# **Repair Guide**

#### **Model List**

| Model name     | 60PN   | GPU     | Date      |  |  |
|----------------|--------|---------|-----------|--|--|
| PH-GTX1650S-4G | YV0E41 | CG161PI | 2019/12/9 |  |  |

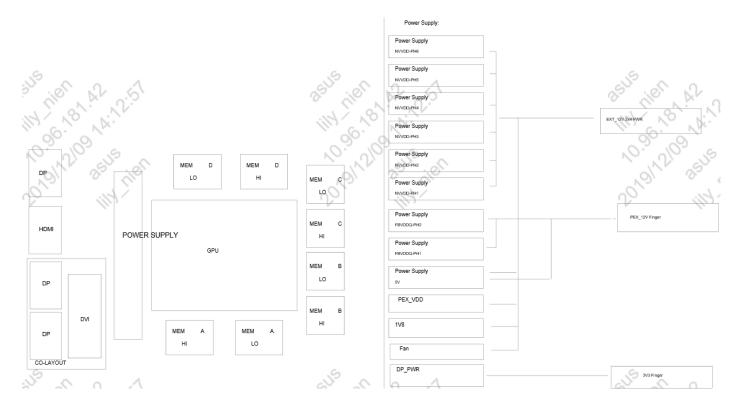
## **STANDARD APPEARANCE**

PH-GTX1650S-4G

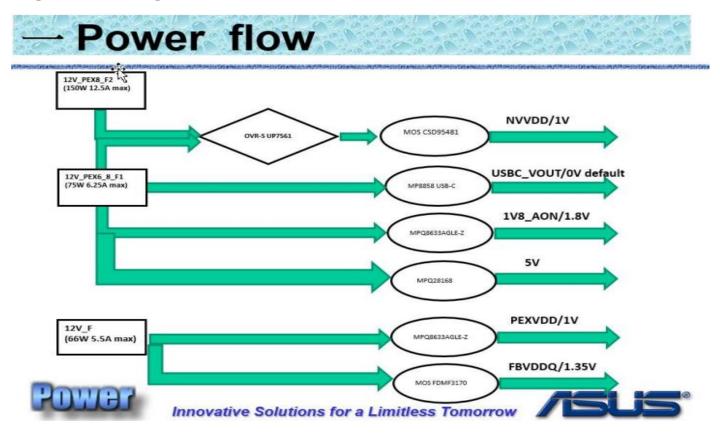




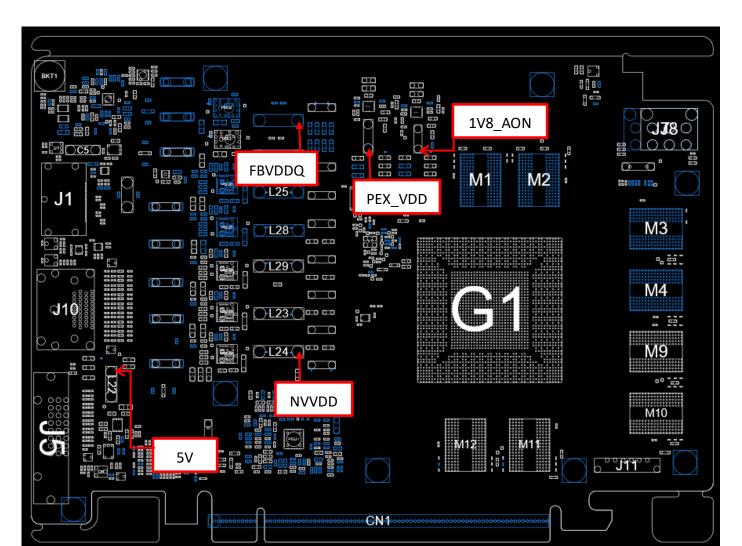
## **BLOCK DIAGRAM**



#### **POWER FLOW**

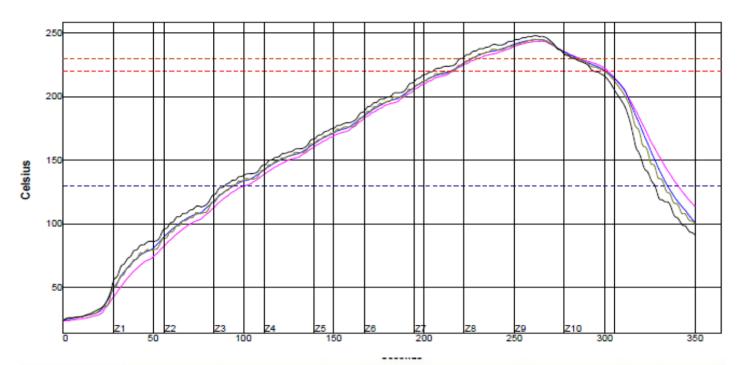


#### **VOLTAGE MEASURE POINT**



## **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             | 18%    | 115.35           | 71%           | 86.97             | 84%       | 243.84    | 38%   | 67.38          | 43%     |
| M2 - 1     | 2.07             | -17%  | -3.28             | -13%   | 120.00           | 78%           | 86.84             | 83%       | 245.08    | 61%   | 68.78          | 47%     |
| J7 - 2     | 2.15             | -14%  | -3.41             | -21%   | 121.51           | 80%           | 84.73             | 78%       | 245,24    | 53%   | 68,12          | 46%     |
| L7 - 2     | 2.36             | -8%   | -3.76             | -38%   | 115.18           | 71%           | 89.37             | 95%       | 248.28    | 83%   | 63,36          | 68%     |
| Delta      | 0.66             | -2400 | 1.06              | 55,000 | 8.35             | 1861 (1.00.0) | 4.85              | 1.1840201 | 4.44      | 10070 | 8.00           | 1 EVICE |