NOVA MEASURING INSTRUMENTS LTD Form 6-K March 11, 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

March 11, 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 presented at Investors' Conference in Tel Aviv on March 11, 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: March 11, 2013 By: /s/ Dror David

Dror David

Chief Financial Officer

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Investors Meeting

Tel-Aviv Stock
Exchange
Gabi Seligsohn, President & CEO
Dror David, CFO
March 11, 2013

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— Brief Company background

— FY 2012 summary

— Industry's main drivers

— Developing new horizons

— Nova & the market - 2013 & beyond

— Summary

Meeting Outline

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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 \$90M in cash reserves available to support the Company's growth plans

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Company overview
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— 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

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

-

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

CD Metrology

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

Nova confidential & proprietary information Optical CD - growing adoption rate 11

Source: Gartner

Disruptive Technology to meet the industry's most difficult challenges

FY 2012 Summary and Q1/13 Guidance

Nova confidential & proprietary information 2012 - a year with many achievements

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- Proliferating previously announced products and launching new ones:
 T600, i500 and NovaMARS adopted by all key customers for advanced tech nodes down to 11nm
 Ground breaking announcement of V2600 for 3D interconnect yielded 4 customers in 6 months
 Shipping our first 450mm tool to key PEM for early development efforts
 R&D efforts deliver high productivity solutions that support our business model:
 Significant increase in number of IM tools shipping with OCD SW
 Extensive deployment of NovaMARS modeling SW
 Achieving remarkable gross margin profile even while introducing new products
 Excellent financial performance during 2012 even as we increased R&D spending:
 Revenues of \$96.2M; non-GAAP net income of \$14.2M; gross margin 53%; cash >\$90M
 - Foundry represented 75% of revenues
 Finishing Q4 at high end of revenue guidance as a result of operational efficiency
 - Temporary reduction in Q4 gross margin to 50% expect to be back on track in Q1/13 Strong bookings during Q4 provide good momentum for 2013

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Nova - Best start for the year 14 Nova Q1/13 Guidance - \$25M-\$27M non GAAP EPS of \$0.09-\$0.13

Industry's Main Drivers

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Excellent exposure to growing markets

Source: Jeffries & Company, iSupply Source: Gartner Q3/12 Tablet

Tablet	% of Tablet	
Semiconductor	,	
Content	BOM	
NAND Flash Memory	7%	P
Mobile DDR DRAM	7%	P
App Processor	5%	P
Baseband / RF	4%	P
Wi-Fi / BT	2%	P
Power Management	2%	P
Accelerometer	1%	P
Memory Controller	1%	P
Touch Controller	1%	P
GPS	<1%	P
Touch Screen Driver	<1%	P
Audio Codec	<1%	P

Expected Contribution to IC growth 2013

17

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

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- The US fiscal cliff is still ahead of us
- The ECB is taking some responsibility but can't fix broken economies
 - China's GDP growth has tempered and India is slower too
 - The world is all about "playing delay" and not paying debts
 - PC sales have seen a significant decline
 - Mega electronic food chain trends miraculously still seem robust:
 - Smart phone sales continue to increase price range of \$60-\$580
- Tablet sales are cannibalizing PC sales "Surface" concept for corporate?
 - Cloud investments on the rise looking for cheap infrastructure
 The global economy and the electronic food chain
 The Environment Entering 2013

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- Very tough to meet yield requirements at <28nm
- Customers are having to work in parallel on ~6 generations
 - This is something we never experienced
 - The cost and risks are HUGE a multibillion \$ game
 - The process complexities continue to rise
 - The OEM equipment is barely meeting the specs
- It's like playing a guessing game of when and where will your fab win Apple related business
 - The opportunities are also HUGE tsmc capital intensity 50%!

 Our customers

The Environment Entering 2013 Customers demand extendable high end solutions from all vendors

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- Time interval between advanced technology nodes is decreasing
- Chip manufacturers are developing multiple tech-nodes in parallel
 - All are fighting for a limited customer base Intel joining the race (Altera announcement)
 - Equipment vendors need to enhance R&D to keep up with customer requirements

Growing Pace of Technology Development
* Source: Publicly available information
Or: The Race to FinFet

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- Modeling complexity and measurement precision increases by tech node:
- More investment in future products is needed to properly address the market
- Metrology TAM grows as number of metrology steps per tech node increases Huge Optical Metrology Opportunity

\$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 -10% vs. Industry -17%)

Source: * Nova 2012 product revenues, Gartner WFE Q4/2012, Needham & Co. Foundry

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Execution continues to drive success

Expanding

Product

Portfolio

Increased

Fab Footprint

Displacing

Traditional

Metrology

Integrated and

Standalone Metrology;

Software

4 Process Steps

2012E TAM =

\$700M

2006 TAM = \$100M

1-2 Process Steps

Integrated Metrology

Nova confidential & proprietary information Product strategy drives high margins Solid Financial performance 27

Enabling the needed investments in advanced technology

Nova and the market 2013 and beyond

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— 2013 outlook
— Expecting WFE to be 0% to down 5%
— Foundry/Logic - spending increase - ramping demand for leading edge mobility à all major players continue to invest in capacity increase for 28/20nm nodes and development of 16/14nm nodes
— Memory - no major growth (VNAND difficulties & PC market)
Wafer Fab Equipment 2013 Outlook
Expected spending by major players

Nova confidential & proprietary information Market Expectations for 2013 30 — Foundry 28nm ramp up is still under way: — Significant capacity insufficiency - expecting an addition of 70,000-100,000 wafer starts per month — Smartphone market remains key driver for 28nm node with several trends driving growth: — Windows 8 proliferation; Nokia Lumia; Blackberry 10 — 2.5G smartphones in China for a mass market — And, overall market share battles — Foundry 20nm ramp to start towards end of H1/13 and deep into 2014: — Extent of ramp up during H2/13 still not clear — Spells big business for Nova — OCD is an enabling technology — Memory customers focused on achieving desired yield numbers: — Next generation DRAM and NAND flash depend on significant gate design changes — OCD is a key component — Nova is actively engaged in these customer efforts — Memory to remain weak at least throughout H1/13 Expecting foundry to remain robust 2013-2014

Nova confidential & proprietary information Nova's plans for 2013

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- Strategic software development team:
- Developing multiple new products to extend differentiation and strategic position with customers and PEM partners
- Products include productivity enhancements, modeling capabilities and novel approaches to process control
- Strong support to our profitability model expect initial revenues by EO/13
 3D interconnect:
 - Continue to focus on expanding penetration
 - Leverage footing at 4 accounts into several others
- Ultimately expecting a \$100M SAM increase once industry moves to HVM
 - 450mm continue early collaborations to secure long term position Continue to expand product offering for larger opportunity

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- The cost associated with retaining a competitive position is rising
 - New technology horizons are critical delivery in the present
- Customers depend on innovation not just to satisfy their curiosity What does it mean to Nova?

Developing New Horizons in Stormy Waters Shooting for a step function in the role we play for our strategic customers

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New Horizons - what does it take
The elephants' trail is crowded
— Working assumption: mature industry
— Implication: scarce opportunities for secular growth
— Look for disruptive technologies - attain a diverse tech portfolio
— Look for enabling technologies
— High value/high technology = high ASP/high margins
— These rules apply for organic and inorganic growth
— Only one elephant fits through the front door
WE NEED SOMETHING DIFFERENT

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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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— This market segment represents \$30M-\$80M new business potential for Nova in the coming years - with significant software content!

New Market being developed by Nova

* Source: Gartner and company data

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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
                                advanced IPC 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
                                         36
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Revenues $\begin{array}{c} FY20112012 \\ \$103M \ \$96M \end{array} Target \ Model \\ \end{array}$

Total Revenues 100% 100% Products Revenues 83% 80%

Services Revenues 17% 20% 15% - 20%

Total Gross Margins 56% 53% 55% Products Gross Margins 61% 59% 58%+ Services Gross Margins 36% 30% 30%+

Total Operating Expenses 32% 42% 30% - 35% R&D, net 18% 26% 16% - 19% SG&A 14% 16% 14% - 16%

Operating Margin 24% 11% 20% - 25%

Financial model

Long - term effective tax rate $\sim 15\%$

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- The foundry "Arms Race" is in full swing and the stakes are high
 - The move to FinFet (3D gates) is focused on 14nm
 - Demand for high end low power devices is solid
- The 28nm ramp up continues in 2013 and 20nm will run well into 2014
 - We expect two strong years for foundry
 - Memory spending will resume once technology challenges are overcome and market conditions improve
 - Nova is very well positioned to capture these opportunities
- We will continue to develop our capabilities to best serve our customers Summary

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Providing an excellent platform for further growth Nova's 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

NG IPC

Expanded Customer Base

Turning penetrations into multi-

tool accounts