

Hermes Microvision, Inc.

Investor Presentation

May 2016



I. Introduction to HMI



HMI Highlights

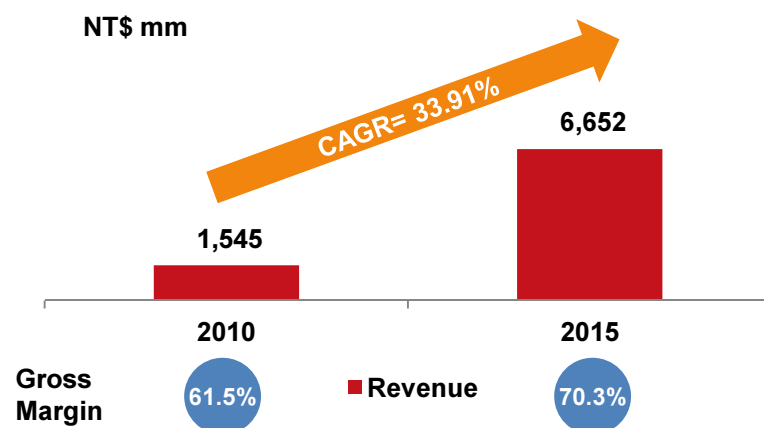
Company Profile

- World's leading supplier of EBI tools and solutions
- Founded in 1998, headquartered in Hsinchu, Taiwan
- Listed on Taipei Exchange (Ticker: 3658)
- 694 employees, of which 245 are R&D engineers, as of Mar 31, 2016

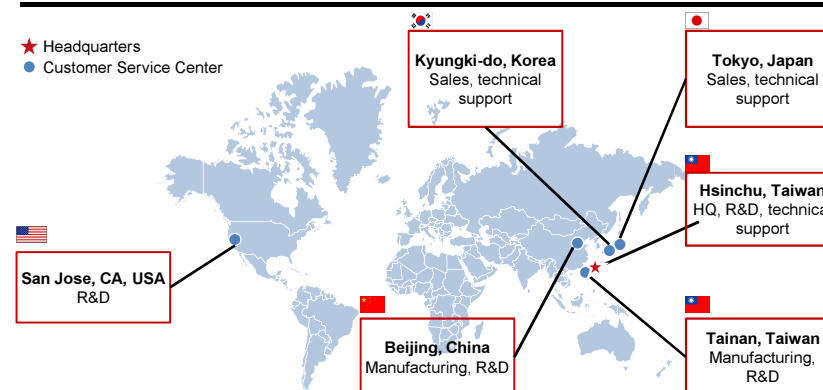
Leading-edge Inspection Tools and Solutions



Robust Growth Momentum



Global Footprint

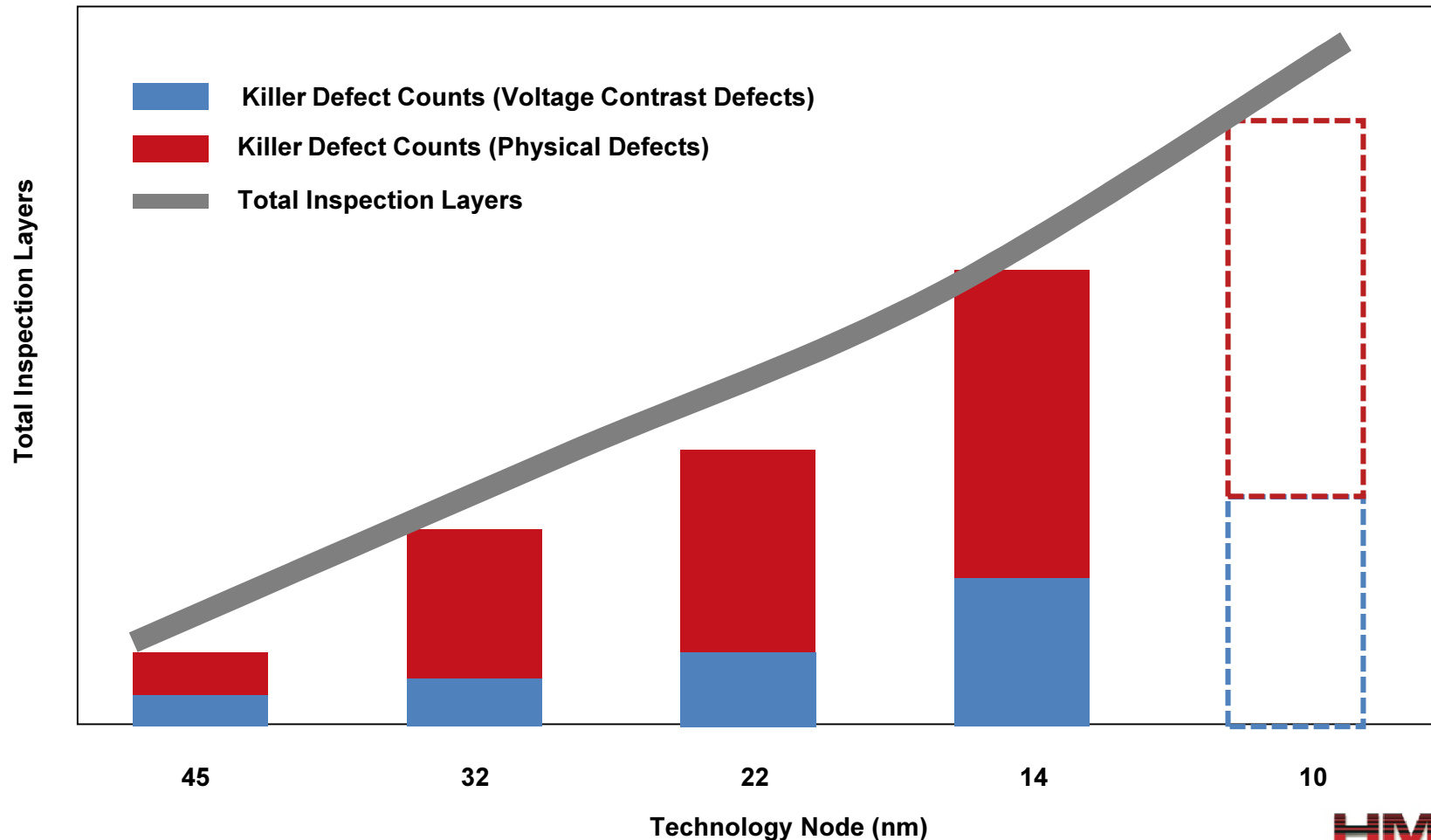


Source: Company Filings



Advanced Geometries and Complex Processes Require Enhanced Precision for Yield Improvement

As technology nodes become smaller, inspection tools with higher resolutions will be required to meet the needs



Source: Company Data

E-Beam Meeting the Challenges of Technology Advancement

Optical inspection does not meet the challenges of advanced node evolution due to low sensitivity and the inability to detect electrical defects in addition to physical defects



Optical Inspection



E-Beam Inspection

Optical Inspection	vs.	E-Beam Inspection
Medium	Resolution	High
Fast	Scanning Speed	Slower
Physical defects	Defects Capability	Nano-scaled physical defects; electrical defects
45nm: Image blurred 28nm: Extremely difficult	Sensitivity	Below 10nm
Largely adopted in manufacturing process above 40nm	Current Application	Advanced process research and development and mass production
Sampling at each stop Large area scanning	Scanning	At crucial process stops Used for high risk wafer areas
~85%	Market Share	~15%
High	Technology Difficulty	High
High	Price	Lower
KLA Tencor; Applied Materials	Major Suppliers	HMI; KLA Tencor; Applied Materials

Source: Company Data



Overview of HMI's Product Portfolio

Diversified Product Offerings and Capabilities

Process Optimization

Early discovery of defect to increase yield and reduce cost

Wafer Inspection

In-line Monitoring

Defect Analysis

ePTM Series

eScan® Series

SuperNova™



Product

ePTM4

eScan®500

eScan®420

SkyScan™5000

NanoScan™3000

SuperNova™

Description

Hotspot inspection and CDU process monitoring system

Highest sensitivity for large-area defect inspection

High throughput defect inspection

Millions+ hotspot in-line monitoring

High Landing Energy EBI for in-line CDU and Hotspot Inspection

Advanced D2DB inspection system and defect Analytics

Key Advantages

- Highest detection sensitivity to physical defects
- Innovative platform to enable highest scan throughput
- Built-in GDS engine to expand the use space of powerful CDU methodology to inline monitor process drift and effective hot-spot monitoring
- Suitable for 10nm and 7nm nodes

- Longest lifetime for advanced fabs
- Highest sensitivity to defect of interest signature detection in large area or full die
- Effective for litho induced DOIs for OPC improvement
- Highest image fidelity and linearity in large scan area for advanced D2DB inspection
- Most advanced defect binning algorithm
- Suitable for 14nm and 10nm nodes

- Largest area coverage with highest defect sensitivity for inline process control
- Proprietary technology for precision positioning of stage and e-beam on the fly
- Vector scan technology to focus on potential hot spots for high resolution with low queue time for inline monitoring
- Suitable for 14nm and 10nm ramp and HVM

- Expand CDU capability to High-Aspect-Ratio structure bottom and see-through overlay measurement
- Advanced electron optics design and innovative platform enable high throughput
- Advanced defect detection algorithms with HMI's unique CDU capability enables quick feedback for inline monitoring

- Advanced GDS D2DB inspection for most demanding defect capturing, analysis, and classification analytics
- In-line D2DB analysis with instantaneous defect report for fast R&D cycles;
- Unique D2DB algorithm with highest defect capture and lowest nuisance

Scan Mode

Hotspot Inspection

Multi-Function

Continuous Scan

Vector Scan

Hotspot Monitoring

Mainstream application

Logic / Memory

Logic / Memory

Memory

Logic

Memory

Design / Manufacturing

In-house

In-house

In-house

In-house

In-house

Highest Resolution

2nm

3nm

10nm

3nm

2nm

Source: Company Filings, Company Website

II. Key Investment Highlights



Key Investment Highlights

1

Clear Beneficiary of Fast Growing Semiconductor Process Control Segment

2

Leading Expertise in E-Beam Inspection Technology

3

Strong Partnerships with Industry Leaders Based on Technology and Services

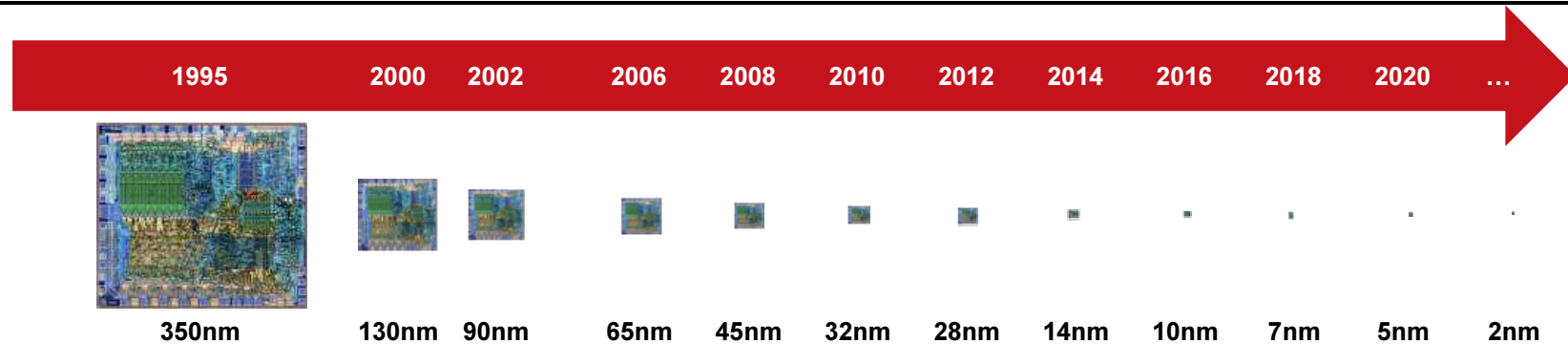
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Integrated Business Model Delivering Superior Operating Efficiency

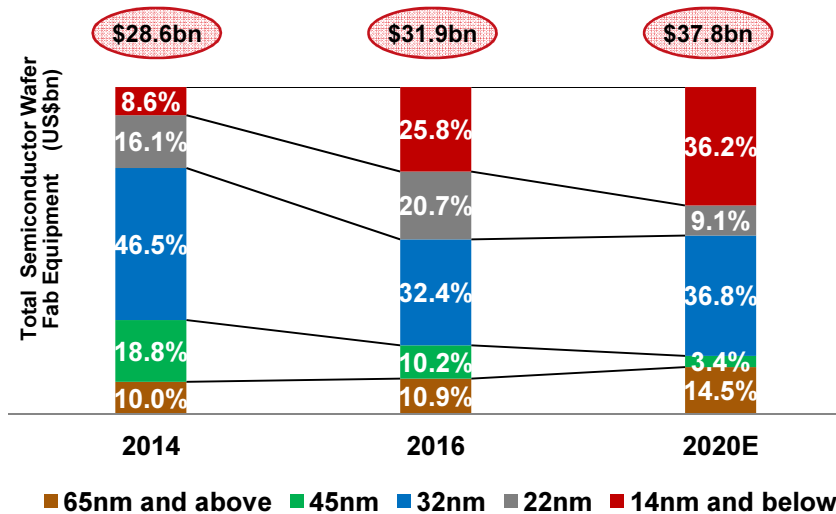
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Clear Beneficiary of Fast Growing Semiconductor Process Control Segment

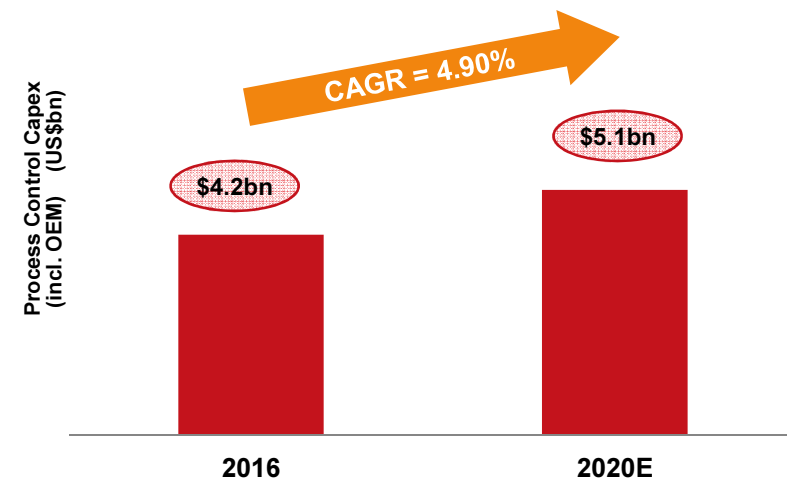
Industry Transitioning to Smaller Technology Nodes



Increasing Importance of Advanced Technology Nodes



Investment in Process Control Tools on the Rise



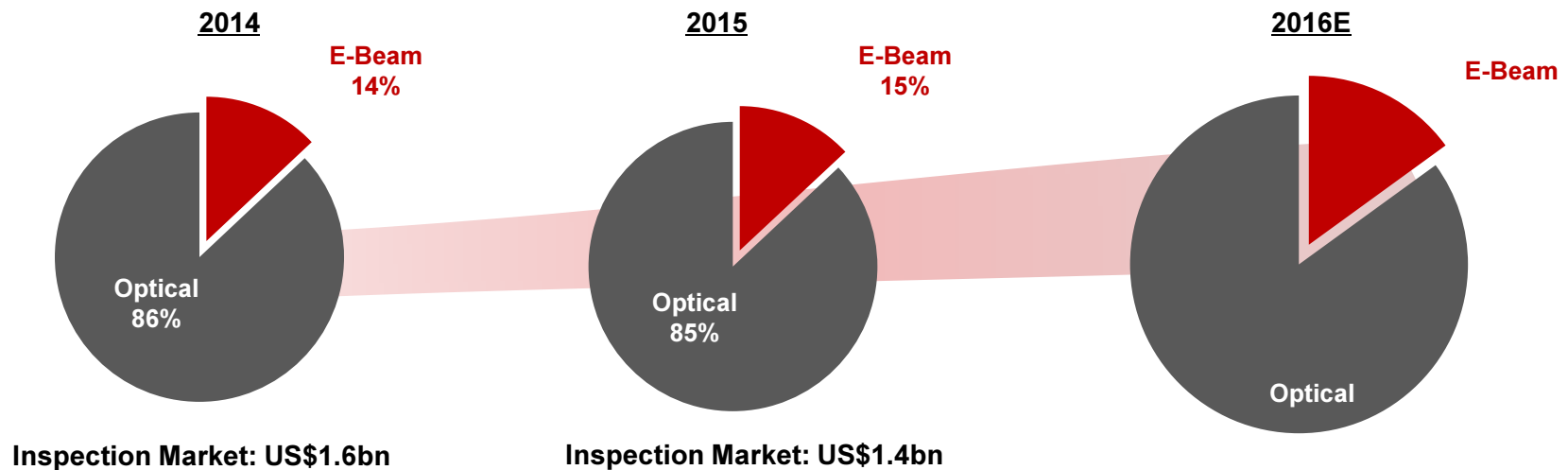
Source: Company Filings, Gartner Research

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1

Clear Beneficiary of Fast Growing Semiconductor Process Control Segment

The distinct advantages of EBI over optical at advanced technology nodes encourages increasing adoption of EBI in wafer inspection. HMI continues to focus on new growth initiatives that include high productivity, low CoO and massive parallel scanning technologies/tools for HVM inline applications

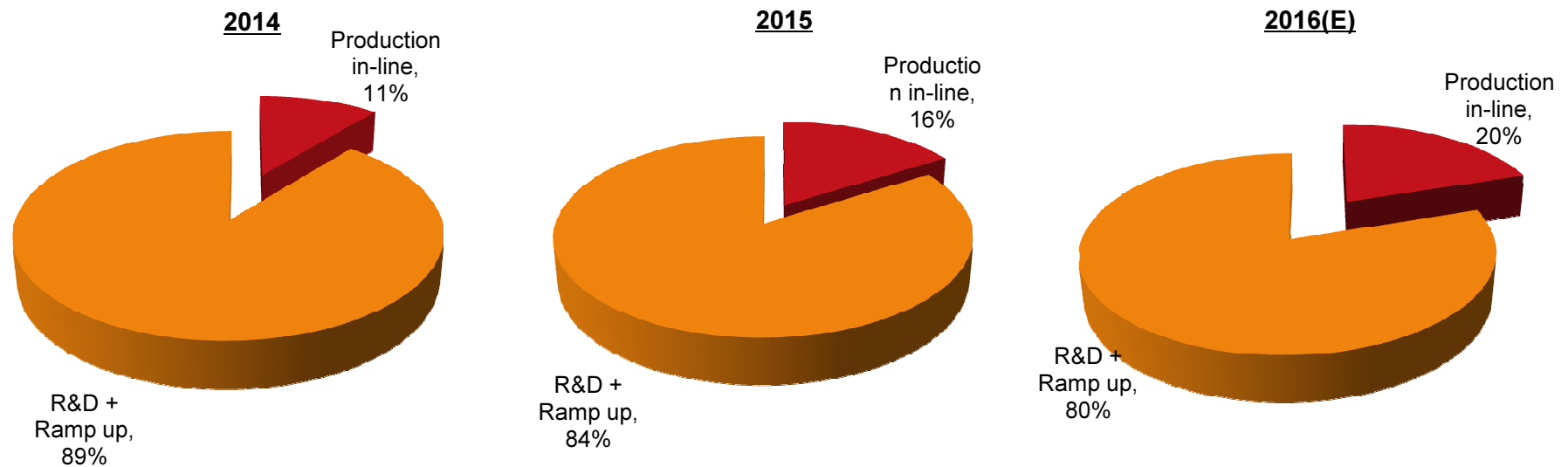


Source: Company Filings, Gartner Research

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Clear Beneficiary of Fast Growing Semiconductor Process Control Segment

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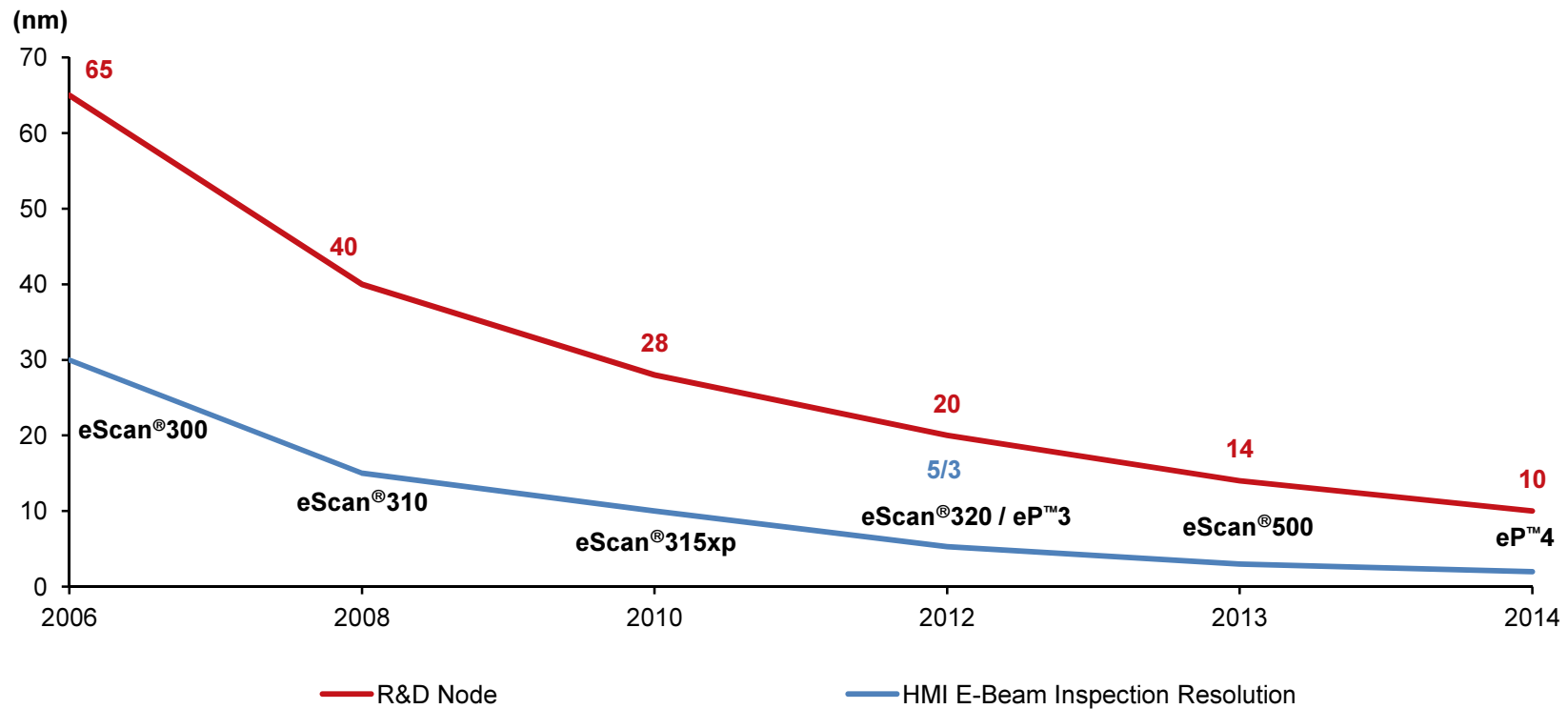


Source: Company Filings, Gartner Research

2

Leading Expertise in E-Beam Inspection Technology

HMI has achieved approximately a 30% improvement in resolution with every generation of tech node evolution



HMI is committed to leading technology innovation through R&D

Source: Company filings

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3

Strong Partnerships with Industry Leaders Based on Technology and Services

Partnerships for Long-term Success

Top IDMs¹



Top Foundries



HMI's Winning Business Model

- ☑ HMI *teams up with customers in R&D* and shares the benefits of innovation
- ☑ HMI *customizes to meet different needs*
- ☑ HMI *provides instant customer service globally*
- Our customer service centers are located where our customers are located

¹ IDM (Integrated Device Manufacturers) includes both logic and memory IC companies.
Source: Company Filings, Gartner Research

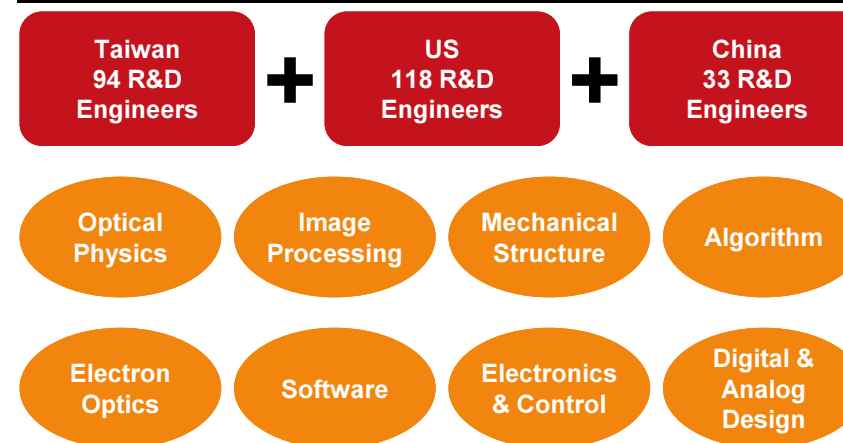
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Integrated Business Model Delivering Superior Operating Efficiency

Key Technologies

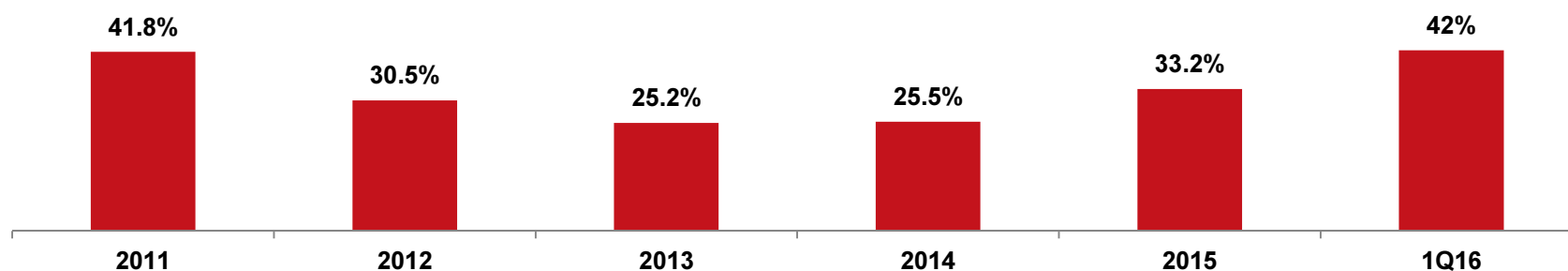
- ☑ Designs all and manufacturers 80% of the key components, modules and systems in-house, which ensures uniqueness, quality, performance and lifetime of products while providing cost advantages
- ☑ Extensive technological expertise in:
 - E-Beam system: e-optics, deflection, imaging
 - Algorithm: image comparison and defect detection
 - Mechanical systems: vacuum and precision movement
 - GDS analysis: defect tracking and analysis database

Multi-Disciplinary R&D Team



Strong Operating Leverage

Operating Expense as % of Revenues



2010 – 2015 Revenue CAGR: 33.91%
2010 – 2015 Opex CAGR: 21.57%

Source: Company Filings

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Growth Strategies

1

Continue to focus on R&D to extend technology leadership

2

Diversify product offerings and capabilities

3

Continue to strengthen partnerships with customers

4

Continue to evaluate and make strategic investments

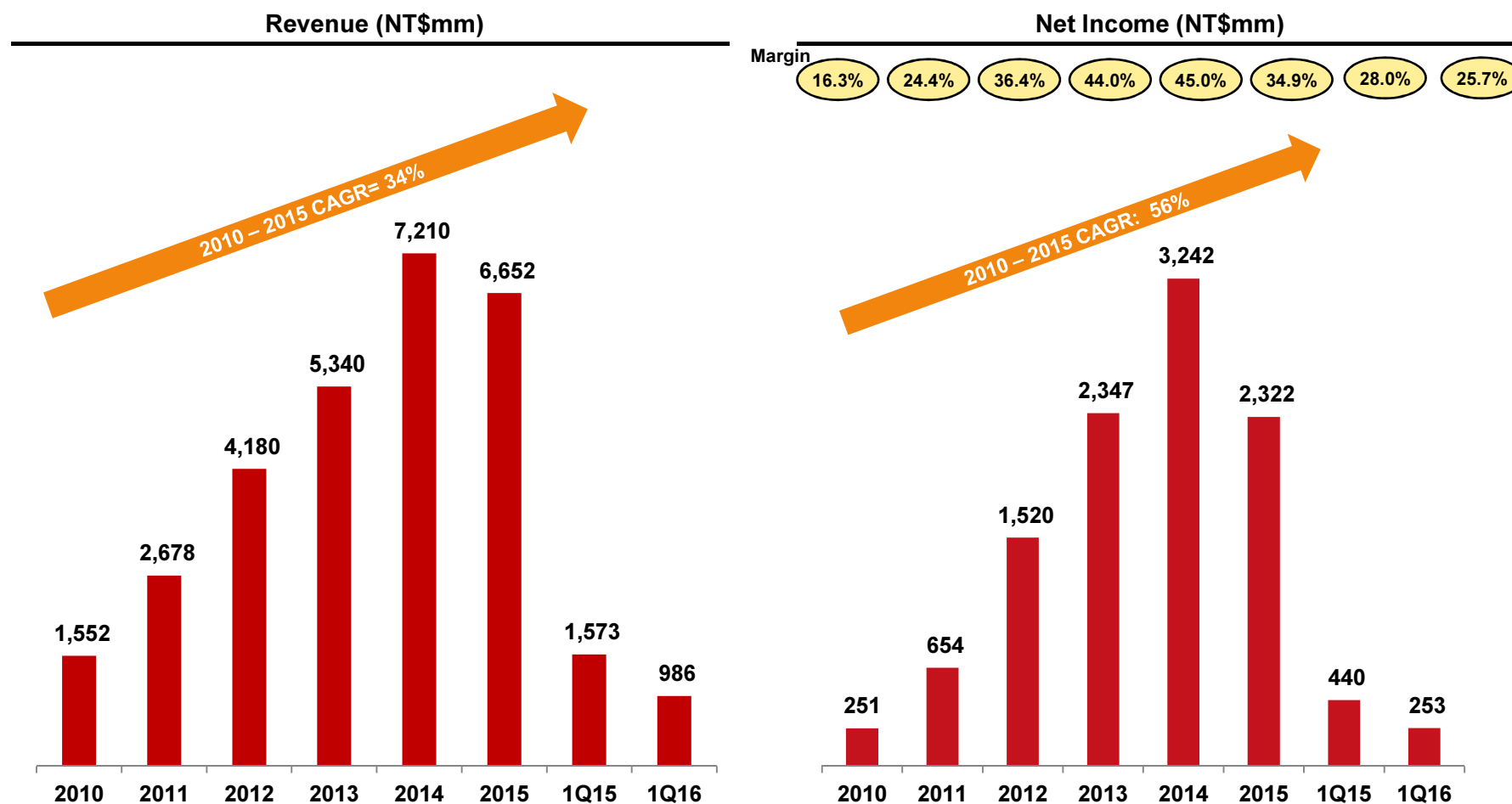
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Attract, train, and retain top talent

III. Financial Highlights



Robust Revenue Momentum and Profitability

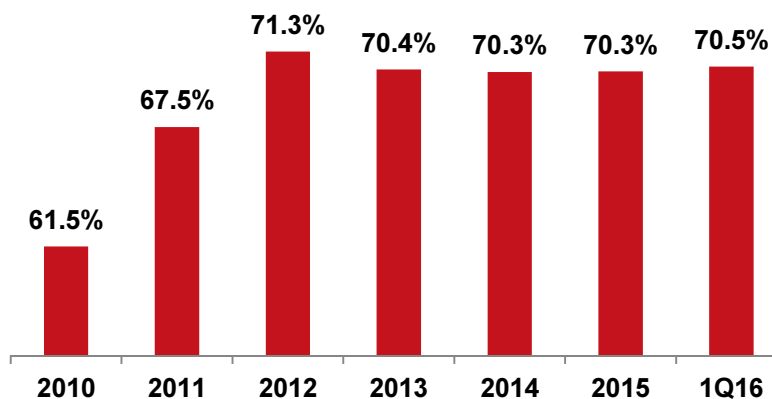


Source: Company Filings

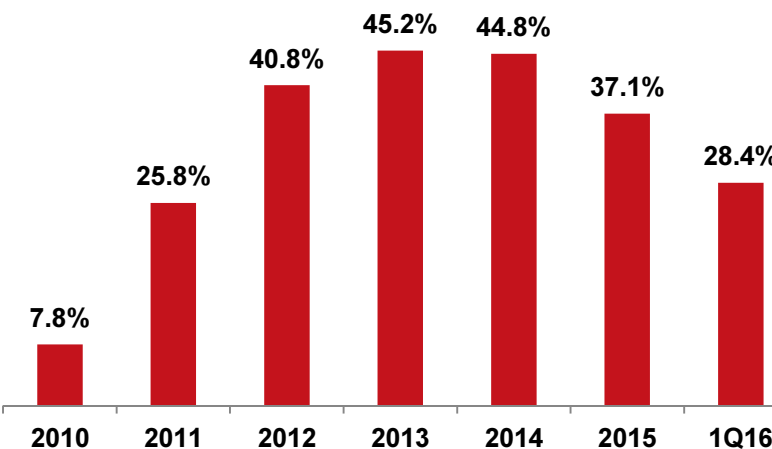
* Profit for the period, excluding other comprehensive income.

Attractive Margin Profile Attributable to Competitive Cost Structure

Gross Margin

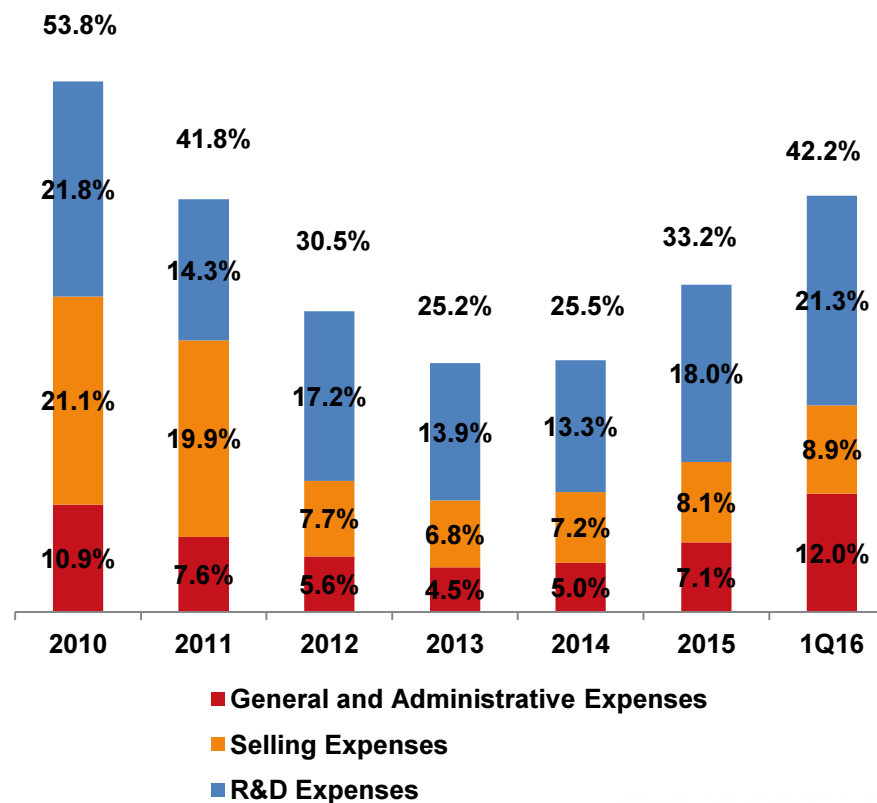


Operating Margin



Disciplined Cost Structure

Operating Expense
as % of Revenues



Source: Company Filings

Healthy Balance Sheet and Strong Cash Flow Position

Selected Balance Sheet Items

NT\$mm	2010	2011	2012	2013	2014	2015	1Q16
Cash and Cash Equivalents	742	612	2,776	5,371	7,396	8,560	8,605
Financial Asset at Fair Value through Profit or Loss	-	-	-	-	1,102	-	763
Bond Investment without Active Market- Current	-	-	-	2,891	1,266	2,828	1,712
Short-Term Borrowings	1,571	657	-	-	-	-	-
Long-Term Debt	-	-	-	-	-	-	-
Total Debt	1,571	657	-	-	-	-	-
Total Common Equity	729	1,354	3,867	9,694	11,828	12,583	12,852
Minority Interest	13	21	33	39	47	53	55
Total Equity	742	1,375	3,900	9,733	11,875	12,636	12,906
Total Liabilities And Equity	2,777	2,740	5,188	11,852	15,126	16,705	16,664

Selected Cash Flow Statement Items

NT\$mm	2010	2011	2012	2013	2014	2015	1Q16
Cash from Operations	(267)	821	1,858	2,171	3,130	3,587	(242)
Capex	(15)	(53)	(46)	(147)	(489)	(326)	(64)
Cash in (from) Investing	(19)	(62)	(52)	(3,048)	26	(827)	295
Dividend	-	-	(264)	(792)	(1,136)	(1,562)	-
Cash in (from) Financing	699	(902)	347	3,446	(1,136)	(1,561)	-

Source: Company Filings

Q&A

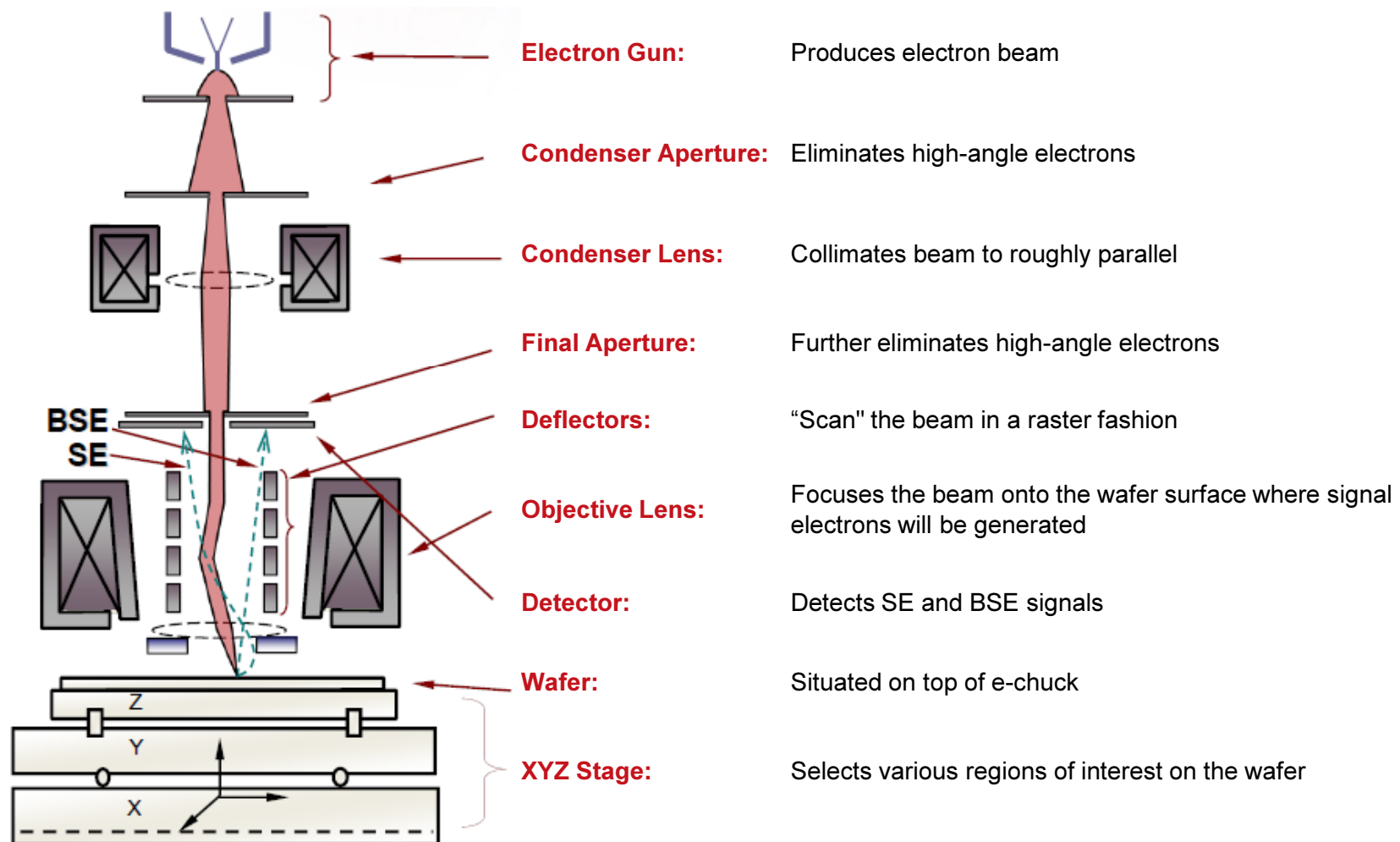
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APPENDIX

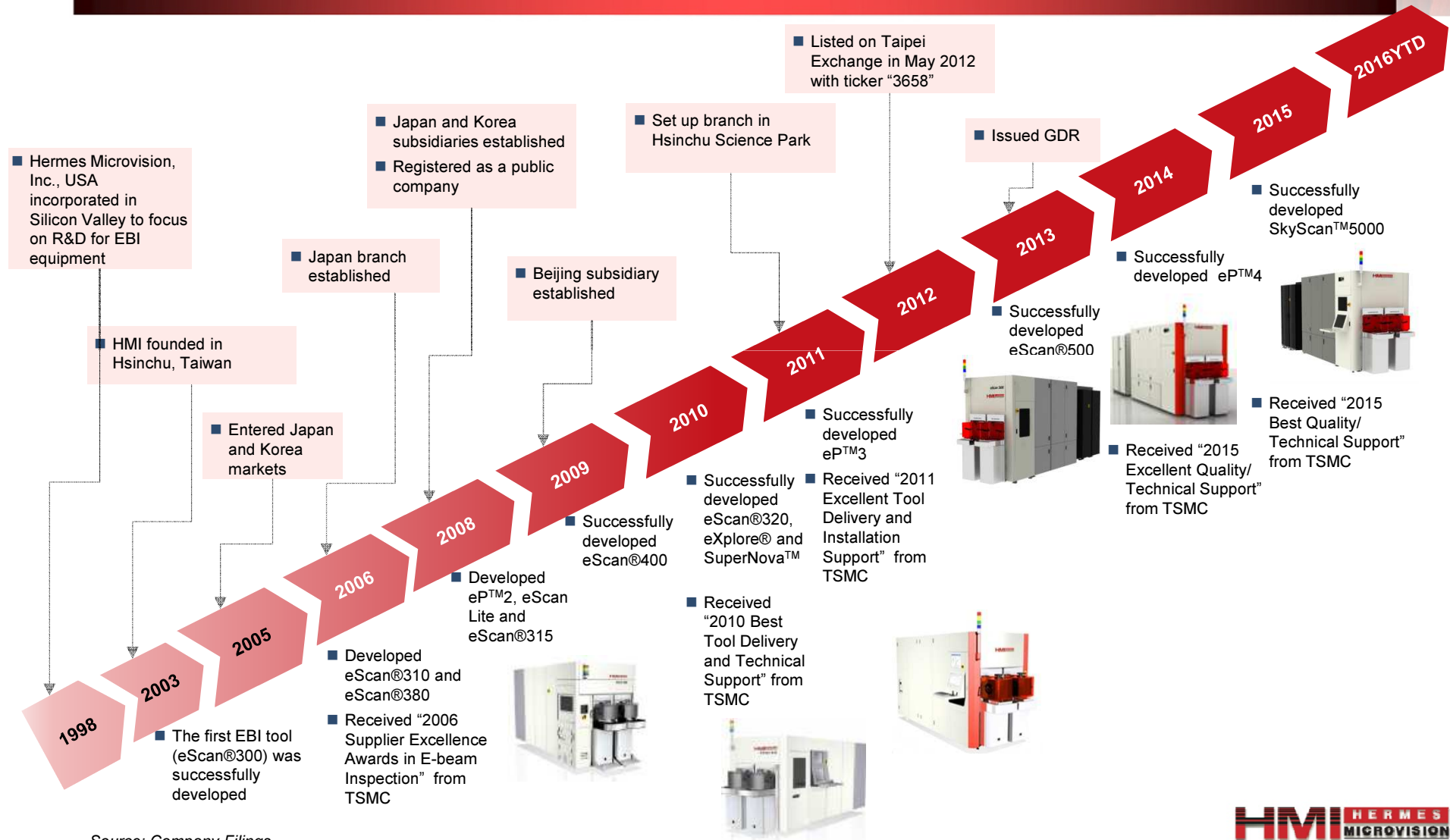


How Does E-Beam Technology Work



Source: Company Filings

History and Key Milestones



Source: Company Filings

Summary Income Statement

NT\$mm, unless otherwise stated	2010	2011	2012	2013	2014	2015	1Q16
Total Revenue	1,545	2,678	4,180	5,340	7,210	6,652	986
<i>YoY Growth %</i>	32.3%	73.3%	56.1%	27.8%	35.0%	(7.7)%	(37.3)%
Gross Profit	951	1,808	2,981	3,758	5,065	4,676	696
<i>Margin %</i>	61.5%	67.5%	71.3%	70.4%	70.3%	70.3%	70.5%
Operating Expenses	(831)	(1,118)	(1,274)	(1,347)	(1,837)	(2,205)	(416)
<i>As % of Total Revenue</i>	(53.8)%	(41.8)%	(30.5)%	(25.2)%	(25.5)%	(33.2)%	(42.2)%
Operating Income	120	690	1,707	2,412	3,228	2,471	280
<i>Margin %</i>	7.8%	25.8%	40.8%	45.2%	44.8%	37.1%	28.4%
Net Income	251	654	1,520¹	2,347¹	3,242¹	2,322¹	253¹
<i>Margin %</i>	16.3%	24.4%	36.4%	44.0%	45.0%	34.9%	25.7%
Diluted EPS (NT\$)	6	11	23	35	46	33	3.55
<i>YoY Growth %</i>	NM	89.5%	116.1%	50.3%	30.0%	(28.3)%	(42.5)%

Source: Company Filings

¹ Profit for the period, excluding other comprehensive income.

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Financial Asset at Fair Value through Profit or Loss	-	-	-	-	1,102	-	763
Bond Investments without Active Markets- Current	-	-	-	2,891	1,266	2,828	1,712
Accounts Receivable – Third Parties	722	653	848	1,557	2,662	1,330	1,601
Inventories, Net	1,074	1,190	1,279	1,516	1,745	2,634	2,585
Total Current Assets	2,587	2,523	4,972	11,444	14,298	15,606	15,536
Property, Plant and Equipment	132	168	170	335	750	975	1,005
Total Assets	2,777	2,740	5,188	11,852	15,126	16,705	16,664
Short-term Loans	1,571	657	-	-	-	-	-
Provisions for Liabilities – Current	130	219	577	972	1,471	1,808	1,778
Total Current Liabilities	2,008	1,300	1,199	2,035	3,162	3,936	3,625
Other Liabilities	27	65	89	84	89	133	133
Total Liabilities	2,035	1,365	1,288	2,119	3,251	4,069	3,758
Total Stockholders' Equity	742	1,375	3,900	9,733	11,875	12,636	12,906
Total Liabilities and Stockholders' Equity	2,777	2,740	5,188	11,852	15,126	16,705	16,664

Source: Company Filings

Summary Cashflow Statement

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Cash from Operations	(267)	821	1,858	2,171	3,130	3,587	(241)
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