

IEEE TRANSACTIONS ON COMPONENTS AND PACKAGING TECHNOLOGIES

A Special Section on **Electronic Part Obsolescence**

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The electronics industries' ability to sustain Moore's Law has transformed our world and many product sectors thrive on the rapid rate of technology change. However, there are a growing number of critical systems for which the rapid rate of technology change is a nightmare not an opportunity. Systems such as aircraft avionics, military system, communications infrastructure, and industrial equipment, which are often produced for many years and sustained for many decades, suffer the consequences of electronic part obsolescence.

This **Special Section** in the *IEEE Transactions on Components and Packaging Technologies* will survey state-of-the-art research in the electronic part obsolescence area (also known as DMSMS - Diminishing Manufacturing Sources and Material Shortages). Topics of interest include, but are not limited to:

Electronic part obsolescence date/risk forecasting

Alternative/substitute part identification

Electronic part obsolescence mitigation approaches:

- Lifetime and bridge buys
- Part emulation
- Thermal uprating of parts
- Aftermarket supplied parts
- Salvaged (reclaimed) parts
- Reverse engineering of legacy parts

Migration to lead-free parts

Counterfeit parts

Material risk index calculations for part insertion

Electronic part qualification and testing

Electronic system refresh/redesign methodologies

Guest Editors: Dr. Peter Sandborn

CALCE, Dept. of Mechanical Engineering

University of Maryland

College Park, MD

Ph: 301-405-3167

Email: sandborn@calce.umd.edu

Ric Loeslein

NAVAIR Aging Aircraft IPT

22347 Cedar Point Rd., Bldg. 2185, Rm. 2100 C-4

Patuxent River, MD 20670

Ph: 301-342-2179

Email: george.loeslein@navy.mil

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