digital Software Product Description

PRODUCT NAME: FORTRAN/RT-11 Extensions, Version 1B

SPD 12.12.4

DESCRIPTION:

The FORTRAN/RT-11 Extensions consist of:

- FORTRAN IV/RT-11
- A library of graphics subroutines supporting the VT11 and VS60 display processors
- A library of laboratory subroutines supporting the LPS11 Laboratory Peripheral System, the AR11 Analog Real Time Subsystem, and the AD11-K, KW11-K, and DR11-K laboratory I/O modules
- A FORTRAN debugger

The FORTRAN/RT-11 graphics library is a comprehensive set of FORTRAN-callable subroutines which enable the user to create and interact with graphic output on the VT11 and VS60 display processors. The subroutines enable the programmer to use many of the features of the VS60. If the library is configured for the VT11, the subroutines emulate the VS60 features whenever possible. Programs can thus be written for either device. The user need only link the program with the appropriate library. For additional flexibility, most subroutines are written in FORTRAN to facilitate maintenance and modification.

The FORTRAN/RT-11 VT55 subroutine provides access to all of the graphics features of the VT55 graphics terminal. In addition, single subroutine calls can be used to plot lines or complete data curves.

The laboratory subroutine library provides the capability of acquiring data in all of the modes provided by the LPS11 and AR11 hardware and to operate a CRT display through the digital-to-analog converters provided in these units. A completion routine capability allows the user to write subroutines which are activated asynchronously upon completion of many actions, such as the filling of a data buffer. DR11-K support allows up to eight of these interfaces to be operated simultaneously. The AD11-K (with optional AM11-K), AA11-K, and KW11-K are supported in a fashion compatible with the LPS11 support. The library is easily configured for the particular set of hardware on the user's machine.

MINIMUM HARDWARE REQUIRED:

Any valid RT-11 configuration with at least 16K words of memory. 24K words of memory are recommended for large graphics display files such as may be encountered with the VS60.

OPTIONAL HARDWARE:

Any optional devices supported by the operating system and FORTRAN IV/RT-11, Version 2.0.

VT11A Graphics Display Processor VS60 Graphics Display Processor

VT55 Graphics Terminal

LPS-11 Laboratory Peripheral System

AR11 Analog Real Time Subsystem

DR11-K Digital I/O System (up to 8)

AD11-K Analog-to-digital converter

KW11-K Real-time clock

AM11-K Multiplexer

AA11-K Digital-to-analog converter

PREREQUISITE SOFTWARE:

RT-11 Operating System, Version 3 (with the exception of the XM feature under the foreground/background monitor) or later.

OPTIONAL SOFTWARE:

None

TRAINING CREDITS:

None

SUPPORT CATEGORY:

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

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C = DECtape

D = 9-track Magnetic Tape E = RK05 Disk Cartridge

Q = RL01 Disk Cartridge

R = Microfiche

T = RK06 Disk Cartridge

Y = RX01 Floppy Diskette

Z = No hardware dependency

Standard Options

QJ980 -A— Single-use license, binaries, documentation, support services (media: C, D, E, Q, T, Y)

QJ980 -C— Single-use license, binaries, documentation, no support services (media: C, D, E, Q, T, Y)

QJ980 -D— Single-use license only, no binaries, no documentation, no support services (media: Z)

Source/Listing Options

QJ980 -E- All sources (media: D, E, Q, T)

QJ980 -F- Listings (media: R)

Update Options

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QJ980 -H— Binaries, documentation (media: C, D, E, T, Y)

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QJ980 -W— Binaries, documentation (media: C, D, E, T, Y)

ADDITIONAL SERVICES:

None

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.

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CATEGORY E

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