Software Product Description

PRODUCT NAME: **VAX 8500/8550/8700/8800 Diagnostic Set**   SPD 27.82.00

DESCRIPTION

The VAX 8500,8550,8700,8800 Diagnostic Set is a package of programs that allows users to maintain VAX 8500,8550,8700,8800 systems. These diagnostics test the CPU, Memory and Peripheral devices. The package includes both micro and macro diagnostics.

Microdiagnostic components

The microdiagnostic components detect and isolate solid faults at the module level within the CPUs and memory system. The microdiagnostic tests are controlled by the MICROMONITOR. The MICROMONITOR is built into the VAX Console software that is shipped with the system. The console provides the storage for the microdiagnostics tests. Microdiagnostics tests are organized into a bottom up test sequence. This sequence first tests the console then the instruction unit, execution unit, cache, and memory. Microdiagnostics are also used to test fault conditions on the NMI bus. All detected faults result in error typeouts that indicate the smallest set of modules to which the program can isolate a failure.

Macrodiagnostic Components

The macrodiagnostics Components provide fault detection and isolation within the VAX 8500-8800 CPUs and standard options.

VAX Diagnostic Supervisor (VDS) Supplies diagnostic operator services (i.e. loading, starting, and control) as a stand-alone controller (non-VAX/VMS) or as a process under VAX/VMS.

Diagnostics consist of exercisers, functional level and logic level tests that run under the control of VDS. Functional level tests run in stand-alone mode or with VAX/VMS. Repair level programs run only in stand-alone mode.

VAX 8500,8550,8700,8800 Diagnostic Program Levels

Level	Run-time Environment	Types of Programs
Level 2R	Runs under VDS in user mode only	Exercisers and functional tests of memory, peripheral devices
Level 2	Runs under VDS in user and stand-alone modes	Functional tests of CPU instructions set
Level 3	Runs under VDS in stand-alone mode only	Functional tests and logic tests of CPU and peripheral devices
Level 4	Runs in stand-alone mode without VDS	Functional and logic tests of CPU

MINIMUM HARDWARE REQUIRED

Any valid VAX 8500,8550,8700,8800 system configuration.

OPTIONAL HARDWARE

None

PREREQUISITE SOFTWARE

VAX/VMS Operating System recommended for optimum diagnostic capabilities.

OPTIONAL SOFTWARE

None

SOFTWARE WARRANTY

THIS SOFTWARE PRODUCT IS PROVIDED **"AS IS"** WITHOUT ANY WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED.

INSTALLATION

CUSTOMER INSTALLED

Optional DIGITAL Installation is available on a time and materials basis.

software digital

ORDERING INFORMATION

Single-Use licensed software 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 DIGITAL's copyright notice and any proprietary notices on the software) for use on that same CPU.

You will need a separate license for each CPU on which you will be using the software product (except as otherwise specified by DIGITAL). Then, Materials and Service Options are selected to utilize the product effectively.

The VAX 8500,8550,8700,8800 Diagnostic Media Kit is available on 9-track 1600 BPI Magtape with RX50 Diskettes.

VAX 8500, 8550, 8700, 8800

Diagnostic Set Ordering Information

VAX 8500	VAX 8550	VAX 8700	VAX 8800	
Z9200-UZ	Z2200-UZ	Z2201-UZ	ZM200-UZ	VAXBI DIAGNOSTIC LICENSE ONLY
Z9200-HW	Z2200-HW	Z2201-HW	ZM200-HW	VAXBI MT/FL MEDIA/DOC KIT
Z9200-WW	Z2200-WW	Z2201-WW	ZM200-WW	VAXBI ANNUAL SUBSC MT/FL

LICENSE OPTIONS

Single-Use License Option

The Single-Use License is your right to use the software product on a single CPU.

For your first installation of this software product you must purchase as a **minimum:**

- Single-Use License Option, and

- Distribution and Documentation Option

The license gives you the right to use the software on a single CPU and the Distribution and Documentation Option provides the machine-readable software and related documentation.

To use this software product on additional CPUs, you must purchase for each CPU as a **minimum:**

- Single-Use License Option

In addition to the right to use, the license gives you the one-time right to copy the software from your original CPU installation to the additional CPU. Therefore, the Distribution and Documentation Option is not required, but optional.

Distribution and Documentation Option

The Distribution and Documentation Option provides the machine-readable software and the basic documentation. You must have, or order, a Single-Use License to obtain this option. You will need this option to install the software for the first time.

Update Options

Licensed users of VAX Diagnostics may purchase, under license, the Annual Subscription Update Service at the prevailing rate for such updates. The update is distributed in binary form on the appropriate medium and includes no installation or other services unless specifically stated.

Miscellaneous Options

Maintenance Documentation Service (MDS) - Microfiche documentation library

MD-VAX	Maintenance Documentation and Diagnostic Listings for VAX Systems (Library Only)
MD-VAX-R	Subscription Update Service for MD-VAX
MD-VAX-D	Maintenance Documentation for VAX systems (Library Only)
MD-VAX-DR	Subscription Update Service for MD-VAX-D
MD-VAX-L	Diagnostic Listings for VAX systems (Library Only)
MD-VAX-LR	Subscription Update Service for MD-VAX-L
DEC-O-LOG	Microfiche
MD-MFDOL-00	Field Change Order notification service for all systems (initial subscription includes one year of updates).
MD-MFDOL-R	Subscription Update Service for MD-MFDOL-R (Renewal of initial subcription).