

Software Product Description

PRODUCT NAME: DSM DDP-DOS, Version 1.0

SPD 50.19.00

DESCRIPTION

DSM DDP-DOS is a software product which allows selected personal computers to access DSM databases on VAX DSM and DSM-11 systems within a Local Area Network.

The DSM (Digital Standard MUMPS®) family of software products includes:

- VAX DSM - A MUMPS language interpreter and database management system layered on the VMS Operating System. VAX DSM software provides DDP (Distributed Data Processing) support through which DSM DDP-DOS software obtains access to VAX DSM databases (SPD 25.08.xx).
- DSM-11 - An operating system for PDP-11 computers which provides MUMPS language and database support. DSM-11 software provides DDP support through which DSM DDP-DOS software obtains access to DSM-11 databases (SPD 12.18.xx).
- DSM DDP-DOS - described in this SPD.

DDP (Distributed Data Processing) is a communications protocol used by all DSM products to access VAX DSM and DSM-11 databases across a local area network. DSM products share MUMPS databases by exchanging DDP messages in an Ethernet-based local area network (LAN).

The DSM DDP-DOS program services MUMPS database requests on behalf of other DOS programs. DDP-DOS (the client, running on the personal computer) formats the request and transmits it to a DSM node (the server) through the LAN. The serving system (which can be either a VAX DSM or DSM-11 system) replies with the requested data. When the client receives the response, DDP-DOS interprets the incoming message and delivers the data to the DOS program that made the request.

Examples of DOS programs which utilize DSM DDP-DOS services include:

- A PC MUMPS software product which provides its users with access to DSM databases. (Consult your PC MUMPS vendor for specific information about their software's support for DSM DDP-DOS.)
- A DOS program (non-MUMPS) which takes advantage of the unique and powerful database facilities available on DSM systems.

The DSM DDP-DOS software provides:

- A command line interface to load the DDP software into memory and establish a connection with the datalink drivers.
- Device drivers for a variety of Ethernet controller boards. The device drivers (DLLxxxx.EXE and SCHPC.EXE programs) are identical to those provided in DECnet PCSA Client for DOS: PC (SPD 55.07.xx) and DECnet/PCSA Client: VAXmate (SPD 55.10.xx).

DSM DDP-DOS and DECnet PCSA Client products may reside on the same PC, sharing the same hardware and device driver without conflict.

- A library of software interrupt calls is provided which DOS programs can use for the following:
 - Format and send DDP requests to and receive DDP responses from VAX DSM and DSM-11 nodes. The supported operations correspond to the following MUMPS language capabilities:

- Fetch global data
- SET command
- KILL command
- \$ORDER() function
- \$QUERY() function
- \$DATA() function
- ZALLOCATE and ZDEALLOCATE commands
- JOB command

- Read lists of volume sets, VAX DSM nodes, and DSM-11 nodes available for servicing DDP requests
- Read and clear statistical information
- Control various aspects of DDP-DOS configuration and operation, including event logging, retransmission policies, and more
- Installation procedures
- Sample programs
- Utility and diagnostic programs

Communications

DSM DDP-DOS software supports direct connections to baseband Ethernet local area networks via Ethernet controllers. (Refer to the System Support Addendum 50.19.00-x for a list of supported Ethernet controllers.) These interfaces, when used in conjunction with Digital's baseband Ethernet components, allow DSM DDP-DOS to utilize Ethernet as its datalink transmission medium.

DSM DDP-DOS does not support Wide Area Network (WAN) connections.

Restrictions and Limitations

Any application which does not properly mask and unmask interrupts is incompatible with this product. For example, applications which use IBM® BASICA, Version 1.0 interpreter or compiler, or GW-BASIC,® Version 1.0 do not unmask the interrupts when they exit. In these cases, a BASIC program must be interpreted or recompiled using a version of BASIC that would unmask the interrupts.

The "Autosense Mode" of the Zenith Enhanced EGA card (Z-449) is incompatible with DDP-DOS and must be disabled. Refer to the *Zenith Owner's Manual* for more information.

Digital recommends the use of the multi-buffered DEPCA Ethernet controller in networks which carry heavy traffic.

HARDWARE REQUIREMENTS

Only systems, components and peripherals as specified in the System Support Addendum (SSA 50.19.00-x) are supported.

SOFTWARE REQUIREMENTS

DSM DDP-DOS supports connections to the following DSM products:

- VAX DSM (SPD 25.08.xx)
- DSM-11 (SPD 12.18.xx)

Refer to the System Support Addendum (SSA 50.19.00-x) for availability and required versions of prerequisite software.

ORDERING INFORMATION

Software Licenses: QL-YG7AW-AA
 Software Media and Documentation: QA-YG7A*-**
 Software Documentation only : QA-YG7AA-GZ
 Software Product Services: QT-YG7A*-**

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

SOFTWARE LICENSING

The license gives the user the right to use the software on a single client CPU. The software may be first read from the media to a storage device associated with a server, and subsequently downline loaded to a client CPU. A license must be obtained for each client CPU to which the software is downline loaded. The client CPUs will be considered the CPU on which the software is "first installed" under the terms of the license agreement.

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

The full portfolio of SPS Services is available for DSM-11 and VAX DSM. Service on DDP is currently provided for under these products. Only self-maintenance services will be offered on DSM DDP-DOS. For customers with VAX DSM or DSM-11 service contracts, telephone support for DSM DDP-DOS will be limited to the system manager of the host DSM system(s). DSM DDP-DOS customers must coordinate service through their system managers.

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: DSM DDP-DOS, Version 1.0

SSA 50.19.00-A

HARDWARE REQUIREMENTS

The systems, components and peripherals as specified below are supported.

- A base system from the *Supported Configuration Chart* at the end of this SPD.
- A minimum of 640KB system memory.
- One network connection chosen from the Ethernet column associated with a base system in the *Supported Configuration Chart*. Only one Ethernet line can be configured under DDP-DOS.
- More than one communications device may be installed in a system subject to system limitations. If use of another device is required, the system may need a reboot. A communications device cannot typically be shared with other communications products, however, DSM DDP-DOS and DECnet/PCSA are able to share the same communications device concurrently.
- A system power supply that provides at least 130 watts (for IBM® XTs with a DEPCA).

Block Space Requirements

Maximum disk space required for the installation of DSM DDP-DOS software for run-time use is 160 KB. This includes the main DDP.EXE program, utility programs, and other batch and data files.

The software development example programs and "include" files require up to 350 KB additional storage if all files (source, object, listing, batch, and text) are copied.

OPTIONAL HARDWARE

Supported Ethernet Controllers

For purposes of this System Support Addendum, the terms DEC1, DEC2, 3COM2, 3COM3 refer to the following definitions:

DEPCA -	Digital's DEPCA-xx Ethernet multi-buffered controller for personal computers. The use of the DEPCA-AU transceiver adapter is also supported. The terms DEC1, and DEC2 refer to revisions of the same Ethernet controller.
DEC1 -	Revision E, or F.
DEC2 -	Revision F03. This Ethernet controller is VDE compliant for DECstation models 200, 300 and 350.
3COM2 -	3C523 EtherLink™/MC Ethernet Multi-buffered Controller for IBM PS/2™ Microchannel Architecture Personal Computers.
3COM3 -	3C503 EtherLink II/IBM Ethernet Network Interface.

In addition, the VAXmate integral Ethernet controller is also supported.

Unsupported Ethernet Controllers

DSM DDP-DOS includes the following unsupported Ethernet controller drivers:

- Interlan Inc. NI5010-1 Ethernet controller (ThinWire or standard Ethernet), NI5010-2 Ethernet controller (standard Ethernet). (Interlan Inc. was formerly known as MICOM™- Interlan.)
- 3COM 3C500B EtherLink/IBM PC Ethernet Network Interface, 3C501 EtherLink/IBM PC Ethernet Network Interface.

SOFTWARE REQUIREMENTS

DSM DDP-DOS supports connections to the following DSM products:

- VAX DSM Version 5.2 (SPD 25.08.xx)
- DSM-11 Version 4.1 (SPD 12.18.xx)

Refer to the *Supported Configuration Chart* at the end of this SPD for a list of supported DOS operating systems.

GROWTH CONSIDERATIONS

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

DISTRIBUTION MEDIA

- RX33 Floppy Diskette
- RX31 Floppy Diskette
- RX24 Hard-shell Diskette

ORDERING INFORMATION

Software Licenses: QL-YG7AW-AA
Software Media and Documentation: QA-YG7A*-**
Software Documentation only : QA-YG7AA-GZ
Software Product Services: QT-YG7A*-**

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

Note: The availability of these software product options and service may vary by country. Customers should contact their local Digital office for information on availability.

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

Table 1
SUPPORTED CONFIGURATION CHART

Base System	Ethernet	Operating System
COMPAQ™DESKPRO Model 2	DEC1, 3COM3	COMPAQ DOS V3.31, V4.0
COMPAQ DESKPRO™ 286 PERSONAL COMPUTER Model 20 and 40 (Model 2551 on UL label)	DEC1, 3COM3	COMPAQ DOS V3.31, V4.0
COMPAQ DESKPRO 286e	DEC1, 3COM3	COMPAQ DOS V3.31, V4.0
COMPAQ 286/SLT*	DEC1, 3COM3	COMPAQ DOS V3.31, V4.0
COMPAQ DESKPRO 386/16	DEC1, 3COM3	COMPAQ DOS V3.31, V4.0
COMPAQ DESKPRO 386/20	DEC1, 3COM3	COMPAQ DOS V3.31, V4.0
COMPAQ DESKPRO 386/25	DEC1, 3COM3	COMPAQ DOS V3.31, V4.0
COMPAQ DESKPRO 386/33	DEC1, 3COM3	COMPAQ DOS V3.31, V4.0
COMPAQ DESKPRO 386s	DEC1, 3COM3	COMPAQ DOS V3.31, V4.0
COMPAQ DESKPRO 386/20e	DEC1, 3COM3	COMPAQ DOS V3.31, V4.0
COMPAQ PORTABLE II	DEC1, 3COM3	COMPAQ DOS V3.31, V4.0
COMPAQ PORTABLE III	DEC1, 3COM3	COMPAQ DOS V3.31, V4.0
COMPAQ PORTABLE 386	DEC1, 3COM3	COMPAQ DOS V3.31, V4.0
DECstation 200	DEC2, 3COM3	DECstation MS®-DOS V3.3
DECstation 210	DEC1	DECstation MS-DOS V3.3
DECstation 212	DEC2	DECstation MS-DOS V3.3
DECstation 300	DEC2, 3COM3	DECstation MS-DOS V3.3
DECstation 316	DEC1	DECstation MS-DOS V3.3
DECstation 316+	DEC2, 3COM3	DECstation MS-DOS V3.3
DECstation 316sx	DEC2, 3COM3	DECstation MS-DOS V3.3
DECstation 320	DEC1	DECstation MS-DOS V3.3
DECstation 325C	DEC2, 3COM3	DECstation MS-DOS V3.3
DECstation 350	DEC2, 3COM3	DECstation MS-DOS V3.3
VAXmate	(integral)	Microsoft® MS-DOS V3.30 (as adapted by Digital)
Olivetti™M24	DEC1, 3COM3	Olivetti DOS V3.3, V4.0
Olivetti M28	DEC1, 3COM3	Olivetti DOS V3.3, V4.0
Olivetti M240	DEC1, 3COM3	Olivetti DOS V3.3, V4.0
Olivetti M250	DEC1, 3COM3	Olivetti DOS V3.3, V4.0
Olivetti M280	DEC1, 3COM3	Olivetti DOS V3.3, V4.0
Olivetti M290	DEC1, 3COM3	Olivetti DOS V3.3, V4.0
Olivetti M300	DEC1, 3COM3	Olivetti DOS V3.3, V4.0
Olivetti M380/XP1	DEC1, 3COM3	Olivetti DOS V3.3, V4.0
Xycom Model 4150-3**	DEC2	MS-DOS V3.3
Zenith 248	DEC1, 3COM3	Zenith DOS V3.3
Zenith 248/12	DEC1, 3COM3	Zenith DOS V3.3
Zenith SupersPort 286/12	DEC1, 3COM3	Zenith DOS V3.3

Table 1 (Cont.)
SUPPORTED CONFIGURATION CHART

Base System	Ethernet	Operating System
IBM 5150 Personal Computer	DEC1, 3COM3	IBM DOS V3.2, V3.3, V4.0
IBM 5160 Personal Computer XT	DEC1, 3COM3	IBM DOS V3.2, V3.3, V4.0
IBM 5162 Personal Computer XT Model 286	DEC1, 3COM3	IBM DOS V3.2, V3.3, V4.0
IBM 5170 Personal Computer AT™	DEC1, 3COM3	IBM DOS V3.2, V3.3, V4.0
IBM 8530-021 Personal System/2 Model 30	DEC1, 3COM3	IBM DOS V3.3, V4.0
IBM 8530-E21 Personal System/2 Model 30-286	DEC1, 3COM3	IBM DOS V3.3, V4.0
IBM 8550 Personal System/2 Model 50	3COM2	IBM DOS V3.3, V4.0
IBM 8550 Personal System/2 Model 50Z	3COM2	IBM DOS V3.3, V4.0
IBM 8550 Personal System/2 Model 55sx	3COM2	IBM DOS V3.3, V4.0
IBM 8560 Personal System/2 Model 60	3COM2	IBM DOS V3.3, V4.0
IBM 8570 Personal System/2 Model 70 386 16mhz, 20mhz, 25mhz	3COM2	IBM DOS V3.3, V4.0
IBM 8580 Personal System/2 Model 80	3COM2	IBM DOS V3.3, V4.0
Nematron System Model WS-4524***	DEC2	MS-DOS V3.3

* Some restrictions apply. Contact COMPAQ for details.

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