

## Technology Development in Today's Global Environment

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#### FOR IMMEDIATE RELEASE

## **HDP User Group Announces New High Frequency Measurement Project**

Cave Creek, Arizona November 10, 2016. The High Density Packaging (HDP) User Group headquartered in the United States is pleased to announce a new project that will focus on understanding the impact of moisture on High Frequency Measurements of printed circuit board material.

As electronic products increase in functionality and interconnect speeds approach 40 GB/sec, the need to measure substrate material performance becomes increasingly important and demanding.

This is the third project in this series. Phase one reviewed and compared the different types of high frequency test measurements that are used in the industry for measuring Dielectric Constant (Dk) and Dissapation factor (Df) at higher frequencies. Moisture content was identified as a significant factor in the testing.

Phase 2 was initiated to establish a test protocol for the accurate measurement of Dk, Df, and weight gain. Weight gain is used to measure moisture content. The objective of Phase 2 was only to establish a test protocol to accurately measure weight to 4 decimal places.

Now that the measurement protocol has been verified, Phase 3 of this project proposes to evaluate the effect of moisture on each of the high frequency Dk and Df test methods. During the testing and analysis of the earlier phases of this project, it was determined that differences in moisture content were found to contribute up to a 20 percent difference in the measured Df values of some laminate materials tested. Phase 3 will use several laminates. Some low Df, some mid Df, and some high Df

Please contact Jack Fisher at <u>fish5er@hdpug.org</u> to be added to project notification list and participation in this investigation. You will be informed of the next project call, tentatively to be held in early November.

### **About HDP User Group**

HDP User Group (<a href="www.hdpug.org">www.hdpug.org</a>) is a global research and development organization based in Cave Creek Arizona, is dedicated to "reducing the costs and risks for the Electronics Manufacturing industry when using advanced electronic packaging and assembly". This international industry led group organizes and conducts R&D

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programs to address the technical issues facing the industry, including design, printed circuit board manufacturing, electronics assembly, and environmental compliance. HDP User Group maintains additional offices in Austin, Texas, Singapore, and Dollar, U.K.

For more information, visit HDP User Group on the Internet at <a href="www.hdpug.org">www.hdpug.org</a> or contact Darryl Reiner at darrylr@hdpug.org, phone number +1 480-951-1963

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