

PG161-A00

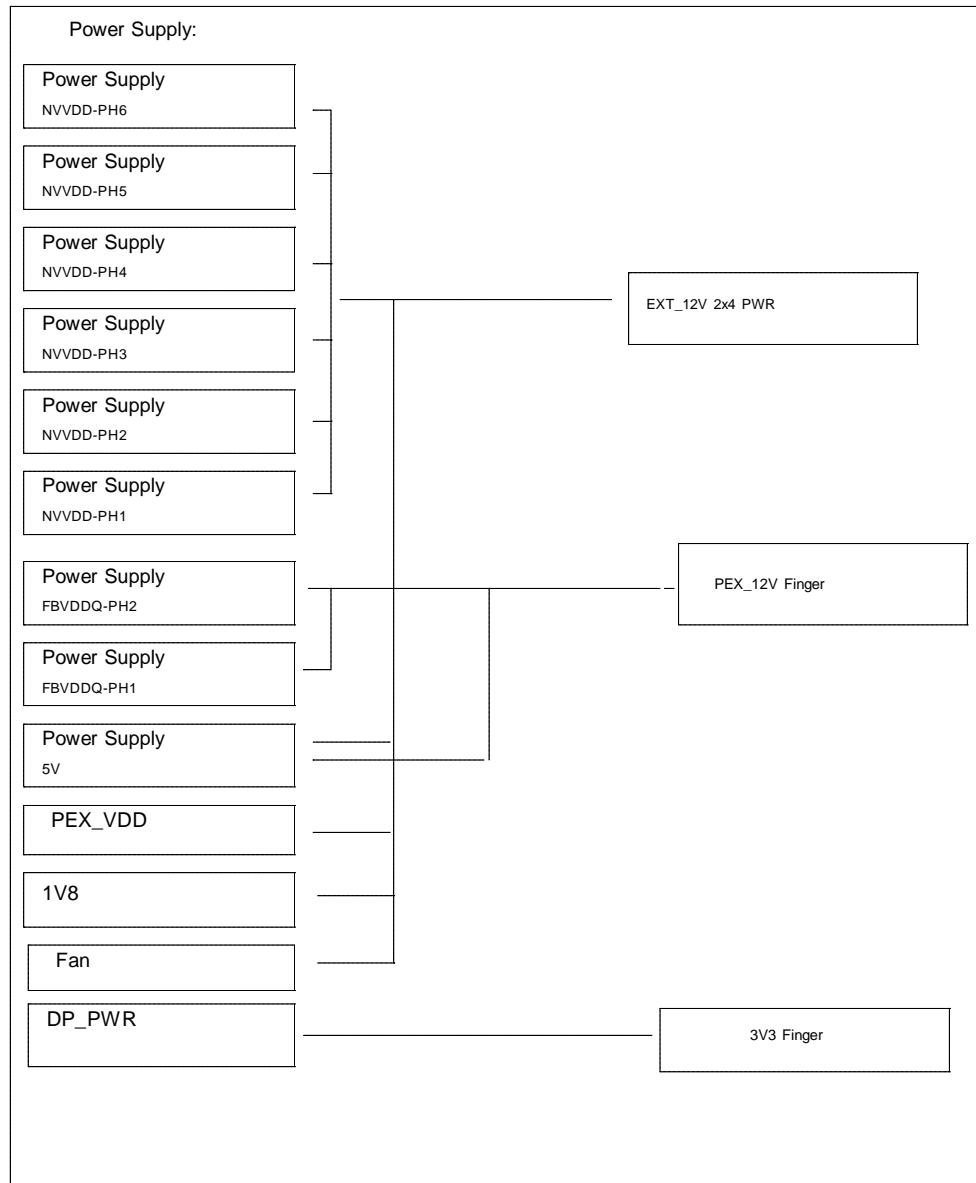
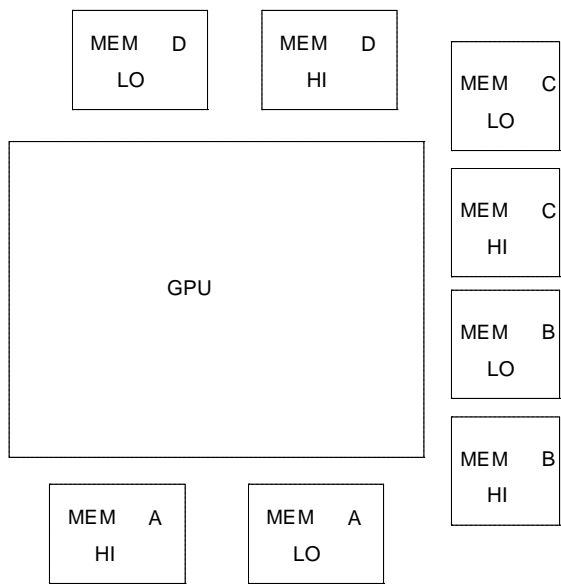
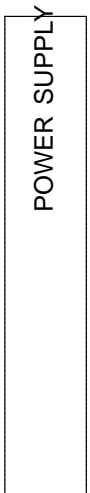
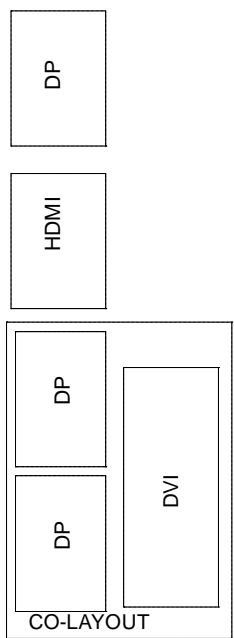
TU106 6GB GDDR6, 192b, X16 DVI-D/DP + DP + HDMI

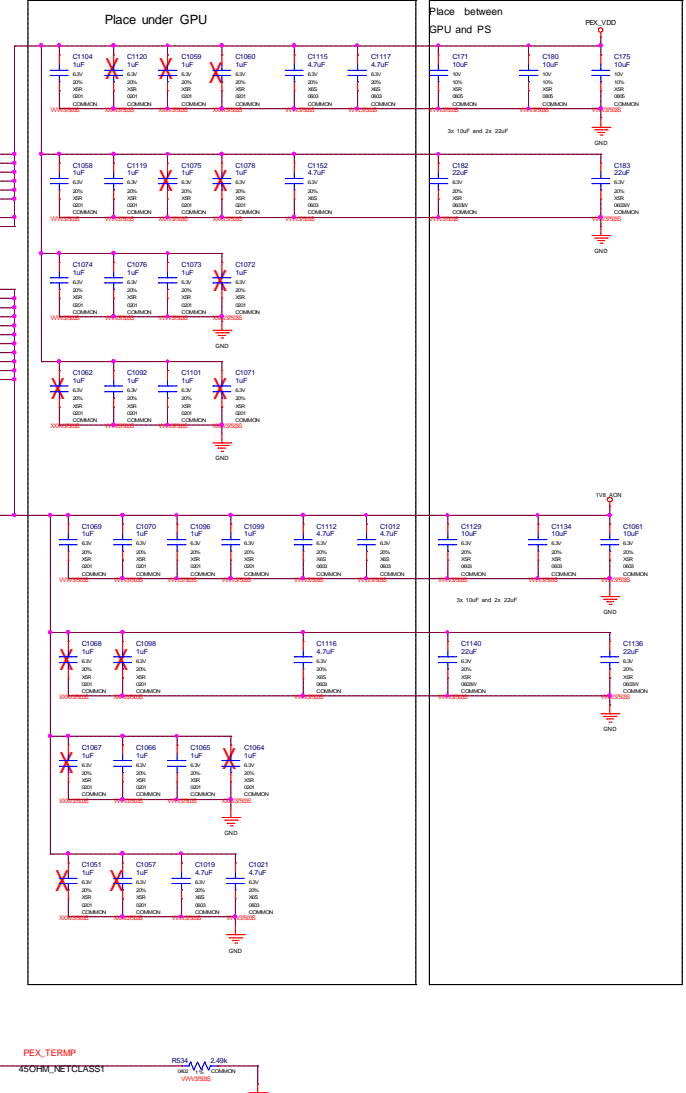
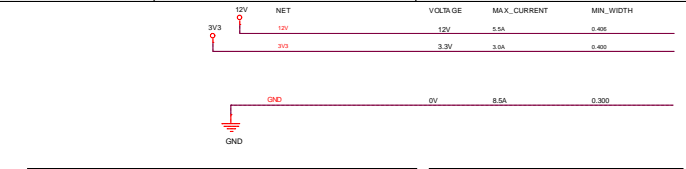
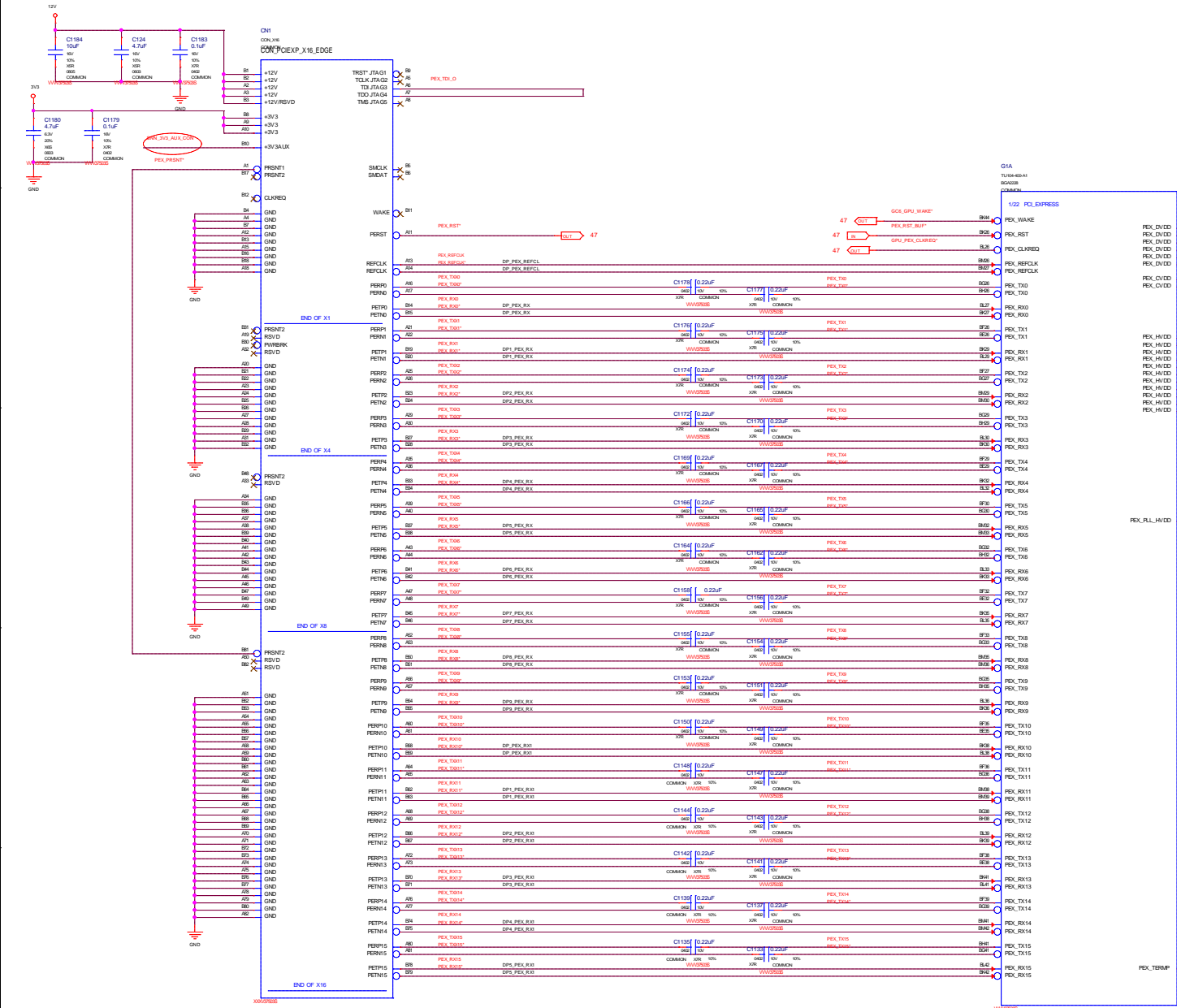
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PEX_TERM

450V/1W/NET/CLASS1

RESM 2-6% W/0.5% W/0.5%

GND


MSI

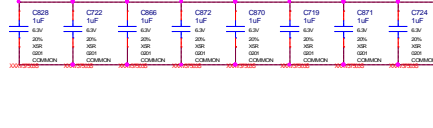
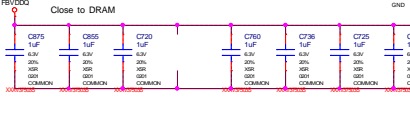
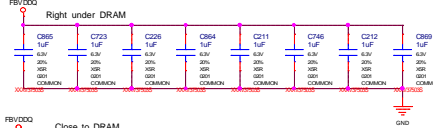
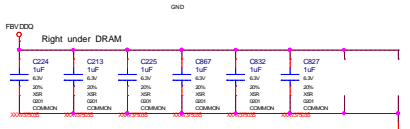
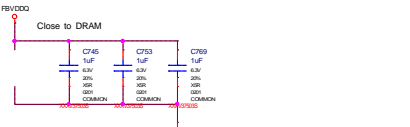
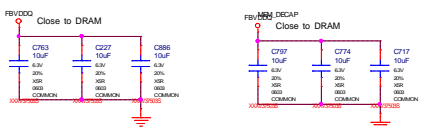
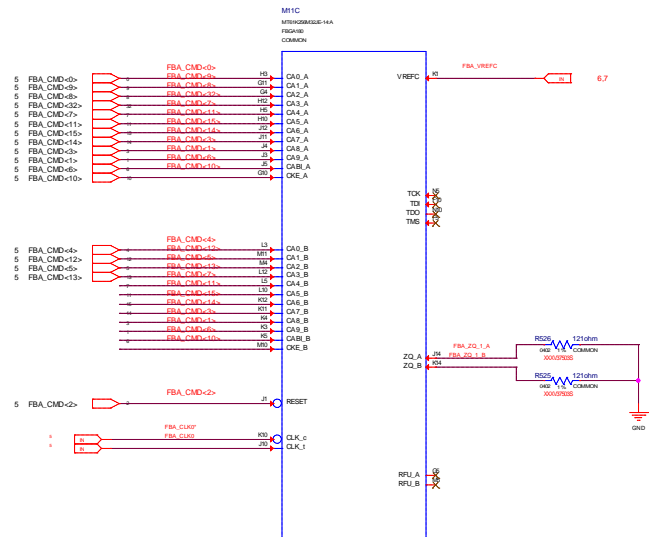
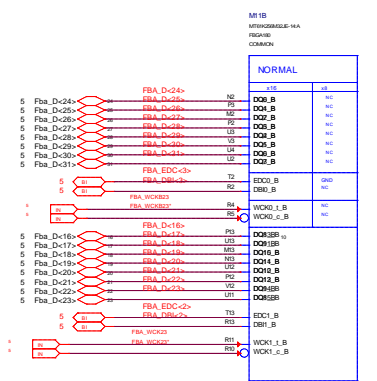
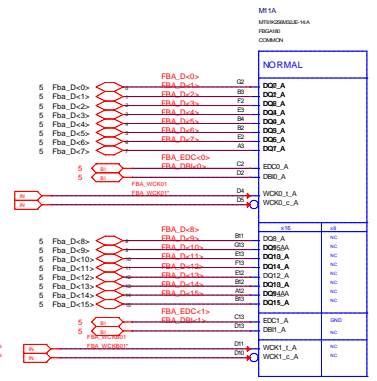
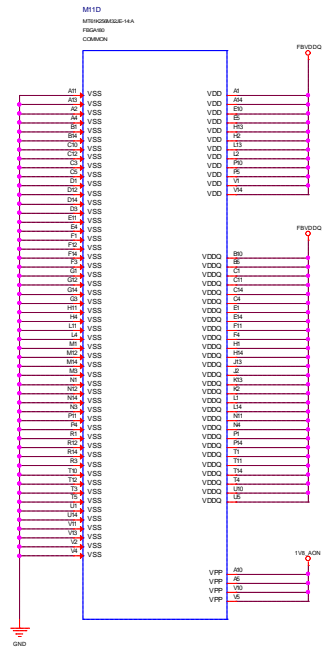
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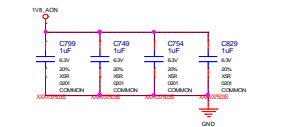
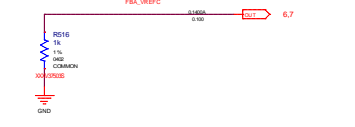
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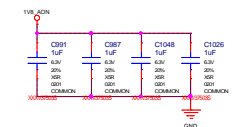
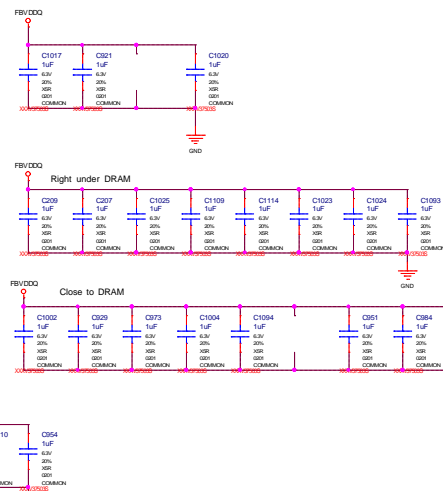
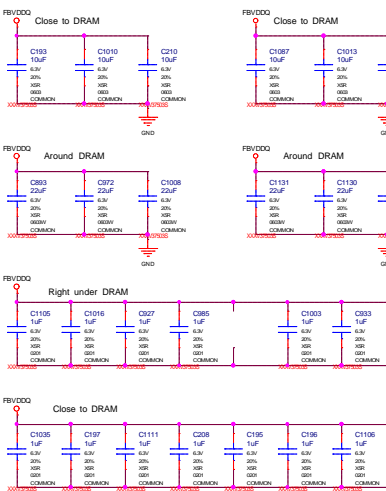
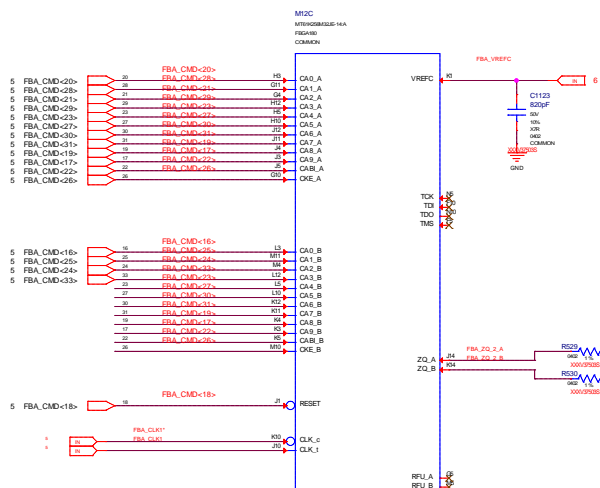
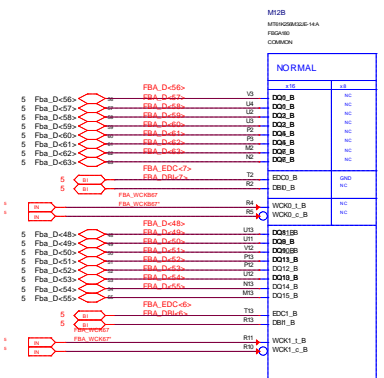
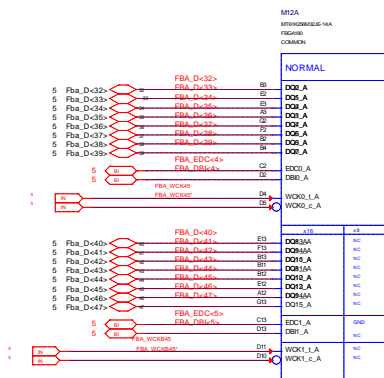
NO PEX GEN4 SUPPORT DELETE RC TERMINATIONS

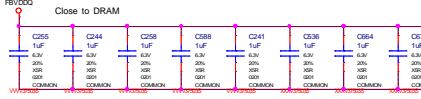
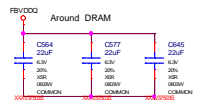
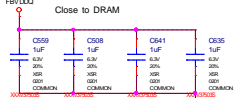
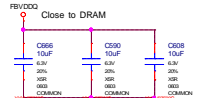
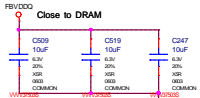
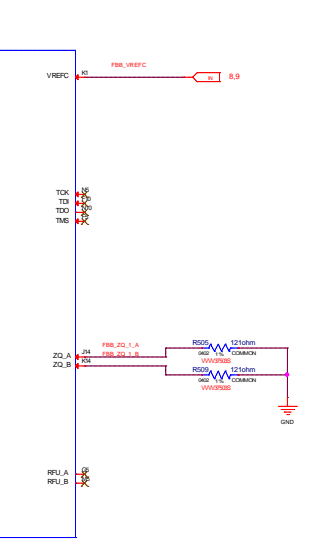
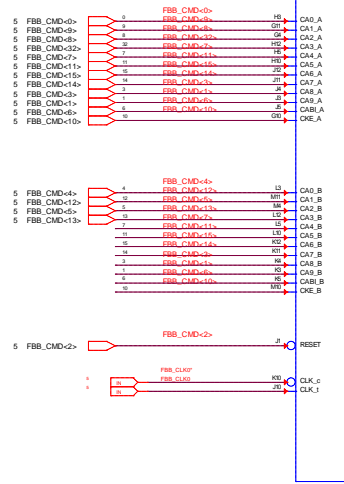
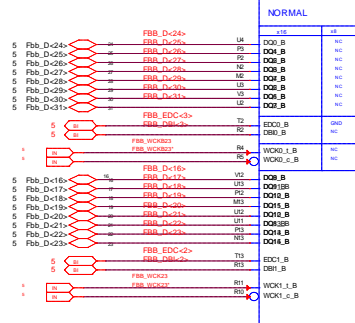
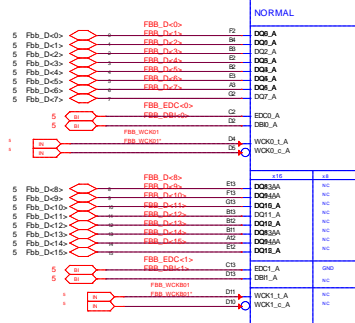
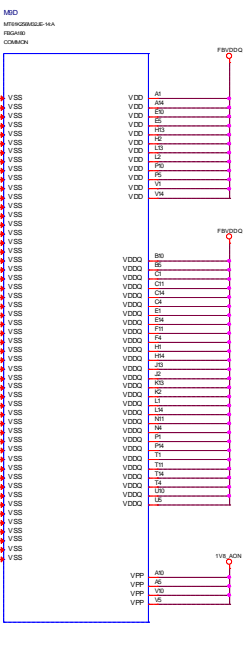
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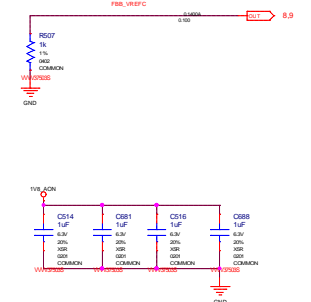
VREFC IS NOT USED IN x16 CONFIGURATION IN PLACE OF THE 1.33K FOR R106

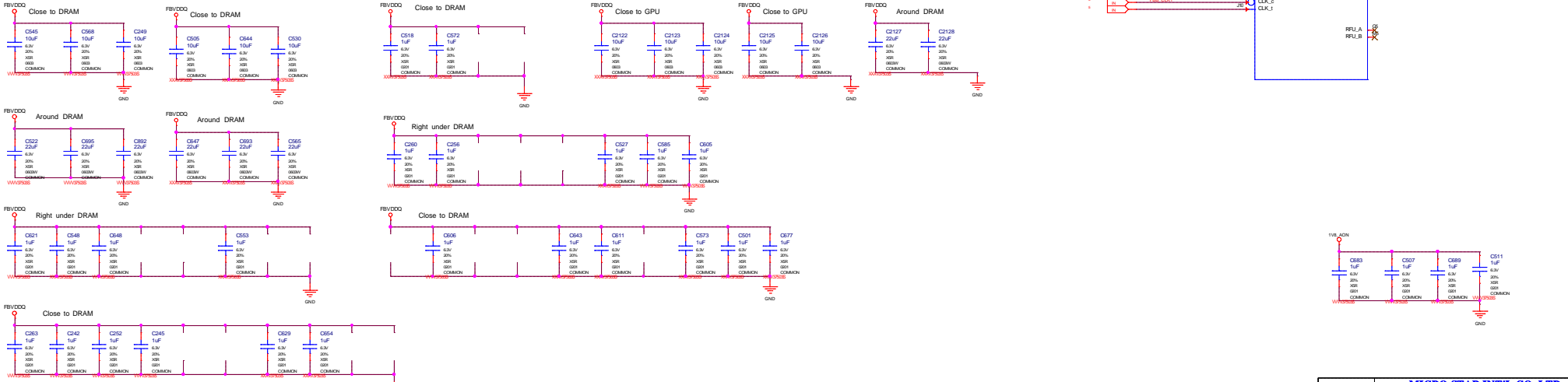
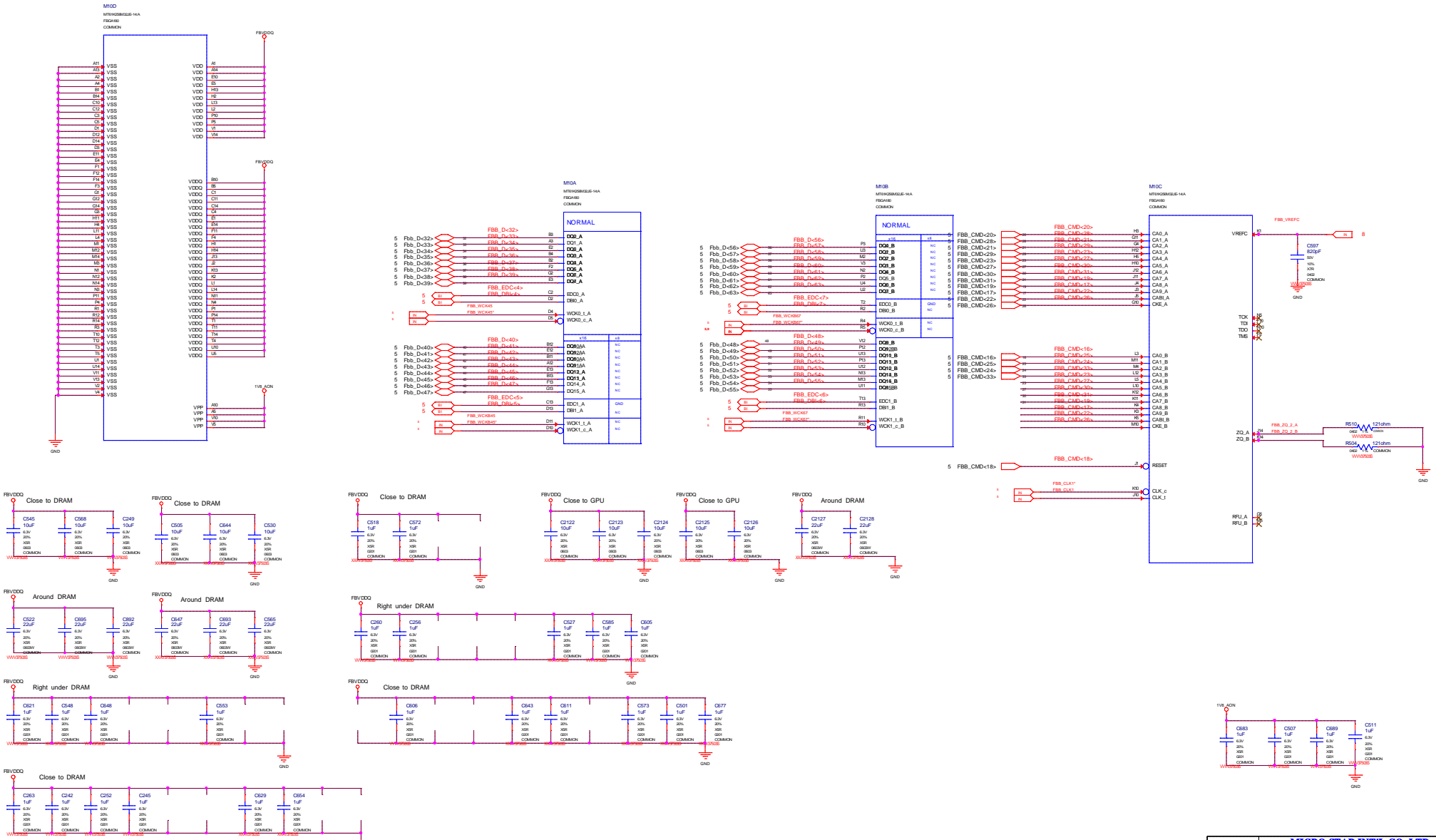


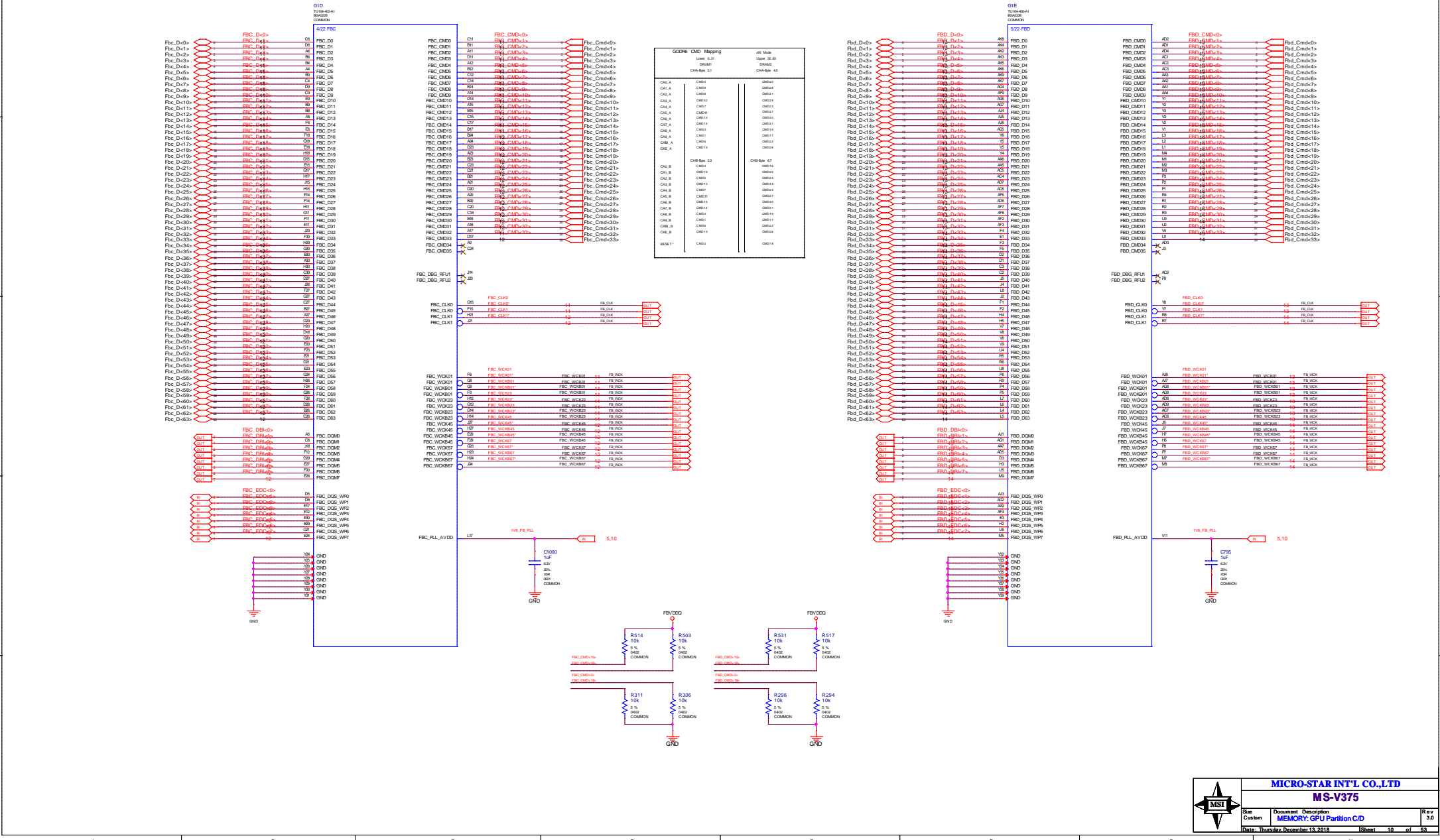


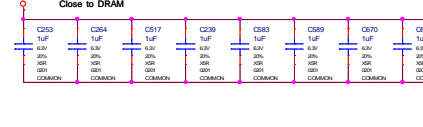
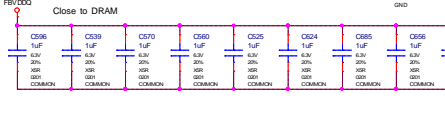
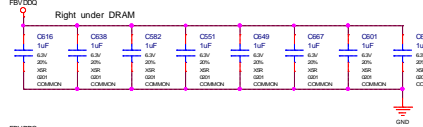
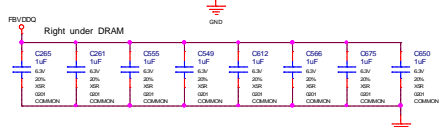
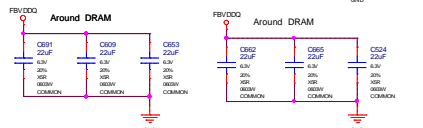
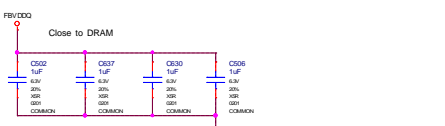
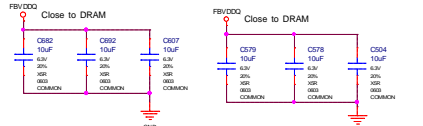
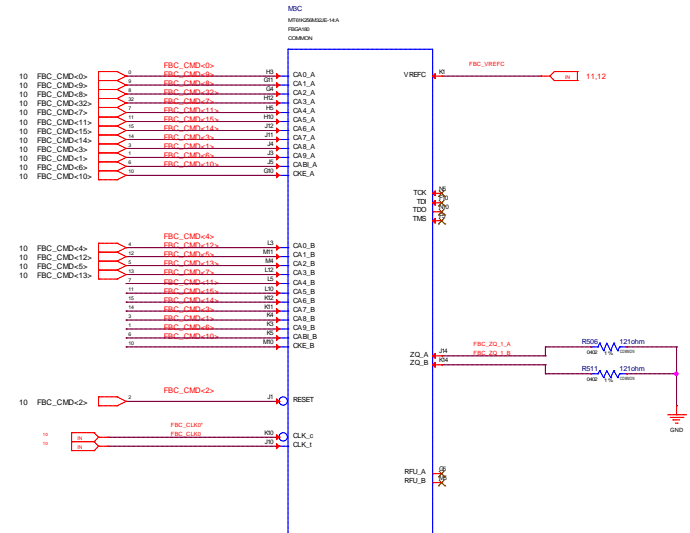
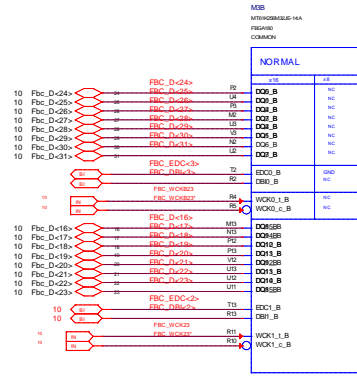
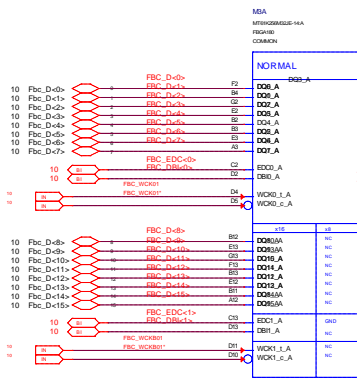
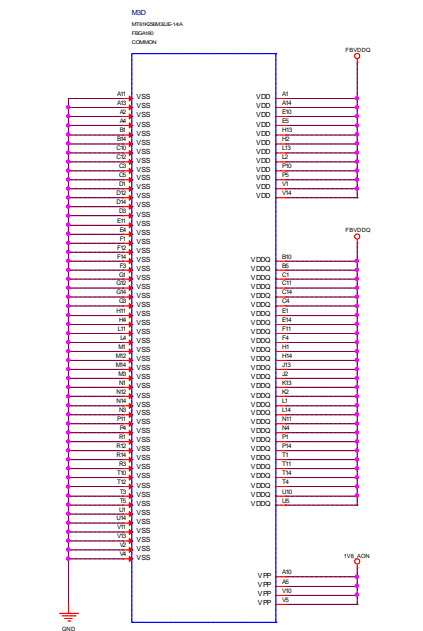


VREF IS NOT USED IN x16 CONFIGURATION
1K OHM PULL-DOWN IS IN PLACE OF THE 1.33K FOR R104

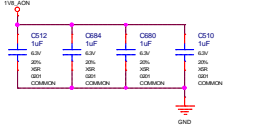
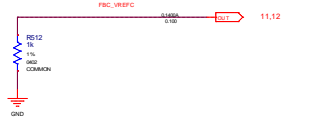


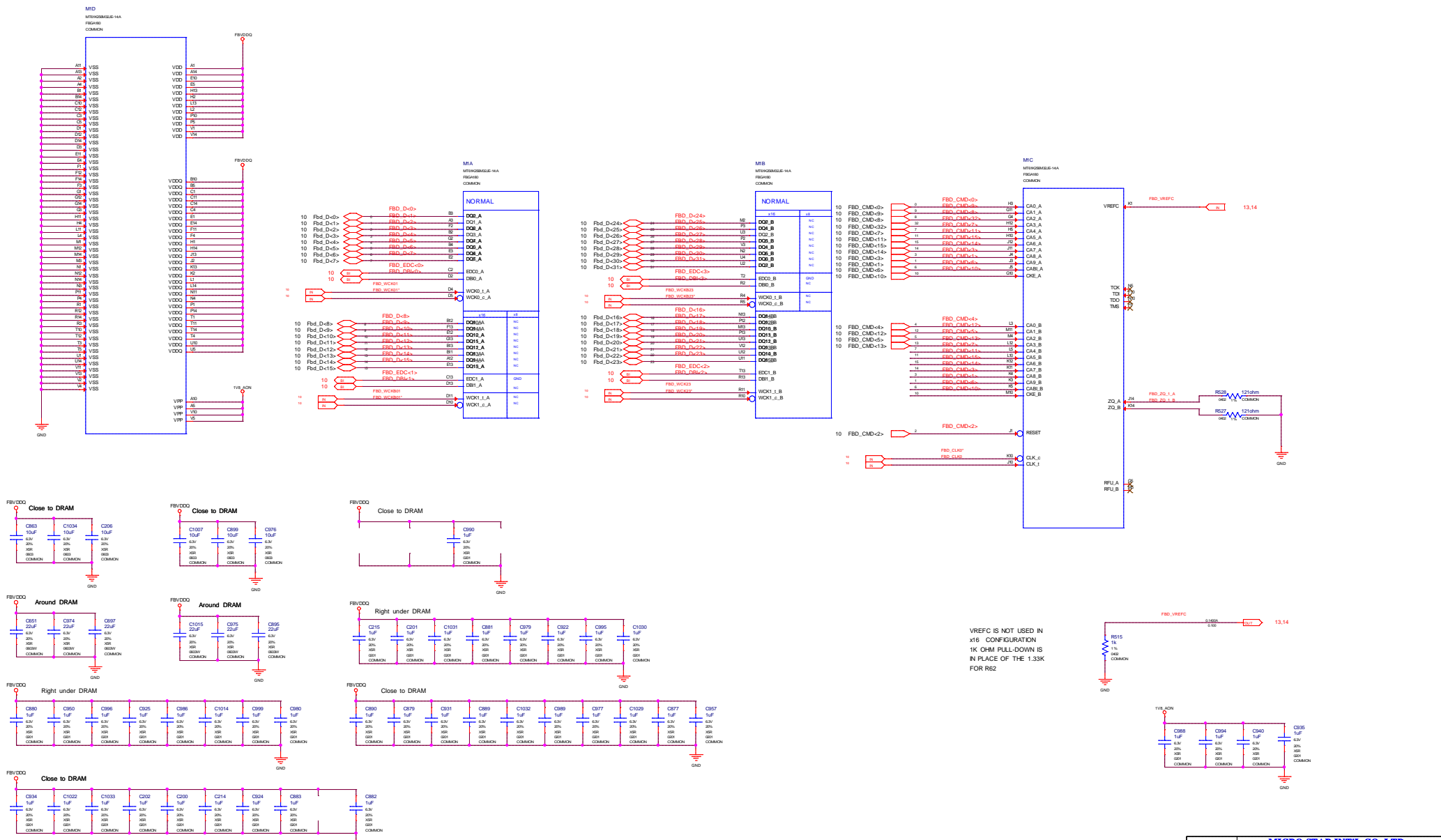




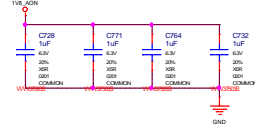
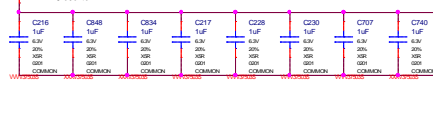
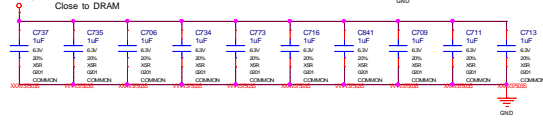
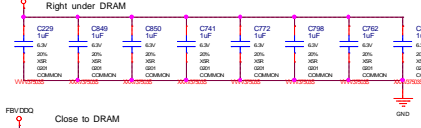
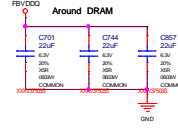
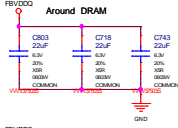
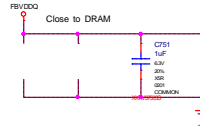
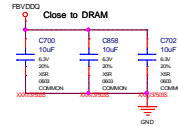
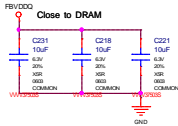
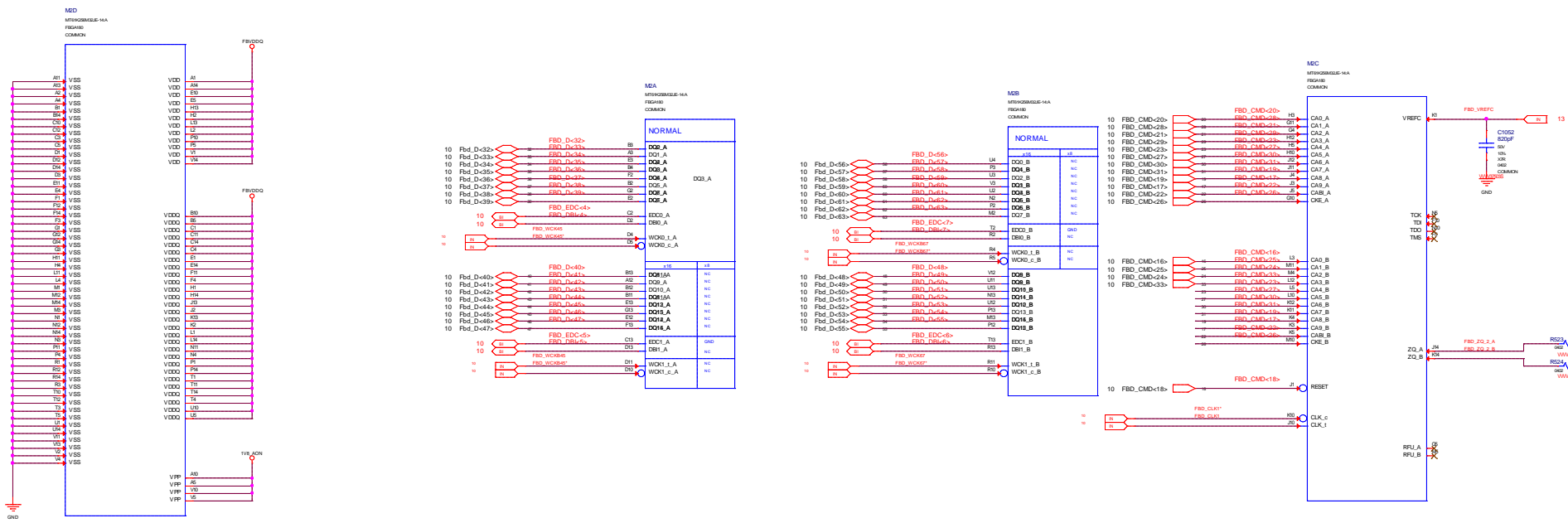


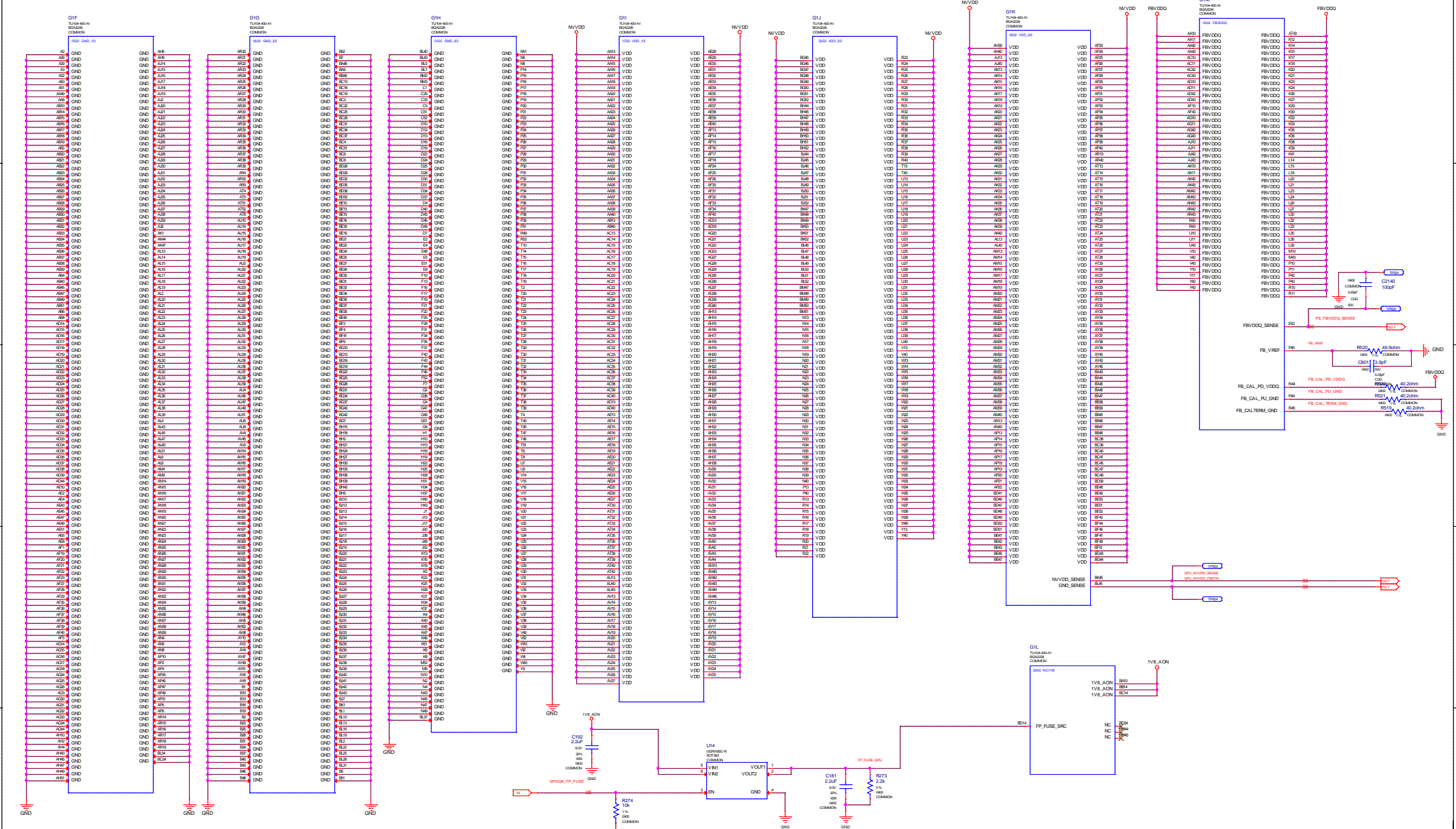
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1K OHM PULL-DOWN IS IN PLACE OF THE 1.33K FOR R75



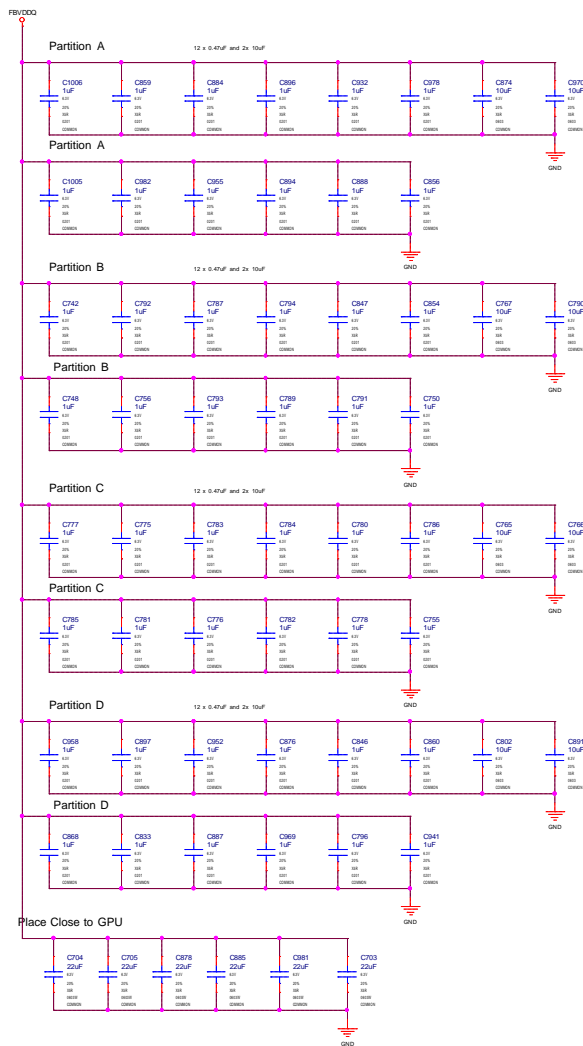


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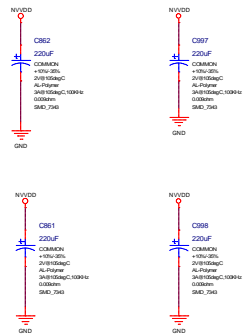




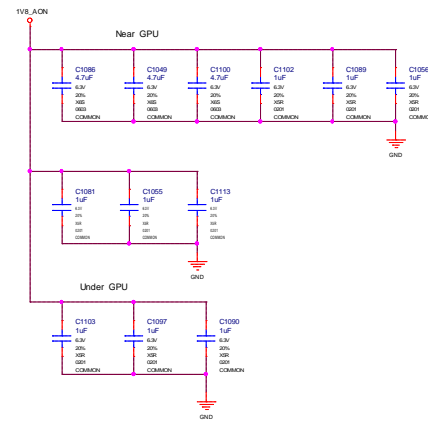
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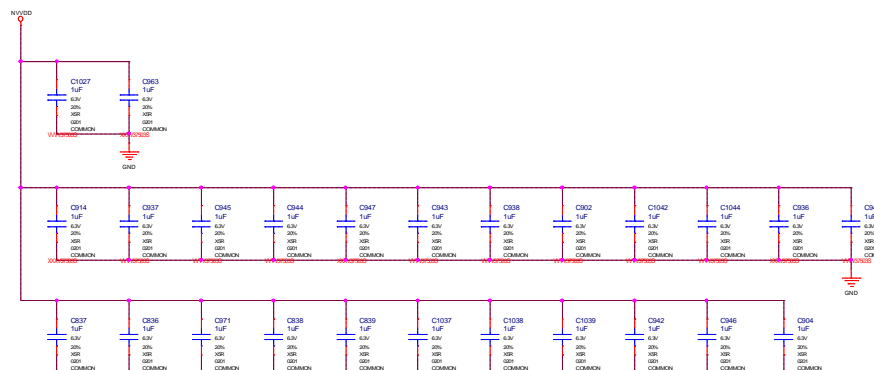
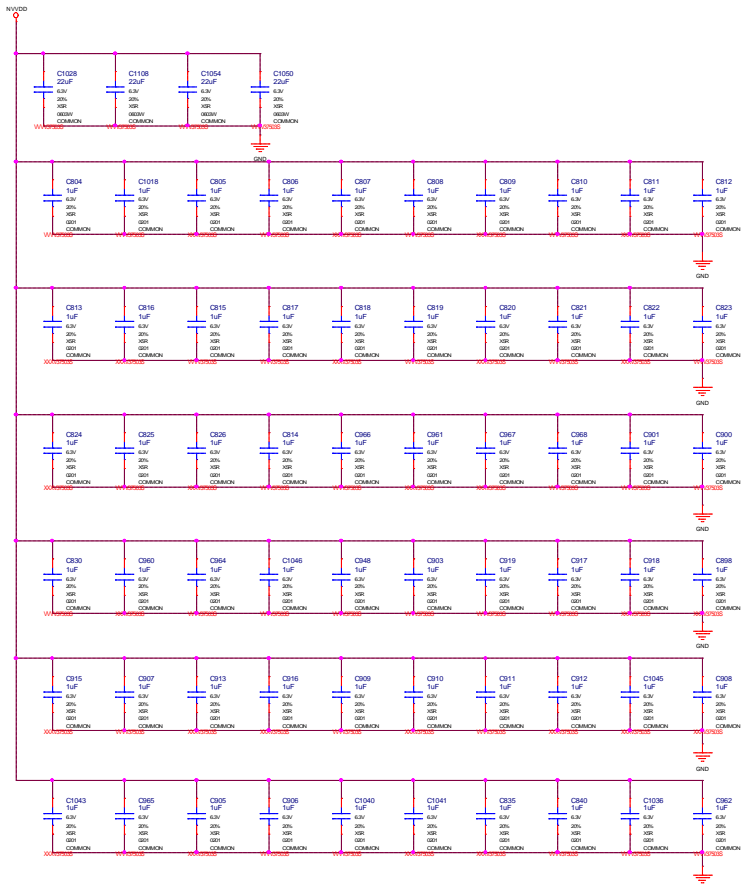
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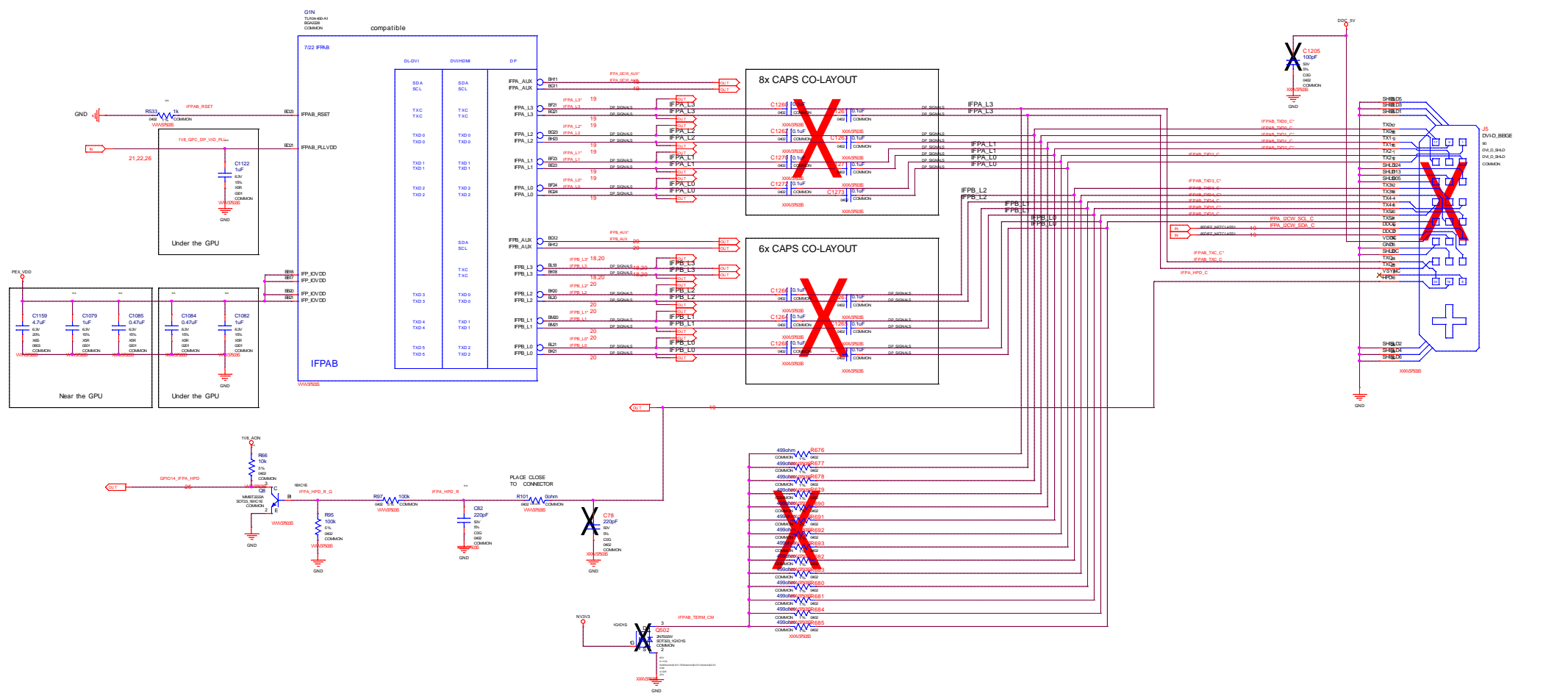
1V8_AON



NVDD

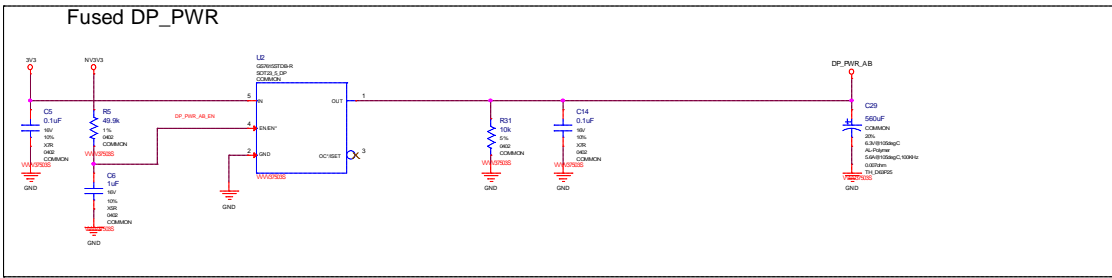
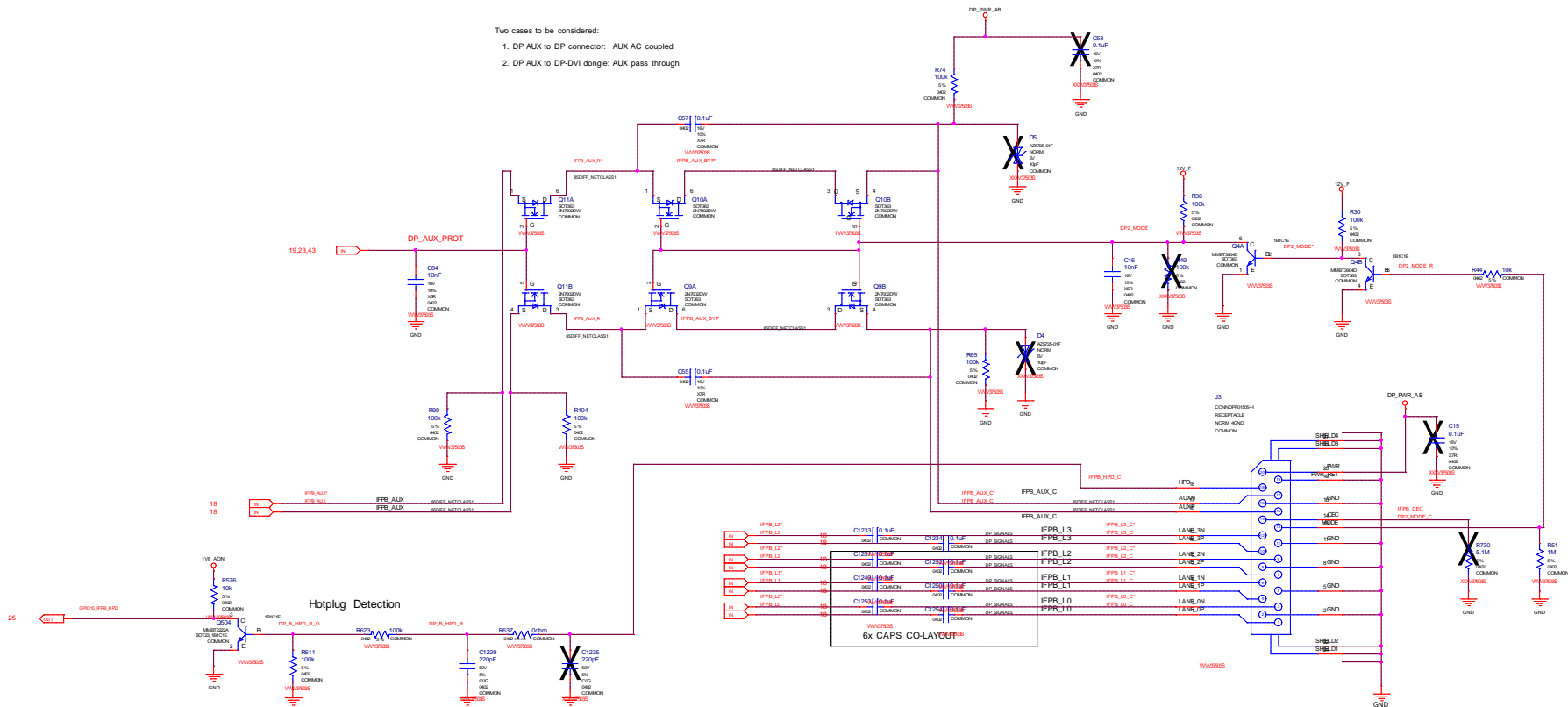


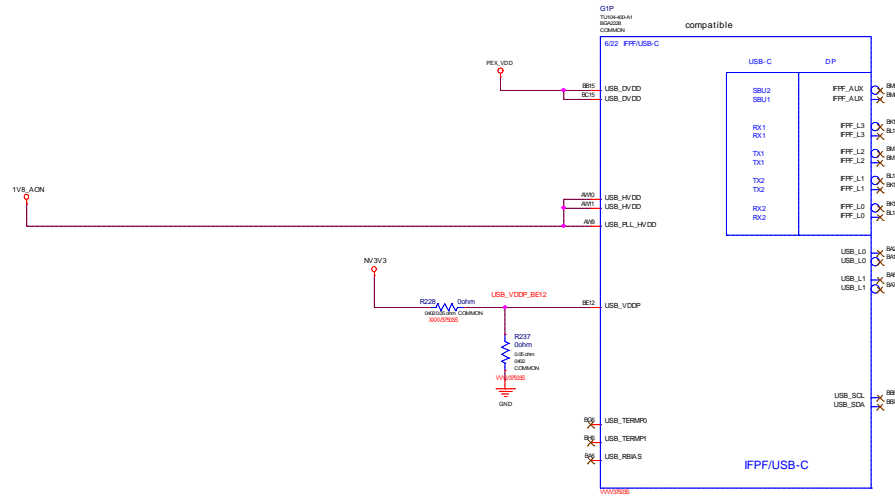
IFPAB DVI-D-DL CO-LAYOUT WITH 2x DP



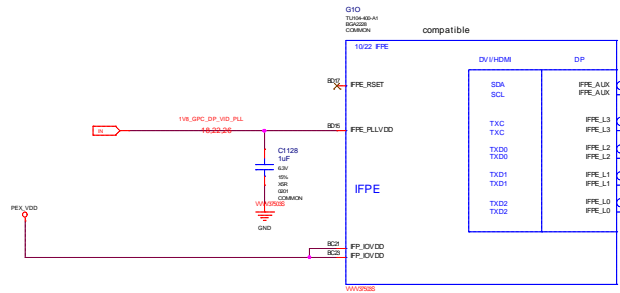
IFPB DP CO-LAYOUT WITH IFPAB DVI-D-DL

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

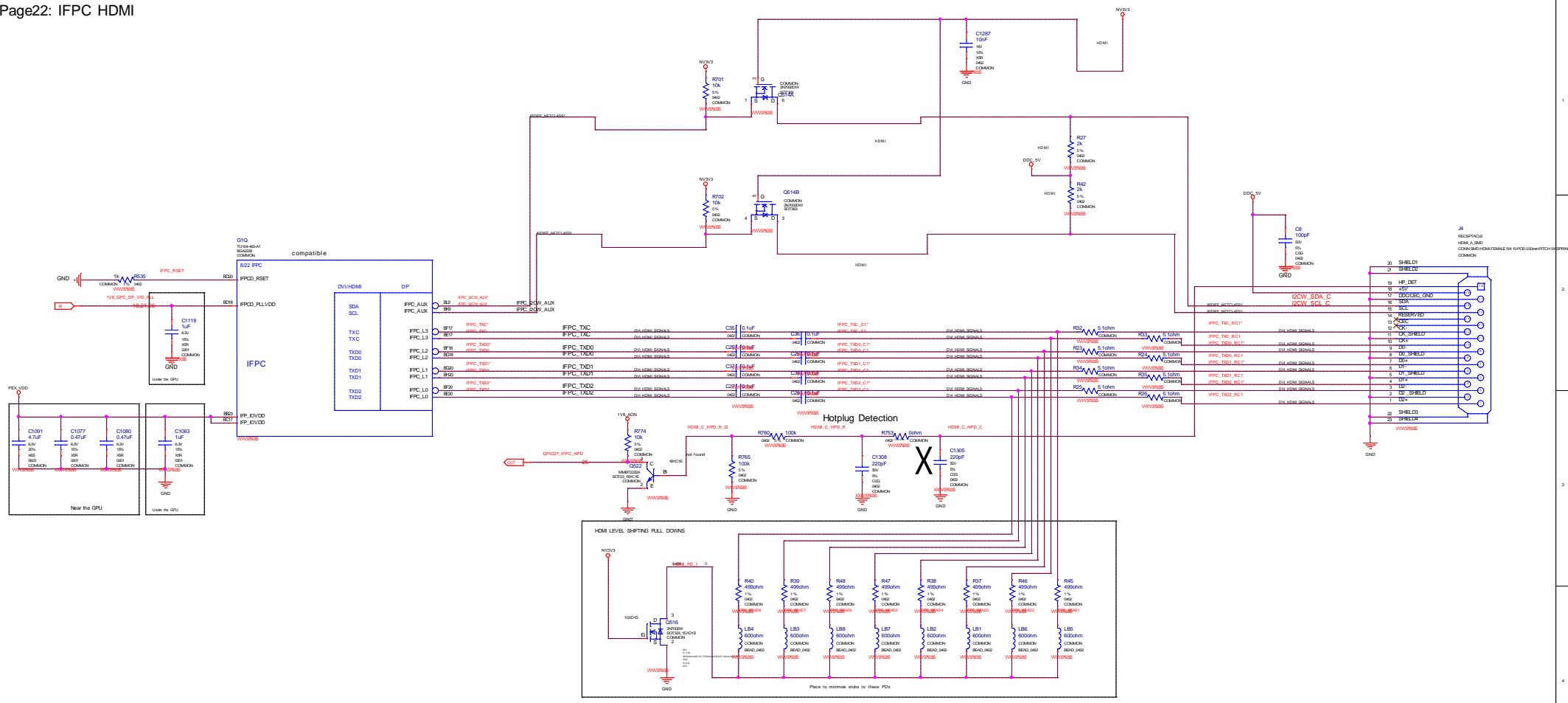




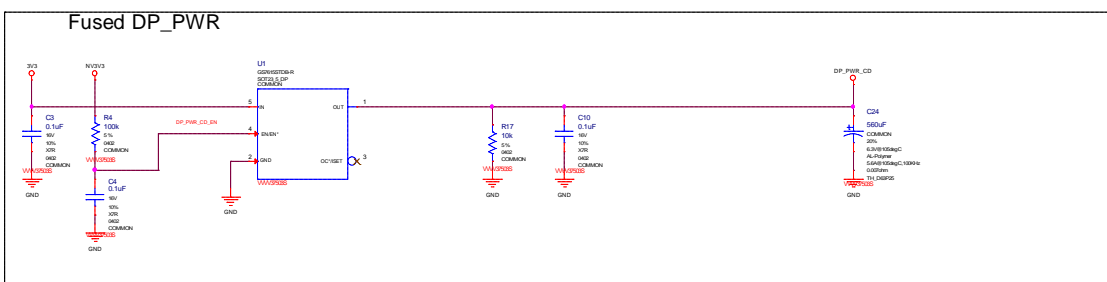
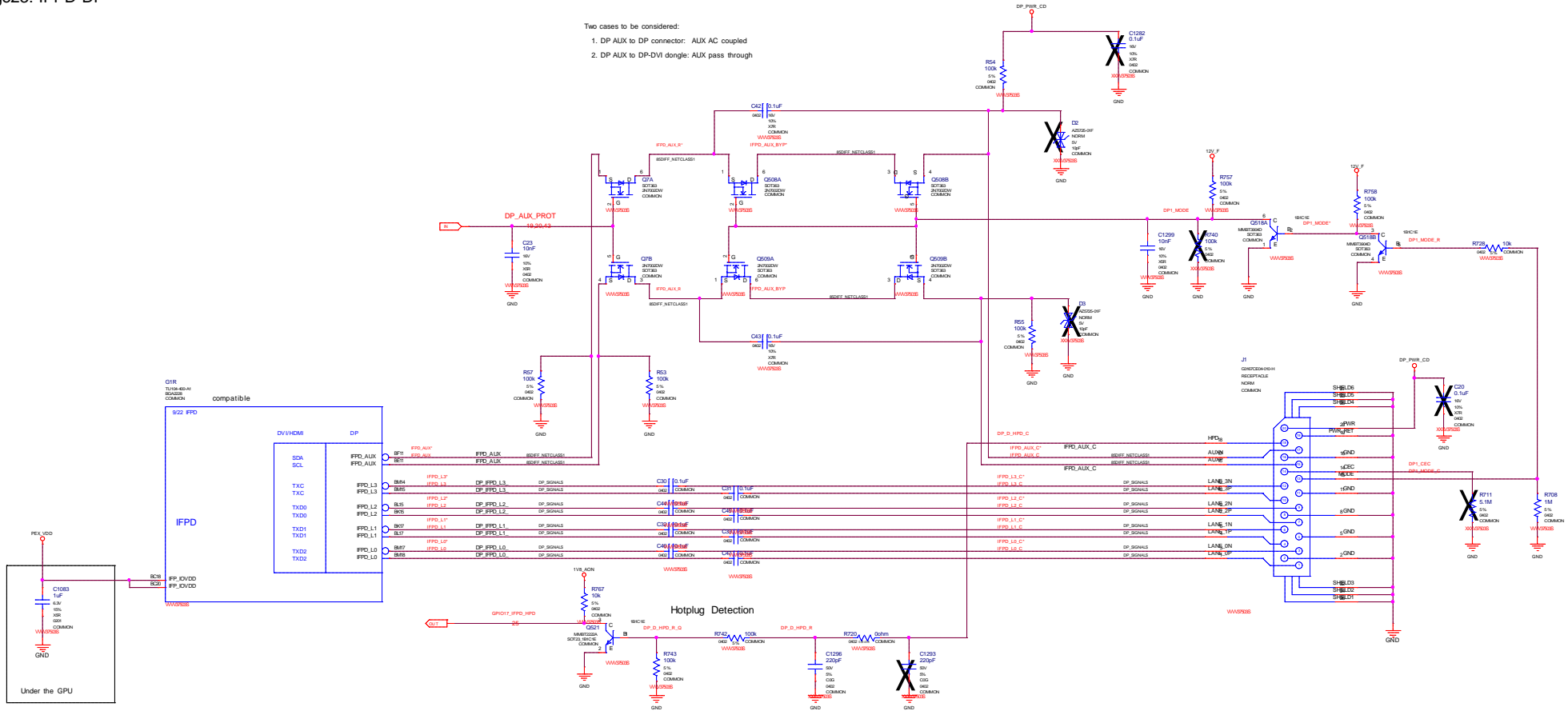
IFPF NC

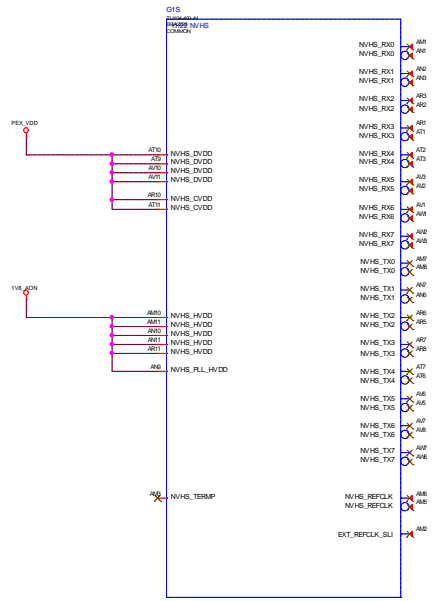


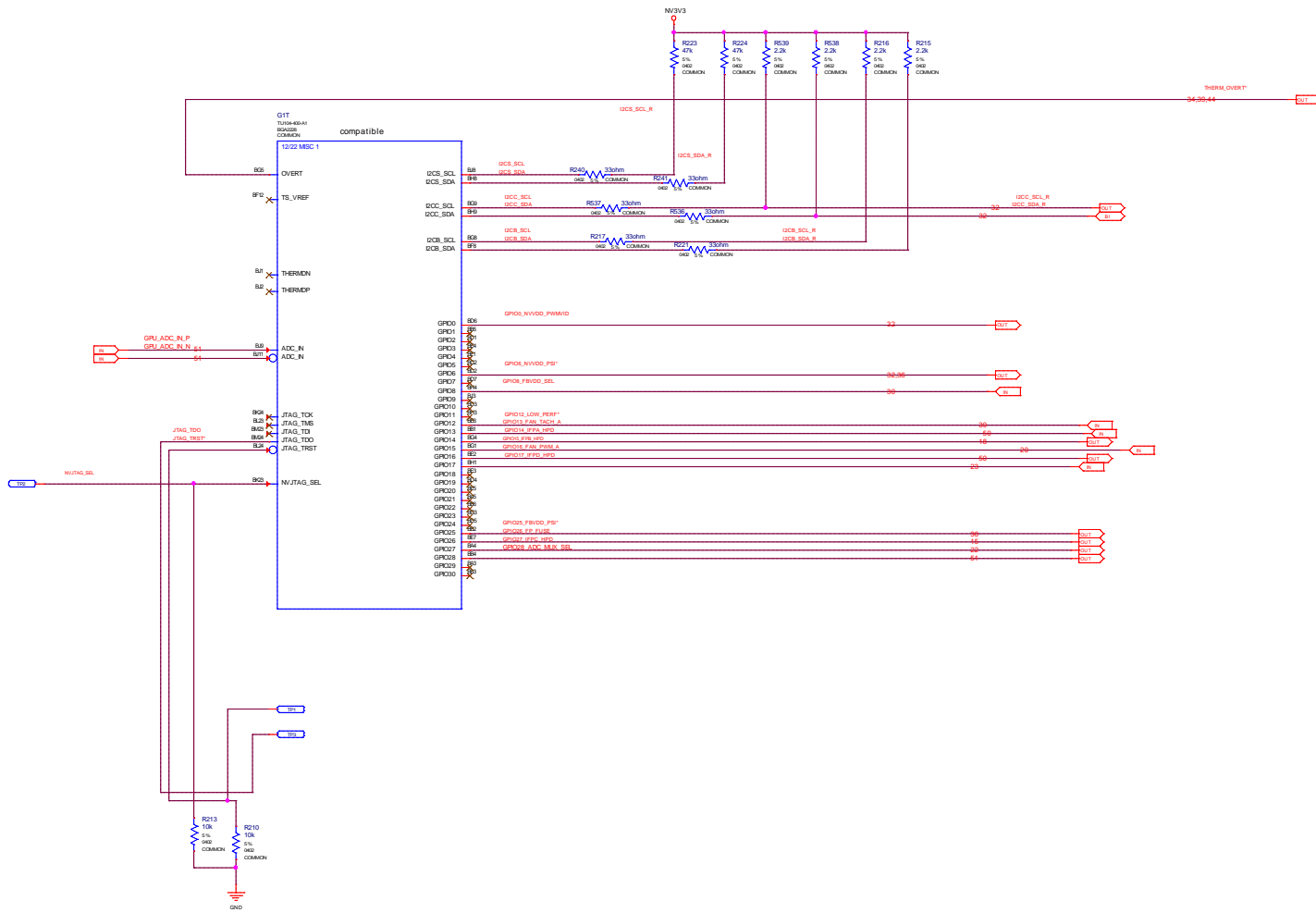
IFPE NC



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







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				

注意上件的MEM Straps

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

STRAP5	STRAP4	STRAP3	SMB_ALT_ADDR	DEVID_SEL	PCE_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
L	L	L	0	0	0	0

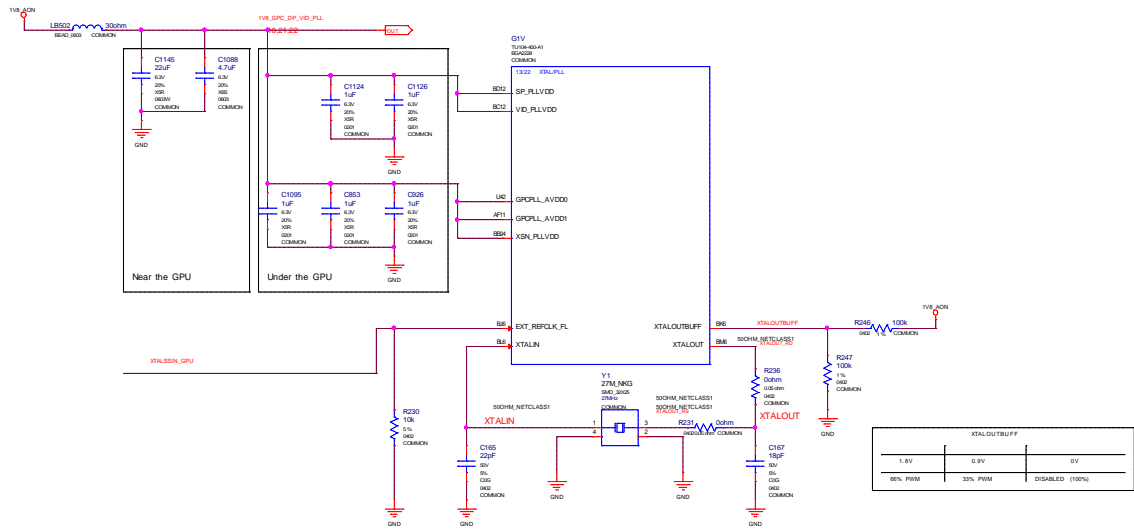
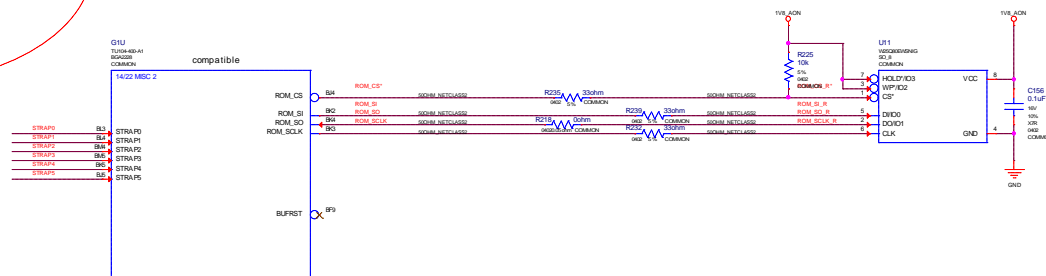
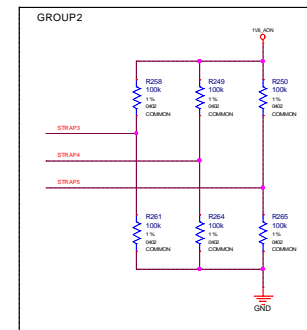
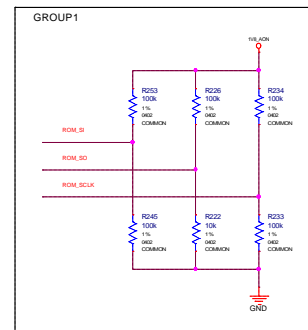
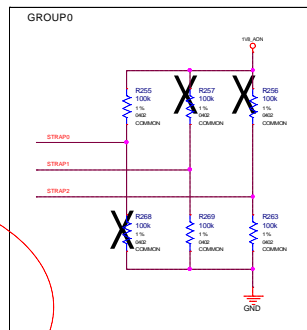
H=High :Tied to 1.8V
M=Middle:Tied to 0.9V
L=Low :Tied to 0V

1:SMB_ALT_ADDR ENABLE
0:SMB_ALT_ADDR DISABLE

1:PCE_CFG LOW POWER
0:PCE_CFG HIGH POWER

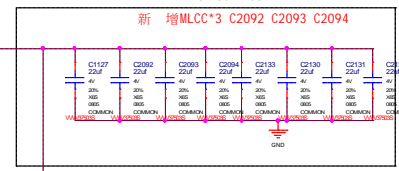
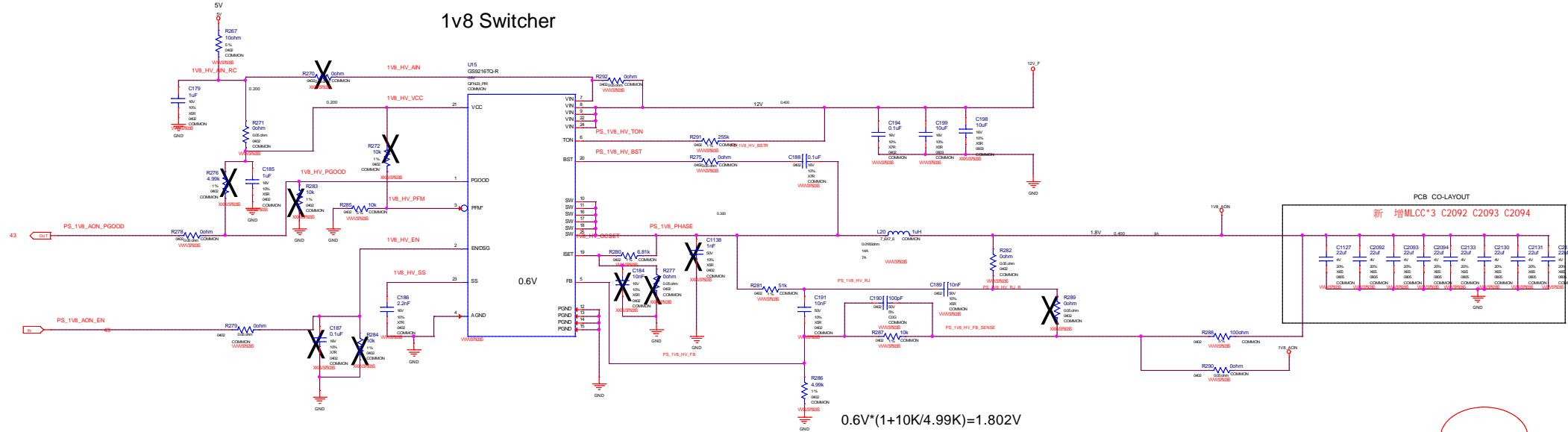
1:DEVID_SEL REBRAND
0:DEVID_SEL ORIGINAL

1:VGA_DEVICE ENABLE
0:VGA_DEVICE DISABLE



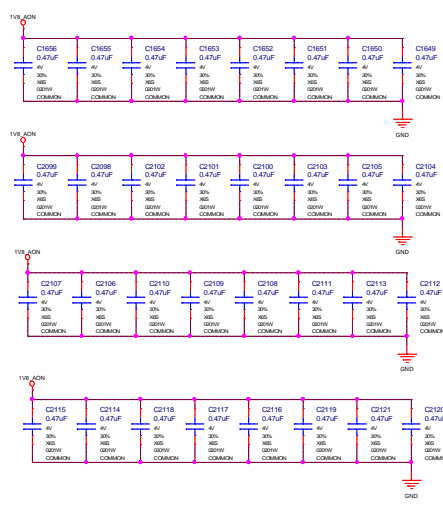
XTALOUT/BUFF	1.8V	0.9V	0V
	65% PWM	50% PWM	DISABLED (100%)

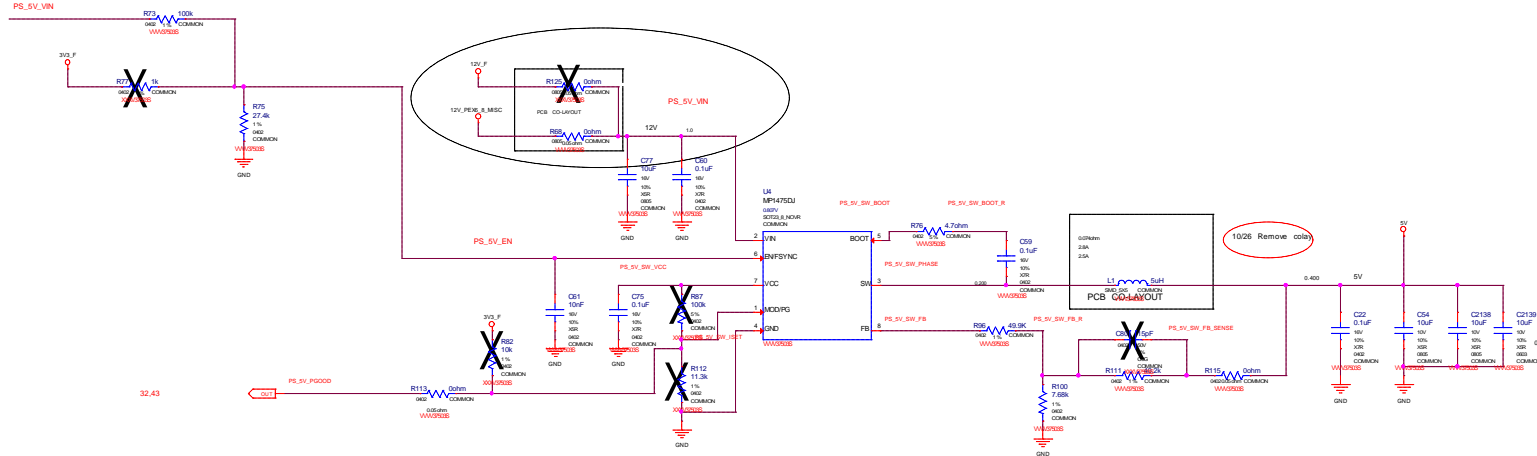
1v8 Switcher



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

1026 Remove Colay

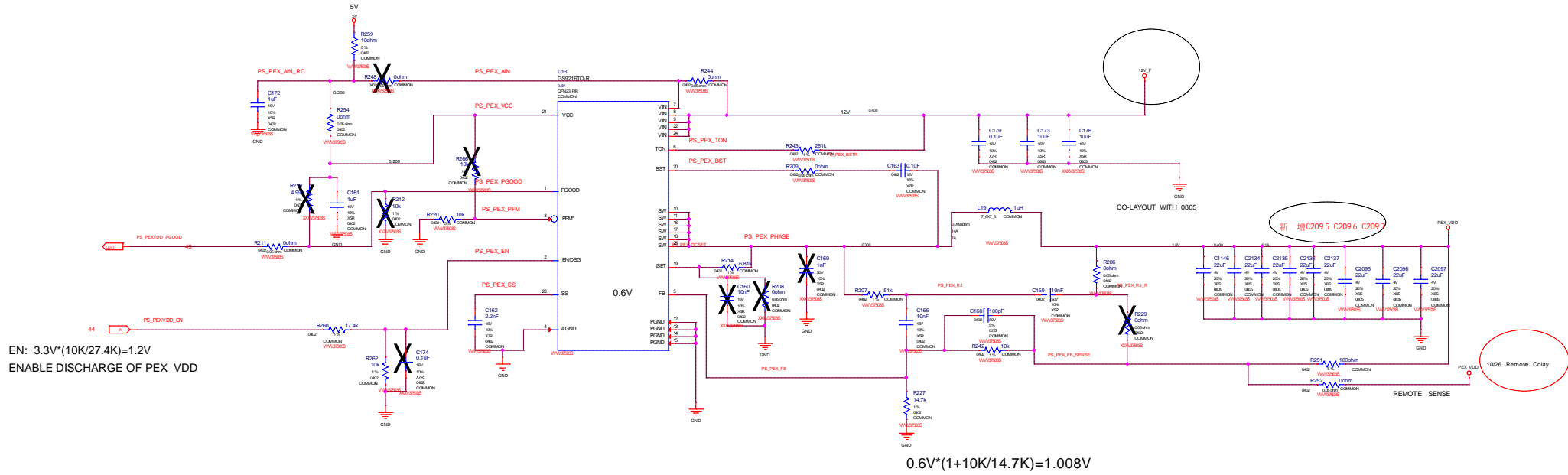


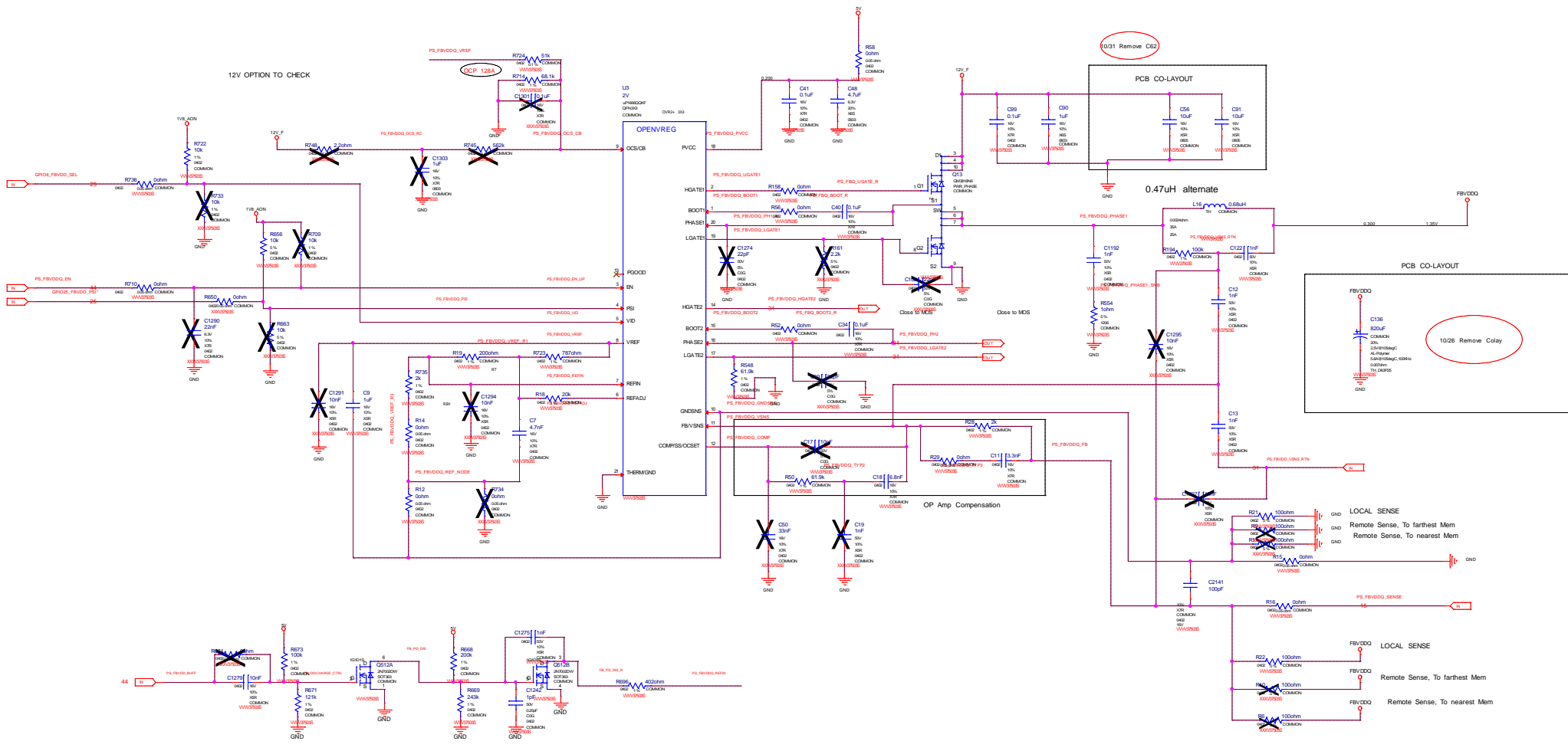


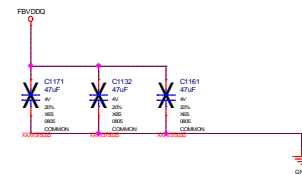
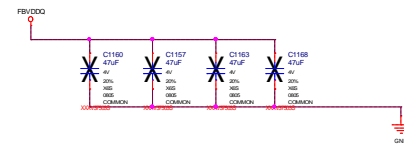
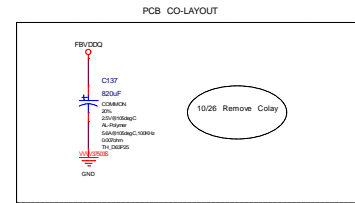
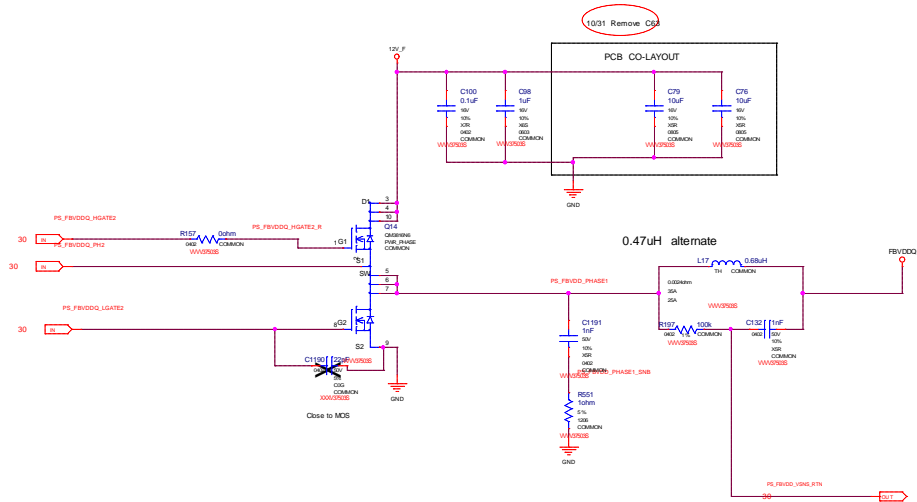
$$0.8V * (1 + 40.2K / 7.68K) = 4.9875V$$

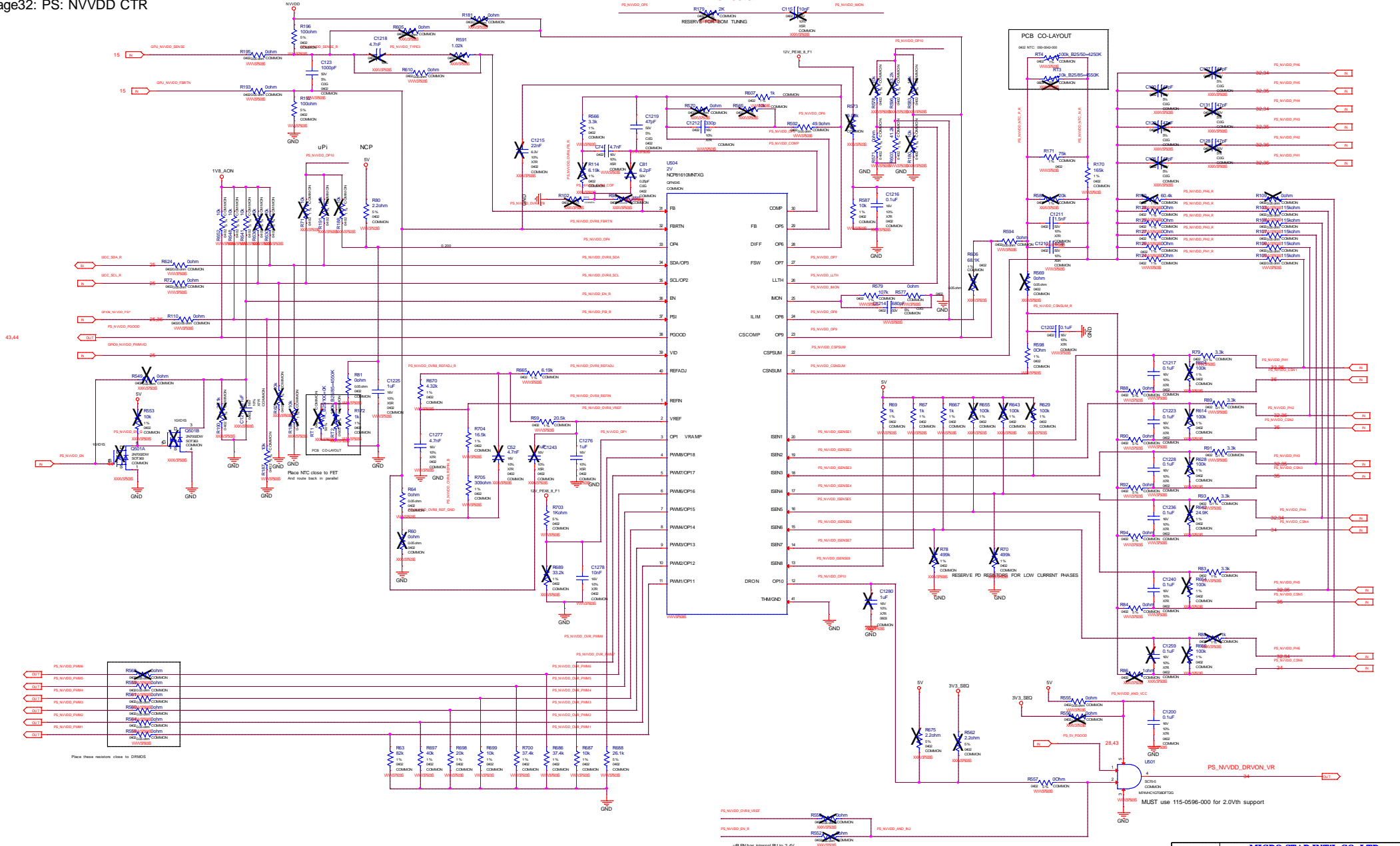


PEX Switcher




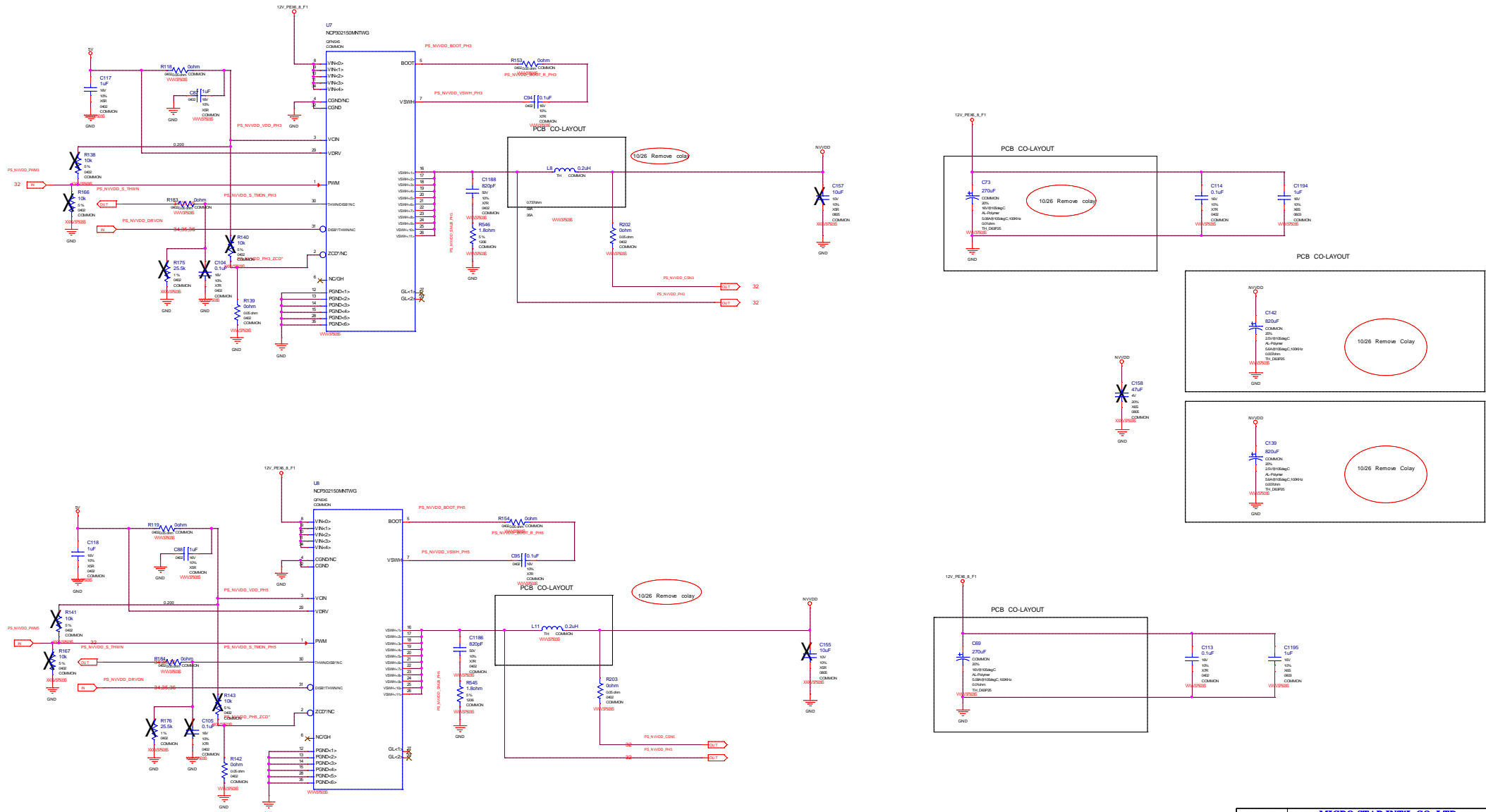


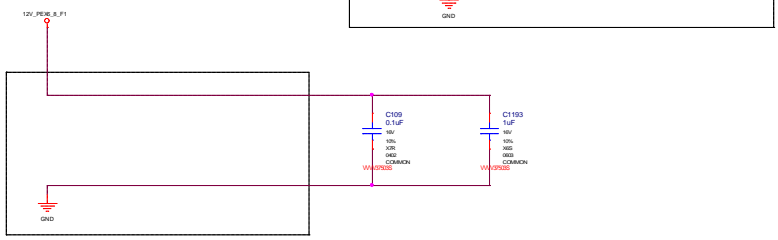
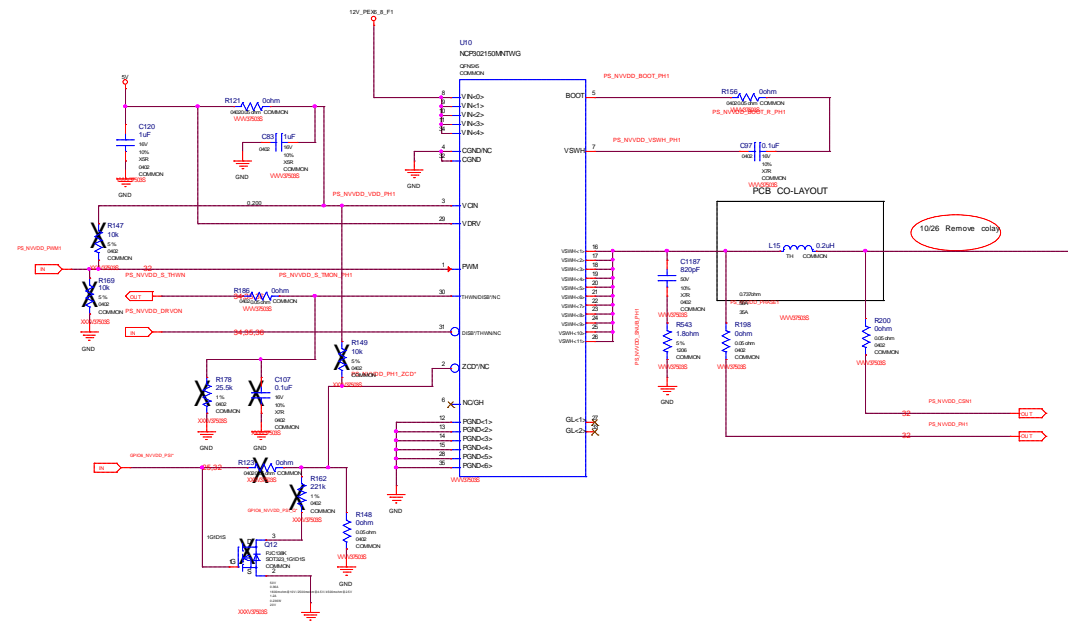
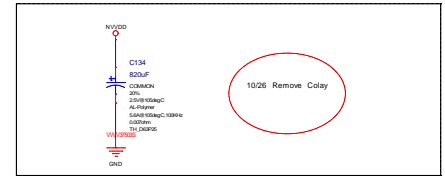
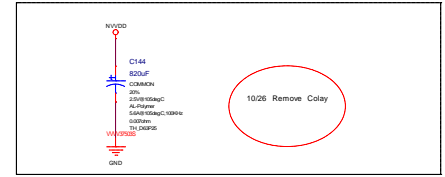
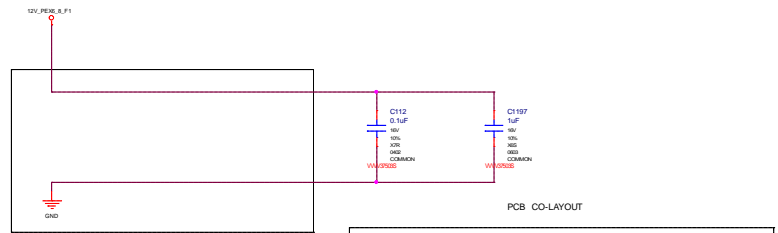
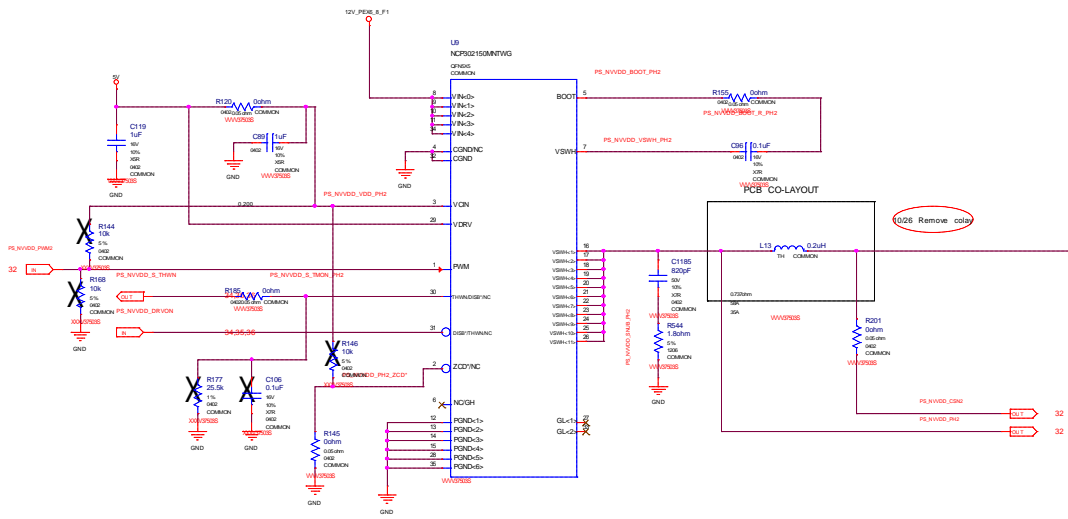




DROP OVR3i SOLUTION

	MICRO-STAR INT'L CO.,LTD		
	MS-V375		
	Size Custom	Document Description PS: NVVDD CTR OVR3i	Rev 2.0
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1

2

3

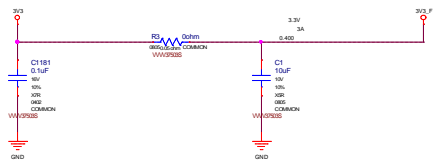
4

5

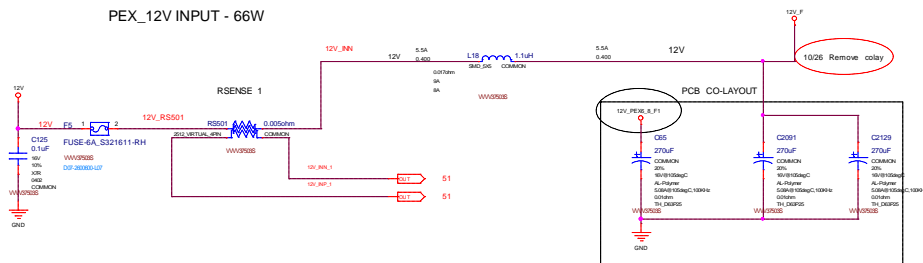
DELETE RAIL BALANCE CIRCUIT

	MICRO-STAR INT'L CO.,LTD		
	MS-V375		
	Size	Document Description	Rev
Custom	Input Power Balancing Switcher	2.0	
Date: Tuesday, December 24, 2014		Sheet 37 of 53	

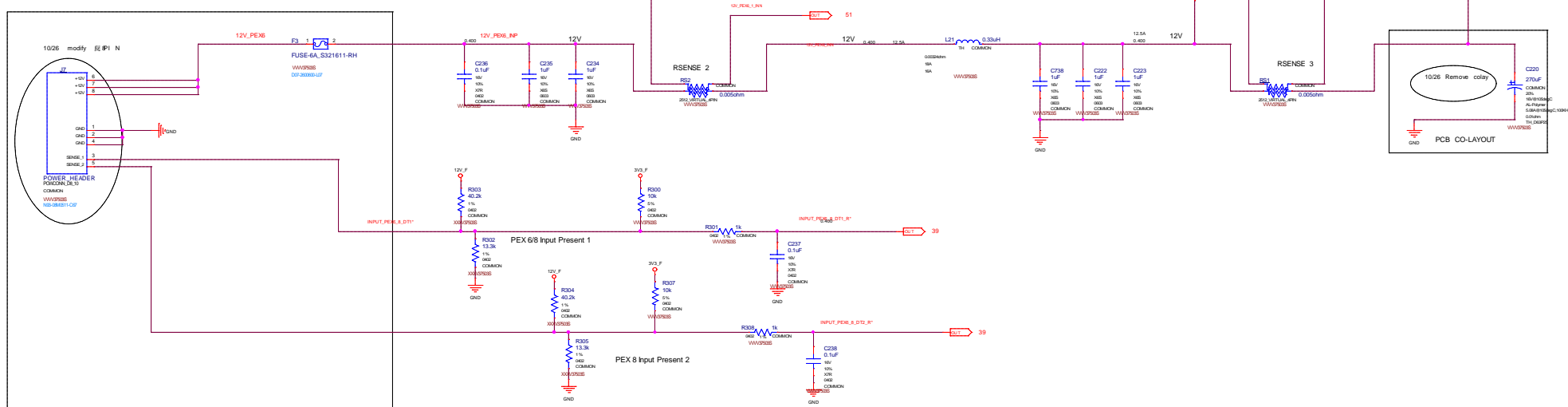
PEX 3V3 INPUT - 10W

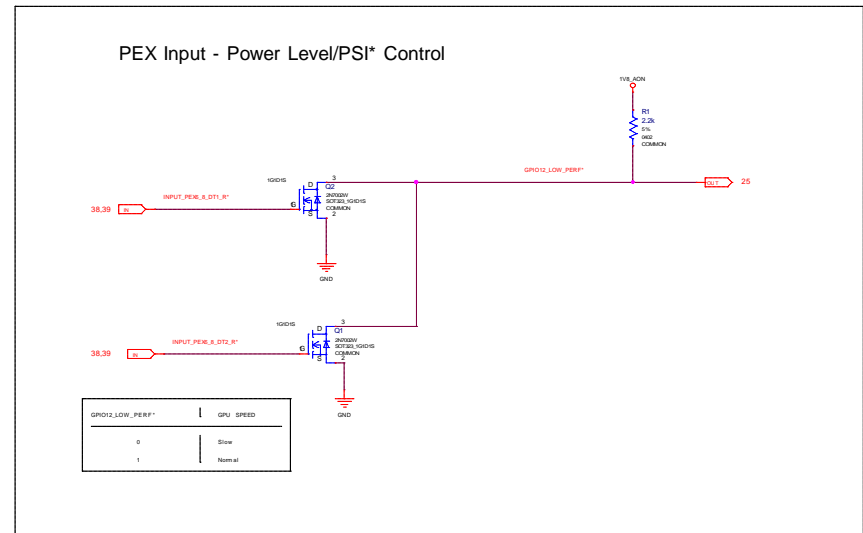
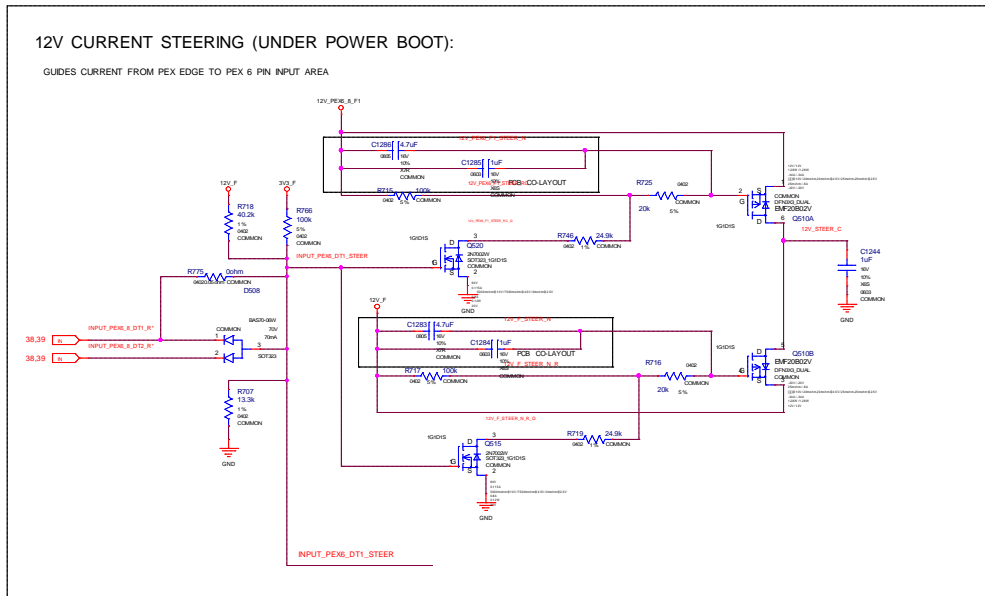
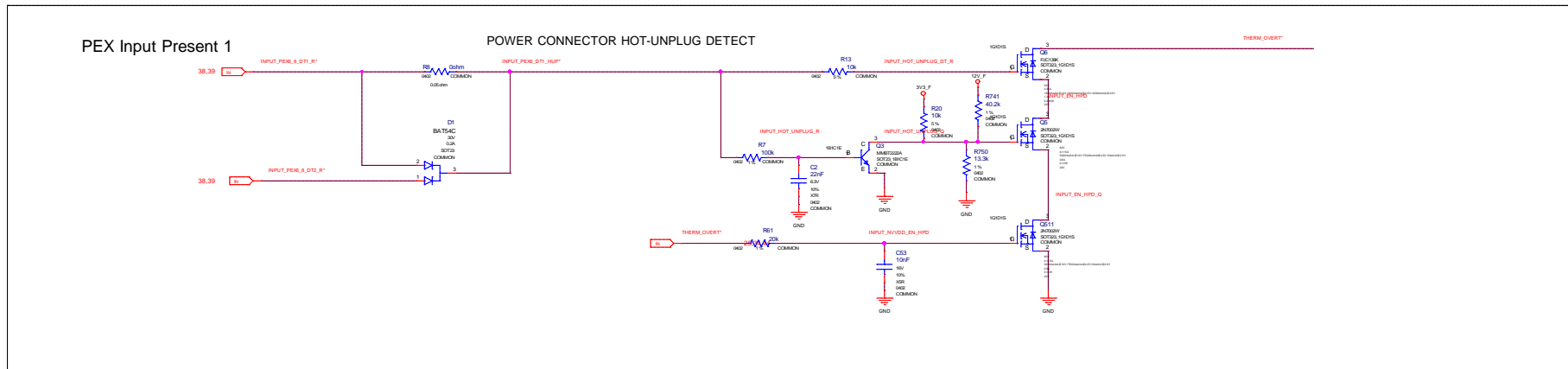



PEX_12V INPUT - 66W





PEX8 INPUT 1 - 2x4 PCIE CON 150W

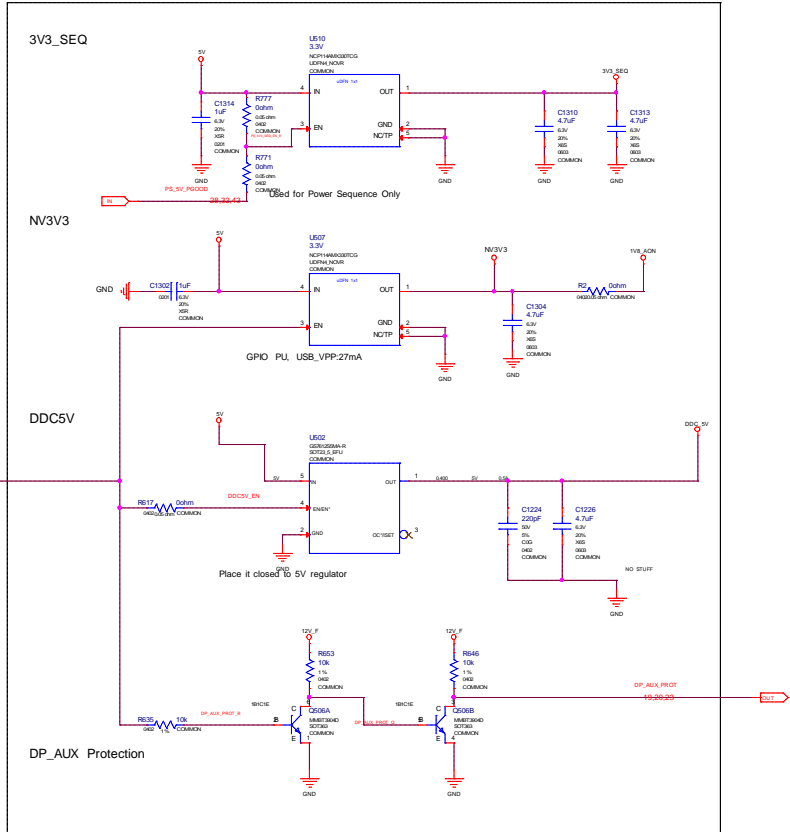
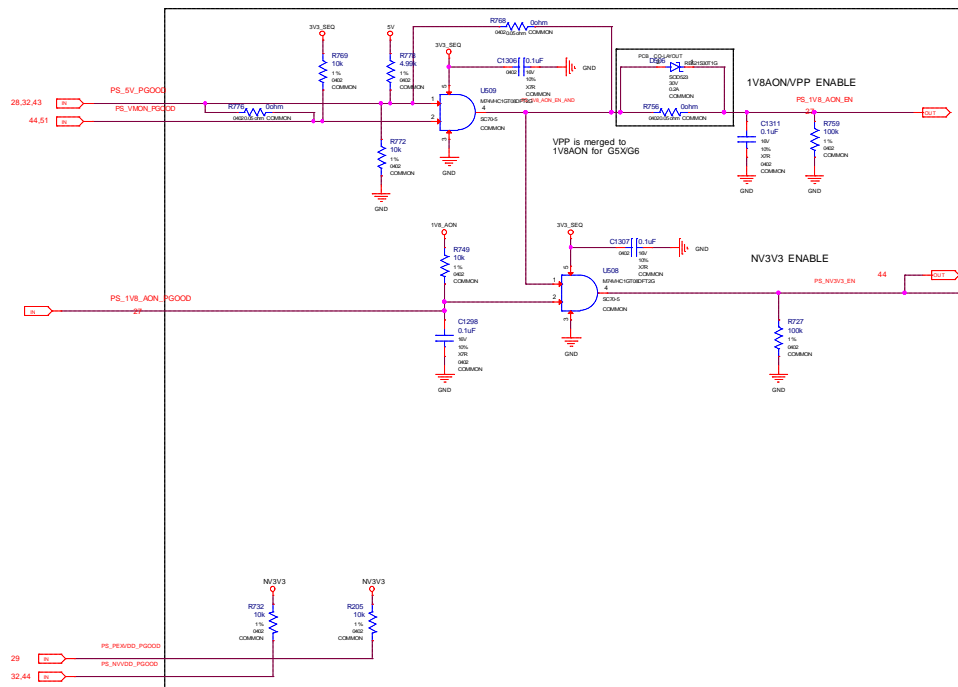


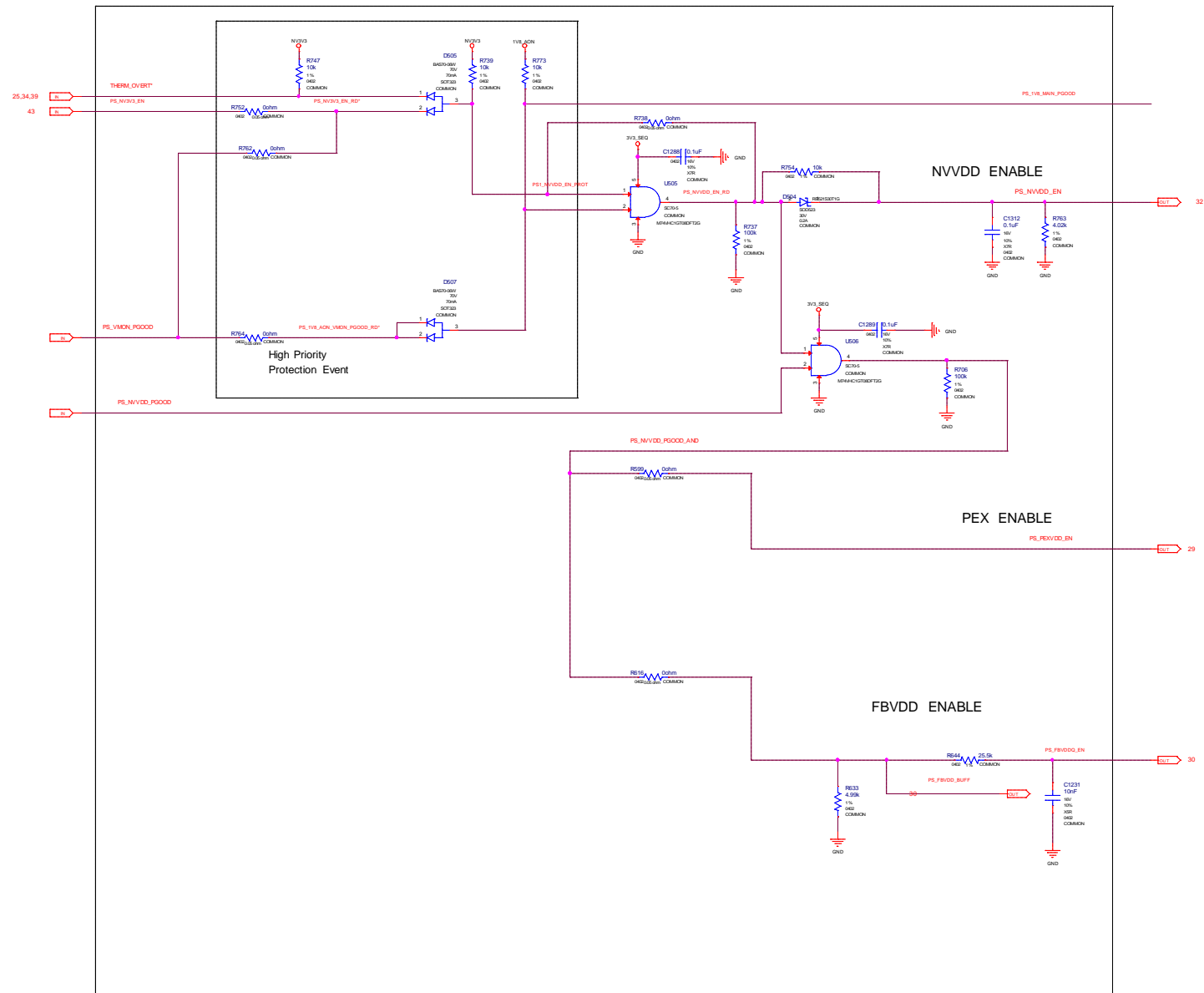



	MICRO-STAR INT'L CO.,LTD	
	MS-V375	
	<small>Size</small> Custom	<small>Document Description</small> BUCKBOOST
<small>Date: Tuesday, December 24, 2018</small>		<small>Rev</small> 2.0
<small>Sheet 40 of 53</small>		


	MICRO-STAR INT'L CO.,LTD		
	MS-V375		
Size	Document	Description	Rev
Custom	PPC		2.0
Date: Tuesday, December 24, 2018		Sheet	41 of 53

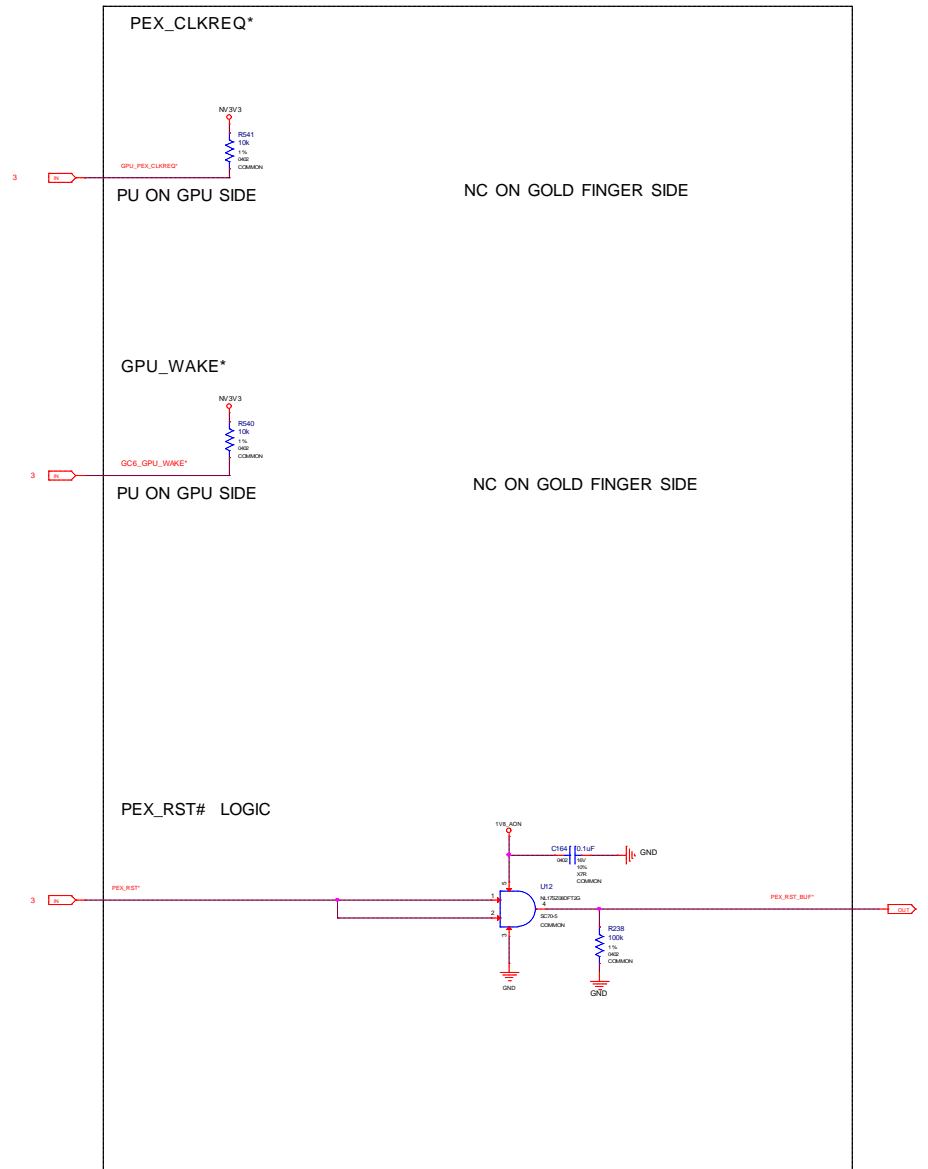
	MICRO-STAR INT'L CO.,LTD		
	MS-V375		
	Size	Document Description	Rev
	Custom	12V & 3V3_A SWITCHER	2.0
Date: Tuesday, December 24, 2013		Sheet 42 of 53	






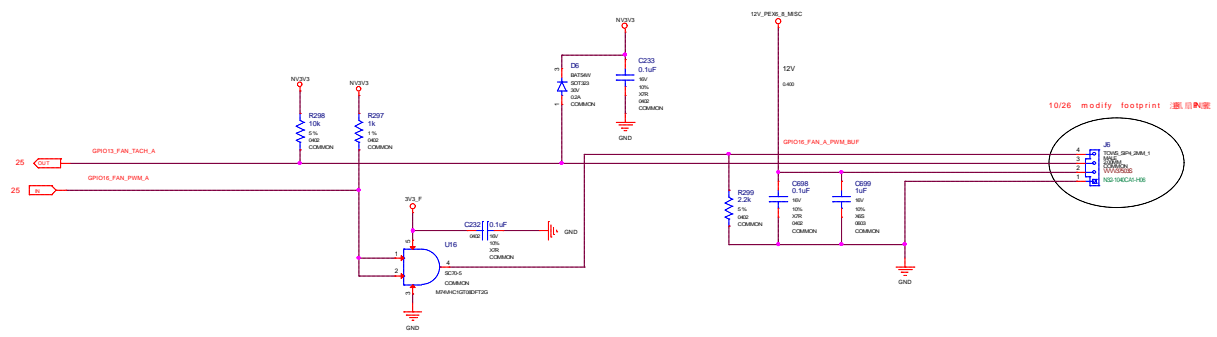
	MICRO-STAR INT'L CO.,LTD		
	MS-V375		
	Size Custom	Document Description SEQUENCE:Voltage Monitor	Rev 2.0
Date: Tuesday, December 24, 2019		Sheet: 46 of 53	

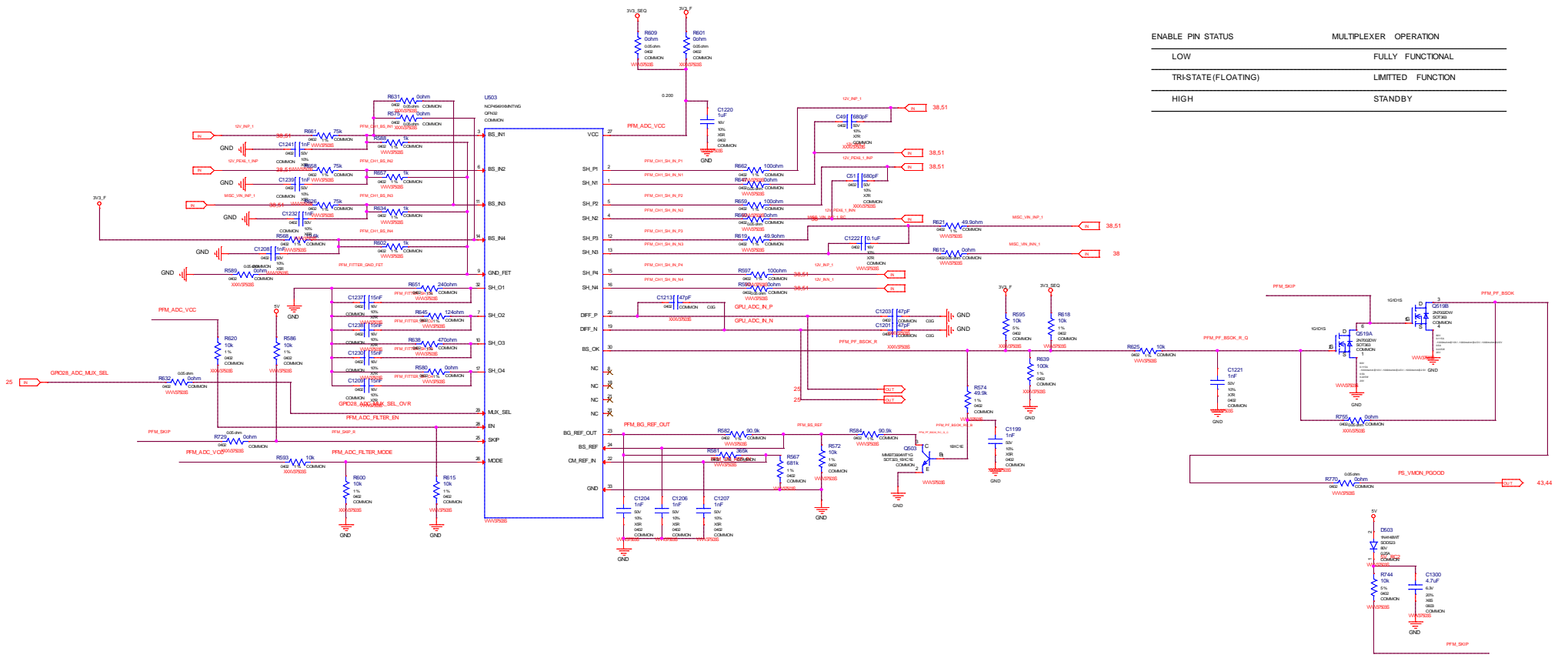
	MICRO-STAR INT'L CO.,LTD		
	MS-V375		
	Size	Document Description	Rev
	Custom	SEQUENCE:Discharge	2.0
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	MICRO-STAR INT'L CO.,LTD		
	MS-V375		
	Size Custom	Document Description LOGO LED	Rev 2.0
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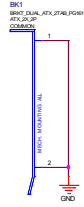




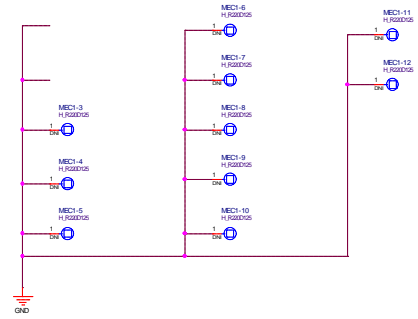
ENABLE PIN STATUS	MULTIPLEXER OPERATION
LOW	DEVICE A
TRISTATE(FLOATING)	STAND-ALONE
HIGH	DEVICE B

ENABLE PIN STATUS	MULTIPLEXER OPERATION
LOW	FULLY FUNCTIONAL
TRISTATE(FLOATING)	LIMITED FUNCTION
HIGH	STANDBY

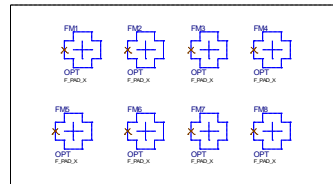
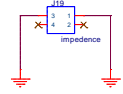
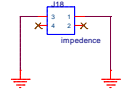
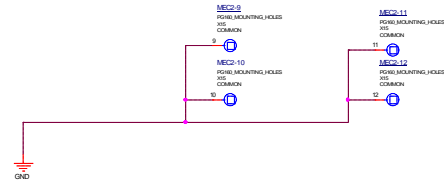
Bracket:




MOUNTING HOLES FOR HS:



BACK STIFFENER:



	MICRO-STAR INT'L CO.,LTD		
	MS-V375		
	Size Custom	Document PTC	Description
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