M75C

75W/100W GK107/GK106/GM107 128-BIT GDDR5 in x32MODE
DVI-D-DL + CRT +HDMI

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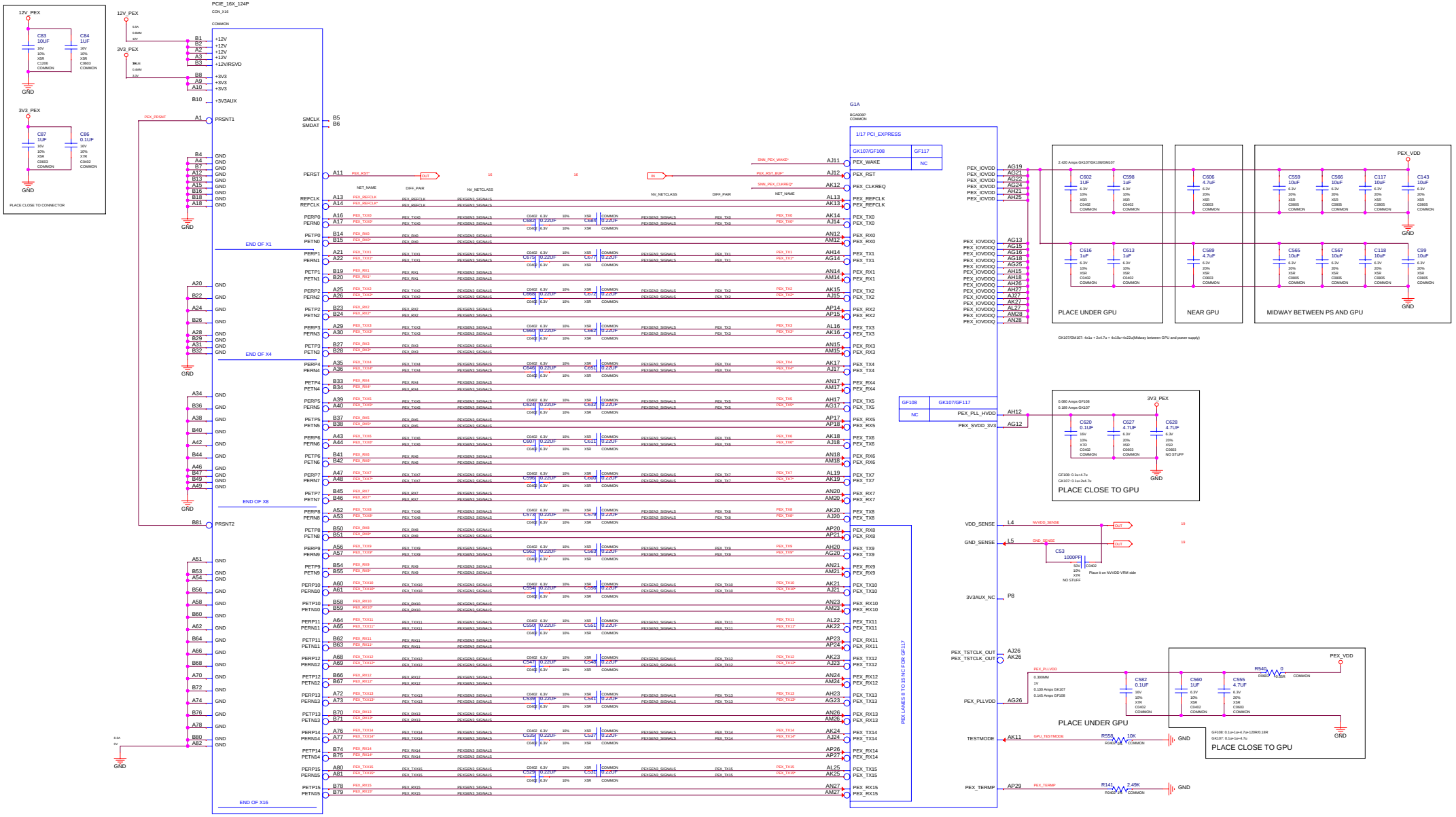
PCI Express



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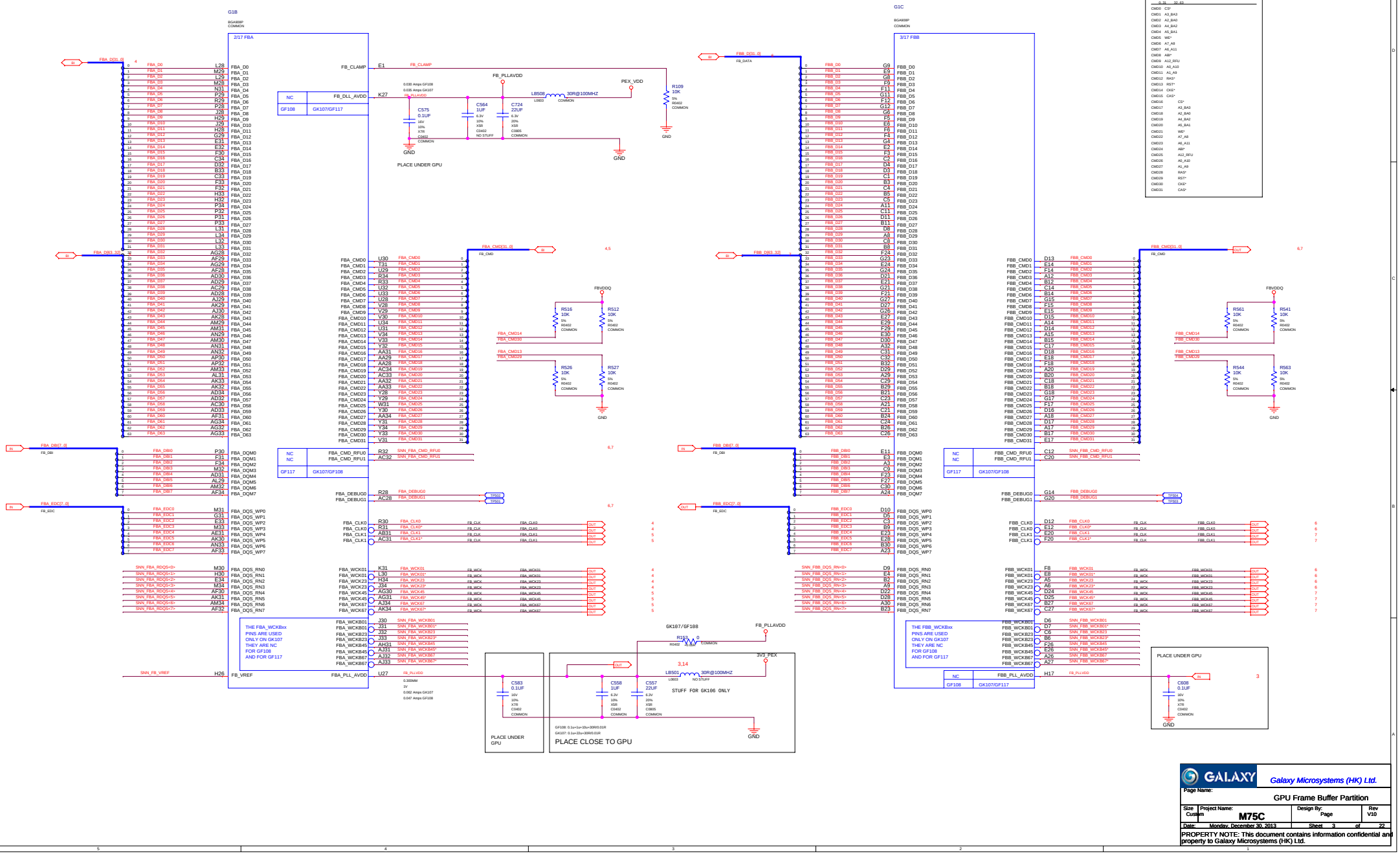
GPU Frame Buffer Partition A/B



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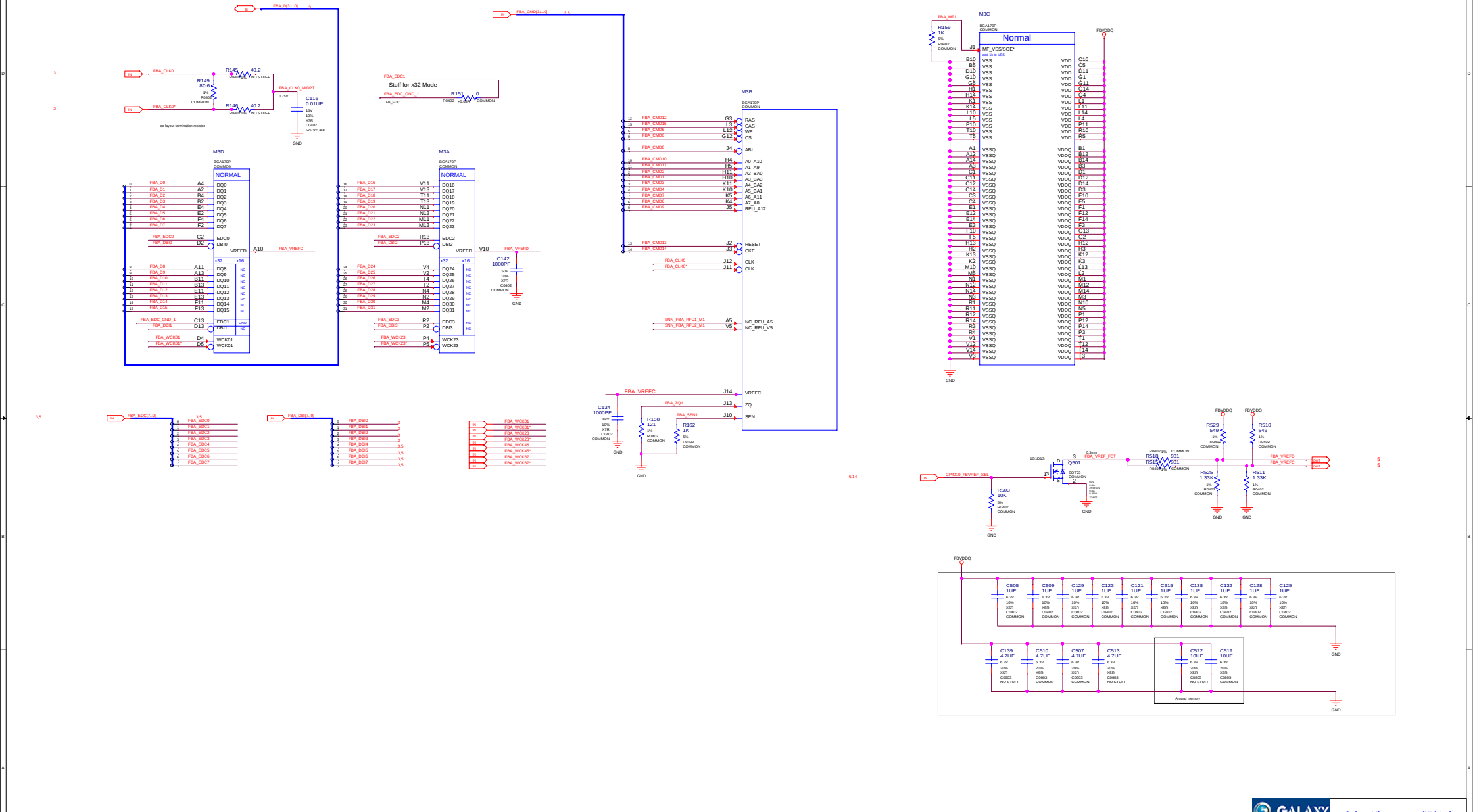

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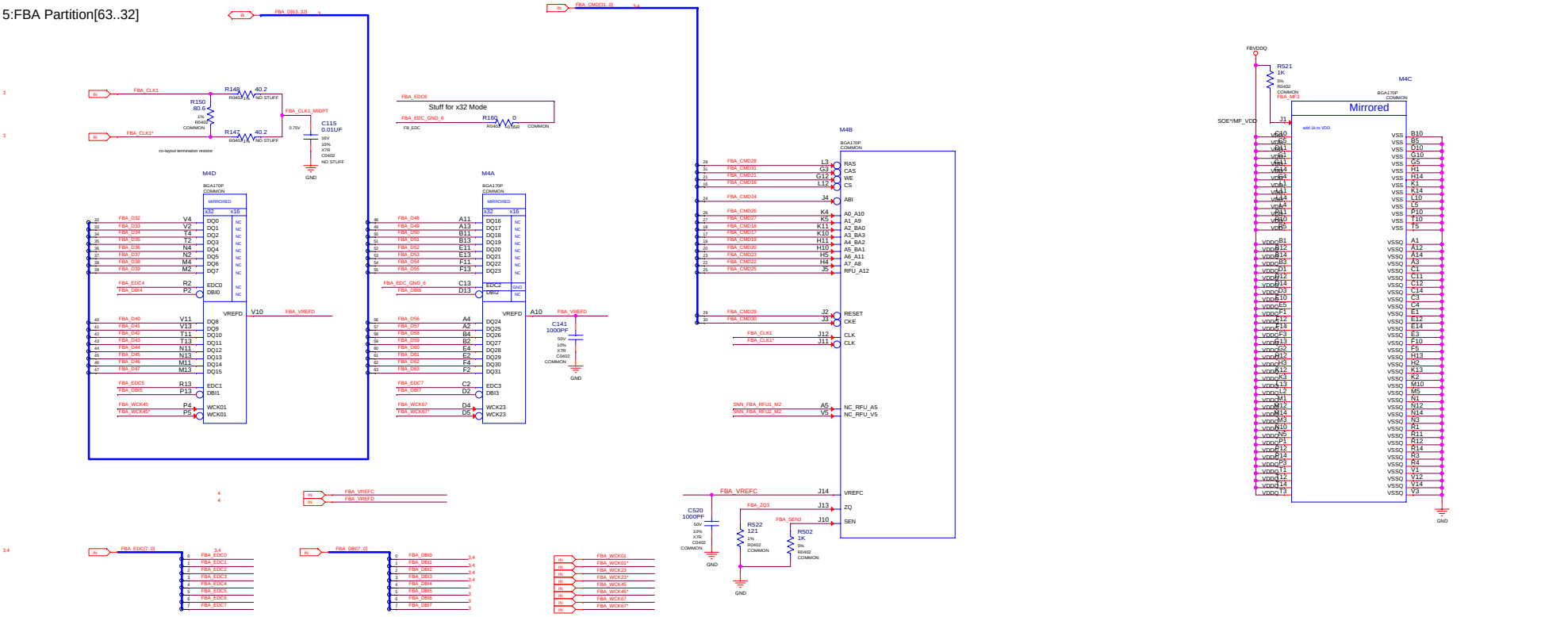
Page 5:FBA Partition[63..32]



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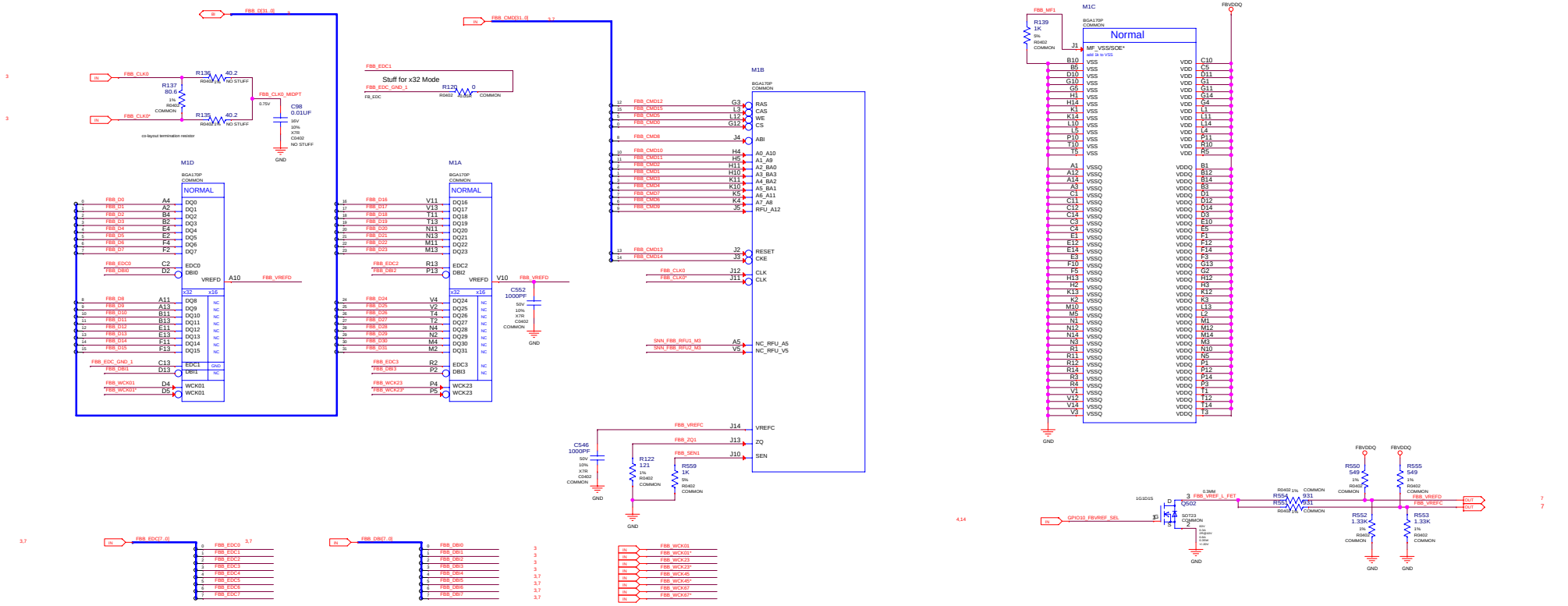

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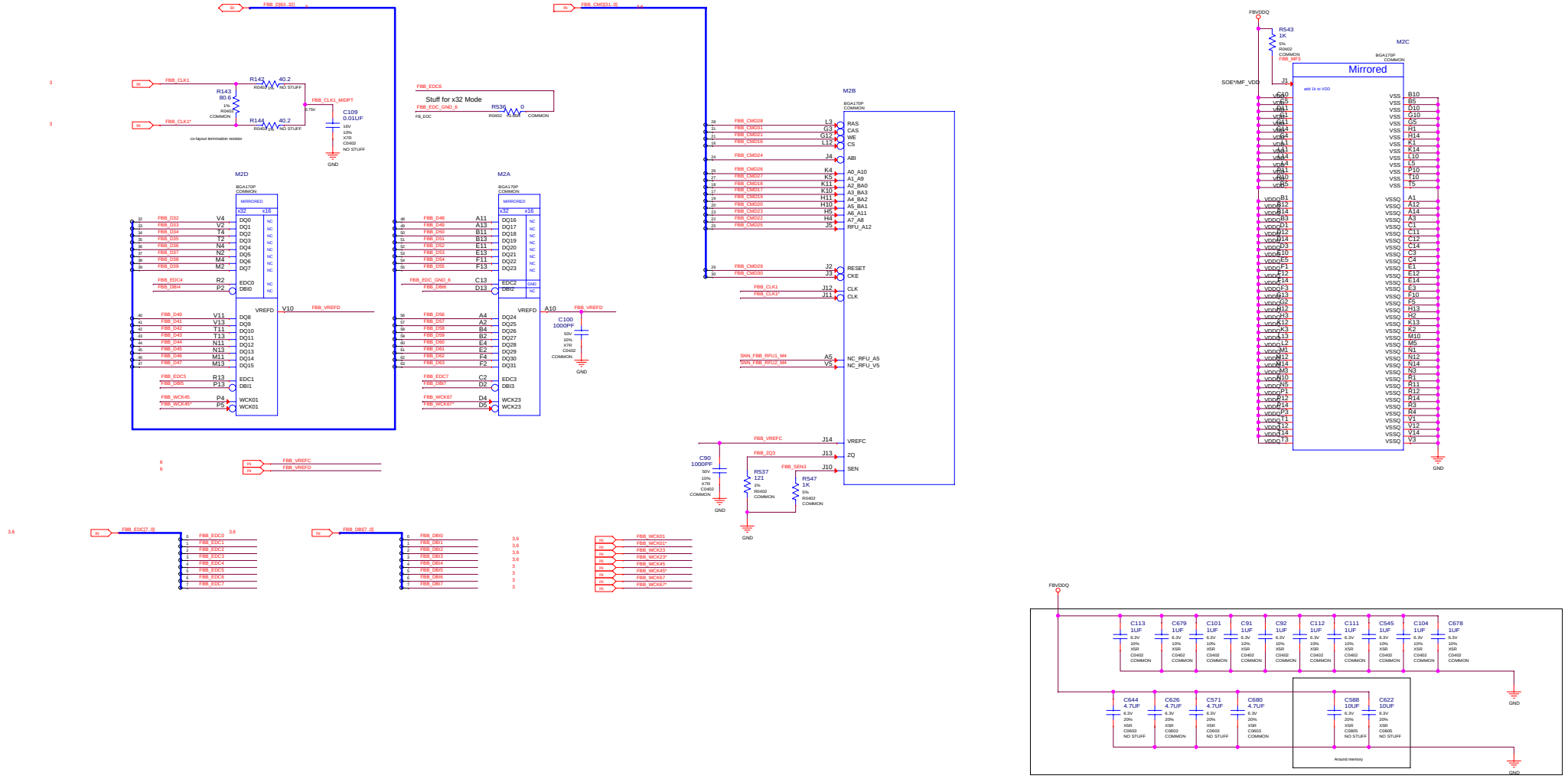

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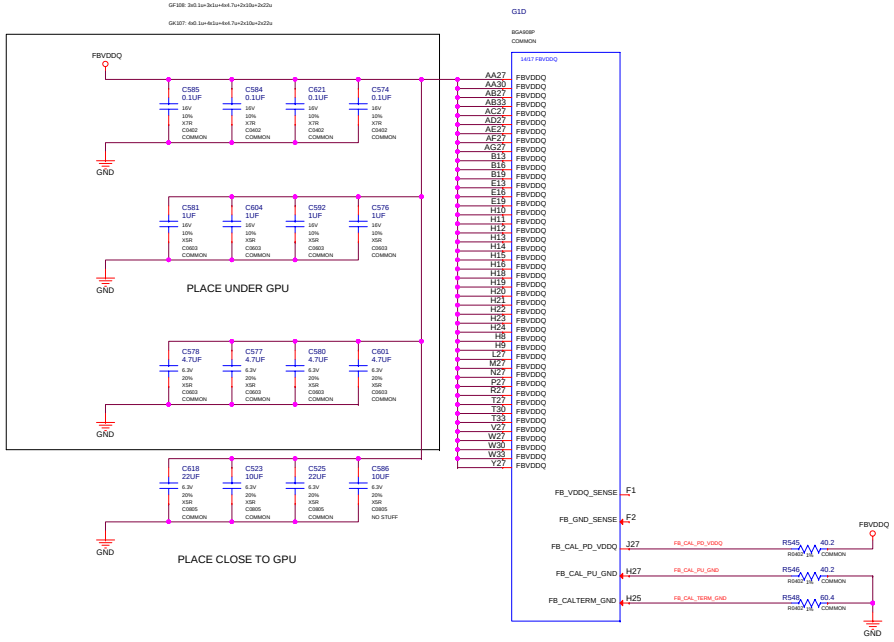
FB Decoupling



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Page Name: GPU FB Decoupling			
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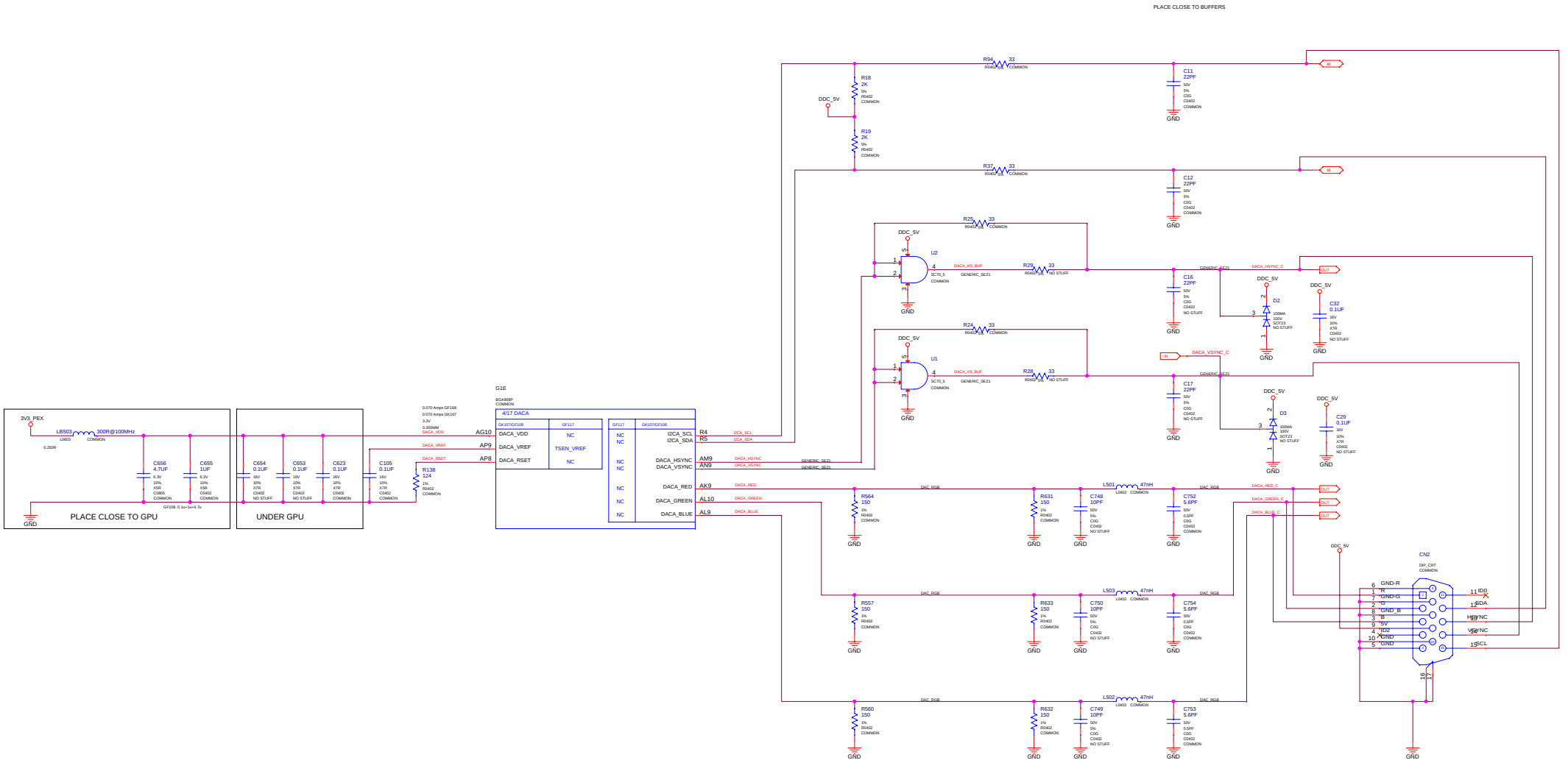
DACA VGA



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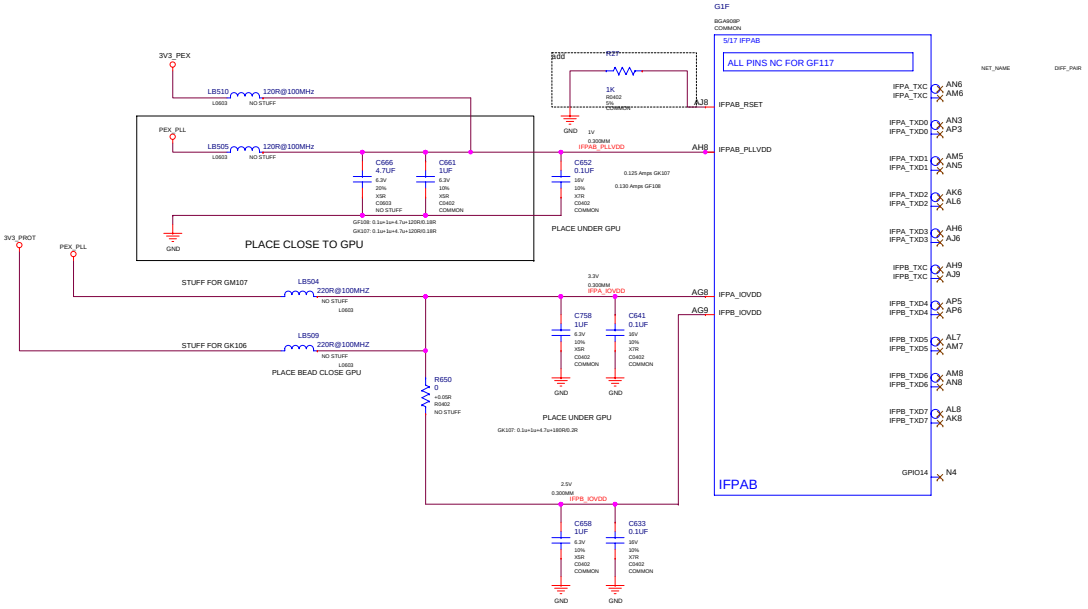
IFPAB TMDS



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Page Name: IFPAB TMDS			
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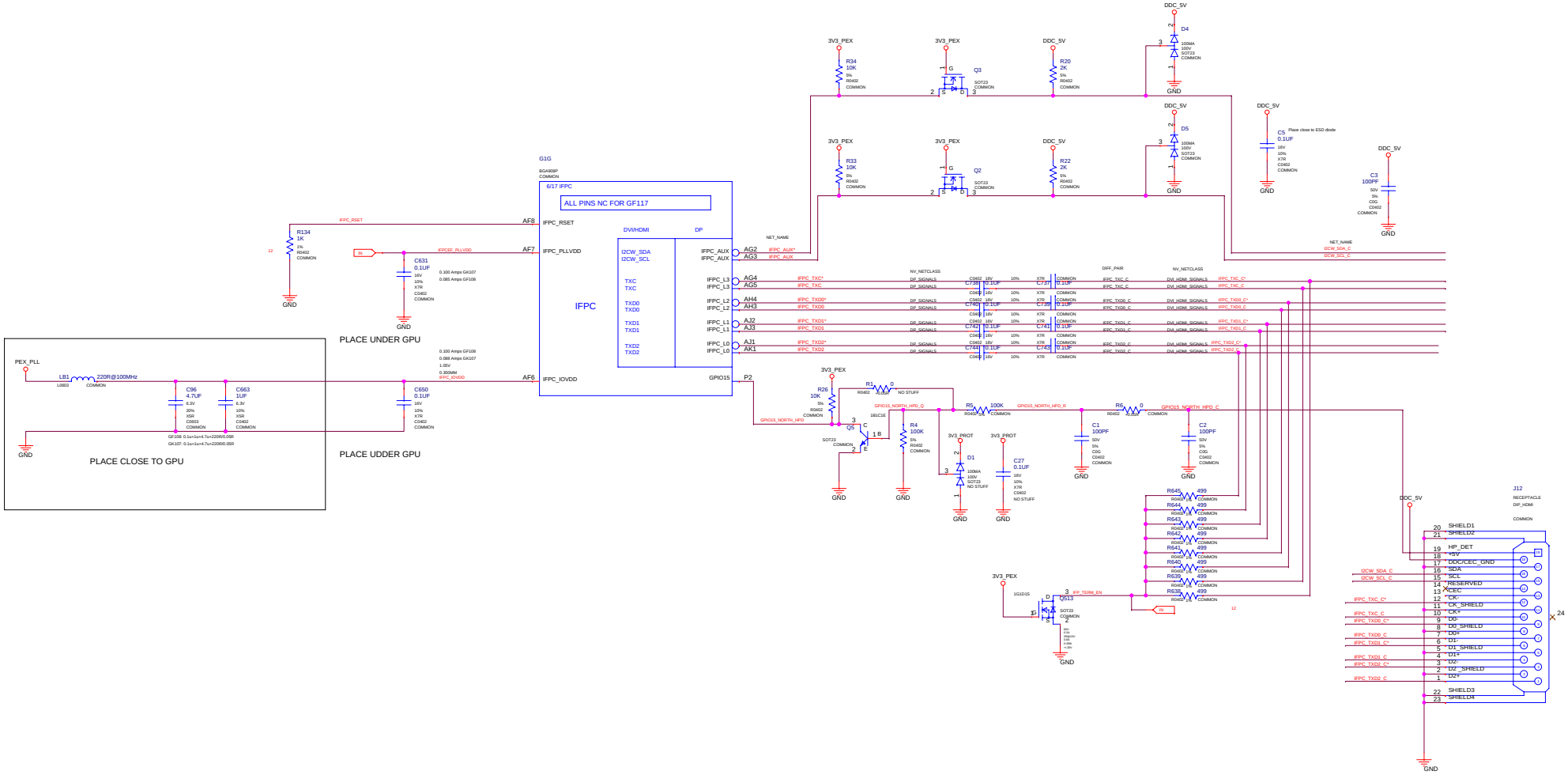
IFPC mHDMI



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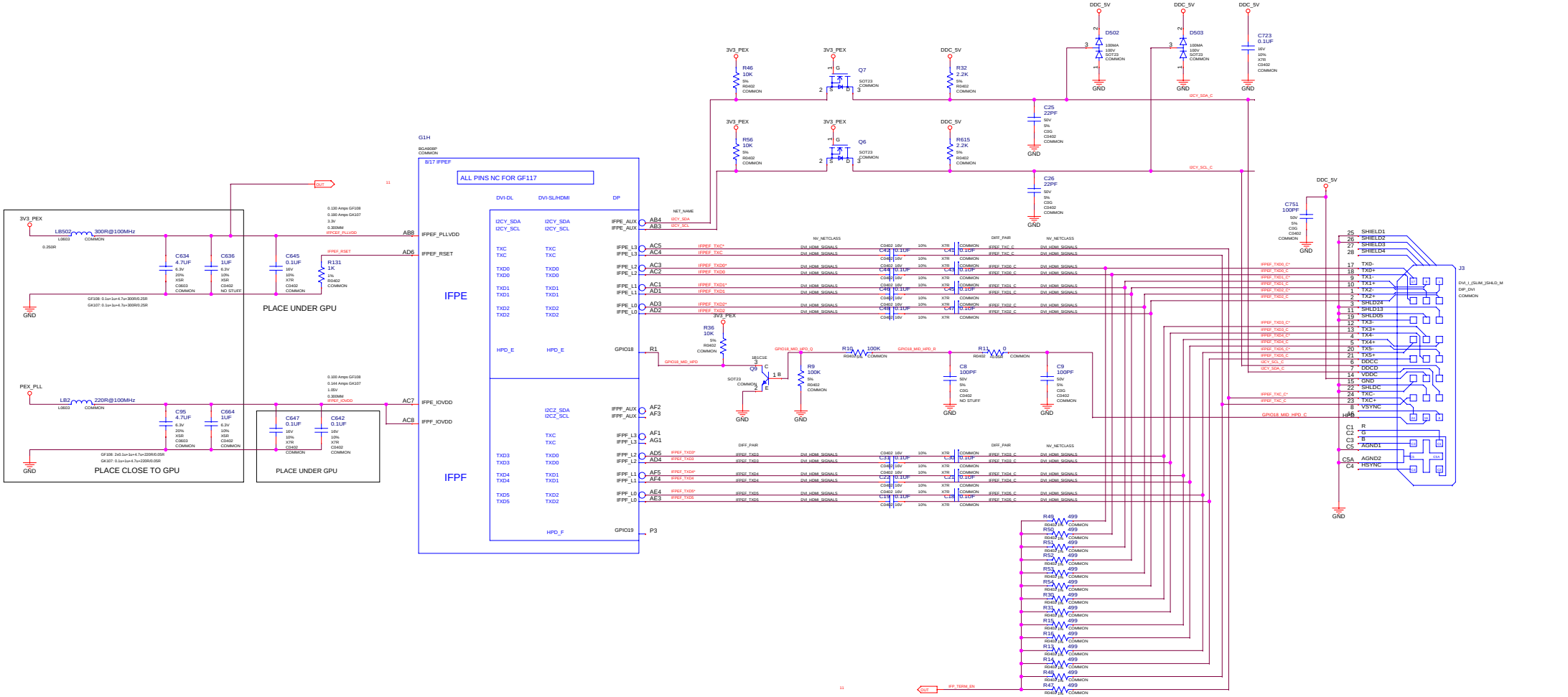
IFPEF TMDS



Page Name:	IFPEF TMDS		
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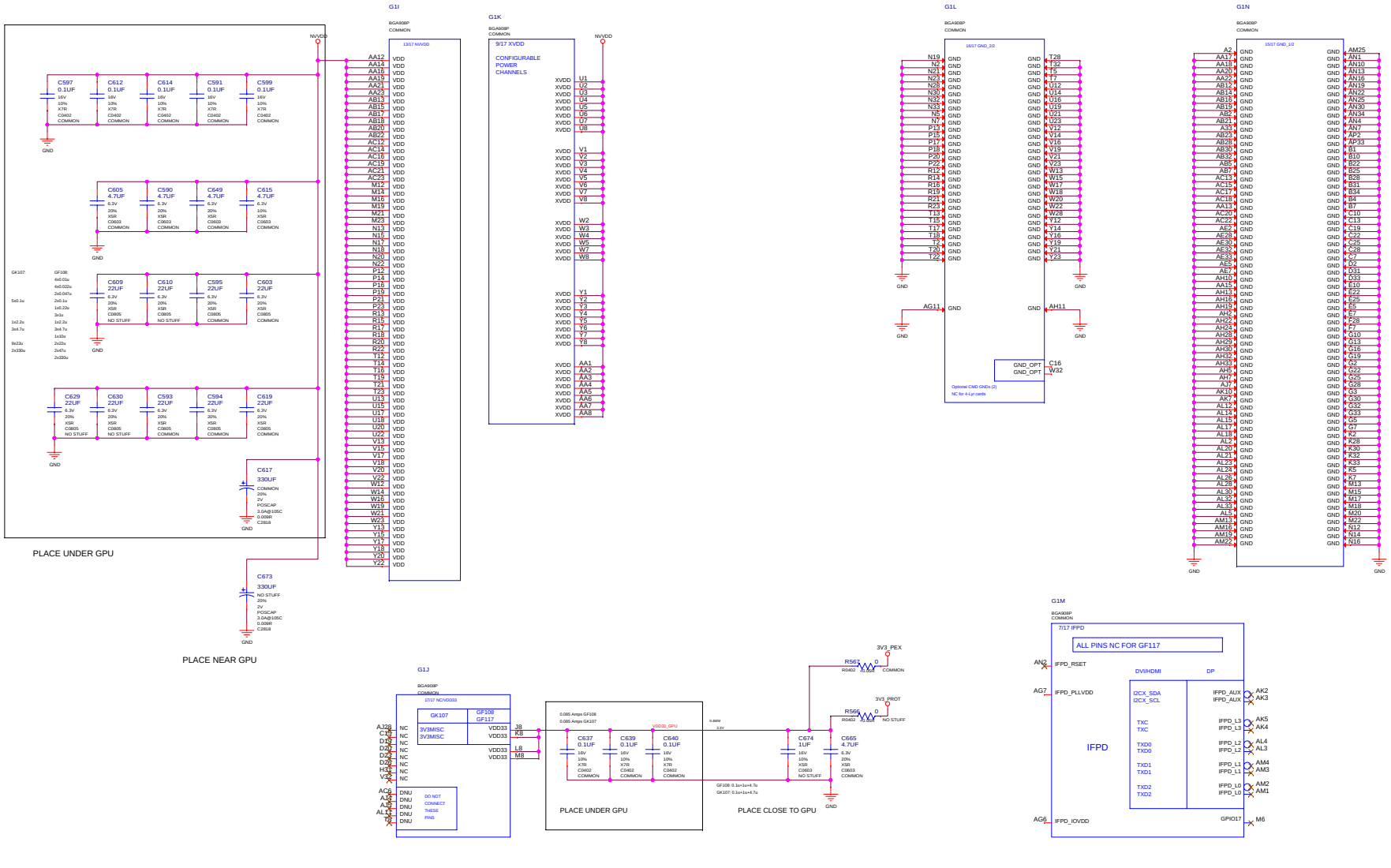
Core Decoupling,GPU_VDD_3V3



Page Name:	Core Decoupling,GPU VDD_3V		
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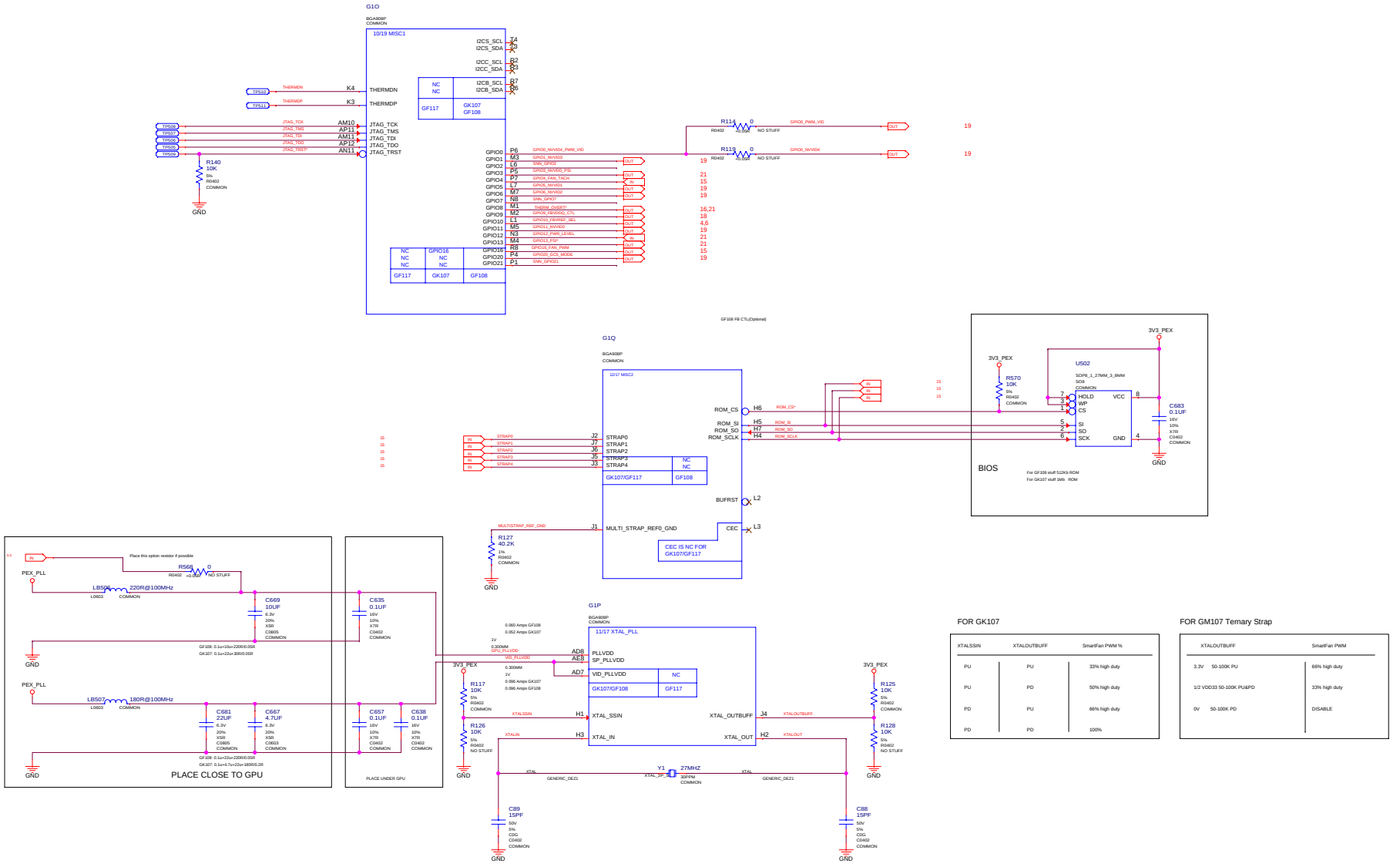
Misc Interfaces



FOR GK107

XTALSSIN	XTALOUTBUFF	SmartFan PWM %
PU	PU	33% high duty
PU	PD	50% high duty
PD	PU	66% high duty
PD	PD	100%

FOR GM107 Ternary Strap

XTALOUTBUFF	SmartFan PWM
3.3V 50-100K PU	66% high duty
1/2 VDD33 50-100K PU&PD	33% high duty
0V 50-100K PD	DISABLE

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Page Name: Misc Interfaces

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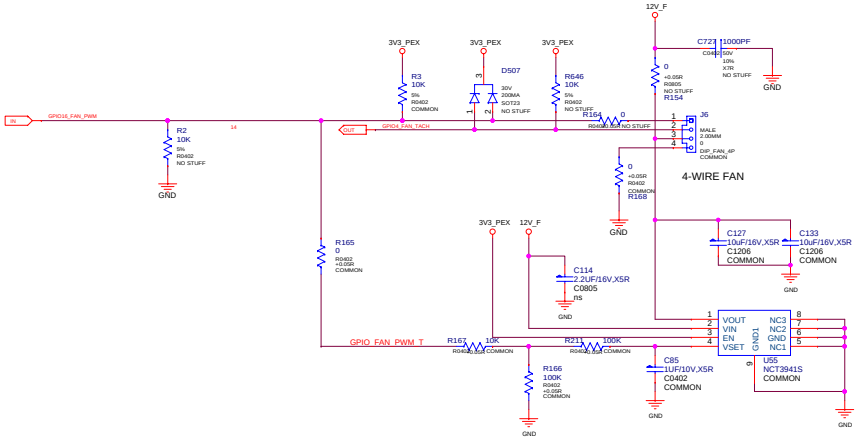
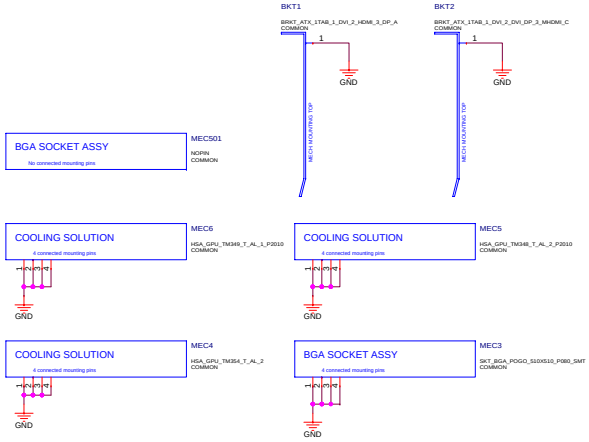
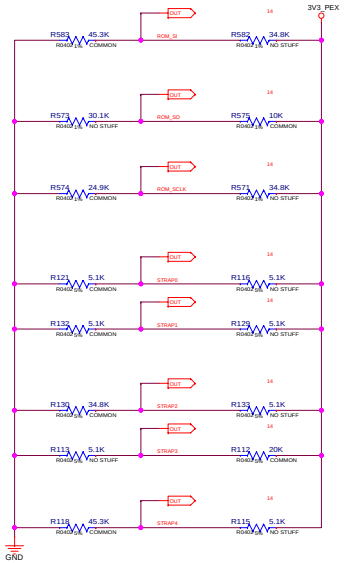
Straps, Thermal, Mechanical







GK107 Straps

Bit	Signal	Values			
03:	RAMCFG[3]	0000	64Mx16 128bit	1000	64Mx16 64bit
		0001	64Mx16 128bit Micron	1001	64Mx16 64bit Micron
02:	RAMCFG[2]	0010	64Mx16 128bit Hynix	1010	64Mx16 64bit Hynix
		0011	64Mx16 128bit Samsung	1011	64Mx16 64bit Samsung
01:	RAMCFG[1]	0100	128Mx16 128bit	1100	128Mx16 64bit
		0101	128Mx16 128bit Micron	1101	128Mx16 64bit Micron
00:	RAMCFG[0]	0110	128Mx16 128bit Hynix	1110	128Mx16 64bit Hynix
		0111	128Mx16 128bit Samsung	1111	128Mx16 64bit Samsung
03:	FB[1]	01	128MB		
02:	FB[0]				
01:	SMB_ALT_ADDR	0	DISABLED	1	ENABLED
00:	VGA_DEVICE	0	DISABLED	1	ENABLED
03:	PCI_DEVID_EXT	0	INIT		
02:	SUB_VENDOR	0	NO_BIOS	1	BIOS
01:	PCI_DEVID_EXT_BITS	0	INIT		
00:	PEX_PLL_EN_TERM100	0	DISABLED	1	ENABLED
03:	USER[3]	0000	INIT		
02:	USER[2]				
01:	USER[1]				
00:	USER[0]				
03:	3GIO_PADCFG_LUT_ADR[3]	0000	DSKTOP_DEFAULT	1000	DSKTOP_HTHRS
		0001	MOBILE_DEFAULT	1001	MOBILE_HTHRS_NAMP
02:	3GIO_PADCFG_LUT_ADR[2]	0010	MOBILE_NTHRS_LLAMP	1010	MOBILE_HTHRS_LLAMP
		0011	MOBILE_NTHRS_LAMP	1011	MOBILE_HTHRS_LAMP
01:	3GIO_PADCFG_LUT_ADR[1]	0100	MOBILE_NTHRS_HAMP	1100	MOBILE_HTHRS_HAMP
		0101	MOBILE_NTHRS_HHAMP	1101	MOBILE_HTHRS_HHAMP
00:	3GIO_PADCFG_LUT_ADR[0]	0110	MOBILE_NTHRS_HHHAMP	1110	MOBILE_HTHRS_HHHAMP
		0111	MOBILE_NTHRS_HHHHAMP	1111	MOBILE_HTHRS_HHHHAMP
03:	PCI_DEVID[3]	0000	GK107-450-A1		
02:	PCI_DEVID[2]	0110	GK107-450-A1		
01:	PCI_DEVID[1]				
00:	PCI_DEVID[0]				
03:	SOR3_EXPOSED	0	DISABLED	1	ENABLED
02:	SOR2_EXPOSED	0	DISABLED	1	ENABLED
01:	SOR1_EXPOSED	0	DISABLED	1	ENABLED
00:	SOR0_EXPOSED	0	DISABLED	1	ENABLED
02:	PCIE_SPEED_CHANGE_GEN3	0	DISABLED	1	ENABLED
01:	PCIE_MAX_SPEED	0	GEN1	1	GEN23
00:	DP_PLL_VDD_3V3	0	USE1V8	1	USE3V3

GM107 Straps

Bit	Signal	Values			
03:	RAMCFG[3]	0000	64Mx32 128bit Hynix	1000	Reserved
		0001	64Mx32 128bit Elpida	1001	Reserved
02:	RAMCFG[2]	0010	64Mx32 128bit Samsung	1010	Reserved
		0011	Reserved	1011	Reserved
01:	RAMCFG[1]	0100	128Mx32 128bit Hynix	1100	Reserved
		0101	128Mx32 128bit Elpida	1101	Reserved
00:	RAMCFG[0]	0110	128Mx32 128bit Samsung	1110	Reserved
		0111	Reserved	1111	Reserved
03:	DEVID_SEL	0	DEVID A	1	DEVID B
02:	PCIE_CFG	0	DESKTOP	1	LAPTOP
01:	SMB_ALT_ADDR	0	DISABLED	1	ENABLED
00:	VGA_DEVICE	0	DISABLED	1	ENABLED
03:	SOR3_EXPOSED	0	DISABLED	1	ENABLED
02:	SOR2_EXPOSED	0	DISABLED	1	ENABLED
01:	SOR1_EXPOSED	0	DISABLED	1	ENABLED
00:	SOR0_EXPOSED	0	DISABLED	1	ENABLED

TERNARY STRAP

3.3V:	GC6_ENABLE	50-100K PU ONLY
1.5V:	FOR DEBUG	50-100K PU & PD
0V:	GC6_DISABLE	50-100K PD ONLY

Multilevel Straps

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	34.8K to GND	1110	34.8K to VCC
0111	45.3K to GND	1111	45.3K to VCC

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Page Name: Straps, Thermal, Mechanica

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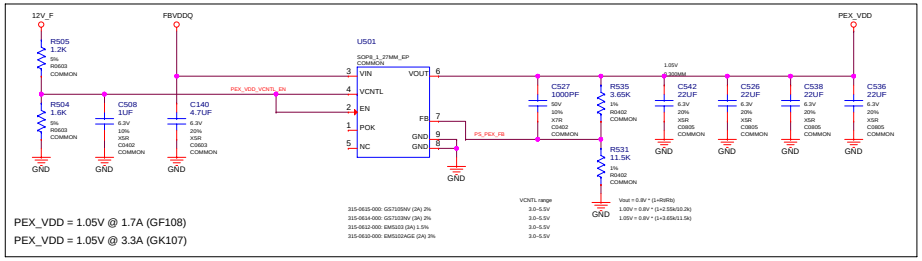
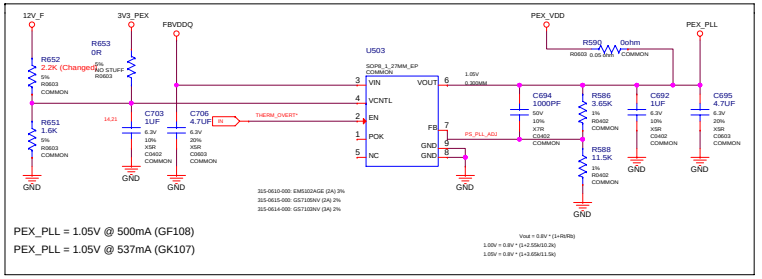
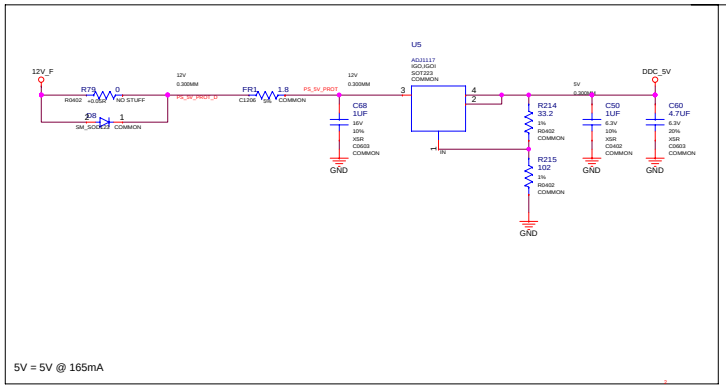
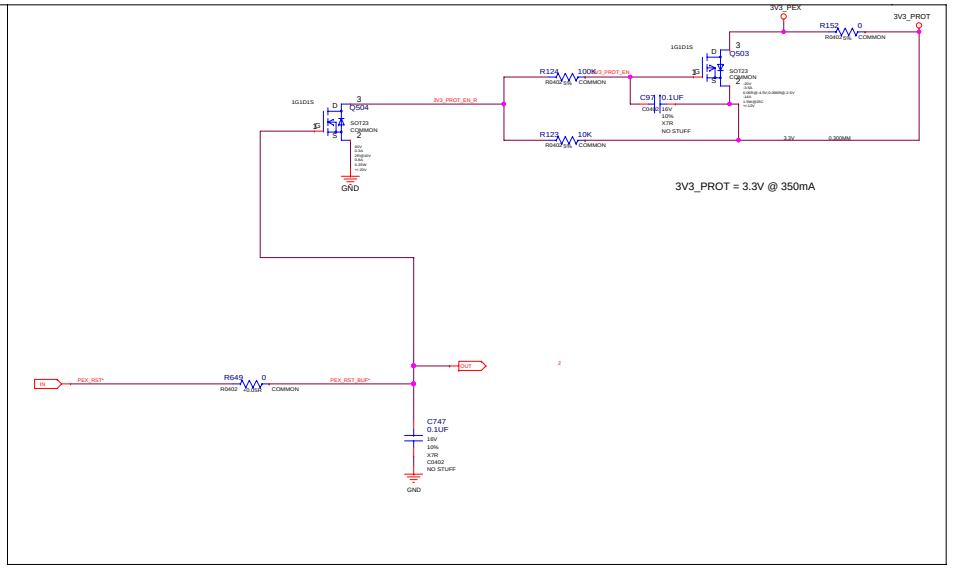
Power Supply I: Misc Power









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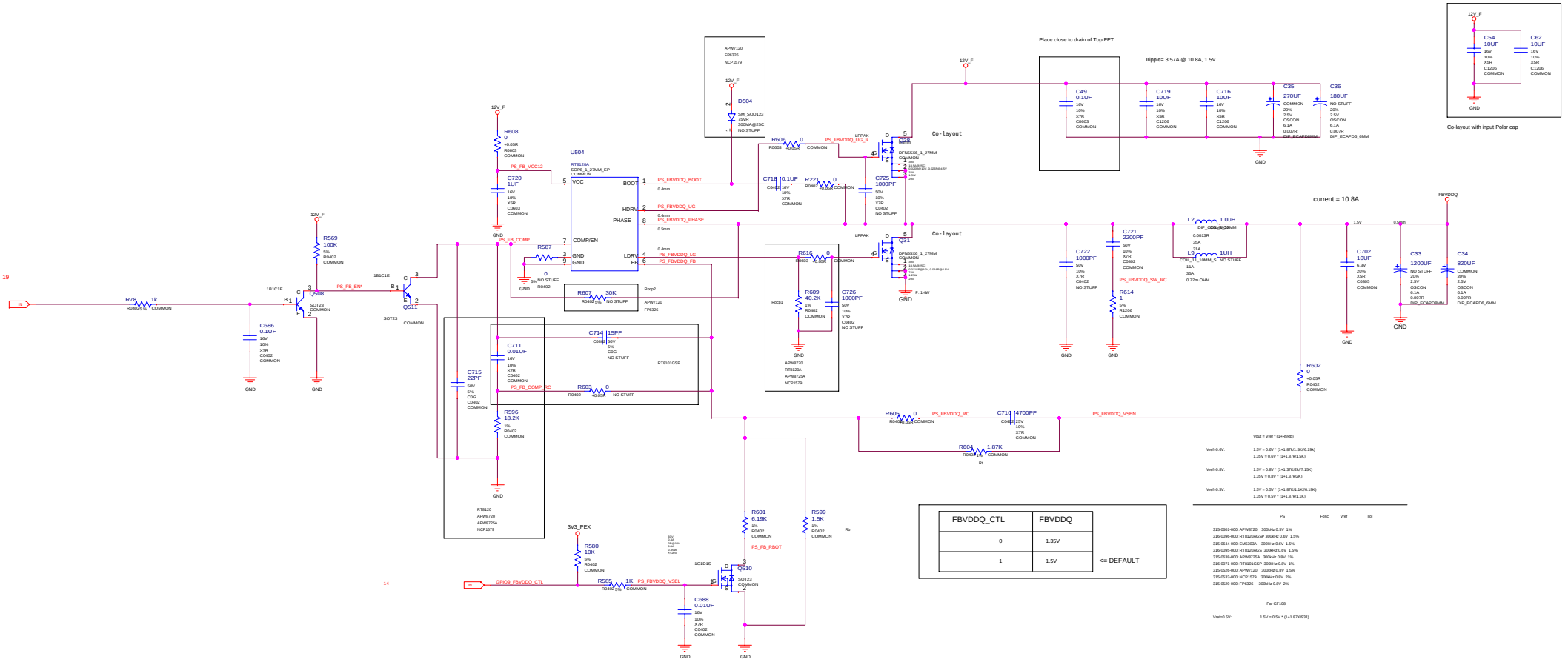
FBVDDQ



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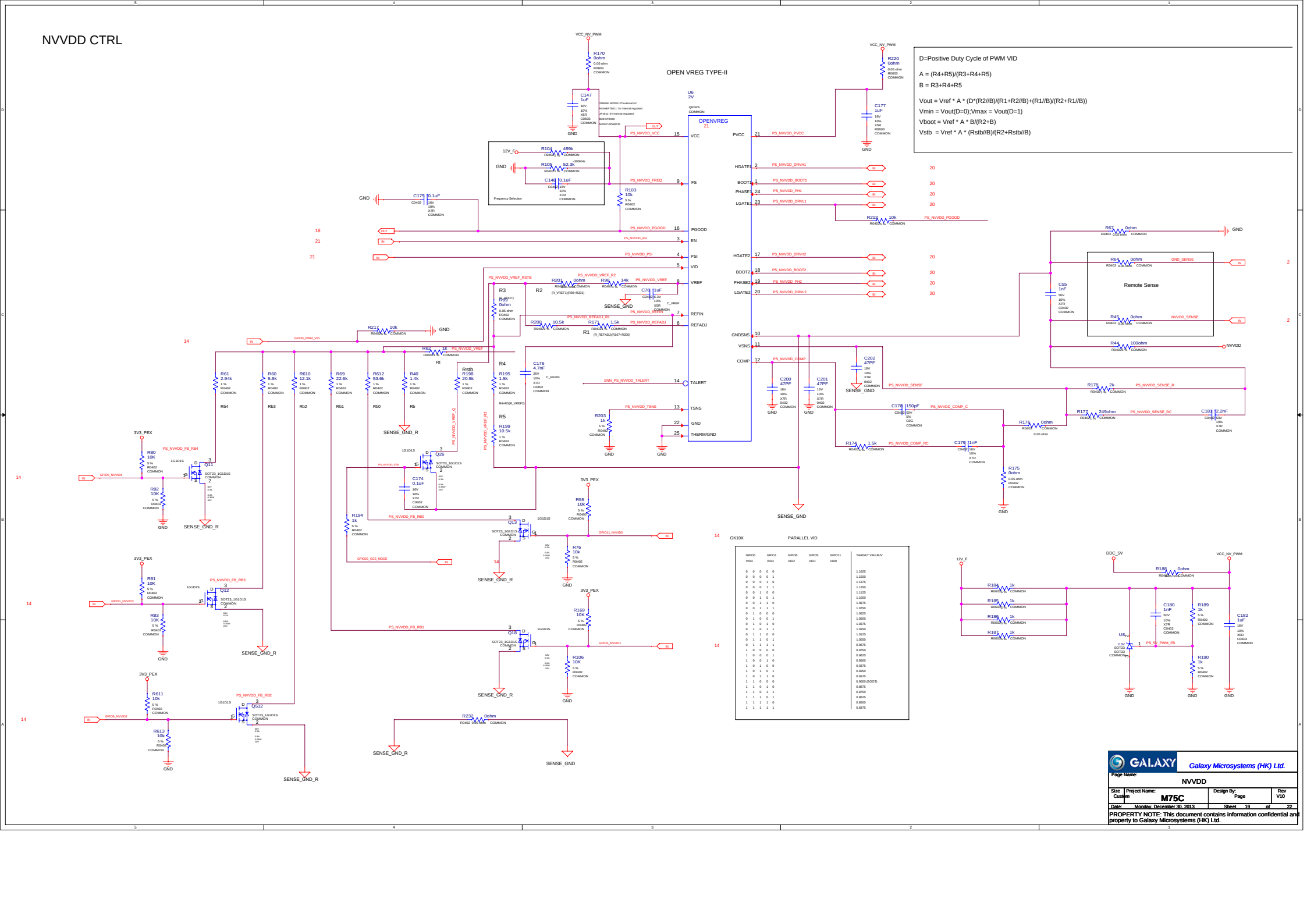
NVVDD CTRL


OPEN VREG TYPE-II
OPENVREG
U6
2V
QFN24
COMMON
D=Positive Duty Cycle of PWM VID
A = (R4+R5)/(R3+R4+R5)
B = R3+R4+R5
Vout = Vref * A * (D*(R2//B)/(R1+R2//B)+(R1//B)/(R2+R1//B))
Vmin = Vout(D=0);Vmax = Vout(D=1)
Vboot = Vref * A * B/(R2+B)
Vstb = Vref * A * (Rstb//B)/(R2+Rstb//B)
VCC_NV_PWM
12V_F
GND
3V3_PEX
SENSE_GND
SENSE_GND_R
Remote Sense
GK10X
PARALLEL VID
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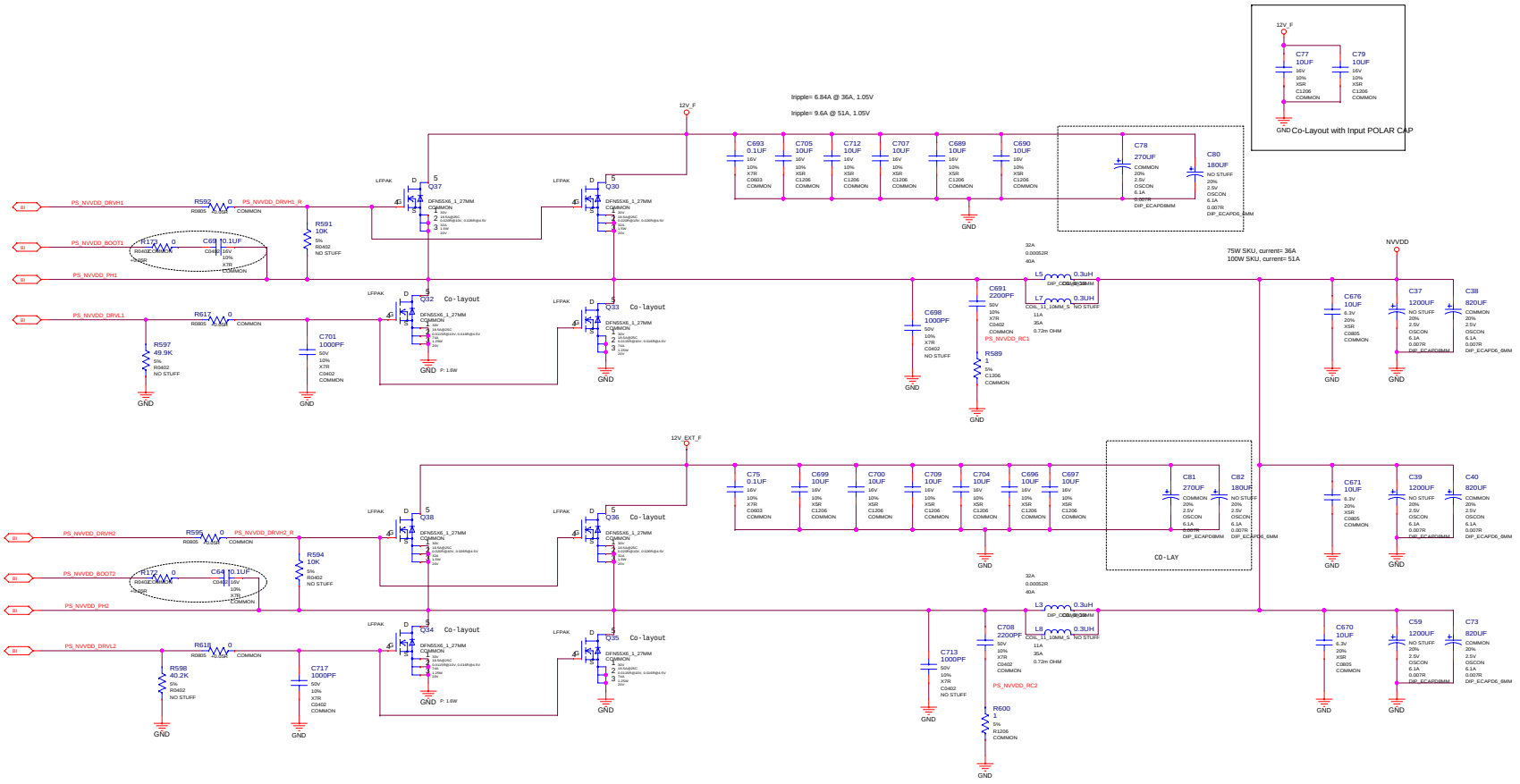
NVVDD MOS



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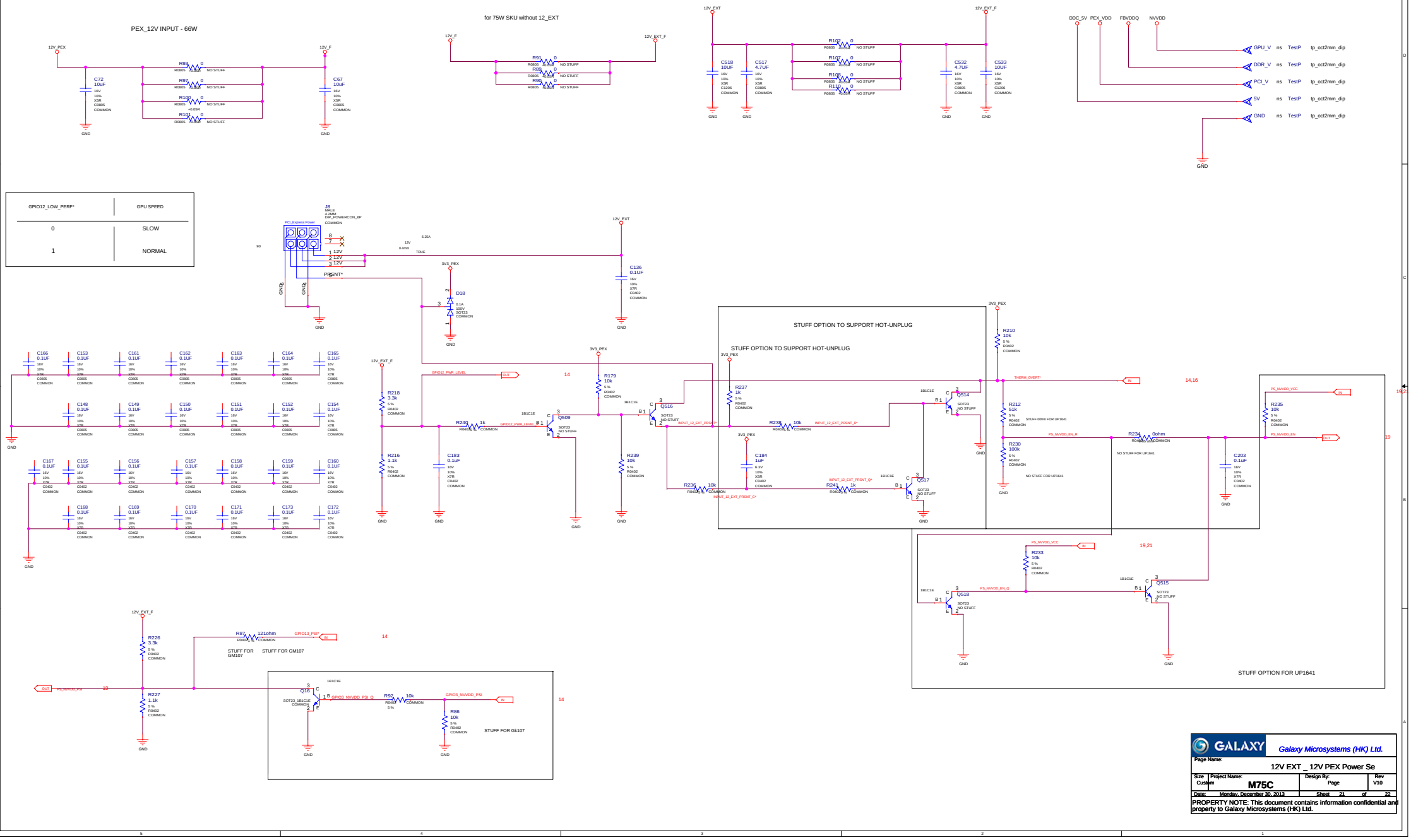
12V EXT / 12V PEX Power Select Circuit



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