



Learn how to detect counterfeit components

Counterfeit Electronic Components Avoidance Workshop

Updated Information

Counterfeit Electronic Components Avoidance Workshop

Counterfeit electronic components entering the supply chain are causing a huge economic impact in the electronics industry. This Workshop discusses avoidance practices to combat this problem through:

Examples of counterfeits
Packaging inspection procedures
Use of microscopes & detection equipment
RoHS - XRF & EDAX
Die inspection & authentication
Electrical Testing
Procurement issues
Avoidance actions and procedures

This Workshop has been presented to a total of over 700 attendees in USA and Europe.

- Counterfeit components are causing a major catastrophe in the electronics industry
- The problem is rapidly growing based on recent surveys.
- The impact is affecting automotive, computer, consumer, telecom, medical, military and space electronics.
- Urgent action is required to reduce counterfeit caused manufacturing scrap, safety problems, improve reliability and customer satisfaction.

The Workshop is Designed for:

Component Engineers
Purchasing Managers and Buyers
Quality Managers & Engineers
Inspection Personnel
Laboratory & Analysis Technicians

What is Causing Counterfeit Components?

- Obsolete Components.
- Long delivery times from OCM and FD.
- Huge accumulations of electronic scrap that source counterfeits.
- Buyers searching for unreasonably low prices.
- Internet Sales.

Goal

Provide awareness and training in the techniques and practices required to detect and avoid counterfeit components and the costs, legal issues and risks associated with them.

New Topics Presented

- An Attorney discusses "Ignorance is no legal excuse" & typical court penalties for selling counterfeit components
- Due diligence practices that OEMs and Independent Distributors should consider.
- Counterfeit techniques through the eyes of ID insider.
- Detecting reclaimed ICs by the leads.

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Workshop Topics

These topics have been expanded and will be presented by experienced component engineers well versed in the detection of counterfeit components.

Day 1 - 8:30 - 5:00

- 1. Introduction; Leon Hamiter, CTI, Inc.
- 2. Ignorance is no legal excuse for counterfeits; Larry Pappas, Attorney
- 3. Due diligence & AS 5553; Leon Hamiter
- 4. Microscopes & lenses; Tom Lee, CTI, Inc.
- 5. Counterfeit techniques through the eyes of ID insider; Robb Hammond, AERI
- 6. Visual & dimensional inspection hermetics & PEMs; Don Trenholm, Custom Analytical
- 7. Analyzing data sheets, mil spec to detect counterfeits; Leon Hamiter
- 8. X-Ray & SCAM-Value & usefulness; Don Trenholm
- 9. X-Ray demonstration; Bill Cardoso, Creative Electron
- 10. Counterfeit passive components; Leon Hamiter

Day 2 - 8:30 - 4:00

- 11. Summary of OEM & CM counterfeit experience; Tom Lee
- 12. Hermetic package de-capping techniques (ceramic, metal, BGAs, PEMs; Don Trenholm
- 13. De-capping PEMs with chemical techniques; Erik Jordan, Nisene
- 14. Die inspection criteria: die attributes, good photography, authentication of die, etc.; Tom Lee
- 15. Clones and ghosts; Leon Hamiter
- 16. RoHS/Pb free analysis-importance & techniques EDAX vs XRF; Tom Lee
- 17. Comparative electronic testing with curve tracer & ABI tester; Tom Lee Summary & discussion

Attendees will receive a Certificate of Attendance

Comments Received from Past Workshops

- Excellent information on how to spot counterfeits.
- Good criteria for supplier selection and product inspections.
- Outstanding photos of counterfeit components and how to spot them.
- More OEMs and Brokers need to understand the actions presented in this Workshop.
- The speakers, technical data, information and examples of counterfeits were outstanding.
- *OEM & CM buyers and purchasing groups need to attend this Workshop.*
- Highly informative for detecting counterfeit components.

Registration Fees & Accommodation

Advance Registration is required. No At the Door Registrations. Registrations must be received by August 13 to assure enough attendees to hold Workshop. No charges will be made until workshop is definite. Three (3) or more from the same company, registered at the same time get a discount of \$70 each. The Registration Fee includes continental breakfast, lunch, two breaks and a copy of the Workshop Notes.

The Workshop is scheduled at the Quality Suites Hotel - John Wayne Airport. Rooms are available at a special rate \$89 + tax. Hotel provides complimentary hot breakfast & shuttle service to & from John Wayne Airport. If hotel is full, call CTI for suggestions. For hotel reservation call 714-957-

9200, identify you are attending CCAW for this rate.

Register early for the lower fee and to assure a seat in Workshop.

For Workshop information call 256-536-1304 or e-mail to Leon.Hamiter34@cti-us.com

CCAW Registration Information

Quality Suites Hotel

John Wayne Airport 2701 Hotel Terrance Dr. Santa Ana, CA 92707 714-957-9200

August 24 - 25, 2010 8:30am - 5:00pm

| Name_ | | | Title |
|--|---------------------------|---------------|--------------------------------|
| | Division | | |
| Address | | | M/S or Suite # |
| | | | Postal Code |
| Country | Phone | Fax | |
| Email | | | |
| | | | After August 13 |
| Registration Fee | advance fee \$695 | | add \$150 |
| 3 or more from same Company, at the same time - \$625 each | | 525 each | add \$100 |
| Please send separate registration for each attendee | | | Total |
| | No At the Door Re | gistrations. | |
| N | No refunds on cancellatio | | ıst 6. |
| _ | Substitutions can be ma | S | |
| New information has been | added: How to detect rec | laimed compo | onents by leads; Clones and |
| ghost products; Performin | g "Due Diligence"? | | |
| Payment must accompany n Company checks must be n dollars drawn on a US bank signature. | nade out to Components To | echnology Ins | titute, Inc. and payable in US |
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