

FOR IMMEDIATE RELEASE

Contact: Amy McGrath, Communications Director

DfR Solutions

amcgrath@dfrsolutions.com

267-337-2495

### **DfR Solutions to Address Reliability Physics at IMAPS NORDPAC**

How design choices and extreme environments impact product performance

**Beltsville, MD – May 1, 2018** – DfR Solutions, the leader in quality, reliability, and durability (QRD) solutions for the electronics industry, today announced that it is presenting, *Overcoming Human Factors by Utilizing Design Modeling to Improve High Reliability Electronics* at The Nordic Conference on Microelectronics Packaging, NordPac 2018, held June 12-14, 2018 in Oulu, Finland. Dr. Natalie Hernandez of DfR Solutions will present this paper as well as teach a short course called, *Reliability Physics in the Early Design Phase*. This conference is a collaboration between IMAPS Nordic and IEEE EPS Nordic.

Frequently, the selection of components and materials for the design of an electronic product are not the best choices to assure that the product will function for its intended lifetime in its intended environments. This human factor element can be avoided using advanced modeling of the materials, solder joints, printed circuit boards, components and potting compounds (if needed). A high reliability electronic assembly is a complex interaction of materials that depends on the harmonious interface of their various mechanical, thermal, and electrical properties. Identifying and correcting design flaws later in the product development cycle is extremely costly, especially once a product is in the field. Dr. Hernandez will discuss how implementing Reliability Physics analyses early in the design phase will mitigate design flaws, saving time and money, improving overall product safety and customer satisfaction.

Increasingly, electronics are being used in more extreme environments where the combination of thermal and mechanical loading conditions significantly impacts the lifetime of the components in a printed circuit card assembly (PCBA). Understanding the responses of PCBAs under environmental stressors is key to answering the ultimate question, 'When will my board fail?' In her short course, Dr. Hernandez will discuss in more detail, the use of Reliability Physics to make more accurate fatigue predictions for electronics operating in extreme environments.

~more~

'The traditional, design-build-test-fix method of engineering is ineffective and wastes valuable time and money during product development,' said Dr. Craig Hillman, CEO of DfR Solutions. 'Reliability Physics methods are a much better way to identify potential design flaws and predict reliability in real world conditions,' noted Hillman. 'We are pleased to be speaking about this critical topic at such a prestigious event,' said Hillman.

### **About Sherlock Automated Design Analysis™ Software**

Sherlock is the first-of-its-kind Automated Design Analysis software for analyzing, grading, and predicting the expected reliability of products at the circuit card assembly level. Based on the science of Reliability Physics, it is used by the electronics industry across all markets. Sherlock continues to evolve, incorporating new innovations and enhancements allowing users to manage increasingly complex analyses faster and more efficiently than ever before. For more information about Sherlock, visit [www.dfrsolutions.com/what-is-sherlock](http://www.dfrsolutions.com/what-is-sherlock).

### **About DfR Solutions**

DfR Solutions has world-renowned expertise in applying Reliability Physics to electrical and electronics technologies and is a leading provider of quality, reliability, and durability (QRD) research and consulting for the electronics industry. The company's integrated use of Sherlock Automated Design Analysis™ Software and best practices provides crucial insights and solutions early in product design and development and throughout the product life cycle. DfR Solutions specializes in providing knowledge- and science-based solutions to maximize and accelerate the product integrity assurance activities of their clients in every marketplace for electronic technologies (consumer, industrial, automotive, medical, military, telecom, oil drilling, and throughout the electronic component and material supply chain). For more information regarding DfR Solutions, visit [www.dfrsolutions.com](http://www.dfrsolutions.com).

###