#### Harmonic Drive Systems Inc.

## Presentation on Business Results for Fiscal 2013

Fiscal year ended March 31, 2014

May 21, 2014

This presentation contains forward-looking statements relating to expected future performance as of May 21, 2014. 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 2013 Performance Summary

### Consolidated results for fiscal year ended March 31, 2014 (versus original forecasts)

(millions of yen) Forecasts (as of 12 Nov, 2013) FY ended Mar. 31, 2014 Vs. original forecasts Percent (%) Percent (%) Rate (%) Change **Amount Amount** 21,083 21,400 100.0 100.0 Net sales ▲316 **▲**1.5 Operating 4,930 4,668 23.0 22.1 ▲261 **▲**5.3 profit Ordinary 5,130 4,822 24.0 22.9 ▲307 **▲**6.0 income Net 3,200 2,993 15.0 14.2 ▲206 **▲**6.4 income 104.81 98.05 EPS (yen) **▲**6.4 **▲**6.76

### Consolidated results for fiscal year ended March 31, 2014 (year-on-year change)

(millions of ye						(millions of yen)
	FY ended Mar. 31, 2013		FY ended Mar. 31, 2014		Year-on-year change	
	Amount	Percent (%)	Amount	Percent (%)	Change	Rate (%)
Net sales	18,130	100.0	21,083	100.0	2,952	16.3
Operating profit	3,436	19.0	4,668	22.1	1,231	35.9
Ordinary income	3,576	19.7	4,822	22.9	1,246	34.9
Net income	1,960	10.8	2,993	14.2	1,032	52.7
EPS (yen)	64.22	_	98.05	_	33.83	52.7
Capital investment	1,377	_	1,304	_	<b>▲</b> 73	▲5.3
Depreciation costs	1,119	_	1,170	_	50	4.5
R&D costs	1,146	_	1,235	_	89	7.8

Capital investment amounts are the amounts of tangible and intangible fixed assets acquired in the term. EPS for fiscal 2011 has been adjusted for the 300-for-1 stock split carried out April 1, 2011 retrospectively.

### Performance of main group companies in fiscal year ended March 31, 2014

(millions of yen)

		Equity	Net sales		Net income	
		stake	Amount	Year-on-year change (%)	Amount	Year-on-year change (%)
	Harmonic Drive Systems Inc.	_	18,584	15.0	2,792	47.4
*1	HD Systems, Inc. (Harmonic Drive L.L.C.) (U.S.A)	100% (51%)	3,184	15.0	130	21.0
	Harmonic AD, Inc.	100%	1,887	9.3	54	33.6
*2	Harmonic Drive AG (Germany)	35%	7,829	23.3	914	▲3.2

<sup>\*1</sup> Exchange rates: FY2013 1US\$ = 79.82yen, FY2014 1US\$ = 97.65yen

<sup>\*2</sup> Exchange rates: FY2013 1€ = 102.63yen, FY2014 1€ = 129.68yen

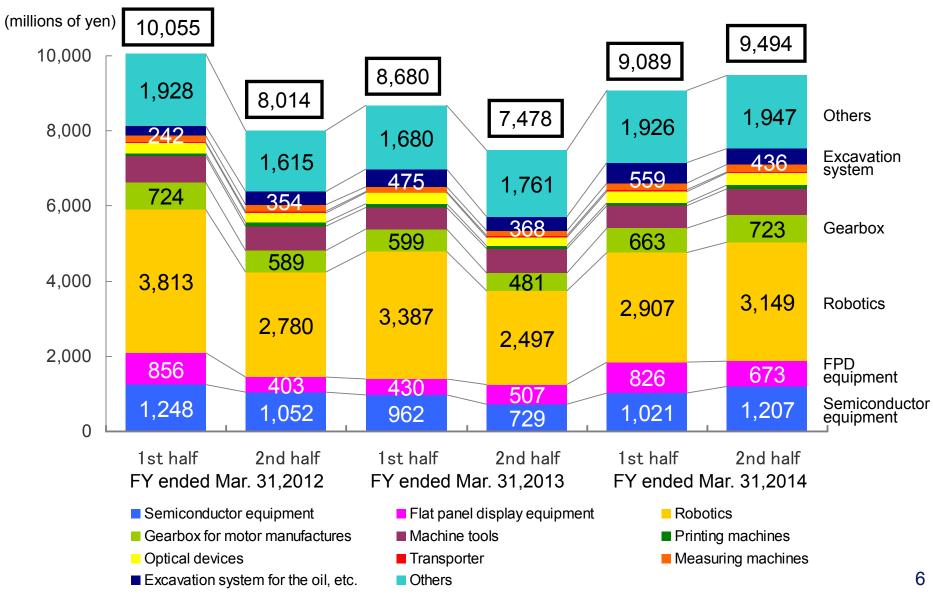
<sup>\*3</sup> Net income of US subsidiaries (consolidated) is after excluding minority interests.

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

### Non-consolidated results for fiscal year ended March 31, 2014 (year-on-year change)

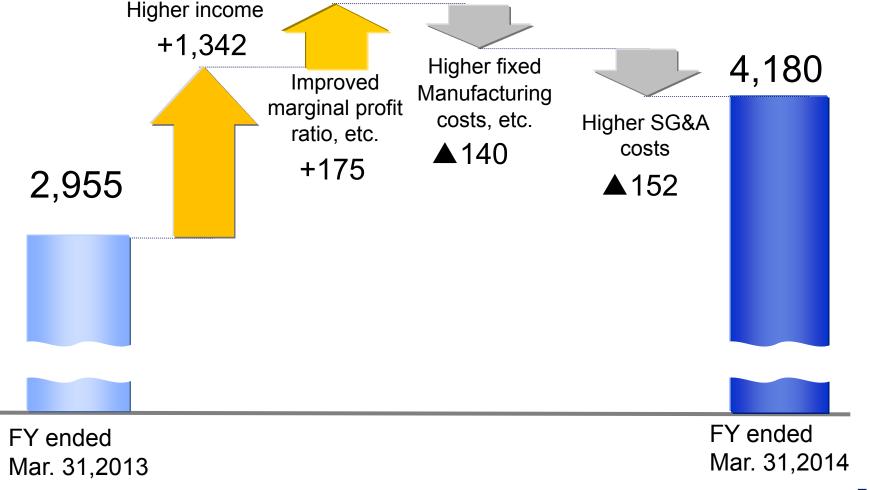
					(r	millions of yen)
	FY ended Mar. 31, 2013		FY ended Mar. 31, 2014		Year-on-year change	
	Amount	Percent (%)	Amount	Percent (%)	Change	Rate (%)
Net sales	16,159	100.0	18,584	100.0	2,425	15.0
Operating profit	2,955	18.3	4,180	22.5	1,225	41.5
Ordinary income	3,173	19.6	4,375	23.5	1,202	37.9
Net income	1,894	11.7	2,792	15.0	898	47.4
EPS (yen)	62.04	_	91.46	_	29.42	47.4
Capital investment	803	_	617	_	▲186	▲23.2
Depreciation costs	711	_	712	_	0	0.1
R&D costs	1,207	_	1,224	_	17	1.4

#### Net sales by application (non-consolidated)

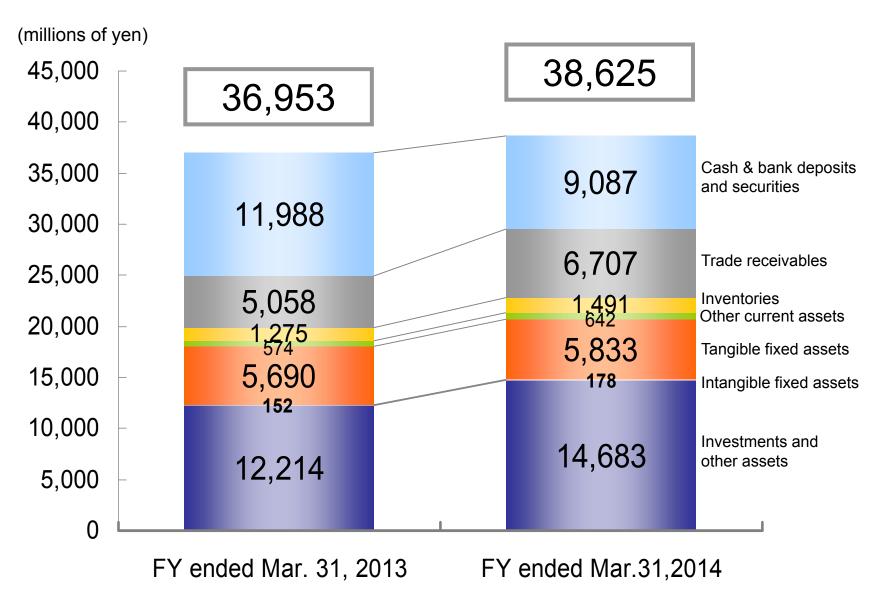


### Factors in year-on-year change in non-consolidated operating profit (fiscal 2013)

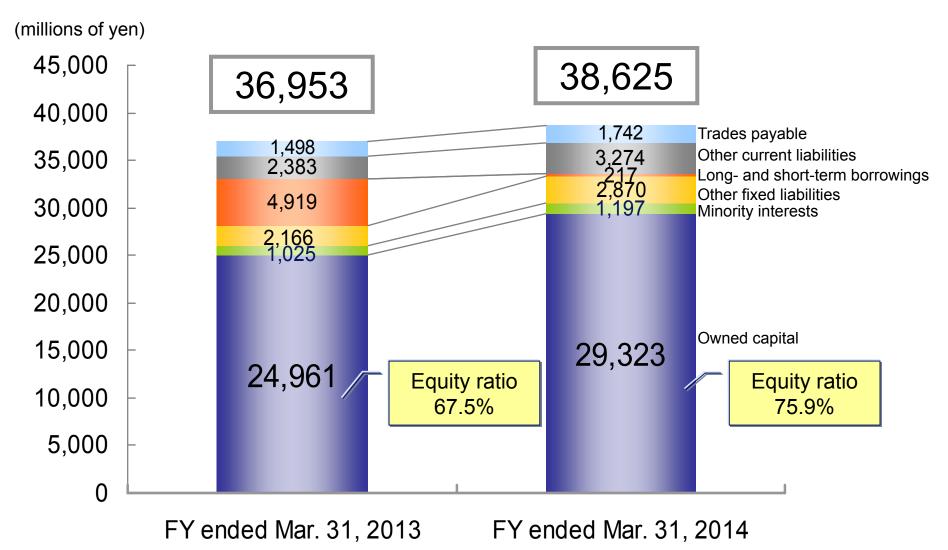
(millions of yen)



#### Status of consolidated assets



#### Status of consolidated liabilities and net assets



#### Status of consolidated cash flows

(millions of yen)	FY ended Mar. 31,2013	FY ended Mar. 31,2014
Cash flow from operating activities	4,700	3,643
Cash flow from investing activities	3,271	▲1,102
Cash flow from financing activities	▲2,545	▲5,591
Effect of exchange rate changes on cash and cash equivalents	107	221
Net increase (decrease) in cash and cash equivalents	5,533	▲2,829
Cash and cash equivalents at end of year	9,713	6,883



### Consolidated performance forecast for fiscal 2014

	(millions of					
	FY ended Mar. 31, 2014		Forecasts FY ended Mar. 31, 2015		Year-on-year change	
	Amount	Percent (%)	Amount	Percent (%)	Change	Rate (%)
Net sales	21,083	100.0	24,500	100.0	3,416	16.2
Operating profit	4,668	22.1	6,400	26.1	1,731	37.1
Ordinary income	4,822	22.9	6,600	26.9	1,777	36.9
Net income	2,993	14.2	4,200	17.1	1,206	40.3
EPS (yen)	98.05	_	137.56	_	39.51	40.3
Capital investment	1,304	_	1,670	_	365	28.0
Depreciation costs	1,170	_	1,200	_	29	2.5
R&D costs	1,235	_	1,350		114	9.3

Capital investment amounts are the amounts of tangible and intangible fixed assets acquired in the term.

#### Fiscal 2014 forecasts for main group firms



<sup>\*1</sup> Exchange rates: FY2013 1US\$ = 97.65yen, FY2014 forecasts 1US\$ = 100.00yen

<sup>\*2</sup> Exchange rates: FY2013 1€ = 129.68yen, FY2014 forecasts 1€ = 135.00yen

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

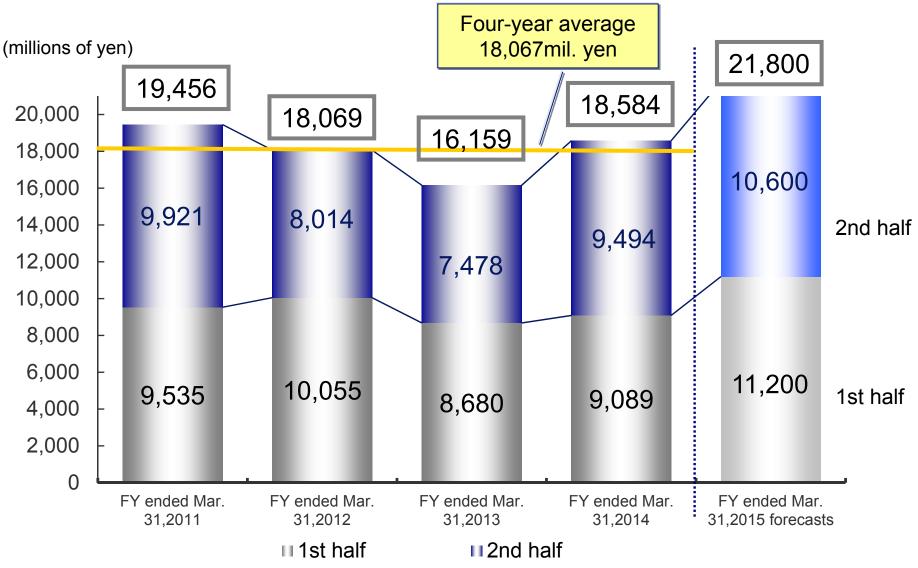
<sup>\*4</sup> For overseas subsidiaries and affiliates, the fiscal year ends December 31.

### Non-consolidated performance forecast for fiscal 2014

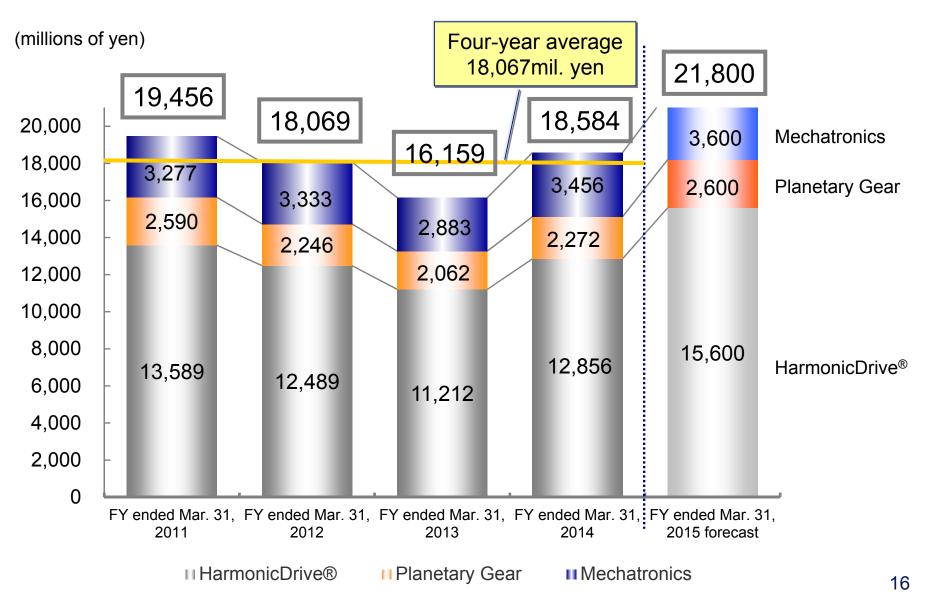
(millions of yer					
FY ended Mar. 31, 2014		Forecasts FY ended Mar. 31, 2015		Year-on-year change	
Amount	Percent (%)	Amount	Percent (%)	Change	Rate (%)
18,584	100.0	21,800	100.0	3,215	17.3
4,180	22.5	5,750	26.4	1,569	37.6
4,375	23.5	6,050	27.8	1,674	38.3
2,792	15.0	3,880	17.8	1,087	38.9
91.46	_	127.08	_	35.61	38.9
617	_	940	_	322	52.3
712	_	750	_	37	5.3
1,224	_	1,330	_	105	8.6
	Amount  18,584  4,180  4,375  2,792  91.46  617  712	Amount       Percent (%)         18,584       100.0         4,180       22.5         4,375       23.5         2,792       15.0         91.46       —         617       —         712       —	Amount         Percent (%)         Amount           18,584         100.0         21,800           4,180         22.5         5,750           4,375         23.5         6,050           2,792         15.0         3,880           91.46         —         127.08           617         —         940           712         —         750	Amount         Percent (%)         Amount         Percent (%)           18,584         100.0         21,800         100.0           4,180         22.5         5,750         26.4           4,375         23.5         6,050         27.8           2,792         15.0         3,880         17.8           91.46         —         127.08         —           617         —         940         —           712         —         750         —	FY ended Mar. 31, 2014         Forecasts FY ended Mar. 31, 2015         Year-on-year Year Year-on-year Year Year-on-year Year Year Year Year Year Year Year Y

Assumed exchange rate for FY ended Mar. 31, 2015 forecasts 1US\$ = ¥100.00 1€ = ¥135.00

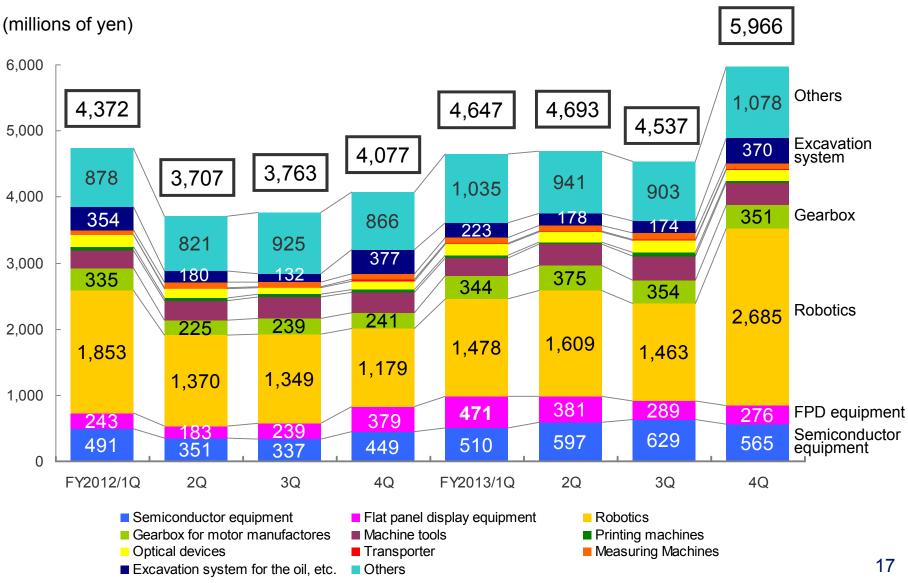
#### Sales trend line (non-consolidated)



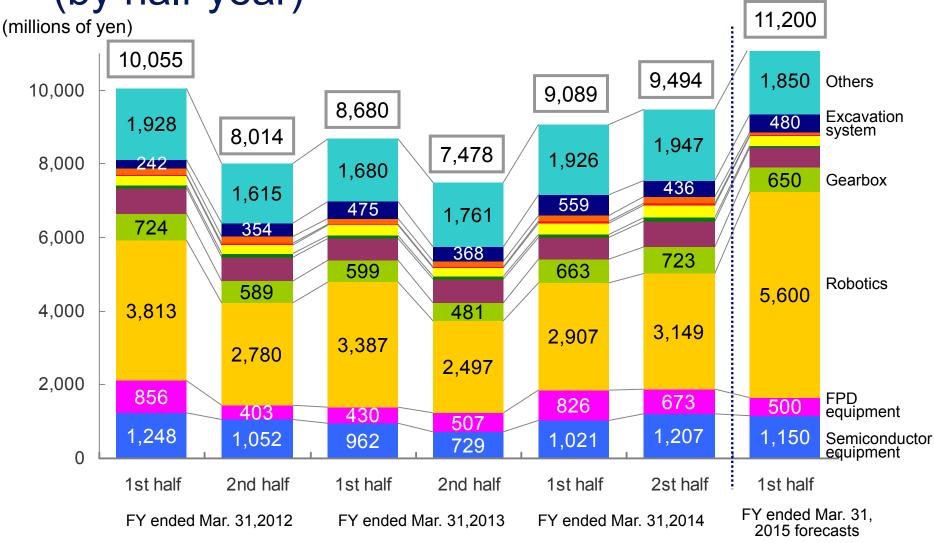
#### Sales trend line by product (non-consolidated)



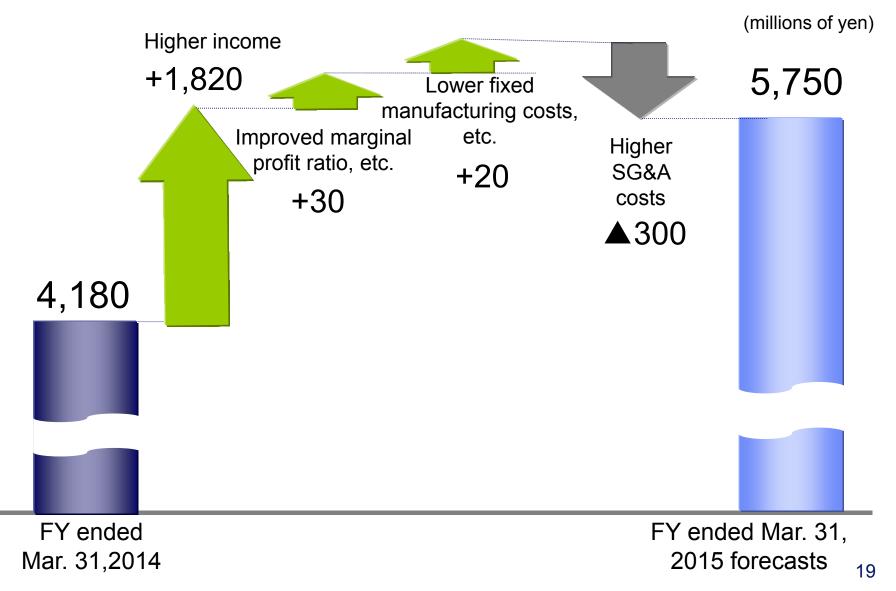
### Non-consolidated bookings by application (quarterly)



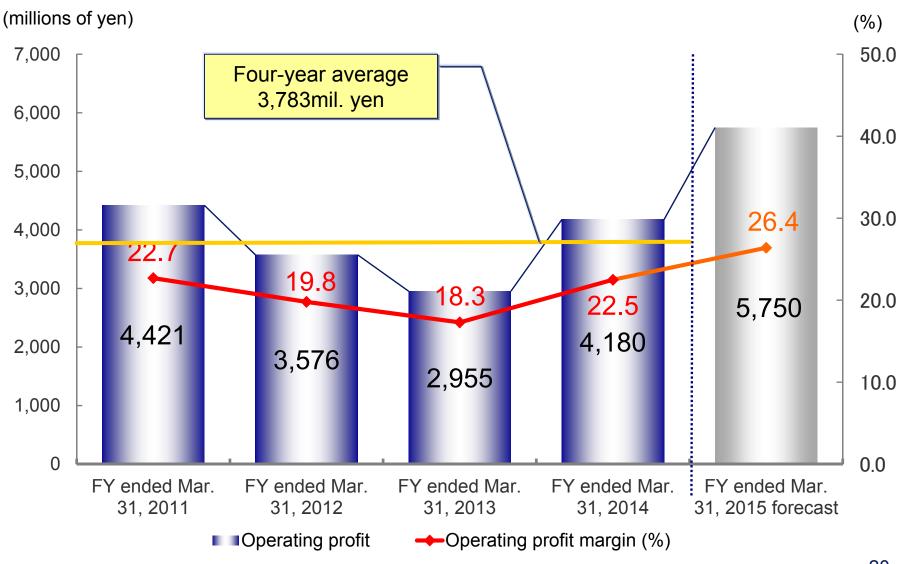
Non-consolidated bookings by application (by half-year)



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



#### Trends in operation profit (non-consolidated)





### New Robot Trends and the HDS Group Advantage

#### Advances in Robots and Their Spheres of Use

1980s—Introduced and promoted wide use in processes inside the safety fence

#### 1: In auto manufacturing plants

1962: Commercialization of industrial robots by Unimation, Inc. (US)

1968: Japanese-made hydraulic servo robots

1973: Development of multi-joint motorized robots

2010s—Growing use in processes collaborating with humans

#### 2: In plants producing IT equipment

- Explosive popularity of smartphones
- Rapid rise in labor costs and growth of middle class in Asia
- Growing investment not just for cost-lowering but for quality improvement

20xxs—Introduction and wide use in living spaces

#### 3: In non-industrial fields

1996: Development of self-standing two-legged walking robots (Honda's ASIMO)

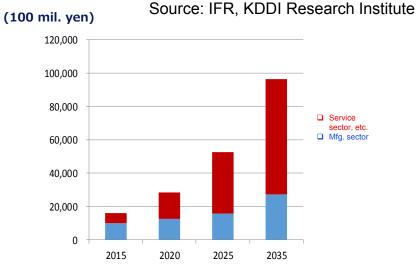
2013: Five-year Plan for Developing Nursing Care Robots (Japan Revitalization Strategy)

2013: Google and others enter robot business

#### **Robot Industry Classifications**

Reducer demands Uses Type High precision, Making things on the I. Industrial robots factory floor high reliability Healthcare, nursing care, Professional Diverse needs rehabilitation, logistics, robots resource extraction II. Service robots Consumer Consumer appliances, Low cost hobbies, and toys robots

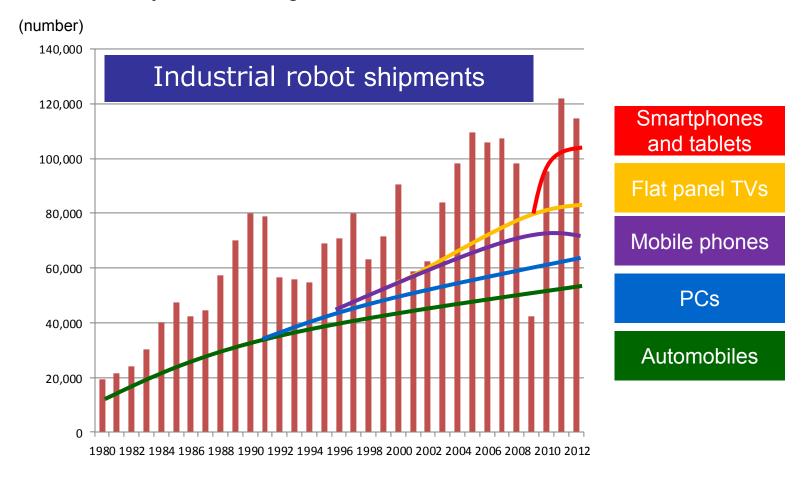
Governments, corporations, and research institutions have high hopes for the growth of the robot industry.



FY2010 Future Market Survey on the Robot Industry by METI and NEDO 24
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#### **Growth Trends in Industrial Robot Market**

The emergence and growth of devices with major impact on life style are driving demand for industrial robots

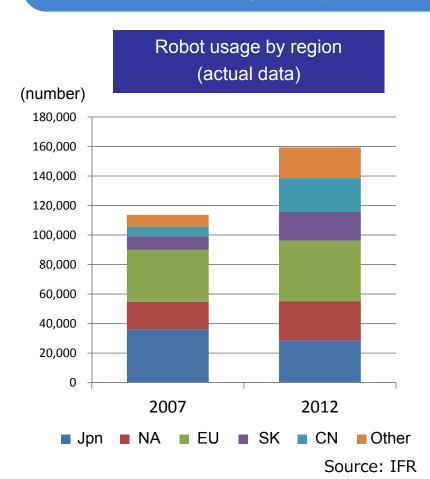


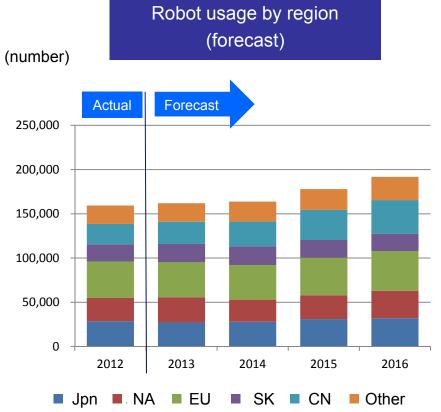
Source: Japan Robot Association

#### **Growth of Industrial Robot Market**

### Robot introduction accelerating in China, South Korea, and other regions

~Aimed at raising quality, reducing labor costs and labor management costs~





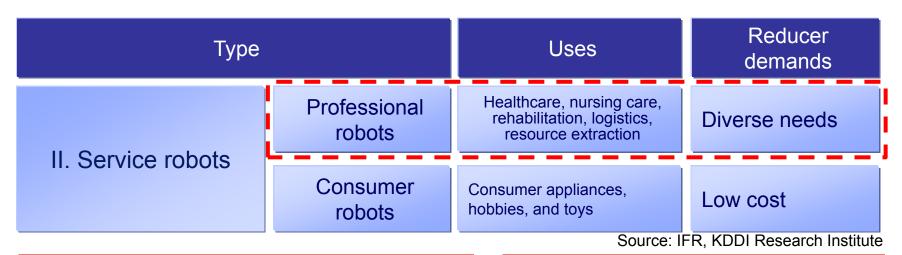
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#### **Uses of Industrial Robots**

Industry	Main processes	Robot features	Illustration			
Automobiles	Welding Painting Transfer	With increasing needs for wider range of movement and carrying heavy items, mid-sized to large robots are common				
Semiconductors	Transfer	As many transferred items are light in weight (wafers), compact robots are common				
Digital devices Smartphones Tablets	Jig replacement Assembly Inspection Transfer	As many transferred items are light in weight (smartphones, tablets), mid-sized to compact robots are common				
<ul> <li>■ Need for quality improvement and stability, rise in labor costs</li> <li>Demand growing in factories of newly emerging nations</li> <li>■ Advance of robot technology and revisions to safety standards</li> </ul>						
As they become skilled at assembly work only humans could perform, robots are expected to work side-by-side with human workers						

#### **Service Robots**



University of Tokyo
Ultra-high-speed multifingered hand system







Photo: Ishikawa Oku Laboratory, University of Tokyo

Shinshu University
Robotic suit to assist with walking

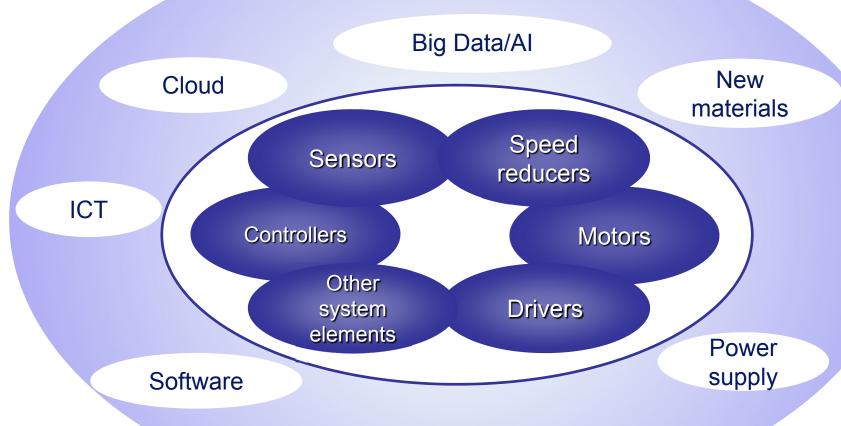


September 21, 2013 Shinano Mainichi Shimbun

#### **Total Motion Control**

Business domain of our Group

Providing the value of Total Motion Control



On to the world of smart robots?

#### The Next Mid-term Management Plan and Longterm Vision

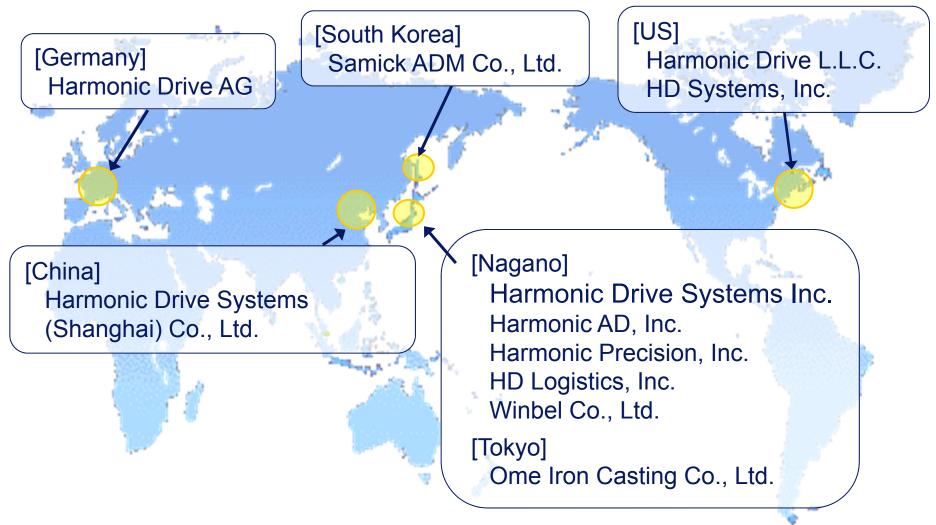
~Looking ahead to our 50th anniversary~

Strengthening our ability to meet future expansion of innovative applications

### Pursuing advances in Total Motion Control

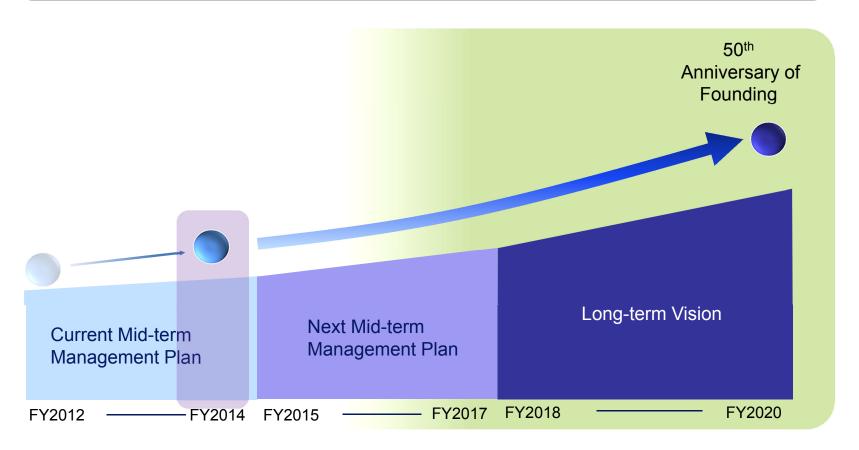
- 1. Raising overall competitiveness of precision speed reducers
- 2. Boosting marketing for next-generation robots, vehicles, and other innovative fields
- 3. Raising manufacturing ability through the upward spiral of technology and skills
- 4. Fostering an R&D climate for boldly challenging new technology
- 5. Promoting globalization

#### **Promoting Globalization**



#### **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:

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