



### **CyberOptics' John Hoffman, PhD to Present during Technical Session at SMTAI 2015**

**Minneapolis, Minnesota — September 2015 — [CyberOptics® Corporation](#) (NASDAQ: CYBE)** today announced that Senior Image Processing Research Engineer, John Hoffman, PhD, will present during the technical session 'Advances in Process Controls, From 3D Printing to 3D Inspection to Measuring Thermal Expansion Mismatch', scheduled to take place Wednesday, September 30, 2015 from 2-3:30PM at SMTA International in Rosemont, IL.

The presentation, entitled "Addressing High Precision Automated Optical Inspection Challenges with Unique 3D Technology Solution", will be presented by Dr. Hoffman based on a manuscript penned by CyberOptics' Todd Liberty and Tim Skunes.

Driven by the continued decrease in the size of electronics packaging, combined with the increase in density, there is a critical need for highly accurate 3D inspection for defect detection.

Using multi-view 3D sensors and parallel projection, it is possible to capture more of the board at a faster rate as compared to serial image acquisition which is more time-consuming. Precise 3D image representation can then be generated using sophisticated fusing algorithms that take the multiple captured images and fuse them into one precise 3D image. The result is high speed 3D inspection.

Multi-reflection suppression (MRS) technology enables highly accurate 3D measurement by meticulously identifying and rejecting reflections caused by shiny components and reflective solder joints. MRS algorithms use a very rich data set from multiple cameras at every location. Combined with sophisticated algorithms that fuse the image data from multiple cameras, multiple reflections are effectively suppressed. By contrast, 3D sensing solutions that use triangulation illumination without MRS run into measurement accuracy issues since solder joints create multiple reflections that can corrupt height image. This technology is a key building block for achieving high accuracy at production speed with an Automated Optical Inspection (AOI) system.

For more information, please attend this technical session. On-line registration:  
<http://www.smta.org/smtai/register.cfm>

#### **About CyberOptics**

CyberOptics Corporation (NASDAQ: CYBE) is a leading global developer and manufacturer of high precision sensing technology solutions. CyberOptics sensors are being used in general purpose metrology and 3D scanning, surface mount technology (SMT) and semiconductor markets to significantly improve yields and productivity. By leveraging its leading edge technologies, the company has strategically established itself as a global leader in high precision 3D sensors, allowing CyberOptics to further increase its penetration of its key vertical segments. Headquartered in Minneapolis, Minnesota, CyberOptics conducts worldwide operations through its facilities in North America, Asia and Europe.

Statements regarding the Company's anticipated performance are forward-looking and therefore involve risks and uncertainties, including but not limited to: market conditions in the global SMT and semiconductor capital equipment industries; increasing price competition and price pressure on our product sales, particularly our SMT systems; the level of orders from our OEM customers; the availability

of parts required to meet customer orders; unanticipated product development challenges; the effect of world events on our sales, the majority of which are from foreign customers; rapid changes in technology in the electronics markets; product introductions and pricing by our competitors; the success of our 3D technology initiatives; expectations regarding LDI and its impact on our operations; integration risks associated with LDI and other factors set forth in the Company's filings with the Securities and Exchange Commission.

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For additional information, contact:

Carla Pihowich, CyberOptics, 952-820-5837, [cpihowich@cyberoptics.com](mailto:cpihowich@cyberoptics.com)