

## Description

FlexOS 386 is a real-time, protected-mode operating system with broad functionality for computers based on the Intel® 80386 microprocessor. FlexOS 386 complements the application program interface (API) it shares with FlexOS 286 and FlexOS 186 by adding flat-space, 32-bit memory addressing and a fully DOS 3.3 compatible application environment. Toolkits are available for application development, system development, and OEM redistribution.

## Usage

FlexOS 386 is the ideal system software platform for turnkey solutions that require multitasking and guaranteed real-time response. Industrial applications that can benefit from the power and versatility of FlexOS 386 are process control, data acquisition, robotics, and motion control. FlexOS 386 is also ideal for applications with transaction processing requirements such as point-of-sale, inventory control, electronic funds transfer, and automated material handling systems.

## Key Features

- **Real-time:** Interrupt latency measurable in the 10s of microseconds; pre-emptive, event-driven dispatcher
- **Multitasking:** Prioritized scheduling with no limit to the number of processes; interprocess communication and synchronization through pipes and semaphores; multi-user support
- **Modular architecture:** Independent resource managers control disk, console, pipe, and other device I/O; unneeded resource managers can be left out of system
- **Flexible device interface:** Dynamically loadable and unloadable device drivers; easy modification and reconfiguration without shutting down system
- **Self-hosting:** Toolkits provide tools (e.g., assembler, linker, debugger) and utilities for creating applications and generating new systems; native C compiler supporting 32-bit addressing available
- **Memory:** Protected-mode, both 32-bit flat or 16-bit segmented addressing models supported; up to 3 gigabytes user address space and 1 gigabyte system address space; shared memory functions
- **DOS:** Enhanced, DOS-compatible file system with password protection, user/group/world access protection, and large disk support; FlexOS 386 DOS Application Environment provides MS-DOS® 3.3 function call support and runs GEM® applications

## Development Environment

The FlexOS development environment is a Compaq® DeskPro® 386. Minimum memory requirement is 2 megabytes. Hard disk drivers available support Compaq 40, 70 and 130 megabyte and IBM® PC AT drives. The console system supports character-mode I/O, multiple windows, and graphic consoles. MDA and CGA graphics and mouse are supported through Digital Research GEM® applications running under the DOS Application Environment. The port drivers support RS-232 serial and Centronics™-type parallel devices. Target system is any 80386-based computer.

## Availability

Now

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**DIGITAL  
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INC.**

Digital Research Inc. is a privately-owned software company with headquarters in Monterey, California. The company provides system software and GEM graphics applica-

tions for the full spectrum of business, professional, educational, public sector and commercial microcomputer use.

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