



# FY2024 1st Half Investor Briefing

**CREATIVE CONNECTIVITY**

—Challenge, Creativity, Solutions

SMK Corporation (6798)

November 7, 2024

# Outline of FY2024 2Q Financial Results

Itaru Kitahira

Vice President and CFO

- Sales increased by 2.3% year-on-year (YoY) to 23.6 billion yen.
- Operating profit turned positive, as the profit margin improved, shifting from a loss of 177 million yen to a profit of 108 million yen.

Unit: Million yen

	FY2023 1H Result	FY2024 1H Result	YoY
Net Sales	23,075	23,614	+ 2.3%
Operating Profit (Operating profit margin)	△177 (—)	108 (0.5%)	—
Ordinary Profit	1,118	74	△93.3%
Net Profit	1,010	△287	—
Earnings per share (yen)	154.50	△45.35	—
Exchange rate (1US\$=)	¥141.27	¥153.17	

- CS Division : Strong performance in the ICT, Car Electronics, and Industry markets.
- SCI Division: While strong in the Home Appliance market, weak in the ICT, Car Electronics, and Industry markets.

Unit: Million yen

		FY2023 1H Result	FY2024 1H Result	YoY		Comments
				Difference	%	
CS Division	Net Sales	10,349	11,519	+1,170	+11.3%	<ul style="list-style-type: none"> <li>■ for cameras, E-Bikes: Increased</li> <li>■ for tablets: Strong</li> <li>■ for renewable energy: Increased</li> <li>■ for amusement: Weak</li> </ul>
	Operating Profit (Operating profit margin)	526 (5.1%)	1,160 (10.1%)	+634	+120.5%	
SCI Division	Net Sales	12,515	11,982	△533	△4.3%	<ul style="list-style-type: none"> <li>■ Remote controls for home appliances: Strong</li> <li>■ Automotive camera modules and units: Weak</li> </ul>
	Operating Profit (Operating profit margin)	△608 (—)	△851 (—)	△243	—	
Innovation Center <small>former R&amp;D Center</small>	Net Sales	210	113	△97	△46.1%	<ul style="list-style-type: none"> <li>■ Bluetooth® modules for mobile printers and medical equipment: Decreased</li> <li>■ Sub-GHz communication systems for lighting equipment: Flat YoY</li> </ul>
	Operating Profit (Operating profit margin)	△95 (—)	△200 (—)	△105	—	
TOTAL	Net Sales	23,075	23,614	+539	+2.3%	
	Operating Profit (Operating profit margin)	△177 (—)	108 (0.5%)	+286	—	
Exchange rate (1US\$=)		¥141.27	¥153.17			

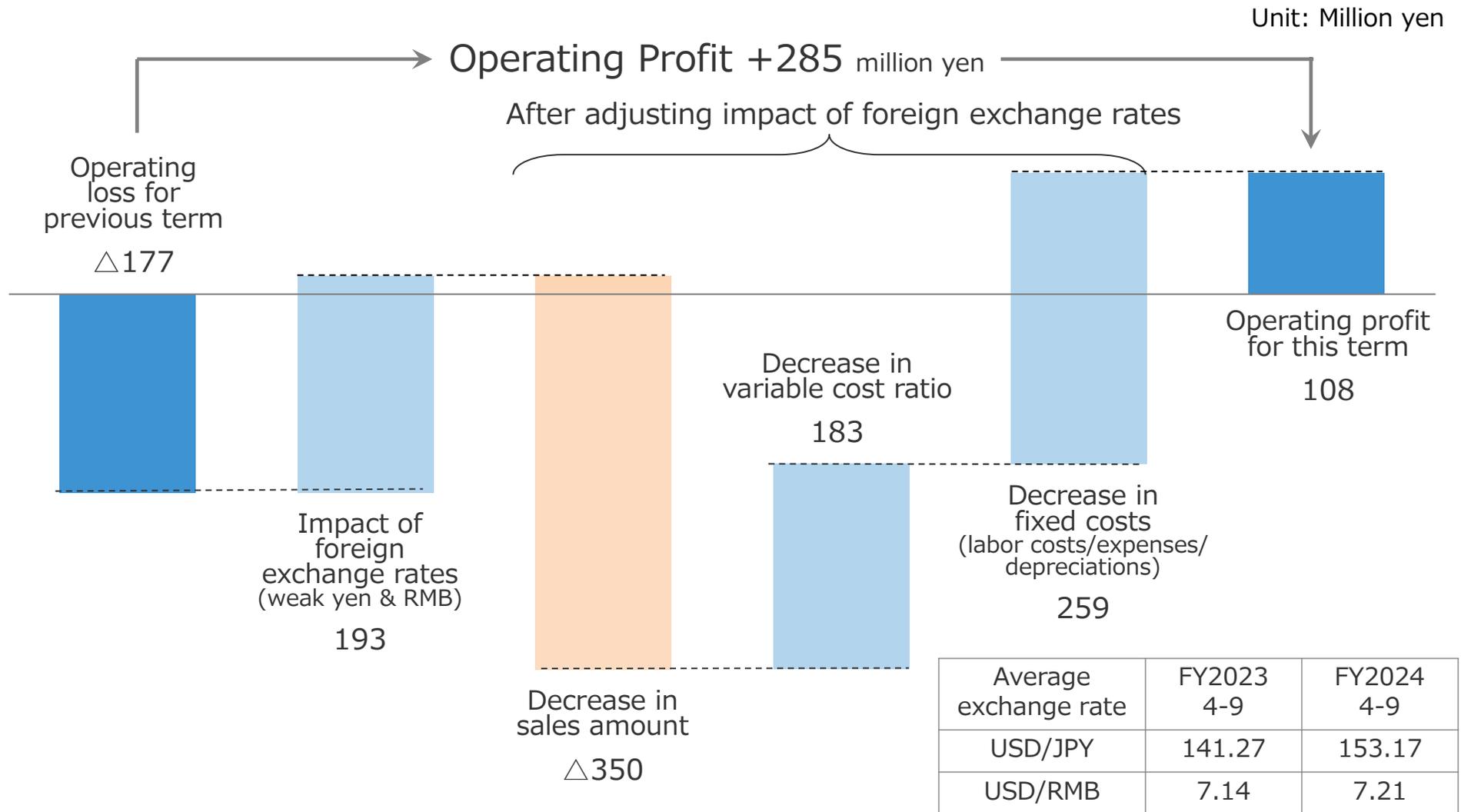
( ): YoY  
 Unit: Million yen

		FY2024		Difference vs. 1Q	1Q to 2Q Trend
		1Q	2Q		
CS Division	Net Sales	(+21.1%) 5,717	(+3.1%) 5,801	+84	Stable (At the same level as 1Q) ■ Connectors for tablets ■ Renewable energy-related connectors
	Operating Profit	(+1,147.8%) 569	(+23.1%) 591	+21	
SCI Division	Net Sales	(△4.4%) 5,944	(△4.1%) 6,037	+92	Stable (At the same level as 1Q) ■ Remote controls for air conditioners ■ Remote controls for sanitary
	Operating Profit	(-) △528	(-) △322	+206	
Innovation Center	Net Sales	(△36.0%) 64	(△55.3%) 49	△14	Weak ■ Sub-GHz communication systems for lighting equipment
	Operating Profit	(-) △104	(-) △95	+9	
TOTAL	Net Sales	(+6.2%) 11,726	(△1.2%) 11,888	+161	
	Operating Profit	(-) △64	(△16.0%) 172	+236	

Unit: Million yen

		FY2023 1H Result	FY2024 1H Result	YoY		Comment on Sales Increase/Decrease
				Difference	%	
by Market	ICT	3,771	4,052	+280	+7.4%	<b>Japan</b> <Home> Remote controls for sanitary: Strong <Car> Control units for E-Bikes: Weak <b>North America</b> <ICT> Connectors for tablets: Increased <Home> Units for housing equipment: Weak <b>China</b> <Industry> Renewable energy-related connectors: Increased <Car> Automotive connectors: Weak <b>Rest of Asia</b> <Home> Remote controls for air conditioners: Strong <b>Europe</b> <Car> Automotive remote controls: Weak <Home> Remote controls for housing equipment: Weak
	Home Appliance	9,045	10,026	+980	+10.8%	
	Car Electronics	8,065	7,145	△919	△11.4%	
	Industry/Others	2,192	2,390	+197	+9.0%	
by Region	Japan	7,208	6,944	△263	△3.7%	
	North America	5,866	6,021	+154	+2.6%	
	China	5,176	5,378	+201	+3.9%	
	Rest of Asia	3,650	4,209	+559	+15.3%	
	Europe	1,173	1,061	△112	△9.6%	
TOTAL		23,075	23,614	+539	+2.3%	
Exchange rate (1US\$=)		¥141.27	¥153.17			

- On a constant-currency basis, operating profit decreased due to a decline in sales. However, the weaker yen, improved variable cost ratio from the product mix, and reduction in fixed costs contributed to a positive operating profit.



- Based on the 1H performance, the full-year profit forecast has been revised upward.
- A 40 yen commemorative dividend for the SMK's 100th anniversary will be paid at the end of FY2024.

Unit: Million yen

	FY2023 Result A	FY2024 Forecast announced on May 9 B	FY2024 Forecast revised on Oct. 29 C	YoY C/A
Net Sales	46,522	50,000	48,000	+3.2%
Operating Profit (Operating profit margin)	△1,243 (△2.7%)	△200 (△0.4%)	200 (0.4%)	—
Ordinary Profit	226	200	600	+165.2%
Net Profit	△489	0	200	—
Earnings per share (yen)	△75.00	0.00	31.56	—
Dividend per share (yen)	100.00 50/50 (Interim/Final)	100.00 50/50 (Interim/Final)	140.00 50/90* (Interim/Final) * incl. commemorative dividend of 40 yen	
Exchange rate (1US\$=)	¥144.56	¥150.00	1H ¥153.17 2H ¥145.00	

Unit: Million yen

	March 2024 A	September 2024 B	Difference B – A
<b>Assets</b>	58,444	57,390	△1,053
Cash and cash equivalents	10,258	10,942	+683
Accounts receivable	13,222	11,644	△1,578
Inventories	9,257	8,948	△308
Fixed assets	24,619	24,594	△25
<b>Liabilities</b>	26,300	26,250	△50
Accounts payable and accrued expenses	6,503	5,742	△761
Interest-bearing debt	14,365	14,995	+629
<b>Net assets</b>	32,143	31,140	△1,002
Common stock	7,996	7,996	–
<b>Equity Ratio</b>	55.0%	54.3%	△0.7%

Unit: Million yen

	FY2023 4-9	FY2024 4-9
<b>Cash flow from operating activities</b>	2,062	1,570
Working capital	75	920
Profit before taxes	1,264	△7
Depreciation	1,254	1,146
Others	△532	△488
<b>Cash flow from investing activities</b>	△977	△1,012
<b>Free cash flow</b>	1,084	558
<b>Cash flow from financing activities</b>	217	324
Increase/decrease in interest-bearing debt	874	643
Increase/decrease in treasury stock	△1	△1
Dividends paid	△655	△318
<b>Initial balance</b>	8,915	10,197
<b>Final balance</b>	9,859	10,882

FY2024 Prospect  
and Progress of  
Medium-Term Business Plan  
“SMK Next100”

Yasumitsu Ikeda  
President, CEO and COO

# Sales and Profit by Segment (FY2023-FY2024)

12/31

Unit: Million yen

		FY2023 Result A	FY2024 Forecast		YoY	Comment on Profit Increase/Decrease
			Announced in May B	Revised in Oct. C	C/A	
CS Division	Net Sales	20,586	23,420	23,158	+12.5%	<ul style="list-style-type: none"> <li>Profit increase due to higher sales</li> <li>Improvement in product mix</li> <li>Increase in productivity</li> </ul>
	Operating Profit	1,095	965	1,775	+62.1%	
SCI Division	Net Sales	25,541	26,283	24,563	△3.8%	<ul style="list-style-type: none"> <li>Inventory valuation loss of approx. 0.7 billion yen recognized in FY2023</li> <li>Reduction in fixed costs and assembly processing costs</li> </ul>
	Operating Profit	△2,145	△709	△1,086	—	
Innovation Center	Net Sales	394	297	278	△29.4%	<ul style="list-style-type: none"> <li>Increase in fixed costs due to reorganization (staffing increase)</li> <li>Decrease in Bluetooth® module sales</li> </ul>
	Operating Profit	△193	△456	△487	—	
TOTAL	Net Sales	46,522	50,000	48,000	+3.2%	
	Operating Profit	△1,243	△200	200	—	
Exchange rate (1US\$=)		¥144.56	¥150.00	1H ¥153.17 2H ¥145.00		

# <Reference> Net Sales by Market and Region (FY2023-FY2024) <sup>13/31</sup>

Unit: Million yen

		FY2023 Result A	FY2024 Forecast		YoY	Comment on Sales Increase/Decrease
			Announced in May B	Revised in Oct. C	C/A	
by Market	ICT	7,908	9,000	8,700	+10.0%	<b>Japan</b> <Home> Remote controls for sanitary and connectors for digital cameras: Strong <Car> Connectors for E-Bikes: Increase / Control units: Weak / Camera connectors: Strong / Camera modules: Decrease <b>North America</b> <ICT> Connectors for tablets: Increase <Home> Remote controls for home appliances: Strong / Units for housing equipment: Weak <Car> Camera connectors: Strong <b>China</b> <Industry> Renewable energy-related connectors: Strong <Car> Automotive connectors: Weak <ICT> Connectors for smartphones: Stable <Home> Connectors for amusement: Weak <b>Rest of Asia</b> <Home> Remote controls for air conditioners: Strong <Car> Automotive connectors: Weak <b>Europe</b> <Car> Automotive remote controls: Weak <Home> Remote controls for housing equipment: Weak
	Home Appliance	17,500	18,000	18,300	+4.6%	
	Car Electronics	16,599	17,500	16,000	△3.6%	
	Industry/Others	4,513	5,500	5,000	+10.8%	
by Region	Japan	15,313	16,800	15,700	+2.5%	
	North America	11,684	14,100	12,700	+8.7%	
	China	9,830	10,000	10,200	+3.8%	
	Rest of Asia	7,414	6,700	7,400	△0.2%	
	Europe	2,279	2,400	2,000	△12.2%	
TOTAL		46,522	50,000	48,000	+3.2%	
Exchange rate (1US\$=)		¥144.56	¥150.00	1H ¥153.17 2H ¥145.00		

- In preparation for great progress in the next 100 years, we will accelerate **structural reforms for sustainable growth**.
- Based on the promotion of sustainable management, we will work to achieve sustainable growth in sales and profits, advance the sophistication of our management base, capital and financial strategies, all aimed at maximizing corporate value.

## Improving Corporate Value

Achieving sustainable  
growth in sales and profit

Strengthening management  
base that supports business

Sophisticating capital  
and financial strategies

Promoting ESG & sustainability management

Challenges	Initiatives
<p><b>CS Division</b> Sustainably expand sales and improve profitability</p>	<ul style="list-style-type: none"> <li>■ Expand sales in focus markets.                             <ul style="list-style-type: none"> <li>- Strong performance in the car electronics/E-Bike, tablet, and renewable energy markets.</li> </ul> </li> <li>■ Advance simulation technology and promote smart manufacturing.                             <ul style="list-style-type: none"> <li>- Productivity is improving through automation.</li> </ul> </li> </ul>
<p><b>SCI Division</b> Enhance profitability and return to a growth path</p>	<ul style="list-style-type: none"> <li>■ Create high value-added products.                             <ul style="list-style-type: none"> <li>- Milweb millimeter-wave (mmWave) sensor</li> <li>- Self-contained power supply coin battery</li> </ul> </li> <li>■ Expand sales in focus markets.                             <ul style="list-style-type: none"> <li>- Strong performance in products for sanitary and air conditioners in the Home Appliance market.</li> </ul> </li> <li>■ Promote automation and smart factory.                             <ul style="list-style-type: none"> <li>- Productivity is improving through automation.</li> </ul> </li> </ul>
<p><b>Innovation Center</b> Create new business</p>	<ul style="list-style-type: none"> <li>■ Accelerate initiatives for new business creation.                             <ul style="list-style-type: none"> <li>- Speech based dementia diagnostic support algorithm: Detection accuracy improved.</li> <li>- Radar based monitoring sensor: Multiple business negotiations are underway.</li> </ul> </li> </ul>

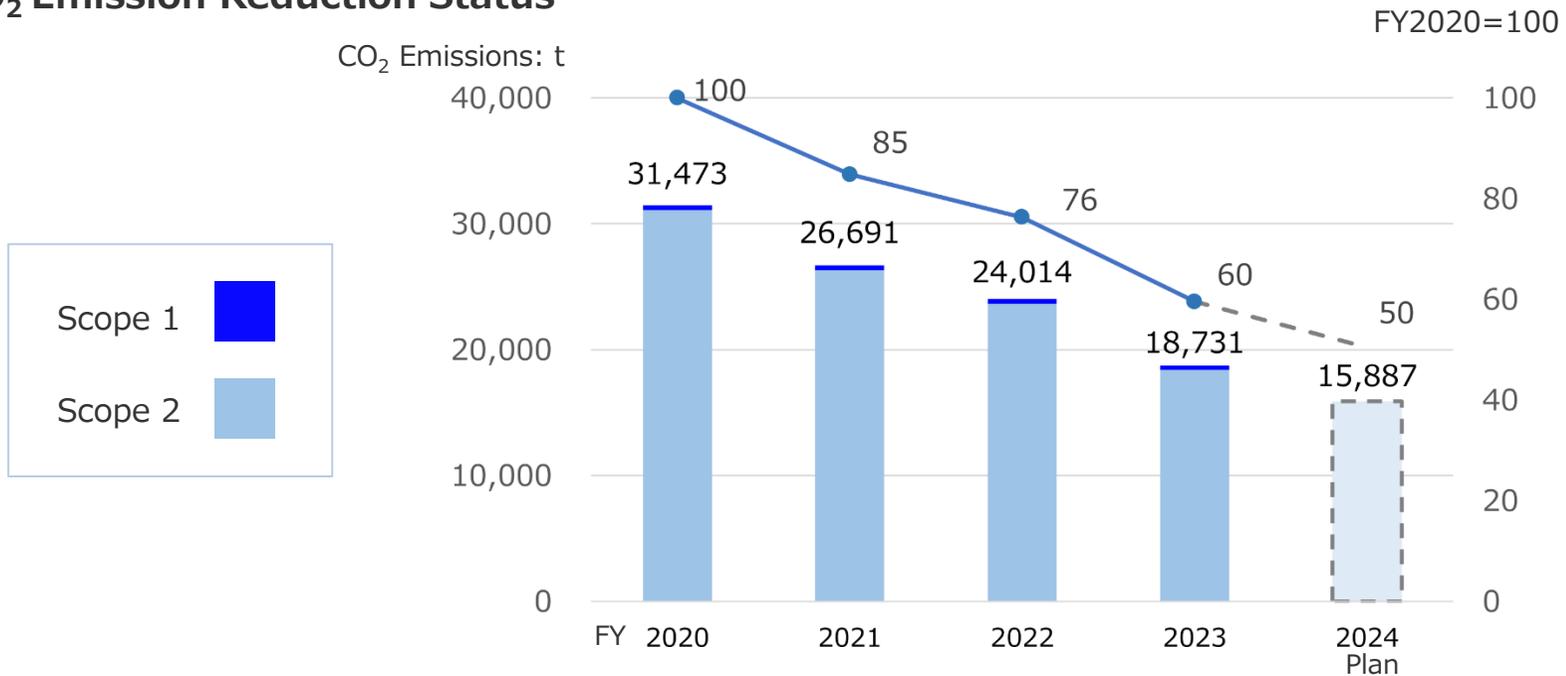
Challenges
<ul style="list-style-type: none"> <li>• Weak sales and profit and uncertainty in growth potential</li> <li>• High profit volatility</li> <li>• Low ROE due to low operating profit margin</li> </ul>

Initiatives
<ol style="list-style-type: none"> <li>1. Steadily execute initiatives to achieve the Medium-Term Business Plan</li> <li>2. Improve capital efficiency</li> <li>3. Strengthen shareholder returns and communication with investors</li> </ol>

Challenges	Ongoing Initiatives
Improving capital efficiency	<ul style="list-style-type: none"> <li>■ Gradually introduce ROIC.                             <ul style="list-style-type: none"> <li>- ROIC measurement trial has started in 1Q.</li> <li>- Improvement of CCC for more efficient capital allocation has begun.</li> <li>- Cross-shareholdings will be gradually reduced.</li> </ul> </li> </ul>
Strengthening shareholder returns and communication with investors	<ul style="list-style-type: none"> <li>■ Implement dividends aiming for a DOE of 2.0%, based on financial soundness (during the current Medium-Term Business Plan period).</li> <li>■ Increase the dividend from 100 yen to 140 yen, including a 40 yen commemorative dividend for the 100th anniversary.</li> <li>■ Enhance financial results presentation slides (now available for 1Q and 3Q as well).</li> <li>■ Enrich information in the Integrated Report.</li> </ul>

Challenges	Initiatives
Promoting ESG & sustainability management	<ul style="list-style-type: none"> <li>■ Reorganized sustainability promotion structure. (July 2024)                             <ul style="list-style-type: none"> <li>- Integrated and restructured the CSR Committee and Crisis-management Committee into the CSR/Sustainability Committee.</li> </ul> </li> <li>■ Revised Environmental Charter. (Aug. 1, 2024)</li> <li>■ Revised Employee Code of Conduct. (Oct. 1, 2024)</li> <li>■ Revise personnel evaluation system. (Apr. 2025)</li> </ul>

■ CO<sub>2</sub> Emission Reduction Status



## In April 2025, SMK will celebrate its 100th anniversary.

### 1. SMK Private Show "TEXPO2025"

Theme: Turning Technology into Solutions

Date: July 2 (Wed) to July 4 (Fri), 2025

Venue: Tokyo International Forum

- ◆ SMK's 100-year journey
- ◆ Cutting-edge components, technologies, and solutions



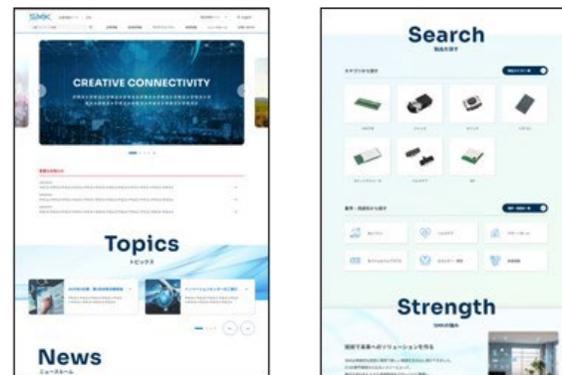
(Tokyo International Forum)

### 2. Comprehensive Renewal of SMK Website

Launch: May 2025

URL: <https://www.smk.co.jp/>

- ◆ Easy-to-navigate structure.
- ◆ Enhanced company and product information.
- ◆ Valuable content for all stakeholder.



(New website image)

### 3. 100th Anniversary Commemorative Dividend

To express our gratitude for the longstanding support of our shareholders, we will issue a commemorative dividend of 40 yen per share.

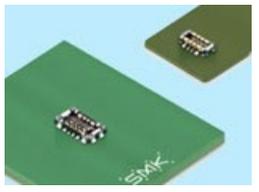
At 2Q end	At fiscal year end	Total
50.00 yen	90.00 yen (ordinary 50 yen + commemorative 40 yen)	140.00 yen

[Major Products] Connectors

## Information & Communication Technology

## Car Electronics

## Home Appliance & Industry/Others



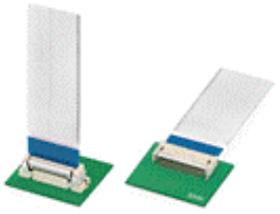
High frequency board to board connectors

High-current small board to board connectors

FPC/FFC connectors with locking structure

Coaxial FAKRA connectors

Connectors for photovoltaic module



USB Type-C® receptacles

φ3.5mm mini jacks

High performance pogo pin Type terminals

Automotive camera connectors

0.5mm pitch one action FPC/FFC connectors

Hideo Sugano, Vice President, CS's Senior General Manager

**<FY2024 1H>**

Sales in 1H increased by 11% YoY to 11.5 billion yen, and operating profit increased by 121% YoY to 1.16 billion yen.

- Performance in the Car Electronics, ICT, and Industry markets was strong compared to the previous year.

**<FY2024 Full-Year>**

For the full year, sales are expected to increase by 12% YoY to 23.2 billion yen, and operating profit is forecasted to rise by 62% YoY to 1.78 billion yen.

- In the all markets, including the Home Appliance market, performance is expected to surpass the previous year.

**<Sales and Profit>**

Unit: Million yen

		FY2023 1H Result	FY2024 1H Result	FY2024 2H Forecast	2H/1H	FY2023 Result	FY2024 Forecast	YoY
Net Sales		10,349	11,519	11,639	101%	20,586	23,158	112%
by Market	ICT	3,167	3,824	3,946	103%	6,670	7,770	116%
	Home Appliance	1,739	1,613	1,362	84%	2,841	2,974	105%
	Car Electronics	4,719	4,919	4,993	102%	9,428	9,912	105%
	Industry/Others	724	1,163	1,338	115%	1,647	2,502	152%
Operating Profit		526	1,160	615	53%	1,095	1,775	162%
1US\$=		¥141.27	¥153.17	¥145.00	-	¥144.56	1H ¥153.17 2H ¥145.00	-

## 1. Business Environment

- Global economy is on a growth trajectory.
- Despite instability from conflicts (Ukraine, Israel) and canal issues, inventory adjustments are settling, and demand is recovering.

## 2. Sales Performance

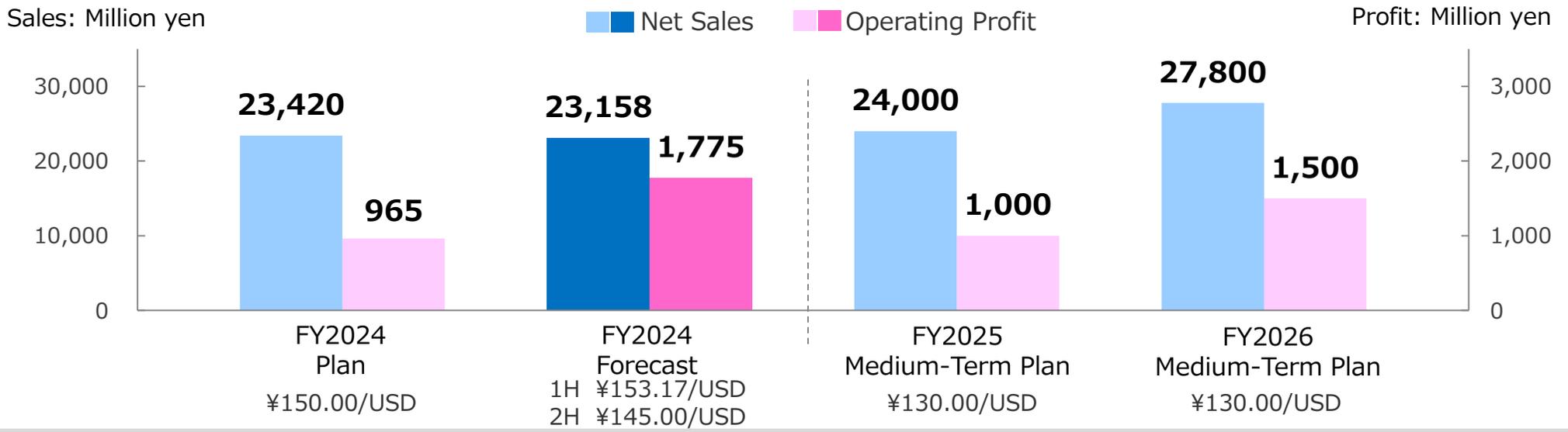
- Conducting order-taking activities with a focus on the Car Electronics and ICT markets.
- Strong performance in automotive camera connectors.
- Stable in tablet and wearable markets.

## 3. Operating Profit

- High raw material, logistics, and labor costs.
- Currency fluctuations.

## 4. Profitability Improvement

- Enhanced manufacturing capabilities through automation and productivity improvements.



## Car Electronics Market

### Sales Expansion of Products for BMS of xEV

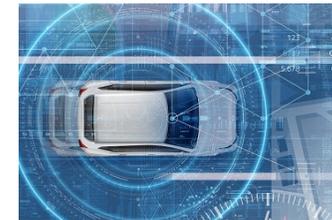
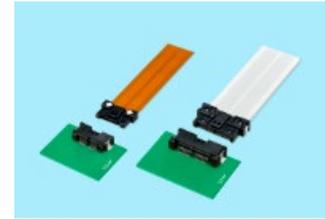
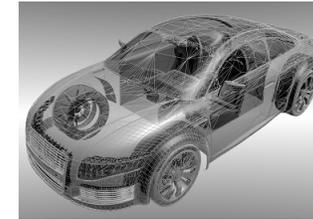
- Expand sales and product lineup of FPC connectors for EV batteries.  
→ **Activate business negotiations and expand sales**

### ADAS, Infotainment

- Develop **high-speed transmission** connectors for higher-resolution automotive cameras.
- Expand sales of 1Gbps Ethernet connectors with the industry's smallest width.

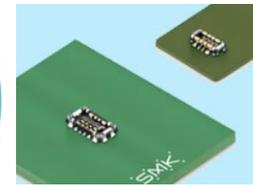
→ **Productize USB Type-C compatible connectors with locking structure**

Press release scheduled for Nov.



## ICT Market

- Develop **small, high-speed, high-current** connectors for high-performance smartphones and tablets. → **Develop new products**
- Actively develop connectors for wearables.



## Renewable Energy-related Market

- Strengthen development of small, high-current connectors.  
→ **Activate business negotiations**



## Strengthening of BCP

[Major Products] Switches, automotive cameras, wireless modules, remote controls, touch sensors

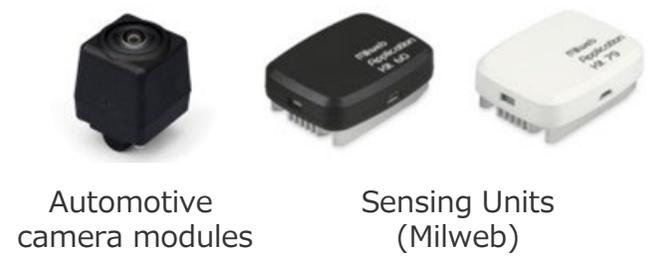
## Main Applications

- ▶ Control switches
- ▶ Switches for smartphones
- ▶ Automotive cameras
- ▶ Wireless modules
- ▶ Remote controls
- ▶ Automotive touch sensors
- ▶ Touch sensors for industrial and consumer applications

## SW - Switch -



## CU - Composite Unit -



## RC - Remote Control -



## TS - Touch Sensor -



Takashi Ito, Vice President, SCI's Senior General Manager

**<FY2024 1H Result>**

Sales were 12 billion yen, 96% YoY, and operating profit worsened from  $\triangle 608$  million yen to  $\triangle 851$  million yen.

- Sales in the Home Appliance market were strong, at 115% YoY, while in the ICT market were 38% YoY, and in the Car Electronics market were 66% YoY, showing weaker performance.

**<FY2024 2H Forecast>**

Sales are forecasted at 12.6 billion yen, 105% of 1H, with operating loss shrinking to  $\triangle 235$  million yen.

- Sales in the Car Electronics market are expected to see a significant increase, reaching 181% of 1H.

**<Sales and Profit>**

Unit: Million yen

		FY2023 1H Result	FY2024 1H Result	FY2024 2H Forecast	2H/1H	FY2023 Result	FY2024 Forecast	YoY
Net Sales		12,512	11,982	12,581	105%	25,536	24,563	96%
by Market	ICT	615	230	221	96%	1,532	451	29%
	Home Appliance	7,278	8,415	7,100	84%	14,811	15,515	105%
	Car Electronics	3,350	2,217	4,012	181%	7,150	6,229	87%
	Industry/Others	1,269	1,120	1,248	111%	2,043	2,368	116%
Operating Profit		$\triangle 608$	$\triangle 851$	$\triangle 235$	-	$\triangle 2,145$	$\triangle 1,086$	-
1US\$=		¥141.27	¥153.17	¥145.00	-	¥144.56	1H ¥153.17 2H ¥145.00	-

## 1. Existing Markets

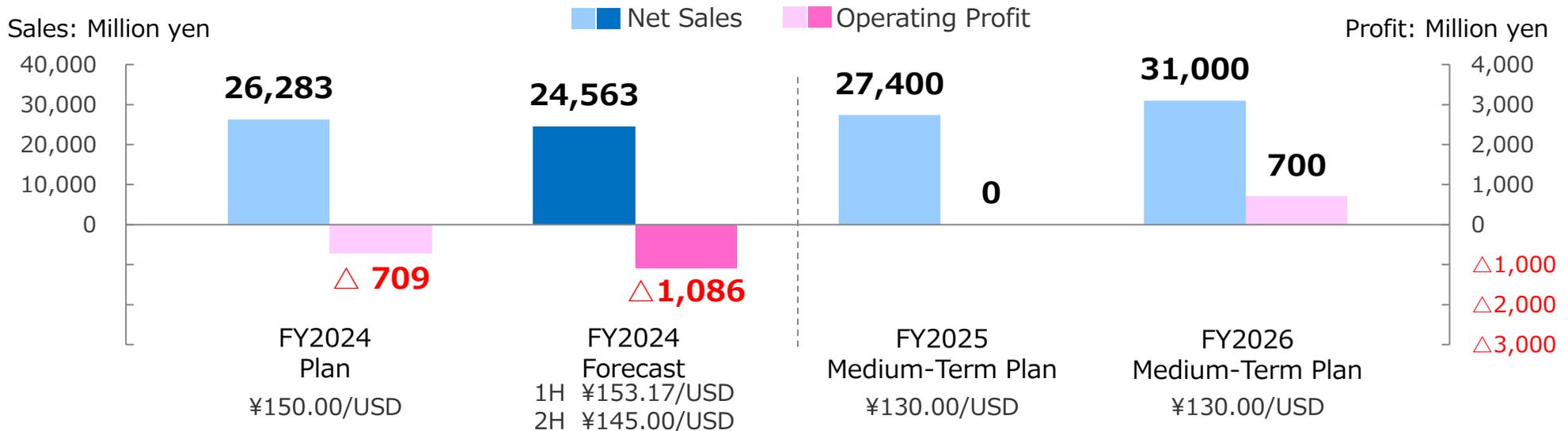
- Home Appliance & Housing: Strong performance, especially in products for sanitary and air conditioners.
- Car Electronics: Sales increased due to the resolution of inventory adjustments at major customers and additional adopted models.

## 2. New Market Development

- Developing high value-added products with sensing & new technology --->Milweb Sleep
- Developing products using existing technology ---> Self-Contained Power Supply Coin Battery

## 3. Organizational Strengthening

- Sales Expansion: Reorganized the sales/design teams and building area-specific sales support systems.
- Production Strengthening: Working to mitigate currency risks and respond to reshoring demands.
- Productivity Improvement: Advancing labor-saving efforts through the introduction of automated remote control assembly and inspection machines, expansion to other overseas production sites, and partial automation with collaborative robots.



## <Home Appliances & Housing Markets>

- Cultivate relationships with major customer.
- Leverage our global development and production system.

Value-added proposals

- ◆ Integration of core technologies
- ◆ Balancing functionality and design

## <Car Electronics Market>

- Propose unit products and expand the E-Bike business.
- Expand automotive product line of camera modules for EVs and ADAS.
- Leverage our global development and production system and explore new fields.

## <New Market and Product Development>

- Products using existing technology
- High value-added products with sensing & new technology

### Milweb Sleep

Using AI to measure sleep depth non-contact.

- Non-contact.
- Supports ultra-low power Bluetooth® Low Energy and UART.
- Connects with home appliances.



Exhibited at the Comfortable Sleep Fair 2024  
(inside Japan Wellness & Health Expo)

### Self-Contained Power Supply Coin Battery

Energy harvesting module, replaceable with coin cell CR2032.

- Maintenance-free.
- Environmentally friendly design.
- Enable functionality expansion through ultra-low power Bluetooth® Low Energy and SoC.



Announced press release in Sept. 2024

In April 2024, Innovation Center was established by integrating former R&D Center and the team creating new businesses through open innovation activities in the former Marketing Department in the Sales Division. This reorganization aims to centralize and strengthen new business creation resources to enhance efficiency and speed.

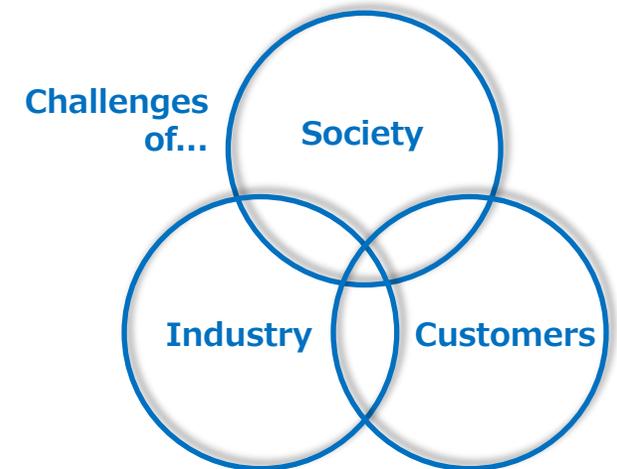
## Mission of Innovation Center

1. Create the next pillars of revenue through unique, high-value-added technologies and products.
2. Develop new business models combining hardware, software (algorithms), and services.
3. Create solution businesses addressing social challenges.

Innovation Center actively integrates internal R&D with external cutting-edge technologies through open innovation, with the aim of addressing social, industry, and customer challenges.

## Themes of Innovation Activities

- Healthcare
- ADAS
- IoT
- AI



**Tetsuo Hara**, Director and Executive Vice President, IC's General Manager

## <Sales>

- Communication Module** | Due to reduced demand from existing customers, sales were 90.3% of the plan.  
 Bluetooth® modules: Sales decreased due to reduced demand from existing customers for mobile printers and medical devices.  
 Sub-GHz modules: For lighting equipment, sales remained flat YoY.
- Open Innovation** | Sales are expected to be weighted toward 2H due to a delay in PoC to 2H.

## <Profit>

- The deficit increased due to unplanned market research expenses for new business launches.

## <Sales and Profit>

Unit: Million yen

		FY2023 1H Result	FY2024 1H Result	FY2024 2H Forecast	2H/1H	FY2023 Result	FY2024 Forecast	YoY
Net Sales		210	113	165	146%	398	278	70%
by Market	ICT	0	0	33	-	0	33	-
	Home Appliance	0	0	0	-	1	0	-
	Car Electronics	0	5	0	-	2	5	250%
	Industry/Others	210	108	132	122%	395	240	61%
Operating Profit		△95	△200	△287	-	△193	△487	-
1US\$=		¥141.27	¥153.17	¥145.00	-	¥144.56	1H ¥153.17 2H ¥145.00	-

## Medium-Term Growth Strategy

## Topics

### 1. Promote development combining sensors and algorithms.

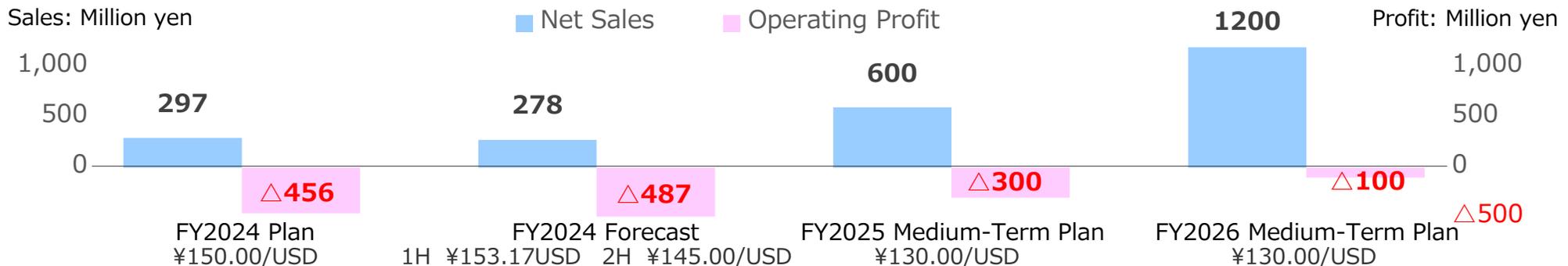
- **Improve profit margins and enable customer support by developing core algorithms in-house.**
- Actively collaborate with universities and companies to complement areas lacking in in-house development.

- Installed **Acoustic sensors** in retail store fixtures. POC underway to develop predictive maintenance algorithms based on failure data.
- Initiating research to improve golf swings using **EMG sensors**.
- **Radar based vital sensors** have met development goals for 1H. In 2H, focus will be on improving accuracy for heart rate and inter-beat intervals.

### 2. Develop healthcare business.

- Pursue business opportunities in collaboration with partner companies related to **dementia** and **depression** (e.g., insurance and pharmaceutical companies).
- In addition to hardware, aim to develop a **high-margin subscription business**.

- **Speech analysis technology** has reached a detection accuracy of over 80%, nearing completion. Ongoing negotiations are taking place with life insurance companies and major system integrators.
- **Radar based monitoring sensors** excel in detecting falls and drowning in bathrooms. Final negotiations are underway with multiple senior care facilities.
- Initiated efforts to develop technology for **visualizing sleep apnea (SAS) syndrome risk**.



## EMG Sensor "Muscle Tracker™"

### Features

- Using SMK's proprietary algorithm, enables **muscle activity visualization** and **muscle fatigue detection** from EMG sensor data.

### Topics

- Golf Swing Analysis: Collaborated with golf school operators to start research on swing improvement.
- In the 2H, analyze **EMG and swing data** from advanced and intermediate players to examine the **correlation between swing mechanics and muscle activity**.



## SAS Risk Visualization Technology

### Features

- Analyze **breathing sounds** during sleep using smartphones and microphone devices.
- Assess **SAS risk** within the day.

### Topics

- Prototype of **SAS risk detection app** completed.
- Trial evaluations** started with bus companies.



## Radar Based Vital Sensor

### Features

- Estimate changes in physical condition and stress levels** from vital data.
- Developing an algorithm to acquire vital data in-house.

### Topics

- Achieved target accuracy for breathing measurement** in resting positions (sitting, supine/prone).
- In the 2H, aim to **improve heart rate/inter-beat interval accuracy** in resting positions using **patent-pending signal processing methods**.
- Explore methods to **enhance vital data accuracy** under vibration, targeting automotive applications.

## Occupant Detection Sensor

### Features

- Install **mmWave radar** on the vehicle ceiling to detect the presence of passengers, their body size (adult/child), position, and the number of passengers.
- Collaborating with Pontosense Inc., Canada, to drive development.

### Topics

- Currently negotiating with customers worldwide.



All information in this material concerning the forecast of business achievements, projections of general business conditions and our business strategies is dependent on our conclusion made to a normally foreseeable extent applying information reasonably accessible to us at the time of preparation of this material.

However, the reality is that it contains risks and uncertainties which may cause result to materially differ from business projections, stated or implied, due to situations which are unforeseeable under normal conditions, or of results which are beyond a reasonably foreseeable outcome at that time.

Despite our active efforts to disclose information which is considered to be important to investors of our company, total dependence on the business projections in this material, stated or implied, must be refrained from when decisions of any kind are made regarding our company.

### **About Trademarks**

- Android TV is a trademark of Google LLC.
- The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by SMK Corporation is under license.
- USB Type-C® is a registered trademark of USB Implementers Forum.
- Other product and company names listed in this material are the registered trademarks or trademarks of their respective owners.