

## Message from the President

**We remain focused on implementing our growth strategy to realize our long-term Vision 2030 and aim to become the Global No. 1 Component & Module Supplier.**

President  
**Norio Nakajima**



### Marking record high performance in fiscal 2021

We will start with reviewing the previous Medium-term business plan, Medium-term Direction 2021, and its final year of fiscal 2021 business results. During the past three years, we have steadily worked on three issues to build a strong management base: practicing portfolio management, dramatically increasing productivity and building a stable supply system, and harmonization between people, organizations, and society. As a result, we generated record performance in fiscal 2021. This was due to strong demand for notebooks and tablets for telecommuting and online education, as well as demand from customers to build up components inventories due to supply-chain disruptions and the increased electrification of automobiles. In addition, although activities were restricted by the COVID-19 pandemic continuing from fiscal 2020, we took measures to prevent the spread of infection and continue operations centered on manufacturing sites which contributed greatly to our success.

With regard to the financial targets of the Medium-term Direction 2021, we achieved our targets of the ratio of operating income to net sales of at least 17% and ROIC (pre-tax basis) of at least 20%. However, we did not reach our net sales target of 2 trillion yen. This was due to external factors such as the impact of the U.S.-China decoupling on smartphone-related businesses and difficulties in procuring semiconductors and other materials, as well as internal factors such as strategic downsizing of the smartphone connectivity module and lithium ion secondary battery businesses due to a decline in profitability.

In addition, the asset turnover ratio, a component of ROIC, fell below the target of 1, which was an indicator that improvements were insufficient. While this is positive in that we are making upfront investments for the future, we believe that we need to ensure that these investments are linked to business expansion going forward. Although these three years have produced considerable results, there are still issues that need to be addressed. The Medium-term Direction 2024, which began in fiscal 2022, will surmount these challenges.

### Determining the direction of changes in the environment toward 2030 and responding to risks and opportunities

In November 2021, we announced Vision 2030 as our new long-term direction. When we take a high-level, long-term look at the future of the electronics industry, we believe that the direction towards technological innovation in each market for 2030 and the shift to a sustainable society will not waver. In terms of the telecommunications market, 5G is currently used primarily in smartphones since its widespread in 2020, but we expect its use to expand to non-smartphone applications in the future – particularly as high speed and increased capacity continue to evolve from its 4G predecessor. However, the other two features, multiple concurrent connections and low-latency communication, are major technological innovations unlike anything seen before. If the number of concurrent connections increases 100 times, it will be possible to connect automobiles to infrastructure for autonomous driving, connect all plant equipment for remote operation, or connect to medical networks for advanced home medical care, and such market growth will be dramatic. In the mobility market, the electrification of automobiles is progressing rapidly, and we believe that sector will continue to grow steadily as other functions are enhanced.

In our efforts toward achieving a more sustainable society, we were one of the first in the industry to become a RE100 member, which marks our commitment to addressing and leading the way to help combat climate change. The foundation of this is pursuing social value with economic value by utilizing electronic components and solutions we can provide. In terms of the global situation,

geopolitical risks are increasing due to the situation in Ukraine. We are also anticipating future changes as India, Southeast Asia, and African countries will rise to prominence due to demographic changes. Considering these developments, we will act quickly to build a business structure that does not rely on a single resource, and we will also take steps to develop multiple supply chains. (▶ P.35 Toward the realization of where Murata wants to be through Vision 2030 (long-term direction))

### Linking “yet-to-be realized financial value” to future profit generation through a continuous cycle of social value and economic value

In Vision 2030, we defined Murata's long-term vision that addresses changes in the business environment and our roadmap to achieve sustainable enhancement of corporate value. In this vision, Murata aims to become the Global No. 1 Component & Module Supplier by innovating to create a continuous cycle of social value and economic value and contributing to the enrichment of society, making Murata the leading choice for customers and society. In the process of achieving this ideal, we believe that not only the members of the technology development team, but also the manufacturing site, the employees who support them, and the organization as a whole can innovate in response to technological and social issues, such as creating new technologies, implementing them in society, and expanding the scale of their implementation.

Social value is commonly referred to as nonfinancial value as opposed to financial value. However, I call this “yet-to-be realized financial value” because efforts to shift to a sustainable society will create business opportunities if we leverage our wisdom and expertise. For example, climate change initiatives will not survive in future markets unless they are addressed today. Although the upfront investments will be significant, we will make this a sustainable effort by linking what is now yet-to-be realized financial value to profit generation.

We have contributed to environmental conservation by making electronic components smaller to reduce waste and decreasing the loss of filters used in smartphones to cut down on battery

drain. Secondly, we will develop a business that contributes to the environment through means such as supplying the market with storage battery systems that combine our lithium ion secondary batteries and power supply modules. Thirdly, we will contribute to solving social issues by promoting the use of renewable energy and energy conservation in business processes, including our own production processes. We believe that these efforts to address climate change are only possible with the cooperation of our suppliers. As such, we will continue to build strong and trusting relationships with our suppliers to ensure that we are the best choice for them as we work throughout our entire supply chain to achieve our greenhouse gas emissions reduction targets.. (▶ P.41 Management that creates a continuous cycle of social value and economic value)

Opening up new electronics possibilities with 3-layer portfolio management as the core of our growth strategy

I would like to share our thoughts on the 3-layer portfolio that are the core of our growth strategy. After joining Murata, I worked on capacitor design and development then transitioned to high frequency solutions. I felt that my job changed dramatically during that time. In the design and development of capacitors, we created standards and developed them horizontally, whereas in high-frequency-related work, we had a greater opportunity to discuss technical aspects with individual customers. Through this experience, I realized that even though we manage electronic components in the same way, each business requires a completely different approach and set of unique skills. When we try to capture these different business models, we decided to use a 3-layer portfolio concept. The first layer is the standard-products business such as capacitors and inductors. The second layer is the application-specific components business such as RF modules, lithium-ion secondary batteries, and sensors. The third layer is new businesses. The change in disclosure segments implemented in fiscal 2022 was met with some opposition. However, it is my belief that it is necessary to improve management

transparency and engage in dialogue with stakeholders to enhance corporate value. The features of each layer of the 3-layer portfolio and our initiatives for growth are as follows. (▶ P.45 Practicing 3-layer portfolio management)

As the first layer, we develop and supply products that serve as the infrastructure for electronics. We can project the direction of technological innovation and demand required over the next decade can be projected, and competitors are moving their businesses in the same direction. Under these circumstances, what we need to do is to remain absolutely competitive in the cutting-edge technology areas where we are currently ahead, and to build a solid supply system to meet medium- to long-term demand growth.

In the case of multilayer ceramic capacitors, we must be the first to respond to trends towards miniaturization and higher capacitance for smartphones and wearable devices and higher voltage for mobility applications. Regarding supply, even as production reaches more than one trillion units per year, production capacity will need also increase annually by approximately 10%per year. By steadily addressing these issues, we intend to secure and maintain our overwhelming competitive advantage going forward. Murata's unique vertically



integrated manufacturing system allows us to quickly address problems that arise in black-box production and internal processes, which are major factors in establishing a competitive advantage. Although it is sometimes pointed out that we have our own production facilities and ample assets, our view is that vertical integration is the source of our strength and something to pursuing intentionally.

The second layer requires responding to specific customer needs and establishing differentiating technologies that will enable us to outperform our competitors. As with first layer , we will leverage our unique technologies and manufacturing expertise which hawse have refined through vertical integration, such as ceramics and high-frequency technologies. In addition, we will procure elemental technologies that we do not own through strategic M&As.

In the high frequency devices and communications modules category, such as RF modules and SAW filters, we acquired Eta Wireless Inc., which has digital ET technology to reduce power consumption of RF circuits, and Resonant Inc., which has XBAR technology to design filters for 5G, in order to acquire the necessary technology for 2024 and beyond, in 2030. By combining these acquired technologies with Murata's proprietary technologies, we hope to create a state of technological superiority for the telecommunications market by 2024. Regarding our connectivity modules, we are reviewing our business portfolio and focusing on mobility and IoT applications. As the market for 5G infrastructure and other technologies expands, we will manage our portfolio by identifying the required architecture needs early.

With battery and power supply, we reviewed our business portfolio of lithium ion secondary batteries. We are scaling back our smartphone business and focusing on areas that require high output, such as power tools, gardening tools, and vacuum cleaners where we can leverage our strengths. Because there is still insufficient supply capacity for future demand, we will not hold back on capital investment to increase production capacity.

In the area of sensors, we are focusing on mobility applications. Based on the technology of VTI Technologies of Finland, which we acquired in 2012, we have products such as inertial sensors

with high characteristics utilizing 3D-MEMS technology and ultrasonic sensors developed in-house. We believe that demand for these products will grow as the level of autonomous driving increases and safety equipment is enhanced.

New segment classification (FY2022 -)

Segments	Net sales classification	Main products
Components	Capacitors	Multilayer ceramic capacitors
	Inductors/EMI filters	Inductors EMI suppression filters
Devices/modules	High frequency devices and communications modules	SAW filters RF modules Multilayer ceramic devices Connectors Connectivity modules Multilayer resin substrates (Multilayer LCP Product)
	Battery and power supply	Lithium-ion secondary batteries Power supply modules
	Functional devices	Sensors Timing devices (Resonators)
Others		Solutions business, Medical products, Machinery manufacturing, etc.

Historically, the work of component & module suppliers referred to the area of first-layer components. However, as RF circuits have become more complex over the decades, the area of second-layer devices and modules has also become the work of component & module suppliers. As a change in the definition of parts and customers occurs, we believe that this trend will continue, leading to an expanded third layer of future business. It is anticipated that the customers targeted by the third layer will not all be familiar with electronic devices and design, as is the case now. Customers will demand products that combine hardware and software, such as components and modules. If we can provide a solution that combines components and software and can also be installed during the manufacturing process, our customer base will be much broader than before. Meanwhile, it is also necessary to demonstrate the effectiveness of such solutions. Since the technology and experience we have developed to date have not been sufficient for building such a new business model, we are taking on various challenges without limiting ourselves.

Currently, the first and second layers are the pillars of our business. However, in the long run,



there is a risk that electronic components will become commoditized as the market and society change. As such, we need to diversify our revenue sources. In portfolio management, we tend to focus on business renewal. Alternatively, it is also necessary to nurture the business over an extended period of time. There has been difficulty in discerning this. It took about 20 years for capacitors to become a major earner, and the RF modules that I worked on were under pressure to be discontinued until the business foundation that we have today was established. We will nurture the third layer to become a pillar of our business in 2030 and beyond while carefully monitoring the results as we take on this challenge.

**Realizing an organization where autonomous decentralized organizational management is achieved through diverse human resources and a shared management philosophy**

Under the Medium-term Direction 2024, the first phase of Vision 2030, the company set a net sale target of 2 trillion yen and the ratio of operating income to net sales and ROIC (pre-tax basis) of at least 20% each. Regarding social value, we set goals related to the environment, as well as diversity and ES related to human capital. With regard to human capital, we have focused on improving the work environment by investing in employee training and implementing work style reforms. I will again discuss diversity and autonomous and decentralized organizational management as they relate to these goals.

Because we manufacture products through vertical integration, no job can be done by a single person. We know that when people work together, it creates a sense of belonging and togetherness that helps set Murata apart. Meanwhile, going forward there will be an increasing number of situations in which specialized talent will be acquired, such as those who are skilled in digital transformation (DX) and those who possess special skills in certain fields, and new forms of employment may be introduced. However, as the number of employees with diverse backgrounds increases due to mid-career hires and M&As, we believe it is important to share our management philosophy and ensure that we are unified (inclusion) to ensure a diverse workforce. In M&As, we make acquisition decisions after determining whether the other party understands and is on board with Murata's Philosophy. With that in mind, I want to emphasize the importance of "diversity on inclusion" (DonI), not diversity & inclusion (D&I). We will continue to build on this concept to create opportunities for our diverse human resources to play an active role on a global scale.

Regarding autonomous and decentralized organizational management, since I took office as President, I have stressed its importance within the company, telling people that it is necessary to fulfill all three elements of autonomy, collectiveness, and evolution. In the past, our company demonstrated strength by optimizing each organization at each site and in each department. However, as I visited our locations, there were times when I felt that what was being done at one site was not being deployed at another or that people did not know

what others were doing. In making decisions, it is imperative that we consider the bigger picture, rather than make decisions based on what is good for yourself. It is also important to pivot on an idea if the environment changes. We aim to evolve into a stronger organization by having each employee think independently, make decisions, and take quick action with an awareness of this overall optimization and response to change. I also believe that everyone will feel a sense of fulfillment and growth through the practice of these actions, which will lead to improved engagement. Although it will take time for autonomous and decentralized organizational management to permeate the company, we will work to increase employee understanding by providing opportunities for discussion across sites and departments and by developing examples of shared technologies at manufacturing sites. (▶ P.59 Murata's human capital - Strengthening the human resources base and organizational capabilities)

**Aim to enhance corporate value by implementing growth strategies and preparing for the future from a medium- to long-term perspective**

In the current global economy, we have to closely monitor events such as monetary tightening by central banks in Europe and the US, shortage of power semiconductors for automobiles, production constraints due to the repeated spread of COVID-19, and soaring raw material and fuel costs. Amid an uncertain economic outlook, we feel there is a risk that our products will be directly affected by economic fluctuations due to the high market share of our products. However, even under these circumstances, instead of decreasing, we will invest where we must and strengthen our management base by taking on the challenge of streamlining, improving quality, and investing in differentiating technologies. In the core fields of communications and mobility, we will surpass competitors with our cutting-edge lighter, thinner, shorter and smaller technology. In the high-frequency area where our presence is declining, we will once again focus on our technology to make Murata the best choice. In addition, we will take this opportunity to promote the use of sensor networks and wireless systems

for facility management at plants that are expected to shift from over-operating conditions to standard operations where they have not been able to leverage 5G, and present our production sites and plants to customers as best-in-class models for elemental technologies. Demand for local 5G seems sluggish, partly due to the high initial investment. However, we intend to strengthen our proposal activities to our customers and create a market by introducing this technology to our production sites and accumulating empirical data through our own experience with its use in smart factories.

In our industry, medium- to long-term demand is growing steadily in all markets, including telecommunications, mobility, environmental (with a focus on energy), and wellness (centered on healthcare). In addition, companies now have a greater role to play in the transition to a sustainable society. We are well prepared for this and will strive to become the Global No. 1 Component & Module Supplier. We hope that stakeholders will also take a medium- to long-term approach when considering whether Murata is on the right path. We humbly ask for your ongoing support going forward.

**Autonomous and decentralized organizational management**

