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## Recommended Operating Conditions for BittWare Hammerhead-6U-cPCI Boards

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### Power Supplies:

- 3.3 volts +/- 5%;      Ripple and Noise < 50 mV peak-peak
- 5 volts +/- 5%;      Ripple and Noise < 50 mV peak-peak

**Note:** The 12 and -12 volt supplies are not actually required by the HH6U and are only provided for the PMC sites.

### Power On Conditions:

- 3.3 volt supply should not exceed 5 volt supply during power on ramp up
- 3.3 volt supply should reach proper level within 20 ms of 5 volt supply reaching its level
- 5 volt supply should reach proper level within 10 ms of 3.3 volt supply reaching its level
- Total ramp up time (from 10% to 95% of level) should be between 0.1 ms and 20 ms
- There should be a smooth and continuous ramp of each supply from 10% to 95% of its proper level

### Temperature:

- Storage: -20 to 70 degrees Celsius
- Operating: 0 to 50 degrees Celsius

**Note:** This temperature is as measured in the system between the boards.

### Humidity:

- Storage: 5 to 95% noncondensing
- Operating: 10 to 90% noncondensing