

# digital

# Software Product Description

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**PRODUCT NAME: VAX 11/780 DIAGNOSTICS EXTENDED, Version 1**

**SPD 25.6.0**

**DESCRIPTION:**

VAX-11/780 Diagnostics Extended is a set of programs that allow a customer to enhance the self-maintenance of his system. These are extensions to the standard diagnostics. These tools are CPU MICRODIAGNOSTICS and SUPERVISOR SCRIPTING.

**MICRODIAGNOSTIC PROGRAM**

The CPU MICRODIAGNOSTIC package is a tool to help repair the CPU, memory and floating point parts of the system. The MICRODIAGNOSTIC package detects faults at the micro level, with isolation to a single module or one of two modules. The MICRODIAGNOSTIC package executes with the MICRODIAGNOSTIC monitor running in the VAX 11/780 LSI-11 console. The console RX01 floppy diskette drive provides storage for the extensive MICRODIAGNOSTIC test overlays. The program will detect stuck high/low logic problems. The microdiagnostic tests are organized in a bootstrapping sequence (i.e., building blocks) of the console interface, data path hardware, SBI-Cache-Translation Buffer, I-Stream Buffer, SBI, and the memory controller, arrays, and FPA. All detected faults result in error typeouts indicating the smallest set of modules to which the program can isolate the failure.

**DIAGNOSTIC SCRIPTING**

The scripting capabilities of the diagnostic supervisor allow a user to invoke standard test sequences by referencing a command file on the disk that contains this sequence. Also, the script feature allows the user to configure the system prior to any diagnostic run. This is done by referencing a command file with specific configuration commands. The script files may be constructed using a text editor.

**MINIMUM HARDWARE REQUIRED:**

The CPU MICRODIAGNOSTICS run on all VAX 11/780 configurations. The SUPERVISOR SCRIPTING requires a VAX 11/780 with 256K bytes (minimum), an RP05/06, RM03, RK06, or RK07.

**OPTIONAL HARDWARE:**

None

**PREREQUISITE SOFTWARE:**

None

**OPTIONAL SOFTWARE:**

None

**TRAINING CREDITS:**

None

**SUPPORT CATEGORY:**

C — Software Support will be provided as stated in the Software Support Categories Addendum to this SPD.

**UPDATE POLICY:**

Software Updates, if any, released by DIGITAL during the one (1) year period following installation, will be provided to the customer for a media charge (includes no installation). After the first year, updates, if any, will be made available according to then prevailing DIGITAL policies.

**ORDERING INFORMATION:**

All binary licensed software, including any subsequent updates, is furnished under the licensing provisions of DIGITAL's Standard Terms and Conditions of Sale, which provide in part that the software and any part thereof may be used on only the single CPU on which the software is first installed, and may be copied, in whole or in part (with the proper inclusion of the DIGITAL copyright notice and any DIGITAL proprietary notices on the software) only for use on such CPU. All source licensed software is furnished only under the terms and conditions of a separate Software Program Sources Agreement between Purchaser and DIGITAL.

A single-use license only option is a license to copy the software previously obtained under license, and use such software in accordance with DIGITAL's Standard Terms and Conditions of Sale. The category of support applicable to such copied software is Category C.

The following key (Y, Z) represents the distribution media for the product and must be specified at the end of the order number, e.g., ZE014-CY = binaries on floppy diskette.

Y = RX01 Floppy Diskette

Z = No hardware dependency

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*Standard Options*

ZE014 -C— Single-use license, binaries, documentation, no support services (media: Y)

ZE014 -D— Single-use license only, no binaries, no documentation, no support services (media: Z)

**ADDITIONAL SERVICES:**

None

ADDENDUM  
SOFTWARE SUPPORT CATEGORIES

Each software product (hereinafter 'SOFTWARE') with a designated Support Category A or B in the applicable Software Product Description (SPD) existing at the time of order will be the current release at the time of delivery and will conform to the SPD. DIGITAL's sole obligation shall be to correct defects (nonconformance of the SOFTWARE to the SPD) as described below. Any SOFTWARE with a designated Support Category C will be furnished on an 'as is' basis.

For SOFTWARE with a designated Support Category A or B, DIGITAL will provide the services set forth below without additional charge.

**CATEGORY A**

1. Upon notification by customer to the nearest DIGITAL office that the computer system, including all required prerequisite hardware and software, is ready for the installation of the SOFTWARE, DIGITAL will install such SOFTWARE in any location within the contiguous forty-eight (48) United States, the District of Columbia, or a country in which DIGITAL or a subsidiary of DIGITAL has a software service facility. The notification must be received by DIGITAL and the system must be ready for installation within thirty (30) days after the delivery of the SOFTWARE to customer or DIGITAL will have no obligation to install. Installation will consist of: (1) verification that all components of the SOFTWARE have been received by customer, (2) loading the SOFTWARE, and (3) executing a DIGITAL sample procedure.
2. During the ninety (90) day period after installation, if the customer encounters a problem with the current unaltered release of the SOFTWARE which DIGITAL determines to be a defect in the SOFTWARE, DIGITAL will provide the following remedial service (on site where necessary): (1) if the SOFTWARE is inoperable, apply a temporary correction (TC) or make a reasonable attempt to develop an emergency by-pass, and (2) assist the customer to prepare a Software Performance Report (SPR) and submit it to DIGITAL.
3. During the one (1) year period following installation, if the customer encounters a problem with the SOFTWARE which his diagnosis indicates is caused by a SOFTWARE defect, the customer may submit an SPR to DIGITAL. DIGITAL will respond to problems reported in SPRs which are caused by defects in the current unaltered release of the SOFTWARE via the Maintenance Periodical for the SOFTWARE, which reports SPRs received, code corrections, temporary corrections, generally useful emergency by-passes and/or notice of the availability of corrected code. Software Updates, if any, released by DIGITAL during the one (1) year period, will be provided to the customer on DIGITAL's standard distribution media as specified in the applicable SPD. The customer will be charged only for the media on which such updates are provided, unless otherwise stated in the applicable SPD, at DIGITAL's then current media prices.

**CATEGORY B**

During the one (1) year period following delivery, the services provided to the customer will be the same as set forth in 3 above.

**CATEGORY C**

SOFTWARE is provided on an 'as is' basis. Any software services, if available, will be provided at the then current charges.

DIGITAL shall have the right to make additional charges for any additional effort required to provide services resulting from customer use of other than current unaltered release of the SOFTWARE operated in accordance with the SPD.