Sn/Pb Conversion and Up Screening of Surface Mount COTS Components and AEM, Inc. Lessons Learned

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Utilizing a Sn/Pb plating method, AEM began Sn/Pb converting surface mount chip passive devices over 25 years ago. Although “chip style” components remain among the most common package styles processed by AEM, the need for processing countless other package types and styles has become increasingly needed in recent years. Examples of these package types include open frame surface mount power beads and inductors, stacked capacitors, connectors DFN, QFN, in addition to the smallest SMD packages such 01005 and 0201 package sizes. Up screening criteria can vary significantly and may include military specifications, customer specific SCD requirements, or any combination thereof. This presentation explores the many unique challenges associated with both Sn/Pb conversion processing and up screening of these devices.