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Software Product Description

PRODUCT NAME: PDP-11 COBOL, Version 4.1

SPD 12.40.13

DESCRIPTION:

COBOL is a precise, well-defined language for business data processing. The PDP-11 COBOL compiler is based on the specifications published by the American National Standards Institute (ANSI) in the document "American National Standard COBOL," X3.23-1974. PDP-11 COBOL operates under the control of the RSX-11M, RSX-11M-PLUS, RSTS/E, CTS-500, or IAS operating system.

PDP-11 COBOL is properly defined as a subset of full ANS COBOL and meets the ANS-74 low-level specifications with the following additions (+) and omissions (-):

- + Full Level 2 Nucleus Module
- + Full Level 2 Table Handling Module
- + Full Level 2 Sequential I/O Module
- + Full Level 2 Relative I/O Module
- + Full Level 2 Indexed I/O Module
- + Full Level 2 Segmentation Module
- + Full Level 1 Library Module, with partial Level 2 REPLACING facility
- + Full Level 1 Interprogram Communication Module
- + Cross Reference Compilation Listing
- + DISPLAY with NO ADVANCING
- RERUN option in I/O-CONTROL paragraph not implemented

The PDP-11 COBOL language processor is composed of a compiler and an Object Time System/Library.

The PDP-11 COBOL compiler produces an object module from a source program. The compiler checks each program line for syntax errors and returns an appropriate message if an error is found. The user can then correct the program (if necessary) and compile it. Program compilations result in an object module that can be linked and executed at the operating system command level.

PDP-11 COBOL allows the user to write subprograms in both COBOL or in MACRO-11 assembly language. These subprograms are accessed with the CALL statement.

PDP-11 COBOL file I/O operations are controlled through the RMS data management software. This method of Record I/O supports sequential, relative, and indexed file organizations. Note that the indexed file support may require, depending on the operating system, the optional RMS-11K software.

PDP-11 COBOL also includes:

- An interactive debugger that allows a user to set and remove breakpoints and examine and change program variables
- Support for the Commercial Instruction Set (CIS)
- CBLMRG, that merges Overlay Descriptor Language (ODL) files generated by COBOL compilations into a single ODL file
- RFRMT, that converts PDP-11 terminal format COBOL programs into conventional ANS COBOL program format

MINIMUM HARDWARE REQUIRED:

One of the following operating system configurations:

- An IAS operating system configuration
- An RSX-11M or RSX-11M-PLUS operating system configuration that includes the extended instruction set. If the system device is an RK05 disk, one additional RK05 disk drive beyond the system minimum configuration is required. This is a total of three RK05 disk drives on an RK05-only configuration.
- A RSTS/E or CTS-500 operating system configuration that includes the following:
 - At least 248K bytes of memory
 - At least 10 million bytes of on-line disk storage

Any configuration must include the following:

- A user area of at least 56K bytes of memory
- At least 3000 free blocks of on-line disk storage on the public disk structure

OPTIONAL HARDWARE:

Supports any mass storage, unit record or terminal device supported by the prerequisite software except TU56 DECTape and TU58 DECTape II.

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PREREQUISITE SOFTWARE:

One of the following operating systems that includes RMS-11:

- RSTS/E, Version 7.0 or, CTS-500, Version 5.0 (includes RMS-11K, Version 1.8 multikey ISAM support)
- ORSX-11M, Version 3.2
- RSX-11M-PLUS, Version 1.0 (includes RMS-11K, Version 1.8 multikey ISAM support)
- IAS, Version 3.0

OPTIONAL SOFTWARE:

- RMS-11K, Version 1.8 for multikey ISAM support (RSX-11M or IAS systems only)
- SORT-11, Version 2.0 (RSX-11M, RSX-11M-PLUS, or IAS systems only)

TRAINING CREDITS:

None

SUPPORT CATEGORY:

DIGITAL SUPPORTED

PDP-11 COBOL is a DIGITAL Supported Software Product.

SOFTWARE INSTALLATION:

DIGITAL INSTALLED

DIGITAL installation is required for Software Product Support. There is no charge for installation if performed at the time of system installation. DIGITAL installed software products, except for operating systems, are subject to an add-on installation fee when purchased subsequent to system installation.

SOFTWARE PRODUCT SUPPORT

PDP-11 COBOL includes standard warranty services as defined in the Software Support Categories Addendum of this SPD.

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 License Agreement between Purchaser and DIGITAL.

Options with no support services are only available after the purchase of one supported license.

A single-use license only option is a license to copy the software previously obtained under license.

The following key (D, E, H, M, Q, T, V, Z) represents the distribution media for the product and must be specified at the end of the order number, e.g., QP011-AD = binaries on 9-track 800 BPI Magtape (NRZI).

D = 9-track 800 BPI Magtape (NRZI)
 E = RK05 Disk Cartridge
 H = RL02 Disk Cartridge
 M = 9-track 1600 BPI Magtape (PE)
 Q = RL01 Disk Cartridge
 T = RK06 Disk Cartridge
 V = RK07 Disk Cartridge
 Z = No hardware dependency

For RSTS/E and CTS-500 Systems

- QP011 -A— Single-use license, binaries, documentation, support services (media: D, E, H, M, Q, T, V)
- QP011 -C— Single-use license, binaries, documentation, no support services (media: D, E, H, M, Q, T, V)
- QP011 -D— Single-use license only, no binaries, no documentation, no support services (media: Z)

For RSX-11M and RSX-11M-PLUS Systems

- QP012 -A— Single-use license, binaries, documentation, support services (media: D, E, H, M, Q, T, V)
- QP012 -C— Single-use license, binaries, documentation, no support services (media: D, E, H, M, Q, T, V)
- QP012 -D— Single-use license only, no binaries, no documentation, no support services (media: Z)

For IAS Systems

- QP013 -A— Single-use license, binaries, documentation, support services (media: D, E, M, Q, T)
- QP013 -C— Single-use license, binaries, documentation, no support services, (media: D, E, M, Q, T)
- QP013 -D— Single-use license only, no binaries, no documentation, no support services (media: Z)

Update Options

Users of PDP-11 COBOL whose specified Support Category warranty has expired can order under license the following software update at the then current charge for such update. The update is distributed in binary form on the appropriate medium and includes no installation or other services unless specifically stated.

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For RSTS/E and CTS-500 Systems

QP011 -H— Binaries, documentation (media: D, E, H, M, Q, T, V)

QP011 -H— Right to copy for single-use (under existing license), no binaries, no documentation (media: Z)

For RSX-11M and RSX-11M-PLUS Systems

QP012 -H— Binaries, documentation (media: D, E, H, M, Q, T, V)

QP012 -H— Right to copy for single-use (under existing license), no binaries, no documentation (media: Z)

For IAS Systems

QP013 -H— Binaries, documentation (media: D, E, M, Q, T)

QP013 -H— Right to copy for single-use (under existing license), no binaries, no documentation (media: Z)

*Miscellaneous Options**For RSTS/E and CTS-500 Systems*

QP011 -G— Documentation only kit (media: Z)

For RSX-11M and RSX-11M-PLUS Systems

QP012 -G— Documentation only kit (media: Z)

For IAS Systems

QP013 -G— Documentation only kit (media: Z)

ADDITIONAL SERVICES:

Post-warranty Software Product Services for this software product are available with the prerequisite being the purchase of the RSTS/E, RSX-11M, RSX-11M-PLUS, or IAS Self-Maintenance Service for Software. Customers should contact their local DIGITAL office for additional information.