

OnWafer Launches Latest Wireless SensorWafer Product Designed to Deliver Unmatched Process Control for Sub-100-nm Photol

March 10 2005

In a move designed to further extend its leadership in process zone control, OnWafer Technologies kicked off the 35th annual SPIE Microlithography 2005 conference by announcing its fourth-generation (G4) wireless BakeTemp SensorWafer product, which is designed to monitor and control sub-100-nm photolithography process applications. This latest product offers significant improvements in manufacturing technology and upgraded electronics -- delivering higher resolution and increased accuracy through a 50 percent increase in sensor density, while extending lifetime.

OnWafer pioneered the wireless wafer-based sensor and has now become the mobile metrology supplier-of-choice among many of today's leading chipmakers. Demonstrative of growing acceptance toward its suite of mobile metrology products, OnWafer continues to witness a pattern of continued growth, with revenues rising by approximately 20 percent quarter- over-quarter throughout fiscal 2003 and 2004.

"We shifted the metrology paradigm when we first unveiled our wireless sensor to the industry, delivering an effective solution for looking inside the process zone to improve CD uniformity," noted OnWafer President and CEO Rod Browning. "The push to 65nm and smaller design rules, along with tighter CD distributions, is resulting in increased demands on our customer's process tools as well as on our own metrology system.

Our customers must see continual metrology performance improvements in order to keep pace with this trend, but also need significant cost-per-test reduction so they can apply this solution to a wider range of applications. Our G4 SensorWafer delivers both unprecedented performance at a significantly reduced cost of ownership (COO) -- resulting in one of the industry's most cost-effective solutions for improving CD uniformity performance."

An advanced wafer platform, higher resolution electronics and improved calibration capabilities all result in the G4's higher performance, while delivering low cost-per-test economics. The new electronics system combined with ultra-flat SensorWafers deliver measurement results virtually identical to an advanced device wafer. Additionally, it delivers an expanded temperature operating regime, up to 160 degrees/Celsius. Prior to G4 technology, customers were limited to 140 degrees/Celsius for wireless process control. G4 also offers unmatched reliability, compared to any other competitive offerings and longer lifetime -- up to six months or 1,500 thermal cycles between calibration and refurbishment. Key to its longer lifetime advantage, the G4 features a field replaceable battery -- enabling a significant cost savings that equates to less than four dollars per test.

OnWafer's Chief Technical Officer, Dr. Costas Spanos, noted, "Today's announcement is the latest endeavor in our strategy to stay ahead of the industry's move toward smaller CD shrinks. With G4, we've re-tooled both our electronics and SensorWafer manufacturing technology to address the need for tighter CD control, which becomes increasingly critical at sub-100nm. As a result, the G4 delivers unparalleled measurement performance to enable next-generation photolithography processes to run at benchmark levels."

Citation: OnWafer Launches Latest Wireless SensorWafer Product Designed to Deliver Unmatched Process Control for Sub-100-nm Photol (2005, March 10) retrieved 1 May 2024 from <https://phys.org/news/2005-03-onwafer-latest-wireless-sensorwafer-product.html>

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