

# Software Product Description

PRODUCT NAME: DRV11-WA/DRV1W ULTRIX Driver, V1.0

SPD 32.91.01

## DESCRIPTION

The DRV11-WA/DRV1W ULTRIX Driver product provides a software interface to the DRV11-WA/DRV1W controller hardware. The DRV11-WA/DRV1W hardware is a general-purpose, 16-bit, parallel, direct-memory-access (DMA) data interface. It is capable of being used either as an interface between memory and a user device, or as an interprocessor link (non-DECnet) between two systems. The DRV11-WA/DRV1W device is compatible with systems which have the 22-bit Q-bus. For more information about the controller hardware, refer to the *DRV11-WA General Purpose DMA Interface User's Guide*.

The DRV11-WA/DRV1W ULTRIX Driver software allows general access to the features provided by the DRV11-WA/DRV1W devices. The standard ULTRIX system driver calls (open, close, read, write, and ioctl) are provided to control and transfer data between the user device or interprocessor link and the ULTRIX Operating System. To allow asynchronous operations, the driver has been implemented to be compatible with the ULTRIX nbuf(4) mechanism. For detailed information about the driver, refer to the *DRV11-WA/DRV1W ULTRIX Driver User's and Installation Guide*.

As well as being installable on supported Q-bus systems, the DRV11-WA/DRV1W ULTRIX Driver can be maintained on any ULTRIX systems with the Remote Installation Service (ris), for installation to supported Q-bus clients.

The DRV11-WA/DRV1W ULTRIX Driver will not support the Diskless Management Service (dms). Use of the DRV11-WA/DRV1W-S controller in a diskless system environment is not a practical configuration.

The DRV11-WA/DRV1W ULTRIX Driver will support up to four DRV11-WA/DRV1W controllers per Q-bus system or client.

## SOURCE CODE INFORMATION

The source files xareg.h, xa\_data.c, xaivp.c, xa\_ex\_nbuf.c, and xa\_ex.c are included with this kit. The files xareg.h and xa\_data.c are used during installation to build the ULTRIX kernel with the DRV11-WA/DRV1W ULTRIX Driver software. The file xareg.h can also be included in users' programs to get symbols and data structures for ioctl calls. The file xaivp.c contains source for the Installation Verification Procedure of this kit. Files xa\_ex\_nbuf.c and xa\_ex.c are example programs that demonstrate the use of the DRV11-WA/DRV1W ULTRIX driver.

## INSTALLATION

Only experienced customers should attempt installation of this product. Digital recommends that all other customers purchase Digital's Installation Services. These services provide for installation of the software product by an experienced Digital Software Specialist.

## HARDWARE REQUIREMENTS

MicroVAX, VAXstation, or DECsystem configuration as specified in the System Support Addendum (SSA 32.91.00-x).

**Note:** A minimum of one DRV11-WA/DRV1W-S\* module is required.

## SOFTWARE REQUIREMENTS

- ULTRIX Operating System

## ORDERING INFORMATION

VAX-Based Systems:

Software Licenses: QL-YLJA\*-\*\*

Software Media: QA-YLJA\*-\*\*

Software Documentation: QA-YLJAA-GZ

*RISC-Based Systems:*

Software Licenses: QL-YLKA\*-\*\*

Software Media: QA-YLKA\*-\*\*

Software Documentation: QA-YLKAA-GZ

\* Denotes variant fields. For additional information on available licenses, services, and media, refer to the appropriate price book.

**SOFTWARE LICENSING**

This software is furnished under the licensing provisions of Digital'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: DRV11-WA/DRV1W ULTRIX Driver, V1.0

SSA 32.91.01-A

## HARDWARE REQUIREMENTS

### *Processors Supported*

#### VAX-Based Processors:

MicroVAX: MicroVAX II, MicroVAX 3300,  
MicroVAX 3400, MicroVAX 3500,  
MicroVAX 3600, MicroVAX 3800,  
MicroVAX 3900

VAXstation: VAXstation II, VAXstation 3200,  
VAXstation II/GPX, VAXstation 3500

#### RISC-Based Processors:

DECsystem: DECsystem 5400

### *Processors Not Supported*

#### VAX-Based Processors:

VAX and VAXserver processors are not supported.

MicroVAX: MicroVAX 2000, MicroVAX 3100

VAXstation: VAXstation 2000, VAXstation 3100,  
VAXstation 3520, VAXstation 3540

#### *RISC-Based Processors:*

DECstation processors are not supported.

DECsystem: DECsystem 3100, DECsystem 5000 Model  
200, DECsystem 5100, DECsystem 5500,  
DECsystem 5810, DECsystem 5820, DEC-  
system 5830, DECsystem 5840

### *Disk Space Requirements:*

#### VAX-Based Systems:

Disk space required for installation:

Root file system:	1,100 Kbytes
Other file systems:	0 Kbytes

Disk space required for use (permanent):

Root file system:	47 Kbytes
Other file systems:	0 Kbytes

#### RISC-Based Systems:

Disk space required for installation:

Root file system:	3,100 Kbytes
Other file systems:	0 Kbytes

Disk space required for use (permanent):

Root file system:	100 Kbytes
Other file systems:	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.

## OPTIONAL HARDWARE

Up to 3 additional DRV11-WA/DRV1W modules may be added for a total of 4 modules maximum in any one supported system.

## SOFTWARE REQUIREMENTS

- ULTRIX Operating System V4.1

## 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 : 9-track 1600 BPI Magtape (PE), TK50 Streaming Tape

**ORDERING INFORMATION**

*VAX-Based Systems:*

Software Licenses: QL-YLJA\*-\*\*

Software Media: QA-YLJA\*-\*\*

Software Documentation: QA-YLJAA-GZ

*RISC-Based Systems:*

Software Licenses: QL-YLKA\*-\*\*

Software Media: QA-YLKA\*-\*\*

Software Documentation: QA-YLKAA-GZ

\* Denotes variant fields. For additional information on available licenses, services, and media, refer to the appropriate price book.

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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