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**FOR IMMEDIATE RELEASE**

## **STI Electronics Selected for a Best Paper Award for BTC/QFN Test Board Design Research**

**MADISON, AL — January 2017 —** STI Electronics, Inc., a full service organization providing training services, training materials, analytical/failure analysis, prototyping, and small-to-medium volume contract PCB assembly, today announced that it has been selected to receive the “Best of Conference” award for a paper presented during SMTA International in September. The paper entitled “BTC/QFN Test Board Design Considerations and Method for Qualifying Soldering Materials and Cleaning Processes” was co-authored by Dr. Mike Bixenman of KYZEN, and Mark McMeen and Jason Tynes from STI Electronics.

It becomes necessary from time to time to change materials of construction, manufacturing processes, and process conditions. A soldering material or cleaning agent may become unavailable due to environmental regulation, market forces, or reformulation. Certain conditions require some form of verification and validation that the process meets the Original Equipment Manufacturers (OEMs) quality and reliability specifications.

J-STD-001 Requirements for Soldered Electrical and Electronic Assemblies states that validation and verification be confirmed with test vehicles that are representative of the product being produced. Many of the industry standard test vehicles are dated and not representative of current electrical and electronic assemblies.

The purpose of this research is to use a non-standard test board with sensors placed at the bottom termination to study cleanliness and contamination effects under QFN components. The non-standard test board has features to also study thermal paddle design options and to develop a risk profile. This research has demonstrated Surface Insulation Resistance effects at the source of the residue

The authors will formally be presented their awards at the Opening Ceremony during SMTA International on September 19 in Rosemont, Illinois. The papers are available in the conference proceedings available in the SMTA Bookstore at [http://www.smta.org/store/book\\_store.cfm](http://www.smta.org/store/book_store.cfm).

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### **About STI Electronics, Inc.**

Since 1982, STI Electronics, Inc. (STI) has been the premier full service organization for training, consulting, laboratory analysis, prototyping, and small-to-medium volume contract PCB assembly in the electronics industry. STI also produces a complete line of solder training kits and training support products. For more information, visit [www.stielectronicsinc.com](http://www.stielectronicsinc.com).