RX570 (D009PI) Repair Guide

Jonas 2018/2/27

Model List

Model name	60PN	GPU	Date
EX-RX570-4G	YV0AI0	D009PI	2017/4/29
EX-RX570-O4G	YV0AI1	D009PI	2017/4/29
EX-RX570-8G	YV0AI2	D009PI	2018/2/27
EX-RX570-O8G	YV0AI3	D009PI	2018/2/27

STANDARD APPEARANCE

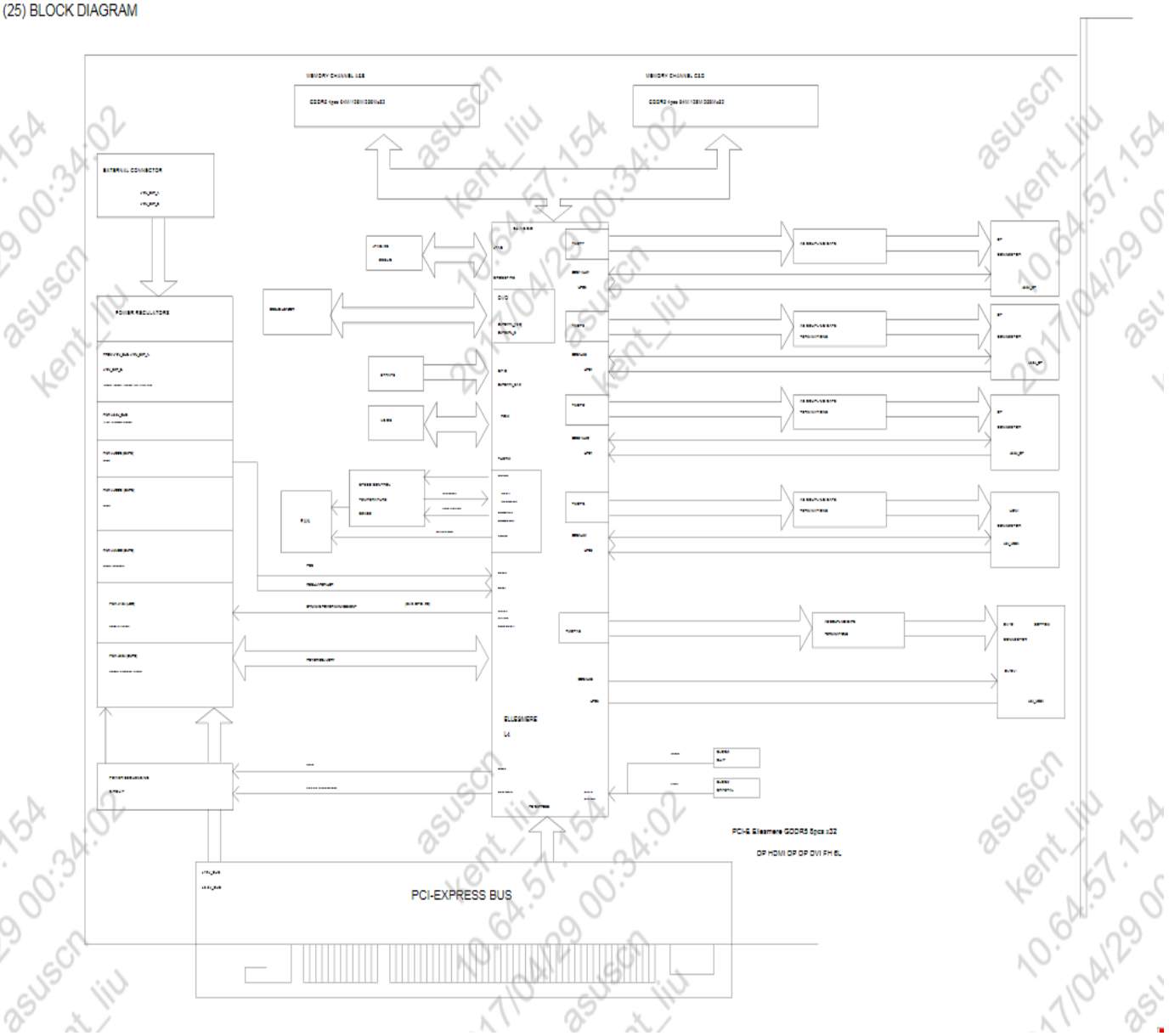
EX-RX570-4G & EX-RX570-O8G & EX-RX570-8G & EX-RX570-O8G


ASUS
ASUS
ASUS

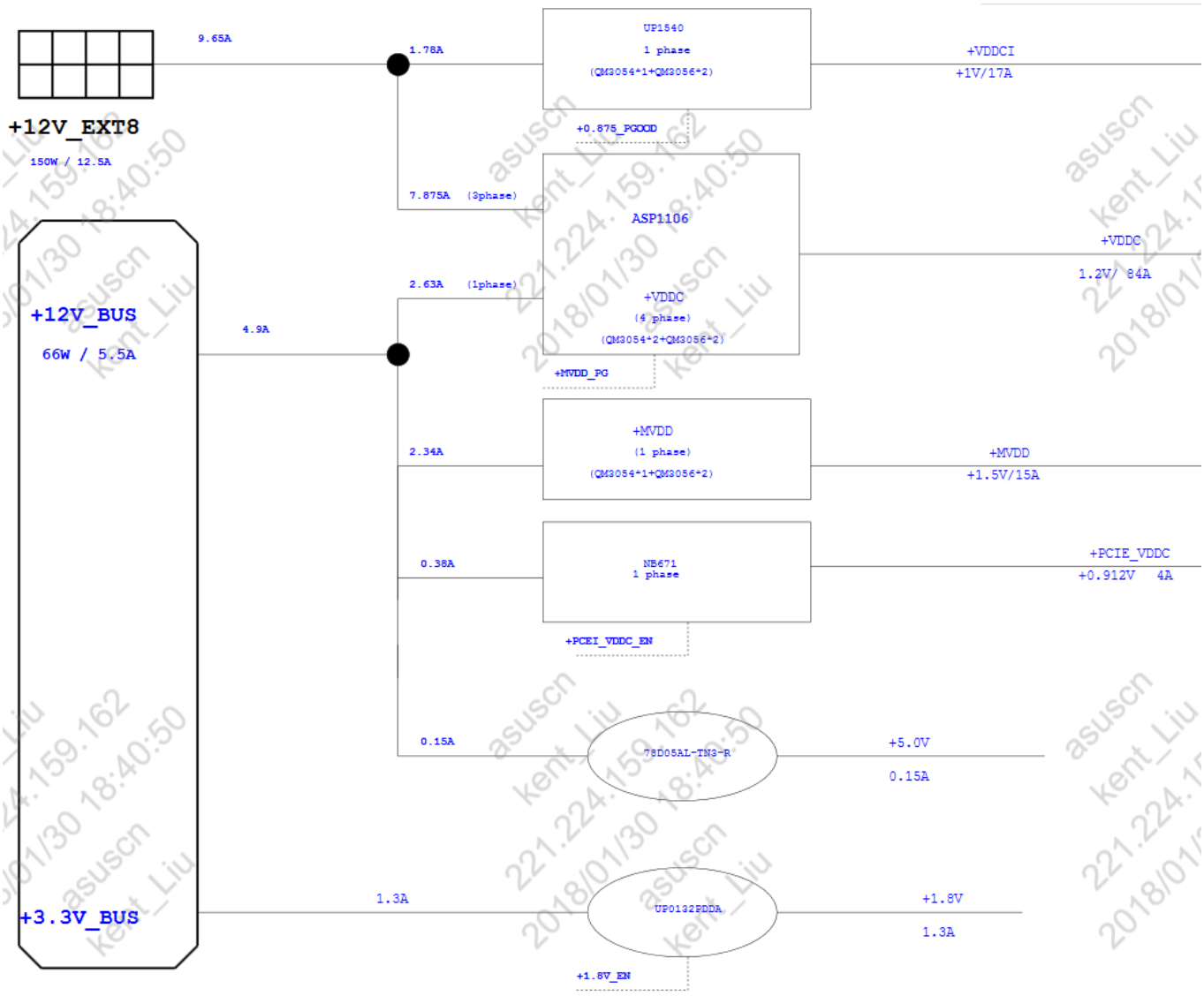

DVI

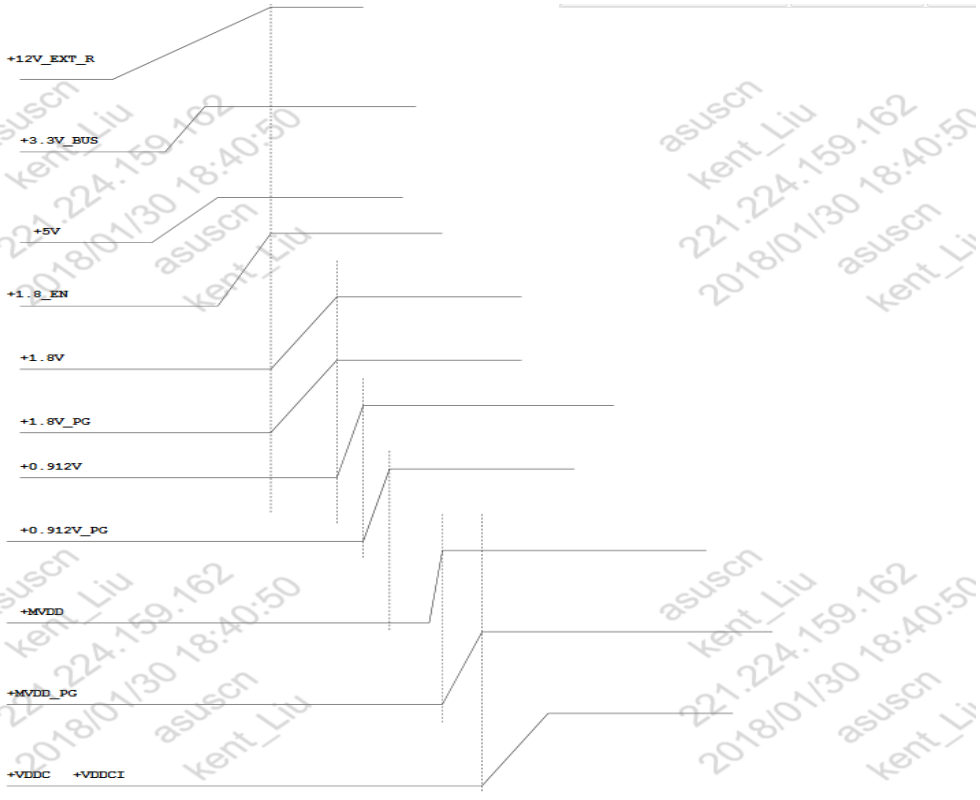
BLOCK DIAGRAM

(25) BLOCK DIAGRAM

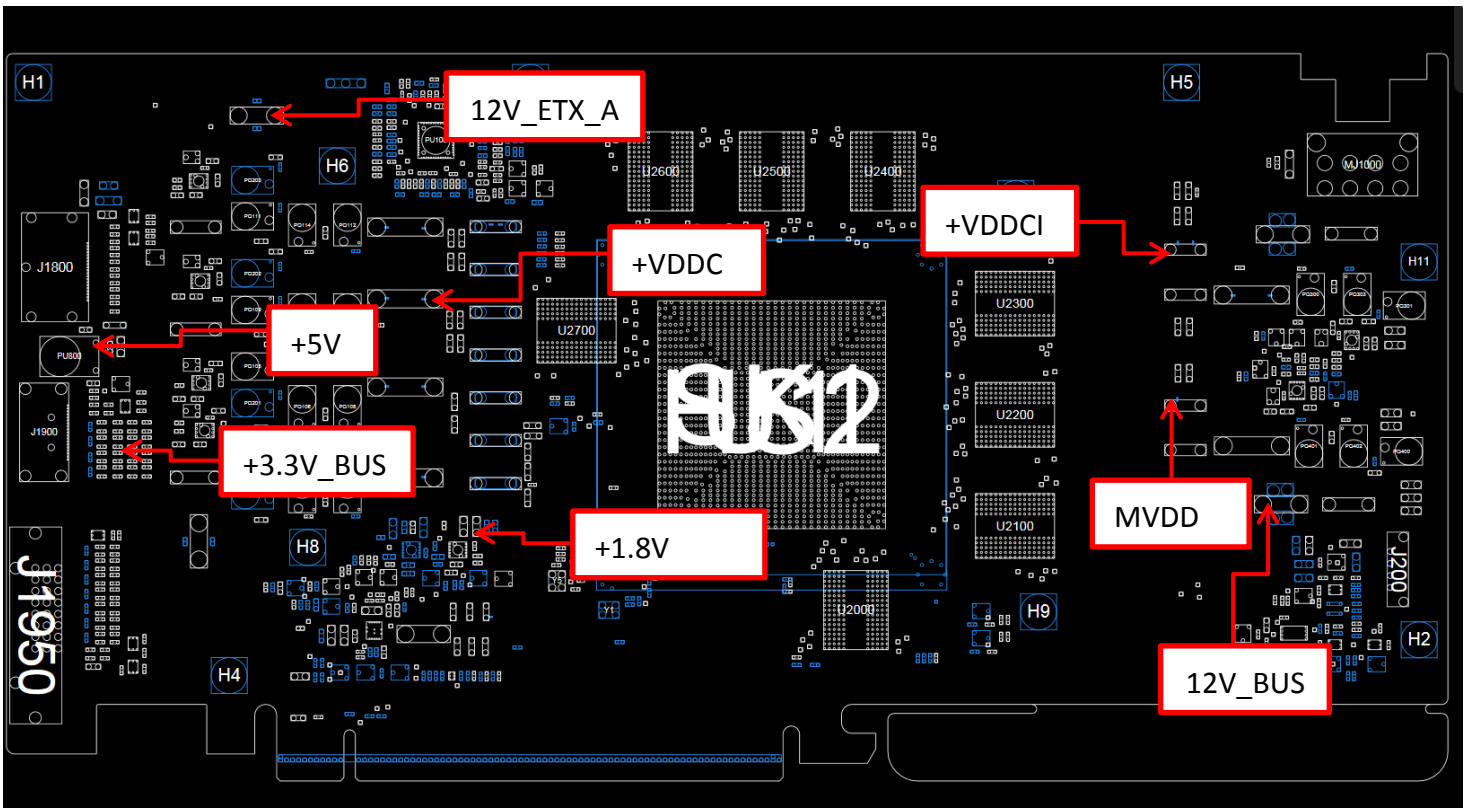


POWER FLOW


+12V_EXT8
150W / 12.5A
9.65A
+12V_BUS
66W / 5.5A
4.9A
+3.3V_BUS
1.78A
UP1540
1 phase
(QM3054*1+QM3056*2)
+VDDCI
+1V/17A
+0.875_PGOOD
7.875A (3phase)
ASP1106
+VDDC
1.2V/ 84A
2.63A (1phase)
+VDDC
(4 phase)
(QM3054*2+QM3056*2)
+MVDD_PG
2.34A
+MVDD
(1 phase)
(QM3054*1+QM3056*2)
+MVDD
+1.5V/15A
0.38A
NB671
1 phase
+PCIE_VDDC
+0.912V 4A
+PCEI_VDDC_EN
0.15A
78D05AL-TN3-R
+5.0V
0.15A
1.3A
UP0132PDDA
+1.8V
1.3A
+1.8V_EN

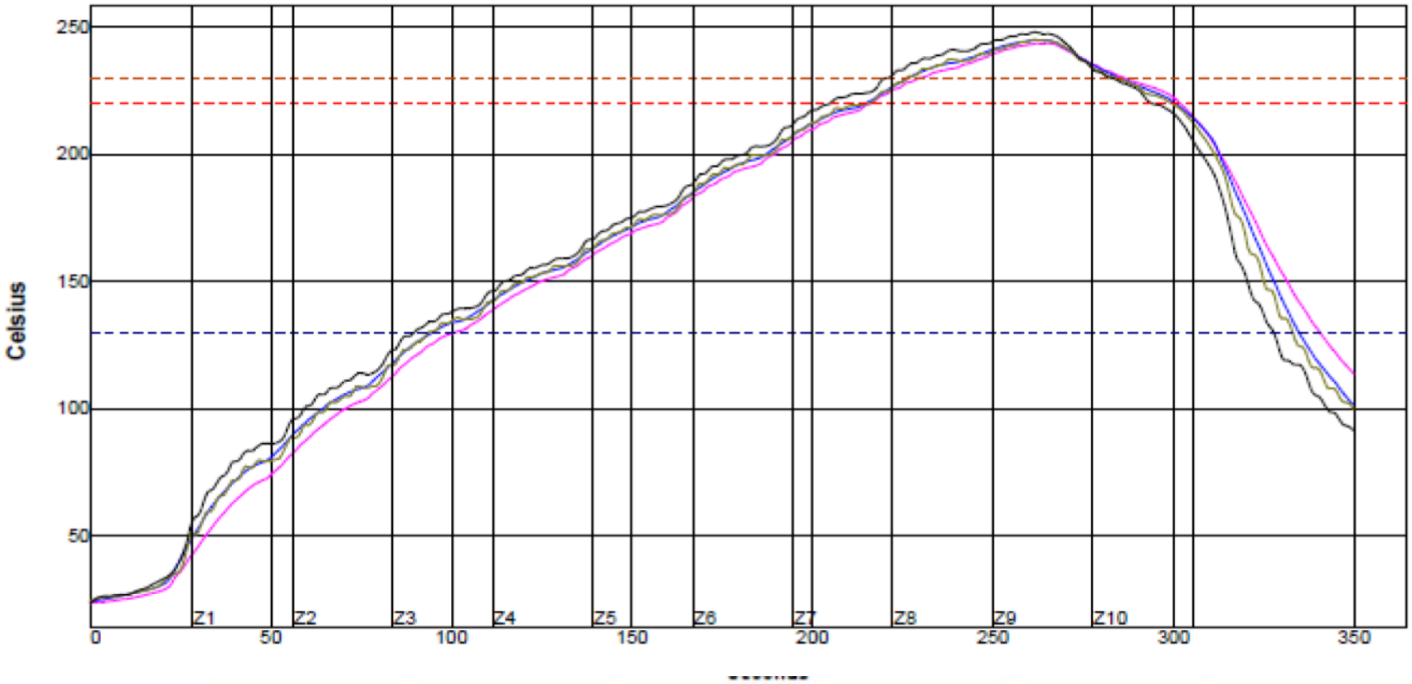

+12V_EXT_R
+3.3V_BUS
+5V
+1.8_EN
+1.8V
+1.8V_PG
+0.912V
+0.912V_PG
+MVDD
+MVDD_PG
+VDDC
+VDDCI

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%	-2.89	16%	116.36	71%	86.87	84%	243.84	38%	67.38	43%
M2 - 1	2.07	-17%	-3.28	-13%	120.00	78%	86.84	83%	246.06	61%	68.78	47%
J7 - 2	2.16	-14%	-3.41	-21%	121.61	80%	84.73	78%	245.34	53%	68.12	45%
L7 - 2	2.36	-8%	-3.76	-38%	115.18	71%	88.37	86%	248.28	83%	69.38	58%
Delta	0.56		1.08		8.36		4.85		4.44		6.00	