

# MPI Corporation (6223.TT)

Goldman Sachs Taiwan Equipment and Automation Day

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## Presentation Disclaimer

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The information herein contains forward-looking statements. We have based these forward-looking statements on our current expectations and projections about future events. Although we believe that these expectations and projections are reasonable, such forward-looking statements are inherently subject to risks, uncertainties and assumptions about us, including, among other things: the intensely competitive Semi-conductor, and LED industries and markets; Cyclical nature of the semiconductor industry; Risks associated with global business activities; General economic and political conditions. All financial figures discussed herein are prepared pursuant to IFRS. All audited figures will be publicly announced upon the completion of our audited process.

# Company at a Glance

### Taiwan and China

**Wuhu Office**  
TEL: +86-21-6563-7000

**Tianjin Office**  
TEL: +86-135-6494-2123

**MJC Microelectronics (Shanghai) Co., LTD.**  
TEL: +86-21-64018400  
FAX: +86-21-64018418  
E-mail: mjcshen@mpicorp.com.cn  
Address: 4F BLD. No.1616, Yishan Road, Shanghai City, China 201103

**Chain Logic International Corp.**  
Room1001, 10F, No. 990, Da-lan Road, Shanghai, China200002  
TEL: +86-21-6563-7000 FAX: +86-21-6563-8188

**Yangzhou Office**  
TEL: +86-514-87877575 / 13773474352

**Xiamen Office**  
TEL: +86-139-5917-7404

**Head Quarter**  
TEL: +886-3-5551771  
FAX: +886-3-5518381  
E-mail: sales@mpi.com.tw  
Address: No. 154, Zhong-Ho St., Hsinchu City, Hsinchu County, 30022, Taiwan, R.O.C.

**LED-ONE (SHENZHEN) CORPORATION**  
TEL: +86-755-2732-5166  
FAX: +86-755-2732-5166  
Address: 802-11CB, HENGFEN INDUSTRIAL PARK, HEZHOU VILLAGE, BAOAN DISTRICT, SHENZHEN CITY

**Ningbo Office**  
TEL: +86-574-86899882

**ST Branch**  
TEL: +886-7-9559966  
FAX: +886-7-9527076  
E-mail: sales@mpi.com.tw  
Address: No. 7, Luke 1st Rd., Luzhu Chiang, Kaohsiung County 831, Taiwan, R.O.C.

### Europe

**Test Equipment Representative**  
**ATV (Automatisierungstechnik Voigt GmbH)**  
Add: Heilbronner Strasse 17, 01189 Dresden, Germany

**EO Tech GmbH**  
Add: Postfach120, CH-9402 Mörschwil

**F. I. Science**  
Add: Le Village, 27500 Triqueville, France

**Signal Solutions Nordic Oy**  
Add: Innemäki 1, Teknikantie 12

### North America

**Test Equipment Representative**  
**ELM Technology**  
Addr: Box 7281, San Jose, CA 95150-7281

**Peak Technology**  
Add: 1895A S. Central Hwy #610A, Escondido, CA 92025

**Office in CA**  
Add: 2334D Walsh Ave. SANTA CLARA CA 95050 U.S.A.

**TEXSource**  
Add: 3267 Bee Caves Road, Ste. 107-601, Austin, Texas 78746

**MJC Electronics Corporation (MEC)**  
Add: 11056 Metro Blvd., Austin, TX 78758 USA

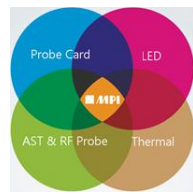
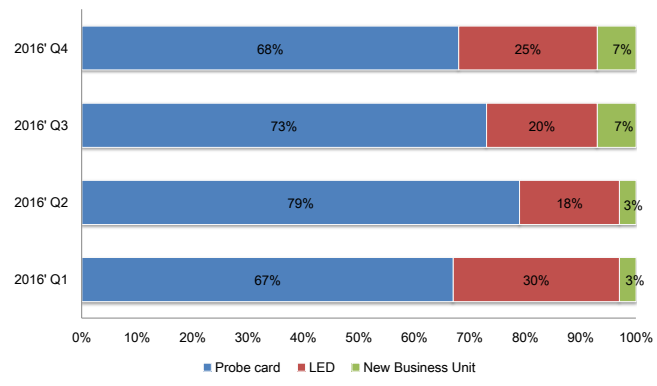
**Office in TX**  
Add: 903 North Dowless Rd. Suite 140, Richardson, TX 75081 USA

**Canada**  
**Testforce Systems Inc**  
Add: 9450 Trans-Canada Hwy, St. Laurent QC H4S 1R7, Canada

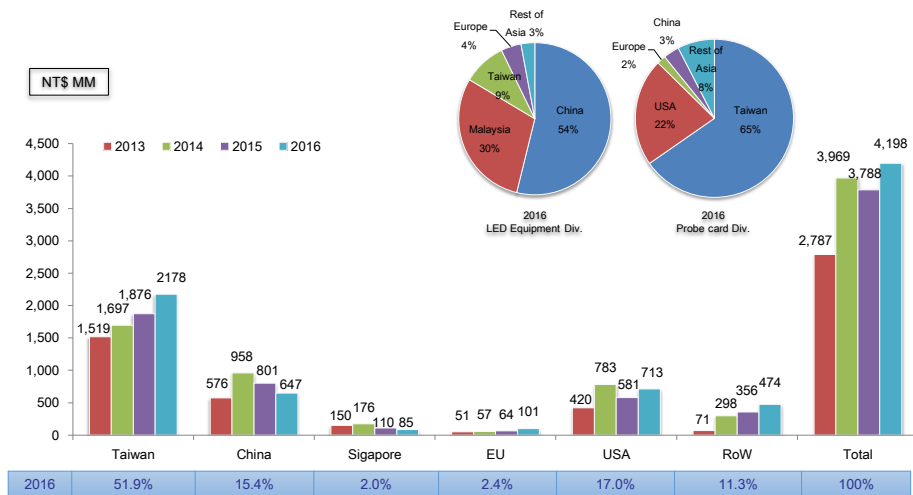
**Test Equipment Representative**  
**CWI Technical Sales**  
Add: 50 Route 9, Suite 302, Morgantown Ju 07751

|                 |                                    |
|-----------------|------------------------------------|
| Founded         | July, 25, 1995                     |
| Paid-in Capital | NTD\$ 796M (2016.12.31-the latest) |
| Employees       | 1443 (2016.12.31)                  |

# Business Portfolio



## Net Sales by Geographic



## Agenda

### ■ Business Contents

- Semi-conductor (Probe Card)
- Photonics Automation (LED)
- RF Probe & AST
- Thermal

### ■ Financial Statements

# Semi-conductor (Probe Card)

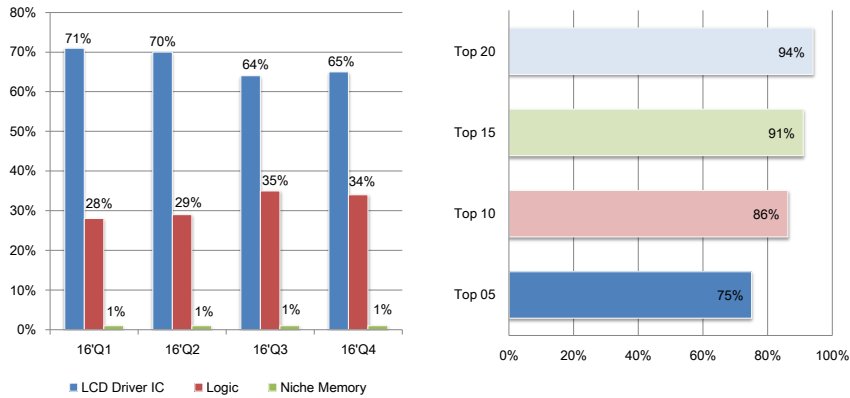
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## Top 10 Probe Card Vendors (2009-2015)

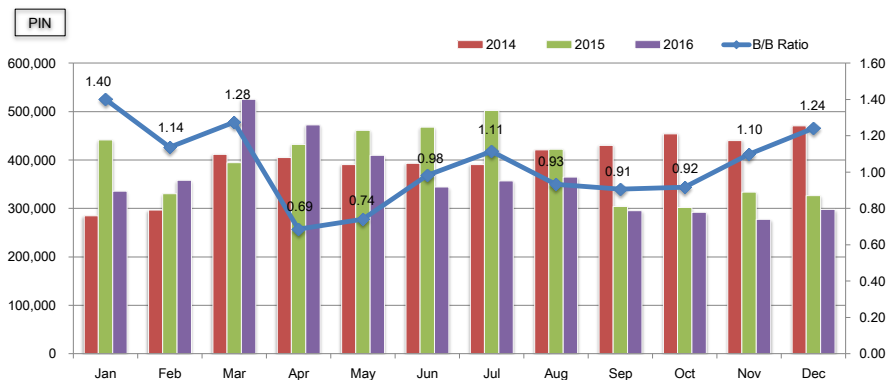
| (Rank)                     |               | 2009     | 2010     | 2011     | 2012     | 2013     | 2014     | 2015     |
|----------------------------|---------------|----------|----------|----------|----------|----------|----------|----------|
| FormFactor, Inc.           | USA           | 1        | 1        | 2        | 2        | 1        | 1        | 1        |
| Micronics Japan Co., Ltd.  | Japan         | 2        | 2        | 1        | 1        | 2        | 2        | 2        |
| Technoprobe                | Italy         | 4        | 4        | 4        | 4        | 3        | 3        | 3        |
| Japan Electronic Materials | Japan         | 3        | 3        | 3        | 3        | 4        | 4        | 4        |
| <b>MPI Corporation</b>     | <b>Taiwan</b> | <b>6</b> | <b>5</b> | <b>6</b> | <b>6</b> | <b>5</b> | <b>5</b> | <b>5</b> |
| Cascade Microtech          | USA           | 8        | 10       | 10       | 8        | 8        | 7        | 6        |
| SV TCL                     | Singapore     | 5        | 6        | 8        | 9        | 10       | 9        | 7        |
| Will Technology            | Korea         | 7        | 7        | 7        | 5        | 6        | 10       | 8        |
| Korea Instrument (KI)      | Korea         | 10       | 8        | 5        | 7        | 9        | 6        | 9        |
| Microfriend                | Korea         | 9        | 9        | 9        | 10       | 7        | 8        | 10       |

## Product Mix of CPC (Cantilever)



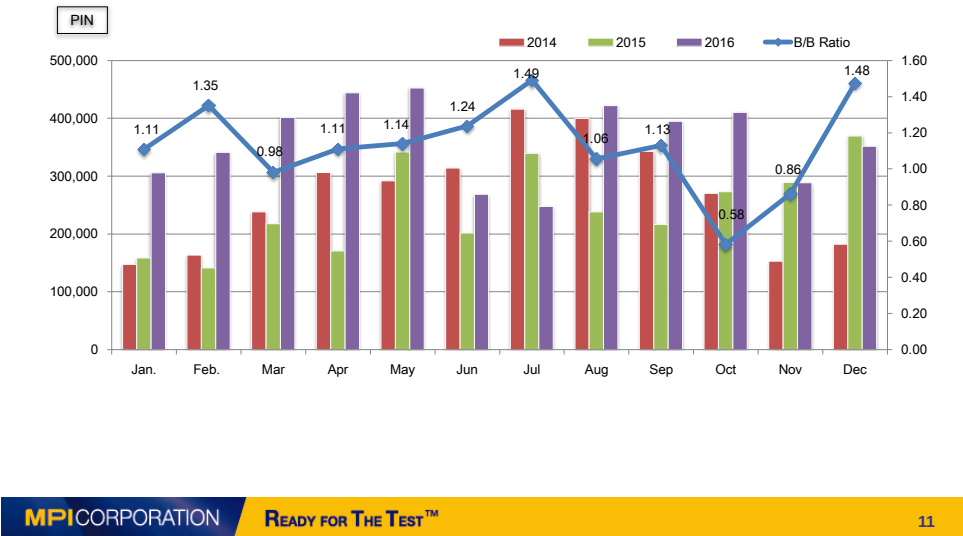
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## CPC Pin-Shipment

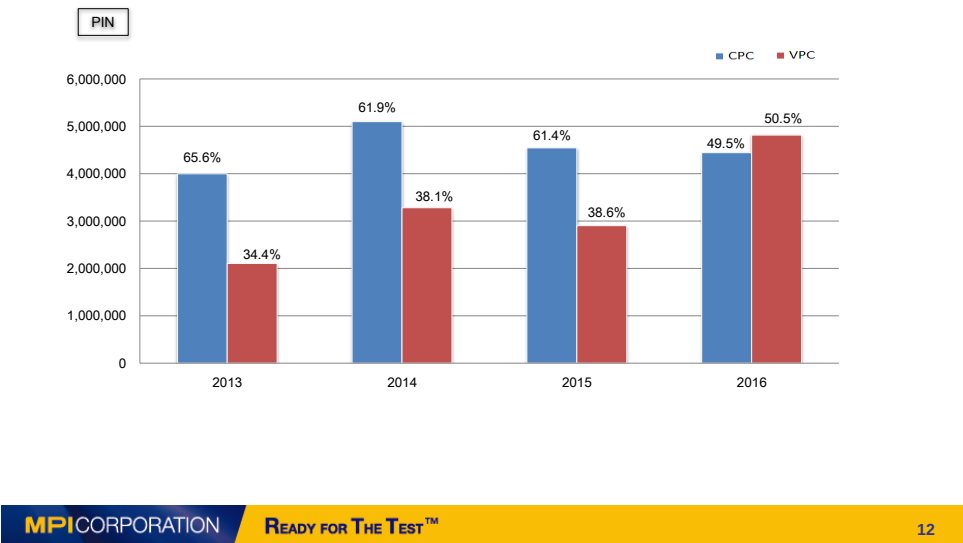


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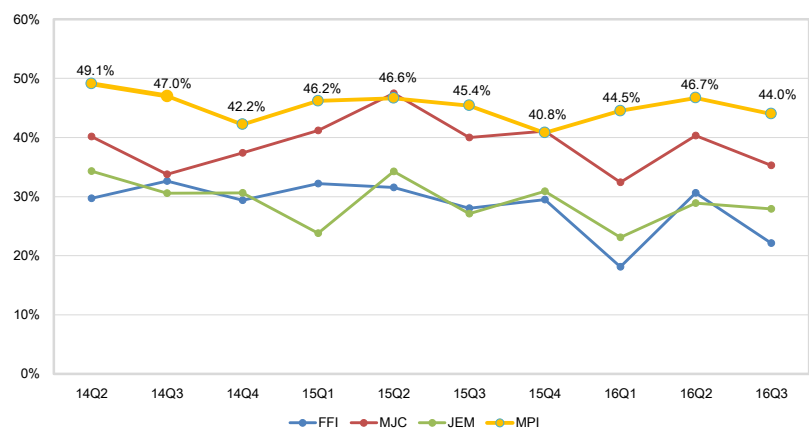
# VPC Pin-Shipment



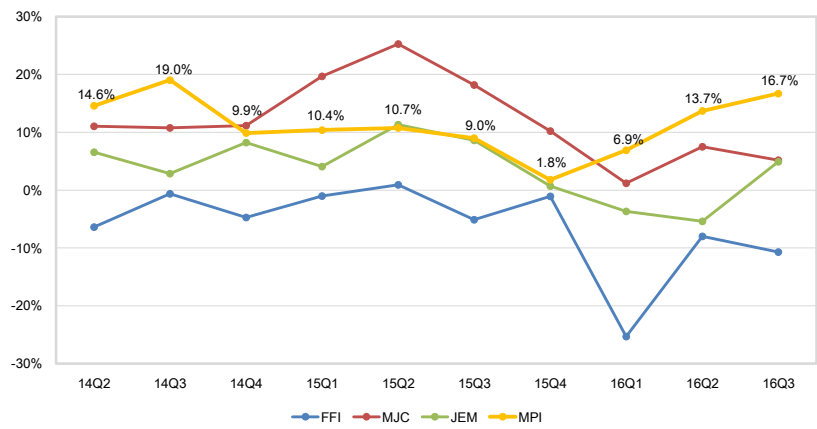
# CPC and VPC Yearly Trend



# Gross Margin Between Competitors



# Operating Margin Between Competitors



# Photonics Automation (LED)

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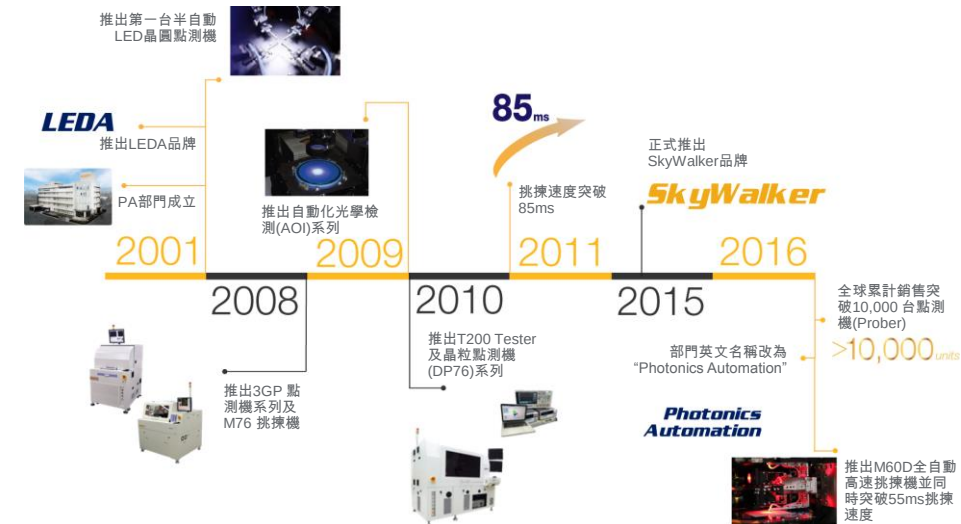
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## Photonics Automation (PA) Overview





## Milestone

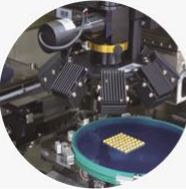
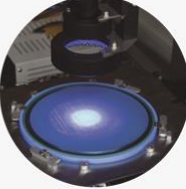
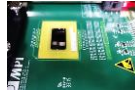
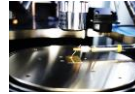
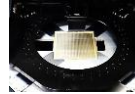


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## Main Product Line

|                                                                                     |                                                                                                           |                                                                                     |                                                                                       |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |                        |  |   |
| <b>Probing System</b><br>Wafer<br>Flip chip<br>Single die                           | <b>Testing System</b><br>Mass production software<br>Integrated spectrum meter<br>Integrated source meter | <b>Chip Sorting</b><br>Mapping sorter                                               | <b>Inspection System</b><br>Chip after dicing<br>Chip after sorting                   |
| <b>Package Probing</b><br>Panel<br>Bottom probing<br>Single package                 | <b>Package Testing</b><br>From low to high power                                                          | <b>Package Level</b><br>Chip Scale Package (CSP)<br>Foil to Foil (FTF)              |                                                                                       |
|  |                        |  |    |
| Wafer                                                                               | Tape                                                                                                      | Die                                                                                 | Packaging Substrate                                                                   |
|                                                                                     |                                                                                                           |                                                                                     |   |
|                                                                                     |                                                                                                           |                                                                                     | Photodiode(PD)                                                                        |
|                                                                                     |                                                                                                           |                                                                                     |  |
|                                                                                     |                                                                                                           |                                                                                     | LED Package Probing                                                                   |

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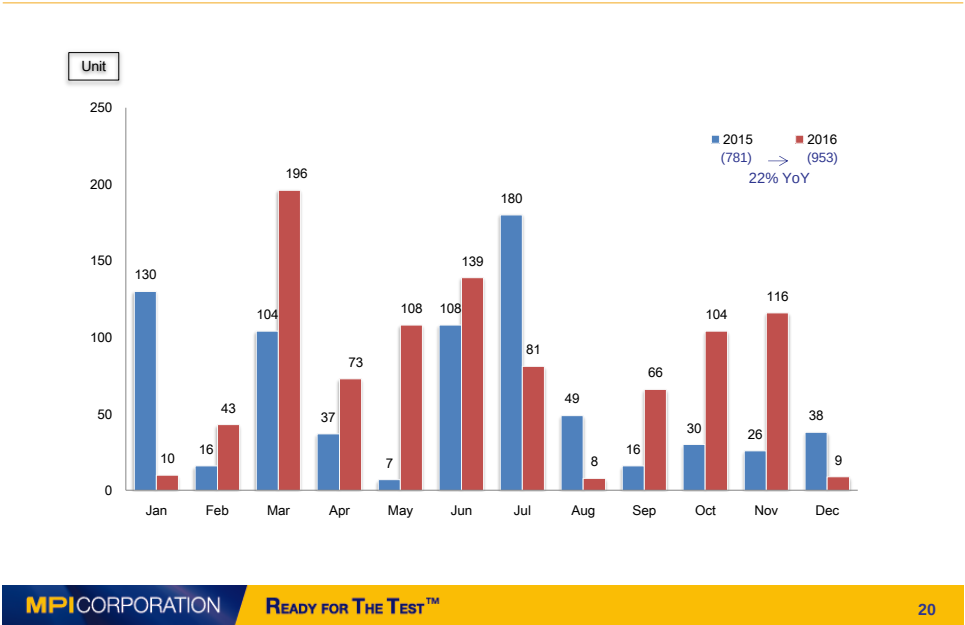
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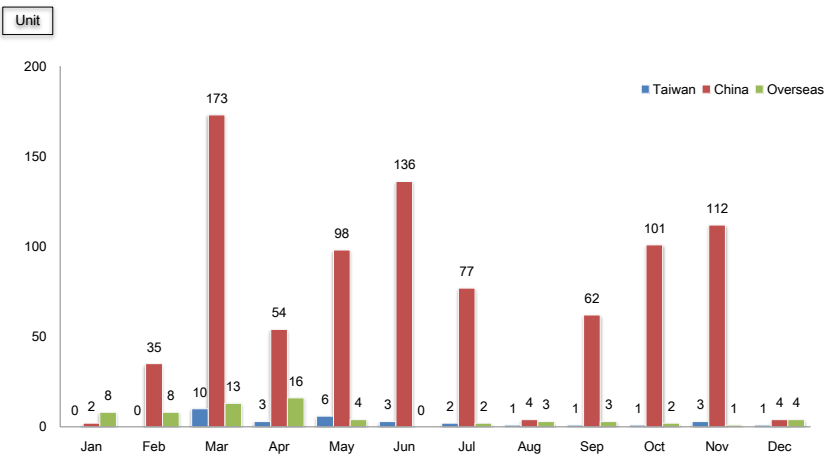
# Wafer Technology Migration



# 2016 Shipment



# 2016 Shipment by Geographic



# LED 2017 Targeting Markets



## Automotive

Night Vision  
IR LED, VCSEL



## Eye Scanning for E-wallet

IR LED (Fujitsu and Samsung)



## VR (2016 Market size 14m USD)

IR LED  
Inside-out Tracking : HTC Vive  
Outside-in Tracking : Oculus Rift (Facebook)  
More Manufacturers: Tencent, Nitendo, Microsoft and Dell

# RF Probe & AST

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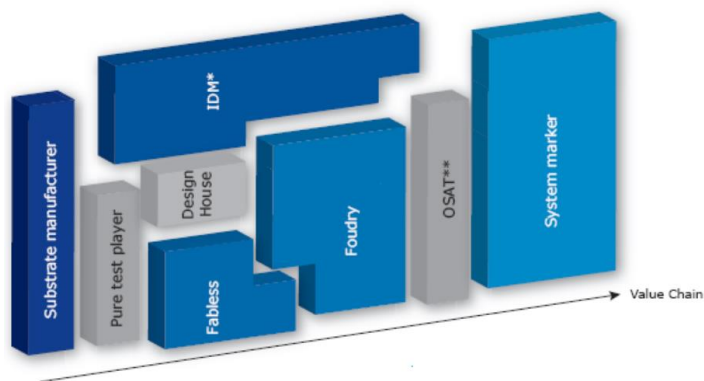
## Thermal



- Market size: roughly NTD\$500-NTD\$600m
- Industries: Telecom / Automotive
- Maximum capacity: 30 – 35 units
- Major supplier: **inTEST Corporation**

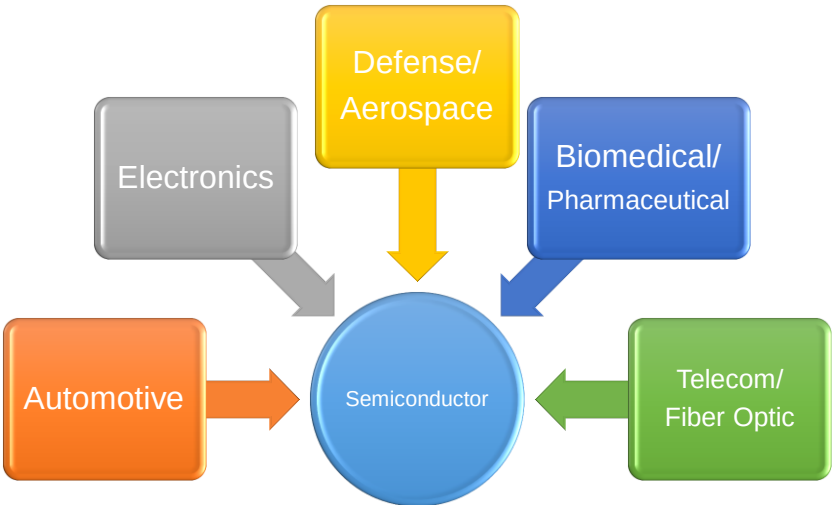
<http://www.mpi-thermal.com/media/>

# Who Are Our Target Customers?



\*IDM: Integrated Device Manufacturer. \*\*OSAT: Outsourced Semiconductor Assembly and Test

# Target Industries



## AST



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# Financial Statements

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## Balance Sheet Highlight

| Amount: NT\$ Million                                            | 3Q 2016 |      | 3Q 2015 |      |
|-----------------------------------------------------------------|---------|------|---------|------|
| Cash and Cash Equivalents                                       | 766     | 10%  | 549     | 8%   |
| Fixed Assets                                                    | 3,485   | 48%  | 3,384   | 51%  |
| Total Assets                                                    | 7,322   | 100% | 6,659   | 100% |
| LT Debt                                                         | 242     | 3%   | 252     | 4%   |
| Shareholders' Equity                                            | 3,817   | 52%  | 3,680   | 56%  |
| EBITDA                                                          | 475     |      | 338     |      |
| *EBITDA=operating income + depreciation & amortization expenses |         |      |         |      |

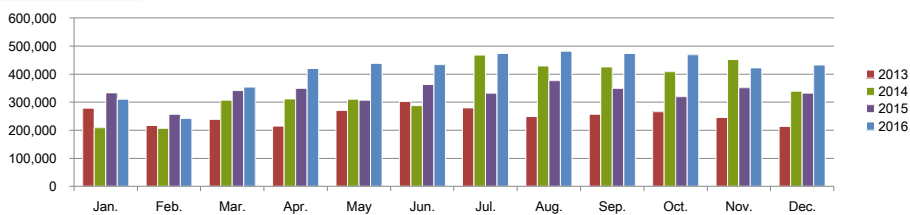
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## Income Statement

| NT\$1,000                  | 2016 Q3   |      | 2015 Q3   |      |
|----------------------------|-----------|------|-----------|------|
| Net Sales                  | 3,637,181 | 100% | 3,009,613 | 100% |
| Cost of Goods Sold         | 1,998,477 | 55%  | 1,623,715 | 54%  |
| Gross Profit               | 1,638,704 | 45%  | 1,385,898 | 46%  |
| Operating Expense          | 1,160,009 | 32%  | 1,087,415 | 37%  |
| Operating Income           | 478,862   | 13%  | 301,426   | 10%  |
| Investment Income & Others | 3,524     |      | 37,223    |      |
| Net Income (before tax)    | 405,531   | 11%  | 275,804   | 9%   |
| EPS (before tax)           | 5.15      |      | 3.47      |      |

Net Sales NT\$ 1,000

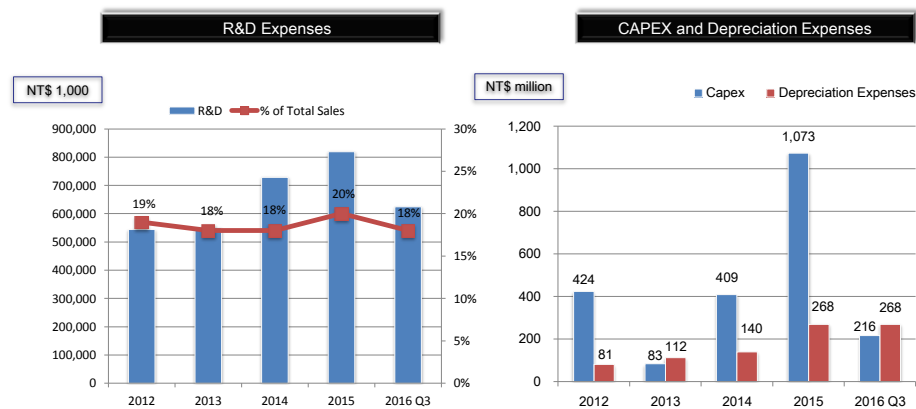


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# R&D Expenses, Capex and Depreciation



Thank You

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