## Harmonic Drive Systems Inc.

# Presentation on Business Results for Fiscal 2014

Fiscal year ended March 31, 2015

May 19, 2015

This presentation contains forward-looking statements relating to expected future performance as of May 19, 2015. Such statements are based on the views and assumptions of company management and involve risks and uncertainties such as changes in the business environment that may cause the actual results to differ materially from expectations.

# Fiscal 2014 Performance Summary

# Consolidated results for fiscal year ended March 31, 2015 (versus original forecasts)

(millions of yen)

	Forec (announced No		FY ended Ma	ar. 31, 2015	Vs. original	forecasts
	Amount	Percent (%)	Amount	Percent (%)	Change	Rate (%)
Net sales	26,000	100.0	25,951	100.0	▲48	▲0.2
Operating profit	7,350	28.3	7,066	27.2	▲283	▲3.9
Ordinary income	7,730	29.7	7,525	29.0	▲204	<b>▲</b> 2.6
Net income	4,900	18.8	4,833	18.6	<b>▲</b> 66	▲1.4
EPS (yen)	53.50	_	52.77	_	▲0.73	▲1.4

EPS has been adjusted for the 3-for-1 stock split carried out on October 1, 2014 retroactively.

# Consolidated results for fiscal year ended March 31, 2015 (year-on-year change)

						(millions of yen)
	FY ended Ma	ar. 31, 2014	FY ended Ma	ar. 31, 2015	Year-on-ye	ar change
	Amount	Percent (%)	Amount	Percent (%)	Change	Rate (%)
Net sales	21,083	100.0	25,951	100.0	4,867	23.1
Operating profit	4,668	22.1	7,066	27.2	2,398	51.4
Ordinary income	4,822	22.9	7,525	29.0	2,702	56.0
Net income	2,993	14.2	4,833	18.6	1,839	61.5
EPS (yen)	32.68	_	52.77	_	20.09	61.5
Capital investment	1,304	_	2,475	_	1,171	89.8
Depreciation costs	1,170	_	1,305	_	134	11.5
R&D costs	1,235	_	1,309	_	74	6.0

EPS has been adjusted for the 3-for-1 stock split carried out on October 1, 2014 retroactively.

# Performance of main group companies in fiscal year ended March 31, 2015

(millions of yen)

		Equity Net sales		Net income		
		stake	Amount	Year-on-year change (%)	Amount	Year-on-year change (%)
	Harmonic Drive Systems Inc.	_	23,029	23.9	4,063	45.5
*1	HD Systems, Inc. (Harmonic Drive L.L.C.) (U.S.A)	100% (51%)	3,417	7.3	128	▲1.7
	Harmonic AD, Inc.	100%	2,102	11.4	97	77.2
*2	Harmonic Drive AG (Germany)	36.8%	10,030	28.1	1,437	57.2

<sup>\*1</sup> Exchange rates: FY2013 1US\$ = 97.65yen, FY2014 1US\$ = 105.85yen

<sup>\*2</sup> Exchange rates: FY2013 1€ = 129.68yen, FY2014 1€ = 140.42yen

<sup>\*3</sup> Net income of US subsidiaries (consolidated) is after excluding minority interests.

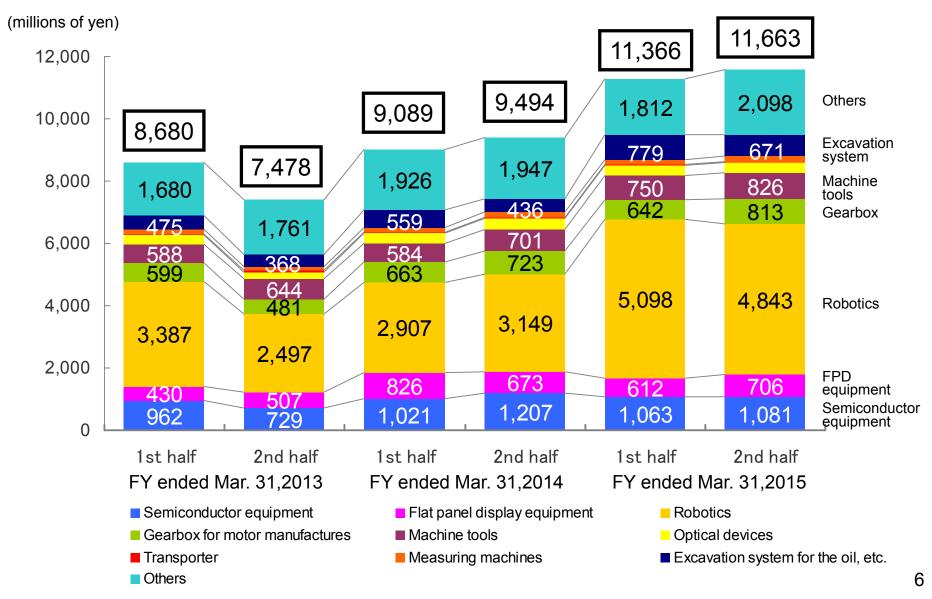
<sup>\*4</sup> For overseas subsidiaries and affiliates, the fiscal year ends December 31.

# Non-consolidated results for fiscal year ended March 31, 2015 (year-on-year change)

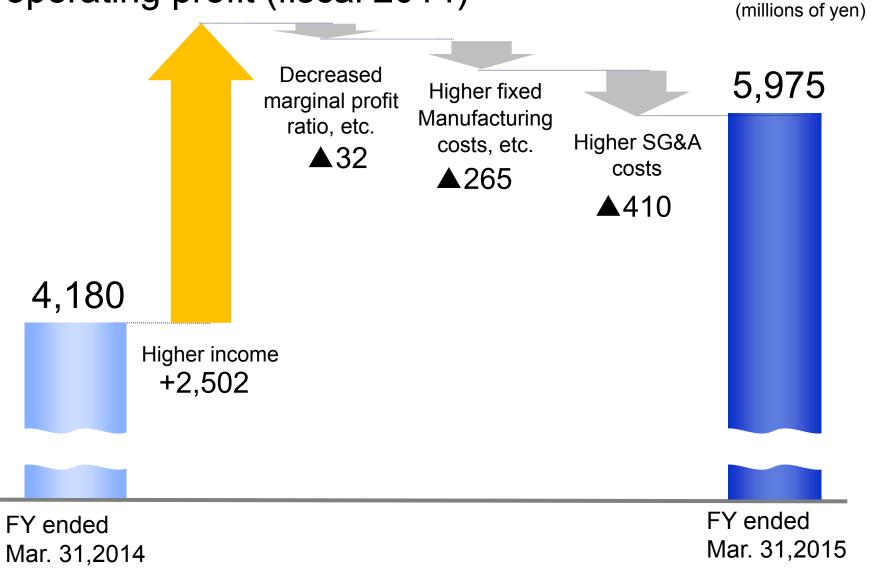
(millions of yen) FY ended Mar. 31, 2014 FY ended Mar. 31, 2015 Year-on-year change Percent (%) **Amount** Percent (%) Change Rate (%) Amount 23,029 4,445 18,584 23.9 100.0 100.0 Net sales Operating 1,794 4,180 5,975 22.5 42.9 25.9 profit Ordinary 4,375 6,340 1,964 23.5 27.5 44.9 income Net 1,271 2,792 4,063 15.0 17.6 45.5 income 30.49 44.37 13.88 45.5 EPS (yen) Capital 617 1,456 839 136.1 investment Depreciation 712 756 44 6.2 costs R&D 72 1,224 1,296 5.9 costs

EPS has been adjusted for the 3-for-1 stock split carried out on October 1, 2014 retroactively.

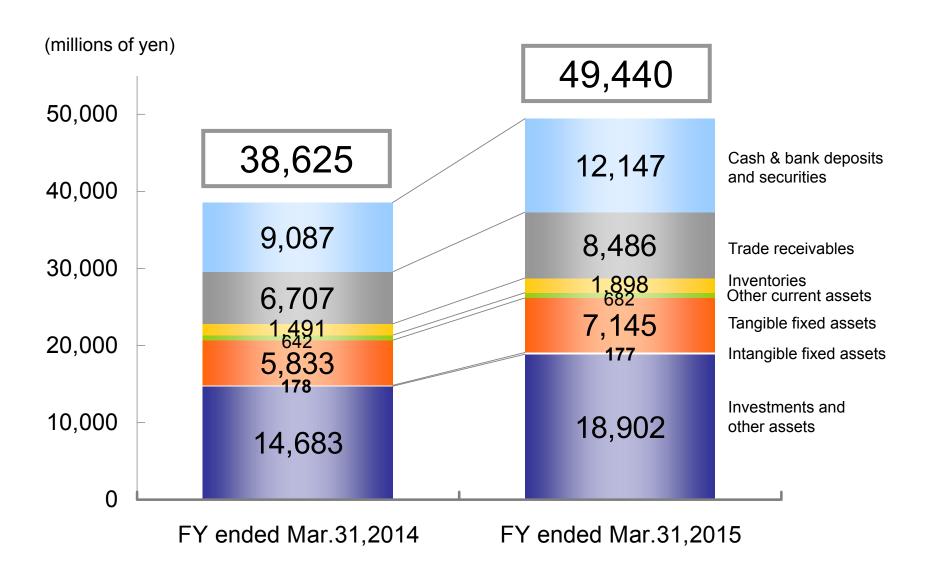
## Net sales by application (non-consolidated)



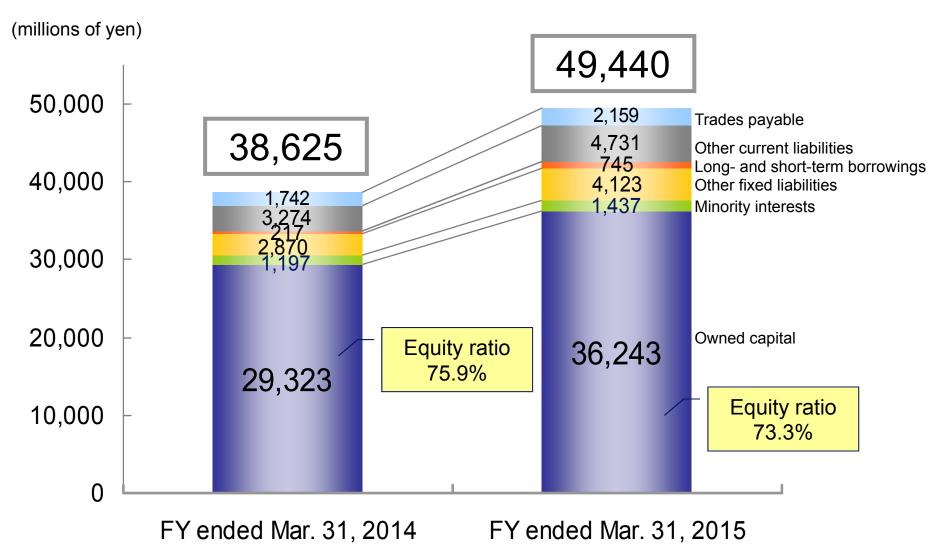
# Factors in year-on-year change in non-consolidated operating profit (fiscal 2014)



#### Status of consolidated assets

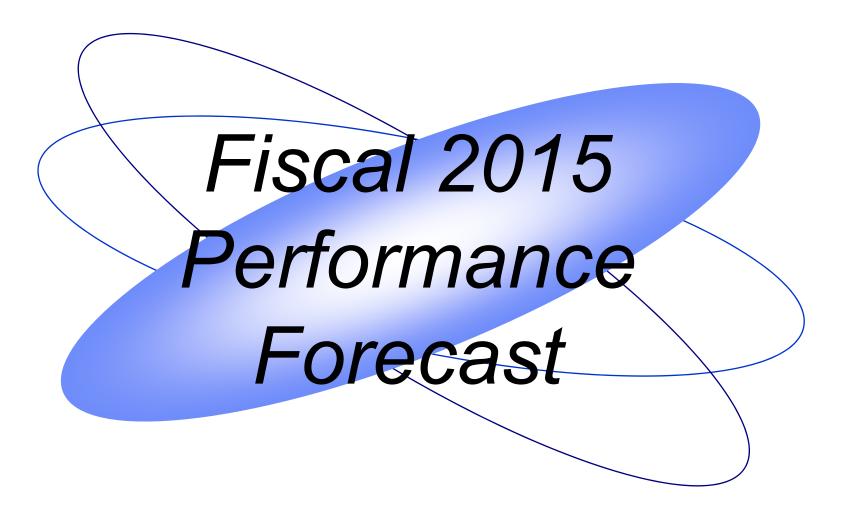


#### Status of consolidated liabilities and net assets



## Status of consolidated cash flows

(millions of yen)	FY ended Mar. 31,2014	FY ended Mar. 31,2015
Cash flow from operating activities	3,643	5,494
Cash flow from investing activities	▲1,102	<b>▲</b> 2,103
Cash flow from financing activities	<b>▲</b> 5,591	<b>▲</b> 737
Effect of exchange rate changes on cash and cash equivalents	221	193
Net increase (decrease) in cash and cash equivalents	▲2,829	<b>▲</b> 2,846
Cash and cash equivalents at end of year	6,883	9,730



# Consolidated performance forecast for fiscal 2015

	(millions of yen					(millions of yen)
	FY ended Ma	ar. 31, 2015	Forec FY ended Ma		Year-on-ye	ar change
	Amount	Percent (%)	Amount	Percent (%)	Change	Rate (%)
Net sales	25,951	100.0	29,000	100.0	3,048	11.7
Operating profit	7,066	27.2	7,800	26.9	733	10.4
Ordinary income	7,525	29.0	8,400	29.0	874	11.6
Net income	4,833	18.6	5,500	19.0	666	13.8
EPS (yen)	52.77	_	60.05	_	7.28	13.8
Capital investment	2,475	_	5,700	_	3,224	130.2
Depreciation costs	1,305	_	1,700	_	394	30.3
R&D costs	1,309	_	1,520	_	210	16.1
Depreciation costs	1,305	_ _	1,700	_ _	394	30.3

Assumed exchange rate for FY ended Mar. 31, 2016 forecasts 1US\$ = ¥115.00 1€ = ¥135.00 EPS has been adjusted for the 3-for-1 stock split carried out on October 1, 2014 retroactively.

(millions of yon)

## Fiscal 2015 forecasts for main group firms

(millions of yen)

		Equity	Net s	sales	Net in	come
		stake	Amount	Year-on-year change (%)	Amount	Year-on-year change (%)
	Harmonic Drive Systems Inc.	_	25,000	8.6	4,600	13.2
<b>%</b> 1	HD Systems, Inc. (Harmonic Drive L.L.C.) (U.S.A)	100% (51%)	4,000	17.1	150	16.8
	Harmonic AD, Inc.	100%	2,200	4.6	105	7.9
<b>%</b> 2	Harmonic Drive AG (Germany)	36.8%	10,400	3.7	1,880	30.7

<sup>\*1</sup> Exchange rates: FY2014 1US\$ = 105.85yen, FY2015 forecasts 1US\$ = 115.00yen

<sup>\*2</sup> Exchange rates: FY2014 1€ = 140.42yen, FY2015 forecasts 1€ = 135.00yen

<sup>\*3</sup> Net income of US subsidiaries (consolidated) is after excluding minority interests.

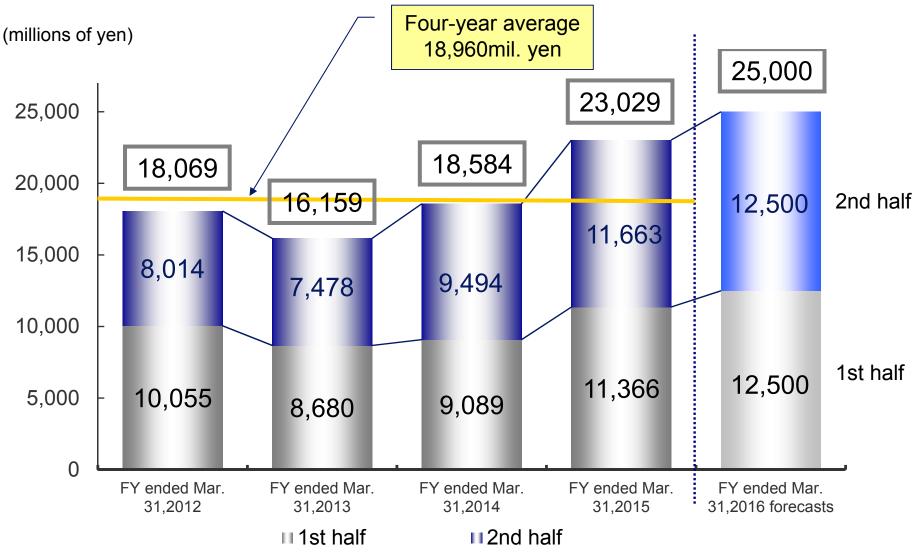
<sup>\*4</sup> For overseas subsidiaries and affiliates, the fiscal year ends December 31.

# Non-consolidated performance forecast for fiscal 2015

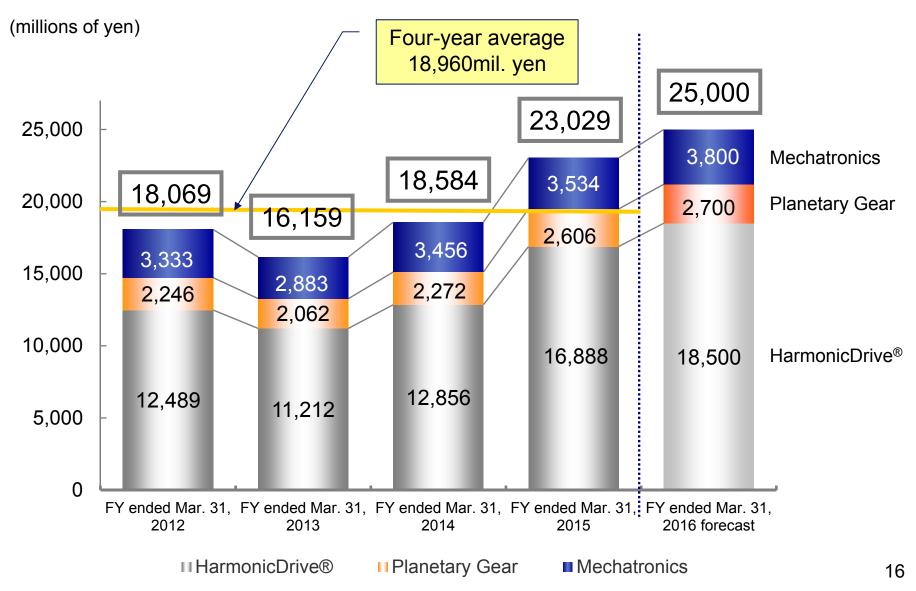
(millions of yen					(millions of yen)	
	FY ended Ma	ar. 31, 2015	Forec FY ended Ma		Year-on-yea	ar change
	Amount	Percent (%)	Amount	Percent (%)	Change	Rate (%)
Net sales	23,029	100.0	25,000	100.0	1,970	8.6
Operating profit	5,975	25.9	6,300	25.2	324	5.4
Ordinary income	6,340	27.5	6,900	27.6	559	8.8
Net income	4,063	17.6	4,600	18.4	536	13.2
EPS (yen)	44.37	_	50.22	_	5.85	13.2
Capital investment	1,456	_	4,700	_	3,243	222.7
Depreciation costs	756	_	1,050	_	293	38.8
R&D costs	1,296	_	1,500	_	203	15.7

Assumed exchange rate for FY ended Mar. 31, 2016 forecasts 1US\$ = ¥115.00 1€ = ¥135.00 EPS has been adjusted for the 3-for-1 stock split carried out on October 1, 2014 retroactively.

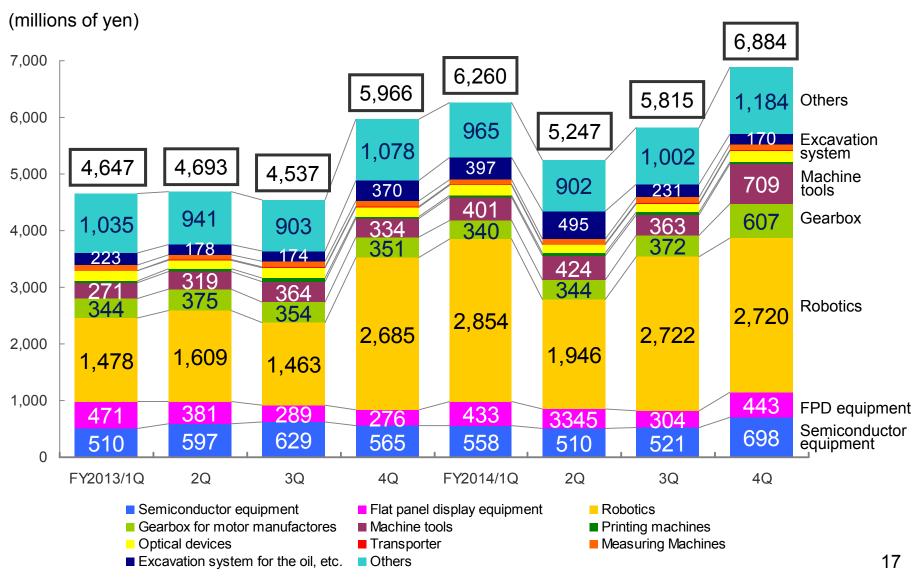
## Sales trend line (non-consolidated)



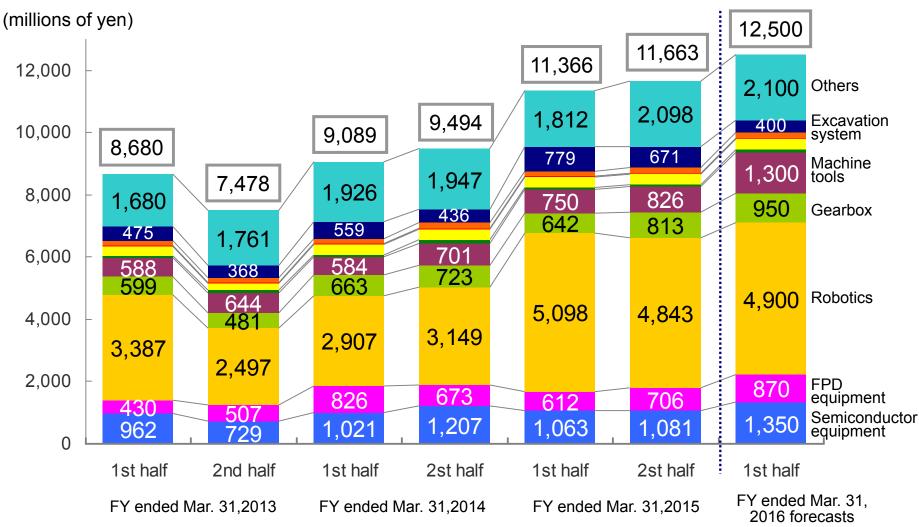
## Sales trend line by product (non-consolidated)



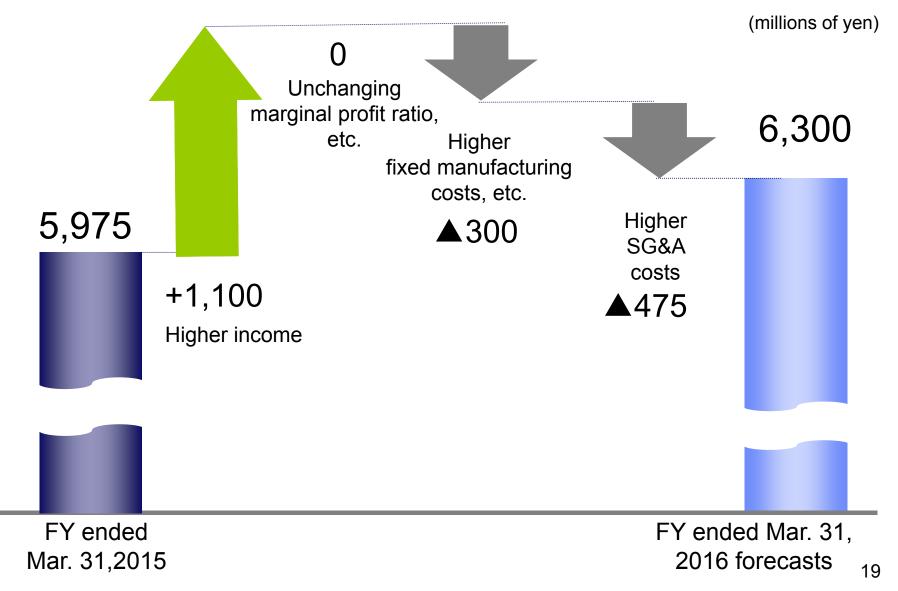
# Non-consolidated bookings by application (quarterly)



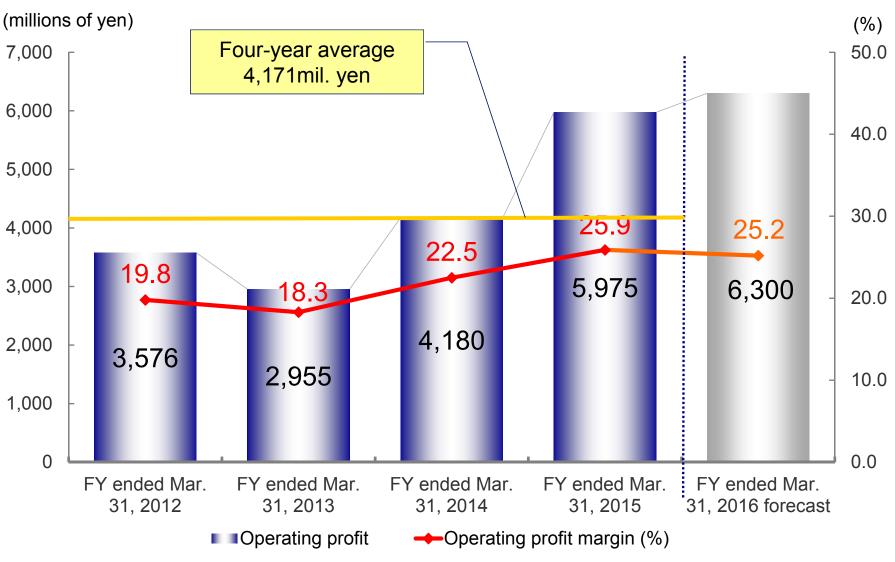
# Non-consolidated bookings by application (by half-year)



# Factors in year-on-year change in non-consolidated operating profit (fiscal 2015 forecast)

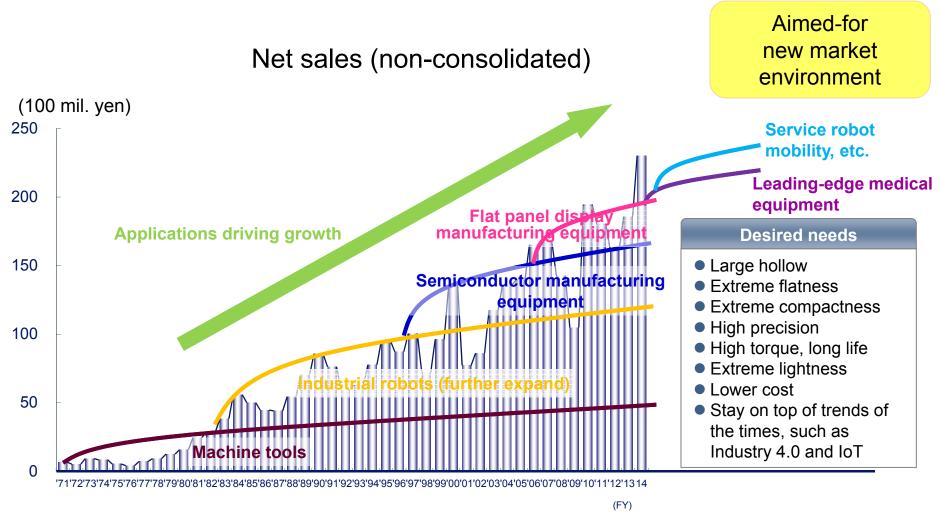


## Trends in operation profit (non-consolidated)



# New Mid-term Management Plan

## Driving forth of our growth



## **Business Climate for HDS Group**

		Business Climate
0	verall	Global speed reducer market is growing at an annual pace of around 6%.
Main appli-	Industrial robots	<ul> <li>Rising labor costs have increased incentives for robot use not just in developed nations but also in emerging economies.</li> <li>New-concept robots, such as those that do not remain in a fixed location like conventional robots but work in collaboration with human beings, are starting to emerge.</li> </ul>
cations	New appli- cations	<ul> <li>Potential expansion to new applications such as personal mobility, robot-assisted walking and other living support/nursing care fields, and self-driving control, etc.</li> <li>Motorization of hydraulic and pneumatic mechanisms is progressing and applicable fields are expanding.</li> </ul>
	Japan	<ul> <li>Market centering on industrial robot makers with a large share of the global market.</li> <li>Many customers, however, are moving their production to China.</li> </ul>
Region	China/ Asia	<ul> <li>Demand is growing among local Chinese robot makers. As Japanese and European robot makers shift production to China, demand for local service is growing (urgent need for lower costs, faster delivery, and stronger local support).</li> </ul>
ı	USA/ Europe	<ul> <li>Demand is expected to rise for lightweight, high-precision robot mechanisms to counter high labor costs and healthcare costs.</li> <li>The startup of new-concept and specialized-service robot markets is possible, with Google playing a leading role.</li> </ul>

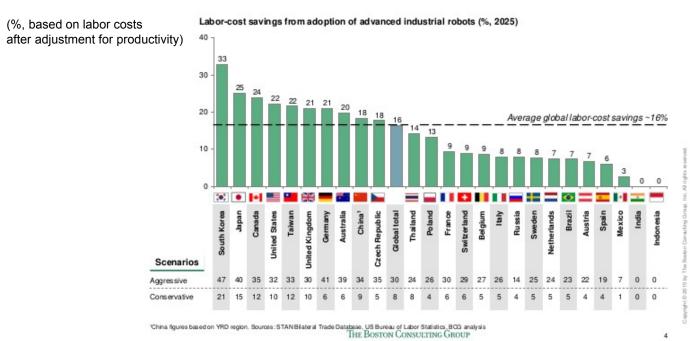
# The cost-effectiveness of industrial robots intoroduction

Rate of labor cost reduction due to rapid expansion of industrial robot use

The more economically developed a country, the higher its labor costs, raising expectations for robot introduction.

Rate of labor cost reduction due to rapid expansion of industrial robot use (2014 and 2025 compared)

By 2025, ~25% of all tasks will be automated through robotics, driving ~16% in global labor-cost savings

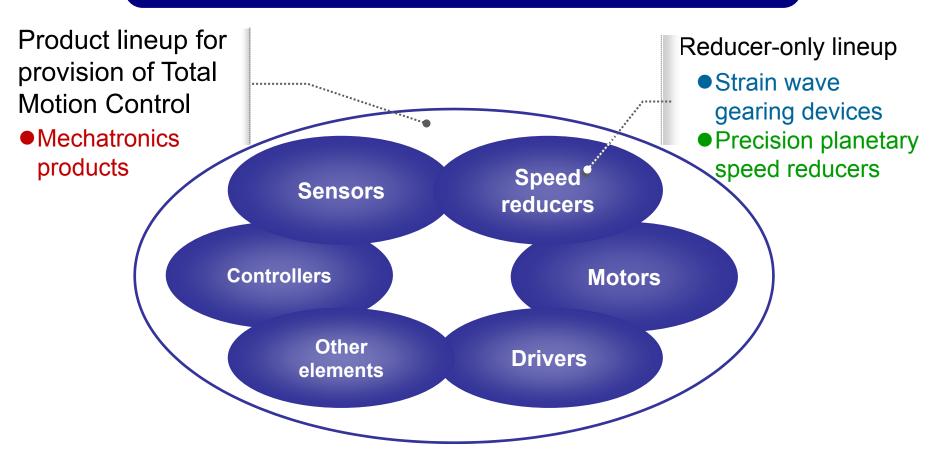


Note 1: China figures based on Yangtze River Delta region.

Sources: STAN Bilateral Trade Database, US Bureau of Labor Statistics, BCG analysis

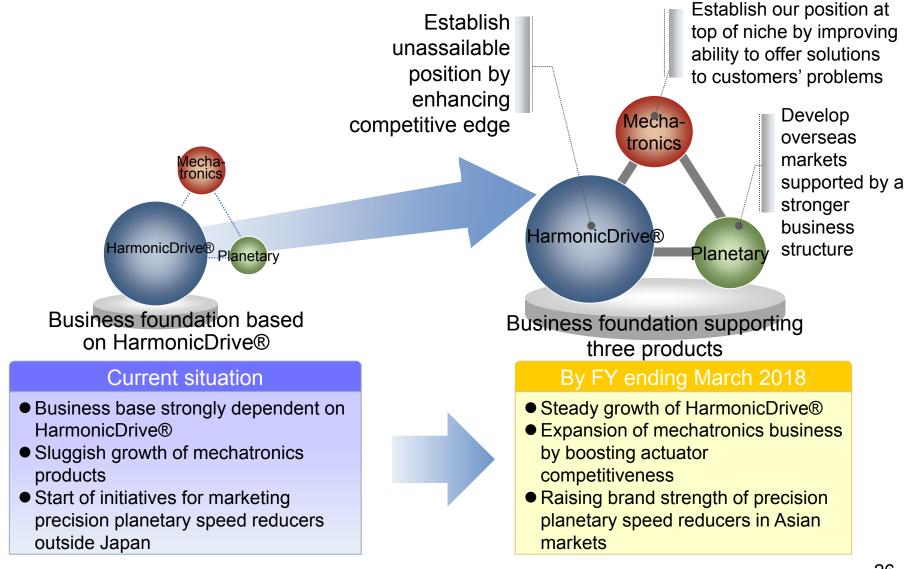
## **HDS Group Business Areas**

#### **Provision of Total Motion Control**



The concept of Total Motion Control

## Basic Policies of New Mid-term Management Plan (1) Business structure aimed for



## Basic Policies of New Mid-term Management Plan (2)

## Strengthen the competitiveness and business base of our three main product lines

Mechatronics products	<ul> <li>Establish our position at the top of the niche by improving problem-solving ability</li> <li>Strengthen our service and sales structures</li> <li>Aggressively introduce new products by strengthening core technologies</li> </ul>
Precision planetary speed reducers	<ul> <li>Take on overseas markets by strengthening business structure</li> <li>Strengthen sales structure in markets outside Japan</li> <li>Build up R&amp;D organizational structure</li> </ul>
HarmonicDrive®	<ul> <li>Increase our competitive edge and establish an unassailable position</li> <li>Extend and develop robot applications</li> <li>Develop and market new products able to meet diverse needs</li> </ul>

## Basic Policies of New Mid-term Management Plan (3)

#### Develop Asian markets and build up business base

Aggressively expand sales in Asian markets

 Establish a community-based structure, and strengthen/popularize the brand

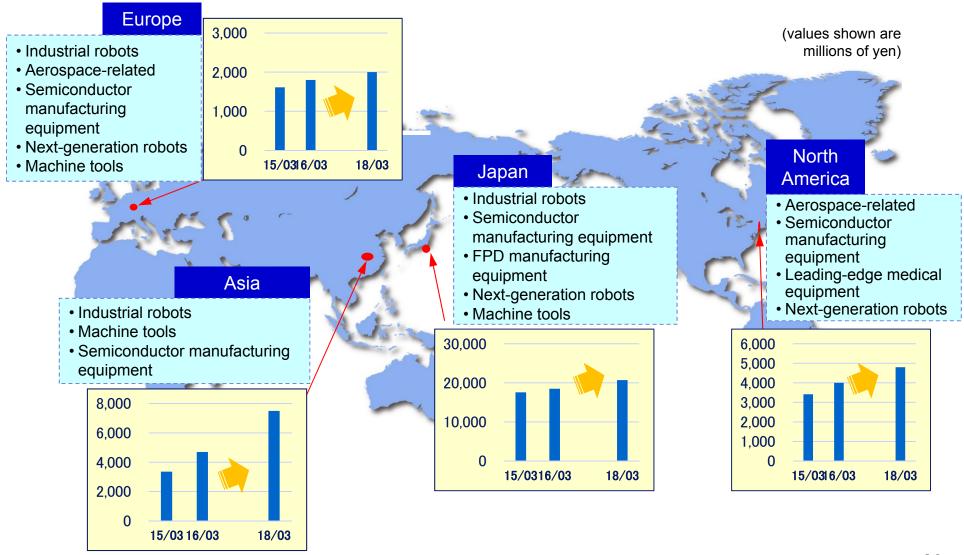
Realize a high-level customer-oriented organization by resolutely pursuing QCDS

 Raise the organizational capability to satisfy market needs

Develop the human resources for achieving sustained growth

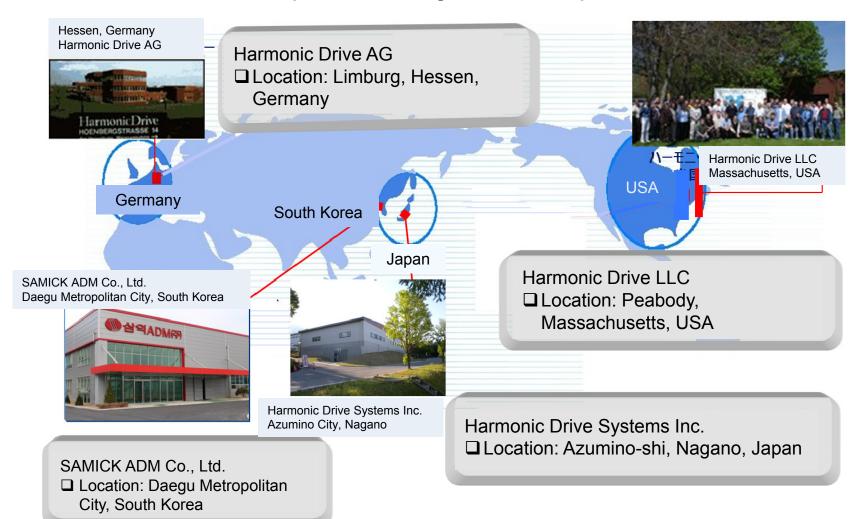
 Develop global and management human resources

## Net Sales Plans per Region



# Production Structure Consisting of Sites in Japan, USA, Europe, and South Korea

Maintain and expand existing 4-location production structure



## Production Plants in Japan, USA, Europe, and South Korea



(Germany) Harmonic Drive AG



Harmonic Drive Systems New Hotaka Plant (artist rendition)

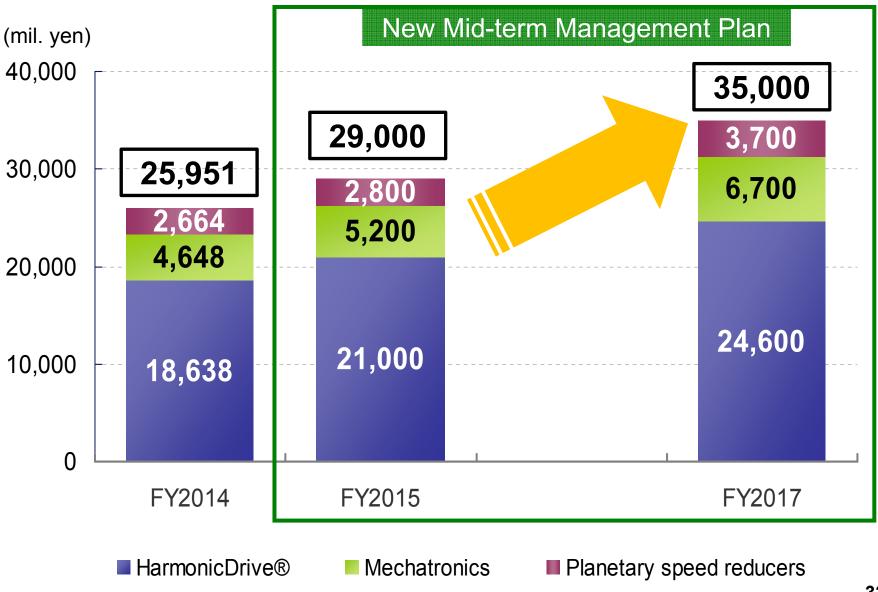


(USA) Harmonic Drive LLC



(South Korea) SAMICK ADM Co., Ltd.

## New Mid-term Management Plan: Consolidated Sales



## New Mid-term Management Plan: Consolidated financial targets

(Millions of Yen)

	FY ended Mar. 2015 (actual)			
	Amount	Percent (%)		
Net sales	25,951	100.0		
Operating income	7,066	27.2		
Net income	4,833	18.6		

FY ending Mar. 20	016 (planned)	FY ending Mar. 2	018 (planned)
Amount	Percent (%)	Amount	Percent (%)
29,000	100.0	35,000	100.0
7,800	26.9	9,500	27.1
5,500	19.0	7,000	20.0

	Cumulative total for three years of previous Mid-term Plan (actual for FY ended March 2013 to FY ended March 2015)	Cumulative total for three years of new Mid-term Plan (planned for FY ending March 2016 to FY ending March 2018)
Capital investment	5,158	10,000
Depreciation costs	3,595	6,000
R&D costs	3,690	4,800

# Long-term Vision

# Aimed-for corporate structure and industry position in 2020

Our business areas

Provision of Total Motion Control

Aimed-for corporate structure in 2020

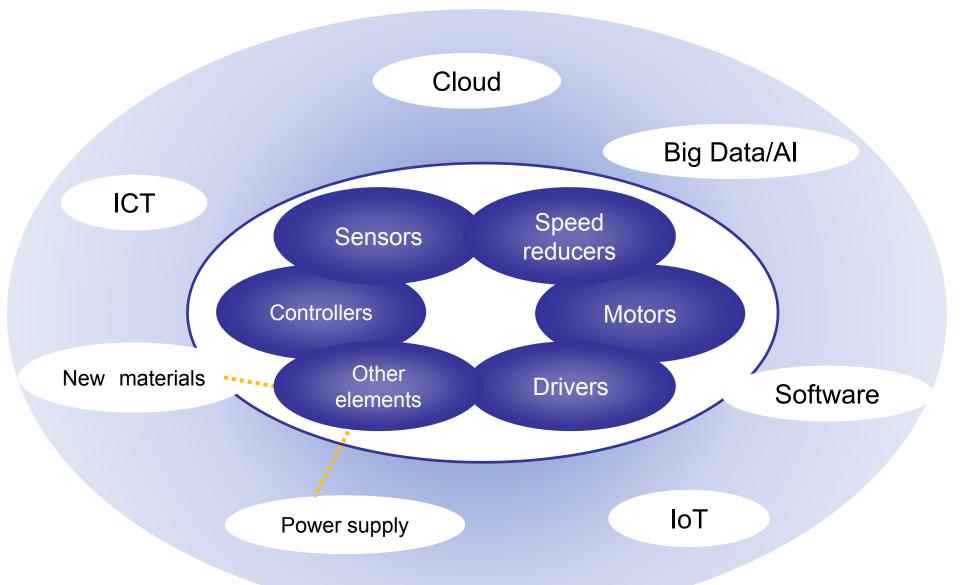
Continue to be without peer in the motion control industry through provision of high-value products and services

Aimed-for position

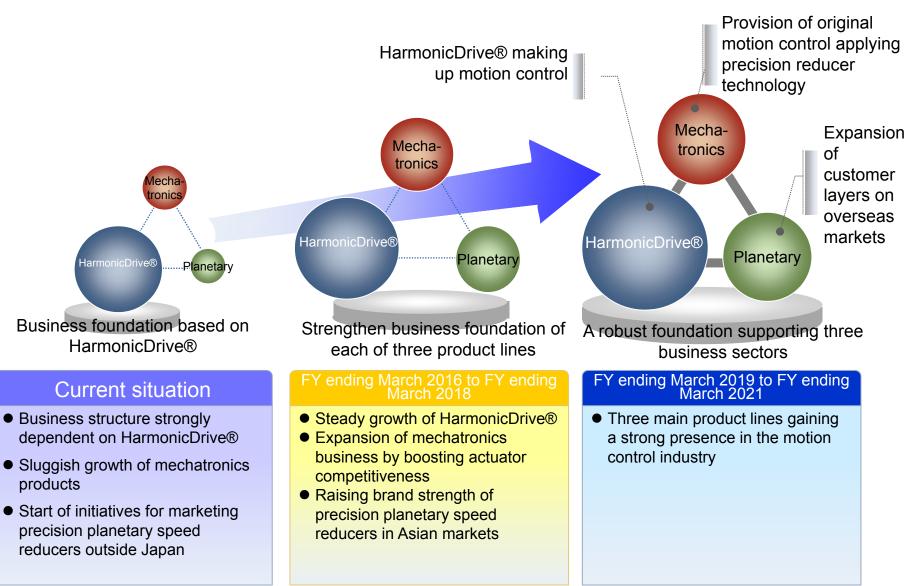
A trusted actuator maker having original technology

A leading company in the precision speed reducer field

## Cooperation with the new element technology



## **Business Structure Aimed For**



## **Examples of Next-generation Motion Control**

## Medical and nursing care fields

#### Surgical robots



Nursing care and healthcare robots



#### Manual labor fields

Collaborative taskperforming robots



From Life Robotics Inc. website



From Rethink Robotics, Inc. website

## Next-generation mobility

#### Self-driving vehicles



**Smart mobility** 



From WHILL website

## Meeting Needs for Next-generation Motion Control

Creation of original value

## High precision plus alpha

- Large hollow
- Extreme flatness
- Extreme compactness
- Extreme lightness
- Long life

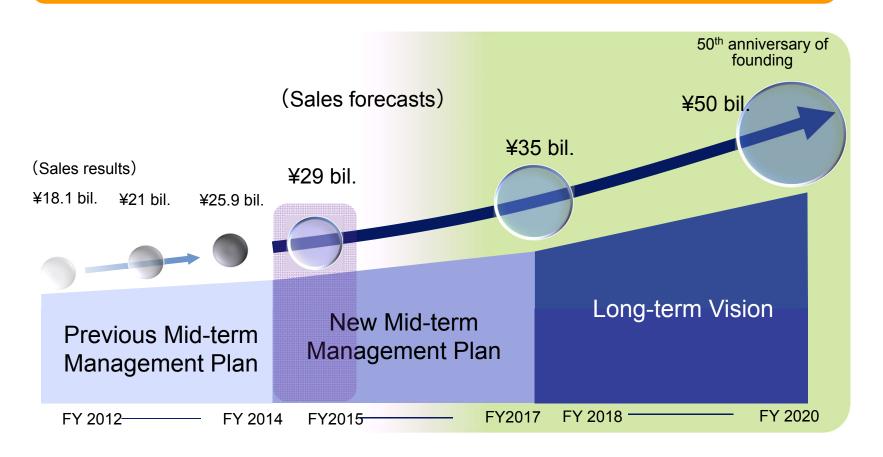
Long life

Strengthen partnership with customers

**Boost R&D** 

## **Envisioning Growth**

## On to a new growth stage



The performance targets and other numerical data presented herein are forecasts based on information available to the HDS Group at the time this material was prepared, and are subject to the influence of uncertainties including those in the economic and competitive environment. Actual performance may therefore differ materially from the forecasts given in this material.

## Harmonic Drive Systems Inc.

#### For more information:

Please contact us as follows for material contents and investor information of all kinds.

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