

## **Dolch's Color Flat Panel Portable PC Implemented 82C457 & Sharp Color TFT Flat Panel**

Dolch gave me this portable PC as a gift. It became an excellent demo machine for customers both in Japan and US.

Later on, I was able to apply it for the demonstration of MPEG audio decoder LSI at remote sites.

## **World's first 486-50MHz portable introduced.**

*Dolch Computer systems brings Intel's fastest CPU to portable market.*

**Milpitas, CA August 5, 1991** - Dolch Computer systems announced today, the world's first implementation of Intel's 50 MHz 486 processor in a portable computer. Known for over 3 years for providing the industry's most powerful portables, Dolch broadens its leadership position with the introduction of the Dolch P.A.C. (Portable Add-In Computer) 486-50E portable computer.

Dolch has always pushed the limits of computer technology. It currently offers the world's fastest 386 SX 20Mhz, 386 DX 33Mhz, and 486 33MHZ portable computers. It also shipped the first 486 portable in 1989.

"The new 486-50E machine offers the sophisticated power user the ultimate in speed and portability," stated Volker Dolch, President of Dolch Computer Systems. It utilizes the 32-bit EISA architecture to maximize throughput to peripherals. This implementation, along with the high speed SCSI interface and cache controller, provides superior disk I/O producing unparalleled performance.

The Dolch P.A.C. 486-33E, the company's previous flagship product, significantly outperforms IBM's P75 portable which also uses a 486-33 MHz chip. Dolch attains this superiority by making full use of its 32-bit EISA architecture, and employing a high speed SCSI hard drive with 1MB of disk cache. IBM's P75 uses only 16-bits of the Micro Channel Architecture resulting in much slower disk data transfer rate. At the same time, the EISA machines don't sacrifice existing ISA-based technology as IBM's MCA standard does.

The Dolch 486-50E offers performance enhancement of up to 50% over the 33MHz processor. Dolch accomplishes this partly with 128K of external RAM cache and 1MB of dedicated cache attached to the disk I/O. It achieves a full 21.5 MIPS of performance.

At this level of computing power the line between RISC workstations and CISC PCs truly begins to blur. The Dolch 486-50E becomes a very efficient portable workstation, and a portable PC with more power than most desktop computers. "Computer intensive applications with a real need for speed and portability will find this new offering essential," Dolch said. The primary market for the 486-50E includes design engineers who use computer intensive CAD/CAM/CAE applications, software developers who compile huge amounts of data and scientists or researchers who require quick analysis. The added benefit of portability makes the Dolch products even more attractive.

"More and more of today's computer users want portability. But no one wants to sacrifice power. With the Dolch P.A.C. 486-50E you get both. Many of our customers don't even own another computer," concluded Dolch.

### **System Expansion**

Users requiring a high level of system adaptability in addition to raw power will find 3 expansion slots available in the Dolch 486-50E. These uncommitted, full-size ISA/EISA internal expansion slots with bus mastering capability provide unprecedented flexibility in a portable PC. In cases where extraordinary expansion is required, Dolch offers its proprietary Back-PAC expansion chassis. Each Back-PAC contains three additional full-sized ISA slots with an additional 200W power supply and cooling fan. Hard disk drives are available from 40 MB up to 420 MB with RAM expansion up to 32 MB.

### **24,389 Colors**

Dolch offers two VGA compatible options in its screen displays. The



standard bright red gas plasma display offers 16 shades of gray on a black background. The TFT (thin film transistor) Active Matrix color display produces full vivid color in a 10.4" flat panel screen. The screen displays 24,389 colors utilizing a Sharp Electronics TFT flat panel display, Chips and Technology's 82C457 VGA flat panel controller chip-set and a proprietary color generation algorithm.

The unique implementation of these technologies produces a contrast ratio of 150:1 and the clarity surpasses most regular CRT monitors. Dolch Computer Systems introduced the computer industry's first active matrix color portable in June, 1990. The second generation TFT screen was introduced to the world in April, 1991.

### **About Dolch Computer Systems**

Dolch manufactures and distributes high-performance portable 286, 386 and 486 computers for the power-user who requires a high level of system adaptability and expandability. The company's products are marketed worldwide to a broad range of scientific, engineering, industrial users via value-added resellers and sold direct to large corporations and government organizations.

The company was founded by Volker Dolch, a German pioneer in the development of microprocessor instrumentation. The company is privately held and located in Milpitas, California with subsidiaries in Germany and the U.K.

### **Pricing and Availability**

Base price for the standard Dolch-486-50E is \$16,995. Standard configurations include 8 MB of RAM, 200 MB high speed SCSI hard drive, 1.44MB 3.5" floppy drive, and VGA Gas Plasma display. The company offers 2-years of on-site service at no charge for all its products with the return of a completed registration card. It covers parts for 1 year. The product will ship beginning October, 1991.



*Volker Dolch*  
*President*

**Dolch.**  
Computer Systems

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