## **Foreword**

## Aiming to Achieve Growth through Creativity and Innovation



NISHIDA Naoto
Corporate Executive Vice President

The Toshiba Group Management Policy Vision prioritizes "growth through creativity and innovation" generated by "value creation" and "productivity improvement." Our focus is on three key strategic areas: energy, storage, and healthcare. In order to realize our management policy vision, we are striving to deliver not only creative and innovative products but excellent user experiences as well, because we understand that customers find greater value in the new or enhanced experiences offered by products than in the products themselves. In keeping with this commitment, our aim is to bring together the essence of our technologies, product development expertise, and monozukuri techniques (the art and craft of manufacturing). We will continue to deliver unique value to our customers to fulfill their present and future needs.

The following is a brief overview of our achievements over the past year.

In the energy field, as part of our efforts to assist with the recovery from the Great East Japan Earthquake, we have supplied the Fukushima Daiichi Nuclear Power Station with a system that is capable of removing many types of radionuclides from the huge amount of contaminated water there. In the global arena, we have helped to expand the use of renewable energy sources through the installation of large-scale photovoltaic systems in Germany and the delivery of new hydroelectric and geothermal power generation facilities throughout the world. The power electronics segment has witnessed Toshiba innovations such as 7 kW wireless power transmission technology for electric vehicle (EV) chargers, heat-resistant rare-metal-free magnets with high magnetic force, and a technology for new energy storage systems using SCiB<sup>TM</sup> battery modules.

In the storage field, we have collaborated with SanDisk Corporation to develop the world's smallest 64 Gbit NAND flash memory chip, which is fabricated using the second-generation 19 nm process. We have also expanded our lineup of solid-state drives (SSDs) for enterprise use featuring high performance and high endurance.

In the healthcare field, we have developed a 1.5-tesla magnetic resonance imaging (MRI) system that achieves the smallest footprint and lowest power consumption in its class. As part of our new-concept innovation efforts, we have also released glasses-free three-dimensional (3D) medical displays for X-ray computed tomography (CT) imaging. Additionally, we have launched a new Web service in the service segment that supports medical care for and well-being of the elderly.

The success of the smart community business requires a fusion of energy, storage, and healthcare technologies. In this field, we have introduced global cloud computing platform services that provide highly available information and communication technology (ICT) resources. Furthermore, we have established the Smart Community Center in Kawasaki, Japan, which is supporting and enhancing the global development and expansion of our smart community business. The Center also facilitates closer cooperation among our nearby research centers, manufacturing sites, and regional communities.

In the field of digital products and home appliances, we have released second-generation 4K ultra-high definition televisions (UHDTVs) with a resolution of  $3\,840\times2\,160$  pixels that incorporate a new video processing engine to reproduce fine and realistic textures. In the service segment of this field, we have launched the "Home Appliance Concierge" cloud service that is designed to connect smart home appliances together to make the lives of users more convenient and comfortable.

These are just a few examples of the technological innovations achieved by the Toshiba Group. We hope that you find *TOSHIBA REVIEW Science and Technology Highlights 2014* both informative and enjoyable to read, and would appreciate your feedback, suggestions, and comments.