

Company Contact:

Dror David, Chief Financial Officer
Nova Measuring Instruments Ltd.
Tel: +972-73-229-5833
E-mail: info@novameasuring.com
www.novameasuring.com

Investor Relations Contacts:

Ehud Helft / Kenny Green
CCG Investor Relations
Tel: +1-646-201-9246
E-mail: nova@ccgisrael.com

Nova Receives over \$10 million in Orders from a Major Foundry for 2Xnm Production Ramp Up

REHOVOT, Israel, September 3, 2013 - Nova Measuring Instruments Ltd. (NASDAQ: NVMI), provider of leading edge stand-alone metrology and the market leader of integrated metrology solutions to the semiconductor process control market, announced today that a leading pure play foundry recently placed over 10 million dollars in orders in the aggregate, for one of its global FABs. The orders received were for integrated and stand-alone metrology products, combined with NovaMARS[®] advanced modeling software, as part of its 2Xnm manufacturing ramp up.

The orders include a portfolio of Nova's most advanced i500 Integrated and T600 stand-alone metrology products, the latest generation of NovaMARS[®] modeling software and Nova's latest Fleet Management software solution that provides an enhanced level of FAB-wide process control management functions across a large fleet of metrology tools. The tools will support the manufacturing ramp up in several process steps including CMP and Etch. The company expects to deliver the tools during the second half of the year.

"We are delighted with this stream of large orders from one of the world's leading Foundries. The growing and broad implementation of our T600 stand-alone and i500 integrated metrology tools, as well as our software solutions at this pure play Foundry, leverage our worldwide experience and leadership in 3D Optical CD measurements for process control. Nova's latest solutions' offering enable customers to meet the high level quality requirements of leading chip design and Fabless companies", said Eitan Oppenheim, Nova's President & CEO. "These latest orders add to a prior delivery of several stand-alone systems to this account for its 2Xnm ramp up. Our recent and ongoing success with this customer further solidifies our leading position in the foundry segment, both in stand-alone and integrated solutions. We expect future expansion of our solutions as this customer continues to ramp up production in order to meet the growing demand of the mobile computing markets."

About Nova: Nova Measuring Instruments Ltd. develops, produces and markets advanced integrated and stand alone metrology solutions for the semiconductor manufacturing industry. Nova is traded on the NASDAQ & TASE under the symbol NVMI. The Company's website is: www.novameasuring.com

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 trends, demand for our products, expected deliveries, transaction, expected revenues, operating results, earnings 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: our dependency on two product lines; 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; cyber security risks; risks related to open source technologies; 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 our lease agreements; our ability to expand our manufacturing capacity or marketing efforts to support our future growth; risks related to quarterly fluctuations in our operating results; risks related to the extremely competitive market we are operation in; our dependency on a small number of large customers and small number of suppliers; our dependency on our key employees; 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; changes in customer demands for our products; new product offerings from our competitors; changes in or an inability to execute our business strategy; 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, 2012 filed with the Securities and Exchange Commission on March 11, 2013. 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.