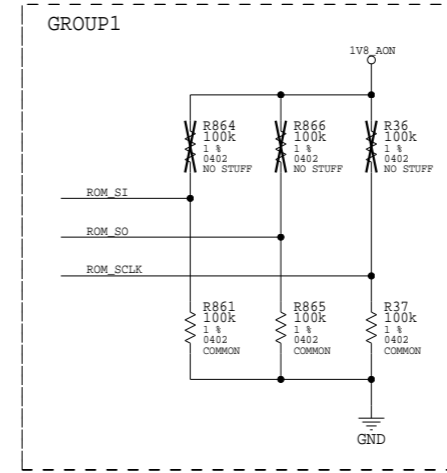
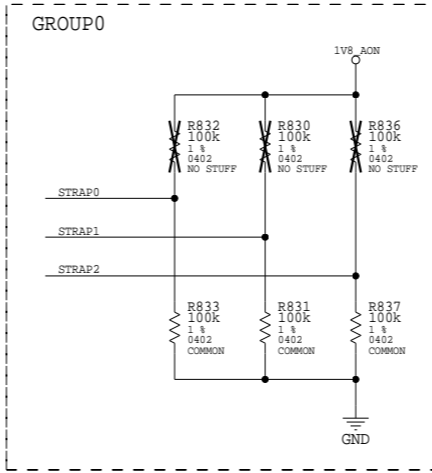
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L	L	L	00000	
L	H	L	00010	
L	H	H	00011	
H	H	L	00110	
H	H	H	00111	
ROM_SO	ROM_SI	ROM_SCLK	SOR_EXPOSED[3:0]	1:ENABLE 0:DISABLE
L	L	L	1111	DEFAULT SOR0/1/2/3 ENABLE
L	L	H	1110	
L	H	L	1101	
L	H	H	1100	
H	L	L	1011	
H	L	H	1010	
H	H	L	1001	
H	H	H	1000	
L	L	M	0111	
L	M	L	0110	
L	M	H	0101	
L	H	M	0100	
H	L	M	0011	
H	M	L	0010	
H	M	H	0001	
H	H	M	0000	

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

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

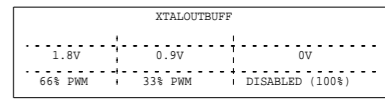
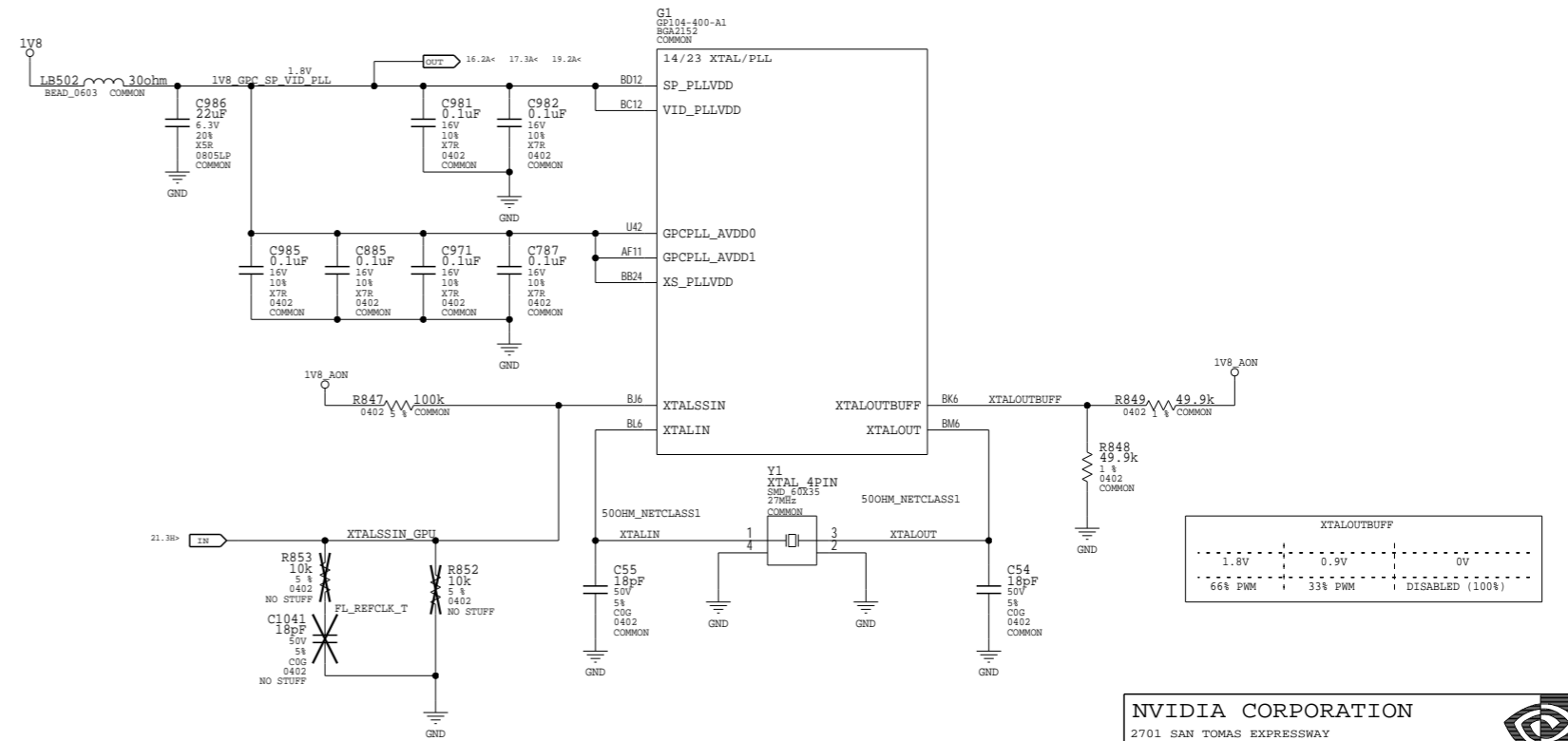
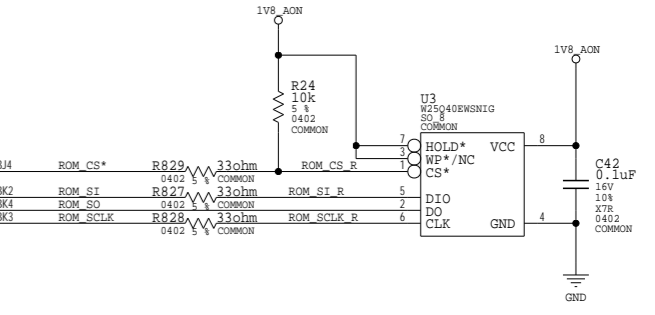
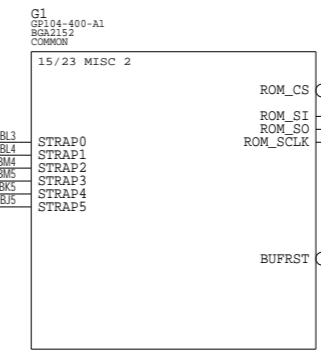
1:SMB_ALT_ADDR ENABLE
0:SMB_ALT_ADDR DISABLE
1:DEVID_SEL REBRAND
0:DEVID_SEL ORIGINAL

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



CFG[3:0] Config Width	Vendor
0000	256Mx32 256-bit Micron
0001	Reserved
0010	Reserved
0011	Reserved
0100	Reserved
0101	Reserved
0110	Reserved
0111	Reserved

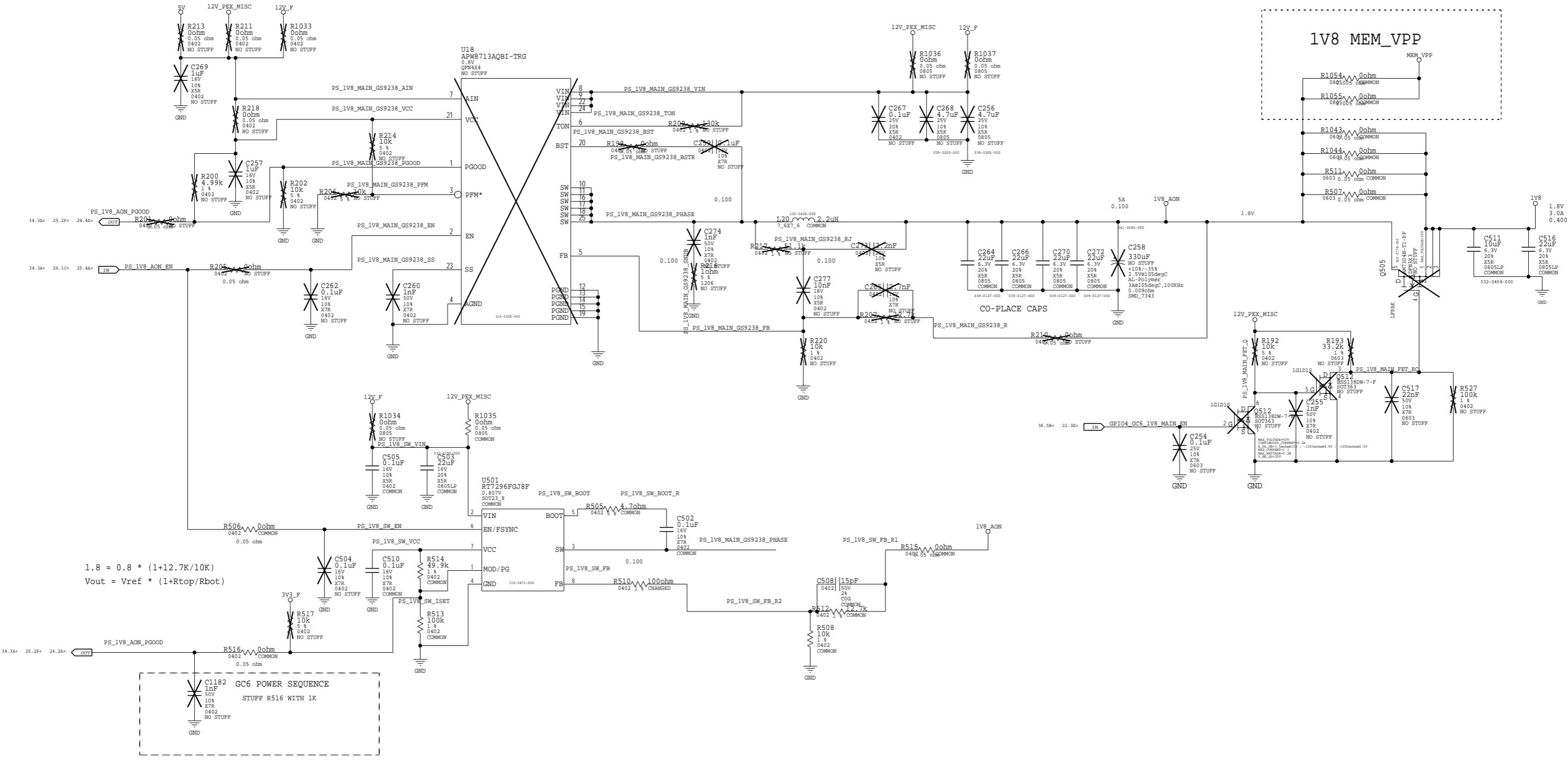
STRAP0	BL3
STRAP0	BL4
STRAP1	BL4
STRAP2	BM4
STRAP3	BM5
STRAP4	BK5
STRAP5	BL5



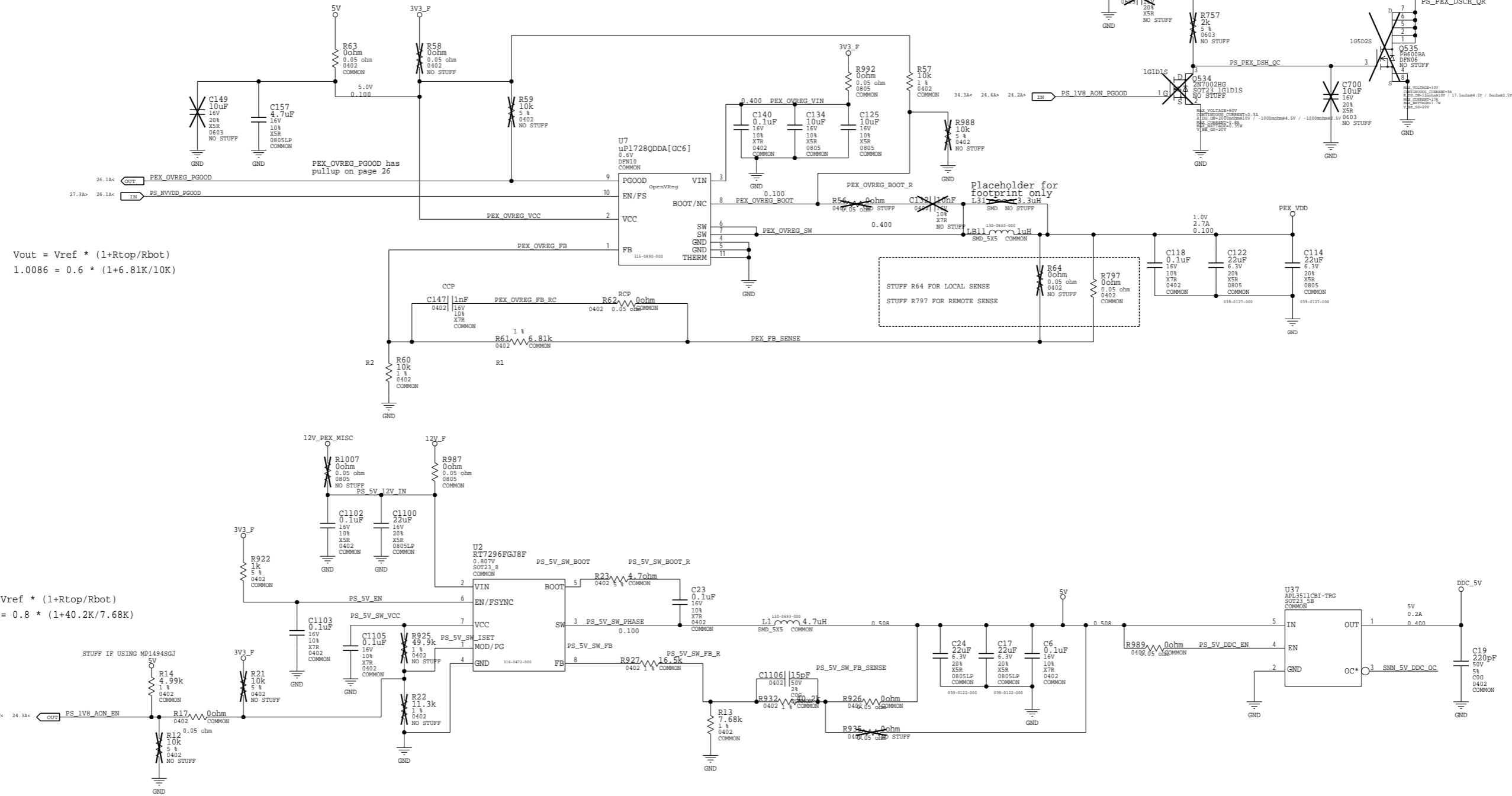
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PAGE DETAIL	MISC2: ROM, XTAL, Straps

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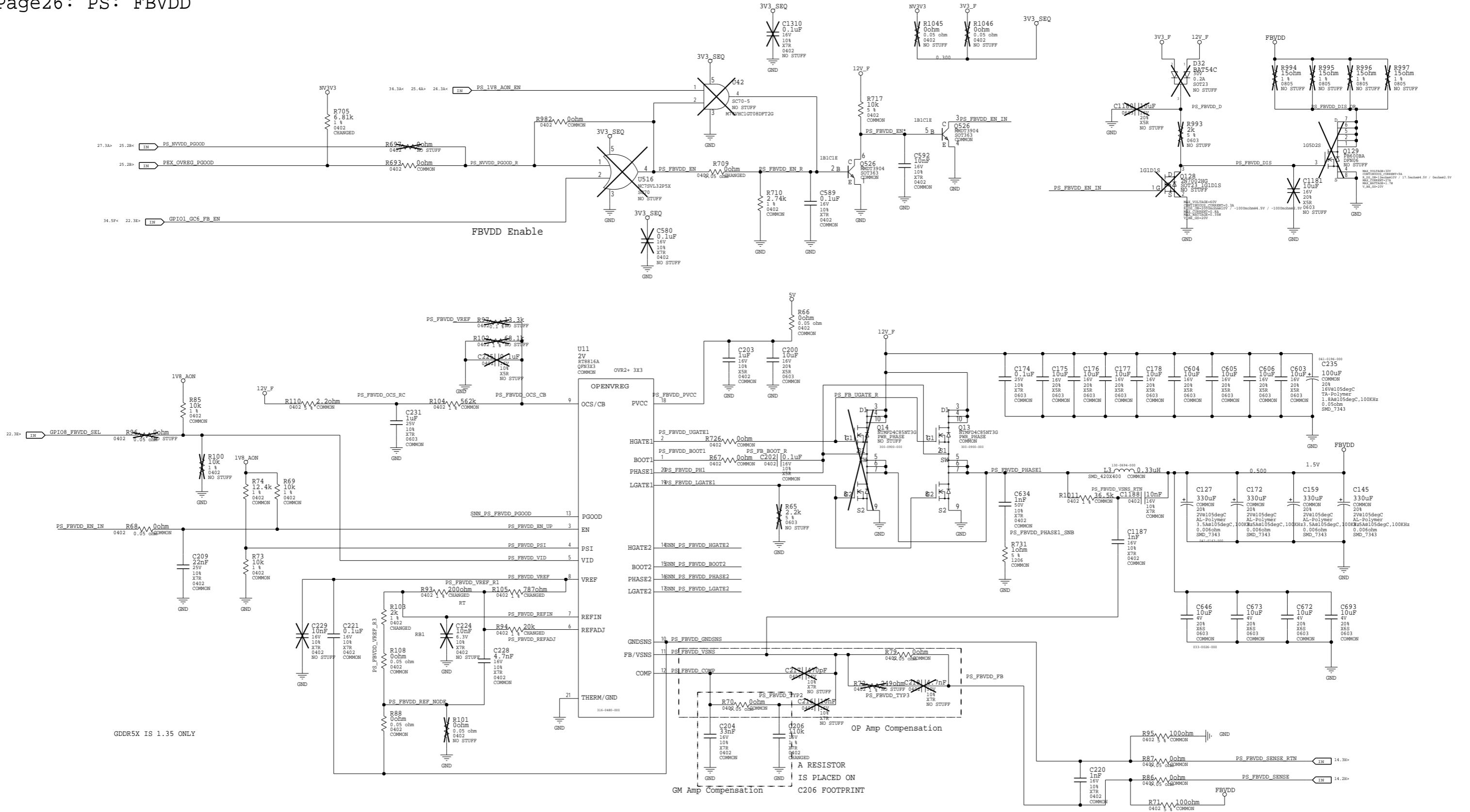
PEX PLL Switcher



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PAGE DETAIL	PS: 5V, PEX_VDD

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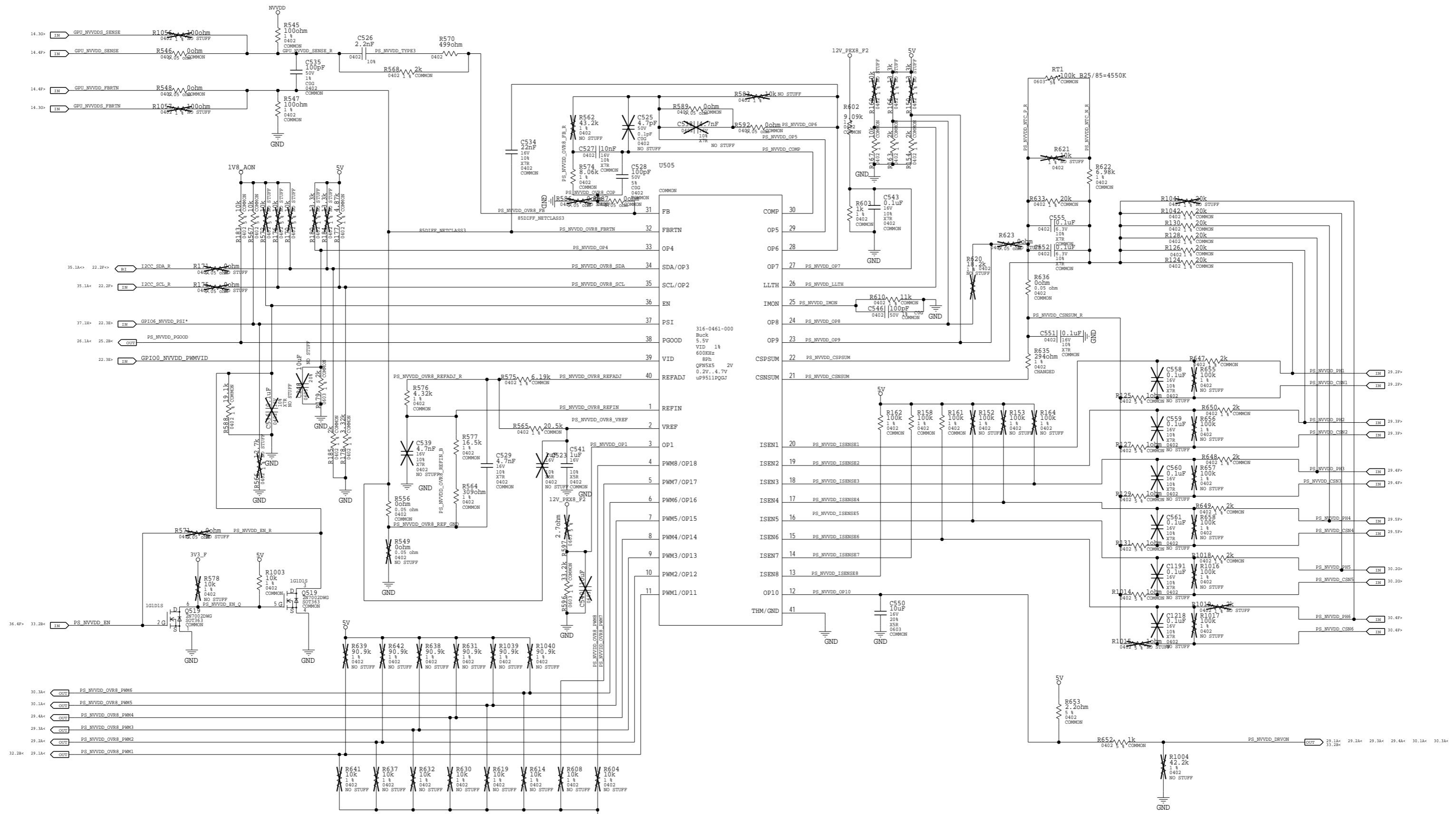
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PAGE DETAIL	PS: FBVDD

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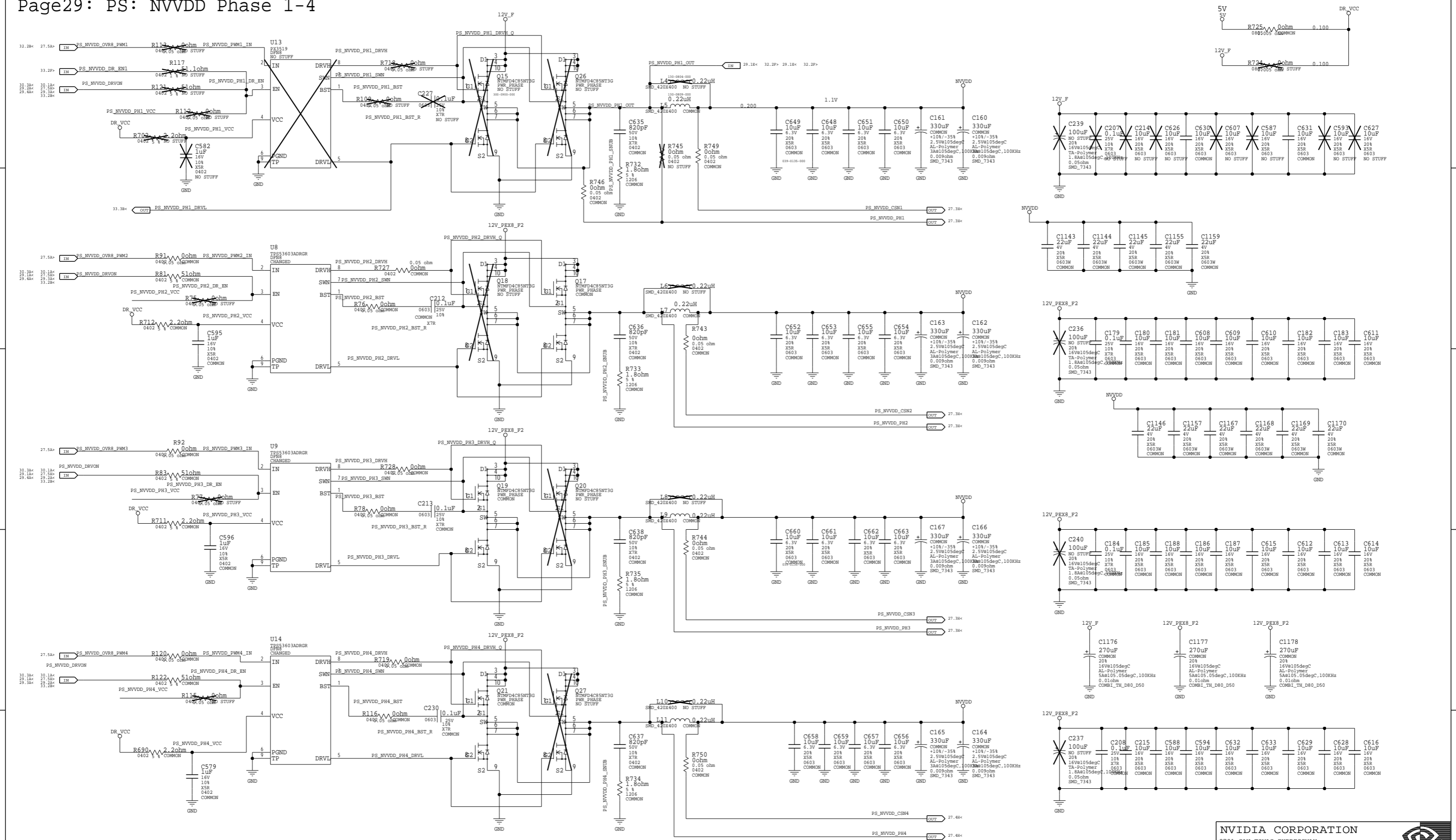
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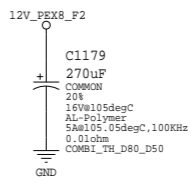
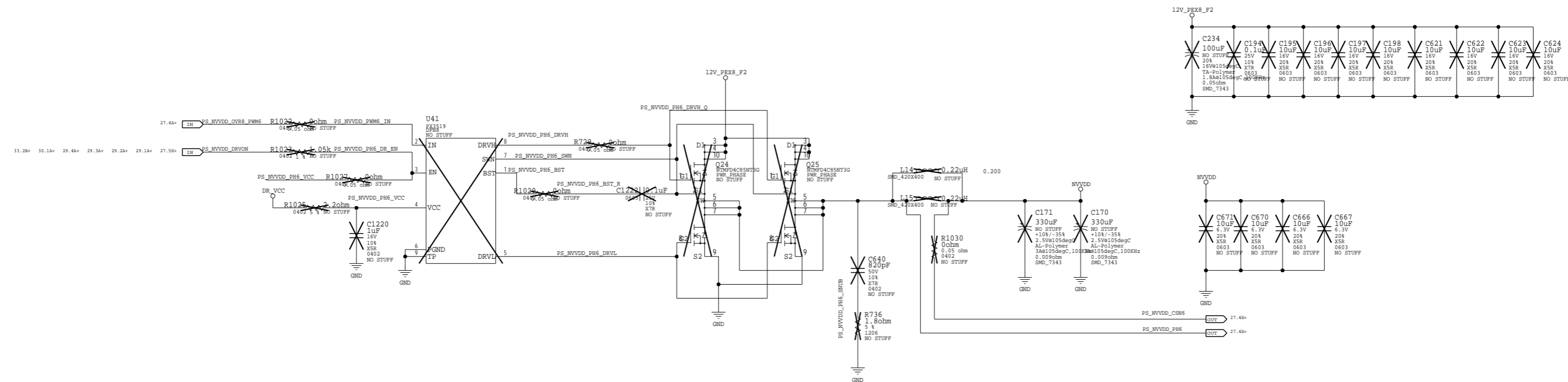
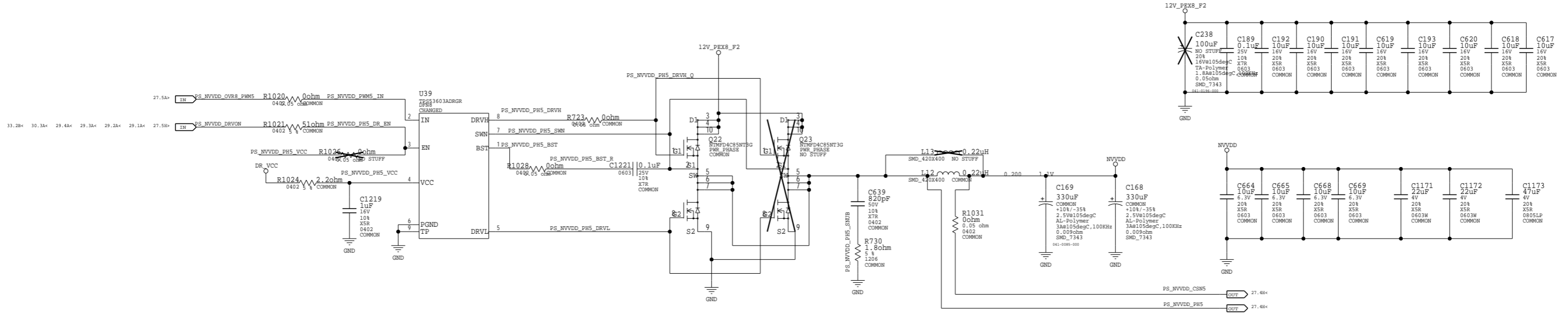
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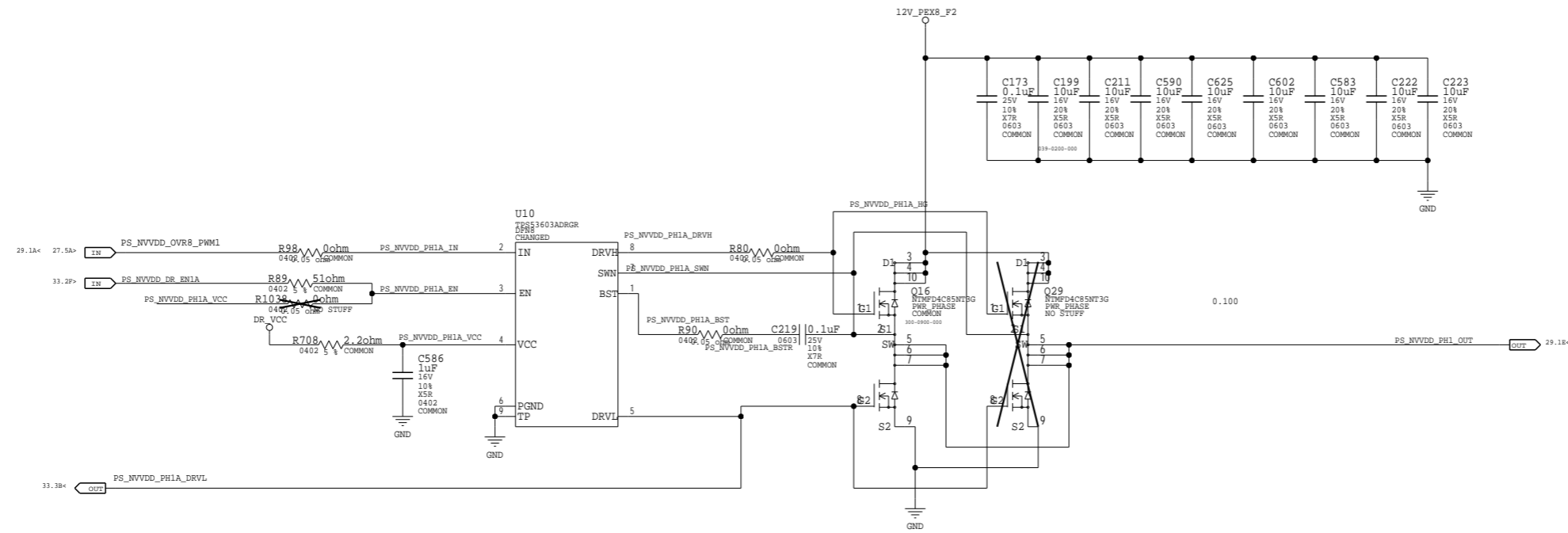
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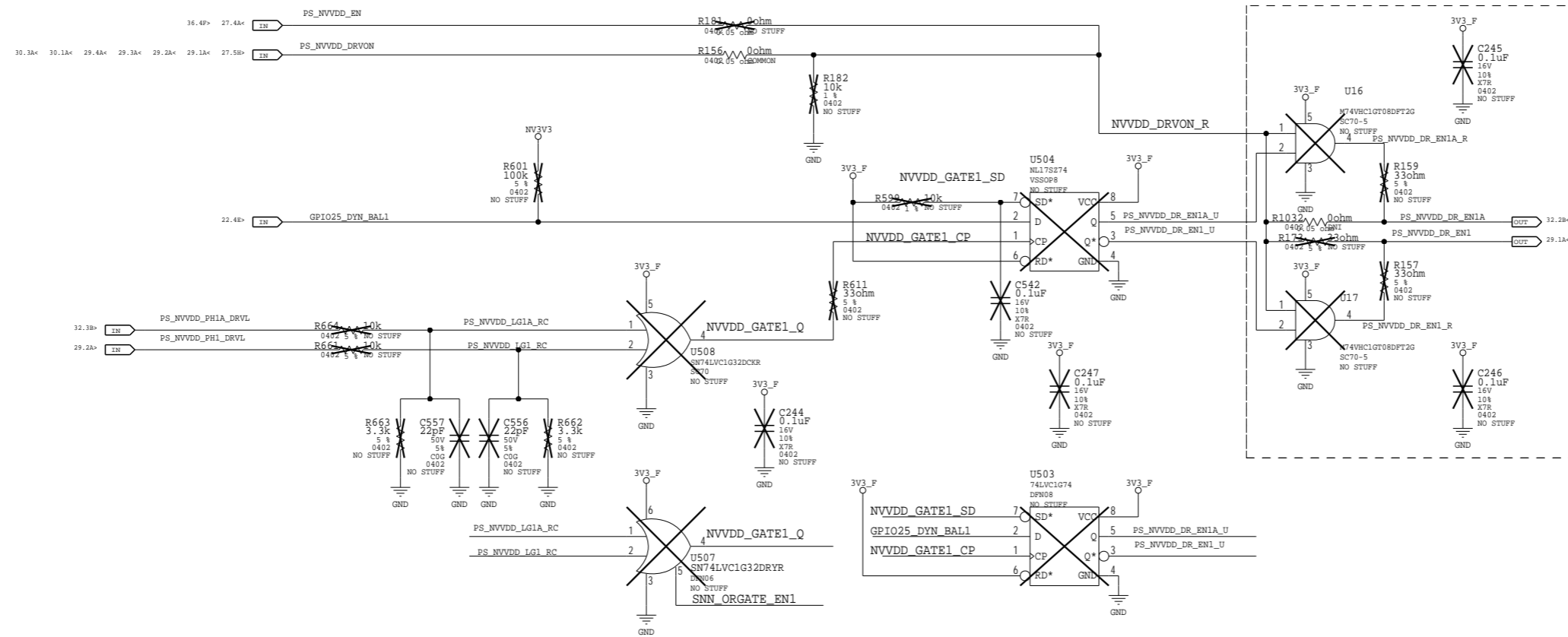
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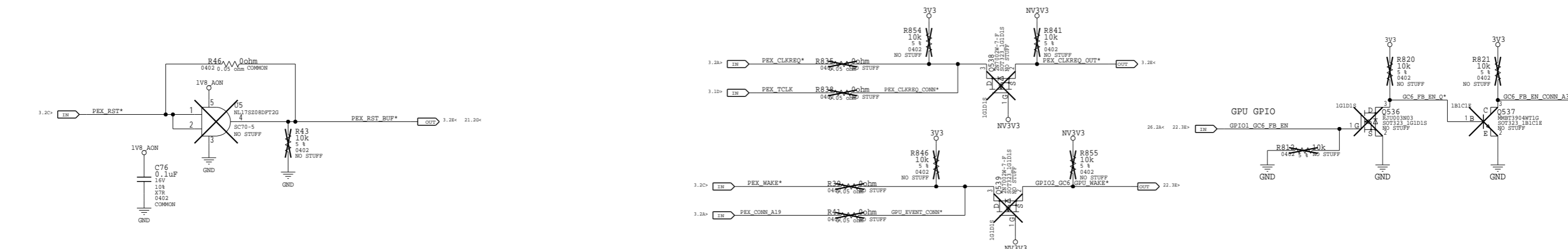
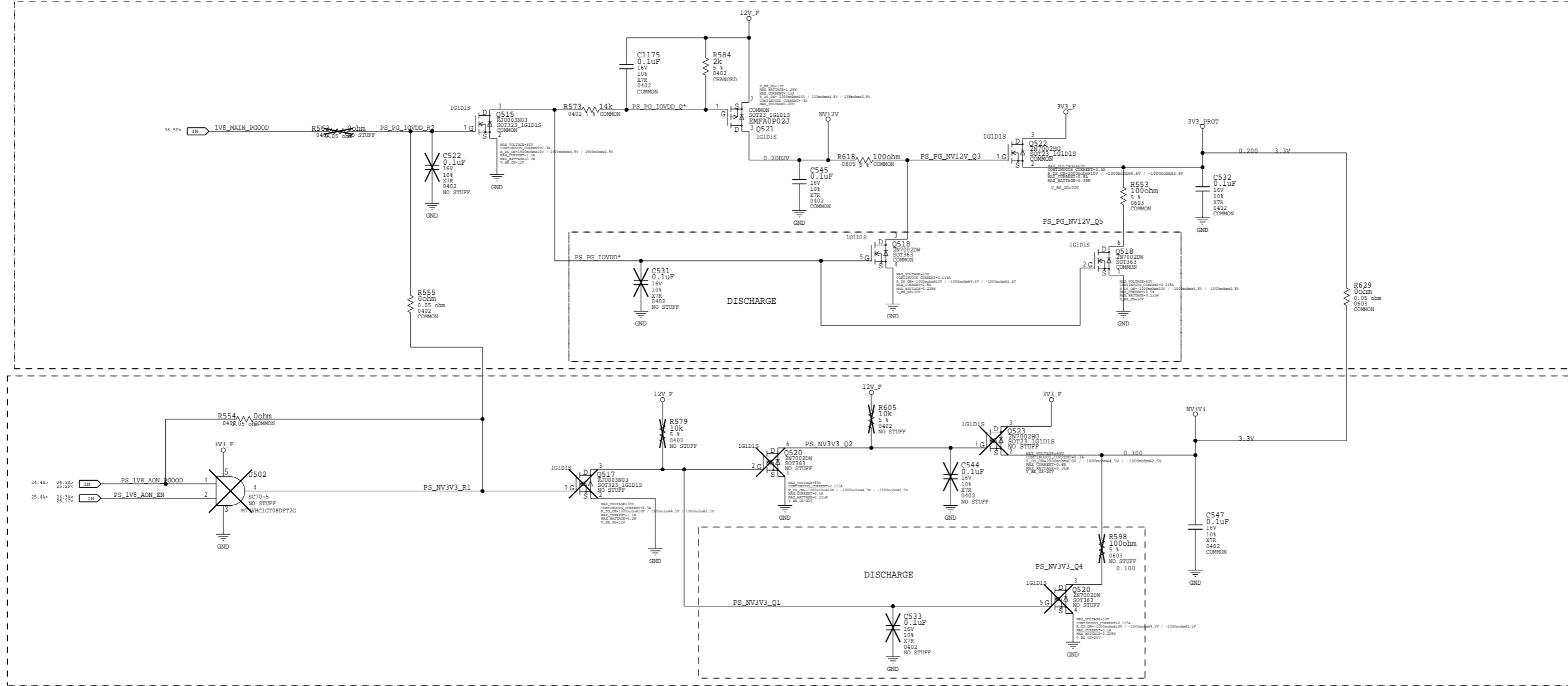


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BOM REV	D	DATE 29-MAR-2016

ASSEMBLY SKU0000 SCHEMATIC COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
 PAGE DETAIL PS: Dynamic Power Balance Phases

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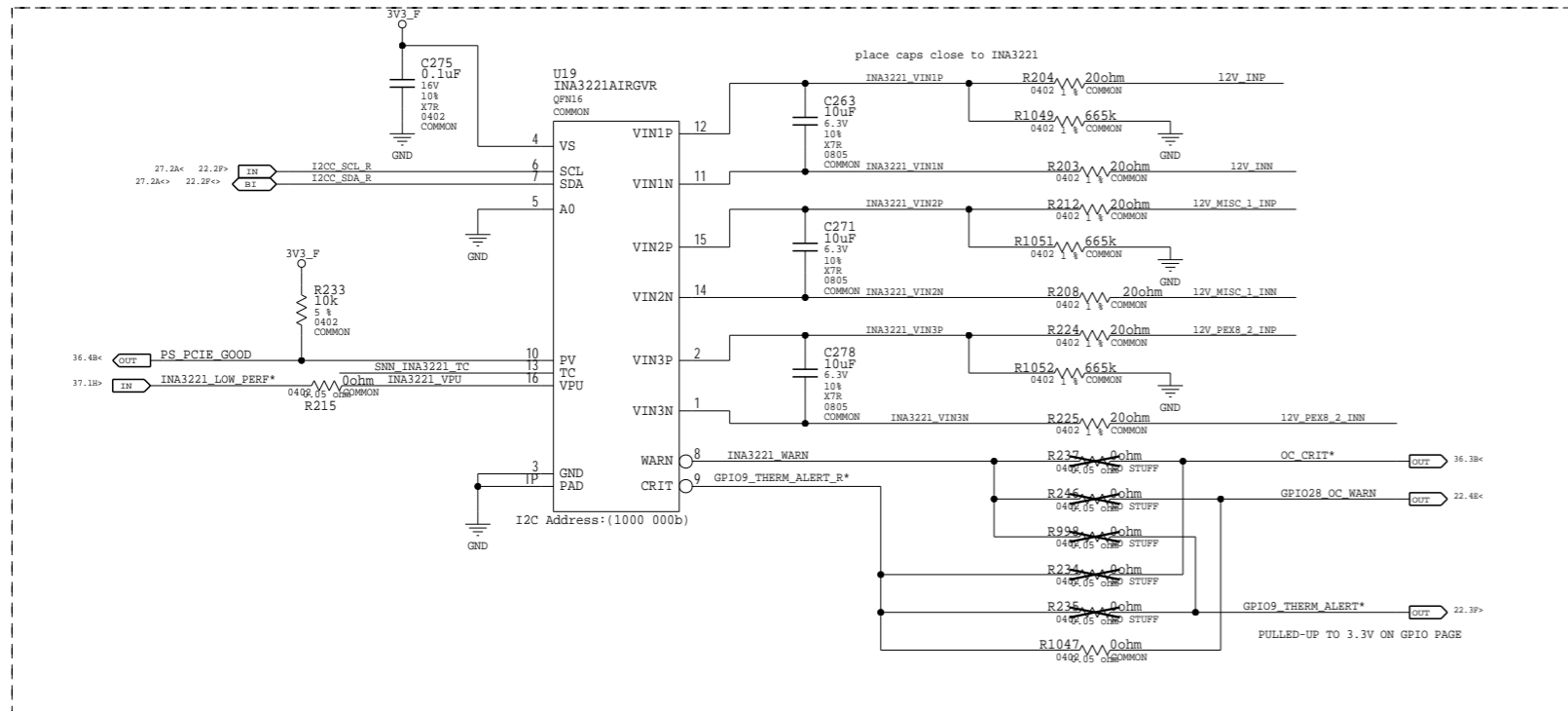
ASSEMBLY	SKU0000 SCHEMATIC COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE DETAIL	PS: NV3V3, NV12V

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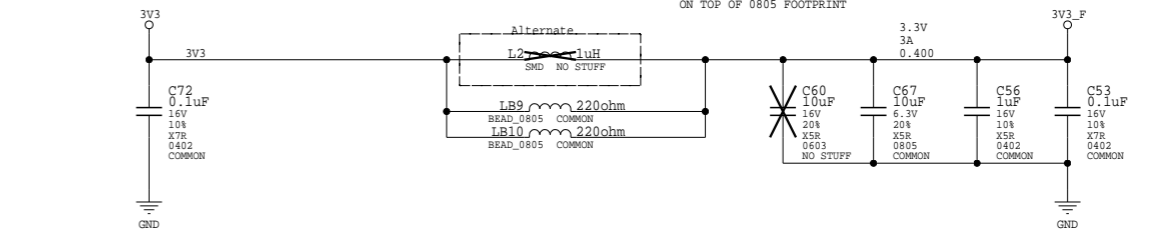


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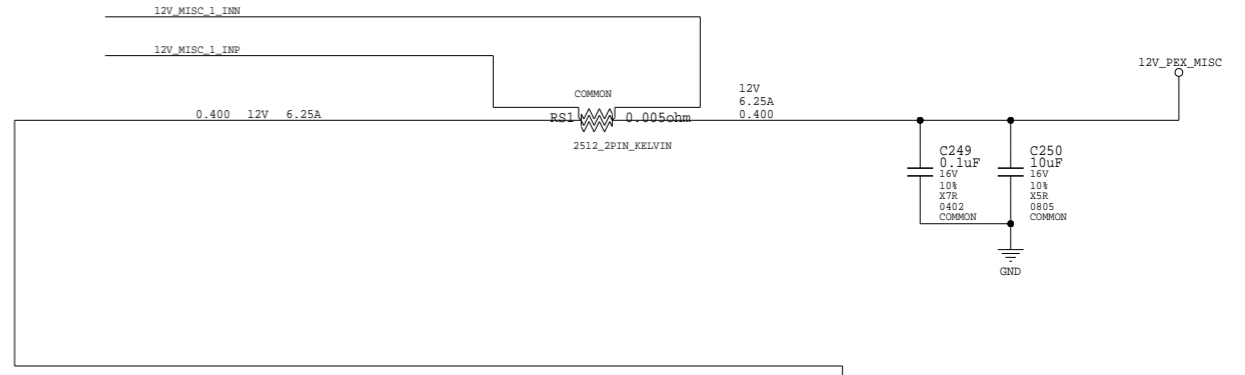
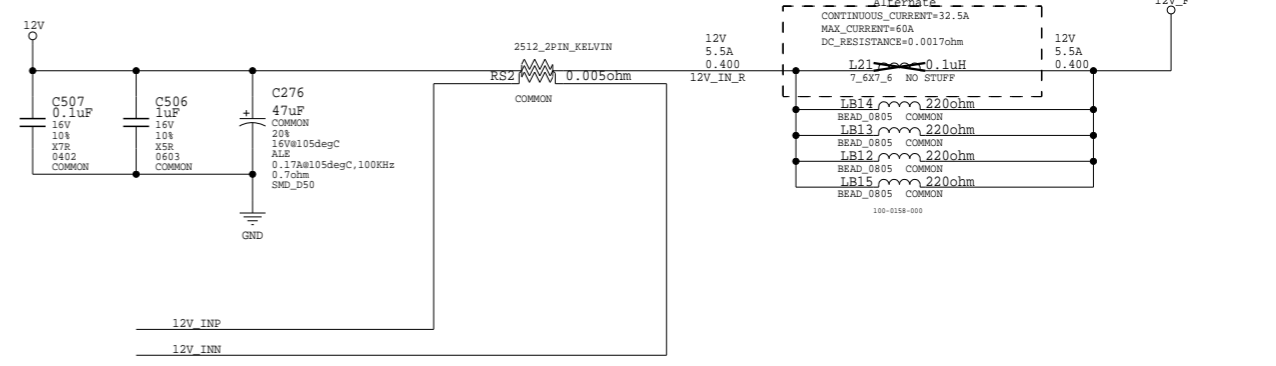
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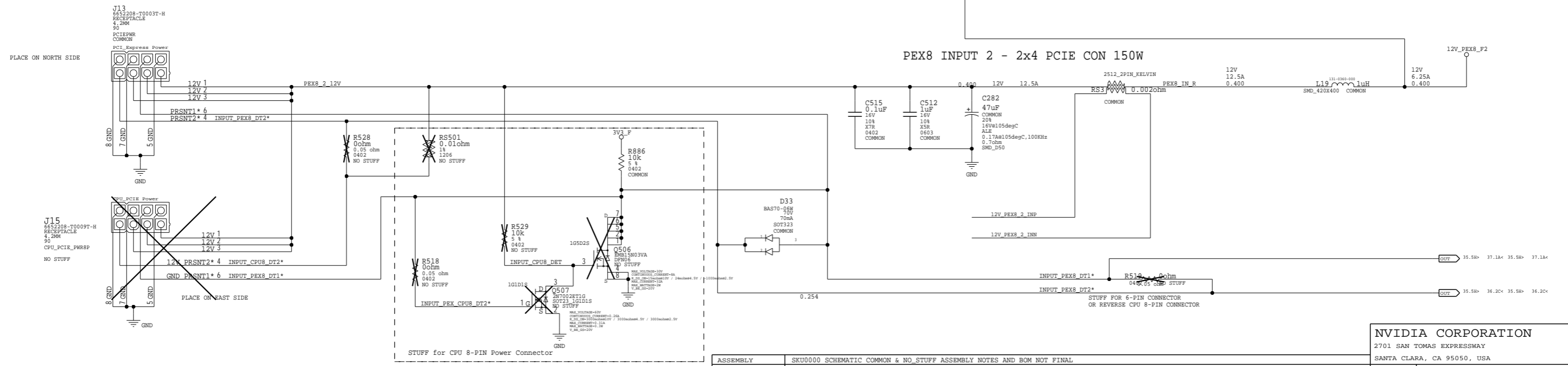
PEX 3V3 INPUT - 10W



PEX_12V INPUT - 66W



PEX8 INPUT 2 - 2x4 PCIE CON 150W



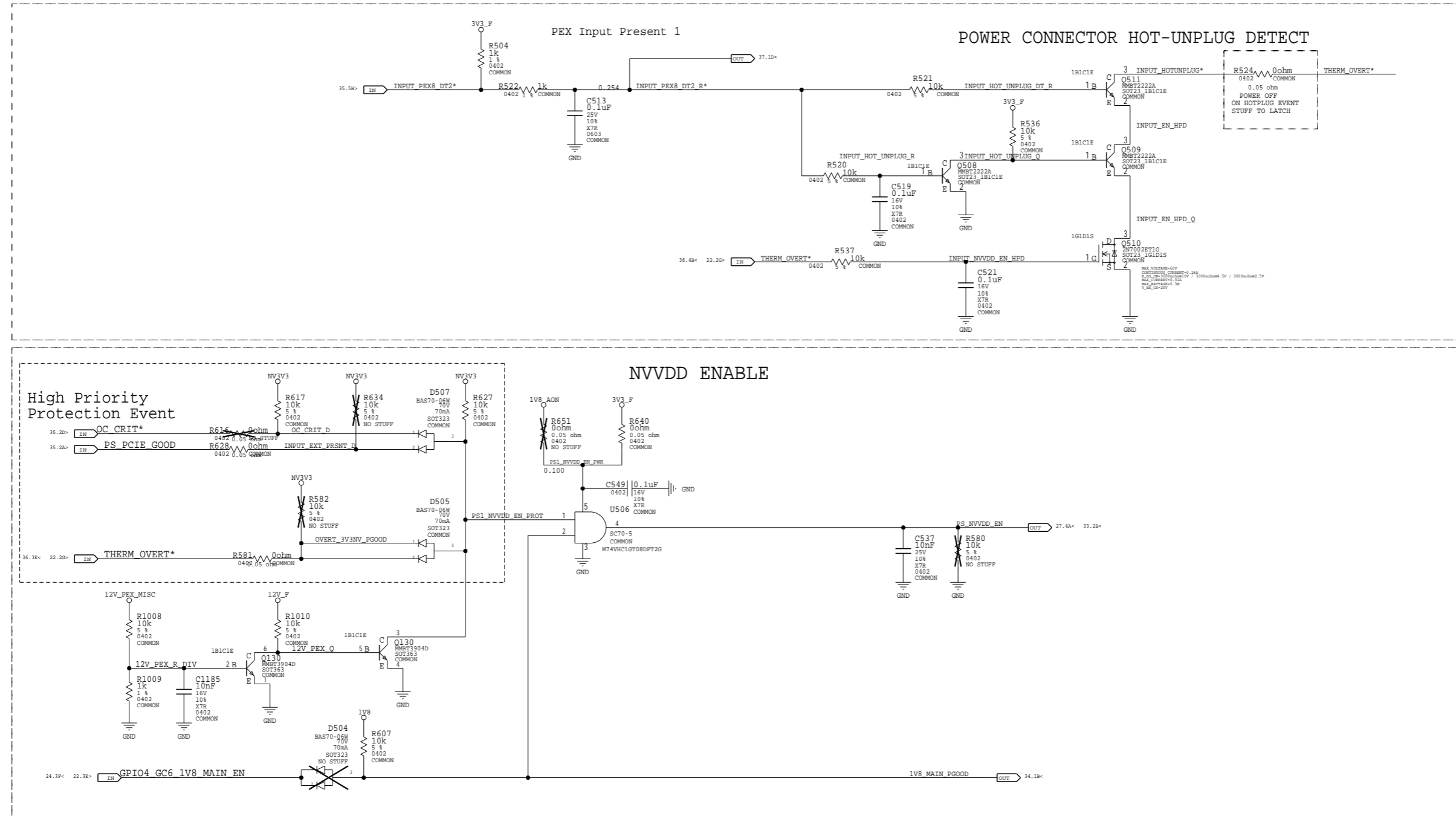
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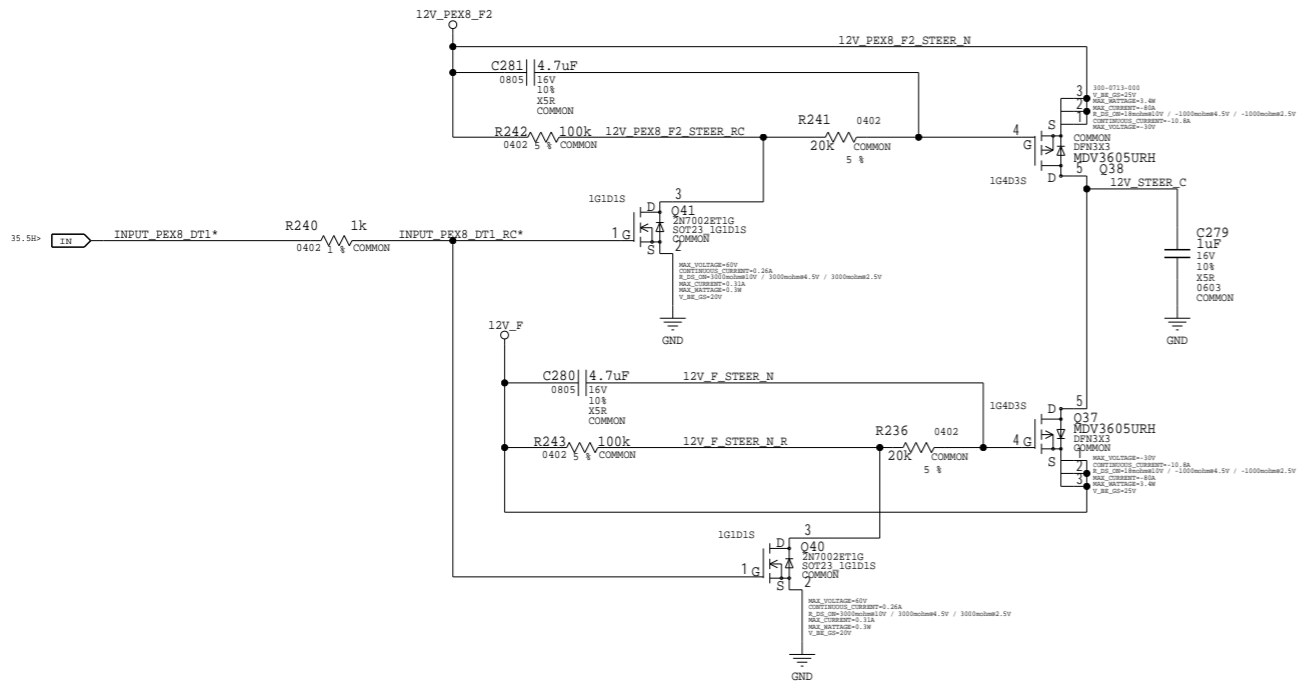
ASSEMBLY	SKU0000 SCHEMATIC COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
PAGE DETAIL	PS: Inputs, Filtering, and Monitoring

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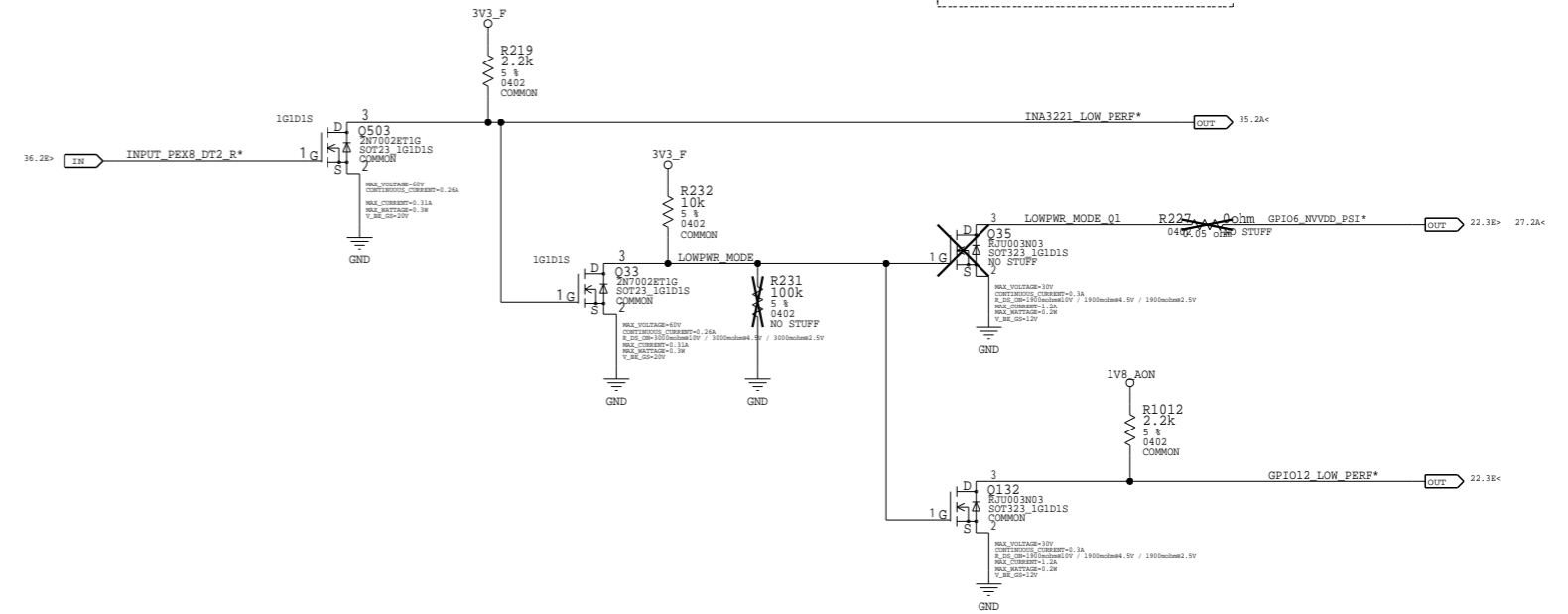


PEX Input - 12V Current Steering FETs

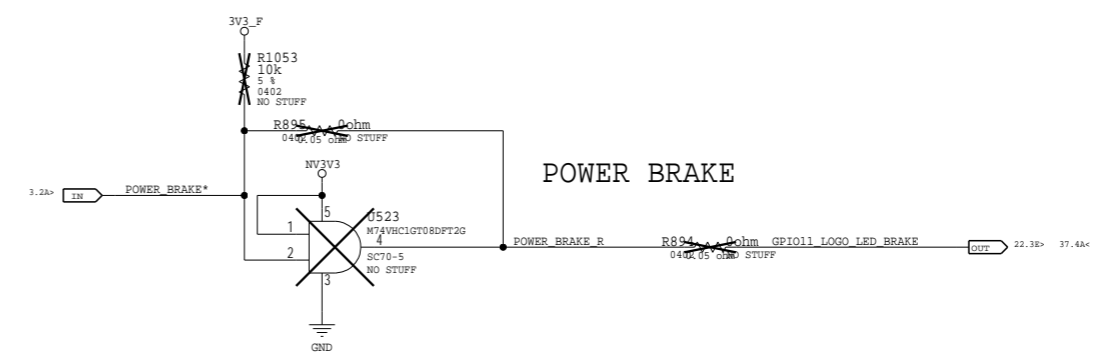


PEX Input - Power Level/PSI* Control

GPIO12_LOW_PERF*	GPU SPEED
0	Slow
1	Normal

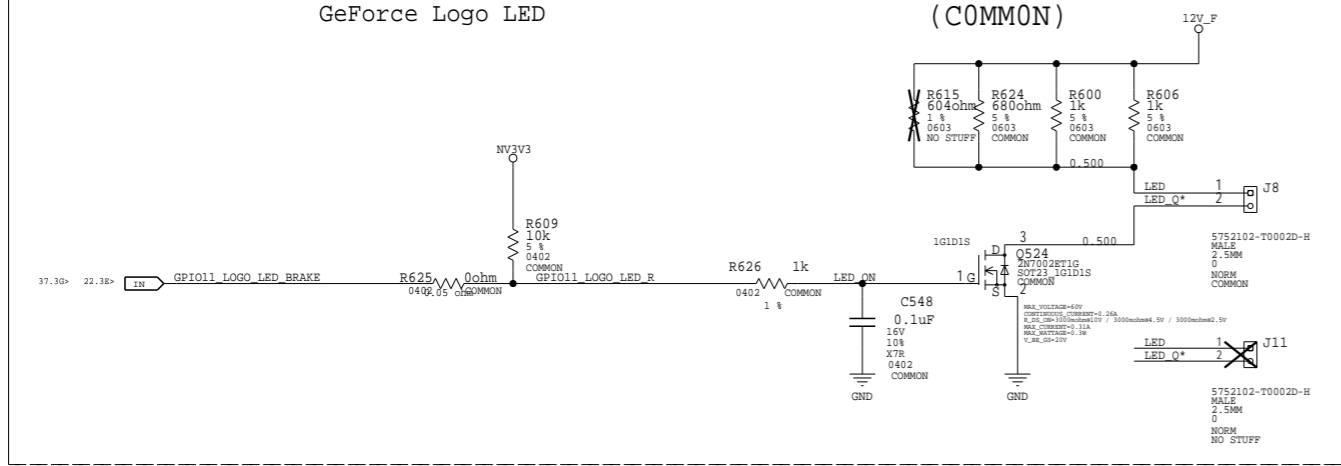


POWER BRAKE

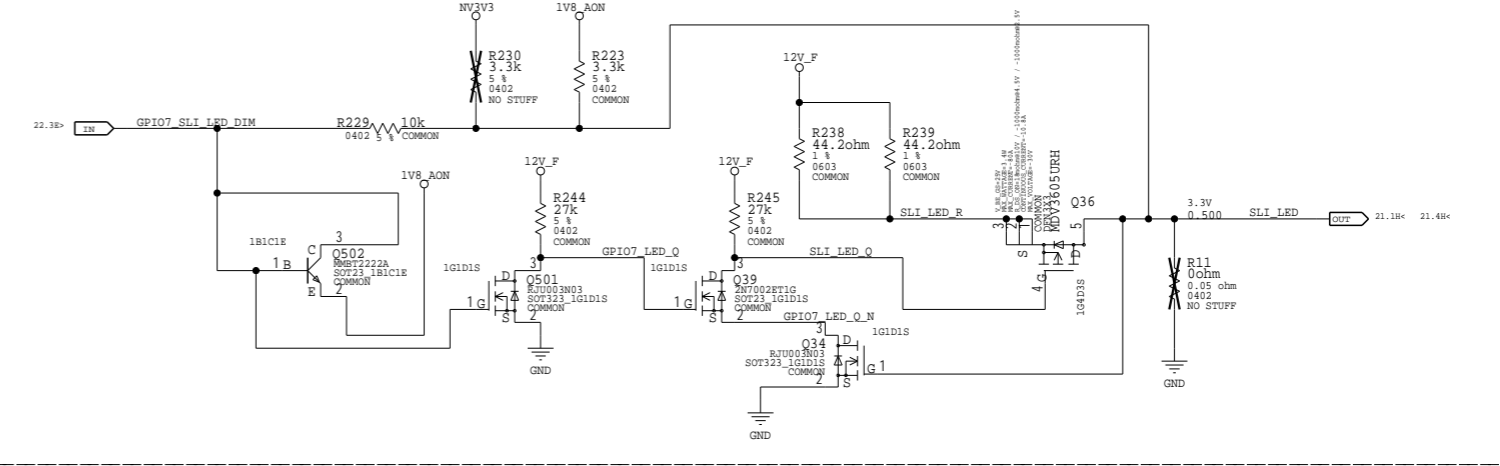


GeForce Logo LED

LED HEADER (COMMON)



SLI LED (GEFORCE ONLY)



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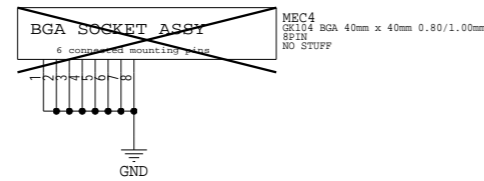
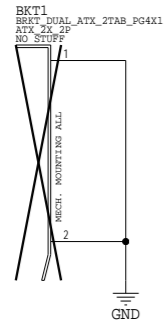
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ASSEMBLY: SKU0000 SCHEMATIC COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
 PAGE DETAIL: PS: 12V Current Steering PSI Control and LED

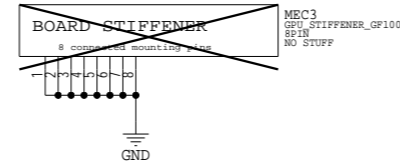
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Brackets:



GPU Stiffner



Mechanical Holes Symbol

