

Message from the president

Micronics Japan is helping to make society brighter and safer using QDCCSS as a guideline for manufacturing.

Continuing to support the semiconductor industry

We live in a world surrounded by electronics. Communication tools such as smartphones and tablet devices have evolved quickly, particularly in recent years, making it possible for people to stay connected regardless of the distance between them. Semiconductors such as processors, memory, and sensors have made this technically possible. Recently a wider variety of semiconductors is being used in various applications such as automobiles, industrial equipment, and home electronics. These developments, coupled with advancements in artificial intelligence (AI) and communications (5G), have set the stage for a major transformation of our lives and industry. Accordingly, there will be growing importance placed on the testing process underpinning the quality of semiconductors.

Since 1970, Micronics Japan has proposed and provided advanced test solutions for semiconductors and FPDs (flatpanel displays), which has been the source of our steady

growth. As a result, we have established a world-leading position in the probe card segment and we deliver high value-added equipment and services for semiconductors and FPDs testing system. The driving force behind our sustained growth has been our corporate culture that values nature's laws and principles, along with our proprietary integrated management system called QDCCSS. This system in particular has enabled us to earn the trust of customers by continually improving and restructuring processes in six areas: quality, delivery, cost, compliance, service, and safety. QDCCSS is understood and practiced by our employees today as a core aspect of our corporate culture.

Achieving the MJC Future Vision

In November 2017, Micronics Japan formulated and released MJC Future Vision, our view on the future of the company, as well as the basic policies and key strategies needed to get us there. The MJC Future Vision calls for contributing to a brighter society by providing safe and reliable solutions to markets, while improving competitiveness in quality and delivery by further promoting QDCCSS.

To achieve the MJC Future Vision, we will further expand the use of QDCCSS, while at the same time we will use our long-standing advanced technology and expertise to contribute to a brighter society.



Masayoshi Hasegawa, President

Corporate philosophy

Management Philosophy

Contribute widely to society with electronic measurement technology.

Management Policy

- 1. Provide the best benefit for customers with accumulated technology and production expertise.
- 2. Pursue the establishment of new technology to focus continuously on development.
- 3. All of our employees must achieve self-realization by building up a creative corporate culture.
- 4. Unite all the employees' abilities to enhance and improve our QDCCSS.

Keystones

1. 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.

2. We value the three *KAN*s, 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.

3. 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.

MJC Future Vision

Our Vision for the Future

We intend to boost competitiveness for quality and delivery by further promoting our QDCCSS, thus enabling us to make further technology advancements and contribute to a more prosperous society.

Basic Policy

- 1. Constantly pursue technological innovation as a leading company, creating new and unrivaled value.
- 2. Secure stable earnings resistant to market changes by developing and expanding sales of products that meet customer needs.
- ${\it 3. Continually take on challenges for new markets.}\\$
- 4. Develop human resources suited for a truly global company.

QDCCSS



Utilizing proprietary concepts from development to materials procurement, manufacturing, and management

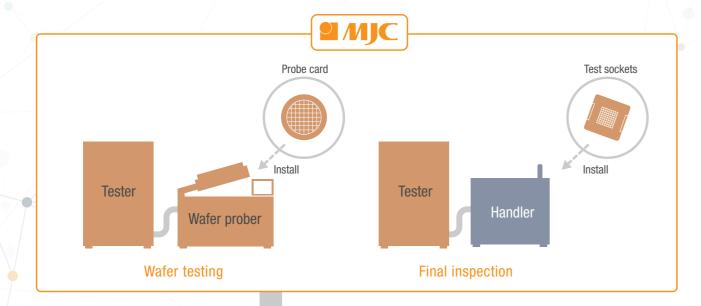
MJC recognizes the importance of earning customer trust. This is why we developed a proprietary integrated management system, QDCCSS, for all aspects of the manufacturing process, from development to manufacturing, materials procurement, management and systems development. The six key activity themes of QDCCSS ensure continual improvements and reform.

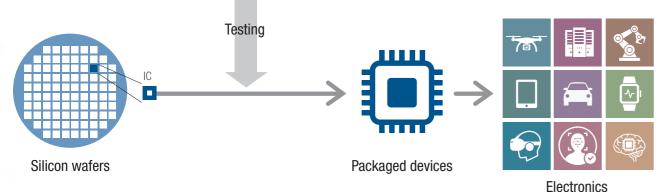
Semiconductor testing and MJC products

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.

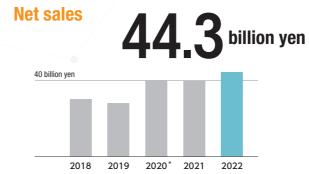






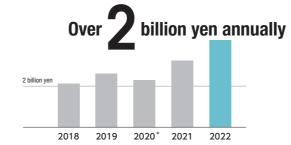
MJC in numbers

A leader in probe cards



While maintaining superiority in memory probe cards, we continue to expand our business lines into logic probe cards and equipment.

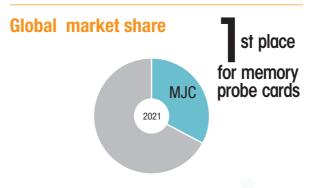
Capex (capital expenditure)



We strive to increase productivity through continuous capex spending.

Percentage of sales from semiconductor-related products Semiconductor testing systems 3% Test sockets 3% Probe cards 91% Semiconductor-related

products centered on probe cards account for 97% of our sales.

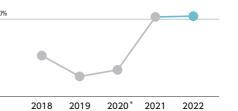


We continue to maintain product superiority and high market share as a leader in probe cards.

* Created based on TechInsights data

Operating margin

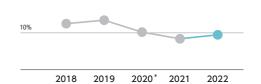
20.8%



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

Ratio of R&D expenses





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

Percentage of overseas sales



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

History

53 years since establishment



MJC has grown through the continual pursuit of technological innovation tied to advancements in electronics since establishment in 1970.

 * In 2020, due to the change in the accounting period, the results for 15 months from October 2019 are posted.

* Fiscal year ended December 2022

MJC's business lines and products

Our testing solutions use the very latest tech nology to satisfy your requirements

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

Semiconductorrelated products

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

Wafer manufacturing



primarily manufactured on ultra-high purity monocrystalline silicon wafers

* IC: integrated circuit

2

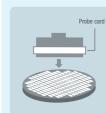
Board wiring



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

3

Wafer testing



Semiconductor devices on

properties.

wafers are tested for electric

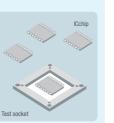
Mounting and



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

5

Final inspection



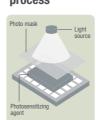
The packaged IC chip receives a rigorous inspection for performance and reliability using a test socket.

FPD manufacturing process

TFT array

FPD-related

products



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

2

TFT array



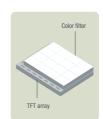
The fine TFT circuit formed on the glass substrate is tested for its electrical and optical properties

3

FPD products contributing to superior contact performance and easy maintenance

as well as contribute to test cost reduction and productivity improvement.

Cell process



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

5

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

4

Cell panel

Using a probe unit, the

liquid crystal cell is tested

for point defects, wiring

uneveness and contrast.

defects, and color

Module process ·

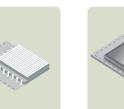


to the cell panel that passed the testing.

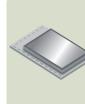
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Final inspection

* FPD: flat panel display



The driver IC circuit and backlight unit are attached



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

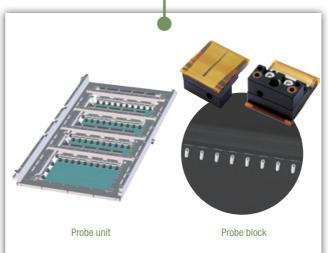
Products

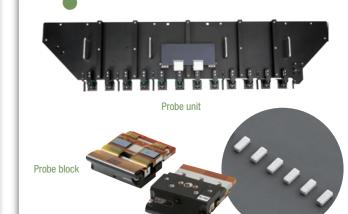






Products





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

1970s

Tackling the challenges of measurement technologies and ultrafine process technologies

1980s

stablished probing technologies

1990s

Explored the potential oprobing technology

2000s

evelled up and globalized MEMS tech

2010s

Unveiled MJC Future Vision, a vision for further growth

2020s~

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. (MJC).

1981

Opened the Hiraka Factory in Aomori Prefecture.



1985

Opened the New Hiraka Factory (now the Aomori Factory) in Aomori Prefecture.

Opened the Aomori Sales Office.

Opened the Oita Factory in Oita City.

1989

Opened an R&D center in Tokyo.

1997

Registered shares on the Japan Securities Dealers Association OTC market.

Opened the Oita Technology Laboratory in Oita Prefecture.



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

1999

Opened a branch office in California.

2000

Opened the Aomori Matsuzaki Factory in Aomori Prefecture.

2003

Established a subsidiary in Shanghai.

2004

Established a subsidiary in Taiwan.

Listed on the JASDAQ Securities Exchange.

2005

Established a subsidiary in Shanghai.

2006

Established a subsidiary in Texas.

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

2007

Established a subsidiary in Germany.

2008

Established a subsidiary in South Korea.



2010

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

2011

Established a subsidiary in Jiangsu Province, China.



2015

Listed on the First Section of the Tokyo Stock Exchange.



2016

Established a subsidiary 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 plants in Aomori Factory and a subsidiary in South Korea.





2023

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

since 1970

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.

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

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.



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).

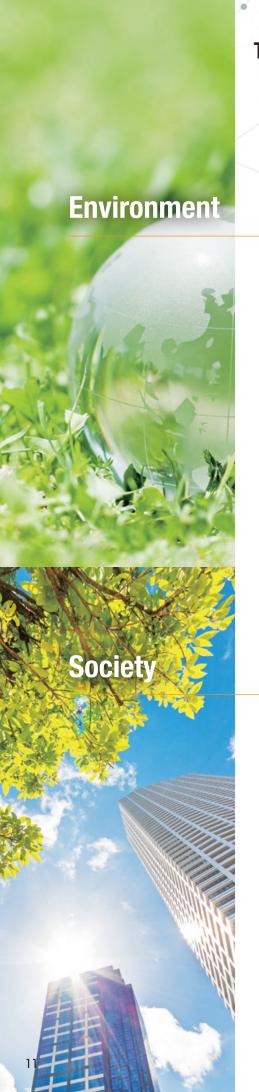
In-house production equipment and manufacturing processes

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.

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.

9



Together with our stakeholders

Engaging in a range of activities aimed at sustainable growth

Environmentally friendly initiatives

MJC is committed to environmental sustainability. We continually strive to reduce waste, promote recycling, and ensure proper management of chemical substances. Our production sites have set targets for reducing carbon emissions and have launched initiatives for improving production processes and reducing production loss.

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

Designated as a specified business under the Act on Rationalizing Energy Use,*1 we work to reduce energy consumption per unit*2 among our businesses in Japan by at least 1% a year.

Energy usage

Overall energy use (kl)

Over the five years since 2017, we have cut the consumption per unit of production by 8.9% a year on average.



Associated officer treatment auto

- *1 Energy Conservation Act; Act on the Rational Use. Etc. of Energy
- *2 Energy consumption per unit: representative figure of energy efficiency. The lower this figure, the more efficient the production, saving energy and contributing to efforts against global warming. (MJC is continually tracking its energy consumption against production figures.)

Partnering with local communities through various activities

Collaboration and co-existence with the local community are vital for the sustainability of companies. We work closely with local communities through various activities. Employees at the Aomori plant engage with the local community by volunteering their time for a community clean-up campaign and attending the Hirakawa Neputa Festival.

Our workplaces in Japan are equipped with automated external defibrillators (AEDs), which are accessible to locals as well as employees. In another example of community contribution, employees in production sites donate blood as a group.



Cooperation with group blood donation



Hirakawa Neputa Festival

Organization for corporate governance and compliance

We are committed to building robust corporate governance, which is crucial to building 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 established 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.



Compliance handbook

Promoting HR development and work-life balance

Human resources (employees) are a company's greatest assets 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 human resources. Furthermore, we take steps to foster the next generation of human resources and to ensure that our employees are always in the right position through 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 people are motivated and committed. We offer a number of 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 a program for employees to use expired paid leave if they require long-term medical treatment, as well as "refreshed" leave for employees with over 15 years of service.

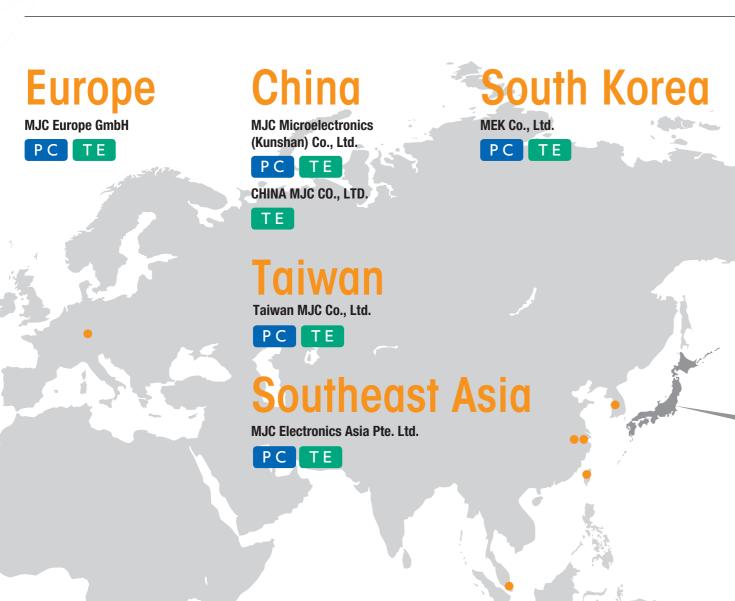


echnical training

HR Development



We established an extensive network of four domestic and seven overseas offices



MICRONICS JAPAN CO., LTD.





Sales Offices

Aomori Sales Office Oita Sales Office

Factories/Laboratory

Aomori Factory Aomori Matsuzaki Factory Oita Technology Laboratory



North America

MJC Electronics Corporation



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



Domestic locations

Headquarters/Sales Offices

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

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/Laboratory

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

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 (main number)

Overseas locations

MJC Electronics Corporation

11004 Metric Blvd. Austin, TX 78758, U.S.A.

MJC Europe GmbH

Guenzenhausener Str. 25, 85386 Eching, Germany

MEK Co., Ltd.

68, Samjak-ro 143beon-gil, 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

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Established November 2, 1970

Headquarters 2-6-8 Kichijoji Hon-cho, Musashino-shi,

Tokyo 180-8508, Japan

Tel: +81-422-21-2665 (main number)

Businesses Development, manufacturing, and sales of semiconductor

testing equipment and semiconductor/LCD testing systems

Paid-in Capital ¥5,018 million

Number of Employees 1,118

Number of Group Employees 1,527

As of Dec. 31, 2022



www.mjc.co.jp/en