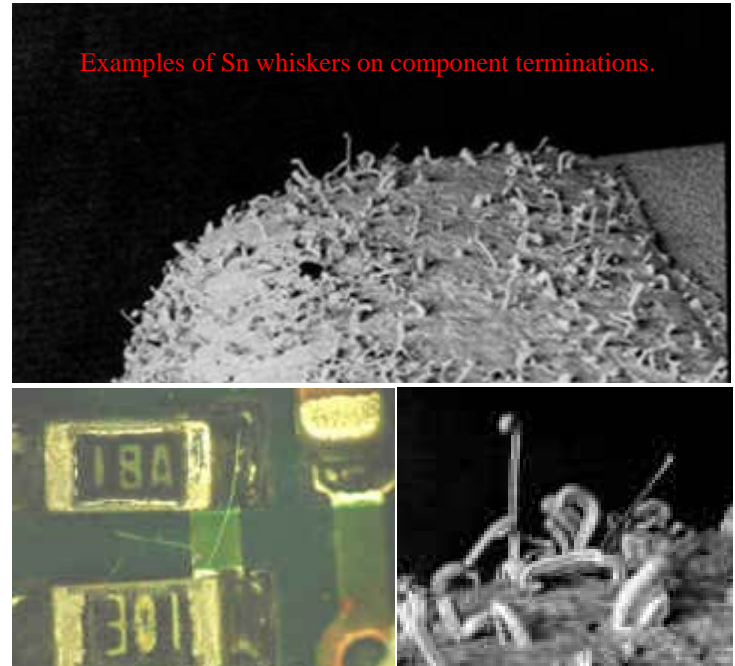


## AEM's Sn/Pb Conversion Process for Tin Whisker Mitigation (TWM)



AEM's Sn/Pb conversion process (TWM) is compatible with thousands of Surface Mount Device (SMD) component types, including the package styles shown above.



Conversion of terminations from 100% Sn to Sn/Pb types helps ensure that whisker formations are minimal or non-existent. Above Sn whisker examples courtesy of NASA and CALCE

### AEM's Sn/Pb Conversion Process:

- Include both Sn/Pb plating and subsequent fusion processing to ensure that resultant component termination finishes are a homogenous mixture of Sn/Pb.
- Ensures that all areas of each component termination are converted to Sn/Pb (including termination locations in egress and wrap-around areas).
- Include monitoring of component quality going into and out of the Sn/Pb conversion process (QA1/QA2/DPA – to verify solderability, leach resistance, and terminal adhesion strength).
- Ensures that converted component terminations contain a minimum of 5% Pb as verified by SEM/EDS and XRF inspection methods.
- May be followed by 100% electrical or customer specified up screening activities. 100% visual inspection at 7X-10X magnification levels is performed by AEM on all TWM lots.
- Included within the scopes of AEM's AS9100 and ISO 9001:2008 QMS Certifications.