# Software Product Description

# PRODUCT NAME: DEC SoftPC for ULTRIX, Version 4.0

SPD 32.17.02

#### DESCRIPTION

DEC SoftPC® for ULTRIX provides the RISC user with the ability to operate DOS-based software. The SoftPC product emulates an IBM® PC/AT® system (both real and protected mode) using standard hardware and software. A DOS application functions in the SoftPC environment as it functions on an IBM PC/AT providing it does not require special hardware or copy protected diskette.

DEC SoftPC supports Motif®, as well as the VT220. As such, it can be executed on an ULTRIX system and can be displayed on a VT220 or a local or remote Motif display station using LK201 or LK401 keyboards.

The performance of the SoftPC facility is dependent upon a number of factors as well as the speed of the processor upon which it executes. A DECstation 5000 will deliver compute performance in the 386 range. Graphics performance will be slower.

Applications used with SoftPC (except those DOS utilities included with the SoftPC software) are not Digital licensed, warranted, or supported products. The user must comply with the terms and conditions of each application software license agreement in effect between the user and application supplier.

Communications applications may not operate in a like manner to a real PC due to differences in signaling on the RISC processor and the PC processor and the way in which the RISC processor handles interrupts. Many communications programs do work correctly and it is recommended these programs be tried before purchasing SoftPC.

#### Emulated Environment

CPU	80286 (real and protected mode) plus 80287 Numeric Co-processor		
ROM BIOS	AT BIOS		
Operating system	DOS Version 5.0		
Diskette	3.5-inch 2.88MB, 1.44MB, and 720kB read/write, 5.25-inch high and low density read/write Copy protection only supported with SLAVEPC <sup>1</sup> The ability to attach and use a real PC floppy as your own		
Floppy drives	A and B are supported		
Hard disk	C and D drives; up to 300MB each		
File sharing	E through Z can be mapped to a native directory, either local or remote		
Communications port	COM1, COM2, COM3, and COM4 map to the system serial ports		
Printer	LPT1, LPT2, and LPT3 map to serial ports or spooled device		
Extended memory	Up to 16MB		
Expanded memory	LIM 4.0 up to 32MB		
CD-ROM	Supported as a file sharing device or with MSCDEX.EXE		
Video	CGA, Hercules®, EGA, VGA, SVGA, or MDA on VT220		
Keyboard	AT enhanced		
Mouse	Microsoft® bus mouse emulated		
Clock	CMOS clock		
CMOS RAM	Emulated as a file		
Not supported	Special hardware options requiring a PC bus, PCSA container files		

<sup>1</sup>SlavePC support provided for the following PCs: IBM PC, IBM PC/AT, PS/2® model 30, COMPAQ®, Vectra®, DECstation 216 and 316, plus any that are 100% compatible with the above.



#### Features

#### **Operational Control**

- Disk Drives—Allows user to set up disk, CD, and floppies
- COM/LPT Ports—Allows user to tailor the COM and LPT ports to the host environment
- Keyboard—Allows user to define what keyboard map file to use
- Display—Allows user to select between display types
- Memory—Allows user to configure extended and expanded memory
- Auto Flush—Allows user to automatically flush the I/O after a prescribed interval
- Auto Freeze—If enabled, will immediately stop the SoftPC window from using CPU cycles whenever a different window is selected
- Sound—Enables workstation to beep if PC application generates sound
- FPU Emulation—Determines whether or not to use the workstation's floating point unit or to emulate the PC 287 in software
- Flush Ports—Forces a port flush on designated port
- Activate/Deactivate—Allows temporary activation or deactivation of a device, such as the floppy, for other use
- Attach/Detach Mouse—Attaches/detaches PC mouse
   to X mouse
- Freeze/Unfreeze—If enabled, will immediately stop the SoftPC window from using CPU cycles
- Restart—Reboots SoftPC

#### Edit Functions

Text may be cut and pasted from the SoftPC window into the same or a different window by using the mouse to select areas.

#### Multiple Sessions

A user may operate multiple sessions of SoftPC on a workstation screen without requiring additional license units. All other use requires one license per session.

# HARDWARE REQUIREMENTS

Hardware and/or processor configurations as specified in the System Support Addendum (SSA 32.17.02-x).

# SOFTWARE REQUIREMENTS

For Systems Using Terminals:

**ULTRIX** Operating System

For Workstations:

ULTRIX Worksystem Software (and necessary components of DECwindows Motif)

Refer to the System Support Addendum (SSA 32.17.02x) for availability and required versions of prerequisite /optional software and for information regarding components of DECwindows Motif.

#### **ORDERING INFORMATION**

Software License: QL-YP7AC-3B

Software Media: QA-YP7AA-H\*

Software Documentation: QA-YP7AA-GZ

Software Product Services: QT-YP7A\*-\*\*

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

## 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.

#### License Management Facility Support

This layered product supports the ULTRIX License Management Facility.

This layered product offers a Concurrent Use license. Each Concurrent Use license allows any one individual to use the layered products.

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. For more information on these or other services, please 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.

#### Warranty Limitations

Digital does not guarantee that every PC application will run although the product has been tested with several hundred.

- ® AT, IBM, Personal Computer AT, and PS/2 are registered trademarks of International Business Machines Incorporated.
- ® COMPAQ is a registered trademark of Compaq Computer Corporation.
- B Hercules is a registered trademark of Hercules Computer Technology.
- Microsoft is a registered trademark of Microsoft Corporation.
- ® Motif is a registered trademark of Open Software Foundation, Inc.
- ® SoftPC is a registered trademark of Insignia Solutions Inc.
- Wectra is a registered trademark of Hewlett-Packard Company.
- ™ The DIGITAL Logo, DEC, DECstation, DECsystem, DECwindows, Digital, MicroVAX, RX, RX33, TK, ULTRIX, VAX, VAXserver, VAXstation, and VT220 are trademarks of Digital Equipment Corporation.

# System Support Addendum

# PRODUCT NAME: DEC SoftPC for ULTRIX, Version 4.0

SSA 32.17.02-A

HARDWARE REQUIREMENTS		DECsystem:	DECsystem 310	00,
RISC-Based Processors Supported:			DECsystem 500	00 Model 25,
DECstation:	DECstation 2100, DECstation 3100, DECstation 3100s		DECsystem 5000 Model 200,	
DECSIATION.		DECsystem 5000 Model 240,		
			DECsystem 5100, DECsystem 5400,	
	Personal DECstation 5000 Model 20/25 HX, Personal DECstation 5000 Model 20/25 MX,	DECsystem 5500, DECsystem 5810,		
	Personal DECstation 5000 Model 20/25 TX,	DECsystem 5820, DECsystem 5830,		
	Personal DECstation 5000 Model 20/25 PXG+,	DECsystem 5840, DECsystem 5900		
	Personal DECstation 5000 Model 20/25 PXG Turbo+	Processors Not Supported:		
	DECstation 5000 Model 120/125/133 CX, DECstation 5000 Model 120/125/133 HX, DECstation 5000 Model 120/125/133 MX, DECstation 5000 Model 120/125/133 PX, DECstation 5000 Model 120/125/133 PXG, DECstation 5000 Model 120/125/133 PXG, DECstation 5000 Model 120/125/133 PXG+, DECstation 5000 Model 120/125/133 PXG	All VAX, MicroVAX, VAXserver, and VAXstation processors		
DE DE		Disk Space Requirements:		
		Disk space required for installation:		
		Root file s	system:	0 Kbytes
	Turbo,	Other file	systems:	12 Mbytes
	DECstation 5000 Model 120/125/133 PXG Turbo+	Disk space required for use (permanent):		
	DECstation 5000 Model 200 CX, DECstation 5000 Model 200 HX,	Root file s	system:	0 Kbytes
	DECstation 5000 Model 200 MX,	Other file	systems:	12 Mbytes
DECstation 5000 DECstation 5000 DECstation 5000 DECstation 5000	DECstation 5000 Model 200 PX, DECstation 5000 Model 200 TX, DECstation 5000 Model 200 PXG, DECstation 5000 Model 200 PXG+, DECstation 5000 Model 200 PXG Turbo, DECstation 5000 Model 200 PXG Turbo+	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 selected. They do not include the space users may optionally configure for their virtual DOS disks.		
	DECstation 5000 Model 240 HX, DECstation 5000 Model 240 MX,	Memory Requirements:		
DECstation 5000 Model 240 TX, DECstation 5000 Model 240 PXG+, DECstation 5000 Model 240 PXG Turbo+		A minimum of 8MB memory is required to operate SoftPC® and ULTRIX worksystem software on a stan- dalone system.		



# **OPTIONAL HARDWARE**

The software can use a local floppy disk drive with the following restrictions:

RX33 — Does not support copy protection mechanism or variable sector sizes

RX23 — Does not support copy protection mechanism or variable sector sizes

RX26 — Does not support copy protection mechanism or variable sector sizes

# SOFTWARE REQUIREMENTS

For Systems Using Terminals:

ULTRIX Operating System V4.2A or later

For Workstations:

ULTRIX Worksystem Software V4.2A or later (and necessary components of DECwindows Motif® V1.1.3)

#### **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**

9-track 1600 BPI Magtape, TK50 Streaming Tape

#### **ORDERING INFORMATION**

Software License: QL-YP7AC-3B Software Media: QA-YP7AA-H\* Software Documentation: QA-YP7AA-GZ Software Product Services: QT-YP7A\*-\*\*

\* 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.

- ® AT, IBM, Personal Computer AT, and PS/2 are registered trademarks of International Business Machines Incorporated.
- ® COMPAQ is a registered trademark of Compaq Computer Corporation.
- ® Hercules is a registered trademark of Hercules Computer Technology.
- ® Microsoft is a registered trademark of Microsoft Corporation.

- ® Motif is a registered trademark of Open Software Foundation, Inc.
- ® SoftPC is a registered trademark of Insignia Solutions Inc.
- ® Vectra is a registered trademark of Hewlett-Packard Company.
- ™ The DIGITAL Logo, DEC, DECstation, DECsystem, DECwindows, Digital, MicroVAX, RX, RX33, TK, ULTRIX, VAX, VAXserver, VAXstation, and VT220 are trademarks of Digital Equipment Corporation.