

This seminar is by Jeff Dunnihoo and the date is TBD

"Advanced ESD Design, Scanning and Analysis Tools"

This webinar will review the state of the art in system/board level ESD analysis and design tools, including:

- 1) Susceptibility Scanning: New technology to map actual circuit "hotspots" on the PCB which are susceptible to radiated (or injected) ESD induced EMI. (Relating to Soft-errors and system upsets)
- 2) Current Reconstruction Scanning: New technology for real time picosecond mapping of actual current flows and discharge paths in system during actual ESD discharges, using Charged Board Event (CBE), Field Collapse Event (FCE), Cable Discharge Event (CDE) or Transmission Line Pulsing (Modified Trailing Edge type) as appropriate on suspected entry-exit vectors. (Relating to both Soft-Errors and Hard (damage) Failures.
- 3) Embedded Scanning: A new patented probing and monitoring of actual and qualification ESD strikes with on-board circuitry and reporting methods to characterize overall system robustness, as well as previously unavailable characterization of actual ESD severity levels and frequency of events experienced by the system in the field, qualification and manufacturing.
- 4) Virtual Simulation and Validation of all of the above: Industry standard "SEED" (System Efficient ESD Design) SPICE Modeling and Simulation of system components and pulse aggressor sources (IEC/TLP/CBE/FCE/CDE/etc.) utilizing PESTO[SM] simulation models and development tools. In addition to running the modeling and simulation for the customer, DA provides continuing access to Pragma's online PESTO[SM] portal allowing customers to repeat and modify parameters and component choices on their own.

Case study examples will be reviewed for each segment.