# Macnica Holdings (3132) 



E The company announced its full-year financial results for the fiscal year ending March 31, 2023 on May 8, 2023. Sales reached the 1 trillion yen mark for the first time in the company's history, and both sales and profits increased significantly. The results also exceeded the company's forecast, which was revised upward three times in each quarter.

- Full-year results: sales of $1,029,263$ million yen ( $+35.1 \%$ YoY), operating profit of 61,646 million yen ( $+67.9 \%$ YoY), recurring profit of 56,832 million yen ( $+60.1 \%$ YoY), net profit of 41,030 million yen ( $+59.0 \%$ YoY). Non-operating expenses were inflated due to an increase in interest expenses and foreign exchange losses. Actual exchange rate was 135 yen/US dollar.
- Percentage of achievement vs. prior forecast: $102.9 \%$ for sales, $108.2 \%$ for operating profit, $111.4 \%$ for recurring profit and $114.0 \%$ for net income. Comparison with initial forecasts: 124.0\%, 158.1\%, 148.0\%, and $157.8 \%$, respectively.
- Semiconductor business: Sales increased (+36.9\% YoY), Profit increased (+101.2\% YoY). Network Systems: Sales increased (+20.5\% YoY), Profit decreased ( $-30.5 \%$ YoY). The impact of the yen's depreciation made a clear difference.
E. Both semiconductor and network businesses exceeded the prior forecast (sales). The weak yen had a positive impact on the semiconductor business and a negative impact on the network business (domestic, profit).
- Percentage of achievement vs. prior forecast: Semiconductor business $103.1 \%$, Network business 101.7\%
- Semiconductor business (sales: $+36.9 \%$ YoY): Industrial equipment ( $+50.1 \%$ ) and automotive ( $+66.1 \%$ ), which accounted for $57.7 \%$ of the company's sales led the way. Sales from PLD (+46.6\%), ASIC (+46.7\%), ASSP (+48.4\%), analog (+53.2\%) and other standard ICs (+39.6\%) increased significantly. Market share continued to increase due to expansion of business areas. Memory ( $-13.3 \%$ ) saw a slowdown in sales to data centers in China, but this was offset by an increase in sales to domestic carriers.
- Network Business (sales $+20.5 \%$ YoY): Software (+60.5\% YoY). Significant growth in endpoint security-related and global business.


May 12, 2023

## Integrity \& Sustainability

## GIR Earnings View (cont.)



E Semiconductor Business (Sales: +250 billion yen YoY): (Japanese) Industrial Equipment: +121.5 billion yen, Automotive: + 52 billion yen, Other markets: +50 billion yen; (Overseas local) Industrial Equipment: +25 billion yen, Automotive: +14.5 billion yen, Other markets: -13 billion yen.

- In Ship \& Debit transactions, a sharp appreciation of the dollar against the yen resulted in a foreign exchange gain on the depreciation of the yen in yen terms when cash is paid back in dollars.
- M\&A of suppliers resulted in the expansion of business area coverage. Price revision by the suppliers filtered through in price optimization.
E. Network Business (Sales: +17.0 billion yen YoY): Security: +5.3 billion yen, Big Data: +1.2 billion yen, Applications: +1.4 billion yen, Overseas: +9.3 billion yen (growth mainly in Singapore, Philippines, India, Indonesia, etc.).
- Cost of sales in the U.S. dollar-denominated purchase and yen sales business rose due to the sharp depreciation of the yen, negatively impacting gross profit margin.



## Integrity $\mathcal{E}$ Sustainability


E. Medium-term targets for the fiscal year ending March 31, 2025 (sales of 1.2 trillion yen, operating profit of 67 billion yen, and net profit of 50 billion yen). Target to return the Services and Solutions business to profitability.
E Sustainable growth by compensating for the impact of market fluctuations in the semiconductor business by focusing on the network business and services \& solutions business.
ㅍ. Security business: growth in existing markets and steady seeding of new markets
E. Evolution of the service \& solution model: expansion of suppliers and partners.
E Commencement of generative AI initiatives. Improved productivity through interlocking of core systems.

- Medium-Term Management Plan Shareholder Return Policy: ROE of $15 \%$ or more, consolidated dividend on equity ratio (DOE) of $4 \%$ or more. Stable and continuous dividend payment, total return ratio of 30-50\%.
- Dividend increase forecast for FY03/2024: Interim dividend of 75 yen, year-end dividend of 75 yen to be paid, total of 150 yen ( 10 yen increase from the previous year), payout ratio of $22.0 \%$.


| Consolidated Results |  |  |  |  |  |  | Share Price $¥ 4,390$ (May 12, 2023) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal year | Sales <br> (mn) | YoY <br> (\%) | Operating profit (mn) | YoY (\%) | Recurring profit (mn) | YoY <br> (\%) | Net profit <br> (mn) | YoY | $\begin{aligned} & \text { EPS } \\ & (Y e n) \end{aligned}$ | PER <br> (x) |
| Accounting standard |  |  |  |  | Japanese | AP |  |  |  |  |
| 03/2019 | 524,235 | 4.0\% | 15,324 | 1.1\% | 13,101 | -12.3\% | 8,883 | -22.2\% | 142.0 | 30.9 |
| 03/2020 | 521,193 | -0.6\% | 14,447 | -5.7\% | 11,072 | -15.5\% | 5,633 | -36.6\% | 90.1 | 48.7 |
| 03/2021 | 553,962 | 6.3\% | 18,769 | 29.9\% | 16,399 | 48.1\% | 10,875 | 93.1\% | 175.4 | 25.0 |
| 03/2022 | 761,823 | 37.5\% | 36,707 | 95.6\% | 35,487 | 116.4\% | 25,798 | 137.2\% | 414.9 | 10.6 |
| 03/2023 | 1,029,263 | 35.1\% | 61,646 | 67.9\% | 56,832 | 60.1\% | 41,030 | 59.0\% | 664.9 | 6.6 |
| 1H of 03/2024 CE | 528,000 | 7.2\% | 30,400 | 13.4\% | 29,200 | 23.2\% | 20,400 | 21.3\% | 336.9 | - |
| 03/2024 CE | 1,100,000 | 6.9\% | 62,000 | 0.6\% | 59,500 | 4.7\% | 41,200 | 0.4\% | 680.4 | 6.5 |

Source: Prepared by Global IR, Inc. based on company data
CE=Company Estimate. Rounded under JPY mn. Rounded to one decimal place. Calculated by Global IR, Inc.

## Integrity $\mathcal{E}$ Sustainability

| Figure 1. 1H \& Full year results and forecasts |  |  |  |  |  |  | Unit: JPY mn, \% |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1H \& Full Year CE | FY03/2023 |  |  | FY03/2024 |  |  | YoY |  |  |
|  | 1H | 2 H | Full year | 1H CE | 2H CE | Full year CE | 1H CE | 2H CE | Full year CE |
| Sales | 492,562 | 536,701 | 1,029,263 | 528,000 | 572,000 | 1,100,000 | 7.2\% | 6.6\% | 6.9\% |
| Cost of sales | 435,006 | 468,353 | 903,359 | 464,600 | 505,400 | 970,000 | 6.8\% | 7.9\% | 7.4\% |
| Gross profit | 57,556 | 68,347 | 125,903 | 63,400 | 66,600 | 130,000 | 10.2\% | -2.6\% | 3.3\% |
| Gross profit margin | 11.7\% | 12.7\% | 12.2\% | 12.0\% | 11.6\% | 11.8\% |  |  |  |
| SG\&A | 30,754 | 33,502 | 64,256 | 33,000 | 35,000 | 68,000 | 7.3\% | 4.5\% | 5.8\% |
| SG\&A ratio to sales | 6.2\% | 6.2\% | 6.2\% | 6.3\% | 6.1\% | 6.2\% |  |  |  |
| Operating profit | 26,801 | 34,845 | 61,646 | 30,400 | 31,600 | 62,000 | 13.4\% | -9.3\% | 0.6\% |
| OP margin | 5.4\% | 6.5\% | 6.0\% | 5.8\% | 5.5\% | 5.6\% |  |  |  |
| Recurring profit | 23,707 | 33,125 | 56,832 | 29,200 | 30,300 | 59,500 | 23.2\% | -8.5\% | 4.7\% |
| RP margin | 4.8\% | 6.2\% | 5.5\% | 5.5\% | 5.3\% | 5.4\% |  |  |  |
| Net profit | 16,821 | 24,209 | 41,030 | 20,400 | 20,800 | 41,200 | 21.3\% | -14.1\% | 0.4\% |
| NP margin | 3.4\% | 4.5\% | 4.0\% | 3.9\% | 3.6\% | 3.7\% |  |  |  |

Source: Prepared by Global IR, Inc. based on company data
Note: CE=Company Estimate. Rounded under JPY mn. Rounded to one dicimal place. Caluculated by Global IR, Inc.


Source: Prepared by Global IR, Inc. based on company data Note: Rounded under JPY mn. Rounded to one dicimal place. Caluculated by Global IR, Inc.

## Integrity \& Sustainability

| Figure 3: Quarterly business segment trends |  |  |  |  |  |  | Unit: JPY mn, \% |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Business Segments | FY03/2022 |  |  |  | FY03/2023 |  |  |  |
| (Cumulative quarterly period) | 1Q | 1-2Q | 1-3Q | 1-4Q | 1Q | 1-2Q | 1-3Q | 1-4Q |
| Sales | 178,064 | 362,343 | 557,145 | 761,823 | 241,320 | 492,562 | 768,004 | 1,029,263 |
| YoY | 42.3\% | 40.9\% | 40.4\% | 37.5\% | 35.5\% | 35.9\% | 37.8\% | 35.1\% |
| ICs, electronic devices and others | 159,465 | 324,768 | 498,120 | 678,602 | 219,303 | 446,305 | 697,323 | 929,020 |
| YoY | 46.9\% | 45.4\% | 44.1\% | 41.0\% | 37.5\% | 37.4\% | 40.0\% | 36.9\% |
| Network Business | 18,599 | 37,575 | 59,025 | 83,220 | 22,017 | 46,256 | 70,681 | 100,242 |
| YoY | 12.0\% | 10.9\% | 15.4\% | 14.3\% | 18.4\% | 23.1\% | 19.7\% | 20.5\% |
| Operating profit | 7,306 | 15,437 | 25,375 | 36,707 | 12,265 | 26,801 | 45,295 | 61,646 |
| YoY | 89.9\% | 103.2\% | 109.2\% | 95.6\% | 67.9\% | 73.6\% | 78.5\% | 67.9\% |
| ICs, electronic devices and others | 5,328 | 11,381 | 18,644 | 27,499 | 10,766 | 23,818 | 40,779 | 55,329 |
| YoY | 206.6\% | 258.0\% | 214.2\% | 184.7\% | 102.1\% | 109.3\% | 118.7\% | 101.2\% |
| Network Business | 1,915 | 3,930 | 6,605 | 9,082 | 1,498 | 2,982 | 4,514 | 6,316 |
| YoY | -7.0\% | -8.6\% | 9.7\% | 2.3\% | -21.8\% | -24.1\% | -31.7\% | -30.5\% |
| Corporate and elimination | 63 | 126 | 126 | 126 | 1 | 1 | 2 | 1 |
| Business Segment | FY03/2022 |  |  |  | FY03/2023 |  |  |  |
| (Quarterly) | 1Q | 2Q | 3Q | 4Q | 1Q | 2Q | 3Q | 4Q |
| Sales | 178,064 | 184,279 | 194,802 | 204,678 | 241,320 | 251,242 | 275,442 | 261,259 |
| YoY | 42.3\% | 39.6\% | 39.6\% | 30.2\% | 35.5\% | 36.3\% | 41.4\% | 27.6\% |
| ICs, electronic devices and others | 159,465 | 165,303 | 173,352 | 180,482 | 219,303 | 227,002 | 251,018 | 231,697 |
| YoY | 46.9\% | 44.1\% | 41.7\% | 33.2\% | 37.5\% | 37.3\% | 44.8\% | 28.4\% |
| Network Business | 18,599 | 18,976 | 21,450 | 24,195 | 22,017 | 24,239 | 24,425 | 29,561 |
| YoY | 12.0\% | 9.8\% | 24.3\% | 11.5\% | 18.4\% | 27.7\% | 13.9\% | 22.2\% |
| Operating profit | 7,306 | 8,131 | 9,938 | 11,332 | 12,265 | 14,536 | 18,494 | 16,351 |
| YoY | 89.9\% | 116.8\% | 119.3\% | 70.7\% | 67.9\% | 78.8\% | 86.1\% | 44.3\% |
| ICs, electronic devices and others | 5,328 | 6,053 | 7,263 | 8,855 | 10,766 | 13,052 | 16,961 | 14,550 |
| YoY | 206.6\% | 320.1\% | 163.7\% | 137.7\% | 102.1\% | 115.6\% | 133.5\% | 64.3\% |
| Network Business | 1,915 | 2,015 | 2,675 | 2,477 | 1,498 | 1,484 | 1,532 | 1,802 |
| YoY | -7.0\% | -10.1\% | 55.4\% | -13.3\% | -21.8\% | -26.4\% | -42.7\% | -27.3\% |
| Corporate and elimination | 63 | 63 | - | - | 1 | - | 1 | -1 |

Source: Prepared by Global IR, Inc. based on company data
Note: Rounded under JPY mn. Rounded to one dicimal place.

## Integrity $\mathcal{E}$ Sustainability

| Figure 4: Quarterly trends by product and application |  |  |  |  | Unit: JPY mn, \% |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| By item | FY03/2022 |  |  |  | FY03/2023 |  |  |  |
|  | 1Q | 2Q | 3Q | 4Q | 1Q | 2Q | 3Q | 4Q |
| Sales | 178,064 | 184,279 | 194,802 | 204,678 | 241,320 | 251,242 | 275,442 | 261,258 |
| ICs | 145,693 | 154,033 | 160,002 | 166,394 | 201,720 | 206,122 | 229,230 | 213,627 |
| PLD | 17,318 | 17,244 | 19,280 | 18,677 | 22,738 | 22,264 | 30,035 | 31,313 |
| ASIC | 2,808 | 4,908 | 4,142 | 3,755 | 6,130 | 5,743 | 5,361 | 5,672 |
| ASSP | 22,642 | 22,605 | 20,714 | 23,113 | 30,703 | 32,943 | 35,787 | 32,768 |
| Analog | 43,710 | 43,478 | 46,355 | 46,896 | 60,248 | 68,191 | 74,152 | 73,859 |
| Memory | 25,106 | 30,214 | 30,323 | 31,562 | 35,015 | 25,000 | 26,776 | 14,845 |
| Other standard IC | 34,106 | 35,584 | 39,186 | 42,387 | 46,883 | 51,982 | 57,117 | 55,167 |
| Electronic device | 10,382 | 8,414 | 9,430 | 10,686 | 13,559 | 16,327 | 15,708 | 12,870 |
| Other | 3,389 | 2,857 | 3,918 | 3,401 | 4,023 | 4,554 | 6,077 | 5,199 |
| Network Related Products | 18,598 | 18,977 | 21,449 | 24,195 | 22,017 | 24,239 | 24,424 | 29,561 |
| Hardware | 4,285 | 4,438 | 4,560 | 4,585 | 4,847 | 4,025 | 3,949 | 3,940 |
| Software | 8,299 | 8,944 | 10,649 | 13,052 | 12,955 | 15,745 | 16,059 | 20,944 |
| Service | 6,013 | 5,595 | 6,239 | 6,558 | 4,214 | 4,469 | 4,415 | 4,676 |
| Gross profit | 20,258 | 21,016 | 23,821 | 25,623 | 27,359 | 30,197 | 34,462 | 33,884 |
| ICs | 13,676 | 14,544 | 16,307 | 17,861 | 19,924 | 22,506 | 26,226 | 25,537 |
| Electronic device | 1,417 | 1,057 | 1,133 | 1,222 | 1,692 | 1,994 | 1,863 | 1,595 |
| Other | 451 | 493 | 661 | 673 | 695 | 624 | 917 | 1,029 |
| Network Related Products | 4,712 | 4,922 | 5,718 | 5,867 | 5,046 | 5,073 | 5,454 | 5,723 |
| Sales by application | FY03/2022 |  |  |  | FY03/2023 |  |  |  |
|  | 1Q | 2Q | 3Q | 4Q | 1Q | 2Q | 3Q | 4Q |
| ICs, electronic devices and others | 159,460 | 165,300 | 173,360 | 180,480 | 219,300 | 227,000 | 251,020 | 231,700 |
| Communication | 28,890 | 32,950 | 32,260 | 31,350 | 45,770 | 32,010 | 39,420 | 28,940 |
| Communication terminal | 5,240 | 5,390 | 6,020 | 5,240 | 6,700 | 6,800 | 6,980 | 6,490 |
| Communications infrastructure | 23,650 | 27,560 | 26,240 | 26,110 | 39,070 | 25,210 | 32,440 | 22,450 |
| OA and Peripheral Equipment | 7,180 | 7,440 | 8,090 | 8,080 | 9,460 | 10,000 | 10,830 | 9,620 |
| Computer | 18,840 | 18,090 | 20,860 | 22,860 | 19,860 | 22,490 | 20,160 | 15,160 |
| Consumer Products | 15,060 | 14,720 | 13,500 | 13,320 | 15,900 | 18,730 | 19,030 | 17,550 |
| In-vehicle | 23,580 | 23,870 | 25,280 | 27,710 | 35,040 | 41,680 | 47,500 | 42,620 |
| Industrial Equipment | 65,910 | 68,230 | 73,370 | 77,160 | 93,270 | 102,090 | 114,080 | 117,810 |
| Network Business | 18,600 | 18,980 | 21,450 | 24,190 | 22,020 | 24,240 | 24,420 | 29,560 |
| Total amount | 178,060 | 184,280 | 194,810 | 204,670 | 241,320 | 251,240 | 275,440 | 261,260 |
| Composition by item | FY03/2022 |  |  |  | FY03/2023 |  |  |  |
|  | 1Q | 2Q | 3Q | 4Q | 1Q | 2Q | 3Q | 4Q |
| Sales | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| ICs | 81.8\% | 83.6\% | 82.1\% | 81.3\% | 83.6\% | 82.0\% | 83.2\% | 81.8\% |
| PLD | 9.7\% | 9.4\% | 9.9\% | 9.1\% | 9.4\% | 8.9\% | 10.9\% | 12.0\% |
| ASIC | 1.6\% | 2.7\% | 2.1\% | 1.8\% | 2.5\% | 2.3\% | 1.9\% | 2.2\% |
| ASSP | 12.7\% | 12.3\% | 10.6\% | 11.3\% | 12.7\% | 13.1\% | 13.0\% | 12.5\% |
| Analog | 24.5\% | 23.6\% | 23.8\% | 22.9\% | 25.0\% | 27.1\% | 26.9\% | 28.3\% |
| Memory | 14.1\% | 16.4\% | 15.6\% | 15.4\% | 14.5\% | 10.0\% | 9.7\% | 5.7\% |
| Other standard IC | 19.2\% | 19.3\% | 20.1\% | 20.7\% | 19.4\% | 20.7\% | 20.7\% | 21.1\% |
| Electronic device | 5.8\% | 4.6\% | 4.8\% | 5.2\% | 5.6\% | 6.5\% | 5.7\% | 4.9\% |
| Other | 1.9\% | 1.6\% | 2.0\% | 1.7\% | 1.7\% | 1.8\% | 2.2\% | 2.0\% |
| Network Related Products | 10.4\% | 10.3\% | 11.0\% | 11.8\% | 9.1\% | 9.6\% | 8.9\% | 11.3\% |
| Hardware | 2.4\% | 2.4\% | 2.3\% | 2.2\% | 2.0\% | 1.6\% | 1.4\% | 1.5\% |
| Software | 4.7\% | 4.9\% | 5.5\% | 6.4\% | 5.4\% | 6.3\% | 5.8\% | 8.0\% |
| Service | 3.4\% | 3.0\% | 3.2\% | 3.2\% | 1.7\% | 1.8\% | 1.6\% | 1.8\% |
| Gross profit | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| ICs | 67.5\% | 69.2\% | 68.5\% | 69.7\% | 72.8\% | 74.5\% | 76.1\% | 75.4\% |
| Electronic device | 7.0\% | 5.0\% | 4.8\% | 4.8\% | 6.2\% | 6.6\% | 5.4\% | 4.7\% |
| Other | 2.2\% | 2.3\% | 2.8\% | 2.6\% | 2.5\% | 2.1\% | 2.7\% | 3.0\% |
| Network Related Products | 23.3\% | 23.4\% | 24.0\% | 22.9\% | 18.4\% | 16.8\% | 15.8\% | 16.9\% |
| Sales composition by application | FY03/2022 |  |  |  | FY03/2023 |  |  |  |
|  | 1Q | 2Q | 3Q | 4Q | 1Q | 2Q | 3Q | 4Q |
| ICs, electronic devices and others | 89.6\% | 89.7\% | 89.0\% | 88.2\% | 90.9\% | 90.4\% | 91.1\% | 88.7\% |
| Communication | 16.2\% | 17.9\% | 16.6\% | 15.3\% | 19.0\% | 12.7\% | 14.3\% | 11.1\% |
| Communication terminal | 2.9\% | 2.9\% | 3.1\% | 2.6\% | 2.8\% | 2.7\% | 2.5\% | 2.5\% |
| Communications infrastructure | 13.3\% | 15.0\% | 13.5\% | 12.8\% | 16.2\% | 10.0\% | 11.8\% | 8.6\% |
| OA and Peripheral Equipment | 4.0\% | 4.0\% | 4.2\% | 3.9\% | 3.9\% | 4.0\% | 3.9\% | 3.7\% |
| Computer | 10.6\% | 9.8\% | 10.7\% | 11.2\% | 8.2\% | 9.0\% | 7.3\% | 5.8\% |
| Consumer Products | 8.5\% | 8.0\% | 6.9\% | 6.5\% | 6.6\% | 7.5\% | 6.9\% | 6.7\% |
| In-vehicle | 13.2\% | 13.0\% | 13.0\% | 13.5\% | 14.5\% | 16.6\% | 17.2\% | 16.3\% |
| Industrial Equipment | 37.0\% | 37.0\% | 37.7\% | 37.7\% | 38.6\% | 40.6\% | 41.4\% | 45.1\% |
| Network Business | 10.4\% | 10.3\% | 11.0\% | 11.8\% | 9.1\% | 9.6\% | 8.9\% | 11.3\% |
| Total amount | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |

Source: Prepared by Global IR, Inc. based on company data Note: Rounded under JPY mn. Rounded to one dicimal place. Caluculated by Global IR, Inc.

## Integrity $\mathcal{E}$ Sustainability

| Figure 5. Business Segments |  |  |  |  |  |  |  |  | Unit: JPY mn, \% |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | FY03/2016 | FY03/2017 | FY03/2018 | FY03/2019 Consolic | Y03/2020 <br> ed | FY03/2021 | FY03/2022 | FY03/2023 | FY03/2024 <br> CE | $\begin{gathered} \text { CAGR } \\ 16 / 3-23 / 3 \end{gathered}$ |
| Sales | 405,315 | 398,503 | 504,085 | 524,235 | 521,193 | 553,962 | 761,823 | 1,029,263 | 1,100,000 | 14.2\% |
| Yoy |  | -1.7\% | 26.5\% | 4.0\% | -0.6\% | 6.3\% | 37.5\% | 35.1\% | 6.9\% |  |
| Domestic | 231,740 | 222,322 | 270,448 | 267,380 | 263,401 | 267,114 | 361,450 |  |  | 7.7\% |
| Overseas | 173,575 | 176,181 | 233,637 | 256,855 | 257,792 | 286,848 | 400,373 |  |  | 14.9\% |
| ICs, electronic devices and others | 378,069 | 365,602 | 465,120 | 470,338 | 459,971 | 481,125 | 678,601 | 929,020 | 987,200 |  |
| Yoy |  | -3.3\% | 27.2\% | 1.1\% | -2.2\% | 4.6\% | 41.0\% | 36.9\% | 6.3\% |  |
| Composition ratio | 93.3\% | 91.7\% | 92.3\% | 89.7\% | 88.3\% | 86.9\% | 89.1\% | 90.3\% | 89.7\% |  |
| ICs | 351,726 | 339,808 | 425,642 | 439,361 | 425,297 | 438,352 | 626,122 | 850,700 |  | 13.4\% |
| YoY |  | -3.4\% | 25.3\% | 3.2\% | -3.2\% | 3.1\% | 42.8\% | 35.9\% |  |  |
| Composition ratio | 86.8\% | 85.3\% | 84.4\% | 83.8\% | 81.6\% | 79.1\% | 82.2\% | 82.7\% |  |  |
| Electronic device | 22,811 | 20,073 | 29,832 | 24,887 | 25,506 | 32,456 | 38,913 | 58,465 |  | 14.4\% |
| Yoy |  | -12.0\% | 48.6\% | -16.6\% | 2.5\% | 27.2\% | 19.9\% | 50.2\% |  |  |
| Composition ratio | 5.6\% | 5.0\% | 5.9\% | 4.7\% | 4.9\% | 5.9\% | 5.1\% | 5.7\% |  |  |
| Other | 3,532 | 5,721 | 9,646 | 6,090 | 9,168 | 10,316 | 13,566 | 19,854 |  | 28.0\% |
| YoY |  | 62.0\% | 68.6\% | -36.9\% | 50.5\% | 12.5\% | 31.5\% | 46.4\% |  |  |
| Composition ratio | 0.9\% | 1.4\% | 1.9\% | 1.2\% | 1.8\% | 1.9\% | 1.8\% | 1.9\% |  |  |
| Domestic |  |  |  | - |  |  | - |  |  |  |
| Overseas (local) |  |  |  | 155,000 |  |  | 248,000 |  |  |  |
| Network business | 27,244 | 32,899 | 38,965 | 53,896 | 61,220 | 72,836 | 83,220 | 100,242 | 112,800 | 20.5\% |
| Yoy | - | 20.8\% | 18.4\% | 38.3\% | 13.6\% | 19.0\% | 14.3\% | 20.5\% | 12.5\% |  |
| Composition ratio | 6.7\% | 8.3\% | 7.7\% | 10.3\% | 11.7\% | 13.1\% | 10.9\% | 9.7\% | 10.3\% |  |
| Security |  |  |  | 26,100 |  |  | 42,200 | 47,500 |  |  |
| Digital Solutions |  |  |  | 3,100 |  |  | 5,800 | 7,000 |  |  |
| Global |  |  |  | 12,000 |  |  | 21,800 | 31,100 |  |  |
| Other (network, etc.) |  |  |  | 12,696 |  |  | 13,420 | 14,642 |  |  |
| Domestic |  |  |  | 41,896 |  |  | 61,420 | 69,142 |  |  |
| Overseas (local) |  |  |  | 12,000 |  |  | 21,800 | 31,100 |  |  |
| Gross profit | 44,287 | 46,269 | 56,094 | 61,061 | 59,891 | 64,835 | 90,718 | 125,903 | 130,000 | 16.1\% |
| YoY | - | 4.5\% | 21.2\% | 8.9\% | -1.9\% | 8.3\% | 39.9\% | 38.8\% | 3.3\% |  |
| Gross profit margin | 10.9\% | 11.6\% | 11.1\% | 11.6\% | 11.5\% | 11.7\% | 11.9\% | 12.2\% | 11.8\% |  |
| ICs, electronic devices and others | 35,869 | 34,808 | 44,338 | 46,533 | 43,125 | 45,160 | 69,497 | 104,604 |  | 16.5\% |
| Yoy | - | -3.0\% | 27.4\% | 5.0\% | -7.3\% | 4.7\% | 53.9\% | 50.5\% |  |  |
| Gross profit margin | 9.5\% | 9.5\% | 9.5\% | 9.9\% | 9.4\% | 9.4\% | 10.2\% | 11.3\% |  |  |
| Composition ratio | 81.0\% | 75.2\% | 79.0\% | 76.2\% | 72.0\% | 69.7\% | 76.6\% | 83.1\% |  |  |
| ICs | 33,518 | 32,345 | 41,240 | 43,463 | 38,171 | 39,095 | 62,389 | 94,194 |  | 15.9\% |
| Yoy | - | -3.5\% | 27.5\% | 5.4\% | -12.2\% | 2.4\% | 59.6\% | 51.0\% |  |  |
| Gross profit margin | 9.5\% | 9.5\% | 9.7\% | 9.9\% | 9.0\% | 8.9\% | 10.0\% | 11.1\% |  |  |
| Composition ratio | 75.7\% | 69.9\% | 73.5\% | 71.2\% | 63.7\% | 60.3\% | 68.8\% | 74.8\% | - |  |
| Electronic device | 1,821 | 1,681 | 2,103 | 2,148 | 3,461 | 4,163 | 4,830 | 7,145 |  | 21.6\% |
| Yoy | - | -7.7\% | 25.1\% | 2.1\% | 61.1\% | 20.3\% | 16.0\% | 47.9\% |  |  |
| Gross profit margin | 8.0\% | 8.4\% | 7.0\% | 8.6\% | 13.6\% | 12.8\% | 12.4\% | 12.2\% |  |  |
| Composition ratio | 4.1\% | 3.6\% | 3.7\% | 3.5\% | 5.8\% | 6.4\% | 5.3\% | 5.7\% | - |  |
| Other | 530 | 782 | 995 | 922 | 1,493 | 1,902 | 2,278 | 3,265 |  | 29.7\% |
| Yoy | - | 47.5\% | 27.2\% | -7.3\% | 61.9\% | 27.4\% | 19.8\% | 43.3\% |  |  |
| Gross profit margin | 15.0\% | 13.7\% | 10.3\% | 15.1\% | 16.3\% | 18.4\% | 16.8\% | 16.4\% |  |  |
| Composition ratio | 1.2\% | 1.7\% | 1.8\% | 1.5\% | 2.5\% | 2.9\% | 2.5\% | 2.6\% |  |  |
| Network business | 8,417 | 11,460 | 11,756 | 14,528 | 16,766 | 19,674 | 21,219 | 21,297 |  | 14.2\% |
| Yoy | - | 36.2\% | 2.6\% | 23.6\% | 15.4\% | 17.3\% | 7.9\% | 8.2\% |  |  |
| Gross profit margin | 30.9\% | 34.8\% | 30.2\% | 27.0\% | 27.4\% | 27.0\% | 25.5\% | 21.2\% |  |  |
| Composition ratio | 19.0\% | 24.8\% | 21.0\% | 23.8\% | 28.0\% | 30.3\% | 23.4\% | 16.9\% |  |  |
| Operating profit | 9,729 | 10,473 | 15,163 | 15,324 | 14,447 | 18,769 | 36,707 | 61,646 | 62,000 | 30.2\% |
| YoY | - | 7.6\% | 44.8\% | 1.1\% | -5.7\% | 29.9\% | 95.6\% | 67.9\% | 0.6\% |  |
| Operating profit margin | 2.4\% | 2.6\% | 3.0\% | 2.9\% | 2.8\% | 3.4\% | 4.8\% | 6.0\% | 5.6\% |  |
| ICs, electronic devices and others | 6,448 | 4,632 | 10,769 | 9,459 | 6,996 | 9,658 | 27,499 | 55,329 | 51,500 | 35.9\% |
| YoY | - | -28.2\% | 132.5\% | -12.2\% | -26.0\% | 38.1\% | 184.7\% | 101.2\% | -6.9\% |  |
| Operating profit margin | 1.7\% | 1.3\% | 2.3\% | 2.0\% | 1.5\% | 2.0\% | 4.1\% | 6.0\% | 5.2\% |  |
| Composition ratio | 66.3\% | 44.2\% | 71.0\% | 61.7\% | 48.4\% | 51.5\% | 74.9\% | 89.8\% | 83.1\% |  |
| Network business | 3,145 | 5,684 | 4,225 | 5,726 | 7,224 | 8,879 | 9,082 | 6,316 | 11,000 | 10.5\% |
| YoY | - | 80.7\% | -25.7\% | 35.5\% | 26.2\% | 22.9\% | 2.3\% | -30.5\% | 74.2\% |  |
| Operating profit margin | 11.5\% | 17.3\% | 10.8\% | 10.6\% | 11.8\% | 12.2\% | 10.9\% | 6.3\% | 9.8\% |  |
| Composition ratio | 32.3\% | 54.3\% | 27.9\% | 37.4\% | 50.0\% | 47.3\% | 24.7\% | 10.2\% | 17.7\% |  |
| Corporate and elimination | 136 | 157 | 169 | 139 | 227 | 232 | 125 | 0 | -500 |  |

Source: Prepared by Global IR, Inc. based on company data
Note1: $\mathrm{CE}=$ Company Estimate. Rounded under JPY mn. Rounded to one dicimal place. Caluculated by Global IR, Inc.
Note2: Operating profit by business segment: Services and solutions is included in semiconductors and networks; FY2024 forecast is shown separately (in red).

## Integrity $\mathcal{E}$ Sustainability



## Integrity $\mathcal{E}$ Sustainability

| Figure 7. Medium-term management plan and Long-term targets |  |  |  |  |  | Unit: JPY mn, \% |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | FY03/2022 | FY03/2023 | FY03/2024 | FY03/2 | 225 | Changes CAGR | FY03/2031 |
|  | Actual | Actual | CE | Mid-term target (New) | Mid-term target (Old) | FY03/2022 - FY03/2025 | Long-term targets |
| Sales | 761,823 | 1,029,263 | 1,100,000 | 1,200,000 | 970,000 | 438,177 16.4\% | 1,300,000 |
| Semiconductor Business | 678,601 | 929,020 | 978,000 | 1,062,000 | 835,000 | 383,399 16.1\% |  |
| Sales Composition | 89.1\% | 90.3\% | 88.9\% | 88.5\% | 86.1\% |  |  |
| Network Business | 83,220 | 100,242 | 113,000 | 122,000 | 119,000 | $38,780 \quad 13.6 \%$ |  |
| Sales Composition | 10.9\% | 9.7\% | 10.3\% | 10.2\% | 12.3\% |  |  |
| (Service and Solution Business) | 4,000 | 5,000 | 9,000 | 16,000 | 16,000 | 12,000 58.7\% |  |
| Sales Composition | 0.5\% | 0.5\% | 0.8\% | 1.3\% | 1.6\% |  |  |
| Domestic Sales | 361,450 |  |  |  | 436,500 |  |  |
| Domestic sales ratio | 47.4\% |  |  |  | 45.0\% |  |  |
| Overseas sales | 400,373 |  |  |  | 533,500 |  |  |
| Overseas sales ratio | 52.6\% |  |  |  | 55.0\% |  |  |
| Operating profit | 36,707 | 61,646 | 62,000 | 67,000 | 48,000 | 30,293 22.2\% | 100,000 |
| Operating profit margin | 4.8\% | 6.0\% | 5.6\% | 5.6\% | 4.9\% |  | 7.7\% |
| Semiconductor Business | 27,499 | 55,329 | 51,500 | 54,000 | 33,000 | 26,501 25.2\% |  |
| Operating profit margin | 4.1\% | 6.0\% | 5.3\% | 5.1\% | 4.0\% |  |  |
| Network Business | 9,082 | 6,316 | 11,000 | 12,000 | 14,000 | 2,918 9.7\% |  |
| Operating profit margin | 10.9\% | 6.3\% | 9.7\% | 9.8\% | 11.8\% |  |  |
| (Service and Solution Business) | -2,000 | -2,000 | -500 | 1,000 | 1,000 | 3,000 |  |
| Operating profit margin | - | - | - | - | 6.3\% |  |  |
| Corporate and elimination | 126 | 1 | 0 | 0 | 0 |  |  |
| Net profit atributable to owners of the parent | 25,798 | 41,030 | 41,200 | 50,000 | 30,000 | 24,202 24.7\% |  |
| Net profit margin | 3.4\% | 4.0\% | 3.7\% | 4.2\% | 3.1\% |  |  |
| ROE | 16.5\% | 22.2\% |  | 15.0\% | 15.0\% |  | 15.0\% |
| Working capital turnover | 3.2 | 4.4 |  | 3.8 | 3.8 |  |  |
| DOE | 4.0\% | 4.6\% |  | 4.0\% | 4.0\% |  |  |
| Total return ratio <br> (actual is dividend payout ratio) | 24.1\% | 21.1\% | 22.0\% | 30~50\% | 30~50\% |  |  |

Source: Prepared by Global IR, Inc. based on company data
Note: CE=Company Estimate. Rounded under JPY mn. Rounded to one dicimal place. Caluculated by Global IR, Inc.
Actual results for Services and Solutions are included in Semiconductor and Networks, respectively. Forecasts and mid-term targets are shown separately for the Services and Solutions segment.

## Integrity $\mathcal{E}$ Sustainability

Financial Data (Consolidated, Full year)




| Cash flows from operating activities |  |  |  |  |  |  |  | (Millions of yen) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal year | FY03/2017 | FY03/2018 | FY03/2019 | FY03/2020 | FY03/2021 | FY03/2022 | FY03/2023 | FY03/2024 | E |
| Depreciation and amortization | 1,274 | 1,500 | 1,660 | 1,976 | 1,986 | 2,804 | 3,468 |  | - |
| Cash flows from operating activities | 3,169 | -28,595 | -30,173 | 45,770 | 38,076 | -15,534 | 38,896 |  |  |
| Cash flows from investing activities | -1,083 | -1,804 | -7,251 | -8,919 | -2,181 | -1,653 | -869 |  | - |
| Cash flows from financing activities | -8,322 | 43,699 | 21,916 | -35,797 | -26,189 | 14,368 | -27,100 |  |  |


| Financial Data | Fiscal year | FY03/2017 | FY03/2018 | FY03/2019 | FY03/2020 | FY03/2021 | FY03/2022 | FY03/2023 | FY03/2024 CE |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Return on Assets (ROA) | $4.6 \%$ | $6.2 \%$ | $4.6 \%$ | $3.9 \%$ | $6.2 \%$ | $11.2 \%$ | $12.9 \%$ |  |  |
| Return on Equity (ROE) | $6.3 \%$ | $10.0 \%$ | $6.9 \%$ | $4.3 \%$ | $7.9 \%$ | $16.5 \%$ | $22.2 \%$ | - |  |
| Equity ratio | $47.9 \%$ | $47.0 \%$ | $44.2 \%$ | $50.2 \%$ | $52.7 \%$ | $46.9 \%$ | $38.6 \%$ | - |  |

Source: Prepared by Global IR, Inc. based on company securities reports
Note: CE=Company Estimate. Rounded under JPY mn. Rounded to one dicimal place. Caluculated by Global IR, Inc.

## Integrity \& Sustainability

## Appendix



## Integrity $\mathcal{E}$ Sustainability

| SG\&A expenses |  | FY03/2016 | FY03/2017 | FY03/2018 | FY03/2019 FY03/2020 <br> Consolidated |  | FY03/2021 | FY03/2022 | FY03/2023 | $\begin{gathered} \text { FY03/2024 } \\ \text { CE } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SG\&A |  | 34,558 | 35,796 | 40,931 | 45,737 | 45,444 | 46,066 | 54,010 | 64,256 | 68,000 |
|  | Selling expenses | 551 | 585 | 860 | 1,362 | 1,343 | 1,187 | 1,451 | 1,552 | 1,800 |
|  | Personnel expenses | 21,494 | 22,523 | 25,855 | 28,438 | 27,665 | 30,856 | 35,596 | 41,958 | 45,150 |
|  | Depreciation and amortization | 822 | 918 | 1,109 | 1,301 | 1,542 | 1,567 | 2,397 | 3,012 | 3,200 |
|  | Development cost | 34 | 157 | 279 | 407 | 403 | 281 | 333 | 326 | 350 |
|  | Other | 11,657 | 11,613 | 12,828 | 14,229 | 14,491 | 12,175 | 14,233 | 17,407 | 17,500 |

Source: Prepared by Global IR, Inc. based on company data
Note: CE=Company Estimate. Rounded under JPY mn. Rounded to one dicimal place. Caluculated by Global IR, Inc.


## Integrity \& Sustainability

|  | FY03/2016 | FY03/2017 | FY03/2018 | FY03/2019 Consolid | FY03/2020 ated | FY03/2021 | FY03/2022 | FY03/2023 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Net assets |  |  |  |  |  |  |  |  |
| Capital stock | 10,066 | 10,066 | 13,888 | 13,888 | 14,040 | 14,040 | 14,040 | 14,040 |
| Capital surplus | 42,673 | 42,641 | 47,468 | 47,398 | 47,550 | 46,762 | 45,996 | 37,066 |
| Retained earnings | 49,186 | 51,841 | 61,322 | 67,591 | 70,079 | 77,854 | 99,611 | 132,857 |
| Treasury stock | -328 | -5,643 | -349 | -274 | -2,152 | -1,586 | -1,389 | -872 |
| Total shareholders' equity | 101,597 | 98,905 | 122,329 | 128,603 | 129,517 | 137,070 | 158,258 | 183,091 |
| Accumulated other comprehensive income | 4,293 | 4,062 | 3,278 | 3,781 | 2,581 | 5,113 | 11,872 | 16,701 |
| Net unrealized gains (losses) on available-for-sale securities, net of taxes | 26 | 41 | 135 | 158 | 26 | 432 | 987 | 333 |
| Deferred gains or losses on hedges | 78 | 27 | 355 | -87 | -29 | -282 | -503 | 38 |
| Foreign currency translation adjustments | 4,233 | 4,024 | 2,819 | 3,764 | 2,684 | 4,963 | 11,388 | 16,329 |
| Accumulated retirement benefit adjustments | -44 | -30 | -31 | -54 | -100 |  |  |  |
| Subscription rights | 59 | 49 |  |  |  |  |  |  |
| Noncontrolling interest | 1,669 | 1,749 | 2,603 | 3,013 | 3,452 | 3,826 | 9,632 | 7,969 |
| Total net assets | 107,620 | 104,769 | 128,210 | 135,399 | 135,551 | 146,010 | 179,764 | 207,762 |
| Total liabilities and net assets | 201,171 | 215,158 | 267,138 | 299,259 | 263,247 | 269,590 | 362,584 | 517,620 |
| Working capital | 114,873 | 130,097 | 170,023 | 193,213 | 174,994 | 163,224 | 236,202 | 235,341 |
| Total interest-bearing debt | 23,223 | 27,546 | 58,262 | 84,685 | 53,961 | 32,047 | 59,158 | 55,318 |
| Net debt | 2,376 | 11,994 | 29,473 | 70,468 | 39,246 | 6,604 | 33,984 | 17,747 |

Source: Prepared by Global IR, Inc. based on company data
Note: CE=Company Estimate. Rounded under JPY mn. Rounded to one dicimal place. Caluculated by Global IR, Inc.
$\left.\begin{array}{l|rrrrrrrr}\hline \text { Figure 10. Profitability Analysis } & & \text { FY03/2016 } & \text { FY03/2017 } & \text { FY03/2018 } & \text { FY03/2019 } & \text { FY03/2020 } & \text { FY03/2021 } & \text { FY03/2022 } \\ \text { FY03/2023 }\end{array}\right]$

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# Macnica Holdings (3132) 



E The company announced 1 H FY03/23 results after the market close on October 31, 2022. The results were better than previously expected, and the company upwardly revised its full-year earnings and dividend forecasts.

- 1 H results: sales 492,562 million yen ( $+35.9 \%$ YoY), operating profit 26,801 million yen ( $+73.6 \%$ YoY), recurring profit 23,707 million yen $(+54.5 \%$ YoY), net profit 16,821 million yen ( $+40.3 \%$ YoY). Foreign exchange loss of 2,098 million yen was recorded under non-operating expenses.
- Percentage of achievement vs. prior forecast: $106.2 \%$ for sales, $121.8 \%$ for operating profit, $115.6 \%$ for recurring profit, and $120.2 \%$ for net profit. Percentage of progress toward full-year forecasts: $50.8 \%$ for sales, $52.6 \%$ for operating profit, $52.7 \%$ for recurring profit, and $53.4 \%$ for net profit.
- Semiconductor business: Sales increased (+37.4\% yoy), Profit increased (+109.3\% yoy). Network business: Sales increased (+23.1\% yoy), Profit decreased ( $-24.1 \%$ yoy). The impact of the weak yen had a positive and negative impact.
- Full-year forecasts: sales of 970,000 million yen ( $+27.3 \% \mathrm{y} / \mathrm{y}$; previous forecast of 930,000 million yen), operating prifit of 51,000 million yen ( $+38.9 \% \mathrm{y} / \mathrm{y} ; 44,000$ million yen), recurring profit of 45,000 million yen $(+26.8 \% \mathrm{y} / \mathrm{y} ; 41,600$ million yen), net profit of 31,500 million yen ( $+22.1 \%$ $y / y ; 28,000$ million yen). Non-operating losses: - 6,000 million yen (vs. prior forecast of $-2,400$ million yen)
- Both semiconductor and network businesses exceeded the prior forecast (sales). Yen depreciation had a positive impact on the semiconductor business and a negative impact on the network business (domestic, profit)
- Percentage of achievement vs. prior forecast: Semiconductor business 106.4\%, Network business 103.7\%
- Progress against full-year forecast: 51.0\% for semiconductor business, 48.6\% for network business



## Integrity \& Sustainability

## GIR Earnings View (cont.)

- Semiconductor business (2Q sales: $+37.3 \%$ yoy, $+3.5 \%$ qoq): Industrial equipment ( $+49.6 \%$ yoy, $+9.5 \%$ qoq) and automotive $(+74.6 \%$ yoy, $+18.9 \%$ qoq) led the growth. Sales declined sharply in telecom infrastructure ( $-8.5 \%,-35.5 \%$ ) and memory (-17.3\%, 28.6\%); PLD (+29.1\%, -2.1\%) and ASIC (+17.0\%, -6.3\%) sales declined from the 1Q
- Network Business (+27.7\%, +10.1\%): Software (+76.0\%, +21.5\%). Significant growth in endpoint security-related products


E - Semiconductor business (2H sales forecast: +21.1\% yoy, -4.0\% yoy)

- Industrial equipment and automotive markets: Driven by manufacturing $D X$, increased semiconductor capex, EVs, etc.
- China: IT investment slowdown due to regulatory restrictions has reduced demand for memory for telecommunication infrastructure and servers.
E - Network business (+7.2\% yoy, $+5.8 \%$ yoy)
- With the increasing use of cloud computing, software is expected to drive growth, especially in endpoint security and cloud services
- Hardware assumes limited growth in the trend toward cloud computing

E - Semiconductor business (1H sales: +121.5 billion yen yoy): Automotive +21.0 billion yen, Industrial equipment +39.5 billion yen, Other markets +6.0 billion yen, Forex (weak yen) +55.0 billion yen

- In Ship \& Debit transactions, a sharp depreciation of the yen against the U.S. dollar generated foreign exchange gains when the cash paid back in dollar was converted to yen equivalent term.
- Semiconductor lead time is about 1 year. Order backlog exceeds approx. 1 year due to long-term contracts.
… Network Business (1H sakes: +8.7 billion yen yoy): Security: +2.6 billion yen, BigData: +1.1 billion yen, Application: +0.7 billion yen, Global: +4.6 billion yen (growth mainly in India and Singapore; foreign exchange effects increased by approximately 2 billion yen), Others: 0.4 billion yen decrease
- Cost of sales increased due to rapid yen depreciation for product procurement carried out in dollar, resulted in negative impact to gross profit margin (cost of sales increased by approximately 1.5 billion yen).



## Integrity \& Sustainability



E: Medium-term targets for the fiscal year ending March 31, 2025 (sales of 970 billion yen, operating profit of 48 billion yen, and net profit of 30 billion yen) are expected to be achieved ahead of schedule in the fiscal year ending March 31, 2023.
E Sustainable growth by compensating for the impact of market fluctuations in the semiconductor business by focusing on the network business and services and solutions business.
E- Security Business: Growth in Existing Markets and Steady Seeding of New Markets
E BigData Business: Developing the company's own services in collaboration with partners
E. At the same time as the earnings announcement, the company announced its decision to repurchase and retire its own shares. Number of shares to be repurchased: $2,500,000$ shares (upper limit, $4 \%$ of total shares issued excluding treasury stock); total acquisition cost: 6 billion yen (upper limit); acquisition period: November 1, 2022 to March 24, 2023; scheduled retirement date: March 31, 2023.
E. Medium-Term Management Plan Shareholder Return Policy: ROE of $15 \%$ or more, consolidated dividend on equity ratio (DOE) of $4 \%$ or more. Stable and continuous dividend payment, total return ratio of 30-50\%
E. Dividend increase for the fiscal year ending March 31, 2023: interim dividend of 65 yen to be paid, year-end dividend of 65 yen to be paid, total of 130 yen (revised up from the previous forecast of 120 yen)


Consolidated Results Share Price $¥ 2,978$ (October 31, 2022)

| Fiscal year | Sales <br> (mn) | YoY (\%) | Operating profit (mn) | YoY <br> (\%) | Recurring profit (mn) | YoY <br> (\%) | Net profit (mn) | YoY (\%) | EPS <br> (Yen) | PER <br> (x) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Accounting standard |  | Japanese GAAP |  |  |  |  |  |  |  |  |
| 3/2019 | 524,235 | 4.0\% | 15,324 | 1.1\% | 13,101 | -12.3\% | 8,883 | -22.2\% | 142.0 | 21.0 |
| 3/2020 | 521,193 | -0.6\% | 14,447 | -5.7\% | 11,072 | -15.5\% | 5,633 | -36.6\% | 90.1 | 33.0 |
| 3/2021 | 553,962 | 6.3\% | 18,769 | 29.9\% | 16,399 | 48.1\% | 10,875 | 93.1\% | 175.4 | 17.0 |
| 3/2022 | 761,823 | 37.5\% | 36,707 | 95.6\% | 35,487 | 116.4\% | 25,798 | 137.2\% | 414.9 | 7.2 |
| 1H of 3/2023 | 492,562 | 35.9\% | 26,801 | 73.6\% | 23,707 | 54.5\% | 16,821 | 40.3\% | 270.1 |  |
| 2 H of 3/2023 CE | 477,438 | 19.5\% | 24,199 | 13.8\% | 21,293 | 5.7\% | 14,679 | 6.3\% | 235.7 |  |
| 3/2023 CE | 970,000 | 27.3\% | 51,000 | 38.9\% | 45,000 | 26.8\% | 31,500 | 22.1\% | 505.9 | 5.9 |

Source: Prepared by Global IR, Inc. based on company data
CE=Company Estimate. Rounded under JPY mn. Rounded to one decimal place. Calculated by Global IR, Inc.

## Integrity \& Sustainability

## FAQs related to financial results

Q1: Factors behind the decrease in the SG\&A ratio?

Q2: Network business increased revenue but decreased profit, and it is difficult to grasp whether the actual situation is good or bad due to the impact of foreign exchange rates?

Q3: What is the current sales/profit mix and optimal balance between the semiconductor and network businesses?

Q4: Are the semiconductor and network businesses independent of each other, or are there any synergies?

## First Half Results Review

The main reason for this is that while the depreciation of the yen has led to a sharp increase in U.S. dollar-denominated semiconductor sales, the growth of yen-cost SG\&A expenses (especially labor costs) is relatively low. The company is not curbing SG\&A expenses, but rather the absolute amount of SG\&A expenses is increasing due to the expansion of the workforce in response to the increase in actual demand. Due in part to an increase in overseas business trips as a result of the easing of travel restrictions for the Corona disaster, the company expects an increase in the second half of the year compared to the first half.

Foreign exchange impact on the network business was negative about 1.5 billion yen (1H, operating profit, yoy). Higher costs (dollar-denominated purchases and domestic yen sales) due to yen depreciation are reflected in prices sequentially. Excluding foreign exchange effects, operating profit was positive by approximately 600 million yen (yoy). Unlike the semiconductor business, the network business has many spot transactions, and it was difficult to obtain foreign exchange contracts. Since it is easy to forecast sales in the subscriber business associated with the shift to cloud computing, the company intends to stabilize profitability by utilizing foreign exchange forward contracts.

In the previous mid-term plan, there was a "Network" category instead of "Application," but since the growth potential of network equipment has been declining due to the spread of cloud computing, cloud computing-related products were reorganized into the "Application" category and network equipment was included in the "Others" category. Overall 1 H sales of the network business increased $23 \%$ yoy to 46.3 billion yen, with Security sales up $13 \%$ to 23.1 billion yen, BigData sales up $43 \%$ to 3.6 billion yen, Application sales up $29 \%$ to 3.2 billion yen, and Global sales up $49 \%$ to 14.1 billion yen, with growth in all focus categories.

Due to the rapid increase in sales in the semiconductor business, both sales and profits are dominated by semiconductors at a ratio of $9: 1$ in the first half, although there was a time when the profit ratio was $5: 5$ until $F Y 3 / 2021$. The negative impact of the exchange rate (yen depreciation) on the network business is considered to be temporary. Since the network business is inherently highly profitable, the company intends to increase its profit contribution. In the long-term vision (operating profit target: 100 billion yen), the three pillars are the semiconductor business, the network business, and the services and solutions business.

The network business used to be an independent subsidiary and was not closely related to the semiconductor business in terms of revenue, but has now been absorbed as a business of the main unit. In recent years, the security field has become very important, and the need to protect factories and supply chains from cyber attacks in the form of CPS security has deepened the mutual relationship. In addition, the network business and the semiconductor business are working closely together in the development of the services and solutions business.

## Integrity \& Sustainability

Q5: Sales in China are slightly stagnant. Is this due to U.S. restrictions on China?

Q6: Prolonged time span in procurement of commercial materials has been an obstacle to rate controlling factor, but are there any signs of improvement?

Q7: The weak yen has caused some Japanese companies to return to the domestic market. How do you see the balance between domestic and overseas sales?

Q8: What are the focus points and market acquisition opportunities in the new services and solutions business?

Q9: Exchange rate assumptions and impact of exchange rate fluctuations (1 yen to the dollar)?

The U.S. restrictions on China apply to cutting-edge semiconductors such as GPUs and CPUs, and the products handled by the company are not subject to the restrictions. Local Chinese companies' investment in data centers temporarily stagnated due to IT investment restrictions imposed by the Chinese authorities, and sales of memory for telecommunication infrastructure and servers declined.

The switch to long-term contracts with customers has progressed and is gradually stabilizing. Lead times, which used to average more than one year, have settled down to about one year. However, analog and power systems are still tight.

## Business Strategy

The ratio of overseas:domestic sales is $55: 45$, with $60 \%$ of overseas sales being local. In other words, one-third is overseas local and two-thirds is Japanese companies. Most of the overseas local companies are Chinese and ASEAN companies. Overseas local companies are shifting from specific data center companies to industrial equipment and in-vehicle equipment, which have a broad base (large number of companies). Even if the number of vehicles in the automotive market does not increase, demand for semiconductors is expected to continue to grow as the electrification of vehicles progresses. In the security business, where demand will continue to increase worldwide, the company has acquired Netpoleon in Singapore through M\&A and is developing a base to expand overseas sales. In the security business, the demand trend in the ASEAN region is expected to emerge two to three years later than in Japan.

In the service and solution model, the company is entering the market through VADs and by gaining intelligence, is converting services to its own. The focus points are 1) smart mobility and 2) smart factories. Coverage is expanding and the company is seeing a positive response. In smart factories, the company also provides CPS security consulting services. In the municipal sector, the company started with mobility and is now involved in policy proposals for smart cities, such as the Digital Countryside Initiative. The company will also expand horizontally to other municipalities.

## Other

The company refrains from disclosing specific figures as to the sensitivity of foreign exchange rate fluctuation. As described in the earnings revision released on October 31st. 2022 regarding its full year forecast, mid-term dividend from retained earnings, and full year dividend forecast, the full year earnings estimate has been revised up taking into account the effect of weaker yen at the half year end compared to the beginning of the term.

# Integrity \& Sustainability 

Q10: Network business: Overseas, increase of approx. 2 billion yen (sales) due to foreign exchange effects, mainly in India and Singapore.

Q11: What was the reason for the significant increase in operating cash flow of 45.5 billion yen (vs. -2.6 billion yen in the same period last year)?

Q12: Are there any revisions to the numerical targets in the mid-term business plan?

In Singapore, the company purchases in U.S. dollars, sells in Singapore dollars, converts to yen, and posts sales in consolidated accounts. Therefore, when the yen depreciates, it is a factor that increases yen sales.

The increase in accounts receivable and inventories was offset by an increase in accounts payable and income before income taxes of 24.9 billion yen. Due to differences in business practices between Japan and other countries, larger working capital has traditionally been required when the semiconductor trading business is strong, which has a negative impact on operating cash flow. Against this backdrop, cash flow from operating activities amounted to 45.5 billion yen, mainly due to the liquidity management of trade receivables and various other measures, including continued thorough inventory control.

The company is currently reviewing and considering the macro environment and market trends.

| Figure.1. 1H Results and Forecasts for 2H and Full Year |  |  |  |  |  |  |  |  |  |  |  | Unit: JPY mn, \% <br> FY03/2023 2H CE <br> (New) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| mparison of old an | FY03/2022 |  |  | FY03/2023 |  |  | $\begin{aligned} & \text { FY03/2023 CE } \\ & \text { (Previous) } \end{aligned}$ |  |  | $\begin{gathered} \text { FY03/2023 } \\ 1 \mathrm{H} \end{gathered}$ |  |  |  |
| new company forecas | 1H | 2 H | Full Year | 1H | 2H CE | Full Year | 1H CE | 2 HCE | Full Year | Achieved | Progress | YoY | Compared to 1H |
| Net sales | 362,343 | 399,480 | 761,823 | 492,562 | 477,438 | 970,000 | 464,000 | 466,000 | 930,000 | 106.2\% | 50.8\% | 19.5\% | -3.1\% |
| Semiconductor Business | 324,768 | 353,834 | 678,602 | 446,305 | 428,520 | 419,413 | 417,000 | 836,413 | 836,413 | 106.4\% | 51.0\% | 21.1\% | -4.0\% |
| Network Business | 37,575 | 45,646 | 83,220 | 46,256 | 48,919 | 44,587 | 49,000 | 93,587 | 93,587 | 103.7\% | 48.6\% | 7.2\% | 5.8\% |
| Cost of sales | 321,069 | 350,035 | 671,104 | 435,006 | 421,564 | 856,570 | 411,940 | 413,760 | 825,700 | 105.6\% | 50.8\% | 20.4\% | -3.1\% |
| Gross profit | 41,274 | 49,444 | 90,718 | 57,556 | 55,874 | 113,430 | 52,060 | 52,240 | 104,300 | 110.6\% | 50.7\% | 13.0\% | -2.9\% |
| SG\&A | 25,837 | 28,173 | 54,010 | 30,754 | 31,676 | 62,430 | 30,060 | 30,240 | 60,300 | 102.3\% | 49.3\% | 12.4\% | 3.0\% |
| Operating profit | 15,437 | 21,270 | 36,707 | 26,801 | 24,199 | 51,000 | 22,000 | 22,000 | 44,000 | 121.8\% | 52.6\% | 13.8\% | -9.7\% |
| Recurring profit | 15,343 | 20,144 | 35,487 | 23,707 | 21,293 | 45,000 | 20,500 | 21,100 | 41,600 | 115.6\% | 52.7\% | 5.7\% | -10.2\% |
| Net profit | 11,988 | 13,810 | 25,798 | 16,821 | 14,679 | 31,500 | 14,000 | 14,000 | 28,000 | 120.2\% | 53.4\% | 6.3\% | -12.7\% |


| 1H \& Full Year CE | FY03/2022 |  |  | FY03/2023 |  |  | YoY |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1H | 2 H | Full Year | 1H | 2H CE | Full year | 1H | 2 H | Full Year |
| Sales | 362,343 | 399,480 | 761,823 | 492,562 | 477,438 | 970,000 | 35.9\% | 19.5\% | 27.3\% |
| Cost of sales | 321,069 | 350,035 | 671,104 | 435,006 | 421,564 | 856,570 | 35.5\% | 20.4\% | 27.6\% |
| Gross profit | 41,274 | 49,444 | 90,718 | 57,556 | 55,874 | 113,430 | 39.4\% | 13.0\% | 25.0\% |
| Gross profit margin | 11.4\% | 12.4\% | 11.9\% | 11.7\% | 11.7\% | 11.7\% |  |  |  |
| SG\&A | 25,837 | 28,173 | 54,010 | 30,754 | 31,676 | 62,430 | 19.0\% | 12.4\% | 15.6\% |
| SG\&A ratio to sales | 7.1\% | 7.1\% | 7.1\% | 6.2\% | 6.6\% | 6.4\% |  |  |  |
| Operating profit | 15,437 | 21,270 | 36,707 | 26,801 | 24,199 | 51,000 | 73.6\% | 13.8\% | 38.9\% |
| OP margin | 4.3\% | 5.3\% | 4.8\% | 5.4\% | 5.1\% | 5.3\% |  |  |  |
| Recurring profit | 15,343 | 20,144 | 35,487 | 23,707 | 21,293 | 45,000 | 54.5\% | 5.7\% | 26.8\% |
| RP margin | 4.2\% | 5.0\% | 4.7\% | 4.8\% | 4.5\% | 4.6\% |  |  |  |
| Net profit | 11,988 | 13,810 | 25,798 | 16,821 | 14,679 | 31,500 | 40.3\% | 6.3\% | 22.1\% |
| NP margin | 3.3\% | 3.5\% | 3.4\% | 3.4\% | 3.1\% | 3.2\% |  |  |  |

Source: Prepared by Global IR, Inc. based on company data
Note: CE=Company Estimate. Rounded under JPY mn. Rounded to one dicimal place. Caluculated by Global IR, Inc.

## Integrity E Sustainability

| Figure. 2. Quarterly Results |  |  |  |  |  |  |  |  | Unit: JPY mn, \% |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Quarterly Financial Results (Cumulative) | FY03/2021 |  |  |  | FY03/2022 |  |  |  | FY03/2023 |  |
|  | 1Q | 1-2Q | 1-3Q | 1-4Q | 1Q | 1-2Q | 1-3Q | 1-4Q | 1Q | 1-2Q |
| Sales | 125,147 | 257,163 | 396,737 | 553,962 | 178,064 | 362,343 | 557,145 | 761,823 | 241,320 | 492,562 |
| YoY | 2.6\% | 1.1\% | 3.0\% | 6.3\% | 42.3\% | 40.9\% | 40.4\% | 37.5\% | 35.5\% | 35.9\% |
| Gross profit | 14,680 | 14,680 | 29,473 | 46,012 | 64,835 | 20,258 | 41,274 | 65,095 | 90,718 | 27,359 |
| Yoy | 2.0\% | 0.0\% | 4.5\% | 8.3\% | 38.0\% | 40.0\% | 41.5\% | 39.9\% | 35.1\% | 39.4\% |
| Gross profit margin | 11.7\% | 11.5\% | 11.6\% | 11.7\% | 11.4\% | 11.4\% | 11.7\% | 11.9\% | 11.3\% | 11.7\% |
| SG\&A | 10,831 | 21,875 | 33,882 | 46,066 | 12,951 | 25,837 | 39,719 | 54,010 | 15,093 | 30,754 |
| YoY | -5.4\% | -3.9\% | -0.2\% | 1.4\% | 19.6\% | 18.1\% | 17.2\% | 17.2\% | 16.5\% | 19.0\% |
| SG\&A ratio to sales | 8.7\% | 8.5\% | 8.5\% | 8.3\% | 7.3\% | 7.1\% | 7.1\% | 7.1\% | 6.3\% | 6.2\% |
| Operating profit | 3,847 | 7,597 | 12,129 | 18,769 | 7,306 | 15,437 | 25,375 | 36,707 | 12,265 | 26,801 |
| YoY | 30.9\% | 13.0\% | 20.6\% | 29.9\% | 89.9\% | 103.2\% | 109.2\% | 95.6\% | 67.9\% | 73.6\% |
| Operating profit margin | 3.1\% | 3.0\% | 3.1\% | 3.4\% | 4.1\% | 4.3\% | 4.6\% | 4.8\% | 5.1\% | 5.4\% |
| Recuring profit | 3,665 | 7,518 | 11,868 | 16,399 | 7,514 | 15,343 | 24,561 | 35,487 | 11,280 | 23,707 |
| Yoy | 75.9\% | 53.3\% | 52.0\% | 48.1\% | 105.0\% | 104.1\% | 107.0\% | 116.4\% | 50.1\% | 54.5\% |
| Recuring profit margin | 2.9\% | 2.9\% | 3.0\% | 3.0\% | 4.2\% | 4.2\% | 4.4\% | 4.7\% | 4.7\% | 4.8\% |
| Net profit | 2,492 | 2,492 | 5,137 | 8,138 | 10,875 | 6,255 | 11,988 | 17,822 | 25,798 | 7,857 |
| Yoy | 104.1\% | 68.3\% | 75.2\% | 93.1\% | 151.0\% | 133.4\% | 119.0\% | 137.2\% | 25.6\% | 40.3\% |
| Net profit margin | 2.0\% | 2.0\% | 2.1\% | 2.0\% | 3.5\% | 3.3\% | 3.2\% | 3.4\% | 3.3\% | 3.4\% |
| Quarterly Financial Results | FY03/2021 |  |  |  | FY03/2022 |  |  |  | FY03/2023 |  |
|  | 1Q | 2Q | 3Q | 4Q | 1Q | 2Q | 3Q | 4Q | 1Q | 2Q |
| Sales | 125,147 | 132,016 | 139,574 | 157,225 | 178,064 | 184,279 | 194,802 | 204,678 | 241,320 | 251,242 |
| YoY | 2.6\% | -0.4\% | 6.8\% | 15.6\% | 42.3\% | 39.6\% | 39.6\% | 30.2\% | 35.5\% | 36.3\% |
| Gross profit | 14,680 | 14,680 | 14,793 | 16,539 | 18,823 | 20,258 | 21,016 | 23,821 | 25,623 | 27,359 |
| Yoy | 2.0\% | -2.0\% | 13.8\% | 18.5\% | 38.0\% | 42.1\% | 44.0\% | 36.1\% | 35.1\% | 43.7\% |
| Gross profit margin | 11.7\% | 11.2\% | 11.8\% | 12.0\% | 11.4\% | 11.4\% | 12.2\% | 12.5\% | 11.3\% | 12.0\% |
| SG\&A | 10,831 | 10,831 | 11,044 | 12,007 | 12,184 | 12,951 | 12,886 | 13,882 | 14,291 | 15,093 |
| YoY | -5.4\% | -2.3\% | 7.2\% | 6.0\% | 19.6\% | 16.7\% | 15.6\% | 17.3\% | 16.5\% | 21.5\% |
| SG\&A ratio to sales | 8.7\% | 8.4\% | 8.6\% | 7.7\% | 7.3\% | 7.0\% | 7.1\% | 7.0\% | 6.3\% | 6.2\% |
| Operating profit | 3,847 | 3,847 | 3,750 | 4,532 | 6,640 | 7,306 | 8,131 | 9,938 | 11,332 | 12,265 |
| Yoy | 30.9\% | -0.9\% | 36.0\% | 51.2\% | 89.9\% | 116.8\% | 119.3\% | 70.7\% | 67.9\% | 78.8\% |
| Operating profit margin | 3.1\% | 2.8\% | 3.2\% | 4.2\% | 4.1\% | 4.4\% | 5.1\% | 5.5\% | 5.1\% | 5.8\% |
| Recuring profit | 3,665 | 3,665 | 3,853 | 4,350 | 4,531 | 7,514 | 7,829 | 9,218 | 10,926 | 11,280 |
| ${ }_{\text {Net profit }} \begin{aligned} & \text { YoY } \\ & \text { Recuring profit margin }\end{aligned}$ | 75.9\% | 36.6\% | 49.9\% | 38.7\% | 105.0\% | 103.2\% | 111.9\% | 141.1\% | 50.1\% | 58.7\% |
|  | 2.9\% | 2.9\% | 3.1\% | 2.9\% | 4.2\% | 4.2\% | 4.7\% | 5.3\% | 4.7\% | 4.9\% |
|  | 2,492 | 2,492 | 2,645 | 3,001 | 2,737 | 6,255 | 5,733 | 5,834 | 7,976 | 7,857 |
| Yoy | 104.1\% | 44.5\% | 88.5\% | 176.7\% | 151.0\% | 116.7\% | 94.4\% | 191.4\% | 25.6\% | 56.4\% |
| Net profit margin | 2.0\% | 2.0\% | 2.2\% | 1.7\% | 3.5\% | 3.1\% | 3.0\% | 3.9\% | 3.3\% | 3.6\% |

Source: Prepared by Global IR, Inc. based on company data
Note: Rounded under JPY mn. Rounded to one dicimal place. Caluculated by Global IR, Inc.

## Integrity $\mathcal{E}$ Sustainability

| Figure 3: Quarterly Business Segment Trends |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

Source: Prepared by Global IR, Inc. based on company data
Note: Rounded under JPY mn. Rounded to one dicimal place.

## Integrity \& Sustainability



Source: Prepared by Global IR, Inc. based on company data
Note: Rounded under JPY mn. Rounded to one dicimal place. Caluculated by Global IR, Inc.

## Integrity \& Sustainability



Source: Prepared by Global IR, Inc. based on company data
Note: CE=Company Estimate. Rounded under JPY mn. Rounded to one dicimal place. Caluculated by Global IR, Inc.

## Integrity $\mathcal{E}$ Sustainability

| Figure 6. Medium-term Management Plan and Long-term Targets |  |  |  |  | Unit: JPY mn, \% |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | FY3/2021 <br> Actual | FY3/2022 <br> Actual | FY3/2023 <br> CE | FY3/2023 <br> Mid-term target | Changes CAGR FY3/2022 - FY3/2025 | FY3/2031 <br> Long-term goal |
| Sales | 553,962 | 761,823 | 970,000 | 970,000 | 208,177 8.4\% | 1,300,000 |
| Semiconductor Business | 481,125 | 678,601 | 874,825 | 835,000 | 156,399 7.2\% | 910,000 |
| Sales Composition | 86.9\% | 89.1\% | 90.2\% | 86.1\% |  | 70.0\% |
| Network Business | 72,836 | 83,220 | 95,175 | 119,000 | 35,780 12.7\% | 260,000 |
| Sales Composition | 13.1\% | 10.9\% | 9.8\% | 12.3\% |  | 20.0\% |
| (Service and Solution Business) | 1,000 | 4,000 |  | 16,000 | 12,000 58.7\% | 130,000 |
| Sales composition | 0.2\% | 0.5\% |  | 1.6\% |  | 10.0\% |
| Domestic Sales | 267,114 | 361,450 |  | 436,500 |  |  |
| Domestic sales ratio | 48.2\% | 47.4\% |  | 45.0\% |  |  |
| Overseas sales | 286,848 | 400,373 |  | 533,500 |  |  |
| Overseas sales ratio | 51.8\% | 52.6\% |  | 55.0\% |  |  |
| Operating profit | 18,769 | 36,707 | 51,000 | 48,000 | 11,293 9.4\% | 100,000 |
| Operating profit margin | 3.4\% | 4.8\% | 5.3\% | 4.9\% |  | 7.7\% |
| Semiconductor Business | 9,658 | 27,499 |  | 33,000 | 5,501 6.3\% | 39,000 |
| Operating profit margin | 2.0\% | 4.1\% |  | 4.0\% |  | 4.3\% |
| Network Business | 8,879 | 9,082 |  | 14,000 | 4,918 $\quad 15.5 \%$ | 31,000 |
| Operating profit margin | 12.2\% | 10.9\% |  | 11.8\% |  | 11.9\% |
| (Service and Solution Business) | -1,100 | -2,000 |  | 1,000 | 3,000 | 30,000 |
| Operating profit margin | - | - |  | 6.3\% |  | 23.1\% |
| Corporate and elimination | 232 | 126 |  | 0.0 |  | 0.0 |
| Net profit attributable to owners of the parent | 10,875 | 25,798 | 31,500 | 30,000 | 4,202 5.2\% |  |
| Net profit margin | 2.0\% | 3.4\% | 3.2\% | 3.1\% |  |  |
| ROE | 7.9\% | 15.2\% |  | 15.0\% |  | 15.0\% |
| Working capital turnover | 3.4 | 3.2 |  | 3.8 |  |  |
| DOE <br> (actual is dividend payout ratio) | $\begin{array}{r} 2.3 \% \\ 28.5 \% \end{array}$ | $\begin{array}{r} 4.0 \% \\ 24.1 \% \end{array}$ |  | $\begin{array}{r} 4.0 \% \\ 30-50 \% \end{array}$ |  |  |

Source: Prepared by Global IR, Inc. based on company data
Note: CE=Company Estimate. Rounded under JPY mn. Rounded to one dicimal place. Caluculated by Global IR, Inc.
Actual results and FY03/2023 forecast for Services and Solutions are included in the Semiconductor and Network businesses, but the target is a separate figure. Figures in light (FY03/2025 domestic and overseas sales forecast and long-term target breakdown) are GIR estimates based on interviews with the company.

## Integrity $\mathcal{E}$ Sustainability

Financial Data (Consolidated, Full year)

| Statements of Income |  |  |  |  |  |  | (JPY mn) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Accounting period | FY3/2017 | FY03/2018 | FY03/2019 | FY03/2020 | FY03/2021 | FY03/2022 | FY03/2023 CE |
| Accounting Standard | Japanese GAAP |  |  |  |  |  |  |
| Net sales | 398,503 | 504,085 | 524,235 | 521,193 | 553,962 | 761,823 | 970,000 |
| YoY | -1.7\% | 26.5\% | 4.0\% | -0.6\% | 6.3\% | 37.5\% | 27.3\% |
| Gross profit | 46,269 | 56,094 | 61,061 | 59,891 | 64,835 | 90,718 | 113,430 |
| Yoy | 4.5\% | 21.2\% | 8.9\% | -1.9\% | 8.3\% | 39.9\% | 25.0\% |
| Gross profit margin | 11.6\% | 11.1\% | 11.6\% | 11.5\% | 11.7\% | 11.9\% | 11.7\% |
| Operating profit | 10,473 | 15,163 | 15,324 | 14,447 | 18,769 | 36,707 | 51,000 |
| YoY | 7.6\% | 44.8\% | 1.1\% | -5.7\% | 29.9\% | 95.6\% | 38.9\% |
| Operating profit margin | 2.6\% | 3.0\% | 2.9\% | 2.8\% | 3.4\% | 4.8\% | 5.3\% |
| Recurring profit | 9,635 | 14,937 | 13,101 | 11,072 | 16,399 | 35,487 | 45,000 |
| YoY | -5.3\% | 55.0\% | -12.3\% | -15.5\% | 48.1\% | 116.4\% | 26.8\% |
| Net profit | 6,534 | 11,412 | 8,883 | 5,633 | 10,875 | 25,798 | 31,500 |
| YoY | -10.3\% | 74.7\% | -22.2\% | -36.6\% | 93.1\% | 137.2\% | 22.1\% |
| Net profit margin | 1.6\% | 2.3\% | 1.7\% | 1.1\% | 2.0\% | 3.4\% | 3.2\% |
| Per Share Data (Yen) |  |  |  |  |  |  |  |
| Accounting period | FY3/2017 | FY03/2018 | FY03/2019 | FY03/2020 | FY03/2021 | FY03/2022 | FY03/2023 CE |
| Total number of shares issued and outstanding (thousand shares) | 58,793 | 62,813 | 62,813 | 63,031 | 63,031 | 63,031 |  |
| EPS | 114.3 | 206.1 | 142.0 | 90.1 | 175.4 | 414.9 | 505.88 |
| EPS Adjusted | 114.0 | - | - | - | - | - | - |
| BPS | 1,879 | 2,010 | 2,116 | 2,142 | 2,290 | 2,735 | - |
| DPS | 35.0 | 50.0 | 50.0 | 50.0 | 50.0 | 100.0 | 130.0 |

Source: Prepared by Global IR, Inc. based on company securities reports
Note: CE=Company Estimate. Rounded under JPY mn. Rounded to one dicimal place. Caluculated by Global IR, Inc.

## Integrity \& Sustainability

| Appendix |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Figure 7. Financial Data (Consolidated, Full year, Japanese GAAP) Unit: JPY mn, \% |  |  |  |  |  |  |  |  |  |  |  |  |
| Profit and loss statement | FY02/2014 <br> Fuji Elec | FY02/2015 <br> Fuji Elec | FY03/2014 <br> Macnica | FY02/2015 Macnica | FY03/2016 | FY03/2017 | FY03/2018 | FY03/2019 <br> nsolidated | FY03/2020 | FY03/2021 | FY03/2022 | $\begin{gathered} \text { FY03/2023 } \\ \text { CE } \end{gathered}$ |
| Sales | 47,387 | 57,331 | 255,967 | 284,673 | 405,315 | 398,503 | 504,085 | 524,235 | 521,193 | 553,962 | 761,823 | 970,000 |
| Yoy |  | 21.0\% | 346.5\% | 11.2\% | 42.4\% | -1.7\% | 26.5\% | 4.0\% | -0.6\% | 6.3\% | 37.5\% | 27.3\% |
| Gross profit | 6,617 | 7,382 | 33,744 | 36,182 | 44,287 | 46,269 | 56,094 | 61,061 | 59,891 | 64,835 | 90,718 | 113,430 |
| Yoy |  | 11.6\% | 357.1\% | 7.2\% | 22.4\% | 4.5\% | 21.2\% | 8.9\% | -1.9\% | 8.3\% | 39.9\% | 25.0\% |
| Gross profit margin | 14.0\% | 12.9\% | 13.2\% | 12.7\% | 10.9\% | 11.6\% | 11.1\% | 11.6\% | 11.5\% | 11.7\% | 11.9\% | 11.7\% |
| Operating profit | 1,148 | 1,820 | 8,456 | 9,195 | 9,729 | 10,473 | 15,163 | 15,324 | 14,447 | 18,769 | 36,707 | 51,000 |
| Yoy |  | 58.6\% | 364.5\% | 8.7\% | 5.8\% | 7.6\% | 44.8\% | 1.1\% | -5.7\% | 29.9\% | 95.6\% | 38.9\% |
| Operating profit margin | 2.4\% | 3.2\% | 3.3\% | 3.2\% | 2.4\% | 2.6\% | 3.0\% | 2.9\% | 2.8\% | 3.4\% | 4.8\% | 5.3\% |
| Recurring profit | 2,028 | 2,539 | 10,603 | 7,200 | 10,176 | 9,635 | 14,937 | 13,101 | 11,072 | 16,399 | 35,487 | 45,000 |
| Yoy |  | 25.2\% | 317.6\% | -32.1\% | 41.3\% | -5.3\% | 55.0\% | -12.3\% | -15.5\% | 48.1\% | 116.4\% | 26.8\% |
| Recurring profit margin | 4.3\% | 4.4\% | 4.1\% | 2.5\% | 2.5\% | 2.4\% | 3.0\% | 2.5\% | 2.1\% | 3.0\% | 4.7\% | 4.6\% |
| Net profit | 1,463 | 1,618 | 6,382 | 4,018 | 7,285 | 6,534 | 11,412 | 8,883 | 5,633 | 10,875 | 25,798 | 31,500 |
| Yoy |  | 10.5\% | 294.5\% | -37.0\% | 81.3\% | -10.3\% | 74.7\% | -22.2\% | -36.6\% | 93.1\% | 137.2\% | 22.1\% |
| Net profit margin | 3.1\% | 2.8\% | 2.5\% | 1.4\% | 1.8\% | 1.6\% | 2.3\% | 1.7\% | 1.1\% | 2.0\% | 3.4\% | 3.2\% |
| Per Share Data (Yen, adjusted for stock split) |  |  |  |  |  |  |  |  |  |  |  |  |
| \# of shares issued and outstanding at FY-end | 16,321 | 16,321 | 18,110 | 17,732 | 58,793 | 58,793 | 62,813 | 62,813 | 63,031 | 63,031 | 63,031 |  |
| Number of treasury stock (000) | 2,311 | 2,310 | 378 | - | 306 | 3,982 | 318 | 248 | 1,348 | 930 | 815 |  |
| EPS | 104.5 | 115.5 | 360.4 | 226.6 | 124.7 | 114.3 | 206.1 | 142.0 | 90.1 | 175.4 | 414.9 | 505.9 |
| EPS (Diluted) | - | - | 359.2 | 225.4 | - | 114.0 | - | - | - | - | - |  |
| DPS | 50.0 | 50.0 | 60.0 | 60.0 | 40.0 | 35.0 | 50.0 | 50.0 | 50.0 | 50.0 | 100.0 | 130.0 |
| BPS | 1,664 | 1,737 | 4,160 | 4,549 | 1,811 | 1,879 | 2,010 | 2,116 | 2,142 | 2,290 | 2,735 |  |
| Balance Sheet |  |  |  |  |  |  |  |  |  |  |  |  |
| Cash, deposits and marketable securities | 9,363 | 8,809 | 18,637 | 13,473 | 20,847 | 15,552 | 28,789 | 14,217 | 14,715 | 25,443 | 25,174 |  |
| Total current assets | 33,348 | 37,089 | 125,696 | 142,697 | 186,895 | 200,543 | 251,399 | 276,885 | 236,384 | 243,400 | 335,032 |  |
| Property, plant and equipment | 68 | 64 | 7,558 | 6,497 | 6,530 | 6,626 | 6,807 | 7,530 | 7,501 | 7,449 | 7,951 |  |
| Total investments and other assets | 2,984 | 1,708 | 4,599 | 4,594 | 6,296 | 6,391 | 6,113 | 12,328 | 17,029 | 15,314 | 10,454 |  |
| Intangible fixed assets | 54 | 66 | 1,861 | 1,662 | 1,448 | 1,597 | 2,821 | 2,515 | 2,332 | 3,426 | 9,145 |  |
| Total assets | 36,454 | 38,926 | 139,715 | 155,451 | 201,171 | 215,158 | 267,142 | 299,259 | 263,247 | 269,590 | 362,584 |  |
| Short-term interest-bearing debt | 4,447 | 4,045 | 10,603 | 9,997 | 16,155 | 23,654 | 51,744 | 77,237 | 49,468 | 23,032 | 44,695 |  |
| Total current liabilities | 9,404 | 10,371 | 59,971 | 63,775 | 79,414 | 99,535 | 125,197 | 149,540 | 116,987 | 108,351 | 161,249 |  |
| Long-term interest-bearing debt | 2,605 | 2,980 | 377 | 4,743 | 7,068 | 3,892 | 6,518 | 7,448 | 4,493 | 9,015 | 14,463 |  |
| Total long-term liabilities | 3,697 | 4,172 | 4,488 | 9,229 | 14,136 | 10,854 | 13,731 | 14,319 | 10,707 | 15,229 | 21,570 |  |
| Total liabilities | 13,101 | 14,543 | 64,459 | 73,004 | 93,551 | 110,389 | 138,928 | 163,860 | 127,695 | 123,580 | 182,819 |  |
| Net worth | 23,317 | 24,340 | 73,774 | 80,660 | 105,891 | 102,969 | 125,609 | 132,385 | 132,099 | 142,183 | 170,131 |  |
| Total net assets | 23,353 | 24,384 | 75,255 | 82,446 | 107,620 | 104,769 | 128,210 | 135,399 | 135,551 | 146,010 | 179,762 |  |
| Total liabilities and net assets | 36,454 | 38,926 | 139,715 | 155,451 | 201,171 | 215,158 | 267,142 | 299,259 | 263,247 | 269,590 | 362,584 |  |
| Interest-bearing debt (short-term and long-term) | 7,052 | 7,025 | 10,980 | 14,740 | 23,223 | 27,546 | 58,262 | 84,685 | 53,961 | 32,047 | 59,158 |  |
| Statements of Cash Flows |  |  |  |  |  |  |  |  |  |  |  |  |
| Cash flows from operating activities | -2,568 | -2,123 | 3,987 | -8,239 | -1,208 | 3,169 | -28,595 | -30,173 | 45,770 | 38,076 | -15,534 |  |
| Cash flows from investing activities | -548 | 2,397 | -1,501 | -261 | -1,460 | -1,083 | -1,804 | -7,251 | -8,919 | -2,181 | -1,653 |  |
| Cash flows from financing activities | -619 | -944 | -1,421 | 2,049 | 2,942 | -8,322 | 43,699 | 21,916 | -35,797 | -26,189 | 14,368 |  |
| Financial index |  |  |  |  |  |  |  |  |  |  |  |  |
| Return on Assets (ROA) | 5.8\% | 6.7\% | 8.3\% | 4.9\% | 5.1\% | 4.6\% | 6.2\% | 4.6\% | 3.9\% | 6.2\% | 11.2\% |  |
| Return on Equity (ROE) | 6.4\% | 6.8\% | 9.1\% | 5.2\% | 6.9\% | 6.3\% | 10.0\% | 6.9\% | 4.3\% | 7.9\% | 16.5\% |  |
| Capital adequacy ratio | 64.0\% | 62.5\% | 52.8\% | 51.9\% | 52.6\% | 47.9\% | 47.0\% | 44.2\% | 50.2\% | 52.7\% | 46.9\% |  |
| Total Assets Turnover | 260.0\% | 152.1\% | 286.6\% | 192.9\% | 227.3\% | 191.4\% | 209.0\% | 185.1\% | 185.3\% | 207.9\% | 241.0\% |  |
| Net Income Ratio | 3.1\% | 2.8\% | 2.5\% | 1.4\% | 1.8\% | 1.6\% | 2.3\% | 1.7\% | 1.1\% | 2.0\% | 3.4\% |  |
| Working capital turnover (x) | 2.8 | 2.8 | 3.9 | 3.4 | 3.5 | 3.1 | 3.0 | 2.7 | 3.0 | 3.4 | 3.2 |  |
| Employee Indicators |  |  |  |  |  |  |  |  |  |  |  |  |
| Number of employees (persons) | 414 |  | 1,827 |  | 2,555 | 2,711 | 3,114 | 3,363 | 3,453 | 3,513 | 3,925 |  |
| Number of temporary employees (annual average, persons) |  |  | 200 |  | 284 | 313 | 316 | 346 | 381 | 384 | 426 |  |
| Net sales per employee (JPY mn) |  |  |  |  |  | 135 | 156 | 146 | 138 | 143 | 184 |  |
| Operating income per employee (JPYmn) |  |  |  |  |  | 3.6 | 4.7 | 4.3 | 3.8 | 4.9 | 8.9 |  |

Source: Prepared by Global IR, Inc. based on company data
Note: CE=Company Estimate. Rounded under JPY mn. Rounded to one dicimal place. Caluculated by Global IR, Inc.

## Integrity \& Sustainability

| Figure 8 Selling, general and administrative expenses |  |  |  |  |  |  |  |  |  |  | Unit: JPY mn, \% |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | FY02/2014 FY02/2015 FY03/2014 FY02/2015 FY03/2016 FY03/2017 FY03/2018 FY03/2019 FY03/2020 FY03/2021 FY03/2022 FY03/2023 |  |  |  |  |  |  |  |  |  |  |  |
| SG\&A | 5,469 | 5,562 | 25,288 | 26,986 | 34,558 | 35,796 | 40,931 | 45,737 | 45,444 | 46,066 | 54,010 | 62,430 |
| Selling expenses |  |  |  |  | 551 | 585 | 860 | 1,362 | 1,343 | 1,187 | 1,451 | 1,370 |
| Personnel expenses |  |  |  |  | 21,494 | 22,523 | 25,855 | 28,438 | 27,665 | 30,856 | 35,596 | 41,380 |
| Depreciation and amortization |  |  |  |  | 822 | 918 | 1,109 | 1,301 | 1,542 | 1,567 | 2,397 | 3,070 |
| Development cost |  |  |  |  | 34 | 157 | 279 | 407 | 403 | 281 | 333 | 320 |
| Other |  |  |  |  | 11,657 | 11,613 | 12,828 | 14,229 | 14,491 | 12,175 | 14,233 | 16,290 |

Source: Prepared by Global IR, Inc. based on company data
Note: CE=Company Estimate. Rounded under JPY mn. Rounded to one dicimal place. Caluculated by Global IR, Inc.

# Macnica Holdings (3132) 


E. The largest semiconductor trading company in Japan

Among Japan's major semiconductor trading companies, the company (Macnica Holdings) has a market share of $12.8 \%$ (in the top two along with Toyota Tsusho, which owns three companies including NEXTY Electronics). Globally, the company holds a market share of 2.6 (ranking seventh after Toyota Tsusho with a $2.7 \%$ share. source: Gartner, based on 2021 sales).
Mainly imports and sales of semiconductors made overseas (over 90\% of purchases).
Macnica and Fuji Electronics, independent semiconductor trading companies, collaborated to establish the company (April 2015).

More than 22,000 customers and 300 suppliers (including more than 170 semiconductor suppliers)
One in three employees is an engineer (about 40\% in the network business).

E Two pillars of business: semiconductor business and network business
Results for the fiscal year ending March 31, 2022 (FY3/2022) : Sales: 761,823 million yen (sales composition: semiconductor business 89.1\%, network business 10.9\%), operating profit: 36,707 million yen, operating profit margin: 4.8\%.

Segment operating profit margin (before deducting corporate wide and unallocated expenses): Semiconductor business 4.1\%

> Network business 10.9\%

In the semiconductor business, the majority (50.6\%) of sales are for industrial equipment (37.4\%) and automotive (13.2\%) (companywide sales composition, FY3/2022). Sales CAGR11.1\% (FY3/2016-FY3/2022) driven by $18.1 \%$ for industrial equipment and 12.5\% for automotive
In the network business, the company is leading the way in the security area. Focus on service and solution model (originated from new value-added business)


## Integrity \& Sustainability

## GIR View(cont.)



- Long-term Management Plan Targets (Vision 2030)

FY3/2031: Aim for net sales of 1.3 trillion yen or more, operating profit of 100,000 million yen or more, operating profit margin of $7.5 \%$ or more, and ROE of $15 \%$ or more.

- Medium-Term Management Plan Targets (FY3/2023-FY3/2025)

Net sales of 970,000 million yen or more, operating profit of 48,000 million yen or more, operating profit margin of $5.0 \%$ or more, net profit of 30,000 million yen or more, ROE of $15.0 \%$ or more, working capital turnover (= annual net sales / working capital (accounts receivable + inventory - accounts payable)) of 3.8 or more
E. Semiconductor business: Expanding market share in growing markets, especially in automotive and industrial equipment
E Network Business: Expand market share in existing areas (cyber security), expand into new areas, and strengthen in-house services
E Service/Solution Model: Business goals are to develop businesses that solve social issues, expand CPS (Cyber-Physical System) platform, and strengthen capability for long-term growth. While upfront investment will continue for some time, the company aims to achieve net sales of 16,000 million yen and operating profit of 1,000 million yen by FY3/2025


E Global support with 80 locations in 24 countries around the world

* Overseas sales have exceeded domestic sales since FY3/2021, and the ratio of overseas sales is increasing ( $42.8 \%$ in $\mathrm{FY} 3 / 2016 \Rightarrow 52.6 \%$ in $\mathrm{FY} 3 / 2022$ )
- Sales to overseas local companies increased due to M\&A of overseas companies
E Sales to overseas local companies accounted for over $50 \%$ of overseas sales in FY3/2016 and are still increasing
- Cash generation from improved working capital (accounts receivable + inventories - accounts payable) turnover (3.2 $\rightarrow 3.8$ )
\# Secure cash and cash equivalents and raise funds through interestbearing debt for growth investments such as M\&A and intangible assets
-     - Stable and continuous dividend with a target dividend on equity ratio (DOE) of $4 \%$
E Investor return policy: Total return ratio (dividends, share buybacks, etc.) to be $30-50 \%$


| Consolidated Results |  |  |  |  |  |  | Share Price $¥ 2,727$ (Oct 21, 2022) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal year | Sales <br> (mn) | YoY <br> (\%) | Operating profit (mn) | YoY <br> (\%) | Recurring profit (mn) | YoY <br> (\%) | $\begin{array}{r} \text { Net } \\ \text { profit } \\ (\mathrm{mn}) \end{array}$ | YoY <br> (\%) | $\begin{gathered} \text { EPS } \\ \text { (Yen) } \end{gathered}$ | PER (x) |
| 3/2019 | 524,235 | 4.0\% | 15,324 | 1.1\% | 13,101 | -12.3\% | 8,883 | -22.2\% | 142.0 | 19.2 |
| 3/2020 | 521,193 | -0.6\% | 14,447 | -5.7\% | 11,072 | -15.5\% | 5,633 | -36.6\% | 90.1 | 30.3 |
| 3/2021 | 553,962 | 6.3\% | 18,769 | 29.9\% | 16,399 | 48.1\% | 10,875 | 93.1\% | 175.4 | 15.5 |
| 3/2022 | 761,823 | 37.5\% | 36,707 | 95.6\% | 35,487 | 116.4\% | 25,798 | 137.2\% | 414.9 | 6.6 |
| 1H of 3/2023 CE | 464,000 | 28.1\% | 22,000 | 42.5\% | 20,500 | 33.6\% | 14,000 | 16.8\% | 225.0 |  |
| 2 H of 3/2023 CE | 466,000 | 16.7\% | 22,000 | 3.4\% | 21,100 | 4.7\% | 14,000 | 1.4\% | 225.0 |  |
| 3/2023 CE | 930,000 | 22.1\% | 44,000 | 19.9\% | 41,600 | 17.2\% | 28,000 | 8.5\% | 450.1 | 6.1 |

Source: Prepared by Global IR, Inc. based on company data
Note: CE=Company Estimate. Rounded under JPY mn. Rounded to one dicimal place. Caluculated by Global IR, Inc.

## FAQs from Investor Meetings

Q1: While digital ICs such as memory and generalpurpose logic are expected to shift from an easing supply-demand to an oversupply, will the tight supply-demand balance for analog ICs for industrial equipment and automotive applications continue for the foreseeable future?

Q2: If EVs become commodities like smartphones, won't the semiconductors they use also become commodities, making it difficult to add value?

Macnica Holdings (3132) (3132) has been meeting with foreign institutional investors on an ongoing basis. The following is a summary of frequently asked questions by investors arise from these meetings and their responses. The responses are based on the company's answers, with analyst commentary and additional information. The order of the responses is based on the questions that seemed to be of particular interest.

## Regarding markets and trends

The company believes that the tight supply-demand situation for analog ICs for industrial equipment and automotive applications will continue for the foreseeable future. Semiconductor market forecasts for industrial equipment and automotive markets are higher than the overall average. The industrial equipment market has a broad base, and investment in semiconductors will continue. The semiconductor production equipment market will also continue to grow. Investments in smart factories and other measures to improve factory efficiency will continue, and the shift to EVs in the automotive market will require new manufacturing lines, so demand for factory automation and robotics will continue to increase. In the automotive market itself, demand for drive motors and batteries will increase in response to the shift to automatic driving and Advanced Driver-Assistance Systems (ADAS) for safety and EVs. The need for semiconductors will increase in many applications, including the instrument panel area for space presentation and improved display functions. However, even so, the sales amount used in industrial equipment and in-vehicles in the overall semiconductor market is far less than that in smartphones and PCs (WSTS data). In other words, it is a market of low priority and influence. In addition, analog ICs and other ICs(and such) used in industrial equipment and automotive applications are based on mature legacy technologies (several microns, 200mm wafers or smaller) from two to three generations ago, and the company believes that the supply rate will continue to slow because of low new capital investment. (see text) The company expects to meet its sales target of 930 billion yen for FY03/2023. However, the company believes that there may be a plateau in FY03/2024 and FY03/2025 (see the medium-term management plan in the main text).

With the popularization of EVs, the amount of semiconductors installed in each vehicle is steadily increasing, and both EVs and internal combustion engine vehicles require high-quality, highly reliable semiconductors to move, turn, and stop. Compared to internal combustion engine vehicles, EVs are increasingly digitized in the interior and around the batteries, but this does not mean that demand for analog ICs will decrease. Analog circuits are needed for the suspension and sensors that transmit power to the wheels. Digital ICs also require durability and high reliability for semiconductors used in harsh environments such as high temperature, high humidity, and vibration. The company provides PLDs and FPGAs, which are used extensively from the vehicle development stage, and can offer high-value-added distribution that provides business and services from upstream to midstream and downstream processes.

Q3: Chinese Business Risk: The impact of U.S. economic sanctions against China and Russia?

Q4: Why do customers purchase from semiconductor trading companies including the company rather than directly from semiconductor manufacturers?

Q5: Are your suppliers domestic or worldwide?

Q6: Is the deal with CrowdStrike EXCLUSIVE? Presence of the competing distributors.

Since the company sells Western semiconductors in China, there could be geopolitical risk in China. Some Japanese manufacturers are also moving production line aimed for China back to Japan. In the past, there have been export restrictions by the U.S. on Huawei and others, but the impact on the company was small. This time, NVIDIA and Advanced Micro Devices (AMD) revealed that they have received notification from the US government that it has imposed approval by the government for the export of some GPU (image processing semiconductor) products to China and Russia (source: Nikkei Newspaper, September 2, 2022). Although the company handles NVIDIA products, it is not affected because it does not sell the products subject to the export restrictions to Chinese companies.

## About Business

The company's customers include a number of medium- to small-sized companies that purchase a wide variety of components in small quantities, such as industrial equipment, automotive, and telecommunications infrastructure. These customers require flexibility in terms of specification changes and delivery dates, which semiconductor manufacturers are unable to meet without bulk transactions. In addition, since the company excels at finding and sourcing cutting-edge products from start-ups and venture companies, the development divisions of major customers benefit greatly from using the company.

Among semiconductor manufacturers, the company handles products from 15 of the world's top 21 companies (other than DRAM manufacturers such as Samsung and Hynix). The semiconductor makers have defined trading areas for each trading company, but recently the number of trading companies has been narrowed down to about two or three. The company is building a dominant position by expanding its share of the trading area or by acquiring new trading areas. The company is often chosen when considering changes in trade areas or customer commercial distribution in M\&As between suppliers. Recently, ADI's agency restructure in 2017 consolidated most of its Japanese business with the company, and in 2020 TI's agency restructure consolidated it with both Tokyo Electron Device (TED) and the company. The company is in the best position to take advantage of such reorganization, as when Renesas Electronics consolidated from 16 to 6 distributors, it removed its original affiliated distributors and selected the company. The company also sources network products from around the world, mainly security-related products. The company often maintains business relationships with CrowdStrike and others from the early days of the company's founding.

The company is the primary distributor for CrowdStrike and other network products, although it does not have exclusive business agreements with suppliers. The company also distributes its products to Fujitsu, NEC, and other Slers, so customers can purchase from them as well as from the company.

Q7: Do customers in the semiconductor business share the same or different customers in the network business?

Q8: What are some examples of semiconductor value-added (VAD) business?

Q9: Who are the top 3 suppliers of network products and top 10 suppliers of semiconductor products?

Q10: Impact of exchange rate fluctuations: What is the change in net sales and operating profit if the exchange rate changes by one yen against the dollar?

The semiconductor business has a high percentage of overseas sales ( $56 \%$ ), while the network business has a high percentage of domestic sales (74\%). Basically, the two businesses have different customer segments (see text). The Service Solutions business is active in six themes (Smart Factory, Smart City/Mobility, CPS Security, Healthcare, Food/Agri-Tech, and Circular Economy), with different customers for each theme and solution.

When delivering semiconductors for specific applications (e.g., communication systems) to its customers, the company provides not only semiconductor chips, but also designs entire circuit boards and modularizes them to include software as a set. For those customers that have no design capabilities, obtaining an outline and specifications for IOT, DX, etc. from the customer, the company takes on the role of a design house by providing products, from hardware design to system construction, for a fee. One in three of the company's employees is an engineer (approximately 1,500 enigneers in total). Gross profit margins on integrated circuits average around $10 \%$, but this varies depending on whether VADs (value-added services) are available. If only logistics is entrusted to the company, the margin is low; if VAD is provided, the margin ratio is higher.

The top three suppliers of network products are Box, CrowdStrike, and Trellix (formerly FireEye) (in alphabetical order). CrowdStrike's sales have been growing rapidly in recent years, with a 57\% increase in FY2021 sales over the previous year. The top 10 suppliers of semiconductor products are Analog Devices, Broadcom, Infineon, Intel (formerly Altera), Microchip, Micron, NVIDIA, ON Semiconductor, Renesas Electronics, and Texas Instruments (in alphabetical order). The top five account for $40 \%$ of sales, and the top ten for $75 \%$.

About 60\% of the company's sales are denominated in foreign currencies (mostly U.S. dollars), and most of the difference between the upwardly revised full-year forecast for $\mathrm{FY} 03 / 2023$ (at the time of the Q1 results announcement) and the original plan is due to the impact of the yen's depreciation. The initial assumption of the yendollar exchange rate was changed from 115 yen to 130 yen, resulting in an upward revision of 100 billion yen for net sales and 5 billion yen for operating profit. Therefore, the impact of a one yen change against the dollar can be calculated to be 6.7 billion yen ( $=100$ billion yen/15 yen) for net sales and 330 million yen ( $=5$ billion/15 yen) for operating profit (GIR's estimate). The company's response was, "For semiconductors, about half of the amount will be reserved for foreign exchange. The impact on sales is 6 billion yen per 1 yen change, but operating profit is only a few percent ( $5 \%$ equates to about 300 million yen). The network business is mainly yendenominated sales, so sales will not be affected. In Japan, gross profit is negatively impacted by an increase in cost of sales due to the yen's depreciation: from JanuaryMarch FY2021 to April-June FY2022, cost of sales rose 3\% as a result of the yen's depreciation averaging about $10 \%$ during the period. Other than that, the company has been able to reduce costs by purchasing in Japanese yen and negotiating with suppliers. (see text)

Q11: Why is the gross profit margin on integrated circuits almost constant at around $10 \%$ ?

Q12: How does the company differentiate itself from competitors in the low gross profit margin semiconductor business?

Q13: Why is it possible to have a high gross profit margin business in the network business?

Q14: Is there a quarterly seasonality?

When quotes are based on the fixed price in the price list, trading companies are free to set gross profit margins to some extent, but very few businesses can sell at the fixed price in the price list. The price list is generally based on a quantity of about 1,000 units. In most cases, a special price is obtained, but it is applied on a percustomer, per-project basis. The supplier determines the gross profit margin for the distributor based on the special price, and the gross profit margin is almost always fixed. The special price is basically valid for one year and is renewed once a year. If conditions change, such as an increase or decrease in quantity, the price may change, but the gross profit margin is almost always fixed. Even if there is a price increase or decrease, the gross profit margin to the distributor remains almost the same.

Gross profit margins are basically determined by trading companies' roles. The broad customer base, such as industrial equipment, has a small usage volume per company. Because of the extremely large number of customers and the wide variety of applications, this is a market where it is difficult for semiconductor manufacturers to provide sales and technical support in terms of human resources. Therefore, it is necessary for trading companies to provide sales, technical, and quality support by themselves. Trading companies are responsible for customer relations, information gathering, project identification, technical PR, design support, and response to any defects. What suppliers value most is the ability of trading companies to independently conduct technical PR and decide on projects. The more projects a trading company can win on its own, the higher its gross profit margin will be. Therefore, the industrial equipment market is a market where high profit margins can be earned. On the other hand, for cutting-edge, high-volume, high-value businesses such as smartphones and PCs, semiconductor manufacturers themselves take the lead in the business (customer relations, project identification, technology PR, pricing, etc.). Trading companies as distributors are responsible only for logistics after the business is decided, resulting in low gross profit margins. However, since the business is large in value, even a low gross profit margin can result in a large sum of money.

As an exclusive distributor or primary distributor, the company negotiates with suppliers and purchases goods and services at a base price against a price list and a special price for each deal. The company then negotiates with secondary distributors (partners) and direct end-users, and sells the products and services at the base price and a special price for each deal. Generally, if a supplier's presence in Japan is low and the value it provides is low, the company can obtain a large discount on the purchase price, resulting in a high gross margin business. In addition, if the company is working directly with end-users and the end-users require the assistance, the company do not need to discount much for the sale, resulting in a high gross margin business.

In the semiconductor business, seasonal fluctuations were seen before Covid, but after Covid, no seasonality is seen, partly due to the shortage of semiconductor supply. However, during the month of Chinese New Year in China, customers have

Q15: Will there be further mergers and acquisitions?

Q16: What is the company's $M \& A$ strategy?

Q17: What is the company's global strategy?

Q18: For the purpose of investing in business partners?

Q19: Is the company's past performance above the industry average due to organic (autonomous) growth or non-organic growth (M\&A)?
fewer operating days and purchases decrease. In Japan, many companies end their fiscal year in March, so there is a tendency for purchase volume to increase. In the network business, sales in Q4 will be the largest in the fiscal year. This is mainly due to the fact that many sales are booked in Q4 to coincide with the end-of-term budgets of client companies. However, looking at the trend over the past two to three years, this seasonal factor is no longer as pronounced as in the past.

## On industry mergers and acquisitions

In the semiconductor industry, further mergers and acquisitions are possible in order to increase competitiveness due to both increase in the amount of semiconductor investment and the complexity/speed of product development. In the networking industry, many start-ups are emerging in the security, data, and application domains. It is not just a trend concentrated in large companies.

The company is currently investigating $M \& A$ deals that are brought to them for their respective investment amounts and current performance. Investment priorities are to expand its market share in Asia in the case of semiconductors, and to expand into new geographic areas in the case of network security, or to conduct M\&A vertically to expand its business domain. In the services and solutions model, the company will consider M\&A to acquire missing capability and accelerate commercialization, and will finance $M \& A$ and intangible asset investments with a combination of operating cash flow generated by the business and bank borrowings, which should account for $50 \%$ of net profit. M\&A and intangible asset investments will be funded by a combination of operating cash flow generated through the business and bank borrowings.

Expansion of global bases is being considered, particularly in the network and security business. In the semiconductor business, the company is considering to expand its market share in Asia. In addition, as a sourcing base, office expansion to Israel and other countries and regions where many cutting-edge technologies are born is conceivable. Overseas sales are centered on East Asia and the ASEAN region, with the TOP 10 countries accounting for $97 \%$ of total sales. All countries are growing universally, including Taiwan, which has an increase due to the consolidation of ANStek in 2021.

The company has not invested in semiconductor manufacturers, but has invested in Israeli Al companies and other companies in the security sector. The company sometimes works with VCs to source technology or, with respect to startups, invests for the purpose of securing the technology. Capital gains are not the initial objective, but they may result in some gains.

## Medium-Term Management Plan and Long-Term Objectives

Sales growth of $37.5 \%$ YoY in $F Y 3 / 2022$ is mostly due to autonomous growth (M\&A effect of Taiwan ANStek in 2021 is only a few \%). The company-wide sales CAGR of $11.1 \%$ ( $\mathrm{FY} 3 / 2016 \sim \mathrm{FY} 3 / 2022$ ) is based on domestic sales of $7.7 \%$ and overseas sales of $14.9 \%$ (the same period), respectively. Cytech (FY08) and Galaxy (FY10) had annual sales of around 10 billion yen each at the time of acquisition, but have

Q20: Numerical targets for the FY3/2031: 1.3 trillion yen in sales and 100 billion yen in operating income, broken down by business unit? What about gross profit?

Q21: DOE and ROE metrics and investor return policies?

Q22: What is the company's uniqueness, corporate culture, comparative advantage, barriers to entry, etc.? Why is it possible for the company to do what other companies cannot?
now grown about 10 fold. This is a typical example of the synergistic effects of M\&A. Netpoleon (FY17) has also achieved high growth after M\&A.

The breakdown of the semiconductor: network: services and solutions business is as follows. The sales are 7:2:1 ( 910 billion yen : 260 billion yen : 130 billion yen), and the operating profit is 39 billion yen : 31 billion yen: 30 billion yen (operating profit margin of $4.3 \%: 11.9 \%: 23.1 \%$ ) (figures in parentheses are calculated by GIR based on the company's comments, see Figure 14). Gross profit target of 180 billion yen (gross profit margin of $11 \%$ : $24-25 \%, 40 \%$ ).

The company has set a medium-term target of 4\% DOE (in line with the actual results for FY3/2022). The company's total return target, including dividend payout ratio and share buybacks, is $30-50 \%$. The company aims for ROE of $15 \%$ or more, but it hopes to improve ROE to a level similar to its U.S. peers by increasing working capital turnover through liquidation of receivables and payables.

## Regarding Strengths

The company's uniqueness lies in its ability to identify and absorb superior technologies and concepts. Since the company's founding, it has been identifying venture companies and other companies with superior technologies and selling them to its clients as a distributor. Because venture companies do not have the resources to provide technical support in Japan, for example, the company has taken on the responsibility of providing all technical support. Therefore, unlike ordinary trading companies, the company quickly understands and absorbs cutting-edge technologies, and has accumulated the knowledge and know-how to implement them.

In addition, the corporate culture necessary for its business model takes root throughout the company. The corporate culture includes delegation of authority that allows the company to move and make decisions at the same speed as a startup, a frontier spirit of being "the first penguin" without fear of failure (fearless), and a culture that celebrates challenges. In the past, many competitors have tried to emulate its business model (i.e., discovering ventures that possess the world's most advanced technologies and developing them into markets), but have had little success.

For example, it is not enough to simply set up an office in Silicon Valley and sign a contract with a talented venture firm, but it is necessary to strengthen partnerships with these firms in creating business and to overcome numerous challenges together. In this process, other competitors have failed to meet the expectations of their suppliers in terms of strategy and speed, and have withdrawn before reaching success. In the networking business, there are competitors in the same industry, but there are only a few competitors that have expertise in cybersecurity and offer consulting sales and technical support with in-depth product knowledge.

Q23: Reasons for continuing long business relationships with overseas suppliers and sustainability?

Q24: Investor-oriented business management indicators?

The company has a culture of encouraging young employees to play an active role, and has proactively sent young salespeople overseas (President Hara was one of them). The temperament of the company is also compatible with the venture spirit of its suppliers. For example, the company has had a long relationship with CrowdStrike since it was a start-up with only a few employees, and the company became its world's first distributor. The business was in the red for five years, but after persistent sales and marketing, the business turned profitable in the seventh year and has reached its current high level of growth. Most of the company's mid-career employees come from different industries and are highly skilled and eager to take on new challenges. The company believes that its corporate culture of independence and autonomy and the diversity of its human network are factors that differentiate it from its competitors.

Since the previous mid-term management plan, the company has introduced management with an awareness of the cost of capital. The management control indicators include ROIC (numerator: operating income after tax, denominator: interest-bearing debt + shareholders' equity) as a financial approach and ROWC (numerator: operating income after tax, denominator: working capital (accounts receivable + inventories - accounts payable)) as a business approach. Hurdle rates for ROWC are set for each major line of semiconductor business and monitored in each month. To reduce working capital, the company has strengthened its inventory and accounts receivable management. In the past, it focused on PL and watched only sales and operating profit, but after the introduction of ROWC, the company is also emphasizing BS. At the shop floor level, the scope of negotiations with suppliers has expanded, such as shortening payment terms instead of lowering prices. (See main text). The network business does not require large working capital due to high weighting of software and services, but it has been commoditized and the operating profit margin is showing a downward trend.

Q25: Employee composition (women, foreigners, midcareer hires)

Q26: Hiring policies, salary levels, and turnover

Q27: Origin of the company name?

## Regarding employees and others

The figures as of the end of March 2022 are as follows (Source:Corporate Governance Report 2022). Macnica Corporation, a major operating subsidiary, has 2,095 employees (including 512 female employees, 37 non-Japanese employees, and 1,304 mid-career hires). 733 managers (including 31 female managers, 7 nonJapanese managers, and 471 mid-career hires). The ratio of women in the group as a whole is $24.4 \%$, and $4.2 \%$ in management positions. Domestic group companies have 37 non-Japanese employees, 7 of whom are in management positions (18.9\%). Management of overseas subsidiaries is entrusted to local personnel in each country who are familiar with local conditions, and the number of employees on loan from Japan is kept as low as possible.

Traditionally, mid-career hiring has been a constant, with 64\% of management positions occupied by mid-career hires, mainly by second-time graduates. The company's mid-career hiring policy is basically not to hire from other companies in the same industry. The company's salary level is among the highest in the industry. The basic salary is fixed, but promotions are based on merit. In addition to regular bonuses, the company offers a closing bonus. Turnover is about $4 \%$, which is relatively low within the industry.

Before becoming Macnica Corporation, the company name was Japan Macnics Corp (JMC). The name was derived from the phrase "Japan the Master of Advanced Concepts in electroNICS".

## Integrity \& Sustainability

## Table of Contents

FAQS FROM INVESTOR MEETINGS .....  3
Regarding markets and trends .....  3
About Business. .....  4
On industry mergers and acquisitions. .....  7
Medium-Term Management Plan and Long-Term Objectives .....  7
Regarding Strengths .....  8
Regarding employees and others ..... 10
ABOUT US ..... 14
Business Model ..... 14
Business Overview. ..... 14
History ..... 14
Percentage of distributor sales worldwide and in Japan ..... 14
Role of Semiconductor Trading Companies ..... 14
Building a Business Foundation ..... 15
Commercial products, customer base, and growth markets ..... 15
Positioning (Semiconductor Business) ..... 16
Overseas development. ..... 17
Segment ..... 17
Sales Composition ..... 17
Segment profit margin ..... 17
Sales Analysis ..... 18
Unit price, quantity, minimum lot ..... 18
Delivery time (lead time) ..... 18
Business practices unique to semiconductor trading companies ..... 19
Impact of exchange rate fluctuations ..... 19
Price shift (semiconductors) ..... 20
Price shift (Network Products) ..... 20
BUSINESS .....  .23
Semiconductor Business ..... 23
Summary. ..... 23
By Product ..... 24
Integrated Circuit ..... 24
Electronic device ..... 25
Other .....  .25
By Use ..... 25
Supplier ..... 26
Client. ..... 26
Network Business. ..... 27
Summary. ..... 27
Major Customers ..... 27
Security. ..... 28
Supplier. ..... 28
EU Regulations ..... 28
Positioning (Security) ..... 29

## Integrity \& Sustainability

Digital Solutions ..... 30
Global ..... 31
Peer Comparison ..... 31
SERVICE AND SOLUTION MODEL (NEW VALUE-ADDED BUSINESS) ..... 31
Purchases, Orders, Backlog, and Sales ..... 34
Sales by Region ..... 35
R\&D, CAPITAL EXPENDITURES, DEPRECIATION AND AMORTIZATION ..... 36
Growth Strategy ..... 36
Mid-term Management Plan ..... 36
Long-term Management Plan ..... 37
Financial Strategy and Dividend Policy ..... 38
MARKET AND COMPETITIVE LANDSCAPE ..... 40
Semiconductor trading company ..... 40
Market share ..... 40
Formation of alliances ..... 40
ICAC5 (IoT, Cloud, AI, Car, 5G) ..... 40
Competition ..... 41
Global Semiconductor Market ..... 43
WSTS (World Semiconductor Trade Statistics) Forecast ..... 43
Security Market ..... 45
MANAGEMENT INDICATORS ..... 46
APPENDIX ..... 47

## Integrity \& Sustainability

TABLE OF FIGURES
Figure 1. M\&A Transition ..... 17
Figure 2. Business Segments ..... 21
Figure 3. Main Clients ..... 27
Figure 4. Domestic Network Business Sales by Category ..... 28
Figure 5. Security Market Positioning ..... 29
Figure 6. Domestic Security-Related Sales by Category ..... 30
Figure 7. Digital Solution Sales in Japan ..... 30
Figure 8. Comparison of Major Network-Related Companies ..... 31
Figure 9. Six Business Themes in the Long-Term Perspective ..... 32
Figure 10. Details of Sales by Product Category and Application ..... 33
Figure 11. Purchases, Orders, Backlog, and Sales ..... 34
Figure 12. Sales by Region ..... 35
Figure 13. R\&D Expenses, Capital Expenditures, Depreciation and Amortization ..... 36
Figure14. Medium-Term Management Plan and Long-Term Targets ..... 37
Figure 16. Market Share of Major Semiconductor Trading Companies ..... 41
Figure 17. Comparison of Sales, Operating Profit, and Operating Profit Margin of Major Semiconductor Trading Companies 43 Figure 18. WSTS Forecast ..... 44
Figure 19. Domestic Information Security Market ..... 45
Figure 20. Information Security and Risk Management Market ..... 45
Figure 21. Balance Sheet ..... 47
Figure 22. Income Statement ..... 49
Figure 23. Selling, General and Administrative Expenses ..... 50
Figure 24. Forecasts for 1 H and Full Year ..... 51
Figure 25. Quarterly Results ..... 51
Figure 26. Quarterly Business Segment Trends ..... 52
Figure 28. Quarterly Trends by Product and Application ..... 53
Figure 29. Investor Returns ..... 54
Figure 30. Major Shareholders (as of March 31, 2022) ..... 54

Japan's largest semiconductor trading company

Macnica and Fuji Electronics merger

Relatively high ratio of distributor sales in Japan

Japan's unique market structure with many small and mediumsized customers

## Business Model

## Business Overview

Macnica Holdings, Inc. (hereafter "the company") is the largest semiconductor trading company in Japan. In FY3/2022, the company posted sales of 761.8 billion yen ( $89.1 \%$ of sales from semiconductor and $10.9 \%$ from network business) and operating profit of 36.7 billion yen ( $4.8 \%$ of operating profit margin). Among Japan's major semiconductor trading companies, the company has a market share of 12.8\%, ranking in the top two along with Toyota Tsusho (which owns three companies including NEXTY Electronics). Globally, the company ranked seventh with a $2.6 \%$ share, after Toyota Tsusho with a 2.7\% share (source: Gartner, based on 2021 sales). The company's operating profit margin of $4.8 \%$ (segment profit margin (before deducting corporate wide and unallocated expenses): $4.1 \%$ for semiconductors and $10.9 \%$ for the network business) is higher than Toyota Tsusho's $3.7 \%$ (most recent fiscal year).

## History

Macnica (formerly Japan Macnics) and Fuji Electronics were established in October 1972 and September 1970, respectively. In October 2020, the two companies merged, with Macnica as the surviving company. Both companies are independent semiconductor trading companies that mainly import and sell semiconductors made overseas (more than 90\% of their purchase volume). They are distinct from affiliated semiconductor trading companies (Ryosan, Ryodeni, Ryoyo Electro, etc.), which mainly handle products of domestic semiconductor manufacturers.

## Percentage of distributor sales worldwide and in Japan

According to the company, the ratio of direct to distributor sales of semiconductors is $74: 26$ worldwide. Globally, the ratio of direct sales is high, while in Japan, the ratio of distributor sales is relatively high. This is due to the difference in market structure between the world and Japan. Globally, the market for smartphones, data centers, and PCs is large and centered on large-lot customers such as Apple and Amazon, and direct sales, mainly bulk sales, are more common. In Japan, on the other hand, industrial equipment and in-vehicle (automotive) equipment account for a high percentage of the market, and there is a wide scope for distributors to play an active role. In addition, there are many small and medium-sized companies in Japan, and many customers cannot be directly supported by the manufacturer, which is another reason for the relatively high ratio of distributor sales.

## Role of Semiconductor Trading Companies

Semiconductor trading companies, along with "Sogo Shosha" (general trading company), play a major role in supporting Japan's unique market structure. Semiconductors use extremely advanced technology and cannot be manufactured in-house or by outsourcing to subcontractors. In addition, a wide variety of

Financial functions and high value-added distribution model

Providing the latest technology from around the world

Sales for industrial equipment expanded
semiconductors are developed and manufactured around the world under the division of labor, and it is not enough to simply buy semiconductors from directly managed stores. Manufacturers must always consider which semiconductors from which companies around the world to use, and must rely on specialized semiconductor trading companies to ensure smooth procurement of parts. Especially in the Japanese market, which has many small and medium-sized customers, small and medium-sized foreign manufacturers with no local knowledge are increasingly dependent on semiconductor trading companies.

Semiconductor trading companies are also responsible for all operational aspects of selling products to customers, including credit, inventory, shipping, price control, collection of accounts receivable, and return and replacement of defective products. In addition, the company promotes the supplier's brand, promotes the design-in of new products to customers, and provides technical support as needed to facilitate market penetration of new technologies. The company calls this framework a high-value-added distribution model.

On the other hand, some major semiconductor manufacturers are shifting to direct sales via the Web. TI has begun downsizing its distributor channels in the Chinese market, and TI itself is promoting a direct Web sales system called "My TI," in which TI itself operates the business aspects of the important role of a semiconductor trading company. In Japan, Marubun has been terminated from its agency contract with TI. As direct sales of semiconductors via the Web and AI logistics, such as fully automated warehouses, become more widespread, semiconductor trading companies will need to shift from the field of business operations to a proposal-based business model as a survival strategy.

## Building a Business Foundation

The company's mission is to "provide the latest technology from around the world," and it has built its business foundation on a high-value-added distribution model, centered on its semiconductor and network businesses. One in three of the company's employees (more than $40 \%$ in the network business) is an engineer, and the company focuses on providing added value that meets customer needs. In its previous medium-term management plan (FY3/2020-FY3/2022), the company focused on a new value-added business strategy. Based on the results of these efforts, the company reorganized its business into the Services and Solutions segment in the current medium-term management plan (FY3/2023-FY3/2025). The company aims to make this business profitable as soon as possible, and intends to make it a pillar of its long-term goal (Vision 2030, ending in FY3/2031).

## Commercial products, customer base, and growth markets

Of the company's suppliers (over 170 companies; over 300 companies in all businesses), the top 20 account for $80 \%$ of its purchases (the top 5 account for $55 \%$ ). As a primary distributor, the company is positioned like a Japanese subsidiary of its suppliers. The company has more than 22,000 customers, and the top 10 largest customers accounted for $41 \%$ of sales in FY3/2016 and declined to less than $30 \%$
in $\mathrm{FY} 3 / 2022$, indicating that the company is expanding its customer base (more than $70 \%$ are mainly small and midsize companies in the industrial equipment industry). The percentage of sales to industrial equipment, the company's focus, increased from $25.8 \%$ in $\mathrm{FY} 3 / 2016$ to $37.2 \%$ in FY3/2022. Combined with the $13.2 \%$ for automotive equipment, this represents the majority of the company's total sales.

## Positioning (Semiconductor Business)

Compared to Ryosan (established in 1957) and Ryoyo Electro (established in 1961), both long-established semiconductor trading companies, the company established in 1972 (formerly Macnica) has focused on overseas markets from the beginning, "providing the latest technologies from around the world". While the former's earnings have been stagnant due to the rise and fall of the Japanese semiconductor industry, the company has been able to ride the growth wave of the overseas semiconductor industry and focus on industrial equipment and automotive applications, achieving high growth (~FY3/2022 6-year sales CAGR 11.1\%) even as overseas manufacturers have shifted to direct sales and mergers and acquisitions. Furthermore, the company has established overseas bases, mainly in China and Hong Kong, and has expanded overseas markets operation, which has also contributed to its high growth. The company's overseas sales have exceeded its domestic sales since FY3/2021, and the ratio of overseas sales to total sales has increased (from 42.8\% in FY3/2016 to 52.6\% in FY3/2022).

M\&As of overseas companies lead to over $50 \%$ of sales geared toward local overseas companies.

Semiconductor business: 89.1\%, Network business: 10.9\% (sales composition ratio, FY3/2022)

## Trends in Gross Profit Margin

Gross profit margin for integrated circuits is fixed at around $10 \%$.

Gross profit margin in the network business is declining.

## Overseas development

The company provides global support through 80 offices in 24 countries. The company's overseas business began by supporting the overseas expansion of Japanese-affiliated companies, but sales to local overseas companies increased as a result of mergers and acquisitions of overseas companies. Compared to FY03/2009, when most of the company's overseas sales were to Japanese-affiliated companies, in FY3/2016, sales to local companies overseas accounted for over 50\% of overseas sales, and are still increasing.

| Figure 1. M\&A Transition |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| M\&A | FY08 | FY10 | FY11 | FY12 | FY16 | FY17 | FY19 |
| APAC | Cytech | Galaxy |  |  |  | Netpoleon | ANSTek |
| EMEA | ActiveComp |  |  | Scantec | ATD |  |  |
| USA |  |  | Octera | DHW |  |  |  |

Source: Prepared by Global IR, Inc. based on company data

## Segment

## Sales Composition

The company's business segments (sales composition, FY3/2022) are 89.1\% semiconductors (integrated circuits, electronic devices, and others) and 10.9\% network business. The semiconductor business is divided into integrated circuits (82.2\%), electronic devices (5.1\%), and others (1.8\%). Over the past six years ( $\sim$ FY2022), the semiconductor business has grown at a CAGR of $10.2 \%$ (integrated circuits: $10.1 \%$; electronic devices: $9.3 \%$; other businesses: $25.1 \%$ ) and the network business at $20.5 \%$. During this period, the network business increased its sales composition from $6.7 \%$ (FY3/2016) to $10.9 \%$ (FY3/2022) (peak value was $13.1 \%$ (FY3/2021)).

## Segment profit margin

Gross profit margin (for the last three fiscal years) has been just under $12 \%$ on a company-wide basis. The breakdown is as follows: semiconductor business around $10 \%$ (integrated circuits: less than $10 \%$, electronic devices: $7-13 \%$, others: $10-18 \%$ ), and network business around 26-34\%. Integrated circuits remained flat (reached the $10.0 \%$ mark in $\mathrm{FY} 3 / 2022$ ), while electronic devices and others are rising.

The gross profit margin in the logistics operations of semiconductor trading companies is fixed at a few percent, with semiconductor manufacturers having the right to make decisions. There was a time when the gross profit margin for integrated circuits reached $20 \%$, when sales of highly profitable engineering services were high. Since then, as engineering services have become increasingly sold directly by manufacturers and semiconductor trading companies have become logistics agents, gross profit margins of around $10 \%$ have taken hold.

On the other hand, the gross profit margin of the Networks business has been declining, partly due to commoditization. The gross profit margin of this business has

Trends in operating profit margin

Unit price varies depending on quantity (minimum lot)

Semiconductor Lead Time

Business model for
Semiconductors is to order prospectively and have a stockpile

Longer lead times for semiconductors
declined by several percentage points from 30.2\% at FY3/2018 to $25.5 \%$ at FY3/2022 due to the acquisition of Netpoleon (2017), which had a low margin of about 15\% for the same business.

The operating profit margin had been hovering around $3 \%$, but rose sharply to $4.8 \%$ for the entire company ( $4.1 \%$ for the semiconductor business and $10.9 \%$ for the network business) in FY3/2022. The semiconductor business rose 2.1 percentage points YoY, while the network business declined 1.3 percentage points YoY.

## Sales Analysis

## Unit price, quantity, minimum lot

Sales are determined by unit price x quantity. Quantity depends on the minimum lot size for the application. In the case of semiconductors, the unit price is higher for products with high functionality and performance and for small-lot, high-variety products (several cents to several million yen/unit). For industrial and medical equipment, space and defense equipment, and automotive applications, the smaller the quantity (several to several thousand units), the higher the unit price. Even for the same product, application varies from commercial, in-vehicle protoype or to testing use, etc. Therefore, the number of in-vehicle protoype or testing use products made in the one sitting is small. On the other hand, consumer products, PCs, and smartphones are made in large quantities (several million units) and have low unit prices. The unit price of network devices varies from several thousand yen to several hundred million yen, depending on the product and quantity.

## Delivery time (lead time)

In the process of manufacturing semiconductors, the basic manufacturing process is the same, and there is no significant difference in lead time for memory, analog, etc. However, depending on the type and grade of product, the number of wafer fabs and testing processes and procedures may differ, affecting lead time. High-grade products, such as those for automotive and space/defense equipment, require longer testing processes. Since the lead time is long and the quantity of products that can be made at one time is small, the unit price is higher than that of commercial products.

Since semiconductors are produced in manufacturer's lots, trading companies will place prospective orders and hold inventory to shorten delivery time to customers. Under normal circumstances, the lead time for semiconductors from order placement with suppliers to delivery ("zero-base") is about 4 months. Since the lead time for formal orders from customers is one to two months, and one to two weeks for automobiles, it is necessary to shorten delivery time by placing anticipated orders with suppliers. For this reason, the company obtains demand forecasts from customers in advance and makes arrangements with suppliers for delivery six months in advance (i.e., two months of inventory plus four months of released order).

As of August 2022, the zero-base lead time for semiconductors is approximately 1 year. Therefore, customers issue formal purchase orders with lead times that match

Lead time for network products

Ship \& Debit

Semiconductor trading companies bear the risk

Weak yen has positive impact on semiconductor business, negative impact on network business

Impact of exchange rate fluctuations on Ship \& Debit
or exceed the zero-based lead time, and place long-term orders with suppliers. Hence, there are now fewer orders placed in advance based on demand forecasts.

Network products are sold on an order-only basis, with virtually no inventory. As the sales mix of software and services increases, lead times have been reduced to a few days.

## Business practices unique to semiconductor trading companies

In direct sales of semiconductors, it is common to sell at different prices (end price) for each specific customer, depending on the volume size and other factors. On the other hand, when semiconductor manufacturers use distributors such as semiconductor trading companies, they first ask distributors to purchase inventory at a regular price higher than end price, and then debit (refund) it after it is sold to customers at a lower end price. This method, called "ship-and-debit," allows semiconductor manufacturers to improve their operating cash flow and manage the risk of end-price fluctuations. From a financial perspective, it is equivalent to semiconductor manufacturers being able to take out short-term loans at zero interest rates.

This approach would result in semiconductor trading companies taking on the inventory risk and interest burden of purchasing at a higher cost, even though the money will be refunded later. Since payment from the semicondutor companies is several months away, semiconductor trading companies' working capital increases and operating cash flow deteriorates. Although this process also places a considerable operational burden on semiconductor companies themselves, they give priority to the need to manage the selling price for each negotiation.

## Impact of exchange rate fluctuations

The company has a majority of its sales overseas (52.6\% in FY3/2022), and the majority of these sales are dollar-denominated. Since the majority of its purchases are overseas products, the majority of its purchases are dollar-denominated. For semiconductors, the majority of purchases are dollar-denominated and slightly more than half of sales are dollar-denominated (slightly less than half are yendenominated). The positive effect on earnings (with the impact of ship-and-debit transactions) will be apparent during the yen's depreciation phase. Since most purchases of network products are denominated in dollars and most sales are denominated in yen, a weaker yen is a negative factor for gross profit due to increased cost of sales. (See FAQ).

In ship-and-debit transactions, large foreign exchange gains or losses occur when the exchange rate fluctuates sharply. That is, when the dollar appreciates against the yen, a foreign exchange gain is generated when cash is paid back in dollars and the yen depreciates against the dollar. For example, if the company purchases goods from a manufacturer for $\$ 10$ and sells them for $\$ 1.1$, the manufacturer later adjusts the company's purchase price to $\$ 1$ and the company receives $\$ 9$ cash back. If the yen depreciates by 15 yen (from 115 yen to 130 yen/dollar) in the meantime, the company will receive a foreign exchange gain of 135 yen (= cash back of 9 dollars $x$

## Price increase factor

Price reduction factor

Price increase/reduction factors

Bulk discount

15 yen). Since the gross profit margin on a \$1.1 sale would be about $10 \%$ ( $\$ 0.1=$ $¥ 11.5$ ) if there were no exchange rate fluctuations, the larger the gap between the purchase price and the sales price, the greater the leverage effect of the foreign exchange gain (currently, the average gap is decreasing from 10:1 to about 3:1. In Hong Kong, it is about $7: 1$, but it can be as high as $50: 1$ for some products). (See FAQ)

## Price shift (semiconductors)

In semiconductors, when the exchange rate moves against the yen, the dollar price of purchases itself rises in yen terms, so the company generally negotiates a higher selling price in yen (the supplier factor). In reality, it is difficult to raise prices based on exchange rate fluctuations alone, since exchange gains from ship-and-debit transactions and inventory interest burdens during that period are also involved. However, when the company retains several years' inventory of discontinued products for customers' convenience (e.g., for automotive and public facilities), soaring raw material and wafer prices, outsourcing line availability, and rising market prices (e.g., for memory) are direct factors for raising prices.

Conversely, if the exchange rate moves in favor of the yen, the dollar price of the purchase itself will drop in yen terms, which will lower the selling price in yen (the supplier factor). In general, apart from exchange rate fluctuations, Japanese customers tend to demand periodic cost reductions (on a semi-annual or yearly basis). Price reductions are also demanded when there is an increase in volume. A specific example of this is when the quantity of a product is doubled by using it for a new model in the next year, in addition to the existing model. In addition, strategic price reductions may be made when there is a possibility of being replaced by a competitor who has lowered prices. For products such as memory, for which market prices fluctuate, there are periodic price reviews. Since many medium-sized companies for industrial equipment demand small-lot orders, volume and delivery time are prioritized, and simple price reduction requests are rare, according to the company.

Along with the increase in quantity, there is a negotiation for a price reduction. Basically, the reason for negotiations is the annual usage volume and usage period. Negotiations for price reductions also occur when multiple semiconductors of the same manufacturer are used in the same product. In the case of annual lump-sum purchases, there is some discounting, but in reality there are various circumstances that make it impossible to sell the entire year in one lump-sum, and there are few actual negotiations.

## Price shift (Network Products)

For network products, it is rare for a supplier's list price to increase, but there are price increases when a supplier's policies change significantly due to mergers and acquisitions. For example, a supplier changes to a new model or a new pricing format.

In general, under the terms of transactions with suppliers, unit prices often decrease as purchase volume increases. In addition, both suppliers and the company often offer large discounts for large-scale projects.

## Integrity \& Sustainability

| Figure 2. Business Segments |  |  |  |  |  |  |  | Unit: JPY mn, \% |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | FY3/2016 | FY3/2017 | FY3/2018 | FY3/2019 | FY3/2020 | FY3/2021 | FY3/2022 | FY3/2023 | CAGR |
|  | Consolidated |  |  |  |  |  |  | CE | 3/16-3/22 |
| Sales | 405,315 | 398,503 | 504,085 | 524,235 | 521,193 | 553,962 | 761,823 | 930,000 | 11.1\% |
| YoY | - | -1.7\% | 26.5\% | 4.0\% | -0.6\% | 6.3\% | 37.5\% | 22.1\% |  |
| Domestic | 231,740 | 222,322 | 270,448 | 267,380 | 263,401 | 267,114 | 361,450 |  | 7.7\% |
| Overseas | 173,575 | 176,181 | 233,637 | 256,855 | 257,792 | 286,848 | 400,373 |  | 14.9\% |
| Integrated circuits and electronic devices and others | 378,069 | 365,602 | 465,120 | 470,338 | 459,971 | 481,125 | 678,601 | 836,413 | 10.2\% |
| YoY | - | -3.3\% | 27.2\% | 1.1\% | -2.2\% | 4.6\% | 41.0\% | 23.3\% |  |
| Composition ratio | 93.3\% | 91.7\% | 92.3\% | 89.7\% | 88.3\% | 86.9\% | 89.1\% | 89.9\% |  |
| Integrated-circuit | 351,726 | 339,808 | 425,642 | 439,361 | 425,297 | 438,352 | 626,122 |  | 10.1\% |
| YoY | - | -3.4\% | 25.3\% | 3.2\% | -3.2\% | 3.1\% | 42.8\% | - |  |
| Composition ratio | 86.8\% | 85.3\% | 84.4\% | 83.8\% | 81.6\% | 79.1\% | 82.2\% | - |  |
| Electronic device | 22,811 | 20,073 | 29,832 | 24,887 | 25,506 | 32,456 | 38,913 |  | 9.3\% |
| YoY | - | -12.0\% | 48.6\% | -16.6\% | 2.5\% | 27.2\% | 19.9\% | - |  |
| Composition ratio | 5.6\% | 5.0\% | 5.9\% | 4.7\% | 4.9\% | 5.9\% | 5.1\% | - |  |
| Other | 3,532 | 5,721 | 9,646 | 6,090 | 9,168 | 10,316 | 13,566 |  | 25.1\% |
| YoY | - | 62.0\% | 68.6\% | -36.9\% | 50.5\% | 12.5\% | 31.5\% | - |  |
| Composition ratio | 0.9\% | 1.4\% | 1.9\% | 1.2\% | 1.8\% | 1.9\% | 1.8\% | - |  |
| Domestic |  |  |  | - |  |  | - |  |  |
| Overseas (local) |  |  |  | 155,000 |  |  | 248,000 |  |  |
| Network Business | 27,244 | 32,899 | 38,965 | 53,896 | 61,220 | 72,836 | 83,220 | 93,587 | 20.5\% |
| YoY | - | 20.8\% | 18.4\% | 38.3\% | 13.6\% | 19.0\% | 14.3\% | 12.5\% |  |
| Composition ratio | 6.7\% | 8.3\% | 7.7\% | 10.3\% | 11.7\% | 13.1\% | 10.9\% | 10.1\% |  |
| Security |  |  |  | 26,100 |  |  | 38,200 |  |  |
| Digital Solutions |  |  |  | 3,100 |  |  | 6,100 |  |  |
| Global |  |  |  | 12,000 |  |  | 21,800 |  |  |
| Other (network, etc.) |  |  |  | 12,696 |  |  | 17,120 |  |  |
| Domestic |  |  |  | - |  |  | - |  |  |
| Overseas (local) |  |  |  | 12,000 |  |  | 21,800 |  |  |
| Gross profit | 44,287 | 46,269 | 56,094 | 61,061 | 59,891 | 64,835 | 90,718 | 104,300 | 12.7\% |
| Yoy | - | 4.5\% | 21.2\% | 8.9\% | -1.9\% | 8.3\% | 39.9\% | 15.0\% |  |
| Gross profit margin | 10.9\% | 11.6\% | 11.1\% | 11.6\% | 11.5\% | 11.7\% | 11.9\% | 11.2\% |  |
| Integrated circuits and electronic devices and others | 35,869 | 34,808 | 44,338 | 46,533 | 43,125 | 45,160 | 69,497 | - | 11.7\% |
| YoY | - | -3.0\% | 27.4\% | 5.0\% | -7.3\% | 4.7\% | 53.9\% | - |  |
| Gross profit margin | 9.5\% | 9.5\% | 9.5\% | 9.9\% | 9.4\% | 9.4\% | 10.2\% | - |  |
| Composition ratio | 81.0\% | 75.2\% | 79.0\% | 76.2\% | 72.0\% | 69.7\% | 76.6\% | - |  |
| Integrated-circuit | 33,518 | 32,345 | 41,240 | 43,463 | 38,171 | 39,095 | 62,389 |  | 10.9\% |
| YoY | - | -3.5\% | 27.5\% | 5.4\% | -12.2\% | 2.4\% | 59.6\% | - |  |
| Gross profit margin | 9.5\% | 9.5\% | 9.7\% | 9.9\% | 9.0\% | 8.9\% | 10.0\% | - |  |
| Composition ratio | 75.7\% | 69.9\% | 73.5\% | 71.2\% | 63.7\% | 60.3\% | 68.8\% | - |  |
| Electronic device | 1,821 | 1,681 | 2,103 | 2,148 | 3,461 | 4,163 | 4,830 |  | 17.7\% |
| Yoy | - | -7.7\% | 25.1\% | 2.1\% | 61.1\% | 20.3\% | 16.0\% | - |  |
| Gross profit margin | 8.0\% | 8.4\% | 7.0\% | 8.6\% | 13.6\% | 12.8\% | 12.4\% | - |  |
| Composition ratio | 4.1\% | 3.6\% | 3.7\% | 3.5\% | 5.8\% | 6.4\% | 5.3\% | - |  |
| Other | 530 | 782 | 995 | 922 | 1,493 | 1,902 | 2,278 |  | 27.5\% |
| Yoy | - | 47.5\% | 27.2\% | -7.3\% | 61.9\% | 27.4\% | 19.8\% | - |  |
| Gross profit margin | 15.0\% | 13.7\% | 10.3\% | 15.1\% | 16.3\% | 18.4\% | 16.8\% | - |  |
| Composition ratio | 1.2\% | 1.7\% | 1.8\% | 1.5\% | 2.5\% | 2.9\% | 2.5\% | - |  |
| Network Business | 8,417 | 11,460 | 11,756 | 14,528 | 16,766 | 19,674 | 21,219 |  | 16.7\% |
| Yoy | - | 36.2\% | 2.6\% | 23.6\% | 15.4\% | 17.3\% | 7.9\% |  |  |
| Gross profit margin | 30.9\% | 34.8\% | 30.2\% | 27.0\% | 27.4\% | 27.0\% | 25.5\% |  |  |
| Composition ratio | 19.0\% | 24.8\% | 21.0\% | 23.8\% | 28.0\% | 30.3\% | 23.4\% | - |  |

## Integrity $\mathcal{E}$ Sustainability

|  | FY3/2016 | FY3/2017 | FY3/2018 | FY3/2019 | FY3/2020 | FY3/2021 | FY3/2022 | FY3/2023 | CAGR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | nsolidated |  |  |  | CE | 3/16-3/22 |
| Operating profit | 9,729 | 10,473 | 15,163 | 15,324 | 14,447 | 18,769 | 36,707 | 44,000 | 24.8\% |
| Yoy | - | 7.6\% | 44.8\% | 1.1\% | -5.7\% | 29.9\% | 95.6\% | 19.9\% |  |
| Operating profit margin | 2.4\% | 2.6\% | 3.0\% | 2.9\% | 2.8\% | 3.4\% | 4.8\% | 4.7\% |  |
| Integrated circuits and electronic devices and others | 6,448 | 4,632 | 10,769 | 9,459 | 6,996 | 9,658 | 27,499 | - | 27.3\% |
| YoY | - | -28.2\% | 132.5\% | -12.2\% | -26.0\% | 38.1\% | 184.7\% | - |  |
| Operating profit margin | 1.7\% | 1.3\% | 2.3\% | 2.0\% | 1.5\% | 2.0\% | 4.1\% | - |  |
| Composition ratio | 66.3\% | 44.2\% | 71.0\% | 61.7\% | 48.4\% | 51.5\% | 74.9\% | - |  |
| Network Business | 3,145 | 5,684 | 4,225 | 5,726 | 7,224 | 8,879 | 9,082 |  | 19.3\% |
| Yoy | - | 80.7\% | -25.7\% | 35.5\% | 26.2\% | 22.9\% | 2.3\% | - |  |
| Operating profit margin | 11.5\% | 17.3\% | 10.8\% | 10.6\% | 11.8\% | 12.2\% | 10.9\% | - |  |
| Composition ratio | 32.3\% | 54.3\% | 27.9\% | 37.4\% | 50.0\% | 47.3\% | 24.7\% | - |  |
| Corporate and elimination | 136 | 157 | 169 | 139 | 227 | 232 | 126 | - |  |

Source: Prepared by Global IR, Inc. based on company data
Note: CE=Company Estimate. Rounded under JPY mn. Rounded to one dicimal place. Caluculated by Global IR, Inc.

High-mix/small quantities or rewritable products that meet user needs

Analog ICs are widely used for industrial equipment and automotive applications.

Analog IC makers manufacture with legacy technology

Supply rate for 200 mm or smaller silicon wafers

Leading-edge technology DRAM and MPUs are susceptible to silicon cycles.

## Semiconductor Business

## Summary

The company handles a broad lineup of products, including logic ICs (PLD, ASIC, ASSP), analog ICs, other standard ICs, memory, electronic devices, and others. The company also handles a large number of PLD products that can be customized by the user and meet the needs for small-lot, high-variety production. The company also handles a wide range of memory products, including DRAM and FLASH (NOR type), and has one of the largest PLD programming (writing) centers in Japan. The company also provides support for defect analysis for foreign-made semiconductors.

Analog ICs are widely used in semiconductors for industrial equipment and automotive applications because of their excellent durability in harsh operating environments. Industrial equipment and automobiles have long development periods and product life cycles of up to 10 years, requiring flexible response to specification changes and stable quality.

Many of the products handled by the company are manufactured with mature legacy technologies (a few microns, 200 mm wafers or smaller) that are two to three generations old. Analog ICs must be designed/manufactured using legacy processes to maintain product accuracy, and the company does not invest in cutting-edge manufacturing equipment. Semiconductor equipment manufacturers themselves are concentrating on cutting-edge 300 mm wafer manufacturing equipment, and manufacturing and sales of equipment for 200 mm wafers and smaller are limited.

Silicon wafer manufacturers (Shin-Etsu Chemical and SUMCO, which together account for $60 \%$ of the market share) are also limiting production of 200 mm and smaller wafers, for which price increases are not expected to their existing facilities, and production volume remains at the current rate of supply. The main production capacity increase is for 300 mm , for which a price increase is possible. Because of this situation, oversupply of analog ICs and other ICs for industrial equipment and automotive applications is unlikely to occur and is less likely to be affected by the silicon cycle. (See FAQ).

DRAM/FLASH/MPUs, which use state-of-the-art microfabrication technology (submicron) and large-diameter silicon wafers ( 300 mm diameter), are used in massproduced products such as PCs and smartphones and are mainly sold directly by manufacturers. Memory and MPU makers invest huge amounts of capital to build new state-of-the-art factories and set up mass production systems, which incur a heavy depreciation burden. The business model is one of continuous full-scale operation even with thin profit margins, making it susceptible to the silicon cycle. The company's sales to PCs and smartphones are small, so it is less susceptible to these effects.

High growth in ASIC, analog, memory, and other standard ICs

PLD
(Programmable Logic Device)

ASIC
(Application Specific Integrated
Circuit)

ASSP
(Application Specific Standard
Product)

Analog

A term used to describe the structural business cycle unique to the semiconductor industry, which repeats boom and bust cycles in approximately four-year cycles. During a boom, orders are concentrated in large quantities and supply is in short supply, while during a recession, demand declines sharply and there is an oversupply. In recent years, the speed of technological innovation has been rapid, and the balance between supply and demand is easily disrupted at times when product generations change.

## By Product

Of the $89.1 \%$ of sales in the semiconductor business (FY3/2022, companywide sales), by product, integrated circuits accounted for 82.2\% (PLD 9.5\%, ASIC 2.0\%, ASSP 11.7\%, analog 23.7\%, memory 15.4\%, other standard ICs 19.9\%), electronic devices $5.1 \%$, and others $1.8 \%$. Electronic devices: $5.1 \%$, Others: $1.8 \%$. For the most recent six years ( $\sim$ FY3/2022), the sales CAGR for semiconductors 10.2\%, integrated circuits 10.1\% (PLD 3.3\%, ASIC 17.6\%, ASSP 2.6\%, analog 9.5\%, memory $12.8 \%$, other standard ICs $21.1 \%$ ), electronic devices $9.3 \%$, and other $25.1 \%$. ASIC, analog, memory, and other standard ICs showed relatively high growth. In terms of operating profit margin, in descending order, analog, PLD, ASSP, ASIC, memory, and other standard ICs were accounted.

## Integrated Circuit

An IC (Integrated Circuit) that can be rewritten many times, allowing the user to customize the internal logic circuits. While the internal circuit structure of an ordinary IC chip cannot be changed after manufacturing, PLDs can be rewritten by transmitting circuit design information externally. When shipped from the factory, no specific circuit structure is built inside the chip, and when design data written in a specific data format is sent from the outside by the user (e.g., the developer of a device in which the chip is embedded), the chip is able to perform a specific function.

Circuit information can be erased and rewritten many times. Because PLDs are more expensive than mass-produced fixed-circuit semiconductor chips, they are used to make prototypes for operation verification during the development of semiconductor products. Another common use of PLDs is to incorporate them into the control devices of communication equipment, and rewrite the circuitry when new communication methods or standards are developed.

PAL (Programmable Array Logic) and GAL (Generic Array Logic) with a circuit size of a few hundred gates or less are called SPLD (Simple PLD), those with a complex structure up to a few thousand gates are called CPLD (Complex PLD), and a large scale one with several tens of thousands of gates or more is called an FPGA (Field Programmable Gate Array). In a broad sense, PLD is a generic term for all of these, but in a narrower sense, PLD is sometimes used to refer to SPLDs alone, or to SPLDs and CPLDs together.

A custom IC designed and manufactured by combining necessary functions for a specific device or application. The initial cost is higher, but the unit cost of components is lower because they are produced in large quantities. Therefore, the applications are suitable for mass-produced products such as TVs and smartphones.

Within ASIC that is an application-specific IC that are designed and developed for a specific application at the initiative of a semiconductor manufacturer and sold to general customers. Application-specific ICs are mainly used in specific applications such as power management, image processing, and voice processing for cell phones and digital cameras, which are used in large volumes.

A semiconductor for processing and controlling continuous electrical signals (analog signals) for changes in physical phenomena such as light, sound, temperature, and pressure. They convert

$$
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\text { an }
\end{gathered}
$$

analog signals such as light, heat (temperature), sound, and vibration captured by sensors into digital signals and vice versa. Examples include signal amplifiers (OP Amp) and A/D converters that convert analog signals to digital signals. Most modern electronic devices consist of analog and digital circuits. In the past, communication devices and home appliances were all composed of analog circuits, but today digital circuits are at the height of their popularity in PCs, smartphones, servers, and smart home appliances. However, there are many applications where analog circuits play an important role, such as industrial equipment and in-vehicle devices. Texas Instruments and Analog Devices are the two strongest companies in the U.S.

Large Scale Integration (LSI) is a semiconductor circuit electrically controlled to store and retain data. There are two types of RAM: read/write RAM and read-only ROM. RAM is used to start up a personal computer, browse the Web, and so on. FALSH Memory (FLASH) is a non-volatile memory that uses a semiconductor device called a floating gate MOSFET to store data by storing electrons in the floating gate. The stored data remains intact even when the power is turned off, and data can be erased in an instant. It is used as a flash memory card or SSD (Solid State Drive) to store photos and videos. South Korea's Samsung and Hynix, and the U.S.-based Micron are the top three manufacturers of both FLASH and DRAM. Japan's Kioxia, for example, specializes in FLASH.

Other standard IC Logic ICs, power semiconductors (MOS FETs, IGBTs, etc.), and discretes (individual semiconductors), which are often used for general purposes. Logic ICs: Microcomponents such as MCUs and MPUs (commonly known as microcontrollers). Power : MOSFETs, IGBTs (Insulated Gate Bipolar Transistors), transistors. Discrete: Capacitors and diodes.

## Electronic device

Optical modules (high profit margin, large weight), power supply modules, passive elements (resistors, capacitors, inductors, reactors, memristors, transformers, piezoelectric elements, quartz crystals, etc.), LCD panels, and others.

## Other

FA system boards, NVIDIA image processing boards, connectors, etc.

## By Use

Of the $89.1 \%$ of the semiconductor business's sales composition (FY3/2022, company-wide sales), by application, telecommunications accounted for $16.5 \%$ (telecom terminals 2.9\%, telecom infrastructure 13.6\%), office automation and peripheral equipment $4.0 \%$, computers $10.6 \%$, consumer equipment $7.4 \%$, automotive $13.2 \%$, and industrial equipment $37.4 \%$. Over the last six years ( $\sim$ FY3/2022), the CAGR for sales is $10.2 \%$ for integrated circuits, $5.9 \%$ for telecommunications (telecom terminals 2.2\%, telecom infrastructure 8.4\%), 3.7\% for office automation and peripheral equipment, $3.4 \%$ for computers, $4.2 \%$ for consumer products, $12.5 \%$ for automotive, and $18.1 \%$ for industrial equipment. While industrial equipment, vehicle-mounted equipment, and telecommunications infrastructure led the way, telecommunications terminals declined.
$90 \%$ by top 20 suppliers

Effects of consolidation between Macnica and Fuji Electronics

Largest number of semiconductor manufacturers and customer base in Japan

Advantageous position in acquiring new clients

## Supplier

The top 20 suppliers account for $90 \%$ of the company's semiconductor sales (USD 5,377 million) for calendar year (CY) 2021. Major suppliers are listed below (in alphabetical order).

- FPGA, memory, ASP (smartphone, PC, server applications): Broadcom, Intel (formerly Altera), Marvell Technology, Micron, NVIDIA, Qualcomm, Skyworks
- Analog, Power Devices, Others (industrial equipment, automotive applications): Analog Devices (ADI), Infineon, Renesas Electronics, Microchip, NXP, ON Semiconductor, Sony, Texas Instruments (TI)

The company has benefited from the consolidation of Macnica and Fuji Electronics, which has been a major force in securing suppliers. Fuji Electronics has consistently handled mainly foreign semiconductors since its establishment in 1970, and signed a distributor agreement with ADI in 1971. The company also handled other manufacturers, including TI, mainly of analog ICs, while focusing on small and medium-sized companies in the industrial equipment market. It handled ADI, TI, Infineon, ON Semiconductor, Micron, and Broadcom, and has an abundance of handling lines in common with Macnica. In addition, from its inception, Macnica had handled foreign semiconductors, and its corporate culture as a technology trading company was similar to that of Macnica.

In 2015, Macnica, which handles common foreign semiconductors and covers large and medium-sized customers, and Fuji Electronics, which covers small and mediumsized customers, merged (to be absorbed in 2020). As a result, Macnica now has the broadest and strongest position in the Japanese market in terms of the number of semiconductor manufacturers it handles and its customer base. Semiconductor manufacturers have come to choose Macnica because of its technological superiority and broad customer base.

Even today, the company is often chosen by semiconducotr companies when they consider changes in commercial rights or customer business distribution through M\&A. Recently, ADI's agency reorganization took place in 2017 consolidated most of its Japanese business with the company. In 2020, TI consolidated its agency structure to two companies Tokyo Electron Device (TED) and Macnica. The company is in the best position to take advantage of such reorganization, as when Renesas Electronics consolidated from 16 to 6 distributors, it removed its original affiliated distributor and selected Macnica.

## Client

The company has more than 22,000 customers, and its top 10 largest customers accounted for $41 \%$ of sales in FY3/2016, down to just under 30\% in FY3/2022. The company is working to expand its customer base. Four foreign companies (in China and Taiwan) are among the top 15, and H3C is the company's top customer. Major customers categorized by application are as follows. The largest number of Japanese companies are in industrial equipment. The four foreign companies include
server companies, which are customers of the Chinese subsidiary Cytech.
Figure 3. Main Clients

|  | Clients (titles omitted, in alphabetical order) |  |
| :--- | :--- | :--- |
| Industrial Equipment | Advantest, Anritsu, Brother Industries, Canon, Fanuc, Fuji Electric, Fujfilm, Fujitsu, Glory, Hitachi, Ikegami <br> Tsushinki, Japan Radio, Makita, Mitsubishi Electric, Murata, NEC, Nihon Kohden, Nikon, Oki Electric Industry, <br> Olympus Omron, Panasonic, Shimadzu, Sony, Toshiba, Yaskawa Electric, Yokogawa Electric <br> Alps Alpine, Aisin, Denso, Volusia Clarion Electronics, Hitachi, JDI, Japan Radio, Minebea, Mitsubishi Electric, <br> In-vehicle | Murata Manufacturing, NIDEC, Panasonic, Pioneer, Sharp, Sony, Sumitomo Electric Industries |
| Communications <br> Infrastructure <br> Communication <br> Terminal | ALIBABA, Fujitsu, NEC, H3C, NTT, Oki Electric Industry, Rakuten, Sumitomo Electric Industries |  |
| Computer <br> Consumer Products <br> OA and Peripheral <br> Equipment | JDI, JVC Kenwood, Kyocera, Murata Manufacturing, Sharp |  |
| Canon, Casio, Funai Electric, JDI, JVC Kenwood, Nikon, Panasonic, Sharp, Sony, Yamaha |  |  |

Source: Prepared by Global IR, Inc. based on company data
Note: Blue = Chinese and Taiwanese companies

## Network Business

High growth in software and services

Customer Attributes

Three Foundations for Growth

## Summary

Network-related products accounted for 10.9\% of total sales (FY3/2022, companywide sales), of which $2.3 \%$ were hardware, $5.4 \%$ software, and $3.2 \%$ services. The CAGR of sales for the last 6 years ( $\sim \mathrm{FY} 3 / 2022$ ) is $20.5 \%(2.9 \%$ hardware, $64.2 \%$ software, $15.9 \%$ services) for network-related products. Software and services are showing higher growth than hardware.

## Major Customers

Customers in Japan range from large to medium-sized companies in all industries, including finance, securities, and insurance; public offices, local governments, and public organizations; the information and telecommunications industry (information system services/SI); the manufacturing industry (electrical, mechanical, and precision equipment); and the information and telecommunications industry (telecommunications carriers). Overseas, they include government and municipal offices, telecommunications carriers/telecom, financial institutions, information and IT, and manufacturing companies. The company has more than 6,700 end users (domestic only, as of March 2022).

The company's network business growth platform consists of (1) security, (2) digital solutions, (3) global, and (4) others (network and others) The network business sales composition for $\mathrm{FY} 3 / 2022$ is (1) $45.9 \%$, (2) $7.3 \%$, (3) $26.2 \%$, and (4) $20.6 \%$. from FY3/09. Sales growth rates for FY3/2022 are (1) $46.4 \%$, (2) $96.8 \%$, (3) $81.7 \%$, and (4) $34.8 \%$ ( $54.4 \%$ for the entire network business).

Security is the common ground

Strengths in countermeasures against targeted server attacks

Top 10 Suppliers

GDPR (General Data Protection Regulation) in EU


Source: Prepared by Global IR, Inc. based on company data

## Security

The company's network business spans network infrastructure, software, system integration, and telecom domains. The network infrastructure business has been in existence for more than 30 years, starting with Ethernet equipment sales in 1983. The company provides a variety of products and services in these business areas, with security as the common foundation.

The company has partnered with the world's leading security companies and its strength is in countermeasures against extremely sophisticated targeted server attacks. In software, the company focuses on cloud security using big data and AI, and in system integration, it provides total solutions specialized in security. In telecom, the company provides everything from security consulting to implementation and operational support, adapted to the special communication technologies of telecom carriers' core networks.

## Supplier

Major suppliers (FY3/2022) include Box, CrowdStrike, Trellix (formerly FireEye), Symantec, Splunk, Menlo Security, Imperva, CyberArk, and Exabeam. The top three suppliers are Box, CrowdStrike, and Trellix (in alphabetical order). CrowdStrike's sales have grown rapidly in recent years, with a $57 \%$ increase in FY3/2022 sales over the previous year.

## EU Regulations

GDPR (General Data Protection Regulation) came into effect in the EU in May 2018. GDPR is a law applicable to countries in the EU that sets out in detail the protection of personal data and its handling. The GDPR is characterized by the imposition of significant fines for non-compliance with the regulation. GDPR is not only for companies operating in the EU, but also applies for many Japanese companies,

Cyber Risk Response

Establish a dominant position in the security market
regardless of size, when handling personal data of EU residents. The company provides cloud-based security (Menlo Security) and endpoint security (CrowdStrike) products and services as GDPR compliant security.

## Positioning (Security)

The company's strength in the security market is detection and control of external threats (cyber attacks). The company is expanding its business domain from EDR (Endpoint Detection and Response) to UEBA (User and Entity Behavior Analytics) and CASB (Cloud Access Security Broker), which cover insider threats and governance. The company is expanding its business domain. The company is also focusing on SOAR (Security Orchestration, Automation and Response), which utilizes AI for management and automation.

Security measures and protections against attackers are becoming more sophisticated, making all kinds of countermeasures essential for companies. The company aims to establish a dominant position in the security market by providing a full range of tools necessary to counter cyber attacks.

On-premise or cloud-based software that sits between cloud service users and cloud applications, monitoring all activity and enforcing security policies.

A new field security solution that uses machine learning and deep learning to learn the normal behavior of users and other entities on an internal network, detect anomalous behavior, and estimate whether that behavior has security implications.

A security measure concept proposed by Gartner Inc. of the United States in 2012. By installing a CASB between a company and a cloud service, the use of cloud services can be visualized, and uploads can be monitored and controlled.

Technologies and solutions for streamlining and automating security operations. Specific capabilities include the aggregation of information from various products, platforms, and external sources and its analysis, the streamlining and standardization of operations according to predefined processes, and the management of incidents as they occur and the notification of relevant personnel.


[^1]Splunk: Integrated log management platform


## Digital Solutions

The company has launched a big data analysis platform and DX solutions including AI. For example, Splunk, which the company handles, provides an integrated log management platform that collects log data from various machines, including servers, network devices, business systems, and sensors, and enables real-time search, analysis, and visualization. The company has a Managed Service Provider agreement with Splunk and has a cooperative relationship with Splunk, enabling it to incorporate Splunk technology as the foundation of its digital solutions.


## M\&A of Netpoleon

Double-digit growth for the company and TechMatrix, operating margin close to SCSK

## Global

To strengthen its global business, on August 1, 2017, the company acquired a 56.5\% stake in Netpoleon Solutions Pte Ltd, a Singapore-based VAD (Value Added Distributor), making it a consolidated subsidiary. Netpoleon is a leading provider of cyber security solutions, with several global system integrators as its distribution partners. It has built up a customer base in the financial, telecommunications, and government industries. Netpoleon's sales grew from 71.4 million USD in FY12/2016 to 170 million USD in FY12/2020. to USD 170 million. During the same period, the number of suppliers increased from 25 to 59, the number of countries of presence increased from 7 (ASEAN) to 11 (expanded to India and Australia), and the number of employees increased from 242 to 391.

## Peer Comparison

We compared the company's network business with that of major companies that handle network-related equipment. In terms of business scale, the company is more than twice the size of TechMatrix, and both companies are experiencing double-digit growth rates. SCSK, Itochu Techno-Solutions, Net One Systems, and Daiwabo Holdings have large sales due to their SI business, but their growth rates are in single-digit percentage or in negative (FY3/2022). The company and SCSK are close in terms of operating profit margin at around $11 \%$, followed by TechMatrix.

| Figure 8. Comparison of Major Network-Related Companies |  | Unit: JPY mn, \% |  |  |
| :---: | ---: | ---: | ---: | ---: |
| Company Name | Net sales | YoY | Operating profit | Operating profit margin |
| $(\mathrm{mn})$ | $(\%)$ | $(\mathrm{mn})$ | 9,082 | $10.9 \%$ |
| Macnica Holdings (network business) | 83,220 | $14.3 \%$ | 47,555 | $11.5 \%$ |
| SCSK | 414,150 | $4.4 \%$ | 3,734 | $10.2 \%$ |
| TechMatrix | 36,513 | $18.1 \%$ | 50,482 | $9.7 \%$ |
| ITOCHU Techno-Solutions Corporation | 522,356 | $8.9 \%$ | 16,790 | $8.9 \%$ |
| Net One Systems | 188,520 | $-6.7 \%$ | 24,059 | $3.1 \%$ |
| Daiwabo Holdings Co. | 763,838 | $-21.6 \%$ |  |  |

Source: Prepared by Global IR, Inc. based on company data

## Service and solution model (new value-added business)

The company promoted new value-added businesses in its previous medium-term management plan. Although the initial plan was not achieved in terms of business performance, the new value-added business model provided the foundation for the high-value-added business in existing businesses (semiconductors and networks) and the service and solution model expected for the third pillar in the Vision 2030 plan.

A summary of the new value-added business is as follows

Summary of new value-added business

Value-added solutions applying semiconductors grew above target, but new valueadded businesses fell short in terms of performance. The original four themes: (1) IoT solutions, (2) automated driving solutions, (3) service robots, and (4) macnica.ai, were repositioned as elements of business development. Six business themes were established based on the backcasting of social issues to be solved. The company

## Integrity © Sustainability

Evolution to a service and solution model
entered the market as a high value-added distributer. The company also shifted to a strategy of acquiring the necessary expertise and partners in each market to develop its own products and services. Although its track record is still small, it has acquired many partners and released more than 10 in-house services.

The service and solution model includes the following

- Business development to solve social issues: Focusing on six business themes (Smart Factory, Cyber Physical System (CPS) Security, Smart City/Mobility, Healthcare, Circular Economy, and Food \& Agri-Tech), we will develop businesses that address the materiality defined in the Basic Sustainability Policy Promote business development in response to materiality.

Physical System = Information collected by sensor systems in the real world is analyzed in cyberspace using computer technology. This is an effort to utilize quantitative analysis, rather than experience and intuition, for the benefit of all industries.

- Expansion of CPS platform: (1)Expand CPS platform to strengthen collaboration with in-house services and eco-partners, and (2) Strengthen inhouse services and solutions that combine cyber and physical strengths.
- Strengthening Capabilities for Long-term Growth: Strengthen market expertise and capabilities needed to develop services and solutions.


[^2]
## Integrity \& Sustainability



Growing orders and order backlogs

## Purchases, Orders, Backlog, and Sales

The company's sales volume has been around 10\% point higher than its purchase volume. On the other hand, orders received were slightly higher than sales, but have diverged significantly from 1.26x in FY3/2021 and 1.72x in FY3/2022. As a result, the backlog of orders has grown to $1.12 x$ sales (as of FY3/2022). The company used to place anticipated orders in advance based on customer demand forecasts, but since FY3/2021, suppliers no longer accept anticipated orders without formal purchase orders due to longer lead times (about 1 year as of August 2022) on a zero basis. For this reason, customers issue formal purchase orders with lead times that match or exceed the zero-based lead time, and place long-term orders with suppliers. This is a direct cause of the apparent increase in order backlogs.

While a transition from easing supply-demand to oversupply is already expected for digital ICs such as memory and general-purpose logic, tight supply-demand is expected to continue for analog ICs for industrial equipment and automotive applications for the foreseeable future. (See FAQ)

| Figure 11. Purchases, Orders, Backlog, and Sales |  |  |  |  |  |  | Unit: JPY mn, \% |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | FY03/2016 |  | FY03/2018 | $=\mathrm{Y} 03 / 2019$ <br> solidated | FY03/2020 | FY03/2021 | FY03/2022 | CAGR <br> FY3/16- <br> FY3/22 |
| Purchases | 367,156 | 363,204 | 469,755 | 477,875 | 432,070 | 480,941 | 719,407 | 11.9\% |
| ICs, electronic devices, and others | 345,869 | 339,856 | 437,627 | 431,120 | 379,123 | 418,094 | 646,459 | 11.0\% |
| Network Business | 21,287 | 23,348 | 32,128 | 46,755 | 52,947 | 62,847 | 72,948 | 22.8\% |
| Orders received | 422,474 | 432,631 | 552,002 | 498,422 | 545,364 | 699,921 | 1,312,606 | 20.8\% |
| ICs, electronic devices, and others | 392,185 | 396,931 | 512,224 | 438,717 | 481,227 | 624,205 | 1,223,315 | 20.9\% |
| Network Business | 30,289 | 35,700 | 39,778 | 59,705 | 64,137 | 75,716 | 89,291 | 19.7\% |
| Order backlog | 73,749 | 107,877 | 155,794 | 129,981 | 154,152 | 300,111 | 850,894 | 50.3\% |
| ICs, electronic devices, and others | 60,924 | 92,251 | 139,355 | 107,733 | 128,987 | 272,067 | 816,780 | 54.1\% |
| Network Business | 12,825 | 15,626 | 16,439 | 22,248 | 25,164 | 28,044 | 34,114 | 17.7\% |
| Sales | 405,315 | 398,503 | 504,085 | 524,235 | 521,193 | 553,962 | 761,823 | 11.1\% |
| ICs, electronic devices, and others | 378,069 | 365,602 | 465,120 | 470,338 | 459,971 | 481,125 | 678,601 | 10.2\% |
| Network Business | 27,246 | 32,901 | 38,965 | 53,897 | 61,222 | 72,837 | 83,222 | 20.5\% |
| Sales / Purchases | 1.10 | 1.10 | 1.07 | 1.10 | 1.21 | 1.15 | 1.06 |  |
| Orders received / Sales | 1.04 | 1.09 | 1.10 | 0.95 | 1.05 | 1.26 | 1.72 |  |
| Order backlog / Sales | 0.18 | 0.27 | 0.31 | 0.25 | 0.30 | 0.54 | 1.12 |  |

[^3]Overseas sales exceed domestic sales

Sales to overseas local companies increased due to M\&A of overseas companies

## Sales by Region

The company has built up overseas bases, mainly in China and Hong Kong, and developed overseas markets. Since FY3/2021, overseas sales have exceeded domestic sales, and the ratio of overseas sales has increased ( $42.8 \%$ in $\mathrm{FY} 3 / 2016$ to $52.6 \%$ in $\mathrm{FY} 3 / 2022$ ). The sales CAGR for the last 6 years ( $\sim \mathrm{FY} 3 / 2022$ ) is $14.9 \%$ overseas, compared to $7.7 \%$ in Japan. Sales breakdown by region, mainland China accounts for $25 \%$, Taiwan and Hong Kong for $15 \%$, and ASEAN and others for $12.6 \%$ (of which Europe, the US, and others account for 2-3\%) (52.6\% breakdown for FY3/2022). Overseas sales by segment are $56 \%$ for the semiconductor business and $26 \%$ for the network business (FY3/2022, GIR estimate based on company disclosed data).

The company's overseas business began by supporting the overseas expansion of Japanese-affiliated companies, but sales to local overseas companies increased as a result of M\&A of overseas companies. Compared to FY3/2009, when most of the company's overseas sales were to Japanese companies, sales to local companies overseas accounted for over 50\% in FY3/2016 and are still increasing (67.4\%, FY3/2022). We estimate that overseas sales in the network business are almost exclusively aimed at local companies.

| Figure 12. Sales by Region |  |  |  |  |  | Unit: JPY mn, \% |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sales by Region | FY3/2016 | FY3/2017 | FY3/2018 | FY3/2019 | FY3/2020 | FY3/2021 | FY3/2022 |
|  | Consolidated |  |  |  |  |  |  |
| Japan | 231,740 | 222,322 | 270,448 | 267,380 | 263,401 | 267,114 | 361,450 |
| Overseas | 173,575 | 176,181 | 233,637 | 256,855 | 257,792 | 286,848 | 400,373 |
| China | 85,576 | 81,454 | 97,194 | 111,513 | 108,916 | 131,535 | 165,326 |
| Hong Kong |  | 30,275 | 55,488 |  |  |  |  |
| Others (Hong Kong, etc.) | 87,999 | 64,452 | 80,955 | 145,342 | 148,876 | 155,313 | 235,047 |
| Total amount | 405,315 | 398,503 | 504,085 | 524,235 | 521,193 | 553,962 | 761,823 |
| Overseas Local |  |  |  | 167,000 |  |  | 269,800 |
| Semiconductor Business |  |  |  | 155,000 |  |  | 248,000 |
| Network Business |  |  |  | 12,000 |  |  | 21,800 |
| Sales composition by region (\%) | FY3/2016 | FY3/2017 | FY3/2018 | FY3/2019 | FY3/2020 | FY3/2021 | FY3/2022 |
| Japan | 57.2\% | 55.8\% | 53.7\% | 51.0\% | 50.5\% | 48.2\% | 47.4\% |
| Overseas | 42.8\% | 44.2\% | 46.3\% | 49.0\% | 49.5\% | 51.8\% | 52.6\% |
| China | 21.1\% | 20.4\% | 19.3\% | 21.3\% | 20.9\% | 23.7\% | 21.7\% |
| Hong Kong | - | 7.6\% | 11.0\% | - | - | - | - |
| Others (Hong Kong, etc.) | 21.7\% | 16.2\% | 16.1\% | 27.7\% | 28.6\% | 28.0\% | 30.9\% |
| Total amount | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| Local ratio to overseas sales | Over 50\% |  |  | 65.0\% |  |  | 67.4\% |

Source: Prepared by Global IR, Inc. based on company data
Note: Rounded under JPY mn. Rounded to one dicimal place.
Hong Kong is included in "Others" from FY3/2019.

## R\&D, capital expenditures, depreciation and amortization

Developing its own products and services

The company's strategy is to develop its own products and services in new valueadded businesses, and R\&D and capital expenditures are on the rise.

| Figure 13. R\&D Expenses, Capital Expenditures, Depreciation and Amortization |  |  |  |  |  |  |  | Unit: JPY mn, \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | FY3/2016 | FY3/2017 | $3 / 2018$ | $\begin{aligned} & 3 / 2019 \\ & \text { olidatec } \end{aligned}$ | $3 / 2020$ |  | /2022 | CAGR FY3/16 - FY3/22 |
| R\&D expenses | 34 | 157 | 279 | 407 | 403 | 281 | 333 | 46.3\% |
| R\&D expenses ratio to sales | 0.01\% | 0.04\% | 0.06\% | 0.08\% | 0.08\% | 0.05\% | 0.04\% |  |
| Capital expenditures | 1,093 | 1,436 | 1,536 | 2,380 | 1,734 | 3,106 | 3,757 | 22.8\% |
| Depreciation and amortization | 1,143 | 1,274 | 1,500 | 1,660 | 1,976 | 1,986 | 2,804 | 16.1\% |

Source: Prepared by Global IR, Inc. based on company data
Note: Rounded under JPY mn. Rounded to two dicimal place.

## Growth Strategy

Long-term management goal (Vision 2030) and mid-term management plan

## Semiconductor Business

Network Business

Service and Solution Model

## Mid-term Management Plan

The company is in the process of formulating its third medium-term management plan to achieve its long-term management goal (Vision 2030). The numerical targets of the current medium-term management plan (FY3/2023-FY3/2025) are net sales of 970 billion yen or more, operating profit of 48 billion yen or more, operating margin of $5.0 \%$ or more, net profit of 30 billion yen or more, ROE of $15.0 \%$ or more, and working capital turnover (= annual sales / working capital (trade receivables + inventories - accounts payable)) of 3.8 or more. In addition, the company's total return ratio (dividends, share buybacks, etc.) is set at $30-50 \%$ as a measure to return profits to investors.

In the semiconductor business, the company will expand its share in growth markets, particularly in industrial equipment and in-vehicle equipment. In addition, the company will further strengthen value-added solutions that apply semiconductors and enhance the development of advanced commercial products, particularly in environment-related, loT-related, telecommunications, and mobility-related fields. In addition, the company will further strengthen its global franchise, consider overseas M\&A, and respond to the Chinese semiconductor market. For $\mathrm{FY} 3 / 2025$, the company targets sales of 835,000 million yen and operating profit of 33,000 million yen (operating profit margin of $4.0 \%$ ) at semiconductor business segment.

In the network business, the company will expand its market share in existing areas (cyber security), expand into new areas, and strengthen its own services. In addition, the company will expand its big data business and application business. In its global strategy, the company will strengthen synergies with its domestic network division and aggressively invest in developing countries. For FY3/2025, the company targets sales of 119,000 million yen and operating profit of 14,000 million yen (operating profit margin of $11.8 \%$ ) at network business segment.

In the services and solutions model, business objectives are to develop businesses that solve social issues, expand the CPS platform, and strengthen capabilities for

## Integrity © Sustainability

Transformation into a Service and Solution Company
long-term growth. While upfront investments will continue for a while, the company aims to achieve sales of 16,000 million yen and operating income in the black (1,000 million yen) in FY3/2025 at services and solutions segment.

## Long-term Management Plan

The company aims to achieve sales of over 1.3 trillion yen, operating profit of over 100 billion yen, operating margin of over $7.5 \%$, and ROE of over $15 \%$ by FY3/2031, the final year of its long-term management goal (Vision 2030). The company will formulate a medium-term management plan that divides the three steps of the transformation into (1) a management resource integration phase (FY3/2023-25), (2) a specialization enhancement phase (FY3/2026-28), and (3) a management resource integration phase (FY3/2029-31). The company's earnings base is based on its semiconductor and network businesses, but it intends to transform itself into a services and solutions company through its services and solutions model.

| Figure14. Medium-Term Management Plan and Long-Term Targets |  |  |  |  |  | Unit: JPY mn, \% |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | FY3/2021 <br> Actual | FY3/2022 <br> Actual | FY3/2023 <br> CE | FY3/2023 <br> Mid-term target | Changes CAGR FY3/2022~FY3/2025 | FY3/2031 <br> Long-term goal |
| Sales |  | 553,962 | 761,823 | 930,000 | 970,000 | 208,177 8.4\% | 1,300,000 |
|  | Semiconductor Business | 481,125 | 678,601 | 836,413 | 835,000 | 156,399 7.2\% | 910,000 |
|  | Sales composition | 86.9\% | 89.1\% | 899\% | 86.1\% |  | 70.0\% |
|  | Network Business | 72,836 | 83,220 | 93,587 | 119,000 | $35,780 \quad 12.7 \%$ | 260,000 |
|  | Sales composition | 13.1\% | 10.9\% | 10.1\% | 12.3\% |  | 20.0\% |
|  | (Services and Solutions Business) | 1,000 | 4,000 |  | 16,000 | 12,000 58.7\% | 130,000 |
|  | Sales composition | 0.2\% | 0.5\% |  | 1.6\% |  | 10.0\% |
|  | Domestic sales | 267,114 | 361,450 |  | 436,500 |  |  |
|  | Domestic sales ratio | 48.2\% | 47.4\% |  | 45.0\% |  |  |
|  | Overseas sales | 286,848 | 400,373 |  | 533,500 |  |  |
|  | Overseas sales ratio | 51.8\% | 52.6\% |  | 55.0\% |  |  |
| Operating profit |  | 18,769 | 36,707 | 44,000 | 48,000 | 11,293 9.4\% | 100,000 |
|  | Operating profit margin | 3.4\% | 4.8\% | 4.7\% | 4.9\% |  | 7.7\% |
|  | Semiconductor Business | 9,658 | 27,499 |  | 33,000 | 5,501 6.3\% | 39,000 |
|  | Operating profit margin | 2.0\% | 4.1\% |  | 4.0\% |  | 4.3\% |
|  | Network Business | 8,879 | 9,082 |  | 14,000 | 4,918 15.5\% | 31,000 |
|  | Operating profit margin | 12.2\% | 10.9\% |  | 11.8\% |  | 11.9\% |
|  | (Services and Solutions Business) | -1,100 | -2,000 |  | 1,000 | 3,000 | 30,000 |
|  | Operating profit margin |  | - |  | 6.3\% |  | 23.1\% |
|  | Corporate and elimination | 232 | 126 |  | 0 |  | 0 |
| Net profit attributable to owners of the parent |  | 10,875 | 25,798 | 28,000 | 30,000 | 4,202 5.2\% |  |
|  | Net profit margin | 2.0\% | 3.4\% | 3.0\% | 3.1\% |  |  |
| ROEWorking capital turnover |  | 7.9\% | 15.2\% |  | 15.0\% |  | 15.0\% |
|  |  | 3.4 | 3.2 |  | 3.8 |  |  |
| DOE <br> (actual is dividend payout ratio) |  | $\begin{array}{r} 2.3 \% \\ 28.5 \% \end{array}$ | $\begin{gathered} 4.0 \% \\ 24.1 \% \end{gathered}$ |  | $\begin{array}{r} 4.0 \% \\ 30-50 \% \end{array}$ |  |  |

Source: Prepared by Global IR, Inc. based on company data
Note: Note: CE=Company Estimate. Rounded under JPY mn. Rounded to one dicimal place. Caluculated by Global IR, Inc.
Actual results and FY03/2023 forecast for the Services and Solutions segment are included in the semiconductor and network businesses, but the target figures are separate. Figures in light font (FY03/2025 domestic and overseas sales forecast and long-term target breakdown) are GIR estimates based on interviews with the company.

Working capital turnover, interest-bearing debt

Cost of Capital Awareness: ROWC Management

Cash Cycle, Measures to Improve Cash Flow Deterioration in China and Taiwan

## Financial Strategy and Dividend Policy

The company's policy is to continuously return profits to shareholders while prioritizing investments for growth in order to sustainably increase corporate value. While generating profit from its business activities, the company aims to generate cash by improving its working capital (accounts receivable + inventory - accounts payable) turnover ratio (from 3.2 to 3.8 ). The company will simultaneously secure cash and deposits and raise funds through interest-bearing debt to invest in M\&A, intangible assets, and other growth investments. However, due to the recent rise in overseas interest rates, the company intends to use excess cash and cash equivalents to repay interest-bearing debt. The company's dividend policy is to pay a stable and sustainable dividend with a target dividend on equity ratio (DOE) of 4\%.

Since the previous mid-term management plan, the company has introduced management with an awareness of the cost of capital. The management control indicators include ROIC (numerator: operating income after tax, denominator: interest-bearing debt + shareholders' equity) as a financial approach and ROWC (numerator: operating income after tax, denominator: working capital (accounts receivable + inventories - accounts payable)) as a business approach. Hurdle rates for ROWC are set for each major line of semiconductor business and monitored in each month. In order to reduce working capital, the company has strengthened its control of inventory and trade receivables. (See FAQ)

The company's cash cycle (accounts receivable turnover + inventory turnover accounts payable turnover) has been 100-130 days (99.9 days in FY3/2022). The company's accounts receivable turnover is 60-70 days (65.4 days in FY3/2022), inventory turnover is 60-90 days ( 60.8 days in $\mathrm{FY} 3 / 2022$ ), and accounts payable turnover is 20-30 days (26.4 days in FY3/2022). The company liquidates its accounts receivable and accounts payable in financial instruments. The company believes that this approach (using financial instruments to liquidate accounts receivable and accounts payable) will reduce interest-bearing debt. Note that accounts payable excludes cash back from ship-and-build transactions. In some cases, delays in the collection of accounts receivable in transactions in China and Taiwan have become the norm, and this is a factor in deteriorating operating cash flow, so the company intends to take drastic measures to improve this situation.

## Integrity \& Sustainability

| Figure 15. Profitability Analysis |  |  |  |  |  |  |  |  | Unit: JPY mn, \%, days, x |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Profitability <br> (Millions of yen, \%) | FY2/2014 <br> Fuji Elec | FY2/2015 <br> Fuji Elec | $\begin{aligned} & \text { FY3/2014 } \\ & \text { Macnica } \end{aligned}$ | $\begin{aligned} & \text { FY3/2015 } \\ & \text { Macnica } \end{aligned}$ | FY3/2016 | Consolidated |  |  |  |  |  |
| Gross profit | 6,617 | 7,382 | 33,744 | 36,182 | 44,287 | 46,269 | 56,094 | 61,061 | 59,891 | 64,835 | 90,718 |
| Gross profit margin | 14.0\% | 12.9\% | 13.2\% | 12.7\% | 10.9\% | 11.6\% | 11.1\% | 11.6\% | 11.5\% | 11.7\% | 11.9\% |
| Operating profit | 1,148 | 1,820 | 8,456 | 9,195 | 9,729 | 10,473 | 15,163 | 15,324 | 14,447 | 18,769 | 36,707 |
| Operating profit margin | 2.4\% | 3.2\% | 3.3\% | 3.2\% | 2.4\% | 2.6\% | 3.0\% | 2.9\% | 2.8\% | 3.4\% | 4.8\% |
| EBITDA | 1,249 | 1,863 | 9,575 | 10,324 | 10,872 | 11,747 | 16,663 | 16,984 | 16,423 | 20,755 | 39,511 |
| EBITDA margin | 2.6\% | 3.2\% | 3.7\% | 3.6\% | 2.7\% | 2.9\% | 3.3\% | 3.2\% | 3.2\% | 3.7\% | 5.2\% |
| Net profit margin | 3.1\% | 2.8\% | 2.5\% | 1.4\% | 1.8\% | 1.6\% | 2.3\% | 1.7\% | 1.1\% | 2.0\% | 3.4\% |
| Financial index |  |  |  |  |  |  |  |  |  |  |  |
| Return on Assets (ROA) | 5.6\% | 6.7\% | 11.9\% | 4.9\% | 5.7\% | 4.6\% | 6.2\% | 4.6\% | 3.9\% | 6.2\% | 11.2\% |
| Return on Equity (ROE) | 6.3\% | 6.8\% | 13.4\% | 5.6\% | 8.3\% | 6.5\% | 10.3\% | 7.1\% | 4.4\% | 8.2\% | 17.5\% |
| Total assets turnover | 2.60 | 1.52 | 2.87 | 1.93 | 2.27 | 1.91 | 2.09 | 1.85 | 1.85 | 2.08 | 2.41 |
| Working capital | 16,999 | 20,577 | 65,020 | 83,834 | 114,873 | 130,097 | 170,023 | 193,213 | 174,994 | 163,224 | 236,487 |
| Working capital turnover | 2.8 | 2.8 | 3.9 | 3.4 | 3.5 | 3.1 | 3.0 | 2.7 | 3.0 | 3.4 | 3.2 |
| Current ratio | 354.6\% | 357.6\% | 209.6\% | 223.8\% | 235.3\% | 201.5\% | 200.8\% | 185.2\% | 202.1\% | 224.6\% | 207.8\% |
| Quick ratio | 259.6\% | 249.7\% | 112.6\% | 111.9\% | 126.6\% | 101.1\% | 104.1\% | 77.8\% | 103.4\% | 131.7\% | 111.7\% |
| CF from operating activities/Current liabilities | -0.27 | -0.21 | 0.11 | -0.13 | -0.02 | 0.04 | -0.25 | -0.22 | 0.34 | 0.34 | -0.12 |
| CF from operating activities/Total liabilities | -0.20 | -0.15 | 0.06 | -0.11 | -0.01 | 0.03 | -0.21 | -0.18 | 0.36 | 0.31 | -0.08 |
| Cash Cycle(days) | 106.4 | 122.3 | 63.3 | 99.6 | 93.0 | 117.1 | 113.9 | 133.9 | 136.2 | 116.4 | 99.9 |
| Increase/decrease in working capital | 16,999 | 3,578 | 44,443 | 18,814 | 31,039 | 15,224 | 39,926 | 23,190 | -18,219 | -11,770 | 73,263 |
| (x, days) | FY2/2014 FY2/2015 |  | FY3/2014 FY3/2015 |  | FY3/2016 FY3/2017 |  | FY3/2018 | FY3/2019 | FY3/2020 | FY3/2021 | FY3/2022 |
| Accounts receivable turnover | 3.2 | 3.6 | 7.9 | 5.5 | 6.0 | 4.9 | 5.5 | 5.2 | 5.0 | 4.9 | 5.6 |
| Accounts receivable turnover days | 114.6 | 101.1 | 46.1 | 66.9 | 61.0 | 74.5 | 66.4 | 70.3 | 73.2 | 73.9 | 65.4 |
| (x, days) | FY2/2014 FY2/2015 |  | FY3/2014 FY3/2015 |  | FY3/2016 FY3/2017 |  | FY3/2018 | FY3/2019 | FY3/2020 | FY3/2021 FY3/2022 |  |
| Inventory turnover | 13.4 | 6.8 | 7.8 | 4.6 | 5.4 | 4.4 | 4.6 | 4.0 | 4.3 | 5.5 | 6.0 |
| Inventory turnover days | 27.2 | 53.7 | 47.0 | 80.0 | 67.7 | 82.6 | 78.8 | 90.7 | 85.5 | 66.5 | 60.8 |
| (x, days) | FY2/2014 | FY2/2015 | FY3/2014 FY3/2015 |  | FY3/2016 | FY3/2017 | FY3/2018 | FY3/2019 F | FY3/2020 | FY3/2021 | FY3/2022 |
| Accounts payable turnover | 10.3 | 11.3 | 12.3 | 7.7 | 10.2 | 9.1 | 11.7 | 13.4 | 16.2 | 15.2 | 13.8 |
| Accounts payable turnover days | 35.5 | 32.4 | 29.7 | 47.3 | 35.7 | 39.9 | 31.2 | 27.2 | 22.5 | 24.0 | 26.4 |
| ( x , days) | FY2/2014 FY2/2015 |  | FY3/2014 FY3/2015 |  | FY3/2016 FY3/2017 |  | FY3/2018 | FY3/2019 F | FY3/2020 | FY3/2021 FY3/2022 |  |
| Tangible fixed assets turnover | 693.7 | 869.7 | 67.2 | 40.5 | 62.2 | 60.6 | 75.1 | 73.1 | 69.3 | 74.1 | 98.9 |
| Tangible fixed assets turnover days | 0.5 | 0.4 | 5.4 | 9.0 | 5.9 | 6.0 | 4.9 | 5.0 | 5.3 | 4.9 | 3.7 |

[^4]The company's domestic market share is $12.8 \%$, ranking in the top 2 along with Toyota Tsusho

Reorganization of independent semiconductor trading companies

Diverse growth drivers and demand creation

## Semiconductor trading company

## Market share

Among Japan's major semiconductor trading companies, the company has a market share of $12.8 \%$, ranking in the top two along with Toyota Tsusho (which owns three companies including NEXTY Electronics). Globally, the company ranks 7th with a 2.6\% market share, following Toyota Tsusho with a $2.7 \%$ market share (source: Gartner, based on 2021 sales). The company's operating profit margin of $4.8 \%$ (segment profit margin (before deducting corporate wide and unallocated expenses): $4.1 \%$ for semiconductors and $10.9 \%$ for the network business) is higher than Toyota Tsusho's 3.7\% (in the most recent fiscal year).

Compared to Ryosan (established in 1957) and Ryoyo Electro (established in 1961), both long-established semiconductor trading companies, the company established in 1972 (formerly Macnica) has focused on overseas markets from the beginning, "providing the latest technologies from around the world." While Ryosan and Ryoyo Electro earnings have been stagnant due to the rise and fall of the Japanese semiconductor industry, the company has been able to ride the growth wave of the overseas semiconductor industry and focus on industrial equipment and automotive applications, resulting in rapid growth (11.1\% six-year sales CAGR up until FY3/2022) even as overseas semiconductor manufacturers have shifted to direct sales and have done mergers and acquisitions.

## Formation of alliances

As the semiconductor industry consolidation has proceeded, semiconductor trading companies, mainly independent companies, also have started reorganization. In October 2009, USC and Kyoshin Techno Sonic established a joint holding company, UKC Holdings. Also in October of the same year, Takachiho Electric and Onishi Electric merged and changed their names to Elematic, and in August 2011, Elematic signed a capital and business alliance agreement with Toyota Tsusho. In April 2015, Macnica and Fuji Electronics merged and established a joint holding company (now the company). In April 2019, UKC Holdings and Vitec Holdings merged and established a joint holding company, Restar Holdings, and in June 2021, Restar Holdings made PALTEK a wholly owned subsidiary.

## ICAC5 (IoT, Cloud, AI, Car, 5G)

The key for semiconductor trading companies will be how they respond to issues such as business integration, globalization of business, expansion of EMS business, and enhancement of technological capabilities based on loT and AI. In the semiconductor market, it is said that ICAC5 (IOT, Cloud, AI, Car, 5G) will create demand in addition to the existing cell phone and PC markets. How the company incorporates these diverse growth drivers into its business strategy will determine the growth of semiconductor trading companies. The company is strengthening its support system by expanding its domestic and overseas bases and the products it
handles. In addition, the company is focusing on "Demand Creation," and as a service and solution company, it aims to develop business areas beyond the conventional boundaries of a semiconductor trading company.

Figure 16. Market Share of Major Semiconductor Trading Companies
Units: USD bn, \%


Source: Transcribed from company data (based on Gartner data, prepared by the company)

## Competition

WPG Holdings (Dalian Grand Investment Holding Company (TPE, 3702)) is a Taiwanese company mainly engaged in the sale of semiconductor components; established on November 9, 2005; in 2014, it became the world leader in electronic component sales, especially semiconductors, but has been reluctant to explore the low-growth Japanese market.

WT-Microelectronics (Wenye Technology CO., LTD (TPE, 3036)) is a Taiwanese company that mainly sells semiconductor components.

Arrow Electronics, Inc. (NYSE, ARW) is an electronic components distributor headquartered in Centennial, Colorado, USA, founded in 1935. Through its global network of more than 345 locations in 80 countries, the company serves more than 120,000 OEM and EMS businesses. In Japan, the company is small in size with few distributorships.

Avnet, Inc. (NYSE, AVT) is an electronic components distributor headquartered in Phoenix, Arizona, USA, and was founded in 1921. The Japanese subsidiary, formerly Okura Corporation, has fewer distributorships in Japan.

Tokyo Electron Device (TED): TED has a long history of business with overseas manufacturers as an affiliate of Tokyo Electron, but currently focuses mainly on TI; has high technological capabilities as it used to deal with FPGAs. Focusing on computer network system-related business.

Marubun: Because it was oriented toward major customers, the company's technological capabilities declined along the way; TI's agency was dissolved and human resources were lost, and the company has become a logistics trading company.

Semiconductor trading company + EMS

Domestic semiconductor manufacturer affiliate

Affiliates of Toyota Tsusho (aimed for Toyota)

Hakuto: Strong in the consumer market, but recently focusing on automotive as well. Lacks comprehensive strength.

Rester Holdings: The former companies (USC and Kyoshin Techno Sonic) were originally mainly Sony's distributors and did well during the digital camera heyday. As the AV and digital camera boom faded and Sony's performance became more difficult, USC and Kyoshin Techno Sonic merged in 2009 to form UKC. In 2019, Vitec Holdings, which mainly dealt with NXP and ST Micro, joined to form Rester Holdings. In 2021, it acquired PALTEK to gain FPGA engineers. PALTEK was in a difficult business environment as Xilinx's main customers were converted to direct sales. Rester Holdings' segments are divided into semiconductor and electronic components (devices, EMS), procurement, electronics, and environmental energy businesses.

Kaga Electronics: Segments are divided into electronic components (semiconductors, general electronic components, and EMS), information equipment, software, and other businesses.

Ryosan (Mitsubishi, Hitachi, Toshiba, etc.), Ryoden, Ryoyo Electro, Glosel
Because the company is affiliated with a domestic semiconductor manufacturer, it cannot handle many semiconductor manufacturers. They are only in charge of logistics because the domestic manufacturers do the technical PR. They are an industrial equipment trading company that sells not only semiconductors but also factory automation equipment from domestic manufacturers. Therefore, when dealing with foreign semiconductors, it is difficult to meet the demands of the manufacturers.

NEXTY Electronics (wholly owned subsidiary): Trading company specializing in cars and Toyota

Tomen Devices (58.6\% subsidiary), Elematic (50.1\% subsidiary)

Record high for two consecutive years in 2022, growth slows in 2023

Figure 17. Comparison of Sales, Operating Profit, and Operating Profit Margin of Major Semiconductor Trading Companies

Unit: JPY mn, \%

| Ranking | Company Name | Net sales <br> (JPY mn) | Share <br> (\%) | Operating income (JPY mn) | Operating profit ratio (\%) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Macnica Holdings, Inc. | 761,823 | 14.9\% | 36,707 | 4.8\% |
| 1 | Macnica Holdings, Inc. <br> (Semiconductor Business) | 678,601 | 13.4\% | 27,499 | 4.1\% |
| 2 | Toyota Tsusho Corporation (NEXTY + Tomen + Elematec) | 707,200 | 13.8\% | 21,345 | 3.0\% |
| 3 | Kaga Electronics Co. | 495,827 | 9.7\% | 20,915 | 4.2\% |
| 4 | Tomen Devices (50.1\% subsidiary) | 462,822 | 9.0\% | 10,629 | 2.3\% |
| 5 | Rester Holdings, Inc. | 399,590 | 7.8\% | 7,485 | 1.9\% |
| 6 | NEXTY Electronics Corporation (Wholly owned subsidiary) | 357,748 | 7.0\% | 11,129 | 3.1\% |
| 7 | Ryosan | 272,647 | 5.3\% | 8,085 | 3.0\% |
| 8 | Ryoden | 229,126 | 4.5\% | 7,062 | 3.1\% |
| 9 | Elematec (58.6\% subsidiary) | 200,646 | 3.9\% | 8,346 | 4.2\% |
| 10 | Hakuto | 191,495 | 3.7\% | 7,304 | 3.8\% |
| 11 | Tachibana Eletech | 193,431 | 3.8\% | 6,710 | 3.5\% |
| 12 | Tokyo Electron Device | 179,907 | 3.5\% | 8,131 | 4.5\% |
| 13 | Marubun | 167,794 | 3.3\% | 5,994 | 3.6\% |
| 14 | Hagiwara Electric Holdings | 158,427 | 3.1\% | 4,356 | 2.7\% |
| 15 | SAN-WA TECHNOS | 154,414 | 3.0\% | 4,804 | 3.1\% |
| 16 | Shinko Shoji | 135,205 | 2.6\% | 4,163 | 3.1\% |
| 17 | Satori Electric | 125,850 | 2.5\% | 2,602 | 2.1\% |
| 18 | Sanshin Electric | 123,583 | 2.4\% | 4,209 | 3.4\% |
| 19 | Ryoyo Electro | 112,099 | 2.2\% | 2,258 | 2.0\% |
| 20 | Kanaden | 100,834 | 2.0\% | 2,846 | 2.8\% |
| 21 | Takebishi | 81,603 | 1.6\% | 3,020 | 3.7\% |
| 22 | Glosel | 67,259 | 1.3\% | 953 | 1.4\% |
| 23 | Kyoei Sangyo | 56,978 | 1.1\% | 1,386 | 2.4\% |
| 24 | Mitachi | 42,519 | 0.8\% | 2,018 | 4.7\% |
| 25 | Innotech | 37,238 | 0.7\% | 2,585 | 6.9\% |
| 26 | Takachiho Koheki | 20,784 | 0.4\% | 1,024 | 4.9\% |
|  | Total amount | 5,129,649 | 100.0\% | 196,066 | 3.8\% |

Source: Prepared by Global IR, Inc. based on company data
Note: Rounded under JPY mn. Rounded to one dicimal place.
Net sales and operating income are the latest results (FY03/2022). Including sales and operating profit other than semiconductors. Toyota Tsusho's sales and operating income are calculated by multiplying the sales and operating income of the three subsidiaries by their respective shareholding ratios (GIR's calculations).

## Global Semiconductor Market

## WSTS (World Semiconductor Trade Statistics) Forecast

The global semiconductor market is expected to reach $\$ 646.4$ billion in 2022 (16.3\%YoY), a record high for the second consecutive year (WSTS 2022 Spring Forecast). By region, the U.S., Europe, Asia Pacific, and Japan are expected to grow $22.6 \%, 20.8 \%, 13.9 \%$, and $12.76 \%$ YoY, respectively. 2023 growth is projected to

## Integrity © Sustainability

slow to $5.1 \%$ YoY. The company expects the Japanese market to grow at a slower rate than the U.S. market (WSTS 2022 Spring Forecast). The company's growth rate will remain above the Japanese market.


[^5]Note: Rounded under JPY mn. Rounded to one dicimal place. Caluculated by Global IR, Inc. Figures for Macnica Holdings semiconductor sales are for the fiscal year ended March 31.Macnica Holdings' market share is calculated by dividingFigures including overseas sales by the Japanese market (GIR calculations).

Domestic Information Security Market

Background of changes in the domestic security market in 2021

Information Security and Risk Management Market Forecast in Japan and APAC

## Security Market

The information security market consists of security software, security appliances, and security services. IDC Japan estimates and forecasts the domestic market size for each market as follows.

| Figure 19. Domestic Information Security Market |  | Unit: JPY bn, \% |  |  |
| :--- | ---: | :--- | ---: | ---: | ---: |
| By Market, Calendar Year | $\mathbf{2 0 2 1}$ | YoY | $\mathbf{2 0 2 6}$ | CAGR |
| Security Software Market | 370 | $17.2 \%$ | 464 | $4.6 \%$ |
| Security Appliance Market | 66 | $9.5 \%$ | 68 | $0.7 \%$ |
| Security Services Market | 296 | $6.9 \%$ | 345 | $3.1 \%$ |
| Total amount | 732 |  | 876 | $3.7 \%$ |

Source: Prepared by Global IR, Inc. based on IDC Japan press release (May 26, 2022)

As background to the above changes, IDC Japan points out the following three points.

1. That the acceleration of hybridization of commerce and communication (real and digital space) due to changes in the way people work has resulted in numerous reports of phishing and malware infection of endpoint devices, security breaches to corporate systems, and identity fraud in 2021.
2. Increased security vigilance on the part of both businesses and consumers due to the darkening of hackers and cybercrime groups in the wake of large-scale domestic and international events such as the Olympics and the war in Russia and Ukraine.
3. The government's promotion of digitization and privacy protection regulations for digital information, such as the revised Personal Information Protection Law, Europe's GDPR, and China's Personal Information Protection Law, have increased momentum for information governance and compliance.

Meanwhile, Gartner forecasts the information security and risk management market in Japan and Asia Pacific (excluding Japan and China) to grow as shown below. CAGR (2021~2024) is expected to be $8 \%$ in Japan and $11 \%$ in Asia Pacific, a growth of more than $3 \%$ points. Both of these rates exceed the global IT investment CAGR of $6 \%$.

| Figure 20. Information Security and Risk Management Market | Unit: USD mn, \% |  |
| :--- | ---: | ---: |
| Information Security and <br> Risk Management Market | 2021 | CAGR |
| Japan | Millions of USD | (24/21) |
| APAC (excluding Japan and China) | 12,078 | $8 \%$ |

[^6]
## Integrity \& Sustainability

Management Indicators

| Statements of Income |  |  |  |  |  | (Millions of yen) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal year | FY03/2017 | FY03/2018 | FY03/2019 | FY03/2020 | FY03/2021 | FY03/2022 | FY03/2023 CE |
| Sales | 398,503 | 504,085 | 524,235 | 521,193 | 553,962 | 761,823 | 930,000 |
| YoY | -1.7\% | 26.5\% | 4.0\% | -0.6\% | 6.3\% | 37.5\% | 22.1\% |
| Gross profit | 46,269 | 56,094 | 61,061 | 59,891 | 64,835 | 90,718 | 104,300 |
| YoY | 4.5\% | 21.2\% | 8.9\% | -1.9\%. | 8.3\% | 39.9\% | 15.0\% |
| Gross profit margin | 11.6\% | 11.1\% | 11.6\% | 11.5\% | 11.7\% | 11.9\% | 11.2\% |
| Operating profit | 10,473 | 15,163 | 15,324 | 14,447 | 18,769 | 36,707 | 44,000 |
| YoY | 7.6\% | 44.8\% | 1.1\% | -5.7\% | 29.9\% | 95.6\% | 19.9\% |
| Operating profit margin | 2.6\% | 3.0\% | 2.9\% | 2.8\% | 3.4\% | 4.8\% | 4.7\% |
| Recurring profit | 9,635 | 14,937 | 13,101 | 11,072 | 16,399 | 35,487 | 41,600 |
| YoY | -5.3\% | 55.0\% | -12.3\% | -15.5\% | 48.1\% | 116.4\% | 17.2\% |
| Net profit | 6,534 | 11,412 | 8,883 | 5,633 | 10,875 | 25,798 | 28,000 |
| YoY | -10.3\% | 74.7\% | -22.2\% | -36.6\% | 93.1\% | 137.2\% | 8.5\% |
| Net profit margin | 1.6\% | 2.3\% | 1.7\% | 1.1\% | 2.0\% | 3.4\% | 3.0\% |


| Per Share Data |  |  |  |  |  |  | FY03/2023 CE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal year | FY03/2017 | FY03/2018 | FY30/2019 | FY03/2020 | FY03/2021 | FY03/2022 |  |
| Total number of shares issued and outstanding (thousand shares) | 58,793 | 62,813 | 62,813 | 63,031 | 63,031 | 63,031 |  |
| EPS | 114.3 | 206.1 | 142.0 | 90.1 | 175.4 | 414.9 | 450.1 |
| EPS Adjusted | 114.0 | - | - | - | - | - |  |
| BPS | 1,879 | 2,010 | 2,116 | 2,142 | 2,290 | 2,735 |  |
| DPS | 35.0 | 50.0 | 50.0 | 50.0 | 50.0 | 100.0 | 120.0 |


| Balance Sheet |  |  |  |  |  | (Millions of yen) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal year | FY03/2017 | FY03/2018 | FY03/2019 | FY03/2020 | FY03/2021 | FY03/2022 | FY03/2023 CE |
| Current assets | 200,543 | 251,399 | 276,885 | 236,384 | 243,400 | 335,032 |  |
| Cash, deposits, and investment securities | 15,552 | 28,789 | 14,217 | 14,715 | 25,443 | 25,174 |  |
| Property, plant and equipment | 6,626 | 6,807 | 7,530 | 7,501 | 7,449 | 7,951 |  |
| Intangible fixed assets | 1,448 | 1,597 | 2,821 | 2,515 | 2,332 | 3,426 |  |
| Investments and other assets | 6,391 | 6,113 | 12,328 | 17,029 | 15,314 | 10,454 |  |
| Total fixed assets | 14,615 | 15,742 | 22,374 | 26,863 | 26,190 | 27,551 |  |
| Total assets | 215,158 | 267,142 | 299,259 | 263,247 | 269,590 | 362,584 |  |
| Total current liabilities | 99,535 | 125,197 | 149,540 | 116,987 | 108,351 | 161,249 |  |
| Total long-term liabilities | 10,854 | 13,731 | 14,319 | 10,707 | 15,229 | 21,570 |  |
| Total liabilities | 93,551 | 110,389 | 138,928 | 163,860 | 127,695 | 123,580 |  |
| Total net assets | 104,769 | 128,210 | 135,399 | 135,551 | 146,010 | 179,762 |  |
| Interest-Bearing Debt* (*) | 27,546 | 58,262 | 84,685 | 53,961 | 32,047 | 59,158 |  |


| Cash flows from operating activities |  |  |  |  |  | (Millions of yen) |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Fiscal year | FY03/2017 | FY03/2018 | FY03/2019 | FY03/2020 | FY03/2021 | FY03/2022 | FY03/2023 CE |
| Depreciation and amortization | 1,274 | 1,500 | 1,660 | 1,976 | 1,986 | 2,804 | - |
| Cash flows from operating activities | 3,169 | $-28,595$ | $-30,173$ | 45,770 | 38,076 | $-15,534$ | -1 |
| Cash flows from investing activities | $-1,083$ | $-1,804$ | $-7,251$ | $-8,919$ | $-2,181$ | $-1,653$ |  |
| Cash flows from financing activities | $-8,322$ | 43,699 | 21,916 | $-35,797$ | $-26,189$ | 14,368 |  |


| Financial Data |  |  |  |  |  |  | (\%) |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Fiscal year | FY03/2017 | FY03/2018 | FY03/2019 | FY03/2020 | FY03/2021 | FY03/2022 | FY03/2023 CE |
| Return on Assets (ROA) | $4.6 \%$ | $6.2 \%$ | $4.6 \%$ | $3.9 \%$ | $6.2 \%$ | $11.2 \%$ |  |  |
| Return on Equity (ROE) | $6.3 \%$ | $10.0 \%$ | $6.9 \%$ | $4.3 \%$ | $7.9 \%$ | $16.5 \%$ | - |  |
| Capital adequacy ratio | $47.9 \%$ | $47.0 \%$ | $44.2 \%$ | $50.2 \%$ | $52.7 \%$ | $46.9 \%$ |  |  |

Source: Prepared by Global IR, Inc. based on company securities reports
Note: Rounded to the nearest million yen, rounded to one decimal place. Calculated by Globl IR, Inc.

## Integrity \& Sustainability

| Appendix |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Figure 21. Balance Sheet |  |  |  |  |  |  |  |  |  | Unit: JPY mn, \% |  |
|  | FY2/2014 <br> Fuji Elec | FY2/2015 <br> Fuji Elec | FY3/2014 <br> Macnica | FY3/2015 <br> Macnica | FY3/2016 | FY3/2017 | FY3/2018 | FY3/2019 <br> nsolidated | FY3/2020 | FY3/2021 | FY3/2022 |
| Assets |  |  |  |  |  |  |  |  |  |  |  |
| Cash on hand and in banks | 9,363 | 8,809 | 18,637 | 13,473 | 20,847 | 15,552 | 28,789 | 14,217 | 14,715 | 25,443 | 25,174 |
| Bills receivable |  |  |  |  |  |  |  |  |  | 1,886 | 640 |
| Electronically recorded Monetary claim |  |  |  |  |  |  |  |  |  | 2,104 | 3,068 |
| Accounts receivable |  |  |  |  |  |  |  |  |  | 115,893 | 151,707 |
| Notes and accounts receivabletrade | 14,878 | 16,882 | 47,710 | 56,600 | 78,860 | 83,800 | 99,653 | 102,340 | 106,614 | 117,779 | 155,415 |
| Goods | 6,082 | 8,610 | 48,576 | 60,356 | 73,474 | 85,881 | 107,440 | 122,771 | 93,296 | 84,882 | 138,764 |
| Inventories | 6,082 | 8,610 | 48,576 | 60,356 | 73,474 | 85,881 | 107,440 | 122,771 | 93,296 | 84,882 | 138,764 |
| Deferred tax asset | 177 | 206 | 1,503 | 1,539 | 1,269 | 1,456 | 1,973 |  |  |  |  |
| Other | 2,850 | 2,585 | 9,584 | 10,991 | 12,859 | 13,986 | 13,676 | 37,712 | 22,090 | 15,818 | 16,201 |
| Allowance for doubtful accounts | -3 | -3 | -314 | -262 | -414 | -132 | -132 | -155 | -331 | -522 | -522 |
| Total current assets | 33,348 | 37,089 | 125,696 | 142,697 | 186,895 | 200,543 | 251,399 | 276,885 | 236,384 | 243,400 | 335,032 |
| Buildings and structures | 31 | 27 | 2,518 | 1,865 | 1,826 | 1,767 | 1,751 | 2,130 | 2,072 | 2,210 | 2,128 |
| Tools, furniture and fixtures | 24 | 22 |  |  | 1,267 | 1,339 | 1,477 | 1,680 | 1,558 | 1,402 | 1,432 |
| Machinery, equipment and vehicles | 0 | 6 | 13 | 35 | 20 | 19 | 53 | 101 | 95 | 124 | 138 |
| Lot |  |  | 3,558 | 3,061 | 3,061 | 3,061 | 3,061 | 3,061 | 3,061 | 3,062 | 3,062 |
| Leased assets | 13 | 9 | 467 | 366 | 354 | 438 | 462 | 555 | 712 | 647 | 1,187 |
| Construction in progress |  |  |  |  |  |  |  |  |  | 1 | 2 |
| Other | 0 | 0 | 999 | 1,168 | - | - | - | - | - | - |  |
| Total property, plant and equipment | 68 | 64 | 7,558 | 6,497 | 6,530 | 6,626 | 6,807 | 7,530 | 7,501 | 7,449 | 7,951 |
| Goodwill |  |  | 1,083 | 855 | 627 | 399 | 1,024 | 762 | 617 | 484 | 2,107 |
| Other | 54 | 66 | 778 | 807 | 821 | 1,198 | 1,797 | 1,753 | 1,715 | 2,942 | 7,038 |
| Total intangible fixed assets | 54 | 66 | 1,861 | 1,662 | 1,448 | 1,597 | 2,821 | 2,515 | 2,332 | 3,426 | 9,145 |
| Investments in securities | 2,524 | 1,200 | 2,788 | 2,747 | 3,578 | 3,583 | 3,492 | 7,557 | 12,264 | 10,169 | 4,872 |
| Long-term loans |  |  |  |  | 157 | 183 | 140 |  |  |  |  |
| Deferred tax asset | 242 | 289 | 1,290 | 1,292 | 1,851 | 1,924 | 1,859 | 3,851 | 3,794 | 4,186 | 4,483 |
| Assets related to retirement benefits |  | 59 |  |  | 80 | 93 | 103 |  |  |  |  |
| Other | 222 | 163 | 575 | 890 | 935 | 827 | 669 | 931 | 1,020 | 965 | 1,101 |
| Allowance for doubtful accounts | -4 | -3 | -54 | -335 | -305 | -219 | -150 | -11 | -49 | -6 | -2 |
| Total investments and other assets | 2,984 | 1,708 | 4,599 | 4,594 | 6,296 | 6,391 | 6,113 | 12,328 | 17,029 | 15,314 | 10,454 |
| Total fixed assets | 3,106 | 1,838 | 14,018 | 12,754 | 14,275 | 14,615 | 15,742 | 22,374 | 26,863 | 26,190 | 27,551 |
| Total assets | 36,454 | 38,926 | 139,715 | 155,451 | 201,171 | 215,158 | 267,142 | 299,259 | 263,247 | 269,590 | 362,584 |
| Liabilities |  |  |  |  |  |  |  |  |  |  |  |
| Notes and accounts payable- | 3,961 | 4,915 | 31,266 | 33,122 | 37,461 | 39,584 | 37,070 | 31,898 | 24,916 | 39,437 | 57,692 |
| trade Short-term interest-bearing debt | 4,447 | 4,045 | 10,603 | 9,997 | 16,155 | 23,654 | 51,744 | 77,237 | 49,468 | 23,032 | 44,695 |
| Short-term debt | 1,486 | 2,100 | 10,552 | 9,946 | 16,095 | 23,579 | 51,658 | 77,097 | 49,223 | 22,715 | 44,119 |
| Current portion of long-term debt | 2,957 | 1,941 |  |  |  |  |  |  |  |  |  |
| Lease obligations | 5 | 5 | 51 | 51 | 60 | 75 | 86 | 140 | 245 | 317 | 576 |
| Arrears |  |  |  |  |  |  |  | 13,595 | 13,776 | 12,826 | 19,573 |
| Income taxes payable | 308 | 632 | 3,126 | 845 | 1,258 | 2,541 | 1,667 | 1,972 | 1,724 | 2,939 | 7,245 |
| Advance received |  |  | 6,592 | 8,112 | 10,697 | 14,643 | 14,948 | 14,921 | 15,183 |  |  |
| Allowance for bonuses | 198 | 201 | 2,203 | 2,590 | 2,285 | 2,343 | 3,714 | 3,948 | 3,035 | 5,516 | 7,202 |
| Allowance for bonuses to directors and corporate auditors |  |  | 14 | 15 |  |  | 22 | 32 | 60 | 106 | 108 |
| Other | 489 | 577 | 6,162 | 9,090 | 11,558 | 16,770 | 16,032 | 5,937 | 8,825 | 24,495 | 24,734 |
| Total current liabilities | 9,404 | 10,371 | 59,971 | 63,775 | 79,414 | 99,535 | 125,197 | 149,540 | 116,987 | 108,351 | 161,249 |
| Long-term interest-bearing debt | 2,605 | 2,980 | 377 | 4,743 | 7,068 | 3,892 | 6,518 | 7,448 | 4,493 | 9,015 | 14,463 |
| Long-term debt | 2,595 | 2,975 |  | 4,418 | 6,756 | 3,503 | 6,112 | 7,000 | 4,000 | 8,660 | 13,835 |
| Lease obligations | 9 | 5 | 377 | 325 | 312 | 389 | 406 | 448 | 493 | 355 | 628 |
| Deferred tax liabilities | 3 | 3 |  |  | 420 | 490 | 762 | 335 | 213 | 238 | 1,010 |
| Allowance for retirement benefits to directors and corporate auditors |  |  | 459 | 479 | 493 | 513 | 534 |  |  |  |  |
| Liabilities for retirement benefits |  | 540 | 3,231 | 3,492 | 5,311 | 5,165 | 5,111 | 5,598 | 5,418 | 5,498 | 5,521 |
| Other | 1,090 | 648 | 421 | 515 | 844 | 794 | 806 | 938 | 583 | 478 | 576 |
| Total long-term liabilities | 3,697 | 4,172 | 4,488 | 9,229 | 14,136 | 10,854 | 13,731 | 14,319 | 10,707 | 15,229 | 21,570 |
| Total liabilities | 13,101 | 14,543 | 64,459 | 73,004 | 93,551 | 110,389 | 138,928 | 163,860 | 127,695 | 123,580 | 182,819 |


|  | FY2/2014 <br> Fuji Elec | FY2/2015 <br> Fuji Elec | FY3/2014 <br> Macnica | FY3/2015 Macnica | FY3/2016 | FY3/2017 | FY3/2018 | FY3/2019 <br> onsolidated | FY3/2020 | FY3/2021 | FY3/2022 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Net assets |  |  |  |  |  |  |  |  |  |  |  |
| Capital stock | 4,835 | 4,835 | 11,194 | 11,194 | 10,066 | 10,066 | 13,888 | 13,888 | 14,040 | 14,040 | 14,040 |
| Capital surplus | 4,726 | 4,726 | 19,476 | 19,476 | 42,673 | 42,641 | 47,468 | 47,398 | 47,550 | 46,762 | 45,996 |
| Retained earnings | 16,518 | 17,435 | 41,186 | 43,128 | 49,186 | 51,841 | 61,322 | 67,591 | 70,079 | 77,854 | 99,611 |
| Treasury stock | -2,851 | -2,851 | -1,011 |  | -328 | -5,643 | -349 | -274 | -2,152 | -1,586 | -1,389 |
| Total shareholders' equity | 23,228 | 24,145 | 70,845 | 73,798 | 101,597 | 98,905 | 122,329 | 128,603 | 129,517 | 137,070 | 158,258 |
| Accumulated other comprehensive income | 90 | 195 | 2,927 | 6,861 | 4,293 | 4,062 | 3,278 | 3,781 | 2,581 | 5,113 | 11,872 |
| Net unrealized gains (losses) on available-forsale securities, net of taxes | 134 | 102 | 366 | 368 | 26 | 41 | 135 | 158 | 26 | 432 | 987 |
| Deferred gains or losses on hedges |  |  |  | -67 | 78 | 27 | 355 | -87 | -29 | -282 | -503 |
| Foreign currency translation adjustments | -44 | 133 | 2,561 | 6,560 | 4,233 | 4,024 | 2,819 | 3,764 | 2,684 | 4,963 | 11,388 |
| Accumulated retirement benefit adjustments |  | -39 |  |  | -44 | -30 | -31 | -54 | -100 |  |  |
| Subscription warrant |  |  | 81 | 81 | 59 | 49 |  |  |  |  |  |
| Noncontrolling interest | 35 | 43 | 1,399 | 1,704 | 1,669 | 1,749 | 2,603 | 3,013 | 3,452 | 3,826 | 9,632 |
| Total net assets | 23,353 | 24,384 | 75,255 | 82,446 | 107,620 | 104,769 | 128,210 | 135,399 | 135,551 | 146,010 | 179,762 |
| Total liabilities and net assets | 36,454 | 38,926 | 139,715 | 155,451 | 201,171 | 215,158 | 267,138 | 299,259 | 263,247 | 269,590 | 362,581 |
| Working capital | 16,999 | 20,577 | 65,020 | 83,834 | 114,873 | 130,097 | 170,023 | 193,213 | 174,994 | 163,224 | 236,487 |
| Total interest-bearing debt | 7,052 | 7,025 | 10,980 | 14,740 | 23,223 | 27,546 | 58,262 | 84,685 | 53,961 | 32,047 | 59,158 |
| Net debt | -2,311 | -1,784 | -7,657 | 1,267 | 2,376 | 11,994 | 29,473 | 70,468 | 39,246 | 6,604 | 33,984 |

Source: Prepared by Global IR, Inc. based on company data
Note: Rounded to one dicimal place. Caluculated by Global IR, Inc.

Integrity \& Sustainability

| Figure 22. Income Statement | Unit: JPY mn, \% |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | FY2/2014 <br> Fuji Elec | FY2/2015 <br> Fuji Elec | FY3/2014 <br> Macnica | FY3/2015 <br> Macnica | FY3/2016 | FY3/2017 | FY3/2018 | FY3/2019 | FY3/2020 | FY3/2021 | FY3/2022 | $\begin{gathered} \text { FY } 3 / 2023 \\ C E \end{gathered}$ |
| Sales | 47,387 | 57,331 | 255,967 | 284,673 | 405,315 | 398,503 | 504,085 | 524,235 | 521,193 | 553,962 | 761,823 | 930,000 |
| YoY | - | 21.0\% | 346.5\% | 11.2\% | - | -1.7\% | 26.5\% | 4.0\% | -0.6\% | 6.3\% | 37.5\% | 22.1\% |
| COGs | 40,771 | 49,948 | 222,223 | 248,490 | 361,027 | 352,234 | 447,991 | 463,173 | 461,302 | 489,126 | 671,104 | 825,700 |
| Gross profit | 6,617 | 7,382 | 33,744 | 36,182 | 44,287 | 46,269 | 56,094 | 61,061 | 59,891 | 64,835 | 90,718 | 104,300 |
| Gross profit margin ratio | 14.0\% | 12.9\% | 13.2\% | 12.7\% | 10.9\% | 11.6\% | 11.1\% | 11.6\% | 11.5\% | 11.7\% | 11.9\% | 11.2\% |
| SG\&A | 5,469 | 5,562 | 25,288 | 26,986 | 34,558 | 35,796 | 40,931 | 45,737 | 45,444 | 46,066 | 54,010 | 60,300 |
| SG\&A ratio to sales | 11.5\% | 9.7\% | 9.9\% | 9.5\% | 8.5\% | 9.0\% | 8.1\% | 8.7\% | 8.7\% | 8.3\% | 7.1\% | 6.5\% |
| Operating profit | 1,148 | 1,820 | 8,456 | 9,195 | 9,729 | 10,473 | 15,163 | 15,324 | 14,447 | 18,769 | 36,707 | 44,000 |
| YoY | - | 58.6\% | 364.5\% | 8.7\% | - | 7.6\% | 44.8\% | 1.1\% | -5.7\% | 29.9\% | 95.6\% | 19.9\% |
| Operating profit margin | 2.4\% | 3.2\% | 3.3\% | 3.2\% | 2.4\% | 2.6\% | 3.0\% | 2.9\% | 2.8\% | 3.4\% | 4.8\% | 4.7\% |
| Non-operating income | 949 | 797 | 2,473 | 336 | 1,150 | 526 | 990 | 711 | 605 | 1,257 | 844 | 760 |
| Interest income | 45 | 28 | 38 | 43 | 95 | 61 | 76 | 116 | 82 | 63 | 65 |  |
| Dividends received | 61 | 50 | 48 | 55 | 251 | 218 | 401 | 191 | 151 | 339 | 155 |  |
| Purchase discount |  |  |  |  |  |  |  | 100 | 68 |  |  |  |
| Rental income |  |  | 33 | 29 |  |  |  |  |  |  |  |  |
| Profit on currency exchange | 793 | 674 | 2,222 |  | 483 |  | 189 |  |  | 295 |  |  |
| Reimbursement for loss on goods |  |  | 34 | 133 |  |  |  |  |  |  |  |  |
| Gain on investment in partnership Reversal of allowance for doubtful accounts |  |  | 9 19 | 11 |  |  |  |  |  | 3 | 102 |  |
| Other | 50 | 45 | 70 | 65 | 321 | 247 | 324 | 304 | 304 | 557 | 522 |  |
| Non-operating expenses | 69 | 78 | 326 | 2,331 | 703 | 1,363 | 1,216 | 2,934 | 3,980 | 3,627 | 2,064 | 3,160 |
| Interest expense | 46 | 38 | 82 | 94 | 171 | 277 | 383 | 1,137 | 1,131 | 304 | 333 |  |
| Loss on transfer of a claim |  |  | 171 | 195 | 283 | 340 | 619 | 704 | 699 | 337 | 432 |  |
| Equity in losses of affiliated companies |  |  |  |  |  |  |  |  | 815 | 2,693 | 808 |  |
| Foreign exchange loss |  |  |  | 1,808 |  | 605 |  | 1,011 | 670 |  | 347 |  |
| Initial expenses |  |  |  |  | 73 |  |  |  |  |  |  |  |
| Product indemnity expenses |  |  | 16 | 88 | 87 |  |  | 34 | 563 |  |  |  |
| Loss on sales of accounts receivable | 13 | 19 |  |  |  |  |  |  |  |  |  |  |
| Fees and commissions | 5 | 17 |  |  |  |  |  |  |  |  |  |  |
| Other | 5 | 4 | 57 | 146 | 89 | 141 | 214 | 46 | 98 | 293 | 144 |  |
| Recurring profit | 2,028 | 2,539 | 10,603 | 7,200 | 10,176 | 9,635 | 14,937 | 13,101 | 11,072 | 16,399 | 35,487 | 41,600 |
| YoY | - | 25.2\% | 317.6\% | -32.1\% | - | -5.3\% | 55.0\% | -12.3\% | -15.5\% | 48.1\% | 116.4\% | 17.2\% |
| Recurring profit margin | 4.3\% | 4.4\% | 4.1\% | 2.5\% | 2.5\% | 2.4\% | 3.0\% | 2.5\% | 2.1\% | 3.0\% | 4.7\% | 4.5\% |
| Extraordinary income | 369 | 432 | 160 | 45 | 2,024 | 197 | 125 | 40 | 128 | 206 | 1,928 | 580 |
| Gain on sales of fixed assets |  | 1 | 5 | 45 |  |  |  |  |  |  |  |  |
| Marginal gain on step acquisitions |  |  |  |  |  |  |  |  |  |  | 1,918 |  |
| Gain on termination of ESOP trust |  |  |  |  |  |  |  |  |  | 198 |  |  |
| Gain on sales of investment securities | 369 | 431 |  |  | 337 | 95 | 121 | 38 | 118 | 3 | 8 |  |
| Reversal of allowance for doubtful accounts for affiliates <br> Negative goodwill accrual |  |  |  |  | 1,686 | 101 |  |  |  |  |  |  |
| Other | - | 0 | 155 | - | 1 | 1 | 4 | 2 | 10 | 5 | 2 |  |

## Integrity $\mathcal{E}$ Sustainability

|  | FY2/2014 <br> Fuji Elec | FY2/2015 <br> Fuji Elec | FY3/2014 <br> Macnica | FY3/2015 <br> Macnica | FY3/2016 | FY3/2017 | FY3/2018 | FY3/2019 <br> Consolidated | FY3/2020 <br> d | FY3/2021 | FY3/2022 | $\begin{gathered} \text { FY } 3 / 2023 \\ C E \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Extraordinary loss | 29 | 345 | 531 | 809 | 1,566 | 55 | 53 | 360 | 1,492 | 328 | 334 | 810 |
| Loss on sales of fixed assets |  |  |  |  |  |  | 8 | 4 |  |  |  |  |
| Loss on disposal of fixed assets | 1 | 1 | 33 | 6 |  | 22 | 7 | 12 | 22 | 33 | 26 |  |
| Loss on sales of investment securities | 22 | 185 |  |  |  | 28 | 22 | 1 | 11 |  |  |  |
| Loss on valuation of investment securities | 7 |  |  |  |  | 4 | 12 | 112 | 1,447 | 123 | 295 |  |
| Loss on valuation of stocks of subsidiaries and affiliates |  |  | 201 | 650 | 240 |  |  |  |  | 166 |  |  |
| Loss on valuation of investments in affiliates |  |  | 131 |  |  |  |  |  |  |  |  |  |
| Loss on liquidation of subsidiaries and affiliates |  |  |  | 80 |  |  |  |  |  |  |  |  |
| Provision for doubtful accounts of subsidiaries and affiliates |  |  | 164 | 72 | 214 |  |  |  |  |  |  |  |
| Loss on dissolution of employees' pension fund |  |  |  |  | 993 |  |  |  |  |  |  |  |
| Other | 0 | 159 | 2 | 1 | 119 | 1 | 4 | 231 | 12 | 6 | 13 |  |
| Income taxes | 897 | 998 | 3,779 | 2,284 | 2,805 | 3,144 | 3,394 | 3,414 | 3,435 | 4,586 | 9,557 | 11,230 |
| Tax rate | 37.9\% | 38.0\% | 36.9\% | 35.5\% | 26.4\% | 32.2\% | 22.6\% | 26.7\% | 35.4\% | 28.2\% | 25.8\% | 27.1\% |
| Net profit attributable to noncontrolling interests | 8 | 11 | 70 | 134 | 243 | 97 | 201 | 483 | 639 | 815 | 1,725 | 2,140 |
| Net profit attributable to owners of the parent | 1,463 | 1,618 | 6,382 | 4,018 | 7,285 | 6,534 | 11,412 | 8,883 | 5,633 | 10,875 | 25,798 | 28,000 |
| YoY | - | 10.5\% | - | -37.0\% | - | -10.3\% | 74.7\% | -22.2\% | -36.6\% | 93.1\% | 137.2\% | 8.5\% |
| Net profit margin (margin) | 3.1\% | 2.8\% | 2.5\% | 1.4\% | 1.8\% | 1.6\% | 2.3\% | 1.7\% | 1.1\% | 2.0\% | 3.4\% | 3.0\% |

Source: Prepared by Global IR, Inc. based on company data
Note: CE=Company Estimate. Rounded under JPY mn. Rounded to one dicimal place.

1. The foreign exchange loss of 347 million yen is largely due to the mark-to-market valuation of receivables and payables denominated in foreign currencies. The large loss was due to accounts receivable in Shenzhen (FY2022).
2. Equity in losses of affiliates is due to cloud analytics (for the past 3 consecutive years).
3. 1,918 million yen in extraordinary gains on the acquisition of a subsidiary was due to the revaluation of the difference between the acquisition price and market value of a $2 \%$ increase in the ownership interest in a Taiwanese subsidiary from $49 \%$ to $51 \%$ as an extraordinary gain (FY03/2022).
The difference between the acquisition price and market value of the $2 \%$ increase was revalued as extraordinary income (for the fiscal year ending
March 31, 2022).

| Figure 23. Selling, General and Administrative Expenses |  |  |  |  |  |  |  |  |  |  | Unit: JPY mn, \% |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | FY2/2014 <br> Fuji elec | FY2/2015 <br> Fuji elec | FY3/2014 <br> Macnica | FY3/2015 <br> Macnica | FY3/2016 | FY3/2017 | FY3/2018 | FY3/2019 <br> nsolidated | FY3/2020 | FY3/2021 | FY3/2022 | FY3/2023 <br> CE |
| SG\&A expenses | 5,469 | 5,562 | 25,288 | 26,986 | 34,558 | 35,796 | 40,931 | 45,737 | 45,444 | 46,066 | 54,010 | 60,300 |
| Selling expenses |  |  |  |  | 551 | 585 | 860 | 1,362 | 1,343 | 1,187 | 1,451 | 1,350 |
| Personnel expenses |  |  |  |  | 21,494 | 22,523 | 25,855 | 28,438 | 27,665 | 30,856 | 35,596 | 39,920 |
| Depreciation |  |  |  |  | 822 | 918 | 1,109 | 1,301 | 1,542 | 1,567 | 2,397 | 2,850 |
| Development cost |  |  |  |  | 34 | 157 | 279 | 407 | 403 | 281 | 333 | 300 |
| Other |  |  |  |  | 11,657 | 11,613 | 12,828 | 14,229 | 14,491 | 12,175 | 14,233 | 15,880 |

[^7]
## Integrity \& Sustainability

| Figure 24. Forecasts for 1H and Full Year |  |  |  |  |  |  |  |  |  | Unit: JPY mn, \% |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | FY03/2021 |  |  | FY03/2022 |  |  | FY03/2023 |  |  | YoY change |  |  |
|  | 1H | 2 H | Full Year | 1H | 2 H | Full Year | 1H | 2 H | Full Year | 1H | 2 H | Full Year |
|  | Actual |  |  | Actual |  |  | CE |  |  | CE |  |  |
| Net sales | 257,163 | 296,799 | 553,962 | 362,343 | 399,480 | 761,823 | 464,000 | 466,000 | 930,000 | 28.1\% | 16.7\% | 22.1\% |
| COGs | 227,690 | 261,436 | 489,126 | 321,069 | 350,035 | 671,104 | 411,940 | 413,760 | 825,700 | 28.3\% | 18.2\% | 23.0\% |
| Gross profit | 29,473 | 35,362 | 64,835 | 41,274 | 49,444 | 90,718 | 52,060 | 52,240 | 104,300 | 26.1\% | 5.7\% | 15.0\% |
| Gross profit margin | 11.5\% | 11.9\% | 11.7\% | 11.4\% | 12.4\% | 11.9\% | 11.2\% | 11.2\% | 11.2\% |  |  |  |
| SG\&A | 21,875 | 24,191 | 46,066 | 25,837 | 28,173 | 54,010 | 30,060 | 30,240 | 60,300 | 16.3\% | 7.3\% | 11.6\% |
| SG\&A ratio to sales | 8.5\% | 8.2\% | 8.3\% | 7.1\% | 7.1\% | 7.1\% | 6.5\% | 6.5\% | 6.5\% |  |  |  |
| Operating profit | 7,597 | 11,172 | 18,769 | 15,437 | 21,270 | 36,707 | 22,000 | 22,000 | 44,000 | 42.5\% | 3.4\% | 19.9\% |
| OP margin | 3.0\% | 3.8\% | 3.4\% | 4.3\% | 5.3\% | 4.8\% | 4.7\% | 4.7\% | 4.7\% |  |  |  |
| Recurring profit | 7,518 | 8,881 | 16,399 | 15,343 | 20,144 | 35,487 | 20,500 | 21,100 | 41,600 | 33.6\% | 4.7\% | 17.2\% |
| RP margin | 2.9\% | 3.0\% | 3.0\% | 4.2\% | 5.0\% | 4.7\% | 4.4\% | 4.5\% | 4.5\% |  |  |  |
| Net profit | 5,137 | 5,738 | 10,875 | 11,988 | 13,810 | 25,798 | 14,000 | 14,000 | 28,000 | 16.8\% | 1.4\% | 8.5\% |
| NP margin | 2.0\% | 1.9\% | 2.0\% | 3.3\% | 3.5\% | 3.4\% | 3.0\% | 3.0\% | 3.0\% |  |  |  |

Source: Prepared by Global IR, Inc. based on company data
Note: Rounded under JPY mn. Rounded to one dicimal place.

| Figure 25. Quarterly Results |  |  |  |  |  |  |  | Unit: JPY mn, \% |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Quarterly Results (Cumulative) | FY03/2021 |  |  |  | FY03/2022 |  |  | FY03/2023 |  |
|  | 1Q | 1-2Q | 1-3Q | 1-4Q | 1Q | 1-2Q | 1-3Q | 1-4Q | 1Q |
| Sales | 125,147 | 257,163 | 396,737 | 553,962 | 178,064 | 362,343 | 557,145 | 761,823 | 241,320 |
| YoY | 2.6\% | 1.1\% | 3.0\% | 6.3\% | 42.3\% | 40.9\% | 40.4\% | 37.5\% | 35.5\% |
| Gross profit | 14,680 | 29,473 | 46,012 | 64,835 | 20,258 | 41,274 | 65,095 | 90,718 | 27,359 |
| YoY | 2.0\% | 0.0\% | 4.5\% | 8.3\% | 38.0\% | 40.0\% | 41.5\% | 39.9\% | 35.1\% |
| Gross profit margin | 11.7\% | 11.5\% | 11.6\% | 11.7\% | 11.4\% | 11.4\% | 11.7\% | 11.9\% | 11.3\% |
| SG\&A | 10,831 | 21,875 | 33,882 | 46,066 | 12,951 | 25,837 | 39,719 | 54,010 | 15,093 |
| YoY | -5.4\% | -3.9\% | -0.2\% | 1.4\% | 19.6\% | 18.1\% | 17.2\% | 17.2\% | 16.5\% |
| SG\&A ratio to sales | 8.7\% | 8.5\% | 8.5\% | 8.3\% | 7.3\% | 7.1\% | 7.1\% | 7.1\% | 6.3\% |
| Operating profit | 3,847 | 7,597 | 12,129 | 18,769 | 7,306 | 15,437 | 25,375 | 36,707 | 12,265 |
| YoY | 30.9\% | 13.0\% | 20.6\% | 29.9\% | 89.9\% | 103.2\% | 109.2\% | 95.6\% | 67.9\% |
| Operating profit margin | 3.1\% | 3.0\% | 3.1\% | 3.4\% | 4.1\% | 4.3\% | 4.6\% | 4.8\% | 5.1\% |
| Recurring profit | 3,665 | 7,518 | 11,868 | 16,399 | 7,514 | 15,343 | 24,561 | 35,487 | 11,280 |
| YoY | 75.9\% | 53.3\% | 52.0\% | 48.1\% | 105.0\% | 104.1\% | 107.0\% | 116.4\% | 50.1\% |
| Recurring profit margin | 2.9\% | 2.9\% | 3.0\% | 3.0\% | 4.2\% | 4.2\% | 4.4\% | 4.7\% | 4.7\% |
| Net profit | 2,492 | 5,137 | 8,138 | 10,875 | 6,255 | 11,988 | 17,822 | 25,798 | 7,857 |
| YoY | 104.1\% | 68.3\% | 75.2\% | 93.1\% | 151.0\% | 133.4\% | 119.0\% | 137.2\% | 25.6\% |
| Net profit margin | 2.0\% | 2.0\% | 2.1\% | 2.0\% | 3.5\% | 3.3\% | 3.2\% | 3.4\% | 3.3\% |
| Quarterly Results | FY03/2021 |  |  |  | FY03/2022 |  |  | FY03/2023 |  |
|  | 1Q | 2Q | 3Q | 4Q | 1Q | 2Q | 3Q | 4Q | 1Q |
| Sales | 125,147 | 132,016 | 139,574 | 157,225 | 178,064 | 184,279 | 194,802 | 204,678 | 241,320 |
| YoY | 2.6\% | -0.4\% | 6.8\% | 15.6\% | 42.3\% | 39.6\% | 39.6\% | 30.2\% | 35.5\% |
| Gross profit | 14,680 | 14,793 | 16,539 | 18,823 | 20,258 | 21,016 | 23,821 | 25,623 | 27,359 |
| YoY | 2.0\% | -2.0\% | 13.8\% | 18.5\% | 38.0\% | 42.1\% | 44.0\% | 36.1\% | 35.1\% |
| Gross profit margin | 11.7\% | 11.2\% | 11.8\% | 12.0\% | 11.4\% | 11.4\% | 12.2\% | 12.5\% | 11.3\% |
| SG\&A | 10,831 | 11,044 | 12,007 | 12,184 | 12,951 | 12,886 | 13,882 | 14,291 | 15,093 |
| YoY | -5.4\% | -2.3\% | 7.2\% | 6.0\% | 19.6\% | 16.7\% | 15.6\% | 17.3\% | 16.5\% |
| SG\&A ratio to sales | 8.7\% | 8.4\% | 8.6\% | 7.7\% | 7.3\% | 7.0\% | 7.1\% | 7.0\% | 6.3\% |
| Operating profit | 3,847 | 3,750 | 4,532 | 6,640 | 7,306 | 8,131 | 9,938 | 11,332 | 12,265 |
| YoY | 30.9\% | -0.9\% | 36.0\% | 51.2\% | 89.9\% | 116.8\% | 119.3\% | 70.7\% | 67.9\% |
| Operating profit margin | 3.1\% | 2.8\% | 3.2\% | 4.2\% | 4.1\% | 4.4\% | 5.1\% | 5.5\% | 5.1\% |
| Recurring profit | 3,665 | 3,853 | 4,350 | 4,531 | 7,514 | 7,829 | 9,218 | 10,926 | 11,280 |
| YoY | 75.9\% | 36.6\% | 49.9\% | 38.7\% | 105.0\% | 103.2\% | 111.9\% | 141.1\% | 50.1\% |
| Recurring profit margin | 2.9\% | 2.9\% | 3.1\% | 2.9\% | 4.2\% | 4.2\% | 4.7\% | 5.3\% | 4.7\% |
| Net profit | 2,492 | 2,645 | 3,001 | 2,737 | 6,255 | 5,733 | 5,834 | 7,976 | 7,857 |
| YoY | 104.1\% | 44.5\% | 88.5\% | 176.7\% | 151.0\% | 116.7\% | 94.4\% | 191.4\% | 25.6\% |
| Net profit margin | 2.0\% | 2.0\% | 2.2\% | 1.7\% | 3.5\% | 3.1\% | 3.0\% | 3.9\% | 3.3\% |

[^8]
## Integrity \& Sustainability

| Figure 26. Quarterly Business Segment Trends |  |  |  |  |  |  |  | Unit: JPY mn, \% |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Business Segments (Cumulative) (JPY mn) | FY03/2021 |  |  |  | FY03/2022 |  |  | FY03/2023 |  |
|  | 1Q | 1-2Q | 1-3Q | 1-4Q | 1Q | 1-2Q | 1-3Q | 1-4Q | 1 Q |
| Sales | 125,147 | 257,163 | 396,737 | 553,962 | 178,064 | 362,343 | 557,145 | 761,823 | 241,320 |
| Yoy | 2.6\% | 1.1\% | 3.0\% | 6.3\% | 42.3\% | 40.9\% | 40.4\% | 37.5\% | 35.5\% |
| ICs and electronic devices, others | 108,547 | 223,285 | 345,602 | 481,125 | 159,465 | 324,768 | 498,120 | 678,602 | 219,303 |
| Yoy | 1.3\% | -1.0\% | 1.4\% | 4.6\% | 46.9\% | 45.4\% | 44.1\% | 41.0\% | 37.5\% |
| Network Business | 16,600 | 33,878 | 51,135 | 72,837 | 18,599 | 37,575 | 59,025 | 83,221 | 22,017 |
| YoY | 12.3\% | 17.3\% | 15.7\% | 19.0\% | 12.0\% | 10.9\% | 15.4\% | 14.3\% | 18.4\% |
| Operating profit | 3,847 | 7,597 | 12,129 | 18,769 | 7,306 | 15,437 | 25,375 | 36,707 | 12,265 |
| YoY | 30.9\% | 13.0\% | 20.6\% | 29.9\% | 89.9\% | 103.2\% | 109.2\% | 95.6\% | 67.9\% |
| ICs and electronic devices, others | 1,738 | 3,179 | 5,933 | 9,658 | 5,328 | 11,381 | 18,644 | 27,499 | 10,766 |
| Yoy | 35.7\% | -0.7\% | 20.1\% | 38.1\% | 206.6\% | 258.0\% | 214.2\% | 184.7\% | 102.1\% |
| Network Business | 2,060 | 4,302 | 6,023 | 8,879 | 1,915 | 3,930 | 6,605 | 9,082 | 1,498 |
| YoY | 27.2\% | 25.0\% | 21.7\% | 22.9\% | -7.0\% | -8.6\% | 9.7\% | 2.3\% | -21.8\% |
| Corporate and elimination | 49 | 116 | 173 | 232 | 63 | 126 | 126 | 126 | 1 |
| Business Segment (Quarter) |  | FY03 |  |  |  | FY03/ |  |  | 03/2023 |
| (JPY mn) | 1Q | 2Q | 3Q | 4Q | 1Q | 2Q | 3Q | 4Q | 1Q |
| Sales | 125,147 | 132,016 | 139,574 | 157,225 | 178,064 | 184,279 | 194,802 | 204,678 | 241,320 |
| YoY | 2.6\% | -0.4\% | 6.8\% | 15.6\% | 42.3\% | 39.6\% | 39.6\% | 30.2\% | 35.5\% |
| ICs and electronic devices, others | 108,547 | 114,738 | 122,317 | 135,523 | 159,465 | 165,303 | 173,352 | 180,482 | 219,303 |
| YoY | 1.3\% | -3.1\% | 6.0\% | 13.9\% | 46.9\% | 44.1\% | 41.7\% | 33.2\% | 37.5\% |
| Network Business | 16,600 | 17,278 | 17,257 | 21,702 | 18,599 | 18,976 | 21,450 | 24,196 | 22,017 |
| YoY | 12.3\% | 22.6\% | 12.8\% | 27.4\% | 12.0\% | 9.8\% | 24.3\% | 11.5\% | 18.4\% |
| Operating profit | 3,847 | 3,750 | 4,532 | 6,640 | 7,306 | 8,131 | 9,938 | 11,332 | 12,265 |
| YoY | 30.9\% | -0.9\% | 36.0\% | 51.2\% | 89.9\% | 116.8\% | 119.3\% | 70.7\% | 67.9\% |
| ICs and electronic devices, others | 1,738 | 1,441 | 2,754 | 3,725 | 5,328 | 6,053 | 7,263 | 8,855 | 10,766 |
| Yoy | 35.7\% | -25.0\% | 58.6\% | 81.1\% | 206.6\% | 320.1\% | 163.7\% | 137.7\% | 102.1\% |
| Network Business | 2,060 | 2,442 | 1,721 | 2,856 | 1,915 | 2,015 | 2,675 | 2,477 | 1,498 |
| Yoy | 27.2\% | 23.0\% | 14.3\% | 25.5\% | -7.0\% | -10.1\% | 55.4\% | -13.3\% | -21.8\% |
| Corporate and elimination | 49 |  |  |  | 63 | 63 | - | - | 1 |

[^9]
## Integrity \& Sustainability

| Figure 27. Quarterly Trends by Product and Application |  |  |  |  | Unit: JPY mn, \% |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| By item | FY03/2021 |  |  |  | FY03/2022 |  |  |  | FY03/2023 1Q |
|  | 1Q | 2Q | 3Q | 4Q | 1Q | 2Q | 3Q | 4Q |  |
| Sales | 125,147 | 132,016 | 139,574 | 157,225 | 178,064 | 184,279 | 194,802 | 204,678 | 241,320 |
| ICs | 98,931 | 106,883 | 110,016 | 122,521 | 145,693 | 154,033 | 160,002 | 166,394 | 201,720 |
| PLD | 13,657 | 11,485 | 13,155 | 14,809 | 17,318 | 17,244 | 19,280 | 18,677 | 22,738 |
| ASIC | 3,478 | 5,065 | 2,243 | 2,827 | 2,808 | 4,908 | 4,142 | 3,755 | 6,130 |
| ASSP | 16,061 | 18,080 | 17,540 | 19,495 | 22,642 | 22,605 | 20,714 | 23,113 | 30,703 |
| Analog | 24,920 | 29,883 | 32,032 | 34,591 | 43,710 | 43,478 | 46,355 | 46,896 | 60,248 |
| Memory | 20,711 | 19,630 | 20,385 | 24,498 | 25,106 | 30,214 | 30,323 | 31,562 | 35,015 |
| Other standard ICs | 20,102 | 22,739 | 24,658 | 26,298 | 34,106 | 35,584 | 39,186 | 42,387 | 46,883 |
| Electronic device | 7,261 | 6,105 | 9,412 | 9,677 | 10,382 | 8,414 | 9,430 | 10,686 | 13,559 |
| Other | 2,354 | 1,750 | 2,888 | 3,324 | 3,389 | 2,857 | 3,918 | 3,401 | 4,023 |
| Network Related Products | 16,599 | 17,279 | 17,257 | 21,701 | 18,598 | 18,977 | 21,449 | 24,195 | 22,017 |
| Hardware | 4,250 | 4,797 | 5,242 | 5,817 | 4,285 | 4,438 | 4,560 | 4,585 | 4,847 |
| Software | 6,377 | 6,990 | 6,462 | 9,422 | 8,299 | 8,944 | 10,649 | 13,052 | 12,955 |
| Service | 5,970 | 5,492 | 5,552 | 6,461 | 6,013 | 5,595 | 6,239 | 6,558 | 4,214 |
| Gross profit | 14,680 | 14,793 | 16,539 | 18,823 | 20,258 | 21,016 | 23,821 | 25,623 | 27,359 |
| ICs | 8,832 | 8,748 | 10,247 | 11,268 | 13,676 | 14,544 | 16,307 | 17,861 | 19,924 |
| Electronic device | 986 | 862 | 1,193 | 1,121 | 1,417 | 1,057 | 1,133 | 1,222 | 1,692 |
| Other | 409 | 333 | 467 | 692 | 451 | 493 | 661 | 673 | 695 |
| Network Related Products | 4,449 | 4,852 | 4,630 | 5,741 | 4,712 | 4,922 | 5,718 | 5,867 | 5,046 |
| Sales by Application | FY03/2021 |  |  |  | FY03/2022 |  |  |  | FY03/2023 |
|  | 1Q | 2Q | 3Q | 4Q | 1Q | 2Q | 3Q | 4Q | 1Q |
| ICs and electronic devices, others | 108,550 | 114,730 | 122,320 | 135,520 | 159,460 | 165,300 | 173,360 | 180,480 | 219,300 |
| Communication | 24,960 | 25,970 | 23,550 | 23,700 | 28,890 | 32,950 | 32,260 | 31,350 | 45,770 |
| Communication terminal | 5,050 | 4,890 | 4,600 | 5,000 | 5,240 | 5,390 | 6,020 | 5,240 | 6,700 |
| Communications infrastructure | 19,910 | 21,080 | 18,950 | 18,700 | 23,650 | 27,560 | 26,240 | 26,110 | 39,070 |
| OA and Peripheral Equipment | 5,550 | 5,000 | 5,710 | 6,270 | 7,180 | 7,440 | 8,090 | 8,080 | 9,460 |
| Computer | 15,140 | 13,260 | 13,510 | 18,650 | 18,840 | 18,090 | 20,860 | 22,860 | 19,860 |
| Consumer Products | 8,700 | 12,370 | 12,490 | 12,760 | 15,060 | 14,720 | 13,500 | 13,320 | 15,900 |
| In-vehicle | 15,030 | 18,690 | 22,690 | 23,900 | 23,580 | 23,870 | 25,280 | 27,710 | 35,040 |
| Industrial Equipment | 39,170 | 39,440 | 44,370 | 50,240 | 65,910 | 68,230 | 73,370 | 77,160 | 93,270 |
| Network Business | 16,600 | 17,280 | 17,260 | 21,700 | 18,600 | 18,980 | 21,450 | 24,190 | 22,020 |
| Total amount | 125,150 | 132,010 | 139,580 | 157,220 | 178,060 | 184,280 | 194,810 | 204,670 | 241,320 |
| Composition by Item | FY03/2021 |  |  |  | FY03/2022 |  |  |  | FY03/2023 |
| (\%) | 1Q | 2Q | 3Q | 4Q | 1Q | 2Q | 3Q | 4Q | 1Q |
| Sales | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| ICs | 79.1\% | 81.0\% | 78.8\% | 77.9\% | 81.8\% | 83.6\% | 82.1\% | 81.3\% | 83.6\% |
| PLD | 10.9\% | 8.7\% | 9.4\% | 9.4\% | 9.7\% | 9.4\% | 9.9\% | 9.1\% | 9.4\% |
| ASIC | 2.8\% | 3.8\% | 1.6\% | 1.8\% | 1.6\% | 2.7\% | 2.1\% | 1.8\% | 2.5\% |
| ASSP | 12.8\% | 13.7\% | 12.6\% | 12.4\% | 12.7\% | 12.3\% | 10.6\% | 11.3\% | 12.7\% |
| Analog | 19.9\% | 22.6\% | 22.9\% | 22.0\% | 24.5\% | 23.6\% | 23.8\% | 22.9\% | 25.0\% |
| Memory | 16.5\% | 14.9\% | 14.6\% | 15.6\% | 14.1\% | 16.4\% | 15.6\% | 15.4\% | 14.5\% |
| Other standard IC | 16.1\% | 17.2\% | 17.7\% | 16.7\% | 19.2\% | 19.3\% | 20.1\% | 20.7\% | 19.4\% |
| Electronic device | 5.8\% | 4.6\% | 6.7\% | 6.2\% | 5.8\% | 4.6\% | 4.8\% | 5.2\% | 5.6\% |
| Other | 1.9\% | 1.3\% | 2.1\% | 2.1\% | 1.9\% | 1.6\% | 2.0\% | 1.7\% | 1.7\% |
| Network Related Products | 13.3\% | 13.1\% | 12.4\% | 13.8\% | 10.4\% | 10.3\% | 11.0\% | 11.8\% | 9.1\% |
| Hardware | 3.4\% | 3.6\% | 3.8\% | 3.7\% | 2.4\% | 2.4\% | 2.3\% | 2.2\% | 2.0\% |
| Software | 5.1\% | 5.3\% | 4.6\% | 6.0\% | 4.7\% | 4.9\% | 5.5\% | 6.4\% | 5.4\% |
| Service | 4.8\% | 4.2\% | 4.0\% | 4.1\% | 3.4\% | 3.0\% | 3.2\% | 3.2\% | 1.7\% |
| Gross profit | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| ICs | 60.2\% | 59.1\% | 62.0\% | 59.9\% | 67.5\% | 69.2\% | 68.5\% | 69.7\% | 72.8\% |
| Electronic device | 6.7\% | 5.8\% | 7.2\% | 6.0\% | 7.0\% | 5.0\% | 4.8\% | 4.8\% | 6.2\% |
| Other | 2.8\% | 2.3\% | 2.8\% | 3.7\% | 2.2\% | 2.3\% | 2.8\% | 2.6\% | 2.5\% |
| Network Related Products | 30.3\% | 32.8\% | 28.0\% | 30.5\% | 23.3\% | 23.4\% | 24.0\% | 22.9\% | 18.4\% |
| Sales composition by application | FY03/2021 |  |  |  | FY03/2022 |  |  |  | FY03/2023 |
| (\%) | 1Q | 2Q | 3Q | 4Q | 1Q | 2Q | 3Q | 4Q | 1Q |
| ICs and electronic devices, others | 86.7\% | 86.9\% | 87.6\% | 86.2\% | 89.6\% | 89.7\% | 89.0\% | 88.2\% | 90.9\% |
| Communication | 19.9\% | 19.7\% | 16.9\% | 15.1\% | 16.2\% | 17.9\% | 16.6\% | 15.3\% | 19.0\% |
| Communication terminal | 4.0\% | 3.7\% | 3.3\% | 3.2\% | 2.9\% | 2.9\% | 3.1\% | 2.6\% | 2.8\% |
| Communications infrastructure | 15.9\% | 16.0\% | 13.6\% | 11.9\% | 13.3\% | 15.0\% | 13.5\% | 12.8\% | 16.2\% |
| OA and peripheral equipment | 4.4\% | 3.8\% | 4.1\% | 4.0\% | 4.0\% | 4.0\% | 4.2\% | 3.9\% | 3.9\% |
| Computer | 12.1\% | 10.0\% | 9.7\% | 11.9\% | 10.6\% | 9.8\% | 10.7\% | 11.2\% | 8.2\% |
| Consumer Products | 7.0\% | 9.4\% | 8.9\% | 8.1\% | 8.5\% | 8.0\% | 6.9\% | 6.5\% | 6.6\% |
| In-vehicle | 12.0\% | 14.2\% | 16.3\% | 15.2\% | 13.2\% | 13.0\% | 13.0\% | 13.5\% | 14.5\% |
| Industrial Equipment | 31.3\% | 29.9\% | 31.8\% | 32.0\% | 37.0\% | 37.0\% | 37.7\% | 37.7\% | 38.6\% |
| Network Business | 13.3\% | 13.1\% | 12.4\% | 13.8\% | 10.4\% | 10.3\% | 11.0\% | 11.8\% | 9.1\% |
| Total amount | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |

Source: Prepared by Global IR, Inc. based on company data
Note: Rounded under JPY mn. Rounded to one dicimal place.

Integrity \& Sustainability


Source: Prepared by Global IR, Inc. based on company data
Note: CE=Company Estimate. Rounded under JPY mn. Rounded to one dicimal place. Caluculated by Global IR, Inc.
The total return ratio (dividends, share buybacks, etc.) is set at 30-50\%

| Figure 29. Major Shareholders (as of March 31, 2022) |  |  |
| :---: | :---: | :---: |
| Shareholder | Number of shares held (Thousands of shares) | $\begin{aligned} & \text { Percentage of } \\ & \text { Number of } \\ & \text { shares held } \end{aligned}$ |
| The Master Trust Bank of Japan, Ltd. | 9,659 | 15.53\% |
| Kamiyama Foundation (General incorporated foundation) | 6,000 | 9.64\% |
| The Custody Bank of Japan, Ltd. | 4,749 | 7.63\% |
| Haruki Kamiyama | 3,500 | 5.63\% |
| Seeds Technology, Inc. | 3,500 | 5.63\% |
| THE BANK OF NEW YORK - JASDECTREATY ACCOUNT (Standing proxy: Mizuho Bank, Ltd.) | 1,078 | 1.73\% |
| STATE STREET BANK ND TRUST COMPANY 505103 (Standing proxy: Mizuho Bank, Ltd.) | 1,037 | 1.67\% |
| Yuko Kamiyama | 1,000 | 1.61\% |
| STATE STREET BANK ND TRUST COMPANY 505103 (Standing proxy: The Hongkong and Shanghai Banking Corporation Limited, Tokyo Branch) | 842 | 1.35\% |
| GOVERNMENT OF NORWAY (Standing proxy: Citibank, N.A. Tokyo Branch) | 827 | 1.33\% |
| Total | 32,196 | 51.75\% |

[^10]
## Integrity \& Sustainability

| Figure 30. Employee Indicators |  |  |  |  |  | Unit: persons, JPY mn, \% |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | FY3/2016 | FY3/2017 | FY3/2018 | FY3/2018 | FY3/2020 | FY3/2021 | FY3/2022 | CAGR |
|  | Consolidated |  |  |  |  |  |  | 3/16-3/22 |
| Number of employees (persons) | 2,555 | 2,711 | 3,114 | 3,363 | 3,453 | 3,513 | 3,925 | 7.4\% |
| Number of temporary employees (annual average, persons) | 284 | 313 | 316 | 346 | 381 | 384 | 426 | 7.0\% |
| Sales per employee ( $¥ \mathrm{mn}$ ) |  | 135 | 156 | 146 | 138 | 143 | 184 |  |
| Operating profit per employee ( $¥ m \mathrm{~m}$ ) |  | 3.6 | 4.7 | 4.3 | 3.8 | 4.9 | 8.9 |  |
| Integrated circuits and electronic devices and others |  |  |  |  |  |  |  |  |
| Number of employees (persons) | 2,067 | 2,218 | 2,290 | 2,482 | 2,487 | 2,466 | 2,777 |  |
| Number of temporary employees (annual average, persons) | 168 | 174 | 155 | 161 | 170 | 155 | 178 |  |
| Net sales per employee ( $¥ \mathrm{mn}$ ) |  | 158 | 193 | 185 | 173 | 183 | 242 |  |
| Operating profit per employee $¥(m n)$ |  | 2.0 | 4.5 | 3.7 | 2.6 | 3.7 | 9.8 |  |
| Network Business |  |  |  |  |  |  |  |  |
| Number of employees (persons) | 303 | 317 | 621 | 675 | 740 | 819 | 907 |  |
| Number of temporary employees (annual average, persons) | 59 | 72 | 84 | 92 | 114 | 128 | 138 |  |
| Net sales per employee ( $¥ \mathrm{mn}$ ) |  | 86 | 70 | 73 | 75 | 80 | 83 |  |
| Operating profit per employee ( $¥ \mathrm{mn}$ ) |  | 14.9 | 7.6 | 7.7 | 8.8 | 9.8 | 9.1 |  |
| Corporate (common) |  |  |  |  |  |  |  |  |
| Number of employees (persons) | 185 | 176 | 203 | 206 | 226 | 228 | 241 |  |
| Number of temporary employees (annual average, persons) | 57 | 67 | 77 | 93 | 97 | 101 | 110 |  |

Source: Prepared by Global IR, Inc. based on company data.
Note: Sales and operating profit per employee are calculated by adding up the average number of employees at the beginning and end of the fiscal year and average temporary employees.

## Disclaimer

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[^0]:    Source: Prepared by Global IR, Inc. based on company data
    Note: CE=Company Estimate. Rounded under JPY mn. Rounded to one dicimal place. Caluculated by Global IR, Inc.

[^1]:    Source: Prepared by Global IR, Inc. based on company data

[^2]:    Source: Transcribed from company data

[^3]:    Source: Prepared by Global IR, Inc. based on company data
    Note: Rounded under JPY mn. Rounded to one dicimal place.

[^4]:    Source: Prepared by Global IR, Inc. based on company data
    Note: Rounded under JPY mn. Rounded to one dicimal place. Caluculated by Global IR, Inc.

[^5]:    Source: Prepared by Global IR, Inc. based on WSTS data (published August 22, 2022)

[^6]:    Source: Prepared by Global IR, Inc. based on the company data

[^7]:    Source: Prepared by Global IR, Inc. based on company data
    Note: CE=Company Estimate. Rounded under JPY mn. Rounded to one dicimal place.

[^8]:    Source: Prepared by Global IR, Inc. based on company data
    Note: Rounded under JPY mn. Rounded to one dicimal place.

[^9]:    Source: Prepared by Global IR, Inc. based on company data
    Note: Rounded under JPY mn. Rounded to one dicimal place.

[^10]:    Source: Prepared by Global IR, Inc. based on company data
    Note: Seeds Technology is an asset management company headed by founder Haruki Kamiyama.

