

# digital

## Software Product Description

**PRODUCT NAME: MU BASIC-11/RT-11, Version 2.0**

**SPD 12.20.6**

### **DESCRIPTION:**

BASIC is a conversational programming language developed at Dartmouth College that uses simple English language-like statements and familiar mathematical notations to perform operations.

MU BASIC-11/RT-11 is an interpreter operating under the RT-11 operating system foreground/background (FB) monitor with multiterminal capability (up to eight).

#### *MU BASIC-11/RT-11 Features*

- One to four users on PDP-11/03, LSI-11, or PDT-11/150 systems
  - One to eight users with equal size memory partitions on larger PDP-11s; no swapping
  - A variety of program manipulation commands, including commands for saving, editing, running, and retrieving BASIC programs
  - Support for real (single or double precision) integer and string data types
  - Ability to run in either the foreground or background under the RT-11 FB monitor concurrently with another job; supports all RT-11 supported devices (except VT11)
  - Support for all terminals supported by RT-11
  - User identification and file protection scheme to control system access and utilization (optional); public and group libraries for file sharing; privileged user capability
  - All peripheral devices can be used by any user at any terminal. However, the ASSIGN and DEASSIGN commands permit restricted use of a non-public device to a single user
  - Limited ability for a user to ASSIGN a terminal (that is currently not in use) as an input or output device
  - Sequential data storage using the RT-11 file system. The maximum number of simultaneously open files is limited only by available memory and RT-11 channel considerations
  - Virtual arrays on disk (integer, real, and string) for processing quantities of data too large to fit in available memory, or for performing random-access I/O
- Program chaining and overlaying with COMMON to accommodate large programs
  - Formatted output with PRINT USING statement
  - String support, complete with string arrays and functions
  - A CALL statement that allows easy interfacing of assembly language routines. These routines can be called by name and passed multiple arguments. These routines must be included at link time.
  - Immediate mode execution for desk calculator operation and program debugging
  - Privileged mode to protect applications programs

#### **MINIMUM HARDWARE REQUIRED:**

Any valid RT-11, Version 4.0 (FB monitor with multiterminal support) configuration with:

- RK11, RX11, or RL11 controller and drive
- Line frequency clock
- 56K bytes of memory

Total memory required depends on the number of users, length of programs, BASIC features included, devices used, and number of simultaneously open files. A maximum of four users are supported for PDP-11/03, LSI-11, or PDT-11/150 based systems.

DECtape II is not supported as the system device.

#### **OPTIONAL HARDWARE:**

Supports any device supported by the prerequisite software (except VT11).

#### **PREREQUISITE SOFTWARE:**

One of the following:

- RT-11, Version 4.0 Operating System with multiterminal support multiterminal support must be sysgened into RT-11; and RT-11 SYSGEN is included in an MU BASIC-11/RT-11 installation.
- RT<sup>2</sup>, Version 4.0 with multiterminal support

#### **OPTIONAL SOFTWARE:**

None

**TRAINING CREDITS:**

None

**SUPPORT CATEGORY:**

DIGITAL SUPPORTED

MU BASIC-11/RT-11 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:**

MU BASIC-11/RT-11 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.

Sources and/or listings options are only available after the purchase of at least one supported license and after a source license agreement is in effect.

The following key (E, G, H, Q, R, Y, Z) represents the distribution media for the product and must be specified at the end of the order number, e.g., QJ921-AY = binaries on RX01 Floppy Diskette.

E = RK05 Disk Cartridge  
G = TU58 DECTape II Cartridge

H = RL02 Disk Cartridge  
Q = RL01 Disk Cartridge  
R = Microfiche  
Y = RX01 Floppy Diskette  
Z = No hardware dependency

QJ921 -A— Single-use license, binaries documentation, support services (media: E, G, H, Q, Y)

QJ921 -C— Single-use license, binaries, documentation, no support services (media: E, G, H, Q, Y)

QJ921 -D— Single-use license only, no binaries, no documentation, no support services (media: Z)

*Sources/Listings Options*

QJ921 -E— Sources (media: E, Q, Y)

QJ921 -F— Listings (media: R)

*Update Options*

Users of MU BASIC-11/RT-11 whose specified Support Category warranty has expired may 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.

QJ921 -H— Binaries, documentation (media: E, G, H, Q, Y)

QJ921 -H— Right to copy for single-use (under existing license), no binaries, no documentation (media: Z)

*Sources/Listings Update Options*

The following options are available to licensed users as updates to sources and/or listings options. The update is distributed in source form on the appropriate medium and includes no installation or other services unless specifically stated.

QJ921 -N— Sources update (media: E, Q, Y)

QJ921 -N— Listings update (media: R)

*Miscellaneous Options*

QJ921 -G— Documentation only kit (media: Z)

**ADDITIONAL SERVICES:**

None