

Technology to Inspire Innovation

Financial Results for 1H of FY2018 and Prospects for FY2018

October 26, 2018

6807 Japan Aviation Electronics Industry, Ltd.

- I. Financial Results for 1H of FY2018**
- II. Prospect and Strategy for FY2018**

I. Financial Results for 1H of FY2018

(From April 1, 2018 to September 30, 2018)

※ Total may not correspond to the total value of the items since amounts less than 100 million JPY are basically rounded off

Net Sales and Incomes

(JPY in 100 millions)

	FY2017		FY2018 1H	Year/Year Change 1H FY2018/ 1H FY2017	
	1H	2H			
Net Sales	1,245	1,294	1,180	-66	95%
Operating Income (to Net Sales)	95 7.6%	111 8.6%	94 7.9%	-1	99%
Ordinary Income (to Net Sales)	85 6.8%	89 6.9%	106 9.0%	22	126%
Net Income (to Net Sales)	62 5.0%	67 5.2%	77 6.5%	15	124%

vs. 1H
FY2018
Projections

15 101%

-1 99%

21 125%

14 123%

**1H FY2018
Projections**

announced
Apr, 2018

1,165

95

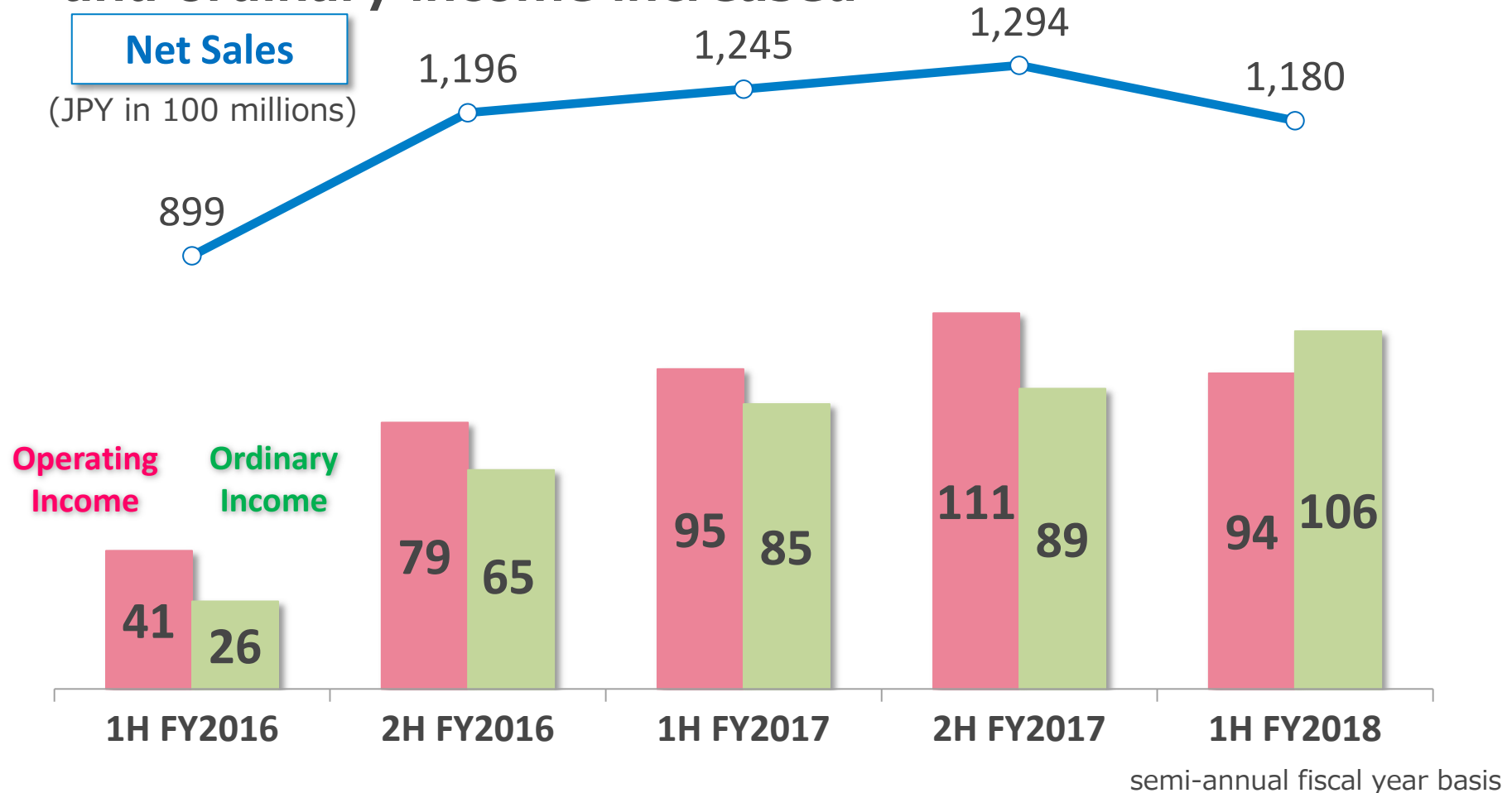
85

63

Exchange Rate (JPY/USD)	111.0	110.7	110.3 (Average)
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Net Sales and Incomes

- ▶ In spite of the net sales decrease compared to 1H of FY2017, operating income maintained the same level and ordinary income increased



Net Sales by Market Segment

(JPY in 100 millions)

	FY2017		FY2018		Year/Year Change		vs. 1H FY2018 Projections	1H FY2018 Projections announced Apr, 2018
	1H	2H	1H		1H FY2018/1H FY2017			
Mobile Devices	692	686	582	Component Ratio 44%	-110	84%	35 106%	547
Automotive	331	367	369	35%	38	111%	-9 98%	378
Industrial & Infrastructure	154	173	171	14%	17	111%	-14 93%	185
Others	67	68	57	7%	-10	85%	2 104%	55
Total	1,245	1,294	1,180	100%	-66	95%	15 101%	1,165

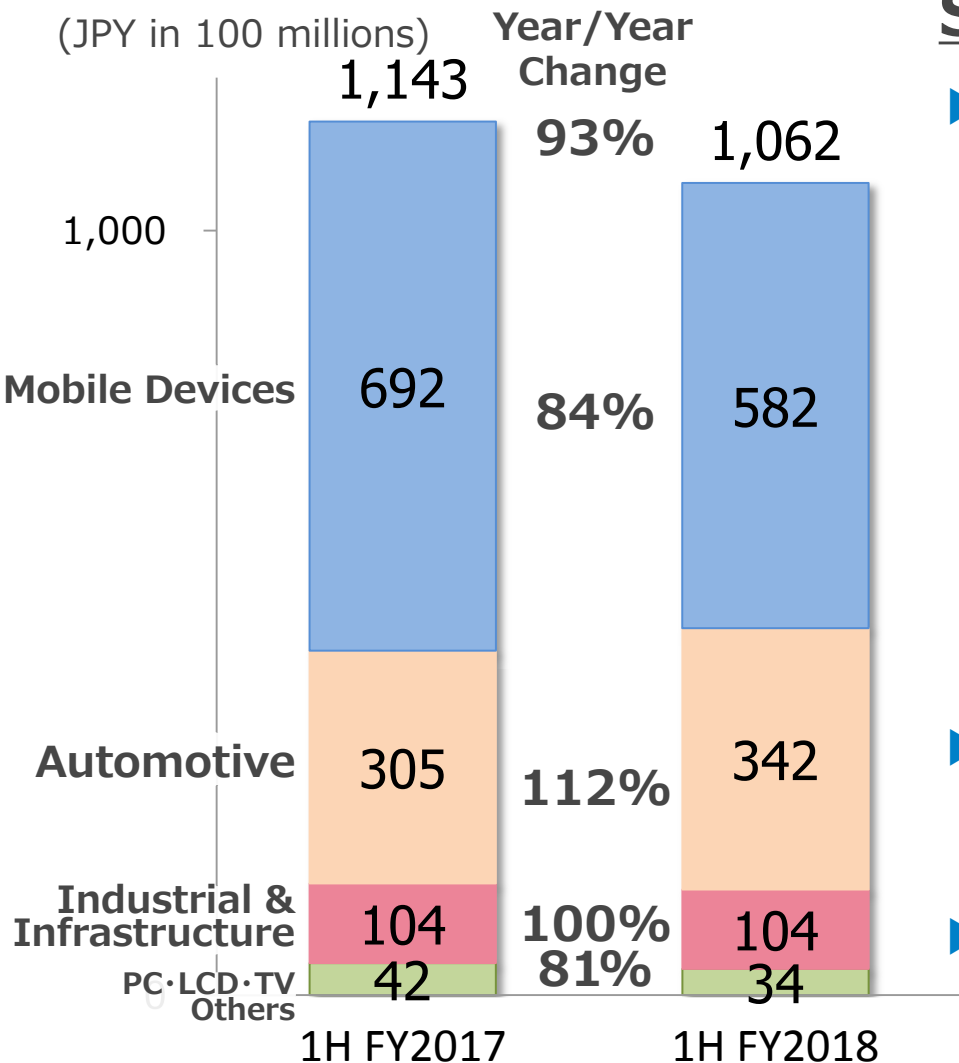
Overseas	937	948	848
Overseas Sales Ratio	75.2%	73.2%	71.9%

Net Sales by Business Segment

(JPY in 100 millions)

	FY2017		FY2018		Year/Year Change		vs. 1H 2018 Projections	1H FY2018 Projections announced Apr, 2018
	1H	2H	1H		1H FY2018/ 1H FY2017			
Connector	1,143	1,173	1,062	Component Ratio 90%	-80	93%	12 101%	1,050
UIS	41	45	43	4%	2	104%	0 100%	43
Aerospace	57	72	70	6%	13	122%	4 106%	66
Others	4	4	4	—	0	109%	-2 74%	6
Total	1,245	1,294	1,180	100%	-66	95%	15 101%	1,165

Sales by Market Segment



Sales: 93% (of 1H FY2017)

▶ Mobile Devices

- Sales of products with built-in procured components decreased significantly
- Sales to Chinese smartphone manufactures recovered
- USB Type-C “DX07 series” maintained the same level as previous year

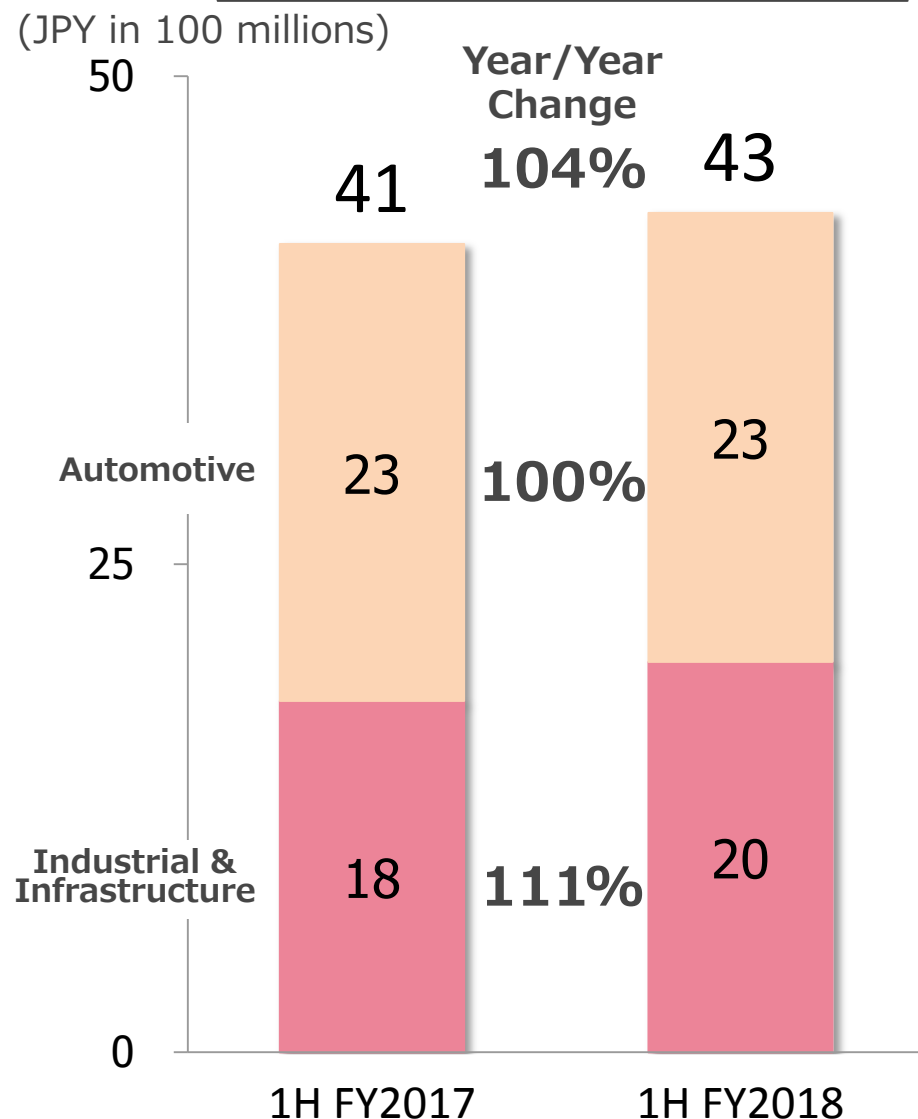
▶ Automotive

- Sales mainly to Japanese OEMs grew

▶ Industrial & Infrastructure

- Declined due to customers’ order adjustment reflecting the uncertain market outlook

Sales by Market Segment



Sales: 104% (of 1H FY2017)

▶ Automotive

(capacitive touch panel)

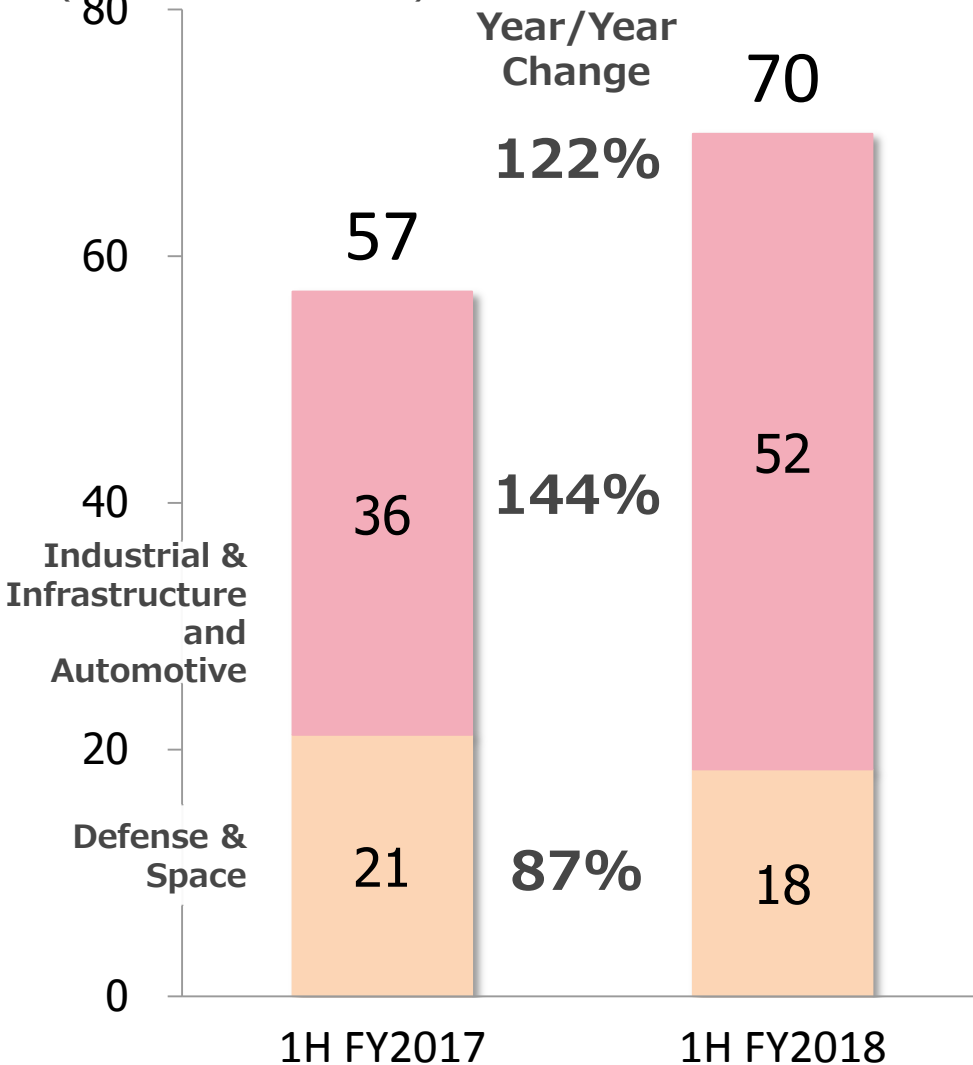
- Full-scale mass production of film sensors was maintained (Mass production started in 4Q of FY2017)

▶ Industrial & Infrastructure

- Operating panels for semiconductor manufacturing equipment and teaching pendants for robots continued to perform well

Sales by Market Segment

(JPY in 100 millions)



Sales: 122% (of 1H FY2017)

▶ Industrial & Infrastructure

- Demand of oil drilling sensors doubled due to rising crude oil prices
- Linear motor for semiconductor lithography equipment remained robust

▶ Defense & Space

- Decreased due to a decline in defense budget for domestic programs

Operating Profit by Business Segment

(JPY in 100 millions)

	FY2017		FY2018	Year/Year Change
	1H	2H	1H	
Connector	112 9.8%	121 10.3%	106 10.0%	-6
UIS	4 9.2%	4 9.6%	3 8.0%	-0.4
Aerospace	1 1.6%	6 8.9%	7 10.0%	6
Others	-22	-20	-23	-1
Total	95 7.6%	111 8.6%	94 7.9%	-1

※ Percentages(%) for FY2017 and 1H FY2018 indicate Operating Income to Net Sales Ratios.

II. Prospect and Strategy for FY2018

(From April 1, 2018 to March 31, 2019)

Prospects for FY2018

(JPY in 100 millions)

	FY2017	FY2018			Year/Year Change FY2018/FY2017		vs. FY2018 Projections	FY2018 Projections (announced Apr, 2018)
		1H	2H Projections	FY2018 Projections				
Net Sales	2,539	1,180	1,235	2,415	-125	95%	15 101%	2,400
Operating Income (to Net Sales)	206 8.1%	94 7.9%	99 8.0%	192 8.0%	-14	93%	-8 96%	200 8.3%
Ordinary Income (to Net Sales)	174 6.8%	106 9.0%	90 7.3%	196 8.1%	23	113%	21 112%	175 7.3%
Net Income (to Net Sales)	129 5.1%	77 6.5%	68 5.5%	145 6.0%	15	112%	15 111%	130 5.4%

※ 2H FY2018 assumed exchange rates ¥110 to the U.S. dollar

Prospect for Net Sales by Market Segment

(JPY in 100 millions)

	FY2017	FY2018			Year/Year Change		vs. FY2018 Projections	FY2018 Projections (announced Apr, 2018)
		1H	2H Projections	FY2018 Projections	FY2018/FY2017			
Mobile Devices	1,379	582	597	1,179	-200	86%	49 104%	1,130
Automotive	698	369	393	762	64	109%	-8 99%	770
Industrial & Infrastructure	327	171	185	356	29	109%	-29 92%	385
Others	135	57	60	118	-17	87%	3 103%	115
Total	2,539	1,180	1,235	2,415	-125	95%	15 101%	2,400

Prospect for Net Sales by Business Segment **JAE**

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(JPY in 100 millions)

	FY2017	FY2018			Year/Year Change		vs. FY2018 Projections	FY2018 Projections (announced Apr, 2018)
		1H	2H Projections	FY2018 Projections	FY2018/FY2017			
Connector	2,316	1,062	1,103	2,165	-151	93%	10 100%	2,155
UIS	86	43	45	88	2	102%	-1 99%	89
Aerospace	129	70	82	152	23	118%	8 106%	144
Others	9	4	5	10	1	112%	-2 80%	12
Total	2,539	1,180	1,235	2,415	-125	95%	15 101%	2,400

► Board-to-Board Connectors

- Increase market share and establish a de facto standard in Chinese Smartphone market

Development Roadmap, Board-to-Board Connectors

Contact Spacing Range

0.3mm Pitch

WP56DK

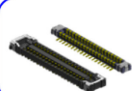
Next

H=0.6

 0.3mm Pitch
compatible to
narrow width with
robust structure

0.35mm Pitch

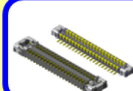
WP27D

 H=0.7
D=1.9

WP26

 H=0.6
D=1.9

 Power Terminals /
Armored Structure

WP27DK

 H=0.7
D=1.9

WP26DK

Next

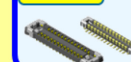
H=0.6


 Robust structure and
improved workability

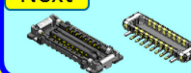
 Narrow width product
introductions scheduled

Next

H=0.6



Next

 New parts for 5G
to be launched

WP10

 H=0.7
D=2.2


Next

 Fast charge /
high-current
series upcoming


0.4mm Pitch

2016

2017

2018

~2020

▶ “DX07 Series” USB Type-C Connector

- Expansion in high-value-added segment

- Launched waterproof receptacle adopting JAE’s unique potting-less technology



Waterproof receptacle

- Strengthening new business areas
(Entering new markets reaching introduction phase)

- Expand VirtualLink™ compatible products
- Development of products for industrial and automotive markets
- Expand cable harness and other products for new field of business



Back: " VirtualLink™ " compatible
Front: on-board 2-row SMT type

Potting-less: Omission of resin seal process

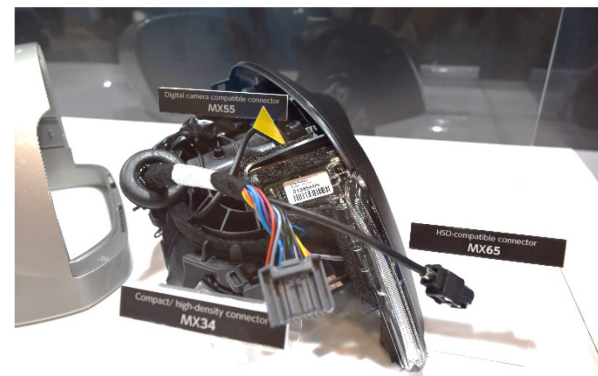
VirtualLink™: New standard enabling VR headsets to connect with the main device over a single Type-C cable



Cable Harness with Screw Lock

▶ Expand products compatible with high-speed data transmission

- Expand onboard camera business to Japanese OEMs based on results in European market
- Develop connectors for next-generation information communication technology

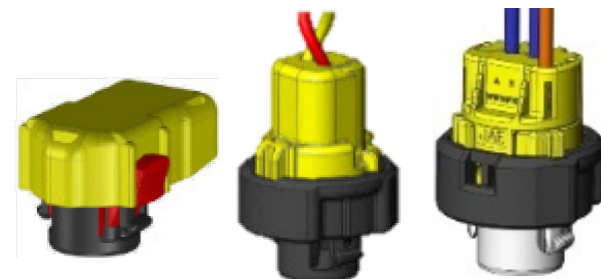


MX55 Series connector for camera

(Actual door mirror of European OEM equipped with JAE connector)

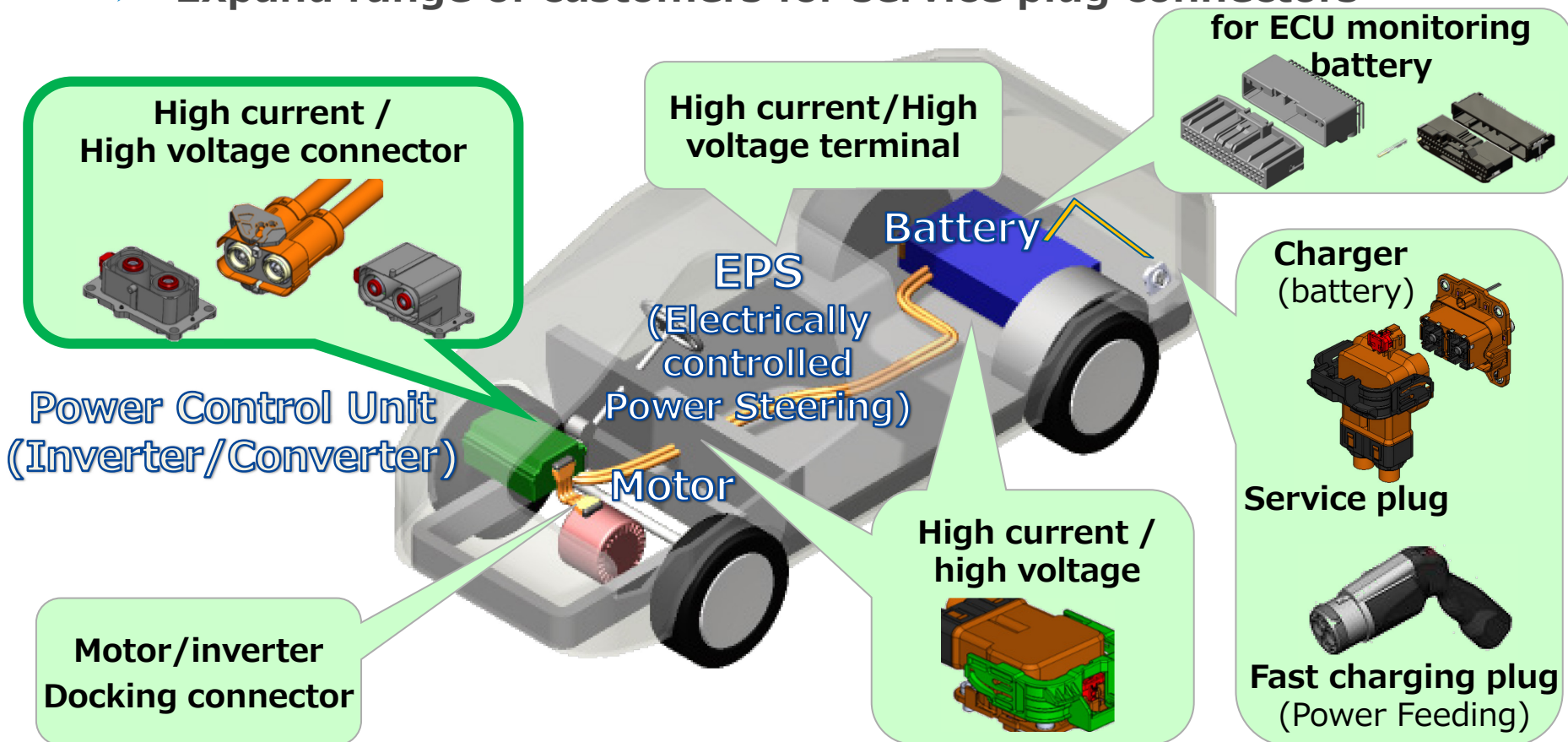
▶ Product compatible with European de-facto standards

- Mass production of airbags connector compatible with European standards will start from the second half of FY2018
- ⇒ Deploy to European, North American and Japanese markets



AK Squib connector for airbags

- ▶ Development of High current / High voltage products for EV
 - Develop and expand business of high current / high voltage connectors
 - Expand range of customers for service plug connectors



Service plug : Connector for battery circuit shutdown during maintenance and inspection of EV

▶ High speed EV charging infrastructure

- Adopting regional sales strategies considering market expansion
 - Already in use in Japan and North America
 - Expanding to Europe and China
- CHAdeMO-type variation covering V2H to High-speed charging already in place
 - COMBO-type to be sequentially launched to cater overseas markets

Variation of KW Series

KW01

High-speed Connector
125A/500V

KW02

V2H Connector
25A/450V

KW03

Medium-speed, V2G Connector
80A/500A

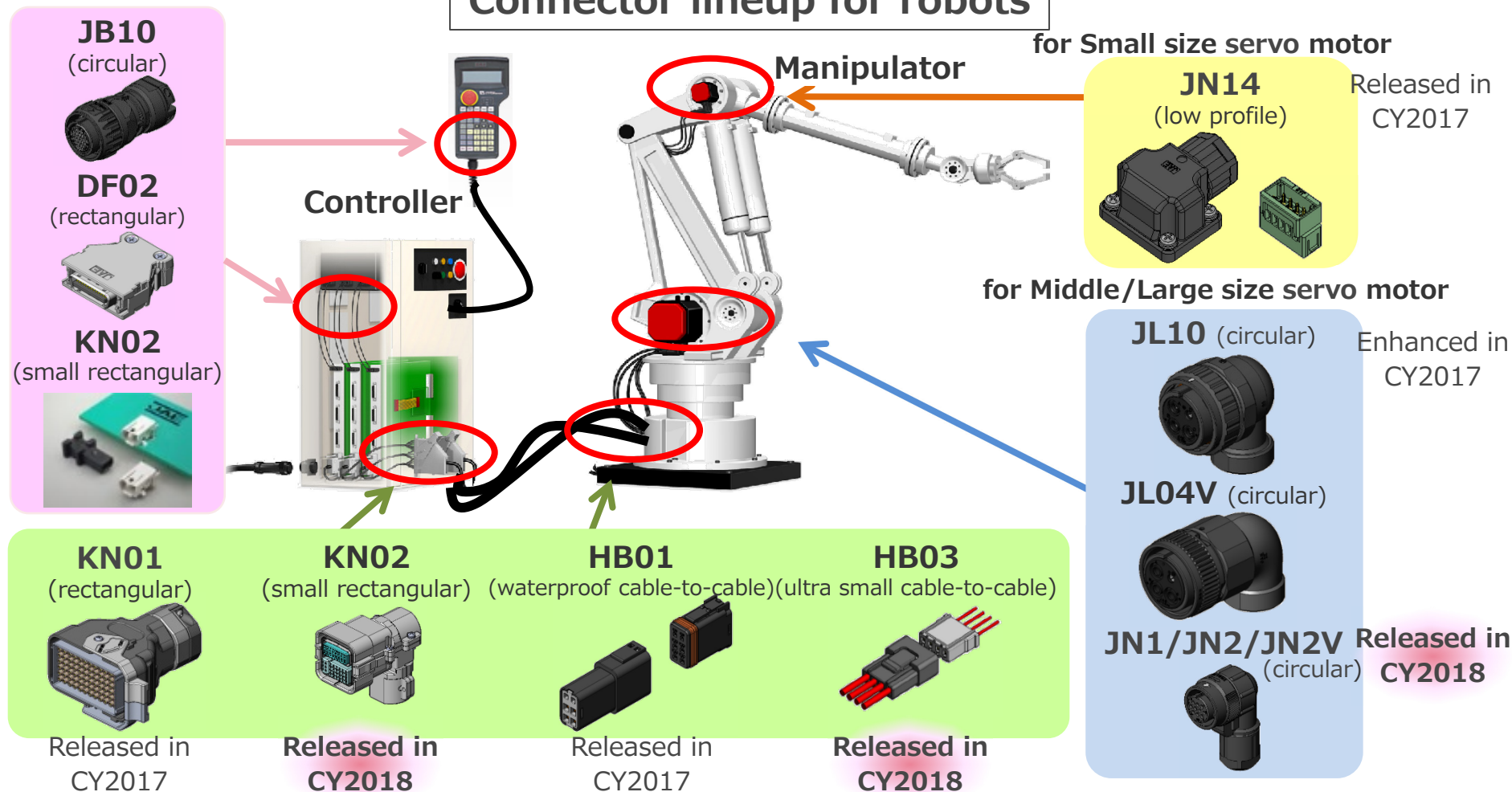


Introduction example in
North America
"KW01 Series"
(CHAdeMO-type)

► Approach to Factory Automation and Robots

- Expanding products for Robots (for Co-robots, overseas market, etc.)

Connector lineup for robots

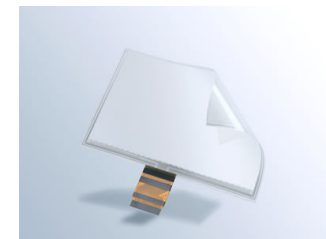


▶ Approach to Automotive Market

- Accelerate promotion for capacitive touch panel
 - Expansion of new adoption leading to sales increase in FY 2019
 - Accelerate adoption to new car models for further growth
- Production capacity increase of film type
 - Mass production for new customer starting from 4Q of 2018



Glass type metal mesh sensor



Film type metal mesh sensor

▶ Approach to Industrial Market

- Capture new markets by catering needs of touch screen operation to controlling panels



Resistive touch screen sensor

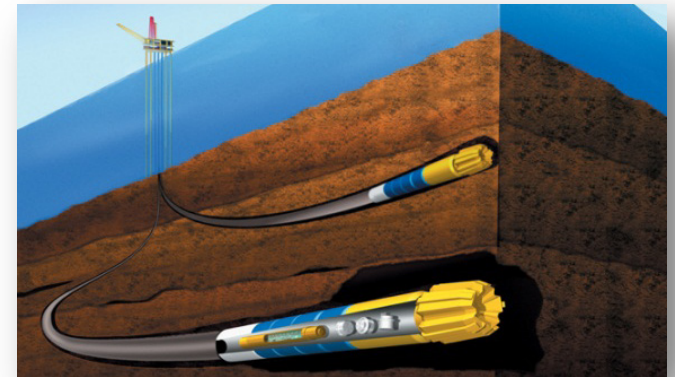
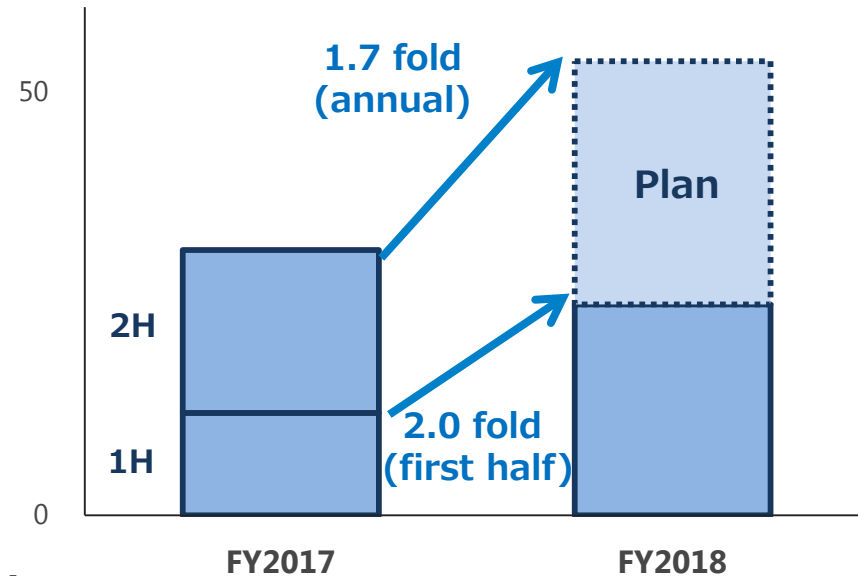
(Exhibited at CEATEC 2018 in Japan, for reference)

► Sensor for Oil Drilling

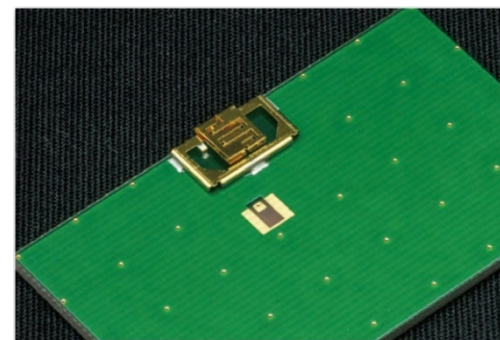
- Strengthen sales and service operation coping to increasing demand
 - Enhance production capacity by expanding production space and increasing manpower (already done in 1H of 2018)
 - ⇒ Continued to operate at full capacity
 - Strengthen technical and maintenance supporting capability in Huston, USA
- Expand business by new products
 - Increase the added value of products such as by improving measuring accuracy

Sales for Oil drilling Market

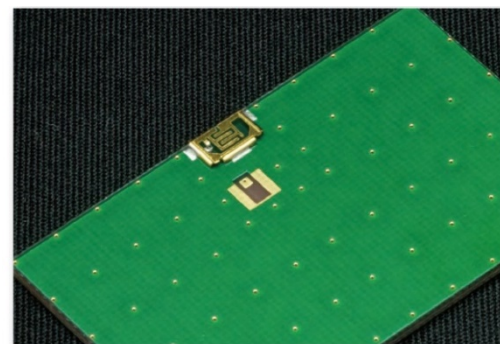
(JPY in 100 millions)



- ▶ JAE and NEC jointly developed one of the world's smallest high performance antenna device
 - The surface mount type antenna was developed by combining NEC's metamaterial ultra compact μ SR™ technology and JAE's precision processing technology
 - Product features
 - ✓ Achieves over 90% of antenna radiation efficiency
 - ✓ High flexibility of mounting places
 - ✓ Widely applicable to standards such as Wi-Fi, Bluetooth, V2X, LPWA, etc.
 - Applicable areas and application (estimate)
 - ✓ Game machines, Wi-Fi routers, network home appliances, etc.
 - ✓ Applicable to a wide range of applications in future such as Connected Car, IoT etc.



Wi-Fi 2.4GHz対応



V2X 5.9GHz対応

Metamaterial: Metamaterials are artificial materials engineered to have properties not found in nature through periodic placement of building blocks.

μ SR™ technology: Split Ring (SR) Resonator Technology (Small Antenna Element Technology)

Pursue further growth in sales and profits by enhancing global marketing and productivity improvement

- **Maintain industry leading position for mobile devices market**
- **Accelerate growth in Automotive and Industrial & Infrastructure markets**
- **Productivity improvement by manufacturing technology innovation**

**Achieve FY 2018 target, set foundation for growth,
and enhance development and marketing for mid-term business growth**

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JAE



<Cautionary Statement>

The plans, strategies & results forecasts and targets for our company and our consolidated affiliates (hereinafter JAE) noted in these materials are forecasts and targets as of October 26, 2018, and include risks and uncertainties.

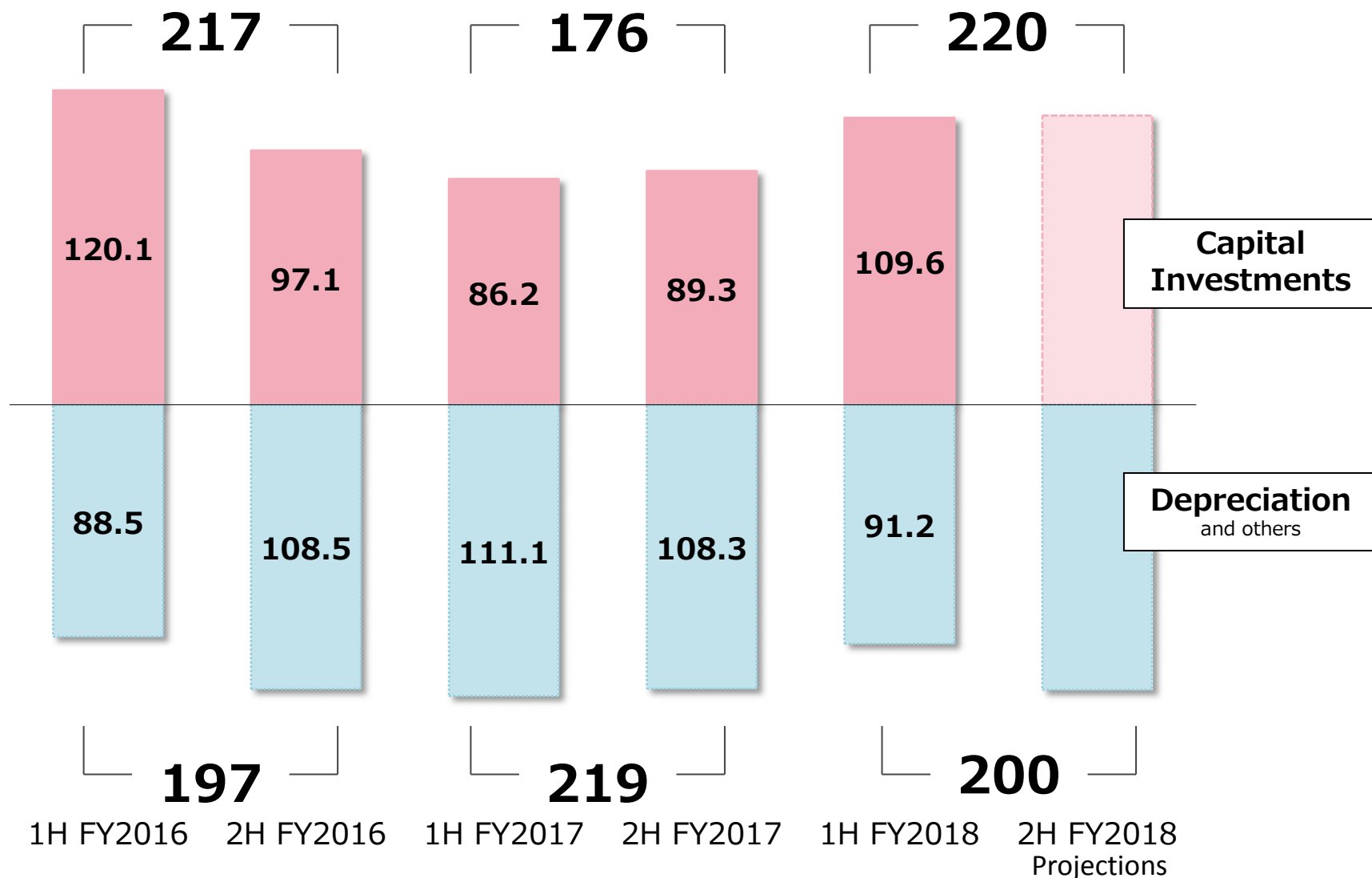
The targets noted in these materials are not projections, and do not reflect current projections by the management team with regards to future results. Rather, these are targets to be attained by the management team through implementing business strategies.

Note that actual results may differ greatly from forecasts and targets, etc. based on various factors. Major factors that affect actual business results, etc. are the political and economic situations in Japan, the US, Asia and so forth that involve regions where JAE conducts business operations, demand fluctuations for JAE products (including software products) in the market, deflationary pressures caused by severe competition, the ability to continue supplying over our competitors, the ability to expand business operations in overseas markets, changes to the laws and regulations concerning business activities, and their transparency, potential legal responsibilities, exchange rates, etc, and there may be other factors beyond the ones listed here. Actual results may differ from management targets and other forecasts due to a worsening global economy and the global financial situation, stagnation in the domestic and overseas stock markets, etc. Note that descriptions concerning projections are current as of that day.

Although new risks and factors of uncertainty that occur at any anytime are evident, it is impossible to predict their occurrence or effects. In addition, details describing future predictions may not actually occur due to risk and uncertainties. Do not rely solely on these descriptions.

Capital Investment & Depreciation

(JPY in 100 millions)



(Depreciation and others include disposal of fixed assets)