

NOVA MEASURING INSTRUMENTS LTD  
Form 6-K  
January 10, 2011

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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 10, 2011

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  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

Attached hereto and incorporated by way of reference herein are the slide presentations to be presented at the Registrant's investor and analyst day to be held on January 10, 2011.

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 10, 2011

By: /s/ Dror David

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Dror David  
Chief Financial Officer

Sustaining Long-Term Profitable Growth  
Presenting the Strategy for Taking Nova to the Next level  
January 10, 2011 Analyst Day  
Gabi Seligsohn, President & CEO  
Dror David, CFO

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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 integrated process control 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; 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; 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

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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Why are we here today?

§ We want to share our story of success:

§ Becoming a multi-product company

§ Expanding our customer base

§ Expanding our addressable markets

§ Delivering strong financial results

§ We would like to share our views of the industry

§ We would like to present our investment strategy for taking Nova to the next level:

§ Expanding our SAM in an expanding market which is expected to approach \$1B

§ Penetrating the emerging 3D-IC market relying on our existing customer base

§ We would like to discuss our long term financial model:

§ Maintain strong operating margin on significantly higher revenues

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Achievements so far

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Nova has executed well on its growth strategy

Expanding

Product

Portfolio

Increased

Fab Footprint

Displacing

Traditional

Metrology

Integrated Metrology;

Standalone Metrology;

Software

4 Process Steps

2012 TAM ~\$700M

2007 TAM ~\$200M

1-2 Process Steps

Integrated Metrology

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Revolutionized Business Model Leads to Improved financial performance

OEM

OEM

End User

End User

Improved

Gross Margin

Stand-alone

(SA)

Service

Higher productivity

&

Advanced software

capabilities

2008 Gross Margin: 9%

2010 Gross Margin: 30%

+ NovaMARS® software

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Well positioned in growing segments and applications  
Nova Customer base includes most of world's leading IC manufacturers

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Memory:  
+135%

Foundry:  
+115%

Est. '10/'09 WFE

Growth:

Source: Gartner Q2

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2010 penetrations create more growth potential for 2011

2005

2007

At Year End

# Standalone

Customers

2

5

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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 Expansion Within the Fab

Wafer In

Wafer Out

Notes:

Based on Foundry with 100,000 wafer starts per month, <65nm, 10 layers

Implant

Litho

Etch

CVD/EP

CMP

\$9 Million Opportunity

- 2007 Opportunity -

- 2010 Opportunity -

\$30-\$40M Million Opportunity

Implant

Litho

Etch

CVD/EP

CMP

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Nova's Market Share in Optical CD (IM and SA)  
Continuously  
Improving  
Market Position

Source: Gartner and Nova's estimates

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Metrology Market Moving to Optical Technology

§ Key 2009 Developments:

- Ø We have taken the lead in the copper metrology market  
(2009 - 50% of our product revenues)
  - Ø 2009 was our first big year in Optical CD, taking share from market leaders  
(2009 - 28% of our product revenues)
- Source: Gartner and Company Estimates
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Unification of the Metrology Market  
From Multiple Technologies to Primarily Optical  
\$284M

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Expansion of Nova's  
Addressable Market  
Source: Gartner and Company Estimates  
Becoming a Unified  
Metrology Market - All  
Addressable by Optical  
Thin Film Metrology  
Copper Metrology  
CD Metrology

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Strong execution outperforming the industry for second consecutive year

Note:

Based on published results and Q4/2010 Guidance

Industry - down 50%

Nova - up 10%

(products)

Industry - up 130%

Nova - up 140%

(products)

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|   | 2009   | 2010E         |
|---|--------|---------------|
| Revenues                                | \$39M  | \$85M-\$86M   |
| Gross Margin Blended %                  | 45%    | 55%           |
| Gross Margin Products                   | 56%    | 60%           |
| Gross Margin Services %                 | 7%     | 30%           |
| Operating Expenses - %<br>of Revenues   | 38%    | 30%           |
| Net Margin %                            | 7%     | 25%           |
| Net Profit                              | \$3M   | \$21M-\$22M   |
| Earnings Per Share                      | \$0.13 | \$0.80-\$0.85 |
| Driving Profitability - Strong Momentum |        |               |

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Note:

2010E - based on published results and Q4/2010 Guidance

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Industry Review - 2011 and Beyond

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Process complexity is THE growth driver for process control

Source: Intel

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Applications driving growth through 2014

Source: Gartner

Memory

Memory;

Foundry

Memory;

Foundry

Memory;

Foundry

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We are focused where the future is being created

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| Item                                  |   |
|---------------------------------------|---|
| NAND flash                            | P |
| Mobile DDR DRAM                       | P |
| NOR flash                             | P |
| Serial flash                          | P |
| WCDMA power amplifier                 | P |
| GSM EDGA power amplifier              | P |
| Baseband                              | P |
| A-GPS                                 | P |
| Bluetooth                             | P |
| Power management IC                   | P |
| 3.2-megapixel CIS                     |   |
| SAW (surface acoustic wave)<br>filter |   |
| Connector                             |   |
| PCB                                   |   |

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Nova 2011 - Well positioned in growing segments and applications

\* Source: Industry sources in Taiwan, compiled by Digitimes, April 2009

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Tablet PC market

Largest yearly growth of any electronic system ever!

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The love for consumer electronics is growing  
Asia Pacific fastest growth rate of new cell subscribers - 210%  
By 2015 will have 3.1 Billion subscribers  
Source: Euromonitor International from Trade Sources  
While per capita income shrunk consumer  
electronics spending grew significantly

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The US Economy - plays a smaller role than before  
Black Friday - the day after Thanksgiving  
212 million hit the streets or the Web  
and spent, on average, \$365.34 (~10% higher than last year)  
58% was spent on consumer electronics mostly handheld  
“Americans’ Spending on Consumer Electronics Up 12% from Last Year”  
Consumer Electronics Association January 5, 2011

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2011 WFE forecast

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| Analyst       | WFE Growth<br>2011/2010 |
|---------------|-------------------------|
| Gartner       | -3.4%                   |
| VLSI Research | +5%                     |
| SEMI          | +23.6%                  |
| Citi          | 0% to +10%              |
| PiperJaffray  | +10%                    |

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| Segment    | 2011/2010 |
|------------|-----------|
| Foundry    | FLAT      |
| NAND Flash | UP        |
| DRAM       | DOWN      |
| IDM        | FLAT      |

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Nova - 2011 and Beyond

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Strategy for taking Nova to the next level

§ Strategic focus has been on execution and expense control while maintaining adequate R&D to penetrate standalone market

§ Main strategic goals for the next 12-18 months:

§ Expand SAM (Share of Addressable Market) in existing segments

§ Expand total addressable market by addressing emerging process technologies

§ Continue to focus on high value - high margin products

§ Generate substantial free cash flow while also investing to support the next phase of growth

Our products will continue to combine high reliability, low COO and advanced measurement capabilities

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Expanding Nova's SAM

- 2010 Opportunity -

Litho

Etch

CVD

CMP

- 2011 and beyond -

Litho

Etch

CVD

CMP

Large scale proliferation still ahead of us

Capturing the expanded opportunity requires increase of R&D investments in 2011

STI, Poly,

Metal 1,

Inter Metal,

Top metal,

STI - ADI, AEI,

spacer H, SiN removal

Poly - ADI, AEI, spacer

BE - M1, TM, IM

Selective depositions,

EPI, SiGe,

FE - Poly, Al, W

BE - M1, TM, IM

Leveraging Nova's Position to expand addressable market

New Process Steps

3D Interconnect

Performance & bandwidth

Form Factor & Power Consumption

Leveraging Customer Base (Foundry & Memory)

Existing Process Steps

Front End IC

manufacturing

Implant

Litho

Etch

CVD/EP

CMP

SOC Horizontal Shrink

"More Moore"

3D Vertical Integration

"More Than Moore"

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SMARTPHONES AND MOBILE COMPUTING

3D IC enables:

15% footprint reduction

30% Thickness reduction

15%-30% less Power Consumption

Reduced RC Delay

Integration of Heterogeneous devices (with different design rules)

DRAM

Bandwidth for High Power Computing

Multi-core CPU are starved by

lack of data (memory) available to them

Frequency - DDR3/DDR4 - wire length, heat,

capacitance is becoming a bottleneck

HORIZONTAL SHRINK LIMIT

§ EUV Litho is expensive and not ready

§ Vertical integration becomes the cost effective alternative

The justifications for 3D IC are numerous

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3D IC main process steps

Several new challenges requiring extensive process control

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

- p Making the process production worthy - currently estimated to be 18-24 months out
- p Cost considerations - market demands that added cost per wafer be <\$100 (currently much higher)
- p Alignment between semiconductor manufacturers to support chip stacking - several collaborations and consortiums have been formed to define standards
  - § As a result:
    - p 3D IC production ramp is expected in 2013
    - p Metrology and Inspection Market expected to be ~\$250M by 2013

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Bond ,Thin &  
Reveal  
Etching  
Filling  
Detach + Align

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Strategy requires stepping up investments

§ Existing markets - expand SAM by enhancing product capabilities:

§ Develop and role out highly competitive Next Generation Optical CD solution to expand the number of measurable applications at 3x/2x nodes

§ Improve sensitivity, productivity, time to solution and ease of use

§ Initial revenue shipments in 2011, significant transition in 2012

§ 3D IC market:

§ Ship initial evaluation units to customers during 2011 - already actively engaged with several customers (all existing Nova customers)

§ Revenues expected to start in 2012 and significantly increase in 2013, as market starts to take off

Continue on path of success with Optical CD while aligning with customers' long term direction of vertical shrink

SOC Horizontal Shrink

“More Moore”

3D Vertical Integration

“More Than Moore”

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Strategic Objective

Expand business:

§ Expand addressable market from ~\$700M to ~\$950M

§ Continue to increase Optical CD market share by adding significant number of applications at existing customer sites

§ Successful execution of strategy should result in:

p Significant revenue increase from current quarterly revenue run rate of ~\$25M to ~\$40M in 2013

p Maintaining target operating profit margins

Near Term Financial Impact:

§ Step up R&D expenses by \$1M-\$1.5M per quarter

§ Incremental revenues from new products will begin to ramp in H2/11

§ Increase in capital spending for infrastructure and tools to support new product roll out and manufacturability and expand evaluations

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Financial Model

Notes:

- (1) 2010E - based on published results and Q4/2010 guidance.
  - (2) Long-term tax rate - ~12%.
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Ability to continue growth is well founded

\$50B spent on 15 new  
fabs over next 2-3 years

Recent SA penetrations

14 customers in 2011

(up from 7 in 2009)

Outpacing industry growth rate

Expanding Fab footprint

Litho

Etch

CVD/EP

CMP

Focus on 3D-IC market

Roadmap aligned with  
customer needs

New products and features

Expanded Customer Base

Industry

Accelerating OCD Adoption

New strategic Initiative

Further

Growth

CAGR 2005-2010

Nova: 26%

Industry: 2%