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Company Press Release

Nova Completes the Acquisition of ReVera

Acquisition adds advanced X-Ray solutions to the portfolio and strengthens Nova's strategic position in the advanced process control market

Rehovot, Israel, April 2, 2015 - Nova Measuring Instruments Ltd. (Nasdaq: NVMI), a leading innovator and a key provider of optical metrology solutions for advanced process control used in semiconductor manufacturing, today announced it has closed the previously announced acquisition of ReVera Incorporated, a profitable privately held company headquartered in Santa Clara, Calif. The acquisition allows Nova to offer the most innovative and unique metrology portfolio, which combines Optical CD and XPS solutions, to address customers' technology and productivity challenges in the most advanced nodes.

Nova acquired 100% of the equity of ReVera for \$46.5 million in cash from existing funds, on a cash free, debt free basis. The deal is expected to contribute annual revenues of \$25-\$30 million USD and be accretive on a non-GAAP basis within 12 months.

"We are looking forward to launching our newly expanded company and forging a strong relationship with ReVera to offer the most advanced metrology portfolio in the marketplace," commented Eitan Oppenheim, President and CEO of Nova. "We believe that this acquisition enables Nova to accelerate growth already in 2015, leveraging our complementary technologies to deliver better solutions to address the increasing challenges in the most advanced nodes. Our diversified portfolio, along with greater scale, provide us a broader access and creates better value for our customers."

About Nova: Nova Measuring Instrument Ltd. delivers continuous innovation by providing advanced optical metrology solutions for the semiconductor manufacturing industry. Deployed with the world's largest integrated-circuit manufacturers, Nova's products deliver state-of-the-art, high-performance metrology solutions for effective process control throughout the semiconductor fabrication lifecycle. Nova's product portfolio, which combines high-precision hardware and cutting-edge software, supports the development and production of the most advanced devices in today's high-end semiconductor market. Nova's technical innovation and market leadership enable customers to improve process performance, enhance products'

yields and accelerate time to market. Nova acts as a partner to semiconductor manufacturers from its offices around the world. Additional information may be found at www.novameasuring.com.

Nova is traded on the NASDAQ & TASE under the symbol NVMI.

This press release contains forward-looking statements within the meaning of safe harbor provisions of the Private Securities Litigation Reform Act of 1995 relating to future events or our future performance, such as statements regarding, but are not limited to, anticipated benefits, growth opportunities and other events relating to the acquisition, projections about our business and its future revenues, expenses and profitability. Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied in those forward looking statements. These risks and other factors include but are not limited to: the ability to recognize benefits of the acquisition; risks that the acquisition disrupts current plans and operations; and impact of the acquisition on relationships with customers, distributors and suppliers. Factors that may affect our results, performance, circumstances or achievements also include, but are not limited to, the following: our dependency on two product lines; our dependency on a small number of large customers and small number of suppliers; the highly cyclical nature of the markets we target; our inability to reduce spending during a slowdown in the semiconductor industry; our ability to respond effectively on a timely basis to rapid technological changes; our dependency on PEM; risks related to exclusivity obligations and non-limited liability that may be included in our commercial agreements and arrangements; our ability to retain our competitive position despite the ongoing consolidation in our industry; risks related to our dependence on a single manufacturing facility; risks related to the extremely competitive market we are operation in; risks related to changes in our order backlog; risks related to the financial, political and environmental instabilities in Asia; risks related to our intellectual property; new product offerings from our competitors; unanticipated manufacturing or supply problems; changes in tax requirements; changes in customer demand for our products; risks related to currency fluctuations and risks related to our operations in Israel. We cannot guarantee future results, levels of activity, performance or achievements. The matters discussed in this press release also involve risks and uncertainties summarized under the heading "Risk Factors" in Nova's Annual Report on Form 20-F for the year ended December 31, 2014 filed with the Securities and Exchange Commission on February 25, 2015. These factors are updated from time to time through the filing of reports and registration statements with the Securities and Exchange Commission. Nova Measuring Instruments Ltd. does not assume any obligation to update the forward-looking information contained in this press release.