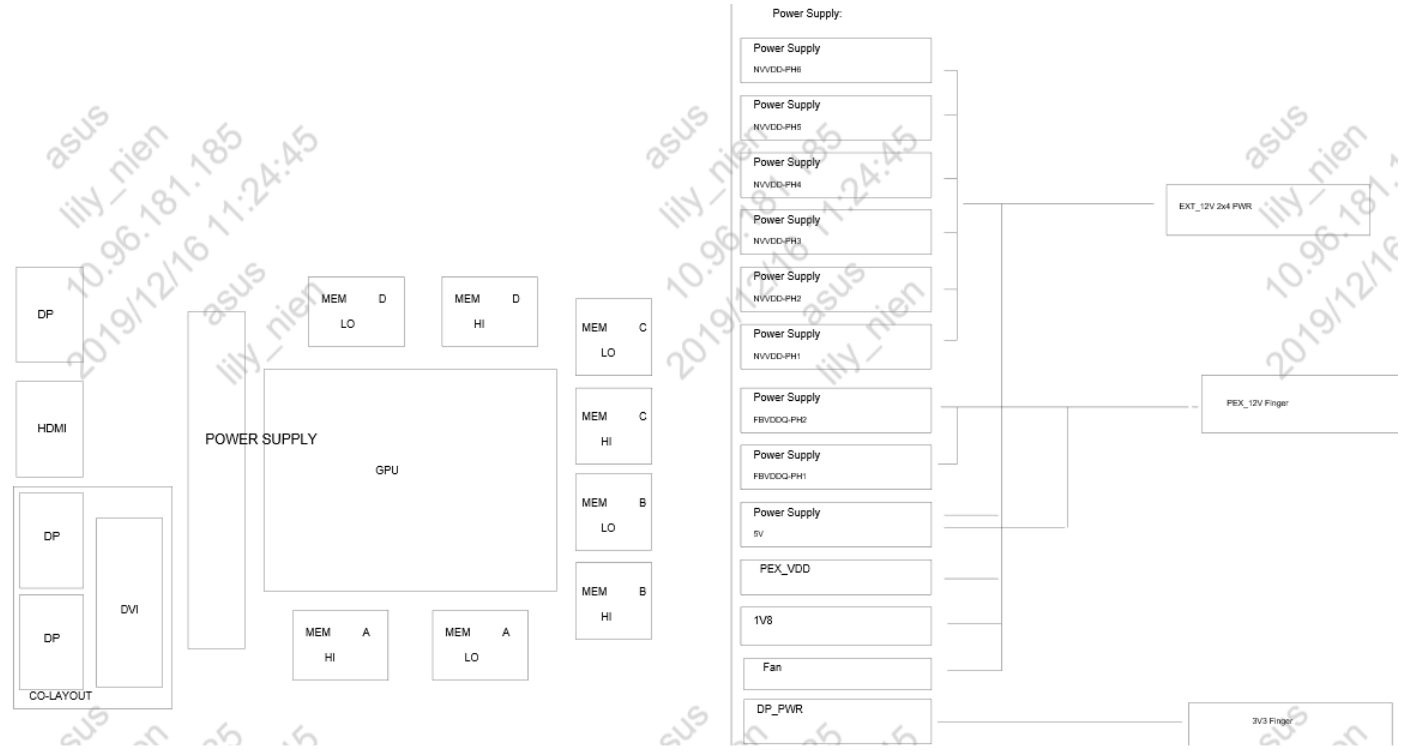
DUAL-RTX2060S-8G-EVO-V2 (CG161P) Repair Guide

Model List

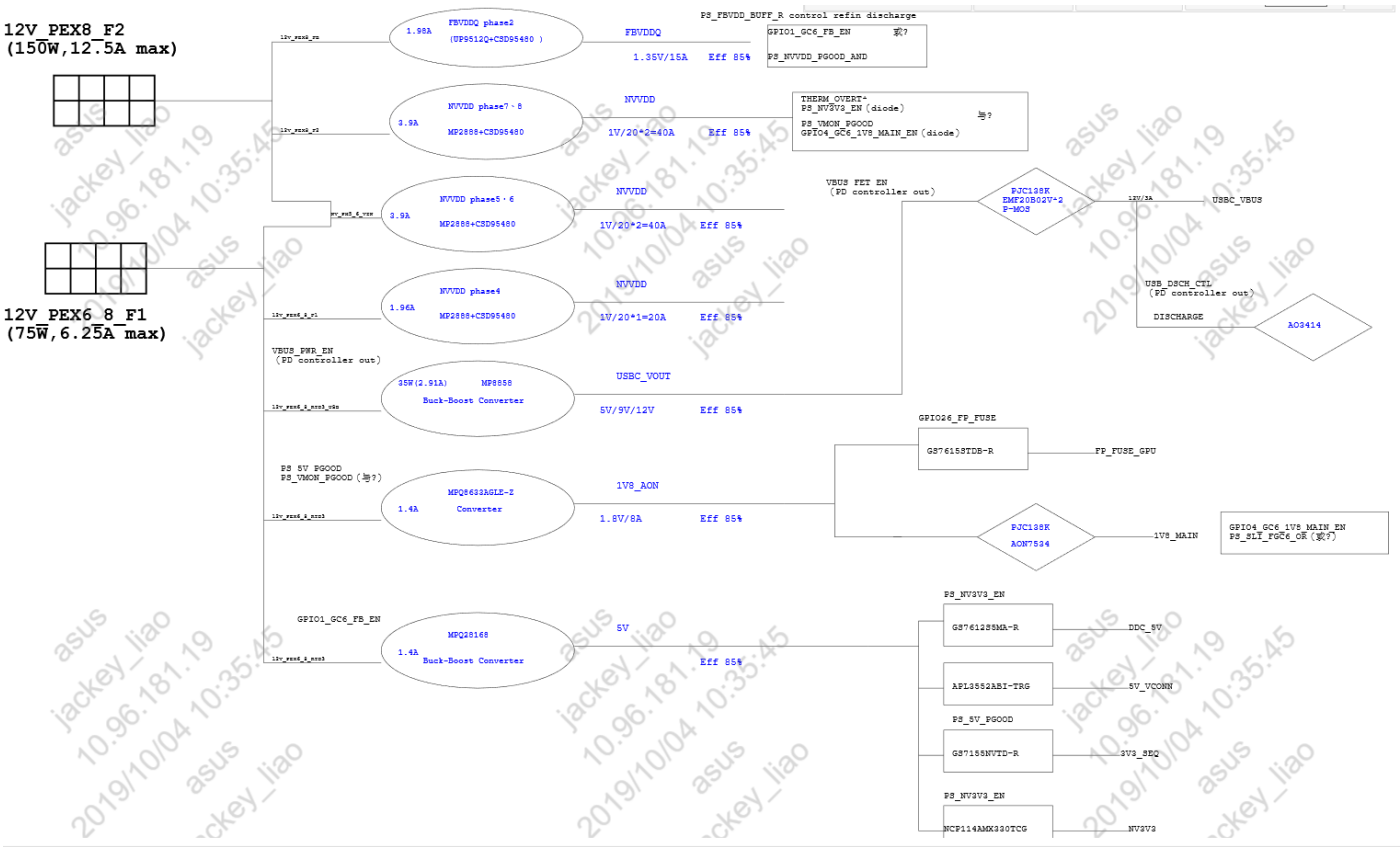
Model name	60PN	GPU	Date
DUAL-RTX2060S-8G-EVO-V2	YV0DZ2	CG161P	2019/12/16

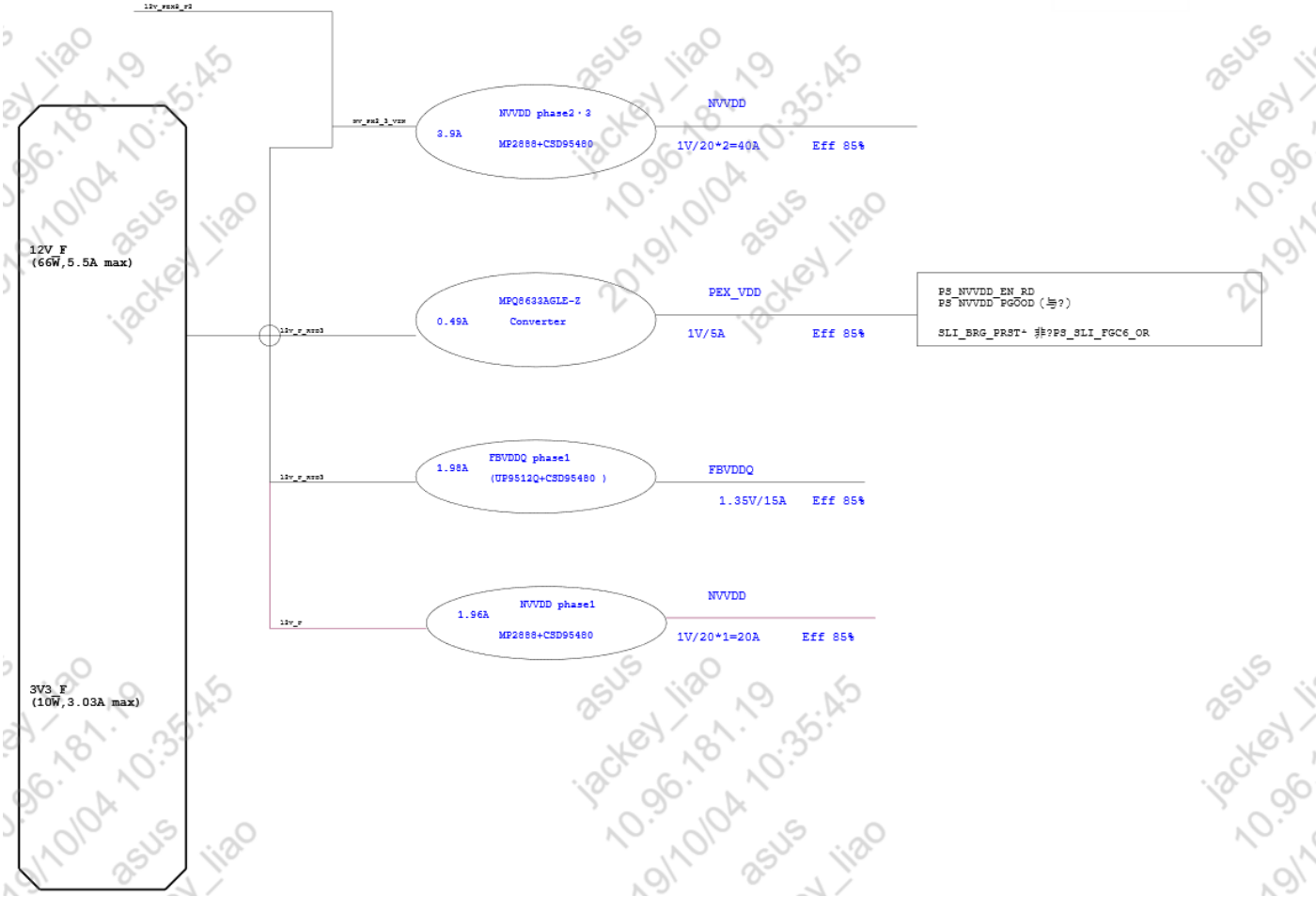
STANDARD APPEARANCE

BLOCK DIAGRAM

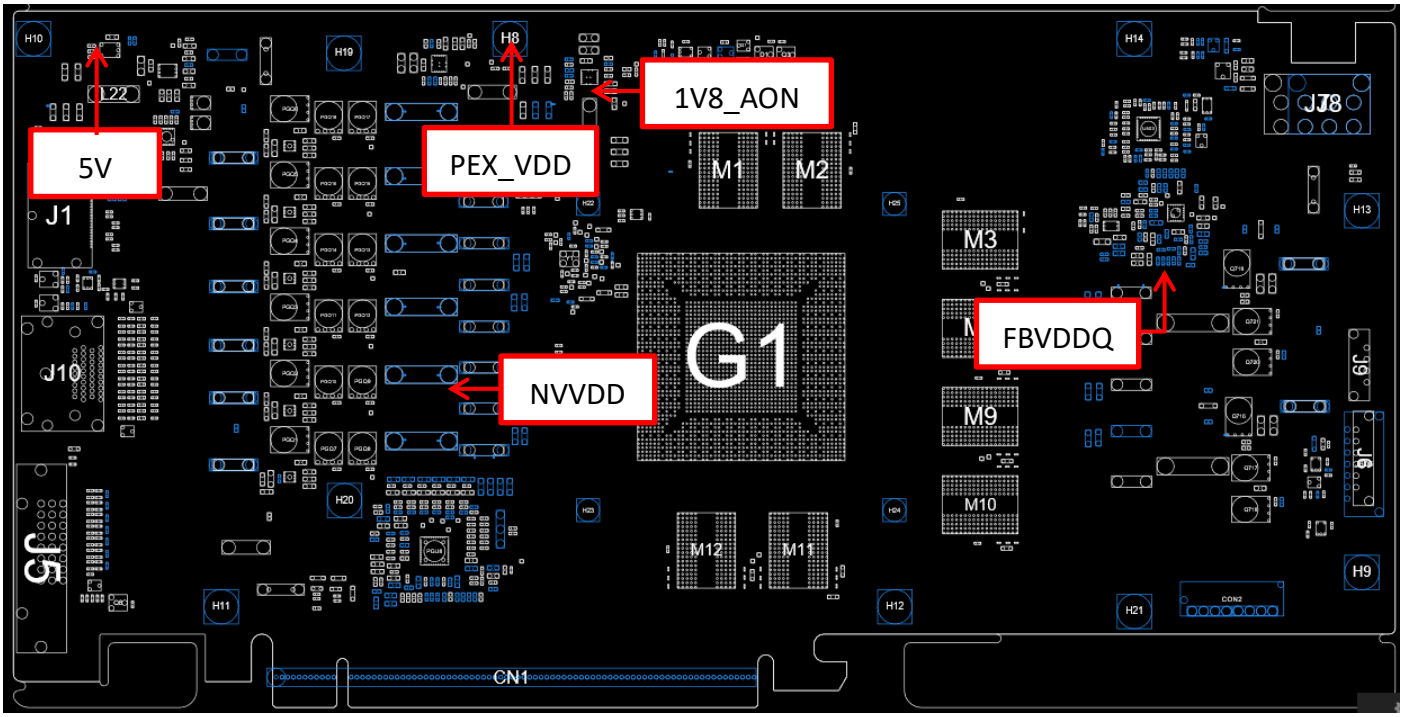


POWER FLOW


12V_PEX8_F2
(150W,12.5A max)
12V_PEX6_8_F1
(75W,6.25A max)
FBVDDQ phase2
(UP9512Q+CSD95480)
1.98A
FBVDDQ
1.35V/15A
Eff 85%
PS_FBVDD_BUFF_R control refin discharge
GPIO1_GC6_FB_EN
PS_NVVDD_PGOOD_AND
NVVDD phase7、8
3.9A
MP2888+CSD95480
NVVDD
1V/20*2=40A
Eff 85%
THERM_OVERT
PS_NV3V3_EN (diode)
PS_VMON_PGOOD
GPIO4_GC6_1V8_MAIN_EN (diode)
NVVDD phase5、6
3.9A
MP2888+CSD95480
NVVDD
1V/20*2=40A
Eff 85%
VBUS_FET_EN
(PD controller out)
FJC138K
EMF20B02V-2
P-MOS
12V/3A
USBC_VBUS
USB_DSCH_CTL
(PD controller out)
DISCHARGE
AO3414
NVVDD phase4
1.96A
MP2888+CSD95480
NVVDD
1V/20*1=20A
Eff 85%
VBUS_PWR_EN
(PD controller out)
35W(2.91A)
MP8858
Buck-Boost Converter
USBC_VOUT
5V/9V/12V
Eff 85%
GPIO26_FF_FUSE
GS7615STDB-R
FF_FUSE_GPU
PS_5V_PGOOD
PS_VMON_PGOOD (待?)
MPQ8633AGLE-Z
1.4A
Converter
1V8_AON
1.8V/8A
Eff 85%
FJC138K
AON7534
1V8_MAIN
GPIO4_GC6_1V8_MAIN_EN
PS_SLI_FGC6_OK (要?)
GPIO1_GC6_FB_EN
MPQ28168
1.4A
Buck-Boost Converter
5V
Eff 85%
PS_NV3V3_EN
GS7612SSMA-R
DDC_5V
APL3552ABI-TRG
5V_VCONN
PS_5V_PGOOD
GS7155NVTD-R
3V3_SEQ
PS_NV3V3_EN
NCP114AMX330TCG
NV3V3


12V_F
(66W,5.5A max)
3V3_F
(10W,3.03A max)
NVVDD phase2、3
3.9A
MP2888+CSD95480
NVVDD
1V/20*2=40A
Eff 85%
MPQ8633AGLE-Z
0.49A
Converter
PEX_VDD
1V/5A
Eff 85%
PS_NVVDD_EN_RD
PS_NVVDD_PGOOD (待?)
SLI_BRG_PRST# 待?PS_SLI_FGC6_OR
FBVDDQ phase1
1.98A
(UP9512Q+CSD95480)
FBVDDQ
1.35V/15A
Eff 85%
NVVDD phase1
1.96A
MP2888+CSD95480
NVVDD
1V/20*1=20A
Eff 85%

VOLTAGE MEASURE POINT

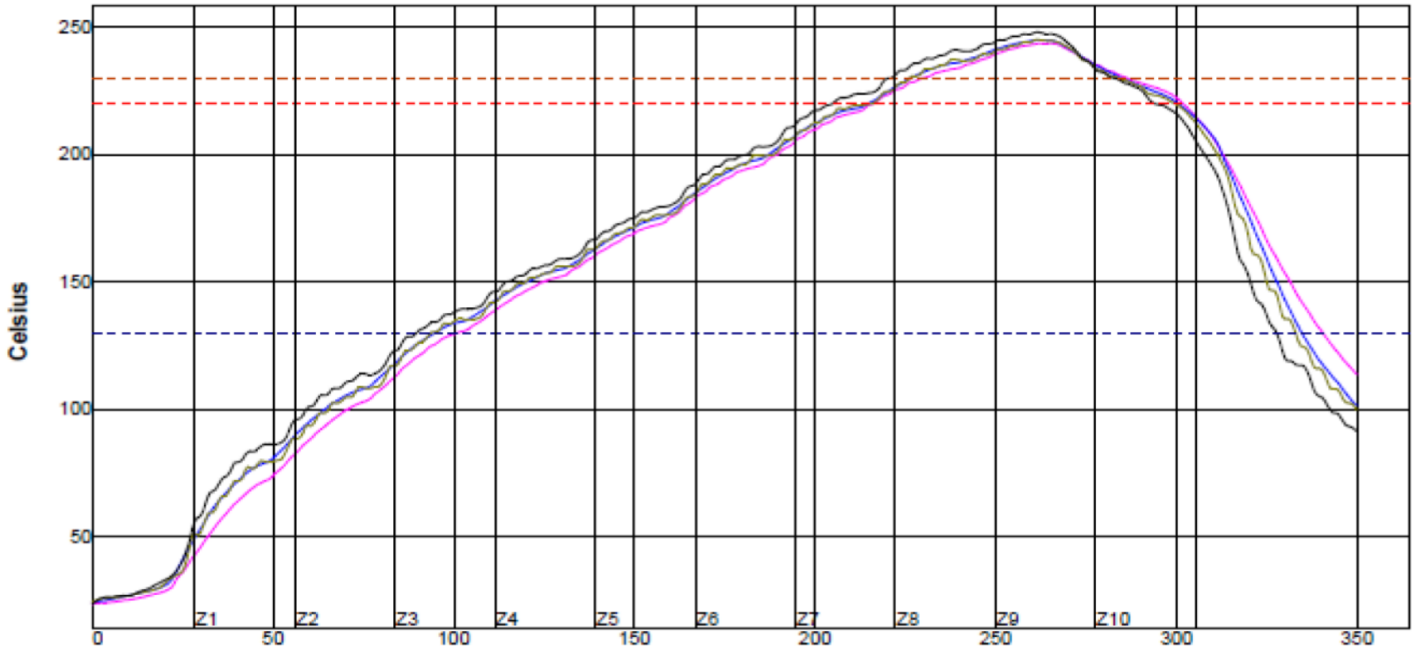


BGA REFLOW PROFILE

Setpoints (Celsius)

Zone	1	2	3	4	5	6	7	8	9	10
Top	100	125	150	170	190	215	235	250	255	200
Bottom	100	125	150	170	190	215	235	250	255	200

Conveyor Speed (inch/min): 26.00



PWI= 95%	Max Rising Slope		Max Falling Slope		Preheat 130-220C		Reflow Time /220C		Peak Temp		Tot Time /230C	
U4 CEN - 1	1.80	-28%	-2.69	16%	116.36	71%	86.97	84%	243.84	38%	67.38	43%
M2 - 1	2.07	-17%	-3.28	-13%	120.00	78%	86.84	83%	245.06	61%	68.78	47%
J7 - 2	2.15	-14%	-3.41	-21%	121.51	80%	84.73	79%	245.34	63%	68.12	45%
L7 - 2	2.36	-8%	-3.76	-38%	115.18	71%	88.37	85%	248.28	83%	83.38	68%
Delta	0.56		1.08		8.36		4.65		4.44		8.00	