



## Preface

### Special Issue on the Broadband Internet

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In 1996, we published a special issue of this technical journal entitled “Broadband Telecommunications/CMOS Technologies.” In those days, “broadband” was a technical word used by the telecommunications community; but now, it has become a more general word that symbolizes the future IT infrastructure.

For the last 10 years, the Internet has been creating a completely new business arena that is strongly impacting the business world. For example, it has been steadily increasing the range of business opportunities and promoting the globalization of business. However, for a network to become a highly profitable business arena, it must be able to quickly and flexibly cope with the rapid changes that are occurring in the business world. We expect that the Broadband Internet will meet these needs by providing transparent, high-speed information conduits.

Penetration of the Broadband Internet can be achieved not only by speeding up telecommunications systems, but also through an overall technological advancement that includes, for example, the development of high-performance servers, large-capacity storages, and high-speed, highly integrated semiconductor technologies. These developments and the technologies that were already available in 1996 when our first “Broadband” special issue was published will enable us to build the Broadband Internet and use it as a practical social infrastructure.

Recently, Fujitsu announced a comprehensive IT infrastructure for the emerging era called “TRIOLE” and started to provide TRIOLE products, including servers, storages, and networks. TRIOLE is designed to respond to our customers’ heightened need to flexibly adapt to changing business circumstances, cope with increased system complexity, and reduce their total cost of operation. Fujitsu is now drawing on its enormous IT expertise to develop core technologies for TRIOLE.

TRIOLE is based on the Broadband Internet. It needs the high performance of the Broadband Internet, and at the same time, it may show how the Broadband Internet can help improve our customers' business. This special issue covers R&D topics in key technologies—ranging from broadband services to platform technologies—that are now available for application in advanced Fujitsu solutions. The Broadband Internet must evolve continuously so it can adapt to the needs of its users. Fujitsu will help steer it in the right direction through the deep insights of our researchers and by paying careful attention to our customers' requirements and opinions. We hope that this issue will give us an opportunity to share with our customers the evolutionary fruit of the Broadband Internet.