Counterfeit electronics have been reported in a wide range of products, including computers, telecommunications equipment, automobiles, avionics and military systems. Counterfeit electronic products include everything from very inexpensive capacitors and resistors to costly microprocessors. Unfortunately, this problem is growing rapidly and no signs of abatement are in sight.

The Webinar will bring you up to date on the progress of the CALCE project C07-41. The Webinar will provide the lessons learned from the survey of counterfeit parts conducted and provide guidance on how to avoid being victim of counterfeit parts.

The key to avoid counterfeit parts is to control the supply chain and to procure parts only from authorized sources (e.g., original part manufacturers or its authorized distributors). However, some organizations continue to buy from unauthorized sources (often due to poor obsolescence and inventory management). Inspection is a risk mitigation technique in the absence of control of supply chain.

As a last line of defense, one can use inspection to identify parts with high risk of being counterfeit. This inspection can be carried out at several levels starting from accompanying documents, external packaging, and the parts themselves. We will focus on the specific attributes of counterfeit parts of different types (e.g., relabeled, illegally manufactured, and salvaged from scrap) that can be identified through inspection.

We will cover the methods to make the process of inspection more effective and productive and close with the cautionary issues on why over-reliance on inspections can be costly, ineffective, and even harmful.

**About the presenter:** Dr. Diganta Das (Ph.D., Mechanical Engineering, University of Maryland, College Park, B.Tech, Manufacturing Science and Engineering, Indian Institute of Technology) is a member of the research staff at the Center for Advanced Life Cycle Engineering. His expertise is in reliability, environmental and operational ratings of electronic parts, uprating, electronic part reprocessing, technology trends in the electronic parts and parts selection and management methodologies. He performs benchmarking processes and organizations of electronics companies for parts selection and management and reliability practices. He also assists organizations in design improvements.

Dr. Das has published more than 50 articles on these subjects, and presented his research at international conferences and workshops. He had been the technical editor for two IEEE standards and is currently coordinator for two additional IEEE standards.

He is an editorial board member for the journal Microelectronics Reliability and International Journal for Performability Engineering. He is a Six Sigma Black Belt and a member of IEEE and IMAPS.

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