# Software Product Description

# PRODUCT NAME: VAX 8200/8300 Diagnostic Set

# DESCRIPTION

The VAX 8200/8300 Diagnostic Set is a package of programs that allows users to maintain a VAX 8200/8300 central processor unit (CPU), memory, and standard VAX 8200/8300 peripheral devices. The set consists of macrodiagnostic programs which are required to fully support diagnosis of a VAX 8200/8300 system.

The heart of the VAX 8200/8300 system is the VAXBI internal bus. CPU, memory, and some peripheral adapters and controllers are connected to this bus, and are referred to as VAXBI nodes. All VAXBI nodes have extensive Self-tests built into them, and these are automatically executed when the system is initialized. This minimizes the number of macrodiagnostics required for maintenance of VAX 8200/8300 systems.

The UNIBUS is supported on VAX 8200/8300 systems, and many existing UNIBUS peripheral devices can be used. This requires macrodiagnostics to be used for maintenance of these devices.

In summary, macrodiagnostics are used for fault detection and isolation within some VAXBI nodes and all UNIBUS peripherals. This complements the extensive self-test capabilities of VAX 8200/8300 systems.

### Macrodiagnostic Components

VAX Diagnostic Supervisor (VAX/DS) -

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

#### **Diagnostics** -

Consist of exercisers, functional-level and logiclevel tests that run under control of VAX/DS. Functional-level tests run with VMS. Logic level programs run only in stand-alone mode.

Supporting programs also included are configurator utility, disk formatters, boots, and autosizers.

Table 1
8200/8300 Diagnostic Program Levels

Level	Runtime Envi- ronment	Types of Programs
Level 2R	Runs under VAX/DS in user mode only	Exercisers and functional tests of memory, peripheral devices
Level 2	Runs under VAX/DS in user and standalone modes	Functional tests of CPU instruction set
Level 3	Runs under VAX/DS in standalone mode only	Functional tests and logic tests of CPU and peripheral devices
Level 4	Runs in stan- dalone mode without VAX/DS	Functional and logic tests of CPU

# HARDWARE REQUIREMENTS

Any valid VAX 8200/8300 system configuration

#### **OPTIONAL HARDWARE**

None

#### SOFTWARE REQUIREMENTS

VMS Operating System is only required for L2R Diagnostic Operation.



SPD 27.81.01

# **OPTIONAL SOFTWARE**

None

#### WARRANTY

None

This software product is provided "AS IS" without any warranty of any kind, either express or implied.

# SOFTWARE LICENSING

This software is 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.

The Single-Use, end-user license is required for each processor to be self-maintained.

The VAX 8200 and 8300 Diagnostic Media Kits each consist of a 9-track 1600 BPI Magtape containing all the diagnostic software, plus a set of RX50 diskettes containing only the diagnostics for system load devices and the Diagnostic Supervisor and Standalone Autosizer.

# **ORDERING INFORMATION**

#### VAX 8200

QX-K10AA-AA Single-use, end-user license only, no binaries, no documentation, no support services. QZ-K10AA-HW Diagnostic Media/Documentation kit, binaries (on 9-track 1600 BPI Magtape) and a dozen RX50 diskettes. (

VAX 8300	
QX-K10AB-AA	Single-use, end-user license only, no binaries, no documentation, no support services.
QZ-K10AA-HW	Diagnostic Media/Documentation kit, binaries (on 9-track 1600 BPI Magtape) and a dozen RX50 diskettes.
QY-K10AA-AW	Annual Diagnostic Update Service

# Update Options

Licensed users of VAX Diagnostics may order 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-01	Maintenance Documentation and Diag- nostic Listings for VAX systems (Library plus updates)		
MD-VAX-D1	Maintenance Documentation for VAX systems (Library plus updates)		
MD-VAX-L1	Diagnostic Listings for VAX systems (Library plus updates)		
DEC-O-LOG	Microfiche		
MD-MFDOL-R	Field Change Order notification service for all systems (initial subscription includes one year of updates )		
The DIGITAL Logo is a registered trademark of			

- The DIGITAL Logo is a registered trademark of Digital Equipment Corporation.
- тм VMS, VAX, VAXBI and UNIBUS are trademarks of Digital Equipment Corporation.