

# Software Product Description

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**PRODUCT NAME: RSX-11M/3271 Protocol Emulator (PE), Version 1.0**

**SPD 10.88.0**

## **DESCRIPTION:**

The RSX-11M/3271 Protocol Emulator (PE) permits applications tasks running under RSX-11M to communicate interactively with tasks in an IBM 360 or 370 system. It is a tool to aid in implementing complex applications requiring on-line information entry and retrieval, file transfer and inter-task communications capabilities between IBM 360 or 370 and RSX-11M systems.

The user task in RSX-11M presents itself to the IBM system as an IBM 3277 display unit attached to an IBM 3271 control unit operating in slave mode.

The emulator operates as a device driver under RSX-11M, maintaining the synchronous line discipline on one side and interfacing with the user tasks on the other. The PE module supports up to six synchronous lines, each of which can be viewed by the 360 or 370 as a 3271 controller. The theoretical maximum number of RSX-11M user tasks that can be supported by each pseudo controller is 32. The maximum number of supported lines and user tasks is a function of application requirements and buffer constraints.

*Line Discipline* — The communications discipline used by the 3271 PE is the 3271 subset of IBM's BSC (Binary Synchronous Communications) protocol using EBCDIC code. Specifically, this subset of BSC supports operation of full- or half-duplex leased lines in either point-to-point or multipoint configurations at transmission speeds up to 9600 bits per second. The protocol does not support switched facilities using contention line control.

The PE does not provide transparent BSC capability, but it can share a multidrop line with terminals functioning in transparent or non-transparent mode.

*User Task Interface* — Applications tasks access the emulator via QIO macro calls.

The emulator does not interpret or insert 3270 orders for formatted screen emulation; therefore, the applications task is responsible for formatting and interpreting the data portion of the messages being sent to and received from the 360 or 370 system.

## **MINIMUM HARDWARE REQUIRED:**

A minimum RSX-11M configuration with:

- An additional 8K words (16K bytes) of memory
- A synchronous interface: either a DV11, a DUP11, or a DU11

- Bell 201, 208 or 209 datasets or equivalent. Operation with other modems is not precluded, but warranted support does not apply in these cases.
- A master host 360/370 configuration which must include a 2701 Data Adapter, a 2703 Transmission Control Unit, a 3704 or 3705 Transmission Controller, or a System/370 Model 135 Integrated Communications Adapter.

## **OPTIONAL HARDWARE:**

- 1K words additional memory for each additional synchronous line after one
- A KG11 for use with the DU11 or DUP11

## **PREREQUISITE SOFTWARE:**

RSX-11M operating system, Version 3.1 or later.

A master/host system running one of the following operating systems and applications task interfaces or equivalent:

- OS, CICS/OS Standard Version 2
- OS/VSI or OS/VS2 or DOS/VS, CICS/VS.
- IMS/VS, Version 1.1

Operation with other operating systems and task interfaces is not precluded, but warranted support does not apply in those cases.

## **OPTIONAL SOFTWARE:**

None

## **TRAINING CREDITS:**

None

## **SUPPORT CATEGORY:**

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

## **CUSTOMER RESPONSIBILITIES:**

Before installation of the software, the customer must:

1. Obtain, install, and demonstrate operational to DIGITAL's satisfaction any modems and other equipment and facilities necessary to interface to DIGITAL's communications line interfaces and terminals.
2. Install or have installed all hardware, including terminals, to be used on the system.
3. Generate any and all IBM systems that will be communicating with the 3271 PE to DIGITAL's satisfaction.

4. Make available to DIGITAL personnel all hardware, including communications facilities and terminals, to be used during installation and acceptance testing for a reasonable period of time each day, as mutually agreed upon by DIGITAL and customer, until acceptance criteria are satisfied.
5. Provide access privileges and machine time on any and all IBM systems on which the installation is to be performed.
6. Provide an IBM application program that performs a write followed by a read to the 3271 PE.
7. Edit the PDP-11 test program to include the correct message to be sent to the IBM system (or supply DIGITAL personnel with this message).

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

#### **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.

Standard options with no support services are only available after the purchase of one supported license. When a software license is ordered without support services, the category of support applicable to such software is Category C.

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.

Source and/or listing options are only available after the purchase of at least one binary license and after a source license agreement is in effect.

The following key (D, E, R, T, Z) represents the distribution media for the product and must be specified at the end of the order number, e.g., QJD76-AE = binaries on RK05 disk.

- D = 9-track Magnetic Tape
- E = RK05 Disk Cartridge
- R = Microfiche
- T = RK06 Disk Cartridge
- Z = No hardware dependency

#### *Standard Options*

- QJD76 -A— Single-use license, binaries, documentation, support services (media: D, E, T)
- QJD76 -C— Single-use license, binaries, documentation, no support services (media: D, E, T)
- QJD76 -D— Single-use license only, no binaries, no documentation, no support services (media: Z)

#### *Source/Listing Options*

- QPD76 -E— All sources (media: D, E, T)
- QPD76 -F— Listings (media: R)

#### **ADDITIONAL SERVICES:**

None

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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.