

# Remarks for Special Issue on Electronic Devices

On behalf of everyone at NEC Electronics and NEC TOKIN, we would like to begin by expressing our heartfelt gratitude for your support and encouragement.

In order to present the reader with a broad overview of the state of electronic device development in the NEC Group, we have published this special series on electronic devices. In this issue, we have the pleasure of introducing you to the research and development activities of two affiliate companies of NEC Group that are involved in electronic device manufacture: NEC Electronics and NEC TOKIN.

Together with the spreading advance of the Ubiquitous Society has come the dawn of the Age of Information and Knowledge, which further fosters the growth of the data and know-how carried by the ubiquitous network. In the Ubiquitous Society, every imaginable electronic device is networked, while on the network tremendous amounts of information and knowledge of every variety are stored, communicated and processed. Together with this evolution of the social environment, it is necessary to not only enhance the performance of the electronic equipment and devices used by the Ubiquitous Society, but also to develop new products that anticipate the needs for society and the marketplace for a higher level of safety, security and reliability and to propose optimal solutions.

In the domain of semiconductors, the widespread diffusion of large-screen flat panel televisions compatible with digital broadcasting and the consequent expansion of the market has in turn stimulated demand for digital image processing LSI that are compatible with high definition television (HDTV) and deliver higher performance with lower energy consumption and at a lower cost. At the same time, we are witnessing growing demand for higher performance and reliability from the semiconductors, which are essential to the realization of electronic control of automotives and “smarter” cars for enhanced automotive safety and comfort. While advancing its business in the three main product groups of SoC (System on Chip), Microcomputers, and Discrete and ICs, NEC Electronics also continues to answer the needs of customers through efficient exploitation of its cutting-edge development of original technologies and resources that span the core business sectors. In the future, NEC Electronics is committed to providing more advanced solutions with a focus on satisfying the demands of the digital consumer market for higher performance with low power consumption at a lower cost, and those of the automotive sector where high reliability is a priority. Taking full advantage of the

synergies generated by the each layer of technology and its position as an IDM (Integrated Device Manufacturer) to realize new levels of performance and low energy consumption in semiconductor products, NEC Electronics aims to both satisfy the needs of customers and create products that a people-friendly and eco-friendly.

In the field of electronic components, customers are looking for higher performance such as more compact size, low voltage/high current and other device performance enhancements. At the same time, there is strong demand for the development of products that are built on new concepts compatible with component packaging technologies, products that take into consideration of environmental responsibility and recycling, and products that offer improved product safety and reliability. Since first setting out to become “Device Creation Company Originating from Innovative Materials”, NEC TOKIN has shaped its business by providing customers with device solutions broadly divided into three areas: Energy, Noise & Power, and Access. While strengthening its tantalum capacitors, EMC devices, miniature relays and other core products, NEC TOKIN is developing new markets through strategic products such as the Proadlizer, laminated batteries, piezoelectric devices and RFID. Through this approach, the company is contributing to society by responding to its needs and those of the marketplace by providing original solutions.

This special issue will report on the latest results of the technological development activities of our two companies on the frontier of our respective fields. It is our hope that the reader will gain a deeper understanding of both the cutting-edge products and device technologies possessed by our companies as well as the innovative solutions that we offer.

By working in even close concert with the NEC Group in the future and continuing to produce innovative devices, NEC Electronics and NEC TOKIN are committed to anticipating and providing optimum solutions that our customers seek. With the continued support and guidance of all our stakeholders, we look forward to leading the Ubiquitous Society into the Information Age.



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