

Remarks for Special Issue on Technologies for Mobile Terminals

Advances in mobile terminals have come at an increasingly high pace in recent years. Not only has the total number of subscribers in Japan exceeded 100 million, but also over 90% of them have signed up for mobile internet services. Moreover, we have seen the appearance of many new services that transcend the domain of mobile telecommunications such as “Osaifu-Keitai”^{(R)*1}. The mobile telephone market is huge with about 50 million new handsets and terminals purchased annually. Also according to a recent survey, it is reported that global penetration of mobile phones has now reached 50%. For people all over the world, the mobile phone has indeed become an indispensable item.

The power driving this giant market comes from the diverse technologies incorporated in the tiny mobile terminal case. A ceaseless technological revolution has given birth to a constant stream of innovative value for mobile terminals and created new markets.

Since first entering the mobile phone market, NEC has been at the forefront of technological innovation. We have been leading the market with innovations in every field from mechanical design technology that makes fold-up phones possible to i-mode^{(R)*2}, 3G telecommunications technology, the integration of Linux^{*3} OS and the PC-like full browser functionality in mobile phones. The scope of our efforts in these areas continues to broaden today, encompassing extremely diverse technologies ranging from the arena of hardware including semiconductors, LCDs, mechanical and electrical engineering, wireless and terrestrial digital technology, sound and cameras to the world of software such as operating systems, middleware, Java^{*4} and web services.

In this special issue on the various technologies that support the advance of the mobile terminal, we will first introduce the latest trends related to the hardware/software platforms that serve as both a foundation for development and the source

*1 “Osaifu-Keitai” is a registered trademark of NTT DoCoMo, Inc. “Osaifu-Keitai” is mobile phones equipped with contactless IC card. With this function, you can use mobile phones as electronic money, credit card, electronic ticket, membership card, airline ticket, and more.

*2 “i-mode” is a registered trademark of NTT DoCoMo, Inc.

*3 Linux is a trademark or registered trademark of Linus Torvalds in Japan and other countries.

*4 Java is a trademark or registered trademark of Sun Microsystems, Inc, in the United States and other countries.

for our competitive edge. Next, we will focus on three important essential NEC technologies: technologies related to the cameras, which among the many peripheral devices of mobile terminals has boasted phenomenal performance gains; “slim” miniaturization technologies, which continue to be pursued with a high priority and earn high evaluations; and wireless LAN technologies, an area in which NEC is leading other companies especially in the chip implementation of this technology. Though these, of course, represent only one small part of the technologies that shape today’s mobile terminals, we hope that through this issue, we can help the reader obtain deeper insights into mobile technology and NEC’s role in its future.

NEC is currently leading the way in the construction of the Next Generation Network (NGN), which will serve as the platform for the Ubiquitous Society of tomorrow. In that world, the mobile terminal is envisaged as a final and key link connecting “people” to the network, its evolution will make unprecedented leaps that will demand epoch-making innovation. Future terminals should be a joy, exciting just to hold and enable effortless reception of a variety of new services provided via networks. It also must be sensitive to a variety of social issues such as our aging society and friendly to human and the earth with user interface that anyone can use easily and with low power consumption.

With this vision in mind, NEC is further boosting its mobile terminal development efforts, paying particular attention to the shape of each terminal and the human interface, simultaneously honing our established edge in telecommunications-related technologies - all to drive a constant evolution in the attractiveness of each mobile device. In addition, in the field of PCs, networks, servers and every imaginable related technology possessed by NEC, we are strengthening their ability to work in concert and aim to provide innovative value to people and society.

We hope that you will continue to provide us with your invaluable support and encouragement as we open new frontiers in innovation.



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