# Software Product Description

# PRODUCT NAME: VAX Diagnostic Program Macros Library

SPD 26.25.02

### DESCRIPTION

The VAX Diagnostic Program Macros Library is a set of macros that establish the interface between a diagnostic program and the VAX diagnostic supervisor.

The VAX Diagnostic Program Macros Library is provided in three versions: MACRO-32, BLISS-32, and C.

**Note:** The "C" library has been added in release 42. For all systems archived prior to release 42, only the MACRO and BLISS versions are available.

#### Library Components

Diagnostic Program Macros are organized into five categories by function and method of implementation:

Utility Macros — Control program format through assembly and linker directives. Program control utility macros enable the diagnostic program to test specific runtime conditions and to alter program flow.

Symbol Definition Macros — Assist the programmer by defining the global symbols required by many programs.

Supervisor Service Macros — Include supervisor service routines that perform specific functions but do not modify program flow. Most supervisor routines return status codes as well as return control to the location following the instruction that called the supervisor routine.

Supervisor routines provide the following functions:

- Program Control
- Channel Control
- Memory Management
- Program Delay
- Program-Operator Dialogue Control
- System Control

VAX/VMS (Virtual Memory System) Service Macros — A subset of VAX/VMS service macros that are available to level 2R diagnostic programs (a few are available to level 3 diagnostic programs). The service macros return status codes as well as return control to the location following the instruction that called the VAX/VMS service.

VAX/VMS Service Macros available:

- I/O Service
- Event Flag Service
- Timer Service
- Formatted ASCII Output Service
- Memory Management Service

When the VAX supervisor runs on-line, service calls are mapped through the supervisor to the required VAX/VMS routines. When run in stand-alone mode, the supervisor emulates the VAX/VMS services.

RMS (Record Management System) Service Macros — A subset of these VAX/VMS macros is available to all diagnostic programs.

When the supervisor is run on-line, service calls are mapped through the supervisor to the required VAX/VMS routines.

When run in the stand-alone mode, the supervisor emulates the RMS services. Files on any supervisorsupported medium may be referenced. However, only Read Services are provided in stand-alone mode.

## HARDWARE REQUIREMENTS

| Minimum Hardware<br>Required Macros Library |         | Version<br>Required |
|---|---------|---------------------|
| System                                      | Version | Release             |
| VAX-11/78X                                  | 11.7    | 36*                 |
| VAX-11/750                                  | 11.6    | 35*                 |
| VAX-11/730/725                              | 10.10   | 31*                 |
| VAX 86XX                                    | 13.1    | 41*                 |
| VAX 58XX                                    | 14.4    | **                  |



| Minimum Hardware<br>Required           | Macros Library<br><i>Version</i> | Version<br>Required<br><i>Release</i> |
|--|----------------------------------|---------------------------------------|
| System                                 |                                  |                                       |
| VAX 6000-2XX/3XX                       | 14.4                             | **                                    |
| VAX 6000-4XX                           | 14.4                             | **                                    |
| VAX 6000-5XX                           | 14.4                             | **                                    |
| VAX 82XX, 83XX,<br>VS8000              | 14.4                             | 43*                                   |
| VAX 85XX, 8700<br>(8810), 8800 (8820N) | 13.1                             | 41*                                   |
| VAX 8820, 8830,<br>8840                | 13.1                             | 41*                                   |
| VAX 9000-2XX/4XX                       | 14.3                             | **                                    |

\* archived

\*\* current

SOFTWARE REQUIREMENTS

The appropriate corresponding diagnostic license and media set for the processor system being utilized. Processor systems are identified in the *HARDWARE RE-QUIREMENTS* section of this SPD.

### 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.

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Tape: TU58 DECTAPE II Cartridge\*, TK50 Streaming Tape

Diskette: RX01 Single Density 8" Diskette, RX50 5 1/4" Floppy Diskette

\* The TU58 is to be used in a stand-alone, lightly loaded environment. If used as a file device in a heavily loaded environment, it can degrade system performance.

#### **ORDERING INFORMATION**

Sources License, Sources: BR-ZE045-E\*

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

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None

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