Whiskers on USB housing of PC Mother Board

September 5, 2008

• A PC motherboard was examined for presence of tin whiskers.
• Tin whiskers were observed on USB housing.
• Observed whiskers were long enough to bridge fine pitched perimeter leaded packaged integrated circuits on the PWAs.
Top Surface
Connector Section
Optical View of Long Whisker on USB Housing
Optical View of Whisker On USB Housing
ESEM Image of Long Whisker of USB
Summary

- XRF analysis of USB housing found ~8 micron thick tin over copper.
- Whisker greater than 900 microns were observed on USB housing.
- Whisker could become dislodged and create a reliability issue.
Contact:

- For information on tin whiskers and assistance with tin whisker related issues, please contact

- Dr. Michael Osterman (osterman@calce.umd.edu)

- Images taken by Research Associate Lyudmyla Panashchenko