


PG141-D00

GA104 GB5-256 DESIGN, 8GB GDDR6X, 256b, X16
DP + DP + DP + HDMI/DP

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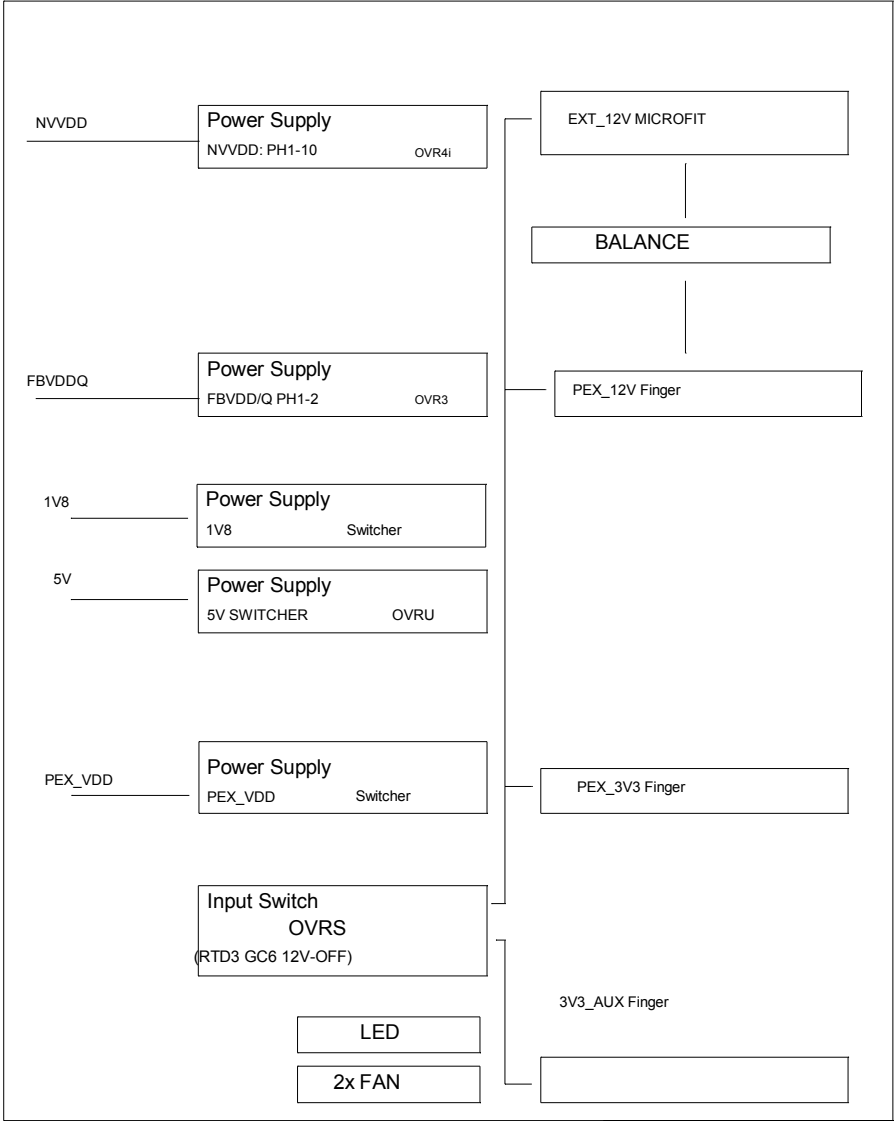
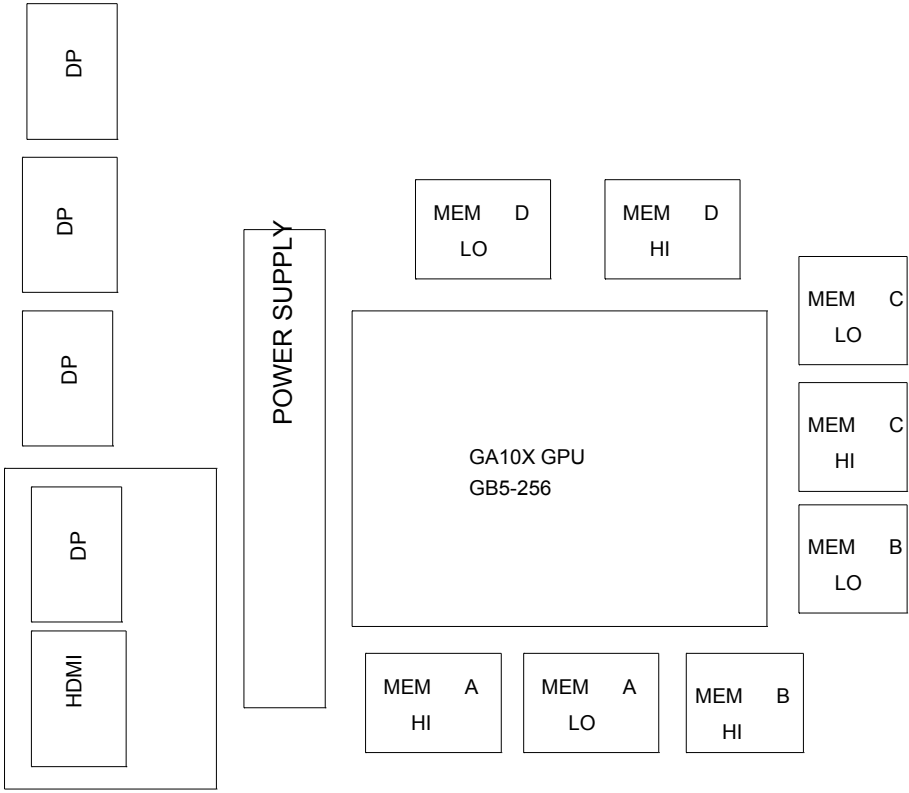
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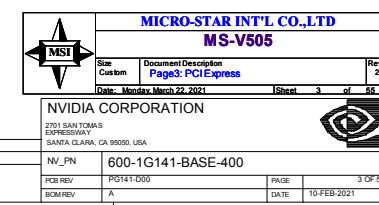
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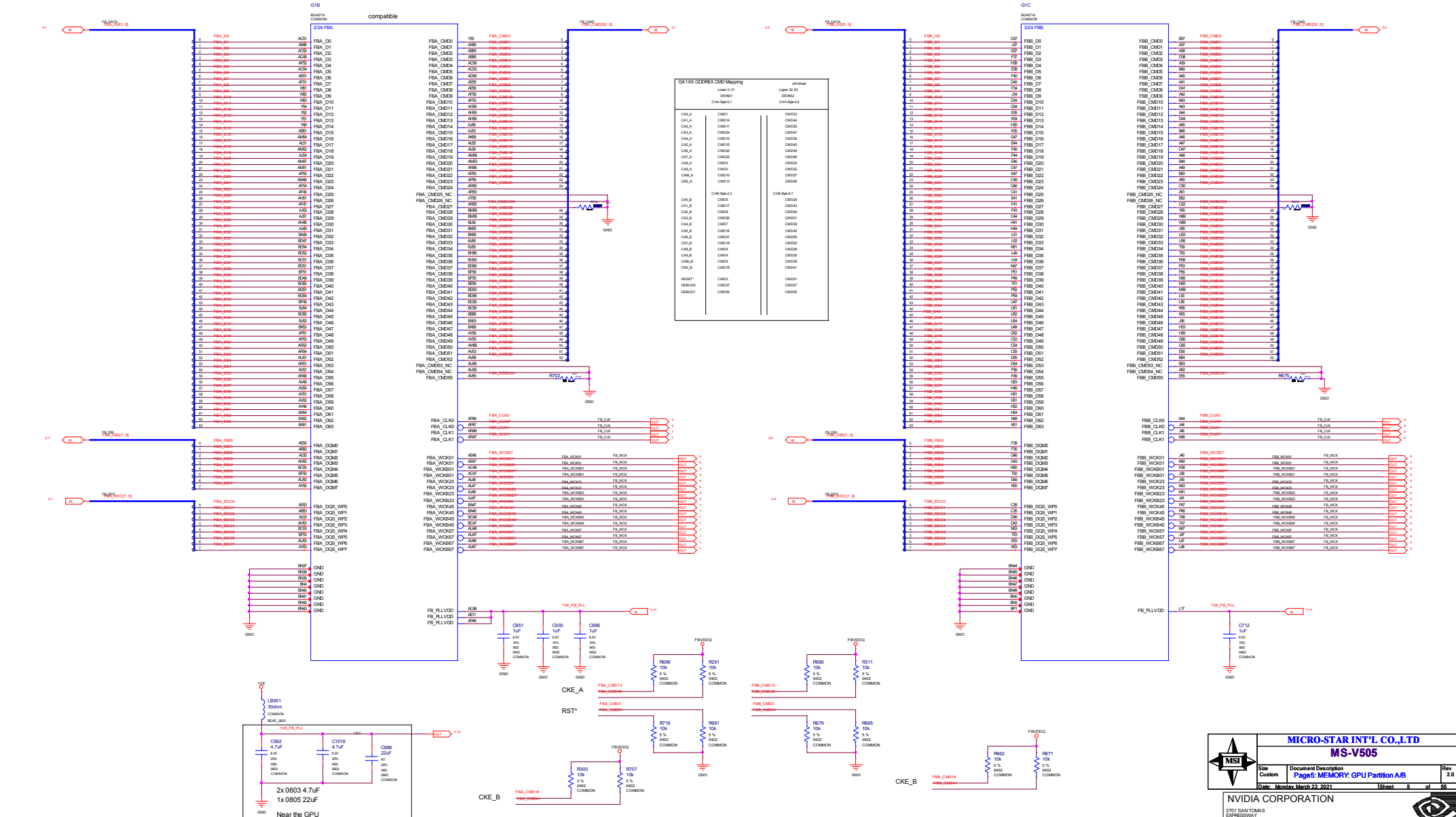
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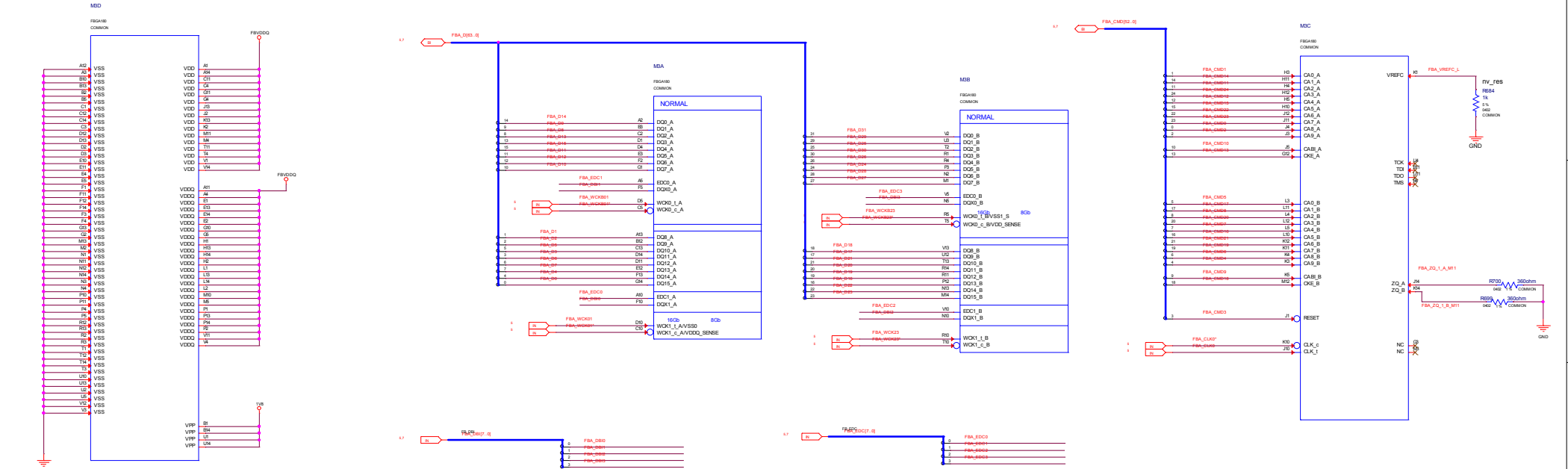
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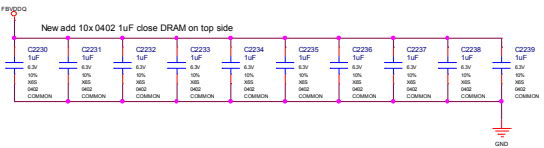
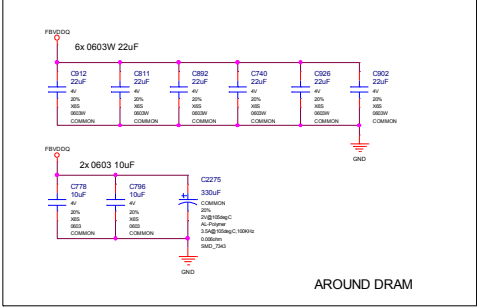
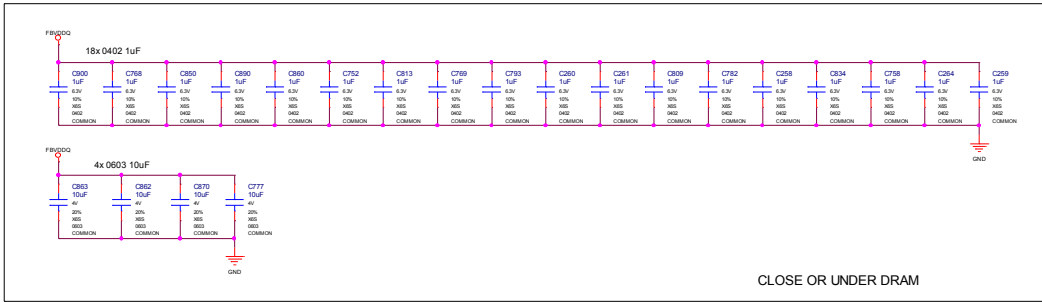
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decap via : at least 2 gnd vias and 2 power vias for each cap



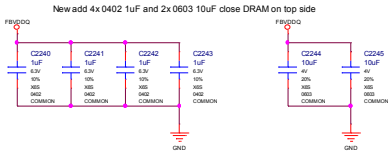
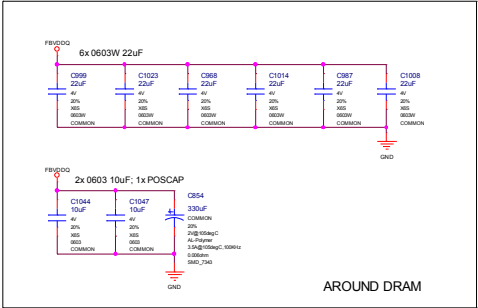
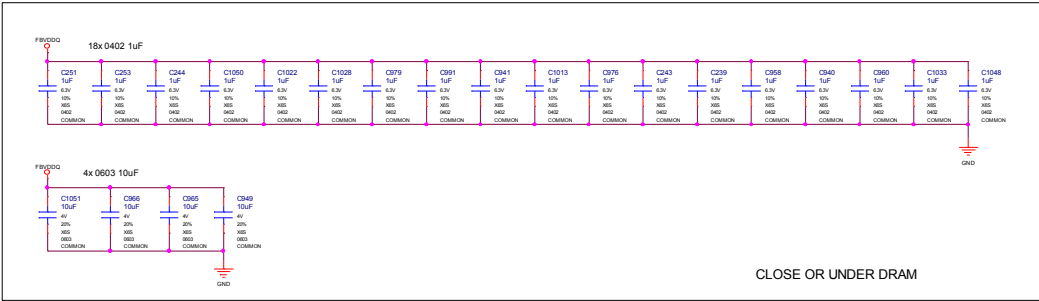
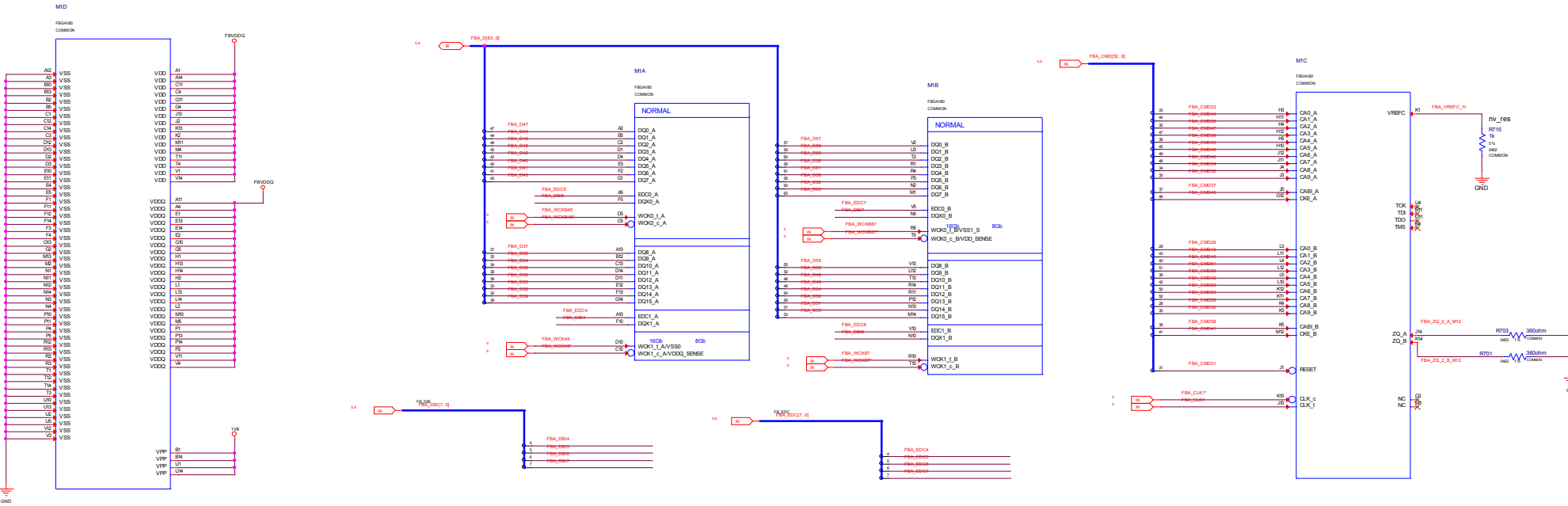
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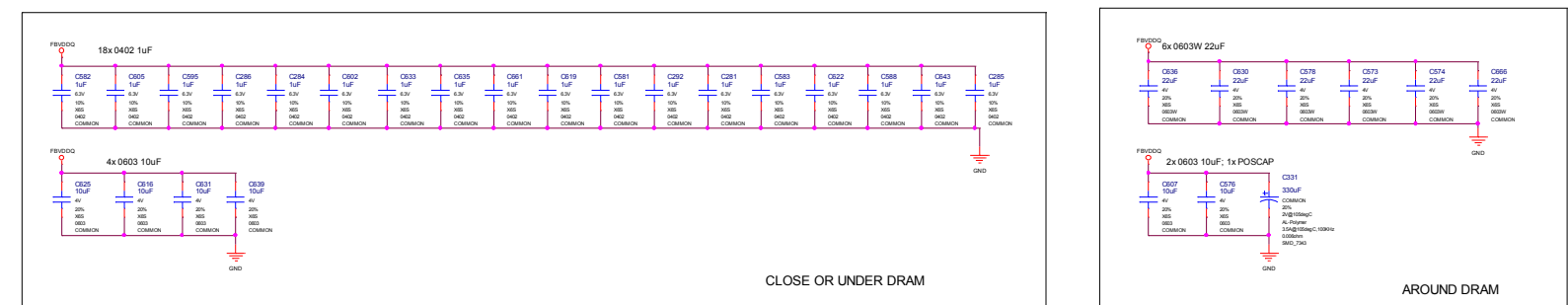
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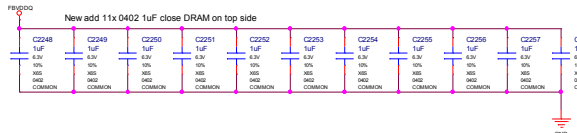
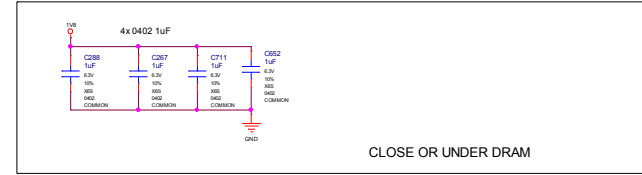
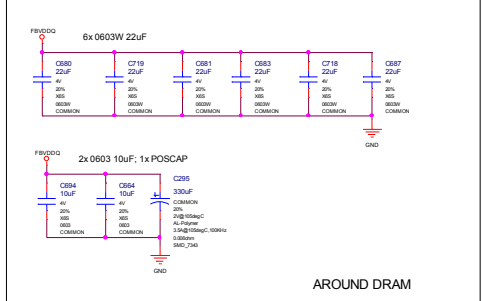
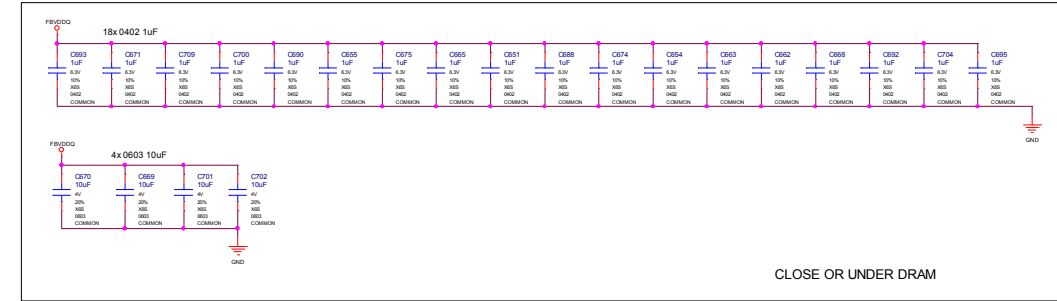
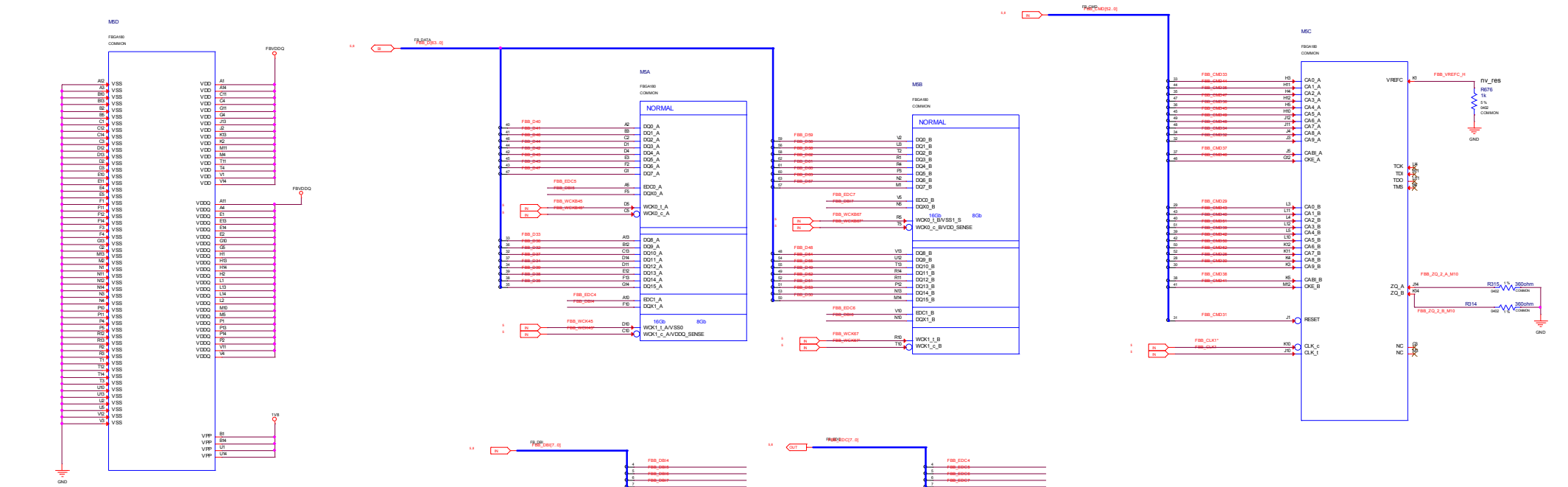
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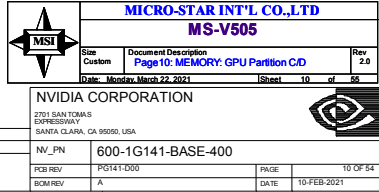
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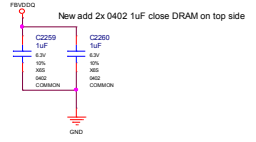
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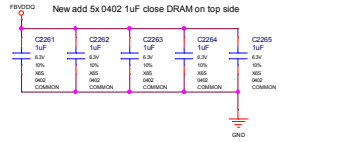
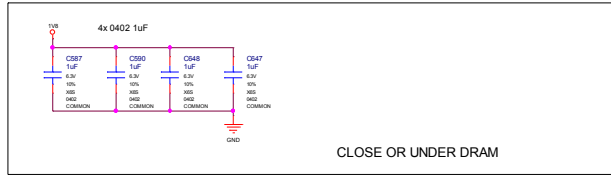
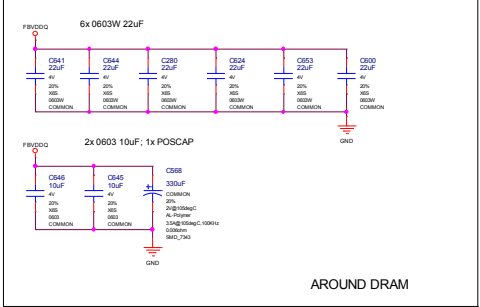
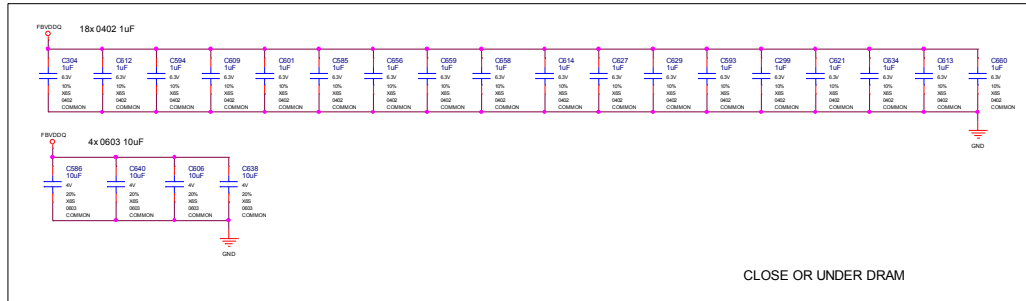
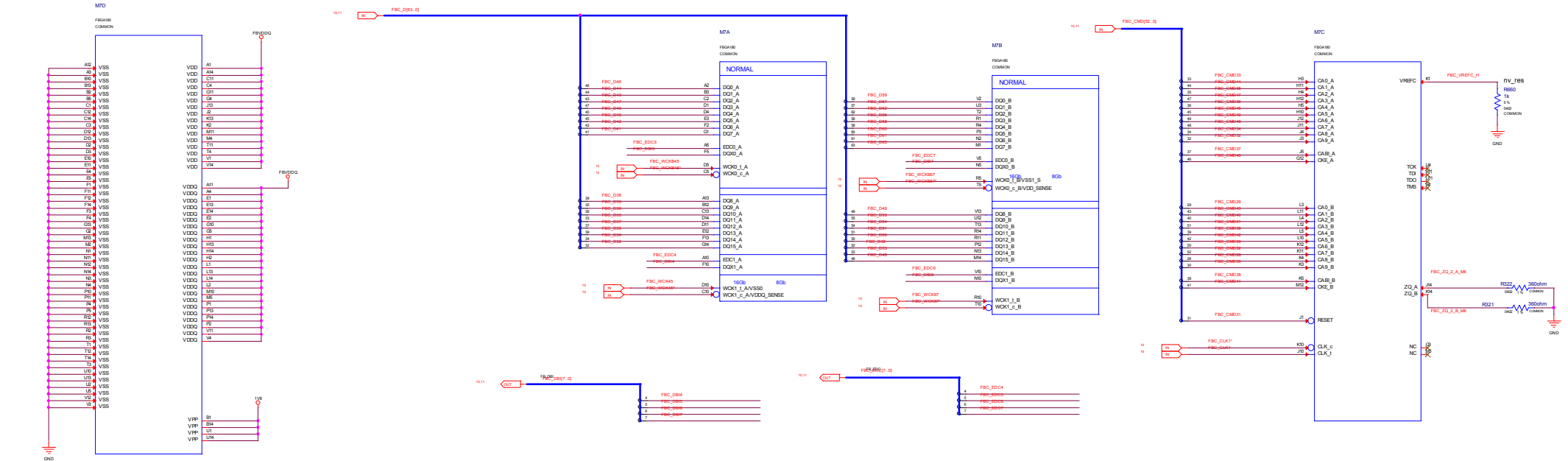
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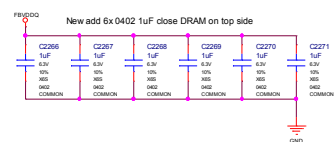
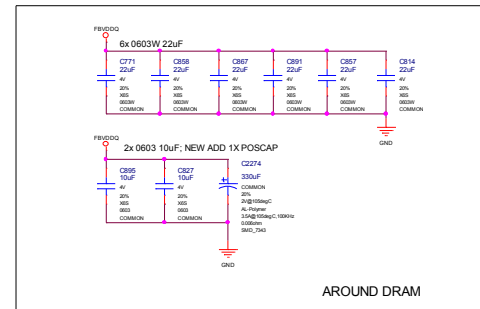
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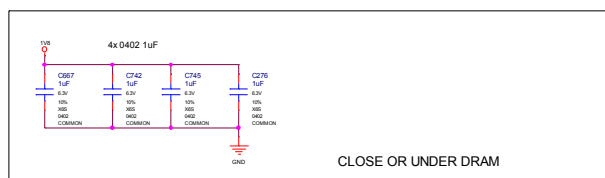
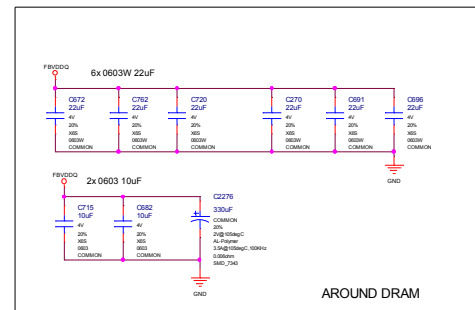
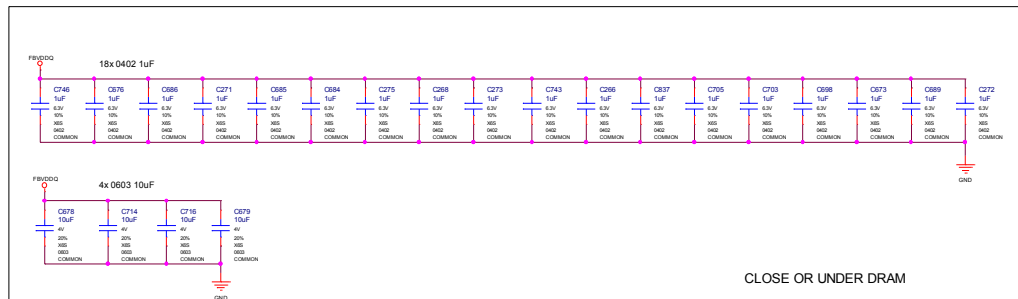
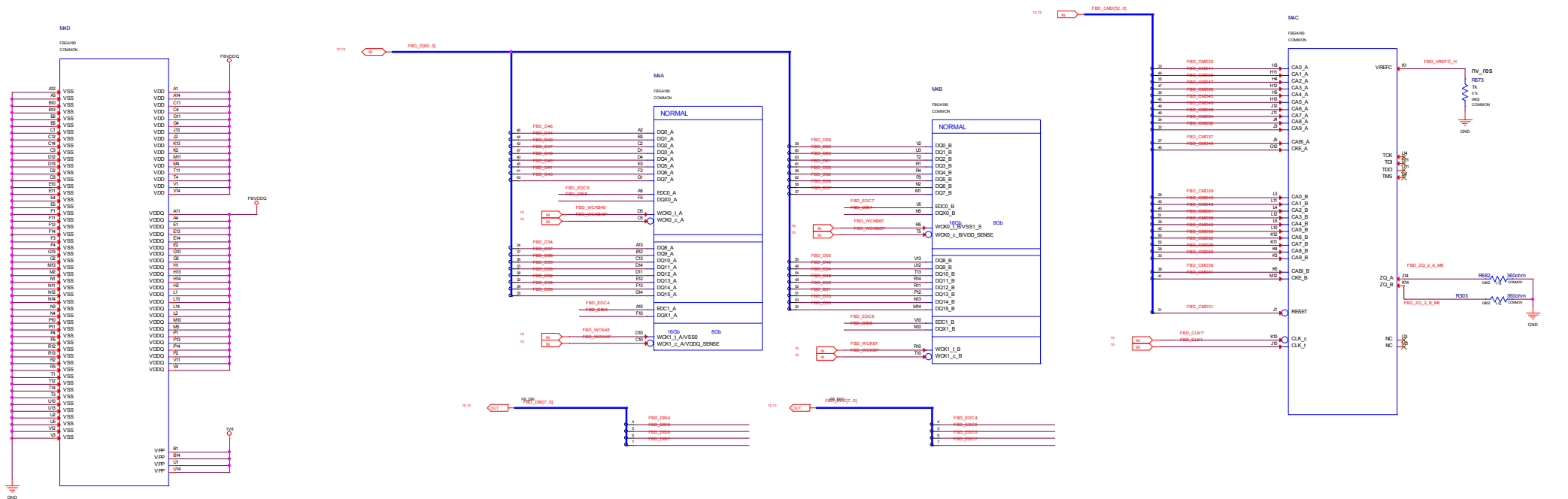
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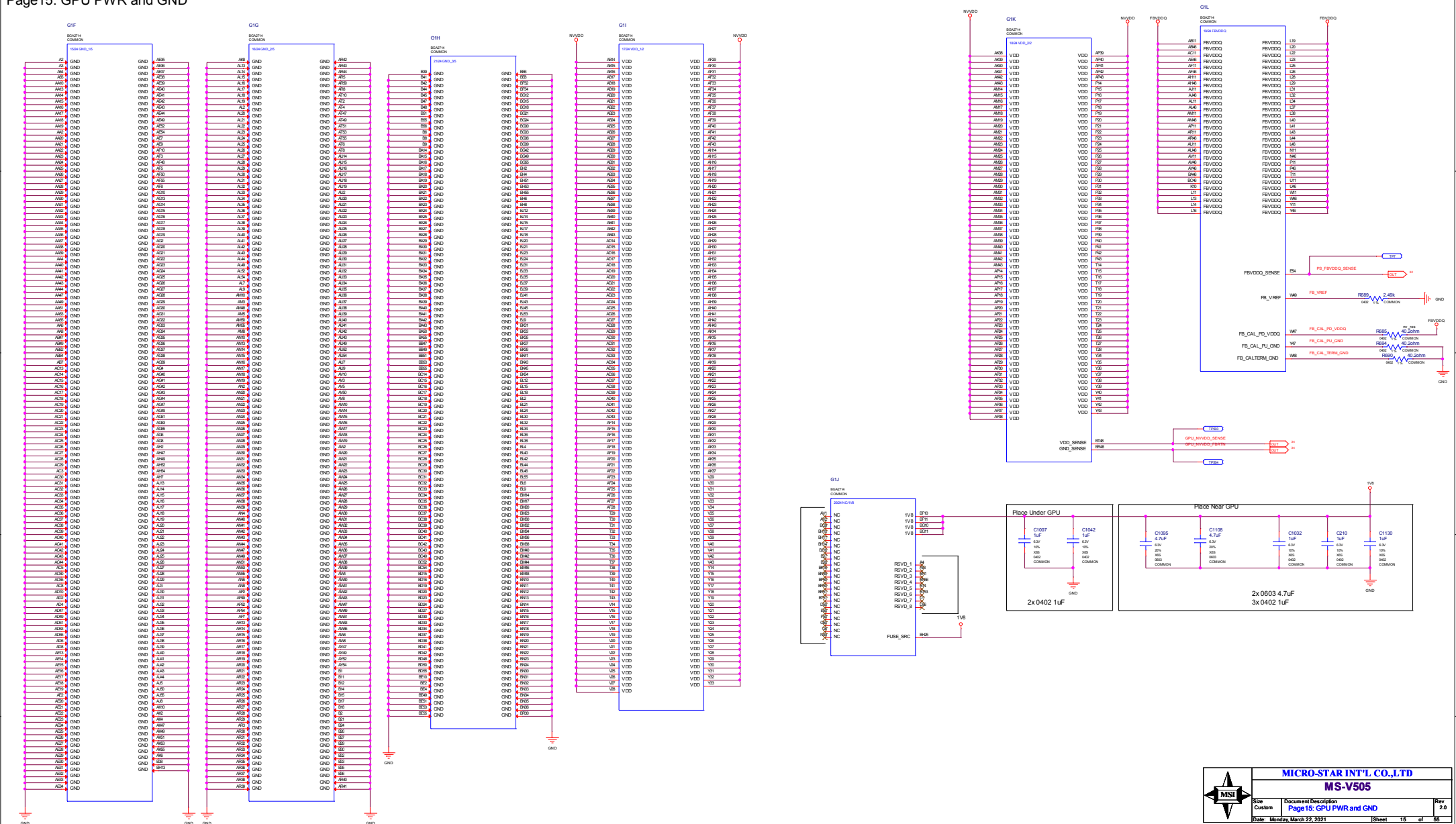
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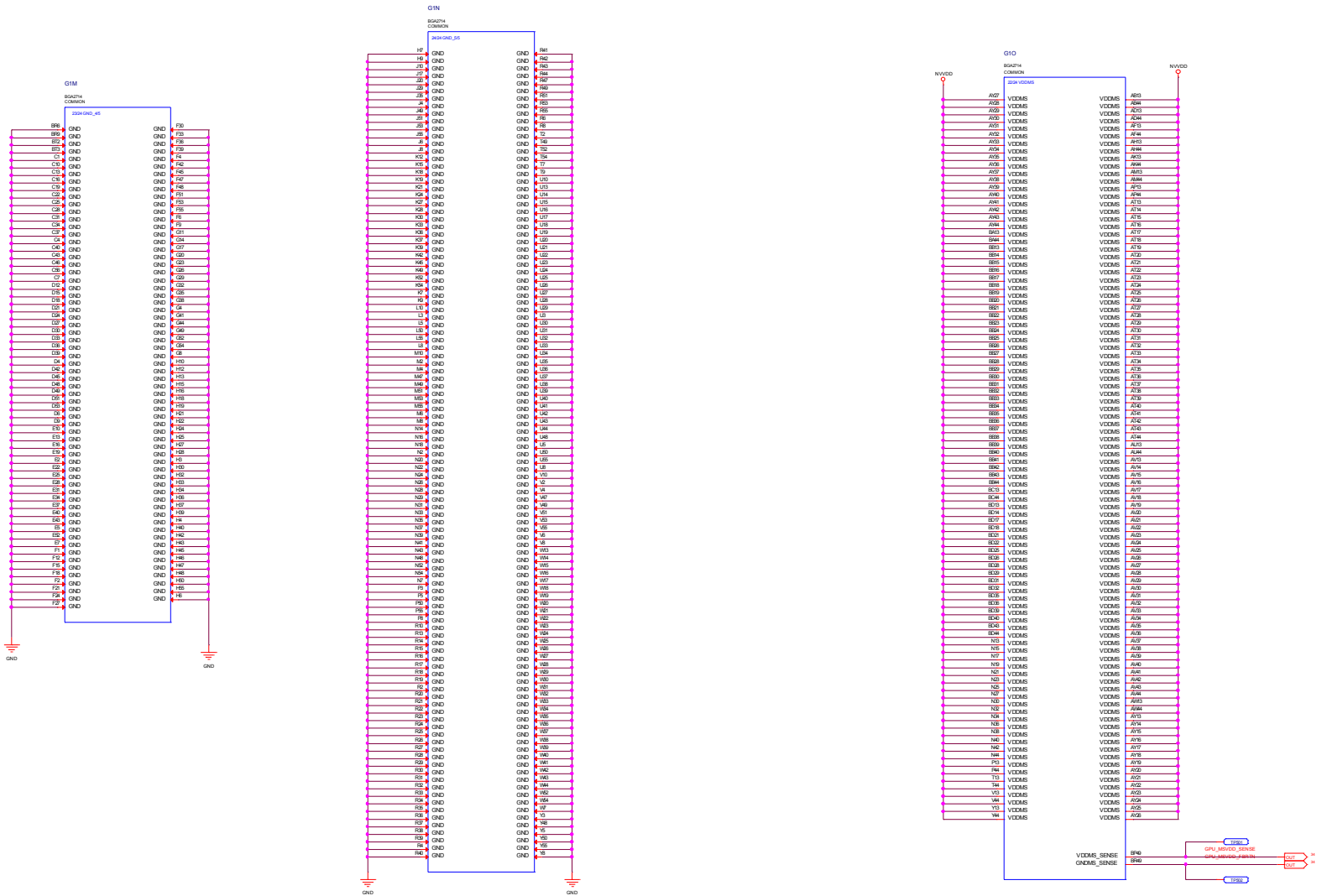


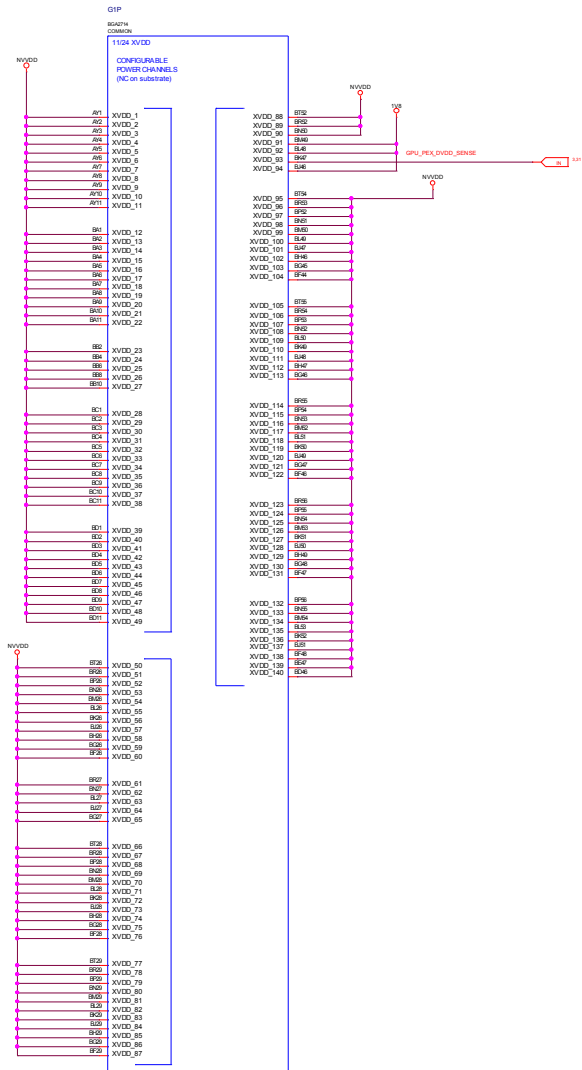
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GPU PWR & GND 3 (N/A)

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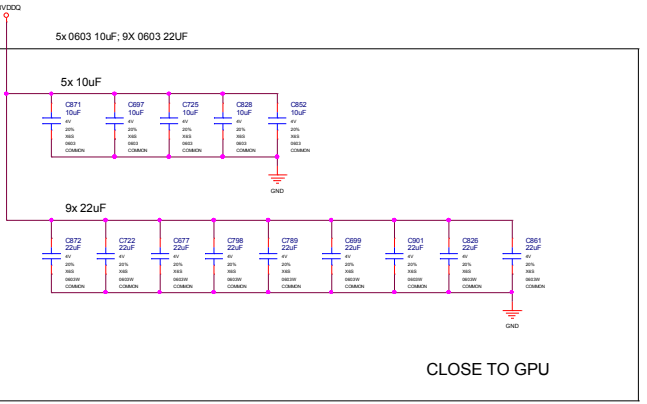
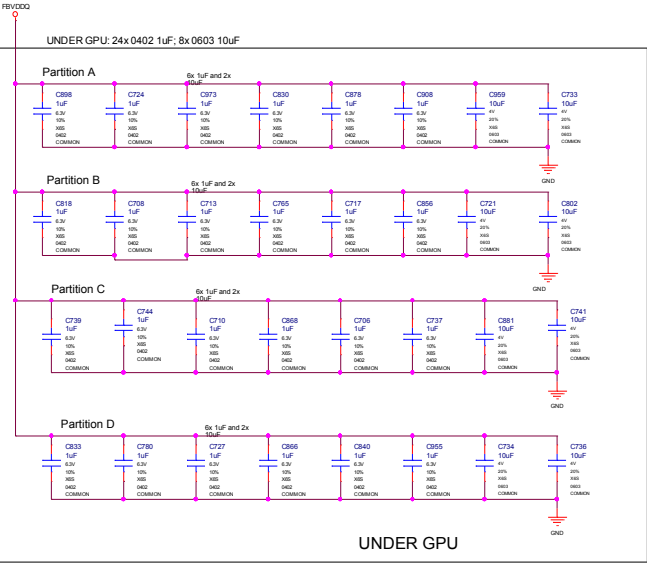
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FBVDDQ






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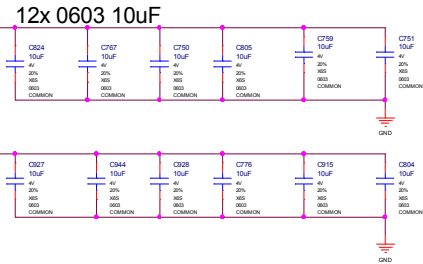
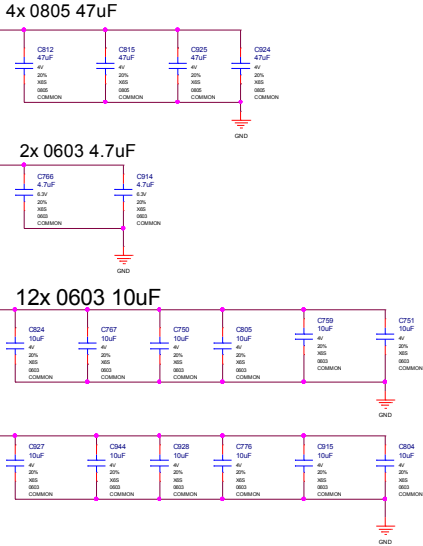
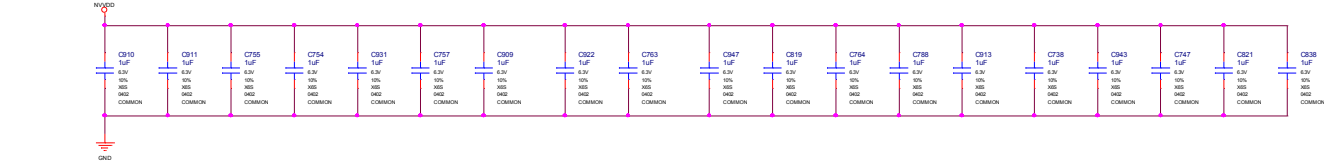
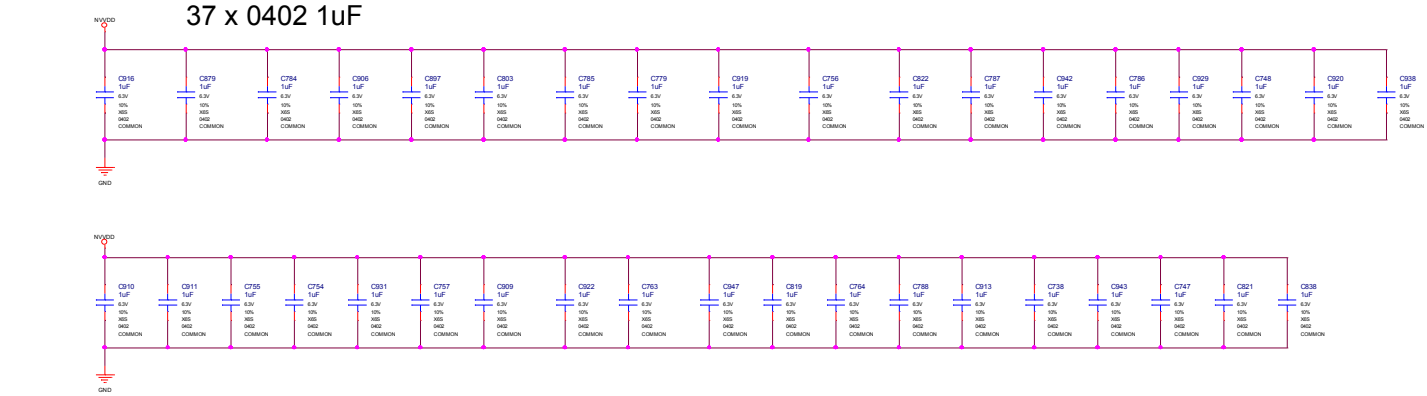
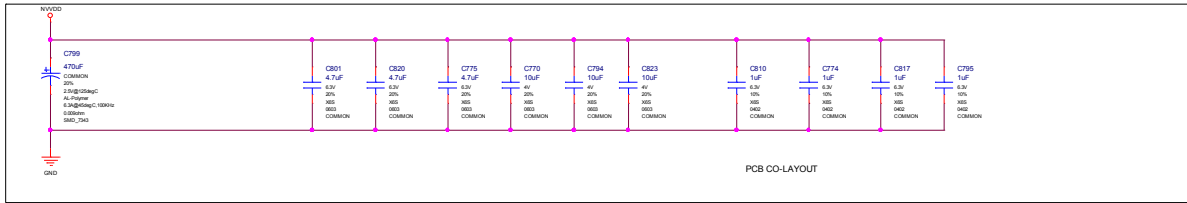
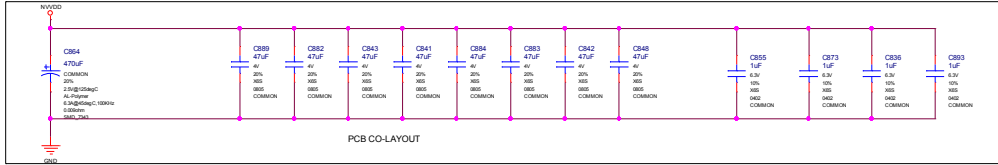
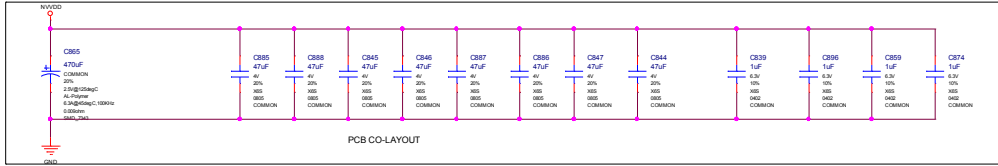
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UNDER GPU



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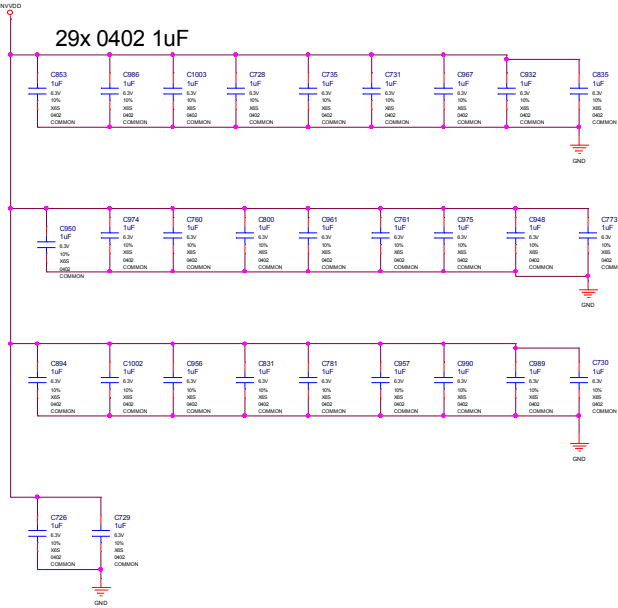
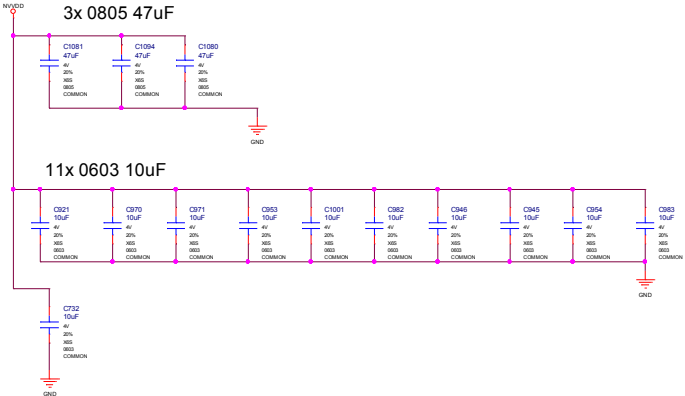
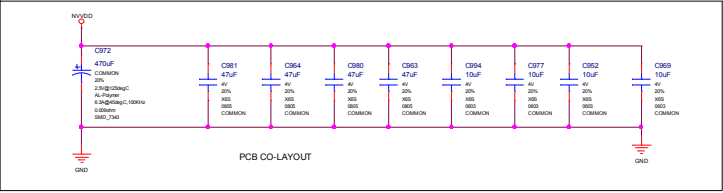
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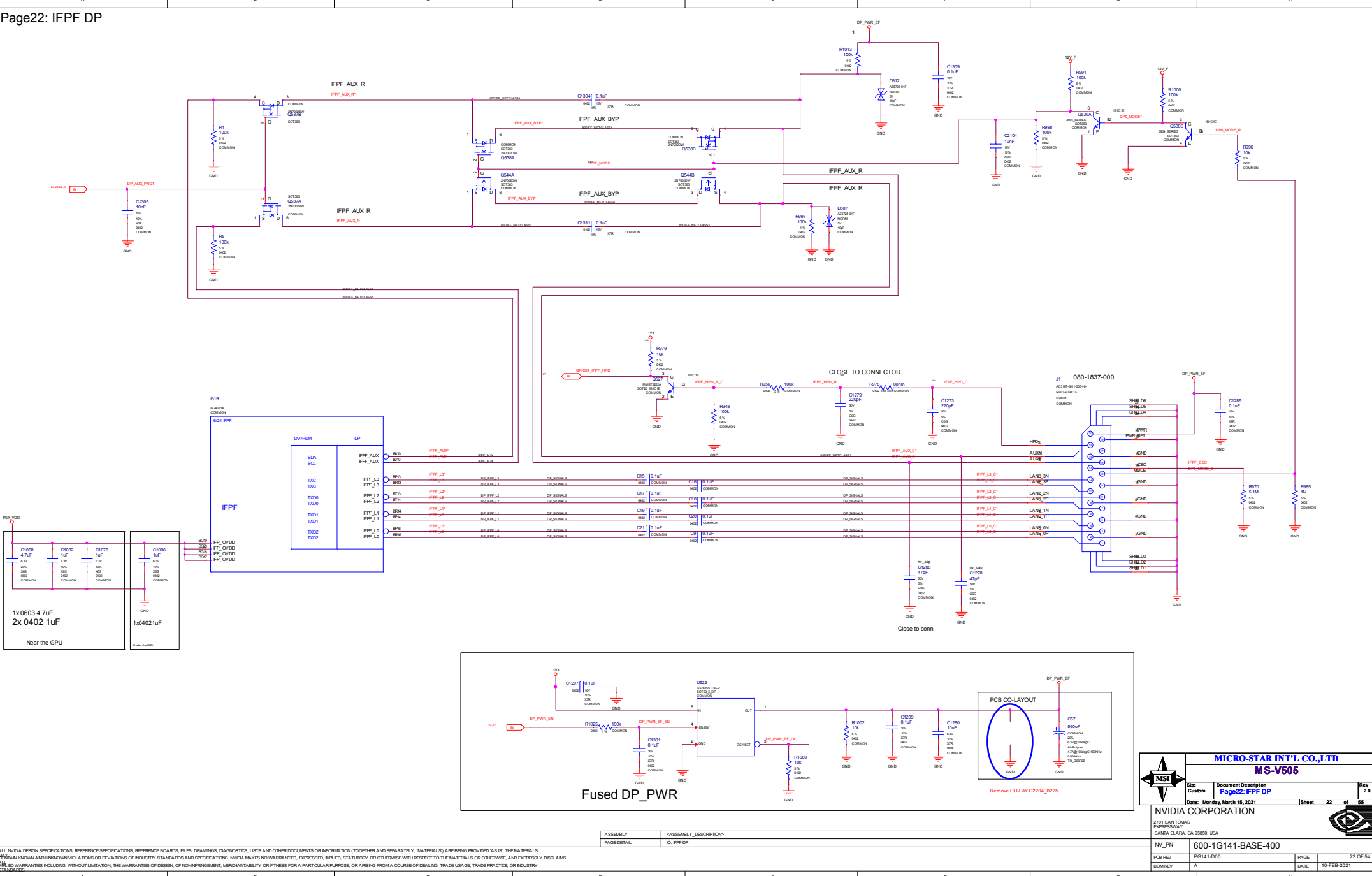
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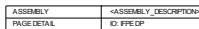
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Page22: IFPF DP

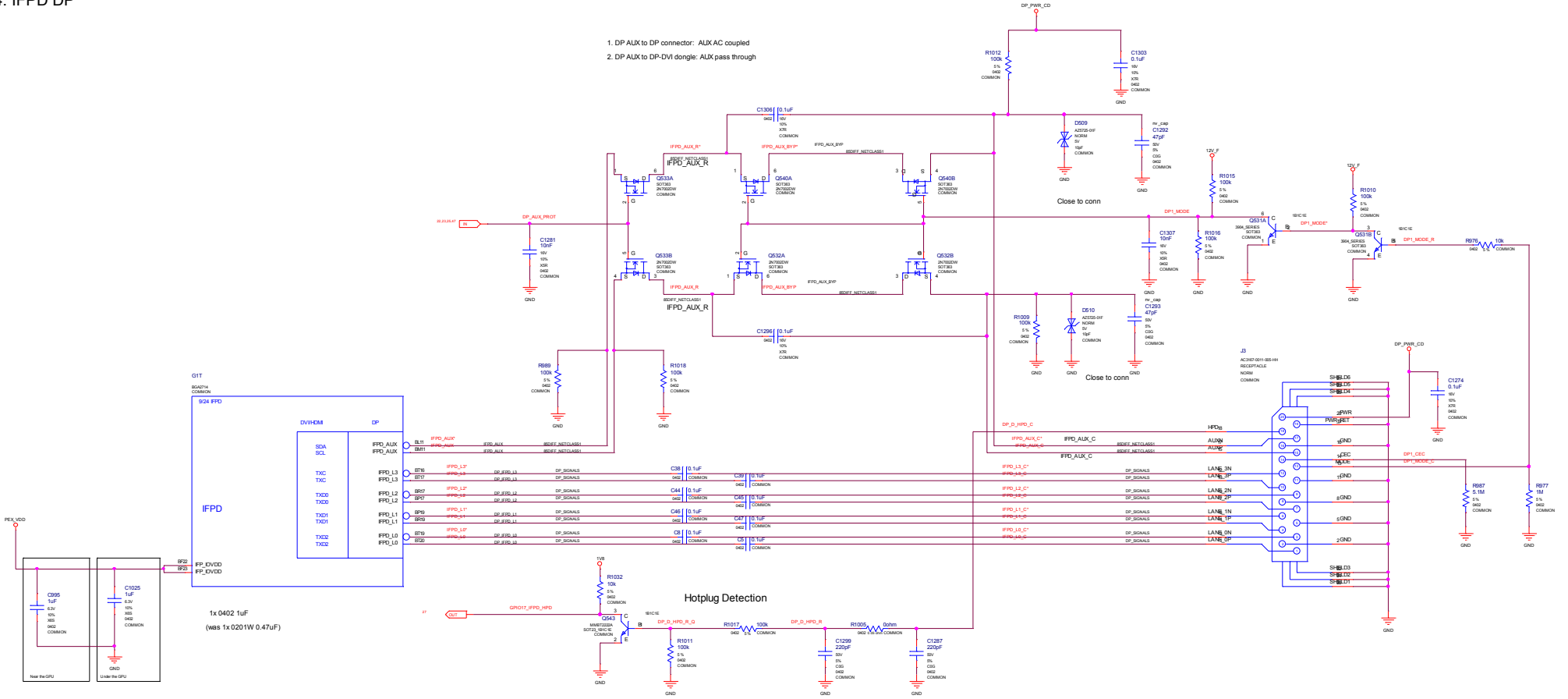
Date: Monday March 18, 2021

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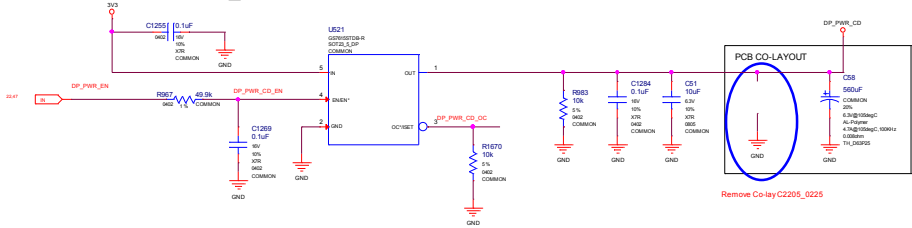



DATE	10-FEB-2021
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- 1. DP AUX to DP connector: AUX/KAC coupled
- 2. DP AUX to DP-DVI dongle: AUX pass through



Fused DP_PWR





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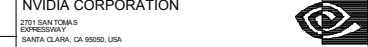
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Document Description: Page24: IFPD DP

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DATE: 24 OF 54

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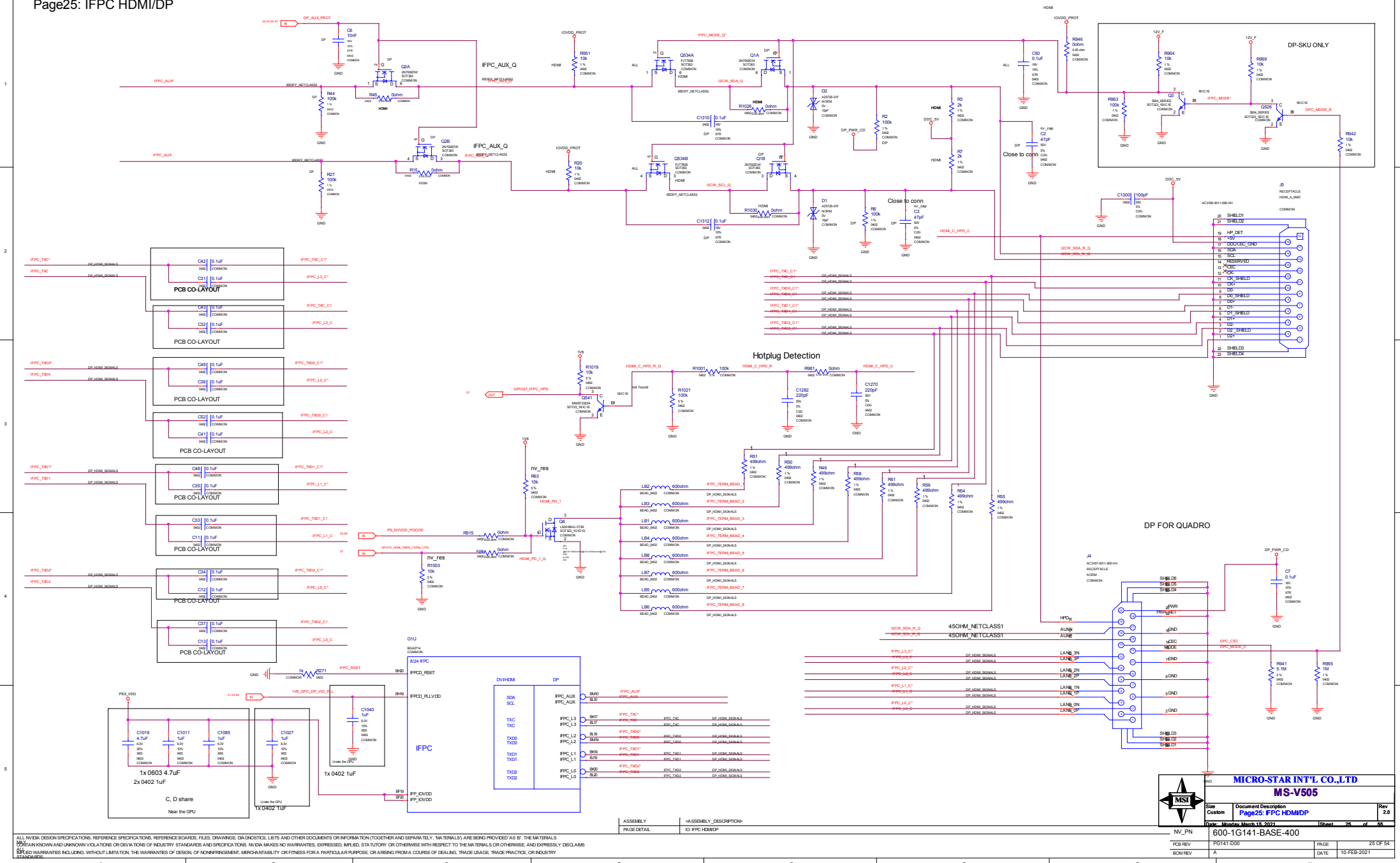
DATE: 24 OF 54

ASSEMBLY: IFPD DP

PRG DETAIL: IFPD DP

ASSEMBLY DESCRIPTION: IFPD DP

PRG DETAIL: IFPD DP



STRAP2	STRAP1	STRAP0	RAMCFG[4:0]	
L	L	L	00000	RAMCFG MICRON 8Gb 19Gbps
L	L	H	00001	RAMCFG MICRON 8Gb 21Gbps
L	H	L	00010	RAMCFG TBD
H	H	L	00110	RAMCFG TBD
TBD				

ROM_SO	ROM_SI	ROM_SCLK	SMARTFAN2.0FS_OVERT	1:ENABLE 0:DISABLE	
L	M	L	1001	FAN0/1=33%33%	FS_OVERT ENABLE <-DEFAULT

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

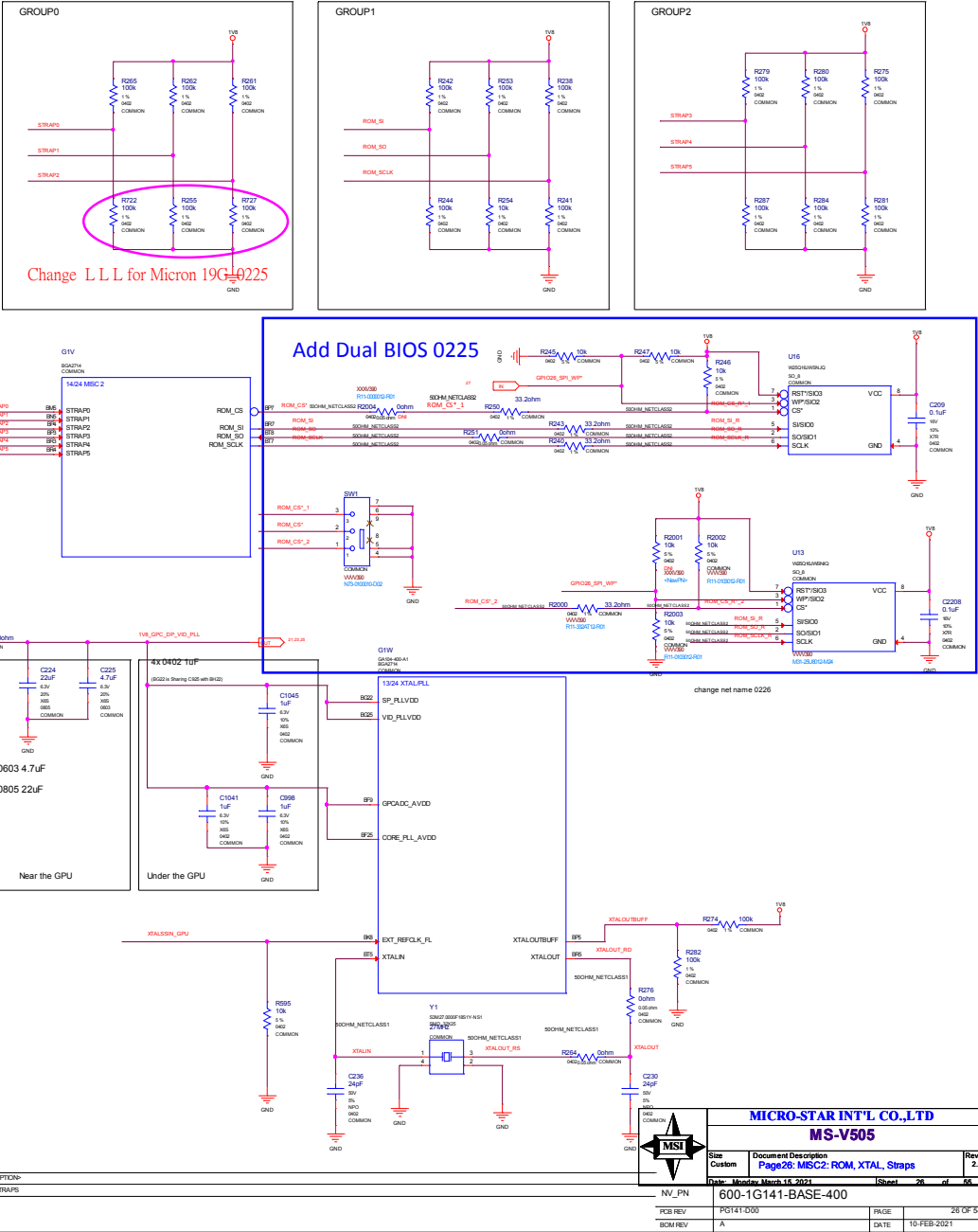
H=High :Tied to 1.8V
M=Middle:Tied to 0.9V
L=Low :Tied to 0V

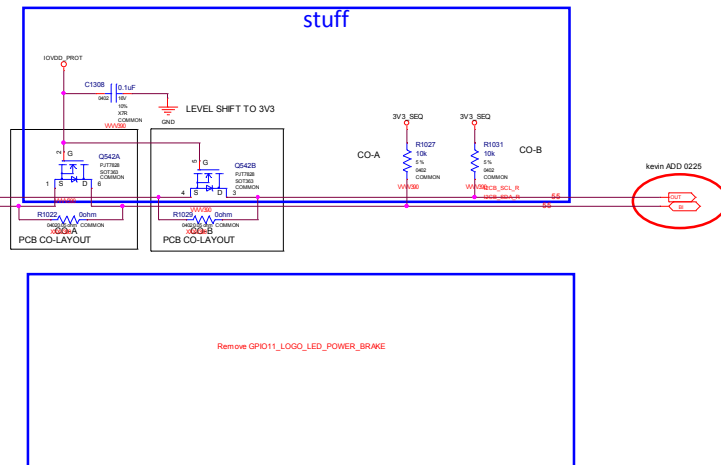
1:SMB_ALT_ADDR ENABLE
0:SMB_ALT_ADDR DISABLE

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







STEREO

remove STEREO

Remove J6_0225

	MICRO-STAR INT'L CO.,LTD MS-V505			Rev 28	
	Size	Document Description			
	Page27: M5C1: JTAG, GPIO, ADC, EC, OVER				
	Date: Monday, March 16, 2021	Sheet	27	of	58
NVIDIA CORPORATION 2701 SAN TOMAS EXPRESSWAY SANTA CLARA, CA 95050, USA					
					
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remove LED

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ASSEMBLY

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PRG DETAIL

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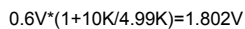
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COM REV

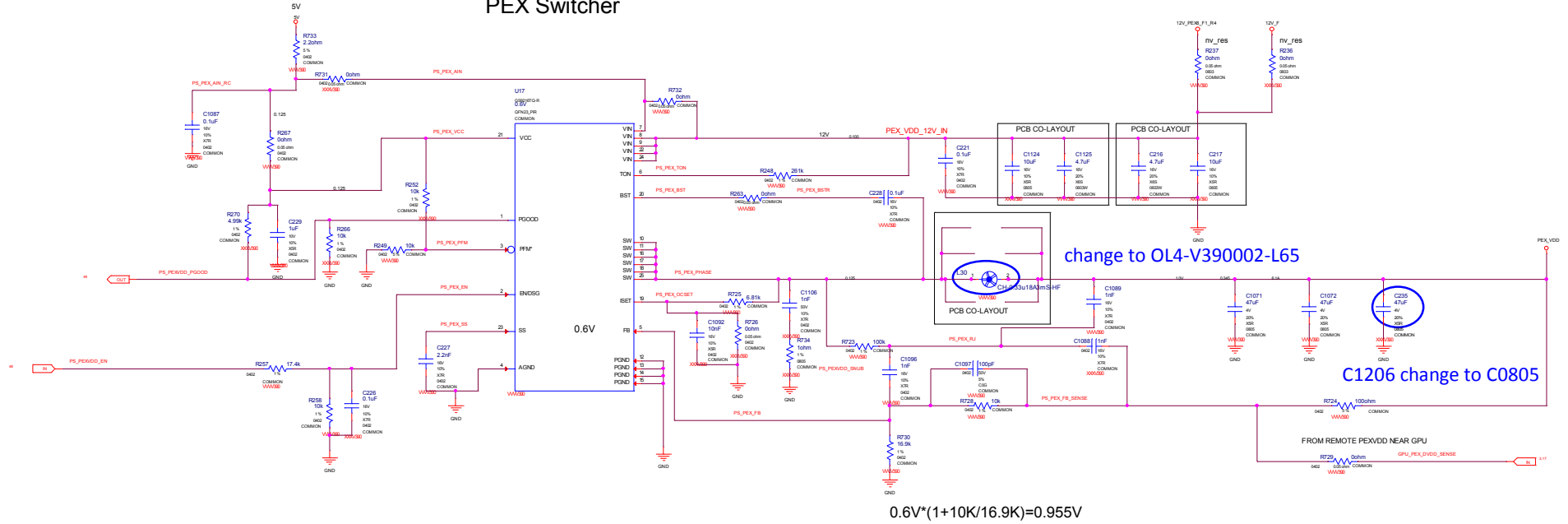
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DATE

10-FEB-2021

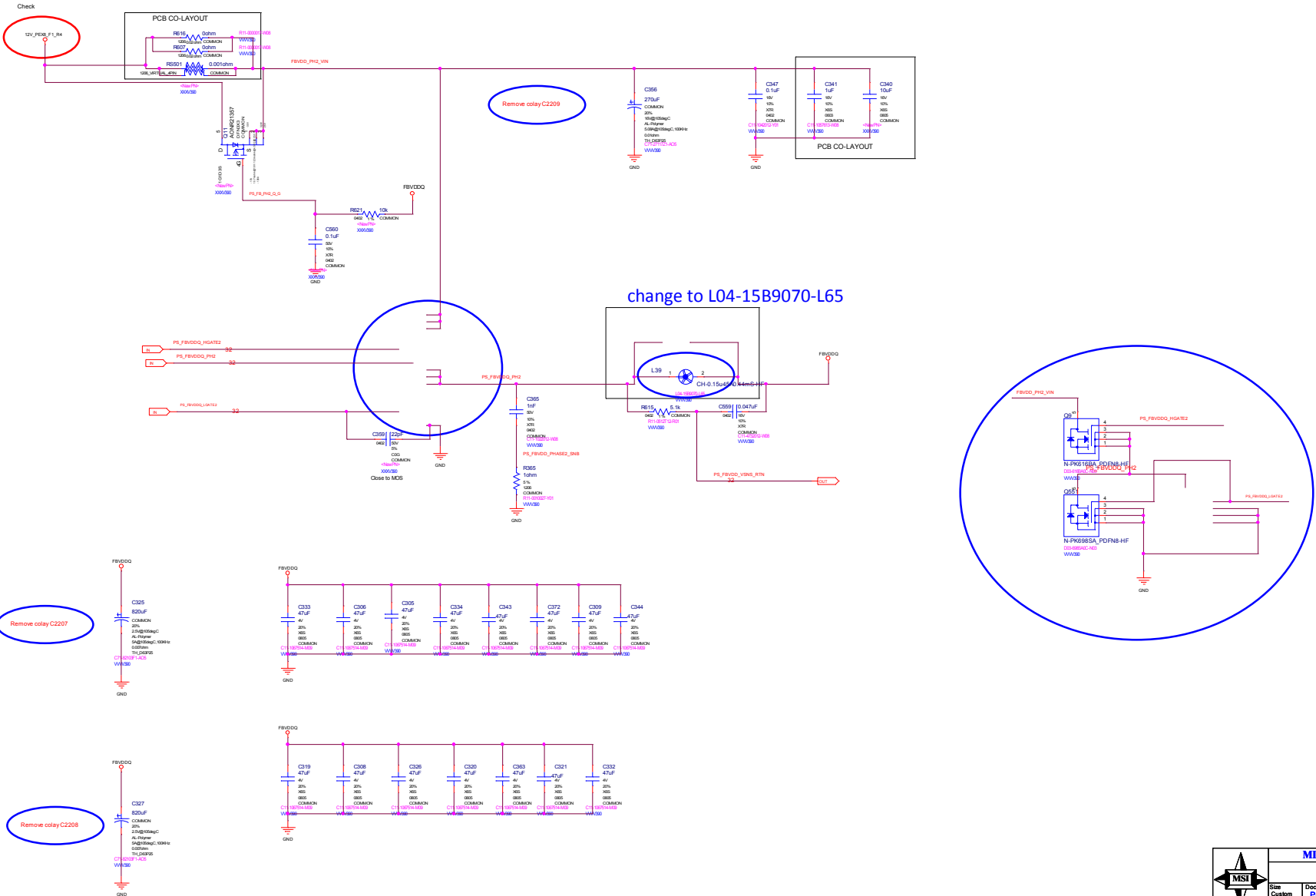


PEX Switcher



$$0.6V \cdot (1 + 10K/16.9K) = 0.955V$$

FBVDD PH2 INPUT ANTI-BACKDRIVE






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BCM REV	A		

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NVVDD PH4(PWM4)

reverse to public board cap

change to OL4-V390003-L65
footprint:public board

delete co-layout MLCC

reverse to public board cap


NVVDD PH6(PWM6)

reverse to public board cap

reverse to public board cap

change to OL4-V390003-L65
footprint:public board

delete co-layout MLCC



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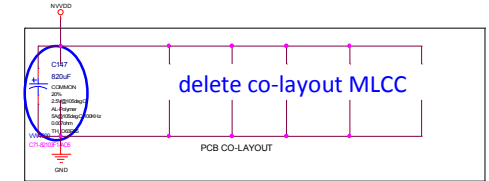
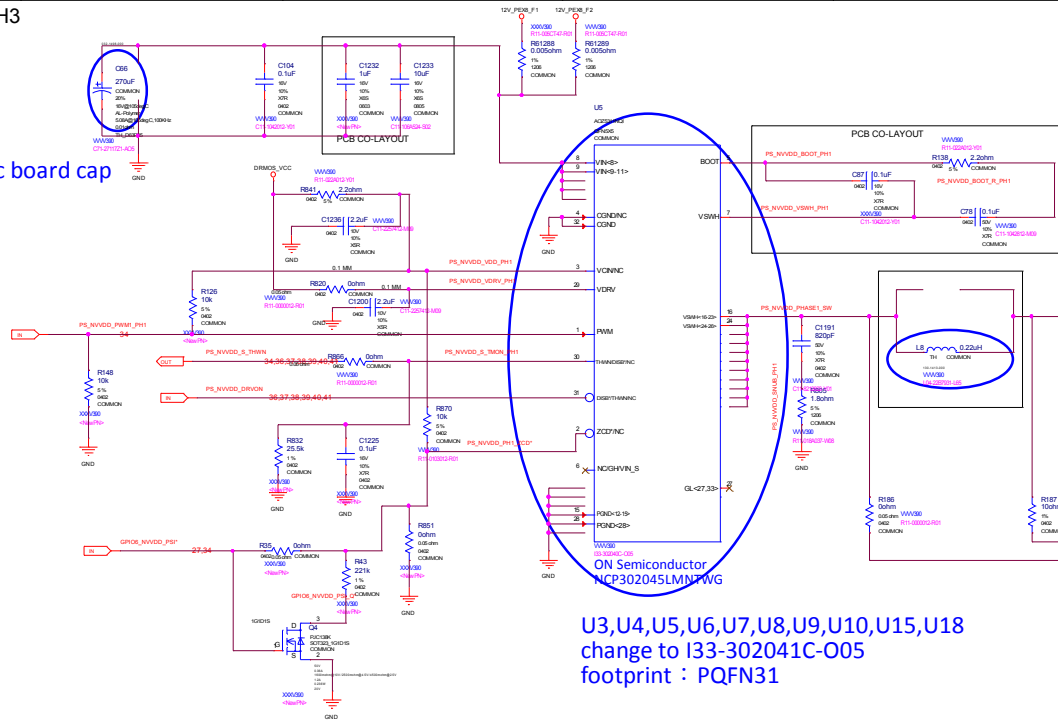
BOB/REV A

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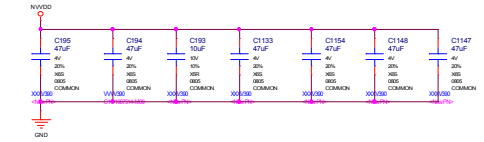
DATE 27-JUN-2020

NVVDD PH1(PWM1)

reverse to public board cap

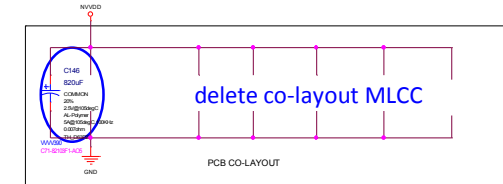
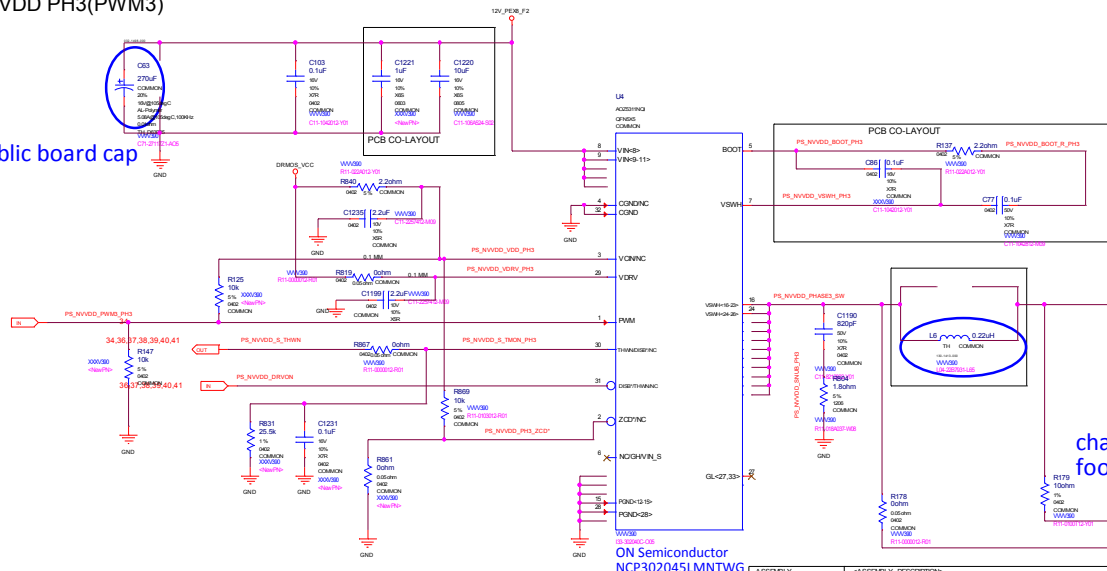


reverse to public board cap

change to OL4-V390003-L65
footprint:public board

NVVDD PH3(PWM3)

reverse to public board cap



reverse to public board cap

colayout only no self standing mlccs

change to OL4-V390003-L65
footprint:public board

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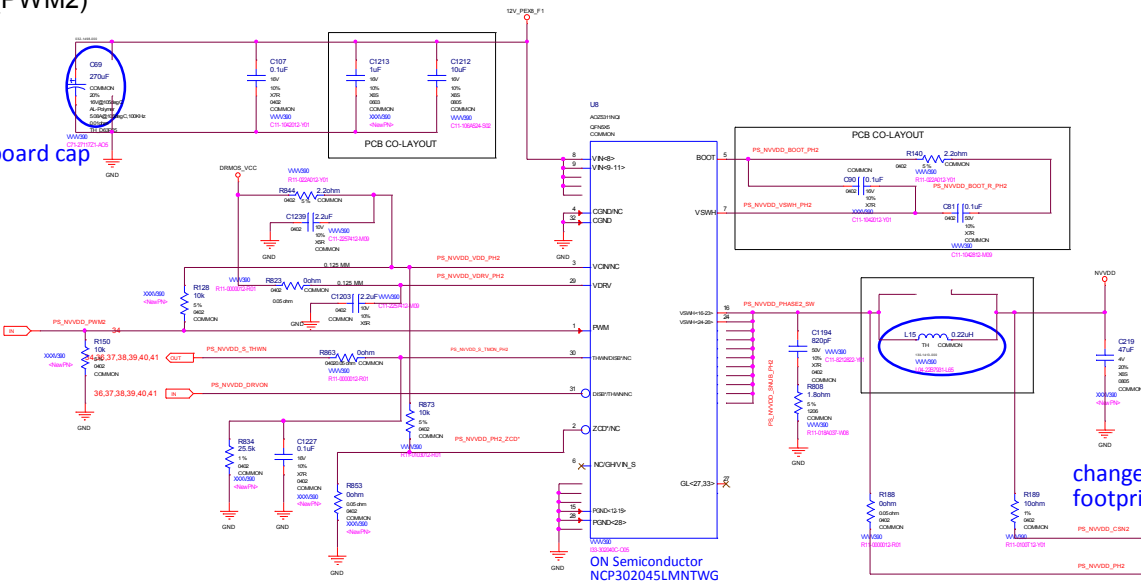
NV_PN 600-1G142-BASE-100

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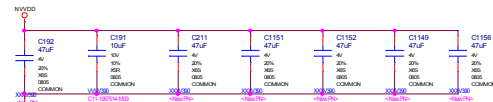
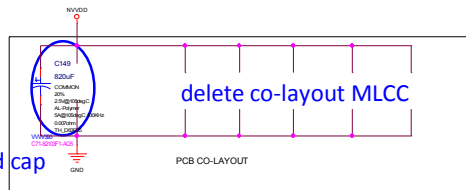
BOM REV A DATE 27-JUN-2020

NVVDD PH2(PWM2)

reverse to public board cap

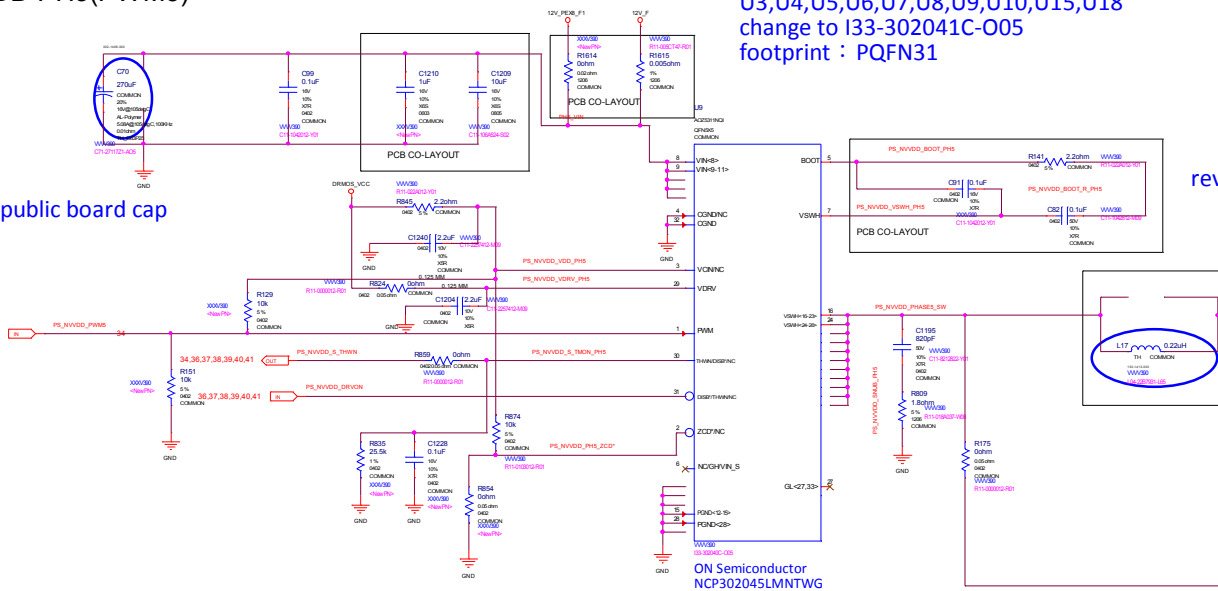


reverse to public board cap



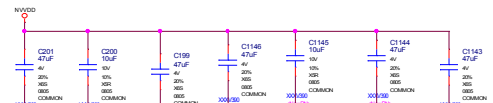
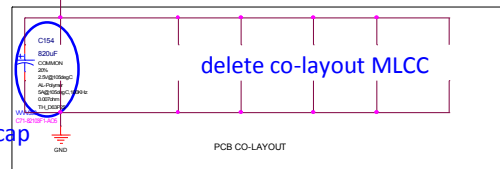
NVVDD PH5(PWM5)

reverse to public board cap



U3,U4,U5,U6,U7,U8,U9,U10,U15,U18
change to I33-302041C-005
footprint : PQFN31

reverse to public board cap



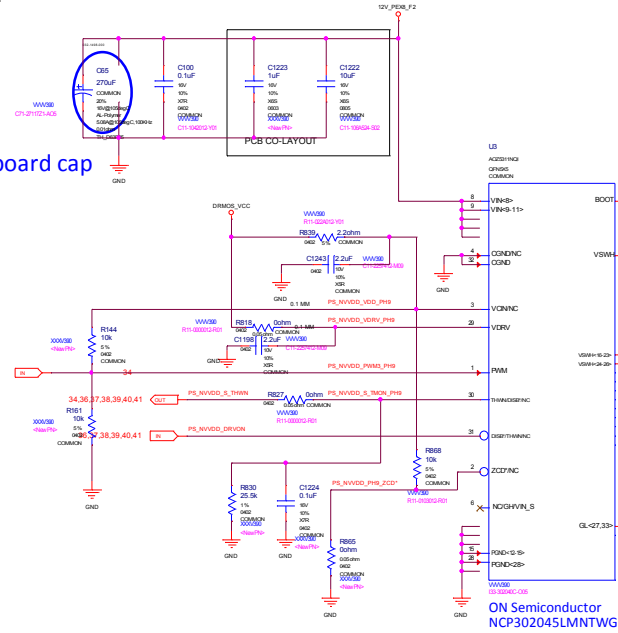
	MICRO-STAR INT'L CO.,LTD		
	MS-V505		
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San Jose	MSI	Page38: NVVDD PH2 & PH5	2.0
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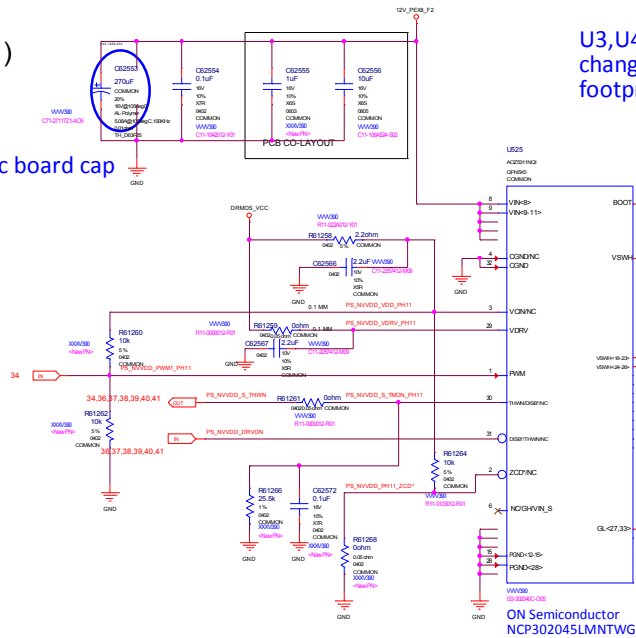
NVVDD PH9(PWM3)

reverse to public board cap

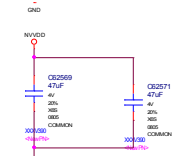
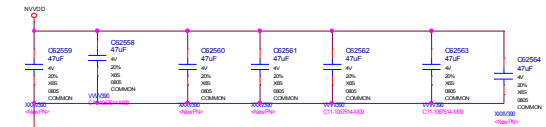
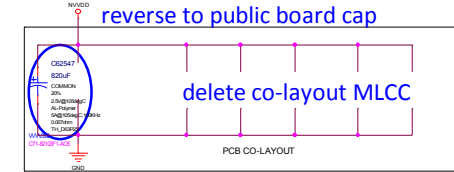
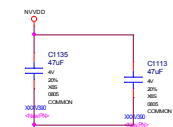
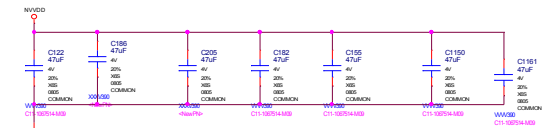
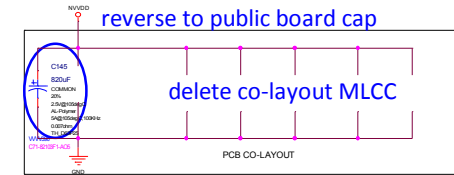



NVVDD PH11(PWM1)


reverse to public board cap

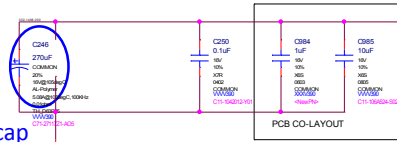


U3,U4,U5,U6,U7,U8,U9,U10,U15,U18
change to I33-302041C-O05
footprint : PQFN31

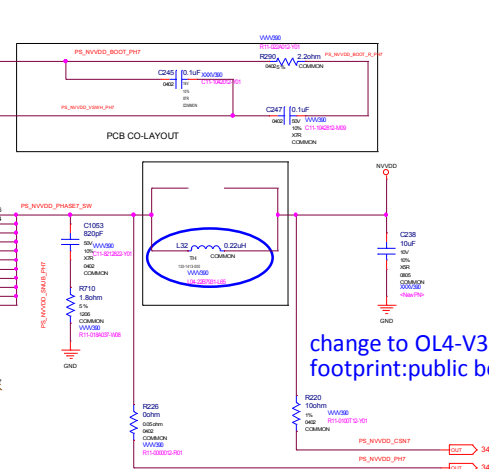
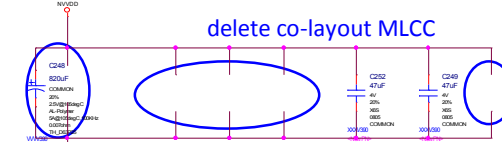


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reverse to public board cap



U3,U4,U5,U6,U7,U8,U9,U10,U15,U18
change to I33-302041C-O05
footprint : PQFN31

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reverse to public board cap

reverse to public board cap

delete co-layout MLCC

change to OL4-V390003-L65
footprint:public board

NVVDD PH8(PWM8)

reverse to public board cap

U3,U4,U5,U6,U7,U8,U9,U10,U15,U18
change to I33-302041C-005
footprint : PQFN31

reverse to public board cap

delete co-layout MLCC

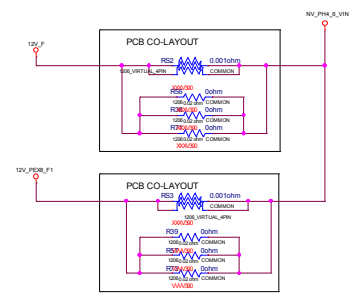
change to OL4-V390003-L65
footprint:public board





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Page41: NVVDD PH10 & 8
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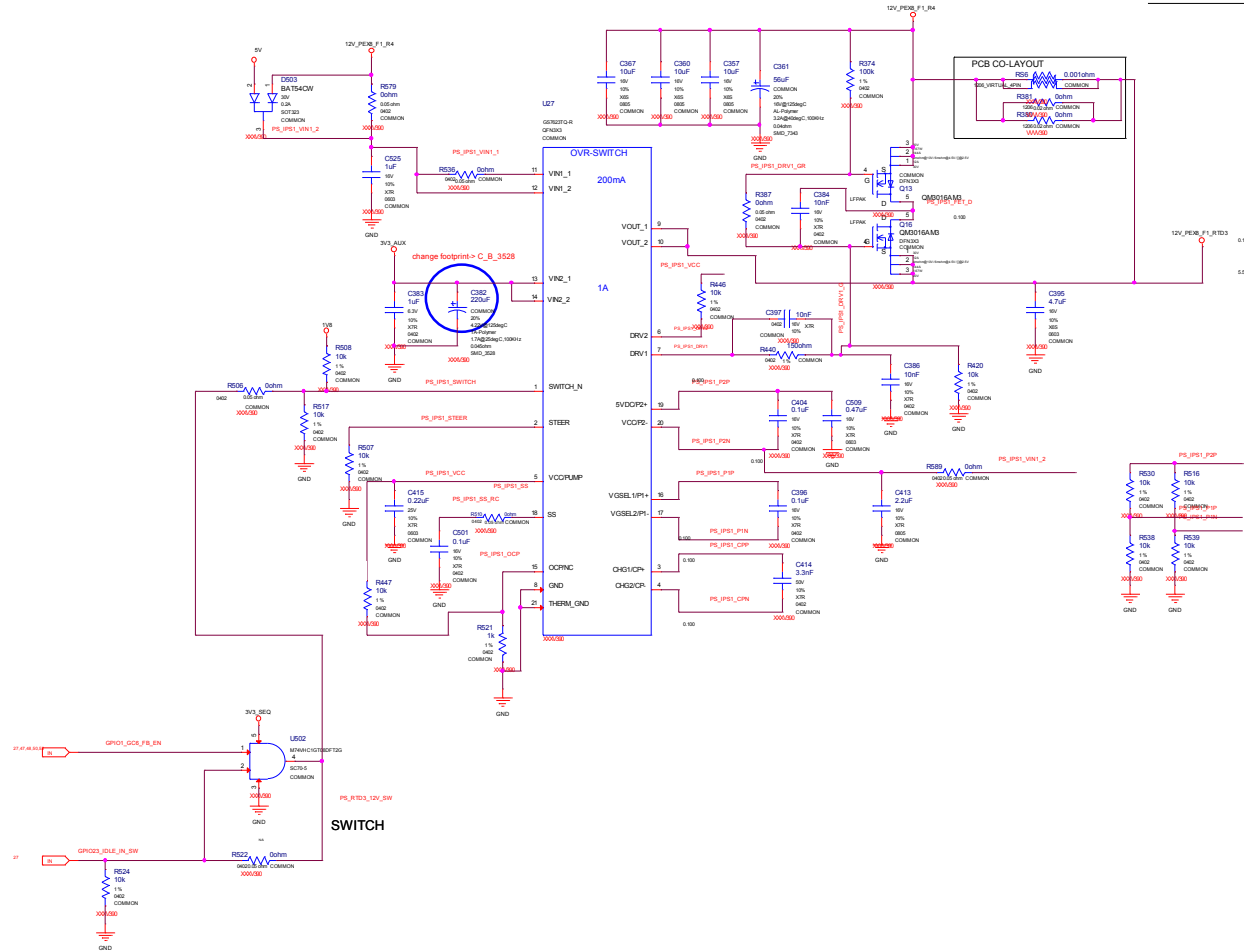
NVIDIA CORPORATION			
2701 SAN TOMAS EXPRESSWAY			
SANTA CLARA, CA 95050, USA			
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		MICRO-STAR INT'L CO.,LTD MS-V505		
		Size Custom Document Description Page42: Input Power Balancing Switcher		
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NV_PN 600-1141-B45E-400				
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AND GATE LOGIC				SWITCH		VOUT	
GPI01	GPI023	SWITCH	VOUT				
0	0	0	12V	0		VOUT = VIN1	
0	1	0	12V	1		VOUT = VIN2	
1	0	0	12V				
1	1	1	3V3A				

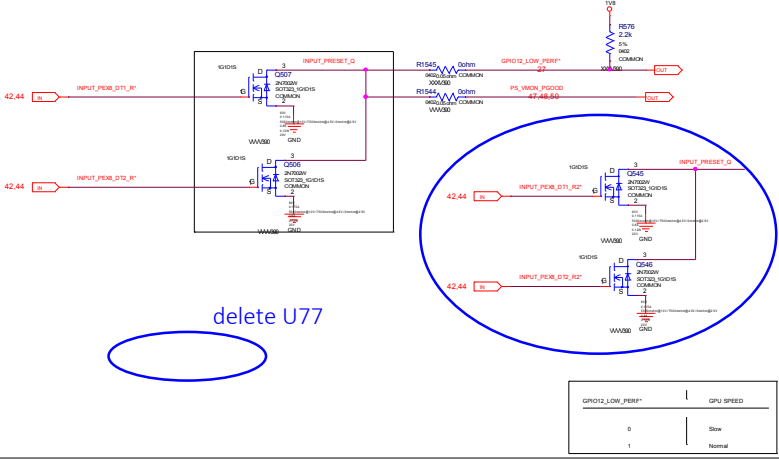


delete 12 pin 12V EXT-POWER Current steering

ADD power tree 0317

12V_F(RSENSE 1) EXT1-12V_PEX8_F1(Rsense 2)->NV_PH4_6_VIN
->NV5,NV8 NV2 NV4,NV6
EXT1-12V_PEX8_F2(RSENSE 3) NV1,NV3,NV7,NV9,NV10,NV11
->12V_PEX8_F1_R4(Rsense4) -->12V_PEX8_F1_RTD3
PEX_VDD,FB2 IV8,5V,FB1

PEX Input - Under Power Boot Control



delete U77

PEX8 INPUT 2/B - 2x4 PCIE CON 150W

Fuse

delete R2007

Fuse

delete R2010

PEX8 INPUT 1/A - 2x4 PCIE CON 150W

Fuse

delete R2007

Fuse

delete R2010

change to L04-33B7320-L65

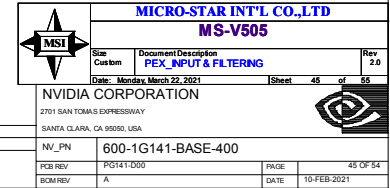
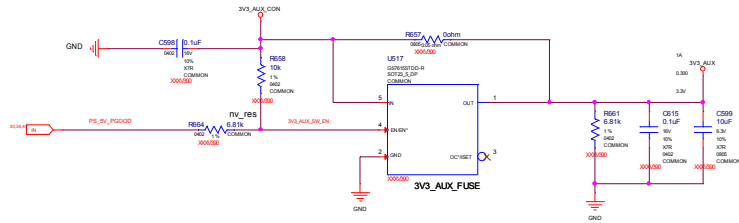
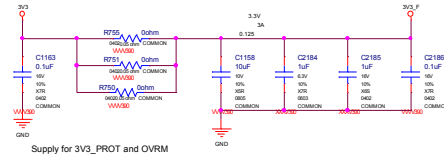
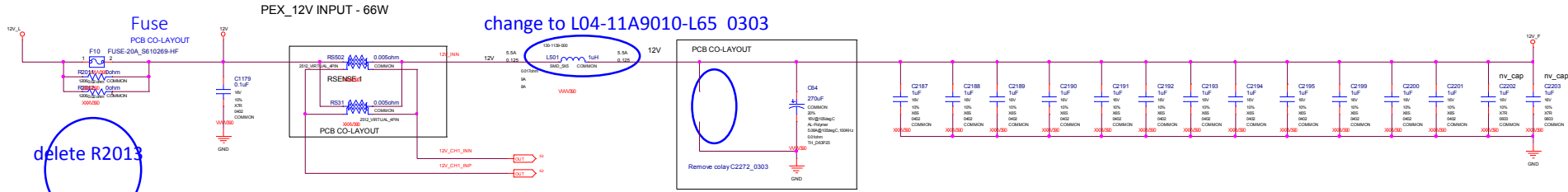
add RS24

change to L04-33B7320-L65

one 12pin EXT power conn. change to reverse 8pin conn.

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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PS: FEX_12V, FEX_3V3 AND A3V3_AUX

POWER CONNECTOR HOT-UNPLUG DETECT


delete POWER CONNECTOR HOT-UNPLUG DETECT

12V CURRENT STEERING (UNDER POWER BOOT):

GUIDES CURRENT FROM PEX EDGE TO PEX 8 PIN INPUT AREA

delete 12V CURRENT STEERING

ASSEMBLY	<ASSEMBLY DESCRIPTION>
PAGE DETAIL	PS: STEERING, UPB, HOT UNPLUG



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STEERING, UPB, HOT UNPLUG

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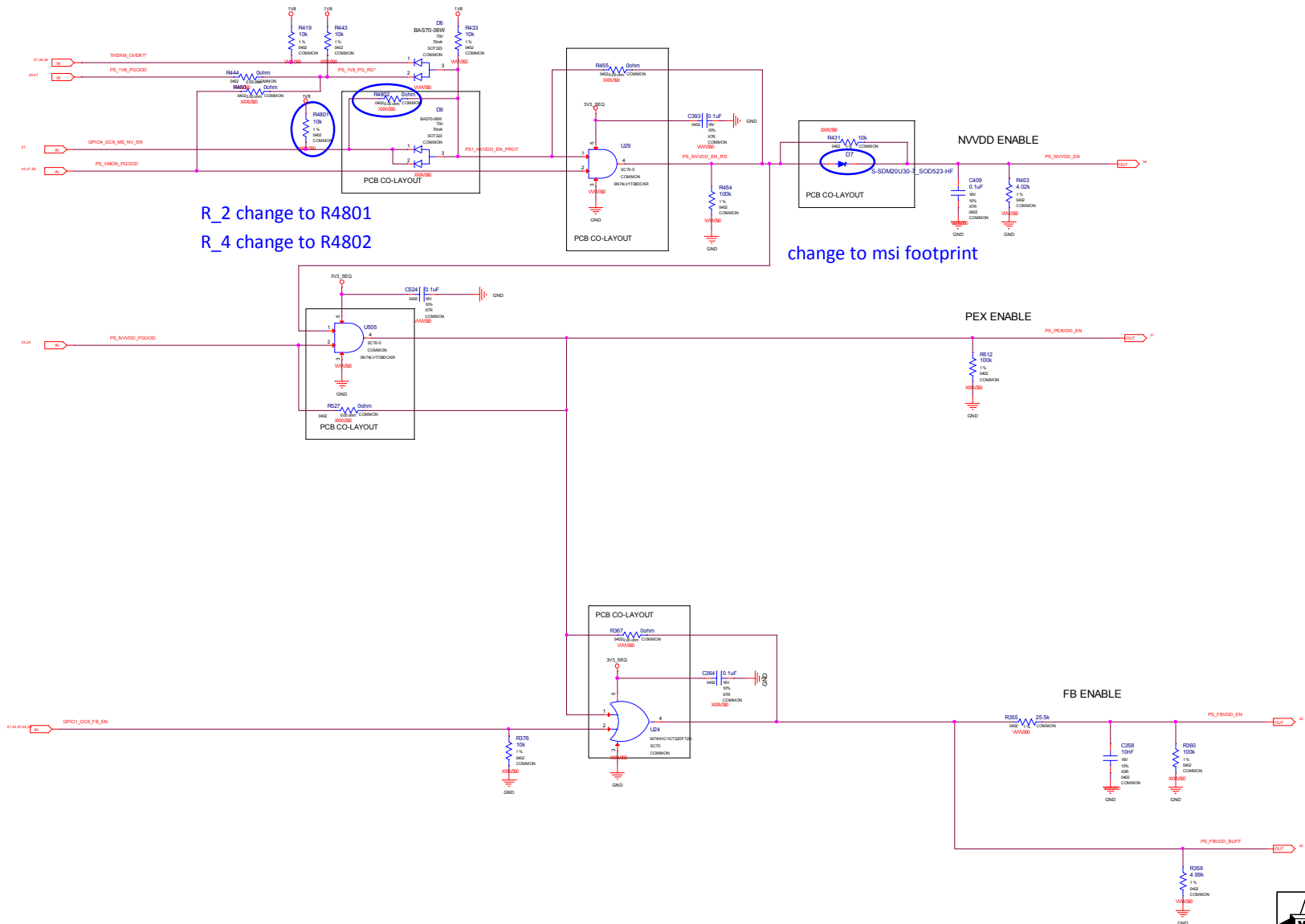
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BOM REV

A


DATE

10-FEB-2021



R_2 change to R4801
R_4 change to R4802

change to msi footprint




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Size: Custom
Document Description: SEQ:NVVDD, PEX, FBVDDQ ENABLE
Date: Monday, March 22, 2021

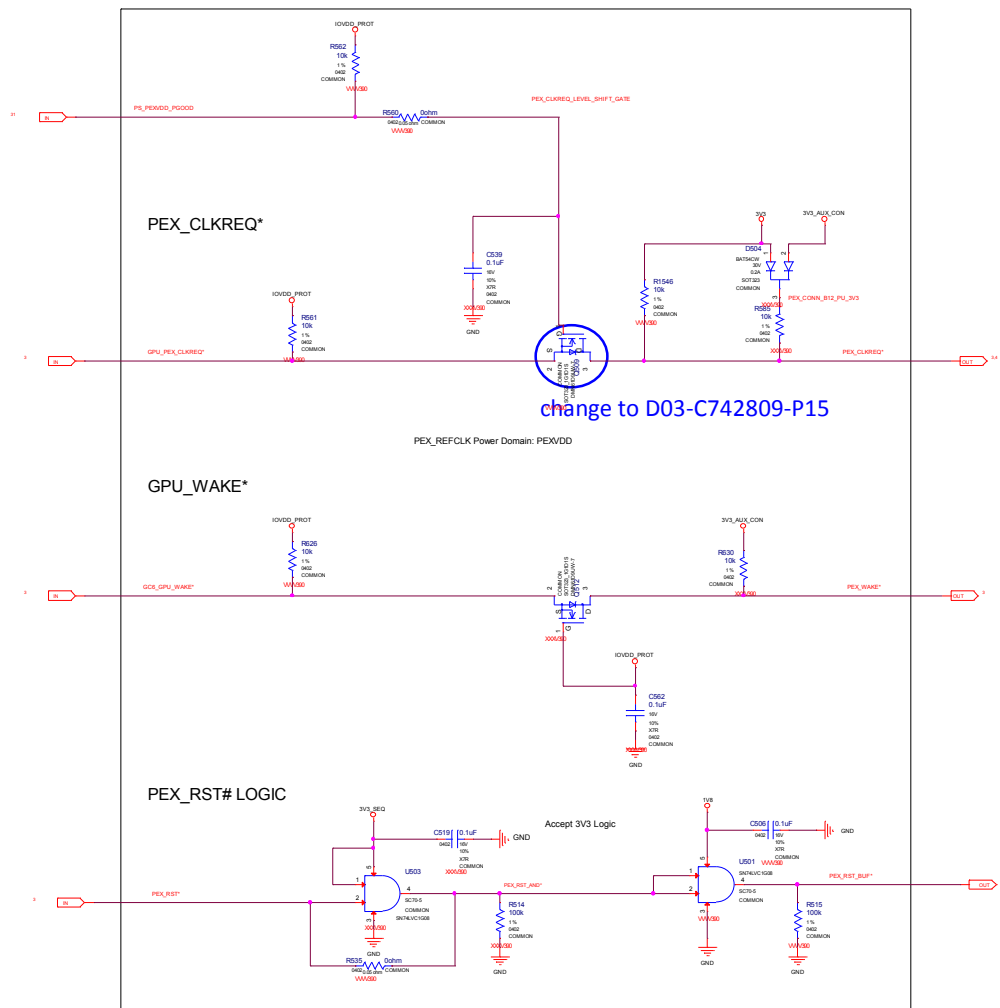
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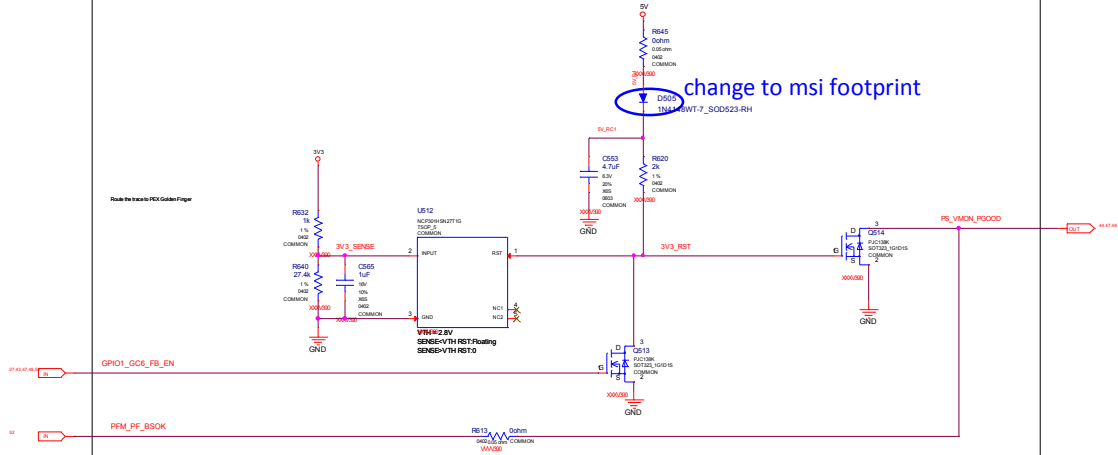
NV_PN	600-1G141-BASE-400	PAGE	48 OF 54
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BCM REV	A		

ASSEMBLY	ASSEMBLY DESCRIPTION
PCB DETAIL	SEQ: NVVDD, PEX, FBVDDQ ENABLE



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Sam Card:	Document Description Page#9: SEQMISC	Re: 2	
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NVIDIA CORPORATION 2701 SAN TOMAS EXPRESSWAY SANTA CLARA, CA 95050, USA			
NV_PN 600-1G141-BASE-400			
PCB REV P0141-2000	PAGE A	DATE 10-FEB-2021	49 of 55

3V3PEX Voltage Monitor



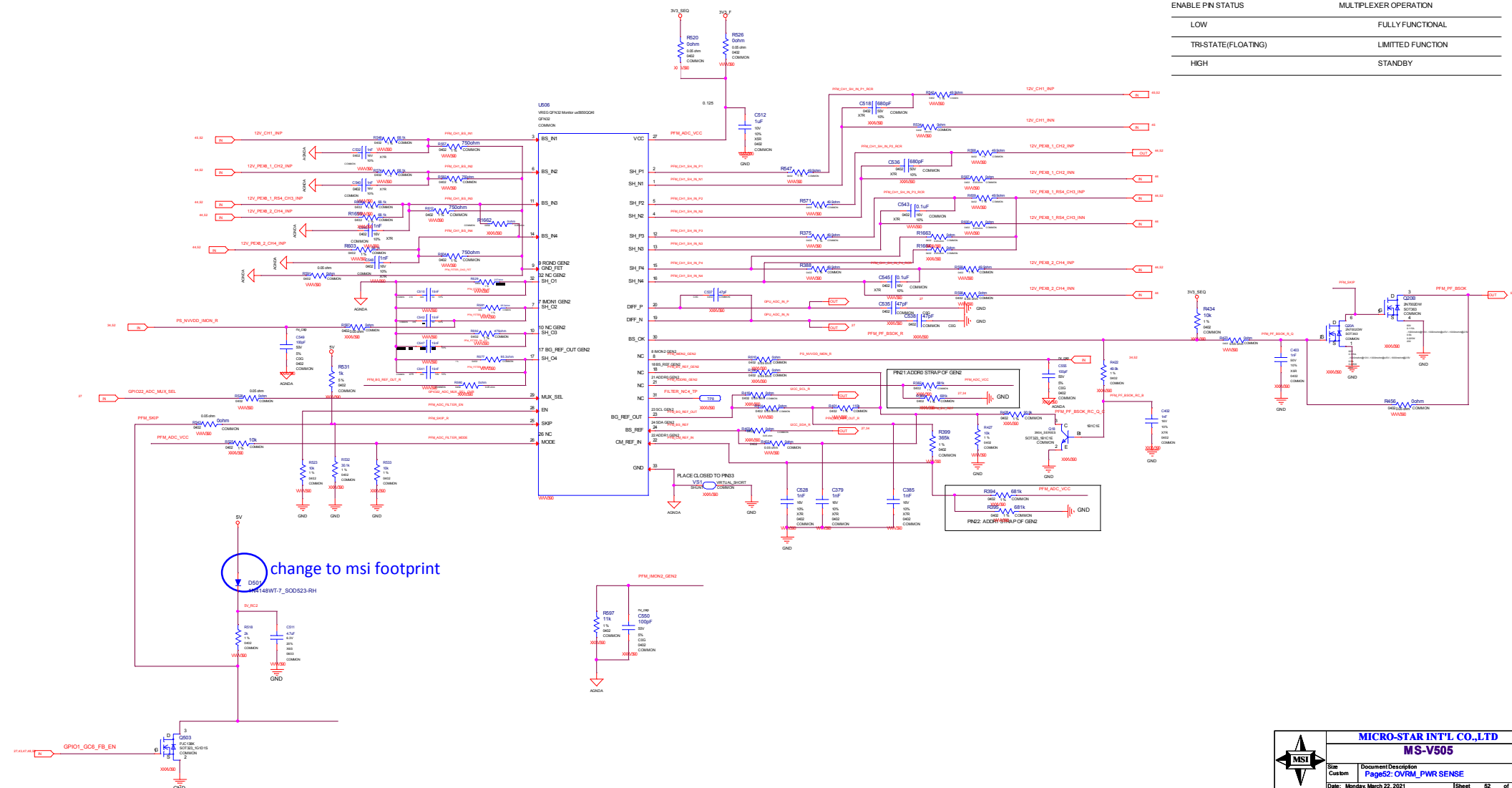
Signal	Direction	Function
3V3	INPUT	Sense the 3V3 Voltage from PCIe golden finger
12V	INPUT	Sense the 12V Voltage from PCIe golden finger
PS_VMON_PGOOD	OPEN-DRAIN	Floating(?) once both 3V3 and 12V reach Vth
G08_FB_EN	INPUT	Indicator for RTD3/G08 residence, Use to Mask the VMON_PGOOD
PS_PF_SKIP	INPUT	From INA3221(VPU) or Pre-filter(SKIP)
PS_PF_BSOK	INPUT	From INA3221(PV) or Pre-filter(BS_OK)

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Size: Custom	Document Description: Page 50: SEQUENCE:Voltage Monitor	Rev: 2.0
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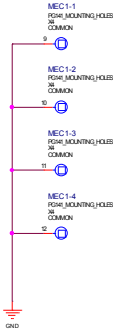
PCB REV: P0141 D00	PAGE: 50	OF 54
RCM REV: A	DATE: 10-FEB-2021	



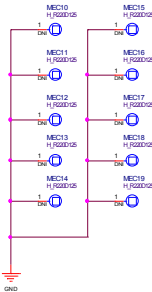
Bracket & Bracket hole: 2pcs
footprint:H_R220D125



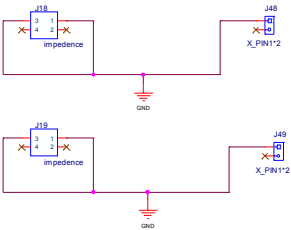
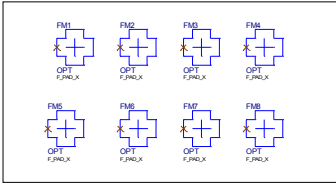
Fan module hole: 4 pcs
footprint : same as public board



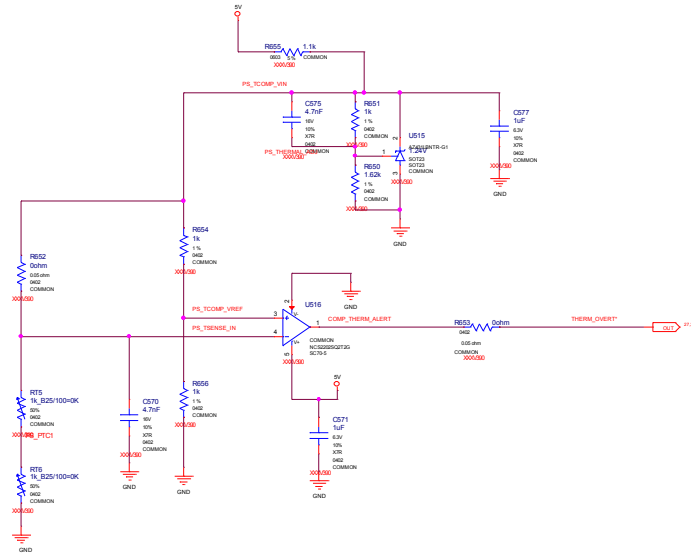
Fan module hole: 10 pcs
footprint:H_R220D125




删除CLP1~CLP3



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		MS-V505	
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Custom	0053_MECH	2.0	
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BOB REV	A	DATE	27-JUN-2020



ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PTC

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	Size	Document Description	Rev
	Custom	<u>PTC</u>	1.5
	Date: <u>Monday, March 22, 2021</u>		Sheet <u>54</u> of <u>55</u>
ASSEMBLY DRAWING NVIDIA CORPORATION 2701 SAN TOMAS AVE SANTA CLARA, CA 95050, USA			
NV_PN 600-1G141-BASE-400			
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debug, not stuff.

LED_A

J5009在J5010的左邊,紅色接口。

LED_B

J5010在J5009的右邊,黑色接口。

LED_C

Remove LED *6 (LED_D) kevin

debug, not stuff.

銷庫存MCU料號

J1022不上件。 kevin ADD J1023 0225

(option)

reserve, not stuff.

change to L04-47A9010-L65

ASSEMBLY	ASSEMBLY DESCRIPTION
PCB DETAIL	PS: NV LED Controller

SOT223
315-0770-000
315-0767-000

Vout=1.25*(1+1020/340)+60uA*1020=5.06V



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Site: Custom

Document Description: Page55: LED (msi Gaming feature)

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