

Rudolph Technologies Releases NovusEdge System for Edge, Notch and Backside Inspection of Unpatterned Wafers

New system combines high sensitivity, repeatability and throughput to deliver the industry's best performance and cost-of-ownership for inspection of critical wafer zones

Wilmington, Mass. (November 1, 2018)—Rudolph Technologies, Inc. (NYSE: RTEC) today announced the availability of its NovusEdge™ system for edge, notch and backside inspection of unpatterned wafers. The company plans to ship multiple systems totaling more than \$3M by year end to fill existing orders from two customers. The new system is the result of a multi-year collaboration with bare wafer manufacturing partners that require one inspection tool capable of detecting defects near the wafer's edge, bevel, back-side and notch. The NovusEdge system meets the stringent new requirements for defect control at the edge and backside of wafers being manufactured for 10nm process nodes. The system provides up to 50 percent faster throughput and two orders of magnitude better edge sensitivity than incumbent technology.

"Gartner estimated the unpatterned wafer inspection market at over \$400M in 2017," Tim Kryman, senior director of product marketing explained. "The bulk of this is focused on finding front surface defects as small as 10nm. However, our development partners also required tighter defect control at the wafer bevel and backside, to ensure the stringent quality standards required for these process nodes. We estimate the NovusEdge system's addressable market at 15 – 20 percent of the overall unpatterned market."

The NovusEdge system uses multiple cameras and advanced imaging technologies to build a high-resolution, composite image of the entire wafer bevel then applies sophisticated analytical routines to identify and classify defects as small as the sub-micron level. On the backside it utilizes high-speed laser-scanning to detect particles, scratches, area defects and haze.

For more information about Rudolph's inspection solutions, visit www.rudolphtech.com.

About Rudolph Technologies

Rudolph Technologies, Inc. is a leader in the design, development, manufacture and support of defect inspection, lithography, process control metrology, and process control software used by semiconductor and advanced packaging device manufacturers worldwide. Rudolph delivers comprehensive solutions throughout the fab with its families of proprietary products that provide critical yield-enhancing information, enabling microelectronic device manufacturers to drive down costs and time to market of their devices. Headquartered in Wilmington, Massachusetts, Rudolph supports its customers with a worldwide sales and service organization. Additional information can be found on the Company's website at www.rudolphtech.com.

Safe Harbor Statement

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 (the "Act") which include the benefit to customers of Rudolph's products, Rudolph's business momentum and future growth and the market demand for semiconductors generally as well as other matters that are not purely historical data. Rudolph wishes to take advantage of the "safe harbor" provided for by the Act and cautions that actual results may differ materially from those projected as a result of various factors, including risks and uncertainties, many of which are beyond Rudolph's control. Such factors include, but are not limited to, Rudolph's offered design enhancements may not necessarily translate into significant revenue and the challenges presented by the new product development and marketing. Additional information and considerations regarding the risks faced by Rudolph are available in Rudolph's Form 10-K report for the year ended December 31, 2017 and other filings with the Securities and Exchange Commission. As the forward-looking statements are based on Rudolph's current expectations, the company cannot guarantee any related future results, levels of activity, performance or achievements. Rudolph does not assume any obligation to update the forward-looking information contained in this press release.

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