

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 Contact:

Miri Segal
MS-IR LLC
Tel: +917-607-8654
E-mail: msegal@ms-ir.com

Nova Expands its Memory Presence with New XPS Orders

Rehovot, Israel – May 31, 2018 – Nova (Nasdaq: NVMI), a leading innovator and a key provider of metrology solutions for advanced process control used in semiconductor manufacturing, announced that a major memory customer in Asia recently placed multiple orders for its newest and most advanced X-Ray metrology solution.

The orders are for Nova's new VeraFlex III+ XF, the fifth generation in-line X-Ray photoelectron spectroscopy (XPS) metrology tool. The new platform embeds an innovative hardware design that allows customers to improve sensitivity, precision and overall system productivity in a wide range of applications in both Memory and Logic/Foundry. The newly ordered tools will be installed in the customer's most advanced DRAM and 3D-NAND fabrication nodes for film thickness and composition measurements.

Nova expects more than \$20 million in aggregate business from this customer over the next twelve months, with shipments beginning in the second quarter of 2018.

"We are very proud of this achievement, which solidifies our position in the Materials Metrology space and is a result of the growing adoption of our in-line XPS platform with leading memory customers," said Adrian Wilson, General Manager of the Materials Metrology Division of Nova. "Following this win, we expect additional orders resulting from a combination of new applications development and an increase in our customer's manufacturing capacity."

About Nova: Nova 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 in 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 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 efforts to complete and integrate current and/or future acquisitions; 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 technology security threats and changes in privacy laws; 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, 2017 filed with the Securities and Exchange Commission on February 28, 2018. 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.