PG190-A02

GA104/GA106 GB5256
DP + DP + DP + HDMI/DP

TABLE OF CONTENTS

Page	Description
1	Table of Contents
2	BLOCK DIAGRAM
3	PCI Express
4	PCIe GEN4 RC Termination
5	MEMORY: GPU Partition A/B
6	MEMORY: FBA Partation 32..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	GPU PWR and GND
16	GPU PWR and GND 2
17	GPU XVDD
18	GPU DECOUPLING FBVDDQ
19	GPU DECOUPLING NVVDD
20	GPU DECOUPLING NVVDD 2
21	IFPAB DVI-D-DL
22	IFPF DP
23	IFPE DP
24	IFPD DP
25	IFPC HDMI/DP

Page	Description
26	MISC: ROM, XTAL, STRAPS
27	MISC2: JTAG,GPIO,ADC.12C,OVERT
28	Blank
29	PS: 1V8
30	PS: 5V
31	PS: PEXVDD
32	PS: FBVDDQ
33	PS: FBVDDQ PH2
34	PS: NVVDD CNTL
35	PS: NVVDD PHASE 1 & 2
36	PS: NVVDD PHASE 3 & 5
37	PS: NVVDD PHASE 4
38	PS: NVVDD PHASE 6 & 8
39	PS: NVVDD PHASE 7
40	Blank
41	INPUT SWITCH RTD3
42	INPUT POWER, FILTERING
43	MISC: Hot Unplug
44	SEQ: 3V3_SEQ,DDC_5V,DP_AUX_PROT
45	SEQ: NVVDD, PEXVDD AND FBVDDQ ENABLE
46	SEQ: MISC
47	SEQUENCE: VOLTAGE MONITOR
48	FAN & LED
49	OVRM POWER SENSE
50	MECH

ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

ASSEMBLY <ASSEMBLY_DESCRIPTION>
PAGE DETAIL Table of Contents

https://t.me/schematicslaptop

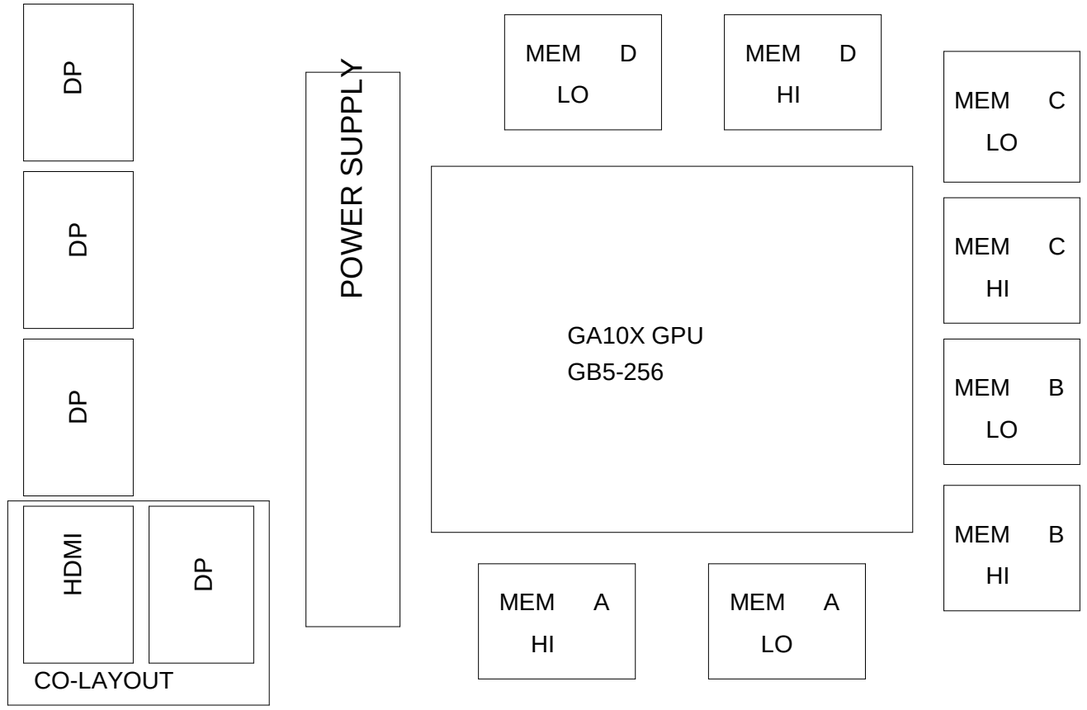
GIGABYTE

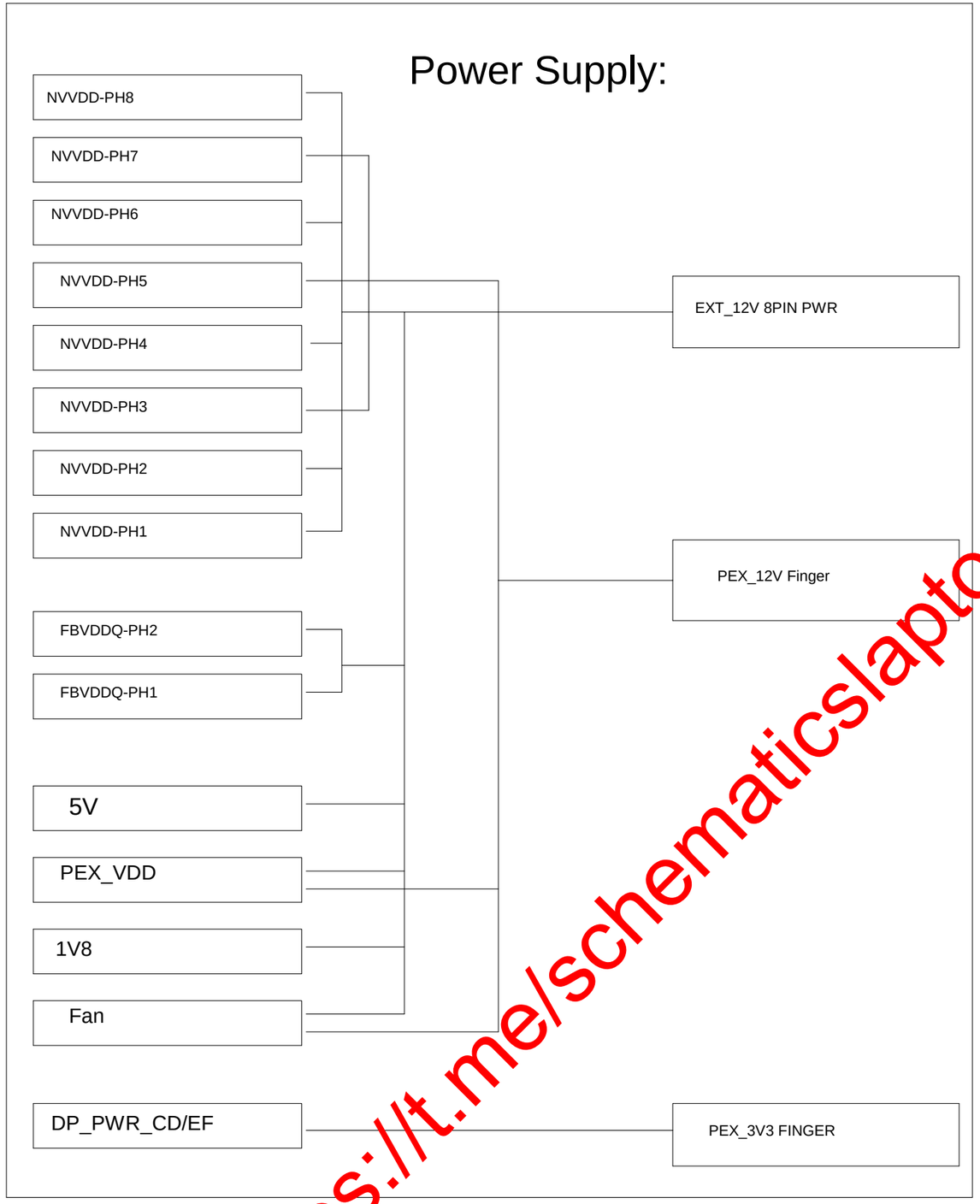
Title: PCIE

Size: Custom | Document Number: GV-N3060VISION OC-12GD | Rev: 1.01

Date: Thursday, January 14, 2021 | Sheet 1 of 54

Page2: Block Diagram





https://t.me/schematicslaptop

ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

ASSEMBLY <ASSEMBLY_DESCRIPTION>
PAGE DETAIL BLOCK DIAGRAM

GIGABYTE

Title: PCIE

Size: Custom | Document Number: GV-N3060VISION OC-12GD | Rev: 1.01

Date: Thursday, January 14, 2021 | Sheet 2 of 54

Page3: PCI Express

F3 F1206HA10V024TM/24V/10A/S

CN1 CON_X16 COMMON CON_PCIEXP_X16_EDGE

PCI_E_12V

C1103 10uF/X 16V 10% X5R 0805 COMMON
C1102 4.7u/6/X5R/16V/K 16V 10% X5R 0603 COMMON
C1099 0.1uF/X 16V 10% X7R 0402 COMMON
C1109 4.7u/6/X5R/6.3V/K 6.3V 20% X6S 0603 COMMON
C1105 0.1u/4/X7R/16V/K 16V 10% X7R 0402 COMMON

3V3_AUX_CON

IOVDD_PROT

C1108 0.1u/4/X7R/16V/K 16V 10% X7R 0402 COMMON

R726 100k/X 5 % 0402 COMMON
R715 100k/X 5 % 0402 COMMON

Q509A PJT7828 SOT363 COMMON
Q509B PJT7828 SOT363 COMMON

NET	VOLTAGE	MAX_CURRENT	MIN_WIDTH
12V	12V	5.5A	0.406
3V3	12V	3.0A	0.400
GND	0V	8.5A	0.300

Place under GPU

C1018 1u/4/X5R/6.3V/K 6.3V 10% X6S 0402 COMMON
C1009 1u/4/X5R/6.3V/K 6.3V 10% X6S 0402 COMMON
C1026 1u/4/X5R/6.3V/K 6.3V 10% X6S 0402 COMMON
C1024 1u/4/X5R/6.3V/K 6.3V 10% X6S 0402 COMMON
C1025 1u/4/X5R/6.3V/K 6.3V 10% X6S 0402 COMMON
C994 1u/4/X5R/6.3V/K 6.3V 10% X6S 0402 COMMON
C1001 4.7u/6/X5R/6.3V/K 6.3V 20% X6S 0603 COMMON
C989 4.7u/6/X5R/6.3V/K 6.3V 20% X6S 0603 COMMON

6x 0402 1uF
2x 0603 4.7uF

Place between GPU and PS

C62563 10u/6/X5R/6.3V/M
C161 10uF/x/X 6.3V 10% X7R 0805 COMMON
C62565 22u/6/X5R/6.3V/M
C163 22uF/x/X 6.3V 20% X6S 0805 COMMON

1x 0805 10uF
1x 0805 22uF

C1019 1u/4/X5R/6.3V/K 6.3V 10% X6S 0402 COMMON
C1005 1u/4/X5R/6.3V/K 6.3V 10% X6S 0402 COMMON
C1020 1u/4/X5R/6.3V/K 6.3V 10% X6S 0402 COMMON
C991 1u/4/X5R/6.3V/K 6.3V 10% X6S 0402 COMMON
C996 1u/4/X5R/6.3V/K 6.3V 10% X6S 0402 COMMON
C1059 1u/4/X5R/6.3V/K 6.3V 10% X6S 0402 COMMON
C1022 1u/4/X5R/6.3V/K 6.3V 10% X6S 0402 COMMON
C988 4.7u/6/X5R/6.3V/K 6.3V 20% X6S 0603 COMMON
C1063 4.7u/6/X5R/6.3V/K 6.3V 20% X6S 0603 COMMON
C1010 4.7u/6/X5R/6.3V/K 6.3V 20% X6S 0603 COMMON
C984 1u/4/X5R/6.3V/K 6.3V 10% X6S 0402 COMMON
C979 1u/4/X5R/6.3V/K 6.3V 10% X6S 0402 COMMON

C62564 10u/6/X5R/6.3V/M
C1095 10uF/x/X 6.3V 10% X7R 0805 COMMON
C1069 22u/6/X5R/6.3V/M

9x 0402 1uF
2x 0603 4.7uF

3x 0805 10uF
2x 0805 22uF

C1093 4.7uF/X 6.3V 20% X6S 0603 COMMON
C1091 0.1uF/X 16V 10% X7R 0402 COMMON

G1A GA104-300-A1 BGA2714 COMMON

1/24 PCI_EXPRESS

B1	+12V	B9	TRST* JTAG1		
B2	+12V	A5	TCLK JTAG2	SNN_PEX_TCLK	
A2	+12V	A6	TDI JTAG3	PEX_TDI_O	
A3	+12V	A7	TDO JTAG4		
B3	+12V/RSVD	A8	TMS JTAG5	SNN_PEX_TMS	
B8	+3V3	B5	SMCLK	PEX_SMCLK	
A9	+3V3	B6	SMDAT	PEX_SMDAT	
A10	+3V3				
B10	+3V3AUX				
A1	PRSNT1				
B17	PRSNT2				
B12	CLKREQ				
B11	WAKE	PEX_WAKE*	46		
A11	PERST	PEX_RST*	46,51		

I2CS_SCL_R, I2CS_SDA_R

GC6_GPU_WAKE* 46
PEX_RST_BUF* 46
GPU_PEX_CLKREQ* 46

BR31	PEX_WAKE				
BT30	PEX_RST				
BP31	PEX_CLKREQ				
BJ30	PEX_REFCLK	A13	REFCLK	PEX_REFCLK	DP_PEX_REFCL
BK30	PEX_REFCLK	A14	REFCLK*	PEX_REFCLK*	DP_PEX_REFCL
BL31	PEX_TX0	A16	PERP0	PEX_TX0	DP_PEX_TXX
BM31	PEX_TX0	A17	PERN0	PEX_TX0*	DP_PEX_TXX
BR32	PEX_RX0	B14	PETP0	PEX_RX0	DP_PEX_RX
BT32	PEX_RX0	B15	PETN0	PEX_RX0*	DP_PEX_RX
BJ32	PEX_TX1	A21	PERP1	PEX_TX1	DP_PEX_TX
BK32	PEX_TX1	A22	PERN1	PEX_TX1*	DP_PEX_TX
BP33	PEX_RX1	B19	PETP1	PEX_RX1	DP1_PEX_RX
BR33	PEX_RX1	B20	PETN1	PEX_RX1*	DP1_PEX_RX
BL33	PEX_TX2	A25	PERP2	PEX_TX2	DP1_PEX_TX
BM33	PEX_TX2	A26	PERN2	PEX_TX2*	DP1_PEX_TX
BR34	PEX_RX2	B23	PETP2	PEX_RX2	DP2_PEX_RX
BT34	PEX_RX2	B24	PETN2	PEX_RX2*	DP2_PEX_RX
BJ34	PEX_TX3	A29	PERP3	PEX_TX3	DP2_PEX_TX
BK34	PEX_TX3	A30	PERN3	PEX_TX3*	DP2_PEX_TX
BP35	PEX_RX3	B27	PETP3	PEX_RX3	DP3_PEX_RX
BR35	PEX_RX3	B28	PETN3	PEX_RX3*	DP3_PEX_RX
BL35	PEX_TX4	A35	PERP4	PEX_TX4	DP3_PEX_TX
BM35	PEX_TX4	A36	PERN4	PEX_TX4*	DP3_PEX_TX
BR36	PEX_RX4	B33	PETP4	PEX_RX4	DP4_PEX_RX
BT36	PEX_RX4	B34	PETN4	PEX_RX4*	DP4_PEX_RX
BJ36	PEX_TX5	A39	PERP5	PEX_TX5	DP4_PEX_TX
BK36	PEX_TX5	A40	PERN5	PEX_TX5*	DP4_PEX_TX
BP37	PEX_RX5	B37	PETP5	PEX_RX5	DP5_PEX_RX
BR37	PEX_RX5	B38	PETN5	PEX_RX5*	DP5_PEX_RX
BL37	PEX_TX6	A43	PERP6	PEX_TX6	DP5_PEX_TX
BM37	PEX_TX6	A44	PERN6	PEX_TX6*	DP5_PEX_TX
BR38	PEX_RX6	B41	PETP6	PEX_RX6	DP6_PEX_RX
BT38	PEX_RX6	B42	PETN6	PEX_RX6*	DP6_PEX_RX
BJ38	PEX_TX7	A47	PERP7	PEX_TX7	DP6_PEX_TX
BK38	PEX_TX7	A48	PERN7	PEX_TX7*	DP6_PEX_TX
BP39	PEX_RX7	B45	PETP7	PEX_RX7	DP7_PEX_RX
BR39	PEX_RX7	B46	PETN7	PEX_RX7*	DP7_PEX_RX
BL39	PEX_TX8	A52	PERP8	PEX_TX8	DP7_PEX_TX
BM39	PEX_TX8	A53	PERN8	PEX_TX8*	DP7_PEX_TX
BR40	PEX_RX8	B50	PETP8	PEX_RX8	DP8_PEX_RX
BT40	PEX_RX8	B51	PETN8	PEX_RX8*	DP8_PEX_RX
BL40	PEX_TX9	A56	PERP9	PEX_TX9	DP8_PEX_TX
BK40	PEX_TX9	A57	PERN9	PEX_TX9*	DP8_PEX_TX
BP41	PEX_RX9	B54	PETP9	PEX_RX9	DP9_PEX_RX
BR41	PEX_RX9	B55	PETN9	PEX_RX9*	DP9_PEX_RX
BL41	PEX_TX10	A60	PERP10	PEX_TX10	DP_PEX_TX10
BM41	PEX_TX10	A61	PERN10	PEX_TX10*	DP_PEX_TX10
BR42	PEX_RX10	B58	PETP10	PEX_RX10	DP_PEX_RX1
BT42	PEX_RX10	B59	PETN10	PEX_RX10*	DP_PEX_RX1
BJ42	PEX_TX11	A64	PERP11	PEX_TX11	DP_PEX_TX11
BK42	PEX_TX11	A65	PERN11	PEX_TX11*	DP_PEX_TX11
BP43	PEX_RX11	B62	PETP11	PEX_RX11	DP1_PEX_RX1
BR43	PEX_RX11	B63	PETN11	PEX_RX11*	DP1_PEX_RX1
BL43	PEX_TX12	A68	PERP12	PEX_TX12	DP_PEX_TX12
BM43	PEX_TX12	A69	PERN12	PEX_TX12*	DP_PEX_TX12
BR44	PEX_RX12	B66	PETP12	PEX_RX12	DP2_PEX_RX1
BT44	PEX_RX12	B67	PETN12	PEX_RX12*	DP2_PEX_RX1
BJ44	PEX_TX13	A72	PERP13	PEX_TX13	DP_PEX_TX13
BK44	PEX_TX13	A73	PERN13	PEX_TX13*	DP_PEX_TX13
BP45	PEX_RX13	B70	PETP13	PEX_RX13	DP3_PEX_RX1
BR45	PEX_RX13	B71	PETN13	PEX_RX13*	DP3_PEX_RX1
BL45	PEX_TX14	A76	PERP14	PEX_TX14	DP_PEX_TX14
BM45	PEX_TX14	A77	PERN14	PEX_TX14*	DP_PEX_TX14
BR46	PEX_RX14	B74	PETP14	PEX_RX14	DP4_PEX_RX1
BT46	PEX_RX14	B75	PETN14	PEX_RX14*	DP4_PEX_RX1
BL47	PEX_TX15	A80	PERP15	PEX_TX15	DP_PEX_TX15
BM47	PEX_TX15	A81	PERN15	PEX_TX15*	DP_PEX_TX15
BP47	PEX_RX15	B78	PETP15	PEX_RX15	DP5_PEX_RX1
BR47	PEX_RX15	B79	PETN15	PEX_RX15*	DP5_PEX_RX1

BF32	PEX_DVDD
BF34	PEX_DVDD
BF35	PEX_DVDD
BF37	PEX_DVDD
BG32	PEX_DVDD
BG34	PEX_DVDD
BG35	PEX_DVDD
BG37	PEX_DVDD
BH32	PEX_DVDD
BH34	PEX_DVDD
BH35	PEX_DVDD
BH37	PEX_DVDD
BF31	PEX_CVDD
BG31	PEX_CVDD
BH31	PEX_CVDD
BF38	PEX_HVDD
BF40	PEX_HVDD
BF41	PEX_HVDD
BG38	PEX_HVDD
BG40	PEX_HVDD
BG41	PEX_HVDD
BG43	PEX_HVDD
BG44	PEX_HVDD
BH38	PEX_HVDD
BH40	PEX_HVDD
BH41	PEX_HVDD
BH43	PEX_HVDD
BH44	PEX_HVDD
BF43	PEX_PLL_HVDD
BK46	PEX_CVDD_SENSE
BT50	PEX_TERMP

GPU_PEX_CLKREQ* 33

PEX_TERMP — R689 2.49K/4/1 0402 1% COMMON

PEX_PRSNT2_A 4
PEX_PRSNT2_B 4
PEX_PRSNT2_C 4
PEX_RSVD3 4
PEX_PWRBRK 4,27
PEX_RSVD5 4
PEX_RSVD6 4
PEX_RSVD7 4
PEX_RSVD8 4

END OF X1
END OF X4
END OF X8
END OF X16

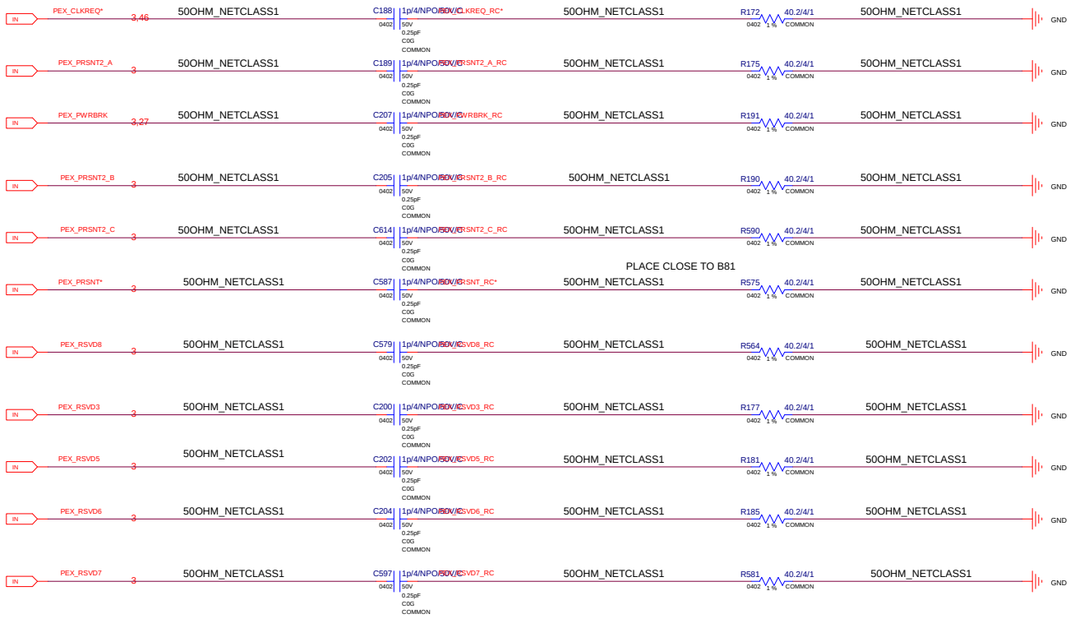
ASSEMBLY
PAGE DETAIL
<ASSEMBLY_DESCRIPTION>
PCI Express

ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ANY IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

Title	PCIE		
Size	Custom	Document Number	GV-N3060VISION OC-12GD
Rev	1.01		
Date:	Thursday, January 14, 2021	Sheet	3 of 54

https://t.me/schematicslaptop

Page4: PCIE GEN4 RC TERMINATION



ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PCIe GEN4 RC Termination

Title	PCIE
Size	Custom
Document Number	GV-N3060VISION OC-12GD
Rev	1.01
Date:	Thursday, January 14, 2021
Sheet	4 of 54

https://t.me/schematicslaptop

Page5: MEMORY: GPU Partition A/B

//syseng/Projects/GA1xx/GA1XX_CMD-Mapping.xlsx

compatible

G1B
GA104-300-A1
BGA2714
COMMON

2/24 FBA

G1C
GA104-300-A1
BGA2714
COMMON

3/24 FBB

GA1XX GDDR6 CMD Mapping

	x16 Mode
Lower 0..31	Upper 32..63
DRAM1	DRAM2
CHA-Byte 0,1	CHA-Byte 4,5
CHB-Byte 2,3	CHB-Byte 6,7

CA0_A	CMD1		CMD33
CA1_A	CMD13		CMD45
CA2_A	CMD12		CMD35
CA3_A	CMD24		CMD46
CA4_A	CMD11		CMD36
CA5_A	CMD15		CMD43
CA6_A	CMD22		CMD48
CA7_A	CMD23		CMD47
CA8_A	CMD0		CMD34
CA9_A	CMD2		CMD32
CABI_A	CMD10		CMD37
CKE_A	CMD14		CMD44
CA0_B	CMD5		CMD29
CA1_B	CMD18		CMD52
CA2_B	CMD7		CMD40
CA3_B	CMD20		CMD50
CA4_B	CMD8		CMD39
CA5_B	CMD16		CMD42
CA6_B	CMD21		CMD49
CA7_B	CMD19		CMD51
CA8_B	CMD6		CMD28
CA9_B	CMD4		CMD30
CABI_B	CMD9		CMD38
CKE_B	CMD17		CMD41
RESET*	CMD3		CMD31

1V8

LB501
30/6/4A/S
COMMON
BEAD_0603

1V8_FB_PLL

C1004 4.7u/6/X5R/6.3V/K
C1029 4.7u/6/X5R/6.3V/K
C1000 22uF/X/X
C62566 22u/6/X5R/6.3V/M

2x 0603 4.7uF
1x 0805 22uF
Near the GPU

Co-Lay

FBVDDQ

CKE_A
RST*
CKE_B

R645 10K/4
R672 10K/4
R687 10K/4
R633 10K/4
R648 10K/4
R671 10K/4
R568 10K/4
R613 10K/4
R622 10K/4
R583 10K/4
R580 10K/4
R612 10K/4

5 % 0402 COMMON

C831 1u/4/X5R/6.3V/K
C910 1u/4/X5R/6.3V/K
C809 1u/4/X5R/6.3V/K
C684 1u/4/X5R/6.3V/K

6.3V 10% X5S 0402 COMMON

R656 R660 R605 R566 0402

GND

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

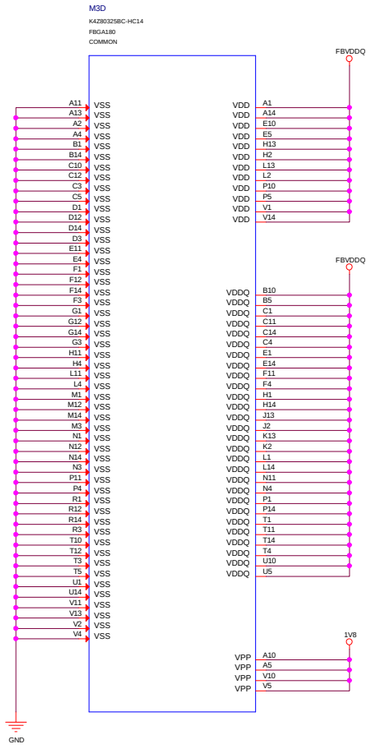
ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

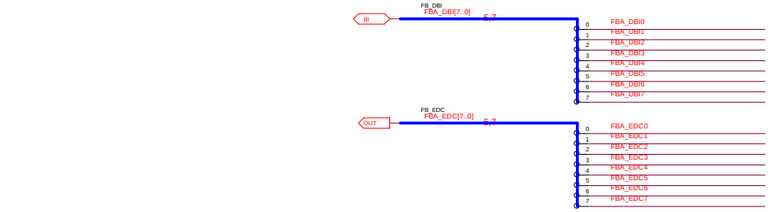
GIGABYTE

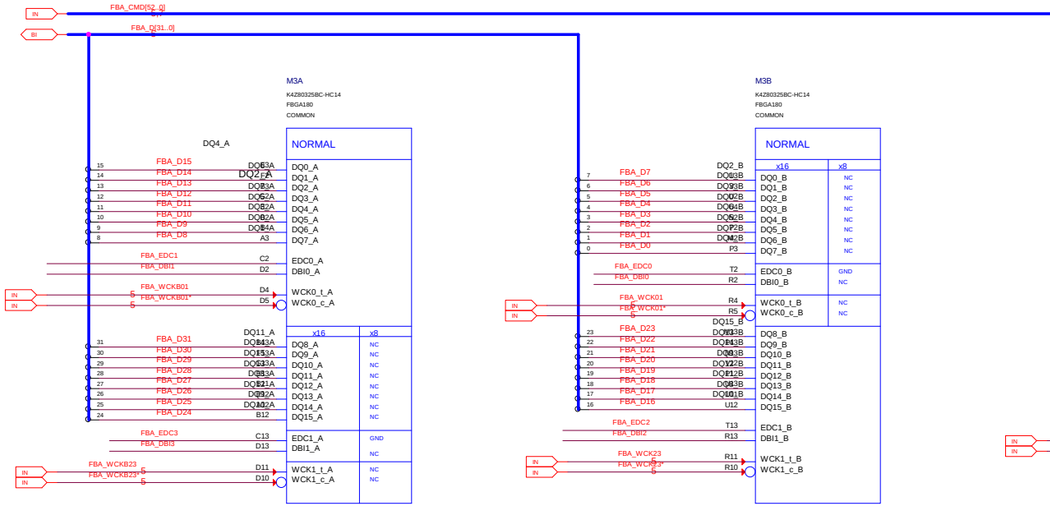
Title	PCIE	
Size: Custom	Document Number: GV-N3060VISION OC-12GD	Rev: 1.01
Date: Thursday, January 14, 2021	Sheet 5 of 54	

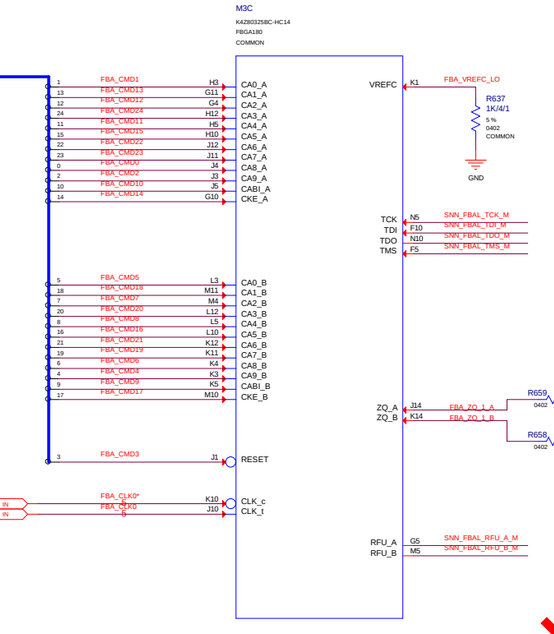
https://t.me/schematicslaptop

Page6: MEMORY: FBA Partition 31..0

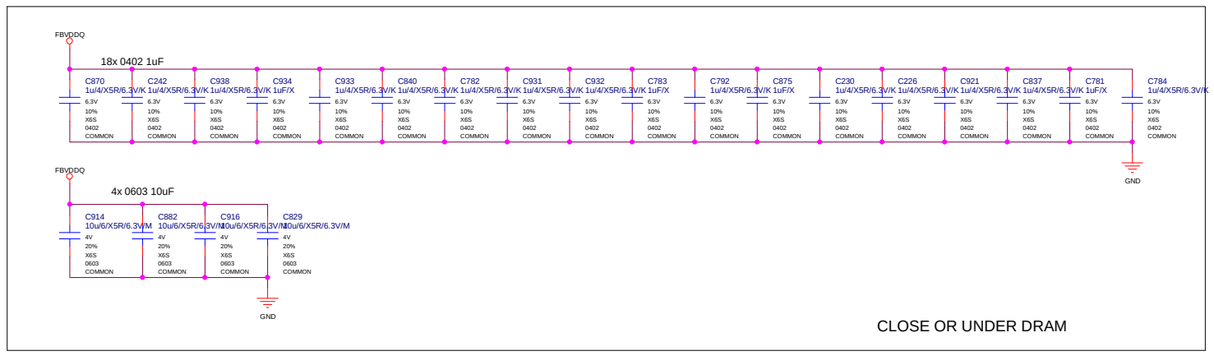


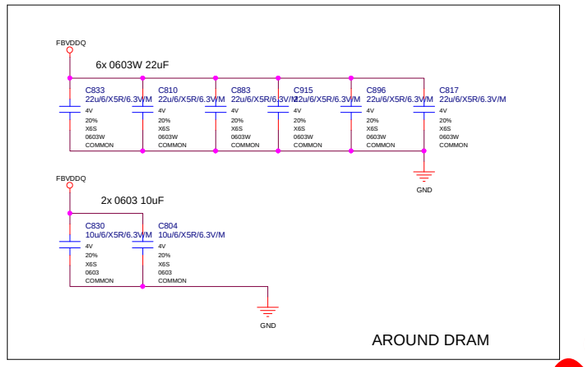


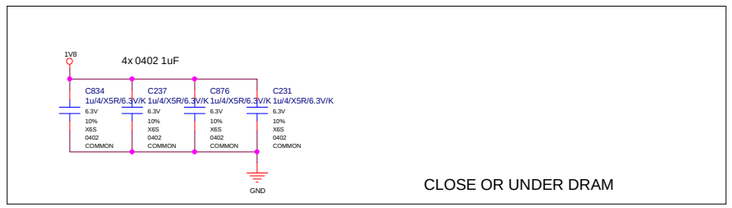




decap via : at least 2 gnd vias and 2 power vias for each cap







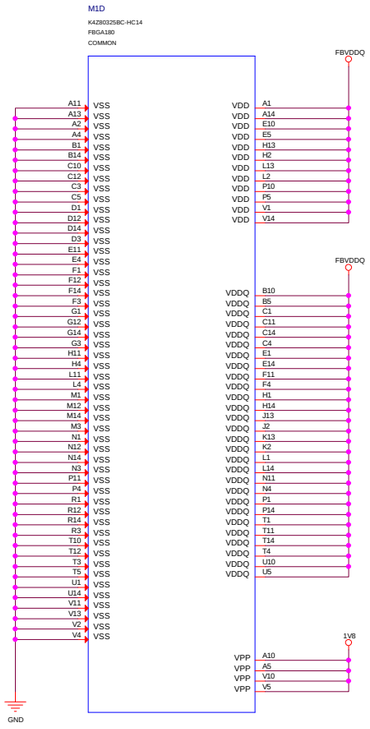
ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

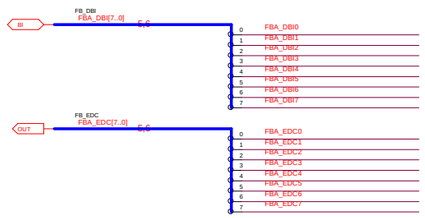
ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	MEMORY: FBA Partation 32..0

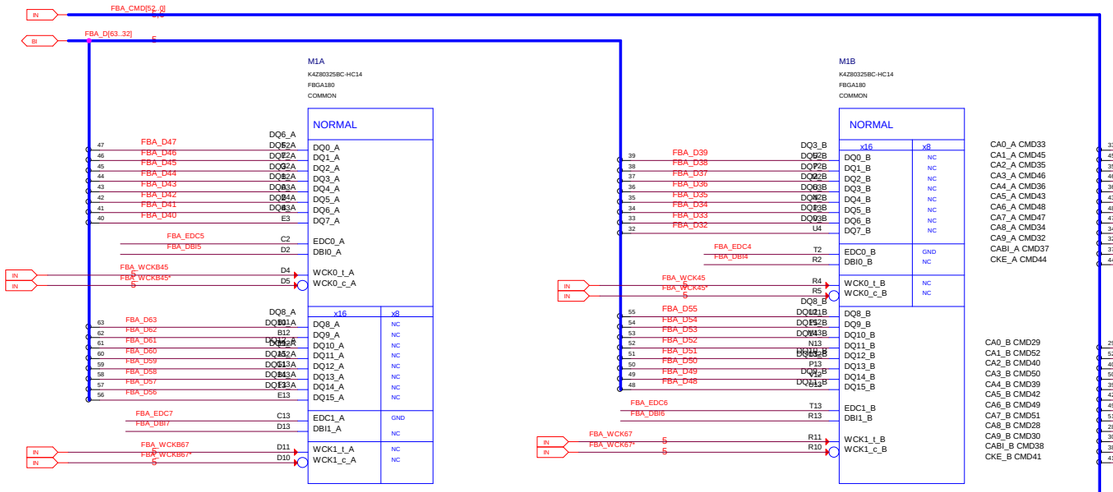
Title	PCIE		
Size: Custom	Document Number: GV-N3060VISION OC-12GD		Rev: 1.01
Date: Thursday, January 14, 2021	Sheet 6	of 54	

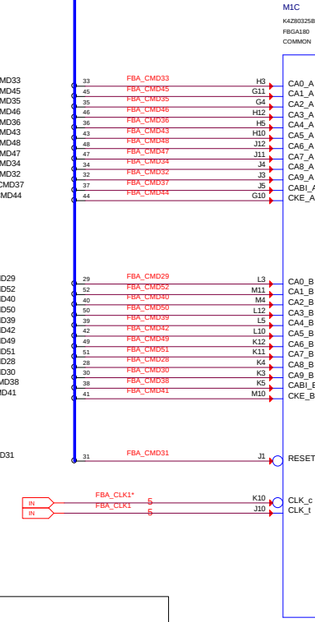
https://t.me/schematicslaptop

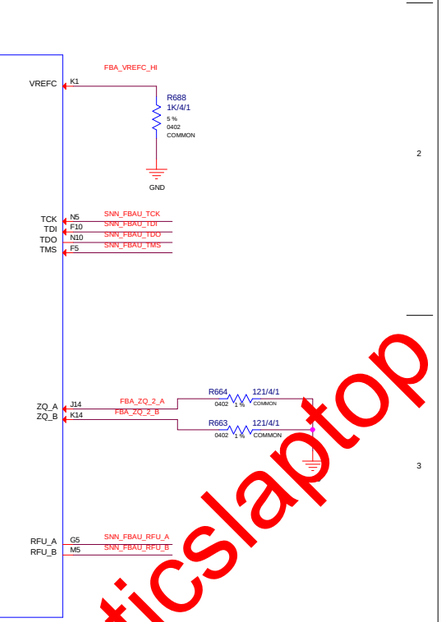
Page7: MEMORY: FBA Partition 63..32

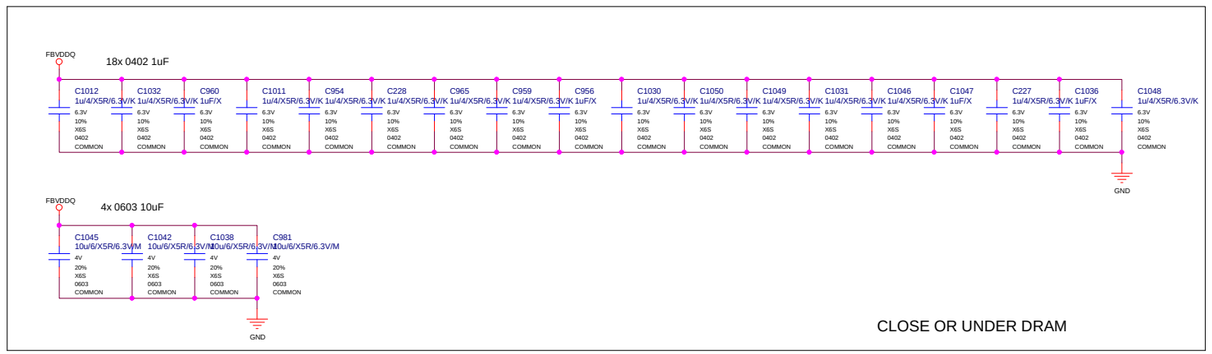


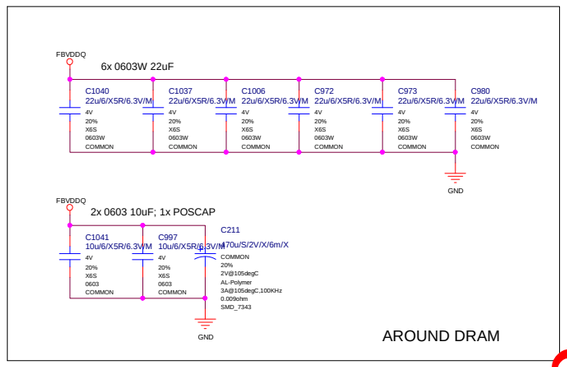












ASSEMBLY | <ASSEMBLY_DESCRIPTION>
PAGE DETAIL | MEMORY: FBA Partition 63..32

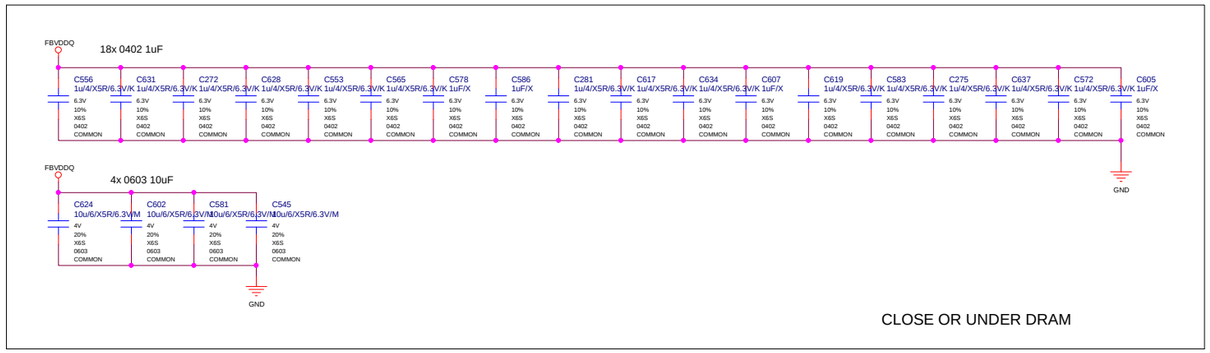
ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

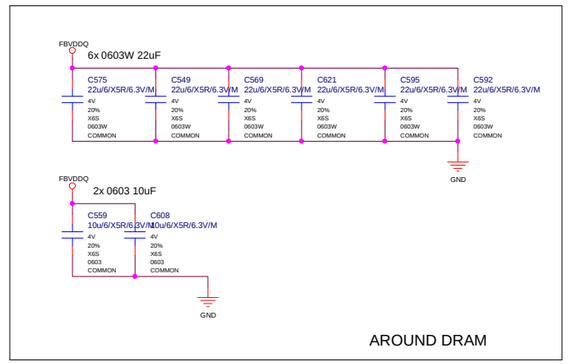
GIGABYTE

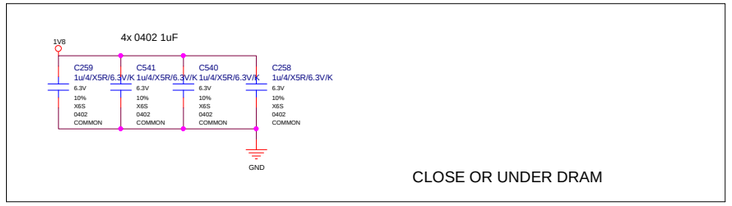
Title: PCIE		
Size: Custom	Document Number: GV-N3060VISION OC-12GD	Rev: 1.01
Date: Thursday, January 14, 2021	Sheet 7 of 54	

https://t.me/schematicslaptop

Page8: MEMORY: FBB Partition 31..0







ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	MEMORY: FBB Partition 31..0

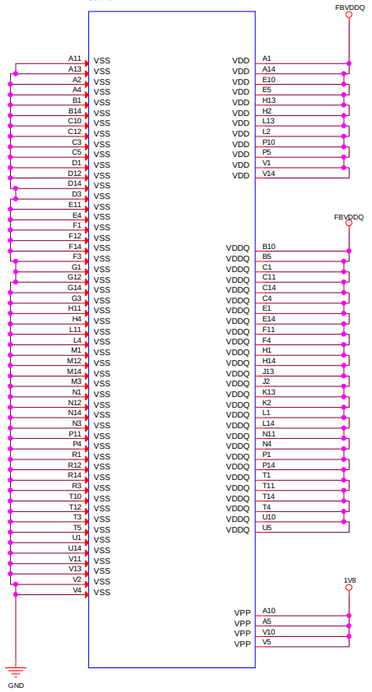
ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

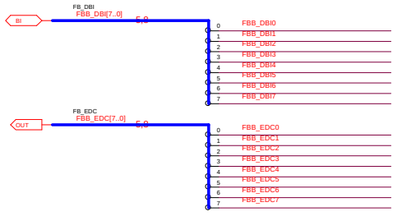
GIGABYTE

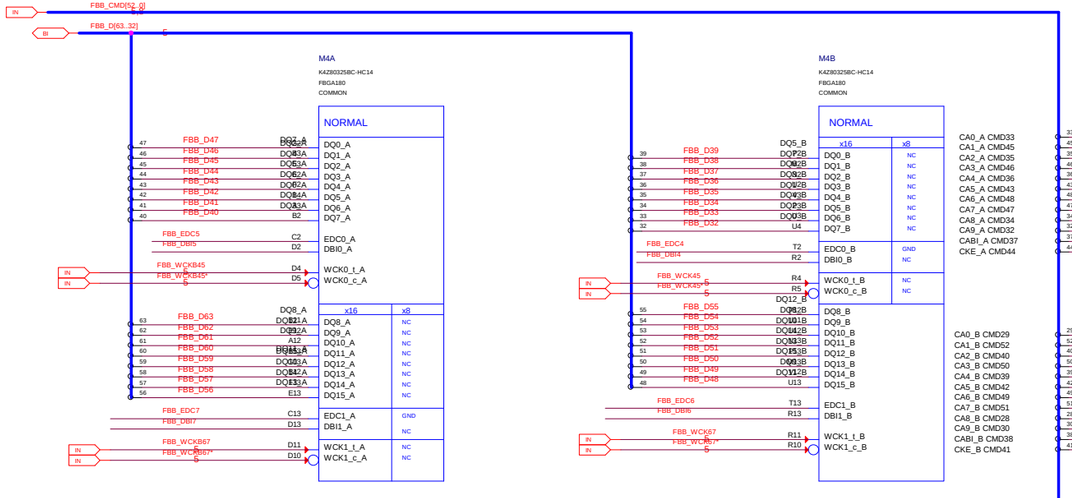
Title	PCIE	
Size: Custom	Document Number: GV-N3060VISION OC-12GD	Rev: 1.01
Date: Thursday, January 14, 2021	Sheet 8 of 54	

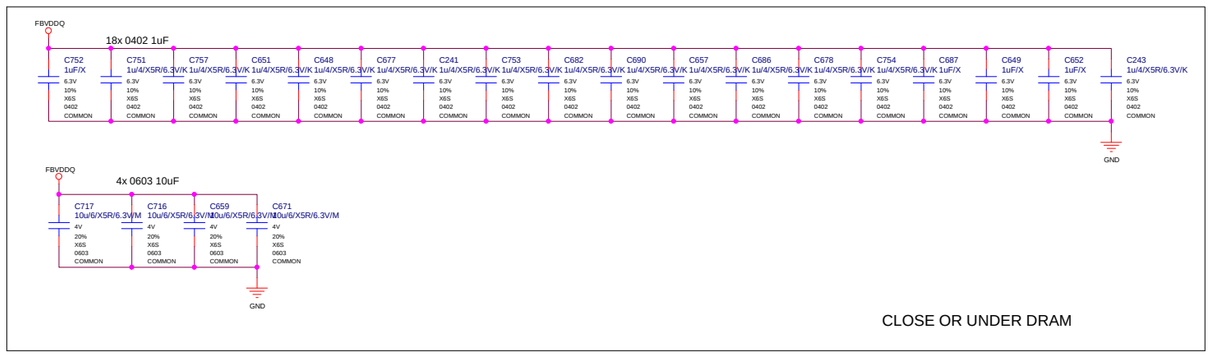
https://t.me/schematicslaptop

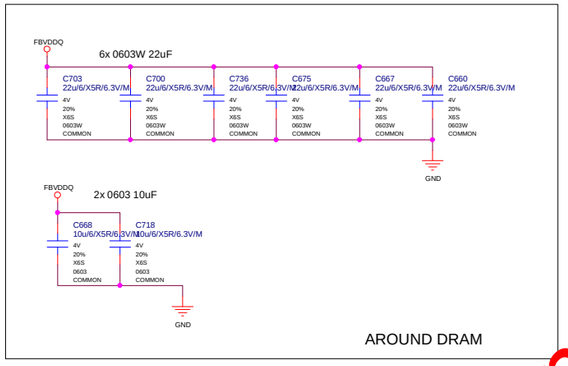
Page9: MEMORY: FBB Partition 63..32

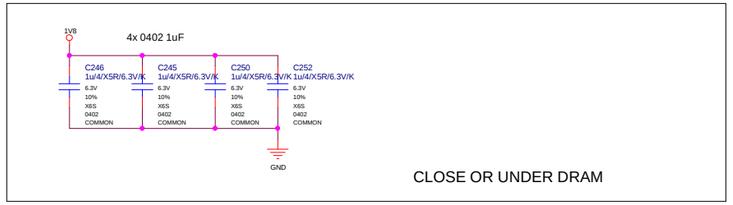












ASSEMBLY | <ASSEMBLY_DESCRIPTION>
PAGE DETAIL | MEMORY: FBB Partition 63..32

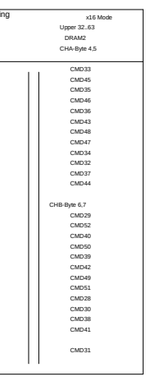
ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

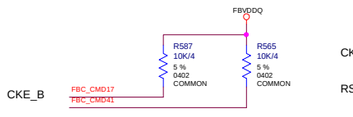
GIGABYTE

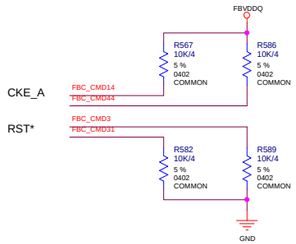
Title	PCIE	
Size: Custom	Document Number: GV-N3060VISION OC-12GD	Rev: 1.01
Date: Thursday, January 14, 2021	Sheet 9 of 54	

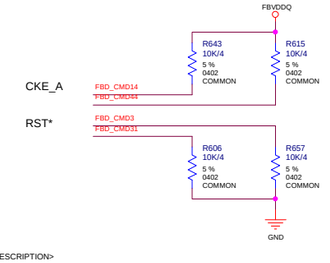
https://t.me/schematicslaptop

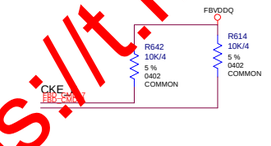
Page10: MEMORY: GPU Partition C/D











ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

ASSEMBLY
PAGE DETAIL

<ASSEMBLY_DESCRIPTION>
MEMORY: GPU Partition C/D

GIGABYTE

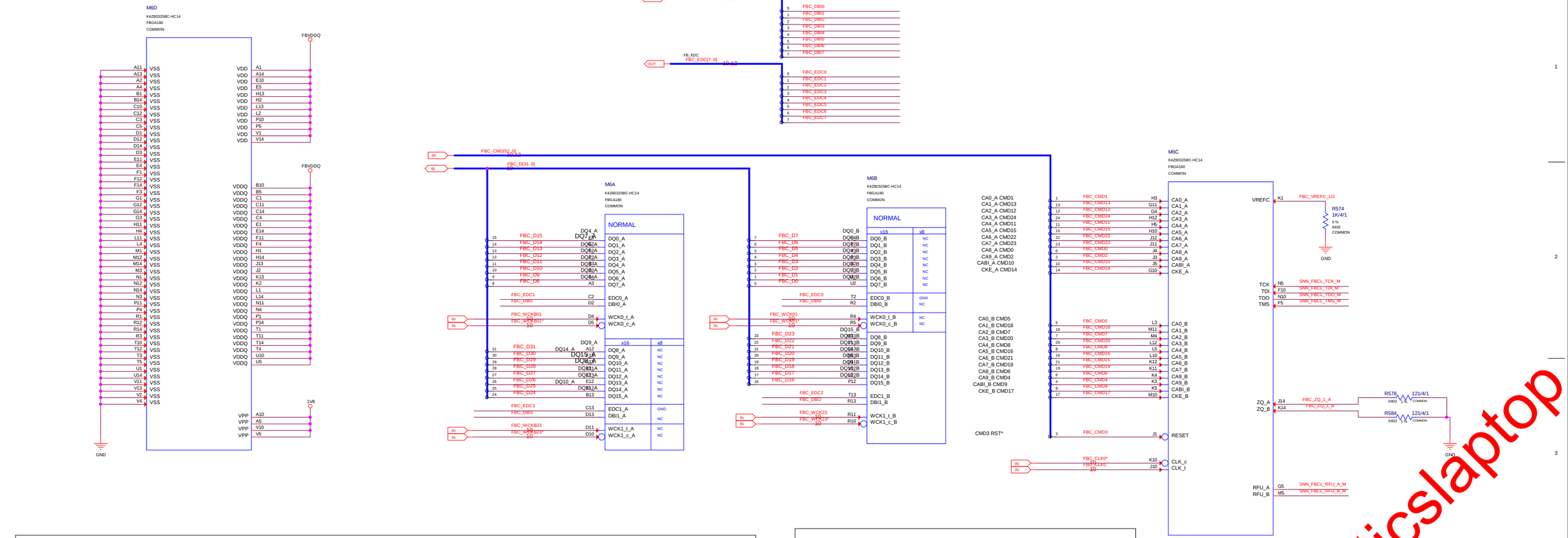
Title: PCIE

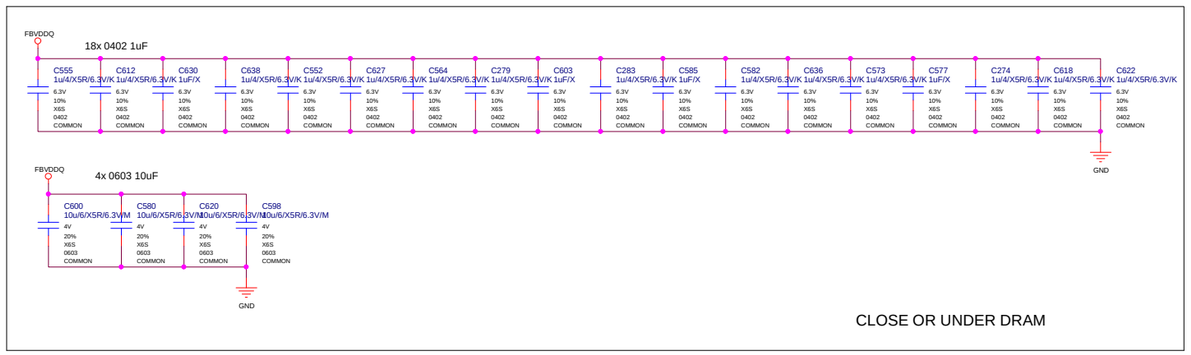
Size: Custom | Document Number: GV-N3060VISION OC-12GD | Rev: 1.01

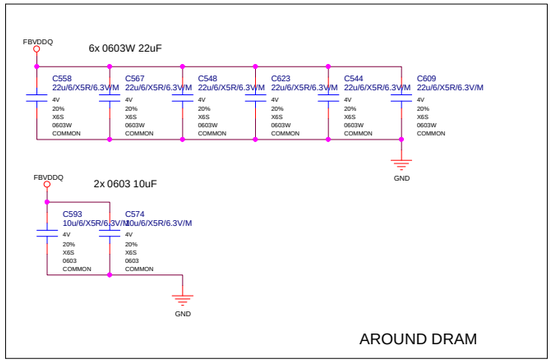
Date: Thursday, January 14, 2021 | Sheet 10 of 54

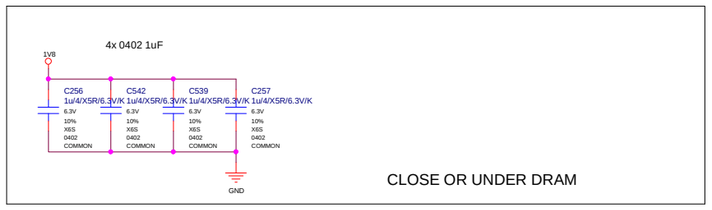
https://t.me/schematicslaptop

Page11: MEMORY: FBC Partition 31..0









https://t.me/schematicslaptop

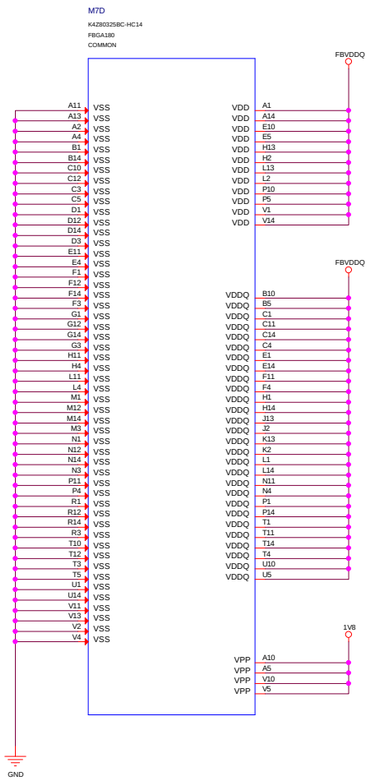
ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

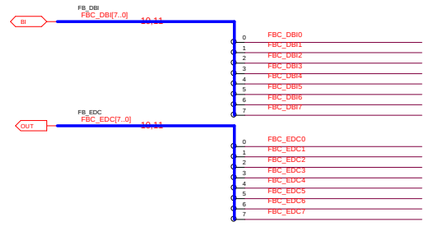
ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	MEMORY: FBC Partition 31..0

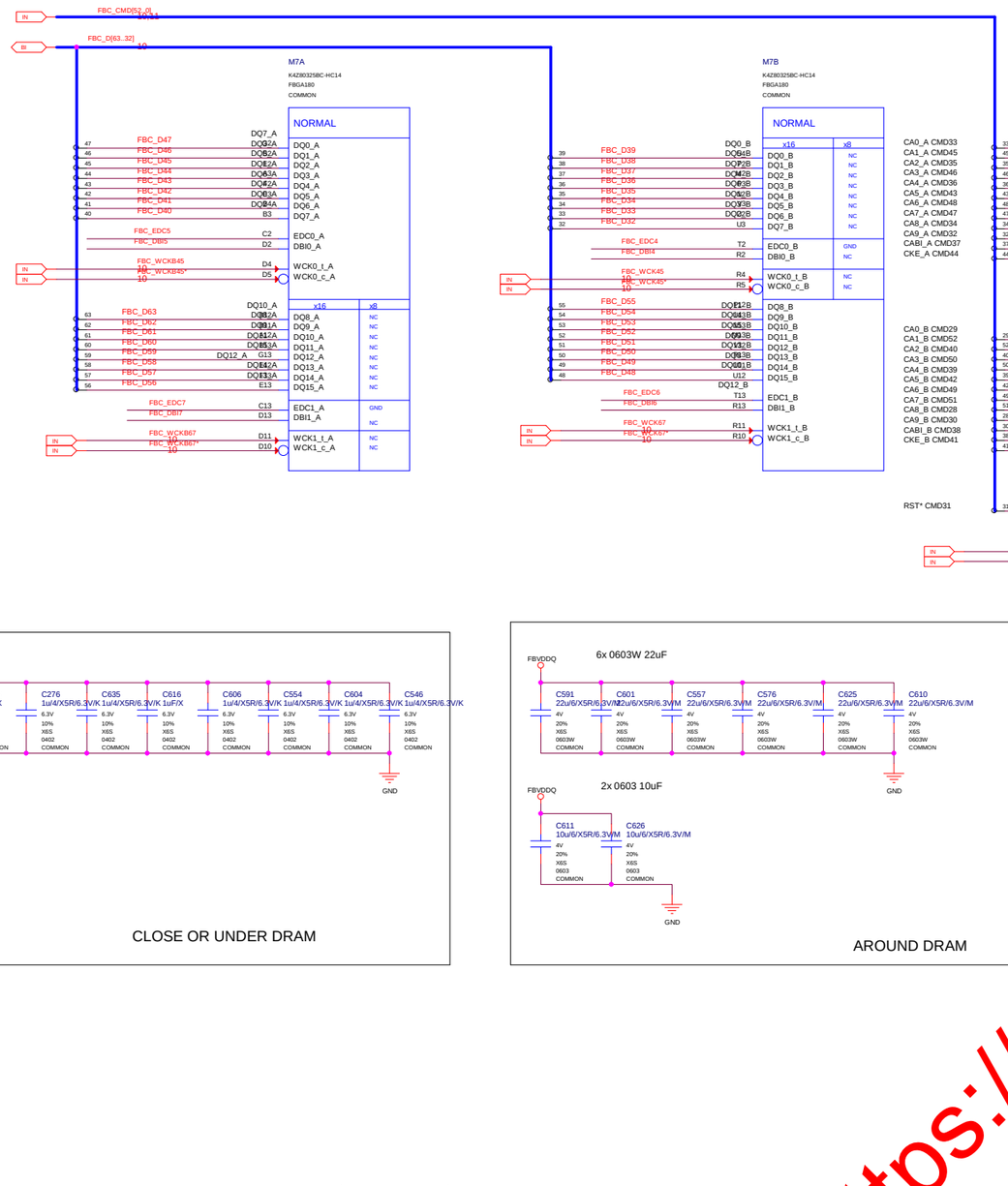
GIGABYTE

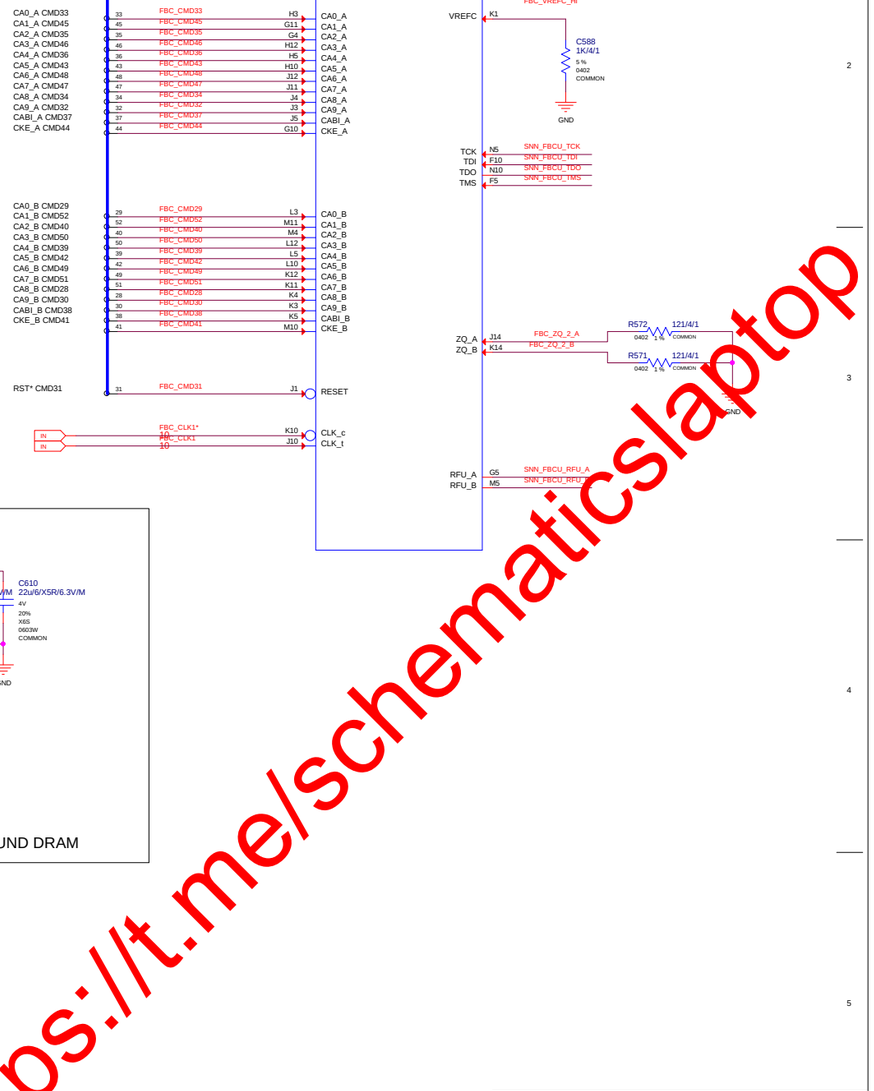
Title: PCIE		
Size: Custom	Document Number: GV-N3060VISION OC-12GD	Rev: 1.01
Date: Thursday, January 14, 2021	Sheet 11 of 54	

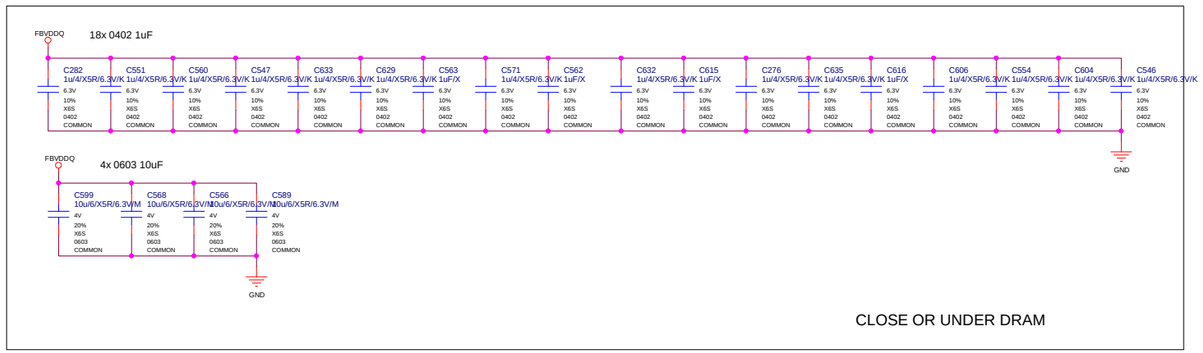
Page12: MEMORY: FBC Partition 63..32

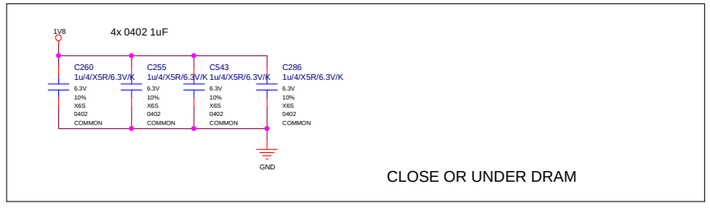












ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	MEMORY: FBC Partition 63..32

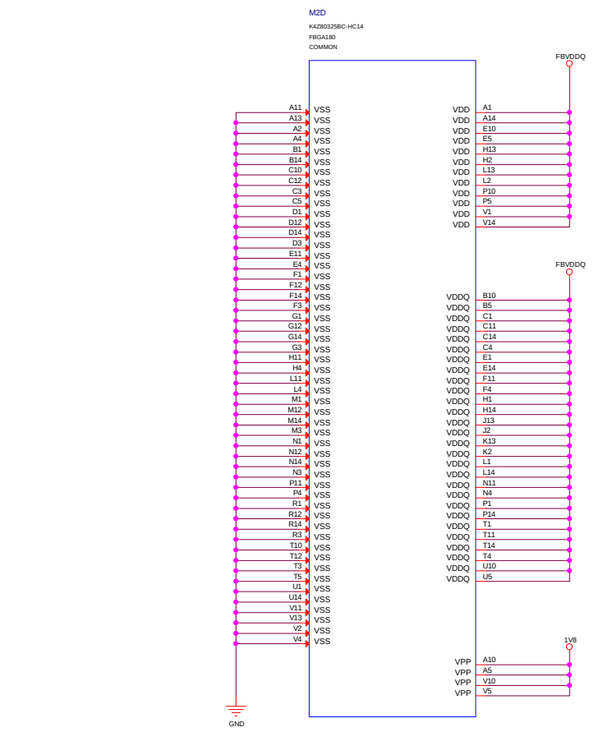
ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

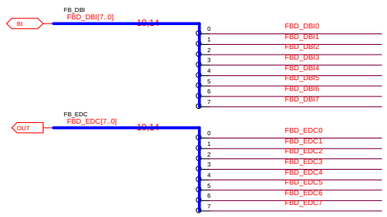
GIGABYTE			
Title	PCIE		
Size: Custom	Document Number: GV-N3060VISION OC-12GD		Rev: 1.01
Date: Thursday, January 14, 2021	Sheet 12 of 54		

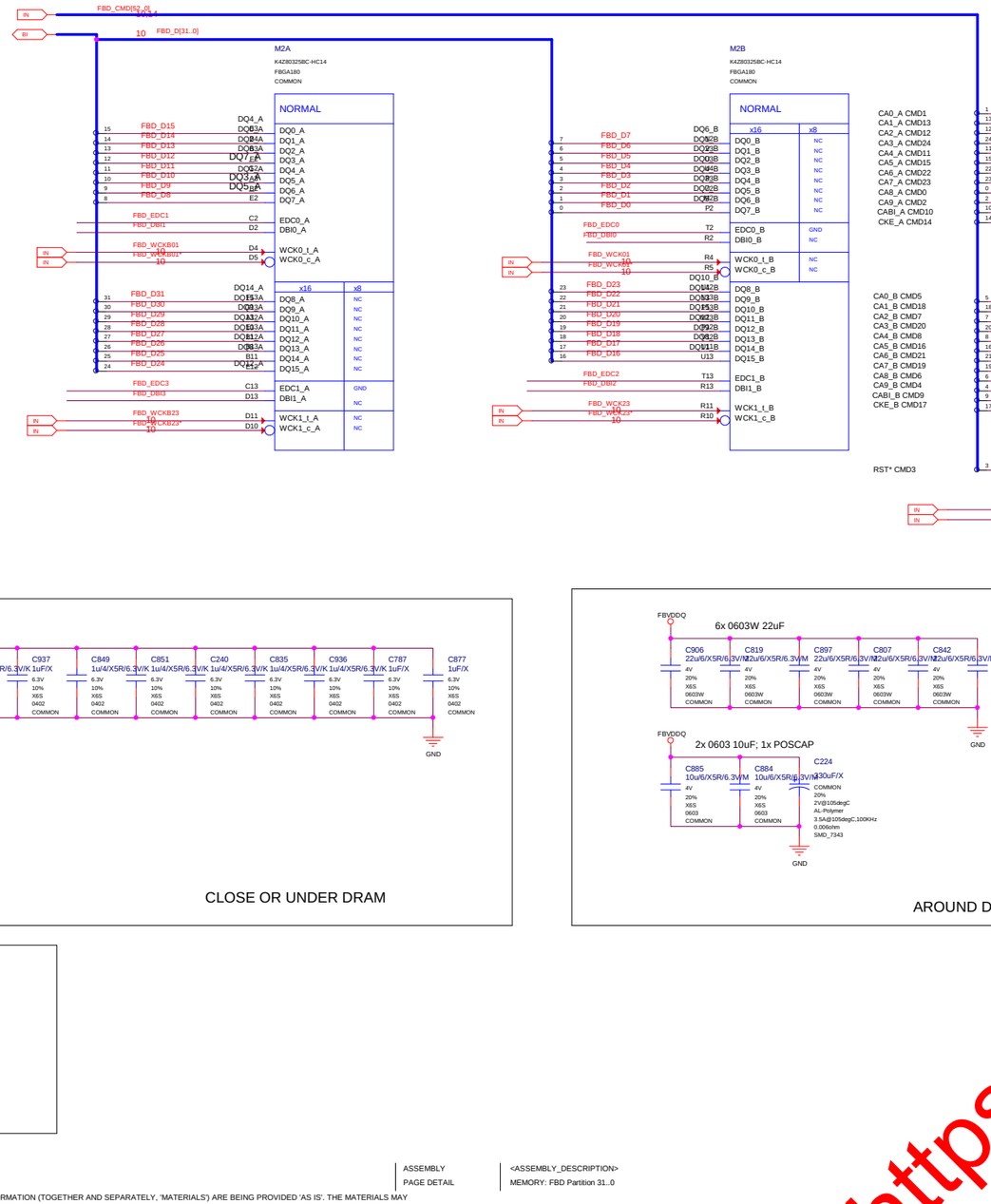
https://t.me/schematicslaptop

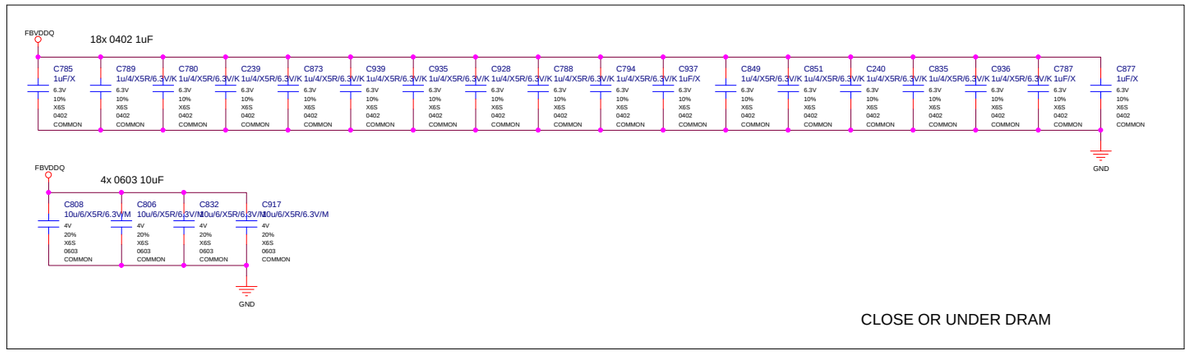
Page13: MEMORY: FBD Partition 31..0

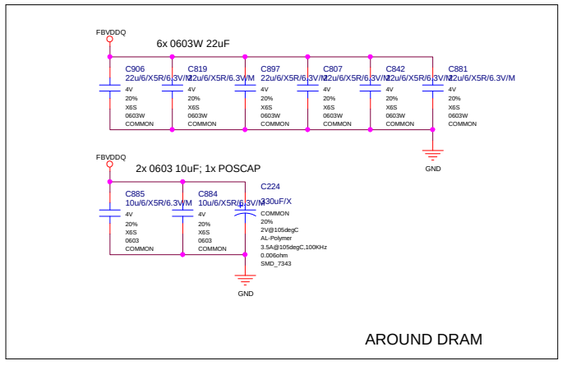
www.teknisi-indonesia.com

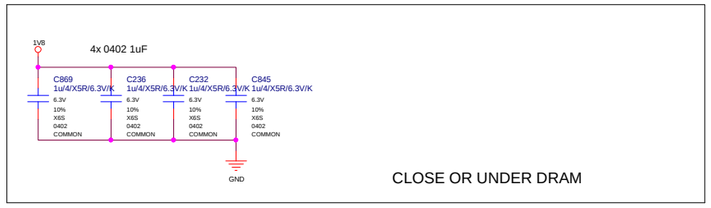












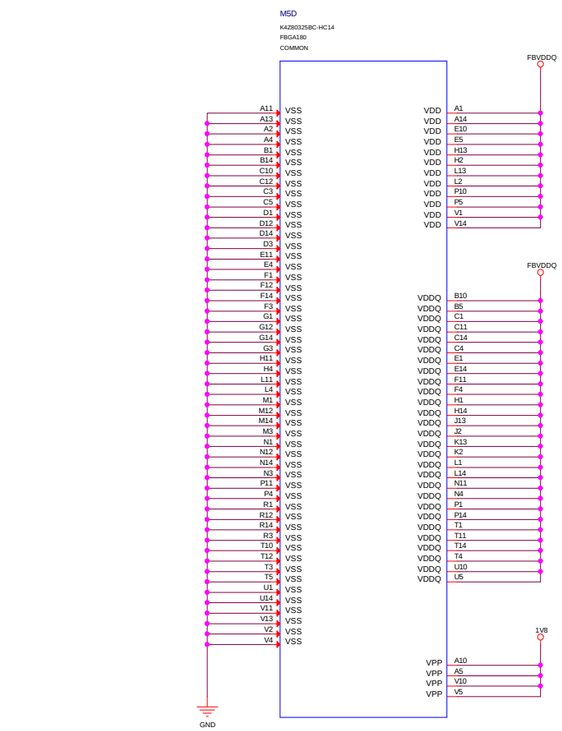
ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	MEMORY: FBD Partition 31..0

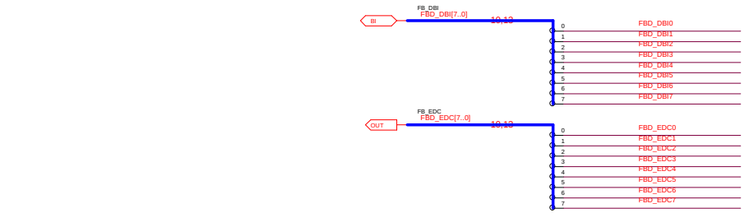
ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

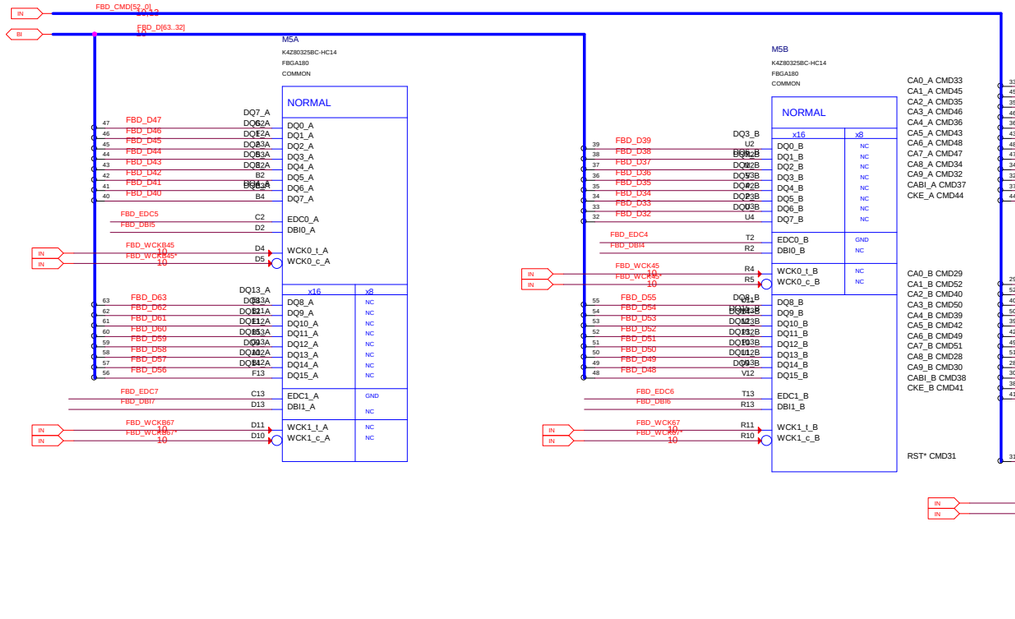
GIGABYTE			
Title	PCIE		
Size	Document Number		Rev
Custom	GV-N3060VISION OC-12GD		1.01
Date:	Thursday, January 14, 2021	Sheet 13 of 54	

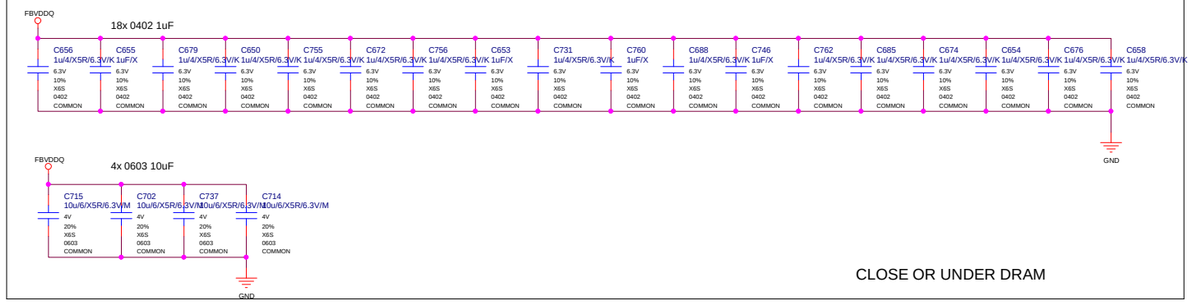
https://t.me/schematicslaptop

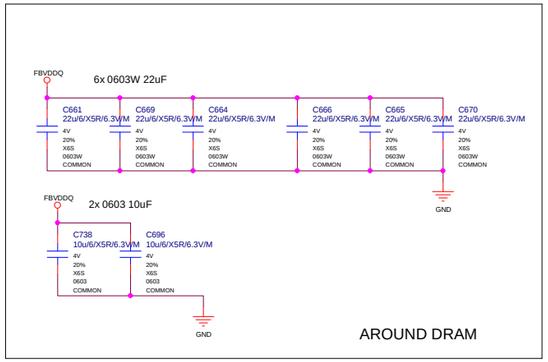
Page14: MEMORY: FBD Partition 63..32

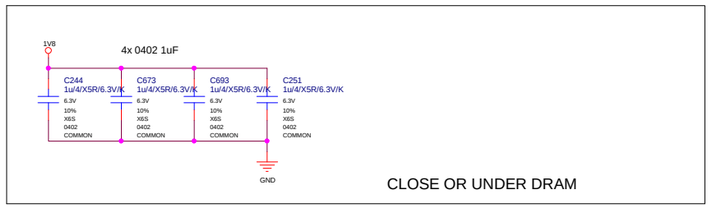












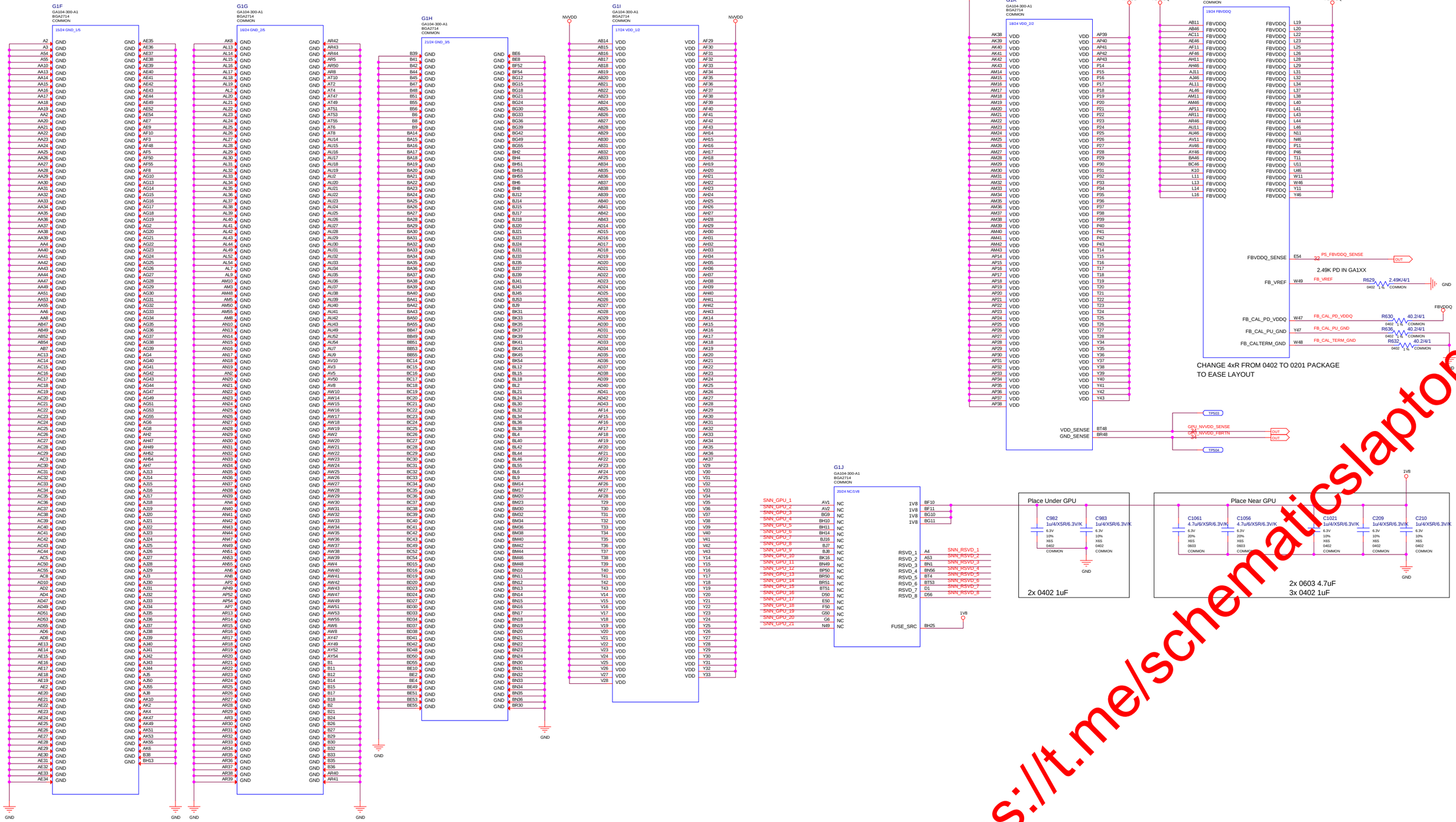
ASSEMBLY <ASSEMBLY_DESCRIPTION>
PAGE DETAIL MEMORY: FBD Partition 63..32

ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, "MATERIALS") ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

GIGABYTE	
Title	PCIE
Size: Custom	Document Number: GV-N3060VISION OC-12GD
Rev	1.01
Date: Thursday, January 14, 2021	Sheet 14 of 54

https://t.me/schematicslaptop

Page15: GPU PWR and GND



ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

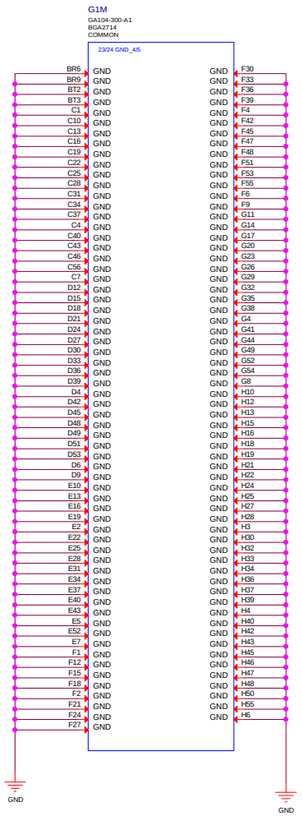
ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	GPU PWR and GND

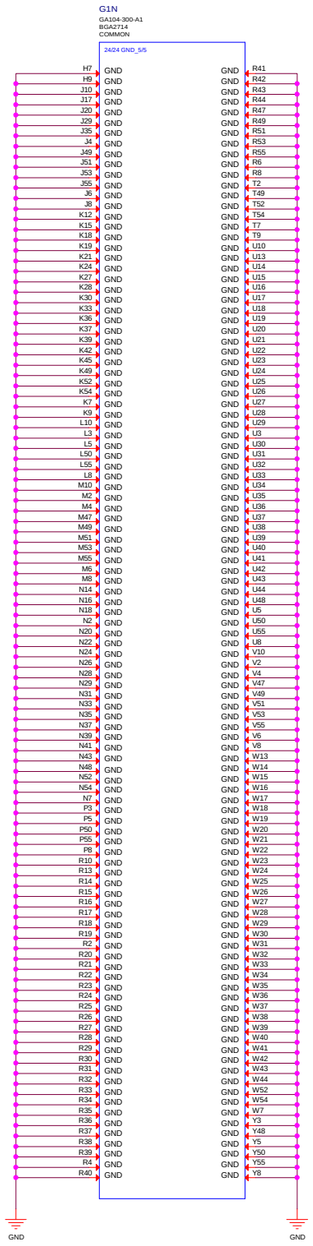
GIGABYTE

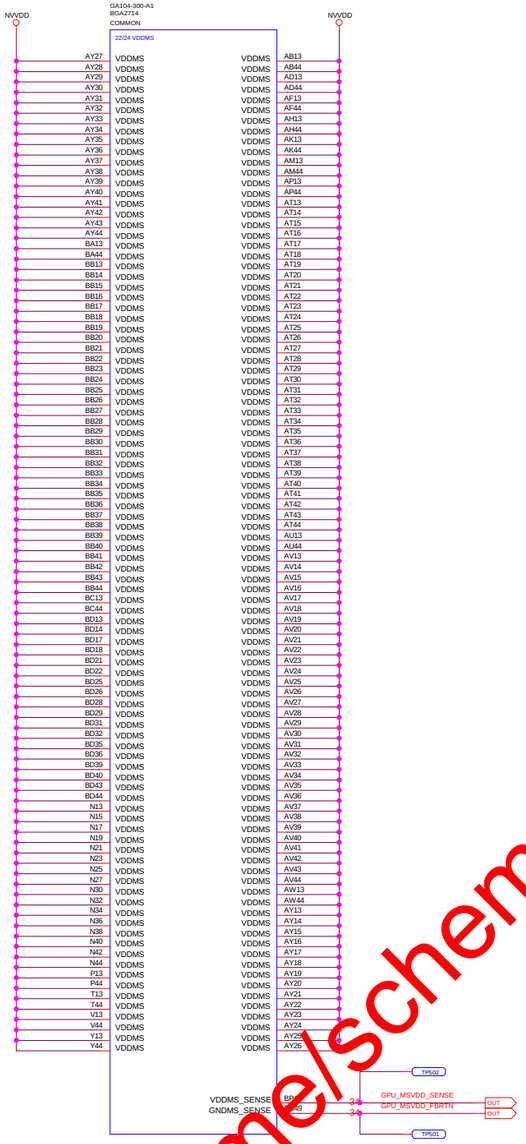
Title	PCIE	
Size: Custom	Document Number: GV-N3060VISION OC-12GD	Rev: 1.01
Date: Thursday, January 14, 2021	Sheet 15 of 54	

https://t.me/schematicslaptop

Page16: GPU PWR and GND 2







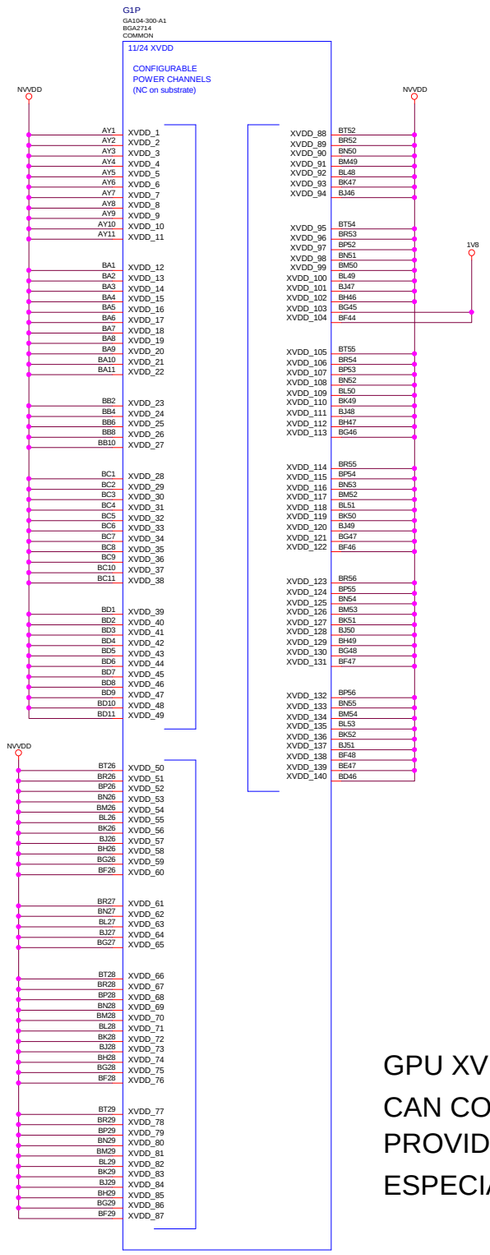
ASSEMBLY | <ASSEMBLY_DESCRIPTION>
PAGE DETAIL | GPU PWR and GND 2

ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

GIGABYTE			
Title: PCIE			
Size: Custom	Document Number: GV-N3060VISION OC-12GD		Rev: 1.01
Date: Thursday, January 14, 2021	Sheet 16 of 54		

https://t.me/schematicslaptop

Page17: GPU XVDD



GPU XVDD BALLS (NC IN SUBSTRATE):

CAN CONNECT TO ANY POWER NET (NV/MS/1V8/PEX, etc.) ON SYSTEM BOARD,
PROVIDE FLEXIBILITY TO OPTIMIZE POWER CHANNELS ON SYSTEM BOARD,
ESPECIALLY USEFUL FOR LOW-COST DESIGN WITH REDUCED PCB LAYERS.

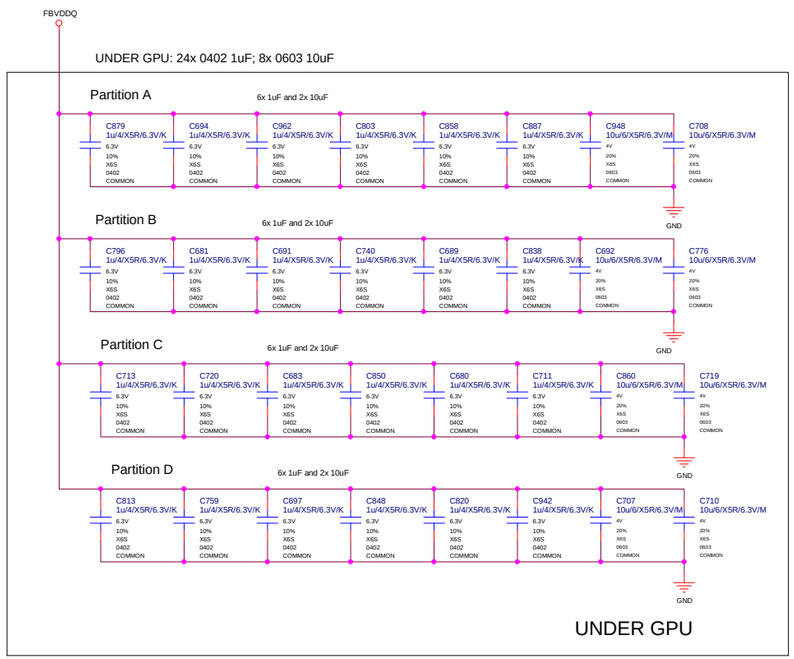
https://t.me/schematicslaptop

ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

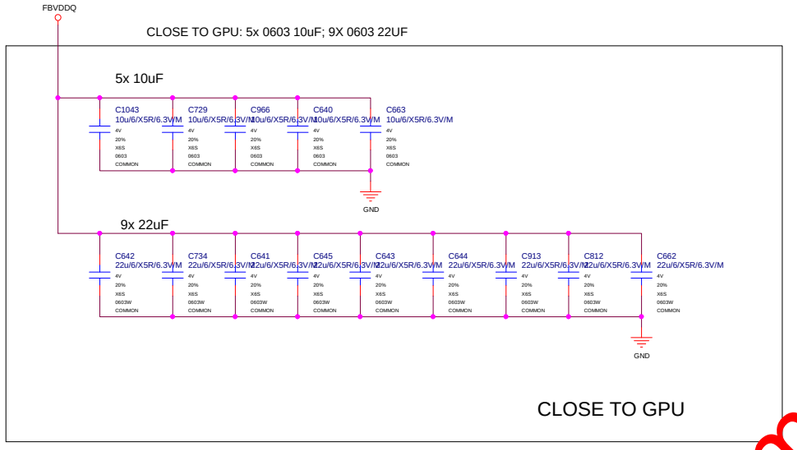
ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	GPU XVDD

GIGABYTE		
Title: PCIE		
Size: Custom	Document Number: GV-N3060VISION OC-12GD	Rev: 1.01
Date: Thursday, January 14, 2021	Sheet 17 of 54	

FBVDDQ



FBVDDQ



www.teknisi-indonesia.com

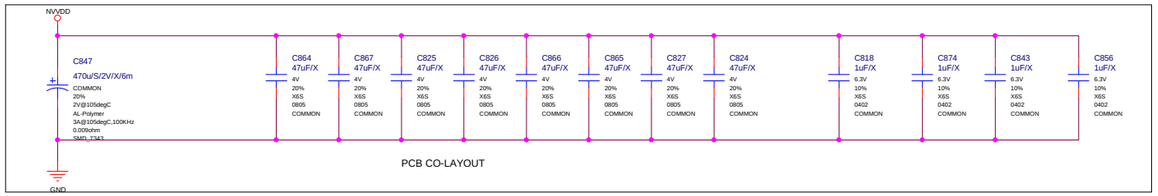
https://t.me/schematicslaptop

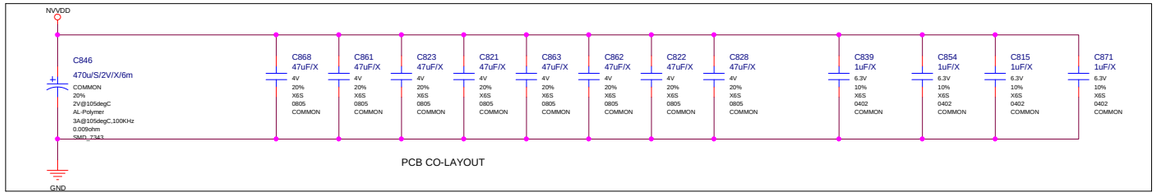
ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	GPU DECOUPLING FBVDDQ

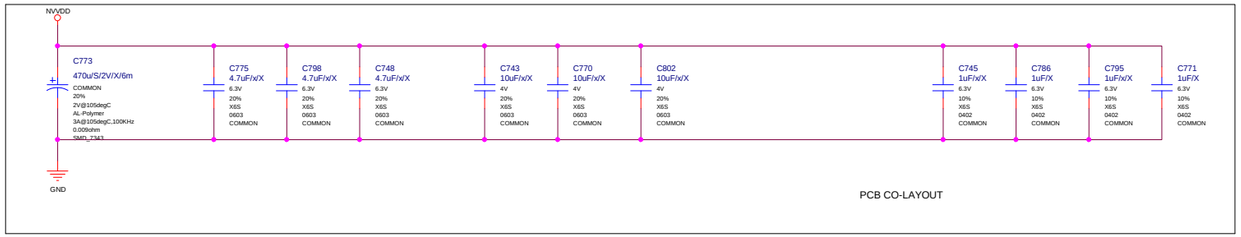
ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

GIGABYTE			
Title: PCIE			
Size: Custom	Document Number: GV-N3060VISION OC-12GD		Rev: 1.01
Date: Thursday, January 14, 2021	Sheet 18 of 54		

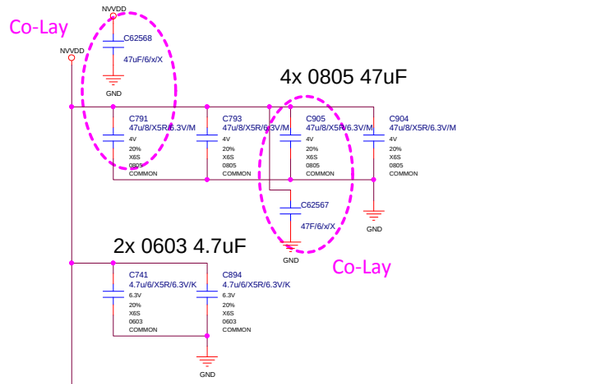
Page19: GPU DECOUPLING NVVDD



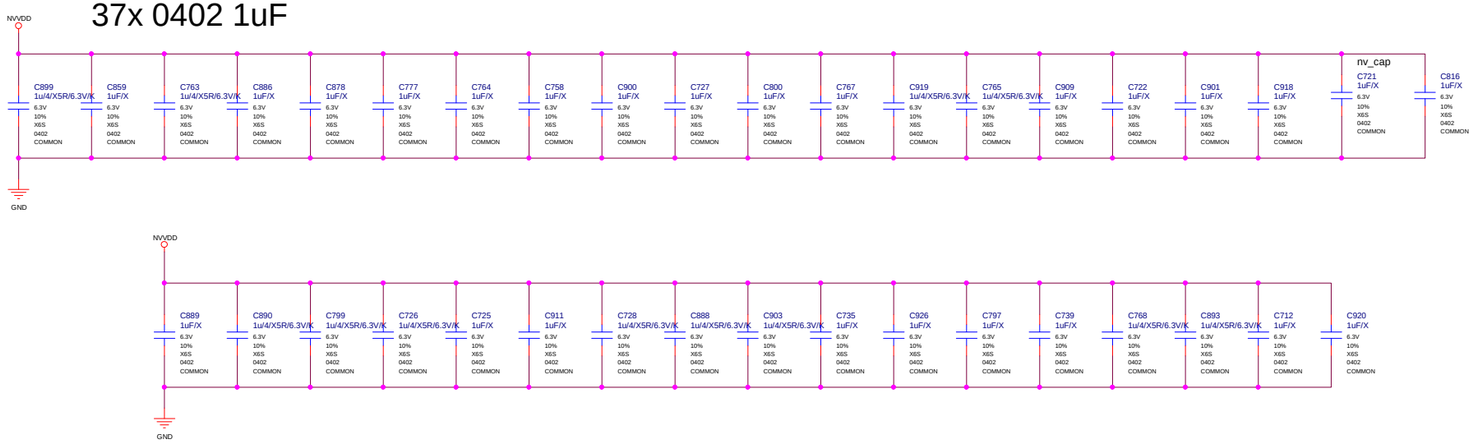




Co-Lay



37x 0402 1uF



UNDER GPU

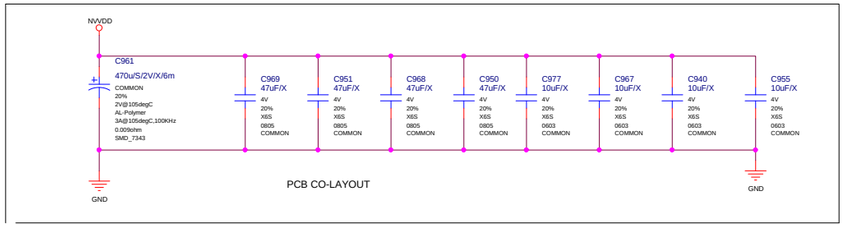
https://t.me/schematicslaptop

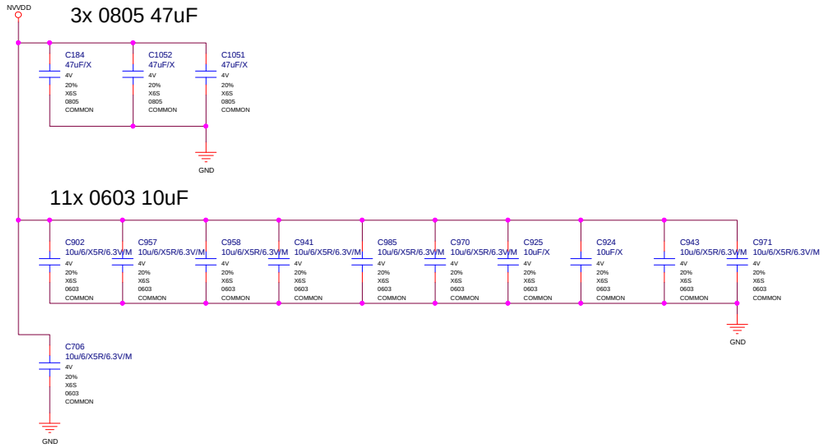
ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	GPU DECOUPLING NVVDD

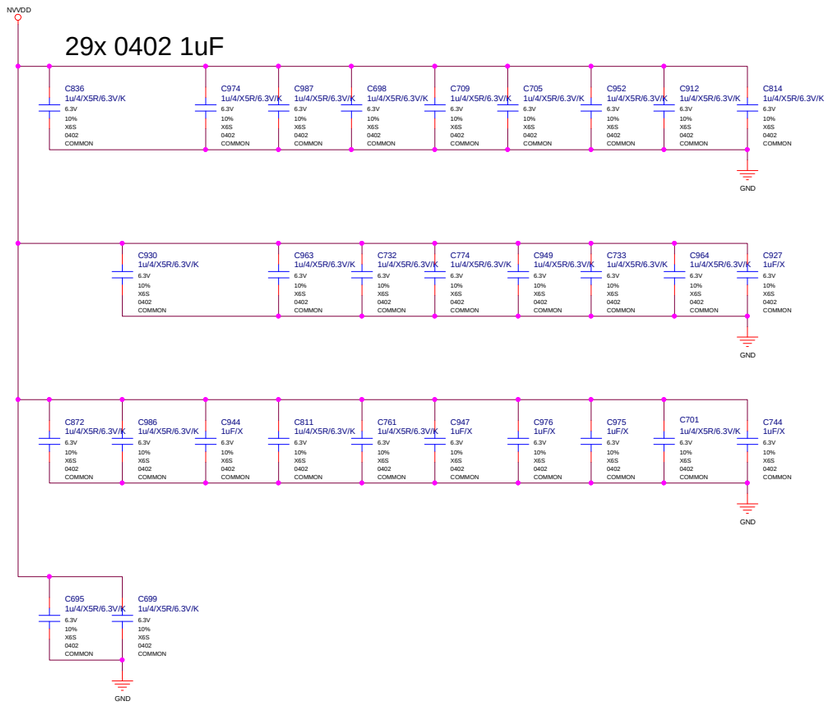
ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

GIGABYTE		
Title: PCIE		
Size: Custom	Document Number: GV-N3060VISION OC-12GD	Rev: 1.01
Date: Thursday, January 14, 2021	Sheet 19 of 54	

Page20: GPU DECOUPLING NVVDD 2







UNDER GPU

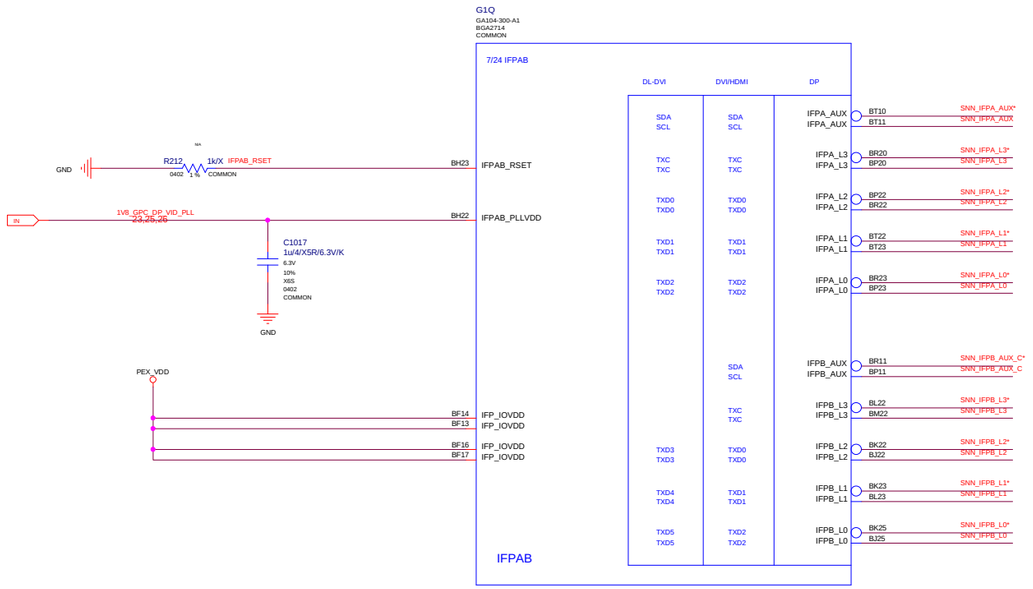
https://t.me/schematicslaptop

ASSEMBLY | <ASSEMBLY_DESCRIPTION>
PAGE DETAIL | GPU DECOUPLING NVVDD 2

ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

GIGABYTE		
Title: PCIE		
Size: Custom	Document Number: GV-N3060VISION OC-12GD	Rev: 1.01
Date: Thursday, January 14, 2021	Sheet 20 of 54	

Page21: IFPAB DVI-D-DL



ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

ASSEMBLY <ASSEMBLY_DESCRIPTION>
PAGE DETAIL IFPAB DVI-D-DL

GIGABYTE

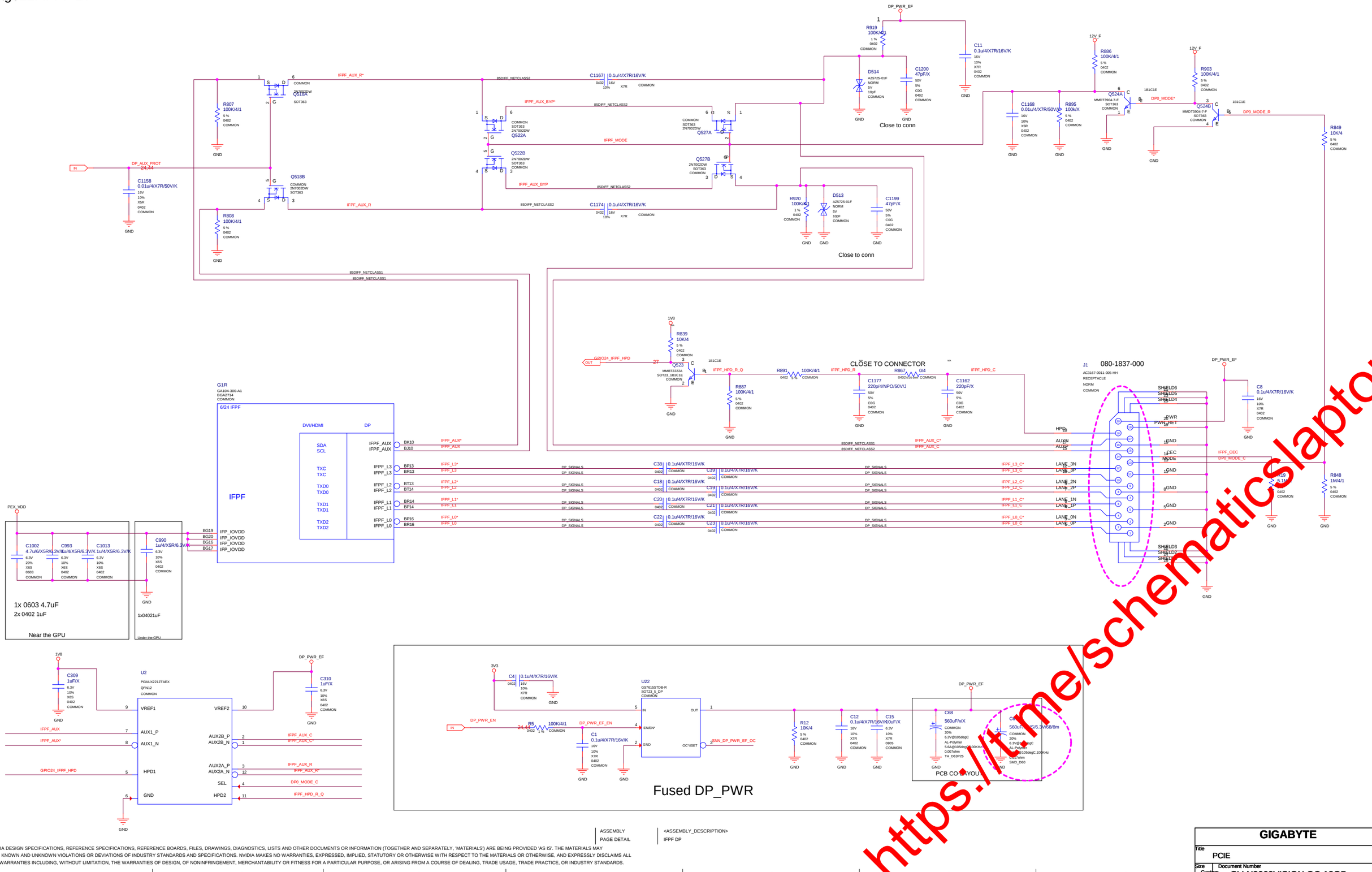
Title: PCIE

Size: Custom | Document Number: GV-N3060VISION OC-12GD | Rev: 1.01

Date: Thursday, January 14, 2021 | Sheet 21 of 54

https://t.me/schematicslaptop

Page22: IFPF DP



ASSEMBLY <ASSEMBLY_DESCRIPTION>
PAGE DETAIL IFPF DP

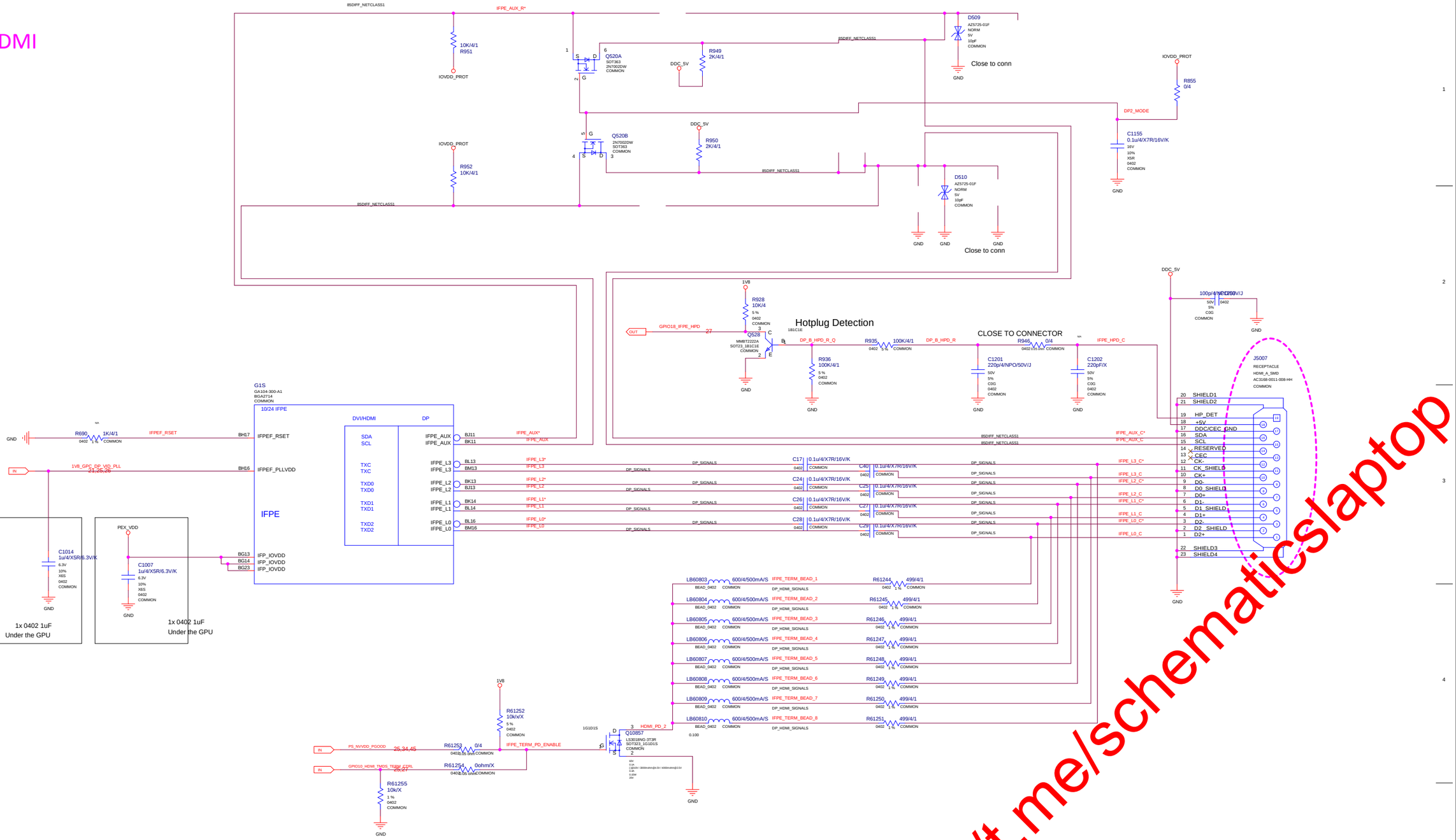
ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

https://t.me/schematicslaptop

GIGABYTE			
Title: PCIE			
Size: Custom	Document Number: GV-N3060VISION OC-12GD		Rev: 1.01
Date: Thursday, January 14, 2021	Sheet 22 of 54		

Page23: IFPE DP

Change to HDMI



https://t.me/schematicslaptop

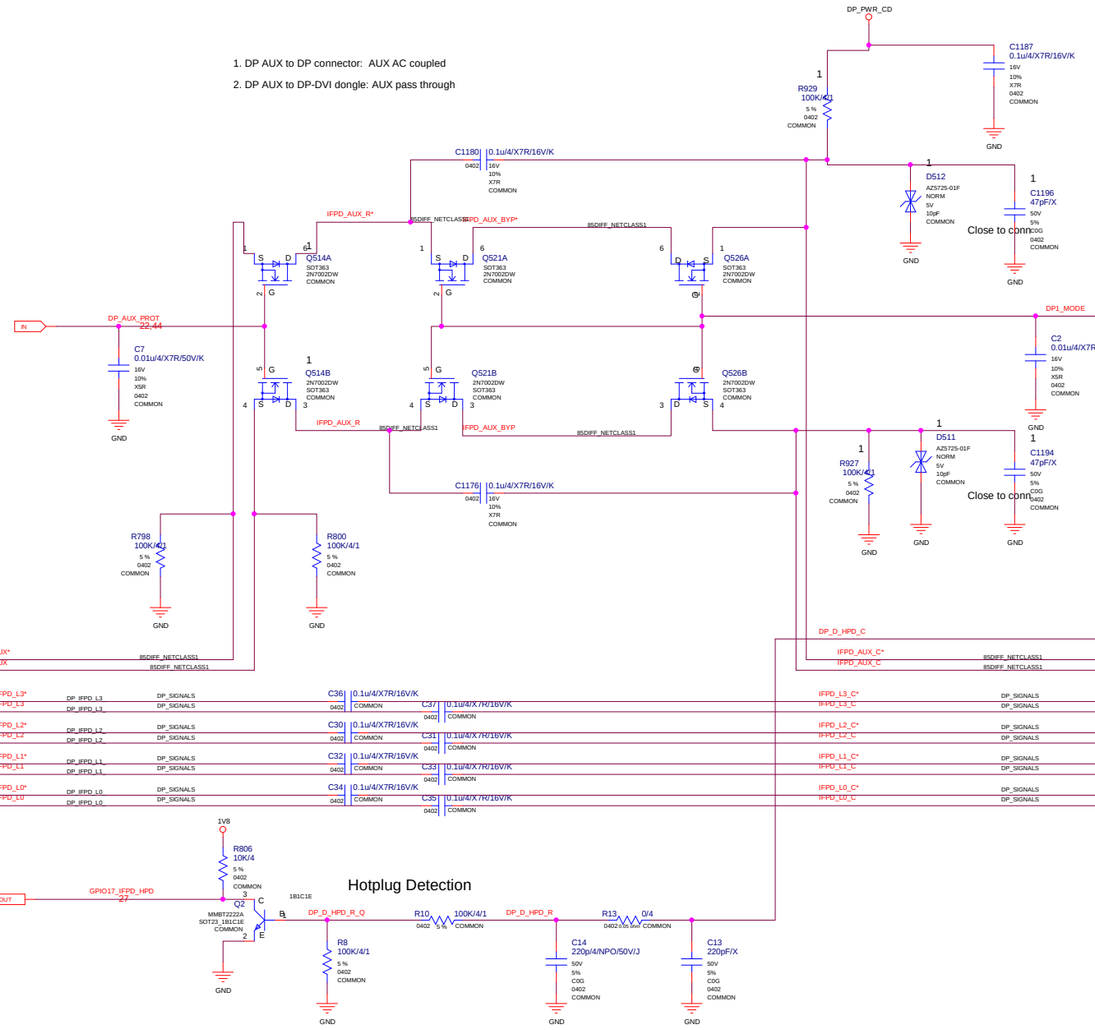
ASSEMBLY <ASSEMBLY_DESCRIPTION>
PAGE DETAIL IFPE DP

ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

GIGABYTE		
Title: PCIE		
Size: Custom	Document Number: GV-N3060VISION OC-12GD	Rev: 1.01
Date: Thursday, January 14, 2021	Sheet 23 of 54	

Page24: IFPD DP

1. DP AUX to DP connector: AUX AC coupled
2. DP AUX to DP-DVI dongle: AUX pass through



ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	IFPD DP

GIGABYTE			
Title: PCIE			
Size: Custom	Document Number: GV-N3060VISION OC-12GD		Rev: 1.01
Date: Thursday, January 14, 2021	Sheet 24 of 54		

https://t.me/schematicslaptop

Page25: IFPC HDMI/DP

Del Co-Lay DP

DP_AUX_PROT
22,24,44
IFPC_AUX*
IFPC_AUX
85DIFF_NETCLASS2
R826 10K/4/1
R824 10K/4/1
Q511A PJT7828 SOT363 COMMON
Q511B PJT7828 SOT363 COMMON
IFPC_MODE_Q*
D508 AZ5725-01F NORM 5V 10pF COMMON
D507 AZ5725-01F NORM 5V 10pF COMMON
DP_PWR_CD
R862 2K/4/1
R861 2K/4/1
DDC_5V
C9 0.1u/4/X7R/16V/K
R828 0/4
Close to conn
DP-SKU ONLY
12V_F
C1186 100p/4/NPO/50V/J
J5 RECEPTACLE HDMI_A_SMD AC3168-0011-00B-HH COMMON
080-1838-000
SHIELD1
SHIELD2
HP_DET
+5V
DDC/CEC_GND
SDA
SCL
RESERVED
CEC
CK-
CK_SHIELD
CK+
D0-
D0_SHIELD
D0+
D1-
D1_SHIELD
D1+
D2-
D2_SHIELD
D2+
SHIELD3
SHIELD4
HDMI_C_HPD_C
I2CW_SDA_R_Q
I2CW_SCL_R_Q
SNN_HDMI_RSVD1
SNN_CEC_C

IFPC_TXC*
IFPC_TXC
DP_HDMI_SIGNALS
C59 0.1u/4/X7R/16V/K
C60 0.1u/4/X7R/16V/K
IFPC_TXC_C1*
IFPC_TXC_C1
PCB CO-LAYOUT

IFPC_TXD0*
IFPC_TXD0
C58 0.1u/4/X7R/16V/K
C56 0.1u/4/X7R/16V/K
IFPC_TXD0_C1*
IFPC_TXD0_C1

IFPC_TXD1*
IFPC_TXD1
C57 0.1u/4/X7R/16V/K
C55 0.1u/4/X7R/16V/K
IFPC_TXD1_C1*
IFPC_TXD1_C1

IFPC_TXD2*
IFPC_TXD2
C53 0.1u/4/X7R/16V/K
C54 0.1u/4/X7R/16V/K
IFPC_TXD2_C1*
IFPC_TXD2_C1

Hotplug Detection
1V8
R896 10K/4
GPIO27_IFPC_HPD
Q530 MMBT2222A SOT23_1B1C1E COMMON
HDMI_C_HPD_R_Q
R922 100K/4/1
HDMI_C_HPD_R
R889 0/4
R940 100K/4/1
C1188 220p/4/NPO/50V/J
C1172 220pF/X

PS_NVVDD_PGOOD
23,34,45
R14 0/4
R16 10k/X
GPIO10_HDMI_TMDS_TERM_CTRL
23,27
R20 0ohm/X
R21 0ohm/X
HDMI_PD_1
HDMI_PD_1_Q
Q3 LS3018NG-3T3R SOT323_1G1D1S COMMON

LB7 600/4/500mA/S IFPC_TERM_BEAD_1
LB6 600/4/500mA/S IFPC_TERM_BEAD_2
LB5 600/4/500mA/S IFPC_TERM_BEAD_3
LB4 600/4/500mA/S IFPC_TERM_BEAD_4
LB3 600/4/500mA/S IFPC_TERM_BEAD_5
LB2 600/4/500mA/S IFPC_TERM_BEAD_6
LB1 600/4/500mA/S IFPC_TERM_BEAD_7
LB8 600/4/500mA/S IFPC_TERM_BEAD_8
R32 499/4/1
R31 499/4/1
R30 499/4/1
R29 499/4/1
R25 499/4/1
R28 499/4/1
R27 499/4/1
R26 499/4/1

G1U GA104-300-A1 BGA2714 COMMON
8/24 IFPC
IFPCD_RSET
IFPCD_PLLVDD
IFPC_IOVDD
DVI/HDMI
DP
SDA
SCL
TXC
TXD0
TXD1
TXD2
IFPC_AUX
IFPC_L3
IFPC_L2
IFPC_L1
IFPC_L0
R214 1K/4/1
1V8_GPC_DP_VID_PLL
23,24,26
C1023 1u/4/X5R/6.3V/K
C1003 4.7u/6/X5R/6.3V/K
C995 1u/4/X5R/6.3V/K
C992 1u/4/X5R/6.3V/K
C1015 1u/4/X5R/6.3V/K
1x 0603 4.7uF
2x 0402 1uF
C, D share
Near the GPU
1x 0402 1uF
Under the GPU

DP FOR QUADRO
DP_PWR_CD

ASSEMBLY | <ASSEMBLY_DESCRIPTION>
PAGE DETAIL | IFPC HDMI/DP

ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

https://t.me/schematicslaptop

GIGABYTE

Title: PCIE

Size: Custom | Document Number: GV-N3060VISION OC-12GD | Rev: 1.01

Date: Thursday, January 14, 2021 | Sheet 25 of 54

Page26: MISC: ROM, XTAL, Straps

STRAP2	STRAP1	STRAP0	RAMCFG[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

RAMCFG[4:0]	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	SMARTFAN[2:0],FS_OVERT	1:ENABLE 0:DISABLE
H	H	H	4'd7	FS_OVERT ENABLE
L	M	L	4'd9	FS_OVERT DISABLE

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

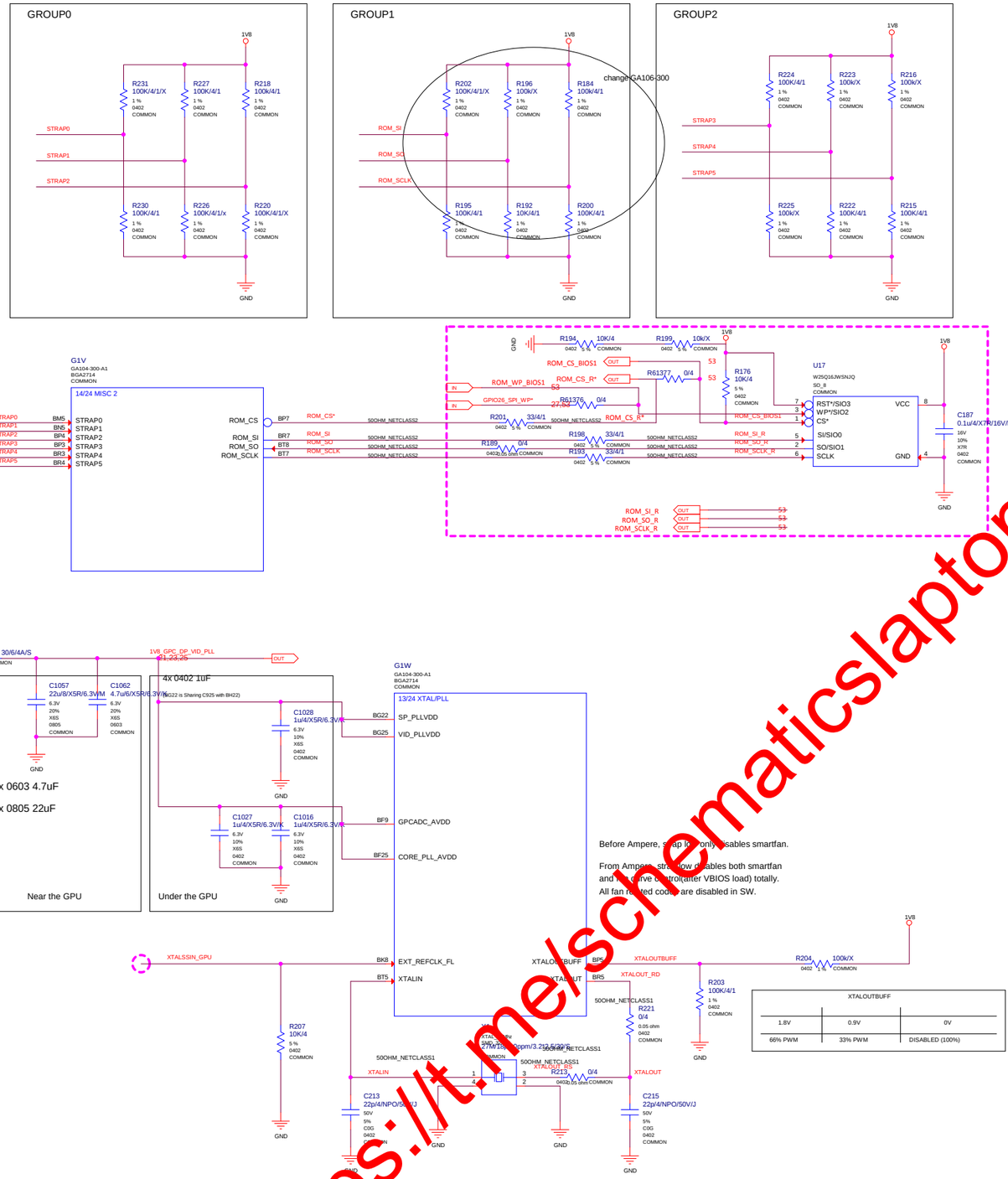
H=High :Tied to 1.8V
M=Middle:Tied to 0.9V
L=Low :Tied to 0V

1:SMB_ALT_ADDR ENABLE
0:SMB_ALT_ADDR DISABLE

1:DEVID_SEL REBRAND
0:DEVID_SEL ORIGNAL

1:PCIE_CFG LOW POWER
0:PCIE_CFG HIGH POWER

1:VGA_DEVICE ENABLE
0:VGA_DEVICE DISABLE



ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

ASSEMBLY
PAGE DETAIL

<ASSEMBLY_DESCRIPTION>
MISC: ROM, XTAL, STRAPS

GIGABYTE

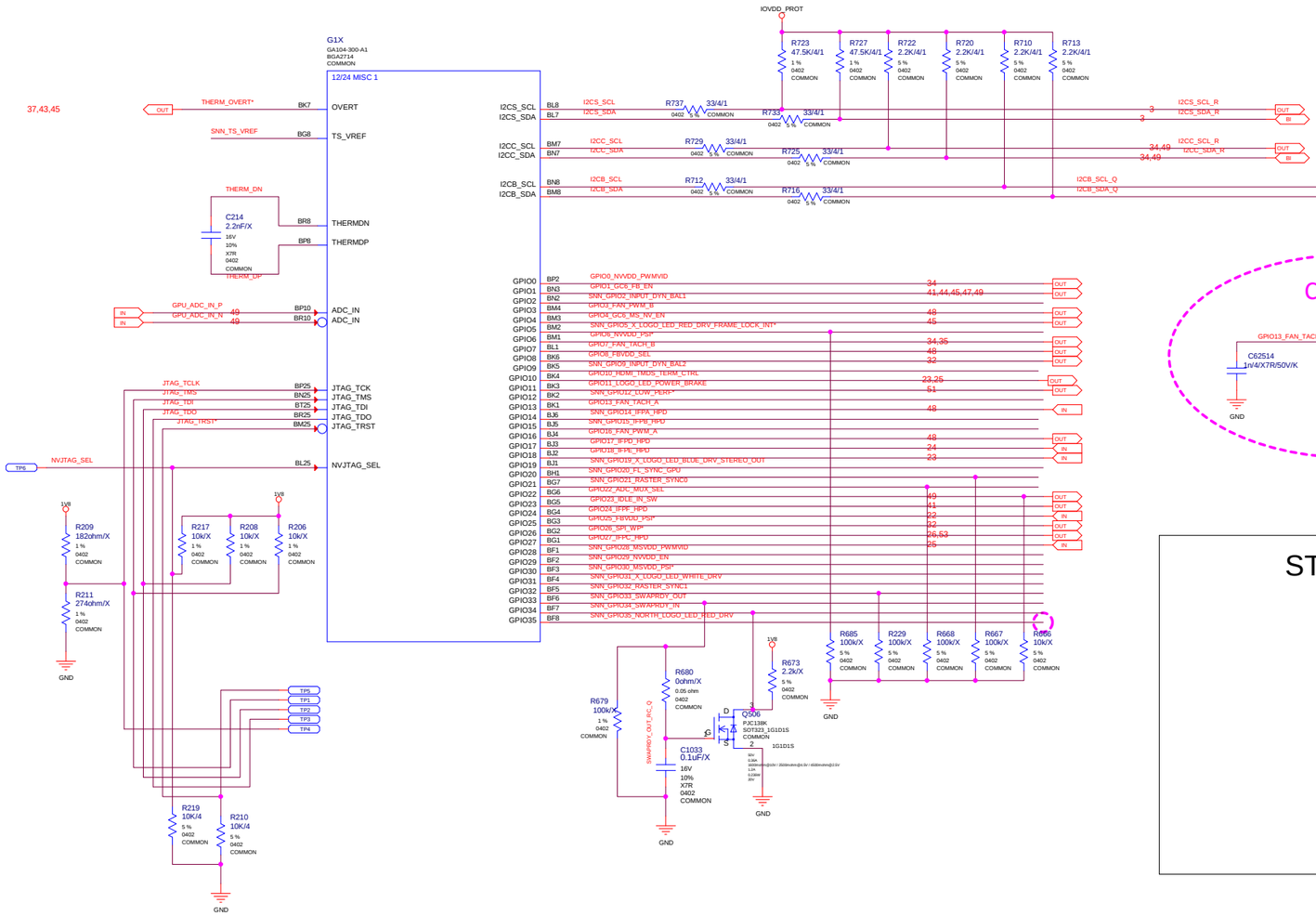
Title: PCIE

Size: Custom | Document Number: GV-N3060VISION OC-12GD | Rev: 1.01

Date: Thursday, January 14, 2021 | Sheet 26 of 54

https://t.me/schematicslaptop

Page27: MISC2: JTAG, GPIO, ADC, I2C, OVERT



https://t.me/schematicslaptop

ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	MISC2: JTAG,GPIO,ADC.12C,OVERT

GIGABYTE			
Title: PCIE			
Size: Custom	Document Number: GV-N3060VISION OC-12GD		Rev: 1.01
Date: Thursday, January 14, 2021	Sheet 27 of 54		

Page28: Blank

ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

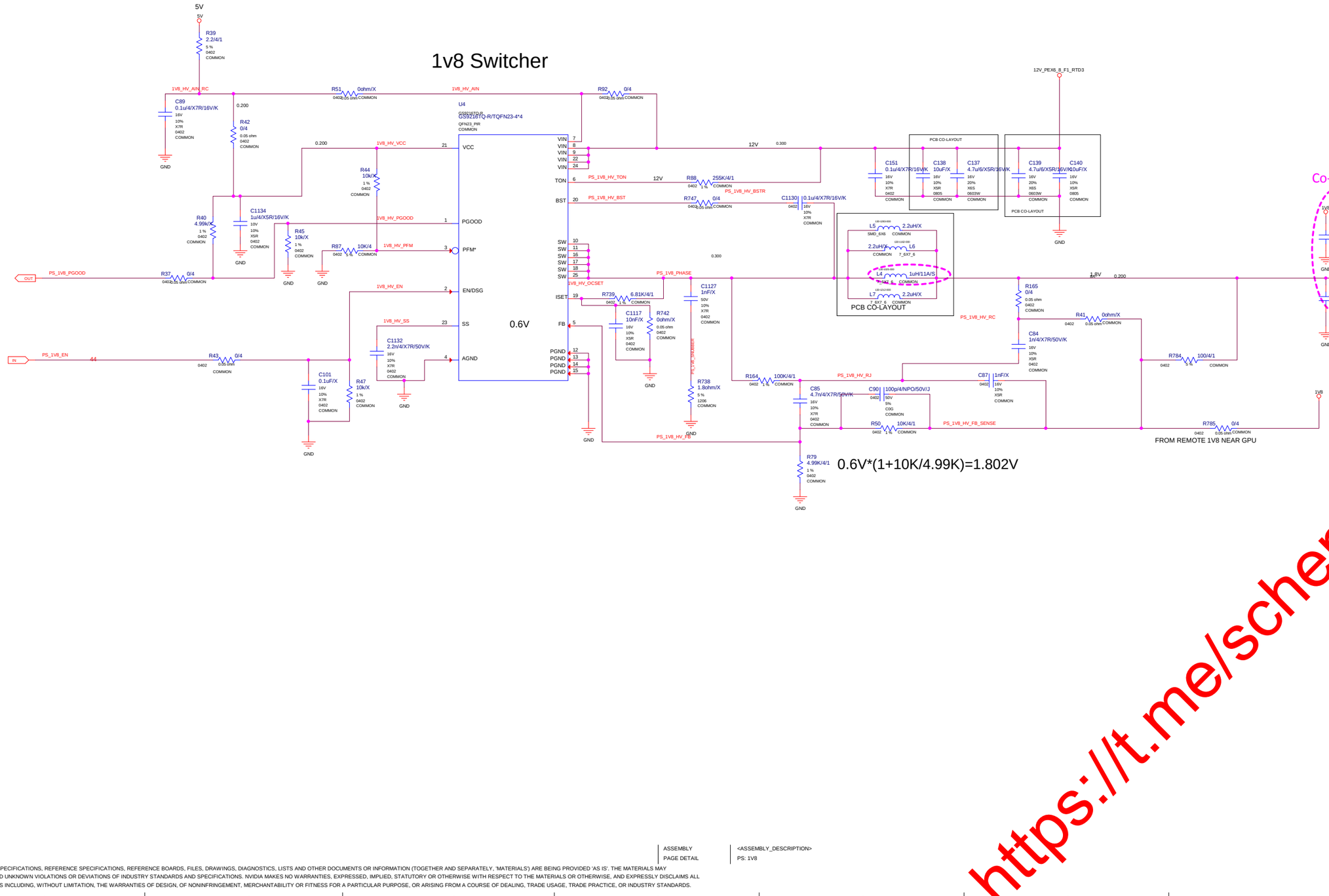
ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	Blank

https://t.me/schematicslaptop

GIGABYTE		
Title: PCIE		
Size: Custom	Document Number: GV-N3060VISION OC-12GD	Rev: 1.01
Date: Thursday, January 14, 2021	Sheet 28 of 54	

Page29: PS: 1V8

1v8 Switcher



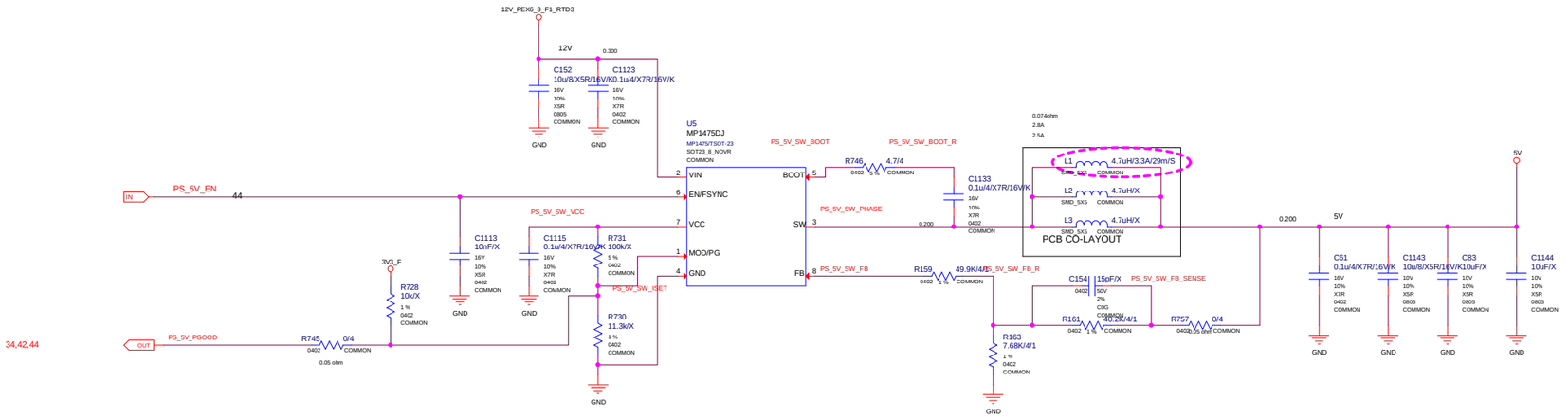
https://t.me/schematicslaptop

ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PS: 1V8

ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

GIGABYTE			
Title: PCIE			
Size: Custom	Document Number: GV-N3060VISION OC-12GD		Rev: 1.01
Date: Thursday, January 14, 2021	Sheet 29 of 54		

Page30: PS: 5V



0.8V*(1+40.2K/7.68K)=4.9875V

ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

ASSEMBLY <ASSEMBLY_DESCRIPTION>
PAGE DETAIL PS: 5V

GIGABYTE

Title: PCIE

Size: Custom | Document Number: GV-N3060VISION OC-12GD | Rev: 1.01

Date: Thursday, January 14, 2021 | Sheet 30 of 54

https://t.me/schematicslaptop

www.teknisi-indonesia.com

PEX Switcher

EN: 3.3V*(10K/27.4K)=1.2V

ENABLE DISCHARGE OF PEX_VDD

0.6V*(1+10K/16.9K)=0.9550V

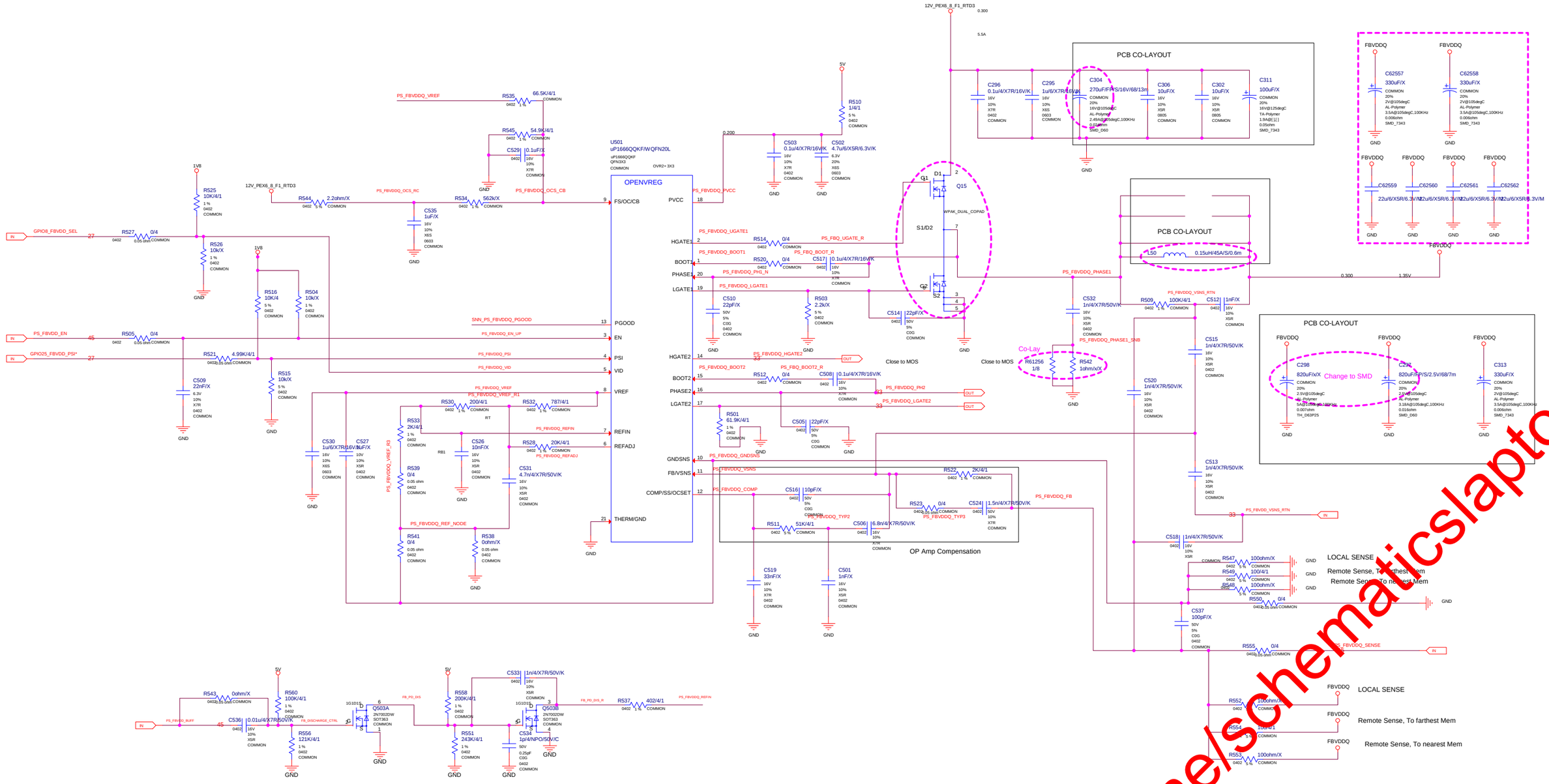
ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

ASSEMBLY <ASSEMBLY_DESCRIPTION>
PAGE DETAIL PS: PEXVDD

Title	PCIE
Size	Custom
Document Number	GV-N3060VISION OC-12GD
Rev	1.01
Date:	Thursday, January 14, 2021
Sheet	31 of 54

https://t.me/schematicslaptop

Page32: PS: FBVDDQ



ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

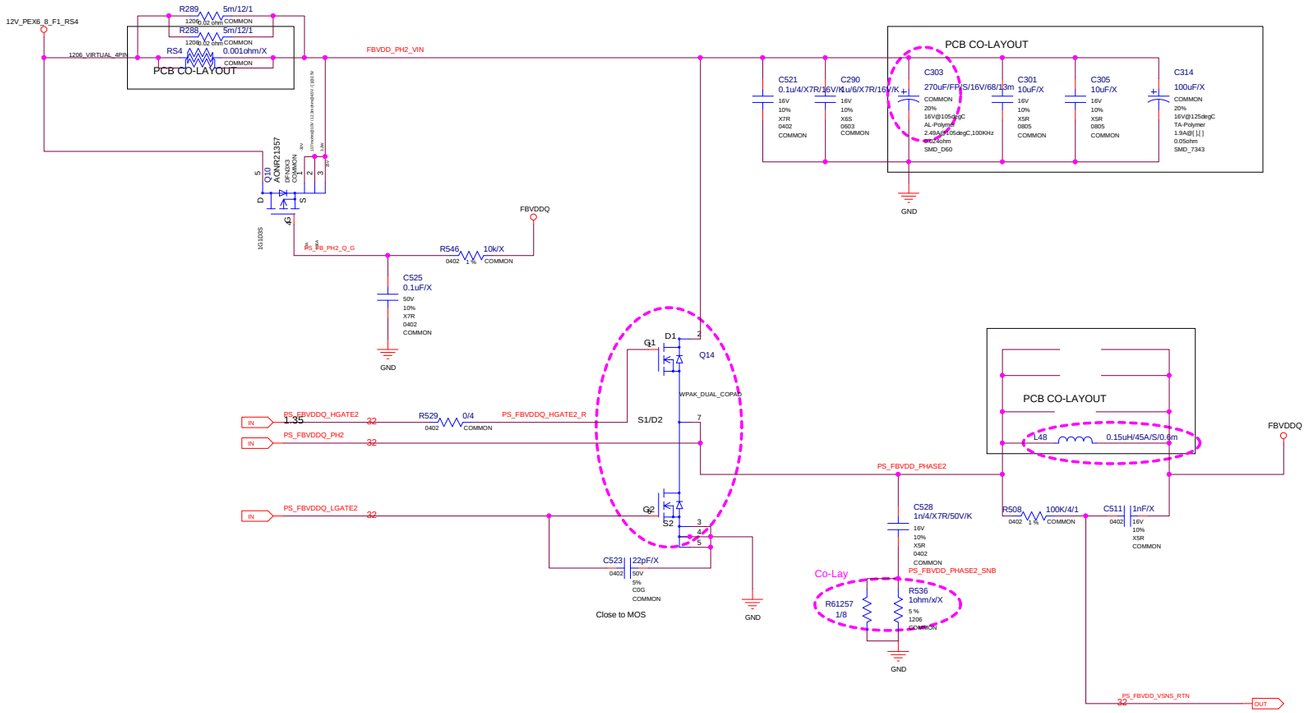
ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PS: FBVDDQ

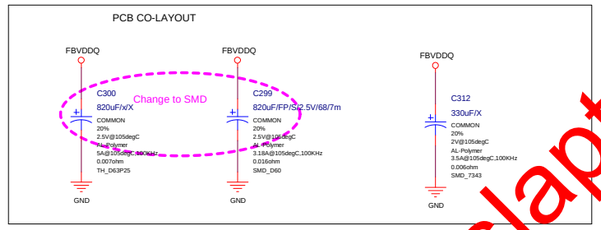
Title	PCIE
Size	Custom
Document Number	GV-N3060VISION OC-12GD
Rev	1.01
Date:	Thursday, January 14, 2021
Sheet	32 of 54

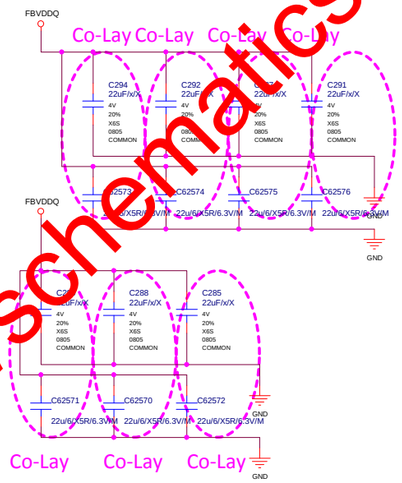
https://t.me/schematicslaptop

Page33: PS: FBVDDQ PH2

FBVDD PH2 INPUT ANTI-BACKDRIVE







https://t.me/schematicslaptop

ASSEMBLY <ASSEMBLY_DESCRIPTION>
PAGE DETAIL PS: FBVDDQ PH2

ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

GIGABYTE			
Title: PCIE			
Size: Custom	Document Number: GV-N3060VISION OC-12GD		Rev: 1.01
Date: Thursday, January 14, 2021	Sheet 33 of 54		

Page34: PS: NVVDD CTR

ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

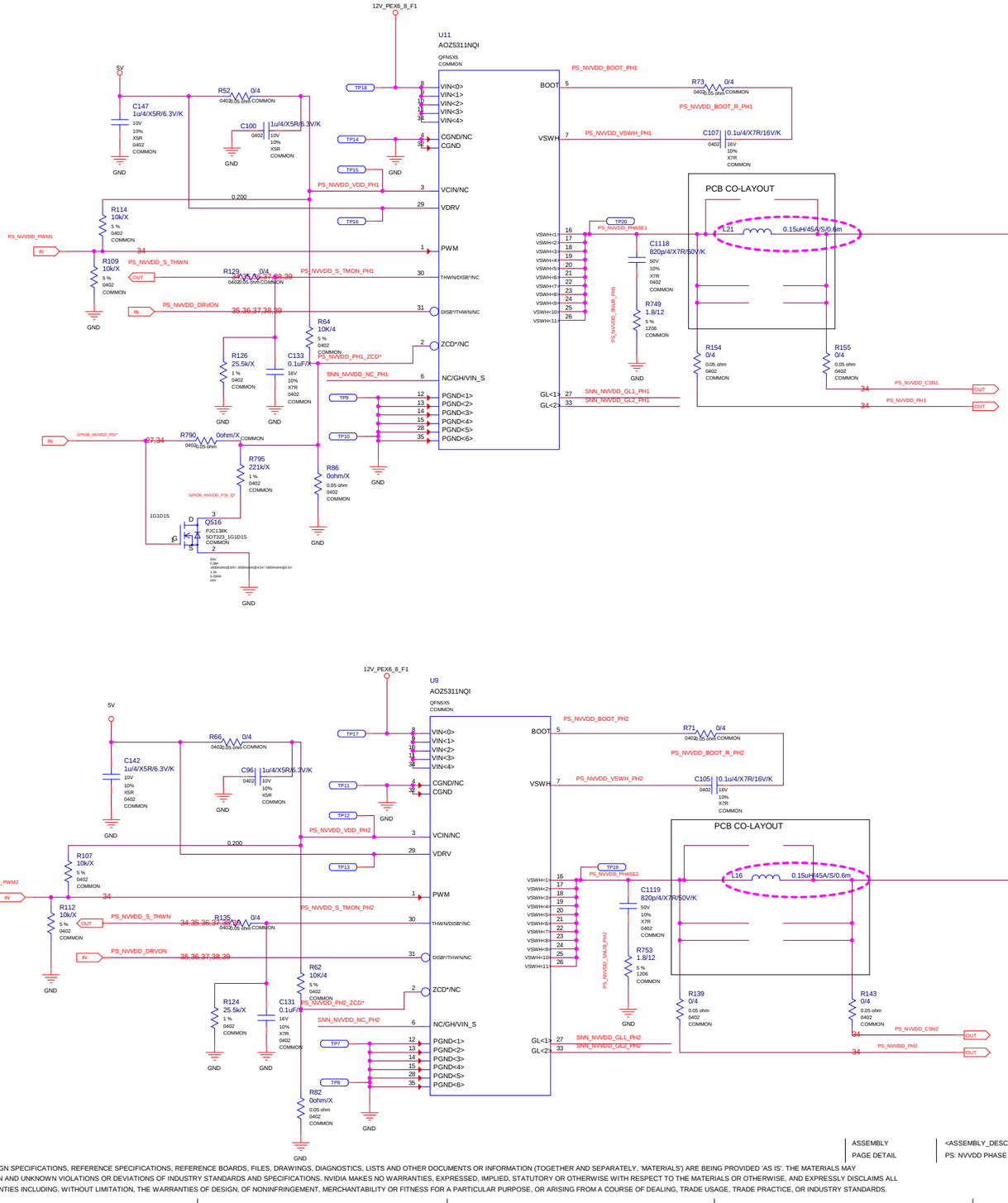
ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PS: NVVDD CNTL

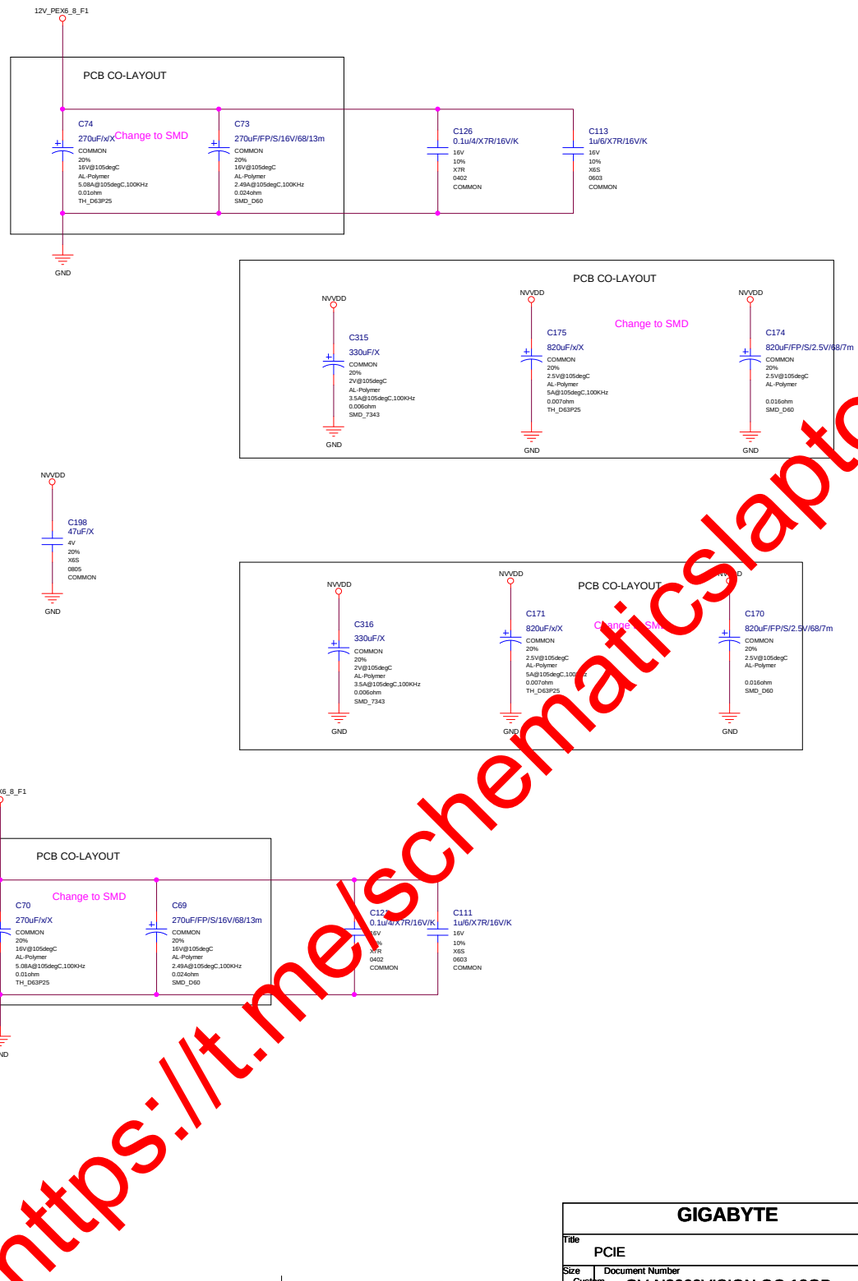
GIGABYTE

Title	PCIE	
Size: Custom	Document Number: GV-N3060VISION OC-12GD	Rev: 1.01
Date: Thursday, January 14, 2021	Sheet 34 of 54	

https://t.me/schematicslaptop

Page35: PS: NVVDD PH1 & 2





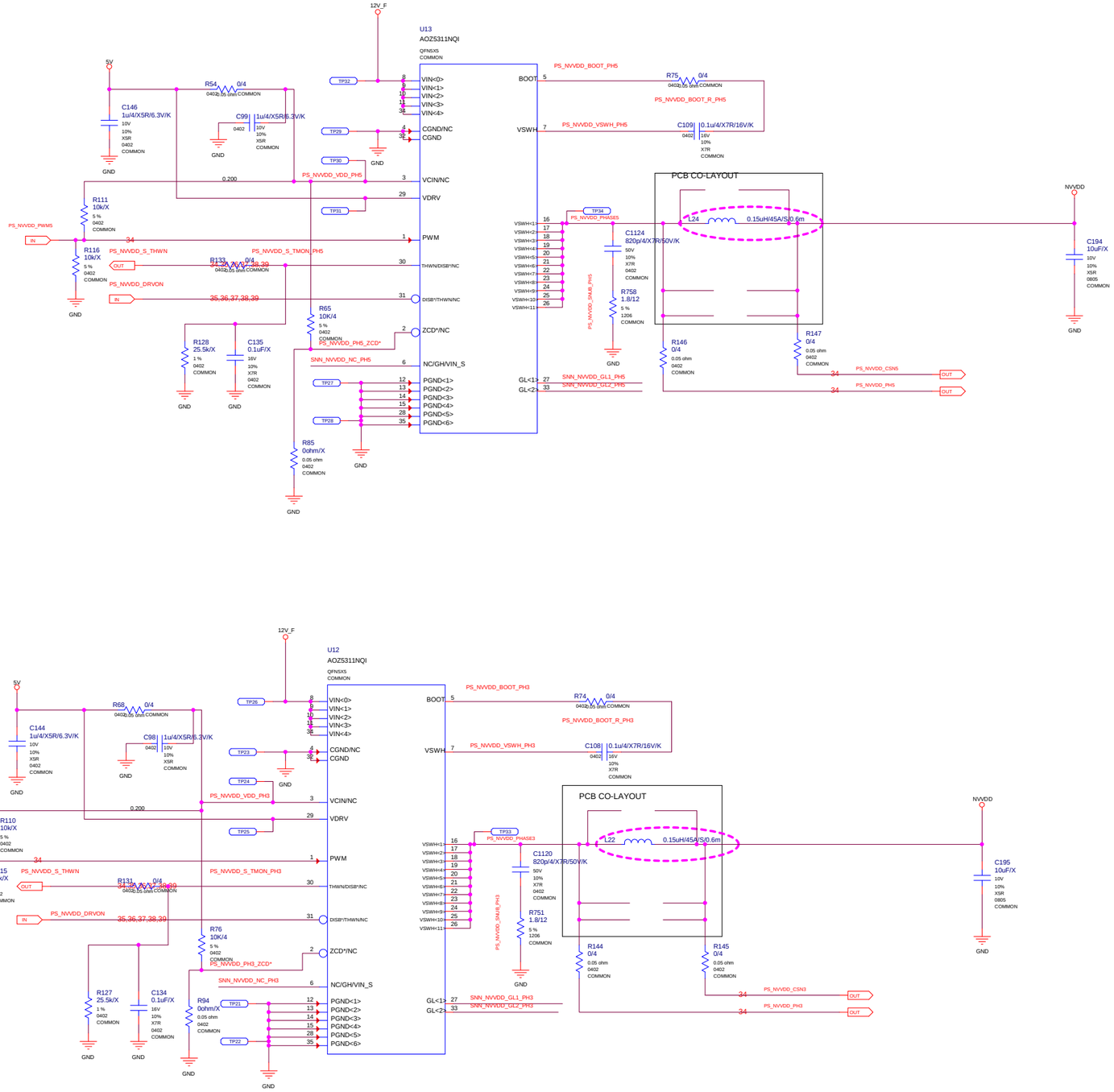
ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PS: NVVDD PHASE 1 & 2

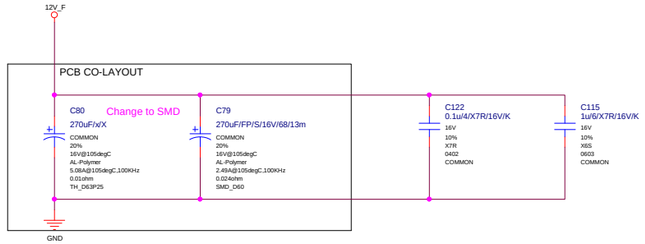
ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

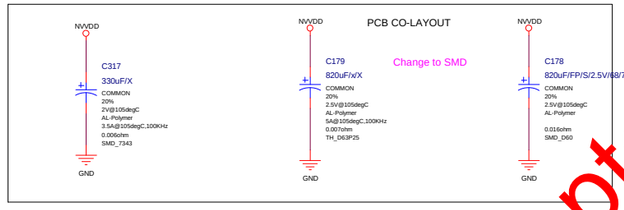
https://t.me/schematicslaptop

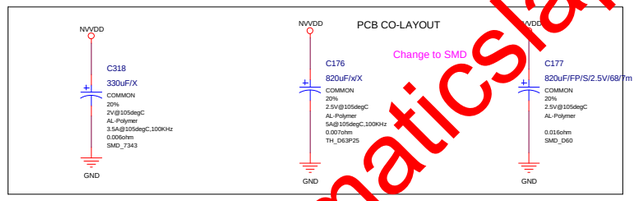
GIGABYTE		
Title: PCIE		
Size: Custom	Document Number: GV-N3060VISION OC-12GD	Rev: 1.01
Date: Thursday, January 14, 2021	Sheet 35 of 54	

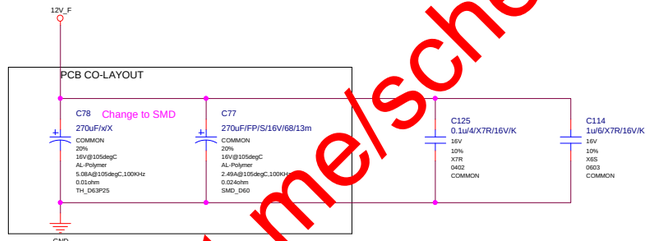
Page36: PS: NVVDD PH3 & 5











ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PS: NVVDD PHASE 3 & 5

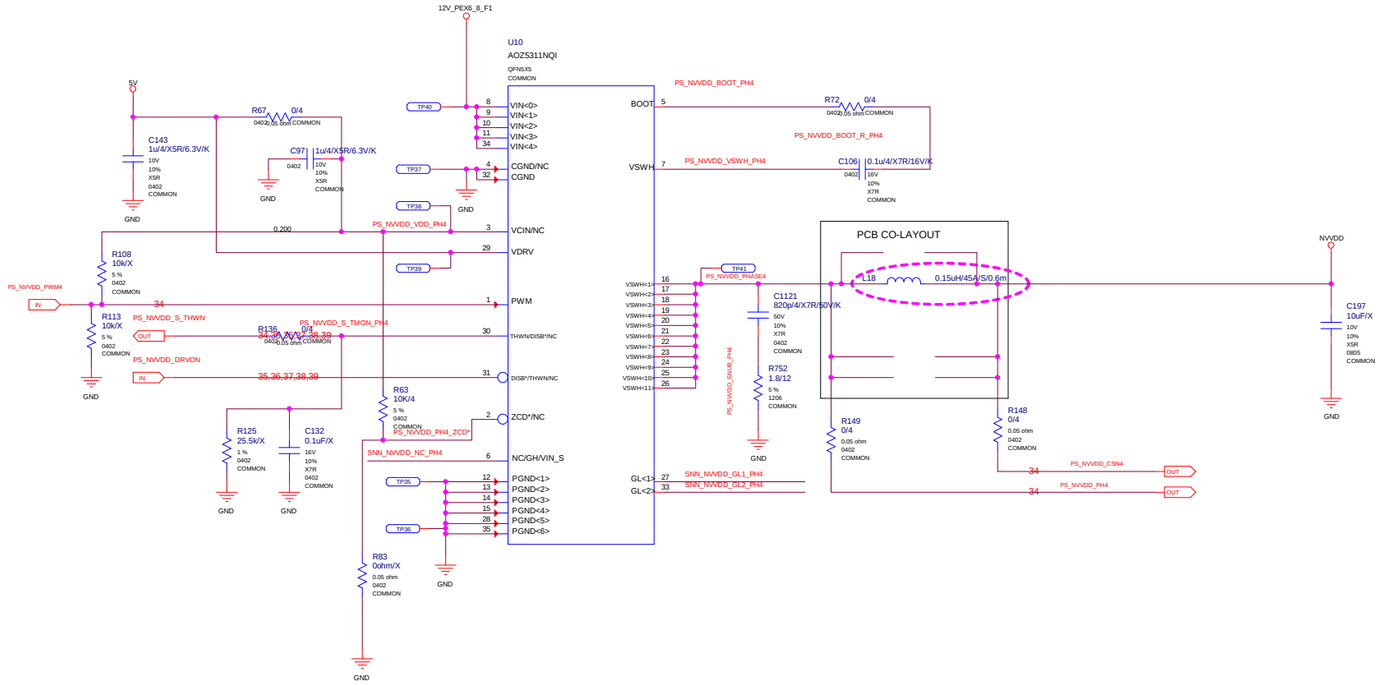
ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

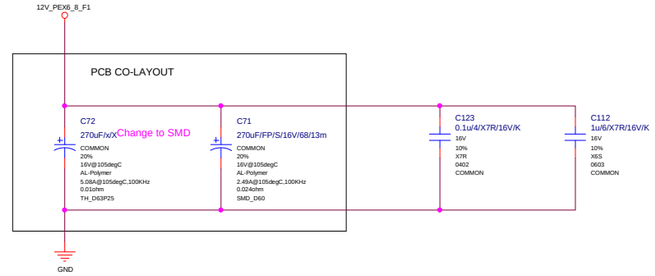
GIGABYTE

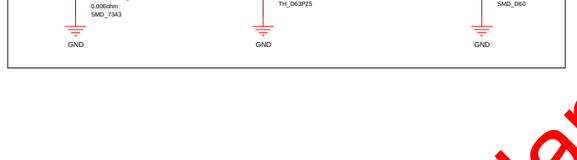
Title	PCIE	
Size: Custom	Document Number: GV-N3060VISION OC-12GD	Rev: 1.01
Date: Thursday, January 14, 2021	Sheet 36 of 54	

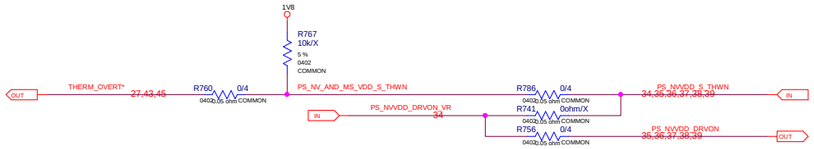
https://t.me/schematicslaptop

Page37: PS: NVVDD PH4









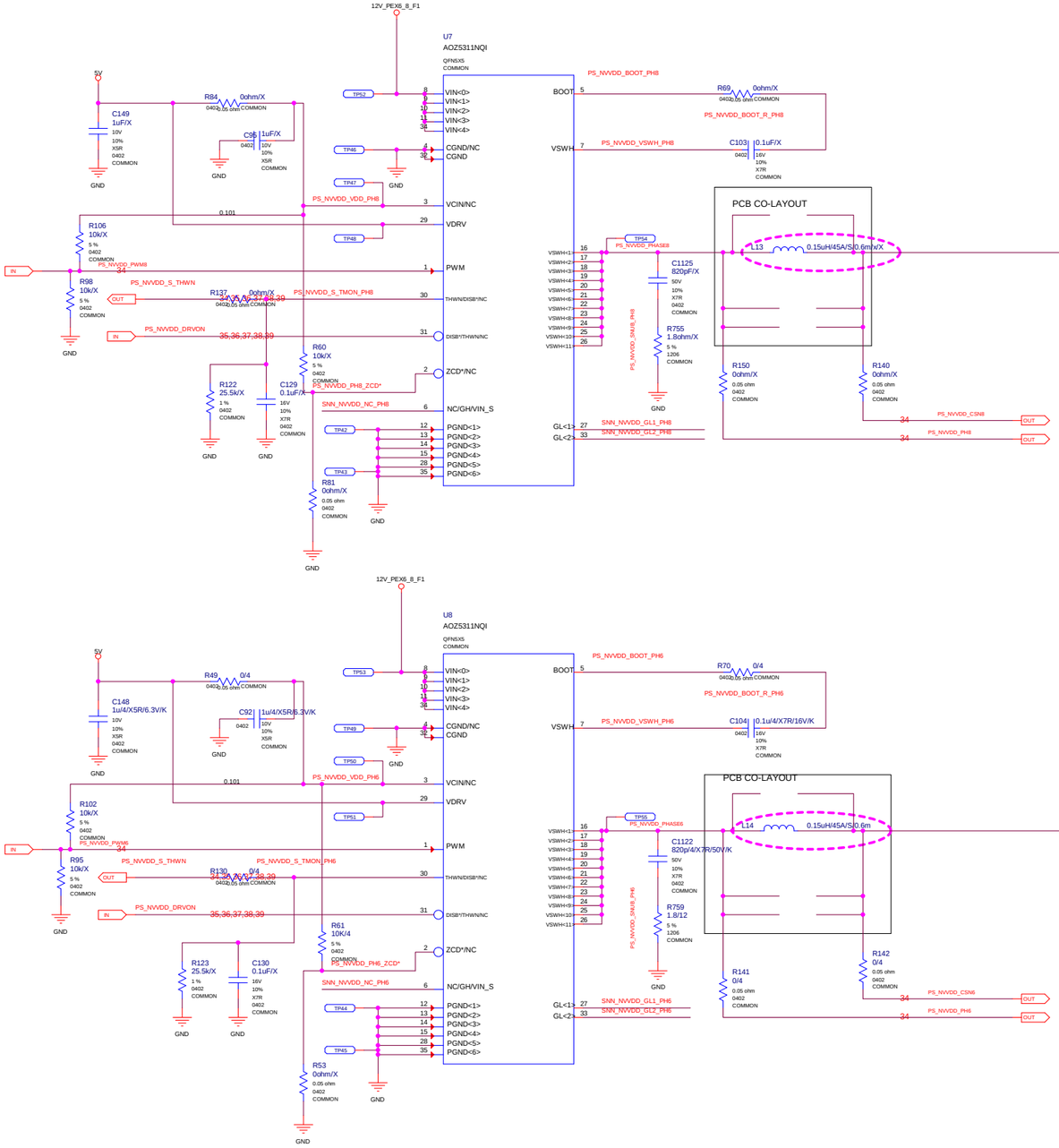
https://t.me/schematicslaptop

ASSEMBLY | <ASSEMBLY_DESCRIPTION>
PAGE DETAIL | PS: NVVDD PHASE 4

ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

GIGABYTE			
Title: PCIE			
Size: Custom	Document Number: GV-N3060VISION OC-12GD		Rev: 1.01
Date: Thursday, January 14, 2021	Sheet 37 of 54		

Page38: PS: NVVDD PH6 & 8



ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

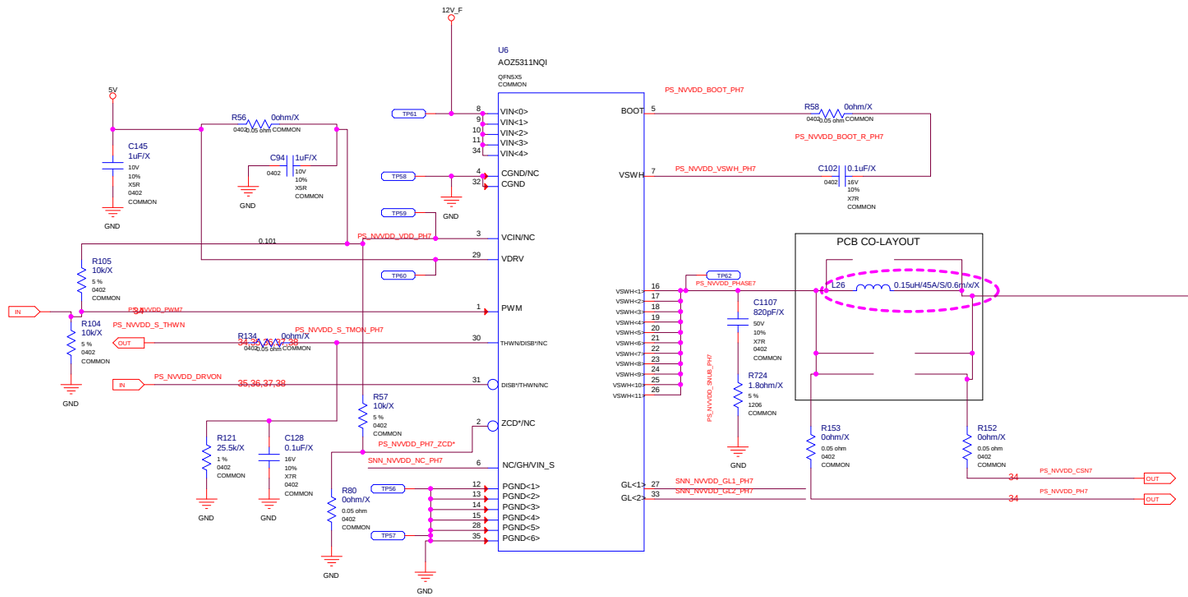
ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PS: NVVDD PHASE 6 & 8

GIGABYTE

Title: PCIE		
Size: Custom	Document Number: GV-N3060VISION OC-12GD	Rev: 1.01
Date: Thursday, January 14, 2021	Sheet 38 of 54	

https://t.me/schematicslaptop

Page39: PS: NVVDD PH7



ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PS: NVVDD PHASE 7

Title	PCIE
Size	Custom
Document Number	GV-N3060VISION OC-12GD
Rev	1.01
Date:	Thursday, January 14, 2021
Sheet	39 of 54

https://t.me/schematicslaptop

Page40: BLANK

www.teknisi-indonesia.com

https://t.me/schematicslaptop

ASSEMBLY <ASSEMBLY_DESCRIPTION>
PAGE DETAIL Blank

ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

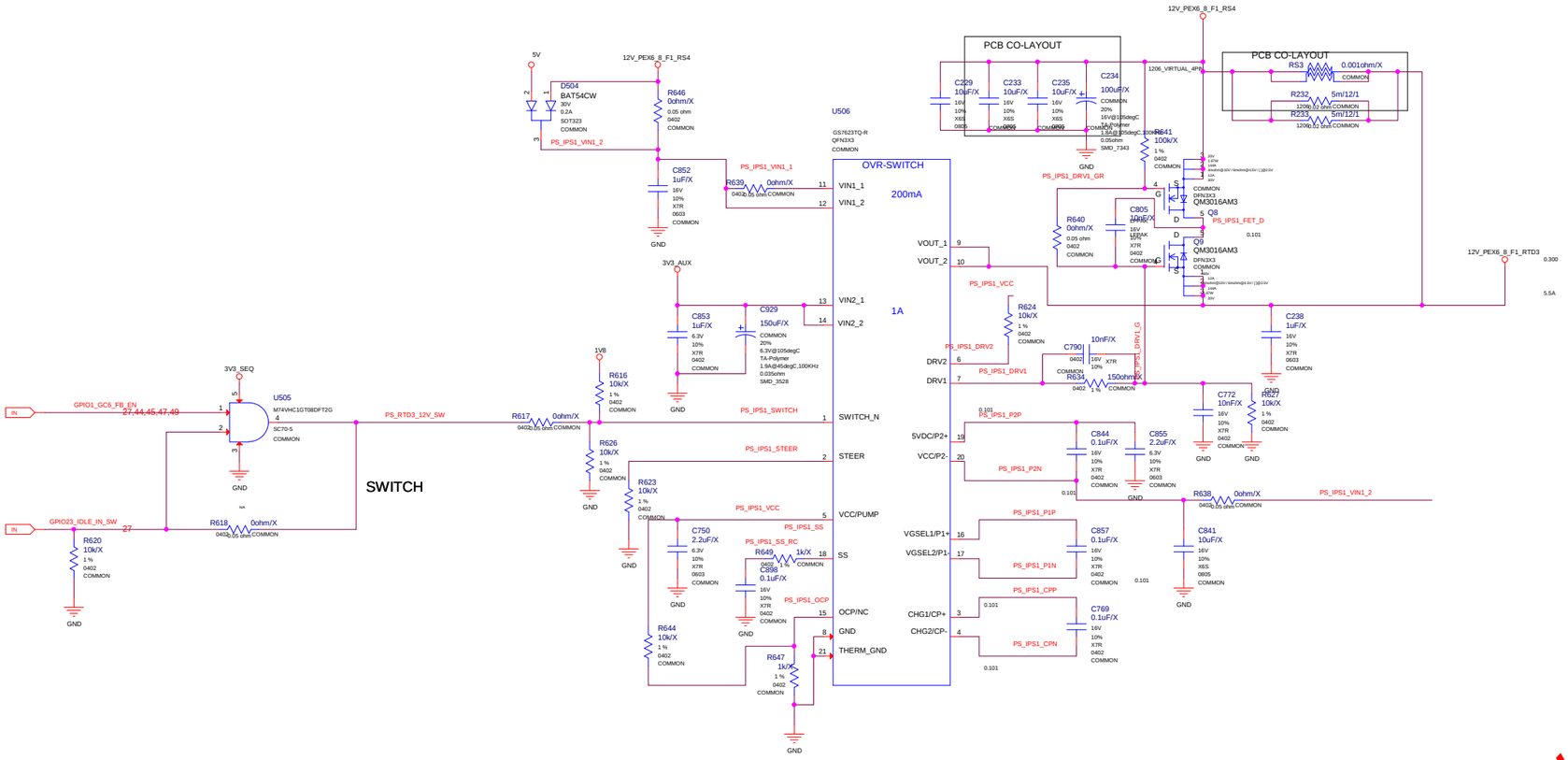
GIGABYTE		
Title: PCIE		
Size: Custom	Document Number: GV-N3060VISION OC-12GD	Rev: 1.01
Date: Thursday, January 14, 2021	Sheet 40 of 54	

Page41: INPUT SWITCH RTD3 (12V & 3V3_A SWITCHER)

AND GATE LOGIC

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

SWITCH	VOUT
0	VOUT = VIN1
1	VOUT = VIN2



ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

ASSEMBLY <ASSEMBLY_DESCRIPTION>
PAGE DETAIL INPUT SWITCH RTD3

GIGABYTE

Title: PCIE

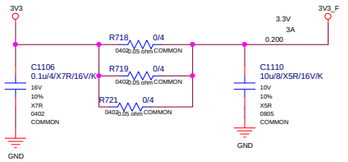
Size: Custom | Document Number: GV-N3060VISION OC-12GD | Rev: 1.01

Date: Thursday, January 14, 2021 | Sheet 41 of 54

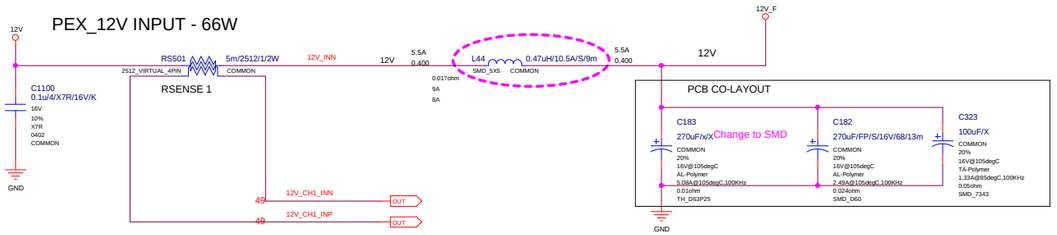
https://t.me/schematicslaptop

Page42: PEX_INPUT, 12V_EXT_INPUT, FILTERING

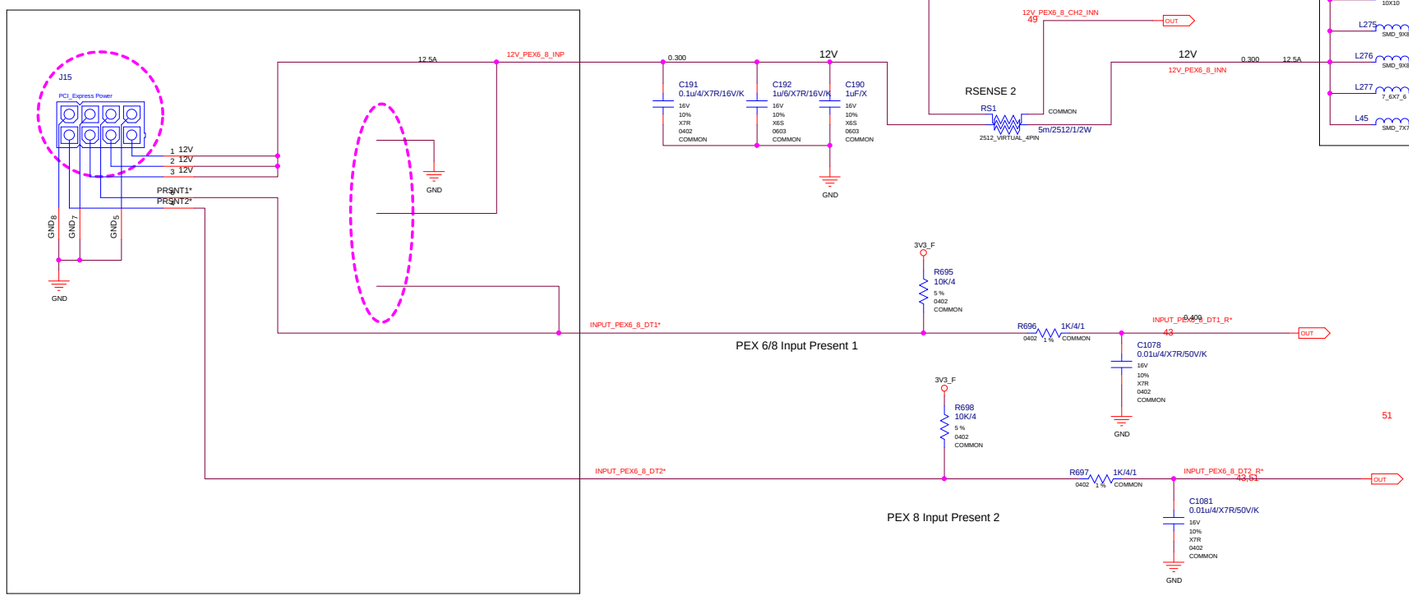
PEX 3V3 INPUT - 10W



PEX_12V INPUT - 66W



PEX8 INPUT 1 - 2x4 PCIE CON 150W



ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	INPUT POWER, FILTERING

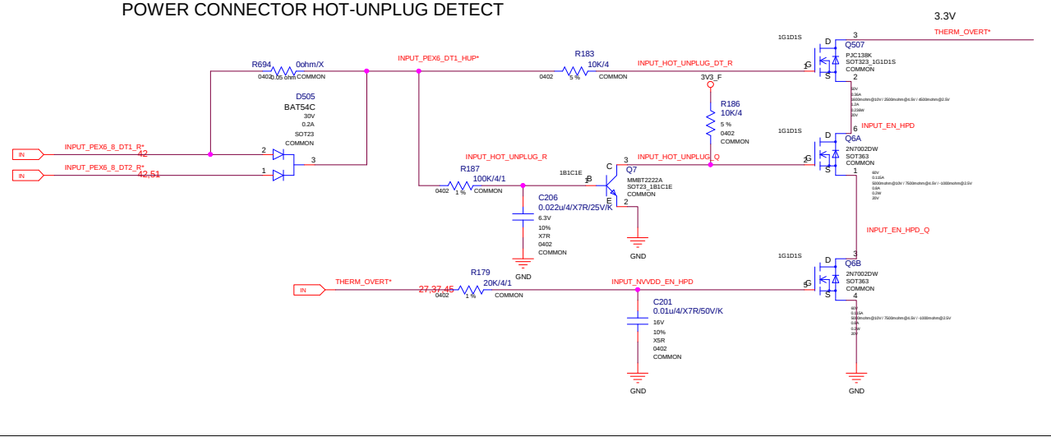
ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

GIGABYTE		
Title: PCIE		
Size: Custom	Document Number: GV-N3060VISION OC-12GD	Rev: 1.01
Date: Thursday, January 14, 2021	Sheet 42 of 54	

https://t.me/schematicslaptop

Page43: MISC: HOT UNPLUG

POWER CONNECTOR HOT-UNPLUG DETECT



ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

ASSEMBLY <ASSEMBLY_DESCRIPTION>
PAGE DETAIL MISC: Hot Unplug

GIGABYTE

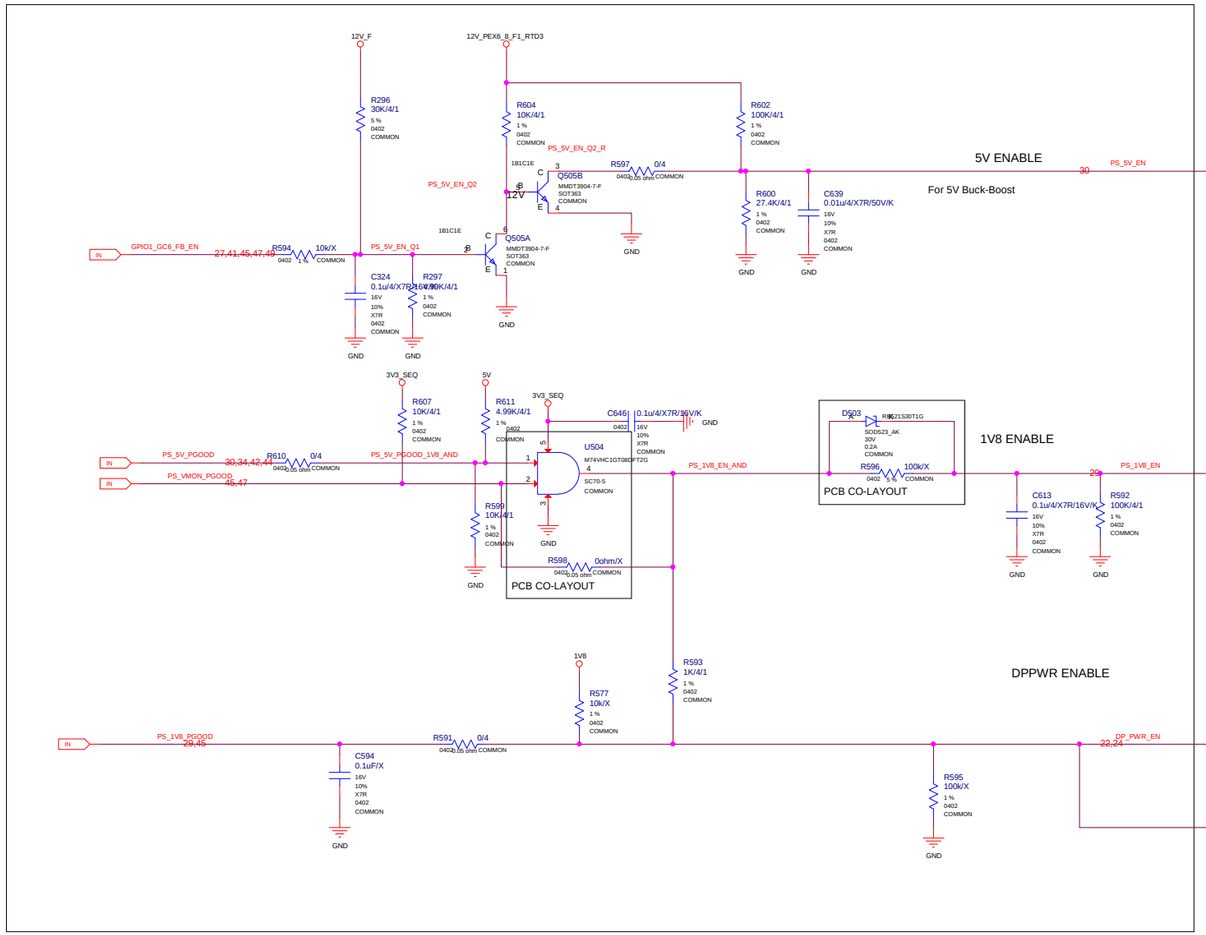
Title: PCIE

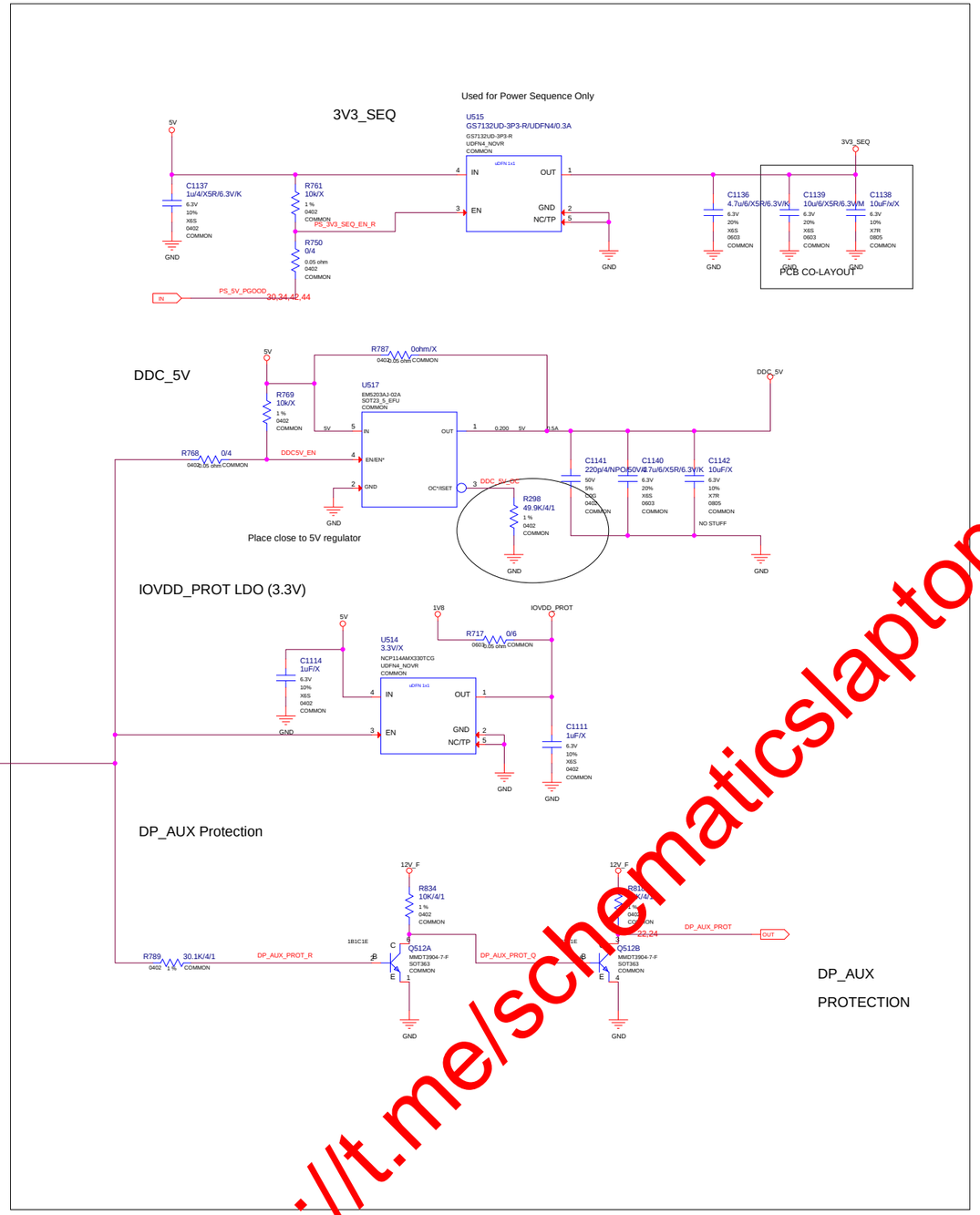
Size: Custom | Document Number: GV-N3060VISION OC-12GD | Rev: 1.01

Date: Thursday, January 14, 2021 | Sheet 43 of 54

https://t.me/schematicslaptop

Page44: SEQ: 3V3_SEQ, DDC_5V, DP_AUX_PROT





ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	SEQ: 3V3_SEQ,DDC_5V,DP_AUX_PROT

Title	PCIE
Size	Custom
Document Number	GV-N3060VISION OC-12GD
Rev	1.01
Date:	Thursday, January 14, 2021
Sheet	44 of 54

https://t.me/schematicslaptop

Page45: SEQ:NVVDD, PEX, FBVDDQ ENABLE

ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	SEQ: NVVDD, PEXVDD AND FBVDDQ ENABLE

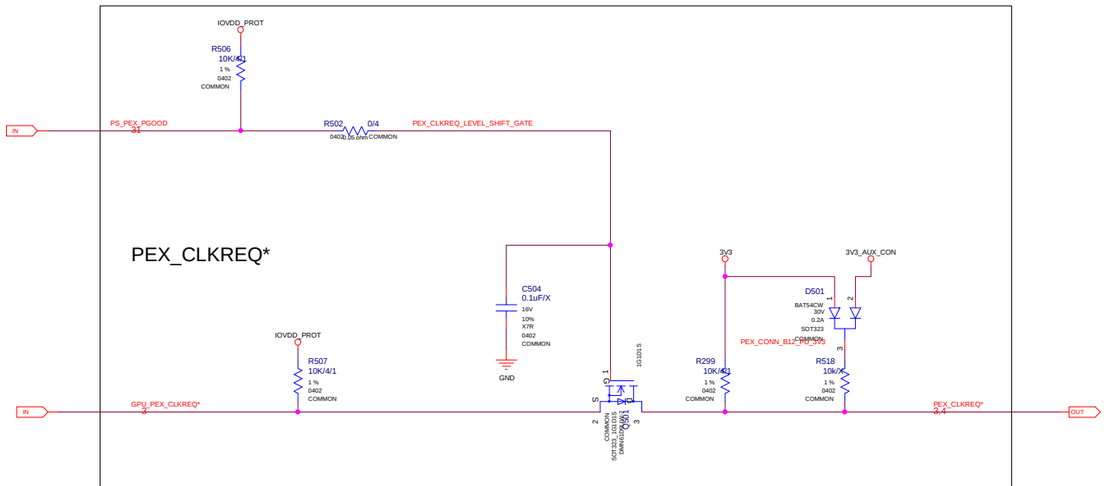
ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

GIGABYTE			
Title: PCIE			
Size: Custom	Document Number: GV-N3060VISION OC-12GD		Rev: 1.01
Date: Thursday, January 14, 2021	Sheet 45 of 54		

https://t.me/schematicslaptop

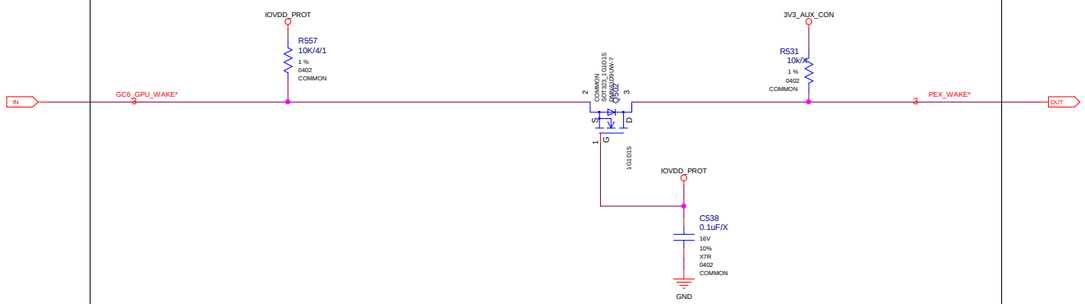
Page46: SEQ:MISC

PEX_CLKREQ*

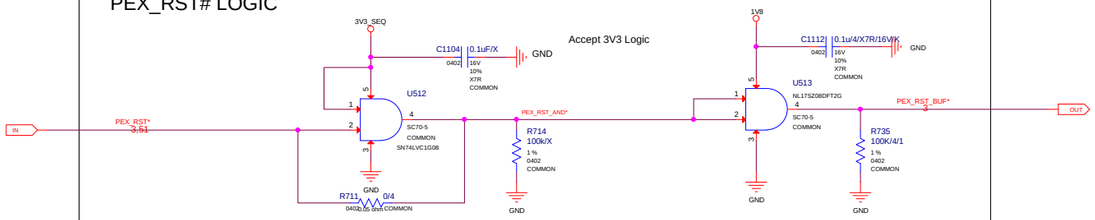


PEX_REFCLK Power Domain: HVDD(1.8V)

GPU_WAKE*



PEX_RST# LOGIC



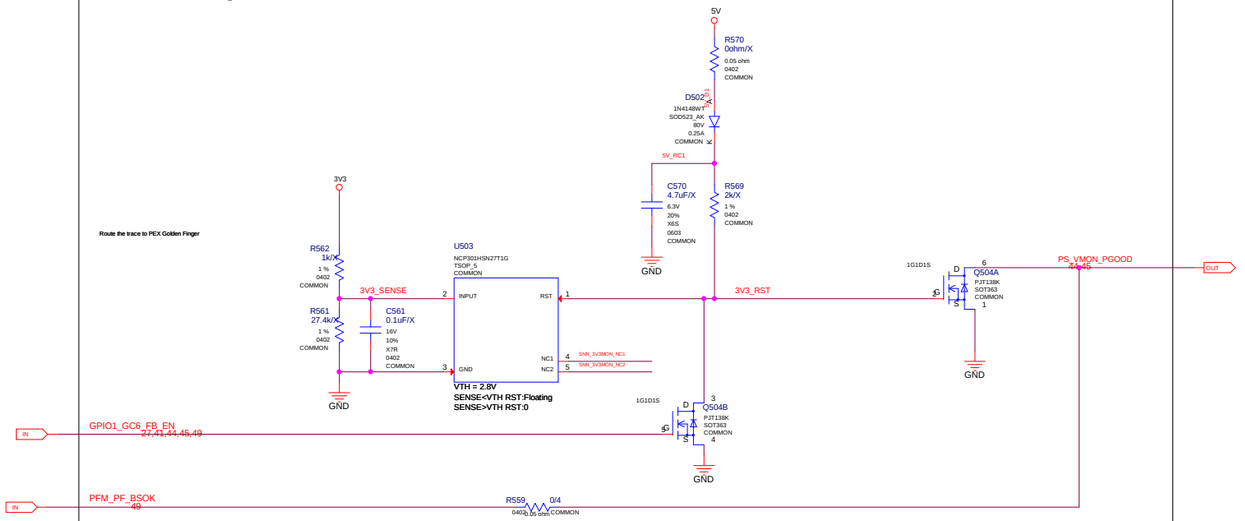
ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	SEQ: MISC

GIGABYTE		
Title: PCIE		
Size: Custom	Document Number: GV-N3060VISION OC-12GD	Rev: 1.01
Date: Thursday, January 14, 2021	Sheet 46 of 54	

https://t.me/schematicslaptop

3V3PEX Voltage Monitor



Route the trace to PEX Golden Finger

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_BSOK	INPUT	From Pre-filter(BS_OK)

ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

ASSEMBLY <ASSEMBLY_DESCRIPTION>
PAGE DETAIL SEQUENCE: VOLTAGE MONITOR

GIGABYTE

Title: PCIE

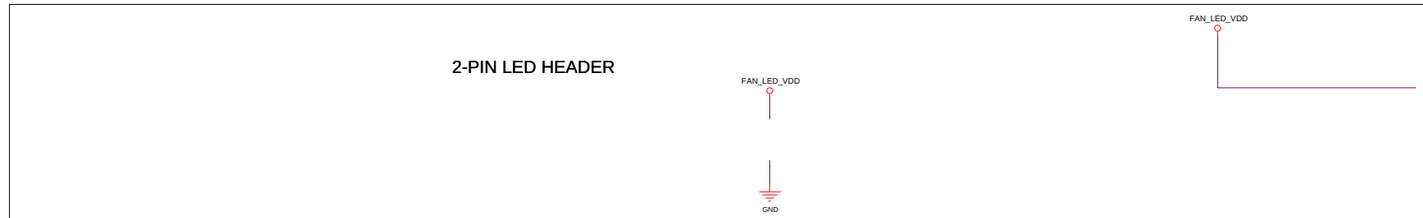
Size: Custom | Document Number: GV-N3060VISION OC-12GD | Rev: 1.01

Date: Thursday, January 14, 2021 | Sheet 47 of 54

https://t.me/schematicslaptop

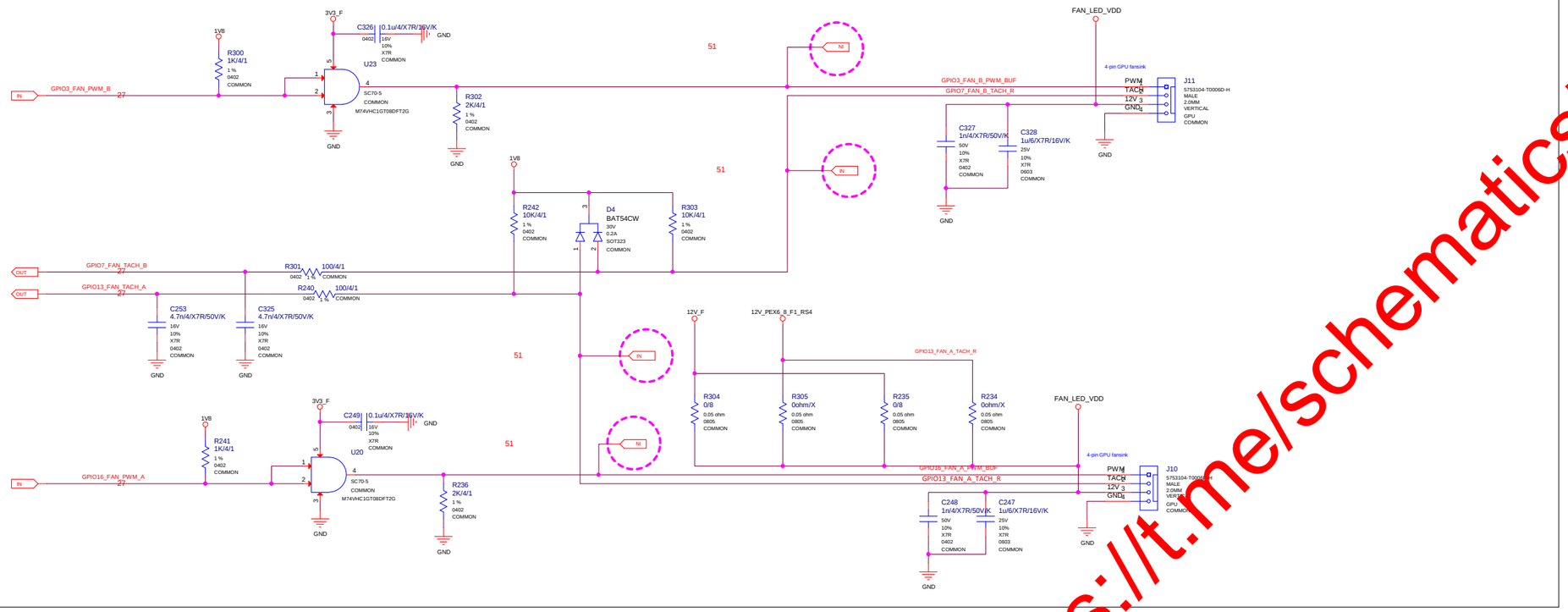
Page48: FAN & LED

2-PIN LED HEADER



Del 2 Pin LED

DUAL FAN 4-PIN HEADERS



ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	FAN & LED

ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

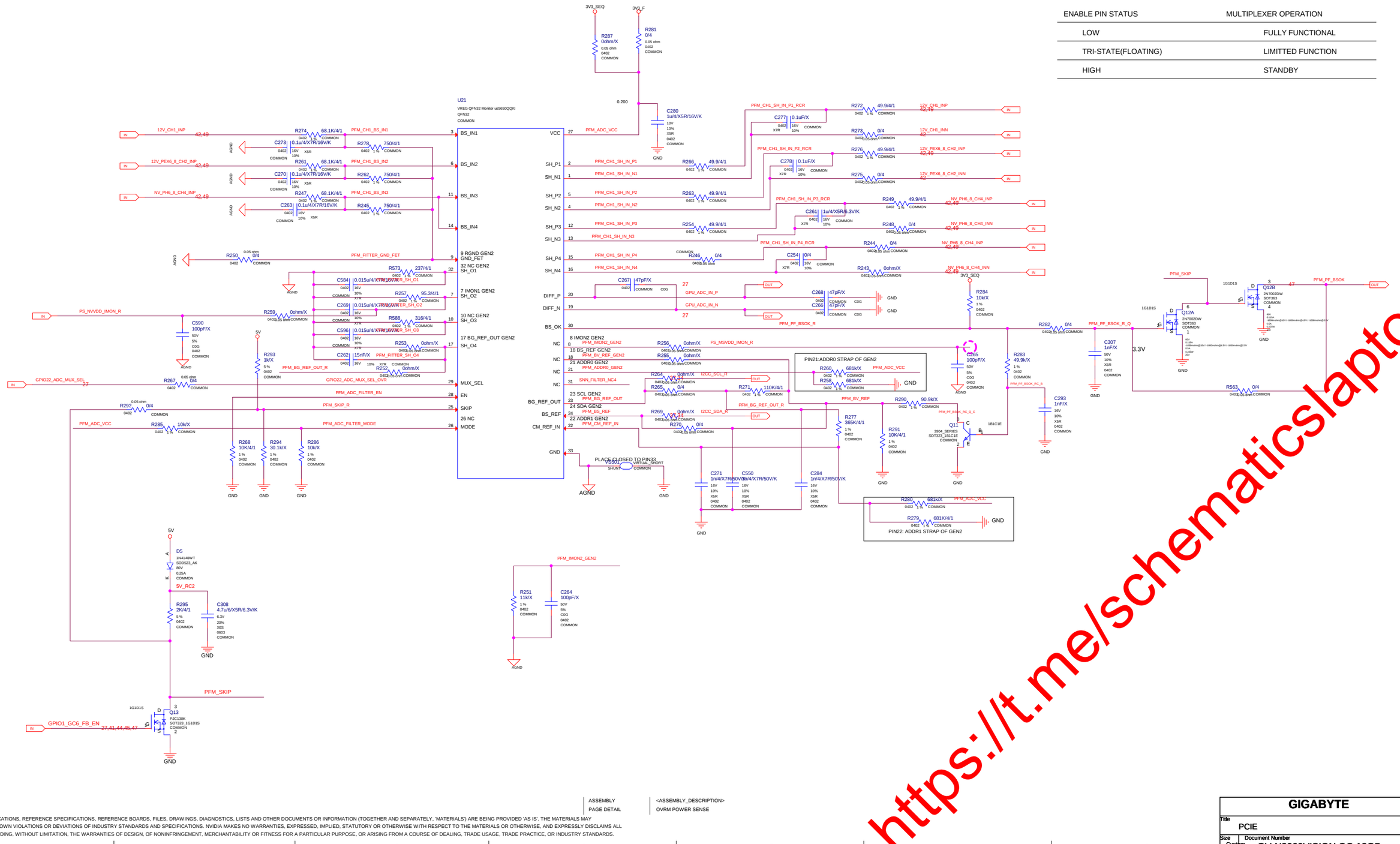
GIGABYTE							
Title: PCIE							
Size: Custom	Document Number: GV-N3060VISION OC-12GD						Rev: 1.01
Date: Thursday, January 14, 2021		Sheet 48 of 54					

https://t.me/schematicslaptop

Page49: OVRM_PWR SENSE

MODE PIN STATUS	MULTIPLEXER OPERATION
LOW	DEVICE A
TRI-STATE(FLOATING)	STAND-ALONE
HIGH	DEVICE B

ENABLE PIN STATUS	MULTIPLEXER OPERATION
LOW	FULLY FUNCTIONAL
TRI-STATE(FLOATING)	LIMITTED FUNCTION
HIGH	STANDBY



https://t.me/schematicslaptop

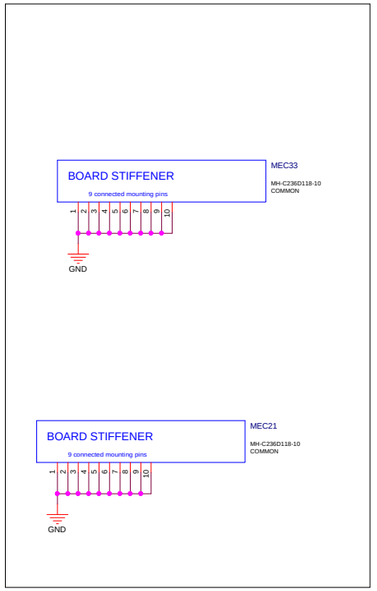
ASSEMBLY | <ASSEMBLY_DESCRIPTION>
PAGE DETAIL | OVRM POWER SENSE

ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

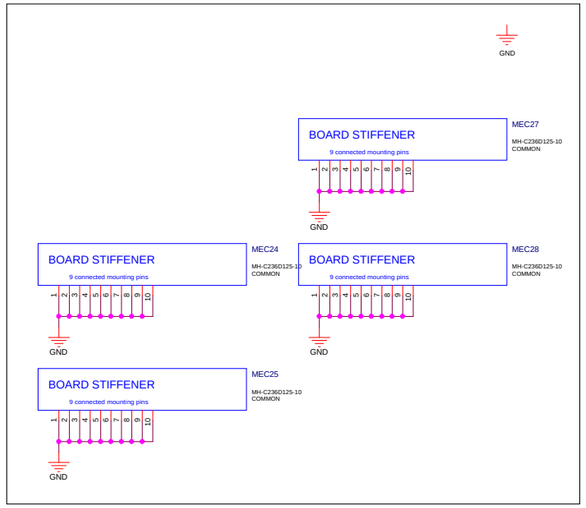
GIGABYTE		
Title: PCIE		
Size: Custom	Document Number: GV-N3060VISION OC-12GD	Rev: 1.01
Date: Thursday, January 14, 2021	Sheet 49 of 54	

Page50: MECH

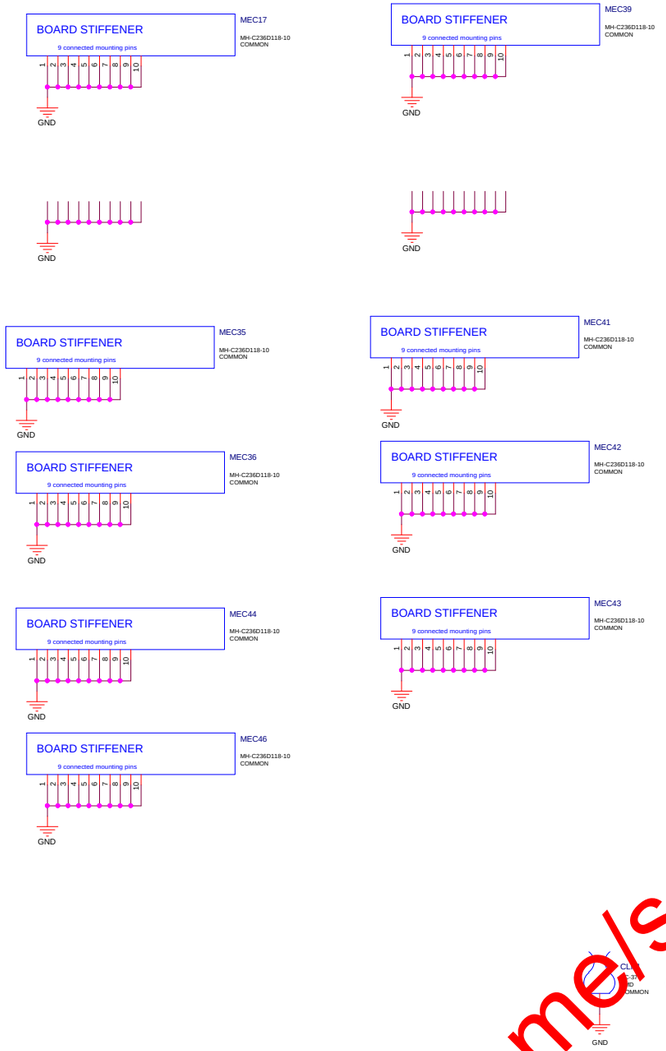
BKT SINK



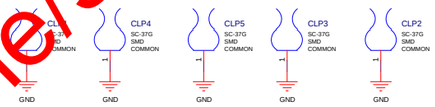
GPU SINK



MOS
螺絲孔



ENCLOS.



https://t.me/schematicslaptop

ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	MECH

ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

GIGABYTE			
Title: PCIE			
Size: Custom	Document Number: GV-N3060VISION OC-12GD		Rev: 1.01
Date: Thursday, January 14, 2021	Sheet 50 of 54		

Page54: MCU

MCU_HT32F52231

U10829
HT32F52342/LQFP48/S

12V ADC Measure

GPIO

PWM 27KHz detect
FAN2 FAN1

GPIO
For EXT 12V plugin detect.

INT, 100Hz

add by diho 20181224

FAN Tach

PCI-E SMBUS

MCU Slave

Winforce LED CONNECT

J5008
JW/1*3/BK/2.0/VA/S/H6.1/FL3.4/X

U10830
APL3532AB-TRG
SOT23_5_EFU
COMMON

10K 2.1 ~ 3.2A
15K 1.4~2A
20K 1.1~1.49A

add by diho

Change value by diho 20170509

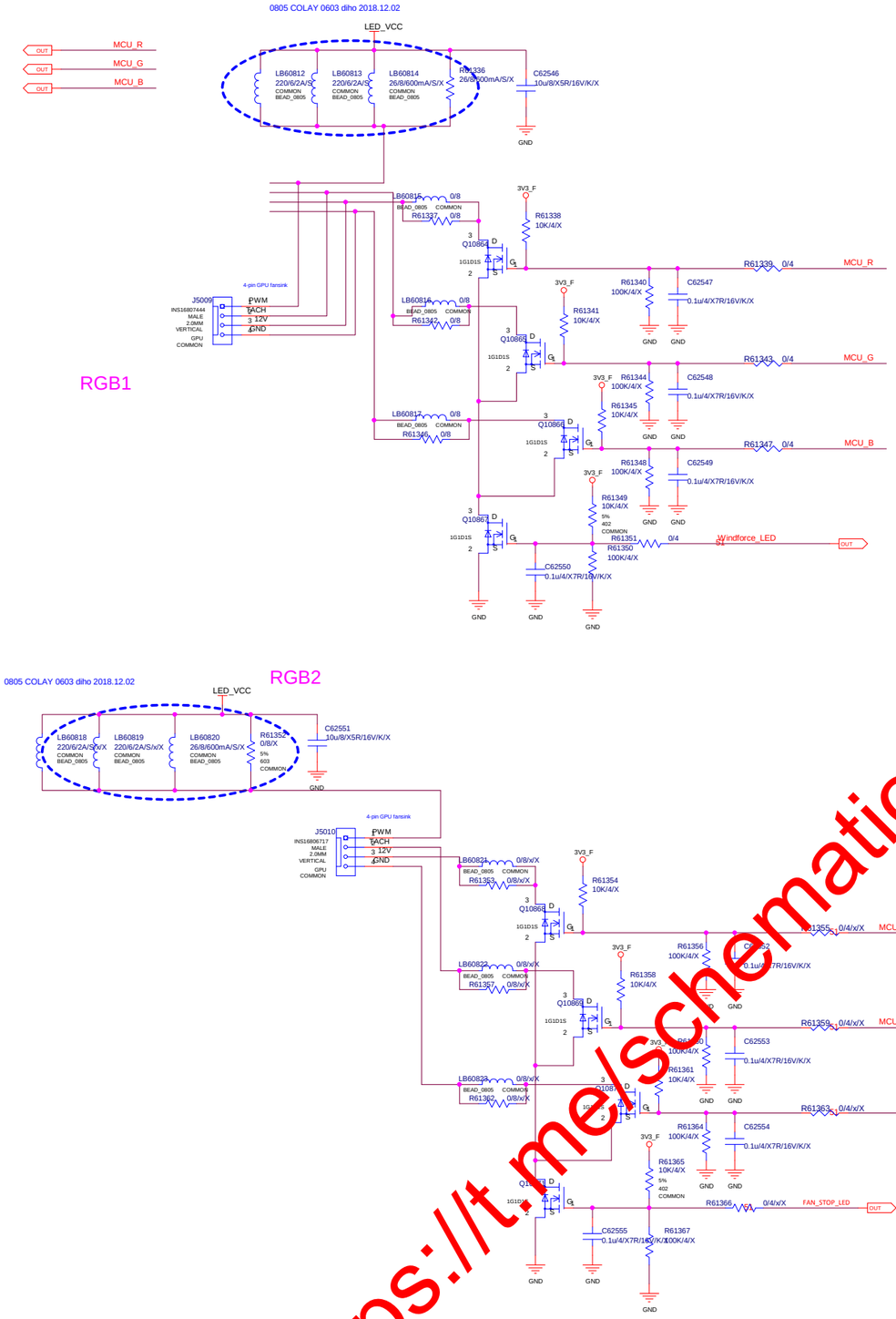
CON2 EVT上件for FW 燒錄，PVT移除

CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL
IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

https://t.me/schematicslaptop

Title	PCIE
Size	Custom
Document Number	GV-N3060VISION OC-12GD
Rev	1.01
Date:	Thursday, January 14, 2021
Sheet	51 of 54

Page40: LED$_{LED}$



https://t.me/schematicslaptop

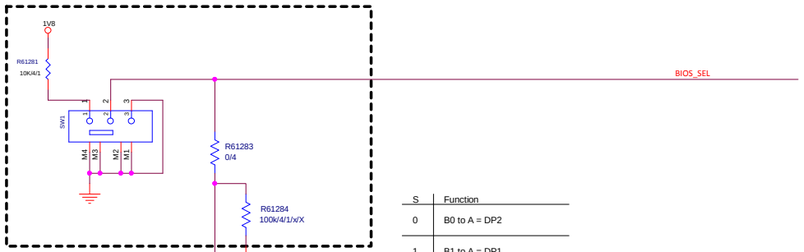
ASSEMBLY		<ASSEMBLY_DESCRIPTION>	
PAGE DETAIL		MECH	

ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

GIGABYTE				
Title: PCIE				
Size: Custom	Document Number: GV-N3060VISION OC-12GD			Rev: 1.01
Date: Thursday, January 14, 2021	Sheet 52 of 54			

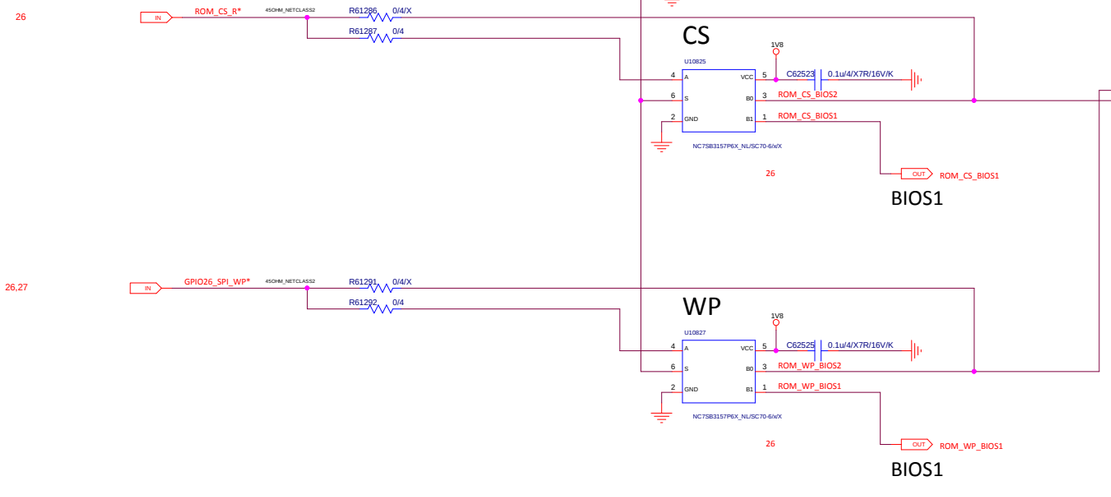
BIOS Switch

For Dual BIOS switch

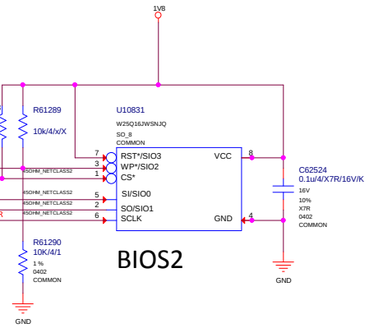


S	Function
0	B0 to A = DP2
1	B1 to A = DP1

CS



WP



ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. THE MATERIALS MAY CONTAIN KNOWN AND UNKNOWN VIOLATIONS OR DEVIATIONS OF INDUSTRY STANDARDS AND SPECIFICATIONS. NVIDIA MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE MATERIALS OR OTHERWISE, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF DESIGN, OF NONINFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE, TRADE PRACTICE, OR INDUSTRY STANDARDS.

ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	MCU ZERO POWER IDLE

GIGABYTE		
Title: PCIE		
Size: Custom	Document Number: GV-N3060VISION OC-12GD	Rev: 1.01
Date: Thursday, January 14, 2021	Sheet 53 of 54	

https://t.me/schematicslaptop

History

Date	Modify
2020.08.06	First version

https://t.me/schematicslaptop

GIGABYTE		
Title: PCIE		
Size: Custom	Document Number: GV-N3060VISION OC-12GD	Rev: 1.01
Date: Thursday, January 14, 2021	Sheet 54 of 54	