FY13/3 Q1 Financial Results

Renesas Electronics Corporation
August 2, 2012
Yasushi Akao, President
Agenda

I. FY13/3 Q1 Financial Results
II. FY13/3 Financial Forecasts
III. Toward a Robust and Profitable Business Structure
   III-1. Business Strategy
   III-2. Production Structural Reforms and Reduction in Human Resources

IV. Summary
Executive Summary

I . FY13/3 Q1 Financial Results
- Semiconductor sales decreased to 168.2 B yen, a reduction by 9.5% QoQ, due to impact of integrating the company’s IT systems
- Operating loss decreased QoQ by streamlining R&D and SG&A despite lower profit caused by sales decline

II . FY13/3 Financial Forecasts
- Expect to achieve operating profit in FY13/3 2H and the full-year with higher profit owing to sales recovery from Q2, and effects from expense reduction measures including streamlining production structure and human resources
- Full-year net income (loss) is expected to be negative 150 B yen due to 155 B yen special loss followed by business/production structural reforms well as reduction in human resources

*) R&D: Research & Development expense,  SG&A: Selling, general and administrative expenses
I. FY13/3 Q1 Financial Results
FY13/3 Q1 Financial Snapshot

- Semiconductor sales decreased to 168.2 billion yen, a reduction by 9.5% QoQ, due to impact of IT system integration.
- Operating loss decreased QoQ by streamlining R&D and SG&A despite lower profit caused by sales decline.

<table>
<thead>
<tr>
<th>(B yen)</th>
<th>FY12/3</th>
<th>FY13/3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Q1</td>
<td>Q4</td>
</tr>
<tr>
<td>Net Sales</td>
<td>207.2</td>
<td>209.7</td>
</tr>
<tr>
<td>Semiconductor Sales</td>
<td>184.0</td>
<td>185.8</td>
</tr>
<tr>
<td>Operating Income (Loss)</td>
<td>-19.1</td>
<td>-23.6</td>
</tr>
<tr>
<td>Ordinary Income (Loss)</td>
<td>-20.3</td>
<td>-24.3</td>
</tr>
<tr>
<td>Net Income (Loss)</td>
<td>-33.2</td>
<td>-18.2</td>
</tr>
<tr>
<td>1 US$=</td>
<td>82 yen</td>
<td>78 yen</td>
</tr>
<tr>
<td>1 Euro=</td>
<td>117 yen</td>
<td>102 yen</td>
</tr>
</tbody>
</table>
Quarterly Financial Results

<table>
<thead>
<tr>
<th>Quarter</th>
<th>FY12/3</th>
<th>FY13/3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>207.2</td>
<td>186.6</td>
</tr>
<tr>
<td>Q2</td>
<td>243.3</td>
<td></td>
</tr>
<tr>
<td>Q3</td>
<td>222.9</td>
<td></td>
</tr>
<tr>
<td>Q4</td>
<td>209.7</td>
<td></td>
</tr>
</tbody>
</table>

(B yen)

Net Sales

Semi. Sales

Operating Income (Loss)
Order Trend

- Order trend based on real demand continues to recover, bottoming out in FY12/3 Q3 despite QoQ sales decrease affected by IT system integration
- Automotive orders continues steadily without big fluctuation

FY13/3 Q1 Operating Income (Loss) QoQ

- Operating loss decreased by 6 B yen QoQ due to higher profit from production increase and decreased R&D and SG&A despite lower profit from sales decrease.

FY12/3 Q4
- Lower profit from sales decrease (Including currency impact)
- Higher profit from production increase (Including improvement of cost)
- Decreased R&D and SG&A

FY13/3 Q1
- Operating loss decreased by 6 B yen QoQ due to higher profit from production increase and decreased R&D and SG&A despite lower profit from sales decrease.

(B yen)
## FY13/3 Q1 Balance Sheets

<table>
<thead>
<tr>
<th>(B yen)</th>
<th>As of Mar.31, 2012</th>
<th>As of Jun.30, 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Assets</td>
<td>858.2</td>
<td>785.7</td>
</tr>
<tr>
<td>Cash and Cash Equivalents</td>
<td>131.9</td>
<td>87.0</td>
</tr>
<tr>
<td>Inventories</td>
<td>151.8</td>
<td>163.8</td>
</tr>
<tr>
<td>Liabilities</td>
<td>631.7</td>
<td>585.4</td>
</tr>
<tr>
<td>Interest-Bearing Debt</td>
<td>258.3</td>
<td>246.5</td>
</tr>
<tr>
<td>Shareholders’ Equity</td>
<td>243.4</td>
<td>222.7</td>
</tr>
<tr>
<td>Net Assets</td>
<td>226.5</td>
<td>200.3</td>
</tr>
<tr>
<td>D/E Ratio (Gross)</td>
<td>1.19</td>
<td>1.29</td>
</tr>
<tr>
<td>D/E Ratio (Net)</td>
<td>0.58</td>
<td>0.83</td>
</tr>
<tr>
<td>Equity Ratio</td>
<td>25.4%</td>
<td>24.4%</td>
</tr>
</tbody>
</table>

### Notes:

1) "Cash and Cash Equivalents": Sum of cash and deposits, and short-term investment securities minus the Time deposits with maturities of more than three months
2) "Interest-bearing debt": Short-term borrowings, Current portion of long-term borrowings, lease obligations, Long-term borrowings
3) "Equity": Shareholders’ equity, Accumulated other Comprehensive Income
4) "D/E ratio (gross)": Interest-bearing debt / Equity


**FY13/3 Q1 Cash Flows**

- Expect cash flows to be recovered, bottoming out in FY13/3 Q1, except possible expense impact due to implementation of early retirement incentive program

<table>
<thead>
<tr>
<th></th>
<th>FY12/3</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Q1</td>
<td>Q4</td>
<td>Full-year</td>
</tr>
<tr>
<td>Cash Flows from</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating Activities</td>
<td>-29.2</td>
<td>-6.6</td>
<td>-9.7</td>
</tr>
<tr>
<td>Cash Flows from</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investing Activities</td>
<td>-14.8</td>
<td>-7.3</td>
<td>-55.1</td>
</tr>
<tr>
<td>Free Cash Flows</td>
<td>-44.0</td>
<td>-14.0</td>
<td>-64.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FY13/3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>-18.1</td>
</tr>
<tr>
<td>-10.7</td>
</tr>
<tr>
<td>-28.7</td>
</tr>
</tbody>
</table>
II. FY13/3 Financial Forecasts
## FY13/3 Consolidated Financial Forecasts

- Expect to achieve full-year operating profit of 21 B yen, an increase of 77.8 B yen YoY with semiconductor sales increase by 25 B yen YoY
- Forecast full-year net loss of 150 B yen due to special income (loss) of negative 155 B yen followed by implementation of early retirement program and business/production structural reforms

<table>
<thead>
<tr>
<th>(B yen)</th>
<th>FY2012/3</th>
<th>FY2013/3</th>
<th>YoY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1H</td>
<td>2H</td>
<td>Full-year</td>
</tr>
<tr>
<td><strong>Net Sales</strong></td>
<td>450.5</td>
<td>432.6</td>
<td>883.1</td>
</tr>
<tr>
<td><strong>Semiconductor Sales</strong></td>
<td>402.2</td>
<td>383.8</td>
<td>786.0</td>
</tr>
<tr>
<td><strong>Operating Income (Loss)</strong></td>
<td>-29.2</td>
<td>-27.6</td>
<td>-56.8</td>
</tr>
<tr>
<td><strong>Ordinary Income (Loss)</strong></td>
<td>-33.4</td>
<td>-27.8</td>
<td>-61.2</td>
</tr>
<tr>
<td><strong>Net Income (Loss)</strong></td>
<td>-42.0</td>
<td>-20.6</td>
<td>-62.6</td>
</tr>
</tbody>
</table>

|                    | 1US$=     | 1 Euro=   |       |
|                    | 81 yen    | 115 yen   |       |
| Net Sales          | 78 yen    | 104 yen   |       |
| Semiconductor Sales | 79 yen    | 109 yen   |       |
| Operating Income (Loss) | 78 yen   | 100 yen   | 1 yen strong |
| Ordinary Income (Loss) |           |           | 9 yen strong |

1 US$ = 81 yen 78 yen 79 yen
1 Euro = 115 yen 104 yen 109 yen

1 Euro = 78 yen 100 yen 109 yen

© 2012 Renesas Electronics Corporation. All rights reserved.
FY13/3 Full-year Semiconductor Sales (YoY)

- MCU sales are expected to increase by around 5% due to steady demand in automotive MCU and demand recover in non-automotive MCU
- Sales of Analog & Power and SoC are expected to be nearly flat QoQ, complementing sales decrease from transfer or withdrawal of some businesses with sales increase from large-scale custom projects

MCU: + around 5%
Analog & Power: Nearly flat
SoC: Nearly flat

FY13/3 Full-year Forecast
FY12/3 Full-year Result

<786.0> <811.0>
**FY13/3 Semiconductor Sales Quarterly Trend**

- Continue sales recovery also from Q3 in addition to an increase by 24% QoQ in Q2 owing to sales increase from large-scale projects as well as continuous order recovery

<table>
<thead>
<tr>
<th>Semiconductor Sales</th>
<th>Q1 Result</th>
<th>Q2 Forecast</th>
<th>Q3 Forecast</th>
<th>Q4 Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>SoC</td>
<td>34.4</td>
<td>&lt;208.8&gt;</td>
<td>&lt;377.0&gt;</td>
<td>&lt;434.0&gt;</td>
</tr>
<tr>
<td>Analog &amp; Power</td>
<td>54.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MCU</td>
<td>75.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Semiconductors</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Factors of increase and decrease from Q2

- **<SoC>**
  - Significant sales increase in amusement SoC from Q2
  - Steady growth in car navigation (CIS) SoC sales
  - Gradual sales decrease in home multimedia SoC

- **<A&P>**
  - Continuous demand increase of display driver ICs for small panels with expanding smartphone market
  - Demand increase in analog ICs for consumer applications
  - Steady growth in automotive power and analog sales

- **<MCU>**
  - Steady growth in automotive MCU sales
  - Demand for general-purpose MCU anticipated to return as customer and distributor deplete stocks
FY13/3 Full-year Operating Income (Loss) Forecasts

- Expect to achieve full-year operating profit of 21 billion, due to expense reduction effect centering on reduction in human resources in addition to higher profit from sales increase.

- Improvement of cost: +37.0
- Decreased R&D and SG&A: +36.5
- Expense reduction measures: +27.0
- Reduction in human resources: +46.5
- Realization of effects from holding down of CAPEX and ongoing implementation of business / production structural reforms since the merger, in addition to expense reduction from streamlining human resources based on early retirement program scheduled in FY13/3 2H.
FY13/3 Full-year Net Income (Loss)

- Expect to record special income (loss) of negative 155 B yen due to implementation of early retirement program and business/ production structural reforms

<table>
<thead>
<tr>
<th>FY13/3</th>
<th>Operating Income (Loss)</th>
<th>Net Income (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(B yen)</td>
<td>21.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>-150.0</td>
</tr>
</tbody>
</table>

Non-operating income (loss): -11 B yen

Special income (loss): -155 B yen

**<Breakdown of special loss>**
- Implementation of early retirement program
- Business/Production structural reforms

Income taxes, minority interests in income (loss) of consolidated subsidiaries: -5.0 B yen
III. Toward a Robust and Profitable Business Structure
Measures Taken to Date in Order to Establish a Robust and Profitable Business Structure

- Faithfully executed on various measures post Apr. 2010 establishment, aimed at realizing merger synergies and implementing structural reforms
- Reduced fixed costs by 20% over 2 years, while also achieving enhancements to core competencies and improvements in business efficiency

### Structural Reforms

**Reduction in Human Resources**
- Reduction in force including early retirement program (Approximately 5,000 employees)
- Transferred Power Amplifier business
- Announced withdrawal from display driver IC for large panels

### Business withdrawal

- Sold Roseville factory
- Closed Fukuoka factory
- Downsized Kofu 6-inch line and Takasaki 5-inch line
- Closed Shiga 5-inch line
- Sold Tsugaru factory

### Factory transfer or closure

- Apr. 2010
  - Announced withdrawal from display driver IC for large panels
  - Transferred Power Amplifier business
- Apr. 2011
  - Sold Roseville factory
  - Closed Fukuoka factory
  - Downsized Kofu 6-inch line and Takasaki 5-inch line
  - Closed Shiga 5-inch line
  - Sold Tsugaru factory
- Apr. 2012
  - Opened Brazil branch
  - Integrated the company's IT systems
  - Developed 700 new power devices
  - Developed 700 MCUs for China

### Business Enhancement

**Enhance core business**
- Announced core-integrated MCU “RL78”
- Acquired wireless modem business
- Introduced SoC integrated platform
- Enhanced local development of MCU for China
- Enhanced business structure leveraging synergies in procurement, design environment, etc

**Enhance local development of MCU for China**
- Enhanced local development of MCU for China
- Developed 700 MCUs for China

**Announced core-integrated MCU "RH850"**
- Announced core-integrated MCU “RH850”
- Developed 700 new power devices

**Announced collaboration with TSMC for 40nm MCU**
- Announced collaboration with TSMC for 40nm MCU
- Developed 700 new power devices

**Announced "Smart Analog" with reconfigurable analog function**
- Announced “Smart Analog” with reconfigurable analog function
- Developed 700 new power devices

**Leverage merger synergies and enhance sales/promotion**
- Enhanced local development of MCU for China
- Developed 700 MCUs for China

**Announced integrated Development Environment "CubeSuite+"**
- Announced integrated Development Environment “CubeSuite+”
- Developed 700 new power devices

**Announced integrated Development Environment "Smart Analog"**
- Announced “Smart Analog” with reconfigurable analog function
- Developed 700 new power devices

**Announced withdrawal from display driver IC for large panels**
- Announced withdrawal from display driver IC for large panels
- Developed 700 new power devices

**Closed Oume factory**
- Closed Oume factory
- Developed 700 new power devices

**Reduction in force including early retirement program (Approximately 5,000 employees)**
- Reduction in force including early retirement program (Approximately 5,000 employees)
- Developed 700 new power devices

**Closed Fukuoka factory**
- Closed Fukuoka factory
- Developed 700 new power devices

**Closed Shiga 5-inch line**
- Closed Shiga 5-inch line
- Developed 700 new power devices

**Sold Tsugaru factory**
- Sold Tsugaru factory
- Developed 700 new power devices

**Closed Oume factory**
- Closed Oume factory
- Developed 700 new power devices

**Transferred Power Amplifier business**
- Transferred Power Amplifier business
- Developed 700 new power devices

**Enhanced business structure leveraging synergies in procurement, design environment, etc**
- Enhanced business structure leveraging synergies in procurement, design environment, etc
- Developed 700 new power devices

**Enhanced core businesses by prioritizing CAPEX and R&D**
- Enhanced core businesses by prioritizing CAPEX and R&D
- Developed 700 new power devices
Promote Business Strategy and Production Structural Reforms as well as Human Resource Rationalization to Respond to Changes

- Despite faithful execution of post-merger measures, have been faced with various changes in the market and competitive environment, i.e.; impact of the Great East Japan Earthquake, deteriorating market conditions in Europe and China, sudden changes in Japanese consumer electronics market and a prolonged strong yen.

- In addition to the acceleration of existing plans, there are plans to implement further measures aimed at an aggressive recovery.

<table>
<thead>
<tr>
<th>Business Structural Reforms</th>
<th>Production Structural Reforms</th>
<th>Reduction in Human Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhancement of MCU and A&amp;P businesses as the core business and optimizing of SoC business portfolio</td>
<td>Steady implementation of production realignment and reduction in human resources announced on July 3, 2012</td>
<td></td>
</tr>
</tbody>
</table>
III. Toward a Robust and Profitable Business Structure

III-1. Business Strategy
Toward a Smart Society

The networking of segments and applications for which Renesas provides semiconductor products will bring about a “Smart Society” that allows for an ecologically friendly, secure, safe, convenient and comfortable life.
CY11-16 CAGR of Semiconductor SAM

**Bigger × Higher-Growth Markets in “Smart Society”**

*) SAM means “Served Available Market” which excludes DRAM, NAND flash, MPU, Sensor from the total semiconductor market.

*) Source: Renesas estimates based on IHS iSuppli’s reports
Automotive Solutions

Automotive
- Powertrain
- Chassis
- Body
- Infotainment

Industry
- FA/Machine Tool
- Water/Gas/Electric Meter
- Power Generation
- Building Management

Home Appliance
- White Goods
- Air Conditioner
- Game Console
- LED Lighting

Communication
- Mobile Phone (Smartphone)
- Tablet
- Wired/Wireless Infrastructure
- Server/Rooter

Health/Medical
- Medical Equipment
- MRI
- Exercise Machine
- Weight Scale/Manometer
Automotive Solutions

- A driving force behind increased sophistication of automotive functions

**Automotive**

- **Powertrain**
  - 40nm achieving higher performance and lower power consumption
  - Multi-core, functional safety, security
  - Lineup covering 8 application areas

- **Chassis**
  - High-precision and low-voltage driver
  - High-precision and high-voltage sensor interface
  - Battery management IC for HEV/EV

- **Body**

- **Infotainment**

- **Safety**

- **Network**

- **HEV/EV**

- **Drive Assist (ADAS)**

**MCU**

- Low-voltage power MOSFET
- IPD for body applications
- IGBT for HEV/EV

**Analog**

- High track record in car information system
- “R-Car” covering high-end, mid-range, and categories
- High performance graphic engine and image recognition technology

*) Market share is based on Renesas estimates. BiCD: Bipolar CMOS DMOS, IPD: Intelligent Power Device, IGBT: Insulated Gate Bipolar Transistor

© 2012 Renesas Electronics Corporation. All rights reserved.
Strong Position in Automotive Semiconductor

- Maintained No. 1 position globally in automotive semiconductors
- Aim to become No. 3 position in automotive analog & power semiconductors

### Automotive Semi. WW

<table>
<thead>
<tr>
<th>Company</th>
<th>CY09</th>
<th>CY10</th>
<th>CY11</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>13.6%</td>
<td>13.8%</td>
<td>14.7%</td>
</tr>
<tr>
<td>2</td>
<td>10.5%</td>
<td>10.9%</td>
<td>11.3%</td>
</tr>
<tr>
<td>3</td>
<td>10.4%</td>
<td>9.1%</td>
<td>9.4%</td>
</tr>
<tr>
<td>4</td>
<td>8.5%</td>
<td>9.3%</td>
<td>8.7%</td>
</tr>
<tr>
<td>5</td>
<td>8.2%</td>
<td>8.8%</td>
<td>8.2%</td>
</tr>
<tr>
<td>6</td>
<td>7.6%</td>
<td>7.9%</td>
<td>8.0%</td>
</tr>
</tbody>
</table>

### Automotive Semi. EU

<table>
<thead>
<tr>
<th>Company</th>
<th>CY09</th>
<th>CY10</th>
<th>CY11</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>13.6%</td>
<td>13.8%</td>
<td>14.7%</td>
</tr>
<tr>
<td>2</td>
<td>10.5%</td>
<td>10.9%</td>
<td>11.3%</td>
</tr>
<tr>
<td>3</td>
<td>10.4%</td>
<td>9.1%</td>
<td>9.4%</td>
</tr>
<tr>
<td>4</td>
<td>8.5%</td>
<td>9.3%</td>
<td>8.7%</td>
</tr>
<tr>
<td>5</td>
<td>8.2%</td>
<td>8.8%</td>
<td>8.2%</td>
</tr>
</tbody>
</table>

### Automotive Semi. US

<table>
<thead>
<tr>
<th>Company</th>
<th>CY09</th>
<th>CY10</th>
<th>CY11</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>16.1%</td>
<td>15.3%</td>
<td>13.8%</td>
</tr>
<tr>
<td>2</td>
<td>7.8%</td>
<td>7.7%</td>
<td>8.5%</td>
</tr>
<tr>
<td>3</td>
<td>6.6%</td>
<td>7.4%</td>
<td>8.0%</td>
</tr>
<tr>
<td>4</td>
<td>6.5%</td>
<td>7.0%</td>
<td>7.5%</td>
</tr>
<tr>
<td>5</td>
<td>7.1%</td>
<td>7.5%</td>
<td>6.7%</td>
</tr>
<tr>
<td>6</td>
<td>5.6%</td>
<td>5.7%</td>
<td>6.0%</td>
</tr>
</tbody>
</table>

### Automotive Processor (MCU/MPU) WW

<table>
<thead>
<tr>
<th>Company</th>
<th>CY09</th>
<th>CY10</th>
<th>CY11</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>41.7%</td>
<td>41.2%</td>
<td>42.7%</td>
</tr>
<tr>
<td>2</td>
<td>19.5%</td>
<td>21.5%</td>
<td>19.5%</td>
</tr>
<tr>
<td>3</td>
<td>6.6%</td>
<td>7.0%</td>
<td>8.3%</td>
</tr>
<tr>
<td>4</td>
<td>6.2%</td>
<td>7.0%</td>
<td>7.0%</td>
</tr>
<tr>
<td>5</td>
<td>6.6%</td>
<td>6.0%</td>
<td>5.9%</td>
</tr>
</tbody>
</table>

### Automotive Analog ASIC & Power WW

<table>
<thead>
<tr>
<th>Company</th>
<th>CY09</th>
<th>CY10</th>
<th>CY11</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>16.6%</td>
<td>17.9%</td>
<td>18.6%</td>
</tr>
<tr>
<td>2</td>
<td>16.5%</td>
<td>15.8%</td>
<td>16.6%</td>
</tr>
<tr>
<td>3</td>
<td>11.4%</td>
<td>12.5%</td>
<td>10.8%</td>
</tr>
<tr>
<td>4</td>
<td>8.3%</td>
<td>8.0%</td>
<td>7.9%</td>
</tr>
</tbody>
</table>

* Source: Strategy Analytics. Market shares of automotive processor and Analog & Power are calculated based on the total amount of top 12 suppliers as a parameter.

© 2012 Renesas Electronics Corporation. All rights reserved.
Build Strategic Partnerships in Automotive

- Enhance customers’ product development capability by sharing long-term technology and product roadmap

Examples in acquiring platform design-win with kit solution
- Design-wins from multiple major electric component makers inside and outside Japan for 2017-2020 models
Analog’s Approaches to Compete Higher Quality with Automotive MCU

- Implement quality improvement program commonly used in MCU and Analog at design and production stage
- Steadily reduce defect ratio target of Zero Defect

* ppm: parts per million, defectiveness in million units
Further Enhance Business

- Increase customer value by leveraging track record as a Strategic Partner to expand kit solution offering

**Now**

**Met Tier1 maker’s requirements as a Strategic Partner**

- Offered one-stop solutions with MCU and Analog & Power
- Reduced development time/cost
- Enhanced development capability by sharing long-term Roadmap
- Stable supply capability
- MCU-Analog competition to leverage remarkable quality improvements

**Future**

**Expand kit solutions with MCU and Analog & Power**

- Expanded design-wins in global major automakers and Tier1 makers

- Reference board for HEV battery control

**Increase Analog & Power market share as well**

#1 share

#5 share
Industrial Solutions

Automotive
- Powertrain
- Chassis
- Body
- Infotainment

Industry
- FA/Machine Tool
- Water/Gas/Electric Meter
- Power Generation
- Building Management

Home Appliance
- White Goods
- Air Conditioner
- Game Console
- LED Lighting

Communication
- Mobile Phone (Smartphone)
- Tablet
- Wired/Wireless Infrastructure
- Server/Router

Health/Medical
- Medical Equipment
- MRI
- Exercise Machine
- Weight Scale/Manometer
Industrial Application Solutions for Social Infrastructure

- Renesas to support social infrastructure with MCU, Analog & Power, and SoC

---

**Industrial**

- FA/Machine Tool
- Water/Gas/Electric Meter
- Power Generation
- Building Management
- Plant
- Transportation

---

- Lower power product lineup using 40nm process
- Global top share in motor MCU
- Smart Analog to support sensors
- High-performance photocoupler for industrial application
- LED lighting solution
- PFC (Power Factor Correction) IC
- Inverter IGBT
- High-voltage SJ-MOSFET
- SiC products
- Low power ASIC for industrial application
- ASSP for industrial network
- High-performance CPU platform

*) Market share is based on Renesas estimates. IGBT: Insulated Gate Bipolar Transistor, SJ-MOSFET: Super Junction Power MOSFET
MCU – Key for Motor Control for Energy Savings

- MCU is essential component for achieving energy efficiency – embedded in various electrical devices and responsible for controlling motors accountable 50% of total electricity consumption
- Focus on MCU to control inverter motor which enables further energy-saving with expected demand increase
Total Solution for Inverter Motor

- Leverage our superiority in inverter motor control and offer optimal total solutions for energy-savings by combining our world leading MCU and power devices
- Working to provide the “All Renesas Solution” that will meet demands in markets the world over

**Inverter Motor MCU**
(Control)

- WW Industrial Application:
  - Approx. 50% Share

**Power Device**
(Improve power efficiency)

- Global top level performance
  - IGBT
  - Power MOSFET
  - PFC
  - Photocoupler

Increase market share of Analog & Power with kit solution to synchronize higher MCU share

Optimize energy-saving performance to meet demands or respective regions

*) Market share is based on Renesas estimates
Solutions for Smartphone

Automotive
- Powertrain
- Chassis
- Body
- Infotainment

Industry
- FA/Machine Tool
- Water/Gas/Electric Meter
- Power Generation
- Building Management

Home Appliance
- White Goods
- Air Conditioner
- Game Console
- LED Lighting

Communication
- Mobile Phone (Smartphone)
- Tablet
- Wired/Wireless Infrastructure
- Server/Rooter

Health/Medical
- Medical Equipment
- MRI
- Exercise Machine
- Weight Scale/Manometer
Contribute to Smartphone’s Evolution with New Technologies

- Accelerate efforts to achieve greater sophistication, further miniaturization and enhanced energy efficiency, leveraging our world leading product lineup
- Deliver innovation and a new market value to smartphones through proprietary technologies

**No.1 share**
- Display driver IC for high-definition LCD
- Low-voltage MOSFET for Lithium battery protection

**Optical image Stabilizer IC**
- Embed

**MCU**
- Double-speed charge
- IC for quick-charge USB

**LTE modem platform**
- World’s smallest, Fastest throughput
- Embed

**MCU**
- For highly-sensitive antenna
- Low-strain and low-loss antenna switch IC
- 1% accuracy
- High-precision battery management IC
- Charge everywhere
- IC for wireless charging system

*)Market share is based on Renesas estimates.*
Enhance General-Purpose Products Used Across Multiple Applications

- Enhance competitiveness and lineup of general-purpose products that are applicable beyond application segments

Automotive | Industry | Home Appliance | Communication | Health/Medical

- Plan to release 1,000 MCUs centering around locally developed products for China
- Already released approx. 700 MCUs
- Offer the 1,000 MCUs in other regions including emerging markets like India

- Plan to release 1,000 power devices centering around high-voltage
- Already released approx. 700 power devices

- Released new series combining MCU and reconfigurable analog
- Support multiple sensors found in various devices with a single chip
- Plan to support 1,000 sensors within this fiscal year

Discrete | Linear IC | SRAM | EEPROM | Photocoupler | \( \cdots \)
Optimize SoC Business Portfolio
- Cease New Product Development for Home Multimedia SoC -

—Past—
Scale back development of SoCs for short life-cycle applications and divest unprofitable product lines in Home Multimedia SoC Business

-Future—
Cease new product development of home multimedia SoC in light of increased deterioration market environment

While obligations to continue sales support for existing products will be met, the discontinuation of new product development and R&D is expected to contribute to an improvement in profitability.
Increase Earning Capacity by Changing Business Portfolio

- Increase earning capacity by focusing on strong segments which build Smart Society based on track record in existing segments

<table>
<thead>
<tr>
<th>Breakdown of sales</th>
<th>(FY10/3-FY15/3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY10/3</td>
<td>37%</td>
</tr>
<tr>
<td>FY11/3</td>
<td>37%</td>
</tr>
<tr>
<td>FY12/3</td>
<td>37%</td>
</tr>
<tr>
<td>FY13/3</td>
<td>37%</td>
</tr>
<tr>
<td>FY14/3</td>
<td>37%</td>
</tr>
<tr>
<td>FY15/3</td>
<td>37%</td>
</tr>
</tbody>
</table>

- SoC
- A&P
- MCU
III. Toward a Robust and Profitable Business Structure

III-2. Production Structural Reforms and Reduction in Human Resources
Realignment of Production Sites in Japan

Complete production site realignment within 3 years

<table>
<thead>
<tr>
<th>Front-end Production</th>
<th>Continue production on an appropriate scale in accordance with production load</th>
<th>Shrink production capacity, and continue production on an appropriate scale</th>
<th>Shrink production capacity, however, transfer will be considered in accordance with our business plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naka</td>
<td>300mm</td>
<td>300mm</td>
<td>*Transfer will be considered within a year</td>
</tr>
<tr>
<td></td>
<td>200mm</td>
<td>125mm</td>
<td>*Transfer or closure will be considered within 3 years</td>
</tr>
<tr>
<td>Tsuruoka*1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kawashiri*2</td>
<td>200mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saljo</td>
<td>200mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shiga*3</td>
<td>200mm</td>
<td>150mm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GaAs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Takasaki</td>
<td>150mm</td>
<td>125mm</td>
<td>*Transfer will be considered within a year</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kofu</td>
<td>200mm</td>
<td>150mm</td>
<td>*Transfer will be considered within a year</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yamaguchi*4</td>
<td>150mm</td>
<td></td>
<td>*Transfer will be considered within a year</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kochi</td>
<td>150mm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Back-end Production</th>
<th>Continue production on an appropriate scale in accordance with production load</th>
<th>Shrink production capacity, and continue production on an appropriate scale, however, transfer could be considered in accordance with our business plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yonezawa*5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oita*6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kumamoto (Ozu)*7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hakodate*8</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aomori*9</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fukui*10</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yanai*11</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yamaguchi</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kumamoto (Nishiki)*12</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*1) Renesas Yamagata Semiconductor, Tsuruoka Factory (Tsuruoka, Yamagata)
*2) Renesas Semiconductor Kyushu/Yamaguchi, Kumamoto Kawashiri Factory (Kumamoto, Kumamoto)
*3) Renesas Kansai Semiconductor, Fukui Factory (Sakai, Fukui)
*4) Renesas Semiconductor Kyushu/Yamaguchi, Yamaguchi Factory (Ube, Yamaguchi)
*5) Renesas Northern Japan Semiconductor, Yonezawa Factory (Yonezawa, Yamagata)
*6) Renesas Semiconductor Kyushu/Yamaguchi, Oita Factory (Oita, Oita)
*7) Renesas Kyushu Semiconductor, Kumamoto Factory (Kumamoto, Kumamoto)
*8) Shrink production capacity, however, closure could be considered in accordance with our business plan
*9) Renesas High Components (Kitatsugaru, Aomori)
*10) Renesas Kansai Semiconductor, Fukui Factory (Sakai, Fukui)
*11) Renesas Yanai Semiconductor (Yanai, Fukui)
*12) Renesas Semiconductor Kyushu/Yamaguchi, Kumamoto Nishiki Factory (Kuma, Kumamoto)
Approach to Fab Network with Production Realignment

- Continuous and stable supply of existing products will be secured by establishing a complete fab network including foundries.

Renesas’ Concept of Fab Network ➔ After Production Structural Reforms
Production Structure after Completion of Structural Reforms

- Establish production structure able to respond to market fluctuations and enhance product competitiveness through wafer enlargement and increased outsourcing in Front-end production, and a further shift to offshore production and increased outsourcing in Back-end production as well.

**Front-end Production**

- 300mm
- 200mm
- 150mm
- 125mm

**Back-end Production**

- *Sub-contractor
- Offshore In-house (Renesas)
- In-house in Japan (Renesas)

*)Foundries and Sub-contractors will include factories which will be transferred from Renesas.
Effects of Structural Reforms

- Significant improvements to the profit structure are anticipated as a result of implementing early retirement programs and structural reforms to business/production.

  Implementation of Early Retirement Program

  Achieve cost reductions of approx. 43 B yen per year with in excess of five thousand applicants expected

  Business Structural Reforms

  Further cost reductions anticipated

  Production Structural Reforms
IV. Summary
Summary: Target Business Structure

Sales Breakdown by Business (FY10/3 to FY15/3)

Fixed Cost Trend (FY10/3 to FY15/3)

- Decreased fixed cost by 20% in 2 years since the merger with synergies and structural reforms
- Expect further decrease by implementation of business/production structural reforms and streamlining of human resources
- Decrease by 45% compared with FY10/3

Target operating margins of more than 10% in FY15/3 through changing business portfolio and cost structure with drastic structural reforms
The statements in this presentation with respect to the plans, strategies and forecasts of Renesas Electronics and its consolidated subsidiaries (collectively “we”) are forward-looking statements involving risks and uncertainties. We caution you in advance that actual results could differ materially from such forward-looking statements due to several factors. The important factors that could cause actual results to differ materially from such statements include, but are not limited to: general economic conditions in our markets, which are primarily Japan, North America, Asia and Europe; demand for, and competitive pricing pressure on, our products and services in the marketplace; our ability to continue to win acceptance of its products and services in these highly competitive markets; and movements in currency exchange rates, particularly the rate between the yen and the U.S. dollar. Among other factors, a worsening of the world economy; a worsening of financial conditions in the world markets, and a deterioration in the domestic and overseas stock markets, would cause actual results to differ from the projected results forecast.