ROG-STRIX-RTX3070-O8G-GAMING (CG142S) Repair Guide

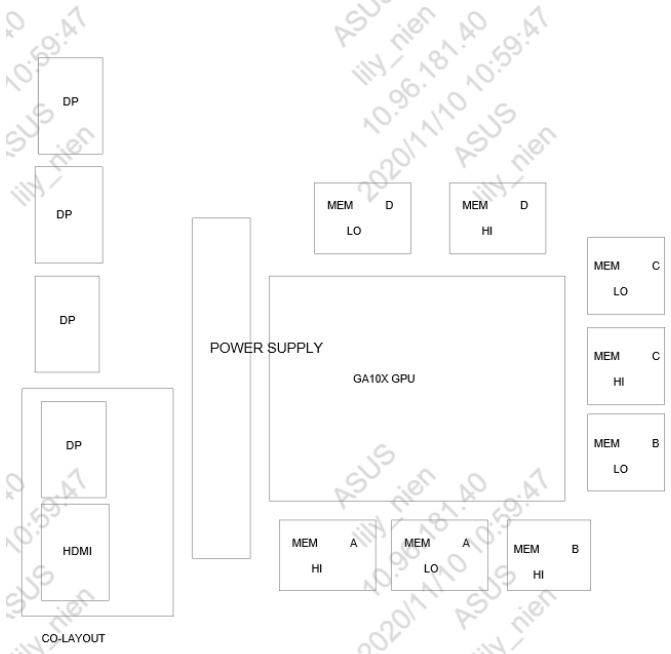
Model List

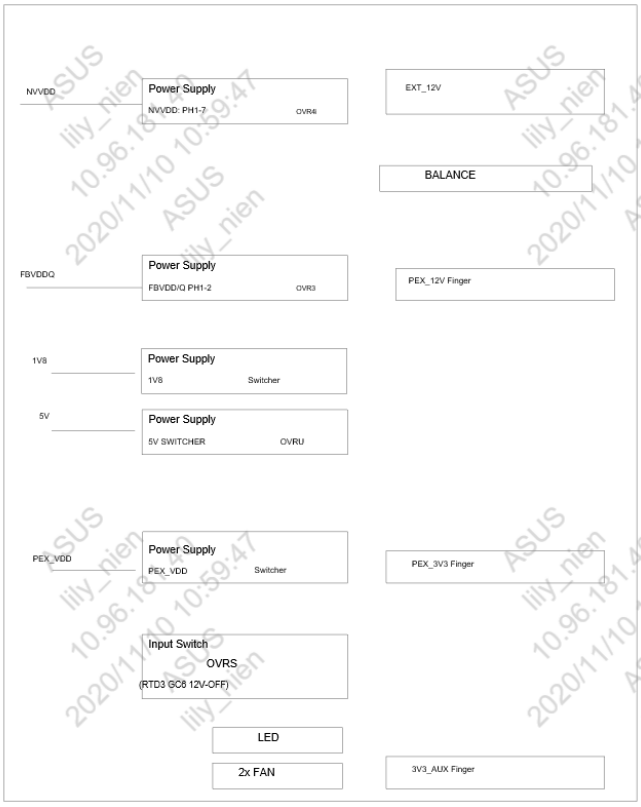
Model name	60PN	GPU	Date
ROG-STRIX-RTX3070-O8G-GAMING	YV0FR1	CG142S	2020/11/10

STANDARD APPEARANCE

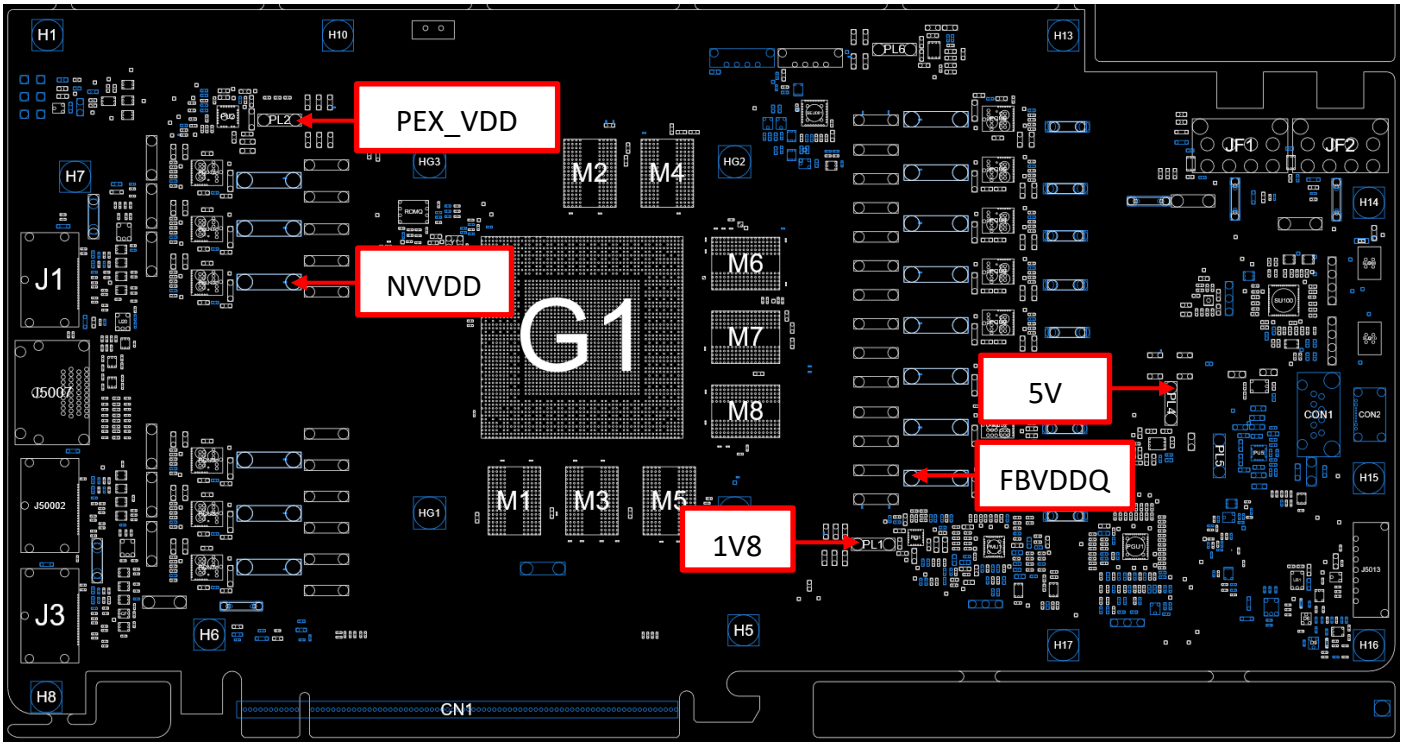
ROG-STRIX-RTX3070-O8G-GAMING

BLOCK DIAGRAM

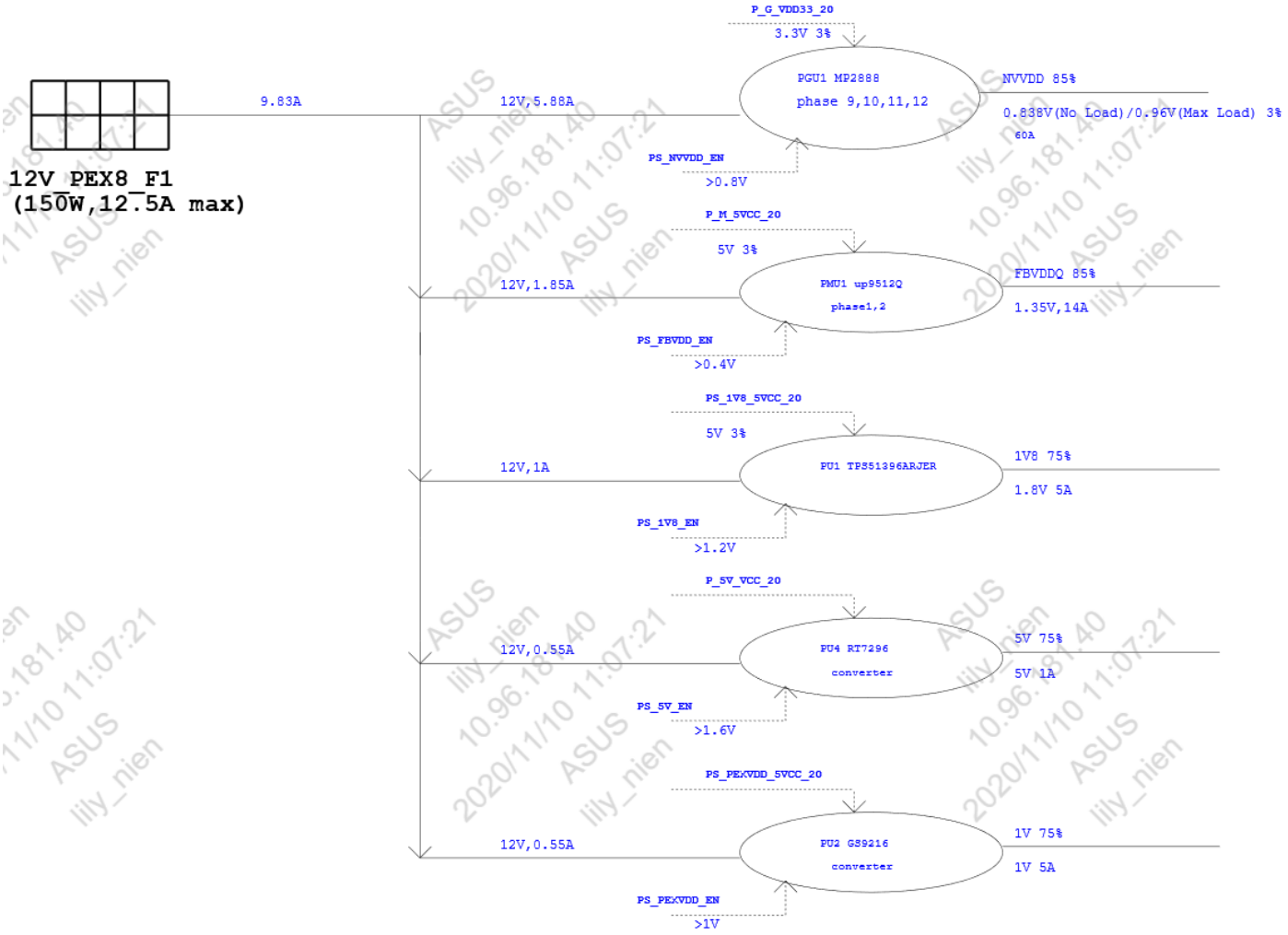


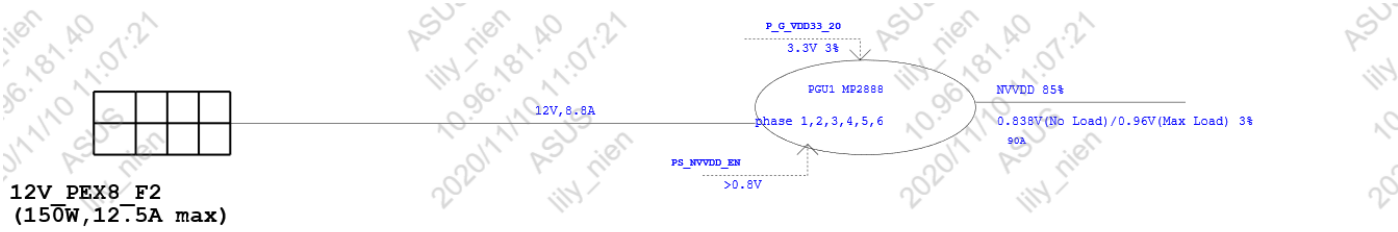


VOLTAGE MEASURE POINT



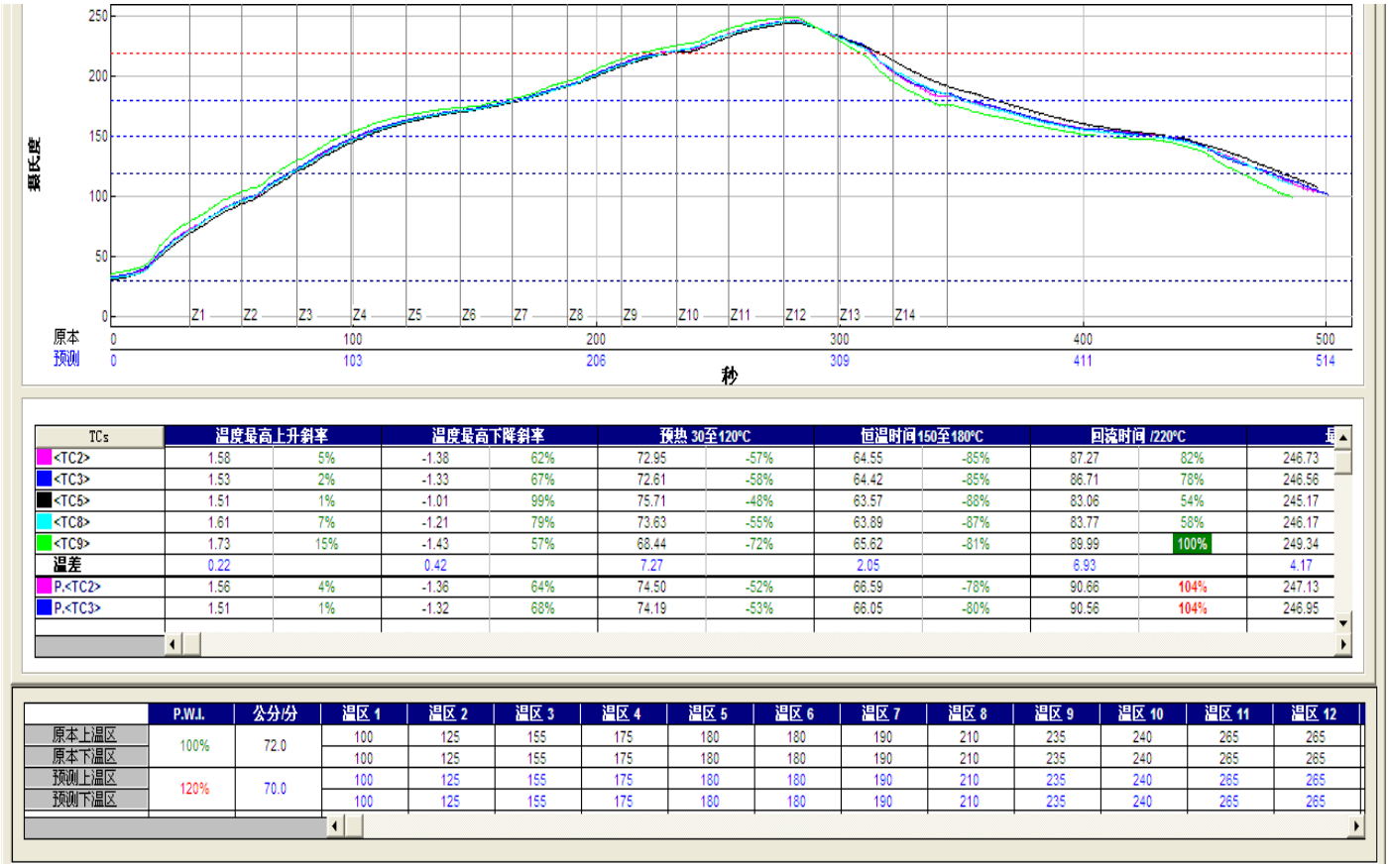
POWER FLOW


12V_PEX8_F1
(150W,12.5A max)
9.83A
12V,5.88A
P_G_VDD33_20
3.3V 3%
PGU1 MP2888
phase 9,10,11,12
NVVDD 85%
0.838V(No Load)/0.96V(Max Load) 3%
60A
PS_NVVDD_EN
>0.8V
P_M_5VCC_20
5V 3%
12V,1.85A
PMU1 up9512Q
phase1,2
FBVDDQ 85%
1.35V,14A
PS_FBVDD_EN
>0.4V
PS_1V8_5VCC_20
5V 3%
12V,1A
FU1 TPS51396ARJER
1V8 75%
1.8V 5A
PS_1V8_EN
>1.2V
P_5V_VCC_20
12V,0.55A
FU4 RT7296
converter
5V 75%
5V 1A
PS_5V_EN
>1.6V
PS_PEXVDD_5VCC_20
12V,0.55A
FU2 G89216
converter
1V 75%
1V 5A
PS_PEXVDD_EN
>1V


12V_PEX8_F2
(150W,12.5A max)
12V,8.8A
P_G_VDD33_20
3.3V 3%
PGU1 MP2888
phase 1,2,3,4,5,6
NVVDD 85%
0.838V(No Load)/0.96V(Max Load) 3%
90A
PS_NVVDD_EN
>0.8V

12V_F
(66W,5.5A max)
12V,2.9A
P_G_VDD33_20
3.3V 3%
PGU1 MP2888
phase 7,8
NVVDD 85%
0.838V(No Load)/0.96V(Max Load) 3%
30A
PS_NVVDD_EN
>0.8V

BGA REFLOW PROFILE



TCs	温度最高上升斜率		温度最高下降斜率		预热 30至120°C		恒温时间 150至180°C		回流时间 /220°C		最
<TC2>	1.58	5%	-1.38	62%	72.95	-57%	64.55	-85%	87.27	82%	246.73
<TC3>	1.53	2%	-1.33	67%	72.61	-58%	64.42	-85%	86.71	78%	246.56
<TC5>	1.51	1%	-1.01	99%	75.71	-48%	63.57	-88%	83.06	54%	245.17
<TC8>	1.61	7%	-1.21	79%	73.63	-55%	63.89	-87%	83.77	58%	246.17
<TC9>	1.73	15%	-1.43	57%	68.44	-72%	65.62	-81%	89.99	100%	249.34
温差	0.22		0.42		7.27		2.05		6.93		4.17
P.<TC2>	1.56	4%	-1.36	64%	74.50	-52%	66.59	-78%	90.66	104%	247.13
P.<TC3>	1.51	1%	-1.32	68%	74.19	-53%	66.05	-80%	90.56	104%	246.95

	P.W.I.	公分/分	温区 1	温区 2	温区 3	温区 4	温区 5	温区 6	温区 7	温区 8	温区 9	温区 10	温区 11	温区 12
原本上温区	100%	72.0	100	125	155	175	180	180	190	210	235	240	265	265
原本下温区			100	125	155	175	180	180	190	210	235	240	265	265
预测上温区	120%	70.0	100	125	155	175	180	180	190	210	235	240	265	265
预测下温区			100	125	155	175	180	180	190	210	235	240	265	265