

# ULTRA-SENSITIVITY TRENDS AND CDM ONLINE

**MARCH 25, 2010 • 10:00 A.M. EASTERN TIME**

## **ULTRA-SENSITIVITY TRENDS AND CDM**

March 25, 2010 • 10:00 a.m. Eastern Time • Course length - one hour.

Instructor: Ted Dangelmayer, Dangelmayer Associates, L.L.C.

The electronics industry faces a double challenge: increasing use of ultra sensitive devices and lack of experience with the Charge Device Model (CDM). This class will give you the background to understand the challenges and prepare to meet them. Case studies will illustrate how CDM failures can persist even with a robust HBM program in place. A series of photographs of common CDM issues in manufacturing will enable students to visualize how to implement CDM controls. A brief summary of the work by the Industry Council on ESD Target Levels will be included.

It is no longer business as usual and it could take up to two years to prepare (example – equipment retooling etc.). Join us for this highly interactive tutorial and learn why these challenges are inevitable and how to prepare for them.

Get the answers to your questions as well as these examples. Are you skeptical about this news of the trend toward the extensive use of ultrasensitive components? Is it really happening? Is it likely to be a problem in your factory? How big a problem is CDM in manufacturing? What is different about CDM controls?

## **INSTRUCTOR - TED DANGELMAYER**

Ted Dangelmayer is the president of Dangelmayer Associates, L.L.C. and has assembled an ESD consulting team consisting of the foremost authorities in numerous ESD areas of both product design and manufacturing. He received the “Outstanding Contributor” award, was President of the ESD Association, Chairman of the ESDA Standards Committee, and General Chairman of the EOS/ESD Symposium. He has published two editions of his book, ESD PROGRAM MANAGEMENT numerous magazine articles, and technical papers. Ted holds three patents, is NARTE Certified, and has successfully completed the ESD Association ANSI/ESDA S20.20 Course for Program Managers and Consultants. He is currently President of the Northeast Chapter of the ESD Association and a member of the national ESD Association’s Standards Committee and Education Committee.

### **Equipment Requirements**

This course uses a multi-way audio broadcast over the Internet. You will need a soundcard and speakers (a headset is recommended) installed to hear the presenter during the course.

**Attendees can send questions to the presenter via text chat, other interaction will not be available.**

ESD Association • 7900 Turin Rd Bld 3 • Rome NY 13440  
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ONLINE TRAINING

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## Registration Form

First Name: \_\_\_\_\_ Last Name: \_\_\_\_\_

Company Name: \_\_\_\_\_

Street: \_\_\_\_\_ City: \_\_\_\_\_

State/Province: \_\_\_\_\_ Country \_\_\_\_\_ Zip/Postal Code: \_\_\_\_\_

Is Address (please circle the one that applies) Home or Company

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

<b>Cost</b>	members	non-members
	\$95.00	\$140.00

**Please Register by March 11th** • Refunds will not be given for cancellations.  
In the event of a cancellation, credit will be given to attend a different online class.

## Payment Information

Payment is required at time of registration. Only checks drawn in U.S. currency on a U.S. bank that is a member of the Federal Reserve will be accepted; make checks payable to ESD Association. Visa®, Mastercard®, Discover® and American Express® are accepted.

Amount enclosed \$ \_\_\_\_\_  Check  Credit Card

Credit card type: Visa® Mastercard® Discover® American Express®

Credit card number: \_\_\_\_\_ Expiration date: \_\_\_\_\_

Name on card: \_\_\_\_\_ Security code: \_\_\_\_\_

Cardholder's signature: \_\_\_\_\_

### Mail, or fax this form with payment to:

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