



**PC-Interface – Locus's network solution**

**PC-Interface (over 100,000 installations) is a low cost, network file and printer server that bridges the gap between multiple personal computers with different hardware configurations running DOS applications and a single, common, UNIX file system.**

Locus Computing Corporation is pleased to make Merge 286 and Merge 386 available to qualified original equipment manufacturers. To establish an OEM relationship, please contact Locus in Santa Monica, CA.

PC-Interface is offered to OEMs, VARs, and end users. For more information on PC-Interface, please direct your inquiry to Locus's PC-Interface Sales Department.

## *Realize the power of Intel's 80386™ microprocessor*

### *Systems software providing transparent integration of DOS and UNIX®*

Now there's an 80386 operating system that combines DOS and UNIX in a unified, synergistic computing environment. Merge 386™ from Locus Computing Corporation provides the ultimate computing environment by combining the applications availability of DOS with the powerful multiuser, multitasking facilities of UNIX.

Merge 386 provides a single-system view of both DOS and UNIX in which users may choose either system interface or a combination of both. DOS users can run multiple DOS sessions and gain powerful UNIX capabilities, such as communications, file sharing/protection, and centralized backup and print facilities. UNIX users, on the other hand, gain access to more than 15,000 DOS applications.

#### **Merge 386 provides:**

- A virtual PC environment in which all DOS applications run "off-the-shelf"
- Transparent execution of DOS and UNIX programs from either environment
- Multiple DOS environments running concurrently on the same processor
- A fully integrated file system

Locus Computing Corporation pioneered transparent DOS and UNIX integration first with PC-Interface™ and later with Merge 286™ and AT&T's Simul-Task. By uniting DOS and UNIX, Locus has achieved the ultimate computing environment by combining a vast library of DOS applications with the powerful multitasking facilities found in UNIX System V.3.

In 386-based computers running Merge 386, DOS and UNIX programs execute concurrently and transparently. Applications written for either environment run without modification or recompilation. And Merge 386 lets data pass between DOS and UNIX programs, providing unprecedented cooperation between what were once separate and distinct operating environments.

**M E R G E 3 8 6™**

  
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The following names are trademarks of the companies indicated: Merge 386 & Merge 286, LOCUS and PC-Interface, LX-Windows, Locus Computing Corporation; UNIX, AT&T; XENIX and MS-DOS, Microsoft Corporation; IBM and PC-DOS, International Business Machines; Intel, followed by any numeric suffix, Intel Corporation.

## The user works from the prompt of his choice

Merge 386 appears to users as a single operating system in which DOS and UNIX applications can be executed to suit different needs. Users may transparently invoke DOS commands from the UNIX interface or UNIX commands from the DOS environment. It isn't necessary for users to distinguish between the two.

At the heart of Merge 386 is a software driver – developed by Locus for PC-Interface and later refined in Merge 286 and SimulTask for AT&T – that maps DOS systems calls into their UNIX equivalents. This underlying technology provides a single, integrated file system where DOS and UNIX applications have complete access to files regardless of where they were created. Even incompatible UNIX file names fit into the DOS file naming scheme through Locus's unique file name mapping technology.

Also significant is Merge 386's ability to create multiple virtual-86 environments running concurrently on the same microprocessor. In virtual-86 mode, DOS sessions appear to have control of all the machine's resources, when in reality they are running in their own protected virtual environments as tasks under UNIX System V.3.

There are no physical limits on the maximum number of 8086 environments. The only limitation is the same limit one would place on any multiuser system – that is, how many users can you have before the system's performance degrades beyond acceptable levels?

And Merge 386 supports multiple users running DOS or UNIX programs in the foreground, while one or more programs run in the background – letting users transparently switch between programs and environments at will. Users share resources without rebooting, relogging-in, or stopping and restarting programs or operating systems. Merge 386 allows for the concurrent and transparent switching between DOS (virtual-86) and UNIX (native 80386) without interrupting the normal flow of operation.

Merge 386 uses the 80386's on-chip memory protection to carefully manage and prevent DOS and UNIX from interfering with each other, ensuring the continued integrity of ongoing processing.

### Additional Merge 386 features

- Totally integrated, seamless implementation of DOS and UNIX within a single, unified system.
- Support for multiple DOS 3.2 virtual machine environments from the console, as well as from simple ASCII terminals, PC terminals, PC workstations, and diskless PCs.
- Multitasking such that multiple DOS programs can run at the same time multiple UNIX programs are running. And the ability to alternate between these sessions at will.

### Hardware and software requirements

- IBM PC AT or compatible personal computers built around Intel's 80386 microprocessor, or non-AT, 32-bit systems.
- UNIX System V.3 with optional porting to XENIX® operating system.
- MS-DOS™ or PC-DOS™ 3.2.
- A minimum of two megabytes of random access memory.

Note: Requires a minimum 20-megabyte hard-disk capacity. The system capacity should accommodate both UNIX and DOS running simultaneously with several applications running under them.

## Availability

Locus Computing Corporation is currently making Merge 386 available to qualified systems manufacturers. Final releases are available to manufacturers in the first quarter of 1987.

Locus provides complete quality assurance testing and support, including documentation, hotline support, bug lists, and semi-annual updates.

## Why choose Locus?

Locus Computing Corporation is a pioneer in merging DOS and UNIX operating systems. Founded in 1982, Locus is known primarily for its extensive contract work with such companies as AT&T, UNISYS and Motorola.

Locus – an acronym for Local Cooperating UNIX Systems – first developed the LOCUS™ Operating System, a distributed UNIX operating system providing total network transparency so a collection of computers – whether workstations or mainframes – appears as a single computer.

Continuing in its development of advanced software packages, Locus was first to develop simultaneous DOS/UNIX network software – PC-Interface – and first to deliver simultaneous DOS/UNIX on a single microprocessor – Merge 286.

From its birth as a brainchild of seven systems experts at UCLA to its current status as the acknowledged leader in DOS/UNIX integration, Locus Computing Corporation continues to create solutions to today's distributed computing problems.