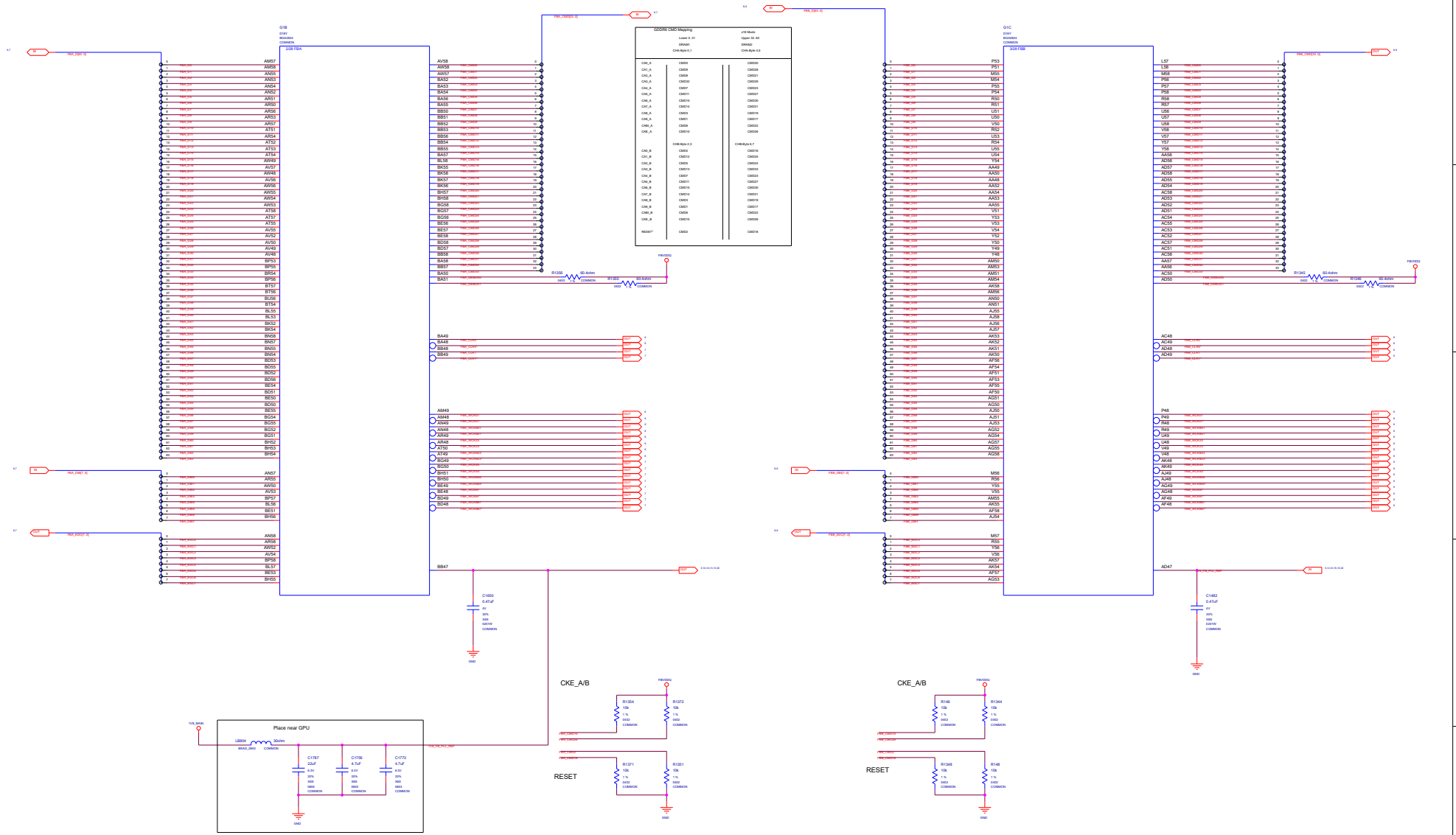
MEMORY: GPU Partition A/B

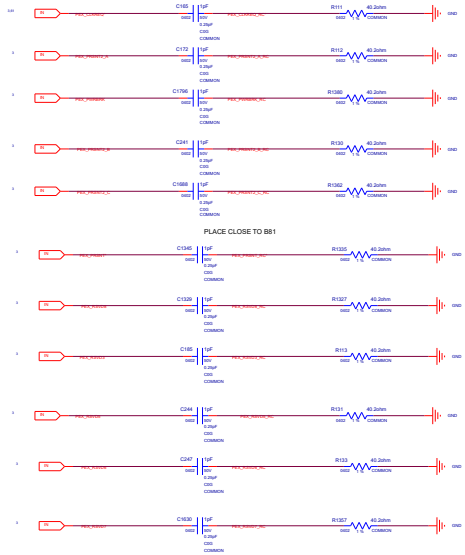


ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	MEMORY: GPU PARTITION A/B

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

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	5 OF 66
BOM REV	A	DATE	09-JUL-2018

PCI TERM

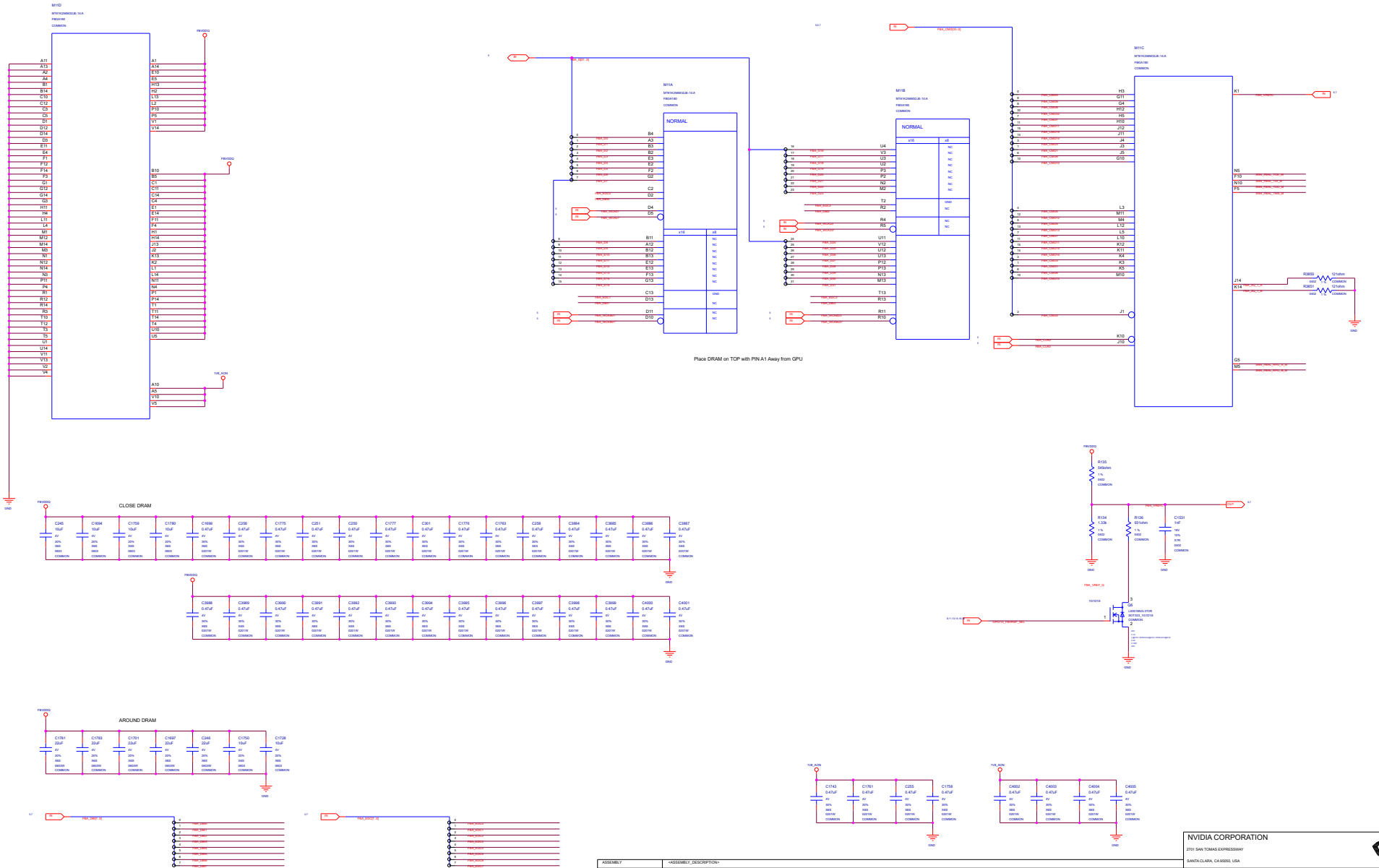


ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PCIE TERM

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

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	4 OF 66
BOM REV	A	DATE	09-JUL-2018

MEMORY: FBA Partition 31..0

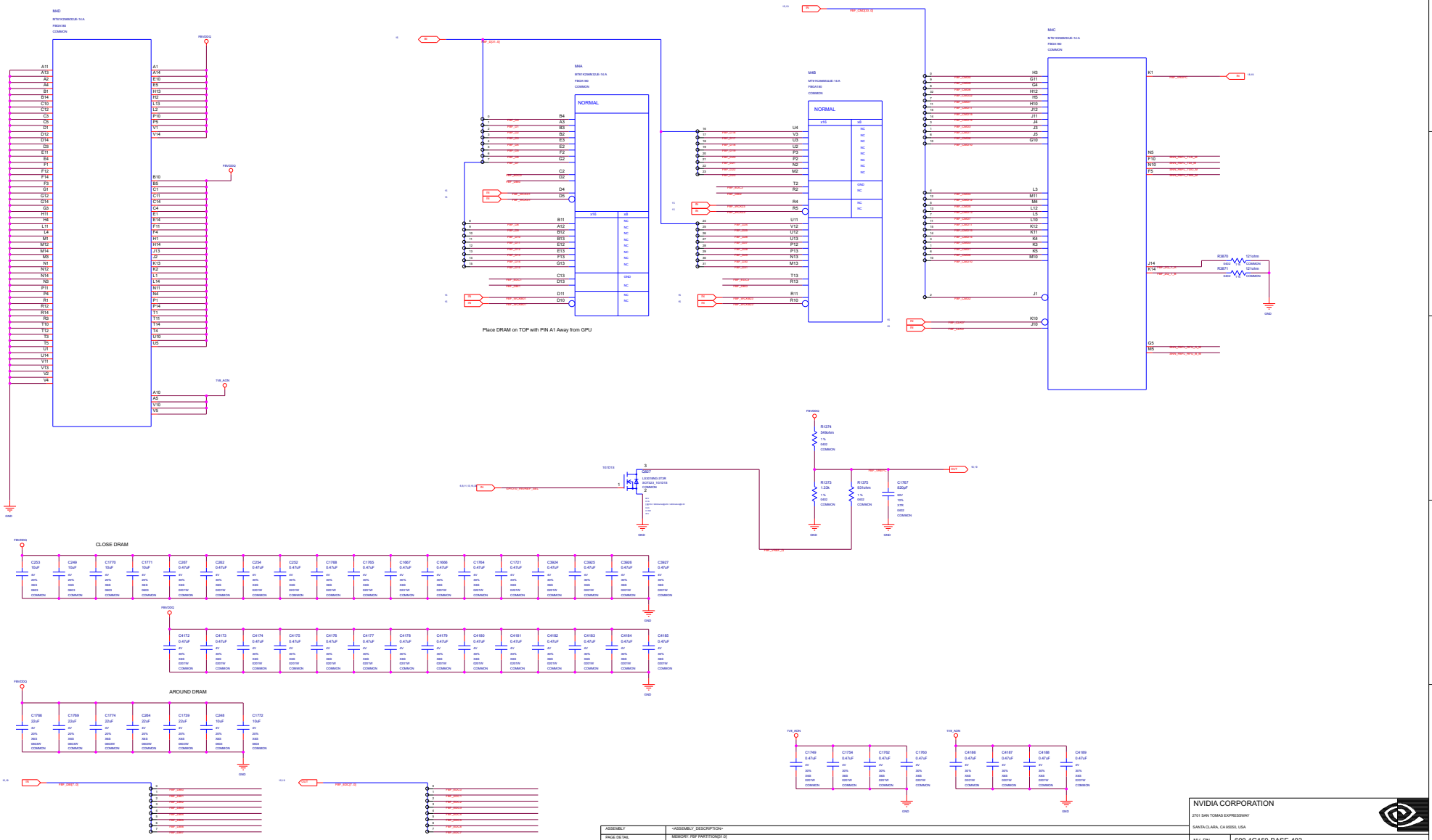


ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	MEMORY: FBA PARTITION[31:0]

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

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	8 OF 66
BOM REV	A	DATE	09-JUL-2018

MEMORY: FBF Partition 31..0

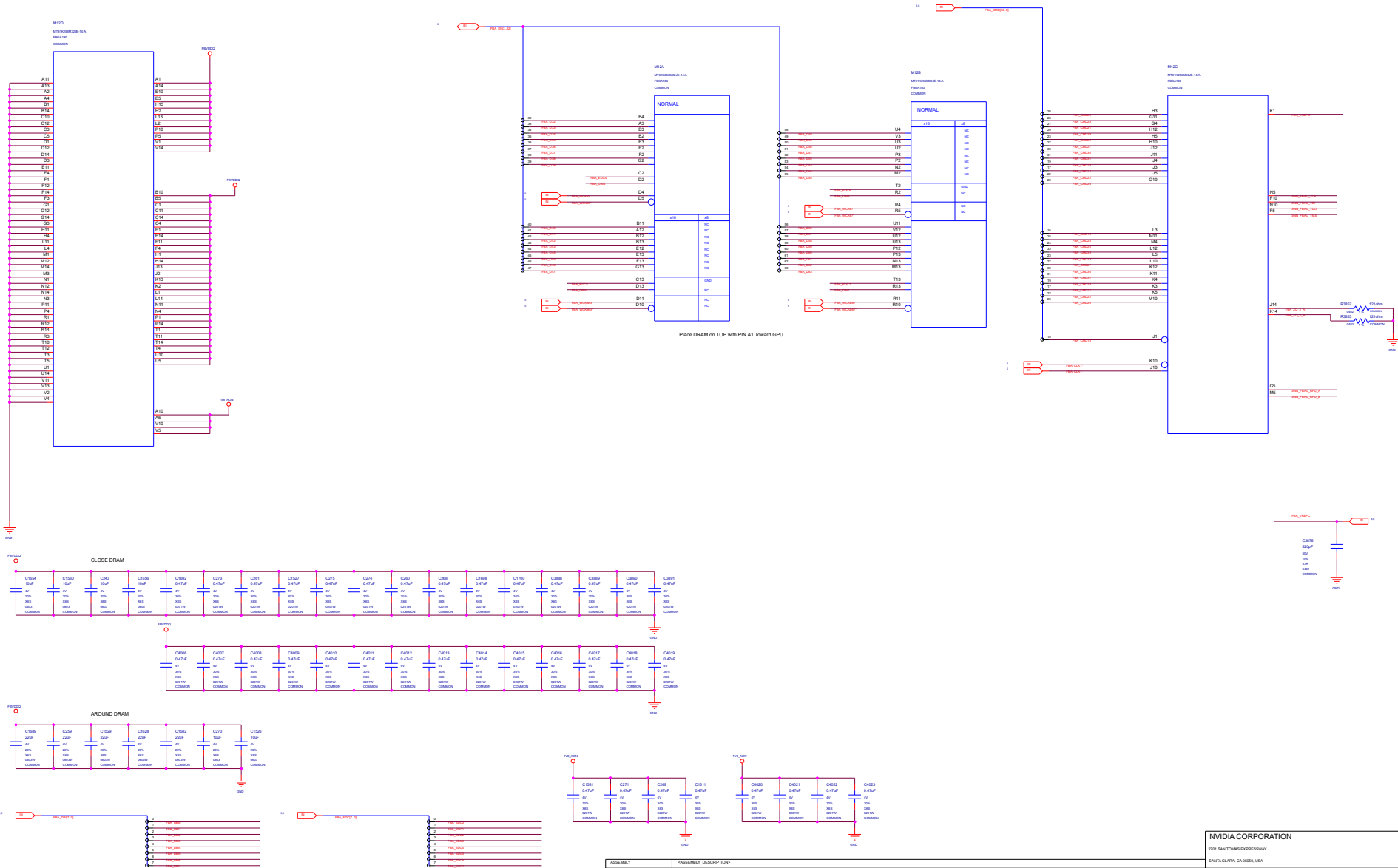


ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	MEMORY: FBF PARTITION[31:0]

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

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	18 OF 66
BOM REV	A	DATE	09-JUL-2018

MEMORY: FBA Partition 63..32

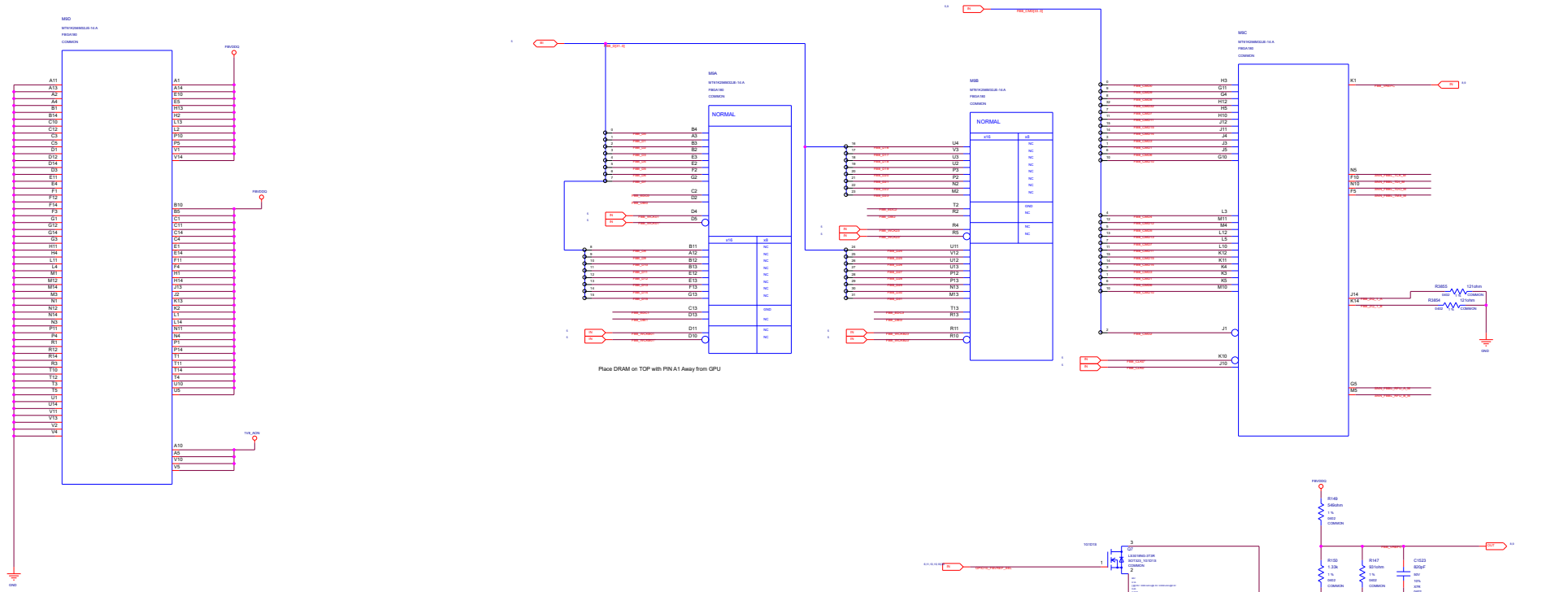


ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	MEMORY: FBA PARTITION[63:32]

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

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	7 OF 66
BOM REV	A	DATE	09-JUL-2018

MEMORY: FBB Partition 31..0

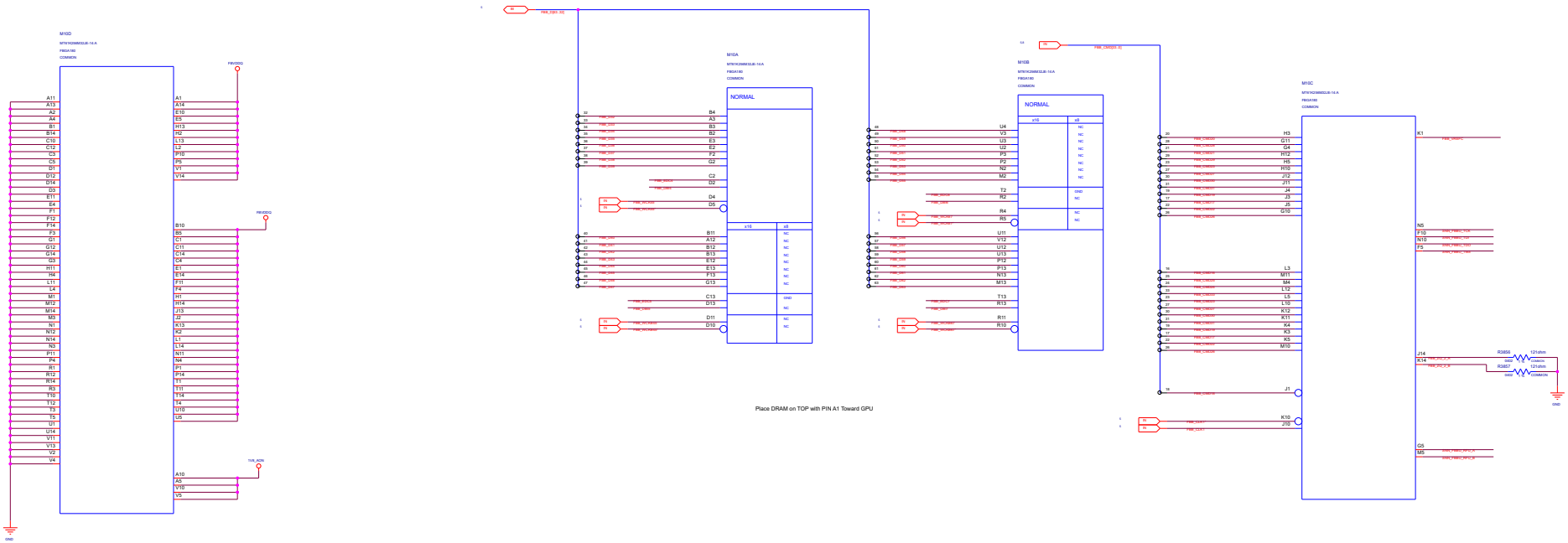


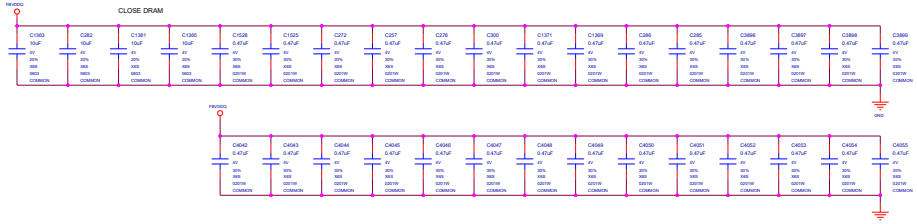
ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	MEMORY: FBB PARTITION[31:0]

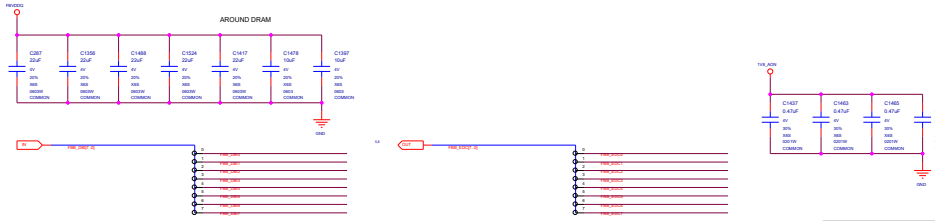
NVIDIA CORPORATION
2701 SAN TOMAS EXPRESSWAY
SANTA CLARA, CA 95050, USA

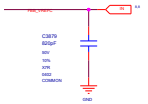
NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	8 OF 66
BOM REV	A	DATE	09-JUL-2018

MEMORY: FBB Partition 63..32







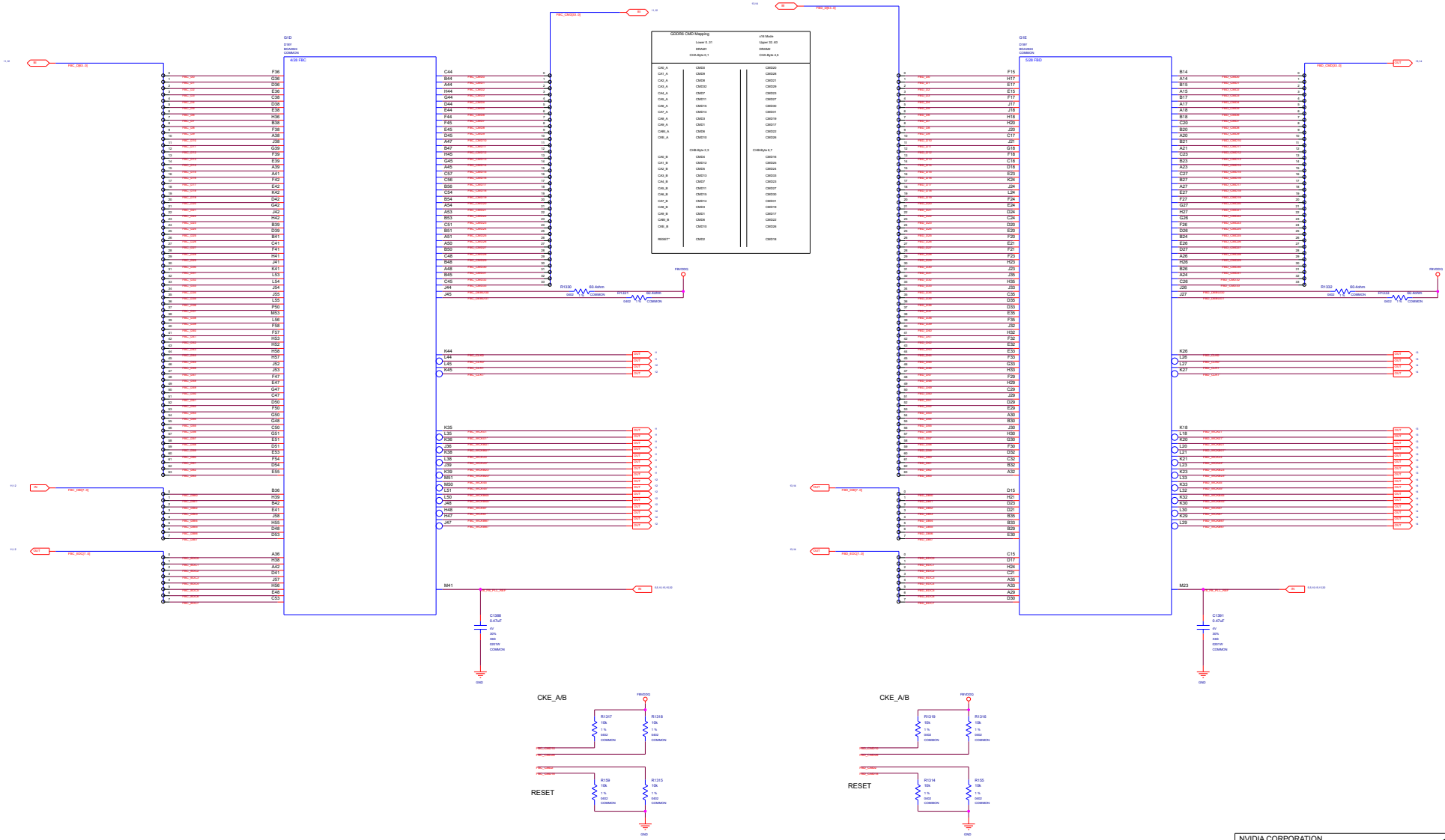


ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	MEMORY: FBB PARTITION[63:32]

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

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	9 OF 66
BOM REV	A	DATE	09-JUL-2018

MEMORY: GPU Partition C/D

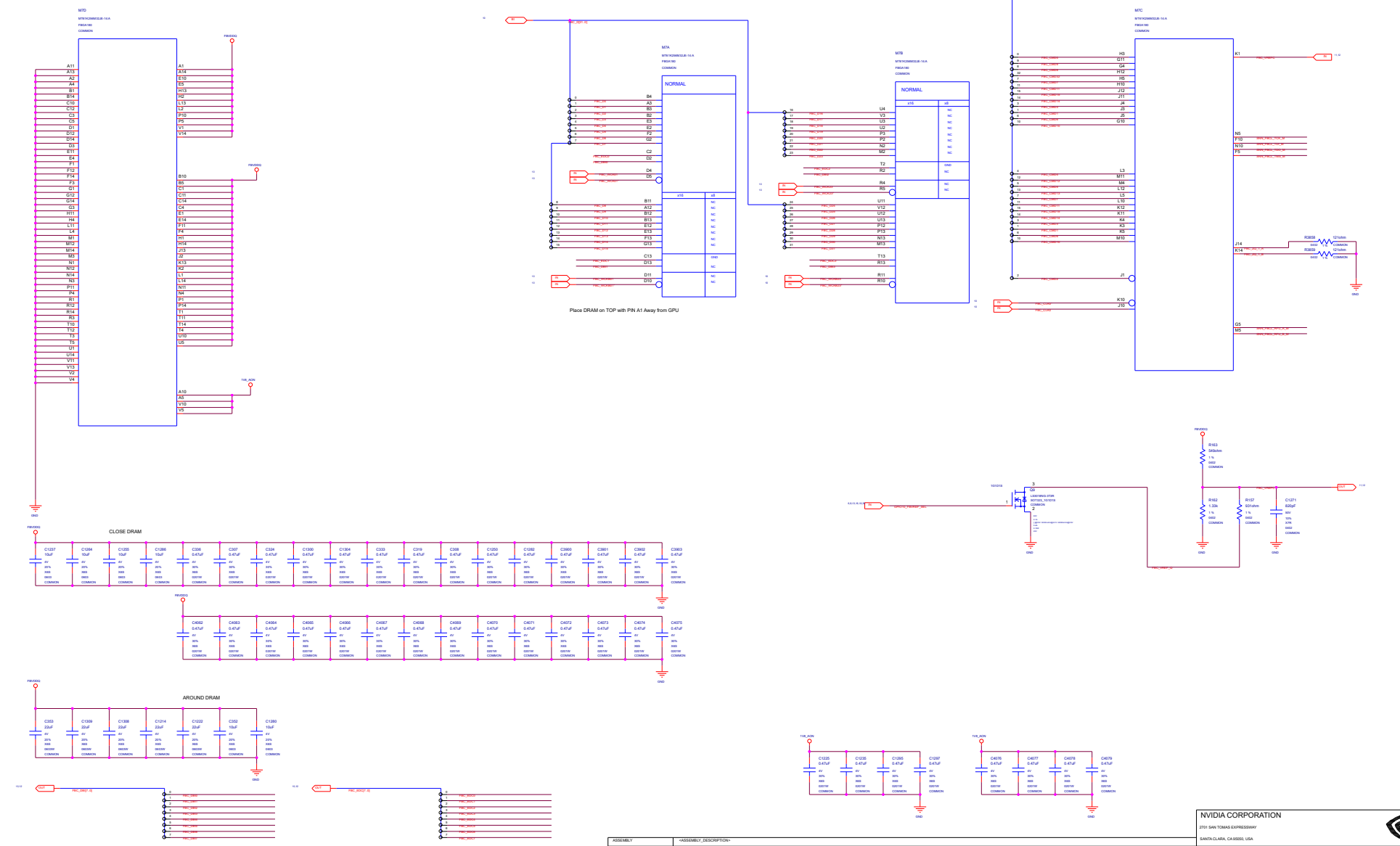


ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	MEMORY: GPU PARTITION C/D

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

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-C/D3	PAGE	10 OF 66
BOM REV	A	DATE	09-JUL-2018

MEMORY: FBC Partition 31..0

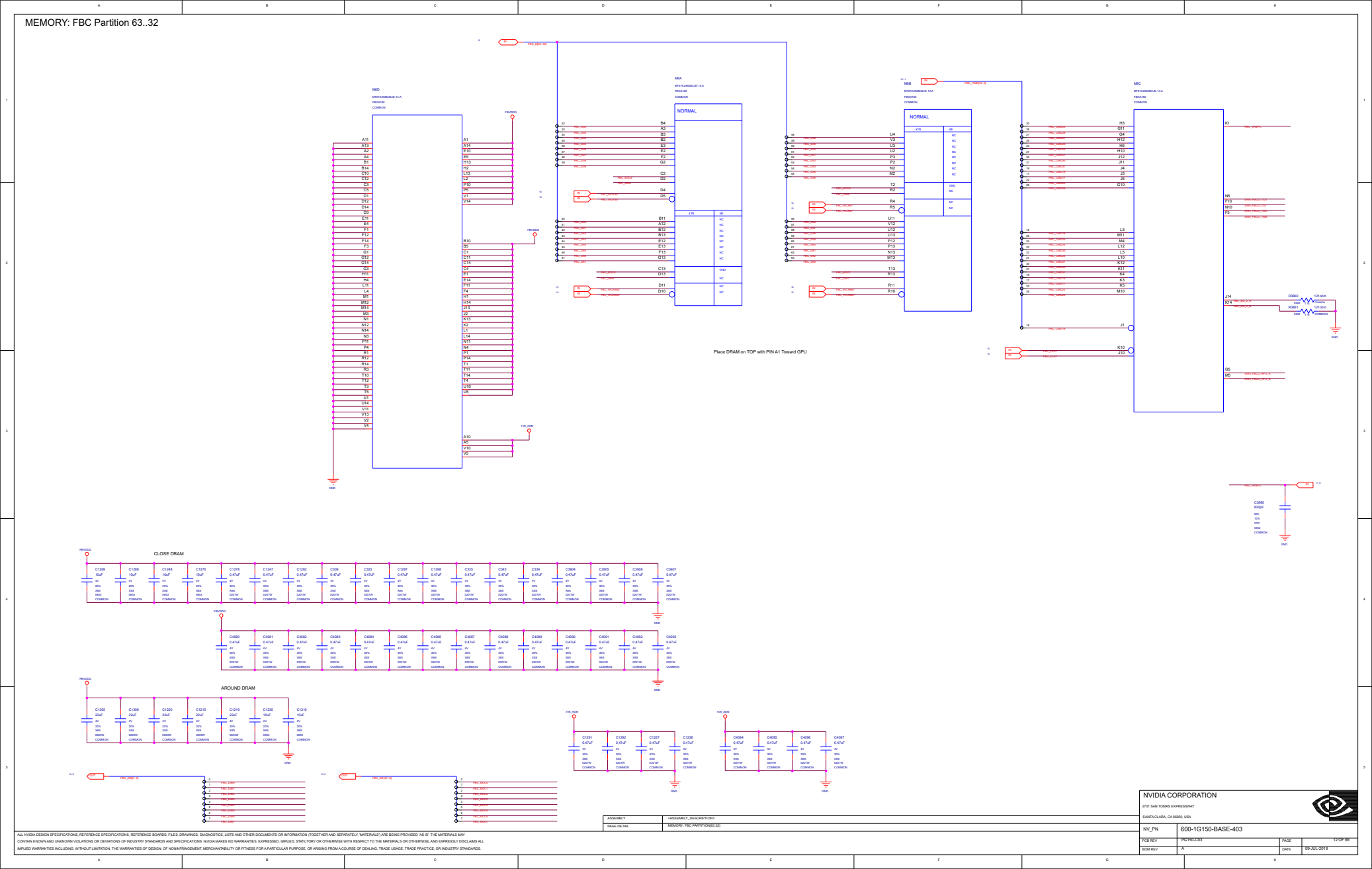


ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	MEMORY: FBC PARTITION[31:0]

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

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	11 OF 66
BOM REV	A	DATE	09-JUL-2018

MEMORY: FBC Partition 63..32



ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	MEMORY: FBC PARTITION[63:32]

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

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	12 OF 66
BOM REV	A	DATE	09-JUL-2018

GPU Decoupling

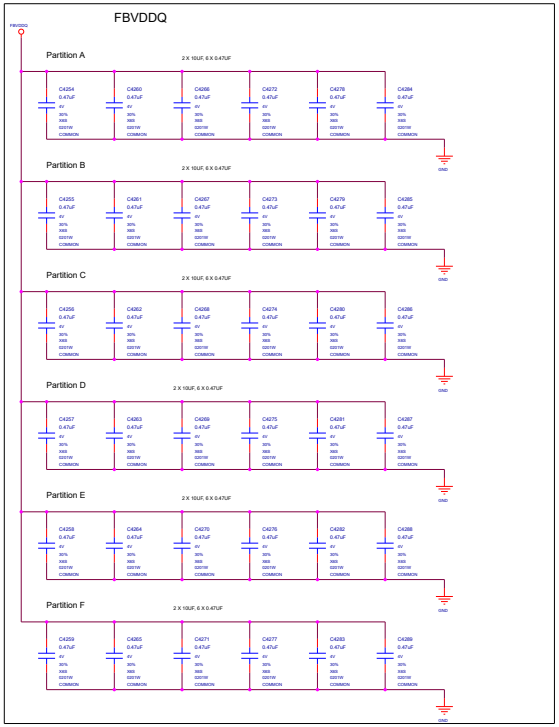
ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	GPU DECOUPLING

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

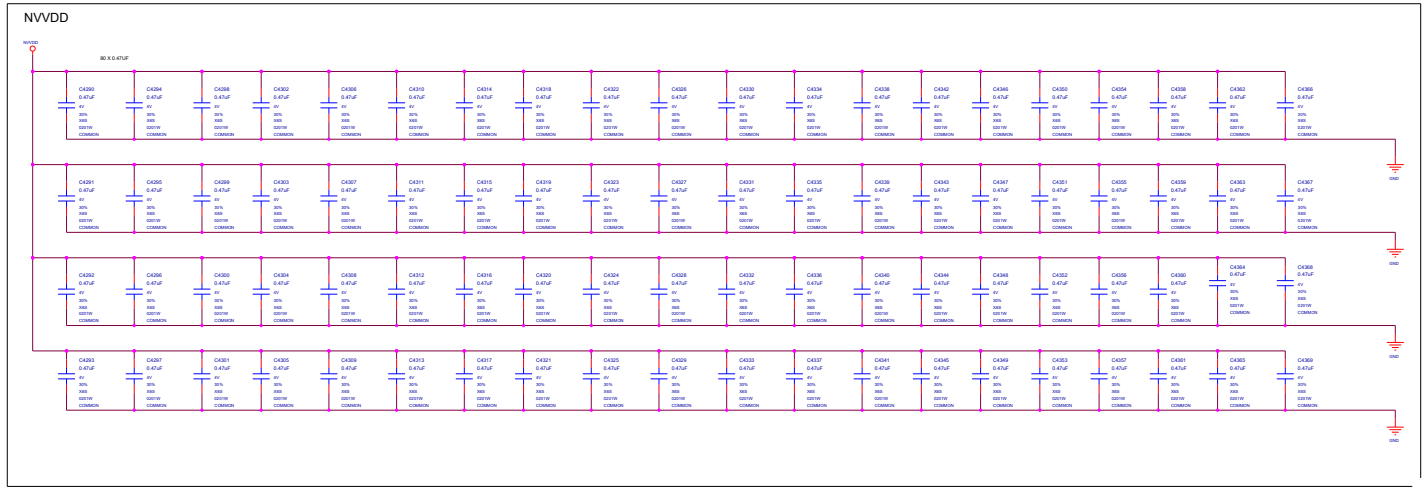
NV_PN	600-1G150-BASE-403		
PCB REV	PG150-C03	PAGE	22 OF 66
BOM REV	A	DATE	09-JULY-2018

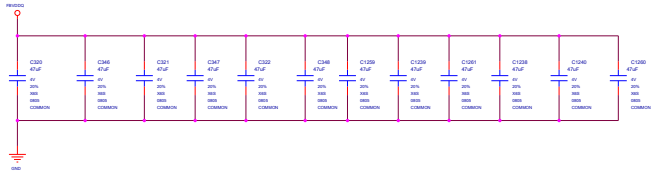
GPU Decoupling

FBVDDQ



NVVDD



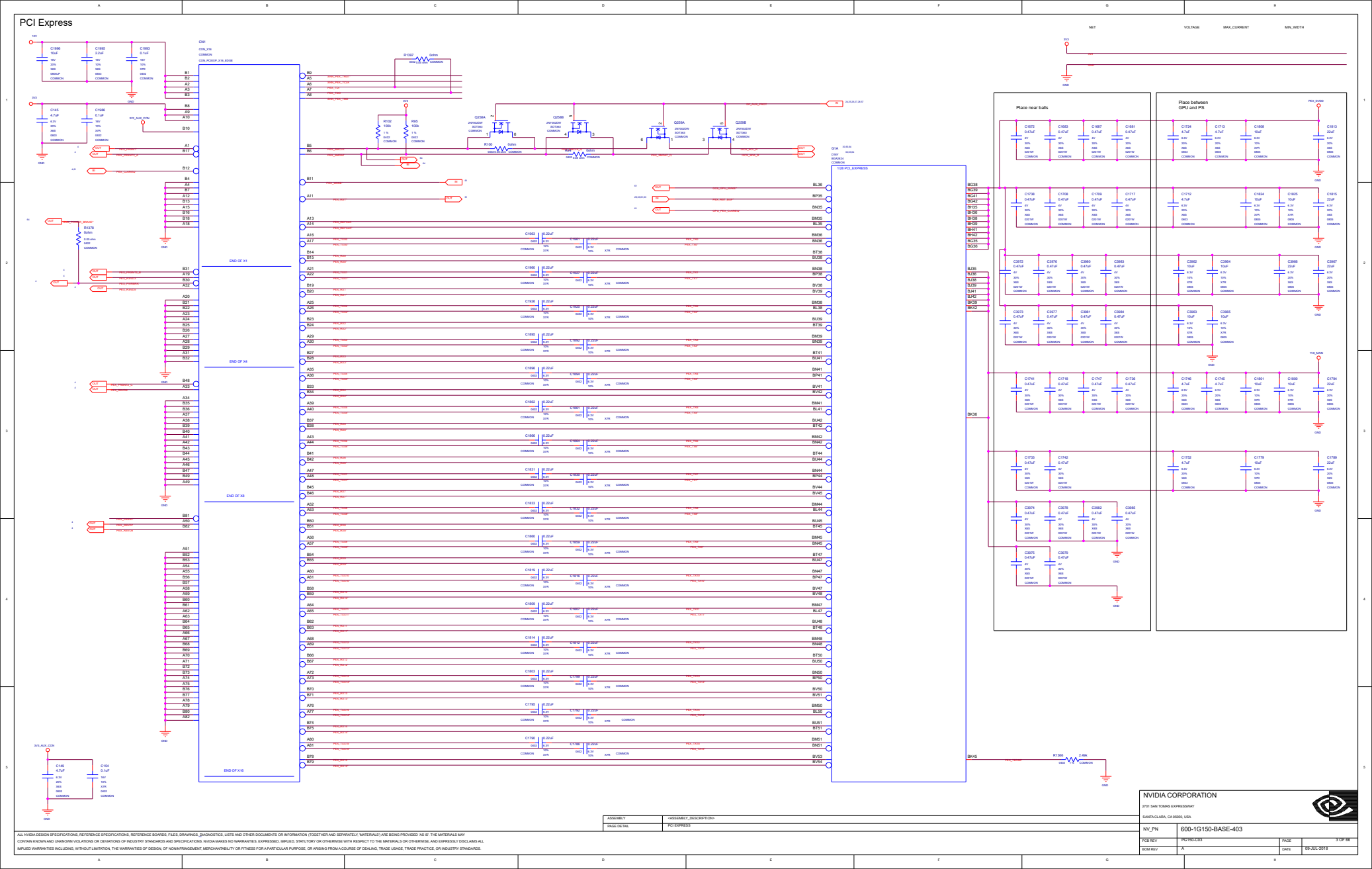


ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	GPU DECOUPLING 2

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

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-C03	PAGE	23 OF 66
BOM REV	A	DATE	09-JUL-2018

PCI Express



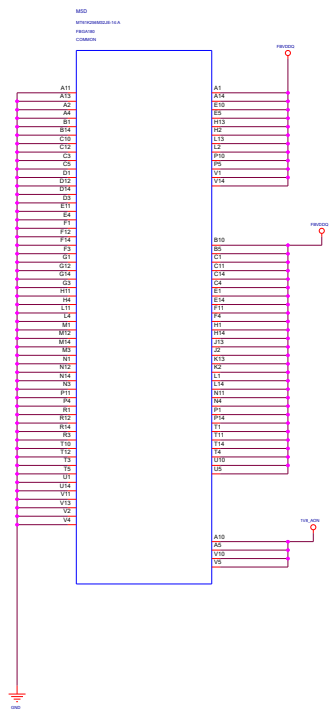
NET	VOLTAGE	MAX_CURRENT	MIN_WIDTH
3V3	3.3V		

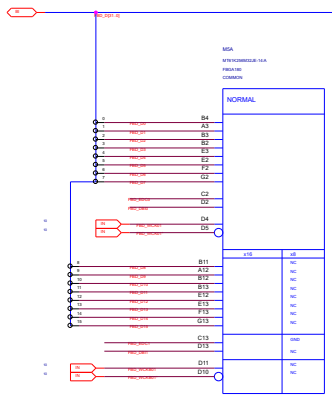
ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	"PCI EXPRESS"

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

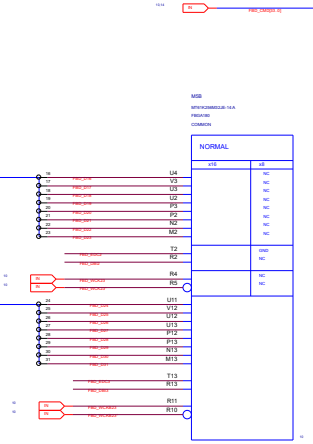
NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	3 OF 66
BOM REV	A	DATE	09-JUL-2018

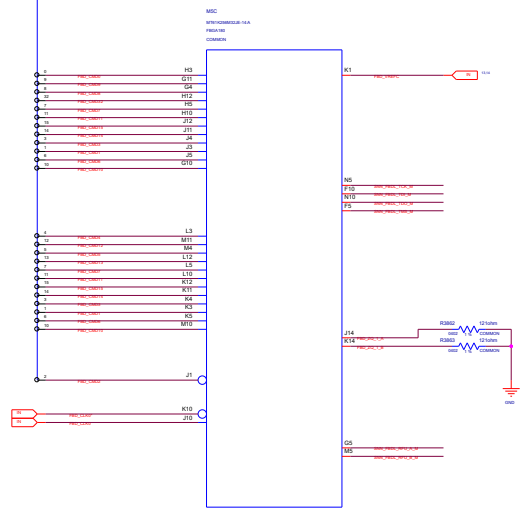
MEMORY: FBD Partition 31..0

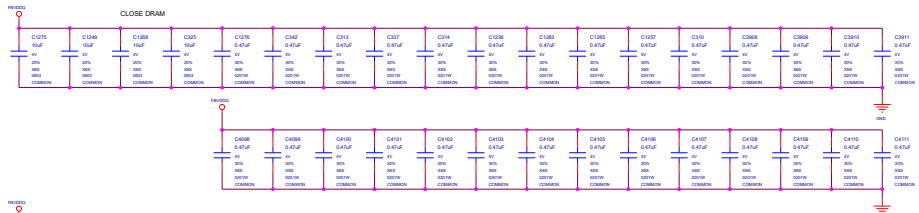


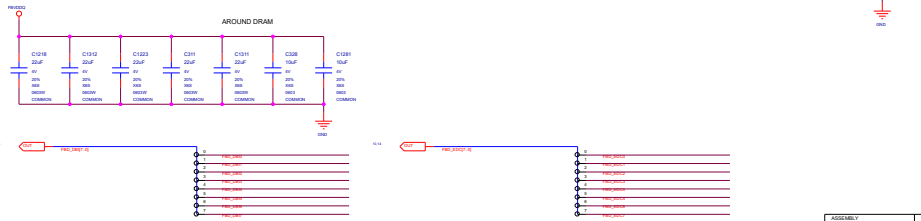


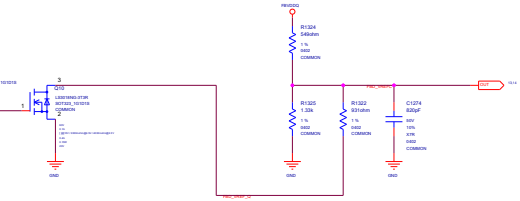
Place DRAM on TOP with PIN A1 Away from GPU

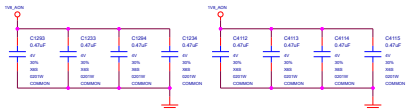










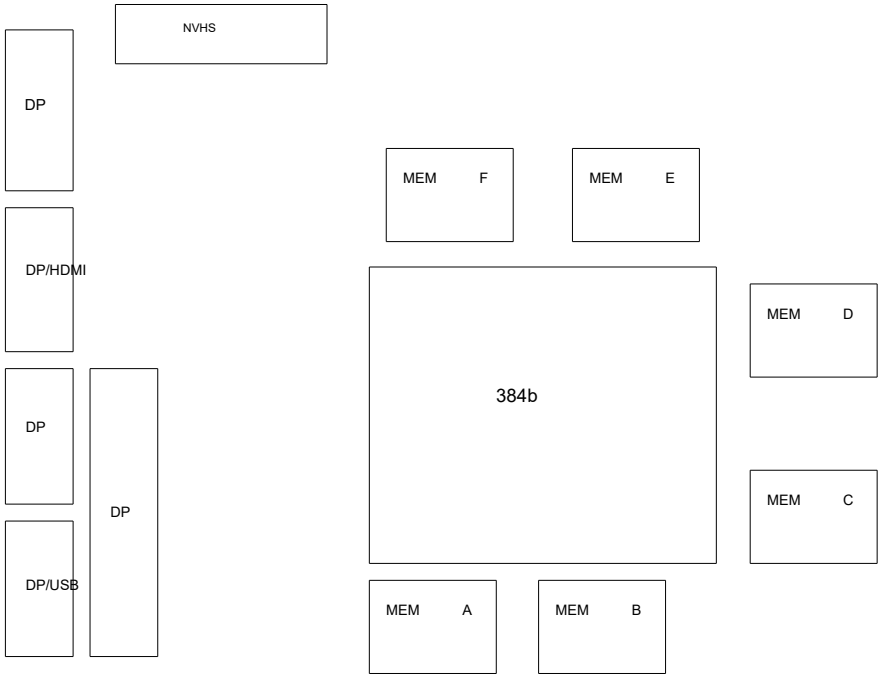


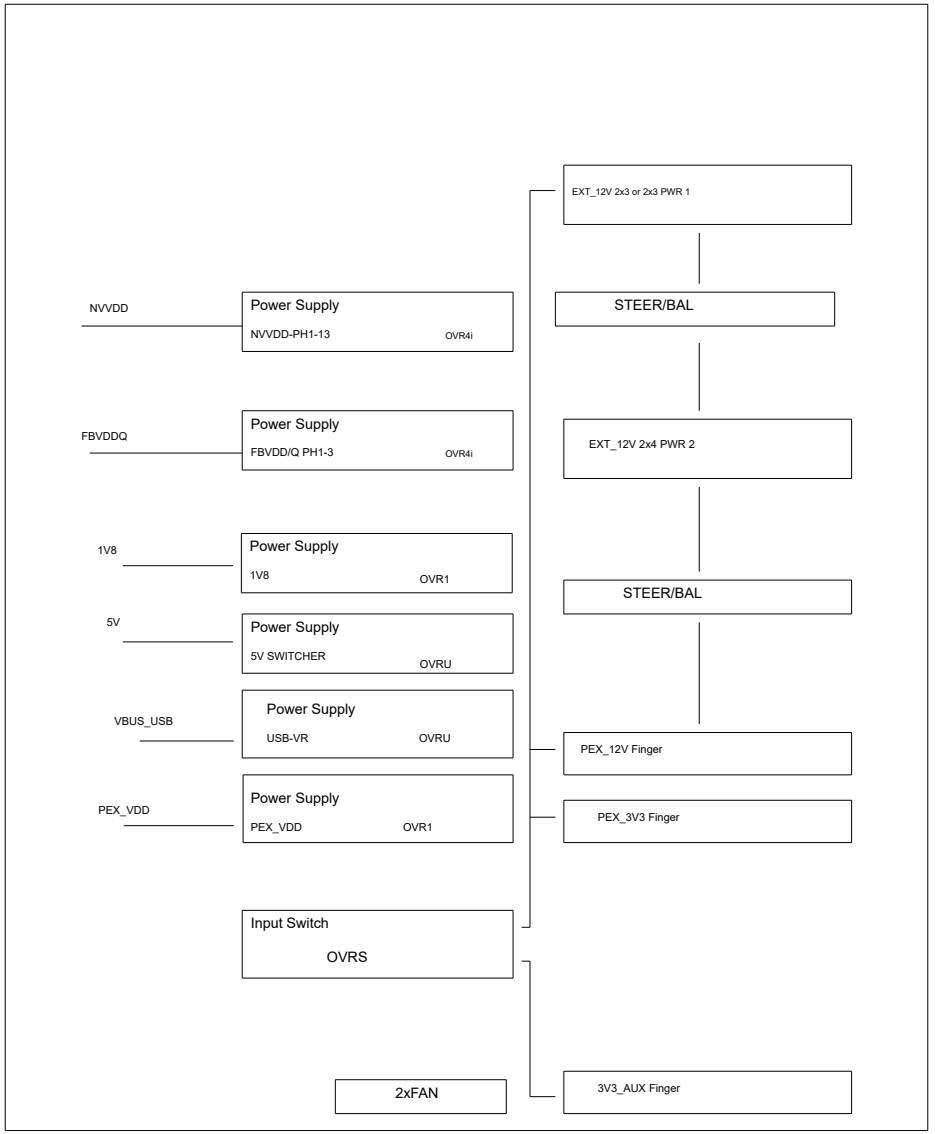
ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	MEMORY: FBD PARTITION[31:0]

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

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	13 OF 66
BOM REV	A	DATE	09-JUL-2018

Block Diagram



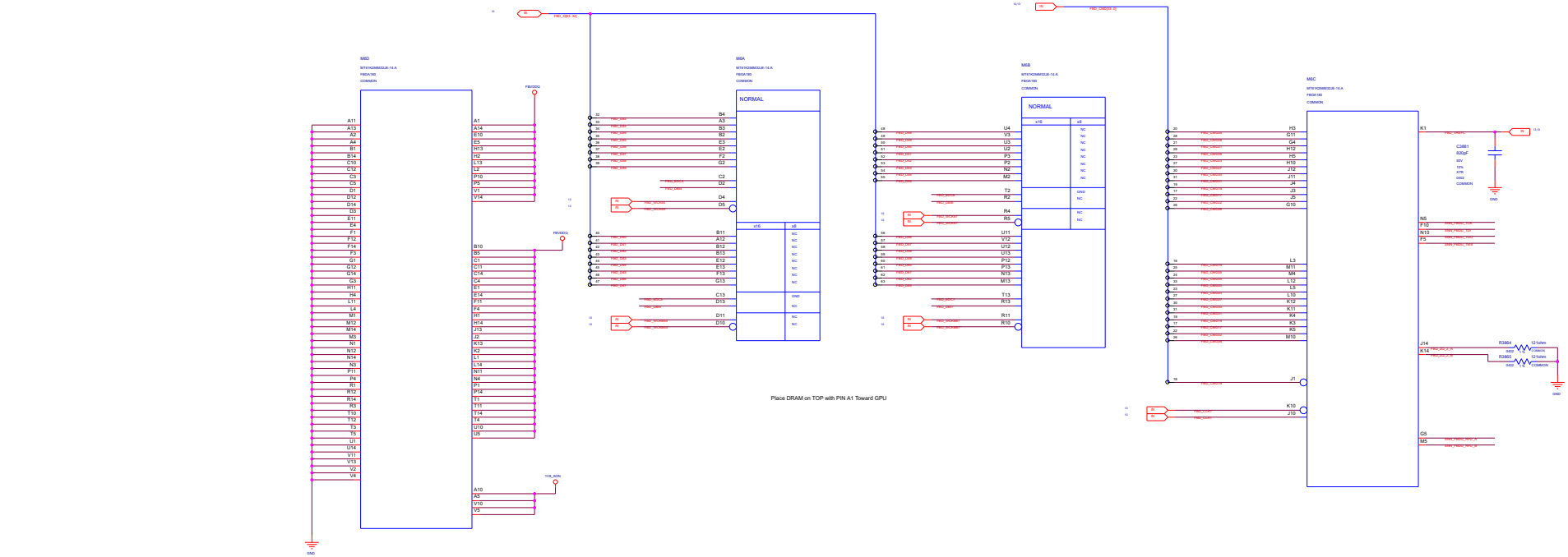


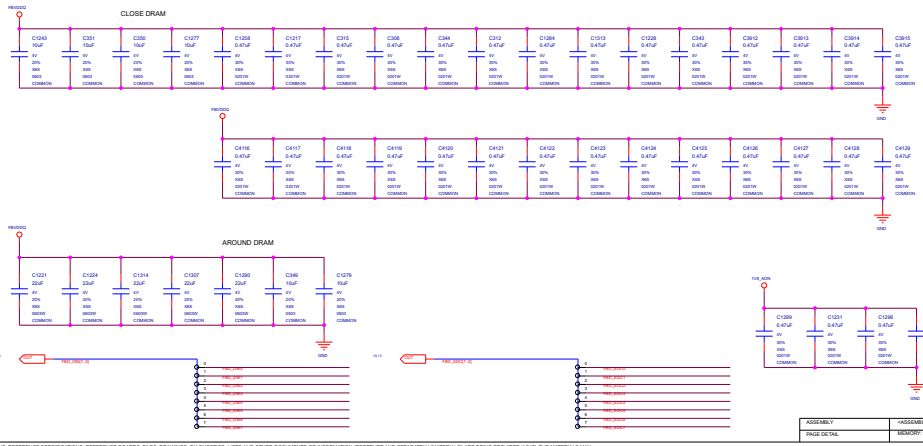
ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	BLOCK DIAGRAM

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

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	2 OF 66
BOM REV	A	DATE	09-JUL-2018

MEMORY: FBD Partition 63..32





ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	MEMORY: FBD PARTITION[63:32]

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

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	14 OF 66
BOM REV	A	DATE	09-JUL-2018

PG150-C03

384b GDDR6 x16

TALL DP + DP + DP + HDMI/DP + USB

TABLE OF CONTENTS

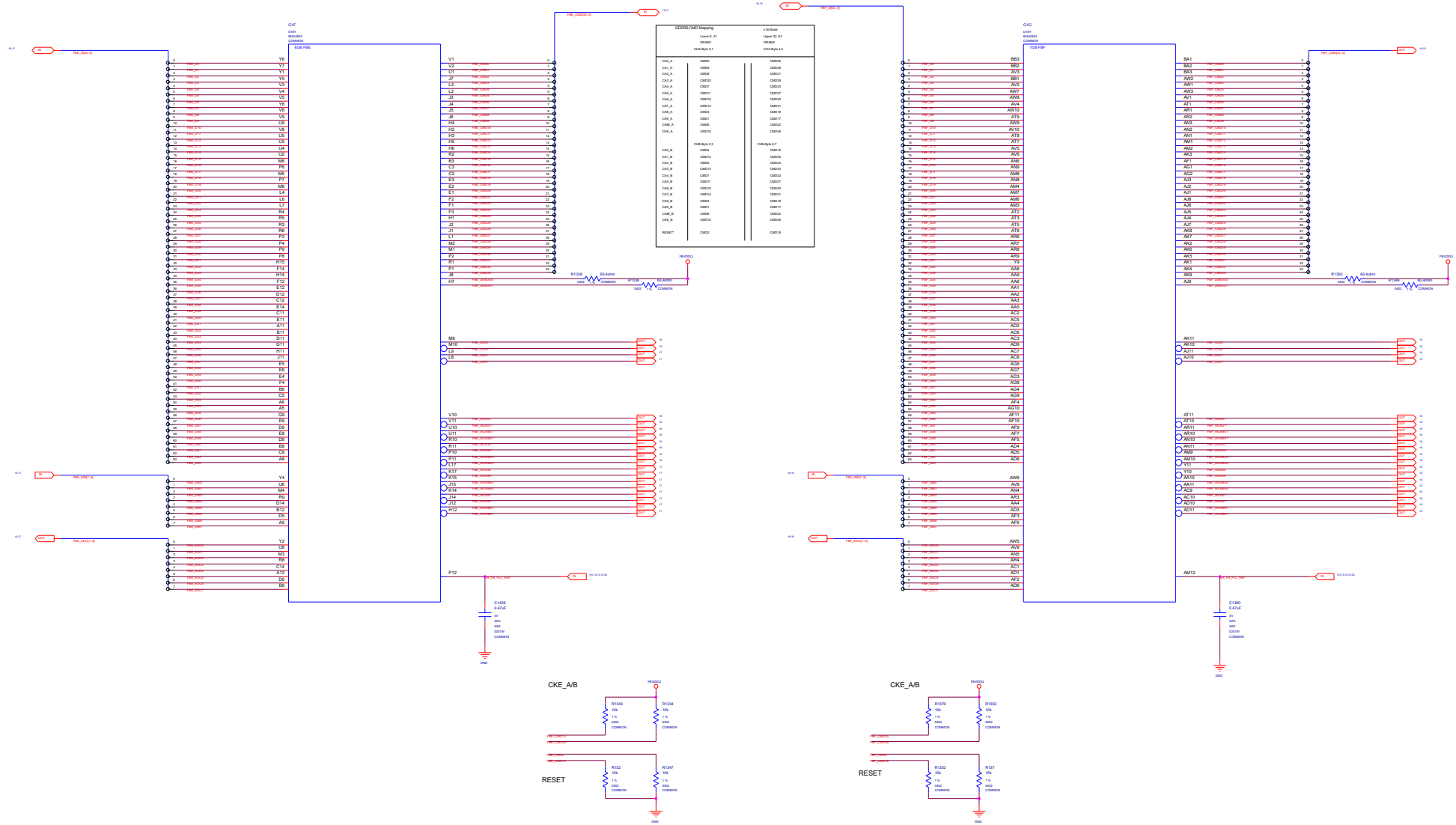
Page	Description
1	Table of Contents
2	BLOCK DIAGRAM
3	PCI EXPRESS
4	PCIE TERM
5	MEMORY: GPU PARTITION A/B
6	MEMORY: FBA PARTITION[31:0]
7	MEMORY: FBA PARTITION[63:32]
8	MEMORY: FBB PARTITION[31:0]
9	MEMORY: FBB PARTITION[63:32]
10	MEMORY: GPU PARTITION C/D
11	MEMORY: FBC PARTITION[31:0]
12	MEMORY: FBC PARTITION[63:32]
13	MEMORY: FBD PARTITION[31:0]
14	MEMORY: FBD PARTITION[63:32]
15	MEMORY: GPU PARTITION E/F
16	MEMORY: FBE PARTITION[31:0]
17	MEMORY: FBE PARTITION[63:32]
18	MEMORY: FBF PARTITION[31:0]
19	MEMORY: FBF PARTITION[63:32]
20	GPU PWR AND GND
21	GPU PWR, GND and NCs
22	GPU DECOUPLING
23	GPU DECOUPLING 2
24	IFPA/B DP
25	IFPE DP
26	IFPF USB
27	IFPC HDMI/DP
28	IFPD DP
29	NVHS X16
30	MISC: THERMAL, JTAG, GPIO, STEREO
31	MISC: ROM, STRAPS
32	MISC: XTAL, PLL
33	MISC: USB PPC
34	PS: USB_C VR
35	PS: 5V
36	PS: PEXVDD 1V8 Rail
37	PS: FBVDD Controller
38	PS: FBVDD Controller OVR3
39	PS: FBVDD Phase 1, 2
40	PS: FBVDD Phase 3
41	PS: NVVDD Controller_OVR8
42	PS: NVVDD Phase 1
43	PS: NVVDD Phase 2
44	PS: NVVDD Phase 3, 4
45	PS: NVVDD Phase 5
46	PS: NVVDD Phase 7, 8
47	PS: NVVDD Phase 9, 10
48	PS: NVVDD Phase 11, 12
49	PS: NVVDD Phase 13, 14
50	PS: INPUT SWITCH_RTD3
51	PS: INPUT SWITCH_RTD3 USB
52	PS: INPUT SWITCH RAIL BALANCE
53	PS: DISCRETE STEERING
54	PS: Input, filtering, and Monitoring
55	PS: Current Sterring, Hot Unplug
56	PS: Prefilter
57	Sequence: 5V, 1V8, NV3V3 EN
58	Sequence: NV, PEX, FB EN
59	Sequence: PCIE Voltage Monitor
60	Sequence: Discharge
61	Sequence: MISC
62	MISC: FAN & LED1
63	MISCL: LED 2
64	MCU ZERO POWER IDLE
65	MECH
66	VR Thermal Protection

ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	Table of Contents

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

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-C03	PAGE	1 OF 66
BOM REV	A	DATE	09-JUL-2018

MEMORY: GPU Partition E/F

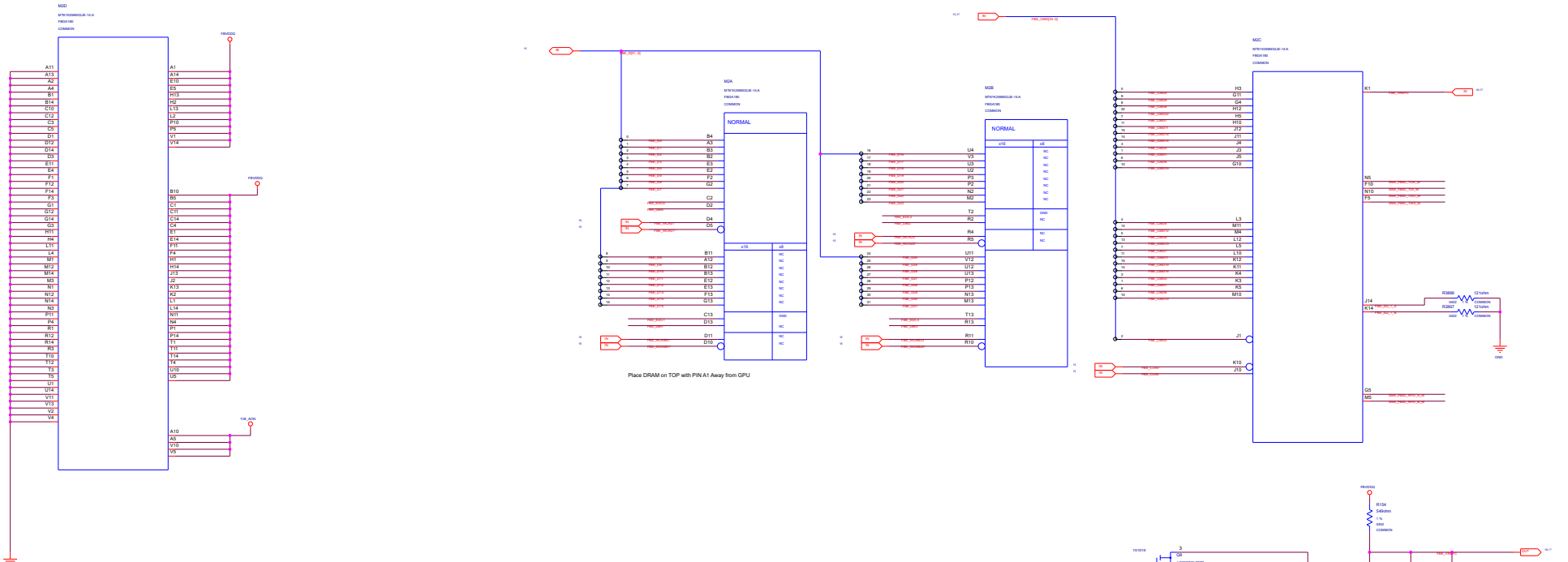


ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	MEMORY: GPU PARTITION E/F

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

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	15 OF 66
BOM REV	A	DATE	09-JUL-2018

MEMORY: FBE Partition 31..0

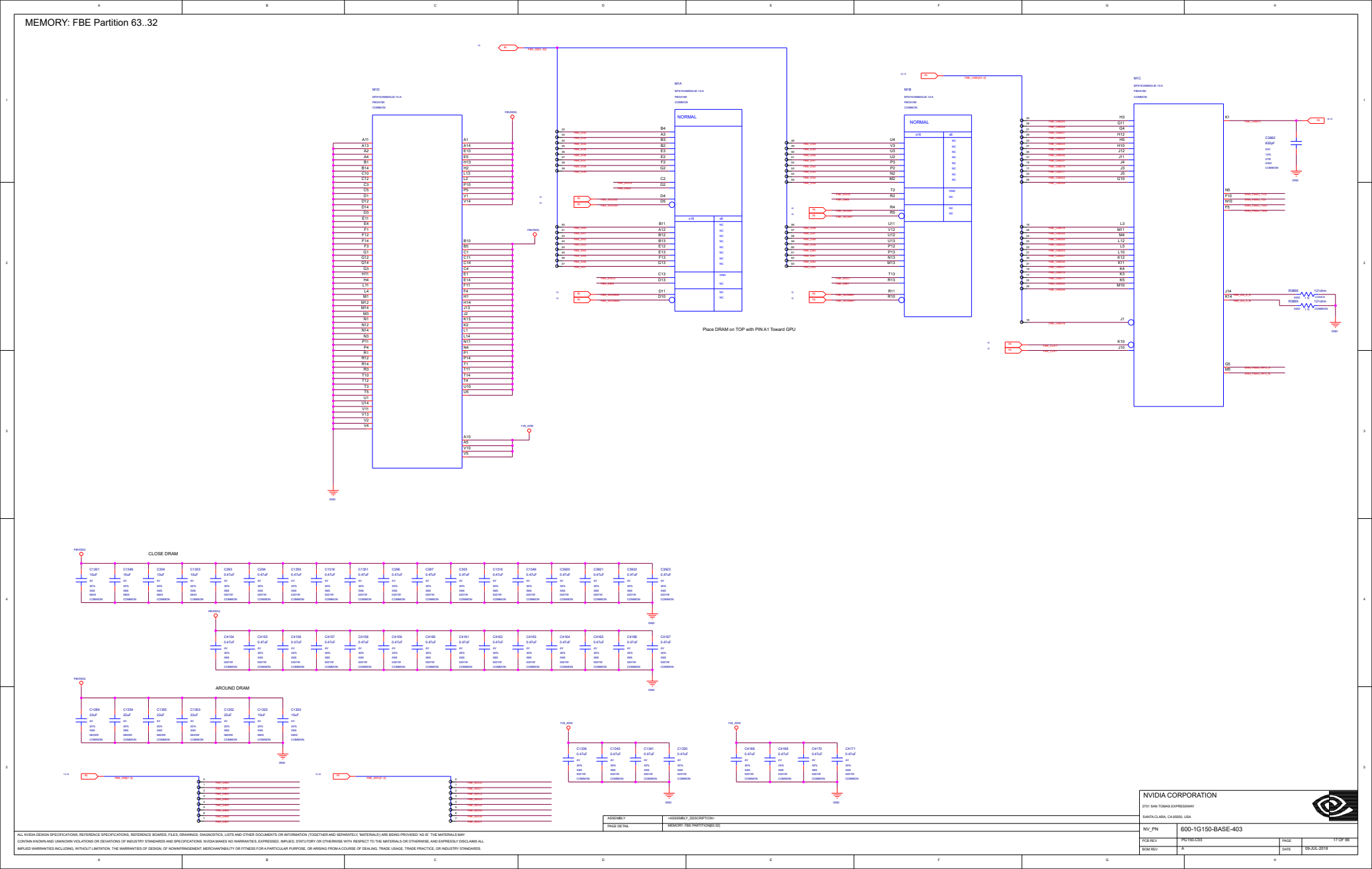


ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	MEMORY: FBE PARTITION[31:0]

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

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	16 OF 66
BOM REV	A	DATE	09-JUL-2018

MEMORY: FBE Partition 63..32

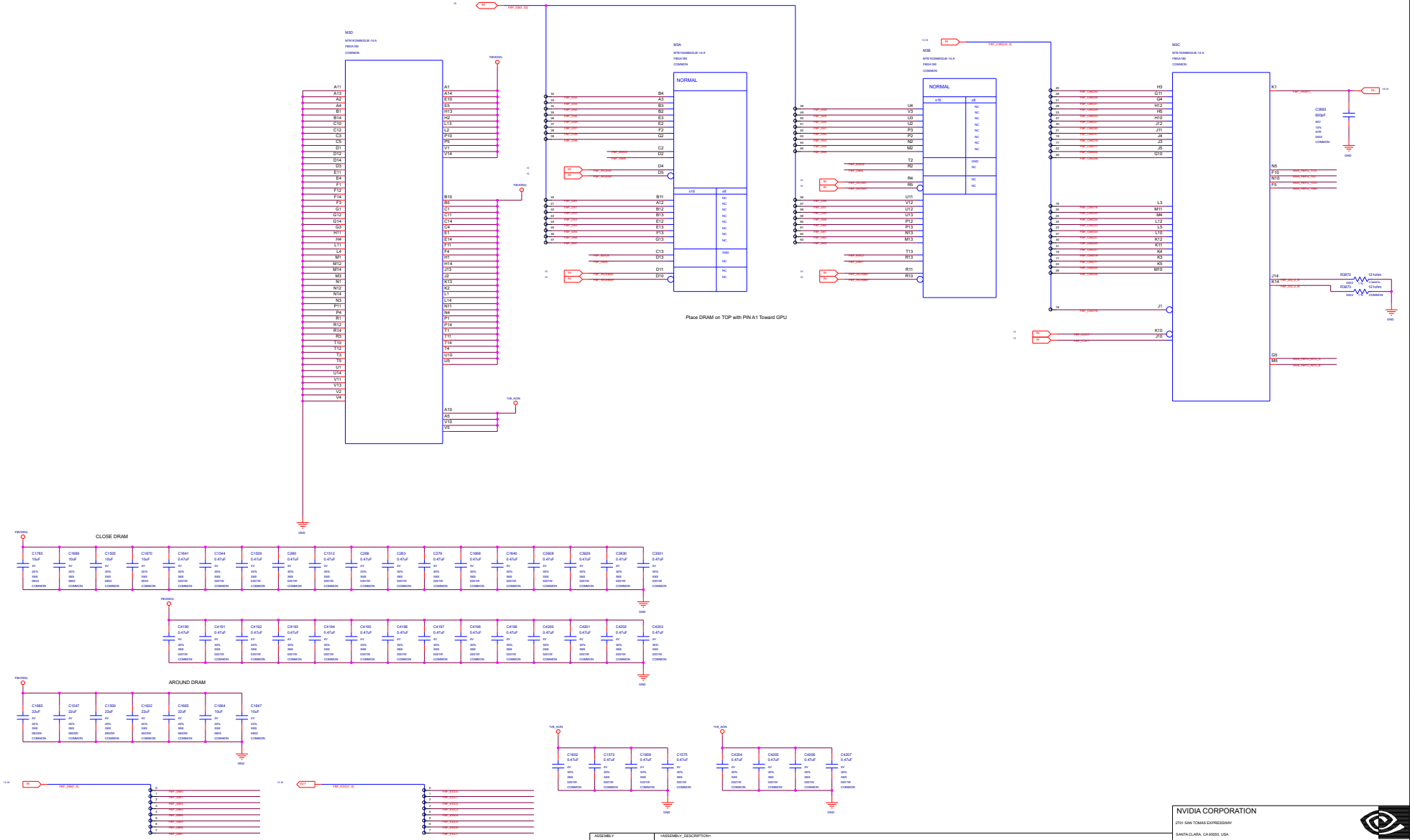


ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	MEMORY: FBE PARTITION[63:32]

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

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	17 OF 66
BOM REV	A	DATE	09-JUL-2018

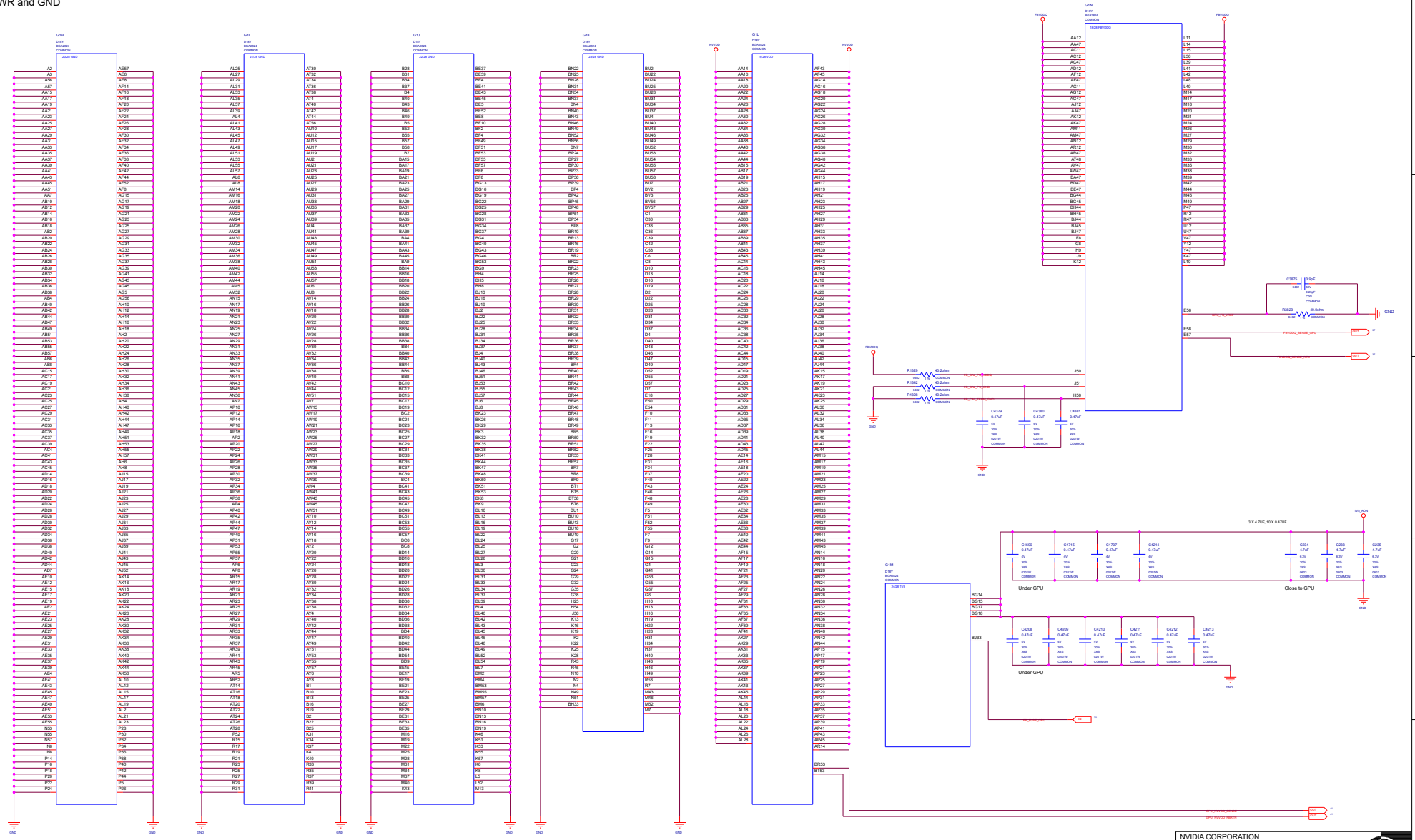
MEMORY: FBF Partition 63..32



ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	MEMORY: FBF PARTITION[63:32]

NVIDIA CORPORATION	
2701 SAN TOMAS EXPRESSWAY	
SANTA CLARA, CA 95050, USA	
NV_PN	600-1G150-BASE-403
PCB REV	PG150-CD3
BOM REV	A
PAGE	19 OF 66
DATE	09-JUL-2018

GPU PWR and GND

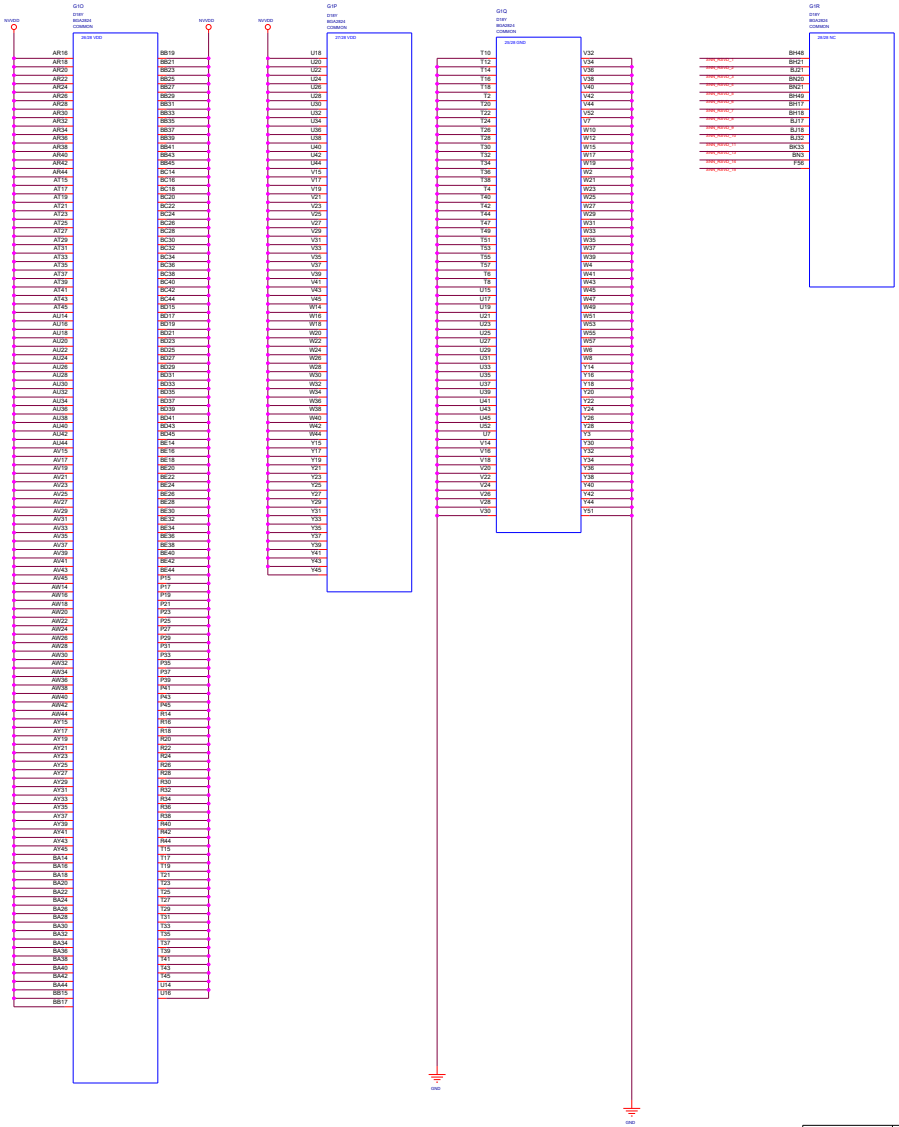


ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	GPU PWR AND GND

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

NV_PN	600-1G150-BASE-403
PCB REV	PG150-C03
BOM REV	A
PAGE	20 OF 66
DATE	09-JUL-2018

GPU PWR GND NCs

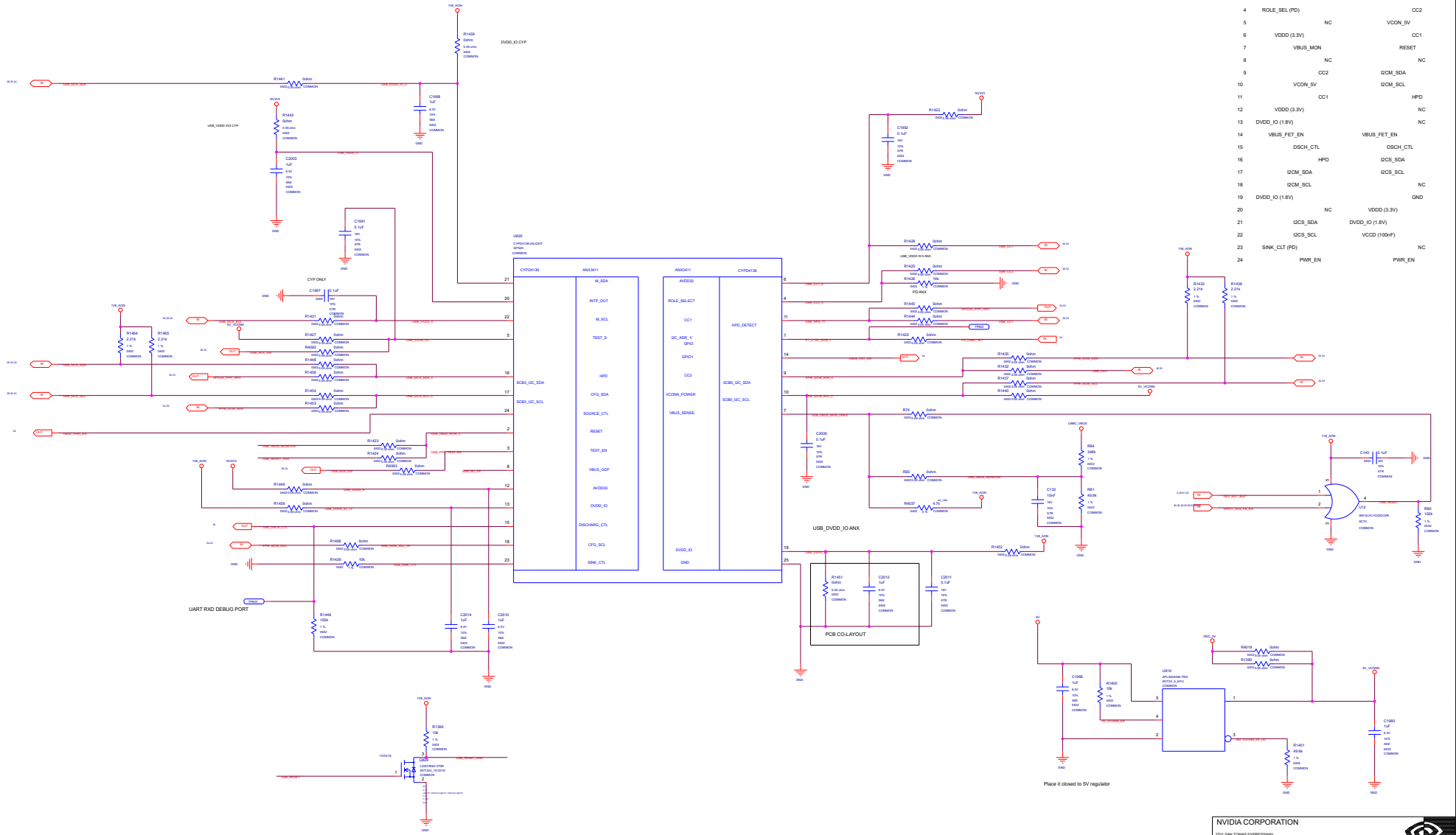


ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	GPU PWR, GND and NCs

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

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	21 OF 66
BOM REV	A	DATE	09-JUL-2018

MISC: USB PPC

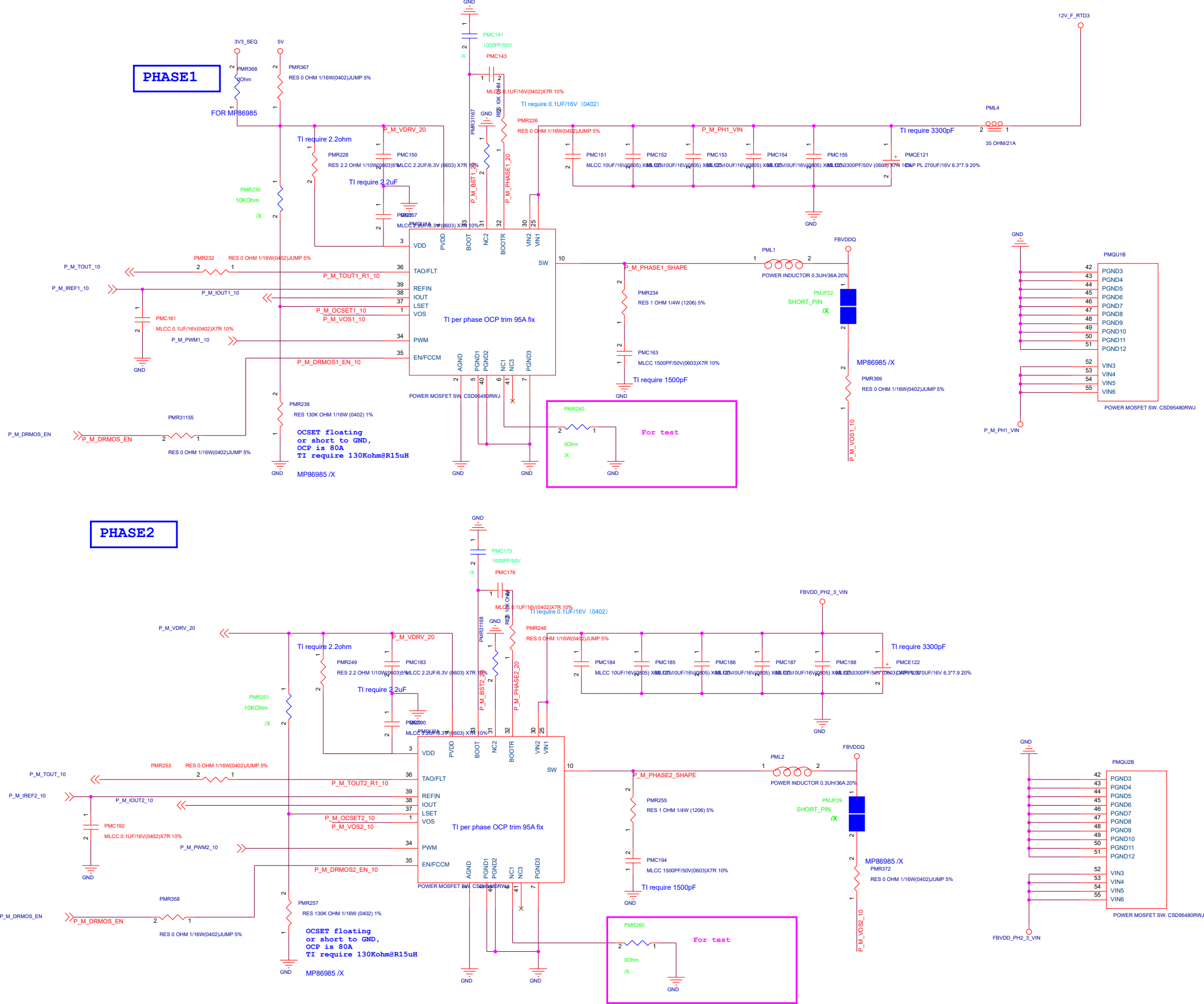


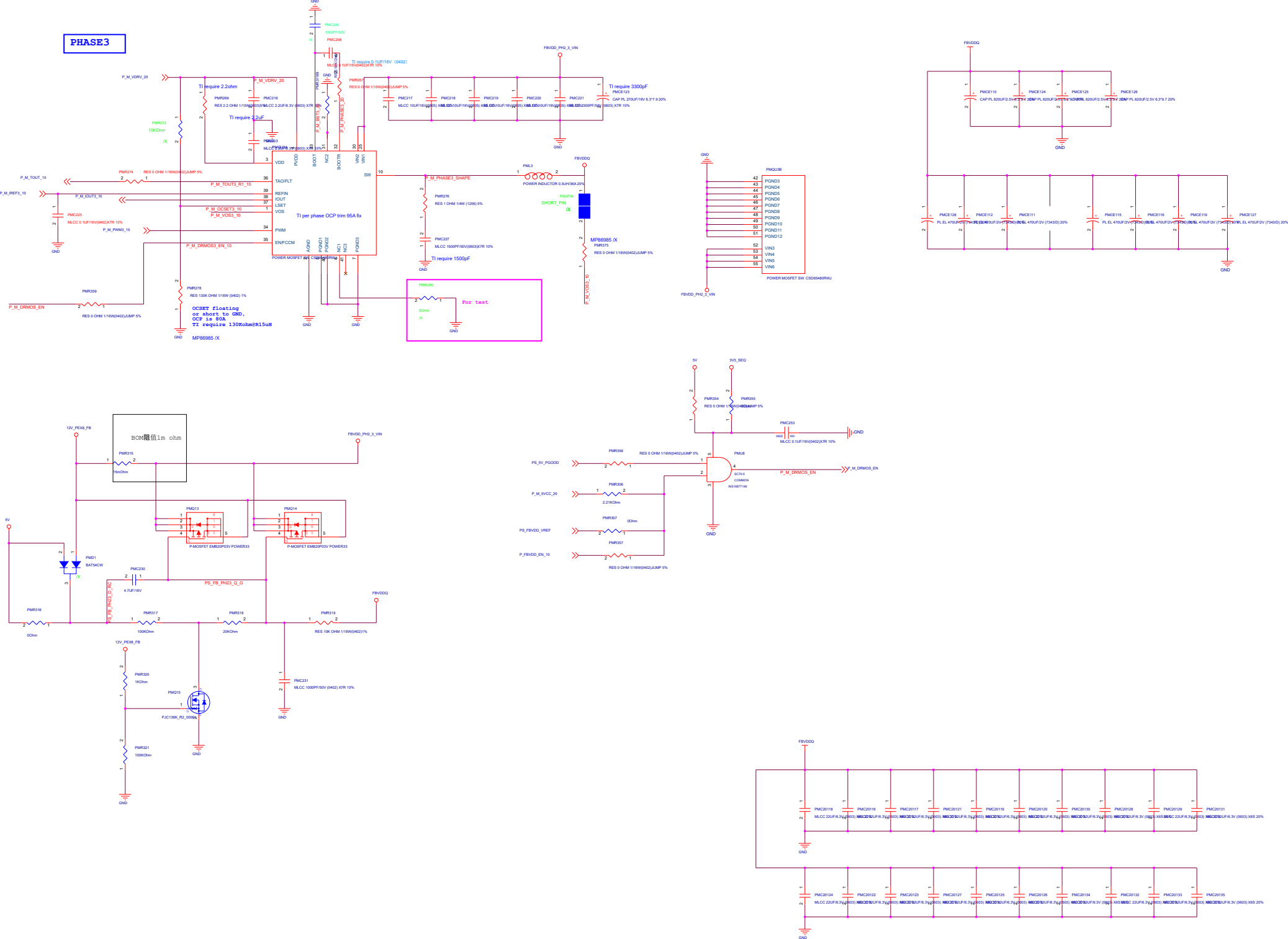
PIN	ANX	CYP
1	TP	TP
2	RESET	VBUS_MON
3	NC	NC
4	ROLE_SEL (PD)	CC2
5	NC	VCON_5V
6	VDDD (3.3V)	CC1
7	VBUS_MON	RESET
8	NC	NC
9	CC2	I2CM_SDA
10	VCON_5V	I2CM_SCL
11	CC1	HPD
12	VDDD (3.3V)	NC
13	DVDD_IO (1.8V)	NC
14	VBUS_FET_EN	VBUS_FET_EN
15	DSCH_CTL	DSCH_CTL
16	HPD	I2CS_SDA
17	I2CM_SDA	I2CS_SCL
18	I2CM_SCL	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_CLT (PD)	NC
24	PWR_EN	PWR_EN

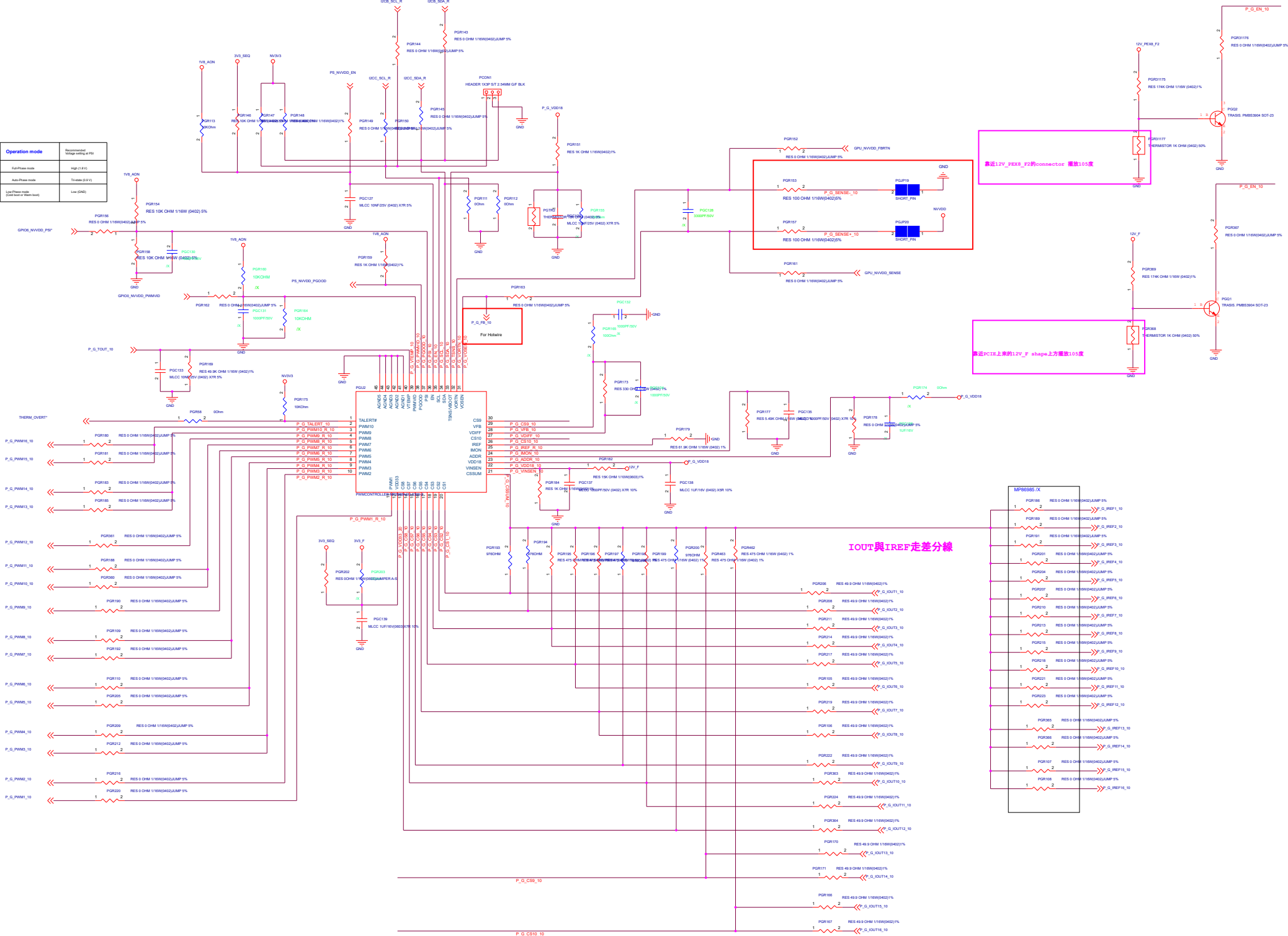
ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	MISC: USB PPC

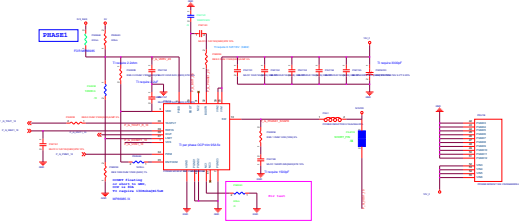
NVIDIA CORPORATION
2701 SAN TOMAS EXPRESSWAY
SANTA CLARA, CA 95050, USA

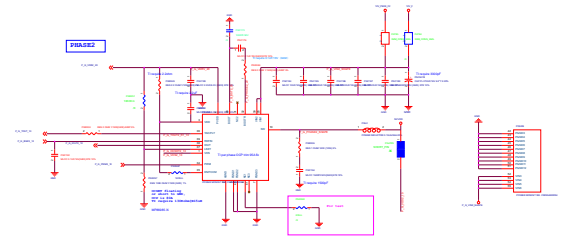
NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	33 OF 66
BOM REV	A	DATE	09-JUL-2018

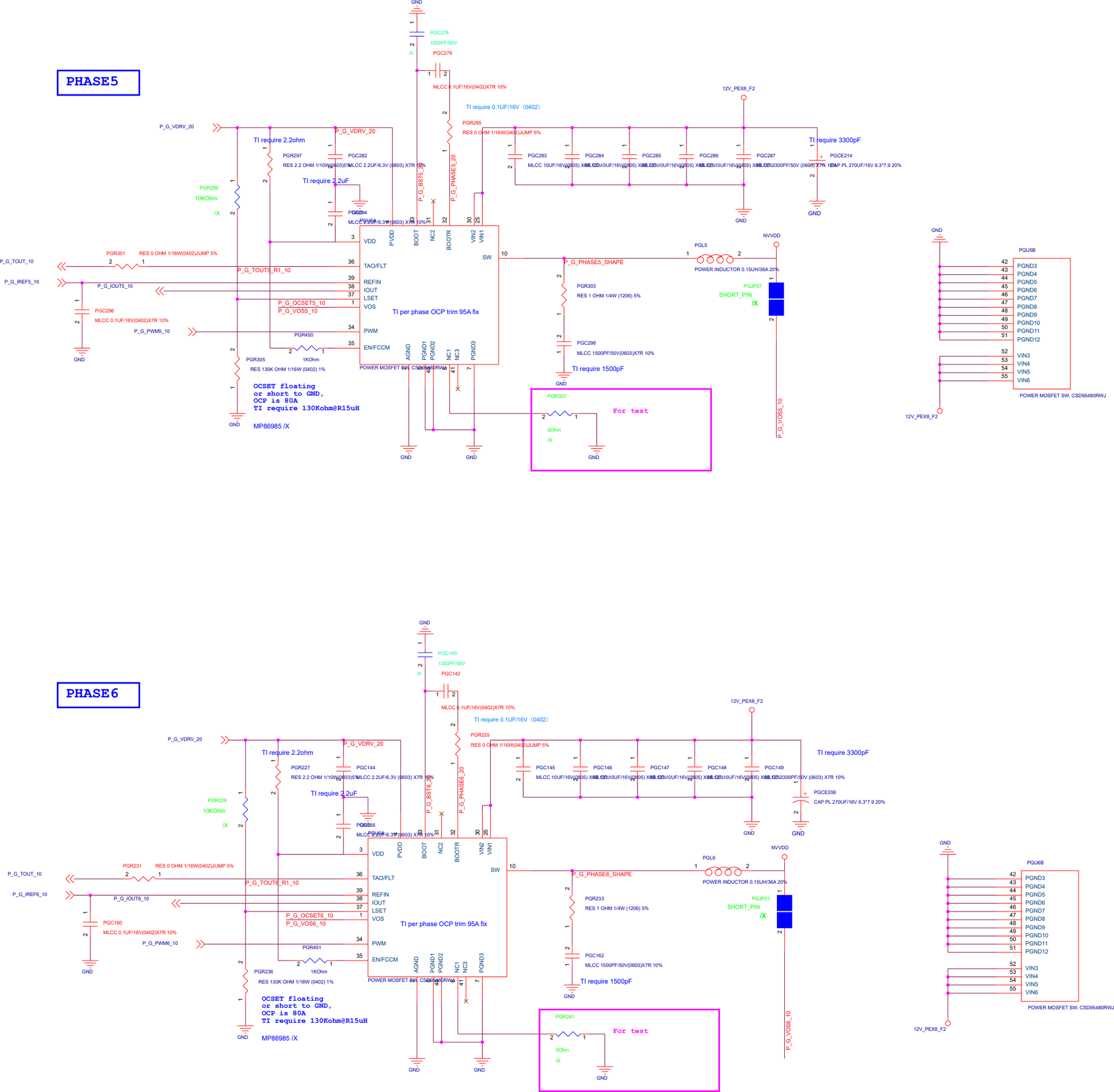

PHASE1
3V3_SEQ
5V
PMR368
0Ohm
FOR MP86985
PMR367
RES 0 OHM 1/16W(0402)JUMP 5%
PMC141
1000PF/50V
/X
PMC143
MLCC 0.1UF/16V(0402)X7R 10%
TI require 0.1UF/16V (0402)
PMR31167
10K OHM
GND
PMR226
RES 0 OHM 1/16W(0402)JUMP 5%
P_M_PH1_VIN
TI require 3300pF
PML4
35 OHM/21A
12V_F_RTD3
TI require 2.2ohm
P_M_VDRV_20
PMR228
RES 2.2 OHM 1/10W(0603)5%
PMC150
MLCC 2.2UF/6.3V (0603) X7R 10%
TI require 2.2uF
PMR230
10KOhm
/X
P_M_BST1_20
P_M_PHASE1_20
PMC151
PMC152
PMC153
PMC154
PMC155
PMCE121
MLCC 10UF/16V(0805) X5R 10%
CAP PL 270UF/16V 6.3*7.9 20%
VDD
PVDD
BOOT
NC2
BOOTR
VIN2
VIN1
SW
TAO/FLT
REFIN
IOUT
LSET
VOS
PWM
EN/FCCM
AGND
PGND1
PGND2
NC1
NC3
PGND3
TI per phase OCP trim 95A fix
POWER MOSFET SW. CSD95480RWJ
P_M_TOUT_10
PMR232
RES 0 OHM 1/16W(0402)JUMP 5%
P_M_TOUT1_R1_10
P_M_IREF1_10
P_M_IOUT1_10
P_M_OCSET1_10
P_M_VOS1_10
PMC161
MLCC 0.1UF/16V(0402)X7R 10%
P_M_PWM1_10
P_M_DRMOS1_EN_10
P_M_PHASE1_SHAPE
PMR234
RES 1 OHM 1/4W (1206) 5%
PMC163
MLCC 1500PF/50V(0603)X7R 10%
TI require 1500pF
PML1
POWER INDUCTOR 0.3UH/36A 20%
FBVDDQ
PMJP22
SHORT_PIN
/X
MP86985 /X
PMR369
RES 0 OHM 1/16W(0402)JUMP 5%
P_M_VOS1_10
PMQU1B
PGND3
PGND4
PGND5
PGND6
PGND7
PGND8
PGND9
PGND10
PGND11
PGND12
VIN3
VIN4
VIN5
VIN6
POWER MOSFET SW. CSD95480RWJ
P_M_PH1_VIN
PMR238
RES 130K OHM 1/16W (0402) 1%
PMR31155
P_M_DRMOS_EN
RES 0 OHM 1/16W(0402)JUMP 5%
OCSET floating
or short to GND,
OCP is 80A
TI require 130Kohm@R15uH
MP86985 /X
PMR240
0Ohm
/X
For test
PHASE2
PMC173
1000PF/50V
/X
PMC176
MLCC 0.1UF/16V(0402)X7R 10%
TI require 0.1UF/16V (0402)
PMR31168
10K OHM
PMR246
RES 0 OHM 1/16W(0402)JUMP 5%
FBVDD_PH2_3_VIN
TI require 3300pF
PMC184
PMC185
PMC186
PMC187
PMC188
PMCE122
MLCC 10UF/16V(0805) X5R 10%
CAP PL 270UF/16V 6.3*7.9 20%
P_M_VDRV_20
TI require 2.2ohm
PMR249
RES 2.2 OHM 1/10W(0603)5%
PMC183
MLCC 2.2UF/6.3V (0603) X7R 10%
TI require 2.2uF
PMR251
10KOhm
/X
P_M_BST2_20
P_M_PHASE2_20
VDD
PVDD
BOOT
NC2
BOOTR
VIN2
VIN1
SW
TAO/FLT
REFIN
IOUT
LSET
VOS
PWM
EN/FCCM
AGND
PGND1
PGND2
NC1
NC3
PGND3
TI per phase OCP trim 95A fix
POWER MOSFET SW. CSD95480RWJ
P_M_TOUT_10
PMR253
RES 0 OHM 1/16W(0402)JUMP 5%
P_M_TOUT2_R1_10
P_M_IREF2_10
P_M_IOUT2_10
P_M_OCSET2_10
P_M_VOS2_10
PMC192
MLCC 0.1UF/16V(0402)X7R 10%
P_M_PWM2_10
P_M_DRMOS2_EN_10
P_M_PHASE2_SHAPE
PMR255
RES 1 OHM 1/4W (1206) 5%
PMC194
MLCC 1500PF/50V(0603)X7R 10%
TI require 1500pF
PML2
POWER INDUCTOR 0.3UH/36A 20%
FBVDDQ
PMJP29
SHORT_PIN
/X
MP86985 /X
PMR372
RES 0 OHM 1/16W(0402)JUMP 5%
P_M_VOS2_10
PMQU2B
PGND3
PGND4
PGND5
PGND6
PGND7
PGND8
PGND9
PGND10
PGND11
PGND12
VIN3
VIN4
VIN5
VIN6
POWER MOSFET SW. CSD95480RWJ
FBVDD_PH2_3_VIN
PMR358
P_M_DRMOS_EN
RES 0 OHM 1/16W(0402)JUMP 5%
PMR257
RES 130K OHM 1/16W (0402) 1%
OCSET floating
or short to GND,
OCP is 80A
TI require 130Kohm@R15uH
MP86985 /X
PMR260
0Ohm
/X
For test

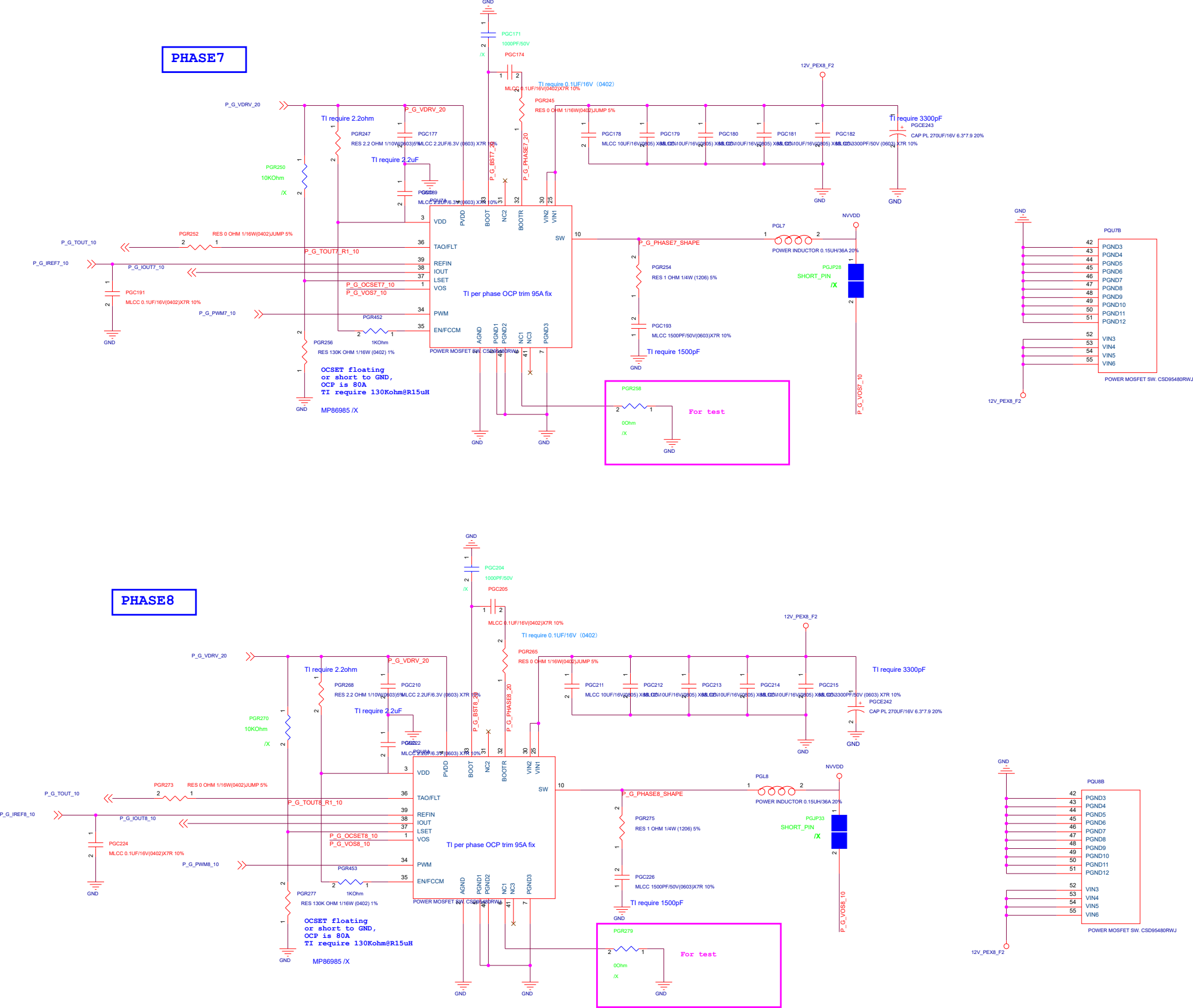

PHASE3
P_M_VDRV_20
TI require 2.2ohm
PMR269
RES 2.2 OHM 1/10W(0603)5%
PMC216
MLCC 2.2UF/6.3V (0603) X7R
TI require 2.2uF
PMR272
10KOhm
/X
PMC223
MLCC 2.2UF/6.3V (0603) X7R
PMC206
1000PF/50V
/X
PMC208
TI require 0.1UF/16V (0402)
PMR267
RES 0 OHM 1/16W(0402)JUMP 5%
PMR268
P_M_BST0_10
P_M_PHASE3_20
FBVDD_PH2_3_VIN
PMC217
PMC218
PMC219
PMC220
PMC221
TI require 3300pF
PMC123
CAP PL 270UF/16V 6.3*7.9 20%
MLCC 10UF/16V(1210) X6S
MLCC 10UF/16V(1210) X6S
MLCC 10UF/16V(1210) X6S
MLCC 10UF/16V(1210) X6S
MLCC 3300PF/50V (0603) X7R 10%
GND
P_M_VDRV_20
P_M_TOUT_10
PMR274
RES 0 OHM 1/16W(0402)JUMP 5%
P_M_TOUT3_R1_10
P_M_IREF3_10
P_M_IOUT3_10
P_M_OCSET3_10
P_M_VOS3_10
P_M_PWM3_10
P_M_DRMOS3_EN_10
PMC225
MLCC 0.1UF/16V(0402)X7R 10%
VDD
PVDD
BOOT
NC2
BOOTR
VINS
VINA
TAO/FLT
REFIN
IOUT
LSET
VOS
PWM
EN/FCCM
AGND
PGND1
PGND2
NC1
NC3
PGND3
SW
TI per phase OCP trim 95A fix
POWER MOSFET SW CSD95480RWJ
P_M_PHASE3_SHAPE
PML3
POWER INDUCTOR 0.3UH/36A 20%
PMR276
RES 1 OHM 1/4W (1206) 5%
PMC227
MLCC 1500PF/50V(0603)X7R 10%
TI require 1500pF
PMJP34
SHORT_PIN
/X
MP86985 /X
PMR375
RES 0 OHM 1/16W(0402)JUMP 5%
P_M_VDS3_10
PMR359
RES 0 OHM 1/16W(0402)JUMP 5%
P_M_DRMOS_EN
PMR278
RES 130K OHM 1/16W (0402) 1%
OCSET floating
or short to GND,
OCP is 80A
TI require 130Kohm@R15uH
MP86985 /X
PMR280
0Ohm
/X
For test
PMQU3B
PGND3
PGND4
PGND5
PGND6
PGND7
PGND8
PGND9
PGND10
PGND11
PGND12
VIN3
VIN4
VIN5
VIN6
POWER MOSFET SW CSD95480RWJ
FBVDD_PH2_3_VIN
FBVDDQ
PMCE110
PMCE124
PMCE125
PMCE126
CAP PL 820UF/2.5V 6.3*9.7 20%
PMCE128
PMCE112
PMCE111
PMCE115
PMCE116
PMCE119
PMCE127
PL EL 470UF/2V (7343D) 20%
5V
3V3_SEQ
PMR354
PMR355
RES 0 OHM 1/16W(0402)JUMP 5%
PMC253
MLCC 0.1UF/16V(0402)X7R 10%
PMR358
RES 0 OHM 1/16W(0402)JUMP 5%
PS_5V_PGOOD
PMU8
SC70-5
COMMON
P_M_DRMOS_EN
P_M_5VCC_20
PMR306
2.21KOhm
PS_FBVDD_VREF
PMR307
0Ohm
P_FBVDD_EN_10
PMR357
RES 0 OHM 1/16W(0402)JUMP 5%
12V_PEX8_FB
BOM阻值1m ohm
PMR315
15mOhm
FBVDD_PH2_3_VIN
PMQ13
PMQ14
P-MOSFET EMB20P03V POWER33
5V
PMD1
BAT54CW
/X
PMC230
4.7UF/16V
PS_FB_PH23_Q_G
PS_FB_PH23_D_R2
PMR316
0Ohm
PMR317
100KOhm
PMR318
20KOhm
PMR319
RES 10K OHM 1/16W(0402)1%
FBVDDQ
PMR320
1KOhm
PMQ15
PJC138K_R2_00001
PMR321
100KOhm
PMC231
MLCC 1000PF/50V (0402) X7R 10%
PMC20118
PMC20116
PMC20117
PMC20121
PMC20119
PMC20120
PMC20130
PMC20128
PMC20129
PMC20131
MLCC 22UF/6.3V (0603) X6S
PMC20124
PMC20122
PMC20123
PMC20127
PMC20125
PMC20126
PMC20134
PMC20132
PMC20133
PMC20135

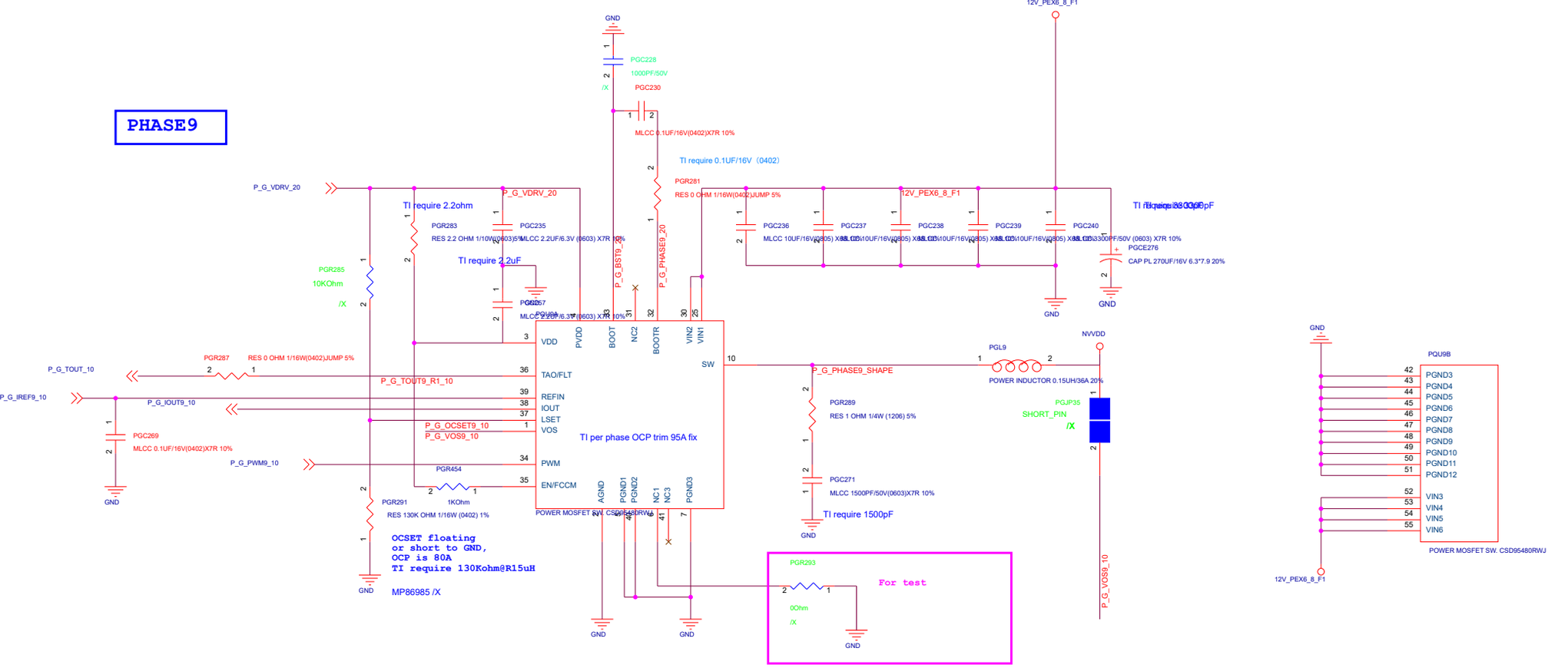

Operation mode
Recommended Voltage setting at PSI
Full-Phase mode
High (1.8 V)
Auto-Phase mode
Tri-state (0.9 V)
Low-Phase mode (Cold boot or Warm boot)
Low (GND)
I2CB_SCL_R
I2CB_SDA_R
PGR143 RES 0 OHM 1/16W(0402)JUMP 5%
PGR144 RES 0 OHM 1/16W(0402)JUMP 5%
1V8_AON
3V3_SEQ
NV3V3
PS_NVVDD_EN
I2CC_SCL_R
I2CC_SDA_R
PCON1 HEADER 1X3P S/T 2.54MM G/F BLK
PGR145 RES 0 OHM 1/16W(0402)JUMP 5%
P_G_VDD18
PGR151 RES 1K OHM 1/16W(0402)1%
PGR113 0Ohm
PGR146 RES 10K OHM 1/16W(0402)1%
PGR147
PGR148
PGR149 RES 0 OHM 1/16W(0402)1%
PGR150
GND
PGR152 RES 0 OHM 1/16W(0402)JUMP 5%
GPU_NVVDD_FBRTN
PGR153 RES 100 OHM 1/16W(0402)5%
P_G_SENSE-_10
PGJP19 SHORT_PIN
PGR157 RES 100 OHM 1/16W(0402)5%
P_G_SENSE+_10
PGJP20 SHORT_PIN
NVVDD
PGR161 RES 0 OHM 1/16W(0402)JUMP 5%
GPU_NVVDD_SENSE
PGC126 1000PF/50V
靠近12V_PEX8_F2的connector 摆放105度
12V_PEX8_F2
PGR31175 RES 174K OHM 1/16W (0402)1%
PGR31177 THERMISTOR 1K OHM (0402) 50%
PGR31176 RES 0 OHM 1/16W(0402)JUMP 5%
PGQ2 TRASIS. PMBS3904 SOT-23
P_G_EN_10
1V8_AON
PGR154 RES 10K OHM 1/16W (0402) 5%
PGR156 RES 0 OHM 1/16W(0402)JUMP 5%
GPIO6_NVVDD_PSI*
PGR158 RES 10K OHM 1/16W (0402) 5%
PGC130 1000PF/50V
PGR160 10KOHM
GPIO5_NVVDD_PWMVID
PGR162 RES 0 OHM 1/16W(0402)JUMP 5%
PGC131 1000PF/50V
PGR164 10KOHM
PS_NVVDD_PGOOD
PGR159 RES 1K OHM 1/16W(0402)1%
PGR111 0Ohm
PGR112 0Ohm
PGR155 THERMISTOR 10K OHM (0402) 5%
PGC127 MLCC 10NF/25V (0402) X7R 5%
PGR163 RES 0 OHM 1/16W(0402)JUMP 5%
P_G_FB_10
For Hotwire
PGC132 1000PF/50V
PGR165 100Ohm
PGR173 RES 330 OHM 1/16W (0402) 1%
1000PF/50V
靠近PCIE上来的12V_F shape上方摆放105度
12V_F
PGR369 RES 174K OHM 1/16W (0402)1%
PGR368 THERMISTOR 1K OHM (0402) 50%
PGQ1 TRASIS. PMBS3904 SOT-23
P_G_EN_10
PGR367 RES 0 OHM 1/16W(0402)JUMP 5%
P_G_TOUT_10
PGR169 RES 49.9K OHM 1/16W (0402)1%
PGC133 MLCC 10NF/25V (0402) X7R 5%
PGR175 10KOhm
PGR58 0Ohm
THERM_OVERT*
PGR174 0Ohm
PGR177 RES 5.49K OHM 1/16W (0402)1%
PGC135 1000PF/50V (0402) X7R 10%
PGR178 RES 0 OHM 1/16W(0402)JUMP 5%
1UF/16V
PGR179 RES 61.9K OHM 1/16W (0402) 1%
PGR182 RES 15K OHM 1/10W(0603)1%
12V_F
P_G_VDD18
PGR184 RES 1K OHM 1/16W(0402)1%
PGC137 1000PF/50V (0402) X7R 10%
PGC138 MLCC 1UF/16V (0402) X5R 10%
PGU2
AGND5 AGND4 AGND3 AGND2 AGND1 VDDIO PWMVID PGOOD PSI SDA SCL TSNS/VSEN VCRTN VDSEN
TALERT# PWM10 PWM9 PWM8 PWM7 PWM6 PWM5 PWM4 PWM3 PWM2
CS9 VFB VDIFF CS10 IREF IMON ADDR VDD18 VNSEN CSSUM
P_G_TALERT_10
P_G_PWM10_R_10
P_G_PWM9_R_10
P_G_PWM8_R_10
P_G_PWM7_R_10
P_G_PWM6_R_10
P_G_PWM5_R_10
P_G_PWM4_R_10
P_G_PWM3_R_10
P_G_PWM2_R_10
P_G_CS9_10
P_G_VFB_10
P_G_VDIFF_10
P_G_CS10_10
P_G_IREF_R_10
P_G_IMON_10
P_G_ADDR_10
P_G_VDD18_10
P_G_VSNSEN_10
PWMCONTROLLER
PWM1 VDD33 CS8 CS7 CS6 CS5 CS4 CS3 CS2 CS1
P_G_PWM1_R_10
PGR193 976OHM
PGR194 976OHM
PGR195 RES 475 OHM 1/16W (0402) 1%
PGR196
PGR197
PGR198
PGR199
PGR200 976OHM
PGR463 RES 475 OHM 1/16W (0402) 1%
PGR462 RES 475 OHM 1/16W (0402) 1%
IOUT與IREF走差分線
3V3_SEQ
3V3_F
PGR202 RES 0OHM 1/16W(0603)JUMPER A-S
PGR203
PGC139 MLCC 1UF/16V(0603)X7R 10%
P_G_VDD33_W
P_G_CS8_W
P_G_CS7_W
P_G_CS6_W
P_G_CS5_W
P_G_CS4_W
P_G_CS3_W
P_G_CS2_W
P_G_CS1_W
P_G_PWM16_10
P_G_PWM15_10
P_G_PWM14_10
P_G_PWM13_10
P_G_PWM12_10
P_G_PWM11_10
P_G_PWM10_10
P_G_PWM9_10
P_G_PWM8_10
P_G_PWM7_10
P_G_PWM6_10
P_G_PWM5_10
P_G_PWM4_10
P_G_PWM3_10
P_G_PWM2_10
P_G_PWM1_10
PGR180 RES 0 OHM 1/16W(0402)JUMP 5%
PGR181 RES 0 OHM 1/16W(0402)JUMP 5%
PGR183 RES 0 OHM 1/16W(0402)JUMP 5%
PGR185 RES 0 OHM 1/16W(0402)JUMP 5%
PGR361 RES 0 OHM 1/16W(0402)JUMP 5%
PGR188 RES 0 OHM 1/16W(0402)JUMP 5%
PGR360 RES 0 OHM 1/16W(0402)JUMP 5%
PGR190 RES 0 OHM 1/16W(0402)JUMP 5%
PGR109 RES 0 OHM 1/16W(0402)JUMP 5%
PGR192 RES 0 OHM 1/16W(0402)JUMP 5%
PGR110 RES 0 OHM 1/16W(0402)JUMP 5%
PGR205 RES 0 OHM 1/16W(0402)JUMP 5%
PGR209 RES 0 OHM 1/16W(0402)JUMP 5%
PGR212 RES 0 OHM 1/16W(0402)JUMP 5%
PGR216 RES 0 OHM 1/16W(0402)JUMP 5%
PGR220 RES 0 OHM 1/16W(0402)JUMP 5%
MP86985 /X
PGR186 RES 0 OHM 1/16W(0402)JUMP 5%
PGR189 RES 0 OHM 1/16W(0402)JUMP 5%
PGR191 RES 0 OHM 1/16W(0402)JUMP 5%
PGR201 RES 0 OHM 1/16W(0402)JUMP 5%
PGR204 RES 0 OHM 1/16W(0402)JUMP 5%
PGR207 RES 0 OHM 1/16W(0402)JUMP 5%
PGR210 RES 0 OHM 1/16W(0402)JUMP 5%
PGR213 RES 0 OHM 1/16W(0402)JUMP 5%
PGR215 RES 0 OHM 1/16W(0402)JUMP 5%
PGR218 RES 0 OHM 1/16W(0402)JUMP 5%
PGR221 RES 0 OHM 1/16W(0402)JUMP 5%
PGR223 RES 0 OHM 1/16W(0402)JUMP 5%
PGR365 RES 0 OHM 1/16W(0402)JUMP 5%
PGR366 RES 0 OHM 1/16W(0402)JUMP 5%
PGR107 RES 0 OHM 1/16W(0402)JUMP 5%
PGR108 RES 0 OHM 1/16W(0402)JUMP 5%
P_G_IREF1_10
P_G_IREF2_10
P_G_IREF3_10
P_G_IREF4_10
P_G_IREF5_10
P_G_IREF6_10
P_G_IREF7_10
P_G_IREF8_10
P_G_IREF9_10
P_G_IREF10_10
P_G_IREF11_10
P_G_IREF12_10
P_G_IREF13_10
P_G_IREF14_10
P_G_IREF15_10
P_G_IREF16_10
PGR206 RES 49.9 OHM 1/16W(0402)1%
PGR208 RES 49.9 OHM 1/16W(0402)1%
PGR211 RES 49.9 OHM 1/16W(0402)1%
PGR214 RES 49.9 OHM 1/16W(0402)1%
PGR217 RES 49.9 OHM 1/16W(0402)1%
PGR105 RES 49.9 OHM 1/16W(0402)1%
PGR219 RES 49.9 OHM 1/16W(0402)1%
PGR106 RES 49.9 OHM 1/16W(0402)1%
PGR222 RES 49.9 OHM 1/16W(0402)1%
PGR363 RES 49.9 OHM 1/16W(0402)1%
PGR224 RES 49.9 OHM 1/16W(0402)1%
PGR364 RES 49.9 OHM 1/16W(0402)1%
PGR170 RES 49.9 OHM 1/16W(0402)1%
PGR171 RES 49.9 OHM 1/16W(0402)1%
PGR166 RES 49.9 OHM 1/16W(0402)1%
PGR167 RES 49.9 OHM 1/16W(0402)1%
P_G_IOUT1_10
P_G_IOUT2_10
P_G_IOUT3_10
P_G_IOUT4_10
P_G_IOUT5_10
P_G_IOUT6_10
P_G_IOUT7_10
P_G_IOUT8_10
P_G_IOUT9_10
P_G_IOUT10_10
P_G_IOUT11_10
P_G_IOUT12_10
P_G_IOUT13_10
P_G_IOUT14_10
P_G_IOUT15_10
P_G_IOUT16_10
P_G_CS9_10
P_G_CS10_10

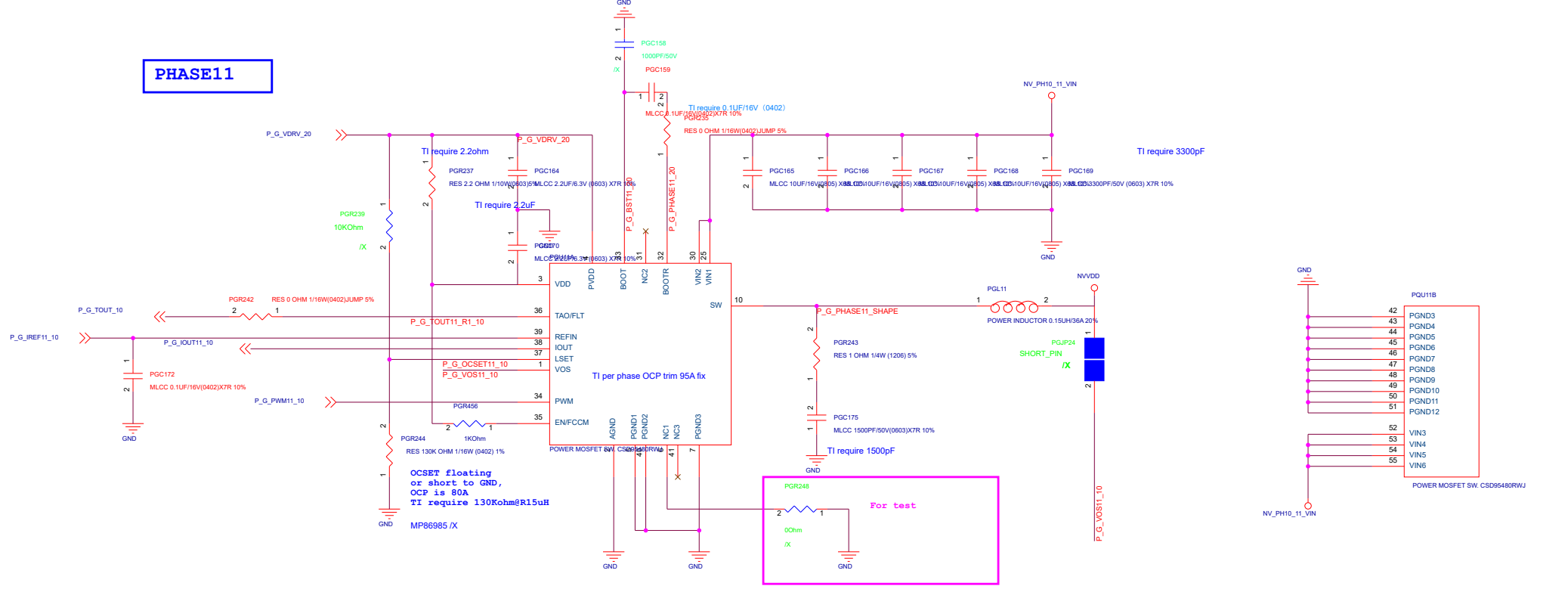

PHASE1


PHASE2

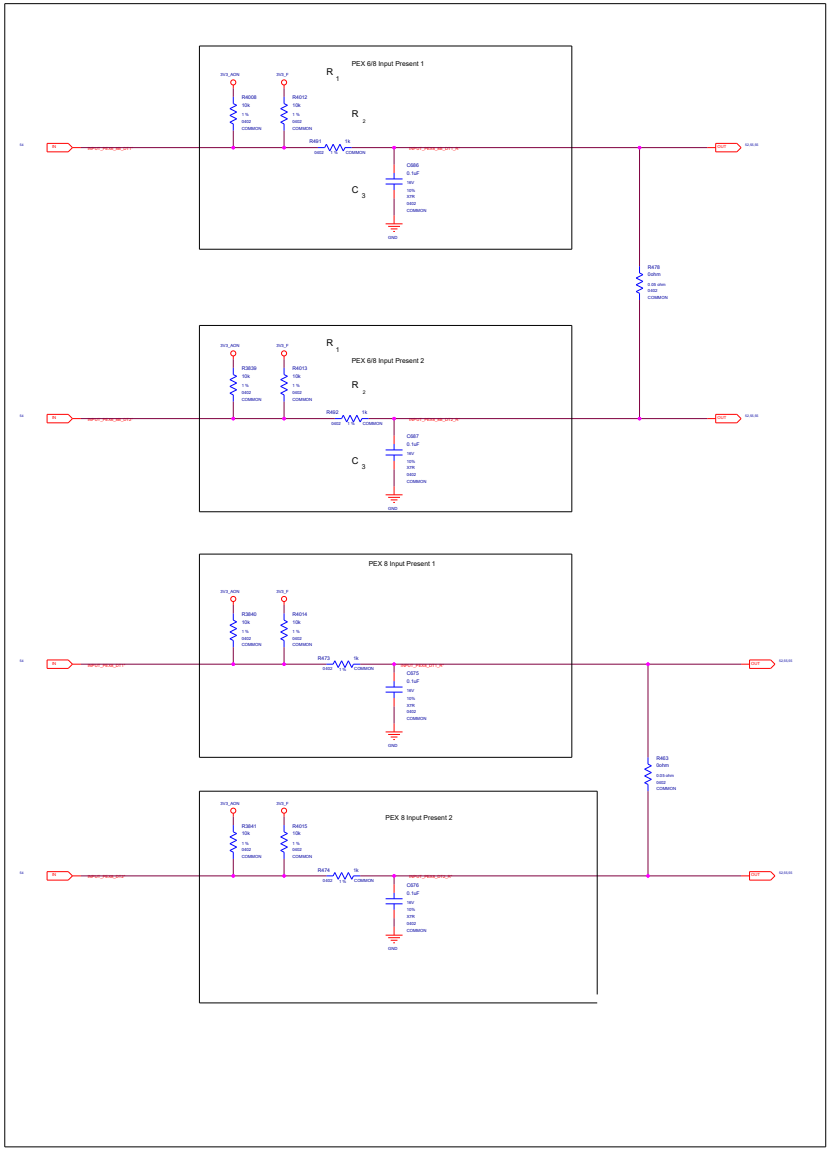

PHASE5
PGC278
1000PF/50V
/X
PGC279
MLCC 0.1UF/16V(0402)X7R 10%
TI require 0.1UF/16V (0402)
PGR295
RES 0 OHM 1/16W(0402)JUMP 5%
12V_PEX8_F2
TI require 3300pF
PGC283
PGC284
PGC285
PGC286
PGC287
PGCE214
CAP PL 270UF/16V 6.3*7.9 20%
P_G_VDRV_20
TI require 2.2ohm
PGR297
RES 2.2 OHM 1/10W(0603)5%
PGC282
MLCC 2.2UF/6.3V (0603) X7R 10%
TI require 2.2uF
PGR299
10KOhm
/X
P_G_BST5_20
P_G_PHASE5_20
PGC294
PGU5A
VDD
PVDD
BOOT
NC2
BOOTR
VIN2
VIN1
SW
TAO/FLT
REFIN
IOUT
LSET
VOS
PWM
EN/FCCM
AGND
PGND1
PGND2
NC1
NC3
PGND3
TI per phase OCP trim 95A fix
POWER MOSFET SW. CSD95480RWJ
P_G_TOUT_10
PGR301
RES 0 OHM 1/16W(0402)JUMP 5%
P_G_TOUT5_R1_10
P_G_IREF5_10
P_G_IOUT5_10
PGC296
MLCC 0.1UF/16V(0402)X7R 10%
P_G_OCSET5_10
P_G_VOS5_10
P_G_PWM5_10
PGR450
1KOhm
PGR305
RES 130K OHM 1/16W (0402) 1%
OCSET floating
or short to GND,
OCP is 80A
TI require 130Kohm@R15uH
MP86985 /X
P_G_PHASE5_SHAPE
PGL5
POWER INDUCTOR 0.15UH/36A 20%
NVVDD
PGR303
RES 1 OHM 1/4W (1206) 5%
PGJP37
SHORT_PIN
/X
PGC298
MLCC 1500PF/50V(0603)X7R 10%
TI require 1500pF
P_G_VOS5_10
PGR307
For test
0Ohm
/X
PQU5B
PGND3
PGND4
PGND5
PGND6
PGND7
PGND8
PGND9
PGND10
PGND11
PGND12
VIN3
VIN4
VIN5
VIN6
POWER MOSFET SW. CSD95480RWJ
GND
PHASE6
PGC140
1000PF/50V
/X
PGC142
MLCC 0.1UF/16V(0402)X7R 10%
TI require 0.1UF/16V (0402)
PGR225
RES 0 OHM 1/16W(0402)JUMP 5%
12V_PEX8_F2
TI require 3300pF
PGC145
PGC146
PGC147
PGC148
PGC149
PGCE206
CAP PL 270UF/16V 6.3*7.9 20%
P_G_VDRV_20
TI require 2.2ohm
PGR227
RES 2.2 OHM 1/10W(0603)5%
PGC144
MLCC 2.2UF/6.3V (0603) X7R 10%
TI require 2.2uF
PGR229
10KOhm
/X
P_G_BST6_20
P_G_PHASE6_20
PGC156
PGU6A
VDD
PVDD
BOOT
NC2
BOOTR
VIN2
VIN1
SW
TAO/FLT
REFIN
IOUT
LSET
VOS
PWM
EN/FCCM
AGND
PGND1
PGND2
NC1
NC3
PGND3
TI per phase OCP trim 95A fix
POWER MOSFET SW. CSD95480RWJ
P_G_TOUT_10
PGR231
RES 0 OHM 1/16W(0402)JUMP 5%
P_G_TOUT6_R1_10
P_G_IREF6_10
P_G_IOUT6_10
PGC160
MLCC 0.1UF/16V(0402)X7R 10%
P_G_OCSET6_10
P_G_VOS6_10
P_G_PWM6_10
PGR451
1KOhm
PGR236
RES 130K OHM 1/16W (0402) 1%
OCSET floating
or short to GND,
OCP is 80A
TI require 130Kohm@R15uH
MP86985 /X
P_G_PHASE6_SHAPE
PGL6
POWER INDUCTOR 0.15UH/36A 20%
NVVDD
PGR233
RES 1 OHM 1/4W (1206) 5%
PGJP21
SHORT_PIN
/X
PGC162
MLCC 1500PF/50V(0603)X7R 10%
TI require 1500pF
P_G_VOS6_10
PGR241
For test
0Ohm
/X
PQU6B
PGND3
PGND4
PGND5
PGND6
PGND7
PGND8
PGND9
PGND10
PGND11
PGND12
VIN3
VIN4
VIN5
VIN6
POWER MOSFET SW. CSD95480RWJ
GND

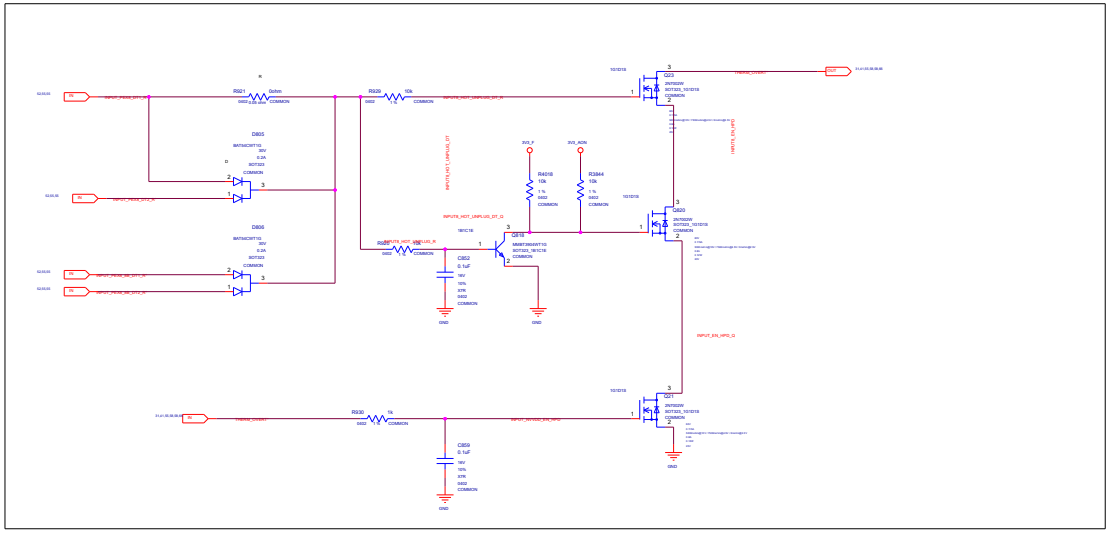

PHASE7
PGC171
1000PF/50V
/X
PGC174
MLCC 0.1UF/16V(0402)X7R 10%
TI require 0.1UF/16V（0402）
12V_PEX8_F2
P_G_VDRV_20
TI require 2.2ohm
PGR247
RES 2.2 OHM 1/10W(0603)5%
MLCC 2.2UF/6.3V (0603) X7R 10%
PGR245
RES 0 OHM 1/16W(0402)JUMP 5%
PGC178
PGC179
PGC180
PGC181
PGC182
MLCC 10UF/16V(0805) X5R 10%
TI require 3300pF
PGCE243
CAP PL 270UF/16V 6.3*7.9 20%
GND
PGR250
10KOhm
/X
TI require 2.2uF
PGC189
P_G_BST7_20
P_G_PHASE7_20
VDD
PVDD
BOOT
NC2
BOOTR
VIN2
VIN1
SW
NVVDD
PGL7
POWER INDUCTOR 0.15UH/36A 20%
P_G_PHASE7_SHAPE
PGR254
RES 1 OHM 1/4W (1206) 5%
PGJP28
SHORT_PIN
/X
PGC193
MLCC 1500PF/50V(0603)X7R 10%
TI require 1500pF
P_G_TOUT_10
PGR252
RES 0 OHM 1/16W(0402)JUMP 5%
P_G_TOUT7_R1_10
TAO/FLT
P_G_IREF7_10
P_G_IOUT7_10
REFIN
IOUT
LSET
VOS
P_G_OCSET7_10
P_G_VOS7_10
TI per phase OCP trim 95A fix
P_G_PWM7_10
PGR452
PWM
EN/FCCM
AGND
PGND1
PGND2
NC1
NC3
PGND3
PGC191
MLCC 0.1UF/16V(0402)X7R 10%
PGR256
1KOhm
RES 130K OHM 1/16W (0402) 1%
OCSET floating
or short to GND,
OCP is 80A
TI require 130Kohm@R15uH
MP86985 /X
POWER MOSFET SW. CSD95480RWJ
PGR258
0Ohm
/X
For test
P_G_VOS7_10
PQU7B
PGND3
PGND4
PGND5
PGND6
PGND7
PGND8
PGND9
PGND10
PGND11
PGND12
VIN3
VIN4
VIN5
VIN6
POWER MOSFET SW. CSD95480RWJ
12V_PEX8_F2
PHASE8
PGC204
1000PF/50V
/X
PGC205
MLCC 0.1UF/16V(0402)X7R 10%
TI require 0.1UF/16V（0402）
12V_PEX8_F2
P_G_VDRV_20
TI require 2.2ohm
PGR268
RES 2.2 OHM 1/10W(0603)5%
MLCC 2.2UF/6.3V (0603) X7R 10%
PGR265
RES 0 OHM 1/16W(0402)JUMP 5%
PGC211
PGC212
PGC213
PGC214
PGC215
MLCC 10UF/16V(0805) X5R 10%
TI require 3300pF
PGCE242
CAP PL 270UF/16V 6.3*7.9 20%
GND
PGR270
10KOhm
/X
TI require 2.2uF
PGC222
P_G_BST8_20
P_G_PHASE8_20
VDD
PVDD
BOOT
NC2
BOOTR
VIN2
VIN1
SW
NVVDD
PGL8
POWER INDUCTOR 0.15UH/36A 20%
P_G_PHASE8_SHAPE
PGR275
RES 1 OHM 1/4W (1206) 5%
PGJP33
SHORT_PIN
/X
PGC226
MLCC 1500PF/50V(0603)X7R 10%
TI require 1500pF
P_G_TOUT_10
PGR273
RES 0 OHM 1/16W(0402)JUMP 5%
P_G_TOUT8_R1_10
TAO/FLT
P_G_IREF8_10
P_G_IOUT8_10
REFIN
IOUT
LSET
VOS
P_G_OCSET8_10
P_G_VOS8_10
TI per phase OCP trim 95A fix
P_G_PWM8_10
PGR453
PWM
EN/FCCM
AGND
PGND1
PGND2
NC1
NC3
PGND3
PGC224
MLCC 0.1UF/16V(0402)X7R 10%
PGR277
1KOhm
RES 130K OHM 1/16W (0402) 1%
OCSET floating
or short to GND,
OCP is 80A
TI require 130Kohm@R15uH
MP86985 /X
POWER MOSFET SW. CSD95480RWJ
PGR279
0Ohm
/X
For test
P_G_VOS8_10
PQU8B
PGND3
PGND4
PGND5
PGND6
PGND7
PGND8
PGND9
PGND10
PGND11
PGND12
VIN3
VIN4
VIN5
VIN6
POWER MOSFET SW. CSD95480RWJ
12V_PEX8_F2

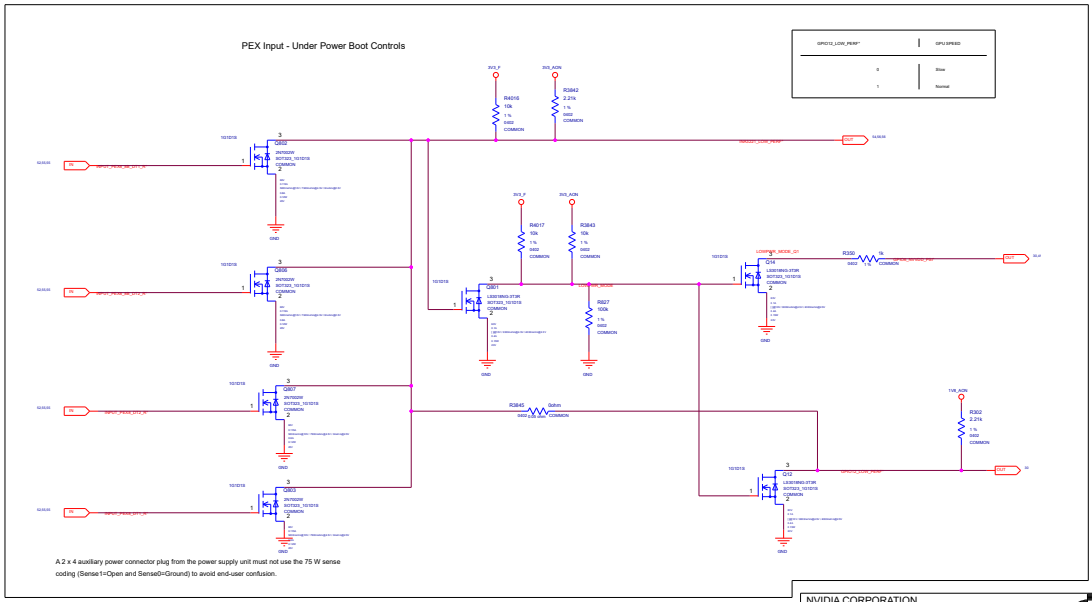

PHASE9
GND
PGC228
1000PF/50V
/X
PGC230
MLCC 0.1UF/16V(0402)X7R 10%
TI require 0.1UF/16V（0402）
12V_PEX6_8_F1
P_G_VDRV_20
TI require 2.2ohm
PGR283
RES 2.2 OHM 1/10W(0603)5%
MLCC 2.2UF/6.3V (0603) X7R 10%
PGC235
TI require 2.2uF
PGR285
10KOhm
/X
PGU9B
P_G_BST9_20
P_G_PHASE9_20
PGR281
RES 0 OHM 1/16W(0402)JUMP 5%
PGC236
PGC237
PGC238
PGC239
PGC240
MLCC 10UF/16V(0805) X5R 20%
TI require 3300pF
PGCE276
CAP PL 270UF/16V 6.3*7.9 20%
VDD
PVDD
BOOT
NC2
BOOTR
VIN2
VIN1
SW
TAO/FLT
REFIN
IOUT
LSET
VOS
PWM
EN/FCCM
AGND
PGND1
PGND2
NC1
NC3
PGND3
POWER MOSFET SW. CSD95480RWJ
P_G_TOUT_10
PGR287
RES 0 OHM 1/16W(0402)JUMP 5%
P_G_TOUT9_R1_10
P_G_IREF9_10
P_G_IOUT9_10
P_G_OCSET9_10
P_G_VOS9_10
TI per phase OCP trim 95A fix
PGC269
MLCC 0.1UF/16V(0402)X7R 10%
P_G_PWM9_10
PGR454
PGR291
1KOhm
RES 130K OHM 1/16W (0402) 1%
OCSET floating
or short to GND,
OCP is 80A
TI require 130Kohm@R15uH
MP86985 /X
P_G_PHASE9_SHAPE
PGR289
RES 1 OHM 1/4W (1206) 5%
PGC271
MLCC 1500PF/50V(0603)X7R 10%
TI require 1500pF
NVVDD
PGL9
POWER INDUCTOR 0.15UH/36A 20%
PGJP35
SHORT_PIN
/X
P_G_VOS9_10
PGR293
For test
0Ohm
/X
PQU9B
PGND3
PGND4
PGND5
PGND6
PGND7
PGND8
PGND9
PGND10
PGND11
PGND12
VIN3
VIN4
VIN5
VIN6
POWER MOSFET SW. CSD95480RWJ
12V_PEX6_8_F1
PHASE10
PGC280
1000PF/50V
/X
PGC281
MLCC 0.1UF/16V(0402)X7R 10%
TI require 0.1UF/16V（0402）
NV_PH10_11_VIN
P_G_VDRV_20
TI require 2.2ohm
PGR298
RES 2.2 OHM 1/10W(0603)5%
MLCC 2.2UF/6.3V (0603) X7R 10%
PGC288
TI require 2.2uF
PGR300
10KOhm
/X
PGU10A
P_G_BST10_20
P_G_PHASE10_20
PGR286
RES 0 OHM 1/16W(0402)JUMP 5%
PGC289
PGC290
PGC291
PGC292
PGC293
MLCC 10UF/16V(0805) X5R 20%
TI require 3300pF
PGCE278
PGCE277
PGCE279
100UF/16V
VDD
PVDD
BOOT
NC2
BOOTR
VIN2
VIN1
SW
TAO/FLT
REFIN
IOUT
LSET
VOS
PWM
EN/FCCM
AGND
PGND1
PGND2
NC1
NC3
PGND3
POWER MOSFET SW. CSD95480RWJ
P_G_TOUT_10
PGR302
RES 0 OHM 1/16W(0402)JUMP 5%
P_G_TOUT10_R1_10
P_G_IREF10_10
P_G_IOUT10_10
P_G_OCSET10_10
P_G_VOS10_10
TI per phase OCP trim 95A fix
PGC297
MLCC 0.1UF/16V(0402)X7R 10%
P_G_PWM10_10
PGR455
PGR306
1KOhm
RES 130K OHM 1/16W (0402) 1%
OCSET floating
or short to GND,
OCP is 80A
TI require 130Kohm@R15uH
MP86985 /X
P_G_PHASE10_SHAPE
PGR304
RES 1 OHM 1/4W (1206) 5%
PGC299
MLCC 1500PF/50V(0603)X7R 10%
TI require 1500pF
NVVDD
PGL10
POWER INDUCTOR 0.15UH/36A 20%
PGJP38
SHORT_PIN
/X
P_G_VOS10_10
PGR308
For test
0Ohm
/X
PQU10B
PGND3
PGND4
PGND5
PGND6
PGND7
PGND8
PGND9
PGND10
PGND11
PGND12
VIN3
VIN4
VIN5
VIN6
POWER MOSFET SW. CSD95480RWJ
NV_PH10_11_VIN


PHASE11
P_G_VDRV_20
TI require 2.2ohm
PGR237
RES 2.2 OHM 1/10W(0603)5%
PGC164
MLCC 2.2UF/6.3V (0603) X7R 10%
TI require 2.2uF
PGR239
10KOhm
/X
PGC170
MLCC 2.2UF/6.3V (0603) X7R 10%
PGC158
1000PF/50V
/X
PGC159
MLCC 0.1UF/16V(0402)X7R 10%
TI require 0.1UF/16V (0402)
PGR235
RES 0 OHM 1/16W(0402)JUMP 5%
NV_PH10_11_VIN
TI require 3300pF
PGC165
PGC166
PGC167
PGC168
PGC169
MLCC 10UF/16V(0805) X5R 10%
MLCC 3300PF/50V (0603) X7R 10%
GND
P_G_BST11_20
P_G_PHASE11_20
PVDD
BOOT
NC2
BOOTR
VIN2
VIN1
VDD
SW
TAO/FLT
REFIN
IOUT
LSET
VOS
PWM
EN/FCCM
AGND
PGND1
PGND2
NC1
NC3
PGND3
POWER MOSFET SW. CSD95480RWJ
P_G_TOUT_10
PGR242
RES 0 OHM 1/16W(0402)JUMP 5%
P_G_TOUT11_R1_10
P_G_IREF11_10
P_G_IOUT11_10
PGC172
MLCC 0.1UF/16V(0402)X7R 10%
P_G_OCSET11_10
P_G_VOS11_10
P_G_PWM11_10
PGR456
PGR244
1KOhm
RES 130K OHM 1/16W (0402) 1%
OCSET floating
or short to GND,
OCP is 80A
TI require 130Kohm@R15uH
MP86985 /X
TI per phase OCP trim 95A fix
NVVDD
PGL11
POWER INDUCTOR 0.15UH/36A 20%
P_G_PHASE11_SHAPE
PGR243
RES 1 OHM 1/4W (1206) 5%
PGJP24
SHORT_PIN
/X
PGC175
MLCC 1500PF/50V(0603)X7R 10%
TI require 1500pF
P_G_VOSI1_10
PGR248
0Ohm
/X
For test
PQU11B
PGND3
PGND4
PGND5
PGND6
PGND7
PGND8
PGND9
PGND10
PGND11
PGND12
VIN3
VIN4
VIN5
VIN6
POWER MOSFET SW. CSD95480RWJ
NV_PH10_11_VIN
PHASE12
P_G_VDRV_20
TI require 2.2ohm
PGR261
RES 2.2 OHM 1/10W(0603)5%
PGC197
MLCC 2.2UF/6.3V (0603) X7R 10%
TI require 2.2uF
PGR262
10KOhm
/X
PGC203
MLCC 2.2UF/6.3V (0603) X7R 10%
PGC195
1000PF/50V
/X
PGC196
MLCC 0.1UF/16V(0402)X7R 10%
TI require 0.1UF/16V (0402)
PGR259
RES 0 OHM 1/16W(0402)JUMP 5%
12V_PEX6_8_F1
TI require 3300pF
PGC198
PGC199
PGC200
PGC201
PGC202
MLCC 10UF/16V(0805) X5R 10%
MLCC 3300PF/50V (0603) X7R 10%
GND
P_G_BST12_20
P_G_PHASE12_20
PVDD
BOOT
NC2
BOOTR
VIN2
VIN1
VDD
SW
TAO/FLT
REFIN
IOUT
LSET
VOS
PWM
EN/FCCM
AGND
PGND1
PGND2
NC1
NC3
PGND3
POWER MOSFET SW. CSD95480RWJ
P_G_TOUT_10
PGR263
RES 0 OHM 1/16W(0402)JUMP 5%
P_G_TOUT12_R1_10
P_G_IREF12_10
P_G_IOUT12_10
PGC207
MLCC 0.1UF/16V(0402)X7R 10%
P_G_OCSET12_10
P_G_VOS12_10
P_G_PWM12_10
PGR457
PGR266
1KOhm
RES 130K OHM 1/16W (0402) 1%
OCSET floating
or short to GND,
OCP is 80A
TI require 130Kohm@R15uH
MP86985 /X
TI per phase OCP trim 95A fix
NVVDD
PGL12
POWER INDUCTOR 0.15UH/36A 20%
P_G_PHASE12_SHAPE
PGR264
RES 1 OHM 1/4W (1206) 5%
PGJP32
SHORT_PIN
/X
PGC209
MLCC 1500PF/50V(0603)X7R 10%
TI require 1500pF
P_G_VOSI2_10
PGR271
0Ohm
/X
For test
PQU12B
PGND3
PGND4
PGND5
PGND6
PGND7
PGND8
PGND9
PGND10
PGND11
PGND12
VIN3
VIN4
VIN5
VIN6
POWER MOSFET SW. CSD95480RWJ
12V_PEX6_8_F1

PS: 12V Current Steering & Hot Unplug Detect







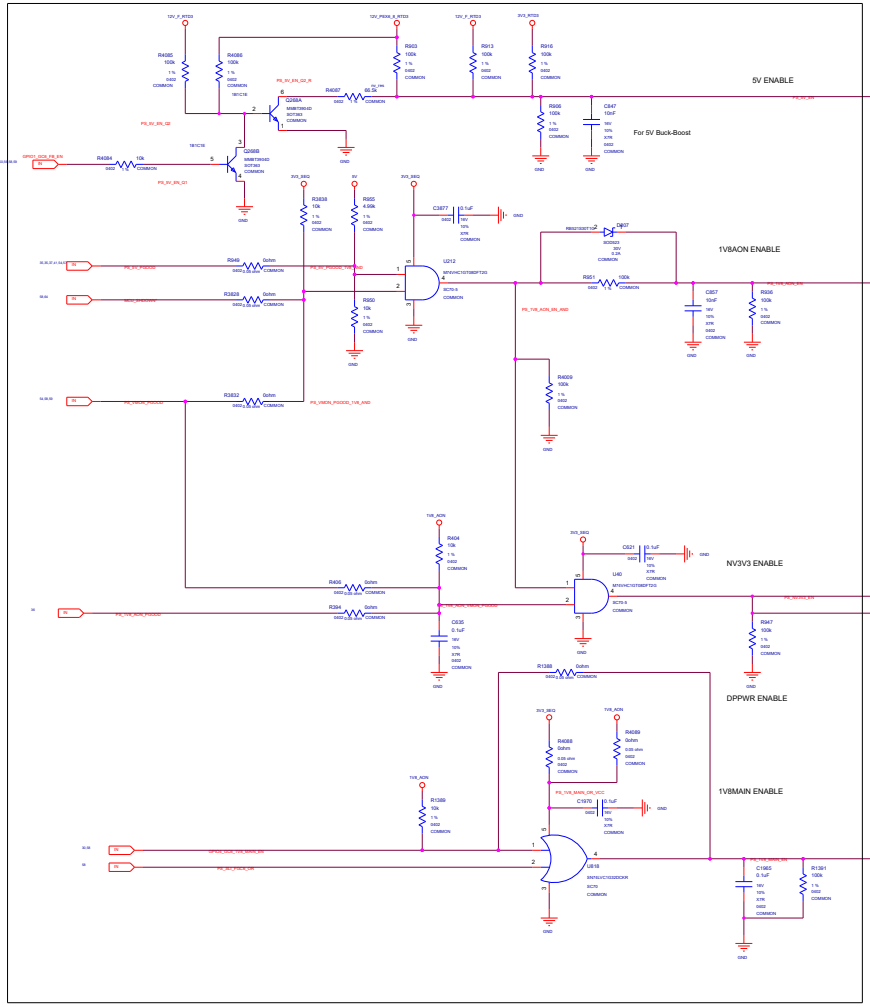
A 2 x 4 auxiliary power connector plug from the power supply unit must not use the 75 W sense coding (Sense1=Open and Sense0=Ground) to avoid end-user confusion.

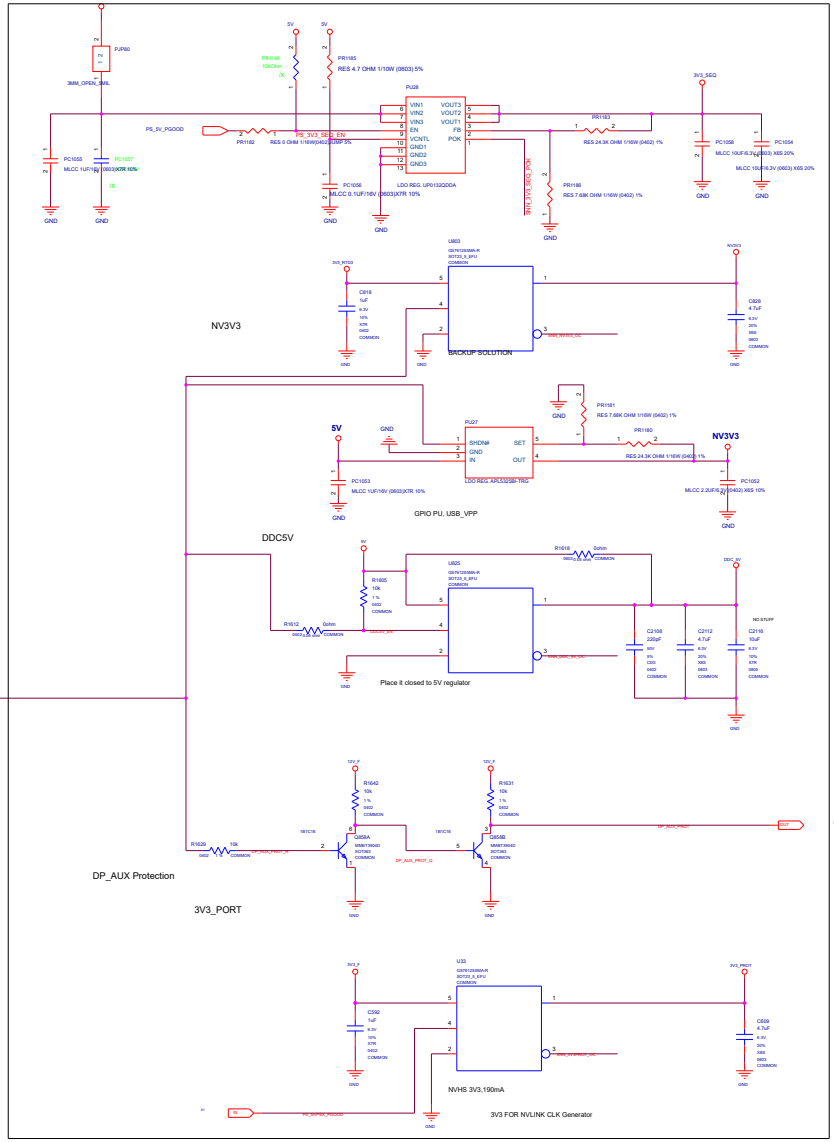
ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PS: Current Steering, Hot Unplug

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

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	55 OF 66
BOM REV	A	DATE	09-JUL-2018

SEQUENCE:5V,1V8,NV3V3 ENABLE



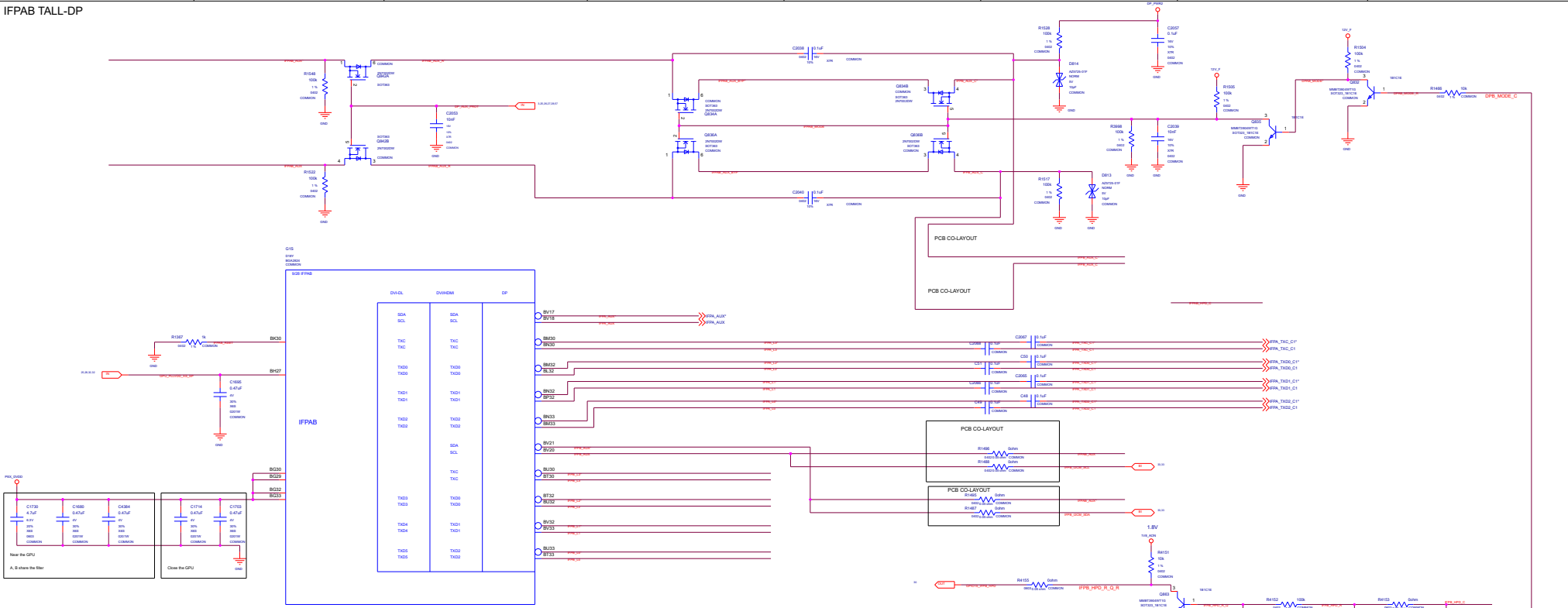


ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	Sequence: 5V, 1V8, NV3V3 EN

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

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	57 OF 66
BOM REV	A	DATE	09-JUL-2018

IFPAB TALL-DP



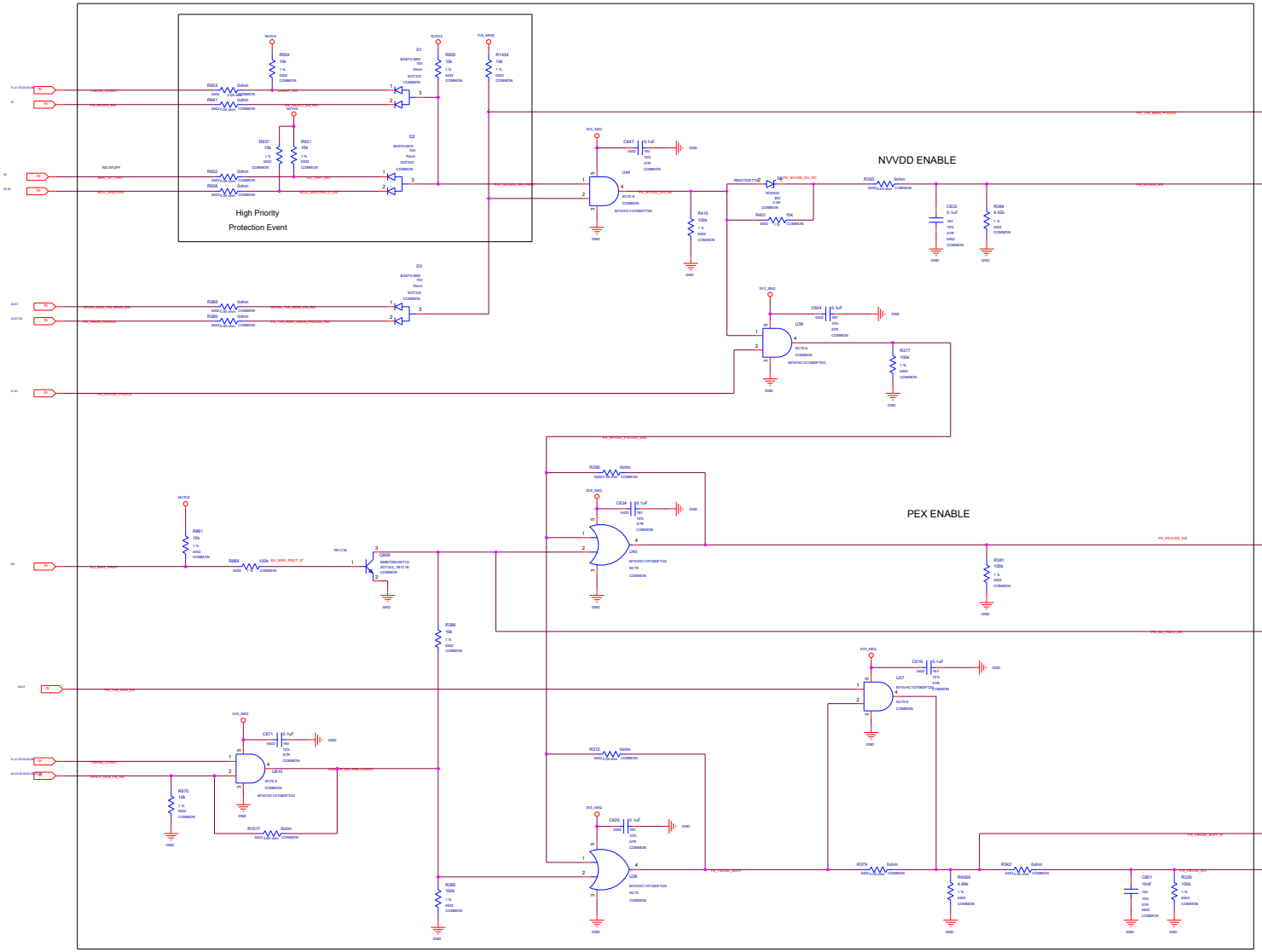
IFPB DP Co-layout with USB-C

ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	IFPAB DP

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

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	24 OF 66
BOM REV	A	DATE	09-JUL-2018

SEQUENCE:NV,PEX,FB ENABLE

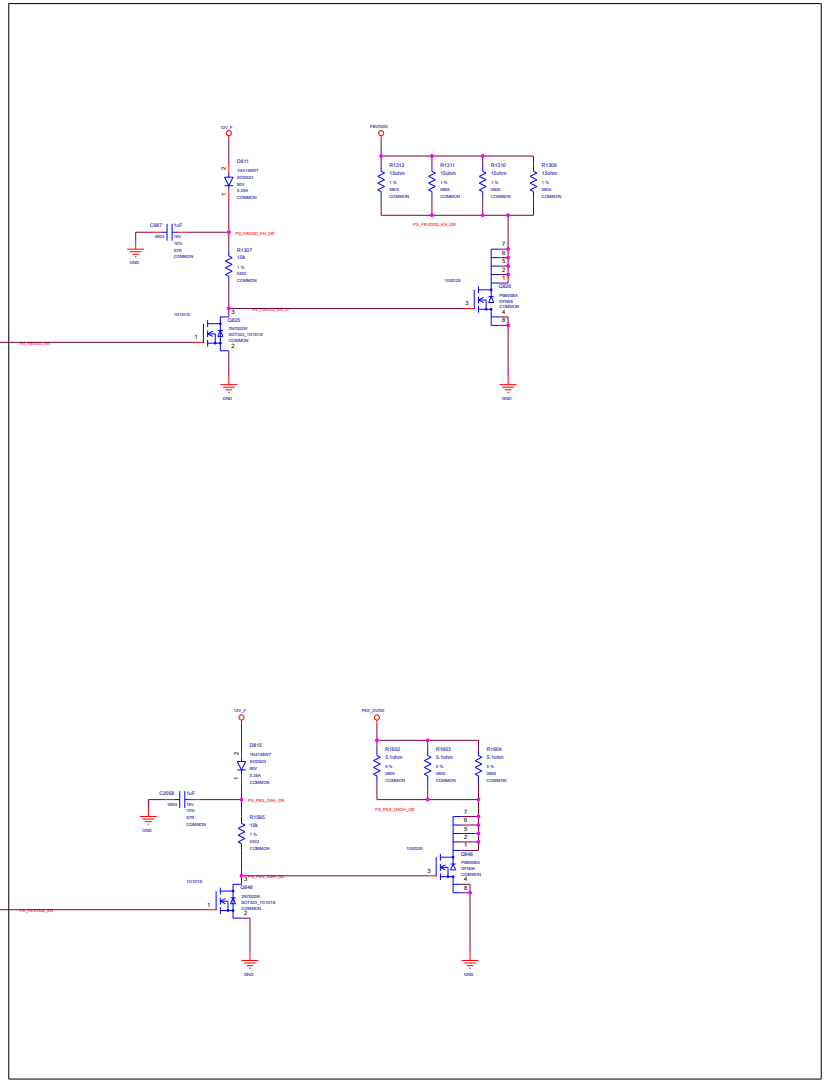


ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	Sequence: NV, PEX, FB EN

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

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	58 OF 66
BOM REV	A	DATE	09-JUL-2018

SEQUENCE:Discharge

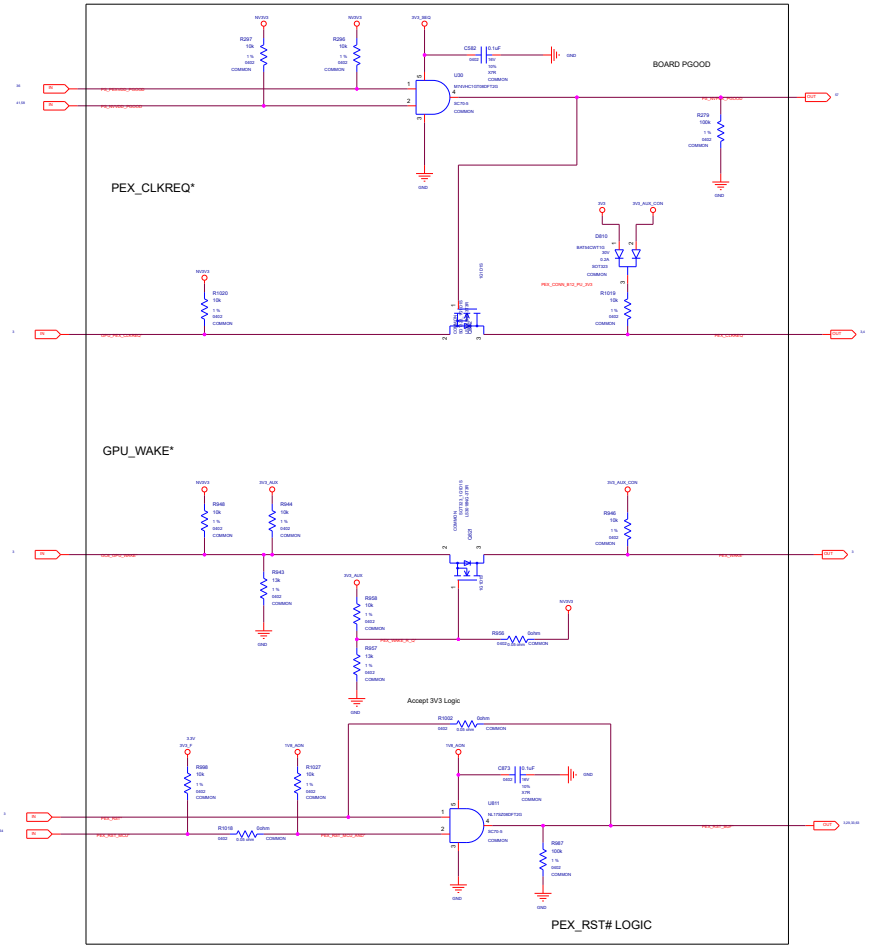


ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	Sequence: Discharge

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

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	60 OF 66
BOM REV	A	DATE	09-JUL-2018

SEQUENCE:MISC

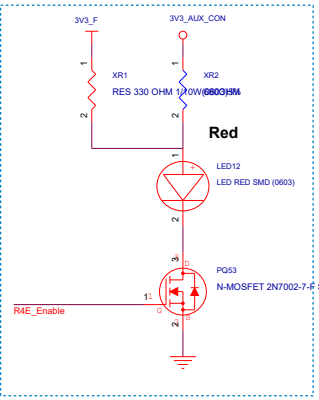


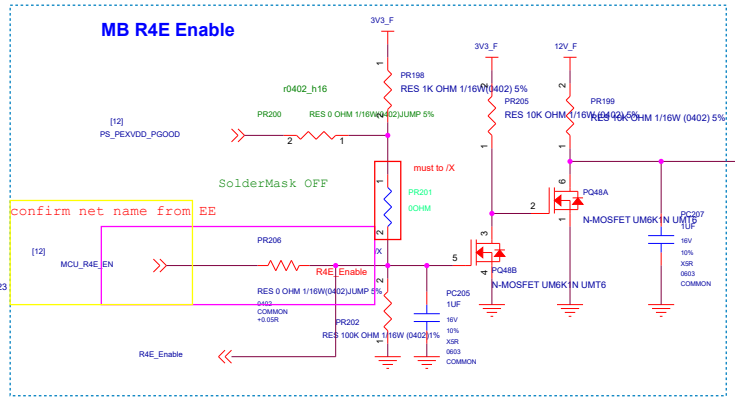
ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	Sequence: MISC

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

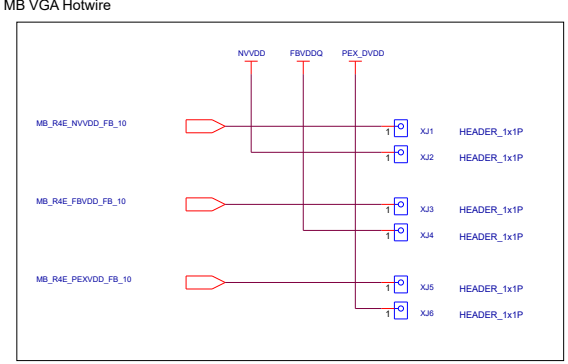
NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	61 OF 66
BOM REV	A	DATE	09-JUL-2018

觸發信號來源需要靠整塊板子最後的POWER RAIL來決定
. 我們會先上PEXVDD這路的PG信號
. 另外預留不上 PEXVDD1這路的PG信號。





MB VGA Hotwire

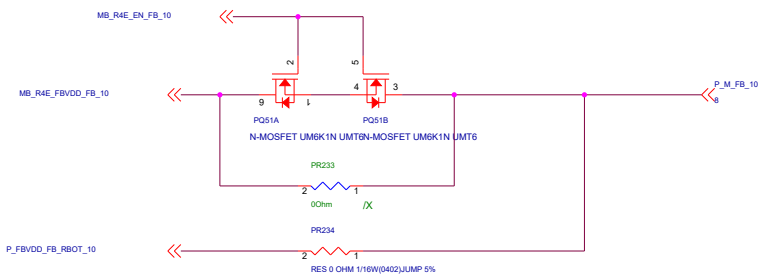


P-STATE VOLTAGES

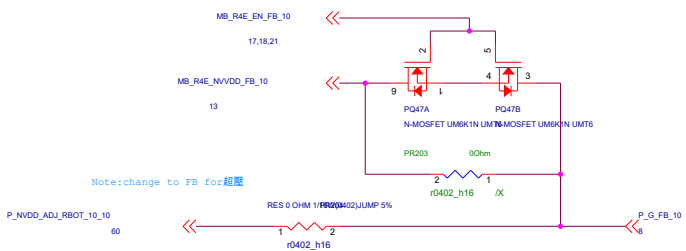
1. P0 at 1.05V to 1.15V (depending on VB)
2. P8/P12 at 0.80V

SOFT START (VR11)

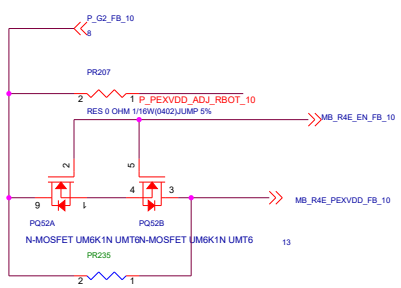
1. Ramp 0V to 1.10V in ~2mS
2. Hold at 1.10V for 170uS
3. Read VID
4. VID set to 0.9V during GPIO tri-state
   VID[5:1]=11000 to set 0.9125V



For MB R4E的預留超壓電路

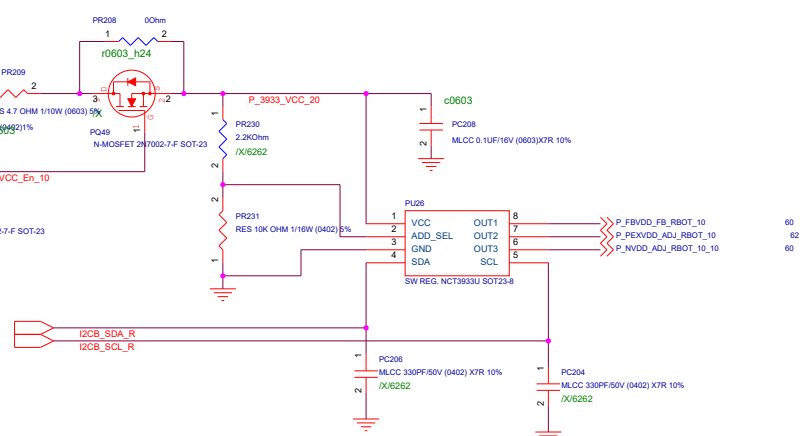


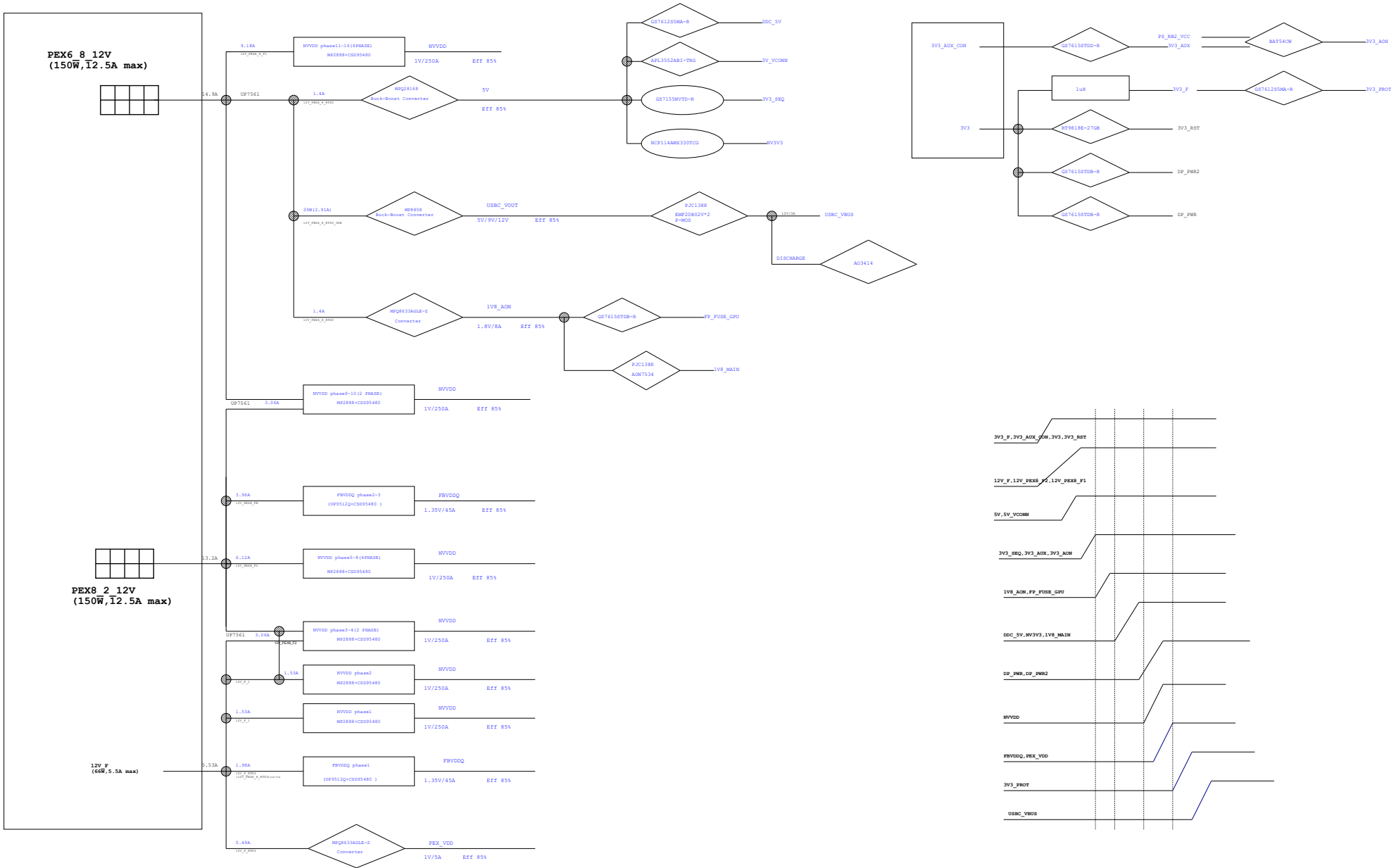
Note:change to LL for超壓(RESERVE)



NCT3933U Over Voltage

Address : 0x2A




PEX6_8_12V
(150W,12.5A max)
14.9A
UP7561
9.18A
NVVDD phase11-16(6PHASE)
MP2888+CSD95480
NVVDD
1V/250A
Eff 85%
1.4A
MPQ8168
Buck-Boost Converter
5V
Eff 85%
GS7612SSMA-R
DDC_5V
APL3552ABI-TRG
5V_VCONN
GS715SNVTD-R
3V3_SEQ
NCP114AMX330TCG
NV3V3
35W(2.91A)
MP8858
Buck-Boost Converter
USBC_VOUT
5V/9V/12V
Eff 85%
PJC138K
EMP20B02V*2
P-MOS
12V/3A
USBC_VBUS
DISCHARGE
AO3414
1.4A
MPQ8633AGLE-Z
Converter
1V8_AON
1.8V/8A
Eff 85%
GS7615STDB-R
FP_FUSE_GPU
PJC138K
AON7534
1V8_MAIN
UP7561
3.06A
NVVDD phase9-10(2 PHASE)
MP2888+CSD95480
NVVDD
1V/250A
Eff 85%
PEX8_2_12V
(150W,12.5A max)
13.2A
3.96A
FBVDDQ phase2-3
(UP9512Q+CSD95480)
FBVDDQ
1.35V/45A
Eff 85%
6.12A
NVVDD phase5-8(4PHASE)
MP2888+CSD95480
NVVDD
1V/250A
Eff 85%
UP7561
3.06A
NVVDD phase3-4(2 PHASE)
MP2888+CSD95480
NVVDD
1V/250A
Eff 85%
1.53A
NVVDD phase2
MP2888+CSD95480
NVVDD
1V/250A
Eff 85%
1.53A
NVVDD phase1
MP2888+CSD95480
NVVDD
1V/250A
Eff 85%
12V_F
(66W,5.5A max)
5.53A
1.98A
FBVDDQ phase1
(UP9512Q+CSD95480)
FBVDDQ
1.35V/45A
Eff 85%
0.49A
MPQ8633AGLE-Z
Converter
PEX_VDD
1V/5A
Eff 85%
3V3_AUX_CON
GS7615STDD-R
PS_RB2_VCC
3V3_AUX
BAT54CW
3V3_AON
1uH
3V3_F
GS7612SSMA-R
3V3_PROT
3V3
MP9818E-27GB
3V3_RST
GS7615STDB-R
DP_PWR2
GS7615STDB-R
DP_PWR
3V3_F,3V3_AUX_CON,3V3,3V3_RST
12V_F,12V_PEX8_F2,12V_PEX8_F1
5V,5V_VCONN
3V3_SEQ,3V3_AUX,3V3_AON
1V8_AON,FP_FUSE_GPU
DDC_5V,NV3V3,1V8_MAIN
DP_PWR,DP_PWR2
NVVDD
FBVDDQ,PEX_VDD
3V3_PROT
USBC_VBUS

ASUS VGA PCB Logo

LOGO1
1 CE
CE
/X

LOGO2
1 VCCI
VCCI
/X

LOGO3
1 EMI_D33005_H
EMI_D33005_H
/X

LOGO4
1 FCC
FCC
/X

LOGO5
1 RCM
RCM
/X

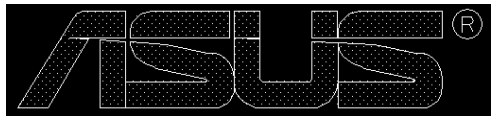
LOGO6
1 CAN ICES-3(B)/NMB-3(B)
CAN_ICES_3B_NMB_3B
/X

LOGO7
1 KC R-R-MSQ-XXXXXXXXXXXXXX
KC_R_R_LOGO

LOGO8
1 UKRAINE
UKRAINE

LOGO9
1 PCB MADE IN CHINA
PCB_MADE_IN_CHINA
/X

LOGO10
1 MARK_L
S_MARK_L
/X



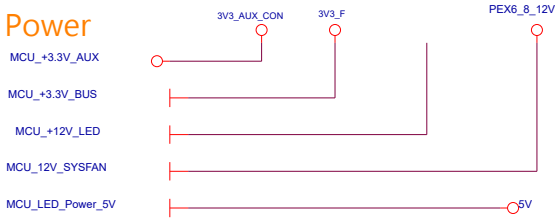
LOGO11
1 WEEE_LOGO
WEEE_LOGO
/X

ASUSTEK COMPUTER INC		Title :	PCB Logo
		Engineer:	Tomo
Size	Project Name	ASUS VGA Logo	Rev 1.00
Date: Monday, August 13, 2018		Sheet 1 of 1	

SXXXX NOTE

2018/06/14

Power



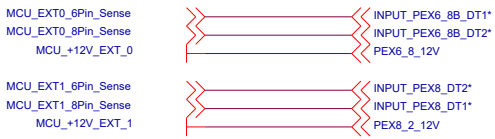
From PCIE 3V3_AUX (for ITE)

From BUS 3V3 (for ITE logic判斷)

From BUS 12V (for Cover LED/RGB Header使用, Max 2.3A)

From 12V (for 外接式風扇使用, 任一組12V皆可)

From 5V (for 背板LED)



From EXT 0 (外部電源第一組)

From EXT 1 (外部電源第二組)

若僅有使用一組, 請拉EXT0組

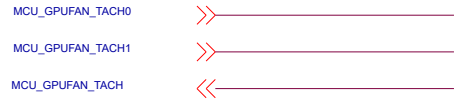
I2C

From GPU (for ITE / ENE)

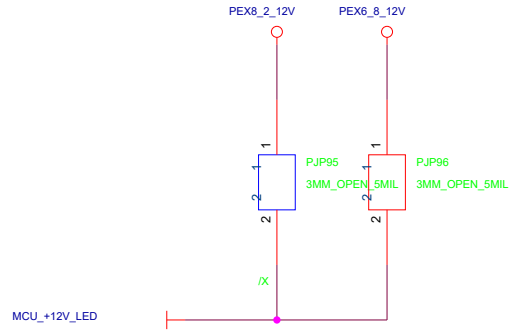
NV I2C 建議使用 I2CB_SDA & I2CB_SCL

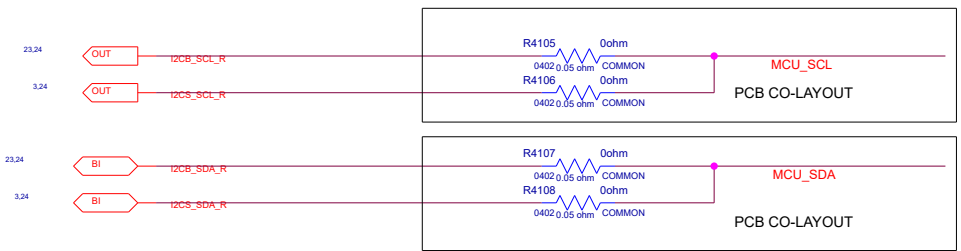
Layout前請再與AMD/NV EE Leader or AMD/NV AE 確認

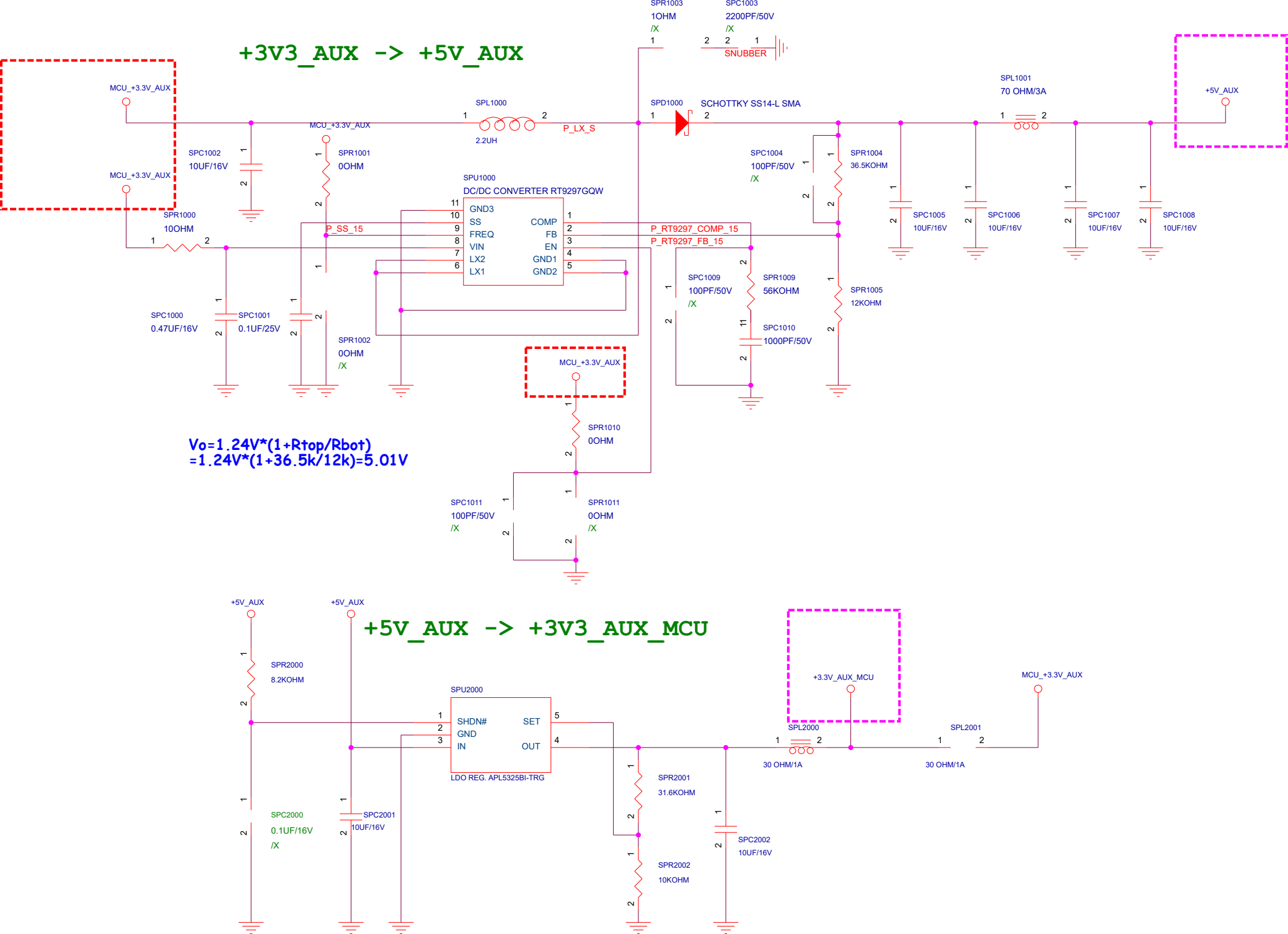
GPUFAN



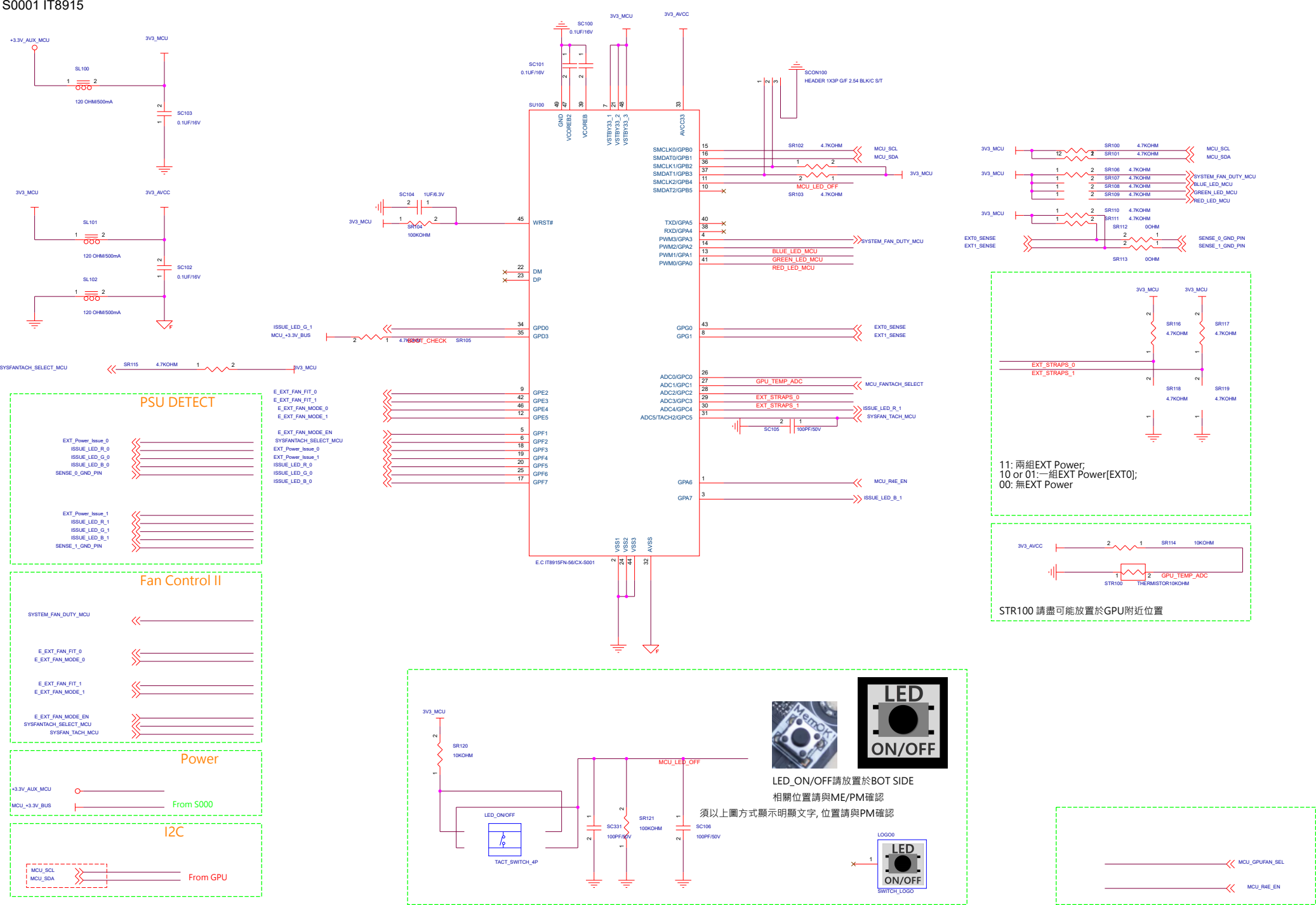
VGA HOTWIRE



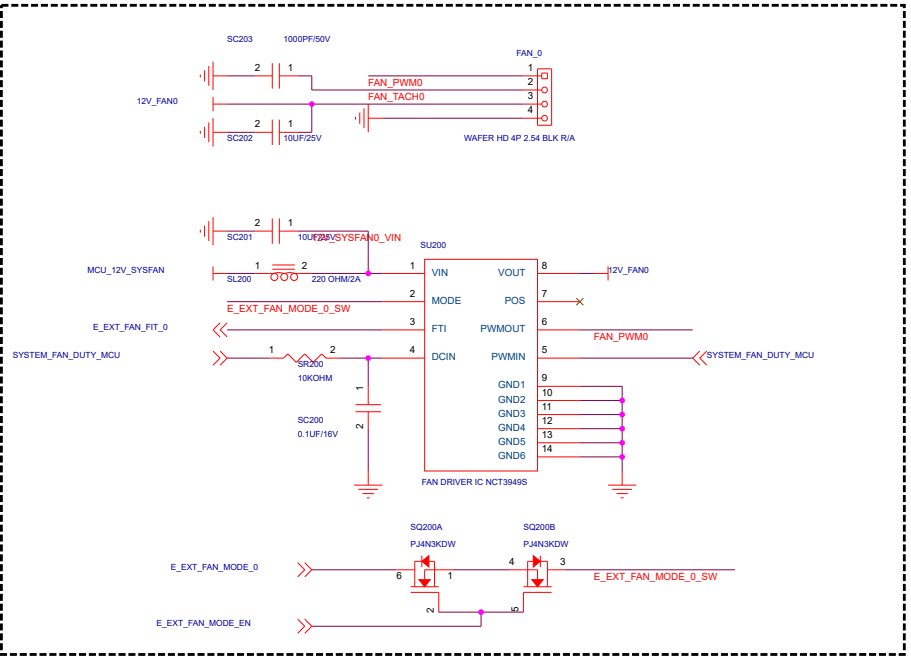


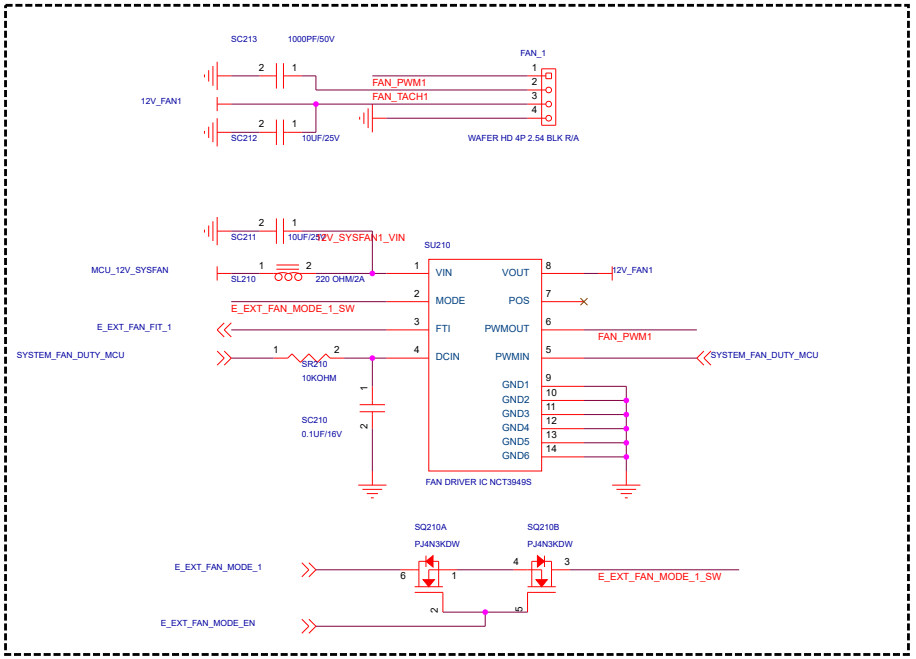

+3V3_AUX -> +5V_AUX
SPR1003
1OHM
/X
SPC1003
2200PF/50V
/X
SNUBBER
MCU_+3.3V_AUX
SPL1000
2.2UH
P_LX_S
SPD1000
SCHOTTKY SS14-L SMA
SPL1001
70 OHM/3A
+5V_AUX
SPC1002
10UF/16V
SPR1001
0OHM
SPU1000
DC/DC CONVERTER RT9297GQW
GND3
SS
FREQ
VIN
LX2
LX1
COMP
FB
EN
GND1
GND2
P_SS_15
P_RT9297_COMP_15
P_RT9297_FB_15
SPR1000
10OHM
SPC1004
100PF/50V
/X
SPR1004
36.5KOHM
SPC1005
10UF/16V
SPC1006
10UF/16V
SPC1007
10UF/16V
SPC1008
10UF/16V
SPC1000
0.47UF/16V
SPC1001
0.1UF/25V
SPR1002
0OHM
/X
SPC1009
100PF/50V
/X
SPR1009
56KOHM
SPC1010
1000PF/50V
SPR1005
12KOHM
Vo=1.24V*(1+Rtop/Rbot)
=1.24V*(1+36.5k/12k)=5.01V
SPR1010
0OHM
SPC1011
100PF/50V
/X
SPR1011
0OHM
/X
+5V_AUX -> +3V3_AUX_MCU
SPR2000
8.2KOHM
SPU2000
SHDN#
GND
IN
SET
OUT
LDO REG. APL5325BI-TRG
+3.3V_AUX_MCU
SPL2000
30 OHM/1A
SPL2001
30 OHM/1A
SPC2000
0.1UF/16V
/X
SPC2001
10UF/16V
SPR2001
31.6KOHM
SPR2002
10KOHM
SPC2002
10UF/16V

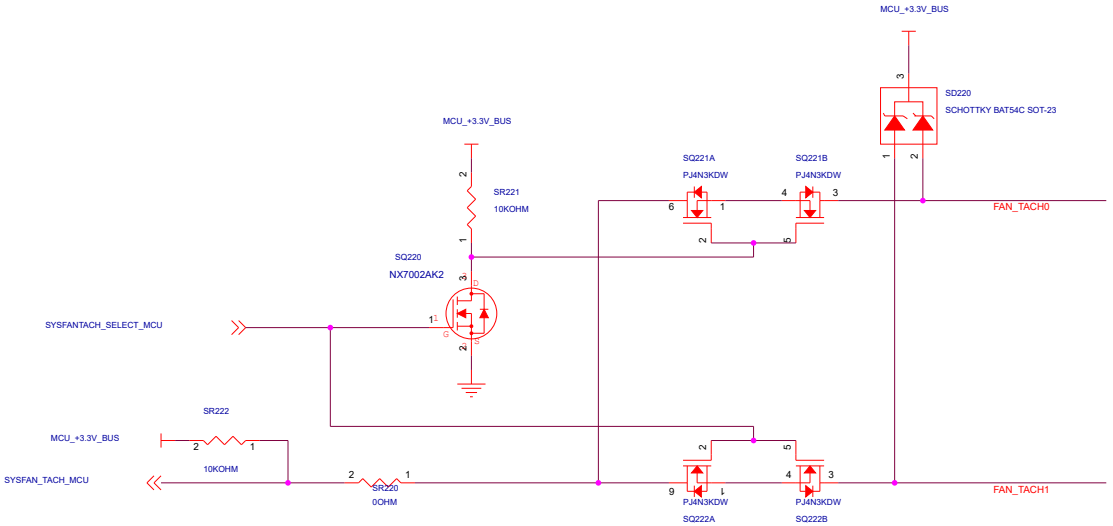
S0001 IT8915



S0002 SYSTEM FAN CONTROL







Power

MCU_+3.3V_BUS — From BUS 3V3

MCU_12V_SYSFAN — From 12V

Fan Control II

E_EXT_FAN_FIT_0
E_EXT_FAN_MODE_0

E_EXT_FAN_FIT_1
E_EXT_FAN_MODE_1

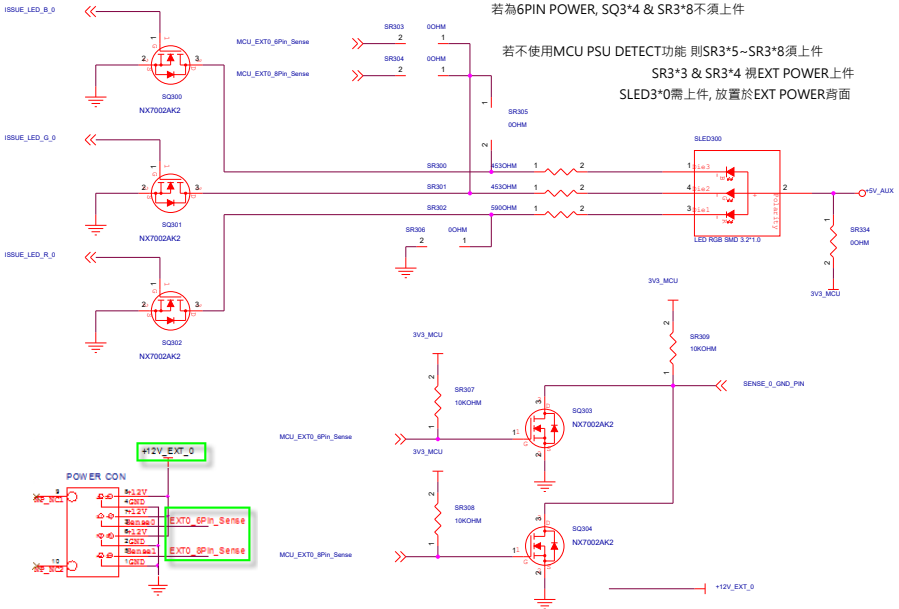
SYSTEM_FAN_DUTY_MCU
E_EXT_FAN_MODE_EN
SYSFANTACH_SELECT_MCU
SYSFAN_TACH_MCU

S0003 PSU DETECT

EXT0

若使用MCU PSU DETECT功能 則SR3*3~SR3*6不須上件
若為8PIN POWER, SQ3*3/SQ3*4/SR3*7/SR3*8皆須上件
若為6PIN POWER, SQ3*4 & SR3*8不須上件

若不使用MCU PSU DETECT功能 則SR3*5~SR3*8須上件
SR3*3 & SR3*4 視EXT POWER上件
SLED3*0需上件, 放置於EXT POWER背面

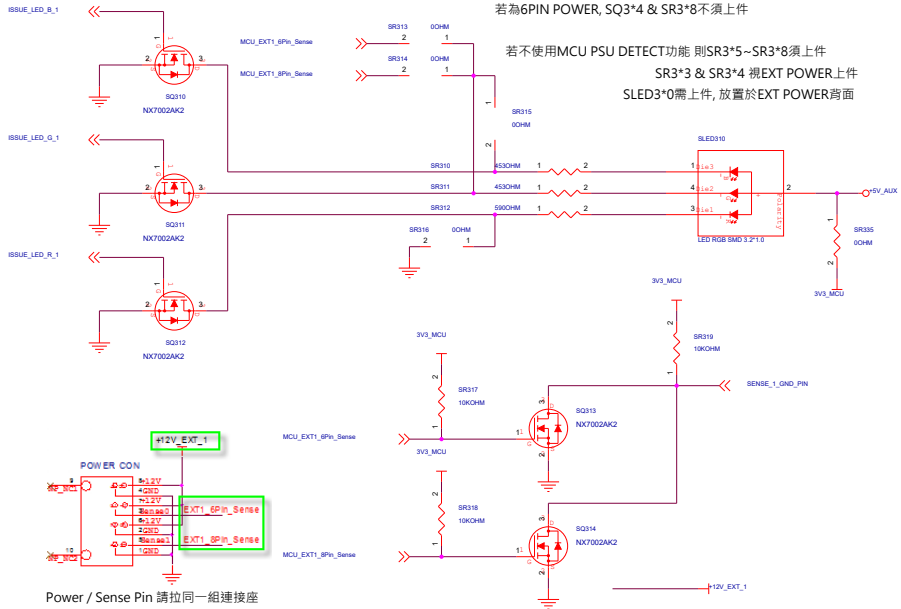


Power / Sense Pin 請拉同一組連接座

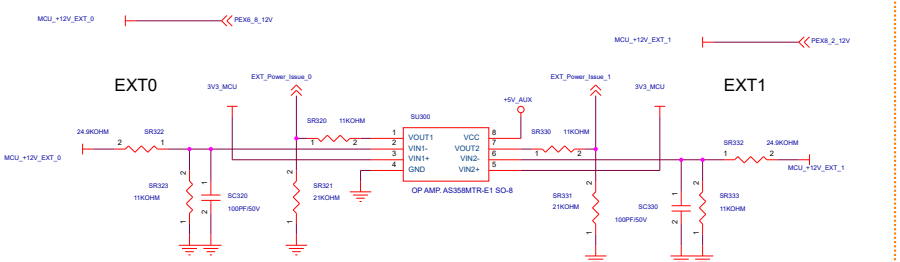
EXT1

若使用MCU PSU DETECT功能 則SR3*3~SR3*6不須上件
若為8PIN POWER, SQ3*3/SQ3*4/SR3*7/SR3*8皆須上件
若為6PIN POWER, SQ3*4 & SR3*8不須上件

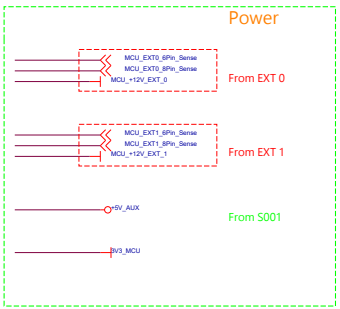
若不使用MCU PSU DETECT功能 則SR3*5~SR3*8須上件
SR3*3 & SR3*4 視EXT POWER上件
SLED3*0需上件, 放置於EXT POWER背面

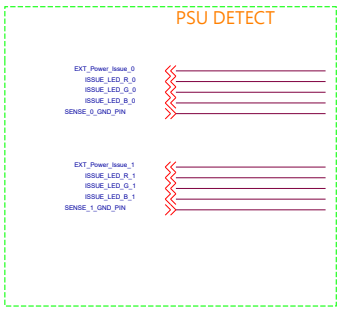


Power / Sense Pin 請拉同一組連接座

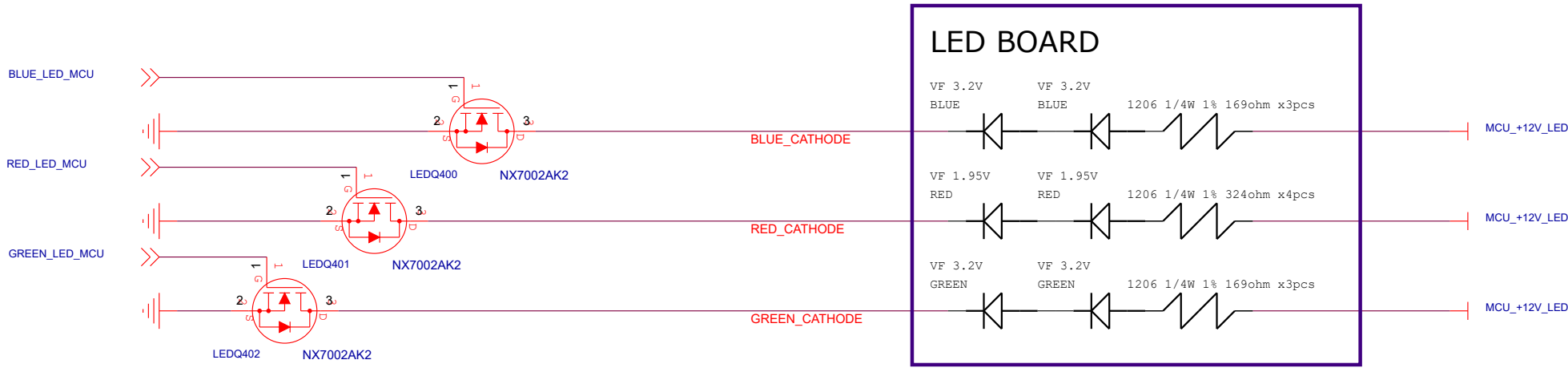


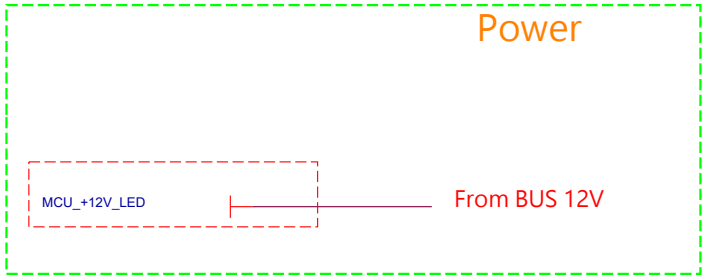
VIN+ > 10.8V: Vout = L
VIN+ < 10.8V: Vout = H
10.8V x 11Kohm / (11Kohm+24.9Kohm) = 3.309V
SR321/SR331, 若僅需做一組連接座偵測, 其他零件可以移除, 但SR321/SR331需上件4.7K

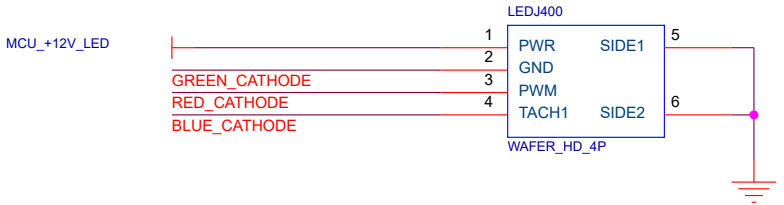




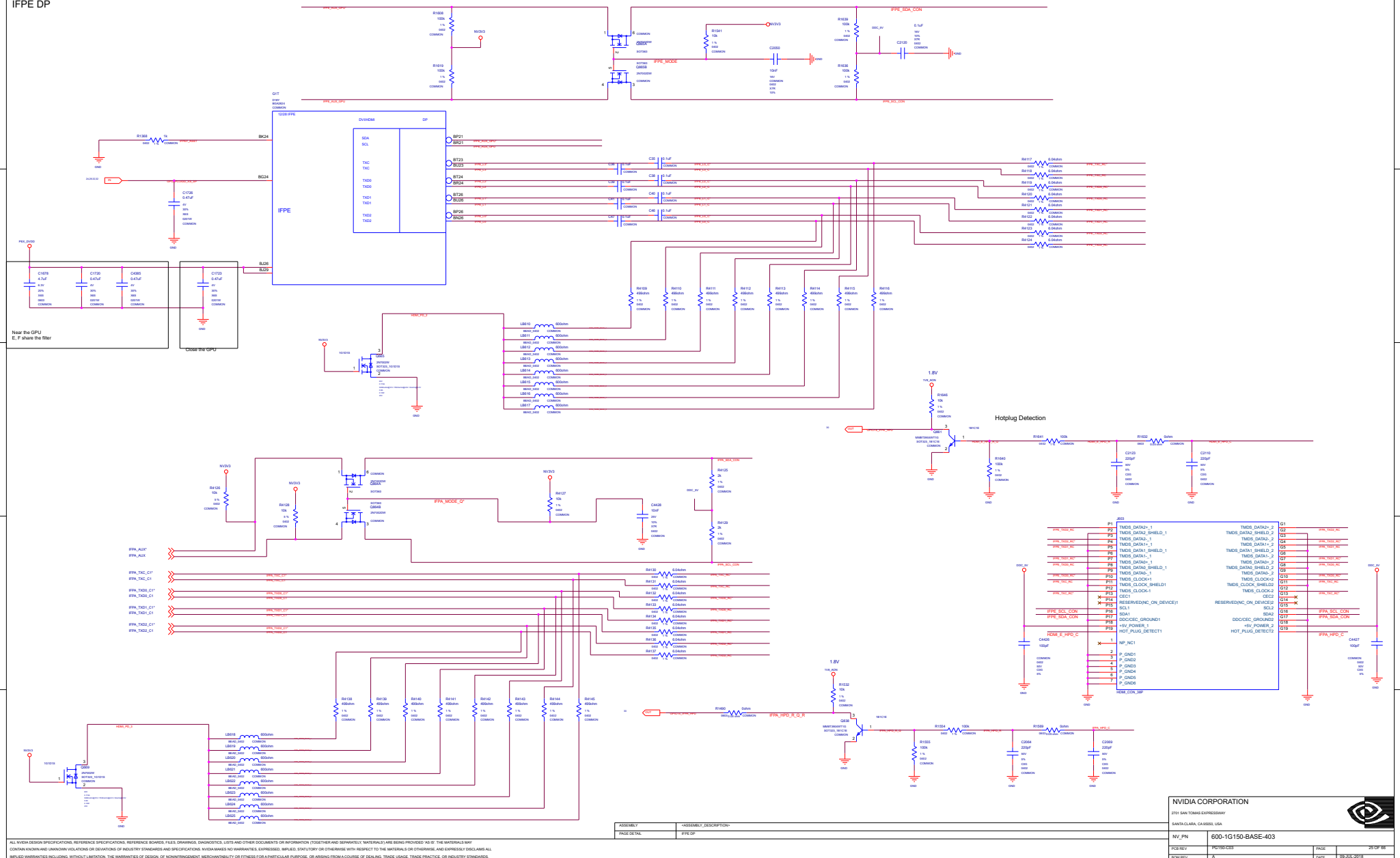
S0003 RGB LED



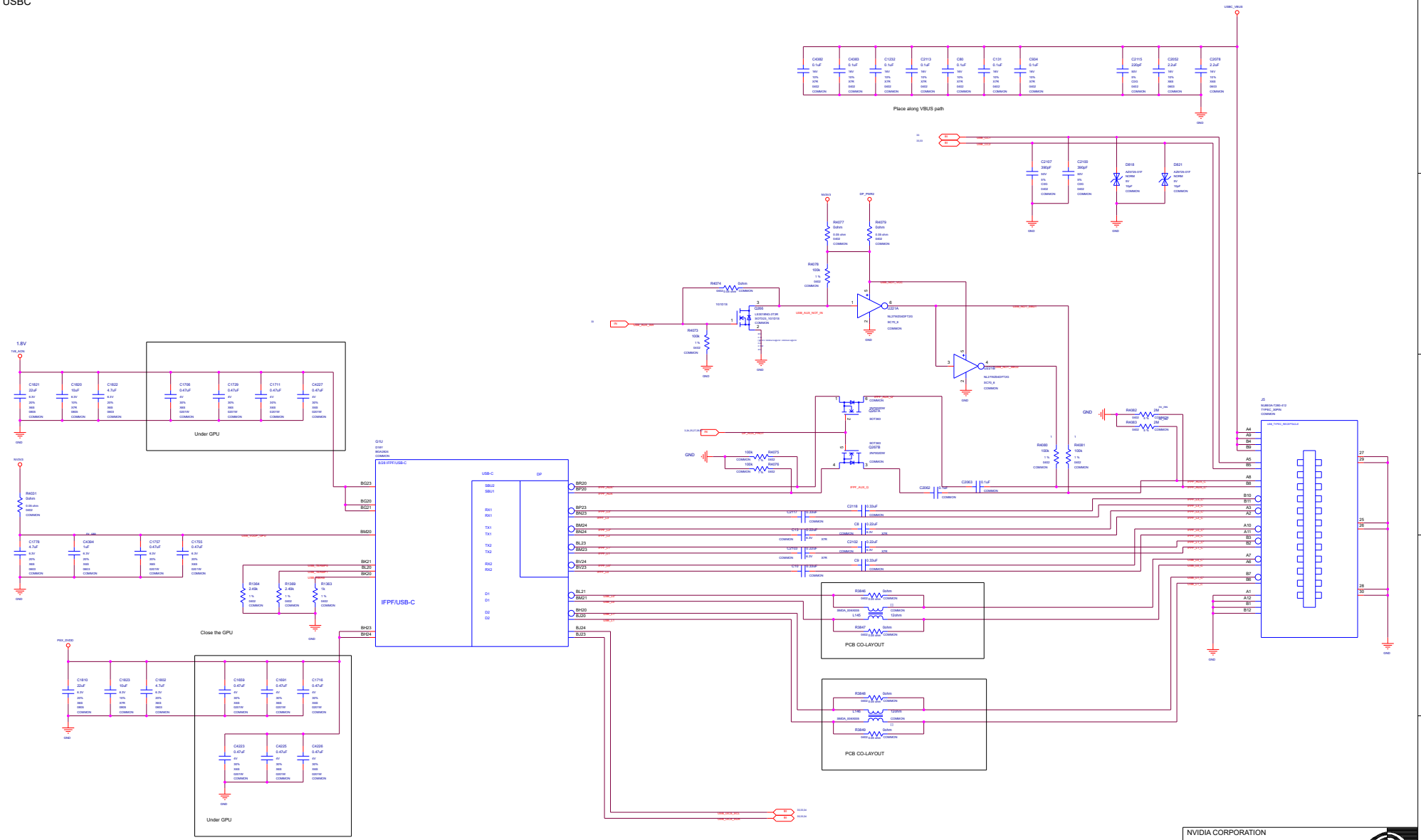




IFPE DP



IFPF USBC



ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	IFPF USB

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

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	26 OF 66
BOM REV	A	DATE	09-JUL-2018

S0015 RGB HEADER

Power

MCU_+12V_LED

From BUS 12V

示意圖

連接座旁請註明 12V G R B

RGB Header

RGB_HEADER

+12V_efuse1

RGBHEADER_B

RGBHEADER_R

RGBHEADER_G

HEADER 1X4P G/F 2.54 RED R/A

RED_LED_MCU

LEDQ601

EMF30N02J

RGBHEADER_R

LEDC601

0.1UF/16V

/X/SB357x

BLUE_LED_MCU

LEDQ602

EMF30N02J

RGBHEADER_B

LEDC602

0.1UF/16V

/X/SB357x

GREEN_LED_MCU

LEDQ603

EMF30N02J

RGBHEADER_G

LEDC603

0.1UF/16V

/X/SB357x

eFuse

LEDU600

GND3

GND2

GND1

dV/dT

EN/UVLO

VIN1

VIN2

VIN3

ILIM

BFET

OUT3

OUT2

OUT1

OVP IC NCT3581Y-D

LEDC604

0.1UF/16V

/X/SB3572

MCU_+12V_LED

LEDR601

8.2KOHM

LEDR602

4.7KOHM

LEDC605

1000PF/16V

/X/SB3572

MCU_+12V_LED

/X/SB3572

LEDC606

1UF/16V

LEDT601

/X/SB3572

LEDJP600

SOLDER PASTE

+12V_efuse1

LEDC607

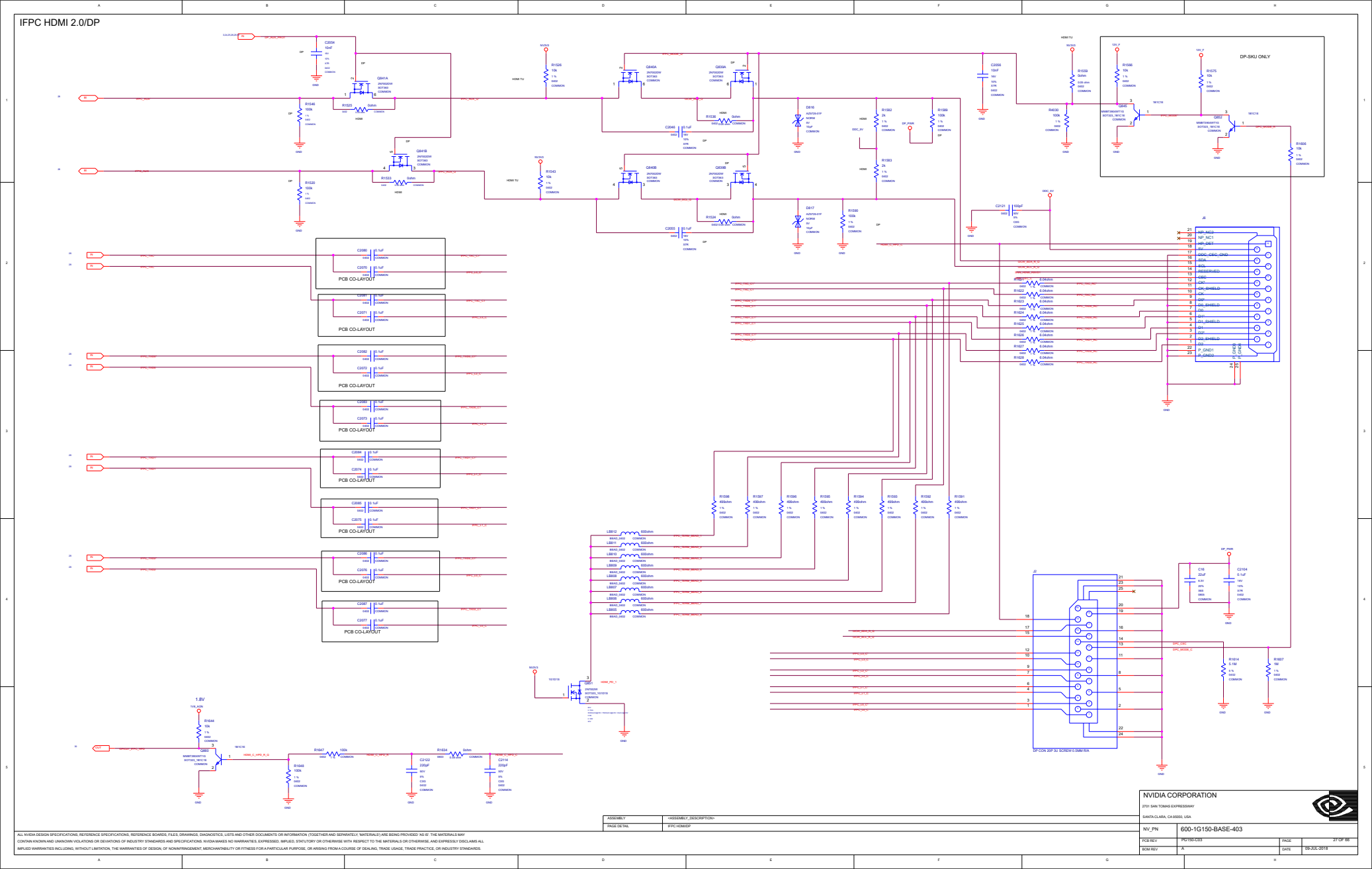
10UF/16V

LEDR603

82.5KOHM

限流=2A, (R*3)/10^5 = I-0.7

IFPC HDMI 2.0/DP

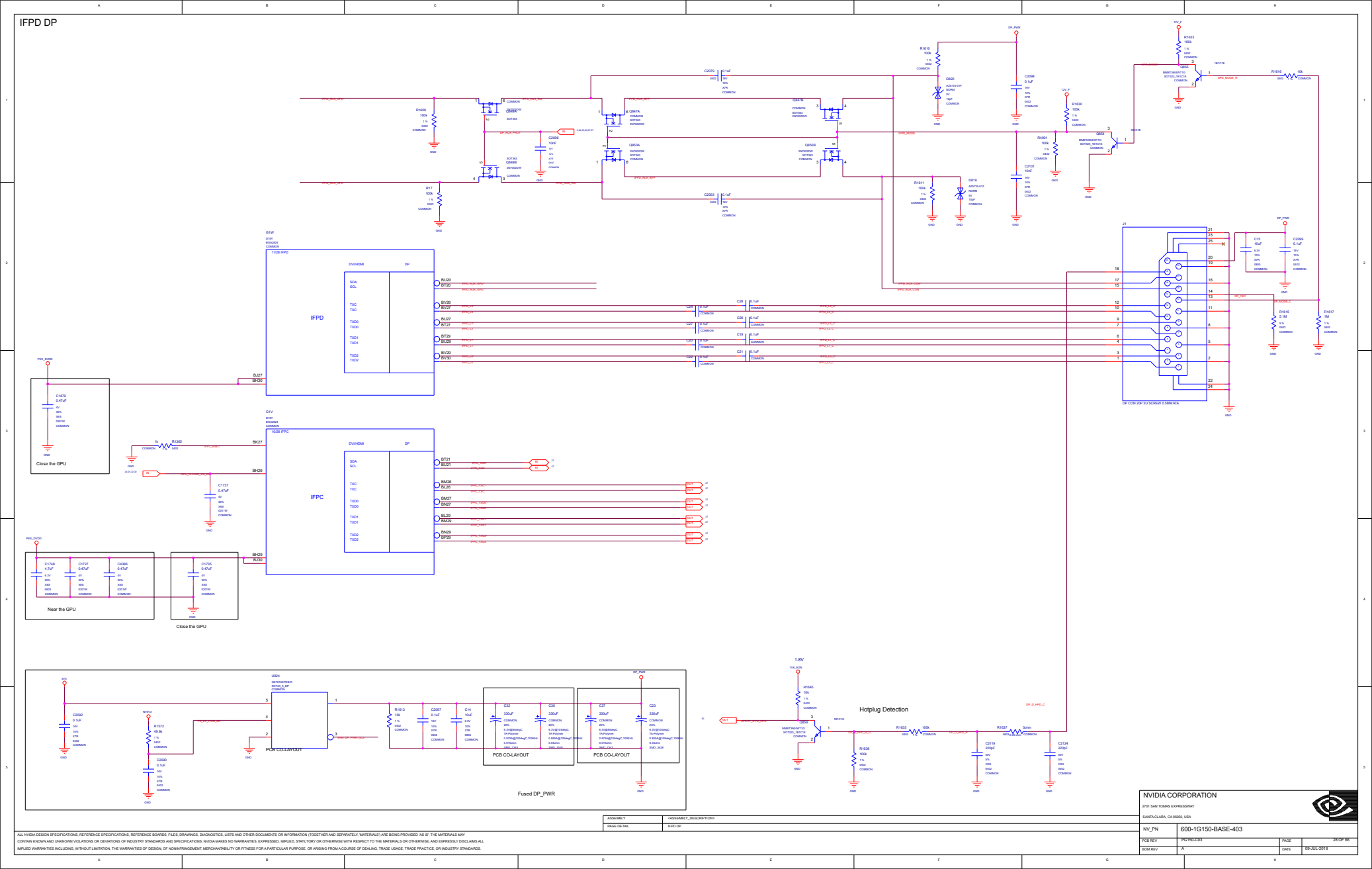


ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	IFPC HDMI/DP

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

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	27 OF 66
BOM REV	A	DATE	09-JUL-2018

IFPD DP

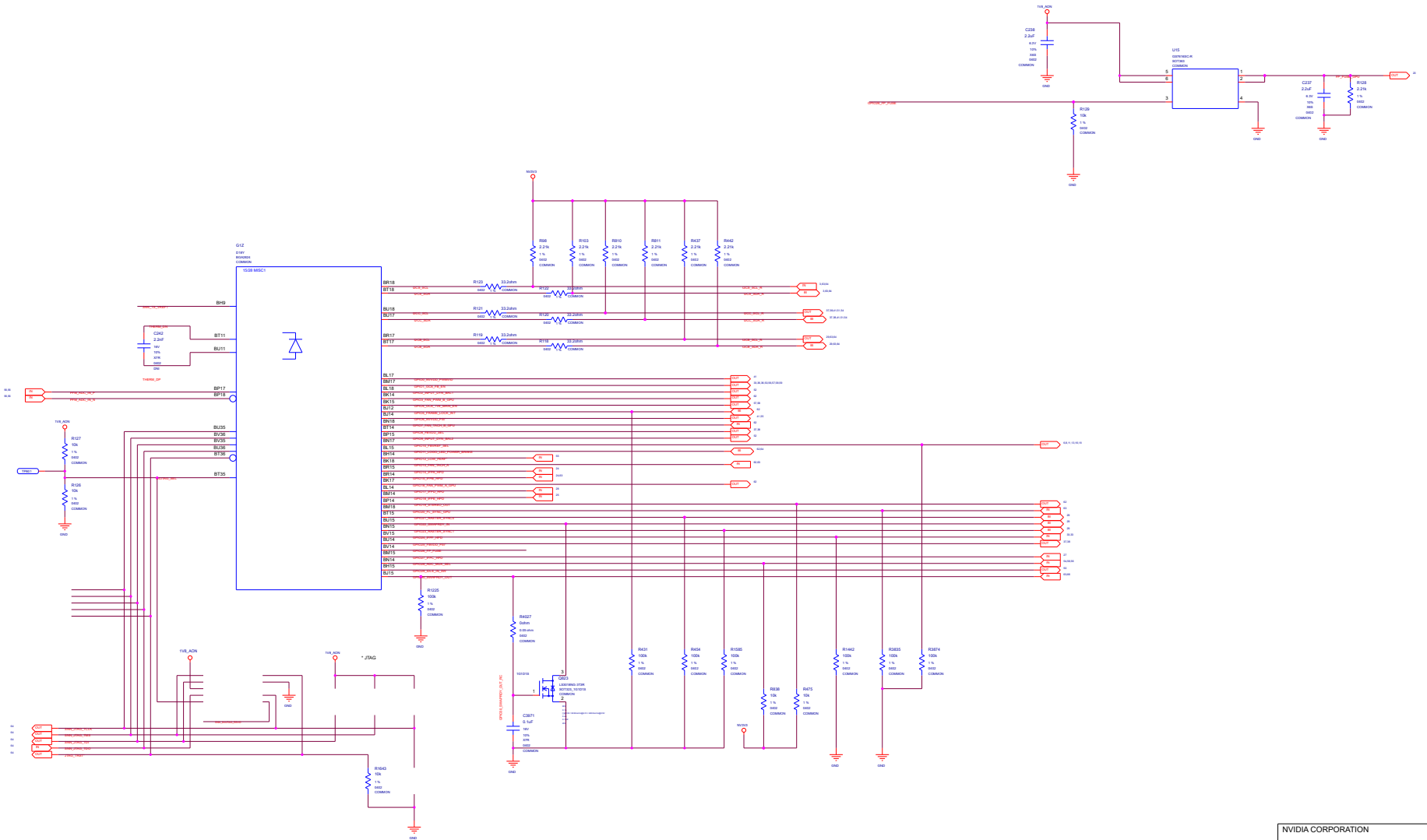


ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	IFPD DP

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

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	28 OF 66
BOM REV	A	DATE	09-JUL-2018

MISC1: Fan, Thermal, JTAG, GPIO, STEREO



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

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

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	30 OF 66
BOM REV	A	DATE	09-JUL-2018

MISC2: ROM, Straps

STRAP2	STRAP1	STRAP0	RAMCFG[4:0]
L	L	L	00000
L	L	H	00001
L	H	L	00010
L	H	H	00011
H	L	L	00100
H	L	H	00101
H	H	L	00110
H	H	H	00111
L	L	M	01000
L	M	L	01001

H=High :Tied to 1.8V

M=Middle:Tied to 0.9V

L=Low :Tied to 0V

DEFAULT

ROM_SO	ROM_SI	ROM_SCLK	DUMMY[2:0],FS_OVERT	1:ENABLE 0:DISABLE
L	L	L	XXX1	FS_OVERT ENABLE
L	L	H	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 ORIGNAL

1:PCIE_CFG LOW POWER

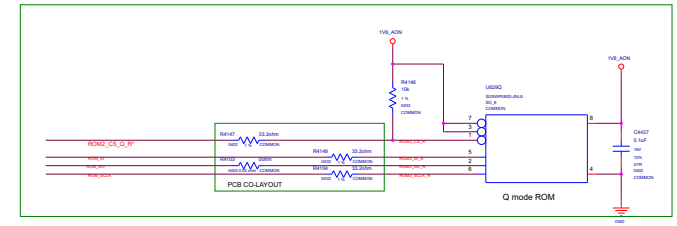
0:PCIE_CFG HIGH POWER

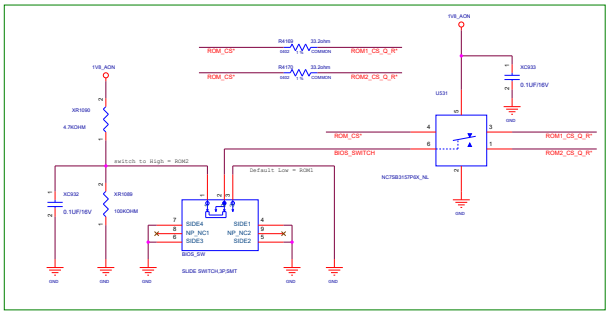
1:VGA_DEVICE ENABLE

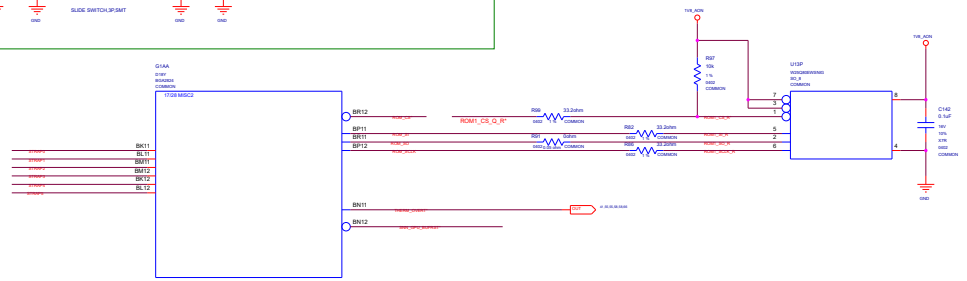
0:VGA_DEVICE DISABLE

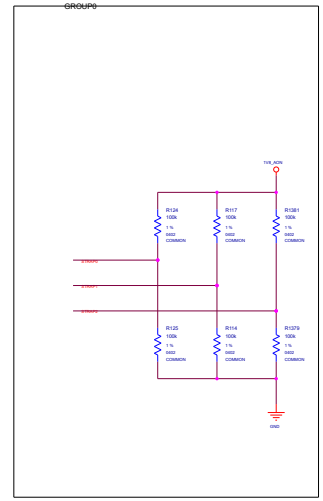
Default

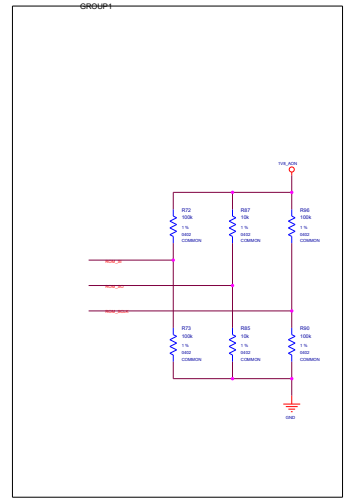
SKU 200

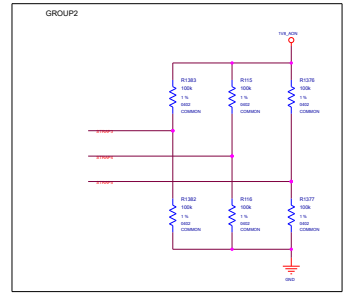










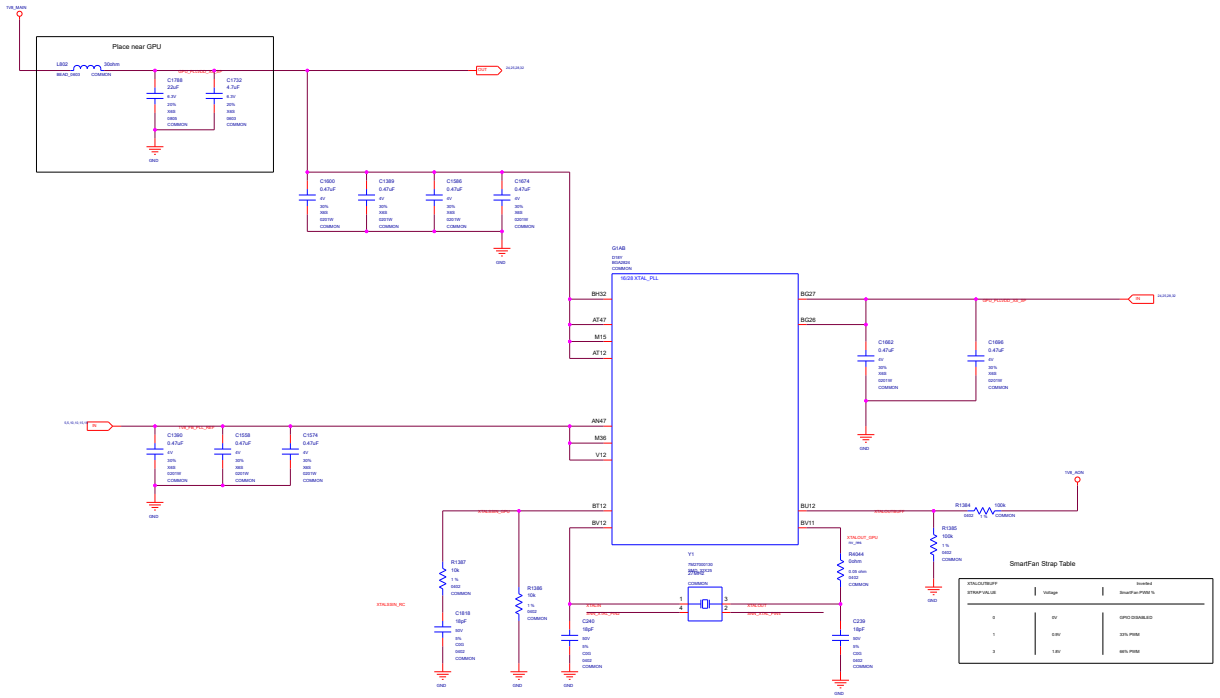


ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	MISC: ROM, STRAPS

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

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	31 OF 66
BOM REV	A	DATE	09-JUL-2018

MISC2: XTAL. PLL

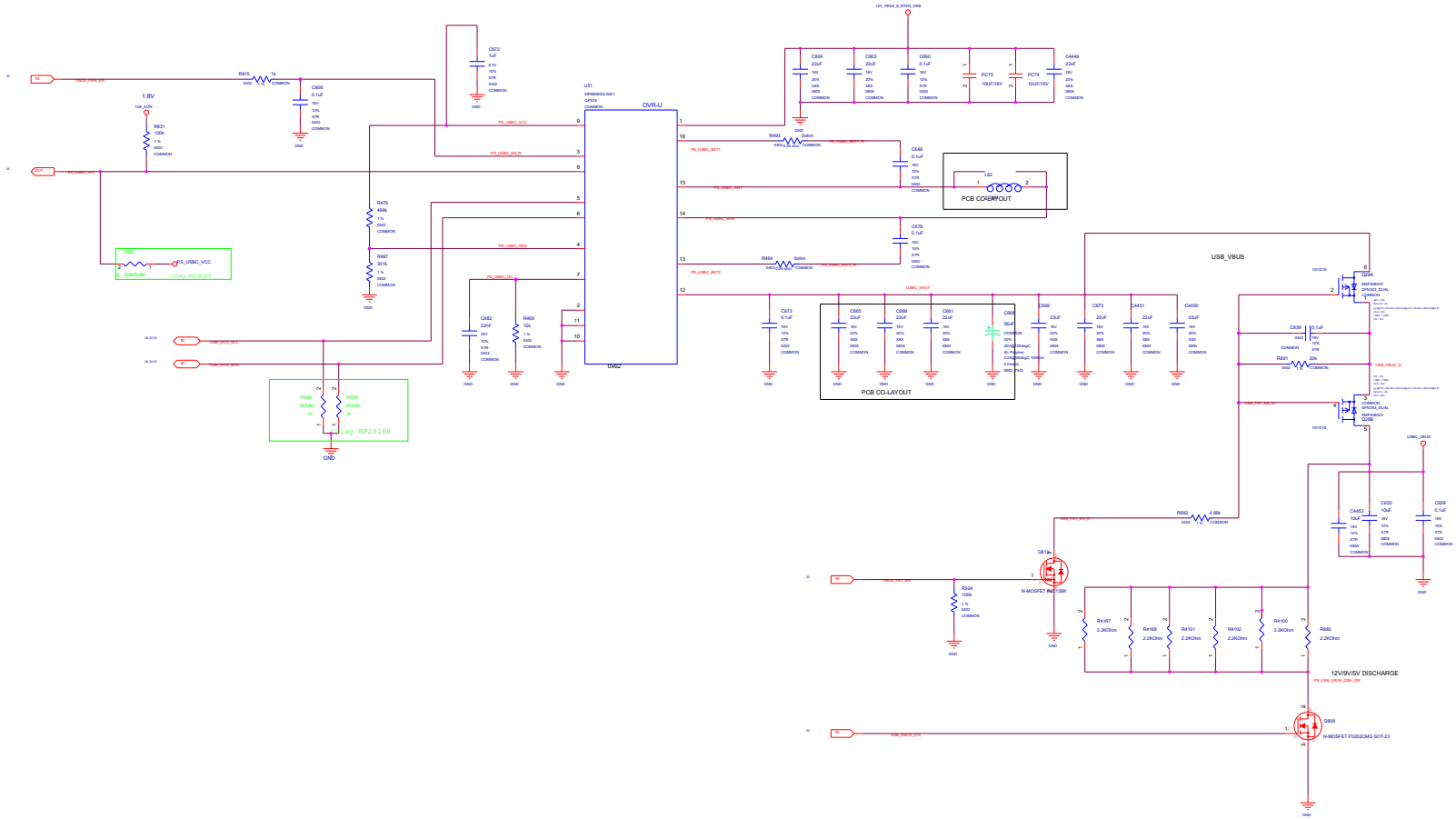


ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	MISC. XTAL PLL

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

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	32 OF 66
BOM REV	A	DATE	09-JUL-2018

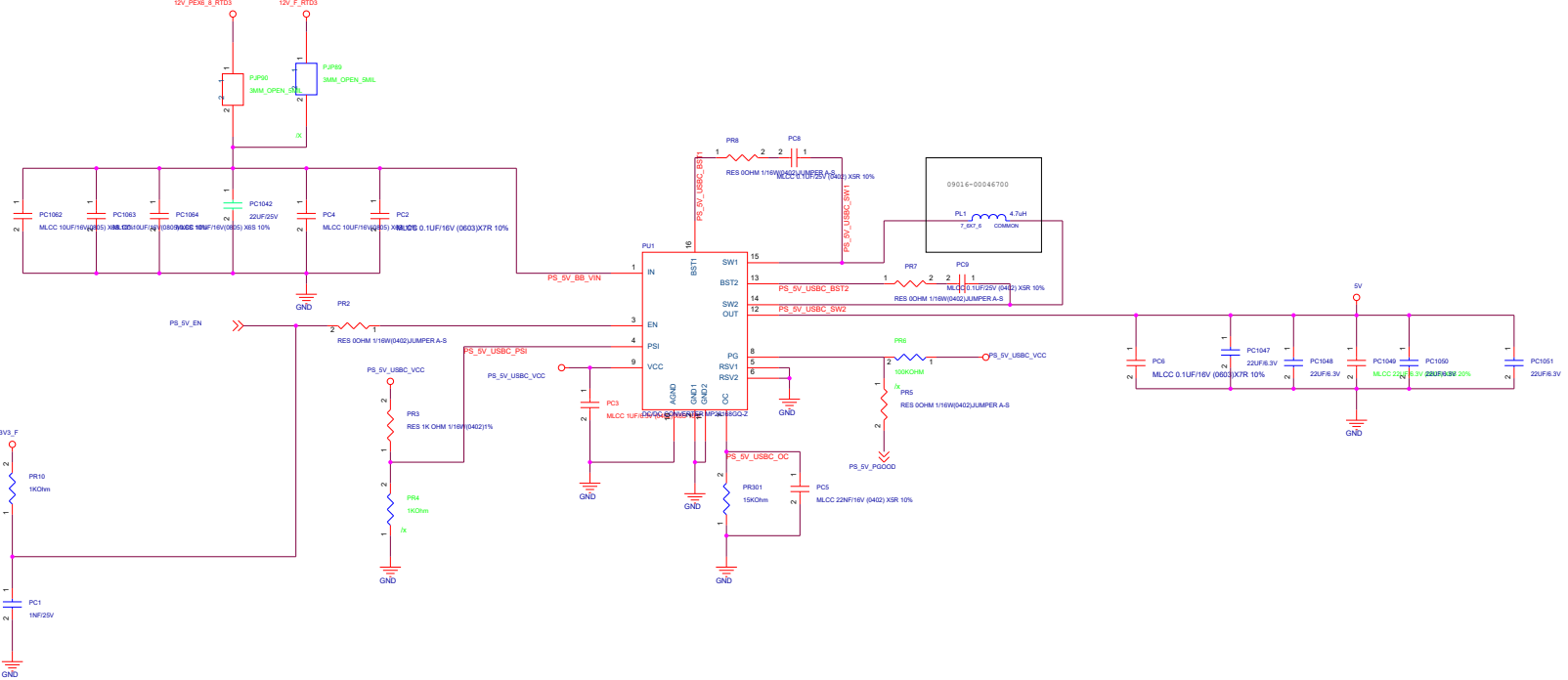
PS: USB VR



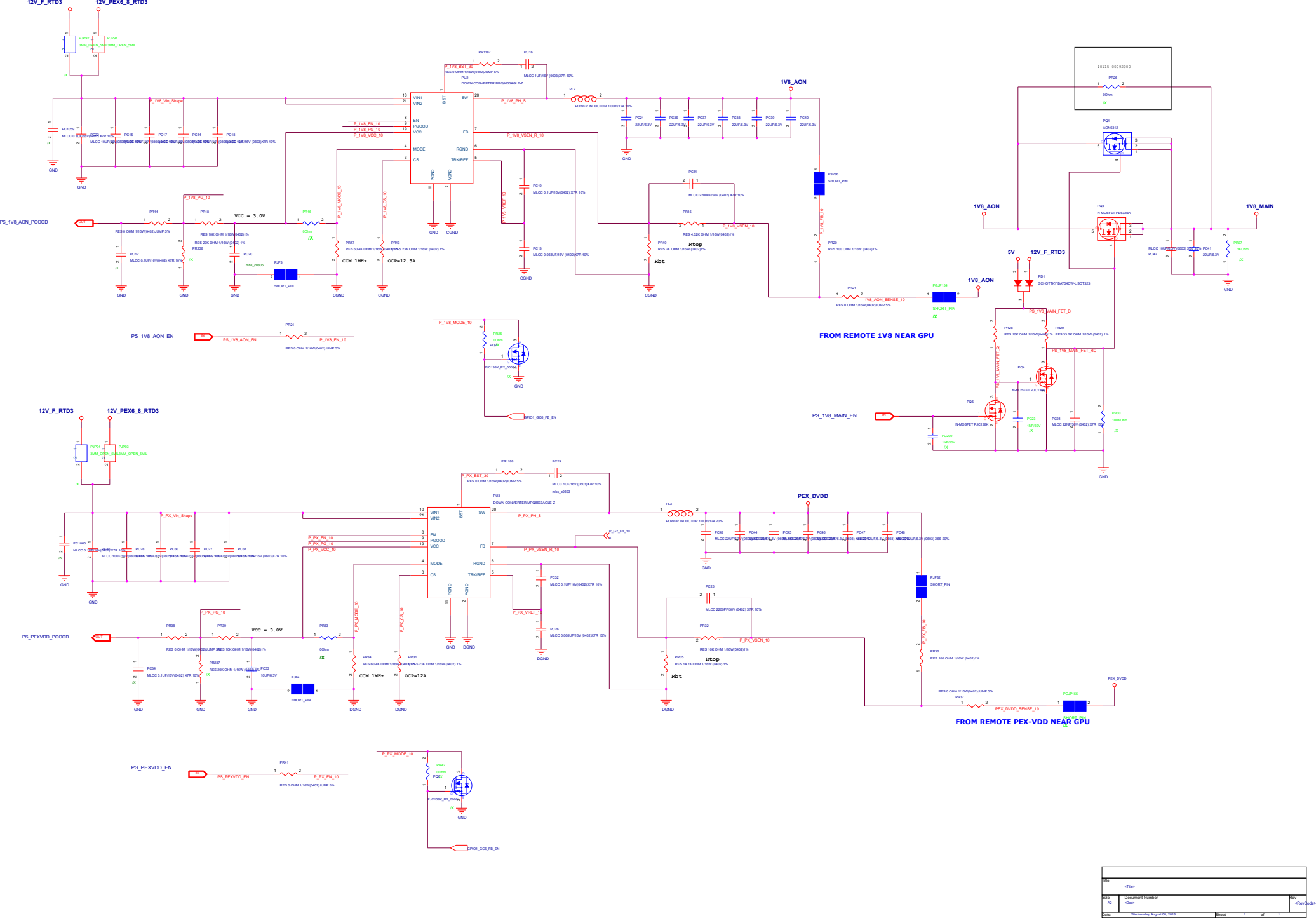
ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PS: USB_C VR

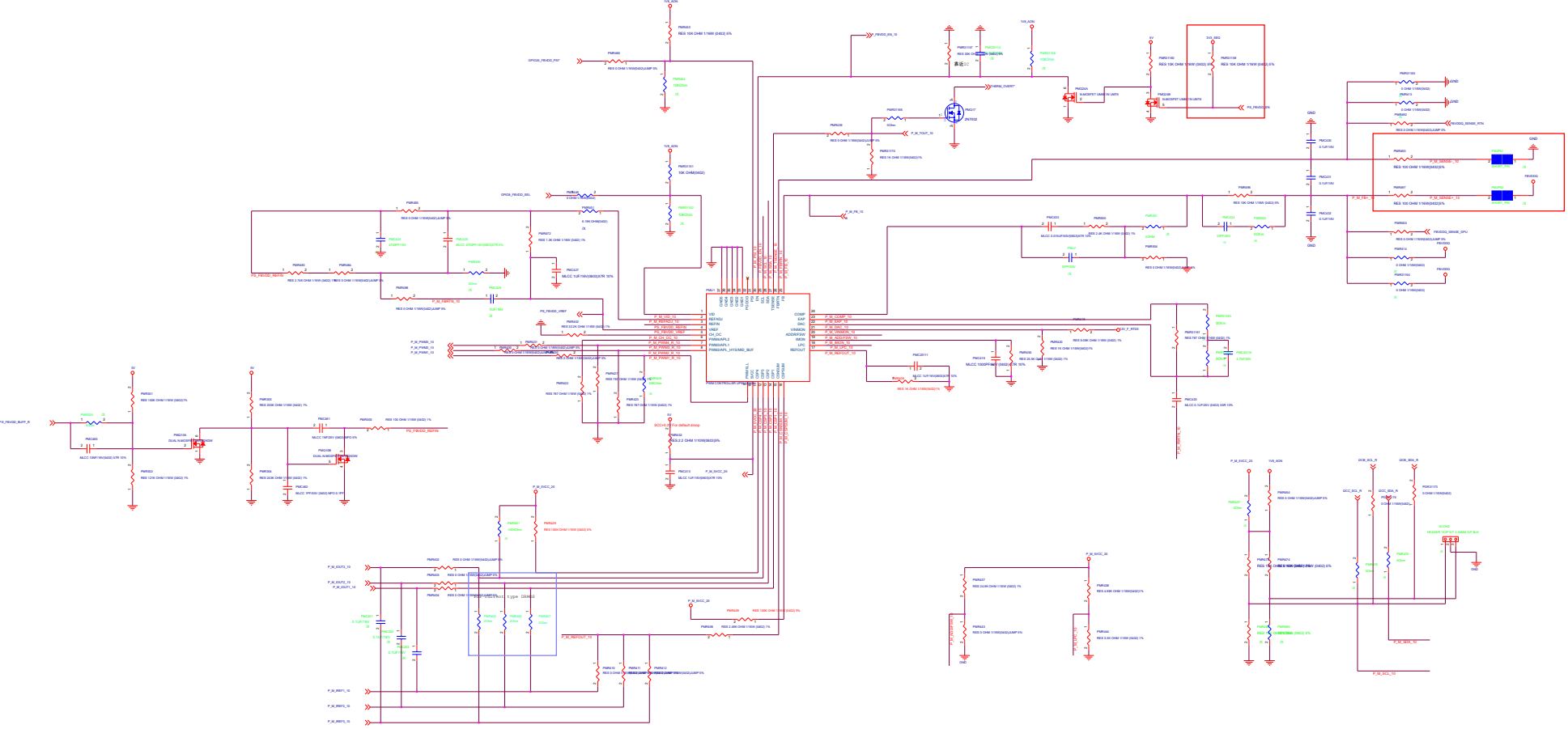
NVIDIA CORPORATION
2701 SAN TOMAS EXPRESSWAY
SANTA CLARA, CA 95050, USA

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	34 OF 66
BOM REV	A	DATE	09-JUL-2018



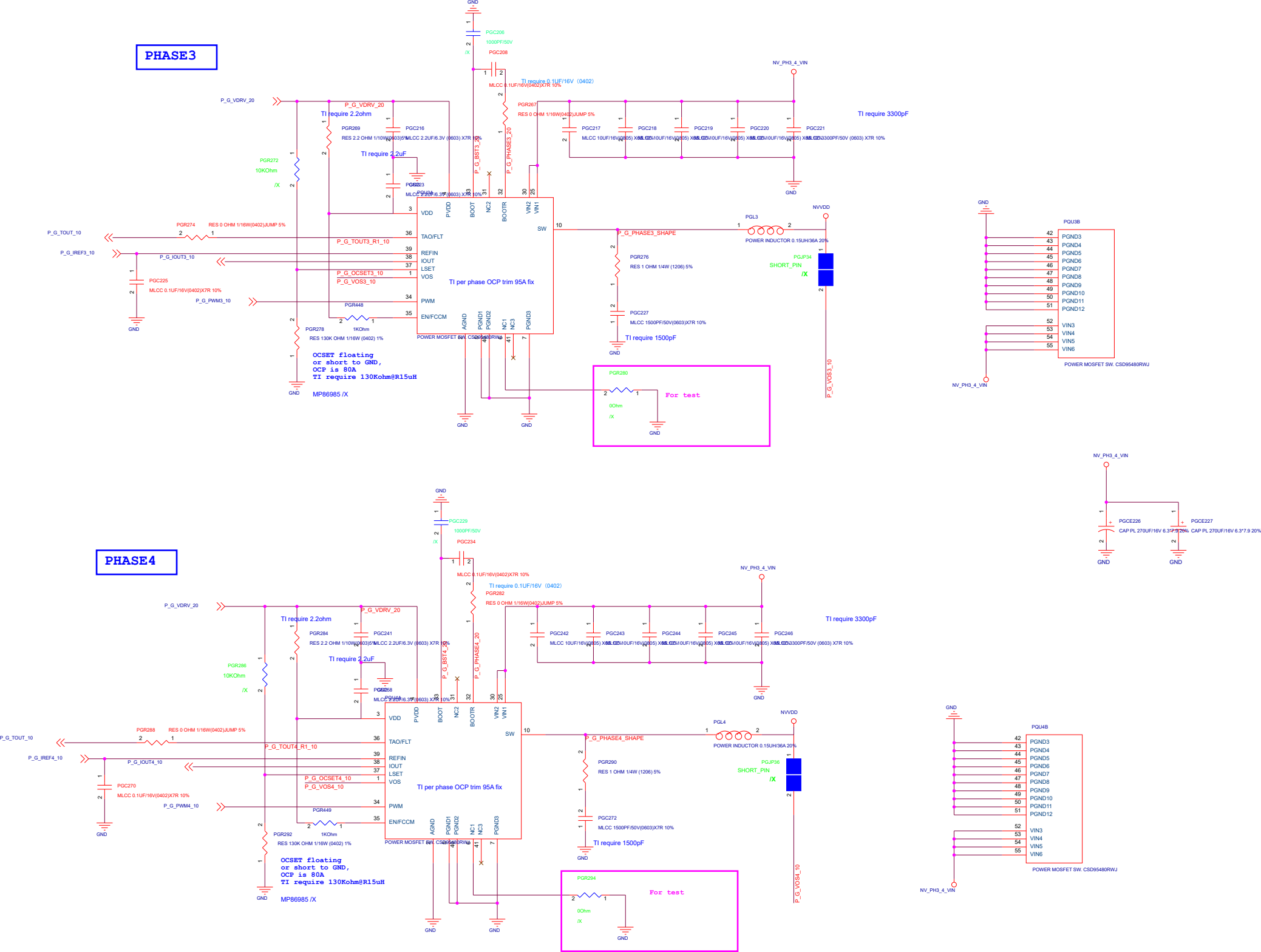
Title	<Title>		
Size: C	Document Number: <Doc>		Rev: <RevCode>
Date: Tuesday, August 07, 2018		Sheet 1 of 1	

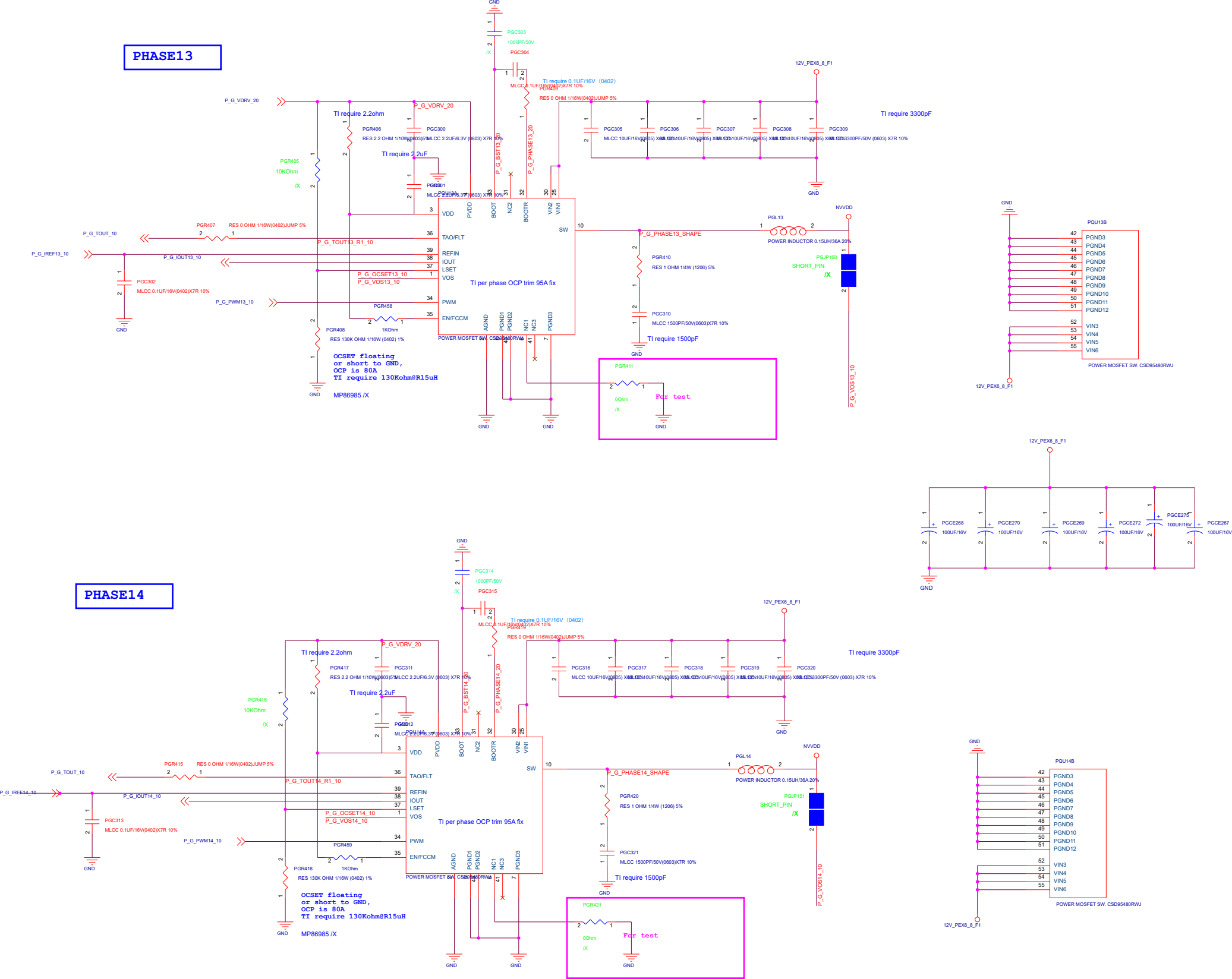

12V_F_RTD3
12V_PEX6_8_RTD3
PJP92
PJP91
3MM_OPEN_SML
3MM_OPEN_SML
P_1V8_Vin_Shape
PC1059
PC15
PC17
PC14
PC18
GND
P_1V8_BST_30
RES 0 OHM 1/16W(0402)JUMP 5%
PR1187
PC16
MLCC 1UF/16V (0603)X7R 10%
PU2
DOWN CONVERTER MPQ8633AGLE-Z
VIN1
VIN2
BST
SW
EN
PGOOD
VCC
FB
MODE
RGND
CS
TRK/REF
PGND
AGND
P_1V8_EN_10
P_1V8_PG_10
P_1V8_VCC_10
P_1V8_PH_S
P_1V8_VSEN_R_10
P_1V8_VREF_10
P_1V8_MODE_10
P_1V8_CS_10
PL2
POWER INDUCTOR 1.0UH/12A 20%
1V8_AON
PC21
PC35
PC37
PC38
PC39
PC40
22UF/6.3V
PJP86
SHORT_PIN
P_1V8_FB_10
PC11
MLCC 2200PF/50V (0402) X7R 10%
PC19
MLCC 0.1UF/16V(0402) X7R 10%
PC13
MLCC 0.068UF/16V (0402)X7R 10%
CGND
PR15
RES 4.02K OHM 1/16W(0402)1%
Rtop
PR19
RES 2K OHM 1/16W (0402)1%
Rbt
PR20
RES 100 OHM 1/16W (0402)1%
PR21
RES 0 OHM 1/16W(0402)JUMP 5%
1V8_AON_SENSE_10
PJP154
SHORT_PIN
/X
PS_1V8_AON_PGOOD
PR14
RES 0 OHM 1/16W(0402)JUMP 5%
PR18
RES 10K OHM 1/16W(0402)1%
VCC = 3.0V
PR16
0Ohm
PR236
RES 20K OHM 1/16W (0402) 1%
PC12
MLCC 0.1UF/16V(0402)X7R 10%
PC20
mba_c0805
PJP3
SHORT_PIN
PR17
RES 60.4K OHM 1/16W(0402)1%
CCM 1MHz
PR13
RES 5.23K OHM 1/16W (0402) 1%
OCP=12.5A
PS_1V8_AON_EN
PR24
RES 0 OHM 1/16W(0402)JUMP 5%
PR25
0Ohm
PQ2X
FJC138K_R2_00001
GPIO1_GD5_FB_EN
FROM REMOTE 1V8 NEAR GPU
10115-00092000
PR26
0Ohm
PQ1
AON6312
1V8_MAIN
PC3
N-MOSFET PE6328A
MLCC 10UF/25V (0603) X5R 20%
PC41
PC42
22UF/6.3V
PR27
1KOhm
5V
PD1
SCHOTTKY BAT54CW-L SOT323
PS_1V8_MAIN_FET_D
PR28
RES 10K OHM 1/16W(0402)1%
PR29
RES 33.2K OHM 1/16W (0402) 1%
PS_1V8_MAIN_FET_RC
PS_1V8_MAIN_FET_G
PQ4
N-MOSFET PJC138K
PQ5
N-MOSFET PJC138K
PS_1V8_MAIN_EN
PC23
1NF/50V
PC24
MLCC 22NF/16V (0402) X7R 10%
PR30
100KOhm
PC209
1NF/50V
12V_F_RTD3
12V_PEX6_8_RTD3
PJP94
PJP93
3MM_OPEN_SML
3MM_OPEN_SML
P_PX_Vin_Shape
PC1060
PC28
PC30
PC27
PC31
GND
P_PX_BST_30
RES 0 OHM 1/16W(0402)JUMP 5%
PR1188
PC29
MLCC 1UF/16V (0603)X7R 10%
mba_c0603
PU3
DOWN CONVERTER MPQ8633AGLE-Z
P_PX_EN_10
P_PX_PG_10
P_PX_VCC_10
P_PX_PH_S
P_PX_VSEN_R_10
P_PX_VREF_10
P_PX_MODE_10
P_PX_CS_10
P_G2_FB_10
PL3
POWER INDUCTOR 1.0UH/12A 20%
PEX_DVDD
PC43
PC44
PC45
PC46
PC47
PC48
22UF/6.3V (0603) X6S 20%
PJP92
SHORT_PIN
PC25
MLCC 2200PF/50V (0402) X7R 10%
PC32
MLCC 0.1UF/16V(0402) X7R 10%
PC26
MLCC 0.068UF/16V (0402)X7R 10%
DGND
PR32
RES 10K OHM 1/16W(0402)1%
Rtop
PR35
RES 14.7K OHM 1/16W (0402) 1%
Rbt
PR36
RES 100 OHM 1/16W (0402)1%
PS_PEXVDD_PGOOD
PR38
RES 0 OHM 1/16W(0402)JUMP 5%
PR39
RES 10K OHM 1/16W(0402)1%
VCC = 3.0V
PR23
0Ohm
PR237
RES 20K OHM 1/16W (0402) 1%
PC34
MLCC 0.1UF/16V(0402) X7R 10%
PC33
10UF/6.3V
PJP4
SHORT_PIN
PR34
RES 60.4K OHM 1/16W(0402)1%
CCM 1MHz
PR31
RES 5.23K OHM 1/16W (0402) 1%
OCP=12A
PS_PEXVDD_EN
PR541
RES 0 OHM 1/16W(0402)JUMP 5%
PR42
0Ohm
PQ2X
FJC138K_R2_00001
GPIO1_GD6_FB_EN
RES 0 OHM 1/16W(0402)JUMP 5%
PR37
PEX_DVDD_SENSE_10
PCJP155
SHORT_PIN
FROM REMOTE PEX-VDD NEAR GPU
Title
<Title>
Size
A2
Document Number
<Doc>
Rev
<RevCode>
Date:
Wednesday, August 08, 2018
Sheet
1
of
1

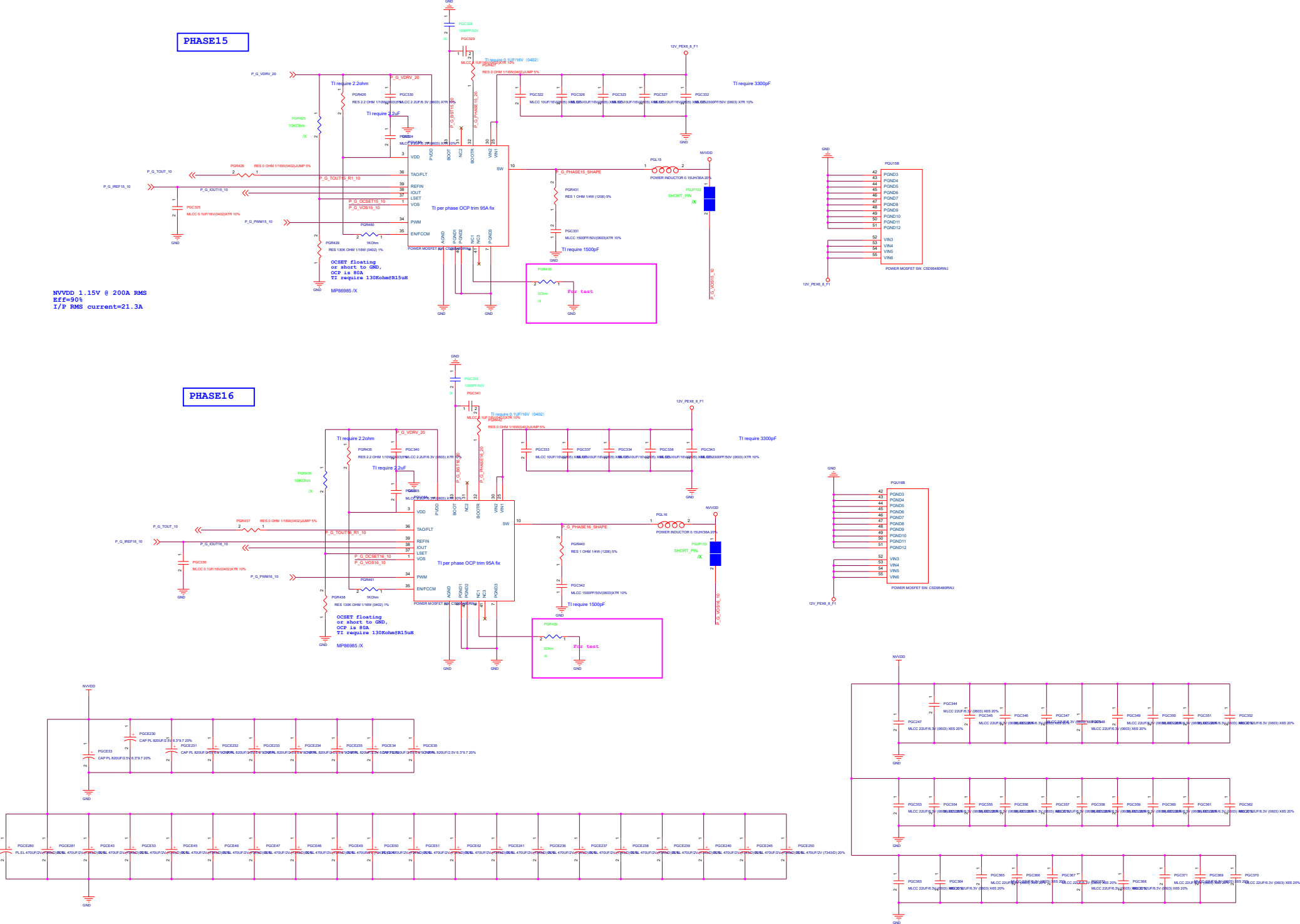


		R15 (09016-00360500) L=0.15uH DCR=0.82mohm	R30 (09016-00130800) L=0.30uH DCR=0.78mohm
RC match	Csum	0.1uF	0.1uF
	Rcsp	14.7K ohm	30k ohm
Total OCP (410A)	Rsum	0.5K ohm	0.5K ohm
	Isum	85.7uA	80uA

	Rimon	28K ohm (418A)	30K ohm (410A)
Loadline (0.3m ohm)	RLL	1.47K ohm	1.54K ohm
Loadline En threshold (101A En, 50A Dis)	Rtop	124K ohm	124K ohm
	Rbot	38.3K ohm	39K ohm


PHASE3
PGC206
1000PF/50V
/X
PGC208
MLCC 0.1UF/16V(0402)X7R 10%
TI require 0.1UF/16V (0402)
NV_PH3_4_VIN
P_G_VDRV_20
TI require 2.2ohm
PGR269
RES 2.2 OHM 1/10W(0603)5%
PGC216
MLCC 2.2UF/6.3V (0603) X7R 10%
TI require 2.2uF
PGR272
10KOhm
/X
PGC223
MLCC 2.2UF/6.3V (0603) X7R 10%
P_G_BST3_20
P_G_PHASE3_20
PGR267
RES 0 OHM 1/16W(0402)JUMP 5%
PGC217
PGC218
PGC219
PGC220
PGC221
MLCC 10UF/16V(0805) X5R
MLCC 3300PF/50V (0603) X7R 10%
TI require 3300pF
GND
VDD
PVDD
BOOT
NC2
BOOTR
VIN2
VIN1
SW
TAO/FLT
REFIN
IOUT
LSET
VOS
PWM
EN/FCCM
AGND
PGND1
PGND2
NC1
NC3
PGND3
TI per phase OCP trim 95A fix
POWER MOSFET SW. CSD95480RWJ
P_G_TOUT_10
PGR274
RES 0 OHM 1/16W(0402)JUMP 5%
P_G_TOUT3_R1_10
P_G_IREF3_10
P_G_IOUT3_10
PGC225
MLCC 0.1UF/16V(0402)X7R 10%
P_G_OCSET3_10
P_G_VOS3_10
P_G_PWM3_10
PGR448
PGR278
1KOhm
RES 130K OHM 1/16W (0402) 1%
OCSET floating
or short to GND,
OCP is 80A
TI require 130Kohm@R15uH
MP86985 /X
P_G_PHASE3_SHAPE
PGR276
RES 1 OHM 1/4W (1206) 5%
PGC227
MLCC 1500PF/50V(0603)X7R 10%
TI require 1500pF
NVVDD
PGL3
POWER INDUCTOR 0.15UH/36A 20%
PGJP34
SHORT_PIN
/X
P_G_VOS3_10
PGR280
0Ohm
/X
For test
PQU3B
PGND3
PGND4
PGND5
PGND6
PGND7
PGND8
PGND9
PGND10
PGND11
PGND12
VIN3
VIN4
VIN5
VIN6
PHASE4
PGC229
1000PF/50V
PGC234
PGR282
PGC242
PGC243
PGC244
PGC245
PGC246
PGR284
PGC241
PGR286
PGC268
P_G_BST4_20
P_G_PHASE4_20
PGR288
P_G_TOUT4_R1_10
P_G_IREF4_10
P_G_IOUT4_10
PGC270
P_G_OCSET4_10
P_G_VOS4_10
P_G_PWM4_10
PGR449
PGR292
PGR294
P_G_PHASE4_SHAPE
PGR290
PGC272
PGL4
PGJP36
P_G_VOS4_10
PGCE226
PGCE227
CAP PL 270UF/16V 6.3*7.9 20%


PHASE13
PGC303
1000PF/50V
/X
PGC304
TI require 0.1UF/16V（0402)
MLCC 0.1UF/16V(0402)X7R 10%
PGR409
RES 0 OHM 1/16W(0402)JUMP 5%
12V_PEX6_8_F1
TI require 3300pF
PGC305
PGC306
PGC307
PGC308
PGC309
MLCC 10UF/16V(0805) X5R
MLCC 3300PF/50V (0603) X7R 10%
P_G_VDRV_20
TI require 2.2ohm
PGR406
RES 2.2 OHM 1/10W(0603)5%
PGC300
MLCC 2.2UF/6.3V (0603) X7R 10%
TI require 2.2uF
PGC301
MLCC 2.2UF/6.3V (0603) X7R 10%
PGR405
10KOhm
/X
P_G_BST13_20
P_G_PHASE13_20
VDD
PVDD
BOOT
NC2
BOOTR
VIN2
VIN1
SW
TAO/FLT
REFIN
IOUT
LSET
VOS
PWM
EN/FCCM
AGND
PGND1
PGND2
NC1
NC3
PGND3
TI per phase OCP trim 95A fix
POWER MOSFET SW. CSD95480RWJ
NVVDD
PGL13
POWER INDUCTOR 0.15UH/36A 20%
P_G_PHASE13_SHAPE
PGR410
RES 1 OHM 1/4W (1206) 5%
PGJP150
SHORT_PIN
/X
PGC310
MLCC 1500PF/50V(0603)X7R 10%
TI require 1500pF
P_G_VOS13_10
PGR407
RES 0 OHM 1/16W(0402)JUMP 5%
P_G_TOUT_10
P_G_TOUT13_R1_10
P_G_IREF13_10
P_G_IOUT13_10
PGC302
MLCC 0.1UF/16V(0402)X7R 10%
P_G_OCSET13_10
P_G_VOS13_10
P_G_PWM13_10
PGR458
PGR408
1KOhm
RES 130K OHM 1/16W (0402) 1%
OCSET floating
or short to GND,
OCP is 80A
TI require 130Kohm@R15uH
MP86985 /X
PGR411
0Ohm
/X
For test
PQU13B
PGND3
PGND4
PGND5
PGND6
PGND7
PGND8
PGND9
PGND10
PGND11
PGND12
VIN3
VIN4
VIN5
VIN6
POWER MOSFET SW. CSD95480RWJ
PGCE268
PGCE270
PGCE269
PGCE272
PGCE275
PGCE267
100UF/16V
PHASE14
PGC314
1000PF/50V
/X
PGC315
TI require 0.1UF/16V（0402)
MLCC 0.1UF/16V(0402)X7R 10%
PGR419
RES 0 OHM 1/16W(0402)JUMP 5%
TI require 3300pF
PGC316
PGC317
PGC318
PGC319
PGC320
MLCC 10UF/16V(0805) X5R
MLCC 3300PF/50V (0603) X7R 10%
P_G_VDRV_20
TI require 2.2ohm
PGR417
RES 2.2 OHM 1/10W(0603)5%
PGC311
MLCC 2.2UF/6.3V (0603) X7R 10%
TI require 2.2uF
PGC312
MLCC 2.2UF/6.3V (0603) X7R 10%
PGR416
10KOhm
/X
P_G_BST14_20
P_G_PHASE14_20
VDD
PVDD
BOOT
NC2
BOOTR
VIN2
VIN1
SW
TAO/FLT
REFIN
IOUT
LSET
VOS
PWM
EN/FCCM
AGND
PGND1
PGND2
NC1
NC3
PGND3
TI per phase OCP trim 95A fix
POWER MOSFET SW. CSD95480RWJ
NVVDD
PGL14
POWER INDUCTOR 0.15UH/36A 20%
P_G_PHASE14_SHAPE
PGR420
RES 1 OHM 1/4W (1206) 5%
PGJP151
SHORT_PIN
/X
PGC321
MLCC 1500PF/50V(0603)X7R 10%
TI require 1500pF
P_G_VOS14_10
PGR415
RES 0 OHM 1/16W(0402)JUMP 5%
P_G_TOUT_10
P_G_TOUT14_R1_10
P_G_IREF14_10
P_G_IOUT14_10
PGC313
MLCC 0.1UF/16V(0402)X7R 10%
P_G_OCSET14_10
P_G_VOS14_10
P_G_PWM14_10
PGR459
PGR418
1KOhm
RES 130K OHM 1/16W (0402) 1%
OCSET floating
or short to GND,
OCP is 80A
TI require 130Kohm@R15uH
MP86985 /X
PGR421
0Ohm
/X
For test
PQU14B
PGND3
PGND4
PGND5
PGND6
PGND7
PGND8
PGND9
PGND10
PGND11
PGND12
VIN3
VIN4
VIN5
VIN6
POWER MOSFET SW. CSD95480RWJ


PHASE15
PHASE16
NVVDD 1.15V @ 200A RMS
Eff=90%
I/P RMS current=21.3A
TI require 2.2ohm
TI require 2.2uF
TI require 3300pF
TI require 1500pF
TI per phase OCP trim 95A fix
OCSET floating
or short to GND,
OCP is 80A
TI require 130Kohm@R15uH
MP86985 /X
For test
POWER INDUCTOR 0.15UH36A 20%
POWER MOSFET SW, CSD95480RWJ
12V_PEX6_8_F1
NVVDD

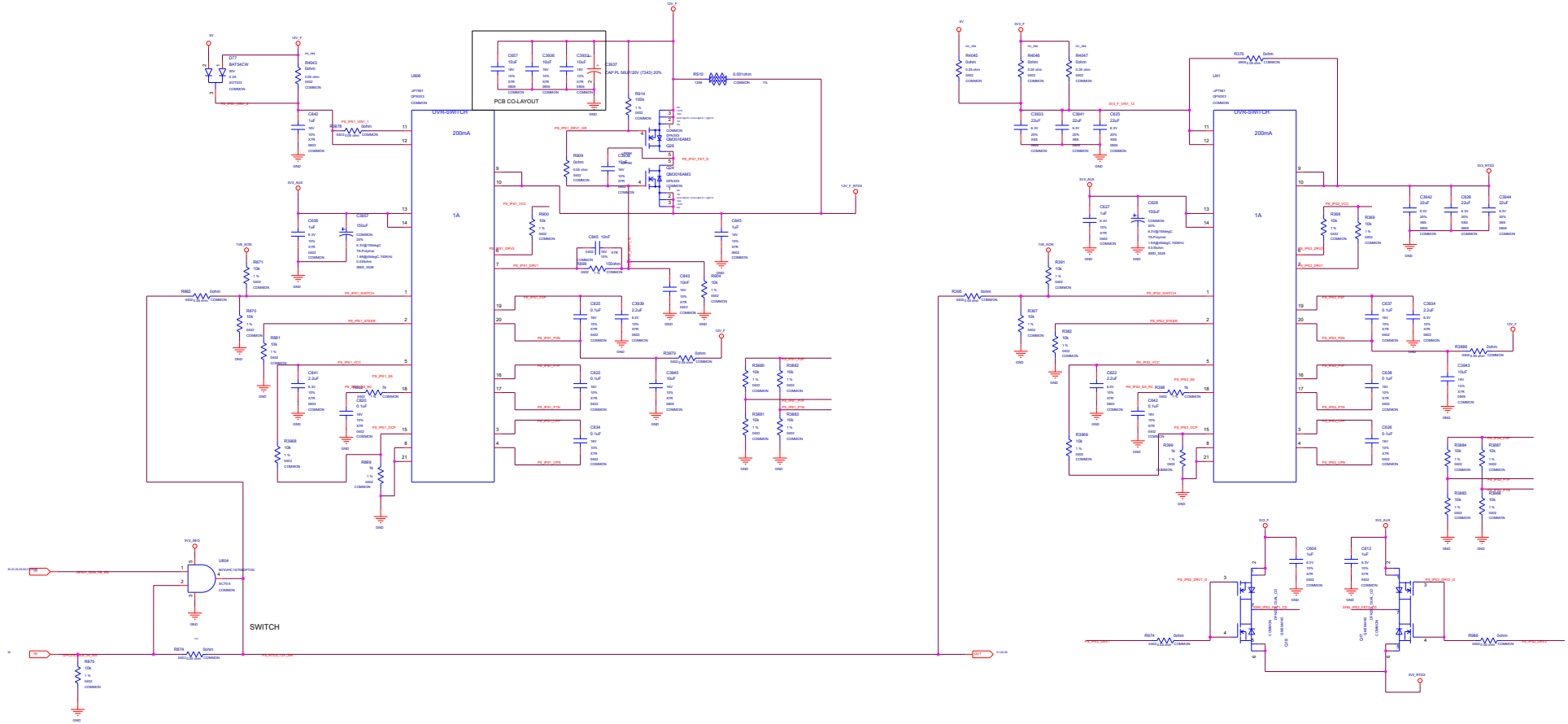
PS: INPUT SWITCH RTD3

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

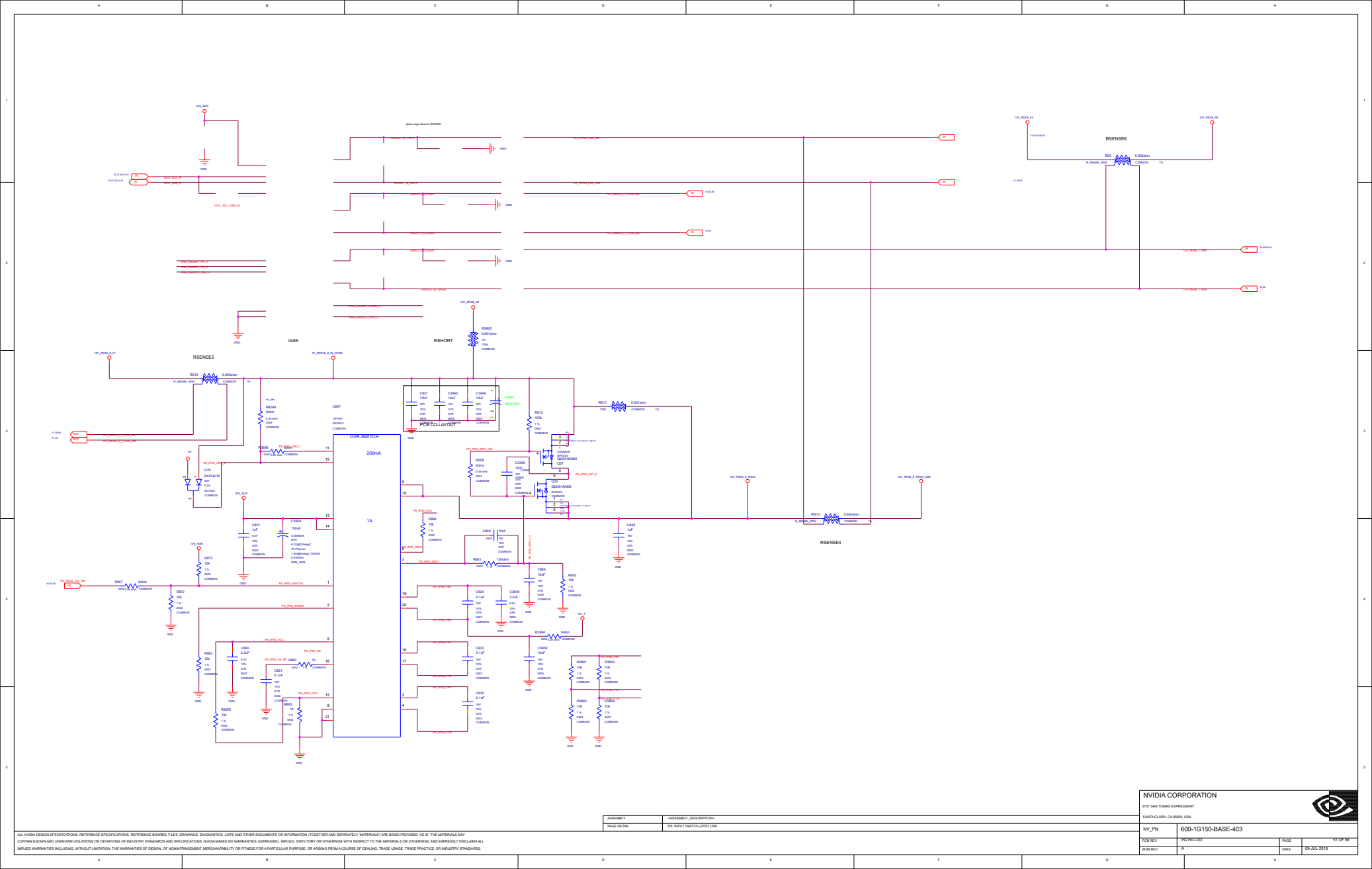
GPIO1	GPIO29	SWITCH	VOUT
0	0	0	3V3
0	1	0	3V3
1	0	0	3V3
1	1	1	3V3A



ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PS: INPUT SWITCH_RTD3

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

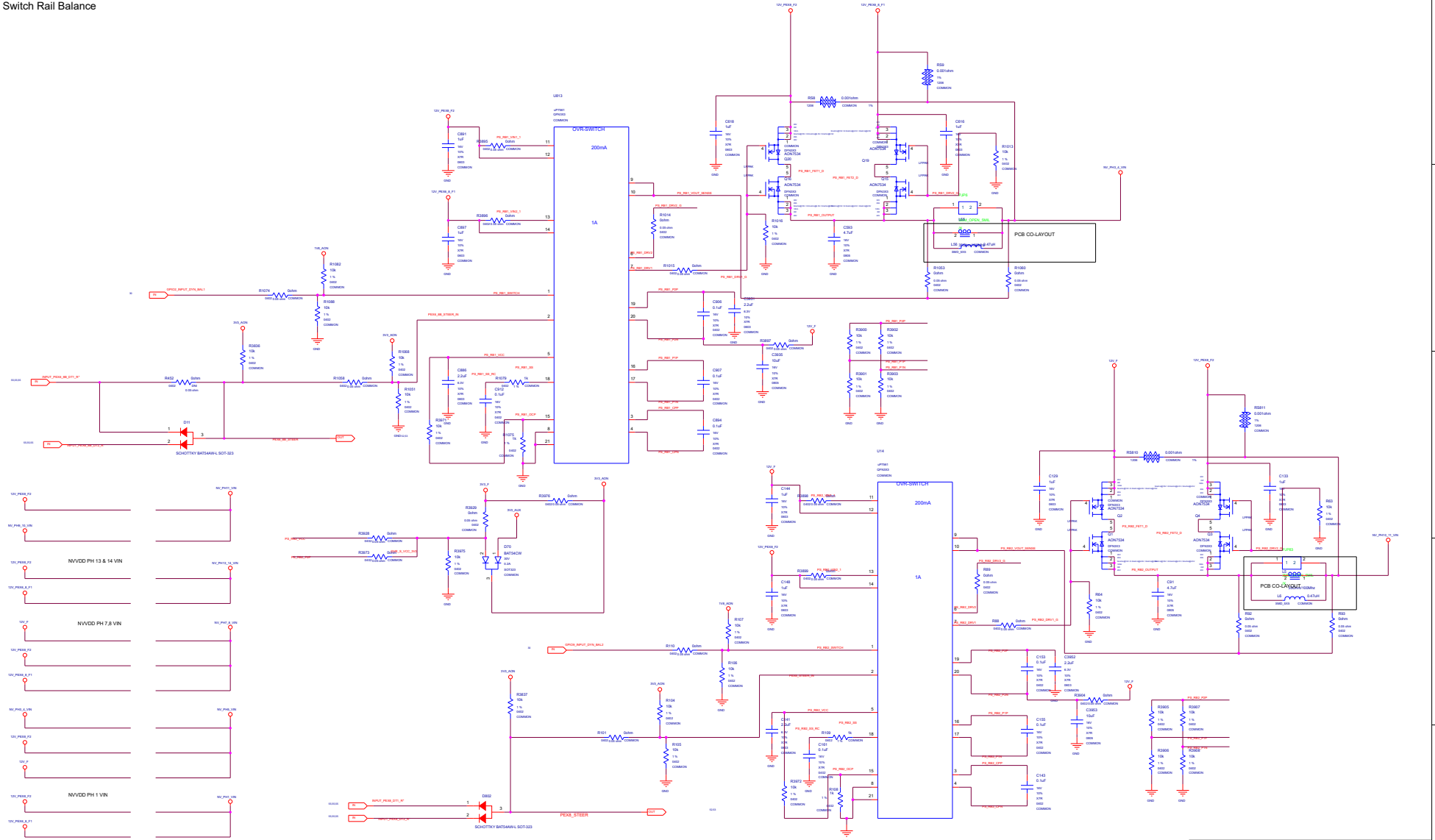
NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	50 OF 66
BOM REV	A	DATE	09-JUL-2018



ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PS: INPUT SWITCH_RTD3 USB

NVIDIA CORPORATION	
2701 SAN TOMAS EXPRESSWAY	
SANTA CLARA, CA 95050, USA	
NV_PN	600-1G150-BASE-403
PCB REV	PG150-CD3
BOM REV	A
PAGE	51 OF 66
DATE	09-JUL-2018

PS: Input Switch Rail Balance



ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PS: INPUT SWITCH RAIL BALANCE

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

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	52 OF 66
BOM REV	A	DATE	09-JUL-2018

12V CURRENT STEERING (UNDER POWER BOOT):

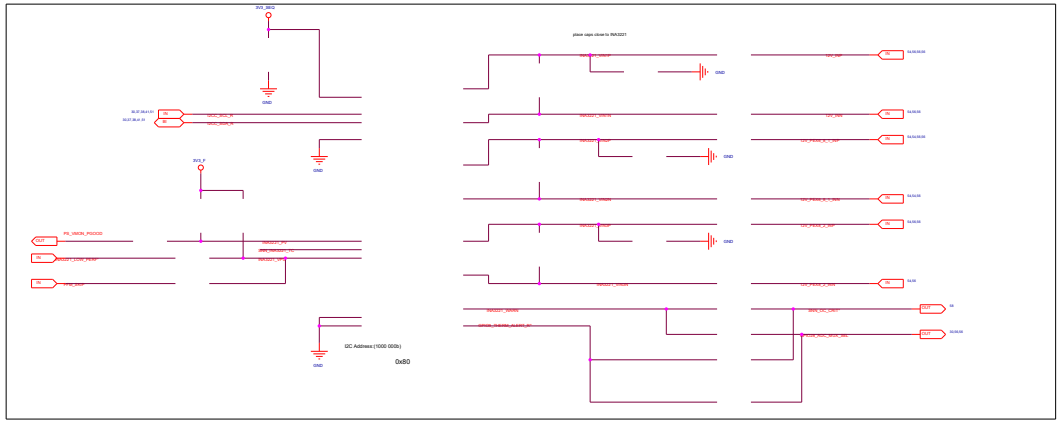
GUIDES CURRENT FROM PEX EDGE TO PEX 6/8 PIN INPUT AREA

ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PS: DISCRETE STEERING

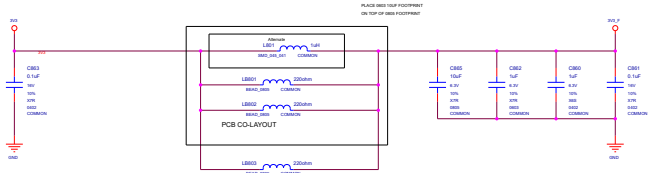
NVIDIA CORPORATION
2701 SAN TOMAS EXPRESSWAY
SANTA CLARA, CA 95050, USA

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	53 OF 66
BOM REV	A	DATE	09-JUL-2018

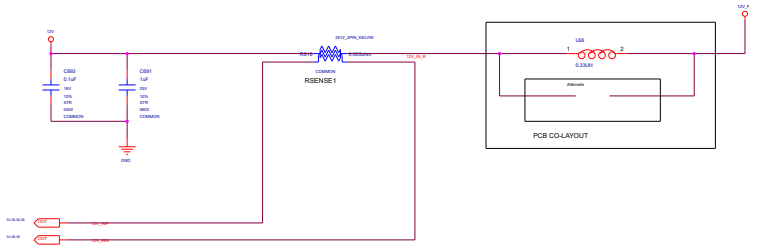
PS: Inputs, Filtering, and Monitoring



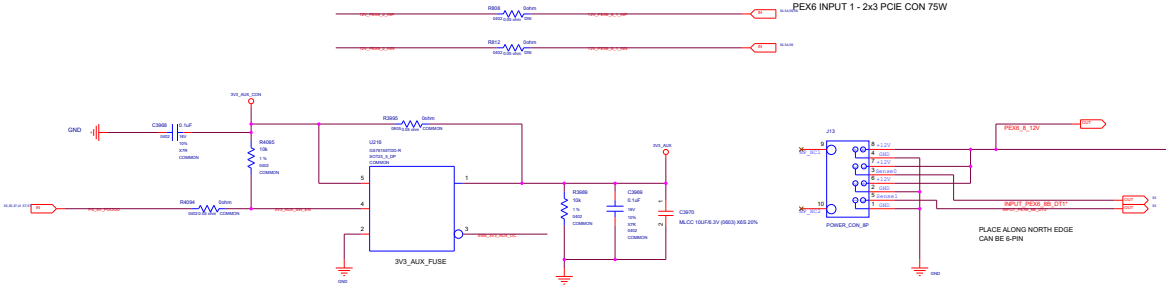
PEX 3V3 INPUT - 10W



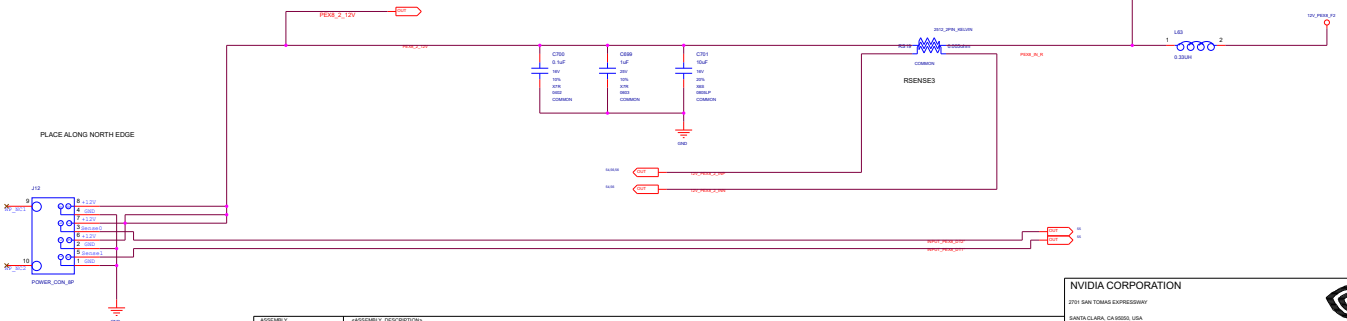
PEX_12V INPUT - 66W



PEX6 INPUT 1 - 2x3 PCIE CON 75W



PEX8 INPUT 2 - 2x4 PCIE CON 150W

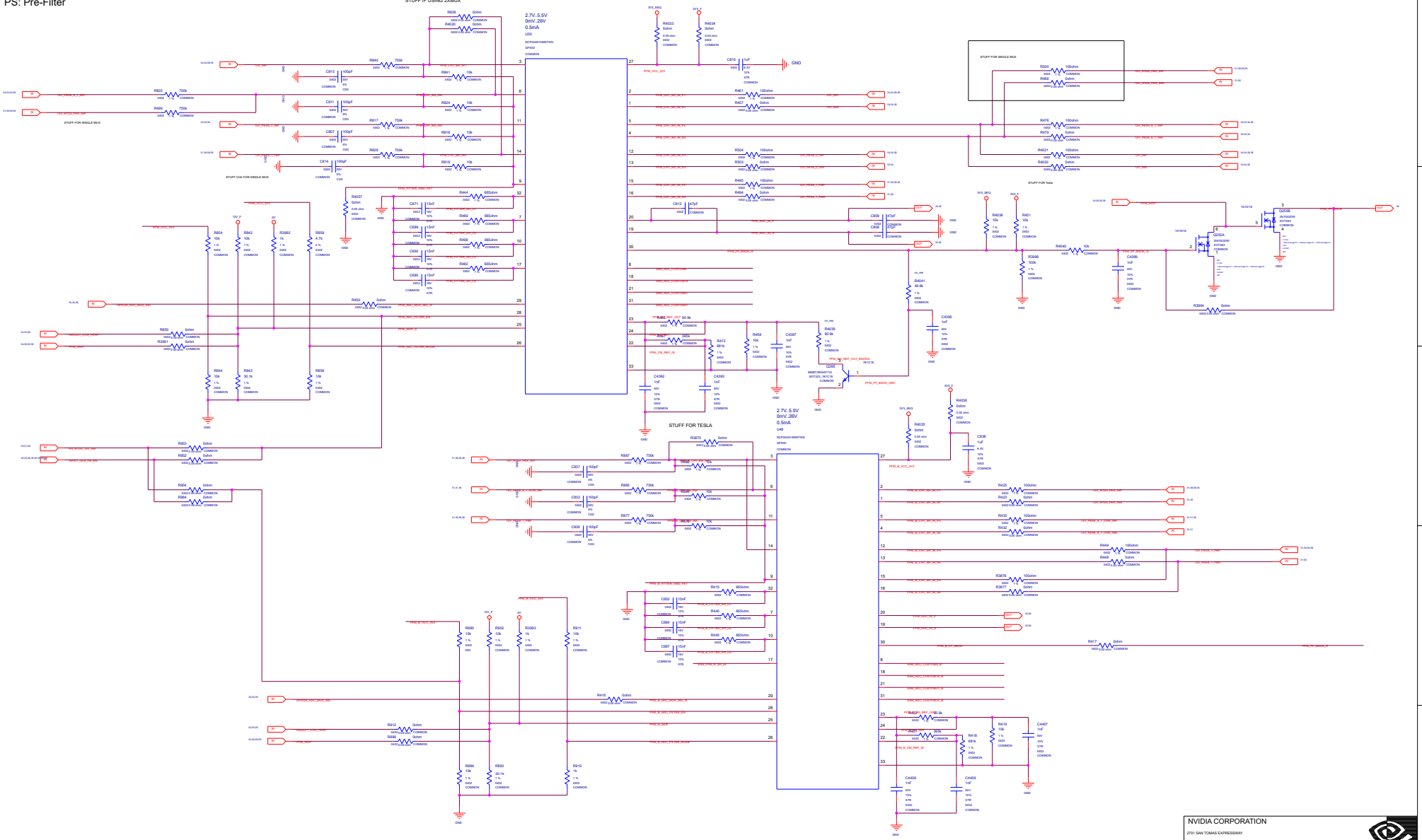


ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PS: Input, filtering, and Monitoring

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

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	54 OF 66
BOM REV	A	DATE	09-JUL-2018

PS: Pre-Filter



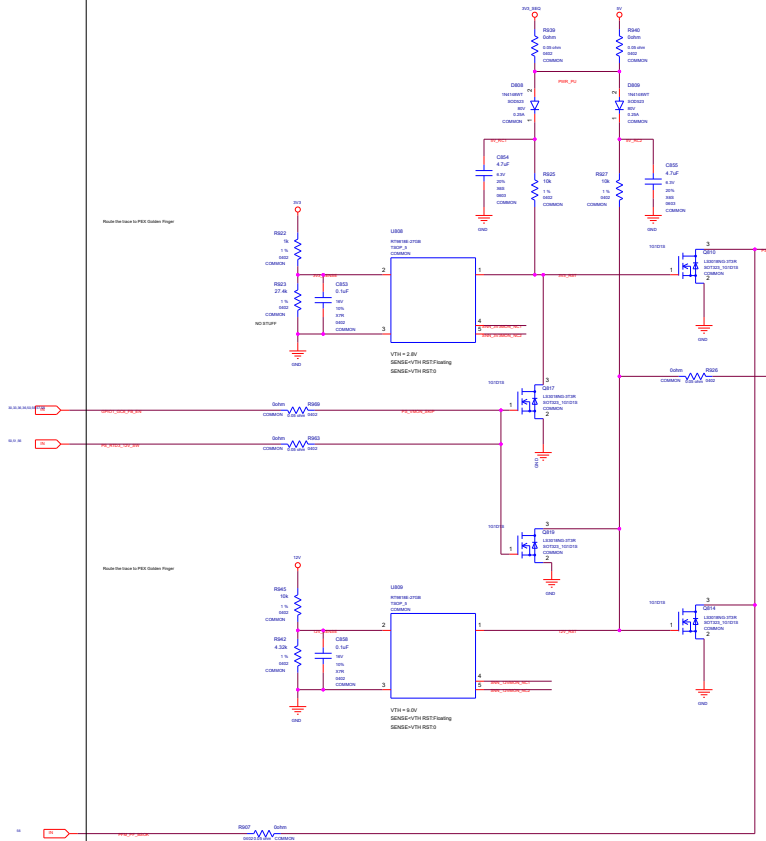
ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PS: Prefilter

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

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	56 OF 66
BOM REV	A	DATE	09-JUL-2018

SEQUENCE:PCIE Voltage Monitor

PCIE 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(H) once both 3V3 and 12V reach Vth
GC6_FB_EN	INPUT	Indicator for RTD3/GC6 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)
PS_RTD3_12V_SW	INPUT	GC6_FB_EN && IDLE_IN_SW

BOM Configuration

OPTIONS	PEX3V3_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

Power Supply

INA3221:3V3_SEQ

Pre_Filter(ADC_MUX):3V3(PEX)

Dual Pre-Filter case:

Only use the Primary Pre-Filter to sense 3V3PEX

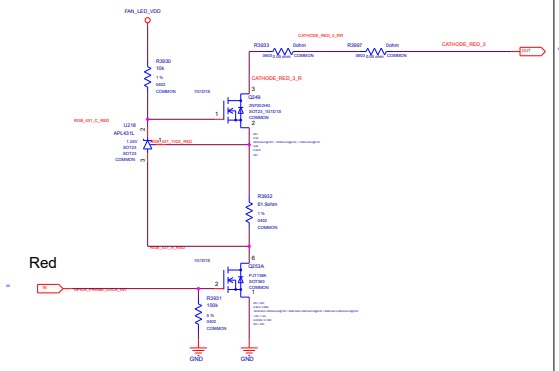
and All Input 12Vs

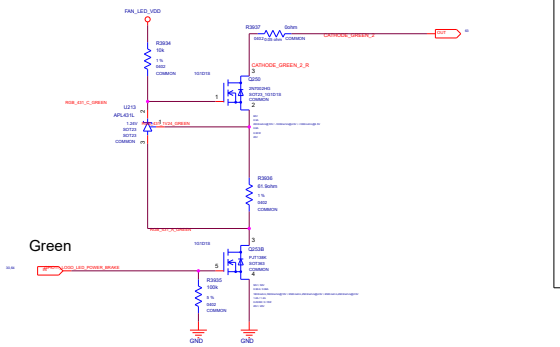
ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	Sequence: PCIE Voltage Monitor

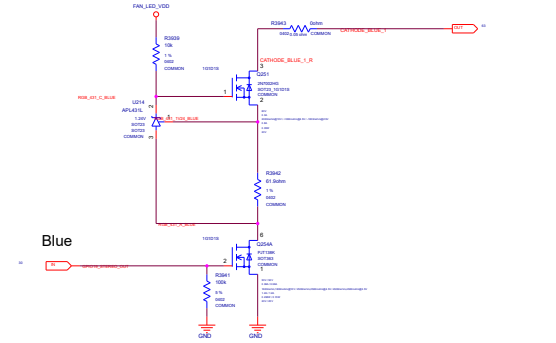
NVIDIA CORPORATION
2701 SAN TOMAS EXPRESSWAY
SANTA CLARA, CA 95050, USA

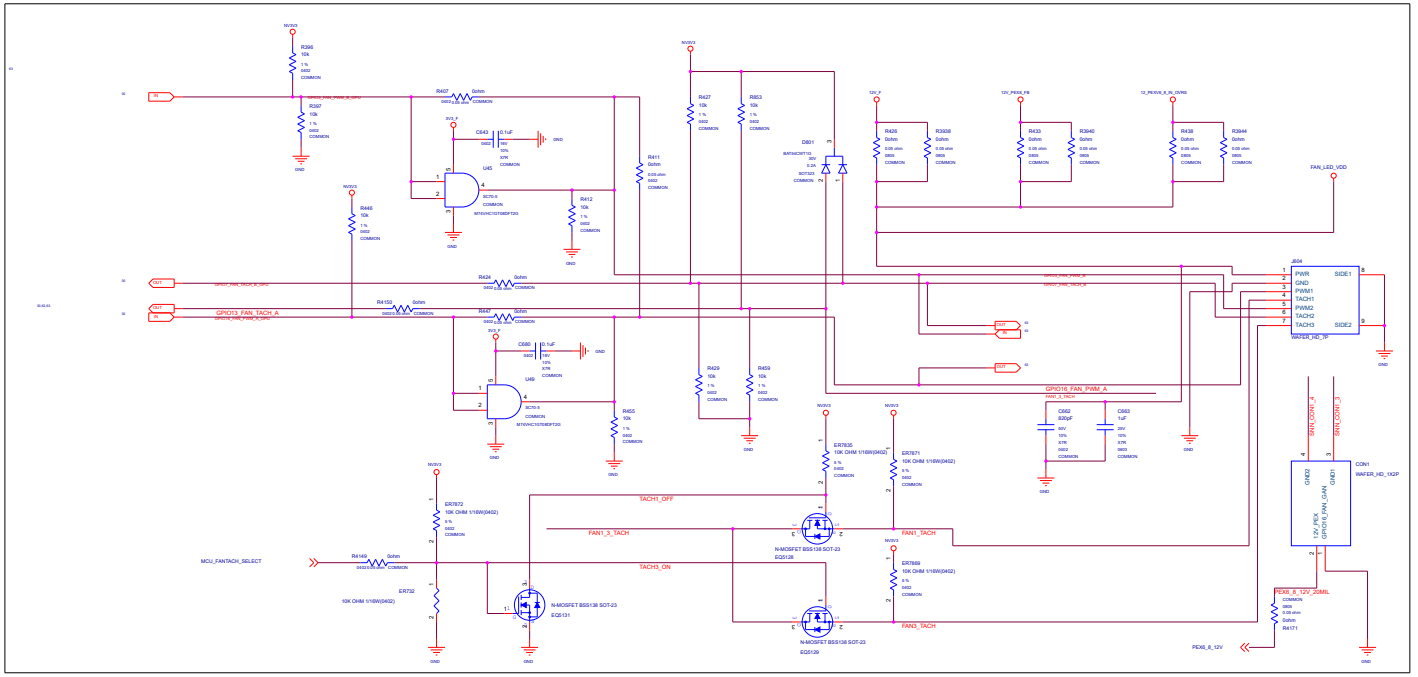
NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	59 OF 66
BOM REV	A	DATE	09-JUL-2018

MISC: FAN & LED1

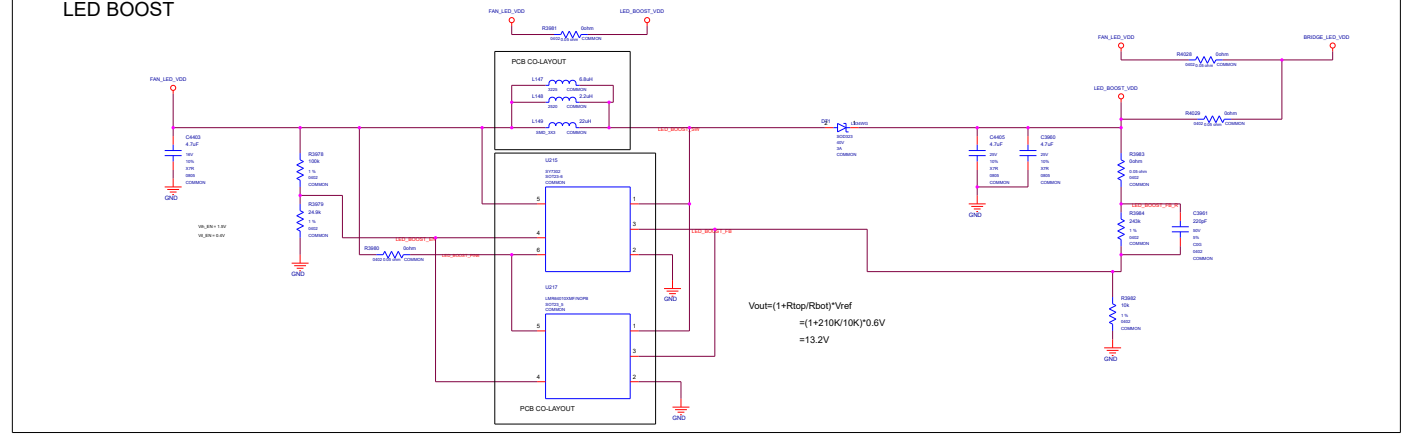








LED BOOST

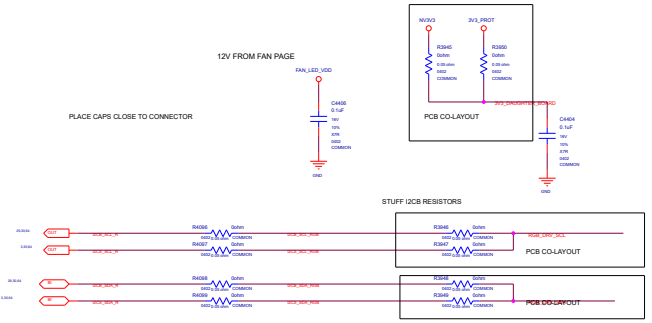


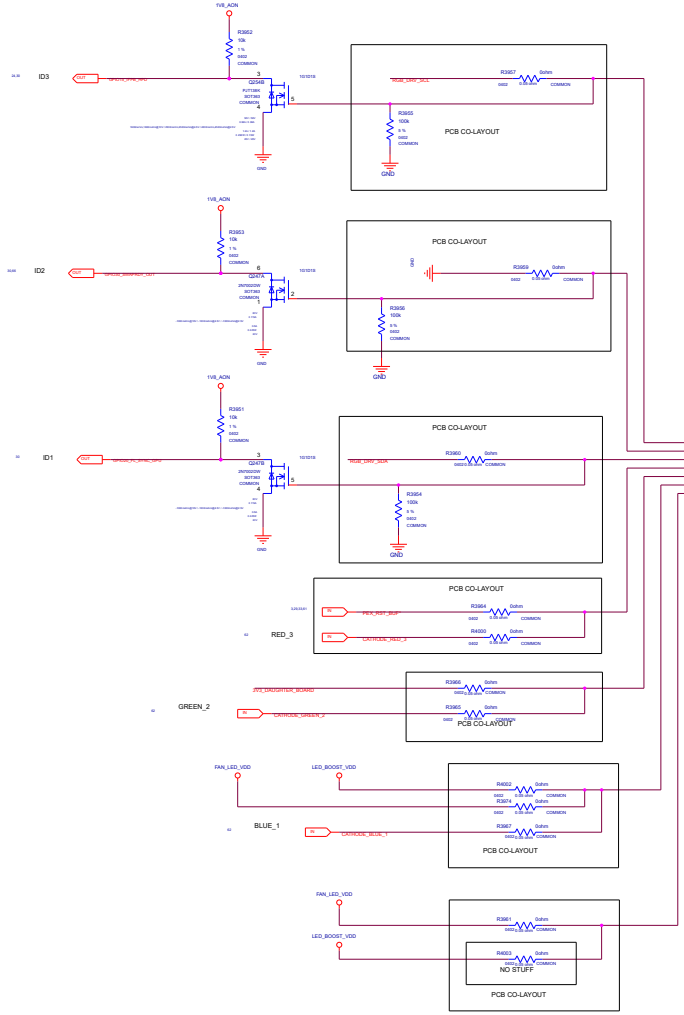
ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	MISC: FAN & LED1

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

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	82 OF 86
BOM REV	A	DATE	09-JUL-2018

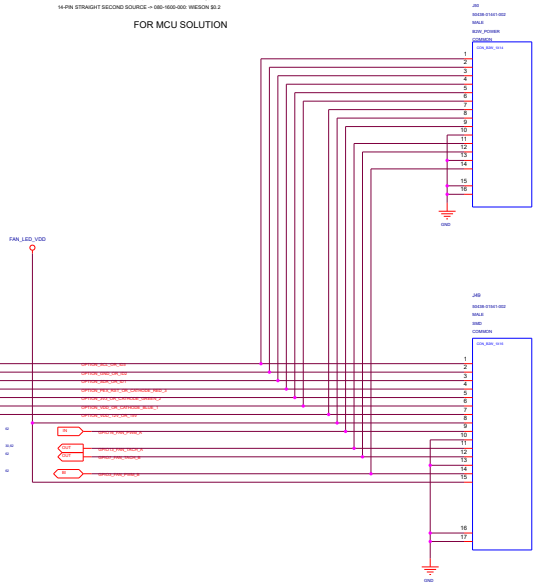
MISC: LED2





14-PIN STRAIGHT PRIMARY SOURCE -> 080-1586-000 ACES $0.115
14-PIN STRAIGHT SECOND SOURCE -> 080-1600-000 WIESON $0.2

FOR MCU SOLUTION



FOR ONE ZONE RGB SOLUTION

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

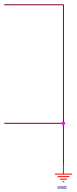
ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	MISC\: LED 2

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

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	83 OF 86
BOM REV	A	DATE	09-JUL-2018

Mechanical: Bracket/Thermal Solution

Brackets:



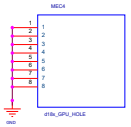
Bracket Screw

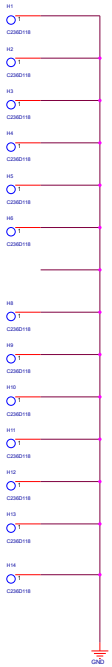
Back Cover

GPU Stiffner back side

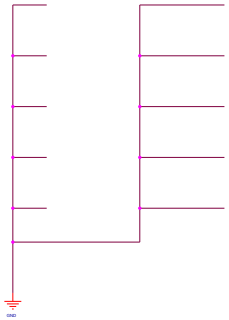
GPU Socket Symbol

GPU Mounting holes





Mechanical Holes Symbol



ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	MECH

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

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	65 OF 66
BOM REV	A	DATE	09-JUL-2018

GPIO6_NVVDD_PSI*

PS_NVVDD_PGOOD

GPIO0_NVVDD_PWMVID

PS_NVVDD_EN

I2CC_SDA_R

I2CC_SCL_R

I2CB_SCL_R

I2CB_SDA_R

GPU_NVVDD_FBRTN

GPU_NVVDD_SENSE

GPIO25_FBVDD_PSI*

PS_FBVDD_PGOOD

GPIO8_FBVDD_SEL

PS_FBVDD_BUFF_R

PS_FBVDD_EN

FBVDDQ_SENSE_RTN

FBVDDQ_SENSE_GPU

I2CC_SCL_R

I2CC_SDA_R

PS_5V_EN

PS_5V_PGOOD

PS_1V8_AON_EN

PS_1V8_AON_PGOOD

GPIO1_GC6_FB_EN

PS_PEXVDD_PGOOD

PS_PEXVDD_EN

GPIO1_GC6_FB_EN

PS_1V8_MAIN_EN

VBUS_PWR_EN

PS_USBC_ALT

VBUS_FET_EN

USB_DSCH_CTL

USB_I2CS_SCL

USB_I2CS_SDA

GPIO28 ADC MUX SEL

PFM PF BSOK

INA3221 LOW PERF*

PFM_SKIP

PFM ADC IN P

PS_RTD3_12V_SW

PFM ADC IN N

GPIO1 GC6 FB EN

12V_INP

12V_INN

12V_PEX6_8_1_INP

12V_PEX6_8_1_INN

12V_PEX8_2_INP

12V_PEX8_2_INN

12V RTD3 PEX INP

12V RTD3 PEX INN

12V_PEX6_8_1_OVR_INP

12V_PEX6_8_1_OVR_INN

12V_PEX8_1_FBP

12V_PEX8_1_FBN

GPIO1_GC6_FB_EN

12V_PEX6_8_1_OVR_INP

GPIO29_IDLE_IN_SW

12V_PEX6_8_1_OVR_INN

PS_RTD3_12V_SW

12V_RTD3_PEX_INN

12V_RTD3_PEX_INP

PEX_RST_BUF*

USB_I2CS_SCL

GPIO1_GC6_FB_EN

IFPB_I2CM_SDA

GPIO24_IFPF_HPD

USB_I2CS_SDA

IFPB_I2CM_SCL

GPIO24_IFPF_HPD

IFPB_I2CM_SDA

VBUS_PWR_EN

USB_CC1

PS_USBC_ALT

USB_CC2

USB_AUX_SW

USB_CC2

USB_AUX_SW

USB_CC1

USB_DSCH_CTL

VBUS_FET_EN

PS_RB2_VCC

FP_FUSE_GPU

PS_RB2_P2P

DP_AUX_PROT

GPIO26_FP_FUSE

PS_5V_PGOOD

PS_NV3V3_EN

PS_NVPEX_PGOOD

12V_PEX8_FB

PS_VMON_PGOOD

GPIO1_GC6_FB_EN

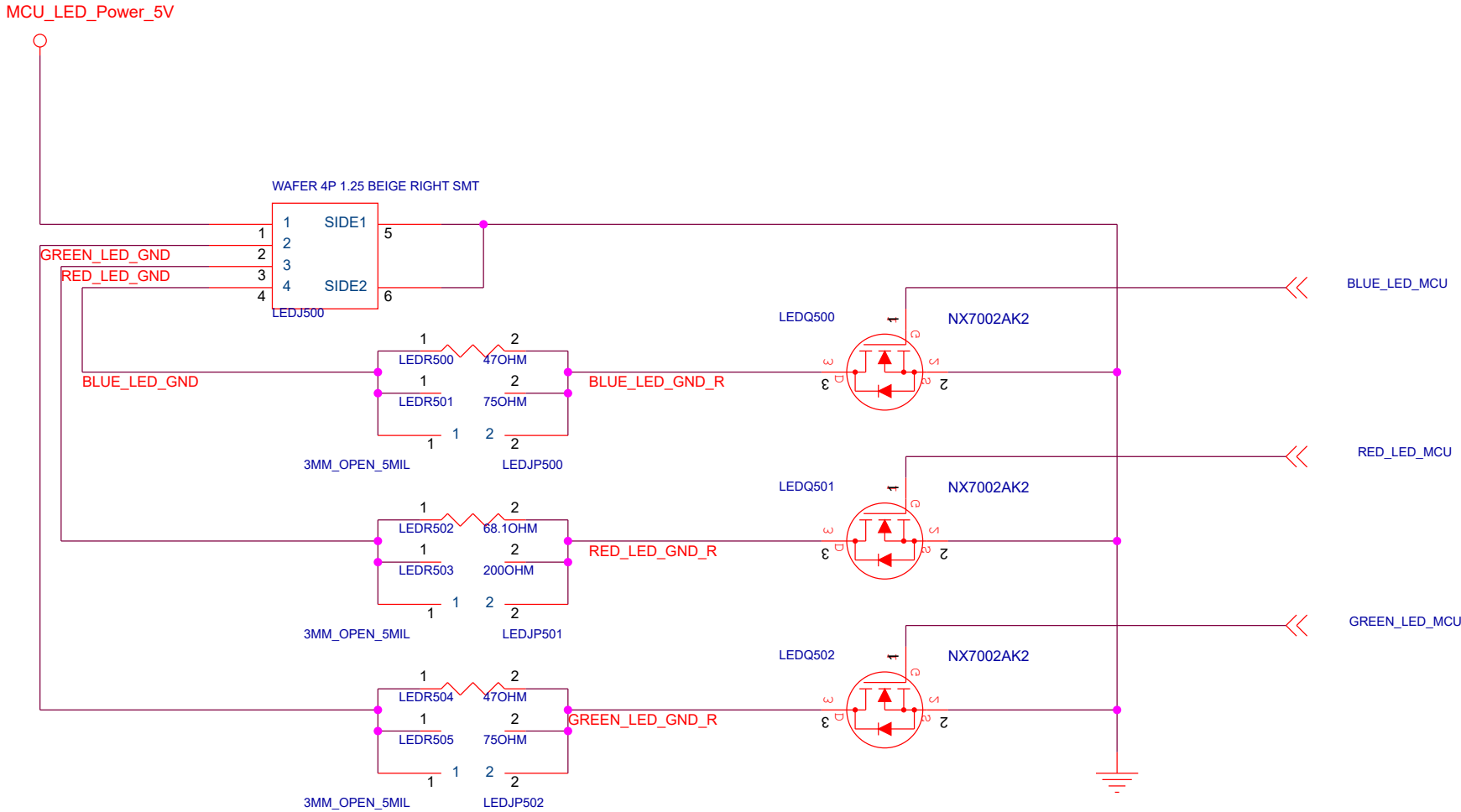
PFM_SKIP

PS_RTD3_12V_SW

PFM_PF_BSOK

Title	<Title>	
Size: A2	Document Number: <Doc>	Rev: <RevCode>
Date: Thursday, July 19, 2018	Sheet 1 of 1	

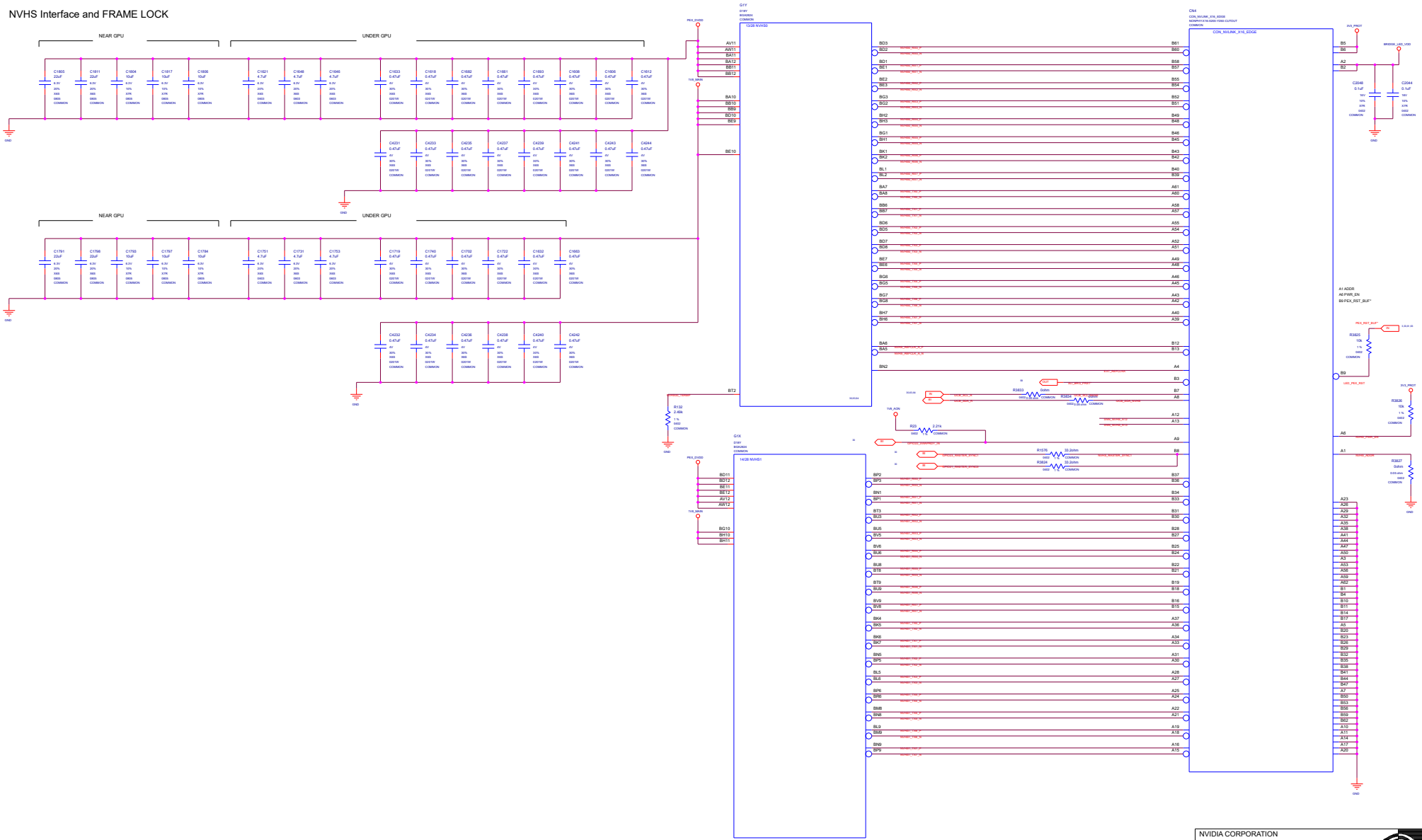
S0014 LIGHT BACK PLATE



Power

MCU_LED_Power_5V From S000

NVHS Interface and FRAME LOCK



ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	NVHS X16

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

NV_PN	600-1G150-BASE-403		
PCB REV	PG150-CD3	PAGE	29 OF 66
BOM REV	A	DATE	09-JUL-2018