CUSTOMER NOTIFICATION

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Device File for 78K0 Series

DF780103 (V2.00)

User's Manual

[Supported machines/OS]
PC-9800 Series (Windows™ Based)
IBM PC/AT™ Compatibles (Windows Based)

Be sure to read this document before using the product.

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1. OUTLINE

A device file is a binary file that contains device-dependent information and is prepared for each device model or for each product in the same series.

Device files are commonly used with development tools (such as assembler, compiler, and debugger). Employing device files enables generation and debugging of device-unique codes. In addition, when developing applications, device files enable the SFR names unique to the device being used to can be used for programming.

The DF780103 contains device files necessary for developing applications using the 78K0/KB1 or 78K0/KB1+ in the 78K0 Series.

2. CONTENTS OF PACKAGE

The device files included in this product and the corresponding devices are as follows.

Table 2-1. Contents of Package

Types	Device File Name	Corresponding Device Name	Device Specification Name	Version
Device file	D0101.78K	μPD780101	0101	V2.00
	D0102.78K	μPD780102	0102	V2.00
	D0103.78K	μPD780103	0103	V2.00
	DF0103.78K	μPD78F0103	F0103	V2.00
	DF0101H.78K	μPD78F0101H	F0101H	V2.00
	DF0102H.78K	μPD78F0102H	F0102H	V2.00
	DF0103H.78K	μPD78F0103H	F0103H	V2.00
Database file	S0101.78K, S010X.78K, SF0103.78K			

The Device Specification Name is the character string specified as "-c *device specification name*" (device type specification option), "#pragma pc(*device specification name*)" in C source in the CC78K0 (C compiler), and "$PROCESSOR(*device specification name*)" in assembler source in the RA78K0 (assembler).

The database file is required when using the system simulator SM78K0. This file is also included in the SM78K0. Installation of the database file can be selected when installing the device file and the SM78K0.

It is recommended to use the latest version of the database file. If this file already exists when the database file is being installed using a device file installer, you are asked if you want to overwrite the file. At this time, confirm the time stamp and make sure that the file being installed is the latest version (note, however, that this file is always overwritten when installing the SM78K0).

The file is not necessary when using the integrated debugger ID78K0-NS or ID78K0-QB. Therefore, you don't have to install this file.

3. USER ENVIRONMENT

Like development tools, device files are available for Windows.

User environment for device files is as follows.

Machine	Operating System
PC-9800 series, IBM PC/AT compatible machines	Windows NT 4.0 Windows 98 Windows 2000 Windows Me Windows XP

4. CORRESPONDING VERSIONS OF DEVELOPMENT TOOLS

The corresponding versions of the DF780103 and 78K0 Series development tools made by NEC Electronics are shown below. Use these tools in the following combinations.

Tool Used	Version of Corresponding Tool
C compiler package CC78K0	V3.50 or later
Assembler package RA78K0	V3.60 or later
Integrated debugger ID78K0-NS	V2.52 or later
Integrated debugger ID78K0-QB	V2.81 or later
System simulator SM78K0	V2.52 or later

Caution The μPD78F0101H, μPD78F0102H, and μPD78F0103H do not support the system simulator SM78K0.

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PC/AT is a trademark of International Business Machines Corporation.

5. INSTALLATION

Device files are included on one floppy disk. Use the device file installer (DFINST) included in the NEC Electronics development tools to install the device file.

Note A self-extraction file (an execution file) is downloaded along with device files with ODS (online delivery service). If this file is executed, a disk image is created. Copy this to hard disk or to a floppy disk and then begin the installation process.

The installation procedure is explained below.

(1) Start Windows.
(2) Start the device file installer (DFINST). If the NEC Electronics development tool has been installed in the standard directory, the device file installer will be in *installed drive*\Nectools32\bin.
(3) If installing from the floppy disk, insert the floppy disk in the floppy disk drive.
(4) Click the Install button.
(5) If installing from the floppy disk, use the FD Browse button to display the path where the disk image (icon) is located. Use the Browse button to do this if installing from hard disk.
(6) Necsetup.ini file and _csetup.ini file are displayed in the file list of the dialog box that appears after step (5). Select _csetup.ini to install the English version and Necsetup.ini to install the Japanese version.
(7) Follow the installation wizard to continue installation.

6. USAGE

Refer to the user's manual of each tool listed in **7. RELATED DOCUMENTS** for details of how to use the device file.

7. RELATED DOCUMENTS

The documents related to the DF780103 are listed below.

User's Manuals
78K0/KB1 Hardware
78K0/KB1+ Hardware
78K/0 Series Instruction
CC78K0 C Compiler Package Operation
CC78K0 C Compiler Package Language
RA78K0 Assembler Package Operation
RA78K0 Assembler Package Assembly Language
RA78K0 Assembler Package Structured Assembly Language
ID78K0-NS Integrated Debugger Operation
ID78K0-QB Integrated Debugger Operation
SM78K0 System Simulator Operation

8. REVISION HISTORY

1. V1.00

(1) First edition

2. V1.20

(1) Modification of the following SFR functions

Change of ASICL6 access attribute from REEEEEEE to RERRRREE [bits 7 to 0]

Removal of TXS0 redraw prohibition (μPD780102, μPD780103, and μPD78F0103 only)

(2) Addition of function to the following SFR

- SBRT6

(3) Correction of illegal trace data and illegal display of SFR data.

(4) Addition of the following devices

μPD78F0101H, μPD78F0102H, μPD78F0103H

3. V2.00

(1) Modification of the following SFR functions

Modification of protect information of LVIS

(2) Addition of information for IECUBE (QB-78K0KX1H) and MINICUBE (QB-78K0MINI)

Remark "Protect information" is information that is used to check the accessible data patterns.