

P2132-A01

NVG GK208 DDR3 64BIT

DVI-I/DVI-D + HDMI + VGA

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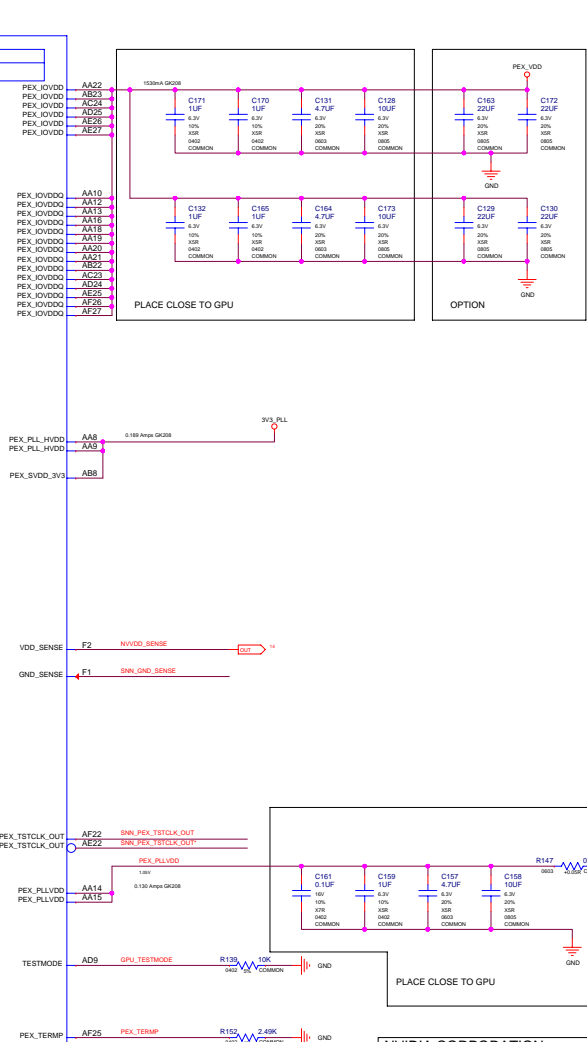
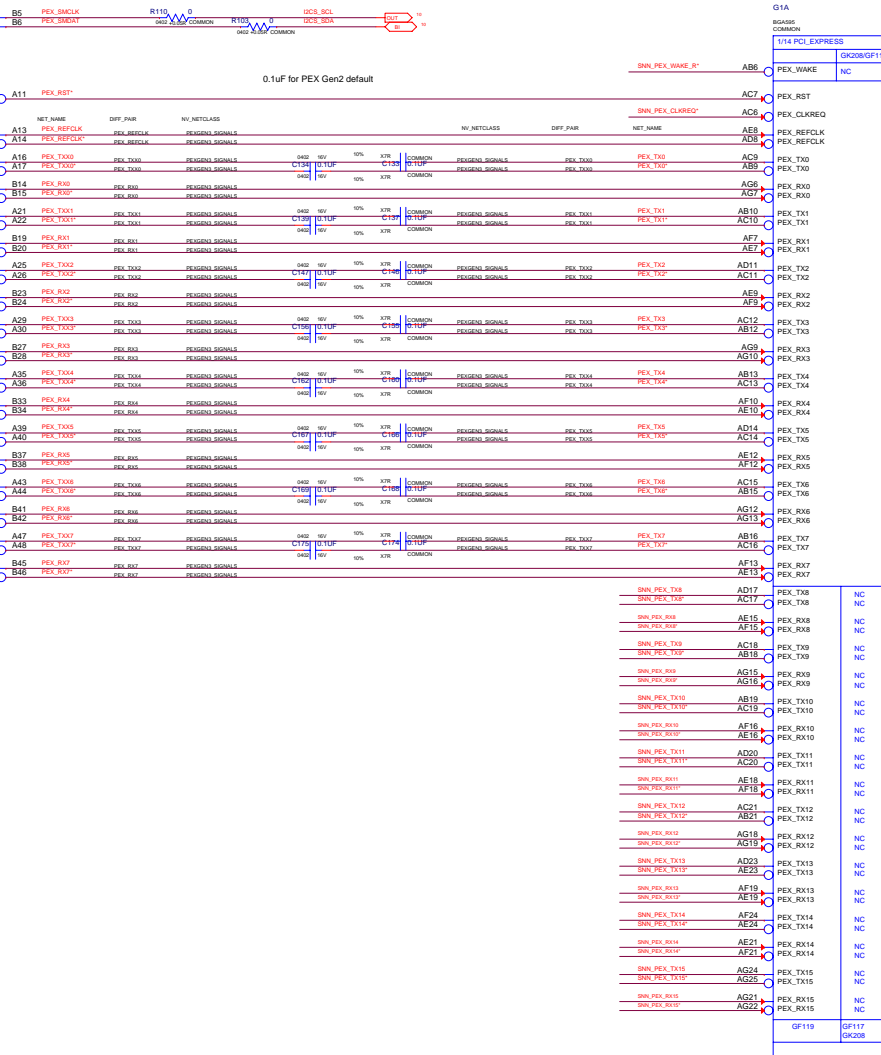
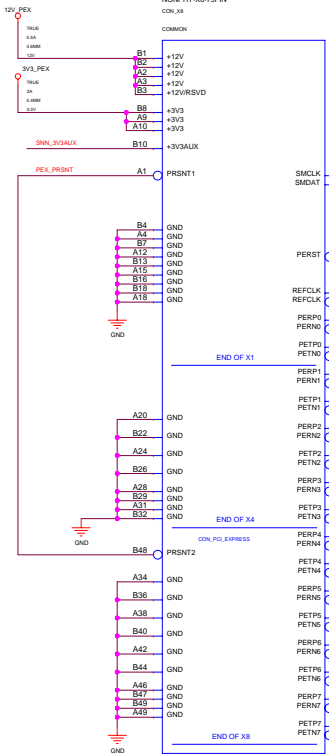
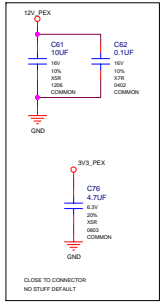
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PCI EXPRESS



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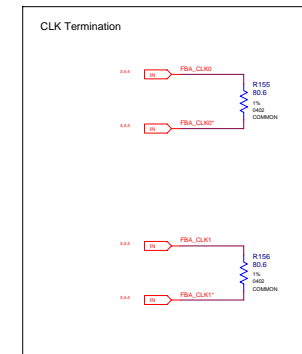
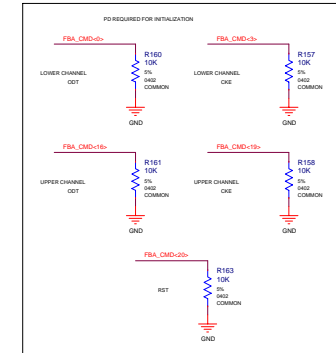
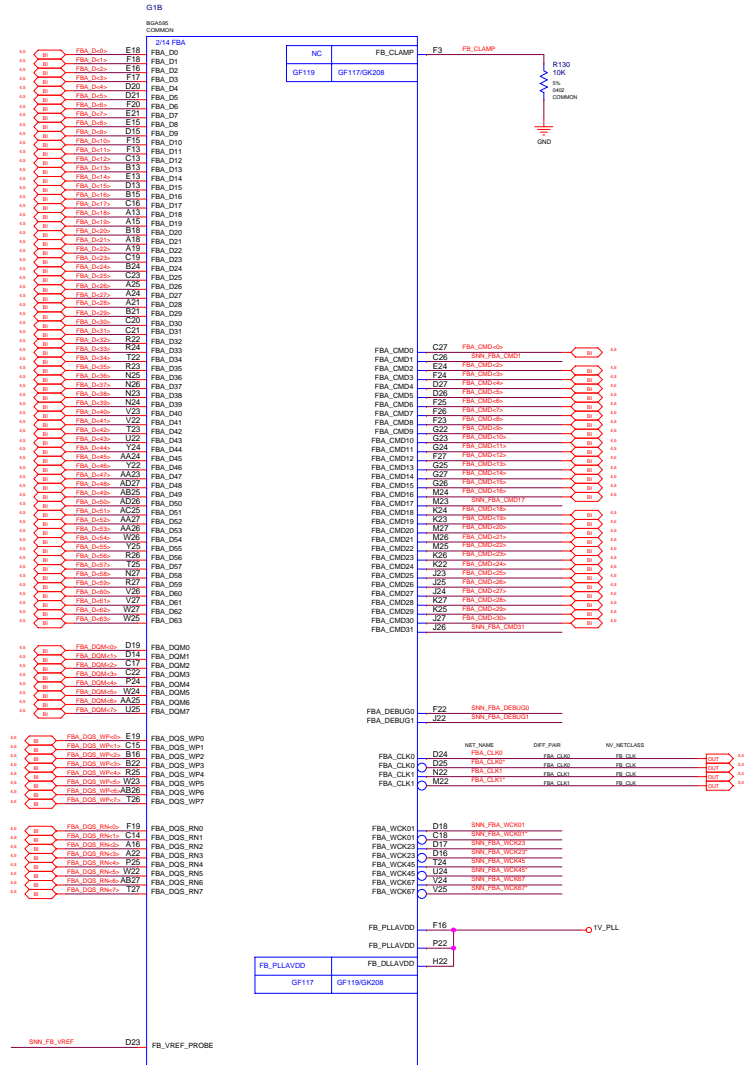
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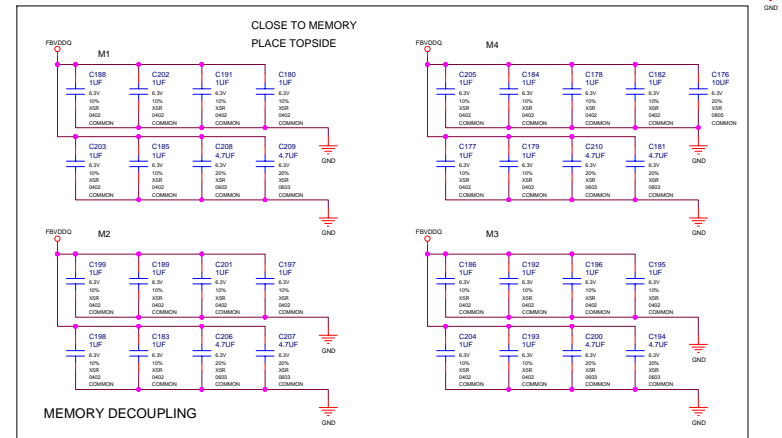
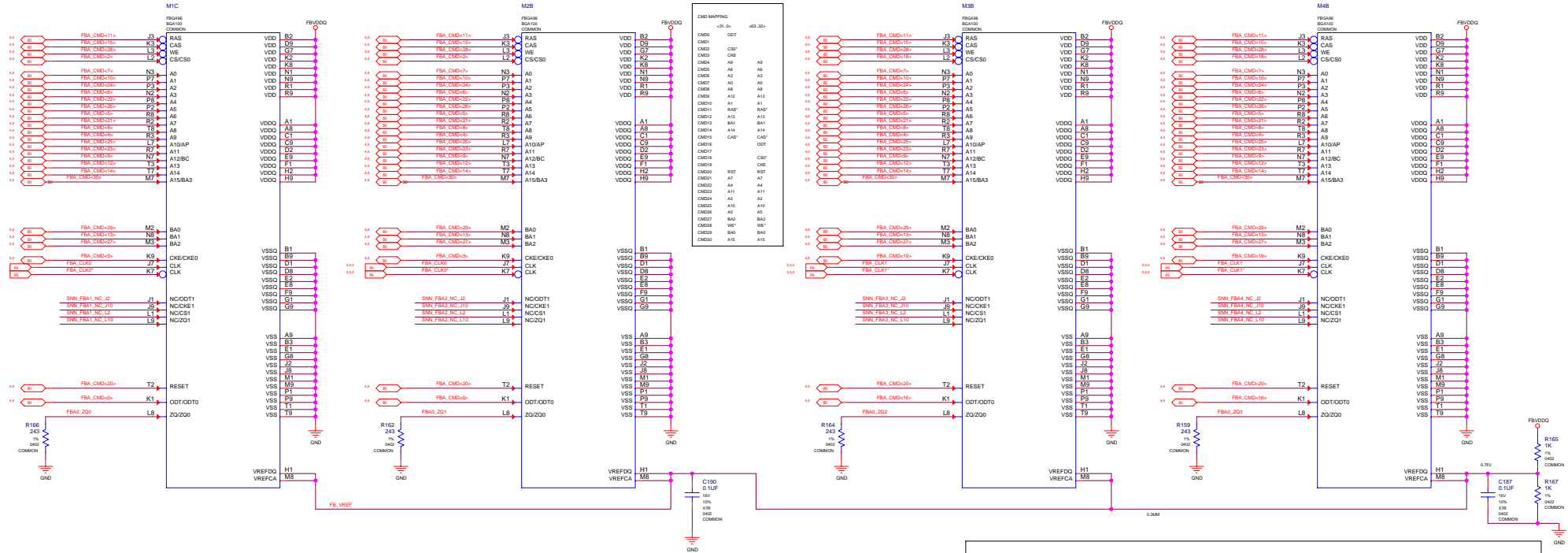


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GPU FRAME BUFFER: PARTITION A



DDR3 Memories



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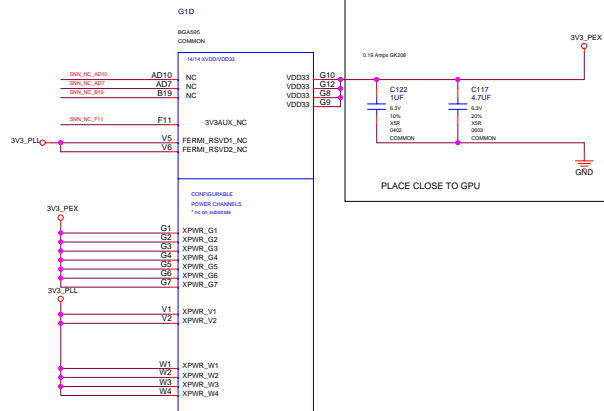
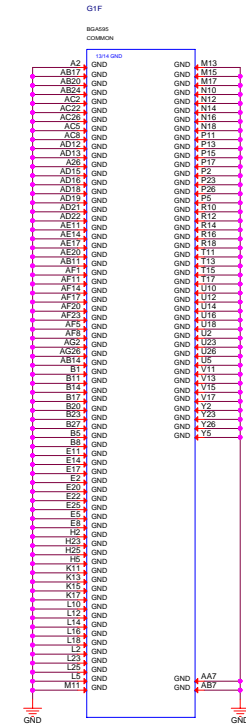
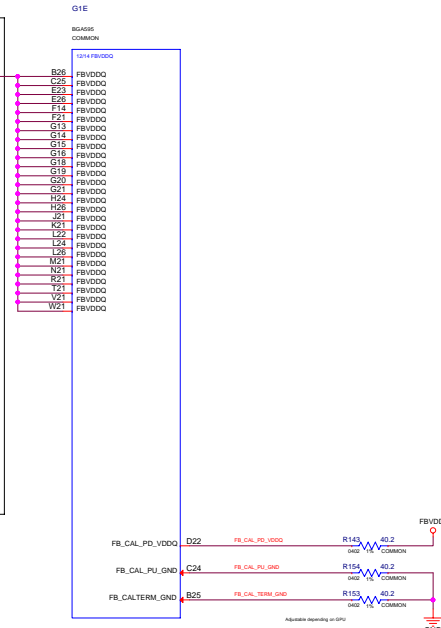
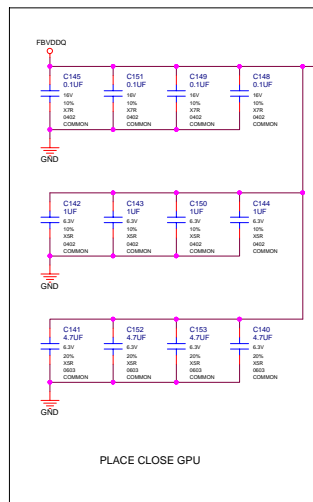
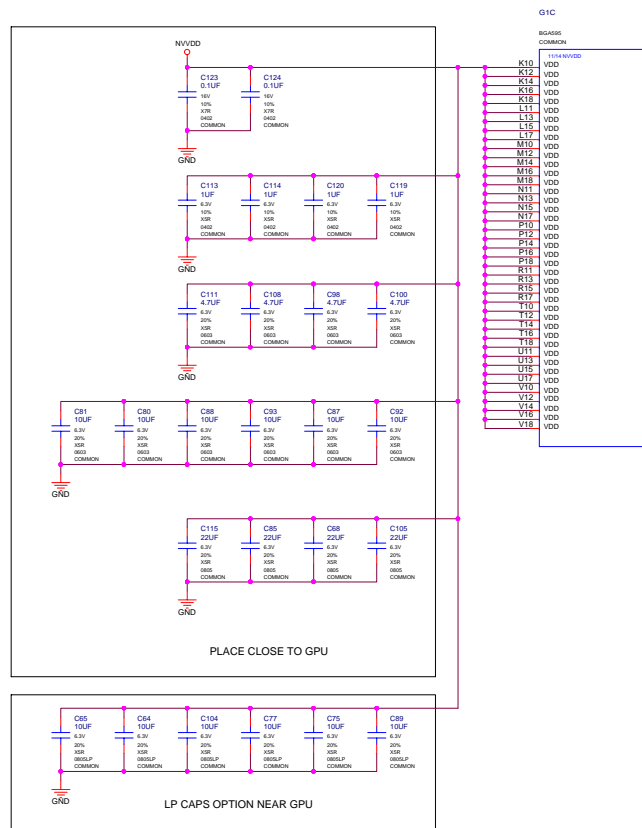
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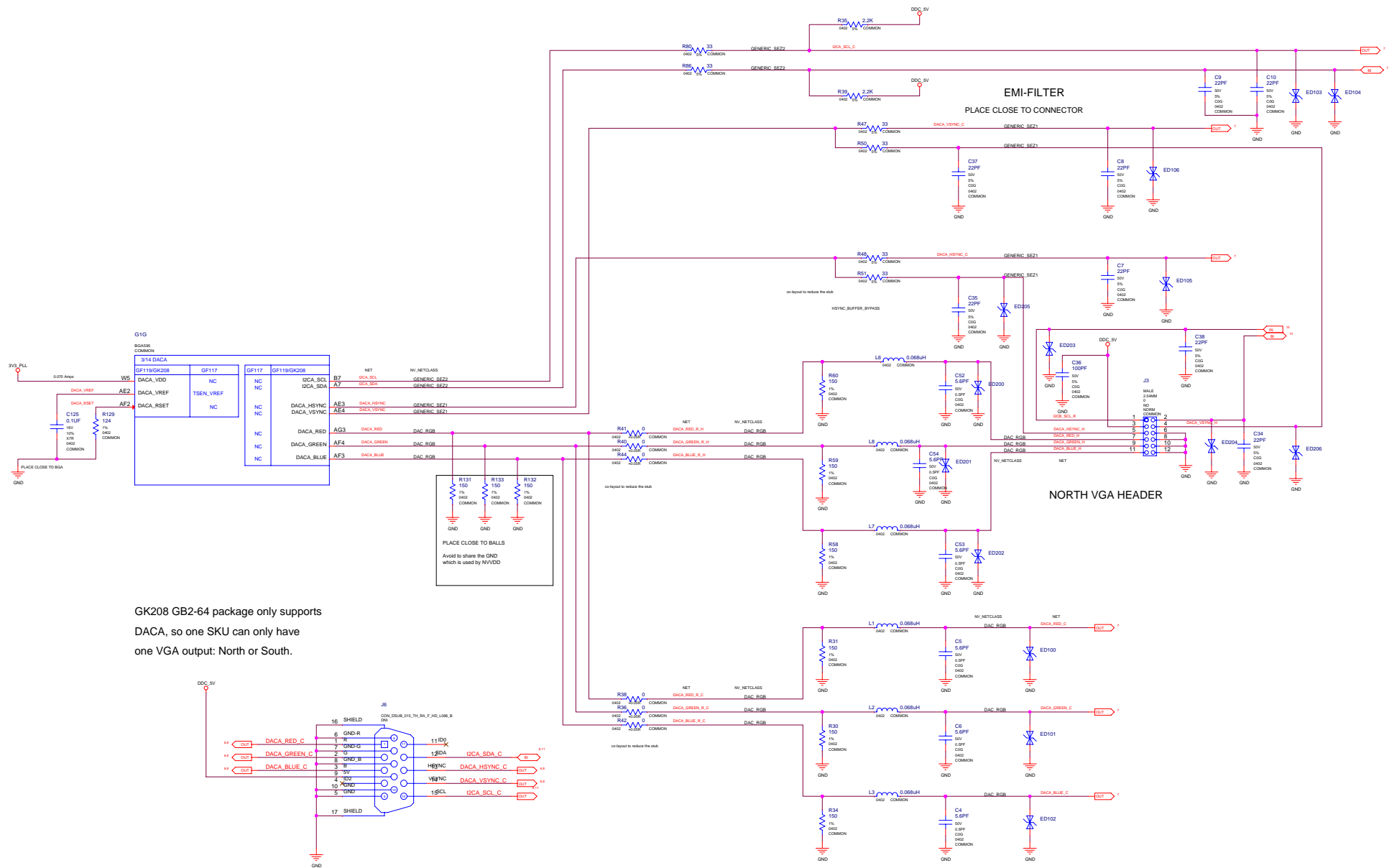
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DECOUPLING FOR CORE POWER_TOP



DACA VGA



GK208 GB2-64 package only supports
DACA, so one SKU can only have
one VGA output: North or South.

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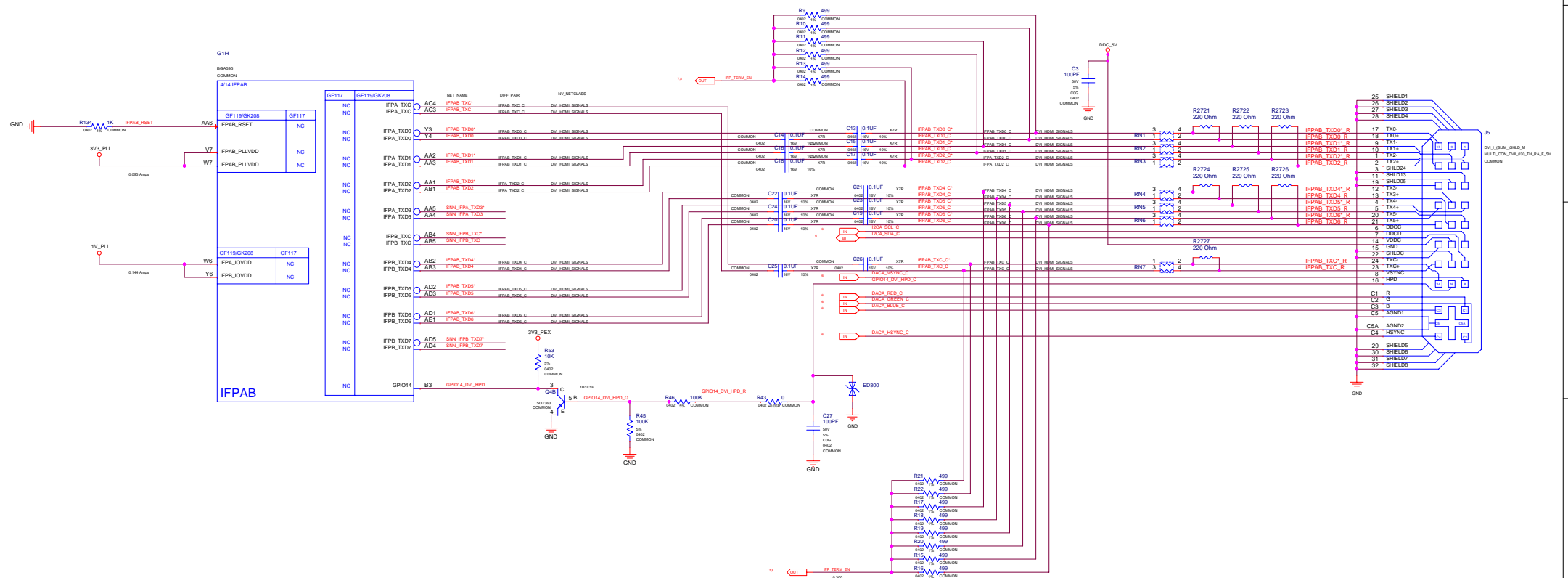
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IFPAB TMDS



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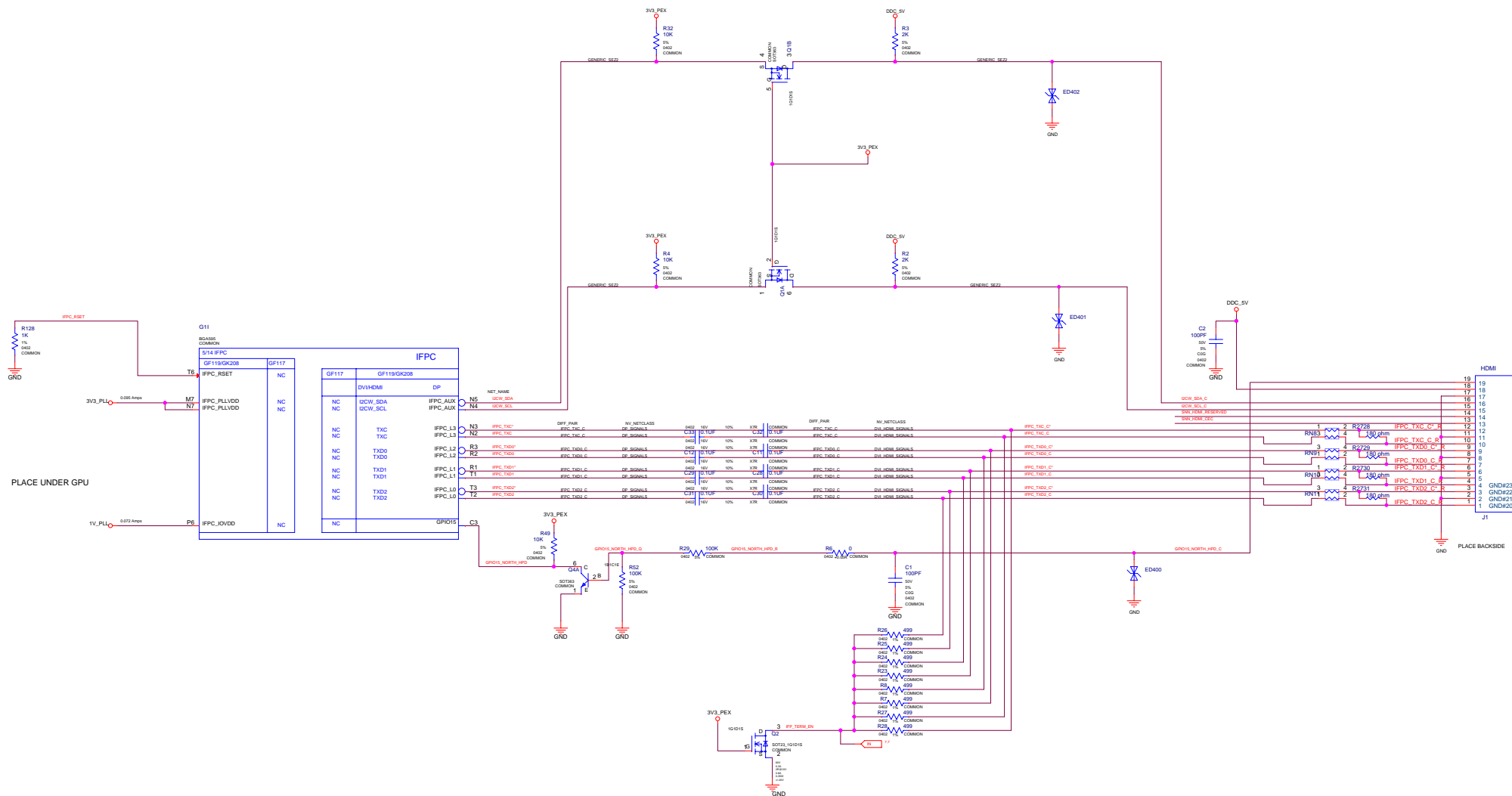
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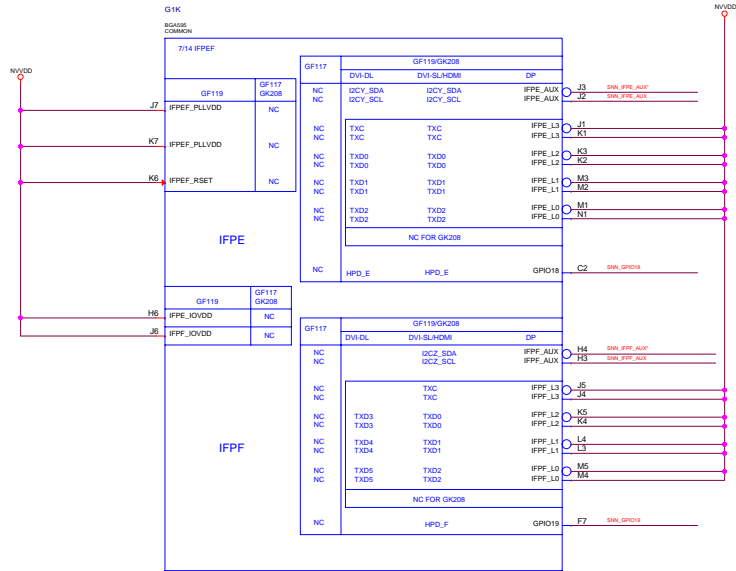
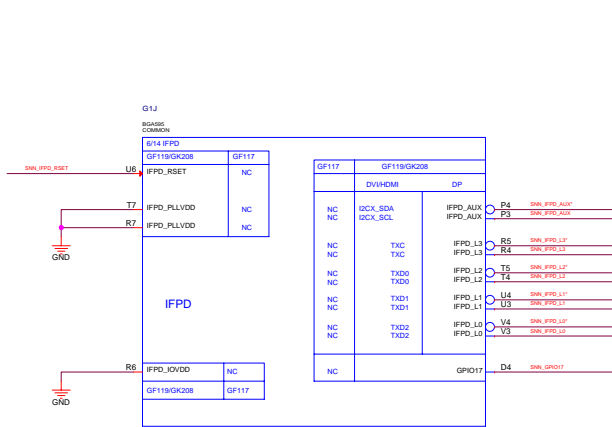
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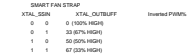
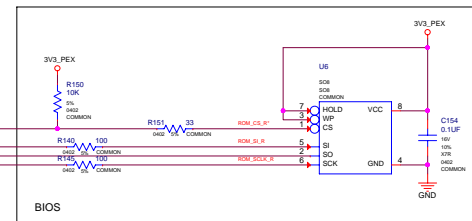
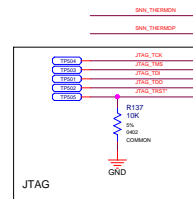


UNUSED IFPD, IFPE & IFPF



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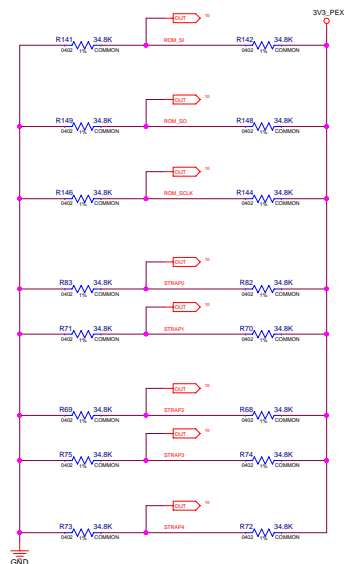
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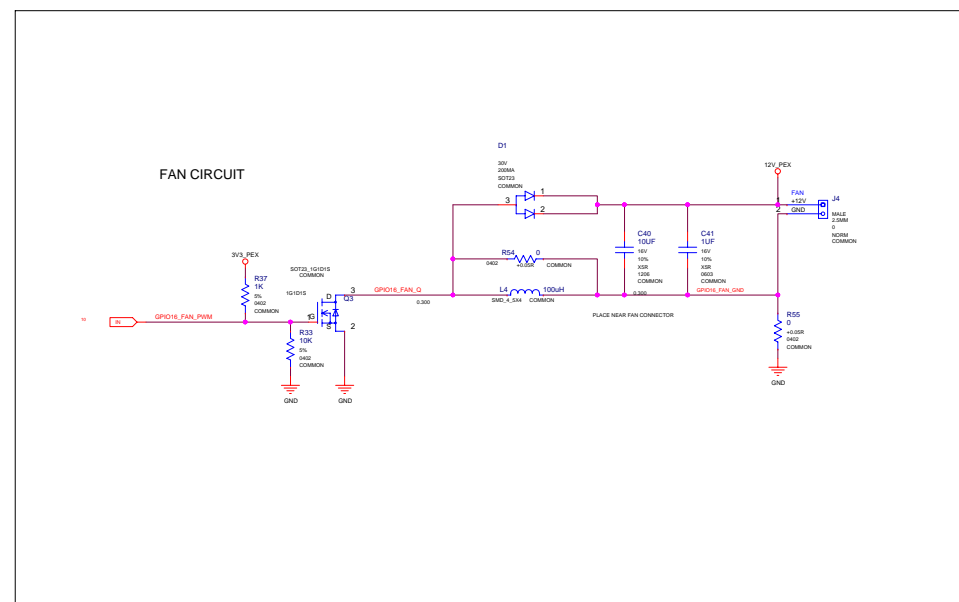
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0000	5.1K to GND	1000	5.1K to VCC
0001	10K to GND	1001	10K to VCC
0010	15K to GND	1010	15K to VCC
0011	20K to GND	1011	20K to VCC
0100	24.9K to GND	1100	24.9K to VCC
0101	30.1K to GND	1101	30.1K to VCC
0110	34.9K to GND	1110	34.9K to VCC
0111	45.3K to GND	1111	45.3K to VCC

Bit Signal	Values
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Bit Signal		Values				
03	RAMCFG[2]	000	Reserved			ROM_Si
		001	256Mx16 DQK3 X16 64Kb Micron			
04	RAMCFG[3]	000	256Mx16 DQK3 X16 64Kb Hynix			
01	RAMCFG[1]	001	256Mx16 DQK3 X16 64Kb Samsung			
05	RAMCFG[0]	010	128Mx16 DQK3 X16 64Kb Micron			
		011	128Mx16 DQK3 X16 64Kb Hynix			
		011	128Mx16 DQK3 X16 64Kb Samsung			
06	FB[0]	01	0256B			ROM_SO
07	FB[0]	10	256B			
08	SMB_ALT_ADDR	0	DISABLED	1	ENABLED	
09	VGA_DEVICE	0	DISABLED	1	ENABLED	
03	PO_DEVICE_EXT	SW0	0	SW1	TBD	ROM_SCL
04	SUB_VENDOR	0	NO_BIOS	1	BIOS	
01	PO_DEVICE_EXT_BITS	SW0	0	SW1	TBD	
00	FEU_PLN_EN_TERM100	0	DISABLED	1	ENABLED	
02	USER[0]	0000	NUT			Strap0
03	USER[0]					
04	USER[0]					
05	USER[0]					
03	SGO_PCFG0_LUT_ADDR[0]	0000	OSKTOP_DEFAULT	1000	OSKTOP_ITHMS	Strap1
		0001	MOBILE_ITHMS_LAMP	1001	MOBILE_ITHMS_SWAMP	
04	SGO_PCFG0_LUT_ADDR[0]	0010	MOBILE_ITHMS_LAMP	1010	MOBILE_ITHMS_SWAMP	
		0011	MOBILE_ITHMS_LAMP	1011	MOBILE_ITHMS_SWAMP	
05	SGO_PCFG0_LUT_ADDR[0]	0100	MOBILE_ITHMS_SWAMP	1100	MOBILE_ITHMS_SWAMP	
		0101	MOBILE_ITHMS_SWAMP	1101	MOBILE_ITHMS_SWAMP	
06	SGO_PCFG0_LUT_ADDR[0]	0110	MOBILE_ITHMS_SWAMP	1110	MOBILE_ITHMS_SWAMP	
		0111	MOBILE_ITHMS_SWAMP	1111	MOBILE_ITHMS_SWAMP	
05	PO_DEVICE	SW0	0000			Strap2
01	PO_DEVICE[0]					
02	PO_DEVICE[0]					
03	PO_DEVICE[0]					
08	SOKI_EXPOSED	0	DISABLED	1	ENABLED	Strap3
02	SOKI_EXPOSED	0	DISABLED	1	ENABLED	
01	SOKI_EXPOSED	0	DISABLED	1	ENABLED	
00	SOKI_EXPOSED	0	DISABLED	1	ENABLED	
03	POE_SPEED_CHANGE_GEN0	0	DISABLED	1	ENABLED	Strap4
01	POE_MAX_SPEED	0	GEN0	1	GEN3	
00	DP_PLL_VDD_3V3	0	USERV0	1	USERV3	

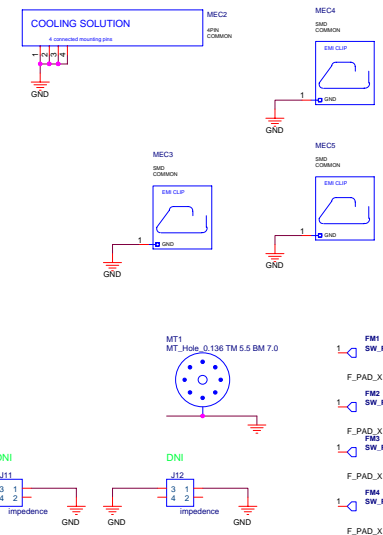
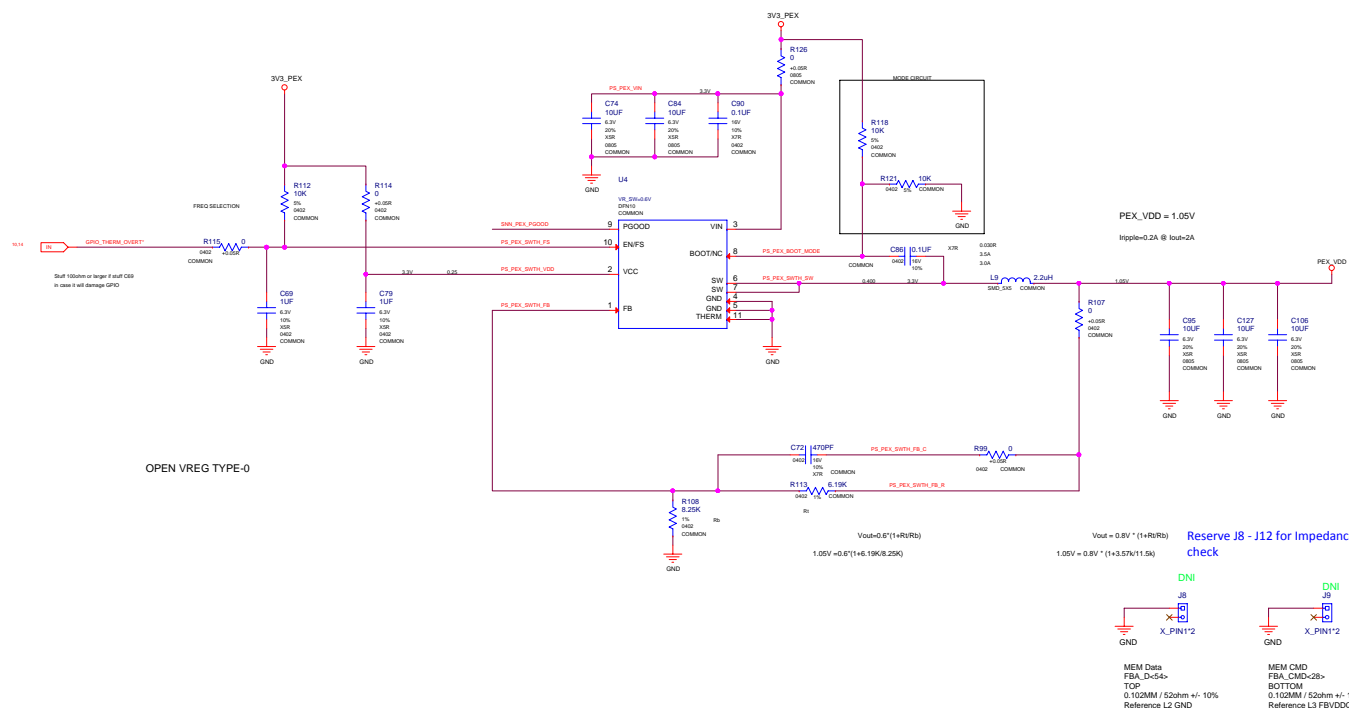
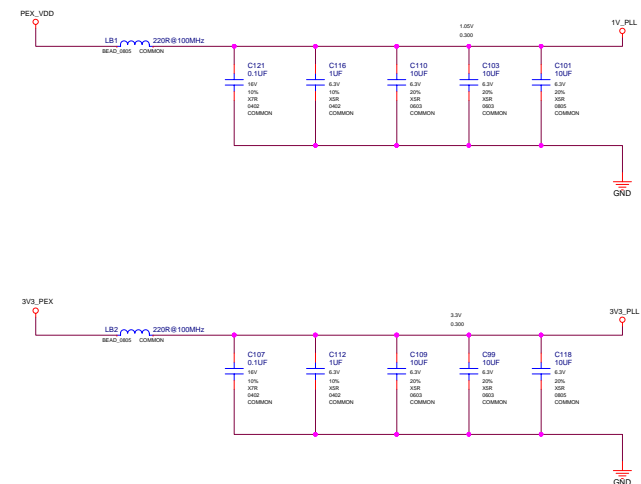
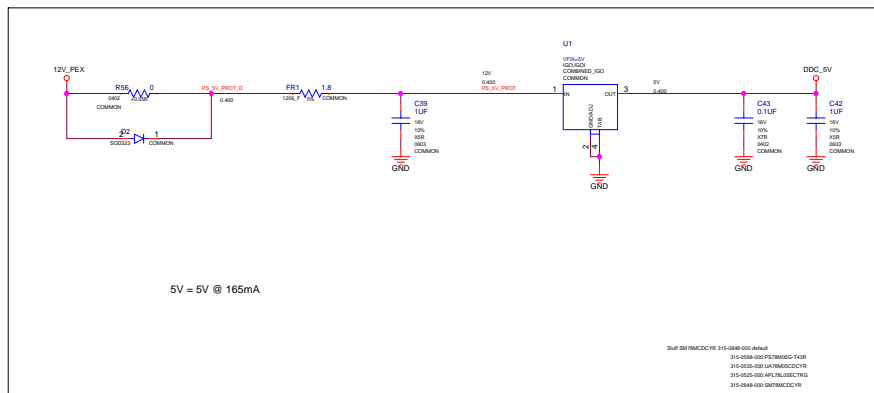


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POWER SUPPLY I: PEXVDD, 5V



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POWER SUPPLY II: FBVDDQ



FBVDDQ = 1.5V
Iripple=0.2A @ Iout=2.5A

OPEN VREG TYPE-0

$$V_{out} = V_{ref} * (1 + R3/R2)$$

$$V_{ref} = 0.6V: \quad 1.5V = 0.6V * (1 + R3/1.24k)$$

	PS	Fosc	Vhf	Tot
316-0168-000; AP3436CONTR 18Hz	0.6V	1.5%		
316-0134-000; RTB071AZQH 18Hz	0.6V	1.5%		
316-0746-000; LIP1728PCCA 18Hz	0.6V	1.5%		

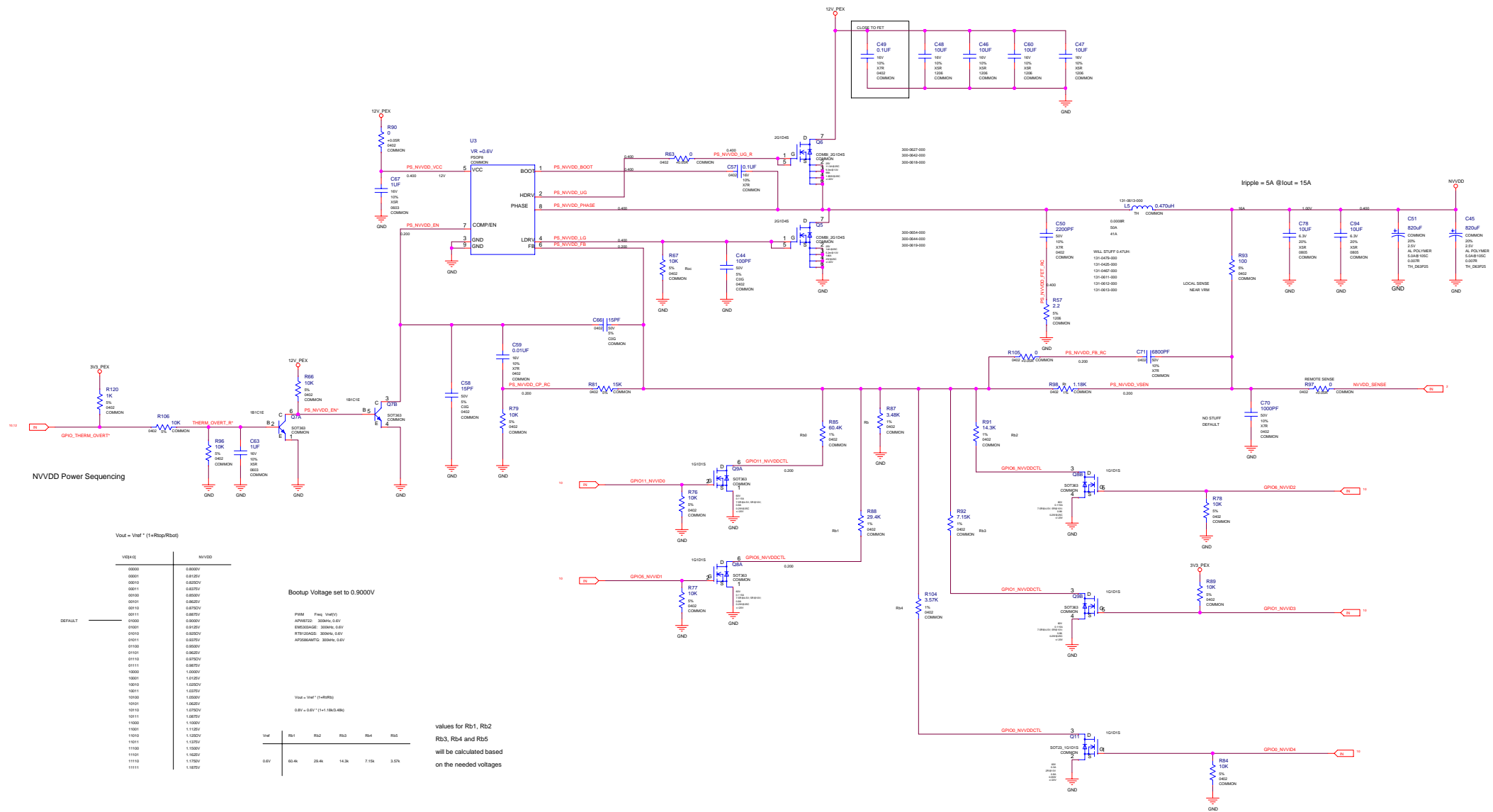
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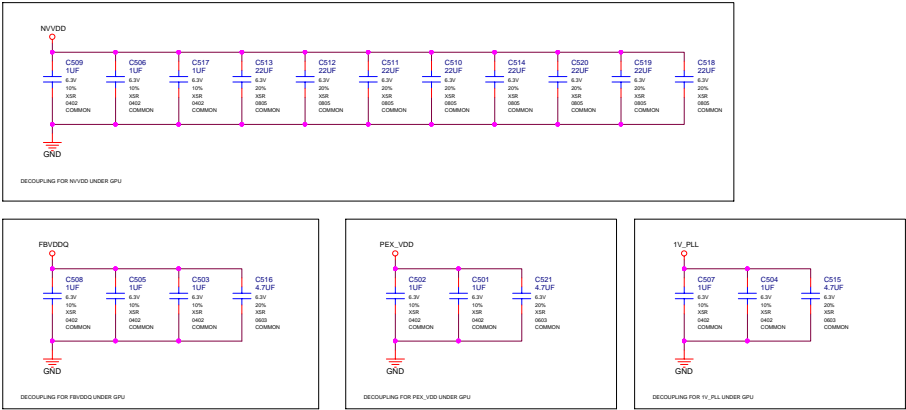


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