CMK CORPORATION
(Stock code: 6958)

Medium-term management plan

November 24, 2021

CMK CORPORATION

Contents

1. Medium- to long term Vision and Management Policy

Medium- to long term vision:
Achievement of the safe and comfortable society by continuously supplying “the highest level of reliable PCBs” that are adapted to new societies and values

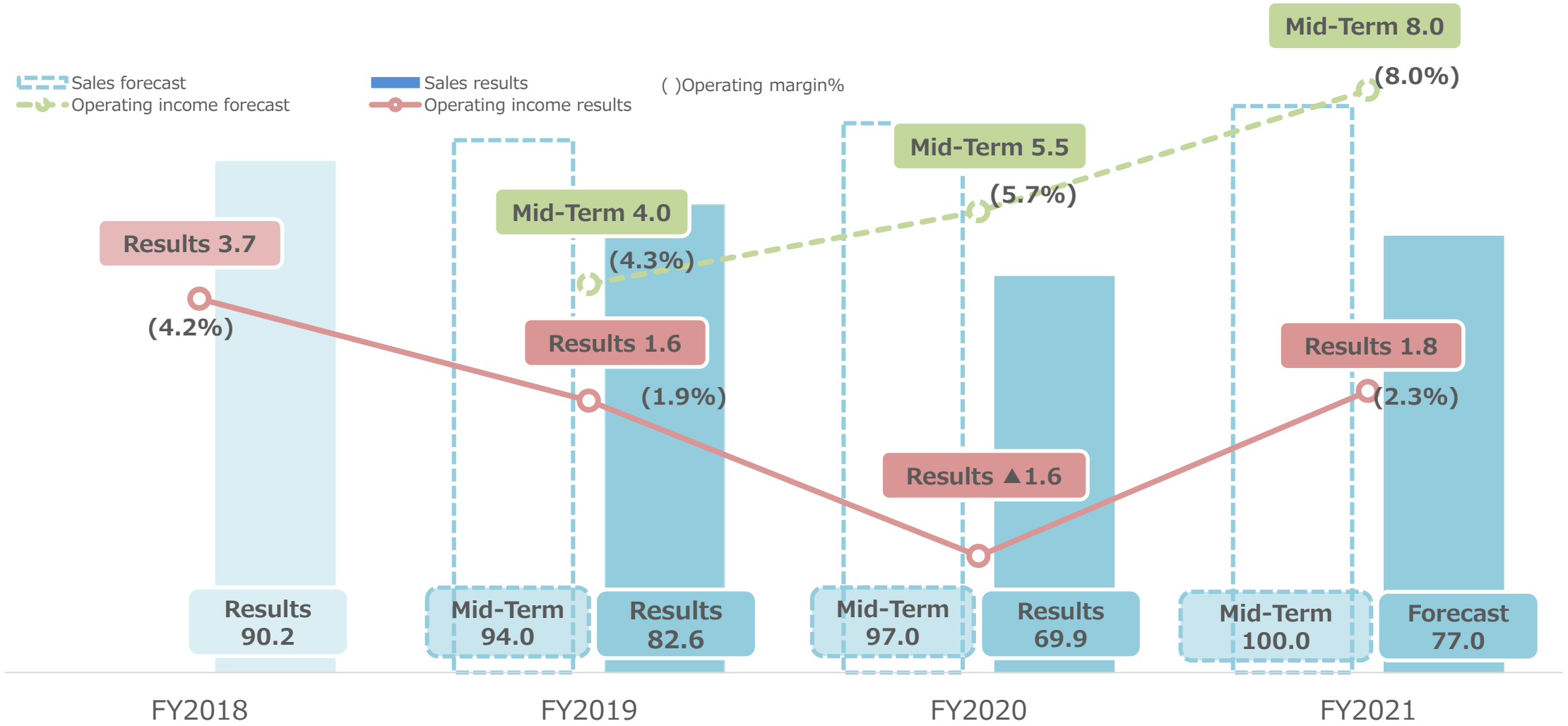
Management Policy:

To achieve

Aiming to Establish a stable profit structure and growth cycle for sustainable growth

2. Review of the previous Mid-term management plan

In addition to the slowdown in the automotive market due to the effects of the trade friction between the United States and China, orders for automotive PCBs declined by the impact of COVID-19; therefore we withdrew the quantitative target in June 2020.



3. Current Status and Medium-Term Management Plan Policy

Current Status

- Although sales of products for automotive use temporarily decreased due to the impact of COVID-19, the profit structure is improving as a result of efforts to the measures at the previous medium-term management plan and streamlining of business operstions
- Creating of the profit structure that can lead to sustainable growth needs further business structure reforms
- Prepatration of medium-term growth strategy by investing in development to new businesses.

Business Environment

- The high growth rate of electric vehicles is expected to help realize a sustainable society. There is significant growth potential in the automotive PCB market over the medium to long term (CASE demand).
- Competition for general-purpose automotive PCB is intensifying due to the expansion of production capacity of competitors.
- The spread of 5G will lead to technological integration with PCBs for telecommunications

Medium-term management plan policy

- **By improving production efficiency and further shifting the highly-added value to the automotive product portfolio, Establish a stable profit base**
- **Based on a stable profit base, we establish a growth cycle by increasing net sales from CASE demand and new businesses and aim for sustainable growth**

4. Outline of the Mid-Term Management Plan

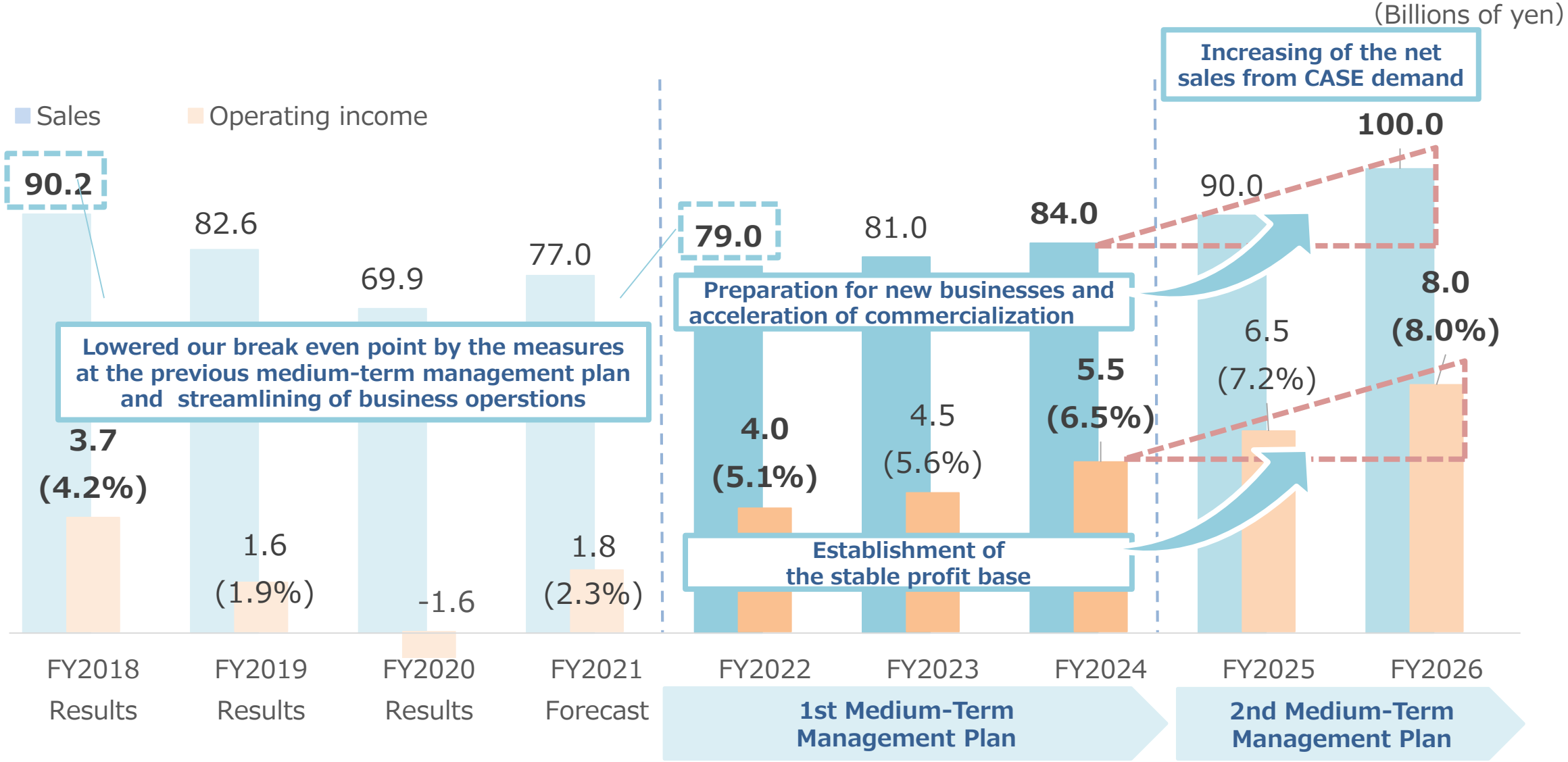
1st Medium-Term Management Plan: Establishment of the profit base through the business structute reform and prepare for the next phase of growth

2nd Medium-Term Management Plan: Accelerated growth by increasing net sales from CASE demand and new businesses

1st Medium-Term Management Plan (From FY2022 to FY2024)	2nd Medium-Term Management Plan (From FY2025 to FY2026)
Establishment of the profit base and preparation for the growth	Accelerated of the growth
・Improving production efficiency through the business structure reform ・Highly-added value shift in the automotive product portfolio (improvement of the product mix) ・Preparation for new businesses and acceleration of commercialization	・Establishment of the growth cycle by increasing net sales from CASE demand ・Increasing of the net sales from new businesses

5. To Achieve the Mid-Term Management Plan

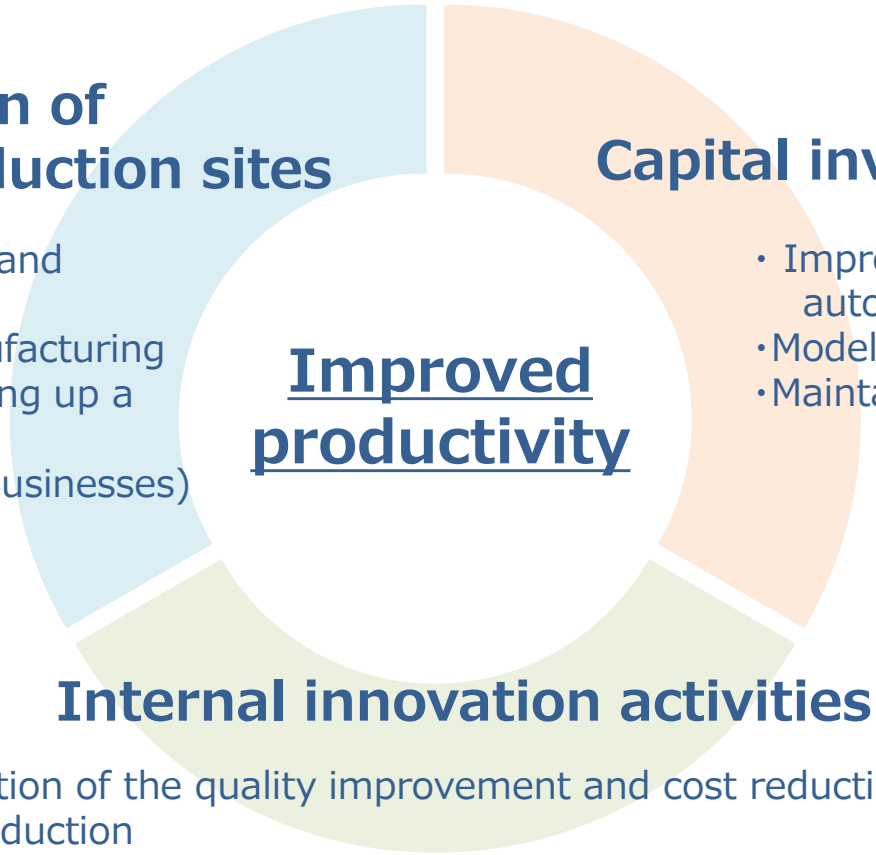
Roadmap to achieve net sales of 100.0 billion yen and operating income of 8.0 billion yen for FY2026



6. Improved productivity

Reorganization of domestic production sites

・Improved efficiency through consolidation and reorganization of production system
・Cost reduction by promoting internal manufacturing
・Appropriate number of personnel by bringing up a multi-skilled workers
(Reduction of Fixed Expenses of Domestic Businesses)



Capital investment

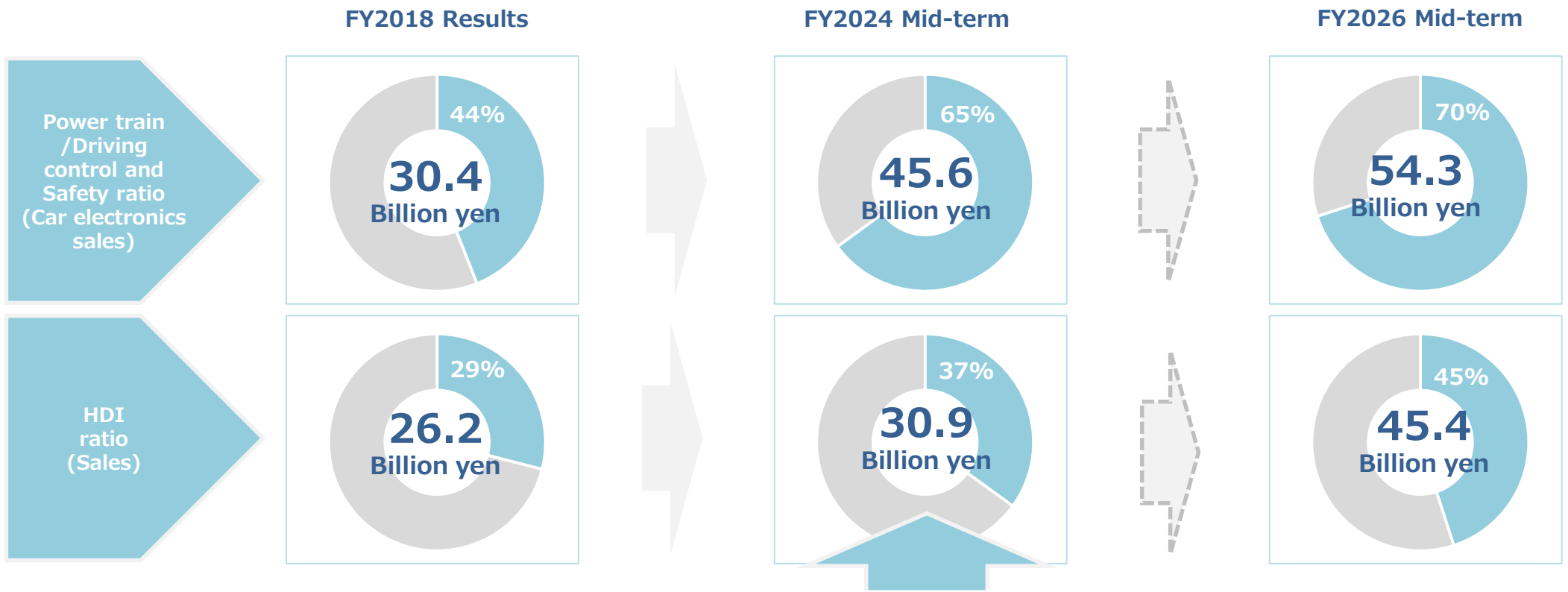
・ Improved productivity and quality by automated and replacement investment
・Model change of production system
・Maintance and improvement of the stable supply

Internal innovation activities

・Promotion of the quality improvement and cost reduction activities
・cost reduction
・Motivation to work in a new way of life

7. Shift to highly-added value

Highly-added value shift in the automotive product portfolio /Increase of the profitability by improvement of the product mix ⇒Focus on Powertrain/Driving control and Safety and increase HDI production ratio



Model change of production system

- Increasing of HDI production ratio at the Thailand factory and producing Multilayered Fine at the China factory
- Outsourced manufacturing of general-purpose automotive PCBs.

8. Capital Investment

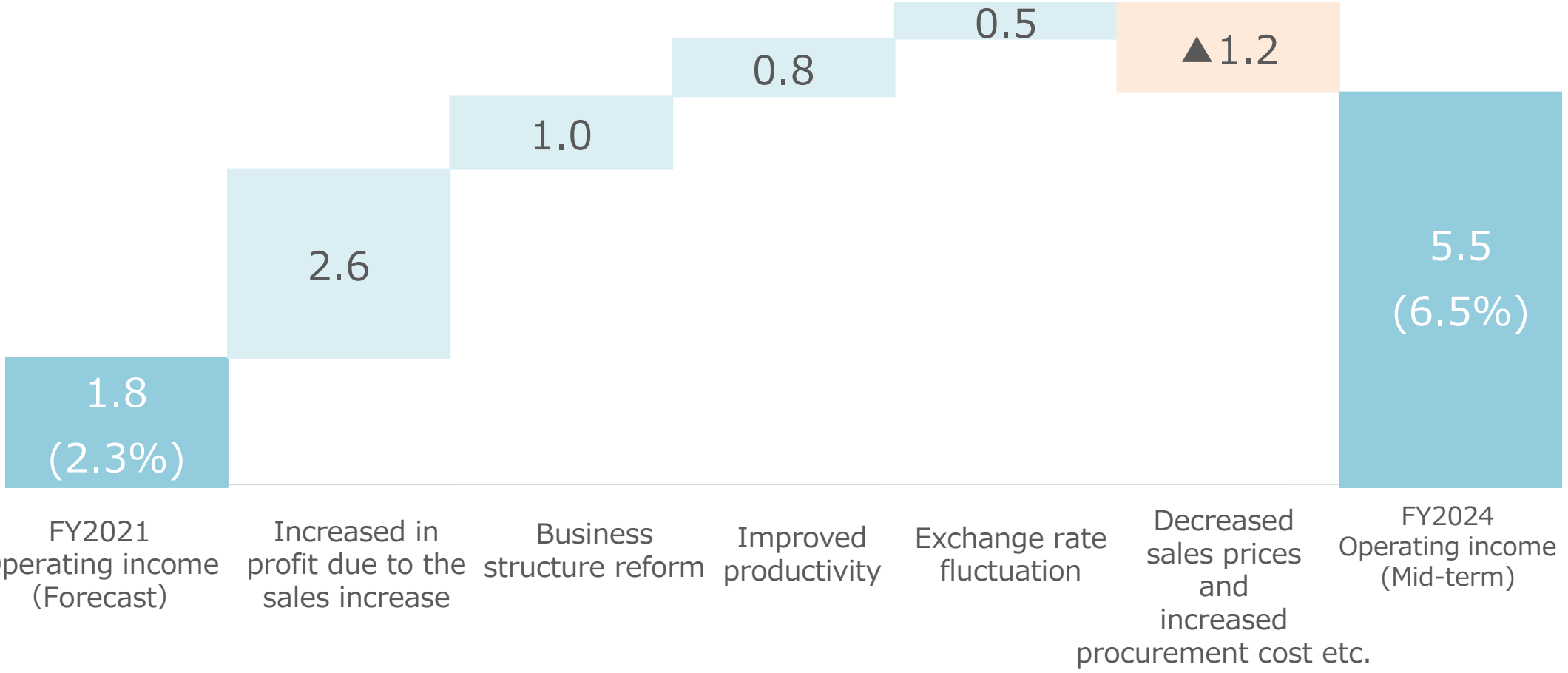
24.0 billion yen capital investment

	< Amount >	< Details>	< Purpose >
Production facilities	21.0 billion yen	✓ Automated investment ✓ Replacement investment (quality improvement, etc.) ✓ Consolidation and reorganization of domestic production sites	**Improved productivity**
		✓ Model change of production system	**Shift to highly-added value**
R&D and others	3.0 billion yen	✓ R&D investment ✓ System and others	-

9. Analysis of changes in operating income

From FY2021 to FY2024
Operating income: 1.8 billion yen ⇒ 5.5 billion yen
Operating margin: 2.3% ⇒ 6.5%

(Billions of yen)

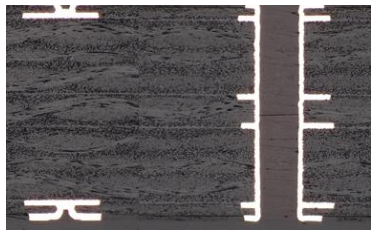


10. Preparing for growth and Acceleration of commercialization

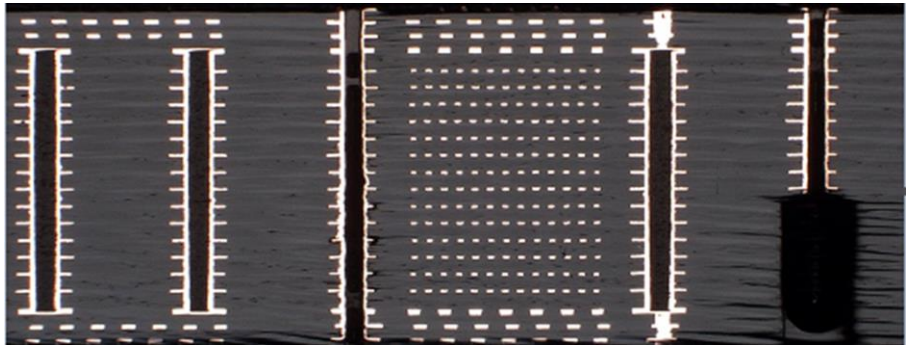
Preparation for new businesses and acceleration of commercialization

【R&D site】
Name : CMK Innovation Center
Site : Niigata factory
Objective: Communication-related fields associated with technological innovation such as 5G communications, and establishment of component technologies required for next-generation automotive PCBs.
Action : Establishment of small quantity and high variety production.

(Reference)
General structure

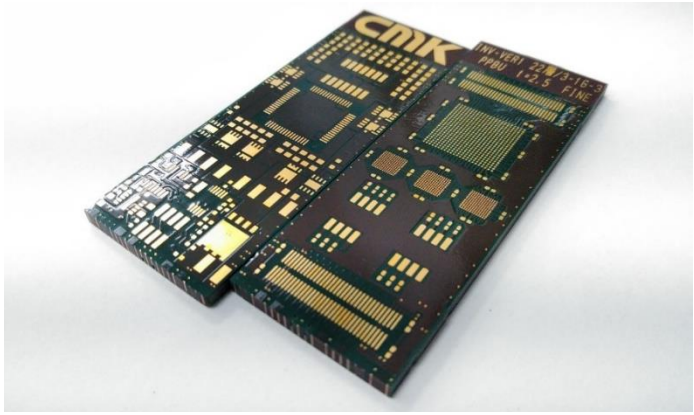


6 layers/1-layer HDI
TH 0.30 mm/Plate thickness 1.6 mm



22 layers/3 Layers HDI
TH 0.15 mm/Plate thickness 2.5 mm/Back Drill

Structure



22 layers (3-16-3) High aspect ratio PCB

11. Expansion of existing business areas

Establishment of the growth cycle by increasing net sales from CASE demand

C Connected
Integration with 5G communications
By connecting to the network,
collaboration between the automobile and the IoT society begins.

▶ **Collaboration with technology of new Business areas**

< Target Item >
Communication Module (Cellular), Satellite positioning system and Narrow area communication Module, DCM (Data Communication Module), Antenna modules, etc.

A Autonomous
Automated operation through information gathering
With the advent of a self-driving society,
increase security, safety and convenience

▶ **Supply of the next-generation automotive PCBs for integrated ECU**

< Target Item >
Integrated ECU, Camera Module and image sensor, millimeter wave radar and LiDAR, automatic brake, Driver support systems, etc.

S Shared & Service
Changes in automobile utilization
From ownership to use, automobiles form the basis of various services.

< Target Item >
Smart keys, Non-contact chargers, etc.

E Electric
Measures of Energy conservation and environmental
By moving from HEV to EV to FCV,
automobiles play a role in the energy ecosystem

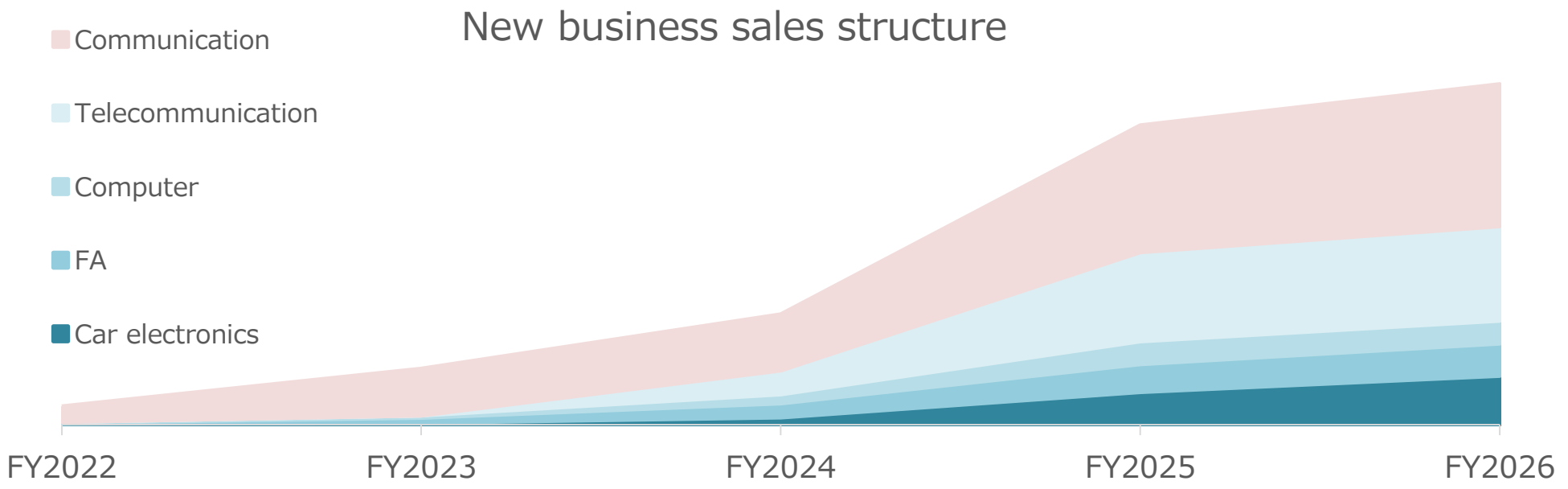
▶ **To a pillar of the automotive product portfolio as our key business sector with competitive advantage**

< Target Item >
inverter and DC-DC converter, Power Control Unit (PCU), HEV/EV ECU, Secondary driving battery (battery), etc.

12. Expansion of new business areas

Target items and required spec in the new business areas

Target Items (Sales)



Required Spec

promotion of finalization Impedance control of high precision circuit forming technology	
0.5 mm Pitch BGA (L/S:50/50μm)	0.4 mm Pitch BGA (L/S:30/30μm)
More than 10 layers ~ 2.4 mm thick (aspect 10)	More than 16 layers ~ 3.0 mm thick (aspect 15)
Macro cell Server SSD Communication modules, etc.	Small Cell Local -5G (Low dielectric material) Communication module (smartphone technology + high-frequency technology) Power Module, Substitution of Ceramics , High Heat Resistance, Low elasticity and Special Structure

13. Optimization of production system for accelerating growth

Japan

・Production of High HDI for mainly new businesses

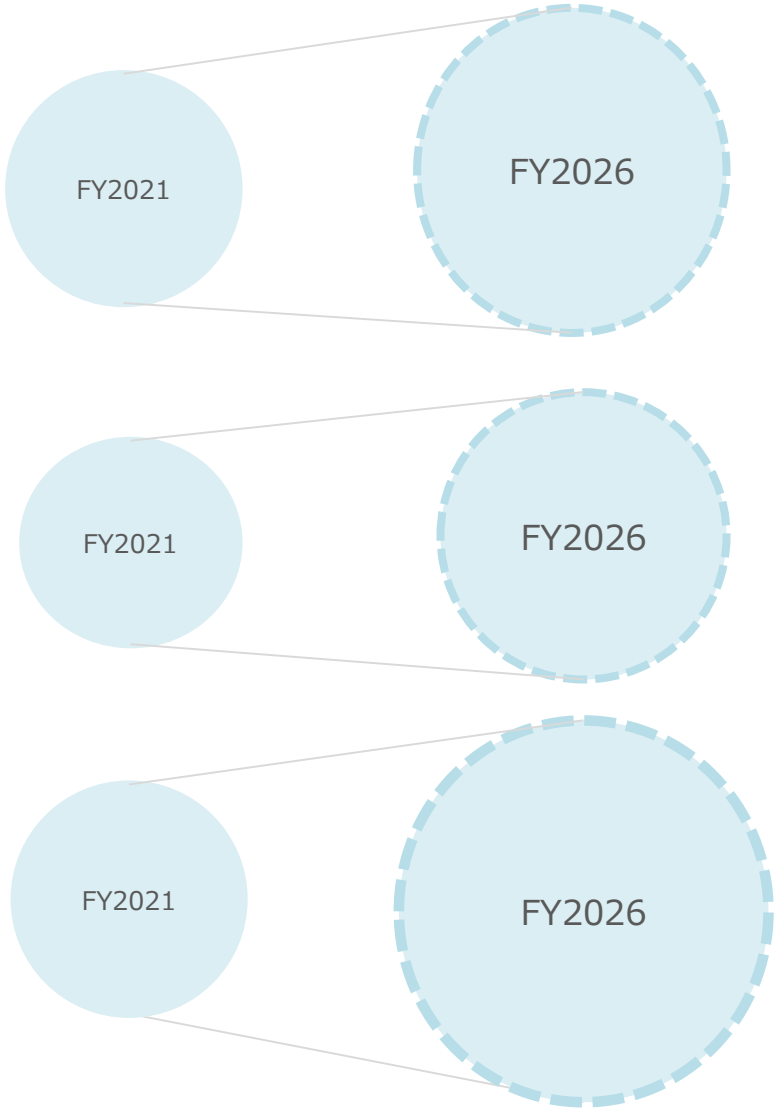
China

・Production of HDI for automotive PCB and Multilayered Fine
・Strengthening cooperation with alliance partners

Thailand

・Production of HDI for automotive PCB to foreign and other customers

Image of sales by region



+ Acceleration of growth through M&A and alliance

14. Numerical Management Targets

Net sales 100.0 billion yen, Operating income 8.0 billion yen, Operating margin 8.0%, ROE 9.0%

	1st Medium-Term Management Plan			2nd Medium-Term Management Plan	
(Billions of yen) *Exchange rate (USD/JPY) 108.00	FY2022	FY2023	**FY2024**	FY2025	**FY2026**
Net sales	79.0	81.0	**84.0**	90.0	**100.0**
Operating income	4.0	4.5	**5.5**	6.5	**8.0**
operating maegin	5.1%	5.6%	**6.5%**	7.2%	**8.0%**
Profit attributable to owners of parent	2.8	3.1	**3.8**	4.5	**5.6**
ROE	5.6%	6.0%	**7.0%**	7.7%	**9.0%**
Depreciation cost	4.5	5.0	5.4	5.9	6.3

■ Continue to pay stable dividends with a payout ration of around 30% in light of our financial results and performance, while securing sufficient internal reserves we need to reinforce our management structure and expand our business further

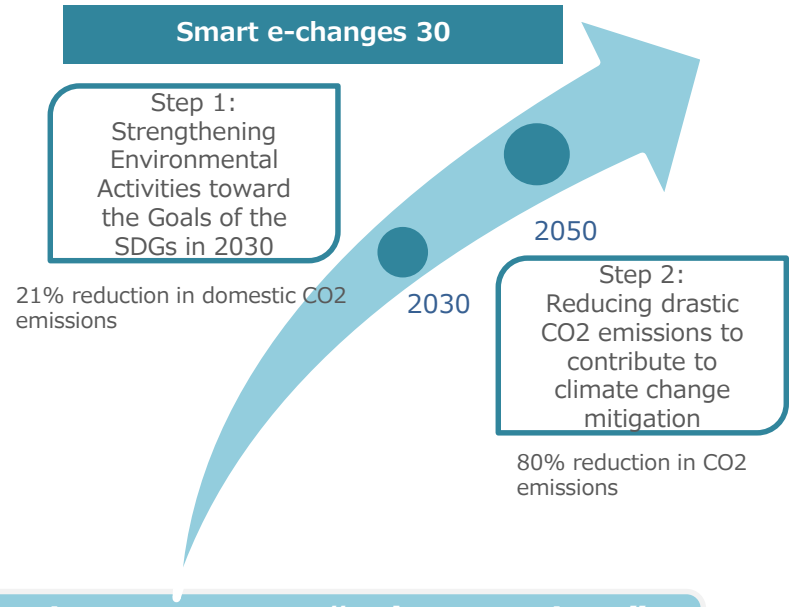
15. Numerical Management Targets ~Breakdown of sales~

		FY2024		FY2026		Change	
		(Billions of yen)	%	(Billions of yen)	%	(Billions of yen)	%
	Car Electronics	68.7	82%	78.5	79%	+9.8	-3%
Breakdown	Power train/Driving control and Safety	45.6	65%	54.3	70%	+8.7	+3%
Breakdown	Body Electronics/Climate Contorol	19.3	28%	20.4	26%	+1.1	-2%
Breakdown	Information and Communication	3.7	5%	3.8	5%	+0.0	-1%
	Mobile communications	1.7	2%	1.7	2%	+0.1	-
	New businesses	2.7	3%	7.0	7%	+4.3	+4%
	Others	11.0	13%	12.8	13%	+1.9	-
	Total	84.0	100%	100.0	100%	+16.0	-

24. Efforts for a Sustainable Society

We are implementing the following 5 initiatives in our Medium- to Long-Term Environmental Action Plan "Smart e-changes 30," to play a role in solving global environmental issues

Tasks	Activities
Climate change mitigation	・Promotion of energy conservation activities to reduce CO2 emissions
Waste reduction Resource recycling	・Separation and collection to reduce waste ・Maintain zaro emission rate of 100% ・Promotion of water recycling
Biodiversity conservation	・Implementation of community-based biodiversity conservation activities
environmentally hazardous substances management	・Compliance with laws and regulations and customer requests ・Continuation of EHS management activities
Environmental pollution control	・Implement environmental risk management activities



October 29, 2021 We submitted the application for the selection of the new market segments "Prime Market " to the Tokyo stock Exchange

With regard to various ESG initiatives "Smart e-changes 30" for a sustainable society, We will review and enhance the initiatives in accordance with the Corporate Governance Code revised in June 2021 in the following schedule

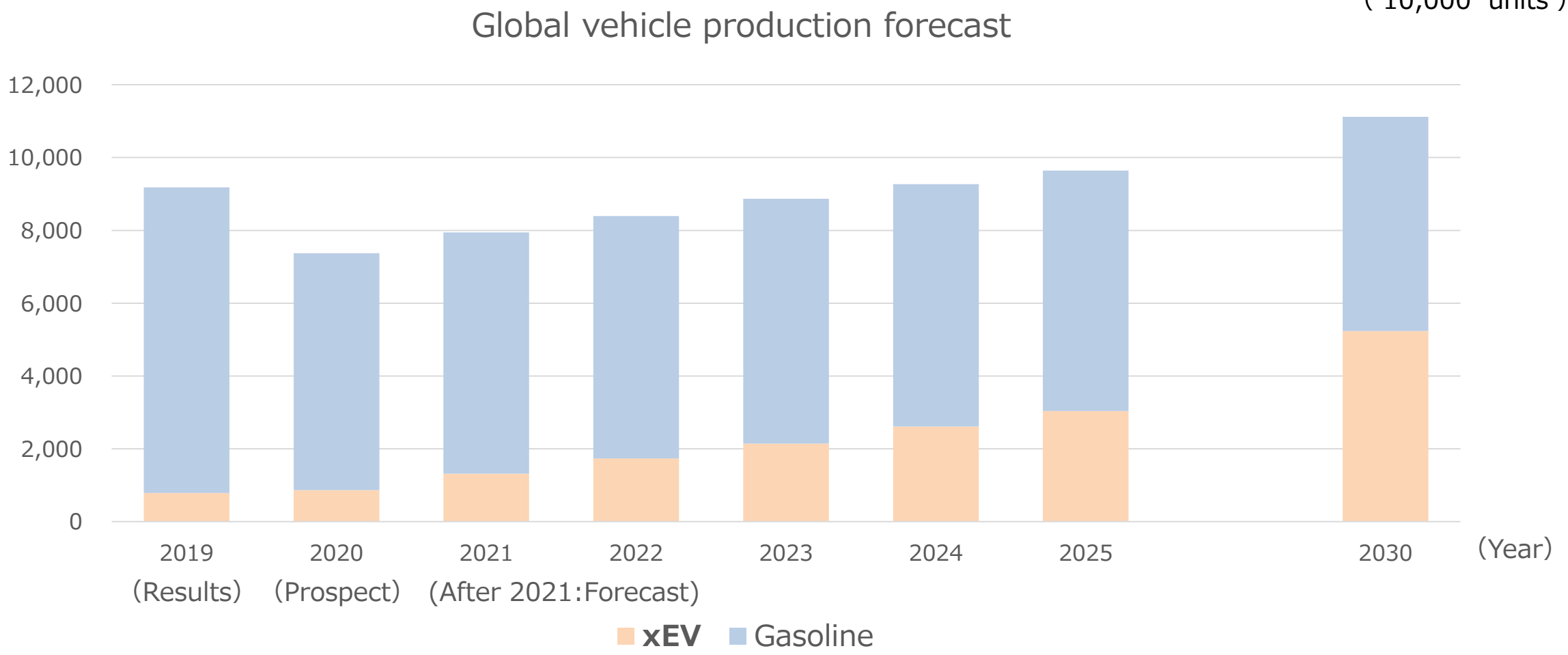
Main items	Schedule
Formulation of key sustainability issues and policies	December 2021
Disclosure of the TCFD framework for responding to climate change	June 2022
Brush-up for TCFD	After July 2022

*The details of various ESG initiatives for a sustainable society are described in the CMK Report. https://www.cmk-corp.com/csr/report/

17. Supplementary information

①Market forecast of global vehicle production

(10,000 units)



▶ Electric vehicles grow at a compound annual growth rate (CAGR) of 18.8% from 2019 to 2030

※Source: Comprehensive Study of In-Vehicle Electronics Devices and components 2021 by Fuji Chimera Research

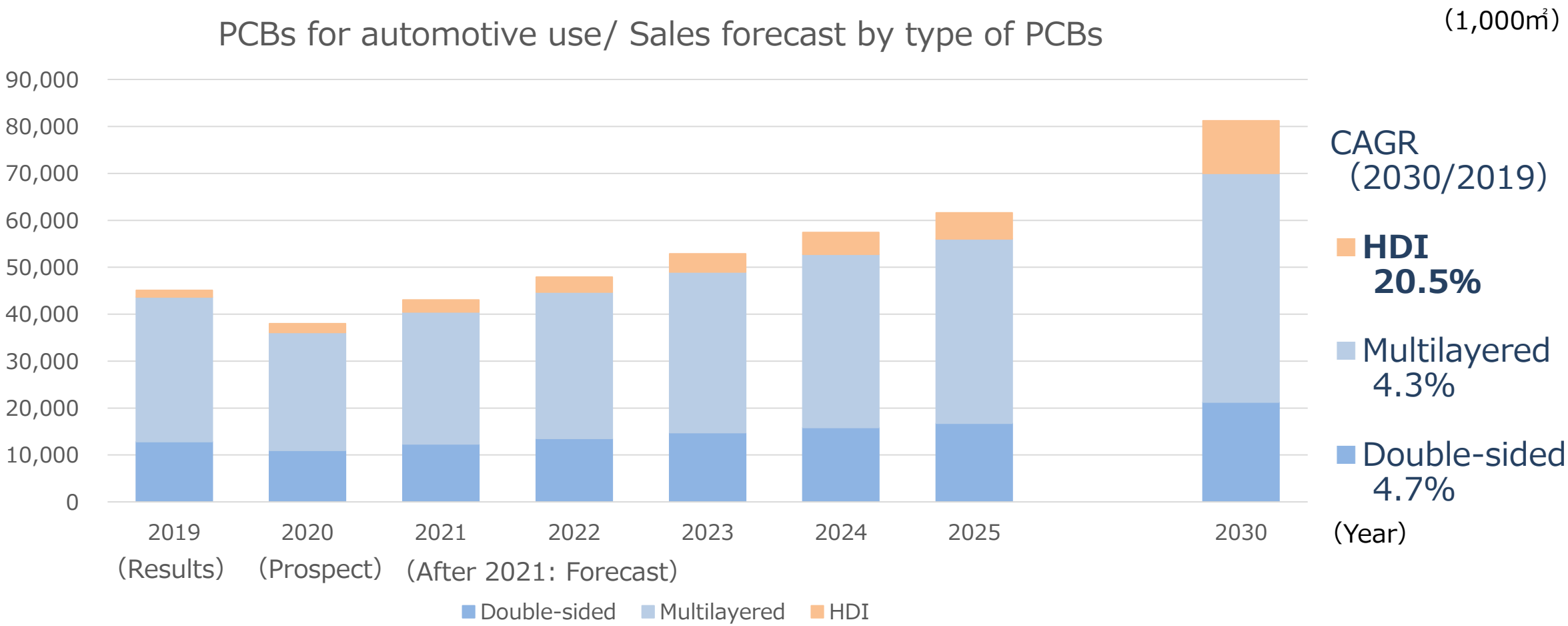
② Trends in the PCBs for automotive use (Sales forecast by Powertrain)

Classification	sales volume（1,000㎡）		CAGR (2030/2019)	Comments
	2019 Results	2030 Forecast		
Engine	39,600	30,570	▲2.3%	・The PCBs used per vehicle is approximately 0.5 ㎡ for gasoline vehicles, nearly 1㎡ for HV, and more than 1㎡ for PHV/EV/FCV ・The spread of electric vehicles with lower pricing, the PCBs used per vehicle will be decreased, however, the total number of PCBs will be increased at the high growth rate.
HV	4,760	25,360	16.4%	
PHV	880	11,340	26.2%	
EV	1,960	14,620	20.0%	
FCV	few	1,000	-	
Total	47,200	82,890	5.3%	

▶ PCBs for HV,PHV, EV will be increased significantly.

※Source: Comprehensive Study of In-Vehicle Electronics Devices and components 2021 by Fuji Chimera Research

③Trends of Automotive PCB market (Sales forecast by type of PCBs)



▶ There is a high demand for HDI PCBs.

※Source: Comprehensive Study of In-Vehicle Electronics Devices and components 2021 by Fuji Chimera Research

④ Technology roadmap

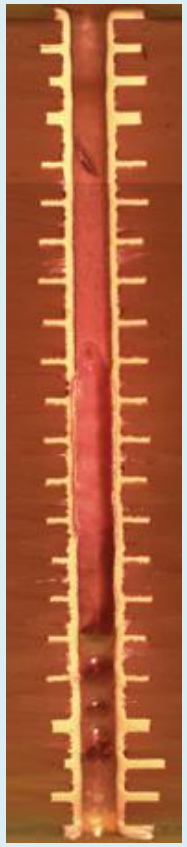
Application for automotive use	Products	Market needs	PCB requirement	2022	2023	2024	After 2025
Electric motorization	HEV/EV ECU PCU/IPM Braking ECU Battery Control Inverter	・Downsized unit（HDI : PPBU) ・High heat resistance (More than 1.5x conductive reliabilities of consumer products) ・ High withstand voltage and High current PCB for PHV/EV, inverter, and coil etc. ・Heat radiation（Heat radiation through PCB)	HDI	Mass-produced			
			HDI Next Generation	Trial	Mass-production		
			Heavy copper	Trial	Mass-production		
		・ High withstand voltage (800 V battery voltage for EV)	Heavy copper	Development	Trial		Mass-production
ADAS Autonomous ↓ ↓ ↓ Connected (Integration with 5G)	Millimeter wave radar sensor	・Downsized unit（HDI : PPBU) ・Improvement and stabilization Antenna accuracy (Improvement of circuit accuracy) ・Low loss（Application of low loss materials) ・High functionality for next generation models	HDI	Mass-produced			
			MSAP	Trial	Mass-production		
			MSAP Next Generation	Development	Trial		Mass-production
	Sensing camera	・Downsized unit（HDI : PPBU) ・High functionality (Thick RF for in-vehicle camera) ＊RF : Rigid Flex	HDI	Mass-produced			
			Thick RF	Trial	Mass-production		
	Communication module (DCM・V2X)	・Multi-pin processors(Fine and high HDI)	High HDI	Trial	Mass-production		
	Integrated ECU Zone ECU	・Multipin processor module (High Reliability, Fine, High HDI)	High HDI	Development	Trial		Mass-production
		・Multifunctional module (High Reliability and Fine)	Multilayered FINE	Development	Trial		Mass-production
5G	Antenna module	・Modules for communication equipment (5G Infrastructure and Local-5G included)	Low loss Heat radiation	Trial	Mass-production		

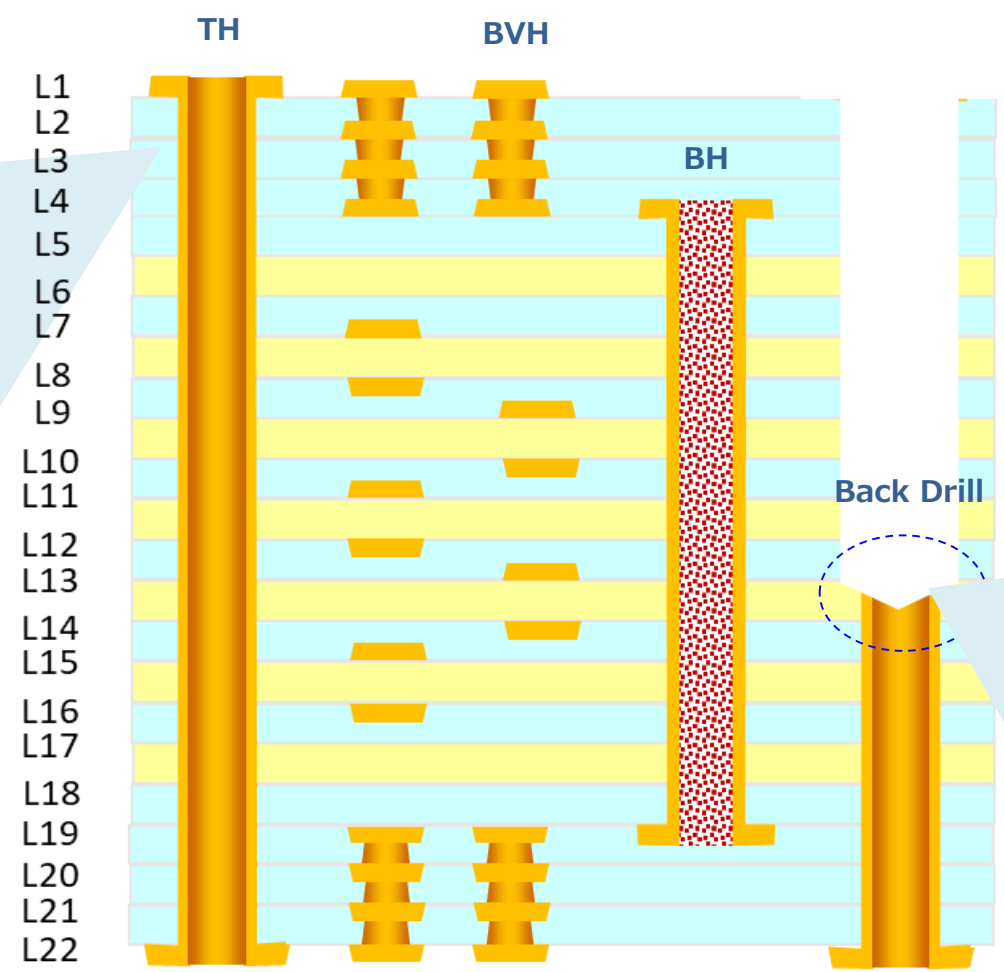
▶ In response to CASE, including 5G communications : Meeting the demand to high functionality and high reliability for fine and high HDI

⑤ 22 layers (3 -16 -3) High aspect ratio PCB

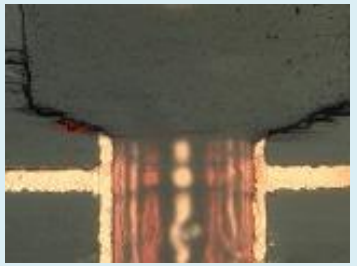
22 Layers (3-16-3) , Plate thickness 2.5mm Hole diameter φ 0.15 , Aspect 16

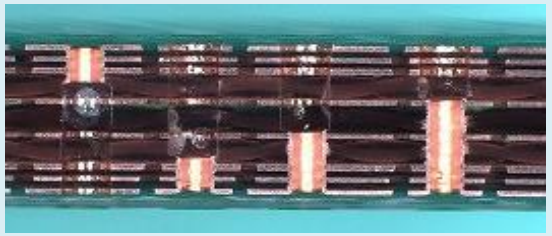
Pulse plating
Plate thickness 2.5 mm/φ 0.15





Back Drill/φ 0.40





Future-related information and descriptions in this material are just forward-looking statements and not guarantees for future achievements

(Amounts are rounded, and % is rounded to one decimal place.)

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