

MJC YOUR Best Partner,  
MJC Anytime Anywhere



Corporate Profile

*MICRONICS JAPAN CO.,LTD.*

## Top Message —

### MJC YOUR Best Partner, MJC Anytime Anywhere

Since its founding in 1970, MICRONICS JAPAN CO., LTD. (MJC) has been providing testing solutions for semiconductors and flat panel displays (FPDs). In particular, MJC has established itself as a world leader in the field of probe cards used for testing semiconductor integrated circuits, receiving high praise from our customers worldwide.

Demand in the semiconductor market has been expanding due to the advancement of digital transformation (DX), the utilization of IoT, and the escalating data traffic facilitated by 5G networks. Future growth is expected with new technologies such as generative AI. In parallel, testing to ensure the quality of semiconductors is becoming increasingly important.

Amidst significant environmental shifts, we believe that the pace of these changes will further accelerate in the future. In response to these evolving dynamics and the new era, we have reviewed and revised our corporate philosophy as 'MJC Mission', 'MJC Future Vision' and 'Our Values'.

The MJC Group will continue to strive for sustainable growth and the enhancement of long-term corporate value under the mission of "Contribute widely to society with electronic measurement technology", and will remain dedicated to fostering a prosperous society.



President & CEO  
Masayoshi Hasegawa

## Corporate Philosophy —

### Messages from our founder

To contribute to building a sustainable society in line with MJC Mission, "Contribute widely to society with electronic measurement technology," we value the three spirits of our founder, who remains the driving force behind MJC Group's growth to date. These spirits will continue to be preserved as part of MJC's DNA and serve as unwavering beacons, guiding us like the North Star.

#### 01 We value nature's laws and principles.

To cultivate new fields and develop ourselves, the important point is not to be bound by past experience, common knowledge or conventional ideas, but to grasp the essence of things and keep up our minds focused on nature's laws and principles in our decisions, actions and thinking. What we must do is act with maturity, morality and ethics to make the right decisions and take the right actions.

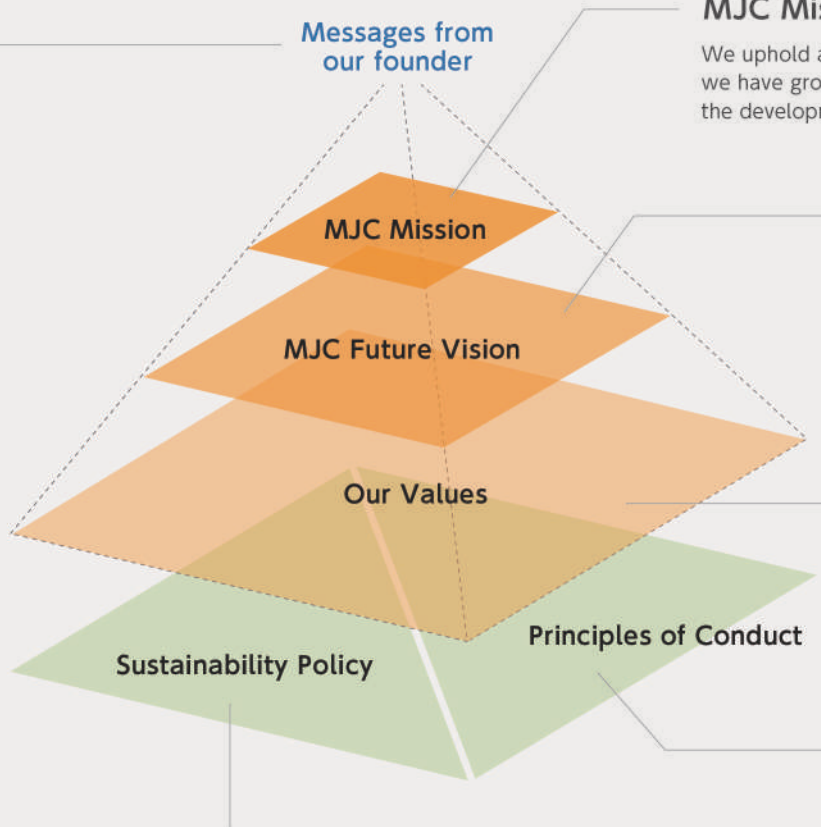
#### 02 We value the three KAN, which are defined as 観 (observation), 感 (impression), and 勘 (imagination), to pursue human resource development.

Those who are dedicated to the development of products and technology must observe carefully and know the value of admiration, impressions and excitement, and the observation and impressions that imagination has produced. This leads to human resource development. Those who are involved in developing products and techniques must always remember to observe things carefully and emphasize the admiration, excitement, and inspiration obtained by observation. Moreover, observation and excitement drive intuition and lead to self-improvement.

#### 03 We take these five steps for achievement: "Dream (or Needs)," "Foresee," "Originality," "Motivation," and "Execution."

The most important points for achievement are to make dreams come true, foresee consequences, look for originality, strive with motivation, and make efforts continuously for execution.

Messages from our founder



### MJC Mission | Contribute widely to society with electronic measurement technology

We uphold and aim to fulfil MJC Mission for our stakeholders. Since our founding, we have explored and refined our technology and we have grown as a company alongside the ever-developing field. Under this mission, we will continue striving to contribute toward the development of a more affluent society.

MJC Mission

### MJC Future Vision | MJC YOUR Best Partner, MJC Anytime Anywhere

'MJC Future Vision', which expresses our long-term aspirations, has been consolidated into this 'MJC Future Vision' which is the same name as before, however, has been updated its contents in light of changes in the business environment.

'MJC Future Vision' expresses what MJC wants to become for our diverse stakeholders; to be the perfect business partner for our stakeholders and exist as the partner of choice regardless of time or place globally. With these aspirations in mind, we can contribute to a better future.

MJC Future Vision

Our Values

### Our Values | QDCCSS + QDCCSS<sup>2.0</sup>

The QDCCSS, our foundation, was created to earn the trust and confidence of our customers, and has continued to permeate our core values over the years. Furthermore, in light of changes in the business environment and employee feedback, we have established 'QDCCSS<sup>2.0</sup>' as a new set of values for growth. With our values as the driving force for growth, we can further strive to realise 'MJC Mission' and 'MJC Future Vision'.

Sustainability Policy

Principles of Conduct

### Principles of Conduct

At MJC, to enhance the practical implementation of compliance, all officers and employees are not only familiar with the law, bylaws, internal regulations and corporate ethics, but also have created a "Compliance Handbook" that compiles points to be noted by each individual. The handbook is aimed at elevating awareness of compliance and ensuring every member is more conscientious about the guidelines.

### Sustainability Policy

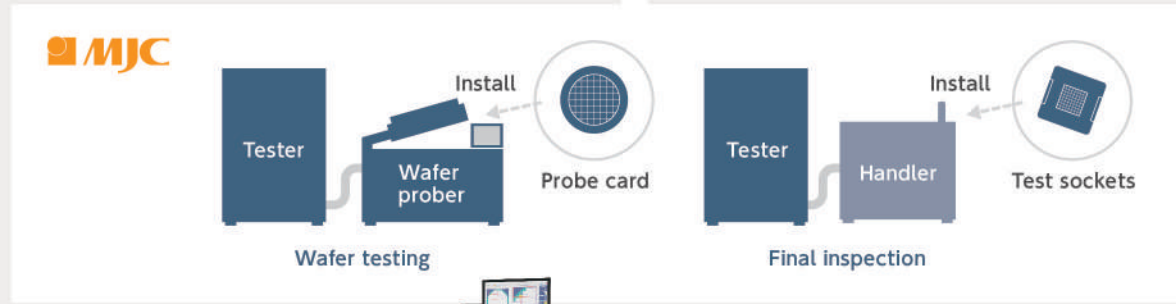
- 01 To be a company that promotes conscientious development
- 02 To be a company that is trusted by its customers
- 03 To be a company that treats the environment and society with due consideration and gratitude
- 04 To be a company where diverse and demonstrable abilities are showcased

## Semiconductor testing and MJC products —

### Contributing to semiconductors through testing

With the Internet of Things (IoT) increasing connectivity between devices, we are seeing growing demand for semiconductors and increasingly stringent performance requirements. For any semiconductor to be certified as safe and high-quality, it must have cleared the tests in the manufacturing process.

We provide reliable solutions for such semiconductor testing. In this way, we contribute to the safety and security of our semiconductor-dependent world.



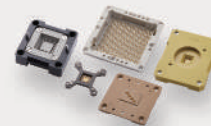
Probe card



Wafer prober



Tester

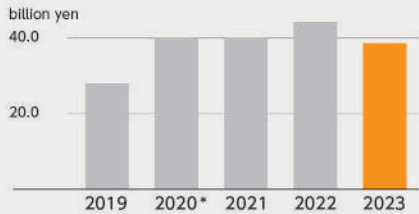


Test sockets

## MJC in numbers —

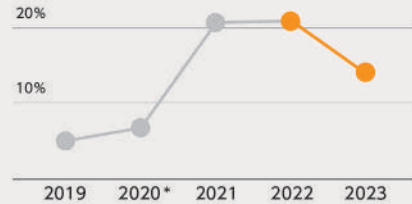
### A leader in probe cards

Net sales **38.3** billion yen



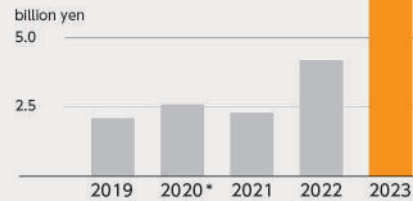
In 2023, our sales decreased slightly due to the decline in demand for semiconductors, but still remained at a high level.

Operating margin **13.9** %



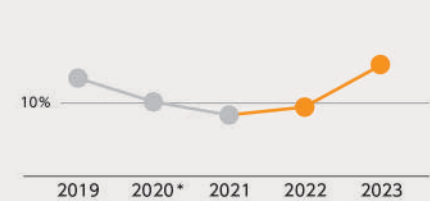
We are building a corporate structure that can generate profits regardless of market conditions by improving productivity and cost efficiency.

Capex (capital expenditure) **6** billion yen



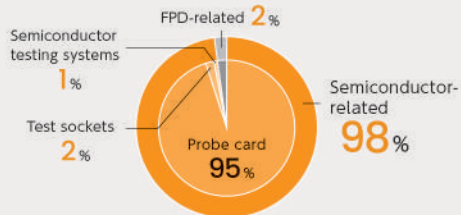
There was a significant increase in 2023 due to the construction of a new building at the Aomori factory.

Ratio of R&D expenses **Approx. 10** % annually.



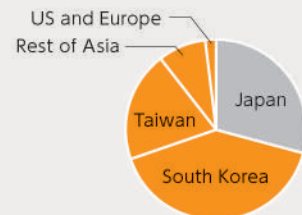
We invest around 10% of net sales back into R&D every year to aggressively develop our technologies.

Percentage of sales from semiconductor-related products **98** %



Semiconductor-related products centered on probe cards account for 98% of our sales.

Percentage of overseas sales **70** %



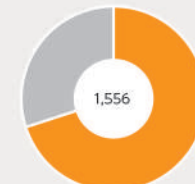
We respond to a broader range of needs using the MJC Group's network.

Global market share **1st place** for memory probe cards



1st place for memory probe cards (Created based on Technights data)

Percentage of employees working at manufacturing sites **70** %



Approximately 70% of all employees at MJC Group are active in the manufacturing field, exploring technology and continuing to refine quality.

# MJC's business lines and products

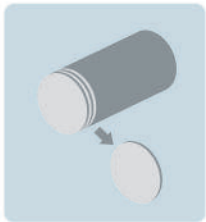
## Semiconductor-related products

### Cutting-edge product lines supporting the diverse needs of semiconductor manufacturing process

Our mainstay product is probe cards. Probe cards test the electrical properties of the integrated circuits printed on wafers. We also sell a range of other products and solutions for semiconductor manufacturing. These include wafer probers for assessing the properties of semiconductor devices, testers for weeding out suboptimal devices, and test sockets used in the final inspection of packaged semiconductors. With our advanced technology and robust supply system, we can meet all your testing needs.

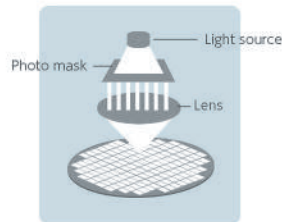
#### Semiconductor manufacturing process >>

##### 01 Wafer manufacturing



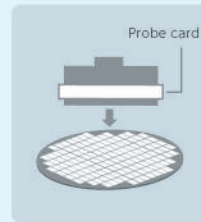
IC\* chips (semiconductors) are primarily manufactured on ultra-high purity monocrystalline silicon wafers.  
\*IC: integrated circuit

##### 02 Board wiring process



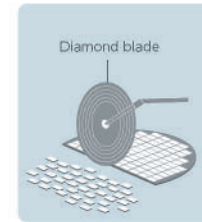
A circuit pattern is printed on the wafer and a fine electronic circuit is formed by injecting ions.

##### 03 Wafer testing



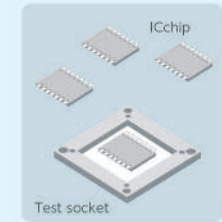
Semiconductor devices on wafers are tested for electric properties.

##### 04 Mounting and assembly process



The IC chips are cut from the wafer every few millimeters and encapsulated in a package using a resin mold.

##### 05 Final inspection



The packaged IC chip receives a rigorous inspection for performance and reliability using a Test socket.

05



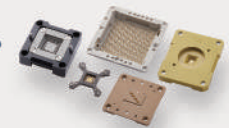
Probe cards



Wafer prober



Semiconductor testing systems (Tester)



Test sockets

FPD-related products

## FPD products contributing to superior contact performance and easy maintenance

We offer a wide variety of probe units mounted on a prober in FPD\* testing to transmit test electric signals to panels. Featuring stable contact and excellent maintenance, our probe units allow highly accurate and reliable testing as well as contribute to test cost reduction and productivity improvement.

\* FPD: flat panel display

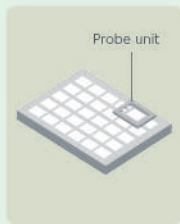
### FPD manufacturing process >>

#### 01 TFT array process



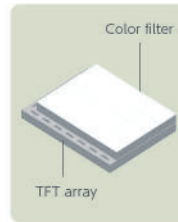
A TFT(thin-film-transistor) circuit atop a specially fabricated glass substrate is formed on the exposed surface.

#### 02 TFT array testing



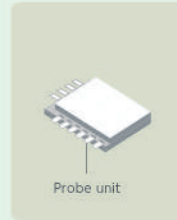
The fine TFT circuit formed on the glass substrate is tested for its electrical and optical properties.

#### 03 Cell process



The TFT array substrate and color filter substrate are attached to encapsulate the liquid crystal and complete the liquid crystal cell.

#### 04 Cell panel testing



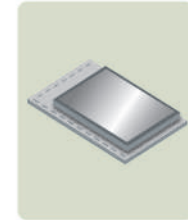
Using a probe unit, the liquid crystal cell is tested for point defects, wiring defects, and color unevenness and contrast.

#### 05 Module process testing



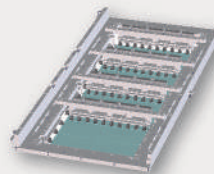
The driver IC circuit and backlight unit are attached to the cell panel that passed the testing.

#### 06 Final inspection

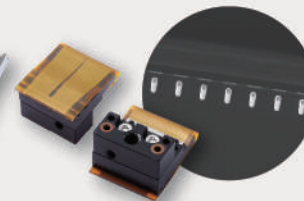


The final product undergoes a visual inspection as well as performance and durability testing.

Products



Probe unit

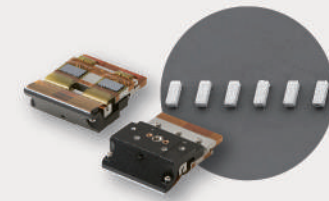


Probe block

Products



Probe unit



Probe block

## History —

since 1970

Our electronic measurement technology has played a valuable role in the semiconductor and FPD market

1970

Established as Towa Electric in Tokyo to provide maintenance services for synchroscopes, fax machines, industrial semiconductors, and vacuum test systems.



1971

Began R&D on semiconductor equipment.

1975

Changed company name to MICRONICS JAPAN CO., LTD.

1981

Opened the Hiraka Factory in Aomori.

1985

Opened the Oita Sales Office.  
Opened the New Hiraka Factory (now the Aomori Factory).  
Opened the Aomori Sales Office.  
Opened the Oita Factory.



1989

Opened an R&D center in Tokyo.

1997

Registered shares on the Japan Securities Dealers Association OTC market.  
Opened the Oita Technology Laboratory.



TFT Array Prober LP4500 came top at 2nd Advanced Display of the Year.

1999

Opened a branch office in California.

1970s

Tackling the challenges of measurement technologies and ultrafine process technologies

1980s

Established probing technologies

1990s

Explored the potential of probing technologies



## 2000

Opened the Aomori Matsuzaki Factory.

## 2003

Established a subsidiary "MJC Microelectronics (Shanghai) Co., Ltd."

Established MDK Co., Ltd. as a subsidiary in South Korea (merged with MEK Co., Ltd. in June 2011).

## 2004

Established a subsidiary "Taiwan MJC Co., Ltd."  
Listed on the JASDAQ Securities Exchange.

## 2005

Established a subsidiary "CHINA MJC CO., LTD." in Shanghai.

## 2006

Established a subsidiary "MJC Electronics Corporation" in Texas.

Established a subsidiary "MJC Techno Co., Ltd." in Tokyo. (merged in 2017)

## 2007

Established a subsidiary "MJC Europe GmbH" in Germany.

## 2008

Established a subsidiary "MEK Co., Ltd." in South Korea.



## 2010

Acquired ISO 9001 and ISO 14001 certification for all domestic factories.

## 2011

Established a subsidiary "MJC Microelectronics (Kunshan) Co., Ltd." in Jiangsu Province, China.



## 2015

Listed on the First Section of the Tokyo Stock Exchange.



## 2016

Established a subsidiary "MJC Electronics Asia Pte.Ltd." in Singapore.

## 2020

Changes the fiscal year-end from September to December.

## 2022

Changes stock market listing to the Prime Market of the Tokyo Stock Exchange following the market restructuring of the Tokyo Stock Exchange.

Unveiled new building in Aomori Factory.



## 2023

Established Sustainability Promotion Office and Sustainability Advisory Committee to drive sustainability efforts.

New factory of Korean subsidiary completed.



## 2024

Revision of Corporate Philosophy and Establishment of Sustainability Policy.

### 2000s

Levelled up and globalized MEMS technologies

### 2010s

Unveiled MJC Future Vision, a vision for further growth

### 2020s~

MJC's core technologies —

## Five core contact technologies

Contact technology involves the use of a probe to evenly and accurately contact the ultrafine pads of the device under test. Products that use this technology include probe cards, test sockets, and probe units, among others. Contact technology has underpinned MJC's sustained growth over the years, and we keep driving this technology forward.

# 01

Design  
Technology

## A design that enables high wiring density

In designing the circuit boards for our probe cards, we use our own design technique. Specifically, we make HDI boards with high-density mounting and high-density wiring. With this approach, we produce highly efficient testers that can test wafers and simultaneously make contact with numerous IC chips (semiconductors).





## 03 Industrial Science

### In-house production equipment and manufacturing processes

When making our core products, we use in-house production equipment and manufacturing processes. To deliver high quality products with short lead times, we automate the process for mounting the ultrafine probes onto boards.

We also have overseas production facilities for local in-house production, enabling us to deliver around the world with the very same quality standards.



## 05 Analysis and Evaluation

### Analysis and evaluation technologies that support the quality and evolution of probe cards

The design of probes and probe cards is an important element for determining the accuracy of electrical measurements for semiconductors. MJC leverages long-standing analysis technologies using computer simulators that strictly evaluate and check product design for transmission circuits, together with the testing environment, ensuring the highest level of quality and performance.

## 02 Design and Manufacturing Technology

### Proprietary MEMS\* design and manufacturing technology meeting the need for ultrafine semiconductors

MJC designs and manufactures prober pins, ultrafine contact elements on probe cards, with proprietary MEMS technology.

MEMS are tiny devices made up of sensors, actuators, and digital circuits placed atop a silicon or plastic substrate.

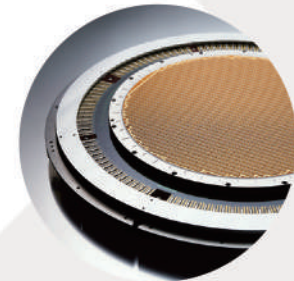
\* MEMS: micro electro mechanical systems



## 04 Wiring Technology

### Thin-film multilayer wiring technology for testing an entire 300 mm wafer with one touchdown

A ceramic thin-film multilayer wiring substrate has a multilayered structure consisted of thin films with ultrafine circuits on top of a ceramic substrate. MJC successfully developed the large burned ceramic substrate and the technology of high-density thin-film multilayer wiring, and eventually became the first company in the world to supply probe cards that test entire 300 mm wafer with one touchdown, which was once considered challenging to develop.



Together with our stakeholders —

## Engaging in a range of activities aimed at sustainable growth

Environment

### Environmentally friendly initiatives

MJC is committed to environmental sustainability. We continually strive to reduce waste, promote recycling and ensure proper management of chemical substances. On the production sites, we are working to improve production processes and reduce production losses by promoting efficient manufacturing with energy conservation in mind.

Our Aomori factory treats its wastewater using coagulation and sedimentation. Since gold and other precious metals are used in the production of probe cards, the factory collects metals from the wastewater and recycles them.



Society

### Local Community Activities

In order for us to continue our business activities, it is essential that we live in harmony with the local community. MJC strengthens its affinity with local communities through a variety of activities. At Aomori factory, besides employees volunteering to take part in cleanup activities, they also participate in the Hirakawa Neputa Festival, and together with members of the local community to make the festival a great success. In addition, all our sites in Japan are equipped with AEDs (automated external defibrillators) that can be used by local residents. Furthermore, each factory cooperates with the Japanese Red Cross Society and regularly organizes blood donations.



## Promoting HR development and work-life balance

A company's workforce is its greatest asset and the driving force behind competitiveness. MJC has established training and education programs enabling the growth of all employees including training for newly hired employees, technical training, and various English language programs to develop globally-minded personnel.

Furthermore, we take steps to foster the next generation of employees and to ensure current employees are always in the right position by carrying out career planning surveys and individual interviews in every department.

In addition, we encourage work-life balance and provide employee-friendly, comfortable workplaces so that our employees are motivated and committed. We offer several programs tailored to the life stage of our employees.

These include a childcare and family care leave program and a reduced working hour program, which help support employees balancing childcare/nursing care and work. We also offer "refresh leave" (sabbatical leave) for employees with over 15 years of service.

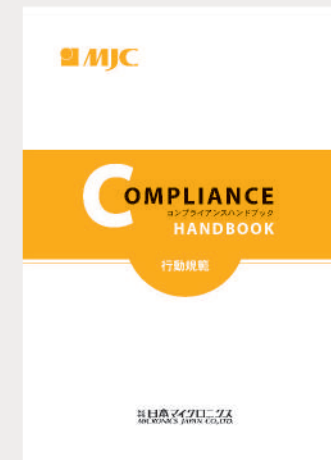


## Organization for corporate governance and compliance

We are committed to building robust corporate governance, which is crucial to establishing long-term value and fulfilling our corporate responsibility. As part of this, we work to ensure propriety and transparency in management decision-making. We also recognize the importance of having effective board oversight of the management. Accordingly, we have implemented a basic policy on internal controls to help members of the Board of Directors and the Audit & Supervisory Committee discharge their oversight role.

Our commitment to compliance extends across the wider corporate group. MJC's Corporate Audit Office organizes internal audits of subsidiaries to ensure they meet our compliance standards. We also hold meetings with subsidiaries to coordinate a unified approach to information and crisis management and to improve business efficiency.

We work to instill a compliance culture across our corporate group, so that all employees, from corporate officers to frontline staff, adhere to ethical standards as well as to legal requirements. As part of this, we issue every employee with a handbook outlining the compliance-related rules and standards we require them to uphold. Additionally, employees attend webinars and other training events led by outside instructors.



## MJC Group's Global Network —

We established an extensive network all over the world.

### Overseas locations

**MJC Electronics Corporation**  
11004 Metric Blvd. Austin, TX 78758, U.S.A.

**MJC Europe GmbH**  
Bodenseestrasse 217, 81243 Munich, Germany

**MEK Co., Ltd.**  
28, Sinheung-ro 446beon-gil, Ojeong-gu, Bucheon-si,  
Gyeonggi-do, 14452, Republic of Korea

**MJC Electronics Asia Pte. Ltd.**  
60 Paya Lebar Road #10-54 Paya Lebar Square, Singapore 409051

**MJC Microelectronics (Kunshan) Co., Ltd.**  
No.6 Dexin Road, Zhangpu Town, Kunshan City, Jiangsu Province,  
215321, China

**CHINA MJC CO., LTD.**  
701 Room, 7th Floor, No.1733, Lianhua Road, Minghang District,  
Shanghai, 201103, China

**Taiwan MJC Co., Ltd.**  
No.36, Sec. 2, Huanbei Rd., Zhubei City, Hsinchu County 30265, Taiwan

### Europe

MJC Europe GmbH



### China

MJC Microelectronics  
(Kunshan) Co., Ltd.



CHINA MJC CO., LTD.



### South Korea

MEK Co., Ltd.



### Taiwan

Taiwan MJC Co., Ltd.



### Southeast Asia

MJC Electronics Asia Pte. Ltd.





## North America

MJC Electronics Corporation



PC

PC business : probe cards

TE

TE(test equipment) business :  
semiconductor testers & probers, test sockets, probe unit

## Japan

MICRONICS JAPAN CO., LTD.



### Domestic Locations

#### Headquarters/Sales Offices

##### Headquarters

2-6-8 Kichijoji Hon-cho, Musashino-shi,  
Tokyo 180-8508, Japan  
Tel: +81-422-21-2665

##### Aomori Sales Office

571-2 Machii Minamida, Hirakawa-shi,  
Aomori 036-0114, Japan  
Tel: +81-172-44-8546

##### Oita Sales Office

2-5-1 Takae-Nishi, Oita-shi, Oita 870-1117,  
Japan  
Tel: +81-97-596-7703

#### Factories

##### Aomori Factory

571-2 Machii Minamida, Hirakawa-shi,  
Aomori 036-0114, Japan  
Tel: +81-172-44-7277

##### Aomori Matsuzaki Factory

41-1 Matsuzaki Nishida, Hirakawa-shi,  
Aomori 036-0164, Japan  
Tel: +81-172-43-0060

##### Oita Technology Laboratory

2-5-1 Takae-Nishi, Oita-shi, Oita 870-1117,  
Japan  
Tel: +81-97-596-7220



Company Name	MICRONICS JAPAN CO., LTD.
Established	November 2, 1970
Headquarters	2-6-8 Kichijoji Hon-cho, Musashino-shi, Tokyo 180-8508, Japan Tel: +81-422-21-2665
Businesses	Development, manufacturing, and sales of semiconductor testing equipment and semiconductor/LCD testing systems
Paid-in Capital	¥5,018 million
Number of Employees	1,147
Number of Group Employees	1,556

As of Dec. 31, 2023



[www.mjc.co.jp/en](http://www.mjc.co.jp/en)