

First Half Results for Fiscal Year 2017 (ending March 2017)

Nihon Dempa Kogyo Co., Ltd.

【Note】

Statements made in this presentation with respect to our current plans, estimates, strategies and beliefs and other statements that are not historical facts are forward-looking statements about our future performance. These statements are based on management's assumptions and beliefs in light of information currently available to it. We caution that a number of important risks and uncertainties could cause actual results to differ materially from those discussed in the forward-looking statements, and therefore you should not place undue reliance on them. You also should not rely on the belief that it is our obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. Risks and uncertainties that might affect us include, but are not limited to; fluctuation of currency exchange rates, overall supply and customer demand in the industry, product development and production capacities, performance of affiliated companies, and other risks and uncertainties.

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**1. FY2017
First Half Results**

**2. FY2017
Full Year Forecast**

FY2017 1st Half Results



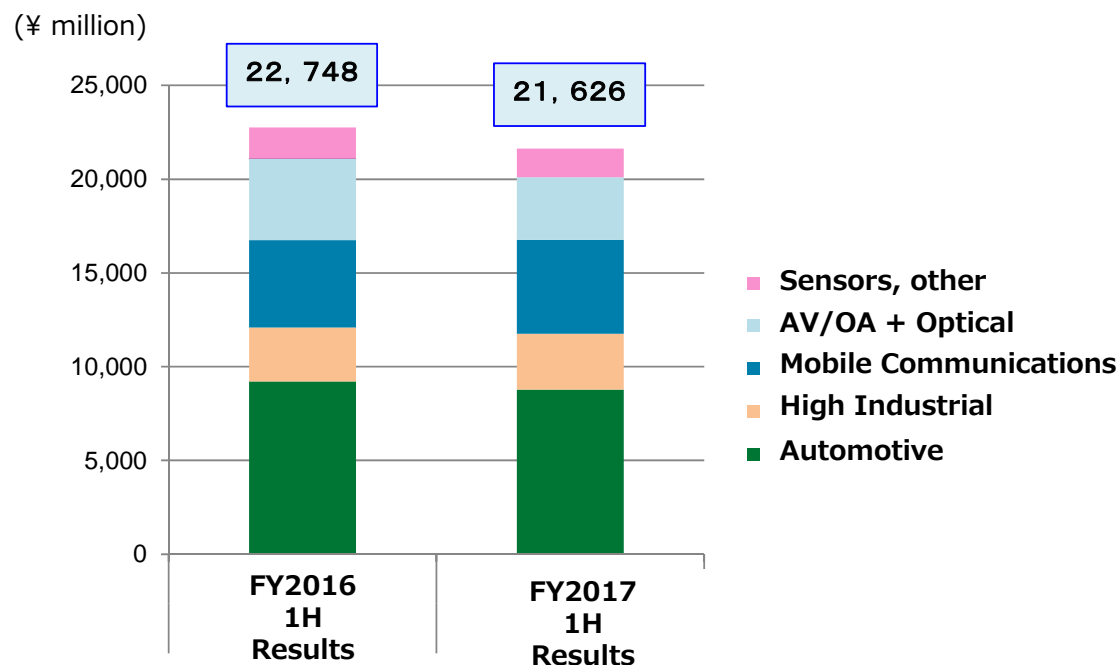
(Million yen)

	①	②	③	③ - ①	③ - ②
	FY2016 1 H result	FY2017 1 H forecast	FY2017 1 H result	Year to year comparison	Comparison to forecast
Net Sales	22,748	22,000	21,626	▲ 1,122	▲ 374
Operating income	4	200	229	225	29
Income before tax	54	150	113	59	▲ 37
Net income	26	100	72	46	▲ 28
Total comprehensive income	▲ 824	-	▲ 1,612	▲ 788	-
Exchange rate (against the U.S. dollar)	¥ 121.50	¥ 110.00	¥106.43	¥ ▲15.07	¥ ▲3.57

FY2017 Net Sales: 1st Half Results



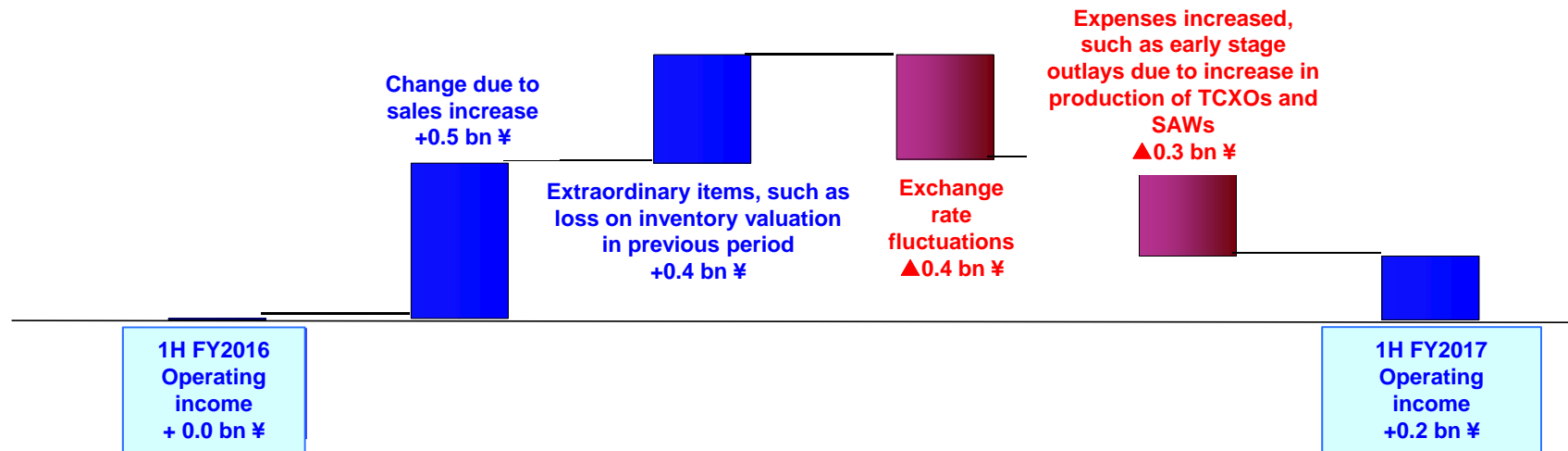
Net Sales in 1st Half of FY2017 (Year on Year)



<FY2017 1st Half Results (Year on Year)>

Automotive		Sales in unit terms increased, but the production trend toward SMD continued and the average unit price decreased because of changes in the product mix. Sales in value terms decreased year on year.
High Industrial		Sales recovered from the effects of production adjustments in mobile communications base stations in the first half of fiscal 2016.
Mobile Communications		Although impacted by yen appreciation, sales rose due to the commencement of mass production of SAW devices for mobile communications and an increase in sales of TCXOs to Chinese smartphone manufacturers.
AV/OA + Optical		Sales for PCs, TVs, cameras, etc., decreased.
Sensors, other		Sales declined due to production adjustments of customers in ultrasonic devices.

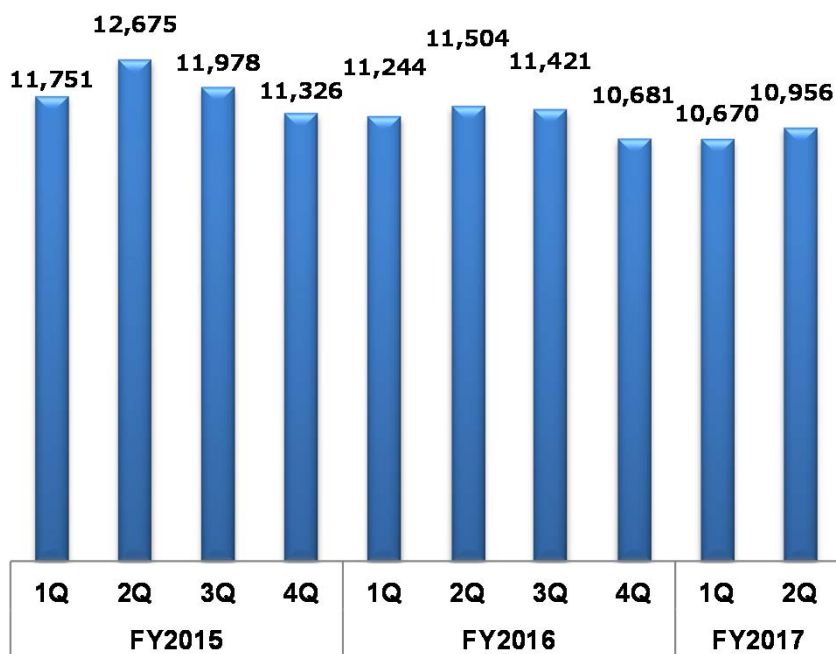
Profit Variation Analysis (1st Half FY2016 vs. 1st Half FY2017)



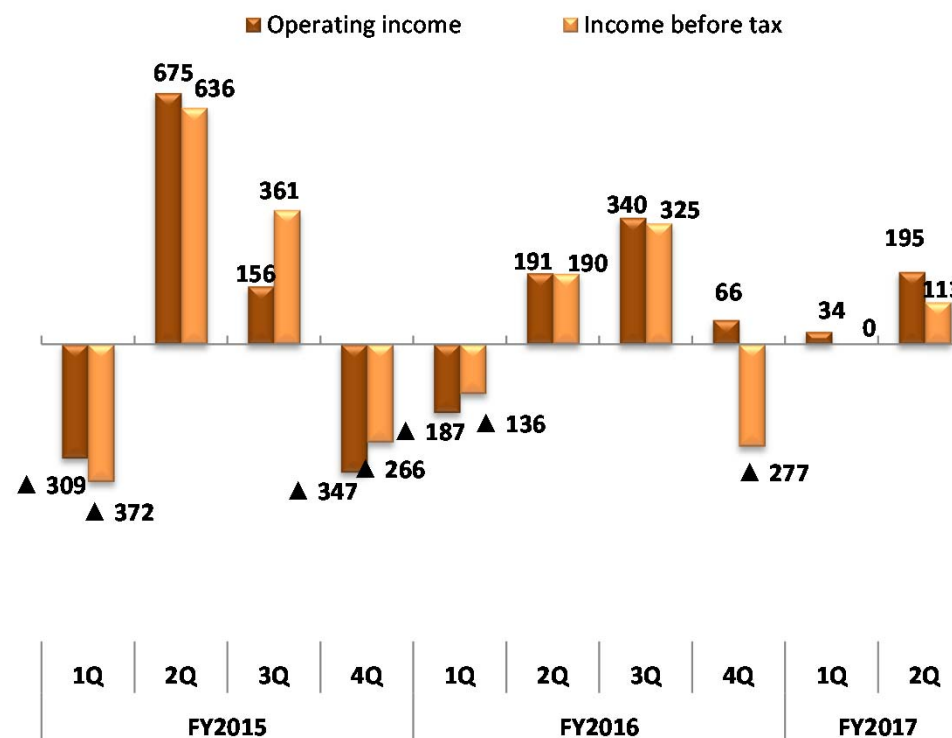
Quarterly Results



Net sales (million yen)



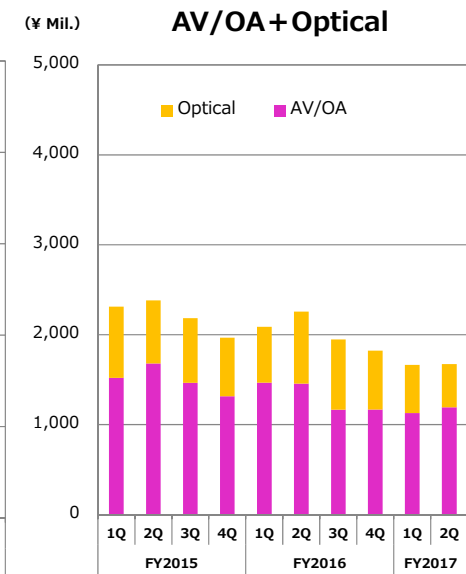
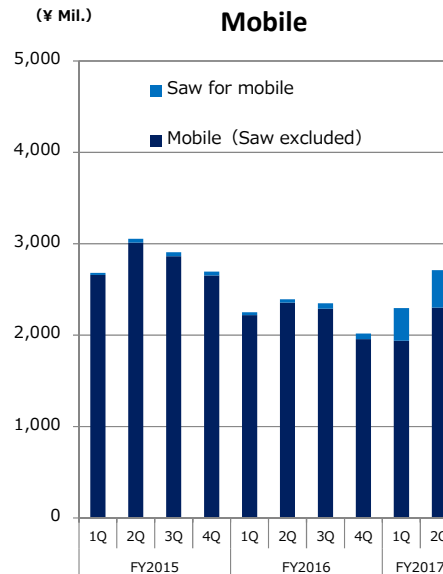
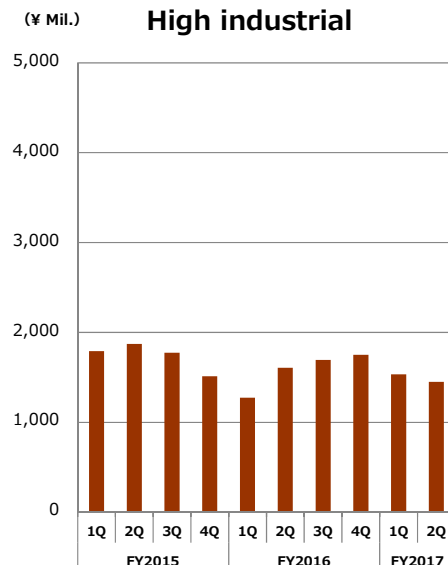
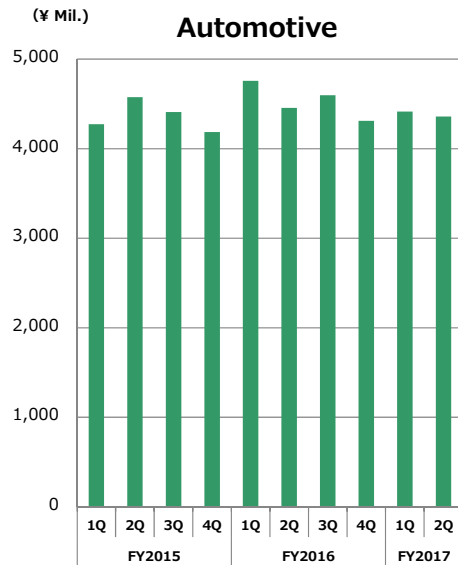
Profit (million yen)



Sales Trends in Main Applications



- Automotive** : Sales in unit terms are expanding also in FY2017, but the production trend toward SMD is proceeding and the average unit price is decreasing because of changes in the product mix. Sales are level.
- High industrial** : Demand for base stations began to decrease entering fiscal 2017.
- Mobile communications** : Production lines for 1612-sized TCXOs and SAWs for mobile communications began operations.
- AV/OA + Optical** : Sales to optical market decreased (decrease in sales for single-lens reflex cameras partially due to the Kumamoto earthquakes).



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1. FY2017
First Half Results

**2. FY2017
Full Year Forecast**

Mobile Communication Market Environment



■ Crystal products used by chip set manufacturers (as of March 2016)

		Company A	Company B	Company C	Company D	Company E
4G/ LTE	PLL	Crystal unit with built-in temperature sensor x 1	TCXO x 1	TCXO x 1	-	TCXO x 1
	GPS		TCXO x 1	-	TCXO x 1	TCXO x 1

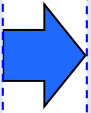


■ Crystal products used by chip set manufacturers (information as of August 2016)

		Company A	Company B	Company C	Company D	Company E
4G/ LTE	PLL	Crystal unit with built-in temperature sensor x 1	Crystal unit with built-in temperature sensor x 1 or TCXO x 1	TCXO x 1	-	Crystal unit with built-in temperature sensor x 1
	GPS		TCXO x 1	-	TCXO x 1	TCXO x 1

Mobile Communication Market

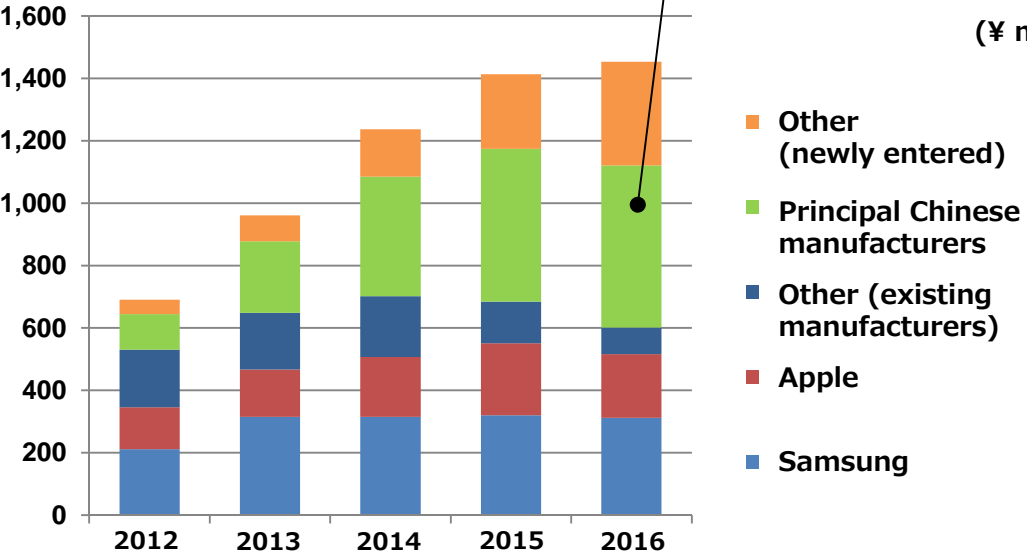
Demand for crystal products for smartphones is continuing to grow



Sales of TCXOs and crystal unit with built-in temperature sensors will expand in 2nd half of FY2017

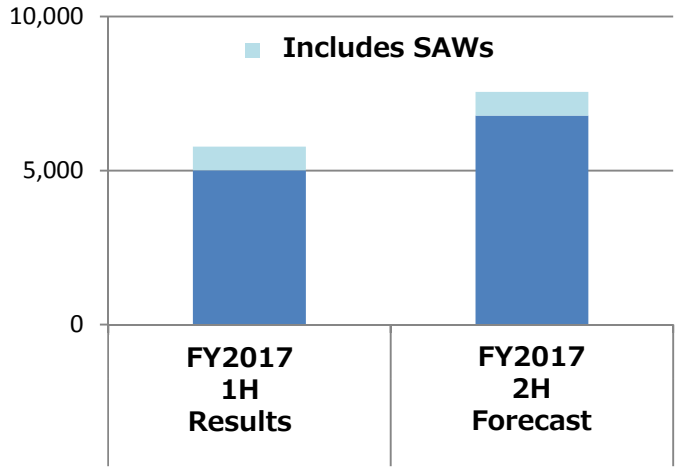
Increase in sales to Chinese smartphone manufacturers who are expanding their market share

Worldwide Shipments of Smartphones
(Million units)



(Source: Pac Rim Research)

Mobile Communication Sales
(¥ million)



High Industrial Market

Promote introduction of new products and sales expansion

[Base Station Market]

Rising requirements for frequency stability, looking to expansion in LTE base stations

⇒ Orders for ultra-stable OCXOs are rising



[Ultra-stable OCXOs]

Temperature range:

±0.1ppb/-40 to +85°C

Hold Over property: 1μsec/8hr

World top level class performance with ±1micro-second discrepancy in eight hours

[Optical Communications Market]

Along with trends toward networks over longer distances and greater transmission volumes, requirements for high-frequency oscillators are rising for high-speed applications.

⇒ Orders for new product MVCXOs* are rising.



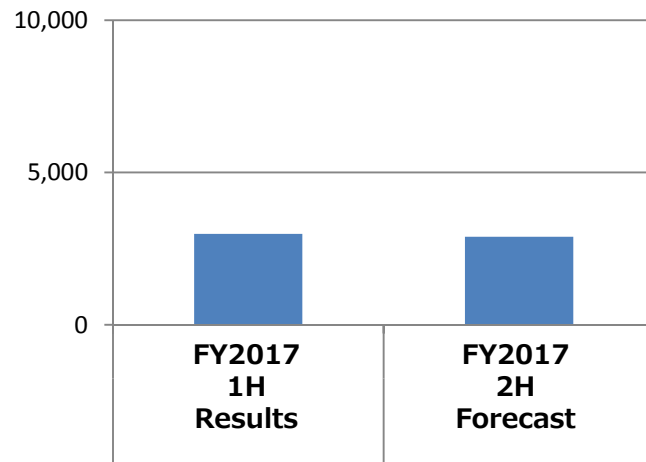
[MVCXO]

Wide frequency range: 15MHz to 2100MHz

Superior jitter performance: 150fs rms / 622MHz

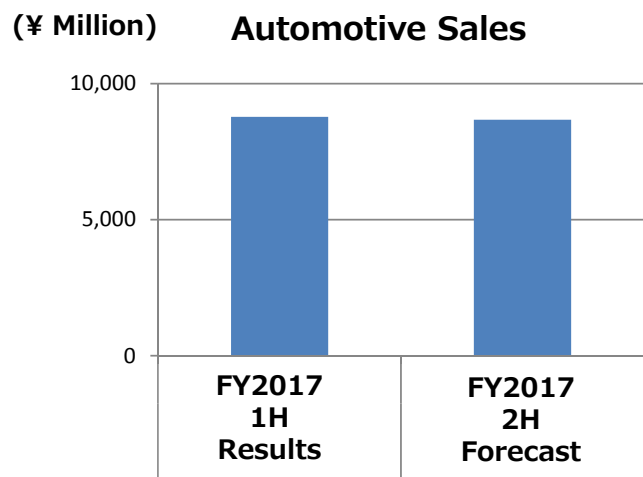
*Multi Mode VCXO

(¥ Million) High Industrial Sales

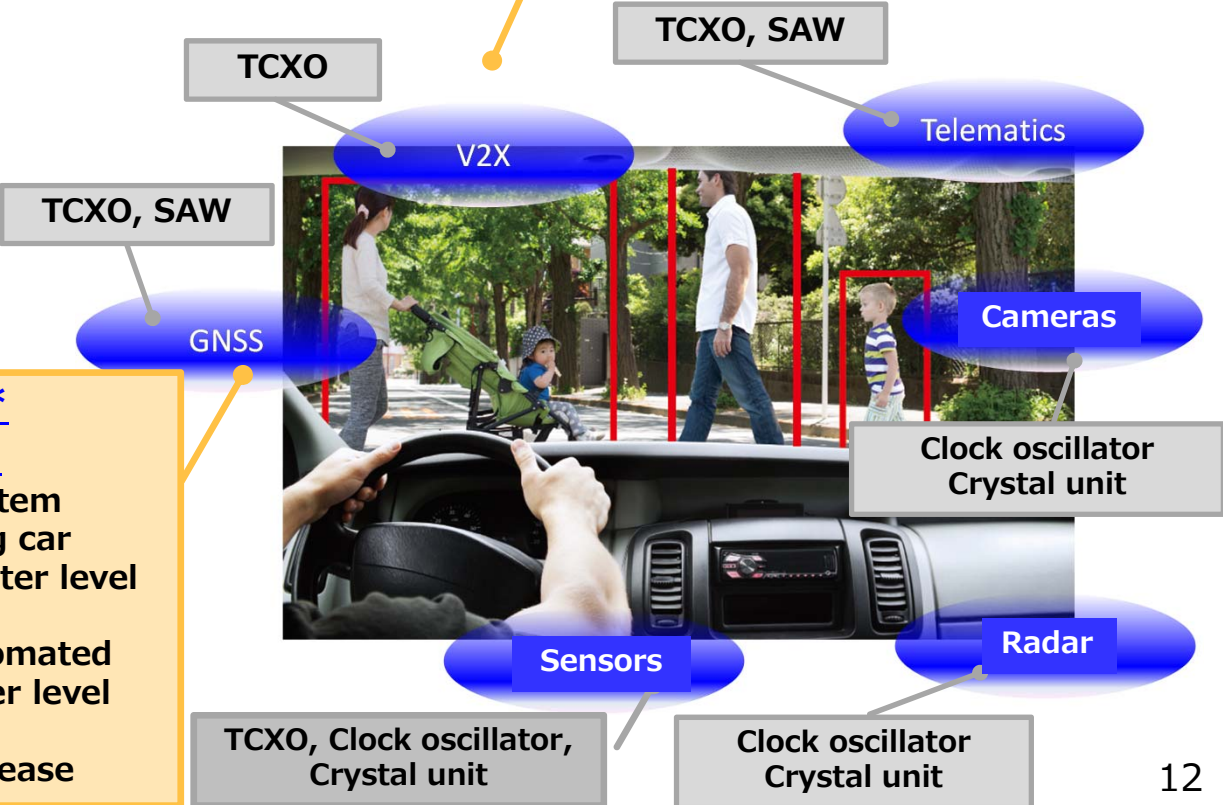


Automotive Market

Promote development of crystal products for advanced driver assistance systems and automated driver systems and develop design-in activities



TCXOs for V2X (vehicles to vehicles/vehicles to infrastructure)
Develop and design-in the products with high temperature tolerance



SAW filters for GNSS* (under development)

*Global Navigation Satellite System
Location accuracy of the existing car navigation systems is at the one-meter level

↓

Location accuracy required by automated driving systems is at the centimeter level

↓

Number of SAW devices will increase

Sensors

Promote expansion of ultrasonic devices



Portable simplified ultrasonic devices
Began Internet sales on July 1

<Features>
Applications in medical, nursing, senior care, etc.
Small and portable

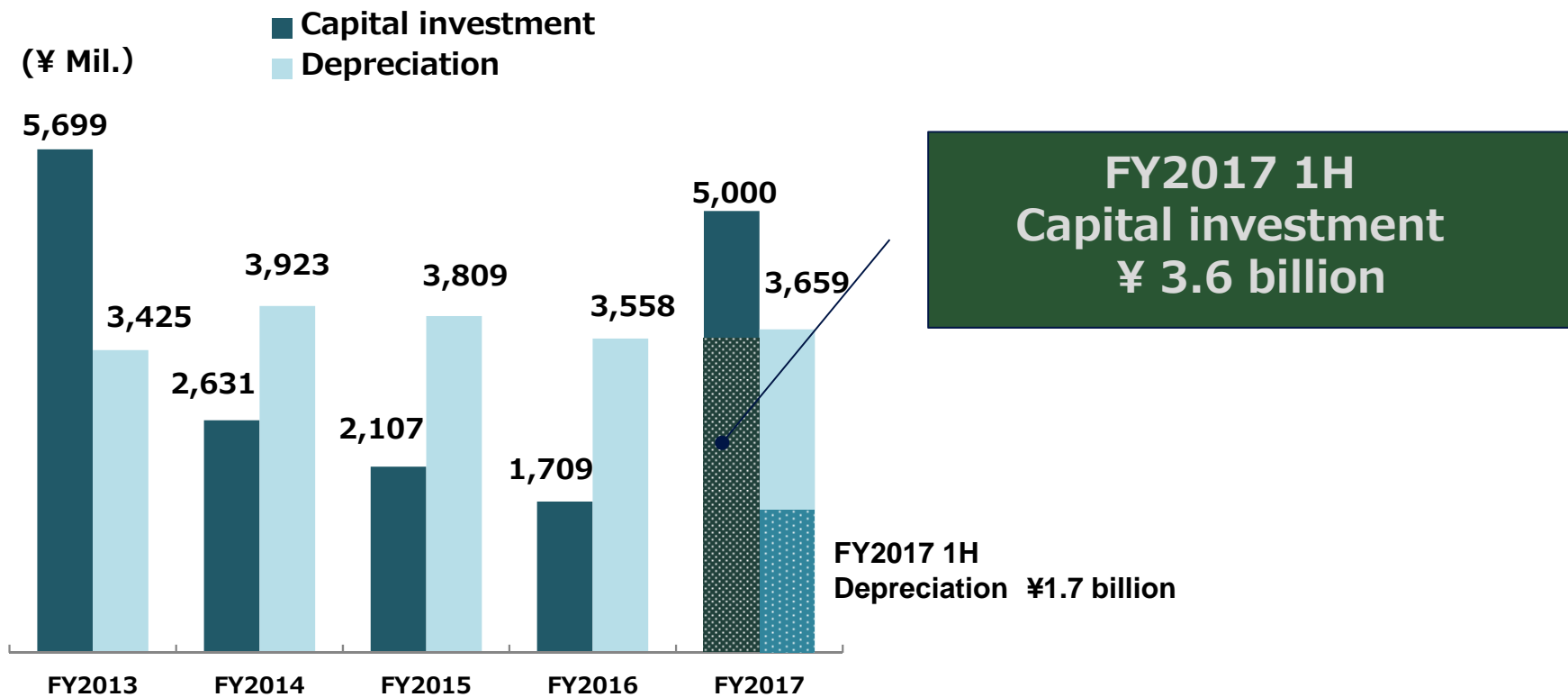
“Pocket Echo Miruco”

Displays ultrasonic images when connected to tablets, etc.

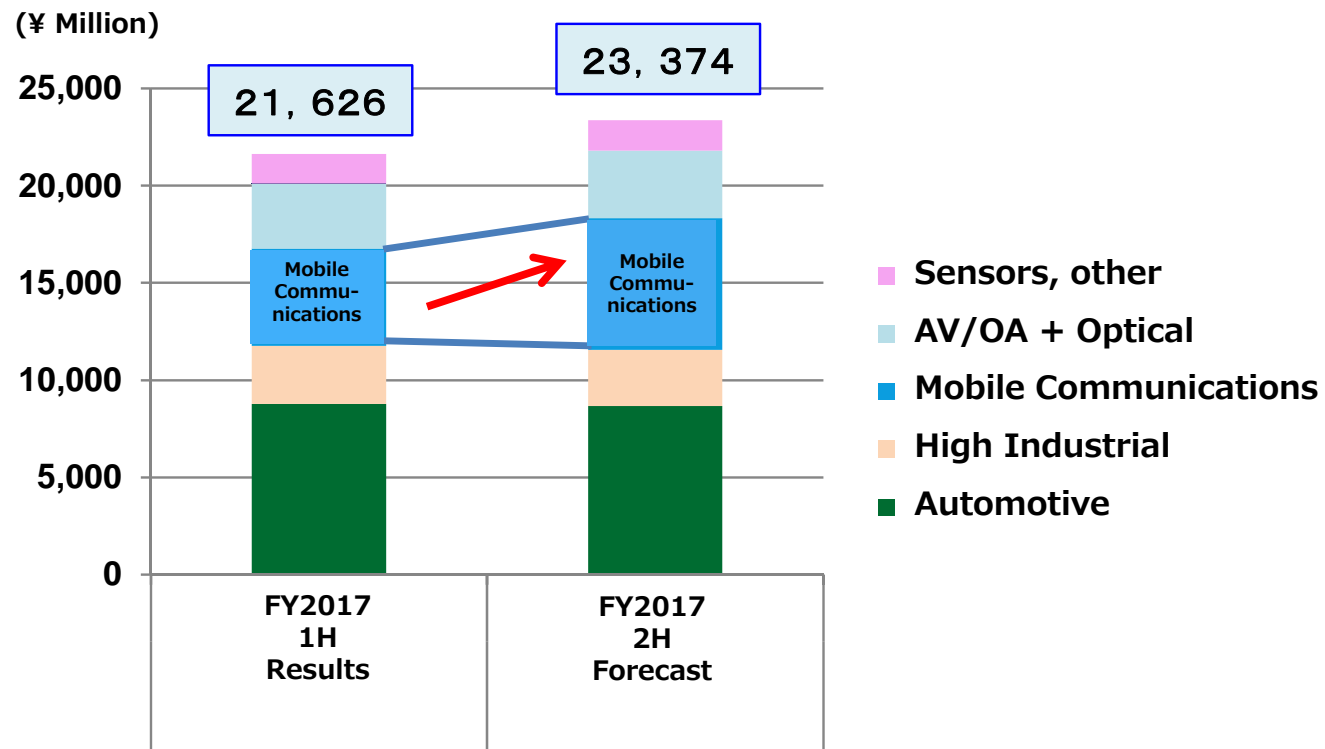
FY2017 Capital Investment



**【Capital investment】 Plan to invest ¥5 billion in FY2017
(Mainly to raise TCXO and SAW capacity)**



FY2017 2nd Half: Outlook for Net Sales



FY2017 Full Year Forecast



(¥ Mil.)

	FY2016 Result	FY2017 Forecast
Net sales	44,850	45,000
Operating income	410	850
Income before tax	102	750
Net income	317	650
Income before tax ratio	0.2%	1.7%
Exchange rate (against the U.S. dollar)	¥120.16	1H: ¥106.43 2H: ¥101.00

<Reference>

- Influence on net sales (Annual) ¥1 fluctuation
⇒ approx. ¥200 million
- Influence on operating income (Annual) ¥1 fluctuation
⇒ approx. ¥50 million

NDK is making maximum efforts to attain net sales of ¥45.0 billion and operating income of ¥850 million during the current fiscal year. We look forward to your continuing support in the years ahead.

Thank you

**For investor relations related inquiries
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