

NOVA MEASURING INSTRUMENTS LTD  
Form 6-K  
January 09, 2012

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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 9, 2012

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  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  F    No  S

Attached hereto and incorporated by way of reference herein are the slide presentations to be presented at the 14th Annual Needham Growth Conference in New York on January 10, 2012.

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 9, 2012

By: /s/ Dror David

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Dror David  
Chief Financial Officer

Investors  
Presentation  
Gabi Seligsohn, President & CEO  
Dror David, CFO  
January 2012

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Cautionary Statement Regarding Forward-Looking Statements

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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; 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

Israel.

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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Business Highlights

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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
  - Optical Metrology continuously outperforms the industry
  - Nova is entering the emerging market of 3D interconnect
  - Strong balance sheet with over \$80M in cash reserves available to support Company's growth plans
  - Strong profit growth and cash generation enables reinvestment to prepare for next phase of growth
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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: 350
  - Active installed base >1000 systems
  - Listed on NASDAQ and Tel-Aviv Stock Exchange
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Optical CD - Leading and emerging technology  
4  
Semiconductor  
Wafer  
Cross-Section  
View Using Electron  
Microscope  
Same View Using Optical  
CD  
Scatterometry  
View  
Integrated  
Circuit Die

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Nova's Products Portfolio

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Starting 2012

3D-IC

NEXT i500

IM

SA

NEXT T500 T600

SW

NOVAMars SW Packages

Multiple

products across

technologies

Process control for current and future technologies

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Well positioned in most critical segments

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Memory:

NAND +5%

DRAM +3%

Foundry:

-8%

Est. 12/11

WFE Growth:

Source: Average Barclays Cap, SEMI, Needham

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Strong SA position at multiple leading accounts  
7  
Providing an excellent platform for further growth  
2005  
2007  
At Year End  
# Standalone  
Customers  
2  
5  
7  
2011  
14  
2009  
Nova Optical CD  
Differentiation  
Cluster  
Best  
Reliability  
Best  
Solution  
Quality  
Highest  
Throughput  
Best  
Tool-to-Tool  
Matching  
Shortest  
Time to  
Solution

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Nova's Addressable Market Expansion Within the Fab

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Process control needs expand as geometries shrink

Wafer In

Wafer Out

2011 Opportunity (<45nm)

\$80-\$100M Million Opportunity

Implant

Litho

Etch

CVD/EP

CMP

2009 Opportunity (<65nm)

\$30-\$40M Million Opportunity

Implant

Litho

Etch

CVD/EP

CMP

Notes:

Company data. Based on Foundry with 100,000 wafer starts per month (updated 9/2011)

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Unification of the Metrology Market

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Expecting a further SAM increase of ~\$250M for 3D/IC starting 2013\*

\$284M

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Expansion of Nova's

Addressable Market

Thin Film Metrology

Copper Metrology

CD Metrology

Source: Gartner, Yole Research and Company Estimates

\*Numbers reference expected metrology and inspection SAM for 3D/IC

Becoming a Unified Metrology Market -

All Addressable by Optical

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Optical CD - Growing Adoption Rate

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Source: Gartner

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Main achievements during 2011

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- Successful launch of Next Gen for 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
- New product introduction:
  - 3D/IC product going through successful beta at leading foundry
  - Several new customer interactions should lead to initial revenues H2/12
- Financial results well within our long term profitability model
  - >70% of revenues coming from <30nm design rules
  - Significant free cash flow enables investments for further growth

Business, Technology, Market share

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

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Investments focused on growth

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Track record of aligning R&D spending with opportunities ahead

\* 2011 Estimated Revs. based on Q4 11 Guidance: Revenues of \$16M-\$19M and net profitability of 1%-8%.

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Industry  
Review - 2011  
and Beyond  
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Excellent Exposure to growing markets

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| Tablet Semiconductor Content | % of Tablet 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 2012

Source: Gartner Q4/11

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Mobile revolution

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Continuation depends on new designs

Source: Intel, Sandisk, KPCB

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Mixed expectations for WFE in 2012

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WFE 2012 forecast - different baseline and different expectations

Source: Barclays Capital, 1/12

Source: Gartner Dec 11

Source: Needham

Average expectation: -13%

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Nova 2012 and  
beyond

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Strategy for taking Nova to the next level

— Nova's strong end market position coupled with excellent technological collaboration with leading OEM's, offer significant opportunities for further growth:

— Short term:

— 28nm ramp up at foundries and 20nm at NAND production sites - adding Optical CD control steps

— Transition to 3D gates (foundry) and vertical gates (memory) - ONLY Optical CD can measure

— Mid term:

— Critical etch steps requiring closer monitoring leading to enhanced transition to IM for etch

— The move to 3D interconnect by all leading customers - expected to ramp up during 2013

— Long term:

— Transition to 450mm by 6 leading customers expected to take place 2015 onwards (pilot lines EO 2013)

— IM use expected to significantly extend given wafer cost and process complexity

— Focus in 2012 will be on maturing existing platforms, enhancing infrastructure and customer technology partnerships via field support and CTO group

Continue to focus on the leading edge

Nova will continue its strategy of investing in creating future growth opportunities

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3D Technology Driving Nova Application Growth

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The need: Low power high performance

3D Devices

3D IC

Integration

Single Chip

Multi-Chip Packaging with TSV

2010

2012 onwards

Planar Transistor

3D Transistor

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

Requires significant increase in number of Etch and CMP layers

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Leveraging Nova's Position to expand addressable market

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New Process Steps

3D Interconnect

Performance & bandwidth

Form Factor & Power Consumption

SOC Horizontal Shrink

"More Moore"

3D Vertical Integration

"More Than Moore"

3D Gates enable: Run almost 50% faster with lower voltage and consume 50% less energy

3D IC enables: 15% footprint reduction, 30% Thickness reduction, 15%-30% less Power

Existing Process Steps

Increased complexity

Significantly more

manufacturing steps

Implant

Litho

Etch

CVD/EP

CMP

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3D IC main process steps

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— The transition to 3D IC depends on several factors:

— Making the process production worthy

— Low Cost of manufacturing - no more than \$100 cost added per wafer

— Standards to enable alignment of chips coming for different manufacturers

— As a result:

— 3D IC production ramp is expected in 2013

— Metrology and Inspection Market expected to be ~\$250M starting 2013

Adding several process steps requiring close monitoring

Rely on existing customers to expand addressable market - all actively moving in this direction

Filling

Etching

Bond ,Thin &

Reveal

Detach + Align

Detach + Align

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Financial Model

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Long-term tax rate - ~15%.

\* 2011E - based on Q4/11 guidance

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Ability to continue growth is well founded

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Mid cycle behavior

Well positioned where

money will be spent

Turning penetrations into

multi-tool accounts

Outpacing industry growth rate

Expanding Fab footprint

Litho

Etch

CVD/EP

CMP

Focus on 3D-IC market

450mm

New products and features

Expanded Customer Base

Industry

Accelerating Op CD Adoption

New strategic Initiatives

Further

Growth