

Software Product Description

PRODUCT NAME: KMV1A RSX HDLC Framing Software, Version 1.0
(Formerly KMV11-A Framing Software)

SPD 14.22.02

DESCRIPTION

The KMV1A RSX HDLC Framing Software is a package consisting of basic HDLC/SDLC framing firmware, a firmware loader, device driver for the KMV1A programmable communication controller.

The driver, in conjunction with the HDLC/SDLC framing firmware, loader, and the KMV1A hardware, allows the RSX operating system user to perform medium speed synchronous communication in a point-to-point or multi-point environment.

The driver provides the interface for transfer of command, control, and data information between the RSX Operating System and the KMV1A basic HDLC/SDLC framing firmware.

The KMV1A driver is full-duplex and maintains internal queues, enabling the supplied firmware, to control two receive and two transmit buffers at the same time. This allows efficient use of the device during transmission and reception of data.

KMV1A HDLC Framing Software was designed according to the specification for HDLC/SDLC frame structure as defined in the ISO 3309 standard.

Driver Features

- Support for the RSX-11M, RSX-11M-PLUS, and RSX-11S operating systems
- Full-duplex operation
- Loads the HDLC/SDLC framing firmware at load time or after power failure.
- Supports KMV1A self-test for hardware diagnosis.
- Supports line configuration and deconfiguration
- Contains full modem control or monitors data leads only
- Provides secondary station address recognition support for multi-point lines.
- Supports DTE clock source from 1200 bps (bits per second) up to 64K bps.

Firmware Features

The major features provided by the HDLC/SDLC framing firmware are:

- Basic HDLC/SDLC framing (flag insertion, FCS generation and check) according to the International Standards Organization standard for the HDLC frame structure, ISO 3309 (1976), with an integral number of 8-bit bytes
- Provides secondary station address recognition support for multi-point lines
- Direct Memory Access (DMA) for high throughput.
- Line speed can be up to 64K bps with a maximum frame size of 1,030 bytes. Line utilization depends on frame size and host CPU loading.

MINIMUM HARDWARE REQUIRED

Any valid PDP-11/23-PLUS, PDP-11/23S, Micro/PDP-11/23, Micro/PDP-11/53, Micro/PDP-11/73 or Micro/PDP-11/83 configuration with a minimum of 2K words additional memory for the driver and 4K words additional memory for the firmware loader.

- Up to 4 KMV1A-M communication controller modules
- One of the following cable kits:
 - CK-KMV1A-AA RS-232 for PDP-11/23S and BA123 cabinet
 - CK-KMV1A-AB RS-232 for BA23 cabinet
 - CK-KMV1A-AC RS-232 for PDP-11/23-PLUS
 - CK-KMV1A-AF RS-232 for H9642 cabinet
 - CK-KMV1A-EA RS-422 for PDP-11/23S and BA123 cabinet
 - CK-KMV1A-EB RS-422 for BA23 cabinet
 - CK-KMV1A-EC RS-422 for PDP-11/23-PLUS
 - CK-KMV1A-EF RS-422 for H9642 cabinet
 - CK-KMV1A-FA RS-423 for PDP-11/23S and BA123 cabinet
 - CK-KMV1A-FB RS-423 for BA23 cabinet

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- CK-KMV1A-FC RS-423 for PDP-11/23-PLUS
- CK-KMV1A-FF RS-423 for H9642 cabinet

Block Space Requirements (Block Cluster Size = 1):

Required for installation: 1125 blocks
(576K bytes)

Required for use (permanent): 45 blocks
(23K bytes)

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, configurations, and software options selected.

GROWTH CONSIDERATIONS

The minimum hardware requirements for any future version of this product may be different from the minimum hardware requirements of the current version.

OPTIONAL HARDWARE

None

PREREQUISITE SOFTWARE

An RSX-11M, RSX-11M-PLUS, or RSX-11S operating system.

Refer to the RSX-11M Optional Software Cross Reference Table (SPD 20.98.xx) for the required version.

Refer to the RSX-11M-PLUS Optional Software Cross Reference Table (SPD 20.99.xx) for the required version.

OPTIONAL SOFTWARE

None

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.

INSTALLATION

This software product can be installed by the customer using the step-by-step documentation available for this product.

Customer Responsibilities

Before installation of the software, the customer must have:

- Previously installed all requisite hardware including terminals.
- Obtained, installed and demonstrated as operational any modems and other equipment and facilities necessary to interface to DIGITAL'S communication equipment.
- Demonstrated equivalency of operation for modems other than Bell 200 series, or in Europe, PTT approved modems.

Delays caused by any failure to meet these responsibilities will be charged at DIGITAL'S prevailing rate for time and materials.

ORDERING INFORMATION

Single-Use licensed software is furnished under the licensing provisions of DIGITAL's Standard Terms and Conditions, 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 copyright notice and any proprietary notices on the software) for use on that same CPU.

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A Single-Use, License-Only Option is a license to copy the software previously obtained under license.

No binary is separately available from DIGITAL for this software product. The sources and/or listings option(s) is available for use only on the single CPU on which it is first installed, and after a source license agreement is in effect.

ADDITIONAL SERVICES

None

SOFTWARE OPTIONS CHART

The Distribution Media Codes used in the Software Options Chart are described below. You specify the desired Media Code at the end of the Order Number, e.g., QYS39-X3 = binaries on RX50 Floppy Diskette.

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|-----------------------------------|-------------------------------------|
| 5 = TK50 Disk Cartridge | X = RX02 Double Density 8" Diskette |
| M = 9-track 1600 BPI Magtape (PE) | Z = No Hardware Dependency |

Note: The availability of these software product options and services may vary by country. Customers should contact their local DIGITAL office for information on availability.

OPTIONS	ORDER NUMBER RSX-11M RSX-11M-PLUS RSX-11S SYSTEMS
LICENSE OPTIONS: A LICENSE IS REQUIRED FOR EACH CPU.	
Single-Use Source License, sources, documentation, warranty	QJS39-X5 QJS39-XM QJS39-XX
Single-Use License-Only Option	QJS39-DZ
Documentation-Only Option	QJS39-GZ