

# Contribute to **5G** society

 **MEC COMPANY LTD.**

Securities code: 4971

March 23, 2024



Note : This document has been translated from the Japanese original for reference purposes only. In the event of any discrepancy between this translated document and the Japanese original, the original shall prevail.



# FYE12/2023 Summary

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## Business environment

In fiscal 2023, although inventory adjustments for PCs, smartphones, displays, tablet PCs, etc. have run their course, demand for electronic devices will remain weak against the backdrop of weak personal consumption. Data centers, which were performing well until Q3 2022, prioritized investment in cutting-edge fields over traditional fields due to limited budgets.

## Summary of financial results

### **YoY decrease in sales and profits**

Sales and profits decreased due to the business environment. Although the market bottomed out in Q1 2023 and has been on a recovery trend, the degree of recovery has been slow.

## Major chemical

CZ : Down Weak demand for related electronic equipment.

V-Bond : Down Although there are signs of recovery in automobile production, it is still affected by smartphones.

EXE : Increase Completed inventory adjustments for relate electronic equipment.

SF : Down Weak demand for related electronic equipment.

# FYE12/2023 Results

Unit : million yen

|                         | FYE12.2022 | FYE12.2023 |         |        |
|-------------------------|------------|------------|---------|--------|
|                         | Results    | Results    | YOY (%) |        |
| Net sales               | 16,329     | 14,020     | -2,309  | -14.1% |
| Chemical sales          | 16,042     | 13,764     | -2,277  | -14.2% |
| Operating income        | 4,004      | 2,492      | -1,511  | -37.7% |
| Operating profit margin | 24.5%      | 17.8%      | -6.7ppt | -      |
| Ordinary income         | 4,246      | 2,683      | -1,563  | -36.8% |
| Ordinary profit margin  | 26.0%      | 19.1%      | -6.9ppt | -      |
| Net income              | 3,064      | 2,304      | -759    | -24.8% |
| Net income per share    | 161.22     | 122.29     | -       | -      |

# FYE12/2024 Forecast

|                              | FYE12/2024              |                        |                      |                         |                        |                      |
|------------------------------|-------------------------|------------------------|----------------------|-------------------------|------------------------|----------------------|
|                              | 1H                      |                        |                      | Full-year               |                        |                      |
|                              | Amount<br>(million yen) | Profit<br>ratio<br>(%) | YOY<br>change<br>(%) | Amount<br>(million yen) | Profit<br>ratio<br>(%) | YOY<br>change<br>(%) |
| Net sales                    | 7,850                   | -                      | 26.6                 | 16,300                  | -                      | 16.3                 |
| Operating income             | 1,300                   | 16.6                   | 55.0                 | 3,000                   | 18.4                   | 20.3                 |
| Ordinary income              | 1,350                   | 17.2                   | 34.6                 | 3,100                   | 19.0                   | 15.5                 |
| Net income                   | 950                     | 12.1                   | -11.7                | 2,150                   | 13.2                   | -6.7                 |
| Net income per<br>share(yen) | 50.73                   | -                      | -                    | 114.82                  | -                      | -                    |

In the first half of FY2023, special profits have been recorded due to the transfer of land and buildings at the Nishinomiya factory.(549 million yen)

# Corporate profile

(As of December 31, 2023)

|                               |   |
|-------------------------------|---|
| <b>Company name</b>           | MEC COMPANY LTD.  |
| <b>Head quarters location</b> | 3-4-1, Kuise Minamishimmachi, Amagasaki, Hyogo 660-0822, JAPAN  |
| <b>Date of establishment</b>  | May 1, 1969   |
| <b>Business activities</b>    | R&D, production and sales of chemicals, equipment and related materials used in the production of PCBs and electronic components. |
| <b>Presentative</b>           | President and CEO Kazuo Maeda   |
| <b>Capital</b>                | 594,142,400 JPY   |
| <b>Net sales</b>              | 14,020 million JPY (Consolidated)   |
| <b>Stock listing</b>          | Tokyo Stock Exchange Prime Market<br>Securities code: 4971  |
| <b>Number of employees</b>    | 454 persons (Consolidated)<br>263 persons (Non-consolidated)  |



# Shareholder composition (number of shares owned)

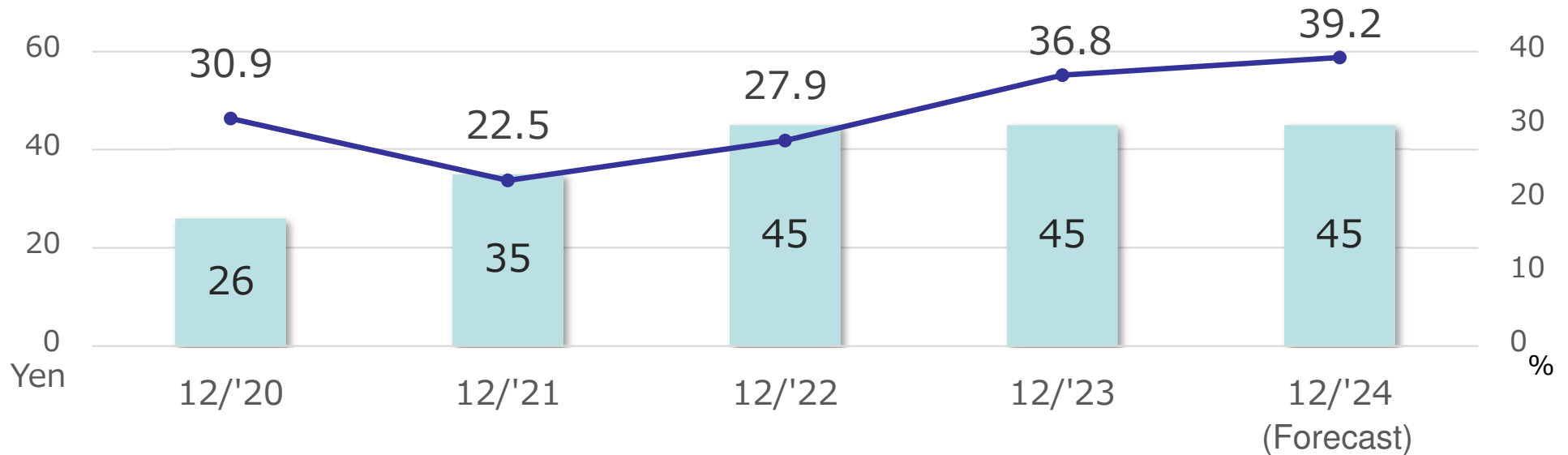
|                               | Jun. 2022 | %    | Dec. 2022 | %    | Jun. 2023 | %    | Dec. 2023 | %    |
|-------------------------------|-----------|------|-----------|------|-----------|------|-----------|------|
| <b>Individuals</b>            | 5,705,803 | 28.4 | 7,411,266 | 36.9 | 5,139,472 | 25.6 | 5,551,958 | 27.7 |
| <b>financial institutions</b> | 7,028,129 | 35.0 | 6,052,129 | 30.2 | 7,682,329 | 38.3 | 6,466,029 | 32.2 |
| <b>domestic corporations</b>  | 1,625,306 | 8.1  | 1,642,663 | 8.2  | 1,633,196 | 8.1  | 1,605,916 | 8.0  |
| <b>foreign corporations</b>   | 4,163,540 | 20.7 | 3,736,113 | 18.6 | 3,807,883 | 19.0 | 4,841,354 | 24.1 |
| <b>securities companies</b>   | 652,542   | 3.3  | 333,107   | 1.7  | 626,371   | 3.1  | 423,924   | 2.1  |

\*% is rounded to the second decimal place.

\*Does not include treasury stock.

# Trends in Total Dividends, Consolidated Dividend Payout Ratio

Medium-term goal(consolidated payout ratio): 30%



## Acquisition of treasury stock

- Jun. 2023 286,000 shares
- Dec. 2018 200,000 shares
- Mar. 2017 200,000 shares
- Mar. 2016 140,000 shares
- Nov. 2015 500,000 shares
- Feb. 2009 300,000 shares

## Shareholder benefits

100 or more shares QUO CARD 1,000 Yen  
 1,000 or more shares QUO CARD 2,000 Yen  
 ※Target shareholders who own 100 or more shares (1 unit) of the Company's stock listed or recorded in the shareholder register as of December 31 of each year



# Motto, Management Philosophy

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***Enjoy your work***

**Visionary Technology**

**Reliable Quality**

**Meticulous Service**

The MEC group will contribute to the creation of a prosperous and diverse society and sustainable environment, inspired by an unconventional approach based on the principles of "Visionary Technology", "Reliable Quality" and "Meticulous Service", thereby creating and fostering value at various interfaces through our global activities.



# What is MEC ?

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MEC develops and sells chemicals used in the manufacture of printed circuit boards and parts.



Melt the surface of metal (Mainly copper) and add value.



Exclusive share in the process of melting copper for organic package substrates.



Approximately 10% of consolidated sales are invested in R&D, and R&D personnel are 1/3 of non-consolidated employees.



We can provide products of the same quality at any production site around the world.



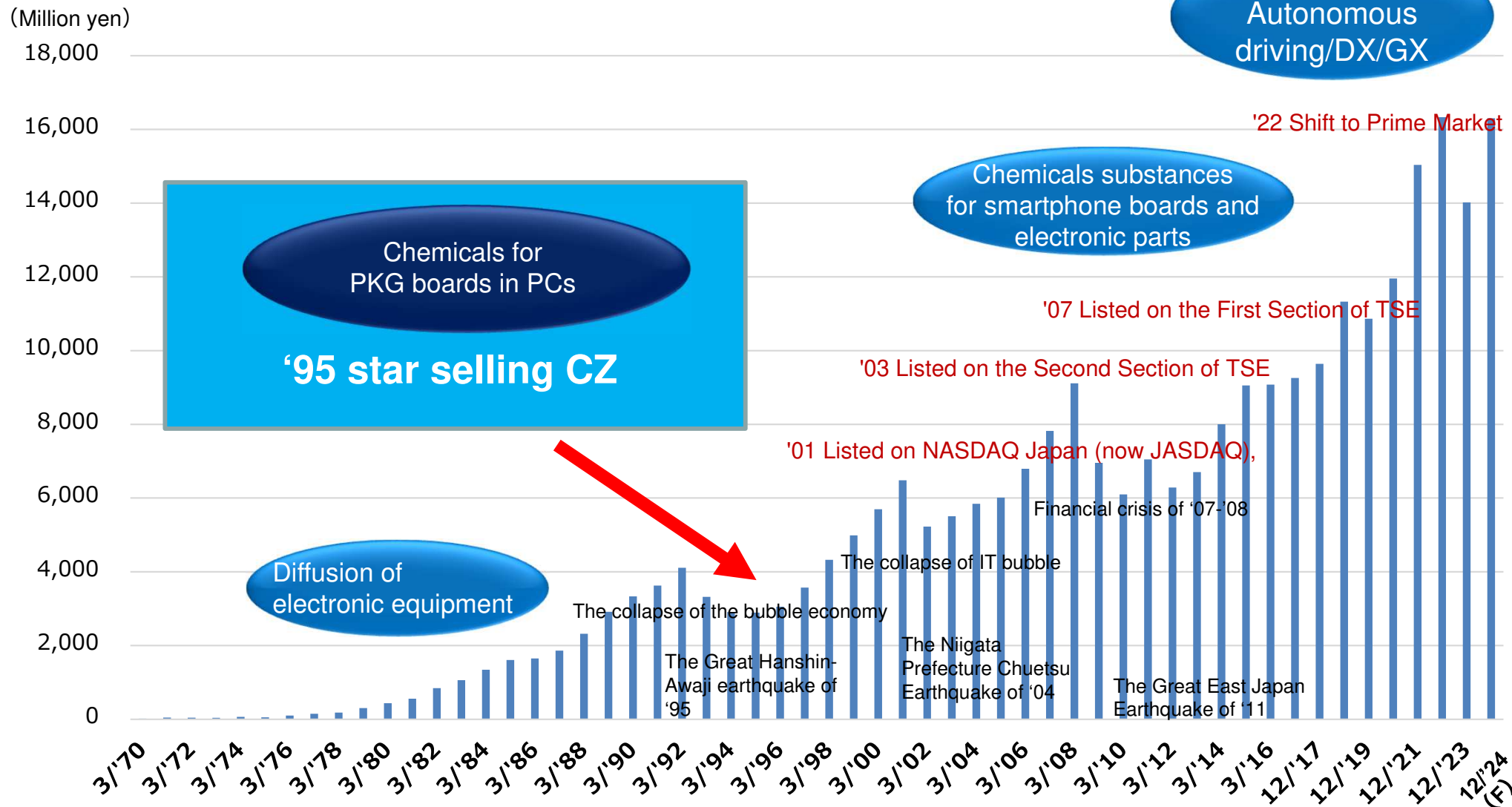
**It's not a substrate manufacturer  
It doesn't carry out plating**



# MEC Sales Trend

'69 Started as a chemical technology consulting company in Kita-ku, Osaka

'70 Started manufacturing chemicals for electronic substrates



# Bases

● Overseas



Factory



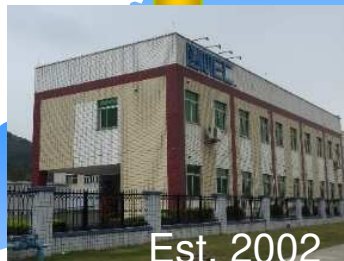
Est. 1992

**MEC EUROPE [Belgium]**



Est. 2001

**MEC SUZHOU**



Est. 2002

**MEC ZHUHAI**



Est. 2017

**MEC THAILAND**



Est. 1990

**MEC TAIWAN**

● MEC (Japan)

**MEC HONG KONG**



2017~

● **Head office (Amagasaki) (Amagasaki, Hyogo)**  
R&D center and Amagasaki factory



2020~

● **Head office (Higashi-hatsushima) (Amagasaki, Hyogo)**  
R&D center



1993~

● **Nagaoka factory (Nagaoka, Niigata)**

● **Sales office (Tachikawa, Tokyo)**  
1974年~

(Image)



**Kitakyushu factory (Kitakyushu, Fukuoka)**  
Scheduled to operate in 2025



# MEC's Chemicals Bring Abundance into Life



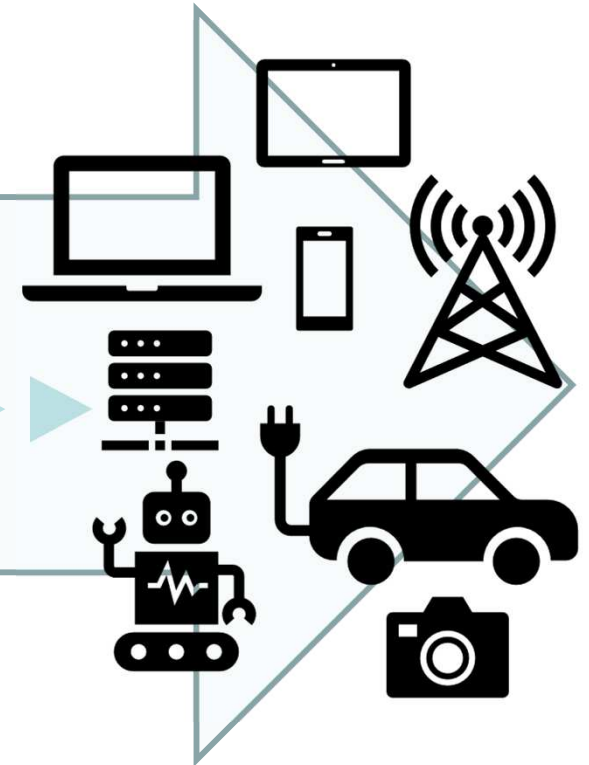
Recipe from R&D



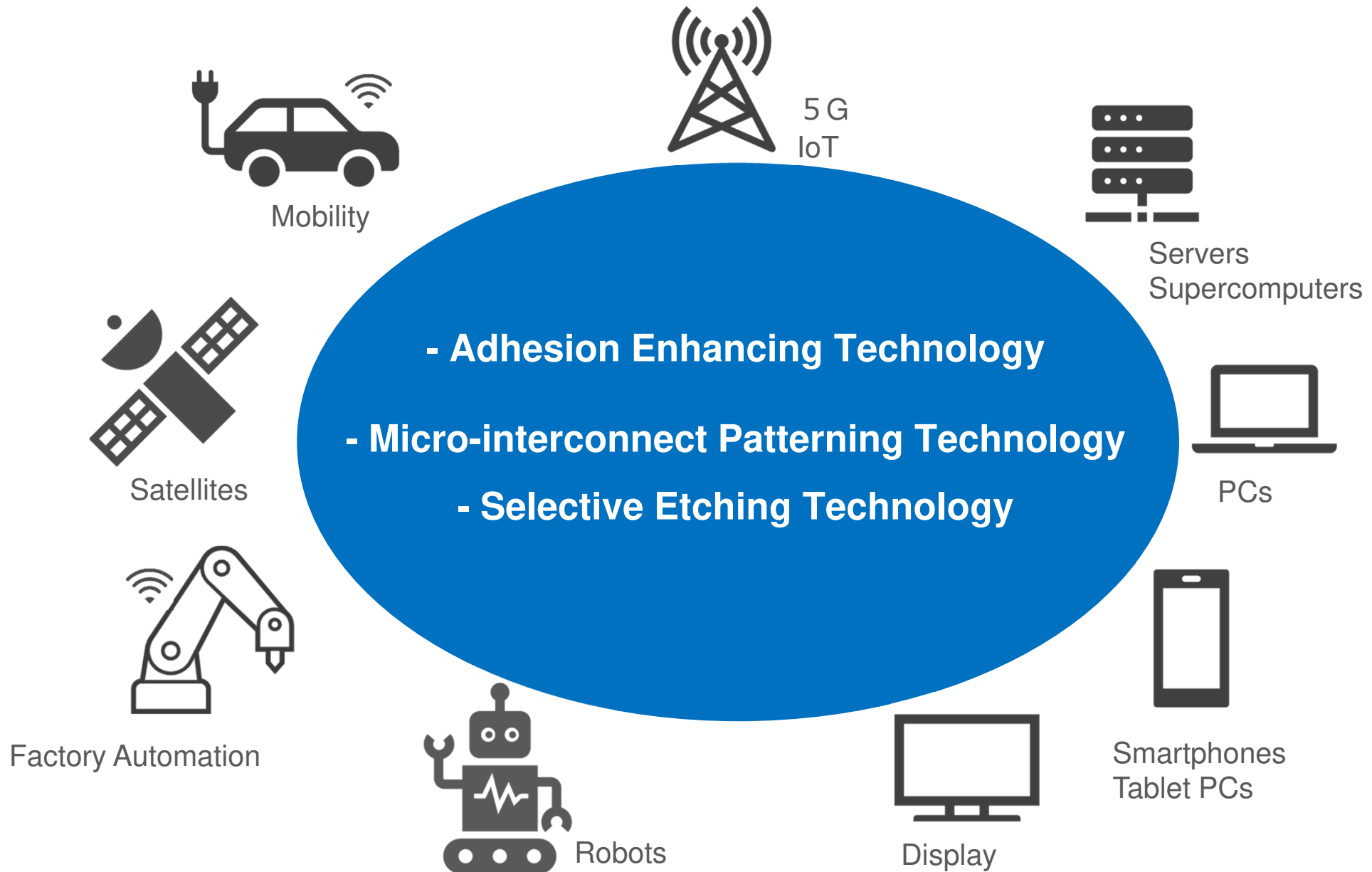
Products made by MEC



PCBs manufactures  
Parts manufactures

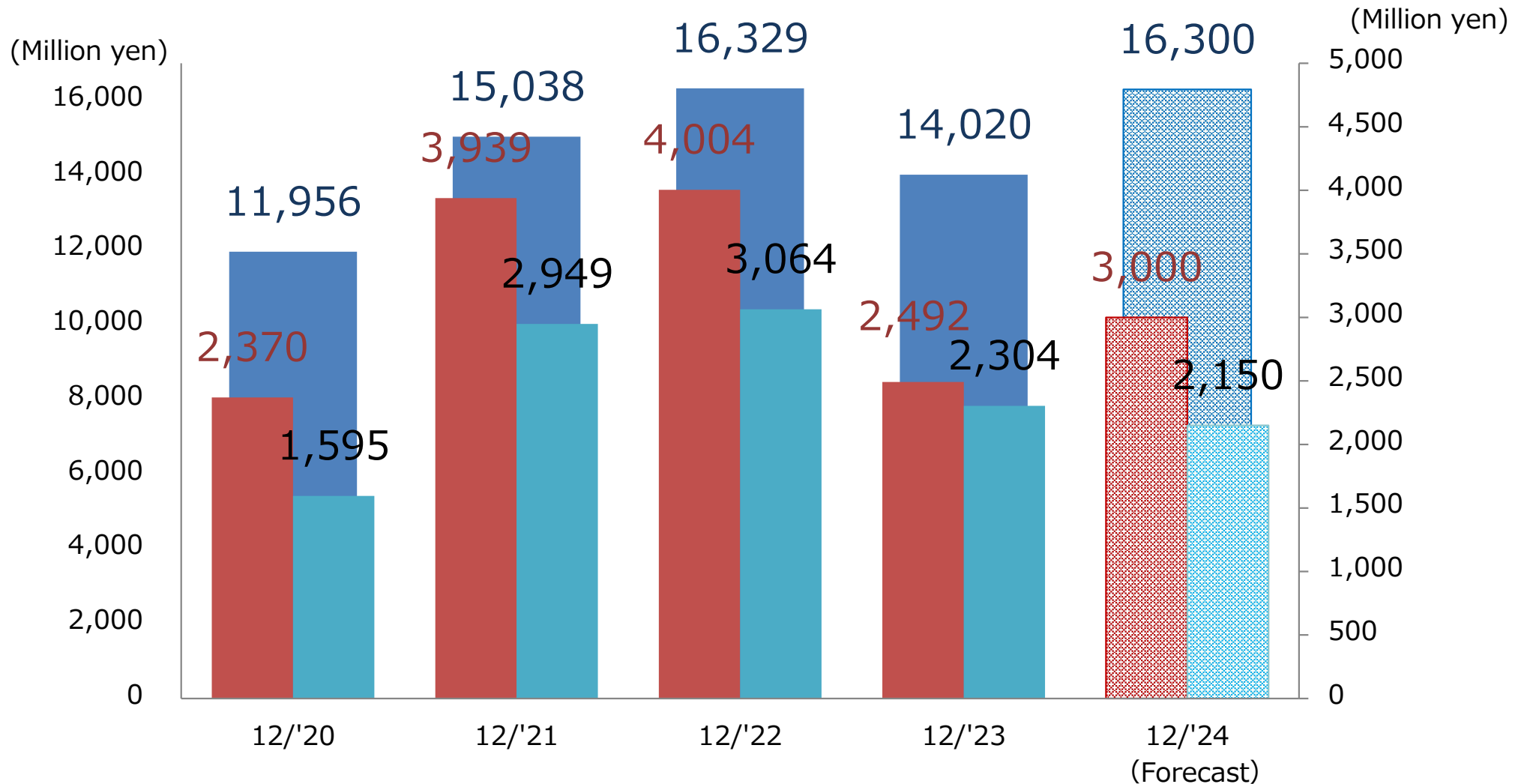


# Fields where MEC can Play an Active Role



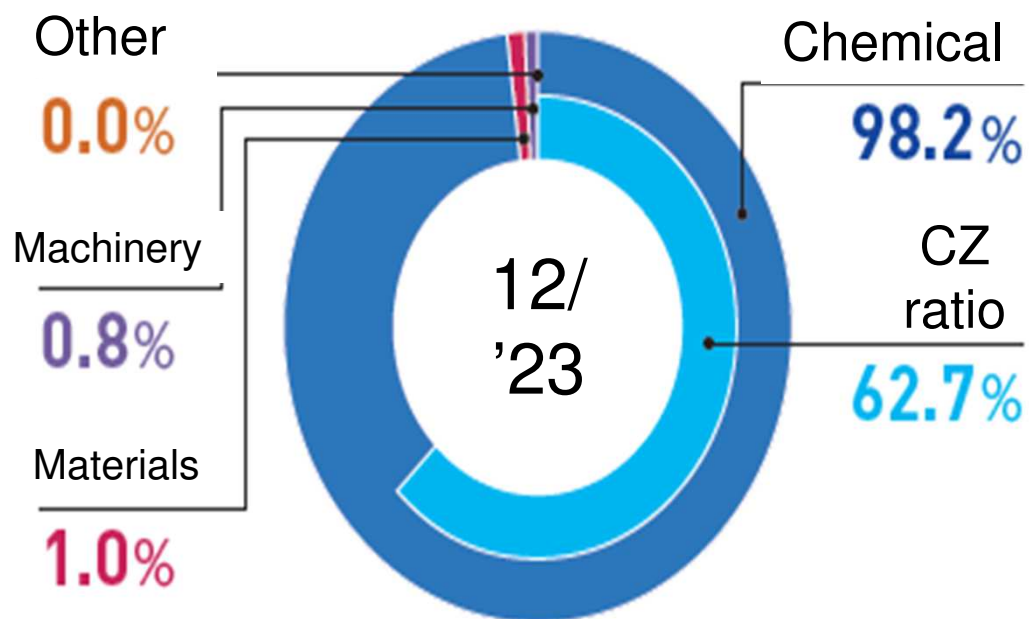
# Consolidated full-year performance trends

■ Net Sales ■ Operating Income ■ Net Profit

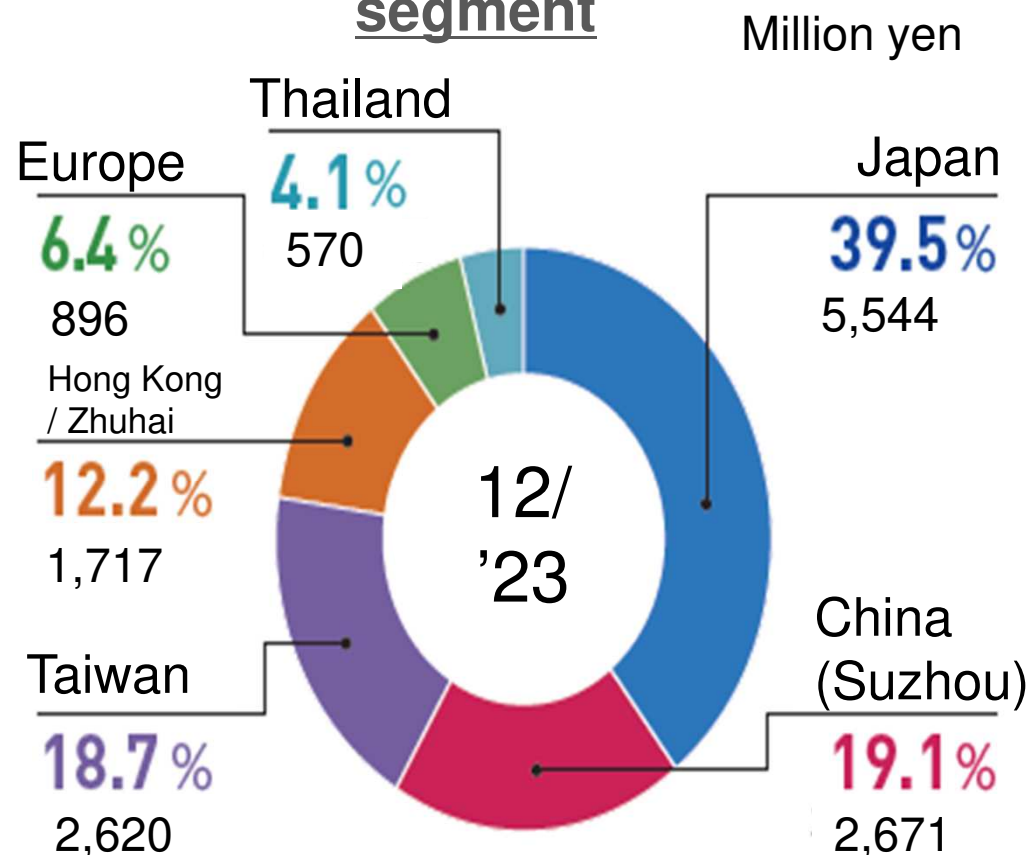


# Sales composition

Percentage of sales by item



Sales and ratio by regional segment



# Growth keywords and steps to sales expansion

## 5G

- Generations of communication methods

## IoT · AI

- Everything is connected to the internet and artificial intelligence is applied to information processing

## Vehicle

- Driving assist system
- EV(Electric Vehicle)

Increase in global demand for semiconductors

Huge investment by semiconductor manufacturers

Huge investment by PKG board manufacturer

Sales expansion for MEC



# The New Factory



Location: 10 Koyomachi, Wakamatsu-ku, Kitakyushu City, Fukuoka Prefecture

Site area : 29,889 m<sup>2</sup>

Start of construction: April 2024 (planned)

Total investment: Approx. 4 billion yen (including land acquisition costs)

Investment plan: Own funds and dept financing (planned)

Production capacity: Approx. 30,000t/year (planned)

Number of newly hired employees: 10 to 20 (planned)

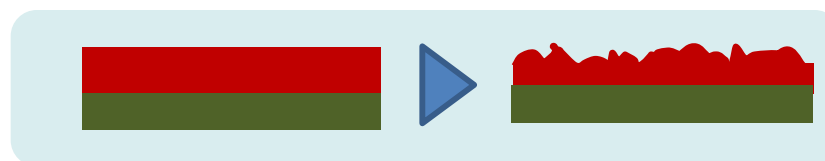
Commencement of operations: July 2025 (planned)



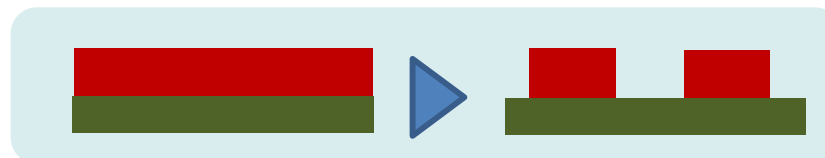
# MEC's Core Technologies

## Creating and Fostering Value at Various Interfaces

● **Roughen** the surface, and **physically improve** adhesion



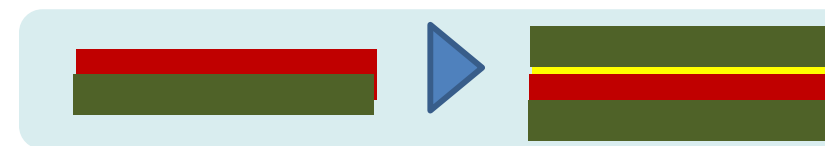
● **Pattern formation**



● **Selective etching**



● **Treat** the surface, and **chemically improve** adhesion



# Examples of Major Chemical Applications and Final Products

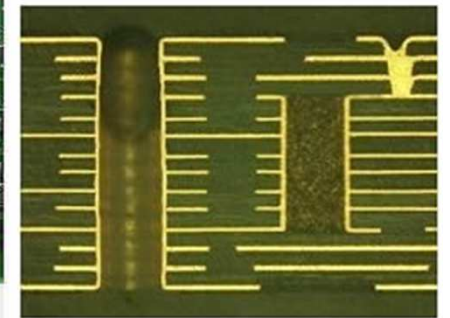
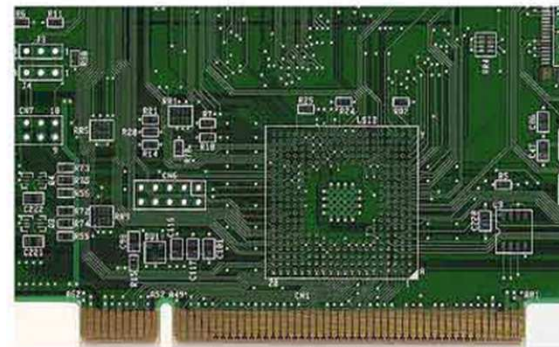
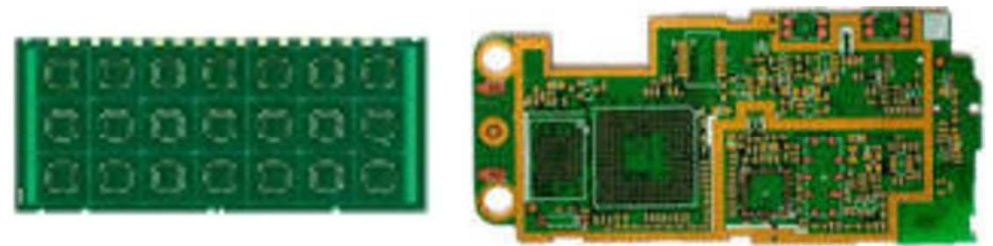
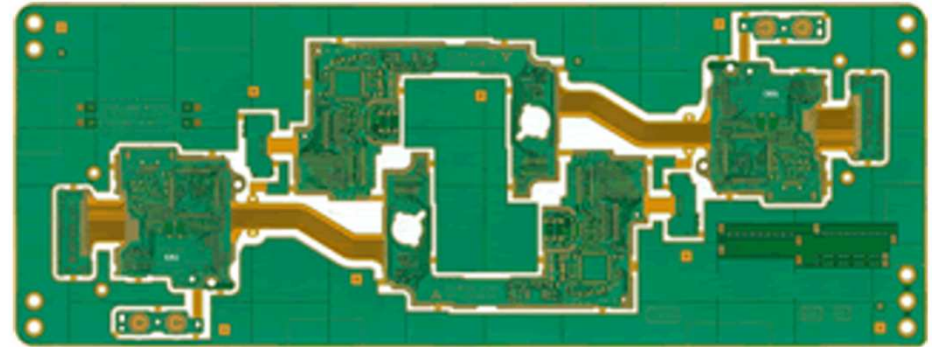
| Major chemical   | Characteristic  | Final products   |
|--|---|--|
| Super-roughening type adhesive enhancement<br><b>CZ series</b>       | Adhesion improver mainly for PKG substrates.<br>A copper surface treatment agent that enhances adhesion between copper and resin.                                     | Infrastructure (5G-related, data centers, etc.) and high-function devices (PCs, smartphones, tablet PCs, etc.) |
| Adhesion improvers for multilayer substrates<br><b>V-Bond series</b> | Adhesion improver mainly for multilayer substrates.<br>A copper surface treatment agent that enhances adhesion between copper and resin. Not used for PKG substrates. | Smartphones, cars, etc.  |
| Anisotropic etchant<br><b>EXE series</b>                             | Etching agent for COF substrates. Fine wiring can be formed through subtraction.  | TV and PC monitors, etc.   |
| Selective etchant<br><b>SF series</b>                                | Etching agent with selectivity to copper.   | Tablet PCs, etc.   |

# What is PCBs ?

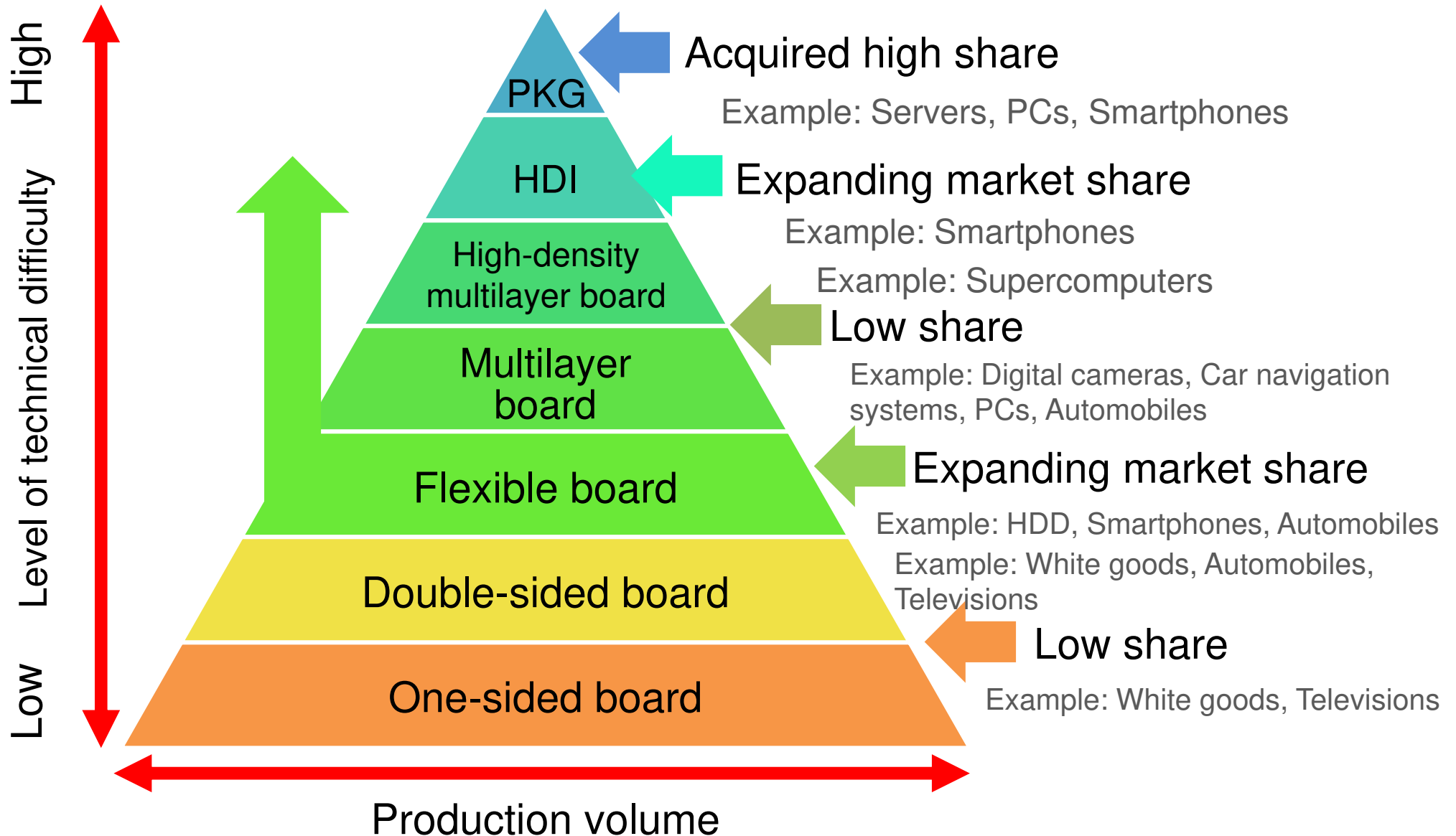
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PCBs are used in all fields: household appliances, communication equipment, medical equipment, airplanes, automobiles and industrial equipment.

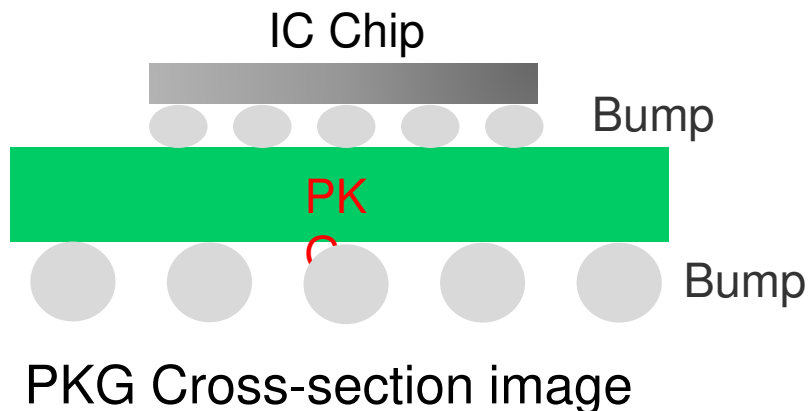
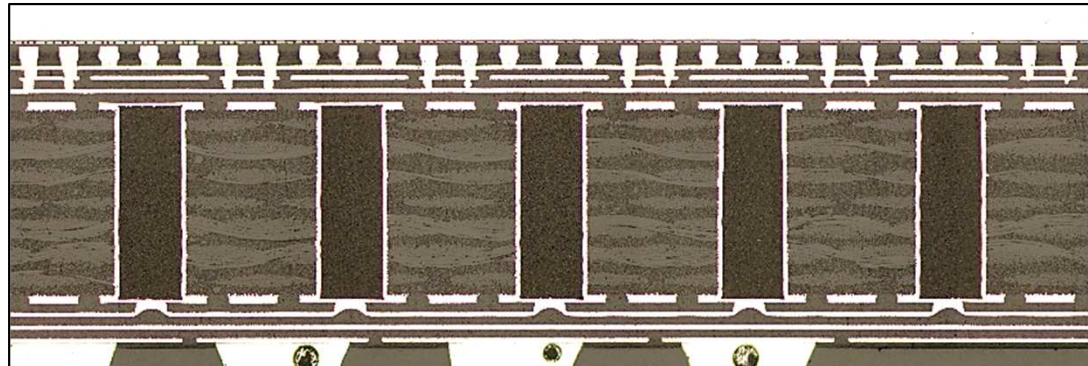
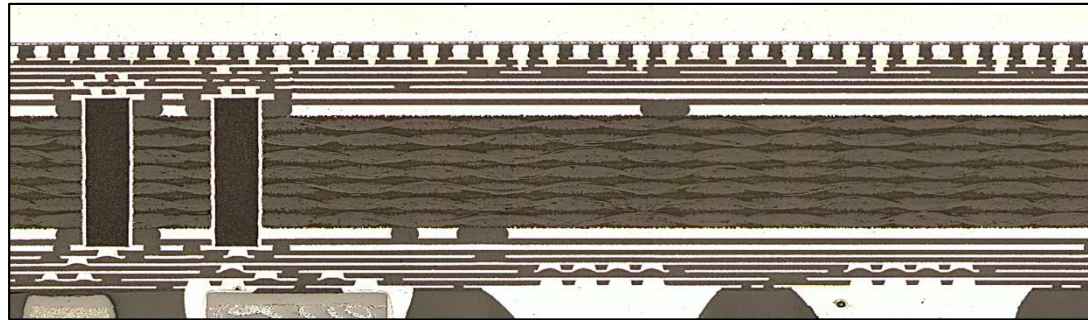
MEC develops and provides chemicals and machines used during the manufacturing process of PCBs which are essential to our living.



# Areas in which MEC has strengths



# Package Substrate (PKG)

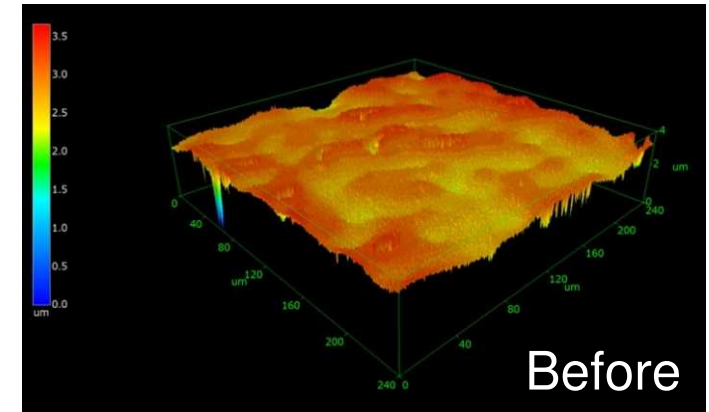
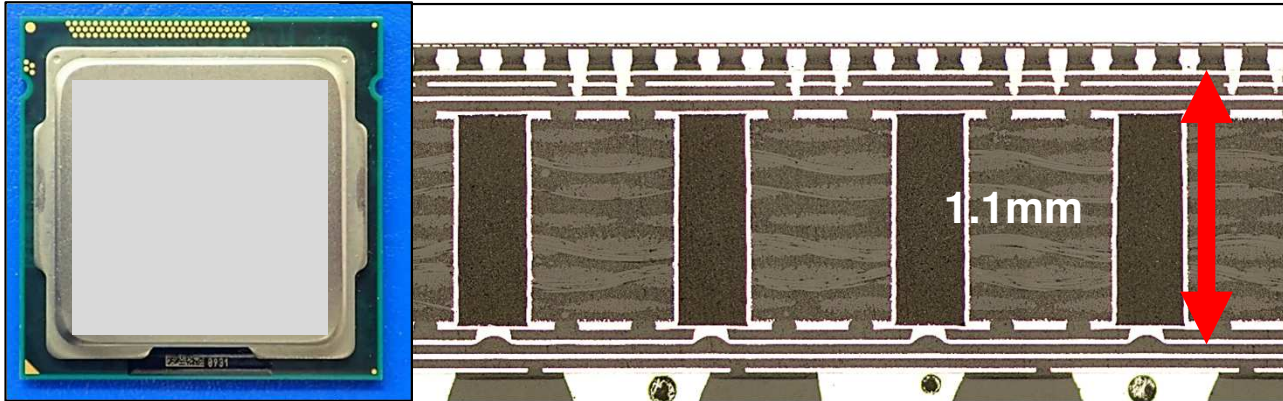


Semiconductors follow the **nm** rule  
Electronic substrates follow the **μm** rule

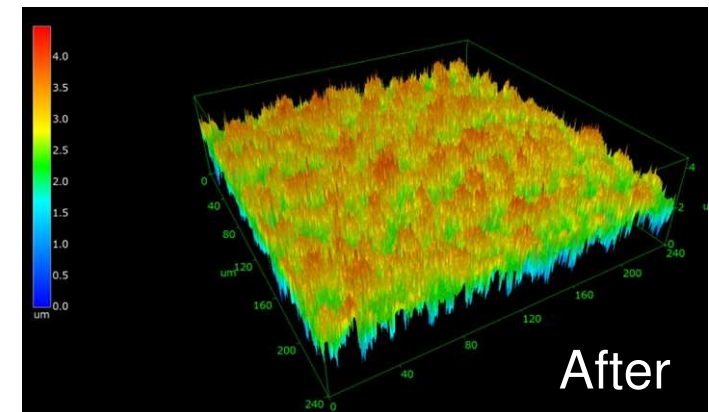
1 mm = 1,000 **μm**

1 mm = 1,000,000 **nm**

# PKG Substrate and CZ

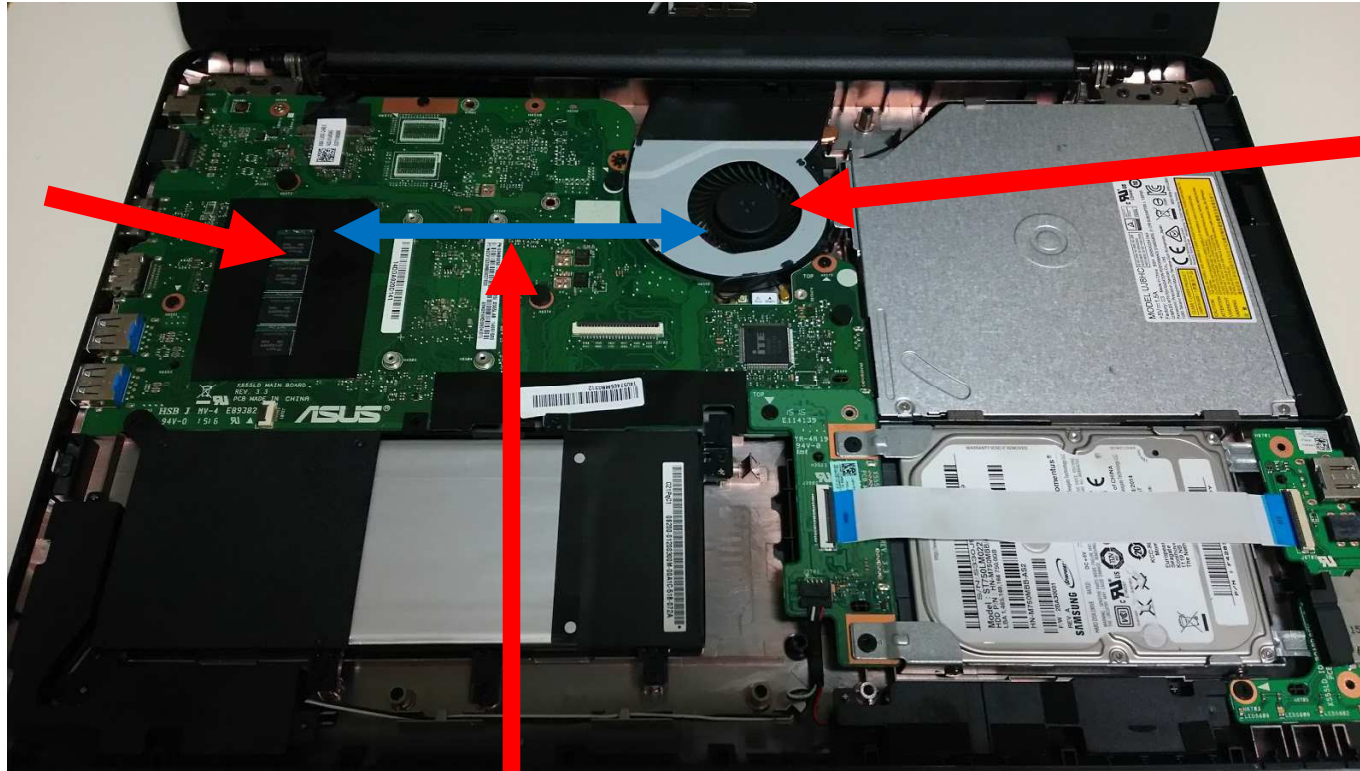


- **PKG Substrate is necessary for mounting semiconductors.**
- MEC's CZ series produces unique, super-fine surface roughness by soft-etching copper surfaces, when hot-melt resin is forced into the roughened surface and solidifies, a strong bond is achieved due to the "anchor effect."



# Inside the computer

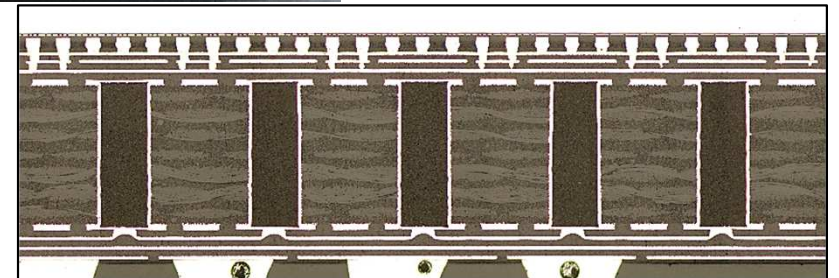
Memory



**PKG board** under cooling fan



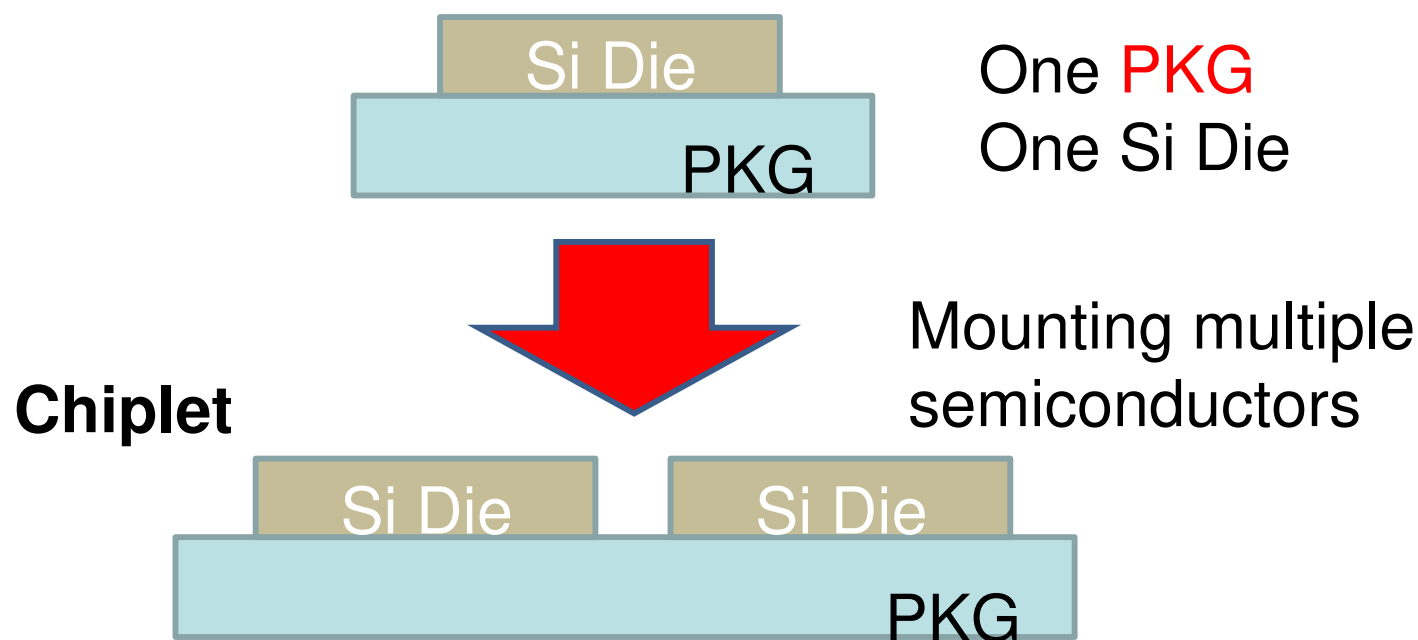
This distance slows down the process



PKG Cross-section



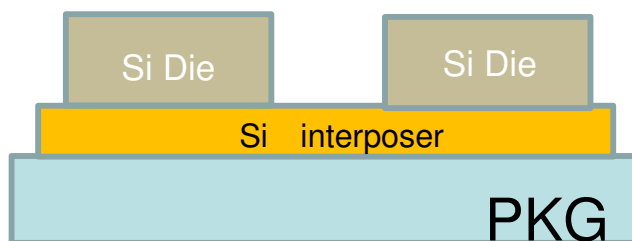
# Evolution of the PKG substrate



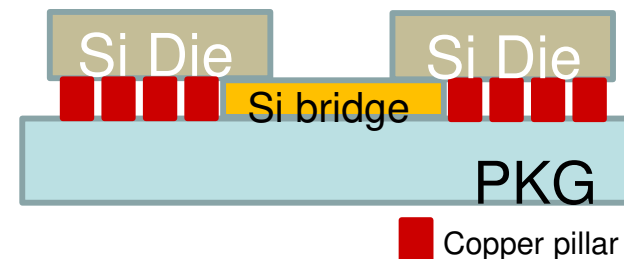
**EMIB**  
(Embedded Multi-die Interconnect Bridge)



**CoWoS**  
(Chip on Wafer on Substrate)

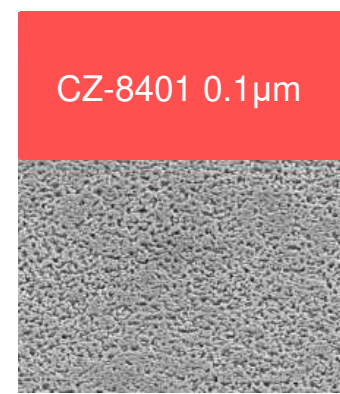
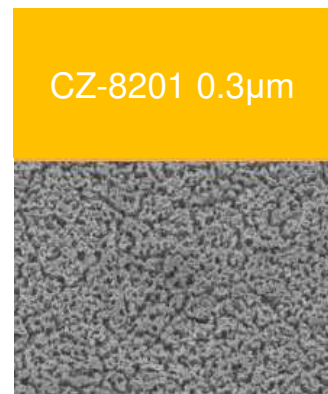
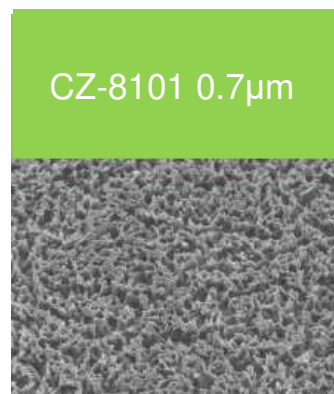
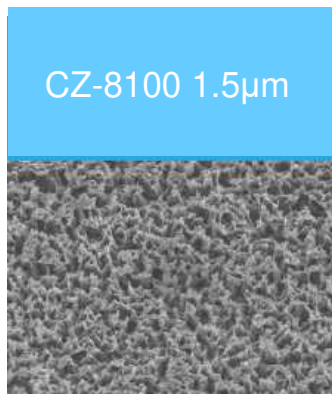
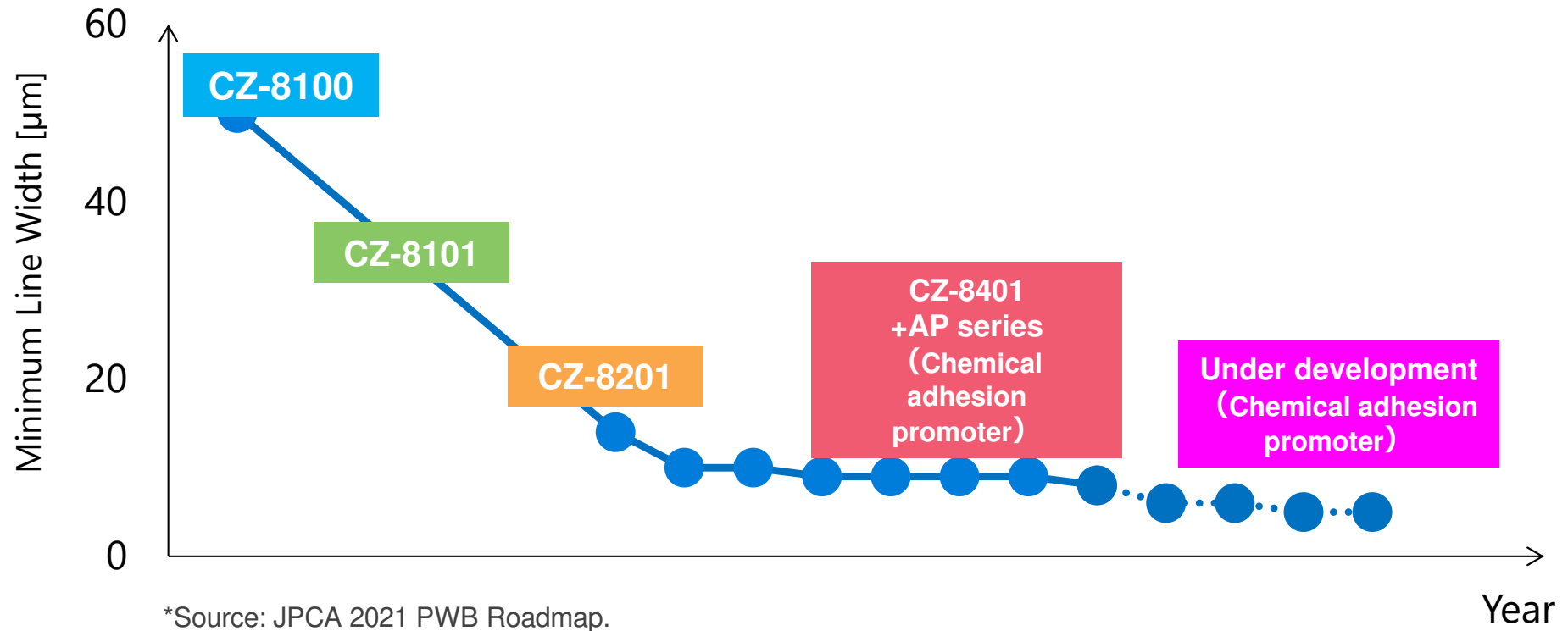


**EFB**  
(Elevated Fanout Bridge)



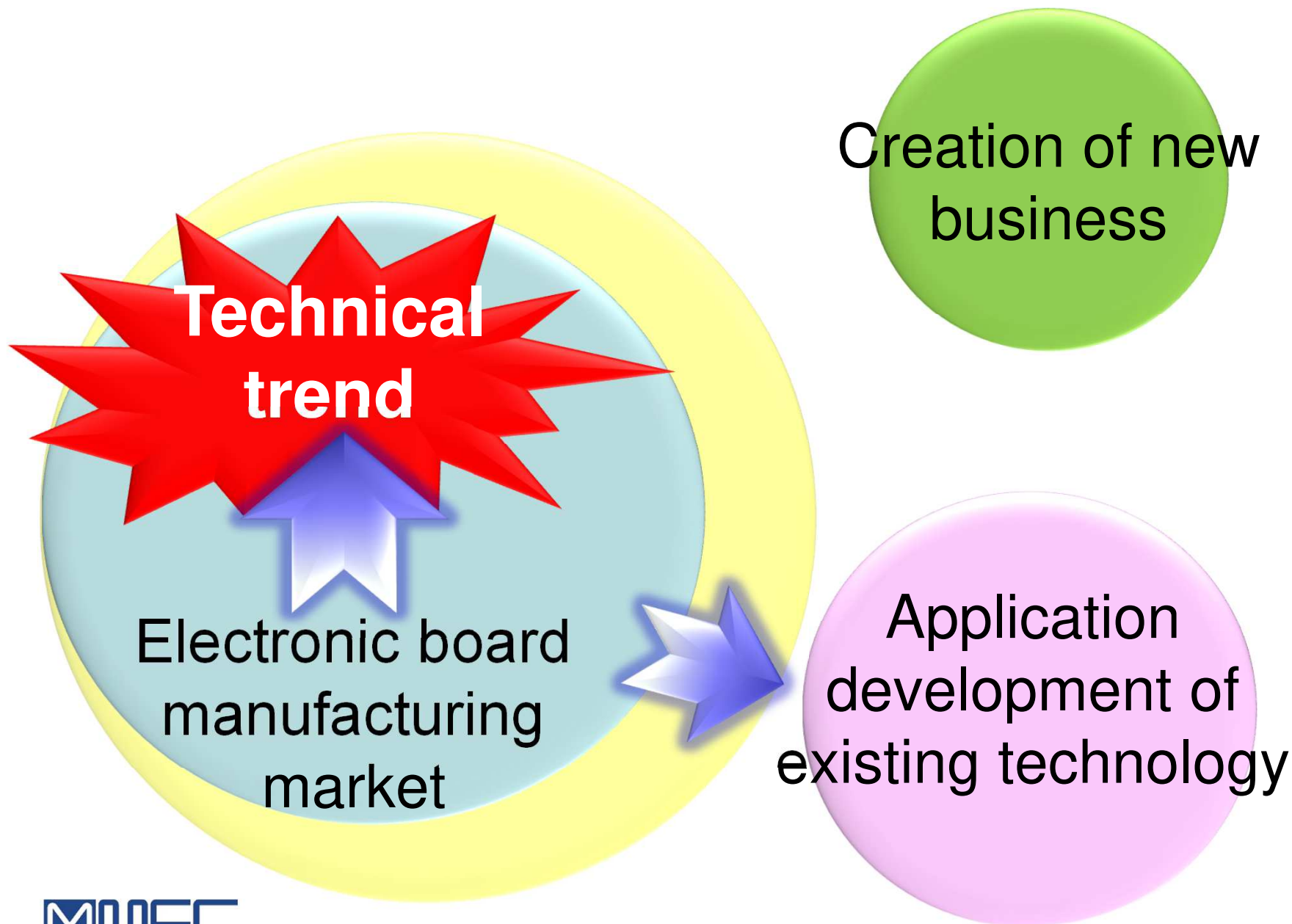
PKG size is big and layers are increase.

# CZ series roadmap



# Aiming to expand the business domain

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# 2030 Vision

## Phase 1

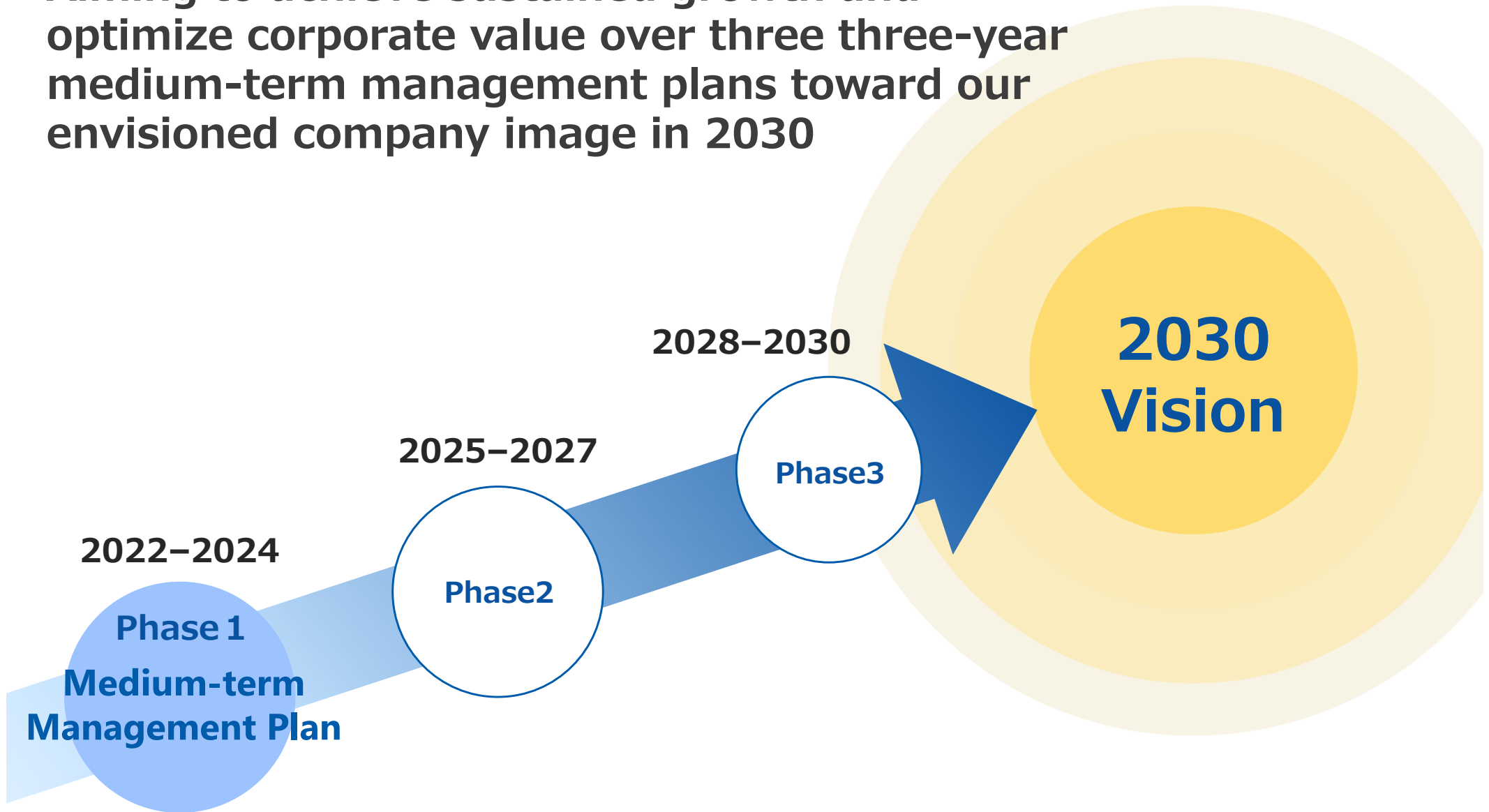
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# Medium-term Management Plan

(2022-2024)

February 22, 2022

Aiming to achieve sustained growth and optimize corporate value over three three-year medium-term management plans toward our envisioned company image in 2030





**Become a truly global company that creates new value with visionary technology**



**Continue to be an R&D-based company**



**Present an image as a visionary AI company**

## 2024 quantitative targets (consolidated)

**Operating  
margin**

At least **20%**

**ROE**

At least **10%**

# Creating and Fostering Value at Various Interfaces

This presentation includes forward-looking statements (such as predictions and business forecasts) made in March 23, 2024. These statements are assumptions based on information available at the time, and they are subject to risks and uncertainties. Actual results or events could differ substantially from those forecasted in such statements due to a plethora of variables.



<https://www.mec-co.com/en/>

Our website contains a variety of information, including press releases, shareholder communications, sustainability reports, corporate governance reports, and more. Please take a look.

