



# ROM-DOS™

## The Essential Operating System for x86 Devices

### Small Footprint, Foundational OS, Connectivity Tools

#### ROM-DOS is the OS for x86 devices

ROM-DOS™ was introduced in 1989 as a DOS compatible operating system engineered specifically for embedded developers. Since that time ROM-DOS has grown into the industry leader in DOS technologies by delivering such features as kernel level FAT32 and Long File Name support. ROM-DOS has never lost its focus on embedded developers; Datalight continues to offer source code modules in library and assembly format that allow developers control over their DOS. Requiring as little as 186 CPU and a small amount of disc space, it is an essential DOS environment for OEMs and system developers.

#### ROM-DOS has a Small Footprint

ROM-DOS was specifically designed for use in embedded systems, and its features make it uniquely suited to embedded devices. These features include RXE, ROM-DOS BUILD Utility, and Dynamic Device Driver Loading.

RXE minimizes RAM by running applications out of ROM. Application programs can be easily converted to have the code run from ROM using the Relocatable Executable (RXE) feature in ROM-DOS. The conversion process is completely transparent to the application program.

ROM-DOS BUILD Utility enables developers to include or exclude a variety of features such as Kernel options, device drivers, FAT32 & Long File Name support, and other ROM-DOS capabilities. Customization can generate smaller ROM-DOS images, providing more memory for application and data storage. The ROM-DOS BUILD Utility allows you to create powerful DOS 7.1 or 6.22 kernels from the same code base.

Dynamic Device Driver Loading provides the ability to detect hardware and load device drivers dynamically, enabling ROM-DOS to configure itself for any given environment.

#### ROM-DOS is a Foundational OS

ROM-DOS provides the closest, most direct access to x86 hardware – no other operating system can be integrated this closely with underlying hardware. This unique ability allows ROM-DOS to serve as a foundational operating system, running either underneath or alongside another operating system. Used in this manner, ROM-DOS stabilizes the underlying device operation, creating a consistent environment in which the companion OS can run to its full potential.

#### ROM-DOS has Connectivity Tools

ROM-DOS incorporates a suite of tools, including a compact TCP/IP stack, that is designed to advance the embedded device market from stand-alone to Internet-enabled. ROM-DOS supports applications that provide embedded systems with the ability to send and receive e-mail, securely transfer files via FTP, run a private remote console or be viewed from a local web browser.

#### Key Features and Benefits of ROM-DOS

- » Customizable kernel
- » Enables drop-in networking capability
- » Connects any device via TCP/IP with Sockets
- » Provides a system update and maintenance platform that is uniform across x86 systems



## ROM-DOS Software Development Kit

The ROM-DOS Software Development Toolkit (SDK) includes the Borland C compiler and linker, Turbo Assembler, as well as tool developed by Datalight for use specifically with Datalight products.

Included in the toolkit are: utilities, libraries, sample device driver source code, networking example code, a developers guide and a users guide.

## ROM-DOS Specifications

Processor	186 or higher
Required Disc Space	48K to 90K of ROM or Flash. Exact size varies with developer's configuration
For Internet Connectivity	Requires a packet driver or modem connection

## Support and Licensing

### Support

Datalight is committed to providing excellent technical support to help OEMs keep projects on schedule.

Datalight's support engineers are available via E-Mail, website and telephone. The team will troubleshoot problems directly on your hardware, if needed.

### Licensing

Distribution of ROM-DOS source code is not allowed.  
Distribution of ROM-DOS binary code is allowed under the terms of the Datalight OEM License Agreement which must be executed prior to any distribution.

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