

## Design for Environment

### Components

- ◆ Understanding temperature limits
- ◆ Understanding moisture sensitivity levels
- ◆ Tin whisker
  - Predictions
  - Mitigations

### Printed circuit boards

- ◆ Predicting and preventing PCB damage
- ◆ Selection of a LF surface finish
- ◆ Halogen free laminates

### Solder and manufacturing

- ◆ Second generation LF solders
  - Which are most promising
  - How do they perform in reliability testing
- ◆ Hole-fill and head-in-pillow

### How to prepare for the coming environmental requirements

- ◆ Elimination of phthalates and BFRs
- ◆ Free air cooling in server farms – can they handle it?