

PG180-A02

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

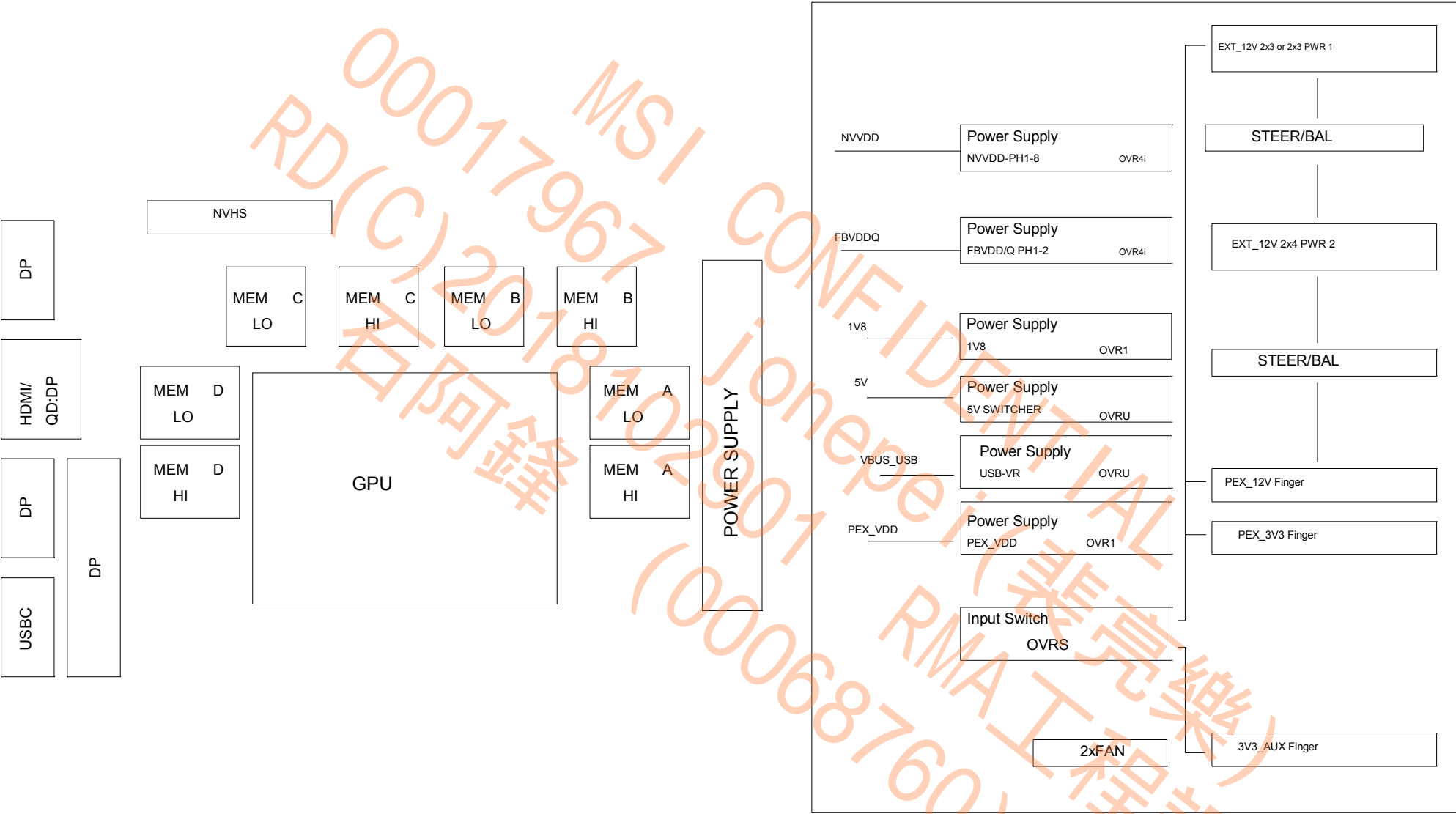
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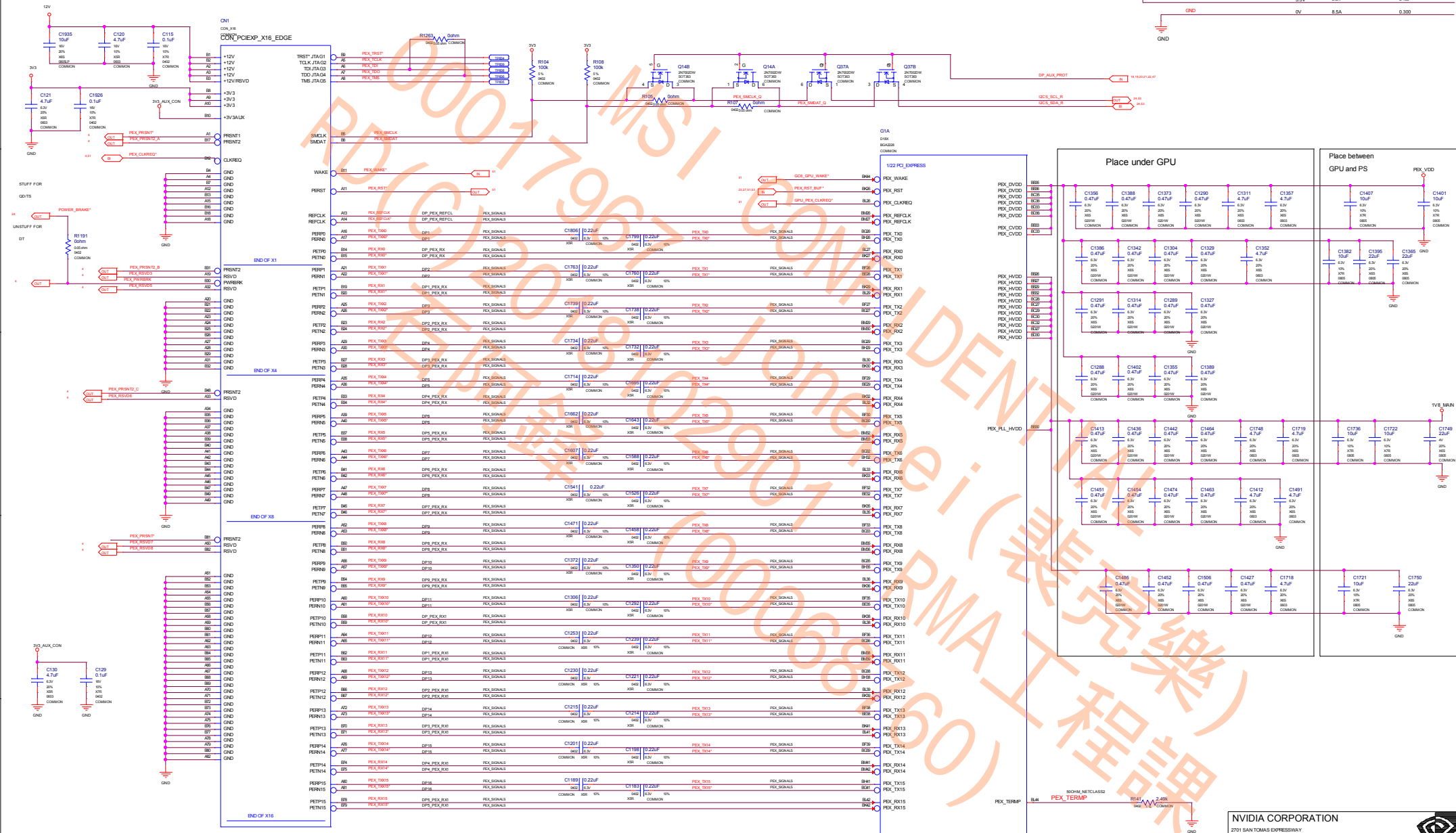
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ASSEMBLY	ASSEMBLY DESCRIPTION
PAGE DETAIL	Block Diagram

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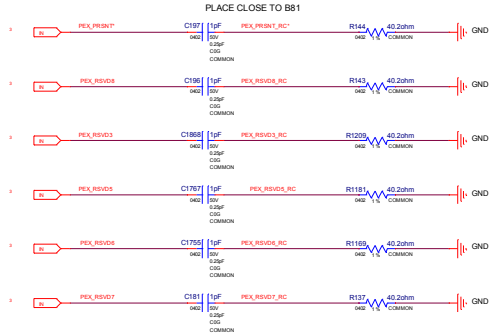
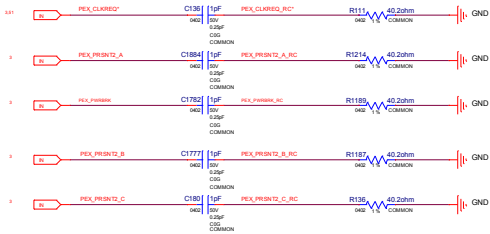


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ASSEMBLY	ASSEMBLY DESCRIPTION
PCIEXP_X16_EDGE	PCI Express

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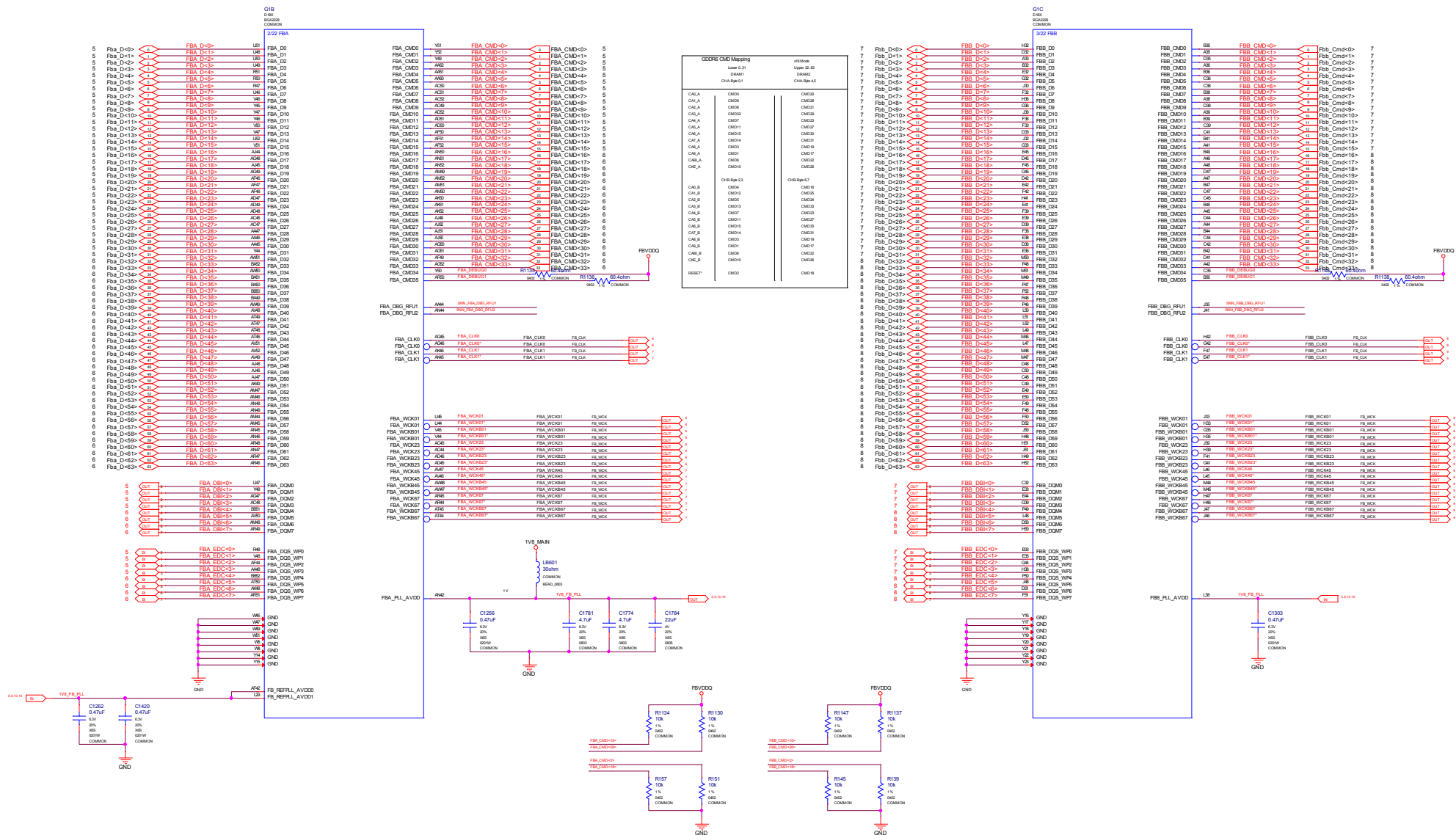


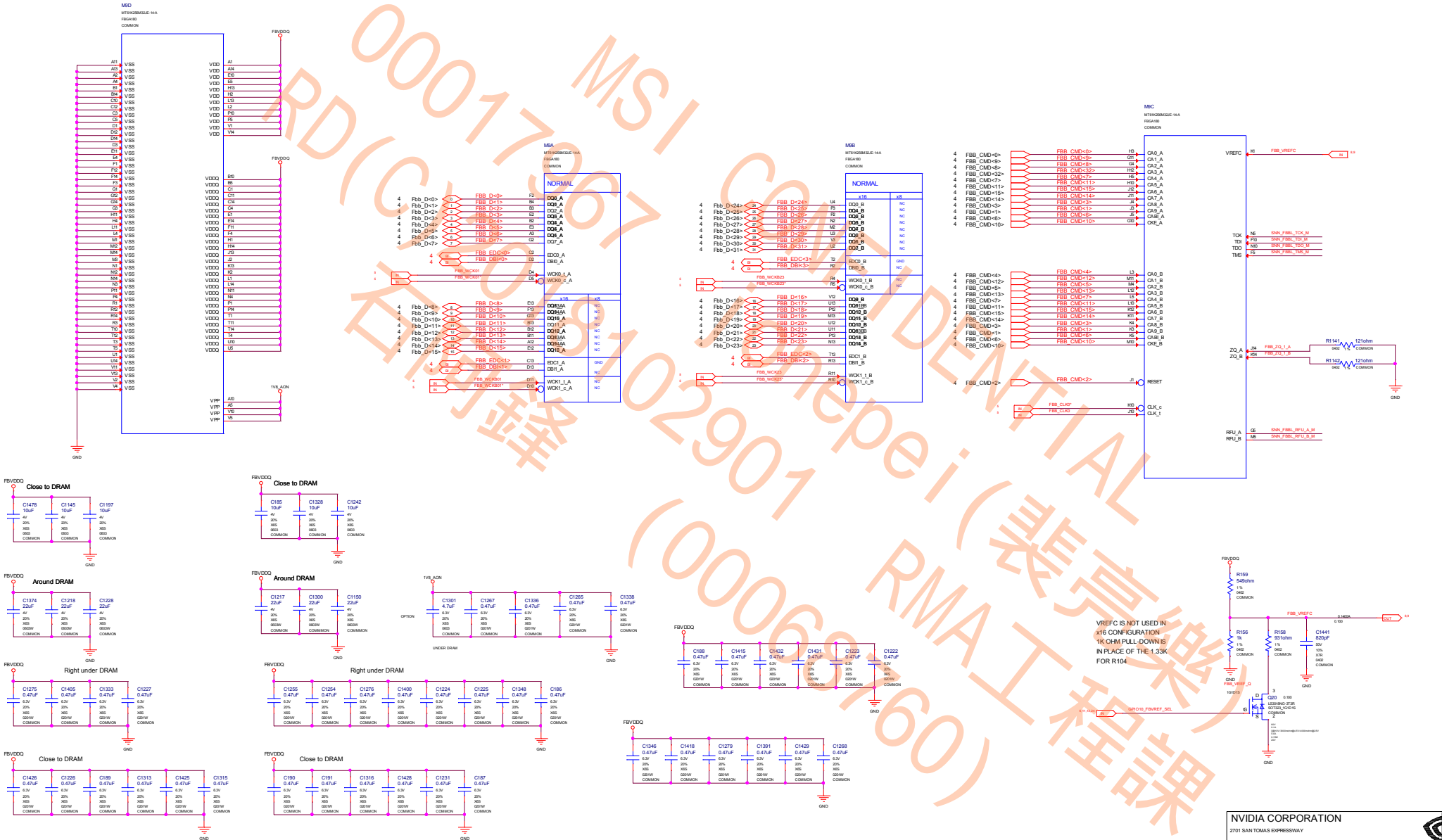
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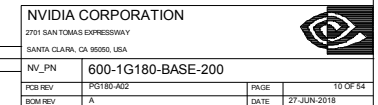
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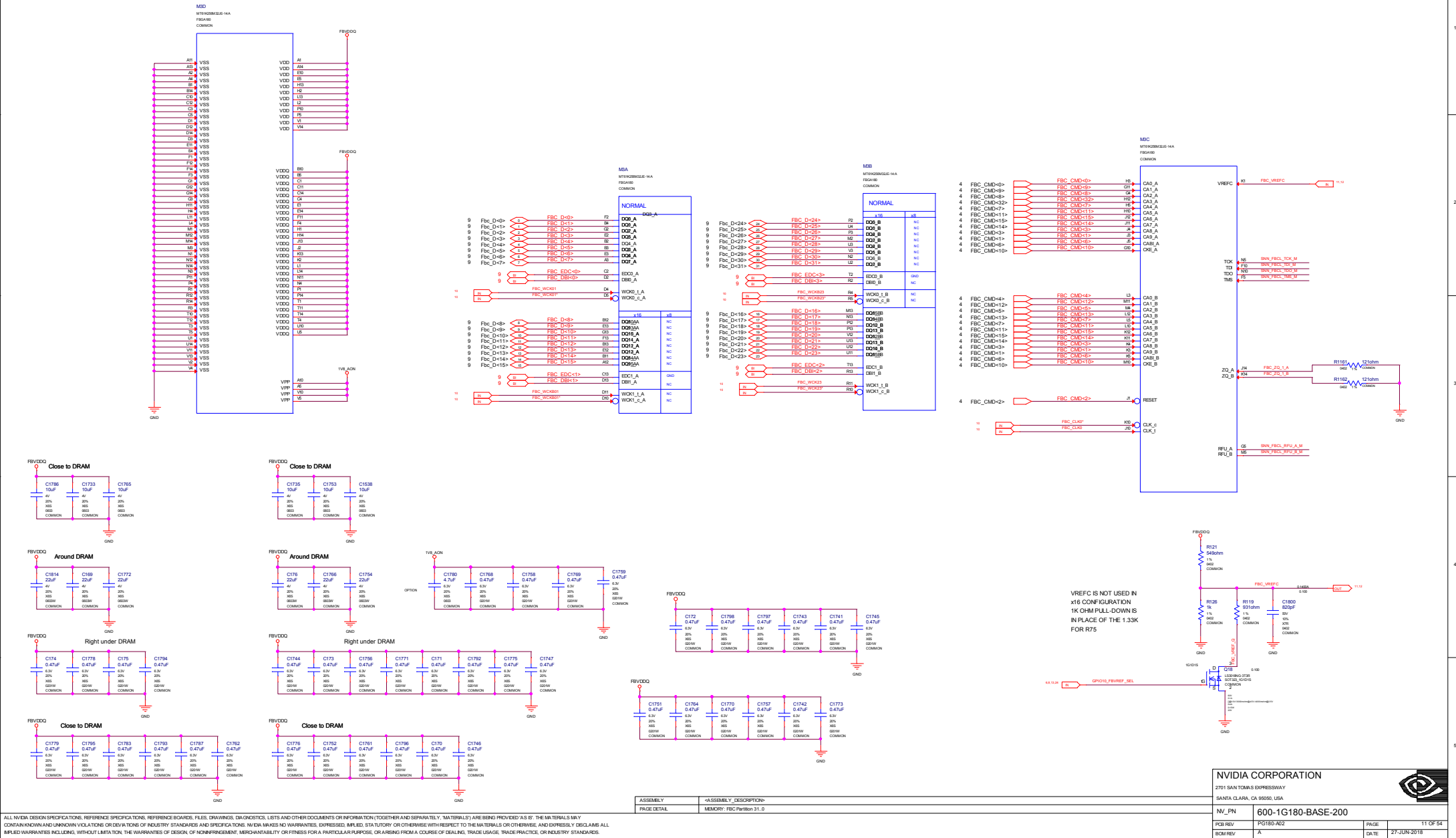






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ASSEMBLY	ASSEMBLY DESCRIPTION
PAGE DETAIL	MEMORY: FBC Partition 31..0

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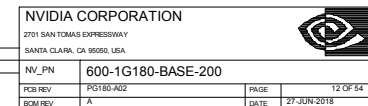
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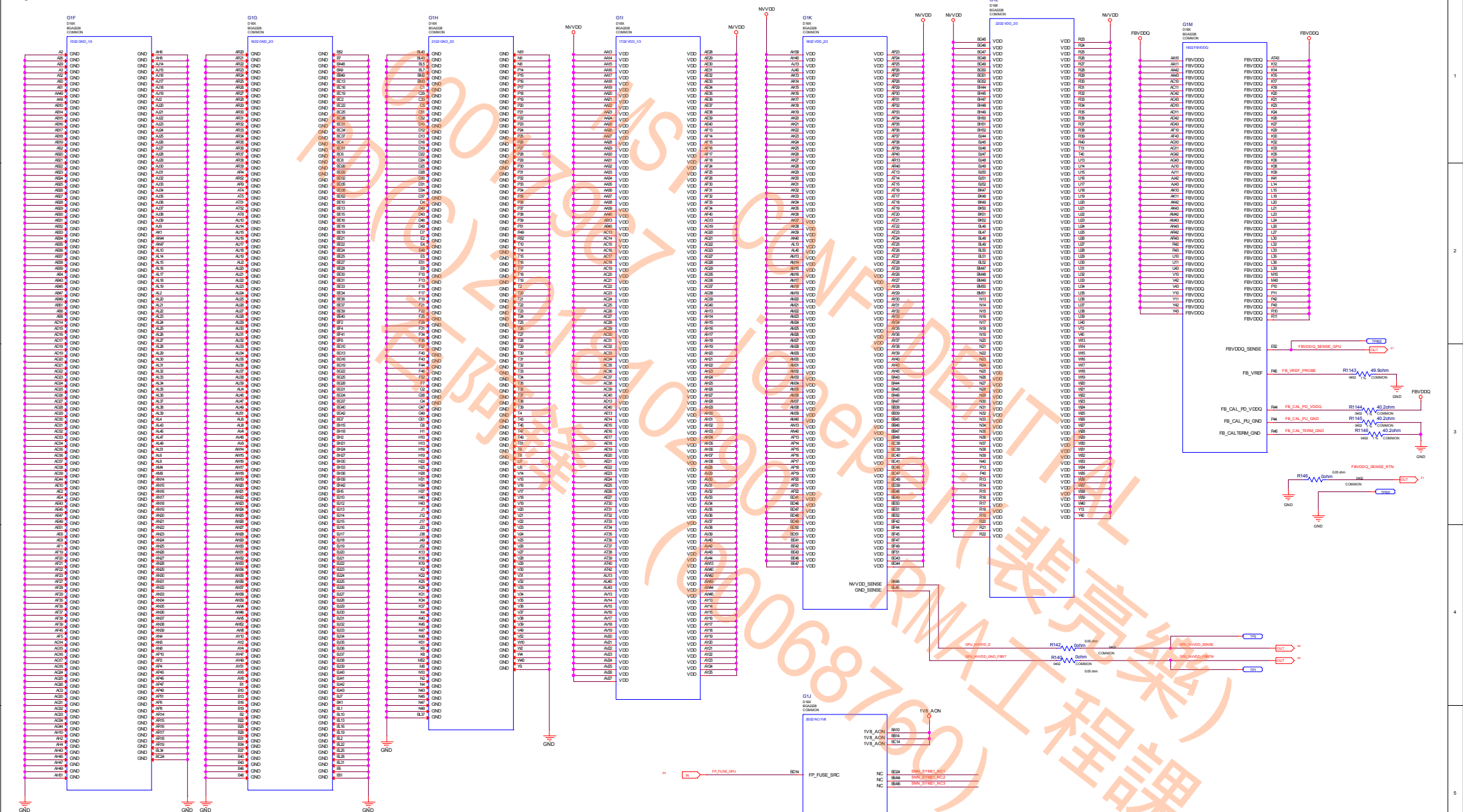
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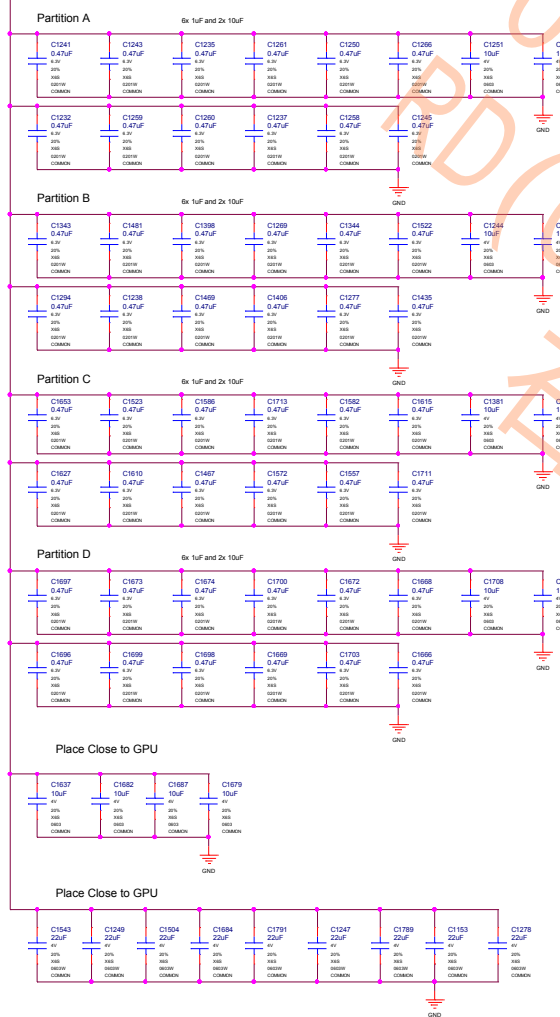


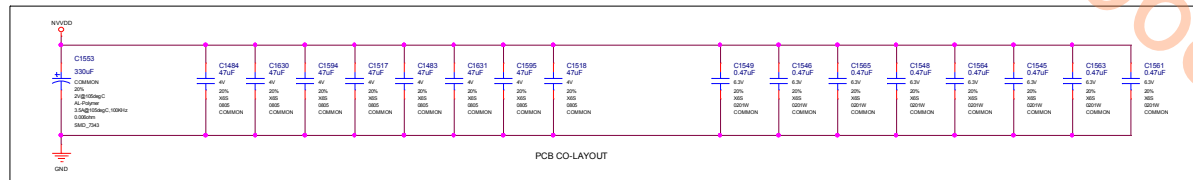
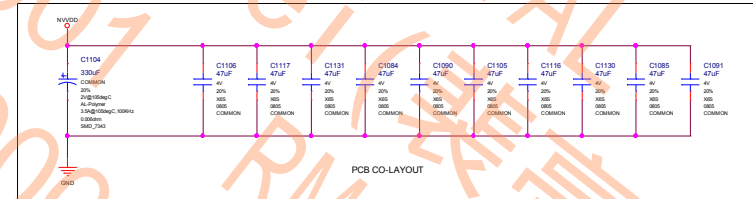
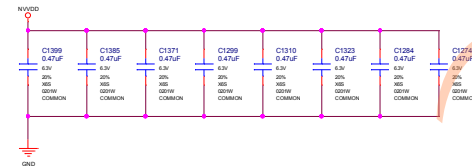
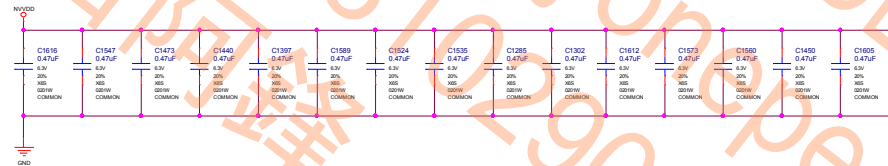
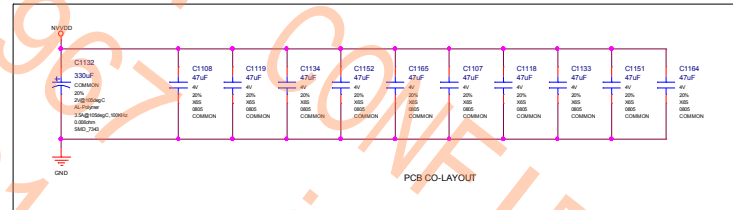
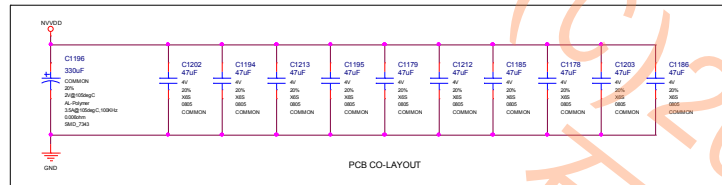
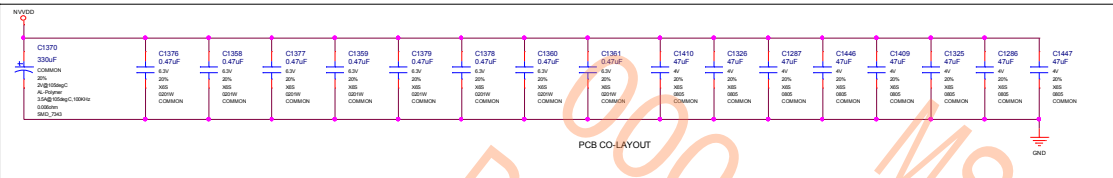


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NVVDD

FBVDDQ





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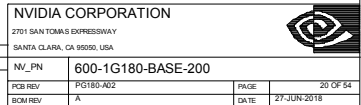


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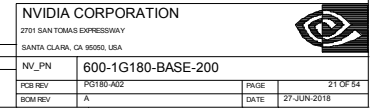
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ASSEMBLY	ASSEMBLY DESCRIPTION
PCB DETAIL	GPU DECOUPLING

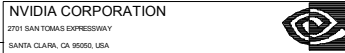
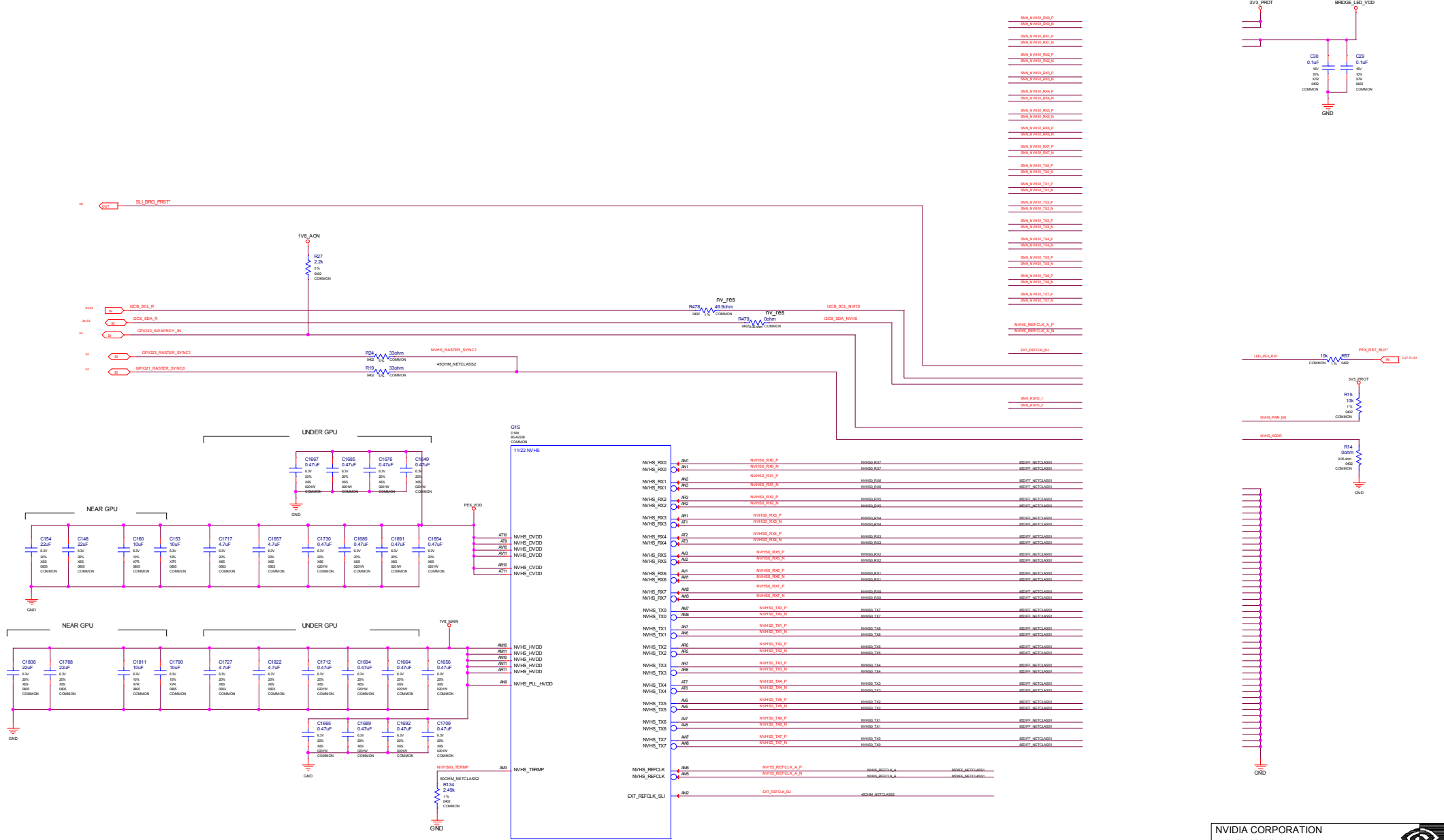
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PAGE DETAIL	IPF USBC

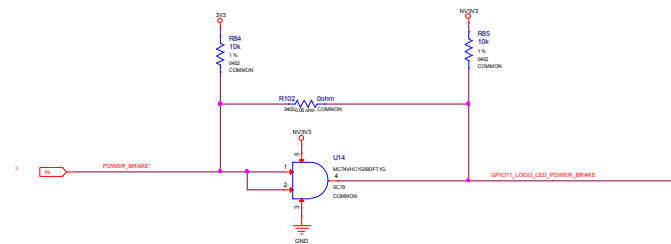



ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	IFPC HDMI 2.0/DP



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

1:SMB_ALT_ADDR ENABLE
0:SMB_ALT_ADDR DISABLE

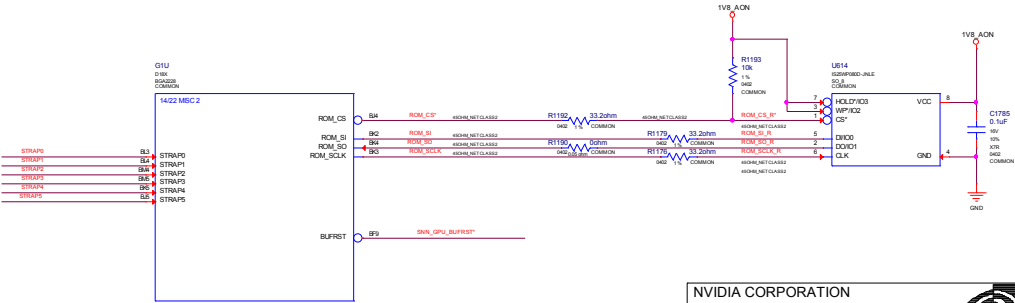
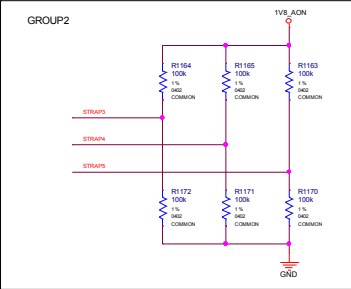
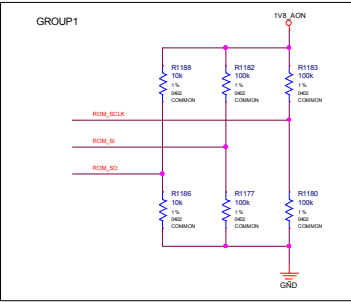
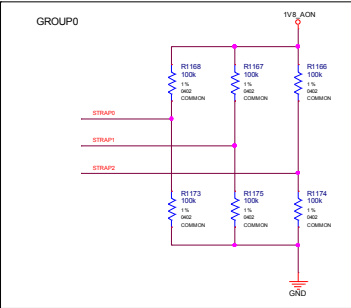
1:DEVID_SEL REBRAND
0:DEVID_SEL ORIGINAL

1:PCIE_CFG LOW POWER
0:PCIE_CFG HIGH POWER

1:VGA_DEVICE ENABLE
0:VGA_DEVICE DISABLE

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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ASSEMBLY	~ASSEMBLY DESCRIPTION~
PAGE:DETAIL	MISC3: ROM STRAPS

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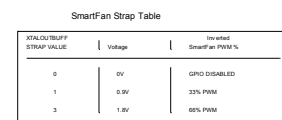
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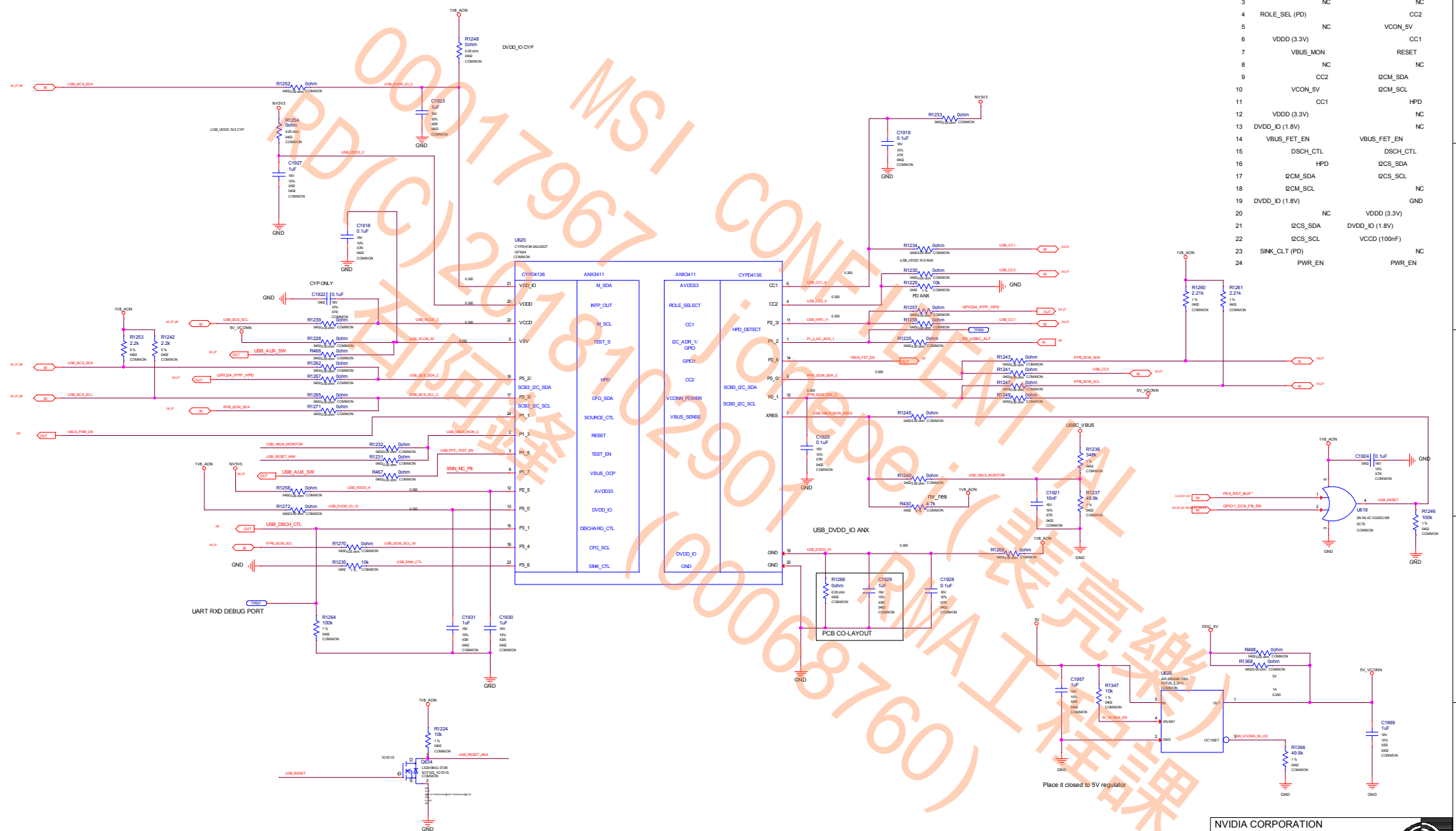
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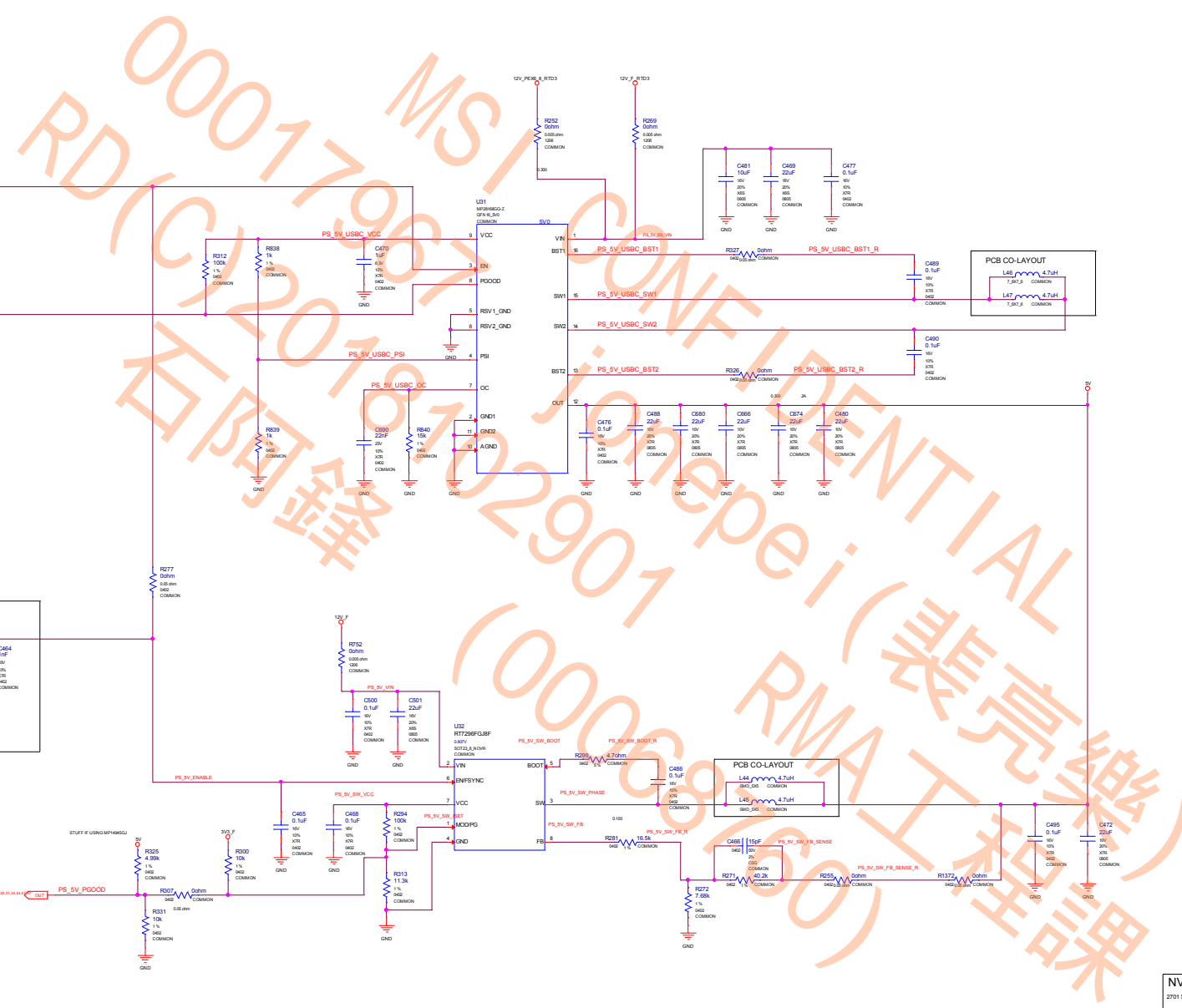
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A	B	C	D	E	F	G	H
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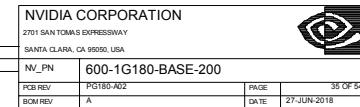
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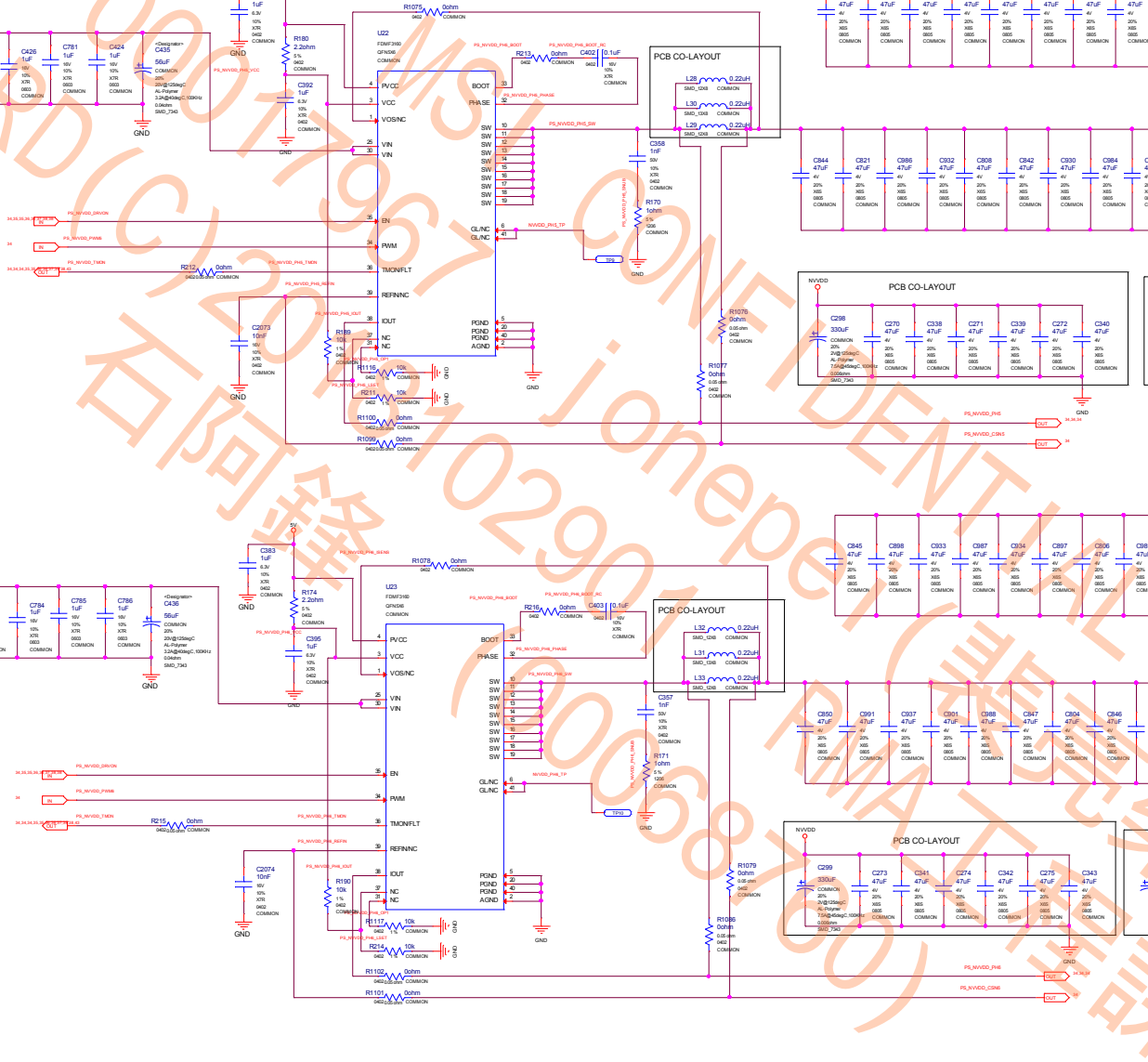
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PAGE DETAIL	PS: NV/DO Phase 3, 4



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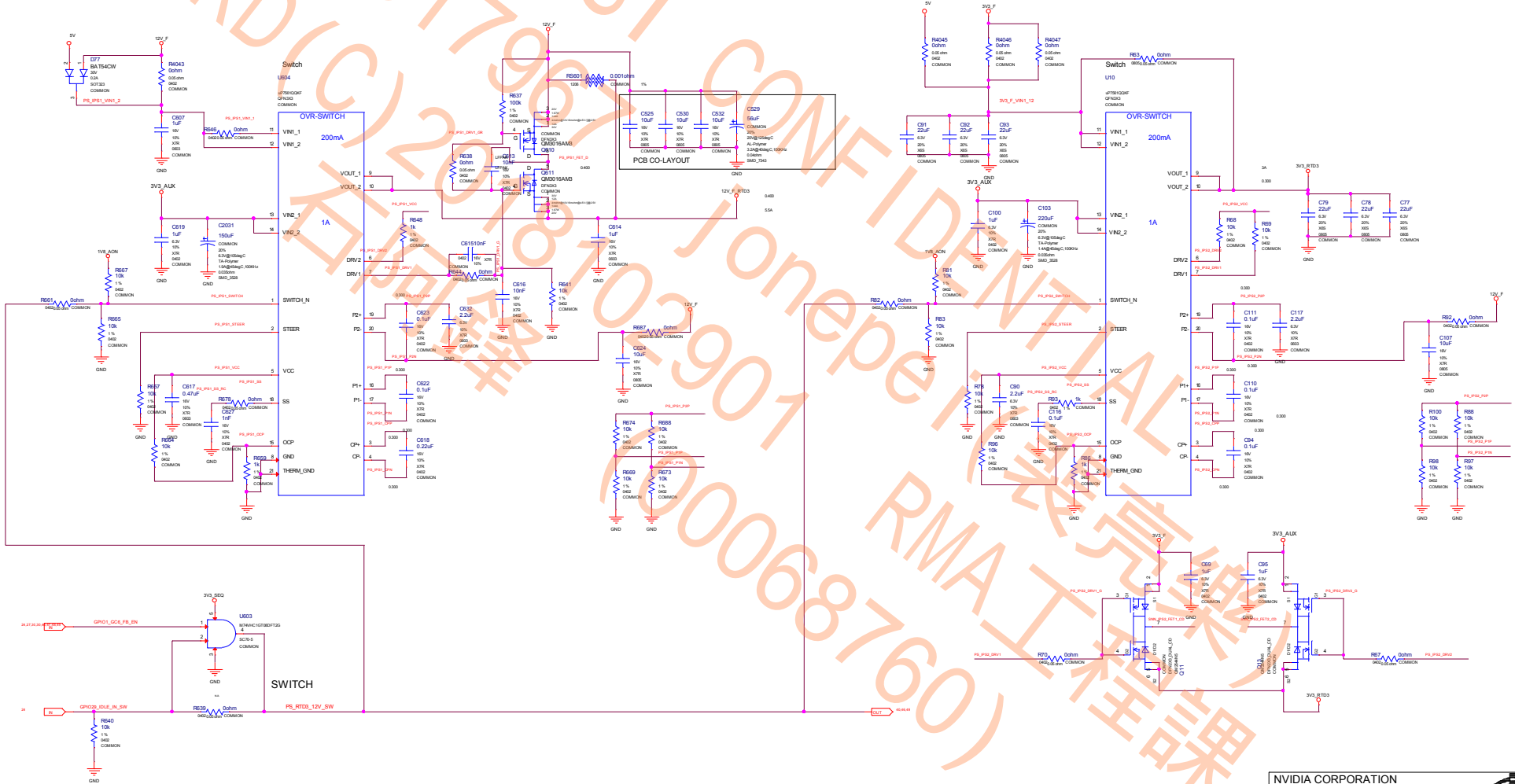
ASSEMBLY	<ASSEMBLY_DESCRIPTION
PAGE DETAIL	PS: N/VCD Phase 5, 6

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



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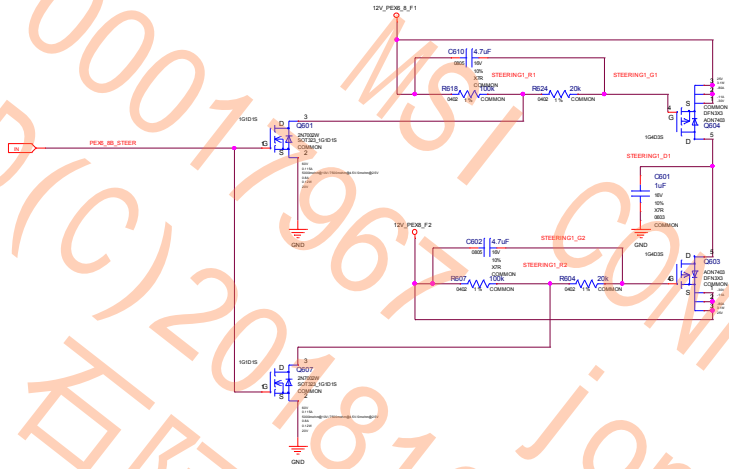
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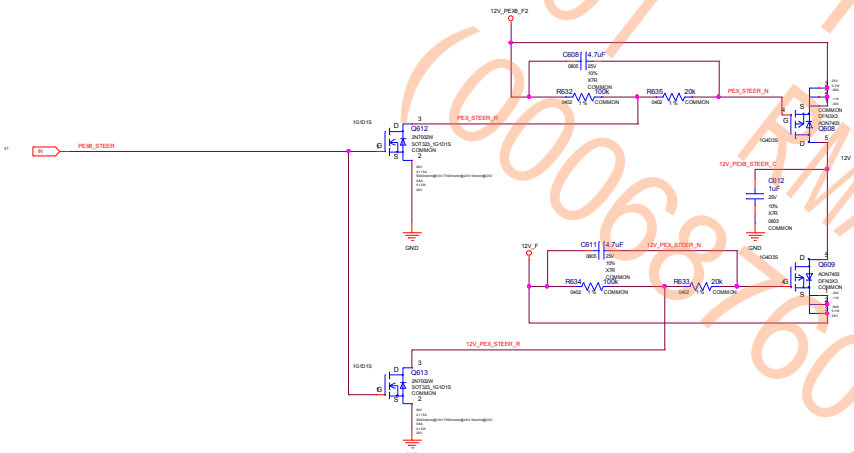
ASSEMBLY	ASSEMBLY DESCRIPTION
PAGE: DETAIL	PS: INPUT SWITCH RTD3

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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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ASSEMBLY	ASSEMBLY DESCRIPTION
PAGE DETAIL	PS: 12V CURRENT STEERING

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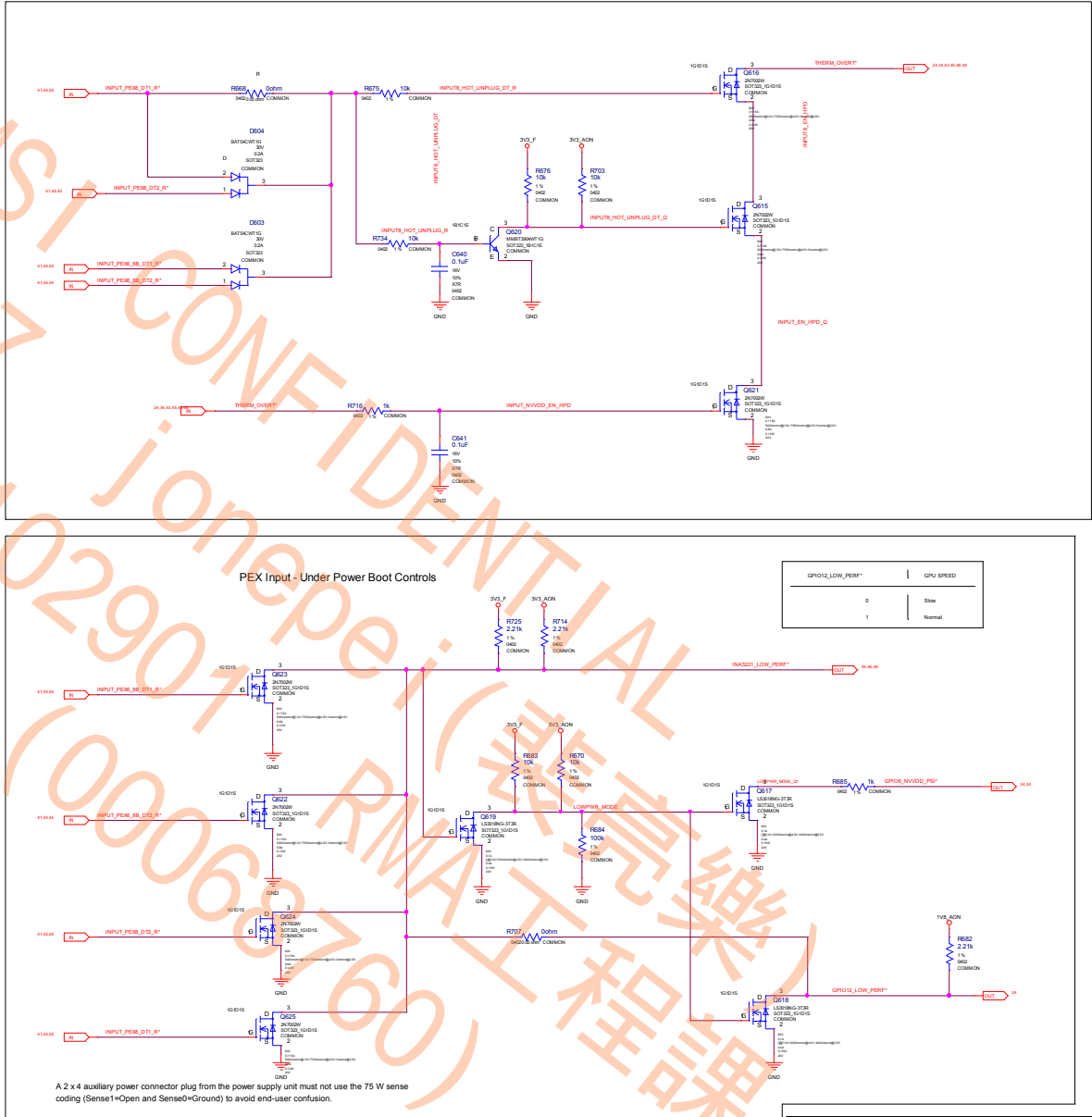
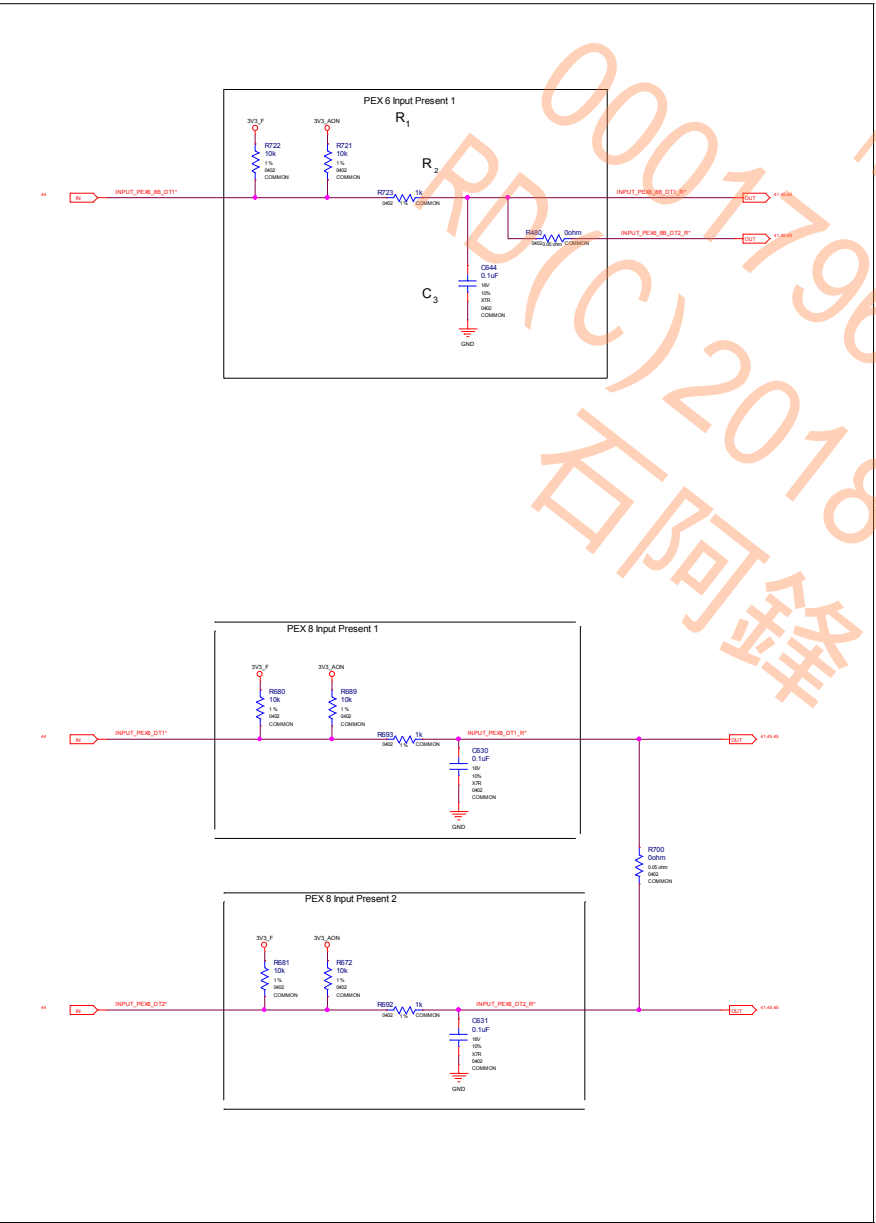


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ASSEMBLY	ASSEMBLY DESCRIPTION
PAGE DETAIL	PS: CURRENT STEERING, HOT UNPLUG DETECT

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A

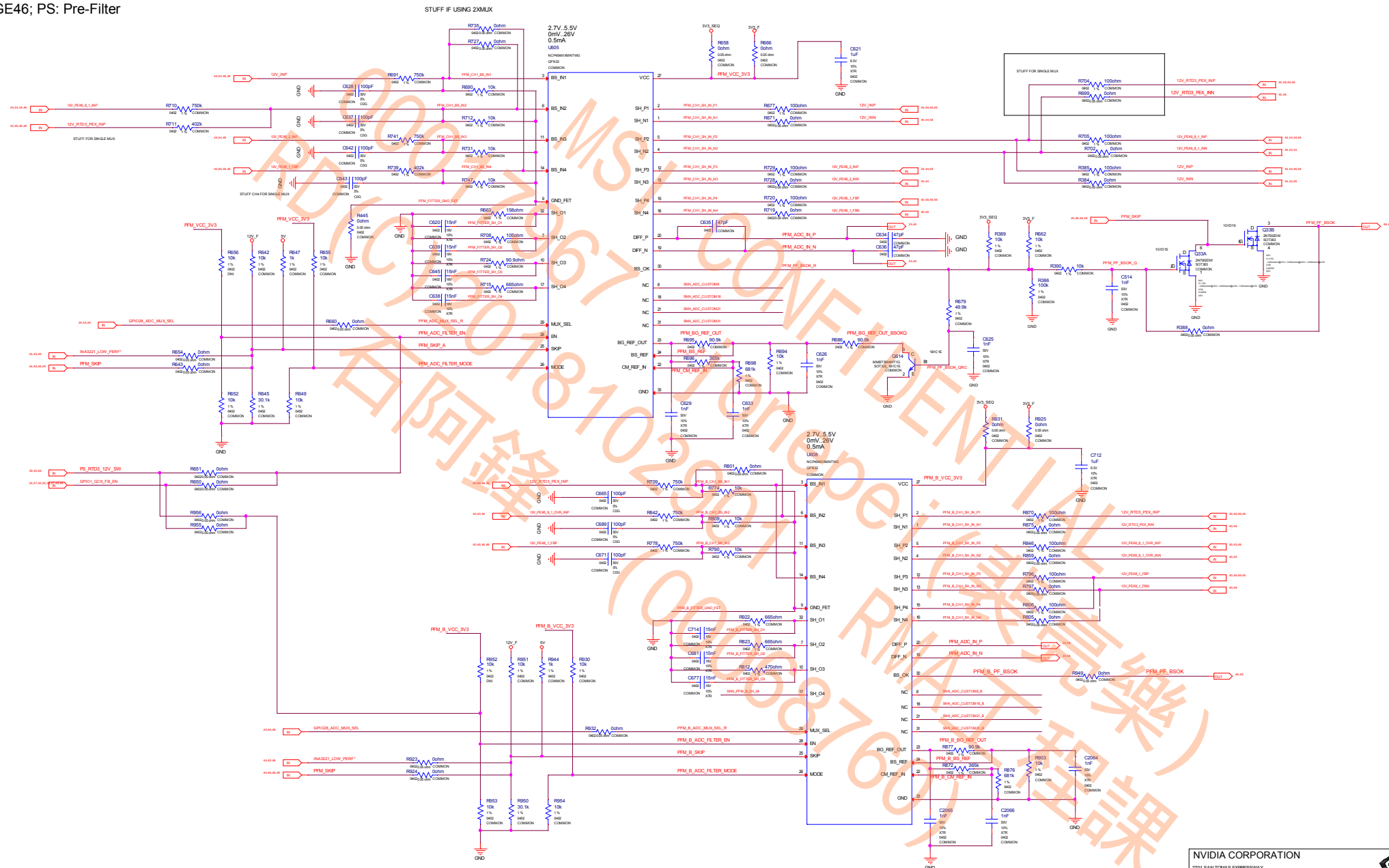
DATE

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PAGE DETAIL	PS: PRE-FILTER

NVIDIA CORPORATION

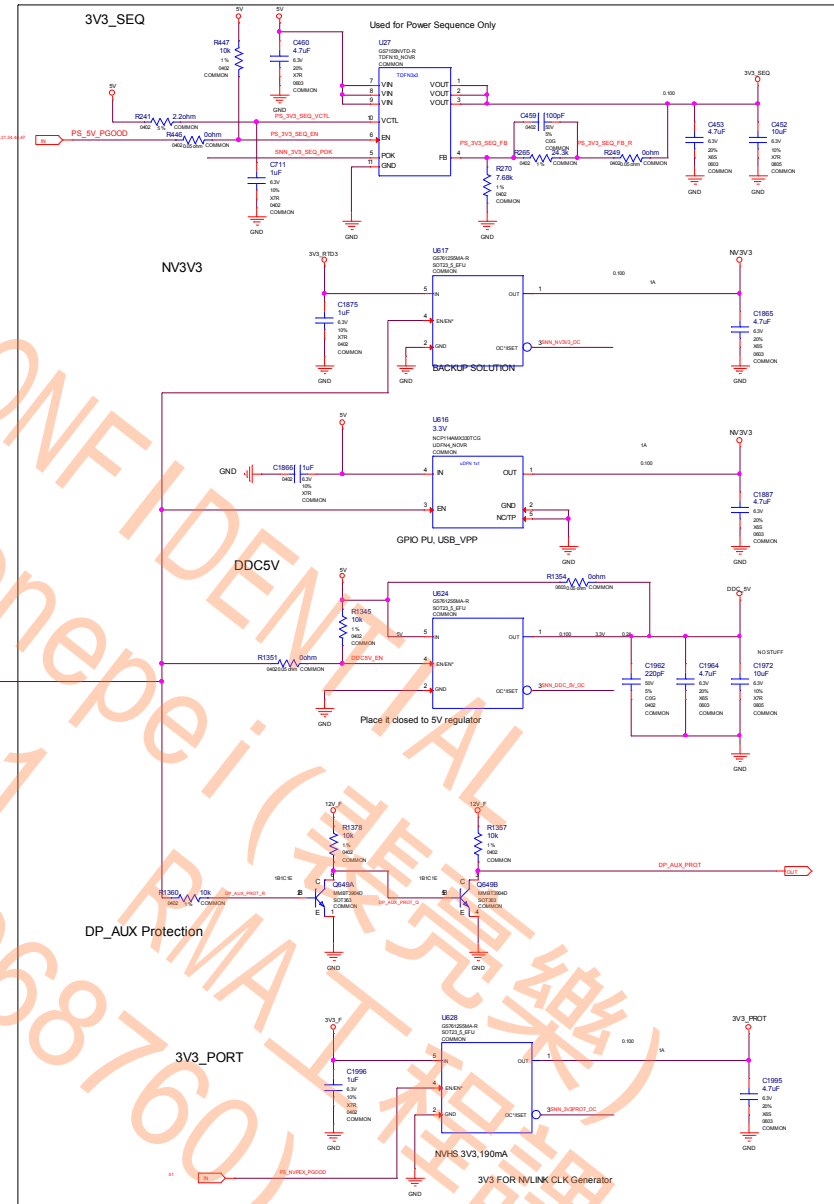
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PAGE DETAIL	SEQUENCE: 5V, 1V8, NV3V3 ENABLE



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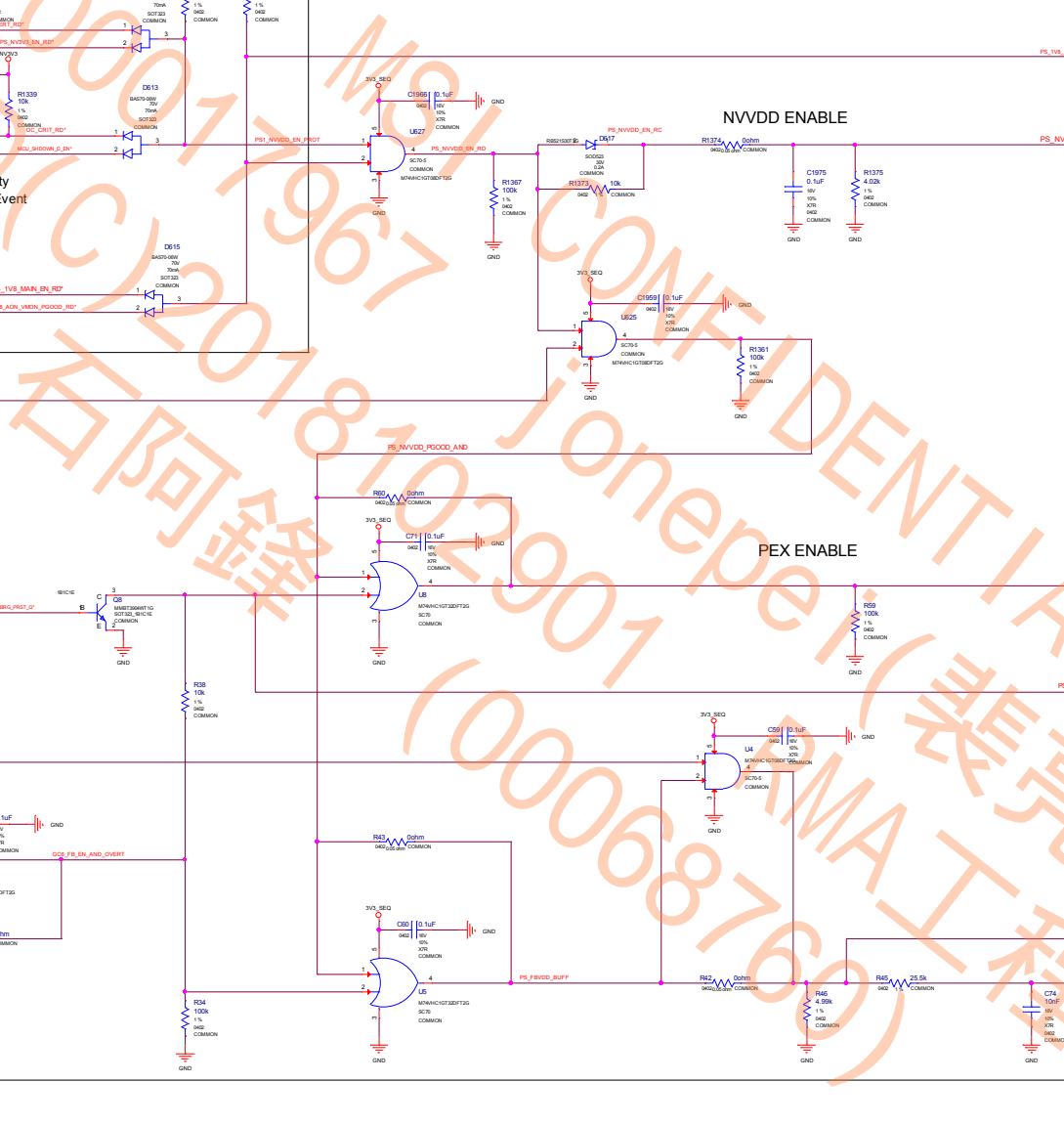
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A	B	C	D	E	F	G	H
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Signal	Direction	Function
3V3	INPUT	Sense the 3V3 Voltage from PCIe golden finger
12V	INPUT	Sense the 12V Voltage from PCIe golden finger
PS_VMON_PGOOD	OPEN DRAIN	Floating(H) once both 3V3 and 12V reach Vth
GC6_FB_EN	INPUT	Indicator for RTD3/GC6 residence. Use to Mask the VMON_PGOOD
PS_FF_SKP	INPUT	From IN3321 (VPU) or Pre-filter (SKP)
PS_FF_BSK	INPUT	From IN3321 (PV) or Pre-filter (BS_SK)
S_RTD3_12V_SW	INPUT	GC6_FB_EN && IDLE_IN_SW



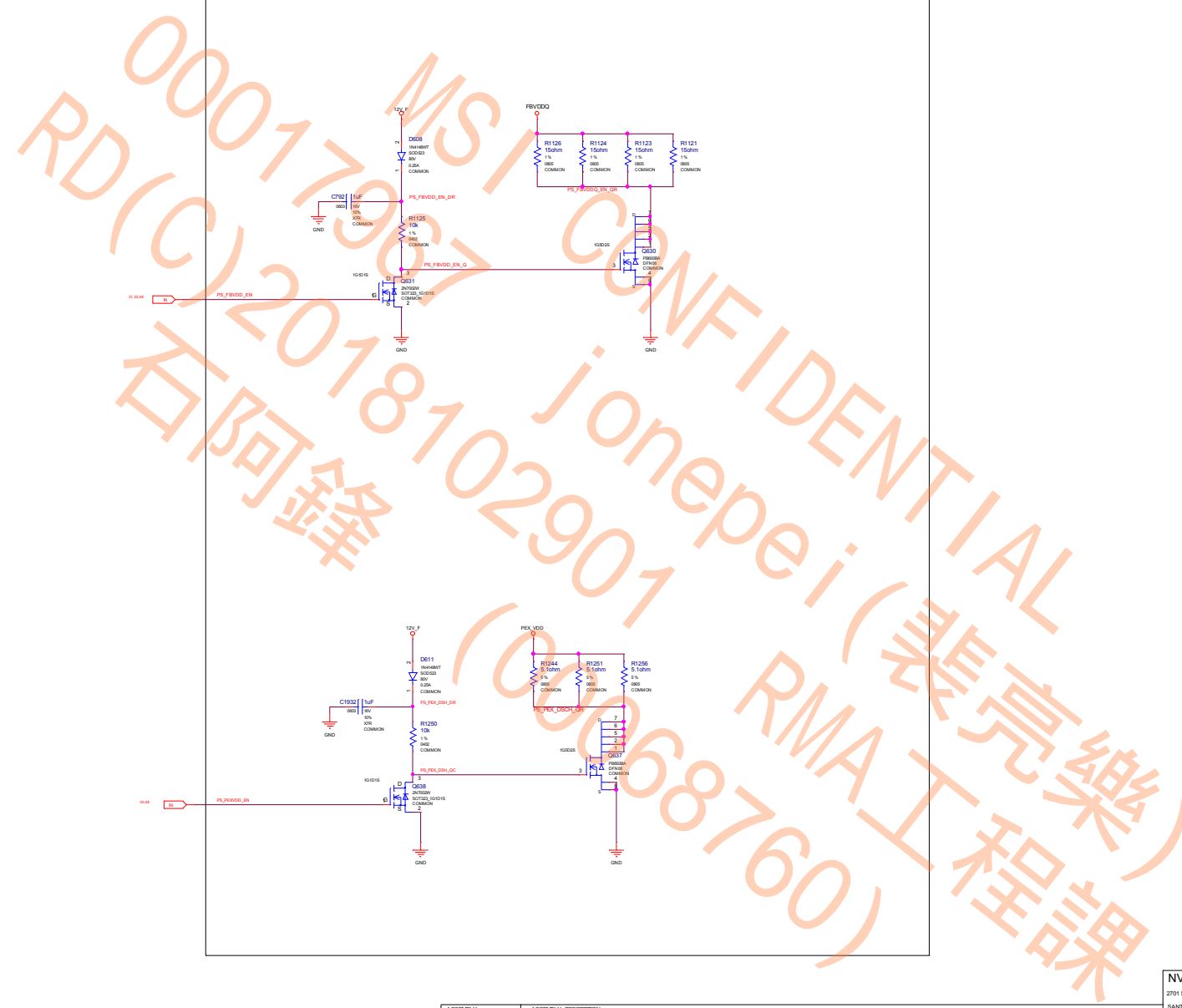
OPTIONS	PEX1V3_SENSE	PEX12V_SENSE	OTHER_12V_SENSE
Use Pre-Filter	Pre-Filter NO STUFF U12 NO STUFF Q3,Q5 NO STUFF D15	Pre-Filter NO STUFF U13 NO STUFF Q4	Pre-Filter
Use INA3221	Voltage_Monitor	INA3221 NO STUFF U12 NO STUFF Q4	INA3221
NO INA3221 NO Pre-Filter	Voltage_Monitor	Voltage_Monitor	N/A


Pre_Filter(ADC_MUX):3V3(PEX)

Only use the Primary Pre-Filter to sense 3V3PEX
and All Input 12Vs

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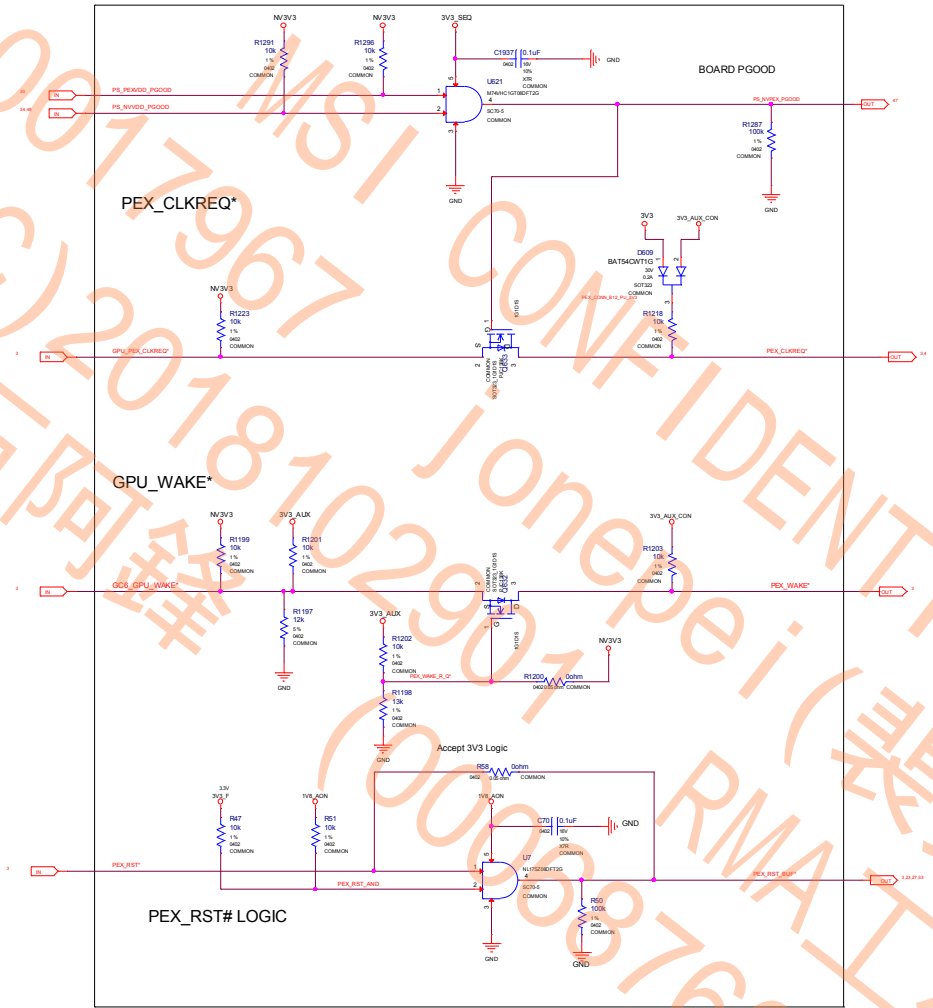




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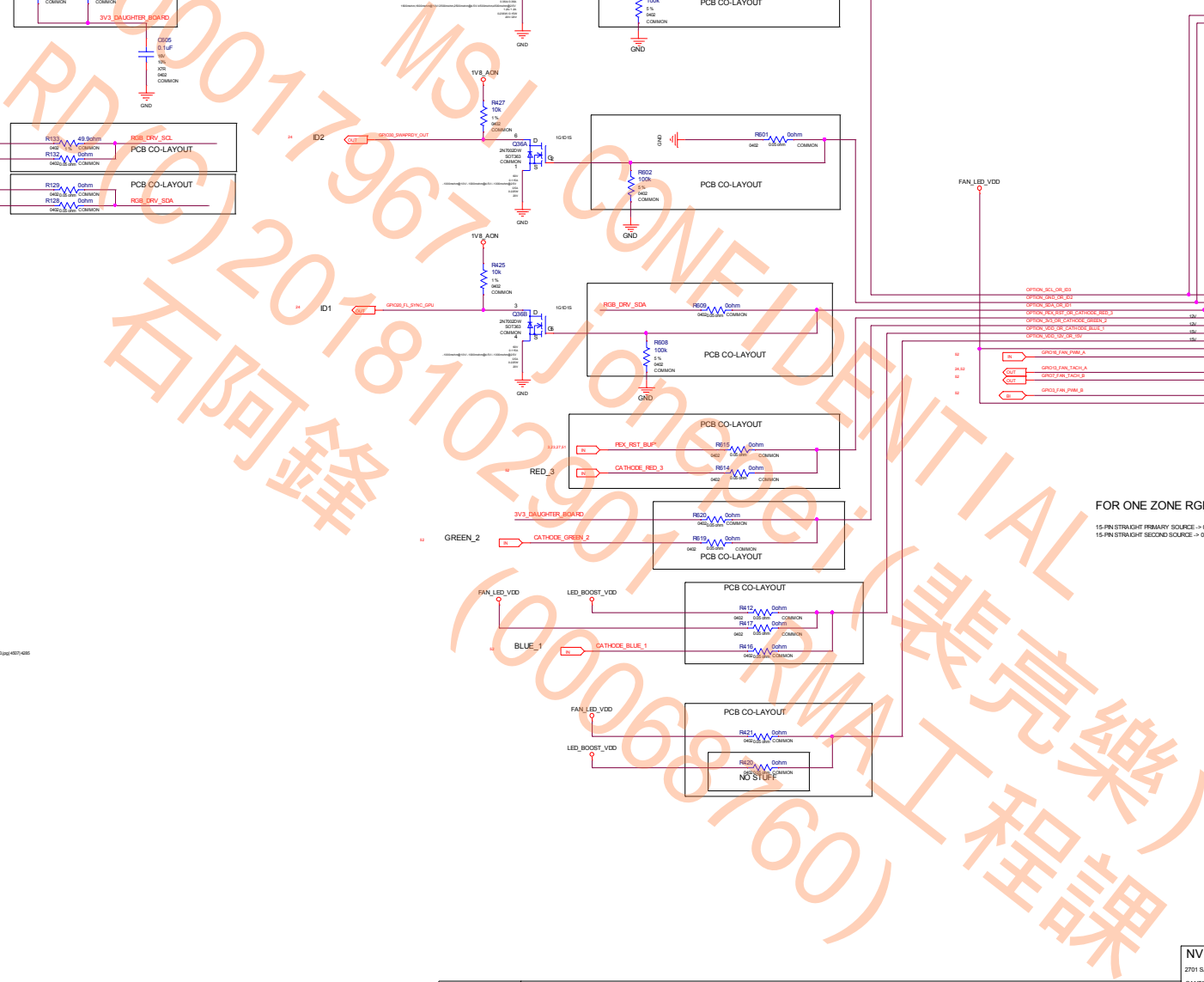
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ASSEMBLY	ASSEMBLY DESCRIPTION
PAGE DETAIL	SEQUENCE: MISC

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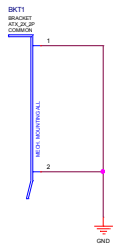


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Brackets:



Bracket Screw

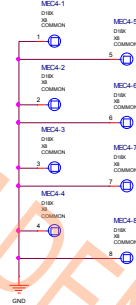


BOARD STIFFENER

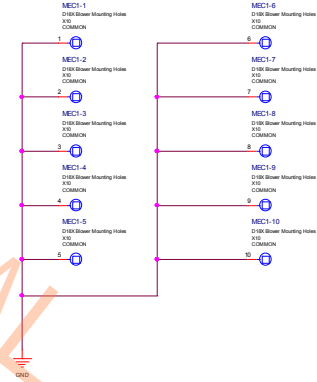


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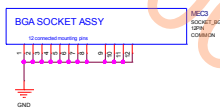
GPU Mounting holes



Mechanical Holes Symbol



GPU Socket Symbol



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ASSEMBLY	ASSEMBLY DESCRIPTION
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