

Results for fiscal year 2012 (ended March 2013)

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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Summary of FY2012 results



(Million yen)

	FY2011 Annual	FY2012 Annual	Change
Net sales	50,804	50,623	▲ 181
Operating income	2,081	112	▲ 1,969
Income/(loss▲) before tax	1,615	▲ 159	▲ 1,774
Net income/(loss▲)	1,759	▲ 412	▲ 2,171
Total comprehensive income	1,863	1,316	▲ 547

<Main factors for incurring loss>

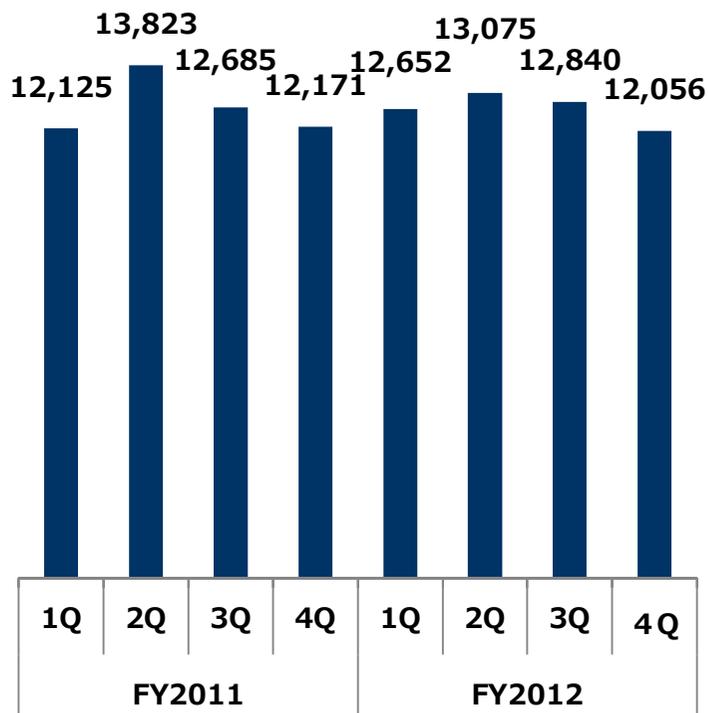
- Demand for smartphones grew less than initially expected
- ASP fell due to intensifying competition in the consumer market
- Product yield rate at a specific product dropped
- Inventory write-down increased
- Deferred tax assets decreased

Quarterly results

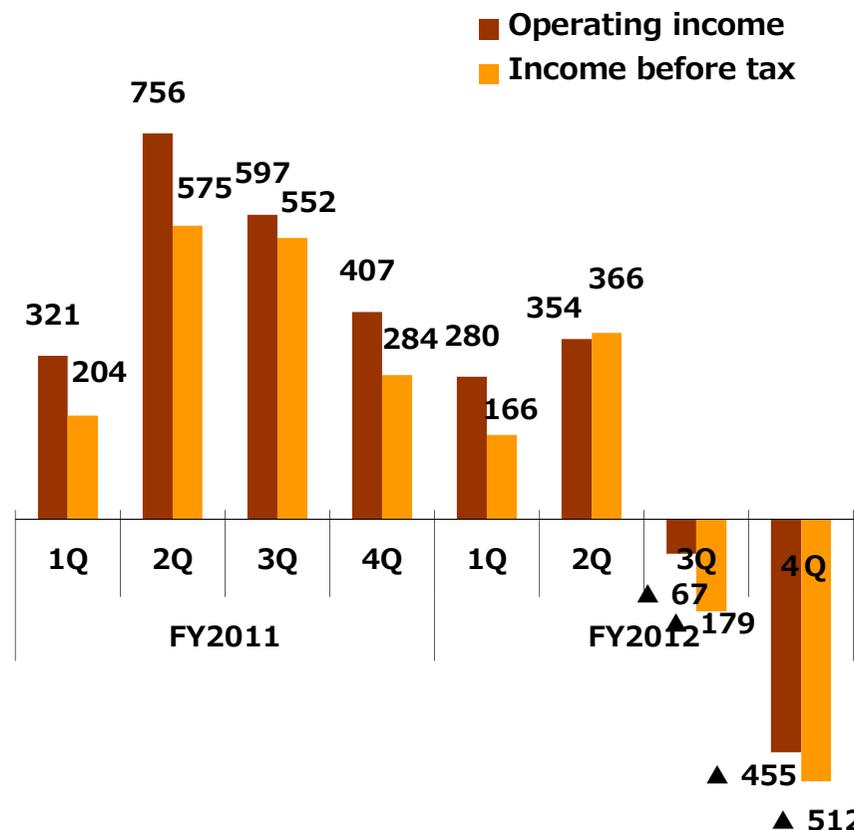


- (1) Net sales reduction at the mobile communications and AV/OA market
- (2) Decrease in product yield at a specific product
- (3) Increase of inventory write-down, resulted in increase of loss in 4Q

Net sales (Million yen)



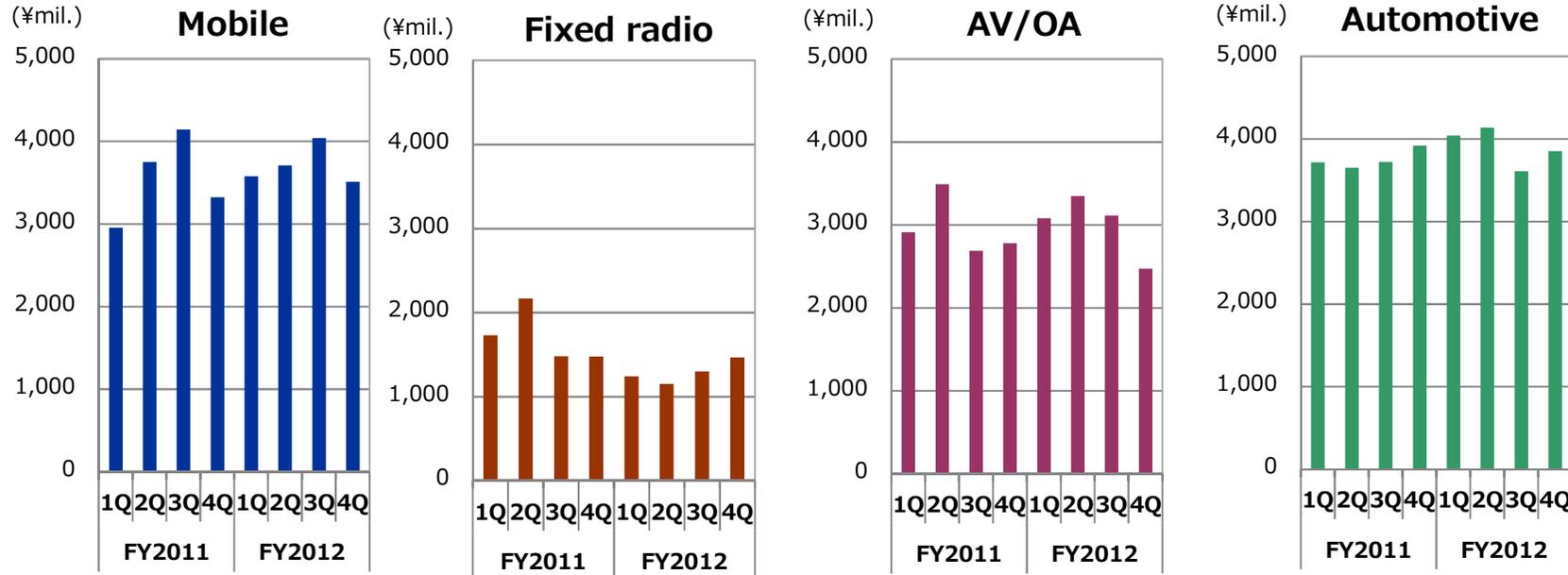
Income (Million yen)



Sales trend of main applications



- ◆ Mobile communications : Demand for smartphones grew less than expected
- ◆ Fixed radio communications : Demand for communications infrastructure, such as domestic mobile phone base station, is on a gradual recovery trend
- ◆ AV/OA : Demand for flat panel TV or PC, etc, decreased
- ◆ Automotive electronics : Demand decreased in 3Q due to the effect from boycott against Japanese cars in China, but demand recovered in 4Q



Business challenges



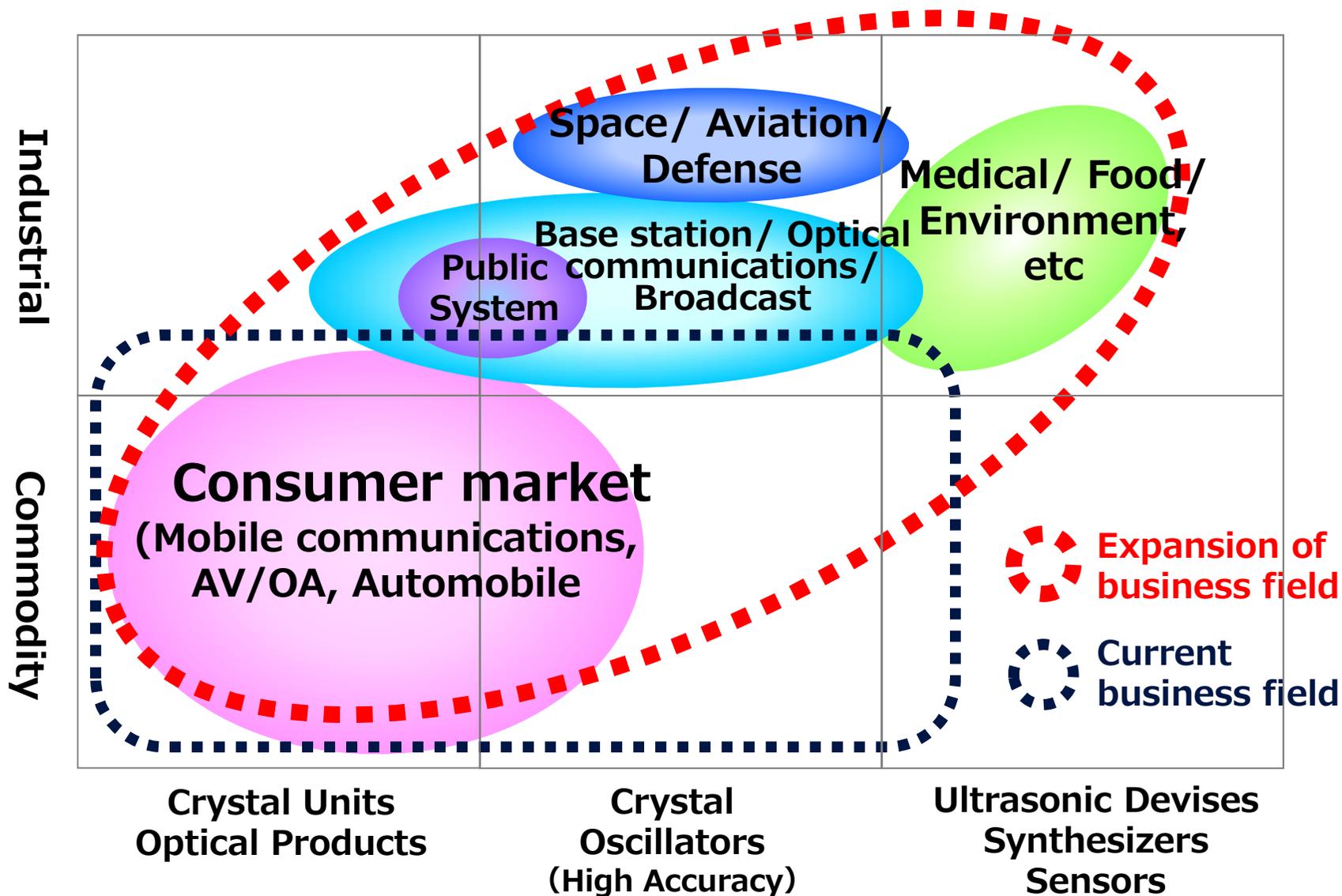
■ Reinforce earning power with a lower break-even point

- Fixed cost
 - Capital investment : Reduce by 50% compared to the previous year
 - Research and development : Prioritize investments (Small-type new products)
- Variable cost
 - Improve product yield rate: Accelerate design improvement and optimize manufacturing processes
 - Costs reduction: Optimize blank production site and accelerate localization of material procurement

■ Promote growth strategy for sustainable growth

- Consumer market (Mobile communications, AV/OA, Automobile)
 - Replace current products with new products made using new materials and new manufacturing methods
- Industrial market (Base station/Optical communications, Public system, Medical)
 - Raise current market share and target new and high-specification applications by strengthening core crystal technology

Business portfolio target

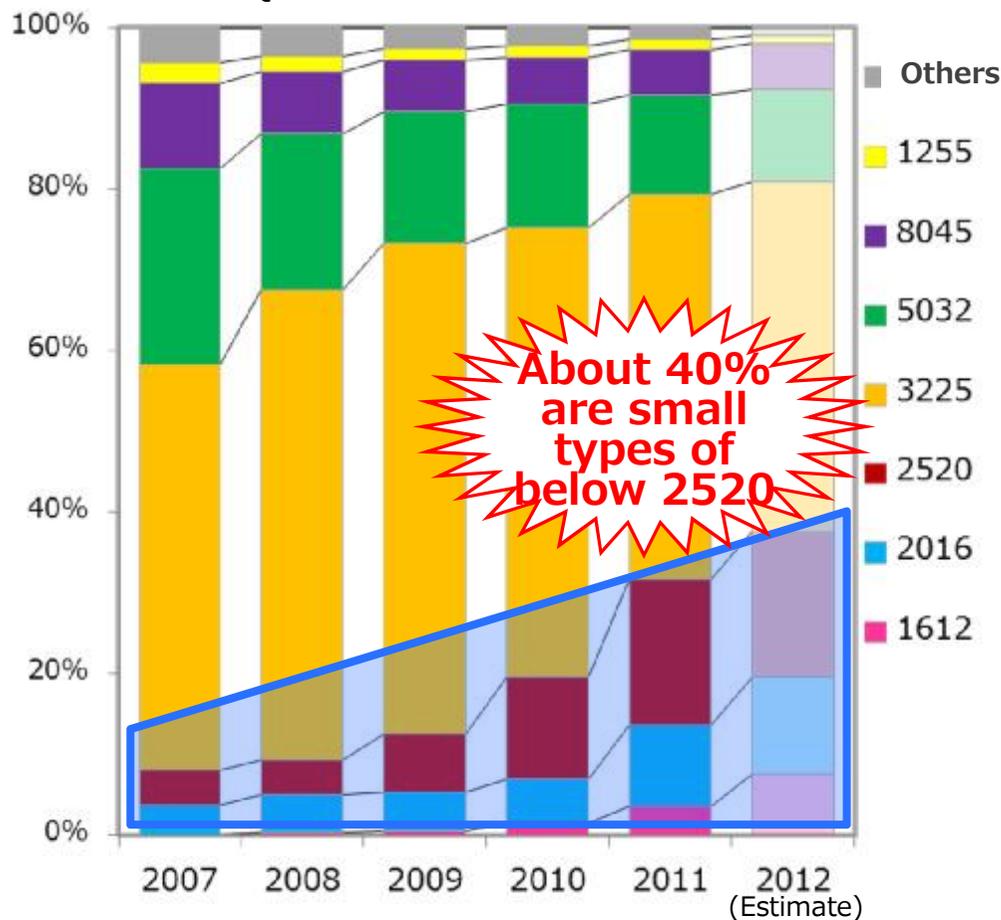


[Consumer market] Miniaturization of crystal units



Crystal units size trend

(QIAJ results and NDK estimate)



◆ Size of crystal oscillators often used in the consumer market is changing from 8045/5032 to 3225



◆ Demand for smaller size has been rapidly increasing due to increase in small and high performing devices



The size of crystal units are expected to change rapidly from 3225/2520 to 2016/1612

[Consumer market] Small size new products



Replace current products with new products made using new materials and new manufacturing methods

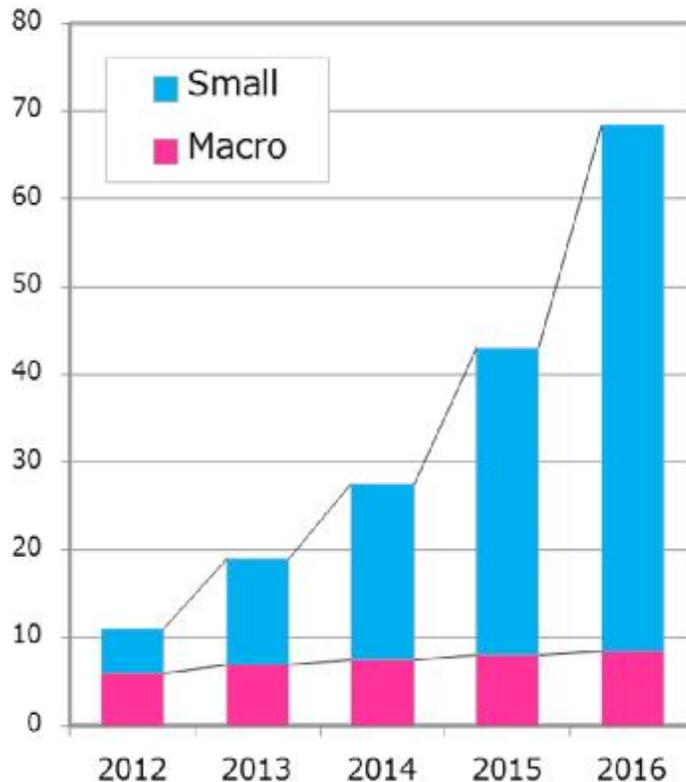
		3225 size	2016 size	1612 size
Low-level accuracy ±100ppm	HDD,SSD USB NFC	current product	current product	
Mid-level accuracy ±50ppm	Note PC, LCD-TV, DSC, Digital broadcasting tuner	current product	current product	current product
High-level accuracy ±20ppm	Smartphone, Tablet, WLAN/BT, Car Audio	current product	current product	current product

New products

[Base station market] From "Macro" to "Small"

Trend of installations of base station by size

Unit : million units (ABI Research)



※Small : Total of Femto, Pico and Micro

◆ In the past

Mainly "Macro cell"



"Small cell" coverage is increasing

- **Eliminate blind zone**
- **Facilitate smooth connection**

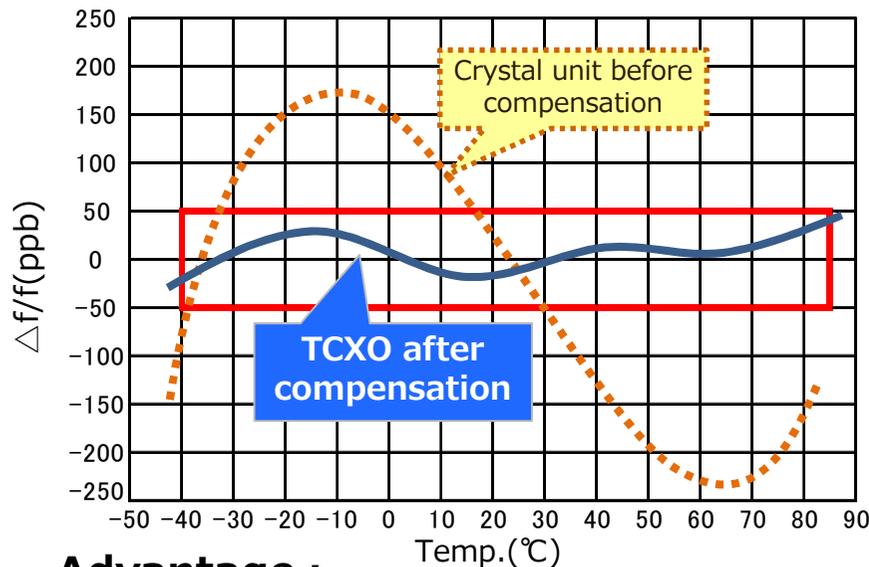
◆ Femto cell (Indoor)	100~200m
◆ Pico cell (Indoor)	250~500m
	(Outdoor) 0.5~1.5km
◆ Micro cell (Outdoor)	1 ~3km

[Base station market] TCXO vs OCXO

TCXO (Temperature Compensated Crystal Oscillators)

Compensate temperature characteristic by circuit

<Relation of temperature and frequency volatility of TCXO>



Advantage :

- ① Low power consumption (1/10 of OCXO)
- ② Quick start-up after turning the switch on

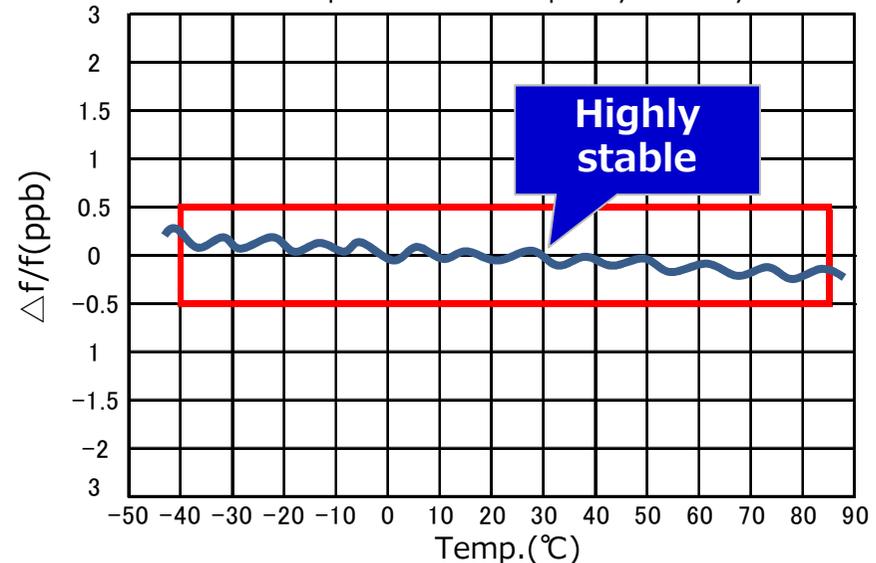
Disadvantage:

Less accuracy than highly stable OCXO

OCXO (Oven-Controlled Crystal Oscillators)

Reduce frequency volatility by maintaining the temperature at a certain level using oven

<Relation of temperature and frequency volatility of OCXO>



Advantage :

High stability

Disadvantage :

High power consumption and slow start-up

[Base station market] Needs for high accuracy oscillators



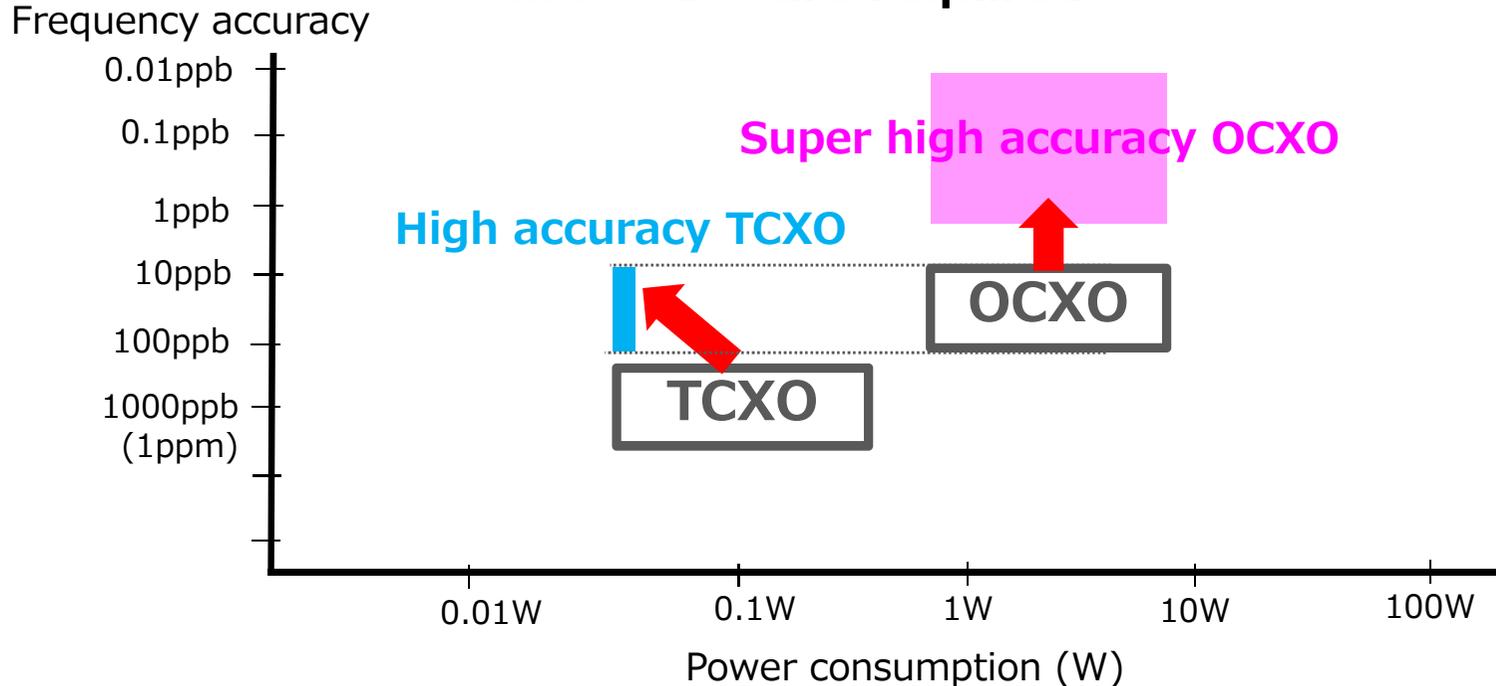
“OCXO” has been used as clock generator for base station,

Macro cell

“Higher accuracy” is required

Small cell

High accuracy equivalent to OCXO
+ “Low power consumption”
+ “Wide temperature range”,
+ “Quick start-up”, and
+ “Small size” are required



[Base station market] High accuracy oscillators



Small cell	Macro cell 	<p>Developed in FY2012</p>  0.5ppb/1600mW 37×28mm	<p>Under development</p>  0.05ppb	<p>Super high accuracy OXO at a world-class level</p> <p>Only 1 second difference in 640 years</p>
	Micro cell/ Pico cell 	<p>Developed in FY2012</p>  50ppb*/70mW 14×9mm	<p>Under development</p>  25ppb*/70mW 14×9mm	<p>High accuracy TCXO at a world-class level</p> <p>Accuracy equivalent to OXO is realized with TCXO</p>
	Femto cell 	<p>Developed in FY2011</p>  100ppb**/30mW 7×5mm	<p>Developed in FY2012</p>  100ppb**/12mW 5×3mm	<p>Ultra compact & high accuracy TCXO at a world-class level</p> <p>【 Reference 】 For smart phones 2.0×1.6mm 500ppb</p>

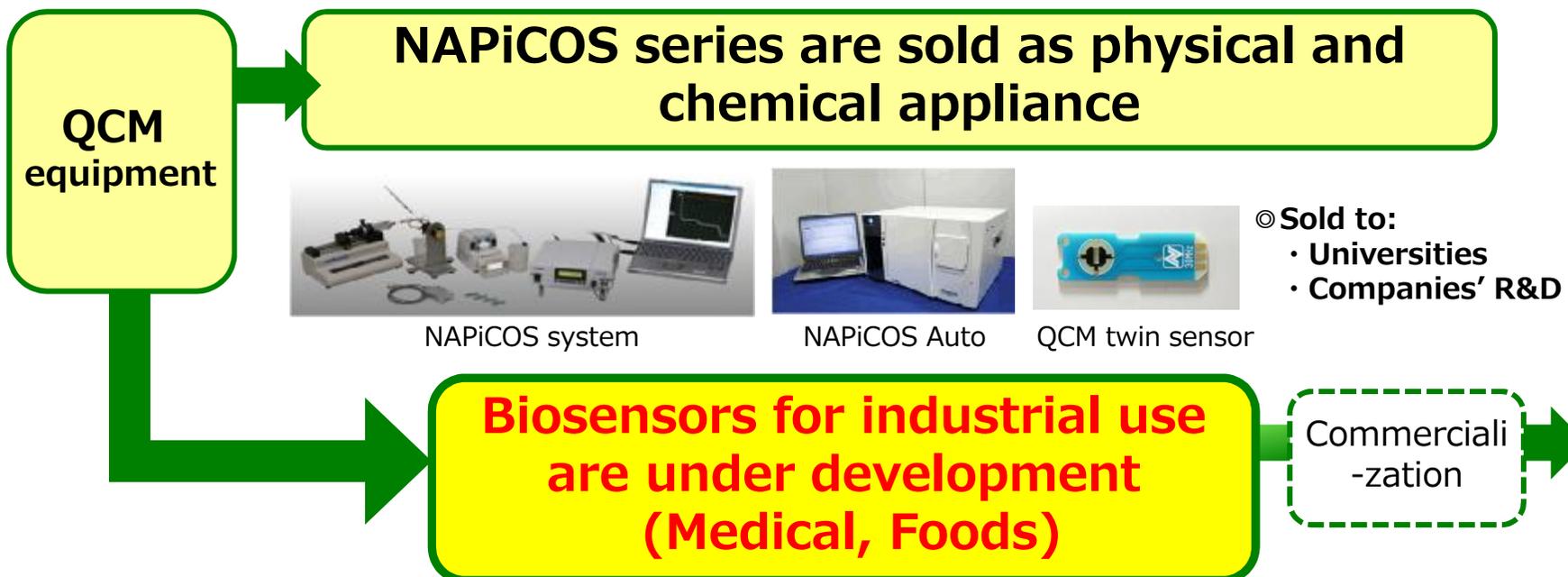
*Frequency temperature characteristics in the wide temperature range from -40° C to +85° C

<Reference> Normal temperature range is from -10° C to +70° C

**Hold over frequency stability: including temperature stability, supply voltage change and aging of 24 hours

[Sensor Market] Biosensor

FY2004~	FY2009~	FY2012~	FY2015~
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Promote commercialization of simplified measuring, sensitive and low-cost biosensor in collaboration with pharmaceutical and food companies

[Sensor Market] Sensor modules

Developed product in FY2012

Crystal physical sensor

Under research for application

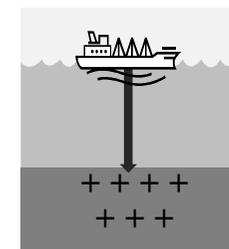
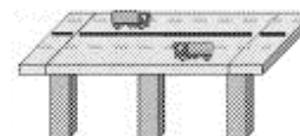


This sensor detects gravity, acceleration, inclination, and displacement at micro level using frequency

<Comparison with silicon MEMS sensor>

- 100 times high sensitivity
- 1600 times external shock resistance

Examples



Measurement of earthquakes, detection of resources, etc.

Developed product in FY2012

Millimeter wave gunn-diodes oscillator

Under research for application



Millimeter wave sensor is resistant to weather conditions, such as rain or fog and suitable to capture movements of objects

<Comparison with other sensors>

Types of sensor	Resistance to environment	Action capture
Visible image sensor	×	△
Infrared image sensor	△	△
Infrared laser sensor	△	○
Millimeter wave sensor	○	○

Examples



Trespass detection, respiration detection for nursing beds in hospitals, etc.

Capital investment & R&D expenses

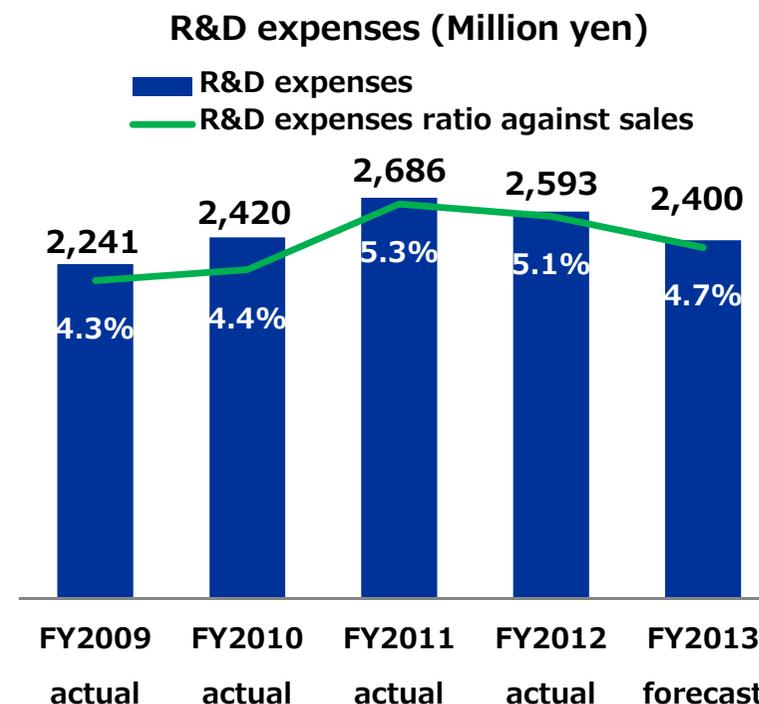
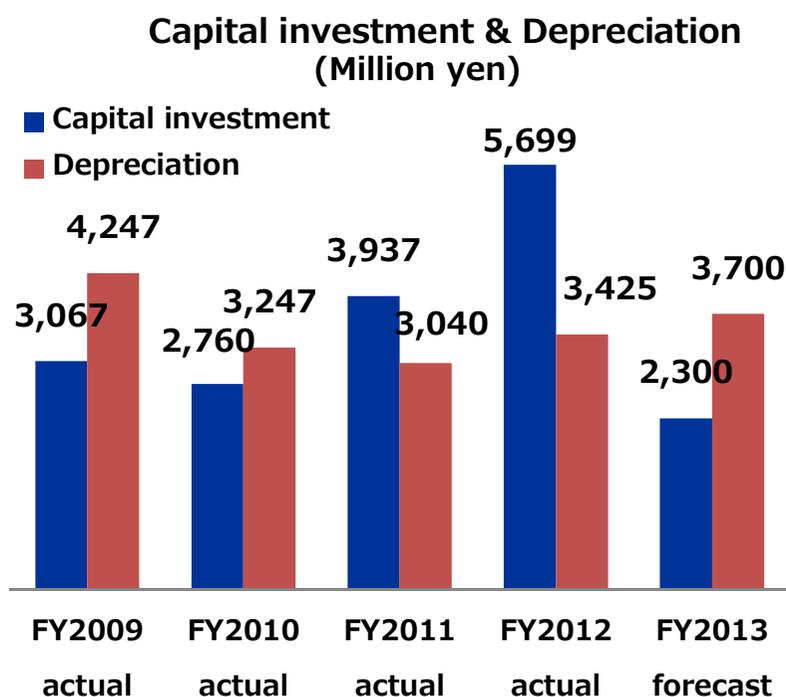


【 Capital investment 】

¥2.3 billion expected for FY2013 (Full use of existing facilities)

【 R&D expenses 】

¥2.4 billion expected for FY2013 (Mainly for new products)



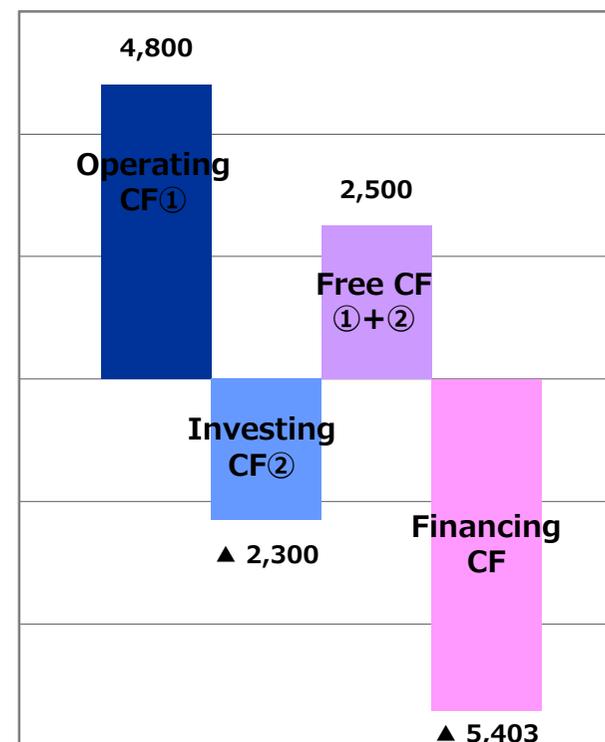
Summary of cash flow



(Million yen)

	FY2012 Results	FY2013 Forecast
Income/(loss▲) before income taxes	▲ 159	1,100
Depreciation and amortization	3,425	3,700
Change in working capital	400	0
I. Operating activities	3,666	4,800
Purchase of property, plant and equipment	▲ 5,699	▲ 2,300
Others	637	0
II. Investing activities	▲ 5,062	▲ 2,300
Free cash flow	▲ 1,396	2,500
Net decrease(▲)/increase in long-term debt	5,055	▲ 5,011
Cash dividends paid	▲ 391	▲ 392
Others	▲ 864	0
III. Financing activities	3,800	▲ 5,403
Net decrease(▲)/increase in cash and cash equivalents	2,404	▲ 2,903
Cash and cash equivalents at beginning of year	8,796	11,812
Net effect of currency translation	611	0
Cash and cash equivalents at end of year	11,812	8,909

Cash Flow forecast of FY2013



Forecast for the year FY2013



(Million Yen)

	FY2012 Actual	FY2013 Forecast
Net sales	50,623	51,000
Operating income	112	1,500
Income/(loss▲) before tax	▲ 159	1,100
Net income/(loss▲)	▲ 412	1,000
Ratio of income before tax	▲ 0.3%	2.2%
Exchange rate (against the U.S. dollar)	¥83.23	¥95.00

<Reference>

Influence on net sales (Annual) ¥1 fluctuation⇒ approx.¥210 million

Influence on operating income (Annual) ¥1 fluctuation⇒ approx.¥50 million

Finally



**We are grateful for your
continuous support.**

IR information contact

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