NOVA MEASURING INSTRUMENTS LTD Form 6-K January 15, 2013

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, DC 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 OF THE SECURITIES EXCHANGE ACT OF 1934

January 15, 2013

Commission File No.: 000-30688

NOVA MEASURING INSTRUMENTS LTD. (Translation of registrant's name into English)

Building 22 Weizmann Science Park, Rehovot
P.O.B 266
Israel
(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F.

Form 20-F S Form 40-F £

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):
Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

Indicate by check mark whether by furnishing the information contained in this Form, the registrant is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes £ No S

Attached hereto and incorporated by way of reference herein are the slide presentations to be presented at the 15th Annual Needham Growth Conference in New York on January 15, 2013.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

NOVA MEASURING INSTRUMENTS LTD.

(Registrant)

Date: January 15, 2013 By: /s/ Dror David

Dror David

Chief Financial Officer

Investors Presentation
Gabi Seligsohn, President & CEO
Dror David, CFO
January 2013

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Cautionary statement regarding forward-looking statements

This presentation includes statements that constitute 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 financial performance, and involve known and unknown risks, uncertainties and other factors that may cause our actual results, level of activity, performance or achievements to be materially different than expressed or implied by these forward looking statements. You should not place undue reliance on forward-looking statements since they involve known and unknown risks, uncertainties and other factors which are in some cases beyond our control and which could materially affect actual results, level of activity, performance or achievements. 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 OEM suppliers; cyber security risks; risks related to open source technologies; our ability to retain our competitive position despite the ongoing consolidation in our industry; risks associated with our dependence on a single manufacturing facility; our ability to expand our manufacturing capacity or marketing efforts to support our future growth; 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

The matters discussed in this presentation also involve risks and uncertainties summarized under the heading "Risk Factors" in Nova's most recent Annual Report on Form 20-F filed with the Securities and Exchange Commission. These factors are updated from time to time through the filing of reports and registration statements with the Securities and Exchange Commission.

Any forward-looking statements contained in this presentation are made as of the presentation date and Nova Measuring Instruments Ltd. is under no obligation to revise or update these forward-looking statements. Certain of the information contained herein concerning economic trends and performance is based upon or derived from information provided by third party consultants and other industry sources. We have not independently verified and cannot assure the accuracy of any data obtained by or from these sources.

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- Pure player in the semiconductors optical metrology market, enjoying strong business fundamentals:
- Nova is exposed to the highest growing semiconductor applications serving industry leading manufacturers
- Nova continuously outperforms the industry
- Nova is entering the emerging market of 3D interconnect
 - Strong balance sheet with over \$85M in cash reserves available to support the Company's growth plans

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Nova confidential & proprietary information Company overview

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Founded in 1993 IPO in 2000

- Founded in 1993 IPO in 2000 (NASDAQ - NVMI)
- Headquarters: Rehovot, Israel
 - Global presence:
 - Asia Pacific -

Taiwan, Korea, Singapore, China

- United States, Japan and Europe
 - Employees: 370
 - Active installed base >1200

systems

- Listed on NASDAQ and

Tel-Aviv Stock Exchange

Nova confidential & proprietary information Optical CD - leading and emerging technology Semiconductor

Wafer

Cross-Section

View Using Electron

Microscope

Same View Using

Optical CD

Scatterometry

View

Integrated

Circuit Die

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Process control for current and future technologies Nova's products portfolio

SW SA

NovaMARS SW Packages Fleet Management NEXT T500 T600

3D-IC IM

TSV NEXT i500

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Well positioned in most critical segments

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Memory:

NAND: Design win

1Y (<10nm)

DRAM: < 30nm

Foundry:

Ramping 28 nm.

Design wins:

20,14,11 nm

Source: Barclays, Needham

2012/3 Semi Market - Capital Spending

Strong position with

leading market spenders

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Well positioned in the right sectors

Source: Gartner Foundry Revenue

Source: Micron, Gartner

NAND Outlook

Capitalize on strong presence in memory once spending resumes Foundry revenues and spending will continue to grow

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Providing an excellent platform for further growth

Nova's winning strategy

Nova

Optical CD

Differentiation

Cluster

Best

Reliability

Highest

Throughput

Shortest Time

to Solution

Best Solution

Quality

Best Tool-to-

Tool Matching

Excellent Global

Services

^{*} Process Equipment Manufacturers

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Expecting a further SAM increase of \sim \$100M for 3D-IC starting in 2013/14* Unification of the metrology market \$284M

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\$800M-\$900M Expansion of Nova's Addressable Market Thin Film Metrology Copper Metrology

Source: Gartner, Yole Research & Company Estimates
* Expected metrology and inspection SAM for 3D Integration
Becoming a Unified Metrology
Market - All Addressable by Optical

CD Metrology

Nova confidential & proprietary information Optical CD - growing adoption rate 10

Source: Gartner

Disruptive Technology to meet the industry's most difficult challenges

\$30-40 M

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Process control needs expand as geometries shrink

Nova's TAM more than tripled 2009-2012

Wafer In

Wafer Out

2013 Opportunity (<28nm)

$150M - $200M Opportunity

Implant

Litho

Etch

CVD/EP

CMP

Notes: Company data. Based on Foundry with 100,000 wafer starts per month (updated 1/2013)

<65nm
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Nova Continuously Exceeds Industry Performance Nova significantly outperforms industry's 5 year CAGR (2011/2012: Nova -8% vs. Industry -17%)

Source: * Nova Q4/2012 mid point guidance, Gartner Q4/2012, Needham & Co. Foundry

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- Successful launch of Integrated and stand alone metrology:
- NovaT600 selected for 11nm/14nm/20nm at multiple foundries
- Nova i500 selected for 11nm/14nm/20nm/30nm at multiple memory and foundries
- First shipment of 450mm tool to major PEM partner for early development
 - New product introduction for the 3D Interconnect market:
 - Multiple orders and installations at multiple customers
 - Several interactions with additional customers
 - Well positioned to take advantage once industry adopts in HVM Recent achievements

Will continue to enhance our development and support capabilities for an expanding SAM

Industry Review: 2012 and Beyond

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Excellent exposure to growing markets

Source: Jeffries & Company, iSuppli Source: Gartner Q3/12

% of Tablat	
,	
BOM	
7%	P
7%	P
5%	P
4%	P
2%	P
2%	P
1%	P
1%	P
1%	P
<1%	P
<1%	P
<1%	P
	5% 4% 2% 2% 1% 1% 1% <1% <1%

Expected Contribution to IC growth 2013

16

Share of Growth

28.2% 16.3% 14.5% 11.3% 7.5% 7.3%

5.5%

0.9%

8.6%

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70-100K WSPM* needed capacity increase for 28nm at foundries in 2013 Mobile Device Capacity needs for 2x Tech Nodes * WSPM - Wafer Starts Per Month

Nova confidential & proprietary information Source: Intel, IDC, Company records Mobile revolution continues to gain traction

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High performance low power - new chip designs are the enablers
3D Gates for foundries
3D Gates for Flash
OCD - the only way to measure and control

Nova 2012 and beyond

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The need: Low power high performance 3D technology driving Nova application growth

3D

Devices

Planar Transistor

3D Transistor

Requires significant increase in number of Etch and CMP layers

Multi-Chip Packaging with TSV

3D IC

Integration

Single Chip

2010

2012 onwards

Nova introducing novel TSV metrology solution in time for transition to production

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                      Strategy for taking Nova to the next level
  Nova will continue its strategy of investing in creating future growth opportunities
                                       Short
                                       Term
             Continue to enhance infrastructure and customer technology
Strong end market position and excellent technological collaboration with leading PEM's
                                  — 28nm ramp up at
                                foundries and 20nm at
                               NAND production sites
                               — Transition to 3D gates
                               Optical CD the ONLY
                                 way to measure and
                                       control
                                        Mid
                                       Term
                                       Long
                                       Term
                                 — Critical etch steps
                                   requiring closer
                                monitoring leading to
                              enhanced transition to IM
                                       for etch
                                — Gradual move to 3D
                                 interconnect by all
                               leading customers, and
                                ramp up during 2014
                                 — 20nm ramp up in
                                      foundries
                             — Transition to 450mm by 6
                                  leading customers
                              expected to start 2015/16
                                      onwards
                                 — IM use expected to
                              significantly extend given
                               wafer cost and process
                                     complexity
                                         20
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Nova confidential & proprietary information Product strategy drives high margins Financial performance 21

Continuously adding feature and functionality for customer benefit

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^{* 2012} Forecast - based on mid range of Q4/12 guidance

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Providing an excellent platform for further growth Ability to continue growth is well founded

Litho

Etch

CVD/EP

CMP

Further

Growth

Accelerating Op CD Adoption

Outpacing industry growth rate

Expanding Fab footprint

Industry

Mid cycle behavior

Well positioned where money will

be spent

New strategic Initiatives

3D-IC market; 450mm

New Products and features

Expanded Customer Base

Turning penetrations into multi-

tool accounts