

Company Contact:

Dror David, Chief Financial Officer
Nova Measuring Instruments Ltd.
Tel: +972-73-229-5760
E-mail: info@novameasuring.com
www.novameasuring.com

Investor Relations Contacts:

Hayden/ MS-IR LLC
Miri Segal
Tel: +917-607-8654
E-mail: msegal@ms-ir.com
Or
Brett Maas
Tel: +646-536-7331
E-mail: brett@haydenir.com

Company Press Release

Nova Announces Royalty Buyout Agreement with the Israeli Office of the Chief Scientist

*Increases Nova's Financial Flexibility and Enables Future Participation in
Non Royalty-Bearing Generic Research Programs*

Rehovot, Israel, August 18, 2016 - Nova Measuring Instruments (Nasdaq: NVMI), a leading innovator and a key provider of metrology solutions for advanced process control used in semiconductor manufacturing, today announced it has entered into a royalty buyout agreement ("Agreement") with the Office of the Chief Scientist ("OCS") in Israel.

The company previously participated in royalty-bearing research and development grants with the OCS, under which the company paid royalties at the rate of 3.5%-5% on sales of products developed with funds provided by the OCS. The company ceased its participation in royalty-bearing programs in December 2014. The contingent net royalty liability to the OCS at the time of the Agreement was approximately \$24 million, and this obligation included different annual interest rates ranging up to 5%.

As part of the Agreement, Nova agreed to pay approximately \$14 million to the OCS in Israel. As a result of this payment, Nova is released from any future royalty payments on the previous funds received from the OCS. The payment is planned to take place by the end of September 2016. Following this payment, the company expects to have over \$90 million in total cash reserves at the end of the third quarter of 2016.

The Agreement enables Nova to apply for R&D program funding without future royalty payments, beginning in 2017, and is expected to improve the company's reported gross margin on products starting the fourth quarter of 2016. In addition, the payment is expected to be tax deductible in Israel and to reduce the company future tax payments by approximately \$2 million.

"By taking advantage of this attractive buyout agreement we are reducing future royalty payments and increasing our financial flexibility for investment in future R&D projects and

increased profitability,” commented Eitan Oppenheim, President and Chief Executive Officer of Nova. “As part of our plans to continue our long-term profitable growth, we are leveraging our financial strength to invest in maximizing shareholder value. This agreement supports these efforts and improves Nova’s position.”

The \$14 million payment of Nova’s royalty obligations to the OCS, will be presented as a one-time expense in the products cost of goods sold in 2016 third quarter financial results, and is expected to be adjusted for non-GAAP purpose.

About Nova: Nova Measuring Instruments delivers continuous innovation by providing advanced 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 growth opportunities and 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. Factors that may affect our results, performance, circumstances or achievements include, but are not limited to, the following: our dependency on three product lines; our dependency on a small number of large customers and small number of suppliers; the highly cyclical and competitive nature of the markets we target and we operate in; 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 ability to recognize the benefits of ReVera acquisition and risks that the acquisition may disrupt current plans and operations and impact relationships with customers, distributors and suppliers; our dependency on PEMs; 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 our manufacturing facilities; risks related to changes in our order backlog; risks related to the worldwide financial instabilities; risks related to our intellectual property; new product offerings from our competitors; unanticipated manufacturing or supply problems; risks related to government programs we participate in; risks related to taxation; changes in customer demand for our products; risks related to currency fluctuations, risks related to acquisitions we may pursue 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, 2015 filed with the Securities and Exchange Commission on February 29, 2016. 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.