GA104/NP, GeForce SKU P-BOARD

400W-500W, 256bit, GDDR6x x16 16GB
DP + DP + DP + HDMI/DP

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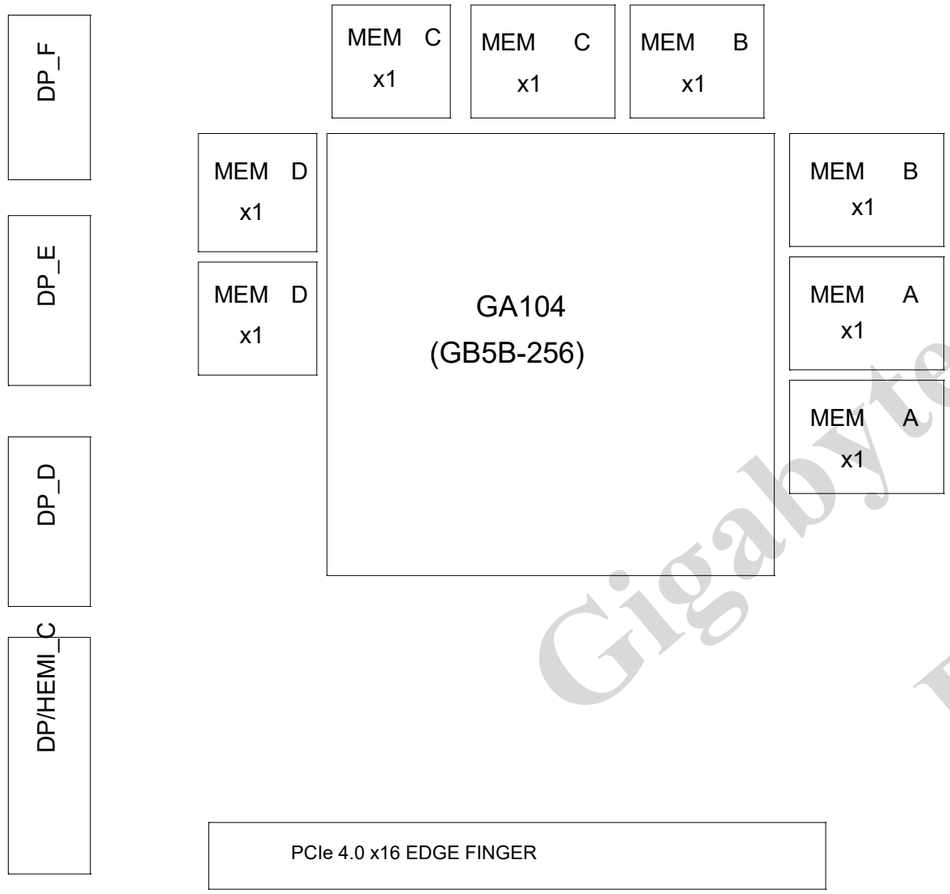

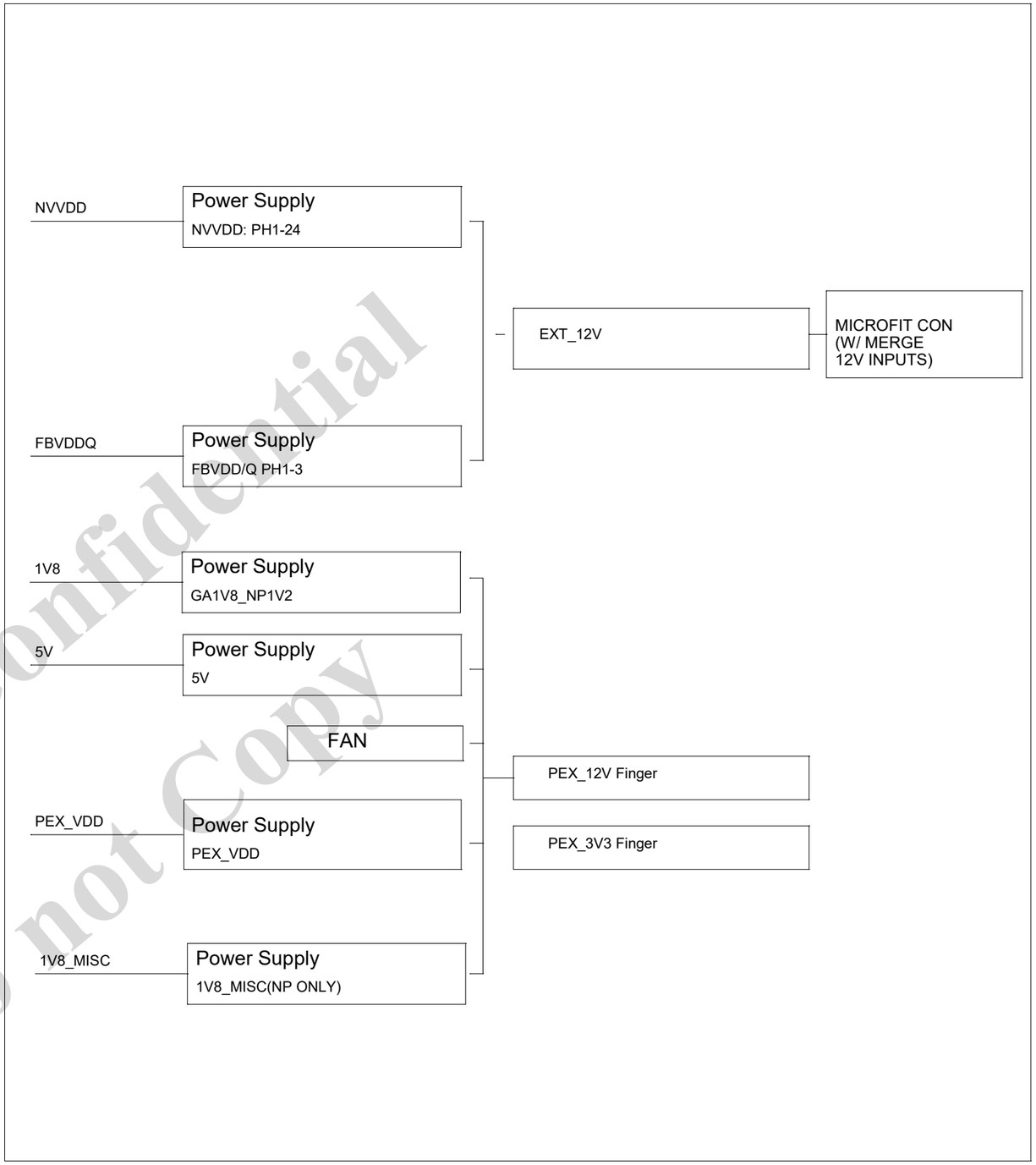

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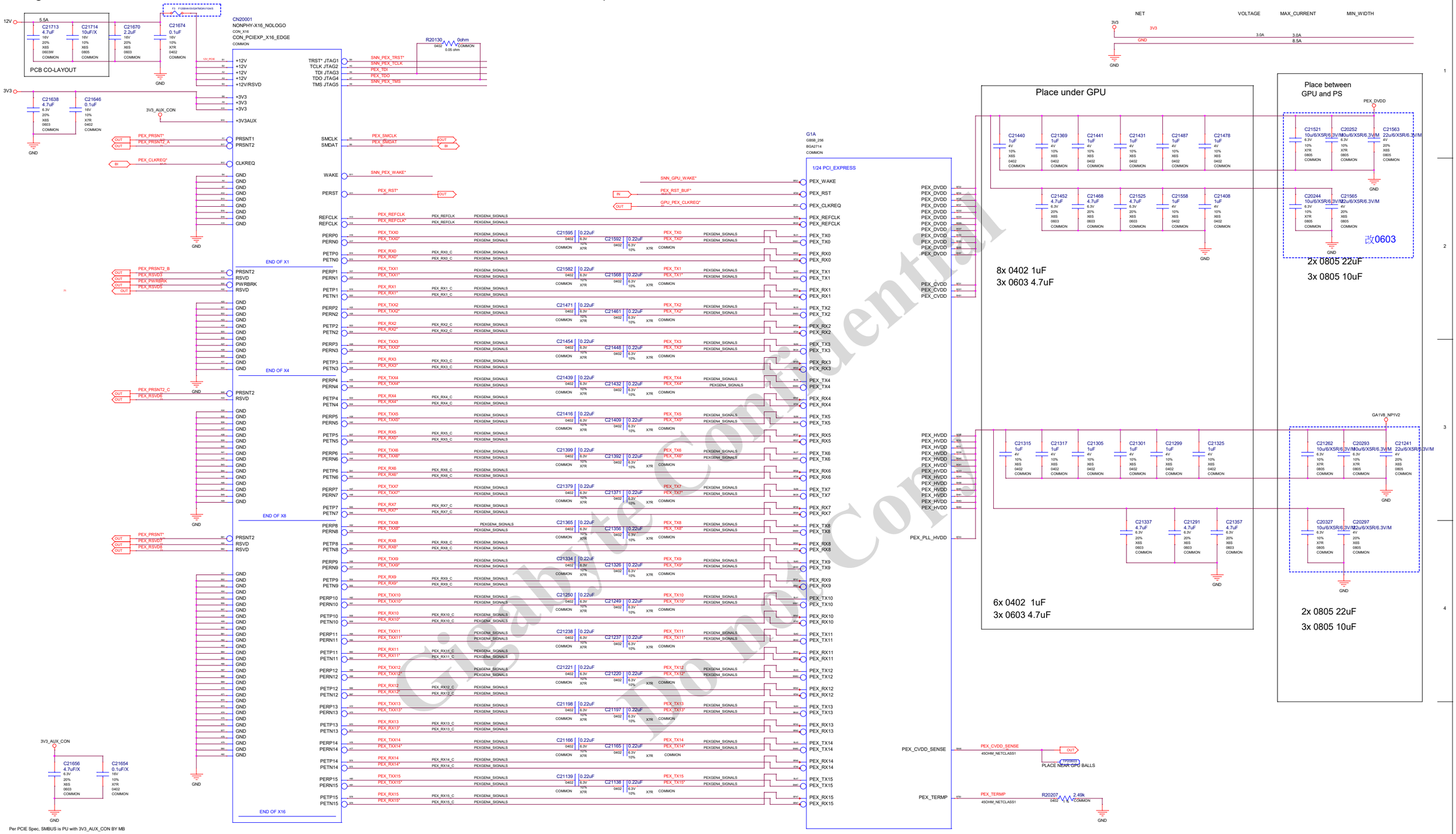

NET	VOLTAGE	MAX_CURRENT	MIN_WIDTH
3V3		3.0A	3.0A
GND			8.5A

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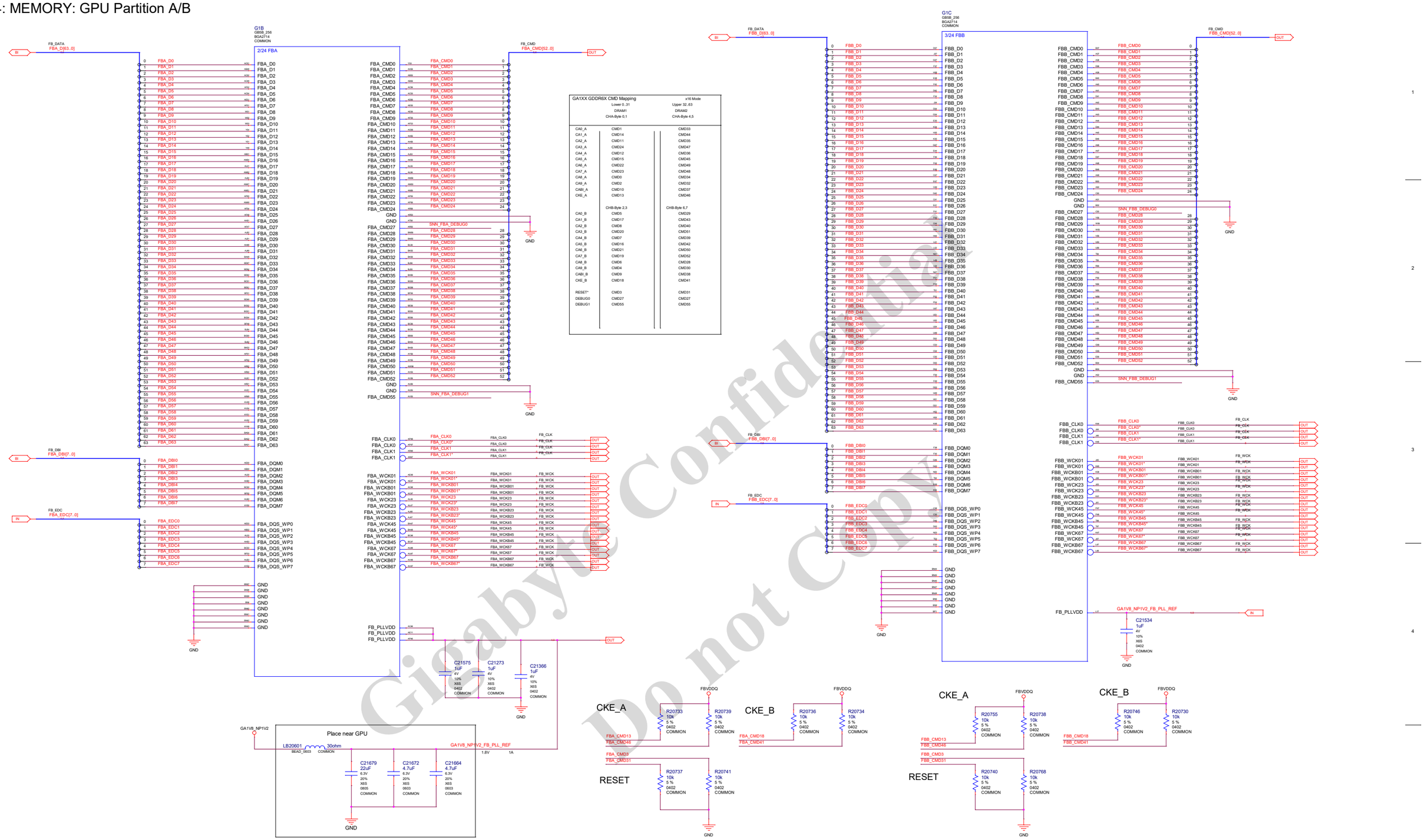

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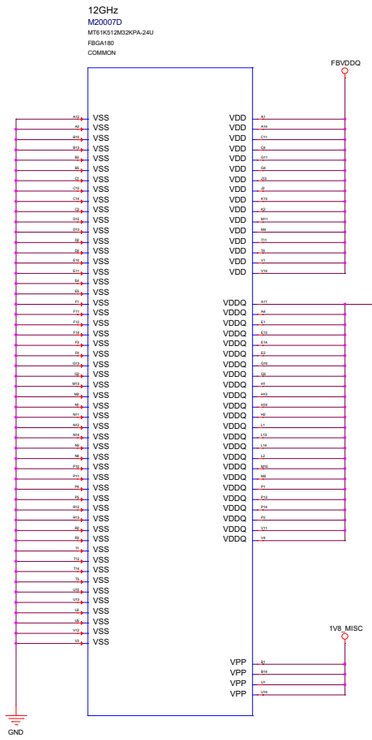
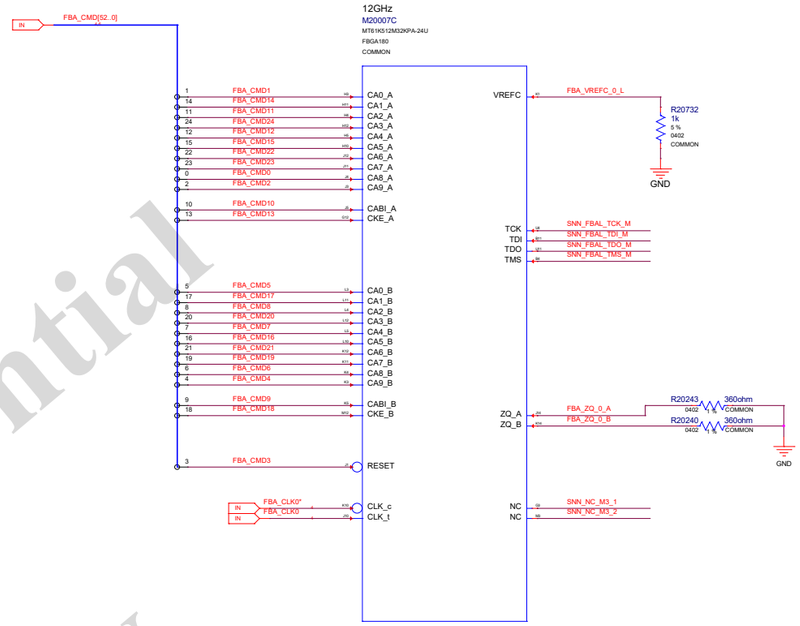
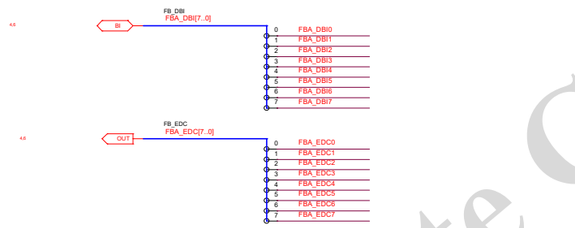
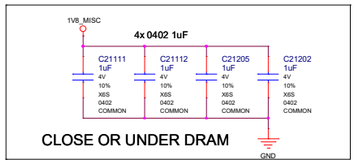
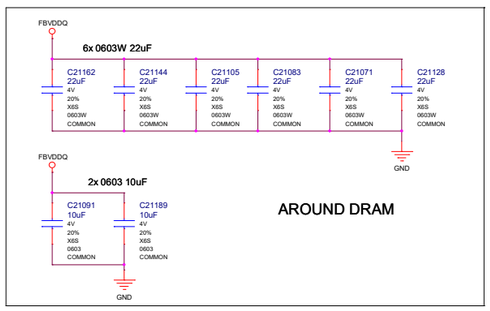






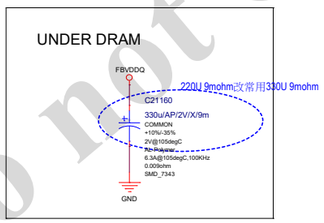


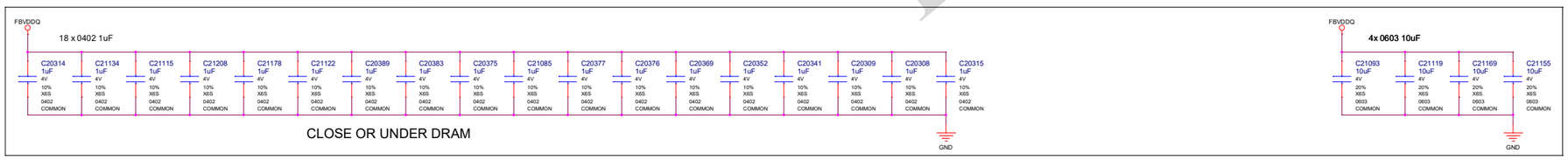


FBVDDQ DECAP per clamshell pair:

Close to DRAM:			Around DRAM:		
18x	1uF	0402	2x	10uF	0603
4x	10uF	0603	6x	22uF	0603W

Need at least 2 gnd and 2 pwr vias per DECAP





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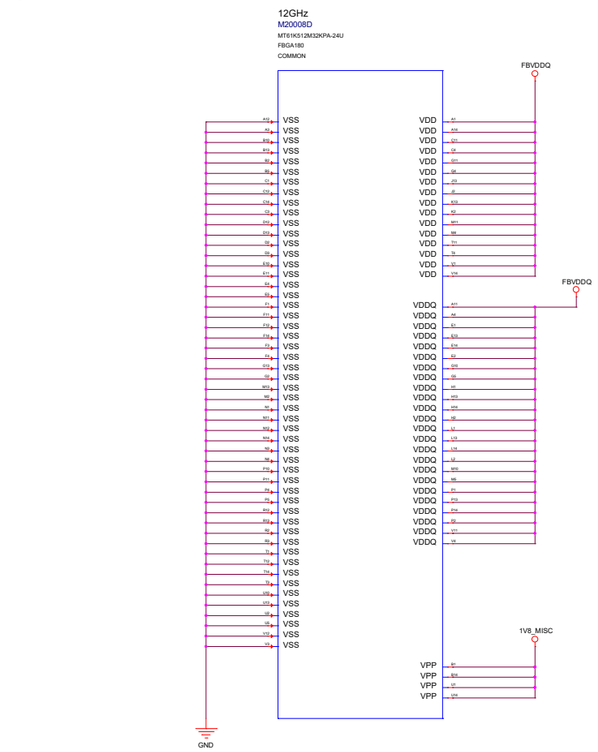

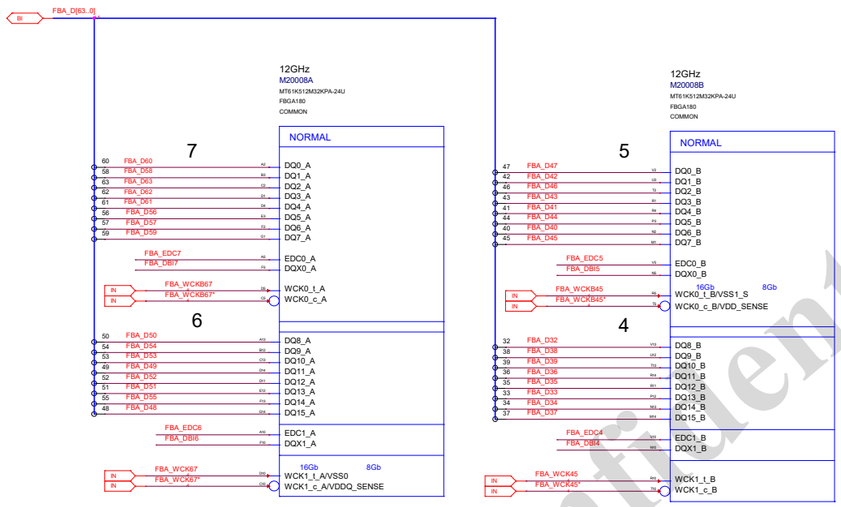

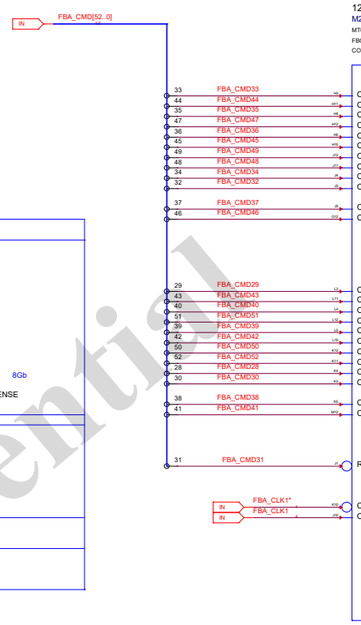

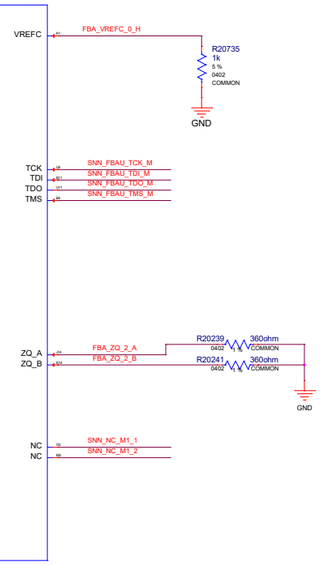

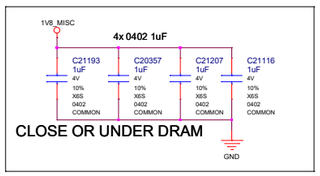

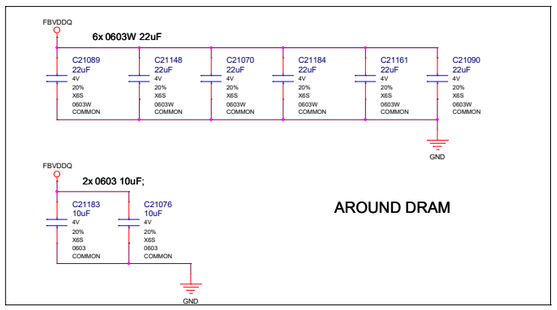

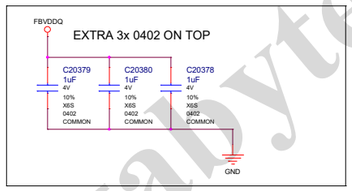

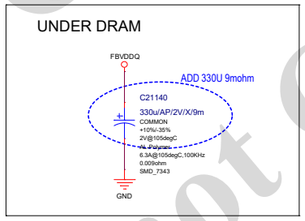

FBVDDQ DECAP per clamshell pair:

Close to DRAM:			Around DRAM:		
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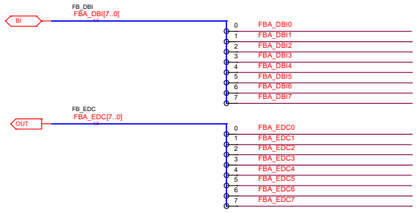

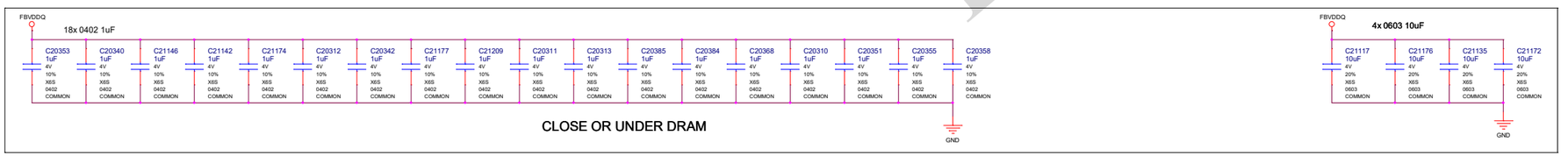

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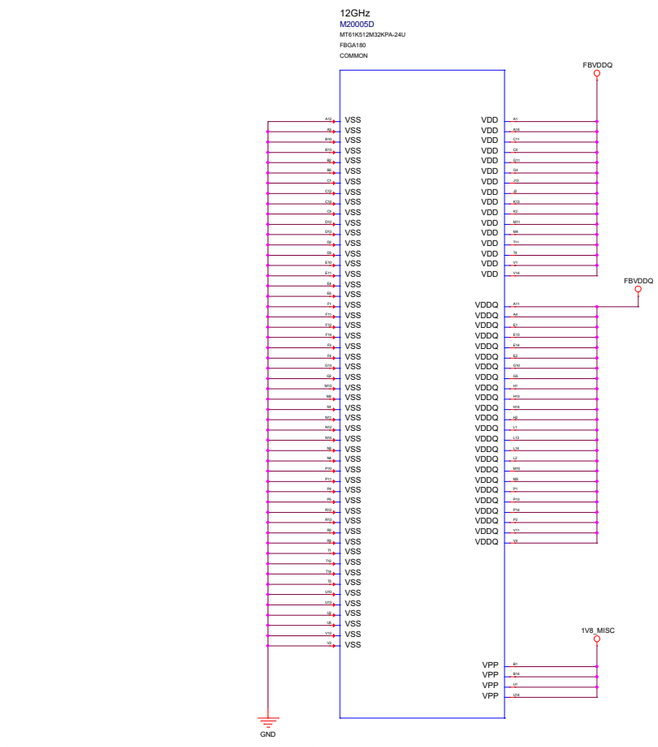

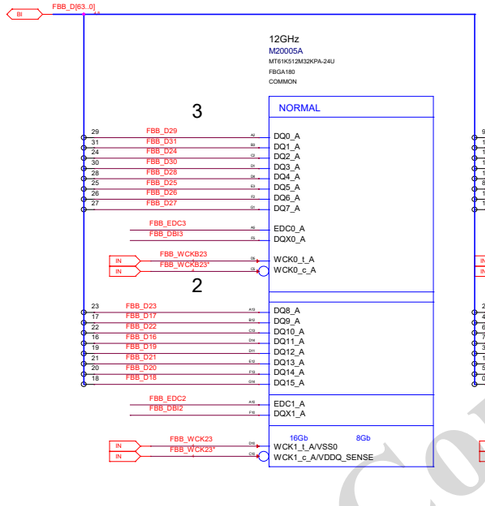

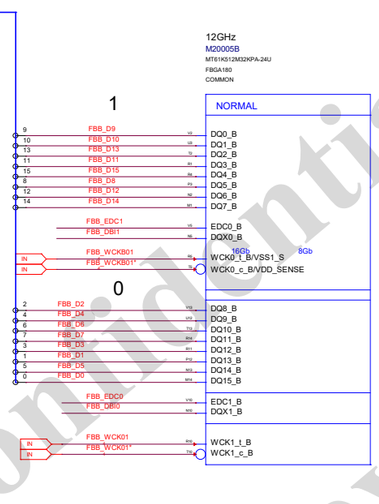

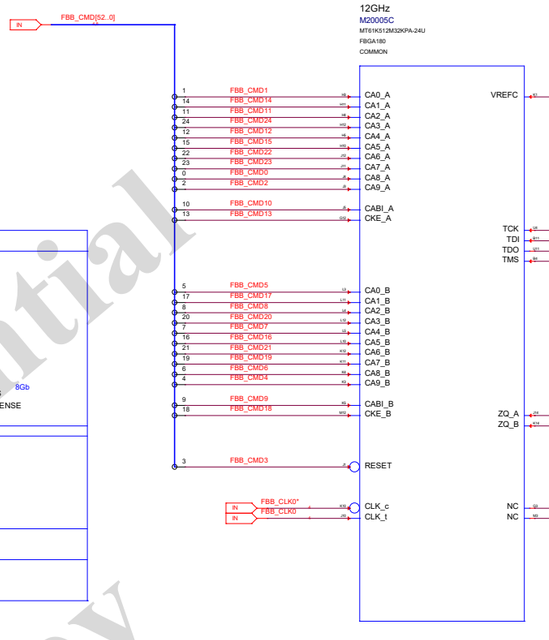

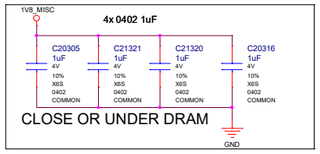

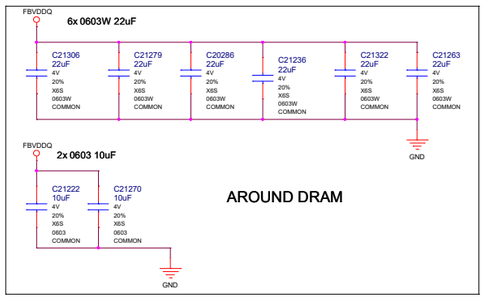

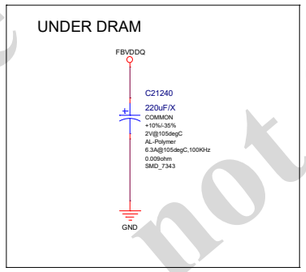

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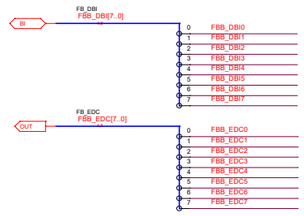

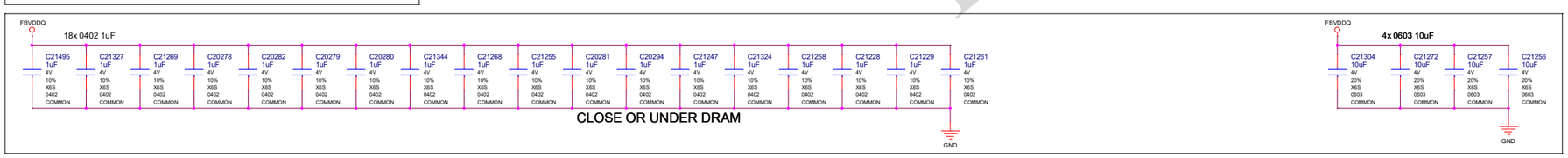

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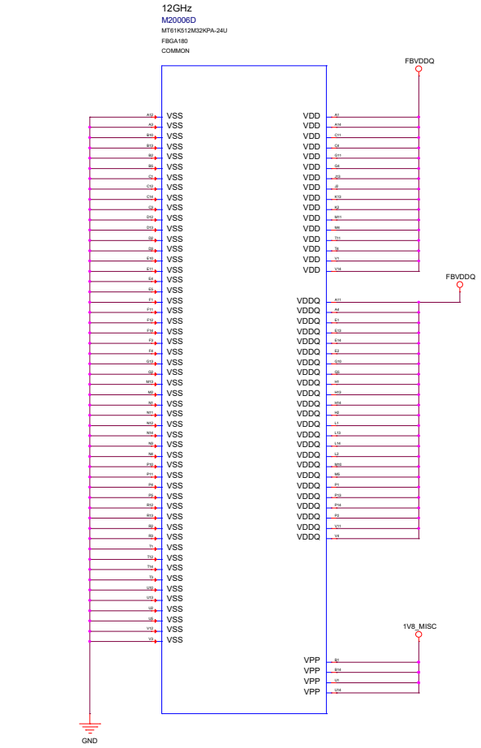

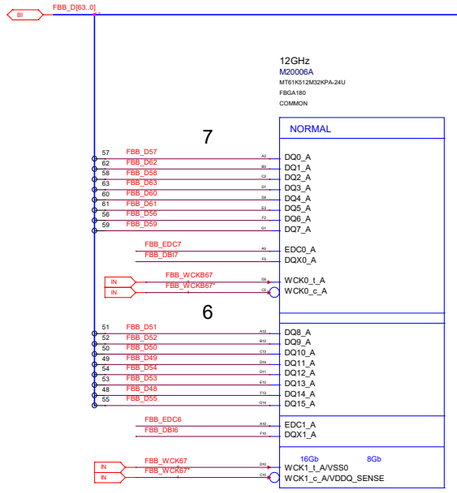

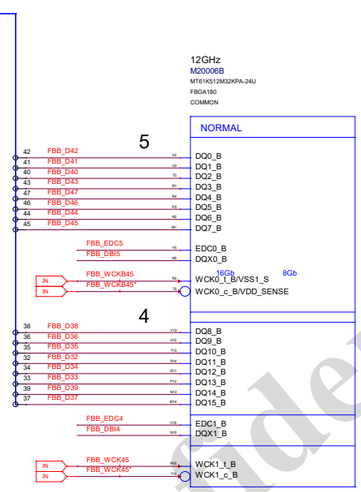

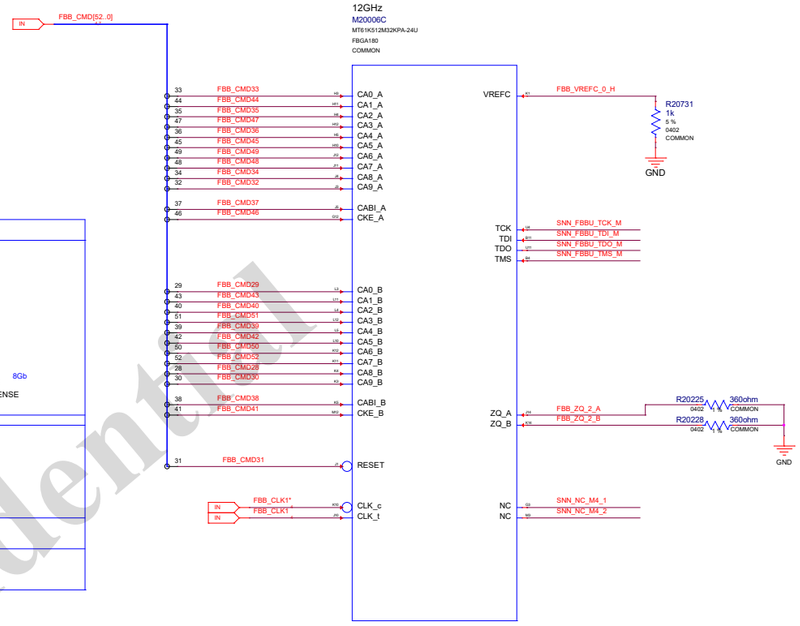

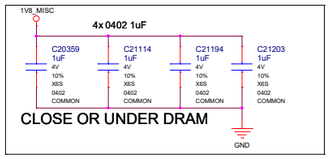

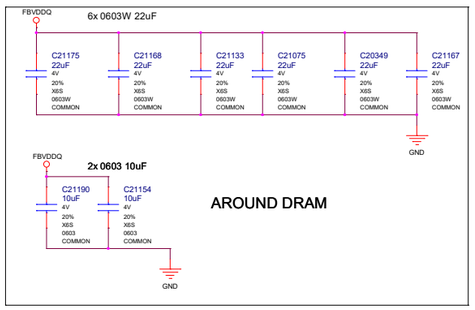

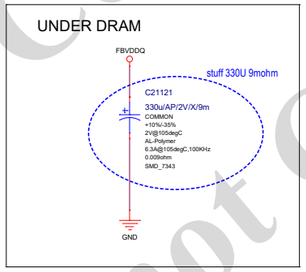

FBVDDQ DECAP per clamshell pair:

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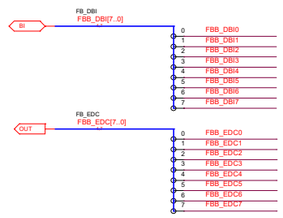

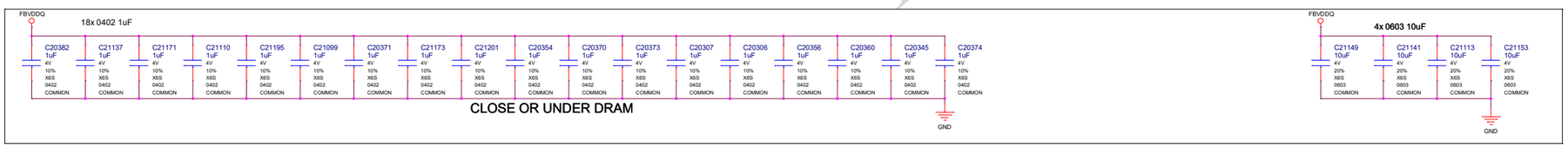

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PAGE DETAIL	MEMORY: FBB PARTITION[63:31]

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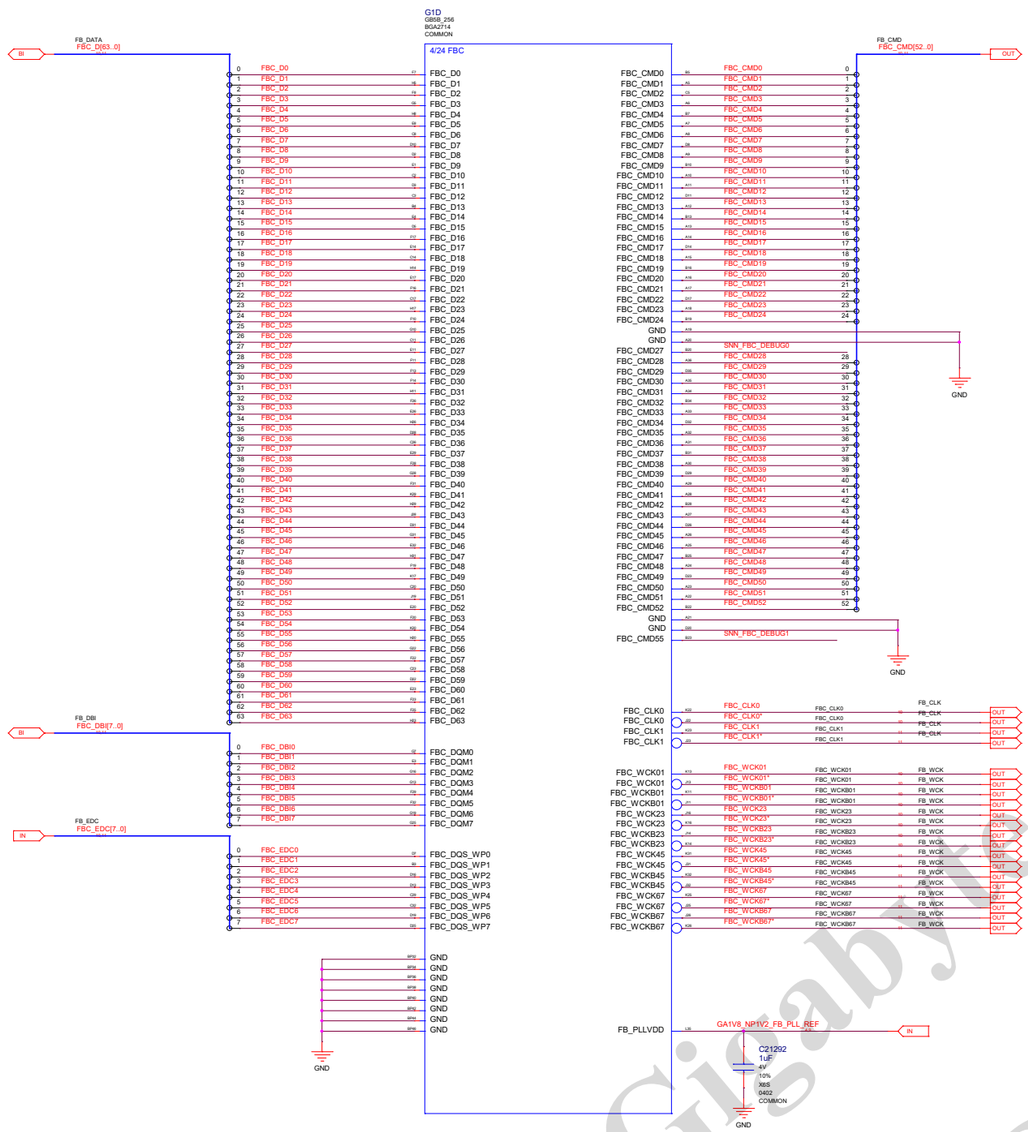
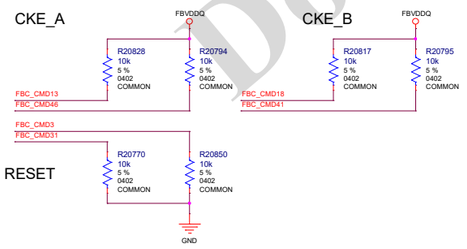
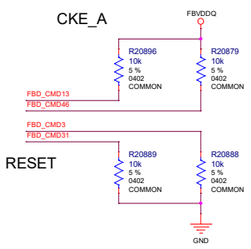
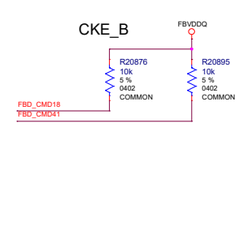
Page 9: MEMORY: GPU Partition C/D









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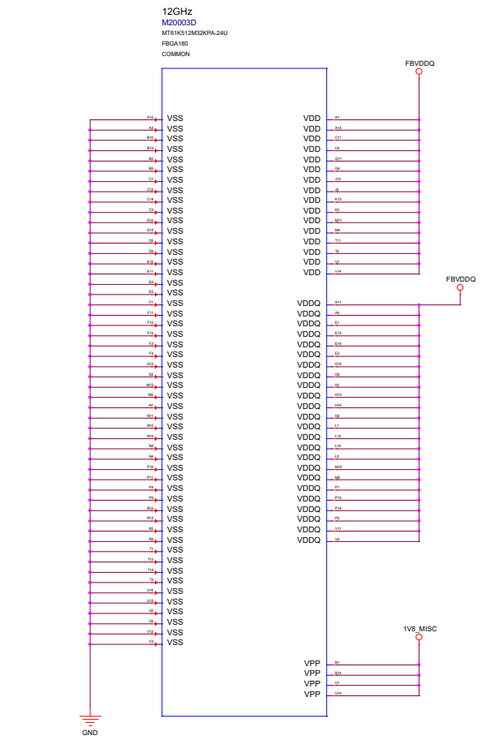

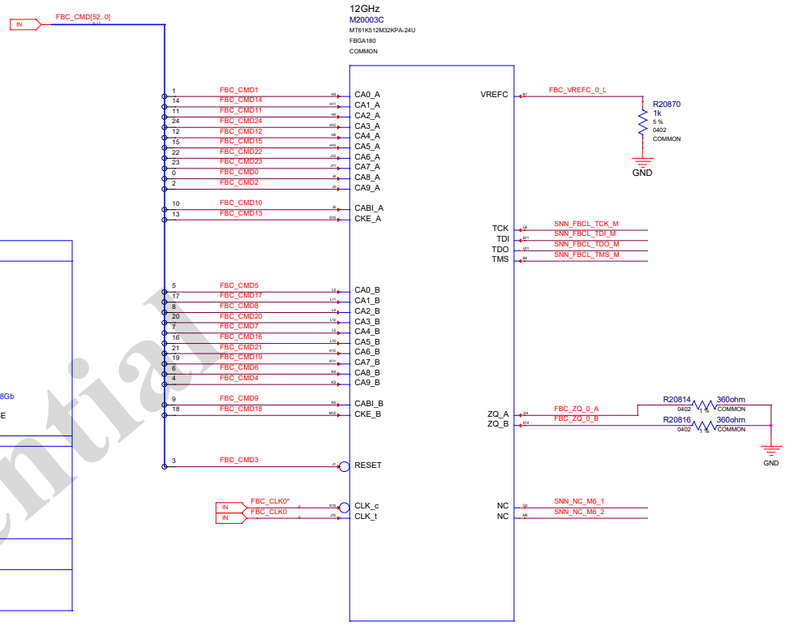

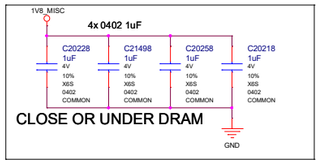

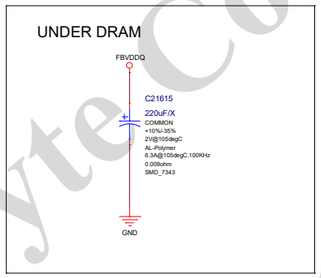

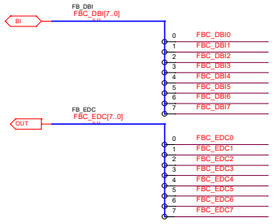

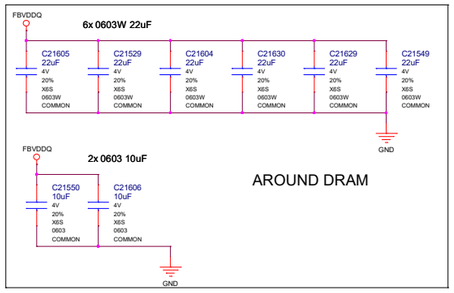

FBVDDQ DECAP per clamshell pair:

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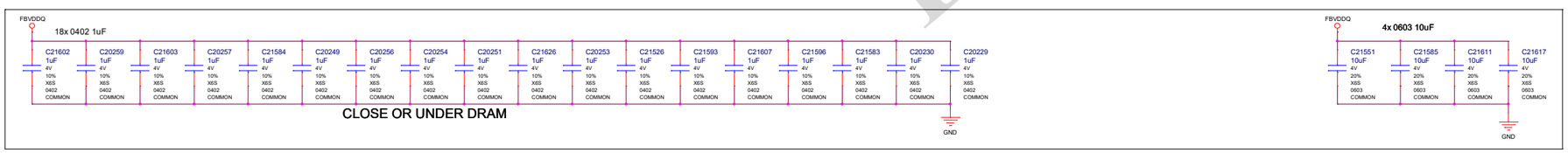

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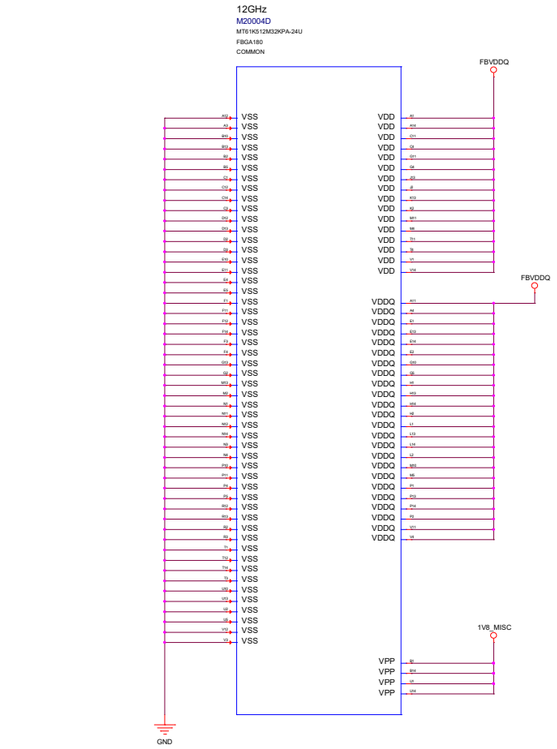

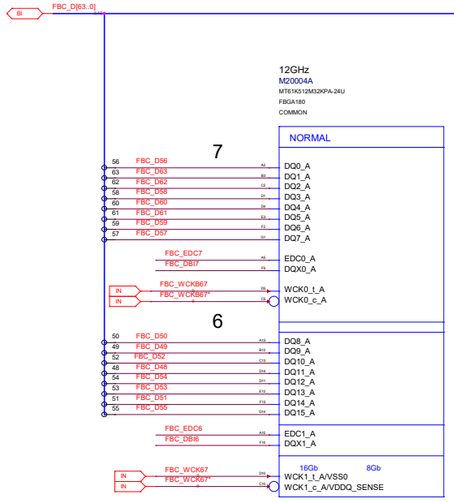

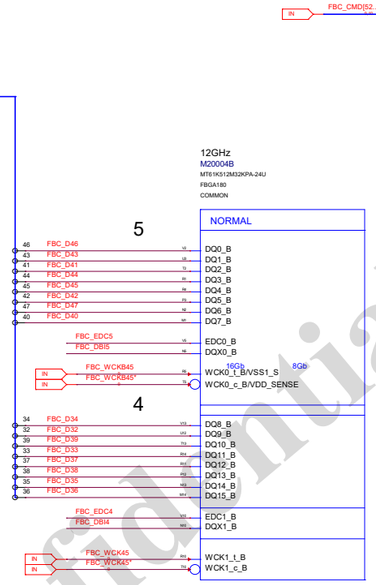

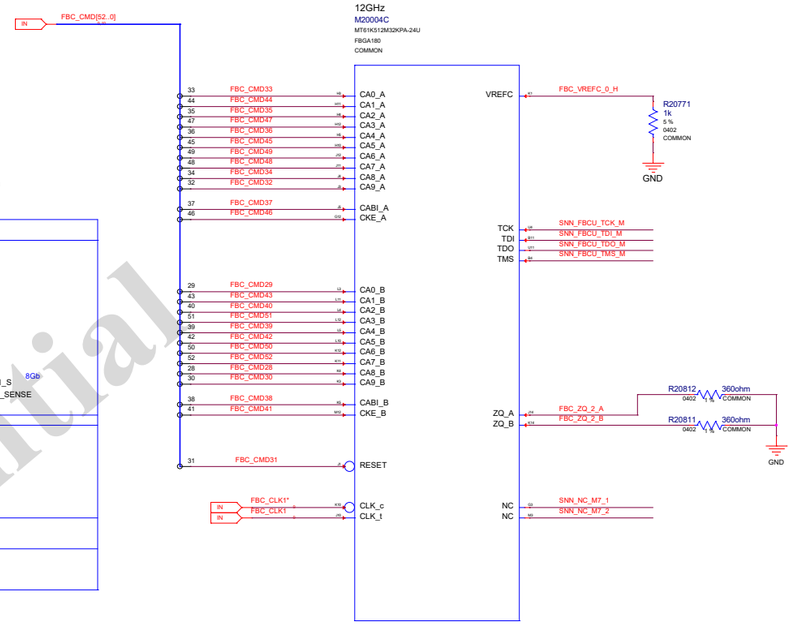

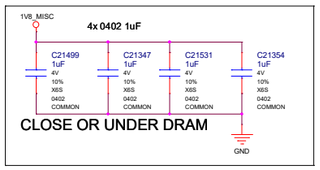

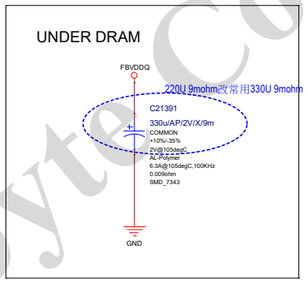

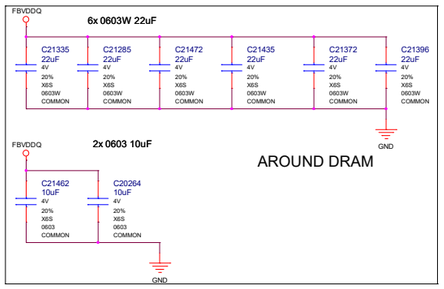

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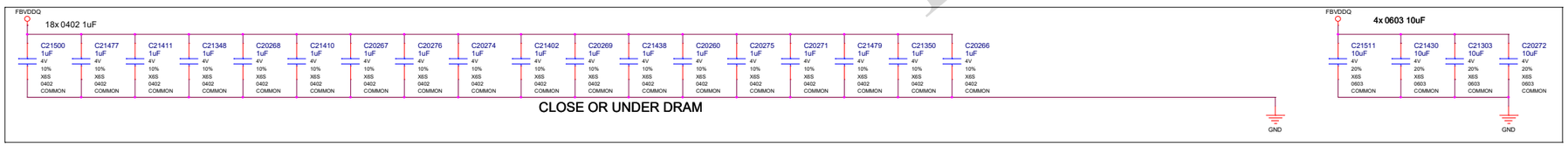

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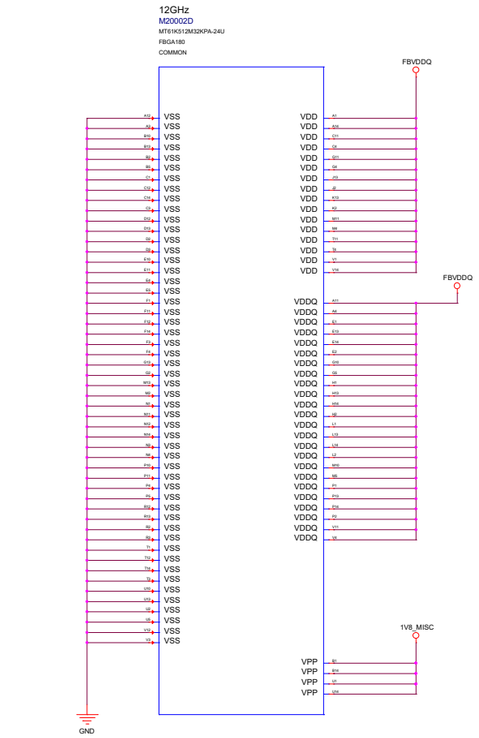

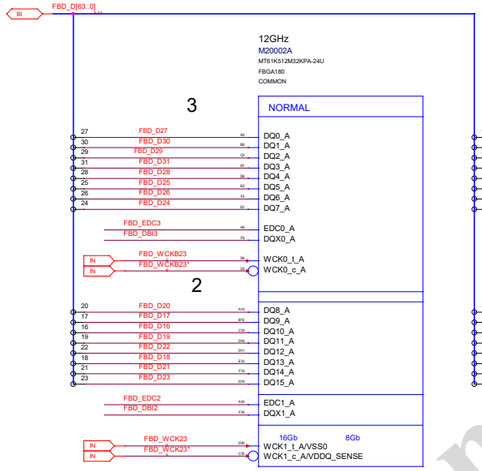

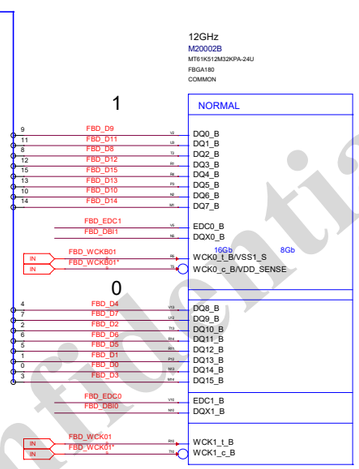

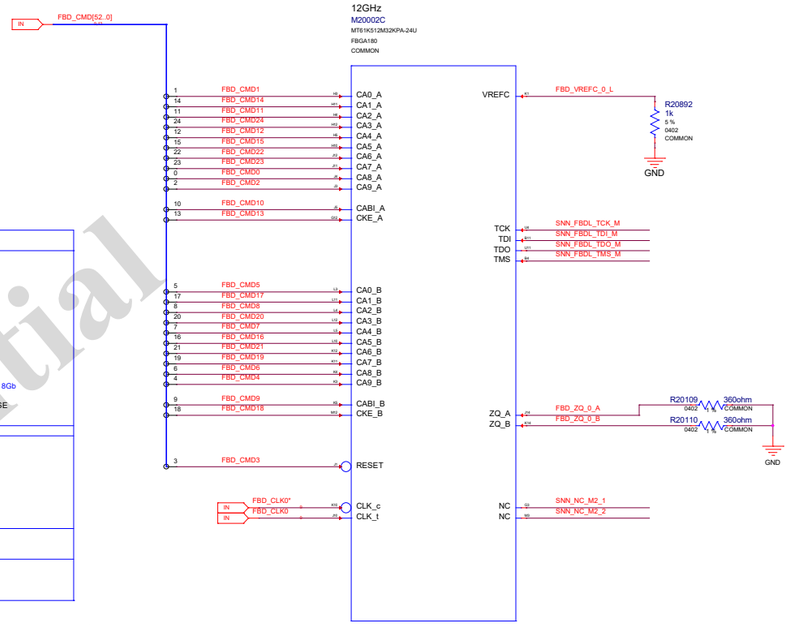

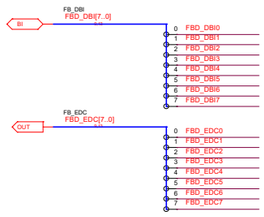

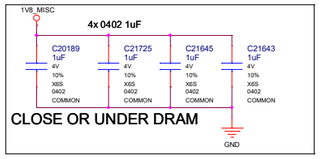

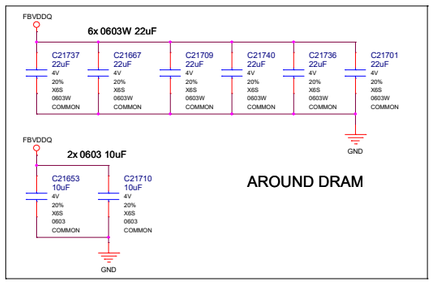

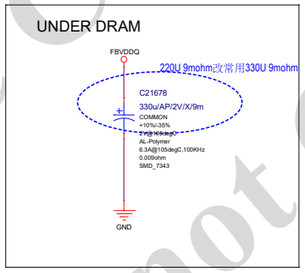

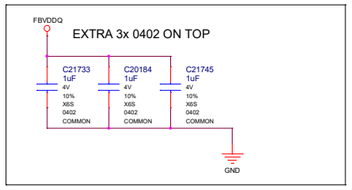

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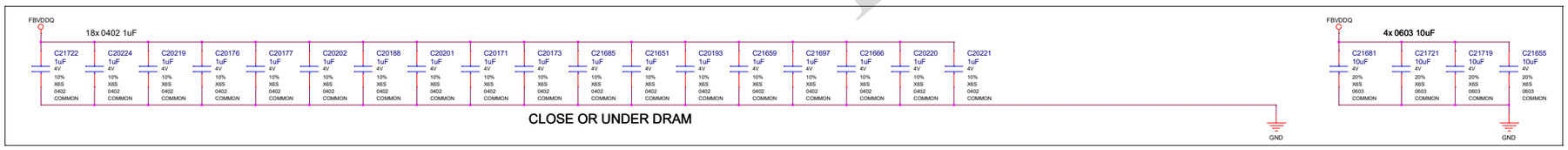

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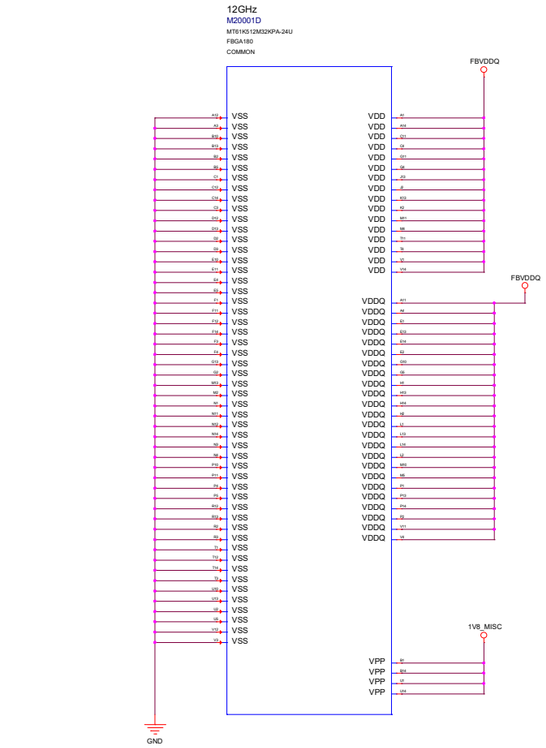
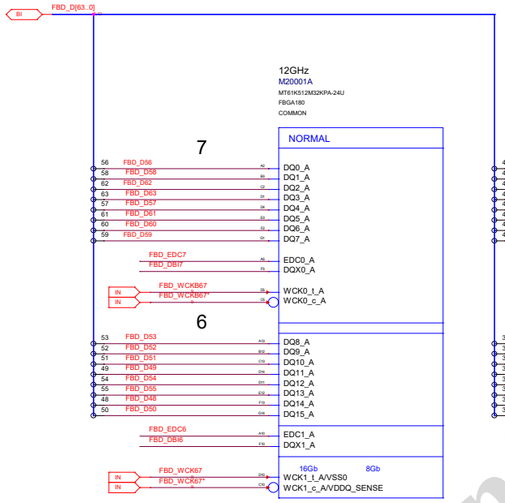
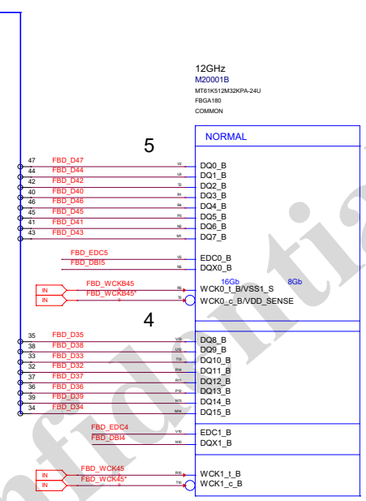
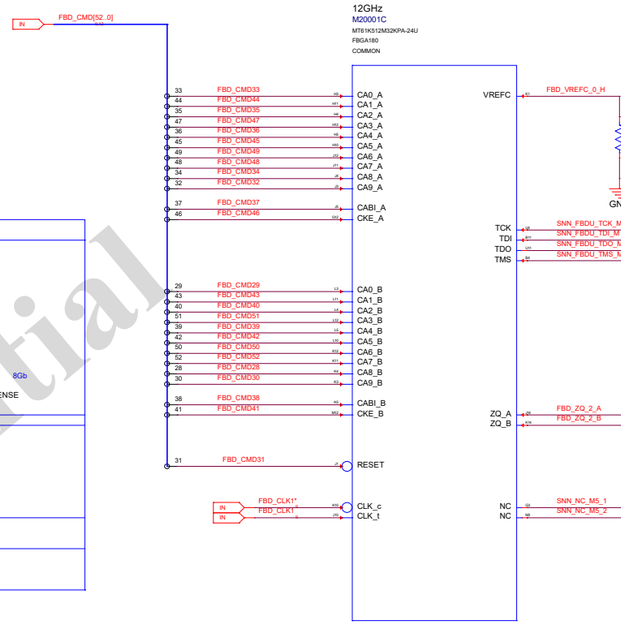
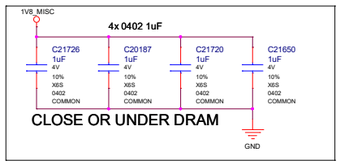
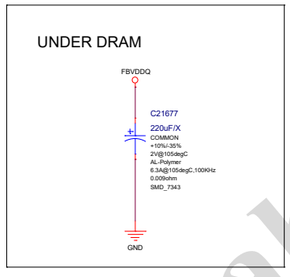


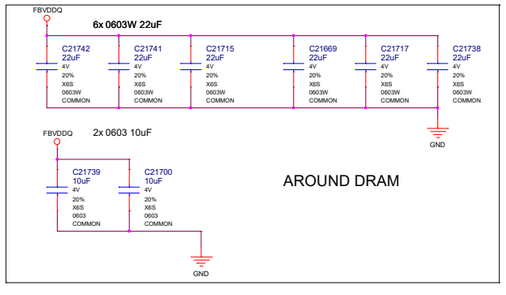










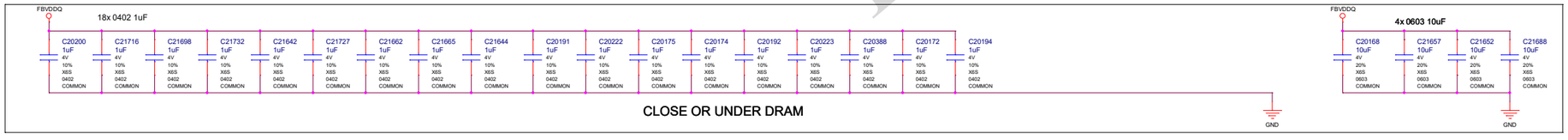


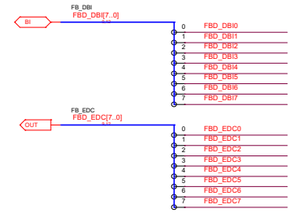
FBVDDQ DECAP per clamshell pair:

Close to DRAM:
18x 1uF 0402
4x 10uF 0603

Around DRAM:
2x 10uF 0603
6x 22uF 0603W

Need at least 2 gnd and 2 pwr vias per DECAP





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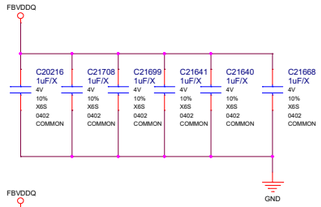
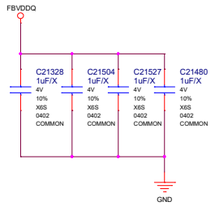
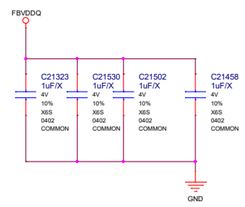
Page 19: MEMORY DECOUPLING

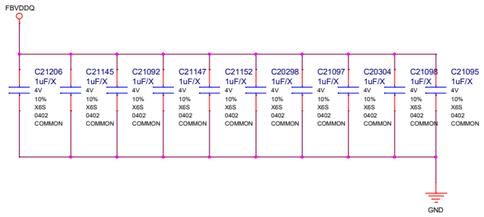
PER SI REQUIREMENT, RESERVE MORE 0402 1UF AROUND DRAM

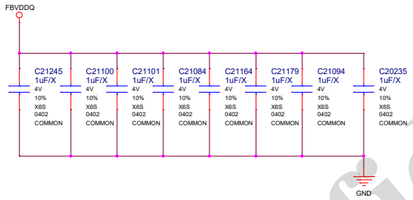




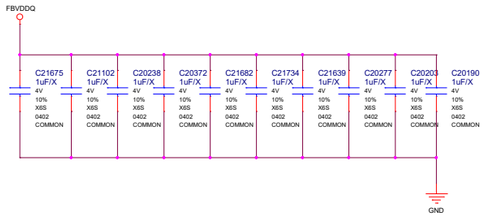


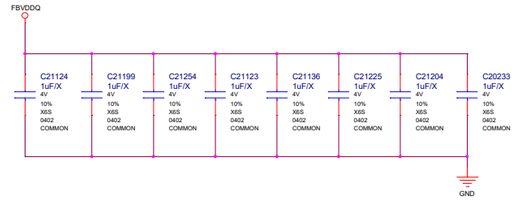
PLACE AROUND WEST DRAM





PLACE AROUND EAST DRAM





PLACE NORTH DRAM

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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	MEMORY DECOUPLING

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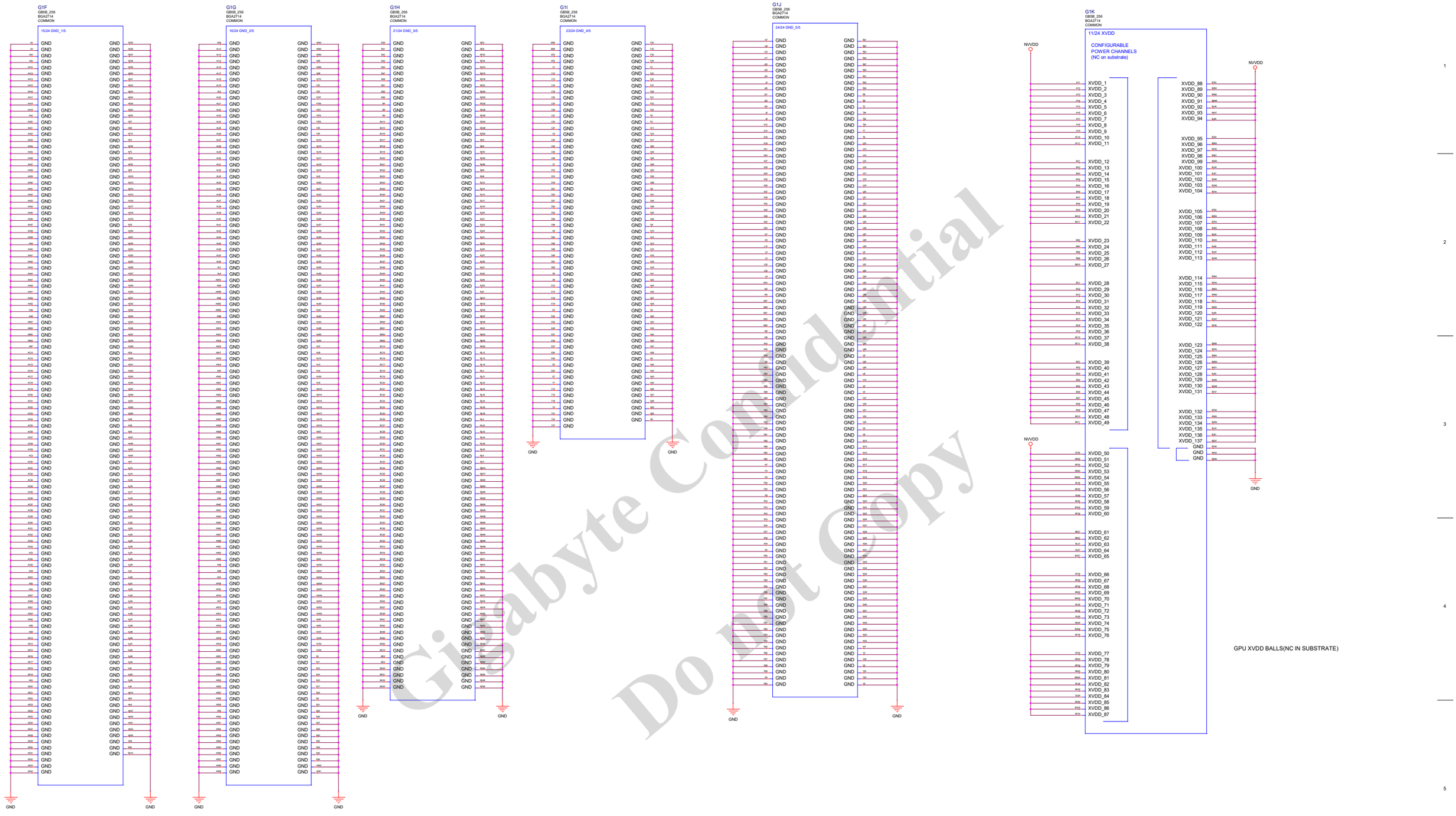
Page20: GPU: GND, NC



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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	GPU: GND, NC

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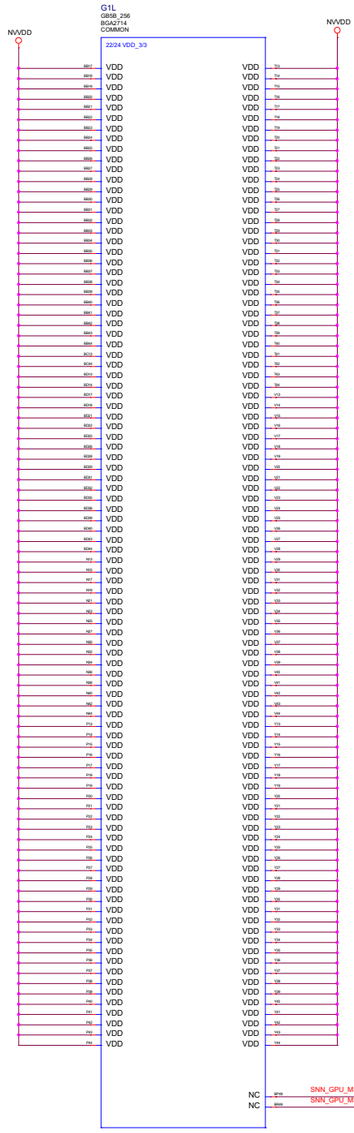
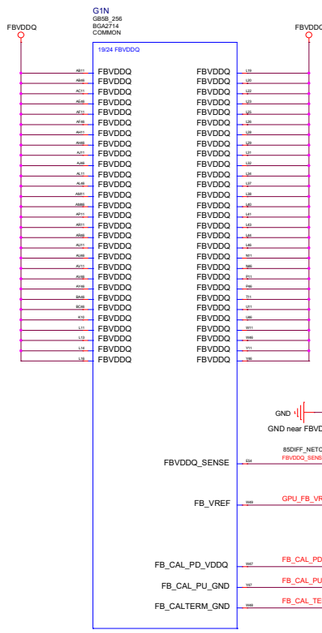
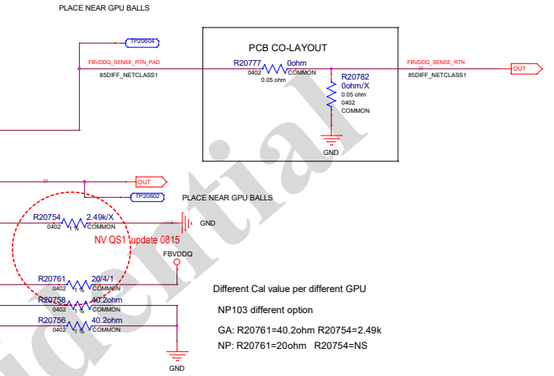
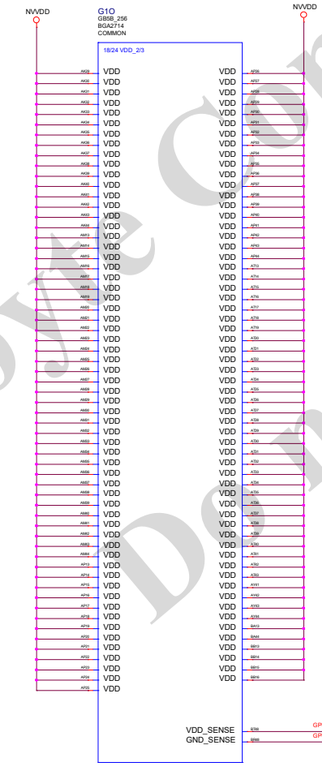
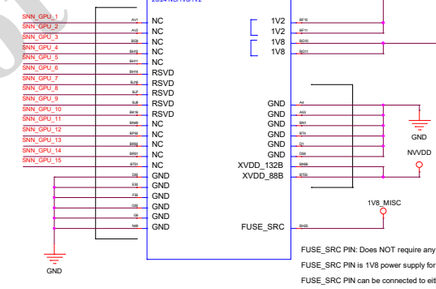
Page21: GPU POWER







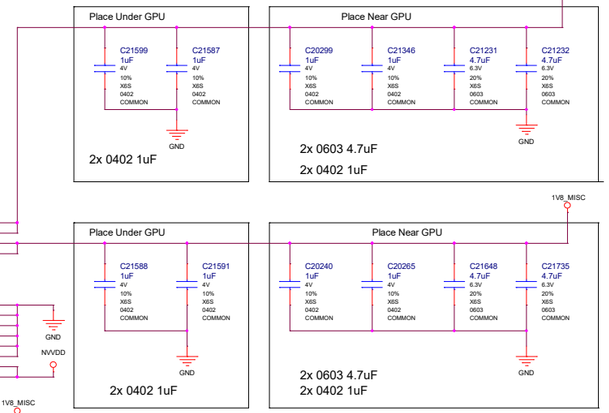




FUSE_SRC PIN: Does NOT require any decap per SI DG.

FUSE_SRC PIN is 1V8 power supply for fuse programming.

FUSE_SRC PIN can be connected to either 1V8 (un-filtered) or GPU_PLLVDD (filtered).



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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	GPU: GPU POWER

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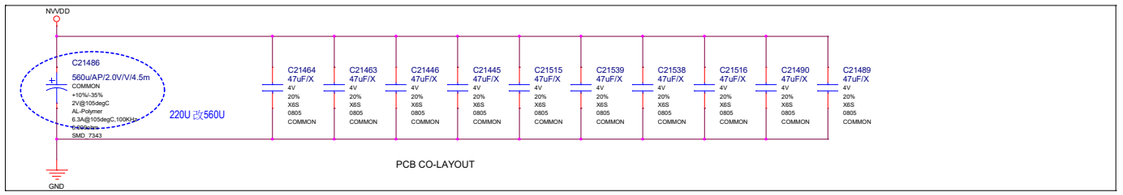
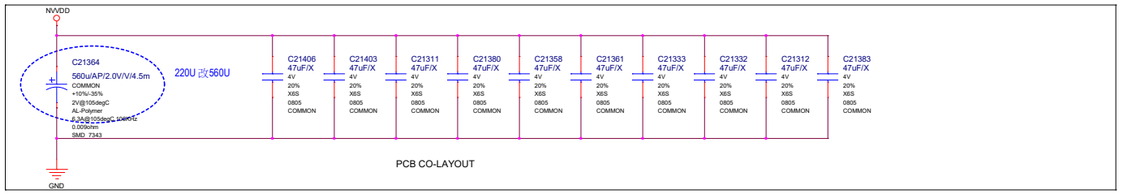
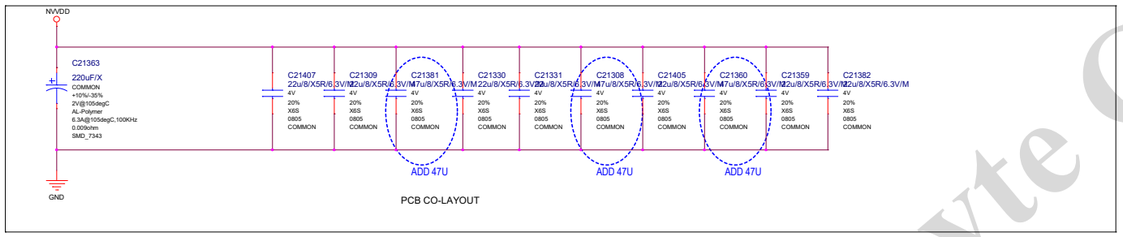
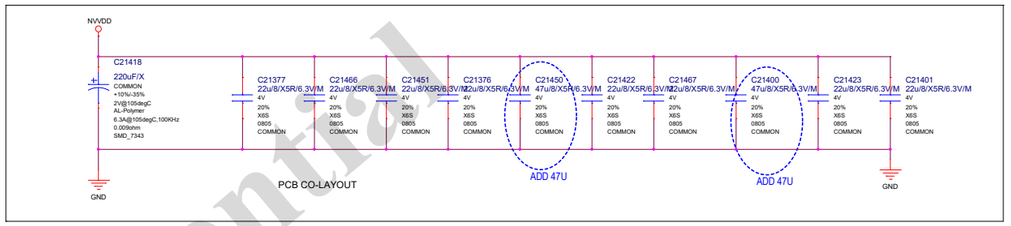
NVVDD

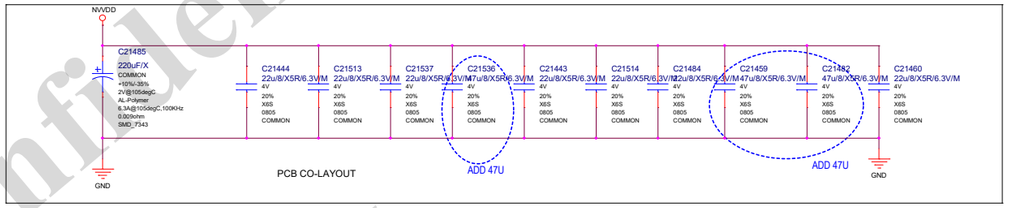
UNDER GPU











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PAGE DETAIL GPU: NVVDD DECOUPLING(1/2)

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Title: PCI EXPRESS

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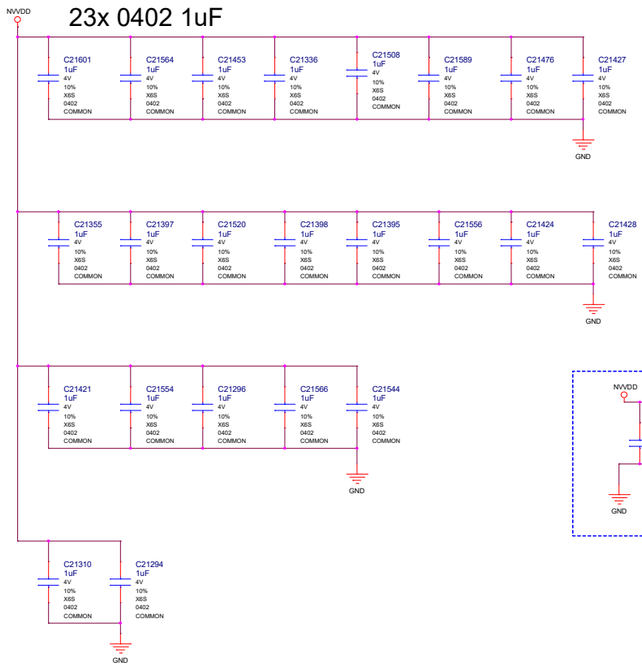
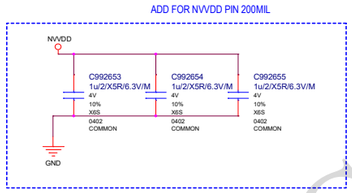
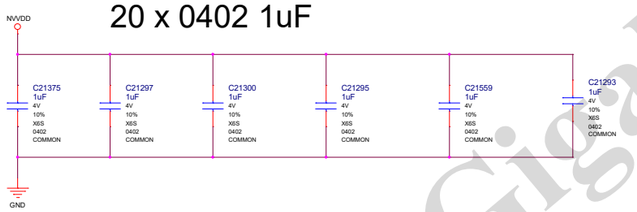
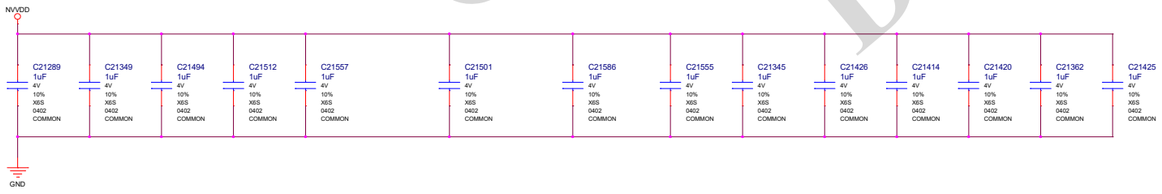
UNDER GPU

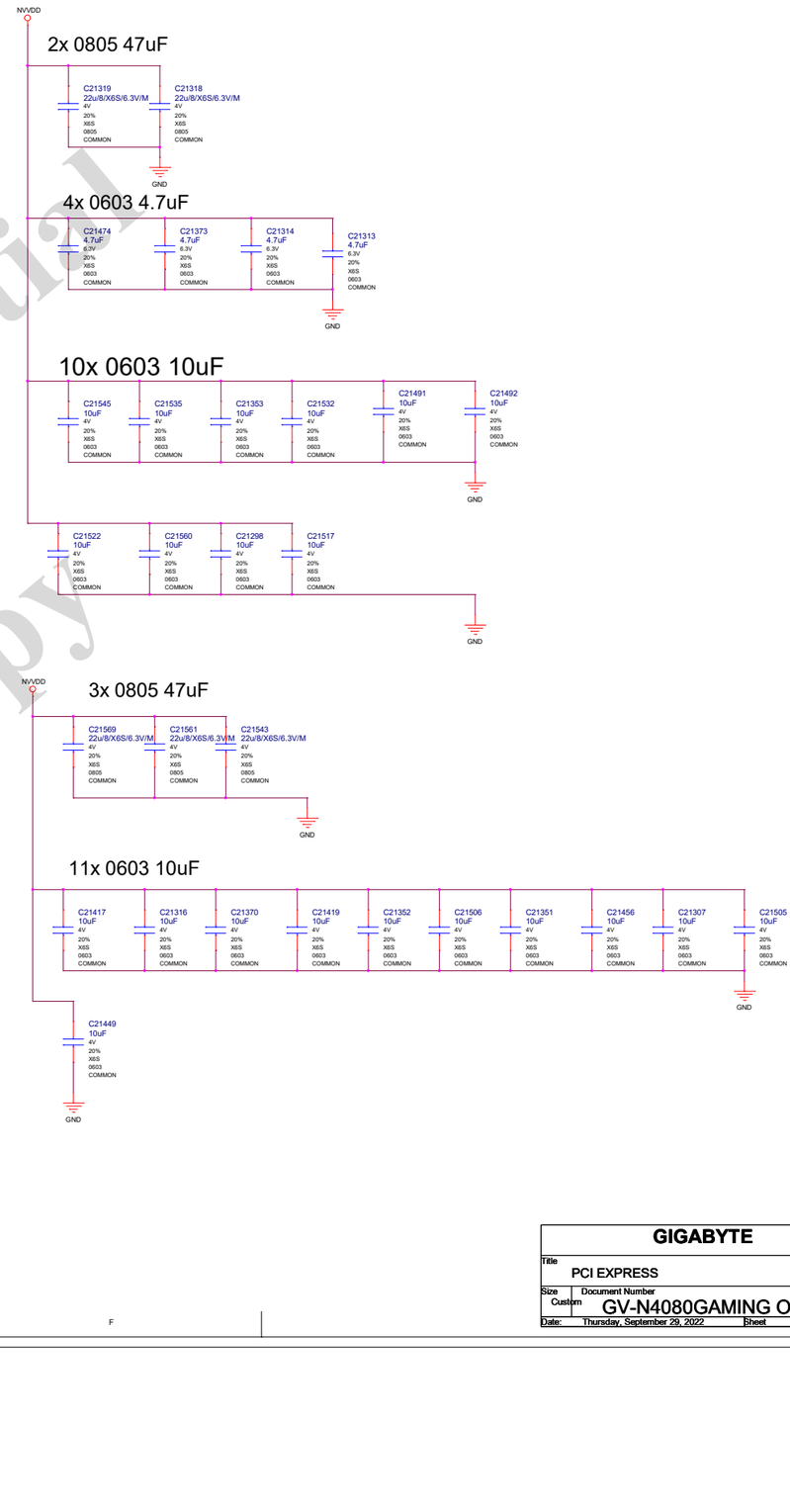
NVVDD











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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	GPU: NVVDD DECOUPLING(2/2)

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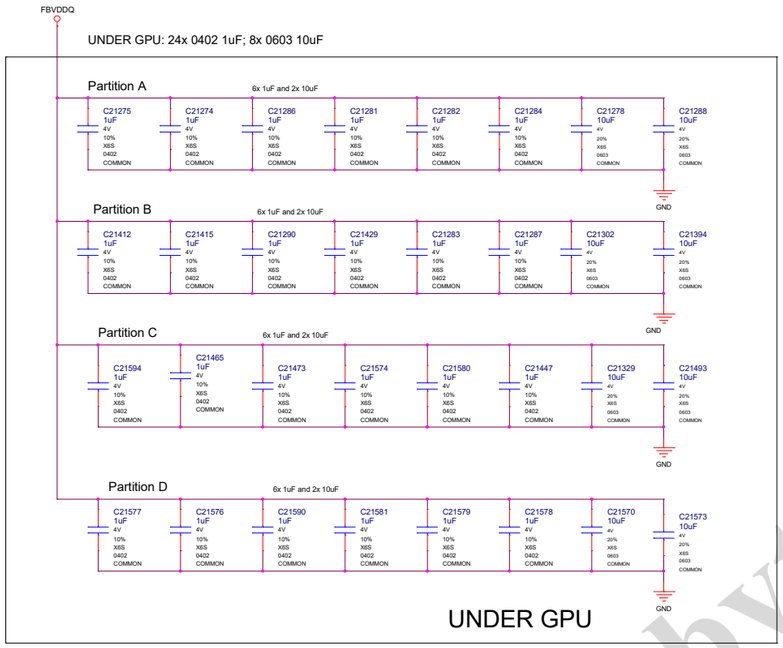
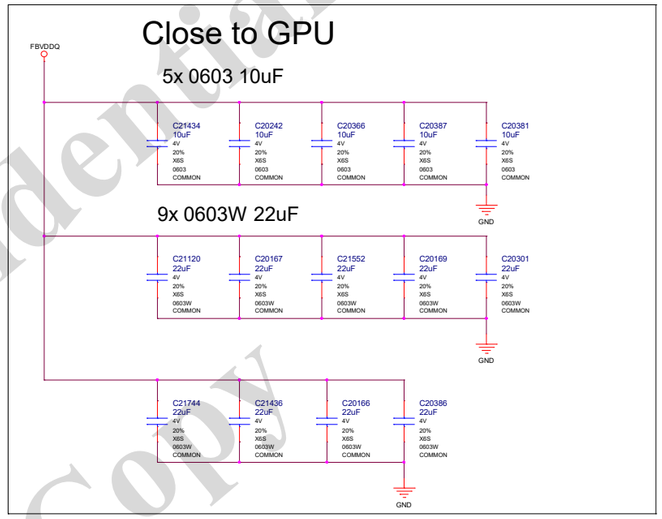
FBVDDQ





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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	GPU: FBVDD DECOUPLING

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ASSEMBLY <ASSEMBLY_DESCRIPTION>
PAGE DETAIL - BLANK -

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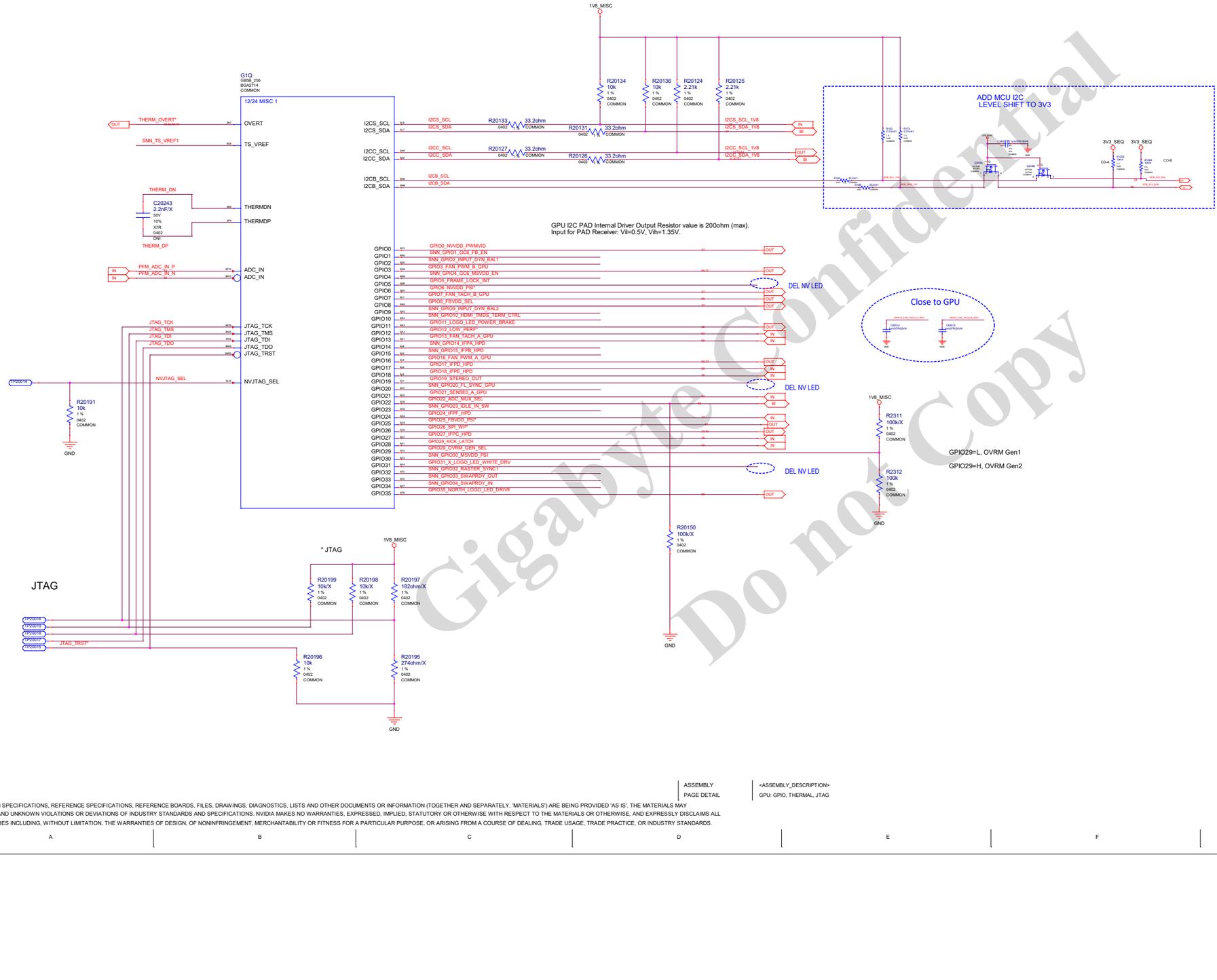
Page 26: GPU: GPIO, THERMAL, JTAG



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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	GPU: GPIO, THERMAL, JTAG

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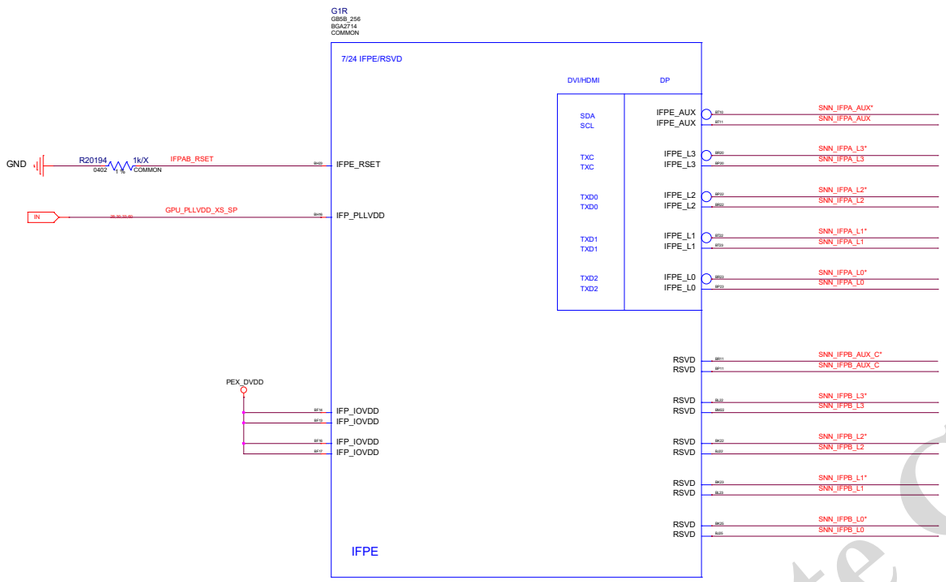

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ASSEMBLY <ASSEMBLY_DESCRIPTION>
PAGE DETAIL IFPA&IFPB UNUSED,NP IFPE

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Page 28: IFPC HDMI 2.1/DP

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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	IFPC HDMI/DP, NP IFPA

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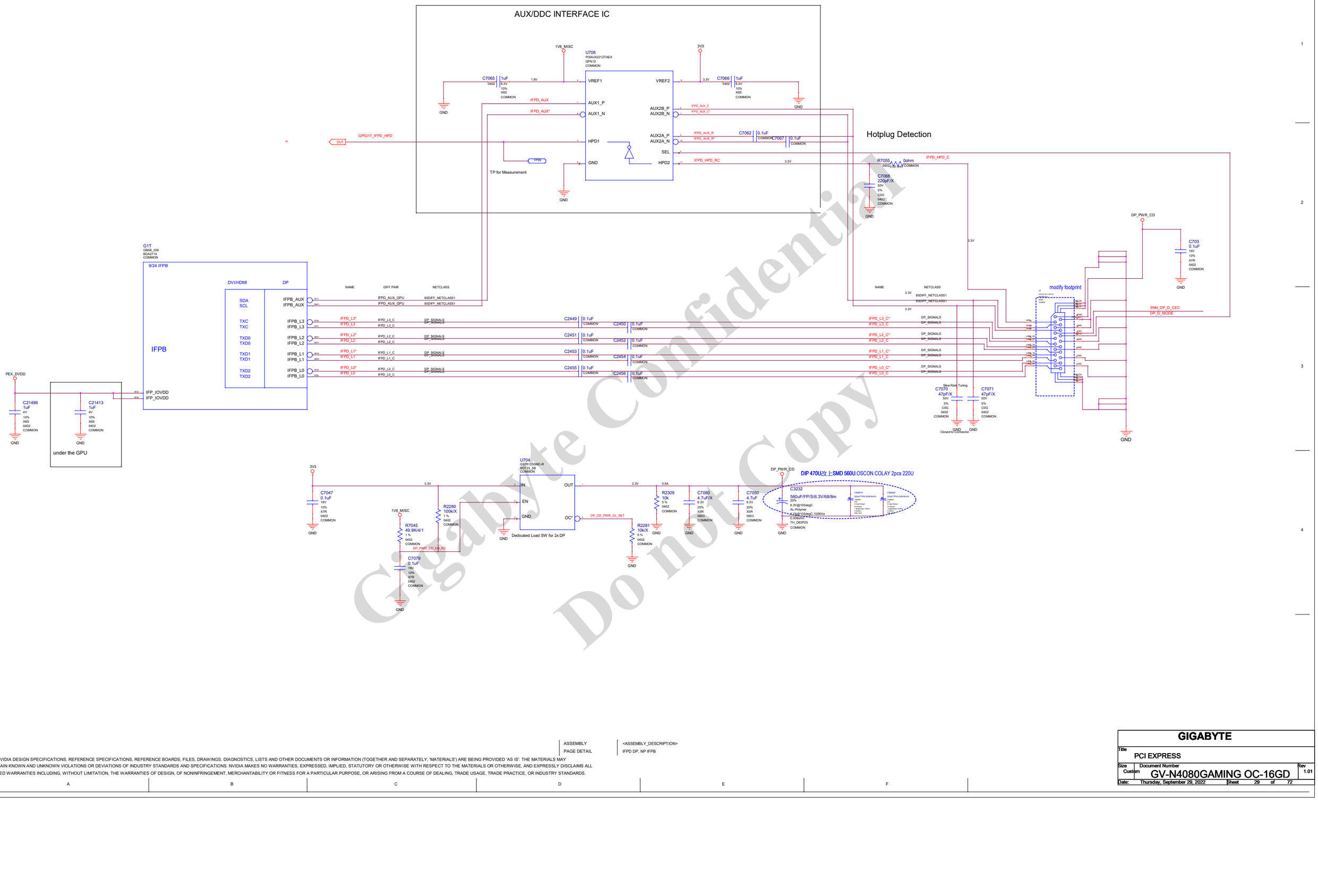
Page 29: IFPD DP



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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	IFPD DP, NP IFPB

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Page 30: IFPE DP

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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	IFPE DP, NP IFPC

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Title	PCI EXPRESS	
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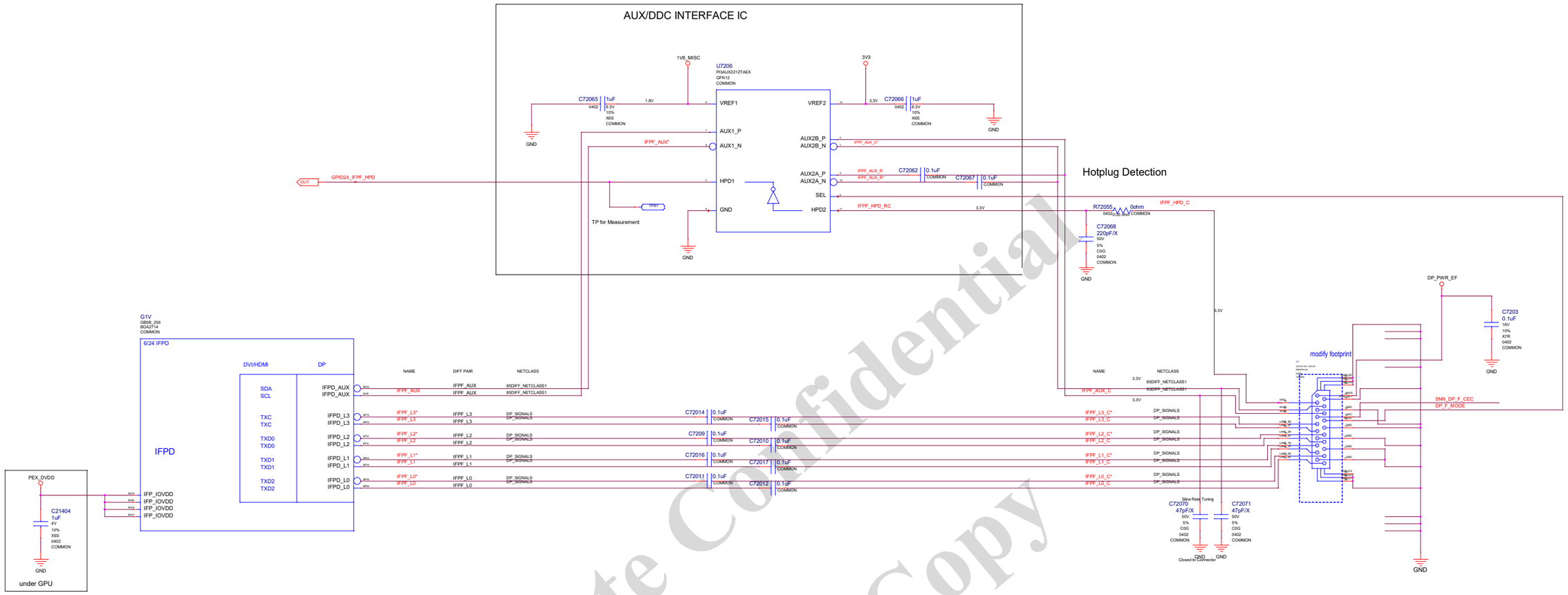

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ASSEMBLY <ASSEMBLY_DESCRIPTION>
PAGE DETAIL IFPF DP, NP IFPD

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Page 32: MISC: ROM, Straps

GROUP0

STRAP2	STRAP1	STRAP0	RAMCFG[4:0]	
L	L	H	00001	
L	H	L	00010	
L	H	H	00011	
L	M	H	01010	RAMCFG MICRON 16Gb G6X x16 (161-0479-900)
L	H	M	01011	RAMCFG MICRON 16Gb G6X x16 (161-0480-901)
H	H	H	00111	

For NP, Middle Level should be 0.6V

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

DEFAULT

GROUP1

ROM_SO	ROM_SI	ROM_SCLK	SMARTFAN[2:0],FS_OVERT	1:ENABLE 0:DISABLE
L	M	L	1001	FAN0/1=33%33%, FS_OVERT ENABLE

<-DEFAULT

GROUP2

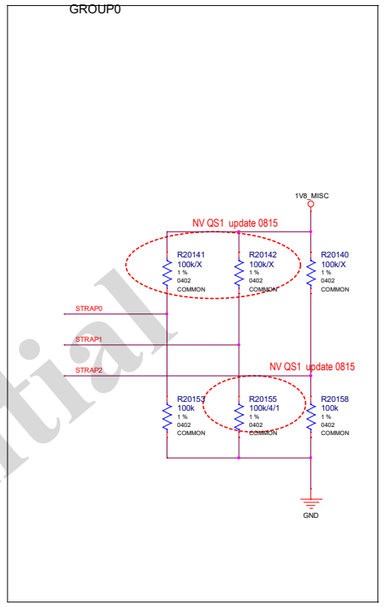
STRAP5	STRAP4	STRAP3	SMB_ALT_ADDR	DEVID_SEL	PCIE_CFG	VGA_DEVICE
M	H	H	1	1	1	1
M	H	L	1	1	1	0
M	L	H	1	1	0	1
M	L	L	1	1	0	0
L	H	M	1	0	1	1
L	M	H	1	0	1	0
L	M	L	1	0	0	1
L	L	M	1	0	0	0
H	H	H	0	1	1	1
H	H	L	0	1	1	0
H	L	H	0	1	0	1
H	L	L	0	1	0	0
L	H	H	0	0	1	1
L	H	L	0	0	1	0
L	L	H	0	0	0	1
L	L	L	0	0	0	0

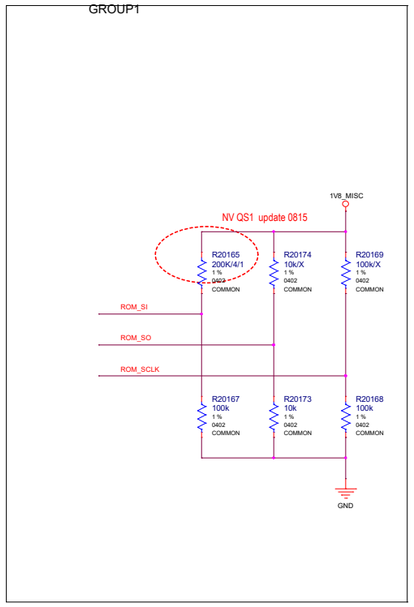
1:SMB_ALT_ADDR ENABLE
0:SMB_ALT_ADDR DISABLE

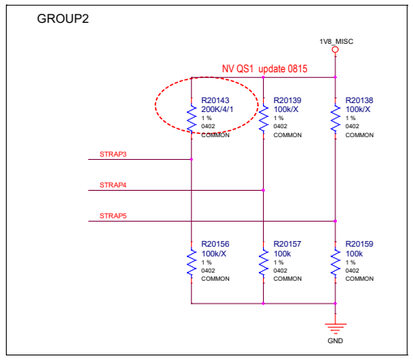
1:DEVID_SEL REBRAND
0:DEVID_SEL ORIGNAL

1:PCIE_CFG LOW POWER
0:PCIE_CFG HIGH POWER

1:VGA_DEVICE ENABLE
0:VGA_DEVICE DISABLE

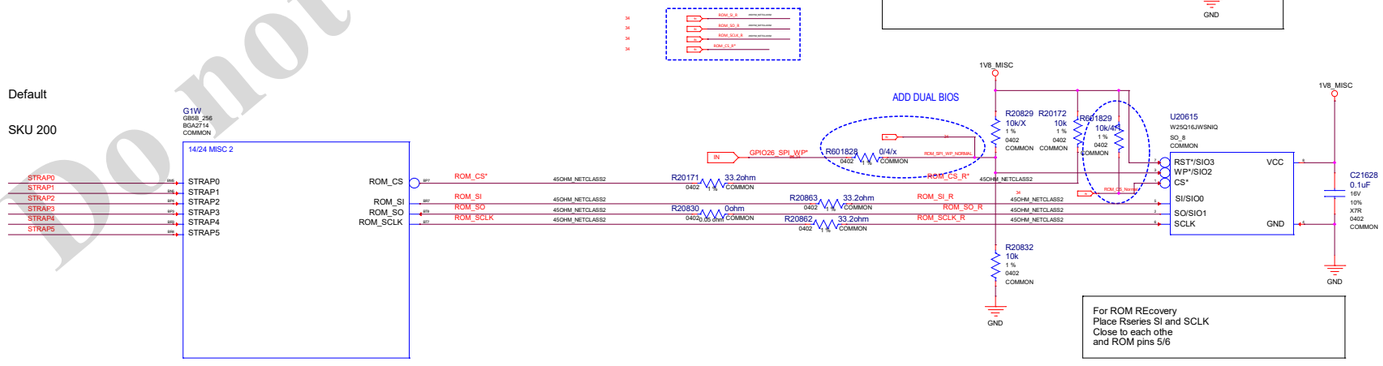






Default

SKU 200



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ASSEMBLY <ASSEMBLY_DESCRIPTION>
PAGE DETAIL MISC. ROM, STRAPS

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Title: PCI EXPRESS

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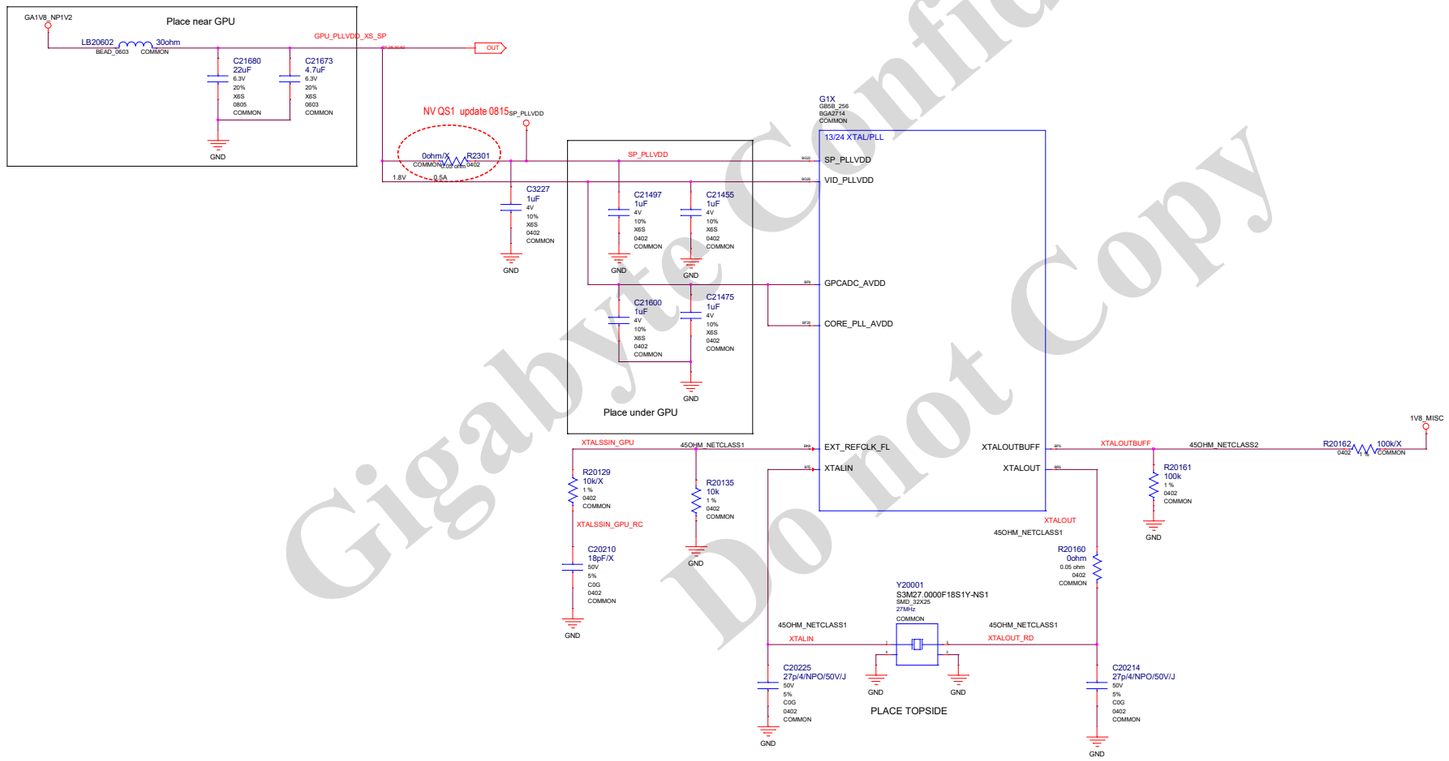
Page 33: MISC. XTAL. PLL



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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	MISC. XTAL. PLL

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Title: PCI EXPRESS

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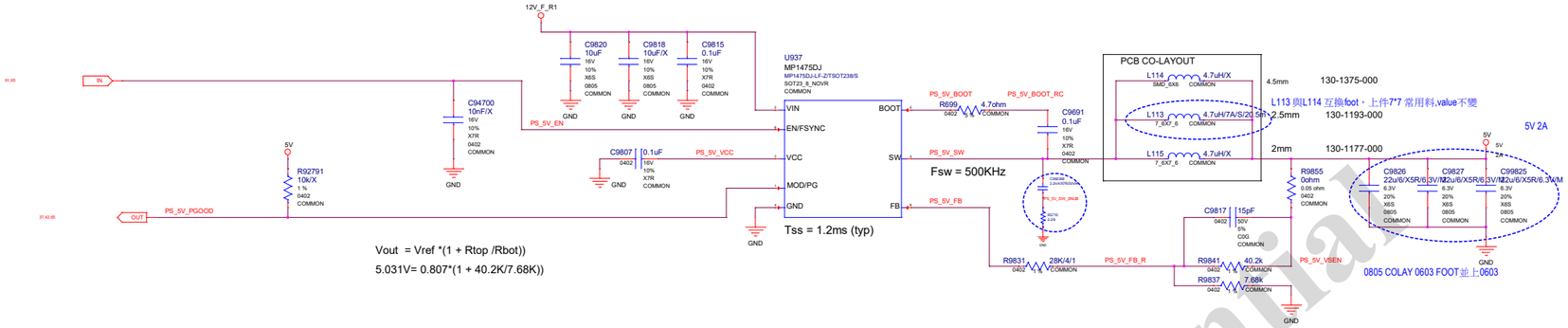
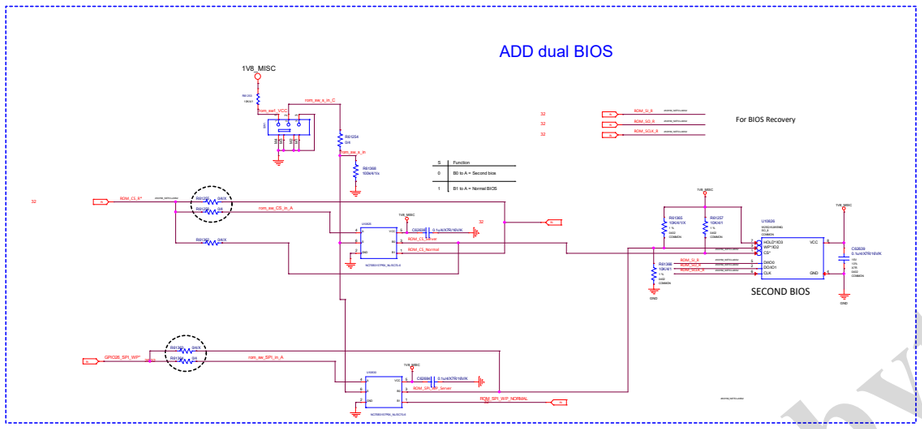
Page 34: PS: 5V





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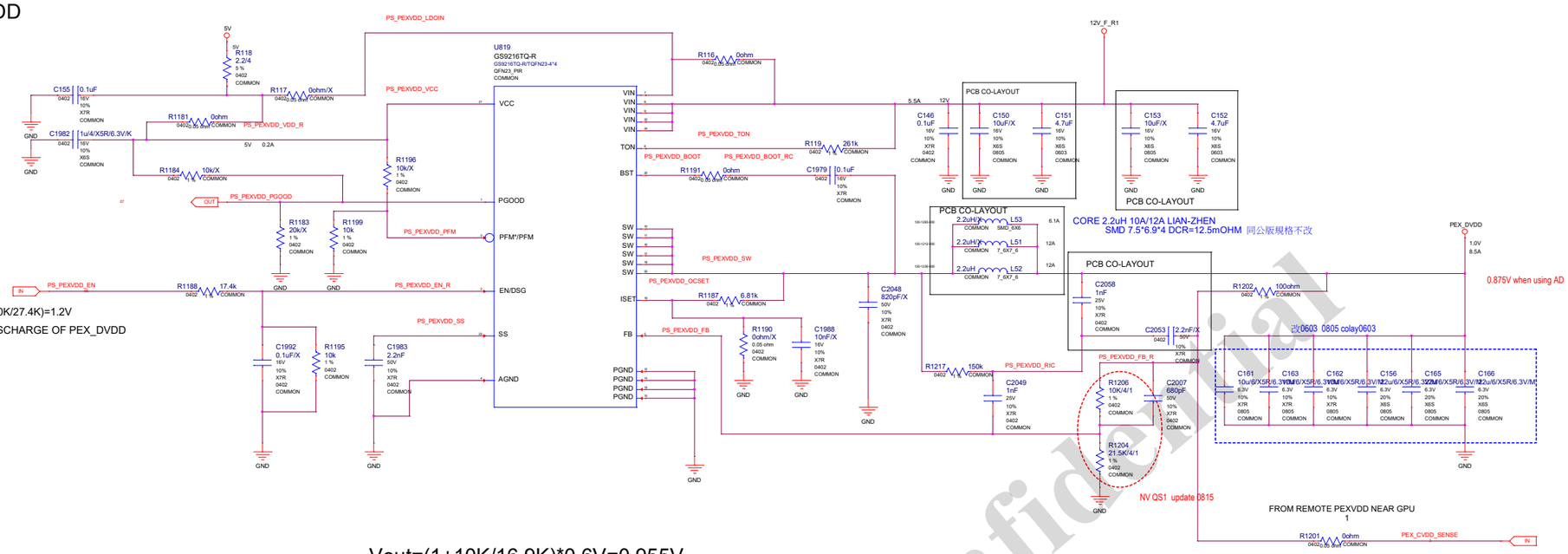
Page 35: PS: PEX_DVDD, GA1V8_NP1V2

PEX_DVDD



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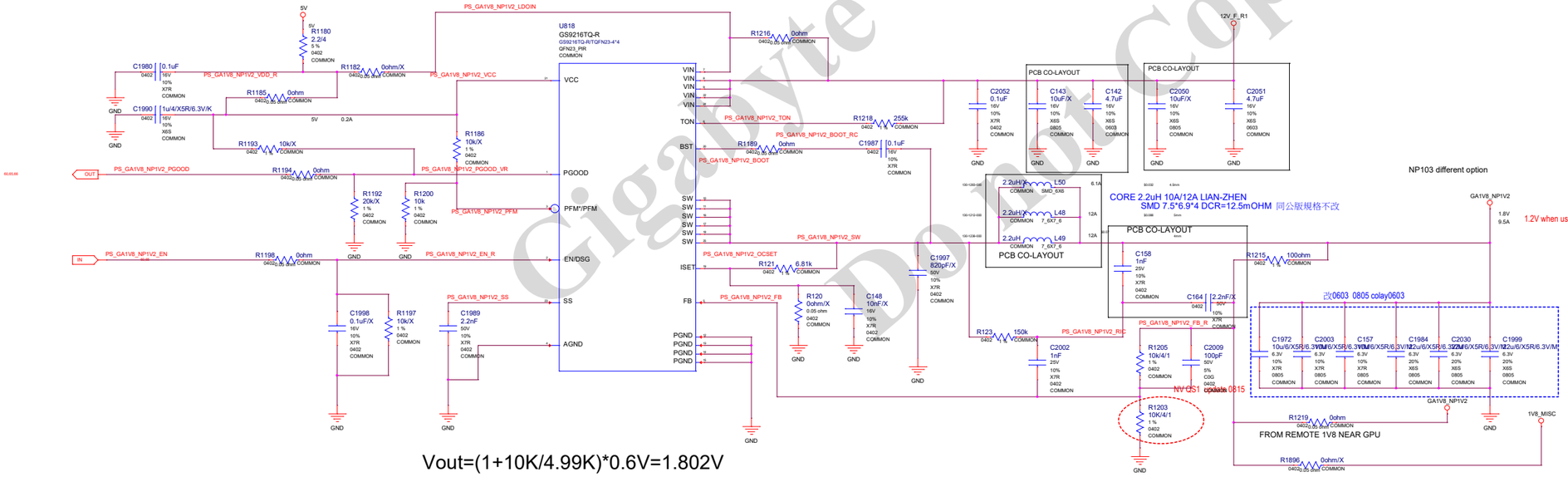
1V8(1V2 for NP;1V8 for GA102)



Vout=(1+10K/4.99K)*0.6V=1.802V

ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PS: PEX_DVDD, GA1V8_NP1V2

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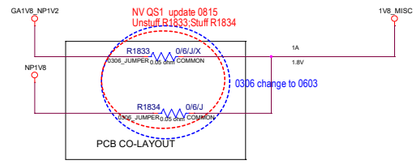
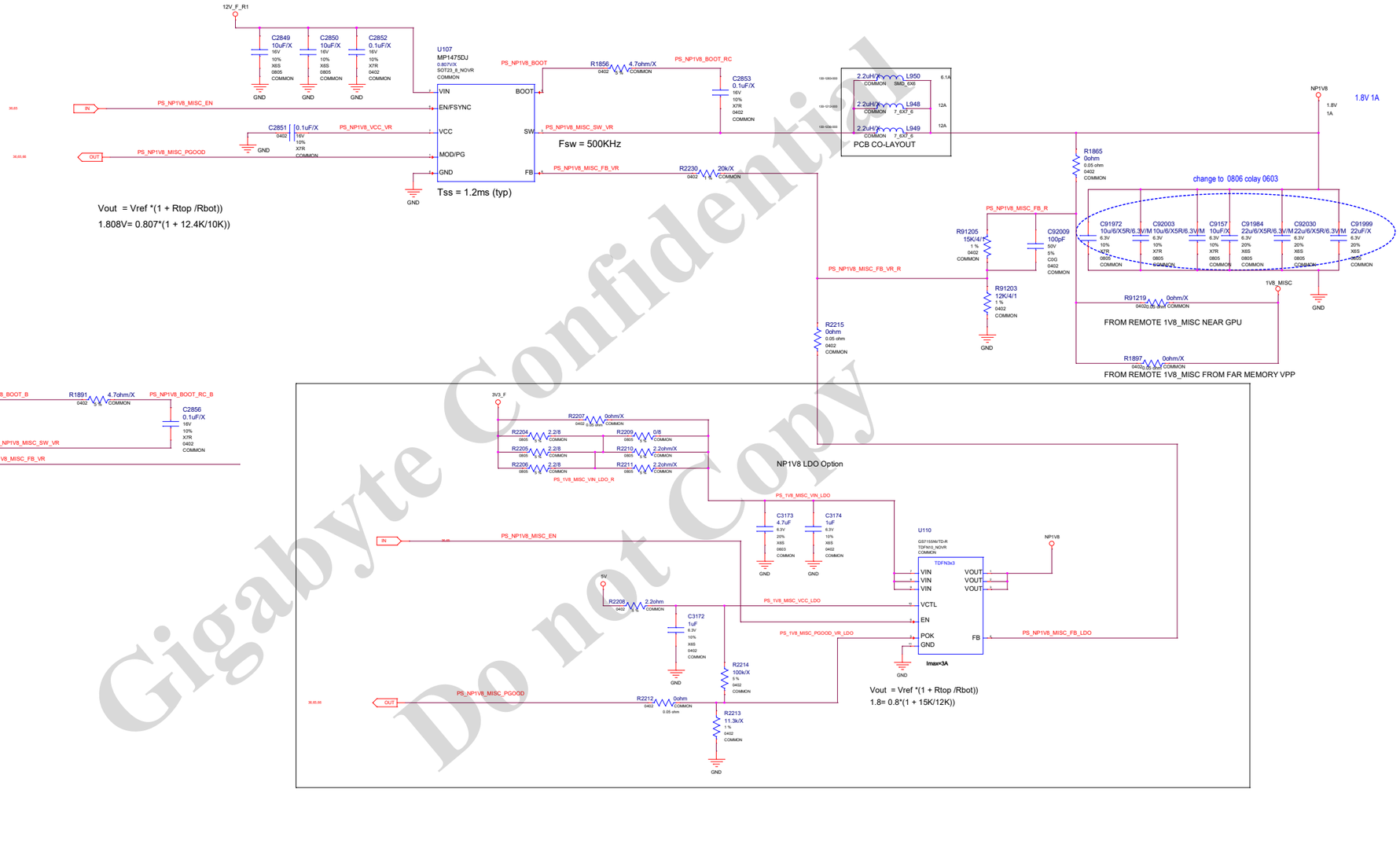
Page 36: PS:NP1V8(NP ONLY),1V8_MISC

NP103 different option





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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PS: NP1V8(NP ONLY), 1V8_MISC

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PS: FBVDDQ OVR3

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PAGE DETAIL	PS: FBVDDQ OVR3

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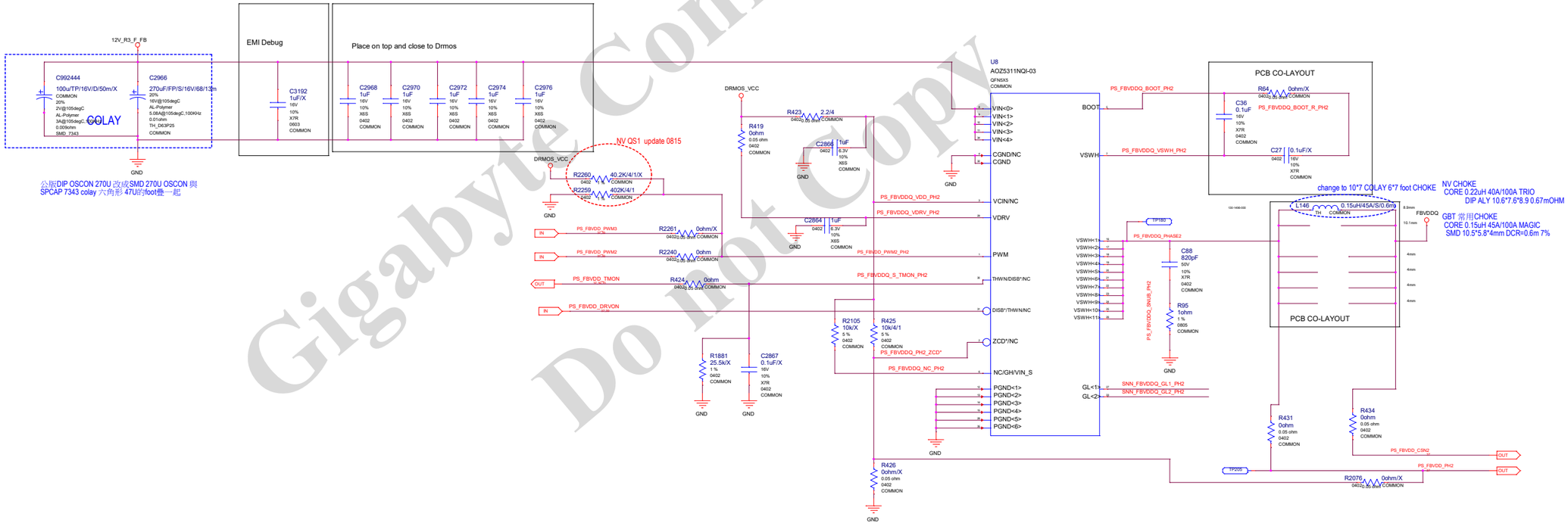

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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PS: FBVDD PH2 (PWM2)

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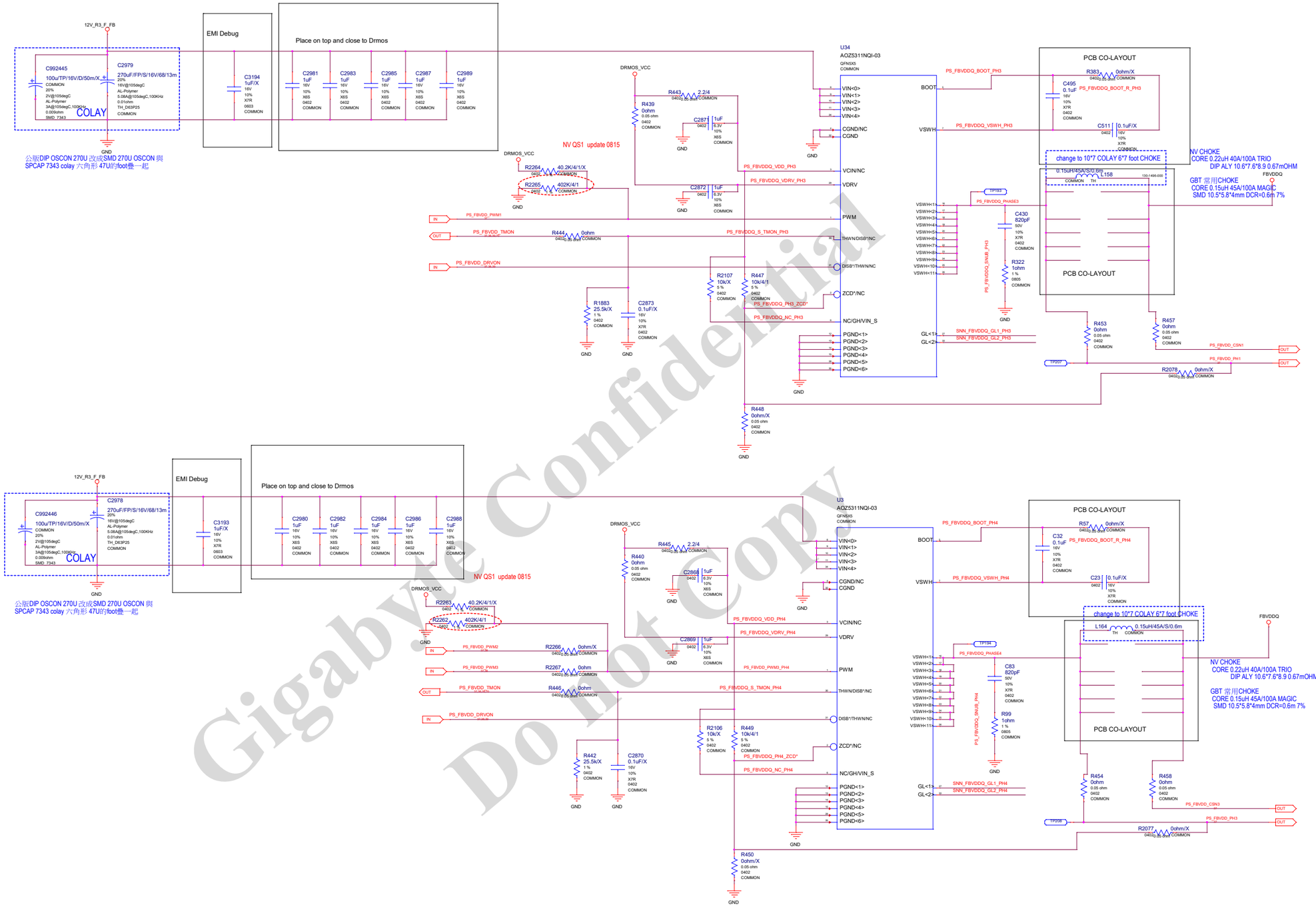
Page 39: PS: FBVDD PH3 (PWM3), PH4 (PWM1)



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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PS: FBVDD PH3 (PWM3) and PH4 (PWM1)

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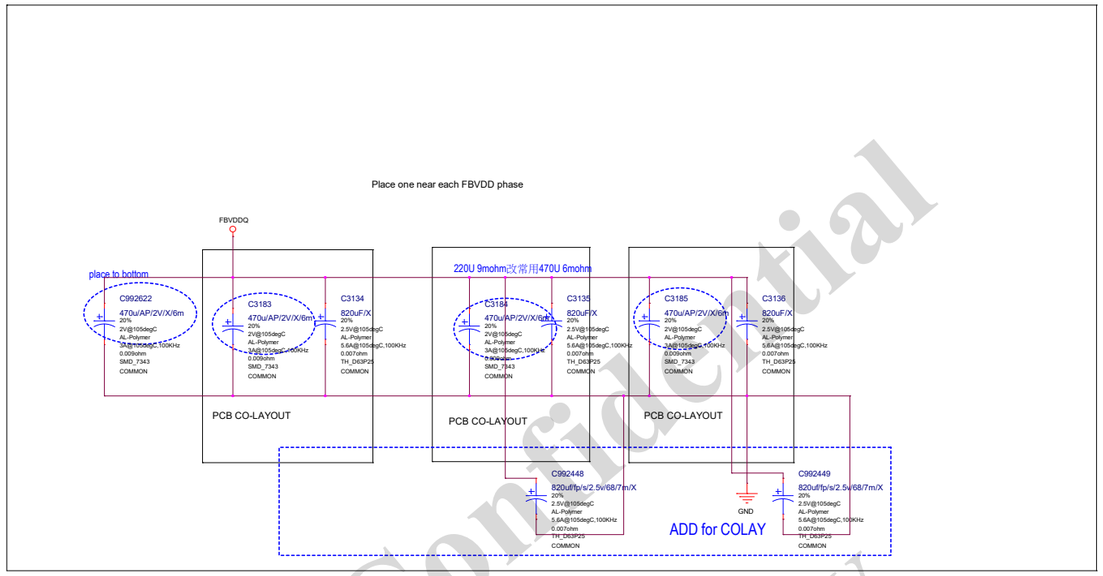
Page 40: PS: FBVDD OUTPUT CAP NEAR VR



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ASSEMBLY <ASSEMBLY_DESCRIPTION>
PAGE DETAIL PS: FBVDD OUTPUT CAP NEAR VR

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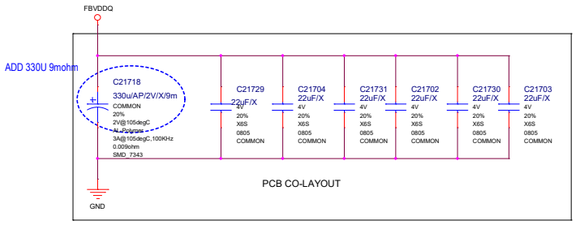
Page 41: PS: FBVDD OUTPUT CAP NEAR MEMORY



PLACE NEAR MEMORY

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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PS: FBVDD OUTPUT CAP NEAR MEMORY

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Page 42: PS: NVVDD Controller_OVR8

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ASSEMBLY | <ASSEMBLY_DESCRIPTION>
PAGE DETAIL | PS: NVVDD Controller

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Page 43: PS: NVVDD Controller_Sense

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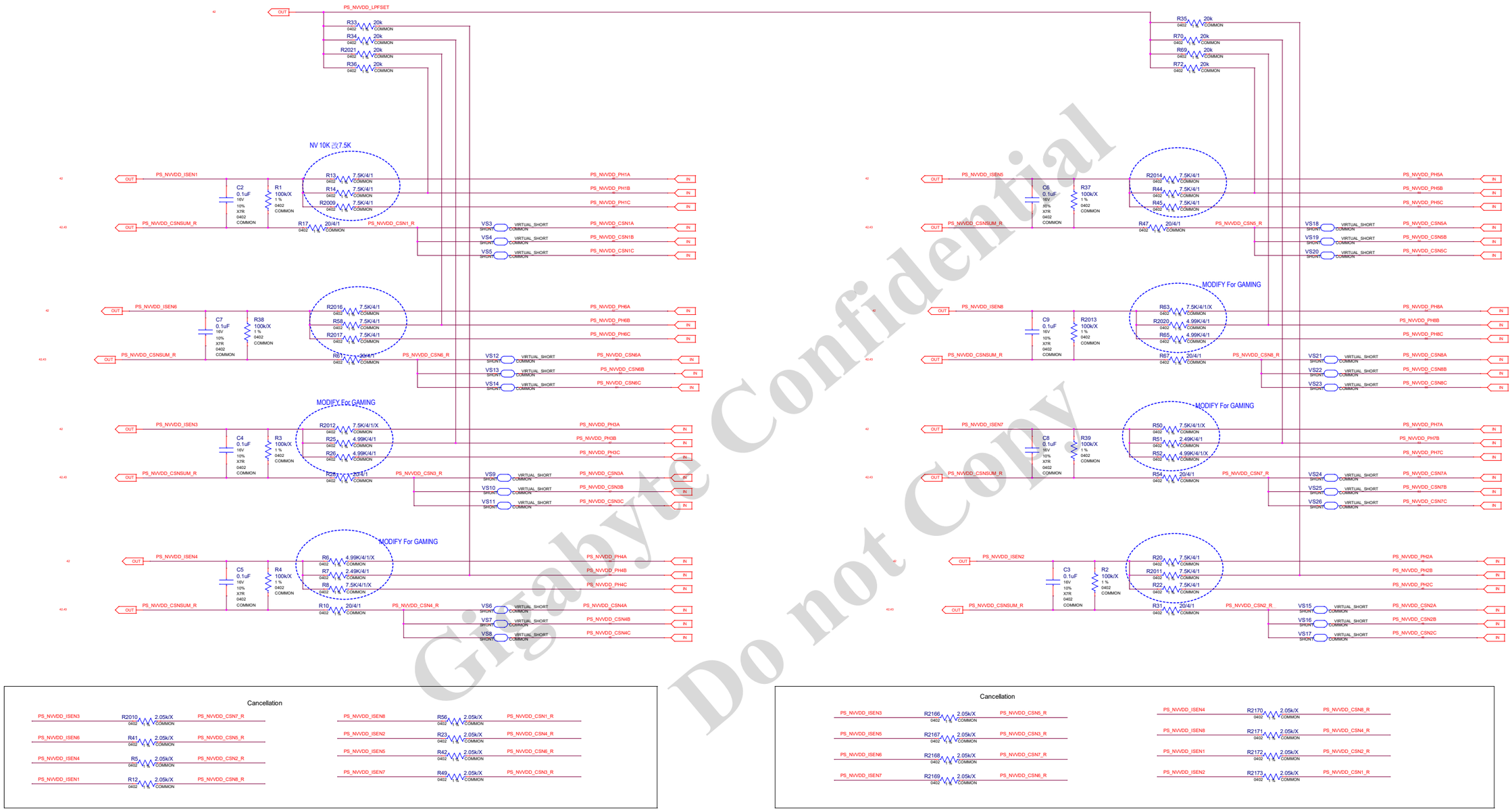
Same side: 3,5 4,8 6,7 1,2



Cancellation

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PS_NVVDD_ISEN6	R41 2.05k/X	PS_NVVDD_CSN5_R	PS_NVVDD_ISEN2	R23 2.05k/X	PS_NVVDD_CSN4_R
PS_NVVDD_ISEN4	R5 2.05k/X	PS_NVVDD_CSN2_R	PS_NVVDD_ISEN5	R42 2.05k/X	PS_NVVDD_CSN6_R
PS_NVVDD_ISEN1	R12 2.05k/X	PS_NVVDD_CSN8_R	PS_NVVDD_ISEN7	R49 2.05k/X	PS_NVVDD_CSN3_R

Cancellation

PS_NVVDD_ISEN3	R2166 2.05k/X	PS_NVVDD_CSN5_R	PS_NVVDD_ISEN4	R2170 2.05k/X	PS_NVVDD_CSN8_R
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PS_NVVDD_ISEN6	R2168 2.05k/X	PS_NVVDD_CSN7_R	PS_NVVDD_ISEN1	R2172 2.05k/X	PS_NVVDD_CSN2_R
PS_NVVDD_ISEN7	R2169 2.05k/X	PS_NVVDD_CSN6_R	PS_NVVDD_ISEN2	R2173 2.05k/X	PS_NVVDD_CSN1_R

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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PS: NVVDD Controller Sense

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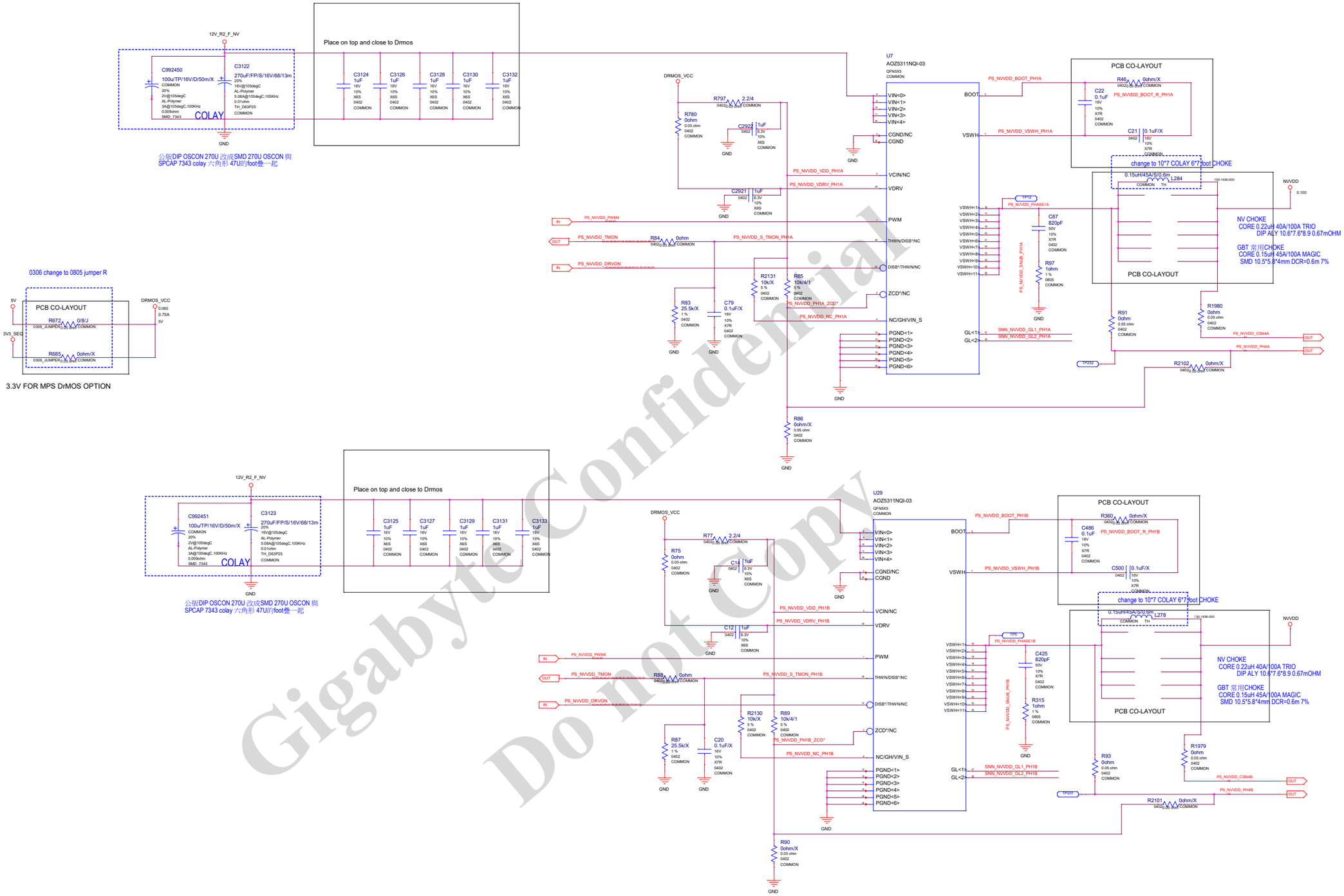
Page 44: PS: NVVDD PH1A, PH1B



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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PS: NVVDD PH1A, PH1B

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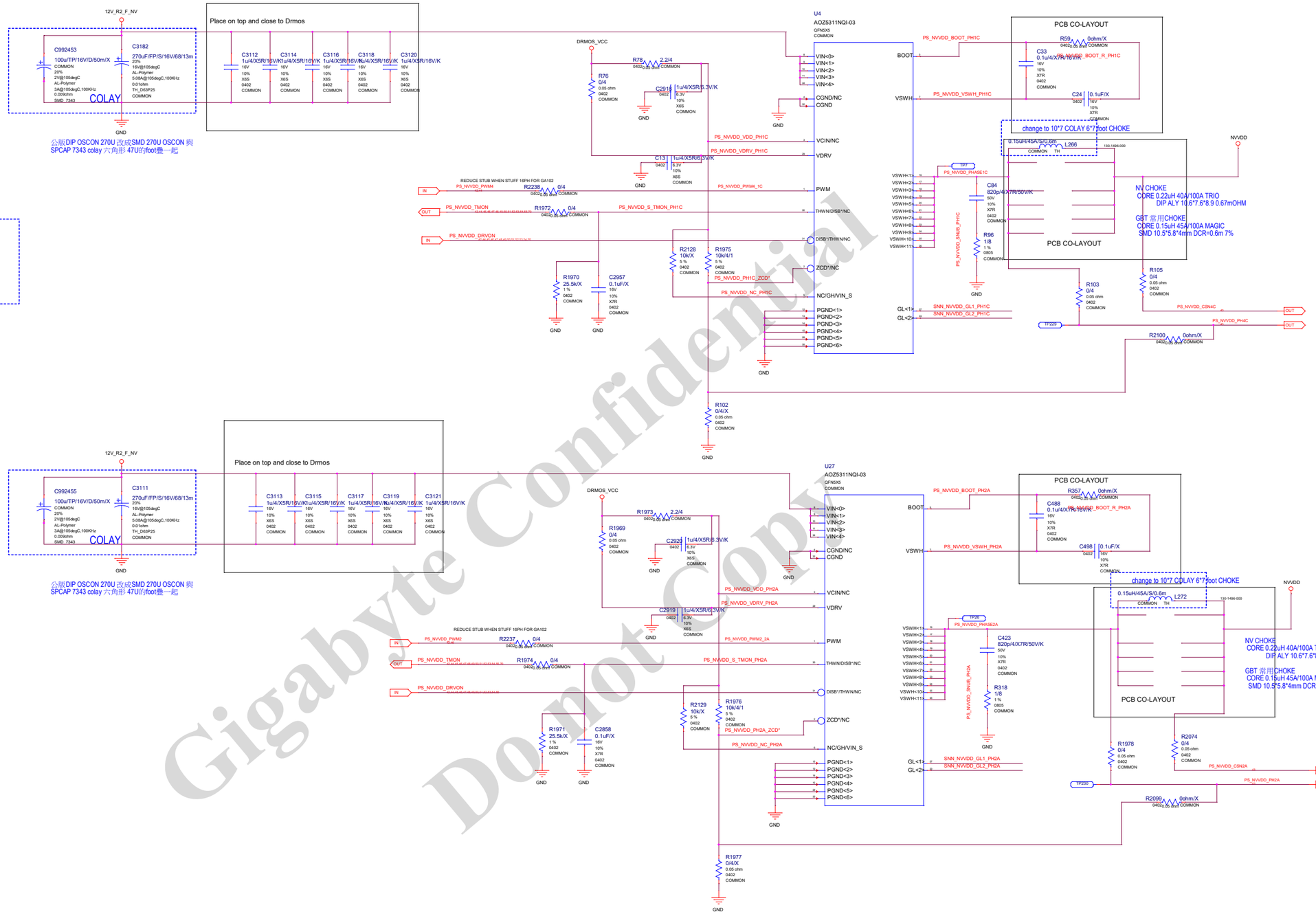
Stuff for AORUS



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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PS: NVVDD PH1C, PH2A

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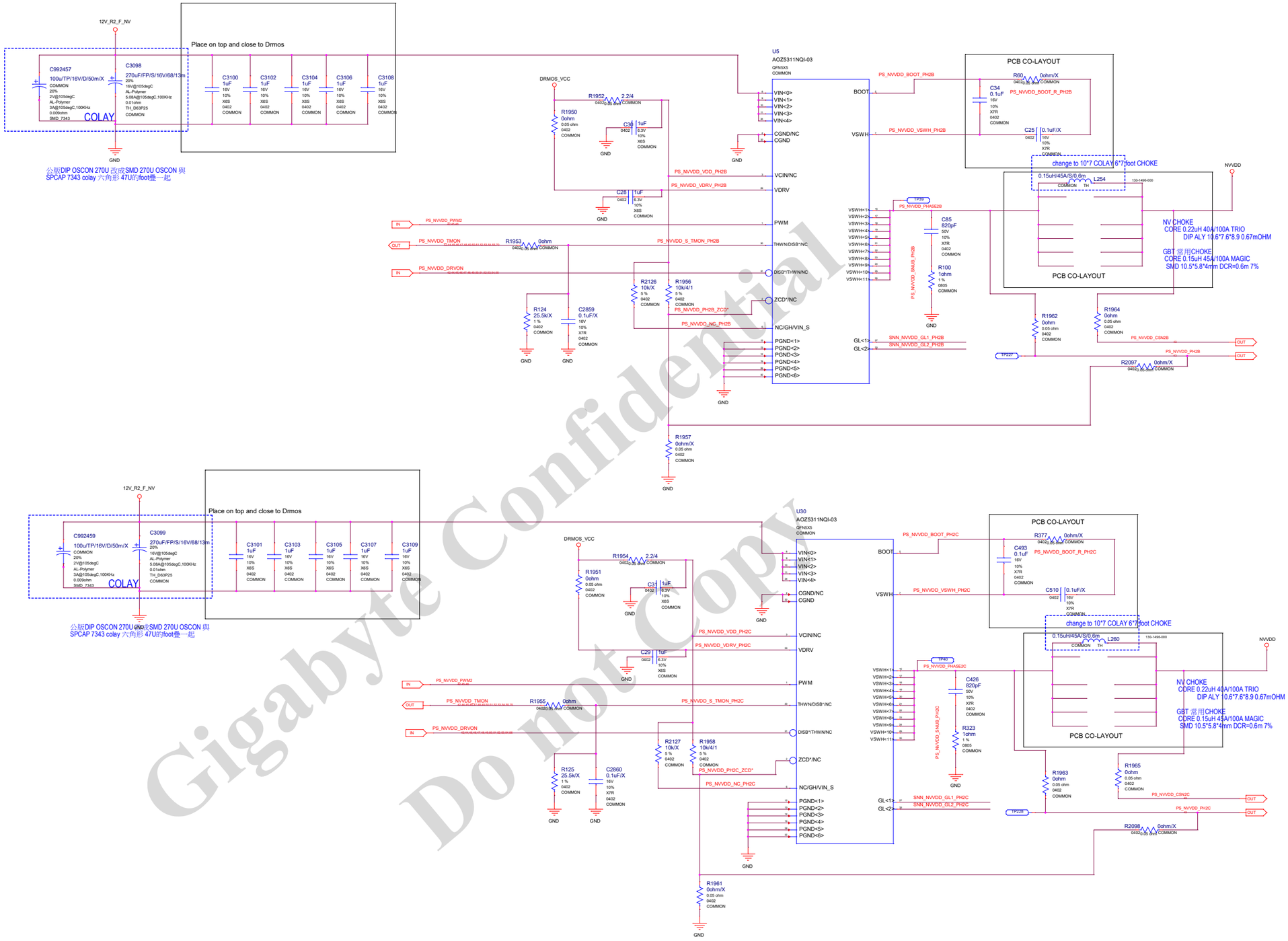
Page 46: PS: NVVDD PH2B, PH2C



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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PS: NVVDD PH2B, PH2C

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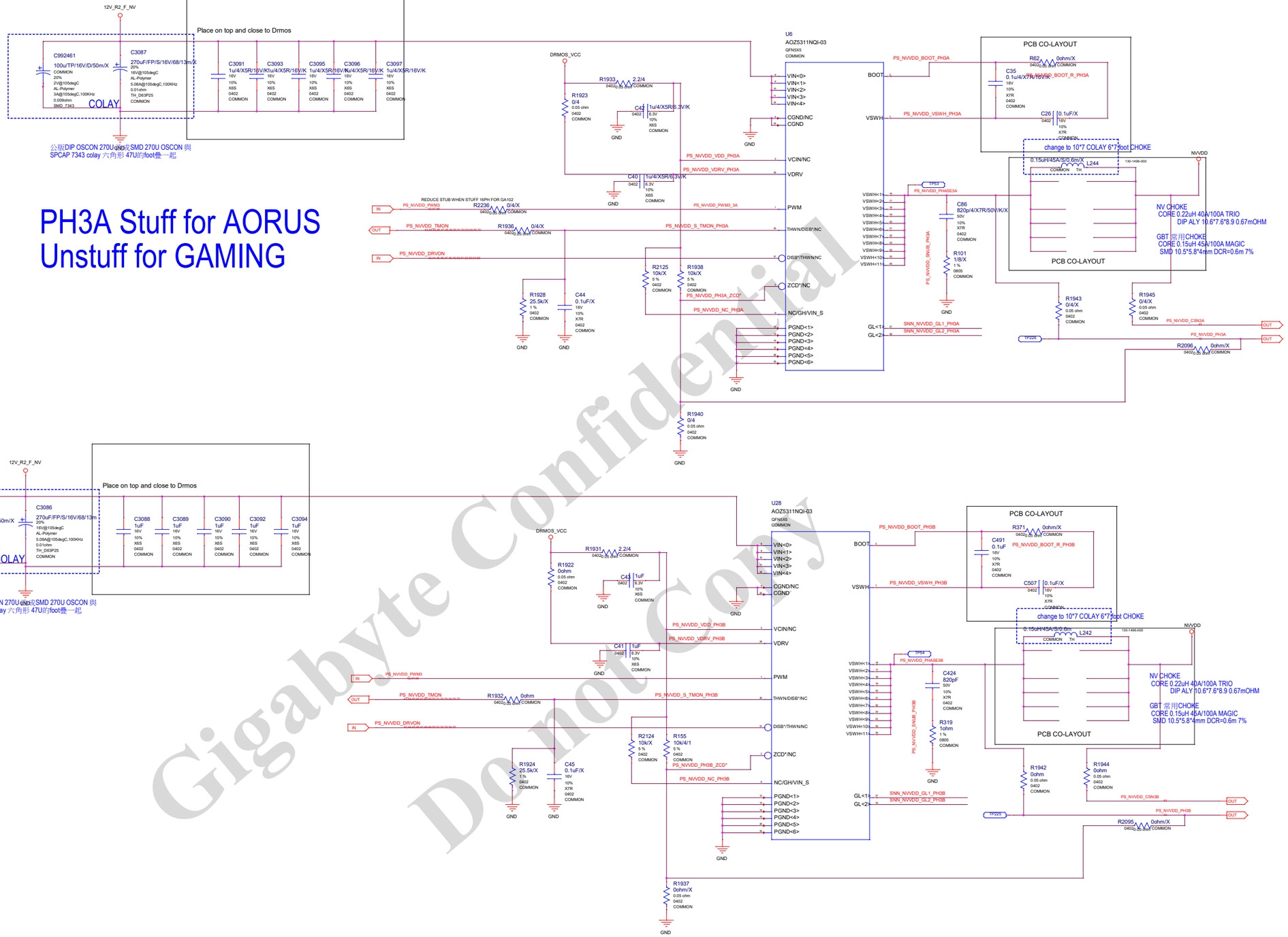
Page 47: PS: NVVDD PH3A,PH3B



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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PS: NVVDD PH3A, PH3B

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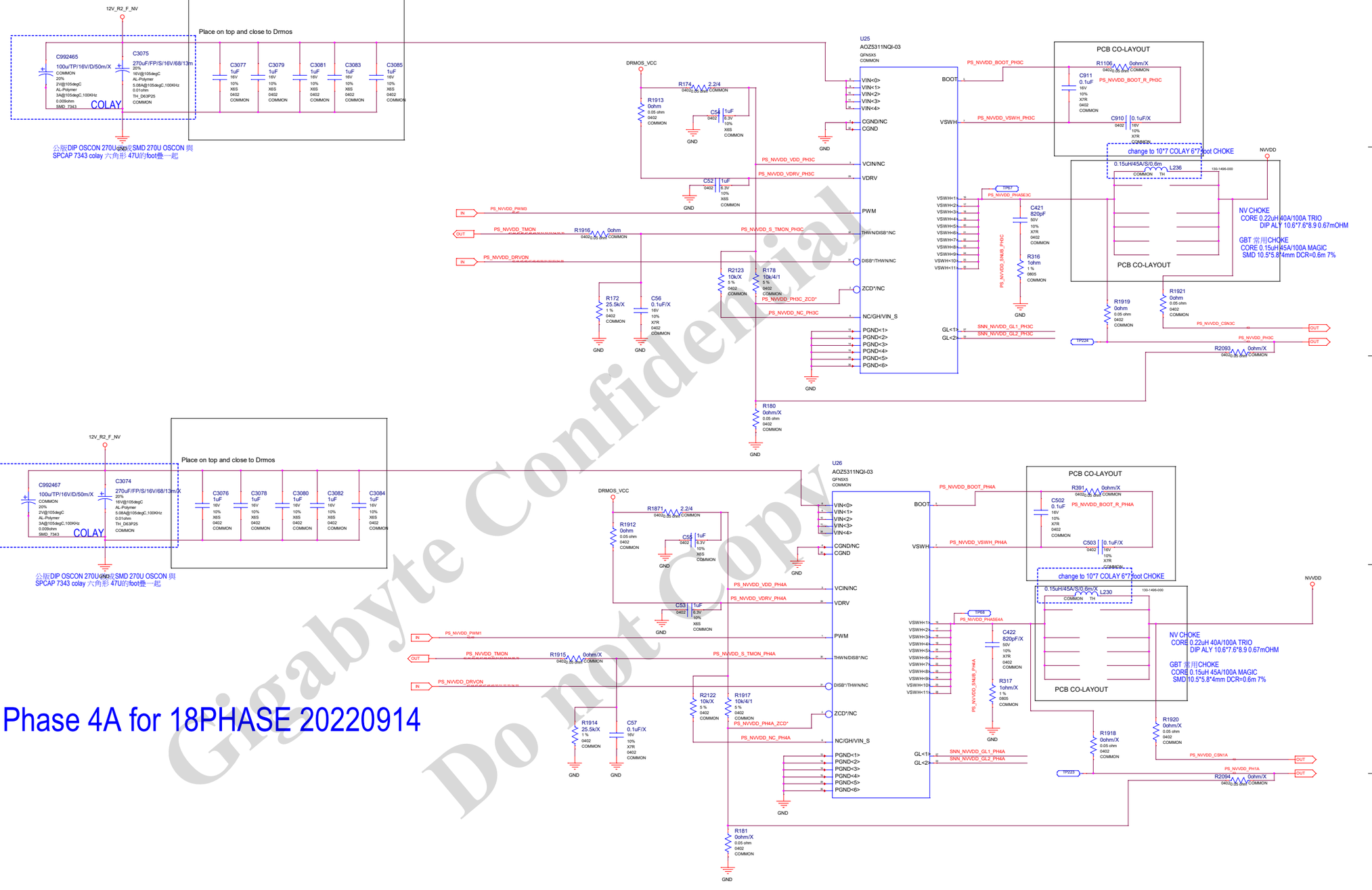
Page 48: PS: NVVDD PH3C,PH4A



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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PS: NVVDD PH3C, PH4A

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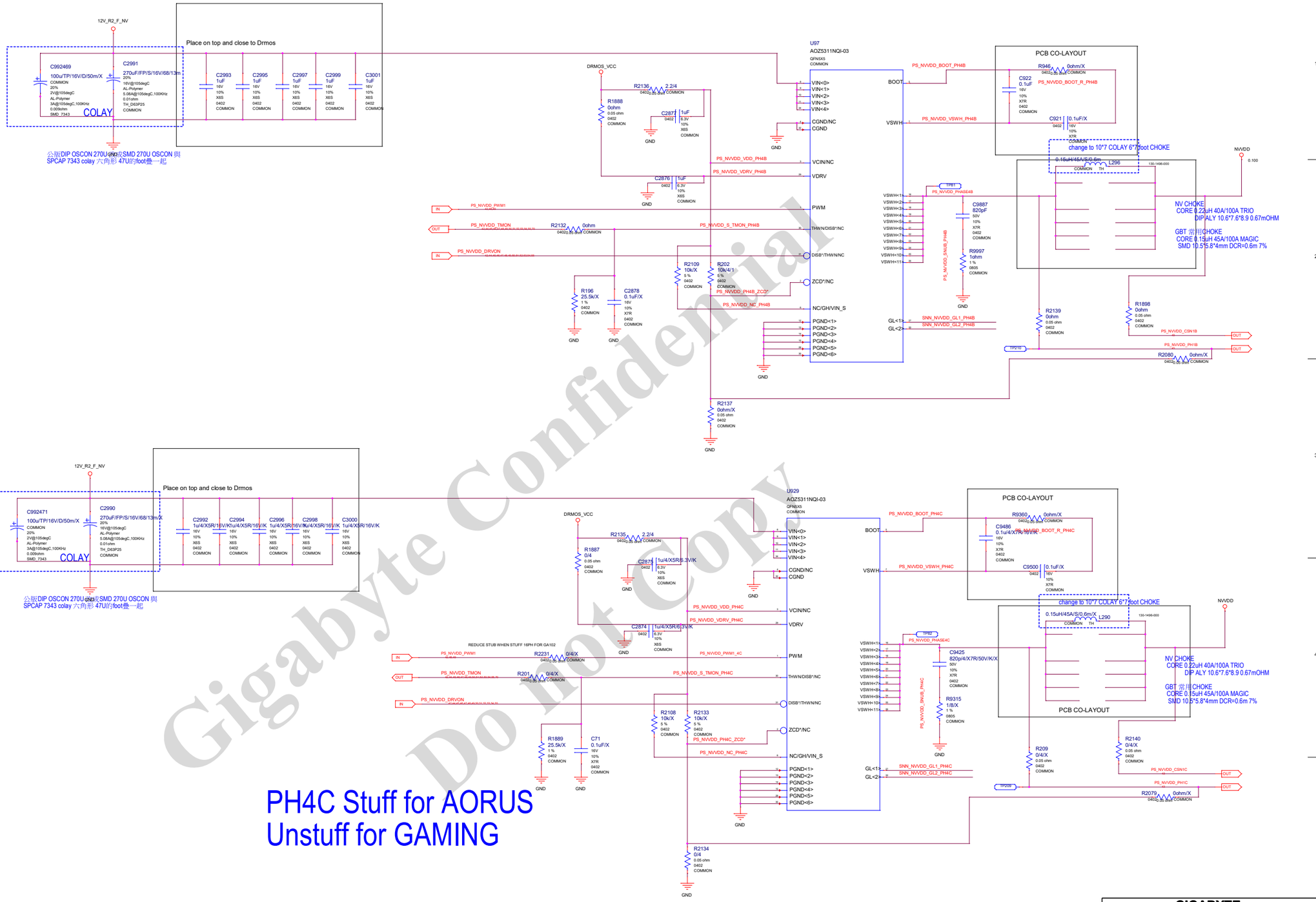
Page 49: PS: NVVDD PH4B, PH4C



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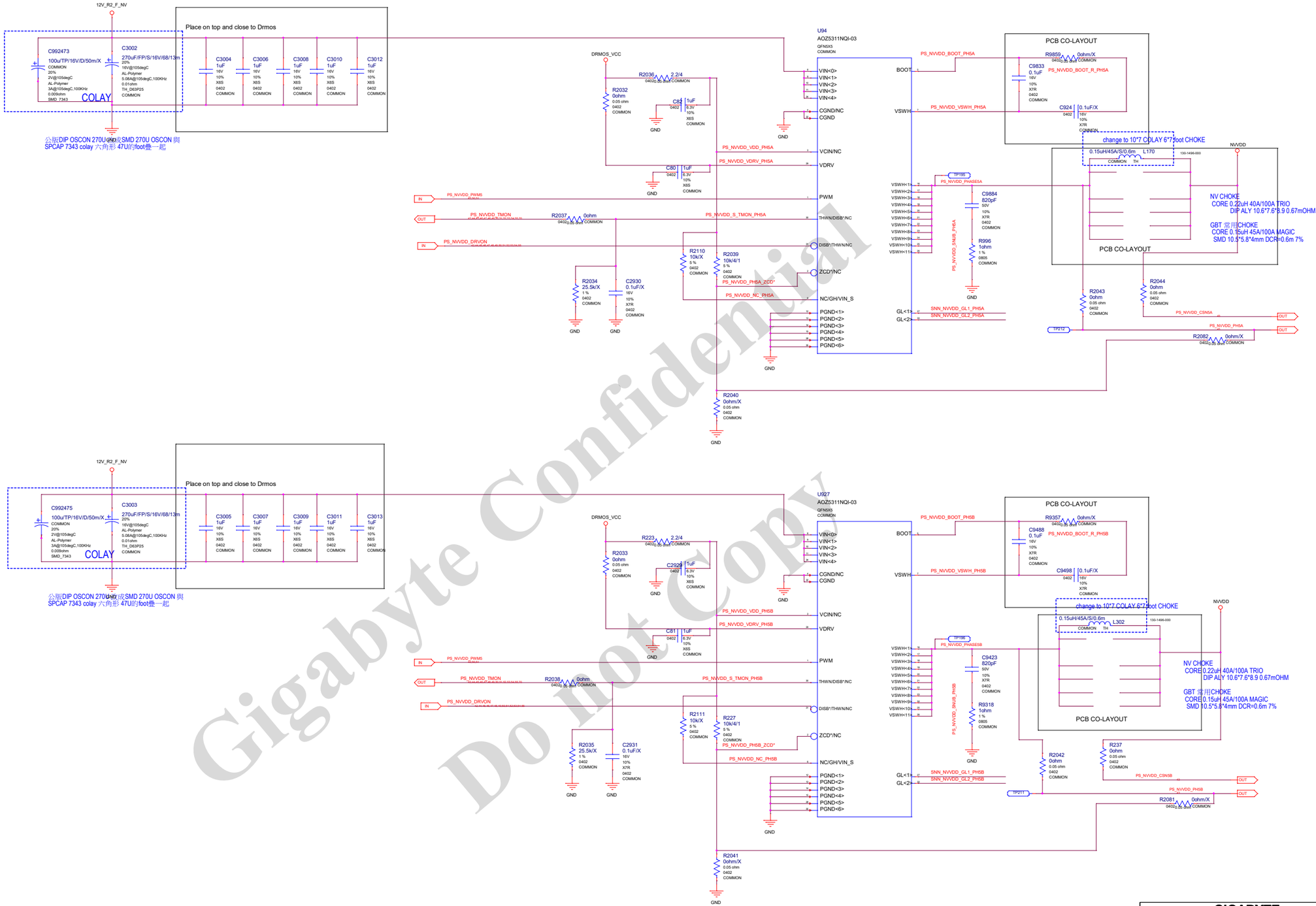
Page 50: PS: NVVDD PH5A, PH5B



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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PS: NVVDD PH5A, PH5B

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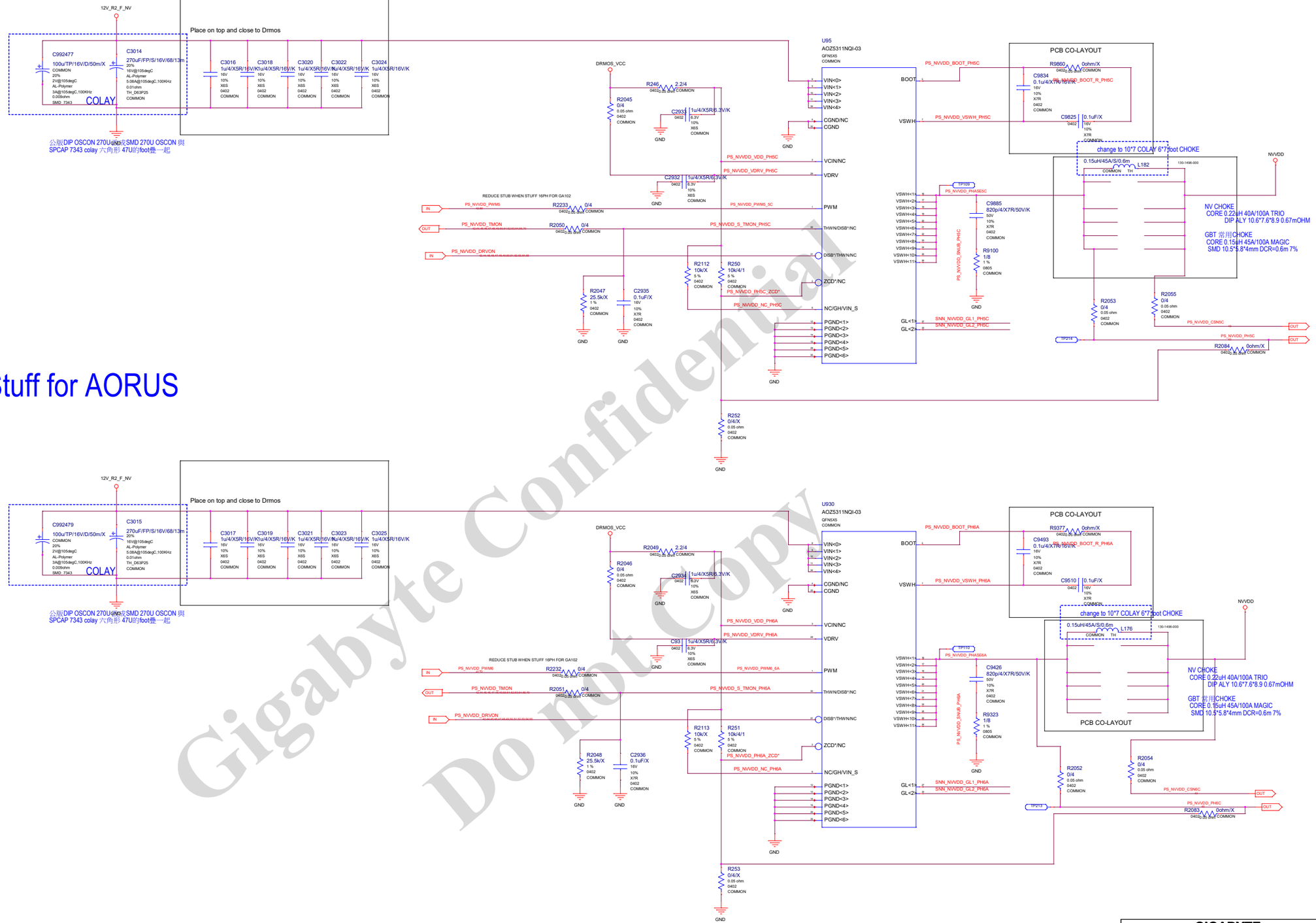
PH5C,6A Stuff for AORUS



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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PS: NVVDD PH5C, PH6A

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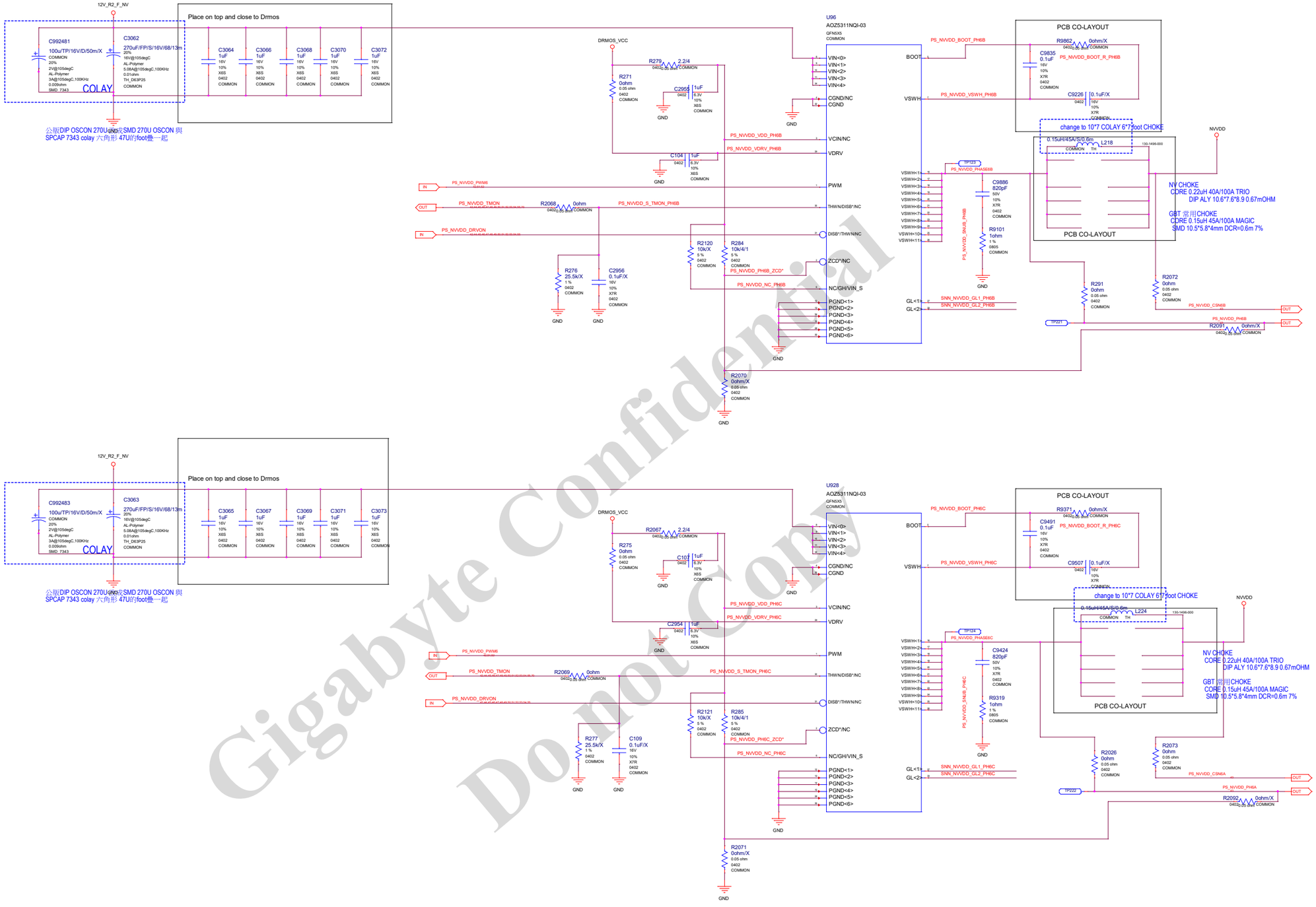

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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PS: NVVDD PH6B, PH6C

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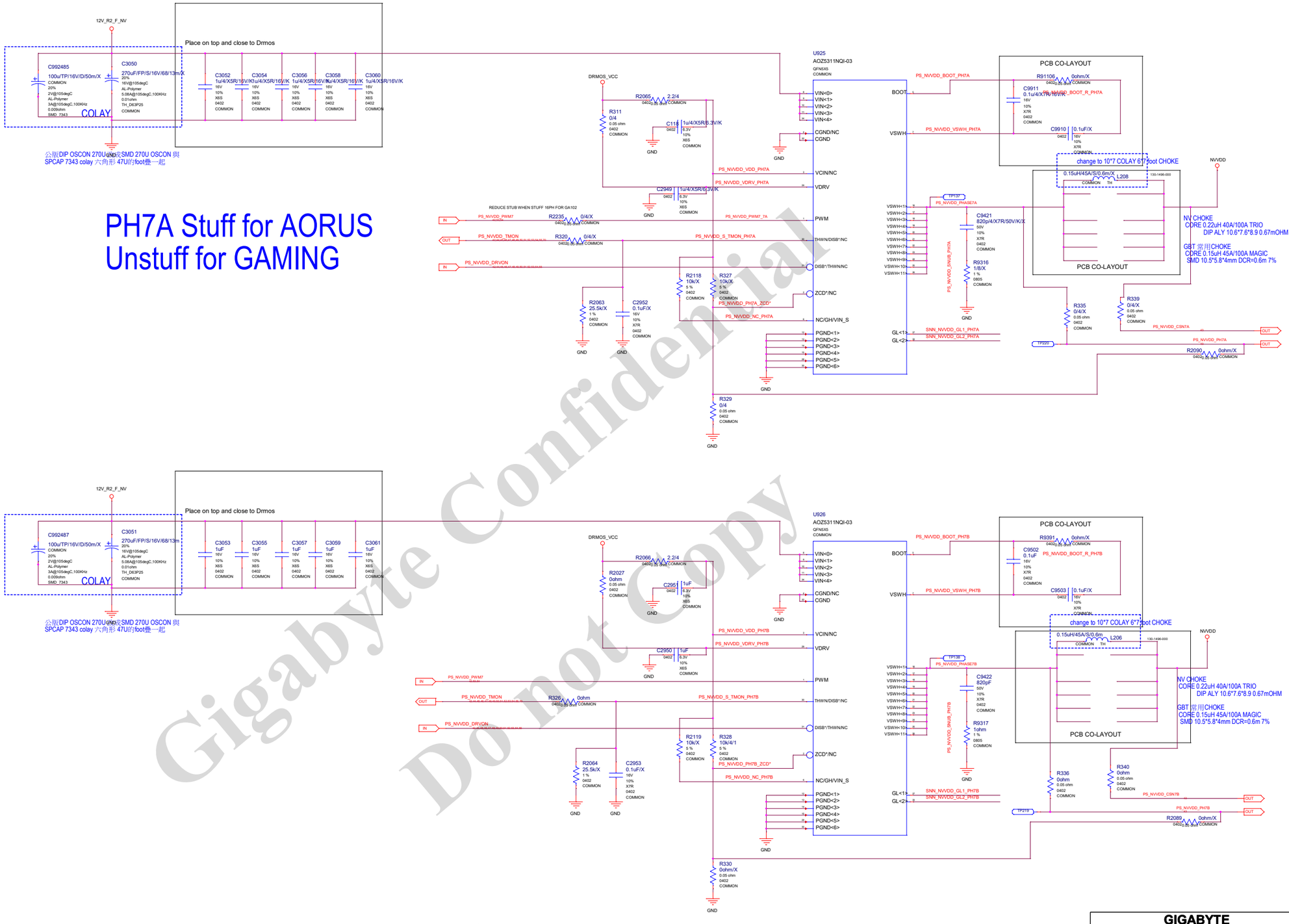

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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
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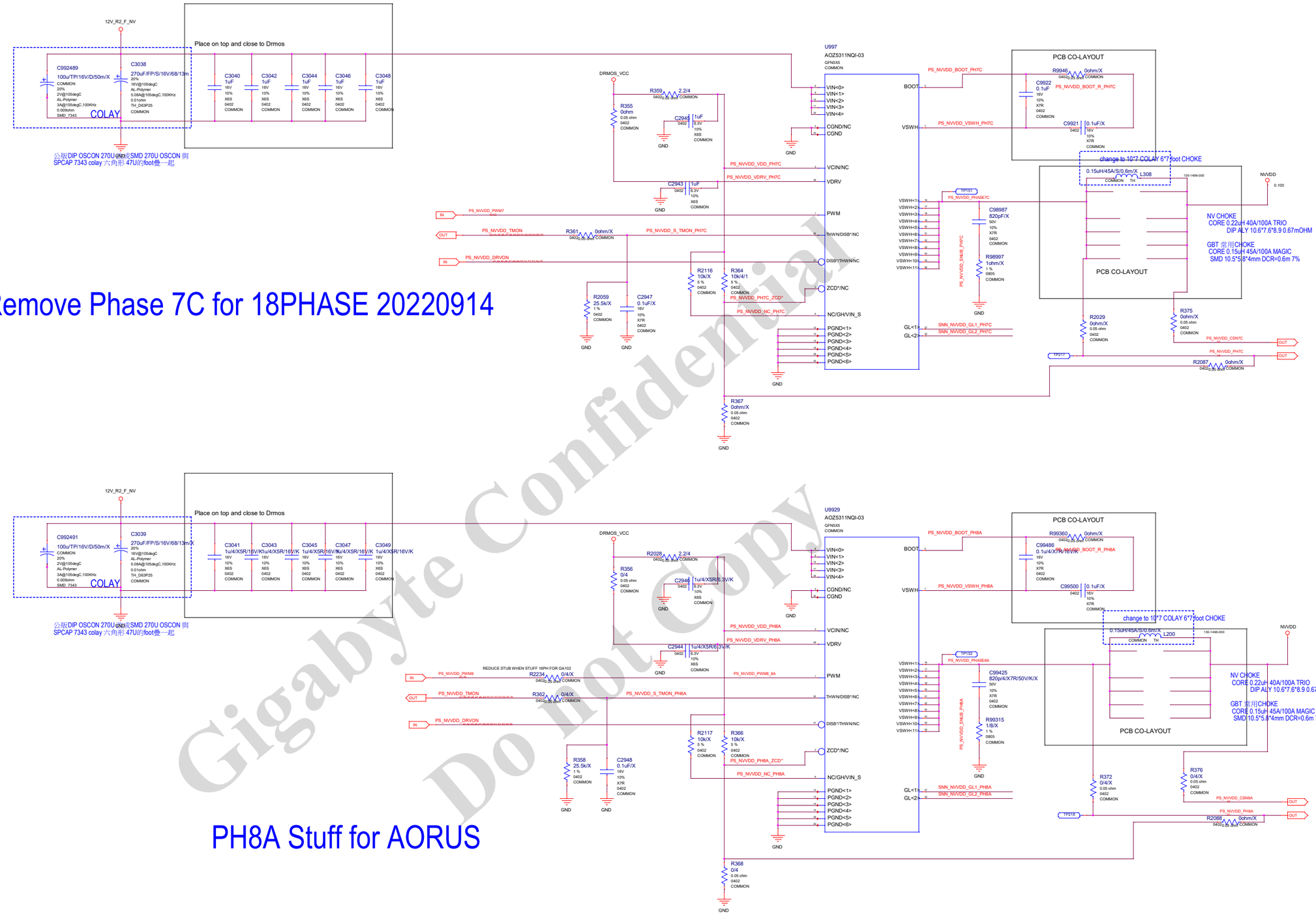

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PAGE DETAIL	PS: NVVDD PH7C, PH8A

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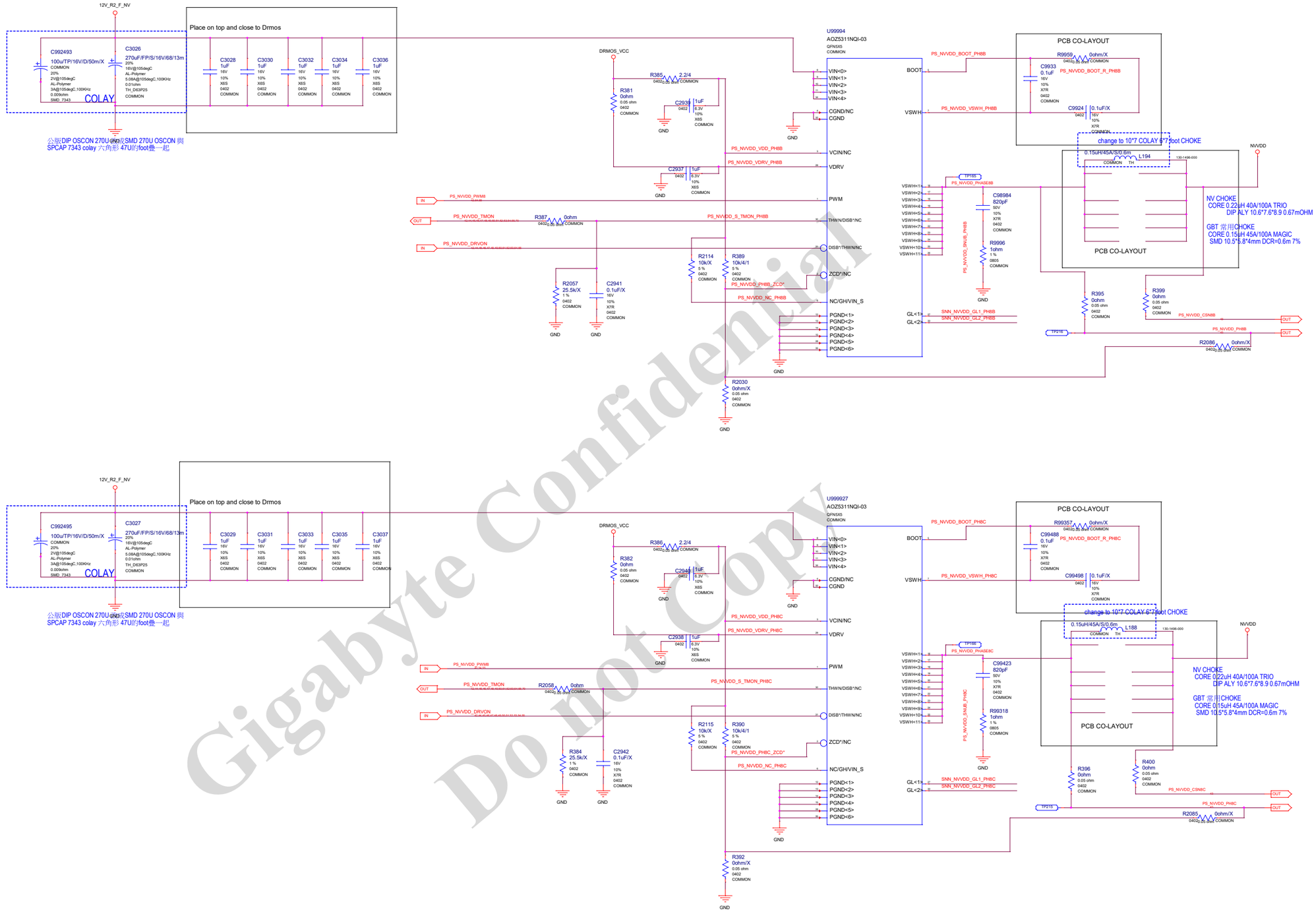

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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	PS: NVVDD PH8B, PH8C

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GIGABYTE			
Title: PCI EXPRESS			
Size: Custom	Document Number: GV-N4080GAMING OC-16GD		Rev: 1.01
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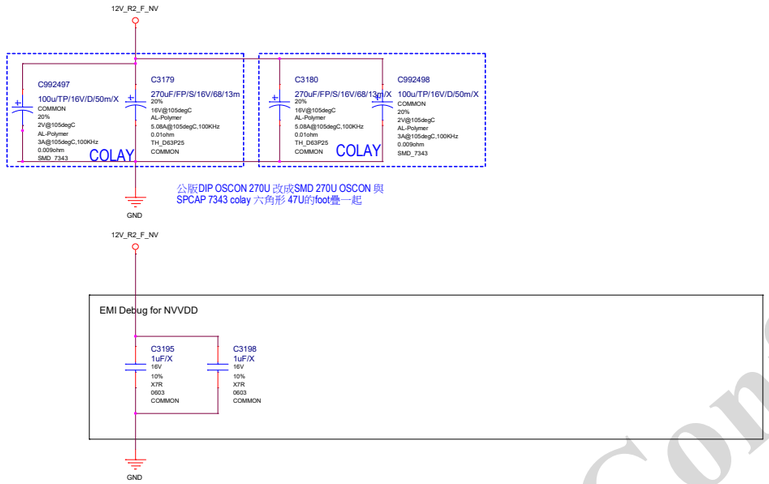
Page 56: PS: INPUT CAP



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ASSEMBLY <ASSEMBLY_DESCRIPTION>
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Title: PCI EXPRESS

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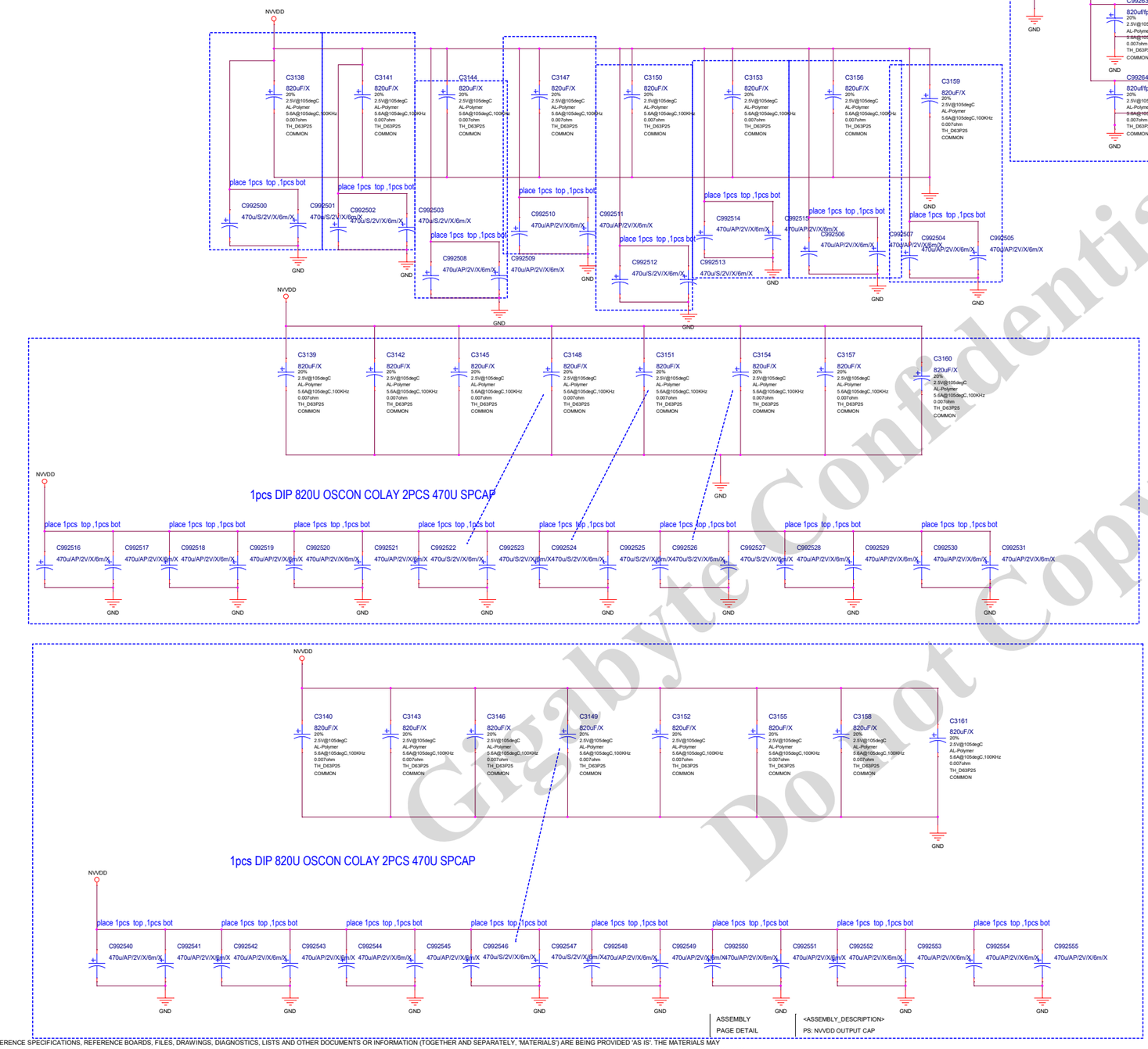
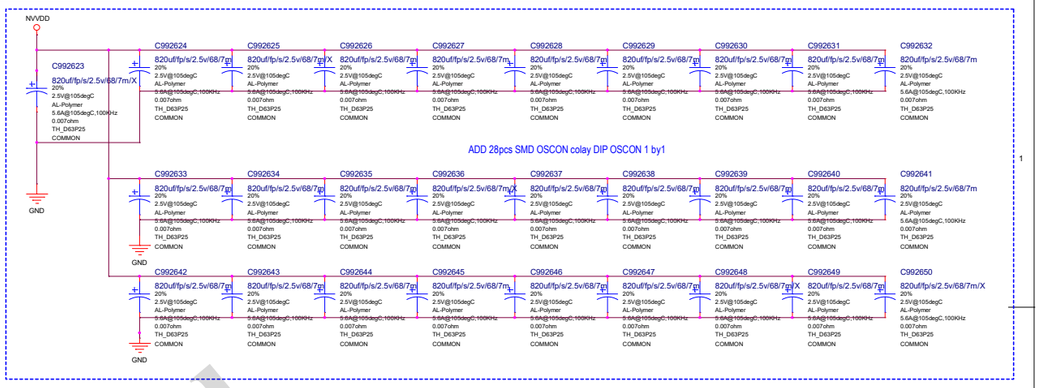
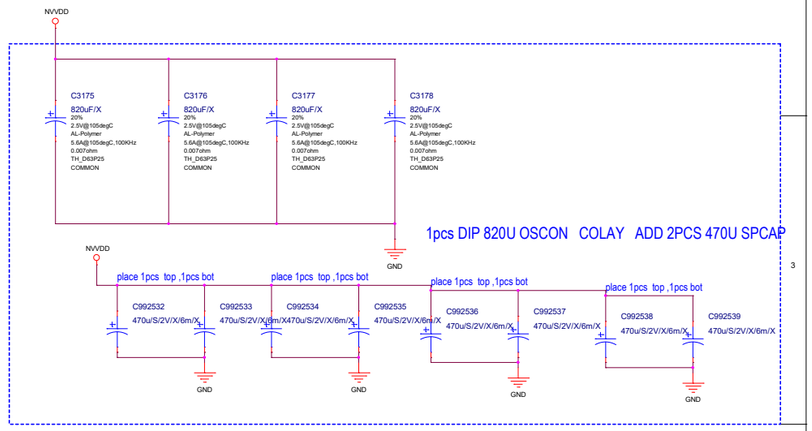
Page 57: PS: NVVDD OUTPUT CAP







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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
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(5V - Ref 2.5V) / 5mA = 500 Ohm
(12V - Ref 2.5V) / 5mA = 1.9K Ohm

Vref = 2.5

ADC_Vref
5V_LED
12V_F_R1
R601832 470/6
R601834 1.5K/6/X
R601835 5.49K/4/1
C992557 4.7u/6/X6S/6.3V/K
C992558 1u/4/X5R/6.3V/K
U999928 LR432ATL71G/SOT23/100mA
R601838 3.83K/4/1
GND

GPIO For EXT 12V plugin detect.
INT, 27KHz
INT, 100Hz
R601836 10K/4/X
R601839 0/4/X
R601840 0/4/X
R601845 0/4
GPIO16_FAN_A_PWM_BUF
C992563 0.1u/4/X7R/16V/K
MCU_R2
U999929
HT32F52352/LQFP-48/S
C992565 10uF/X
C992566 0.1u/4/X7R/16V/K
R601842 0/4
R601843 0/4
R601844 0/4
R601848 0/4
R601849 0/4
R601850 0/4
R601846 0/4

MCU_R R62473 0/4/X
MCU_G R62475 0/4/X
RGB_D_1 R601853 0/4
RGB_D_2 R601854 0/4
RGB_D_3 R601856 0/4
MCU_B R62477 0/4/X
MCU_R3 R601860 0/4
MCU_G4 R601861 0/4
MCU_B3 R601862 0/4
MCU_G3 R601864 0/4
12V_PEX81_detect R601866 0/4
3V3_F_Detect R601869 0/4
FAN_STOP_LED R601871 0/4
Windforce_LED R601872 0/4

PA0/ADC_INT2/GT_CH0
PA1/ADC_INT3/GT_CH1
PA2/ADC_INT4/GT_CH2
PA3/ADC_INT5/GT_CH3
PA4/ADC_INT6/GT_CH0
PA5/ADC_INT7/GT_CH1
PA6/ADC_INT8/GT_CH2
PA7/ADC_INT9/GT_CH3
PC4/ADC_INT10
PC5/ADC_INT11
PC6
PC7
PB1
PB0
PA15
PA14
SWDIO/PA13
SWCLK/PA12
PA11
PA10
PA9_BOOT
PA8
PB15
PC0
RGB_LED
MCU_R4
GPIO7_FAN_B_TACH_R_R
R601863 0/4 SWDIO
R601865 0/4 SWCLK
R601867 0/4 FAN_Tach3_RR
R601870 0/4
3V3 sence for MKT demo
R601873 0/4 3CIRCLE_LED
GPIO13_FAN_TACH_A_R

3V3_F
R601889 10K/4/1
C992579 0.1u/4/X7R/16V/K
R601891 1K/4/1/X
3V3_F_Detect

CLDO VDD_1 VSS_1 nRST PB9 X32KIN/PB10 X32KOUT/PB11 RTCOUT/PB12 XTALIN/PB13 XTALOUT/PB14 PB15 PC0
C992571 1u/4/X5R/6.3V/K
C992569 1u/4/X5R/6.3V/K
C992572 0.1u/4/X7R/16V/K
R601877 0/4 I2CB_3V3_SDA
R601878 0/4 I2CB_3V3_SCL
MCU Slave
R601880 0/4
R601881 100/4/X PEX_RST_BUF*
C992573 0.01u/4/X7R/50V/K
R601884 100K/4
XTIN XTOUT

add by diho 20181224
3V3_F
LB20603 30/6/4A/S BEAD_0603 COMMON
R601831 0/4/X
COLAY
XTIN XTOUT
R601833 1M/4/X
12M/20p/30ppm/3.2*2.5/80/S/X Y20002
XTAL_4PIN_SMD-E3SB270000F18S3B
C992559 10p/4/NPO/50V/J/X
C992560 10p/4/NPO/50V/J/X
C992561 0.1u/4/X7R/16V/K
C992562 10u/6/X5R/6.3V/M

R601837 10K/4/1X
Q6017 INS16890900 SOT23_1G1D1S COMMON
Q6018 INS16891223 SOT23_1G1D1S COMMON
R601841 0/4/X INT, 100Hz
GPIO11_LOGO_LED_POWER_BRAKE
R601847 100K/4/X 1% COMMON 402
C992564 0.1u/4/X7R/16V/K/X
R601851 10K/4/1
R601852 1K/4/X
GPIO7_FAN_B_TACH_R_R
Q6019 INS16892231 SOT23_1G1D1S COMMON
R601855 10K/4/1X
R601850 0/4
FAN_Tach1
C992567 1n/4/X7R/50V/K
R601868 10K/4/1
Q6020 INS16891531 SOT23_1G1D1S COMMON
R601878 10K/4/1
R601870 0/4
FAN_Tach2
C992570 1n/4/X7R/50V/K

C992568 0.1u/4/X7R/16V/K
R601875 10K/4
CON1
SWCLK
SWDIO
R601879 10K/4
Reset
COM5-2015/X
SW-DP
CON2 EVT上件for FW 燒錄，PVT移除

R601882 10K/4/1X
R601883 10K/4/1X
For LCD monitor
J5013 HDR_1M4 MALE 2.0MM VERTICAL GPU COMMON
SCL SDA 5V GND

For MKT Demo, Add 5V Power bank to MCU 3V3
U999930
AZ1117CH-ADJTRG1/SOT223/1A/X
5V_LED
0.400
C992574 0.1u/4/X7R/16V/K
C992575 10u/6/X5R/6.3V/M
0.100
R601890 620/4/1
C992576 10u/6/X5R/6.3V/M4.7uF/X
C992577
C992578 1u/4/X5R/6.3V/K
PS_5V_ADJ
R601892 1.02K/4/1
Vout=1.25*(1+1020/620)+60uA*1000=3.36V

SINK 正面 LED CONNECT
R601885 2K/4/1
R601886 1K/4
Q10906
J5015
JW/1*3/BK/2.0/VA/S/H6.1/FL3.4
FAN Leak GND J5014 <PITCH> H1X2-2MM
Colay With J5013
R601887 10K/4
RGB_D_1
R601888 0/4/x
Leak_Det

側面 LED CONNECT
R601893 2K/4/1
R601895 1K/4
Q10907
J5016
JW/1*3/BK/2.0/VA/S/H6.1/FL3.4/X
R601898 10K/4
RGB_D_2

FAN_Tach3_RR
R601896 10K/4/1
R601899 0/4/X
Q6023
R601900 0/4
R601897 10K/4/1/X
C992583 1n/4/X7R/50V/K
FAN_Tach3

BOT SMD LED CONNECT
R601908 2K/4/1
R601910 1K/4
Q10908
J5017 WF/1*4/WH/1.25/VA/S/X
R601912 10K/4
RGB_D_3

Co-Lay
LB20604 30/6/4A/S
R601894 0/8/x
12V_F_R1

PS_5V_LED_VIN
R601907 100K/4/1
R601902 1K/4/1/x
C992580 0.1u/4/X7R/16V/K
C992581 10u/8/X5R/16V/K
C992582 10u/8/X5R/16V/K
U999931 INS16892309 MP1475/TSOT-23 SOT23_8 COMMON
R601903 4.7/6 PS_5V_LED_SW_BOOT_R
PS_5V_LED_SW_BOOT
C992585 0.1u/4/X7R/16V/K
L953 4.7uH/3.3A/29m/S SMD_5X5
L954 1uH/11A/S/x IND_NONRKO_SMD_06X06
PS_5V_LED_EN
R601904 27.4K/4/1
C992588 0.01u/4/X7R/50V/K
PS_5V_LED_SW_VCC
C992589 0.1u/4/X7R/16V/K
R601905 49.9k/4/1
PS_5V_LED_SW_ISET
R601911 100K/4/1
PS_5V_LED_SW_PHASE
C992595 2.2n/4/X7R/50V/K
R601913 2.2/8
PS_5V_LED_SW_FB
R601907 49.9k/4/1
PS_5V_LED_SW_FB_R
C992591 0.1u/4/X7R/16V/K
C992592 22u/6/X5R/6.3V/M
C992590 22u/6/X5R/6.3V/M
C992593 22u/6/X5R/6.3V/M
C992594 15pF
R601914 40.2k/4/1
R601915 7.68k/4/1
near by Connect

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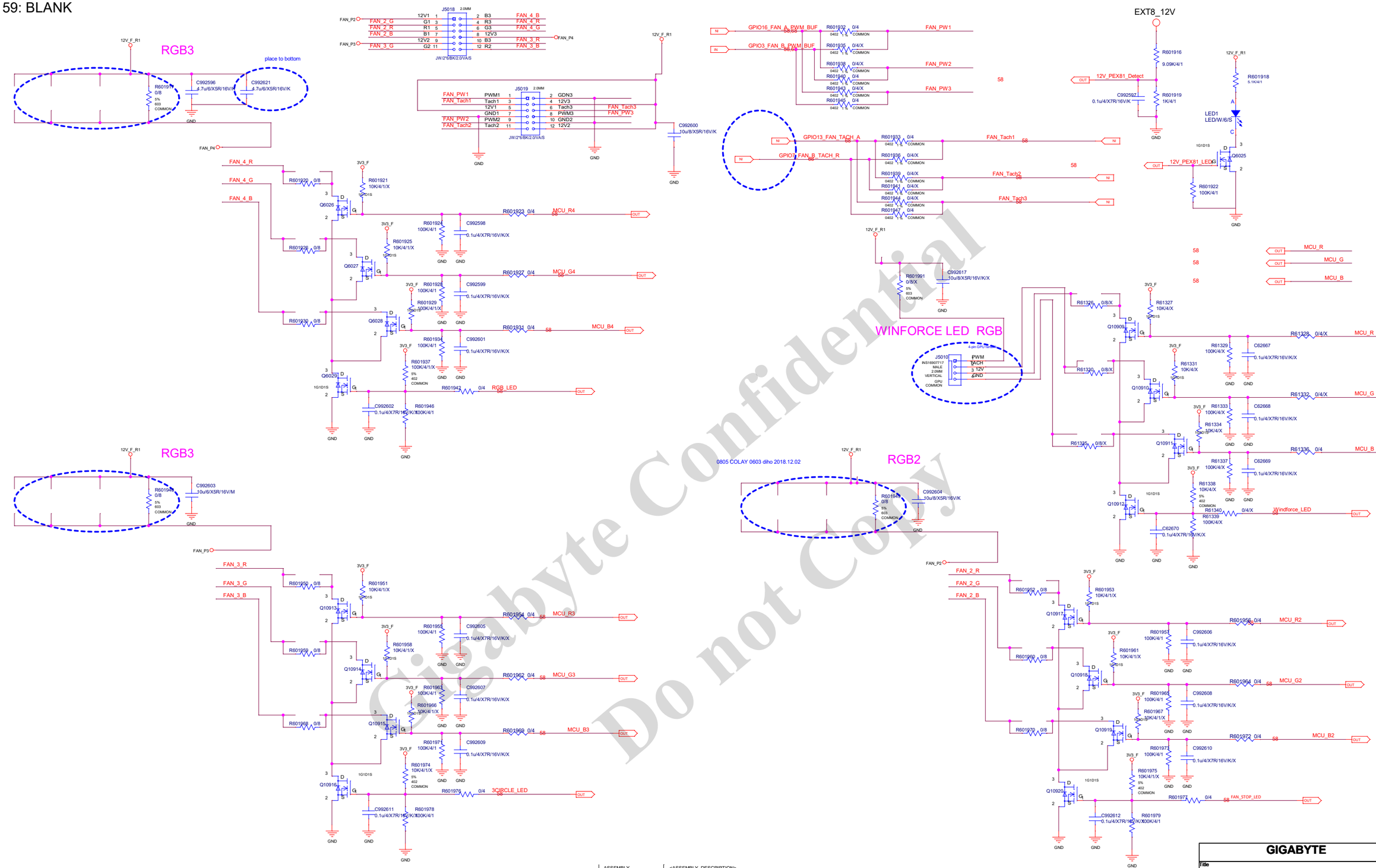

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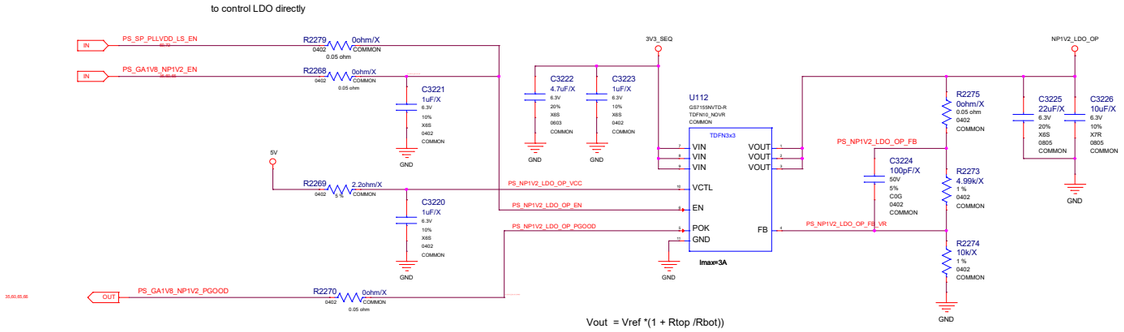
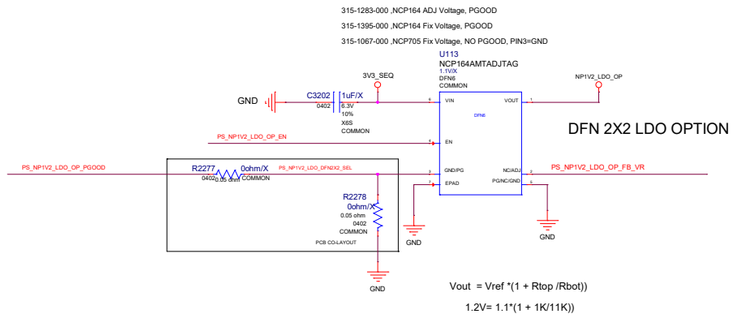
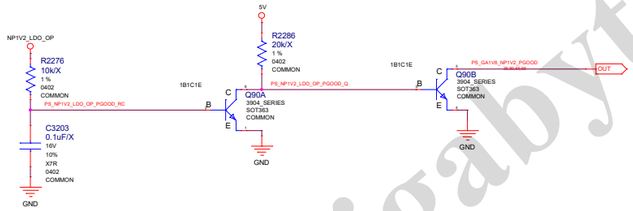
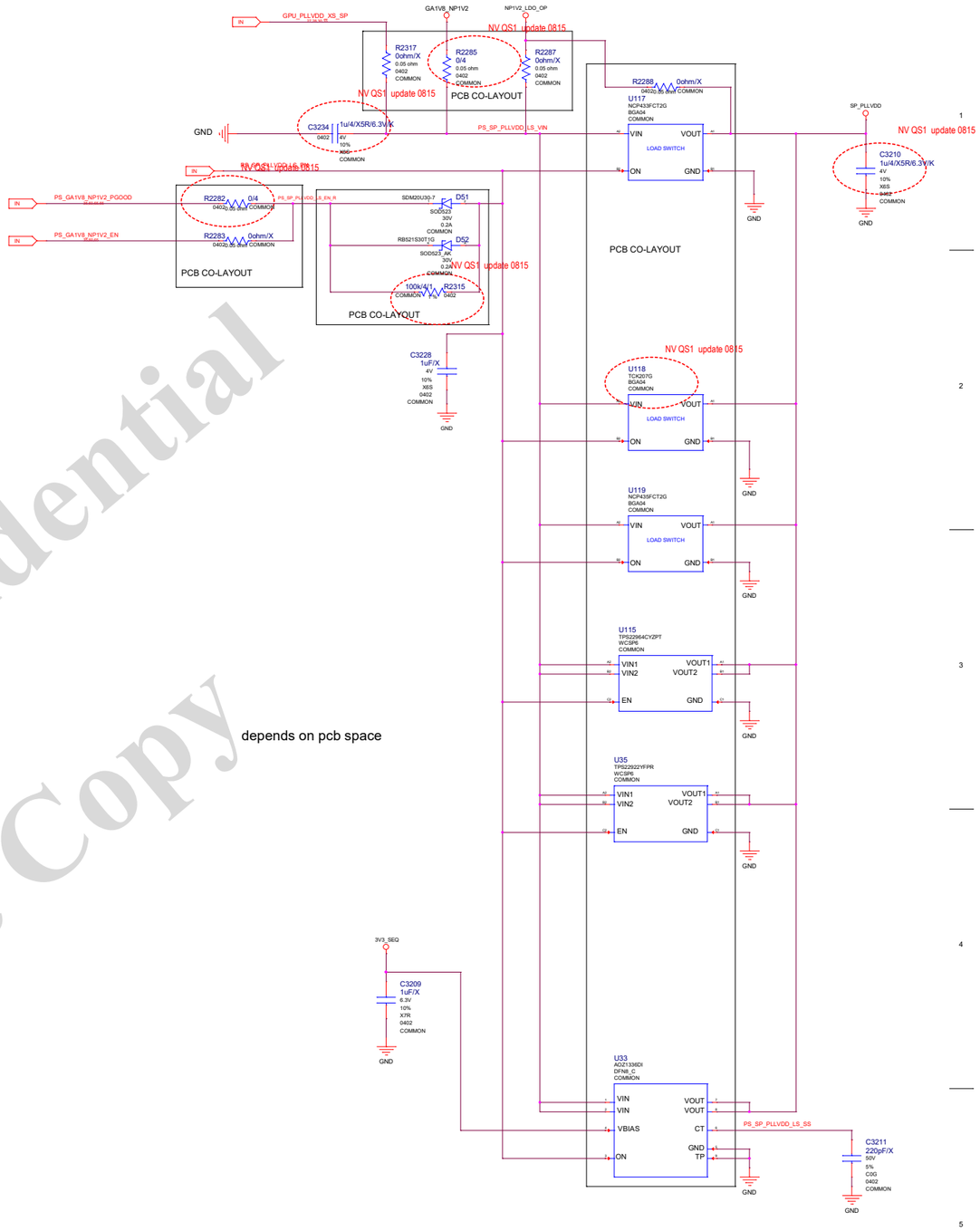
Page 60: SPPLLVDD LDO_LOADSWITCH









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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	SP_PLLVDD LDO_LOADSWITCH

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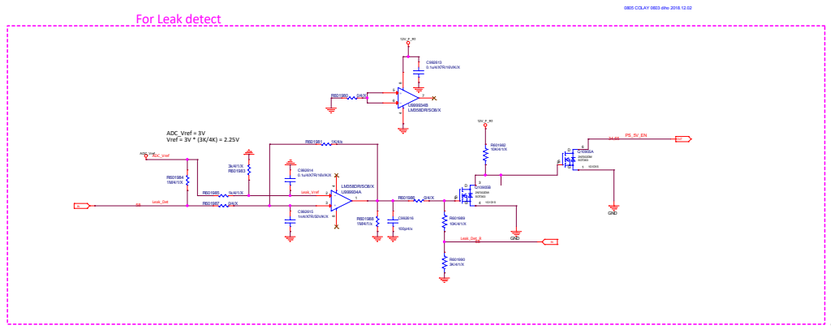
Page 61: Leakage detection



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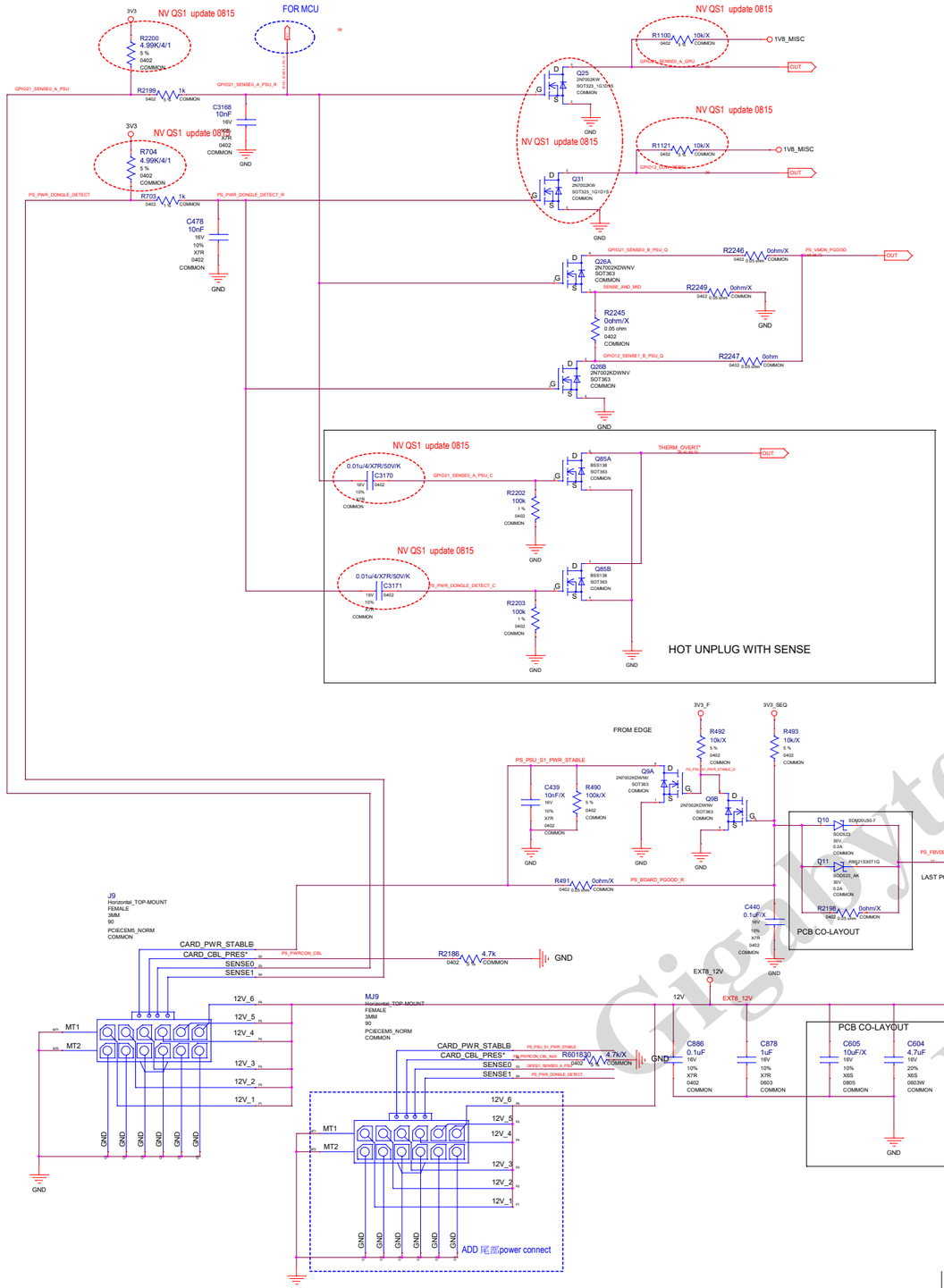
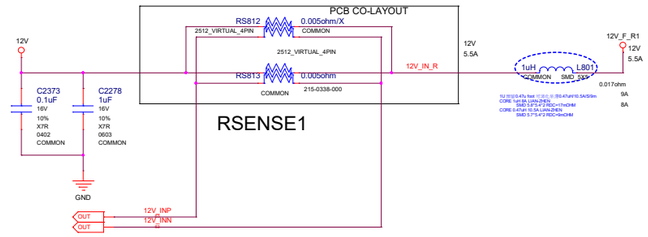
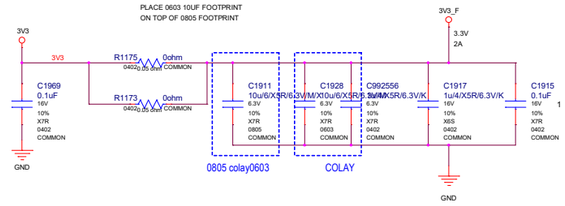
Page 62: PS: INPUTS, FILTERING, MONITORING

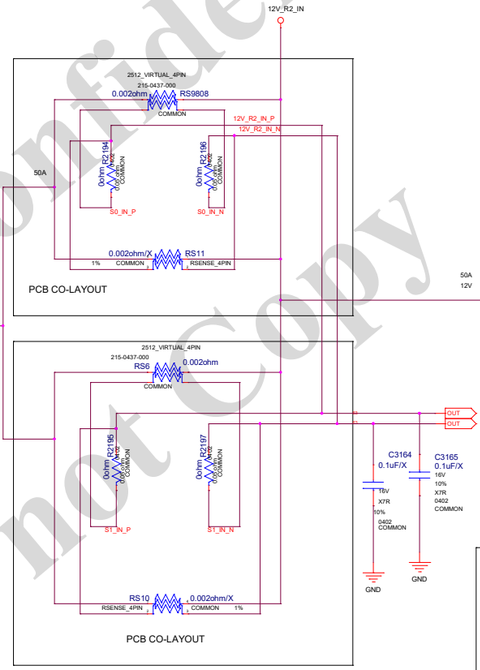


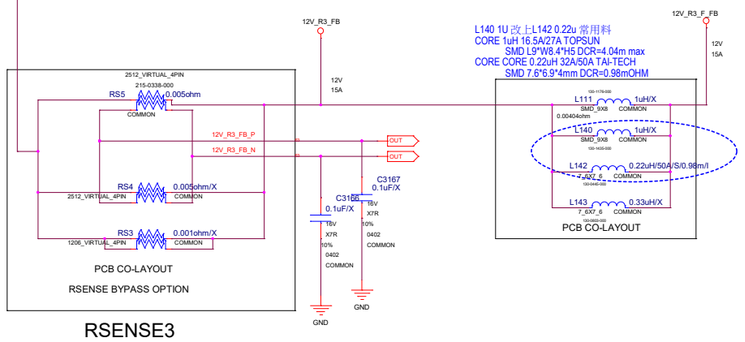
PEX_12V INPUT - 66W



PEX 3V3 INPUT - 10W







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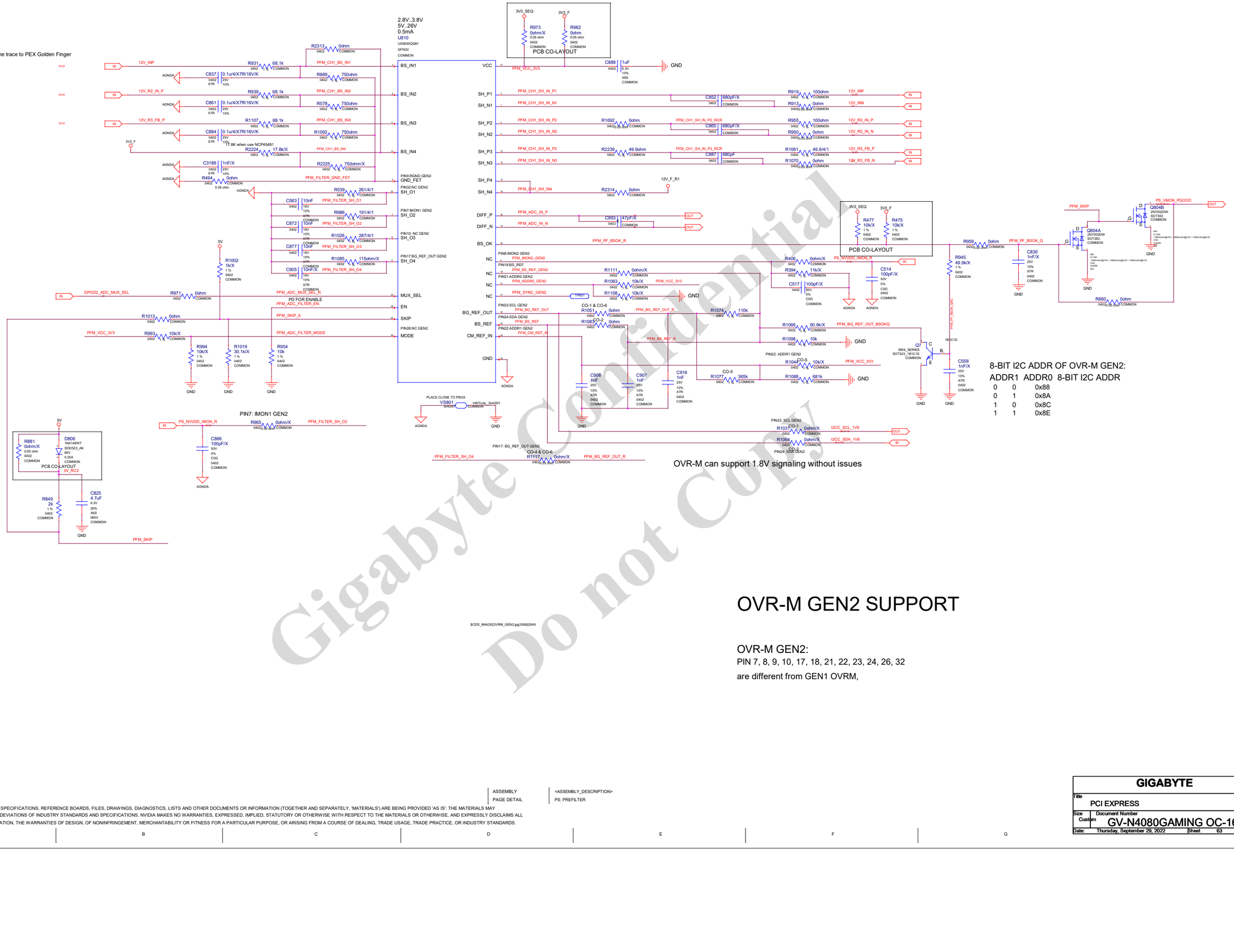

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$CDS_IMAGE|OVRM_GEN2.jpg|3598|2649

OVR-M GEN2 SUPPORT

OVR-M GEN2:
PIN 7, 8, 9, 10, 17, 18, 21, 22, 23, 24, 26, 32
are different from GEN1 OVRM,

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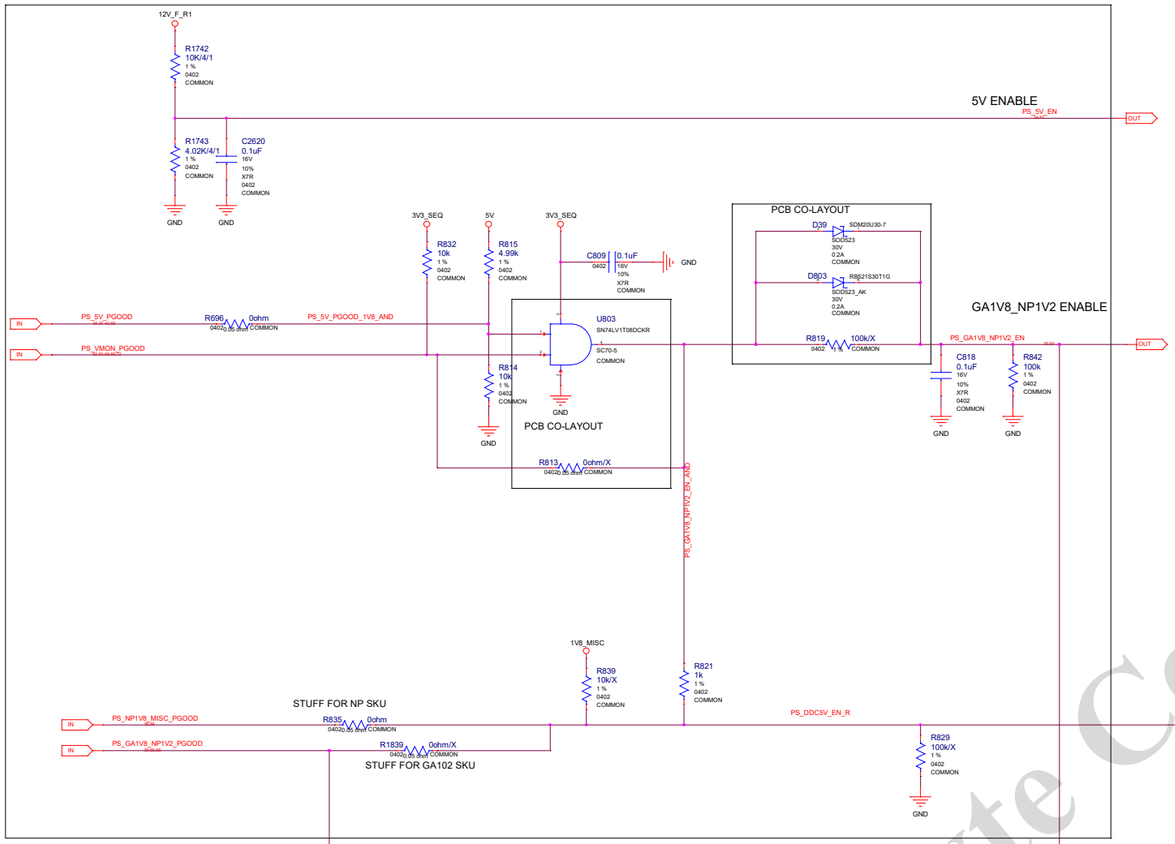
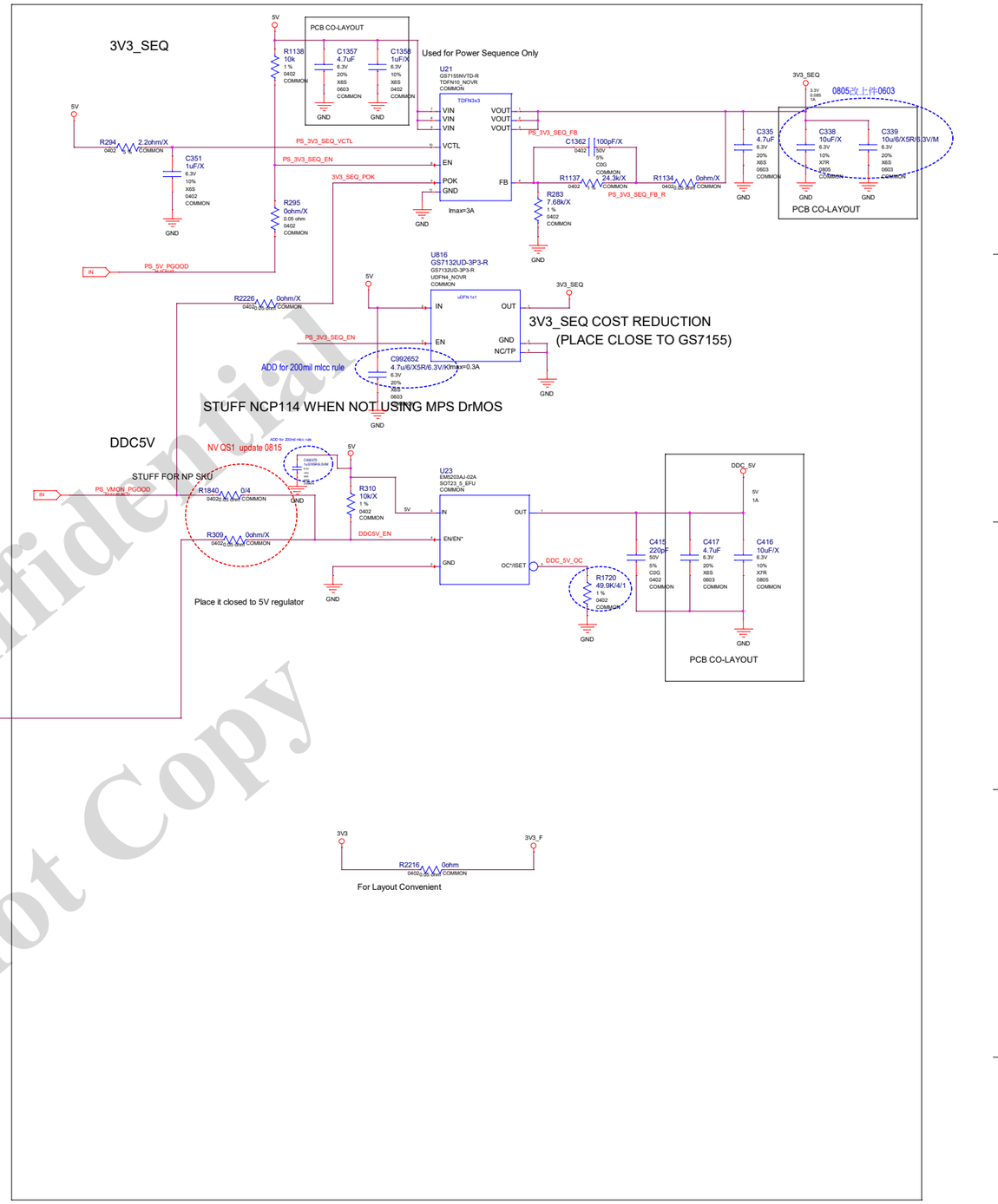
Page 65: SEQ: 5V,GA1V8_AD1V2 ENABLE,3V3_SEQ,3V3_PROT





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Page 66: SEQ: NV,PEX,FB EN

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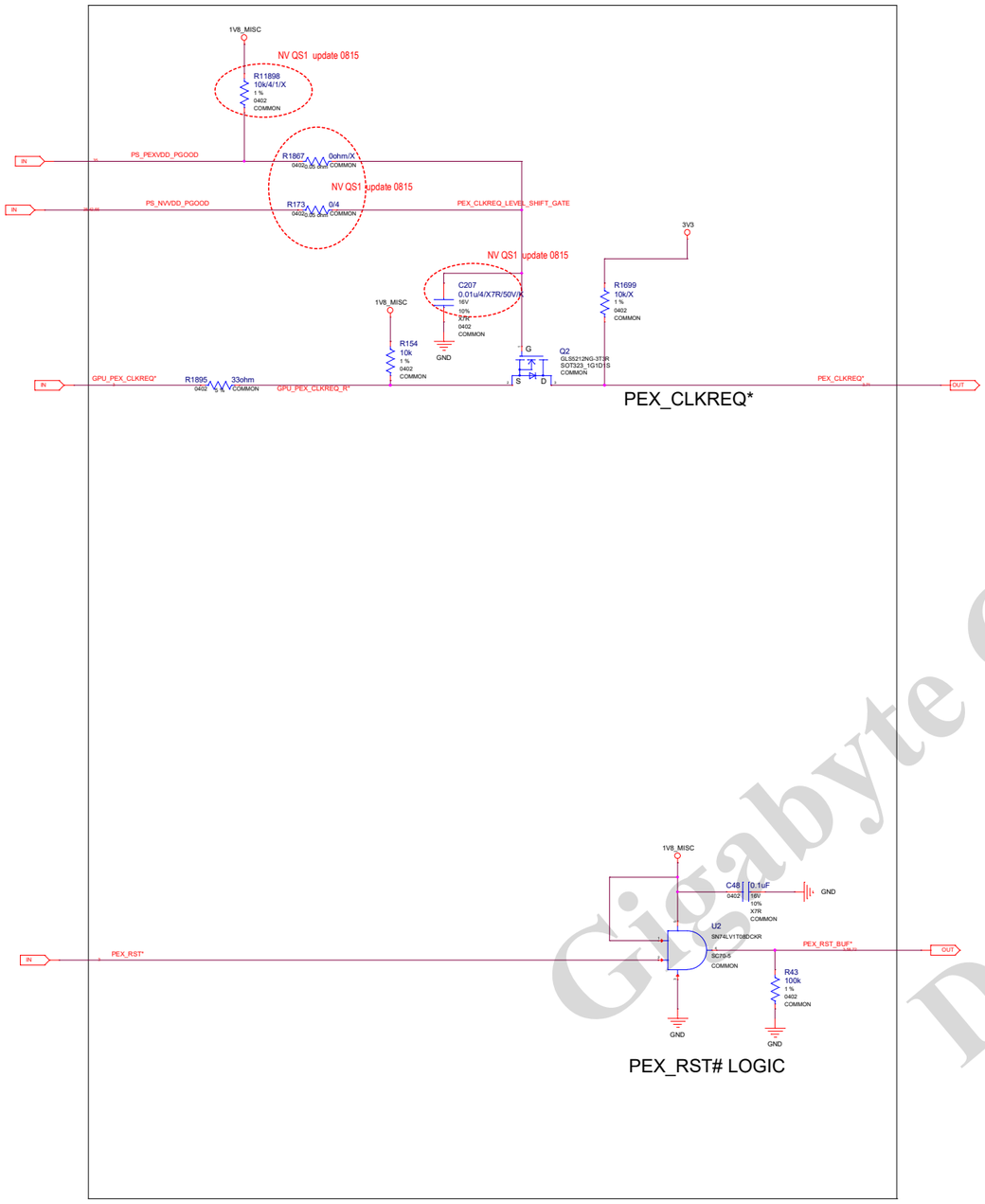
Page 67: SEQUENCE: MISC, PEX3V3 MONITOR



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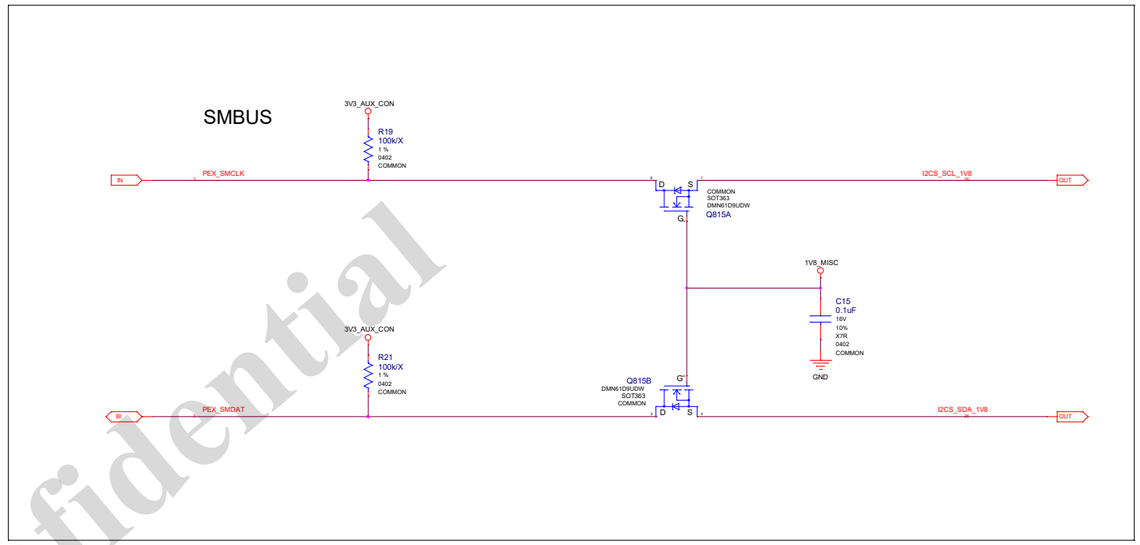
PEX_RST# LOGIC



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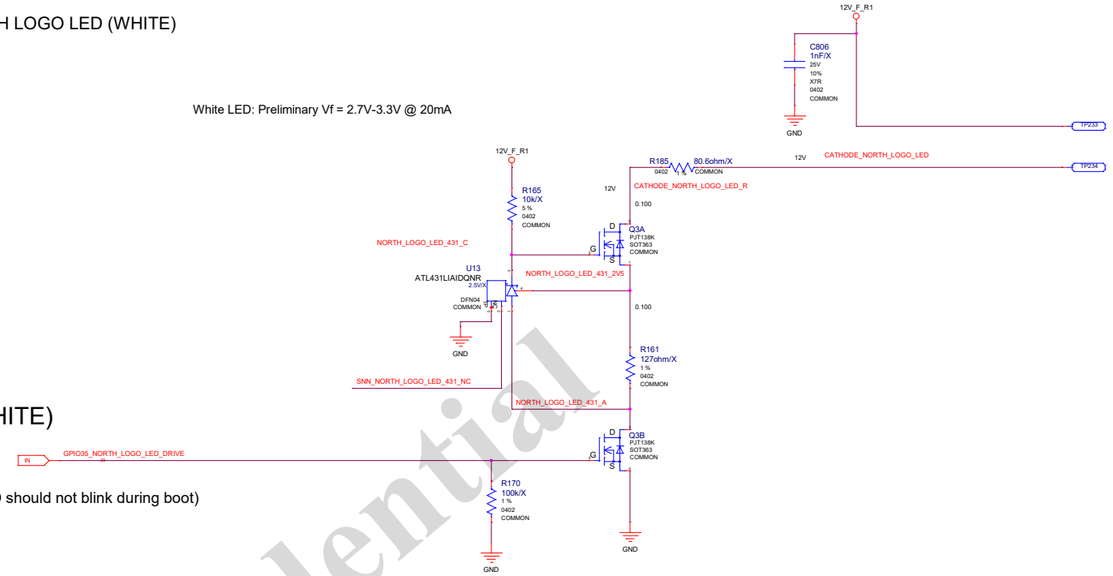
Page 68: FAN & NORTH LOGO LED

2-PIN LED HEADER FOR NORTH LOGO LED (WHITE)

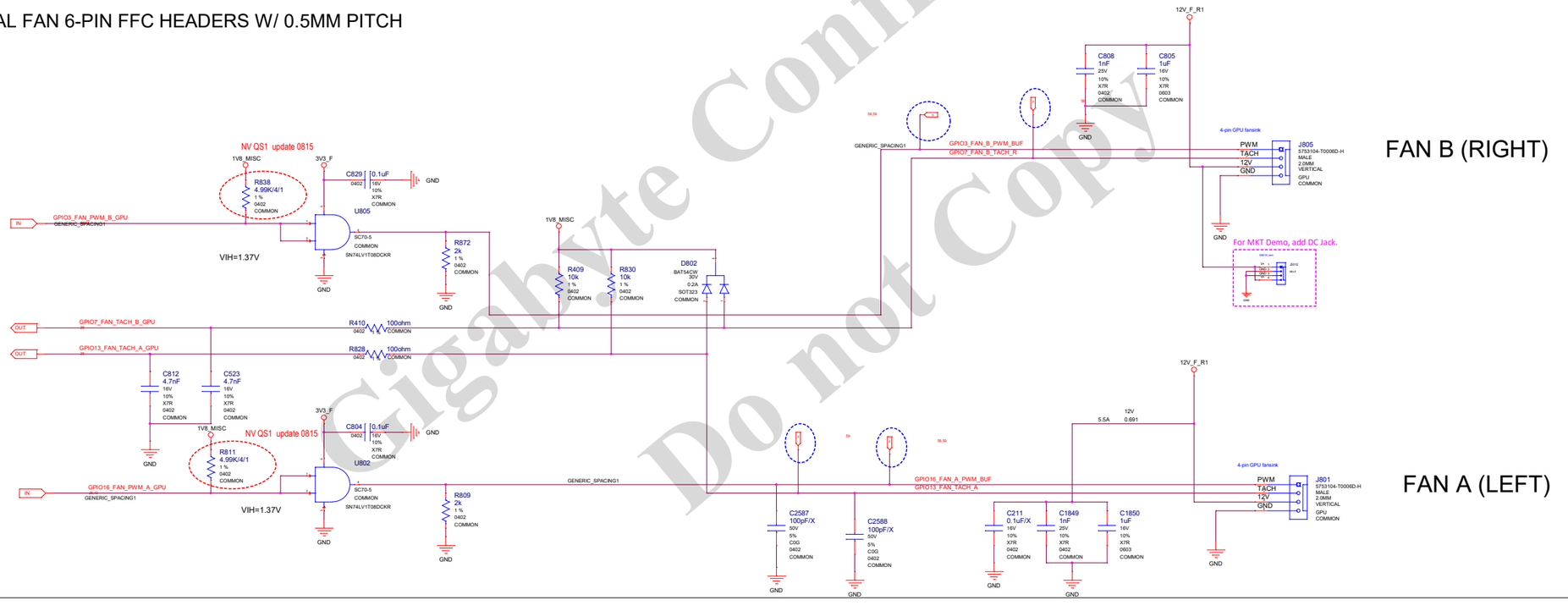
White LED: Preliminary Vf = 2.7V-3.3V @ 20mA

NORTH LOGO LED (WHITE)

(LED should not blink during boot)



DUAL FAN 6-PIN FFC HEADERS W/ 0.5MM PITCH



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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	FAN & NORTH LOGO LED

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PAGE 69: X/V LEDs

5-PIN POGO-PIN HEADERS FOR 'X' LOGO LEDS

'X' LOGO LED WHITE (3PCS)

(LED should not blink during boot)

'X' LOGO LED RED (3PCS)

/X LED線路

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ASSEMBLY <ASSEMBLY_DESCRIPTION>
PAGE DETAIL X/V LEDs

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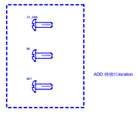
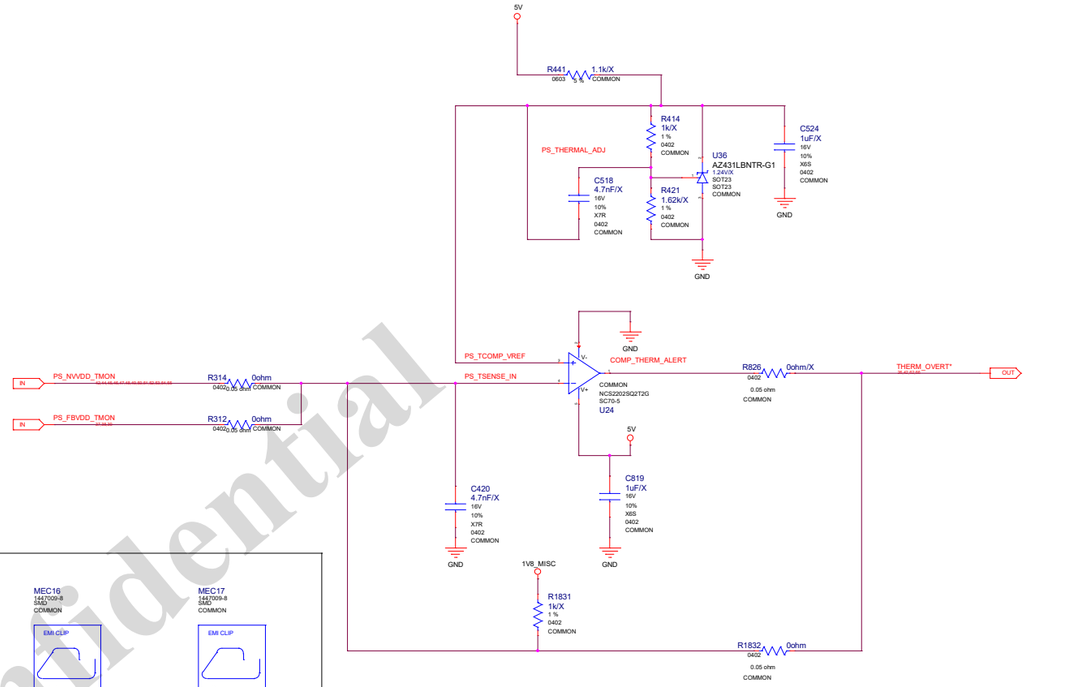
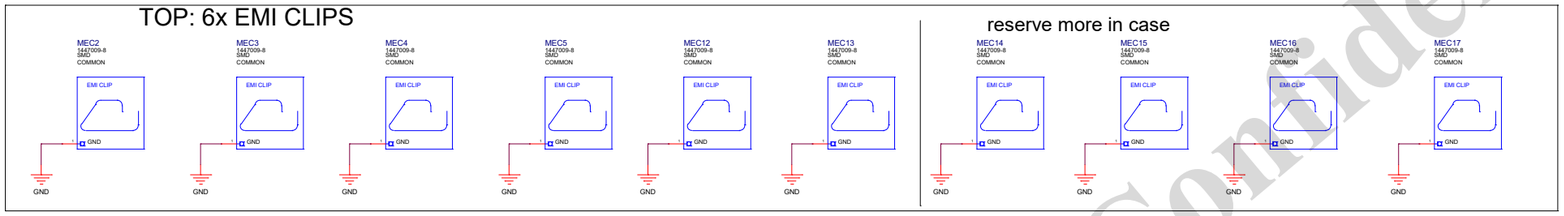
Page 70: MECHANICAL & VR THERMAL PROTECTION

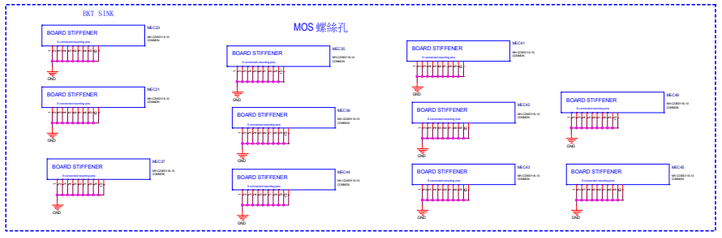


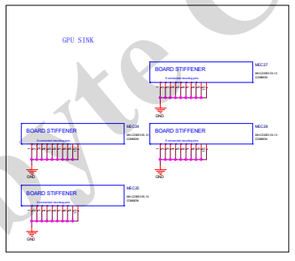


TOP: 6x EMI CLIPS



reserve more in case





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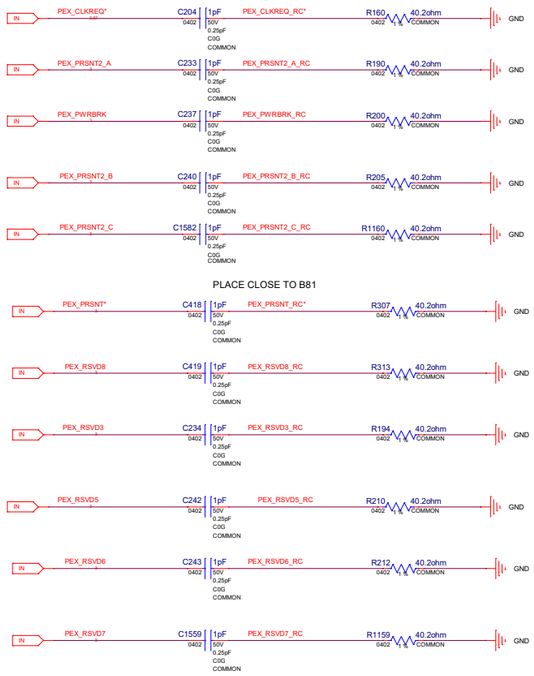
Page 71: PCI TERM



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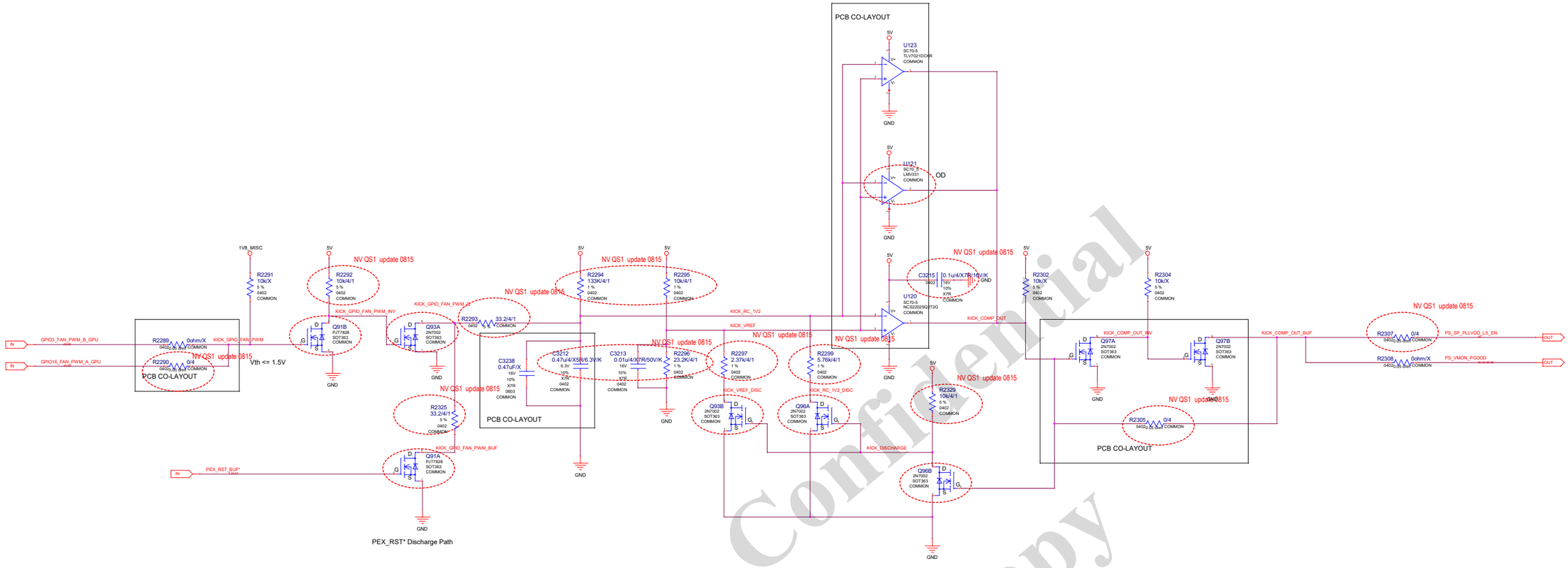
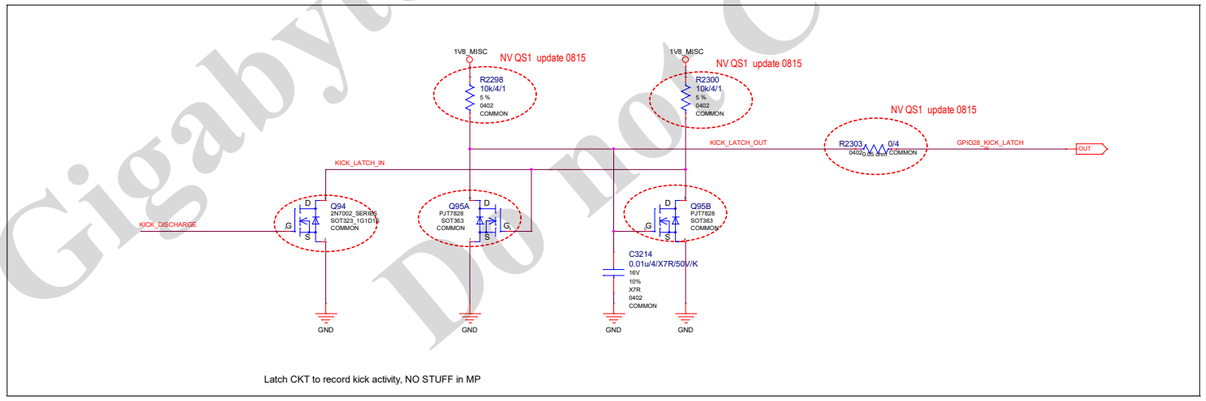
Page 72: KICKER





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