

# Investor Day 2024

SECTION 1  
June 18, 2024

I am Kanai, President and CEO. Thank you for joining us today for KOKUSAI ELECTRIC's first IR Day. We take it as a great opportunity to explain our mid- to long-term business strategy and business goals announced at the time of our IPO. We would like to explain them in detail, taking into account current market trends and the progress of our business.

## Today's Agenda

Part 1	9:00	Industry Update from Applied Materials – Mr. Terrance Lee, Corporate VP, Applied Materials
	9:20	Overview of Kokusai Electric – Fumiyuki Kanai, Representative Director, President and CEO
	9:30	Q&A
	9:50	Break
Part 2	10:00	Management Strategies (Market and Growth Outlook) – Kazunori Tsukada, Executive VP
	10:10	Equipment (NAND · DRAM) – Shigeru Odake, Corporate VP
	10:20	Equipment (Logic · Mature Logic · Treatment) – Kenji Kanayama, Senior VP
	10:30	Service – Naotoshi Yamamine, Senior VP
	10:40	Global Operation – Masayuki Yamada, Senior VP
	10:50	Financial – Yoshitaka Kawakami, Senior VP
	11:00	Q&A

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Here is the agenda. Today, we have a guest speaker, Mr. Lee, from Applied Materials, a shareholder and collaboration partner of our company. In part one, Mr. Lee will share his view of the industry as a whole, and then I will give an overview of KOKUSAI ELECTRIC. After that, with Mr. Lee, we will have a Q&A session about the industry and KOKUSAI as a whole followed by a break.

After short break, part two will be a detailed explanation of KOKUSAI's strategy for each device, followed by Q&A session with the presenters who are executive officers. The session will be three hours long, but we will make every effort to deepen the participants' understanding of our company. So I would like to start with Mr. Lee's presentation.

## Special Guest from Applied Materials



### TERRANCE LEE

Corporate Vice President, GM  
Etch Products Business Unit  
Semiconductor Products Group



- Terrance Lee is a corporate vice president for the Etch Products Business Unit. He is responsible for defining the strategic roadmap and marketing of Etch products.
- Previously, he worked in DCVD, Chemical Mechanical Planarization and Plating Business Units. Before joining Applied Materials, he held executive positions in Business Development and Finance in the capital equipment sector.
- Mr. Lee earned a Bachelor of Science degree in Chemical Engineering from UC Berkeley and holds patents in CVD, CMP and Etch.

First of all, I would like to thank everyone at Kokusai Electric and President Kanai for inviting me here and giving me the opportunity to present about Applied Materials and the outlook for our industry, so thank you very much indeed.

## Forward-Looking Statements

This presentation contains forward-looking statements, including those regarding anticipated growth and trends in our businesses and markets, industry outlooks and demand drivers, technology transitions, our business and financial performance and market share positions, our investment and growth strategies, our development of new products and technologies, and other statements that are not historical facts. These statements and their underlying assumptions are subject to risks and uncertainties and are not guarantees of future performance.

Factors that could cause actual results to differ materially from those expressed or implied by such statements include, without limitation: the level of demand for our products; global economic, political and industry conditions, including rising inflation and interest rates; the implementation and interpretation of export regulations and license requirements, and their impact on our ability to export products and provide services to customers and on our results of operations; global trade issues and changes in trade and export license policies; our ability to obtain licenses or authorizations on a timely basis, if at all; the effects of geopolitical turmoil or conflicts; consumer demand for electronic products; the demand for semiconductors; customers' technology and capacity requirements; the introduction of new and innovative technologies, and the timing of technology transitions; our ability to develop, deliver and support new products and technologies; our ability to meet customer demand, and our suppliers' ability to meet our demand requirements; the concentrated nature of our customer base; our ability to expand our current markets, increase market share and develop new markets; market acceptance of existing and newly developed products; our ability to obtain and protect intellectual property rights in key technologies; our ability to achieve the objectives of operational and strategic initiatives, align our resources and cost structure with business conditions, and attract, motivate and retain key employees; the effects of regional or global health epidemics; acquisitions, investments and divestitures; changes in income tax laws; the variability of operating expenses and results among products and segments, and our ability to accurately forecast future results, market conditions, customer requirements and business needs; our ability to ensure compliance with applicable law, rules and regulations and other risks and uncertainties described in our SEC filings, including our recent Forms 10-Q and 8-K. All forward-looking statements are based on management's current estimates, projections and assumptions, and we assume no obligation to update them.

In today's session, we will be having some forward-looking projections and statements. However, any projections for the future also entail risks. It is in this sense that I would like to decline your request.

## Our Beginnings



### **FOUNDED in 1967**

Applied Materials began in a small industrial unit in Mountain View, California

Let me start by telling you how Applied Materials was founded. We started in 1967, founded in a very small office in Mountain View, California. We sold originally industrial gases for our industry.

# APPLIED MATERIALS AT-A-GLANCE



REPORTING SEGMENTS  
**Semiconductor Systems**  
**Applied Global Services**  
**Display and Adjacent Markets**



CURRENT FISCAL  
YEAR ENDS  
**27 October 2024**



FOUNDED  
**1967**  
FIRST PUBLIC  
OFFERING  
**1972**



**\$26.5 billion**  
TTM REVENUE



**\$3.1 billion**  
TTM R&D  
INVESTMENTS



**~34,800\***  
employees  
in **24\*\*** countries



**~19,600\*\***  
active patents



TTM is trailing twelve months. \*As of fiscal Q2'24 ended 4/28/2024 \*\*As of fiscal year-ended 10/29/2023.

We had just had our earnings call, so I urge you to look at the earnings call online. It was announced on May 16. The details on outlook and specific projections can be found there and in its transcripts. In the trailing 12 months, we're about USD26 billion in terms of revenue. We continue to invest in R&D. It's very important for us. You can see it in our patent portfolio, which continues to grow, and the number of employees in the 35,000 worldwide.

## Key Messages

- Highly positive long-term outlook
  - » Semiconductor market on a path to ~\$1T in revenue by ~2030
  - » AI, IoT, EVs and Global Energy Transformation driving long-term semiconductor growth and innovation
  
- Major inflections create exciting opportunities
  - » Several major technology inflections expand our market opportunity in logic and memory
  - » Well positioned to enable transition of next-generation technologies to volume production
  
- Innovating in how we innovate is key
  - » Collaboration across our ecosystem is critical to our mutual success
  - » We can accelerate development cycles and boost R&D productivity

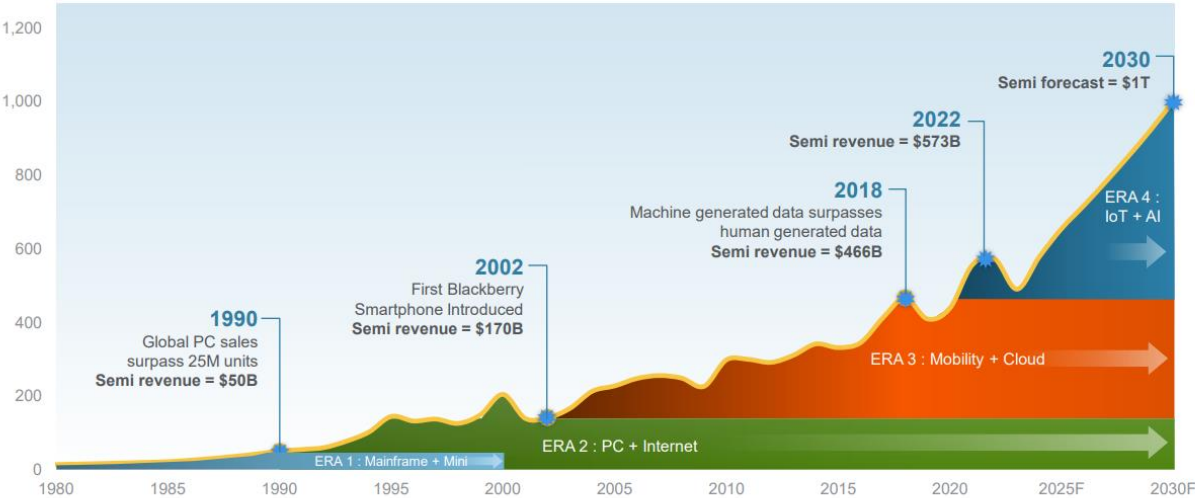
Now a couple of key messages in my talk. One, the long-term outlook is very robust and positive. For semiconductor revenue, we believe it's going to approach USD1 trillion in this 2030 time frame. A lot of it is driven by what we see today in terms of AI, IoT, EV, and renewable energy. We believe these megatrends will be very sustainable going forward in the future.

The second item will be inflections. There are many major inflections that are coming from our customers and with those inflections creates opportunities for us to capitalize and demonstrate our value in accelerating the customers' roadmap with our broad portfolio. Applied has one of the broadest portfolios in the space, and the ability to connect across the products is one of what we think is an enabling capability to accelerate our customers' roadmaps across these inflections.

The third point is innovation. We're looking at how we can innovate on how we innovate, and we're looking at broader and deeper collaboration with our customers, engaging early so we can accelerate these roadmaps for these inflections, and we're also looking at how we engage with our partners.



# Semiconductor Industry Revenue (\$B)

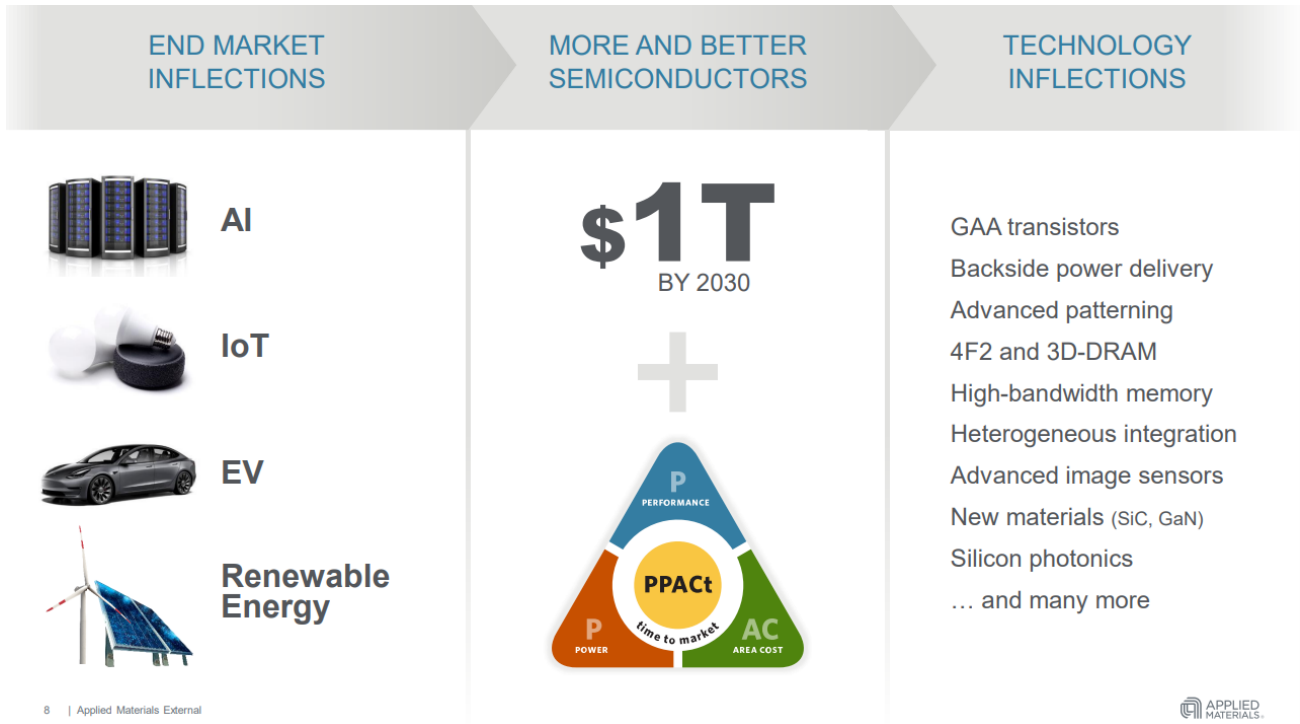


## IoT + AI Era is the 4<sup>th</sup> and Biggest Age of Computing

Source 2030 forecast: Technisights, McKinsey & Company, SEMI. Source Historical data: SIA, Technisights, Applied Materials.

This next slide talks about where we are today and why we have confidence in this USD1 trillion in semiconductor revenue. If you look at it today, we're in the fourth age of compute, and it's driven by AI and the Internet of Things. If we look at what that means to WFE, we can go to the next slide.

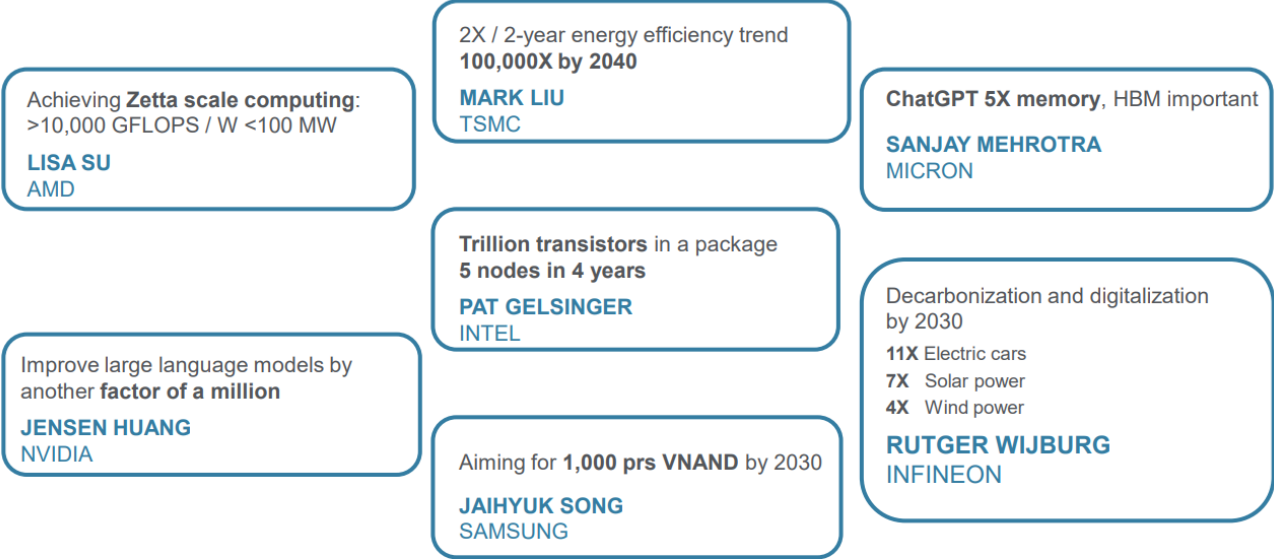




Again, I talk about these end market inflections or these megatrends around AI, IoT, EVs, renewable energy. That drives us to the USD1 trillion. From Applied Materials, we have an existing playbook. We call it the PPACTt playbook. We look at customers' metrics, things like power, performance, area cost as well as time to market. We want to use that playbook to accelerate the customers' roadmaps across these inflections that you see on the right-hand side.

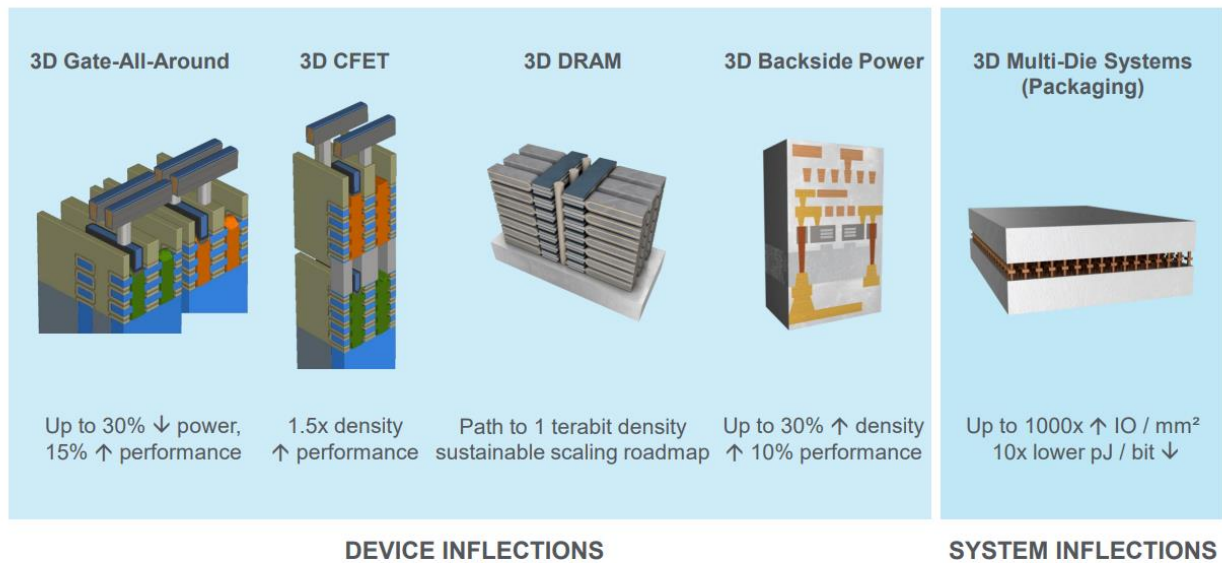
There's many inflections. We're seeing those inflections today on gate-all-around, backside power, advanced packaging for high-bandwidth memory. All these and many inflections on how we enable our customers' roadmaps are very key. We are using our playbook to help our customers collaborate on that.

# Big Industry Opportunities and Challenges



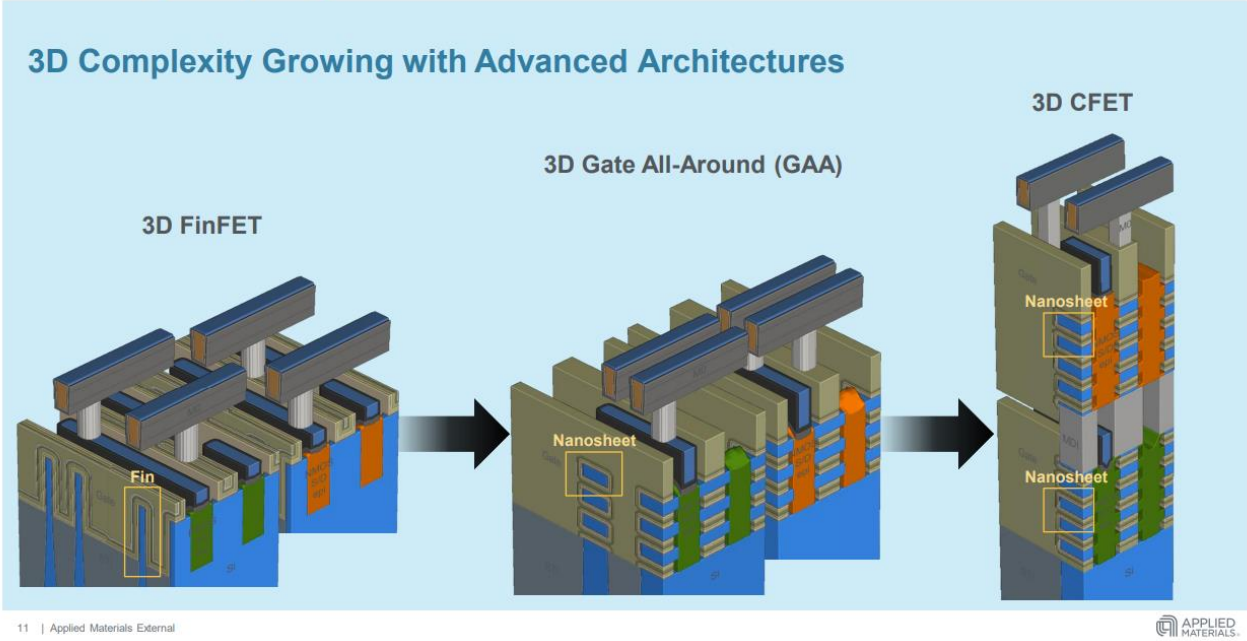
You can see also from our customers' voice, the voice of the customer, very key things like scaling, how do they look at sustainability, how they increase memory capacity. This is important across all aspects, whether it be logic, memory, DRAM, ICAP, or IoT.

## 3D Inflections Overcome 2D Physics Limitations



One of the ways our customers are looking at this inflection and how they scale is going from two dimensions to three dimensions, and this is happening across all devices. You can see it in Logic with gate-all-around, CFET. You see it in the 3D DRAM and then backside power. It's already occurred in them. We continue to see how they scale from two dimensions to three dimensions across all devices. Now, they also are looking at it not only at a device standpoint, but at a system standpoint, how they integrate multiple devices on one module using packaging to move that forward. It's another inflection that we are looking at how we help our customers.

# Enabling Key Logic Inflections

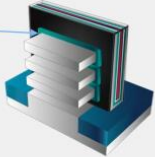


This is specifically discussing Logic. As you can see, the Logic increase in complexity as they go from FinFET to gate-all-around to CFET. Gate-all-around now is ramping. This is something that we see numerous opportunities for us to solve in this inflection.

# Logic Gate-All-Around: Solutions to Enable Customer Inflections

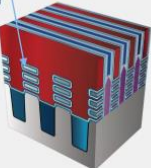
**High Value Problems**

Inner spacer



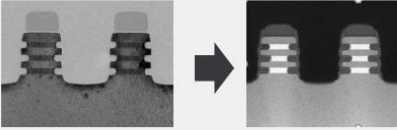
Uniform SiGe lateral push amount  
High SiGe to Si selectivity

HKMG



Narrow GAA channels require advanced conformality-underside of channel "slabs"

**Inner spacer formation**




Selective SiGe removal      ALD spacer deposition

- Advanced Conductor Etch
- Tunable SiGe Selective Etch
- ALD spacer deposition

Images source: Applied Materials

**High-k and metal gate module**



IL and ALD high-k      N atom concentration

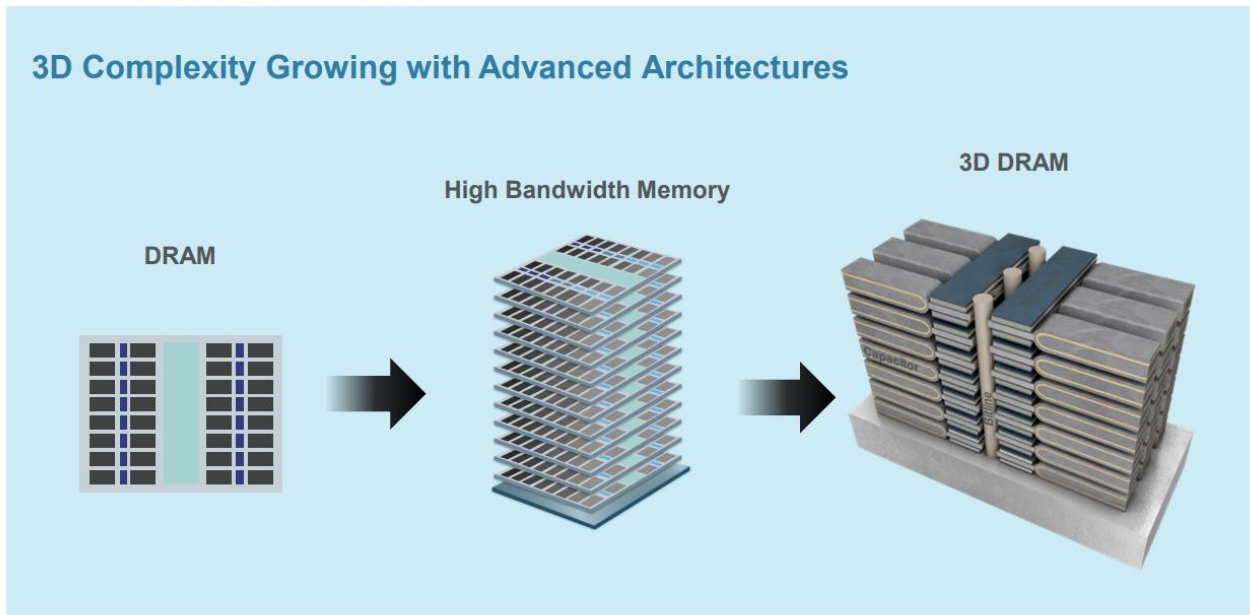
- Gate stack module
- ALD work function metals
- Treatments

Images source: Applied Materials

## Co-Optimization across Process Tools to Enable Customer Key Inflections

You can see some of what we see as the challenges that our customers are looking at, what they see as the high-value problems. If you look at Innerspace or you look at high-k metal gate, there are many opportunities here. Whether you're looking at conductor etch, tunable, and selective SiGe removal, ALD deposition, these are inflections that with our broad portfolio, we're able to connect across the portfolio, looking for a one plus one is greater than two solution. That's what we'd consider co-optimization, the ability to connect different process tools and make a more optimized module. We're looking at that and collaborating with our customers now as well as collaborating with our partners to enable the roadmap.

## Enabling Key Memory Inflections




A similar thing is happening on DRAM as they go from two-dimensional DRAM to stack DRAM for the high-bandwidth memory. Further in the roadmap is the 3D DRAM.

# DRAM: Solutions for Scaling Inflections

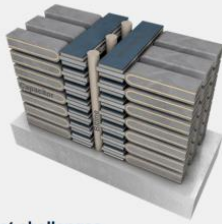
### High Value Problems

High-Bandwidth Memory



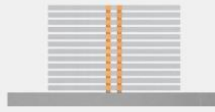
**Advanced Packaging  
HBM Materials Engineering**

3D DRAM



**Patterning cost challenges**

### 3D stacking




TSV and Hybrid Bonding


- Through-Silicon Via
  - HAR TSV Etch
  - TSV liner & Metallization
- Hybrid Bonding
  - Planarization
  - CVD/PVD metallization

Images source: Applied Materials

### 3D DRAM



High-Aspect-Ratio Etch  
>100:1 aspect ratio



Form lateral junction selective deposition

- Mold Stack Si + SiGe epitaxy
- High mobility channel Epi
- High-Aspect-Ratio Etch
- Selective Lateral Recess
- HAR ALD dielectric & metal films
- Advanced doping & silicide

Images source: Applied Materials

## Enabling the Memory Roadmap with Materials Engineering

You can see the same challenges that our customers are facing. If you look at the ability to stack multiple DRAM die, it will require high aspect ratio etch. It will require TSV and advanced packaging. You can already see the advanced packaging is increasing in the customers' flows as well as if you look forward, you can see 3D DRAM.

In 3D DRAM, you have new materials that are coming in, new ability to grow that stack or etch that stack or pattern that stack. These are things that, again, collaborating with our customers will enable this inflection. It also creates an opportunity for us to look at different materials engineering, whether it's hard mask, the ability to etch this material, pattern this material. That also opens a window for us to collaborate with customers and our partners.





I talked about this fourth wave of compute. One is powered by AI, which is advanced logic and advanced memory. But the other thing was the Internet of Things. In the Internet of Things, it has Internet of Things, communications, automotive, power as well as sensor technology. That's what Applied Materials calls ICAPS. We refer to this entire space as the ICAPS space. It continues to be a big portion of our Logic/Foundry going forward.

# ICAPS Key Technology Drivers



You can see the devices that we capture under what we call the ICAPS umbrella. We're looking at Mature Logic node, analog devices, all the way down to MEMS and optoelectronics. These types of customer devices are considered under our ICAPS business. In our ICAPS business, we believe this will continue and be a significant portion of Logic/Foundry because we continue to, one, work with our customers to further optimize their devices as well as releasing new products into this space.

## Global EPIC Platform: Collaborating with Customers

- Changing the industry's innovation model to accelerate mutual success rates and increase investment efficiencies
- Deploying our broad, deep and connected portfolio of materials engineering solutions to support high-velocity innovation and commercialization of next-generation technologies
- Anticipating key roadmap inflections and delivering enabling solutions critical to competitive advantage in fast-growing markets



Maydan Technology Center, Sunnyvale CA



META Center, Albany NY



EPIC Center (Planned), Sunnyvale CA



Advanced Packaging Dev. Center, Singapore

EPIC = Equipment and Process Innovation and Commercialization

I want to talk about the third theme that I have is innovating how we innovate. We have the EPIC platform. This is the connected platform of all our labs worldwide. We obviously have labs in Santa Clara, but we also have labs in New York, and we have labs in Singapore, and now we're building what we call the EPIC Center in Santa Clara, actually in Sunnyvale, California. What we're doing here is enabling a platform where we can have earlier and broader engagements with our customers, with university partners as well as industry partners. Again, it's a platform to help accelerate our customers' roadmaps and the time to market.

LATEST 3 <sup>rd</sup> PARTY ESG RATINGS	
CDP Climate	A-
CDP Water	B
MSCI	AAA
Sustainalytics Risk Rating	Low
ISS (E/S/G)	1/2/1

Links: [Net Zero 2040 Playbook](#) | [2022 Sustainability Report](#) | [2022 Sustainability Report Data Annex](#)

The next slide talks about our recently announced net zero playbook for 2040. It's our ESG initiatives. On this, we've had very strong ratings from external third parties. This is another collaboration that we have with our customers as well as our suppliers to advance the ESG roadmap to help further the industry.



# FY24

Key Focus Areas  
Applied Materials

Demonstrate our capabilities at key inflections

Generate value from our technology and scale

Take collaboration to next level inside and  
outside the Company

ご清聴ありがとうございました

In closing, long-term positive forecast and outlook. Applied Materials is well positioned with our broad and connected portfolio of products. We want to use those connected products to advance our customers' roadmaps and inflections. Finally, we want to take collaboration to the next level, working both with our customers, our suppliers, and our partners. Thank you very much for your attention.

# KOKUSAI ELECTRIC's Experienced Management Team

## Strong Leadership by Semiconductor Industry Specialists X Disciplined Governance

### Executive Officers

							
<b>Fumiya Kanai</b> Representative Director President and CEO	<b>Hidehiro Yanagawa</b> Executive VP Head of Business Development, Sales, DX/IT, Information Security	<b>Kazunori Tsukada</b> Executive VP Head of Corporate Planning, Export Control, Legal, Intellectual Property, PR & IR, Sustainability	<b>Masayuki Yamada</b> Senior VP Head of Global Supply Chain, Quality Assurance, Site Operations	<b>Yoshitaka Kawakami</b> Senior VP Finance & Accounting	<b>Kenji Kanayama</b> Senior VP Technology Management, Process Technology Development	<b>Naotoshi Yamamine</b> Senior VP Services, Field Engineering, Group Governance	<b>Masami Miyamoto</b> Corporate VP Sales
Years of Experience in Industry :							
43yrs	36yrs	38yrs	41yrs	35yrs	33yrs	34yrs	34yrs

### Executive Officers

### Business Strategy

### Accounting

### Directors

### Independent Directors

							
<b>Shigeru Odake</b> Corporate VP System Technology Development, Technical Support Center	<b>Teruhiko Kawakami</b> Corporate VP HR & Corporate Administration, Ethics & Compliance	<b>Takashi Hashimoto</b> VP Business Strategy	<b>Hajime Oyama</b> VP Accounting	<b>Yuji Kamiya</b> Director	<b>Unryu Ogawa</b> Director Executive Fellow	<b>Masaaki Tsuruta</b> ex-CEO of Samsung Japan; ex-Deputy of Sony's Semi Business <b>SAMSUNG / SONY</b>	<b>Noriko Sakai</b> Partner, HIRAKAWA International Law Office; ex-Partner at O'Melveny, TMI Associates <b>O'Melveny / TMI</b>
Years of Experience in Industry :						Values :	
32yrs	32yrs	41yrs	29yrs	43yrs	27yrs	Knowledge and Experience in Semiconductor Industry	
						Disciplined Governance, International Legal Expertise	

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Next, I Kanai, will give you an overview of our company.

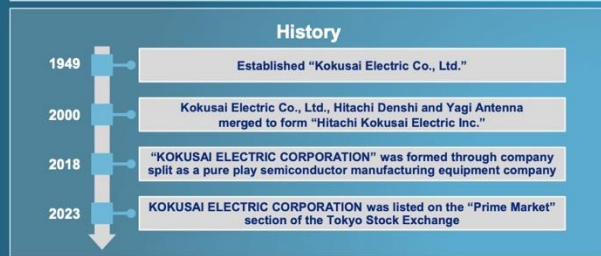
First of all, I would like to explain our company's management structure. As you can see, we have built a strong management structure with a management team that has long been in the semiconductor industry, and we are very proud of our management team's commitment to KOKUSAI ELECTRIC over the years.

As of April 1, Mr. Kamiya who had been serving as a Senior Managing Executive Officer and CFO became a full-time Director, and Mr. Ogawa, who has been serving as Senior Managing Executive Officer and CTO, assumed the position of Director and Executive fellow. Upon resolution of the June 27 General Shareholders' Meeting, Mr. Kamiya will become a director as a member of the Audit Committee and Mr. Ogawa will continue to serve as a director and executive fellow. In addition, Senior Managing Executive Officers, Mr. Yanagawa and Mr. Tsukada, will be newly appointed as directors.

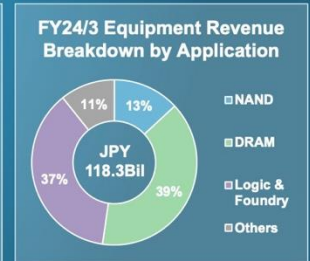
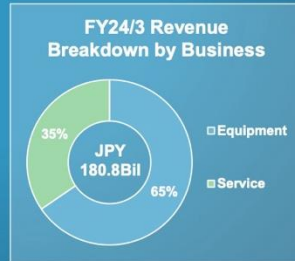
# KOKUSAI ELECTRIC at a Glance

70+ Year History with a Specialty Position in the Batch Deposition Market, with High-Quality Products / Services Valued by Customers

## Company Overview



## Key Financials



Notes:  
 1. We refer to a technique for thin-film deposition at an atomic layer level involving a process of cyclical supply of multiple gases as "ALD".  
 2. Source: Technisights Inc. (VLSI) "TI\_ALD Tools\_YEARLY 2024 (April)".  
 3. Gartner Market share: semiconductor metal film equipment, Worldwide, 2023. Bob Johnson, Gartner Group, Margin Co., 1, May 2024.  
 Gartner research. Calculations performed by KE. Treatment: RTP and Oxidation/Deposition.  
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This is the corporate profile. In the last 70 years of history, we have achieved strong growth together with our customers, the world leading device manufacturers. Our products and services are of the highest quality and have been highly evaluated by our customers for a long time. Although NAND used to account for a higher percentage of sales, as shown in the pie chart below right, DRAM and Logic have recently accounted for a higher percentage due to the slowdown in the NAND market and the expansion of our DRAM and Logic market share.



# Management Policy

Driving Economic, Environmental, and Social Value through "KOKUSAI ELECTRIC Way"



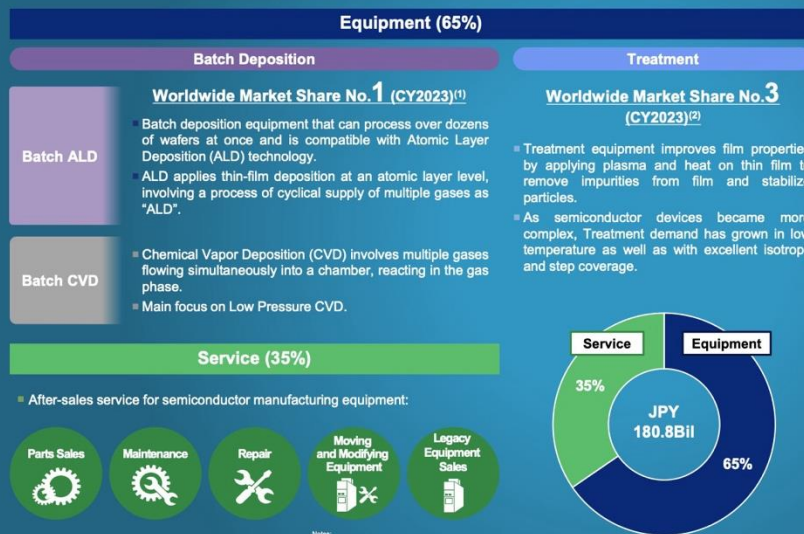
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Page six is the management policy of our group. KOKUSAI Group's corporate philosophy is the KOKUSAI ELECTRIC Way, which expresses our determination to further deepen dialogue with our stakeholders and support the future with our technologies. To realize this corporate philosophy, we are aware of our social responsibility as a specialized manufacturer of semiconductor production equipment, and we will pursue economic value and the environmental and social value from both business activities and ESG initiatives. We strive to contribute to achieve the SDGs and to realize a sustainable society and the sustainable development of our group.

# Our Business and Major Products

Specializing in Film Deposition, with Batch ALD and Treatment Equipment as Our Main Products, Leading in Global Market Share

## Business Profile and Revenue Breakdown (FY24/3)



## Major Products

- Large batch deposition "AdvancedAce®-300"**
  - Compatible with technology including batch ALD, batch CVD, oxidation, diffusion and steady annealing.
- Mini batch deposition "TSURUGI-C® 霧®"**
  - Capable of both highly difficult deposition and high productivity on next-generation devices.
  - Compatible with thin film formation processes, incl. latest batch ALD technology.
- Single-wafer treatment "MARORA®"**
  - Applies plasma and heat on film.
  - Able to treat complex semiconductor shapes with high productivity and quality.
- Single-wafer treatment "TANDUO®"**
  - Applies heat on thin film.
  - Capable of annealing in low temperature.
- High-Temp Activation Anneal (New Product)**
  - Adopts a new heating system for ultra high temperature and 150/200mm common platform.
  - Mass production is expected to begin in 2025.

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Notes:  
1. Source: Technights Inc. (MLSI) "ALD Tools, YEARLY" 2024 (April)  
2. Gartner® Market Share: Semiconductor Wafer Size Equipment Worldwide, 2023, Bob Johnson, Gartner, Quartz, Morgan Cas, 1, May 2024  
Gartner research, calculations performed by KE: Treatment, RTP and Oxidation/Diffusion  
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This page summarizes our unique business model. We are a company specializing in film deposition and in the equipment business, which account for approximately 70% of our consolidated sales. We are developing our business globally with the focus on that deposition equipment, including batch ALD, which has the largest share of global market and treatment equipment, which has the third largest share of the global market. The service business, which account for about 30% of consolidated sales revenue is for relocation and modification of equipment and sales of equipment for wafer size of 200 millimeter or smaller. In addition to recurring business of part sales and maintenance services, recently, sales of equipment for SiC power devices have been growing.

## Our Technological Strength

As Semiconductor Manufacturing Processes Evolve, Our Technological Strengths are Becoming Increasingly Important

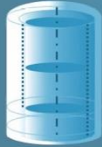
### Batch ALD Technology

- ✓ The complexity of semiconductor devices boosts the need for batch ALD with high productivity and quality
- ✓ Implementation in NAND is already advanced, and future demand increase is expected in DRAM and Logic/Foundry

Increased demand for batch ALD that can achieve both high productivity and highly difficult film deposition

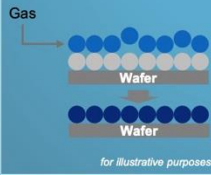
Batch Deposition  
High Productivity

Process dozens or more wafers simultaneously



ALD Technology  
High Quality

Gas reacts on the surface



### Treatment Technology

- ✓ As the deposition process advances towards lower temperatures, the need for plasma-assisted treatment is increasing
- ✓ Our unique plasma method creates abundant radicals, achieving excellent isotropy and step coverage, enhancing film quality with high productivity



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This section summarizes batch ALD technology and treatment technology. In recent years, semiconductor devices have become more complex and three-dimensional. The scope of application of ALD technology, which provides excellent step coverage in deposition of films with challenging and complex structures have expanded. Since the ALD technology is a cyclical gas supply process and deposition takes time, batch ALD technology, which combines batch deposition and ALD technology is the optimal solution.

Batch ALD equipment is not simply a combination of batch deposition ALD technology, but rather a combination of complex technology and years of expertise that only achieves high performance and is recognized by device manufacturers around the world for its high value-added. Treatment technology is a highly proactive solution that improves the film quality with excellent isotropy and step coverage, thanks to the abundant radicals produced by our unique plasma method.

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## Mid-term Management Strategies

Mid-term Management Strategies to Achieving Growth Higher than WFE



1

Expand Sales of Batch ALD and Treatment Equipment that Process the Increasing Complexity and 3D Devices of Various Applications

2

Expand Sales of Batch Equipment for Mature Nodes and Equipment for SiC Power Devices

3

Expand the High-Profit Service Business that Meets Customer Needs throughout the Entire Product Lifecycle

This section summarizes our medium- to longer-term management strategy. The first growth strategy is to expand sales of our batch ALD and treatment systems to meet the increasing complexity and 3D nature of NAND, DRAM, and Logic applications and to achieve business growth that exceeds WFE growth.

The second growth strategy is to expand the scope of our business in the film deposition area by increasing sales of batch deposition equipment for mature nodes and equipment for SiC power devices, which are experiencing remarkable growth. To achieve these goals, we will focus on continuous creation of high value-added technologies and products and research and development that looks 10 years into the future while strengthening our ability to make proposals to and engage with customers.

The third growth strategy is to expand business in the highly profitable service business by providing services that meet customer needs throughout the product life cycle, including parts sales and maintenance. The details will be explained by the respective business managers in part two.



## Our Key Growth Drivers

Clear Growth Drivers across Device Types, Contributing to Higher and More Stable Growth and Profitability

### NAND

- Market recovery from CY2025
- Even higher market shares as the device moves to >200 layers

### DRAM

- Increasing market shares in D1b and D1c, with strong tailwind of HBM
- Structural shift to VCT<sup>(1)</sup> DRAM and 3D-Stacked DRAM

### Logic / Foundry

- Increasing market shares in GAA (N2 and N1.4)
- New application in Si Interposer
- Mature nodes in US / Europe



### Treatment

- NAND market recovery
- New PORs<sup>(2)</sup> in DRAM, with HBM tailwind
- Aiming to expand to Logic

### SiC Power Device

- Already expanding sales in conventional processes
- New high-temp anneal equipment in CY2025
- New solution of ALD-SiO

### Service

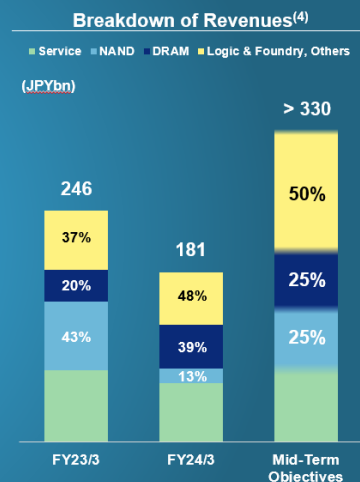
- Increase of installed base and service sales per unit
- Expansion of global service network to address localization

The drivers for materializing growth exceeding WFE markets exist in each respective area. In addition to the common trend of devices becoming more three-dimensional and complex, industry-wide trends such as HBM, silicon interposer, SiC power devices, and the localization of the semiconductor supply chain are also expected to provide further tailwinds.

## Mid-Term Objectives<sup>(1)</sup> - Summary

We Updated Mid-Term Objectives with Higher Margins and More Balanced Application Mix

	FY2023/3	FY2024/3	Mid-Term Objectives
<b>WFE Assumption</b>	\$100 Bil (CY2022) <sup>(2)</sup>	\$100 Bil (CY2023) <sup>(2)</sup>	> \$120 Bil
<b>Revenue</b>	JPY 246 Bil	JPY 181 Bil	> JPY 330 Bil
Equipment (% Revenue)	69%	65%	~ 75%
Service (% Revenue)	31%	35%	> 25%
Adjusted OP Margin <sup>(3)</sup>	26.1%	20.9%	> 30%
R&D (% Revenue)	5.1%	7.0%	> 6%



Notes:  
 1. Regarding the Mid-Term Objectives, the landing prospects for the Mid-to-Long Term Objectives at the current point in time are described based on the current environment and progress.  
 2. KE estimates.  
 3. Adjusted Operating Profit is calculated as operating profit - other income + other expenses + purchase price allocation amortization + stand-alone related expenses + stock-based compensation (except for performance-linked stock compensation). Adjusted Operating Profit Margin is calculated as Adjusted Operating Profit / Revenue.  
 4. Percentage of equipment revenue.  
 5. The forward-looking statements included above are based on the current assumptions and beliefs of KE in light of the information currently available to it and involve known and unknown risks, uncertainties and other factors. Such risks, uncertainties and other factors may cause KE's actual results, performance, achievements or financial position to be materially different from any future results, performance, achievements or financial position expressed or implied by such forward-looking information.

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Here are the updated midterm goals. Based on the assumption that WFE will expand to more than USD120 billion, we have set a medium-term target that we aim to achieve in three or four years starting from the current fiscal year. Specifically, on a consolidated basis, we aim to achieve net sales of JPY330 billion or more and an adjusted operating income margin of 30% or more.

For reference, the sales composition by business segment is expected to be approximately 75% for the equipment business and 25% for the service business. The sales composition of equipment sales by application is expected to be 50% for Logic/Foundry and others and 50% for memory, including DRAM and NAND. The reason why the service ratio will be lower than the current ratio is that equipment sales will recover at a faster rate in the future. Although NAND sales will grow significantly as the NAND market recovers, the NAND ratio is expected to remain at around 25% as sales of GAA and other advanced Logic products and Mature Logic products for customers in Europe, the US, and China expand.

We will spend about 6% levels of our sales revenue in R&D each year to materialize these goals. Although the R&D ratio appears to be declining, the absolute amount of R&D continues to grow significantly each year because sales will grow more strongly than the R&D ratio. That is all for myself.

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