



21520 30th Drive SE #110
Bothell, WA 98021 USA
Tel: (425) 951-8086
Fax: (425) 951-8095
sales@datalight.com
support@datalight.com
www.datalight.com

XMS 2.0 and 3.0

WHITEPAPER SERIES

The ROM-DOS™ device driver HIMEM.SYS supports the Extended Memory Specification (XMS) 2.0, and thus can only provide up to 64 megabytes of extended memory to applications. This driver is compact and quick, and for many embedded programs this will be sufficient.

To exceed the 64 megabyte boundary, the ROM-DOS team is providing a new driver which supports version 3.0 of the Extended Memory Specification. The driver XMS3.SYS provides support for extended memory up to 4 gigabytes in size.

Support for XMS 3.0 API requires an 80386 or higher processor, as the driver utilizes the CPU's 32 bit extended registers. The new functions supported are:

- 88h - Query Any Free Extended Memory
- 89h - Allocate Any Extended Memory
- 8Eh - Get Extended Memory Block (EMB)
Handle Information
- 8Fh - Reallocate Any Extended Memory

For specific details of these functions, please see the Extended Memory Specification version 3.0 copyrighted by Microsoft Corporation, Lotus Development Corporation, Intel Corporation, and AST Research, Inc. within the resource section of the Datalight Web Site.

This driver can be found on the ROM-DOS CDROM in the directory 3RDPARTY\XMS3.

