

Software Product Description

PRODUCT NAME: VAX Image/3L Supporting Software
for VMS, Version 1.1

SPD 33.42.00

DESCRIPTION

VAX Image/3L Supporting Software is a programmer interface allowing access to the Image/3L image accelerator option module. It is used for display of bitonal images and provides software support of the hardware that accelerates image decompression, scaling, and rotations of 90°, 180°, and 270°.

The Image/3L module can be used only in monochrome systems and is designed to plug into the color option slot of a VAXstation 3100 (Model 30, 40, 38, 48), or a VAXstation 2000.

VAX Image/3L Supporting Software includes a device driver that provides a VMS interface to the Image/3L hardware module. A shareable subroutine library is also included that provides a callable interface equivalent to that of the DECimage Application Services (DAS)/Image Display Services (IDS) with the functional differences listed below. Refer to the DECimage Application Service Software Product Description (SPD 25.E8.xx) for more information on DECimage Application Services and, in particular, Image Display Services.

The shareable library will determine if the Image/3L hardware module is present and use it to accelerate image operations whenever possible. Only one process at a time can access the Image/3L hardware module. If the Image/3L hardware is in use by another process, the shareable library will perform the required image operations in software. Applications designed to use IDS should be able to make use of the Image/3L by relinking to the Image/3L shareable library. There are several minor differences between the DECimage version of IDS and the Image/3L version. These differences are as follows:

- The Image/3L module uses a different scaling algorithm than is provided in the IDS software. The resultant image will look slightly different.
- The Image/3L version of the shareable library provides control over the scaling algorithm using 2 IDS parameters that are otherwise not available for use with bitonal images. They are called Punch1 and Punch2. They primarily affect the thickness of lines

produced by the scaling operation and can be used to override the default parameters that are automatically selected based on the scaling parameters being applied to the image.

- Normally, the IDS software will automatically decompress images in place immediately before the image data is to be accessed. Software decompression is a time-consuming operation and IDS attempts to avoid decompressing the image more than necessary. When using the Image/3L module, the image is kept in its compressed state as the hardware can deal with compressed images very quickly. If an application depends on the image being decompressed in place, it will have to be recoded to work with the Image/3L module.

SOURCE CODE INFORMATION

A source code example in VAX C is provided to show the programmer interface to the VAX Image/3L Supporting Software.

INSTALLATION

Digital recommends that a customer's first purchase of this software product include Digital Installation Services. These services provide for installation of the software product by an experienced Digital Software Specialist.

For subsequent purchases of this product, only experienced customers should attempt installation. Digital recommends that all other customers purchase Digital's Installation Services.

Customer Responsibilities

Before installation of the software, the customer must:

- Previously have installed all requisite software and hardware, including terminals.
- Make available for a reasonable period of time, as mutually agreed by Digital and the customer, all hardware, communication facilities, and terminals that are to be used during installation.

Delays caused by any failure to meet the responsibilities will be charged at the prevailing rate for time and materials.

HARDWARE REQUIREMENTS

VAXstation configuration as specified in the System Support Addendum (SSA 33.42.00-x).

SOFTWARE REQUIREMENTS

VMS Operating System (and necessary components of VMS DECwindows)

DECimage Application Services for VMS

Refer to the System Support Addendum (SSA 33.42.00-x) for availability and required versions of prerequisite software and for information regarding components of VMS DECwindows.

ORDERING INFORMATION

Hardware and Software Kit: 2R-PV01X-AB

The complete hardware and software kit contains the Image/3L option module, software media, documentation, and license.

SOFTWARE LICENSING

This software is furnished under the licensing provisions of Digital Equipment Corporation's Standard Terms and Conditions. For more information about Digital's licensing terms and policies, contact your local Digital office.

SOFTWARE PRODUCT SERVICES

A variety of service options are available from Digital. For more information, contact your local Digital office.

SOFTWARE WARRANTY

Warranty for this software product is provided by Digital with the purchase of a license for the product as defined in the Software Warranty Addendum of this SPD.

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System Support Addendum

PRODUCT NAME: VAX Image/3L Supporting Software for VMS, Version 1.1

SSA 33.42.00-A

HARDWARE REQUIREMENTS

Processors Supported

VAXstation: VAXstation 2000, VAXstation 3100 Series

Processors Not Supported

No other processors except those listed above are supported.

Processor Restrictions

Only models 30, 38, 40, and 48 of the VAXstation 3100 Series support the Image/3L option module, which is a prerequisite for this software. The Image/3L option module can be used only with a monochrome system.

Other Hardware Required

- Image/3L Image Accelerator Option Module
- At least 12MB of memory

Block Space Requirements (Block Cluster Size = 1):

Disk space required for installation: 1,600 blocks
(819.2 Kbytes)

Disk space required for use (permanent): 1,500 blocks
(768.0 Kbytes)

These counts refer to the disk space required on the system disk. The sizes are approximate; actual sizes may vary depending on the user's system environment, configuration, and software options.

Memory Requirements for DECwindows Support

The minimum supported memory for this application running in a standalone DECwindows environment with both the client and server executing on that same system is 12 Mbytes.

The performance and memory usage of DECwindows applications are particularly sensitive to system configuration. Less memory may be required on the client system (the system where the software is installed and executed) if the server (the component that displays the application) resides on another system. More memory may be required on a system with several applications running or where it may be desirable to improve the performance of an application.

The minimum memory supported is 12 Mbytes. However, the use of this software in conjunction with increased memory capability improves performance. The memory size suggested for most typical hardware configurations is at least 16 Mbytes.

Note: This software product supports only U.S. English.

CLUSTER ENVIRONMENT

This layered product is fully supported when installed on any valid and licensed VAXcluster* configuration without restrictions. The HARDWARE REQUIREMENTS sections of this product's Software Product Description and System Support Addendum detail any special hardware required by this product.

* V5.x VAXcluster configurations are fully described in the VAXcluster Software Product Description (29.78.xx) and include CI, Ethernet, and Mixed Interconnect configurations.

SOFTWARE REQUIREMENTS

VMS Operating System V5.3–V5.4 (and necessary components of VMS DECwindows)

DECimage Application Services for VMS V2.0

This product is supported only in the following DECwindows configuration:

- Stand-alone execution—running the X11 display server and the client application on the same machine.

VMS DECwindows is part of the VMS Operating System but must be installed separately. Installation of VMS DECwindows gives you the option to install any or all of the following three components:

- VMS DECwindows Compute Server (Base kit; includes runtime support)
- VMS DECwindows Device Support
- VMS DECwindows Programming Support

For stand-alone execution, the following DECwindows components must be installed on the machine:

- VMS DECwindows Compute Server
- VMS DECwindows Device Support
- VMS DECwindows Programming Support

VMS Tailoring:

For VMS V5.x systems, the following VMS classes are required for full functionality of this layered product:

- VMS Required Saveset
- Network Support
- Programming Support
- System Programming Support
- Miscellaneous Files

For more information on VMS classes and tailoring, refer to the VMS Operating System Software Product Description (SPD 25.01.xx).

GROWTH CONSIDERATIONS

The minimum hardware/software requirements for any future version of this product may be different from the requirements for the current version.

DISTRIBUTION MEDIA

Tape: TK50 Streaming Tape

ORDERING INFORMATION

Hardware and Software Kit: 2R-PV01X-AB

The complete hardware and software kit contains the Image/3L option module, software media, documentation, and license.

The above information is valid at time of release. Please contact your local Digital office for the most up-to-date information.

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