


NO PEX GEN4 SUPPORT

DELETE RC TERMINATIONS

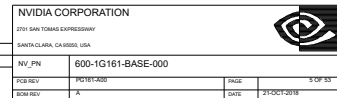
ASSEMBLY	ASSEMBLY DESCRIPTION
PCIe RC TERM	

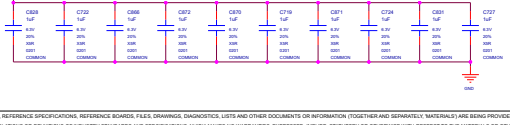
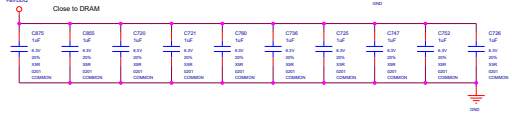
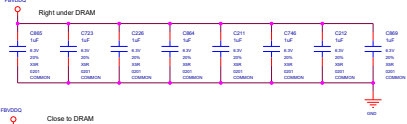
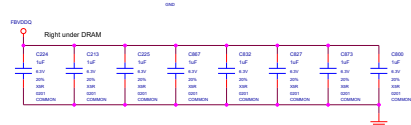
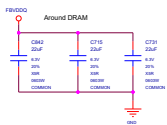
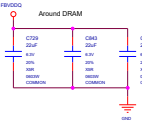
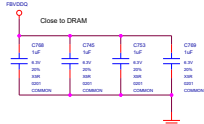
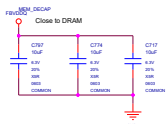
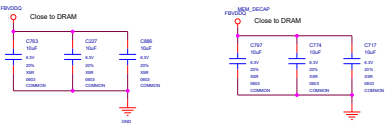
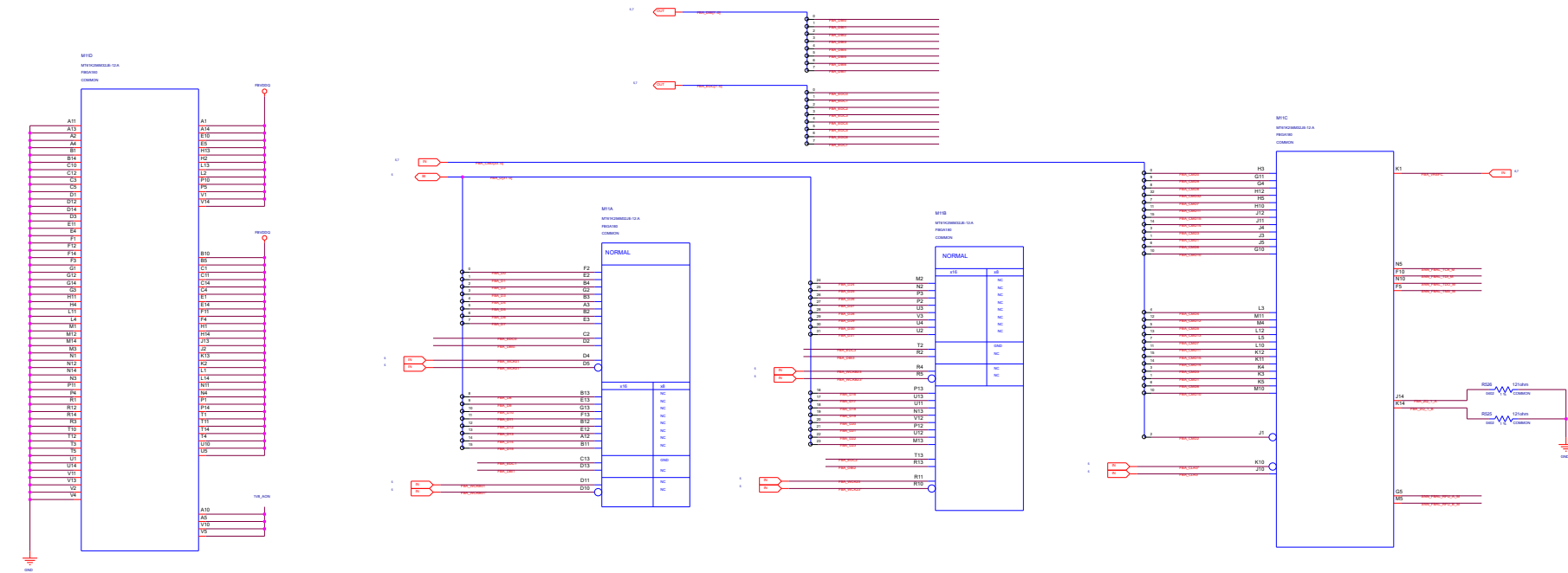
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2701 SAN TOME AVE, SUITE 5000
SANTA CLARA, CA 95051, USA

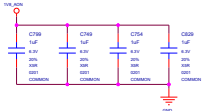


NV_PN	600-1G161-BASE-000		
PCBREV	PCB161-000	PNQ	4 OF 53
BOXREV	A	DATE	27-OCT-2018





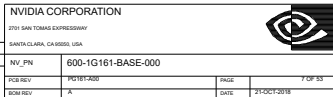
VREFC IS NOT USED IN
x16 CONFIGURATION
1K OHM PULL-DOWN IS
IN PLACE OF THE 1.33K
FOR R106

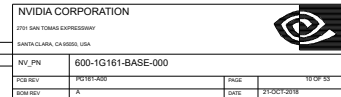


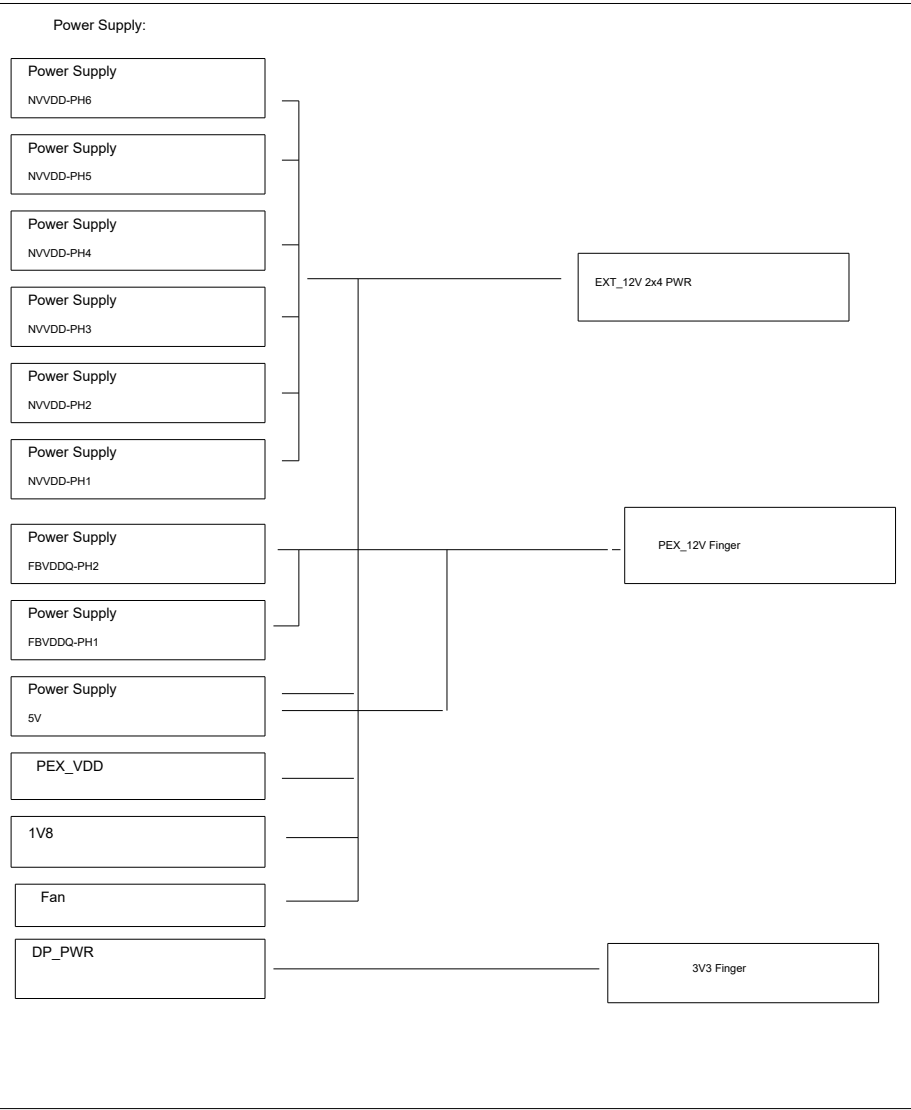
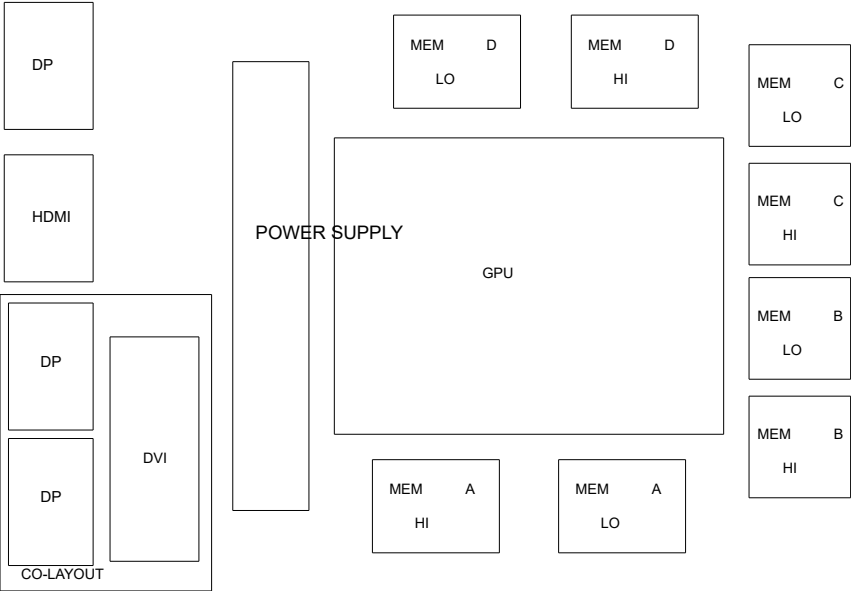
ASSEMBLY	ASSEMBLY DESCRIPTION
FRONT SIDE	MEMORY (FRONT)

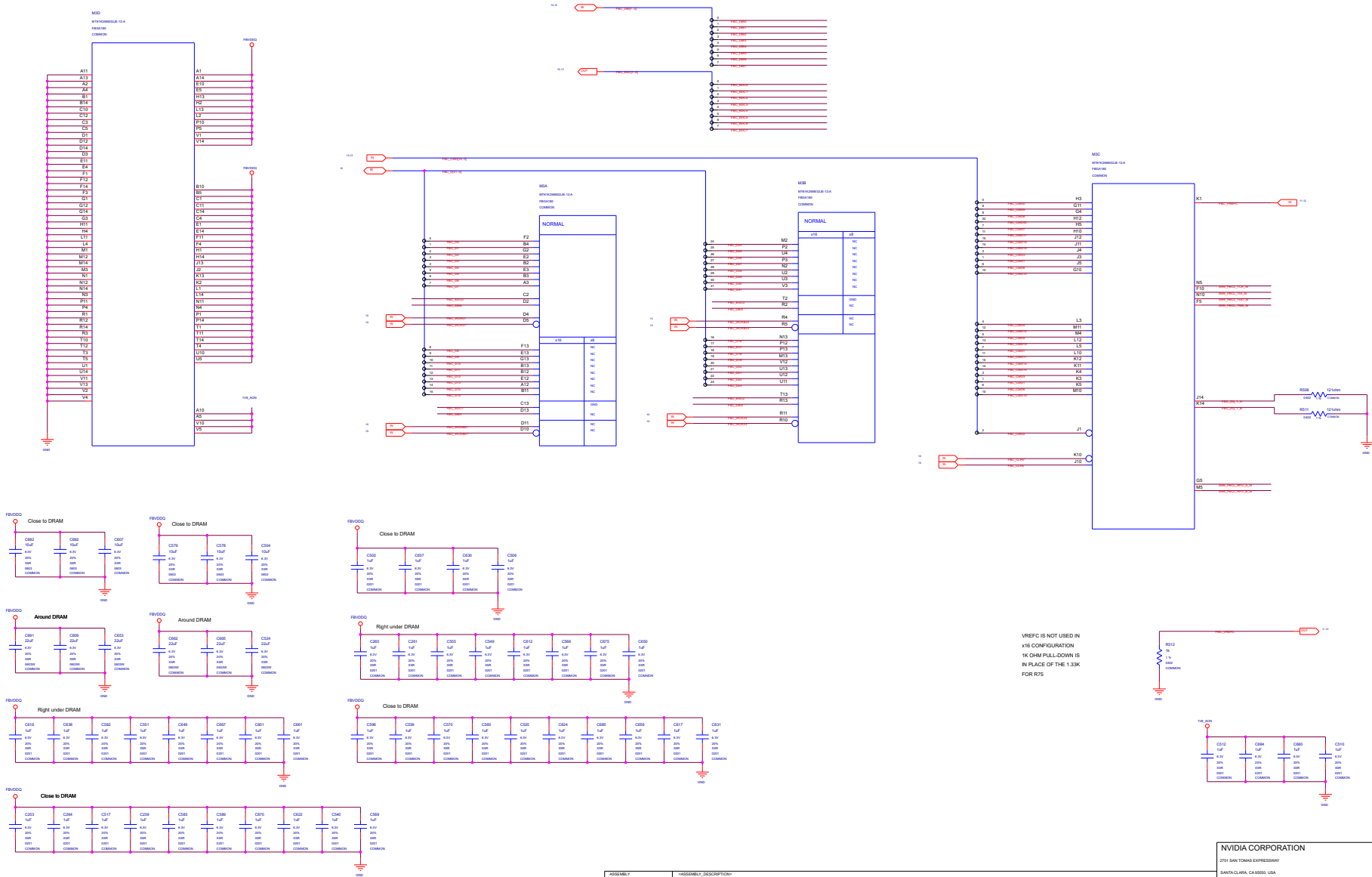
NVIDIA CORPORATION			
2701 SAN TOME DRIVE, SUITE 500			
SAN JOSE, CALIFORNIA, 95134, USA			
REV	600-1G161-BASE-000	PAGE	8 OF 33
REV	1	DATE	21-OCT-2016











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ASSEMBLY	ASSEMBLY DESCRIPTION
FRIDGE 31..0	MEMORY FRIDGE 31..0

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2700 SAN TOME AVE, SANTA CLARA, CA 95050, USA

NV_PN

600-1G161-BASE-000

PCB REV

PC18CAB05

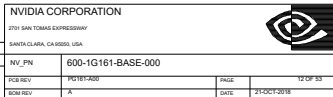
BOX REV

X

DATE

21-OCT-2018

11 OF 31



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


TABLE OF CONTENTS

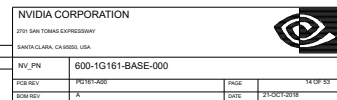
Page	Description
1	Table of Contents
2	Block Diagram
3	PCI Express
4	PCIe RC TERM
5	MEMORY: GPU FB_AB
6	MEMORY: FBA[31:0]
7	MEMORY: FBA[63:32]
8	MEMORY: FBB[31:0]
9	MEMORY: FBB[63:32]
10	MEMORY: GPU FB_CD
11	MEMORY: FBC[31:0]
12	MEMORY: FBC[63:32]
13	MEMORY: FBD[31:0]
14	MEMORY: FBD[63:32]
15	GPU PWR & GND
16	GPU Decoupling
17	GPU Decoupling2
18	IO: IFPAB DVI-D-DL
19	IO: IFPA DP
20	IO: IFPB DP
21	IO: IFPE & IFPF USBC NC
22	IO: IFPC HDMI
23	IO: IFPD DP
24	IO: NVHS Interface and Frame Lock
25	MISC1: Thermal, JTAG, GPIO,STEREO

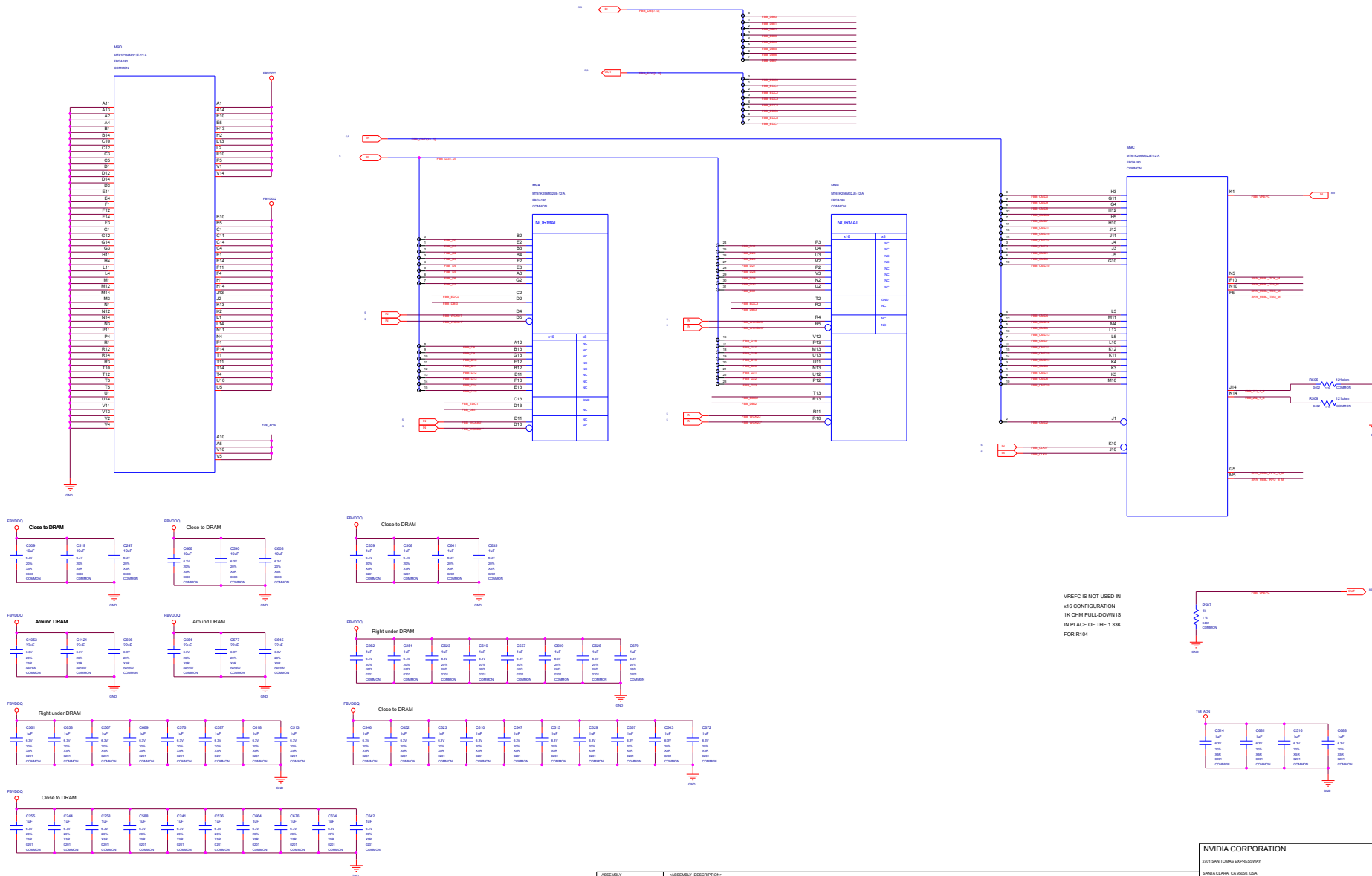
Page	Description
26	MISC2: ROM, XTAL,STRAPS
27	PS: 1V8_AON
28	PS: 5V
29	PS: PEXVDD
30	PS: FBVDDQ
31	PS: FBVDDQ PH2
32	PS: NVVDD Controller
33	PS: NVVDD Controller OVR3i
34	PS: NVVDD Phase 6,4
35	PS: NVVDD Phase 3,5
36	PS: NVVDD Phase 2,1
37	PS: Input Power Balancing Switcher
38	PS: Input, Filtering, and Monitoring
39	PS: STEERING, UPB & HOT-UNPLUG
40	PS: Type-C BuckBoost
41	PD PPC
42	PS: 12V & 3V3_A SWITCHER
43	SEQ: 5V, 1V8, NV3V3 ENABLE
44	SEQ: NV, PEX, FB ENABLE
45	SEQ: VOLTAGE MONITOR
46	SEQ: DISCHARGE
47	SEQ: MISC
48	LOGO LED
49	LED DRIVER & BOOST
50	FAN

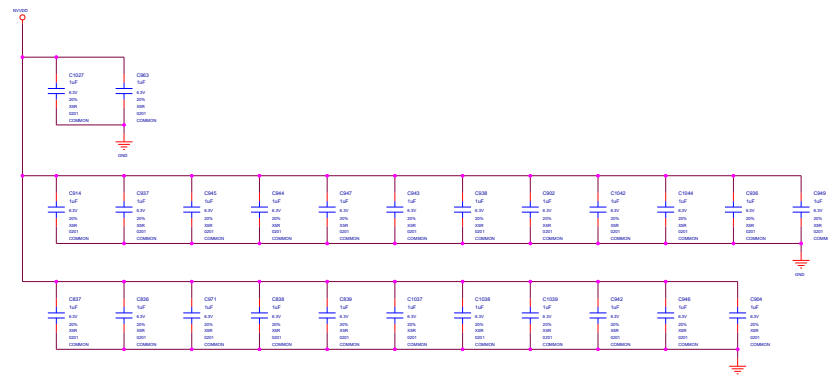
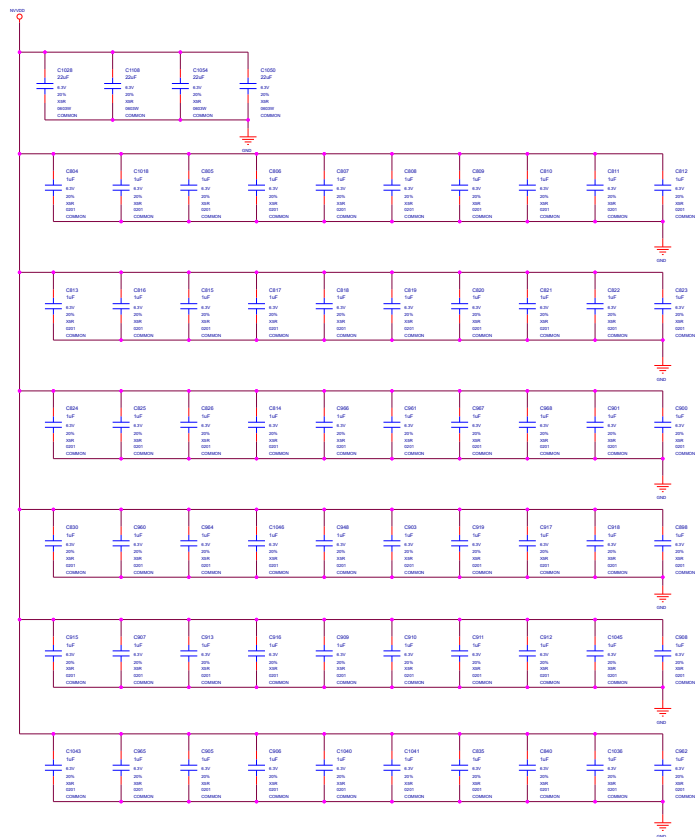
Page	Description
51	PS: Pre-filter
52	MECH
53	PTC

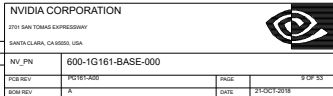


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NV_PN	600-1G161-BASE-000			
PCB REV	PG161-A20	PAGE	13 OF 53	
BOM REV	A	DATE	21-OCT-2018	











2

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SANTA CLARA, CA 95050, USA

The NVIDIA logo, which is a stylized, circular, black and white graphic resembling an eye or a camera lens, positioned to the right of the company name and address.


NV_PN	600-1G161-BASE-000		
PCB REV	PG161-A20	PAGE	19 OF 53
SOM REV	A	DATE	21-OCT-2018

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

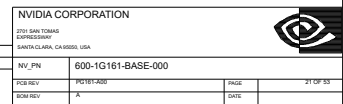
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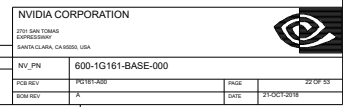
NVIDIA CORPORATION

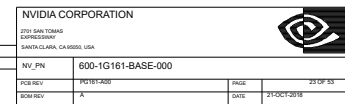
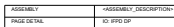
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SANTA CLARA, CA 95050, USA



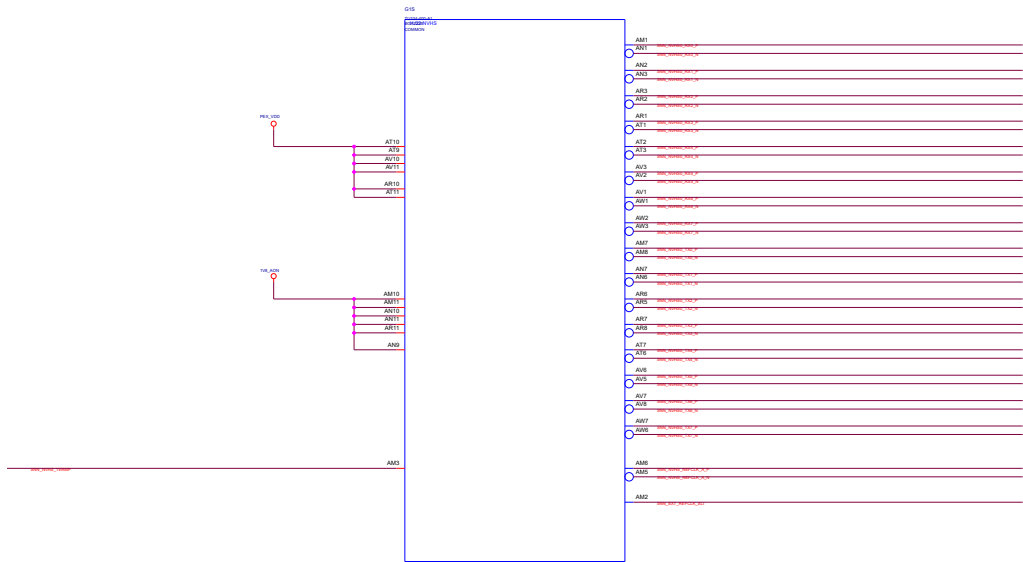
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PCB REV	PCB161A00	PNQ	20 OF 33
BOX REV	A	DATE	21-OCT-2018





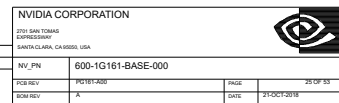






ASSEMBLY	ASSEMBLY DESCRIPTION
FRIDGE 101	101: FRIDGE 101





STRAP2	STRAP1	STRAP0	RAMCFGE[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

RAMCFQ4-0	DENSITY	WIDTH	VENDOR	DIE
00000	8Gb	256-bit	Samsung	C
00001	8Gb	256-bit	Micron	A
00010	8Gb	256-bit	Hynix	M
00011	8Gb	256-bit	Samsung	C
00100	8Gb	256-bit	Micron	A
00101	8Gb	256-bit	Hynix	M
00110	16Gb	256-bit	Samsung	M
00111				

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

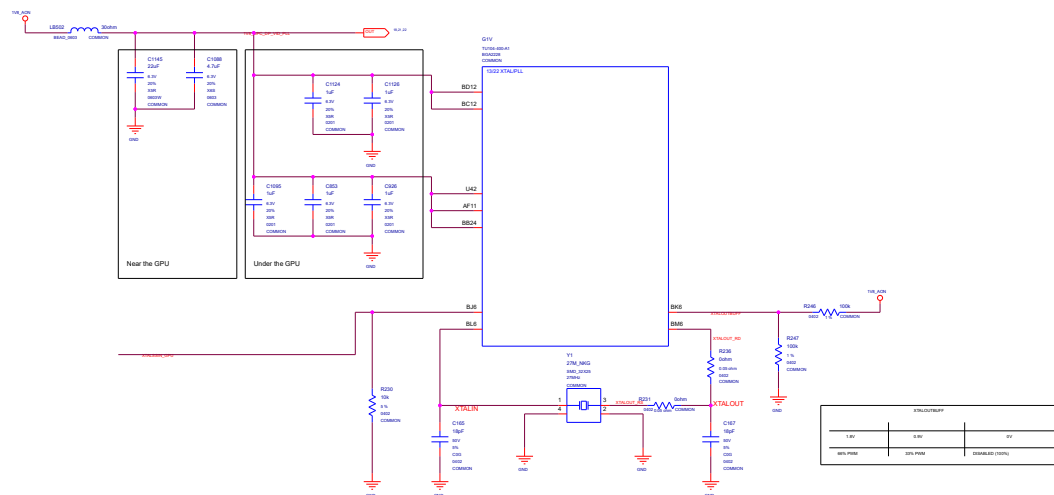
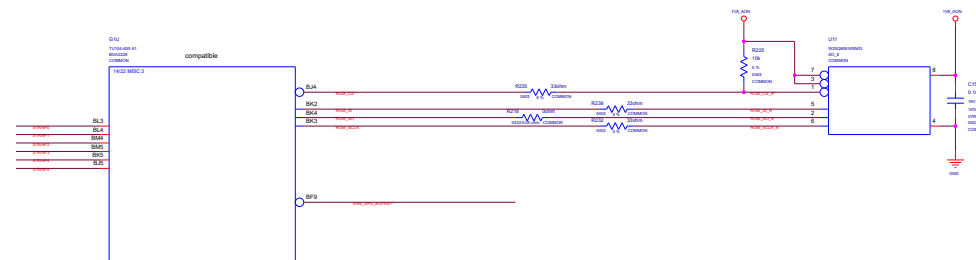
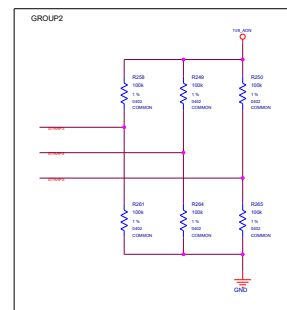
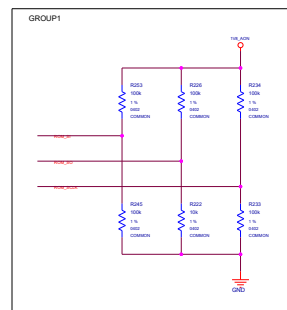
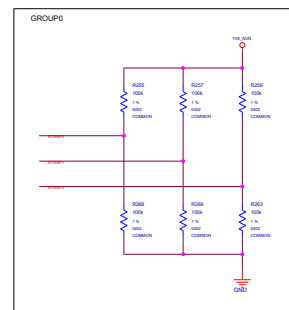
STRAP5	STRAP4	STRAP3	SMB_ALT_ADDR	DEVID_SEL	PCI_CFG	VGA_DEVICE
M	H	H	1	1	1	1
M	H	L	1	1	1	0
M	L	H	1	1	0	1
M	L	L	1	1	0	0
L	H	M	1	0	1	1
L	M	H	1	0	1	0
L	M	L	1	0	0	1
L	L	M	1	0	0	0
H	H	H	0	1	1	1
H	H	L	0	1	1	0
H	L	H	0	1	0	1
H	L	L	0	1	0	0
L	H	H	0	0	1	1
L	H	L	0	0	1	0
L	L	H	0	0	0	1 DEFAULT
L	L	L	0	0	0	0

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 ORIGNAL

1:PCIE_CFG LOW POWER
0:PCIE_CFG HIGH POWER
1:VGA_DEVICE ENABLE
0:VGA_DEVICE DISABLE



STROBEOUTP		
1.8V	0.8V	0V
80% PWM	33% PWM	DISABLED (100%)

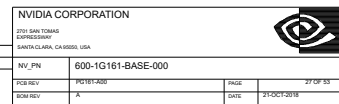
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NV_FN	600-1G161-BASE-000		
PCB REV	PG161-A20	PAGE	28 OF 53
BOM REV	A	DATE	21-OCT-2018

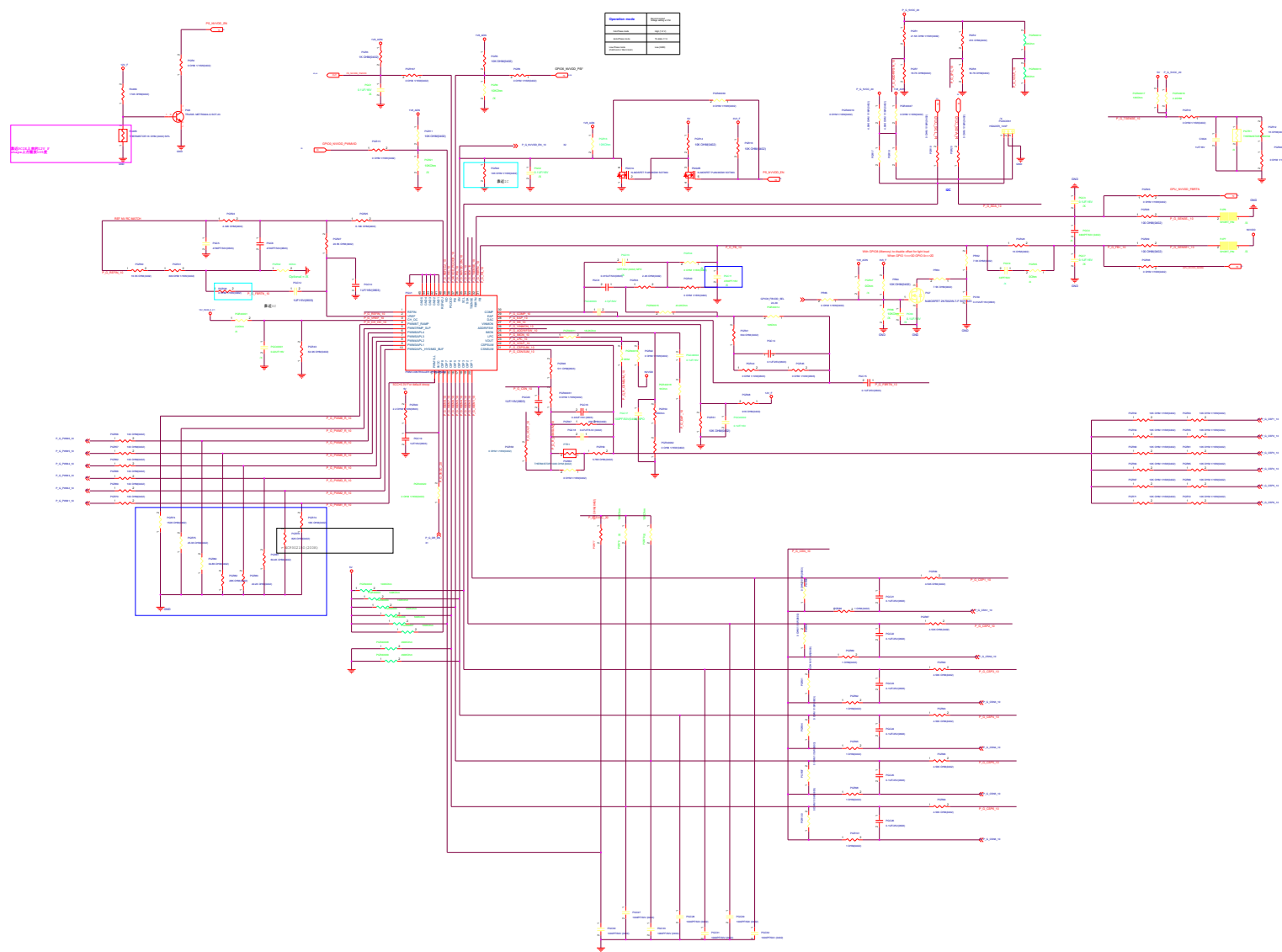
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PAGE DETAIL	MISC2: ROM, XTAL, STRAPS

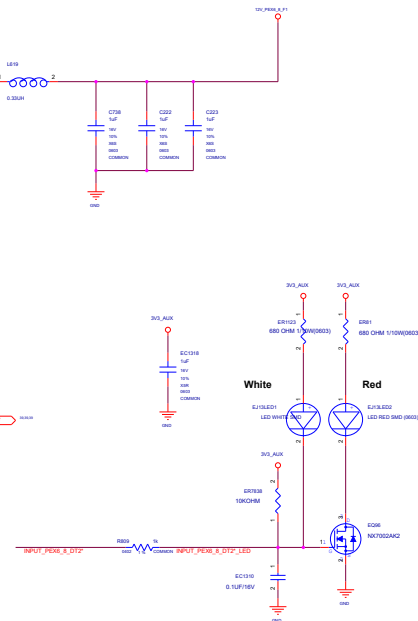
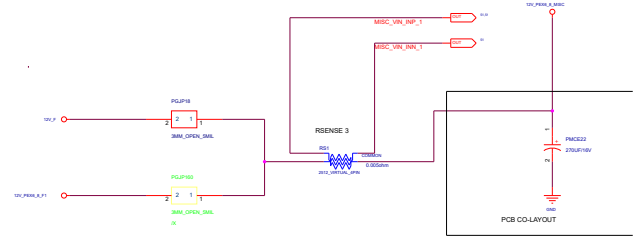
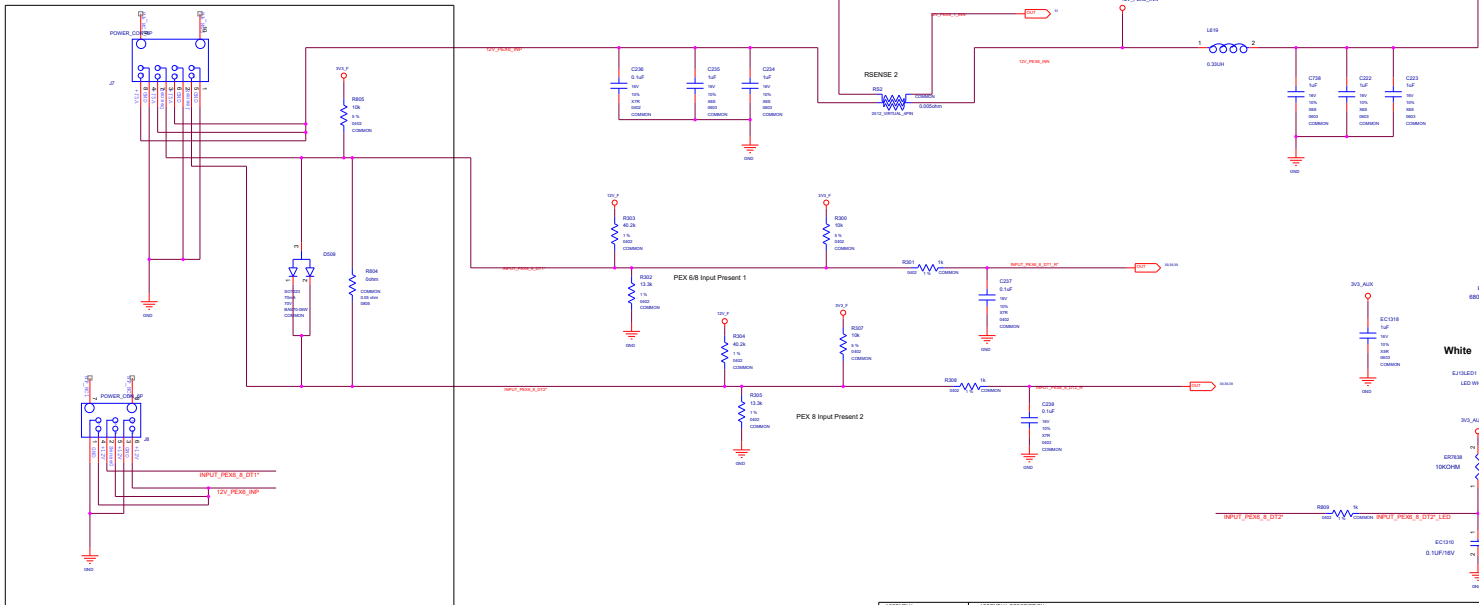
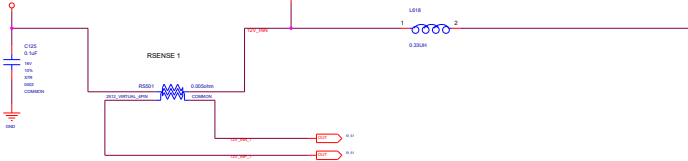
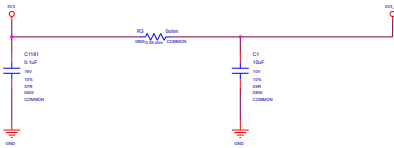
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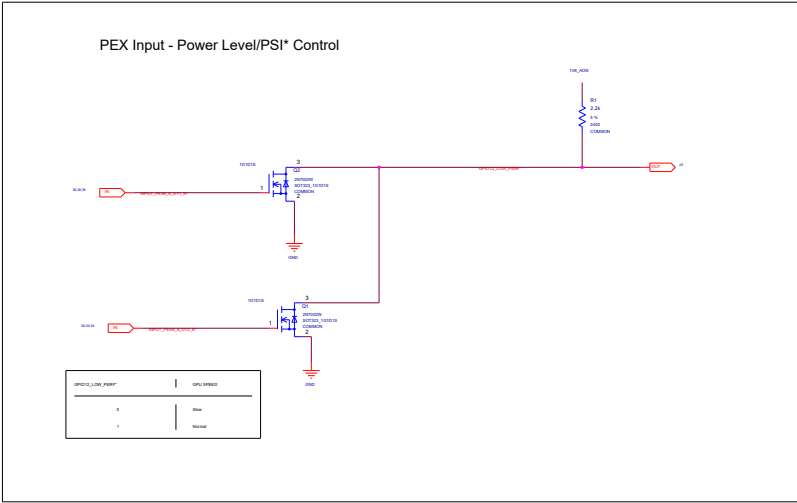
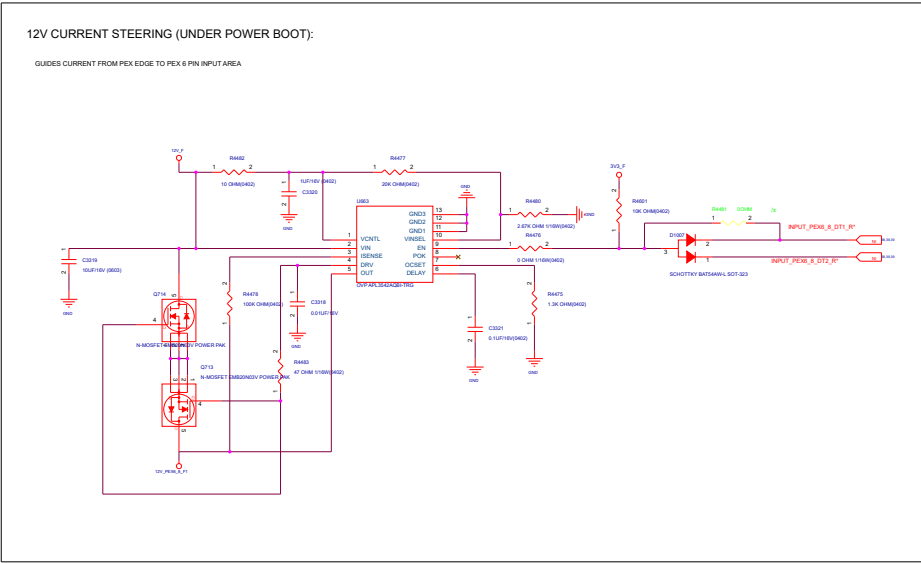
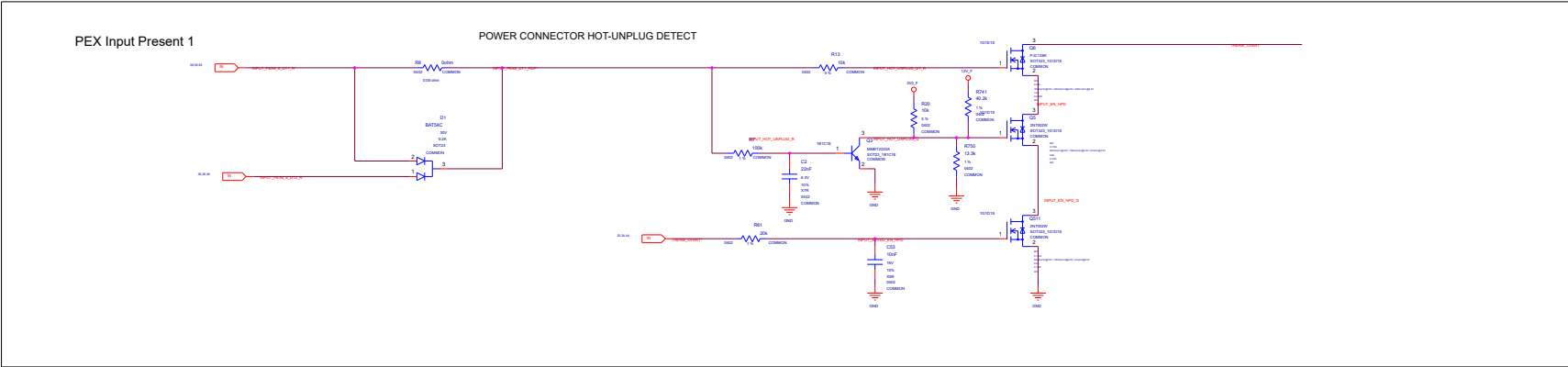


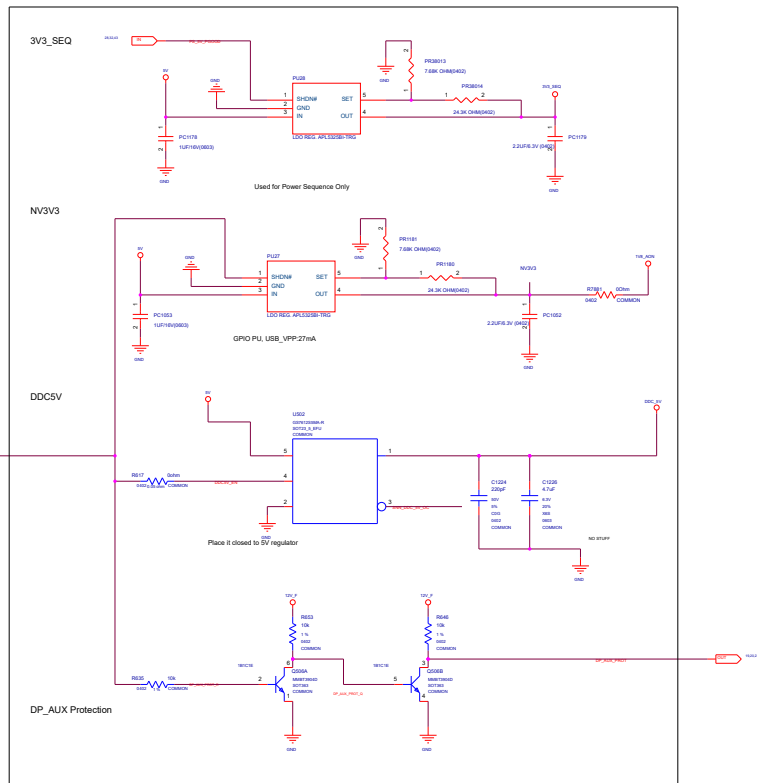
NVIDIA CORPORATION 2701 SAN TOMAS EXPRESSWAY SANTA CLARA, CA 95050, USA				
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PCB REV	PG181-A00	PAGE	28 OF 53	
SCM REV	A	DATE	21-OCT-2018	



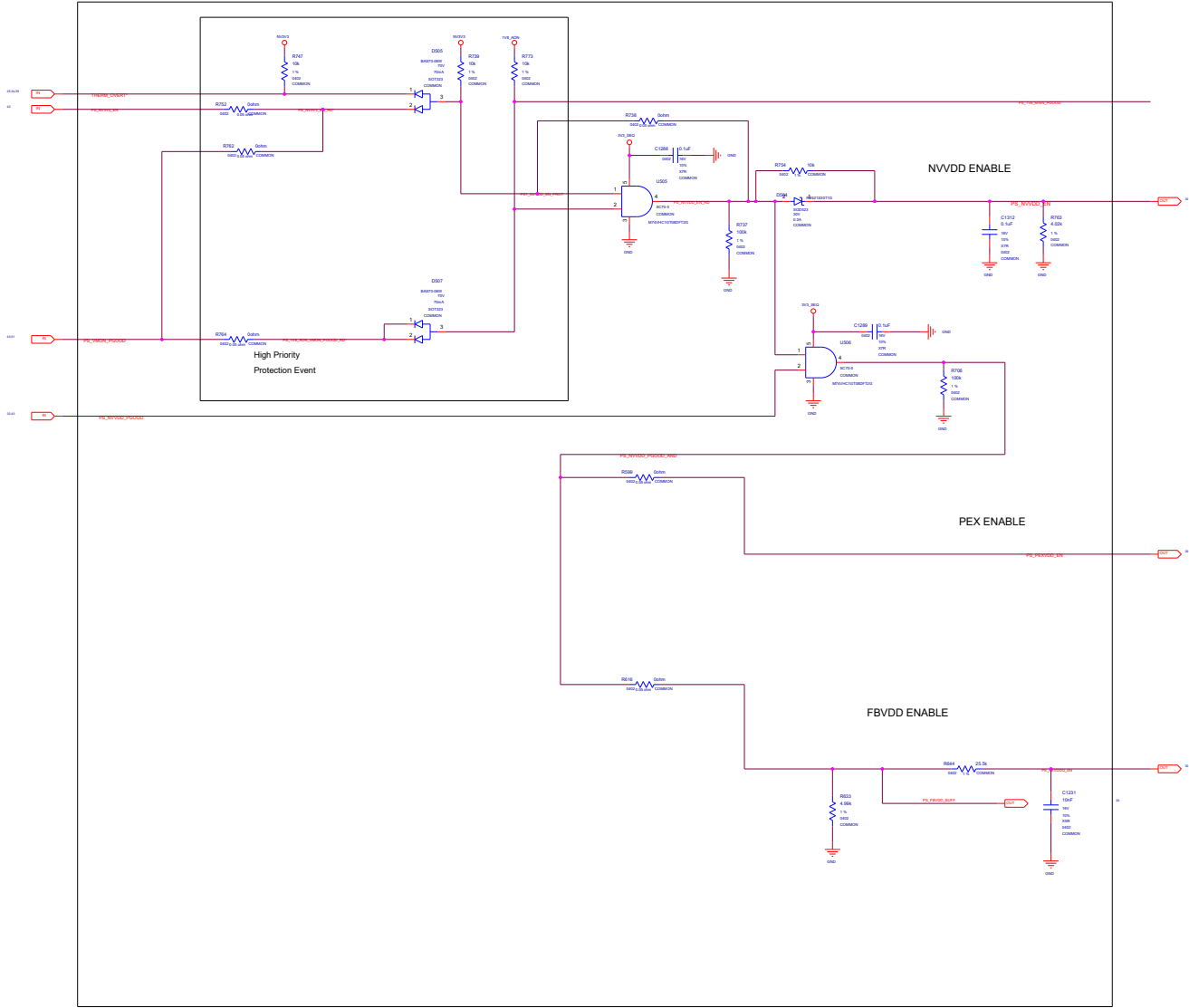


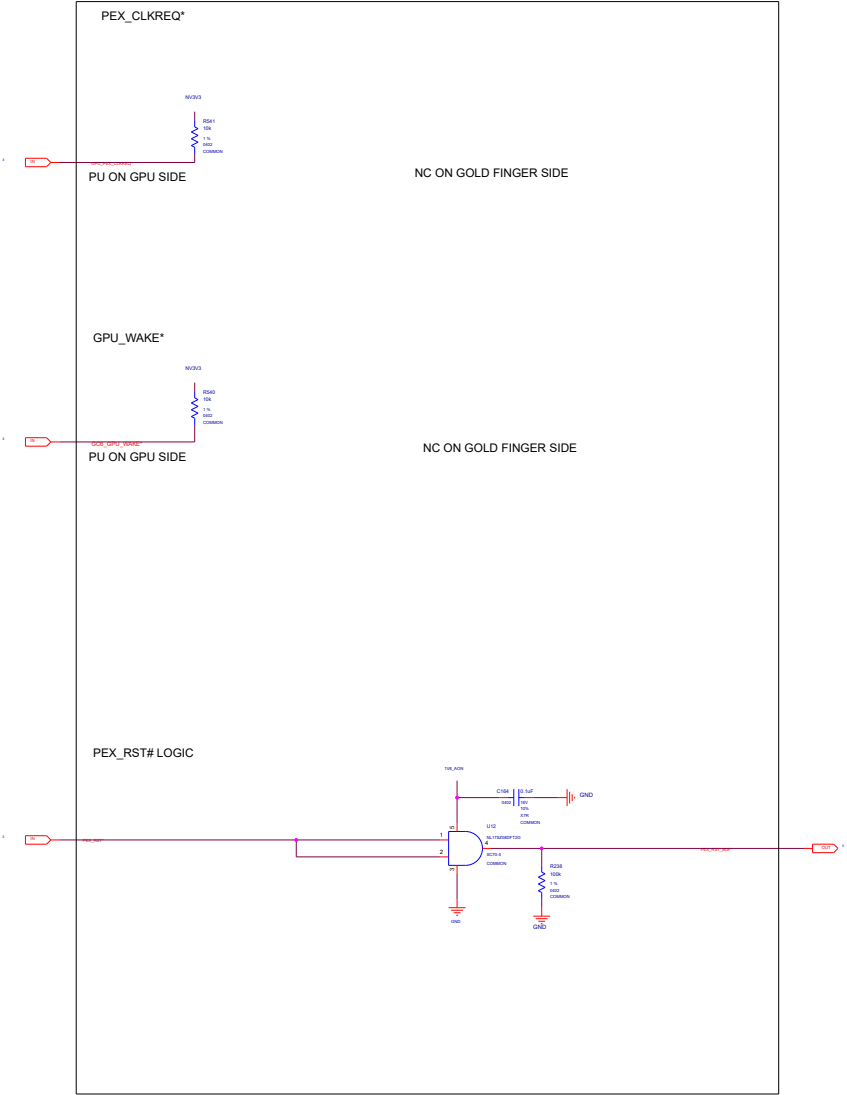
NVIDIA CORPORATION
2701 SAN TOMAS
EXPRESSWAY
SANTA CLARA, CA 95050, USA

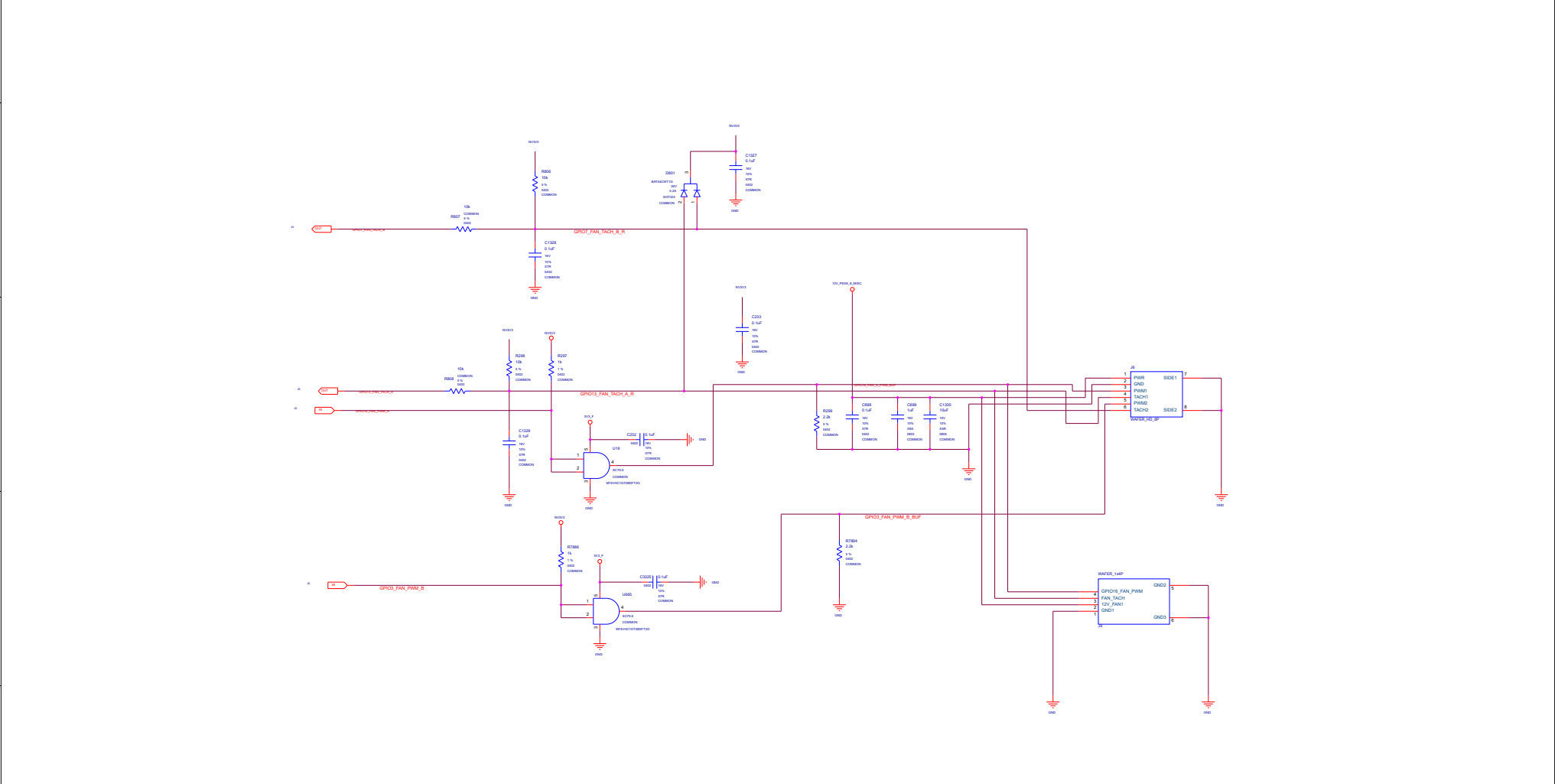





NV_PN	600-1G161-BASE-000		
PCB REV	PG161-A20	PAGE	43 OF 53
SOM REV	A	DATE	21-OCT-2018

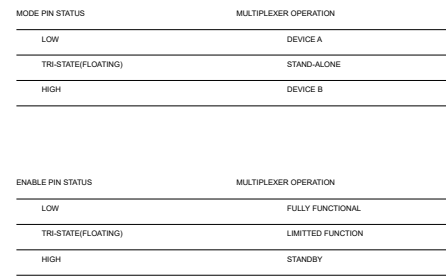






NVIDIA CORPORATION 2701 SAN TOMAS EXPRESSWAY SANTA CLARA, CA 95050, USA			
NV_PN		600-1G161-BASE-000	
PCB REV	PG161-A20	PAGE	50 OF 53
SOM REV	A	DATE	21-OCT-2018

NV_PN	600-1G161-BASE-000		
PCB REV	PG161-A00	PAGE	50 OF 53
BOM REV	A	DATE	21-OCT-2018

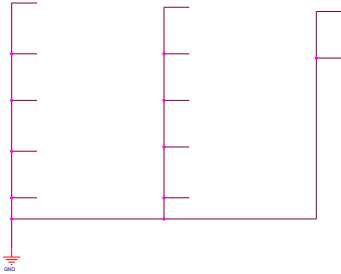


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		P0181-CAS0		PAGE	
		BASE REV		DATE	
				31 OF 33	
				21 OCT 2018	

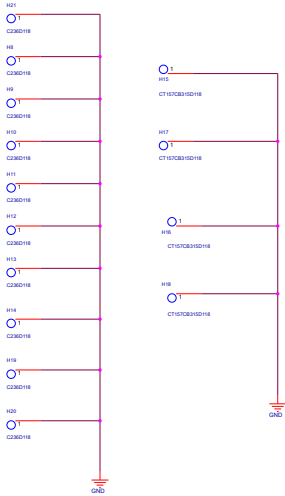
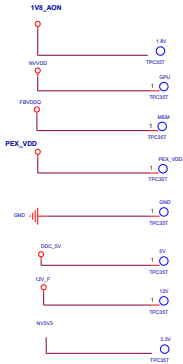
Bracket:



MOUNTING HOLES FOR HS:



BACK STIFFENER:



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ASUS VGA PCB Logo

LOG01
1
CE
/X



LOG08
1
UKRAINE
UKRAINE
/X



LOG02
1
VCCI
VCCI
/X



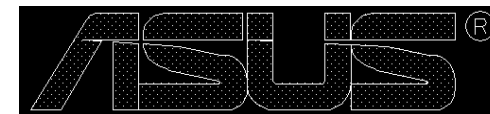
LOG09
1
PCB MADE IN CHINA
PCB_MADE_IN_CHINA
/X

PCB MADE IN CHINA

LOG03
1
EMI_D33005_H
EMI_D33005_H
/X



LOG010
1
MARK_L
S_MARK_L
/X



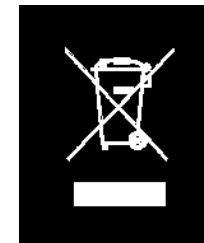
LOG04
1
FCC
FCC
/X



LOG05
1
RCM
RCM
/X



LOG011
1
WEEE_LOGO
WEEE_LOGO
/X



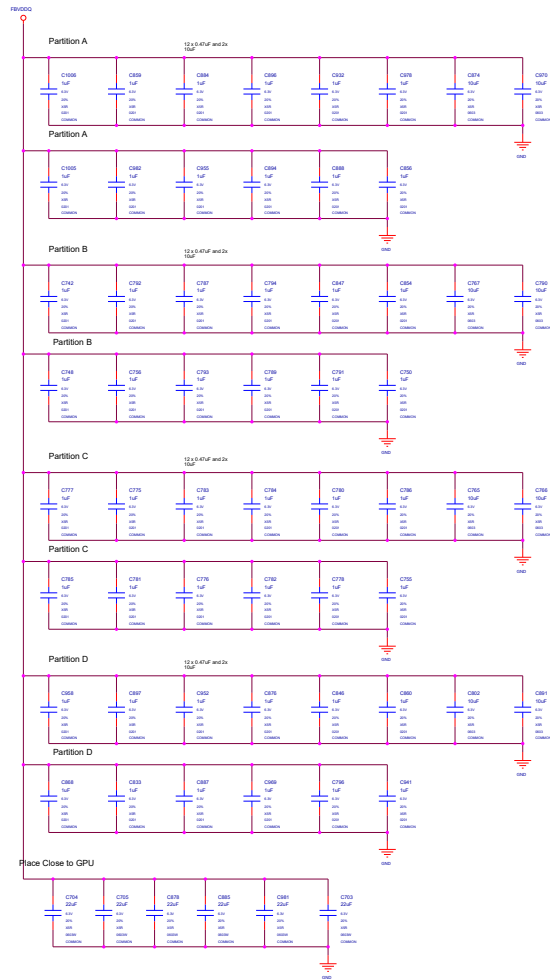
LOG06
1
CAN ICES-3 (B) /NMB-3 (B)
CAN_ICES_3B_NMB_3B
/X

CAN ICES-3 (B) /NMB-3(B)

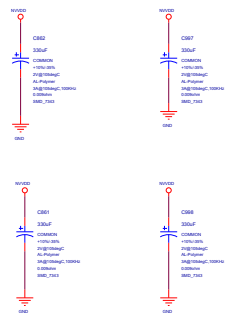
LOG07
1
R/C R-R-MSQ-XXXXXXXXXXXXXXXXXXXX
KC_R_R_LOGO
/X



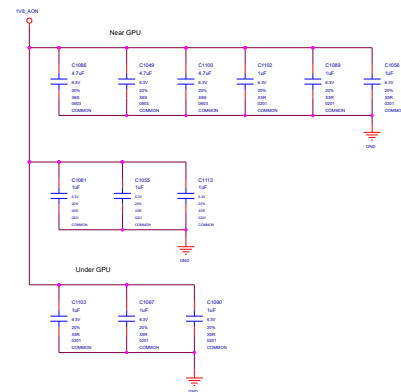
FBVDDQ



NVVDD



1V8_AON



ASSEMBLY	ASSEMBLY DESCRIPTION	SANTA CLARA, CA 95050, USA													
PAGE OF TOTAL	GPU Decoupling	<table border="1"> <tr> <td>REV PN</td><td colspan="3">600-1G161-BASE-000</td></tr> <tr> <td>FILE REV</td><td>REV 1000</td><td>PAGE</td><td>1 OF 33</td></tr> <tr> <td>ECN REV</td><td>A</td><td>DATE</td><td>21-OCT-2018</td></tr> </table>		REV PN	600-1G161-BASE-000			FILE REV	REV 1000	PAGE	1 OF 33	ECN REV	A	DATE	21-OCT-2018
REV PN	600-1G161-BASE-000														
FILE REV	REV 1000	PAGE	1 OF 33												
ECN REV	A	DATE	21-OCT-2018												



$$V_{out} = 0.6 (1 + R_{TP}/R_{BT}) = 1.05V$$



SS	Kg2
1500uB	30 Kuhn
4000uB	62 Kuhn
9000uB	120 Kuhn
1.5mB	Opan



2701 SAN TOMAS
EXPRESSWAY
SANTA CLARA, CA 95050, USA

NV_PN	600-1G161-BASE-000		
PCB REV	PG161-A00	PAGE	30 OF 53
BOM REV	A	DATE	21-OCT-2018

