

DoD / Aerospace Perspectives on the Transition to Pb-free (Lead-free) Solder Technology

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Since 2004, the aerospace, defense, and high-performance (ADHP) industries have worked together to develop approaches to address challenges with Pb-free solders and finishes. The challenges deal with assuring conformance to performance requirements when subjected to harsh service, environmental, and storage conditions. These efforts have resulted in characterizations of widely used Pb-free materials providing strategies and tools to execute risk mitigation as needed. This paper will show how Commercial-off-the-Shelf (COTS) products have influenced the impact of Pb-free and driven an industry-wide collaboration to identify and mitigate risks to comply with customer requirements.