Preface
Fujitsu's Activities in Mobile Computing

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As the number of PC users has increased, mobile computing has spread rapidly, allowing people to use their computers anytime and anywhere, whether in the office or even outdoors. Light notebook PCs and portable information devices are now in widespread use, and high-performance PCs and networks with advanced functions have contributed much to the growth of mobile computing.

– Hardware with advanced functions and high-speed processing capability:
  Rapid technical innovation of CPU, memory, hard disk, LCD, etc.
– Improved OS and application software:
  OS with advanced functions and various application software products
– Useful network functions:
  Propagation of high-speed mobile communication infrastructure and Internet environment

Accordingly, the range of mobile computing is greatly expanding, and mobile computing is now an essential part of our society.

– Sales and service engineers are working outside of their offices.
– The latest information can be obtained immediately, even from the customer's site.
– A seamless environment can be built at the office, school, and home.
– For indoor use, mobile computers can be used as a PC requiring less space.

As mobile computing has become more important, we have adopted a global business strategy, tailoring a broad range of products to regional market needs in North America and Europe as well as Japan.

– A high-end notebook PC with advanced functions. This model em-

ploys a dual multibay structure in which multiple devices (e.g., floppy disk drive, CD-ROM drive, DVD-ROM drive, and batteries) can simultaneously be built in.
- An A4-size slim notebook PC that is portable and expansible. This model is suitable for outdoor use because of its slim body, but it can also be used as a desktop PC indoors because of its attached unit.
- A compact and light notebook PC. This model is ultra-portable and can be used anywhere thanks to its A5 size and weight of only 1.1 kg.
- Small and light PCs with pen input. The B5-size model is called "Stylistic" while the A4-size model is called "Point." "Stylistic" is popular for its functions and operability, and is mounted in the space shuttles of NASA.
- A compact and light portable information terminal. This model, called "INTERTop," offers Internet support and is convenient for sending and receiving information.

When developing products, we use our core competencies and know-how such as high-speed and high-density mounting methods, reliability designing, and simulation technique, which we developed through our experience with mainframes. We also research, develop, and apply the latest technology trends. We are implementing the following three key technologies in advanced mobile computing:
- Light, high-quality, and high-density hardware technology
- Mobile communication technology
- Architecture of convenient user environment

Regarding the hardware technology for mobile computing, we use high-performance components, for example, high-performance CPUs, and make machines smaller and lighter using light molding materials, resin-metal hybrid cabinets, multichip modules, and multipackage modules. Radiating and cooling is done using structure materials instead of fans, while power consumption is reduced by using a power control IC. With these techniques, in 1990, we released the "FMR CARD," which weighed less than 1 kg and ran for eight hours on two size AA batteries. We have also adopted these techniques in our latest models, the BIBLO-NC and BIBLO-NP series. The BIBLO-NC features a high-performance CPU and has the same user environment as that of a desktop PC even though it is just A5 size, while the BIBLO-NP has a 12.1-inch LCD and weighs only 2 kg.

For mobile communication, we have developed high-speed modem modules with low power consumption and software products such as IR Gateway, WebCross, and Network AccessDirector (provisional name). These software products overcome various problems related to mobile

communication.

Lastly, regarding the architecture of the convenient user environment, we have been analyzing an optimal design for mobile computing to suit various user situations. We have developed not only regular PCs and portable information terminals, but also peripherals such as storage drive devices, super-small scanners, and PC cards that enhance the security of mobile computing.

We also produce a whole range of application software products that support Windows 98 and provide information through the Web at sites such as FM WORLD, Mobile World, and INTERTop WORLD. In this way, we make mobile computing more convenient.

Without the above technologies, mobile computing will never be truly convenient. We make our products attractive by carefully balancing technology with usability.

In this issue, we will introduce some of the technologies and services we have developed for the mobile computing environment.

As technology advances, mobile computing will spread and become even easier to use. And as mobile computing grows, we will continue to develop technologies for products and services to meet the demands of our customers all over the world.