

PG161-A00

TU106 6GB GDDR6, 192b, X16 DVI-D/DP + DP + HDMI

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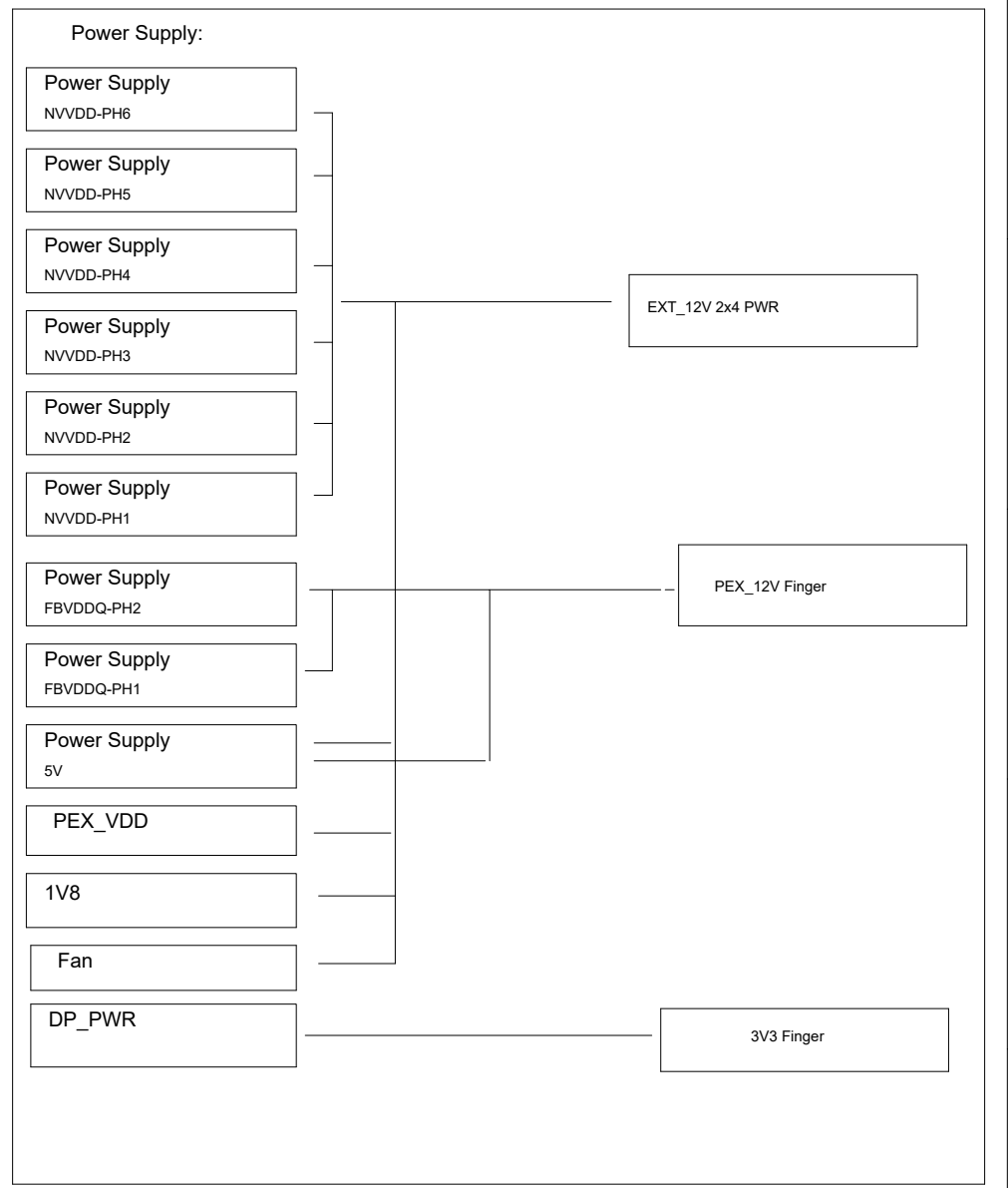
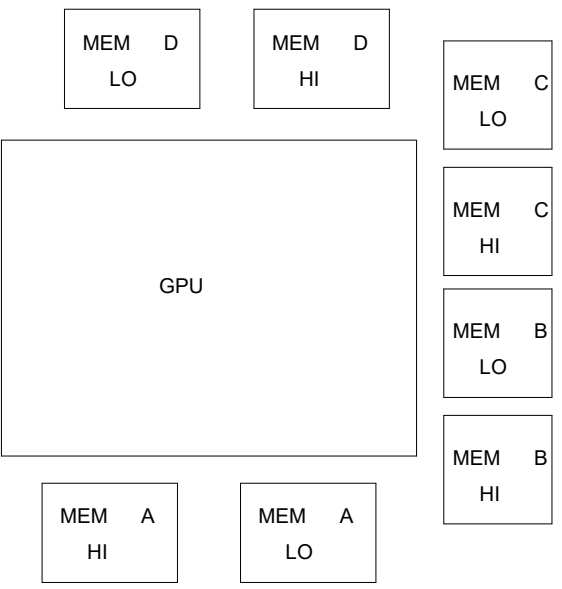
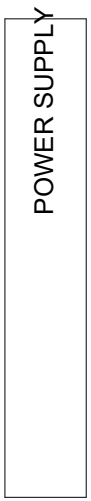
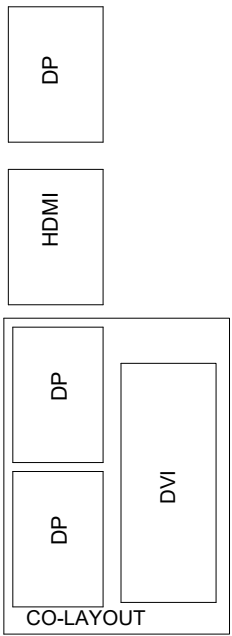
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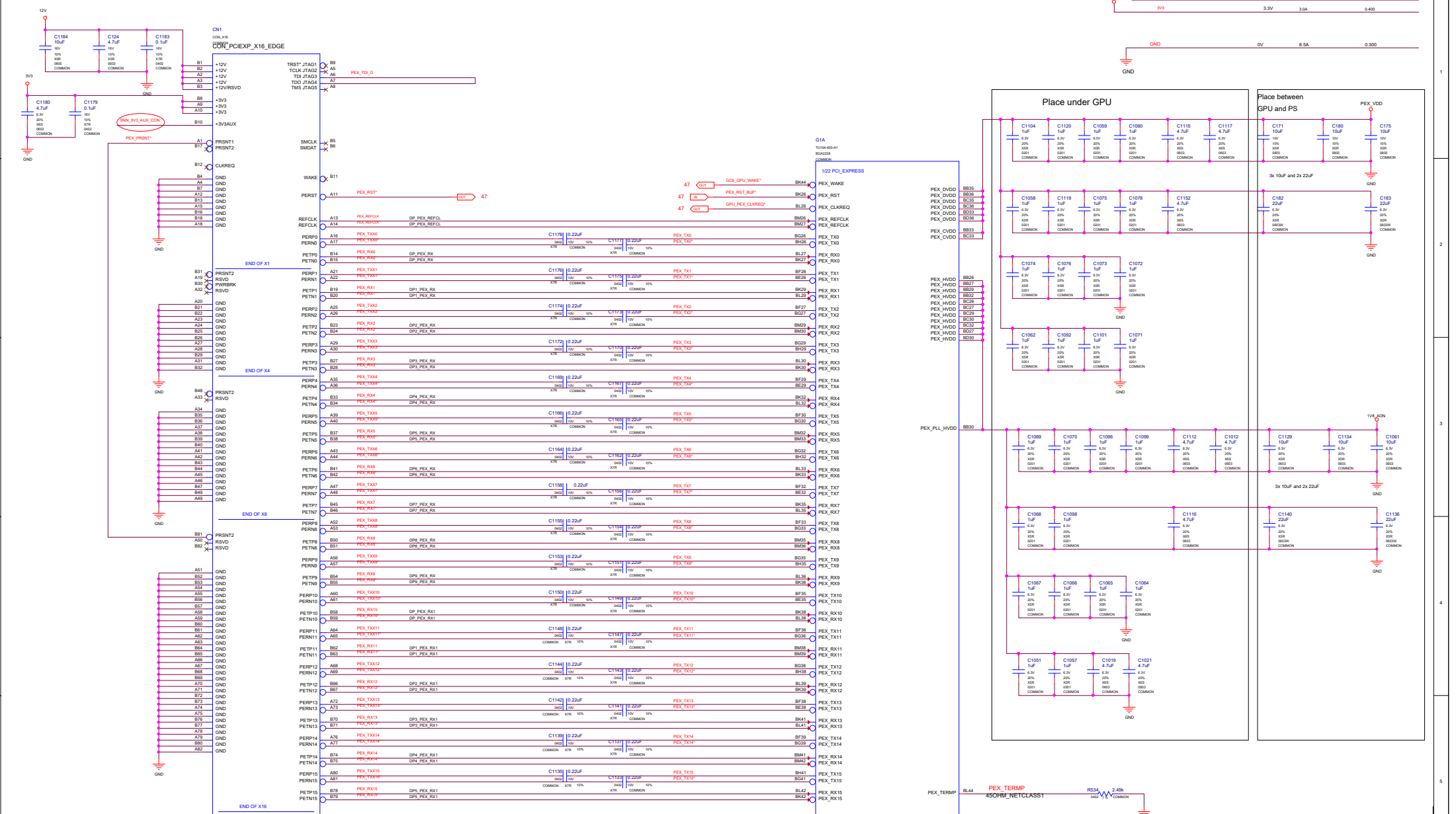
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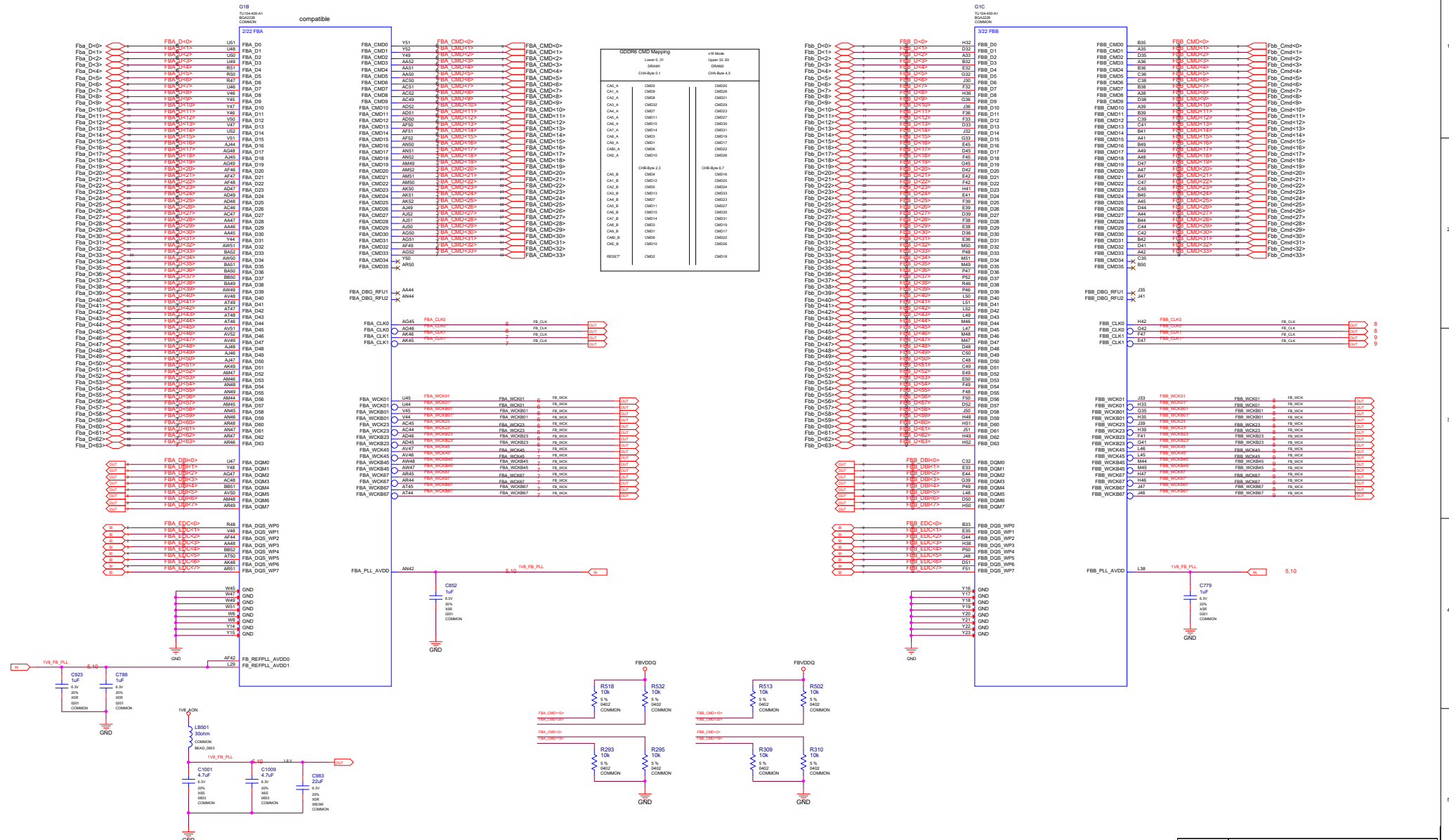


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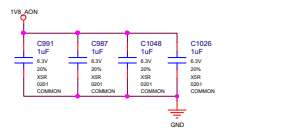
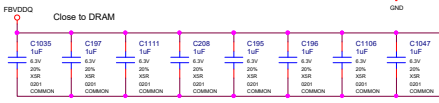
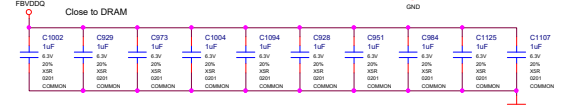
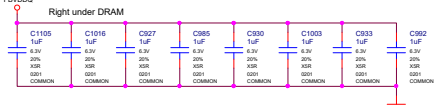
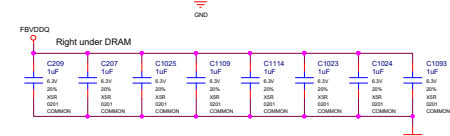
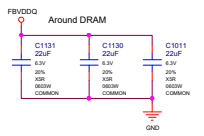
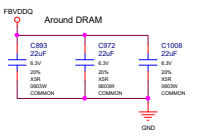
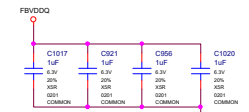
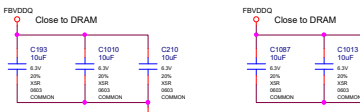
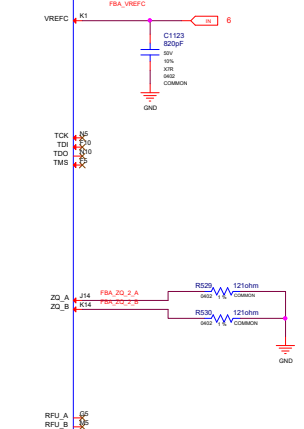
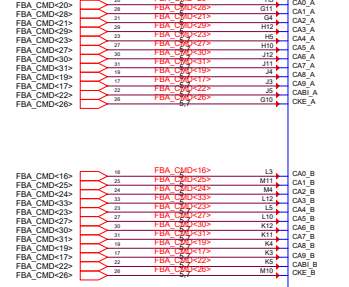
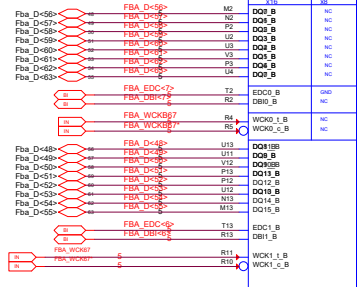
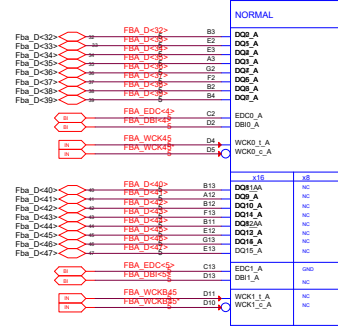
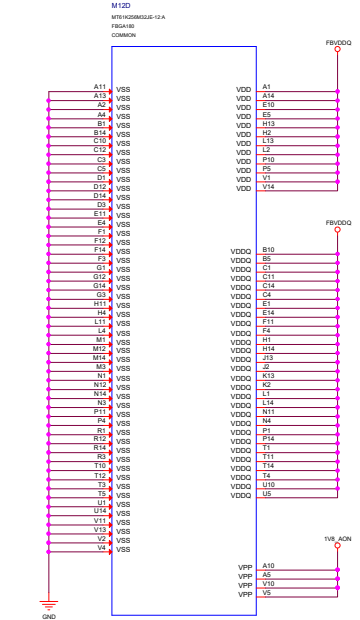
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NO PEX GEN4 SUPPORT DELETE RC TERMINATIONS

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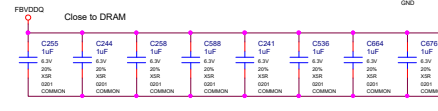
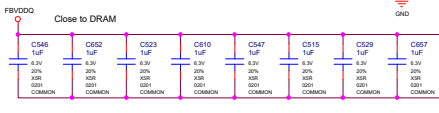
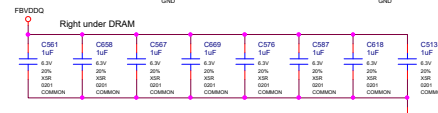
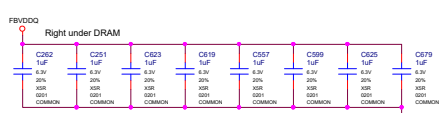
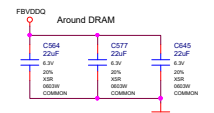
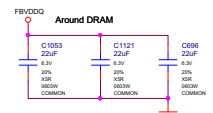
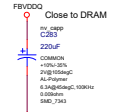
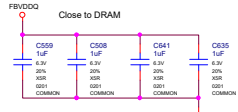
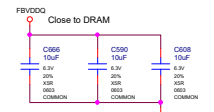
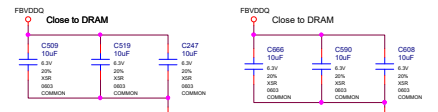
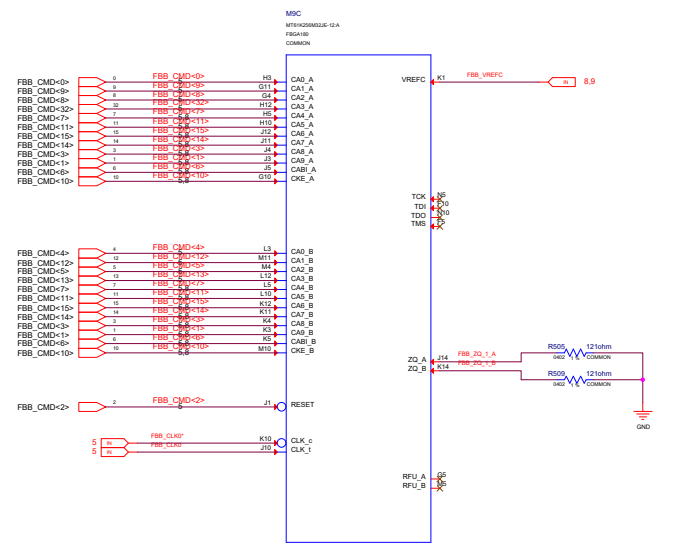
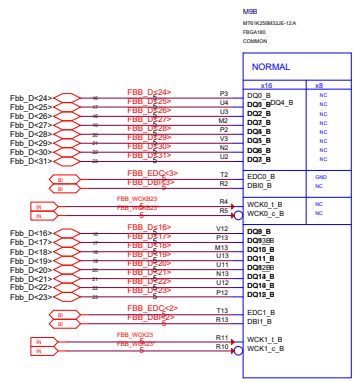
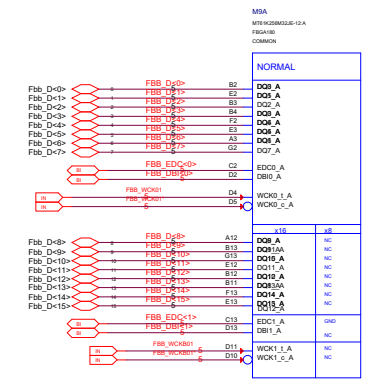
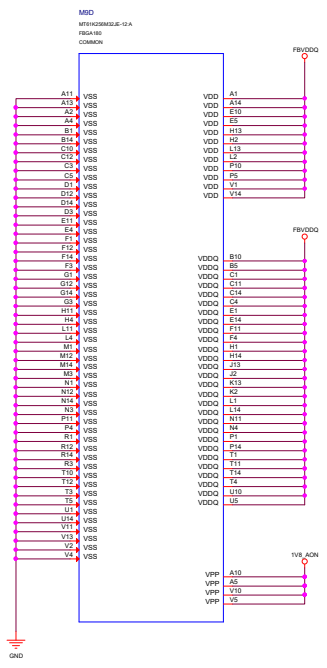


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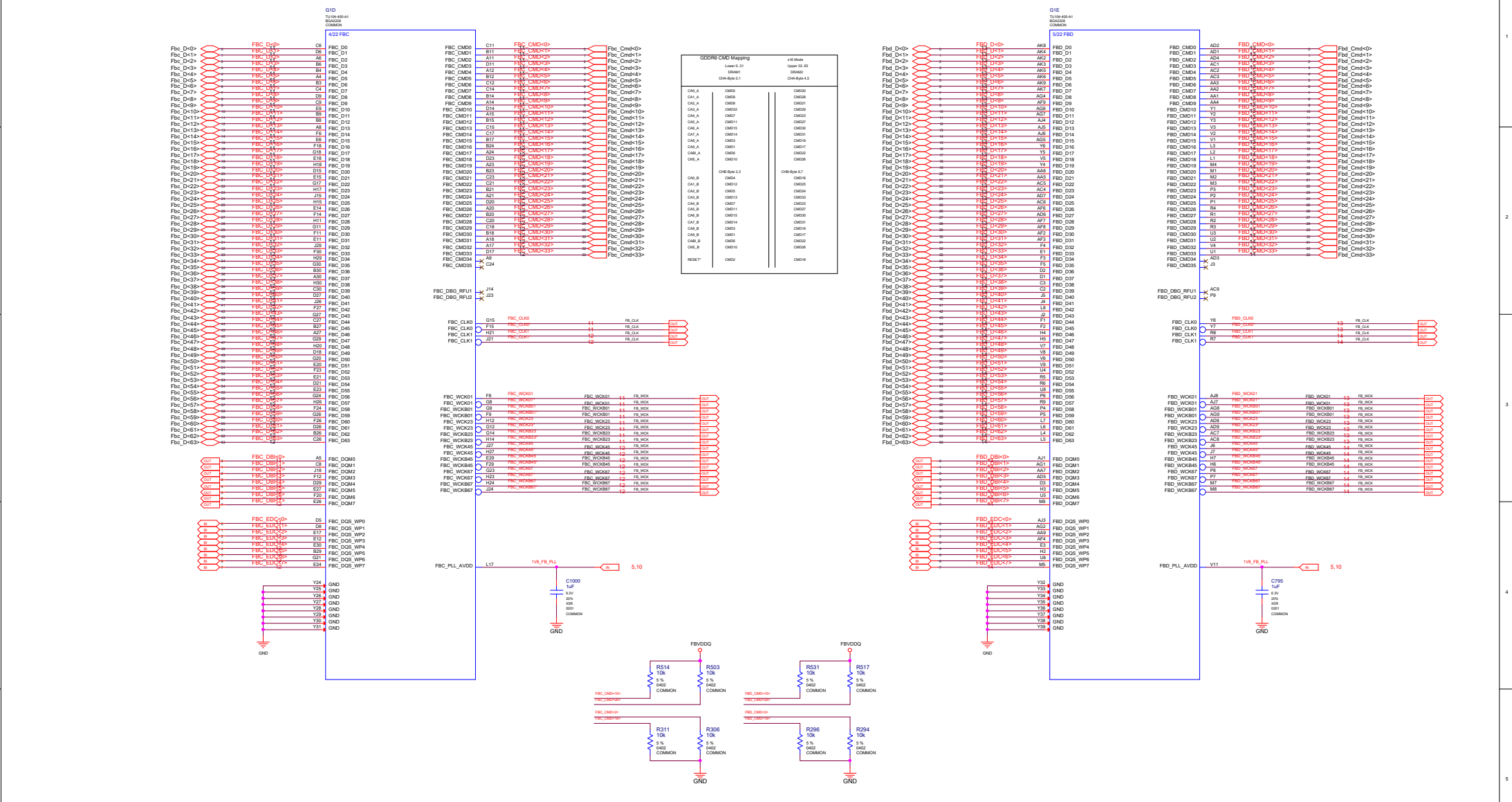


VREFC IS NOT USED IN x16 CONFIGURATION
1K OHM PULL-DOWN IS IN PLACE OF THE 1.33K FOR R104

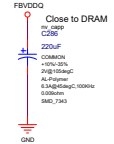
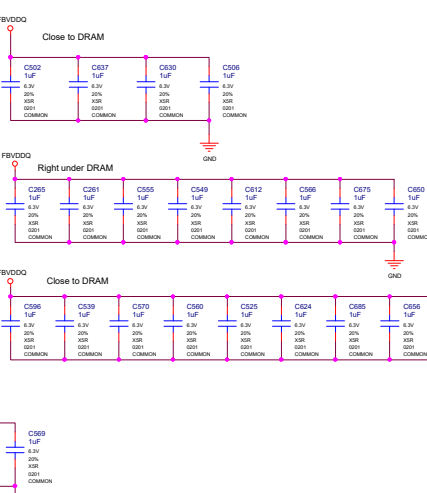
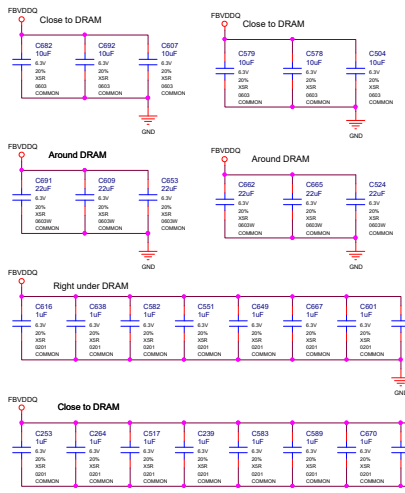
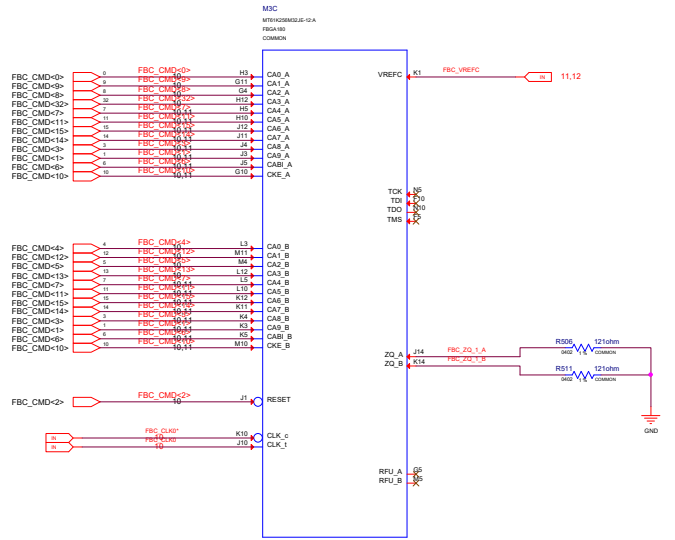
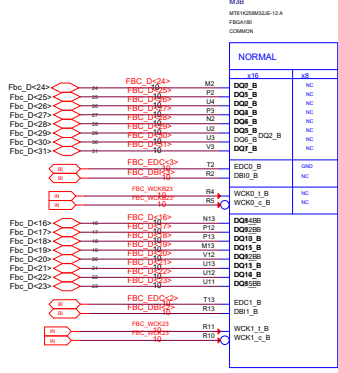
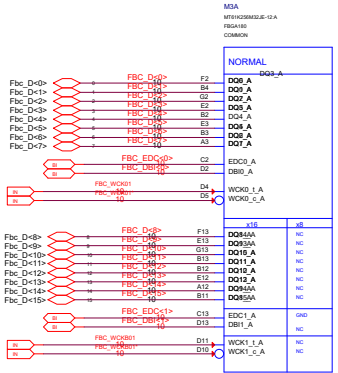
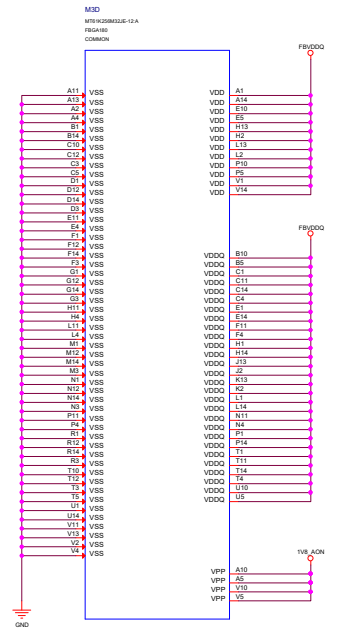


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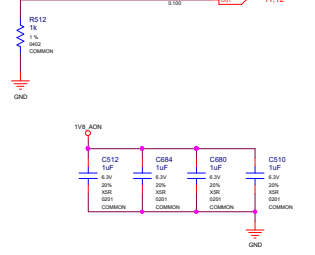
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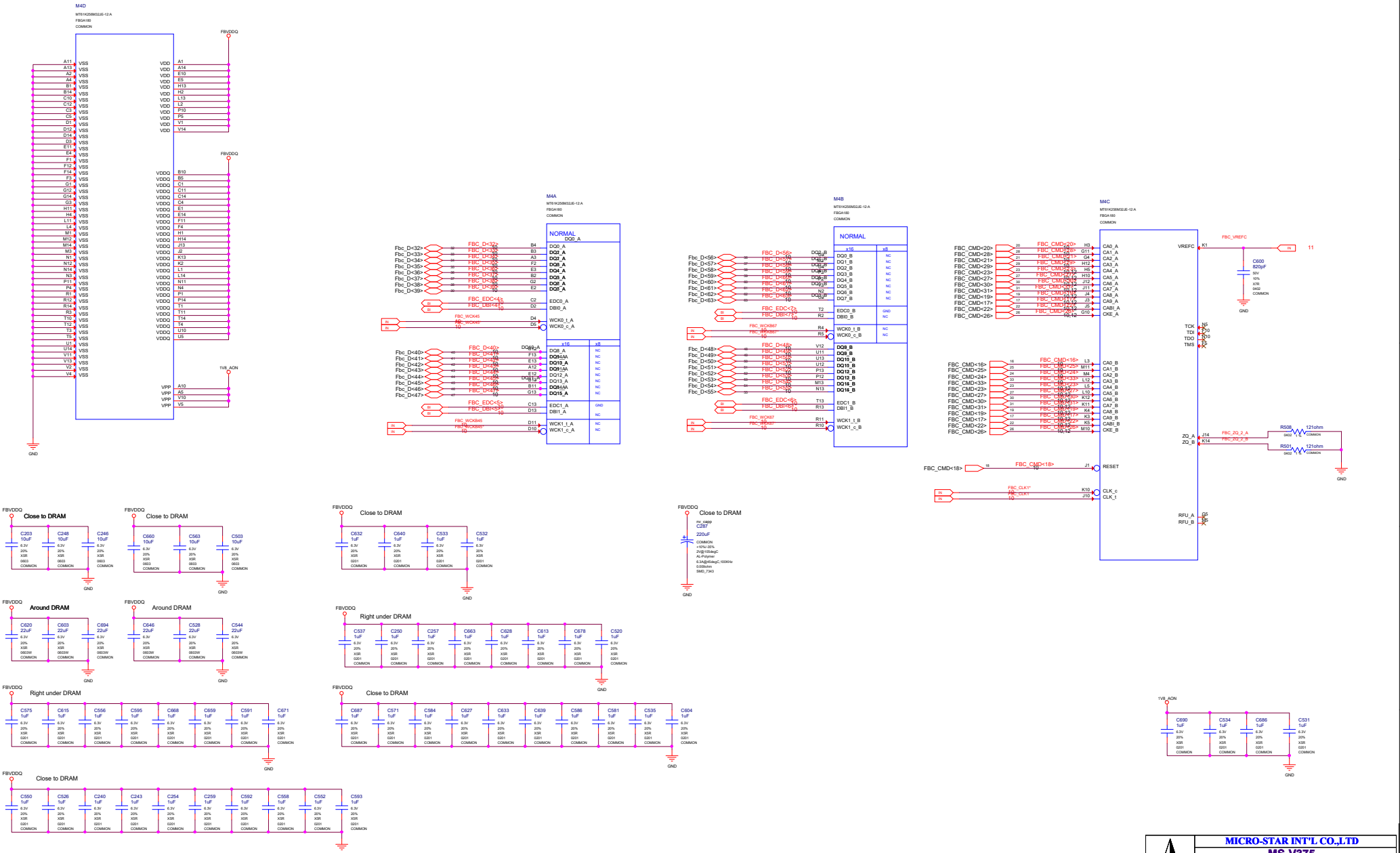


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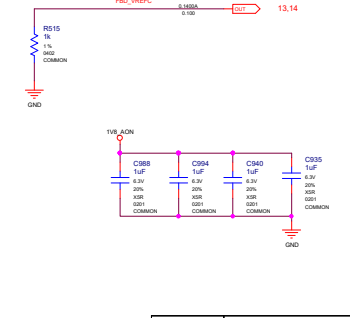
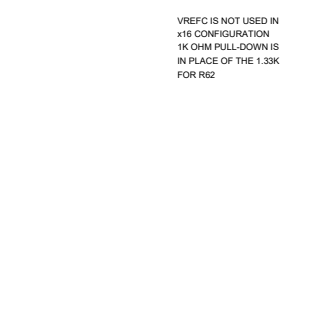
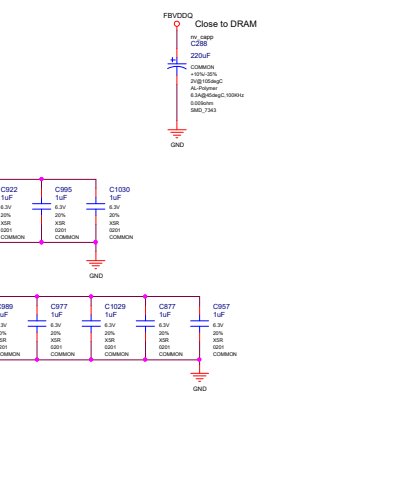
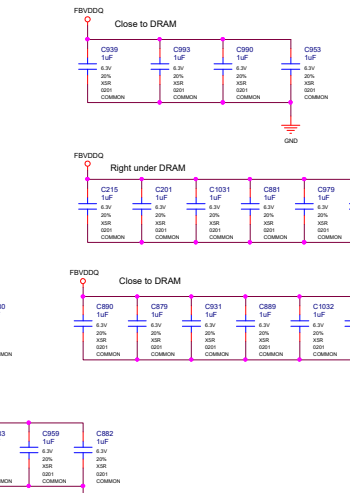
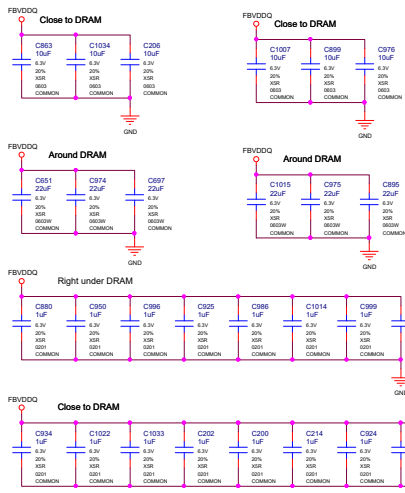
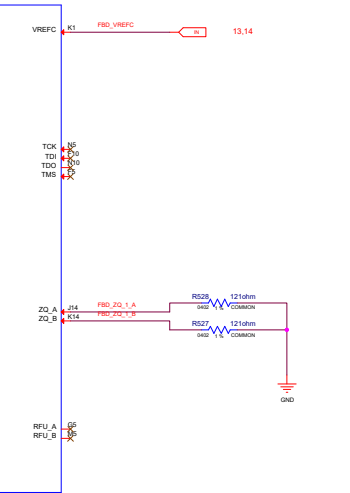
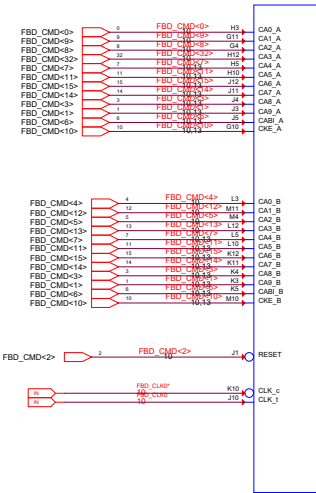
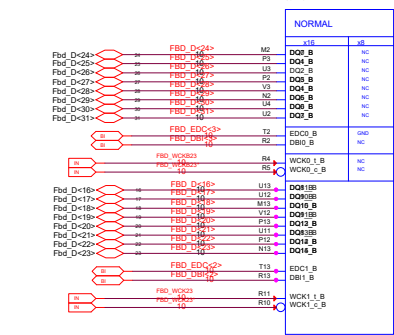
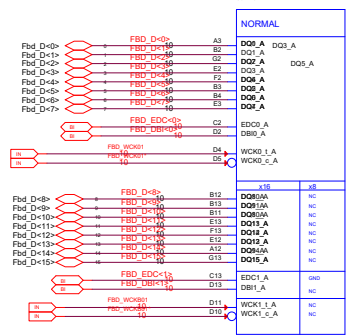
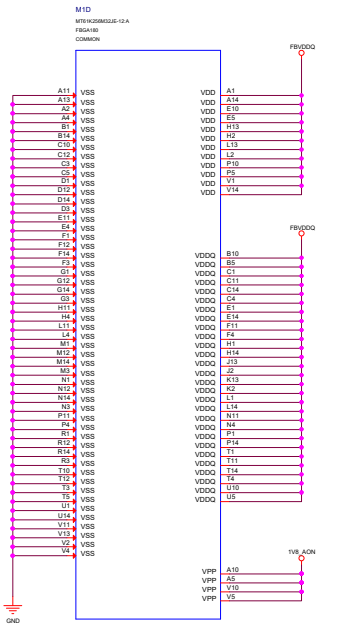


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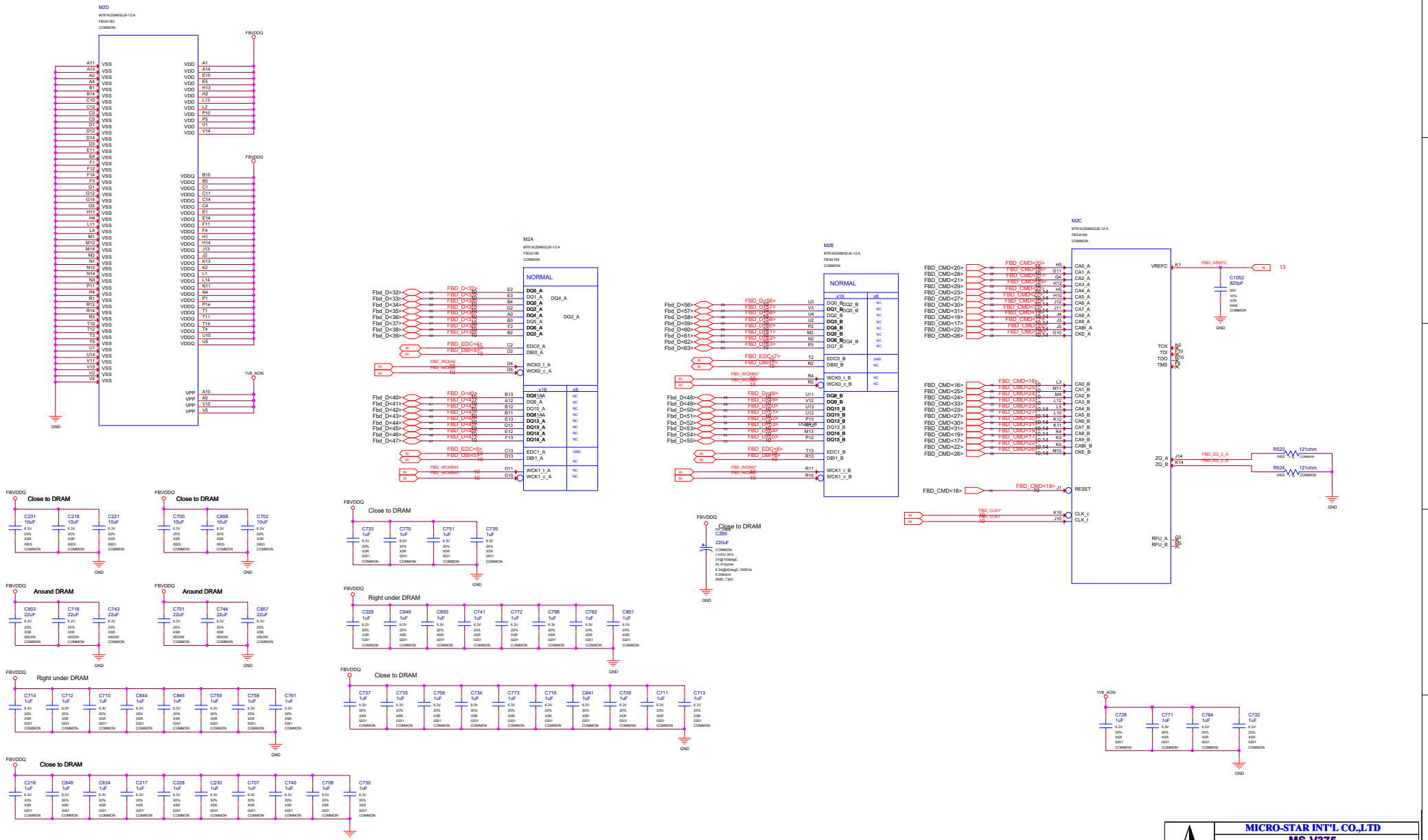


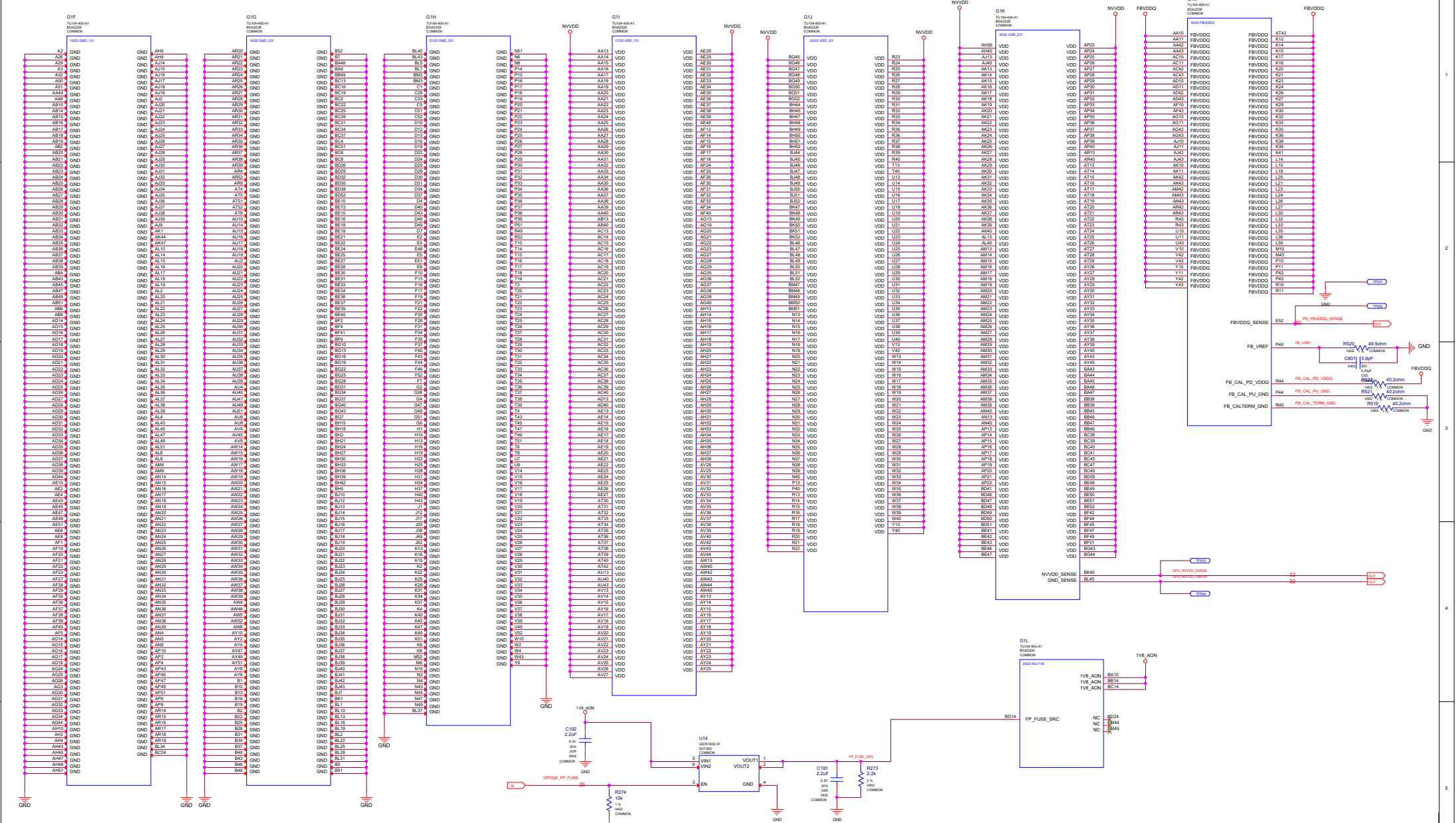


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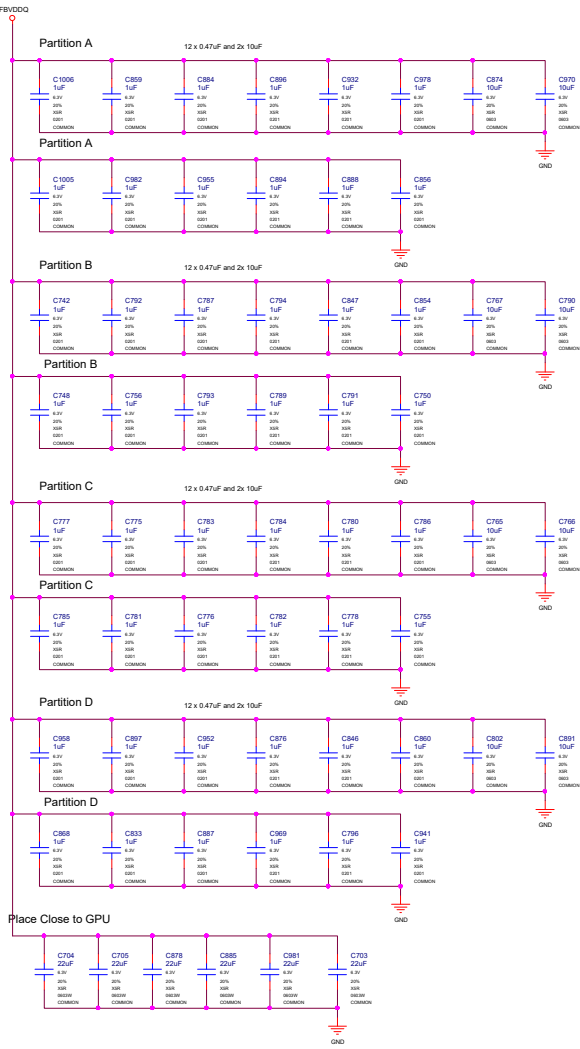
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1K OHM PULL-DOWN IS IN PLACE OF THE 1.33K FOR R52



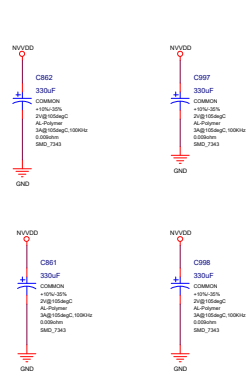


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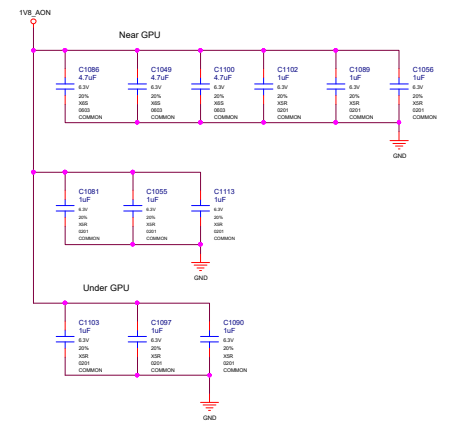
FBVDDQ



NVVD

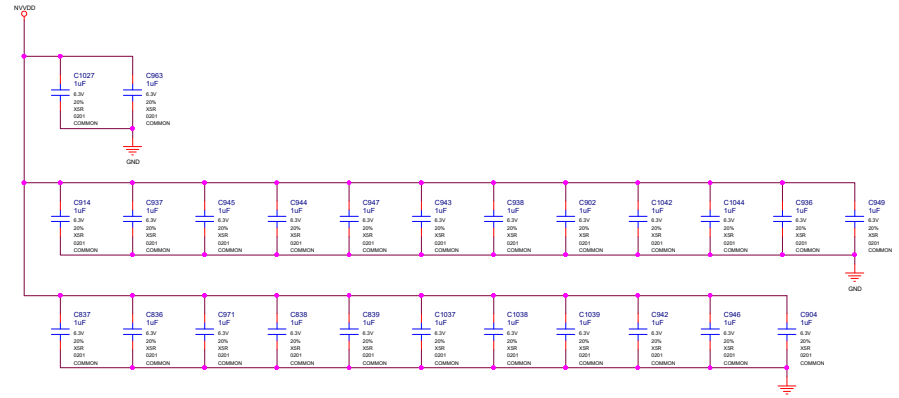
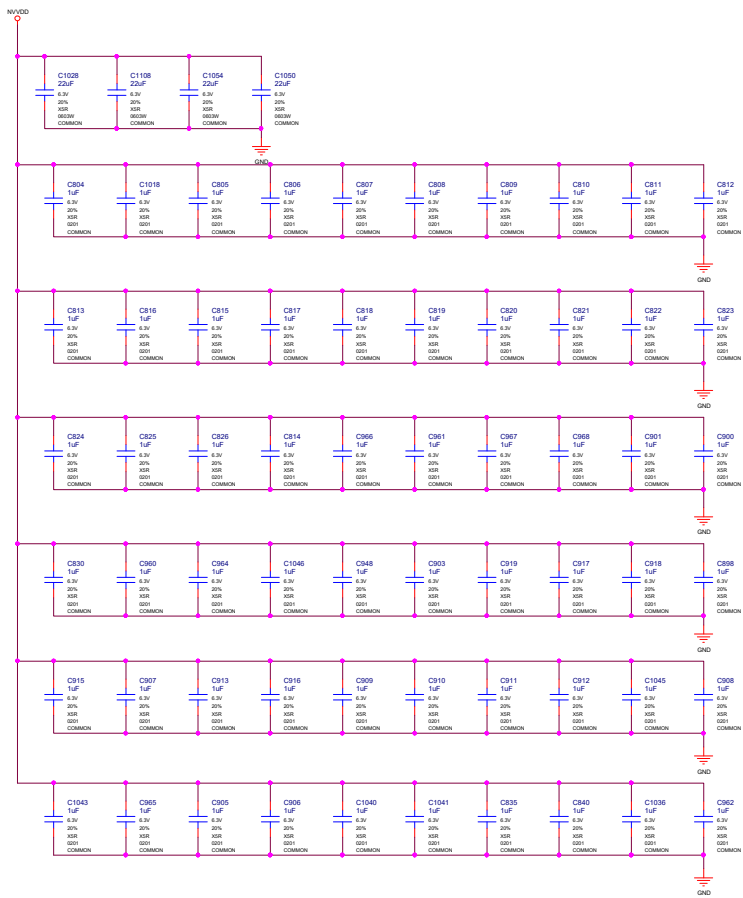


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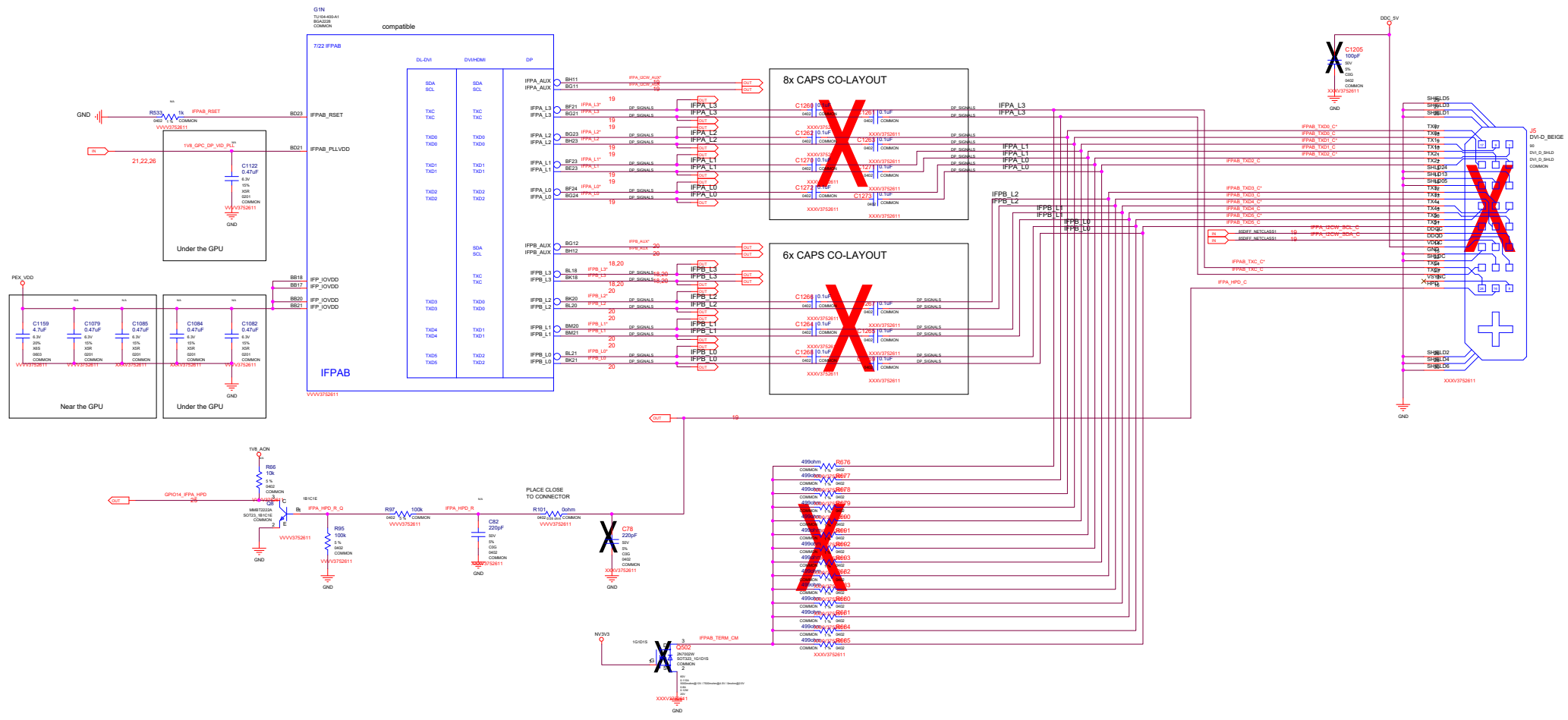


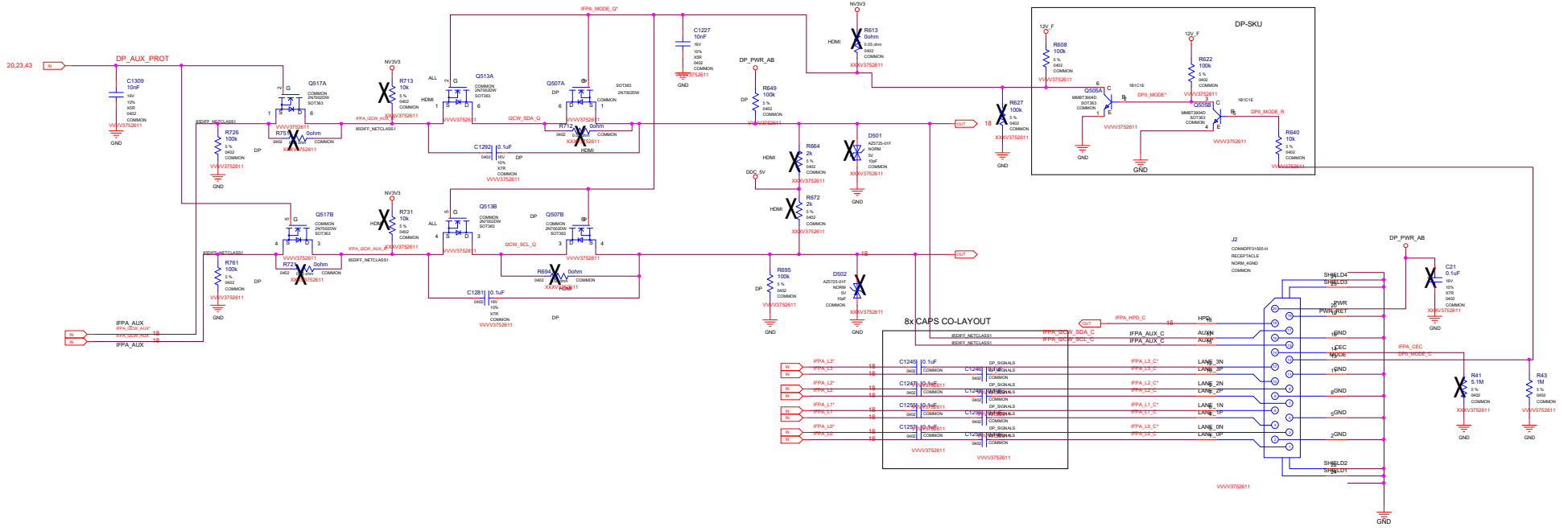
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NVDD



IFPAB DVI-D-DL CO-LAYOUT WITH 2x DP



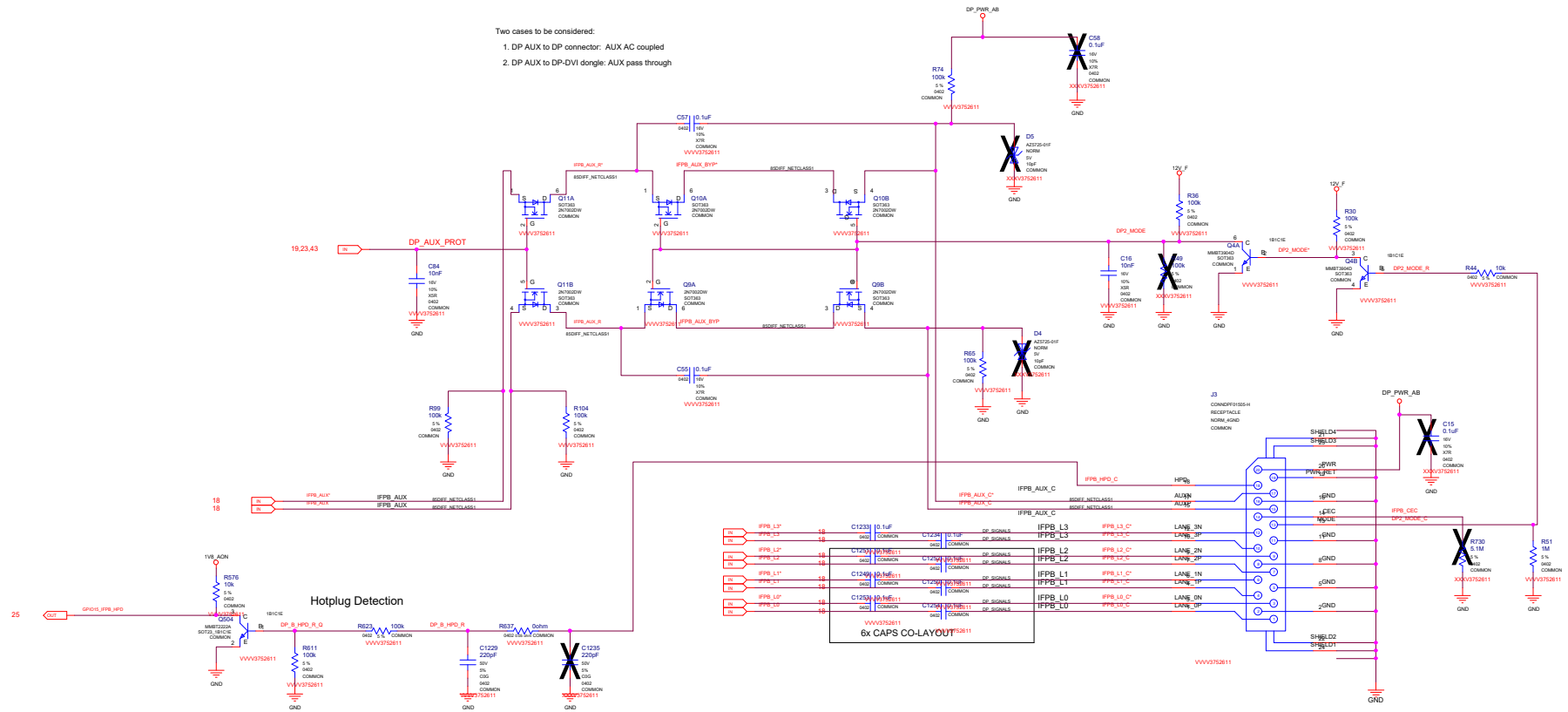


IFPA DP CO-LAYOUT WITH IFPAB DVI-D-DL

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IFPB DP CO-LAYOUT WITH IFPBAB DVI-D-DL

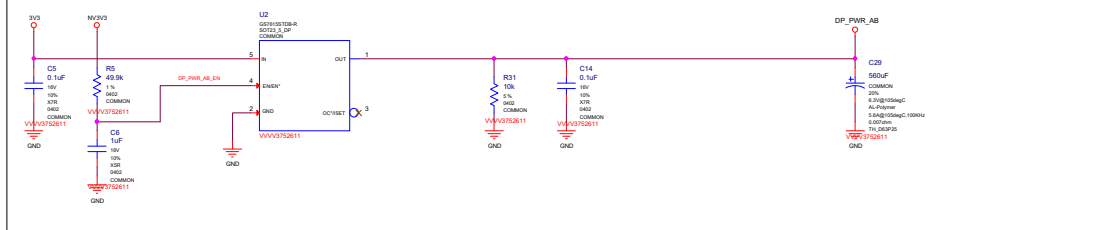
Two cases to be considered:
 1. DP AUX to DP connector: AUX AC coupled
 2. DP AUX to DP-DVI dongle: AUX pass through

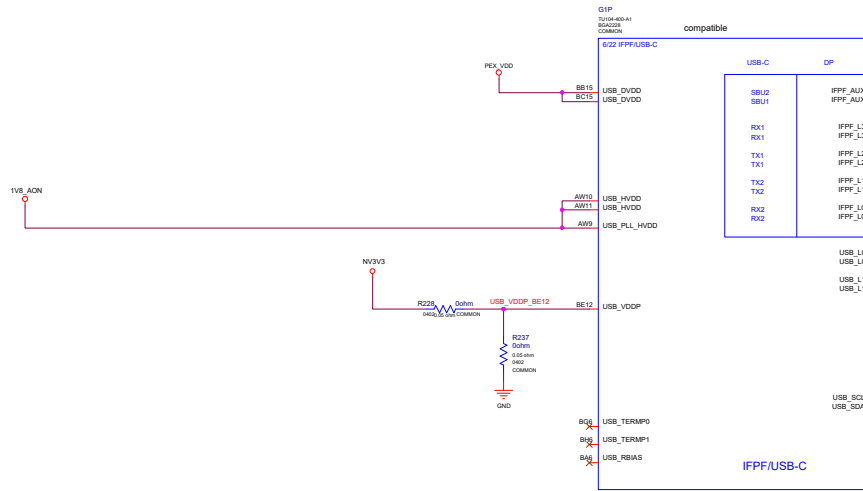


Hotplug Detection

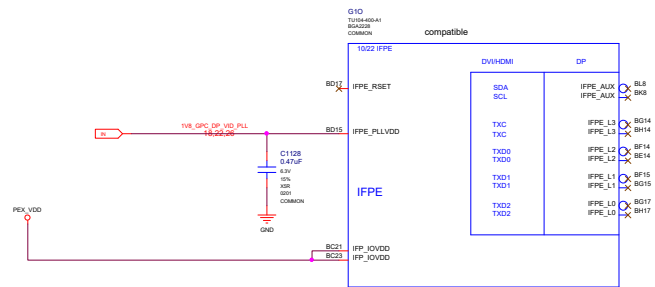


Fused DP_PWR

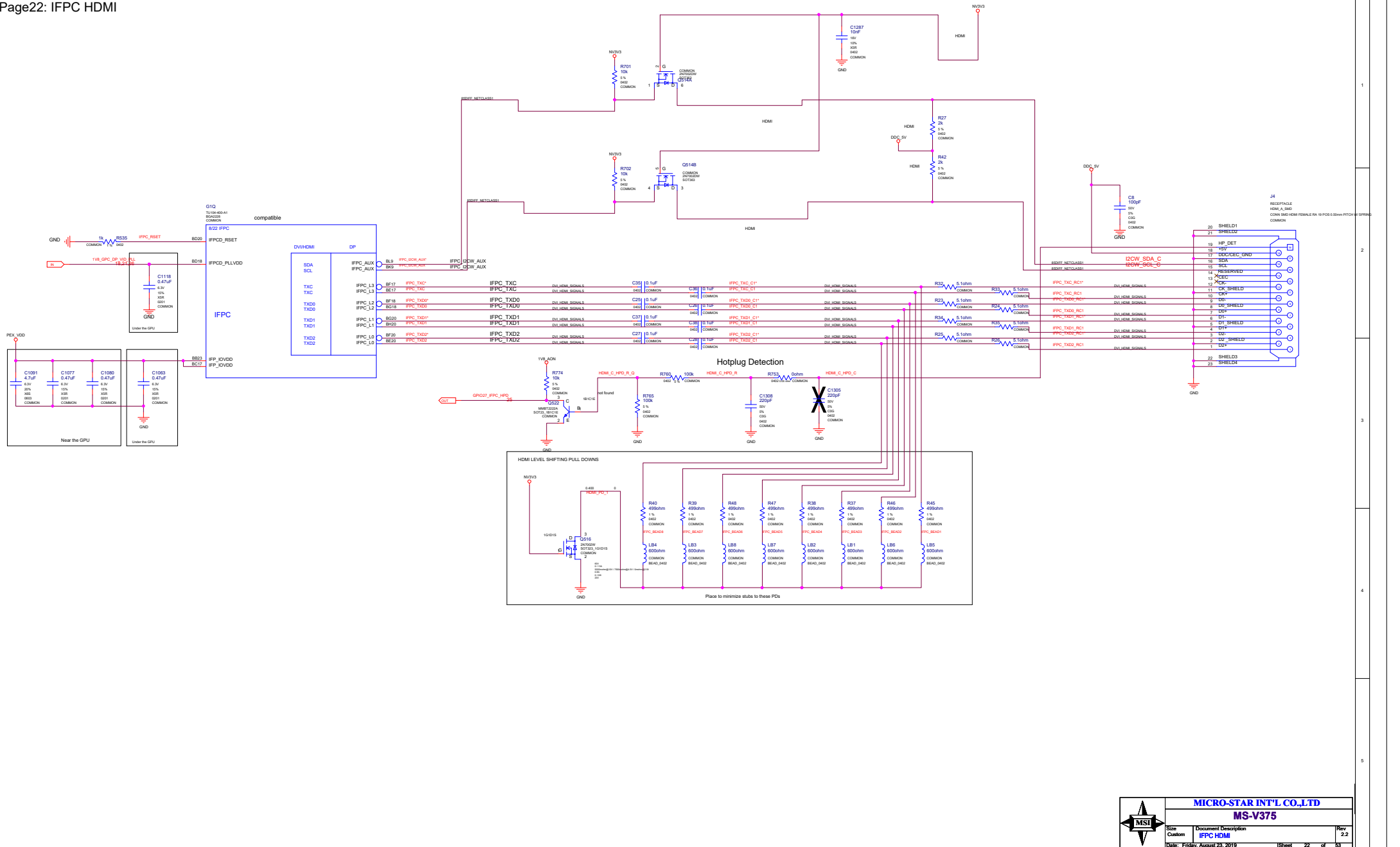




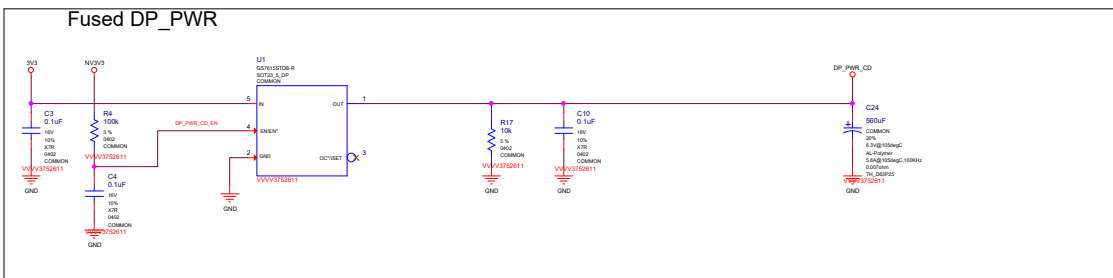
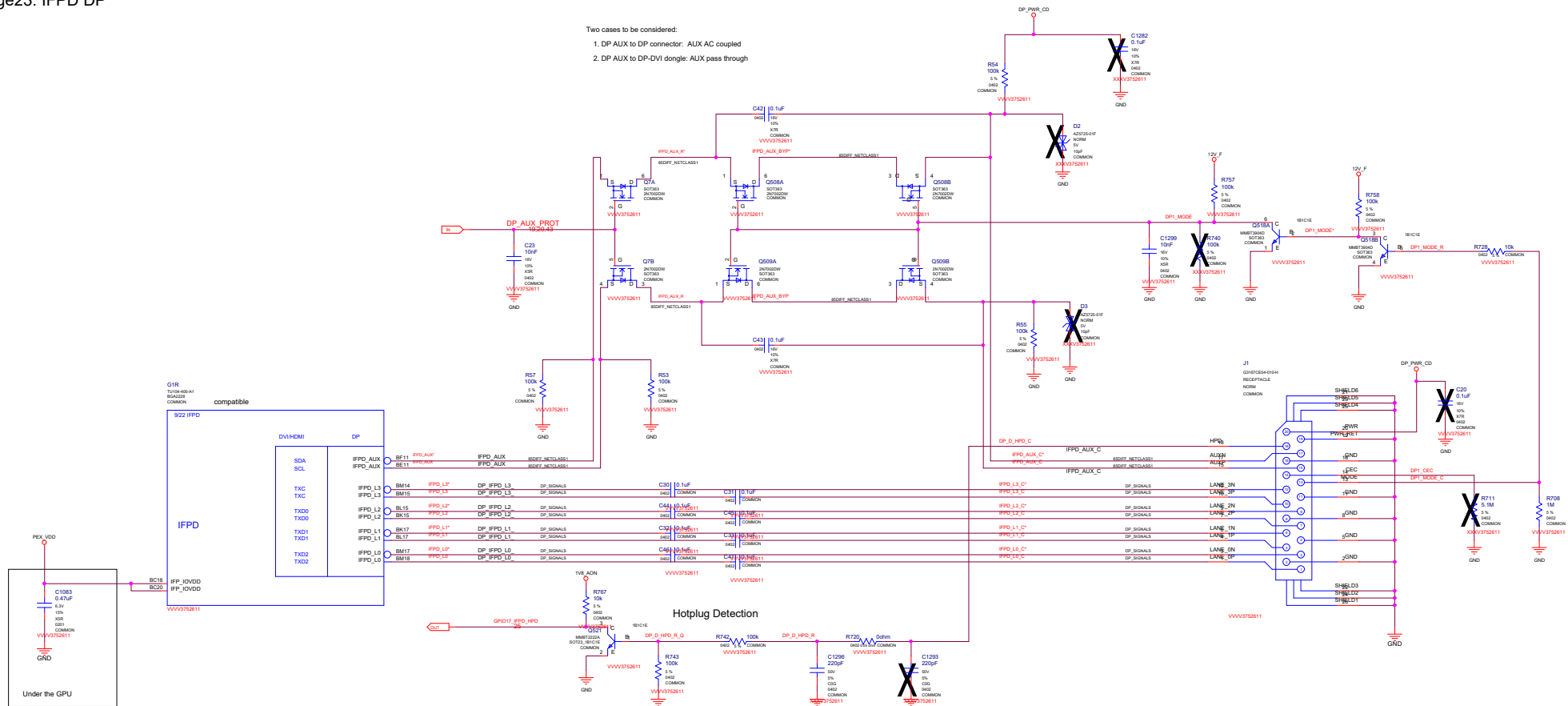
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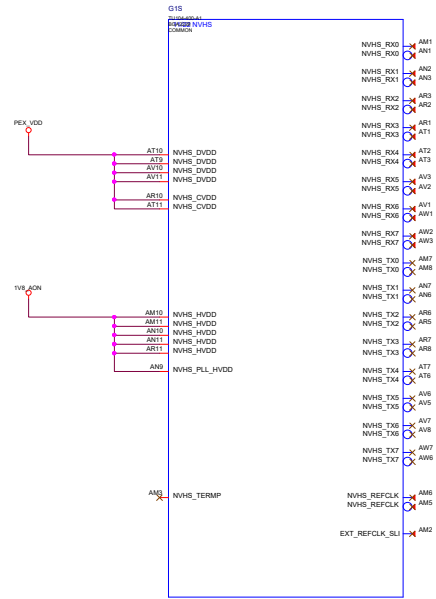
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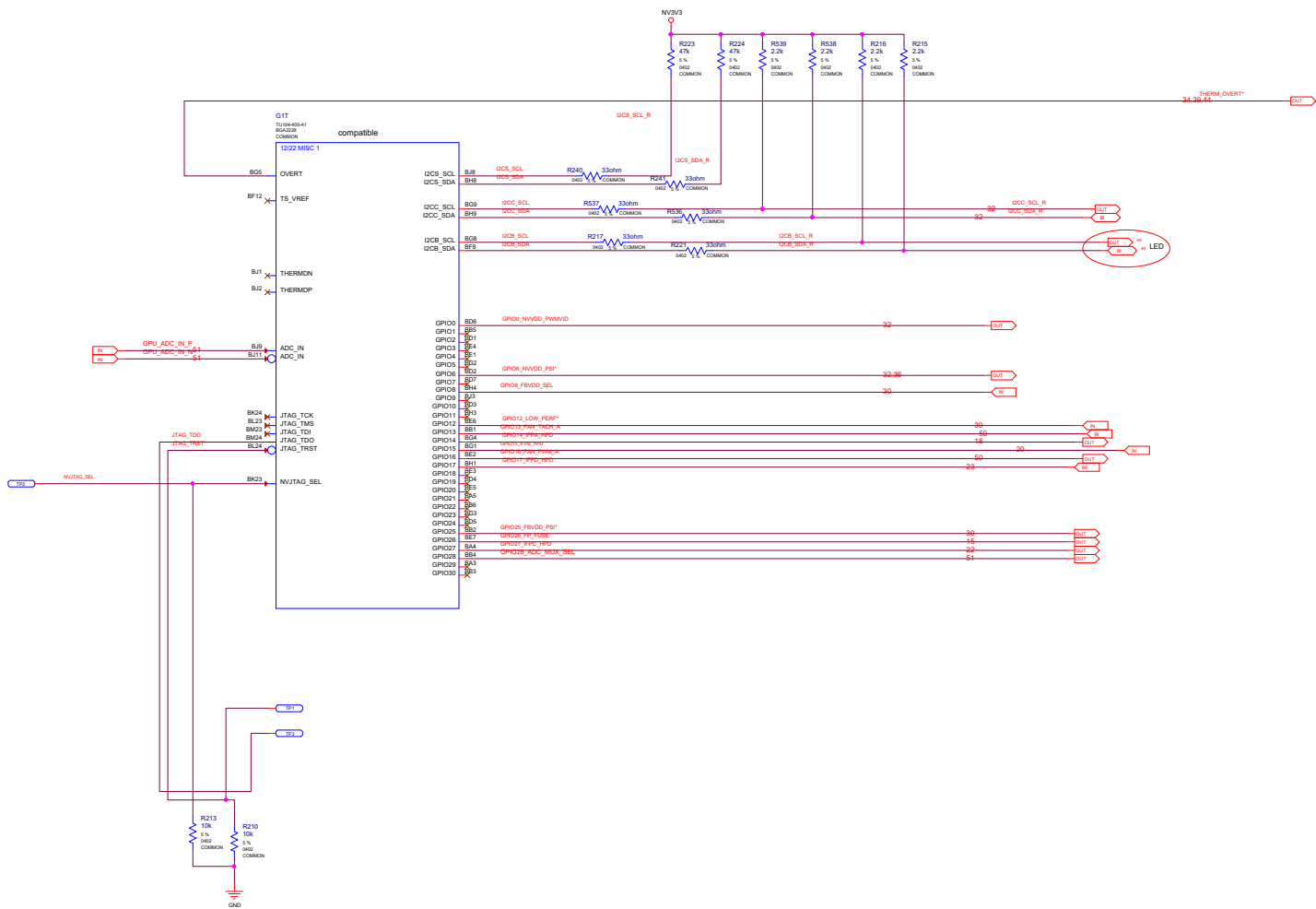


Two cases to be considered:
 1. DP AUX to DP connector: AUX AC coupled
 2. DP AUX to DP-DVI dongle: AUX pass through



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STRAP2	STRAP1	STRAP0	RAMCFG[4:0]
L	L	L	00000
L	L	H	00001
L	H	L	00010
L	H	H	00011
H	H	L	00110
H	H	H	00111
L	L	M	01000

RAMCFG[4:0]	DENSITY	WIDTH	VENDOR	DIE
00000	8Gb	256-bit	Samsung	C
00001	8Gb	256-bit	Micron	A
00010	8Gb	256-bit	Hynix	M
00011	8Gb	256-bit	Samsung	C
00100	8Gb	256-bit	Micron	A
00101	8Gb	256-bit	Hynix	M
00110	16Gb	256-bit	Samsung	M
00111				

ROM_SO	ROM_SI	ROM_SCLK	DUMMY[2:0].FS_OVERT	1:ENABLE 0:DISABLE	
L	L	L	XXX1	FS_OVERT ENABLE	DEFAULT
L	L	M	XXX0	FS_OVERT DISABLE	

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

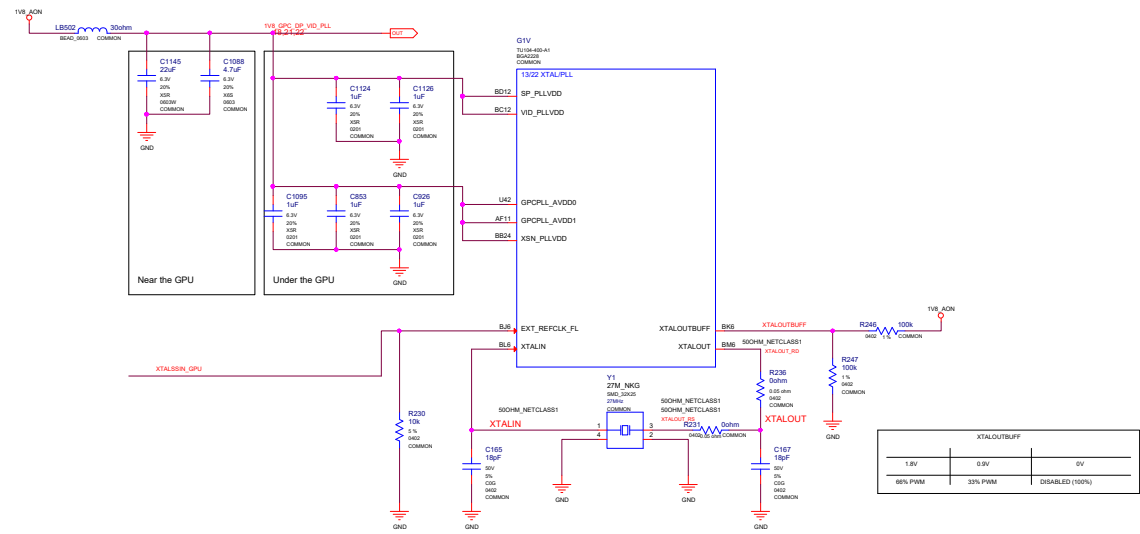
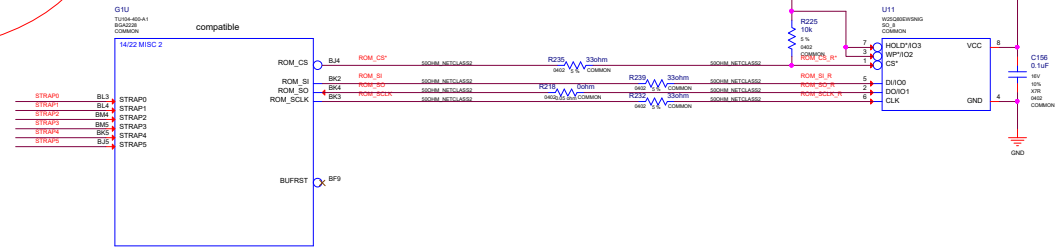
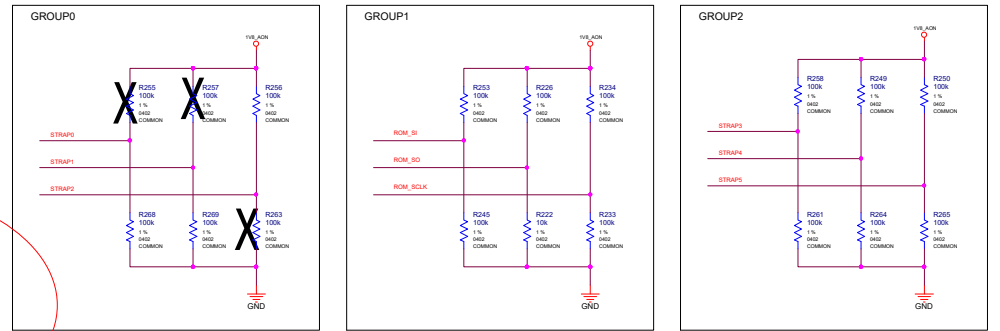
1:SMB_ALT_ADDR ENABLE
0:SMB_ALT_ADDR DISABLE

1:DEVID_SEL REBRAND
0:DEVID_SEL ORIGINAL

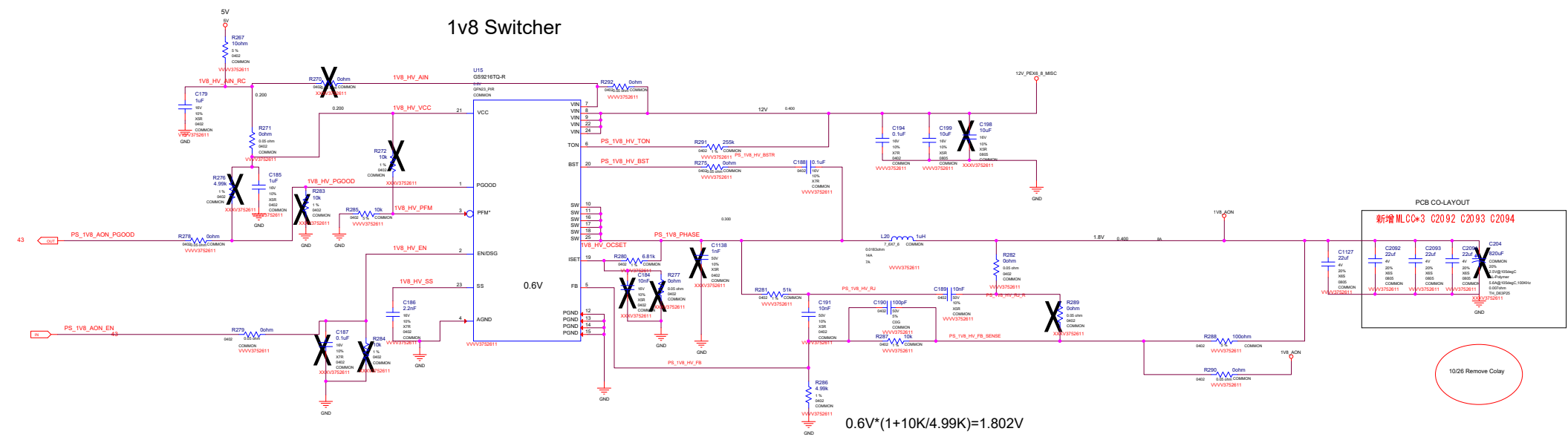
1:PCIE_CFG LOW POWER
0:PCIE_CFG HIGH POWER

1:VGA_DEVICE ENABLE
0:VGA_DEVICE DISABLE

注意上件的MEM Straps

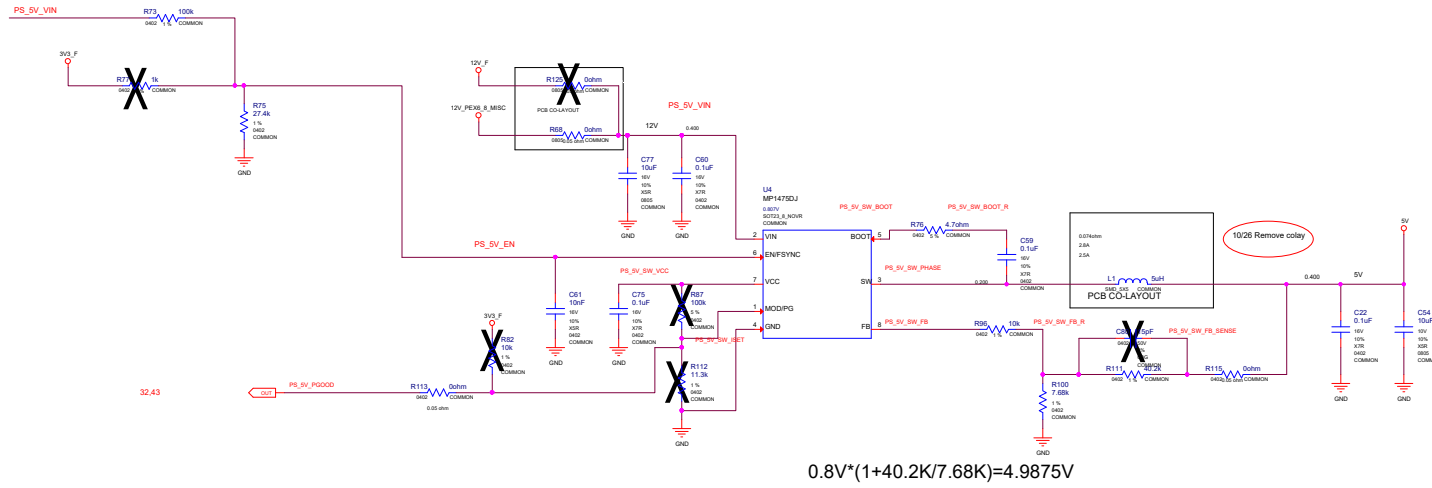


1v8 Switcher

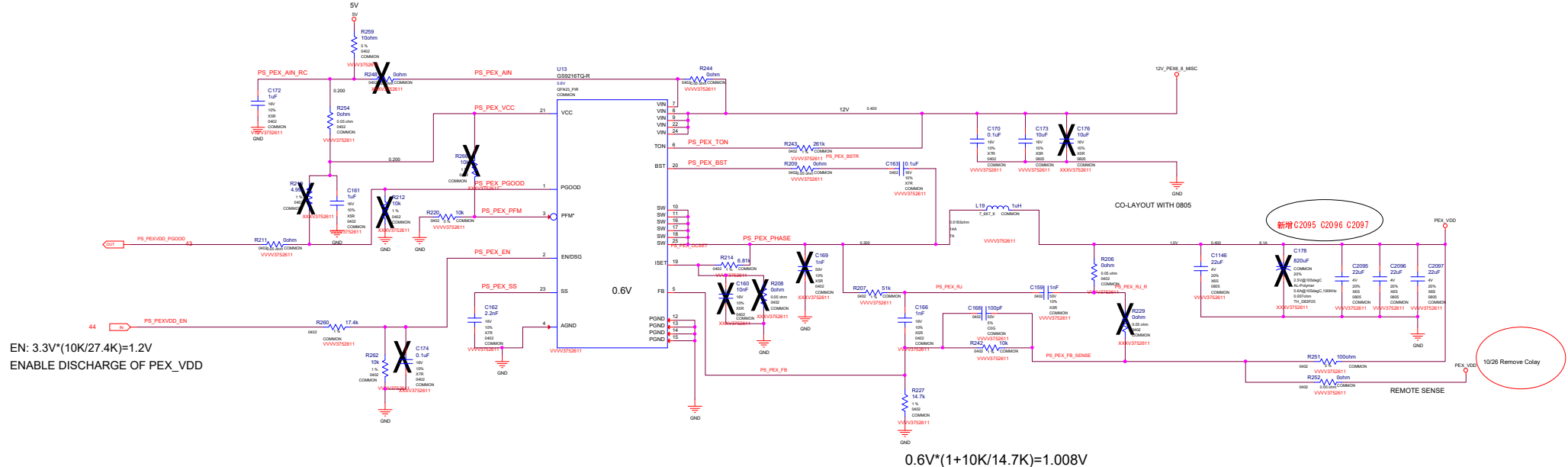


$0.6V * (1 + 10K / 4.99K) = 1.802V$

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	MS-V375	
	Size: Custom	Document Description: PS: 1V8_AON
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PEX Switcher

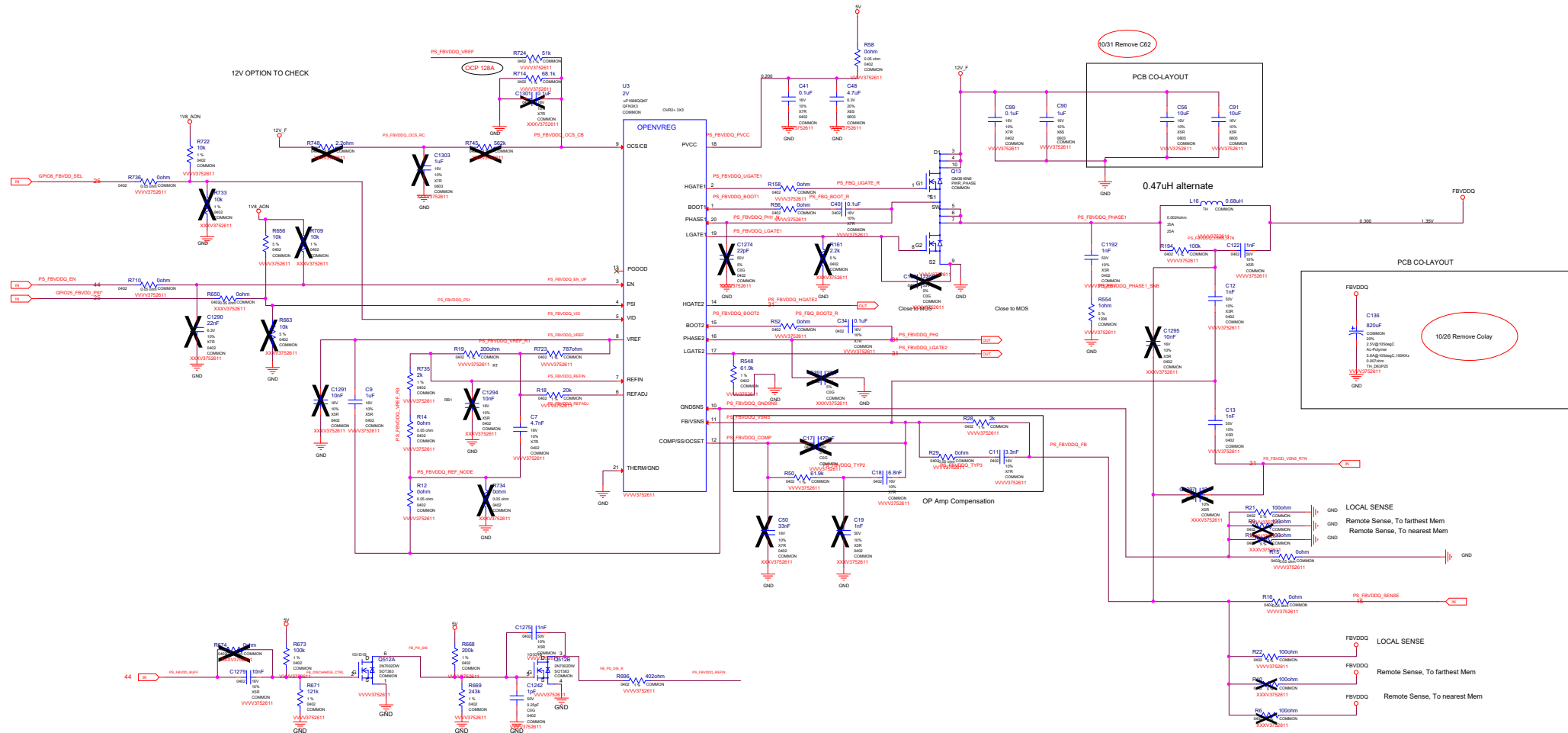


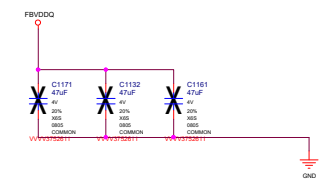
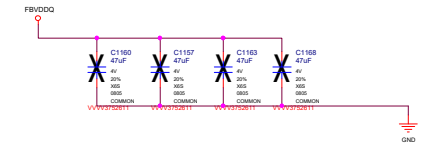
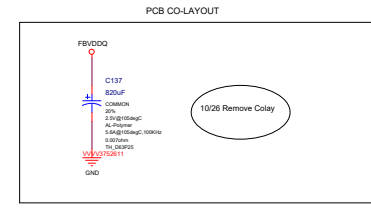
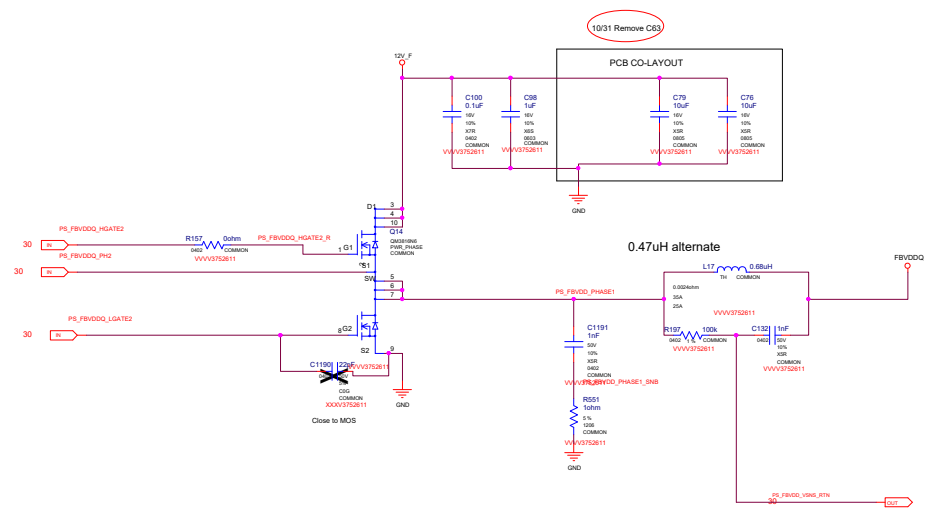
EN: $3.3V \cdot (10K/27.4K) = 1.2V$
 ENABLE DISCHARGE OF PEX_VDD

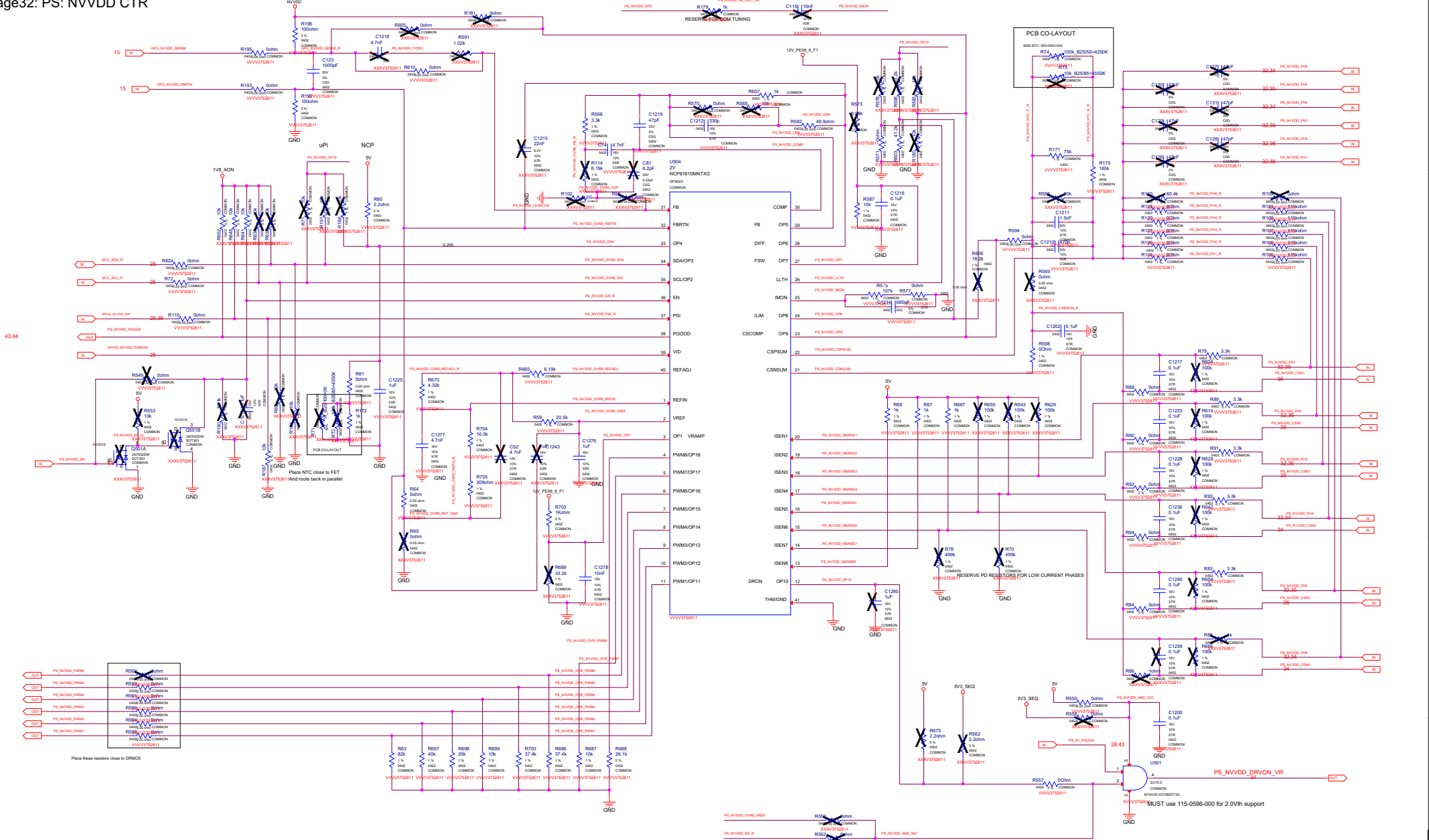
$0.6V \cdot (1 + 10K/14.7K) = 1.008V$

新增 C2095 C2096 C2097

10/26 Remove Colay








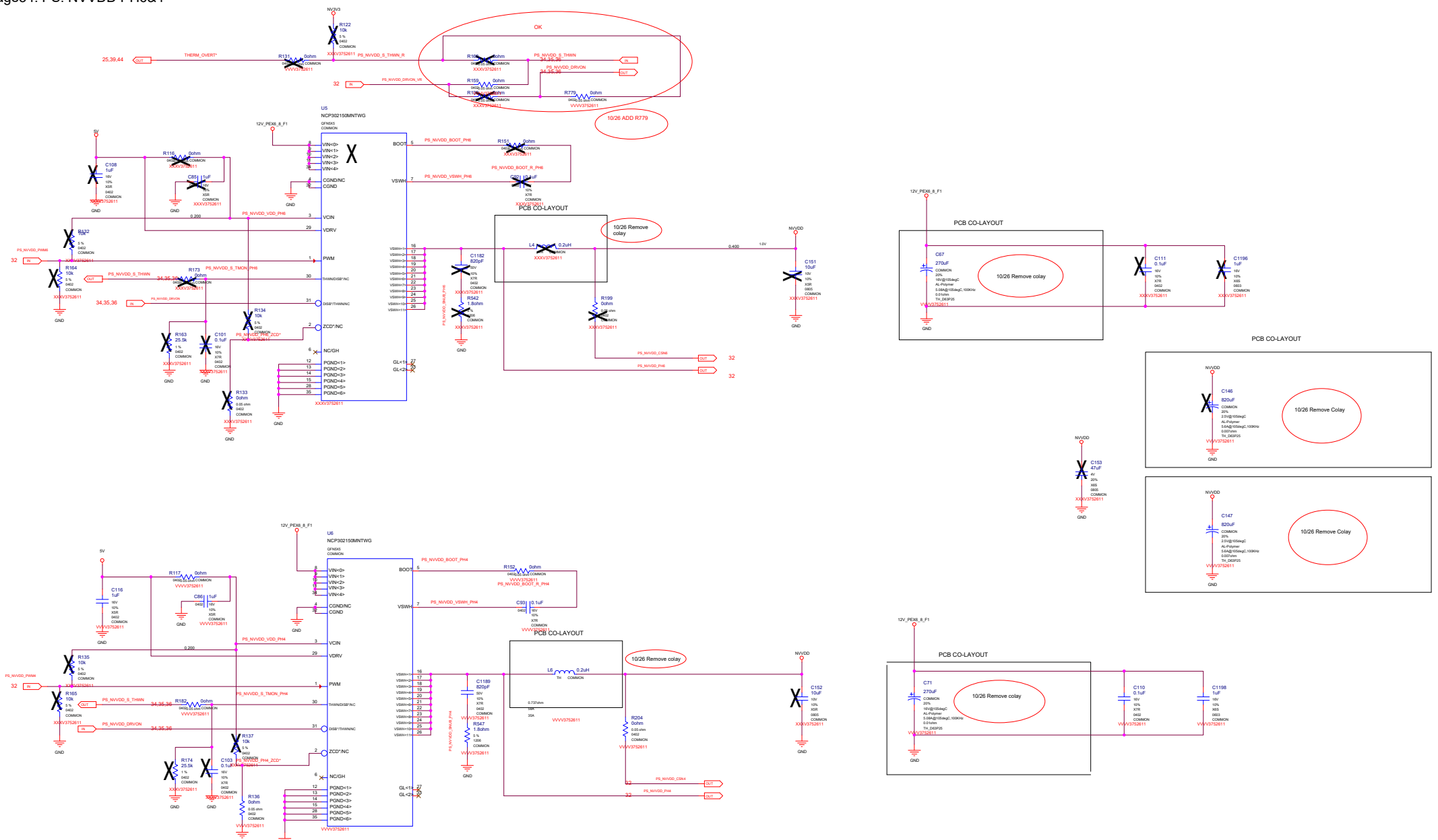
43.44

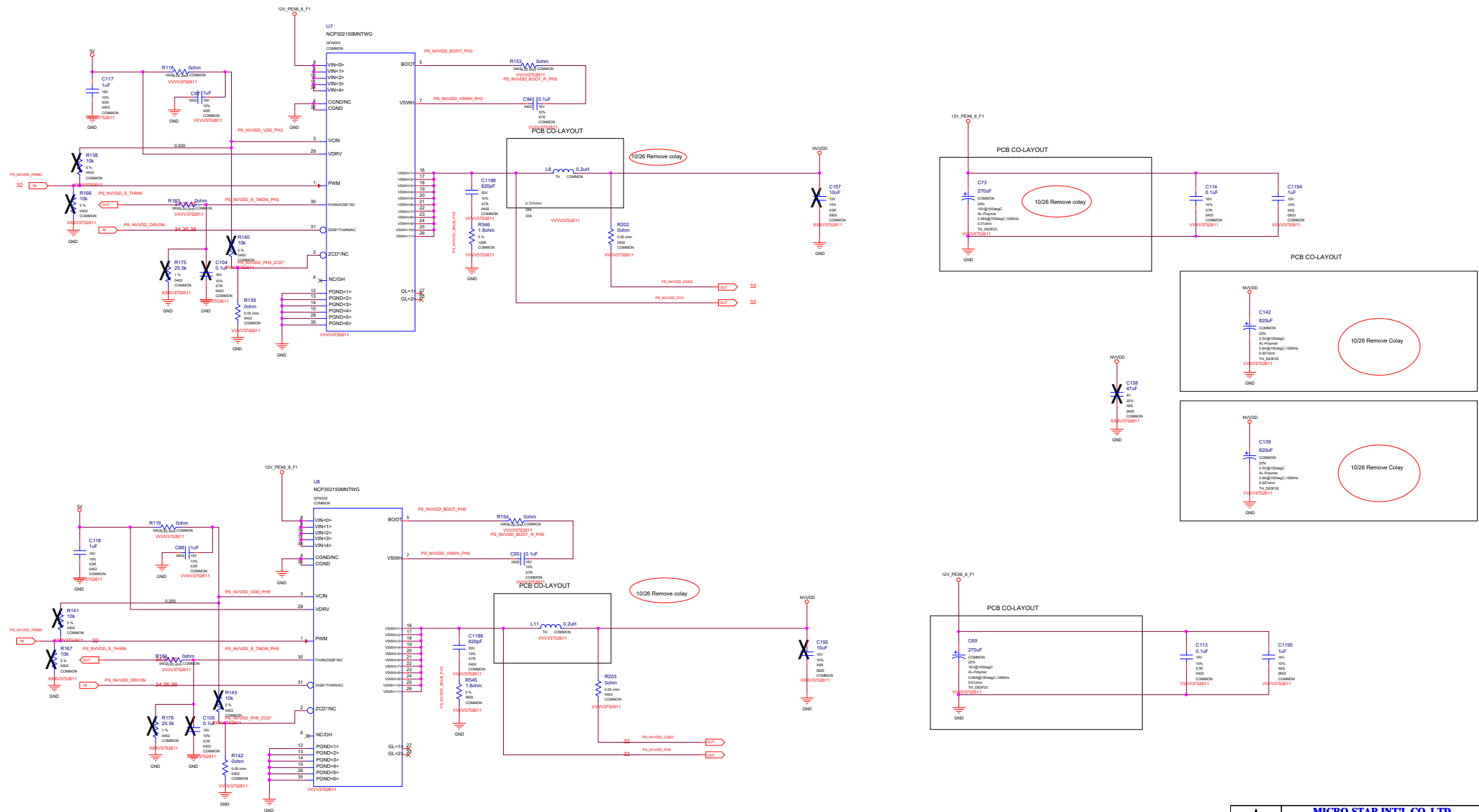
	MICRO-STAR INT'L CO.,LTD		Rev 2.2
	MS-V375		
Size Custom	Document Description PS: NVVDD CTR	Sheet 32 of 33	Date: Friday, August 23, 2019

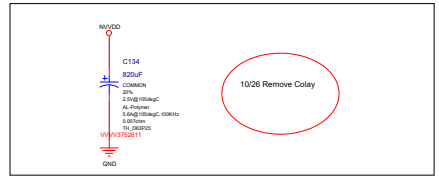
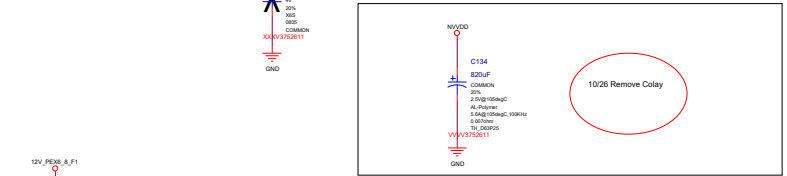
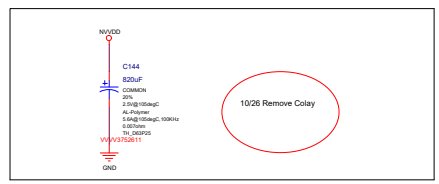
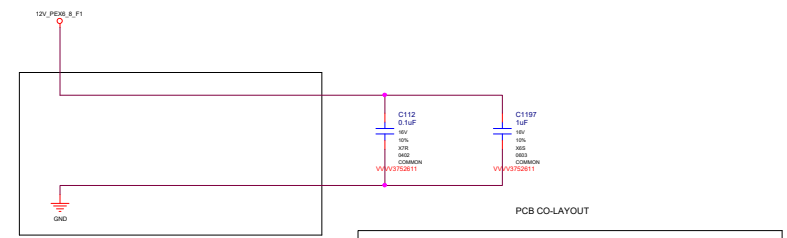
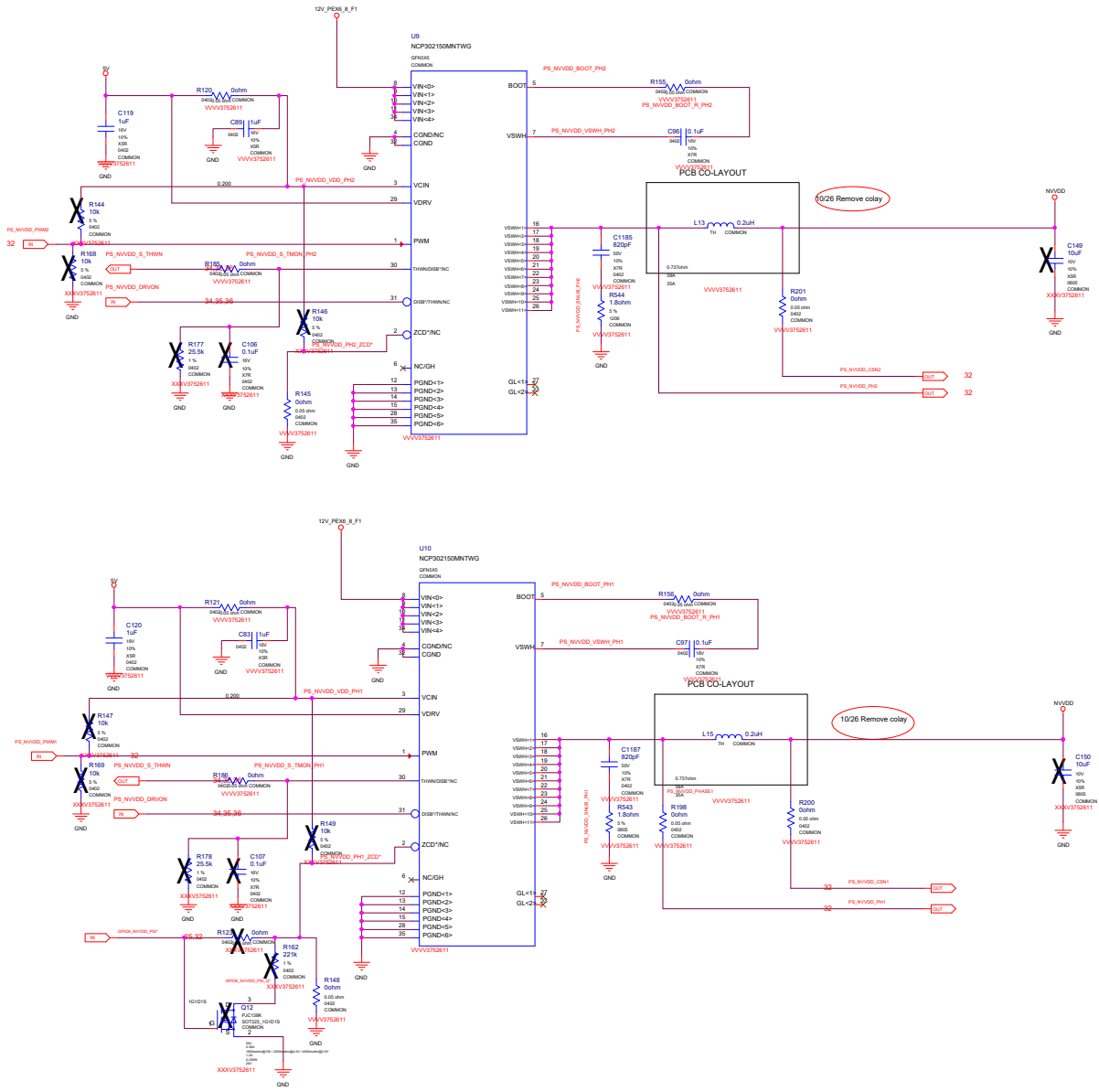
1
2
3
4
5

DROP OVR3i SOLUTION

	MICRO-STAR INT'L CO.,LTD	
	MS-V375	
	Size: Custom	Document Description: PS: NVVDD CTR OVR3i
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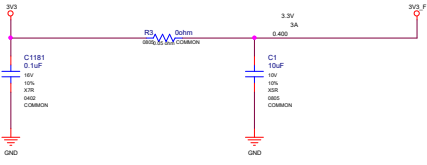


MICRO-STAR INT'L CO.,LTD		
MS-V375		
Size Custom	Document Description NVVDD PH2&1	Rev 2.2
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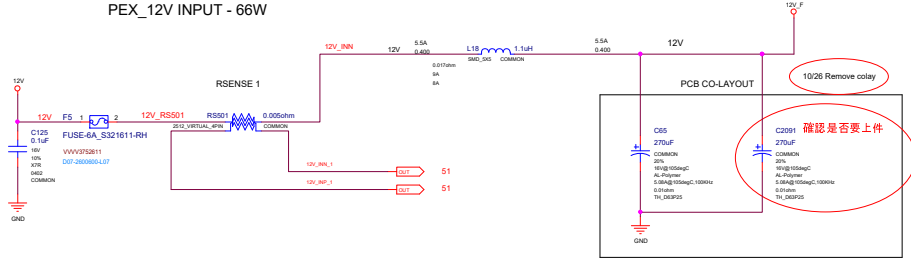
DELETE RAIL BALANCE CIRCUIT

	MICRO-STAR INT'L CO.,LTD	
	MS-V375	
	Size Custom	Document Description Input Power Balancing Switcher
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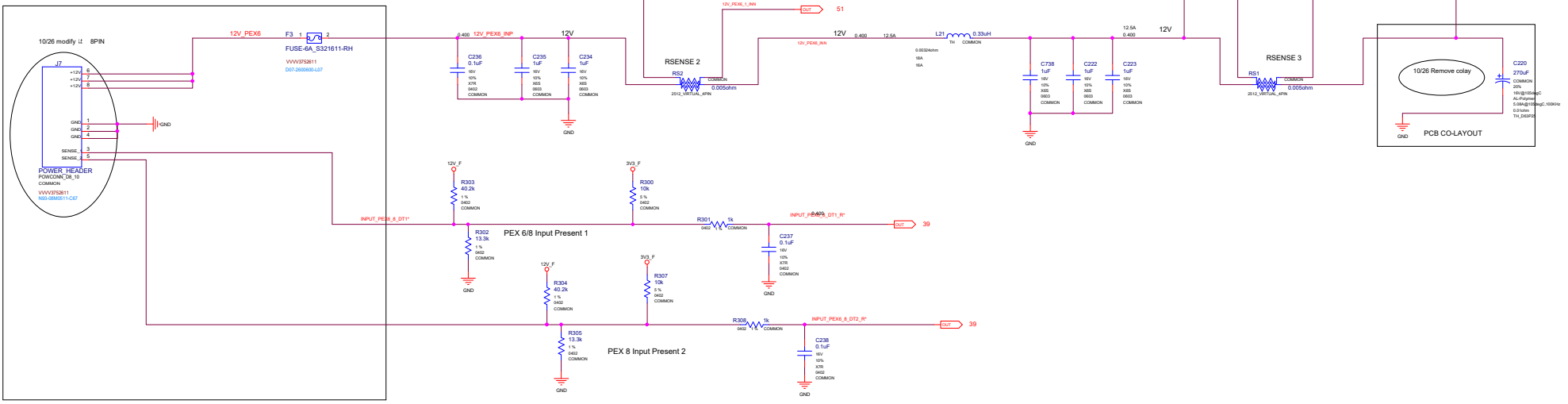
PEX 3V3 INPUT - 10W



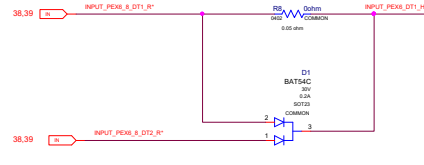
PEX_12V INPUT - 66W



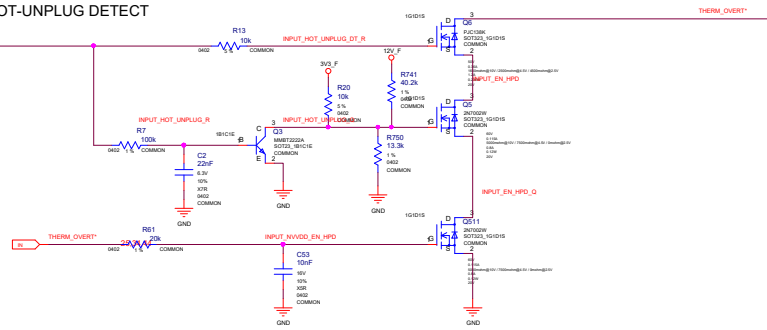
PEX8 INPUT 1 - 2x4 PCIE CON 150W



PEX Input Present 1

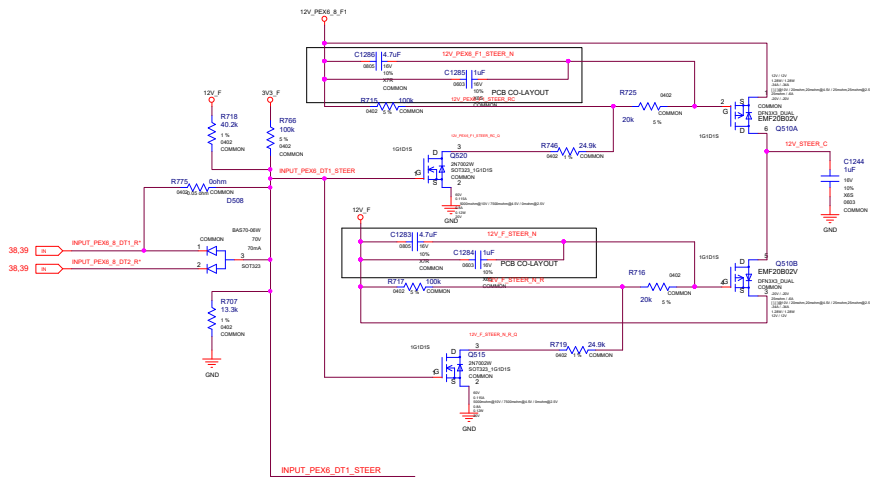


POWER CONNECTOR HOT-UNPLUG DETECT

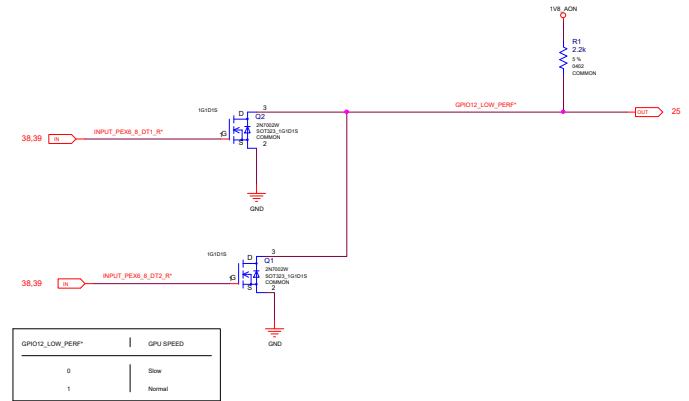



12V CURRENT STEERING (UNDER POWER BOOT):

GUIDES CURRENT FROM PEX EDGE TO PEX 6 PIN INPUT AREA




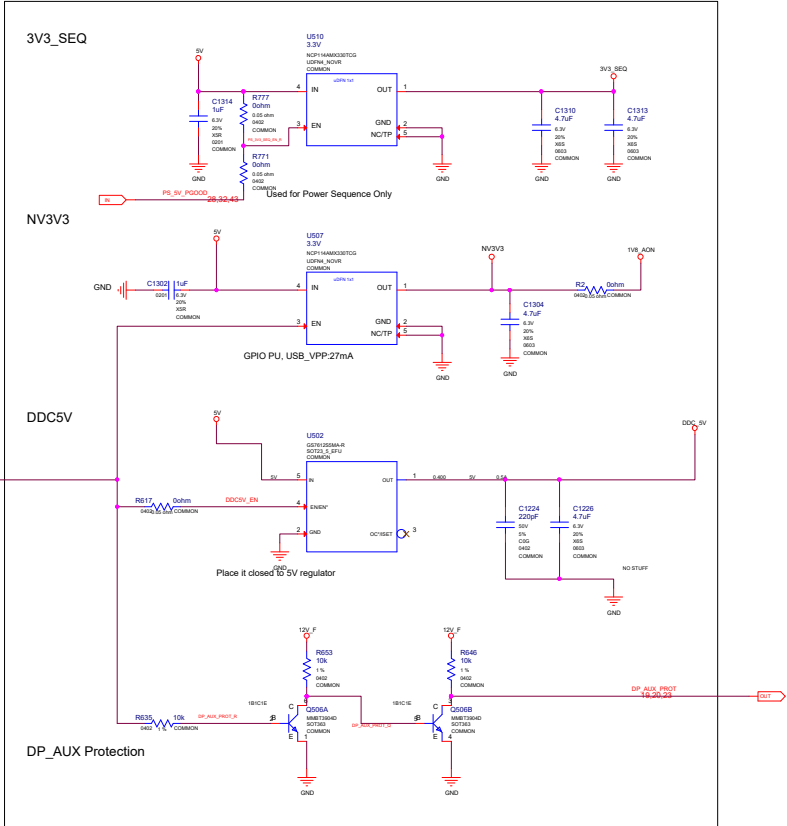
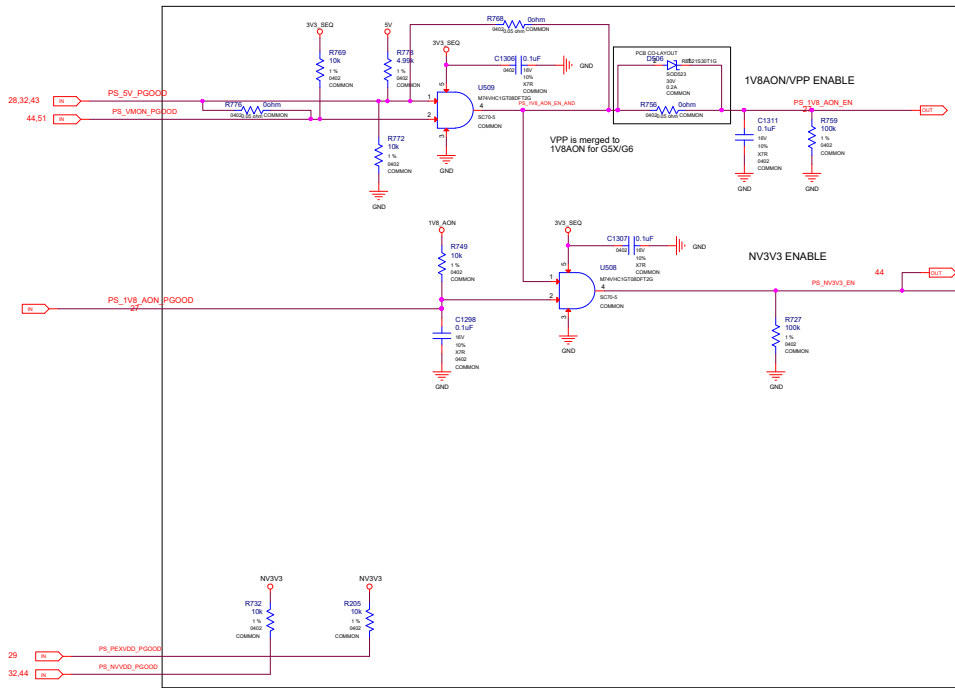
PEX Input - Power Level/PSI* Control

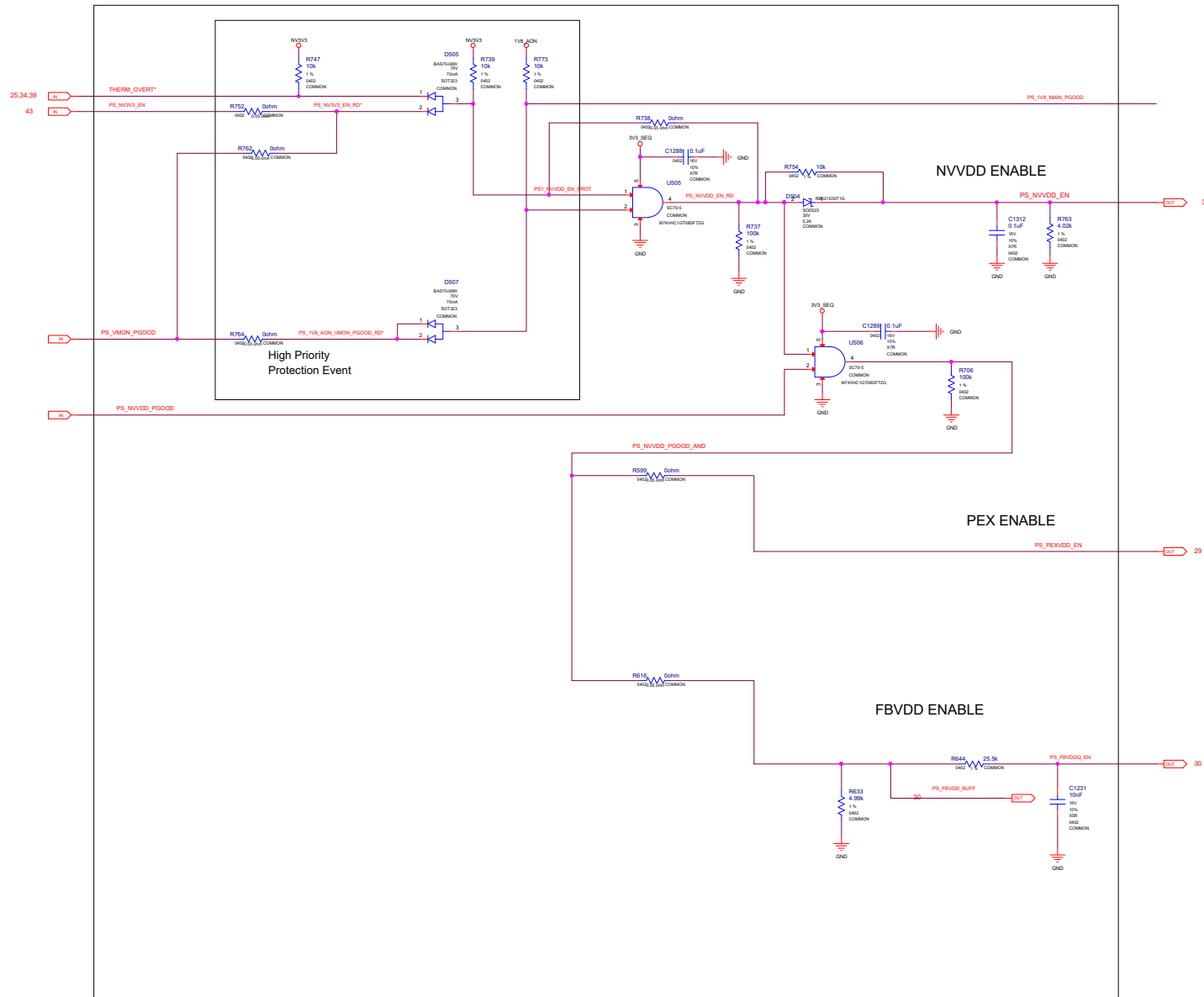



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	MS-V375		
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	MICRO-STAR INT'L CO.,LTD	
	MS-V375	
	Size Custom	Document Description PPC
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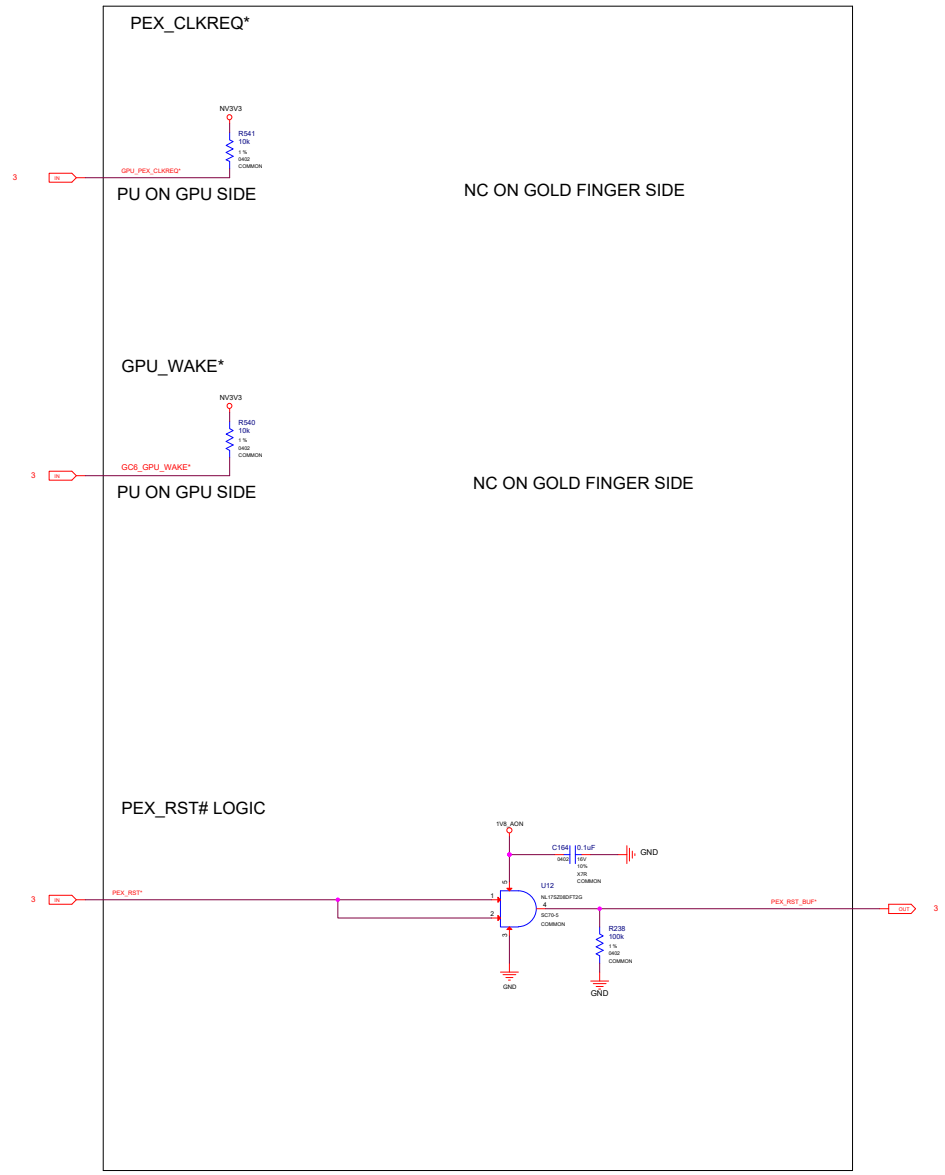
	MICRO-STAR INT'L CO.,LTD	
	MS-V375	
	Size Custom	Document Description 12V & 3V3_A SWITCHER
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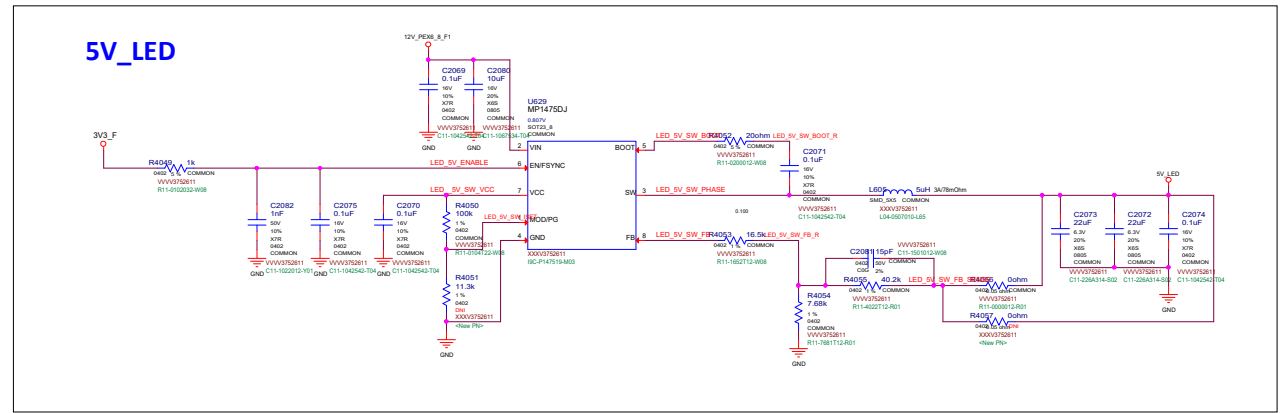
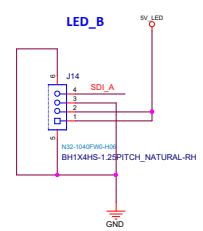
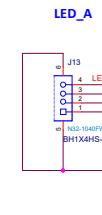
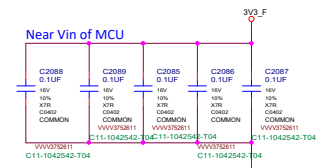
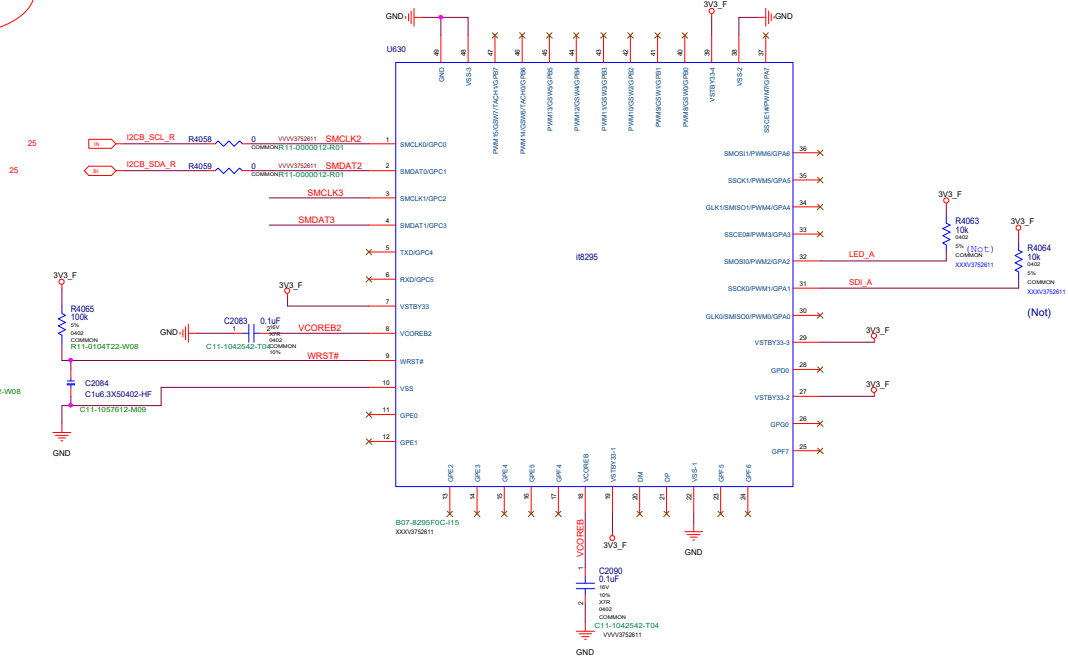
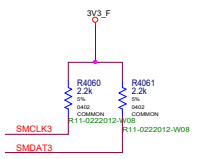
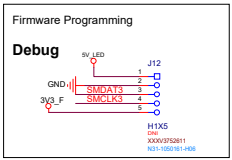


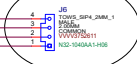
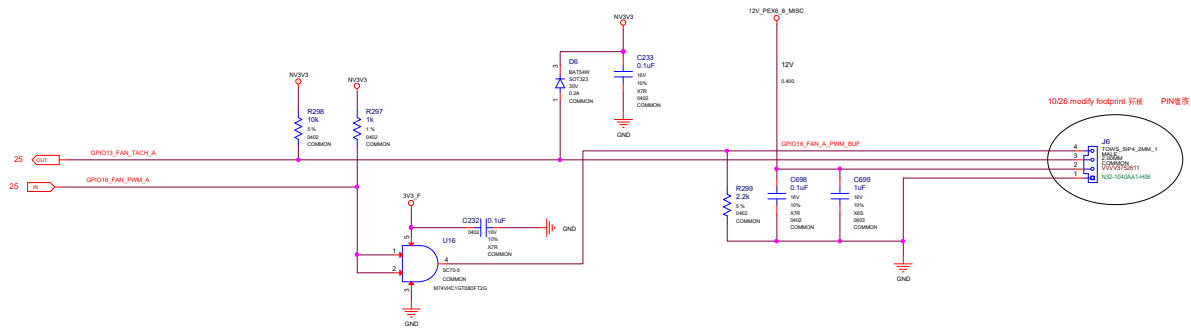
	MICRO-STAR INT'L CO.,LTD	
	MS-V375	
	Size Custom	Document Description SEQUENCE:Voltage Monitor
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	MICRO-STAR INT'L CO.,LTD		
	MS-V375		
	Size Custom	Document Description SEQUENCE:Discharge	Rev 2.2
	Date: Friday, August 23, 2019		Sheet 46 of 53

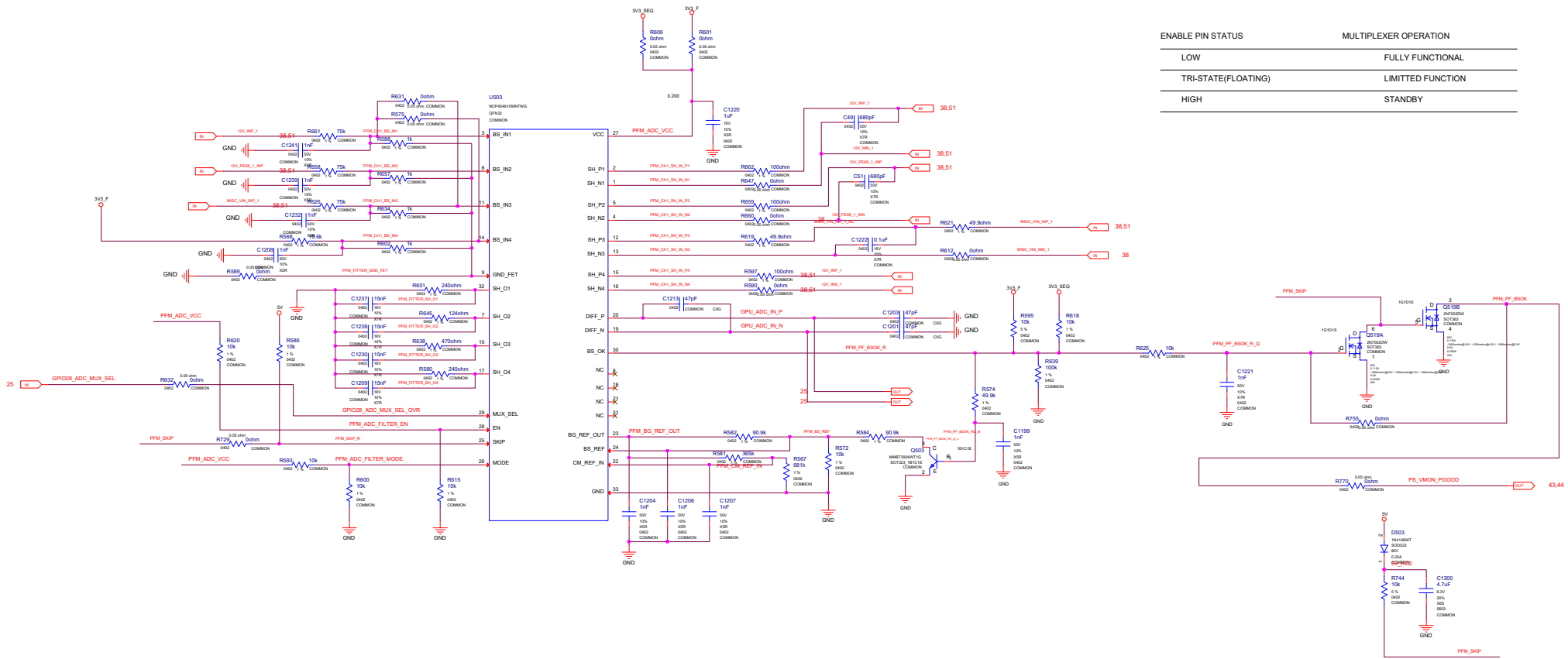


	MICRO-STAR INT'L CO.,LTD		
	MS-V375		
	Size Custom	Document Description LOGO LED	Rev 2.2
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Size Custom	Document Description FAN	Rev 2.2
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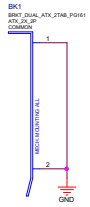


MODE PIN STATUS	MULTIPLEXER OPERATION
LOW	DEVICE A
TRI-STATE(FLOATING)	STAND-ALONE
HIGH	DEVICE B

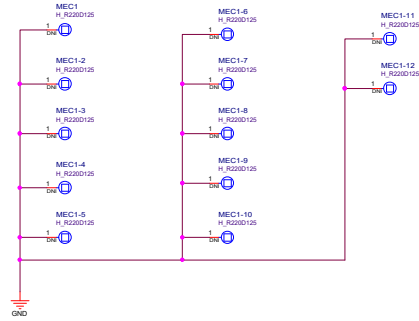
ENABLE PIN STATUS	MULTIPLEXER OPERATION
LOW	FULLY FUNCTIONAL
TRI-STATE(FLOATING)	LIMITED FUNCTION
HIGH	STANDBY

MICRO-STAR INT'L CO.,LTD MS-V375		
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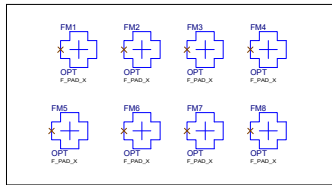
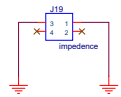
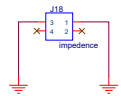
Bracket:



MOUNTING HOLES FOR HS:



BACK STIFFENER:



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	Size Custom	Document Description PTC
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