

PG180-A02

256b GDDR6 x16  
TALL DP + DP + DP + HDMI/DP + USB

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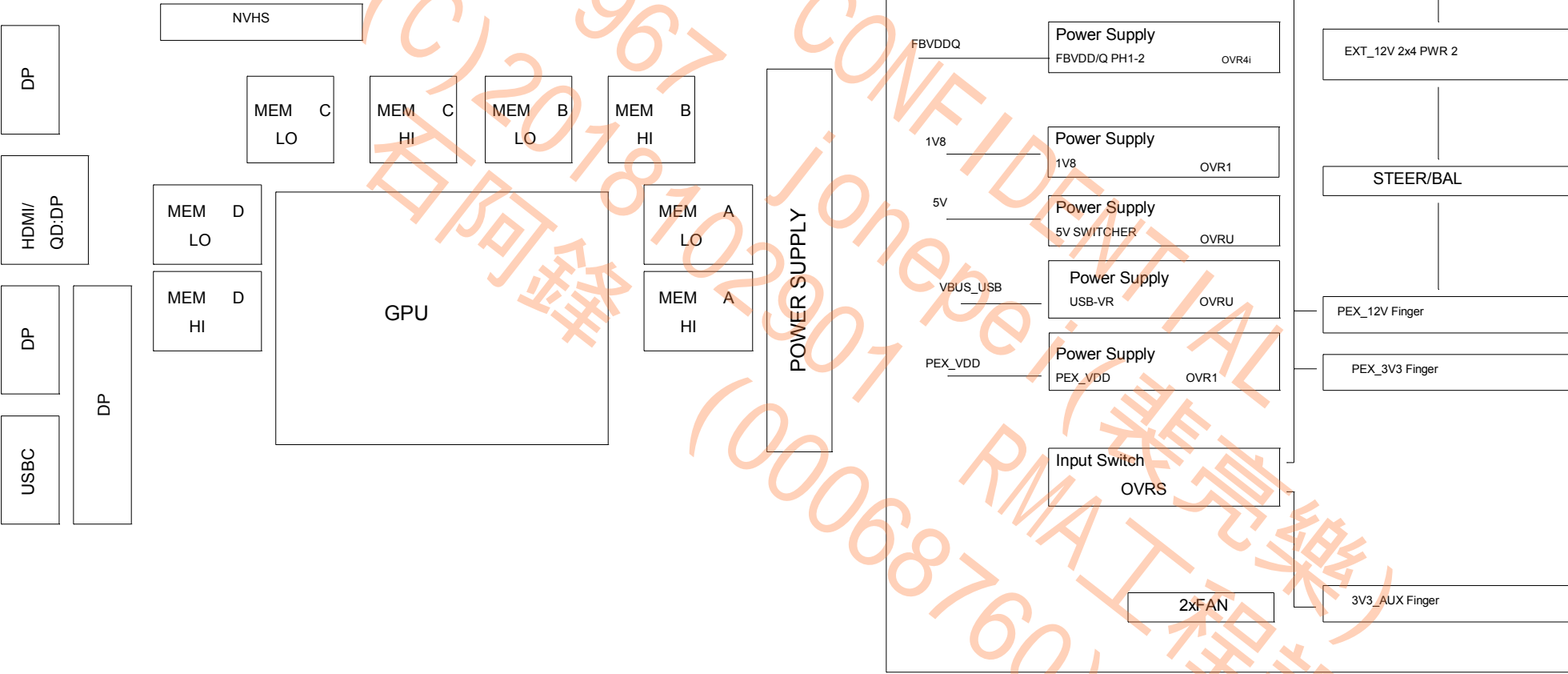
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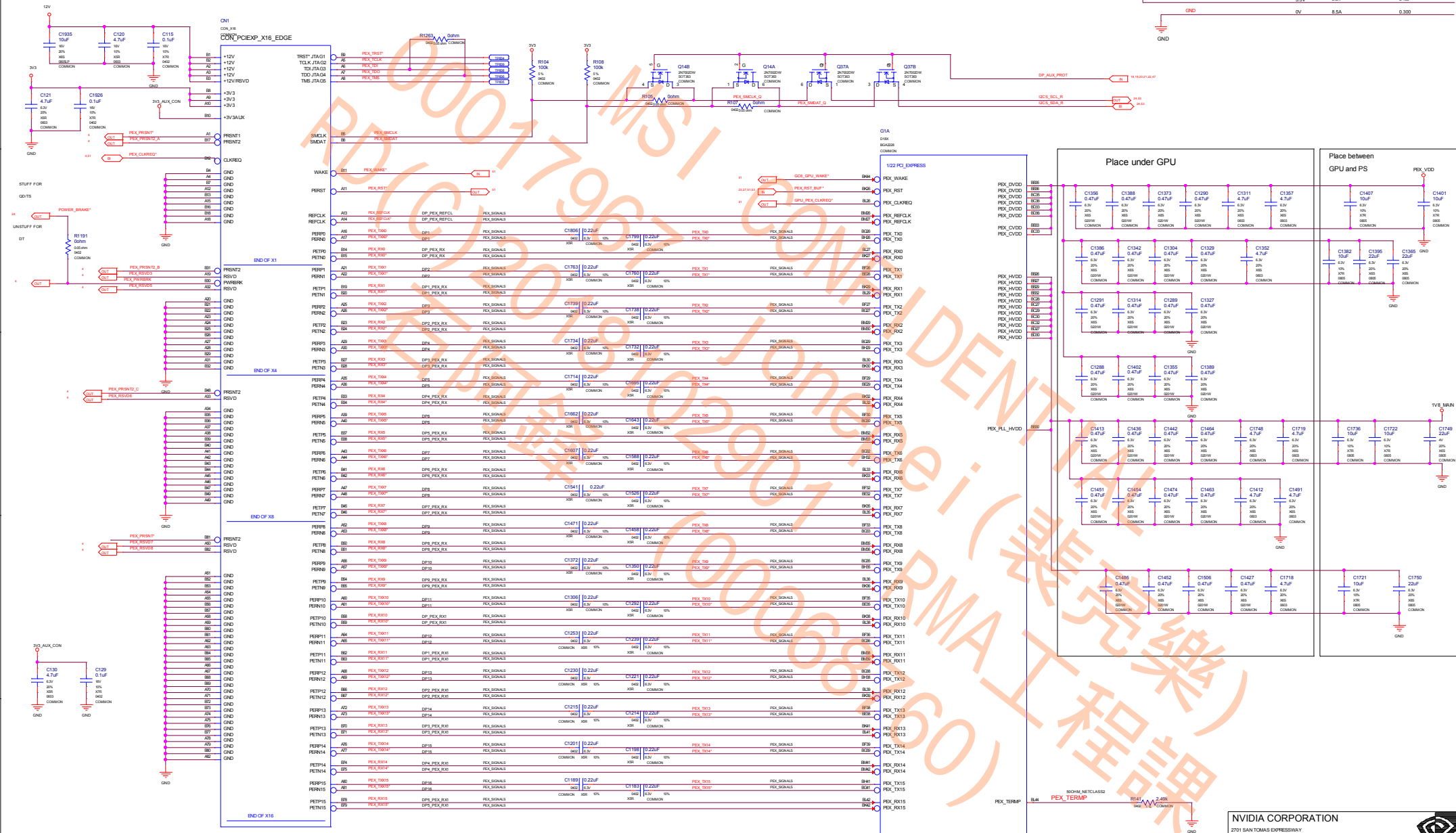
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ASSEMBLY	ASSEMBLY DESCRIPTION
PAGE DETAIL	Block Diagram

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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PCIEXP_X16_EDGE	PCI Express

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ROM REV

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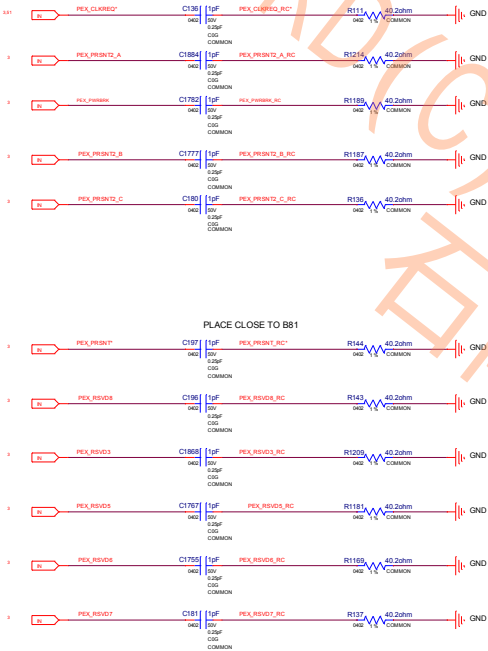
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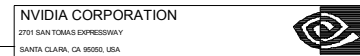
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PAGE DETAIL	PCI Termination

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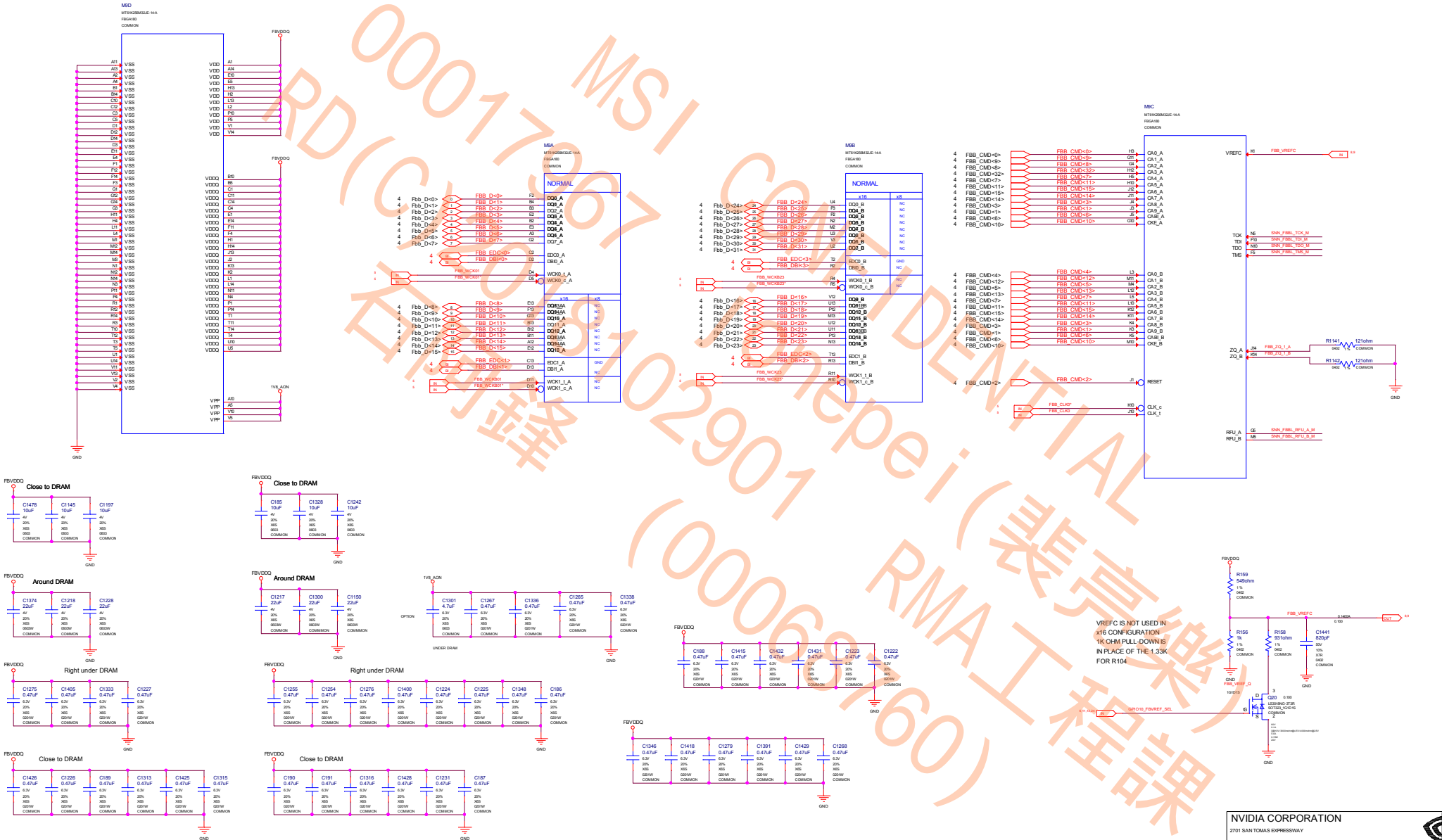












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PCB REV	MEMORY: FBB Partition 31..0	DATE	27 JUN 2018
ICOM REV		DATE	

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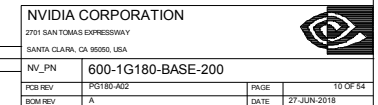
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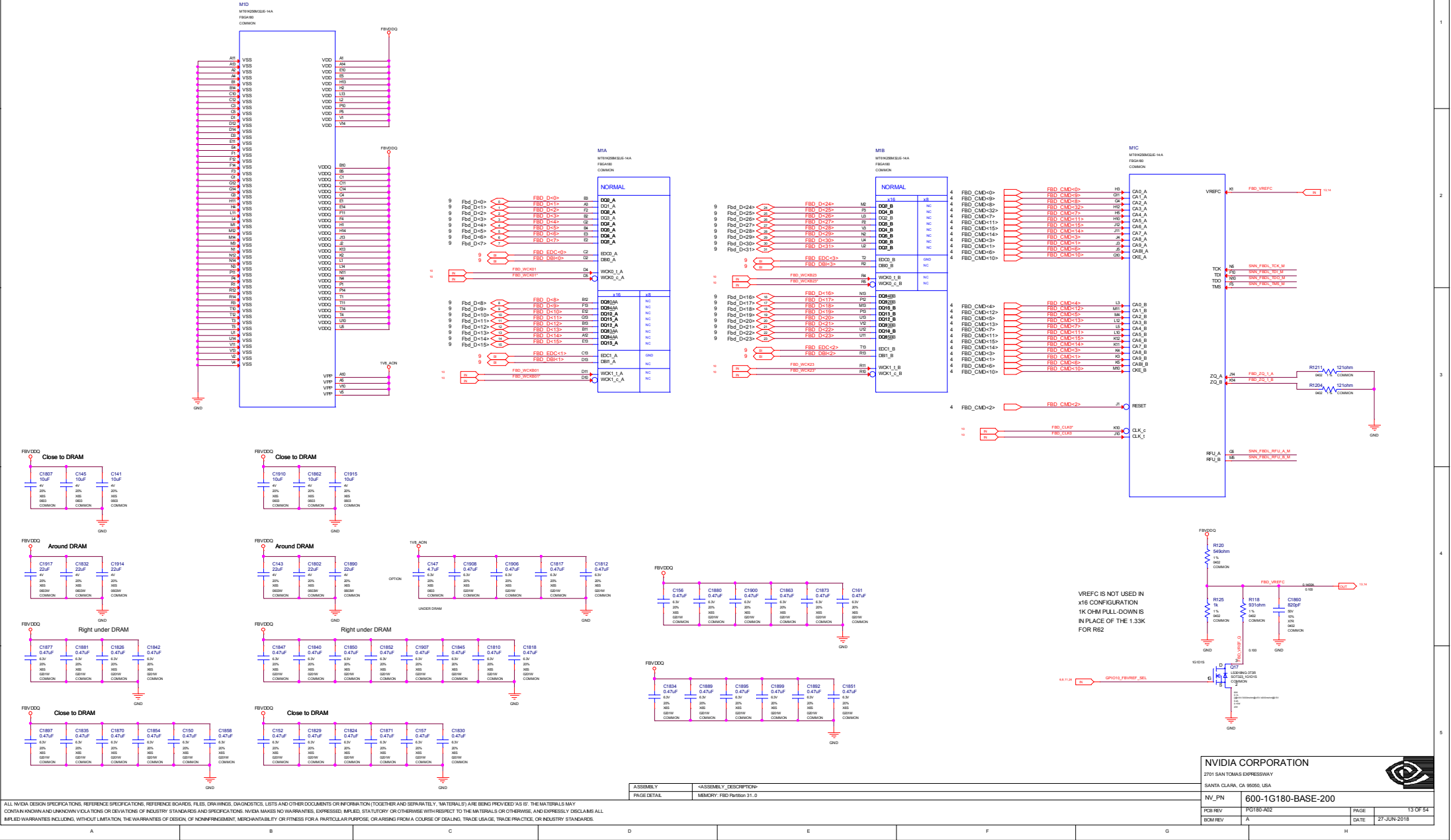


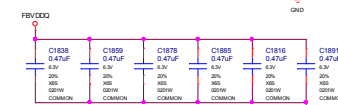
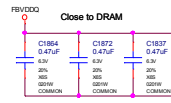
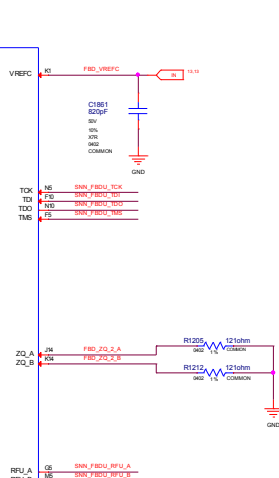






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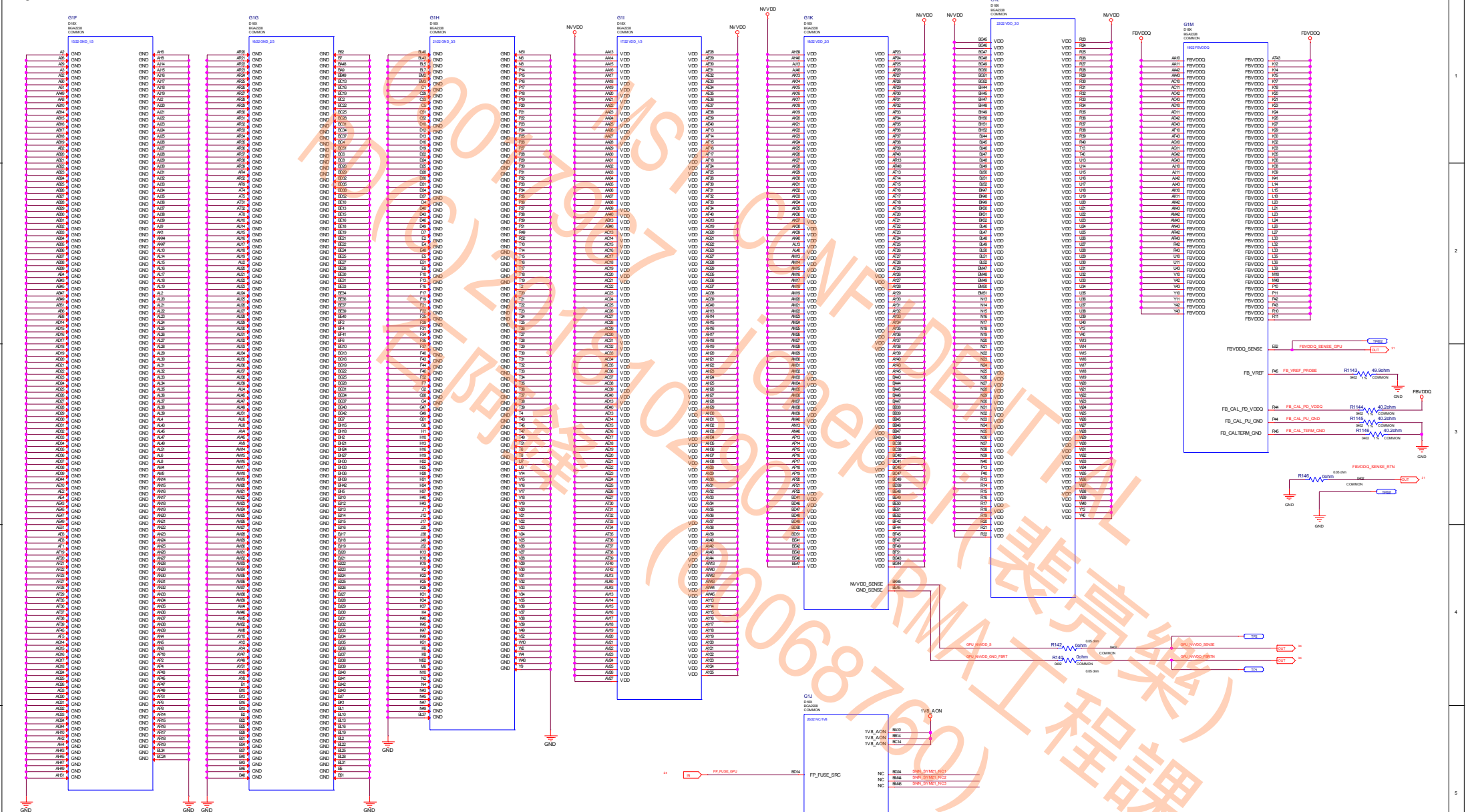


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PAGE DETAIL	MEMORY: FBD Partition 63.32


BOM REV	A	DATE	27-JUN-2018
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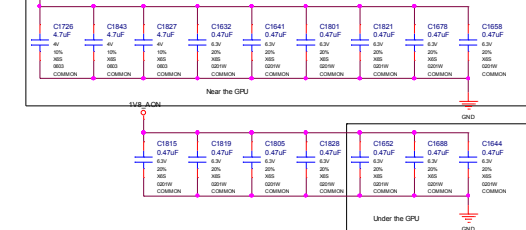
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PAGE DETAIL	GPU PWR and GND

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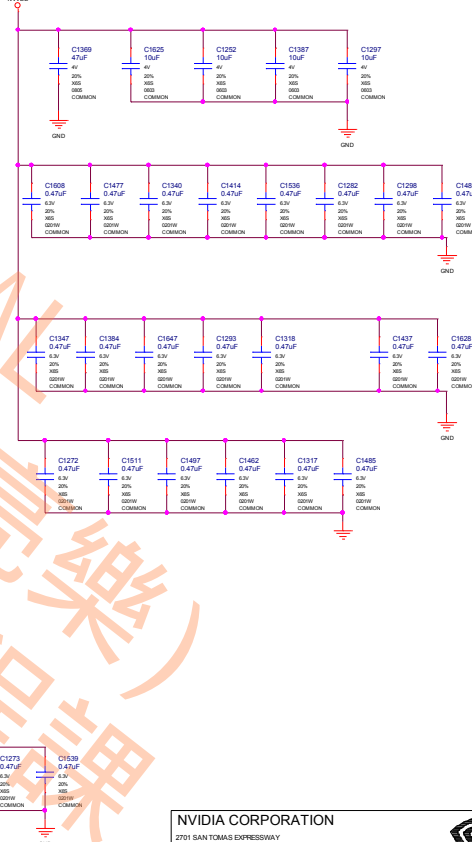
NVDC



1V8\_AON



## NVVDD



032-0532-000  
X6S  
0805

0805	
ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	GPU Decoupling

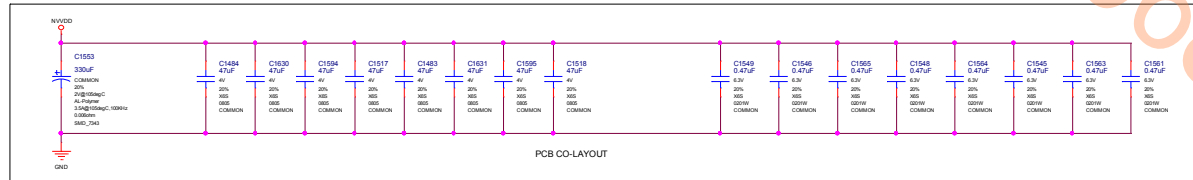
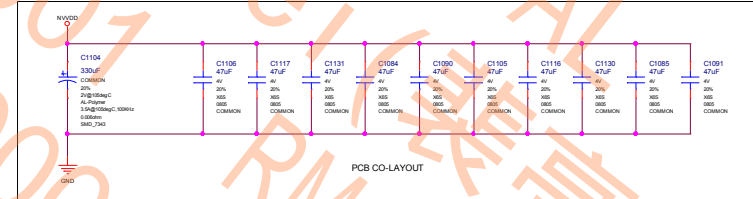
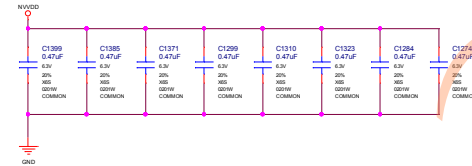
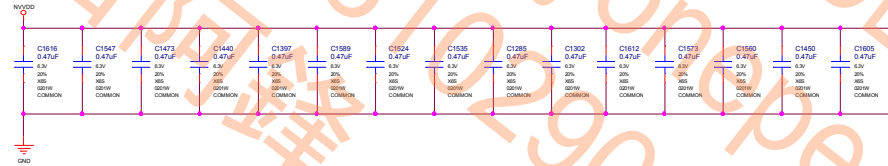
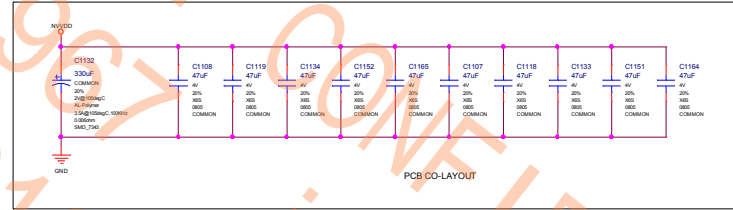
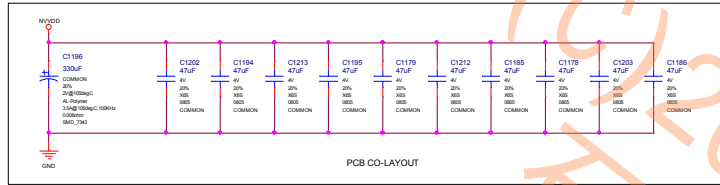
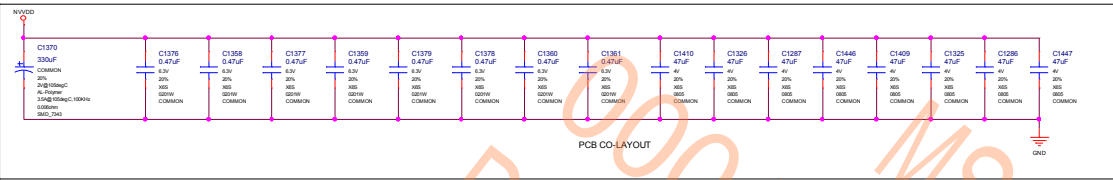
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ASSEMBLY	ASSEMBLY DESCRIPTION
PCB DETAIL	GPU DECOUPLING

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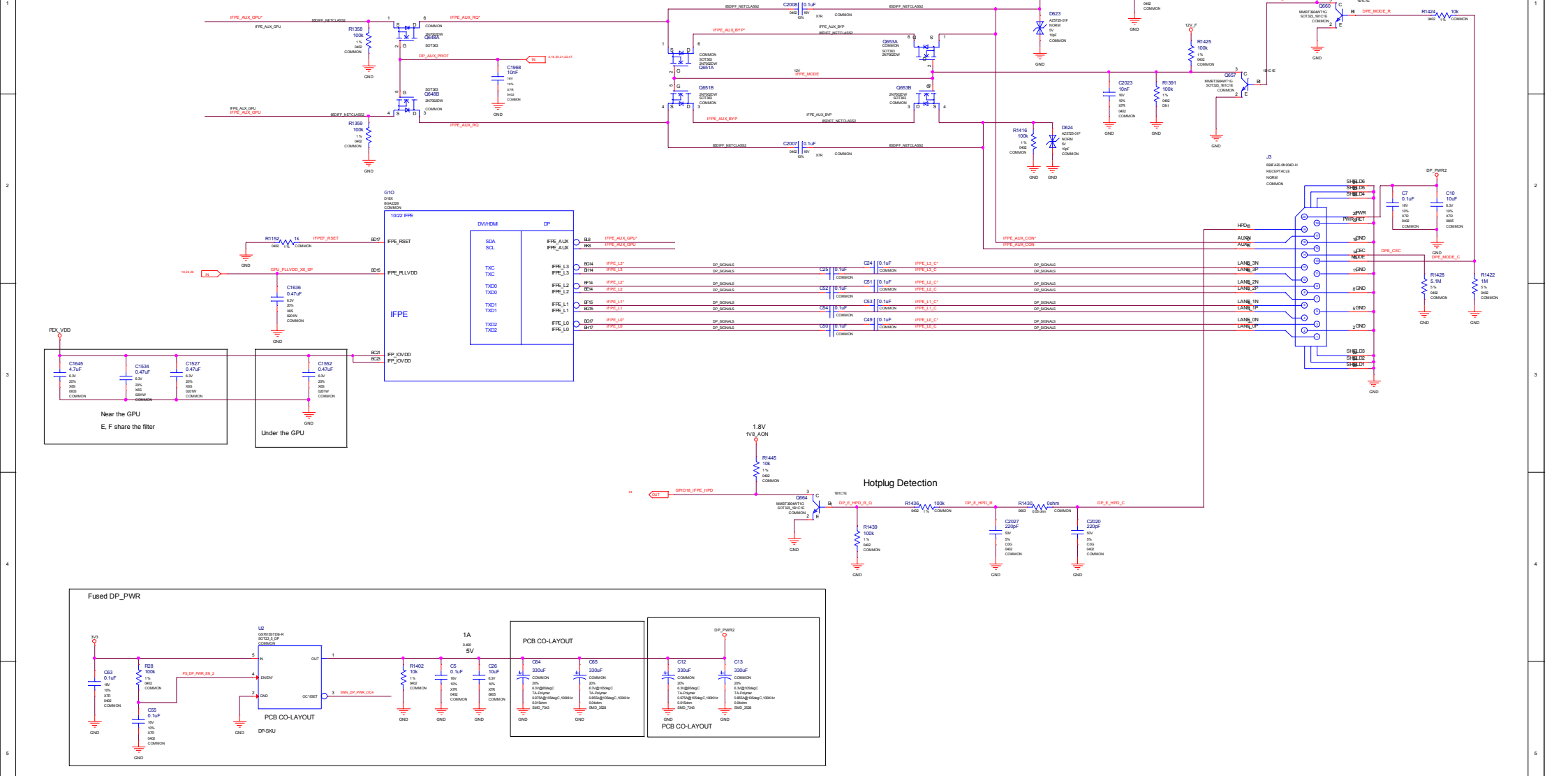


NV\_PN 600-1G180-BASE-200

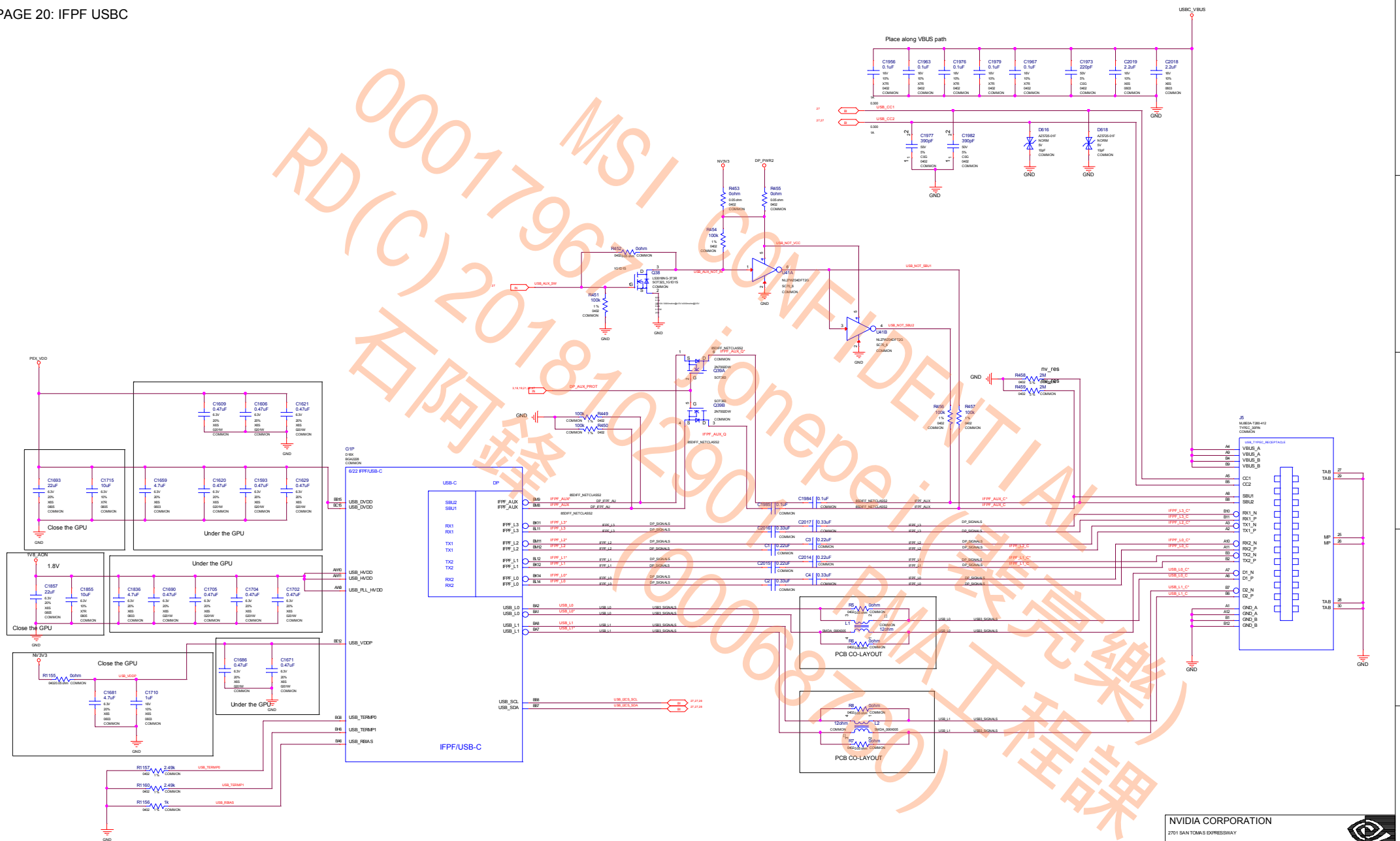
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PCB REV	PG180-A02
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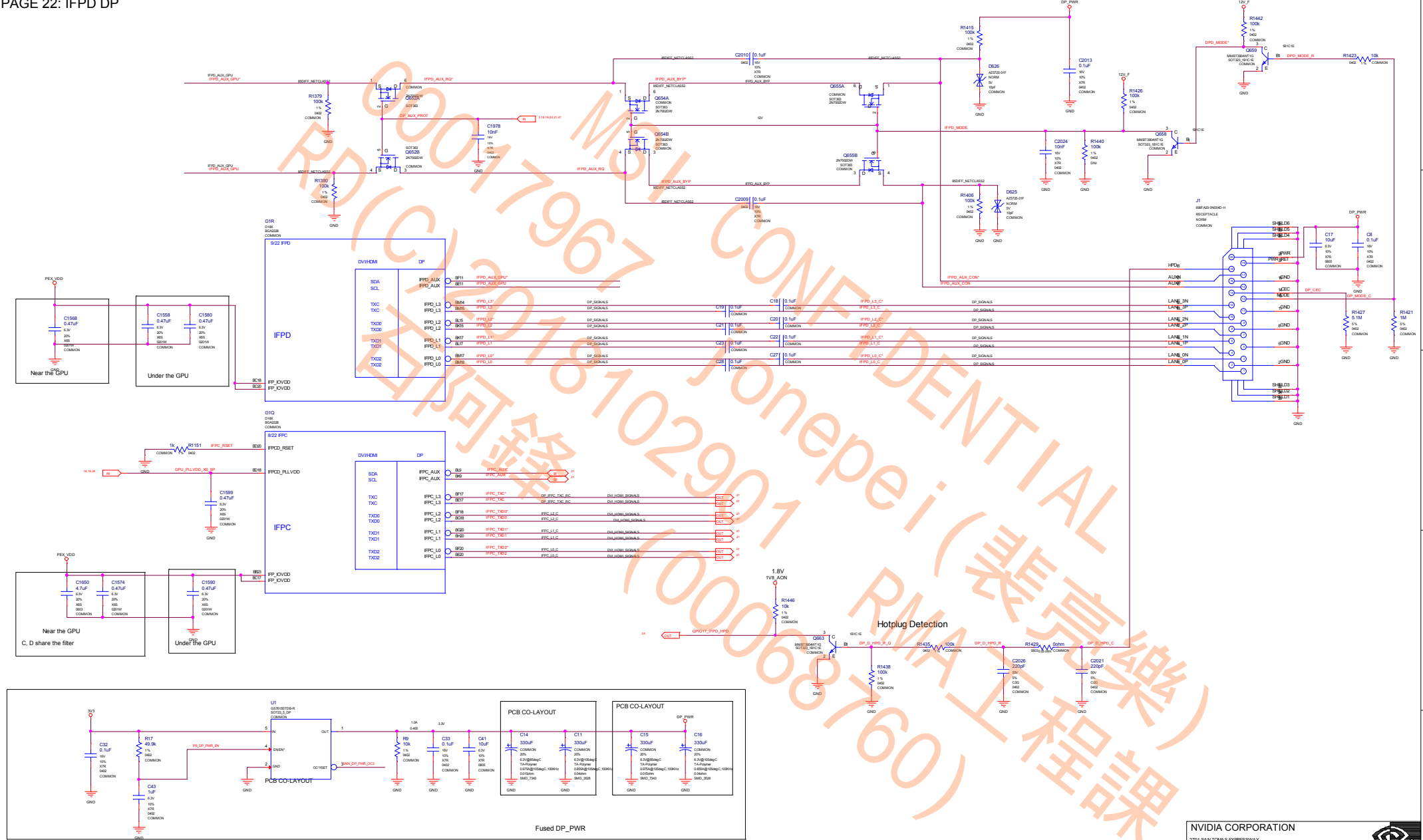
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ASSEMBLY	ASSEMBLY DESCRIPTION
PAGE DETAIL	IFPF USB-C

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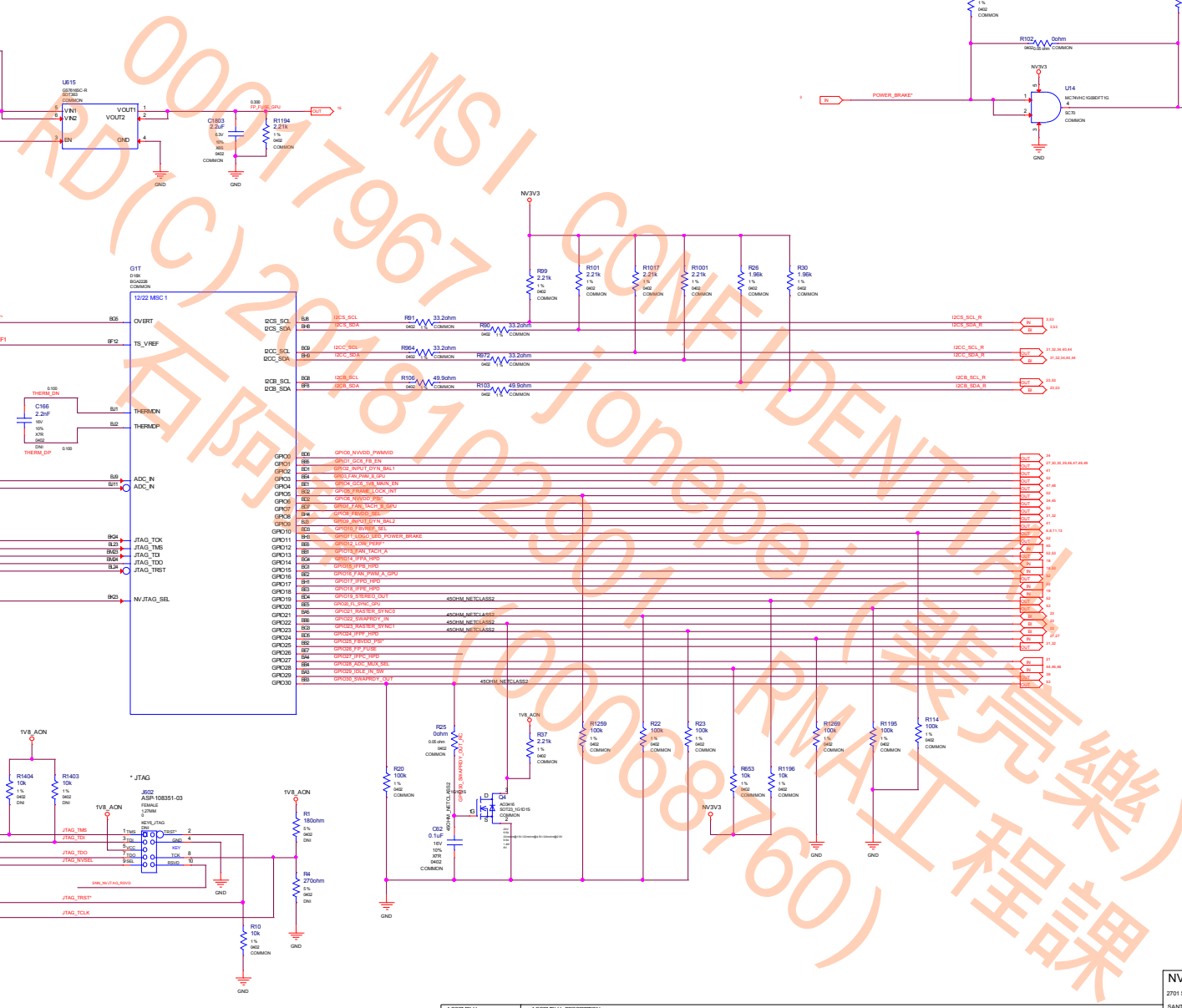


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ASSEMBLY	ASSEMBLY DESCRIPTION
PAGE DETAIL	IFPD DP

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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	MISC: FAN,THERMAL,JTAG,GPIO,STEREO

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

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

DEFAULT

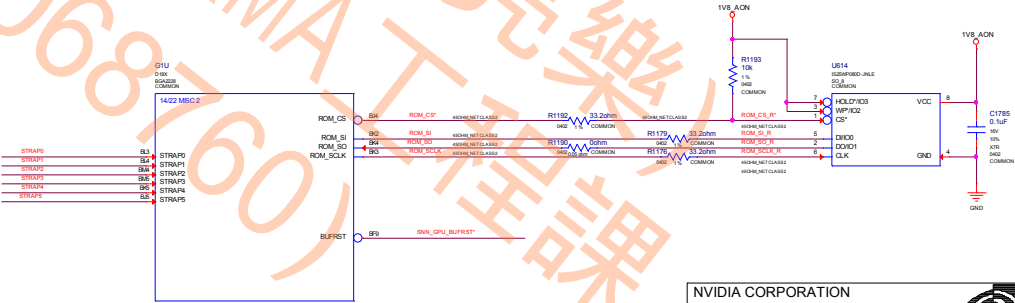
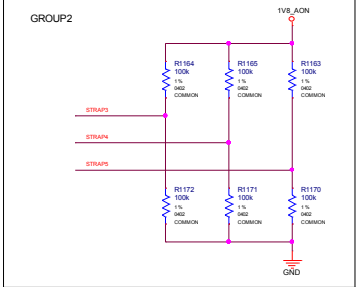
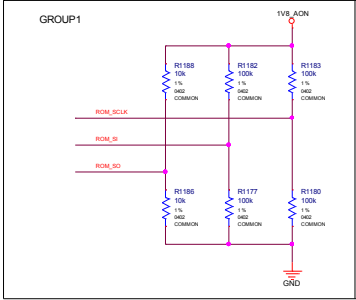
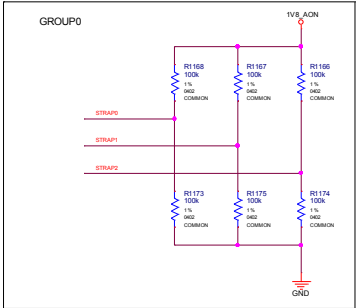
ROM_SO	ROM_SI	ROM_SCLK	DUMMY[2:0]FS_OVERT	
L	L	L	XXX1	1:ENABLE 0:DISABLE
L	L	M	XXX0	FS_OVERT ENABLE
L	L	M	XXX0	FS_OVERT DISABLE

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	0
L	L	H	0	0	0	1
L	L	L	0	0	0	0

Default

RAMCFG[4:0]	DENSITY	WIDTH	VENDOR
00000	8Gb	256-bit	Samsung
00001	8Gb	256-bit	Micron
00010	8Gb	256-bit	Hynix
00110	16Gb	256-bit	Samsung
00111	16Gb	256-bit	Samsung



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ROM REV

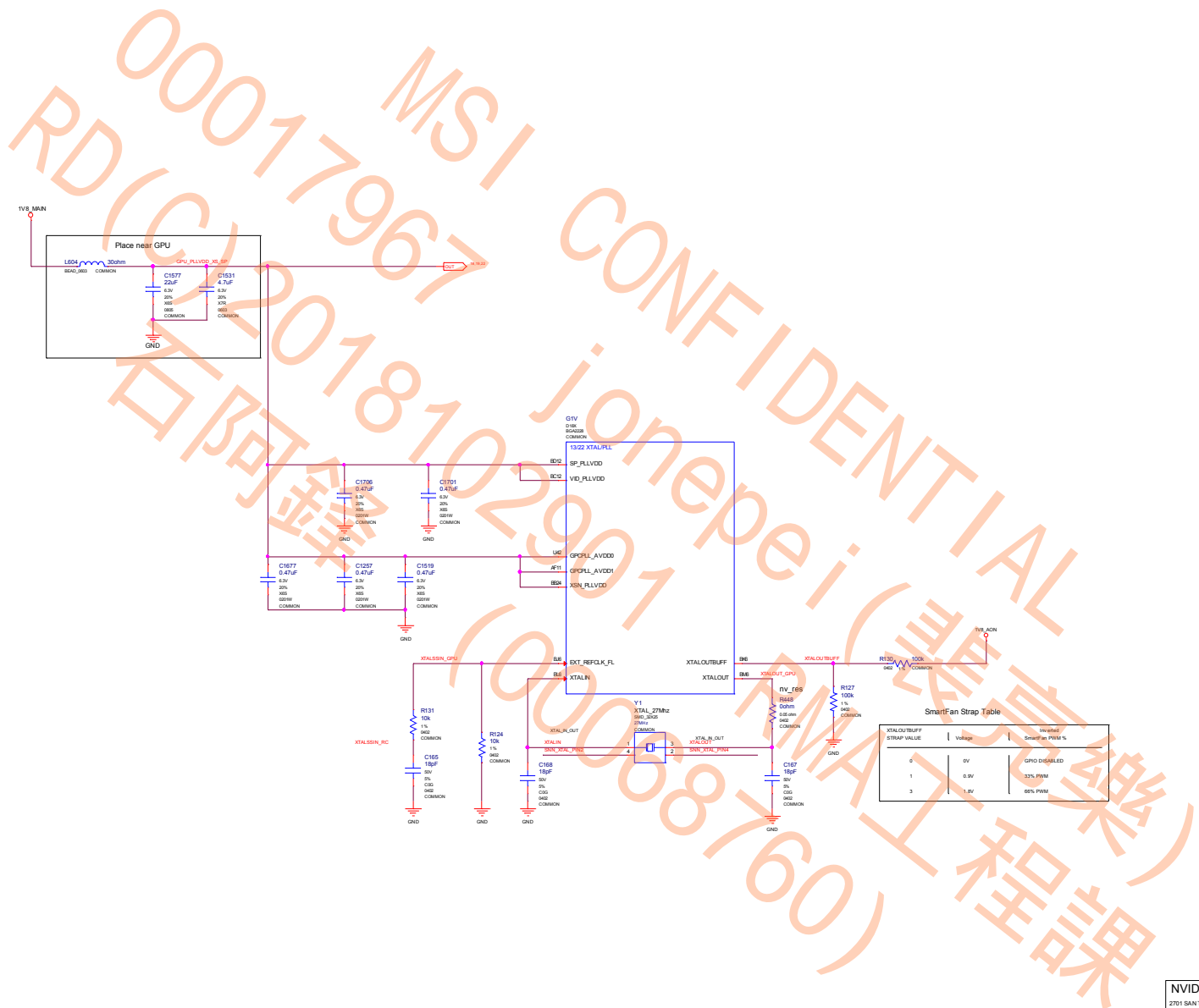
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XTALOUTBUFF STRAP VALUE	Voltage	Inverted Smart on PWM %
0	0V	GPIO DISABLED
1	0.9V	33% PWM
3	1.8V	66% PWM

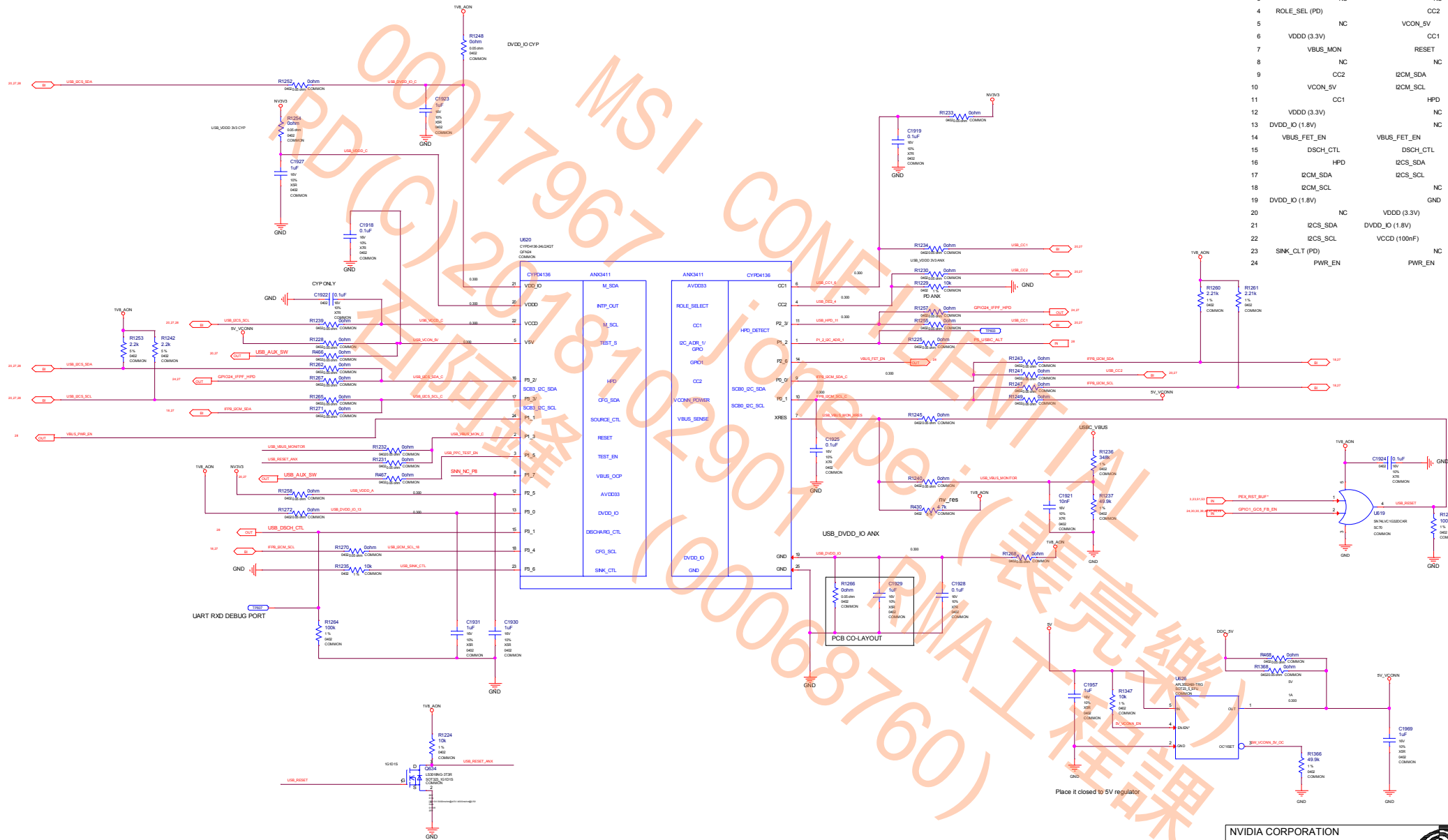


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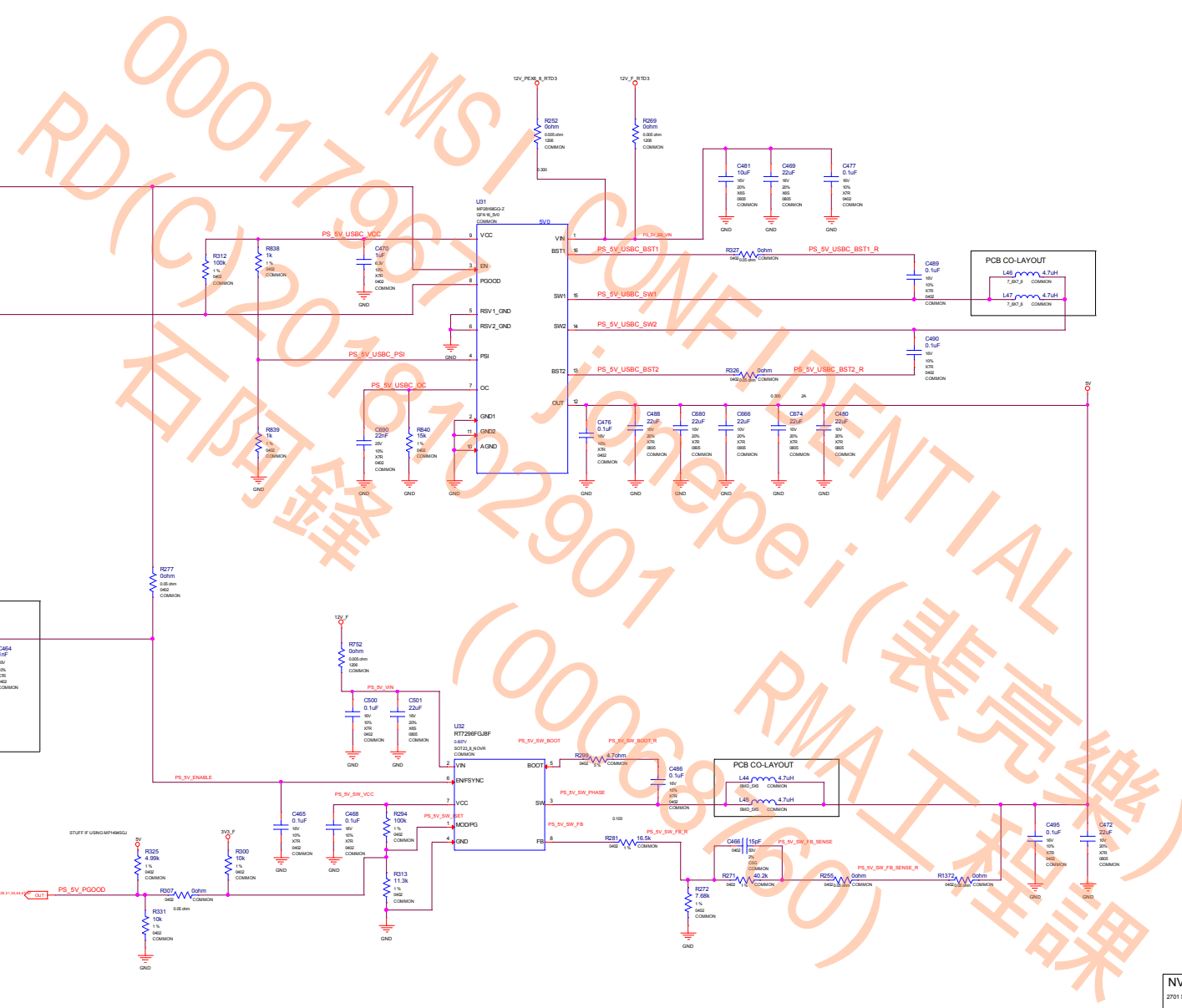
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2	RESET	VBUS_MON
3	NC	NC
4	ROLE_SEL (PD)	CC2
5	NC	VCON_SV
6	VDDD (3.3V)	CC1
7	VBUS_MON	RESET
8	NC	NC
9	CC2	I2CM_SDA
10	VCON_SV	I2CM_SCL
11	CC1	HPD
12	VDDD (3.3V)	NC
13	DVDD_IO (1.8V)	NC
14	VBUS_FET_EN	VBUS_FET_EN
15	DSCH_CTL	DSCH_CTL
16	HPD	I2CS_SDA
17	I2CM_SDA	I2CS_SCL
18	I2CM_SCL	NC
19	DVDD_IO (1.8V)	GND
20	NC	VDDD (3.3V)
21	I2CS_SDA	DVDD_IO (1.8V)
22	I2CS_SCL	VCCD (100nF)
23	SINK_CTL (PD)	NC
24	PWR_EN	PWR_EN

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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	MISC USB PPC

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ASSEMBLY	<ASSEMBLY_DESCRIPTION
PAGE DETAIL	PS: 5V, 5V BACKUP

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PCB REV	PG180-A02
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BCM REV	A
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<b>NV_PN</b>		<b>600-1G180-BASE-200</b>		
<b>PCB REV</b>		<b>PG180-A02</b>		<b>PAGE</b>
<b>BOM REV</b>		<b>A</b>		<b>34 OF 54</b> <b>DATE</b>
				<b>27-JUN-2018</b>

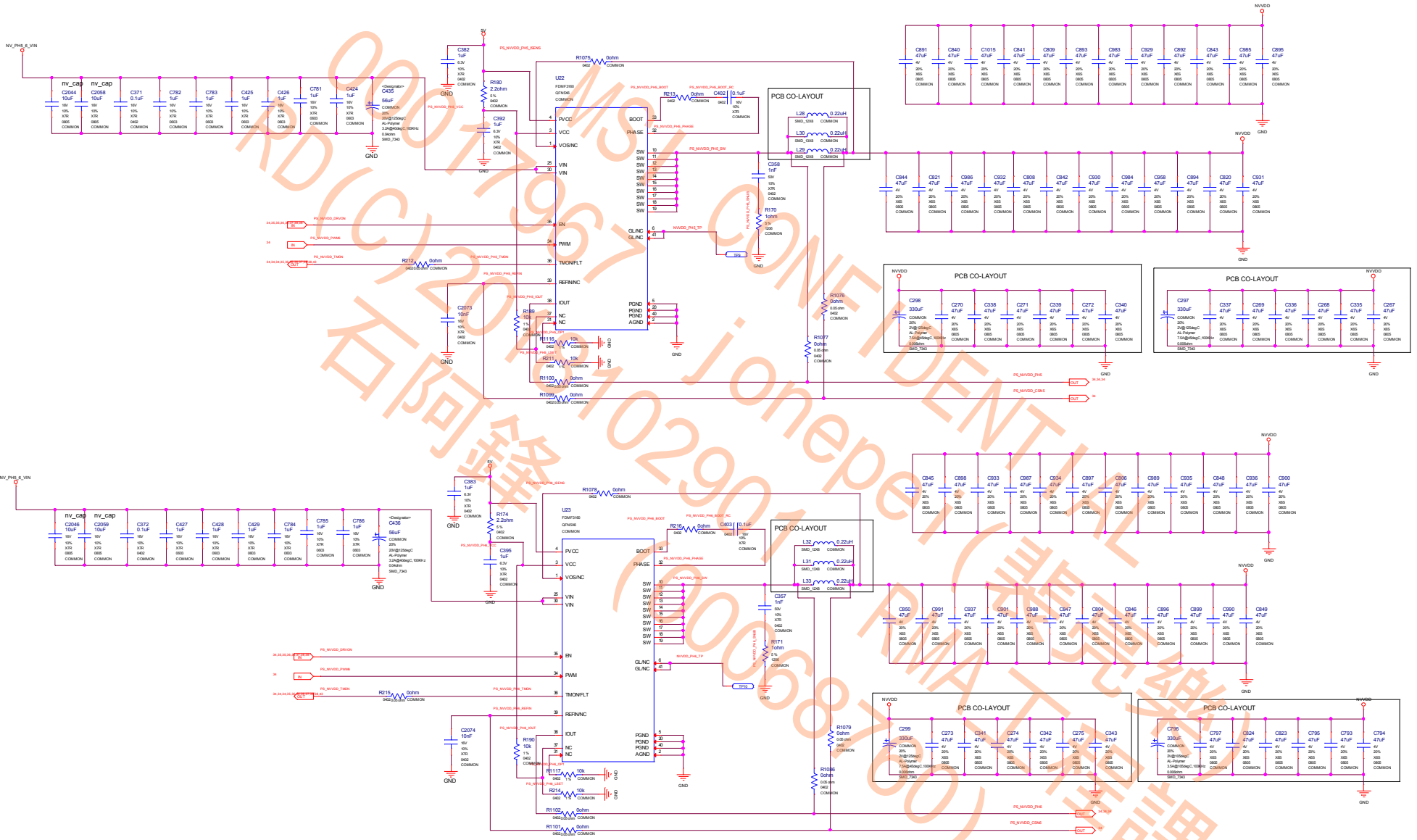


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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PS: NVVDD Phase 1, 2



ASSEMBLY	<ASSEMBLY_DESCRIPTION
PAGE DETAIL	PS: NV/DD Phase 3, 4



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ASSEMBLY	ASSEMBLY DESCRIPTION
PAGE: 37 OF 54	PS: NVVDD Phase 5, 6

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PCB REV

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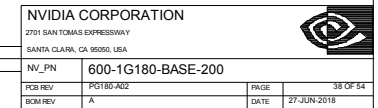
DATE

27-JUN-2018

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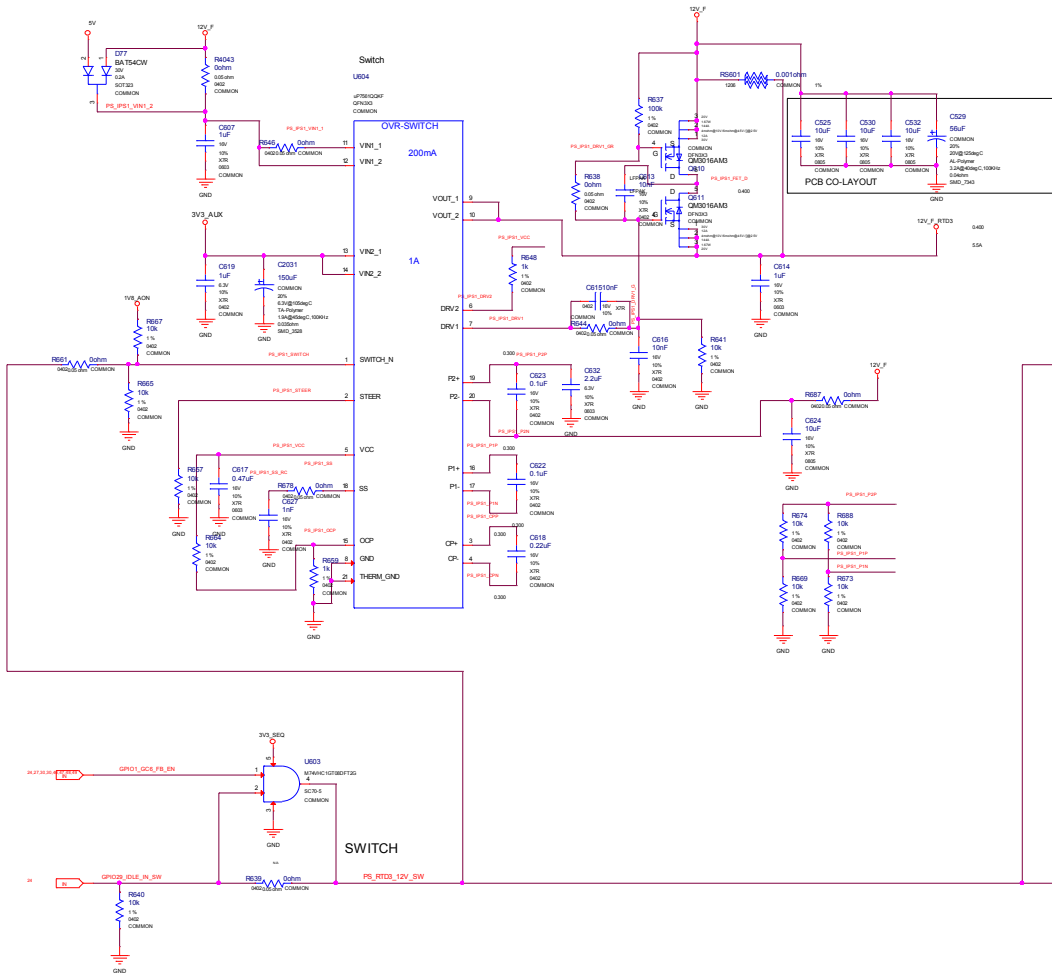


AND GATE LOGIC FOR P-BOARD

GPIO1	GPIO29	SWITCH	VOUT
0	0	0	12V_F
0	1	0	12V_F
1	0	0	12V_F
1	1	1	3V3A

AND GATE LOGIC FOR P-BOARD

GPIO1	GPIO29	SWITCH	VOUT
0	0	0	3V3
0	1	0	3V3
1	0	0	3V3
1	1	1	3V3A

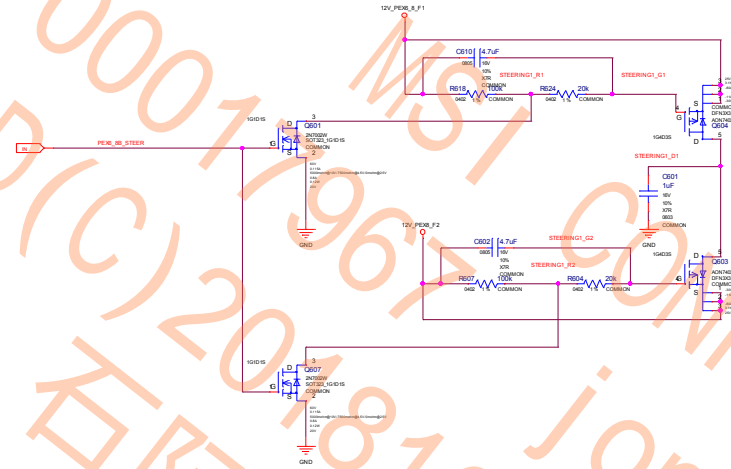




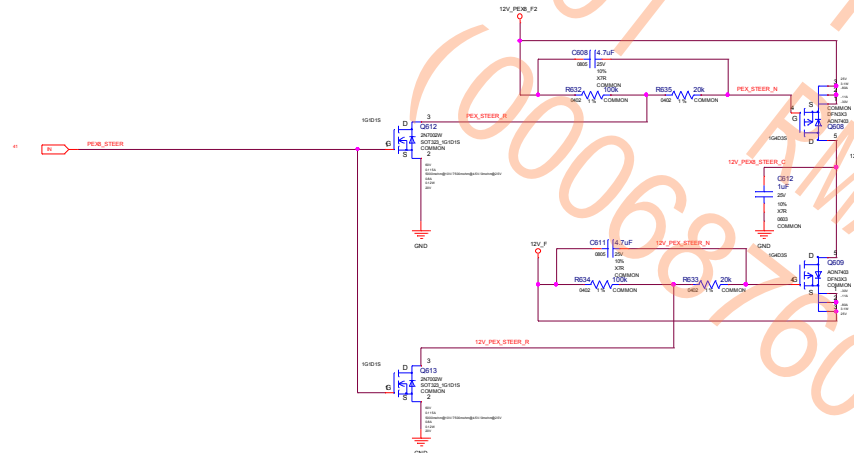




12V CURRENT STEERING (UNDER POWER BOOT):  
GUIDES CURRENT FROM PEX EDGE TO PEX 6/8 PIN INPUT AREA



12V CURRENT STEERING (UNDER POWER BOOT):  
GUIDES CURRENT FROM PEX EDGE TO PEX 8 PIN INPUT AREA



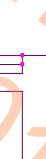
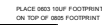
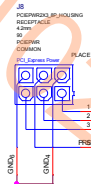
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PAGE DETAIL	PS: 12V CURRENT STEERING

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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PS: INPUTS, FILTERING AND MONITORING

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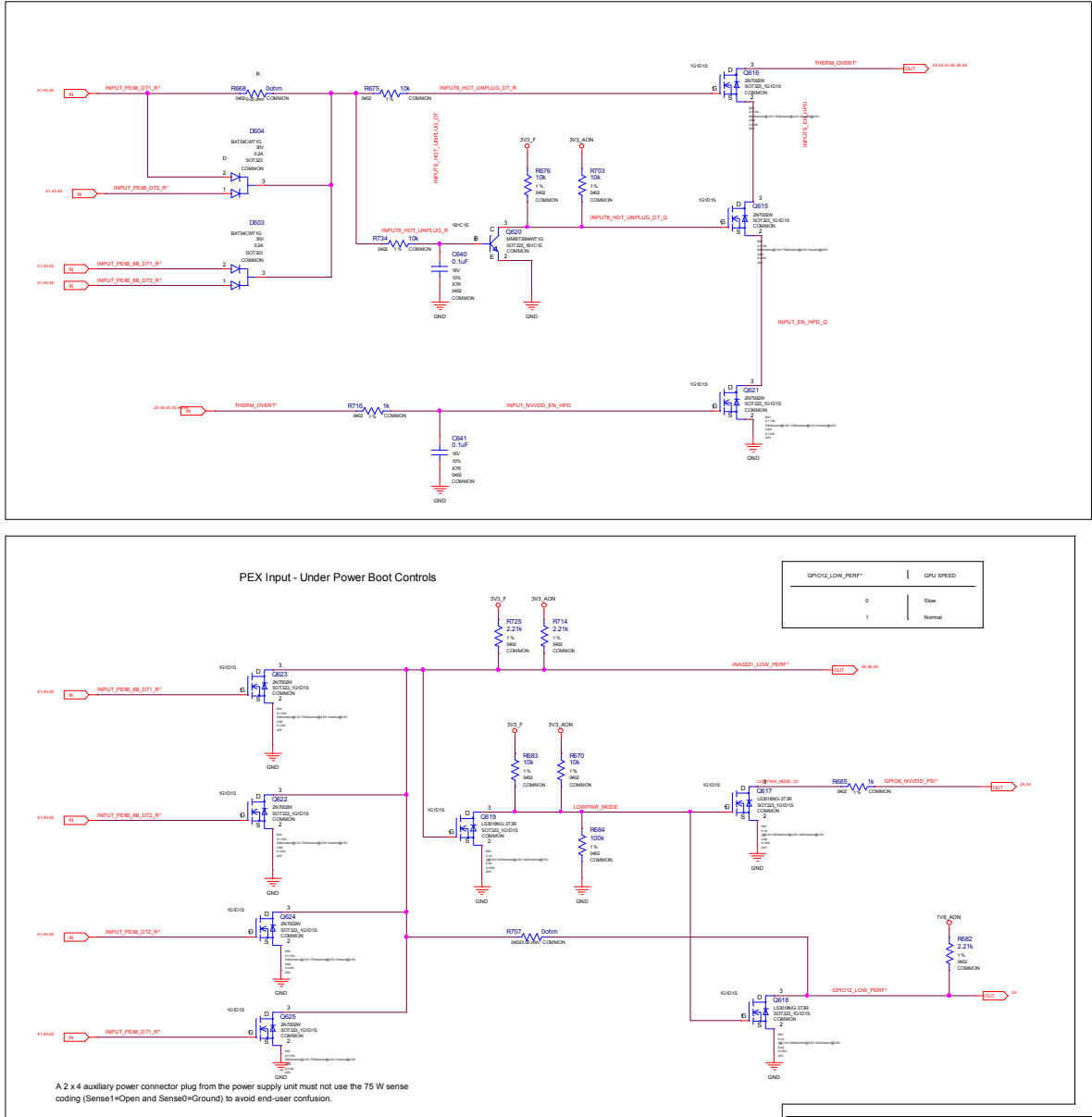
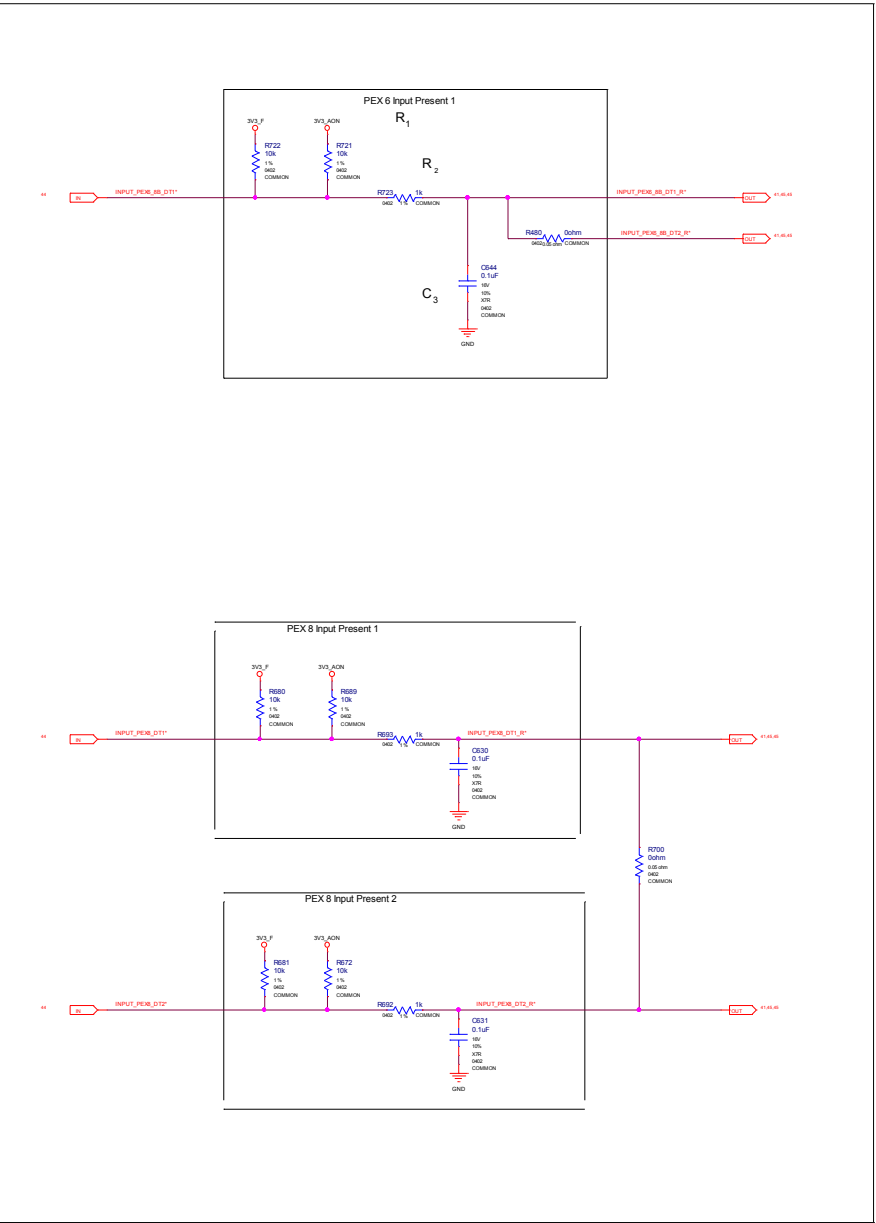


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ASSEMBLY	ASSEMBLY DESCRIPTION
PAGE DETAIL	PS: CURRENT STEERING, HOT UNPLUG DETECT

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PCB REV

PG180-A02

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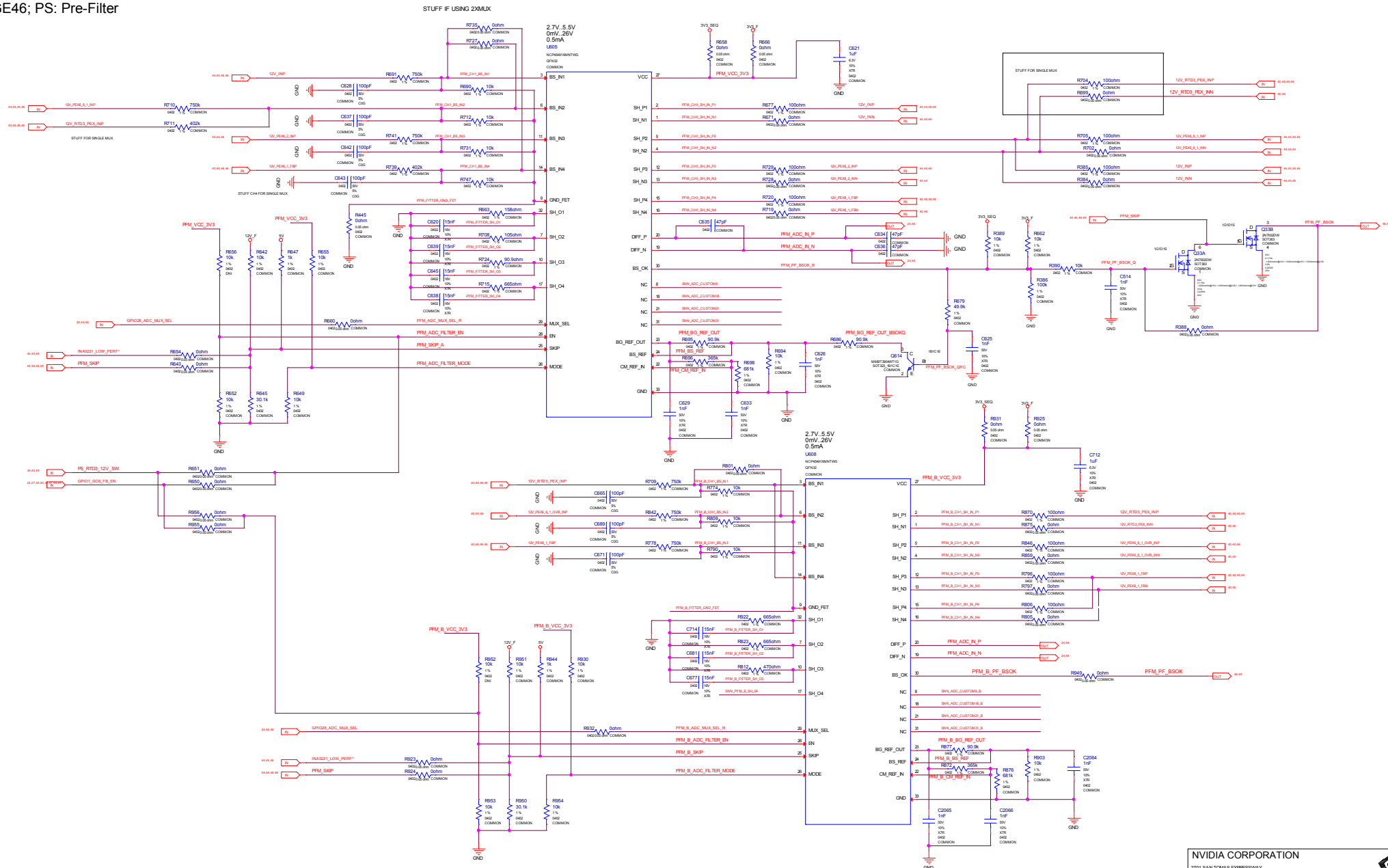
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PAGE DETAIL	PS: PRE-FILTER

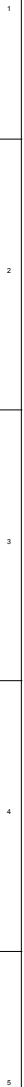
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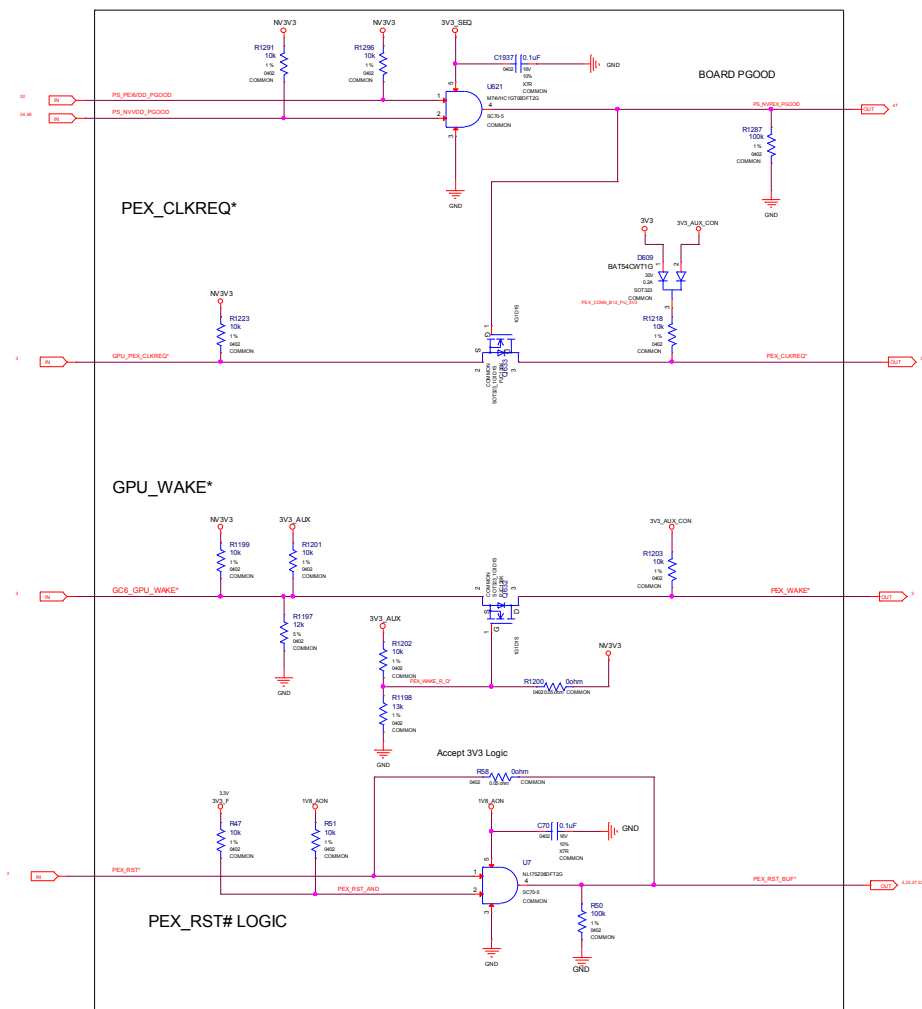


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PAGE DETAIL	SEQUENCE: DISCHARGE

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NV_PN	600-1G180-BASE-200
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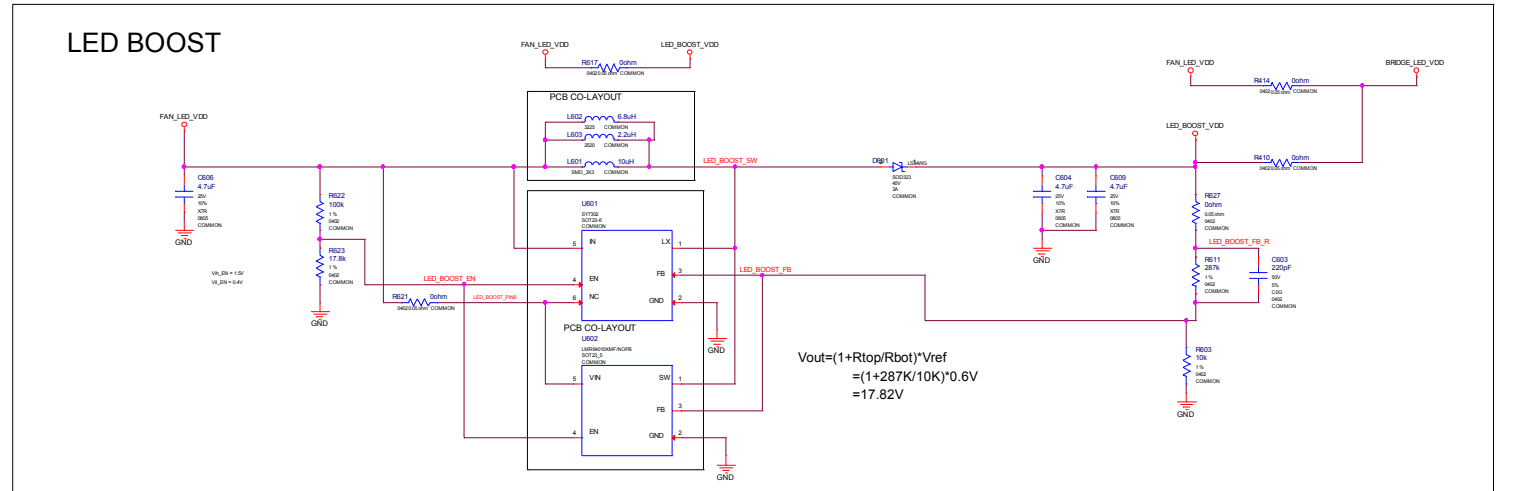
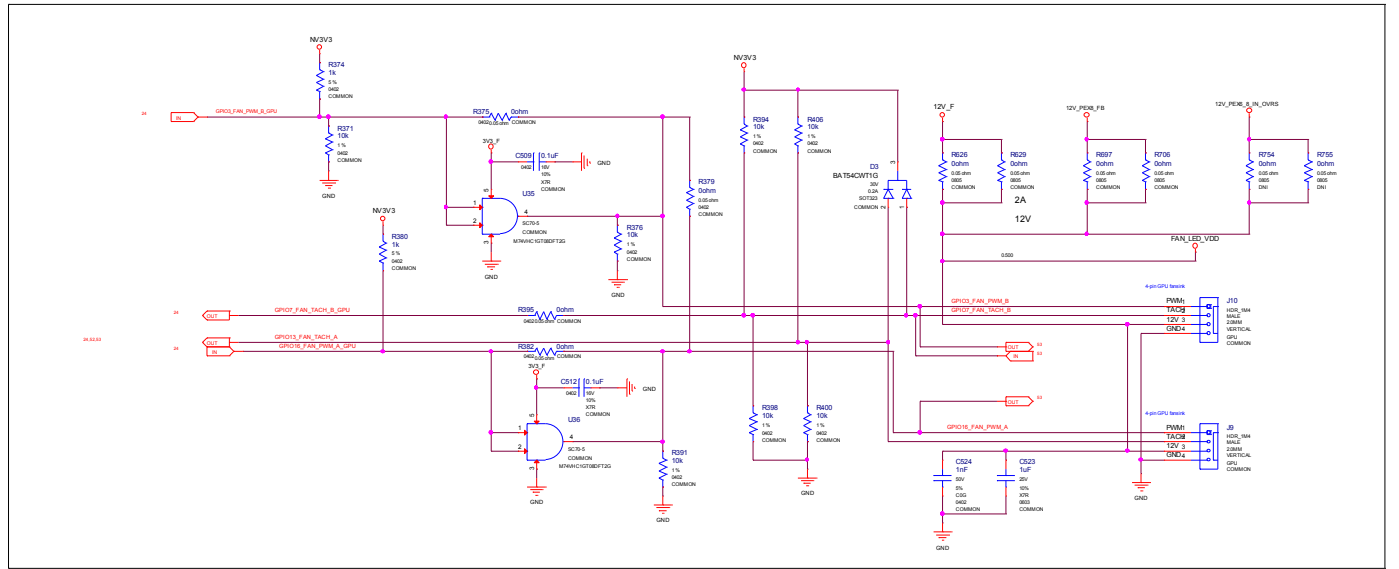
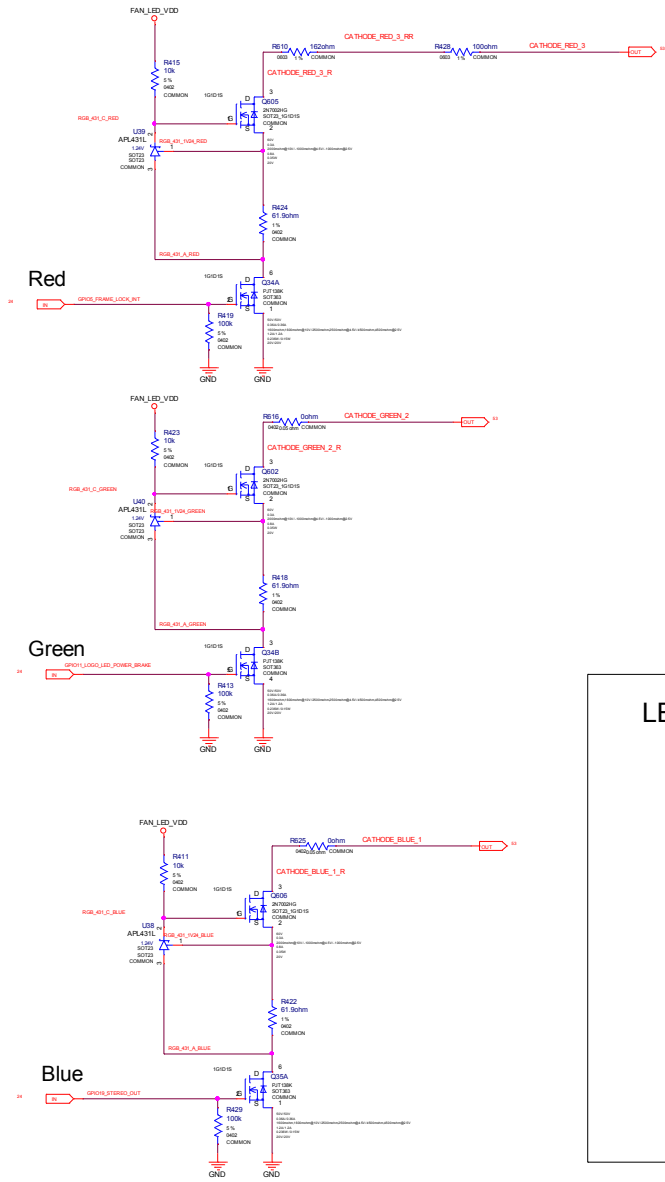
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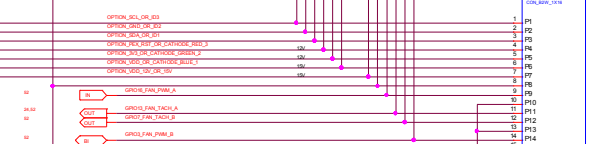
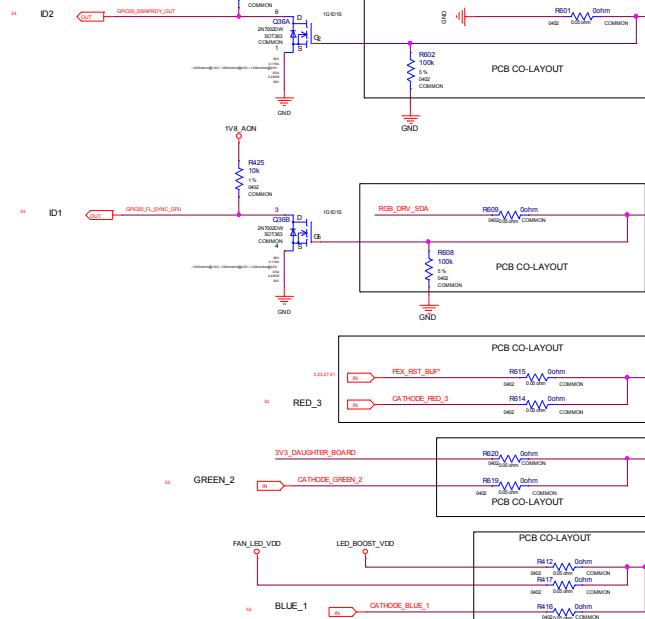
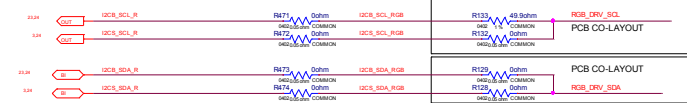


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ASSEMBLY	ASSEMBLY DESCRIPTION
PAGE DETAIL	LED & FAN HEADERS

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15-PIN STRAIGHT PRIMARY SOURCE -> 080-1617-000: ACES \$0.1165  
15-PIN STRAIGHT SECOND SOURCE -> 080-1628-000: WESON \$0.23

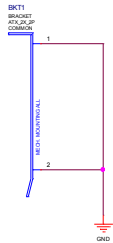
<b>NVIDIA CORPORATION</b> 2701 SAN TOMAS EXPRESSWAY SANTA CLARA, CA 95050, USA			
<b>NV_PN</b>		<b>600-1G180-BASE-200</b>	
<b>PCB REV</b>	<b>PG180-A02</b>	<b>PAGE</b>	<b>53 OF 54</b>
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Brackets:



Bracket Screw



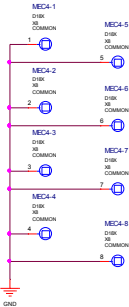
BOARD STIFFENER

MEC501

GPU Socket Symbol

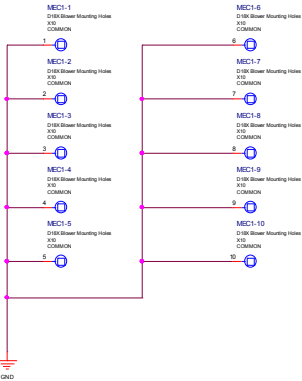


GPU Mounting holes



STIFFENER

Mechanical Holes Symbol



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ASSEMBLY	<ASSEMBLY DESCRIPTION>
PAGE DETAIL	Mechanical: Bracket/Thermal Solution

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